FBISD BP013 KITCHEN RENOVATIONS ES



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ISSUED FOR BIDDING AND PERMITTING - JULY 18, 2025

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ALTERNATE #3:
CORNERSTONE (E)
LEAVING E

FBISD BP013 KITCHEN RENOVATIONS ES

AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PKWY, MISSOURI CITY, TX 77479

FORT BEND INDEPENDENT SCHOOL DISTRICT

FORT BEND INDEPENDENT SCHOOL DISTRICT

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ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

a

PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.
B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.
C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.
D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.
E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.
F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL, ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.
B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.
B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.
C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.
D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY. IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.

1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.

E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.

B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT. REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.

B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED. CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.

D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

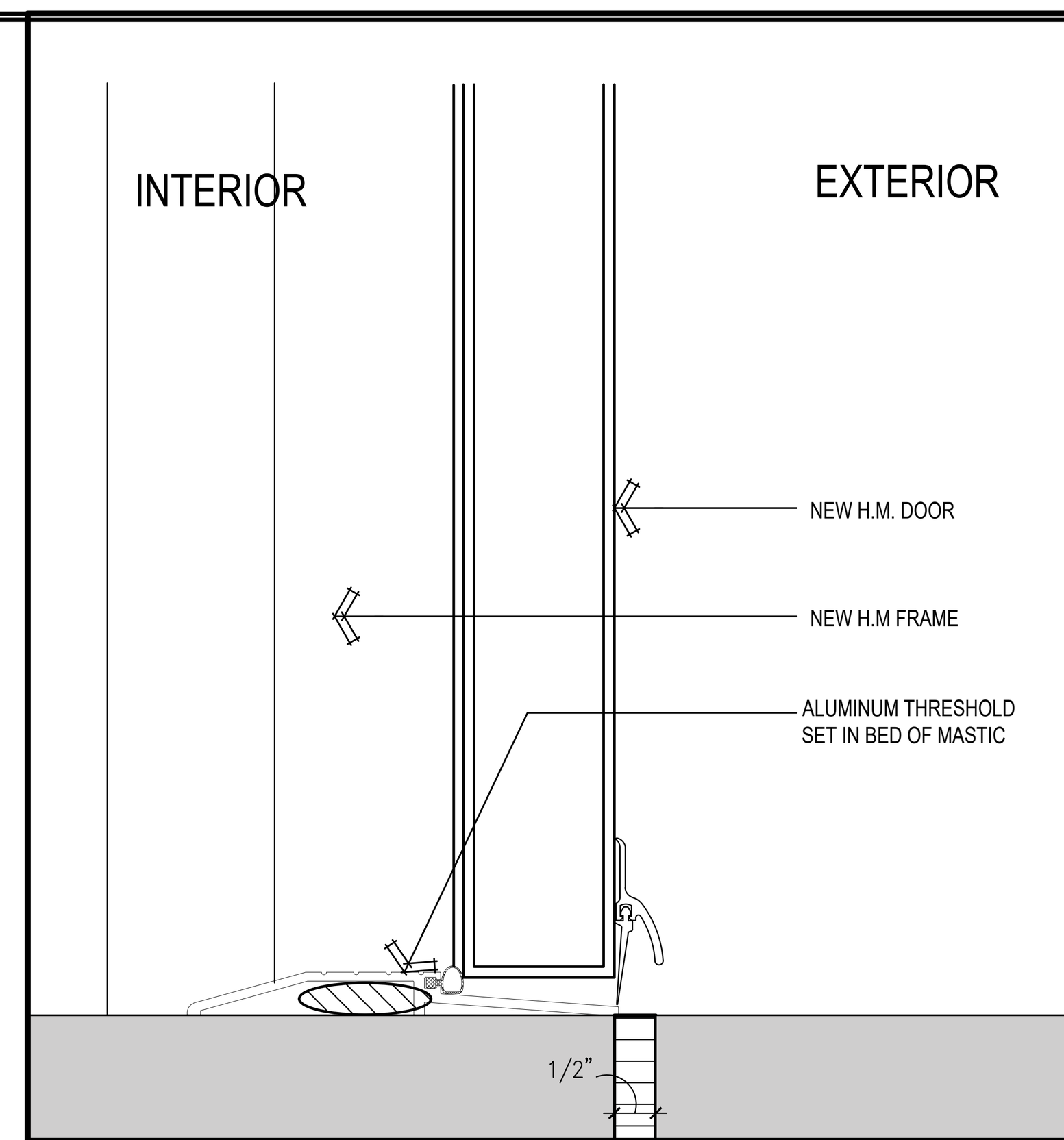
A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

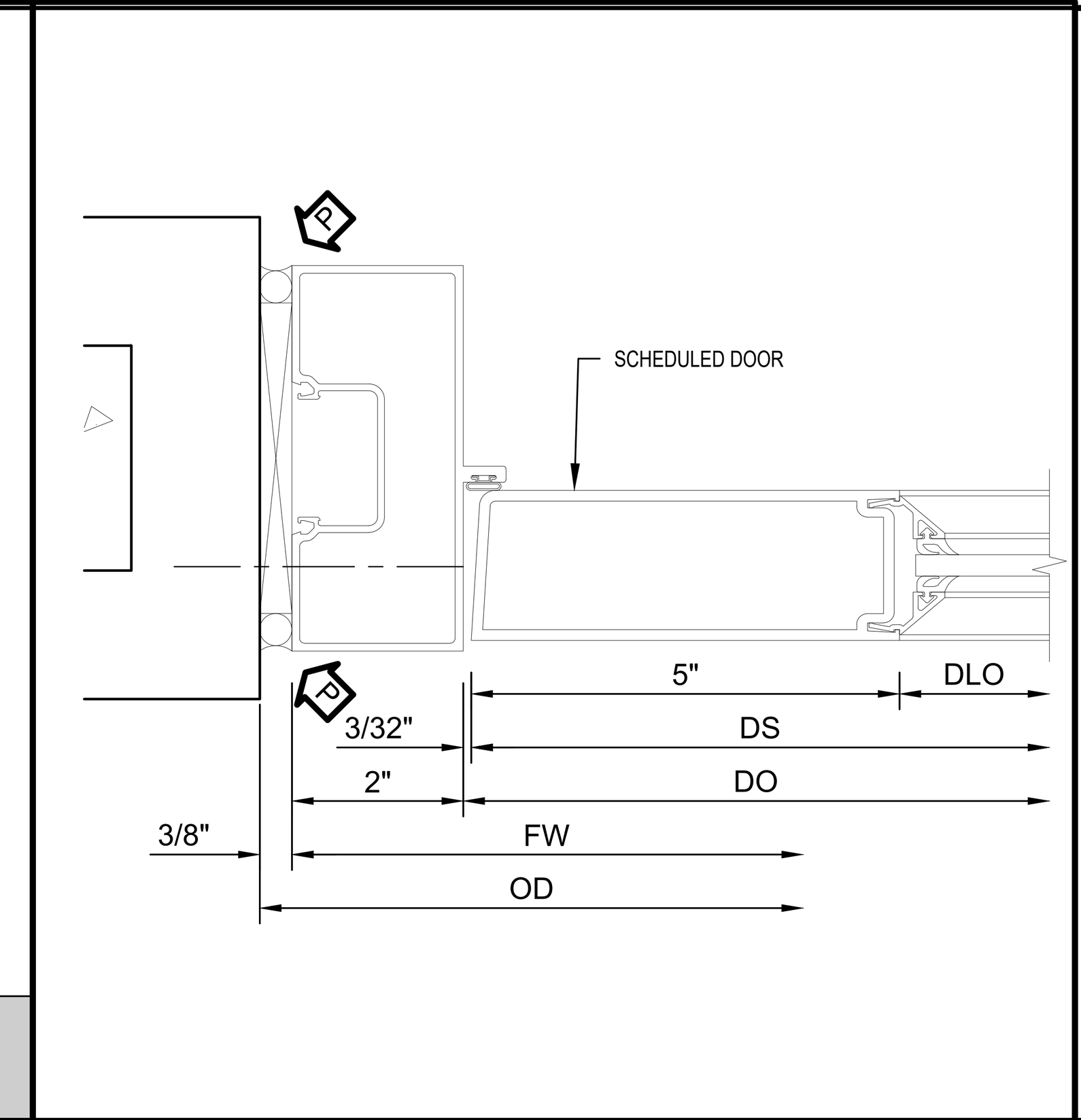
A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

01 GENERAL NOTES



21 EXTERIOR DOOR SILL
SCALE: 6" = 1'-0"_XREF



22 DOOR JAMB
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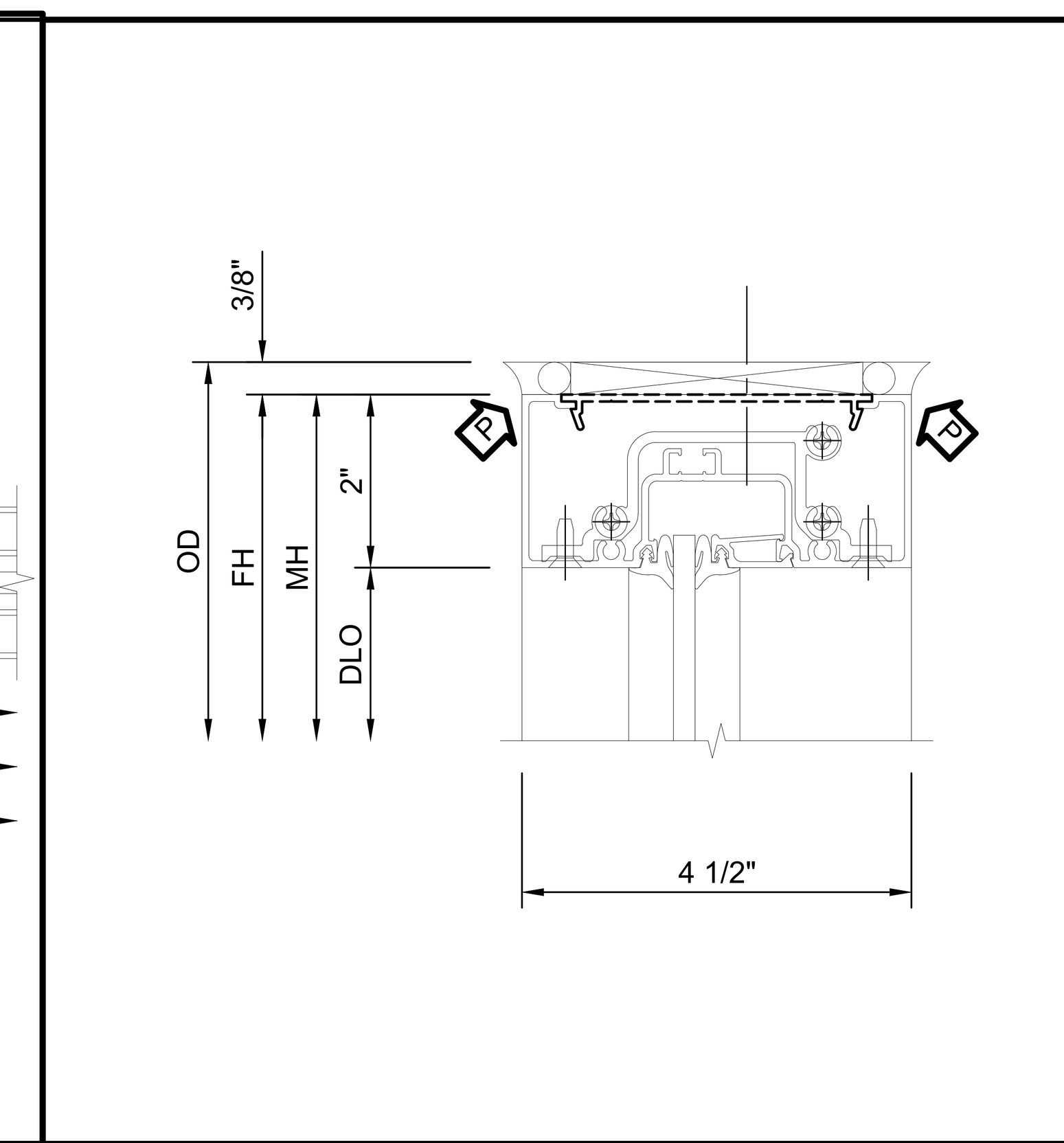

23 WINDOW HEAD
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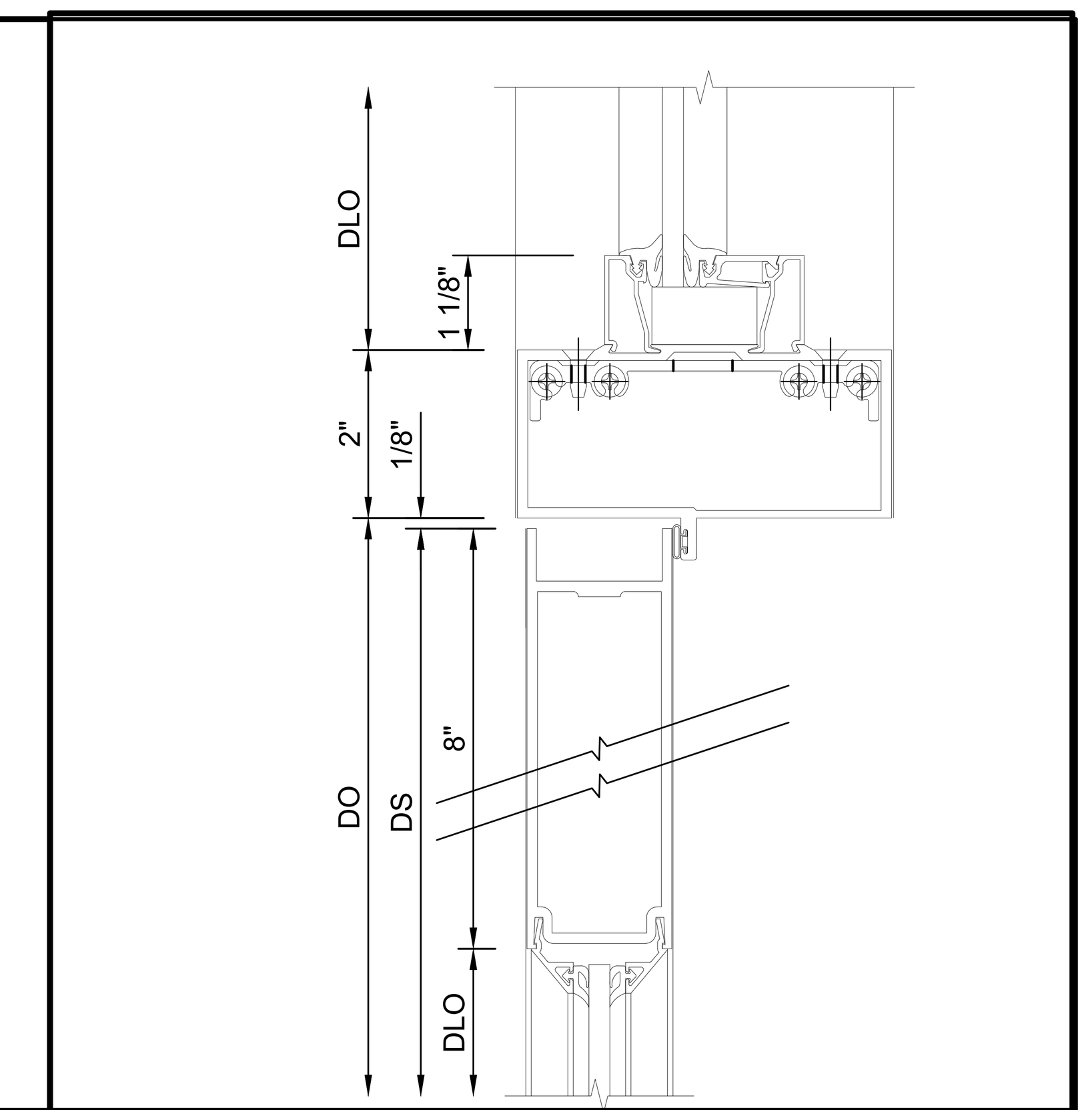

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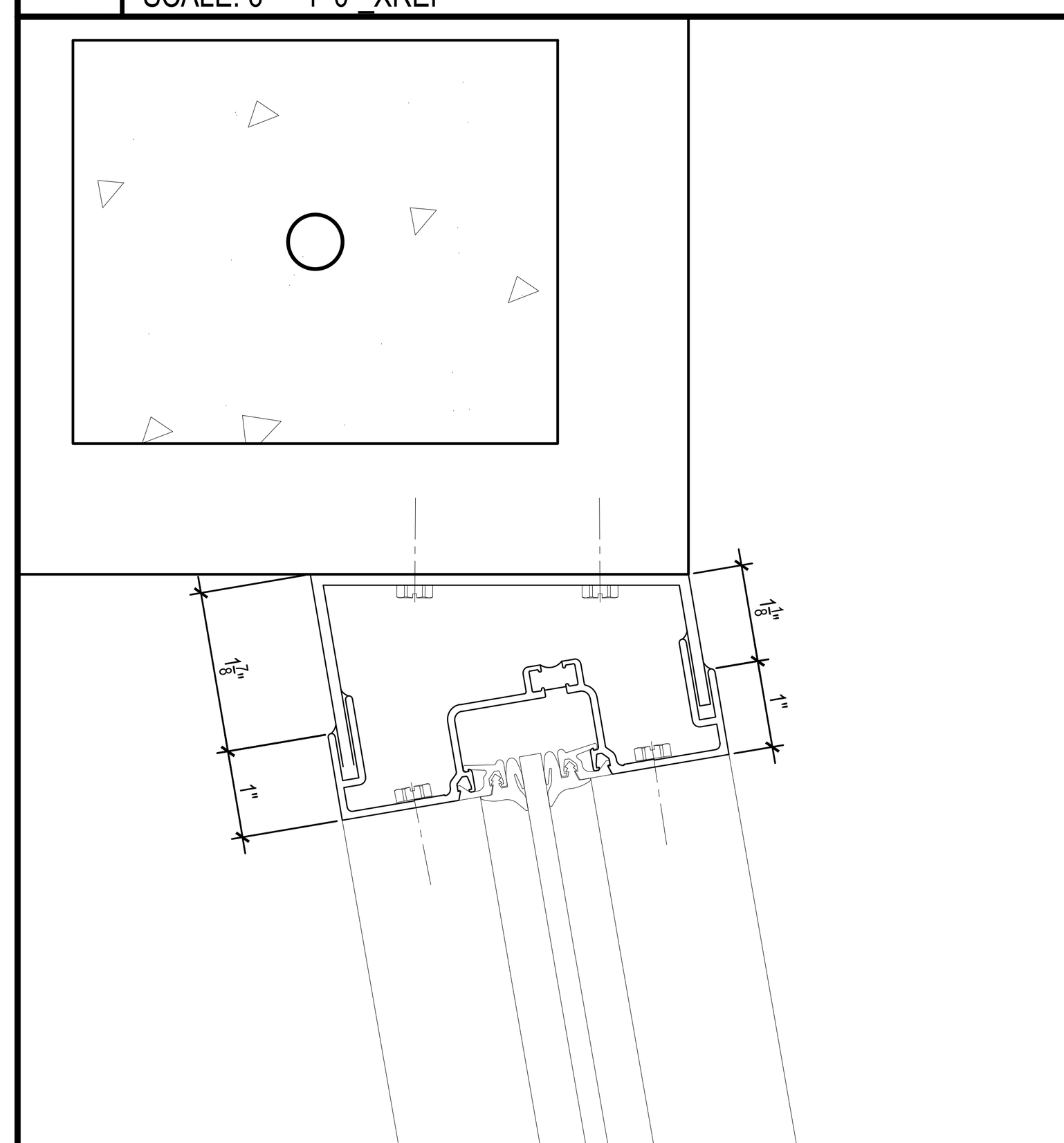

15 WINDOW JAMB AT WALL
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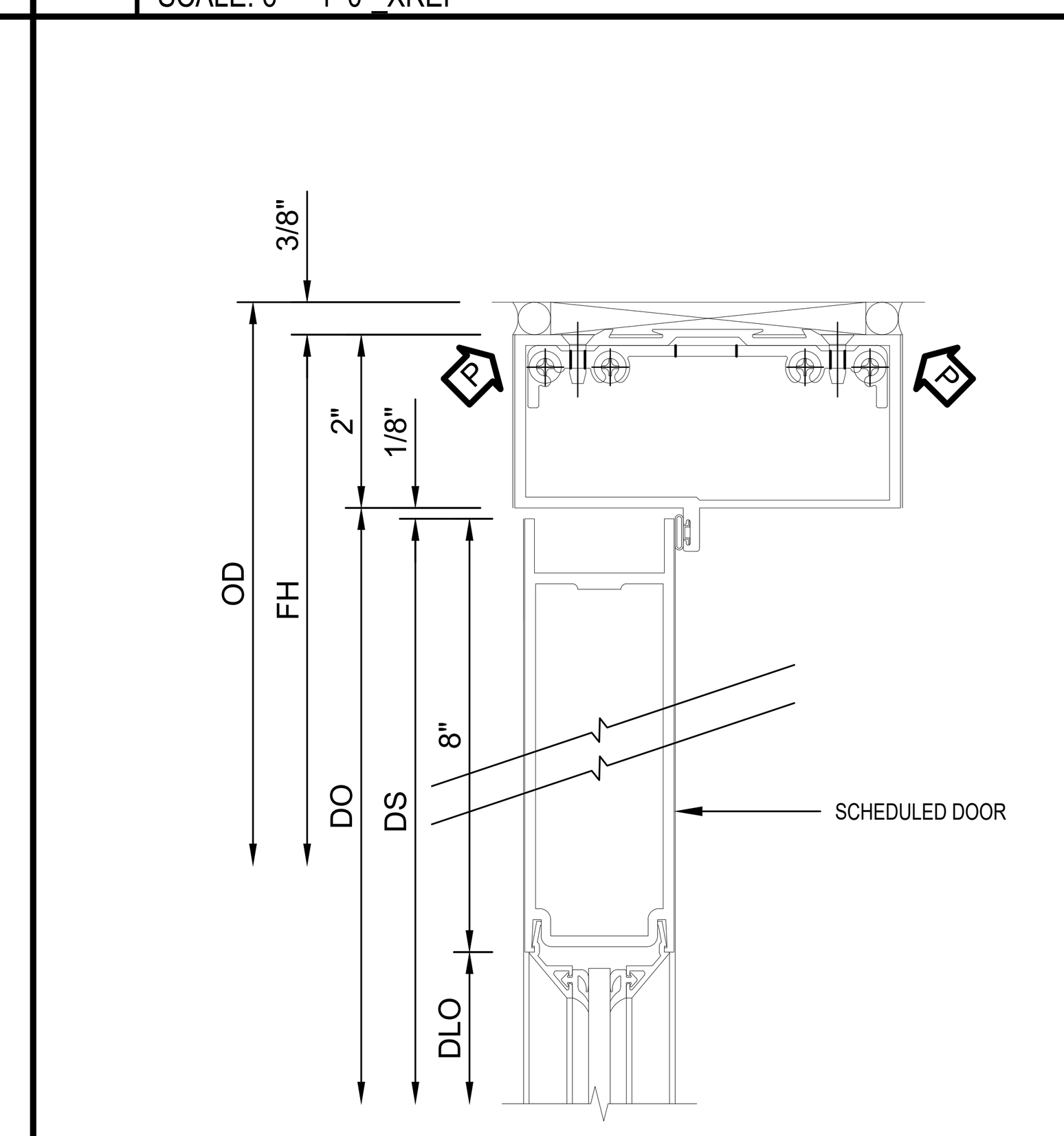

16 DOOR HEAD
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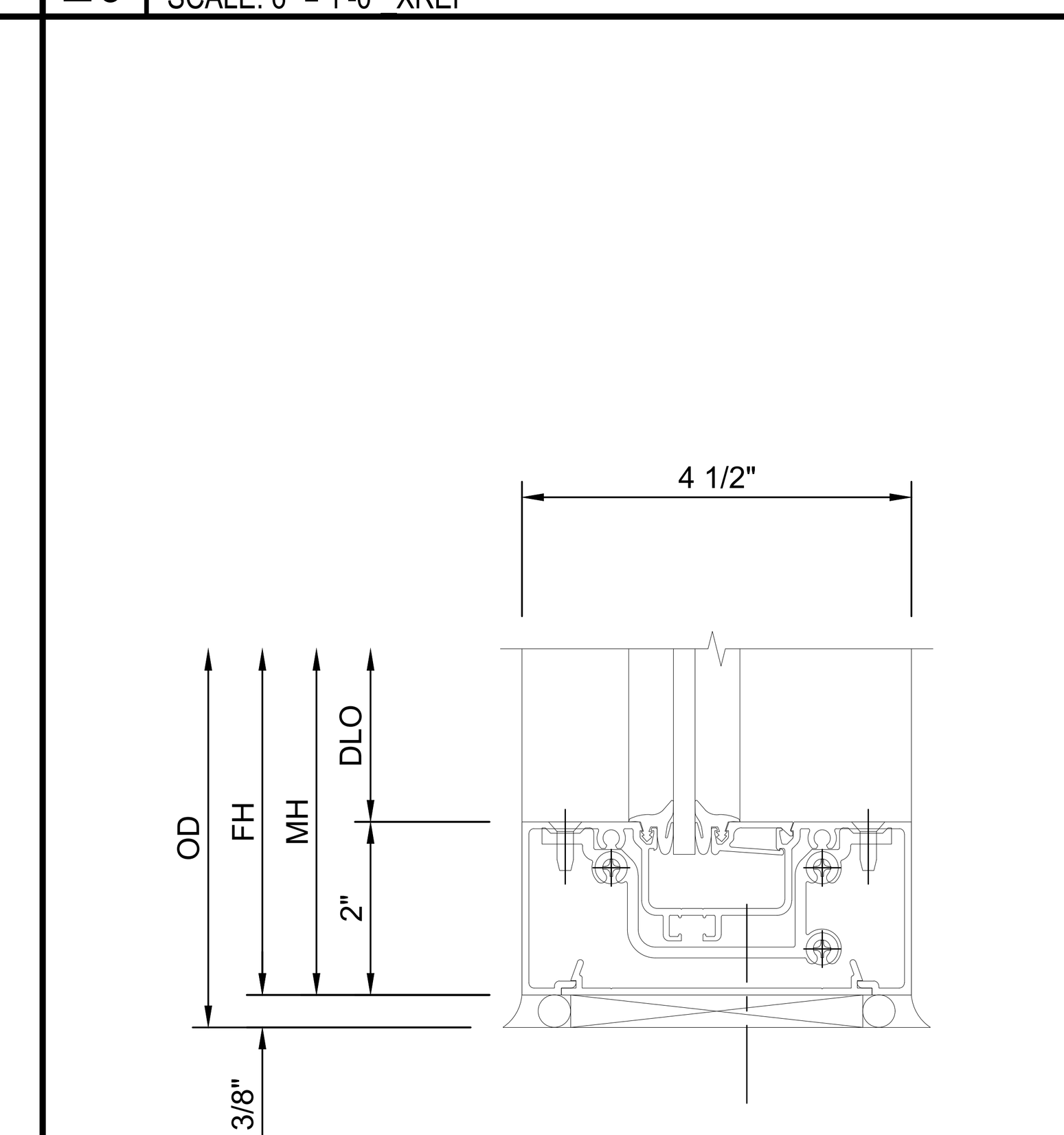

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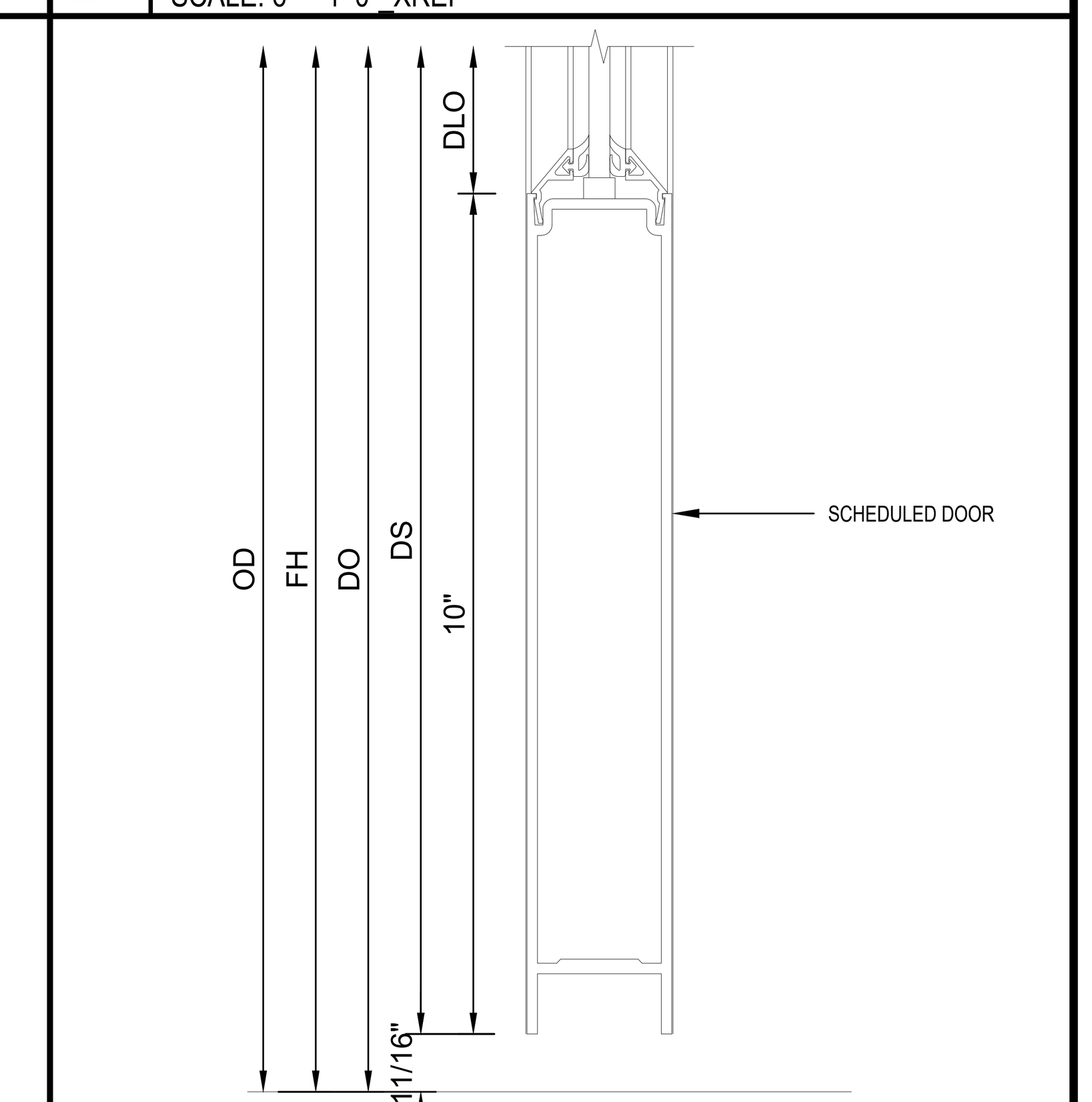

18 DOOR SILL
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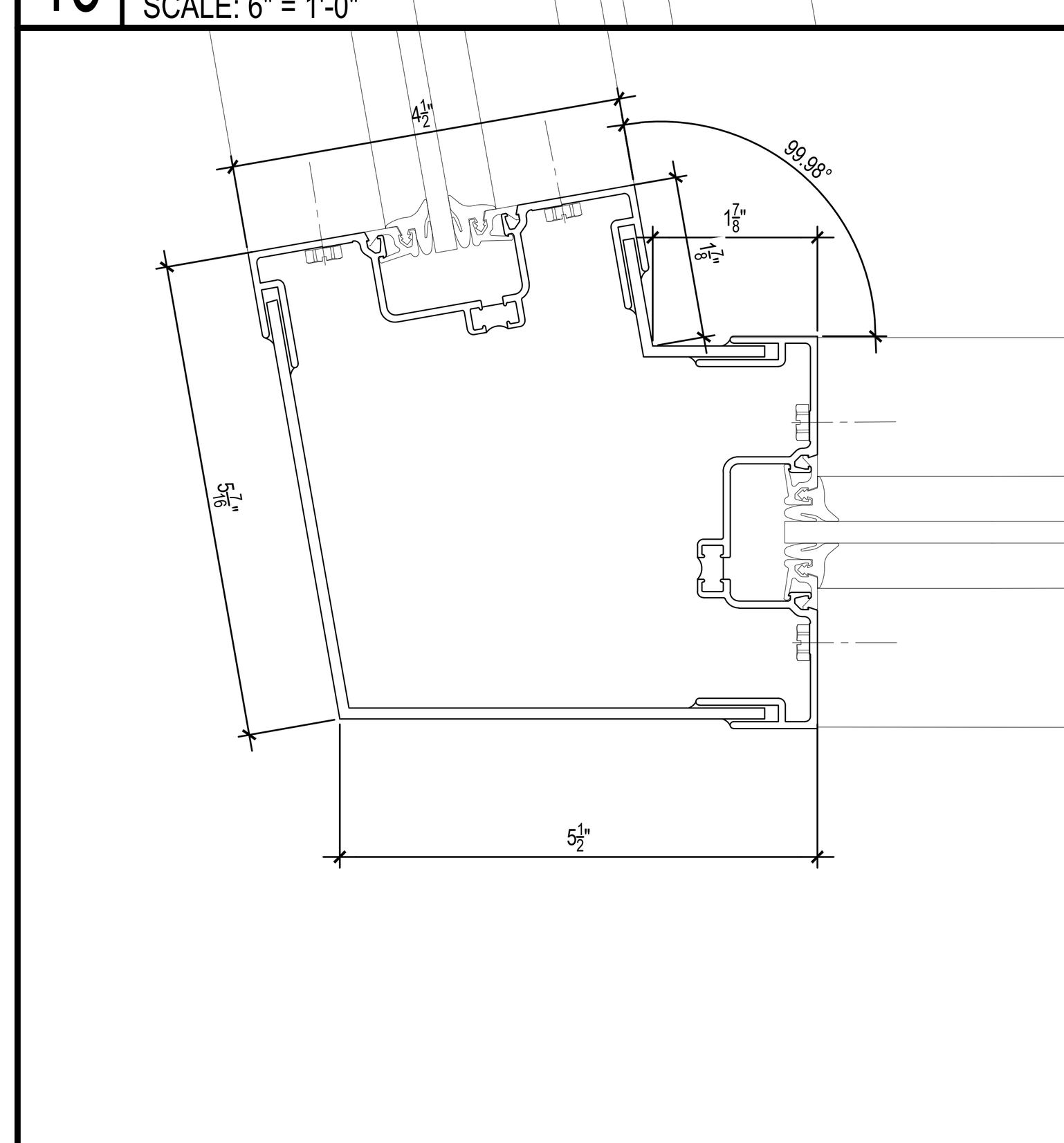

09 WINDOW CORNER
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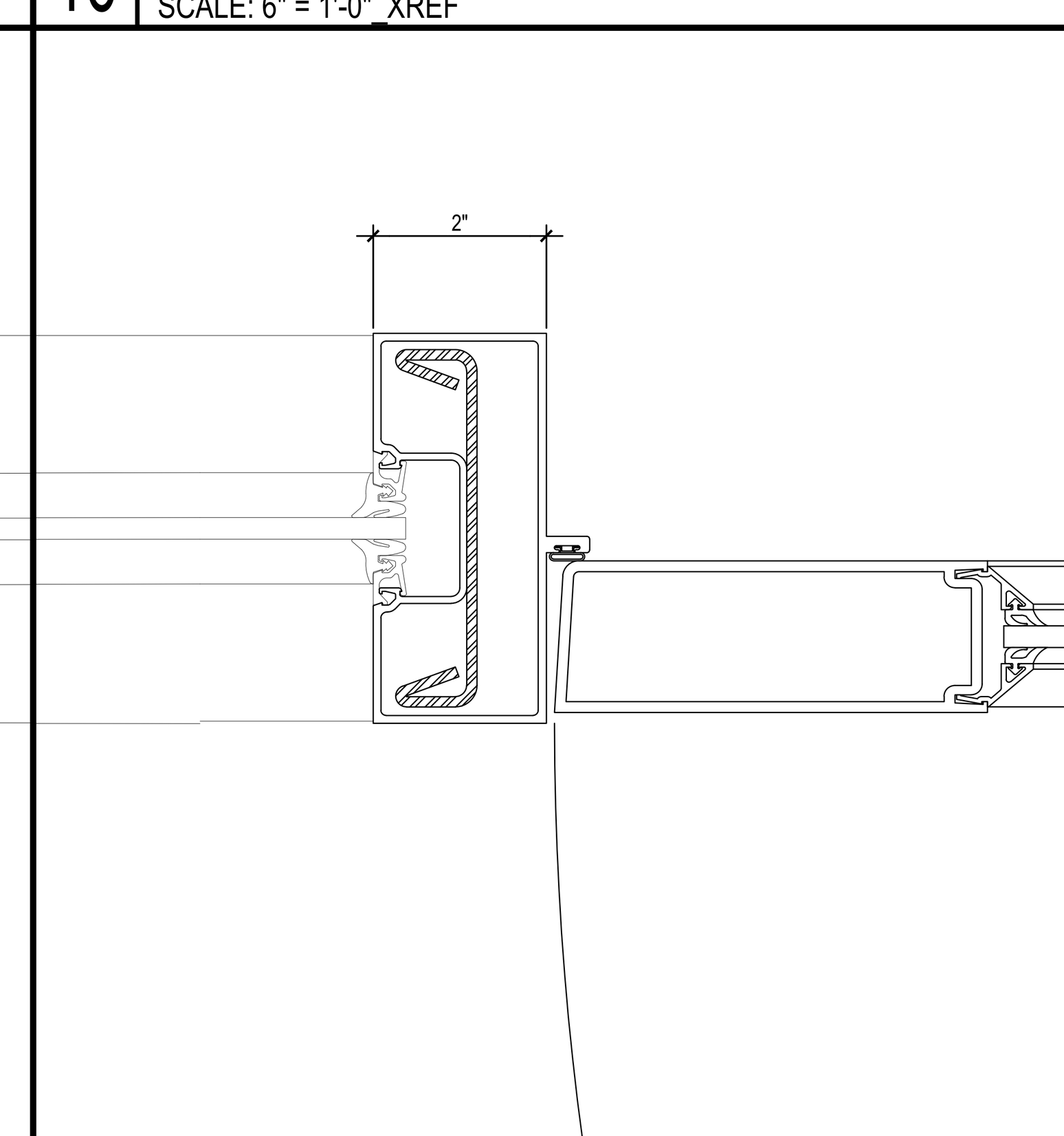

10 DOOR STRIKE JAMB
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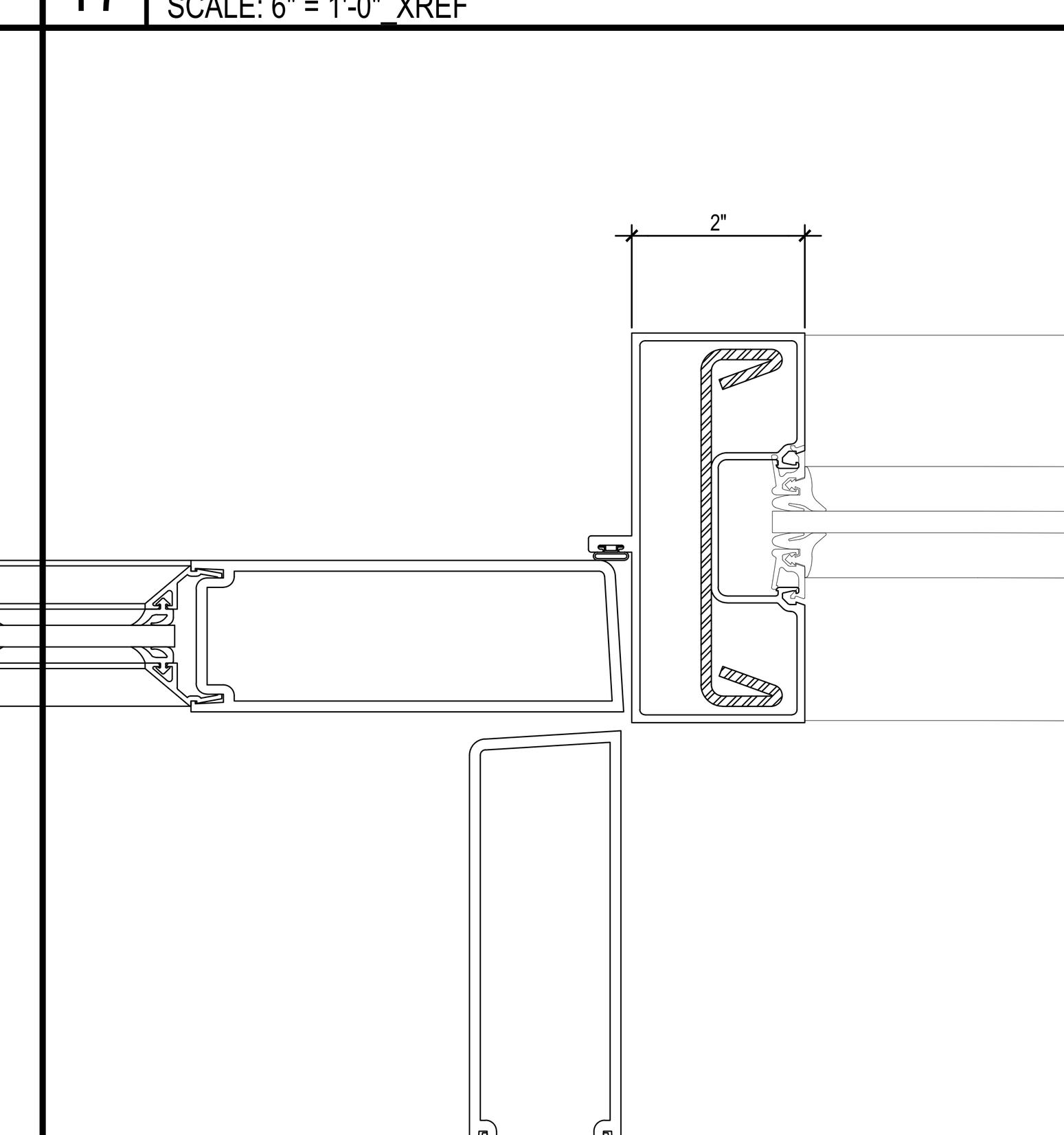

11 DOOR HINGE JAMB
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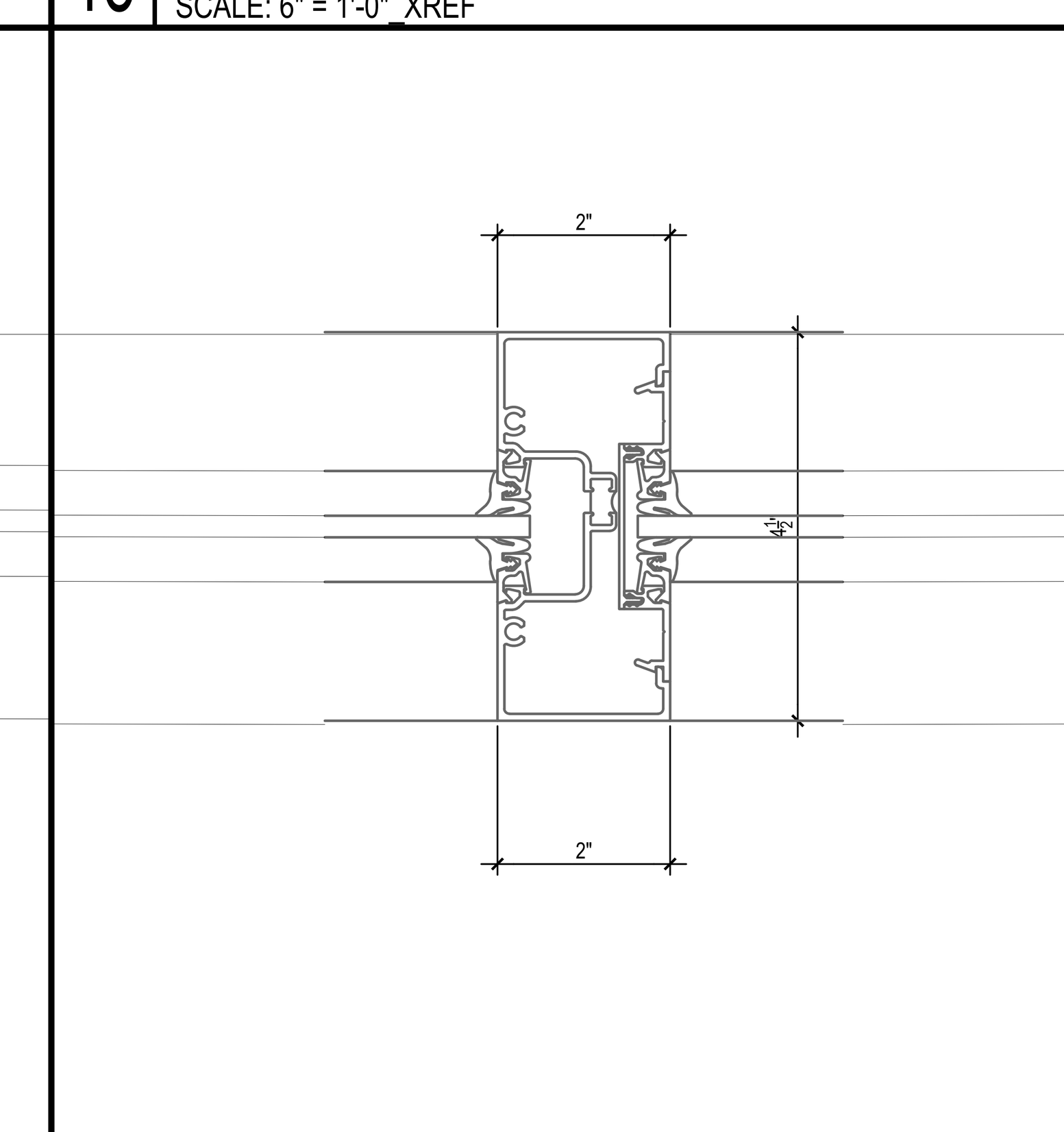
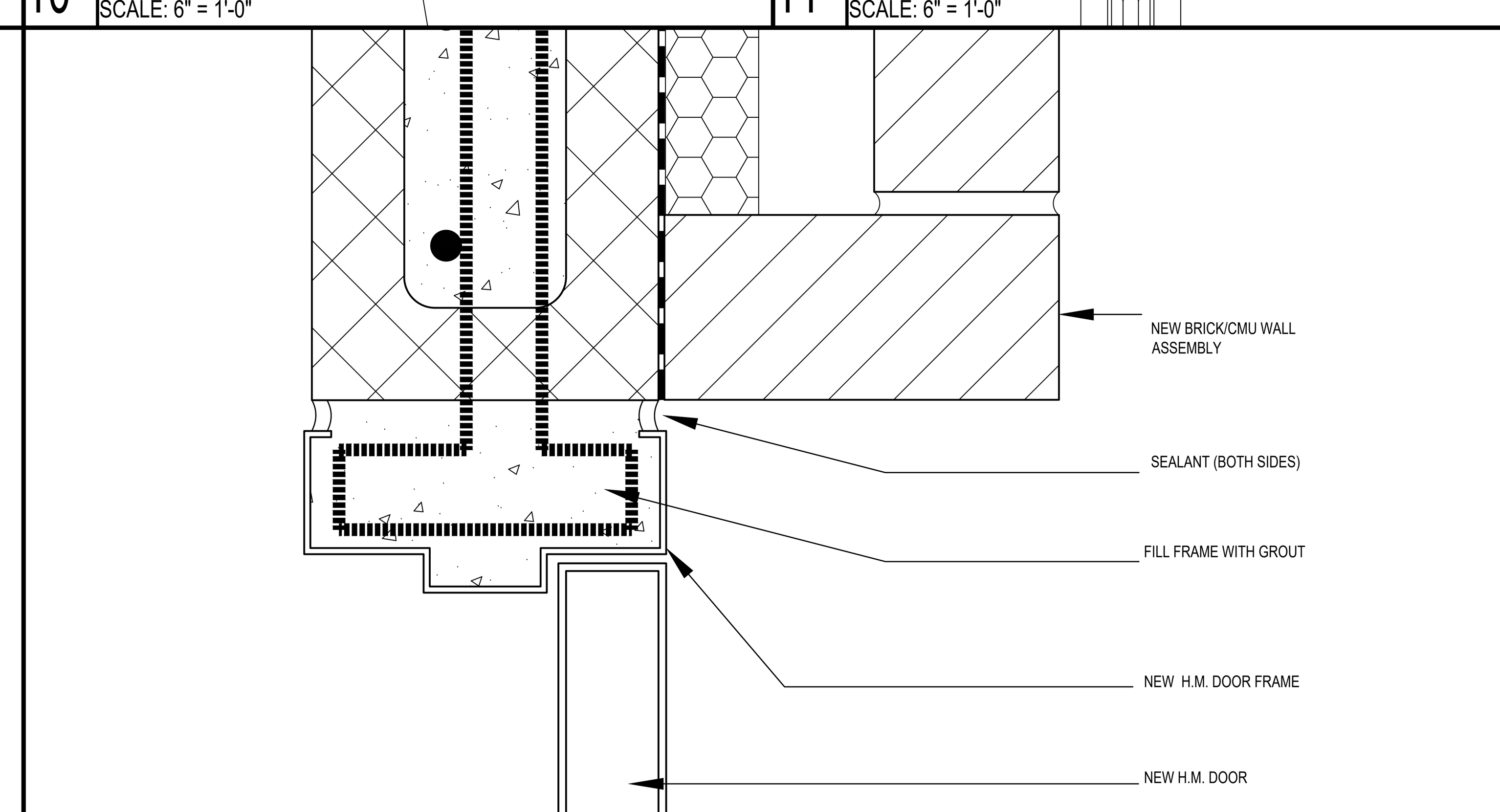


12 WINDOW MULLION
SCALE: 6" = 1'-0"

SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025) Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

03 PROJECT SCHEDULE



04 EXTERIOR DOOR HEAD JAMB
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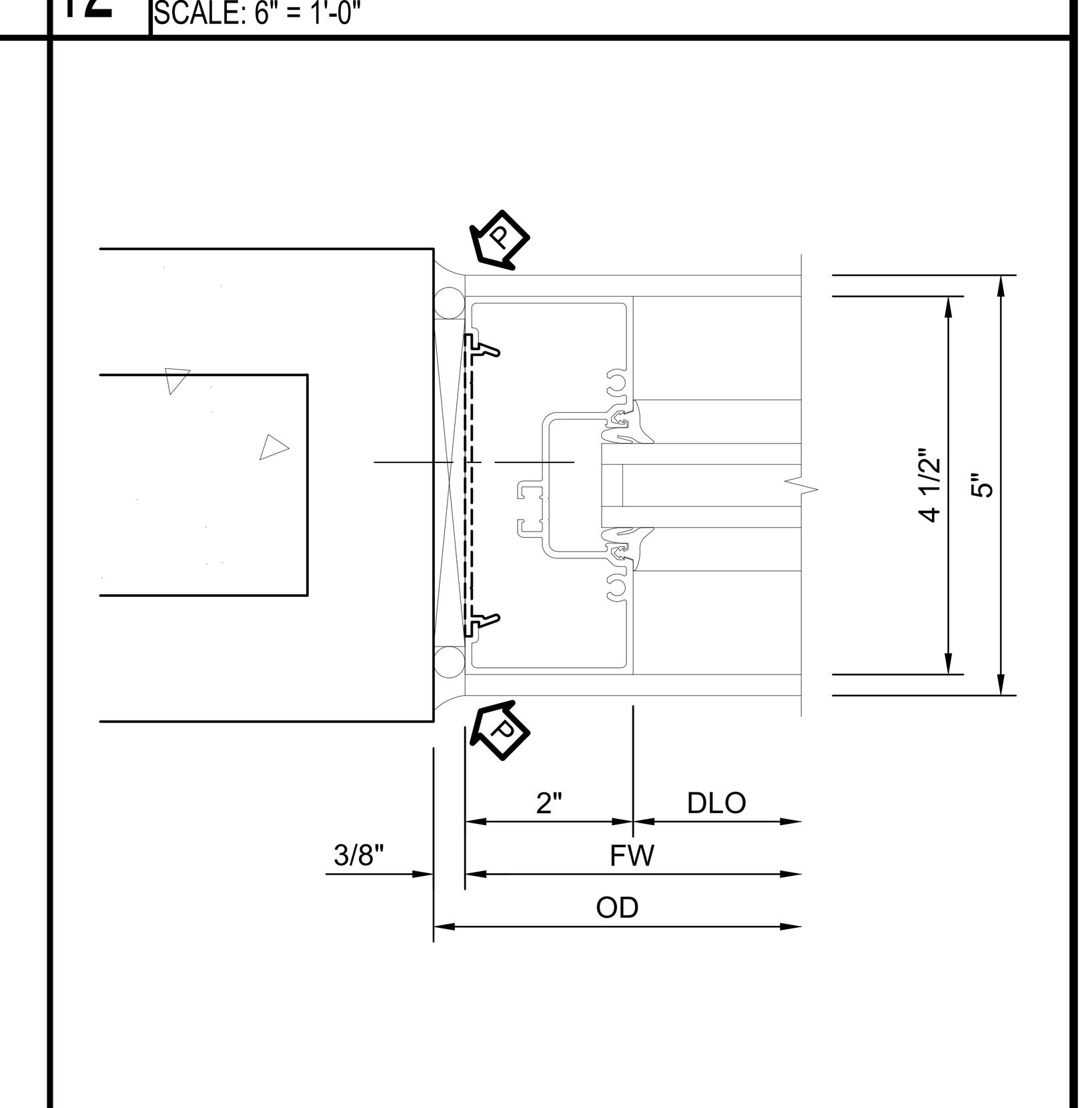

06 WINDOW JAMB
SCALE: 6" = 1'-0"_XREF

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05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL

REGISTERED ARCHITECT NOE ALMAGUER 22651 STATE OF TEXAS

7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
GENERAL NOTES AND ABBREVIATIONS

A00-01

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GENERAL DEMOLITION NOTES
(NOT ALL NOTES USED ON EACH SHEET)

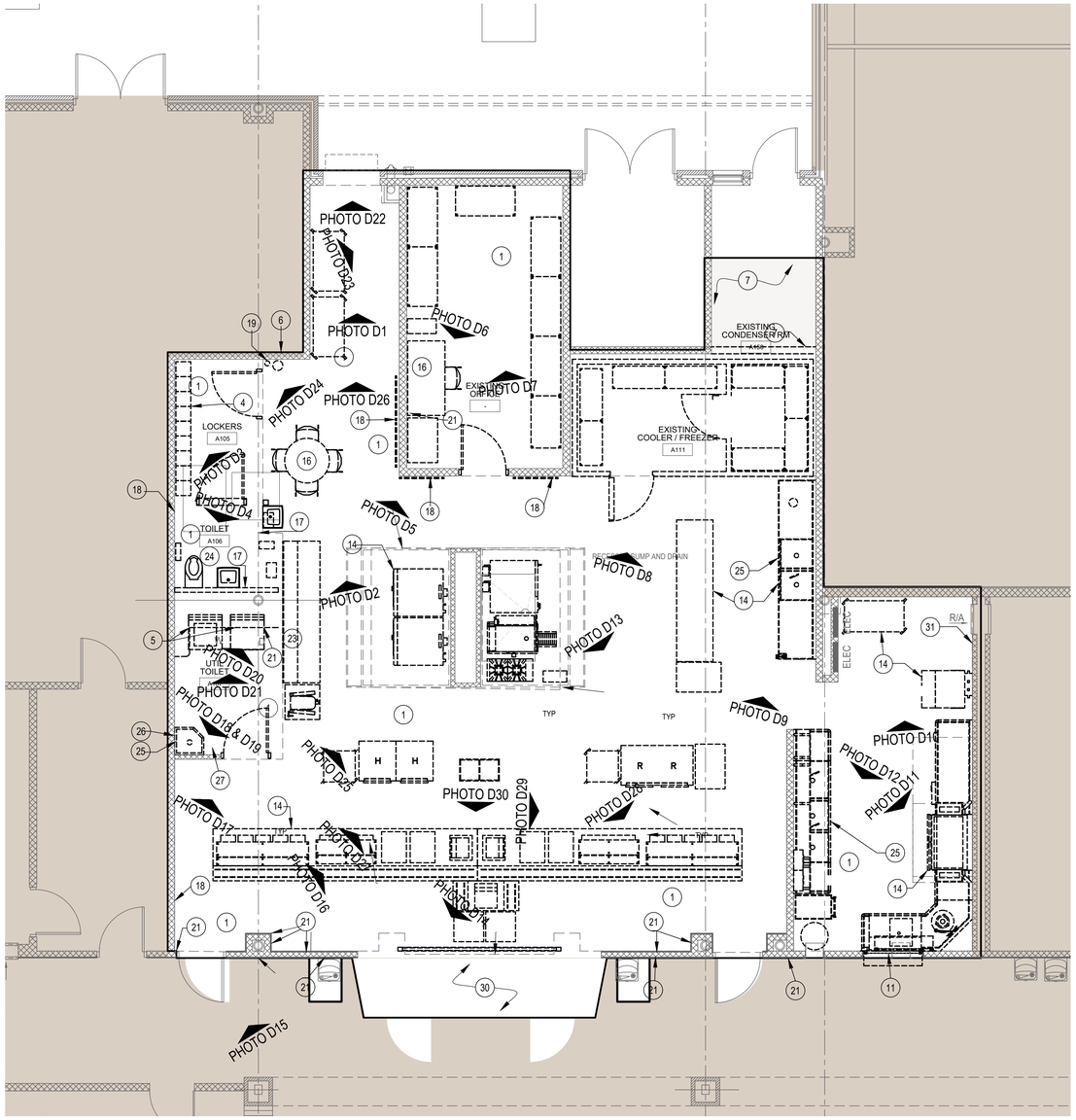
1. REFER TO SHEET A00-01 FOR DEMOLITION GENERAL NOTES. THESE NOTES APPLY TO ALL SCHOOL KITCHENS.
2. COORDINATE EXTENT OF SAW CUTTING AREAS WITH NEW RECESSED SLAB FOR COOLER/FREEZER LAYOUTS, NEW SERVICE ENTRANCE FLOOR AND EXISTING KITCHEN LAYOUTS THAT REMAIN. SEE STRUCTURAL DRAWINGS AND SLAB DIMENSION CONTROL PLANS FOR ADDITIONAL SCOPE.
3. REMOVE PROTECT AND REINSTALL ALL EXISTING SURFACE MOUNTED FIRE EXTINGUISHERS (TYPES ABC AND K) AT ALL KITCHENS.
4. SAWCUT AND RE-LOCATE EXPOSED CONDUITS AND WIREMOLD TO INSIDE OF WALLS. PATCH AND PAINT. EXCEPTION: WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS.
5. CONTRACTOR TO RELOCATE EXISTING KITCHEN EQUIPMENT AND OFFICE FURNITURE TO TEMPORARY KITCHEN LAYOUT AS REQUESTED BY KITCHEN MANAGER. ALSO THAT THE IT EQUIPMENT IS PROTECTED DURING RENOVATIONS. ALL EXISTING EQUIPMENT SHALL BE RETURNED TO OWNER.
6. EXISTING TACKBOARDS TO BE REMOVED BY OWNER.
7. IF PRESENT, EXISTING SAFE IN EACH KITCHEN TO BE TEMPORARILY REMOVED DURING RENOVATION AND REINSTALLED IN KITCHEN AREA.
8. ORIGIN POINT OF EXISTING CEILING GRID SHALL BE IDENTIFIED. NEW CEILING WILL BE INSTALLED (AS MUCH AS POSSIBLE) AT THE SAME ORIGIN POINT SO THAT SPRINKLER SYSTEM PIPING CAN REMAIN UNCHANGED.
9. ABOVE-CEILING INFRASTRUCTURE SHALL REMAIN UNDISTURBED AS MUCH AS IS POSSIBLE. CEILING DEVICES ARE TO BE REMOVED FROM EXISTING GRID/TILE THEN DURING RE-INSTALATION OF CEILING DEVICES SHALL BE LOCATED AS CLOSE TO ORIGINAL LOCATION AS POSSIBLE INTO THE NEW GRID/TILE. PROTECT AND STORE EXISTING INFRASTRUCTURE (CABLING, ELECTRICAL POWER, PIPING) DURING CONSTRUCTION.
10. EXISTING HOOD IN WAREWASH AND (2) HOODS IN PRODUCTION AREA ARE TO BE CLEANED, INSPECTED, SERVICED AND REFURBISHED TO A LIKE NEW CONDITION. THEY ARE TO REMAIN IN PLACE.

KEYED DEMOLITION NOTES
(NOT ALL NOTES USED ON EACH SHEET)

1. REMOVE EXISTING THINSET SYNTHETIC TERRAZZO FLOOR AND TERRAZZO COVE BASE MATERIAL IF ANY EXISTS THROUGHTOUT KITCHEN AREA. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOOR. RE: FINISH PLAN FOR NEW FLOOR FINISH MATERIAL.
2. REMOVE EXISTING QUARRY TILE FLOORING AND BASE. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOORING. RE: FINISH SCHEDULE FOR NEW FLOOR FINISH MATERIAL.
3. CEILING DEVICES: REMOVE SMOKE DETECTORS, STROBES, EXIT SIGNAGE, MOTION DETECTORS AND CEILING SPEAKERS. PROTECT AND RE-INSTALL AFTER FINISHES ARE APPLIED.
4. REMOVE EXISTING LOCKERS. PROTECT AND RE-INSTALL AFTER FINISHES APPLIED.
5. REMOVE EXISTING WASHER AND DRYER. VERIFY WITH FBISD FOR RELOCATION TO WAREHOUSE.
6. TEMPORARILY REMOVE EXISTING WALL MOUNTED CLOCK AND STORE FOR REINSTALLATION AFTER WALL RECEIVED NEW FINSH.
7. REMOVE EXISTING WALK-IN COOLER/FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT SPACE. MITIGATE ANY MOLD FOUND.
8. REMOVE EXISTING DOOR AND PROTECT EXISTING FRAME TO REMAIN
9. REMOVE EXISTING DOOR AND FRAME, PROTECT FRAME AND OR DOOR IF IT IS SCHEDULED TO REMAIN.
10. REMOVE PARTIAL EXISTING CMU PARTITION FOR NEW DOOR OPENING
11. INSPECT EXISTING WAREWASH COUNTER DOOR AND S.S. PASS-THRU WINDOW CHUTE. REPAIR REPLACE DAMAGED COMPONENTS. CLEAN, LUBRICATE AND RE-INSTALL.
12. EXISTING CARD READER ACCESS TO REMAIN
13. EXISTING WINDOW TO REMAIN
14. REMOVE EXISTING KITCHEN EQUIPMENT THROUGHOUT KITCHEN INCLUDING WALK-IN COOLER / FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT ROOM OR OUTSIDE OF THE BUILDING. VERIFY WITH OWNER FOR RELOCATION TO WAREHOUSE. SOME EQUIPMENT IS TO BE RE-USED IN TEMPORARY SERVING LINES. SEE ALSO GENERAL DEMOLITION NOTE 6.
15. REMOVE EXISTING FRP AND PREP FOR NEW TILE FINISH.
16. COORDINATE REMOVAL AND STORAGE OF ANY EXISTING FURNITURE ITEMS WITH OWNER . SEE ALSO GENERAL DEMOLITION NOTE 5.
17. REMOVE EXISTING SOAP AND PAPER TOWEL DISPENSER AND RETURN TO OWNER
18. EXISTING WALL MOUNTED ACCESSORIES SIGNS, DISPLAY BOARDS, AND MATS TO BE REMOVED BY FORT BEND ISD (VERIFY EQUIPMENT - IF ANY).
19. REMOVE EXISTING SURFACE MOUNTED FIRE EXTINGUISHER. RE-INSTALL AFTER NEW FINISH APPLIED.
20. REMOVE EXISTING ACOUSTIC CEILING TILE CEILNG SYSTEM AND LIGHT FIXTURES, HVAC DEVICES, SENSORS, ETC. THROUGHTOUT RENOVATED AREAS. PREP FOR NEW SUSPENDED CEILING. EXISTING SPRINKLE SYSTEM TO REMAIN AS-IS UNLESS ROOM CONFIGURATION HAS CHANGED IN NEW DESIGN. PROTECT RECESSED SPRINKLER HEADS AND - RE-INSTALL IN NEW CEILING.
21. REMOVE EXISTING CASEWORK/SHELVING
22. EXISTING CERAMIC WALL TILE TO REMAIN. PROTECT FROM DAMAAGE.
23. REMOVE EXISTING COAT HANGER / ROD / SHELF
24. REMOVE EXISTING PLUMBING FIXTURES IN RESTROOMS. RE: PLUMBING FOR NEW FIXTURES.
25. REMOVE EXISTING UTILITY SINK. RE: PLUMBING FOR NEW PLUMBING FIXTURES.
26. REMOVE EXISTING MOP HOLDER. REPLACE WITH NEW UNIT AS SPECIFIED.
27. REMOVE EXISTING WALL MOUNTED CLEANING SOLUTION DISPENSER (BY FBISD VENDOR)
28. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
29. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
30. REMOVE FLOORING IN THIS AREA FOR NOTE 1.
31. REMOVE CARTIDGE FILTER AND WATER PURTICATION CABNET

DEMOLITION LEGEND

- EXISTING PARTITION TO REMAIN
- REMOVE EXISTING PARTITION
- EXISTING CMU PARTITION
- REMOVE DOOR AND FRAME TO REMAIN
- REMOVE EXISTING DOOR AND FRAME
- EXISTING PLUMBING FIXTURES (WATER CLOSET, HAND LAVATORY, AND MOP SINK TO BE REMOVED. RE: PLUMBING DRAWINGS.
- EXISTING ACOUSTIC CEILING TILE AND GRID TO BE REMOVED. RE: ELECTRICAL DRAWINGS.
- SPRINKLER HEAD (RECESSED)
- CLOCK
- CEILING MOUNTED SPEAKERS



1 DEMOLITION FLOOR PLAN
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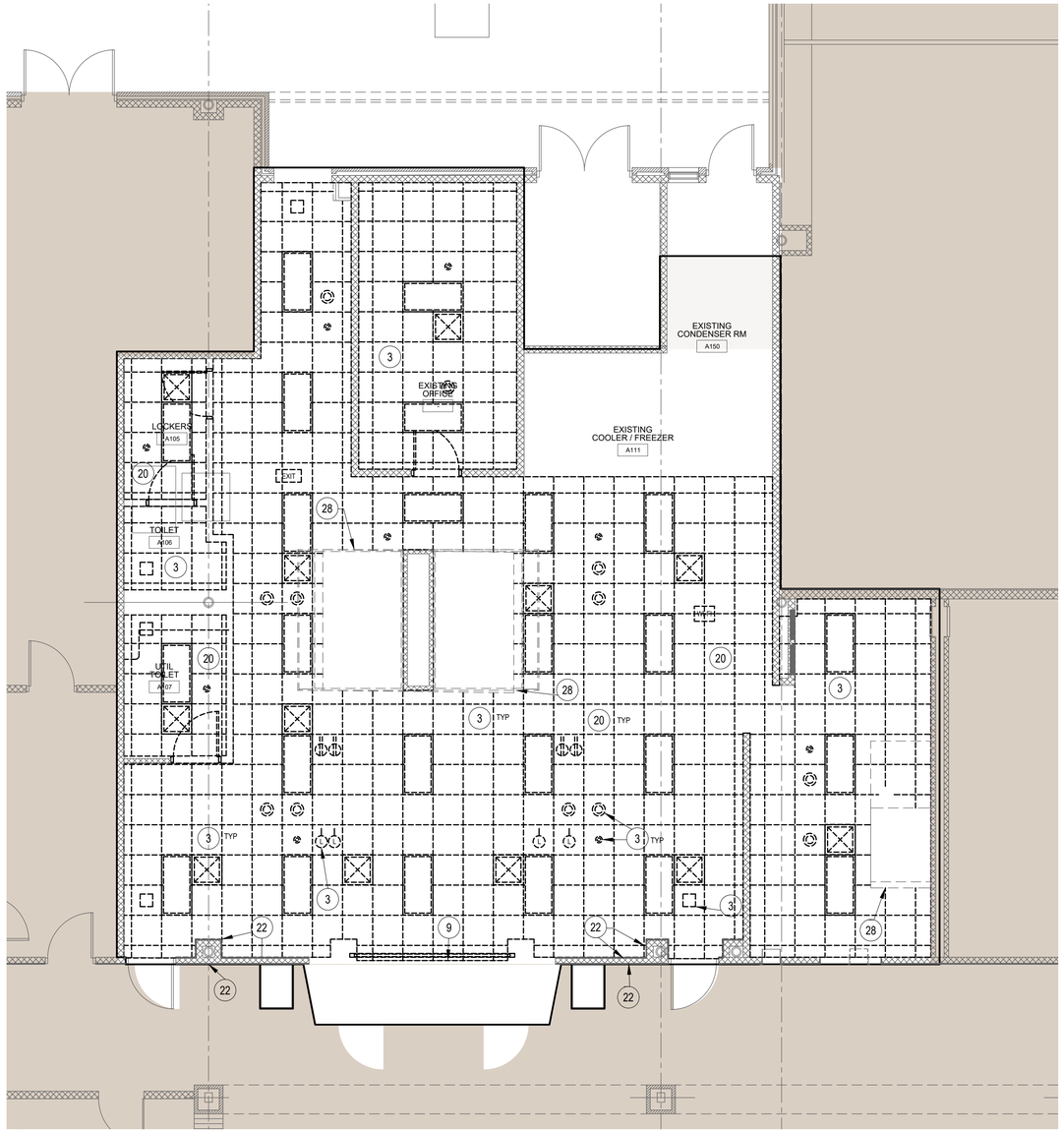

2 DEMOLITION REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

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FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
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SEAL
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STATE OF TEXAS
7/15/2025

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PROJ. NO.: 23-25
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DEMO PLANS

a-D.101



PHOTO D1

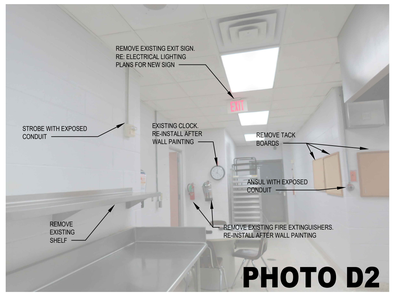

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PHOTO D3

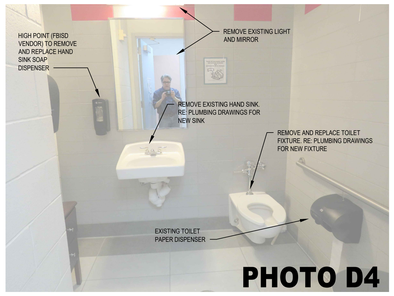

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PHOTO D5

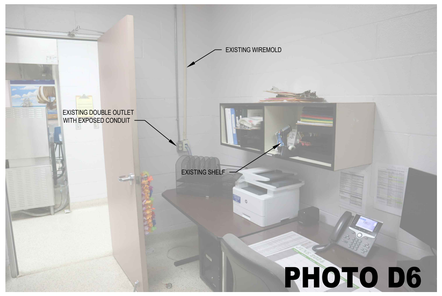

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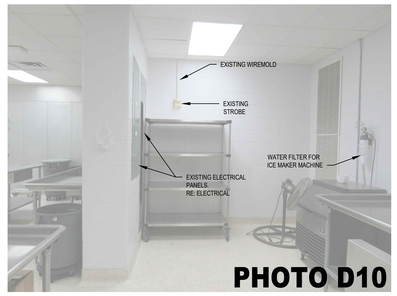
PHOTO D7



PHOTO D8



PHOTO D9



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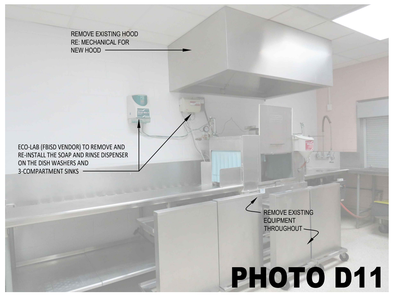

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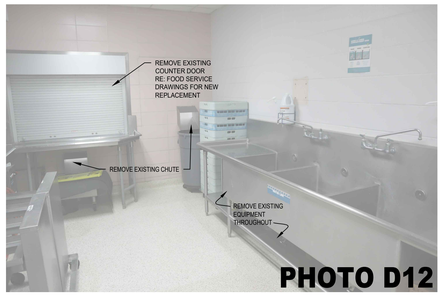

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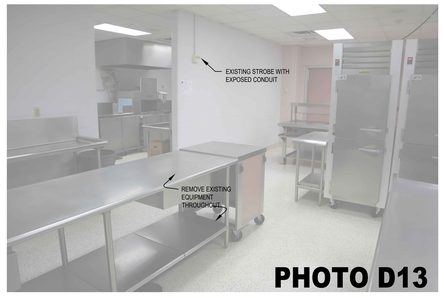

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PHOTO D15



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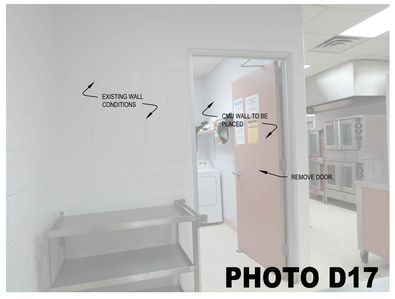

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PHOTO D18



PHOTO D19



PHOTO D20

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SEAL
REGISTERED ARCHITECT
ROBERT A. MAGNUSON
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
DEMO PLAN PHOTOS
a-D01-02

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\A-Austin Parkway ES\a-D01-02 DEMO PLAN PHOTOS.dwg Jul 23, 2025 - 3:51pm

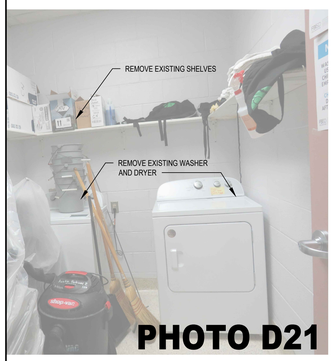
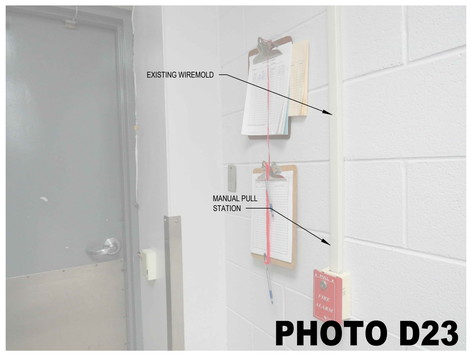


PHOTO D21



PHOTO D22



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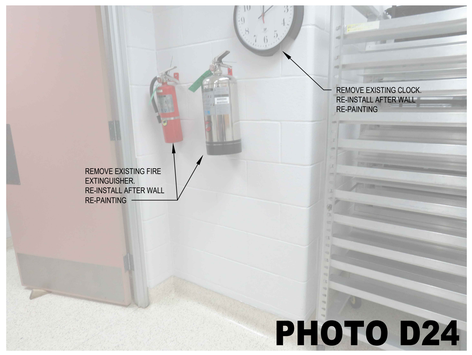

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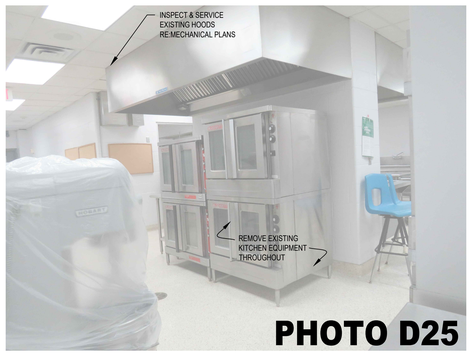

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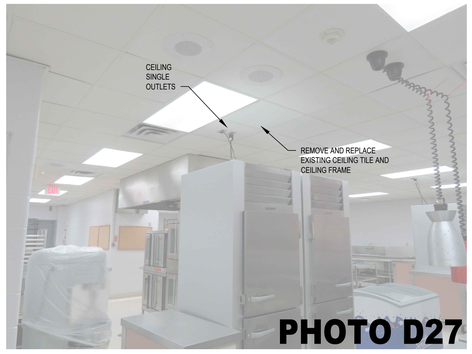

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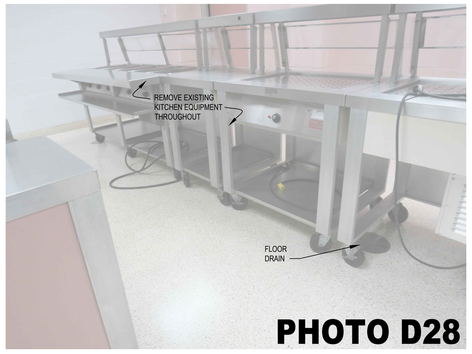

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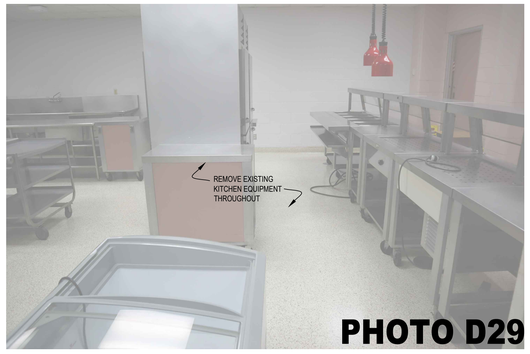

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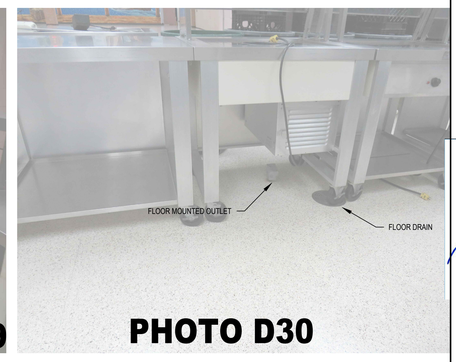

PHOTO D30

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

a

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT
#29651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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DEMO PLAN PHOTOS
a-D01-03

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NEW PANEL

TEMP KITCHEN

PANEL LTK

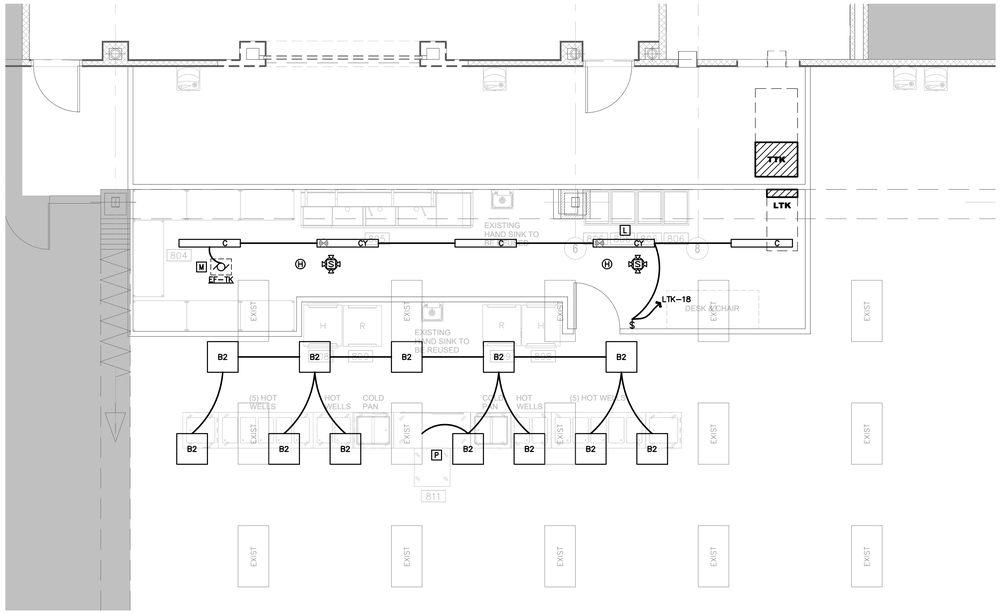
150A MCB
208Y/120V, 3ø, 4 WIRE

AVAILABLE FAULT: <10,000A
SCCR & AIC: 10,000A

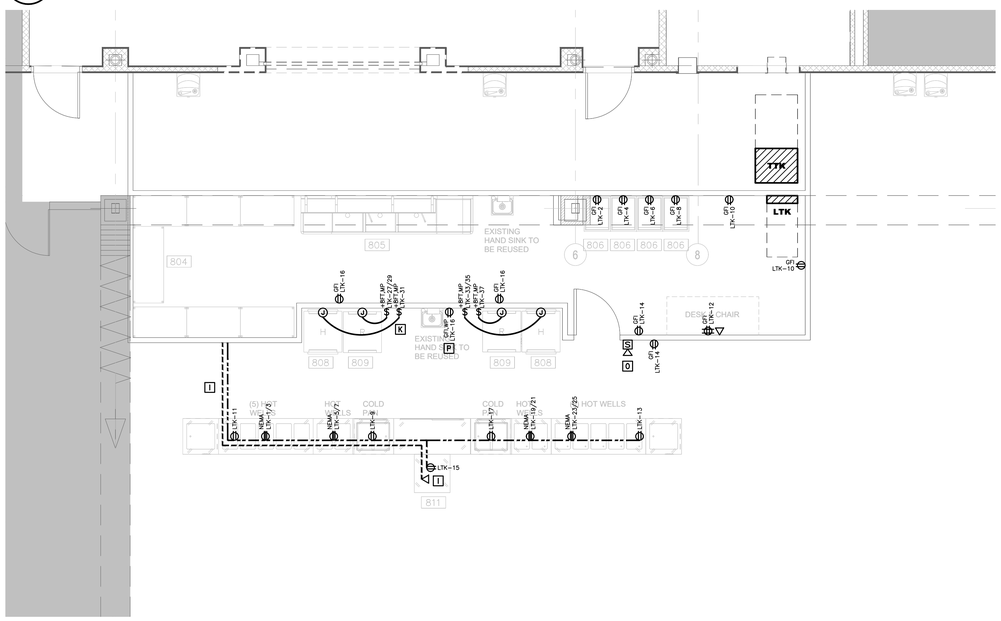
MOUNTING: SURFACE

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E810	2766	HOT WELLS	2–12	20/2GFI	1	■			2	20/1	3–12	TRANSPORT CART	1920	E806	
		–	–	+12G	–	3		■		4	20/1	3–12	TRANSPORT CART	1920	E806	
	E810A	1643	HOT WELLS	2–12	20/2GFI	5			■	6	20/1	3–12	TRANSPORT CART	1920	E806	
		–	–	+12G	–	7	■			8	20/1	3–12	TRANSPORT CART	1920	E806	
	E810B	600	COLD PAN	3–12	20/1GFI	9		■		10	20/1	3–12	2 REC	360	E800A	
	E810C	1200	BEVERAGE	3–12	20/1GFI	11			■	12	20/1	3–12	2 REC – DESK	360	E800B	
	E810C	1200	BEVERAGE	3–12	20/1GFI	13	■			14	20/1	3–12	2 REC	360	E800A	
	E811	180	CASH REGISTER	3–12	20/1GFI	15		■		16	20/1	3–12	3 REC	360	E800A	
	E810B	600	COLD PAN	3–12	20/1GFI	17			■	18	20/1	3–12	TEMP. KITCHEN LTS/FAN	566		
	E810A	1643	HOT WELLS	2–12	20/2GFI	19	■			20	20/1		SPARE			
		–	–	+12G	–	21		■		22	20/1		SPARE			
	E810	2766	HOT WELLS	2–12	20/2GFI	23			■	24	20/1		SPARE			
		–	–	+12G	–	25	■			26	20/1		SPARE			
	E808	1622	HEATED CABINET	2–12	20/2	27		■		28	20/1		SPARE			
		–	–	+12N+12G	–	29			■	30	20/1	3–12	EXISTING CIRCUIT	500		3
	E809	984	REFRIGERATOR	3–12	20/1	31	■			32	20/1	3–12	EXISTING CIRCUIT	500		3
	E808	1622	HEATED CABINET	2–12	20/2	33		■		34	15/2	2–12	EXISTING CIRCUIT	1000		3
		–	–	+12N+12G	–	35			■	36	–	+12N+12G	–	–		
	E809	984	REFRIGERATOR	3–12	20/1	37	■			38	20/2	2–12	EXISTING CIRCUIT	1000		3
			SPARE		20/1	39		■		40	–	+12N+12G	–	–		
			SPARE		20/1	41			■	42	50/2	2–8	EXISTING CIRCUIT	5000		3
			SPARE		20/1	43	■			44	–	+8N+10G	–	–		
TOTAL LOAD @ 100% = 35498VA						TOTAL LOAD @ 100% = 99A										

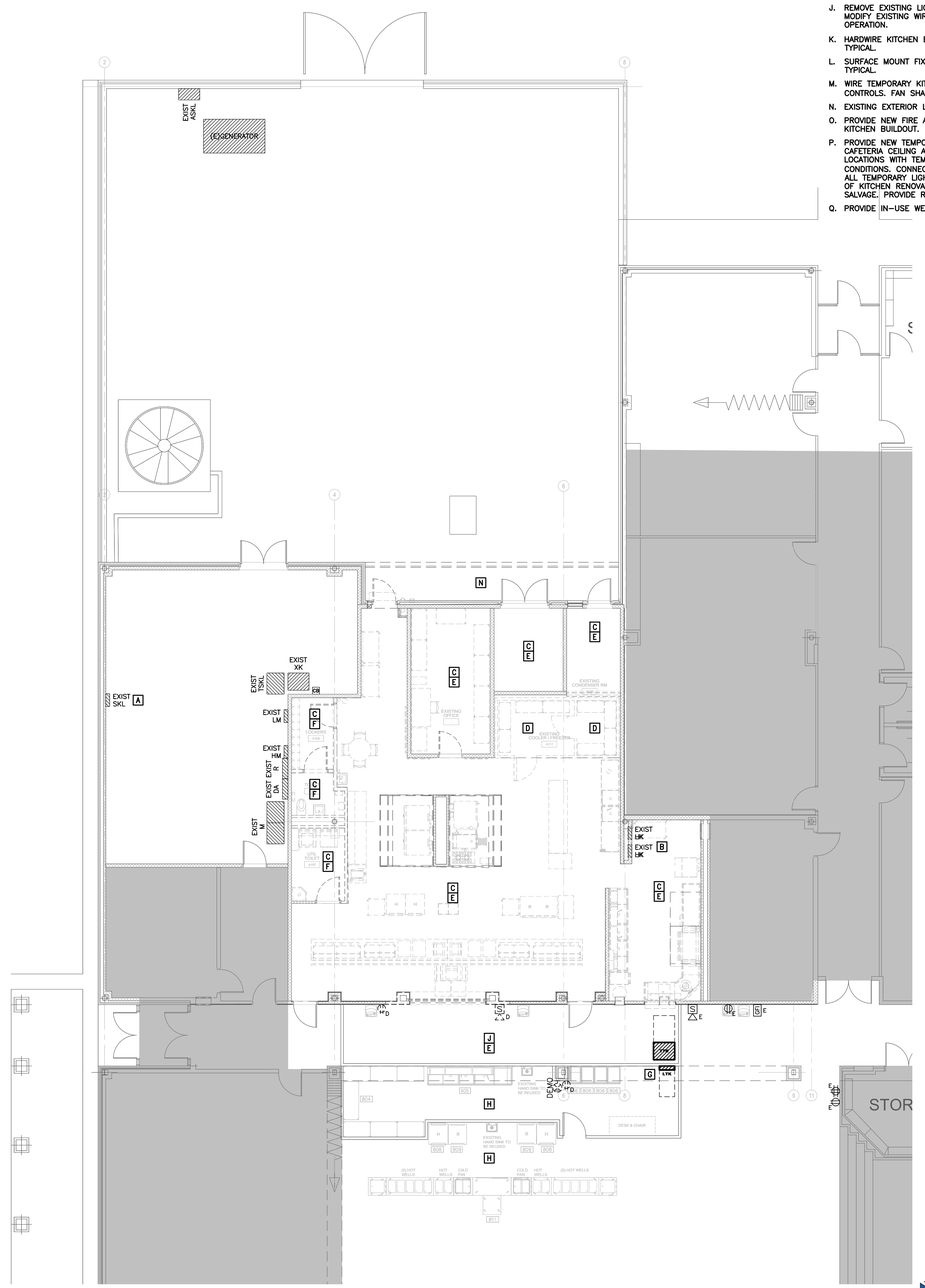
1. REF. KITCHEN CONSULTANT'S "FS" DRAWINGS FOR KITCHEN EQUIPMENT NUMBERS.
2. A DEMAND FACTOR PERCENT OF 65% HAS BEEN APPLIED TO THE KITCHEN EQUIPMENT LOAD PURSUANT TO NEC 220–20 AND NEC TABLE 220–20.
3. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.



T1 **TEMPORARY KITCHEN - LIGHTING PLAN**
SCALE: 1/4" = 1'– 0"



T2 **TEMPORARY KITCHEN - ELECTRICAL PLAN**
SCALE: 1/4" = 1'– 0"



1 **DEMOLITION FLOOR PLAN**
SCALE: 1/8" = 1'– 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

DEMOLITION NOTES:

A. EXISTING STANDBY GENERATOR PANEL TO REMAIN.

B. EXISTING KITCHEN PANELS TO BE REPLACED WITH NEW. MODIFY EXISTING WALLS TO MATCH NEW PANEL LAYOUTS AND DIMENSIONS.

C. EXISTING LIGHTING FIXTURES AND CEILING DEVICES TO BE REMOVED THROUGHOUT.

D. EXISTING WALK–IN COOLER/FREEZER AND ASSOCIATED EQUIPMENT TO BE REMOVED.

E. EXISTING WALL ELECTRICAL DEVICES TO BE REMOVED. EXISTING J–BOXES MAY BE REUSED WHERE NEW DEVICES ARE TO BE INSTALLED AT THE SAME LOCATIONS.

F. EXISTING ELECTRICAL DEVICES TO BE REMOVED.

G. NEW 208Y/120V PANEL AND TRANSFORMER FOR TEMPORARY KITCHEN TO BE INSTALLED PRIOR TO DEMOLITION. PANEL AND TRANSFORMER TO BE REMOVED AT END OF KITCHEN RENOVATION AND TURNED OVER TO THE DISTRICT. INSTALL TRANSFORMER ON PREMADE FIBERCRETE PAD AND WAFFLE TYPE VIBRATION ISOLATION PADS. DO NOT PROVIDE A POURED IN PLACE CONCRETE PAD AT THIS LOCATION.

H. PROVIDE RECEPTACLES AND LIGHT FIXTURES FOR TEMPORARY KITCHEN DURING RENOVATION. ALL TEMPORARY DEVICES AND EQUIPMENT TO BE REMOVED AT END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE.

I. CONDUITS ROUTED FROM TEMPORARY KITCHEN WALL AND BENEATH SERVING LINE. PROVIDE MULTICHANNEL ROLLOVER CABLE PROTECTOR FOR EXPOSED CONDUITS NOT UNDER THE SERVING LINE. ALL CONDUITS UNDER THE SERVING LINE SHALL BE SECURED TO/ROUTED ON TOP OF UNISTRUT AND NOT DIRECTLY ON THE FLOOR. DO NOT ANCHOR UNISTRUT TO THE EXISTING FLOORING. COORDINATE POWER AND DATA OUTLET LOCATIONS WITH OTHER TRADES.

J. REMOVE EXISTING LIGHT FIXTURES ABOVE NEW KITCHEN EXTENSION. MODIFY EXISTING WIRING TO MAINTAIN REMAINING FIXTURE OPERATION.

K. HARDWIRE KITCHEN EQUIPMENT TO LOCAL ON/OFF SWITCH. TYPICAL.

L. SURFACE MOUNT FIXTURES ON TEMPORARY KITCHEN CEILING. TYPICAL.

M. WIRE TEMPORARY KITCHEN FAN TO LOCAL LIGHTING CIRCUIT AND CONTROLS. FAN SHALL BE ON/OFF WITH LIGHTS.

N. EXISTING EXTERIOR LIGHT FIXTURES TO BE REMOVED.

O. PROVIDE NEW FIRE ALARM DEVICES AS PART OF THE TEMPORARY KITCHEN BUILDOUT.

P. PROVIDE NEW TEMPORARY LIGHT FIXTURES IN THE EXISTING CAFETERIA CEILING ABOVE THE SERVING LINE. COORDINATE LOCATIONS WITH TEMPORARY SERVING LINE AND EXISTING CONDITIONS. CONNECT TO EXISTING LIGHTING CONTROLS/CIRCUIT. ALL TEMPORARY LIGHT FIXTURES SHALL BE REMOVED AT THE END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE. PROVIDE REPLACEMENT CEILING TILES.

Q. PROVIDE IN–USE WEATHERPROOF COVER FOR RECEPTACLE.

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a

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL

STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED
PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL DEMO AND TEMP PLANS

a-ED.100

STANTON ENGINEERING GROUP
INFO@STANTON–ENGR.COM (713) 300–6080

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1300 W. SAM HOUSTON PARKWAY N., SUITE 125, HOUSTON, TX 77043

DEMOLITION KEYED NOTES

D1 EXISTING CLEAN OUT SHALL BE REPLACED WITH NEW. CHIP OUT SLAB AROUND CLEANOUT TO REMOVE.

D2 EXISTING FLOOR DRAIN SHALL BE REPLACED WITH NEW, INCLUDING P-TRAP. CHIP OUT SLAB AROUND DRAIN TO REMOVE FLOOR DRAIN AND EXISTING P-TRAP.

D3 CUT AND CAP EXISTING HW/CW FOR FUTURE EXTENSION. DEMOLISH ALL PIPING WITHIN KITCHEN. DEMOLITION SHALL BE DELAYED UNTIL NEW CW MAIN AND HW PIPING LOOP IS INSTALLED IN PARALLEL. CW/HW SERVICE TO THE TEMPORARY KITCHEN SHALL BE UNINTERRUPTED DURING OCCUPIED HOURS. COORDINATE SWITCHOVER FROM EXISTING PIPING TO NEW WITH OCCUPANCY SCHEDULE.

D4 EXISTING FLOOR DRAIN TIED TO GREASE WASTE SYSTEM. DRAIN IS BEING USED FOR TEMPORARY KITCHEN INDIRECT WASTE AND SHALL REMAIN ACTIVE DURING OCCUPIED HOURS. COORDINATE DEMOLITION AND REPLACEMENT WITH TEMPORARY KITCHEN USAGE.

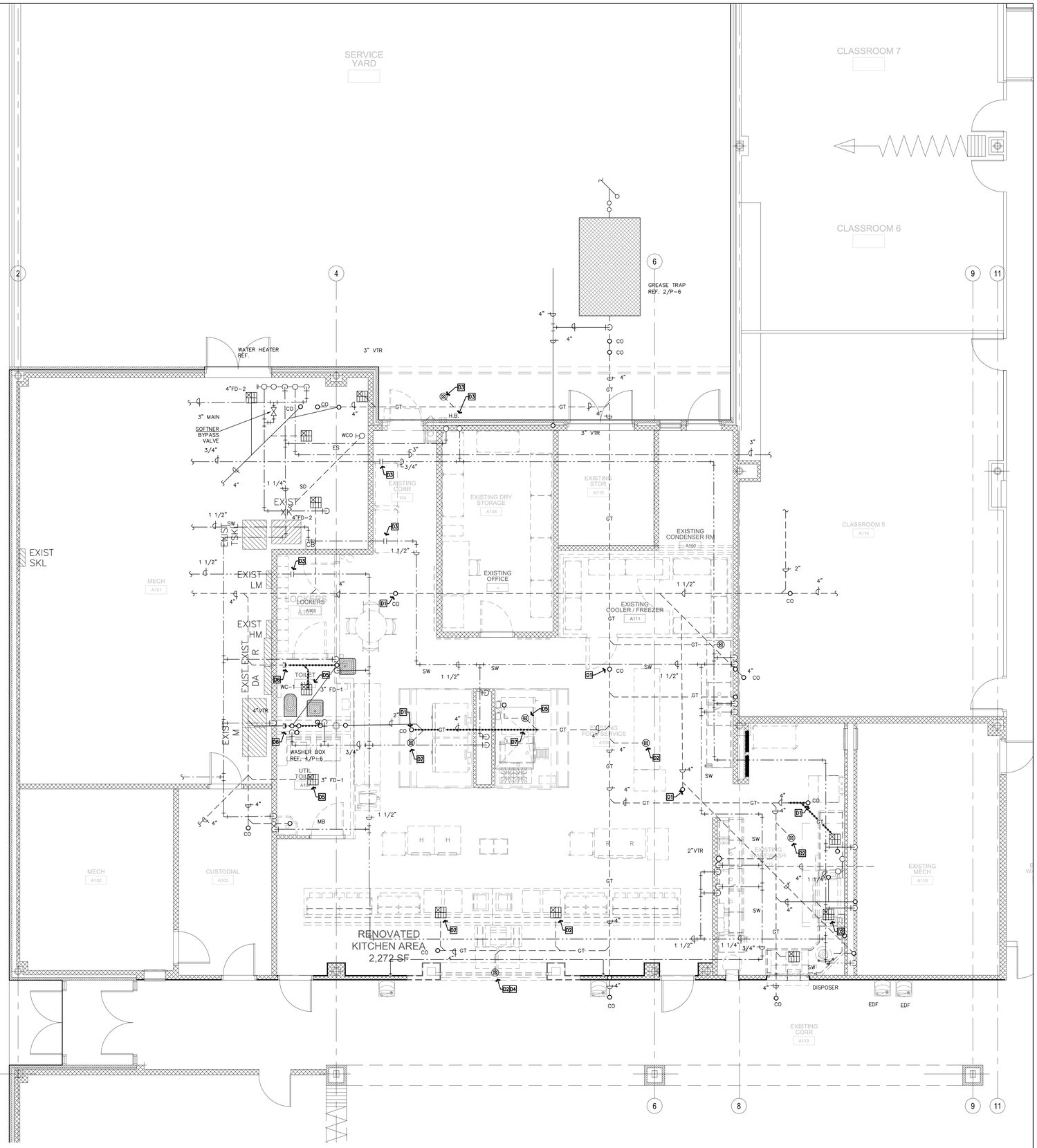
D5 DEMOLISH EXISTING DRAIN A CAP BELOW SLAB.

D6 EXISTING SPACE BEING DEMOLISHED. CAP EXISTING SANITARY MAIN BELOW SLAB AND REMOVE UPSTREAM PIPING. CUT/CHIP OUT SLAB AS REQUIRED AND REPAIR TO MATCH EXISTING.

D7 TEMPORARILY CAP EXISTING SANITARY MAIN BELOW SLAB AND REMOVE UPSTREAM PIPING. CUT/CHIP OUT SLAB AS REQUIRED AND REPAIR TO MATCH EXISTING. PIPING TO BE REPLACED WITH NEW TRUNK AND ADDITIONAL DRAIN BRANCH LINES.

D8 EXISTING CANWASH DRAIN TO REMAIN.

D9 EXISTING CANWASH FAUCET TO REMAIN, ALONG WITH CW CONNECTION FROM ADJACENT MECHANICAL ROOM. DISCONNECT HW IN CEILING PLENUM FOR RECONNECTION TO NEW PIPING LOOP.



1 PLUMBING DEMOLITION FLOOR PLAN

SCALE: 1/4" = 1'- 0"

ISSUE:

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a

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FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL

STATE OF TEXAS
TYLER W. HERRING
106052
LICENSED PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

PLUMBING DEMOLITION FLOOR PLAN

a-PD1.01

STANTON ENGINEERING GROUP
INFO@STANTON-ENG.COM (713) 300-4080

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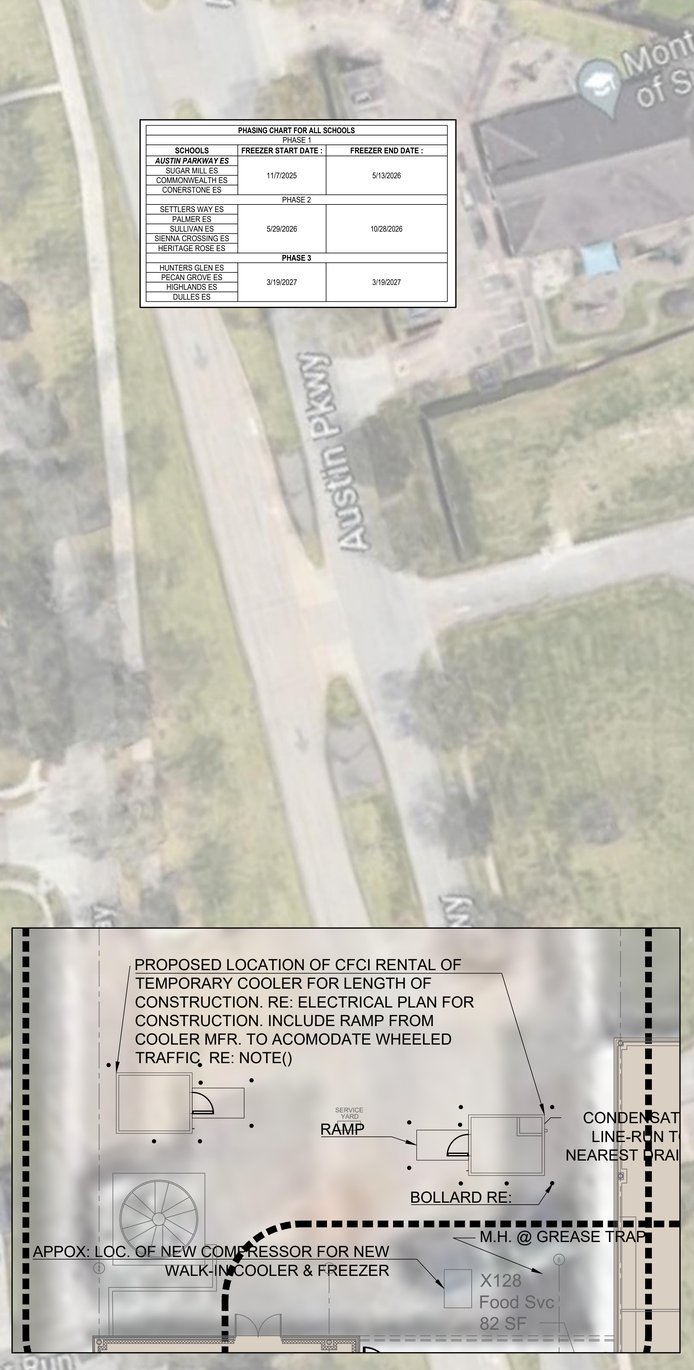
1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

PHASING CHART FOR ALL SCHOOLS		
PHASE 1		
SCHOOLS	**FREEZER START DATE :**	**FREEZER END DATE :**
AUSTIN PARKWAY ES	11/7/2025	5/13/2026
SUGAR MILL ES		
COMMONWEALTH ES		
CONERSTONE ES		
PHASE 2		
SETTLERS WAY ES	5/29/2026	10/28/2026
PALMER ES		
SULLIVAN ES		
SIENNA CROSSING ES		
HERITAGE ROSE ES		
PHASE 3		
HUNTERS GLEN ES	3/19/2027	3/19/2027
PECAN GROVE ES		
HIGHLANDS ES		
DULLES ES		

REFER TO SHEET A-A.201 FOR CODE ANALYSIS

2/a-A.101

1/a-A.301 FLOOR PLAN
1/a-D.101 DEMOLITION PLAN



1 SITE PLAN
SCALE: 1" = 30'-0"

SITE PLAN IS ISSUED FOR INFORMATION ONLY. NO WORK IS SHOWN ON THIS PLAN.

ISSUE:

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FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT
ROY A. WILLIAMS
23451
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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SITE PLAN

a-A.101

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ADOPTED CODES W/ AMENDMENTS OF

CITY OF SUGAR LAND, TX

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL RESIDENTIAL CODE
- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2023 NATIONAL ELECTRIC CODE NFPA 70
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2021 INTERNATIONAL FUEL GAS CODE
- 2021 INTERNATIONAL FIRE CODE

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY E:

NON SPRINKLED

INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS **A**

CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS **B**

ROOMS AND ENCLOSED SPACES **C**

FLOORING SHALL BE CLASS II

2021 INTERNATIONAL EXISTING BUILDING CODE

301.3.1 PRESCRIPTIVE COMPLIANCE METHOD. REPAIRS, ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH CHAPTER FIVE OF THIS CODE IN BUILDINGS COMPLYING WITH THE INTERNATIONAL FIRE CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

302.3 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE .

302.4 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED THAT NO UNSAFE CONDITION IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT PERMIT THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

ALTERATION - LEVEL 1 INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES THAT SERVE THE SAME PURPOSE.

ALTERATION - LEVEL 2 INCLUDE THE ADDITION OR ELIMINATION OF ANY DOOR OR WINDOW, THE RECONFIGURATION OR EXTENSION OF ANY SYSTEM, OR THE INSTALLATION OF ANY ADDITIONAL EQUIPMENT, AND SHALL APPLY WHERE THE WORK IS EQUAL TO OR LESS THAN 50% OF THE BUILDING AREA.

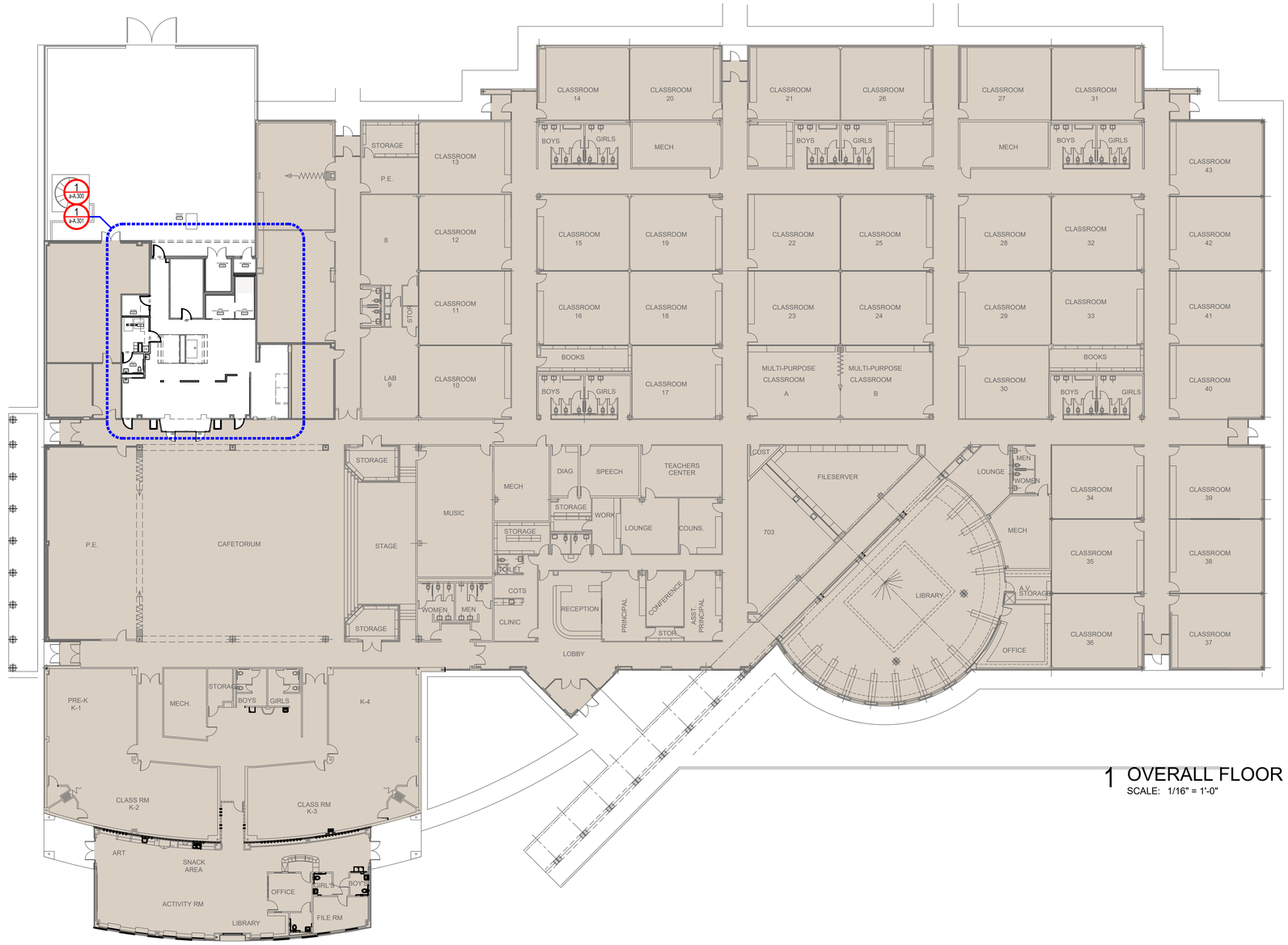
FIRE RESISTIVE RATINGS

EXTERIOR NON-LOAD BEARING WALLS	NON-COMBUSTIBLE
STRUCTURAL FRAME:	
COLUMNS	2 HOURS (W6x16 MIN SIZE UL#X722) (4"ø PIPE UL#X751)
BEAMS	1 HOUR (W6x16 MIN SIZE UL#P901)
ROOF/CEILING ASSEMBLYS	1 HOURS
TYPICAL	UL# P255
CLERESTORY	UL# P255
CAFETORIUM	UL# P255
MECHANICAL ROOM	UL# P255
PERMANENT PARTITIONS	
EXIT/ACCESS CORRIDOR	1 HOUR UL#U427
OCCUPANCY SEPERATION CMU WALLS	2 HOURS UL#U906

RESPONSIBILITY MATRIX

ITEM				CONTRACTOR RESPONSIBLITY		OWNER RESPONSIBILITY		NOTES
EQUIPMENT	**MAKE**	**MODEL**	**BASIS OF DESIGN**	FURNISHED	INSTALL	FURNISHED	INSTALL	
MARKERBOARD			MUST BE MAGNETIC, LOW GLOS, WHITE, NO GREY ALLOWED, 5' X 10'	X	X			
MOTORIZED FOLDING PARTITION			TOP SUPPORTED AND CONTINUOUSLY HINGED, MADE OF 3" THICK STEEL WITH FULL SOUND SEALS. THEY FEATURE AUTOMATIC FLOOR SEALS THAT DEPLOY WHEN POSITIONED. MARKERBOARD FINISHES ARE SUGGESTED FOR CLASSROOM USE. LARGE PARTITIONS SHOULD BE ELECTRONICALLY OPERATED, INTEGRATED WITH THE SCHOOL SYSTEM, AND SUPPORTED FROM THE BOTTOM IN A RECESSED MANNER.	X	X			
PAPER TOWEL DISPENSER			1 PAPER TOWEL DISPENSER PER SINK			X	X	
SOAP DISPENSER			1 SOAP DISPENSER PER SINK			X	X	
COMMERCIAL WASHER	GE	GTW790CPLDG	STAINLESS STEEL, ASTM A666, TYPE 304 WITH NUMBER 4 FINISH. ELECTRIC, 480 VOLTS, 40 LB CAPACITY, MINIMUM EXTRACTOR FORCE 140 G FACTOR.	X	X			
COMMERCIAL DRYER	GE	GTD75ECPLDG	HEAVY DUTY EMBOSSED STEEL WITH ELECTROSTATICALLY APPLIED BACKED ENAMEL FINISH.	X	X			
MOP RACK			BROOM AND MOP HANGGERS FOR A MINIMUM OF TWELVE (12) HANGERS TO BE PROVIDED IN THE CONTRACT	X	X			
KITCHEN MENU SYSTEM DEVICE			RE: J-QF1.0 SF EQUIPMENT PLAN	X	X			REFERED TO IT DRAWINGS
LOCKERS			12"W X 15"D, 2 TIER, 60" HIGH. 16 GA. DOOR WITH 20GA. BODY	X	X			
MIRROR			TOP EDGE 74 INCHES (1880 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND & BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES (1015 MM) MAXIMUM	X	X			
GRAB BARS			AS REQUIRED BY ADA	X	X			
HOOKS			J-HOOKS	X	X			
TIME CLOCK	KRONOS		EXISTING UNIT		X			COORDINATE HEIGHT, DATA, POWER AND ROUGH-IN REQUIREMENTS WITH FBISD IT. REMOVE, PROTECT & REINSTALL EXISTITING TIME CLOCK.
KITCHEN OFFICE FURNITURE								
AUSTIN PARKWAY ES						X	X	
PECAN GROVE ES						X	X	
SETTLERS WAY ES						X	X	
SUGAR MILL ES						X	X	
HIGHLANDS ES						X	X	
PALMER ES						X	X	
HUNTERS GLEN ES						X	X	

2 CODE ANALYSIS



1 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

01
Main Bldg
81,730 SF

1st
80,437 SF

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

a

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT
ROBERT A. MEYER
22651
STATE OF TEXAS
7/15/2025

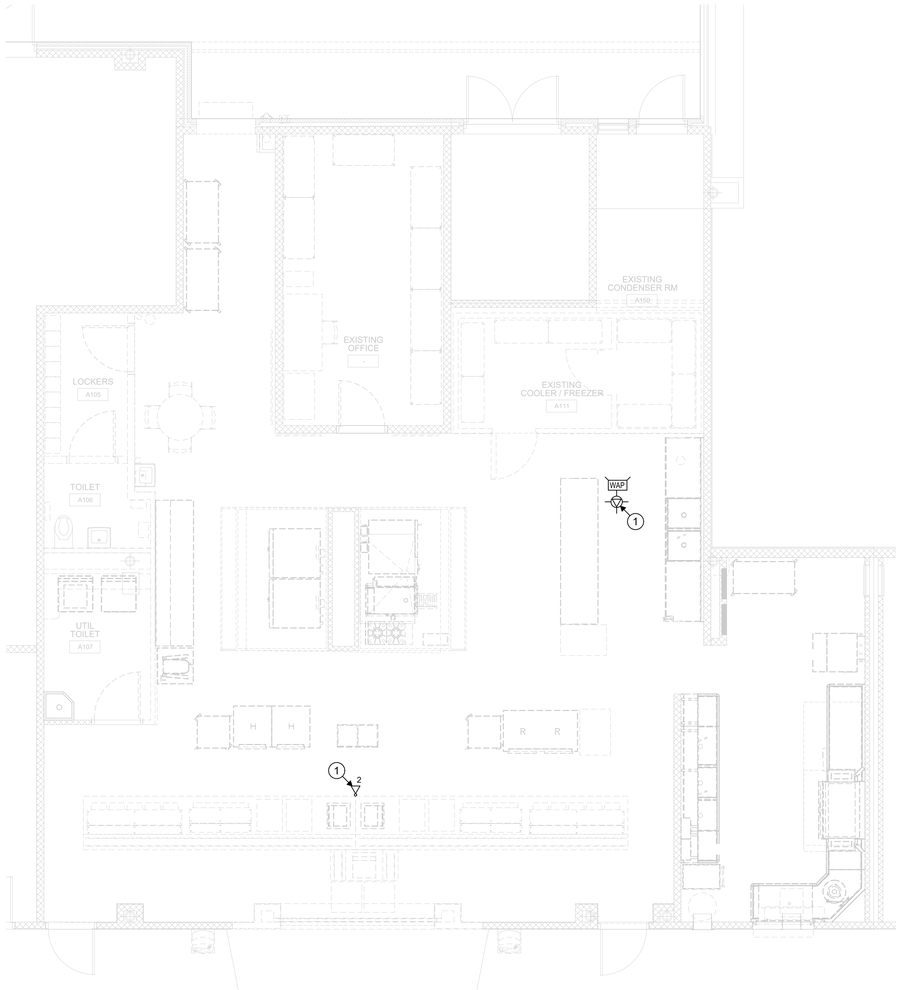
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

OVERALL FLOOR PLAN

a-A.201

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\A-Austin Parkway ES\a-A.201 FLOOR PLAN.dwg Jul 23, 2025 - 3:52pm



1 TECHNOLOGY DEMOLITION FLOOR PLAN
a-TD201 1/4" = 1'-0"

TECHNOLOGY DEMOLITION PLAN GENERAL NOTES

1. ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS SHALL REMAIN OPERATIONAL AT ALL TIMES DURING BUSINESS HOURS UNLESS OTHERWISE NOTED. ANY SYSTEM DOWNTIME SHALL BE SCHEDULED WITH THE ARCHITECT/ENGINEER AND OWNER AT LEAST TEN (10) WORKING DAYS IN ADVANCE. CONTRACTOR SHALL DEVELOP A PHASING PLAN AND SCHEDULE OF ANY REQUIRED SYSTEM DOWNTIME FOR REVIEW AND APPROVAL BY THE ARCHITECT/ENGINEER AND OWNER PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. OWNER SHALL BE RESPONSIBLE FOR POWER DOWN AND START-UP OF ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT/ENGINEER AND OWNER AND PROVIDE A MINIMUM OF TEN (10) WORKING DAYS NOTICE FOR SCHEDULING OF ANY REQUIRED DOWNTIME.
3. ALL EXISTING WIRELESS ACCESS POINTS ARE TO BE REMOVED AND RETURNED TO OWNER. CONTRACTOR SHALL RE-INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.
4. COORDINATE REMOVAL OF EXISTING CAMERA WITH OWNER/ARCHITECT DURING CONSTRUCTION.

TECHNOLOGY DEMOLITION PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

(1) EXISTING DATA/VOICE/WIRELESS ACCESS POINT OUTLET TO BE REMOVED. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL 4-PAIR CABLES AND WORKSTATION CONNECTING HARDWARE TERMINATED AT THIS LOCATION. IF LOCATION IS NOT RE-USED, CONTRACTOR SHALL SUPPLY AND INSTALL BLANK COVER. CONTRACTOR IS TO REMOVE EACH CABLE TO BE DEMOLISHED FROM THE PATCH PANEL OR TERMINATION BLOCK IN THE TELECOMMUNICATIONS ROOM. REMOVE THE ENTIRE LENGTH OF THE CABLE AND THE CORRESPONDING MODULAR CONNECTOR, FACEPLATE AND ACCESSORIES. NO ABANDONED CABLING IS TO BE LEFT ABOVE CEILING. CONTRACTOR SHALL INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.

(2) EXISTING VIDEO SURVEILLANCE CAMERA. CONTRACTOR SHALL REMOVE AND RETURN TO OWNER.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 564070
EXPIRES 12-31-25
RCDD

07/18/2025

MWA ARCHITECTS

ARCHITECTS
AND PLANNING
CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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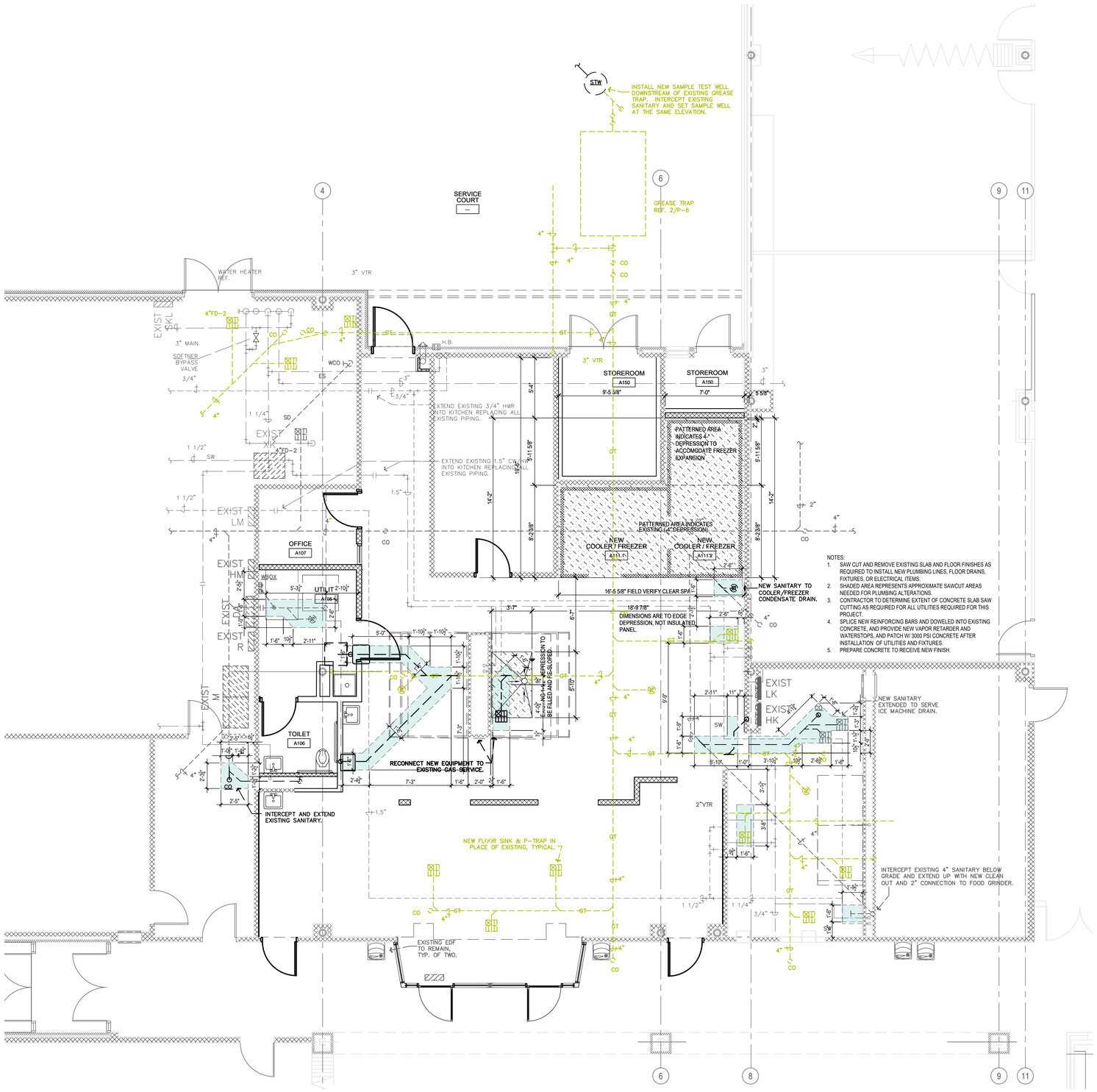
TECHNOLOGY DEMOLITION FLOOR PLAN

SHEET NO.
a-TD201



1 SLAB DEPRESSION PLAN
SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL
7/15/2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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SLAB DIMENSION CONTROL PLAN
a-A.300

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FLOOR PLAN - GENERAL NOTES

1. REFER TO SHEET FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SCHOOL KITCHENS.
2. REFER TO SHEET FOR PARTITION TYPES.
3. EXIXSTING EXPOSED CONDUITS AND DATA CABLING IN WIREMOLD TO BE ROUTED INSIDE WALLS (EXCEPT AT WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS). PATCH AND REPAIR AS REQUIRED TO ACHIEVE SMOOTH CLEAN WALL SURFACE.

PARTITION LEGEND

- EXISTING CMU PARTITION
- NEW CMU SCHEDULED PARTITION
- EXISTING METAL PARTITION
- NEW FRAMED SCHEDULED PARTITION

REFER TO SHEET FOR PARTITION TYPES

FLOOR PLAN - KEYED NOTES

(NOT ALL NOTES USED ON EACH SHEET)

01 PROVIDE NEW MOP SINK UTILITY SHELF
RE: PLUMBING FOR MOP SINK
RE: SPEC 10 28 00 FOR UTILITY SHELF

02 REMOVE, STORE & REPLACE WALL MOUNTED FIRE EXTINGUISHER

03 PROVIDE NEW WALL MOUNTED FIRE EXTINGUISHER
RE: SPEC SECTIONS 10 44 13

04 PROVIDE NEW LOCKERS
RE: SPEC 10 51 13.

05 PROVIDE WASHER AND DRYER
RE: SPEC 11 45 20

06 REMOVE, PROTECT & REINSTALL WALL MOUNTED CLOCK.

07 PROVIDE CONDENSING UNIT
FOR WALK-IN COOLER/FREEZER
RE: MECHANICAL AND SPEC 11 40 00

08 PROVIDE POWER AND DATA FOR MENU BOARD.
RE: ELECTRICAL, TECHNOLOGY DRAWINGS & FOOD SERVICE.

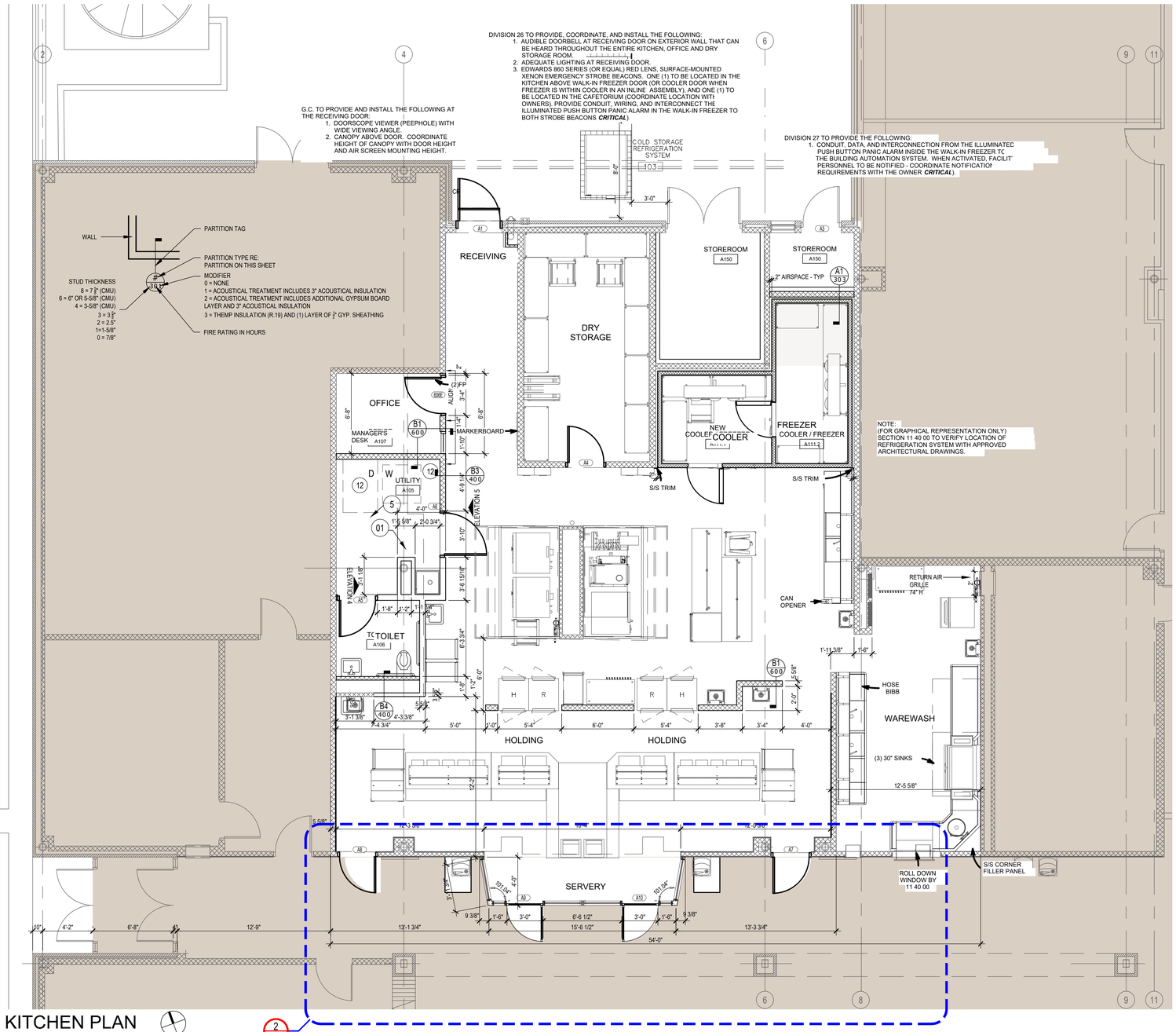
09 PROVIDE P-LAM SHELVING
REFER TO DETAIL FOR BRACKET SUPPORT

10 FURNITURE & NON FOOD SVE EQUIPMENT RETURN TO OWNER FOR STORAGE

11 INSPECT & SREVICE TOLLING COUNTER DOORS. RETURN TO LIKE NEW CONDITION.

12 COMMERCIAL CLOSED WASHER 40LB CAPACITY.
COMMERCIAL CLOSED DRYER 55LB CAPACITY.
BASIS OF DESIGN: WASHER; SPEED QUEEN SYN040
DRYER; SPEED QUEEN ST055.
REFER TO ELECTRICAL & PLUMBING FOR CONNECTIONS.

3 FLOOR PLAN NOTES



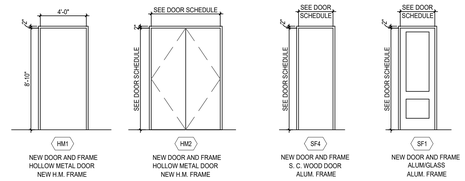
1 KITCHEN PLAN

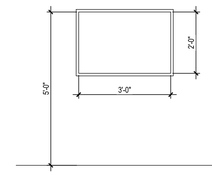
SCALE: 1/4"=1'-0"

2 DOOR SCHEDULE

DOOR SCHEDULE

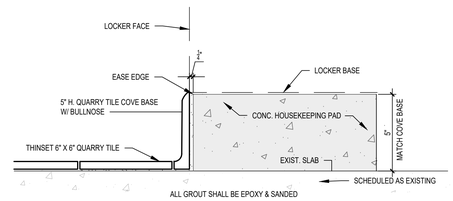
DOOR #	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FIRE RATING	FRAME THICKNESS	FRAME FINISH	KEY	HARDWARE	DETAILS SILL	DETAILS JAMB	DETAILS HEAD	REMARKS
A1	3'-0"	X 7'-0"	EXIST	EXIST	EXIST	EXIST	EXIST	EXIST		EX715V	EXIST	EXIST	EXIST	
A3	3'-0"	X 7'-0"	HM1	H.M.	H.M.	NR		H.M.		205	21/A00-01	04/A00-01	04/A00-01	
A4	3'-0"	X 7'-0"	SF4	S.C. WOOD	PLAM	NR		NAT. ANOD.		503S		22/A00-01	16/A00-01	
A5	3'-0"	X 7'-0"	SF4	S.C. WOOD	PLAM	NR		NAT. ANOD.		341		22/A00-01	16/A00-01	
A6	3'-0"	X 7'-0"	SF4	S.C. WOOD	PLAM	NR		NAT. ANOD.		501		22/A00-01	16/A00-01	
A7	3'-0"	X 7'-0"	SF4	S.C. WOOD	PLAM	NR		NAT. ANOD.		501H		22/A00-01	16/A00-01	
A8	3'-0"	X 7'-0"	SF4	S.C. WOOD	PLAM	NR		NAT. ANOD.		501H		22/A00-01	16/A00-01	
606E	3'-0"	X 7'-0"	SF4	S.C. WOOD	PLAM	NR		NAT. ANOD.		103		22/A00-01	16/A00-01	
A9	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ALUM/GLASS	NR		NAT. ANOD.		501AH	18/A00-01	10&11/A00-01	23&24/A00-01	
A10	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ALUM/GLASS	NR		NAT. ANOD.		501AH	18/A00-01	10&11/A00-01	23&24/A00-01	





4 MAKERBOARD ELEVATION

SCALE: 1/2"=1'-0"



5 LOCKER HOUSEKEEPING PAD

SCALE: 3"=1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT
KEITH A. MAYER
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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KITCHEN PLAN

a-A.301

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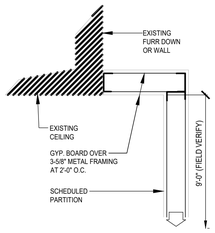


3 TEMPORARY LAYOUT SECTION

SCALE: 1"=1'-0"

TEMPORARY KITCHEN FLOOR PLAN KEYED NOTES 04/a-A.302

01 PROVIDE & INSTALL 555 SF OF RAM BOARD TO PROTECT EXISTING FLOORING. REMOVE AFTER CONSTRUCTION IS COMPLETE. CONTRACTOR MUST REPAIR FLOORING DAMAGED DURING CONSTRUCTION.

02 PROVIDE SCHEDULED PARTITIONS. BUILD PARTITIONS ON TOP OF RAM BOARD. DO NOT ATTACH PARTITIONS TO FLOOR.

03 ATTACH PARTITIONS TO EXISTING WALL. REPAIR WALL TO MATCH EXISTING AFTER CONSTRUCTION IS COMPLETE.

TEMPORARY KITCHEN RCP KEYED NOTES 03/A-A03-02

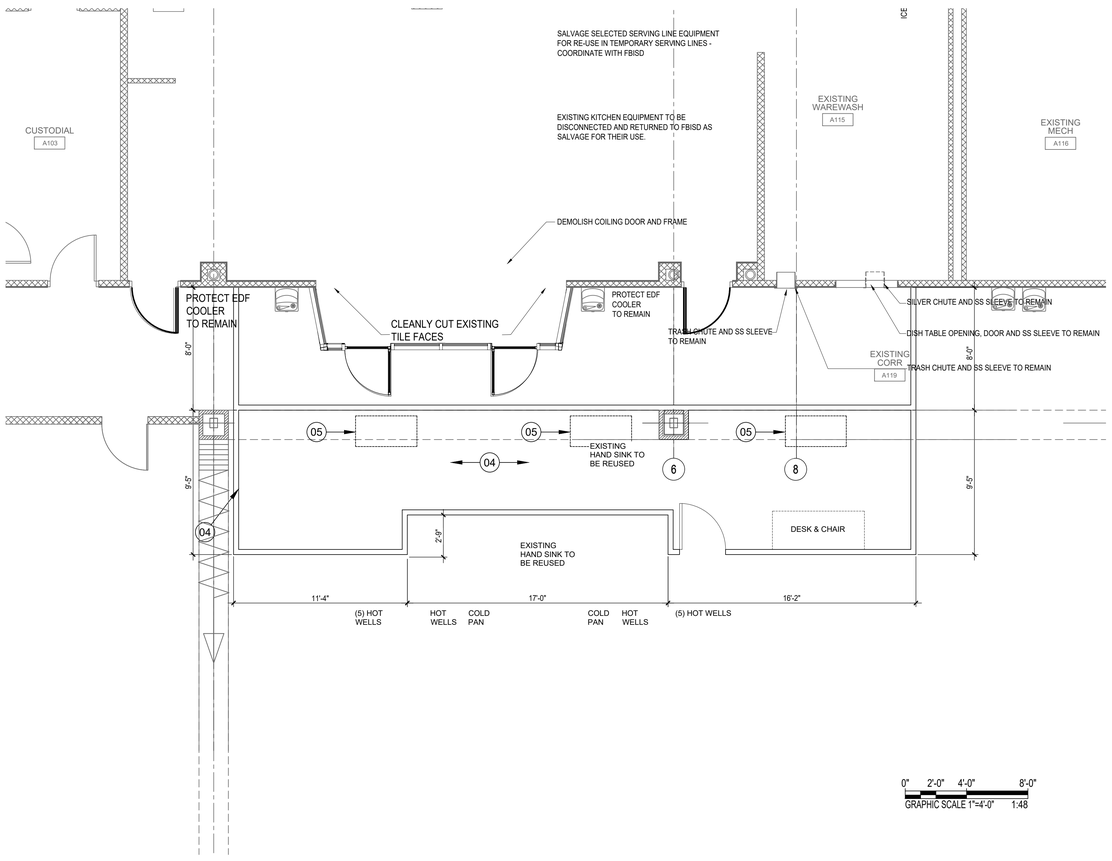
04 ALL NEW SCHEDULED PARTITIONS AND CEILINGS FOR TEMPORARY STORAGE LAYOUT TO BE EPOXY PAINTED SW 7014 EIDER WHITE WITH SPECIFIED 4" RUBBER BASE. REMOVE WHEN CONSTRUCTION IS COMPLETED.

05 MOUNT TEMPORARY FLUORESCENT LIGHTS TO TEMPORARY CEILING.

RCP DEVICE LEGEND

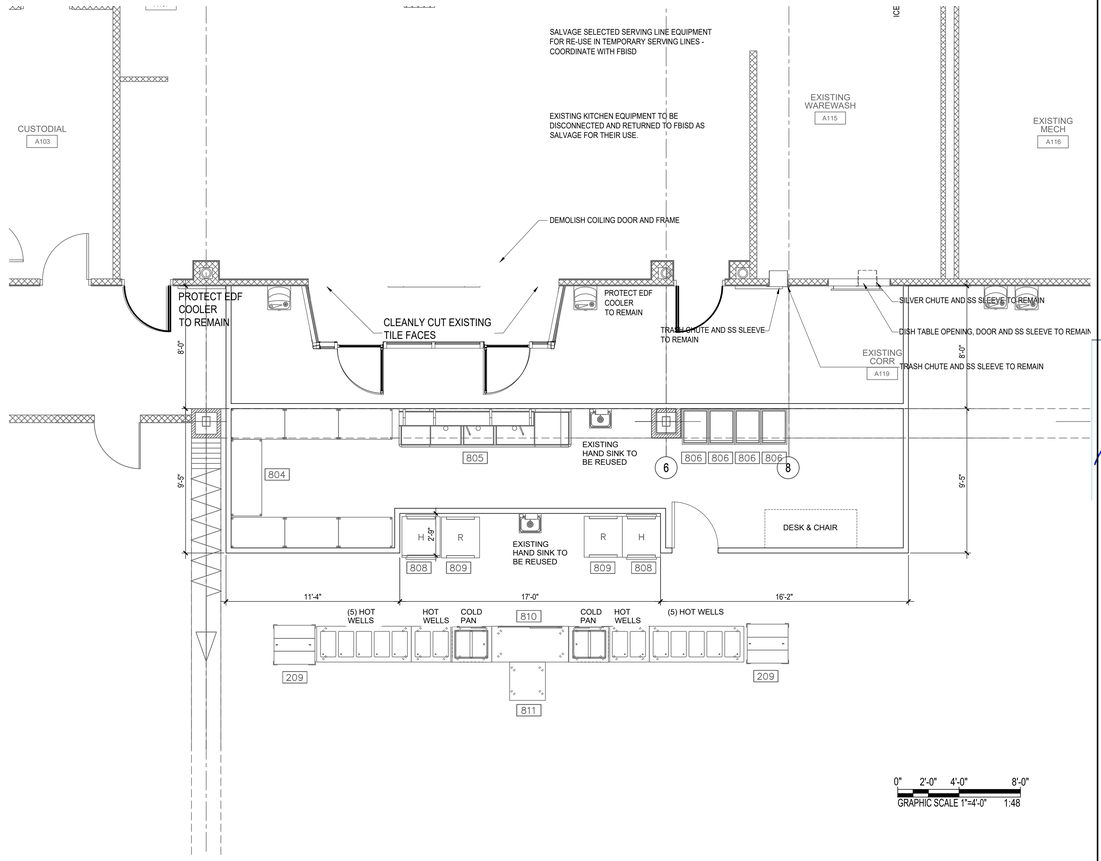
EXISTING TO REMAIN	NEW	DEMO	
S	S	S	CEILING MOUNTED SPEAKERS
			SECURITY CAMERA
W	W	W	WIRELESS ACCESS POINT
			CEILING MOUNTED FIRE ALARM AND STROBE
			SMOKE DETECTOR
			SPRINKLER HEAD (RECESSED)
			SPRINKLER HEAD (PENDANT)
			DRYER VENT
			EXIT
			CLOCK

4 KEYED NOTES



1 TEMPORARY KITCHEN RCP

1/4"=1'-0"



2 TEMPORARY KITCHEN FLOOR PLAN

1/4"=1'-0"

ISSUE:

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FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT
ANN ANDERSON
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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TEMPORARY KITCHEN LAYOUT

a-A.302

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PAINT COLOR SCHEDULE

UNLESS OTHERWISE INDICATED FIELD COLOR IS PT-1 (SW 7014 EIDER WHITE)

SW 7014 EIDER WHITE (EPOXY PAINT)

WALL TILE

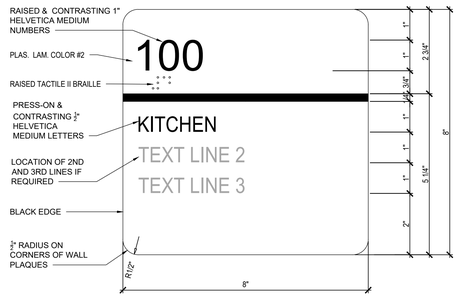
CERAMIC WALL TILE (WT-1)
REFER TO TILE PATTERN AT SERVING AND RESTROOM
FIELD WALL TILE: DALTILE RITTENHOUSE SQUARE K175 BISCUIT (3X6)

QUARRY TILE

QUARRY TILE AND BASE - SURE-STEP II QQ30
TILE COLOR SELECTION TO BE APPROVED BY FBISD
EPOXY GROUT COLOR: STERLING SILVER BY LATICRETE

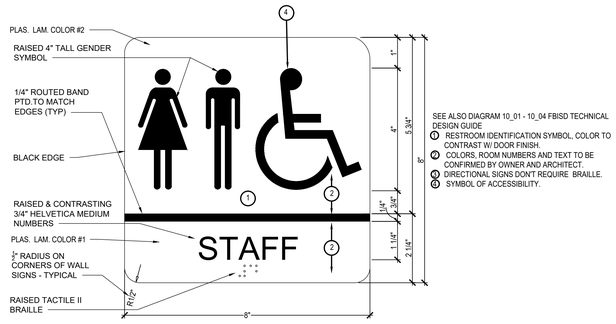
A — PROVIDE ROOM SIGN TO REPLACE EXISTING. SEE LAYOUT FOR TYPE A OR TYPE B SIGN LOCATIONS.

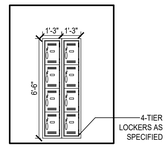
2 FLOOR FINISH LEGEND



3 ROOM SIGNAGE

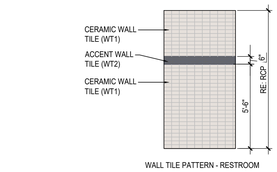
SCALE: 6"=1'-0"





8 LOCKERS ELEVATION

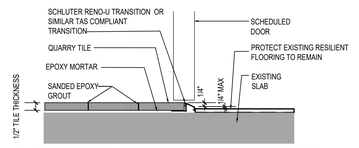
SCALE: 1/4"=1'-0"



WALL TILE PATTERN - RESTROOM

4 WALL TILE PATTERN

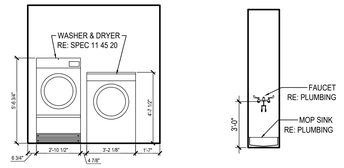
SCALE: 1/4"=1'-0"



NEW QUARRY TILE TO EXISTING VCT OR LVT FLOORING TRANSITION OCCURS AT CENTERLINE OF DOOR

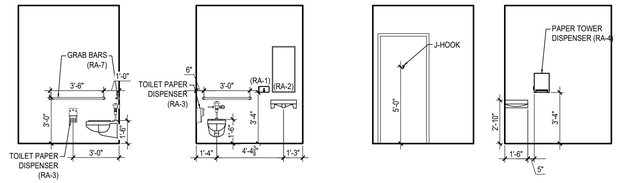
5 FLOOR TRANSITION - THRESHOLD

SCALE: 3"=1'-0"



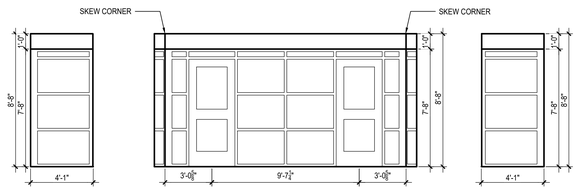
7 UTILITY ELEVATIONS

SCALE: 1/4"=1'-0"



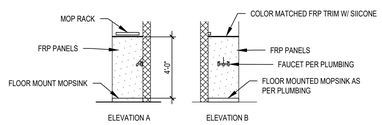
6 RR ELEVATIONS

SCALE: 1/4"=1'-0"

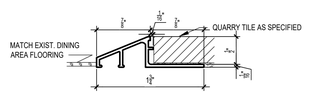


9 STOREFRONT ELEVATIONS

SCALE: 1/4"=1'-0"

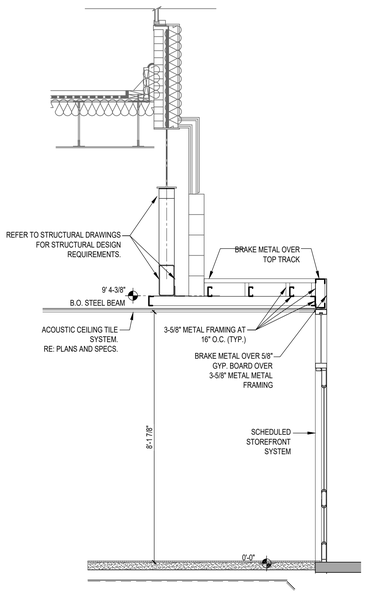


10 MOPSINK ELEVATIONS



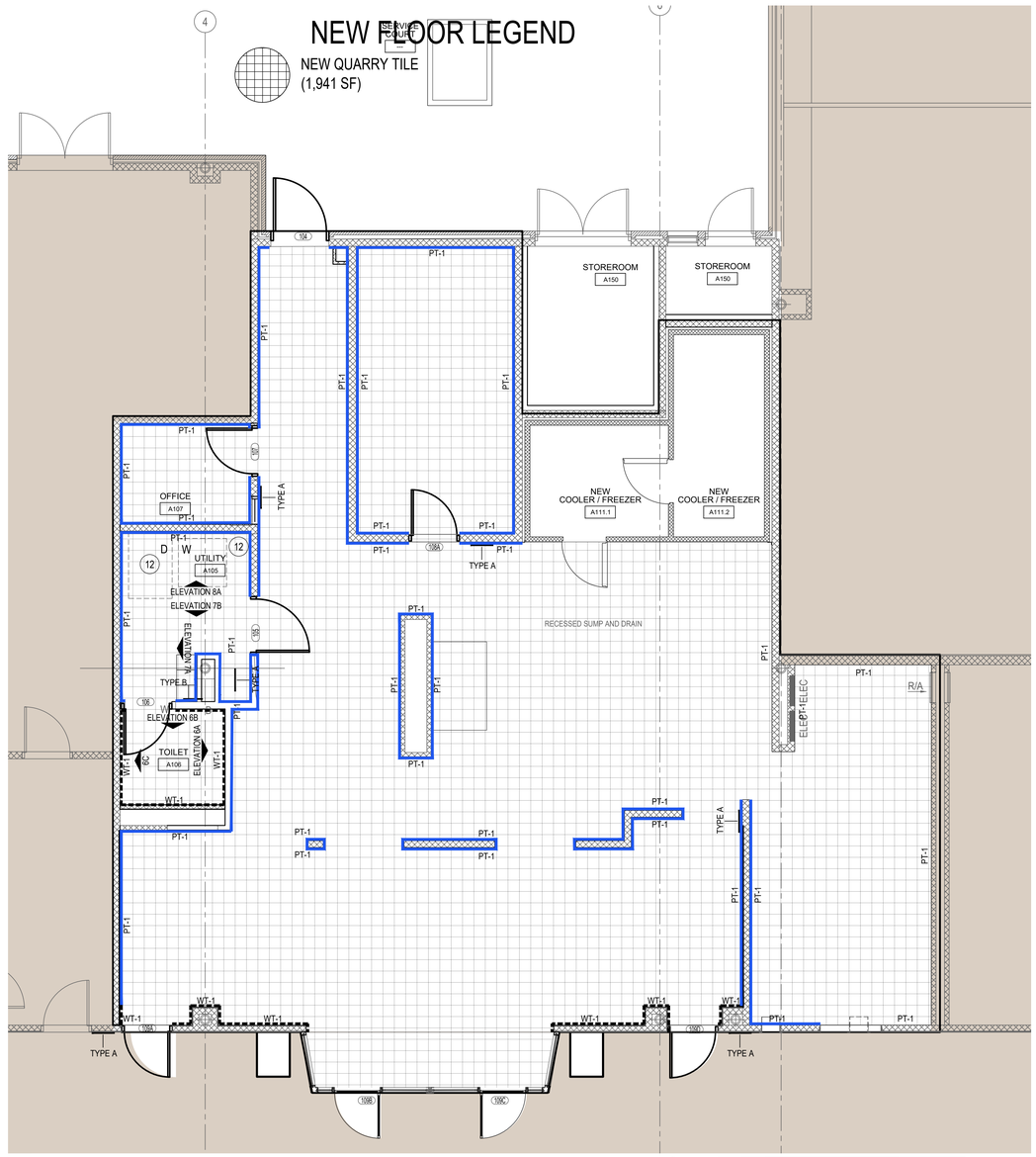
11 SILL @ KITCHEN/DINING

SCALE: 1:1



12 STOREFRONT SECTION

SCALE: 1/2"=1'-0"



1 FINISH FLOOR PLAN

SCALE: 1/4" = 1'-0"

ALL FINISHED NOT DENOTED IN DRAWINGS SHALL BE SELECTED DURING THE SUBMITTAL PROCESS

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL

7/15/2025

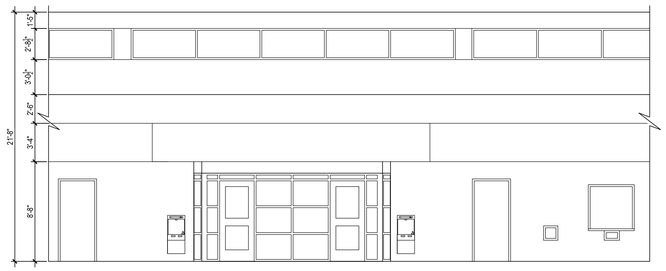
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FINISH FLOOR PLAN

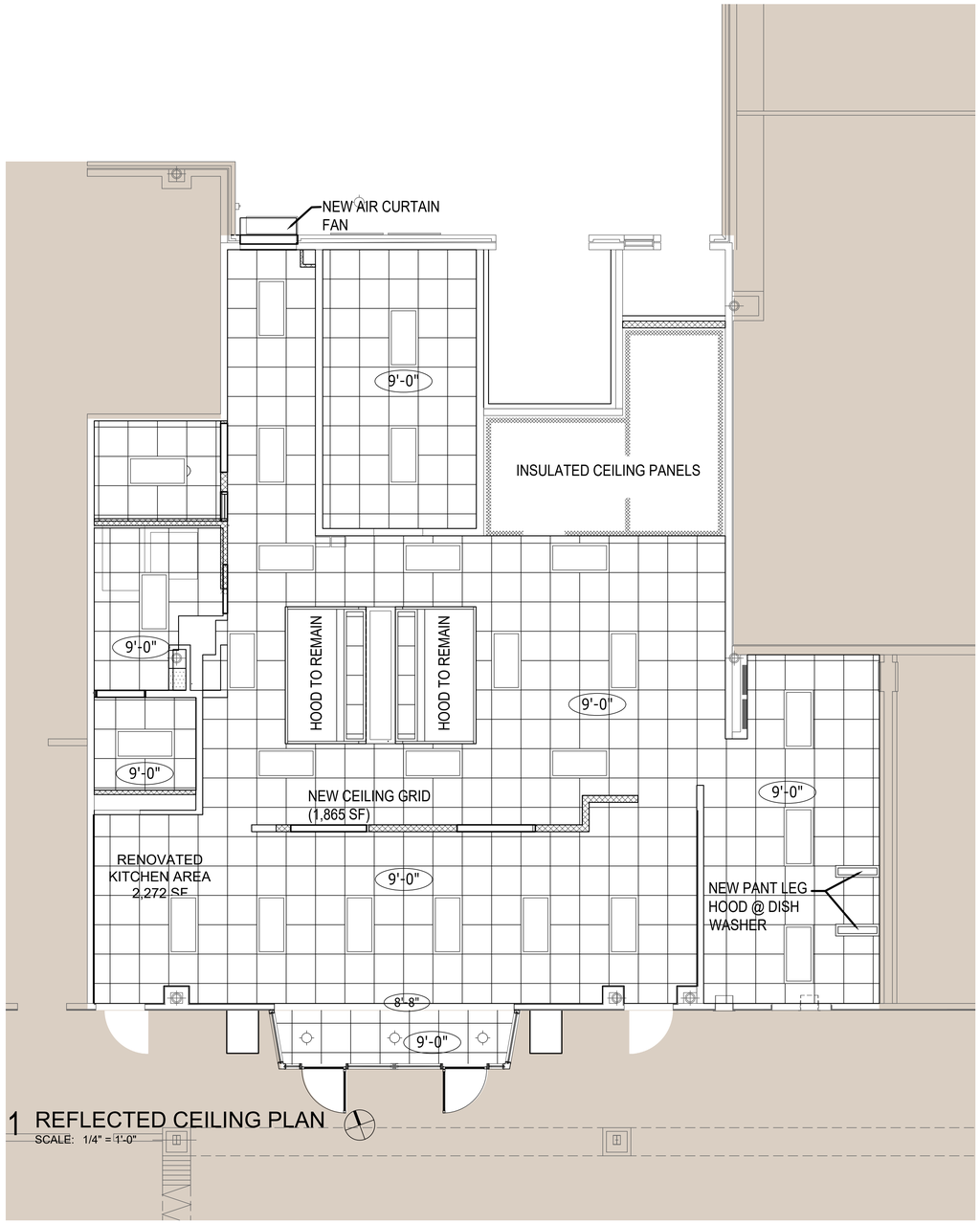
a-A.501

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\A-Austin Parkway ES\a-A.501 FINISH FLOOR PLAN.dwg Jul 28, 2025 - 5:29pm



2 FOOD SERVICE AREA ELEVATION

SCALE: 3/16" = 1'-0"



1 REFLECTED CEILING PLAN

SCALE: 1/4" = 1'-0"

RCP - GENERAL NOTES

1. CEILING GRID SHALL BE INSTALLED TO MATCH EXISTING GRID'S POINT OF ORIGIN. THIS WILL REDUCE NEED TO RE-LOCATE ABOVE CEILING DUCTS, SPRINKLER PIPING AND OTHER SUPPORT SYSTEMS.
2. REFER TO SHEET A00-01 FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SEVEN SCHOOL KITCHEN REMODELS.
3. LIGHTING LEVELS SHOULD BE 50 FC IN PREPARATION AREAS, WARE WASH AND SERVING LINES, OR MEET MINIMUM HEALTH CODE LEVELS, WHICHEVER ITS GREATER. SEE MEP PLANS
4. REPLACE HVAC DEVICES. REPLACE LIGHTING WITH 24"x24" LED LAY IN LIGHT AS SCHEDULED IN ELECTRICAL PLANS.
5. REFER TO MECHANICAL, ELECTRICAL SHEETS FOR DEVICE SCHEDULES.

RCP - NUMBERED NOTES

01 PROVIDE 30"x30" MIN. ACCESS HATCH IN SOFFIT CENTERED ON MOTOR.

02 AFTER LOWERING THE NEW POWER RETRACTION SYSTEM. REPAIR AND PAINT SOFFITS AND SIDWALLS OF FURR TO MATCH EXISTING.

NEW RCP LEGEND

PROVIDE NEW VINYL FACED ACOUSTIC CEILING TILE AND GRID AS SPECIFIED (CLEAN ROOM VL NO. 868 BY ARMSTRONG) RE: SPEC 09 51 13 AND MEP DRAWINGS.

DEMOLISH EXISTING CEILING GRID AND ACOUSTIC TILES. SALVAGE OR REPLACE EXISTING DEVICES AND LIGHTS AS PER SCHEDULE AND NOTES.

9'-6" ACOUSTIC CEILING TILE CEILING HEIGHT - MATCH EXISTING.

MISC. DEVICE LEGEND

EXISTING TO REMAIN	NEW	DEMO	
(S)	(S)		CEILING MOUNTED SPEAKERS
			SECURITY CAMERA
(W)	(W)		WIRELESS ACCESS POINT
			CEILING MOUNTED FIRE ALARM AND STROBE
			SMOKE DETECTOR
			SPRINKLER HEAD (RECESSED)
			SPRINKLER HEAD (PENDANT)
			DRYER VENT
			EXIT

RCP HVAC LEGEND

EXISTING TO REMAIN	NEW	DEMO	
			LAY-IN CEILING DIFFUSER
			LAY-IN CEILING RETURN / FAN
			HARD CEILNG DIFFUSER
			HARD CEILNG RETURN / FAN

RCP LIGHT LEGEND

EXISTING TO REMAIN	NEW	DEMO	
			2x2 LAY IN LIGHT FIXTURE
			2x4 LAY IN LIGHT FIXTURE
			1X4 SURFACE MOUNTED UTILITY LIGHT FIXTURE WITH PROTECTIVE CAGE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
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a

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SUGAR LAND, TX 77479

SEAL

REGISTERED ARCHITECT
ROBERT A. WEBB
22651
STATE OF TEXAS

7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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REFLECTED CEILING PLAN

a-A.401

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\A-Austin Parkway ES\a-A.401 REFLECTED CEILING PLAN.dwg Jul 23, 2025 - 3:54pm

1. AT WALLS THAT TERMINATE ABOVE CEILING, CONTRACTOR MAY CONTINUE METAL STUD FRAMED WALLS TO UNDERSIDE OF METAL DECK AND OMIT DIAGONAL BRACING IF HEIGHT DOES NOT EXCEED LIMITING HEIGHT OF METAL STUD AS INDICATED ON CHART BELOW.

2. PROVIDE INTERMEDIATE BRACING AT ALL PARTITIONS THAT EXCEED LIMITING HEIGHT OF METAL STUDS AS INDICATED ON CHART BELOW.

3. ALL BRACING SHALL BE AT STUD POINTS.

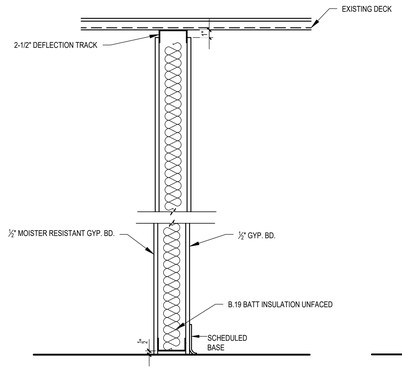
CMU PARTITION NOTES:

1. MATCH EXISTING CMU COURSING.(TYP.):
   BRIARGATE ES (4" CMU STARTER COURSE)
   LAKE OLYMPIA MS (4" CMU STARTER COURSE)
   MISSION BEND ES (8" CMU STARTER COURSE)
   RIDGEMONT ES (8" CMU STARTER COURSE)
   TOWNEWEST ES (8" CMU STARTER COURSE)
2. PROVIDE CMU LINTELS FOR ALL OPENINGS IN INTERIOR CMU PARTITIONS. COORDINATE WITH STRUCTURAL.
3. PROVIDE A 3/4" SPACE BETWEEN TOP OF CMU AND STRUCTURE/DECK FOR POTENTIAL DEFLECTION. SEAL WITH APPROPRIATE CAULK.
4. REFER TO FINISH SCHEDULES FOR CERAMIC TILE LOCATIONS.

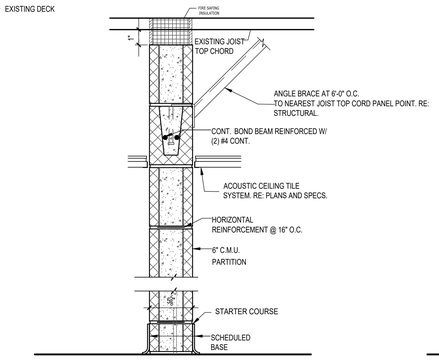
GYPSUM WALLBOARD PARTITION NOTES:

1. ALL METAL STUDS PARTITIONS ARE 25 GAUGE METAL STUDS AT 16" O.C. UNLESS OTHERWISE NOTED. IF THE LIMITING HEIGHT FOR A PARTITION TYPE IS EXCEEDED, INCREASE SIZE AND/OR GAUGE OF METAL STUDS AS INDICATED ON "LIMITING HEIGHT OF METAL STUDS" TABLE. NOTIFY THE ARCHITECT PRIOR TO INSTALLATION.

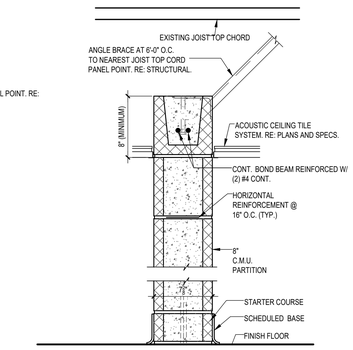
LIMITING HEIGHT OF METAL STUDS			
STUD SIZE	SPACING	25 GA.	20 GA.
2-1/2"	16"	11'-3"	12'-10"
3-5/8"	16"	14'-4"	16'-5"
6"	16"	19'-9"	24'-6"



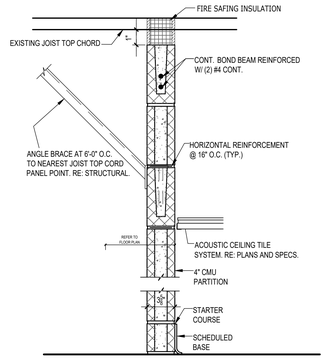
PARTITION A
SCALE: 1-1/2" = 1'-0"



PARTITION B1
SCALE: 1-1/2" = 1'-0"



PARTITION B2
SCALE: 1-1/2" = 1'-0"



PARTITION B3
SCALE: 1-1/2" = 1'-0"

PARTITION B4
SCALE: 1-1/2" = 1'-0"

PARTITION B5
SCALE: 1-1/2" = 1'-0"

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05/23/2025	90% CD PKG.

a

FBISD PKG 13 KITCHEN RENOVATIONS
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AUSTIN PARKWAY ELEMENTARY SCHOOL
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SUGAR LAND, TX 77479

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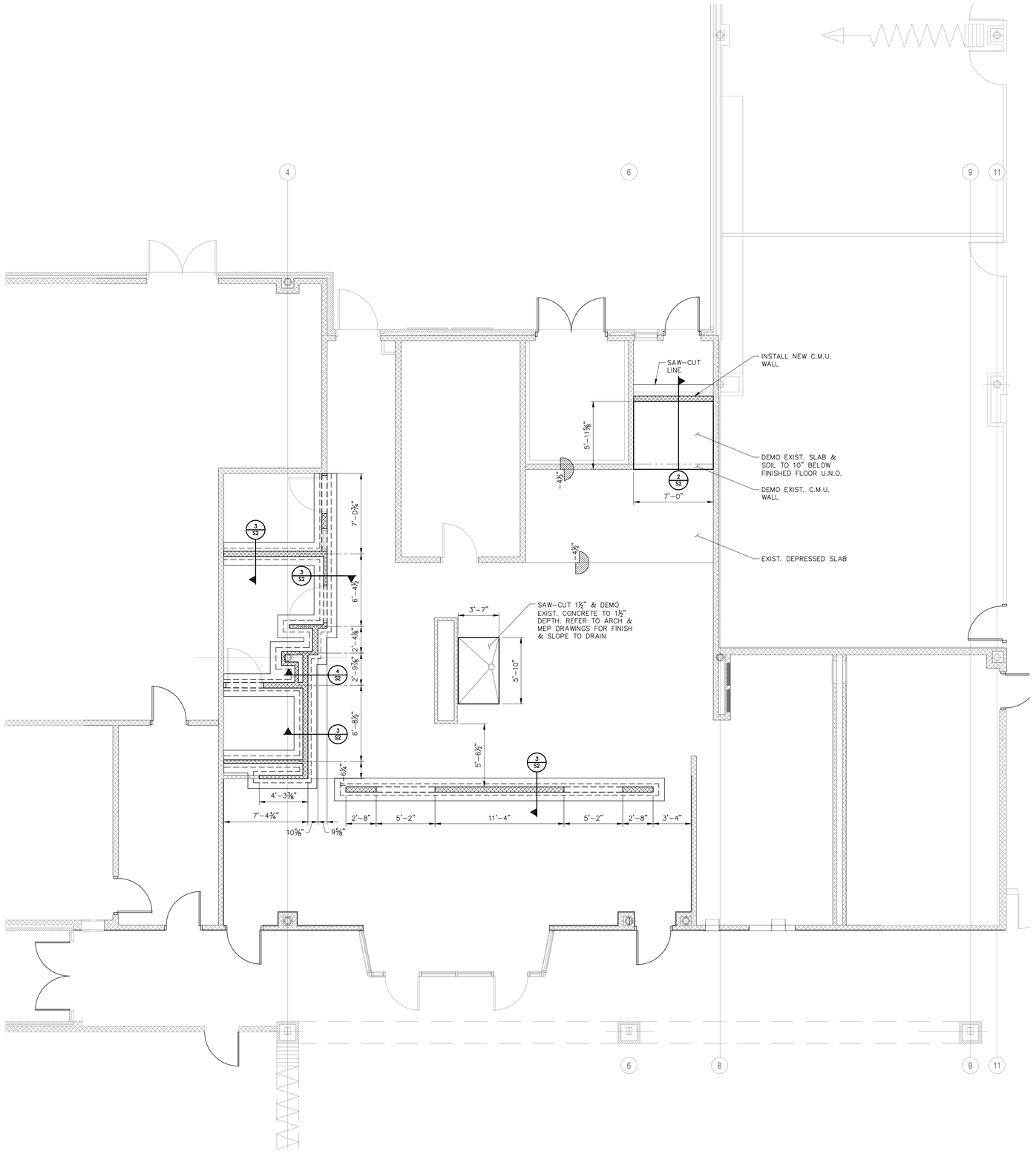
FOR
INTERIM REVIEW
AND NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 05/23/25

PARTITION SCHEDULE

a-A.502



GENERAL NOTES

1. ALL CONCRETE SHALL TEST 4000 PSI AT 28 DAYS.
2. ALL CONCRETE REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60.
3. DETAILING AND FABRICATION OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL BE IN ACCORDANCE WITH ACI-315 LATEST EDITION.
4. LAP ALL CONTINUOUS REINFORCING BARS 50 DIAMETERS AT SPLICES, TEES, AND CORNERS.
5. THE USE OF HEAT TO FACILITATE THE BENDING OF REINFORCING BARS WILL NOT BE PERMITTED.
6. NO ENGINEERING DRAWING MAY BE REPRODUCED FOR USE AS SHOP DRAWINGS.
7. CONTRACTOR SHALL COORDINATE ALL LOCATIONS OF ALL ANCHOR BOLTS AND OPENINGS FOR MECHANICAL, PIPING, AND ELECTRICAL EQUIPMENT WITH THE RESPECTIVE ENGINEERING AND VENDOR DRAWINGS.

SLAB NOTE

4" CONC. SLAB ON 10 MIL POLY FILM ON 2" MAX. SAND FILL. REINFORCE WITH #3 @ 15"c.c. E.W. IN CENTER OF SLAB.

SLAB SIDEWALK SLAB NOTE

4" CONC. SLAB ON 2" MAX. SAND FILL. REINF. W/ #3 @ 18"c.c. IN CENTER OF SLAB.

GEOTECHNICAL NOTE:

ALLOWABLE BEARING CAPACITY IS ASSUMED TO BE 1500 PSF AND SHALL BE CONFIRMED PRIOR TO CONSTRUCTION.

FOUNDATION PLAN

SCALE: 1/4"=1'-0"

FIELD VERIFICATION NOTE

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR CONSTRUCTION.
2. CONTRACTOR SHALL VERIFY AND NOTIFY ENGINEER OF EXISTING CONDITIONS IN NEED OF REVIEW AND POSSIBLE MODIFICATION PRIOR TO FABRICATION.

ISSUE:

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HOUSTON, TEXAS 77079

KEVIN STANLEY 69701 REGISTERED PROFESSIONAL ENGINEER
July 17, 2025

STANLEY SPURLING & HAMILTON, INC.
50 Years
Consulting Engineering Services
T.B.P.E. Registration #F-000175
www.sshinc.net
3301 Edloe Street, Suite 200 Houston, Texas 77027 Tel 713-776-9433
E-MAIL: info@sshinc.net | 0002-0256

PROJ. NO.: 23-25
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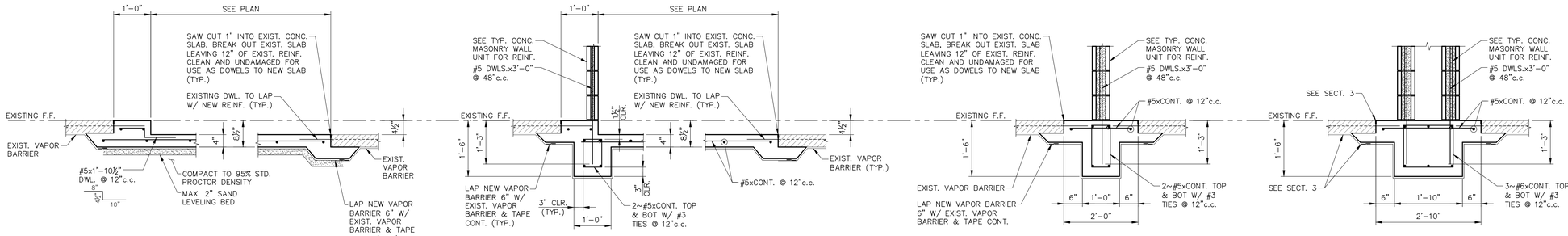
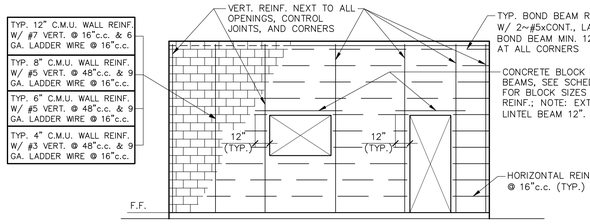
KITCHEN PLAN

S1





MIN. REBAR LAP SCHEDULE FOR f'm = 1,500 psi

BAR SIZE	6" CMU	8" CMU	10" CMU	12" CMU
#3	12"	12"	12"	12"
#4	20"	15"	12"	12"
#5	32"	23"	18"	15"
#6	54"	43"	34"	28"
#7	NA	60"	46"	38"
#8	NA	72"	71"	57"
#9	NA	NA	82"	74"

CONCRETE MASONRY NOTES

1. CONCRETE MASONRY UNITS AND CONSTRUCTION TO BE PER "NATIONAL CONCRETE MASONRY ASSOCIATION" RECOMMENDATIONS (WHERE NOT COVERED BY THE LOCAL BUILDING CODE).
2. ALL MASONRY GROUT TO BE PER TABLE 1 (THIS SHEET); ALL MORTAR PER TABLE 2 (THIS SHEET).
3. FILL CELLS WITH GROUT AT VERTICAL REINFORCEMENT.
4. CAST-IN-ANCHORS EMBEDDED IN CONCRETE MASONRY SHALL EXTEND BEYOND REINFORCING 1" MIN.
5. COMPRESSIVE STRENGTH OF MASONRY SHALL BE 1500 PSI AT 28 DAYS.
6. CMU SHALL BE PLACED IN A RUNNING BOND PATTERN UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS.
7. CONTROL JOINTS SHALL HAVE NO HORIZONTAL REINFORCING THROUGH THE JOINT AND VERTICAL REINFORCING ON BOTH SIDES OF JOINT. CONTROL JOINTS SHALL BE UNGROUTED WITH A BACKER ROD AND SEALANT ON BOTH SIDES OF WALL.
8. BOND BEAMS AND REINFORCING SHALL BE CONTINUOUS AT CONTROL JOINT WITH BACKER ROD AND SEALANT CONTINUOUS WITH JOINT.

CONCRETE BLOCK LINTEL SCHEDULE

WALL THICKNESS \ MAXIMUM SPAN	4'-6"	9'-0"
4"	GROUT; 1 COURSE 1~#4 CONT.	#3 STIRRUPS @ 16" c.c.; GROUT 2 COURSES; 1~#4 CONT.
6" & 8" & 12"	GROUT; 1 COURSE 2~#5 CONT.	#3 STIRRUPS @ 16" c.c.; GROUT 2 COURSES; 2~#5 CONT. TOP & BOT.

TABLE 1. GROUT PROPORTIONS BY VOLUME

TYPE	PARTS BY VOLUME OF PORTLAND CEMENT OR PORTLAND BLAST-FURNACE SLAG CEMENT	PARTS BY VOLUME OF HYDRATED LIME OR LIME PUTTY	AGGREGATE MEASURED IN DAMP, LOOSE CONDITION	
			FINE	COARSE
FINE GROUT (<4" WIDE CAVITY)	1	0 TO 1/10	2¼ TO 3 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL	
COARSE GROUT (>4" WIDE CAVITY)	1	0 TO 1/10	2¼ TO 3 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL	1 TO 2 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL

TABLE 2. MORTAR PROPORTIONS BY VOLUME

MATERIAL	TYPE	PORTLAND CEMENT OR BLENDED CEMENT	MASONRY CEMENT	HYDRATED LIME OR LIME PUTTY	AGGREGATE RATIO (MEASURE IN DAMP, LOOSE CONDITION)
CEMENT LIME	S	1	....	OVER ¼ TO ½	NOT LESS THAN 2¼ & NOT MORE THAN 3 TIMES THE SUM OF THE SEPARATE VOLUMES OF CEMENTITIOUS MATERIALS
MASONRY/ CEMENT	S	1/2	1	....	

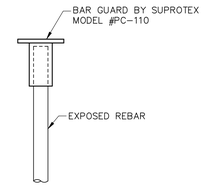
NOTE: CONTROL JOINTS SHALL BE LOCATED AT THE FOLLOWING

1. AT ALL CHANGES IN WALL HEIGHT.
2. AT ALL CHANGES IN WALL THICKNESS SUCH AS CHASES, COLUMNS OR PILASTERS.
3. AT (ABOVE) MOVEMENT JOINTS IN FOUNDATIONS AND FLOORS.
4. AT (BELOW) MOVEMENT JOINTS IN ROOFS AND FLOORS THAT BEAR ON A WALL.
5. ADJACENT TO CORNERS OF WALLS OR INTERSECTIONS WITHIN A DISTANCE OF ONE-HALF THE NORMAL CONTROL JOINT SPACING.
6. CONTROL JOINTS SHALL BE SPACED NO MORE THAN 25'-0" APART.
7. DO NOT PLACE CONTROL JOINT ABOVE OR BELOW OPENINGS.
8. CONTRACTOR SHALL PROVIDE A CONTROL JOINT PLAN PRIOR TO FABRICATION OR CONSTRUCTION.

LOOSE LINTEL SCHEDULE

SPAN	LINTEL	SPAN	LINTEL
0' TO 6'	L3½x3½x¼	8' TO 9'	L5x3½x5/16
6' TO 7'	L4x3½"x¼	9' TO 10'	L6x3½x5/16
7' TO 8'	L4x3½x5/16	10' TO 12'	L7x4x⅜

LOOSE LINTEL MIN. BEARING OF 8".



CONTRACTOR SHALL COVER ALL EXPOSED REBAR DURING CONSTRUCTION.

TYPICAL ELEVATION OF CONCRETE MASONRY WALL AND NOTES

SCALE: N.T.S.

TYPICAL REBAR CAP DETAIL

SCALE: N.T.S.

ISSUE:

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SECTIONS AND TYPICAL DETAILS

S2



July 17, 2025

STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
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50 Years
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E-MAIL: info@sshinc.net | 0002-0256

REFER TO FOODSERVICE DESIGN PROFESSIONALS SPECIFICATIONS AND SUBSEQUENT SHEETS FOR ADDITIONAL COORDINATION INFORMATION

EXISTING EQUIPMENT NOTES (IF EXISTING EQUIPMENT IS PROVIDED IN THIS PROJECT):

1. EXISTING EQUIPMENT NOT SCHEDULED FOR RE-USE TO BE RELOCATED BY THE K.E.C. COORDINATE WITH OWNER FOR NEW LOCATION.
2. ALL UTILITIES NOT SCHEDULED FOR RE-USE TO BE CAPPED & COVERED BY REQUIRED DISCIPLINE.
3. K.E.C. TO VERIFY ALL EXISTING UTILITY LOCATIONS & COORDINATE WITH ALL EQUIPMENT AS REQUIRED.

8 EXISTING EQUIPMENT NOTES
NOT TO SCALE

ARCHITECT TO VERIFY/COORDINATE THE AESTHETIC OPTIONS BELOW (FOOD SERVICE COLOR, MATERIAL, OR SIGNAGE SELECTIONS) IF THESE ITEMS ARE PROVIDED IN THIS PROJECT:

1. COUNTERTOPS: STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
2. TRAY SLIDES: CORIAN OR STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
3. COUNTER FRONTS: CERAMIC TILE, 3 FORM, OR PLASTIC LAMINATE.
4. SNEEZE GUARDS: STONE INSETS.
5. GENERAL COLOR, MATERIAL AND GRAPHIC SELECTIONS:
   - A. DISPLAY AIR SCREEN MERCHANDISERS - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - B. BAKERY DISPLAY CASES - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - C. PASS THRU OR REACH IN HOLDING CABINETS - COLOR SELECTION: POWDER COAT (MFG.: TRUE) OR PLASTIC LAMINATE (MFG.: TRAULSEN) (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - D. HANGING HEAT LAMPS - TRACK AND FIXTURE COLOR SELECTION.
   - E. HEATED MERCHANDISERS.
   - F. PORTABLE GUIDE RAILS - STANCHION AND BELT COLOR SELECTION.
   - G. POPCORN MACHINE - SIGNAGE SELECTION.
   - H. BOTTLE COOLER - SIGNAGE SELECTION.
   - I. GRAPHICS PACKAGE INFORMATION.
   - J. HOT FOOD WELL COVERS.
6. ARCHITECT TO VERIFY/COORDINATE THE FINISHES BELOW:
   - A. WALLS: CERAMIC TILE, FLAT FRP, OR MOLDED FRP (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - B. CEILINGS: REMOVABLE VINYL FACE TILE (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - C. FLOORS: TILE, EPOXY, OR RUBBERIZED FLOORING SYSTEM (SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT AS APPROVED BY LOCAL JURISDICTION) (COORDINATE FLOOR TILE TRANSITION AT SERVING LINES).
   - D. FLOORS: WALK-IN ASSEMBLY - EXTEND KITCHEN FLOOR FLUSH INTO WALK-IN ASSEMBLY WITH COVED BASE.
   - E. FURR DOWNS ABOVE SERVING COUNTERS.

5 ARCHITECTURAL COORDINATION NOTES
NOT TO SCALE

CRITICAL NOTES:

1. CONTRACTOR MUST COORDINATE AND VERIFY ALL DIMENSIONS WITH FOOD SERVICE EQUIPMENT SHOP DRAWINGS AND MANUFACTURER'S DATA. DIMENSIONS SHOWN ARE FOR DESIGN AND BIDDING PURPOSES ONLY.
2. WALK-IN ASSEMBLY DOORS MUST BE LEFT OPEN WHILE INTERIOR CONCRETE FLOOR CURES.
3. INSTALL PROTECTIVE COVER ON WALK-IN ASSEMBLY WALL PANELS BEFORE INSTALLING CONCRETE FLOORS AND CURBS.
4. REFER TO GENERAL SPECS - DIVISION 27 TO PROVIDE CONDUIT, DATA, AND INTERCONNECT THE PANIC ALARM INSIDE FREEZER TO THE BUILDING AUTOMATION SYSTEM FOR NOTIFICATION TO DISTRICT PERSONNEL IN THE EVENT OF STAFF ENTRAPMENT.
5. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL (DIV. 22).

7 CRITICAL NOTES
NOT TO SCALE

DIVISION 26 (ELECTRICAL) IS RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL ELECTRICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. ROUGH-IN AND FINAL CONNECTION OF ELECTRICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 26.
6. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
7. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR INTERCONNECT CABLES BETWEEN LAN AND POS TERMINALS, CHANGE-MAKERS, PRE-CHECK UNITS, PRINTERS, CPUS, ETC. DIVISION 26 TO VERIFY WHERE THE CONDUIT IS TO RUN FOR POS SYSTEM (I.E., MANAGER'S OFFICE OR IDF ROOM).
8. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR FIRE SUPPRESSION SYSTEMS. INTERCONNECT FIRE PROTECTION SYSTEM TO PANEL BOX SHUNT TRIPS AND BUILDING ALARM.
9. WALK-IN LIGHT FIXTURE INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF WALK-IN IS PROVIDED IN THIS PROJECT).
10. TABLE LIMIT SWITCH INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF DISHMACHINE IS PROVIDED IN THIS PROJECT).
11. ELECTRICAL MATERIALS AND DEVICES (SHUNT-TRIP BREAKERS, SURGE PROTECTORS, LIGHTING CONTROL DEVICES, CONDUIT, WIRE, ETC.).
12. SWITCHES AND STAINLESS STEEL DISCONNECTS AS REQUIRED (PROVIDE, LOCATE, AND INSTALL – TO BE IN AN ACCESSIBLE LOCATION).
13. CHARGING STATIONS FOR FORKLIFTS, PALLET STACKERS, AND PALLET JACKS (SIZE, PROVIDE, LOCATE, AND INSTALL) (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
14. INTERCONNECTION BETWEEN CONDENSATE FAN AND DISHMACHINE CONTROL PANEL (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
15. INTERCONNECTION BETWEEN EXHAUST HOOD FANS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
16. INTERCONNECTION BETWEEN EXHAUST HOOD LIGHTS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
17. DOOR HEATERS, LIGHTS, COILS, AND PRESSURE RELIEF PORTS PRE-WIRED TO JUNCTION BOX AT TOP OF WALK-IN ASSEMBLIES (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) PROVIDED BY SECTION 11 40 00. FINAL CONNECTION BY DIV. 26.
18. IF ANY ELECTRICAL ACCESSORIES, FITTINGS, AND CORD/PLUGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV.26 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
19. PROVIDE WATERPROOF RECEPTACLES IN WET AREAS.
20. ALL ELECTRICAL CONNECTIONS BENEATH EXHAUST HOODS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) TO EXTEND TO SHUNT TRIP BREAKERS WITH ELECTRICAL PANEL BOX FOR SHUTDOWN DURING FIRE MODE.
21. RECEPTACLES ARE TO BE PRE-WIRED TO THE JUNCTION BOX OR LOAD CENTER FOR FINAL CONNECTION BY DIVISION 26.
22. ALL ELECTRICAL LIGHTING, POWER, AND DISTRIBUTION SYSTEMS.
23. DO NOT INTERCONNECT MORE THAN THREE (3) CONVENIENCE OUTLETS ON ONE (1) BREAKER.
24. OTHER THAN CONVENIENCE OUTLETS, ALL ELECTRICAL CONNECTIONS SHOWN ON FOOD SERVICE PLANS ARE DEDICATED BREAKERS.
25. DOORBELL AT RECEIVING DOOR (PROVIDE AND INSTALL – TO BE AUDIBLE THROUGHOUT KITCHEN, OFFICE, AND DRY STORAGE ROOM).
26. ADEQUATE LIGHTING AT RECEIVING DOOR.
27. PROVIDE AND INSTALL TWO EMERGENCY STROBE BEACONS THAT INTERCONNECT TO PANIC ALARM IN WALK-IN FREEZER. ONE (1) IN KITCHEN ABOVE WALK-IN FREEZER DOOR ONE (1) IN CAFETORIUM (IF WALK-IN IS PROVIDED IN THIS PROJECT). REFER TO GENERAL SPECIFICATIONS FOR ADDITIONAL DETAILS.
28. DEDICATED CIRCUIT FOR HEATED DRAIN LINE CONNECTION IN WALK-IN FREEZER AT EACH COIL (IF WALK-IN IS PROVIDED IN THIS PROJECT).

NOTE: ELECTRICAL CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 26. FOR ADDITIONAL REQUIREMENTS, REFER TO THE ELECTRICAL ENGINEER'S DRAWINGS.

6 ELECTRICAL COORDINATION NOTES
NOT TO SCALE

DIVISION 22 (PLUMBING) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL PLUMBING REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY PVC CONDUIT WITH WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO BEVERAGE LINES, CO2 LINES, AND REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL PLUMBING CONNECTIONS TO FOOD SERVICE EQUIPMENT AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 22. THIS INCLUDES BUT IS NOT LIMITED TO INSTALLATION OF ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), HOSES, GAS DISCONNECTS, AND DRAINS FROM EQUIPMENT POINT OF CONNECTION TO BUILDING PLUMBING SYSTEMS. ALL DRAIN LINES ARE PROVIDED AND INSTALLED BY DIV. 22.
7. KITCHEN EQUIPMENT CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), DRAIN FITTINGS, MIXING VALVES, CONTROL VALVES, WATER PRESSURE REGULATORS, VACUUM BREAKERS, AND ALL ACCESSORIES FOR EQUIPMENT SPECIFIED UNDER 11 40 00. DIVISION 22 IS RESPONSIBLE FOR INSTALLATION.
8. INDIRECT DRAIN LINE RUNS FROM EQUIPMENT TO NEAREST DRAIN OR FLOOR SINK. LINES TO BE TYPE 'K' COPPER.
9. IF ANY PLUMBING ACCESSORIES OR FITTINGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV. 22 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
10. GAS SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
11. WATER SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
12. COMPRESSED AIR SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM (IF REQUIRED FOR THIS PROJECT).
13. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL.
14. FLOOR SINKS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
15. FLOOR DRAINS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
16. TRENCH DRAINS (PROVIDE AND INSTALL). TRENCH LINERS PROVIDED BY 11 40 00. FLANGE AND LINERS TO BE FLUSH WITH FINISHED FLOOR.
17. GREASE TRAPS AS REQUIRED. VERIFY WITH LOCAL CODES TO BYPASS OR PIPE THRU GREASE TRAP AND/OR INTERCEPTOR.
18. P-TRAPS AS REQUIRED (INCLUDING ALL DISPOSERS).
19. INTERCONNECT WATER THRU WATER FILTER (FILTER PROVIDED BY 11 40 00 UNLESS OTHERWISE SPECIFIED) TO EQUIPMENT.
20. GAS QUICK DISCONNECT INSTALLATION (QUICK DISCONNECT PROVIDED BY 11 40 00).
21. SAFETY RESTRAINT CABLE INSTALLATION (SAFETY RESTRAINT CABLE PROVIDED BY 11 40 00).
22. SPECIFIED COUPLINGS AND PIPING TO ALL EQUIPMENT FURNISHED BY 11 40 00.
23. AIR COMPRESSORS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
24. WATER SOFTENERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
25. PRESSURE BOILERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
26. HAND SINKS (PROVIDE (UNLESS OTHERWISE SPECIFIED) AND INSTALL). PROVIDE HOT WATER TEMPERING VALVE IF REQUIRED. WATER TEMPERATURE TO BE AT LEAST 100 DEGREES AND FLOW FOR AT LEAST 20 SECONDS.
27. ICE BIN DRAIN INSULATION (IF ICE MACHINE IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
28. UNIONS AT DISPOSER SOLENOID VALVES (IF DISPOSER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
29. BACK FLOW PREVENTION AS REQUIRED (PROVIDE AND INSTALL - INCLUDING ALL DISPOSERS). BACK- SIPHONAGE SHALL BE INSTALLED AT ALL FIXTURES AND EQUIPMENT WHERE BACKFLOW AND/OR BACK-SIPHONAGE MAY OCCUR AND WHERE A MINIMUM AIR GAP CANNOT BE PROVIDED BETWEEN THE WATER TO THE FIXTURE OR EQUIPMENT AT ITS FLOOD/LEVEL RIM. VACUUM BREAKERS, WHEN FURNISHED WITH EQUIPMENT, SHALL OVERRIDE THE ABOVE, IF ACCEPTABLE WITH APPLICABLE CODES. DIVISION 22 RESPONSIBLE FOR VERIFYING REQUIREMENT WITH LOCAL CODES.
30. JANITOR SINK WITH FAUCET (PROVIDE AND INSTALL).
31. FREEZE PROOF HYDRANT AT EXTERIOR OF BUILDING BY RECEIVING DOOR (PROVIDE AND INSTALL).
32. REVERSE OSMOSIS SYSTEMS (SIZE, PROVIDE (UNLESS OTHERWISE SPECIFIED), LOCATE AND INSTALL).
33. ALL PIPING WITHIN COUNTER BODY OR UNDER FABRICATED COUNTERS TO BE RUN TO A CONNECTION POINT BELOW COUNTER BODY BY SECTION 11 40 00. FINAL CONNECTION BY DIVISION 22.
34. EXHAUST HOOD CONDENSATE DRAIN CONNECTIONS (IF EXHAUST HOOD IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
35. INTERCONNECTION OF 1/2" CW TO PRE-RINSE AND DISPOSERS CONE/BODY INLETS PIPED THROUGH SOLENOID AND VACUUM BREAKER (IF DISPOSER IS PROVIDED IN THIS PROJECT).
36. FIRE SYSTEM PIPING. EXPOSED PIPING TO BE CHROME PLATED.
37. PIPE 1/2" COLD WATER TO SWIRL INLETS AT DISPOSERS (IF DISPOSER IS PROVIDED IN THIS PROJECT).
38. WATER TREATMENT FOR ICE BUILDERS (NON-CHLORINATED WATER WITH A PH LEVEL OF 10 OR HIGHER) AND ANY DRAINS AND OVERFLOWS. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS BY DIV. 23 (IF ICE BUILDERS AND TUMBLE CHILLERS ARE PROVIDED IN THIS PROJECT).

NOTE: WATER AND DRAIN CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 22. FOR ADDITIONAL WATER AND DRAIN REQUIREMENTS REFER TO MECHANICAL DRAWINGS.

NOTE: REFER TO ELECTRICAL/MECHANICAL DRAWINGS FOR REQUIREMENTS OF EXHAUST FANS AND MAKE-UP AIR HANDLERS AND LOCATION OF AN INTERLOCK AND START/STOP CONTROLS TO BE LOCATED WITHIN FOOD SERVICE AREA BY DIVISION 26.

4 PLUMBING COORDINATION NOTES
NOT TO SCALE

DIVISION 23 (MECHANICAL) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL MECHANICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL CONNECTION OF MECHANICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR).
7. TESTING AND BALANCING FOR ROOMS AND EXHAUST HOODS TO BE PERFORMED BY MECHANICAL CONTRACTOR. BALANCE REPORT FOR FOOD SERVICE EXHAUST HOODS TO BE PROVIDED TO FOODSERVICE DESIGN PROFESSIONALS (FDP) IMMEDIATELY UPON COMPLETION (SEND TO HOUSTON.SUBMITTAL@FDP.ORG FOR HOUSTON OFFICE AND DALLAS.SUBMITTAL@FDP.ORG FOR DALLAS OFFICE) AND MUST BE SUBMITTED WITH O&M MANUALS.
8. EXHAUST HOODS, CONDENSATE HOODS, FIRE SUPPRESSION SYSTEMS, CONNECTIONS AND CONTROLS (PROVIDE AND INSTALL – *UNLESS OTHERWISE SPECIFIED*). PROVIDE TEMPERED AIR AT ALL SUPPLY DUCTS.
   - A. IF EXHAUST/CONDENSATE HOODS AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED UNDER SECTION 11 40 00, DIVISION 23 IS RESPONSIBLE FOR ALL EXHAUST AND CONDENSATE HOOD CONNECTIONS (PROVIDE AND INSTALL).
9. VFD SYSTEM AND CONTROLLERS, WHEN REQUIRED BY CODE (PROVIDE AND INSTALL).
10. PROVIDE AND INSTALL ALL VENTILATION (DIRECT OR INDIRECT), AIR CONDITIONING AND HEATING SYSTEMS (UNLESS OTHERWISE SPECIFIED).
11. COORDINATE SUPPLY AND RETURN DUCTS ABOVE SERVING COUNTERS OR OPEN-AIR REFRIGERATED MERCHANDISERS. NO COLD AIR TO BLOW DIRECTLY ON HOT FOOD COUNTERS.
12. COORDINATE SUPPLY AND RETURN DUCTS AWAY FROM EQUIPMENT WITH TOP MOUNTED REFRIGERATION. NO COLD AIR TO BLOW DIRECTLY ON COMPRESSORS.
13. MECHANICAL CONTRACTOR TO LOCATE TEMPERATURE MONITORS WITHIN RETURN DUCTS.
14. CIRCULATING AIR ABOVE WALK-IN ASSEMBLIES (PROVIDE AND INSTALL).
15. CIRCULATING AIR ABOVE AND IN AIR GAPS AT WAREHOUSE COLD STORAGE ASSEMBLIES (PROVIDE AND INSTALL).
16. WATER CHILLERS AS REQUIRED (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).
17. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).

3 MECHANICAL COORDINATION NOTES
NOT TO SCALE

GENERAL CONTRACTOR RESPONSIBLE FOR BUT NOT LIMITED TO:

1. ANY WALL PENETRATION REQUIRED FOR FOOD SERVICE EQUIPMENT UTILITIES. ESCUTCHEON PLATES OR S/S SLEEVES TO BE PROVIDED AND INSTALLED AS NEEDED.
2. BULK FREEZER VENTILATION PIPE (IF BULK FREEZER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
3. CORE DRILLING FOR GUIDE RAILS (IF GUIDE RAILS ARE PROVIDED IN THIS PROJECT).
4. REFRIGERATION ROOF CURBS / ROOF JACK (IF REFRIGERATION SYSTEM IS PROVIDED IN THIS PROJECT AND LOCATED ON ROOF).
5. INTERIOR BOLLARDS (IF REQUIRED FOR THIS PROJECT) – TO BE EPOXY PAINTED PER LOCAL CODES (PROVIDE AND INSTALL).
6. FURNISH AND INSTALL 3/4" PLYWOOD BLOCKING IN THE WALL FOR MOUNTING EQUIPMENT FURNISHED BY SECTION 11 40 00 AS REQUIRED.
7. WALK-IN DEPRESSIONS (TO BE DEAD LEVEL) AND SAND LEVELING BED (IF WALK-IN IS PROVIDED IN THIS PROJECT AND RECESS IS SHOWN).
8. STRUCTURAL BRACING FOR BULK WALK-IN CEILING PANELS IF REQUIRED.
9. MENU SYSTEM VIDEO MONITORS IN SERVERY (UNLESS OTHERWISE SPECIFIED).
10. STRUCTURAL BRACING FOR MENU SYSTEM VIDEO MONITORS IF REQUIRED.
11. INTERIOR/EXTERIOR REFRIGERATION PENETRATIONS AND SLEEVES AT BUILDING PENETRATIONS.
12. DOORSCOPE VIEWER (PEEPHOLE) WITH WIDE VIEWING ANGLE AT RECEIVING DOOR.
13. CANOPY AT RECEIVING DOOR. COORDINATE HEIGHT WITH THE HEIGHT OF RECEIVING DOOR (8') AND THE MOUNTING HEIGHT OF AIR SCREEN ABOVE THE DOOR.
14. SOAP AND TOWEL DISPENSER PROVIDED BY OWNER. G.C. RESPONSIBLE FOR INSTALLATION.
15. WASHER AND DRYER (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
16. DWARF WALL AT EXPOSED FRONT/ENDS OF CAFETERIA SERVING COUNTERS WITH FINISH AS SELECTED BY ARCHITECT (IF REQUIRED IN THIS PROJECT).

2 GENERAL CONTRACTOR COORDINATION NOTES
NOT TO SCALE

HEALTH DEPARTMENT REQUIREMENTS (VERIFY WITH LOCAL JURISDICTIONS):

1. FLOORS: VERIFY WITH DIVISION 9. FLOORS TO BE SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT.
2. WALLS: VERIFY WITH ARCHITECTURAL DOCUMENTS. WALLS TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
3. CEILING: LAY-IN TILES. CEILING TILES TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
4. EMPLOYEE TOILET: TO BE LOCATED OFF MAIN CORRIDOR AND ADJACENT TO MAIN KITCHEN. RESTROOM MUST HAVE A VESTIBULE AND NOT OPEN TO KITCHEN / PREP AREAS. TOILETS TO BE WELL VENTILATED.
5. LAVATORIES: WALL HUNG LAVATORIES LOCATED WITHIN ALL FUNCTIONAL WORKING AREAS.
6. UTENSIL CLEANING/SANITIZING: ACCOMPLISHED IN UTENSIL WASH AREA WITH (3) 2'-0" x 2'-2" x 15" MINIMUM DEEP SINKS AND WAREWASH MACHINE.
7. MECHANICAL CLEANING/SANITIZING OF TABLEWARE: ACCOMPLISHED BY WAREWASH MACHINE.
8. STOREROOMS: AMPLE DAILY STORAGE PROVIDED IN ENCLOSED STORE ROOMS. STORE ROOMS TO BE VENTILATED AND MAINTAIN PROPER TEMPERATURE.
9. WATER HEATER: LOCATED IN THE MECHANICAL ROOM ADJACENT TO KITCHEN. TO BE SIZED TO PROVIDE AMPLE WATER TO MAINTAIN PROPER WATER TEMPERATURE THROUGHOUT HOURS OF OPERATION.
10. GREASE TRAP: LOCATED AT EXTERIOR OF BUILDING. REFER TO ENGINEER'S DRAWINGS.
11. FOOD SERVICE EQUIPMENT: ALL FLOOR-MOUNTED EQUIPMENT IS TO BE SEALED TO THE FLOOR TO PROVIDE AN EASILY CLEANABLE SURFACE AND PREVENT SEEPAGE. EQUIPMENT NOT MOUNTED TO THE FLOOR IS TO BE WALL MOUNTED ON WALL CARRIERS, OR ELEVATED ON LEGS TO PROVIDE AT LEAST A SIX-INCH CLEARANCE BETWEEN FLOOR AND EQUIPMENT.
12. MOP SINK: LOCATED IN JANITOR CLOSET OFF MAIN KITCHEN CORRIDOR, AND LOCATED IN CLOSE PROXIMITY TO THE SERVERY WAREWASH AREA.
13. EXHAUST HOODS: EXHAUST HOODS PROVIDED OVER COOKING EQUIPMENT WITH LIQUID CHEMICAL ANSUL FIRE EXTINGUISHING SYSTEM.
14. LIGHTING AND PROTECTIVE SHIELDING: RECESSED CEILING-MOUNTED FLUORESCENT LIGHT FIXTURES FITTED WITH CLEAR LEXAN DIFFUSERS.
15. GARBAGE AND REFUSE: CENTRAL TRASH COLLECTION PROVIDED FOR BUILDING LOCATED NEAR RECEIVING AREA ON SMOOTH CONCRETE SURFACE.
16. POISONOUS AND TOXIC MATERIAL STORAGE: LOCATED IN RESPECTIVE JANITOR CLOSETS WITH LOCKING HARDWARE.

1 HEALTH DEPARTMENT COORDINATION NOTES
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL
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MELISSA MOORE
FCSI
48854119
PROFESSIONAL MEMBER
7/15/2025
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO: 48854119 ON: 07/18/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
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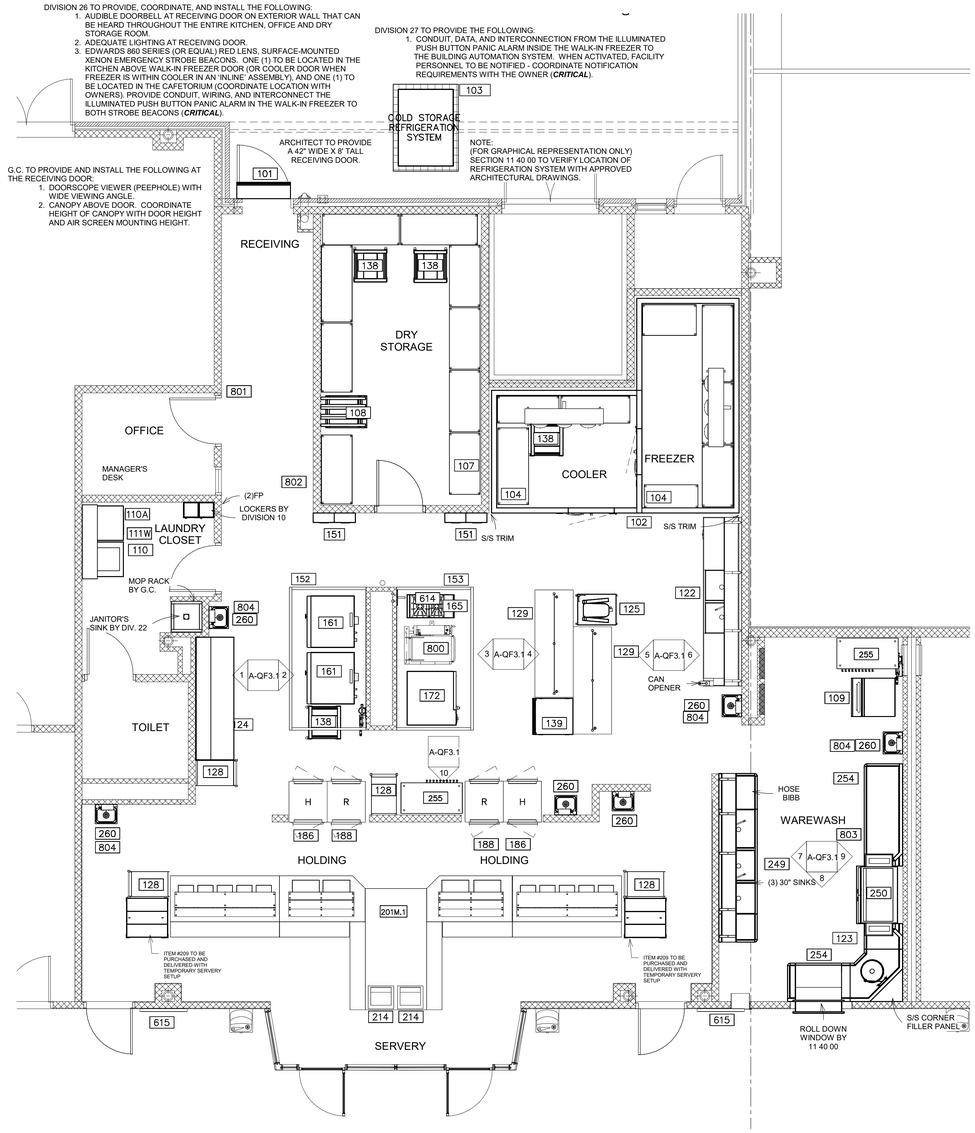
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS GENERAL COORDINATION NOTES

A-QF0.0

FOOD SERVICE DRAWING INDEX	
FDP SHEET NUMBER	FDP SHEET NAME

A-QF0.0	FS GENERAL COORDINATION NOTES
A-QF1.0	FS EQUIPMENT PLAN
A-QF1.1	FS FACILITY MODEL
A-QF1.2	FS EQUIPMENT MODEL
A-QF1.3	FS SPECIAL CONDITIONS & MECHANICAL PLAN
A-QF1.4	FS PLUMBING PLAN
A-QF1.5	FS ELECTRICAL PLAN
A-QF1.6	FS CONDENSING UNITS
A-QF1.7	FS WALK-INS
A-QF2.0	FS EXISTING EQUIPMENT PLAN
A-QF2.1	FS EQUIPMENT PLAN - TEMPORARY SERVING & MEPS



1 FOOD SERVICE EQUIPMENT PLAN
1/4" = 1'-0"

FOOD SERVICE EQUIPMENT SCHEDULE					
REFER TO SHEET QF1 FOR GENERAL CONTRACTOR & HEALTH DEPARTMENT COORDINATION NOTES					
FDP ITEM	FDP QTY	FDP DESCRIPTION	FDP REMARKS	MANUFACTURER	MODEL
101	1	AIR SCREEN		MARS	STD248-1UA-OB
102	1	COLD STORAGE ASSEMBLY		American Panel	
103	1	COLD STORAGE REFRIGERATION SYSTEM		RDT	ZS1-02Z-CT3-AST
104	2	COLD STORAGE SHELVING		METRO	METROMAX Q
107	1	DRY STORAGE SHELVING		METRO	METROMAX Q
108	1	CAN RACK		NEW AGE	1250CK
109	1	ICE MACHINE W/ BIN		MANITOWOC	UYF0310A
110	1	CLOTHES WASHER		WHIRLPOOL	Residential
110A	1	CLOTHES DRYER		WHIRLPOOL	Residential
111W	1	WALL MOUNTED OVERSHELF		CUSTOM FABRICATED	
122	1	TWO COMPARTMENT SINK WITHOUT DISPOSER		CUSTOM FABRICATED	
123	1	DISPOSER - 3HP		SALVAFOR	300-CA-18-ARSS-LD
124	1	WORKTABLE		CUSTOM FABRICATED	
125	1	20 QT. MIXER W/STAND		HOBART	HL200
128	4	UTILITY CART		LAKESIDE	522
129	2	WORKTABLE W/S.BAR UT.RACK		CUSTOM FABRICATED	
138	4	PAN RACK		CRES COR	207-UA-13A
139	1	INSUL MOBILE PROOFER		CRES COR	H-137-WSUA-12D
151	2	FIRE PROTECTION SYSTEM		ANSUL	R102
152	1	EXHAUST HOOD	EXISTING		
153	1	EXHAUST HOOD	EXISTING		
161	2	CONVECTION OVEN		BLODGETT	DFG-200 DBL
165	1	TWO BURNER RANGE		VULCAN	V2B18B
172	1	COMBI OVEN		RATIONAL	ICP 6-FULL/6-FULL N/G
186	2	PASS-THRU HEATED CABINET-1DR		TRAULSEN	AHF-132WP
188	2	PASS-THRU REFRIGERATOR-1DR		TRAULSEN	AHT-132WPUT
201M.1	1	SERVING COUNTER-MODULAR		COUNTERCRAFT	SCOL-408-MOD
209	2	DROP FRONT MILK COOLER - 8 CASE		TRAULSEN	RMC34D4
214	2	CASH REGISTER	OWNER FURNISHED		
249	1	THREE COMPARTMENT SINK NO DISPOSER		CUSTOM FABRICATED	
250	1	DISHMACHINE		HOBART	CL44-BAS
254	2	SOILED & CLEAN DISHTABLE		CUSTOM FABRICATED	
255	2	MOBILE DRYING RACK		METRO	PR48VX3
260	6	HAND SINK	FURNISHED & INSTALLED BY DIV. 22		
614	1	FILL FAUCET		T&S	B-0610
615	2	MENU MONITOR	BY OWNER		
800	1	15 GAL. BRAISING PAN		GROEN	BPM-15GA
801	1	S/S CORNER GUARDS	LOCATED ON EVERY EXPOSED CORNER THROUGHOUT KITCHEN	CUSTOM FABRICATED	
802	1	WALL BUMPERS	LOCATED ON ALL EXPOSED BUILDING WALLS	PAWLING	MD-1
803	1	WATER SOFTENER		HOBART	WA-40
804	6	S/S SPLASH GUARDS		CUSTOM FABRICATED	

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SEAL
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MELISSA MOON
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PROFESSIONAL MEMBER
Melissa Moon
7/18/2025
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ON: 07/18/2025

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ARCHITECTS AND PLANNING CONSULTANTS
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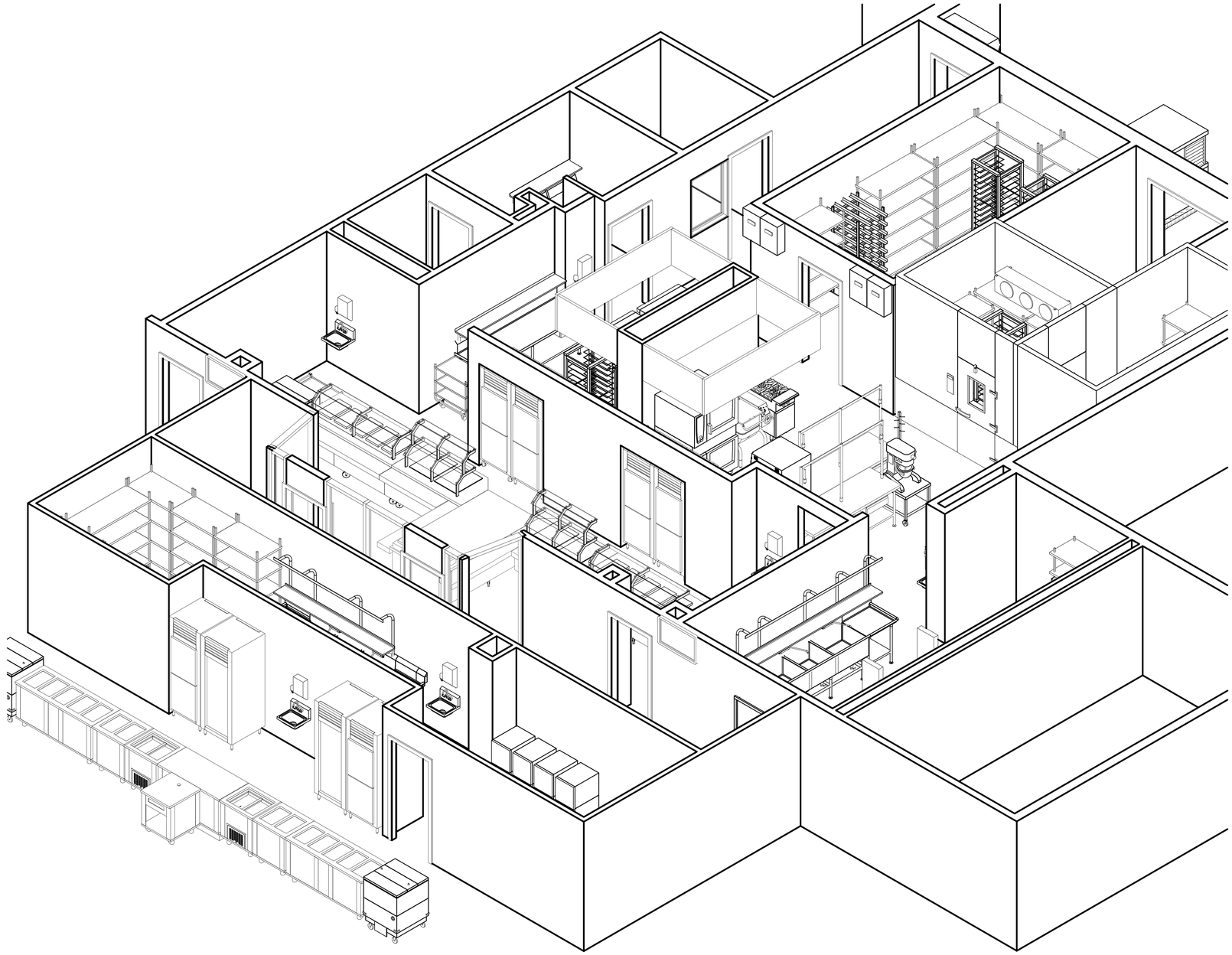
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS EQUIPMENT PLAN

A-QF1.0

ISOMETRIC VIEWS WITHIN THIS DRAWING ARE NOT TO SCALE AND ARE PROVIDED FOR REFERENCE PURPOSES ONLY. ISOMETRIC VIEWS ARE NOT INTENDED FOR REGULATORY APPROVAL, PERMITTING, NOR CONSTRUCTION. REFER TO FLOOR PLANS AND DETAILS FOR SPECIFIC PROJECT INFORMATION.



1 FS FACILITY MODEL

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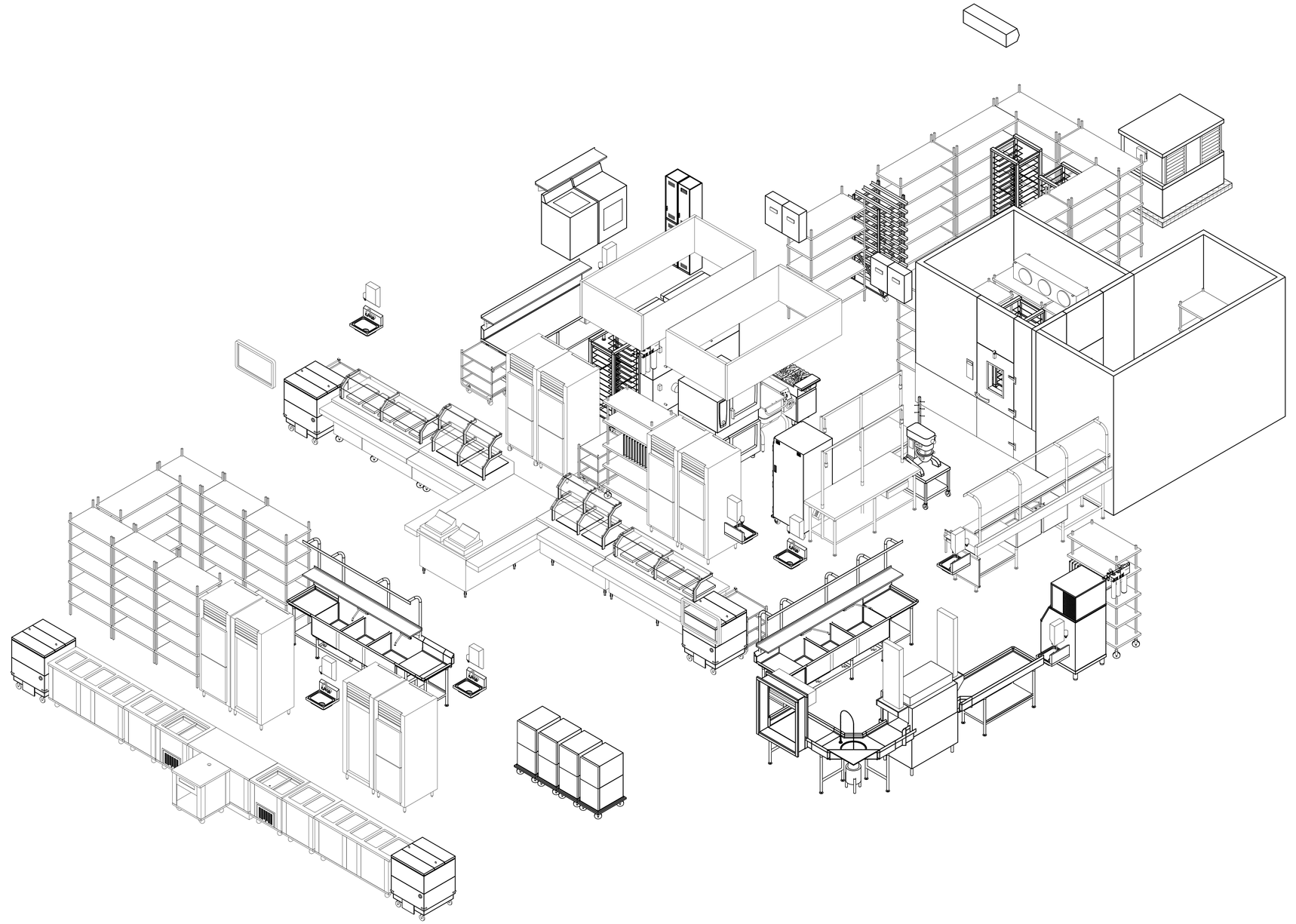
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THE ITEM APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI 48854119 ON 07/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS FACILITY MODEL

A-QF1.1

ISOMETRIC VIEWS WITHIN THIS DRAWING ARE NOT TO SCALE AND ARE PROVIDED FOR REFERENCE PURPOSES ONLY. ISOMETRIC VIEWS ARE NOT INTENDED FOR REGULATORY APPROVAL, PERMITTING, NOR CONSTRUCTION. REFER TO FLOOR PLANS AND DETAILS FOR SPECIFIC PROJECT INFORMATION.



1 FS EQUIPMENT MODEL

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FDP
FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL

FOODSERVICE CONSULTANT
MELISSA MOORE
FCSI
48854119
SOCIETY INTERNATIONAL
PROFESSIONAL MEMBER
Melissa Moore
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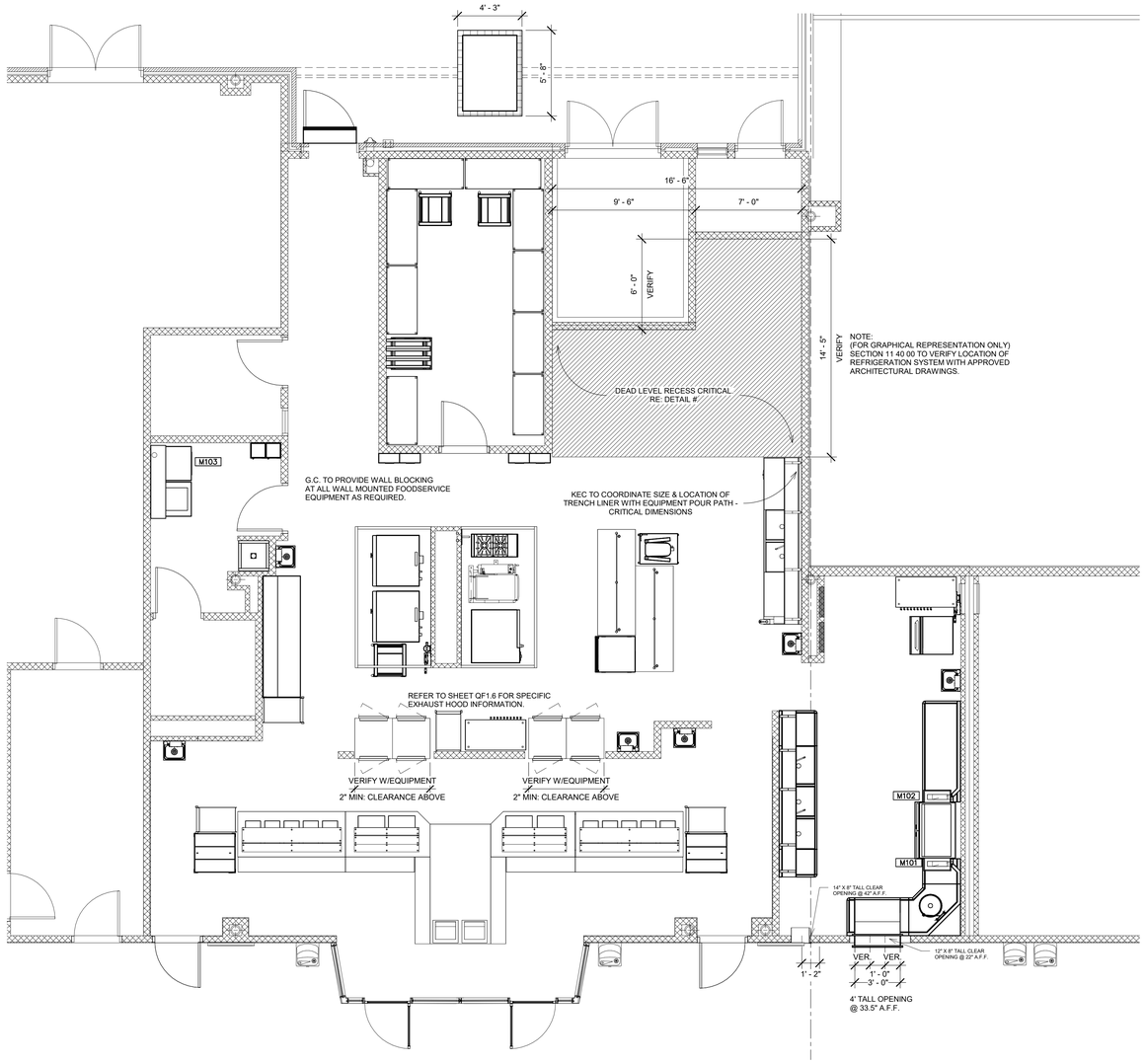
FS EQUIPMENT MODEL

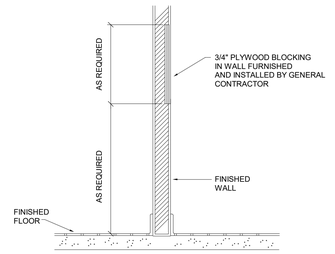
A-QF1.2

FOOD SERVICE MECHANICAL SCHEDULE						
REFER TO SHEET QF1 FOR MECHANICAL COORDINATION NOTES						
FDP NO.	FDP QTY	FDP TYPE	FDP SIZE	FDP LOC	FDP CFM	FDP S.P.
M101	1	EXHAUST	4" X 16"		1500	0.35"
M102	1	EXHAUST	4" X 16"		1500	0.35"
M103	1	DRYER VEBT	6" DIA.		---	---



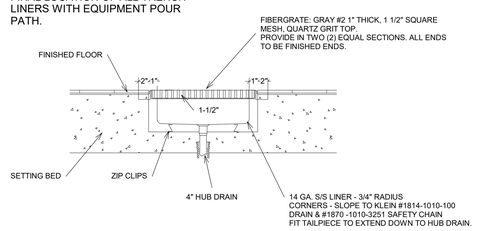
1 FOOD SERVICE SPECIAL CONDITIONS PLAN
1/4" = 1'-0"

NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION AND SIZE OF WALL BLOCKING.

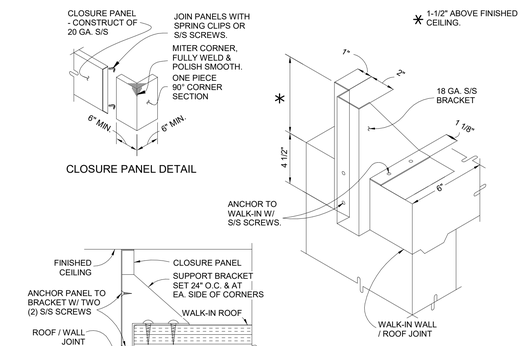


5 WALL BLOCKING DETAIL
NOT TO SCALE

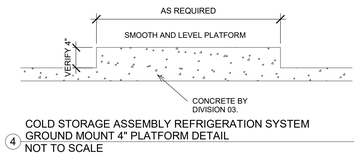
NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION OF ALL TRENCH LINERS WITH EQUIPMENT POUR PATH.



6 TRENCH LINER DETAIL
NOT TO SCALE

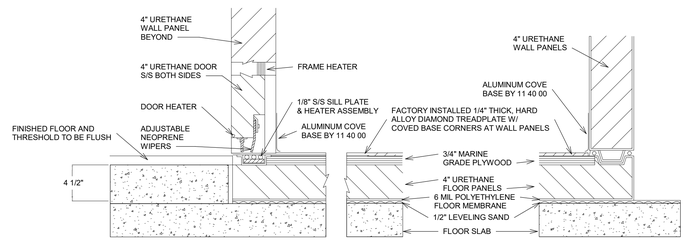


3 COLD STORAGE ASSEMBLY ENCLOSURE PANEL DETAIL
NOT TO SCALE



4 COLD STORAGE ASSEMBLY REFRIGERATION SYSTEM GROUND MOUNT 4" PLATFORM DETAIL
NOT TO SCALE

SLAB TO BE MODIFIED AS REQUIRED TO ALLOW FOR A 4 1/2" DEPRESSION SLAB. PROVIDE NEW LEVEL CONCRETE PAD FOR COLD STORAGE ASSEMBLY.



WALL SECTION @ EXTERIOR DOOR

2 COLD STORAGE ASSEMBLY 4 1/2" DEPRESSION DETAIL
NOT TO SCALE

ISSUE:

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SEAL

FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
46854119
PROFESSIONAL MEMBER
Melissa Moore
7/18/2025
I HEREBY CERTIFY THAT I PREPARED OR APPROVED THIS DOCUMENT AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF TEXAS.
MELISSA MOORE, FCSI NO. 46854119
ON: 07/18/2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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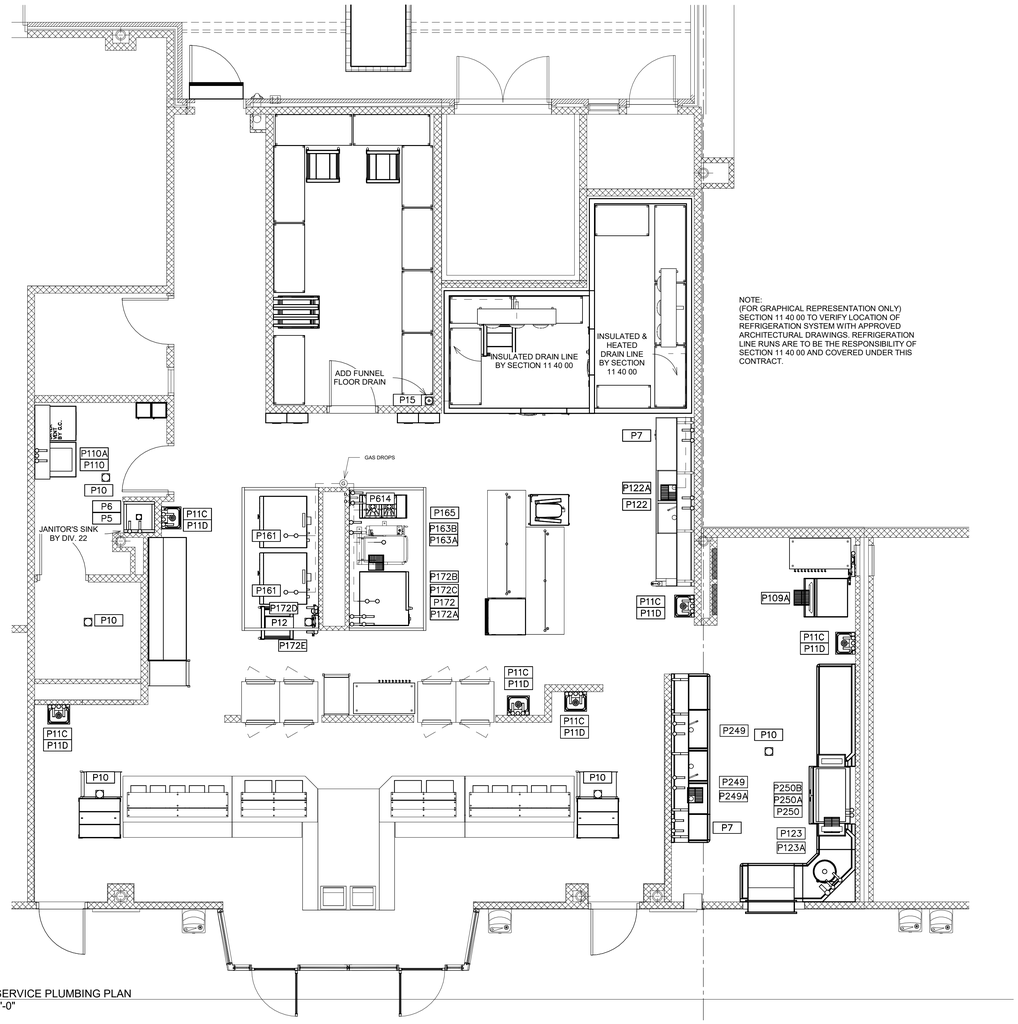
FS SPECIAL CONDITIONS & MECHANICAL PLAN

A-QF1.3

FOOD SERVICE PLUMBING SCHEDULE

REFER TO SHEET QF1 FOR PLUMBING COORDINATION NOTES

FDP PNO	FDP PSIZE	FDP PCONN	FDP PSERVICE TO	FDP PLOC	FDP PAFF	FDP PREMARKS
P5	3/4"	H & C WATER	JANITOR SINK	WALL	48"	JANITOR SINK BY PLUMBER
P6	4"	FLOOR DRAIN	JANITOR SINK	FLOOR	VERIFY	JANITOR SINK BY PLUMBER
P7	3/4"	H & C WATER	HOSE BIBB	WALL	18"	BTC
P10	VERIFY	FLOOR DRAIN	GENERAL AREA DRAIN	FLOOR	VERIFY	---
P11C	1/2"	H & C WATER	FAUCET	WALL	18"	FURNISHED & INSTALLED BY DIV. 22
P11D	1 1/2"	DIRECT DRAIN	HAND SINK	WALL	15"	FURNISHED & INSTALLED BY DIV. 22
P12	VERIFY	FLOOR DRAIN	EQUIP. DRAIN	FLOOR	VERIFY	NO SLOPE
P15	4"	FLOOR DRAIN	FUNNEL FLOOR DRAIN	FLOOR	0"	---
P109	3/4"	COLD WATER	WATER/ ICE	WALL	60"	BTC
P109A	12" SQ.	FLOOR SINK	ICE MACHINE	FLOOR	0"	FULL GRATE
P110	3/4"	H & C WATER	CLOTHES WASHER	WALL	48"	BTC; VALVE BOX
P110A	2"	INDIRECT DRAIN	CLOTHES WASHER	WALL	48"	VALVE BOX
P122	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P122A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	3/4 GRATE
P123	3/4"	H & C WATER	FAUCET / DISPOSER	WALL	13"	BTC
P123A	2"	DIRECT DRAIN	DISPOSER	WALL	10"	BTC
P161	(2)3/4"	NATURAL GAS	CONVECTION OVEN	WALL	18"/36"	BTC - 60 MBTU/HR EACH
P163A	3/4"	NATURAL GAS	TILT BRAISING PAN	WALL	18"	BTC - 65 MBTU/HR
P163B	3/4"	H & C WATER	TILT BRAISING PAN	WALL	36"	BTC
P165	1"	NATURAL GAS	RANGE	WALL	18"	BTC - 70 MBTU/HR
P172	(2)3/4"	COLD WATER	COMBI OVEN	WALL	24"/48"	BTC - INTERCONNECT THRU FILTERS
P172A	3/4"	COLD WATER	COMBI OVEN	WALL	48"	BTC
P172B	12"SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE
P172C	(2)3/4"	NATURAL GAS	COMBI OVEN	WALL	18"/36"	BTC - 105 MBTU/HR EACH
P172D	3/4"	COLD WATER	COMBI OVEN	WALL	66"	BTC; INTERCONNECT TO P172
P172E	3/4"	COLD WATER	COMBI OVEN WATER FILTER	WALL	66"	BTC
P249	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P249A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	THREE QUARTER GRATE
P250	12" SQ.	FLOOR SINK	BOOSTER / DISHMACHINE	FLOOR	18"	BTC
P250A	3/4"	HOT WATER	DISHMACHINE	WALL	18"	EXT. THRU W.FILTER TO BOOSTER / DISH MACHINE - 140DEG.MIN.
P250B	3/4"	COLD WATER	DISHMACHINE	WALL	18"	BTC
P614	1/2"	H & C WATER	FILL FAUCET	WALL	42"	BTC



1 FOOD SERVICE PLUMBING PLAN
1/4" = 1'-0"

SECTION 11 40 00 TO PROVIDE LOOSE WITH FOOD SERVICE EQUIPMENT. INSTALLATION BY DIV. 22 & 26.

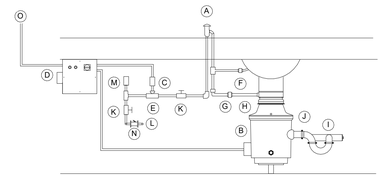
- (A) VACUUM BREAKER
- (B) DISPOSER
- (C) TIME DELAY
- (D) CONTROL PANEL
- (E) SOLENOID VALVE

DIVISION 22 TO PROVIDE AND INSTALL

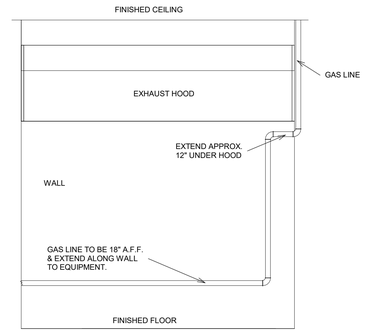
- (F) 1/2" CW INLET
- (G) FLOW CONTROL
- (H) 1/2" CW
- (I) 2" DRAIN LINE WITH P-TRAP & Y ADAPTOR
- (J) 1-1/2" TAILPIECE
- (K) GATE VALVE
- (L) 1/2" CW SUPPLY
- (M) SHOCK STOP
- (N) RPZ BACK FLOW PREVENTOR

DIVISION 26 TO PROVIDE AND INSTALL

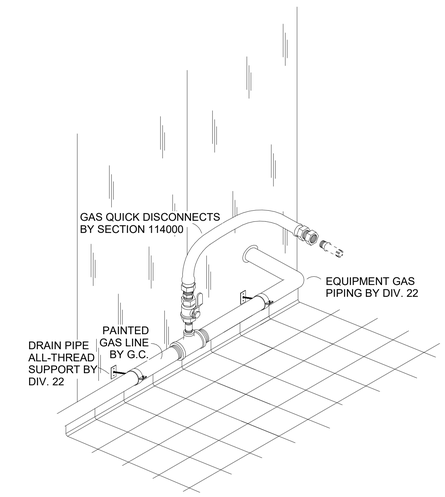
- (O) POWER SUPPLY



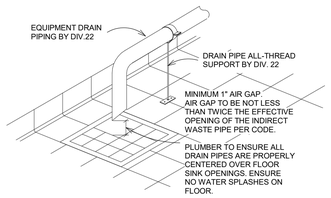
6 DISPOSER WITH VACUUM BREAKER DETAIL
NOT TO SCALE



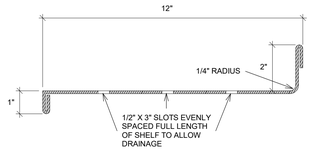
7 EXHAUST HOOD - GAS LINE ROUTING DETAIL
NOT TO SCALE



3 GAS DISCONNECT DETAIL
NOT TO SCALE



5 DRAIN PIPING FASTENER DETAIL
NOT TO SCALE



8 WAREWASH - PERFORATED OVER SHELF DETAIL
NOT TO SCALE

○	HW	HOT WATER	☑	FFD	FUNNEL FLOOR DRAIN
○	CW	COLD WATER	◣	EVC	EXHAUST VENT CONNECTION
○	HTW	180 F HOT WATER	◢	SVC	SUPPLY VENT CONNECTION
◎		CHILLED WATER	◐	FR	DIRECT-CONNECTED FLUE RISER
●	W	DIRECT WASTE	⊕	PS	PIPE SLEEVE
○	IW	INDIRECT WASTE	⊙		COMPRESSED AIR
⊙		GAS SUPPLY	♦		CO2
◕		STEAM SUPPLY		AFF	ABOVE FINISHED FLOOR
⊗	CR	CONDENSATE RETURN		BTC	BRANCH TO CONN. ON EQUIP
◉	DR	DRAIN		DFA	DROP FROM ABOVE
□	FD	FLOOR DRAIN		CLG	CEILING
▤	FST	FLOOR SINK 3/4 GRATE			
▥	FSH	FLOOR SINK 3/4 GRATE			

2 PLUMBING SYMBOLS
NOT TO SCALE

ISSUE:

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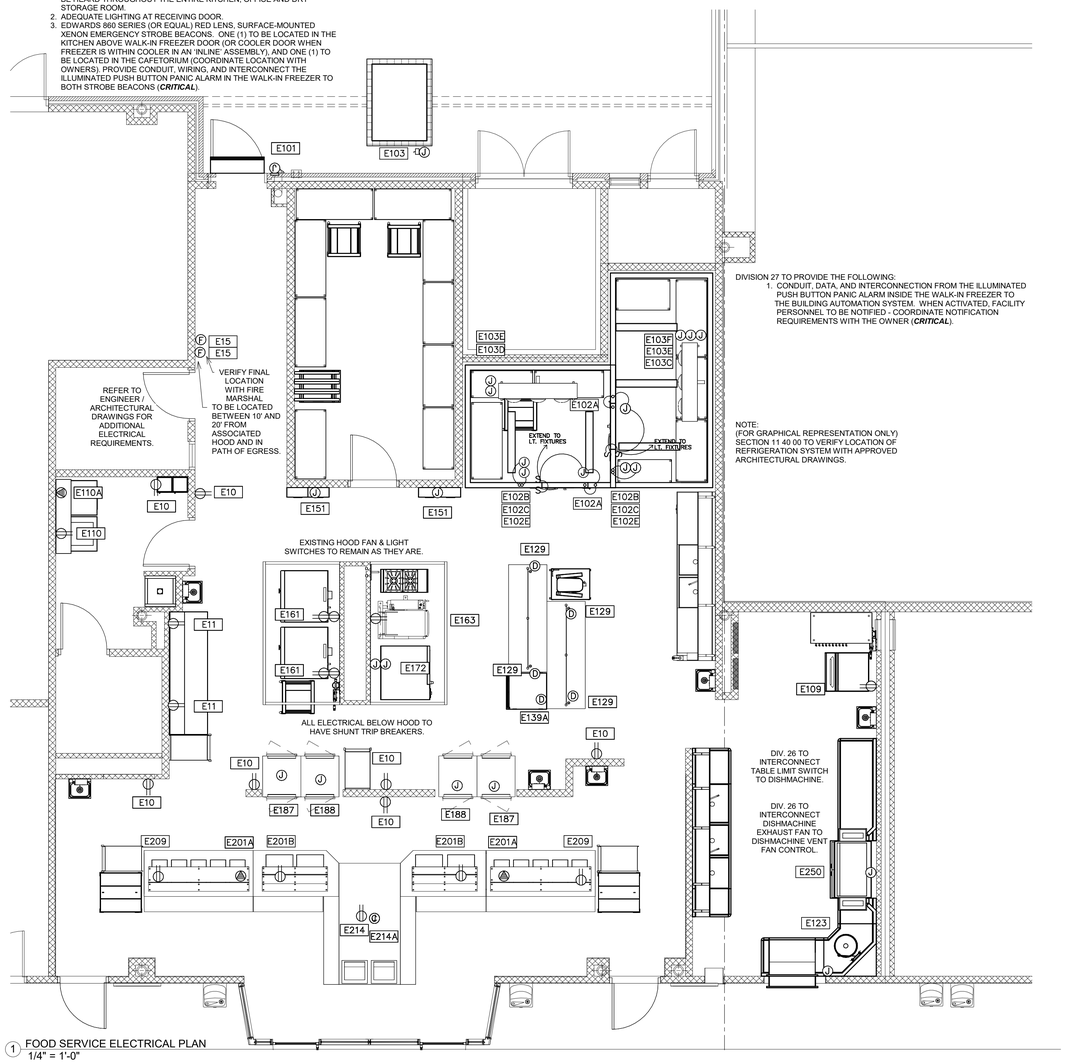
FS PLUMBING PLAN

A-QF1.4

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E10	DR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E11	DR	16.0A	120	1	CONVENIENCE OUTLET	WALL	47"	MOUNT HORIZONTAL
E15	JB	---	---	--	FIRE PULL	WALL	48"	BTC; RECESSED
E101	JB	5.1A	120	1	AIR SCREEN	WALL	82"	BTC; MAGNETIC REED SWITCH ON DOOR JAMB & DOOR
E102A	JB	16.0A	120	1	DOOR HEATER/LIGHTS	CLG	DFA	BTC
E102B	JB	5.0A	120	1	TEMP. ALARM	CLG	DFA	BTC
E102C	JB	5.0A	120	1	PRESSURE RELIEF PORT	CLG	DFA	BTC
E102E	JB	10.0A	120	1	PANIC ALARM BUTTON	CLG	DFA	BTC-INTERCONNECT TO STROBE LIGHT/HORN ABOVE FREEZER DOOR AND IN CAFETORIUM
E103	JB/DS	25.0A	208	3	REFRIGERATION SYSTEM	VERIFY	VERIFY	BTC
E103C	JB	16.0A	208	1	FREEZER COIL	CLG	DFA	BTC
E103D	JB	10.0A	120	1	COOLER COIL	CLG	DFA	BTC
E103E	JB	---	---	---	DATA CONNECTION	CLG	DFA	BTC; RUN TO NEAREST IDF / MDF ROOM
E103F	JB	16.0A	120	1	DRAIN LINE HEATER	CLG	DFA	BTC; DEDICATED CIRCUIT
E109	DR	11.9A	120	1	ICE MACHINE	WALL	60"	---
E110	DR	16.0A	120	1	CLOTHES WASHER	WALL	48"	--
E110A	SR	30.0A	208	1	CLOTHES DRYER	WALL	48"	VERIFY NEMA PLUG RECEPTACLE
E123	JB	3.0HP	208	3	DISPOSER	WALL	24"	BTC; CONNECT THRU C.P. TO DISPOSER
E129	DCR	16.0A	120	1	TABLE RECEPTACLE	CLG	84"	TWISTLOCK PLUG & RECEPTACLE
E139A	DCR	16.6A	120	1	HEATED CABINET	CEILING	DFA	BTC
E151	JB	1.0A	120	1	FIRE PROT. SYSTEM	CLG	DFA	BTC
E161	(2)DR	6.0A EA.	120	1	CONVECTION OVEN	WALL	24"/48"	SHUNT TRIP BREAKER
E163	DR	5.0A	120	1	TILT BRAISING PAN	WALL	24"	SHUNT TRIP BREAKER
E172	(2)JB	15.0A EA.	208	1	COMBI OVEN	WALL	24"/48"	BTC - SHUNT TRIP BREAKER
E187	JB	15.5A	120/208	1	HEATED CABINET	WALL	96"	BTC; MOUNT ON KITCHEN SIDE
E188	JB	7.2A	120	1	REFRIGERATOR	WALL	96"	BTC; MOUNT ON KITCHEN SIDE-OMIT PLUG, UNIT TO BE HARDWIRED
E201A	PMR	28.0A	208	1	HOT FOOD COUNTER	FLOOR	4.5"	BTC
E201B	PMR	16.0A	120	1	COLD FOOD COUNTER	FLR	4.5"	---
E209	PMR	8.0A	120	1	DROP FRONT MILK COOLER-8 CASE	FLR	4.5"	---
E214	PMR	16.0A	120	1	CASH REGISTER	FLR	4.5"	DEDICATED CIRCUIT

DIVISION 26 TO PROVIDE, COORDINATE, AND INSTALL THE FOLLOWING:
1. AUDIBLE DOORBELL AT RECEIVING DOOR ON EXTERIOR WALL THAT CAN BE HEARD THROUGHOUT THE ENTIRE KITCHEN, OFFICE AND DRY STORAGE ROOM.
2. ADEQUATE LIGHTING AT RECEIVING DOOR.
3. EDWARDS 860 SERIES (OR EQUAL) RED LENS, SURFACE-MOUNTED XENON EMERGENCY STROBE BEACONS. ONE (1) TO BE LOCATED IN THE KITCHEN ABOVE WALK-IN FREEZER DOOR (OR COOLER DOOR WHEN FREEZER IS WITHIN COOLER IN AN 'INLINE' ASSEMBLY), AND ONE (1) TO BE LOCATED IN THE CAFETORIUM (COORDINATE LOCATION WITH OWNERS). PROVIDE CONDUIT, WIRING, AND INTERCONNECT THE ILLUMINATED PUSH BUTTON PANIC ALARM IN THE WALK-IN FREEZER TO BOTH STROBE BEACONS (***CRITICAL***).

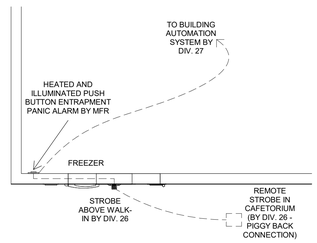


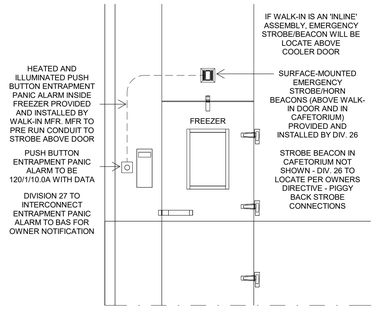
DIVISION 27 TO PROVIDE THE FOLLOWING:
1. CONDUIT, DATA, AND INTERCONNECTION FROM THE ILLUMINATED PUSH BUTTON PANIC ALARM INSIDE THE WALK-IN FREEZER TO THE BUILDING AUTOMATION SYSTEM. WHEN ACTIVATED, FACILITY PERSONNEL TO BE NOTIFIED - COORDINATE NOTIFICATION REQUIREMENTS WITH THE OWNER (***CRITICAL***).

NOTE:
(FOR GRAPHICAL REPRESENTATION ONLY)
SECTION 11 40 00 TO VERIFY LOCATION OF REFRIGERATION SYSTEM WITH APPROVED ARCHITECTURAL DRAWINGS.

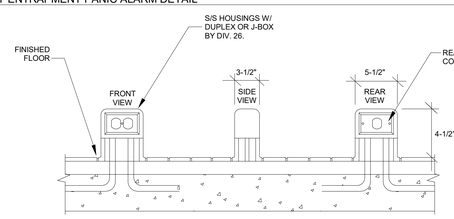
1 FOOD SERVICE ELECTRICAL PLAN
1/4" = 1'-0"

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E214A	CS	---	---	---	POS	FLOOR	6"	BTC; CONDUIT W/DATA LINE TO RUN TO MANAGER'S OFFICE OR IDF ROOM-VERIFY
E250	JB/DS-JB	51.7A	480	3	DISHMACHINE	WALL	66"	BTC; EXTEND FROM JB/DS AT NEAREST WALL



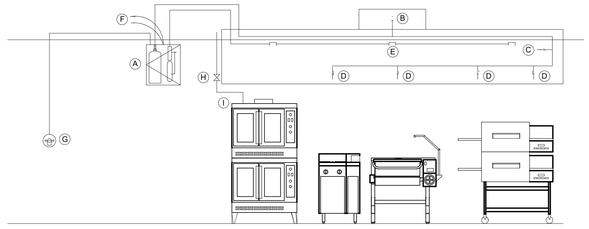


6 COLD STORAGE ASSEMBLY ENTRAPMENT PANIC ALARM DETAIL
NOT TO SCALE



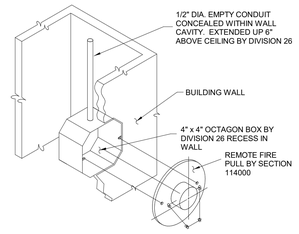
3 PEDESTAL MOUNTED RECEPTACLE DETAIL
NOT TO SCALE

NOTE:
REFER TO FDP EQUIPMENT PLAN
FOR SPECIFIC COMPONENTS UNDER HOOD.
ALL EQUIPMENT SHOWN HERE FOR GRAPHICAL REPRESENTATION ONLY.



A	S/S ENCLOSURE W/AGENT TANK AND NITROGEN CARTRIDGE
B	DUCT NOZZLE(S)
C	PLENUM NOZZLE(S)
D	SURFACE PROTECTION NOZZLE(S)
E	FUSIBLE LINK(S)
F	(2) WIRES FROM FIRE SYSTEM TO SHUNT TRIP BREAKERS FOR SHUT DOWN OF ELECTRICAL CONNECTIONS LOCATED BENEATH EXHAUST HOOD DURING FIRE MODE
G	REMOTE FIRE PULL
H	GAS VALVE
I	GAS SUPPLY (AS REQUIRED)

4 FIRE PROTECTION SYSTEM TYPICAL DETAIL
NOT TO SCALE



5 FIRE PROTECTION SYSTEM RECESSED FIRE PULL DETAIL
NOT TO SCALE

	SCR	CONDUIT STUB BTC ON RECEPT FURNISH WITH EQUIPMENT		CC	CONDUIT FOR COMPUTER CABLES
•	CS	CONDUIT STUB UP/OUT FOR DIRECT CONNECTION		BTC	BRANCH TO CONNECTION ON EQUIPMENT
	DR	DUPLEX RECEPTACLE		WPR	WATERPROOF RECEPTACLE (SPRING COVER)
	SR	SINGLE PURPOSE RECEPTACLE-1PH		FPB	FIRE PROTECTION BUZZER
	SR	SINGLE PURPOSE RECPTACLE-3PH		BSC	BEVERAGE SYSTEM CONDUIT
	FR	FLUSH FLOOR RECEPTACLE		DFA	DROP FROM ABOVE
	PMR	PEDESTAL MOUNTED RECEPTACLE		AFF	ABOVE FINISH FLOOR
	DCR	DROP CORD RECEPTACLE		CS/JB	JUNCTION BOX ON PEDESTAL
	JB	JUNCTION BOX ON CEILING		SW	SWITCH
	JB	JUNCTION BOX IN WALL		D	DATA
	JB/DS	JUNCTION BOX WITH DISCONNECT BY DIV.26			

2 ELECTRICAL SYMBOLS
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

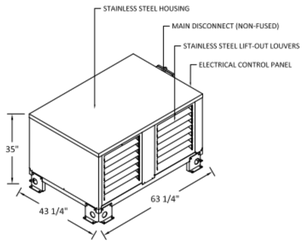
SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
#8854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ELECTRONICALLY SIGNED AND SEALED. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.
MELISSA MOORE, FCSI NO. #8854119
SHA: 8319A35D25

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS ELECTRICAL PLAN

A-QF1.5

MODEL NO. ZS1-02Z-CT3-EST OUTDOOR AIR COOLED REFRIGERATION SYSTEM
ITEM NO. 103



NOTE:
- CRANKCASE HEATERS
- FAN CYCLING SWITCHES
- (2) DOOR SENSORS (SHIPPED LOOSE)
- 24" STAND W/ SKIRT (SHIPPED LOOSE)
- REFRIGERANT DETECTION SYSTEM
- CHECK VALVE (SHIPPED LOOSE)
- SHUT OFF VALVE (SHIPPED LOOSE)

RACK WEIGHT: 900 LBS.

ENGINEERING SUMMARY

POWER SUPPLY: 208-230/60/3
CONNECTED LOAD: 25 AMPS

MOPD: 35 AMP
MINIMUM CIRCUIT AMPACITY: 28.0

	FIXTURES						CONDENSING UNIT								EVAPORATOR COILS												REFRIGERANT LINE				
			TEMP °F				COMPRESSOR										FAN MOTORS			HEATERS				ACCESSORIES			SIZES (IN)				
							RATING @ 60 HZ										@ 60 HZ			@ 60 HZ											
SYSTEM	ITEM #	DESCRIPTION	FIXT.	SUCT.	REQ'D FIXTURE BTU/H	REFRIG. R.	MODEL NO.	H.P.	RLA	V	PH	BTU CAP @ AMB °F 110	TYPE	REC. CAP. (lbs)	CONDENSER	ITEM #	MODEL NO.	QTY	RLA	V	PH	RLA	V	PH	DEFR. TYPE	DEFROST CONTROLLER TYPE	CONTROLLER QTY	TSTAT	SOL. VALVE	EXP. V/LV.	SUCT.	SUCT. LINE RISER	LIQUID	LINE RUN (FT)	TYPE	TOTAL SYSTEM LOAD
A	102	WALK-IN COOLER	35	25	8831	454A	YS11KAE		11.2	208	3	11700	Z	14.0	L1R	-	BEL0095	1	1.8	115	1				O.C.	ECOSMART	1	F	F	EF	5/8	5/8	3/8	100	M	11.2
B	102	WALK-IN FREEZER	-10	-20	10573	454A	YF10KAE		13.8	208	3	11050	Z	14.0	L2R	-	BEL0130	1	1.5	208	1	13.7	208	1	ELEC	ECOSMART	1	F	F	EF	7/8	7/8	3/8	100	M	13.8

ALL EVAPORATOR COILS WILL REQUIRE A HOUSE POWER SUPPLY

c UL us LISTED

NOTE:
IT IS THE INSTALLING CONTRACTORS RESPONSIBILITY TO FOLLOW ALL APPLICABLE CODES AND CURRENT REFRIGERATION INDUSTRY STANDARDS AND PRACTICES WHEN DETERMINING LINE SIZES, AND INSTALLING AND STARTING UP RDT EQUIPMENT.

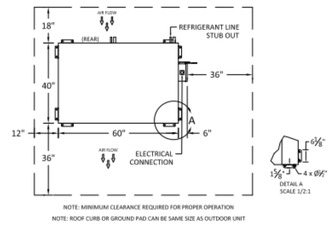
COMPRESSOR TYPE
Z SCROLL
H HERMETIC
S SEMI-HERMETIC
D DISCUS

DEFROST TYPE
O.C. OFF CYCLE
ELEC ELECTRIC

LINE TYPE
M MAIN - UP TO 100'
B BRANCH - UP TO 50'
T TRUNK - UP TO 200'

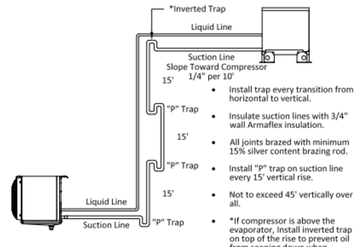
EVAPORATOR ACCESSORIES
EF EEV FACTORY EQUIPPED ON EVAP
TF TXV FACTORY EQUIPPED ON EVAP
F FACTORY EQUIPPED ON EVAP
O PROVIDED BY OTHERS
L LOOSE (FIELD INSTALLATION)

PLANVIEW/ CLEARANCE REQUIREMENTS



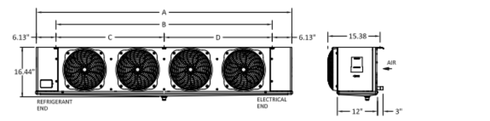
NOTE: MINIMUM CLEARANCE REQUIRED FOR PROPER OPERATION
NOTE: ROOF CURB OR GROUND PAD CAN BE SAME SIZE AS OUTDOOR UNIT

SUCTION LINE VERTICAL RISE DETAIL



- Install trap every transition from horizontal to vertical.
- Insulate suction lines with 3/4" wall Armaflex insulation.
- All joints brazed with minimum 15% silver content brazing rod.
- Install "P" trap on suction line every 15' vertical rise.
- Not to exceed 45' vertically over all.
- *If compressor is above the evaporator, Install inverted trap on top of the rise to prevent oil from seeping down when fixture(s) is turned off.

EVAPORATOR DETAILS - MODEL BEL



AIR DEFROST Size	DIMENSIONS A	B	C	D	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. Lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps 115V	208V
	Inches	Inches	Inches	Inches							
095	45-1/2	33-1/4	-	-	1/2 OD	5/8 OD	3/4 MPT	51	2	1.8	1.0

ELECTRIC DEFROST	DIMENSIONS A	B	C	D	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. Lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps	Heater Amps as wired for 208-230/60/1	208-230/60/3	460/60/3
	Inches	Inches	Inches	Inches									
130	61-1/2	49-1/4	-	-	1/2 OD	7/8 OD	3/4 MPT	71	3	1.5	13.7	8.5	6.8

EACH EVAPORATOR COIL:
- EQUIPPED WITH TWO LEAK SENSORS, PRE-MOUNTED AND PRE-WIRED
- SUPPLIED WITH A LIQUID LINE SHUT-OFF VALVE AND SUCTION LINE CHECK VALVE, SHIPPED LOOSE FOR FIELD INSTALL OUTSIDE OF COMPARTMENTS AND NO MORE THAN 10' FROM EVAPORATOR COIL.

ZS SERIES ENGINEERING SPECIFICATIONS

Multi compressor, outdoor, air cooled. The refrigeration package shall be a pre-engineered and factory-assembled unit, trade name "ZS", as manufactured by Refrigeration Design Technologies, 1808 FM Road 66, P.O. Box 622, Waxahachie, Texas 75168. Phone: (972) 937-3215, Fax: (972) 937-0970.

1. Air-Cooled Refrigeration System
The RDT UL Listed "Air-Cooled" Refrigeration system shall be housed in a weather-protected compact powder coated steel frame. The entire housing shall be brushed stainless steel. The unit shall include an air-cooled aluminum fin copper tube condenser designed to operate at 15 degrees TD. The exterior housing shall feature stainless steel one piece louvers. Lifting points shall be integrated in the framing component. Condenser fan motors shall be mounted within the enclosure. The condenser intake surface shall be protected with stainless steel expanded metal guard to protect against vandalism and hail damage.

Each unit shall be equipped with a ball-bearing fan motor, suction filter, sight glass, liquid filter/drier, liquid line inlet and outlet valve, defrost cycle and high pressure super-hose connections. Each unit shall be equipped with fan cycling controls and/or head pressure regulator where required for low ambient conditions.

Condensing unit shall contain scroll, hermetic, semi-hermetic, and/or discus type compressor(s) assembled to operate with the refrigerant specified for both medium and low temperature applications.

2. Evaporator Coils
A. Evaporator coils shall be direct expansion type fabricated of copper tubes with aluminum fins.
B. All evaporator coils shall be provided with solenoid valve, thermostatic or electronic expansion valve and thermostat.

3. Pre-Piping
All refrigerant lines shall be extended to outside of the housing in a neat and orderly manner. All tubing shall be securely supported and anchored with non-corrosive coated clamps.

All joints must be brazed, not soldered.

All piping and controls shall be factory pressure-tested with dry nitrogen.

4. Control Panel
The package shall have a factory-mounted and pre-wired control panel, with main disconnect (non fused) where required, circuit breakers, contactors wired for single point power connection.

General Information
Contractors shall verify all dimensions onsite and coordinate with other trades.

General contractor shall prepare the platform, curbed openings and weatherproofing the unit after installation.

Refrigeration Contractor
All copper tubing to be refrigerant grade. A.C.R. or type "L".

Brazing should be used for all refrigerant piping. Silver solder or soft solder is not acceptable.

All piping to be pressure tested with nitrogen at 300 psi. After the condensing unit and coil have been connected the balance of the system shall be leak tested with the valves open at 200 psi.

The complete system shall be evacuated with a vacuum pump. Each unit should be charged tested and adjusted to assure operation.

Contractor should provide and install the drain-line heater in freezer. Heater shall be connected by electrical contractor. Seal all penetrations through the walk-in units with foam.

Electrical Contractor
Electrical contractor to provide power for refrigeration package and connect control and defrost system as called for in the wiring diagram.

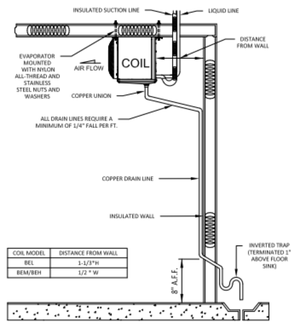
Electrical contractor to connect drain-line heater in the freezer.

All electrical wiring and installation shall be in accordance with the wiring diagram and local codes. Seal all penetrations through the walk-in units with foam.

Plumbing Contractor
Plumbing contractor to provide copper drain lines for walk-in refrigerator and freezer, pitched 1/4" per foot of run. Trap drain-line outside of refrigerated space to avoid entrance of warm, moist air.

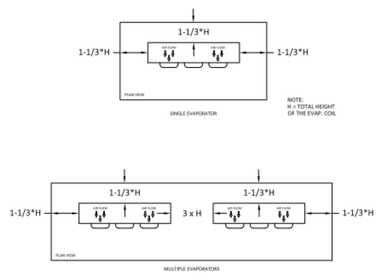
All plumbing installation shall be in accordance with local codes.

EVAPORATOR MOUNTING DETAIL (TYPICAL)



COIL MODEL	DISTANCE FROM WALL
BEL	1-1/3"H
BEM/BEH	1/2 " W

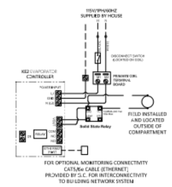
EVAPORATOR PLACEMENT & CLEARANCE REQUIREMENTS LOW PROFILE EVAPORATOR COILS (I.E. - BEL)



WIRING DIAGRAM - ECOSMART - AKEA1AE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN COOLER WITH ONE COIL 115/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW:

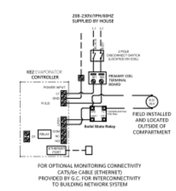
SYS	DESCRIPTION	VOLTAGE
A	WALK-IN COOLER	115/1



WIRING DIAGRAM - ECOSMART - AKEB1EE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN FREEZER WITH ONE COIL 208-230/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW:

SYS	DESCRIPTION	VOLTAGE
B	WALK-IN FREEZER	208/1



APPROVAL STATUS

THIS DRAWING REPRESENTS OUR UNDERSTANDING OF THE SPECIFICATIONS. PLEASE REVIEW IT CAREFULLY FOR ACCURACY. CLEARLY AND IN DETAIL NOTE CHANGES REQUIRED.

MARK APPROPRIATE BOX, SIGN, AND DATE BELOW.

- ☐ APPROVED FOR FABRICATION NO CHANGES
- ☐ APPROVED FOR FABRICATION WITH CHANGES NOTED
- ☐ REVISE AND RE-SUBMIT DRAWING

BY: _____ DATE: _____

NOTICE

THIS DRAWING BEING AN INSTRUMENT OF SERVICE IS AND WILL REMAIN PROPERTY OF REFRIGERATION DESIGN TECHNOLOGIES AND CANNOT BE USED WITHOUT WRITTEN AUTHORIZATION.

No.	Revision/Issue	Date
0	ORIGINAL ISSUE	10-02-25
1	CHANGES PER NEW FLOOR PLAN	1-17-25
2	CHANGED TO A2L EQUIPMENT	7-16-25

REFRIGERATION DESIGN TECHNOLOGIES
1808 FM Road 66 / P.O. Box 622
Waxahachie, Texas
(800) 736-9518
www.rdtonline.com

Consultant:
Foodservice Design professionals
The Woodlands, TX

Dealer
-
-

Austin Parkway Elementary School
Sugarland, TX

Project No: 31072
Designed By: A. RODRIGUEZ
Drawn By: A. RODRIGUEZ
Sheet 1.1 of sheets

ISSUE:
12/05/2024 DD PACKAGE
03/11/2025 50% CD PKG.
05/23/2025 90% CD PKG.
07/18/2025 ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

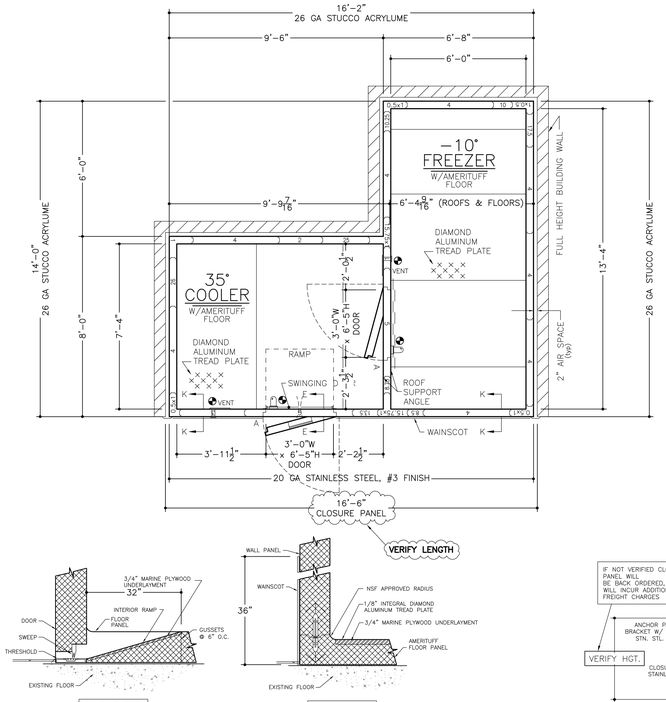
FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

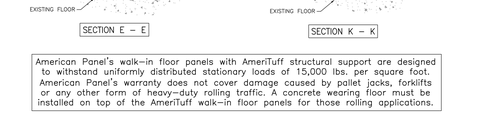
SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
46854119
PROFESSIONAL MEMBER
Melissa Moore
7/18/2025
THIS ITEM IS RELEASED FOR PERMITTING PURPOSES ONLY
MELISSA MOORE, FCSI NO. 46854119
ON: 07/18/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS CONDENSING UNITS

A-QF1.6

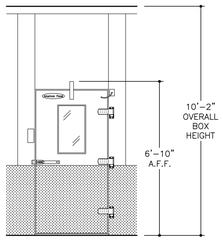




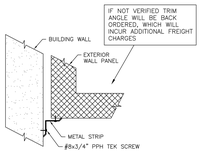
SECTION E – E

SECTION K – K

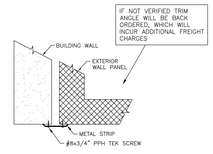
American Panel's walk-in floor panels with AmeriTuff structural support are designed to withstand uniformly distributed stationary loads of 15,000 lbs. per square foot. American Panel's warranty does not cover damage caused by pallet jacks, forklifts or any other form of heavy-duty rolling traffic. A concrete wearing floor must be installed on top of the AmeriTuff walk-in floor panels for those rolling applications.



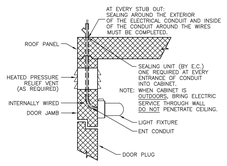
COOLER DOOR ELEVATION



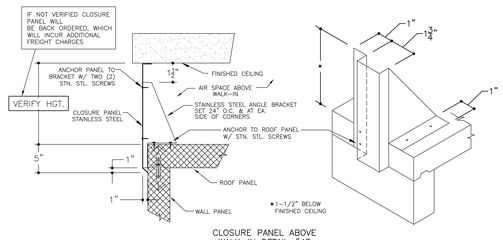
TRIM ANGLE
DETAIL #2



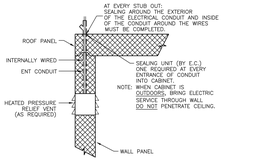
TRIM ANGLE
DETAIL #3



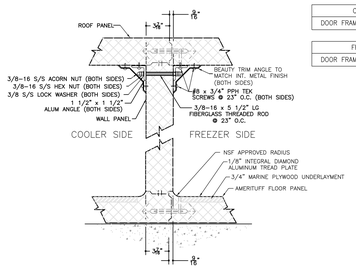
DOOR ELECTRICAL CONNECTION



CLOSURE PANEL ABOVE WALK-IN DETAIL #4E



PANEL MOUNTED ELECTRICAL CONNECTION



ROOF SUPPORT ANGLE
SPLIT PARTITION FLOOR & ROOF

COOLER DOOR	
DOOR FRAME KWHr/DAY	2.424

FREEZER DOOR	
DOOR FRAME KWHr/DAY	4.392

WALK-IN PANEL R-8967		
BUILDING UNITS	R-8967	37M2
USA		
SURFACE BURNING CHARACTERISTICS		
MATERIAL DETAILS	"FLAME SPREAD"	"SMOKE DEVELOPED"
ALUMINUM PANELS, PAINTED OR UNPAINTED, 5" OR LESS.	15	250
GALVANIZED STEEL OR STAINLESS STEEL PANELS, PAINTED OR UNPAINTED, 5" OR LESS*.	10	400 TO 500
CORE MATERIAL 6" THICK	20	250

AMERICAN PANEL WALK-IN COOLERS AND FREEZERS COMPLY WITH THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC), SECTION C403.11

THIS AMERICAN PANEL WALK-IN WILL BE MANUFACTURED TO UL & NSF REQUIREMENTS. AMERICAN PANEL ACCEPTS NO LIABILITY FOR LOCAL CODE REQUIREMENTS OF WHICH AMERICAN PANEL HAS NOT BEEN MADE AWARE OF IN WRITING PRIOR TO FABRICATION.

~SPECIFICATIONS~

BOX HEIGHT: FREEZER – 10'-2" OVERALL (9'-6 1/4" INTERIOR)
COOLER – 10'-2" OVERALL (9'-6 1/4" INTERIOR)

CONSTRUCTION: FOAMED IN PLACE
NSF LISTED, STANDARD NO. 7

INSULATION: 4" URETHANE, FINISHED PANEL
UL CLASSIFIED FLAME SPREAD 20
CORE SMOKE DEVELOPED 250

INSTALLATION: INDOOR

FLOOR: (SEE DETAILS)
FREEZER – AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE, 3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)
COOLER – AMERITUFF STRUCTURAL FLOOR W/3/4" DEEP INTERIOR RAMP
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE, 3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)

DOOR HARDWARE & ACCESSORIES: (EACH DOOR)
SMOOTH POLISHED DOOR HARDWARE
POWER TO BE STUBBED OUT CEILING PANEL
DRY CONTACT LEADS TO BE STUBBED OUT CEILING PANEL IN A SEPARATE STUB OUT
DEADBOLT HANDLE W/KEYED CYLINDER LOCK, PADLOCK PROVISION & QUARTER TURN INSIDE RELEASE (EXTERIOR DOOR ONLY)
1/8" STAINLESS STEEL THRESHOLD COVER PLATE
14 GA STAINLESS STEEL SUB THRESHOLD
FRAME HEATER WIRE
HYDRAULIC DOOR CLOSER
IC+ WALK-IN DOOR CONTROLLER AND ALARM SYSTEM INCLUDING:
INTEGRATED LIGHT SWITCH WITH AUTOMATIC LIGHT OFF AND 3-WAY & 4-WAY CAPABILITY
TEMPERATURE MONITOR AND LOGGER WITH HIGH TEMP. AND LOW TEMP. VISUAL AND AUDIO ALARM
F OR C TEMPERATURE SELECTION
INTEGRATED DRY CONTACT FOR ALARM SIGNALING & POWER FAILURE (1A @ 24VAC, 1A @ 30VDC)
DOOR AND WINDOW HEATER CONTROL (WHEN SO EQUIPPED)
HACCP PREVIEW VIA ONBOARD LCD SCREEN
HACCP DOWNLOAD VIA USB
WIFI CONNECTIVITY (INTERNET ENABLED WIFI NETWORK NEEDED)
BATTERY BACKUP
TEMPERATURE ALARM NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES
POWER FAILURE NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES (FOR THIS FEATURE TO WORK THE LOCAL WIFI NETWORK MUST BE POWER PROTECTED AND WORKING AT THE TIME OF POWER FAILURE EVENT)
AUTOMATIC AND ON DEMAND TRANSMISSION OF HACCP DATA VIA EMAIL
ADAPTIVE SETTINGS
MOMENTARY BACK-TO-BACK LIGHT SWITCH W/PILOT
25' AIR TEMPERATURE PROBE
25' SECOND PROBE (EXTENDED) FOR MONITORING THE TEMPERATURE AT A SECOND LOCATION OR FOR MONITORING A SECOND CABINET
DOOR SWITCH TO ENABLE DOOR AJAR ALARM, DOOR AJAR NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES, AND AUTOMATIC LIGHTS ON WHEN DOOR OPENS
PANIC ALARM WITH ILLUMINATED PANIC BUTTON, ALARM BUZZER WITH LED, & NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES (1-COOLER, 2-FREEZER)
KASON SCREW-IN VAPOR PROOF LIGHT FIXTURE
W/8.5 WATT SYLVANIA LED BULB & GLOBE
CCI CLEAR VU SWINGING DOOR
3 – KASON #1346 ADJUSTABLE SPRING LOADED HINGES
HEATED VISION WINDOW (14" x 24")
1/8" DIAMOND ALUMINUM TREAD PLATE KICKPLATES @ 36" HIGH S/S & O/S DOOR & FRAME

PANEL MOUNTED ACCESSORIES:
2 – KASON 1826 INTELLO-VENT WITH LIGHTS – FIELD INTERCONNECTION REQUIRED (FOAMED IN PANEL – PER PLAN) (2-COOLER, 2-FREEZER)

ACCESSORIES: (SHIPPED LOOSE)
2 – PCS. TRIM ANGLE – 18 GA STAINLESS STEEL, #3 FINISH
CLOSURE PANEL TO AN EXISTING CEILING (PER PLAN) — VERIFY LENGTH
18 GA STAINLESS STEEL, #3 FINISH
3 – 48" (1810LO) LED LIGHT FIXTURE(S) @ 40W EACH
1/8" DIAMOND ALUMINUM TREAD PLATE WAINSCOT @ 36" HIGH (EXPOSED EXTERIOR ONLY)
2 – BAKELITE LABEL(S) (BLACK) ("FREEZER", "COOLER")
1 – BAKELITE LABEL (YELLOW W/BLACK LETTERING) ("VACUUM PRESSURE RELIEF")
6 MIL POLYETHYLENE VAPOR BARRIER
6 – BELL BOX(ES) & COVER PLATE(S)
2 – DOOR STOP(S)
2 – EDWARDS 860 SERIES STROBE BEACONS
1 – EMERGENCY PRESSURE RELEASE
ROOF SUPPORT ANGLE W/BEAUTY TRIM

METAL FINISHES: INTERIOR & EXTERIOR DOOR & FRAME – 18 GA STAINLESS STEEL, #3 FINISH
INTERIOR WALLS & CEILING – WHITE .040 STUCCO ALUMINUM
EXPOSED EXTERIOR – 20 GA STAINLESS STEEL, #3 FINISH
UNEXPOSED EXTERIOR – 26 GA STUCCO ACRYLUME
EXTERIOR FLOOR & CEILING – 26 GA STUCCO ACRYLUME
INTERIOR FLOOR – AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE, 3/4" AC PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)

REFRIGERATION: BY OTHERS

NOTE: THE LARGEST DOOR PANEL ON THIS JOB IS 57.5" x 118". CUSTOMER IS TO VERIFY THAT THIS PANEL SIZE WILL NOT CONFLICT WITH ANY JOB SITE RESTRICTIONS.

NOTE: CUSTOMER IS TO VERIFY ALL DIMENSIONS, SECTIONS, DETAILS AND SPECIFICATIONS

NOTE: MAXIMUM LIGHT CIRCUIT LOAD IS 1200W 120VAC TUNGSTEN, 5A 120VAC ELECTRONIC BALLAST. FOR HIGHER LOADS ADDITIONAL LIGHT FIXTURES MUST BE CONTROLLED VIA RELAY (BY OTHERS).

ELECTRICAL DATA
⚽ = POINT OF ELECTRICAL CONNECTIONS.
WALK-IN DOORS: 115v/1ø – 350w*
PANEL MOUNTED ACC: 115v/1ø – 23w (EACH VENT)

*NOTE: ADD WATTAGE FOR EACH ADDITIONAL LIGHT FIXTURE IN ACCESSORIES.

INSULATION R-VALUES		
PANEL TYPE	COOLER	FREEZER
4" WALLS, ROOFS	R-29	R-32
5" WALLS, ROOFS	R-36	R-40
FLOORS	R-25	R-28
DOORS	R-32	

☐ APPROVED SIGNATURE
☐ APPROVED AS NOTED PRINT NAME
☐ REVISE & RESUBMIT DATE

1) Please verify that door swing and location are correct.
2) If this walk-in is to be installed in a depression, or quarry tile is to be applied to the interior, depression depths or tile thickness must be specified to insure proper door height.
3) All site preparation, floor or slab construction, plumbing, electrical connections (including control wiring) by others.
4) ⚽ Electrical: 115-60-1 required above latch side of each door, through ceiling, to operate frame heater and light.
5) Special note to General Contractor and his Sub Contractor for quarry tile or concrete wearing floors: the sheet metal panel facings may be susceptible to staining due to excessive moisture created by hydration of concrete type materials. Therefore, it is absolutely necessary that each room be properly ventilated. Also note that special precautions must be taken when using muriatic acid due to effects hydrochloric acid fumes have on aluminum and stainless steel.
6) This drawing and information contained herein are the exclusive property of American Panel Corporation. It shall be returned to American Panel Corporation upon demand and shall not be reproduced in whole or part, disclosed to anyone else, or used without the written consent of American Panel Corporation.

ITEM #102 Walk-In Cooler/Freezer

REV.	DATE	DESCRIPTION	REV. BY	CK'D BY
A	1/23/25	REVISED SPEC	WS	WQ

American Panel
AMERICAN PANEL CORPORATION
5800 S.E. 78th St. Ocala, Florida 34472
Ph. (352) 245-7055 Fax (352) 245-0726

CUSTOMER: FOODSERVICE DESIGN PROFESSIONALS
PROJECT: AUSTIN PARKWAY ES–FBISD – FORT BEND, TX
DATE: 10/4/24 | DRAWN BY: LC/TR | P.O.#:
SCALE: 3/8"=1'-0" | PROPOSAL#: PD213242 | JOB#: | SHEET: 1 of 1

ALL DIMENSIONS MUST BE FIELD VERIFIED PRIOR TO FABRICATION AND INSTALLATION

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

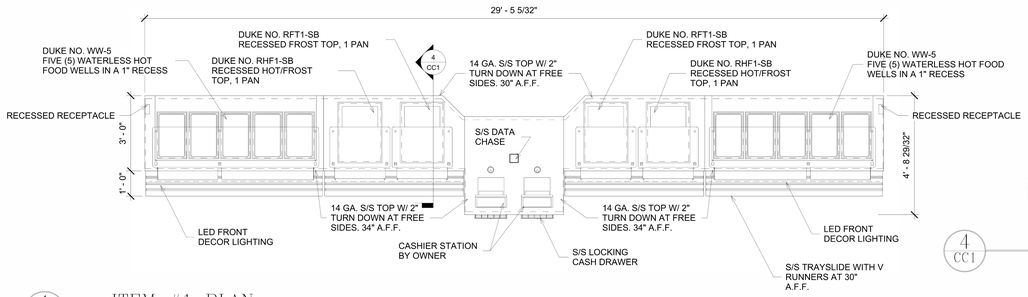
FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ELECTRONICALLY SIGNED AND SEALED USING AUTHENTICSEAL
MELISSA MOORE, FCSI NO. 48854119
ON: 07/15/2025

ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

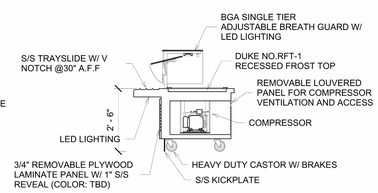
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS WALK-INS

A-QF1.7



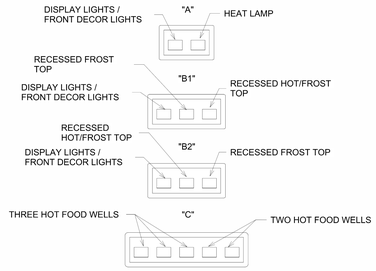
1 CC1 ITEM #1 PLAN

SCALE: 1/2" = 1'-0"



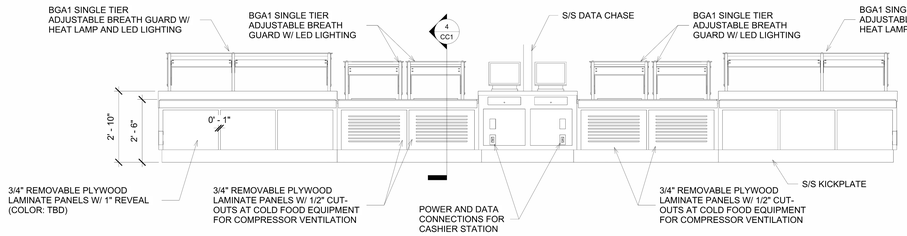
4 CC1 ITEM #1 SECTION VIEW

SCALE: 1/2" = 1'-0"



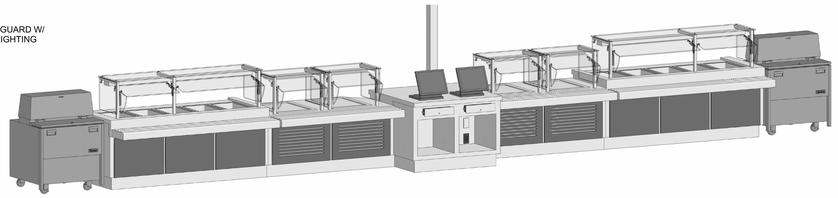
8 CC1 ITEM #1 CONTROL PANEL LAYOUT

SCALE: 1 1/2" = 1'-0"



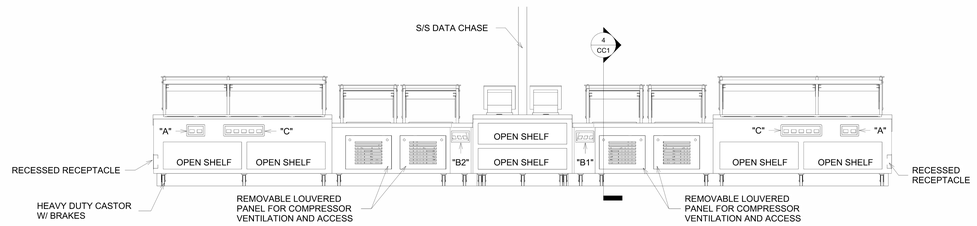
2 CC1 ITEM #1 FRONT ELEVATION

SCALE: 1/2" = 1'-0"



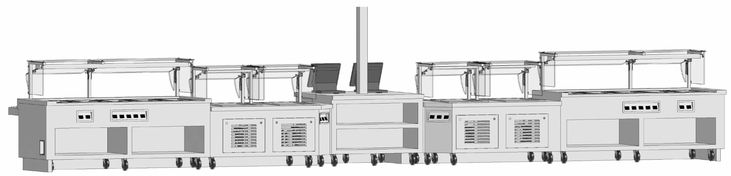
11 CC1 ITEM #1 3D PERSPECTIVE

SCALE:



3 CC1 ITEM #1 REAR ELEVATION

SCALE: 1/2" = 1'-0"



12 CC1 ITEM #1 3D PERSPECTIVE 2

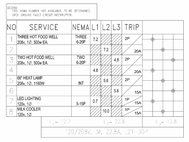
SCALE:



NOTE: THIS IS NOT A LOAD CENTER, THIS IS A JUNCTION/DISTRIBUTION BLOCK INSIDE THE BREAKER BOX

13 CC1 ELECTRICAL SCHEDULE

CASHIER COUNTER



NOTE: THIS IS NOT A LOAD CENTER, THIS IS A JUNCTION/DISTRIBUTION BLOCK INSIDE THE BREAKER BOX

18 CC1 ELECTRICAL SCHEDULE

HOT FOOD COUNTER #1
(TWO (2) REQUIRED)



NOTE: THIS IS NOT A LOAD CENTER, THIS IS A JUNCTION/DISTRIBUTION BLOCK INSIDE THE BREAKER BOX

16 CC1 ELECTRICAL SCHEDULE

HOT/FROST COUNTER
(TWO (2) REQUIRED)

EQUIPMENT BY OTHERS
COUNTERCRAFT LAYOUTS, MEPS, AND LOAD CENTERS ARE BASED ON SPECIFIED MANUFACTURERS AND MODELS AS OUTLINED IN THE SPECIFICATIONS IN THE CONTRACT DOCUMENTS. COUNTERCRAFT MUST BE NOTIFIED OF ANY CHANGES TO THE CONTRACT DOCUMENTS IN A TIMELY MANNER.

NO.	REVISIONS PRELIMINARY DWG	DATE	BY
1		10/18/2024	MAX
2			
3			
4			
5			
6			
7			
8			
9			

ANOTHER QUALITY PRODUCT FROM
CounterCraft
7007 STEARNS HOUSTON,TEXAS 77021
(713) 747-3611

Austin Parkway ES FBISD
PROJ.CT
FOOD SERVICE CONSULTANTS
FOODSERVICE DESIGN PROFESSIONALS

PROJECT NO.
AUPES
DATE
10/18/2024
SCALE
As indicated
DRAWN BY
MAX.C
CHECKED BY
E.S
SHEET NO.
CC1
OF SHEET

ISSUE:

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FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/18/2025
DIGITALLY SIGNING ON THIS DRAWING AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/18/2025

MWA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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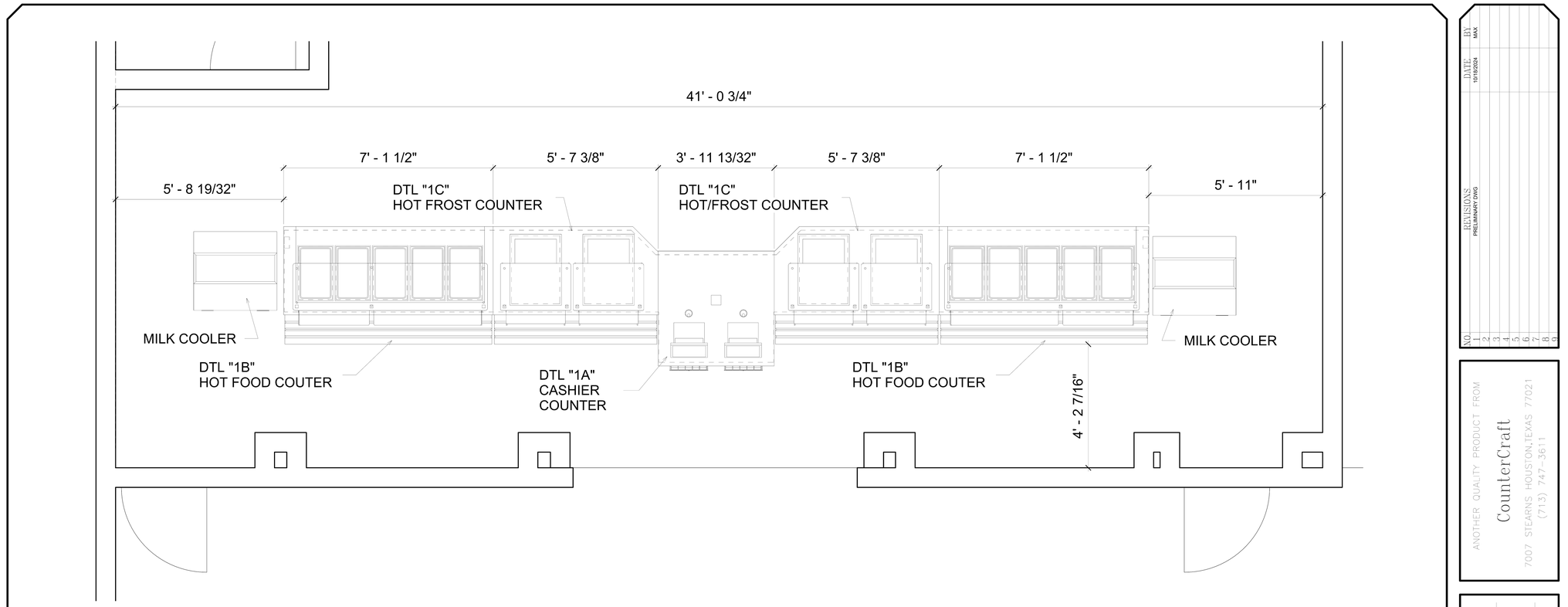
FS SERVING COUNTERS

A-QF1.8



2 CC2 LAYOUT

SCALE: 3/4" = 1'-0"

EQUIPMENT BY OTHERS
COUNTERCRAFT LAYOUTS, MEPS, AND LOAD CENTERS ARE BASED ON SPECIFIED MANUFACTURERS AND MODELS AS OUTLINED IN THE SPECIFICATIONS IN THE CONTRACT DOCUMENTS. COUNTERCRAFT MUST BE NOTIFIED OF ANY CHANGES TO THE CONTRACT DOCUMENTS IN A TIMELY MANNER.

NO.	REVISIONS PRELIMINARY DWG	DATE	BY
1		10/18/2024	MAX
2			
3			
4			
5			
6			
7			
8			
9			

ANOTHER QUALITY PRODUCT FROM
CounterCraft
7007 STEARNS HOUSTON,TEXAS 77021
(713) 747-3611

PROJECT: Austin Parkway ES FBISD
FOODSERVICE CONSULTANT: FOODSERVICE DESIGN PROFESSIONALS

PROJECT NO. AUPES
DATE 10/18/2024
SCALE: 3/4" = 1'-0"
DRAWN BY MAX.C
CHECKED BY E.S
SHEET NO. CC2
OF SHEET

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FDP
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4400 AUSTIN PARKWAY
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PROFESSIONAL MEMBER
Melissa Moore
7/15/2025 PREPARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO 48854119 ON 07/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
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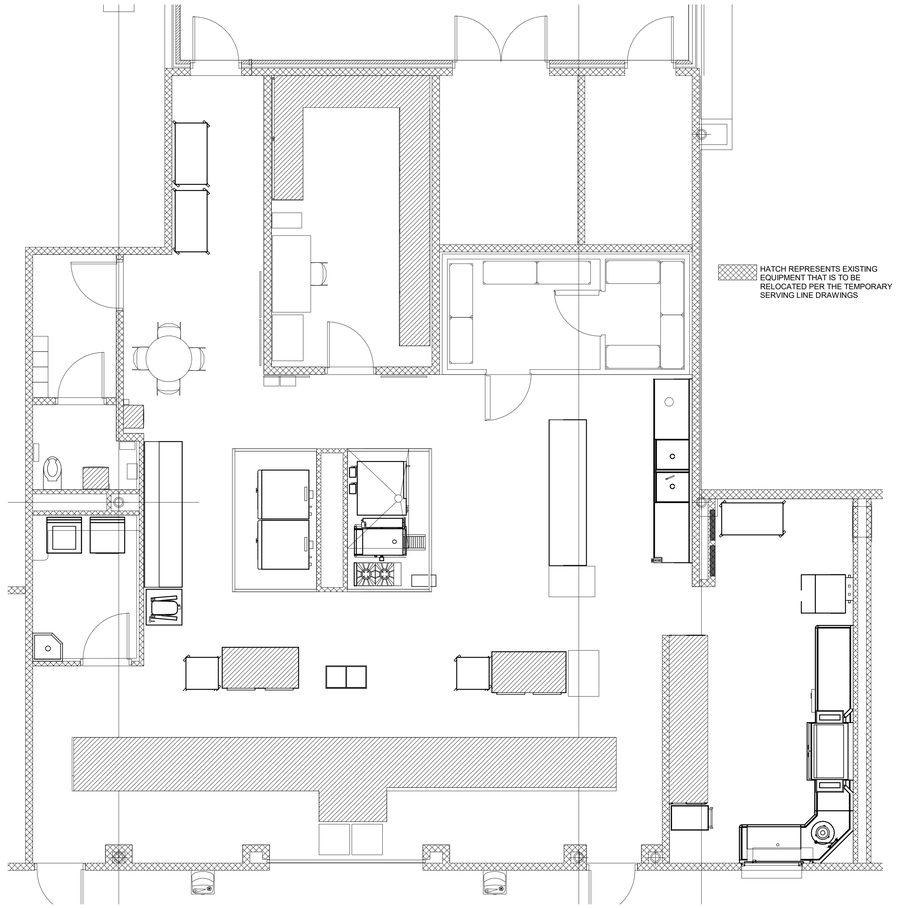
ISSUED FOR BIDDING AND PERMITTING
FS SERVING COUNTERS

A-QF1.9



1 FOOD SERVICE EQUIPMENT PLAN - DEMO PLAN
1/4" = 1'-0"

ISSUE:

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4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

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FCSI
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/18/2025
THIS ITEM APPEARING ON THIS SHEET WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/18/2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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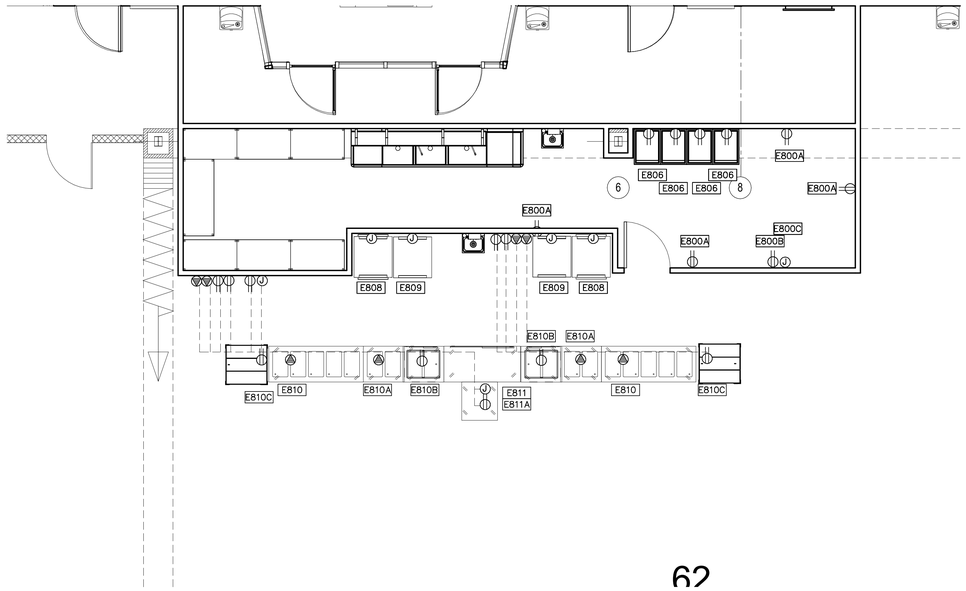
FS EXISTING EQUIPMENT PLAN

A-QF2.0



4 FOOD SERVICE ELECTRICAL PLAN - TEMPORARY SERVING
1/4" = 1'-0"

FOOD SERVICE ELECTRICAL SCHEDULE - TEMPORARY SERVING								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E800A	DR	16.0A	120	1	CONVENIENCE	WALL	24"	---
E800B	DR	16.0A	120	1	CONVENIENCE	WALL	24"	DEDICATED CIRCUIT
E800C	JB	---	---	--	DATA CONNECTION	WALL	24"	---
E806	DR	16.0A	120	1	TRANSPORT CABINET	WALL	24"	---
E808	JB	7.8A	120/208	1	HEATED CABINET	WALL	96"	BTC; OMIT PLUG, UNIT TO BE HARDWIRED
E809	JB	8.2A	120	1	REFRIGERATOR	WALL	96"	BTC; OMIT PLUG, UNIT TO BE HARDWIRED
E810	CS/SR	13.3A	208	1	(4) HOT WELLS	WALL	24"	EXTEND TO EQUIPMENT - CONFIRM NEMA PLUG
E810A	SR	7.9A	208	1	(2) HOT WELLS	WALL	24"	EXTEND TO EQUIPMENT - CONFIRM NEMA PLUG
E810B	DR	5.0A	120	1	COLD PAN	WALL	24"	EXTEND TO EQUIPMENT
E810C	DR	10.0A	120	1	BEVERAGE	WALL	24"	EXTEND TO EQUIPMENT
E811	DR	16.0A	120	1	CASH REGISTER	WALL	24"	DEDICATED CIRCUIT - EXTEND TO EQUIPMENT
E811A	JB	-	---	1	POS	WALL	24"	BTC

	SCR	CONDUIT STUB BTC ON RECEPT FURNISH WITH EQUIPMENT		CC	CONDUIT FOR COMPUTER CABLES
•	CS	CONDUIT STUB UP/OUT FOR DIRECT CONNECTION		BTC	BRANCH TO CONNECTION ON EQUIPMENT
	DR	DUPLEX RECEPTACLE		WPR	WATERPROOF RECEPTACLE (SPRING COVER)
	SR	SINGLE PURPOSE RECEPTACLE-1PH		FPB	FIRE PROTECTION BUZZER
	SR	SINGLE PURPOSE RECPTACLE-3PH		BSC	BEVERAGE SYSTEM CONDUIT
	FR	FLUSH FLOOR RECEPTACLE		DFA	DROP FROM ABOVE
	PMR	PEDESTAL MOUNTED RECEPTACLE		AFF	ABOVE FINISH FLOOR
	DCR	DROP CORD RECEPTACLE		CS/JB	JUNCTION BOX ON PEDESTAL
	JB	JUNCTION BOX ON CEILING	1	SW	SWITCH
	JB	JUNCTION BOX IN WALL		D	DATA
	JB/DS	JUNCTION BOX WITH DISCONNECT BY DIV.26			

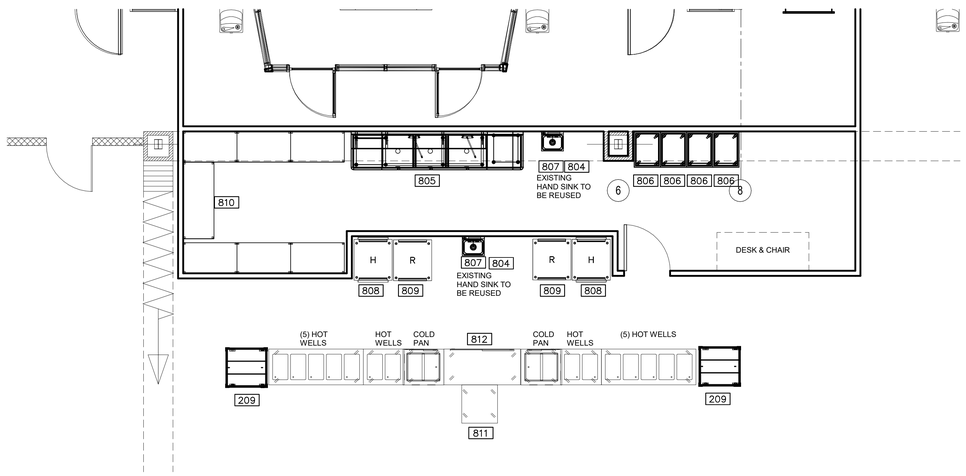
5 ELECTRICAL SYMBOLS 1
NOT TO SCALE

FOOD SERVICE PLUMBING SCHEDULE - TEMPORARY SERVING						
REFER TO SHEET QF1 FOR PLUMBING COORDINATION NOTES						
FDP PNO	FDP PSIZE	FDP PCONN	FDP PSERVICE TO	FDP PLOC	FDP PAFF	FDP PREMARKS
P11C	1/2"	H & C WATER	FAUCET	WALL	18"	FURNISHED & INSTALLED BY DIV. 22
P11D	1 1/2"	DIRECT DRAIN	HAND SINK	WALL	15"	FURNISHED & INSTALLED BY DIV. 22
P249	3/4"	H & C WATER	FAUCET	WALL	13"	BTC

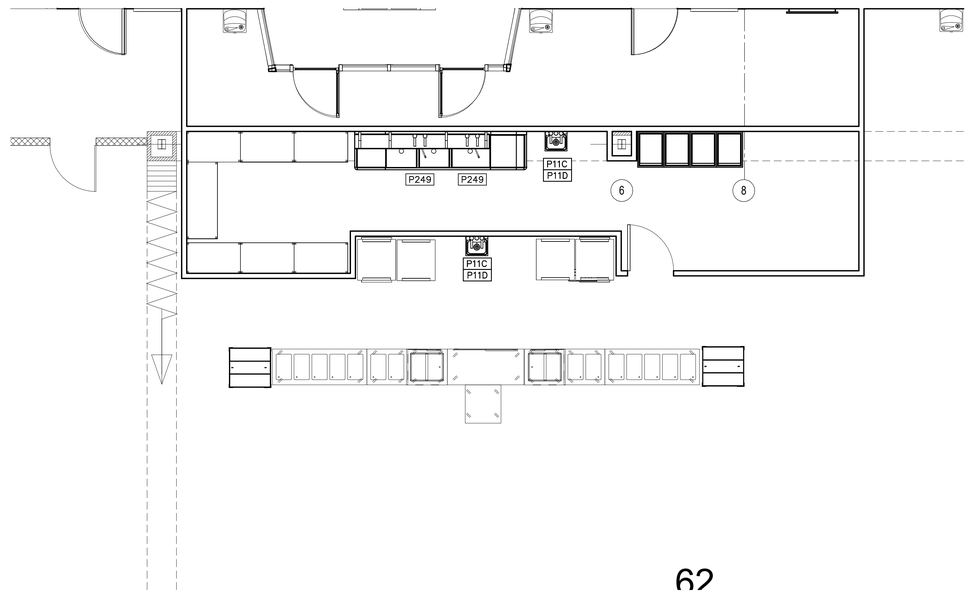
	HW	HOT WATER		FFD	FUNNEL FLOOR DRAIN
	CW	COLD WATER		EVC	EXHAUST VENT CONNECTION
	HTW	180 F HOT WATER		SVC	SUPPLY VENT CONNECTION
		CHILLED WATER		FR	DIRECT-CONNECTED FLUE RISER
	W	DIRECT WASTE		PS	PIPE SLEEVE
	IW	INDIRECT WASTE			COMPRESSED AIR
		GAS SUPPLY			CO2
		STEAM SUPPLY		AFF	ABOVE FINISHED FLOOR
	CR	CONDENSATE RETURN		BTC	BRANCH TO CONN. ON EQUIP
	DR	DRAIN		DFA	DROP FROM ABOVE
	FD	FLOOR DRAIN		CLG	CEILING
	FST	FLOOR SINK 3/4 GRATE			
	FSH	FLOOR SINK 3/4 GRATE			

3 PLUMBING SYMBOLS 1
NOT TO SCALE

FOOD SERVICE EQUIPMENT SCHEDULE - TEMPORARY SERVING					
REFER TO SHEET QF1 FOR GENERAL CONTRACTOR & HEALTH DEPARTMENT COORDINATION NOTES					
FDP ITEM	FDP QTY	FDP DESCRIPTION	FDP REMARKS	MANUFACTURER	MODEL
804	2	S/S SPLASH GUARDS		CUSTOM FABRICATED	
805	1	THREE COMPARTMENT SINK NO DISPOSER	EXISTING		
806	4	TRANSPORT CART	EXISTING		
807	2	HAND SINKS	EXISTING / RELOCATE		
808	2	REACH IN HEATED CABINET - 1DR	EXISTING		
809	2	REACH IN REFRIGERATOR - 1DR.	EXISTING		
810	1	DRY STORAGE SHELVING	EXISTING / RELOCATE		
811	1	CASH REGISTER	OWNER FURNISHED		
812	1	SERVING COUNTER	EXISTING / RELOCATE		



1 FOOD SERVICE EQUIPMENT PLAN - TEMPORARY SERVING
1/4" = 1'-0"



2 FOOD SERVICE PLUMBING PLAN - TEMPORARY SERVING
1/4" = 1'-0"

62

ISSUE:

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FOODSERVICE DESIGN PROFESSIONALS

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FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
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SUGAR LAND, TX 77479

SEAL

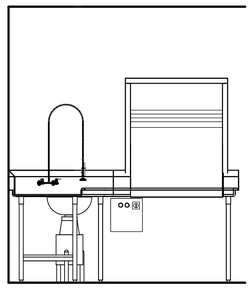
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THIS ITEM IS PREPARING ON THIS DATE AND NOT INTENDED OR AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/18/2025

MWA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

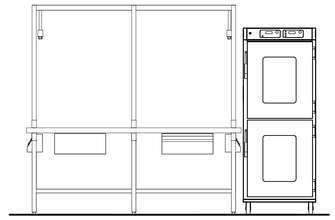
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FS EQUIPMENT PLAN - TEMPORARY SERVING & MEPS

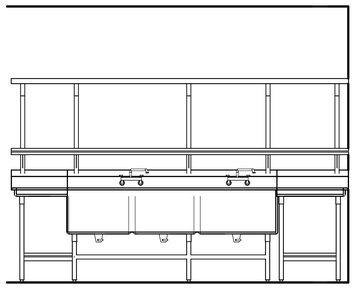
A-QF2.1



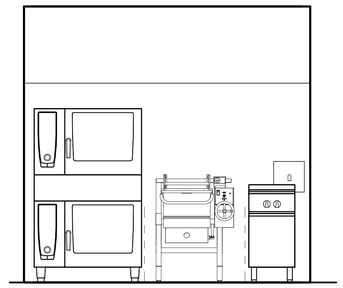
8 ELEVATION @ TRAY DROP
1/2" = 1'-0"



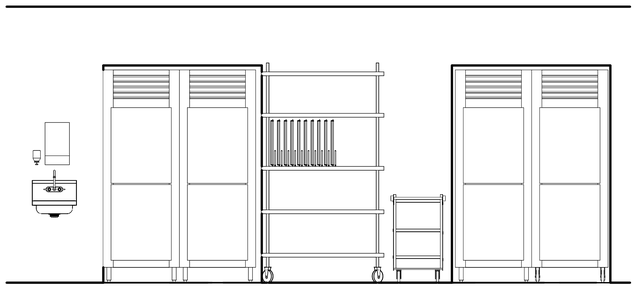
4 ELEVATION @ SETUP AREA B
1/2" = 1'-0"



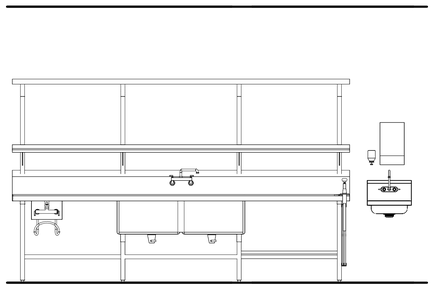
7 ELEVATION @ UTENSIL WASH
1/2" = 1'-0"



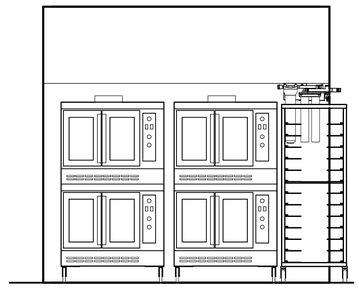
3 ELEVATION @ PRODUCTION LINE A
1/2" = 1'-0"



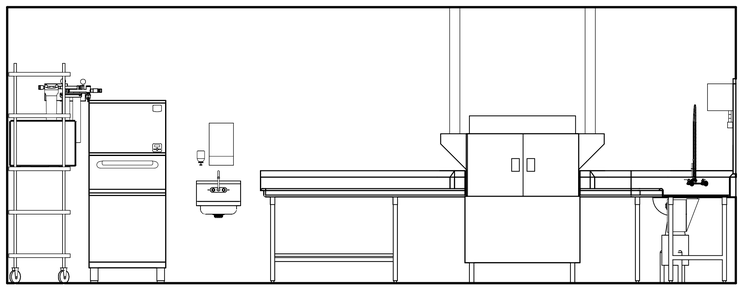
10 ELEVATION @ HOLDING AREA
1/2" = 1'-0"



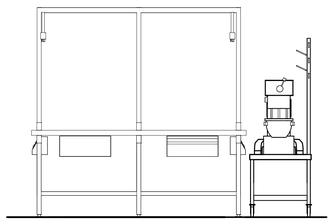
6 ELEVATION @ PREP SINK
1/2" = 1'-0"



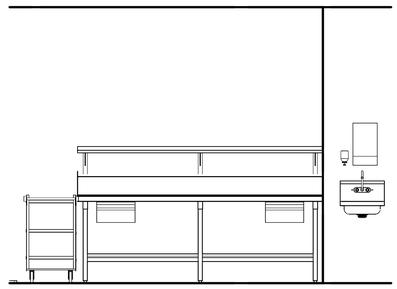
2 ELEVATION @ PRODUCTION LINE B
1/2" = 1'-0"



9 ELEVATION @ WAREWASH
1/2" = 1'-0"



5 ELEVATION @ SETUP AREA A
1/2" = 1'-0"



1 ELEVATION @ WORKTABLE
1/2" = 1'-0"

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FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
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PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
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FS ELEVATIONS

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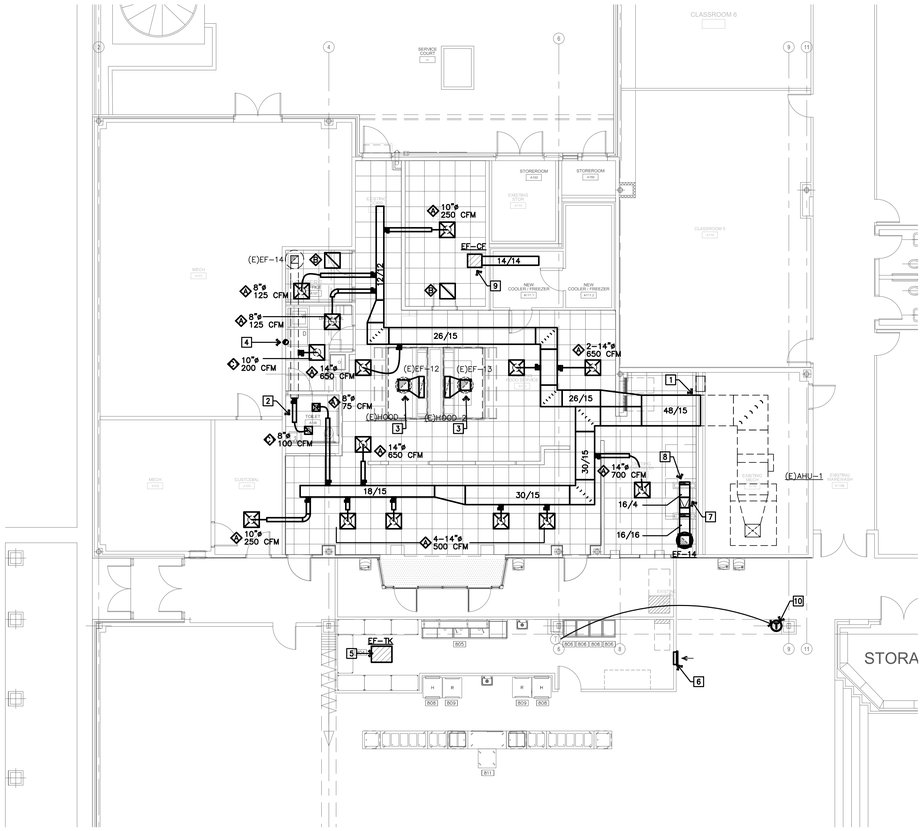
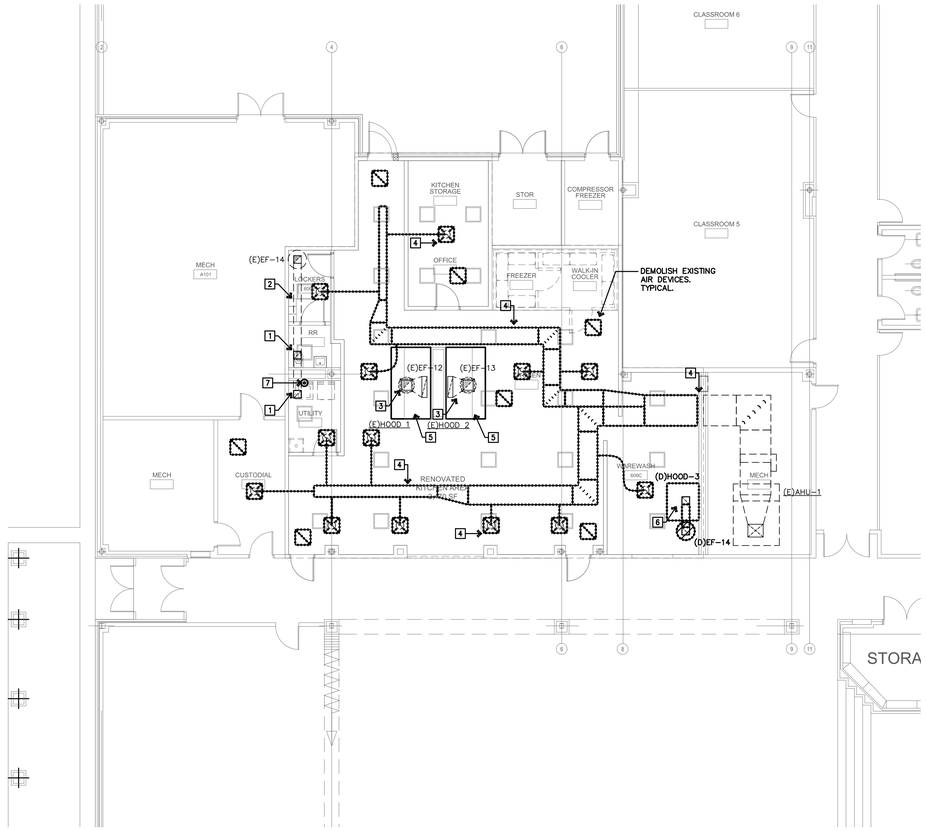


2 RENO MECHANICAL FLOOR PLAN - KITCHEN AREA

SCALE: 1/8" = 1'-0"

NORTH



1 EXIST/DEMO MECHANICAL FLOOR PLAN - KITCHEN AREA

SCALE: 1/8" = 1'-0"

NORTH

MECHANICAL RENO KEYED NOTES

1. TIE-IN NEW DUCTWORK TO EXISTING DUCTWORK AT WALL PENETRATION.
2. CONNECT NEW AIR DEVICE AND TAP TO EXISTING E/A TRUNK DUCT.
3. EXISTING KITCHEN HOOD AND ASSOCIATED EXHAUST DUCTWORK AND FAN SHALL REMAIN. VERIFY OPERATION AND REPORT ANY DEFICIENCIES TO THE A/E FOR REVIEW.
4. NEW 6" DRYER FLUE VENT DUCT AND TO VENT CAP.
5. TEMP. KITCHEN – CEILING MOUNTED CABINET EXHAUST FAN.
6. TEMP. KITCHEN – 24"X24" SIDE WALL GRILLE. SURFACE MOUNT OPTIONAL. AUXILIARY FRAME: TITUS CT-700.
7. NEW DISH MACHINE: TWO (2) 4"X16" EXHAUST DUCT CONNECTIONS. TRANSITION. PROVIDE NEW CONDENSATE EXHAUST DUCTWORK TO NEW ROOF MOUNTED EXHAUST FAN.
8. NEW ROOF MOUNTED EXHAUST FAN SERVING DISH MACHINE. INSTALL ON EXISTING ROOF OPENING.
9. INLINE FAN INSTALLED ABOVE PLENUM.
10. TEMPORARILY RELOCATE THERMOSTAT (TIED TO CAFTETERIA AHU) TO COLUMN LOCATED OUTSIDE OF TEMPORARY KITCHEN AREA. THERMOSTAT TO BE MOVED BACK TO THE ORIGINAL LOCATION AFTER REMOVAL OF THE TEMPORARY KITCHEN. RELOCATION SHALL BE NON-DESTRUCTIVE, AS TO NOT DAMAGE EXISTING FINISHES WHEN REINSTALLED IN ORIGINAL LOCATION.

MECHANICAL DEMO KEYED NOTES

1. DEMOLISH EXISTING AIR DEVICE, BRANCH DUCT, DAMPER AND TAP BACK TO TRUNK DUCT. CAP AND SEAL RESULTING OPENING.
2. EXISTING E/A TRUNK DUCT TO REMAIN.
3. EXISTING E/A DUCTWORK AND EXHAUST FAN SERVING KITCHEN HOOD SHALL REMAIN FOR FUTURE USE.
4. DEMOLISH ALL EXISTING AIR DEVICES, DUCTWORK, AND DUCTWORK ACCESSORIES SERVING KITCHEN AREA BACK TO MECH. ROOM WALL PENETRATION.
5. REFURBISH EXISTING KITCHEN HOOD. REFER TO "KITCHEN HOOD REFURBISHMENT NOTES".
6. DEMOLISH EXISTING CONDENSATE HOOD, ASSOCIATED DUCTWORK, AND ROOF EXHAUST FAN.
7. DEMO AND CAP EXISTING DRYER VENT AND FLUE.

EXHAUST FAN SCHEDULE

MARK	EF-TK	EF-CF	EF-14
SERVES	TEMPORARY KITCHEN	COOLER/FREEZER	DISH WASHER
TYPE	CEILING CABINET	INLINE FAN	ROOF UPBLAST
DRIVE	DIRECT	DIRECT	DIRECT
SPEED CONTROL	CONSTANT	CONSTANT	CONSTANT
CFM	1055	1000	1200
EXT. S.P. (IN. W.G.)	0.3	0.35	0.75
IMP. SIZE (IN.)	8.0	13.5	14
HORSEPOWER (WATTS)	1/3 HP	1/6 HP	1/4 HP
VOLTAGE	120V/1-PHASE	120V/1-PHASE	120V/1-PHASE
MANUFACTURER	COOK	COOK	COOK
MODEL	GC-862	1355QN10D	CUE-140-VG
SONES (MAX.)	15.0	15.0	15.0
NOTES	1,2,3,4	1,2,3,4	1,2,3,4,5,6

NOTES

1. STATIC PRESSURE SHOWN IS EXTERNAL TO THE UNIT. MANUFACTURER SHALL ADD DAMPER AND ACCESSORY LOSSES TO THIS VALUE BEFORE SELECTING FAN. FANS SHALL BE CAPABLE OF 120% OF THE SCHEDULED CFM CAPACITY.
2. INTEGRAL DISCONNECT SWITCH.
3. RUBBER IN-SHEAR ISOLATORS.
4. BACKDRAFT DAMPER.
5. BIRD SCREEN AND NEW ROOF CURB
6. REFER TO WRITTEN SPECS FOR ADDITIONAL REQUIREMENTS.

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A	CEILING DIFFUSER – 24" X 24" FACE, PATTERN TYPE, STEEL CONSTRUCTION, OBD/RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE SCD A1-12" X 12"
B	CEILING RETURN GRILLE – 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE PDFR B1-12" X 12"
C	CEILING EXHAUST GRILLE – 24" X 24" PERFORATED FACE, STEEL CONST., OBD/RADIATION DAMPER, WHITE FINISH, NECK SIZE SHOWN, U.L. LISTED PRICE PDDR C1-12" X 12"

NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPES FOR AIR DEVICES.

KITCHEN HOOD REFURBISHMENT NOTES

HOOD REFURBISHMENT FOR KITCHEN HOODS (QUANTITY 2):

- STEAM WASH AND DEEP CLEAN STAINLESS STEEL HOOD ASSEMBLY, CASING, AND SUPPLY GRILLES WHERE APPLICABLE.
- REPLACE GREASE FILTER RACKS.
- CLEAN EXISTING MAKE-UP AIR AND GREASE EXHAUST DUCT.
- RELAMP EXISTING LIGHT FIXTURES WITH NEW 4000K BULBS LISTED FOR USE IN AN ENCLOSED KITCHEN HOOD FIXTURE.
- COORDINATE WITH DIVISION 11 FOR REPLACEMENT OF ANSUL FIRE SUPPRESSION SYSTEM.
- HOOD ASSEMBLIES SHALL BE CLEANED TO MEET THE STANDARDS ESTABLISHED IN NFPA STANDARD 96.

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LEVEL 1 KITCHEN MECHANICAL PLANS
A-M1.01

MECHANICAL SYMBOL SCHEDULE

CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
RS	REFRIGERANT SUPPLY
RR	REFRIGERANT RETURN
D	CONDENSATE LINE
	PETE'S PLUG
	ISOLATION VALVE
	ELECTRONIC CONTROL VALVE
	BUTTERFLY VALVE
	BALL VALVE
	UNION OR FLANGE
	STRAINER
	AUTOMATIC AIR VENT
T	LOCAL CONTROL THERMOSTAT
T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
FD	FIRE DAMPER
SD	SMOKE DAMPER
FSD	FIRE/SMOKE COMBINATION DAMPER
MD	MOTORIZED DAMPER
C	CARBON MONOXIDE SENSOR
CO2	CARBON DIOXIDE SENSOR
	SUPPLY AIR DIFFUSER
	RETURN AIR GRILLE
	EXHAUST GRILLE
10	RETURN AIR OPENING IN WALL
VD	VOLUME DAMPERS
	DUCT ELEVATION CHANGE
	90° DUCT ELBOW WITH TURNING VANES
	FLEXIBLE DUCT

M	DAMPER MOTOR
T	TEMPERATURE TRANSMITTER
FS	FLOW SWITCH
P	DIFFERENTIAL PRESSURE SENSOR
SD	DUCT SMOKE DETECTOR
PS	STATIC PRESSURE SENSOR
PH	STATIC PRESSURE SENSOR HI-LIMIT
	ACCESS PANEL

A.P.	ACCESS PANEL
AHU	AIR HANDLING UNIT
B	BOILER
CH	CHILLER
CHP	CHILLED WATER PUMP
CVT	CONSTANT VOLUME TERMINAL
DH	DEHUMIDIFIER
E/A	EXHAUST AIR
EF	EXHAUST FAN
F&B	FACE & BYPASS
FF	FLY FAN
HDT	HORIZONTAL DRAW THROUGH
HWP	HOT WATER PUMP
KEF	KITCHEN EXHAUST FAN
KSF	KITCHEN SUPPLY FAN
O/A	OUTSIDE AIR
OBD	OPPOSED-BLADES DAMPER
PT	PRE-TREAT
R/A	RETURN AIR
RAHU	ROOF-MOUNTED AIR HANDLING UNIT
S/A	SUPPLY AIR
SA	SOUND ATTENUATOR
SF	SUPPLY FAN
SPD	SPILTER DAMPER
SZ	SINGLE ZONE
VAV	VARIABLE AIR VOLUME
VB	VAV BOX
VD	VOLUME DAMPER
VDT	VERTICAL DRAW THROUGH
VFD	VARIABLE FREQUENCY DRIVE
WH	WATER HEATER
⌀	DESIGNATION FOR "ROUND"
⌀	DESIGNATION FOR "OVAL"

GENERAL MECHANICAL NOTES

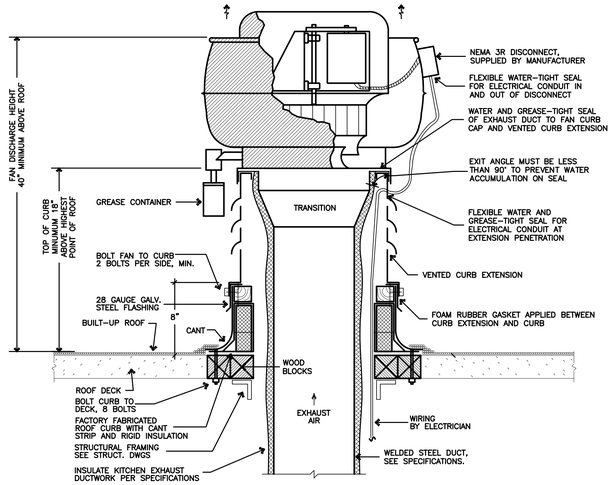
1. REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. COORDINATE INSTALLATION OF EQUIPMENT AND PIPING WITH THE ELECTRICAL CONTRACTOR TO INSURE NEC CLEARANCE (42 INCHES) IN FRONT OF ALL ELECTRICAL PANELS. DO NOT INSTALL DUCTWORK OR WATER PIPING OVER THE TOP OF ELECTRICAL PANELS SEE DETAIL 1/M2.01.
3. DUCT SIZES SHOWN ARE NET FREE AIR PASSAGE DIMENSIONS, DUCTS ARE NOT LINED, BUT ARE EXTERNALLY INSULATED. RUNOUTS TO CEILING OUTLETS SHALL BE EXTERNALLY INSULATED GALVANIZED SHEET METAL WITH SPIN-IN V.D. AT TRUNK TAPS, SEE DETAIL 1 & 2/M2.01.
4. REFER TO ARCHITECTURAL REFLECTED CEILING DRAWINGS FOR EXACT LOCATIONS OF CEILING OUTLETS IN RELATION TO OTHER CEILING ENTITIES. OUTLETS MUST BE COMPATIBLE WITH THE CEILING TYPES FOR THE VARIOUS AREAS.
5. IN AREAS WHERE SUPPLY AIR ENTERS CEILING CAVITY THRU RETURN AIR GRILLES AND FREE RETURNS TO AHU'S VIA CEILING CAVITY, PROVIDE RETURN AIR OPENING IN WALL-TO-DECK ABOVE CEILING THAT BLOCK PATH, REFER TO ARCHITECTURAL DRAWINGS. RETURN AIR ELBOWS SHALL BE SIZED AT 1 SQ. FT PER 400 CFM SUPPLY AIR.
6. ARRANGE PIPING CONNECTIONS TO ALL EQUIPMENT TO ALLOW EASY REMOVAL OF EQUIPMENT, SUB-ASSEMBLIES, COILS, FANS, MOTORS, FILTERS, ACCESS PANELS, ETC... PROVIDE UNIONS, FLANGES AND VALVES AT CONNECTIONS. PROVIDE AND INSTALL VICTAULIC JOINTS AT COILS, REF. SPECIFICATIONS. PLACE STOP VALVES ON SYSTEM SIDE OF REMOVABLE PIPE SECTIONS.
7. CONTRACTOR SHALL FIELD MEASURE STRUCTURAL ELEMENTS AND COORDINATE EQUIPMENT, PIPING AND DUCT ROUTING TO FIT EXISTING CONSTRUCTION. PROVIDE OFFSETS, BOOTS FOR ENVELOP OBSTRUCTIONS THAT CANNOT BE AVOIDED. CONSTRUCTION SHALL BE PER SMACNA FIGURE 2-10.

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A	CEILING DIFFUSER – 24" X 24" FACE, PATTERN TYPE, STEEL CONSTRUCTION, OBD/RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE SCD
B	CEILING RETURN GRILLE – 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE PDFR
C	CEILING EXHAUST GRILLE – 24" X 24" PERFORATED FACE, STEEL CONST., OBD/RADIATION DAMPER, WHITE FINISH, NECK SIZE SHOWN, U.L. LISTED PRICE PDDR

NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPES FOR AIR DEVICES.
2. ALL CEILINGS ARE FIRE RATED PER U.L. LISTINGS ON ARCHITECTURAL DRAWINGS. PROVIDE FIRE PROTECTION FOR ALL CEILING DEVICES PER DETAIL 13/M-17 AND SPECIFICATIONS.

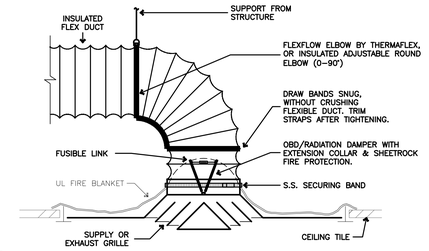


6 KITCHEN UPBLAST EXHAUST FAN DETAIL

NO SCALE

NOTES

1. ARCHITECTURAL ROOF CURB INSTALLATION REQUIREMENTS SHALL SUPERCEDE THIS DETAIL.
2. INSTALL SHEETMETAL COVERING OVER WOOD BLOCKING IN THE AIRSTREAM OR OPEN TO THE CEILING CAVITY.

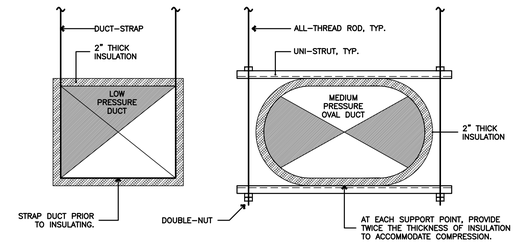


5 AIR DEVICE DETAIL

NO SCALE

NOTES:

1. RADIATION DAMPER SHALL ONLY BE PROVIDED IN CEILING DEVICES INSTALLED IN RATED CEILING ASSEMBLIES. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO DETERMINE WHICH, IF ANY, CEILINGS ARE RATED.
2. REFER TO SPECIFICATIONS OF FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

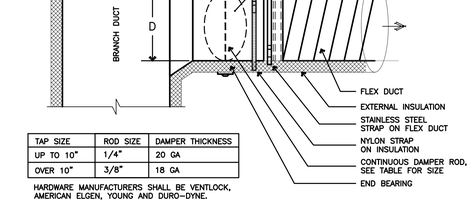


4 EXTERNALLY INSULATED DUCT SUPPORT DETAIL

NO SCALE

NOTES:

1. ROUND MEDIUM PRESSURE DUCT MAY BE SUPPORTED WITH DUCT STRAPS.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



TAP SIZE	ROD SIZE	DAMPER THICKNESS
UP TO 10"	1/4"	20 GA
OVER 10"	3/8"	18 GA

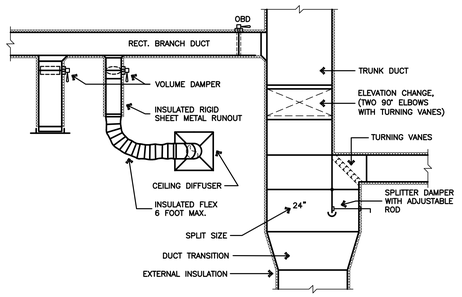
HARDWARE MANUFACTURERS SHALL BE VENTLOCK, AMERICAN ELGEN, YOUNG AND DURO-DYNE.

3 DUCT TAP CONNECTION DETAIL

NO SCALE

NOTES:

1. DELETE CONICAL SECTION IF TOO LARGE FOR THE DUCT.
2. REFER TO SPECIFICATIONS OF FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

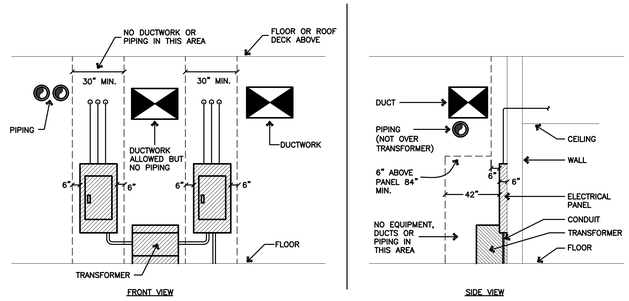


2 DUCTWORK DETAIL

NO SCALE

NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



1 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

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MECHANICAL NOTES AND DETAILS
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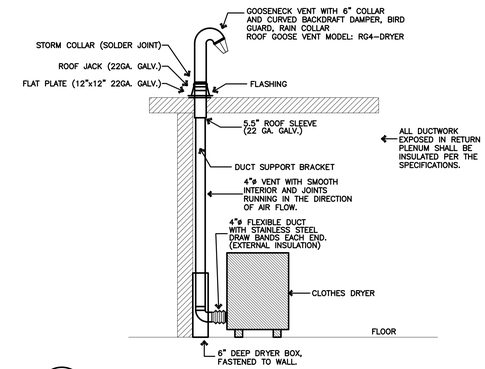
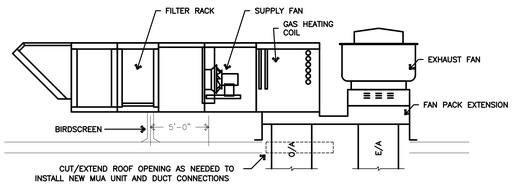


5 RESIDENTIAL CLOTHES DRYER FLUE VENT

NO SCALE

NOTES:

1. VENT TERMINATION AT WALL FOR STACKABLE WASHER/DRYER SHALL BE AT 60" AFF.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

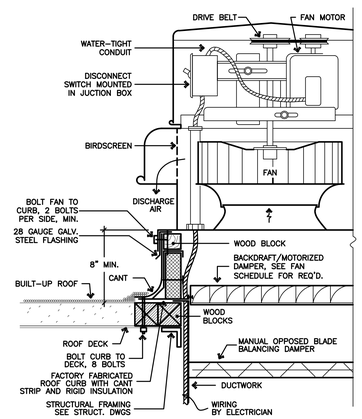


4 SUPPLY/EXHAUST KITCHEN PLENUM DETAIL

NO SCALE

NOTES:

1. xxxxx

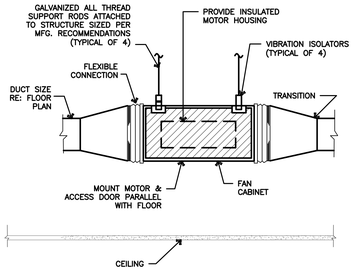


3 ROOF EXHAUST FAN AND VENT DETAIL

NO SCALE

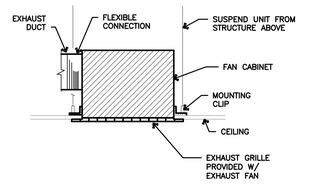
NOTES:

1. NO WOOD BLOCKING SHALL BE LEFT EXPOSED IN THE CEILING PLENUM. COVER ALL EXPOSED WOOD WITH 1/2" SHEETROCK OR 20 GAUGE GALVANIZED SHEETMETAL.
2. ROOF VENT WILL NOT HAVE FAN/MOTOR ASSEMBLY, DISCONNECT SWITCH OR OBD.
3. ARCHITECTURAL ROOF CURB INSTALLATION REQUIREMENTS SHALL SUPERCEDE THIS DETAIL WHERE APPLICABLE.
4. ALL FANS SCHEDULED TO BE PROVIDED WITH 140MPH WIND RATING, INCLUDING FACTORY PROVIDED CURB. CURB INSTALLATION SHALL FOLLOW MANUFACTURER'S REQUIREMENTS FOR SECURING TO ROOF AND EQUIPMENT WHERE IT DIFFERS FROM THE DETAIL.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



2 INLINE EXHAUST FAN DETAIL

NO SCALE



1 CABINET EXHAUST FAN

NO SCALE

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
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SEAL

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PROJ. NO.: 23-25
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MECHANICAL DETAILS (CONT'D.)

A-M2.02

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ELECTRICAL AND LOW VOLTAGE LEGEND AND SYMBOLS

TYPE 'A' LIGHT FIXTURE
LIGHT FIXTURE WITH EMERGENCY BACKUP
EXIT SIGN/EXIT SIGN WITH DIRECTIONAL ARROW
EMERGENCY EGRESS LIGHT FIXTURE
WALL MOUNTED FIXTURE OR SCONCE
CEILING DOWNLIGHT OR CYLINDER
WALL PACK FIXTURE
INV — LIGHTING INVERTER

20A, 277V TOGGLE/3-WAY/4-WAY SWITCH
20A, 277V MOMENTARY 3-POSITION TOGGLE SWITCH
20A, 277V, MOMENTARY 3-POSITION KEY SWITCH
20A, 277V MAINTAINED 2-POSITION/3-WAY/4-WAY KEY SWITCH
20A, 277V TOGGLE SWITCH W/ INTEGRAL NIGHT LIGHT
MOTOR RATED ON/OFF SWITCH, MP W/ PILOT LIGHT (SWITCH RATING SHALL BE ≥ UPSTREAM OCPD & VOLTAGE)
DPST — DOUBLE POLE SINGLE THROW (DPST) SWITCH WITH RED PILOT LIGHT.
TSW — TIMER SWITCH

NETWORK LIGHTING CONTROLS

#B — MULTIBUTTON LOW VOLTAGE LIGHTING SWITCH PROVIDE NUMBER OF BUTTONS INDICATED IN SINGLE PLATE.
#D — MULTIPLE DIMMER SWITCHES PROVIDE NUMBER OF SWITCHES INDICATED IN SINGLE PLATE.
#K — MULTIPLE KEY TYPE SWITCHES PROVIDE NUMBER OF SWITCHES INDICATED IN SINGLE PLATE.
OC — WALL SENSOR SWITCH
20A, 277V, STANDALONE DIMMER SWITCH (DISPLAY CABINET)
OC — 360° CEILING SENSOR
OC — 180° CEILING SENSOR
OC — CEILING SENSOR
OC — WALL MOUNT SENSOR
PC — DAYLIGHT PHOTOSENSOR
RC / RCD — LIGHTING ROOM CONTROLLER/POWER PACK
ER — EMERGENCY LIGHTING RELAY/CONTROL UNIT
PLC — PLUG LOAD CONTROLLER

20A, 125V SIMPLEX/DUPLEX/QUAD RECEPTACLE
GFI — 20A, 125V DUPLEX RECEPTACLE WITH GFCI PROTECTION
GFI WP — 20A, 125V DUPLEX RECEPTACLE WITH GFCI PROTECTION AND WEATHERPROOF COVER.
GFI — REMOTE GFCI DEVICE, REF SPECS AND EDF GFI DETAIL.
USB — 20A, 125V DUPLEX/QUAD RECEPTACLE W/ USB-A PORTS PROVIDE 2-5A PORTS PER DEVICE – HUBBELL USB20A5
20A, 125V SIMPLEX/DUPLEX/QUAD IG/COMPUTER RECEPTACLE
GFI — 20A, 125V, IG/COMPUTER DUPLEX RECEPTACLE WITH GFCI
PLUG LOAD CONTROLLED DUPLEX
NEMA IEC CS — NEMA/IEC/CS NUMBERED POWER OUTLET MATCH PROVIDED EQUIPMENT CONNECTION OR CIRCUIT.
PROJ TV IM — 20A, 125V IG DUPLEX RECEPTACLE AT PROJECTOR, TV, OR INTERACTIVE MEDIA LOCATION.
LOW VOLTAGE OUTLET
CEILING MOUNTED RECEPTACLE
CEILING MOUNTED LOW VOLTAGE OUTLET
SINGLE SERVICE FLOOR BOX WITH DUPLEX/QUAD REC
SINGLE SERVICE FLOOR BOX WITH DUPLEX/QUAD IG REC
SINGLE SERVICE LOW VOLTAGE FLOOR BOXES
MULTI SERVICE FLOOR BOX WITH QUAD/QUAD IG REC
CR — CORD REEL
D — DROP CORD
EPO — EMERGENCY POWER OFF (EPO) SWITCH
PB — PUSH BUTTON
SP — TELEPOWER POLE

J — J-BOX
J — CEILING MOUNTED J-BOX
CA — J-BOX FOR ACCESS CONTROL DEVICE
HD — JUNCTION BOX AND FINAL CONNECTION TO HAND DRYER BY DIVISION 26.
HDWR — JUNCTION BOX AND FINAL CONNECTION TO ELECTRIFIED DOOR HARDWARE BY DIVISION 26.
HEAT — JUNCTION BOX AND FINAL CONNECTION TO HEAT TRACE EQUIPMENT BY DIVISION 26.
WC — JUNCTION BOX AND FINAL CONNECTION TO POWERED PLUMBING EQUIPMENT BY DIVISION 26.
SF — JUNCTION BOX AND FINAL CONNECTION TO SYSTEM FURNITURE BY DIVISION 26.

CONTACTOR
NON-FUSED DISCONNECT SWITCH
DT — NON-FUSED DOUBLE THROW DISCONNECT
FUSED DISCONNECT SWITCH
ST — DISCONNECT/CB WITH SHUNT TRIP
CB — ENCLOSED CIRCUIT BREAKER
MOTOR STARTER 'VFD' INDICATES VARIABLE FREQUENCY DRIVE MOTOR STARTER
MOTOR STARTER WITH INTEGRAL DISCONNECT
MOTOR
TC — TIME CLOCK

ELECTRICAL PANELBOARD
ELECTRICAL METER
SPD — TVSS OR SPD
GANN — GENERATOR REMOTE ANNUNCIATOR

LOW VOLTAGE CABLING PATHWAY, REF. SPECIFICATIONS

KITCHEN SYMBOL LEGEND

C — LOAD CENTER, BY FOOD SERVICE PROVIDE UNDERGROUND CONDUIT STUBBED UP AT LOAD CENTER LOCATION PER SUBMITTAL SHOP DRAWINGS.
P — POINT OF SALE EQUIPMENT, BY FOOD SERVICE. PROVIDE UNDERGROUND CONDUIT STUBBED UP POS LOCATION PER SUBMITTAL SHOP DRAWINGS.
F — REMOTE FIRE PULL, REFERENCE INSTALLATION DETAIL
B — BELL/BUZZER WITH 120V TO LOW VOLTAGE TRANSFORMER
D — DROP CORD
DB — DOORBELL BUTTON
V CLR/FRZR — CEILING STROBE FOR ENTRAPMENT ALARM
V CLR/FRZR — WALL STROBE FOR ENTRAPMENT ALARM

COORDINATION SYMBOL LEGEND

DDC — HVAC CONTROL PANEL, REQUIRES POWER AND DATA CONNECTIONS WITHIN CABINET COOR EXACT LOCATION AND REQUIREMENTS WITH CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.
SD — SMOKE DAMPER
FSD — FIRE/SMOKE COMBINATION DAMPER
M / MD — MOTORIZED DAMPER

SITE PLAN

UTILITY POLE
POLE MOUNTED TRANSFORMER BANK
SITE POLE LIGHT
UGE — FLUSH IN GRADE ELECTRICAL PULL BOX
LV HH — FLUSH IN GRADE, LOW VOLTAGE HAND HOLE
CONCRETE BOLLARD

(X)PP	POWER POLE
(X)SP	SERVICE POLE OR RACK
(X)XP	XFMR POLE
(X)LVP	LOW VOLTAGE POLE
(X)TP	TRANSITION POLE
OHP	OVERHEAD POWER WIRING
480V	480V OVERHEAD POWER WIRING
UGP	UNDERGROUND PRIMARY ELECTRICAL
UGS	UNDERGROUND SECONDARY ELECTRICAL
UGE	UNDERGROUND EMERGENCY ELECTRICAL

DIVISION 28 LEGENDS

FIRE ALARM

F — FIRE ALARM PULL STATION W/ STOPPER II
F / S — WALL FIRE ALARM AUDIO/VISUAL DEVICE
WP S — OUTDOOR WEATHERPROOF FIRE AUDIO/VISUAL DEVICE
H — WALL FIRE ALARM AUDIO DEVICE
V — WALL FIRE ALARM VISUAL DEVICE
F / S — CEILING FIRE ALARM AUDIO/VISUAL DEVICE
S — CEILING FIRE ALARM AUDIO DEVICE
V — CEILING FIRE ALARM VISUAL DEVICE
DUCT SMOKE DETECTOR
I / PS — CEILING SMOKE DETECTOR
H — CEILING HEAT DETECTOR
CO — CEILING CARBON MONOXIDE DETECTOR
PS CO — CEILING COMBINATION SMOKE/CARBON MONOXIDE DETECTOR
FR — FIRE ALARM RELAY FOR STAGE SOUND RACK OVERRIDE
BSD / BSR — BEAM SMOKE DETECTOR
FANN — FIRE ALARM REMOTE ANNUNCIATOR OR LOCAL OPERATOR'S CONSOLE
FACP — FIRE ALARM CONTROL PANEL
FAPS — FIRE ALARM POWER SUPPLY/AMPLIFIER

G	INDICATES DEVICE WITH PROTECTIVE GUARD
WG	INDICATES DEVICE WITH WIRE GUARD
HC	INDICATES DEVICE RATED FOR HAZARDOUS CONDITIONS

SD — SMOKE DAMPER
FSD — FIRE/SMOKE COMBINATION DAMPER

MULTI-SERVICE FLOOR BOX NOTES

FLOOR POWER AND LOW VOLTAGE
PROVIDE HEAVY-DUTY MULTI-GANG FLUSH IN GRADE OR FIRE RATED POKE-THRU OUTLET WITH HEAVY DUTY METAL HINGED COVER WITH CABLE EXIT SLOT.
FLOOR BOX MUST BE RATED FOR INSTALLATION IN GRADE.

FOR EACH FLOOR BOX PROVIDE:
1. PROVIDE:
   1.A. ONE QUAD OR TWO DUPLEX RECEPTACLES.
   1.B. PROVIDE IG RECEPTACLES WHERE SHOWN.
   1.C. POWER CONNECTION TO TABLE (WHERE SHOWN)
2. BLANK STAINLESS STEEL COVER FOR UN-USED GANGS.
3. PROVIDE ONE 3/4"C UNDERGROUND CONDUIT FOR POWER.
4. PROVIDE ONE 1"C UNDERGROUND CONDUIT WITH WATERPROOF INNER DUCT FOR DATA.
5. PROVIDE ONE 1"C UNDERGROUND CONDUIT WITH WATERPROOF INNER DUCT FOR LOW VOLTAGE CABLING
6. PROVIDE DIVIDERS TO MAINTAIN SEPARATION BETWEEN SERVICES.

UNDERGROUND CONDUITS MUST BE WATER TIGHT TO PREVENT MOISTURE ENTERING CONDUITS.
DO NOT COMBINE CONDUIT FOR POWER & LOW VOLTAGE.

REFERENCE FLOOR PLANS AND SPECIFICATIONS FOR QUANTITY OF DATA DROPS AND ADDITIONAL INFORMATION.

COORDINATE WITH ARCHITECT TO PROVIDE COVER/RING TO MATCH FLOOR MATERIAL AND SUBMIT COVER FINISH FOR ARCHITECT TO SELECT PRIOR TO ORDERING.

GENERAL NOTES / TAGS

+18"	INDICATES DEVICES AT +18" AFF
+42"	INDICATES DEVICES AT +42" AFF
+96"	INDICATES DEVICES AT +96" AFF
+12 FT	INDICATES DEVICES AT +12 FT AFF, ETC.
*	INDICATES DEVICES ABOVE COUNTER, REF ARCH
CLG	INDICATES DEVICES AT CEILING
PMR	INDICATES PEDESTAL MOUNTED DEVICE, REF PMR DETAIL
TV	INDICATES DEVICES AT TELEVISION/DISPLAY LOCATION
IM	INDICATES DEVICES AT INTERACTIVE MEDIA LOCATION
PROJ	INDICATES DEVICES AT PROJECTOR LOCATION
S	INDICATES SURFACE MOUNTED DEVICE
IEC	INDICATES IEC POWER OUTLET
NEMA	INDICATES NEMA NUMBERED POWER OUTLET
GFI	INDICATES GROUND FAULT INTERRUPT (GFI) PROTECTION
WP	INDICATES WEATHERPROOF DEVICES
GFI WP	INDICATES GFI PROTECTED WEATHERPROOF DEVICE
G	INDICATES DEVICE WITH PROTECTIVE GUARD
WG	INDICATES DEVICE WITH WIRE GUARD
3R	INDICATES NEMA 3R RATED DEVICE
4XSS	INDICATES NEMA 4XSS RATED DEVICE
EM	INDICATES DEVICE ON EM/STANDBY POWER
VFD	INDICATES VARIABLE FREQUENCY DRIVE (VFD)
E	EXISTING DEVICES TO REMAIN
D	EXISTING DEVICES TO BE DEMO/REMOVED
R	EXISTING DEVICES TO BE RELOCATED
REP	EXISTING DEVICES TO BE REPLACED
	(X) = (E) FOR EXISTING
	(X) = (D) FOR DEMO
	(X) = (R) FOR RELOCATION
	(X) = (N) FOR NEW
→	HOMERUN TO CIRCUIT NOTED

1. RECEPTACLES AND DATA OUTLETS SHALL BE MOUNTED AT +18" AFF UNLESS NOTED ON THE DRAWINGS.
2. REF. SPECIFICATIONS FOR MOUNTING HEIGHT OF OTHER DEVICES.
3. ELECTRICAL RECEPTACLES, TELEPHONES, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
4. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
4. ALL DEVICES SHOWN AT THE SAME LOCATION AND ELEVATION SHALL BE GROUPED TOGETHER AND SPACED 2 INCHES BETWEEN BOXES.
5. PROVIDE SS COVER PLATE FOR ALL EMPTY JBOX.
6. ALL NON-LOCKING 125V AND 250V, 15A AND 20A RECEPTACLES SHALL BE TAMPER RESISTANT TYPE.

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PROJ. NO.: 23-25
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ELECTRICAL AND FIRE ALARM SCHEDULES
a-E.000

PROVIDE CONDUIT & SLEEVES THRU FIRE WALLS, WALLS AND FLOORS FOR LOW VOLTAGE CABLING WIRING, ETC.

ALL CONDUIT & J-BOXES FOR LOW VOLTAGE CABLING SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL LOW VOLTAGE CABLING IN WALLS, EXPOSED AREAS AND ABOVE INACCESSIBLE CEILINGS SHALL REQUIRE CONDUIT AND J-BOXES. REFERENCE SPECIFICATIONS AND TECHNOLOGY DOCUMENTS FOR ADDITIONAL INFORMATION/REQUIREMENTS.

PULL BOXES AND BELOW GRADE CONDUIT FOR LOW VOLTAGE CABLING, WIRING, ETC. BY ELEC CONTRACTOR.

FIRE ALARM SYSTEM DESCRIPTION AND SEQUENCE OF OPERATION

1. FIRE ALARM SYSTEM SHALL BE DESIGNED TO MEET NFPA REQUIREMENTS AS WELL AS CITY AND NATIONAL BUILDING CODES. PROVIDE COMPLETE FIRE ALARM SYSTEM, DEVICES AND WIRING.
2. INSTALL FIRE ALARM CONTROL PANEL IN RECEPTION AREA. INSTALL REMOTE POWER SUPPLY PANELS IN MECHANICAL/ELECTRICAL ROOMS.
3. FIRE ALARM PANEL, POWER SUPPLIES, DEVICES, ETC. SHALL BE MANUFACTURED BY THE SAME MANUFACTURER AS THE FIRE ALARM CONTROL PANEL.
4. FIRE ALARM REMOTE POWER SUPPLIES AND PANELS SHALL BE LOCATED IN MECHANICAL OR ELECTRICAL ROOMS ONLY. DO NOT LOCATE IN STORAGE ROOMS, DATA CLOSETS OR FINISHED SPACES.
4. PROVIDE AUDIBLE, INTELLIGIBLE AND VISUAL ALARM COVERAGE OF THE AREA OF RENOVATION AS REQUIRED BY CODE.
5. PROVIDE SMOKE DETECTORS AT EACH FIRE ALARM PANEL, REMOTE TRANSPONDER PANEL, BOOSTER PANEL AND REMOTE ANNUNCIATOR PER NFPA 72.
6. IN ADDITION TO THE SPECIFIED FIRE ALARM EQUIPMENT, THE FIRE ALARM CONTRACTOR SHALL PROVIDE
   - 6.A. SURGE PROTECTORS FOR ALL NEW 120V POWER CONNECTIONS TO FIRE ALARM EQUIPMENT.
   - 6.B. SURGE PROTECTORS FOR ALL SIGNALING LINE CIRCUITS (SLC), NOTIFICATION CIRCUITS AND INITIATING CIRCUITS CONNECTED TO THE FIRE ALARM CONTROL PANEL WHICH LEAVE THE BUILDING.
7. SHOULD ANY DETECTOR, MONITOR OR PULL STATION ACTIVATE, ALL SPEAKERS SHALL SOUND AND STROBES FLASH. AIR HANDLING EQUIPMENT SHALL BE DEACTIVATED. AN ALARM SIGNAL SHALL BE SENT TO A REMOTE LOCATION VIA AUTOMATIC DIALER. ALSO, DE-ENERGIZE SUPPLY FANS, EXHAUST FANS AND OTHER AIR CIRCULATING DEVICES IF 2000 CFM OR OVER, SERVING THE AREA IN ALARM.
8. ALL LOW VOLTAGE WIRING SHALL BE FPLP RATED WIRE, WITH MINIMUM WIRE SIZE PER SPECIFICATIONS.
   - 8.A. PLENUM RATED CABLE ABOVE ACCESSIBLE CEILING SHALL BE SUPPORTED BY J-HOOKS, SPACED AT FOUR (4) FEET ON CENTER.
   - 8.B. INSTALL FIRE ALARM CABLES IN CONDUIT FOR AREAS WITHOUT CEILING OR ABOVE INACCESSIBLE CEILINGS.
   - 8.C. EXPOSED CONDUIT IN FINISHED SPACES SHALL BE ALLOWED WHERE NO OTHER OPTION EXISTS AND ONLY WITH PRIOR WRITTEN APPROVAL BY THE OWNER. ALL EXPOSED CONDUIT SHALL BE PAINTED TO MATCH.
   - 8.D. ALL CABLING THROUGH WALLS, FIRE WALLS AND FLOORS SHALL BE INSTALLED IN SLEEVES WITH PROTECTIVE BUSHINGS ON BOTH ENDS.
9. FIRE ALARM SYSTEM SHALL BE MONITORED BY A UL LISTED CENTRAL RECEIVING STATION.
10. INTERLOCK LIGHTING CONTROL PANELS WITH FIRE ALARM SYSTEM TO ENABLE ALL LIGHTING UPON ACTIVATION.
11. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

FIRE ALARM SYSTEM NOTES

1. GENERAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL AND FIRE ALARM SUBCONTRACTOR FOR LOCATIONS OF REMOTE POWER SUPPLIES. FIRE ALARM POWER SUPPLIES ARE NOT SHOWN ON THIS DRAWING AND SHALL BE LOCATED BY FIRE ALARM SUBCONTRACTOR IN ORDER TO ACCOMMODATE HIS FIRE ALARM SYSTEM BATTERY AND VOLTAGE DROP CALCULATIONS PER MANUFACTURER'S RECOMMENDATION & NFPA REQUIREMENTS. ELECTRICAL CONTRACTOR SHALL INCLUDE ADDITIONAL DEDICATED 120V CIRCUITS IN BASE BID TO SERVE FIRE ALARM POWER SUPPLIES IN DIFFERENT AREAS. PROVIDE 2-12 +12G, 3/4"C AND SPARE 20A/1P CB(S) IN LOCAL LIFE SAFETY EMERGENCY 120V PANELS TO SERVE FIRE ALARM REMOTE POWER SUPPLIES.
2. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR DESIGN AND FOR FINAL CORRECT LOCATION OF DEVICES TO RELIEVE NUISANCE ALARMS, SUCH AS INSTALLING A HEAT DETECTOR IN FRONT OF AN OVEN WHICH WILL RELEASE STEAM, THUS POTENTIALLY SETTING OFF THE ALARM. ALSO, THE CONTRACTOR IS RESPONSIBLE FOR DETECTORS REQUIRED BY CODE EVEN IF NOT SHOWN ON DRAWING, LIKE A CLOSET. IF THERE IS UNCERTAINTY, BRING UP DURING THE BID PROCESS AND THEY WILL BE ADDRESSED DURING THE BIDDING PROCESS.
3. FIELD VERIFY ENVIRONMENTAL ISSUES THAT CAN ADVERSELY AFFECT OPERATION OF SMOKE DETECTORS. DO NOT LOCATE NEAR AIR FLOW DEVICES LEADING TO PREMATURE BUILD UP OF DUST CAUSING NUISANCE TROUBLE SIGNALS. DEVICE RELOCATION OR TYPE CHANGE WILL BE COVERED UNDER WARRANTY.

FIRE ALARM SCOPE OF WORK

1. THERE IS AN EXISTING FIRE ALARM SYSTEM IN EACH BUILDING.
   - 1.A. TEST THE EXISTING SYSTEM PRIOR TO BEGINNING DEMO. NOTE ANY FAULTS OR TROUBLES AND PROVIDE A WRITTEN REPORT TO THE OWNER.
   - 1.B. EXPAND THE EXISTING SYSTEM AS REQUIRED TO INTEGRATE THE NEW DEVICES IN THE AREA OF RENOVATION.
2. PROVIDE WIRING AND DEVICES AS INDICATED TO PROVIDE COMPLETE AUDIBLE, INTELLIGIBLE AND VISUAL ALARM COVERAGE OF RENOVATED AREAS AS REQUIRED BY CODE.
   - 2.A. PROVIDE SMOKE DETECTOR COVERAGE OF ALL STORAGE ROOMS AND ADDITIONALLY AS SHOWN ON THE DRAWINGS.
   - 2.B. PROVIDE HEAT DETECTOR COVERAGE OF THE KITCHEN, CUSTODIAL ROOMS, AND ADDITIONALLY AS SHOWN ON THE DRAWINGS.
   - 2.C. PROVIDE DUCT MOUNTED DETECTORS AT EACH NEW AIR HANDLING UNIT SUPPLY AND RETURN CONNECTION EXCEEDING 2000 CFM. IF FREE AIR RETURN, PROVIDE FREE AIR DETECTOR COVERAGE OF THE RETURN AIR OPENINGS TO THE MECHANICAL ROOM. ENSURE AIR FLOW CANNOT PREVENT OPERATION OF THE DETECTORS AND PROVIDE ADEQUATE CLEARANCE PER NFPA 72.
   - 2.D. CONTROL RELAYS SHALL BE LOCATED WITHIN 3 FT OF THE CONTROLLED CIRCUIT OR APPLIANCE.
3. PROVIDE SMOKE DETECTORS AT EACH NEW FIRE ALARM PANEL, REMOTE TRANSPONDER PANEL, BOOSTER PANEL AND REMOTE ANNUNCIATOR PER NFPA 72.
4. PROVIDE LED REMOTE ALARM WITH ENGRAVED STAINLESS STEEL PLATE WHERE DUCT DETECTORS ARE NOT LOCATED IN MECHANICAL ROOM, LOCATED ABOVE CEILINGS OR WHERE MOUNTED TOO HIGH OR VIEW IS BLOCKED BY DUCTWORK IN MECHANICAL ROOM.
   - 4.A. REMOTE LED LIGHT INDICATOR FOR DUCT SMOKE DETECTORS SHALL BE MOUNTED FLUSH IN CEILING OR MOUNTED IN WALL AT +7FT.
   - 4.B. STAINLESS STEEL PLATE SHALL BE ENGRAVED WITH THE DUCT SMOKE DETECTOR AS-BUILT IDENTIFICATION NUMBER.
5. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SPARES

1. THE FIRE ALARM CONTRACTOR SHALL INCLUDE IN HIS BID THE COST TO PROVIDE AND INSTALL THE ADDITIONAL SPARE PARTS AND ASSOCIATED CABLING PER THE SPECIFICATIONS. SPARES SHALL BE INSTALLED AS INSTRUCTED BY THE OWNER. UNINSTALLED DEVICES SHALL BE DELIVERED TO THE OWNER AS ATTIC STOCK.

GENERAL RENOVATION AND REMODELING NOTES

1. READ ALL MEP AND ARCH. DRAWINGS TO IDENTIFY AREAS OF RENOVATION AND SCOPE OF WORK.
2. ALL RENOVATION AND DEMOLITION WORK SHALL NOT AFFECT AREAS NOT INCLUDED IN THE AREAS OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUITY OF ALL SERVICES (POWER, TELEPHONE, FIRE ALARM, DATA, SECURITY, ETC.) IN NON-DEMOLITION/RENOVATION AREAS. ALL SERVICES SHALL BE MAINTAINED AT ALL TIMES.
3. ALL OUTAGES AFFECTING NON-DEMOLITION/RENOVATION AREAS SHALL BE SCHEDULED WITH THE OWNER WITH A MINIMUM 2 WEEKS ADVANCE NOTICE. OUTAGES SHALL BE COORDINATED WITH OTHER TRADES TO MINIMIZE THE QUANTITY AND IMPACT ON BUILDING OPERATION.
4. THIS ELECTRICAL DRAWING ONLY SHOWS SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J-BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
5. CONTRACTOR SHALL FIELD VERIFY AND MARK UP THE FOLLOWINGS IN AREAS OF RENOVATION:
   - 5.A. EXISTING DATA, AUDIO, VIDEO, SPEAKERS AND OTHER LOW VOLTAGE OUTLETS AND DEVICES.
   - 5.B. EXISTING CEILING MOUNTED PROJECTORS.
   - 5.C. EXISTING SECURITY, CCTV, ACCESS CONTROL DEVICES.
   - 5.D. EXISTING FIRE ALARM DEVICES.
   - 5.E. EXISTING WIRELESS ACCESS POINTS AND GRID LABELING.
   - 5.F. EXISTING LIGHT FIXTURES AND SWITCHES.
   - 5.G. EXISTING ELECTRICAL DEVICES, J-BOXES, CONDUIT, WIRING, WIRING SUPPORTS, ETC.
   - 5.H. EXISTING ELECTRICAL SWITCHGEAR.
   - 5.I. EXISTING CONTROL PANELS AND CONTROL CIRCUITS.
   - 5.J. EXISTING HANGER WIRE FROM CONC. CEILING.
6. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
7. ALL EXISTING DEVICES SHALL BE REINSTALLED IN NEW CEILINGS AT SAME LOCATION EXCEPT WHERE SHOWN TO BE NEW.
8. CONDUIT/WIRE NOT TO BE REUSED SHALL BE REMOVED ALL THE WAY BACK TO THE UPSTREAM EQUIPMENT.
   - 8.A. PROVIDE ADDITIONAL SUPPORTS FOR EXISTING CONDUIT/WIRE TO REMAIN TO MEET CURRENT CODE REQUIREMENTS.
9. ANY MATERIAL THAT HAS SALVAGE VALUE SHALL BE OFFERED TO THE OWNER, AND IF ACCEPTED, DELIVERED TO HIS WAREHOUSE. IF NOT ACCEPTED IT SHALL BE PROPERLY DISPOSED OF WITH THE OTHER CONSTRUCTION DEBRIS.
10. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITES.
11. WHERE PARTIAL CIRCUITS OR SYSTEMS ARE TO BE REUSED, ENSURE THAT THEY REMAIN ACTIVE. WHERE EXISTING EQUIPMENT IS RELOCATED OR REPLACED WITH NEW. MODIFY, EXTEND AND RELOCATE EXISTING CIRCUIT TO CONNECT TO EQUIPMENT, UNLESS SHOWN TO HAVE NEW CIRCUIT.
12. WHERE AUXILIARY SYSTEMS SUCH AS SECURITY, DATA, SOUND, ETC. INTERFACE WITH EXISTING EQUIPMENT THAT IS REPLACED OR MODIFIED (MECHANICAL, ELECTRICAL OR PLUMBING), DISCONNECT AND RECONNECT THESE SYSTEMS.
13. WHERE NEW CIRCUIT BREAKERS ARE TO BE INSTALLED IN EXISTING PANELS OR SWITCHBOARD, VERIFY THAT THE CIRCUIT BREAKER WILL FIT IN THE ALLOTTED SPACE. PROVIDE NEMA 1 ENCLOSURE ADJACENT TO PANEL & WIRE CONNECT TO BUSSING IF THERE IS INSUFFICIENT SPACE.
14. WHERE PARTIAL CIRCUITS OR SYSTEMS ARE TO BE REUSED, ENSURE THAT THEY REMAIN ACTIVE. WHERE EXISTING EQUIPMENT IS RELOCATED OR REPLACED WITH NEW, MODIFY, EXTEND AND RELOCATE EXISTING CIRCUIT TO CONNECT TO EQUIPMENT, UNLESS SHOWN TO HAVE NEW CIRCUIT.
15. WHEN REPLACING LIGHTS AND CEILINGS, ENSURE THAT EXISTING DATA, TELEVISION AND PA CABLES TO REMAIN CONTINUE TO MEET THE CURRENT STANDARDS. FOR DATA CABLES, THIS IS THE IEEE 802.1. FOR TELEVISION AND PA CABLE, A FOUR INCH DISTANCE IS NEEDED FROM ALL LIGHT FIXTURES. NEW DROP LOCATION SHOULD BE WITHIN THREE FEET OF POWER OUTLET.
16. PAINT NEW AND EXISTING EXPOSED RACEWAY IN AREAS OF RENOVATION TO MATCH FINISHES.
17. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
18. INTERESTED CONTRACTORS MUST VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH THE PROJECT REQUIREMENTS AND EXISTING CONDITIONS AND SHALL INCLUDE IN THEIR PROPOSALS COSTS TO REPAIR, RELOCATE, MODIFY AND REMOVE EXISTING ELEMENTS AS REQUIRED TO COMPLETE INSTALLATION OF ALL SYSTEMS SHOWN ON THESE DRAWINGS.
19. SEE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

ELEC REQUIREMENTS FOR BUILDING RENOVATION

1. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
2. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
3. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
4. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
5. ALL EXISTING DEVICES TO REMAIN SHALL BE REINSTALLED IN NEW CEILINGS AND WALLS EXCEPT WHERE INDICATED TO BE REMOVED/RELOCATED/REPLACED.
6. EXISTING DEVICES IN WALLS TO BE FURRED OUT OR RECEIVE NEW SURFACE TREATMENT SHALL REMAIN. EXTEND JBOX TO NEW WALL SURFACE AND RECONNECT TO EXISTING CIRCUITS. EXTEND WIRING/CABLING FROM NEAREST ACCESSIBLE POINT AS NECESSARY.
7. REINSTALL ALL DEVICES NOT SHOWN TO BE REMOVED.
8. EXISTING LIGHT FIXTURES SHALL REMAIN EXCEPT WHERE SHOWN AS NEW. EXTEND EXIST CONDUIT AND WIRE DOWN TO NEW LIGHT FIXTURES, REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. ALL EXISTING EXIT SIGNS SHALL BE REINSTALLED AND RECONNECTED TO EXISTING CIRCUITS EXCEPT IN CORRIDORS AND AREAS OF RENOVATION SHOWING NEW.
10. ALL NEW DEVICES IN EXISTING WALLS IN FINISHED SPACES SHALL BE INSTALLED FLUSH MOUNTED, NO EXPOSED CONDUIT OR WIREMOLD ALLOWED. CUT EXISTING WALLS AND PATCH/REPAIR TO MATCH EXISTING AS REQUIRED.
    - 10.1. DEVICES/CONDUIT IN CUSTODIAL, MECHANICAL AND ELECTRICAL ROOMS MAY BE EXPOSED AND SURFACE MOUNTED.
11. PROVIDE NEW DIRECTORY FOR ALL EXISTING AND NEW PANELS SHOWING FIELD VERIFIED CIRCUITS.
12. ANY FEEDER AND BRANCH CIRCUIT NOT TO BE REUSED SHALL BE REMOVED COMPLETELY UP TO CB IN EXISTING PANEL.
13. ANY CIRCUIT OR PARTIAL CIRCUIT TO BE REUSED SHALL REMAIN ACTIVE.

GENERAL EQUIPMENT ELECTRICAL NOTE

THE ELECTRICAL DESIGN HAS BEEN COORDINATED FOR SPACE, INSTALLATION AND ELECTRICAL REQUIREMENTS WITH EQUIPMENT THAT IS SCHEDULED BY OTHER DIVISIONS. THE REQUIREMENTS FOR OTHER EQUIPMENT AND MODELS FROM ACCEPTABLE MANUFACTURERS HAVE NOT BEEN VERIFIED OR COORDINATED. THE GENERAL CONTRACTOR SHALL VERIFY THESE REQUIREMENTS PRIOR TO USING OTHER EQUIPMENT IN HIS BID AND INCLUDE ANY ADDITIONAL COSTS FOR INSTALLATION OF THE EQUIPMENT. THIS INCLUDES GENERAL CONSTRUCTION AND MEP COSTS.

ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER/OTHER TRADES FOR EXACT ELECTRICAL REQUIREMENTS OF EQUIPMENT PRIOR TO ORDERING CB(S). FIELD VERIFY EQUIPMENT NAMEPLATE RATINGS AND EQUIPMENT CONNECTION LOCATIONS WITH OTHER TRADES PRIOR TO ROUGH-IN.

TYPICAL OF HVAC EQUIPMENT, SHOP EQUIPMENT, KITCHEN EQUIPMENT, ELECTRIC ROLLUP DOORS, ETC.

GENERAL ELECTRICAL NOTES

1. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. INSTALL SYSTEMS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
3. PROVIDE LIGHT FIXTURE FIRE PROTECTION AND CONDUIT FIRE SEALING TO MAINTAIN FIRE RATING OF WALLS AND CEILINGS PER ARCHITECT'S SCHEDULE. REF. SPECIFICATIONS AND ARCH. DRAWINGS FOR ADDITIONAL INFORMATION.
4. ELECTRICAL RECEPTACLES, TELEPHONES, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
5. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
6. DO NOT INSTALL ELECTRICAL PANELS AND TRANSFORMERS UNTIL 1/4" SCALE DRAWINGS SHOWING LOCATION OF THIS EQUIPMENT RELATIVE TO MECHANICAL/PLUMBING EQUIPMENT, DUCTWORK AND PIPING IS SUBMITTED AND APPROVED. NEC CODE CLEARANCE MUST BE MAINTAINED.
7. ELECTRICAL EQUIPMENT HAS BEEN COORDINATED WITH PIPING AND DUCTWORK. DO NOT RELOCATE PANELS WITHOUT PRIOR APPROVAL.
8. ELECTRICAL DEVICES IN FIRE RATED WALLS SHALL BE A MINIMUM OF 24" AWAY FROM DEVICES ON THE OPPOSITE SIDE OF THE WALL TO MAINTAIN FIRE RATING.
9. MINIMUM SIZE CONDUIT FOR POWER SHALL BE 3/4", MIN. SIZE FLEX CONDUIT MAY BE 1/2". MINIMUM SIZE CONDUIT FOR DATA SHALL BE 1"C. DO NOT COMBINE CONDUIT FOR DATA.
10. MAX. LENGTH FOR FLEX CONDUIT SHALL BE 6 FT. ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
11. LIGHT FIXTURE WHIPS MAY BE MIN. 1/2" FLEX CONDUIT WITH MIN. #12 WIRE. LIGHT FIXTURE WHIPS SHALL BE NO MORE THAN 6 FT LONG.
12. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
13. GROUND TRANSFORMER SECONDARIES TO BUILDING STEEL AND GROUND ROD. PROVIDE CONDUIT TO PROTECT GROUNDING CONDUCTOR AND BOND EACH END OF CONDUIT TO GROUNDING SYSTEM. MIN. SIZE OF CONDUIT FOR GROUND WIRE SHALL BE 3/4"C.
14. PROVIDE J-BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM AND SOUND SYSTEMS WIRINGS, ETC. SEE SPECIFICATIONS.
15. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS.
16. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
17. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12. ALL WIRE SHALL BE STRANDED TYPE THHN OR THWN-2 (WET RATED FOR 90° C). ALL WIRES SHALL BE COLOR CODED WITH SAME COLOR CONNECTED TO SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION.
18. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT. NO SURFACE MOUNTED WIREMOLD SHALL BE ALLOWED IN FINISHED SPACES. MC CABLE SHALL BE ALLOWED INSIDE EXIST STUD WALLS OR CHASE WALLS.
19. PROVIDE AND INSTALL FINAL CONNECTIONS TO ALL EQUIPMENT PROVIDED BY OTHER TRADES AND/OR FURNISHED BY OWNER INCLUDING ALL NECESSARY CONDUIT, CORDS, PLUGS, WHIPS, HARDWIRING, ETC. IN PARTICULAR CONFIRM CONNECTION REQUIREMENTS WITH DELIVERED EQUIPMENT PRIOR TO ROUGH-IN.
20. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

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STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED PROFESSIONAL ENGINEER
07.18.2025

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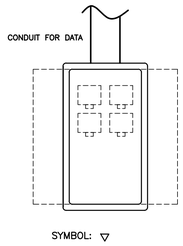
ELECTRICAL AND FIRE ALARM NOTES

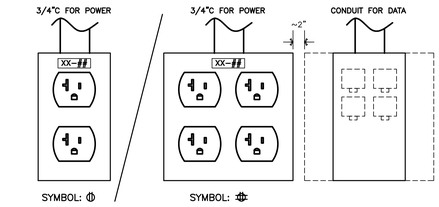
a-E.001



1 TYPICAL DATA OUTLETS

NO SCALE

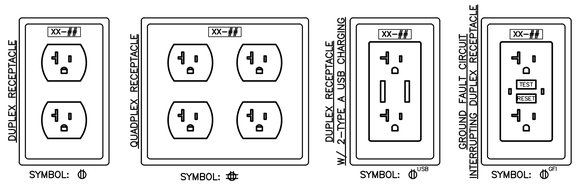
NOTES:
1. PROVIDE DEEP 4 11/16" X 4 11/16" X 2 1/8", 2-GANG BACK BOX FOR ALL DATA OUTLETS.
   1.A. PROVIDE SINGLE GANG MUDRING FOR DATA OUTLETS WITH 1-4 DROPS.
   1.B. PROVIDE PULL STRING IN ALL LOW VOLTAGE CONDUITS.
2. LOW VOLTAGE CABLING AND DEVICES BY DIVISION 27.
3. REFERENCE TECHNOLOGY DRAWINGS FOR ADDITIONAL INFORMATION.



2 TYPICAL POWER & DATA OUTLET DETAIL

NO SCALE

NOTES:
1. LOCATE DEVICES GROUPED TOGETHER AS CLOSELY TOGETHER AS POSSIBLE.
   1.A. USE CADDY TSGB16, RBS16 OR SIMILAR MOUNTING BAR IN SHEETROCK WALLS.



3 TYPICAL ELECTRICAL DEVICES

NO SCALE

NOTES:
1. ALL DEVICES SHALL BE COLOR CODED PER SPECIFICATIONS WITH 302/304 STAINLESS STEEL, STANDARD SIZE, FACEPLATES.
2. ONLY SELECT RECEPTACLES ARE SHOWN HERE. PROVIDE SIMILAR LABELS ON ALL SWITCHES, NEMA POWER OUTLETS, ETC.
3. PROVIDE LABEL WITH RED TEXT READING "EMERGENCY" FOR DEVICES ON GENERATOR FED CIRCUITS.
4. PROVIDE TYPEWRITTEN OR PREMADE CIRCUIT LABELS INDICATING THE ELECTRICAL CIRCUIT ON:
   4.A. INSTALLED WIRING AT EACH SPLICE POINT
   4.B. EACH J-BOX ABOVE CEILING WITH WIRING INSTALLED OR MODIFIED AS PART OF THIS PROJECT.
   4.C. AFFIXED TO THE FRONT OF EACH NEW AND EXISTING DEVICE FACEPLATE IN THE AREA OF RENOVATION.

XX-## CIRCUIT LABEL
A. XX = PANEL DESIGNATION
B. ## = AS-BUILT CIRCUIT DESIGNATION

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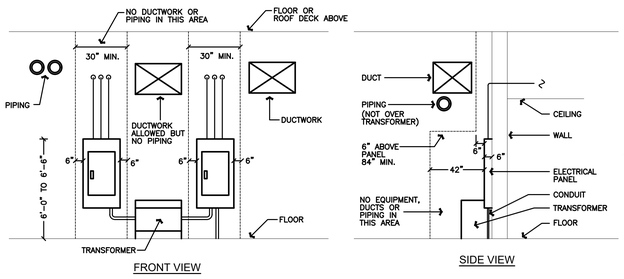
ELECTRICAL DEVICE DETAILS

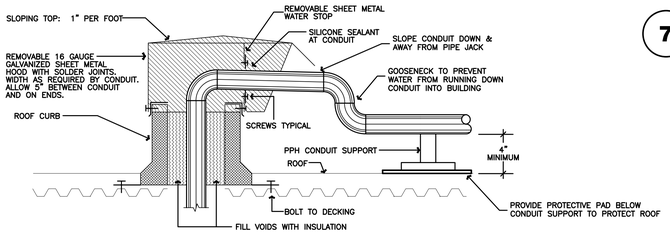
a-E.010



10 MECHANICAL - ELECTRICAL COORDINATION DETAIL

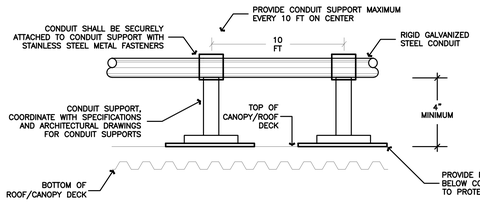
NO SCALE

COORDINATE WITH OTHER TRADES TO ENSURE NO PIPING AND DUCTWORK ABOVE ELECTRICAL EQUIPMENT AS SHOWN. PROVIDE WORKING CLEARANCE IN FRONT OF STARTERS, DISCONNECTS, PANELS, XFMRS AND ADDITIONALLY PER CODE.



11 CONDUIT ROOF PENETRATION DETAIL

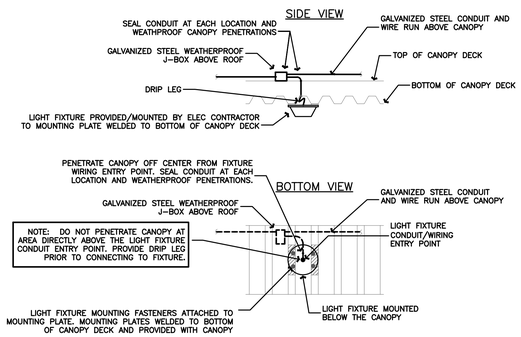
NO SCALE



12 ROOF AND CANOPY CONDUIT SUPPORT DETAIL

NO SCALE

1. COORDINATE WITH ARCHITECTURAL DRAWINGS, DETAILS, SPECIFICATIONS AND OTHER TRADES.

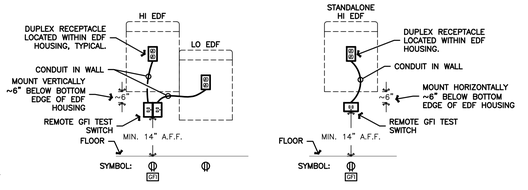


13 CANOPY LIGHT MOUNTING DETAIL TYPE 1

NO SCALE

NOTES:

1. MOUNTING PLATES SHALL BE WELDED TO CANOPY TO MOUNT LIGHT FIXTURES.
2. FOR FIXTURES WITH END CONDUIT ATTACHMENTS ALL CANOPY PENETRATIONS SHALL BE MADE OFF CENTER FROM THE FIXTURE WIRING ENTRY POINT AND SHALL HAVE WEATHERTIGHT SEALING. (SHOWN HERE)
3. CANOPY PENETRATIONS ABOVE FIXTURES SHALL BE PERMITTED ONLY WHERE THE SUPPLIED FIXTURE HAS NO END CONDUIT ATTACHMENTS.
4. CONDUIT SHALL BE SEALED BOTH ABOVE AND BELOW THE CANOPY PENETRATION AND AGAIN AT THE FIXTURE ENTRY POINT TO PREVENT WATER FROM ENTERING THE LIGHTING FIXTURE.
5. CANOPY PENETRATIONS SHALL BE MADE AS CLOSE TO CONDUIT ENTRY PENETRATION POINT AS POSSIBLE AND CONDUIT SHALL BE ROUTED TO MINIMIZE EXPOSED CONDUIT.

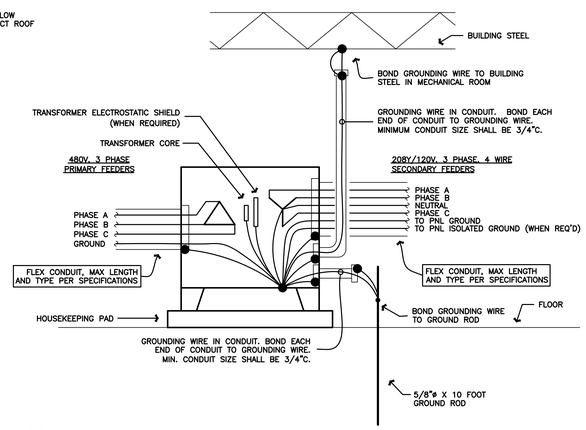


7 EDF GFI PROTECTION DETAIL

NO SCALE

NOTES:

1. MODIFY EXISTING WALL AS NEEDED TO INSTALL NEW RECEPTACLE AND REMOTE GFI TEST SWITCH. PATCH/REPAIR WALL AS NEEDED TO MATCH EXISTING.
2. WIRE NEW RECEPTACLE DOWNSTREAM OF REMOTE GFI TEST SWITCH.
3. REMOTE GFI TEST SWITCH SHALL BE A DEAD FRONT GFI DEVICE TO BE INSTALLED FLUSH MOUNTED IN WALL WITH EDF SERVED AND PROVIDE GFI PROTECTION FOR THE RECEPTACLE LOCATED WITHIN THE EDF HOUSING.
4. GFI TEST SWITCH SHALL BE READILY ACCESSIBLE PER NEC 210.8.
5. COORDINATE RECEPTACLE LOCATION(S) WITHIN EDF HOUSINGS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

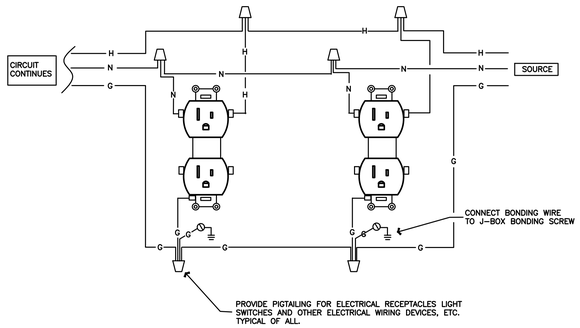


8 TRANSFORMER CONNECTION AND GROUNDING DETAIL

NO SCALE

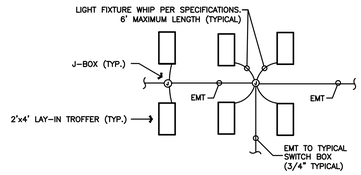
NOTES:

1. INSTALL GROUND ROD ADJACENT TO TRANSFORMER AND SEAL PENETRATION AROUND GROUND ROD.
2. WHERE AN ISOLATED GROUND IS PROVIDED MAKE THE CONNECTION AT THE TRANSFORMER AND RUN DIRECTLY TO THE ISOLATED GROUND BAR IN THE PANELBOARD. DO NOT DEFINE THE ISOLATED GROUND AT THE PANELBOARD.
3. FINAL CONNECTIONS TO TRANSFORMERS SHALL BE MADE IN FLEXIBLE CONDUIT. PROVIDE LIQUID TIGHT CONSTRUCTION AND FITTINGS IN WET, DAMP OR OUTSIDE AREAS EXCEPT WHERE LOCATED IN AIR HANDLING ROOMS. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.



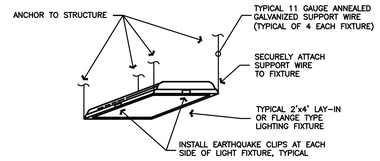
9 PIGTAIL WIRING DETAIL FOR ELECTRICAL DEVICE

NO SCALE



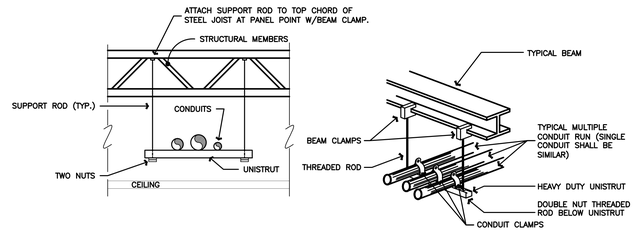
1 CONDUIT/J-BOX DETAIL FOR LIGHT FIXTURES IN LAY-IN CEILING

NO SCALE



2 FIXTURE SUPPORT DETAIL

NO SCALE

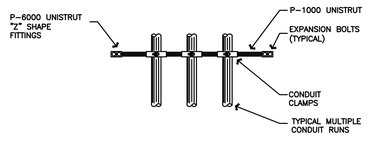


3 TRAPEZE MOUNTED CONDUIT DETAIL

NO SCALE

NOTES:

1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

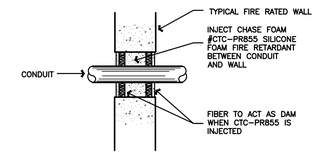


4 WALL MOUNTED CONDUITS

NO SCALE

NOTES:

1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

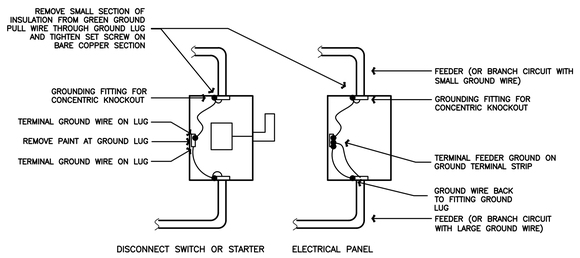


5 FIREWALL PENETRATION DETAIL

NO SCALE

NOTES:

1. FIRE RATING OF COMPLETED FIREPROOFED ASSEMBLY SHALL BE EQUAL OR EXCEED RATING OF WALL.



6 GROUNDING BUSHING WIRING DETAIL

NO SCALE

NOTE:

1. PROVIDE AND INSTALL GROUNDING BUSHINGS FOR DISCONNECT SWITCHES, PANELS AND TRANSFORMERS.

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ELECTRICAL DETAILS

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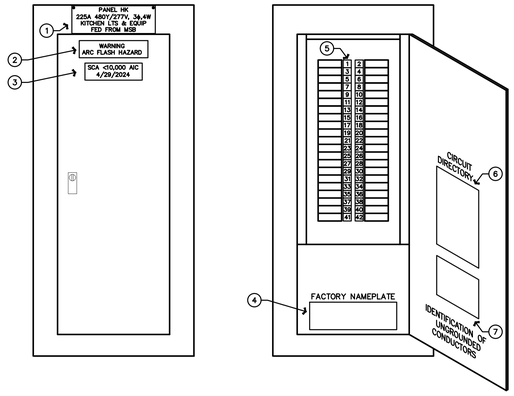


5 TYPICAL BRANCH CIRCUIT PANEL LABELING DETAIL

NO SCALE

NOTES:

1. LAYOUT OF PANELBOARD, INCLUDING LOCATIONS OF NAMEPLATES, CIRCUIT DIRECTORY, AND OTHER LABELING IS SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS.
2. REFERENCE OWNER'S DESIGN GUIDELINES FOR ADDITIONAL LABELING REQUIREMENTS.

(1) PROVIDE LAMACOID NAMEPLATE WITH 5/16" LETTERS SHOWING PANEL NAME, AMPERAGE RATING, VOLTAGE, AND FROM WHERE POWER IS DERIVED. ATTACH WITH MASTIC AND TWO SCREWS. COORDINATE TO GIVE SAME NAME AS PANEL SCHEDULE. IF USED AS MAIN SERVICE PANEL, PROVIDE SHORT CIRCUIT AVAILABLE AND RATING INFORMATION.

(2) PROVIDE PERMANENT ARC FAULT WARNING LABEL.

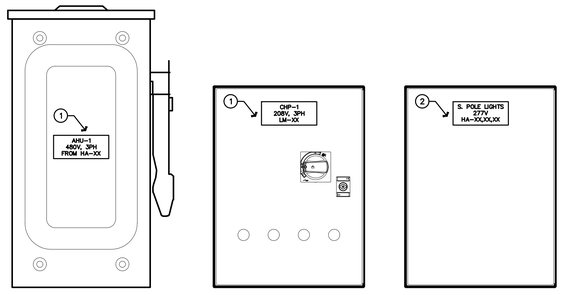
(3) FOR ALL NEW ELECTRICAL EQUIPMENT, PROVIDE PERMANENTLY AFFIXED LABEL STATING FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE MINIMUM 2" X 3" IN SIZE, AND INCLUDE THE DATE OF THE CALCULATION. REFERENCE ELECTRICAL DRAWINGS AND EQUIPMENT SHORT CIRCUIT ANALYSIS TABLE. ATTACH WITH MASTIC AND TWO SCREWS.

(4) PROVIDE INFORMATION PER INDUSTRY STANDARDS, BUT SHALL INCLUDE VOLTAGE, PHASE, BUS AMPERAGE, AND SHORT CIRCUIT RATING

(5) FOR EACH CIRCUIT PROVIDE PERMANENT LABEL INDICATING CIRCUIT BREAKER NUMBER, NUMBER SHALL MATCH CIRCUIT DIRECTORY.

(6) CIRCUIT DIRECTORY TO BE COMPLETED AT END OF JOB, TYPEWRITTEN, STATING EQUIPMENT OR ROOMS SERVED BY CIRCUIT. EVEN CIRCUIT ON RIGHT SIDE OF CARD, ODD ON LEFT. PROVIDE LAMINATED DIRECTORY FOR EXTERIOR OR WET LOCATIONS.

(7) PROVIDE PERMANENT LABEL INDICATING COLOR CODING OF PHASE CONDUCTORS BASED ON VOLTAGE USING BUILDING COLOR SCHEME AS IDENTIFIED IN THE OWNER'S DESIGN GUIDELINES.



1 TYPICAL DISCONNECT, STARTER, & CONTACTOR LABELING DETAIL

NO SCALE

NOTES:

1. LOCATIONS OF NAMEPLATES SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS. REFERENCE OWNER'S DESIGN GUIDELINES FOR ADDITIONAL LABELING REQUIREMENTS.

(1) PROVIDE AN ENGRAVED NAMEPLATE SHOWING LOAD SERVED, EQUIPMENT VOLTAGE, AND CIRCUIT NUMBER MATCHING AS-BUILT CONDITIONS.

(2) PROVIDE AN ENGRAVED NAMEPLATE SHOWING LOADS SERVED, VOLTAGES, AND CIRCUIT NUMBERS MATCHING AS-BUILT CONDITIONS FOR ALL CONTACTOR CIRCUITS. LOADS SERVED SHALL BE "LIGHTING", "FAN", "RECEPTACLES", "PUMP", "WATER HEATER", OR SIMILAR DESCRIPTIVE NOTE.

DISHWASHER
480V, 3PH, 3 WIRE
FROM HK-2/4/6

2 DISCONNECT LABELING

NO SCALE

NOTES:

1. PROVIDE LABEL ON EACH DISCONNECT AND FUSED SWITCH.
   1.1. FOR DISCONNECTS AND FUSED SWITCHES REPLACE "PANEL P1NA" WITH THE LOAD SERVED.
   1.2. REFER TO OWNER'S STANDARDS FOR ADDITIONAL LABEL REQUIREMENTS.
2. PROVIDE LABEL ON ELECTRICAL PANEL AND TRANSFORMER.
   2.1. REPLACE "PANEL P1NA" WITH THE PANEL OR TRANSFORMER NAME BEING LABELED.
3. REPLACE "400A FUSED SWITCH" WITH UPSTREAM SOURCE OR CONNECTION.
   3.1. IF FED FROM A XFMR REPLACE "400A FUSED SWITCH" WITH "XFMR XX" WHERE XX IS THE FIELD VERIFIED XFMR NAME.
4. REPLACE VOLTAGE CONFIGURATION TO MATCH THE EQUIPMENT BEING LABELED.
5. REFERENCE FLOOR PLANS FOR EQUIPMENT LOCATIONS.

⚠ WARNING
Arc Flash and Shock Hazard
Appropriate PPE Required

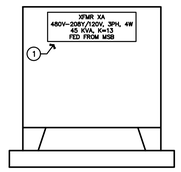
FLASH PROTECTION		SHOCK PROTECTION	
Incident Energy at:	18 in	Shock Risk When Cover is Removed	480 VAC
Min. Arc Rating:	0.45 cal/cm²	Limited Approach	42 in
Arc Flash Boundary:	10 in	Restricted Approach	12 in
PPE: Per NFPA 70E 2015	1	Equipment Name: **PANEL HA** Prot Dev: 225/3 CB from Panel DA	

3 TYPICAL ARC FLASH LABEL DETAIL

NO SCALE

NOTES:

1. VALUES AND NAMES SHOWN HERE ARE FOR REFERENCE ONLY, MODIFY TO REFLECT PROJECT'S ARC FLASH STUDY VALUES AND EQUIPMENT NAMES.
2. IF MIN. ARC RATING IS OVER 40CAL/CM² MODIFY "WARNING" TEXT TO READ "DANGER" AND PROVIDE RED SHADING IN LIEU OF ORANGE SHOWN.



4 TYPICAL TRANSFORMER LABELING DETAIL

NO SCALE

NOTES:

1. LOCATIONS OF NAMEPLATES SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS.

(1) PROVIDE AN ENGRAVED NAMEPLATE SHOWING EQUIPMENT NAME, RATING, VOLTAGE, SOURCE.

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL



07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

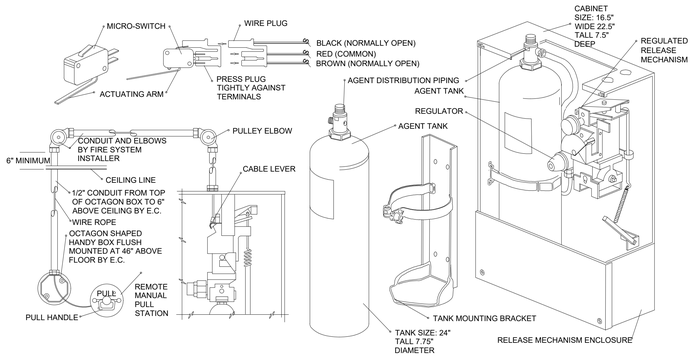
PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL DETAILS

a-E.012

KITCHEN AREA ELECTRICAL NOTES

1. REFER TO KITCHEN CONSULTANTS "FS" DRAWINGS FOR ADDITIONAL REQUIREMENTS PARTICULARLY NOTING MOUNTING HEIGHTS OF EQUIPMENT OUTLETS AND JUNCTION BOXES, AND WHETHER SERVICE IS FROM WALL, FLOOR OR OVERHEAD.
2. SOME RECEPTACLES SHALL BE MOUNTED HORIZONTALLY, REFER TO KITCHEN CONSULTANTS "FS" DRAWINGS.
3. FOR DEVICES WITH SERVICE FROM FLOOR, RUN UNDERGROUND CONDUIT FROM DEVICES TO NEAREST COLUMN OR WALL THEN TURN CONDUIT UP AND RUN CONDUIT IN CEILING CAVITY.
4. LIGHT SWITCHES AND RECEPTACLES NOT SERVING A SPECIFIC PIECE OF EQUIPMENT SHALL BE MOUNTED AT ADA HEIGHTS.
5. CONNECTION TYPE SHOWN ON KITCHEN ELECTRICAL FLOOR PLAN IS FOR BIDDING PURPOSES, COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER FOR FINAL CONNECTIONS:
   - 5.A. OBTAIN WIRING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT FROM EQUIPMENT SUPPLIER PRIOR TO ORDERING WIRING DEVICES AND ROUGH-IN.
   - 5.B. IF EQUIPMENT REQUIRES CORD AND PLUG CONNECTION, CONTRACTOR SHALL PROVIDE NEMA POWER CORD, PLUG, AND RECEPTACLES PER MANUFACTURER'S INSTRUCTION.
   - 5.C. IF EQUIPMENT REQUIRES JUNCTION BOX AND/OR DISCONNECT SWITCH, CONTRACTOR SHALL PROVIDE JUNCTION BOX AND DISCONNECT SWITCH AND CONNECT EQUIPMENT WITH SEALTITE FLEXIBLE CONDUIT.
6. ALL DISCONNECT SWITCHES IN THE KITCHEN AREA SHALL BE NEMA 4XSS STAINLESS STEEL.
7. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
8. FLEXIBLE CONDUIT IN KITCHENS, FOOD PRODUCTION SPLASH ZONES AND WASH DOWN AREAS, FOOD PROCESSING, AND SIMILAR AREAS SHALL BE LIQUID TIGHT CONSTRUCTION INCORPORATING A BACTERIAL GROWTH INHIBITING PVC JACKET THAT MAY BE CLEANED WITHOUT DEGREDATION TO THE JACKET BLEACHING ELEMENTS AND APPROVED FITTINGS FOR WET LOCATION.
   - 8.A. AFC SZ TYPE LFMC OR EQUAL BY KAF-TECH.
9. INTERLOCK KITCHEN EXHAUST HOOD FIRE SYSTEM WITH FIRE ALARM SYSTEM.
10. PROVIDE RELAYS AND INTERLOCK KITCHEN HOOD FANS WITH FIRE ALARM SYSTEM. ACTUATION OF ANY ALARM INITIATING DEVICE SHALL DE-ENERGIZE KITCHEN HOOD FANS.
11. ALL GFI RECEPTACLES IN KITCHEN SHALL BE PASS & SEYMOUR MODEL 2097TRWR-XX TO EXCEED UL943 VOLTAGE SURGE REQUIREMENTS.

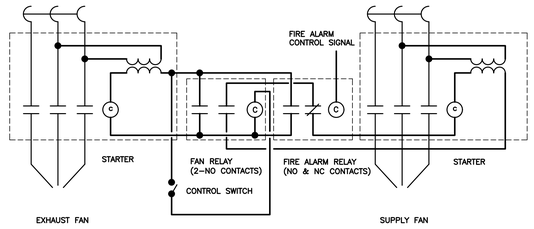


4 FIRE PROTECTION SYSTEM DETAIL

NO SCALE

NOTES:

1. ANSUL MODEL R-120 FIRE PROTECTION SYSTEM AND TANK(S)
2. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL POWER DISCONNECT DEVICES FOR ALL EQUIPMENT BELOW THE HOOD, SHUTTING OFF ALL SERVICE, INCLUDING CONTROL VOLTAGE, UPON ACTIVATION OF THE FIRE PROTECTION SYSTEM.
3. MICRO-SWITCH FURNISHED WITH SYSTEM TO BE INTERWIRED TO THE SHUT-OFF DEVICES FOR THE COOKING EQUIPMENT BY THE ELECTRICAL CONTRACTOR.
4. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL AN OCTAGON SHAPED HANDY BOX FOR THE PULL STATION AT 54" ABOVE THE FLOOR WITH 1/2" CONDUIT FROM THE TOP OF THE BOX TO 6" ABOVE THE CEILING.
5. GAS SHUT-OFF VALVE FURNISHED WITH THE SYSTEM (IF REQUIRED) TO BE INSTALLED IN THE GAS LINE SERVING THE COOKING EQUIPMENT BY THE PLUMBING CONTRACTOR. VERIFY SIZE OF GAS LINE.
6. ALL EXPOSED PIPEWORK TO BE STAINLESS STEEL OR CHROME WHERE EXPOSED.
7. VERIFY LOCATION OF REMOTE MANUAL PULL STATION.
8. UNIT MUST BE PLACED WITHIN EASY ACCESS OF EXIT DOOR.

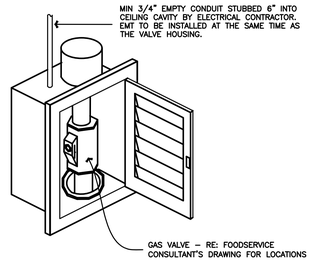


5 KITCHEN HOOD FAN CONTROL SCHEMATIC

NO SCALE

NOTES:

1. THE FANS SHALL BE WIRED SO THAT ONE LOCAL SWITCH TURNS ON ASSOCIATED SUPPLY AND EXHAUST FANS.
2. IF THE FIRE ALARM IS IN ALARM, A FIRE ALARM CONTROL CONTACT SHALL CAUSE THE SUPPLY FAN TO STOP AND THE EXHAUST FAN TO START, EVEN IF THE CONTROL SWITCH IS "OFF".
3. SCHEMATIC IS DIAGRAMMATIC. PROVIDE INTERLOCK WIRING BASED ON EQUIPMENT PROVIDED AND FAN VOLTAGE TO IMPLEMENT THE SEQUENCE SPECIFIED.
4. COORDINATE BETWEEN FIRE ALARM CONTRACTOR, CONTROLS CONTRACTOR AND ELECTRICAL CONTRACTOR TO PROVIDE A COMPLETE INSTALLATION.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

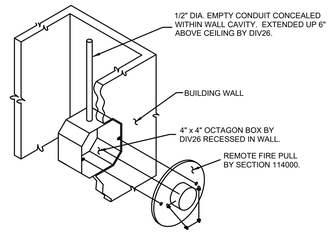


1 GAS VALVE DETAIL

NO SCALE

NOTES:

1. GAS VALVE HOUSINGS ARE NOT SHOWN ON THE ELECTRICAL DRAWING. GC AND ELECTRICAL CONTRACTOR SHALL COORDINATE SIZE AND LOCATION OF GAS VALVE HOUSINGS.
2. SEE FOOD SERVICE CONSULTANT'S DRAWINGS ADDITIONAL INFORMATION AND REQUIREMENTS.
3. PROVIDE MINIMUM 3/4"C AS SHOWN ON THIS DETAIL.

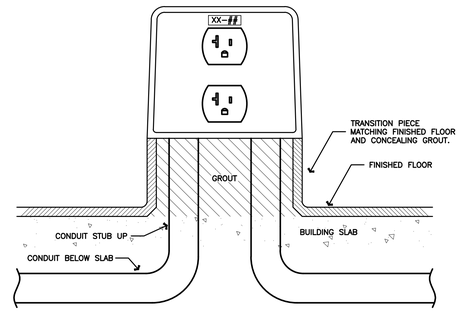


2 RECESSED FIRE PULL DETAILS

NO SCALE

NOTES:

1. VERIFY LOCATION OF REMOTE MANUAL PULL STATION.
   - 1.A. MANUAL PULL STATION MUST BE PLACED WITHIN EASY ACCESS OF EXIT DOOR.
   - 1.B. MANUAL PULL STATION MUST BE PLACED NO LESS THAN 4 FEET AWAY FROM KITCHEN HOOD BUT WITHIN A MAXIMUM OF 20 FEET FROM THE KITCHEN HOOD.



3 TYPICAL PEDESTAL MOUNTED DEVICE

NO SCALE

NOTES:

1. ALL FACEPLATES SHALL BE STAINLESS STEEL.
2. PEDESTAL BOX PROVIDED BY DIVISION 26.
   - 2.A. A STANDARD DUPLEX INSTALLATION IS SHOWN FOR REFERENCE, PROVIDE SIMILAR INSTALLATION FOR QUAD RECEPTACLES, GFI RECEPTACLES, DATA OUTLETS, NEMA POWER OUTLETS, ETC.
   - 2.B. ALL PEDESTAL BOXES TO BE DOUBLE FACED WITH ONE BLANK FACE FOR FUTURE GROWTH. 2-GANG PEDESTALS WITH ONE BLANK FACE FOR QUAD RECEPTACLE LOCATIONS.
   - 2.C. PEDESTAL BOXES TO BE SIZED BY DIVISION 26 TO PROVIDE SCHEDULED DEVICES ON A SINGLE FACE AND SUFFICIENT DEPTH FOR BACK TO BACK DEVICES ON DOUBLE FACED PEDESTALS.
   - 2.D. BASIS OF DESIGN:
     - 2.D.A. 1-GANG ELECTRICAL DEVICES: LEGRAND LBP2 OR WATER SAVER E400SA-WS
     - 2.D.B. 1-GANG LOW VOLTAGE DEVICES: LEGRAND LBP2 OR WATER SAVER E400SA-WS
     - 2.D.C. 2-GANG ELECTRICAL DEVICES: WATER SAVER E600SA-WS
     - 2.D.D. 2-GANG LOW VOLTAGE DEVICES: WATER SAVER E600SA-WS
3. INSTALLATION REQUIREMENTS:
   - 3.A. STUB UP CONDUIT ABOVE FLOOR TO PEDESTAL BOX CONNECTION LOCATION.
   - 3.B. GROUT GAP BETWEEN FINISHED FLOOR AND BOTTOM OF PEDESTAL BOX.
   - 3.C. PROVIDE TRANSITION PIECE TO CONTINUE FINISHED FLOOR TO BOTTOM EDGE OF SERVICE FITTING AND CONCEAL GROUT. TRANSITION PIECE TO MATCH ARCHITECT'S FINISH SCHEDULE.
   - 3.D. PEDESTAL BOX TO BE INSTALLED SQUARE TO THE FINISHED FLOOR.
4. PROVIDE TYPEWRITTEN OR PREMADE CIRCUIT LABELS ON INSTALLED WIRING AT EACH DEVICE AND SPLICE POINT.
5. PROVIDE TYPEWRITTEN LABEL AFFIXED TO THE FRONT OF EACH DEVICE FACEPLATE INDICATING ELECTRICAL CIRCUIT.

CIRCUIT LABEL

XX-##

A. XX = PANEL DESIGNATION

B. ## = AS-BUILT CIRCUIT DESIGNATION

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STATE OF TEXAS
GEORGE L. STANTON
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REGISTERED
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07.18.2025

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ELECTRICAL
KITCHEN DETAILS

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LIGHTING SYSTEM FUNCTIONAL TESTING AND DOCUMENTATION NOTES:

1. PRIOR TO PASSING FINAL INSPECTION, THE CONTRACTOR SHALL PERFORM FUNCTIONAL TESTING IN THE PRESENCE OF THE REGISTERED DESIGN PROFESSIONAL, THE OWNER AND/OR THEIR AGENT. THE FUNCTIONAL TESTING SHALL BE AS REQUIRED BY SECTION C408.3.1 OF THE 2021 IECC.
   - 1.A. THE FUNCTIONAL TESTING SHALL PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SYSTEMS, INCLUDING BOTH HARDWARE AND SOFTWARE, ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTRUCTIONS.
   - 1.B. THE FUNCTIONAL TESTING SHALL BE IN ACCORDANCE WITH SECTIONS C408.3.1.1 AND C408.3.1.2 OF THE 2021 IECC FOR THE APPLICABLE CONTROL TYPE.
   - 1.C. A WRITTEN REPORT SHALL BE GENERATED DOCUMENTING THE FUNCTIONAL TESTING RESULTS IN ACCORDANCE WITH THE 2015 IECC REQUIREMENTS.
2. ALL LIGHTING CONTROLS O&M MANUALS, AS-BUILTS, TESTING REPORTS AND DOCUMENTATION RELATED TO THE LIGHTING CONTROL SYSTEM SHALL BE PROVIDED IN THEIR FINAL AND APPROVED FORM WITHIN 60 DAYS OF THE CERTIFICATE OF OCCUPANCY. ALL DOCUMENTS CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA OF SECTION C405 OF THE 2021 IECC SHALL BE INCLUDED IN THE O&M MANUALS.
3. ALL DOCUMENTS FROM ITEMS #1 AND #2 ABOVE SHALL BE COMBINED AND PROVIDED TO THE OWNER WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

LIGHT FIXTURE SCHEDULE

EXTERIOR LIGHT FIXTURE SCHEDULE

RECESSED 6" DOWNLIGHT WET LOCATION	D5 D5Y	6" DIAMETER RECESSED LED DOWNLIGHT, SPECULAR CLEAR REFLECTOR, MEDIUM (56°) BEAM DISTRIBUTION, 1000 LUMENS, 4000K COLOR TEMPERATURE, 120–277V MULTIVOLT INPUT, 1% 0–10V DIMMING DRIVER. LIGHTOLIER 6R–N / C6L–10–9–40–M–Z10–U / C6–R–DL–CC	9W
RECESSED 6" DOWNLIGHT WET LOCATION	D6 D6Y	6" DIAMETER RECESSED LED DOWNLIGHT, SPECULAR CLEAR REFLECTOR, MEDIUM (56°) BEAM DISTRIBUTION, 2000 LUMENS, 4000K COLOR TEMPERATURE, 120–277V MULTIVOLT INPUT, 1% 0–10V DIMMING DRIVER. LIGHTOLIER 6R–N / C6L–20–9–40–M–Z10–U / C6–R–DL–CC	22W
SURFACE CANOPY SQUARE LED	WC1 WC1X WC1Y	9" SQUARE SURFACE LED CANOPY LIGHT, 4000K COLOR TEMPERATURE, 3500 LUMENS, 120–277V MULTIVOLT INPUT, DARK BRONZE FINISH. EELP VR7–T–28L–QT–40K (EBLED9W)	28W
EXTERIOR WALL PACK	WP1 WP1X WP1Y	7" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 5000 LUMENS, TYPE 3 DISTRIBUTION, 120–277 MULTIVOLT INPUT, WET LOCATION, 10KV KA SURGE PROTECTION. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM SMALL GWS–A04–740–UNV–XX FINISH (EM)	34W
EXTERIOR WALL PACK	WP2 WP2X WP2Y	12" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 8500 LUMENS, TYPE 3 DISTRIBUTION, 120–277 MULTIVOLT INPUT, WET LOCATION. REFER TO ARCH FOR MOUNTING HEIGHT. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM MEDIUM GWM–A11–740–T3M–UNV–XX FINISH (REMOTE EM BATTERY)	52W
EXTERIOR WALL PACK	WP3 WP3X WP3Y	17" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 12500 LUMENS, TYPE 3 DISTRIBUTION, 120–277 MULTIVOLT INPUT, WET LOCATION. REFER TO ARCH FOR MOUNTING HEIGHT. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM MEDIUM GWM–A14–740–T3M–UNV–XX FINISH (REMOTE EM BATTERY)	77W

1. LIGHT FIXTURE CATALOG NUMBERS AND DESCRIPTIONS ARE SCHEDULED FOR ESTABLISHING QUALITY, APPEARANCE AND PERFORMANCE OF THE FIXTURES. EXACT CATALOG NUMBERS DESCRIBING MOUNTING CONDITIONS AND REQUIREMENT RELATED TO TRIM FOR ALL FIXTURES SHALL BE CONFIRMED (BY THE ELECTRICAL CONTRACTOR) WITH THE ROOM FINISH SCHEDULE AND REFLECTED CEILING PLANS ON THE ARCHITECTURAL PLANS PRIOR TO BIDDING AND SUBMITTING LIGHT FIXTURES. PROVIDE DRY WALL KIT AS REQUIRED.
2. ALL 'X', 'Y', AND 'Z' TYPE FIXTURES SHALL HAVE EMERGENCY POWER BACKUP. EMERGENCY POWER SOURCES SHALL MONITOR POWER UPSTREAM OF THE LIGHTING CONTROLS TO SEE IF POWER IS LOST. BATTERY PACKS AND INVERTERS SHALL BE CAPABLE OF POWERING THE DESIGNATED FIXTURE(S) WITH AN OUTPUT OF 1400 LUMENS FOR A MINIMUM OF 90–MINUTES, PROVIDE REMOTE BATTERY PACKS OR INVERTERS AS NECESSARY. EMERGENCY LIGHTS SHALL OPERATE ONLY UPON LOSS OF POWER. ALSO, PROVIDE AND WIRE TEST SWITCH AND LED INDICATOR LIGHT FOR EMERGENCY BATTERY. SEE WIRING INSTRUCTION SUPPLIED BY EMERGENCY BATTERY MANUFACTURER.
   - 2.A. 'X' TYPE FIXTURES (AX, ETC.) HAVE EMERGENCY GENERATOR POWER LIGHTING TRANSFER DEVICES.
   - 2.B. 'Y' TYPE FIXTURES (MY, ETC.) HAVE INDIVIDUAL 90–MINUTE EMERGENCY BATTERY POWER.
   - 2.C. 'Z' TYPE FIXTURES (QTZ, ETC.) HAVE 90–MINUTE INVERTER EMERGENCY BATTERY POWER.
3. PROVIDE BASE COVER FOR ALL LIGHT POLES.
4. ALL EXTERIOR FIXTURES SHALL BE WET RATED WITH COLD WEATHER BALLASTS AND BATTERY PACKS.
5. PROVIDE SPARE FIXTURES AND EMERGENCY DEVICES PER SPECIFICATIONS.
6. WHERE FIXTURE FINISHES ARE INDICATED TO BE SELECTED BY ARCHITECT THE CONTRACTOR SHALL INCLUDE IN THEIR BID ALL AVAILABLE FINISHES. SUBMIT COMPLETE FIXTURE FINISH OPTIONS AS PART OF THE LIGHTING SUBMITTAL PACKAGE.
7. EQUAL BY PHILIPS (CW LIGHTING), COOPER (PUTTERMAN SCHARCK), AND LITHONIA (LESCO) SHALL BE ACCEPTABLE.

INTERIOR LIGHT FIXTURE SCHEDULE

APPLICATION	TYPE	DESCRIPTION	WATTS
1X4 RECESSED LAY–IN CEILING SELECTABLE CCT & LUMENS	A1 A1X A1Y	2X4 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY–IN CEILING, 6000 LUMENS, 4000K COLOR TEMPERATURE, 120–347V MULTIVOLT INPUT, 5% 0–10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (47W). DAYBRITE 2SBP3550L8CS–4–UN3–DIM	47W
1X4 RECESSED LAY–IN CEILING SELECTABLE CCT & LUMENS	B1 B1X B1Y	1X4 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY–IN CEILING, 4500 LUMENS, 4000K COLOR TEMPERATURE, 120–347V MULTIVOLT INPUT, 5% 0–10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE 1SBP3040L8CS–4–UN3–DIM	36W
2X2 RECESSED LAY–IN CEILING SELECTABLE CCT & LUMENS	B2 B2X B2Y	2X2 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY–IN CEILING, 4250 LUMENS, 4000K COLOR TEMPERATURE, 120–347V MULTIVOLT INPUT, 5% 0–10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE 2SBP3040L8CS–2–UN3–DIM	39W
4FT STRIP LED MECHANICAL & STORAGE ROOMS	C CX CY	4 FOOT STRIP LED, STEEL HOUSING, FROSTED ACRYLIC LENS, 4000 LUMENS, 3500K COLOR TEMPERATURE, CHAIN HANGING SET, WIRE GUARD, 120–277V MULTIVOLT INPUT, 0–10V DIMMING DRIVER. PROVIDE CHAIN HANGING SET AND WIREGUARD IN MECHANICAL ROOMS AND AREAS WITHOUT CEILINGS. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE SDS–4–2448L–8CST–UNV–DIM	30W
RECESSED 6" DOWNLIGHT	D1 D1X D1Y	6" DIAMETER RECESSED LED DOWNLIGHT, MATTE WHITE FINISH, WIDE (76°) BEAM DISTRIBUTION, 1000 LUMENS, 4000K COLOR TEMPERATURE, 120–277V MULTIVOLT INPUT, 1% 0–10V DIMMING DRIVER. LIGHTOLIER 6R–N / C6L–10–9–40–W–Z10–U / C6–R–DL–WH	9W
RECESSED 6" DOWNLIGHT	D2 D2X D2Y	6" DIAMETER RECESSED LED DOWNLIGHT, MATTE WHITE FINISH, WIDE (76°) BEAM DISTRIBUTION, 2000 LUMENS, 4000K COLOR TEMPERATURE, 120–277V MULTIVOLT INPUT, 1% 0–10V DIMMING DRIVER. LIGHTOLIER 6R–N / C6L–20–9–40–W–Z10–U / C6–R–DL–WH	22W
EXIT SIGN	XB XS XD	DIE CAST ALUMINUM LED EXIT LIGHT, RED LETTERS, MATTE BLACK HOUSING W/ BRUSHED ALUMINUM FACE, UNIVERSAL ARROWS, 120/277 VOLT DUAL INPUT, 90 MINUTE EMERGENCY BATTERY. VERIFY LETTER AND FACE COLOR WITH OWNER/ARCHITECT PRIOR TO ORDERING. XS=SINGLE FACE, XD=DOUBLE FACE, XB=BACK MOUNTED PHILIPS CHLORIDE ER55L–3–R SURELITES CX7–1/2–R LITHONIA LQC–1/2–R–EL N	5W
EXIT SIGN INTEGRAL BATTERY INTEGRAL EM LIGHT BAR	YB YS YD	THERMOPLASTIC LED EXIT LIGHT WITH INTEGRAL EM LIGHT, RED LETTERS, WHITE HOUSING W/ WHITE FACE, UNIVERSAL ARROWS, 120–277 MULTIVOLT INPUT, 90 MINUTE EMERGENCY BATTERY. VERIFY LETTER AND FACE WITH OWNER/ARCHETICT PRIOR TO ORDERING. YS=SINGLE FACE, YD=DOUBLE FACE, YB=BACK MOUNTED SIGNTEX CLP–BB–U–R–W–DG	5W
TWIN HEAD EM LIGHT INTEGRAL BATTERY WET LOCATION	YT1	TWIN HEAD EM LIGHT, INJECTION–MOLDED THERMOPLASTIC WHITE HOUSING, GASKETED CLEAR POLYCARBONATE COVER, LED LAMPS, 90–MINUTE EMERGENCY BATTERY. CHLORIDE TPU–W–N–LM7–W	7W

LIGHTING CONTROL SEQUENCE OF OPERATIONS

ROOM TYPE	OCCUPANCY SENSOR						TIME SWITCH/SCHEDULING			DAYLIGHT CONTROL		LIGHT REDUCTION		MANUAL CONTROL			PLUG LOAD CONTROL	SEQUENCE OF OPERATION
	AUTO ON	MANUAL ON (VACANCY)	AUTO OFF (20 MIN MAX)	PARTIAL OFF AT NORMAL HOURS	AUTO ON AFTER HOURS	AUTO OFF AFTER HOURS (20 MIN MAX)	TIME ON	TIME OFF	ASTRONOMIC OR PHOTOCELL ON/OFF	AUTO STEP CONTROL WITH OFF	AUTO CONTINUOUS DIM WITH OFF	MANUAL BI–LEVEL REDUCTION CONTROL	MANUAL CONTINUOUS DIM CONTROL	MANUAL ON/OFF SWITCH	MANUAL DIMMER SWITCH	DISPLAY, ACCENT, TASK CONTROL		
Kitchen/Serving							•	•				•		•				LOCAL ON/OFF CONTROLS, LOCAL CONTROLS MAY OVERRIDE BUILDING SCHEDULE AND TURN ALL LIGHTS ON FOR MAXIMUM 2HRS. NETWORK LIGHTING CONTROLS ROOM CONTROLLER CONNECTED TO BUILDING CONTROLS; ON/OFF BASED ON BUILDING SCHEDULE, AFTER HOURS ON/OFF BASED ON OCCUPANCY, COORDINATE SCHEDULING WITH OWNER. WHERE ≥150W IN DAYLIGHT AREA, USE CONTINUOUS DIMMING DAYLIGHTING CONTROL.
Restrooms	100%		20 MIN											•				AUTO ON 100%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Custodial rooms		•	20 MIN											•	•			MANUAL ON, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Storage rooms	50%		20 MIN											•	•			AUTO ON 50%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF/DIMMING CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Private Offices	50%		20 MIN											•	•		•	AUTO ON 50%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF/DIMMING CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Corridors					100%	20 MIN	•	•						•				LOCAL ON/OFF CONTROLS, LOCAL CONTROLS MAY OVERRIDE BUILDING SCHEDULE AND TURN ALL LIGHTS ON FOR MAXIMUM 2HRS. NETWORK LIGHTING CONTROLS ROOM CONTROLLER CONNECTED TO BUILDING CONTROLS; ON/OFF BASED ON BUILDING SCHEDULE, AFTER HOURS ON/OFF BASED ON OCCUPANCY, COORDINATE SCHEDULING WITH OWNER. WHERE ≥150W IN DAYLIGHT AREA, USE CONTINUOUS DIMMING DAYLIGHTING CONTROL.
Electrical Rooms														•				MANUAL ON/OFF; LOCAL CONTROL DEVICE NOT TIED TO LVLCS.
Building Facade/Landscape							•	•										CONNECTED TO BUILDING CONTROLS THROUGH LIGHTING CONTACTOR; ON/OFF BASED ON BUILDING SCHEDULE.

1. DIMMER SWITCHES SHALL ACTIVATE PRESET ALL ON LIGHTING LEVEL WHEN PRESSED IN THE UP POSITION. LIGHTING LEVELS MAY BE RAISED/LOWERED BY HOLDING THE DIMMER PADDLE. WHEN PRESSED IN THE DOWN POSITION ALL LIGHTS SHALL SMOOTHLY DIM TO OFF.
2. AT LEAST 50 PERCENT OF ALL 125V, 15– AND 20–AMP RECEPTACLES INSTALLED IN ENCLOSED OFFICES, CONFERENCE ROOMS, ROOMS USED PRIMARILY FOR COPY OR PRINT FUNCTIONS, BREAKROOMS, CLASSROOMS AND INDIVIDUAL WORKSTATIONS, INCLUDING THOSE INSTALLED IN MODULAR PARTITIONS AND MODULE OFFICE WORKSTATION SYSTEMS SHALL HAVE PLUG LOAD CONTROL PER IECC 2021 C405.11.

LIGHTING CONTACTOR SCHEDULE

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	CONTACTOR LOCATION	CONTACTOR TYPE
CONTACTOR CT1						
CT1–1	KITCHEN/SERVING AREA – ZONE 'a'	HK–3	–	Kitchen–a	CENTRAL PLANT	MAGNETICALLY HELD
CT1–2	SPARE			Kitchen–a	CENTRAL PLANT	MAGNETICALLY HELD
CT1–3	SPARE			Kitchen–a	CENTRAL PLANT	MAGNETICALLY HELD
CONTACTOR CT2						
CT2–1	KITCHEN/SERVING AREA – ZONE 'b'	HK–3	–	Kitchen–b	CENTRAL PLANT	MAGNETICALLY HELD
CT2–2	SPARE			Kitchen–b	CENTRAL PLANT	MAGNETICALLY HELD
CT2–3	SPARE			Kitchen–b	CENTRAL PLANT	MAGNETICALLY HELD
CONTACTOR CT3						
CT3–1	KITCHEN SOFFIT/CANOPY LTS	HK–5	–	Exterior	CENTRAL PLANT	MAGNETICALLY HELD
CT3–2				Exterior	CENTRAL PLANT	MAGNETICALLY HELD
CT3–3				Exterior	CENTRAL PLANT	MAGNETICALLY HELD

1. REFERENCE TYPICAL LIGHTING CONTACTOR WIRING DIAGRAM.
2. EMERGENCY AND NORMAL ZONES WITHIN THE KITCHEN/SERVING SHALL HAVE SEPARATE CONTROLS TO ALLOW FOR LIGHTING REDUCTION CONTROL.
3. LIGHTING CONTACTORS SHALL BE DIN RAIL MOUNTED, MAGNETICALLY HELD TYPE WITH THREE WIRE CONTROL BY THE BAS.
   - 3.A. PROVIDE CABINET AT EACH LOCATION TO MOUNT ALL CONTACTORS IN A SINGLE ENCLOSURE. ENCLOSURE SIZED BY DIVISION 26.
   - 3.B. PROVIDE SEPARATE HOA SWITCHES IN THE FRONT COVER OF THE ENCLOSURE WIRED TO CONTROL THE FOLLOWING ZONES SEPARATELY.
     - 3.B.1. INTERIOR LIGHTING (ALL INTERIOR LIGHTING GROUPS)
     - 3.B.2. EXTERIOR LIGHTING (ALL EXTERIOR LIGHTING GROUPS)
     - 3.B.3. HOA SWITCH SHALL PASS THE BAS SIGNALS IN AUTO MODE, DISENGAGE ALL CONTACTORS IN THE OFF POSITION, AND ENGAGE ALL THE CONTACTORS IN THE ON POSITION.
   - 3.C. SPARE CAPACITY:
     - 3.C.1. PROVIDE MINIMUM TWO (2) SPARE POLE ON EACH COMBINED TYPE CONTACTOR FOR FUTURE USE.

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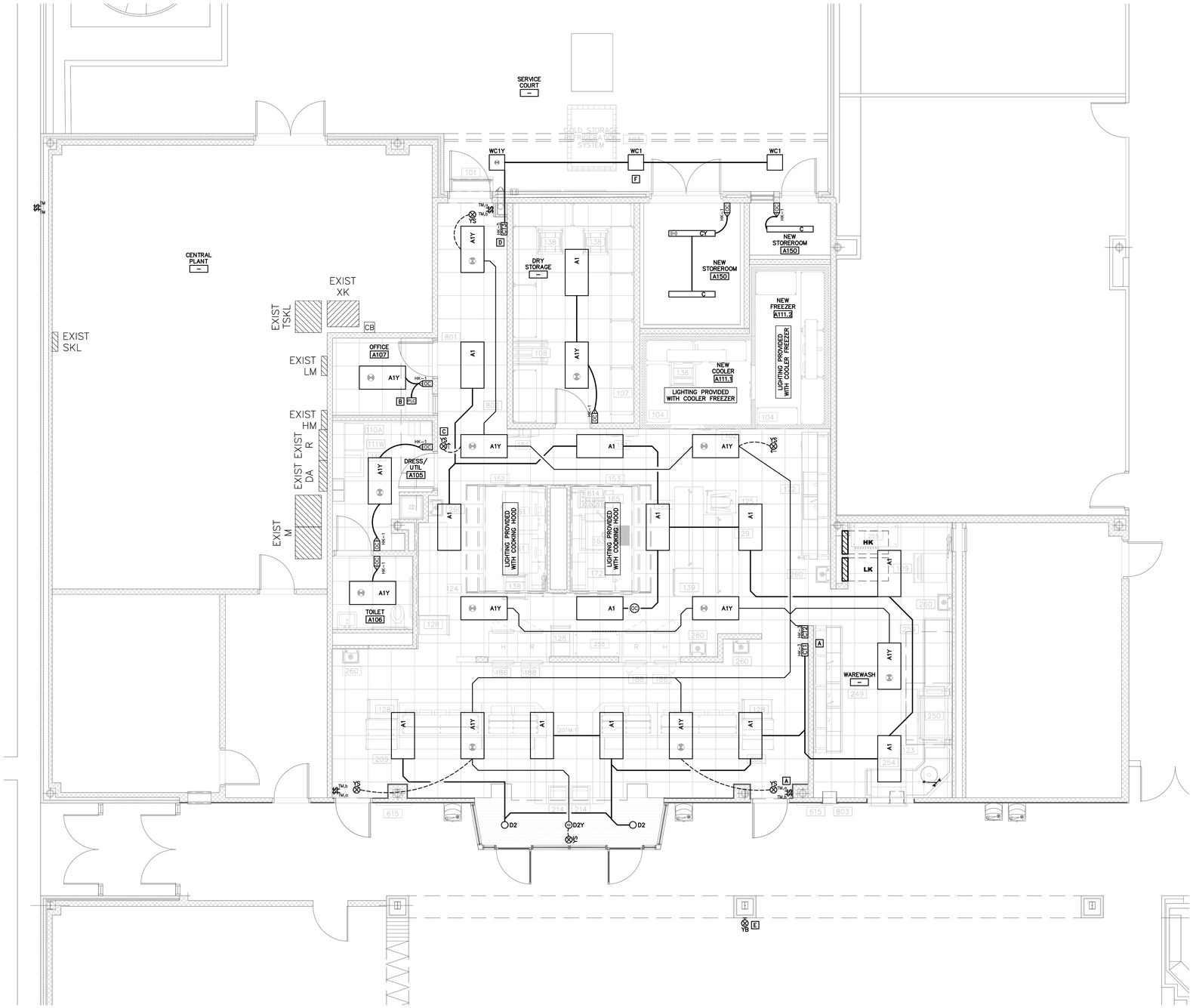
LIGHTING SCHEDULES

a-E.060



1 LIGHTING RENOVATION PLAN

SCALE: 1/4" = 1'- 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

LIGHTING RENOVATION NOTES:

A. KITCHEN LIGHTS TO BE CONTROLLED BY LOCAL MOMENTARY SWITCHES AND BAS. LIGHTING CONTACTOR LOCATIONS SHOWN SCHEMATICALLY ONLY. LOCATE LIGHTING CONTACTOR ENCLOSURE IN THE ADJACENT CENTRAL PLANT SPACE, FIELD VERIFY. REFERENCE LIGHTING CONTROL DETAIL. TYPICAL.

LEFT SWITCH SHALL CONTROL ZONE 'a' NORMAL POWER LIGHTING FIXTURES.

RIGHT SWITCH SHALL CONTROL ZONE 'b' EMERGENCY LIGHTING FIXTURES.

B. PROVIDE PLUG LOAD CONTROLS TIED TO THE LIGHTING IN OFFICE SPACES.

C. WIRE EXIT SIGNS UPSTREAM OF LIGHTING CONTROLS. TYPICAL.

D. EXTERIOR LIGHTS TO BE CONTROLLED BY BAS. LIGHTING CONTACTOR LOCATIONS SHOWN SCHEMATICALLY ONLY. LOCATE LIGHTING CONTACTOR ENCLOSURE IN THE ADJACENT CENTRAL PLANT SPACE, FIELD VERIFY. REFERENCE LIGHTING CONTROL DETAIL. TYPICAL.

E. AFTER REMOVAL OF THE TEMPORARY KITCHEN. PROVIDE NEW EXIT SIGN AT ORIGINAL LOCATION AND RECONNECT TO EXISTING CAFETERIAL LIGHTING CIRCUIT.

F. PATCH/REPAIR EXTERIOR SOFFIT TO ACCOMMODATE NEW SURFACE MOUNTED FIXTURES.

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LIGHTING FLOOR PLANS

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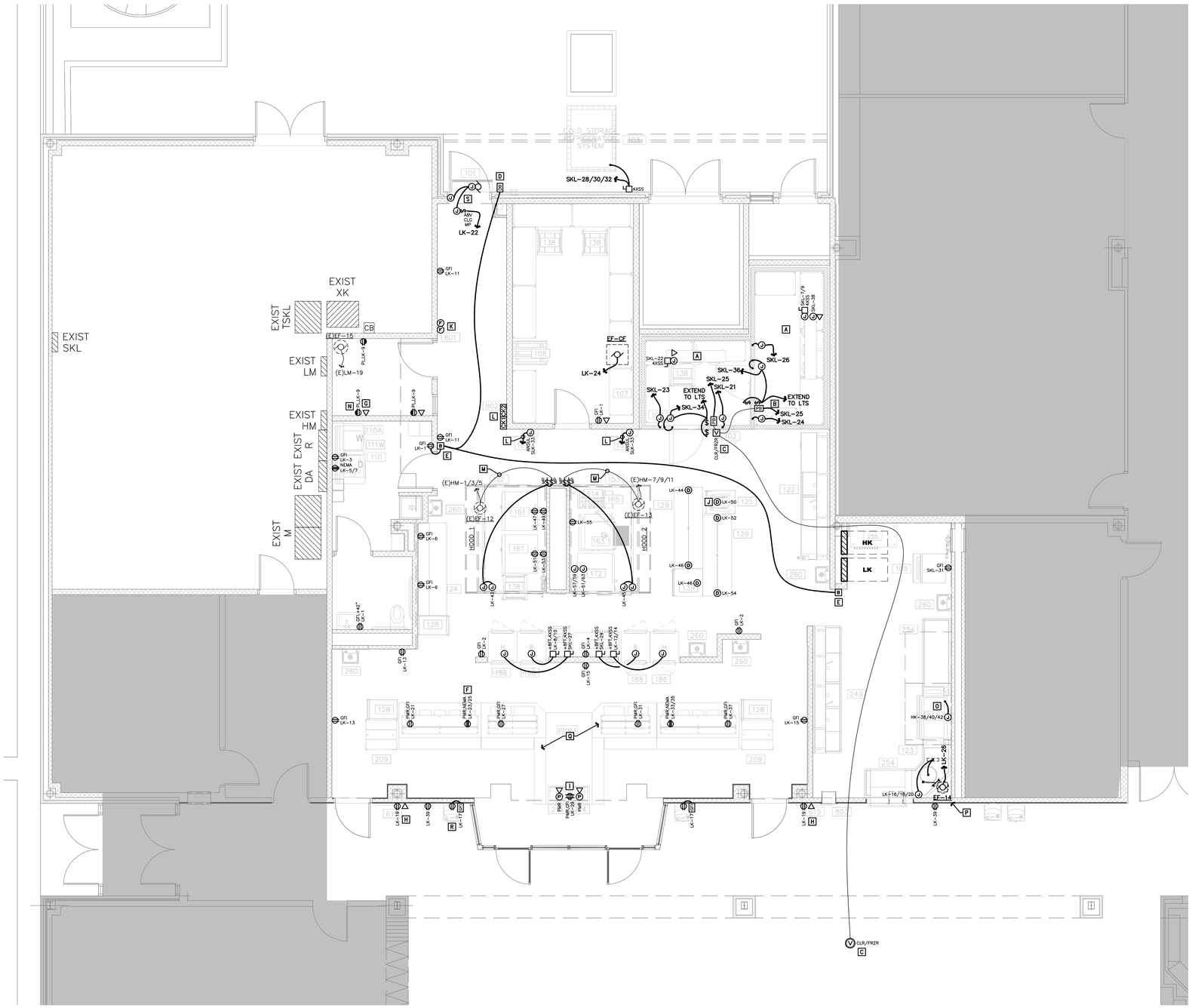

1 ELECTRICAL RENOVATION PLAN

SCALE: 1/4" = 1'- 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

ELECTRICAL RENOVATION NOTES:

A. CONNECT NEW FREEZER/COOLER AND CONDENSER TO EXISTING STANDBY GENERATOR.

B. PROVIDE ILLUMINATED PUSH BUTTON IN COOLER AND FREEZER. WHEN PRESSED RED STROBE DEVICES IN KITCHEN AND CAFETERIA SHALL ACTIVATE. TYPICAL.

C. PROVIDE HORN/STROBE DEVICE TIED TO PUSH BUTTONS IN FREEZER/COOLER.
(EDWARDS 860 SERIES OR EQUAL).

D. PROVIDE NEW DOORBELL BUTTON AT RECEIVING DOOR. DOORBELL BUTTON SHALL BE THE CLOSEST DEVICE TO THE DOOR FRAME.

E. PROVIDE NEW VIBRATING BUZZER TIED TO DOORBELL BUTTON AT RECEIVING DOOR. BUZZER TO BE WALL MOUNTED JUST BELOW THE CEILING.

F. PROVIDE NEW ELECTRICAL DEVICES MATCHING NEW KITCHEN EQUIPMENT AND ROOM LAYOUTS. REFERENCE FOOD SERVICE DRAWINGS. TYPICAL.

G. PROVIDE ROUGH-IN FOR LOW VOLTAGE DEVICES. REFERENCE TECHNOLOGY DRAWINGS, TYPICAL.

H. POWER AND DATA ROUGH-IN FOR KITCHEN MENU BOARD.

I. POWER AND DATA ROUGH-IN FOR POINT OF SALE (POS) LOCATION.

J. PROVIDE DROP CORD RECEPTACLE WITH HUBBELL KELLEMS LIQUIDTIGHT GRIPS FOR STRAIN RELIEF, TYPICAL OF ALL.

K. PROVIDE J-BOXES AND CONDUIT FOR REMOTE FIRE PULLS, SEE FOOD SERVICE DETAIL DRAWING FOR REQUIREMENTS, TYPICAL

L. WIRE ANSUL SYSTEM TO HOOD EQUIPMENT CONTROL CONTRACTOR. UPON ANSUL SYSTEM ACTIVATION ALL POWER TO EQUIPMENT BENEATH THE HOODS SHALL BE DEACTIVATED. MOUNT CONTACTOR CABINET(S) JUST BELOW THE CEILING.

M. PROVIDE SEPARATE SWITCHES TO TURN ON HOOD LIGHTS AND FANS. WIRE HOOD TEMP SENSOR AHEAD OF HOOD LIGHT SWITCH. USE 120V CIRCUIT TO CONTROL HOOD FANS THROUGH EXISTING STARTER. PROVIDE CONTROLS TRANSFORMER AS REQUIRED TO MATCH STARTER CONTROL INPUT VOLTAGE. TYPICAL.

N. PROVIDE PLUG LOAD CONTROLS TIED TO THE LIGHTING IN OFFICE SPACES.

O. INTERCONNECT DISH MACHINE TO VENT CONTROL. INTERCONNECT TABLE LIMIT SWITCH TO DISHMACHINE.

P. EXISTING MECHANICAL EQUIPMENT TO BE REPLACED. CONNECT TO CIRCUIT AS SHOWN. RECONNECT TO EXISTING STARTER/CONTACTORS, FIELD VERIFY.

Q. SAWCUT FLOOR TO INSTALL NEW PEDESTAL MOUNTED DEVICE BENEATH NEW SERVING LINES, DO NOT REUSE EXISTING STUB UPS OR DEVICES. POUR BACK SLAB AND PROVIDE NEW FINISHES, REFERENCE ARCHITECTURAL.

R. REFERENCE EDF GFI PROTECTION DETAIL FOR INSTALLATION REQUIREMENTS, TYPICAL.

S. WIRE MICRO SWITCH IN DOOR FRAME TO AIR SCREEN. COOR W/ FOOD SERVICE CONTRACTOR PRIOR TO ROUGH-IN. LOCATE LOCAL MOTOR RATED SWITCH ABOVE CEILING ADJACENT TO THE AIR SCREEN.

COOLER/FREEZER NOTES:

1. PROVIDE SEALING FOR CONDUIT IN COOLER AND FREEZER. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, CIRCULATION OF AIR FROM WARMER TO A COLDER SECTION SHALL BE PREVENTED PER N.E.C. ARTICLE 300.7 (A).
2. PROVIDE GROUND-FAULT PROTECTION OF EQUIPMENT FOR ELECTRIC HEAT TRACING AND HEATING PANELS IN THE FREEZER PER N.E.C. ARTICLE 427.22.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE LIQUID TIGHT CONDUIT AND WIRING FOR LIGHT FIXTURES AND LIGHT SWITCHES IN WALK-IN COOLER AND FREEZER, SEE FOODSERVICE CONSULTANT'S DRAWINGS.

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ELECTRICAL FLOOR PLANS

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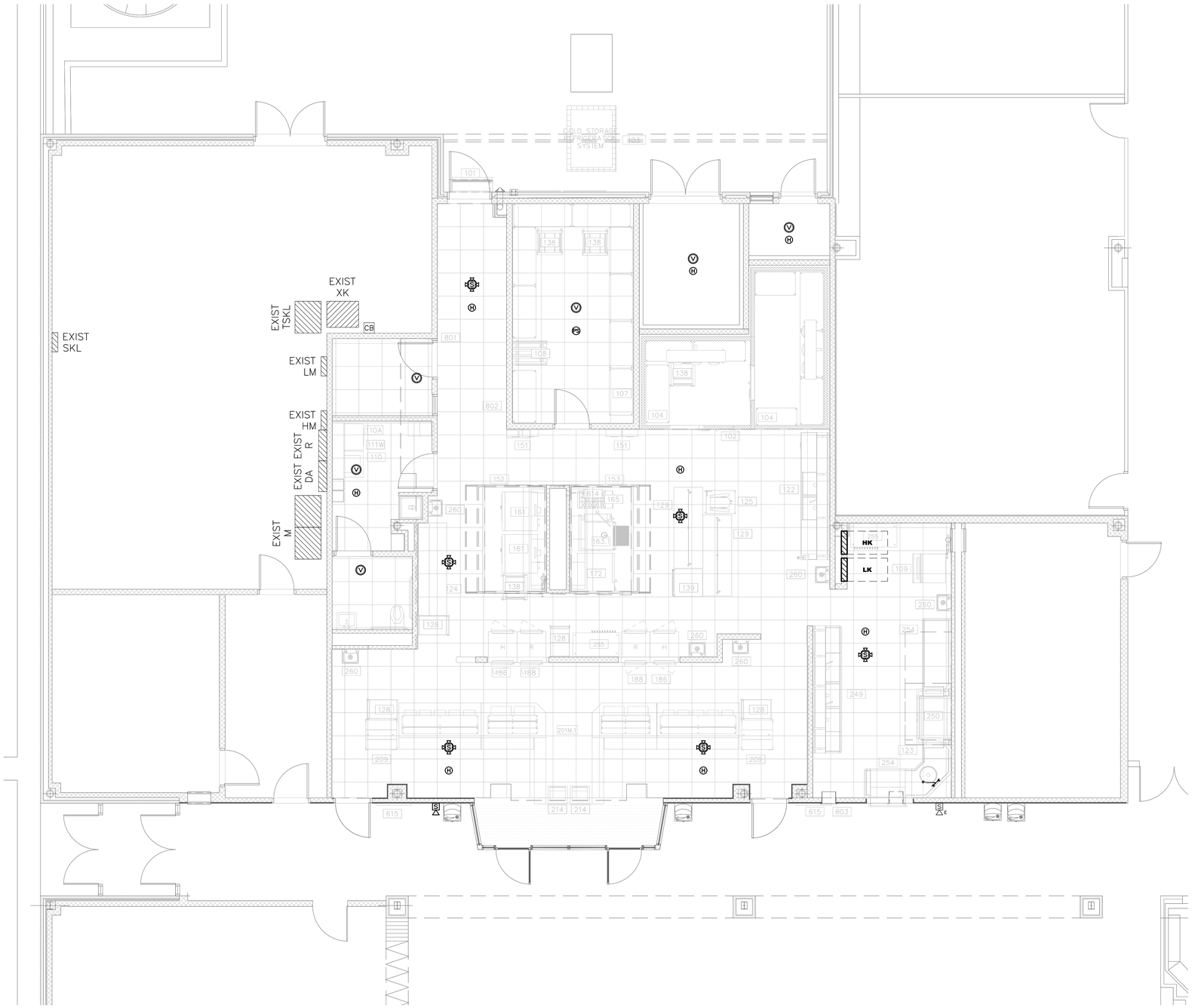

1 **FIRE ALARM RENOVATION PLAN**
SCALE: 1/4" = 1'- 0"

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FIRE ALARM
FLOOR PLANS

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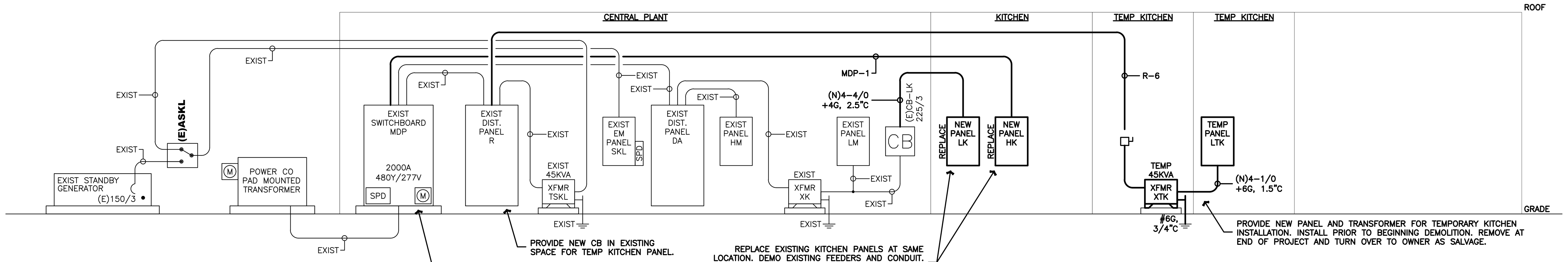

1 PARTIAL ELECTRICAL RISER

NO SCALE

NOTES:

1. FIELD VERIFY ALL EXISTING ELECTRICAL PANELS AND FEEDERS SHOWN ON DRAWINGS.
2. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
3. ALL OUTAGES SHALL BE SCHEDULED/CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
4. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.
5. REFERENCE PANEL SCHEDULES AND SHORT CIRCUIT TABLE FOR AIC AND SCCR VALUES.

NEW KITCHEN PANEL

PANEL HK

225A MLO, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 20,250A — SCCR & AIC: 25,000A — MOUNTING: RECESSED, STAINLESS STEEL COVER

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
		325	KITCHEN ROOM LIGHTS	3–12	20/1	1				2			SPACE			
6		1041	KITCHEN LIGHTS	3–12	20/1	3				4			SPACE			
7		84	KITCHEN SOFFIT LIGHTS	3–12	20/1	5				6			SPACE			
			SPARE		20/1	7				8			SPACE			
			SPARE		20/1	9				10			SPACE			
			SPARE		20/1	11				12			SPACE			
			SPARE		20/1	13				14			SPACE			
			SPARE		20/1	15				16			SPACE			
			SPARE		20/1	17				18			SPACE			
			SPARE		20/1	19				20			SPACE			
			SPARE		20/1	21				22			SPACE			
			SPACE			23				24			SPACE			
			SPACE			25				26			SPACE			
			SPACE			27				28			SPACE			
			SPACE			29				30			SPACE			
			SPACE			31				32			SPACE			
			SPACE			33				34			SPACE			
			SPACE			35				36			SPACE			
			SPACE			37				38	70/3	3–6	DISHMACHINE	42963	E250	
			SPACE			39				40	–	+8G	–	–		
			SPACE			41				42	–	3/4"C	–	–		
		TOTAL LOAD @ 100% =	44413VA		TOTAL LOAD @ 100% =						53A		TOTAL LOAD @ 125% =	67A		

NEW KITCHEN PANEL

PANEL LK

225A MLO, 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: RECESSED, STAINLESS STEEL COVER

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E10	640	3 REC – RR/STOR/CUST & BELL	3–12	20/1	1				2	20/1	3–12	2 REC – KITCHEN	360	E10	
	E110	1920	WASHING MACHINE	3–12	20/1	3				4	20/1	3–12	1 REC – KITCHEN	180	E10	
	E110A	5000	DRYER	2–10	30/2GFI	5				6	20/1	3–12	2 REC – KITCHEN	360	E11	
		–	–	+10N+10G	3/4"C	7				8	20/2	2–10	HEATED CABINET	3224	E187	
		540	3 REC – OFFICE	3–12	20/1	9				10	3/4"C	+10G	–	–		
	E10	360	2 REC – KITCHEN	3–12	20/1	11				12	20/2	2–10	HEATED CABINET	3224	E187	
	E10	360	2 REC – SERVING LINE	3–12	20/1	13				14	3/4"C	+10G	–	–		
	E10	360	2 REC – SERVING LINE	3–12	20/1	15				16	20/3	3–12	DISPOSER	3960	E123	
		1000	2 EDF – CAFETERIA	3–12	20/1	17				18	–	+12G	(3 HP)	–		
	E615	500	2 MENU BOARDS	3–12	20/1	19				20	–	3/4"C	–	–		
	E209	960	MILK COOLER	3–12	20/1	21				22	20/1	3–12	AIR SCREEN	612	E101	
	E201A	5824	HOT FOOD COUNTER	2–8	35/2	23				24	15/1	3–12	EF–CF (1/6HP)	528		
		–	–	+10G	3/4"C	25				26	15/1	3–12	EF–14 (1/6HP)	528		
	E201B	1920	COLD FOOD COUNTER	3–12	20/1	27				28	20/1		SPARE			
	E214	360	CASH REGISTERS	3–12	20/1	29				30	20/1		SPARE			
	E201B	1920	COLD FOOD COUNTER	3–12	20/1	31				32	20/1		SPARE			
	E201A	5824	HOT FOOD COUNTER	2–8	35/2	33				34	20/1		SPARE			
		–	–	+10G	3/4"C	35				36	20/1		SPARE			
	E209	960	MILK COOLER	3–12	20/1	37				38	20/1		SPARE			
		360	2 REC – CAFETERIA	3–12	20/1	39				40	20/1		SPARE			
			SPARE		20/1	41				42	20/1		SPARE			
	E153/E153M	250	HOOD LTS & SENSOR	3–12	20/1	43				44	20/1GFI	3–12	DROP CORD	180	E129	
	E153/E153M	250	HOOD LTS & SENSOR	3–12	20/1	45				46	20/1GFI	3–12	DROP CORD	180	E129	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	47				48	20/1GFI	3–12	MOBILE PROOFER	1800	E139A	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	49				50	20/1GFI	3–12	20QT MIXER	960	E125	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	51				52	20/1GFI	3–12	DROP CORD	180	E129	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	53				54	20/1GFI	3–12	DROP CORD	180	E129	
8	E163	600	TILT BRAISING PAN	3–12	20/1	55				56			SPACE			
8	E172	3120	COMBI OVEN	2–12	20/2	57				58	20/1	3–12	EXISTING CIRCUIT	500		5
		–	–	+12G	3/4"C	59				60	20/1	3–12	EXISTING CIRCUIT	500		5
	E172	3120	COMBI OVEN	2–12	20/2	61				62	15/2	2–12	EXISTING CIRCUIT	1000		5
		–	–	+12G	3/4"C	63				64	–	+12N+12G	–	–		
			SPACE			65				66	20/2	2–12	EXISTING CIRCUIT	1000		5
			SPACE			67				68	–	+12N+12G	–	–		
9		0	TEMP LOAD CENTER	2–6	50/2	69				70	30/2	2–10	EXISTING CIRCUIT	3000		5
		–	–	+6N+8G	1"C	71				72	–	+10N+10G	–	–		
		TOTAL LOAD @ 100% =	61484VA		TOTAL LOAD @ 100% =						171A		TOTAL LOAD @ 65% =	111A		

KITCHEN HOOD CONTACTOR SCHEDULE

HOOD 1

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	EQUIPMENT LOCATION	CONTACTOR TYPE
CK1–1	CONVECTION OVEN	LK–47	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–2	CONVECTION OVEN	LK–49	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–3	CONVECTION OVEN	LK–51	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–4	CONVECTION OVEN	LK–53	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–5	SPARE					ELECTRICALLY HELD – NO
CK1–6	SPARE					ELECTRICALLY HELD – NO
CK1–7	SPARE					ELECTRICALLY HELD – NO
CK1–8	SPARE					ELECTRICALLY HELD – NO

HOOD 2

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	EQUIPMENT LOCATION	CONTACTOR TYPE
CK2–1	TILT BRAISING PAN	LK–55	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–2	COMBI–OVEN	LK–57/59	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–3	(2–POLE)	–	–	–	–	ELECTRICALLY HELD – NO
CK2–4	COMBI–OVEN	LK–61/63	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–5	(2–POLE)	–	–	–	–	ELECTRICALLY HELD – NO
CK2–6	SPARE					ELECTRICALLY HELD – NO
CK2–7	SPARE					ELECTRICALLY HELD – NO
CK2–8	SPARE					ELECTRICALLY HELD – NO

1. REFERENCE FLOOR PLANS FOR EQUIPMENT LOCATIONS AND ADDITIONAL INFORMATION.
2. EACH KITCHEN HOOD CONTACTOR HALL BE CONTROLLED ON/OFF BY THE APPROPRIATE HOOD ANSUL SYSTEM. WHEN ACTIVATED ALL POWER WITHIN THE COOKING HOOD SHALL BE DE–ENERGIZED.

EXIST SQUARE D QED SWITCHBOARD — CENTRAL PLANT

(E)SWBD MDP

2000A MCB, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 37,000A — SCCR & AIC: 100,000A — FREE STANDING

NOTES	CIRCUIT	DESCRIPTION	CB	FEEDER SIZE	AMPS
4	1	NEW PANEL HK	225/3	4–4/0 +4G, 2.5"C	53A
	2	EXIST PANEL HE	400/3	EXIST FEEDER	
	3	EXIST DISTRIBUTION PANEL DA	800/3	EXIST FEEDER	
	4	EXIST DISTRIBUTION PANEL DB	1200/3	EXIST FEEDER	
	5	EXIST DISTRIBUTION PANEL R	800/3	EXIST FEEDER	
2	6	EXIST PANEL HK	400/3		
	7	EXIST 180KVAR CAPACITOR	400/3	EXIST FEEDER	
	8	EXIST SPD	60/3	EXIST FEEDER	
				TOTAL LOAD @ 100% =	53A
				TOTAL LOAD @ 125% =	67A

1. THE EXISTING 2000A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE AND PROVIDE NEW LAMACOID LABELS TO MATCH REVISED EQUIPMENT DESCRIPTION.

EXIST SQURE D I-LINE DIST PANELBOARD — CENTRAL PLANT

(E)DIST. PANEL R

800A MLO, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 37,000A — SCCR & AIC: 65,000A — MOUNTING: SURFACE

NOTES	CIRCUIT	DESCRIPTION	CB	FEEDER SIZE	AMPS
	1	EXIST CHILLER CH–1	250/3	EXIST FEEDER	100A
	2	EXIST SPARE	200/3	–	0A
	3	EXIST CHILLER CH–2	250/3	EXIST FEEDER	100A
	4	EXIST SPARE	200/3	–	0A
	5	EXIST ATS ASKL	70/3	EXIST FEEDER	38A
4	6	TEMP KITCHEN PANEL LTK	70/3	3–6 +8G, 3/4"C	40A
				TOTAL LOAD @ 100% =	238A
				TOTAL LOAD @ 125% =	298A

1. THE EXISTING 800A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE AND PROVIDE NEW LAMACOID LABELS TO MATCH REVISED EQUIPMENT DESCRIPTION.

EXIST EM STANDBY PANELBOARD — CENTRAL PLANT

(E)PANEL SKL

150A MCB, 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: SURFACE

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
		10000	PANEL SLE	EXIST	60/3	1				2	40/3		REFRIGERATION SYSTEM			2
		–	–	–	–	3				4	–	–	–	–		
		–	–	–	–	5				6	–	–	–	–		
2,3	E103C	3328	FREEZER COIL	2–10	20/2	7				8	20/1	EXIST	HEATER LIGHTS	1000		
		–	–	+10G	–	9				10	20/1		DOOR HEATER/LTS COOLER			2
2			COOLER COIL BLOWER		20/2	11				12	20/1		DOOR HEATER/LTS FREEZER			2
		–	–	–	–	13				14	20/1		EXIST SPARE			
2			REFRIGERATION SYSTEM		60/3	15				16	20/1	EXIST	GEN BATTERY CHARGER	500		
		–	–	–	–	17				18	20/1	EXIST	GENERATOR POWER	500		
		–	–	–	–	19				20	20/1		EXIST SPARE			
3	E102B	600	COOLER TEMP. ALARM	3–12	20/1	21				22	20/1	3–12	COOLER COIL	1200	E103D	3
3	E102C	600	COOLER PRESSURE PORT	3–12	20/1	23				24	20/1	3–12	FREEZER TEMP. ALARM	600	E102B	3
3	E102E	120	PANIC ALARM BUTTONS	3–12	20/1	25				26	20/1	3–12	FREEZER PRESSURE PORT	600	E102C	3
4	E188	864	REFRIGERATOR	3–12	20/1	27				28	35/3	3–8	REFRIGERATION SYSTEM	7344	E103	4
4	E188	864	REFRIGERATOR	3–12	20/1	29				30	–	+10G	–	–		
4	E109	1428	ICE MACHINE	3–12	20/1	31				32	–	3/4"C	–	–		
4	E151	240	HOOD ANSUL SYSTEMS	3–12	20/1	33				34	20/1EGF	3–12	COOLER DOOR HEATER/LTS	600	E102A	4
			SPACE			35				36	20/1EGF	3–12	FREEZER DOOR HEATER/LTS	600	E102A	4
			SPACE			37				38	20/1EGF	3–12	FREEZER DRAIN LINE HEATER	600	E103F	4
			SPACE			39				40			SPACE			
			SPACE			41				42			SPACE			
		–	MAIN CIRCUIT BREAKER	–	–	43				44			SPACE			
		–	–	–	–	45				46			SPACE			
		–	–	–	–	47				48			SPACE			
		–	–	–	–	49				50			SPACE			
		–	–	–	–	51				52			SPACE			
		–	–	–	–	53				54			SPACE			
		TOTAL LOAD @ 100% =	31588VA		TOTAL LOAD @ 100% =						88A		TOTAL LOAD @ 125% =	110A		

1. THE EXISTING 150A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

GENERAL PANEL REQUIREMENTS:

A. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
B. FIELD VERIFY EXISTING CIRCUITS PRIOR TO BEGINNING WORK.
C. ALL OUTAGES SHALL BE SCHEDULED AND CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
D. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.

PANEL NOTES:

1. REVISE/REWORK WIRING/CONDUIT AS REQUIRED TO ADD/REMOVE DEVICES FROM EXISTING CIRCUIT.
2. EXISTING CIRCUIT TO BE DEMO.
3. REUSE EXISTING SPARE CB AND WIRE NEW CIRCUIT.
4. PROVIDE NEW CB & WIRE NEW CIRCUIT.
5. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.
6. KITCHEN LIGHTS TO BE DUAL ZONES WIRED THROUGH LIGHTING CONTACTORS AND CONTROLLED ON/OFF BY THE BAS AND LOCAL LIGHTING SWITCHES.
7. EXTERIOR LIGHTS TO BE WIRED THROUGH LIGHTING CONTACTOR AND CONTROLLED ON/OFF BY THE BAS.

STANTON ENGINEERING GROUP
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a

FBISD BP 013 KITCHEN RENOVATIONS
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AUSTIN PARKWAY ELEMENTARY SCHOOL
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PROJ. NO.: 23-25
DATE: 07/18/2025
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ELECTRICAL SCHEMATIC

a-E.400

PLUMBING SYMBOLS LEGEND

———————	SANITARY WASTE BELOW SLAB	SAN.	SANITARY
———	SANITARY WASTE ABOVE SLAB	CW	DOMESTIC COLD WATER
—— V. ——	VENT PIPING ABOVE SLAB	HW	DOMESTIC HOT WATER
— — — —	VENT PIPING	WC	WATER CLOSET
—— G ——	GAS PIPING, 4-8oz	UR	URINAL
—— G5 ——	GAS PIPING, 5LB	LAV	LAVATORY
—·—·—	DOMESTIC COLD WATER PIPING	SK	SINK
—·—·—·—	DOMESTIC HOT WATER PIPING	EDF	ELECTRIC DRINKING FOUNTAIN
—— D ——	DRAIN/RELIEF VENT PIPING	WH	WALL HYDRANT
—⋈—	STOP VALVE	HB	HOSEBIBB
2CO	DOUBLE SAN. CLEANOUT (2-WAY)	CP	HOT WATER CIRCULATOR PUMP
CO	SANITARY SEWER CLEANOUT	FD	FLOOR DRAIN
WCO	WALL CLEANOUT	FSINK	FLOOR SINK
EXIST.	EXISTING		
(R)	REMOVE (DEMOLISH)		
(D)	DEMOLISH (REMOVE)		
(E)	EXISTING – NO WORK		

PLUMBING FIXTURE NOTES

1. ALL FIXTURES SHALL MEET WATER CONSERVATION PERFORMANCE STANDARDS MANDATED BY SENATE BILL 587. ALL FIXTURES SHALL HAVE FLOW RESTRICTION DEVICES (DRINKING FOUNTAINS SHALL BE SELF-CLOSING) TO COMPLY WITH THESE REQUIREMENTS.
2. ALL FIXTURES SHALL HAVE CONTROLS REQUIRING OPERATING FORCE NO GREATER THAN FIVE (5) POUNDS.
3. FOR LAVATORIES AND SINKS, ALL FAUCETS SHALL BE NO–LEAD SOLID BRASS, MEETING ALL REQUIREMENTS OF ANSI/NSF 61, SECTION 9 AND CERTIFIED AS SUCH. ALSO, INSTALL SYMMONS 7–210 MIXING VALVE ON HOT WATER SUPPLY SIDE OF ALL FAUCETS UNLESS HIGH TEMPERATURE LIMIT IS PROVIDED WITH FAUCET. MAXIMUM WATER TEMPERATURE FOR ALL FAUCETS THAT DELIVER HOT OR TEPID WATER SHALL BE 110°F. ALL METERING FAUCETS SHALL HAVE A MINIMUM TEN (10) SECONDS OF WATER FLOW, AND, INSTALL TRUEBRO HANDI LAV–GUARD VANDAL–PROOF INSULATION KITS OVER P–TRAP, SUPPLIES, STOPS AND ALL SHARP EDGES FOR ALL SINKS AND LAVATORIES (TRAP WRAP FROM BROCAR OR PROWRAP FROM McGUIRE SHALL BE ACCEPTABLE).
4. ALL PLUMBING FIXTURES REFERENCED AS "ADA", "TAS" OR "HANDICAP COMPLIANT" SHALL MEET ALL REQUIREMENTS OF THE ADA AND THE TEXAS ACCESSIBILITY STANDARDS. IT SHALL BE THE PLUMBING CONTRACTORS RESPONSIBILITY TO MEET THESE REQUIREMENTS.
5. IN MANY CASES, FIXTURES WITH THE SAME PLUMBING DESIGNATION HAVE DIFFERENT INSTALLATION HEIGHTS – REFERENCE ARCHITECTURAL DRAWINGS FOR ALL INSTALLATION HEIGHTS AND HANDICAP FIXTURE DESIGNATIONS. FIXTURES DESIGNATED AS ADULT HANDICAP SHALL MEET ALL REQUIREMENTS OF THE ADA. FIXTURES DESIGNATED AS CHILD HANDICAP SHALL MEET ALL REQUIREMENTS OF THE TEXAS ACCESSIBILITY STANDARDS FOR THE APPROPRIATE CHILDREN'S AGE GROUP (REF. ARCH. DWGS. AND SPECIFICATIONS).

PLUMBING MATERIALS

SANITARY WASTE AND VENT

BELOW SLAB/GRADE: SCHEDULE 40, DWV PVC

ABOVE SLAB: STANDARD WEIGHT, CAST IRON, NO–HUB PIPING.

STORM DRAIN PIPING

BELOW SLAB/GRADE: SCHEDULE 40, DWV PVC

ABOVE SLAB, 8" AND UNDER: STANDARD WEIGHT, CAST IRON, NO–HUB PIPING.

ABOVE SLAB, 10" AND ABOVE: SERVICE WEIGHT, CAST IRON, BELL & SPIGOT.

NATURAL GAS

BELOW GRADE (OUTSIDE): YELLOW POLYETHYLENE PIPE WITH COATED STEEL RISER AND TRACER WIRE.

ABOVE SLAB: SCHEDULE 40 BLACK STEEL. PIPING 2.5" AND LARGER SHALL BE WELDED. PIPING 2" AND SMALLER SHALL HAVE SCREWED FITTINGS.

DOMESTIC WATER

INTERIOR: TYPE L COPPER WITH SOLDER TYPE WROUGHT COPPER FITTINGS, MADE UP WITH LEAD–FREE SOLDER.

EXTERIOR: TYPE K COPPER WITH SWEAT FITTINGS AND LEAD–FREE SOLDER. BEYOND 5 FEET FROM BUILDING, SCHEDULE 40 PVC.

FIRE SPRINKLER SYSTEM NOTES

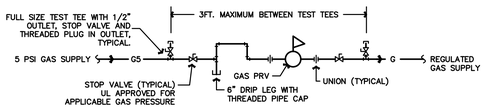
1. THE EXISTING FIRE SPRINKLER SYSTEM SHALL BE MODIFIED AND/OR EXPANDED TO COVER THE AREA OF RENOVATION IN ENTIRETY. ALL NEW AND REVISED PIPING SHALL BE ENGINEERED AND INSTALLED BY A LICENSED FIRE SPRINKLER CONTRACTOR.
2. REFERENCE THE SPECIFICATIONS, DIVISION 21, FOR MORE INFORMATION.

GENERAL PLUMBING NOTES

1. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK DESCRIPTION. SEE THIS SHEET (P4.00) FOR PLUMBING SYMBOLS LEGEND.
2. COORDINATE PLUMBING SYSTEMS INSTALLATION WITH ARCHITECTURAL, STRUCTURAL, HVAC SYSTEMS, ELECTRICAL SYSTEMS, CONDUITS, ETC.... OFFSET PIPING AS REQUIRED TO PROVIDE A FUNCTIONING SYSTEM WITH ADEQUATE SPACE FOR SERVICING AND REPAIRS.
3. MAKE CONNECTIONS OF NEW PIPE SYSTEMS IN TO EXISTING PIPE SYSTEMS WITH THREADED OR SWEAT JOINTS. PROVIDE ELECTROLYSIS ISOLATING UNIONS AT CONNECTION OF DISSIMILAR MATERIALS. REFERENCE THE SPECIFICATIONS.
4. SITE SERVICES ARE SHOWN FOR REFERENCE ONLY. PLUMBING CONTRACTOR SHALL REFERENCE CIVIL DRAWINGS, INCLUDING LOCATIONS OF SERVICES, SIZES OF PIPES, FLOWLINE ELEVATIONS, ETC..
5. DO NOT INSTALL PLUMBING PIPING OVER ANY ELECTRICAL EQUIPMENT. REFERENCE ELECTRICAL DRAWINGS FOR LOCATIONS OF ELECTRICAL EQUIPMENT AND COORDINATE WITH ELECTRICAL SUBCONTRACTORS ACCORDINGLY. SEE DETAIL 2/MEP1. THIS INCLUDES FIRE SPRINKLER PIPING.
6. ALL PIPES THROUGH WALLS OR FLOORS SHALL BE SLEEVED AND SEALED PER DETAIL 5/P4.02. FIRE CAULK WHERE REQUIRED. THIS INCLUDES ALL WALLS, INTERIOR AND EXTERIOR. THIS INCLUDES FIRE SPRINKLER PIPING.
7. ALL CLEANOUTS SHALL BE CONNECTED TO SANITARY LINES USING WYES AND/OR LONG RADIUS ELLS. SANITARY TEES ARE NOT ACCEPTABLE. 2" MINIMUM SIZE. ALL WALL CLEAN OUTS IN VERTICAL RISERS, OR BANKS OF FIXTURES SHALL BE INSTALLED 4" ABOVE THE FLOOD RIM LEVEL OF THE LOWEST CONNECTED FIXTURE AND A MINIMUM OF 24" AFF.
8. ALL WASTE AND VENT PIPING BELOW SLAB SHALL BE 2" MINIMUM.
9. LOCATE PLUMBING VENTS THROUGH ROOF NOT NEARER THAN SIX (6) FEET AWAY FROM EDGE OF BUILDING AND TEN (10) FEET AWAY FROM ANY FRESH AIR INTAKES. OFFSET VENT PIPING, AS REQUIRED, IN CEILING SPACE BETWEEN CEILING AND ROOF TO MEET THESE REQUIREMENTS. SEE DETAIL 3/P4.02.
10. ALL DOMESTIC WATER PIPING (CW, HW AND HWR) SHALL BE INSULATED PER THE WRITTEN SPECIFICATIONS.
11. TOP OF FLOOR DRAINS IN MECHANICAL, AHU AND BOILER ROOMS SHALL BE SET 1–1/2" BELOW FINISHED FLOOR SURFACE. CONCRETE FLOOR SHALL BE SLOPED TO DRAIN, REFERENCE ARCHITECTURAL DRAWINGS. IN ALL OTHER LOCATIONS, FLOOR DRAINS SHALL BE SET FLUSH WITH FINISHED FLOOR, TAKING INTO ACCOUNT ANY FLOOR SLOPE OR FLOOR FINISH (TILE, TERRAZZO, ETC.) AS SHOWN ON ARCHITECTURAL DRAWINGS.
12. PROVIDE AN ISOLATING VALVE AT EACH WATER TAP OFF HOT AND COLD WATER MAINS TO ALLOW FOR SERVICING. VALVE SHALL BE BALL VALVE IF PIPE SIZE IS 2" OR LESS AND GATE VALVE OR BUTTERFLY VALVE IF LARGER THAN 2". SEE WRITTEN SPECIFICATIONS. VALVES SHALL BE EASILY ACCESSIBLE: PROVIDE 18" X 18", FIRE–RATED, STAINLESS STEEL ACCESS PANELS WITH HINGED, CYLINDER LOCK DOORS WHERE VALVES ARE INSTALLED ABOVE INACCESSIBLE CEILINGS OR IN WALL CHASES (MIFAB MODEL MPFR–SS–C). BALL VALVES AND BUTTERFLY VALVES INSTALLED ABOVE CEILINGS SHALL BE INSTALLED SUCH THAT HANDLE IS ON BOTTOM OF PIPE. ISOLATING WATER VALVES ABOVE CEILINGS SHALL BE INSTALLED NO MORE THAN 24" ABOVE CEILING. VALVES ABOVE INACCESSIBLE CEILINGS SHALL BE INSTALLED WITHIN REASONABLE REACH OF CEILING MOUNTED ACCESS PANEL.
13. WATER HAMMER ARRESTERS SHALL BE INSTALLED IN ADDITION TO AIR CHAMBERS PER THE RISER DIAGRAMS. SEE SPECIFICATIONS.
14. MECHANICALLY CLEAN ALL WASTE LINES WITH ROTARY MACHINE TO PROVE FREE FLOWING, SEE SPECIFICATIONS.
15. PROVIDE VENTED SLEEVE (2 PIPE SIZES LARGER THAN GAS PIPE UNLESS NOTED OTHERWISE) FOR ALL GAS PIPING IN GROUND BELOW PAVING OR SIDEWALKS AND INSIDE BUILDING IN WALLS AND IN UNVENTILATED CEILING SPACES, SEE SPECIFICATIONS.
16. GAS PIPING SHALL BE 1/2" MINIMUM. TAP GAS PIPING ON TOP OR SIDES ONLY. DO NOT INSTALL VALVES IN CEILING PLENUM OR IN ANY INACCESSIBLE LOCATION. ALL GAS VALVES SHALL BE EASILY ACCESSIBLE. REFER TO DETAIL 9/P4.01 FOR TYPICAL GAS CONNECTION INSTALLATION. REFER TO DETAIL 8/P4.02 FOR TYPICAL PRV INSTALLATION.
17. CENTER WALL HYDRANTS IN BRICK PATTERN OF EXTERIOR WALLS, REFERENCE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
18. ALL REFRIGERATORS WITH ICE MAKERS, COMMERCIAL TYPE COFFEE MAKERS, ICE MAKERS, COFFEE VENDING MACHINES AND OTHER ITEMS REQUIRED BY OTHERS THAT REQUIRE A WATER CONNECTION SHALL HAVE A CW VALVE BOX, "VBOX", INSTALLED TO ALLOW EASY ACCESS AND REMOVAL OF MACHINE. ALSO, INSTALL IN–LINE FILTER IN WATER CONNECTION.
19. REFER TO CIVIL DRAWINGS FOR SITE SANITARY, SITE STORM SEWER, FIRE SERVICE AND DOMESTIC WATER SERVICE. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PIPING INSIDE BUILDING TO OUTSIDE LOCATIONS SHOWN ON PLUMBING DRAWINGS. PLUMBING CONTRACTOR SHALL INCLUDE COST OF FINAL TIE–INS TO SITE SERVICES.
20. PER THE DRAWINGS, ALL DRAINS (FLOOR DRAINS, FLOOR SINKS, HUB DRAINS, KITCHEN DRAINS, SHOWER DRAINS, ETC.) SHALL BE VENTED AND TRAP PRIMED – NO EXCEPTIONS. TRAP PRIMING SHALL BE ACCOMPLISHED USING WATER CLOSET FLUSH VALVE TRAP PRIMING DEVICES OR PROSET SYSTEMS TRAP GUARD SEWER GAS EMISSION PROTECTION, AS SHOWN ON DRAWINGS. REFERENCE PLUMBING FLOOR PLANS AND RISER DIAGRAMS.
21. ALL PIPING LOCATED ON ROOF (GAS PIPING) SHALL BE INSTALLED ON ROOF PIPE SUPPORTS PER DETAIL 10/P4.02, 6–FOOT ON CENTER. INSTALL ROOF PIPE JACK PER DETAIL 9/P4.02 FOR ALL PIPING THROUGH ROOF.
22. COORDINATE LOCATIONS OF ALL ROOF DRAINS AND OVERFLOW ROOF DRAINS WITH ARCHITECTURAL DRAWINGS.
23. FOR COMBINATION WASTE AND VENT SYSTEMS (WHERE APPLICABLE ON DRAWINGS), DRAIN P–TRAPS SHALL BE SIZE OF PIPE SHOWN ON DRAWINGS (I.E. TWO PIPE SIZES LARGER THAN DRAIN SIZE). FOR EXAMPLE, A 4" FLOOR DRAIN SHALL HAVE A 6" P–TRAP.
24. FOR ALL PLUMBING FIXTURES, IF COPPER PIPING IS STUBBED THROUGH WALL FOR DRAIN CONNECTION, INSTALL MARVEL FITTING AT DRAIN CONNECTION FOR EASE OF SERVICING AND REPAIRS. COPPER DRAIN PIPING WILL ONLY BE ALLOWED FOR DIRECT/STRAIGHT STUB–OUT OF FIXTURE DRAIN PIPING THROUGH WALL.
25. DO NOT INSTALL ANY PIPING BENEATH CVT OR VAV BOXES. THIS INCLUDES FIRE SPRINKLER PIPING.
26. WHERE UNDERGROUND VENT PIPE SIZE IS NOT NOTATED, VENT SHALL BE 2" DIAMETER.
27. WHERE UNDERGROUND SANITARY PIPE SIZE IS NOT NOTATED, REFER TO THE RISER DIAGRAMS FOR SIZE. NOT BELOW GRADE SANITARY PIPE SHALL BE SMALLER THAN 2". NO SANITARY LINE OR P–TRAP FOR A DRAIN/FIXTURE SHALL BE SMALLER THAN THE FIXTURE CONNECTION SIZE SHOWN ON THE DRAIN/FIXTURE SCHEDULE.
28. WHERE ABOVE GROUND VENT PIPE SIZE IS NOT NOTATED, REFER TO THE RISER DIAGRAMS FOR VENT SIZE.
29. WHERE CW/HW PIPING SIZE TO THE FIXTURE IS NOT SHOWN ON THE FLOOR PLAN, REFER TO THE RISER DIAGRAMS FOR CW/HW PIPE SIZE. NO PIPING TO FIXTURE SHALL BE SMALLER THAN THE FIXTURE CONNECTION SIZE SHOWN ON THE FIXTURE SCHEDULE.
30. TO INSTALL NEW PLUMBING SYSTEMS BELOW EXISTING CONCRETE SLABS, FIRST PLUMBING CONTRACTOR SHALL LAY OUT CUT. THEN, DEMOLITION CONTRACTOR SHALL SAW CUT SLAB TO CONTROL CRACKING AND REMOVE ALL CONCRETE. PLUMBING CONTRACTOR SHALL THEN EXCAVATE FILL TO PROPER SLOPE, INSTALL NEW PIPING SYSTEMS AS REQUIRED, THEN BACKFILL AND COMPACT TO PROPER DENSITY. THE CONCRETE CONTRACTOR SHALL THEN INSTALL NEW SIX (6) MIL POLYETHYLENE VAPOR BARRIER AND SEAL, INSTALL NEW REINFORCING STEEL AND WELD ON TO EXISTING, THEN RE–POUR CONCRETE TO NEW LEVEL. DO NOT CUT THROUGH GRADE BEAMS WITHOUT APPROVAL FROM THE STRUCTURAL ENGINEER. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
31. ALL ABANDONED FIXTURES, DRAINS AND PIPING (INCLUDING PIPING ABANDONED IN THE PAST) IN AREAS WHERE WORK IS BEING DONE SHALL BE COMPLETELY REMOVED FROM BUILDING (INCLUDING PIPING BELOW SLAB/GRADE – UNLESS SHOWN OTHERWISE ON DRAWINGS). EXISTING WATER PIPING SHALL BE CAPPED AT EXISTING WATER MAIN TAPS AND ALL ABANDONED PIPING REMOVED. ABANDONED VENT PIPING SHALL BE COMPLETELY REMOVED, INCLUDING EXISTING VTR'S NOT RE–USED. PATCH AS REQUIRED. ONLY ACTIVE PIPING, FIXTURES AND DRAINS SHALL REMAIN IN BUILDING WHERE WORK IS BEING DONE.

GAS PRV SCHEDULE

MARK	PRV–K
LOCATION	MECH. YARD
SERVES	KITCHEN
GAS LOAD	585 CFH
DISTANCE FROM METER	150 FT
DISTANCE TO LAST OUTLET	200 FT
INLET (SIZE/PRESSURE)	1" / 5 PSI
OUTLET (SIZE/PRESSURE)	2" / 7–12 IN WC



4 GAS PRESSURE REGULATOR DETAIL (PRV)

NO SCALE

NOTES:
1. GAS REGULATOR SHALL BE ANSI Z21.80 CERTIFIED FOR LINE PRESSURE REGULATION BETWEEN THE SERVICE REGULATOR AND CONNECTED EQUIPMENT.
2. ALL GAS REGULATORS WITH INLET PRESSURE ABOVE 2 PSI SHALL BE EQUIPPED WITH A FACTORY INSTALLED OVERPRESSURE PROTECTION DEVICE, AS PART OF THE ANSI Z21.80 CERTIFICATION.
3. GAS REGULATOR SHALL BE EQUIPPED WITH A VENT LIMITING DEVICE, SIZED IN ACCORDANCE WITH THE REGULATOR OUTLET PRESSURE.
4. ALL REGULATORS INSTALLED OUTDOORS SHALL BE RATED FOR OUTDOOR INSTALLATION.
5. BASIS OF DESIGN IN THE MAXITROL 325–L SERIES OF REGULATORS

PLUMBING DRAINS, CLEANOUTS AND HYDRANTS

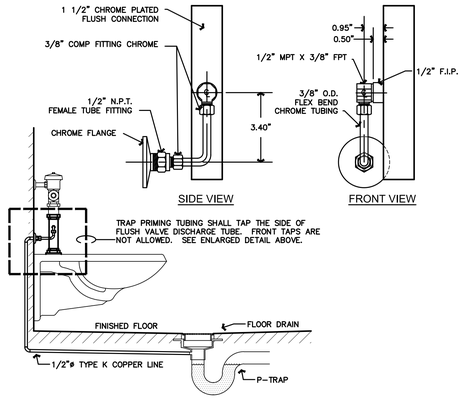
MARK	MIN. CONNECTION SIZES (IN.) SAN	VENT	CW	HW	DESCRIPTION/SPECIFICATION FOR FIXTURE OR EQUIPMENT
FD	4	2	1/2	–	TOILET FLOOR DRAIN – TWO–PIECE CAST IRON WITH SEEPAGE FLANGE, REVERSIBLE CLAMPING COLLAR, 1/2" TRAP PRIMER TAP, 6" SQUARE, NICKEL BRONZE HSTRAINER AND SECURITY SCREWS JR SMITH MODEL 2005–03–K06PB–P050–U.
FD2	4	2	1/2	–	EQUIPMENT FLOOR DRAIN – CAST IRON, MEDIUM DEPTH DRAIN WITH FLANGE, CLAMPING DEVICE, SEEPAGE OPENINGS, DUCTILE IRON TRUE–FIT SEDIMENT BUCKET WITH 12" STAINLESS STEEL RIM LESS GRATE, 1/2" TRAP PRIMER TAP ZURN MODEL ZS–540–U–P DRAIN SHALL BE DESIGNED SUCH THAT GRATE CANNOT BE INSTALLED WITHOUT SEDIMENT BUCKET.
FD3	4	2	1/2	–	GRATED MECHANICAL ROOM FLOOR DRAIN – CAST IRON WITH FLANGE, SEEPAGE OPENINGS, 9" HEAVY–DUTY DUCTILE IRON GRATE WITH STAINLESS STEEL VENEER, CLAMPING DEVICE AND 1/2" TRAP PRIMER TAP ZURN MODEL ZS–550–C–P
FD4	4	2	1/2	–	CANWASH FLOOR DRAIN – ALL GALVANIZED CAST IRON, MEDIUM DEPTH DRAIN WITH FLANGE, CLAMPING DEVICE, SEEPAGE OPENINGS, GALVANIZED SUR–SET SEDIMENT BUCKET WITH 12" GALVANIZED DUCTILE IRON RIM AND GRATE, 1/2" TRAP PRIMER TAP ZURN MODEL ZS–540–P–G–HD. DRAIN SHALL BE DESIGNED SUCH THAT GRATE CANNOT BE INSTALLED WITHOUT SEDIMENT BUCKET.
FD5	4	2	1/2	–	KITCHEN FLOOR DRAINS SHALL BE SIMILAR EXCEPT WITH 7" SQUARE, BRONZE GRATE JR SMITH MODEL 2005–03–K07PB–P050–U PROVIDE 4" DIAMETER STAINLESS STEEL FUNNEL WHERE SHOWN ON DRAWINGS. REFERENCE KITCHEN CONNECTION SCHEDULE ON PLUMBING RENOVATION FLOOR PLAN SHEET.
FS KITCHEN FS	4	2	1/2	–	FLOOR SINK – CAST IRON, 8" DEEP SUMP, A.R.E. INTERIOR, INTEGRAL FLANGE FOR SUPPORT, CLAMPING DEVICE WHERE VAPOR BARRIER IS INSTALLED BETWEEN SLAB AND CONCRETE BEDDING FOR FLOOR, ALUMINUM SECONDARY DOME STRAINER AND 12" SQUARE HEAVY DUTY STAINLESS STEEL TRACTOR DUTY FRAME WITH 3/4–TRACTOR GRATE AND 1/2" TRAP PRIMER TAP JR SMITH MODEL 3150Y–04–C–13.
CO	VARIES	–	–	–	FLOOR CLEANOUT – ADJUSTABLE EXTENSION HOUSING, CAST IRON FERRULE WITH FULL–LINE–SIZE BRASS PLUG (UP TO 4"), 5" DIAMETER STAINLESS STEEL ACCESS COVER WITH VARIABLE–DEPTH FRAME AND TOP SECURING SCREW, ROUND FRAME AND TOP TO BE COMPATIBLE WITH FLOOR TYPE (REFERENCE ARCHITECTURAL DRAWINGS FOR FLOOR TYPES) ZURN MODEL ZS–1400–VP. PROVIDE CARPET FLANGE FOR CARPETED AREAS (CARPET MARKER SHALL NOT BE ACCEPTABLE) AND TERRAZZO RECESS FOR TERRAZZO FLOORS. OUTDOOR CLEANOUT – SAME AS TYPE "CO" EXCEPT WITH HEAVY–DUTY NICKEL BRONZE TOP ZURN MODEL ZN–1400–HD–VP. INSTALL 18" X 18" X 6" THICK CONCRETE PAD AROUND EACH OUTDOOR CLEANOUT.
WCO	VARIES	–	–	–	WALL CLEANOUT – CAST IRON FERRULE WITH COUNTERSUNK HEAD (FULL–LINE–SIZE PVC PLUG UP TO 4") AND ROUND, COUNTERSUNK, NICKEL BRONZE ACCESS COVER SHALL BE 8" SQUARE, SURFACE MOUNT, FLUSH INSTALLATION, 16–GAUGE STAINLESS STEEL ACCESS DOOR WITH FLANGED FRAME AND VANDAL–PROOF OPTION MI–FAB MODEL UA–SS–VP. ACID WASTE CLEANOUT (AWCO) SHALL BE SAME EXCEPT ACID WASTE PIPING. INSIDE CABINETWORK WHERE CLEANOUT IS NOT VISIBLE, ACCESS PANEL MAY BE ROUND STAINLESS STEEL TYPE WITH VANDAL–PROOF CENTER SCREW MI–FAB MODEL C1450–RD–3–6.
2CO	4	–	–	–	DOUBLE CLEANOUTS – SAME AS OUTDOOR CLEANOUTS. INSTALLED FOR TWO–WAY RODDING. SINGLE CLEANOUT WITH 2–WAY FITTING IS NOT ACCEPTABLE, PROVIDE TWO SEPARATE CLEANOUTS. INSTALL 18" X 18" X 6" THICK CONCRETE PAD AROUND EACH OUTDOOR CLEANOUT.
HB	–	–	3/4	–	HOSEBIBB – 3/4" HOSE THREAD, INTEGRAL VACUUM BREAKER SPOUT, ROUGH CHROME FINISH WITH REMOVABLE KEYED HANDLE, WALL FLANGE CHICAGO MODEL 952.
WH	–	–	3/4	–	RESTROOM WALL HYDRANT – NARROW WALL, WARM CLIMATE TYPE HOSE BOX, QUARTER–TURN WHEEL HANDLE, ASSE APPROVED ANTI–SIPHON INTEGRAL VACUUM BREAKER AND DUAL CHECK VALVE, 3/4" STRAIGHT INLET HOSE CONNECTION, CAST STAINLESS STEEL HYDRANT BOX. FLUSH MOUNTED 16–GAUGE STAINLESS STEEL FRAME AND 180° DROP DOWN DOOR WITH KEY LOCK AND WALL CLAMP JR SMITH MODEL 5518
WH2	–	–	3/4	–	EXTERIOR WALL HYDRANT – NON–FREEZE HOSE BOX, QUARTER–TURN WHEEL HANDLE, ASSE APPROVED ANTI–SIPHON INTEGRAL VACUUM BREAKER AND DUAL CHECK VALVE, 3/4" STRAIGHT INLET HOSE CONNECTION, CAST STAINLESS STEEL HYDRANT BOX, FLUSH MOUNTED 16–GAUGE STAINLESS STEEL FRAME AND 180° DROP DOWN DOOR WITH KEY LOCK AND WALL CLAMP JR SMITH MODEL 5519
WH3	–	–	3/4	3/4	CANWASH WALL HYDRANT – NON–FREEZE HOSE BOX WITH STRAIGHT INLET CONNECTION, HOT AND COLD MIXING, REMOVABLE KEYED HANDLE, ASSE APPROVED ANTI–SIPHON INTEGRAL BACKFLOW PREVENTER WITH 3/4" HOSE CONNECTION, HEAVY DUTY BRASS CASING, POLISHED BRONZE HYDRANT BOX WITH HINGED COVER, "WATER" CAST ON COVER, DRIP LIP AND WALL CLAMP J.R. SMITH MODEL 5560–QT–WC–H–W–PB.
WBOX	2	2	3/4	3/4	CLOTHES WASHER DRAIN/VALVE BOX – HEAVY–GAUGE GALVANIZED STEEL CONSTRUCTION, RECESSED IN WALL VALVE AND DRAIN CONNECTIONS, WATTS DUO–CLOZ VALVE GUY GRAY MODEL WB–200.

PLUMBING FIXTURES AND EQUIPMENT

MARK	MIN. CONNECTION SIZES (IN.) SAN	VENT	CW	HW	DESCRIPTION/SPECIFICATION
WC	4	2	1	–	WATER CLOSET – WALL MOUNTED, WHITE VITREOUS CHINA, SIPHON JET ACTION, 1.28 GPF, ELONGATED BOWL, TOP SPUD, ADA/TAS COMPLIANT, AMERICAN STANDARD AFWALL: SLOAN ROYAL 111–1.28 FLUSH VALVE WITH VANDAL–PROOF FREE–SPINNING TOP CAP, 1.28 GPF, VANDAL–PROOF STOP AND ADA/TAS COMPLIANT LEVER ACTUATOR WITH LEVER INSTALLED ON LEFT SIDE (FOR FIXTURES DESIGNATED AS "HANDICAP"). INSTALL LEVER ON "WIDE–SIDE" OF TOILET STALL); BEMIS 1655–SS/C EXTRA HEAVY DUTY, WHITE, OPEN FRONT SEAT LESS COVER WITH SELF–SUSTAINING, STAINLESS STEEL CHECK HINGE; AND, FLOOR MOUNTED CARRIER.
LV	1–1/4	1–1/4	1/2	1/2	LAVATORY GOOSENECK FAUCET – WALL HUNG, WHITE VITREOUS CHINA, FRONT OVERFLOW, SELF–DRAINING DECK AREA, 21" X 18", ADA/TAS COMPLIANT AMERICAN STANDARD LUCERNE 0355.012; DECK MOUNTED FAUCET, 4" CENTERS, FIXED, CHROME PLATED, 5.25" GOOSENECK SPOUT, PRESSURE COMPENSATING LAMINAR FLOW NON–AERATING 0.5 GPM OUTLET, 4" WRISTBLADE HANDLES, BUILDABLE COMPRESSION CARTRIDGES, CHICAGO 895–317GN2AE72ABCP; CHROME PLATED, 17–GAUGE CAST BRASS GRID DRAIN WITH WHEELCHAIR OFFSET FITTING; CHROME PLATED, 17–GAUGE CAST BRASS P–TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; TRUEBRO HANDI LAV–GUARD VANDAL–PROOF, WHITE INSULATION KITS; AND, FLOOR MOUNTED, CONCEALED ARMS CARRIER. PROVIDE ASSE 1070 LISTED MIXING VALVE, LEONARD 170–LF OR EQUAL (MUST BE CAPABLE OF ADJUSTMENT ABOVE 130°F).
LV2	1–1/4	1–1/4	1/2	1/2	LAVATORY – WALL HUNG, WHITE VITREOUS CHINA, FRONT OVERFLOW, SELF–DRAINING DECK AREA, 21" X 18", ADA/TAS COMPLIANT AMERICAN STANDARD LUCERNE 0355.012; CHROME PLATED, ALL CAST BRASS CONSTRUCTION, ADA/TAS COMPLIANT, VANDAL–PROOF FAUCET WITH 4" WRIST BLADE HANDLES, COMPRESSION STYLE CARTRIDGES, CHROME DECK PLATE, VANDAL–PROOF AERATOR, COPPER SUPPLIES AND CERTIFIED FOR MEETING ALL REQUIREMENTS OF NSF 61 SECTION 9 CHICAGO MARATHON MODEL 802–E70–317ABCP; CHROME PLATED, 17–GAUGE CAST BRASS GRID DRAIN WITH WHEELCHAIR OFFSET FITTING; CHROME PLATED, 17–GAUGE CAST BRASS P–TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; TRUEBRO HANDI LAV–GUARD VANDAL–PROOF, WHITE INSULATION KITS; AND, FLOOR MOUNTED, CONCEALED ARMS CARRIER. PROVIDE ASSE 1070 LISTED MIXING VALVE, LEONARD 170–LF OR EQUAL (MUST BE CAPABLE OF ADJUSTMENT ABOVE 130°F).
EDF	1–1/2	1–1/2	1/2	–	BI–LEVEL ELECTRIC DRINKING FOUNTAINS WITH BOTTLE FILLER – WALL MOUNTED, ALL STAINLESS STEEL, ADA AND TAS COMPLIANT FOR ALL AGES, 8 GPH AT ARI STANDARDS, 2–STREAM ALL METAL BUBBLER FITTING WITH VANDAL–RESISTANT KIT AND FRONT PUSH BUTTON ACTUATION, PUSH BUTTON ACTIVATED BOTTLE FILLER WITH 1.1GPM FILL RATE AND ANTI–MICROBIAL COATING, INTEGRAL WATER FILTER, LEAD–FREE (CERTIFIED FOR MEETING ALL REQUIREMENTS OF NSF 61 SECTION 9), REFRIGERANT HFC–134a, MAINTENANCE ACCESS PANEL, HALSEY–TAYLOR MODEL HTHBHVR8BL; CHROME PLATED, 17–GAUGE CAST BRASS P–TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; FLOOR MOUNTED CHAIR CARRIER; AND, STAINLESS STEEL ADA APRON FOR LOCATIONS REQUIRED BY ADA OR TAS.
MB	3	2	3/4	3/4	MOP BASIN – 24" X 24" X 12" DEEP TERRAZZO, TWO (2) STAINLESS STEEL SPLASH CATCHER PANELS, 8" DROP FRONT WITH STAINLESS STEEL CAP, CAST BRASS DRAIN WITH STAINLESS STEEL STRAINER – STERN WILLIAMS HILOW MODEL HI–1800–BP; FAUCET SHALL BE POLISHED CHROME PLATED SERVICE SINK TYPE WITH VACUUM BREAKER, INTEGRAL SUPPLY CHECK STOPS, SPOUT WITH PAIL HOOK, HOSE END AND TOP BRACE CHICAGO MODEL 897–CCF (INSTALL BACKING/BRACING INSIDE WALL TO SUPPORT FAUCET AND TOP BRACE).
LP–1	3	2	3/4	3/4	LAVATORY PUMP – FACTORY BUILT, LIFT PUMP FOR GRAY WATER WASTE, TOP ACCESS TO INTERNAL 1/6HP PUMP AND FLOAT SWITCH, 1.5" TOP AND SIDE INLETS, 1.5" TOP OUTLET, INTEGRAL CHECK VALVE AT BOTTOM INLET CONNECTIONS, 9FT POWER CORD WITH GROUNDED PLUG; LIBERTY PUMPS MODEL 406

KITCHEN PLUMBING CONNECTION SCHEDULE

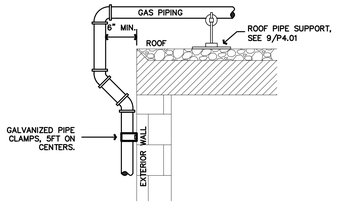
MARK	DESCRIPTION
P5	3/4" CW AND 3/4" HW – IN WALL, 36" AFF, TO MOP BASIN ("MB") FAUCET. REFERENCE PLUMBING FIXTURE SCHEDULE.
P6	3" DRAIN IN FLOOR FOR MOP BASIN ("MB") DRAIN. REFERENCE PLUMBING FIXTURE SCHEDULE.
P7	3/4" CW AND 3/4" HW – IN WALL, 18" AFF, TO HOSE BIBB.
P10	FLOOR DRAIN – 3" OUTLET; FLUSH WITH FLOOR; TWO–PIECE CAST IRON WITH SEEPAGE FLANGE, REVERSIBLE CLAMPING COLLAR, 7" SQUARE HEAVY–DUTY POLISHED BRONZE GRATE, 1/2" TRAP PRIMER TAP, AND TRAP SEAL DEVICE (MODEL 2692) JR SMITH MODEL 2005–03–K07PB–P050–U.
P11C	1/2" CW AND 1/2" HW – IN WALL, FOR HAND LAVATORY WITH FOOT CONTROLS ("LV"). REFERENCE PLUMBING FIXTURE SCHEDULE.
P11D	2" DRAIN – IN WALL, FOR HAND LAVATORY WITH FOOT CONTROLS ("LV"). REFERENCE PLUMBING FIXTURE SCHEDULE.
P12	FLOOR SINK – 4" OUTLET; FLUSH WITH FLOOR; CAST IRON, 8" DEEP SUMP, A.R.E. INTERIOR, INTEGRAL FLANGE FOR SUPPORT, CLAMPING DEVICE WHERE VAPOR BARRIER IS INSTALLED BETWEEN SLAB AND CONCRETE BEDDING FOR FLOOR, ALUMINUM SECONDARY DOME STRAINER AND 12" SQUARE HEAVY D



13 FLUSH VALVE TRAP PRIMING TUBE DETAIL

NO SCALE

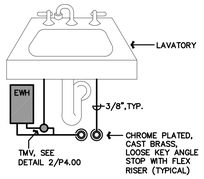
MI-FAB MODEL MI-702-MOD FLUSH VALVE TRAP PRIMER, OR EQUAL



13 GAS PIPING WALL-TO-ROOF TRANSITION DETAIL

NO SCALE

TANKLESS WATER HEATER SCHED.		
MARK	IEWH-1	
SERVES	LAVATORY	
LOCATION	BELOW COUNTER	
HEATER KW	1.8 KW	
TEMP RISE (@ 0.5 GPM)	25°F	
VOLTAGE/PHASE	120V/1PH	
EEMAX MODEL	SPEX1812T	

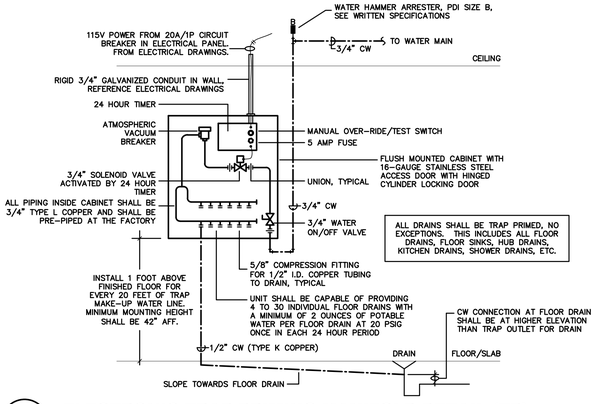


11 TANKLESS WATER HEATER

NO SCALE

NOTES:

1. LOCATION OF VALVE AND PIPING SHALL NOT INTERFERE WITH ANY ADA/HANDICAP KNEE-SPACE CLEARANCE REQUIREMENTS.
2. ALL PIPING SHALL BE CHROME PLATED CAST BRASS AND SHALL BE INSULATED BY TRUEBRO HANDI LAV-GUARD INSULATION KITS. INSULATION KITS SHALL COVER P-TRAP, MIXING VALVE, WATER STOPS, PIPING AND ALL SHARP EDGES (ONLY WHERE CABINETWORK KNEESPACE SCREEN NOT PROVIDED).
3. ALL CW AND HW CONNECTIONS SHALL HAVE COMPRESSION TYPE FITTINGS.
4. FURNISH & INSTALL 0.5-GPM AERATOR ON FAUCET COMPATIBLE WITH TANKLESS EWH REQUIREMENTS.
5. WATER HEATER SHALL HAVE INTEGRAL ASSE-1070 COMPLIANT TEMPERED MIXING VALVE.

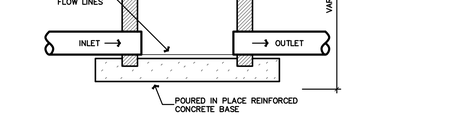


10 ELECTRONIC TRAP PRIMING MANIFOLD DETAIL (TP)

NO SCALE

NOTES:

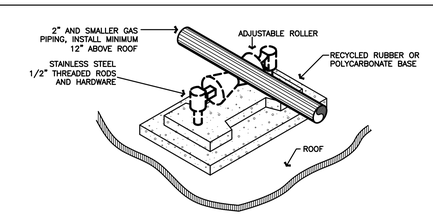
1. REFERENCE SCHEDULE ON SHEET P3.00



8 SAMPLE TEST WELL DETAIL (STW)

NO SCALE

NOTES:

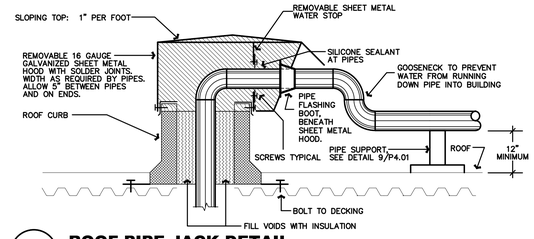


14 GAS PIPING ROOF SUPPORT DETAIL

NO SCALE

NOTES:

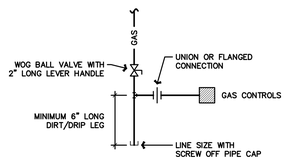
1. GAS PIPING SUPPORT SHALL BE PORTABLE PIPE HANGERS, INC. MODEL PP10-R. PIPING SHALL BE INSTALLED 12" ABOVE FINISHED ROOF. PROVIDE 18" X 18" CAREY TREAD-TYPE MATERIAL BENEATH EACH PIPE SUPPORT.
2. FIELD LOCATE ROOF STRUCTURAL SUPPORTS AND PLACE BASE OF PIPE SUPPORT OVER ROOF SUPPORTS ONLY. PROVIDE BASE OF ADEQUATE LENGTH TO SPAN ROOF JOIST TO PREVENT SUPPORTS SETTING ON ROOF DECK ONLY.
3. INSTALL SIX (6) FOOT-ON-CENTERS.
4. PIPE SUPPORT MANUFACTURER'S REPRESENTATIVE SHALL PERSONALLY INSPECT INSTALLATIONS OF PIPE SUPPORTS AND MAKE CORRECTIONS AND HEIGHT ADJUSTMENTS TO INSTALLATIONS, AS REQUIRED, DURING INSPECTION.



9 ROOF PIPE JACK DETAIL

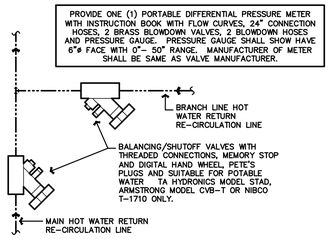
NO SCALE

NOTE: COORDINATE WITH ARCHITECTURAL DRAWINGS, DETAILS AND SPECIFICATIONS.



7 TYPICAL GAS CONNECTION

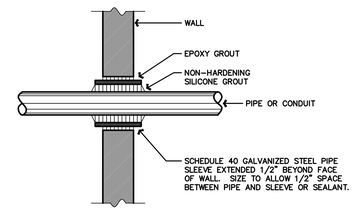
NO SCALE



6 HOT WATER BALANCING STATION

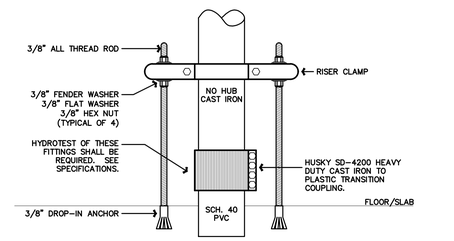
NO SCALE

PROVIDE AT EACH JUNCTION OF BRANCH HOT WATER RETURN LOOPS TO MAIN CIRCULATING HOT WATER LINE, SEE PLUMBING PLANS.



5 WALL PENETRATION DETAIL

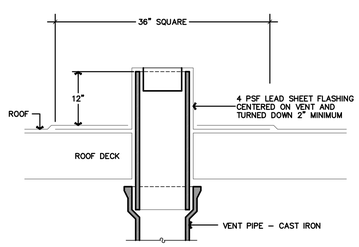
NO SCALE



4 PVC-TO-CAST IRON INSTALLATION DETAIL

NO SCALE

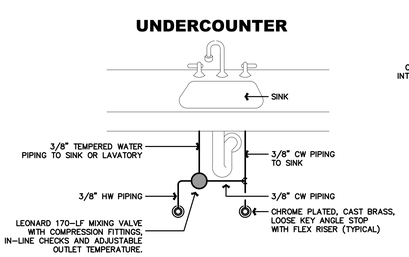
MISSION TRANSITION COUPLING DESIGNED AND CERTIFIED FOR THIS SPECIFIC APPLICATION SHALL BE ACCEPTABLE IN LIEU OF HUSKY COUPLING IN THIS DETAIL.



3 ROOF VENT DETAIL

NO SCALE

COORDINATE WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

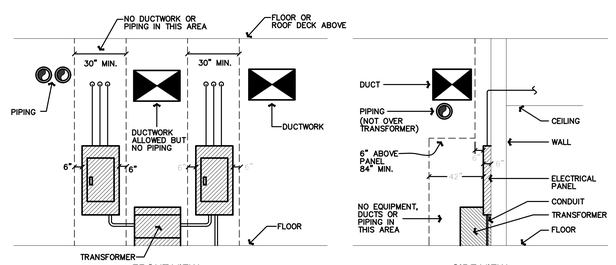


2 MIXING VALVE DETAIL

NO SCALE

NOTES

1. UNDERCOUNTER MIXING VALVE SHALL BE MOUNTED ON WALL IN FIXTURE KNEE-SPACE. LOCATION OF VALVE AND PIPING SHALL NOT INTERFERE WITH ANY ADA/HANDICAP KNEE-SPACE CLEARANCE REQUIREMENTS.
2. ALL PIPING SHALL BE CHROME PLATED CAST BRASS AND SHALL BE INSULATED BY TRUEBRO HANDI LAV-GUARD INSULATION KITS. INSULATION KITS SHALL COVER P-TRAP, MIXING VALVE, WATER STOPS, PIPING AND ALL SHARP EDGES (ONLY WHERE CABINETWORK KNEESPACE SCREEN NOT PROVIDED).
3. ALL CW AND HW CONNECTIONS SHALL HAVE COMPRESSION TYPE FITTINGS.
4. FOR ABOVE CEILING INSTALLATION, VALVE SHALL BE INSTALLED IN AN EASILY/READILY ACCESSIBLE LOCATION. SEE KITCHEN PLUMBING CONNECTION SCHEDULE FOR REQUIRED KITCHEN LOCATIONS.
5. LAVATORY MIXING VALVES SHALL HAVE AN OUTPUT ADJUSTMENT RANGE UP TO OR ABOVE 130°F.
   SINK MIXING VALVES SHALL HAVE AN OUTPUT ADJUSTMENT RANGE UP TO OR ABOVE 140°F.



1 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

DO NOT INSTALL ANY PIPING BENEATH CVT BOXES. DO NOT INSTALL ANY PIPING (EXCEPT FIRE SPRINKLER PIPING AND OTHER PIPES SHOWN SPECIFICALLY ON THE PLUMBING FLOOR PLANS) OVER COMPUTER CLASSROOMS, BOOKROOMS, IDF/MDF/SERVER ROOMS OR OTHER ROOMS NOTED ON THE PLUMBING FLOOR PLANS.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
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a

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL

STATE OF TEXAS
INTERIM REVIEW
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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PLUMBING SCHEDULES & DETAILS

a-P0.02

PRELIMINARY
NOT FOR CONSTRUCTION OR BIDDING PURPOSES

STANTON ENGINEERING GROUP
INFO@STANTON-ENG.COM (713) 300-9080
TEXAS ENGINEERING FIRM REG. NO. F-18153-00

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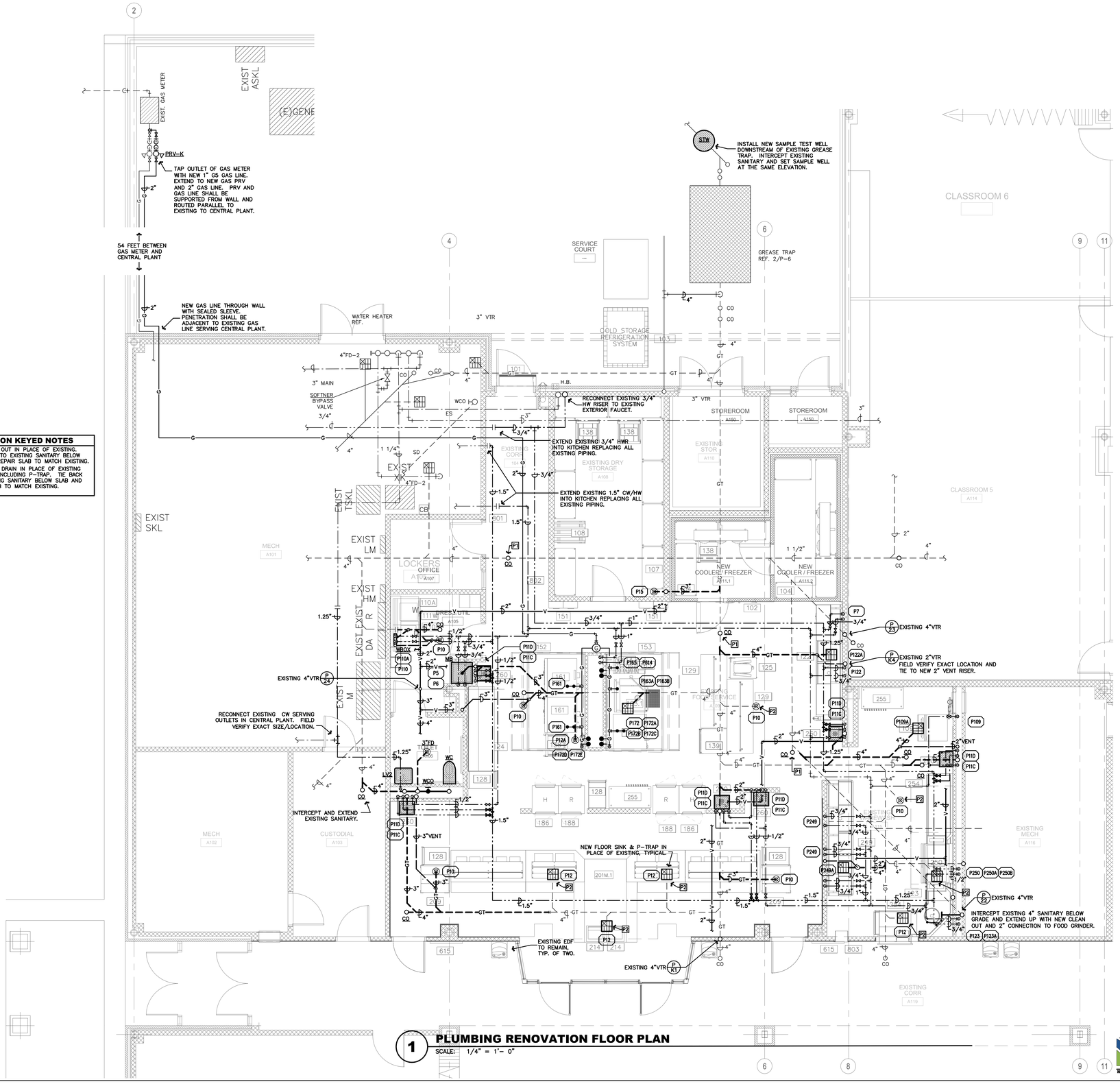

RENOVATION KEYED NOTES

P1 NEW CLEAN OUT IN PLACE OF EXISTING. TIE BACK INTO EXISTING SANITARY BELOW SLAB AND REPAIR SLAB TO MATCH EXISTING.

P2 NEW FLOOR DRAIN IN PLACE OF EXISTING WITH NEW, INCLUDING P-TRAP. TIE BACK INTO EXISTING SANITARY BELOW SLAB AND REPAIR SLAB TO MATCH EXISTING.

1 PLUMBING RENOVATION FLOOR PLAN

SCALE: 1/4" = 1'- 0"

STANTON ENGINEERING GROUP

INFORMATION-ENGINEER (713) 300-6292 | TEXAS ENG. FIRM REG. NO. F-018332 | © 2025 ALL RIGHTS RESERVED 1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

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FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
4400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL

STATE OF TEXAS
TYLER W. HERRING
106052
LICENSED PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS

ARCHITECTS AND PLANNING CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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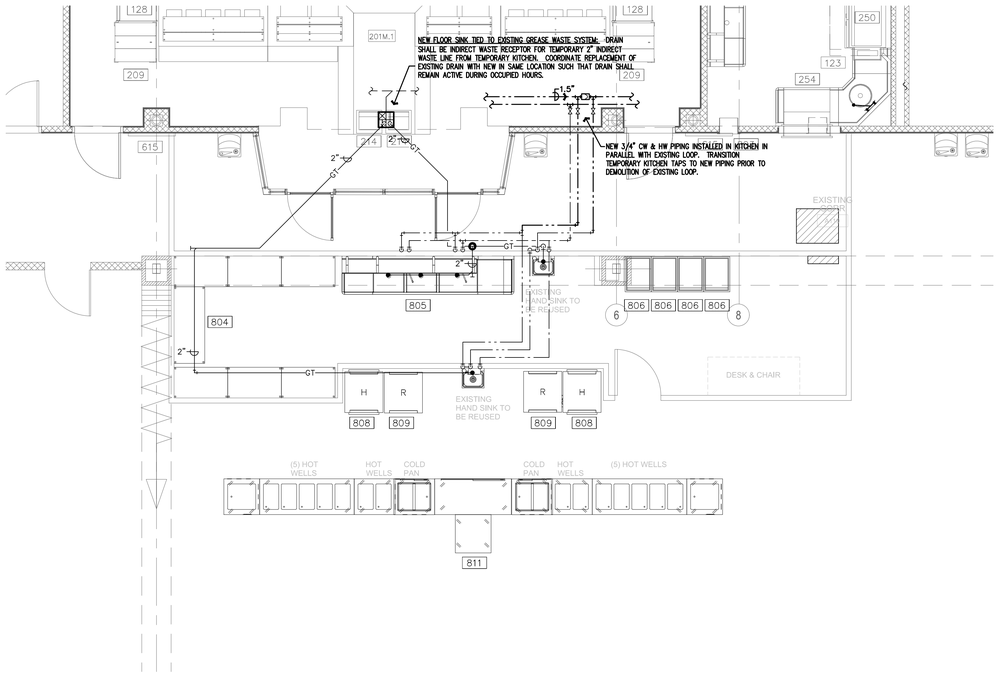
PLUMBING FLOOR PLAN

a-P1.01



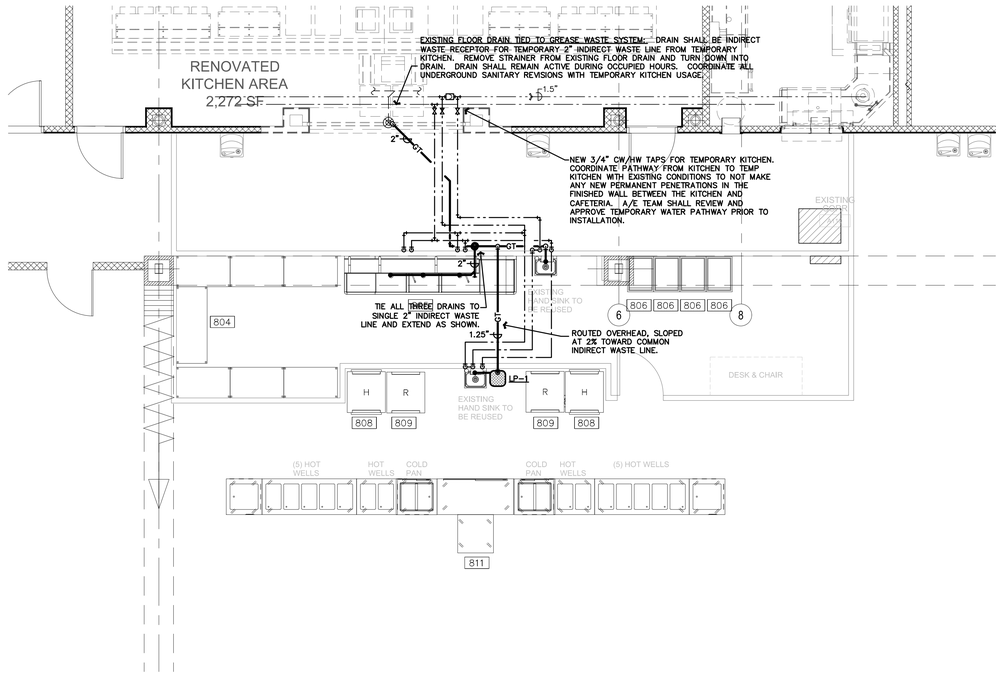
2 PLUMBING TEMPORARY KITCHEN PLAN - POST DEMO

SCALE: 1/4" = 1'-0"

NOTES:

1. AFTER DEMOLITION OF EXISTING KITCHEN AND DURING CONSTRUCTION OF NEW KITCHEN, EXISTING TEMPORARY KITCHEN SHALL REMAIN ACTIVE.
2. ALL SANITARY, CW AND HW CONNECTIONS SHALL REMAIN ACTIVE DURING ALL TIMES WHEN TEMPORARY KITCHEN IS ACTIVE.
3. UPON COMPLETION OF NEW KITCHEN, EXISTING TEMPORARY KITCHEN SHALL BE DEMOLISHED AND ALL TEMPORARILY UTILITIES SHALL BE REMOVED AND TEMPORARY WATER TAPS CAPPED AT MAIN LINE TAP.
4. ALL DEMOLISHED LAVATORIES AND FAUCETS SHALL BE PERMITTED TO BE RELOCATED ACROSS TEMPORARY KITCHENS WITHIN THE PROJECT BASED ON AVAILABILITY/PROJECT PHASING SCHEDULE. AT THE END OF THE PROJECT, REMOVE FIXTURES AND OFFER TO OWNER AS SALVAGE. IF NOT ACCEPTED, ALL FIXTURES SHALL BE DISPOSED OF BY THE CONTRACTOR.

NORTH



1 PLUMBING TEMPORARY KITCHEN PLAN - PRE DEMO

SCALE: 1/4" = 1'-0"

NOTES:

1. BEFORE DEMOLITION OF THE EXISTING KITCHEN BEGINS, INSTALL ALL NEW PLUMBING FIXTURES AND UTILITIES FOR TEMPORARY KITCHEN.

NORTH

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PLUMBING FLOOR PLAN - TEMP KITCHEN

a-P1.02

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TECHNOLOGY SYMBOLS & LEGEND

VOICE SYMBOLS

	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS PER LOCATION.
W	SINGLE VOICE OUTLET FOR WALL-MOUNTED PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.

DATA SYMBOLS

	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF DATA OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
W	SINGLE DATA OUTLET FOR WALL-MOUNTED IP PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA CABLE FOR COMPUTER ON WHEELS, CABLE TYPE AS SPECIFIED MOUNTED + 18-INCHES A.F.F UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
X	DATA CABLE FOR CEILING MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X	DATA CABLE FOR CEILING MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
	DATA CABLE FOR CEILING MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR CEILING MOUNTED AUDIO/VISUAL EQUIPMENT ENCLOSURE, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR WALL MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.

DATA SYMBOLS, CONT.

X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW, REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
X CAMW	DATA CABLE FOR INTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPW	DATA CABLE FOR INTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPE	DATA CABLE FOR EXTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.

CABLE PLANT & RISER DIAGRAM

	MAINTENANCE HOLE, SIZE & TYPE AS SPECIFIED.
	PULLBOX, SIZE AND TYPE AS SPECIFIED.
UGC	DIRECT BURIED COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
AER	AERIAL COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
	CONDUIT, SIZE AND TYPE AS SPECIFIED.

VOICE/DATA SYMBOLS

	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF VOICE TERMINATIONS , Y = NUMBER OF DATA TERMINATIONS PER LOCATION.
	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF VOICE OUTLETS AND Y = NUMBER OF DATA OUTLETS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET AND SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X Y	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X Y	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS PER LOCATION.

FIBER OPTIC SYMBOLS

	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF FIBER OPTIC OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.

ROUGH-IN & MISC. SYMBOLS

	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
	POWER POLE WITH ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	ROUGH-IN LOCATION, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
WAP	WIRELESS ACCESS POINT. EQUIPMENT AS SPECIFIED.

GENERAL SYMBOLS

# SHEET DRAWING TITLE SCALE: SCALE	DRAWING TITLE CALLOUT, # = DETAIL NUMBER.
# SHEET	DETAIL CALLOUT, # = DETAIL NUMBER.
# SHEET	SECTION CALLOUT, # = DETAIL NUMBER.
SHEET #	ELEVATION CALLOUT, # = DETAIL NUMBER.
#	KEYED NOTE, # = KEYED NOTE NUMBER.
#	REVISION TRIANGLE, # = REVISION NUMBER (PER SHEET).
TR (IDF XXX)	INDICATES TELECOMMUNICATIONS REGION

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
AER	AERIAL
DEMARC	DEMARCATION POINT
EMT	ELECTRIC METALLIC TUBE
F.O.C.	FIBER OPTIC CABLE
GIP	GALVANIZED IRON PIPE
HE	PAINTERCOM HEAD-END
IMC	INTERMEDIATE METAL CONDUIT
ISP	INSIDE CABLE PLANT
IDF	INTERMEDIATE DISTRIBUTION FRAME
MDF	MAIN DISTRIBUTION FRAME
MH	MAINTENANCE HOLE
MM	MULTIMODE
OSP	OUTSIDE CABLE PLANT
PB	PULLBOX
PR	PAIR
PVC	POLYVINYL CHLORIDE
RSC	RIGID STEEL CONDUIT
SM	SINGLE MODE
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TB	TERMINAL BLOCK
TR	TELECOMMUNICATION REGION
UGC	UNDERGROUND COMMUNICATION
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR

NOTES

1. CONTRACTOR SHALL REVIEW DRAWINGS AND SPECIFICATIONS THAT MAKE UP THE CONTRACT DOCUMENTS AND COMPLETE ALL WORK INCLUDED THEREIN.
2. SCALE OF TECHNOLOGY DRAWINGS IS PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CABLE LENGTHS, SIZE OF PATHWAYS, DIMENSIONS, ETC.
3. TECHNOLOGY DRAWINGS SHALL BE USED TO COMPLEMENT THE WRITTEN SPECIFICATIONS.
4. ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT'S. DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT AND SUBSEQUENTLY CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE ARCHITECT'S/DESIGN CONSULTANT'S INTERPRETATION.

INDEX OF DRAWINGS

a-T000 TECHNOLOGY SYMBOLS & LEGEND
a-TD201 TECHNOLOGY DEMOLITION FLOOR PLAN
a-T200 TECHNOLOGY COMPOSITE FLOOR PLAN
a-T201 TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
a-T202 TECHNOLOGY TEMPORARY KITCHEN PLAN
a-T300 TECHNOLOGY ENLARGED VIEWS
a-T400 TECHNOLOGY TYPICAL DETAILS
a-T401 TECHNOLOGY TYPICAL DETAILS
a-T500 TECHNOLOGY TYPICAL DETAILS

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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 564970
EXPIRES 12-31-25
RCDD

07/18/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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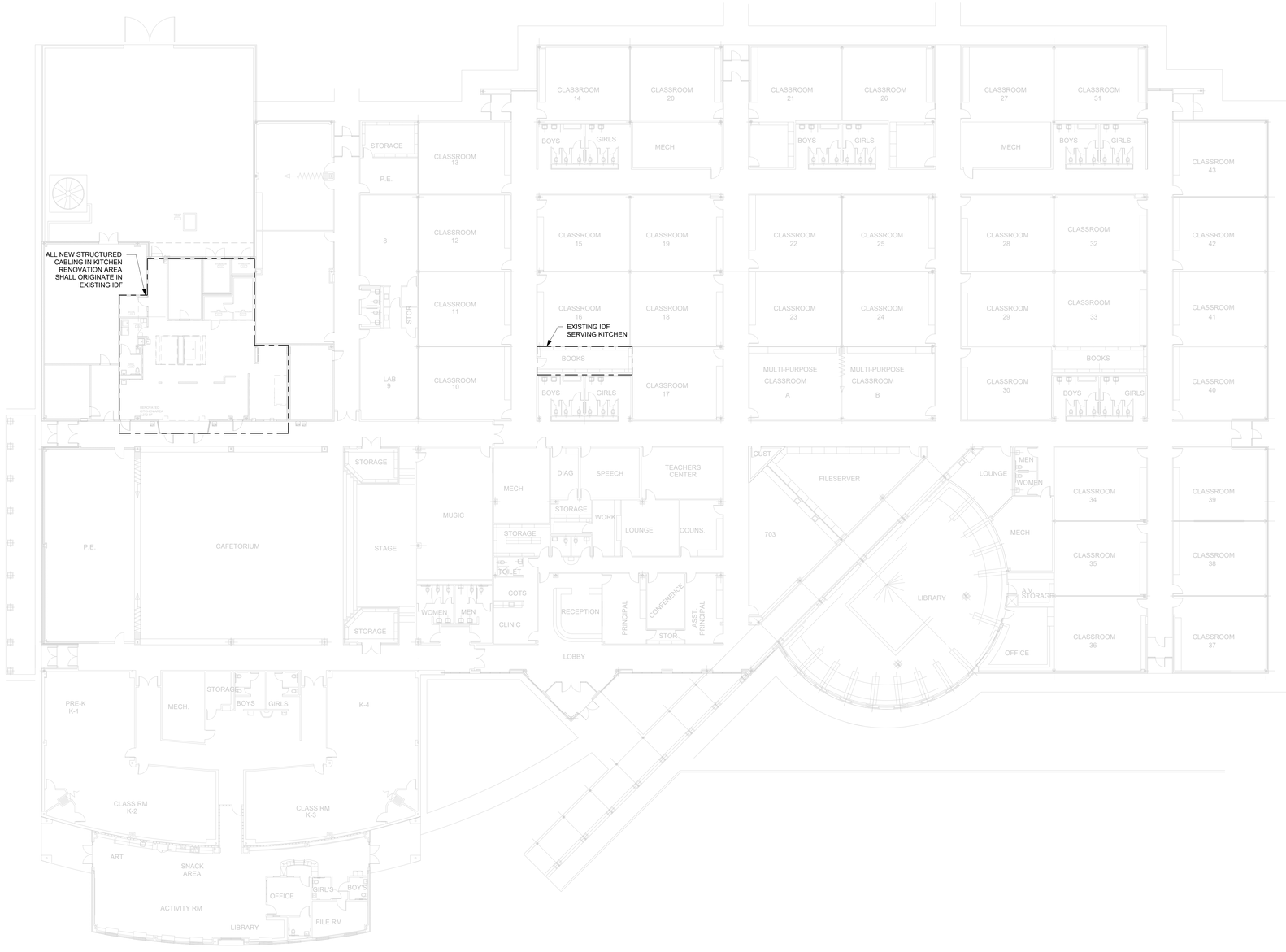
TECHNOLOGY SYMBOLS & LEGEND

SHEET NO.
a-T000



1 a-T200 TECHNOLOGY COMPOSITE FLOOR PLAN
1/16" = 1'-0"

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Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
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07/18/2025

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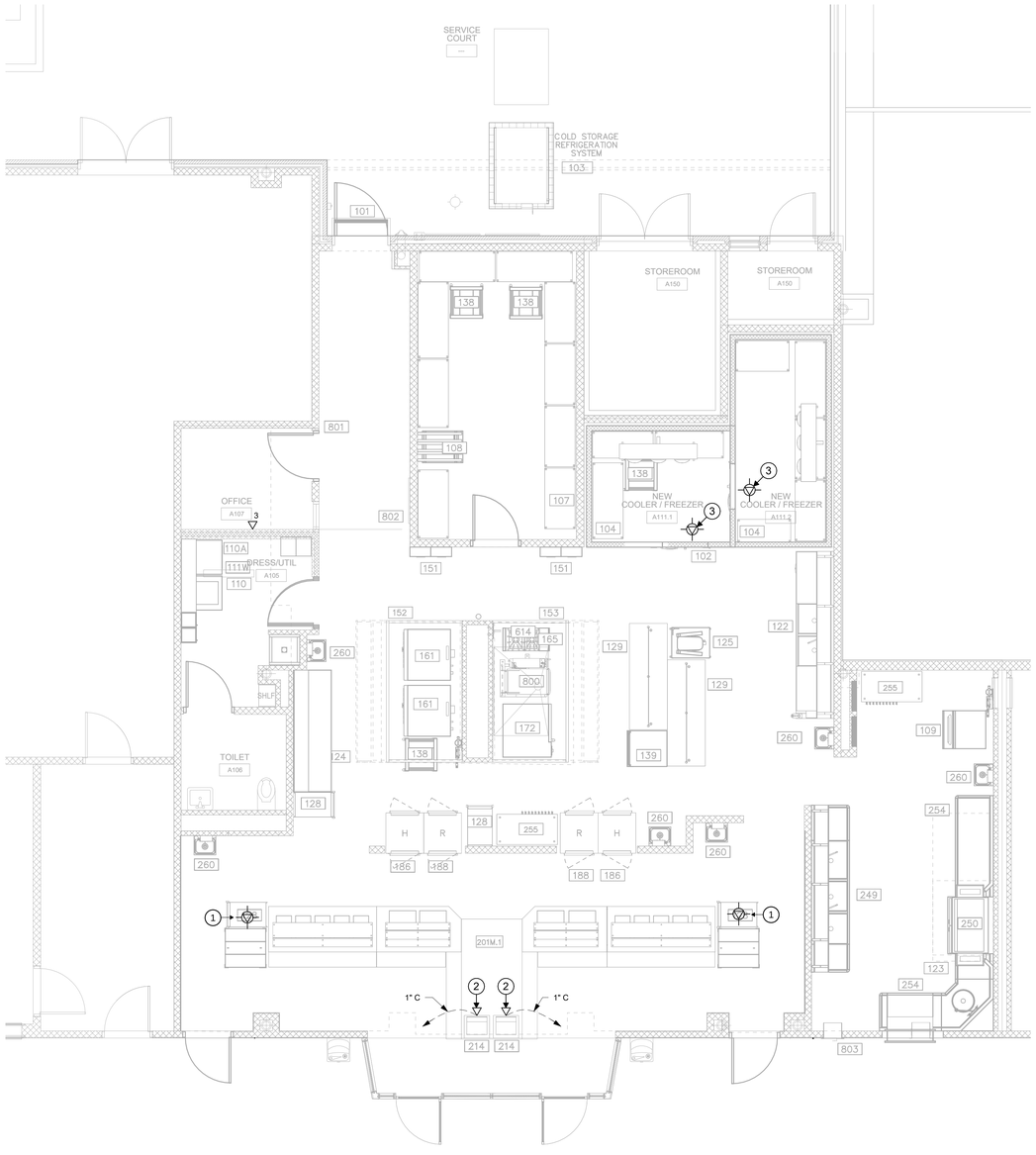
TECHNOLOGY COMPOSITE FLOOR PLAN

SHEET NO.
a-T200



1 TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
a-T201 1/4" = 1'-0"

TECHNOLOGY FLOOR PLANS GENRAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
2. ALL CONDUIT PATHWAYS, ROUGH-INS, BACKBOXES, FLOOR BOXES, CONDUIT SLEEVES, ETC. INDICATED ON THE TECHNOLOGY DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26.
3. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. TECHNOLOGY CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES/ ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM.
14. ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE A LAY-IN TYPE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE A LAY- IN TYPE CEILING TO PREVENT THE CABLES FROM BEING EXPOSED, THE CONDUIT SHALL ROUTE TO THE NEAREST LAY-IN TYPE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. THE CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE MAIN CORRIDOR OR NEAREST MDF/IDF TO MINIMIZE THE CABLE LENGTH ENSURING THE CABLE LENGTH DOES NOT EXCEED 275 FEET. CONDUIT, CONNECTIONS, J-BOXES, SUSPENSION, ANCHORAGES, AND OTHER CONDUIT COMPONENTS EXPOSED TO VIEW IN PUBLIC SPACES SHALL BE ROUTED AND INSTALLED CAREFULLY TO MINIMIZE VISUAL IMPACT AND SHALL BE FULLY PAINTED TO MATCH UNLESS NOTED OTHERWISE.
15. CONDUIT(S) INSTALLED IN-SLAB OR UNDER-SLAB TO FLOOR BOXES, POKE-THURS, AND TO WORKAREA OUTLETS, ETC. SHALL BE INSTALLED WITH WET RATED CABLE(S).
16. NO GRID WIRE SHALL BE UTILIZED FOR SUPPORTS ONLY USE SOLID SUPPORTS (CLIPS, ALL-THREAD, ANCHORS, ETC.).

TECHNOLOGY PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

1. DATA CABLE FOR CONTRACTOR FURNISHED / CONTRACTOR INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.
2. INDOOR / OUTDOOR RATED DATA CABLE FOR POINT OF SALE LOCATION. PROVIDE (1) 1-INCH CONDUIT FOR DATA TO THE WALL BEHIND POINT OF SALE LOCATION AND UP WALL TO ABOVE ACCESSIBLE CEILING. CONDUITS SHALL TERMINATE INSIDE A DOUBLE GANG BOX THAT IS SECURED TO THE POINT OF SALE LOCATION. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.
3. DATA CABLE FOR TEMPERATURE MONITORING OF FREEZER COOLER. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS AND TERMINATION POINT AND CONNECTIVITY NEEDS IN FREEZER / COOLER CONTROL UNIT.
4. DATA CABLE FOR TEMPORARY POINT OF SALES CASH REGISTER. COORDINATE WITH OWNER, ARCHITECT, AND CONSULTANT FOR ROUTING OF CABLES TO POINT OF SALE CASH REGISTER PRIOR TO INSTALLATION

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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 564070
EXPIRES12-31-25
RCDD

07/18/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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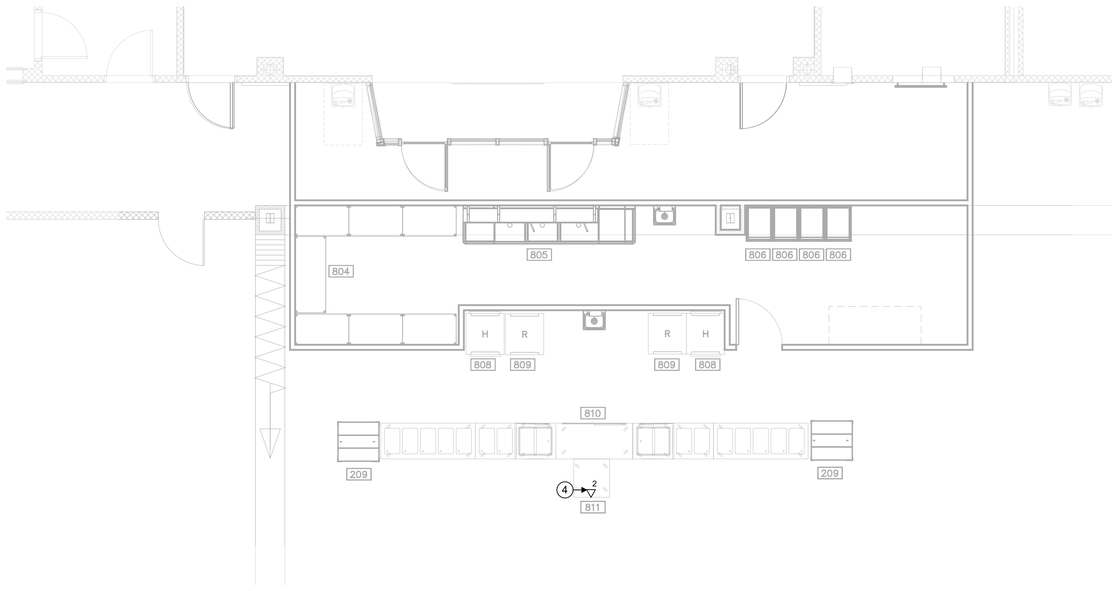
TECHNOLOGY NEW/RENOVATION KITCHEN PLAN

SHEET NO.
a-T201



1 a-T202 TECHNOLOGY TEMPORARY KITCHEN FLOOR PLAN
1/4" = 1'-0"

TECHNOLOGY FLOOR PLANS GENRAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
2. ALL CONDUIT PATHWAYS, ROUGH-INS, BACKBOXES, FLOOR BOXES, CONDUIT SLEEVES, ETC. INDICATED ON THE TECHNOLOGY DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26.
3. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. TECHNOLOGY CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES/ ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM.
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15. CONDUIT(S) INSTALLED IN-SLAB OR UNDER-SLAB TO FLOOR BOXES, POKE-THURS, AND TO WORKAREA OUTLETS, ETC. SHALL BE INSTALLED WITH WET RATED CABLE(S).
16. NO GRID WIRE SHALL BE UTILIZED FOR SUPPORTS ONLY USE SOLID SUPPORTS (CLIPS, ALL-THREAD, ANCHORS, ETC.).

TECHNOLOGY PLAN KEYED NOTES

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1. DATA CABLE FOR CONTRACTOR FURNISHED / CONTRACTOR INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.
2. INDOOR / OUTDOOR RATED DATA CABLE FOR POINT OF SALE LOCATION. PROVIDE (1) 1-INCH CONDUIT FOR DATA TO THE WALL BEHIND POINT OF SALE LOCATION AND UP WALL TO ABOVE ACCESSIBLE CEILING. CONDUITS SHALL TERMINATE INSIDE A DOUBLE GANG BOX THAT IS SECURED TO THE POINT OF SALE LOCATION. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.
3. DATA CABLE FOR TEMPERATURE MONITORING OF FREEZER COOLER. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS AND TERMINATION POINT AND CONNECTIVITY NEEDS IN FREEZER / COOLER CONTROL UNIT.
4. DATA CABLE FOR TEMPORARY POINT OF SALES CASH REGISTER. COORDINATE WITH OWNER, ARCHITECT, AND CONSULTANT FOR ROUTING OF CABLES TO POINT OF SALE CASH REGISTER PRIOR TO INSTALLATION

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Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 10-31-25
RCDD

07/18/2025

MWA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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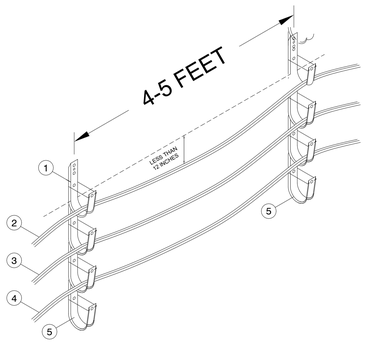
TECHNOLOGY TEMPORARY KITCHEN PLAN

SHEET NO.
a-T202

NOTE TO CONTRACTOR:

UNLESS OTHERWISE NOTED, LOW VOLTAGE CABLING SHALL BE INSTALLED WITHIN 6-INCHES OF THE CEILING AND ACCESSIBLE BY A TECHNICIAN ON A STANDARD A-FRAME LADDER.

CONTRACTOR SHALL MAINTAIN AT LEAST 6-INCHES OF SEPRATION BETWEEN CABLING BUNDLES AND MECHANICAL DUCTWORKS, EQUIPMENT, PIPIING OR OTHER SYSTEMS IN THE CEILING PLENUM.

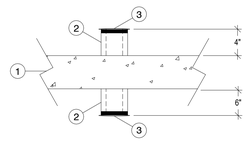


KEYED NOTES:

1. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
2. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
3. A/V CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. SECURITY CABLE ABOVE ACCESSIBLE CEILING (BY DIV 28).
5. SPARE J-HOOK (BY DIV 27).

1 T400 TYPICAL J-HOOK CABLE PATHWAY

SCALE: N.T.S.

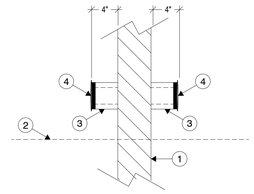


KEYED NOTES:

1. SCHEDULED FLOOR OR DECK.
2. CONDUIT SLEEVE (BY DIV 26).
3. NYLON BUSHING (BY DIV 26).

2 T400 TYPICAL CONDUIT SLEEVE THROUGH FLOOR OR DECK DETAIL

SCALE: N.T.S.

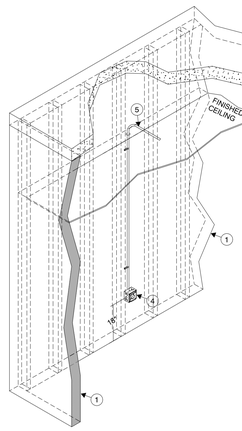


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. CONDUIT SLEEVE (BY DIV 26).
4. NYLON BUSHING (BY DIV 26).

3 T400 TYPICAL CONDUIT SLEEVE GOING THROUGH WALL

SCALE: N.T.S.

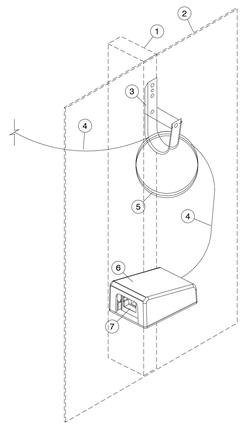


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. SCHEDULED DECK ABOVE.
4. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX WITH DOUBLE GANG PLASTER RING (BY DIV 26).
5. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH. (BY DIV 26).

4 T400 TYPICAL TECHNOLOGY CONDUIT ROUGH-IN

SCALE: N.T.S.

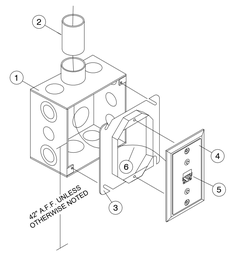


KEYED NOTES:

1. SCHEDULED STUD.
2. SCHEDULED WALL.
3. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
5. 20 FOOT SERVICE LOOP ABOVE ACCESSIBLE CEILING NEATLY COILED AND SECURED TO J-HOOK (BY DIV 27).
6. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BUILDING STRUCTURE (BY DIV 27).
7. DATA INSERT (BY DIV 27).

5 T400 TYPICAL ABOVE CEILING SINGLE DATA OUTLET (WALL MOUNTED)

SCALE: N.T.S.

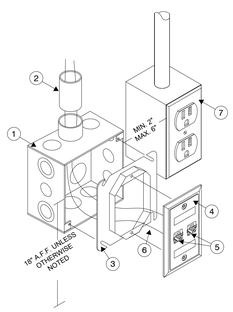


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH PHONE STUDS (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).

6 T400 TYPICAL WALL PHONE OUTLET CONFIGURATION

SCALE: N.T.S.

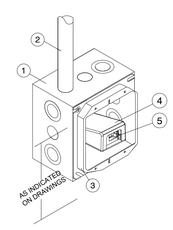


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

7 T400 TYPICAL DUAL DATA OUTLET CONFIGURATION

SCALE: N.T.S.

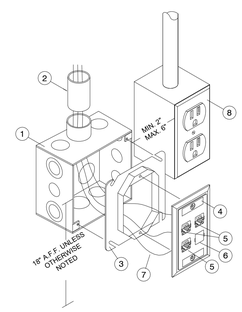


KEYED NOTES:

1. 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. DOUBLE GANG PLASTER RING (BY DIV 26).
4. SURFACE MOUNT BOX INSIDE THE 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH DOUBLE GANG BOX (BY DIV 27).
5. RJ-45 INSERT (BY DIV 27).

8 T400 TYPICAL WALL-MOUNTED WIRELESS ACCESS POINT

SCALE: N.T.S.



KEYED NOTES:

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2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

9 T400 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.

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Bicsi
Jason Gonzalez Jr
BICSI ID # 554370
EXPIRES 12-31-25
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MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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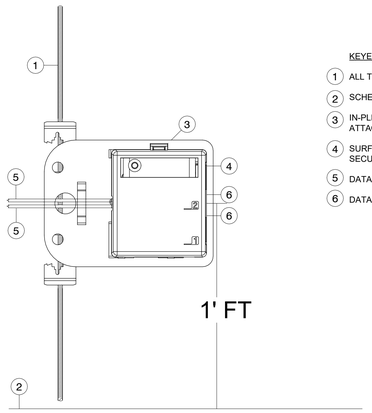
TECHNOLOGY TYPICAL DETAILS

SHEET NO.
a-T400

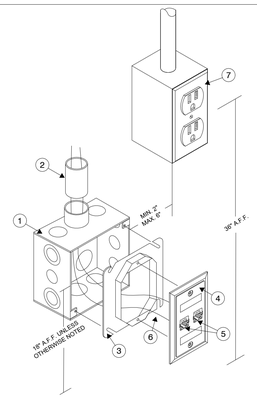


KEYED NOTES:

1. ALL THREAD TO BUILDING STRUCTURE (BY DIV. 27)
2. SCHEDULING CEILING
3. IN-PLENUM CEILING BRACKET PN 49223-CBC ATTACHED TO ALL THREAD (BY DIV. 27)
4. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BRACKET (BY DIV. 27)
5. DATA CABLE (BY DIV. 27)
6. DATA INSERT (BY DIV. 27)

1 / T401 TYPICAL ABOVE CEILING DATA OUTLET

SCALE: N.T.S.

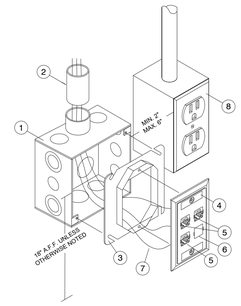


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26). ELECTRICAL RECEPTACLE TO BE INSTALLED AT 36" A.F.F AND ADJACENT TO COW / SECONDARY TEACHING OUTLET LOCATION.

2 / T401 TYPICAL COW / SECONDARY TEACHER'S DATA OUTLET CONFIGURATION

SCALE: N.T.S.

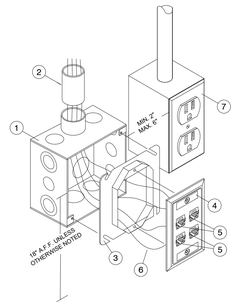


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

3 / T401 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.



KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

4 / T401 TYPICAL FOUR DATA OUTLET CONFIGURATION

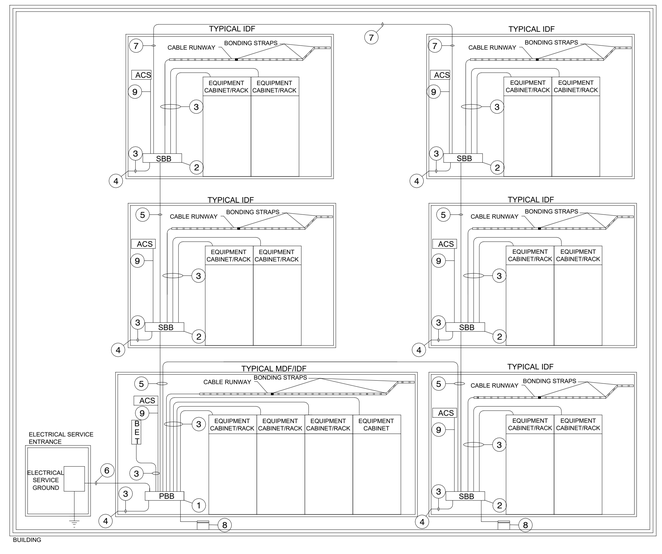
SCALE: N.T.S.

TBB/GE CONDUCTOR SIZING	
LENGTH IN LINEAR M (FT)	SIZE (AWG)
LESS THAN 4 (13)	6
4 - 6 (14-20)	4
6 - 8 (21 - 26)	3
8 - 10 (27 - 33)	2
10 - 13 (34 - 41)	1
13 - 16 (42 - 52)	1/0
16 - 20 (53 - 66)	2/0
20 - 26 (67 - 84)	3/0
26 - 32 (85 - 105)	4/0
32 - 38 (106 - 125)	250 kcmil
38 - 46 (126 - 150)	300 kcmil
46 - 53 (151 - 175)	350 kcmil
53 - 76 (176 - 250)	500 kcmil
76 - 91 (251 - 300)	600 kcmil
GREATER THAN 91 (301)	750 kcmil

ROUTE THE TBB TO EACH TGB IN AS STRAIGHT A PATH AS POSSIBLE. THE TBB SHOULD BE INSTALLED AS A CONTINUOUS CONDUCTOR, AVOIDING SPLICES WHERE POSSIBLE.

5 / T401 TBB CONDUCTOR SIZING

SCALE: N.T.S.

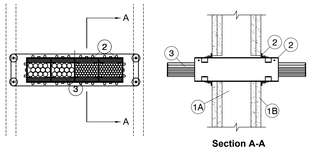


1. TELECOMMUNICATIONS MAIN GROUNDING BUS BAR (PBB)(BY DIV. 27)
2. TELECOMMUNICATIONS GROUNDING BUS BAR (SBB)(BY DIV 27)
3. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 27)
4. CONNECT TO GROUNDED BUILDING STEEL WHEN EXPOSED IN ROOM.
5. TELECOMMUNICATIONS BONDING BACKBONE (TBB). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 26)
6. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). BY ELECTRICAL CONTRACTOR.REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS.
7. GROUNDING EQUALIZER CONDUCTOR (GEC)(BY DIV 26)
8. BOUND WITH GROUDING COLLARS TO EACH CONTINUOUS CONDUIT THAT ENTERS THE TELECOM ROOM. (BY DIV 26).
9. BOND TO EACH ACCESS CONTROL PANEL AND OTHER SECURITY PANELS IN HE TELECOM ROOM. (BY DIV 27)

6 / T401 TYPICAL GROUNDING DIAGRAM

SCALE: N.T.S.

System No. W-L-3218
F Ratings - 1, 2, 3 and 4 Hr (See Items 1 and 3)
T Ratings - 3/4 and 1 Hr (See Item 3)
L Rating At Ambient - Less Than 1, 1, 3, 4 or 7 CFM (See Item 3)
L Rating At 400 F - Less Than 1, 2 or 3 CFM (See Item 3)



Section A-A

1. Wall Assembly - The 1, 2, 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described within the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall incorporate the following construction features:
   A. Studs - Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
   B. Gypsum Board* - Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Opening in gypsum board to be max 1/4 in. (6 mm) larger then width and height dimensions of firestop device(s).

   The hourly F Rating of the firestop system is dependent upon the hourly rating of the wall in which it is installed.
2. Firestop Device* - One, two, three, four or seven firestop device modules ganged together. Each firestop device module consists of a 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long galv steel tube with an intumescent material lining. Firestop device modules to be installed in accordance with the accompanying installation instructions. The space between the firestop device module(s) and the periphery of the opening shall be min 0 in. (0 mm, point contact) to max 1/8 in. (3.2 mm). In round openings, the space between the firestop device and the periphery of the opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). Firestop device module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device by means of steel set screws provided with device. Each four- and seven-gang steel wall plate shall be fastened to the studs with steel screws sized to extend through the gypsum board layers and penetrate 1/2 in. (13 mm) into the framing member. Each firestop device module is to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   As an alternate, the four- and seven-gang steel wall plates may be installed directly against the studs for walls having 16 and 24 in. (406 and 610 mm) center-to-center stud spacing, respectively, prior to installation of the gypsum board layers. The steel wall plates shall be secured to the stud by means of steel screws. After installation of the steel wall plates and firestop device modules, the gypsum board shall be installed as specified in the individual U300 or U400 Design with a maximum 1/8 in. (3.2 mm) gap between the firestop device module and the cutout in the gypsum board. Gap between the firestop device module and the cutout in the gypsum board may be filled with gypsum joint compound or fill material (Item 4).

   SPECIFIED TECHNOLOGIES INC - EZ PATH Series 33 Fire Rated Pathway

2A. Firestop Device* - Extension Module - (Optional, Not Shown) - Module attached to ends of 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long firestop device (Item 3) to increase its length to facilitate installation in thicker walls. Each module consists of a 3 by 3 by 6 in. (76 by 76 by 152 mm) long galv steel tube with an intumescent material lining. Extension module to be installed in accordance with the accompanying installation instructions. When module is used, firestop device (Item 2) and extension module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device or extension module(s) by means of steel set screws provided with wall plates. Firestop device and extension module(s) assembly to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   SPECIFIED TECHNOLOGIES INC - EZ PATH Extension

3. Cables - Within the loading area for each firestop device module, the cables may represent a 0 to 100 percent visual fill. Cable fill to be distributed at a uniform height across the width of the firestop device module. Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types of cables may be used:
   A. Max 400 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) jacketing and insulation.
   B. Max 350 kcmil single copper conductor power cable with XLPE jacket and insulation
   C. Max 7/C No. 12 AWG copper conductor control cable with PVC or XLPE jacket and insulation.
   D. Max 3/C No. 10 AWG metal clad or armored cable with steel or aluminum jacket.
   E. Max 3/C No. 8 AWG NM cable (Romex) with PVC insulation and jacket.
   F. Max four pair No. 22 AWG (or smaller) copper conductor data cable with PVC or plenum rated jacketing and insulation.
   G. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
   H. Fiber optic cable with PVC or polyethylene (PE) jacket and insulation having a max diam of 5/8 in. (16 mm).
   I. Optical Fiber Raceway+ - Max 1-1/2 in. (38 mm) diam (or smaller) optical fiber raceway ("innerduct") formed of either PVC or polyvinylidene fluoride (PVDF) with optical fiber cable fill. Raceways installed in accordance with the National Electrical Code (NFPA 70).

   When the hourly rating of the wall assembly is 1 hr, the T Rating is 3/4 hr. When the hourly fire rating of the wall assembly is greater than 1 hr, the T Rating is 3/4 hr when Item 3A, 3B, 3C, 3D or 3E is used. Otherwise the T Rating is 1 hr. When Item 3A, 3B, 3C, 3D or 3E is used, the maximum F Rating is 2 hr. When max 200 pair No. 24 AWG telecommunication cable is used or when Item 3F, 3G, 3H or 3I is used, the maximum F Rating is 4 hr.

   The L Rating for each empty firestop device module is less than 1 cfm at ambient and at 400F. When Item 3A is used, the L Rating for each firestop device module with 100 percent visual fill is 4 cfm at ambient and 3 cfm at 400F. When Item 3F is used, the L Rating for each firestop device module with 100 percent visual fill is 1.3 cfm at ambient and 1 cfm at 400F. When Item 3G or 3H is used, the L Rating for each firestop device module with 100 percent visual fill is 7 cfm at ambient and 2 cfm at 400F.
4. Fill, Void or Cavity Material* - Sealant or Putty - (Not Shown) - As an alternate to gypsum joint compound, the gap between the firestop device module and the cutout in the gypsum board may be sealed with fill material on each side of the wall assembly when four- and seven-gang steel wall plates are installed directly against the wood or steel studs.

   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant, SpecSeal Putty

   *Bearing the UL Classification Mark

7 / T401 TYPICAL STI EZ-PATH SLEEVE DETAIL

SCALE: N.T.S.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

a

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL

DISTRIBUTION DESIGNER
REGISTERED COMMUNICATIONS
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

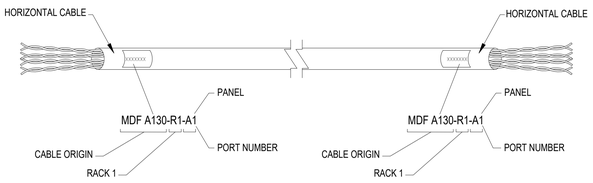
07/18/2025

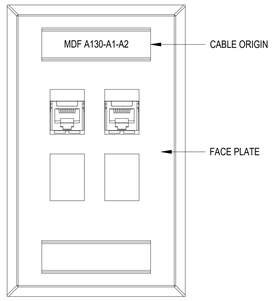
MVA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

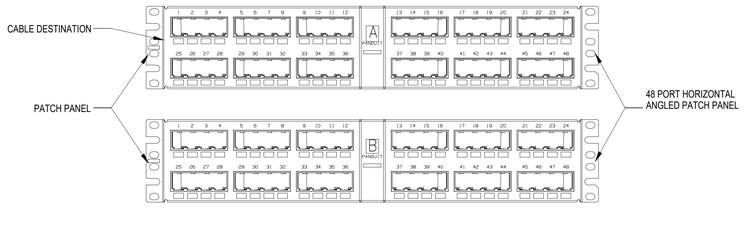
PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

TECHNOLOGY TYPICAL DETAILS

SHEET NO.
a-T401

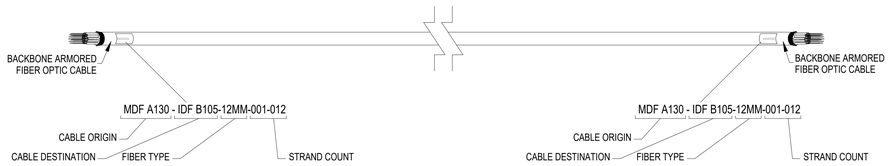


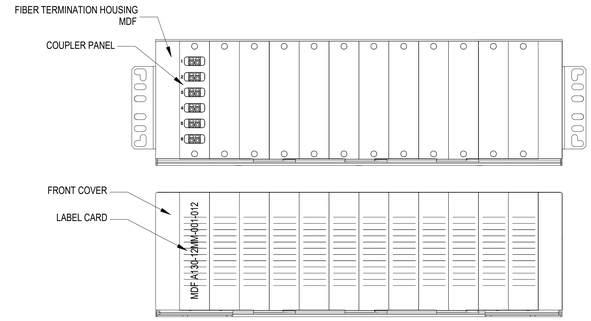


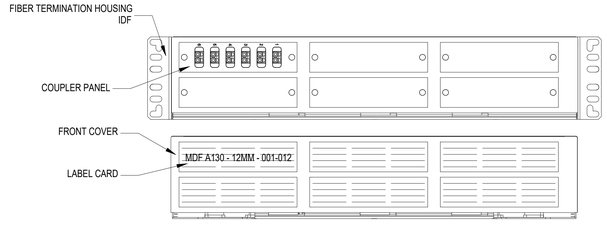


1 T500 TYPICAL HORIZONTAL DATA CABLE LABELING SCHEME

SCALE: N.T.S.

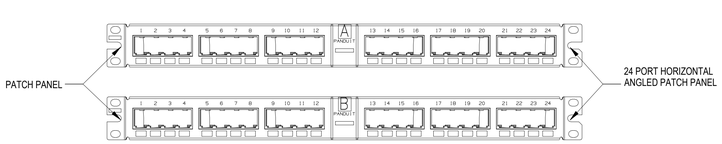






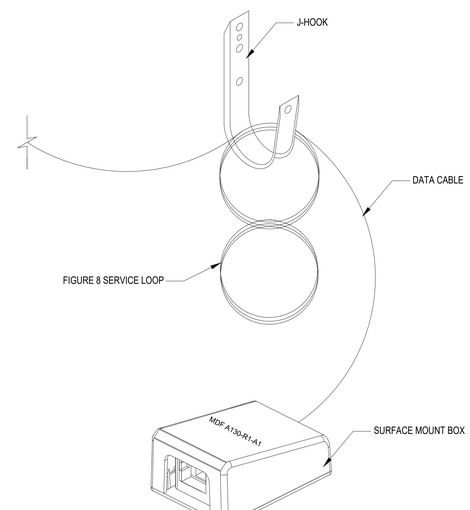
2 T500 TYPICAL FIBER BACKBONE LABELING SCHEME

SCALE: N.T.S.



3 T500 TYPICAL COPPER BACKBONE LABELING SCHEME

SCALE: N.T.S.



4 T500 ABOVE ASSESSIBLE CEILING LABELING SCHEME

SCALE: N.T.S.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

a

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
AUSTIN PARKWAY ELEMENTARY SCHOOL
400 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL

BICSI REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

TECHNOLOGY TYPICAL DETAILS

SHEET NO.
a-T500

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- A## — AV WALL ROUGH-IN WITH DATA
- # — KEYNOTE
- C — Proposed Camera Direction — SURVEILLANCE CAMERA
- T#-## — Camera Schedule Number (Floor #-Camera #) — Camera (N)ew, (E)xisting Rough-in, (D)emo
- C — Proposed Camera Direction — #-## PTZ — PTZ CAMERA
- C — Proposed Camera Direction — #-## — FIXED SURVEILLANCE CAMERA
- C — 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- ##° — Approximate view of lens
- Lens View Angle
- C — 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- #mm — Lens size
- C M — MICROPHONE WITH AUDIO LINKED TO CAMERA
- C CR — CARD READER LINKED TO CAMERA
- SYMBOL TAG — CR # — (#) = DIFFERENT TYPES OF CARD READERS: M = MULLION; W = WIRELESS (Proprietary); WI = Wi-Fi (802.11); POE = POWER OVER ETHERNET
- SYMBOL TAG — KP # — (#) = DIFFERENT TYPES OF CARD READERS: TS = TOUCHSCREEN; PU = PUSH BUTTON
- # / #### — TOP = DETAIL NUMBER; DETAIL REFERENCE; BOTTOM = SHEET NUMBER
- NORTH ARROW
- # / #### — SHEET NUMBER; SECTION MARKER; DETAIL NUMBER
- DIRECTION OF ELEVATION; # / #### — ELEVATION MARKER; SHEET NUMBER; DETAIL NUMBER
- DIRECTION OF ELEVATION; SHEET NUMBER; # / #### — DIRECTION OF ELEVATION; DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

TRUENORTH A PMY COMPANY

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FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Austin Parkway Elementary School
4400 Austin Pkwy, Sugar Land, TX 77479

SEAL

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Brian C Porter
BICSI ID # 256587
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07-18-25

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ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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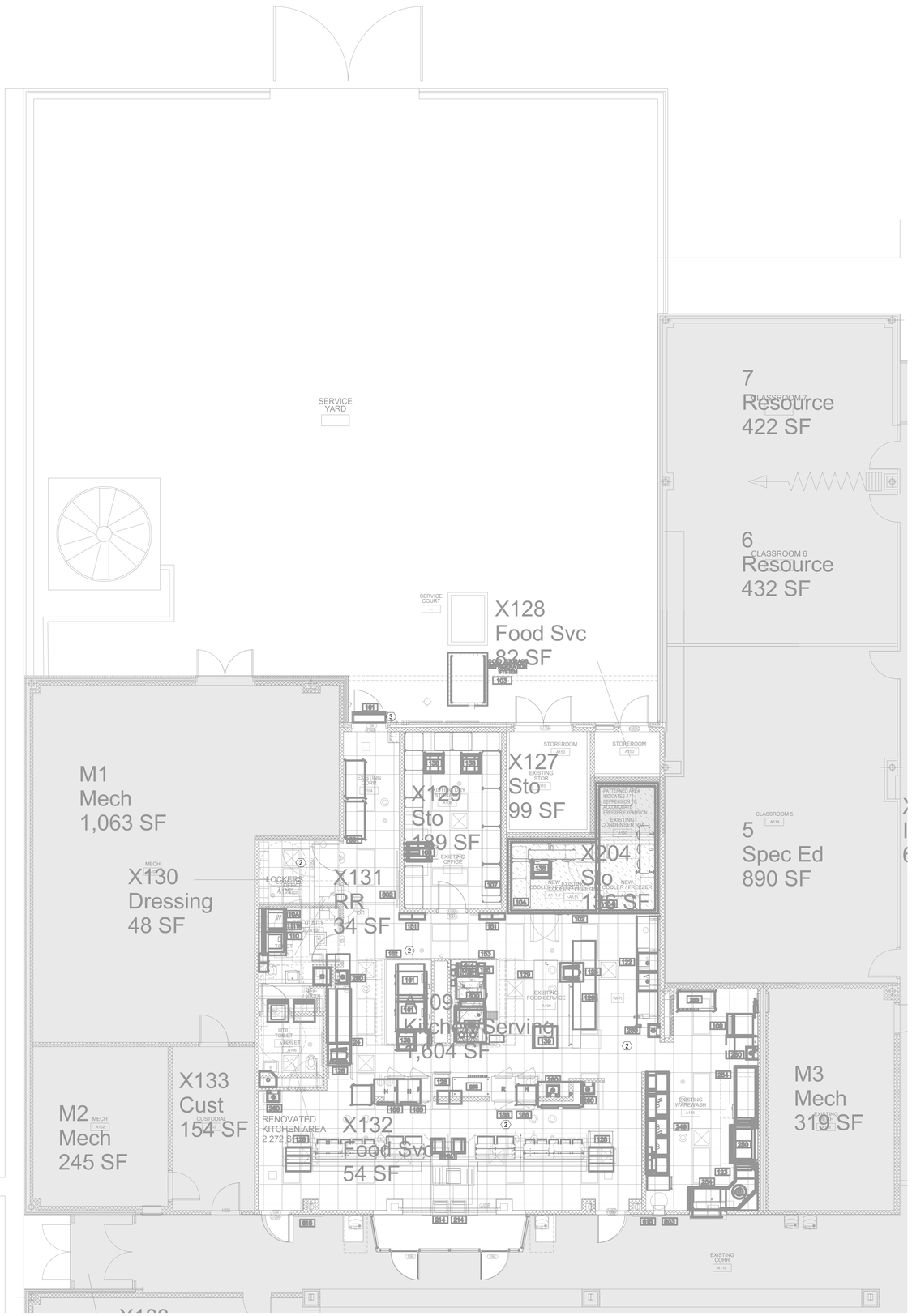
TECHNOLOGY - TITLE SHEET

a-TN000



1 AUSTIN PARKWAY - DEMO PLAN
SCALE: 3/16" = 1'-0"

DEMO KEYNOTES

1. REMOVE, AND PROTECT DURING CONSTRUCTION, INSTALL IN EXISTING LOCATION AFTER NEW ACT GRID IS IN PLACE.
2. DEVICES IN ACT ARE TO BE REMOVED AND PROTECTED DURING CONSTRUCTION AND REINSTALLED IN THE SAME LOCATION AFTER THE NEW CEILING GRID IS IN PLACE. DECIVES INCLUDE: SPEAKERS, ACCESS POINTS AND INTRUSION MOTION DETECTORS.
3. EXISTING CARD READER, DOOR CONTACT, & REX (REQUEST TO EXIT) TO BE DEMOLISHED, REMOVE DEVICES AND PROTECT WIREING.

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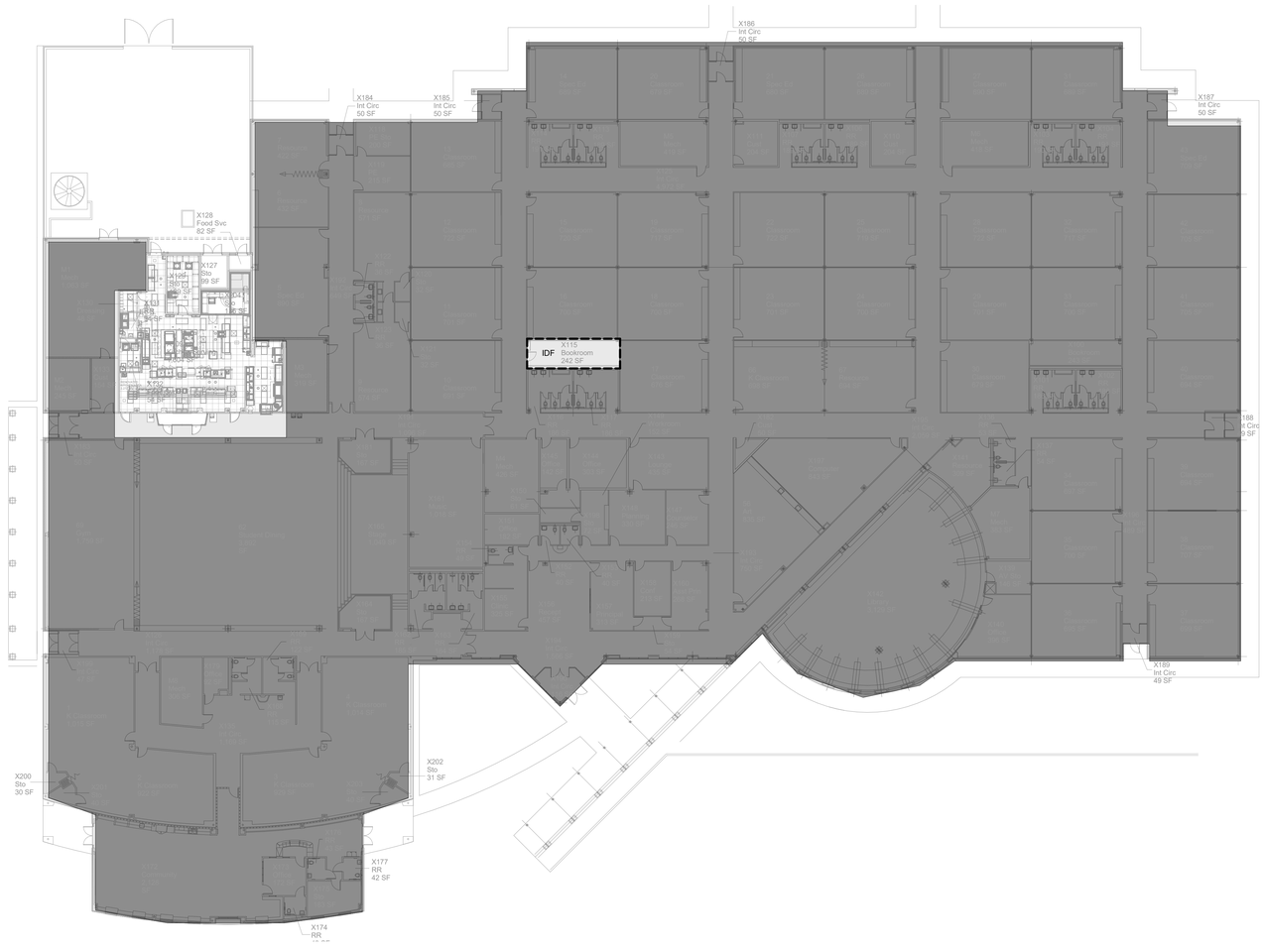
TECHNOLOGY - Austin Parkway ES - DEMO

a-TN.001

TRUENORTH A PMY COMPANY

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BACKGROUND A (AUSTIN PARKWAY) OVERALL
SCALE: 1" = 20'-0"

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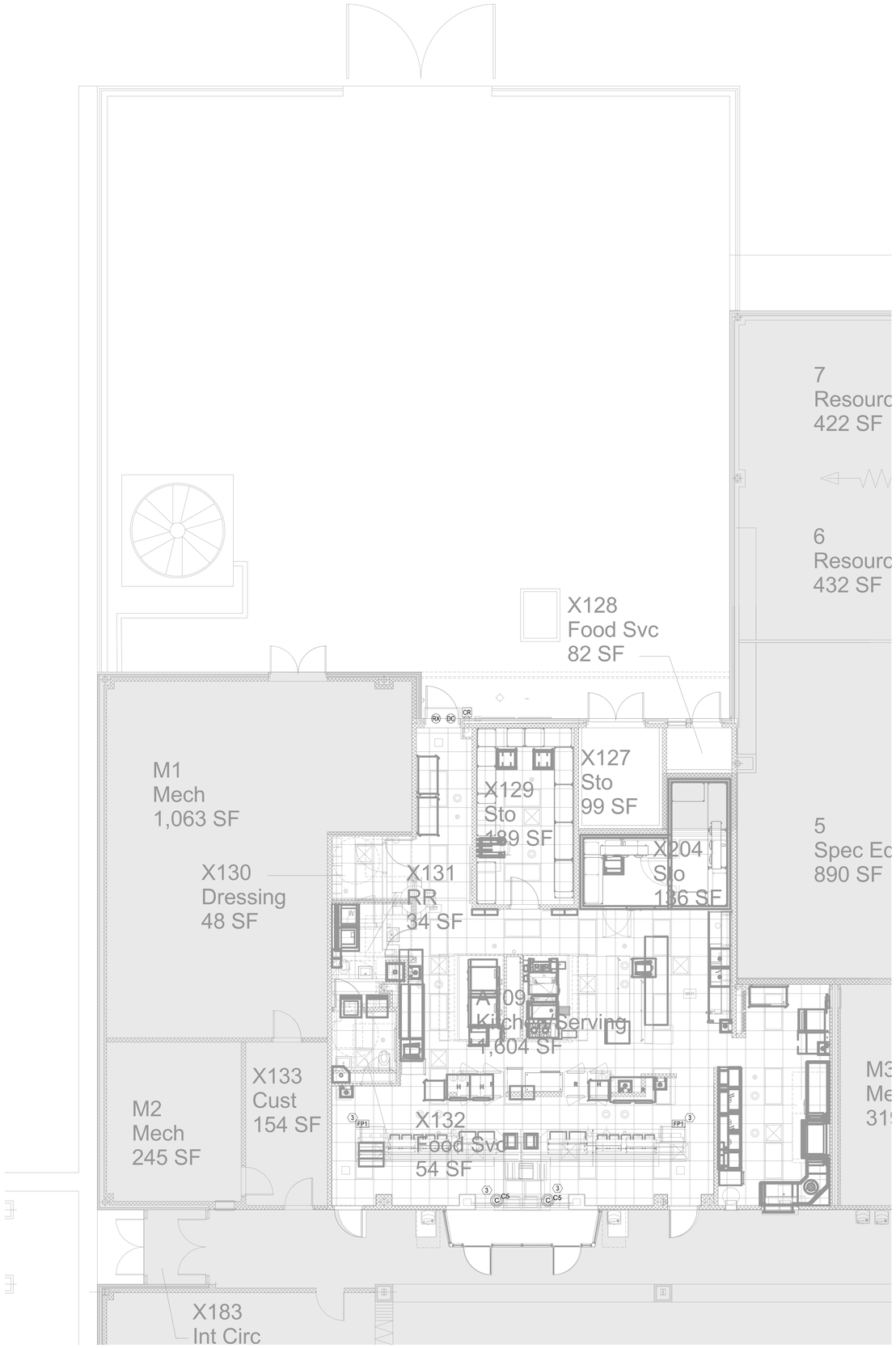
TECHNOLOGY - Austin Parkway ES - OVERALL

a-TN.100



1 AUSTIN PARKWAY - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.

TRUENORTH A PWY COMPANY

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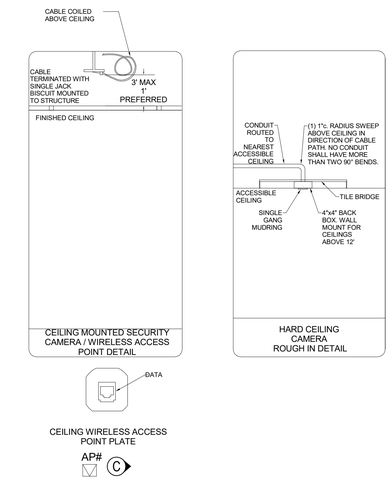
TECHNOLOGY - Austin Parkway ES - KITCHEN

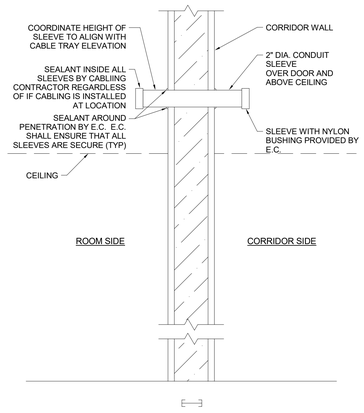
a-TN.101

GENERAL NOTE

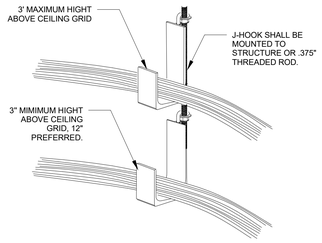
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



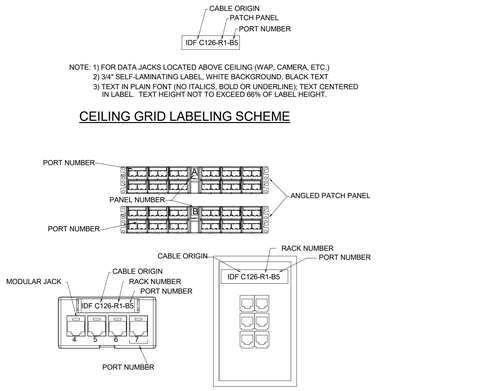
1 DATA ROUGH-IN DETAILS
SCALE: NS



2 TYPICAL CABLING SLEEVE
SCALE: NTS

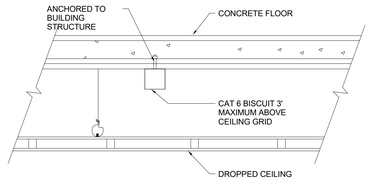


3 PANDUIT J-HOOK DETAIL
SCALE: NTS

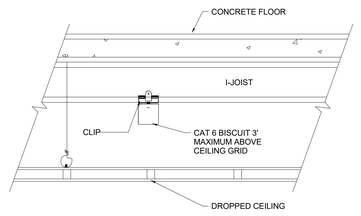


4 LABELING & CABLING SCHEMES
SCALE: NTS

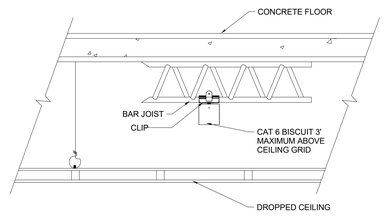
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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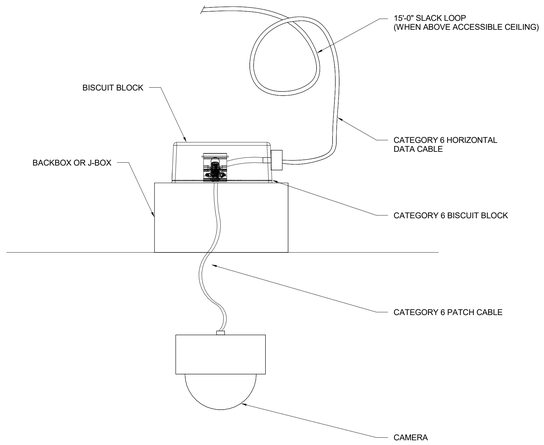
TECHNOLOGY - Austin Parkway ES - DETAILS

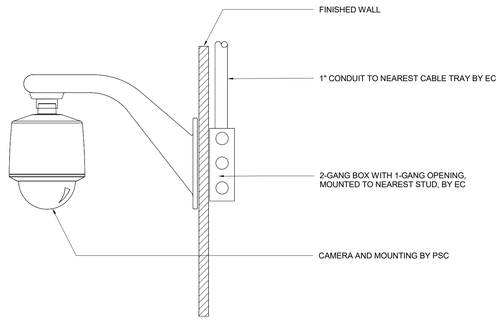
a-TN.500

GENERAL NOTES:

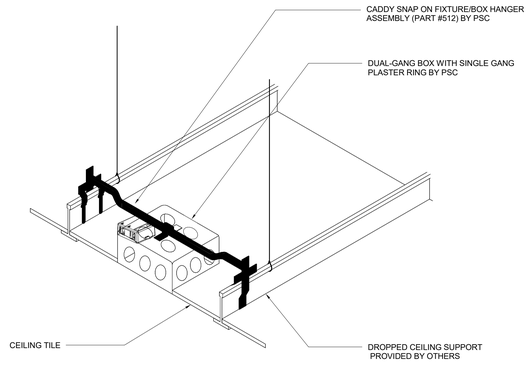
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



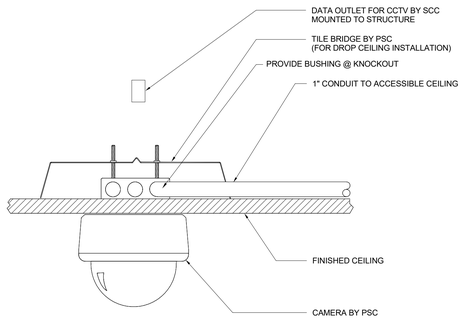
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

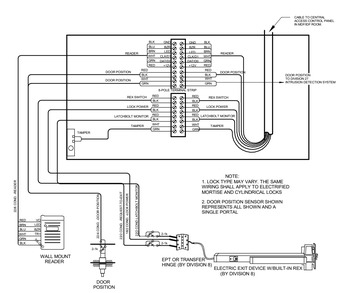


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

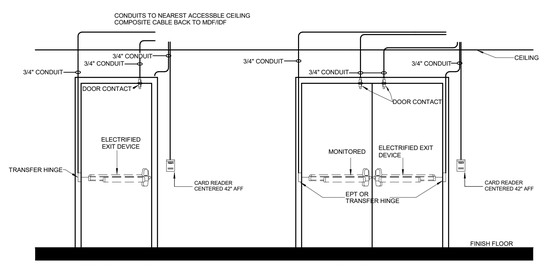
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

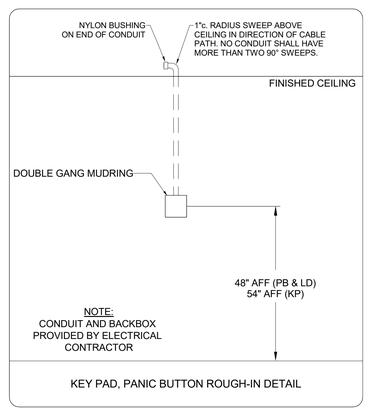
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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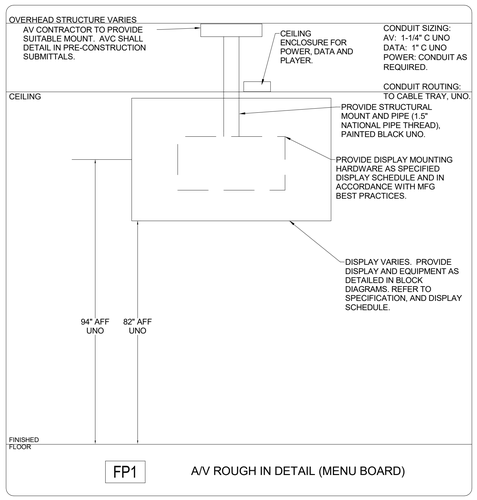
TECHNOLOGY - Austin Parkway ES - SECURITY DETAILS

a-TN.600



6 CEILING MOUNT DISPLAY - A/V ROUGH-IN DETAIL
SCALE: NTS

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TECHNOLOGY - Austin Parkway ES - AV DETAILS

a-TN.700

FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
School: b-Burton ES	
b-A-000	COVER AND INDEX
b-TN-000	TECHNOLOGY - INDEX SHEET
b-TN-100	TECHNOLOGY - OVERALL
b-TN-101	TECHNOLOGY - KITCHEN
b-TN-500	TECHNOLOGY - DETAILS
b-TN-600	TECHNOLOGY - SECURITY DETAILS



FORT BEND INDEPENDENT SCHOOL DISTRICT

WALTER MOSES BURTON ELEMENTARY SCHOOL
1625 HUNTER GREEN LANE, FRESNO, TX 77545

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DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

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Stanley Spurling & Hamilton
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Houston, Texas 77027
Phone Number: 713-776-9433

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

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AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- AV WALL ROUGH-IN WITH DATA
- KEYNOTE
- Proposed Camera Direction
  SURVEILLANCE CAMERA
  Camera Schedule Number (Floor #-Camera #)
  Camera (N)ew, (E)xisting Rough-in, (D)emo
- Proposed Camera Direction
  PTZ CAMERA
  PTZ
- Proposed Camera Direction
  FIXED SURVEILLANCE CAMERA
- 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Approximate view of lens
  Lens View Angle
  360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
  Lens size
- MICROPHONE WITH AUDIO LINKED TO CAMERA
- CARD READER LINKED TO CAMERA
- SYMBOL TAG — (#) = DIFFERENT TYPES OF CARD READERS:
  M = MULLION
  W = WIRELESS (Proprietary)
  Wi = Wi-Fi (802.11)
  POE = POWER OVER ETHERNET
- SYMBOL TAG — (#) = DIFFERENT TYPES OF CARD READERS:
  TS = TOUCHSCREEN
  PU = PUSH BUTTON
- TOP = DETAIL NUMBER
  DETAIL REFERENCE
  BOTTOM = SHEET NUMBER
- NORTH ARROW
- SHEET NUMBER
  SECTION MARKER
  DETAIL NUMBER
- DIRECTION OF ELEVATION
  ELEVATION MARKER
  SHEET NUMBER
  DETAIL NUMBER
- DIRECTION OF ELEVATION
  SHEET NUMBER
  DIRECTION OF ELEVATION
  DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Burton Elementary School
1625 Hunter Green Ln, Fresno, TX 77545

SEAL



07-18-25

MVA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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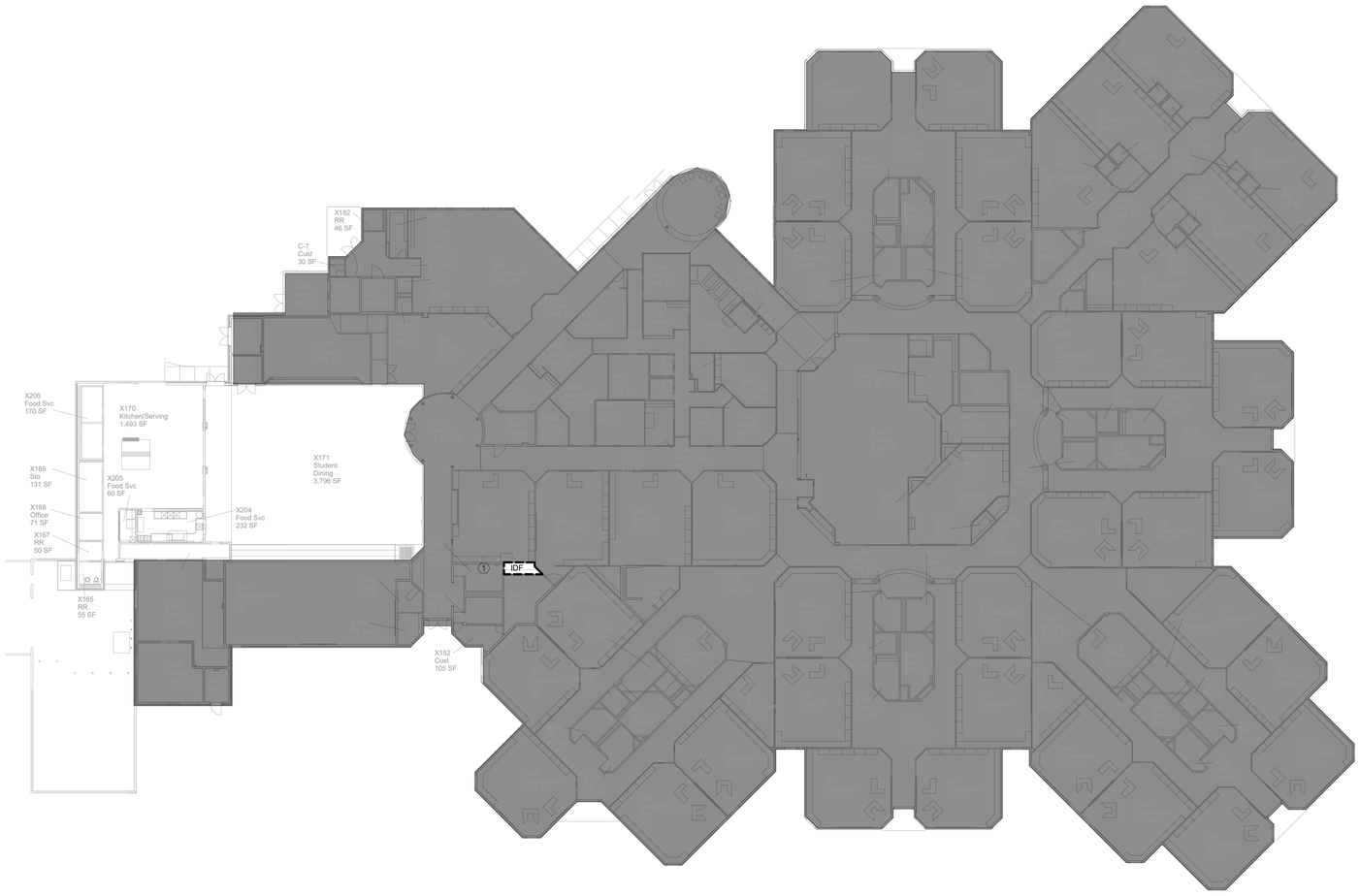
TECHNOLOGY - TITLE SHEET

b-TN000

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BURTON (OVERALL)
SCALE: 1" = 20'-0"

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BICSI ID # 256557
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TECHNOLOGY - Burton ES - OVERALL

b-TN.100

TECHNOLOGY KEYNOTES

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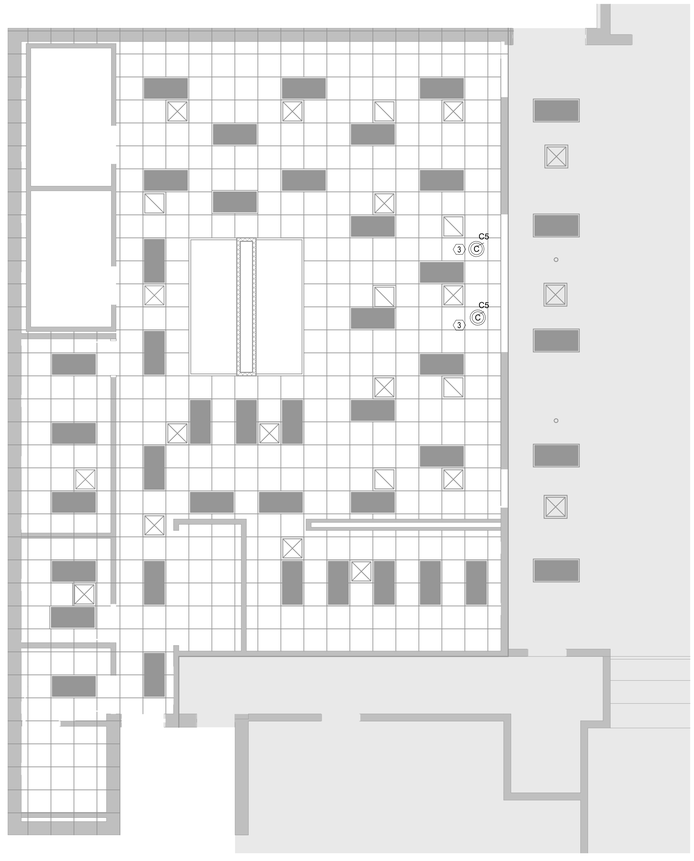
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BURTON - REFLECTED CEILING PLAN
SCALE: 3/16" = 1'-0"

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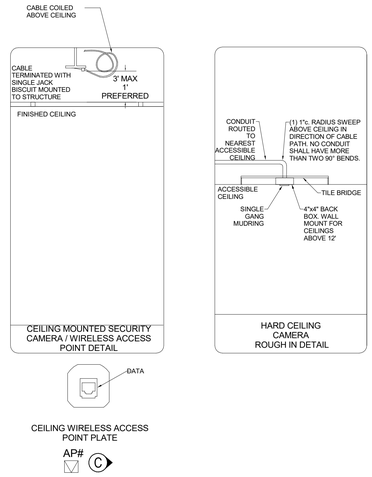
TECHNOLOGY - Burton ES - KITCHEN

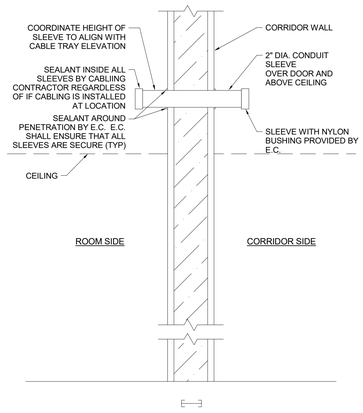
b-TN.101

GENERAL NOTE

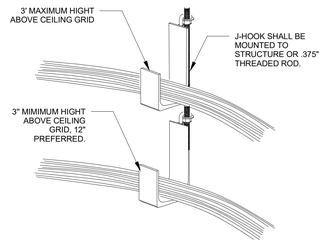
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



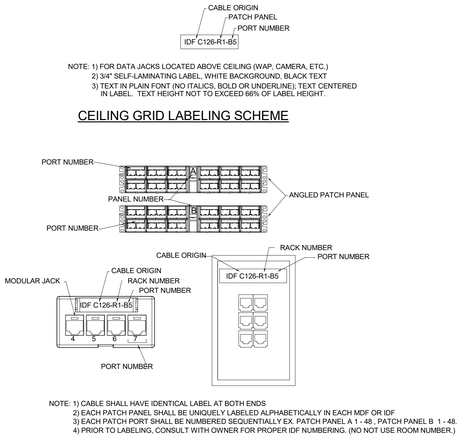
1 DATA ROUGH-IN DETAILS
SCALE: NS



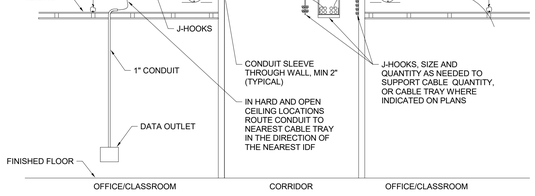
2 TYPICAL CABLING SLEEVE
SCALE: NTS



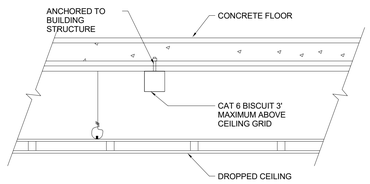
3 PANDUIT J-HOOK DETAIL
SCALE: NTS



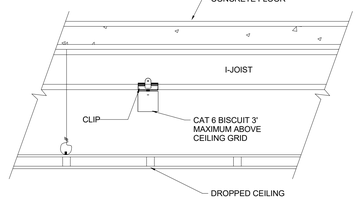
4 LABELING & CABLING SCHEMES
SCALE: NTS



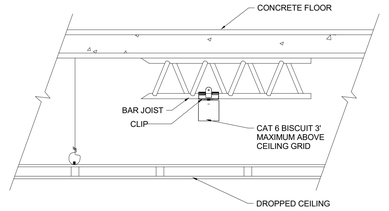
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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PROJ. NO.: 23-25
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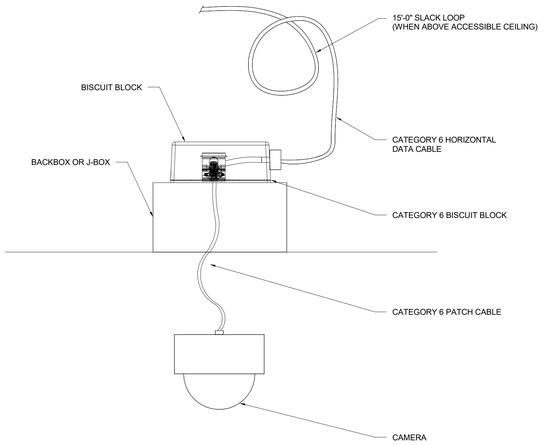
TECHNOLOGY - DETAILS

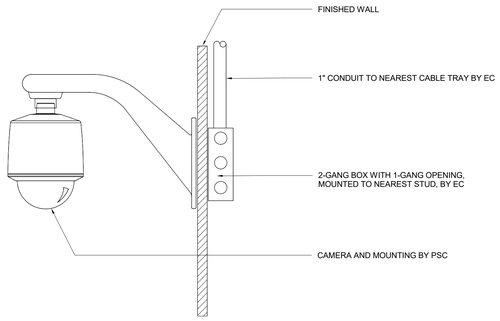
b-TN.500

GENERAL NOTES:

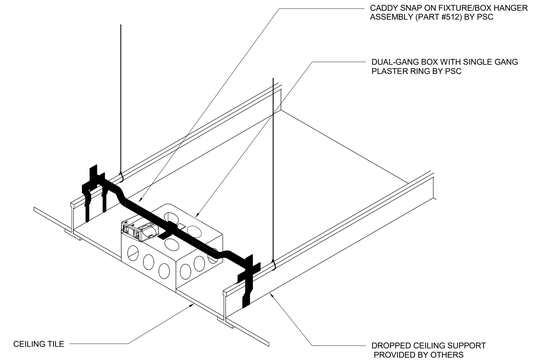
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



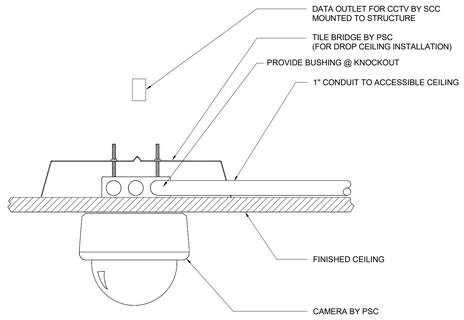
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

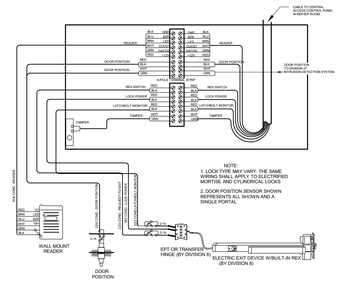


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

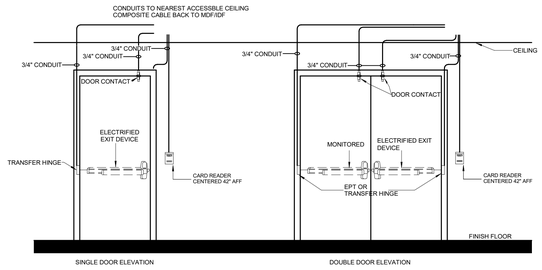
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

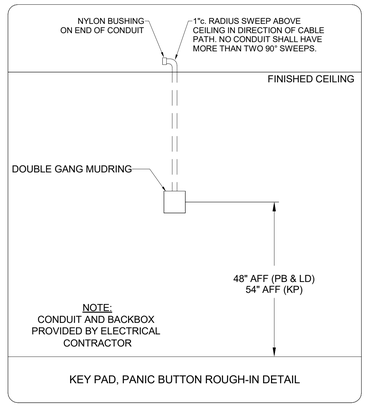
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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HOUSTON, TEXAS 77079

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TECHNOLOGY - SECURITY DETAILS

b-TN.600

FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
School: c-Colony Bend-ES	
c-A.000	COVER AND INDEX
c-TN.000	TECHNOLOGY - INDEX SHEET
c-TN.100	TECHNOLOGY - OVERALL
c-TN-101	TECHNOLOGY - KITCHEN
c-TN-500	TECHNOLOGY - DETAILS
c-TN-600	TECHNOLOGY - SECURITY DETAILS



FORT BEND INDEPENDENT SCHOOL DISTRICT

WALTER MOSES BURTON ELEMENTARY SCHOOL
1625 HUNTER GREEN LANE, FRESNO, TX 77545

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DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

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PROGRAM MANAGEMENT
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Phone Number: 713-782-8188

FOOD SERVICE
Food Design Professionals
26215 Oak Ridge Drive
The Woodlands, Texas 77380
Phone Number: 281-350-2323

MEP ENGINEERS
Stanton Engineering Group
1300 W. Sam Houston Pkwy South, Suite 121
Houston, Texas 77042
Phone Number: 713-300-9292

STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

C

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

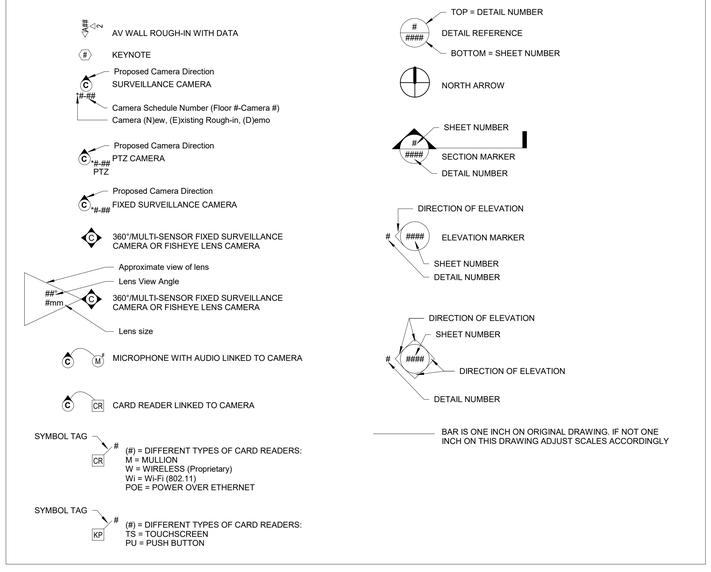
SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED



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2720 Planters St, Sugar Land, TX 77479

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c-TN000

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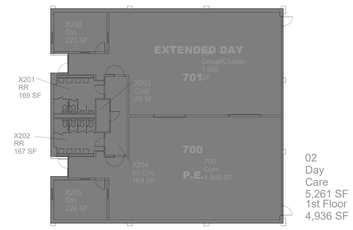
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.





1 COLONY BEND (OVERALL)
SCALE: 1" = 20'-0"

TRUENORTH A PMY COMPANY

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

C

FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Colony Bend Elementary School
2720 Planters St, Sugar Land, TX 77479

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Brian C Perez
BICSI ID # 295857
EXPIRES 12-31-27
07-18-25

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07-18-25
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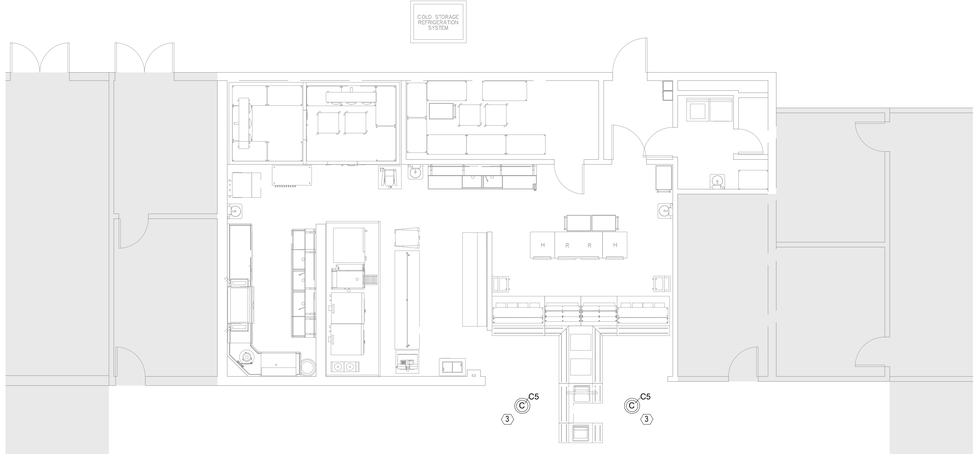
TECHNOLOGY - Colony Bend ES - OVERALL

c-TN.100

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 COLONY BEND - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

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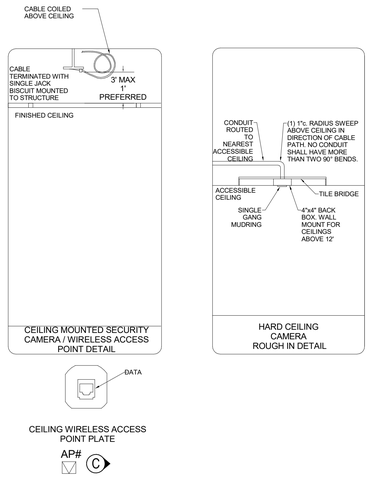
TECHNOLOGY - Colony Bend ES - KITCHEN

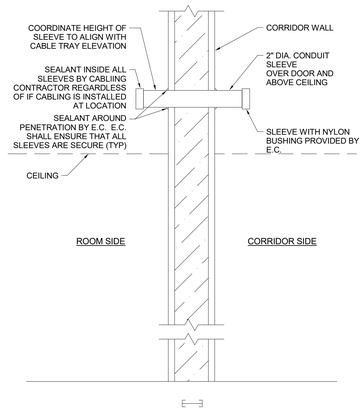
c-TN.101

GENERAL NOTE

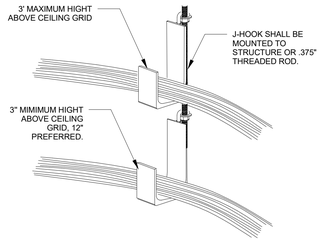
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



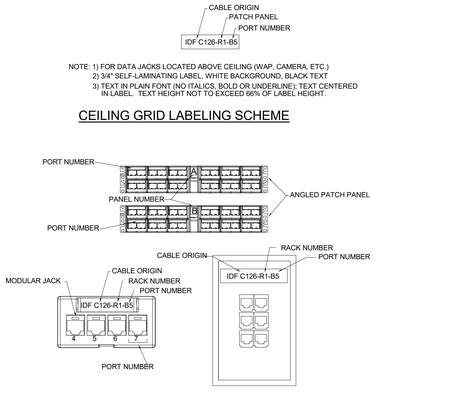
1 DATA ROUGH-IN DETAILS
SCALE: NS



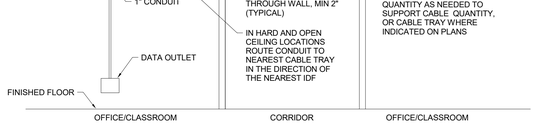
2 TYPICAL CABLING SLEEVE
SCALE: NTS



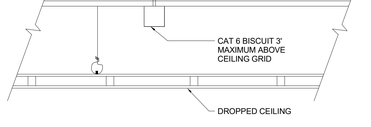
3 PANDUIT J-HOOK DETAIL
SCALE: NTS



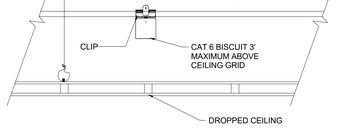
4 LABELING & CABLING SCHEMES
SCALE: NTS



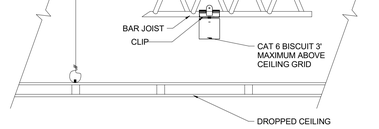
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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Colony Bend Elementary School
2720 Planters St, Sugar Land, TX 77479

SEAL

BICSI REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
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07-18-25

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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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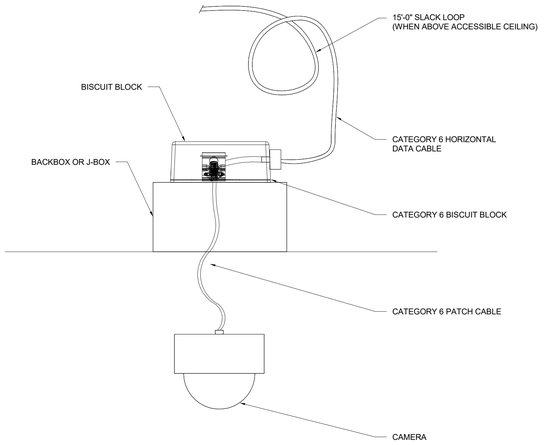
TECHNOLOGY - Colony Bend ES - DETAILS

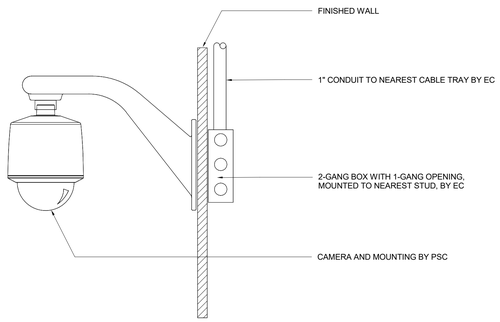
c-TN.500

GENERAL NOTES:

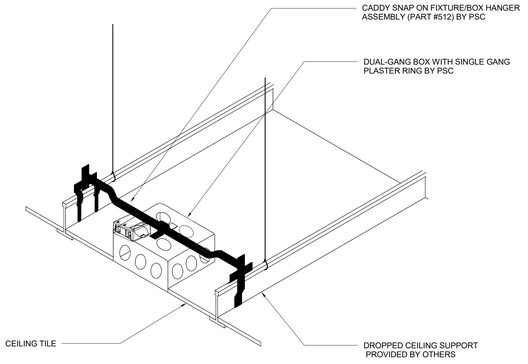
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



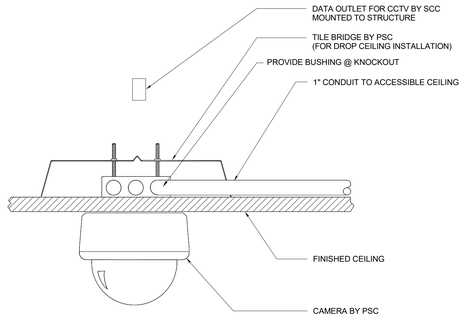
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

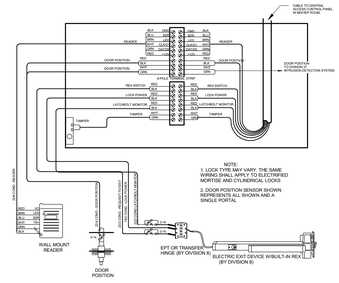


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

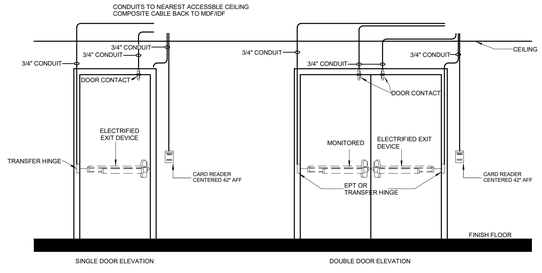
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

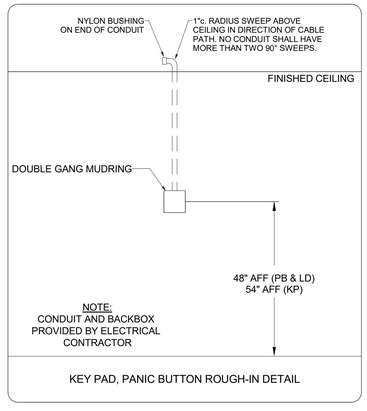
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Colony Bend Elementary School
2720 Planters St, Sugar Land, TX 77479

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
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BICSI ID # 256657
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TECHNOLOGY - Colony Bend
ES - SECURITY DETAILS

c-TN.600

FBISD BP013 KITCHEN RENOVATIONS ES

COMMONWEALTH ELEMENTARY SCHOOL
4909 COMMONWEALTH BLVD, SUGAR LAND, TX 77479

Sheet List Table	
Sheet Number	Sheet Title
School: d-Commonwealth ES	
d-A.000	COVER AND INDEX
d-A00-01	GENERAL NOTES AND ABBREVIATIONS
d-D.101	DEMO PLAN, DEMO RCP
d-A.201	OVERALL FLOOR PLAN
d-A4.01	CAFETERIA ENLARGED RCP & PLAN
d-E.200	ELECTRICAL FLOOR PLAN AND SCHEDULES
d-TN-000	INDEX SHEET
d-TN-100	TECHNOLOGY - OVERALL
d-TN-101	TECHNOLOGY - KITCHEN
d-TN-500	TECHNOLOGY - DETAILS
d-TN-600	TECHNOLOGY - SECURITY DETAILS



ISSUED FOR BIDDING AND PERMITTING - JULY 18, 2025

FORT BEND INDEPENDENT SCHOOL DISTRICT

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

KRISTIN K. TASSIN	PRESIDENT
RICK GARCIA	VICE PRESIDENT
DAVID HAMILTON	SECRETARY
ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

PROJECT DESIGN TEAM

PROGRAM MANAGEMENT
FBISD 2023 Bond Team
2323 Texas Parkway
Missouri City, TX 77489
Phone Number: 281-327-5481

ARCHITECT
MWA Architects
11767 Katy Freeway, Suite 430
Houston, Texas 77079
Phone Number: 713-782-8188

FOOD SERVICE
Food Design Professionals
26215 Oak Ridge Drive
The Woodlands, Texas 77380
Phone Number: 281-350-2323

MEP ENGINEERS
Stanton Engineering Group
1300 W. Sam Houston Pkwy South, Suite 121
Houston, Texas 77042
Phone Number: 713-300-9292

STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

d

PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.
B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.
C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.
D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.
E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.
F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL, ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.
B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.
B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.
C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.
D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY. IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.

1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.

E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.

B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT. REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.

B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED. CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.

D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

01 GENERAL NOTES

SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025) Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

03 PROJECT SCHEDULE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
COMMONWEALTH ELEMENTARY SCHOOL
4909 COMMONWEALTH BLVD
SUGAR LAND, TX 77479

SEAL

REGISTERED ARCHITECT
NOE ALMAGUER
22651
STATE OF TEXAS

7/15/2025

ARCHITECTS

ARCHITECTS
AND PLANNING
CONSULTANTS

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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

GENERAL NOTES AND ABBREVIATIONS

A00-01

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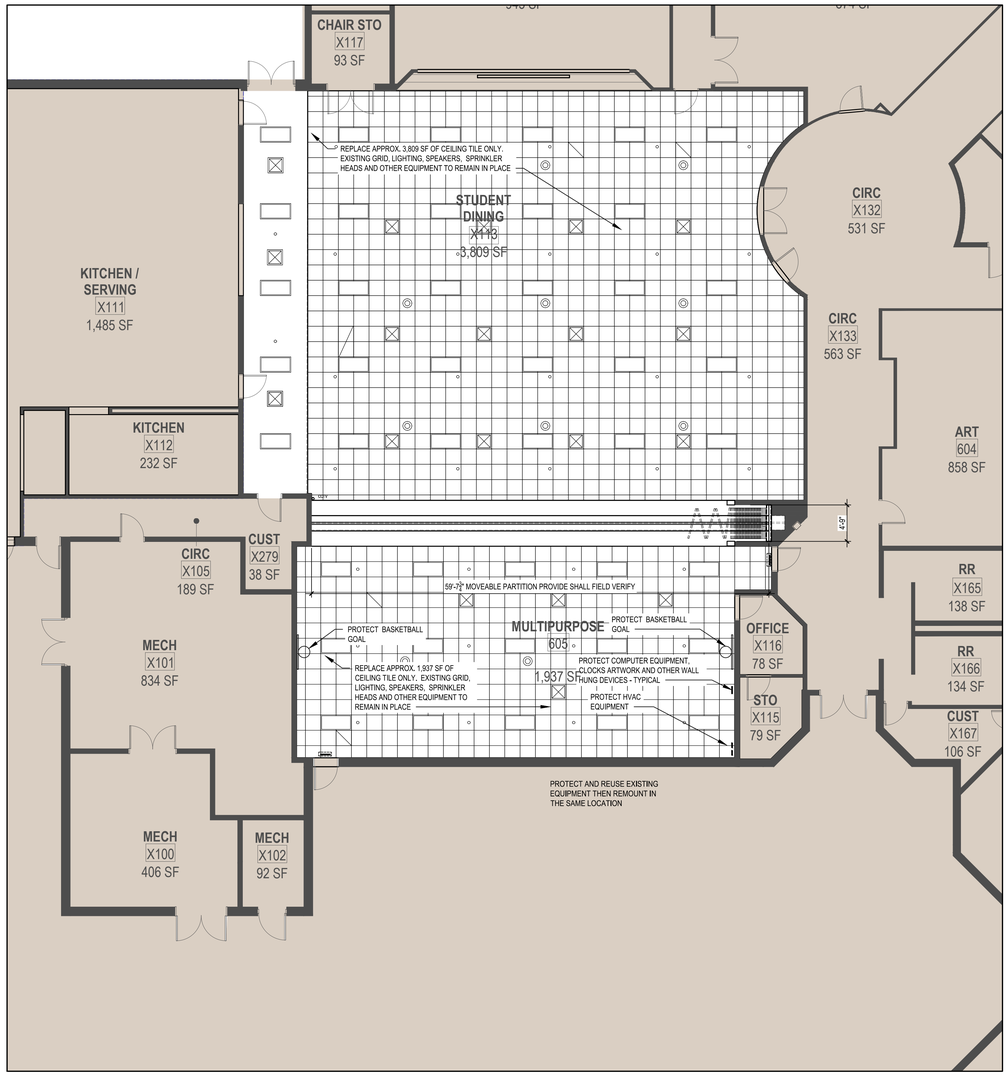
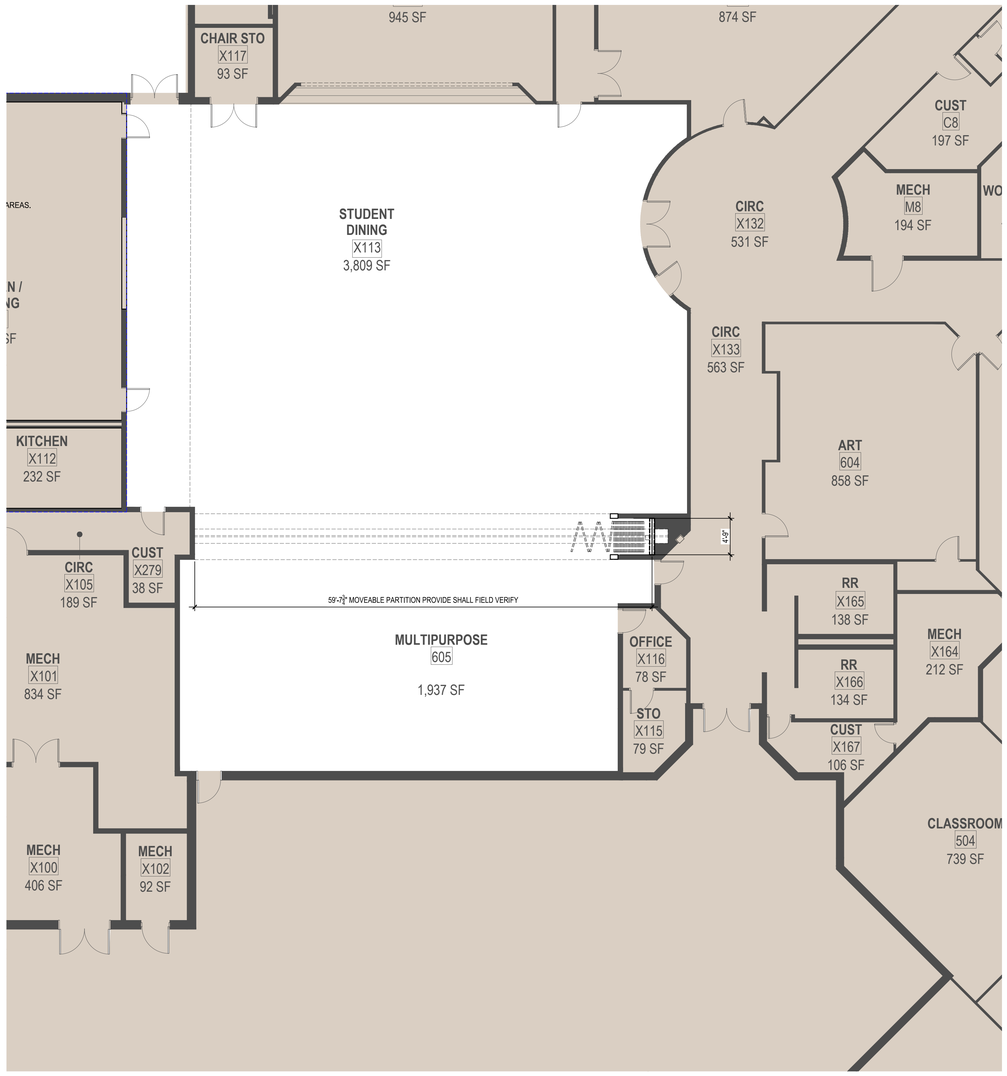


2 DEMO REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0"



1 DEMO PLAN

SCALE: 1/8" = 1'-0"

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FORT BEND INDEPENDENT SCHOOL DISTRICT
COMMONWEALTH ELEMENTARY SCHOOL
4909 COMMONWEALTH BLVD
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SEAL

7/15/2025

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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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DEMO PLAN, DEMO RCP

d-D.101

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Project Information

PROJECT: COMMONWEALTH ELEMENTARY SCHOOL
LOCATION: 4909 COMMONWEALTH BLVD
SUGAR LAND, TX 77479

REVISED SCOPE OF WORK: REPLACE CEILING TILE IN GYMNASIUM AND CAFETERIA AREAS, REPLACE DAMAGED MOVEABLE PARTITION PANELS. SCOPE REVISION DATED 08/20/24

City of Sugar Land Adopted Building Codes

2021 INTERNATIONAL BUILDING CODE (AS AMENDED)
2021 INTERNATIONAL FIRE CODE (AS AMENDED)
2021 INTERNATIONAL MECHANICAL CODE (AS AMENDED)
2021 INTERNATIONAL PLUMBING CODE (AS AMENDED)
2021 INTERNATIONAL FUEL GAS CODE (AS AMENDED)
2023 NATIONAL ELECTRICAL CODE *PER STATE OF TEXAS ADOPTION. (AS AMENDED)
2021 INTERNATIONAL ENERGY CONSERVATION CODE
2021 EXISTING BUILDING CODE (AS AMENDED)

* ALTHOUGH THE CITY OF SUGARLAND HAS ADOPTED THE 2021 NATIONAL ELECTRIC CODE, THE STATE OF TEXAS HAS ADOPTED THE 2023 NATIONAL ELECTRICA CODE, THEREFORE THE CITY ENFORCES CODE COMPLIANCE WITH THIS NEWER CODE.

Chapter 3 - Use and Occupancy Classification

GROUP E (EDUCATIONAL - IBC 2021 SECTION 305)
EXISTING ELEMENTARY SCHOOL, FULLY SPRINKLERED BUILDING, PER 302.1

Chapter 5 - General Building Heights and Area

ALLOWABLE BUILDING HEIGHT:
TWO STORIES W/ 55 FT MAX. HEIGHT FOR GROUP E
(AS ALLOWED BY TABLE 504.3)

EXISTING BUILDING HEIGHT PROVIDED:
HEIGHT TO HIGHEST ROOF: 36'-0"

INCIDENTAL USE SEPARATION:
SEPARATIONS REQUIRED: INCIDENTAL USE AREAS, AS PER TABLE 509.4, STORAGE ROOMS OVER 100 S.F. ARE REQUIRED TO BE ONE HOUR RATED OR HAVE AUTOMATIC FIRE EXTINGUISHING SYSTEM.

INCIDENTAL USE ROOM AREAS PROVIDED WITH EXISTING AUTOMATIC SPRINKLER SYSTEM.

TOTAL EXISTING BUILDING AREA IS 80,729 SF.

Chapter 6 - Construction Type Fire Resistance Ratings

EXISTING CONSTRUCTION: TYPE IIB

TABLES 601 AND 602

BUILDING ELEMENTS	REQUIRED (FOR TYPE IIB)	PROVIDED
STRUCTURAL FRAME (TABLE 601)	NO RATING	NO RATING
EXTERIOR BEARING WALLS (TABLE 601)	NO RATING	NO RATING
INTERIOR BEARING WALLS (TABLE 601)	NO RATING	NO RATING
EXTERIOR NON-BEARING WALLS (TABLE 602)	NO RATING	NO RATING (WALLS GREATER THAN 30' FROM PROPERTY LINE)
INTERIOR NON-BEARING WALLS (TABLE 601)	NO RATING	NO RATING
FLOOR CONSTRUCTION (TABLE 601)	NO RATING	NO RATING
ROOF CONSTRUCTION (TABLE 601)	NO RATING	NO RATING

Chapter 9 - Fire Protection Systems

AUTOMATIC SPRINKLER SYSTEM: EXISTING SPRINKLER SYSTEM PROVIDED THROUGHOUT.

Chapter 29 - Plumbing

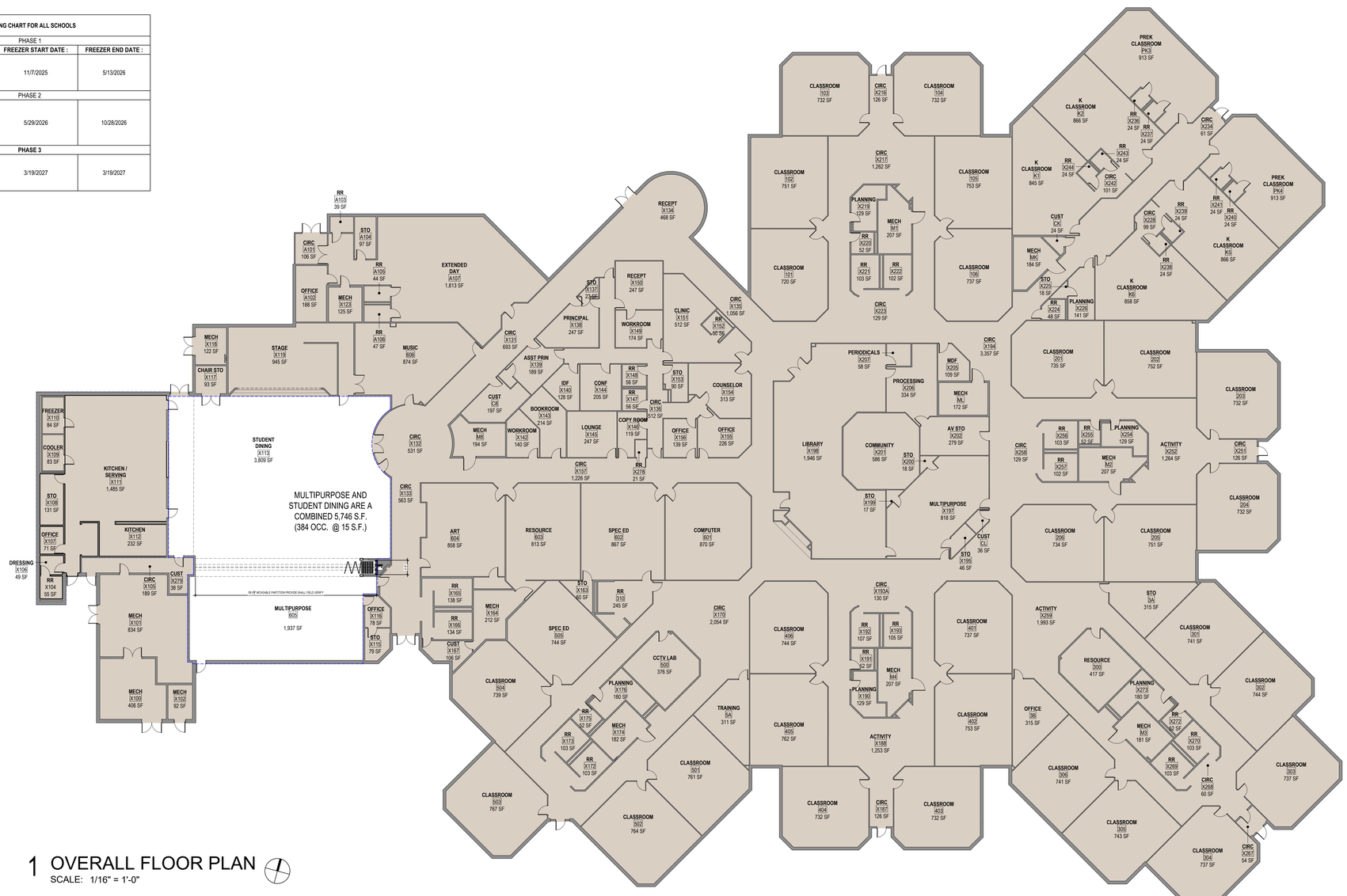
Fixture Count per Table 2902.1
Occupant Load Basis:

12 Occupants

	Total Fixtures REQUIRED	Total Fixtures PROVIDED
Unisex:		
W.C.	1 per 50	1
lavatories	1 per 50	1
Drinking Fountains	1 per 100	2

2 CODE ANALYSIS

PHASING CHART FOR ALL SCHOOLS		
PHASE 1		
SCHOOLS	**FREEZER START DATE :**	**FREEZER END DATE :**
AUSTIN PARKWAY ES	11/7/2025	5/13/2026
SUGAR MILL ES		
COMMONWEALTH ES		
CONERSTONE ES		
PHASE 2		
SETTLERS WAY ES	5/29/2026	10/28/2026
PALMER ES		
SULLIVAN ES		
SIENNA CROSSING ES		
HERITAGE ROSE ES		
PHASE 3		
HUNTERS GLEN ES	3/19/2027	3/19/2027
PECAN GROVE ES		
HIGHLANDS ES		
DULLES ES		



1 OVERALL FLOOR PLAN

SCALE: 1/16" = 1'-0"

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4909 COMMONWEALTH BLVD
SUGAR LAND, TX 77479

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OVERALL FLOOR PLAN

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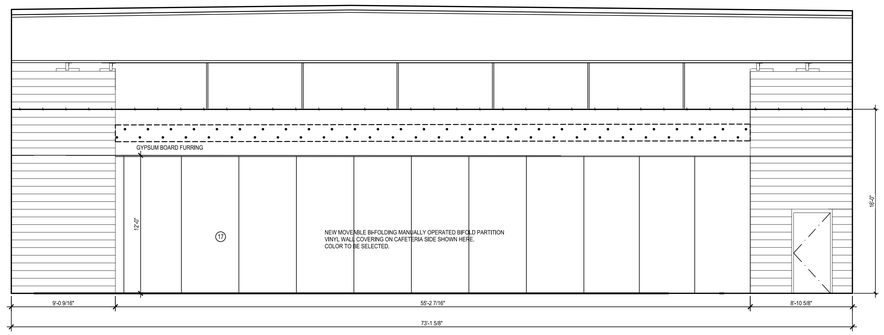
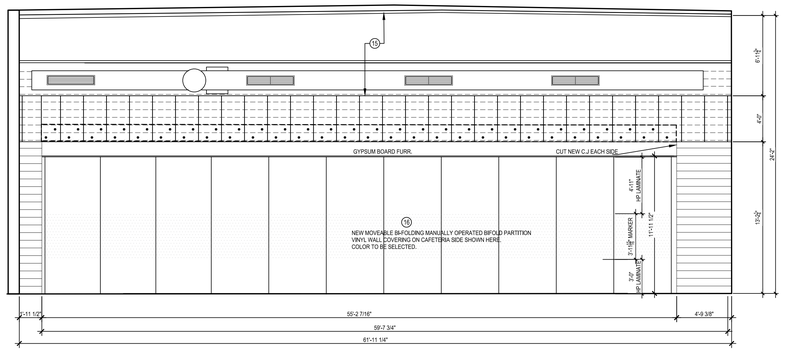
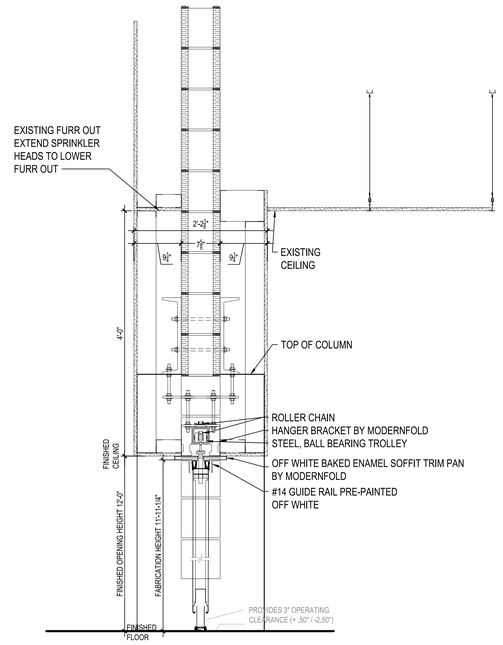


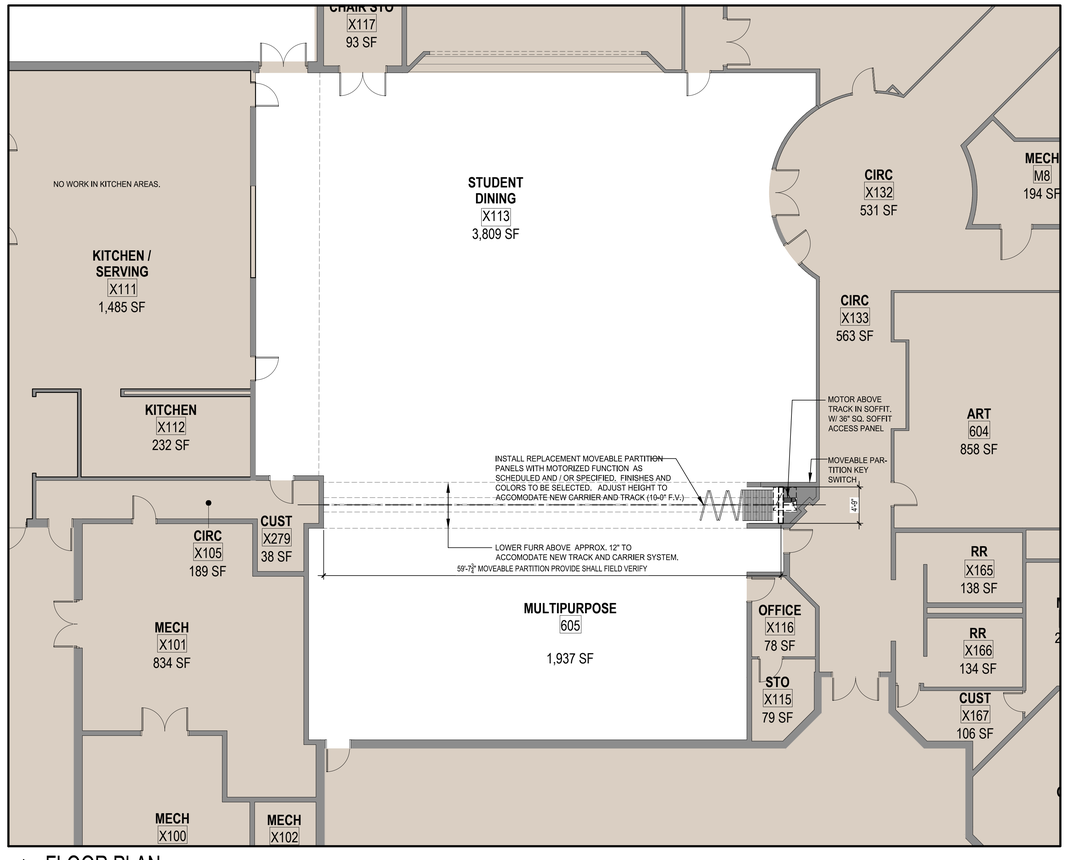
4 CAFETERIA SIDE OF WALL (NEW CONSTRUCTION)
SCALE: 3/16" = 1'-0"



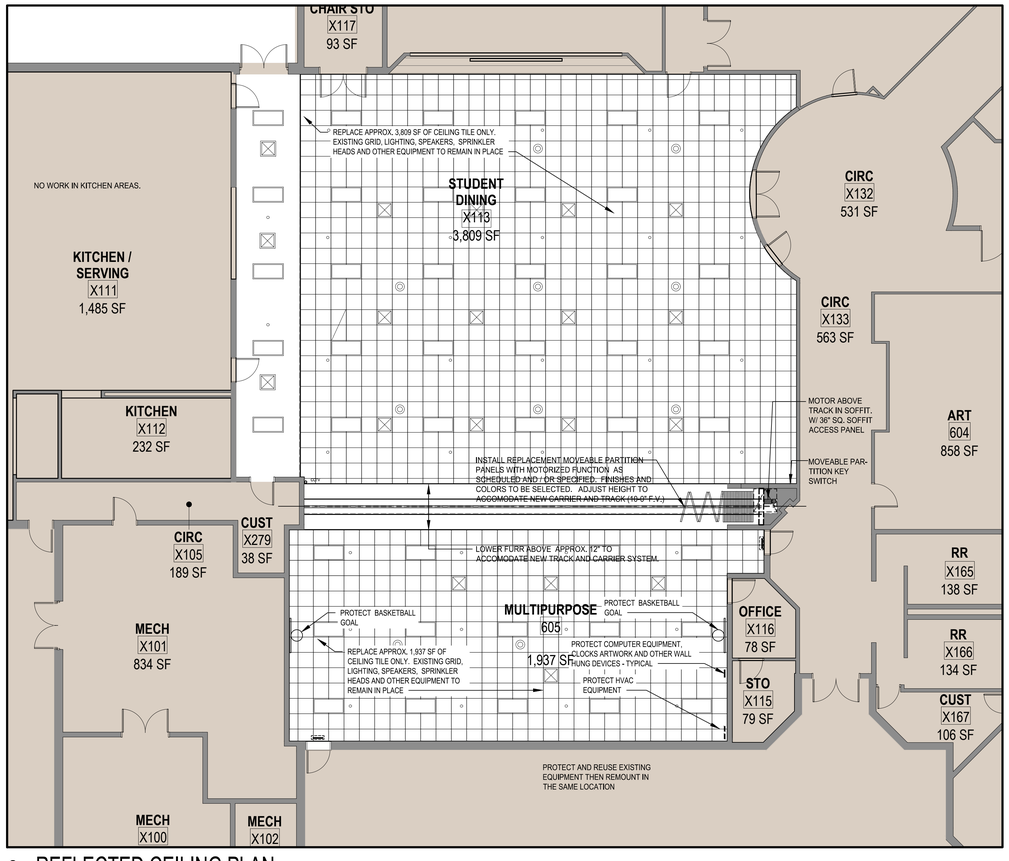
5 GYM SIDE OF WALL (NEW CONSTRUCTION)
SCALE: 3/16" = 1'-0"



3 SECTION AT FOLDING PARTITION
SCALE: 1"=1'-0"



1 FLOOR PLAN
SCALE: 1/8"=1'-0"



2 REFLECTED CEILING PLAN
SCALE: 1/8"=1'-0"

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FORT BEND INDEPENDENT SCHOOL DISTRICT
COMMONWEALTH ELEMENTARY SCHOOL
4909 COMMONWEALTH BLVD
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS
AND PLANNING
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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DATE: 07/18/25
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CAFETERIA
ENLARGED RCP &
PLAN
D-A4.01

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SYMBOL LEGEND

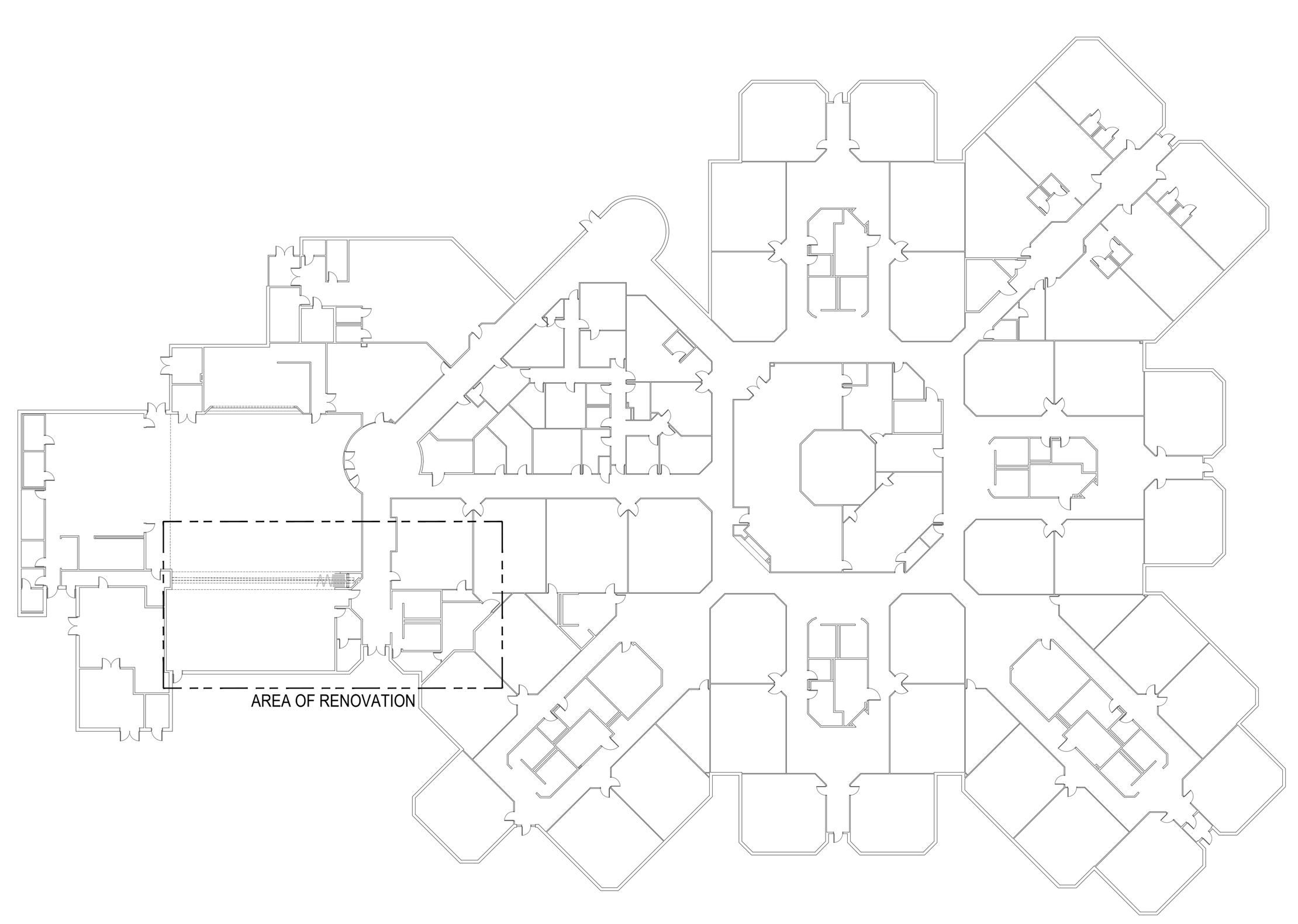
Symbol	Description
(simplex/duplex/quad receptacle)	SIMPLEX/DUPLEX/QUAD – 5361/2 REC
GFI	DUPLEX W/ GFCI PROTECTION–P&S 2097
J	J-BOX
J (boxed)	CEILING MOUNTED J-BOX
(motor)	MOTOR
(disconnect)	HEAVY DUTY, NON-FUSED DISCONNECT. MIN RATING OF CIRCUIT OCPD/VOLTAGE.
(panel)	ELECTRICAL PANEL
(arrow)	HOMERUN TO CIRCUIT NOTED
E	EXISTING DEVICES TO REMAIN
R	EXISTING DEVICES TO BE RELOCATED
D	EXISTING DEVICES TO BE DEMO/REMOVED
REP	EXISTING DEVICES TO BE REPLACED
S	INDICATES SURFACE MOUNTED
SR	INDICATES SURFACE RACEWAY
*	INDICATES ABOVE COUNTER DEVICE
+	INDICATES DEVICE AT +30–60"
++	INDICATES DEVICE AT +80–96"
CLG	INDICATES DEVICES MOUNTED IN CEILING
WP	INDICATES WEATHERPROOF COVER
3R	INDICATES 3R RATED DEVICE
(E)LA–X	CONNECT(ED) TO EXIST CIRCUIT LA–X
(D)LA–X	DEMO PORTION OF EXIST CIRCUIT LA–X
(N)LA–X	CONNECT(ED) TO NEW CIRCUIT LA–X

GENERAL ELECTRICAL NOTES:

1. INSTALL SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ALL AMENDMENTS.
2. PROVIDE CONDUIT FOR ALL DEVICES INSTALLED IN WALLS.
   - 2.A. 3/4"C FOR POWER AND 1"C FOR LOW VOLTAGE/DATA UNLESS NOTED OTHERWISE.
   - 2.B. PROVIDE PROTECTIVE BUSHING ON END OF ALL LOW VOLTAGE CONDUITS.
   - 2.C. ALL ELECTRICAL HOMERUNS SHALL BE IN CONDUIT, MIN 3/4"C.
   - 2.D. USE INSULATED THROAT FITTINGS FOR CONNECTIONS TO HOUSINGS, BOXES, ENCLOSURES, ETC.
   - 2.E. MAX LENGTH FOR FLEX CONDUIT SHALL BE 6FT AND MIN. SIZE SHALL BE 1/2". ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
3. CONDUIT TYPES:
   - 3.A. INSIDE BUILDINGS: GALVANIZED STEEL EMT.
     - 3.A.A. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT IN EXPOSED CEILING AREAS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
     - 3.A.B. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT ABOVE INACCESSIBLE CEILINGS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
   - 3.B. NO MC CABLE SHALL BE ALLOWED.
   - 3.C. PROVIDE FLEXIBLE CONNECTIONS TO MOTORS, PUMPS, TRANSFORMERS, OR SIMILAR EQUIPMENT.
4. PROVIDE GALVANIZED STEEL, ONE-PIECE CONSTRUCTION, OUTLET BOXES IN ALL CASES SUITABLE FOR INTENDED USE.
   - 4.A. BOXES OUTSIDE SHALL BE STEEL NEMA 3 TYPE.
   - 4.B. PROVIDE CEILING BRACKET TO SUPPORT CEILING MOUNTED DEVICES FROM CEILING TEES.
5. 20 AMP, SINGLE PHASE BRANCH CIRCUITS SERVING LIGHTING AND GENERAL RECEPTACLES MAY BE GROUPED IN A SINGLE RACEWAY PROVIDED A NEUTRAL CONDUCTOR IS INSTALLED FOR EACH CIRCUIT REQUIRING A NEUTRAL.
   - 5.A. DO NOT INSTALL MORE THAN FOUR CURRENT CARRYING CONDUCTORS IN A CONDUIT EXCEPT SIX #12 OR #10 CURRENT CARRYING CONDUCTORS MAY BE INSTALLED IN 3/4" OR LARGER CONDUIT FOR 20A CIRCUITS.
   - 5.B. DO NOT INSTALL 480/277 VOLT CONDUCTORS IN THE SAME CONDUIT WITH 240/208/120 VOLT CONDUCTORS.
   - 5.C. DO NOT COMBINE NEUTRALS. PROVIDE DEDICATED NEUTRALS FOR EACH BRANCH CIRCUIT.
   - 5.D. MULTIPLE DEVICES ON A CIRCUIT SUCH AS RECEPTACLES SHALL BE WIRED WITH A PIGTAIL SO THE DEVICE DOES NOT PROVIDE THE CONTINUITY PATH. FEED THROUGH CONNECTIONS FOR GFCI RECEPTACLES SHALL NOT BE USED FOR PROTECTION OF DOWNSTREAM DEVICES.
6. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
7. PROVIDE J-BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM, SOUND SYSTEM, LOW VOLTAGE WIRING, ETC. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF ALL LOW VOLTAGE CONDUITS.
8. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS. ALL JUNCTION/PULL BOXES INSTALLED ABOVE ACCESSIBLE CEILINGS SHALL BE MOUNTED SO THAT THE ACCESS PANEL IS NO HIGHER THAN 18" ABOVE THE CEILING.
9. PROVIDE CIRCUIT LABELS IN PERMANENT MARKER ON ALL NEW AND EXISTING J-BOX COVERS UTILIZED IN THE AREA OF RENOVATION.
10. PROVIDE CIRCUIT LABEL ON ALL ABOVE CEILING J-BOXES, EQUIPMENT, ETC. IDENTIFYING THE CIRCUITS CONTAINED/CONNECTED.
11. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12.
    - 11.A. TYPICAL BUILDING WIRE SHALL BE STRANDED TYPE THHN, THWN-2 (WET RATED FOR 90°C), OR XHHW-2. MINIMUM WIRE SIZE SHALL BE #12.
    - 11.B. ALL BUILDING WIRE SHALL BE COLOR CODED WITH THE SAME COLOR CONNECTED TO THE SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION MATCHING THE EXISTING BUILDING COLOR CODE SCHEME.
12. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEAL PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO COOLER SECTIONS.
13. DRAWINGS, SCHEDULES, NOTES, AND DETAILS ARE INTENDED TO BE COMPLIMENTARY. ANY WORK DESCRIBED IN ANY OF THEM, WILL BE WORK REQUIRED UNDER THIS CONTRACT. WHERE THERE IS A CONFLICT BETWEEN DIFFERENT PORTIONS OF THE DESIGN DOCUMENTS IT SHALL BE CLARIFIED BY RFI. BARRING CLARIFICATION PRIOR TO BIDDING THE MOST EXPENSIVE OPTION SHALL BE INCLUDED AND CLARIFICATION SHALL BE MADE DURING CONSTRUCTION.
14. SHOULD ANY WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS BE IN VIOLATION OF ANY FEDERAL, STATE, COUNTY OR CITY LAWS, ORDINANCE OR REGULATION, THOSE LAWS AND REGULATIONS SHALL PREVAIL, AND SHALL BE COMPLIED WITH BY THE CONTRACTOR AS A PART OF THIS WORK WITH NO EXTRA COMPENSATION.
15. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

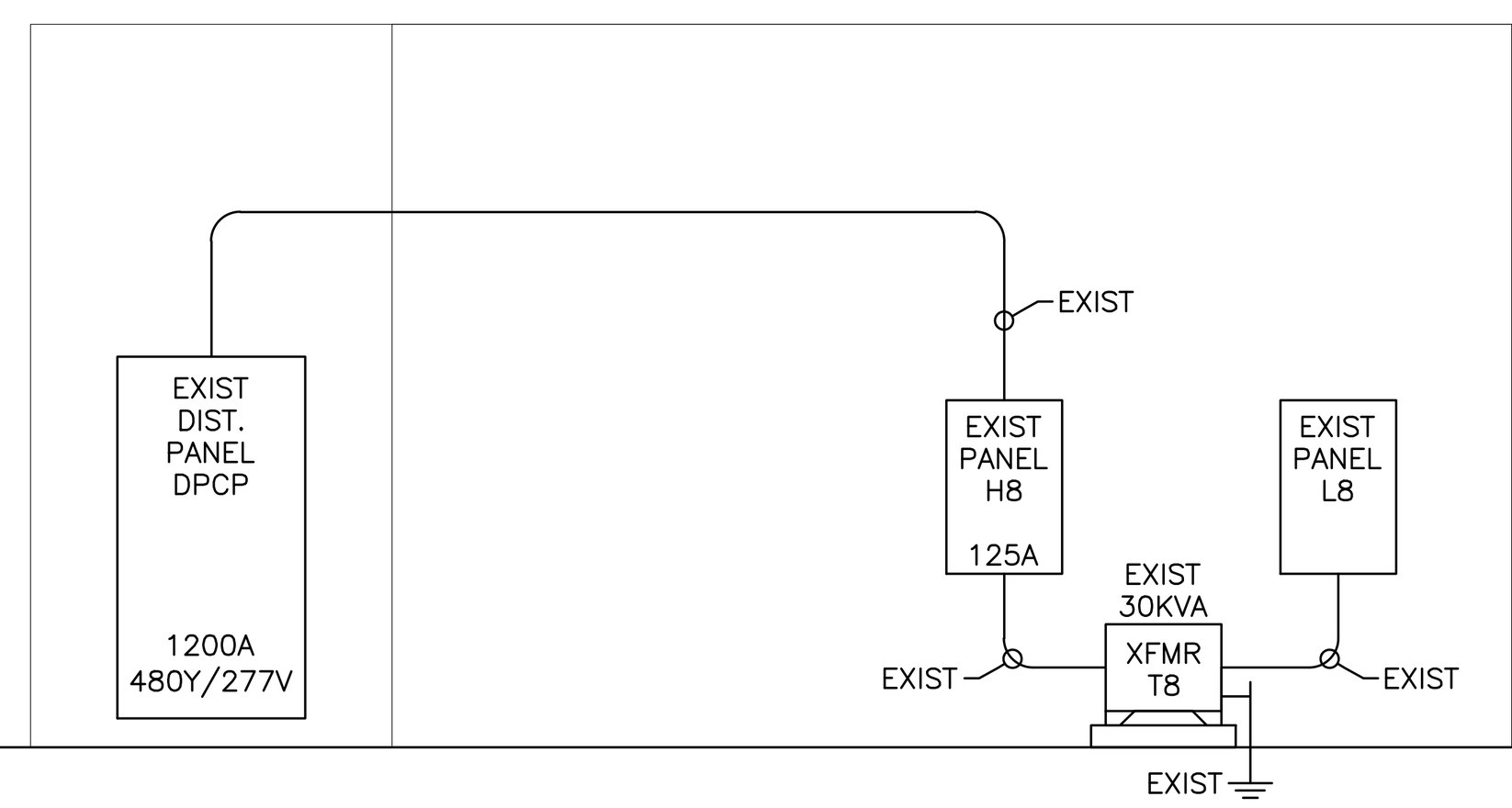
GENERAL RENOVATION AND REMODELING NOTES:

1. THESE ELECTRICAL DRAWINGS ONLY SHOW SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J-BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
2. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
3. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. RESUPPORT EXISTING CABLING/CONDUIT TO REMAIN TO MEET CURRENTLY ADOPTED CODE REQUIREMENTS. REMOVE ALL ABANDONED CONDUIT AND WIRE. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITIES.
4. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
5. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
6. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
7. ANY CIRCUIT OR PARTIAL CIRCUIT TO REMAIN OR BE REUSED SHALL REMAIN ACTIVE.
8. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
9. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
10. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN AS-BUILT PANEL SCHEDULE FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT USING BUILDING ROOM NUMBERS.



2 OVERALL FLOOR PLAN

SCALE: 1" = 50'- 0"



3 PARTIAL ELECTRICAL RISER - COMMONWEALTH ES

NO SCALE

NOTES:

1. FIELD VERIFY ALL EXISTING ELECTRICAL PANELS AND FEEDERS SHOWN ON DRAWINGS.
2. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
3. ALL OUTAGES SHALL BE SCHEDULED/CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
4. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.
5. REFERENCE PANEL SCHEDULES AND SHORT CIRCUIT TABLE FOR AIC AND SCCR VALUES.

MECH X164

(E)PANEL H8 — 1025A MCB, 480Y/277V, 3Ø, 4 WIRE — AVAILABLE FAULT: <14,000A — SCCR & AIC: 14,000A — MOUNTING: SURFACE

NOTES	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	NOTES
	540	EXIST CIRCUIT	EXIST	20/1	1				2	15/3	EXIST	AHU-1	6316	
	540	EXIST CIRCUIT	EXIST	20/1	3				4	–	–	(5 HP)	–	
	540	EXIST CIRCUIT	EXIST	20/1	5				6	–	–	–	–	
	14498	TRANSFORMER T8	EXIST	50/3	7				8	15/3	EXIST	OAHU-1	2493	
	–	(30KVA, PANEL L8)	–	–	9				10	–	–	(1.5 HP)	–	
	–	–	–	–	11				12	–	–	–	–	
		SPACE			13				14			SPACE		
		SPACE			15				16			SPACE		
		SPACE			17				18			SPACE		
		SPACE			19				20			SPACE		
		SPACE			21				22			SPACE		
		SPACE			23				24			SPACE		
		SPACE			25				26			SPACE		
		SPACE			27				28			SPACE		
		SPACE			29				30			SPACE		
		SPACE			31				32			SPACE		
		SPACE			33				34			SPACE		
		SPACE			35				36			SPACE		
		SPACE			37				38			SPACE		
		SPACE			39				40			SPACE		
		SPACE			41				42			SPACE		

TOTAL LOAD @ 100% = 24927VA — TOTAL LOAD @ 100% = 30A — TOTAL LOAD @ 125% = 37A

1. THE EXISTING 125A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.

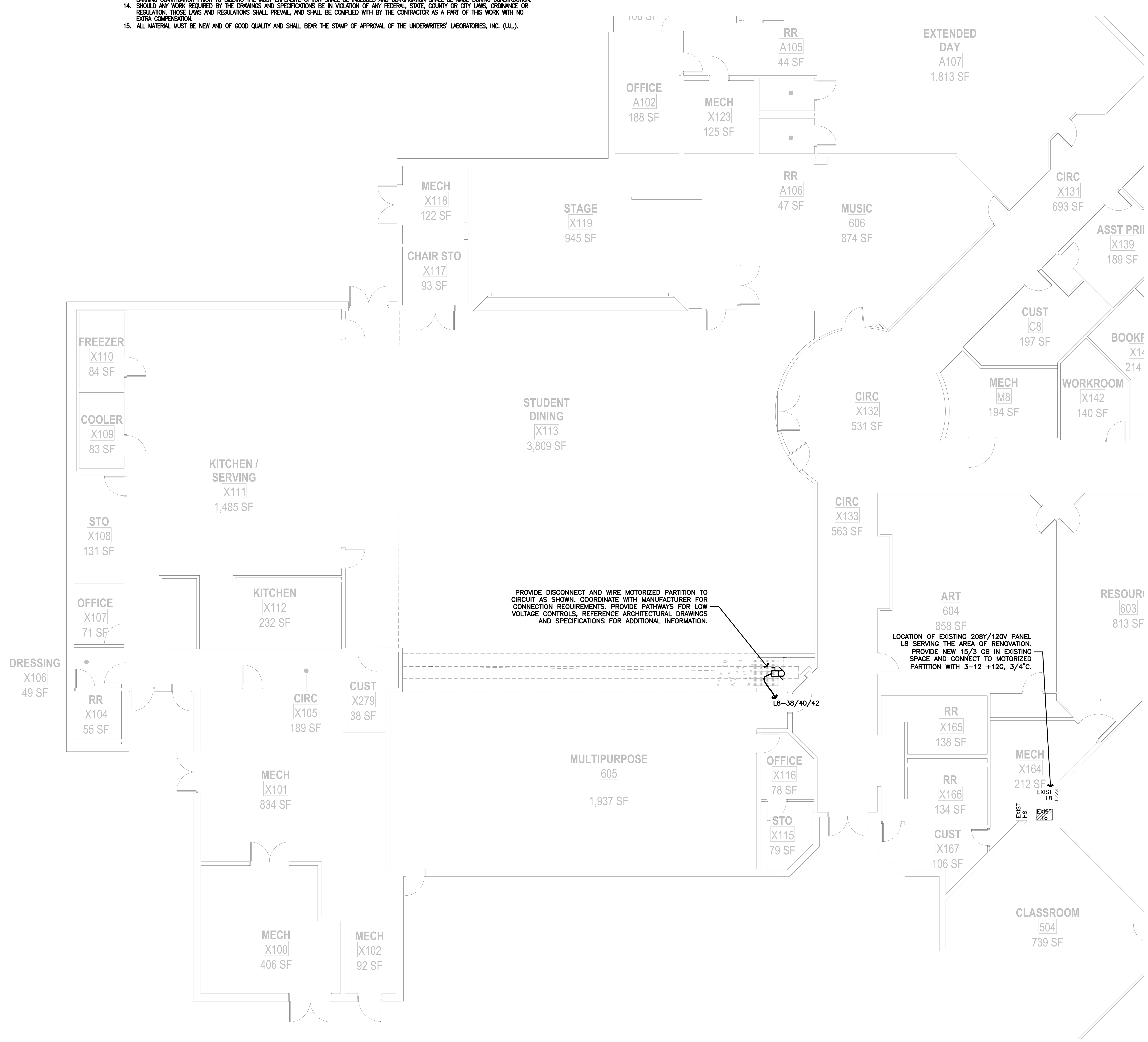
MECH X164

(E)PANEL L8 — 100A MCB, 208Y/120V, 3Ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: SURFACE

NOTES	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	NOTES
	540	RECEPTACLES	EXIST	20/1	1				2	20/1	EXIST	RECEPTACLES	540	
	720	COMPUTER RECEPTACLES	EXIST	20/1	3				4	20/1	EXIST	RECEPTACLES	540	
	900	RECEPTACLES	EXIST	20/1	5				6	20/1	EXIST	COMPUTER RECEPTACLES	720	
	720	GYM OFFICE RECEPTACLES	EXIST	20/1	7				8	20/1	EXIST	COMPUTER RECEPTACLES	540	
	1080	GYM RECEPTACLES	EXIST	20/1	9				10	20/1	EXIST	COMPUTER RECEPTACLES	360	
	500	EDF	EXIST	20/1	11				12	20/1	EXIST	COMPUTER RECEPTACLES	360	
	500	EDF	EXIST	20/1	13				14	20/1	EXIST	COMPUTER RECEPTACLES	540	
		EXIST SPARE		20/1	15				16	20/1	EXIST	RECEPTACLES	900	
		EXIST SPARE		20/1	17				18	20/1	EXIST	RECEPTACLES 602	900	
	250	EMS	EXIST	20/1	19				20	20/1	EXIST	EF-1F	260	
		EXIST SPARE		20/1	21				22	20/1	EXIST	DOOR HOLDER	800	
		EXIST SPARE		20/1	23				24	20/1	EXIST	FIRE/SMOKE DAMPERS	300	
		EXIST SPARE		20/1	25				26	20/1	EXIST	FIRE/SMOKE DAMPERS	300	
		EXIST SPARE		20/1	27				28	20/1	EXIST	EXIST CIRCUIT	500	
		EXIST SPARE		20/1	29				30			SPACE		
		SPACE			31				32			SPACE		
		SPACE			33				34			SPACE		
		SPACE			35				36			SPACE		
		SPACE			37				38	15/3	3-12	MOTORIZED PARTITION – CAFE	1728	2
		SPACE			39				40	–	+12G	–	–	
		SPACE			41				42	–	3/4"C	–	–	

TOTAL LOAD @ 100% = 14498VA — TOTAL LOAD @ 100% = 40A — TOTAL LOAD @ 125% = 50A

1. THE EXISTING 100A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. PROVIDE NEW CIRCUIT BREAKER IN EXISTING SPACE AND WIRE CIRCUIT AS SHOWN.



1 ELECTRICAL RENOVATION PLAN

SCALE: 1/8" = 1'- 0"

ISSUE:

Date	Issue
12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
COMMONWEALTH ELEMENTARY SCHOOL
4909 COMMONWEALTH BLVD
SUGAR LAND, TX 77479

SEAL

STATE OF TEXAS — GEORGE L. STANTON — 38582 — REGISTERED PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

STANTON ENGINEERING GROUP
INFO@STANTON-ENG.COM (713) 300-9292 | TEXAS ENG. FIRM REG NO. F-016332 |
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PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL FLOOR PLAN & SCHEDULES

d-E.200

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

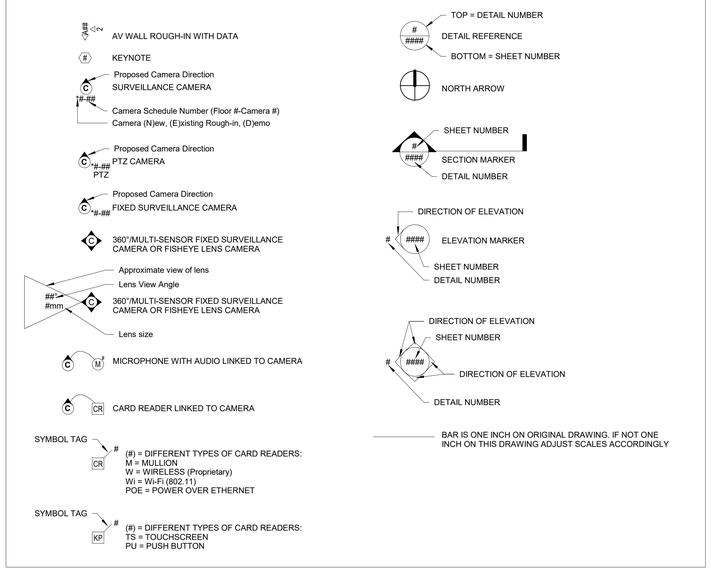
SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED



TRUENORTH A PMY COMPANY

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FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Commonwealth Elementary School
4909 Commonwealth Blvd, Sugar Land, TX 77479

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Brian C Porter
BICSI ID # 256587
EXPIRES 12-31-27

07-18-25

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PROJ. NO.: 23-25
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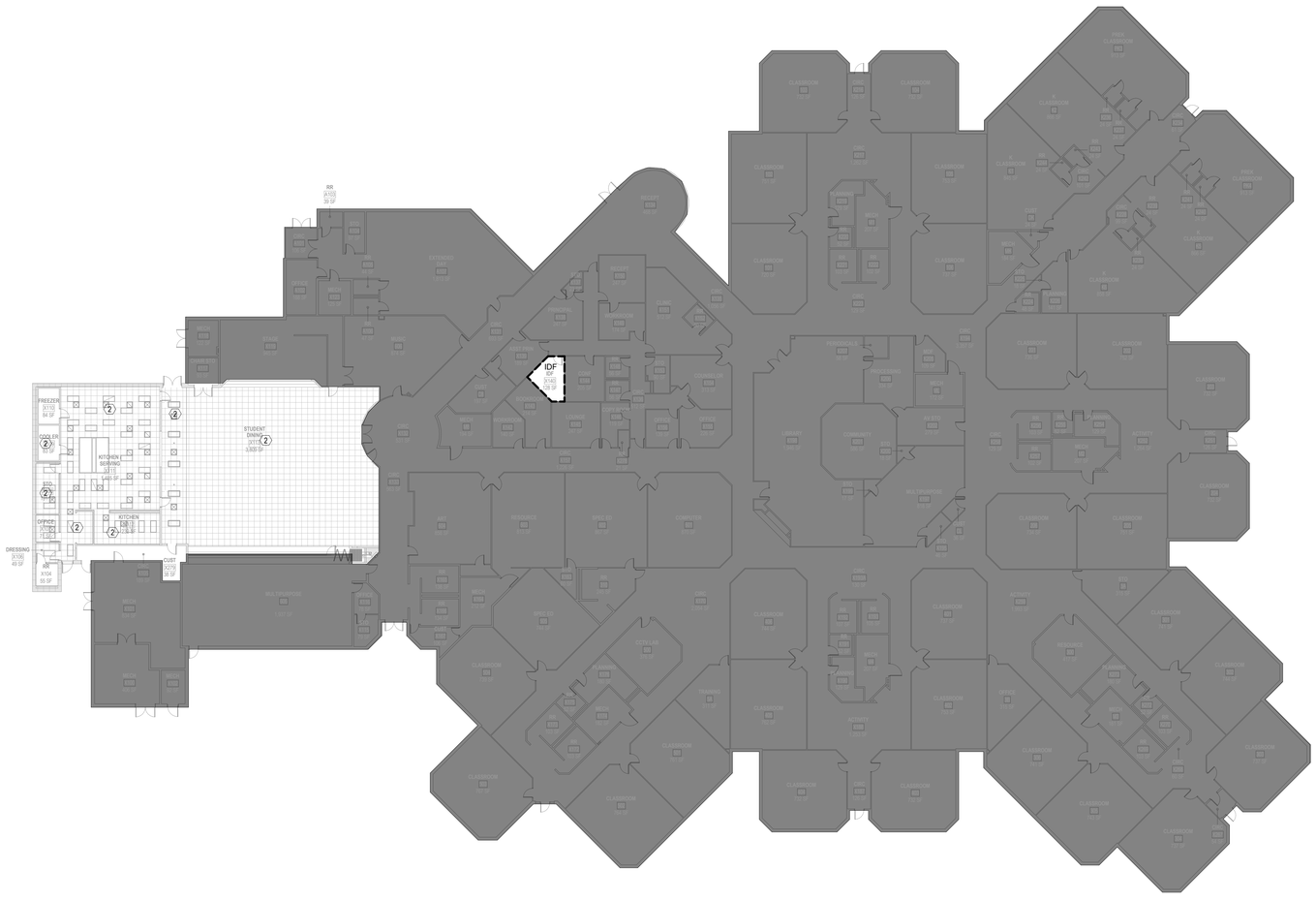
TECHNOLOGY - TITLE SHEET

d-TN000

DEMO KEYNOTES

1. REMOVE, AND PROTECT DURING CONSTRUCTION, INSTALL IN EXISTING LOCATION AFTER NEW ACT GRID IS IN PLACE.
2. DEVICES IN ACT ARE TO BE REMOVED AND PROTECTED DURING CONSTRUCTION AND REINSTALLED IN THE SAME LOCATION AFTER THE NEW CEILING GRID IS IN PLACE. DECIVES INCLUDE: SPEAKERS, ACCESS POINTS AND INTRUSION MOTION DETECTORS.
3. EXISTING CARD READER, DOOR CONTACT, & REX (REQUEST TO EXIT) TO BE DEMOLISHED, REMOVE DEVICES AND PROTECT WIREING.



1 BACKGROUND D (COMMONWEALTH ES)
SCALE: 1" = 20'-0"

TRUENORTH A PMT COMPANY

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TECHNOLOGY - Commonwealth ES - OVERALL

d-TN.100

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



2 COMMONWEALTH - REFLECTED CEILING PLAN
SCALE: 3/16" = 1'-0"

TRUENORTH A PMY COMPANY

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Commonwealth Elementary School
4909 Commonwealth Blvd. Sugar Land, TX 77479

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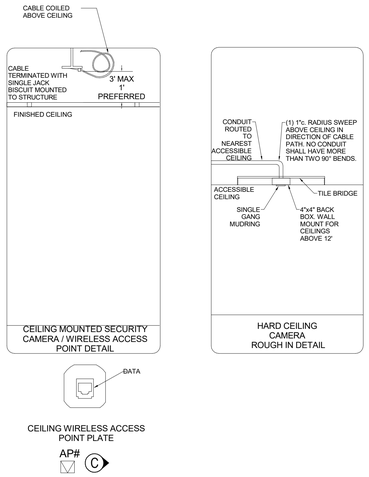
TECHNOLOGY - Commonwealth ES - KITCHEN

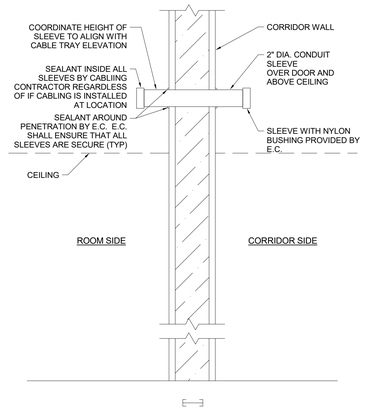
d-TN.101

GENERAL NOTE

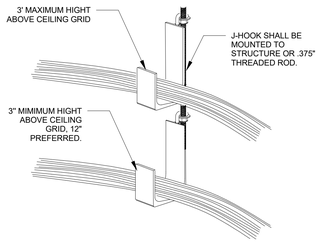
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



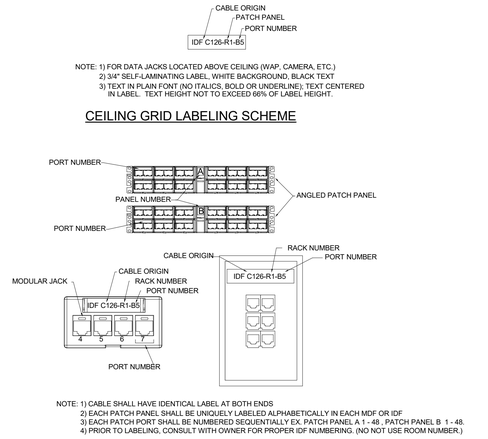
1 DATA ROUGH-IN DETAILS
SCALE: NS



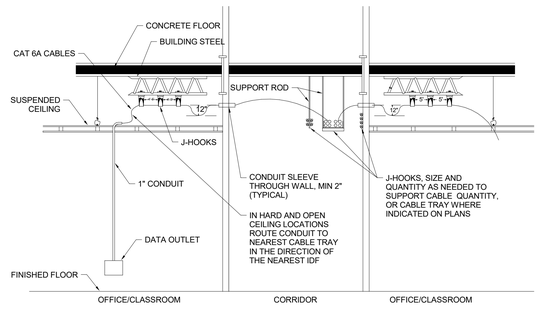
2 TYPICAL CABLING SLEEVE
SCALE: NTS



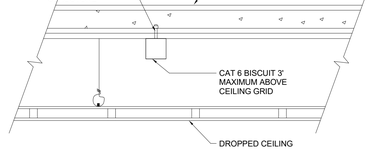
3 PANDUIT J-HOOK DETAIL
SCALE: NTS



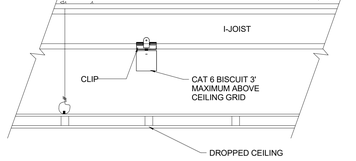
4 LABELING & CABLING SCHEMES
SCALE: NTS



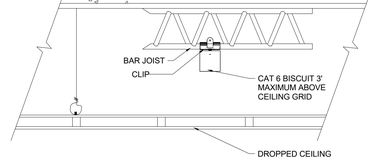
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

TRUENORTH
A PMY COMPANY

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

d

FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Commonwealth Elementary School
4909 Commonwealth Blvd, Sugar Land, TX 77479

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Brian C Porter
BICSI ID # 256687
EXPIRES 12-31-27

07-18-25

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

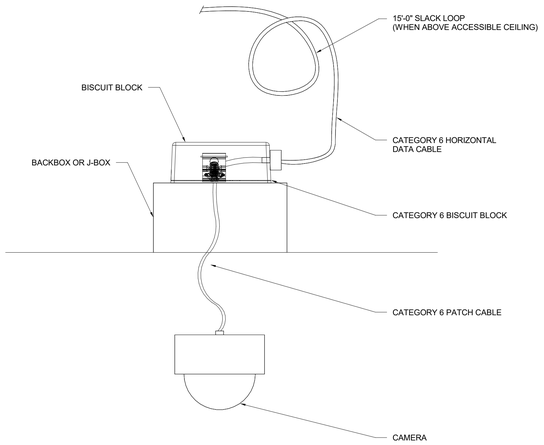
PROJ. NO.: 23-25
DATE: 07-18-25
ISSUED FOR BIDDING AND PERMITTING

TECHNOLOGY - Commonwealth ES - DETAILS

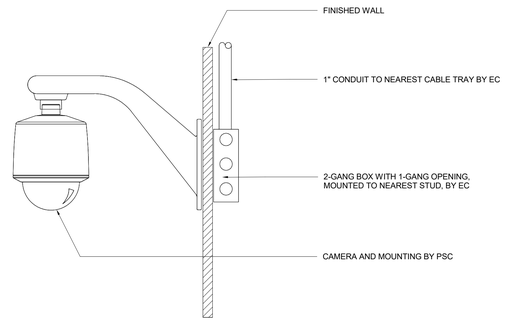
d-TN.500

GENERAL NOTES:

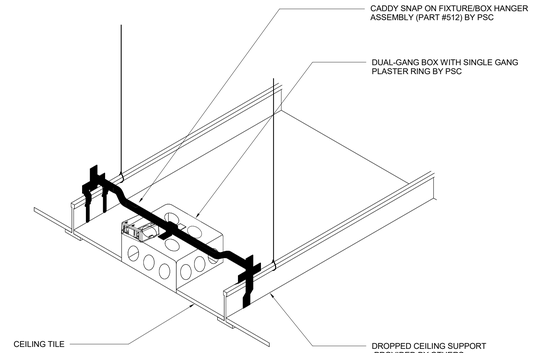
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



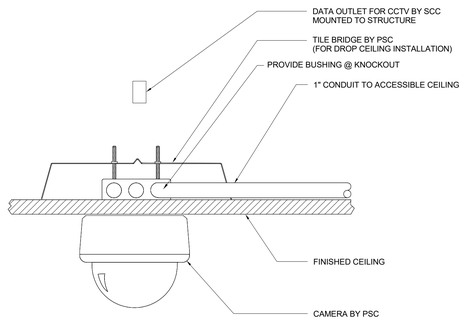
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

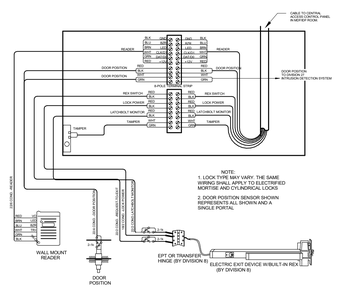


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

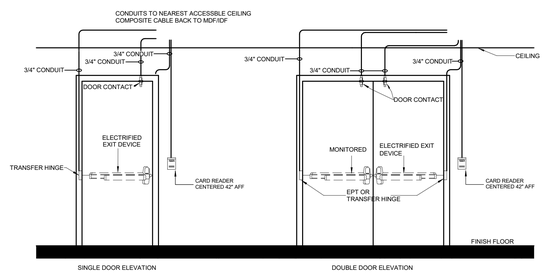
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

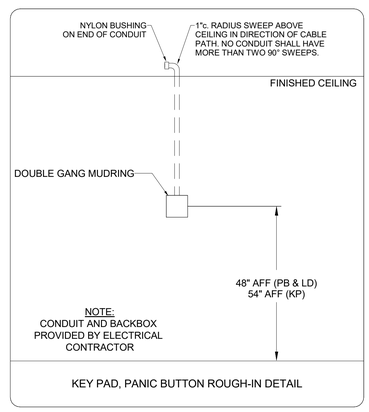
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

TRUENORTH A PMY COMPANY

ISSUE:

12/05/2024	DD PACKAGE
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05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

d

FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Commonwealth Elementary School
4909 Commonwealth Blvd, Sugar Land, TX 77479

SEAL



07-18-25

MVA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07-18-25
ISSUED FOR BIDDING
AND
PERMITTING

TECHNOLOGY -
Commonwealth ES -
SECURITY DETAILS

d-TN.600

FBISD BP013 KITCHEN RENOVATIONS ES

CORNERSTONE ELEMENTARY SCHOOL
1800 CHANTHAM AVE, SUGAR LAND, TX 77479

FORT BEND INDEPENDENT SCHOOL DISTRICT 2023 BOND

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Sheet Number	Sheet Title
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e-A.000	COVER AND INDEX
e-A00-01	GENERAL NOTES AND ABBREVIATIONS
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e-A.201	FLOOR PLAN
e-A.301	STUDENT CAFETERIA AND GYM PLAN
e-A.501	FINISH FLOOR PLAN
e-A.601	INTERIOR ELEVATIONS
e-S1	GYMNASIUM PLAN
e-S2	SECTIONS AND TYPICAL DETAILS
e-E.000	ELECTRICAL AND FIRE ALARM SCHEDULES
e-E.001	ELECTRICAL AND FIRE ALARM NOTES
e-E.200	ELECTRICAL FLOOR PLAN & SCHEDULES
e-TN-000	TECHNOLOGY - INDEX SHEET
e-TN-100	TECHNOLOGY - OVERALL
e-TN-101	TECHNOLOGY - KITCHEN
e-TN-500	TECHNOLOGY - DETAILS
e-TN-600	TECHNOLOGY - SECURITY DETAILS



ISSUED FOR BIDDING AND PERMITTING - JULY 18, 2025

FORT BEND INDEPENDENT SCHOOL DISTRICT

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

KRISTIN K. TASSIN	PRESIDENT
RICK GARCIA	VICE PRESIDENT
DAVID HAMILTON	SECRETARY
ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

PROJECT DESIGN TEAM

PROGRAM MANAGEMENT
FBISD 2023 Bond Team
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Missouri City, TX 77489
Phone Number: 281-327-5481

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Houston, Texas 77079
Phone Number: 713-782-8188

FOOD SERVICE
Food Design Professionals
26215 Oak Ridge Drive
The Woodlands, Texas 77380
Phone Number: 281-350-2323

MEP ENGINEERS
Stanton Engineering Group
1300 W. Sam Houston Pkwy South, Suite 121
Houston, Texas 77042
Phone Number: 713-300-9292

STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.
B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.
C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.
D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.
E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.
F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.
B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.
B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.
C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.
D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY, IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.
   1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
   2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.
E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.
B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT, REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.
B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.
C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED, CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.
D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.
B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

01 GENERAL NOTES

SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025): Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

03 PROJECT SCHEDULE

ISSUE:

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05/23/2025	90% CD PKG.
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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
CORNERSTONE ELEMENTARY SCHOOL
1800 CHATHAM AVE.
SUGAR LAND, TX 77479

SEAL

7/15/2025

ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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GENERAL NOTES AND ABBREVIATIONS

A00-01

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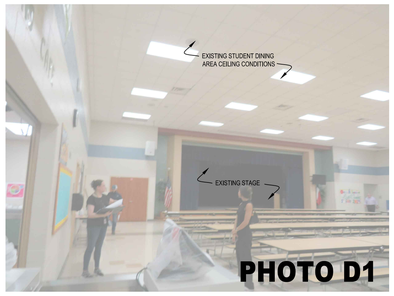


PHOTO D1



PHOTO D2



PHOTO D3



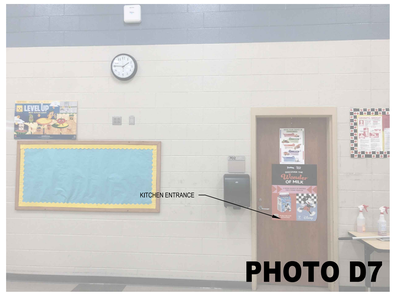
PHOTO D4



PHOTO D5



PHOTO D6



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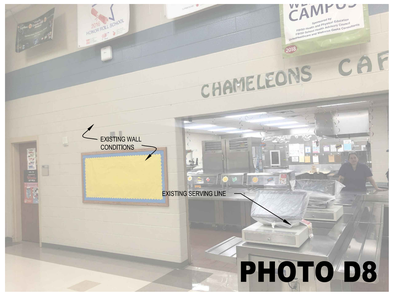

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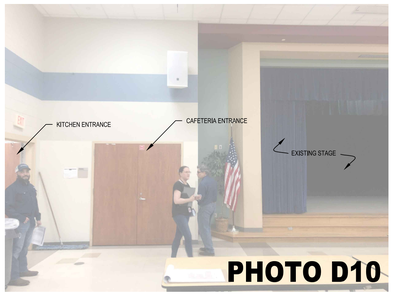

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DEMO PLAN PHOTOS

e-D.101-2

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2015 INTERNATIONAL EXISTING BUILDING CODE

301.1.1 PRESCRIPTIVE COMPLIANCE METHOD. REPAIRS, ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH CHAPTER FOUR OF THIS CODE IN BUILDINGS COMPLYING WITH THE INTERNATIONAL FIRE CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

401.2.1 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE PER SECTION 115.

401.2.2 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED NO HAZARD TO LIFE, HEALTH OR PROPERTY IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT PERMIT THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

Area increase due to frontage and fire sprinkler protection TYPE IIB

$$A_a = [A_t + (NS \times I_f)] \times Sa$$

ALLOWABLE BUILDING AREA ONE STORY = 58,000 + (14,500 x 1.5) x 1 = 79,750 SF

ONE SINGLE STORY 100,643 SF.

2 CODE ANALYSIS

Project Information

PROJECT: CORNERSTONE ELEMENTARY SCHOOL
LOCATION: 1800 CHATHAM AVE
SUGAR LAND, TX 77479

SCOPE OF WORK: SECURITY CAMERAS OVER SERVING LINES.
RENOVATE, RECONFIGURE, AND EXPAND EXISTING CAFETERIA.

City of Sugar Land Adopted Building Code

2015 INTERNATIONAL BUILDING CODE (AS AMENDED)
2015 INTERNATIONAL FIRE CODE (AS AMENDED)
2015 INTERNATIONAL MECHANICAL CODE (AS AMENDED)
2015 INTERNATIONAL PLUMBING CODE (AS AMENDED)
2014 NATIONAL ELECTRICAL CODE (AS AMENDED)
2015 INTERNATIONAL ENERGY CONSERVATION CODE

Chapter 3 - Use and Occupancy Classification

GROUP E (EDUCATIONAL - IBC 2015 SECTION 305)
EXISTING FULLY SPRINKLERED BUILDING

Chapter 5 - General Building Heights and Area

ALLOWABLE BUILDING HEIGHT:
TWO STORIES W/ 55 FT MAX. HEIGHT FOR GROUP E
(AS ALLOWED BY TABLE 503)

EXISTING BUILDING HEIGHT PROVIDED:
HEIGHT TO ROOF: 15'-0"

INCIDENTAL USE SEPARATION:
SEPARATIONS REQUIRED: INCIDENTAL USE AREAS, AS PER TABLE 509.4, STORAGE ROOMS OVER 100 S.F. ARE REQUIRED TO BE ONE HOUR RATED OR HAVE AUTOMATIC FIRE EXTINGUISHING SYSTEM.

INCIDENTAL USE ROOM AREAS PROVIDED WITH EXISTING AUTOMATIC SPRINKLER SYSTEM.

TOTAL EXISTING BUILDING AREA IS 100,643 SF.

Chapter 6 - Construction Type Fire Resistance Ratings

EXISTING CONSTRUCTION: TYPE IIB

TABLES 601 AND 602

BUILDING ELEMENTS	REQUIRED (FOR TYPE IIB)	PROVIDED
STRUCTURAL FRAME (TABLE 601)	NO RATING	NO RATING
EXTERIOR BEARING WALLS (TABLE 601)	NO RATING	NO RATING
INTERIOR BEARING WALLS (TABLE 601)	NO RATING	NO RATING
EXTERIOR NON-BEARING WALLS (TABLE 602)	NO RATING	NO RATING (WALLS GREATER THAN *30'* FROM PROPERTY LINE)
INTERIOR NON-BEARING WALLS (TABLE 601)	NO RATING	NO RATING
FLOOR CONSTRUCTION (TABLE 601)	NO RATING	NO RATING
ROOF CONSTRUCTION (TABLE 601)	NO RATING	NO RATING

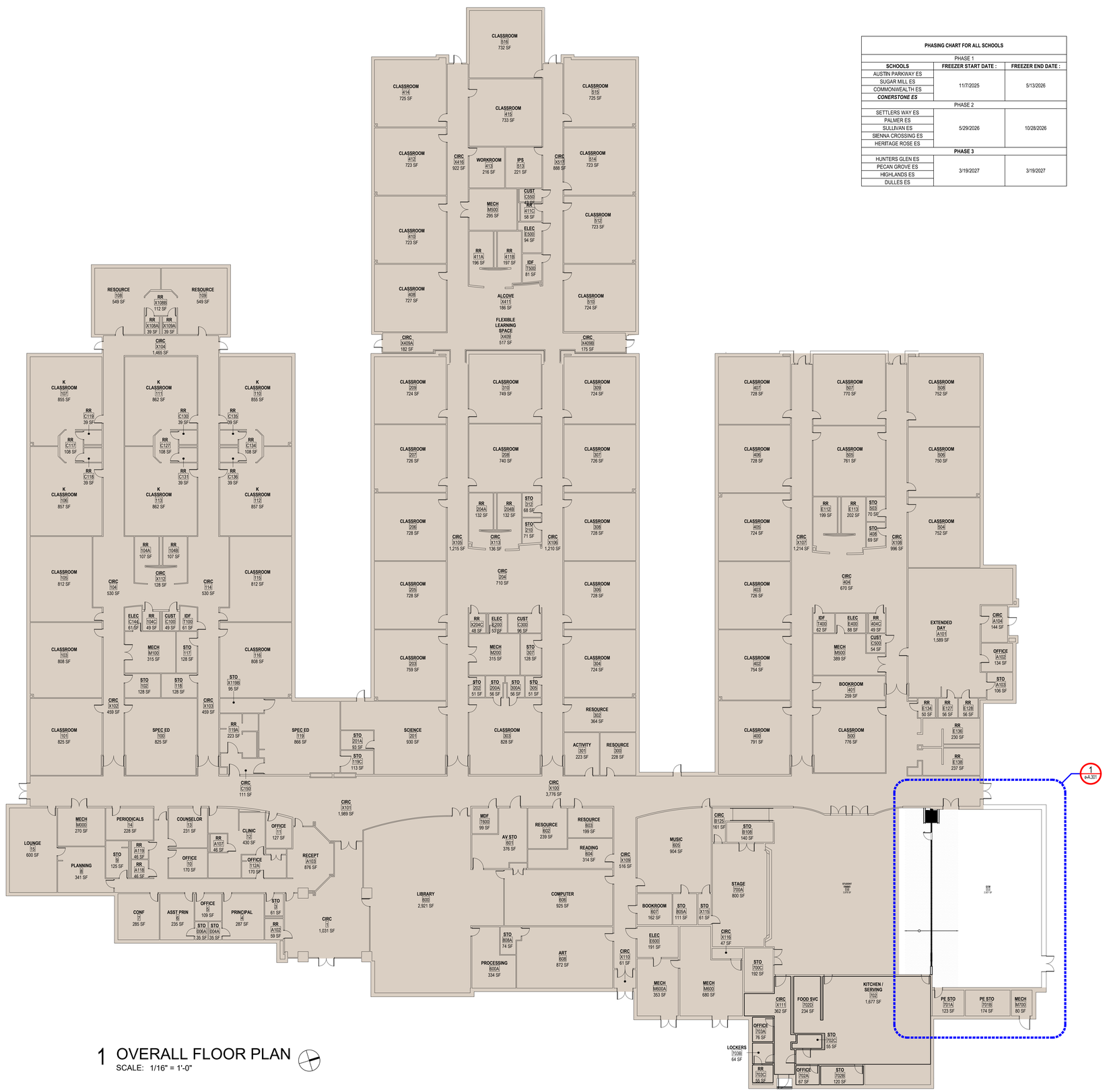
Chapter 9 - Fire Protection Systems

AUTOMATIC SPRINKLER SYSTEM: EXISTING SPRINKLER SYSTEM PROVIDED THROUGHOUT.

Chapter 29 - Plumbing

Fixture Count per Table 2902.1		
Occupant Load Basis:		
12 Occupants		
	Total Fixtures REQUIRED	Total Fixtures PROVIDED
Unisex:		
W.C.	1 per 50	1
lavatories	1 per 50	1
Drinking Fountains	1 per 100	2

PHASING CHART FOR ALL SCHOOLS		
	PHASE 1	
SCHOOLS	**FREEZER START DATE :**	**FREEZER END DATE :**
AUSTIN PARKWAY ES	11/7/2025	5/13/2026
SUGAR MILL ES		
COMMONWEALTH ES		
CONERSTONE ES		
	PHASE 2	
SETTLERS WAY ES	5/29/2026	10/28/2026
PALMER ES		
SULLIVAN ES		
SIENNA CROSSING ES		
HERITAGE ROSE ES		
	PHASE 3	
HUNTERS GLEN ES	3/19/2027	3/19/2027
PECAN GROVE ES		
HIGHLANDS ES		
DULLES ES		



1 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

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OVERALL FLOOR PLAN

e-A.201

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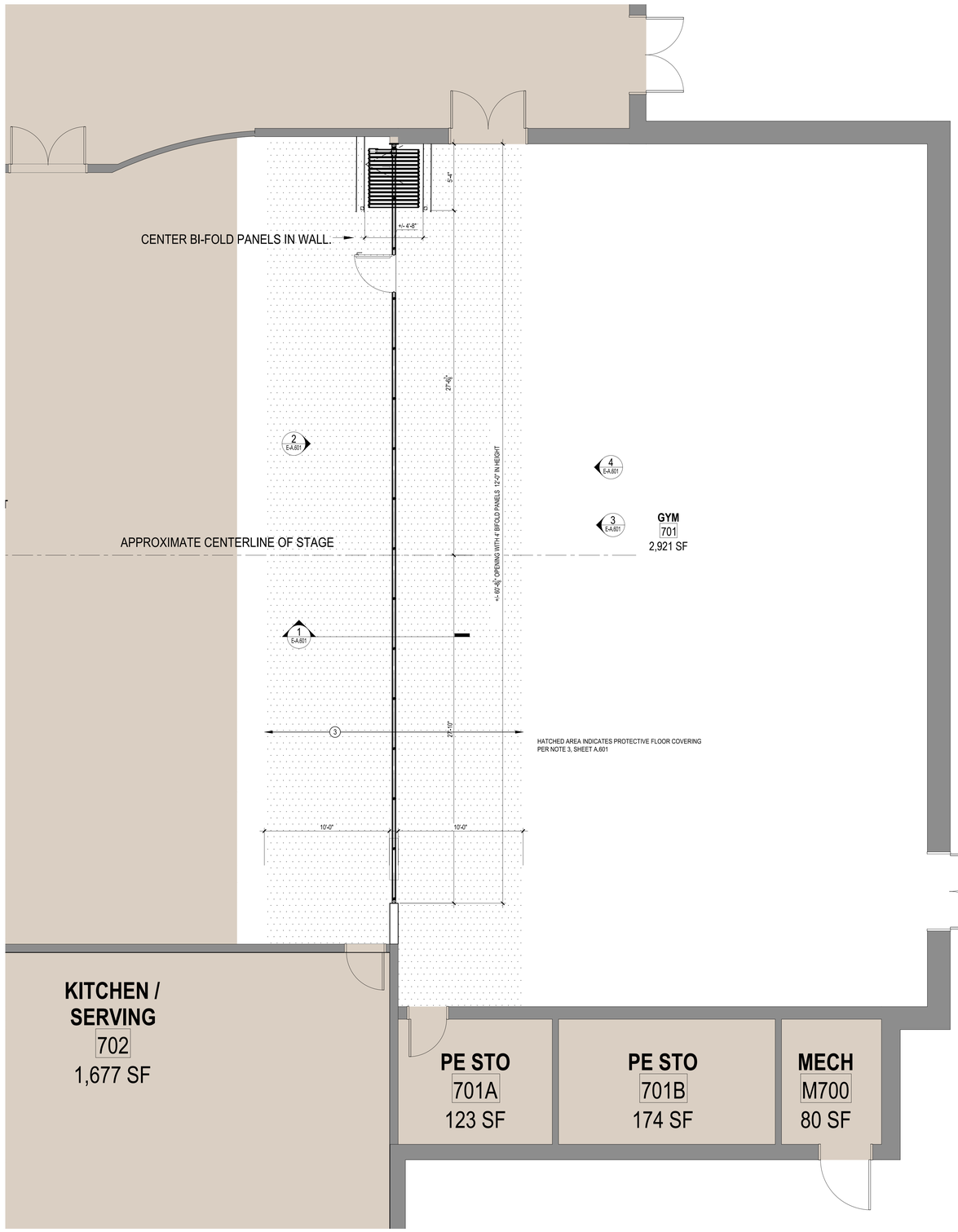
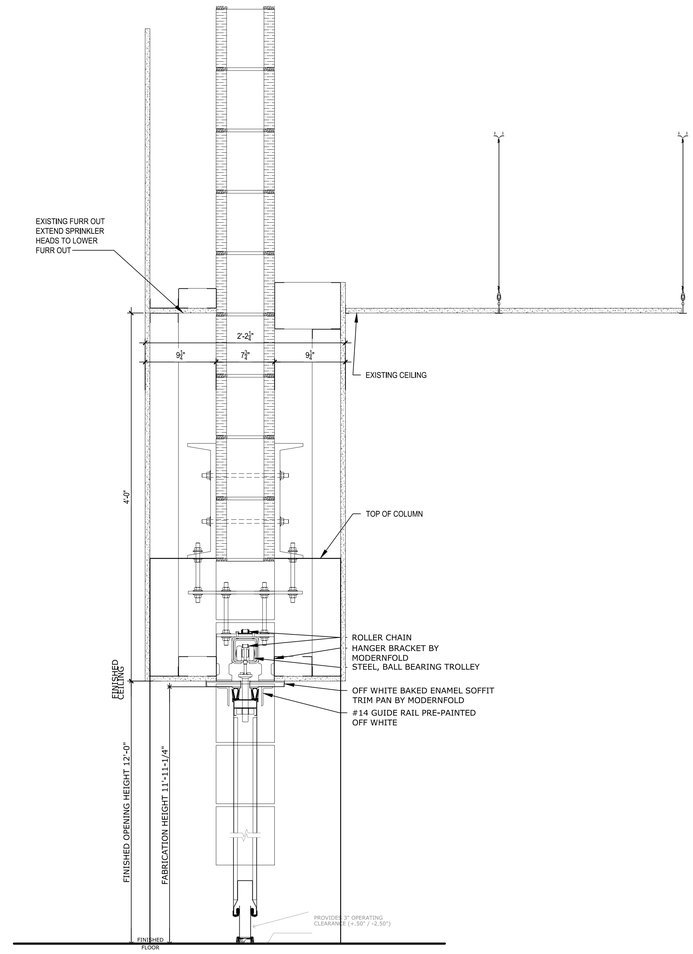


1 PLAN STUDENT DINING AND GYM

SCALE: 1/4" = 1'-0"



3 SECTION AT FOLDING PARTITION

SCALE: 1-1/2" = 1'-0"

FLOOR PLAN - GENERAL NOTES

1. REFER TO SHEET FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SCHOOL KITCHENS.
2. REFER TO SHEET FOR PARTITION TYPES.
3. EXIXSTING EXPOSED CONDUITS AND DATA CABLING IN WIREMOLD TO BE ROUTED INSIDE WALLS (EXCEPT AT WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS). PATCH AND REPAIR AS REQUIRED TO ACHIEVE SMOOTH CLEAN WALL SURFACE.

2 FLOOR PLAN NOTES

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STATE OF TEXAS
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KITCHEN FLOOR PLAN

e-A.301

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PAINT COLOR SCHEDULE

UNLESS OTHERWISE INDICATED FIELD COLOR IS PT-1 (SW 7014 EIDER WHITE)

SW 7014 EIDER WHITE (EPOXY PAINT)

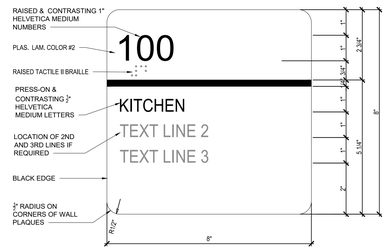
WALL TILE

CERAMIC WALL TILE (WT-1)
REFER TO TILE PATTERN AT SERVING AND RESTROOM
FIELD WALL TILE: DALTILE RITTENHOUSE SQUARE K175 BISCUIT (3X6)

A PROVIDE ROOM SIGN TO REPLACE EXISTING. SEE LAYOUT FOR TYPE A OR TYPE B SIGN LOCATIONS.

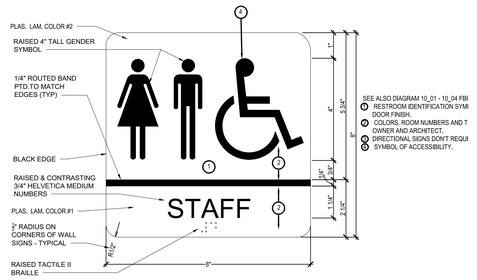
JOHNSONITE DURCOVE RB-1 BURNT UMBER - 6"

2 FLOOR FINISH LEGEND



TYPE A

ROOM SIGNAGE - FIXED NAMES

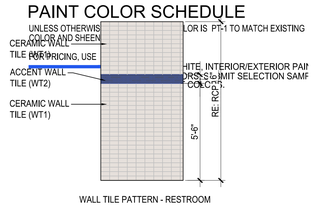


TYPE B

KITCHEN RESTROOM SIGNAGE

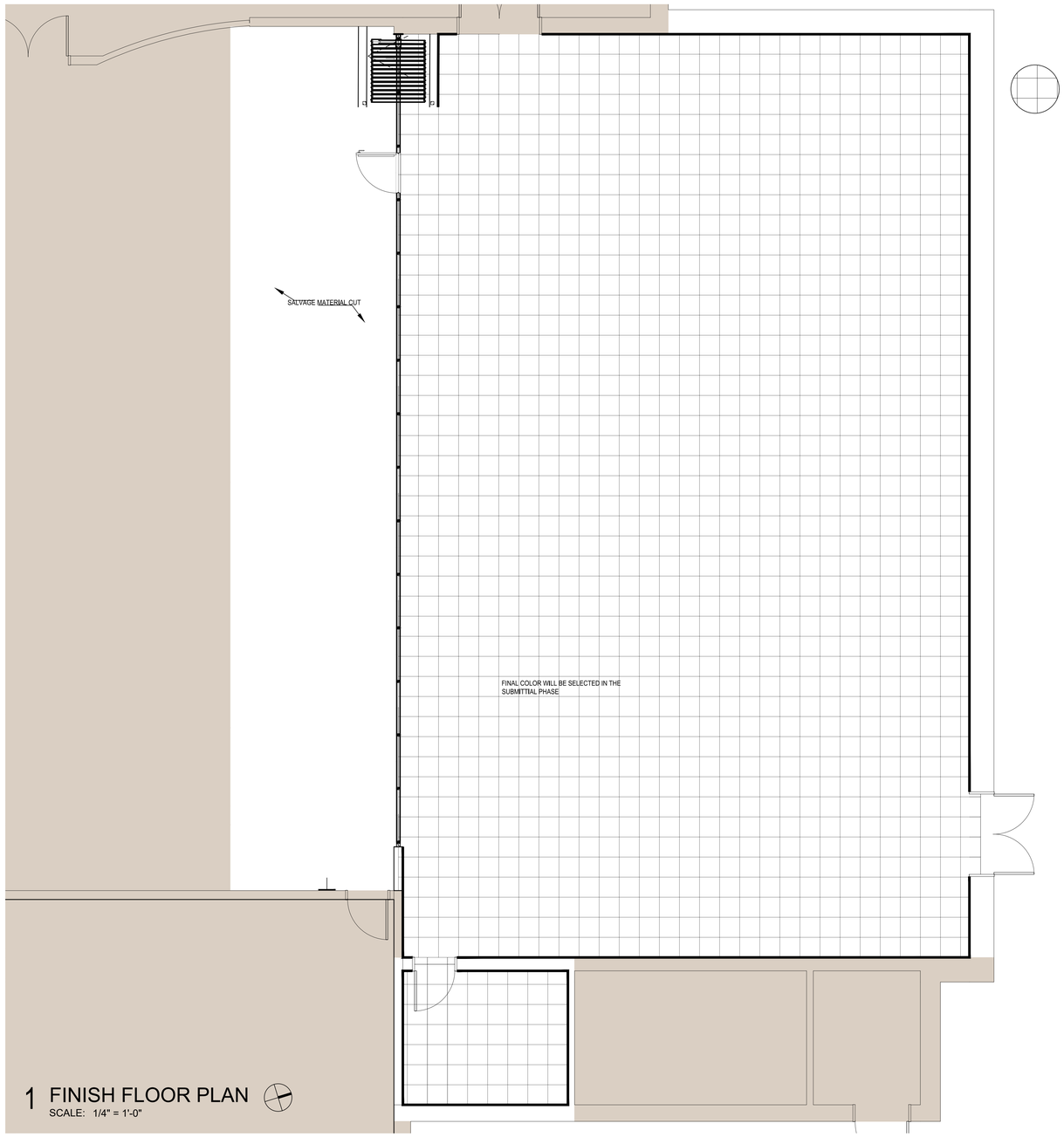
3 ROOM SIGNAGE

PAINT COLOR SCHEDULE



WALL TILE PATTERN - RESTROOM

4 WALL TILE PATTERN



1 FINISH FLOOR PLAN

SCALE: 1/4" = 1'-0"

NEW FLOOR LEGEND

NEW LVT : TARKETT - EVENT ABSTRACT/ MELANGE - 18 X 18
(1,941 SF)

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FINISH FLOOR PLAN

e-A.501

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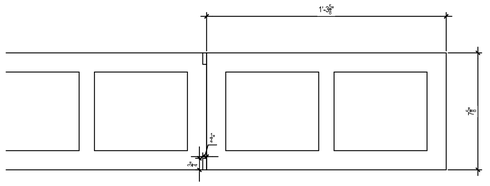
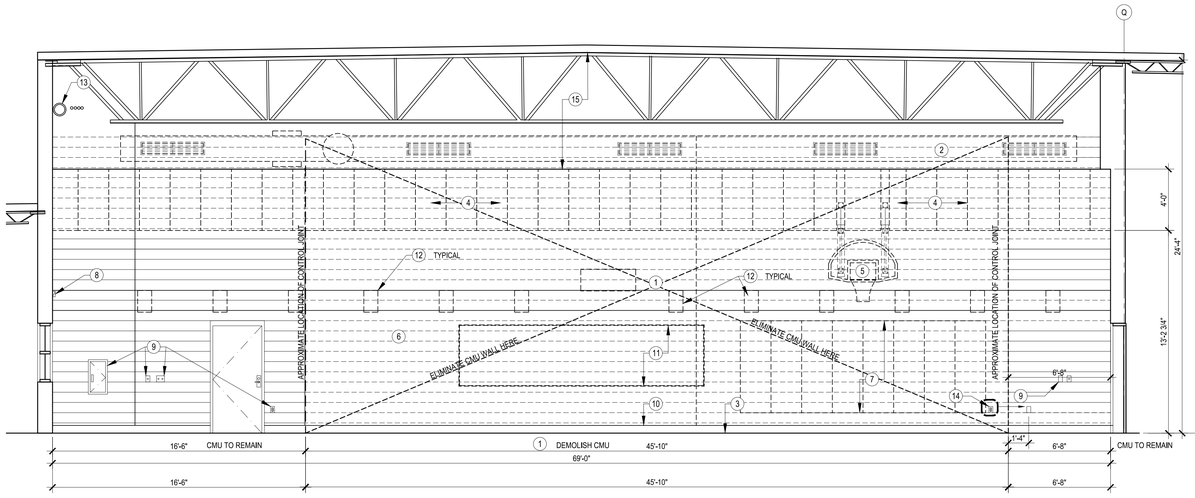


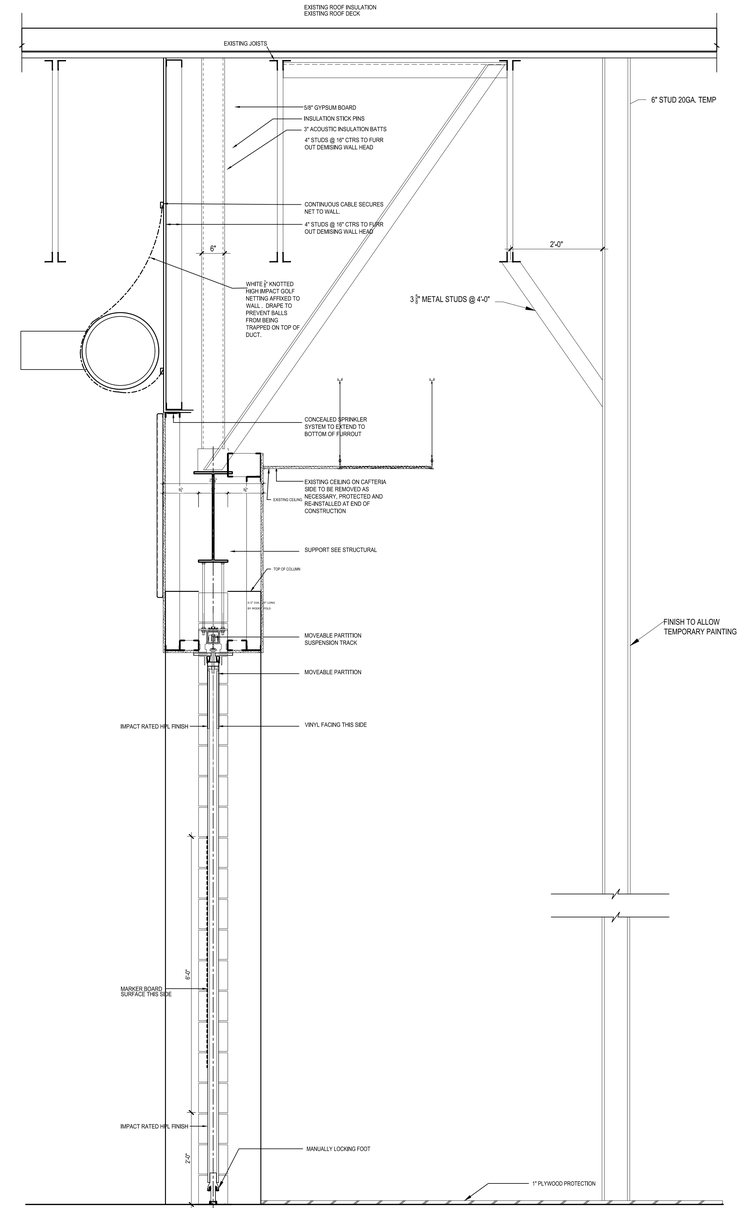
5 NEW CONTROL JOINT
3"=1'-0"

NUMBERED DEMOLITION NOTES - CORNERSTONE

1. REMOVE 12" CMU WALL BETWEEN CONTROL JOINTS.
2. IF NEEDED FOR WORKING SPACE, CAREFULLY REMOVE CIRCULAR DUCTS, STORE AND PROTECT. RE-INSTALL DUCT AND DIFFUSERS, CLEAN AND RE-PAINT TO MATCH EXISTING.
3. PROTECT FLOOR FINISH ON BOTH SIDES OF WALL FROM DAMAGE BY INSTALLING MIN. 3/4" T&G PLYWOOD (STURDI-FLOOR) OR EQ. FOR A DISTANCE OF 10' OUTWARD FROM WALL. PLYWOOD SHALL BE UNTREASED AND BE PLACED ON NONSTAINING TEMPORARY FLOOR PROTECTION "RAM-BOARD".
4. SALVAGE, STORE AND PROTECT EXISTING ACOUSTIC PANELS. CLEAN AND RE-INSTALL ON NEW WALL FACE. USE PANELS FROM NEWLY RELOCATED BASKETBALL GOAL ON OPPOSITE SIDE OF GYM TO REPLACE THE GAPS LEFT IN THIS RUN OF PANELS.
5. RELOCATE EXISTING BASKETBALL GOAL TO OPPOSITE WALL. COORDINATE WITH PRINCIPAL AND COACH.
6. PHOTOGRAPH BOTH SIDES OF THIS WALL BEFORE WORK BEGINS. RESTORE NEW WALL TO LIKE CONDITIONS INCUDING SIGNAGE, ACCESSORIES, SECURITY ITEMS, POWER AND SWITCHES.
7. SALVAGE, STORE AND PROTECT EXISTING WALL PADS/PROTECTIVE PANELS. CLEAN AND REMOUNT BELOW RELOCATED BASKETBALL GOAL ON OPPOSITE WALL.
8. PROTECT EXISTING SECURITY DEVICE.
9. PROTECT EXISTING SECURITY FIRE EXTINGUISHER CABINET, DUPLEX RECEPTACLE AND KEYED SWITCHES
10. SOURCE, MATCH AND REPLACE BASE ON BOTH SIDES OF WALL.
11. SALVAGE MARKER BOARD. CLEAN AND RE-MOUNT AT COACH'S DIRECTION.
12. SALVAGE PAPER SIGNS. DELIVER TO COACH AND RE-MOUNT AT COACH'S DIRECTION.
13. EXISTING CONDUIT, LIGHTING, PLUMBING TO REMAIN IN PLACE.
14. RELOCATE EXISTING DUPLEX RECEPTACLE
15. GYP. BD. FURR OFF FACE OF CMU WALL IS BE REMOVED DURING DEMOLITION AND RE-BUILT BETWEEN TWO REMAINING SECTIONS OF CMU WALL WITH COLD FORMED METAL FRAMING SYSTEM. SPRINKLER PIPING INSIDE TO BE PROTECTED.
16. NEW MOVEABLE PARTITION AND SUPPORT BEAM.
17. MANUFACTURER STANDARD VINYL WALCOVERING FINISH, COLOR TO BE DECIDED.
18. GYPSUM BOARD WALL FINISH ON CFMF FRAMING SYSTEM

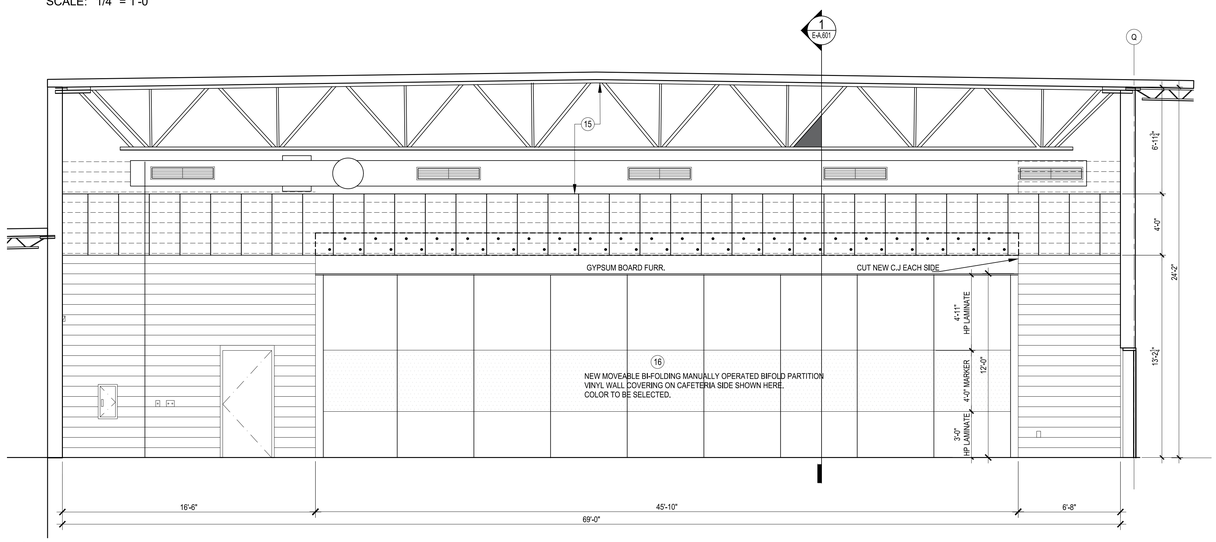


4 DEMOLITION (FROM GYM SIDE OF WALL)
SCALE: 1/4" = 1'-0"

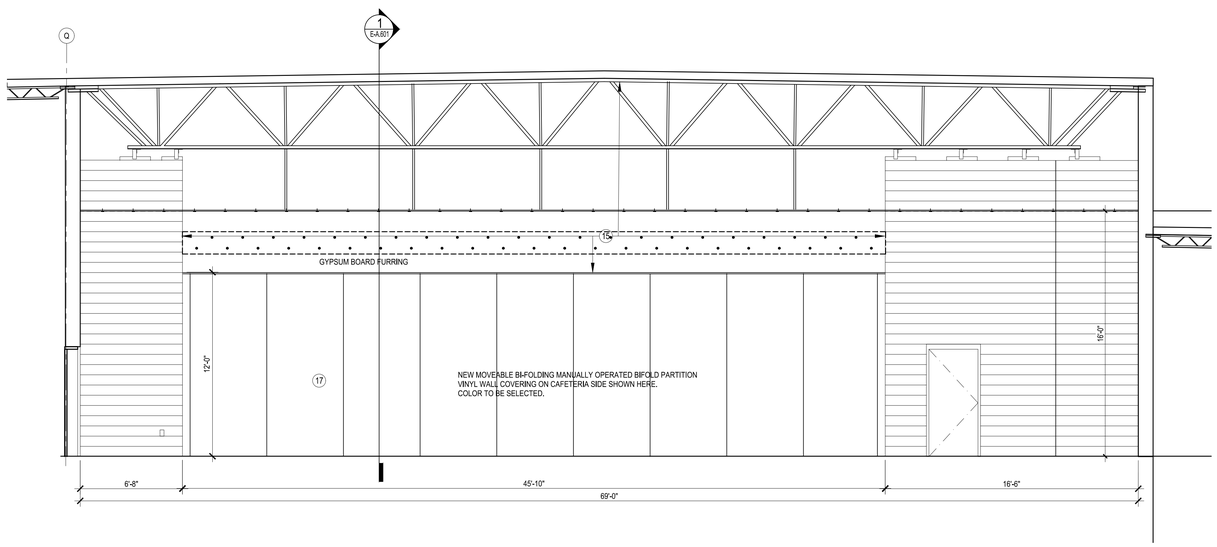


6 SECTION THRU MOVEABLE PARTITION
3/4"=1'-0"

7 TEMPORARY CONTRUCTION WALL
3/4"=1'-0"



3 GYM SIDE OF WALL (NEW CONSTRUCTION)
SCALE: 1/4" = 1'-0"



2 CAFETERIA SIDE OF WALL (NEW CONSTRUCTION)
SCALE: 1/4" = 1'-0"

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INTERIOR ELEVATIONS

e-A.601

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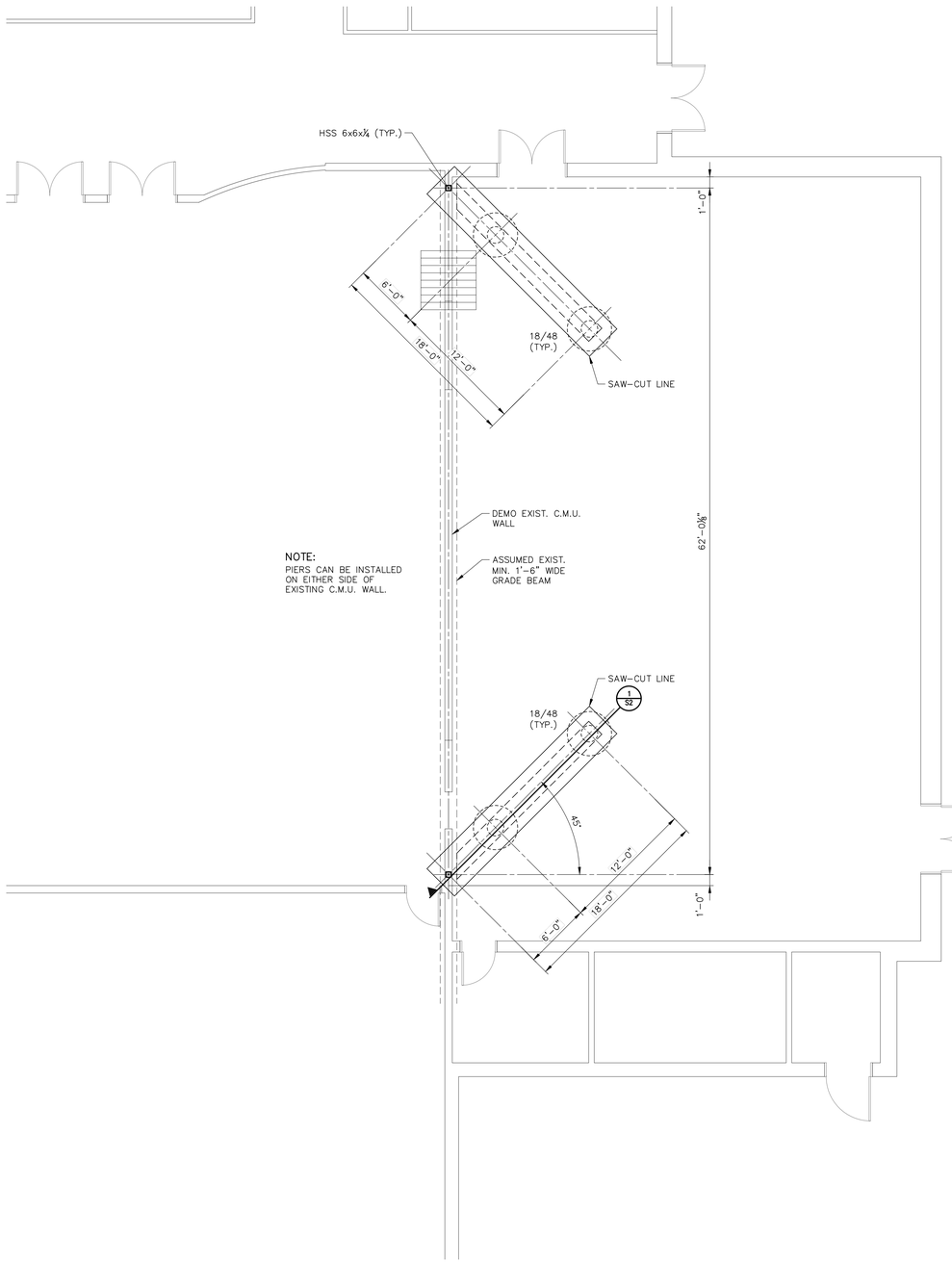


FOUNDATION PLAN
SCALE: 3/16"=1'-0"

FIELD VERIFICATION NOTE

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR CONSTRUCTION.
2. CONTRACTOR SHALL VERIFY AND NOTIFY ENGINEER OF EXISTING CONDITIONS IN NEED OF REVIEW AND POSSIBLE MODIFICATION PRIOR TO FABRICATION.

WORK SEQUENCE

1. DEMO PORTIONS OF CMU WALL TO ALLOW FOUNDATION INSTALLATION.
2. INSTALL FOUNDATION.
3. INSTALL COLUMN/STRONG-BACKS.
4. INSTALL CHANNEL HEADERS.
5. DEMO ONE COURSE CMU BELOW HEADER AND INSTALL TEMPORARY POSTS.
6. INSTALL HEADER PLATE.
7. INSTALL KICKERS.
8. DEMO REMAINDER OF CMU.
9. INSTALL PARTITION.

GENERAL NOTES

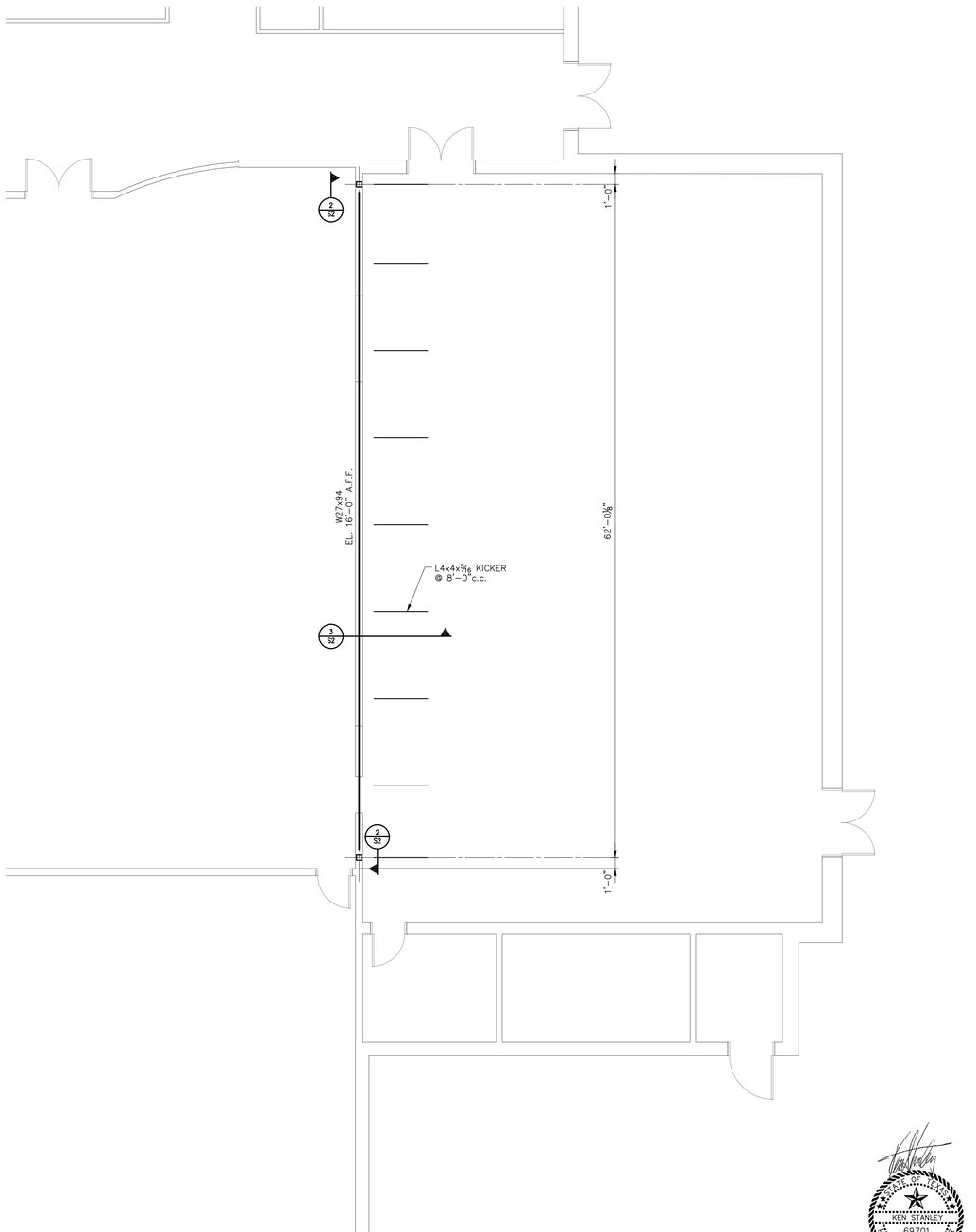
1. ALL CONCRETE SHALL TEST 4000 PSI AT 28 DAYS.
2. ALL CONCRETE REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60.
3. DETAILING AND FABRICATION OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL BE IN ACCORDANCE WITH ACI-315 LATEST EDITION.
4. LAP ALL CONTINUOUS REINFORCING BARS 50 DIAMETERS AT SPLICES, TEES, AND CORNERS.
5. THE USE OF HEAT TO FACILITATE THE BENDING OF REINFORCING BARS WILL NOT BE PERMITTED.
6. NO ENGINEERING DRAWING MAY BE REPRODUCED FOR USE AS SHOP DRAWINGS.
7. CONTRACTOR SHALL COORDINATE ALL LOCATIONS OF ALL ANCHOR BOLTS AND OPENINGS FOR MECHANICAL, PIPING, AND ELECTRICAL EQUIPMENT WITH THE RESPECTIVE ENGINEERING AND VENDOR DRAWINGS.

SLAB NOTE

4" CONC. SLAB ON 10 MIL POLY FILM ON 2" MAX. SAND FILL. REINFORCE WITH #3 @ 15"c.c. E.W. IN CENTER OF SLAB. FOR SUBGRADE PREPARATION REFER TO GEOTECHNICAL INVESTIGATION BY PARADIGM CONSULTANTS, INC. REPORT NUMBER 24-1071, DATED DEC. 2024.

SLAB SIDEWALK SLAB NOTE

4" CONC. SLAB ON 2" MAX. SAND FILL. REINF. W/ #3 @ 18"c.c. IN CENTER OF SLAB.



FRAMING PLAN
SCALE: 3/16"=1'-0"

KEN STANLEY 69701 REGISTERED PROFESSIONAL ENGINEER
July 17, 2025

STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.B.P.E. Registration # F-000175
www.sshinc.net
50 Years
3301 Edloe Street, Suite 200 Houston, Texas 77027 Tel 713-776-9433
E-MAIL: info@sshinc.net
0002-0256

ISSUE:

03/07/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

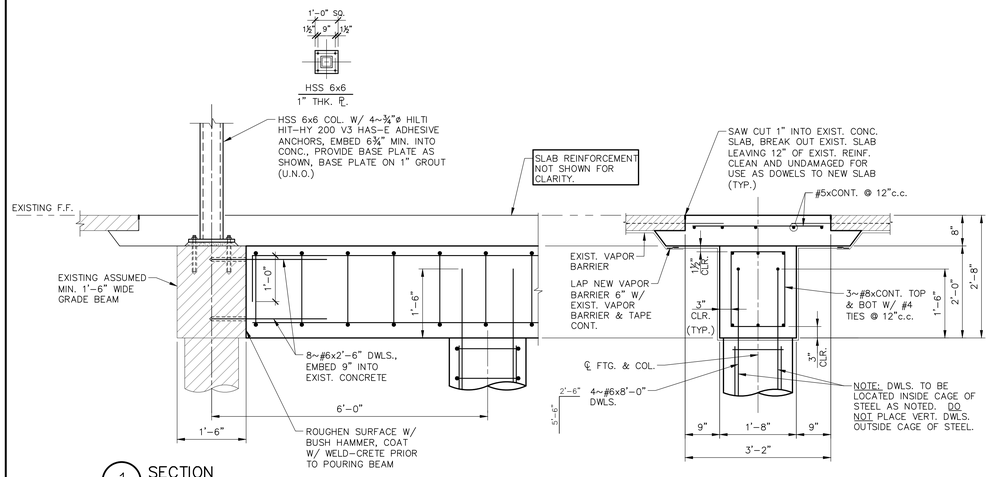
FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
CORNERSTONE ELEMENTARY SCHOOL
1800 CHATHAM AVE
SUGAR LAND, TX 77479

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

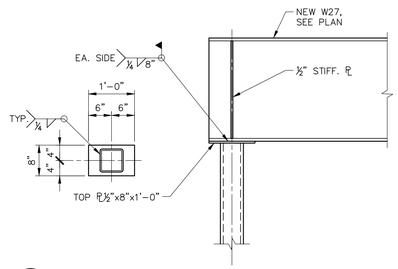
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

KITCHEN PLAN

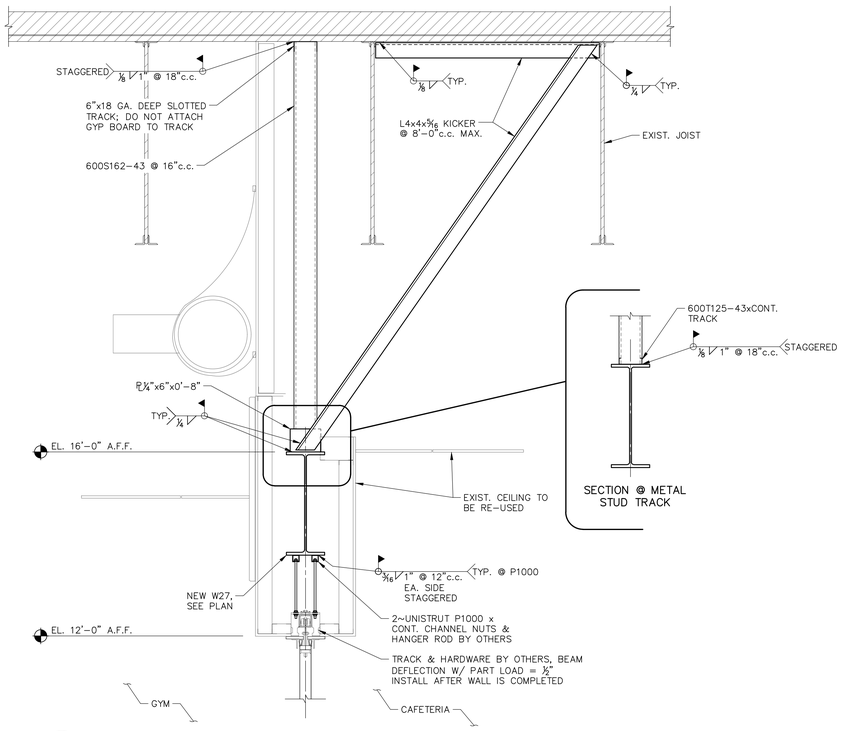
S1



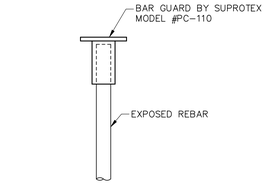
1 SECTION
SCALE: 3/4"=1'-0"



2 SECTION
SCALE: 3/4"=1'-0"

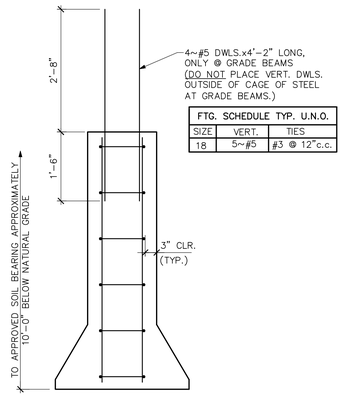


3 SECTION
SCALE: 3/4"=1'-0"



CONTRACTOR SHALL COVER ALL EXPOSED REBAR DURING CONSTRUCTION.

TYPICAL REBAR CAP DETAIL
SCALE: N.T.S.



FTG. SCHEDULE TYP. U.N.O.		
SIZE	VERT.	TIES
18	5~#5	#3 @ 12"c.c.

TYPICAL FOOTING DETAIL (U.N.O.)
SCALE: N.T.S.

ISSUE:

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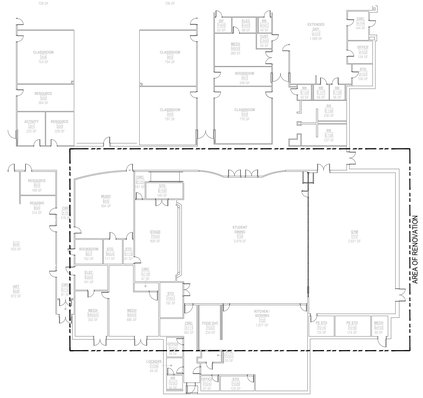
SECTIONS AND TYPICAL DETAILS

S2



2 OVERALL FLOOR PLAN

SCALE: 1" = 30'- 0"

SYMBOL LEGEND

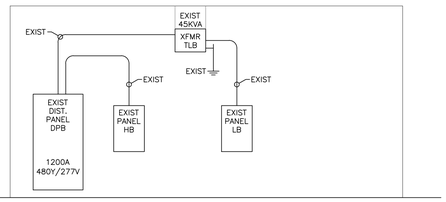
①①①①	SIMPLEX/DUPLEX/QUAD – 5361/2 REC
GFI	DUPLEX W/ GFCI PROTECTION–P&S 2097
J	J–BOX
	CEILING MOUNTED J–BOX
M	MOTOR
	HEAVY DUTY, NON–FUSED DISCONNECT. MIN RATING OF CIRCUIT OCPD/VOLTAGE.
	ELECTRICAL PANEL
	HOMERUN TO CIRCUIT NOTED
E	EXISTING DEVICES TO REMAIN
R	EXISTING DEVICES TO BE RELOCATED
D	EXISTING DEVICES TO BE DEMO/REMOVED
REP	EXISTING DEVICES TO BE REPLACED
S	INDICATES SURFACE MOUNTED
SR	INDICATES SURFACE RACEWAY
*	INDICATES ABOVE COUNTER DEVICE
+	INDICATES DEVICE AT +30–60"
++	INDICATES DEVICE AT +80–96"
CLG	INDICATES DEVICES MOUNTED IN CEILING
WP	INDICATES WEATHERPROOF COVER
3R	INDICATES 3R RATED DEVICE
(E)LA–X	CONNECT(ED) TO EXIST CIRCUIT LA–X
(D)LA–X	DEMO PORTION OF EXIST CIRCUIT LA–X
(N)LA–X	CONNECT(ED) TO NEW CIRCUIT LA–X

GENERAL ELECTRICAL NOTES:

1. INSTALL SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ALL AMENDMENTS.
2. PROVIDE CONDUIT FOR ALL DEVICES INSTALLED IN WALLS.
   - 2.A. 3/4"C FOR POWER AND 1"C FOR LOW VOLTAGE/DATA UNLESS NOTED OTHERWISE.
   - 2.B. PROVIDE PROTECTIVE BUSHING ON END OF ALL LOW VOLTAGE CONDUITS.
   - 2.C. ALL ELECTRICAL HOMERUNS SHALL BE IN CONDUIT, MIN 3/4"C.
   - 2.D. USE INSULATED THROAT FITTINGS FOR CONNECTIONS TO HOUSINGS, BOXES, ENCLOSURES, ETC.
   - 2.E. MAX LENGTH FOR FLEX CONDUIT SHALL BE 6FT AND MIN. SIZE SHALL BE 1/2". ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
3. CONDUIT TYPES:
   - 3.A. INSIDE BUILDINGS: GALVANIZED STEEL EMT.
     - 3.A.A. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT IN EXPOSED CEILING AREAS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
     - 3.A.B. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT ABOVE INACCESSIBLE CEILINGS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
   - 3.B. NO MC CABLE SHALL BE ALLOWED.
   - 3.C. PROVIDE FLEXIBLE CONNECTIONS TO MOTORS, PUMPS, TRANSFORMERS, OR SIMILAR EQUIPMENT.
4. PROVIDE GALVANIZED STEEL, ONE–PIECE CONSTRUCTION, OUTLET BOXES IN ALL CASES SUITABLE FOR INTENDED USE.
   - 4.A. BOXES OUTSIDE SHALL BE STEEL NEMA 3 TYPE.
   - 4.B. PROVIDE CEILING BRACKET TO SUPPORT CEILING MOUNTED DEVICES FROM CEILING TEES.
5. 20 AMP, SINGLE PHASE BRANCH CIRCUITS SERVING LIGHTING AND GENERAL RECEPTACLES MAY BE GROUPED IN A SINGLE RACEWAY PROVIDED A NEUTRAL CONDUCTOR IS INSTALLED FOR EACH CIRCUIT REQUIRING A NEUTRAL.
   - 5.A. DO NOT INSTALL MORE THAN FOUR CURRENT CARRYING CONDUCTORS IN A CONDUIT EXCEPT SIX #12 OR #10 CURRENT CARRYING CONDUCTORS MAY BE INSTALLED IN 3/4" OR LARGER CONDUIT FOR 20A CIRCUITS.
   - 5.B. DO NOT INSTALL 480/277 VOLT CONDUCTORS IN THE SAME CONDUIT WITH 240/208/120 VOLT CONDUCTORS.
   - 5.C. DO NOT COMBINE NEUTRALS. PROVIDE DEDICATED NEUTRALS FOR EACH BRANCH CIRCUIT.
   - 5.D. MULTIPLE DEVICES ON A CIRCUIT SUCH AS RECEPTACLES SHALL BE WIRED WITH A PIGTAIL SO THE DEVICE DOES NOT PROVIDE THE CONTINUITY PATH. FEED THROUGH CONNECTIONS FOR GFCI RECEPTACLES SHALL NOT BE USED FOR PROTECTION OF DOWNSTREAM DEVICES.
6. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
7. PROVIDE J–BOXES, CONDUIT AND DEVICES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM, SOUND SYSTEM, LOW VOLTAGE WIRING, ETC. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF ALL LOW VOLTAGE CONDUITS.
8. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS. ALL JUNCTION/PULL BOXES INSTALLED ABOVE ACCESSIBLE CEILINGS SHALL BE MOUNTED SO THAT THE ACCESS PANEL IS NO HIGHER THAN 18" ABOVE THE CEILING.
9. PROVIDE CIRCUIT LABELS IN PERMANENT MARKER ON ALL NEW AND EXISTING J–BOX COVERS UTILIZED IN THE AREA OF RENOVATION.
10. PROVIDE CIRCUIT LABEL ON ALL ABOVE CEILING J–BOXES, EQUIPMENT, ETC. IDENTIFYING THE CIRCUITS CONTAINED/CONNECTED.
11. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12.
    - 11.A. TYPICAL BUILDING WIRE SHALL BE STRANDED TYPE THHN, THWN–2 (WET RATED FOR 90°C), OR XHHW–2. MINIMUM WIRE SIZE SHALL BE #12.
    - 11.B. ALL BUILDING WIRE SHALL BE COLOR CODED WITH THE SAME COLOR CONNECTED TO THE SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION MATCHING THE EXISTING BUILDING COLOR CODE SCHEME.
12. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEAL PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO COOLER SECTIONS.
13. DRAWINGS, SCHEDULES, NOTES, AND DETAILS ARE INTENDED TO BE COMPLIMENTARY. ANY WORK DESCRIBED IN ANY OF THEM, WILL BE WORK REQUIRED UNDER THIS CONTRACT. WHERE THERE IS A CONFLICT BETWEEN DIFFERENT PORTIONS OF THE DESIGN DOCUMENTS IT SHALL BE CLARIFIED BY RFI. BARRING CLARIFICATION PRIOR TO BIDDING THE MOST EXPENSIVE OPTION SHALL BE INCLUDED AND CLARIFICATION SHALL BE MADE DURING CONSTRUCTION.
14. SHOULD ANY WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS BE IN VIOLATION OF ANY FEDERAL, STATE, COUNTY OR CITY LAWS, ORDINANCE OR REGULATION, THOSE LAWS AND REGULATIONS SHALL PREVAIL, AND SHALL BE COMPLIED WITH BY THE CONTRACTOR AS A PART OF THIS WORK WITH NO EXTRA COMPENSATION.
15. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

GENERAL RENOVATION AND REMODELING NOTES:

1. THESE ELECTRICAL DRAWINGS ONLY SHOW SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J–BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
2. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
3. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. RESUPPORT EXISTING CABLING/CONDUIT TO REMAIN TO MEET CURRENTLY ADOPTED CODE REQUIREMENTS. REMOVE ALL ABANDONED CONDUIT AND WIRE. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITIES.
4. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
5. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
6. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
7. ANY CIRCUIT OR PARTIAL CIRCUIT TO REMAIN OR BE REUSED SHALL REMAIN ACTIVE.
8. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
9. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
10. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN AS–BUILT PANEL SCHEDULE FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT USING BUILDING ROOM NUMBERS.

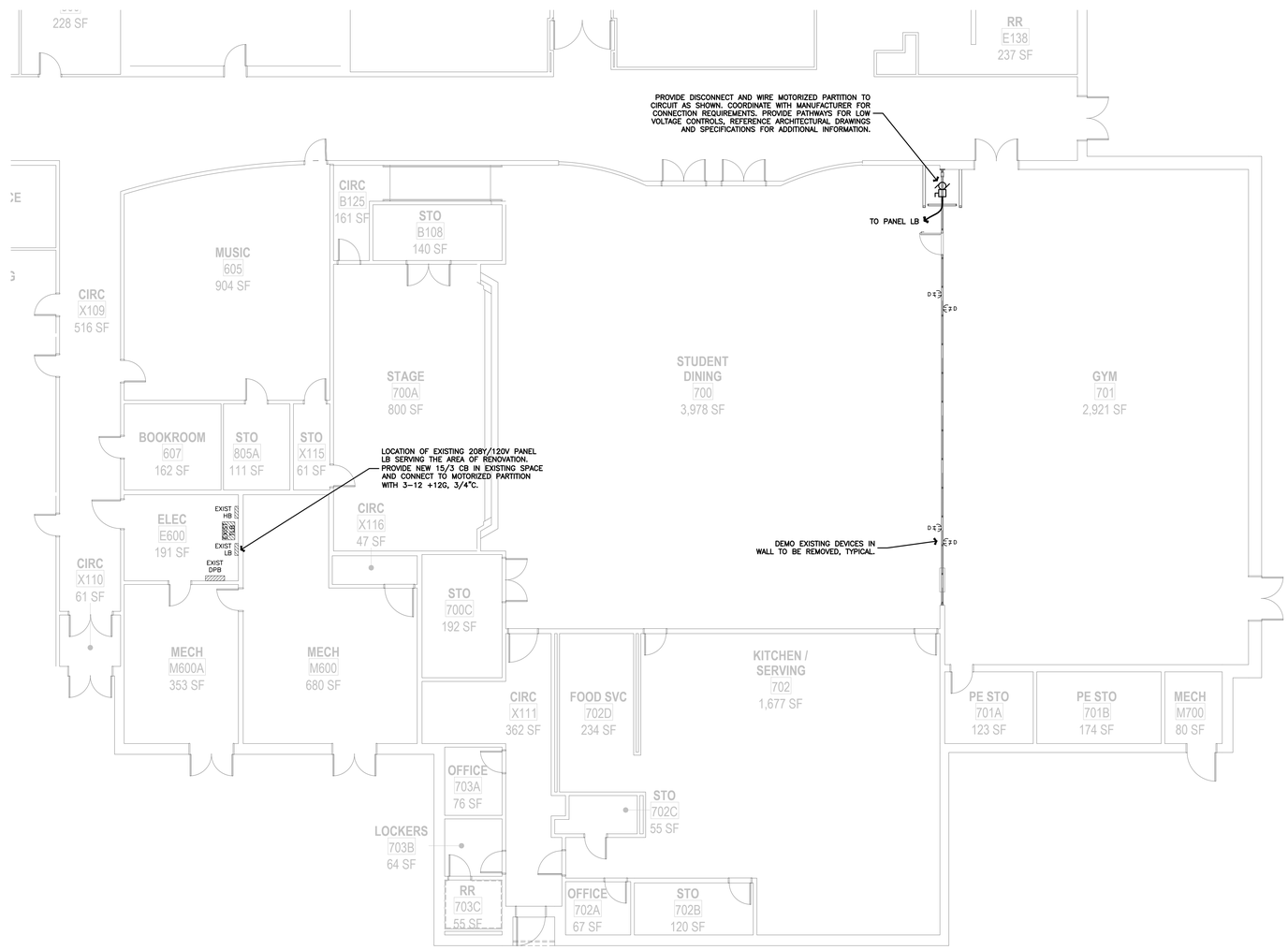


3 PARTIAL ELECTRICAL RISER - CORNERSTONE ELEMENTARY

NO SCALE

NOTES:

1. FIELD VERIFY ALL EXISTING ELECTRICAL PANELS AND FEEDERS SHOWN ON DRAWINGS.
2. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
3. ALL OUTAGES SHALL BE SCHEDULED/CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
4. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.
5. REFERENCE PANEL SCHEDULES AND SHORT CIRCUIT TABLE FOR AIC AND SCCR VALUES.



1 ELECTRICAL RENOVATION PLAN

SCALE: 1/8" = 1'- 0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

e

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
CORNERSTONE ELEMENTARY SCHOOL
1800 CHATHAM AVE
SUGAR LAND, TX 77479

SEAL



07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL FLOOR PLAN & SCHEDULES

e-E.200

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12800 W. SAM HOUSTON PARKWAY N., SUITE 125, HOUSTON, TX 77064

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- AV WALL ROUGH-IN WITH DATA
- KEYNOTE
- Proposed Camera Direction
  SURVEILLANCE CAMERA
  Camera Schedule Number (Floor #-Camera #)
  Camera (N)ew, (E)xisting Rough-in, (D)emo
- Proposed Camera Direction
  PTZ CAMERA
  PTZ
- Proposed Camera Direction
  FIXED SURVEILLANCE CAMERA
- 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Approximate view of lens
  Lens View Angle
  360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
  Lens size
- MICROPHONE WITH AUDIO LINKED TO CAMERA
- CARD READER LINKED TO CAMERA
- SYMBOL TAG
  (#) = DIFFERENT TYPES OF CARD READERS:
  M = MULLION
  W = WIRELESS (Proprietary)
  Wi = Wi-Fi (802.11)
  POE = POWER OVER ETHERNET
- SYMBOL TAG
  (#) = DIFFERENT TYPES OF CARD READERS:
  TS = TOUCHSCREEN
  PU = PUSH BUTTON
- TOP = DETAIL NUMBER
  DETAIL REFERENCE
  BOTTOM = SHEET NUMBER
- NORTH ARROW
- SHEET NUMBER
  SECTION MARKER
  DETAIL NUMBER
- DIRECTION OF ELEVATION
  ELEVATION MARKER
  SHEET NUMBER
  DETAIL NUMBER
- DIRECTION OF ELEVATION
  SHEET NUMBER
  DIRECTION OF ELEVATION
  DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

TRUENORTH A PMY COMPANY

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Cornerstone Elementary School
1600 Chatham Ave, Sugar Land, TX 77479

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ARCHITECTS AND PLANNING CONSULTANTS
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HOUSTON, TEXAS 77079

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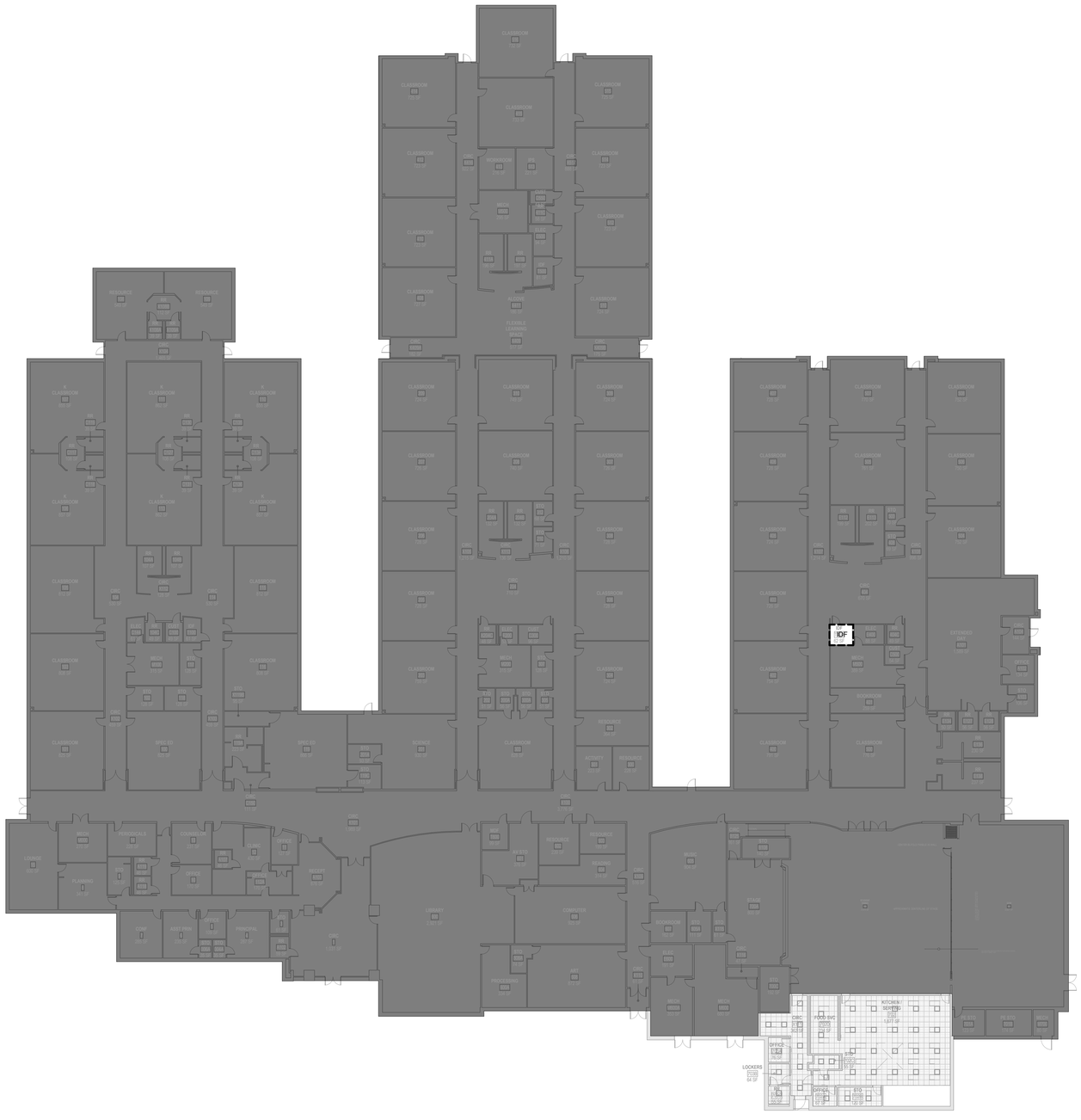
TECHNOLOGY - TITLE SHEET

e-TN000

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 CORNERSTONE - OVERALL
SCALE: 1" = 20'-0"

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TECHNOLOGY - Cornerstone
ES - OVERALL

e-TN.100

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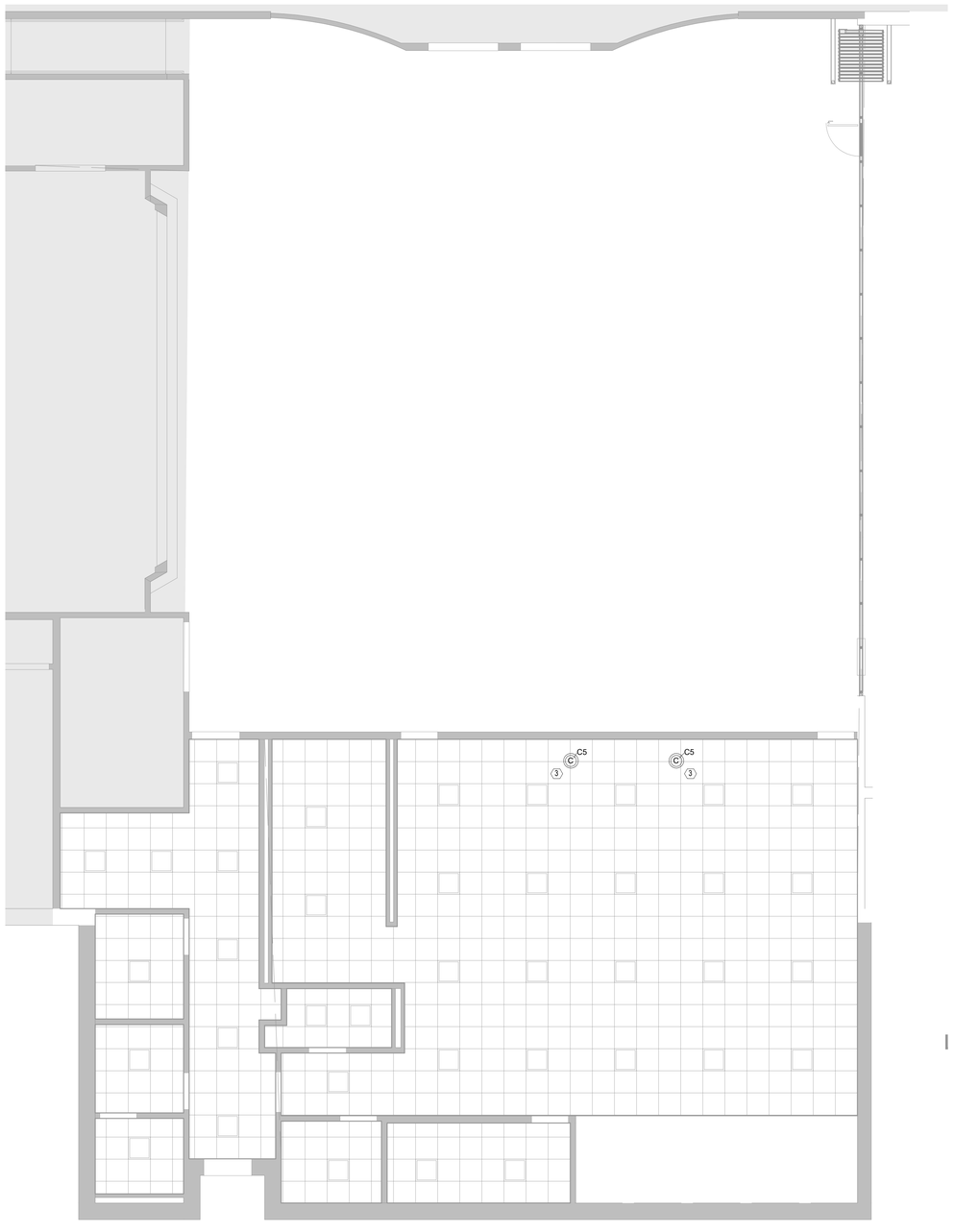

2 CORNERSTONE - REFLECTED CEILING PLAN
SCALE: 3/16" = 1'-0"

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.

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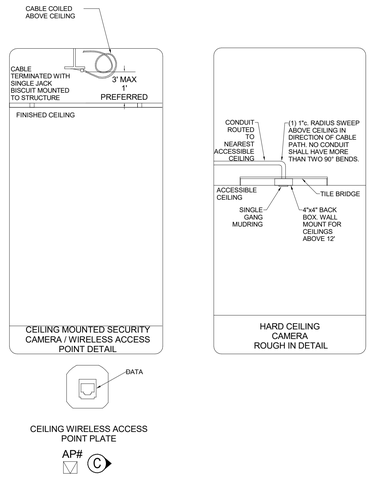
TECHNOLOGY - Cornerstone ES - KITCHEN

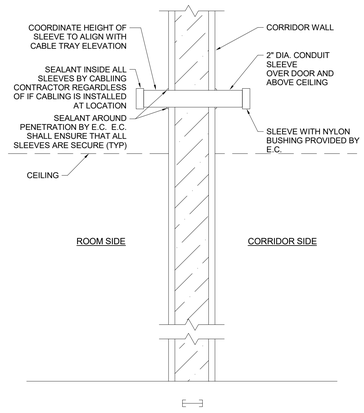
e-TN.101

GENERAL NOTE

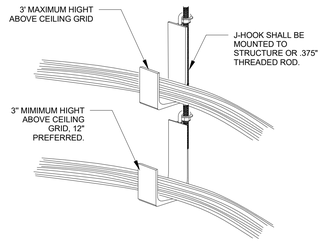
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



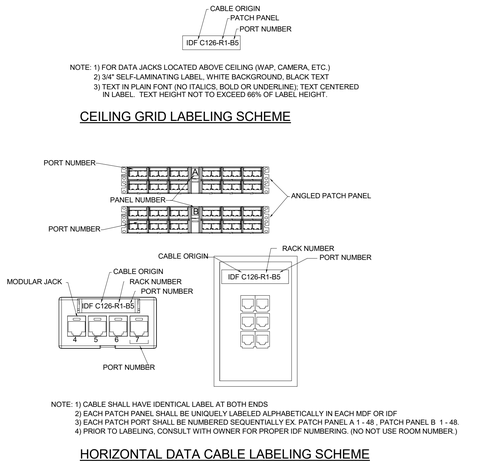
1 DATA ROUGH-IN DETAILS
SCALE: NS



2 TYPICAL CABLING SLEEVE
SCALE: NTS



3 PANDUIT J-HOOK DETAIL
SCALE: NTS



4 LABELING & CABLING SCHEMES
SCALE: NTS

5 CABLE PATHWAY CROSS SECTION
SCALE: NTS

6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS

7 I-JOIST MOUNTING DETAIL
SCALE: NS

8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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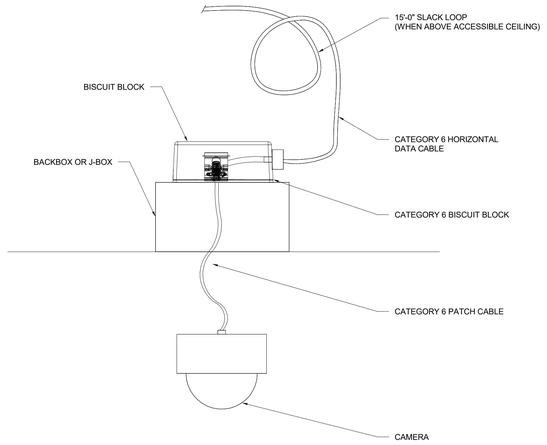
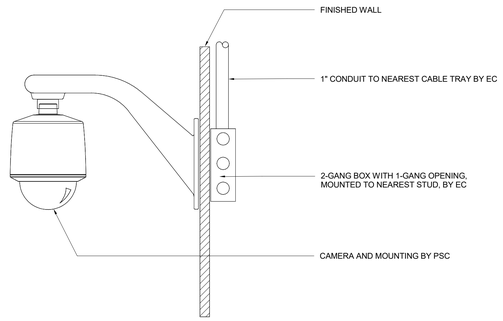
e-TN.500

GENERAL NOTES:

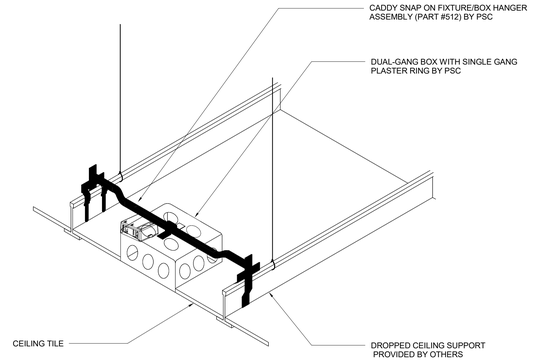
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



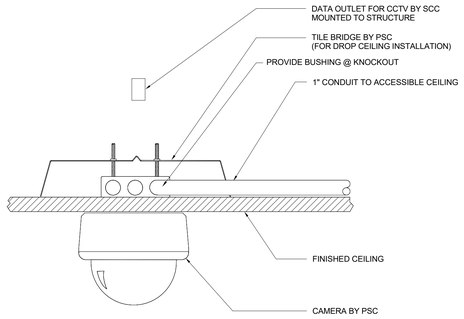
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

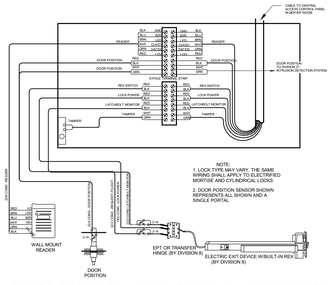


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

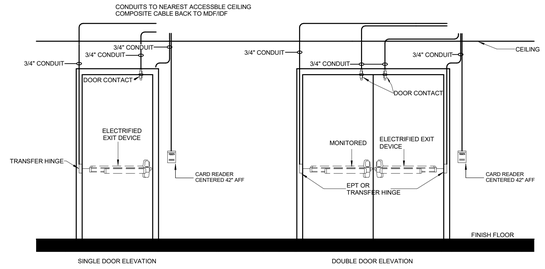
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

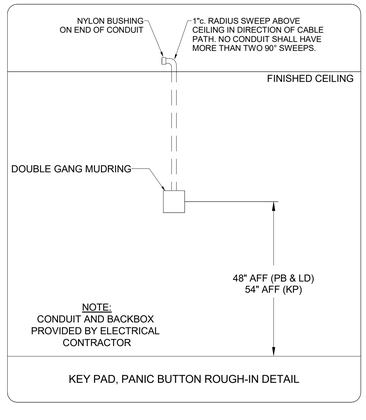
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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FBISD BP013 KITCHEN RENOVATIONS ES

DULLES ELEMENTARY SCHOOL
630 DULLES AVE, SUGAR LAND, TX 77478

FORT BEND INDEPENDENT SCHOOL DISTRICT

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f-A.000	COVER AND INDEX
f-A00-01	GENERAL NOTES AND ABBREVIATIONS
f-D.101	DEMO PLAN
f-A.101	SITE PLAN
f-A.201	OVERALL FLOOR PLAN
f-A.301	KITCHEN FLOOR PLAN
f-QF1	FS GENERAL COORDINATION NOTES
f-QF1.0	FS EQUIPMENT ELECTRICAL PLAN
f-E.200	ELECTRICAL FLOOR PLAN & SCHEDULES
f-TN.000	TECHNOLOGY - INDEX SHEET
f-TN-100	TECHNOLOGY - OVERALL
f-TN-101	TECHNOLOGY - KITCHEN
f-TN-500	TECHNOLOGY - DETAILS
f-TN-600	TECHNOLOGY - SECURITY DETAILS



ISSUED FOR BIDDING AND PERMITTING - JULY 18, 2025

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

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KRISTIN K. TASSIN	PRESIDENT
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DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

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PROGRAM MANAGEMENT
FBISD 2023 Bond Team
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Phone Number: 281-327-5481

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Phone Number: 713-782-8188

FOOD SERVICE
Food Design Professionals
26215 Oak Ridge Drive
The Woodlands, Texas 77380
Phone Number: 281-350-2323

MEP ENGINEERS
Stanton Engineering Group
1300 W. Sam Houston Pkwy South, Suite 121
Houston, Texas 77042
Phone Number: 713-300-9292

STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.

B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.

C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.

D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.

E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.

F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL, ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.

B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.

B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.

C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.

D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY. IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.

1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.

E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.

B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT. REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.

B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED. CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.

D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

01 GENERAL NOTES

SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025) Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

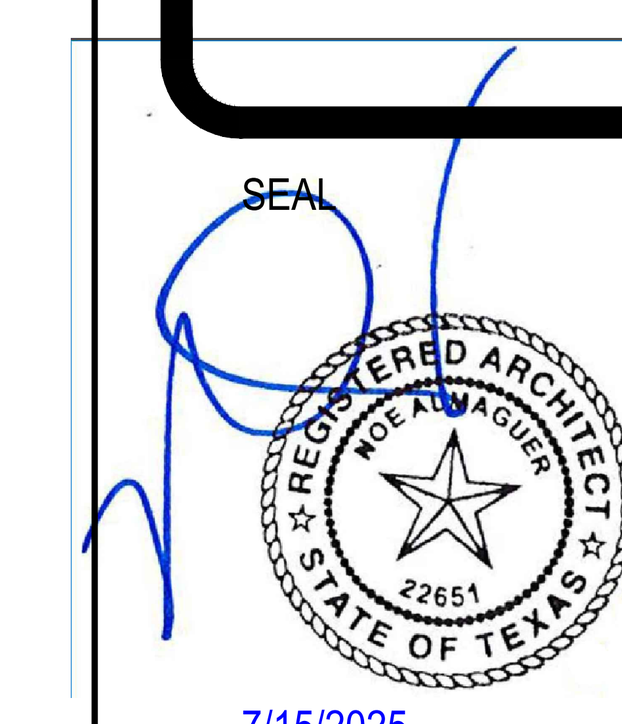
03 PROJECT SCHEDULE

ISSUE:
12/05/2024 DD PACKAGE
03/11/2025 50% CD PKG.
05/23/2025 90% CD PKG.
07/18/2025 ISSUED FOR BIDDING AND PERMITTING

f

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
DULLES ELEMENTARY SCHOOL
630 DULLES AVENUE
SUGAR LAND, TX 77478

SEAL



7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
GENERAL NOTES AND ABBREVIATIONS

A00-01

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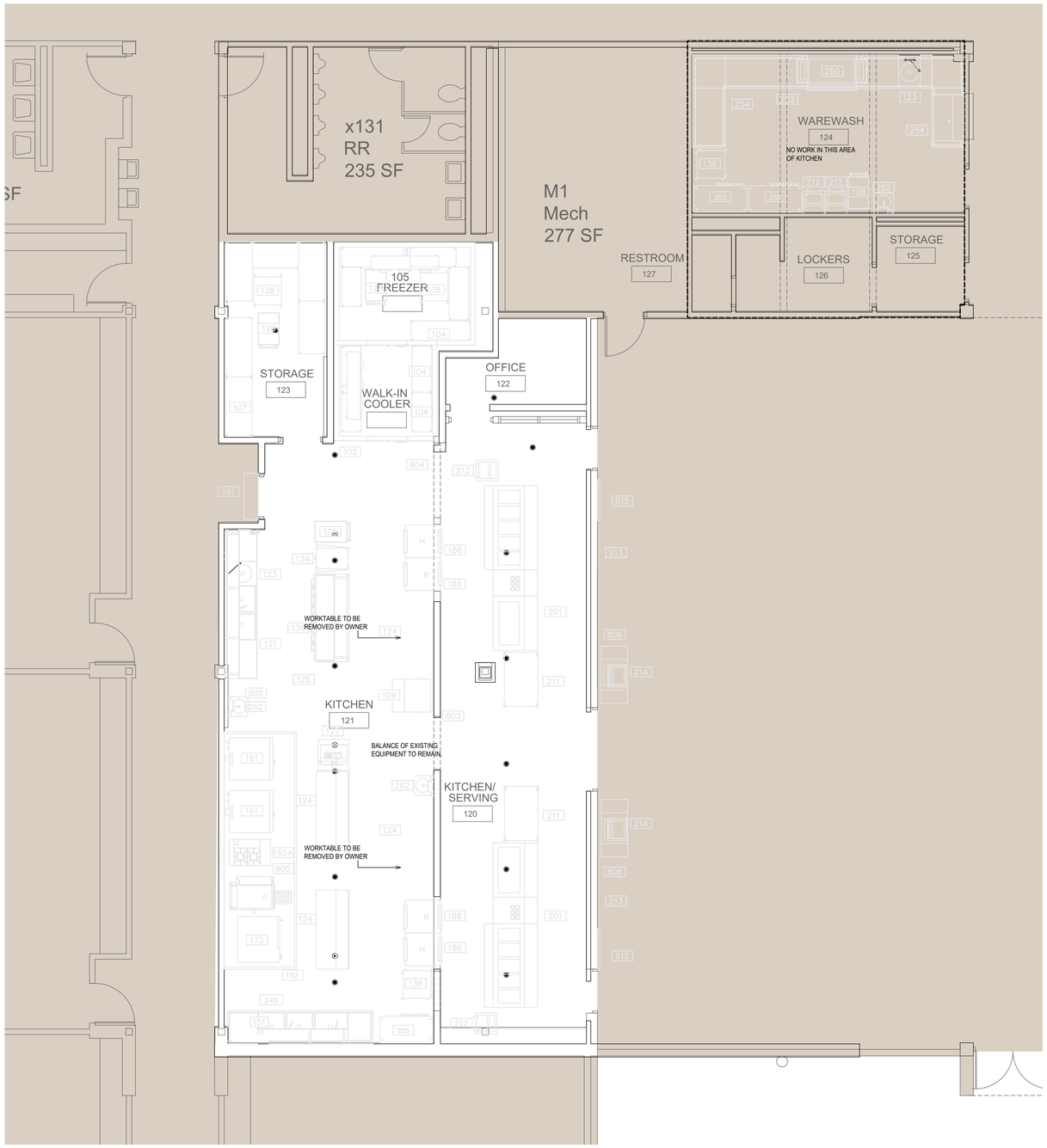

1 DEMOLITION FLOOR PLAN
SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

f

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
DULLES ELEMENTARY SCHOOL
630 DULLES AVENUE
SUGAR LAND, TX 77478

SEAL

REGISTERED ARCHITECT
NOE ALMAGUER
22651
STATE OF TEXAS

7/15/2025

MWA ARCHITECTS

ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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DEMO PLAN

f-D.101

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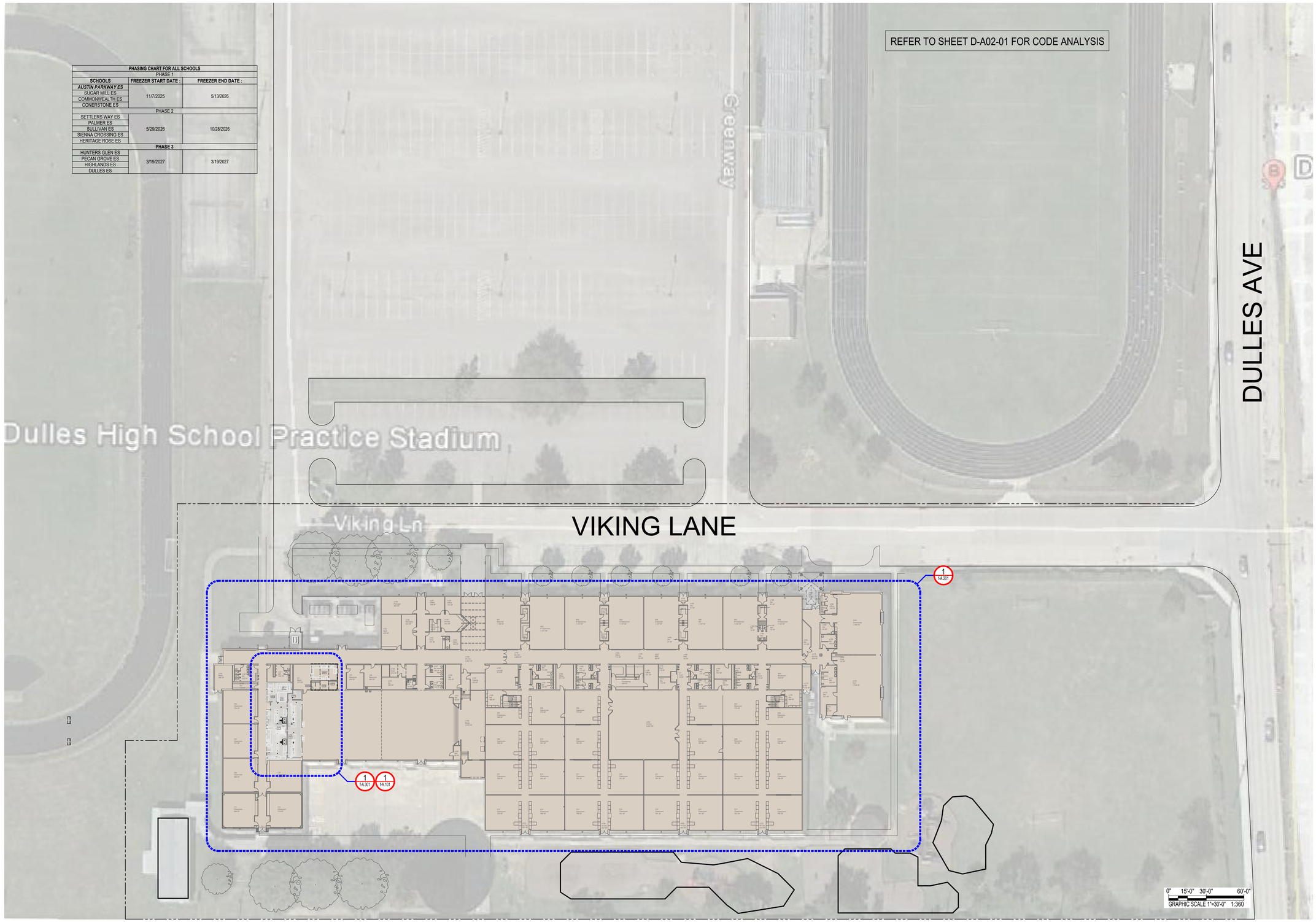
PHASING CHART FOR ALL SCHOOLS		
PHASE 1		
SCHOOLS	**FREEZER START DATE :**	**FREEZER END DATE :**
AUSTIN PARKWAY ES	11/7/2025	5/13/2026
SUGAR MILL ES		
COMMONWEALTH ES		
CONERSTONE ES		
PHASE 2		
SETTLERS WAY ES	5/29/2026	10/28/2026
PALMER ES		
SULLIVAN ES		
SIENNA CROSSING ES		
HERITAGE ROSE ES		
PHASE 3		
HUNTERS GLEN ES	3/19/2027	3/19/2027
PECAN GROVE ES		
HIGHLANDS ES		
DULLES ES		

REFER TO SHEET D-A02-01 FOR CODE ANALYSIS



1 SITE PLAN
SCALE: 1" = 30'-0"

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ISSUE:

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

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STATE OF TEXAS
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SITE PLAN

f-A.101

2 CODE ANALYSIS

SCOPE OF WORK: ALL SCOPE FALLS UNDER A LEVEL 2 ALTERATION PER SECTION 603.1 OF THE INTERNATIONAL EXISTING BUILDING CODE AS FOLLOWS:

ADD (1) REACH-IN FREEZER AND (1) REACH-IN REFRIGERATOR AND UTILTIES FOR EACH. THIS PROVIDES STORAGE FOR CEP PROGRAM.

ADOPTED CODES: CITY OF MISSOURI CITY AND SUGAR LAND, TX

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL RESIDENTIAL CODE
- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2023 NATIONAL ELECTRIC CODE NFPA 70
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2021 INTERNATIONAL FUEL GAS CODE
- 2021 INTERNATIONAL FIRE CODE

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY:

SPRINKLERED

INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS	**B**
CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS	**C**
ROOMS AND ENCLOSED SPACES	**C**

FLOORING SHALL BE CLASS II

2021 INTERNATIONAL EXISTING BUILDING CODE

301.3.1 PRESCRIPTIVE COMPLIANCE METHOD. REPAIRS, ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH CHAPTER FIVE OF THIS CODE IN BUILDINGS COMPLYING WITH THE INTERNATIONAL FIRE CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

302.3 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE .

302.4 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED THAT NO UNSAFE CONDITION IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT PERMIT THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

ALTERATION - LEVEL 1 INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES THAT SERVE THE SAME PURPOSE.

ALTERATION - LEVEL 2 INCLUDE THE ADDITION OR ELIMINATION OF ANY DOOR OR WINDOW, THE RECONFIGURATION OR EXTENSION OF ANY SYSTEM, OR THE INSTALLATION OF ANY ADDITIONAL EQUIPMENT, AND SHALL APPLY WHERE THE WORK IS EQUAL TO OR LESS THAN 50% OF THE BUILDING AREA.

THIS BUILDING'S CONSTRUCTION IS TYPE IIB.

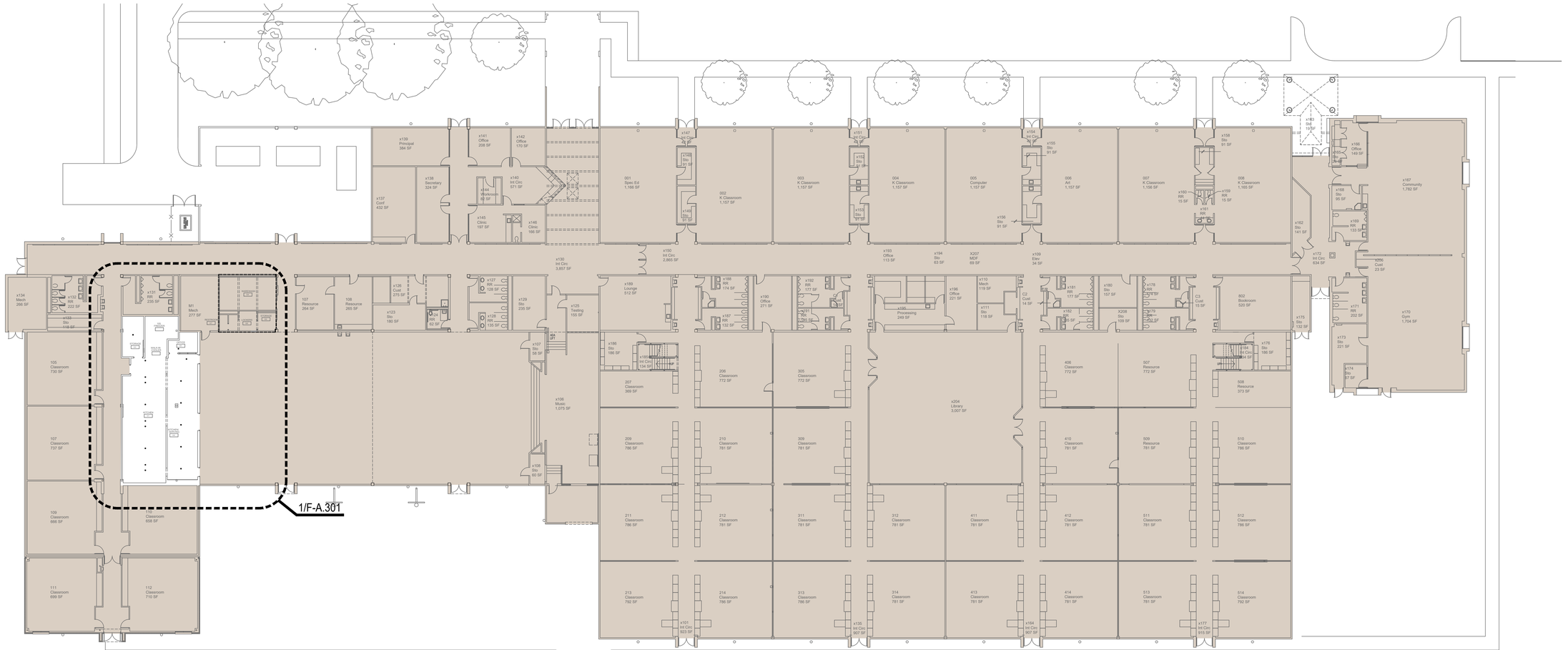
THIS BUILDING'S OCCUPANCY IS E.

THIS BUILDING'S IS SPRINKLERED.

THERE WILL NOT BE ANY MODIFACATIONS TO THE HOOD SYSTEMS IN THE KITCHENS BEYOND REPLACEMENT OF MOTOR FOR LIKE KIND IF NEEDED.

THE BUILDING WILL NOT HAVE ADDITIONAL SQUARE FOOTAGE AS PART OF THE WORK.

NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODES



1 OVERALL FLOOR PLAN

SCALE: 1/16" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

DULLES ELEMENTARY SCHOOL
630 DULLES AVENUE
SUGAR LAND, TX 77478

SEAL

REGISTERED ARCHITECT
MICHAEL ANDERSON
#22651
STATE OF TEXAS

7/15/2025

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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

OVERALL FLOOR PLAN

f-A.201

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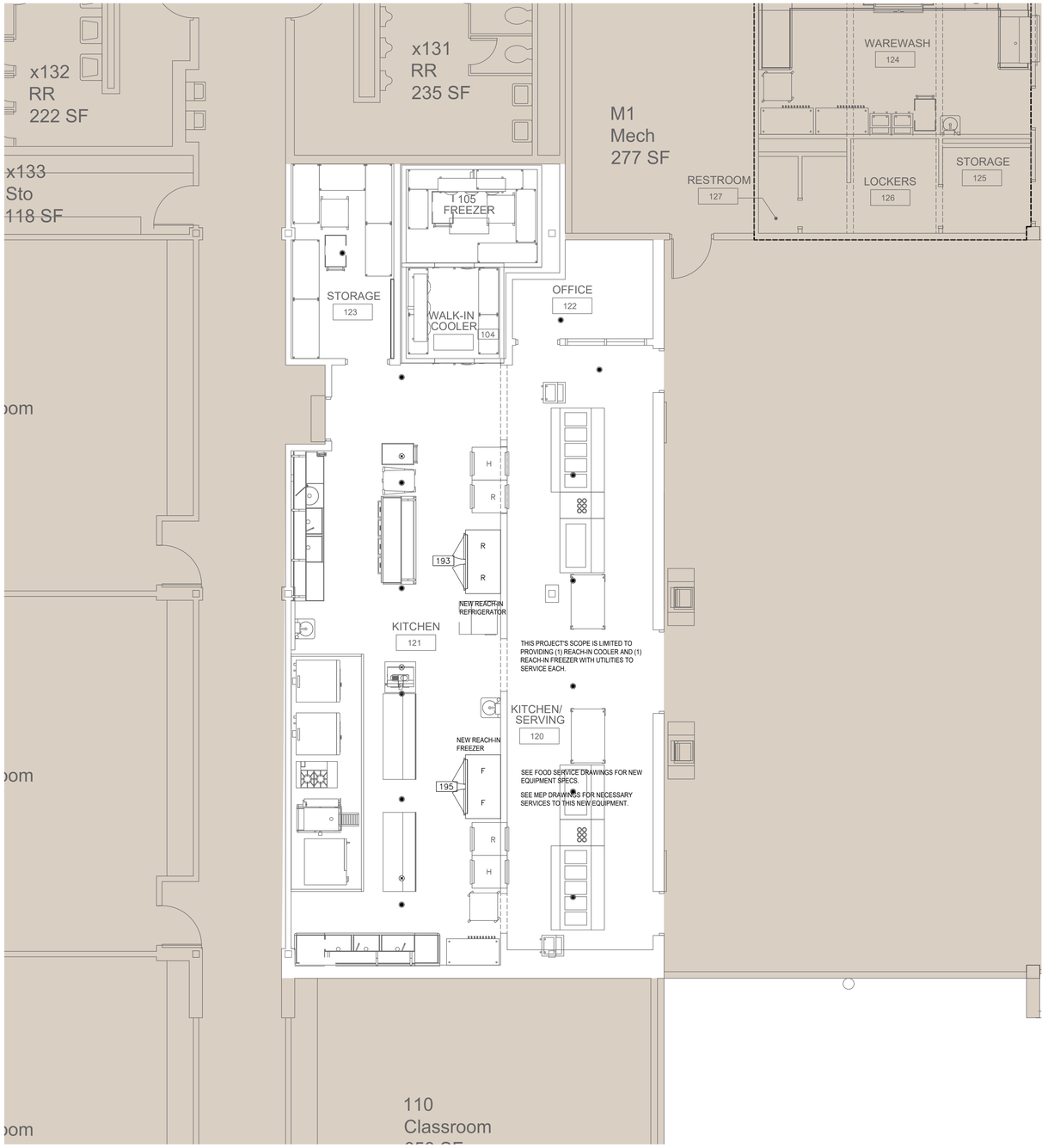

1 KITCHEN FLOOR PLAN
SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FORT BEND INDEPENDENT SCHOOL DISTRICT
DULLES ELEMENTARY SCHOOL
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SEAL

REGISTERED ARCHITECT
NOE ALMAGUER
22651
STATE OF TEXAS

7/15/2025

MWA ARCHITECTS

ARCHITECTS
AND PLANNING
CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

KITCHEN
FLOOR PLAN

f-A.301

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REFER TO FOODSERVICE DESIGN PROFESSIONALS SPECIFICATIONS AND SUBSEQUENT SHEETS FOR ADDITIONAL COORDINATION INFORMATION

EXISTING EQUIPMENT NOTES (IF EXISTING EQUIPMENT IS PROVIDED IN THIS PROJECT):

1. EXISTING EQUIPMENT NOT SCHEDULED FOR RE-USE TO BE RELOCATED BY THE K.E.C. COORDINATE WITH OWNER FOR NEW LOCATION.
2. ALL UTILITIES NOT SCHEDULED FOR RE-USE TO BE CAPPED & COVERED BY REQUIRED DISCIPLINE.
3. K.E.C. TO VERIFY ALL EXISTING UTILITY LOCATIONS & COORDINATE WITH ALL EQUIPMENT AS REQUIRED.

8 EXISTING EQUIPMENT NOTES
NOT TO SCALE

ARCHITECT TO VERIFY/COORDINATE THE AESTHETIC OPTIONS BELOW (FOOD SERVICE COLOR, MATERIAL, OR SIGNAGE SELECTIONS) IF THESE ITEMS ARE PROVIDED IN THIS PROJECT:

1. COUNTERTOPS: STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
2. TRAY SLIDES: CORIAN OR STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
3. COUNTER FRONTS: CERAMIC TILE, 3 FORM, OR PLASTIC LAMINATE.
4. SNEEZE GUARDS: STONE INSETS.
5. GENERAL COLOR, MATERIAL AND GRAPHIC SELECTIONS:
   - A. DISPLAY AIR SCREEN MERCHANDISERS - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - B. BAKERY DISPLAY CASES - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - C. PASS THRU OR REACH IN HOLDING CABINETS - COLOR SELECTION: POWDER COAT (MFG.: TRUE) OR PLASTIC LAMINATE (MFG.: TRAULSEN) (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - D. HANGING HEAT LAMPS - TRACK AND FIXTURE COLOR SELECTION.
   - E. HEATED MERCHANDISERS.
   - F. PORTABLE GUIDE RAILS - STANCHION AND BELT COLOR SELECTION.
   - G. POPCORN MACHINE - SIGNAGE SELECTION.
   - H. BOTTLE COOLER - SIGNAGE SELECTION.
   - I. GRAPHICS PACKAGE INFORMATION.
   - J. HOT FOOD WELL COVERS.
6. ARCHITECT TO VERIFY/COORDINATE THE FINISHES BELOW:
   - A. WALLS: CERAMIC TILE, FLAT FRP, OR MOLDED FRP (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - B. CEILINGS: REMOVABLE VINYL FACE TILE (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - C. FLOORS: TILE, EPOXY, OR RUBBERIZED FLOORING SYSTEM (SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT AS APPROVED BY LOCAL JURISDICTION) (COORDINATE FLOOR TILE TRANSITION AT SERVING LINES).
   - D. FLOORS: WALK-IN ASSEMBLY - EXTEND KITCHEN FLOOR FLUSH INTO WALK-IN ASSEMBLY WITH COVED BASE.
   - E. FURR DOWNS ABOVE SERVING COUNTERS.

ARCHITECTURAL COORDINATION NOTES
5 NOT TO SCALE

CRITICAL NOTES:

1. CONTRACTOR MUST COORDINATE AND VERIFY ALL DIMENSIONS WITH FOOD SERVICE EQUIPMENT SHOP DRAWINGS AND MANUFACTURER'S DATA. DIMENSIONS SHOWN ARE FOR DESIGN AND BIDDING PURPOSES ONLY.
2. WALK-IN ASSEMBLY DOORS MUST BE LEFT OPEN WHILE INTERIOR CONCRETE FLOOR CURES.
3. INSTALL PROTECTIVE COVER ON WALK-IN ASSEMBLY WALL PANELS BEFORE INSTALLING CONCRETE FLOORS AND CURBS.
4. REFER TO GENERAL SPECS - DIVISION 27 TO PROVIDE CONDUIT, DATA, AND INTERCONNECT THE PANIC ALARM INSIDE FREEZER TO THE BUILDING AUTOMATION SYSTEM FOR NOTIFICATION TO DISTRICT PERSONNEL IN THE EVENT OF STAFF ENTRAPMENT.
5. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL (DIV. 22).

7 CRITICAL NOTES
NOT TO SCALE

DIVISION 26 (ELECTRICAL) IS RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL ELECTRICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. ROUGH-IN AND FINAL CONNECTION OF ELECTRICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 26.
6. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
7. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR INTERCONNECT CABLES BETWEEN LAN AND POS TERMINALS, CHANGE-MAKERS, PRE-CHECK UNITS, PRINTERS, CPUS, ETC. DIVISION 26 TO VERIFY WHERE THE CONDUIT IS TO RUN FOR POS SYSTEM (I.E., MANAGER'S OFFICE OR IDF ROOM).
8. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR FIRE SUPPRESSION SYSTEMS. INTERCONNECT FIRE PROTECTION SYSTEM TO PANEL BOX SHUNT TRIPS AND BUILDING ALARM.
9. WALK-IN LIGHT FIXTURE INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF WALK-IN IS PROVIDED IN THIS PROJECT).
10. TABLE LIMIT SWITCH INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF DISHMACHINE IS PROVIDED IN THIS PROJECT).
11. ELECTRICAL MATERIALS AND DEVICES (SHUNT-TRIP BREAKERS, SURGE PROTECTORS, LIGHTING CONTROL DEVICES, CONDUIT, WIRE, ETC.).
12. SWITCHES AND STAINLESS STEEL DISCONNECTS AS REQUIRED (PROVIDE, LOCATE, AND INSTALL – TO BE IN AN ACCESSIBLE LOCATION).
13. CHARGING STATIONS FOR FORKLIFTS, PALLET STACKERS, AND PALLET JACKS (SIZE, PROVIDE, LOCATE, AND INSTALL) (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
14. INTERCONNECTION BETWEEN CONDENSATE FAN AND DISHMACHINE CONTROL PANEL (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
15. INTERCONNECTION BETWEEN EXHAUST HOOD FANS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
16. INTERCONNECTION BETWEEN EXHAUST HOOD LIGHTS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
17. DOOR HEATERS, LIGHTS, COILS, AND PRESSURE RELIEF PORTS PRE-WIRED TO JUNCTION BOX AT TOP OF WALK-IN ASSEMBLIES (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) PROVIDED BY SECTION 11 40 00. FINAL CONNECTION BY DIV. 26.
18. IF ANY ELECTRICAL ACCESSORIES, FITTINGS, AND CORD/PLUGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV.26 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
19. PROVIDE WATERPROOF RECEPTACLES IN WET AREAS.
20. ALL ELECTRICAL CONNECTIONS BENEATH EXHAUST HOODS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) TO EXTEND TO SHUNT TRIP BREAKERS WITH ELECTRICAL PANEL BOX FOR SHUTDOWN DURING FIRE MODE.
21. RECEPTACLES ARE TO BE PRE-WIRED TO THE JUNCTION BOX OR LOAD CENTER FOR FINAL CONNECTION BY DIVISION 26.
22. ALL ELECTRICAL LIGHTING, POWER, AND DISTRIBUTION SYSTEMS.
23. DO NOT INTERCONNECT MORE THAN THREE (3) CONVENIENCE OUTLETS ON ONE (1) BREAKER.
24. OTHER THAN CONVENIENCE OUTLETS, ALL ELECTRICAL CONNECTIONS SHOWN ON FOOD SERVICE PLANS ARE DEDICATED BREAKERS.
25. DOORBELL AT RECEIVING DOOR (PROVIDE AND INSTALL – TO BE AUDIBLE THROUGHOUT KITCHEN, OFFICE, AND DRY STORAGE ROOM).
26. ADEQUATE LIGHTING AT RECEIVING DOOR.
27. PROVIDE AND INSTALL TWO EMERGENCY STROBE BEACONS THAT INTERCONNECT TO PANIC ALARM IN WALK-IN FREEZER. ONE (1) IN KITCHEN ABOVE WALK-IN FREEZER DOOR ONE (1) IN CAFETORIUM (IF WALK-IN IS PROVIDED IN THIS PROJECT). REFER TO GENERAL SPECIFICATIONS FOR ADDITIONAL DETAILS.
28. DEDICATED CIRCUIT FOR HEATED DRAIN LINE CONNECTION IN WALK-IN FREEZER AT EACH COIL (IF WALK-IN IS PROVIDED IN THIS PROJECT).

NOTE: ELECTRICAL CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 26. FOR ADDITIONAL REQUIREMENTS, REFER TO THE ELECTRICAL ENGINEER'S DRAWINGS.

6 ELECTRICAL COORDINATION NOTES1
NOT TO SCALE

DIVISION 22 (PLUMBING) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL PLUMBING REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY PVC CONDUIT WITH WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO BEVERAGE LINES, CO2 LINES, AND REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL PLUMBING CONNECTIONS TO FOOD SERVICE EQUIPMENT AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 22. THIS INCLUDES BUT IS NOT LIMITED TO INSTALLATION OF ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), HOSES, GAS DISCONNECTS, AND DRAINS FROM EQUIPMENT POINT OF CONNECTION TO BUILDING PLUMBING SYSTEMS. ALL DRAIN LINES ARE PROVIDED AND INSTALLED BY DIV. 22.
7. KITCHEN EQUIPMENT CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), DRAIN FITTINGS, MIXING VALVES, CONTROL VALVES, WATER PRESSURE REGULATORS, VACUUM BREAKERS, AND ALL ACCESSORIES FOR EQUIPMENT SPECIFIED UNDER 11 40 00. DIVISION 22 IS RESPONSIBLE FOR INSTALLATION.
8. INDIRECT DRAIN LINE RUNS FROM EQUIPMENT TO NEAREST DRAIN OR FLOOR SINK. LINES TO BE TYPE 'K' COPPER.
9. IF ANY PLUMBING ACCESSORIES OR FITTINGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV. 22 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
10. GAS SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
11. WATER SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
12. COMPRESSED AIR SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM (IF REQUIRED FOR THIS PROJECT).
13. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL.
14. FLOOR SINKS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
15. FLOOR DRAINS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
16. TRENCH DRAINS (PROVIDE AND INSTALL). TRENCH LINERS PROVIDED BY 11 40 00. FLANGE AND LINERS TO BE FLUSH WITH FINISHED FLOOR.
17. GREASE TRAPS AS REQUIRED. VERIFY WITH LOCAL CODES TO BYPASS OR PIPE THRU GREASE TRAP AND/OR INTERCEPTOR.
18. P-TRAPS AS REQUIRED (INCLUDING ALL DISPOSERS).
19. INTERCONNECT WATER THRU WATER FILTER (FILTER PROVIDED BY 11 40 00 UNLESS OTHERWISE SPECIFIED) TO EQUIPMENT.
20. GAS QUICK DISCONNECT INSTALLATION (QUICK DISCONNECT PROVIDED BY 11 40 00).
21. SAFETY RESTRAINT CABLE INSTALLATION (SAFETY RESTRAINT CABLE PROVIDED BY 11 40 00).
22. SPECIFIED COUPLINGS AND PIPING TO ALL EQUIPMENT FURNISHED BY 11 40 00.
23. AIR COMPRESSORS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
24. WATER SOFTENERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
25. PRESSURE BOILERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
26. HAND SINKS (PROVIDE (UNLESS OTHERWISE SPECIFIED) AND INSTALL). PROVIDE HOT WATER TEMPERING VALVE IF REQUIRED. WATER TEMPERATURE TO BE AT LEAST 100 DEGREES AND FLOW FOR AT LEAST 20 SECONDS.
27. ICE BIN DRAIN INSULATION (IF ICE MACHINE IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
28. UNIONS AT DISPOSER SOLENOID VALVES (IF DISPOSER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
29. BACK FLOW PREVENTION AS REQUIRED (PROVIDE AND INSTALL - INCLUDING ALL DISPOSERS). BACK- SIPHONAGE SHALL BE INSTALLED AT ALL FIXTURES AND EQUIPMENT WHERE BACKFLOW AND/OR BACK-SIPHONAGE MAY OCCUR AND WHERE A MINIMUM AIR GAP CANNOT BE PROVIDED BETWEEN THE WATER TO THE FIXTURE OR EQUIPMENT AT ITS FLOOD/LEVEL RIM. VACUUM BREAKERS, WHEN FURNISHED WITH EQUIPMENT, SHALL OVERRIDE THE ABOVE, IF ACCEPTABLE WITH APPLICABLE CODES. DIVISION 22 RESPONSIBLE FOR VERIFYING REQUIREMENT WITH LOCAL CODES.
30. JANITOR SINK WITH FAUCET (PROVIDE AND INSTALL).
31. FREEZE PROOF HYDRANT AT EXTERIOR OF BUILDING BY RECEIVING DOOR (PROVIDE AND INSTALL).
32. REVERSE OSMOSIS SYSTEMS (SIZE, PROVIDE (UNLESS OTHERWISE SPECIFIED), LOCATE AND INSTALL).
33. ALL PIPING WITHIN COUNTER BODY OR UNDER FABRICATED COUNTERS TO BE RUN TO A CONNECTION POINT BELOW COUNTER BODY BY SECTION 11 40 00. FINAL CONNECTION BY DIVISION 22.
34. EXHAUST HOOD CONDENSATE DRAIN CONNECTIONS (IF EXHAUST HOOD IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
35. INTERCONNECTION OF 1/2" CW TO PRE-RINSE AND DISPOSERS CONE/BODY INLETS PIPED THROUGH SOLENOID AND VACUUM BREAKER (IF DISPOSER IS PROVIDED IN THIS PROJECT).
36. FIRE SYSTEM PIPING. EXPOSED PIPING TO BE CHROME PLATED.
37. PIPE 1/2" COLD WATER TO SWIRL INLETS AT DISPOSERS (IF DISPOSER IS PROVIDED IN THIS PROJECT).
38. WATER TREATMENT FOR ICE BUILDERS (NON-CHLORINATED WATER WITH A PH LEVEL OF 10 OR HIGHER) AND ANY DRAINS AND OVERFLOWS. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS BY DIV. 23 (IF ICE BUILDERS AND TUMBLE CHILLERS ARE PROVIDED IN THIS PROJECT).

NOTE: WATER AND DRAIN CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 22. FOR ADDITIONAL WATER AND DRAIN REQUIREMENTS REFER TO MECHANICAL DRAWINGS.

NOTE: REFER TO ELECTRICAL/MECHANICAL DRAWINGS FOR REQUIREMENTS OF EXHAUST FANS AND MAKE-UP AIR HANDLERS AND LOCATION OF AN INTERLOCK AND START/STOP CONTROLS TO BE LOCATED WITHIN FOOD SERVICE AREA BY DIVISION 26.

4 PLUMBING COORDINATION NOTES1
NOT TO SCALE

DIVISION 23 (MECHANICAL) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL MECHANICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL CONNECTION OF MECHANICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR).
7. TESTING AND BALANCING FOR ROOMS AND EXHAUST HOODS TO BE PERFORMED BY MECHANICAL CONTRACTOR. BALANCE REPORT FOR FOOD SERVICE EXHAUST HOODS TO BE PROVIDED TO FOODSERVICE DESIGN PROFESSIONALS (FDP) IMMEDIATELY UPON COMPLETION (SEND TO HOUSTON.SUBMITTAL@FDP.ORG FOR HOUSTON OFFICE AND DALLAS.SUBMITTAL@FDP.ORG FOR DALLAS OFFICE) AND MUST BE SUBMITTED WITH O&M MANUALS.
8. EXHAUST HOODS, CONDENSATE HOODS, FIRE SUPPRESSION SYSTEMS, CONNECTIONS AND CONTROLS (PROVIDE AND INSTALL – *UNLESS OTHERWISE SPECIFIED*). PROVIDE TEMPERED AIR AT ALL SUPPLY DUCTS.
   - A. IF EXHAUST/CONDENSATE HOODS AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED UNDER SECTION 11 40 00, DIVISION 23 IS RESPONSIBLE FOR ALL EXHAUST AND CONDENSATE HOOD CONNECTIONS (PROVIDE AND INSTALL).
9. VFD SYSTEM AND CONTROLLERS, WHEN REQUIRED BY CODE (PROVIDE AND INSTALL).
10. PROVIDE AND INSTALL ALL VENTILATION (DIRECT OR INDIRECT), AIR CONDITIONING AND HEATING SYSTEMS (UNLESS OTHERWISE SPECIFIED).
11. COORDINATE SUPPLY AND RETURN DUCTS ABOVE SERVING COUNTERS OR OPEN-AIR REFRIGERATED MERCHANDISERS. NO COLD AIR TO BLOW DIRECTLY ON HOT FOOD COUNTERS.
12. COORDINATE SUPPLY AND RETURN DUCTS AWAY FROM EQUIPMENT WITH TOP MOUNTED REFRIGERATION. NO COLD AIR TO BLOW DIRECTLY ON COMPRESSORS.
13. MECHANICAL CONTRACTOR TO LOCATE TEMPERATURE MONITORS WITHIN RETURN DUCTS.
14. CIRCULATING AIR ABOVE WALK-IN ASSEMBLIES (PROVIDE AND INSTALL).
15. CIRCULATING AIR ABOVE AND IN AIR GAPS AT WAREHOUSE COLD STORAGE ASSEMBLIES (PROVIDE AND INSTALL).
16. WATER CHILLERS AS REQUIRED (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).
17. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).

3 MECHANICAL COORDINATION NOTES
NOT TO SCALE

GENERAL CONTRACTOR RESPONSIBLE FOR BUT NOT LIMITED TO:

1. ANY WALL PENETRATION REQUIRED FOR FOOD SERVICE EQUIPMENT UTILITIES. ESCUTCHEON PLATES OR S/S SLEEVES TO BE PROVIDED AND INSTALLED AS NEEDED.
2. BULK FREEZER VENTILATION PIPE (IF BULK FREEZER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
3. CORE DRILLING FOR GUIDE RAILS (IF GUIDE RAILS ARE PROVIDED IN THIS PROJECT).
4. REFRIGERATION ROOF CURBS / ROOF JACK (IF REFRIGERATION SYSTEM IS PROVIDED IN THIS PROJECT AND LOCATED ON ROOF).
5. INTERIOR BOLLARDS (IF REQUIRED FOR THIS PROJECT) – TO BE EPOXY PAINTED PER LOCAL CODES (PROVIDE AND INSTALL).
6. FURNISH AND INSTALL 3/4" PLYWOOD BLOCKING IN THE WALL FOR MOUNTING EQUIPMENT FURNISHED BY SECTION 11 40 00 AS REQUIRED.
7. WALK-IN DEPRESSIONS (TO BE DEAD LEVEL) AND SAND LEVELING BED (IF WALK-IN IS PROVIDED IN THIS PROJECT AND RECESS IS SHOWN).
8. STRUCTURAL BRACING FOR BULK WALK-IN CEILING PANELS IF REQUIRED.
9. MENU SYSTEM VIDEO MONITORS IN SERVERY (UNLESS OTHERWISE SPECIFIED).
10. STRUCTURAL BRACING FOR MENU SYSTEM VIDEO MONITORS IF REQUIRED.
11. INTERIOR/EXTERIOR REFRIGERATION PENETRATIONS AND SLEEVES AT BUILDING PENETRATIONS.
12. DOORSCOPE VIEWER (PEEPHOLE) WITH WIDE VIEWING ANGLE AT RECEIVING DOOR.
13. CANOPY AT RECEIVING DOOR. COORDINATE HEIGHT WITH THE HEIGHT OF RECEIVING DOOR (8') AND THE MOUNTING HEIGHT OF AIR SCREEN ABOVE THE DOOR.
14. SOAP AND TOWEL DISPENSER PROVIDED BY OWNER. G.C. RESPONSIBLE FOR INSTALLATION.
15. WASHER AND DRYER (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
16. DWARF WALL AT EXPOSED FRONT/ENDS OF CAFETERIA SERVING COUNTERS WITH FINISH AS SELECTED BY ARCHITECT (IF REQUIRED IN THIS PROJECT).

GENERAL CONTRACTOR COORDINATION NOTES
2 NOT TO SCALE

HEALTH DEPARTMENT REQUIREMENTS (VERIFY WITH LOCAL JURISDICTIONS):

1. FLOORS: VERIFY WITH DIVISION 9. FLOORS TO BE SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT.
2. WALLS: VERIFY WITH ARCHITECTURAL DOCUMENTS. WALLS TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
3. CEILING: LAY-IN TILES. CEILING TILES TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
4. EMPLOYEE TOILET: TO BE LOCATED OFF MAIN CORRIDOR AND ADJACENT TO MAIN KITCHEN. RESTROOM MUST HAVE A VESTIBULE AND NOT OPEN TO KITCHEN / PREP AREAS. TOILETS TO BE WELL VENTILATED.
5. LAVATORIES: WALL HUNG LAVATORIES LOCATED WITHIN ALL FUNCTIONAL WORKING AREAS.
6. UTENSIL CLEANING/SANITIZING: ACCOMPLISHED IN UTENSIL WASH AREA WITH (3) 2'-0" x 2'-2" x 15" MINIMUM DEEP SINKS AND WAREWASH MACHINE.
7. MECHANICAL CLEANING/SANITIZING OF TABLEWARE: ACCOMPLISHED BY WAREWASH MACHINE.
8. STOREROOMS: AMPLE DAILY STORAGE PROVIDED IN ENCLOSED STORE ROOMS. STORE ROOMS TO BE VENTILATED AND MAINTAIN PROPER TEMPERATURE.
9. WATER HEATER: LOCATED IN THE MECHANICAL ROOM ADJACENT TO KITCHEN. TO BE SIZED TO PROVIDE AMPLE WATER TO MAINTAIN PROPER WATER TEMPERATURE THROUGHOUT HOURS OF OPERATION.
10. GREASE TRAP: LOCATED AT EXTERIOR OF BUILDING. REFER TO ENGINEER'S DRAWINGS.
11. FOOD SERVICE EQUIPMENT: ALL FLOOR-MOUNTED EQUIPMENT IS TO BE SEALED TO THE FLOOR TO PROVIDE AN EASILY CLEANABLE SURFACE AND PREVENT SEEPAGE. EQUIPMENT NOT MOUNTED TO THE FLOOR IS TO BE WALL MOUNTED ON WALL CARRIERS, OR ELEVATED ON LEGS TO PROVIDE AT LEAST A SIX-INCH CLEARANCE BETWEEN FLOOR AND EQUIPMENT.
12. MOP SINK: LOCATED IN JANITOR CLOSET OFF MAIN KITCHEN CORRIDOR, AND LOCATED IN CLOSE PROXIMITY TO THE SERVERY WAREWASH AREA.
13. EXHAUST HOODS: EXHAUST HOODS PROVIDED OVER COOKING EQUIPMENT WITH LIQUID CHEMICAL ANSUL FIRE EXTINGUISHING SYSTEM.
14. LIGHTING AND PROTECTIVE SHIELDING: RECESSED CEILING-MOUNTED FLUORESCENT LIGHT FIXTURES FITTED WITH CLEAR LEXAN DIFFUSERS.
15. GARBAGE AND REFUSE: CENTRAL TRASH COLLECTION PROVIDED FOR BUILDING LOCATED NEAR RECEIVING AREA ON SMOOTH CONCRETE SURFACE.
16. POISONOUS AND TOXIC MATERIAL STORAGE: LOCATED IN RESPECTIVE JANITOR CLOSETS WITH LOCKING HARDWARE.

HEALTH DEPARTMENT COORDINATION NOTES
1 NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
DULLES ELEMENTARY SCHOOL
630 DULLES AVE. SUGAR LAND, TX 77478

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL FCSI 48854119 PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ELECTRONICALLY APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FS GENERAL COORDINATION NOTES

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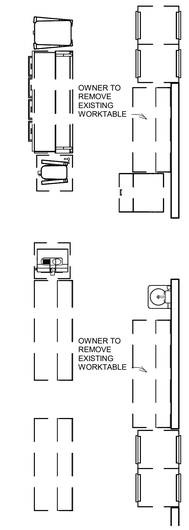
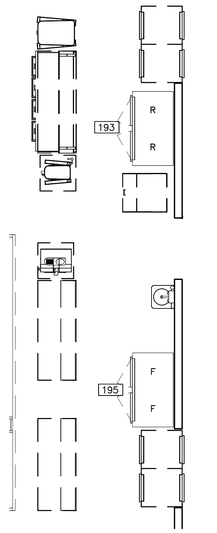
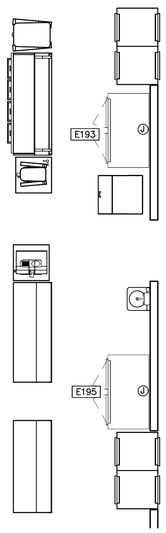


1 FOODSERVICE EXISTING EQUIPMENT PLAN
1/4" = 1'-0"



2 FOODSERVICE EQUIPMENT PLAN
1/4" = 1'-0"

FOODSERVICE EQUIPMENT SCHEDULE			
FDP ITEM	QTY	FDP DESCRIPTION	FDP REMARKS
193	1	REACH-IN REFRIGERATOR-2DR	
195	1	REACH-IN FREEZER - 2DR	



4 FOODSERVICE ELECTRICAL CONNECTION PLAN
1/4" = 1'-0"

FOODSERVICE ELECTRICAL SCHEDULE								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E193	JB	8.2A	120	1	REFRIGERATOR	WALL	96"	BTC; OMIT PLUG, UNIT TO BE HARDWIRED
E195	JB	14.9A	120	1	FREEZER	WALL	96"	BTC; OMIT PLUG, UNIT TO BE HARDWIRED

	SCR	CONDUIT STUB BTC ON RECEPT FURNISH WITH EQUIPMENT	CC	CC	CONDUIT FOR COMPUTER CABLES
	CS	CONDUIT STUB UP/OUT FOR DIRECT CONNECTION		BTC	BRANCH TO CONNECTION ON EQUIPMENT
	DR	20 AMP DUPLEX RECEPTACLE (MOUNT HORIZONTAL)		WPR	20 AMP WEATHERPROOF RECEPTACLE (SPRING COVER)
	SR	SINGLE PURPOSE RECEPTACLE		FPB	FIRE PROTECTION BUZZER
	SR	SINGLE PURPOSE RECPT. 208V 1PH		BSC	BEVERAGE SYSTEM CONDUIT
	FR	FLUSH FLOOR RECEPTACLE		DFA	DROP FROM ABOVE
	PMR	PEDESTAL MOUNTED RECPTACLE		AFF	ABOVE FINISH FLOOR
	DCR	DROP CORD RECEPTACLE		CS/JB	JUNCTION BOX ON PEDSTAL
	JB	JUNCTION BOX ON CEILING		DS	DISCONNECT SWITCH
	JB	JUNCTION BOX IN WALL			
	JB/DS	JUNCTION BOX WITH DISCONNECT BY DIV.26		JB/DS	CONDUIT STUB-UP WITH DISCONNECTI BY DIV.26

3 ELECTRICAL SYMBOLS
NONE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
DULLES ELEMENTARY SCHOOL
630 DULLES AVE. SUGAR LAND, TX 77478

SEAL

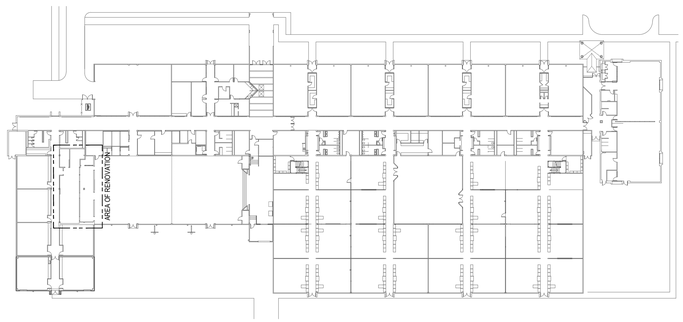
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
7/18/2025
THIS DOCUMENT APPEARING ON THIS SHEET WAS AUTHORIZED BY MELISSA MOORE, FCSI NO: 48854119 ON: 07/18/2025

MWA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

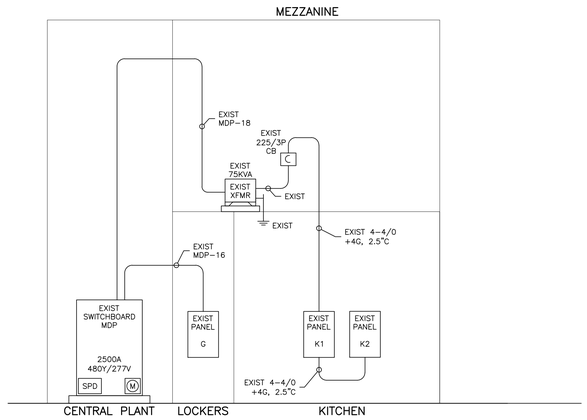
FS EQUIPMENT / ELECTRICAL PLAN

F-QF1.0



2 OVERALL FLOOR PLAN

SCALE: 1" = 50'- 0"



3 PARTIAL ELECTRICAL RISER - DULLES ELEMENTARY

NO SCALE

NOTES:

1. FIELD VERIFY ALL EXISTING ELECTRICAL PANELS AND FEEDERS SHOWN ON DRAWINGS.
2. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
3. ALL OUTAGES SHALL BE SCHEDULED/CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
4. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.
5. REFERENCE PANEL SCHEDULES AND SHORT CIRCUIT TABLE FOR AIC AND SCCR VALUES.

SYMBOL LEGEND

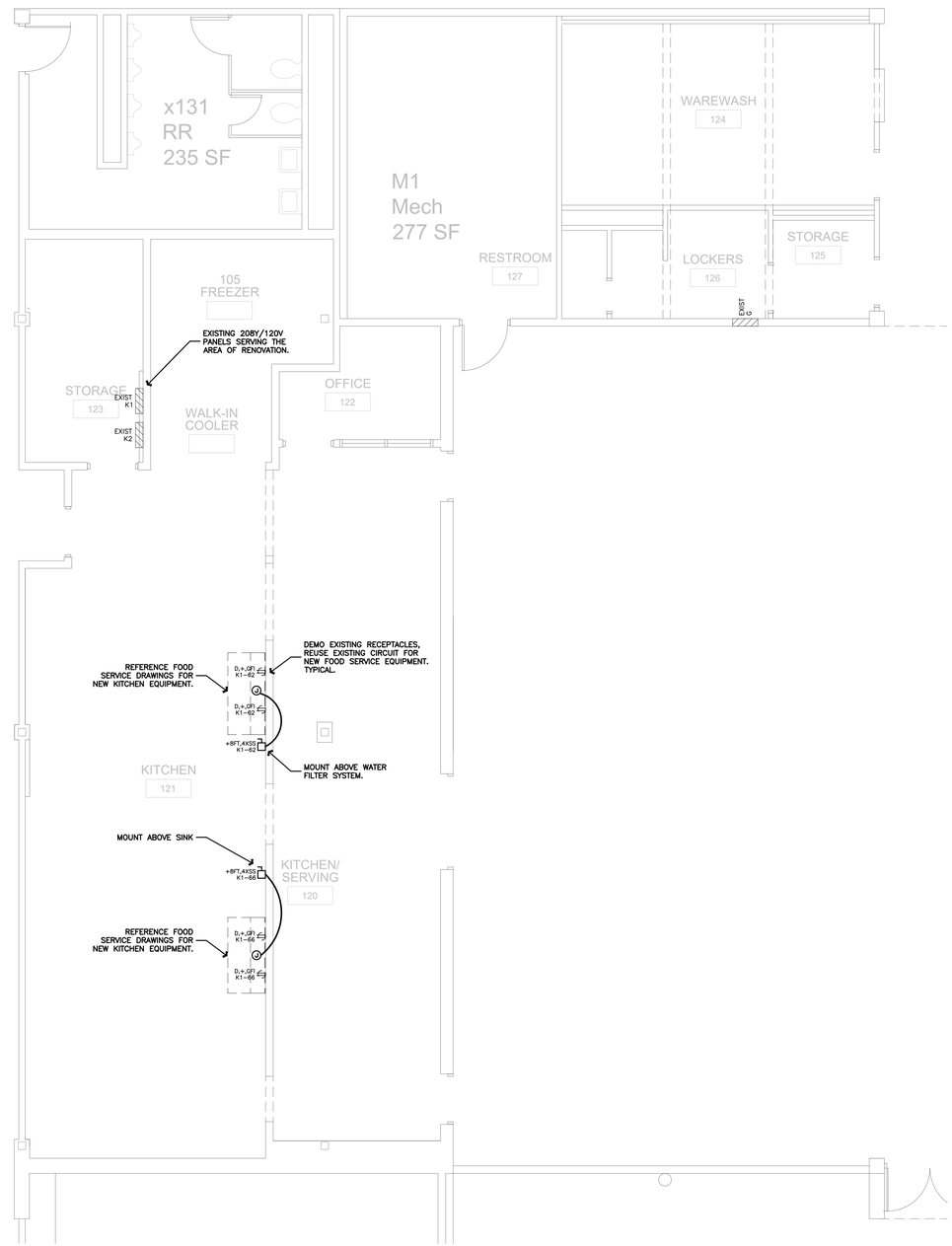
①/②/④:	SIMPLEX/DUPLEX/QUAD – 5361/2 REC
GFI	DUPLEX W/ GFCI PROTECTION–P&S 2097
J	J–BOX
	CEILING MOUNTED J–BOX
M	MOTOR
	HEAVY DUTY, NON–FUSED DISCONNECT. MIN RATING OF CIRCUIT OCPD/VOLTAGE.
	ELECTRICAL PANEL
	HOMERUN TO CIRCUIT NOTED
E	EXISTING DEVICES TO REMAIN
R	EXISTING DEVICES TO BE RELOCATED
D	EXISTING DEVICES TO BE DEMO/REMOVED
RCP	EXISTING DEVICES TO BE REPLACED
S	INDICATES SURFACE MOUNTED
SR	INDICATES SURFACE RACEWAY
+	INDICATES ABOVE COUNTER DEVICE
+	INDICATES DEVICE AT +30–60"
++	INDICATES DEVICE AT +80–96"
CLG	INDICATES DEVICES MOUNTED IN CEILING
WP	INDICATES WEATHERPROOF COVER
3R	INDICATES 3R RATED DEVICE
(C)LA–X	CONNECT(ED) TO EXIST CIRCUIT LA–X
(D)LA–X	DEMO PORTION OF EXIST CIRCUIT LA–X
(N)LA–X	CONNECT(ED) TO NEW CIRCUIT LA–X

GENERAL ELECTRICAL NOTES:

1. INSTALL SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRC CODE AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ALL AMENDMENTS.
2. PROVIDE CONDUIT FOR ALL DEVICES INSTALLED IN WALLS.
   - 2.A. 3/4"C FOR POWER AND 1"C FOR LOW VOLTAGE/DATA UNLESS NOTED OTHERWISE.
   - 2.B. PROVIDE PROTECTIVE BUSHING ON END OF ALL LOW VOLTAGE CONDUITS.
   - 2.C. ALL ELECTRICAL HOMERUNS SHALL BE IN CONDUIT, MIN 3/4"C.
   - 2.D. USE INSULATED THROAT FITTINGS FOR CONNECTIONS TO HOUSINGS, BOXES, ENCLOSURES, ETC.
   - 2.E. MAX LENGTH FOR FLEX CONDUIT SHALL BE 6FT AND MIN. SIZE SHALL BE 1/2". ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
3. CONDUIT TYPES:
   - 3.A. INSIDE BUILDINGS: GALVANIZED STEEL EMT.
     - 3.A.A. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT IN EXPOSED CEILING AREAS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
     - 3.A.B. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT ABOVE INACCESSIBLE CEILINGS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
   - 3.B. NO MC CABLE SHALL BE ALLOWED.
   - 3.C. PROVIDE FLEXIBLE CONNECTIONS TO MOTORS, PUMPS, TRANSFORMERS, OR SIMILAR EQUIPMENT.
4. PROVIDE GALVANIZED STEEL, ONE–PIECE CONSTRUCTION, OUTLET BOXES IN ALL CASES SUITABLE FOR INTENDED USE.
   - 4.A. BOXES OUTSIDE SHALL BE STEEL NEMA 3 TYPE
   - 4.B. PROVIDE CEILING BRACKET TO SUPPORT CEILING MOUNTED DEVICES FROM CEILING TEES.
5. 20 AMP, SINGLE PHASE BRANCH CIRCUITS SERVING LIGHTING AND GENERAL RECEPTACLES MAY BE GROUPED IN A SINGLE RACEWAY PROVIDED A NEUTRAL CONDUCTOR IS INSTALLED FOR EACH CIRCUIT REQUIRING A NEUTRAL.
   - 5.A. DO NOT INSTALL MORE THAN FOUR CURRENT CARRYING CONDUCTORS IN A CONDUIT EXCEPT SIX #12 OR #10 CURRENT CARRYING CONDUCTORS MAY BE INSTALLED IN 3/4" OR LARGER CONDUIT FOR 20A CIRCUITS.
   - 5.B. DO NOT INSTALL 480/277 VOLT CONDUCTORS IN THE SAME CONDUIT WITH 240/208/120 VOLT CONDUCTORS.
   - 5.C. DO NOT COMBINE NEUTRALS. PROVIDE DEDICATED NEUTRALS FOR EACH BRANCH CIRCUIT.
   - 5.D. MULTIPLE DEVICES ON A CIRCUIT SUCH AS RECEPTACLES SHALL BE WIRED WITH A PIGTAIL SO THE DEVICE DOES NOT PROVIDE THE CONTINUITY PATH. FEED THROUGH CONNECTIONS FOR GFCI RECEPTACLES SHALL NOT BE USED FOR PROTECTION OF DOWNSTREAM DEVICES.
6. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
7. PROVIDE J–BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM, SOUND SYSTEM, LOW VOLTAGE WIRING, ETC. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF ALL LOW VOLTAGE CONDUITS.
8. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS. ALL JUNCTION/PULL BOXES INSTALLED ABOVE ACCESSIBLE CEILINGS SHALL BE MOUNTED SO THAT THE ACCESS PANEL IS NO HIGHER THAN 18" ABOVE THE CEILING.
9. PROVIDE CIRCUIT LABELS IN PERMANENT MARKER ON ALL NEW AND EXISTING J–BOX COVERS UTILIZED IN THE AREA OF RENOVATION.
10. PROVIDE CIRCUIT LABEL ON ALL ABOVE CEILING J–BOXES, EQUIPMENT, ETC. IDENTIFYING THE CIRCUITS CONTAINED/CONNECTED.
11. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12.
    - 11.A. TYPICAL BUILDING WIRE SHALL BE STRANDED TYPE THHN, THWN–2 (WET RATED FOR 90°C), OR XHHW–2. MINIMUM WIRE SIZE SHALL BE #12.
    - 11.B. ALL BUILDING WIRE SHALL BE COLOR CODED WITH THE SAME COLOR CONNECTED TO THE SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION MATCHING THE EXISTING BUILDING COLOR CODE SCHEME.
12. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEAL PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO COOLER SECTIONS.
13. DRAWINGS, SCHEDULES, NOTES, AND DETAILS ARE INTENDED TO BE COMPLIMENTARY. ANY WORK DESCRIBED IN ANY OF THEM, WILL BE WORK REQUIRED UNDER THIS CONTRACT. WHERE THERE IS A CONFLICT BETWEEN DIFFERENT PORTIONS OF THE DESIGN DOCUMENTS IT SHALL BE CLARIFIED BY RFI. BARRING CLARIFICATION PRIOR TO BIDDING THE MOST EXPENSIVE OPTION SHALL BE INCLUDED AND CLARIFICATION SHALL BE MADE DURING CONSTRUCTION.
14. SHOULD ANY WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS BE IN VIOLATION OF ANY FEDERAL, STATE, COUNTY OR CITY LAWS, ORDINANCE OR REGULATION, THOSE LAWS AND REGULATIONS SHALL PREVAIL, AND SHALL BE COMPLIED WITH BY THE CONTRACTOR AS A PART OF THIS WORK WITH NO EXTRA COMPENSATION.
15. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

GENERAL RENOVATION AND REMODELING NOTES:

1. THESE ELECTRICAL DRAWINGS ONLY SHOW SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J–BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
2. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
3. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. RESUPPORT EXISTING CABLING/CONDUIT TO REMAIN TO MEET CURRENTLY ADOPTED CODE REQUIREMENTS. REMOVE ALL ABANDONED CONDUIT AND WIRE. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITIES.
4. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
5. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
6. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
7. ANY CIRCUIT OR PARTIAL CIRCUIT TO REMAIN OR BE REUSED SHALL REMAIN ACTIVE.
8. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
9. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
10. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN AS–BUILT PANEL SCHEDULE FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT USING BUILDING ROOM NUMBERS.



1 ELECTRICAL RENOVATION PLAN

SCALE: 1/4" = 1'– 0"

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
DULLES ELEMENTARY SCHOOL
630 DULLES AVENUE
SUGAR LAND, TX 77478

SEAL

STATE OF TEXAS
GEORGE L. STANTON
38582
LICENSED
PROFESSIONAL ENGINEER
07.18.2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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ELECTRICAL FLOOR PLAN & SCHEDULES

f-E.200

STANTON ENGINEERING GROUP
INFORMATION@SEGI.COM (713) 300–6060 | TEXAS ENG. FIRM REG. NO. F–01853/01 | 1300 W. SAM HOUSTON PKWY.N., SUITE 125, HOUSTON, TX 77043
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AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

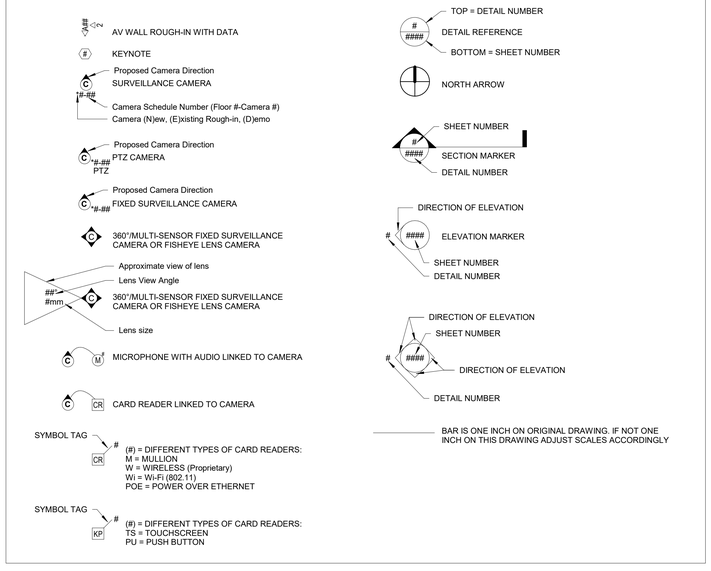
SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED



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FORT BEND INDEPENDENT SCHOOL DISTRICT
Dulles Elementary School
630 Dulles Ave, Sugar Land, TX 77478

SEAL



07-18-25

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ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
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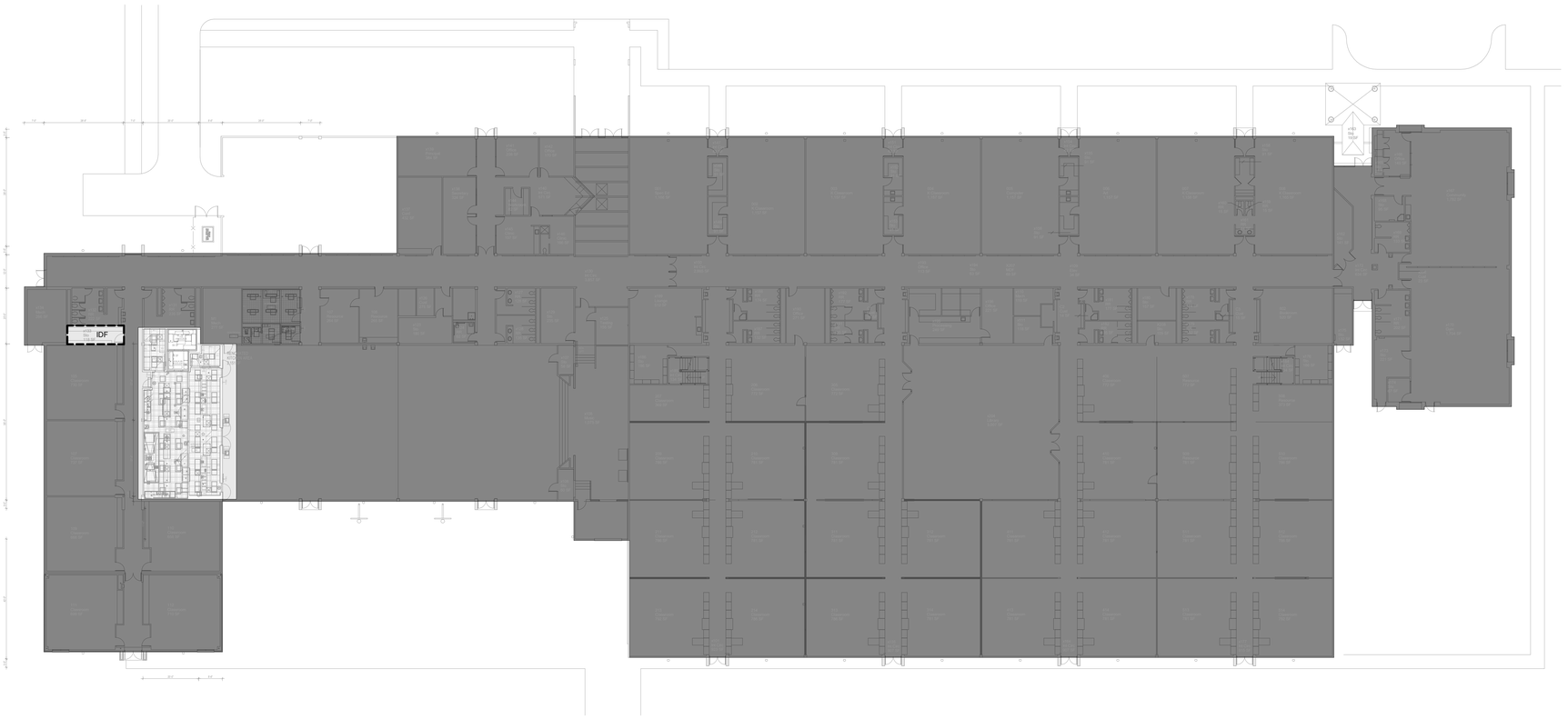
TECHNOLOGY - TITLE SHEET

f-TN000

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BACKGROUND F (DULLES ES)
SCALE: 1" = 20'-0"

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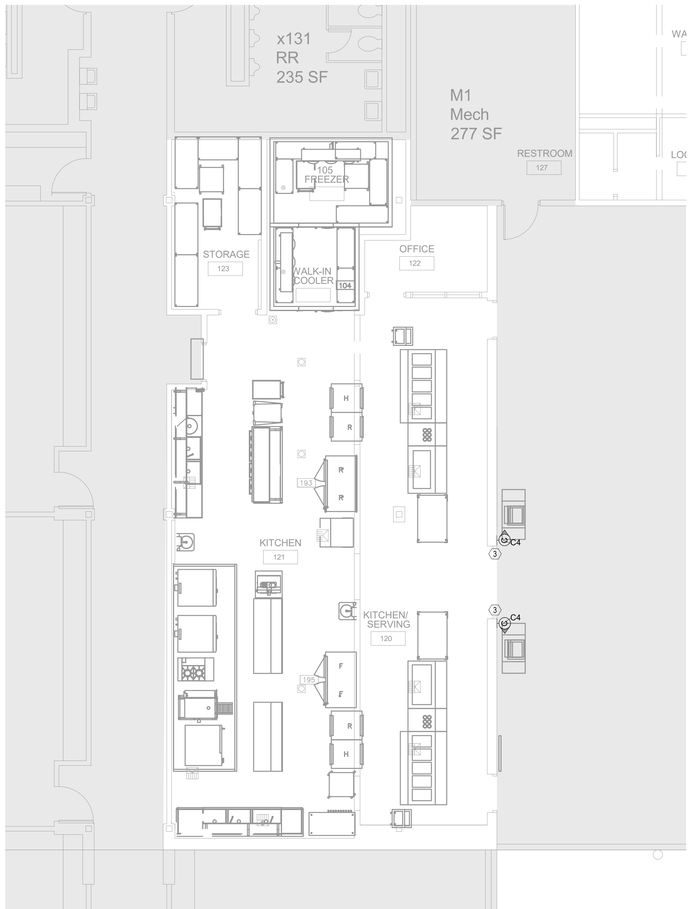
TECHNOLOGY - Dulles ES - OVERALL

f-TN.100



1 DULLES - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.

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TECHNOLOGY - Dulles ES - KITCHEN

f-TN.101

TRUENORTH
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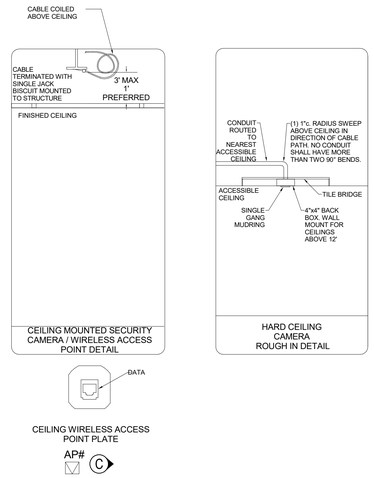
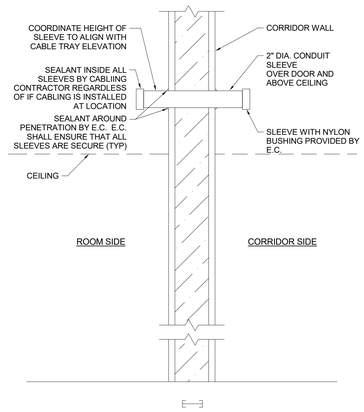
GENERAL NOTE

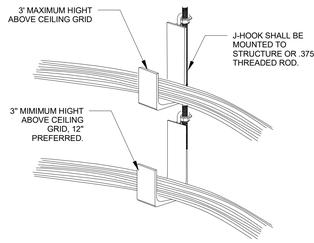
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



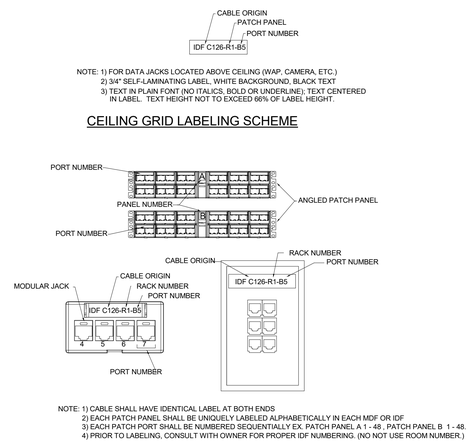
1 DATA ROUGH-IN DETAILS
SCALE: NS



2 TYPICAL CABLING SLEEVE
SCALE: NTS



3 PANDUIT J-HOOK DETAIL
SCALE: NTS



4 LABELING & CABLING SCHEMES
SCALE: NTS

5 CABLE PATHWAY CROSS SECTION
SCALE: NTS

6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS

7 I-JOIST MOUNTING DETAIL
SCALE: NS

8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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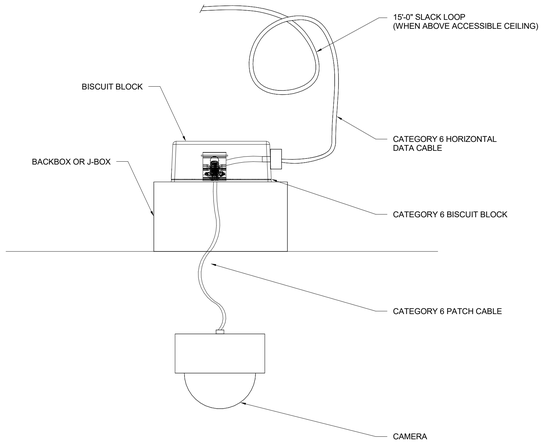
TECHNOLOGY - Dulles ES - DETAILS

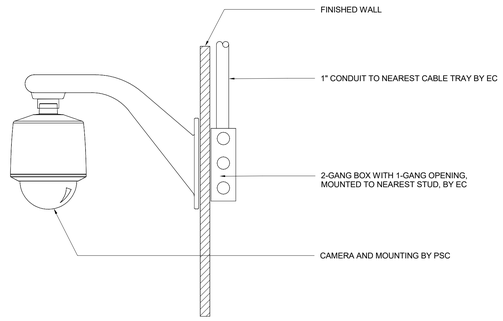
f-TN.500

GENERAL NOTES:

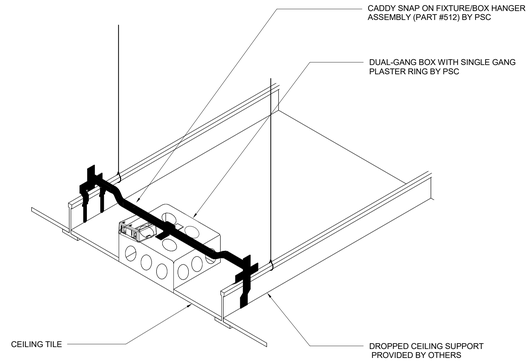
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



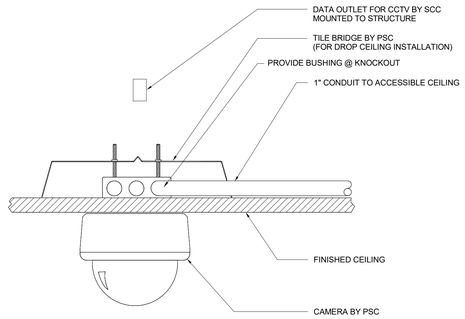
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

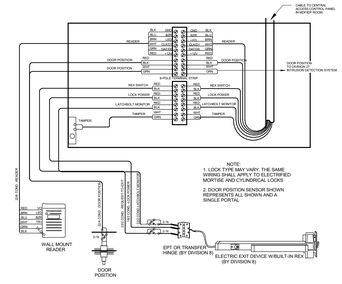


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

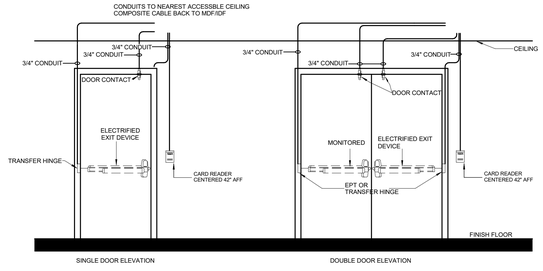
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

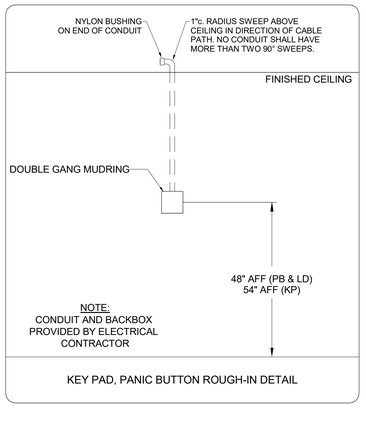
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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Dulles Elementary School
630 Dulles Ave, Sugar Land, TX 77478

SEAL



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TECHNOLOGY - Dulles ES - SECURITY DETAILS

f-TN.600

FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
School: g-Fleming ES	
g-A-000	COVER AND INDEX
g-TN-000	TECHNOLOGY - INDEX SHEET
g-TN-100	TECHNOLOGY - OVERALL
g-TN-101	TECHNOLOGY - KITCHEN
g-TN-500	TECHNOLOGY - DETAILS
g-TN-600	TECHNOLOGY - SECURITY DETAILS



FORT BEND INDEPENDENT SCHOOL DISTRICT

ARIZONA FLEMING ELEMENTARY SCHOOL
14850 BISSONNET STREET, HOUSTON, TX 77083

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DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

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Phone Number: 281-350-2323

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Houston, Texas 77042
Phone Number: 713-300-9292

STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

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g

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- AV WALL ROUGH-IN WITH DATA
- KEYNOTE
- Proposed Camera Direction SURVEILLANCE CAMERA
- Camera Schedule Number (Floor #-Camera #) Camera (N)ew, (E)xisting Rough-in, (D)emo
- Proposed Camera Direction PTZ CAMERA
- Proposed Camera Direction FIXED SURVEILLANCE CAMERA
- 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Approximate view of lens
- Lens View Angle
- 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Lens size
- MICROPHONE WITH AUDIO LINKED TO CAMERA
- CARD READER LINKED TO CAMERA
- SYMBOL TAG — (#) = DIFFERENT TYPES OF CARD READERS: M = MULLION; W = WIRELESS (Proprietary); Wi = Wi-Fi (802.11); POE = POWER OVER ETHERNET
- SYMBOL TAG — (#) = DIFFERENT TYPES OF CARD READERS: TS = TOUCHSCREEN; PU = PUSH BUTTON
- TOP = DETAIL NUMBER; DETAIL REFERENCE; BOTTOM = SHEET NUMBER
- NORTH ARROW
- SHEET NUMBER; SECTION MARKER; DETAIL NUMBER
- DIRECTION OF ELEVATION; ELEVATION MARKER; SHEET NUMBER; DETAIL NUMBER
- DIRECTION OF ELEVATION; SHEET NUMBER; DIRECTION OF ELEVATION; DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

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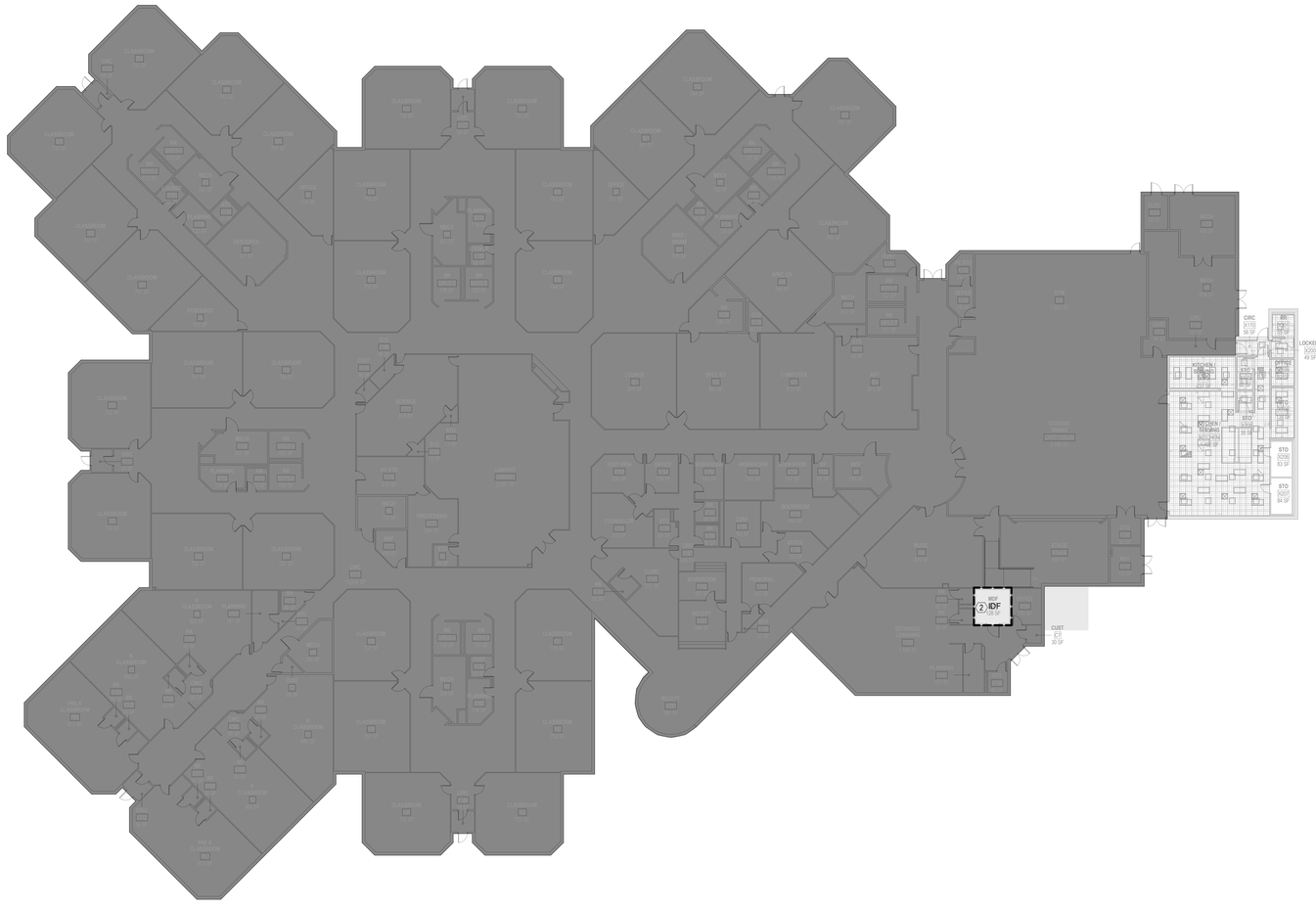
TECHNOLOGY - TITLE SHEET

g-TN000

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BACKGROUND G (FLEMING ES)
SCALE: 1" = 20'-0"

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TECHNOLOGY - Fleming ES - OVERALL

g-TN.100

TECHNOLOGY KEYNOTES

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2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.

1 FLEMING - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

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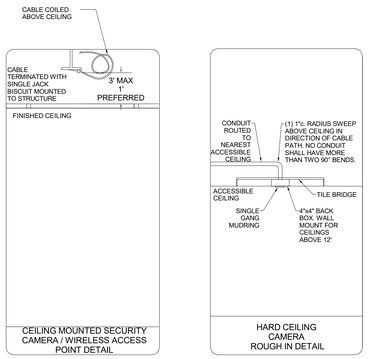
TECHNOLOGY - Fleming ES - KITCHEN

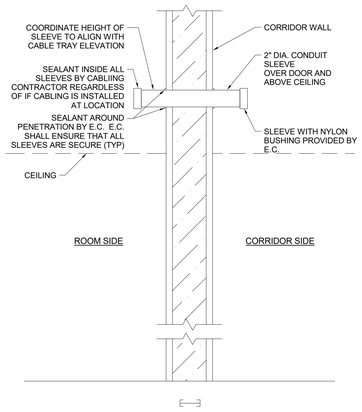
g-TN.101

GENERAL NOTE

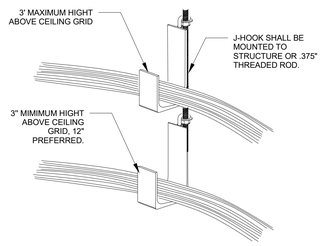
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



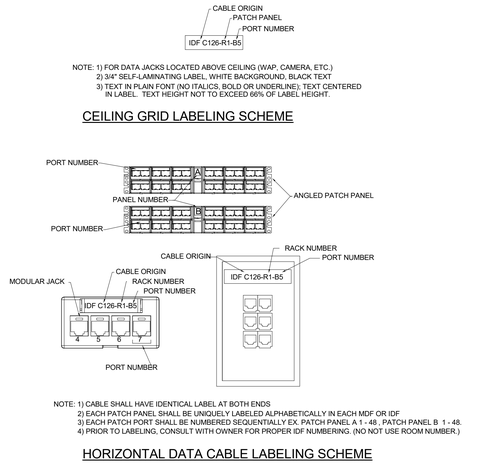
1 DATA ROUGH-IN DETAILS
SCALE: NS



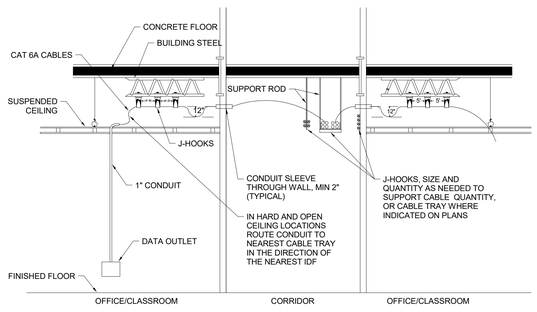
2 TYPICAL CABLING SLEEVE
SCALE: NTS



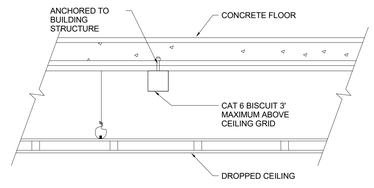
3 PANDUIT J-HOOK DETAIL
SCALE: NTS



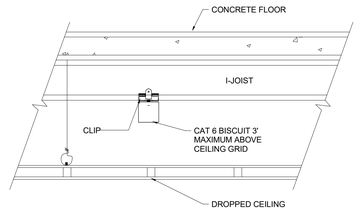
4 LABELING & CABLING SCHEMES
SCALE: NTS



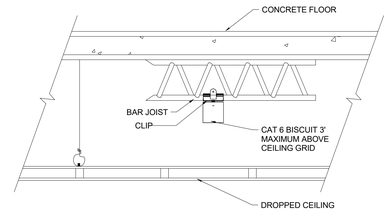
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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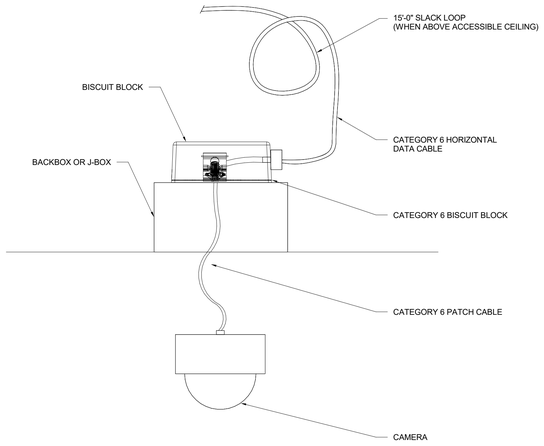
TECHNOLOGY - Fleming ES - DETAILS

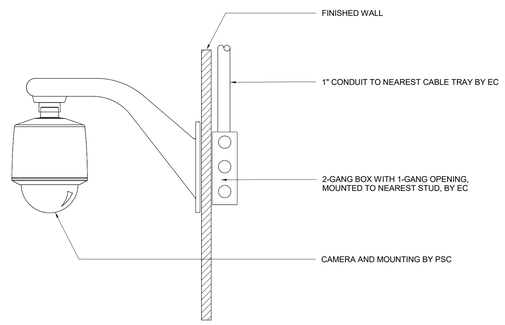
g-TN.500

GENERAL NOTES:

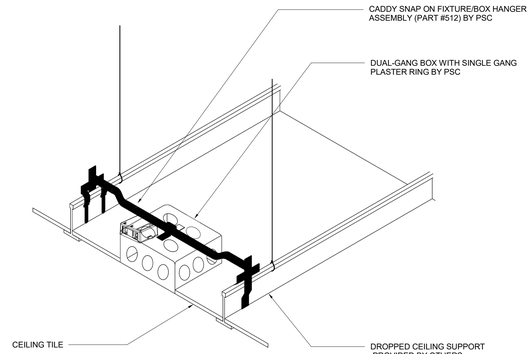
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



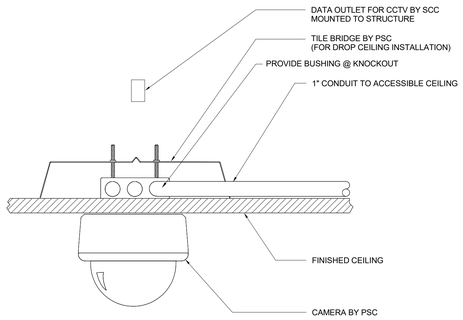
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

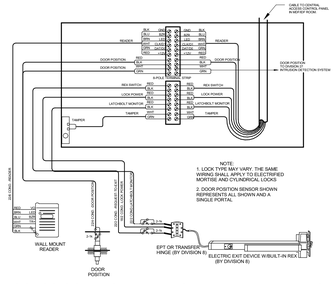


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

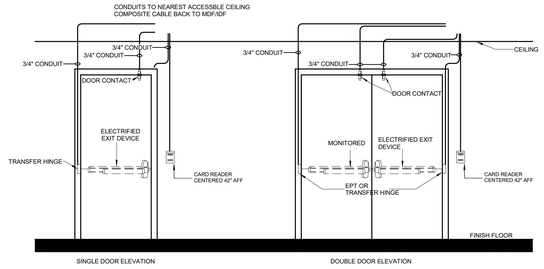
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

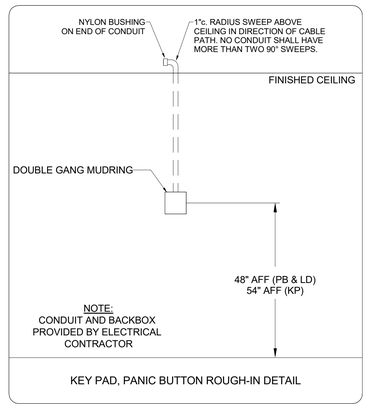
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Fleming Elementary School
630 Dulles Ave, Sugar Land, TX 77478

SEAL



07-18-25

MVA ARCHITECTS
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AND PLANNING
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TECHNOLOGY - Fleming ES - SECURITY DETAILS

g-TN.600

FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
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h-A-000	COVER AND INDEX
h-TN-000	TECHNOLOGY - INDEX SHEET
h-TN-100	TECHNOLOGY - OVERALL
h-TN-101	TECHNOLOGY - KITCHEN
h-TN-500	TECHNOLOGY - DETAILS
h-TN-600	TECHNOLOGY - SECURITY DETAILS



FORT BEND INDEPENDENT SCHOOL DISTRICT

EDGAR GLOVER JR ELEMENTARY SCHOOL
1510 COLUMBIA BLUE DRIVE, MISSOURI CITY, TX 77489

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

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RICK GARCIA	VICE PRESIDENT
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ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

PROJECT DESIGN TEAM

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STRUCTURAL ENGINEER
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AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- AV WALL ROUGH-IN WITH DATA
- KEYNOTE
- Proposed Camera Direction SURVEILLANCE CAMERA
- Camera Schedule Number (Floor #-Camera #) Camera (N)ew, (E)xisting Rough-in, (D)emo
- Proposed Camera Direction PTZ CAMERA
- Proposed Camera Direction FIXED SURVEILLANCE CAMERA
- 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Approximate view of lens
- Lens View Angle
- Lens size
- MICROPHONE WITH AUDIO LINKED TO CAMERA
- CARD READER LINKED TO CAMERA
- SYMBOL TAG — (#) = DIFFERENT TYPES OF CARD READERS: M = MULLION, W = WIRELESS (Proprietary), Wi = Wi-Fi (802.11), POE = POWER OVER ETHERNET
- SYMBOL TAG — (#) = DIFFERENT TYPES OF CARD READERS: TS = TOUCHSCREEN, PU = PUSH BUTTON
- TOP = DETAIL NUMBER; DETAIL REFERENCE; BOTTOM = SHEET NUMBER
- NORTH ARROW
- SHEET NUMBER; SECTION MARKER; DETAIL NUMBER
- DIRECTION OF ELEVATION; ELEVATION MARKER; SHEET NUMBER; DETAIL NUMBER
- DIRECTION OF ELEVATION; SHEET NUMBER; DIRECTION OF ELEVATION; DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Glover Elementary School
1510 Columbia Blue Dr, Missouri City, TX 77489

SEAL

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Brian C Porter
BICSI ID # 258557
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RCDD

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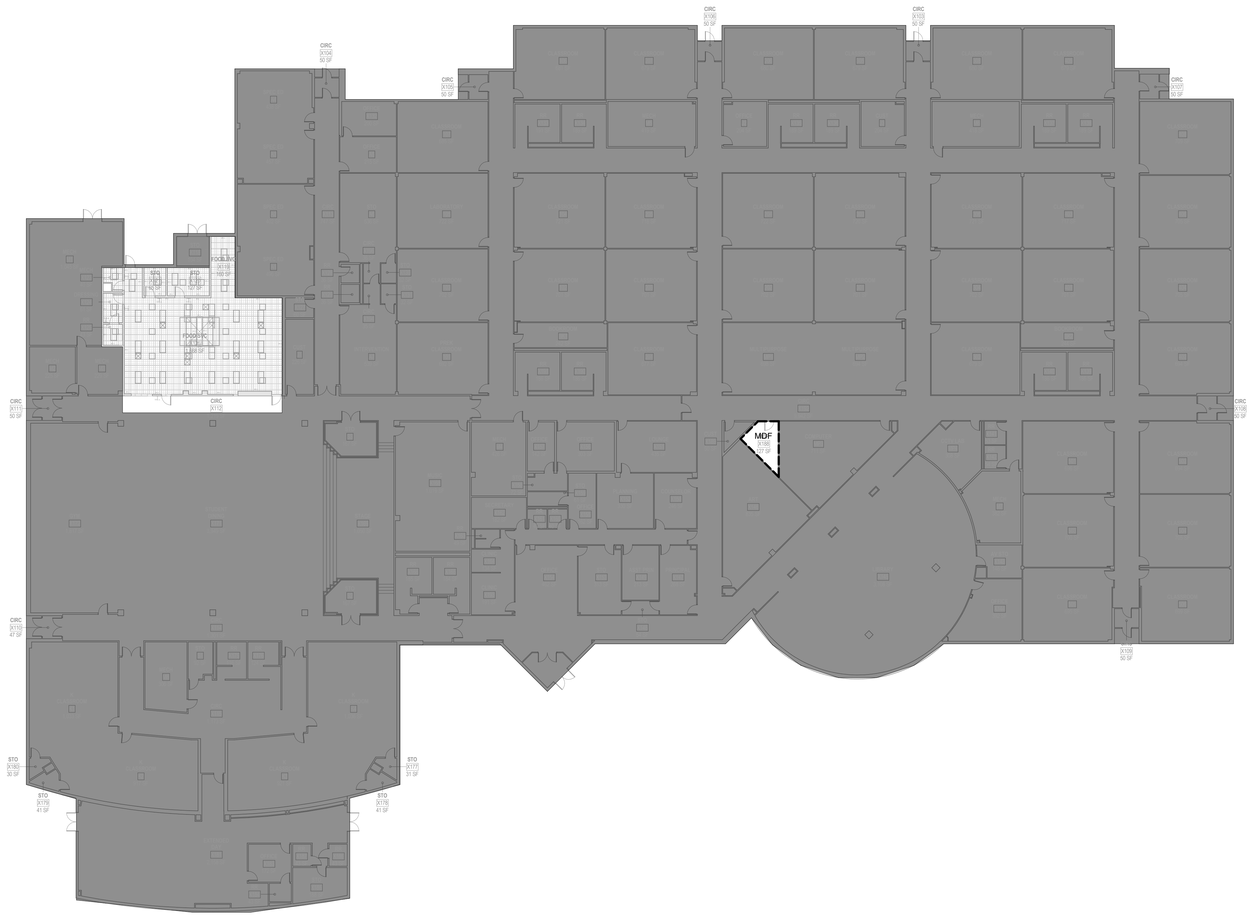
TECHNOLOGY - TITLE SHEET

h-TN000



1 BACKGROUND H (GLOVER ES)
SCALE: 1" = 20'-0"

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.

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TECHNOLOGY - Glover ES - OVERALL

h-TN.100

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.

2 GLOVER - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

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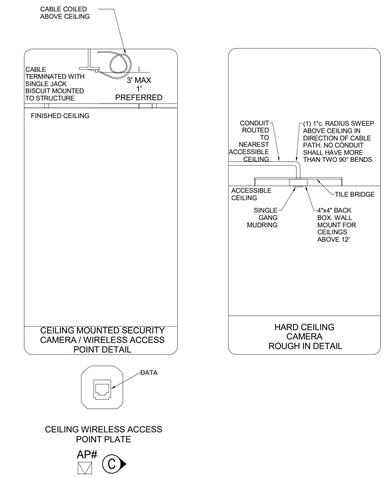
TECHNOLOGY - Glover ES - KITCHEN

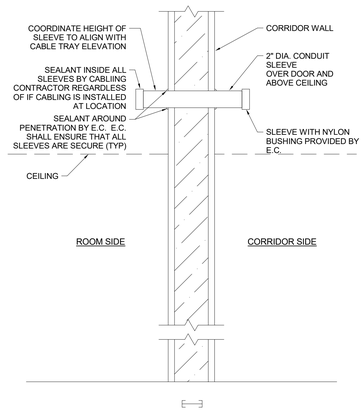
h-TN.101

GENERAL NOTE

1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



1 DATA ROUGH-IN DETAILS
SCALE: NS



2 TYPICAL CABLING SLEEVE
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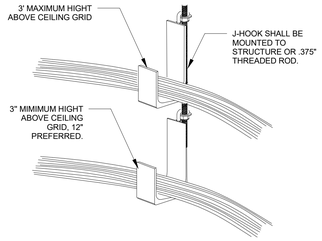

3 PANDUIT J-HOOK DETAIL
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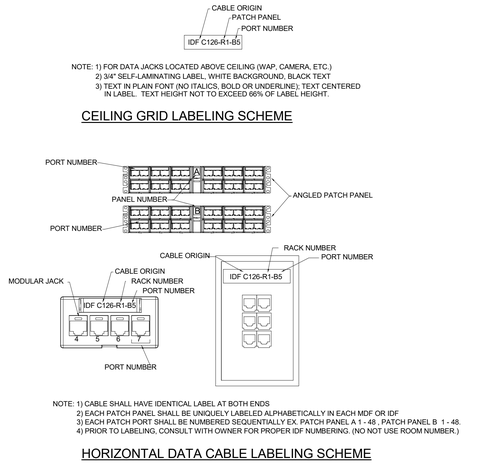
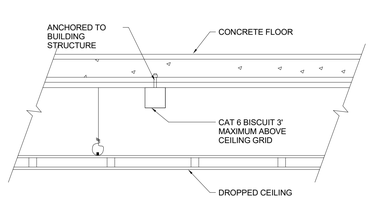
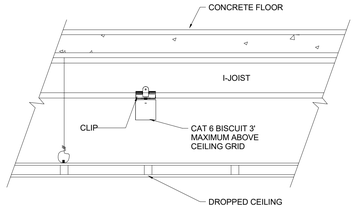


4 LABELING & CABLING SCHEMES
SCALE: NTS

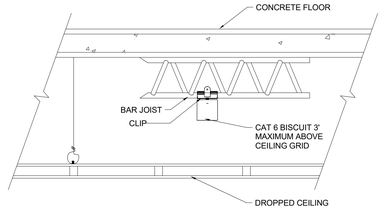
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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SEAL



07-18-25

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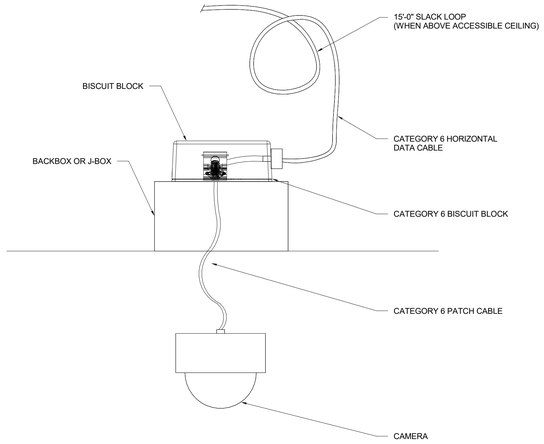
TECHNOLOGY - Glover ES - DETAILS
h-TN.500

GENERAL NOTES:

1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
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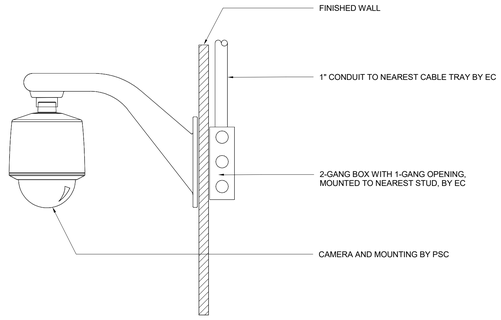

6 WALL MOUNTED CAMERA DETAIL
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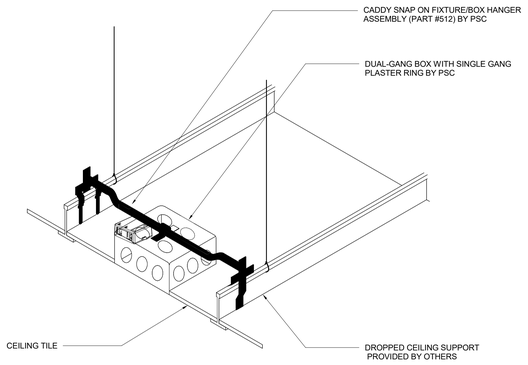
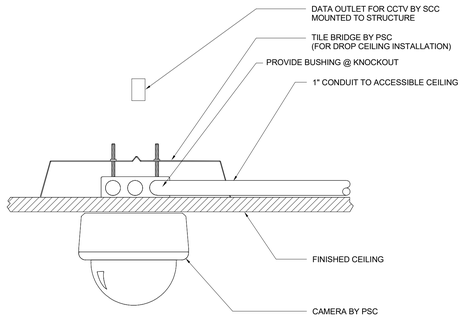


4 TILE BRIDGE DETAIL
SCALE: NS

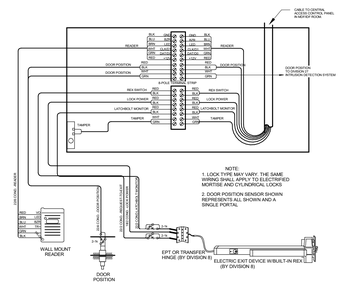


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

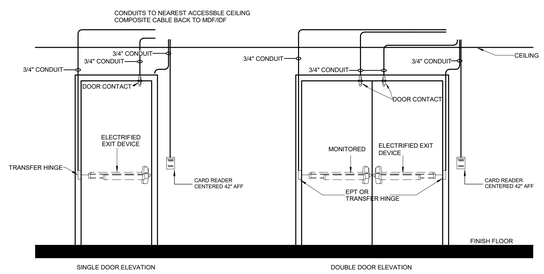
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

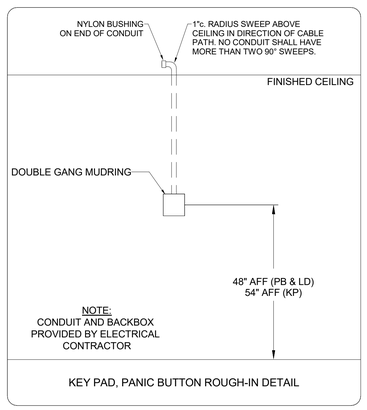
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
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TECHNOLOGY - Glover ES - SECURITY DETAILS

h-TN.600

FBISD BP013 KITCHEN RENOVATIONS ES

HERITAGE ROSE ELEMENTARY SCHOOL
636 GLENDALE LAKES DR, ROSHARON, TX 77583

FORT BEND BOND 2023
INDEPENDENT SCHOOL DISTRICT

Sheet List Table	
Sheet Number	Sheet Title
School: i-Heritage Rose ES	
i-A.000	COVER AND INDEX
i-A00-01	GENERAL NOTES AND ABBREVIATIONS
i-A.201	OVERALL FLOOR PLAN
i-A.301	KITCHEN PLAN
i-P.101	FILTER AND NEW WATER SOFTENER

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FORT BEND INDEPENDENT SCHOOL DISTRICT

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DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

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PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.
B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.
C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.
D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.
E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.
F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.
B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.
B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.
C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.
D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY. IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.
    1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
    2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.
E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.

B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT. REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.

B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED. CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.

D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

01 GENERAL NOTES

03 PROJECT SCHEDULE

SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025). Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HERITAGE ROSE ELEMENTARY SCHOOL
636 GLENDALE LAKES DRIVE
ROSHARON, TX 77583

SEAL

7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

GENERAL NOTES AND ABBREVIATIONS

A00-01

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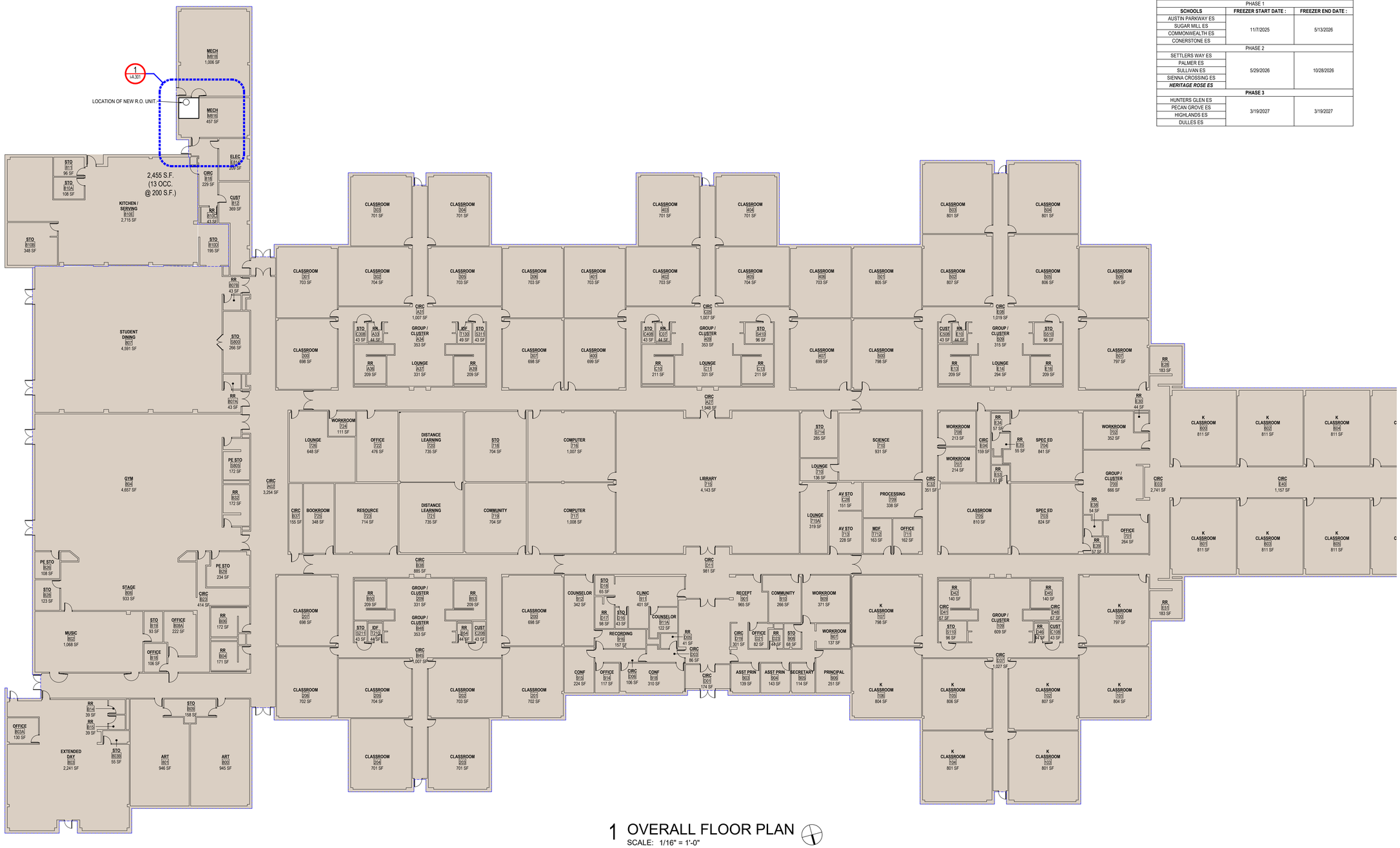
Project Information

PROJECT: HERITAGE ROSE ELEMENTARY SCHOOL
LOCATION: 636 GLENDALE LAKES DRIVE
ROSHARON, TX 77583

SCOPE OF WORK: PROVIDE AND INSTALL REVERSE OSMOSIS FOR KITCHEM APPLIANCES.

PHASING CHART FOR ALL SCHOOLS		
PHASE 1		
SCHOOLS	**FREEZER START DATE :**	**FREEZER END DATE :**
AUSTIN PARKWAY ES	11/7/2025	5/13/2026
SUGAR MILL ES		
COMMONWEALTH ES		
CONERSTONE ES		
PHASE 2		
SETTLERS WAY ES	5/29/2026	10/28/2026
PALMER ES		
SULLIVAN ES		
SIENNA CROSSING ES		
HERITAGE ROSE ES		
PHASE 3		
HUNTERS GLEN ES	3/19/2027	3/19/2027
PECAN GROVE ES		
HIGHLANDS ES		
DULLES ES		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1/A.301
LOCATION OF NEW R.O. UNIT
MECH M818 1,006 SF
MECH M816 457 SF
ELEC E314 209 SF
STO B11 96 SF
STO B10A 108 SF
2,455 S.F.
(13 OCC.
@ 200 S.F.)
KITCHEN / SERVING B150 2,715 SF
CIRC B18 229 SF
CUST B12 369 SF
RR B102 43 SF
STO B10B 348 SF
STO B100 195 SF
RR B078 43 SF
STO B809 266 SF
RR B07A 43 SF
STUDENT DINING B07 4,591 SF
PE STO B802 172 SF
RR B32 172 SF
GYM B04 4,657 SF
CIRC A02 3,254 SF
PE STO B29 108 SF
STO B28 123 SF
STAGE B06 933 SF
PE STO B28 234 SF
CIRC B23 414 SF
MUSIC B02 1,088 SF
STO B18 93 SF
OFFICE B09A 222 SF
OFFICE B18 106 SF
RR B096 172 SF
RR B094 171 SF
OFFICE B03A 130 SF
RR B14 39 SF
RR B15 39 SF
STO B09 158 SF
EXTENDED DAY B03 2,241 SF
STO B03B 55 SF
ART B01 946 SF
ART B00 945 SF
CLASSROOM 801 703 SF
CLASSROOM 802 704 SF
CLASSROOM 803 701 SF
CLASSROOM 804 701 SF
CLASSROOM 805 703 SF
CLASSROOM 806 703 SF
CLASSROOM 807 703 SF
CLASSROOM 808 703 SF
CLASSROOM 809 704 SF
CLASSROOM 810 703 SF
CLASSROOM 811 805 SF
CLASSROOM 503 801 SF
CLASSROOM 504 801 SF
CLASSROOM 505 807 SF
CLASSROOM 506 806 SF
CLASSROOM 507 804 SF
CIRC A31 1,007 SF
CIRC A26 1,007 SF
CIRC A27 1,048 SF
CIRC E26 1,019 SF
CIRC E34 1,157 SF
CIRC E33 2,741 SF
CIRC E32 351 SF
CIRC B36 885 SF
CIRC D11 981 SF
CIRC B45 1,007 SF
CIRC F23 86 SF
CIRC D21 174 SF
CIRC E37 1,027 SF
CLASSROOM 698 SF
CLASSROOM 699 SF
CLASSROOM 798 SF
CLASSROOM 702 SF
CLASSROOM 704 SF
CLASSROOM 703 SF
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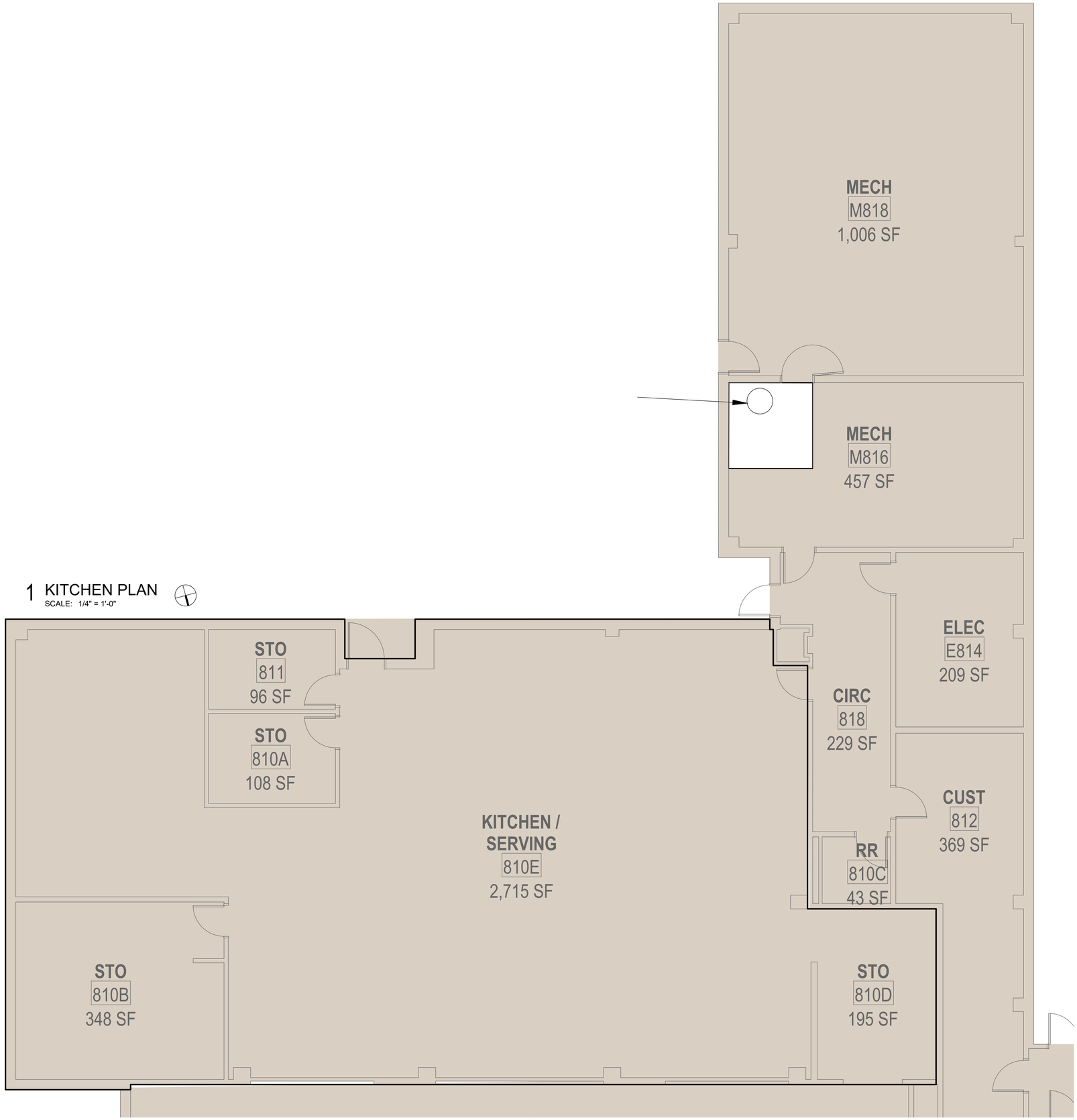


1 KITCHEN PLAN
SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

i

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

SEAL

REGISTERED ARCHITECT
WOE ALMAGUER
22651
STATE OF TEXAS

7/15/2025

MWA ARCHITECTS

ARCHITECTS AND PLANNING CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

KITCHEN PLAN

i-A.301

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\i-Heritage Rose ES\i-A.301 KITCHEN PLAN.dwg Jul 23, 2025 - 1:50pm

PLUMBING SYMBOLS LEGEND

Symbol	Description	Abbrev.	Description
(dashed line)	SANITARY WASTE BELOW SLAB	SAN.	SANITARY
(solid line)	SANITARY WASTE ABOVE SLAB	CW	DOMESTIC COLD WATER
—— V ——	VENT PIPING ABOVE SLAB	HW	DOMESTIC HOT WATER
(dashed line)	VENT PIPING	WC	WATER CLOSET
—— G ——	GAS PIPING, 4-8oz	UR	URINAL
—— G5 ——	GAS PIPING, 5LB	LAV	LAVATORY
—·—·—·—	DOMESTIC COLD WATER PIPING	SK	SINK
—··—··—	DOMESTIC HOT WATER PIPING	EDF	ELECTRIC DRINKING FOUNTAIN
—— D ——	DRAIN/RELIEF VENT PIPING	WH	WALL HYDRANT
——▷◁——	STOP VALVE	HB	HOSEBIBB
2CO	DOUBLE SAN. CLEANOUT (2-WAY)	CP	HOT WATER CIRCULATOR PUMP
CO	SANITARY SEWER CLEANOUT	FD	FLOOR DRAIN
WCO	WALL CLEANOUT	FSINK	FLOOR SINK
EXIST.	EXISTING		
(R)	REMOVE (DEMOLISH)		
(D)	DEMOLISH (REMOVE)		
(E)	EXISTING – NO WORK		

PLUMBING FIXTURE NOTES

1. ALL FIXTURES SHALL MEET WATER CONSERVATION PERFORMANCE STANDARDS MANDATED BY SENATE BILL 587. ALL FIXTURES SHALL HAVE FLOW RESTRICTION DEVICES (DRINKING FOUNTAINS SHALL BE SELF-CLOSING) TO COMPLY WITH THESE REQUIREMENTS.
2. ALL FIXTURES SHALL HAVE CONTROLS REQUIRING OPERATING FORCE NO GREATER THAN FIVE (5) POUNDS.
3. FOR LAVATORIES AND SINKS, ALL FAUCETS SHALL BE NO-LEAD SOLID BRASS, MEETING ALL REQUIREMENTS OF ANSI/NSF 61, SECTION 9 AND CERTIFIED AS SUCH. ALSO, INSTALL SYMMONS 7-210 MIXING VALVE ON HOT WATER SUPPLY SIDE OF ALL FAUCETS UNLESS HIGH TEMPERATURE LIMIT IS PROVIDED WITH FAUCET. MAXIMUM WATER TEMPERATURE FOR ALL FAUCETS THAT DELIVER HOT OR TEPID WATER SHALL BE 110°F. ALL METERING FAUCETS SHALL HAVE A MINIMUM TEN (10) SECONDS OF WATER FLOW. AND, INSTALL TRUEBRO HANDI LAV-GUARD VANDAL-PROOF INSULATION KITS OVER P-TRAP, SUPPLIES, STOPS AND ALL SHARP EDGES FOR ALL SINKS AND LAVATORIES (TRAP WRAP FROM BROCAR OR PROWRAP FROM McGUIRE SHALL BE ACCEPTABLE).
4. ALL PLUMBING FIXTURES REFERENCED AS "ADA", "TAS" OR "HANDICAP COMPLIANT" SHALL MEET ALL REQUIREMENTS OF THE ADA AND THE TEXAS ACCESSIBILITY STANDARDS. IT SHALL BE THE PLUMBING CONTRACTORS RESPONSIBILITY TO MEET THESE REQUIREMENTS.
5. IN MANY CASES, FIXTURES WITH THE SAME PLUMBING DESIGNATION HAVE DIFFERENT INSTALLATION HEIGHTS – REFERENCE ARCHITECTURAL DRAWINGS FOR ALL INSTALLATION HEIGHTS AND HANDICAP FIXTURE DESIGNATIONS. FIXTURES DESIGNATED AS ADULT HANDICAP SHALL MEET ALL REQUIREMENTS OF THE ADA. FIXTURES DESIGNATED AS CHILD HANDICAP SHALL MEET ALL REQUIREMENTS OF THE TEXAS ACCESSIBILITY STANDARDS FOR THE APPROPRIATE CHILDREN'S AGE GROUP (REF. ARCH. DWGS. AND SPECIFICATIONS).

PLUMBING MATERIALS

SANITARY WASTE AND VENT

BELOW SLAB/GRADE: SCHEDULE 40, DWV PVC

ABOVE SLAB: STANDARD WEIGHT, CAST IRON, NO-HUB PIPING.

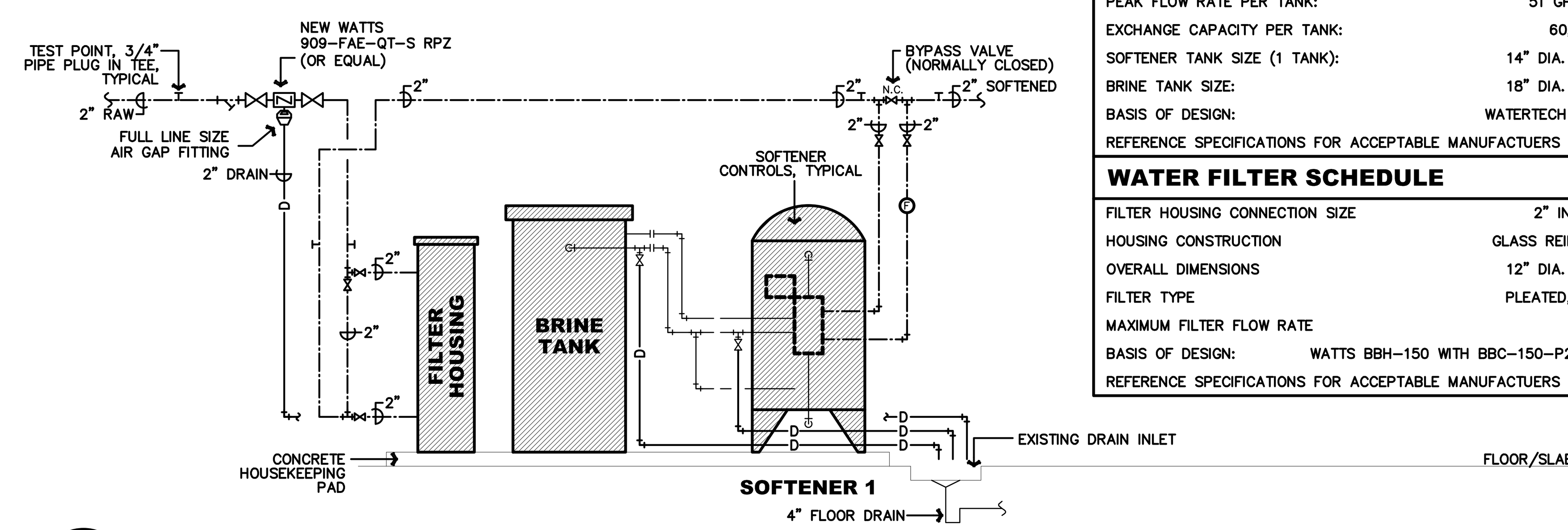
DOMESTIC WATER

INTERIOR: TYPE L COPPER WITH SOLDER TYPE WROUGHT COPPER FITTINGS, MADE UP WITH LEAD-FREE SOLDER.

EXTERIOR: TYPE K COPPER WITH SWEAT FITTINGS AND LEAD-FREE SOLDER. BEYOND 5 FEET FROM BUILDING, SCHEDULE 40 PVC.

GENERAL PLUMBING NOTES

1. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK DESCRIPTION. SEE THIS SHEET (P4.00) FOR PLUMBING SYMBOLS LEGEND.
2. COORDINATE PLUMBING SYSTEMS INSTALLATION WITH ARCHITECTURAL, STRUCTURAL, HVAC SYSTEMS, ELECTRICAL SYSTEMS, CONDUITS, ETC.... OFFSET PIPING AS REQUIRED TO PROVIDE A FUNCTIONING SYSTEM WITH ADEQUATE SPACE FOR SERVICING AND REPAIRS.
3. MAKE CONNECTIONS OF NEW PIPE SYSTEMS IN TO EXISTING PIPE SYSTEMS WITH THREADED OR SWEAT JOINTS. PROVIDE ELECTROLYSIS ISOLATING UNIONS AT CONNECTION OF DISSIMILAR MATERIALS. REFERENCE THE SPECIFICATIONS.
4. SITE SERVICES ARE SHOWN FOR REFERENCE ONLY. PLUMBING CONTRACTOR SHALL REFERENCE CIVIL DRAWINGS, INCLUDING LOCATIONS OF SERVICES, SIZES OF PIPES, FLOWLINE ELEVATIONS, ETC..
5. DO NOT INSTALL PLUMBING PIPING OVER ANY ELECTRICAL EQUIPMENT. REFERENCE ELECTRICAL DRAWINGS FOR LOCATIONS OF ELECTRICAL EQUIPMENT AND COORDINATE WITH ELECTRICAL SUBCONTRACTORS ACCORDINGLY. SEE DETAIL 2/MEP1. THIS INCLUDES FIRE SPRINKLER PIPING.
6. ALL PIPES THROUGH WALLS OR FLOORS SHALL BE SLEEVED AND SEALED PER DETAIL 5/P4.02. FIRE CAULK WHERE REQUIRED. THIS INCLUDES ALL WALLS, INTERIOR AND EXTERIOR. THIS INCLUDES FIRE SPRINKLER PIPING.
7. ALL CLEANOUTS SHALL BE CONNECTED TO SANITARY LINES USING WYES AND/OR LONG RADIUS ELLS. SANITARY TEES ARE NOT ACCEPTABLE. 2" MINIMUM SIZE. ALL WALL CLEAN OUTS IN VERTICAL RISERS, OR BANKS OF FIXTURES SHALL BE INSTALLED 4" ABOVE THE FLOOD RIM LEVEL OF THE LOWEST CONNECTED FIXTURE AND A MINIMUM OF 24" AFF.
8. ALL WASTE AND VENT PIPING BELOW SLAB SHALL BE 2" MINIMUM.
9. LOCATE PLUMBING VENTS THROUGH ROOF NOT NEARER THAN SIX (6) FEET AWAY FROM EDGE OF BUILDING AND TEN (10) FEET AWAY FROM ANY FRESH AIR INTAKES. OFFSET VENT PIPING, AS REQUIRED, IN CEILING SPACE BETWEEN CEILING AND ROOF TO MEET THESE REQUIREMENTS. SEE DETAIL 3/P4.02.
10. ALL DOMESTIC WATER PIPING (CW, HW AND HWR) SHALL BE INSULATED PER THE WRITTEN SPECIFICATIONS.
11. TOP OF FLOOR DRAINS IN MECHANICAL, AHU AND BOILER ROOMS SHALL BE SET 1-1/2" BELOW FINISHED FLOOR SURFACE. CONCRETE FLOOR SHALL BE SLOPED TO DRAIN, REFERENCE ARCHITECTURAL DRAWINGS. IN ALL OTHER LOCATIONS, FLOOR DRAINS SHALL BE SET FLUSH WITH FINISHED FLOOR, TAKING INTO ACCOUNT ANY FLOOR SLOPE OR FLOOR FINISH (TILE, TERRAZZO, ETC.) AS SHOWN ON ARCHITECTURAL DRAWINGS.
12. PROVIDE AN ISOLATING VALVE AT EACH WATER TAP OFF HOT AND COLD WATER MAINS TO ALLOW FOR SERVICING. VALVE SHALL BE BALL VALVE IF PIPE SIZE IS 2" OR LESS AND GATE VALVE OR BUTTERFLY VALVE IF LARGER THAN 2". SEE WRITTEN SPECIFICATIONS. VALVES SHALL BE EASILY ACCESSIBLE: PROVIDE 18" X 18", FIRE-RATED, STAINLESS STEEL ACCESS PANELS WITH HINGED, CYLINDER LOCK DOORS WHERE VALVES ARE INSTALLED ABOVE INACCESSIBLE CEILINGS OR IN WALL CHASES (MIFAB MODEL MPFR-SS-C). BALL VALVES AND BUTTERFLY VALVES INSTALLED ABOVE CEILINGS SHALL BE INSTALLED SUCH THAT HANDLE IS ON BOTTOM OF PIPE. ISOLATING WATER VALVES ABOVE CEILINGS SHALL BE INSTALLED NO MORE THAN 24" ABOVE CEILING. VALVES ABOVE INACCESSIBLE CEILINGS SHALL BE INSTALLED WITHIN REASONABLE REACH OF CEILING MOUNTED ACCESS PANEL.
13. WATER HAMMER ARRESTERS SHALL BE INSTALLED IN ADDITION TO AIR CHAMBERS PER THE RISER DIAGRAMS. SEE SPECIFICATIONS.
14. MECHANICALLY CLEAN ALL WASTE LINES WITH ROTARY MACHINE TO PROVE FREE FLOWING, SEE SPECIFICATIONS.
15. PROVIDE VENTED SLEEVE (2 PIPE SIZES LARGER THAN GAS PIPE UNLESS NOTED OTHERWISE) FOR ALL GAS PIPING IN GROUND BELOW PAVING OR SIDEWALKS AND INSIDE BUILDING IN WALLS AND IN UNVENTILATED CEILING SPACES, SEE SPECIFICATIONS.
16. GAS PIPING SHALL BE 1/2" MINIMUM. TAP GAS PIPING ON TOP OR SIDES ONLY. DO NOT INSTALL VALVES IN CEILING PLENUM OR IN ANY INACCESSIBLE LOCATION. ALL GAS VALVES SHALL BE EASILY ACCESSIBLE. REFER TO DETAIL 9/P4.01 FOR TYPICAL GAS CONNECTION INSTALLATION. REFER TO DETAIL 8/P4.02 FOR TYPICAL PRV INSTALLATION.
17. CENTER WALL HYDRANTS IN BRICK PATTERN OF EXTERIOR WALLS, REFERENCE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
18. ALL REFRIGERATORS WITH ICE MAKERS, COMMERCIAL TYPE COFFEE MAKERS, ICE MAKERS, COFFEE VENDING MACHINES AND OTHER ITEMS PROVIDED BY OTHERS THAT REQUIRE A WATER CONNECTION SHALL HAVE A CW VALVE BOX, "VBOX", INSTALLED TO ALLOW EASY ACCESS AND REMOVAL OF MACHINE. ALSO, INSTALL IN-LINE FILTER IN WATER CONNECTION.
19. REFER TO CIVIL DRAWINGS FOR SITE SANITARY, SITE STORM SEWER, FIRE SERVICE AND DOMESTIC WATER SERVICE. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PIPING INSIDE BUILDING TO OUTSIDE LOCATIONS SHOWN ON PLUMBING DRAWINGS. PLUMBING CONTRACTOR SHALL INCLUDE COST OF FINAL TIE-INS TO SITE SERVICES.
20. PER THE DRAWINGS, ALL DRAINS (FLOOR DRAINS, FLOOR SINKS, HUB DRAINS, KITCHEN DRAINS, SHOWER DRAINS, ETC.) SHALL BE VENTED AND TRAP PRIMED – NO EXCEPTIONS. TRAP PRIMING SHALL BE ACCOMPLISHED USING WATER CLOSET FLUSH VALVE TRAP PRIMING DEVICES OR PROSET SYSTEMS TRAP GUARD SEWER GAS EMISSION PROTECTION, AS SHOWN ON DRAWINGS. REFERENCE PLUMBING FLOOR PLANS AND RISER DIAGRAMS.
21. ALL PIPING LOCATED ON ROOF (GAS PIPING) SHALL BE INSTALLED ON ROOF PIPE SUPPORTS PER DETAIL 10/P4.02, 6-FOOT ON CENTER. INSTALL ROOF PIPE JACK PER DETAIL 9/P4.02 FOR ALL PIPING THROUGH ROOF.
22. COORDINATE LOCATIONS OF ALL ROOF DRAINS AND OVERFLOW ROOF DRAINS WITH ARCHITECTURAL DRAWINGS.
23. FOR COMBINATION WASTE AND VENT SYSTEMS (WHERE APPLICABLE ON DRAWINGS), DRAIN P-TRAPS SHALL BE SIZE OF PIPE SHOWN ON DRAWINGS (I.E. TWO PIPE SIZES LARGER THAN DRAIN SIZE). FOR EXAMPLE, A 4" FLOOR DRAIN SHALL HAVE A 6" P-TRAP.
24. FOR ALL PLUMBING FIXTURES, IF COPPER PIPING IS STUBBED THROUGH WALL FOR DRAIN CONNECTION, INSTALL MARVEL FITTING AT DRAIN CONNECTION FOR EASE OF SERVICING AND REPAIRS. COPPER DRAIN PIPING WILL ONLY BE ALLOWED FOR DIRECT/STRAIGHT STUB-OUT OF FIXTURE DRAIN PIPING THROUGH WALL.
25. DO NOT INSTALL ANY PIPING BENEATH CVT OR VAV BOXES. THIS INCLUDES FIRE SPRINKLER PIPING.
26. WHERE UNDERGROUND VENT PIPE SIZE IS NOT NOTATED, VENT SHALL BE 2" DIAMETER.
27. WHERE UNDERGROUND SANITARY PIPE SIZE IS NOT NOTATED, REFER TO THE RISER DIAGRAMS FOR SIZE. NOT BELOW GRADE SANITARY PIPE SHALL BE SMALLER THAN 2". NO SANITARY LINE OR P-TRAP FOR A DRAIN/FIXTURE SHALL BE SMALLER THAN THE FIXTURE CONNECTION SIZE SHOWN ON THE DRAIN/FIXTURE SCHEDULE.
28. WHERE ABOVE GROUND VENT PIPE SIZE IS NOT NOTATED, REFER TO THE RISER DIAGRAMS FOR VENT SIZE.
29. WHERE CW/HW PIPING SIZE TO THE FIXTURE IS NOT SHOWN ON THE FLOOR PLAN, REFER TO THE RISER DIAGRAMS FOR CW/HW PIPE SIZE. NO PIPING TO FIXTURE SHALL BE SMALLER THAN THE FIXTURE CONNECTION SIZE SHOWN ON THE FIXTURE SCHEDULE.
30. TO INSTALL NEW PLUMBING SYSTEMS BELOW EXISTING CONCRETE SLABS, FIRST PLUMBING CONTRACTOR SHALL LAY OUT CUT. THEN, DEMOLITION CONTRACTOR SHALL SAW CUT SLAB TO CONTROL CRACKING AND REMOVE ALL CONCRETE. PLUMBING CONTRACTOR SHALL THEN EXCAVATE FILL TO PROPER SLOPE, INSTALL NEW PIPING SYSTEMS AS REQUIRED, THEN BACKFILL AND COMPACT TO PROPER DENSITY. THE CONCRETE CONTRACTOR SHALL THEN INSTALL NEW SIX (6) MIL POLYETHYLENE VAPOR BARRIER AND SEAL, INSTALL NEW REINFORCING STEEL AND WELD ON TO EXISTING, THEN RE-POUR CONCRETE TO NEW LEVEL. DO NOT CUT THROUGH GRADE BEAMS WITHOUT APPROVAL FROM THE STRUCTURAL ENGINEER. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
31. ALL ABANDONED FIXTURES, DRAINS AND PIPING (INCLUDING PIPING ABANDONED IN THE PAST) IN AREAS WHERE WORK IS BEING DONE SHALL BE COMPLETELY REMOVED FROM BUILDING (INCLUDING PIPING BELOW SLAB/GRADE – UNLESS SHOWN OTHERWISE ON DRAWINGS). EXISTING WATER PIPING SHALL BE CAPPED AT EXISTING WATER MAIN TAPS AND ALL ABANDONED PIPING REMOVED. ABANDONED VENT PIPING SHALL BE COMPLETELY REMOVED, INCLUDING EXISTING VTR's NOT RE-USED. PATCH AS REQUIRED. ONLY ACTIVE PIPING, FIXTURES AND DRAINS SHALL REMAIN IN BUILDING WHERE WORK IS BEING DONE.



2 WATER SOFTENING SYSTEM SCHEMATIC

NO SCALE

SEE WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

WATER SOFTENER SCHEDULE

CONSTANT FLOW RATE PER TANK:	39 GPM @ 15 PSI
PEAK FLOW RATE PER TANK:	51 GPM @ 25 PSI
EXCHANGE CAPACITY PER TANK:	60,000 GRAINS
SOFTENER TANK SIZE (1 TANK):	14" DIA. X 65" TALL
BRINE TANK SIZE:	18" DIA. X 40" TALL
BASIS OF DESIGN:	WATERTECH WTS-F90 2
REFERENCE SPECIFICATIONS FOR ACCEPTABLE MANUFACTUERS	

WATER FILTER SCHEDULE

FILTER HOUSING CONNECTION SIZE	2" INLET/OUTLET
HOUSING CONSTRUCTION	GLASS REINFORCED PP
OVERALL DIMENSIONS	12" DIA. X 40" TALL
FILTER TYPE	PLEATED, 20 MICRON
MAXIMUM FILTER FLOW RATE	150 GPM
BASIS OF DESIGN:	WATTS BBH-150 WITH BBC-150-P20 CARTRIGE
REFERENCE SPECIFICATIONS FOR ACCEPTABLE MANUFACTUERS	

PLUMBING KEYED NOTES:

1 NEW SEDIMENT FILTER WITH ISOLATION VALVES ON INLET AND OUTLET AND FULL LINE SIZE BYPASS VALVE.

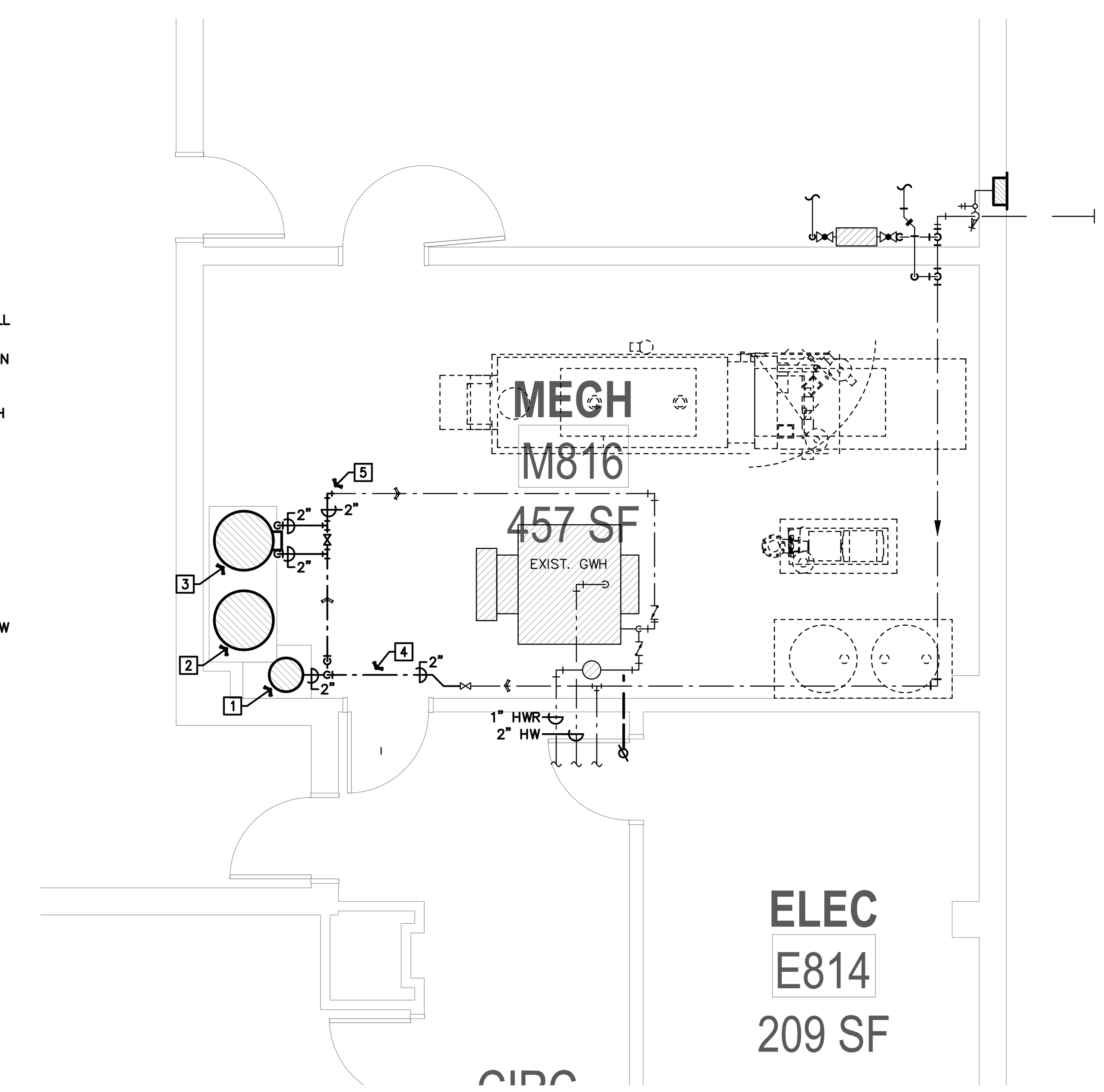
2 NEW WATER SOFTENER MINERAL TANK, IN PLACE OF EXISTING ON EXISTING CONCRETE PAD.

3 NEW WATER SOFTENER BRINE TANK WITH CONTROLLER IN PLACE OF EXISTING ON EXISTING CONCRETE PAD. EXTEND NEW 2" CW TO INLET/OUTLET CONNECTIONS WITH ISOLATION VALVES AND FULL LINE SIZE BY PASS VALVE.

4 NEW 2" CW, REROUTED FROM EXISTING. DEMOLISH ALL ABANDONED EXISTING PIPING.

5 NEW 2" CW, REROUTED FROM EXISTING AND TIED BACK TO CW FEED TO EXISTING GAS WATER HEATER.

6 EXISTING 2" HW FEED TO KITCHEN, SHOW FOR REFERENCE ONLY.



1 PLUMBING RENOVATION FLOOR PLAN

SCALE: 1/4" = 1'- 0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

j

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

STATE OF TEXAS
TYLER W. HERRING
106052
LICENSED
PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
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PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

PLUMBING FLOOR PLAN

i-P1.01

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TEXAS ENG. FIRM REG NO. F-016332

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FBISD BP013 KITCHEN RENOVATIONS ES

HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DR, SUGAR LAND, TX 77478

FORT BEND INDEPENDENT SCHOOL DISTRICT 2023 BOND

FORT BEND INDEPENDENT SCHOOL DISTRICT

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REGISTERED ARCHITECT MIKE MAGUIRE 22651 STATE OF TEXAS

18 July 2025

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

j

GENERAL NOTES

PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.
B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.
C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.
D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.
E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.
F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL, ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.
B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.
B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.
C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.
D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY. IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.

1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.

E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.

B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT. REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.

B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED. CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.

D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

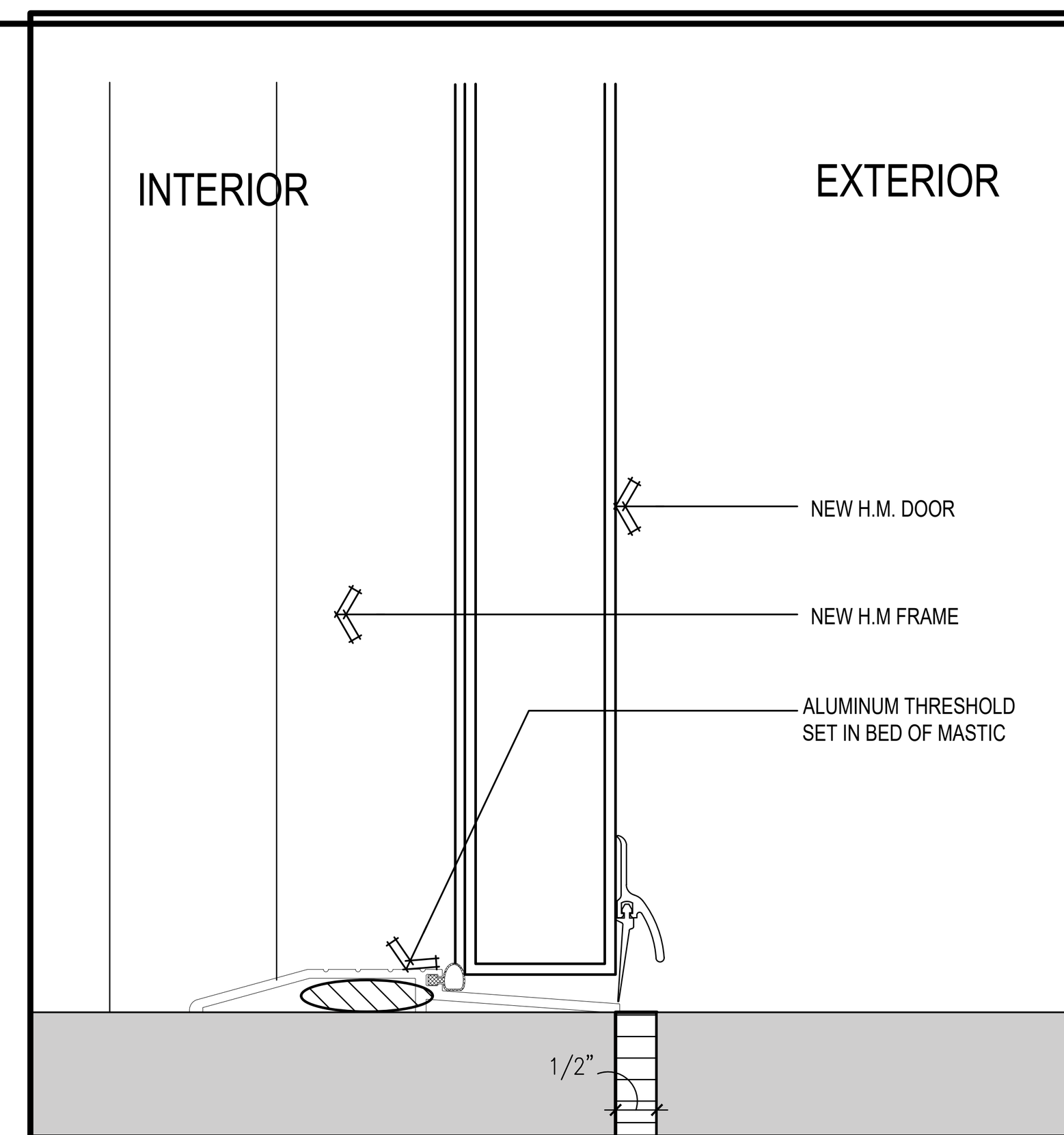
A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

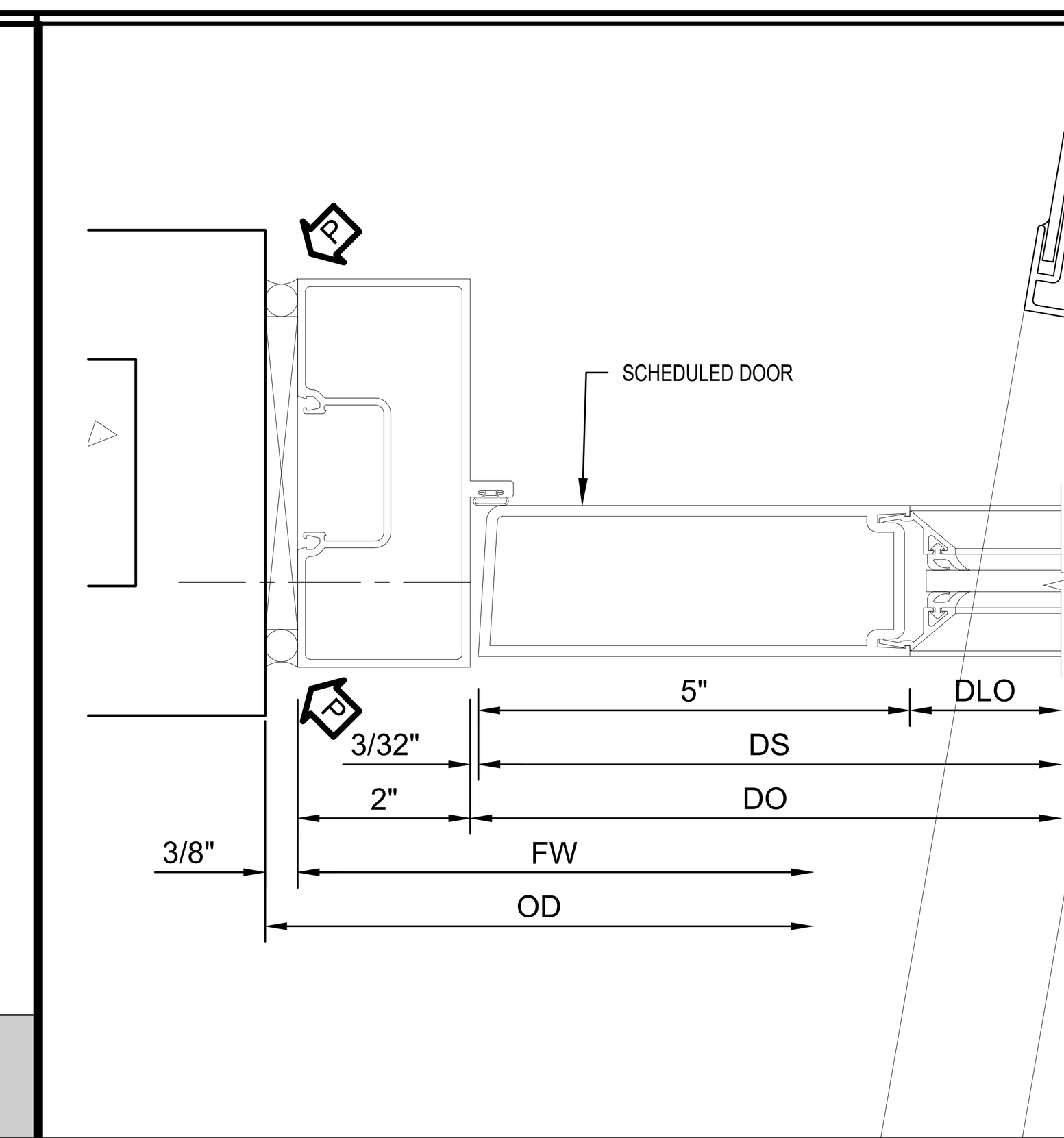
A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

01 GENERAL NOTES



21 EXTERIOR DOOR SILL
SCALE: 6" = 1'-0"_XREF



22 DOOR JAMB
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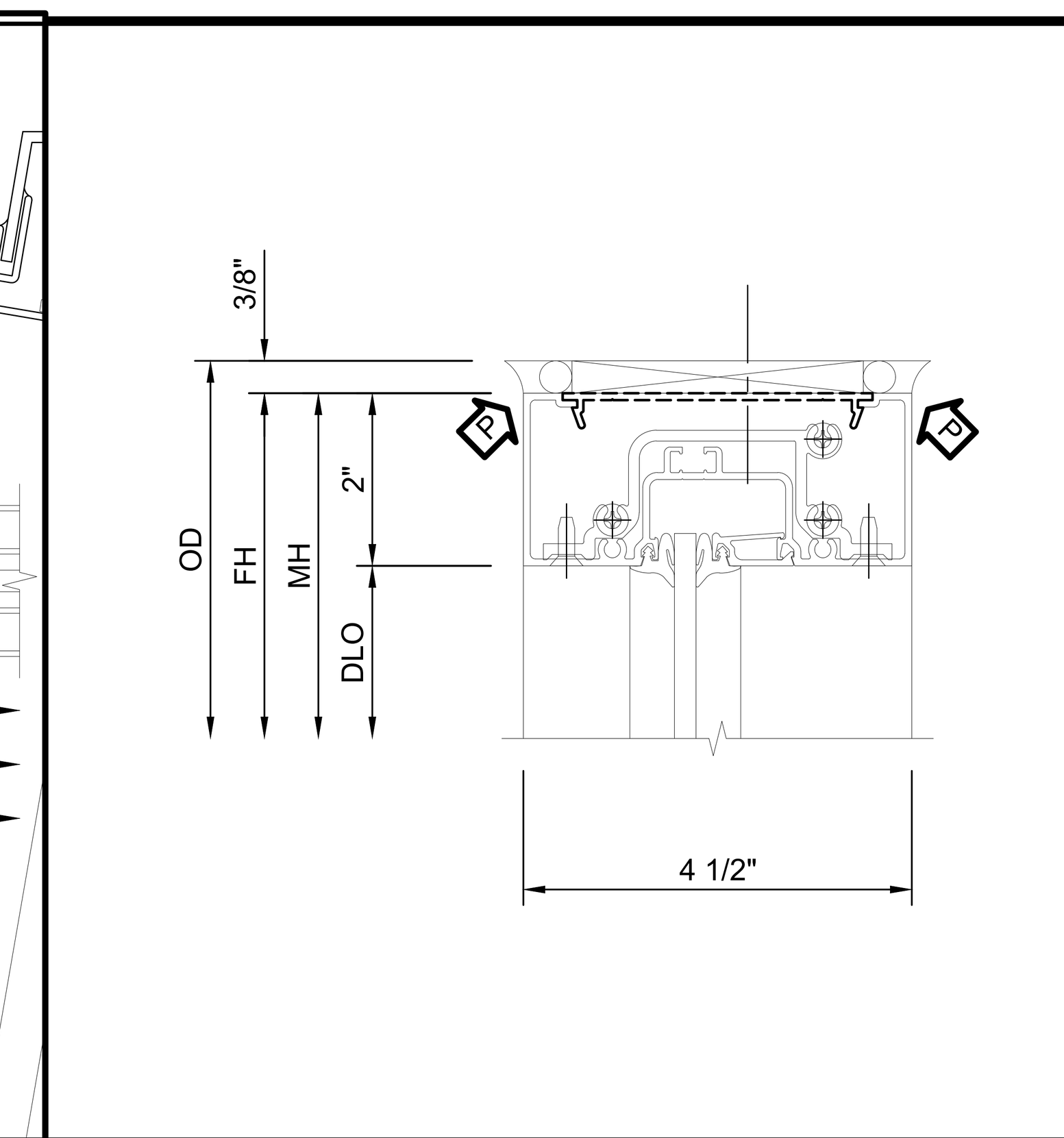

23 WINDOW HEAD
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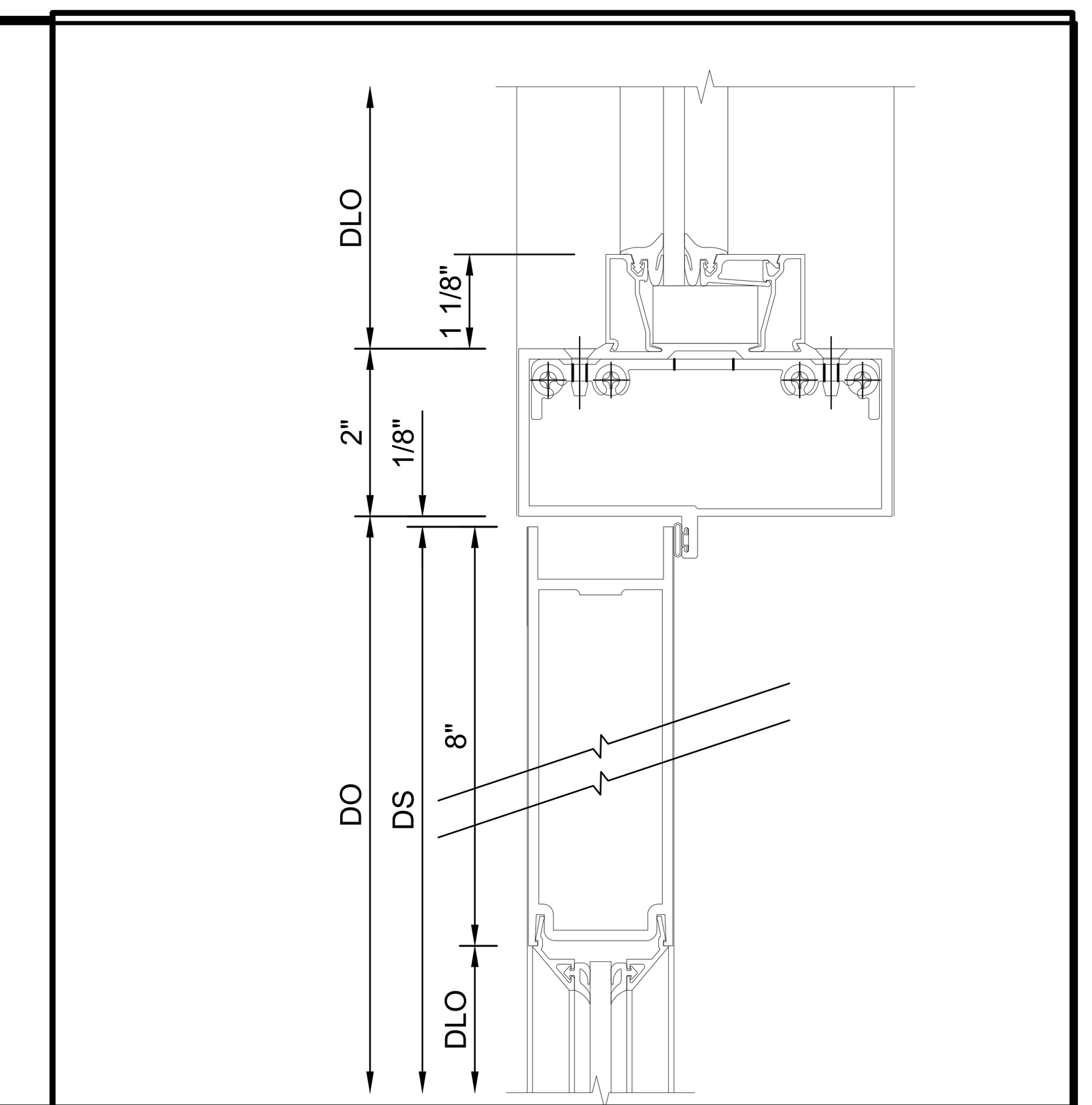

24 DOOR WINDOW HEAD
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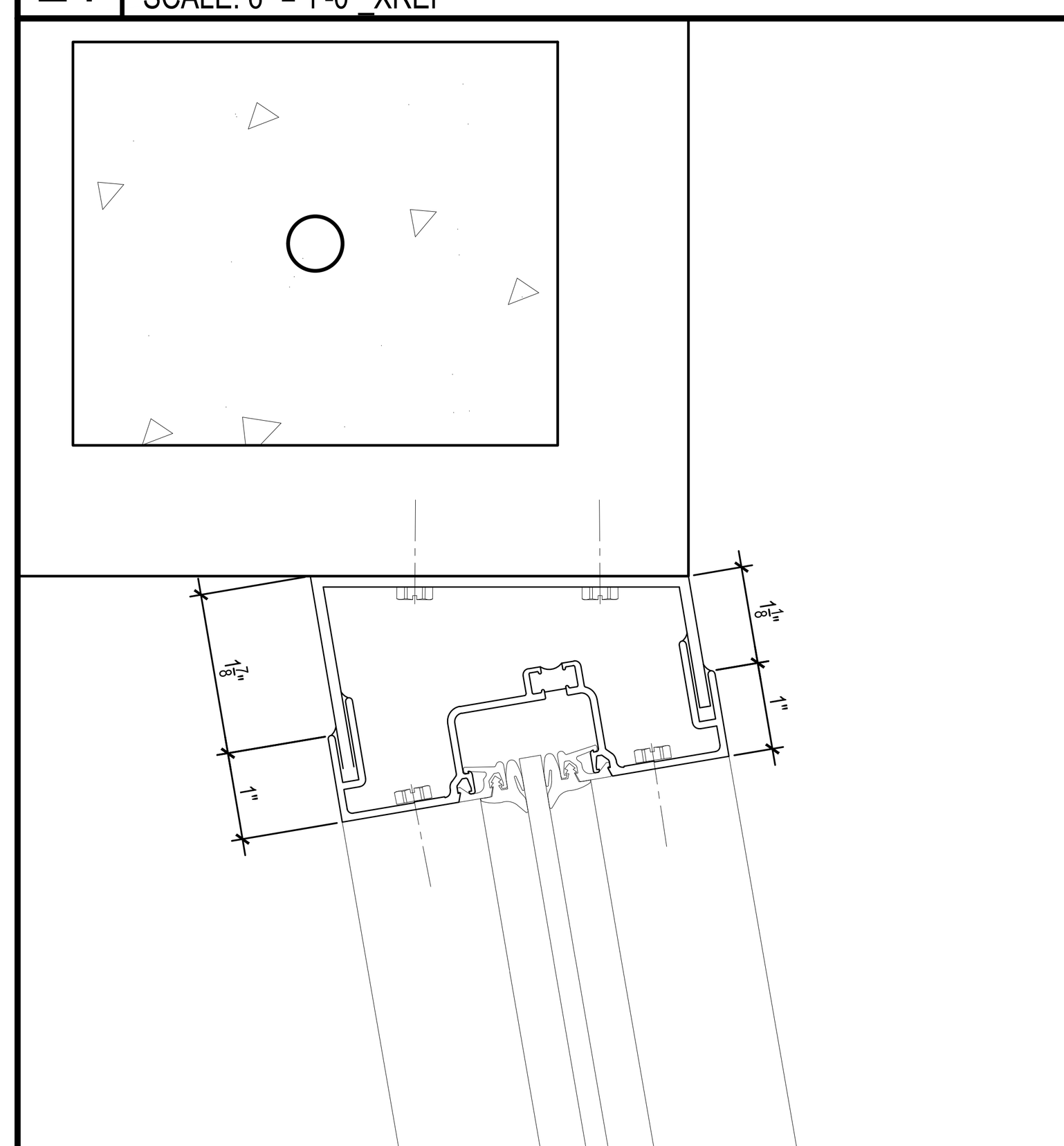

15 WINDOW JAMB AT WALL
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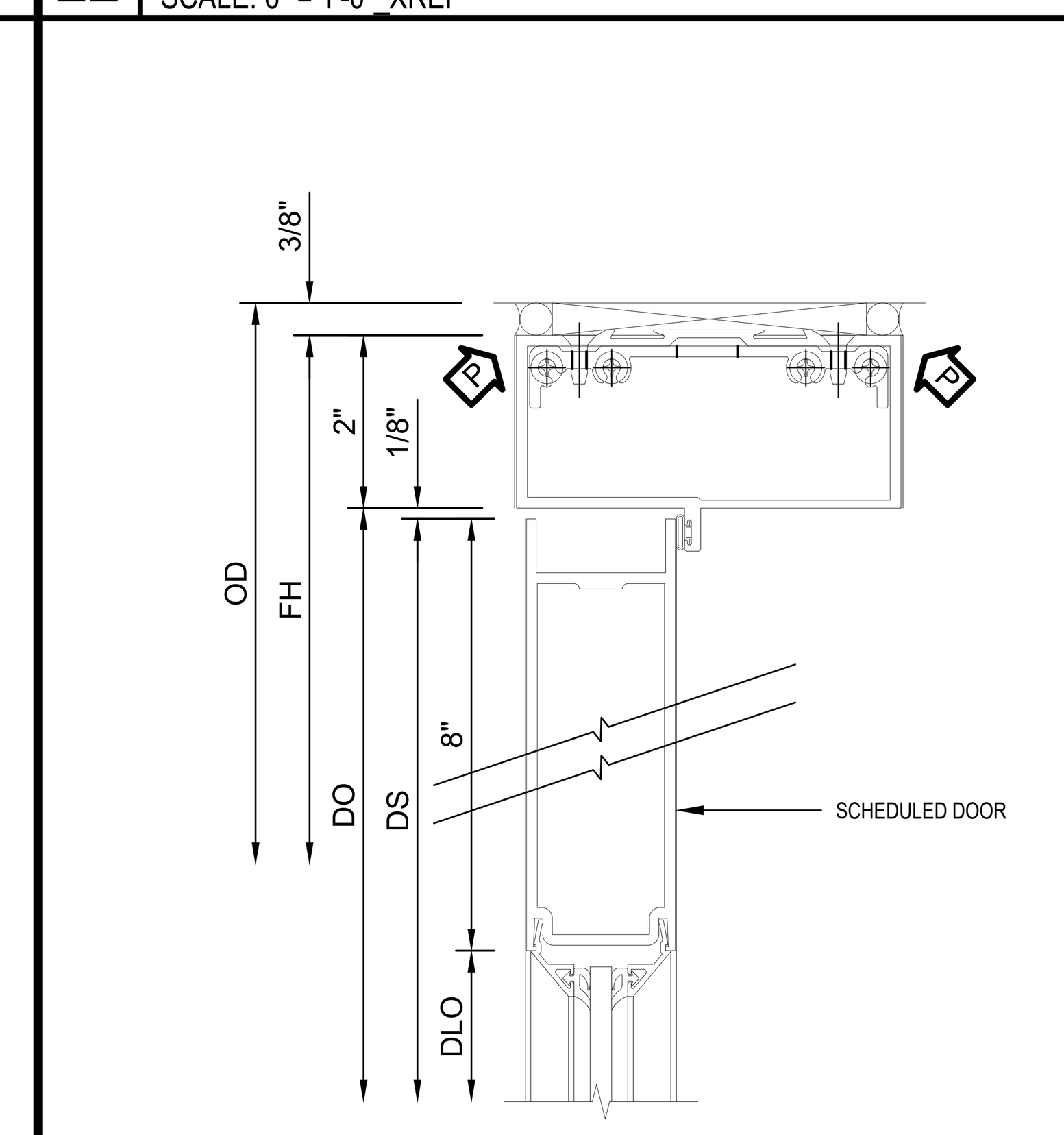

16 DOOR HEAD
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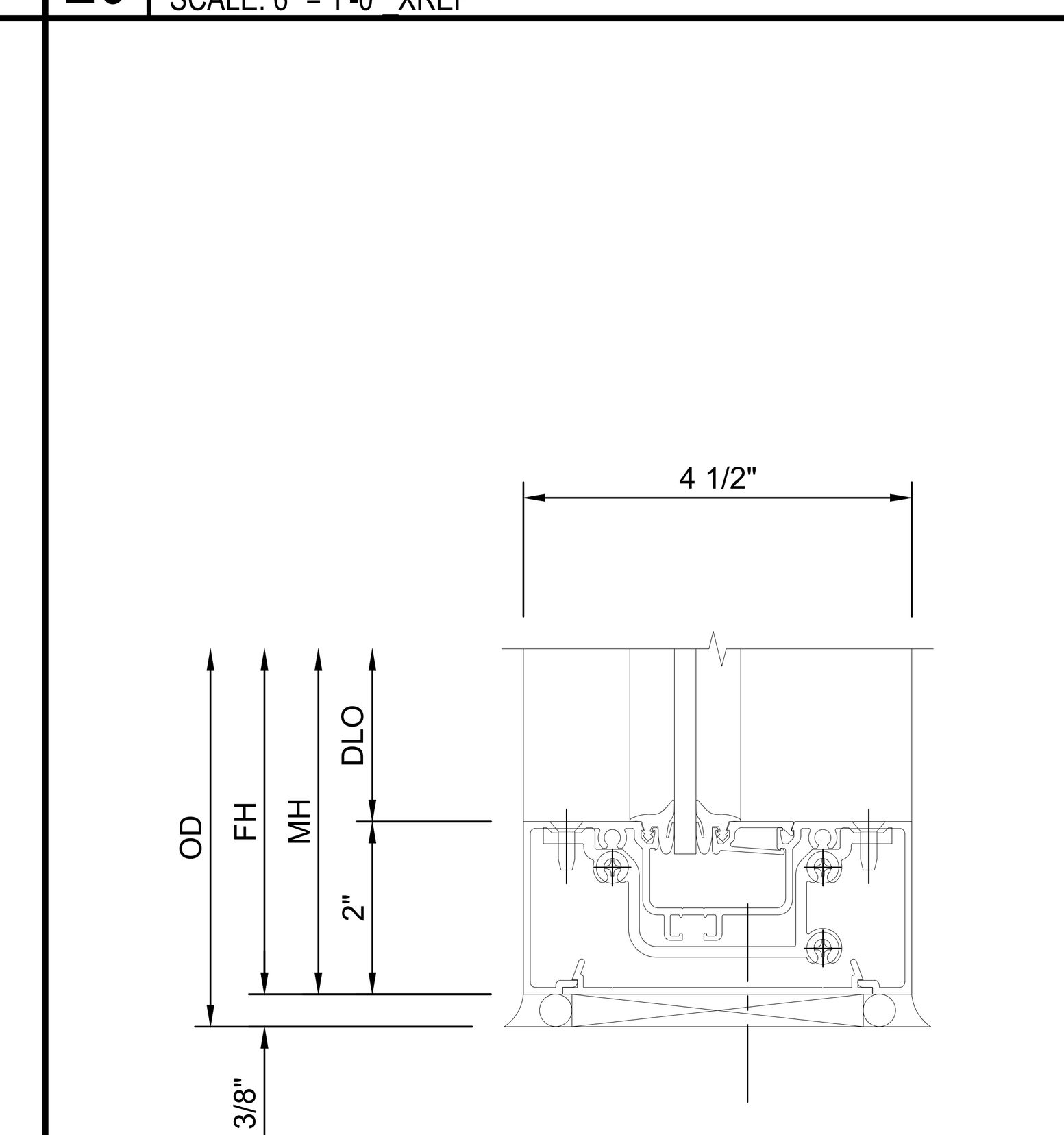

17 WINDOW SILL
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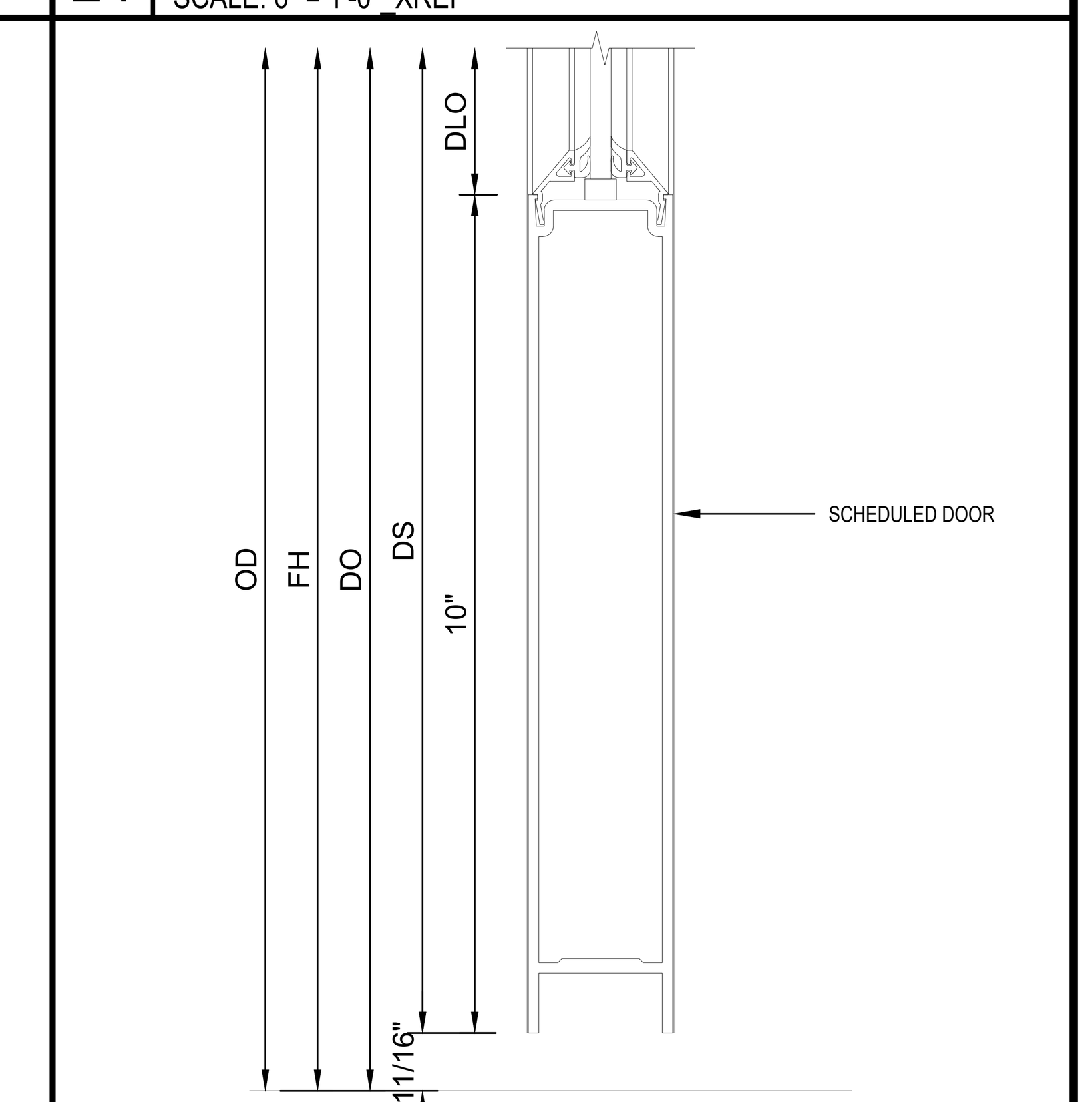

18 DOOR SILL
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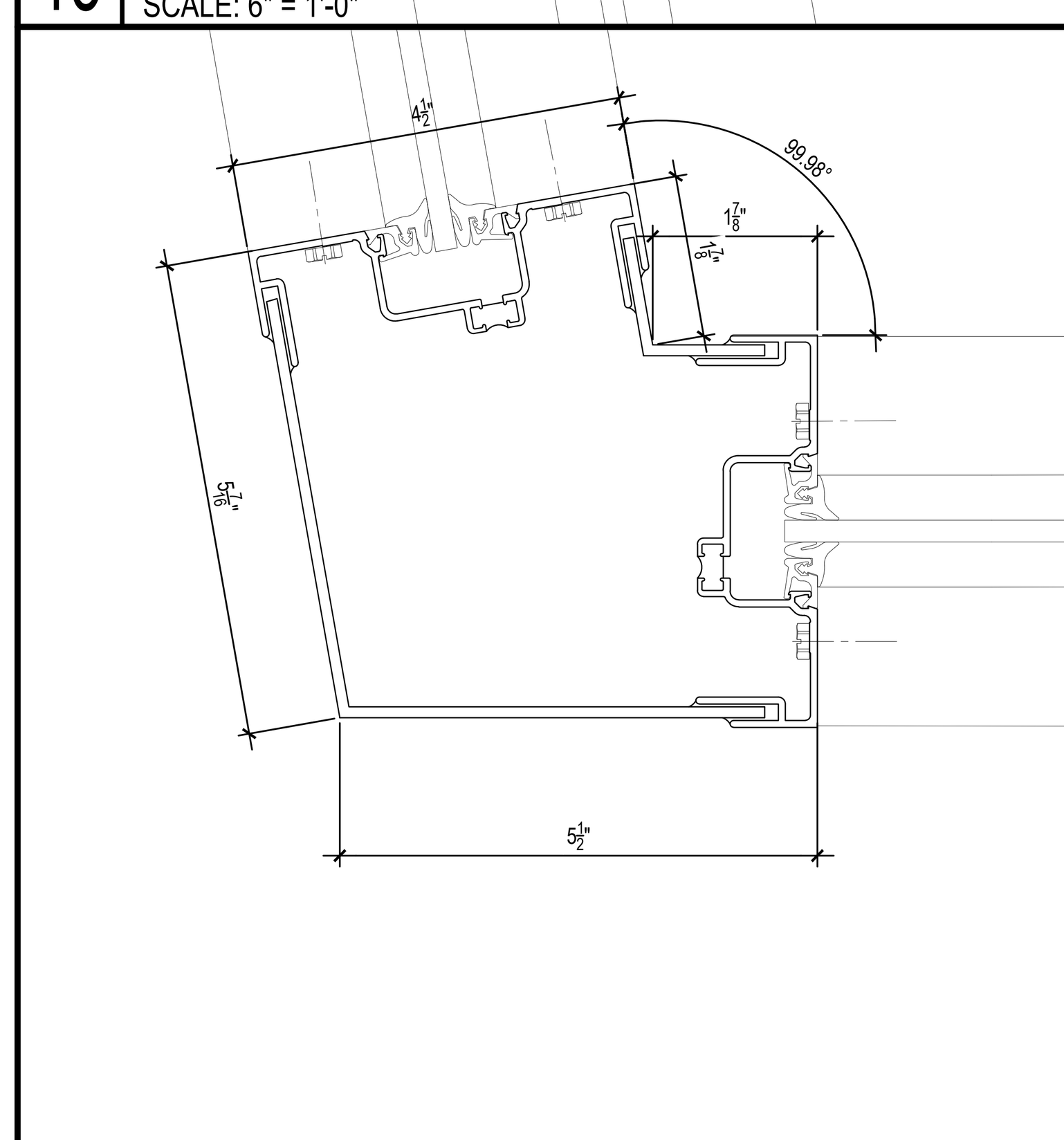

09 WINDOW CORNER
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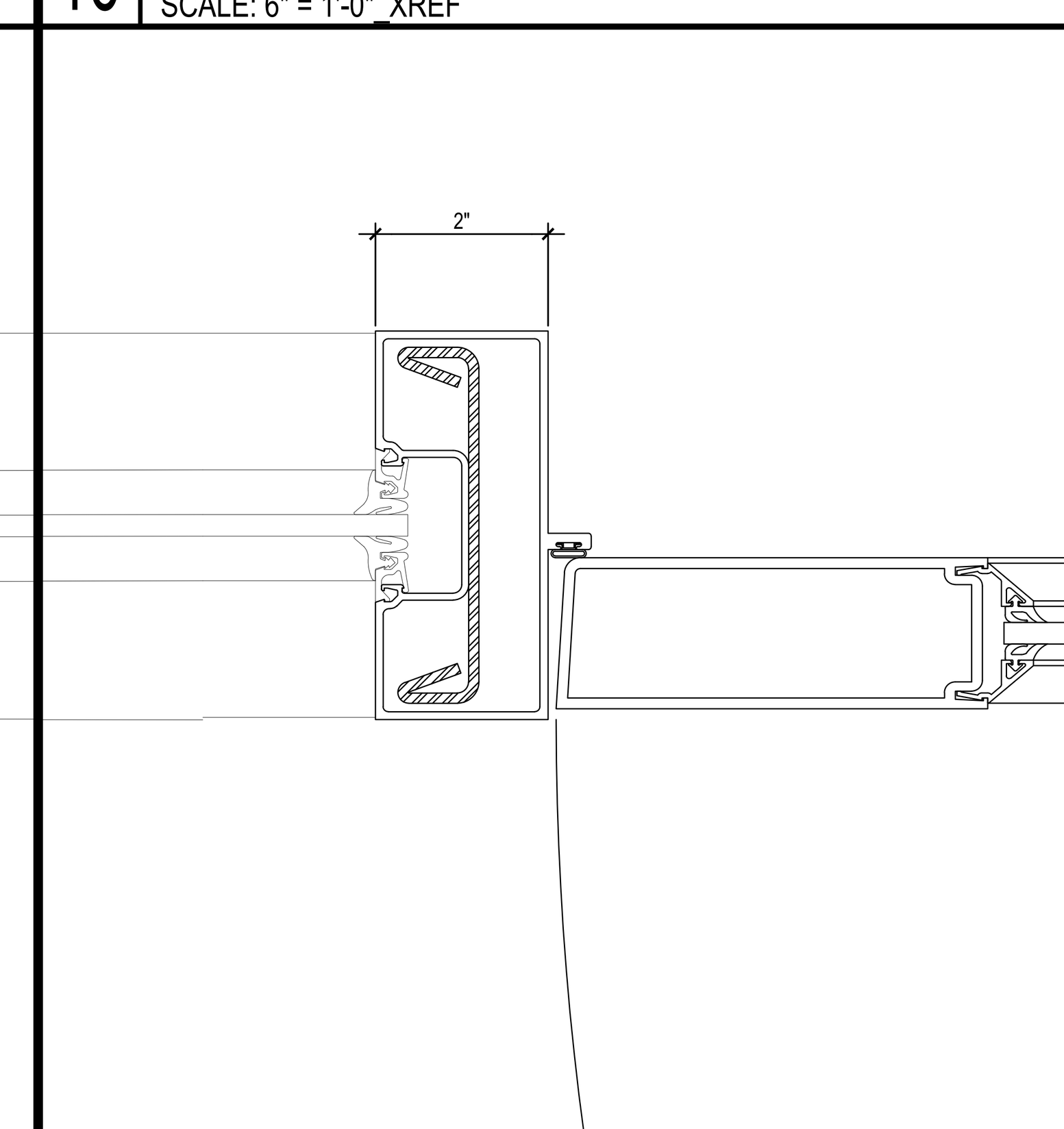

10 DOOR STRIKE JAMB
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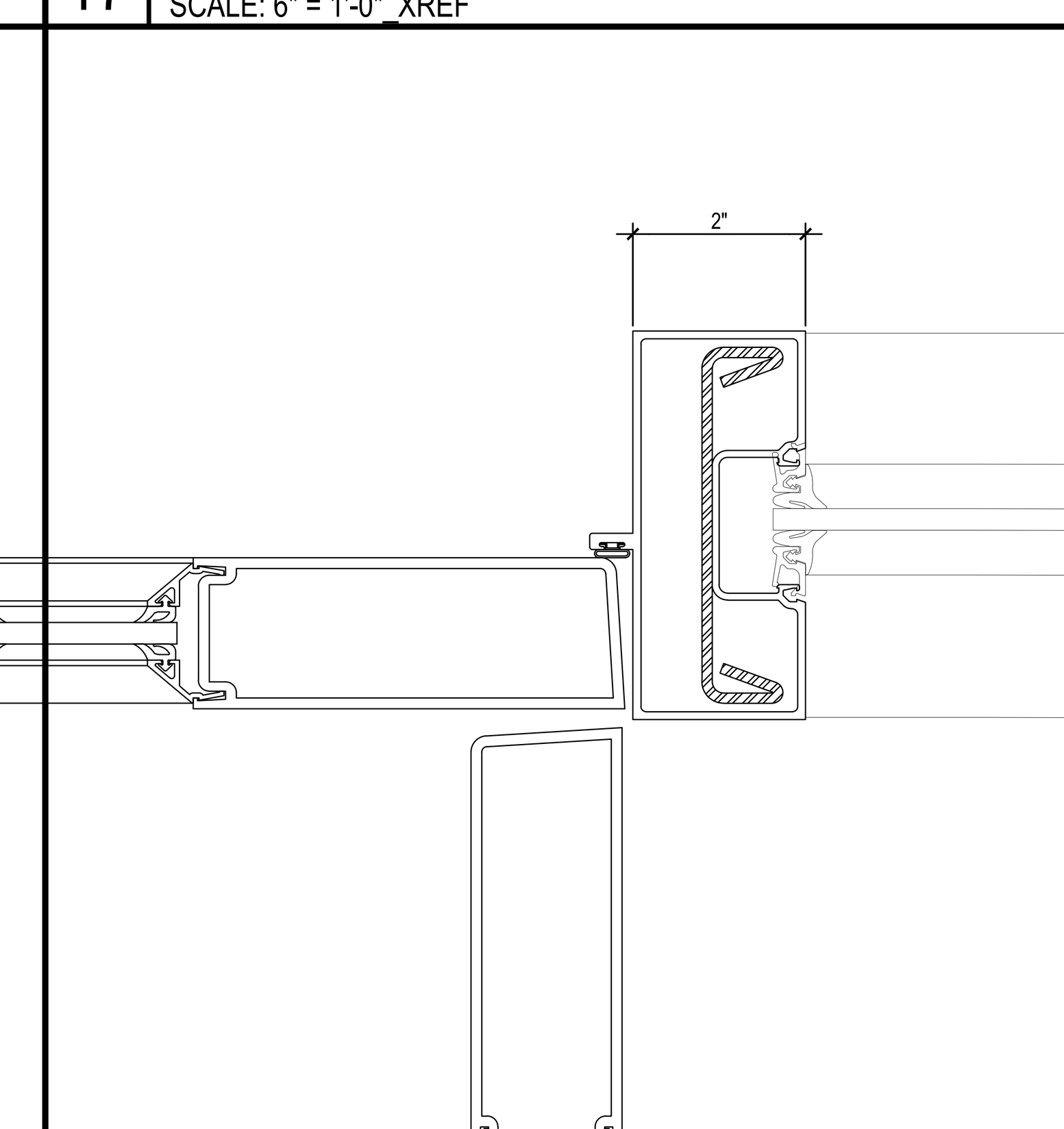

11 DOOR HINGE JAMB
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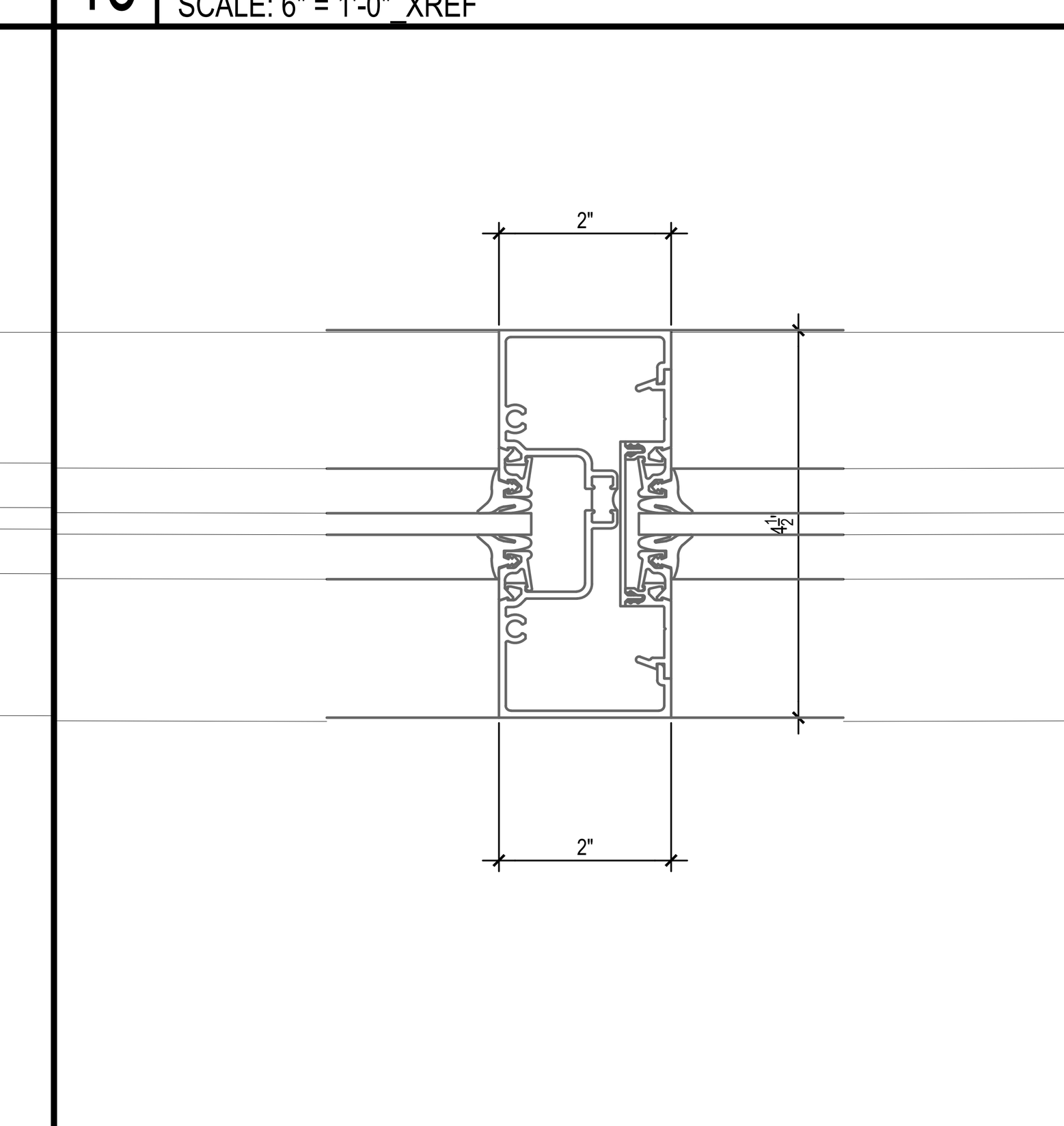
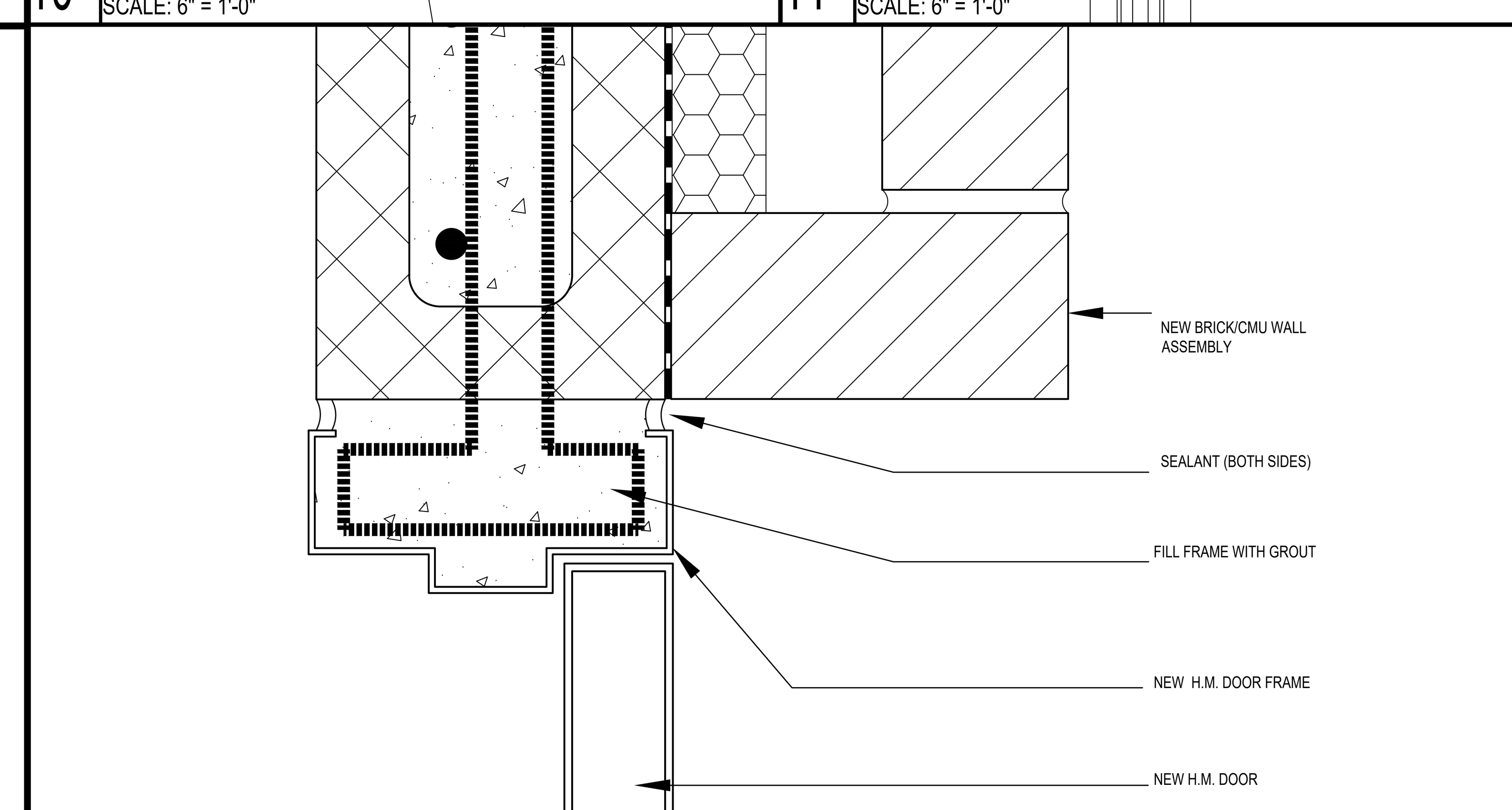


12 WINDOW MULLION
SCALE: 6" = 1'-0"

SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025) Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

03 PROJECT SCHEDULE



04 EXTERIOR DOOR HEAD JAMB
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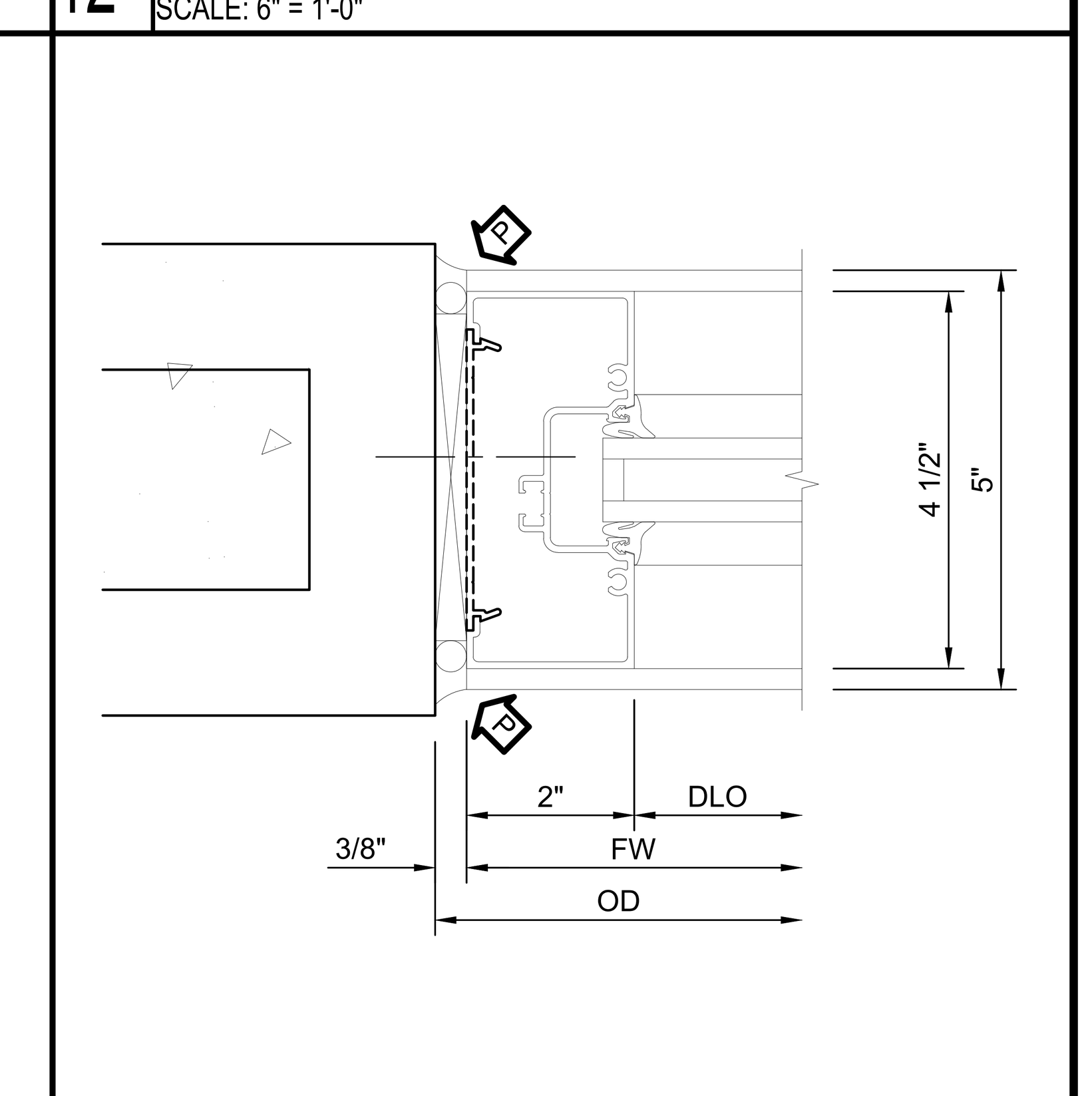


06 WINDOW JAMB
SCALE: 6" = 1'-0"_XREF

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

SEAL
REGISTERED ARCHITECT NOE ALMAGUER 22651 STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
GENERAL NOTES AND ABBREVIATIONS

A00-01

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\A00-01 GENERAL NOTES AND ABBREVIATIONS.dwg Jul 23, 2025 - 1:53pm

GENERAL DEMOLITION NOTES
(NOT ALL NOTES USED ON EACH SHEET)

1. REFER TO SHEET A00-01 FOR DEMOLITION GENERAL NOTES. THESE NOTES APPLY TO ALL SCHOOL KITCHENS.
2. COORDINATE EXTENT OF SAW CUTTING AREAS WITH NEW RECESSED SLAB FOR COOLER/FREEZER LAYOUTS, NEW SERVICE ENTRANCE FLOOR AND EXISTING KITCHEN LAYOUTS THAT REMAIN. SEE STRUCTURAL DRAWINGS AND SLAB DIMENSION CONTROL PLANS FOR ADDITIONAL SCOPE.
3. REMOVE PROTECT AND REINSTALL ALL EXISTING SURFACE MOUNTED FIRE EXTINGUISHERS (TYPES ABC AND K) AT ALL KITCHENS.
4. SAWCUT AND RE-LOCATE EXPOSED CONDUITS AND WIREMOLD TO INSIDE OF WALLS. PATCH AND PAINT. EXCEPTION: WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS.
5. CONTRACTOR TO RELOCATE EXISTING KITCHEN EQUIPMENT AND OFFICE FURNITURE TO TEMPORARY KITCHEN LAYOUT AS REQUESTED BY KITCHEN MANAGER. ALSO THAT THE IT EQUIPMENT IS PROTECTED DURING RENOVATIONS. ALL EXISTING EQUIPMENT SHALL BE RETURNED TO OWNER.
6. EXISTING TACKBOARDS TO BE REMOVED BY OWNER.
7. IF PRESENT, EXISTING SAFE IN EACH KITCHEN TO BE TEMPORARILY REMOVED DURING RENOVATION AND REINSTALLED IN KITCHEN AREA.
8. ORIGIN POINT OF EXISTING CEILING GRID SHALL BE IDENTIFIED. NEW CEILING WILL BE INSTALLED (AS MUCH AS POSSIBLE) AT THE SAME ORIGIN POINT SO THAT SPRINKLER SYSTEM PIPING CAN REMAIN UNCHANGED.
9. ABOVE-CEILING INFRASTRUCTURE SHALL REMAIN UNDISTURBED AS MUCH AS IS POSSIBLE. CEILING DEVICES ARE TO BE REMOVED FROM EXISTING GRID/TILE THEN DURING RE-INSTALATION OF CEILING DEVICES SHALL BE LOCATED AS CLOSE TO ORIGINAL LOCATION AS POSSIBLE INTO THE NEW GRID/TILE. PROTECT AND STORE EXISTING INFRASTRUCTURE (CABLING, ELECTRICAL POWER, PIPING) DURING CONSTRUCTION.
10. EXISTING HOOD IN WAREWASH AND (2) HOODS IN PRODUCTION AREA ARE TO BE CLEANED, INSPECTED, SERVICED AND REFURBISHED TO A LIKE NEW CONDITION. THEY ARE TO REMAIN IN PLACE.

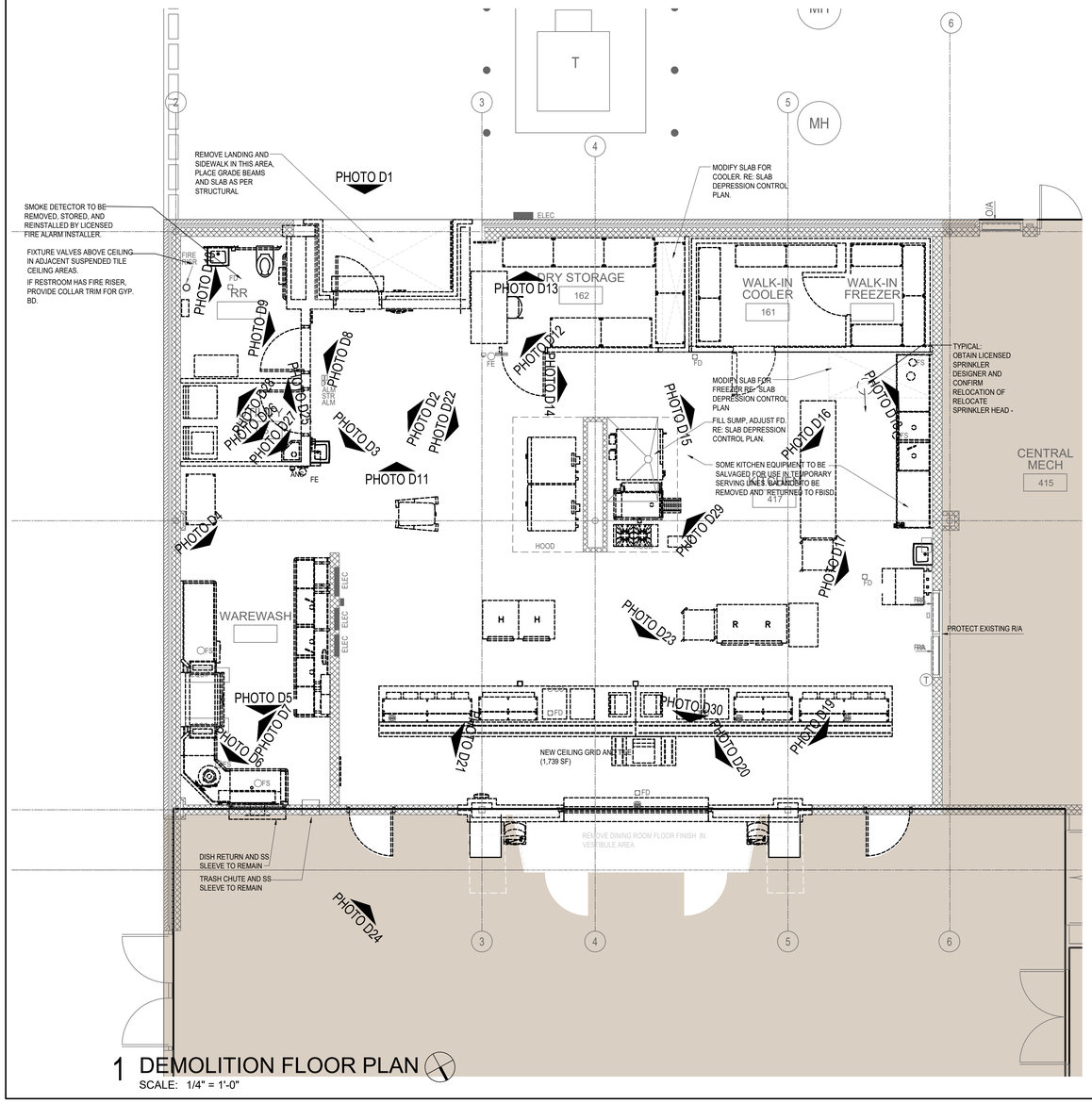
KEYED DEMOLITION NOTES
(NOT ALL NOTES USED ON EACH SHEET)

1. REMOVE EXISTING THINSET SYNTHETIC TERRAZZO FLOOR AND TERRAZZO COVE BASE MATERIAL IF ANY EXISTS THROUGHTOUT KITCHEN AREA. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOOR. RE: FINISH PLAN FOR NEW FLOOR FINISH MATERIAL.
2. REMOVE EXISTING QUARRY TILE FLOORING AND BASE. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOORING. RE: FINISH SCHEDULE FOR NEW FLOOR FINISH MATERIAL.
3. CEILING DEVICES: REMOVE SMOKE DETECTORS, STROBES, EXIT SIGNAGE, MOTION DETECTORS AND CEILING SPEAKERS. PROTECT AND RE-INSTALL AFTER FINISHES ARE APPLIED.
4. REMOVE EXISTING LOCKERS. PROTECT AND RE-INSTALL AFTER FINISHES APPLIED.
5. REMOVE EXISTING WASHER AND DRYER. VERIFY WITH FBISD FOR RELOCATION TO WAREHOUSE.
6. TEMPORARILY REMOVE EXISTING WALL MOUNTED CLOCK AND STORE FOR REINSTALLATION AFTER WALL RECEIVED NEW FINSH.
7. REMOVE EXISTING WALK-IN COOLER/FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT SPACE. MITIGATE ANY MOLD FOUND.
8. REMOVE EXISTING DOOR AND PROTECT EXISTING FRAME TO REMAIN
9. REMOVE EXISTING DOOR AND FRAME, PROTECT FRAME AND OR DOOR IF IT IS SCHEDULED TO REMAIN.
10. REMOVE PARTIAL EXISTING CMU PARTITION FOR NEW DOOR OPENING
11. INSPECT EXISTING WAREWASH COUNTER DOOR AND S.S. PASS-THRU WINDOW CHUTE. REPAIR REPLACE DAMAGED COMPONENTS. CLEAN, LUBRICATE AND RE-INSTALL.
12. EXISTING CARD READER ACCESS TO REMAIN
13. EXISTING WINDOW TO REMAIN
14. REMOVE EXISTING KITCHEN EQUIPMENT THROUGHOUT KITCHEN INCLUDING WALK-IN COOLER / FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT ROOM OR OUTSIDE OF THE BUILDING. VERIFY WITH OWNER FOR RELOCATION TO WAREHOUSE. SOME EQUIPMENT IS TO BE RE-USED IN TEMPORARY SERVING LINES. SEE ALSO GENERAL DEMOLITION NOTE 6.
15. REMOVE EXISTING FRP AND PREP FOR NEW TILE FINISH.
16. COORDINATE REMOVAL AND STORAGE OF ANY EXISTING FURNITURE ITEMS WITH OWNER . SEE ALSO GENERAL DEMOLITION NOTE 5.
17. REMOVE EXISTING SOAP AND PAPER TOWEL DISPENSER AND RETURN TO OWNER
18. EXISTING WALL MOUNTED ACCESSORIES SIGNS, DISPLAY BOARDS, AND MATS TO BE REMOVED BY FORT BEND ISD (VERIFY EQUIPMENT - IF ANY).
19. REMOVE EXISTING SURFACE MOUNTED FIRE EXTINGUISHER. RE-INSTALL AFTER NEW FINISH APPLIED.
20. REMOVE EXISTING ACOUSTIC CEILING TILE CEILNG SYSTEM AND LIGHT FIXTURES, HVAC DEVICES, SENSORS, ETC. THROUGHTOUT RENOVATED AREAS. PREP FOR NEW SUSPENDED CEILING. EXISTING SPRINKLE SYSTEM TO REMAIN AS-IS UNLESS ROOM CONFIGURATION HAS CHANGED IN NEW DESIGN. PROTECT RECESSED SPRINKLER HEADS AND - RE-INSTALL IN NEW CEILING.
21. REMOVE EXISTING CASEWORK/SHELVING
22. EXISTING CERAMIC WALL TILE TO REMAIN. PROTECT FROM DAMAAGE.
23. REMOVE EXISTING COAT HANGER / ROD / SHELF
24. REMOVE EXISTING PLUMBING FIXTURES IN RESTROOMS. RE: PLUMBING FOR NEW FIXTURES.
25. REMOVE EXISTING UTILITY SINK. RE: PLUMBING FOR NEW PLUMBING FIXTURES.
26. REMOVE EXISTING MOP HOLDER. REPLACE WITH NEW UNIT AS SPECIFIED.
27. REMOVE EXISTING WALL MOUNTED CLEANING SOLUTION DISPENSER (BY FBISD VENDOR)
28. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
29. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
30. REMOVE FLOORING IN THIS AREA FOR NOTE 1.
31. REMOVE CARTIDGE FILTER AND WATER PURTICATION CABNET

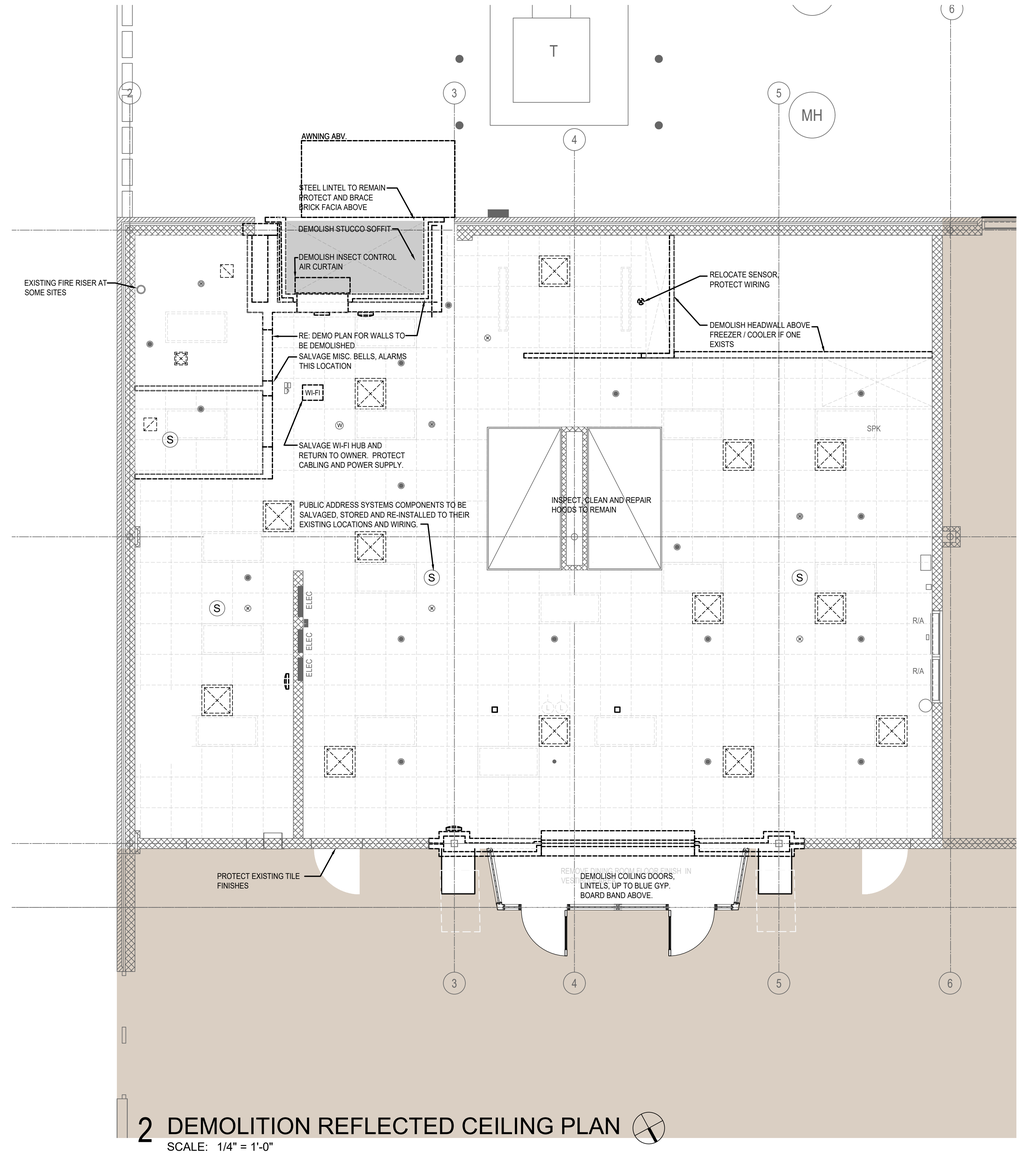
DEMOLITION LEGEND

- EXISTING PARTITION TO REMAIN
- REMOVE EXISTING PARTITION
- EXISTING CMU PARTITION
- REMOVE DOOR AND FRAME TO REMAIN
- REMOVE EXISTING DOOR AND FRAME
- EXISTING PLUMBING FIXTURES (WATER CLOSET, HAND LAVATORY, AND MOP SINK TO BE REMOVED. RE: PLUMBING DRAWINGS.
- EXISTING ACOUSTIC CEILING TILE AND GRID TO BE REMOVED. RE: ELECTRICAL DRAWINGS.
- SPRINKLER HEAD (RECESSED)
- CLOCK
- CEILING MOUNTED SPEAKERS

3 DEMOLITION NOTES



1 DEMOLITION FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 DEMOLITION REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

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FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

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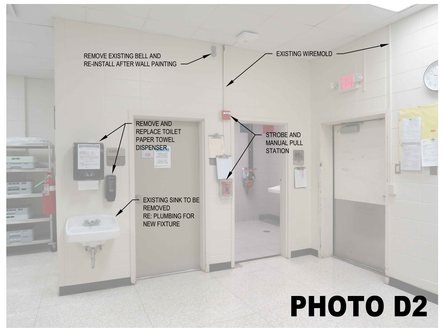
DEMO PLAN

j-D.101


PHOTO D1



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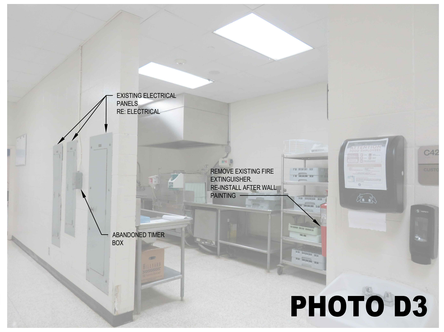

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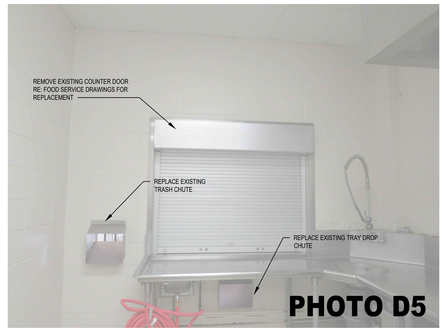
PHOTO D4



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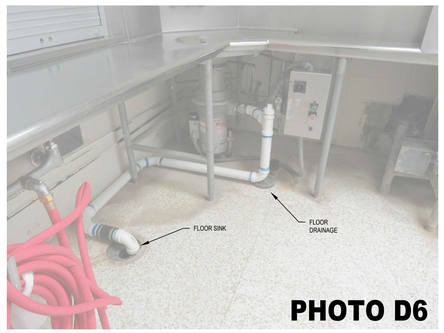

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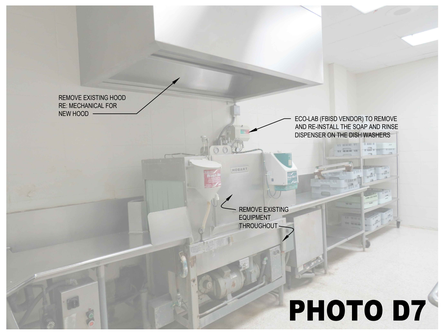

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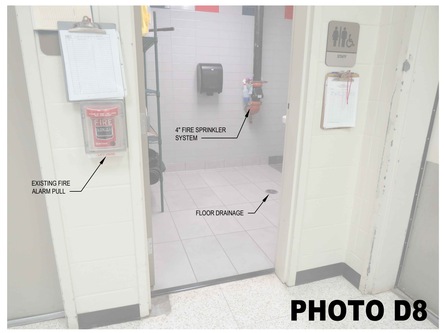
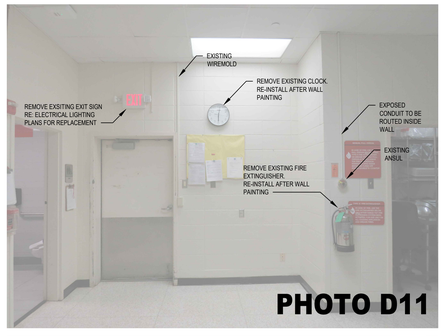


PHOTO D8



PHOTO D9


PHOTO D10



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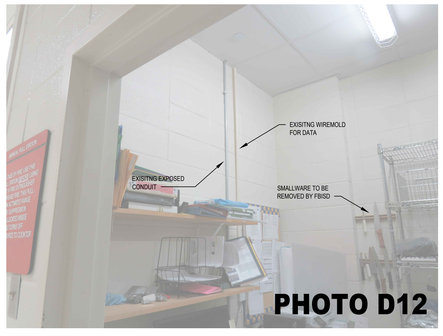

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PHOTO D13

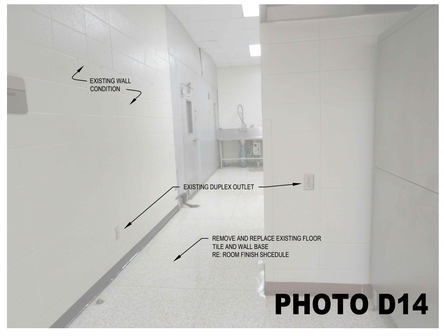


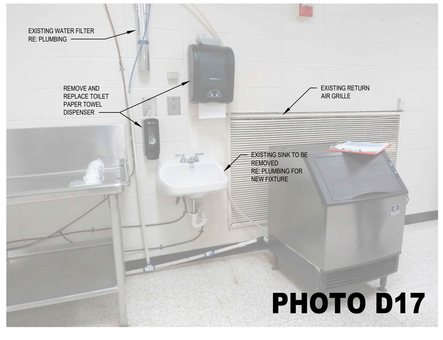
PHOTO D14



PHOTO D15



PHOTO D16



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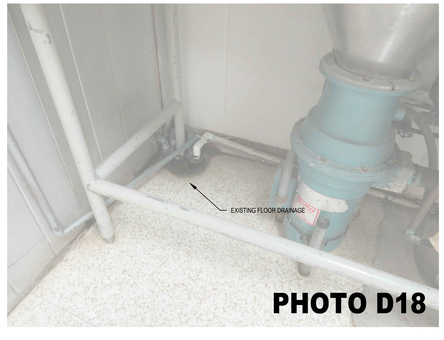

PHOTO D18



PHOTO D19



PHOTO D20

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FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DR,
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DEMO PLAN PHOTOS
j-D.101-2

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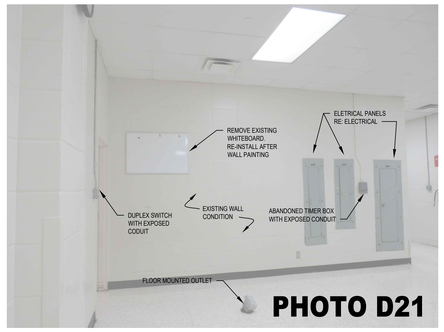

PHOTO D21



PHOTO D22

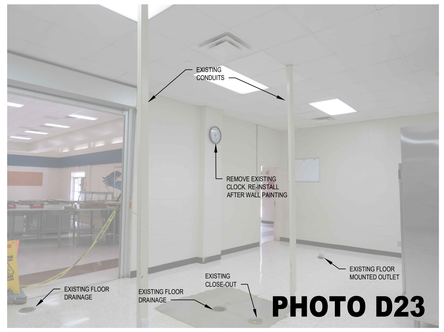

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PHOTO D24



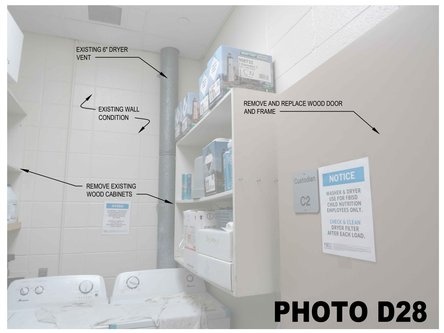
PHOTO D25



PHOTO D26



PHOTO D27



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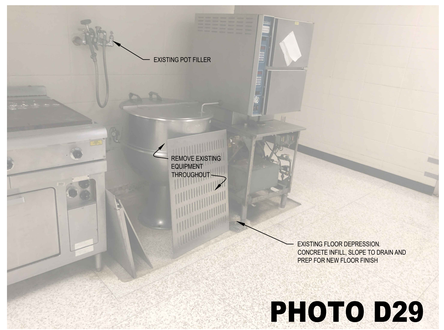

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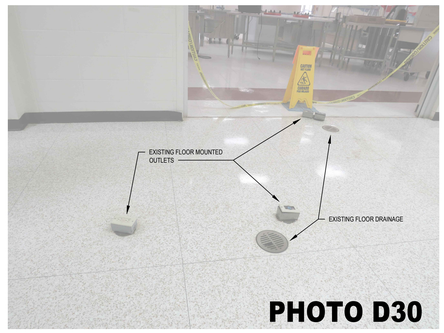

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HIGHLANDS ELEMENTARY SCHOOL
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DEMO PLAN PHOTOS

j-D.101-3

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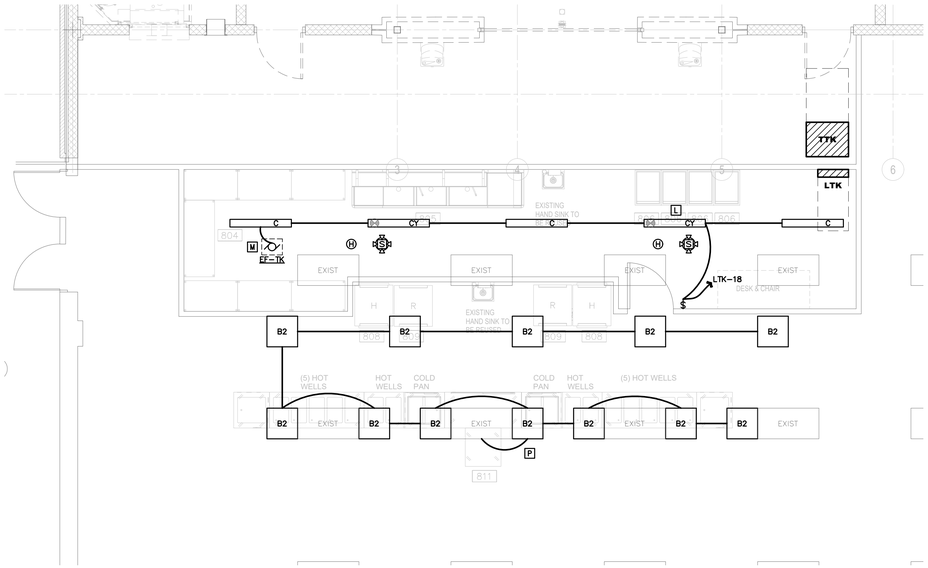
NEW PANEL — TEMP KITCHEN

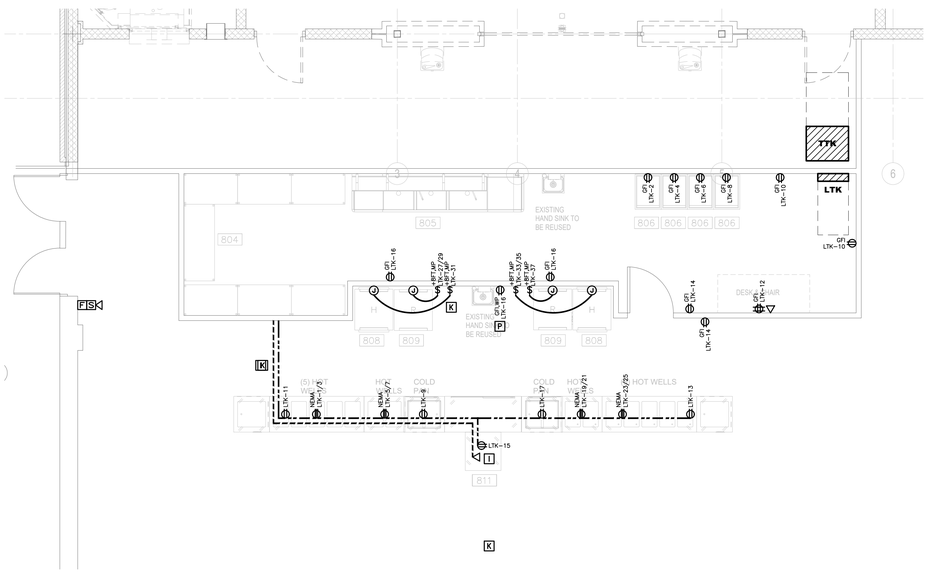
PANEL LTK — 150A MCB, 208Y/120V, 3ϕ, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: SURFACE

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E810	2766	HOT WELLS	2–12	20/2GFI	1	■			2	20/1	3–12	TRANSPORT CART	1920	E806	
	–	–	–	+12G	–	3		■		4	20/1	3–12	TRANSPORT CART	1920	E806	
	E810A	1643	HOT WELLS	2–12	20/2GFI	5			■	6	20/1	3–12	TRANSPORT CART	1920	E806	
	–	–	–	+12G	–	7	■			8	20/1	3–12	TRANSPORT CART	1920	E806	
	E810B	600	COLD PAN	3–12	20/1GFI	9		■		10	20/1	3–12	2 REC	360	E800A	
	E810C	1200	BEVERAGE	3–12	20/1GFI	11			■	12	20/1	3–12	2 REC – DESK	360	E800B	
	E810C	1200	BEVERAGE	3–12	20/1GFI	13	■			14	20/1	3–12	2 REC	360	E800A	
	E811	180	CASH REGISTER	3–12	20/1GFI	15		■		16	20/1	3–12	3 REC	360	E800A	
	E810B	600	COLD PAN	3–12	20/1GFI	17			■	18	20/1	3–12	TEMP. KITCHEN LTS/FAN	566		
	E810A	1643	HOT WELLS	2–12	20/2GFI	19	■			20	20/1		SPARE			
	–	–	–	+12G	–	21		■		22	20/1		SPARE			
	E810	2766	HOT WELLS	2–12	20/2GFI	23			■	24	20/1		SPARE			
	–	–	–	+12G	–	25	■			26	20/1		SPARE			
	E808	1622	HEATED CABINET	2–12	20/2	27		■		28	20/1		SPARE			
	–	–	–	+12N+12G	–	29			■	30	20/1	3–12	EXISTING CIRCUIT	500		3
	E809	984	REFRIGERATOR	3–12	20/1	31	■			32	20/1	3–12	EXISTING CIRCUIT	500		3
	E808	1622	HEATED CABINET	2–12	20/2	33		■		34	15/2	2–12	EXISTING CIRCUIT	1000		3
	–	–	–	+12N+12G	–	35			■	36	–	+12N+12G	–	–		
	E809	984	REFRIGERATOR	3–12	20/1	37	■			38	20/2	2–12	EXISTING CIRCUIT	1000		3
			SPARE		20/1	39		■		40	–	+12N+12G	–	–		
			SPARE		20/1	41			■	42	50/2	2–8	EXISTING CIRCUIT	5000		3
			SPARE		20/1	43	■			44	–	+8N+10G	–	–		
	TOTAL LOAD @ 100% =		35498VA			TOTAL LOAD @ 100% =				99A						

1. REF. KITCHEN CONSULTANT'S "FCS" DRAWINGS FOR KITCHEN EQUIPMENT NUMBERS.
2. A DEMAND FACTOR PERCENT OF 65% HAS BEEN APPLIED TO THE KITCHEN EQUIPMENT LOAD PURSUANT TO NEC 220–20 AND NEC TABLE 220–20.
3. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.



T1 **TEMPORARY KITCHEN - LIGHTING PLAN**
SCALE: 1/4" = 1'– 0"



T2 **TEMPORARY KITCHEN - ELECTRICAL PLAN**
SCALE: 1/4" = 1'– 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

DEMOLITION NOTES:

A. EXISTING STANDBY GENERATOR PANEL TO REMAIN.

B. EXISTING KITCHEN PANELS TO BE REPLACED WITH NEW. MODIFY EXISTING WALLS TO MATCH NEW PANEL LAYOUTS AND DIMENSIONS.

C. EXISTING LIGHTING FIXTURES AND CEILING DEVICES TO BE REMOVED THROUGHOUT.

D. EXISTING WALK–IN COOLER/FREEZER AND ASSOCIATED EQUIPMENT TO BE REMOVED.

E. EXISTING WALL ELECTRICAL DEVICES TO BE REMOVED. EXISTING J–BOXES MAY BE REUSED WHERE NEW DEVICES ARE TO BE INSTALLED AT THE SAME LOCATIONS.

F. EXISTING ELECTRICAL DEVICES TO BE REMOVED.

G. NEW 208Y/120V PANEL AND TRANSFORMER FOR TEMPORARY KITCHEN TO BE INSTALLED PRIOR TO DEMOLITION. PANEL AND TRANSFORMER TO BE REMOVED AT END OF KITCHEN RENOVATION AND TURNED OVER TO THE DISTRICT. INSTALL TRANSFORMER ON PREMADE FIBERCRETE PAD AND WAFFLE TYPE VIBRATION ISOLATION PADS. DO NOT PROVIDE A POURED IN PLACE CONCRETE PAD AT THIS LOCATION.

H. PROVIDE RECEPTACLES AND LIGHT FIXTURES FOR TEMPORARY KITCHEN DURING RENOVATION. ALL TEMPORARY DEVICES AND EQUIPMENT TO BE REMOVED AT END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE.

I. CONDUITS ROUTED FROM TEMPORARY KITCHEN WALL AND BENEATH SERVING LINE. PROVIDE MULTICHANNEL ROLLOVER CABLE PROTECTOR FOR EXPOSED CONDUITS NOT UNDER THE SERVING LINE. ALL CONDUITS UNDER THE SERVING LINE SHALL BE SECURED TO/ROUTED ON TOP OF UNISTRUT AND NOT DIRECTLY ON THE FLOOR. DO NOT ANCHOR UNISTRUT TO THE EXISTING FLOORING. COORDINATE POWER AND DATA OUTLET LOCATIONS WITH OTHER TRADES.

J. REMOVE EXISTING LIGHT FIXTURES ABOVE NEW KITCHEN EXTENSION. MODIFY EXISTING WIRING TO MAINTAIN REMAINING FIXTURE OPERATION.

K. HARDWIRE KITCHEN EQUIPMENT TO LOCAL ON/OFF SWITCH. TYPICAL.

L. SURFACE MOUNT FIXTURES ON TEMPORARY KITCHEN CEILING. TYPICAL.

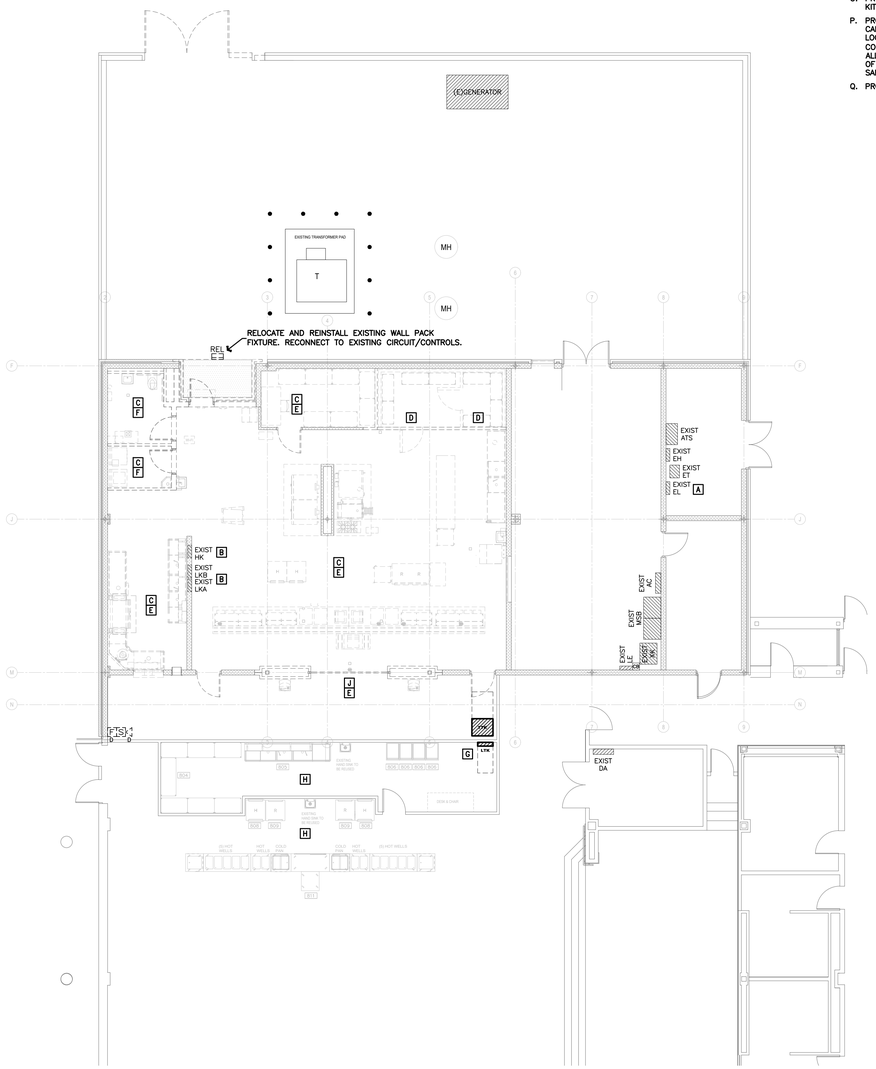
M. WIRE TEMPORARY KITCHEN FAN TO LOCAL LIGHTING CIRCUIT AND CONTROLS. FAN SHALL BE ON/OFF WITH LIGHTS.

N. EXISTING EXTERIOR LIGHT FIXTURES TO BE REMOVED.

O. PROVIDE NEW FIRE ALARM DEVICES AS PART OF THE TEMPORARY KITCHEN BUILDOUT.

P. PROVIDE NEW TEMPORARY LIGHT FIXTURES IN THE EXISTING CAFETERIA CEILING ABOVE THE SERVING LINE. COORDINATE LOCATIONS WITH TEMPORARY SERVING LINE AND EXISTING CONDITIONS. CONNECT TO EXISTING LIGHTING CONTROLS/CIRCUIT. ALL TEMPORARY LIGHT FIXTURES SHALL BE REMOVED AT THE END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE. PROVIDE REPLACEMENT CEILING TILES.

Q. PROVIDE IN–USE WEATHERPROOF COVER FOR RECEPTACLE.



1 **DEMOLITION FLOOR PLAN**
SCALE: 1/8" = 1'– 0"

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HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

STATE OF TEXAS — GEORGE L. STANTON — 38582 — REGISTERED PROFESSIONAL ENGINEER
07.18.2025

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PROJ. NO.: 23-25
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ELECTRICAL DEMO AND TEMP PLANS

j-ED.100

STANTON ENGINEERING GROUP
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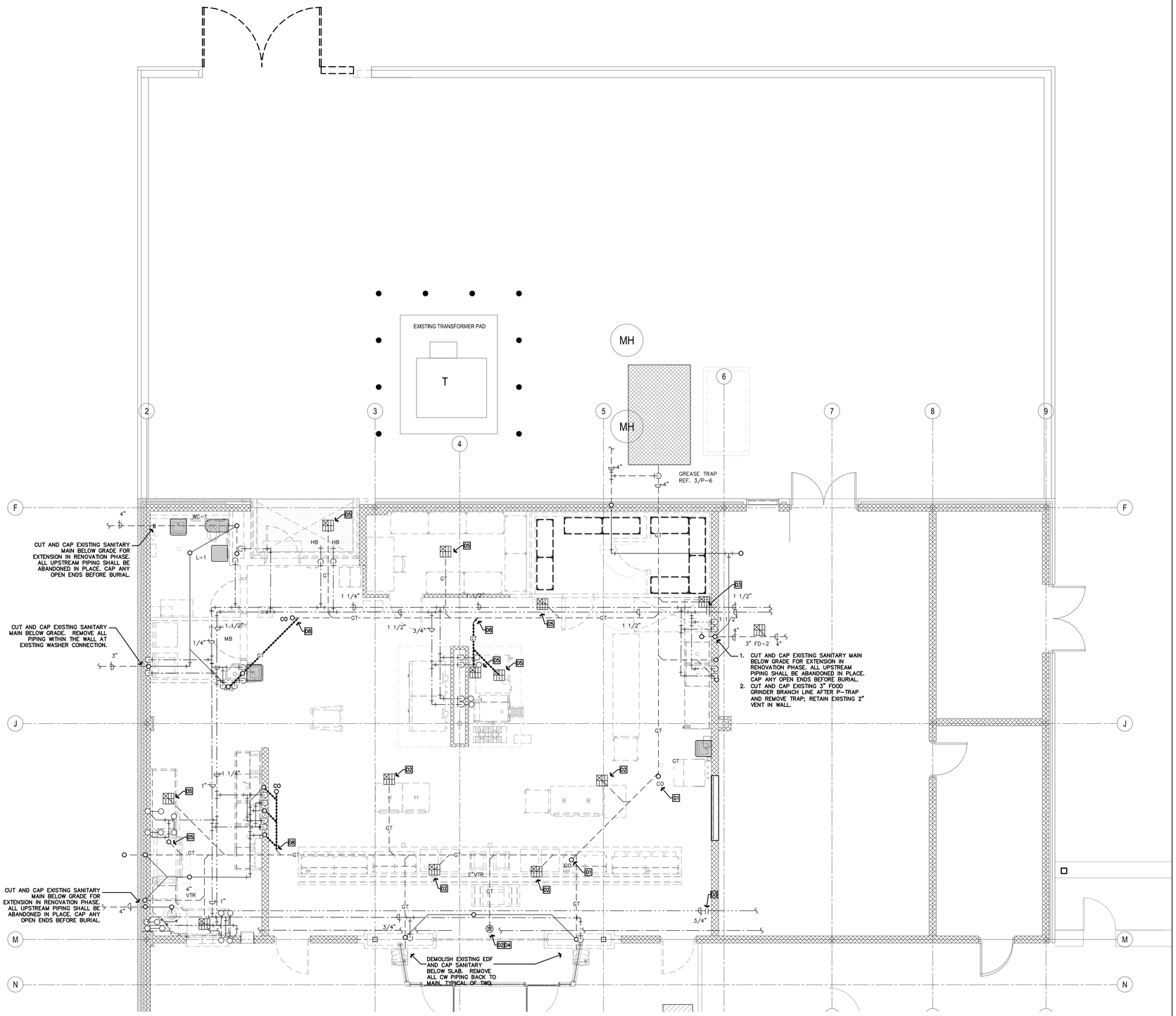

DEMOLITION KEYED NOTES

D1 EXISTING CLEAN OUT SHALL BE REPLACED WITH NEW. CHIP OUT SLAB AROUND CLEANOUT TO REMOVE.

D2 EXISTING FLOOR DRAIN SHALL BE REPLACED WITH NEW, INCLUDING P-TRAP. CHIP OUT SLAB AROUND DRAIN TO REMOVE FLOOR DRAIN AND EXISTING P-TRAP.

D3 CUT AND CAP EXISTING HW/CW FOR FUTURE EXTENSION. DEMOLISH ALL PIPING WITHIN KITCHEN. DEMOLITION SHALL BE DELAYED UNTIL NEW CW MAIN AND HW PIPING LOOP IS INSTALLED IN PARALLEL. CW/HW SERVICE TO THE TEMPORARY KITCHEN SHALL BE UNINTERRUPTED DURING OCCUPIED HOURS. COORDINATE SWITCHOVER FROM EXISTING PIPING TO NEW WITH OCCUPANCY SCHEDULE.

D4 EXISTING FLOOR DRAIN TIED TO GREASE WASTE SYSTEM. DRAIN IS BEING USED FOR TEMPORARY KITCHEN INDIRECT WASTE AND SHALL REMAIN ACTIVE DURING OCCUPIED HOURS. COORDINATE DEMOLITION AND REPLACEMENT WITH TEMPORARY KITCHEN USAGE.

D5 DEMOLISH EXISTING DRAIN A CAP BELOW SLAB.

D6 EXISTING SPACE BEING DEMOLISHED. CAP EXISTING SANITARY MAIN BELOW SLAB AND REMOVE UPSTREAM PIPING. CUT/CHIP OUT SLAB AS REQUIRED AND REPAIR TO MATCH EXISTING.

D7 TEMPORARILY CAP EXISTING SANITARY MAIN BELOW SLAB AND REMOVE UPSTREAM PIPING. CUT/CHIP OUT SLAB AS REQUIRED AND REPAIR TO MATCH EXISTING. PIPING TO BE REPLACED WITH NEW TRUNK AND ADDITIONAL DRAIN BRANCH LINES.

D8 CUT AND CAP EXISTING SANITARY MAIN BELOW GRADE FOR EXTENSION IN RENOVATION PHASE. ALL UPSTREAM PIPING SHALL BE ABANDONED IN PLACE. CAP ANY OPEN ENDS BEFORE BURIAL.

1 PLUMBING DEMOLITION FLOOR PLAN

SCALE: 1/4" = 1'- 0"

STANTON ENGINEERING GROUP

INFORMATION-ENGINEER (713) 300-6092 | TEXAS ENG. FIRM REG. NO. F-016332 | © 2025 ALL RIGHTS RESERVED 1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

STATE OF TEXAS
TYLER W. HERRING
106052
LICENSED
PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS

ARCHITECTS AND PLANNING CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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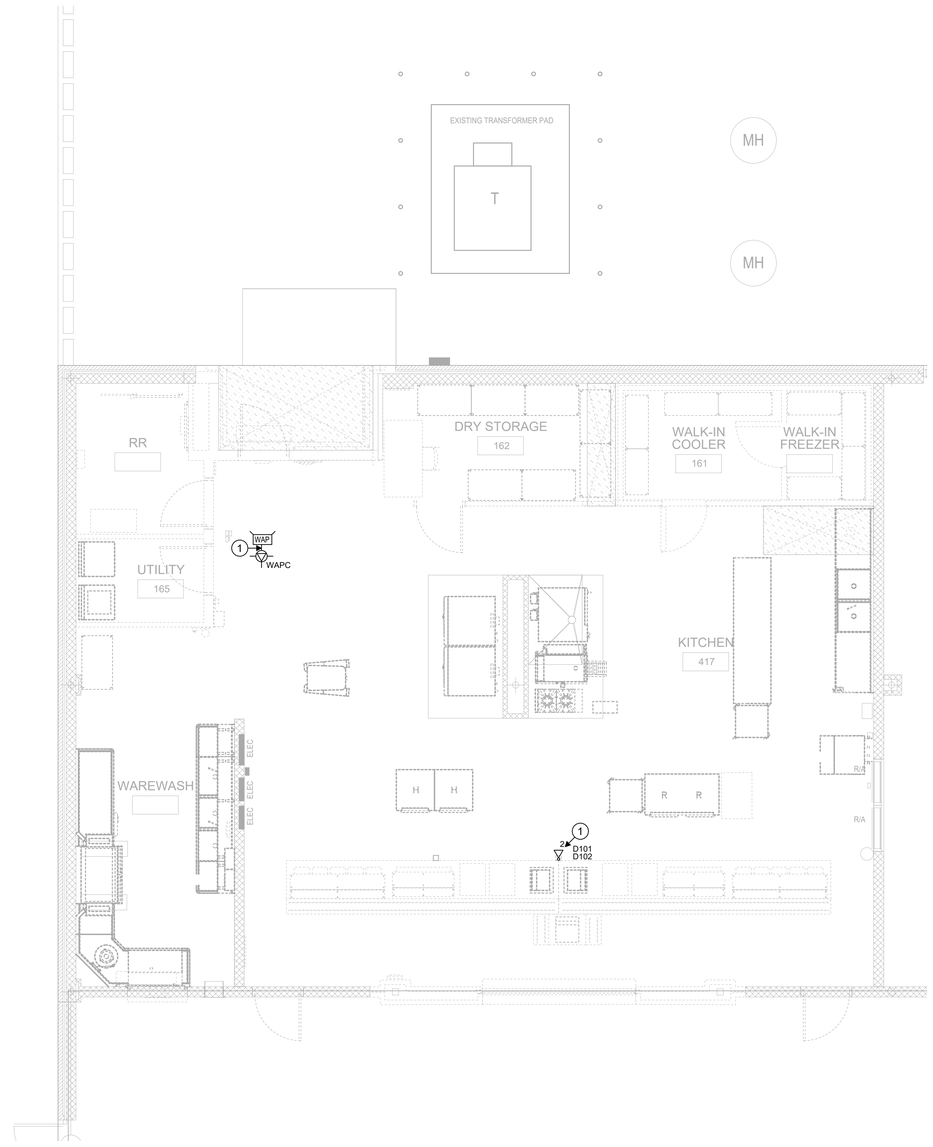
PLUMBING DEMOLITION FLOOR PLAN

j-PD1.01



1 j-TD201 TECHNOLOGY DEMOLITION FLOOR PLAN
1/4" = 1'-0"

TECHNOLOGY DEMOLITION PLAN GENERAL NOTES

1. ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS SHALL REMAIN OPERATIONAL AT ALL TIMES DURING BUSINESS HOURS UNLESS OTHERWISE NOTED. ANY SYSTEM DOWNTIME SHALL BE SCHEDULED WITH THE ARCHITECT/ENGINEER AND OWNER AT LEAST TEN (10) WORKING DAYS IN ADVANCE. CONTRACTOR SHALL DEVELOP A PHASING PLAN AND SCHEDULE OF ANY REQUIRED SYSTEM DOWNTIME FOR REVIEW AND APPROVAL BY THE ARCHITECT/ENGINEER AND OWNER PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. OWNER SHALL BE RESPONSIBLE FOR POWER DOWN AND START-UP OF ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT/ENGINEER AND OWNER AND PROVIDE A MINIMUM OF TEN (10) WORKING DAYS NOTICE FOR SCHEDULING OF ANY REQUIRED DOWNTIME.
3. ALL EXISTING WIRELESS ACCESS POINTS ARE TO BE REMOVED AND RETURNED TO OWNER. CONTRACTOR SHALL RE-INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.
4. COORDINATE REMOVAL OF EXISTING CAMERA WITH OWNER/ARCHITECT DURING CONSTRUCTION.

TECHNOLOGY DEMOLITION PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

(1) EXISTING DATA/VOICE/WIRELESS ACCESS POINT OUTLET TO BE REMOVED. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL 4-PAIR CABLES AND WORKSTATION CONNECTING HARDWARE TERMINATED AT THIS LOCATION. IF LOCATION IS NOT RE-USED, CONTRACTOR SHALL SUPPLY AND INSTALL BLANK COVER. CONTRACTOR IS TO REMOVE EACH CABLE TO BE DEMOLISHED FROM THE PATCH PANEL OR TERMINATION BLOCK IN THE TELECOMMUNICATIONS ROOM. REMOVE THE ENTIRE LENGTH OF THE CABLE AND THE CORRESPONDING MODULAR CONNECTOR, FACEPLATE AND ACCESSORIES. NO ABANDONED CABLING IS TO BE LEFT ABOVE CEILING. CONTRACTOR SHALL INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.

(2) EXISTING VIDEO SURVEILLANCE CAMERA. CONTRACTOR SHALL REMOVE AND RETURN TO OWNER.

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FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

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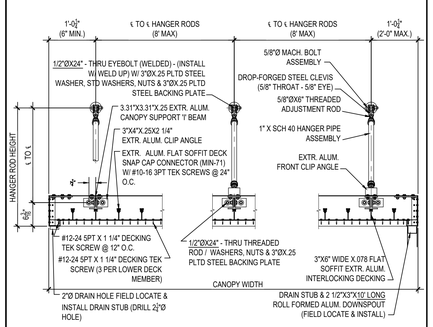
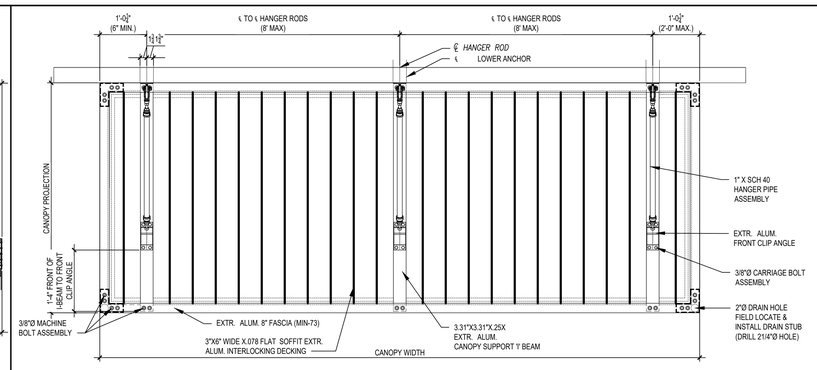
TECHNOLOGY DEMOLITION FLOOR PLAN

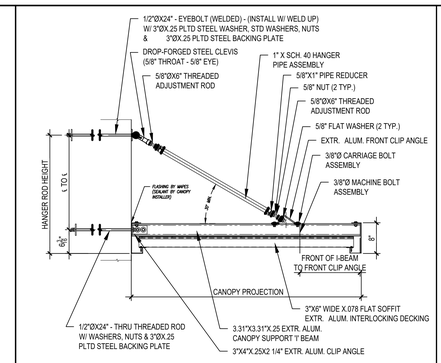
SHEET NO.
j-TD201



10 CANOPY DETAILS
3/4" = 1'-0"



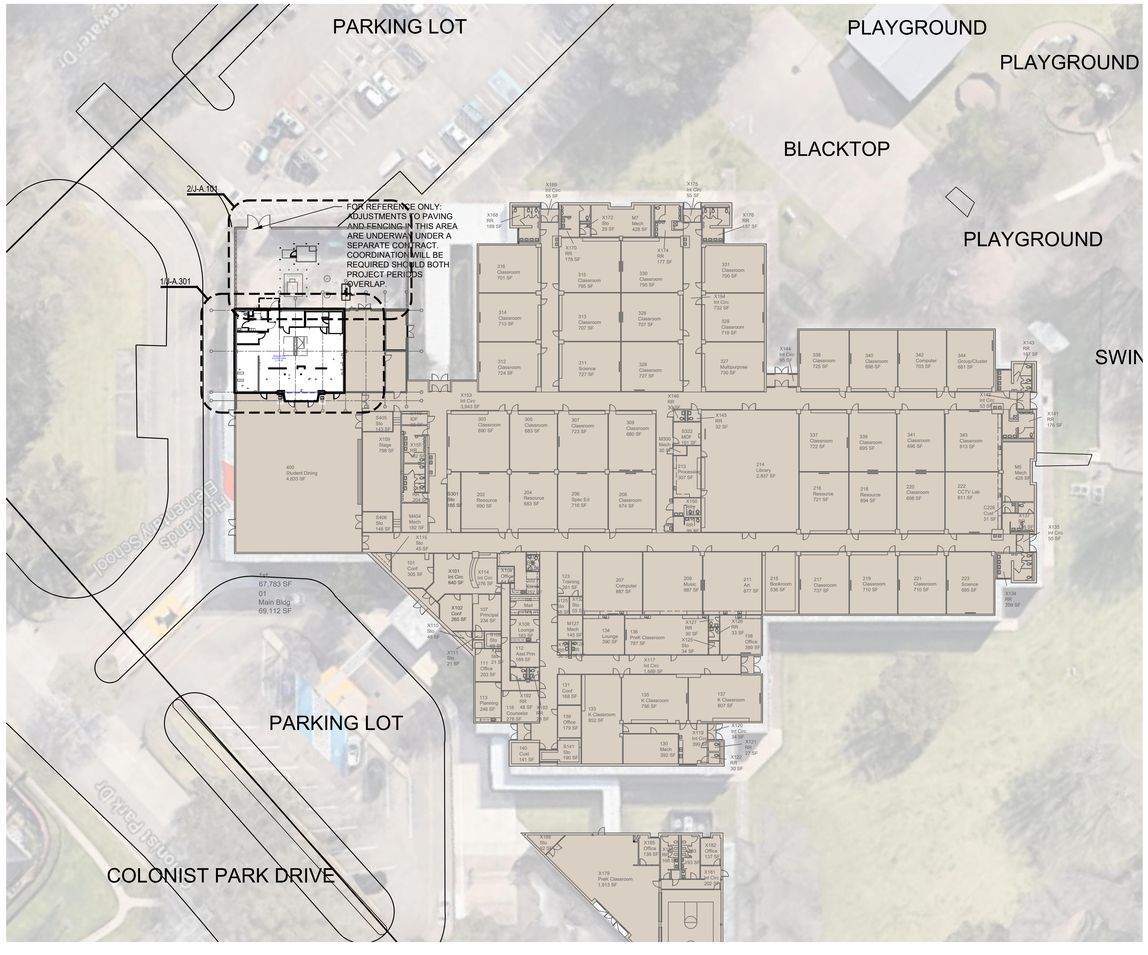
11 CANOPY PLAN
3/4" = 1'-0"



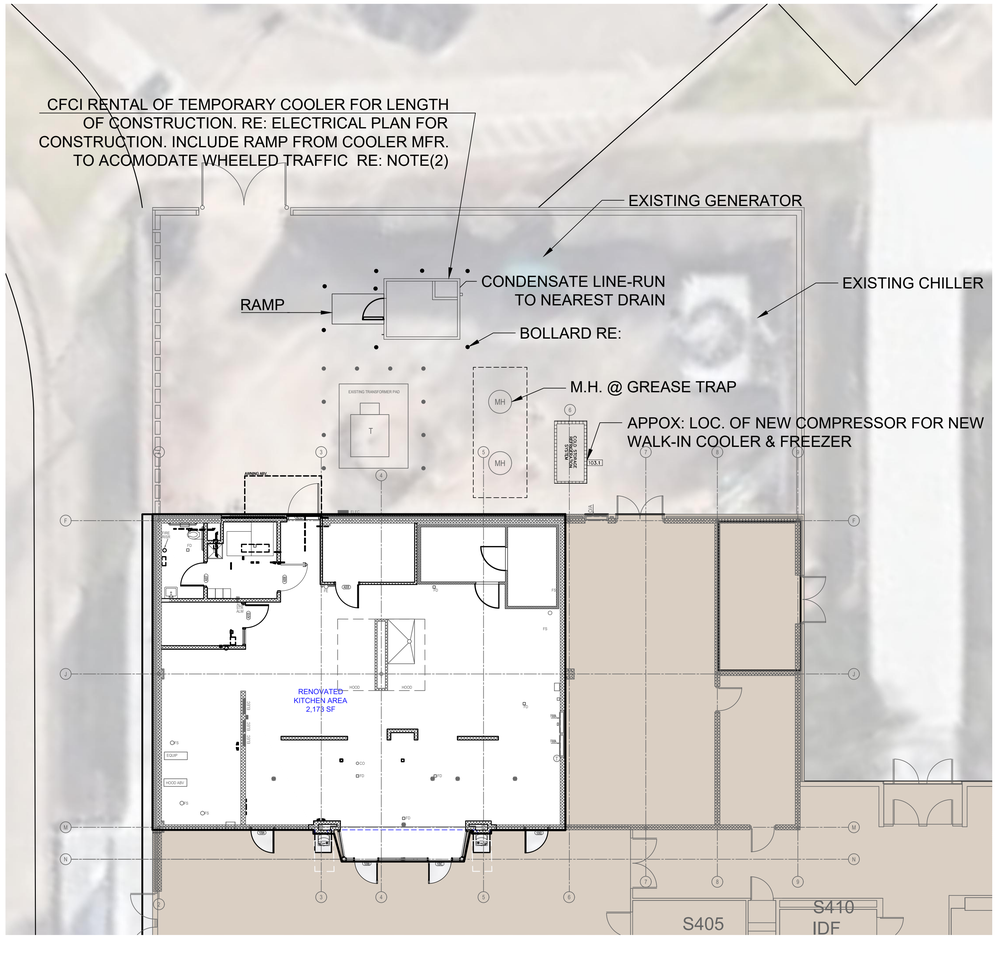
12 CANOPY SECTION
3/4" = 1'-0"

NUMBERED NOTES: FOR 2/J-A.101

1. COOLER RENTAL UNIT; APPROX. 8' X 10' BASIS OF DESIGN: MODEL DT810 BY POLAR LEASING REFRIGERATION RENTAL.
2. INCLUDE OPTIONAL DIAMOND TREAD RAMP SUITABLE FOR WHEELED TRAFFIC
3. LOCATION SHOWN IS SUBJECT TO OWNER APPROX. LOCATION MUST NOT BLOCK DELIVERIES TO REAR DOOR, MUST BE WITH 10' OF AREA DRAIN, AND WITHIN 100' OF ELECTRICAL POWER.
4. CONTRACTOR SHALL SCAN PAVING FOR BURIED UTILITIES BEFOR CUTTING CONC.



1 SITE PLAN
SCALE: 1" = 30'-0"



2 ENLARGED SITE PLAN
SCALE: 1/8" = 1'-0"

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FORT BEND INDEPENDENT SCHOOL DISTRICT

HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

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SITE PLAN

j-A.101

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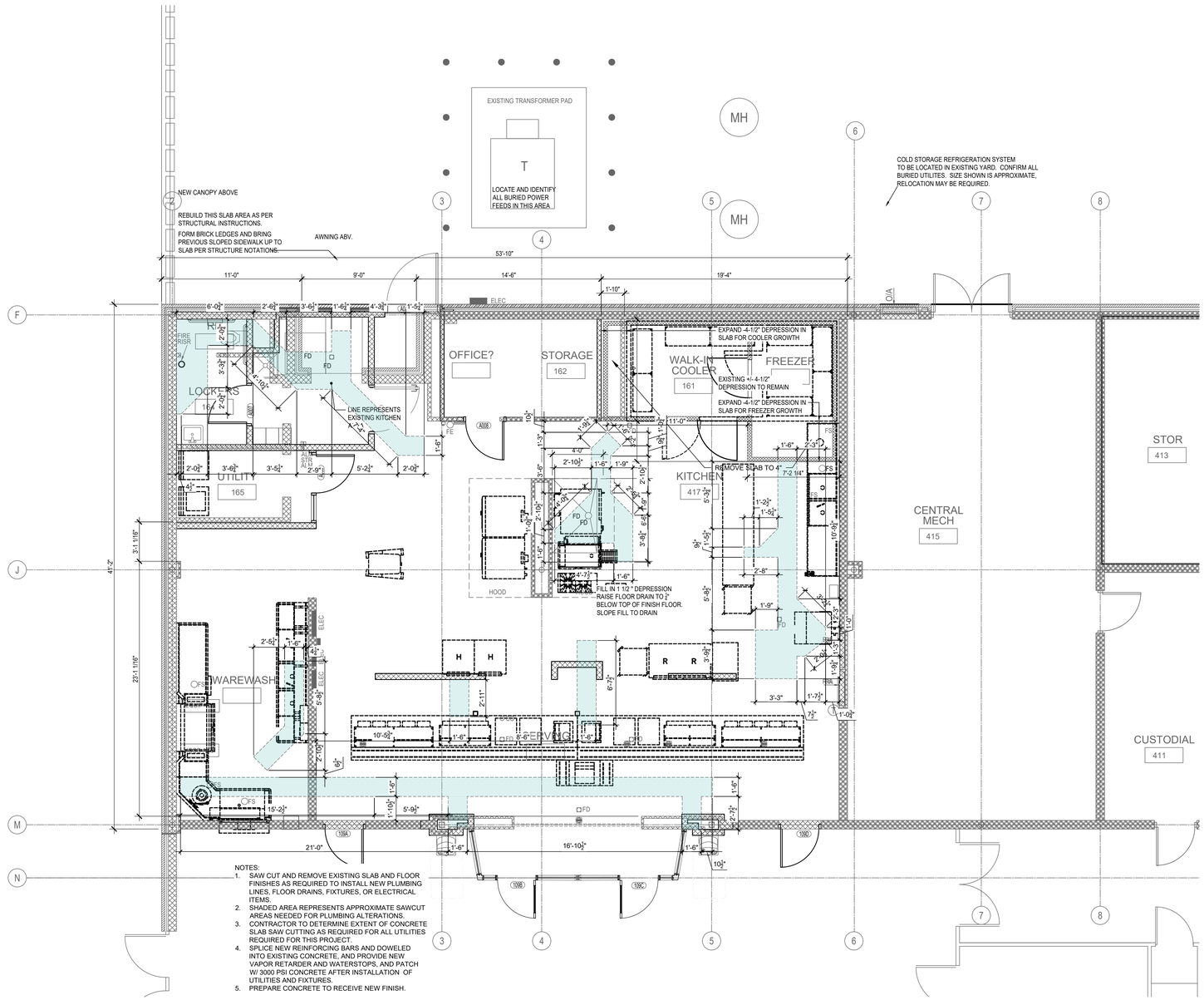

1 SLAB DEPRESSION PLAN

SCALE: 1/4" = 1'-0"

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7/15/2025

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SLAB SIMENSION CONTROL PLAN

j-A.200

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RESPONSIBILITY MATRIX

ITEM				CONTRACTOR RESPONSIBILITY		OWNER RESPONSIBILITY		NOTES
EQUIPMENT	**MAKE**	**MODEL**	**BASIS OF DESIGN**	FURNISHED	INSTALL	FURNISHED	INSTALL	
MARKERBOARD			MUST BE MAGNETIC; LOW GLOS, WHITE. NO GREY ALLOWED. 5' X 10'	X	X			
MOTORIZED FOLDING PARTITION			TOP SUPPORTED AND CONTINUOUSLY HINGED. MADE OF 3" THICK STEEL WITH FULL SOUND SEALS. THEY FEATURE AUTOMATIC FLOOR SEALS THAT DEPLOY WHEN POSITIONED. MARKERBOARD FINISHES ARE SUGGESTED FOR CLASSROOM USE. LARGE PARTITIONS SHOULD BE ELECTRONICALLY OPERATED, INTEGRATED WITH THE SCHOOL SYSTEM, AND SUPPORTED FROM THE BOTTOM IN A RECESSED MANNER.	X	X			
PAPER TOWEL DISPENSER			1 PAPER TOWEL DISPENSER PER SINK		X	X		
SOAP DISPENSER			1 SOAP DISPENSER PER SINK		X	X		
COMMERCIAL WASHER	GE	GTW750CPLDG	STAINLESS STEEL; ASTM A666, TYPE 304 WITH NUMBER 4 FINISH. ELECTRIC, 480 VOLTS, 40 LB CAPACITY, MINIMUM EXTRACTOR FORCE 140 G FACTOR.	X	X			
COMMERCIAL DRYER	GE	GTD75ECPLDG	HEAVY DUTY EMBOSSED STEEL WITH ELECTROSTATICALLY APPLIED BACKED ENAMEL FINISH.	X	X			
MOP RACK			BROOM AND MOP HANGGERS FOR A MINIMUM OF TWELVE (12) HANGERS TO BE PROVIDED IN THE CONTRACT	X	X			
KITCHEN MENU SYSTEM DEVICE			RE: J-QP1.0 SF EQUIPMENT PLAN	X	X			REFERED TO IT DRAWINGS
LOCKERS			12"W X 15"D, 2 TIER, 60" HIGH. 16 GA. DOOR WITH 20GA. BODY	X	X			
MIRROR			TOP EDGE 74 INCHES (1880 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND & BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES (1015 MM) MAXIMUM	X	X			
GRAB BARS			AS REQUIRED BY ADA	X	X			
HOOKS			J-HOOKS	X	X			
TIME CLOCK	KRONOS		EXISTING UNIT		X			COORDINATE HEIGHT, DATA, POWER AND ROUGH-IN REQUIREMENTS WITH FBISD IT. REMOVE, PROTECT & REINSTALL EXISTITNG TIME CLOCK.
KITCHEN OFFICE FURNITURE								
AUSTIN PARKWAY ES						X	X	
PECAN GROVE ES						X	X	
SETTLERS WAY ES						X	X	
SUGAR MILL ES						X	X	
HIGHLANDS ES						X	X	
PALMER ES						X	X	
HUNTERS GLEN ES						X	X	

2 CODE ANALYSIS

SCOPE OF WORK: KITCHEN REPLACEMENT OF FLOOR, WALL, AND CEILING FINISHES, AS WELL AS, REPLACEMENT OF KITCHEN EQUIPMENT. BACK DOOR DELIVERY AREA UPGRADE.

ADOPTED CODES: CITY OF SUGAR LAND, TX

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL RESIDENTIAL CODE
- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2023 NATIONAL ELECTRIC CODE NFPA 70
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2021 INTERNATIONAL FUEL GAS CODE
- 2021 INTERNATIONAL FIRE CODE

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY:

SPRINKLED

INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS **B**

CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS **C**

ROOMS AND ENCLOSED SPACES **C**

FLOORING SHALL BE CLASS II

2021 INTERNATIONAL EXISTING BUILDING CODE

301.3.1 PRESCRIPTIVE COMPLIANCE METHOD. REPAIRS, ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH CHAPTER FIVE OF THIS CODE IN BUILDINGS COMPLYING WITH THE INTERNATIONAL FIRE CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

302.3 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE .

302.4 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED THAT NO UNSAFE CONDITION IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT PERMIT THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

ALTERATION - LEVEL 1 INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES THAT SERVE THE SAME PURPOSE.

ALTERATION - LEVEL 2 INCLUDE THE ADDITION OR ELIMINATION OF ANY DOOR OR WINDOW, THE RECONFIGURATION OR EXTENSION OF ANY SYSTEM, OR THE INSTALLATION OF ANY ADDITIONAL EQUIPMENT, AND SHALL APPLY WHERE THE WORK IS EQUAL TO OR LESS THAN 50% OF THE BUILDING AREA.

THIS BUILDING'S CONSTRUCTION IS TYPE IIB.

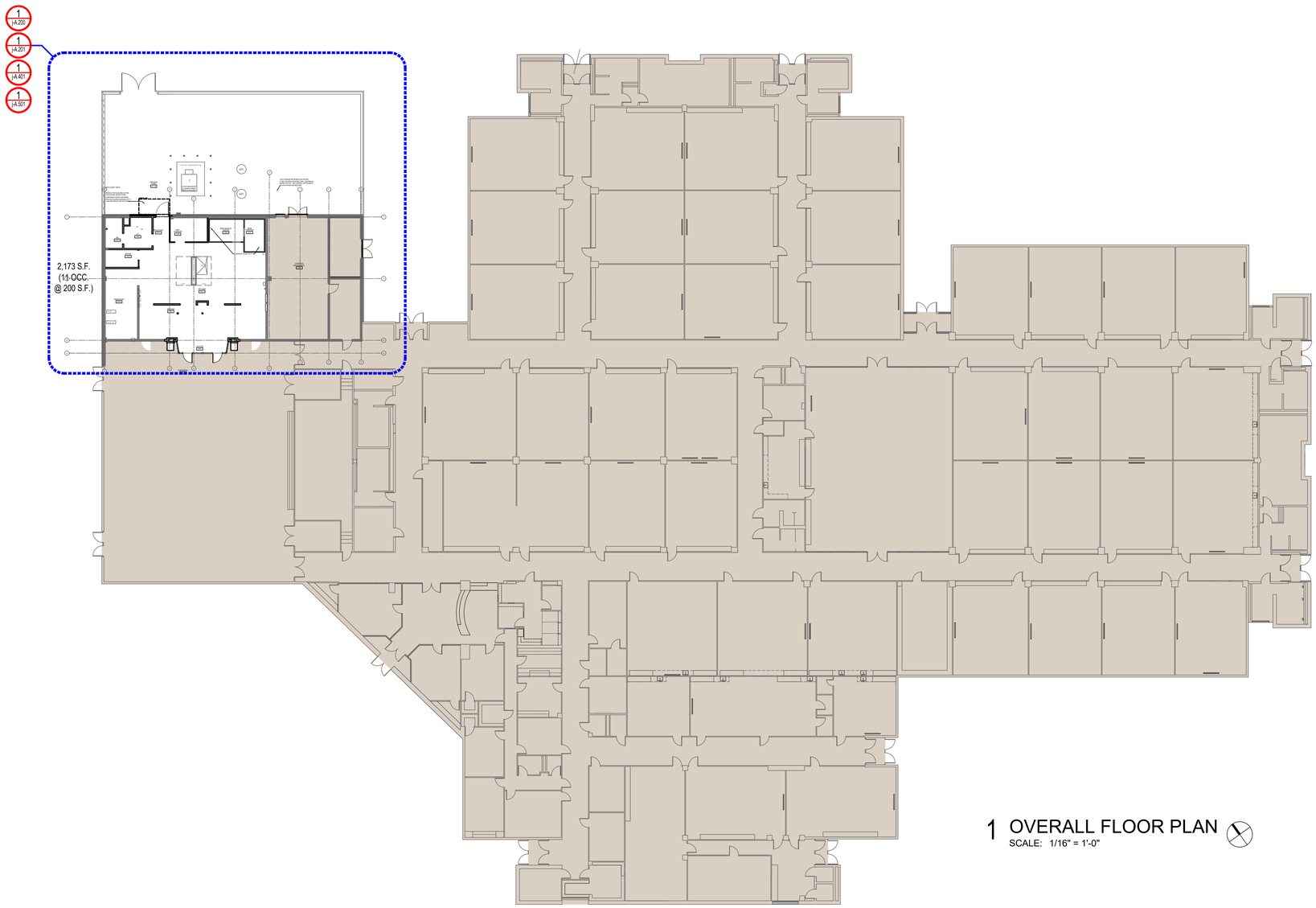
THIS BUILDING'S OCCUPANCY IS E.

THIS BUILDING'S IS SPRINKLED.

THERE WILL NOT BE ANY MODIFICATIONS TO THE HOOD SYSTEMS IN THE KITCHENS BEYOND REPLACEMENT OF MOTOR FOR LIKE KIND IF NEEDED.

THE BUILDING WILL NOT HAVE ADDITIONAL SQUARE FOOTAGE AS PART OF THE WORK.

NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODES



1 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

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STATE OF TEXAS
7/15/2025

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OVERALL
FLOOR PLAN

j-A.201

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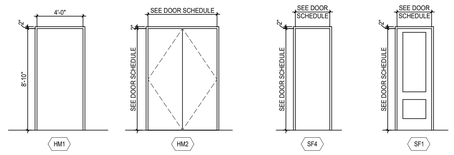
DOOR SCHEDULE

DOOR #	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FIRE RATING	FRAME THICKNESS	FRAME FINISH	KEY	HARDWARE	DETAILS			REMARKS
											SILL	JAMB	HEAD	
A005	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		103		22/A00-01	16/A00-01	
A006	3'-6"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501		22/A00-01	16/A00-01	
A007	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		341		22/A00-01	16/A00-01	
A008	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501C		22/A00-01	16/A00-01	
A012	4'-0"	X 7'-0"	HM1	H.M.	PAINT	NR	6"	PAINT HM		715V	21/A00-01	04/A00-01	04/A00-01	
109A	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501H		22/A00-01	16/A00-01	
109B	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ANOD AL	NR	4 1/2"	ANOD AL		C201AH	18/A00-01	10&11/A00-01	23&24/A00-01	CARD READER, CLOSER, BUZZER
109C	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ANOD AL	NR	4 1/2"	ANOD AL		C201AH	18/A00-01	10&11/A00-01	23&24/A00-01	CARD READER, CLOSER, BUZZER
109D	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501H		22/A00-01	16/A00-01	



2 DOOR SCHEDULE

FLOOR PLAN - GENERAL NOTES

1. REFER TO SHEET FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SCHOOL KITCHENS.
2. REFER TO SHEET FOR PARTITION TYPES.
3. EXIXSTING EXPOSED CONDUITS AND DATA CABLING IN WIREMOLD TO BE ROUTED INSIDE WALLS (EXCEPT AT WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS). PATCH AND REPAIR AS REQUIRED TO ACHIEVE SMOOTH CLEAN WALL SURFACE.

PARTITION LEGEND

- EXISTING CMU PARTITION
- NEW CMU SCHEDULED PARTITION
- EXISTING METAL PARTITION
- NEW FRAMED SCHEDULED PARTITION

REFER TO SHEET FOR PARTITION TYPES

FLOOR PLAN - KEYED NOTES

(NOT ALL NOTES USED ON EACH SHEET)

01 PROVIDE NEW MOP SINK UTILITY SHELF
RE: PLUMBING FOR MOP SINK
RE: SPEC 10 28 00 FOR UTILITY SHELF

02 REMOVE, STORE & REPLACE WALL MOUNTED FIRE EXTINGUISHER

03 PROVIDE NEW WALL MOUNTED FIRE EXTINGUISHER
RE: SPEC SECTIONS 10 44 13

04 PROVIDE NEW LOCKERS
RE: SPEC 10 51 13.

05 PROVIDE WASHER AND DRYER
RE: SPEC 11 45 20

06 REMOVE, PROTECT & REINSTALL WALL MOUNTED CLOCK.

07 PROVIDE CONDENSING UNIT
FOR WALK-IN COOLER/FREEZER
RE: MECHANICAL AND SPEC 11 40 00

08 PROVIDE POWER AND DATA FOR MENU BOARD.
RE: ELECTRICAL, TECHNOLOGY DRAWINGS & FOOD SERVICE.

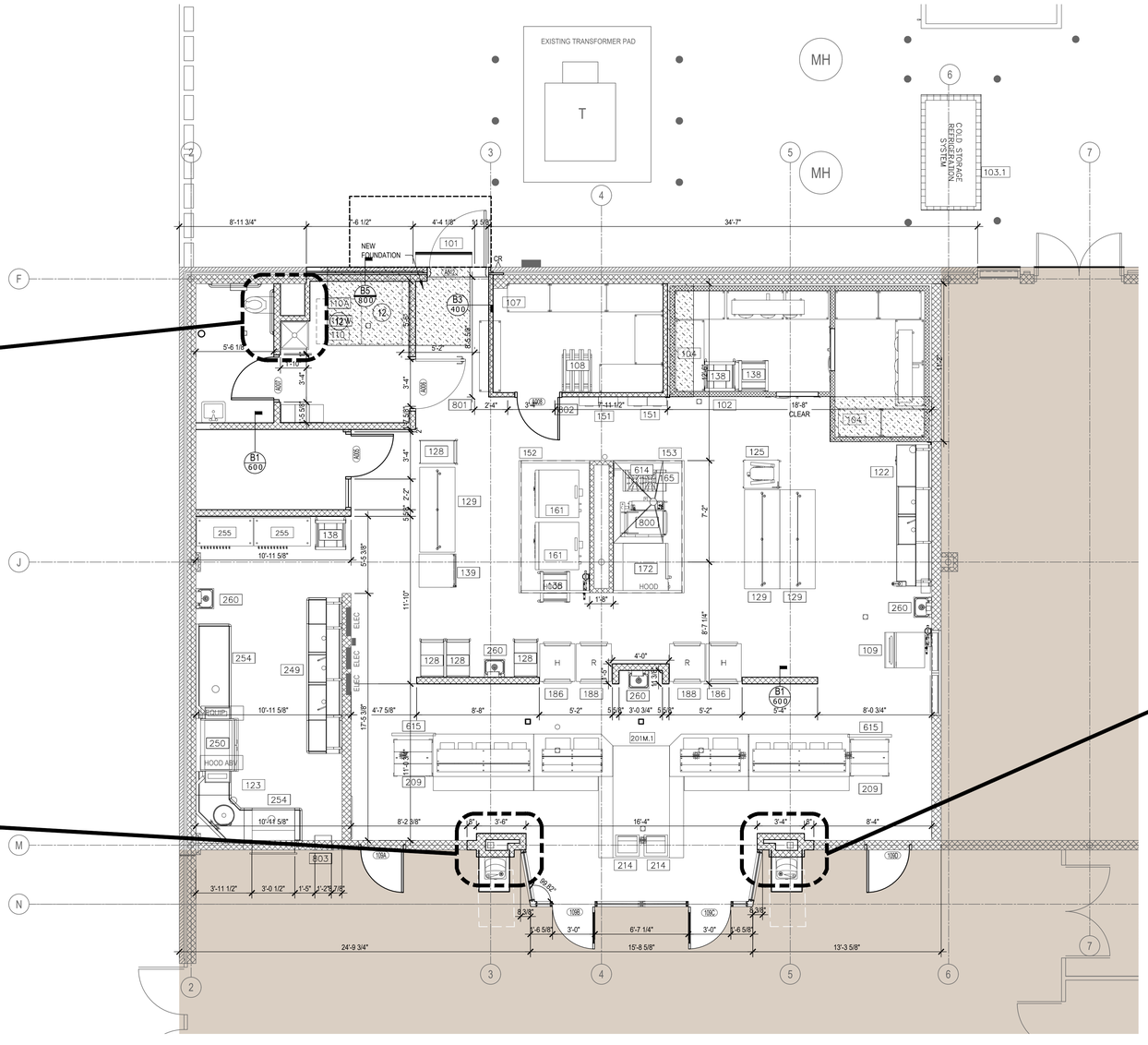
09 PROVIDE P-LAM SHELVING
REFER TO DETAIL FOR BRACKET SUPPORT

10 FURNITURE & NON FOOD SVE EQUIPMENT RETURN TO OWNER FOR STORAGE.

11 INSPECT & SREVICE TOLLING COUNTER DOORS. RETURN TO LIKE NEW CONDITION.

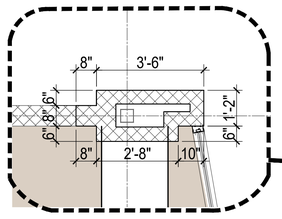
12 COMMERCIAL CLOSED WASHER 40LB CAPACITY.
COMMERCIAL CLOSED DRYER 55LB CAPACITY.
BASIS OF DESIGN: WASHER; SPEED QUEEN SYN040
DRYER; SPEED QUEEN ST055.
REFER TO ELECTRICAL & PLUMBING FOR CONNECTIONS.

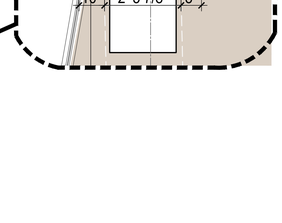
3 FLOOR PLAN NOTES

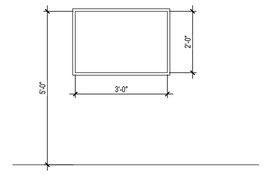


1 KITCHEN PLAN

SCALE: 1/4" = 1'-0"

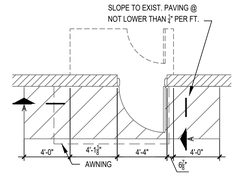






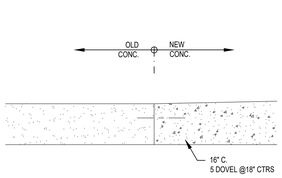
4 MAKERBOARD ELEVATION

SCALE: 1/2"=1'-0"



5 RAMP @ REAR DOOR

SCALE: 3/16"=1'-0"



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SCALE: 1/2"=1'-0"

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KITCHEN PLAN

j-A.301

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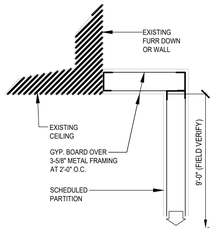


TEMPORARY KITCHEN FLOOR PLAN KEYED NOTES 05/A-A03-02

01 PROVIDE & INSTALL 555 SF OF RAM BOARD TO PROTECT EXISTING FLOORING. REMOVE AFTER CONSTRUCTION IS COMPLETE. CONTRACTOR MUST REPAIR FLOORING DAMAGED DURING CONSTRUCTION.

02 PROVIDE SCHEDULED PARTITIONS. BUILD PARTITIONS ON TOP OF RAM BOARD. DO NOT ATTACH PARTITIONS TO FLOOR.

03 ATTACH PARTITIONS TO EXISTING WALL. REPAIR WALL TO MATCH EXISTING AFTER CONSTRUCTION IS COMPLETE.

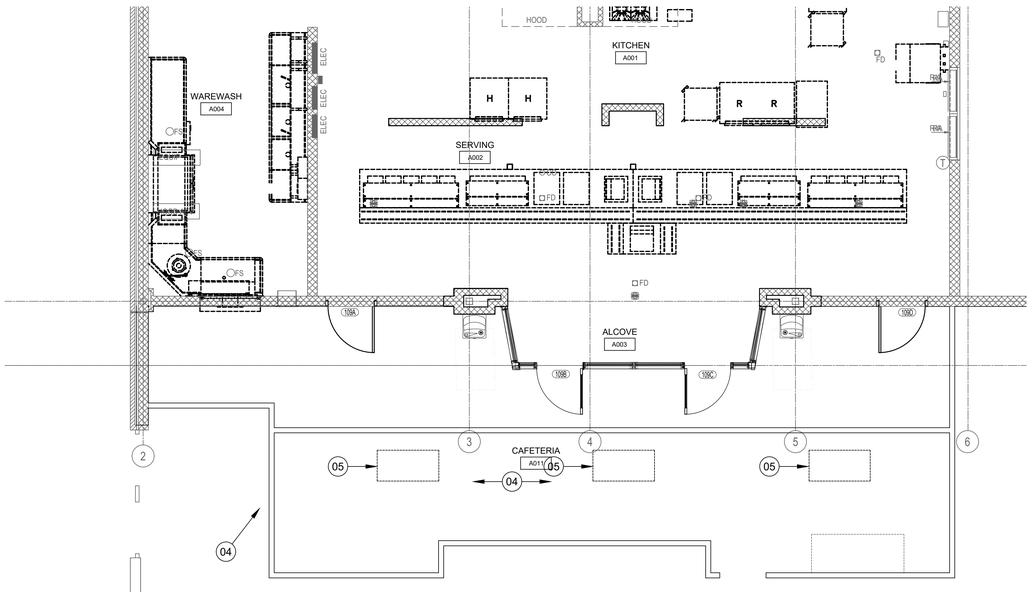
TEMPORARY KITCHEN RCP KEYED NOTES 03/A-A03-02

04 ALL NEW SCHEDULED PARTITIONS AND CEILINGS FOR TEMPORARY STORAGE LAYOUT TO BE EPOXY PAINTED SW 7014 EIDER WHITE WITH SPECIFIED 4" RUBBER BASE. REMOVE WHEN CONSTRUCTION IS COMPLETED.

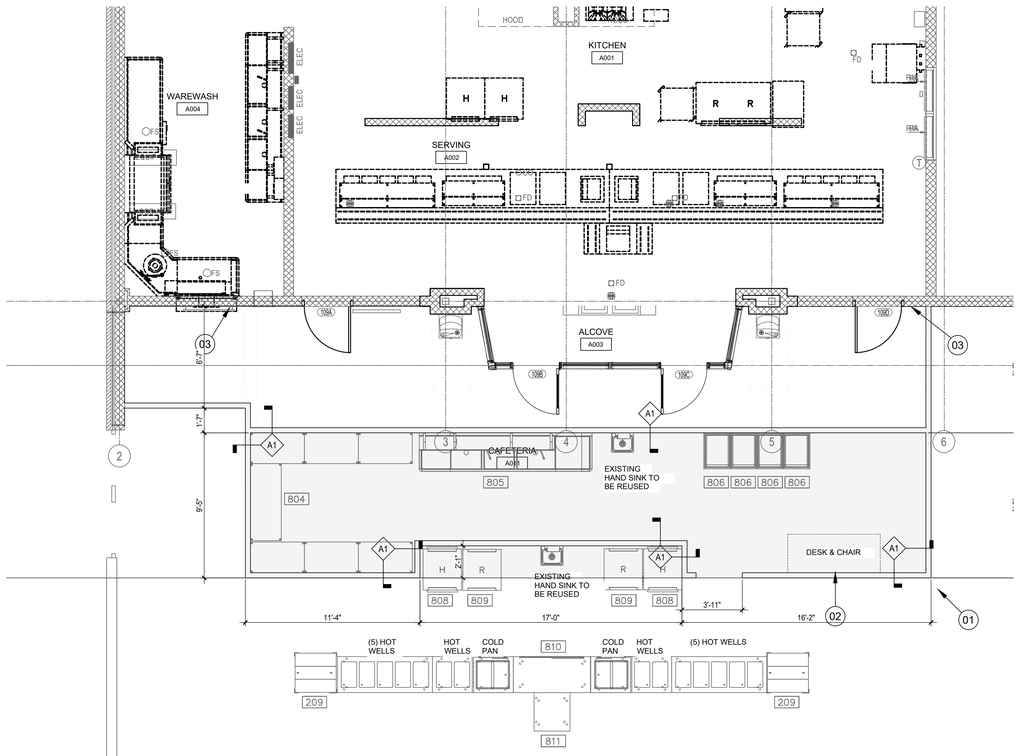
05 MOUNT TEMPORARY FLUORESCENT LIGHTS TO TEMPORARY CEILING.

3 TEMPORARY LAYOUT SECTION
SCALE: 1"=1' 0"

4 KEYED NOTES
SCALE: 1/4"=1'0"



1 TEMPORARY KITCHEN RCP
SCALE: 1/4" = 1'-0"



2 TEMPORARY KITCHEN FLOOR PLAN
SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

j

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL
REGISTERED ARCHITECT
ROBERT M. WILLIAMS
23051
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

TEMPORARY
KITCHEN
LAYOUT
j-A.302

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RCP - GENERAL NOTES

1. CEILING GRID SHALL BE INSTALLED TO MATCH EXISTING GRID'S POINT OF O THIS WILL REDUCE NEED TO RE-LOCATE ABOVE CEILING DUCTS, SPRINKLER AND OTHER SUPPORT SYSTEMS.
2. REFER TO SHEET A00-01 FOR GENERAL NOTES. GENERAL NOTES APPLY TO SEVEN SCHOOL KITCHEN REMODELS.
3. LIGHTING LEVELS SHOULD BE 50 FC IN PREPARATION AREAS, WARE WASH A SERVING LINES, OR MEET MINIMUM HEALTH CODE LEVELS, WHICHEVER ITS SEE MEP PLANS
4. REPLACE HVAC DEVICES. REPLACE LIGHTING WITH 24"x24" LED LAY IN LIGH SCHEDULED IN ELECTRICAL PLANS.
5. REFER TO MECHANICAL, ELECTRICAL SHEETS FOR DEVICE SCHEDULES.

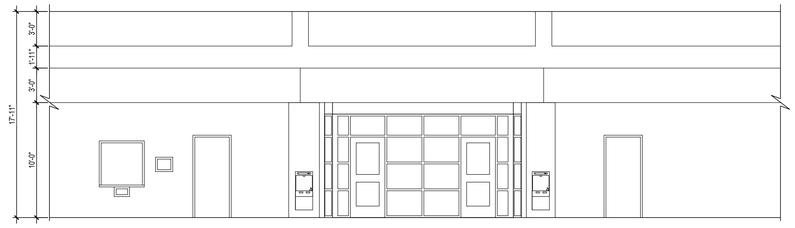
RCP - NUMBERED NOTES

01 PROVIDE 30"x30" MIN. ACCESS HATCH IN SOFFIT CENTERED ON MOTOR.

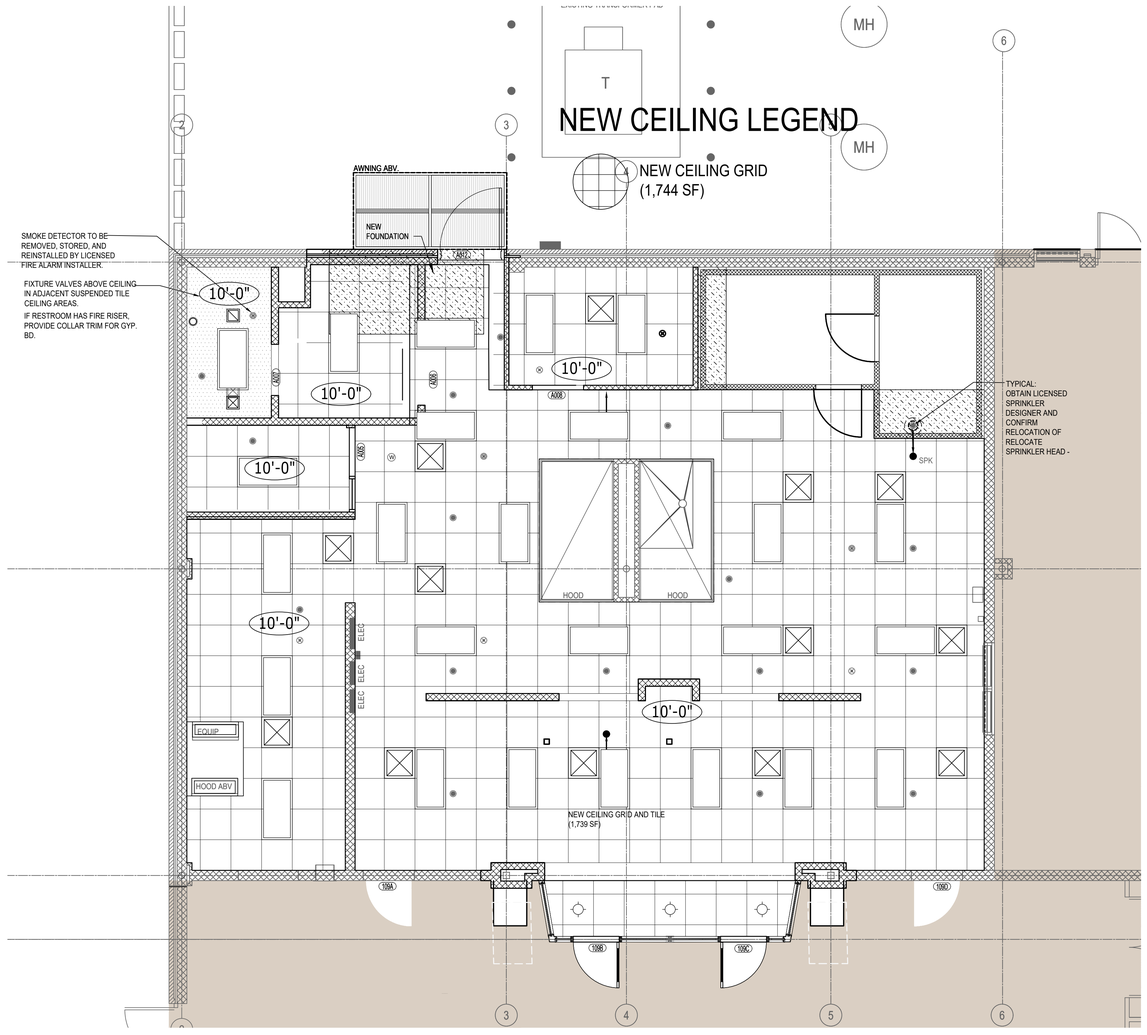
02 AFTER LOWERING THE NEW POWER RETRACTION SYSTEM. REPAIR AND PAINT SOFFITS AND SIDWALLS OF FURR TO MATCH EXISTING.

RCP DEVICE LEGEND

EXISTING TO REMAIN	NEW	DEMO	
S	S	S	CEILING MOUNTED SPEAKERS
			SECURITY CAMERA
W	W	W	WIRELESS ACCESS POINT
901-33	901-33	901-33	CEILING MOUNTED FIRE ALARM AND STROBE
			SMOKE DETECTOR
			SPRINKLER HEAD (RECESSED)
			SPRINKLER HEAD (PENDANT)
			DRYER VENT
			EXIT
			DOOR



2 FOOD SERVICE AREA ELEVATION
SCALE: 3/16" = 1'-0"



1 REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
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07/18/2025	ISSUED FOR BIDDING AND PERMITTING

j

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL
REGISTERED ARCHITECT
ROY A. MARTINEZ
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

REFLECTED CEILING PLAN

j-A.401

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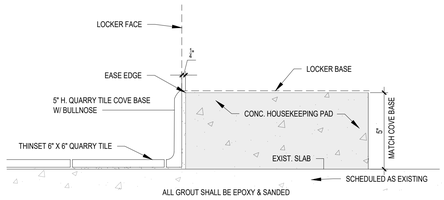
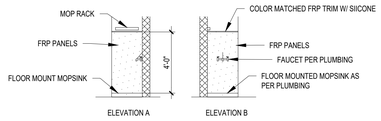
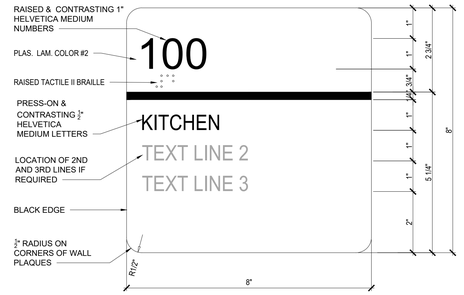


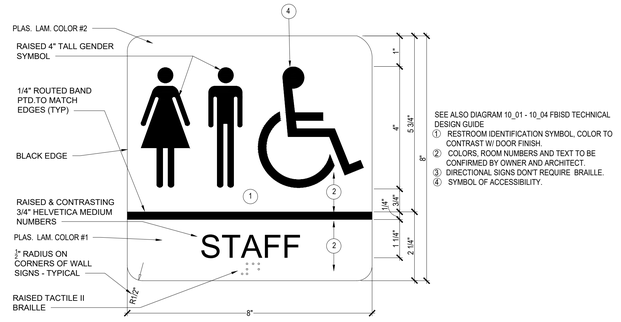
3 LOCKER HOUSEKEEPING PAD
SCALE: 3"=1'-0"



4 MOPSINK ELEVATIONS
SCALE: 1/4"=1'-0"



TYPE A
ROOM SIGNAGE - FIXED NAMES



TYPE B
KITCHEN RESTROOM SIGNAGE

7 ROOM SIGNAGE
SCALE: 6"=1'-0"

PAINT COLOR SCHEDULE
UNLESS OTHERWISE INDICATED FIELD COLOR IS PT-1 (SW 7014 EIDER WHITE)

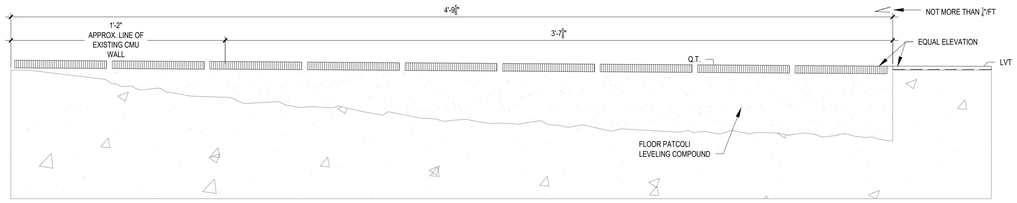
SW 7014 EIDER WHITE (EPOXY PAINT)

WALL TILE
CERAMIC WALL TILE (WT-1)
REFER TO TILE PATTERN AT SERVING AND RESTROOM
FIELD WALL TILE: DALTILE RITTENHOUSE SQUARE K175 BISCUIT (3X6)

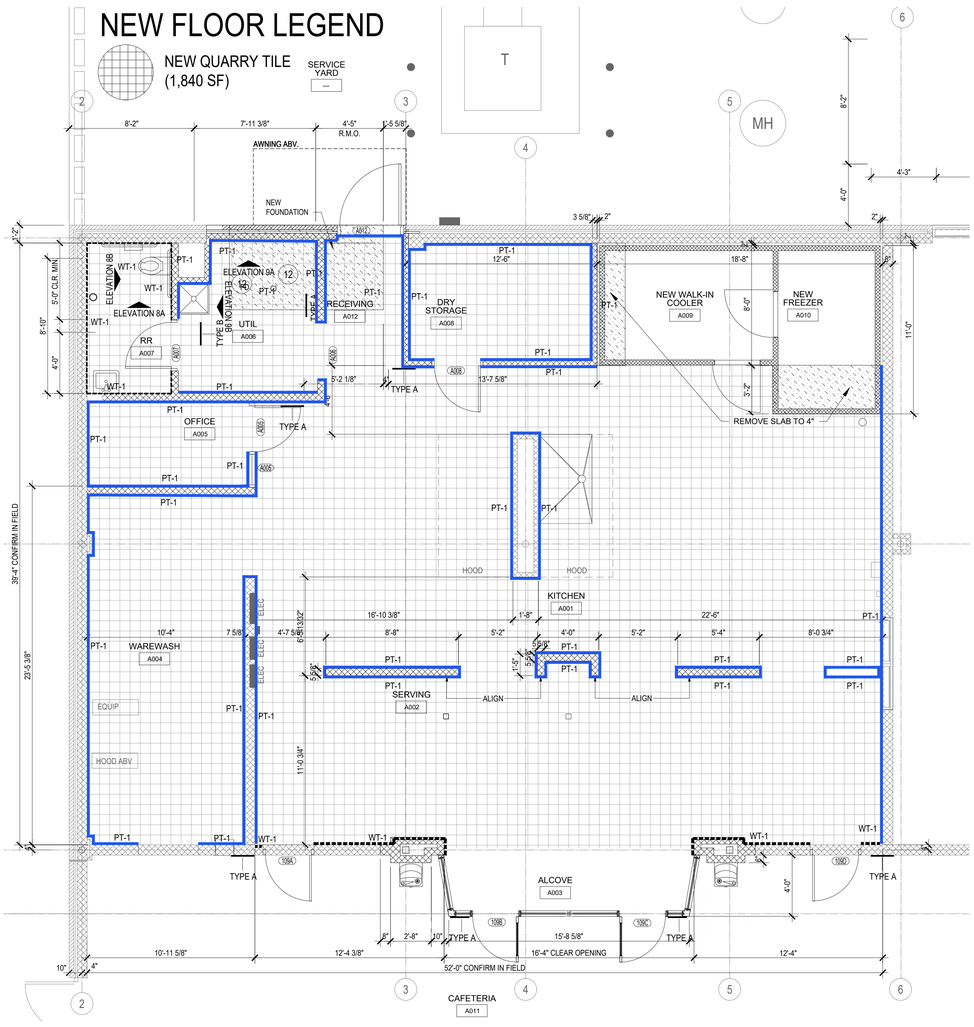
QUARRY TILE
QUARRY TILE AND BASE - SURE-STEP II OQ30
TILE COLOR SELECTION TO BE APPROVED BY FBISD
EPOXY GROUT COLOR: STERLING SILVER BY LATICRETE

A — PROVIDE ROOM SIGN TO REPLACE EXISTING. SEE LAYOUT FOR TYPE A OR TYPE B SIGN LOCATIONS.

2 FLOOR FINISH LEGEND

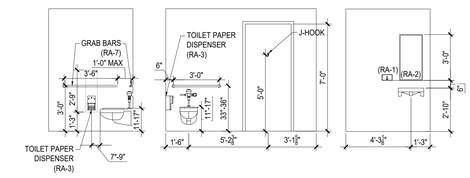


5 FLOOR TRANSITION - THRESHOLD
SCALE: 3"=1'-0"

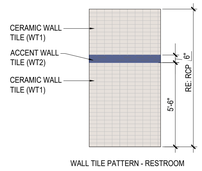


1 FINISH FLOOR PLAN
SCALE: 1/4" = 1'-0"

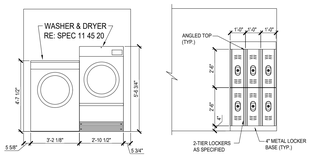
ALL FINISHED NOT DENOTED IN DRAWINGS SHALL BE SELECTED DURING THE SUBMITTAL PROCESS



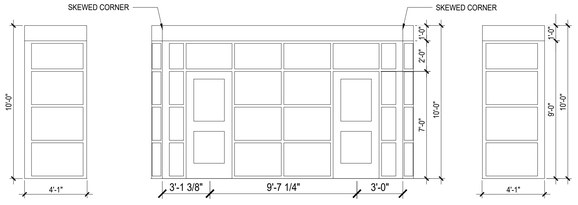
8 RR ELEVATIONS
SCALE: 1/4"=1'-0"



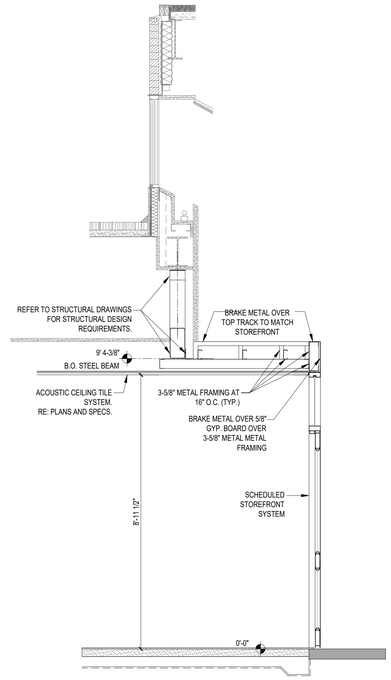
6 WALL TILE PATTERN
SCALE: 1/4"=1'-0"



9 UTILITY ELEVATIONS
SCALE: 1/4"=1'-0"



10 STOREFRONT ELEVATIONS
SCALE: 1/4"=1'-0"



11 STOREFRONT SECTION
SCALE: 1/2"=1'-0"

ISSUE:

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL
REGISTERED ARCHITECT
MIR ALI KAZMI
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STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FINISH FLOOR PLAN

j-A.501

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1. AT WALLS THAT TERMINATE ABOVE CEILING, CONTRACTOR MAY CONTINUE METAL STUD FRAMED WALLS TO UNDERSIDE OF METAL DECK AND OMIT DIAGONAL BRACING IF HEIGHT DOES NOT EXCEED LIMITING HEIGHT OF METAL STUD AS INDICATED ON CHART BELOW.

2. PROVIDE INTERMEDIATE BRACING AT ALL PARTITIONS THAT EXCEED LIMITING HEIGHT OF METAL STUDS AS INDICATED ON CHART BELOW.

3. ALL BRACING SHALL BE AT STUD POINTS.

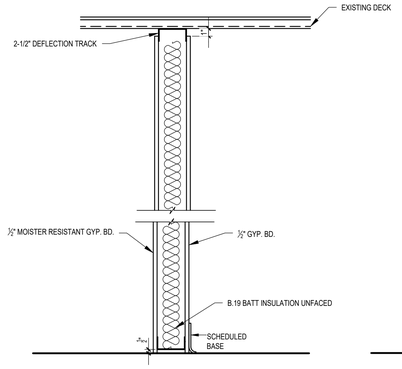
CMU PARTITION NOTES:

1. MATCH EXISTING CMU COURSING (TYP.):
   BRIARGATE ES (4" CMU STARTER COURSE)
   LAKE OLYMPIA MS (4" CMU STARTER COURSE)
   MISSION BEND ES (8" CMU STARTER COURSE)
   RIDGEMONT ES (8" CMU STARTER COURSE)
   TOWNEWEST ES (8" CMU STARTER COURSE)
2. PROVIDE CMU LINTELS FOR ALL OPENINGS IN INTERIOR CMU PARTITIONS. COORDINATE WITH STRUCTURAL.
3. PROVIDE A 3/4" SPACE BETWEEN TOP OF CMU AND STRUCTURE/DECK FOR POTENTIAL DEFLECTION. SEAL WITH APPROPRIATE CAULK.
4. REFER TO FINISH SCHEDULES FOR CERAMIC TILE LOCATIONS.

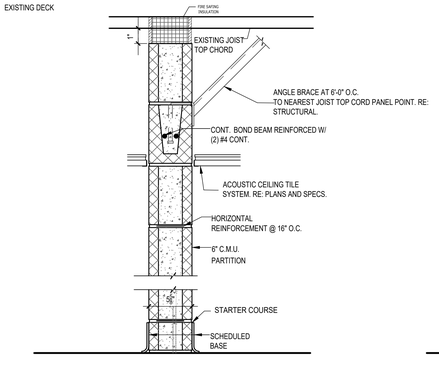
GYPSUM WALLBOARD PARTITION NOTES:

1. ALL METAL STUDS PARTITIONS ARE 25 GAUGE METAL STUDS AT 16" O.C. UNLESS OTHERWISE NOTED. IF THE LIMITING HEIGHT FOR A PARTITION TYPE IS EXCEEDED, INCREASE SIZE AND/OR GAUGE OF METAL STUDS AS INDICATED ON "LIMITING HEIGHT OF METAL STUDS" TABLE. NOTIFY THE ARCHITECT PRIOR TO INSTALLATION.

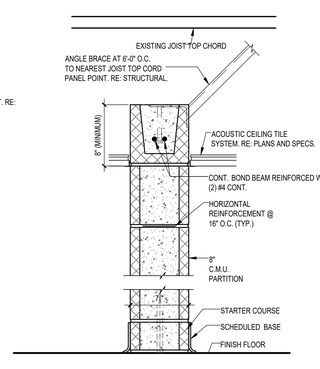
LIMITING HEIGHT OF METAL STUDS			
STUD SIZE	SPACING	25 GA.	20 GA.
2-1/2"	16"	11'-3"	12'-10"
3-5/8"	16"	14'-4"	16'-5"
6"	16"	19'-9"	24'-6"



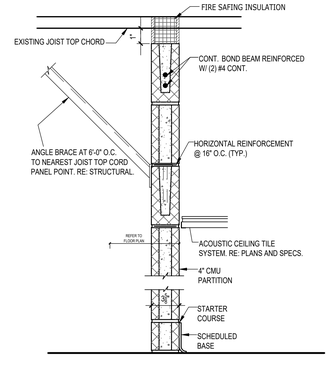
PARTITION A
SCALE: 1-1/2" = 1'-0"



PARTITION B1
SCALE: 1-1/2" = 1'-0"



PARTITION B2
SCALE: 1-1/2" = 1'-0"



PARTITION B3
SCALE: 1-1/2" = 1'-0"

PARTITION B4
SCALE: 1-1/2" = 1'-0"

PARTITION B5
SCALE: 1-1/2" = 1'-0"

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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

FOR
INTERIM REVIEW
AND NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 05/23/25

PARTITION SCHEDULE

j-A.502

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\j-A.502 PARTITION SCHEDULE.dwg, Jul 23, 2025, 1:56pm

REFER TO FOODSERVICE DESIGN PROFESSIONALS SPECIFICATIONS AND SUBSEQUENT SHEETS FOR ADDITIONAL COORDINATION INFORMATION

EXISTING EQUIPMENT NOTES (IF EXISTING EQUIPMENT IS PROVIDED IN THIS PROJECT):

1. EXISTING EQUIPMENT NOT SCHEDULED FOR RE-USE TO BE RELOCATED BY THE K.E.C. COORDINATE WITH OWNER FOR NEW LOCATION.
2. ALL UTILITIES NOT SCHEDULED FOR RE-USE TO BE CAPPED & COVERED BY REQUIRED DISCIPLINE.
3. K.E.C. TO VERIFY ALL EXISTING UTILITY LOCATIONS & COORDINATE WITH ALL EQUIPMENT AS REQUIRED.

8 EXISTING EQUIPMENT NOTES
NOT TO SCALE

ARCHITECT TO VERIFY/COORDINATE THE AESTHETIC OPTIONS BELOW (FOOD SERVICE COLOR, MATERIAL, OR SIGNAGE SELECTIONS) IF THESE ITEMS ARE PROVIDED IN THIS PROJECT:

1. COUNTERTOPS: STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
2. TRAY SLIDES: CORIAN OR STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
3. COUNTER FRONTS: CERAMIC TILE, 3 FORM, OR PLASTIC LAMINATE.
4. SNEEZE GUARDS: STONE INSETS.
5. GENERAL COLOR, MATERIAL AND GRAPHIC SELECTIONS:
   - A. DISPLAY AIR SCREEN MERCHANDISERS - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - B. BAKERY DISPLAY CASES - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - C. PASS THRU OR REACH IN HOLDING CABINETS - COLOR SELECTION: POWDER COAT (MFG.: TRUE) OR PLASTIC LAMINATE (MFG.: TRAULSEN) (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - D. HANGING HEAT LAMPS - TRACK AND FIXTURE COLOR SELECTION.
   - E. HEATED MERCHANDISERS.
   - F. PORTABLE GUIDE RAILS - STANCHION AND BELT COLOR SELECTION.
   - G. POPCORN MACHINE - SIGNAGE SELECTION.
   - H. BOTTLE COOLER - SIGNAGE SELECTION.
   - I. GRAPHICS PACKAGE INFORMATION.
   - J. HOT FOOD WELL COVERS.
6. ARCHITECT TO VERIFY/COORDINATE THE FINISHES BELOW:
   - A. WALLS: CERAMIC TILE, FLAT FRP, OR MOLDED FRP (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - B. CEILINGS: REMOVABLE VINYL FACE TILE (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - C. FLOORS: TILE, EPOXY, OR RUBBERIZED FLOORING SYSTEM (SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT AS APPROVED BY LOCAL JURISDICTION) (COORDINATE FLOOR TILE TRANSITION AT SERVING LINES).
   - D. FLOORS: WALK-IN ASSEMBLY - EXTEND KITCHEN FLOOR FLUSH INTO WALK-IN ASSEMBLY WITH COVED BASE.
   - E. FURR DOWNS ABOVE SERVING COUNTERS.

5 ARCHITECTURAL COORDINATION NOTES
NOT TO SCALE

CRITICAL NOTES:

1. CONTRACTOR MUST COORDINATE AND VERIFY ALL DIMENSIONS WITH FOOD SERVICE EQUIPMENT SHOP DRAWINGS AND MANUFACTURER'S DATA. DIMENSIONS SHOWN ARE FOR DESIGN AND BIDDING PURPOSES ONLY.
2. WALK-IN ASSEMBLY DOORS MUST BE LEFT OPEN WHILE INTERIOR CONCRETE FLOOR CURES.
3. INSTALL PROTECTIVE COVER ON WALK-IN ASSEMBLY WALL PANELS BEFORE INSTALLING CONCRETE FLOORS AND CURBS.
4. REFER TO GENERAL SPECS - DIVISION 27 TO PROVIDE CONDUIT, DATA, AND INTERCONNECT THE PANIC ALARM INSIDE FREEZER TO THE BUILDING AUTOMATION SYSTEM FOR NOTIFICATION TO DISTRICT PERSONNEL IN THE EVENT OF STAFF ENTRAPMENT.
5. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL (DIV. 22).

7 CRITICAL NOTES
NOT TO SCALE

DIVISION 26 (ELECTRICAL) IS RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL ELECTRICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. ROUGH-IN AND FINAL CONNECTION OF ELECTRICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 26.
6. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
7. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR INTERCONNECT CABLES BETWEEN LAN AND POS TERMINALS, CHANGE-MAKERS, PRE-CHECK UNITS, PRINTERS, CPUS, ETC. DIVISION 26 TO VERIFY WHERE THE CONDUIT IS TO RUN FOR POS SYSTEM (I.E., MANAGER'S OFFICE OR IDF ROOM).
8. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR FIRE SUPPRESSION SYSTEMS. INTERCONNECT FIRE PROTECTION SYSTEM TO PANEL BOX SHUNT TRIPS AND BUILDING ALARM.
9. WALK-IN LIGHT FIXTURE INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF WALK-IN IS PROVIDED IN THIS PROJECT).
10. TABLE LIMIT SWITCH INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF DISHMACHINE IS PROVIDED IN THIS PROJECT).
11. ELECTRICAL MATERIALS AND DEVICES (SHUNT-TRIP BREAKERS, SURGE PROTECTORS, LIGHTING CONTROL DEVICES, CONDUIT, WIRE, ETC.).
12. SWITCHES AND STAINLESS STEEL DISCONNECTS AS REQUIRED (PROVIDE, LOCATE, AND INSTALL – TO BE IN AN ACCESSIBLE LOCATION).
13. CHARGING STATIONS FOR FORKLIFTS, PALLET STACKERS, AND PALLET JACKS (SIZE, PROVIDE, LOCATE, AND INSTALL) (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
14. INTERCONNECTION BETWEEN CONDENSATE FAN AND DISHMACHINE CONTROL PANEL (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
15. INTERCONNECTION BETWEEN EXHAUST HOOD FANS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
16. INTERCONNECTION BETWEEN EXHAUST HOOD LIGHTS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
17. DOOR HEATERS, LIGHTS, COILS, AND PRESSURE RELIEF PORTS PRE-WIRED TO JUNCTION BOX AT TOP OF WALK-IN ASSEMBLIES (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) PROVIDED BY SECTION 11 40 00. FINAL CONNECTION BY DIV. 26.
18. IF ANY ELECTRICAL ACCESSORIES, FITTINGS, AND CORD/PLUGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV.26 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
19. PROVIDE WATERPROOF RECEPTACLES IN WET AREAS.
20. ALL ELECTRICAL CONNECTIONS BENEATH EXHAUST HOODS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) TO EXTEND TO SHUNT TRIP BREAKERS WITH ELECTRICAL PANEL BOX FOR SHUTDOWN DURING FIRE MODE.
21. RECEPTACLES ARE TO BE PRE-WIRED TO THE JUNCTION BOX OR LOAD CENTER FOR FINAL CONNECTION BY DIVISION 26.
22. ALL ELECTRICAL LIGHTING, POWER, AND DISTRIBUTION SYSTEMS.
23. DO NOT INTERCONNECT MORE THAN THREE (3) CONVENIENCE OUTLETS ON ONE (1) BREAKER.
24. OTHER THAN CONVENIENCE OUTLETS, ALL ELECTRICAL CONNECTIONS SHOWN ON FOOD SERVICE PLANS ARE DEDICATED BREAKERS.
25. DOORBELL AT RECEIVING DOOR (PROVIDE AND INSTALL – TO BE AUDIBLE THROUGHOUT KITCHEN, OFFICE, AND DRY STORAGE ROOM).
26. ADEQUATE LIGHTING AT RECEIVING DOOR.
27. PROVIDE AND INSTALL TWO EMERGENCY STROBE BEACONS THAT INTERCONNECT TO PANIC ALARM IN WALK-IN FREEZER. ONE (1) IN KITCHEN ABOVE WALK-IN FREEZER DOOR ONE (1) IN CAFETORIUM (IF WALK-IN IS PROVIDED IN THIS PROJECT). REFER TO GENERAL SPECIFICATIONS FOR ADDITIONAL DETAILS.
28. DEDICATED CIRCUIT FOR HEATED DRAIN LINE CONNECTION IN WALK-IN FREEZER AT EACH COIL (IF WALK-IN IS PROVIDED IN THIS PROJECT).

NOTE: ELECTRICAL CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 26. FOR ADDITIONAL REQUIREMENTS, REFER TO THE ELECTRICAL ENGINEER'S DRAWINGS.

6 ELECTRICAL COORDINATION NOTES
NOT TO SCALE

DIVISION 22 (PLUMBING) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL PLUMBING REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY PVC CONDUIT WITH WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO BEVERAGE LINES, CO2 LINES, AND REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL PLUMBING CONNECTIONS TO FOOD SERVICE EQUIPMENT AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 22. THIS INCLUDES BUT IS NOT LIMITED TO INSTALLATION OF ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), HOSES, GAS DISCONNECTS, AND DRAINS FROM EQUIPMENT POINT OF CONNECTION TO BUILDING PLUMBING SYSTEMS. ALL DRAIN LINES ARE PROVIDED AND INSTALLED BY DIV. 22.
7. KITCHEN EQUIPMENT CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), DRAIN FITTINGS, MIXING VALVES, CONTROL VALVES, WATER PRESSURE REGULATORS, VACUUM BREAKERS, AND ALL ACCESSORIES FOR EQUIPMENT SPECIFIED UNDER 11 40 00. DIVISION 22 IS RESPONSIBLE FOR INSTALLATION.
8. INDIRECT DRAIN LINE RUNS FROM EQUIPMENT TO NEAREST DRAIN OR FLOOR SINK. LINES TO BE TYPE 'K' COPPER.
9. IF ANY PLUMBING ACCESSORIES OR FITTINGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV. 22 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
10. GAS SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
11. WATER SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
12. COMPRESSED AIR SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM (IF REQUIRED FOR THIS PROJECT).
13. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL.
14. FLOOR SINKS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
15. FLOOR DRAINS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
16. TRENCH DRAINS (PROVIDE AND INSTALL). TRENCH LINERS PROVIDED BY 11 40 00. FLANGE AND LINERS TO BE FLUSH WITH FINISHED FLOOR.
17. GREASE TRAPS AS REQUIRED. VERIFY WITH LOCAL CODES TO BYPASS OR PIPE THRU GREASE TRAP AND/OR INTERCEPTOR.
18. P-TRAPS AS REQUIRED (INCLUDING ALL DISPOSERS).
19. INTERCONNECT WATER THRU WATER FILTER (FILTER PROVIDED BY 11 40 00 UNLESS OTHERWISE SPECIFIED) TO EQUIPMENT.
20. GAS QUICK DISCONNECT INSTALLATION (QUICK DISCONNECT PROVIDED BY 11 40 00).
21. SAFETY RESTRAINT CABLE INSTALLATION (SAFETY RESTRAINT CABLE PROVIDED BY 11 40 00).
22. SPECIFIED COUPLINGS AND PIPING TO ALL EQUIPMENT FURNISHED BY 11 40 00.
23. AIR COMPRESSORS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
24. WATER SOFTENERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
25. PRESSURE BOILERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
26. HAND SINKS (PROVIDE (UNLESS OTHERWISE SPECIFIED) AND INSTALL). PROVIDE HOT WATER TEMPERING VALVE IF REQUIRED. WATER TEMPERATURE TO BE AT LEAST 100 DEGREES AND FLOW FOR AT LEAST 20 SECONDS.
27. ICE BIN DRAIN INSULATION (IF ICE MACHINE IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
28. UNIONS AT DISPOSER SOLENOID VALVES (IF DISPOSER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
29. BACK FLOW PREVENTION AS REQUIRED (PROVIDE AND INSTALL - INCLUDING ALL DISPOSERS). BACK- SIPHONAGE SHALL BE INSTALLED AT ALL FIXTURES AND EQUIPMENT WHERE BACKFLOW AND/OR BACK-SIPHONAGE MAY OCCUR AND WHERE A MINIMUM AIR GAP CANNOT BE PROVIDED BETWEEN THE WATER TO THE FIXTURE OR EQUIPMENT AT ITS FLOOD/LEVEL RIM. VACUUM BREAKERS, WHEN FURNISHED WITH EQUIPMENT, SHALL OVERRIDE THE ABOVE, IF ACCEPTABLE WITH APPLICABLE CODES. DIVISION 22 RESPONSIBLE FOR VERIFYING REQUIREMENT WITH LOCAL CODES.
30. JANITOR SINK WITH FAUCET (PROVIDE AND INSTALL).
31. FREEZE PROOF HYDRANT AT EXTERIOR OF BUILDING BY RECEIVING DOOR (PROVIDE AND INSTALL).
32. REVERSE OSMOSIS SYSTEMS (SIZE, PROVIDE (UNLESS OTHERWISE SPECIFIED), LOCATE AND INSTALL).
33. ALL PIPING WITHIN COUNTER BODY OR UNDER FABRICATED COUNTERS TO BE RUN TO A CONNECTION POINT BELOW COUNTER BODY BY SECTION 11 40 00. FINAL CONNECTION BY DIVISION 22.
34. EXHAUST HOOD CONDENSATE DRAIN CONNECTIONS (IF EXHAUST HOOD IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
35. INTERCONNECTION OF 1/2" CW TO PRE-RINSE AND DISPOSERS CONE/BODY INLETS PIPED THROUGH SOLENOID AND VACUUM BREAKER (IF DISPOSER IS PROVIDED IN THIS PROJECT).
36. FIRE SYSTEM PIPING. EXPOSED PIPING TO BE CHROME PLATED.
37. PIPE 1/2" COLD WATER TO SWIRL INLETS AT DISPOSERS (IF DISPOSER IS PROVIDED IN THIS PROJECT).
38. WATER TREATMENT FOR ICE BUILDERS (NON-CHLORINATED WATER WITH A PH LEVEL OF 10 OR HIGHER) AND ANY DRAINS AND OVERFLOWS. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS BY DIV. 23 (IF ICE BUILDERS AND TUMBLE CHILLERS ARE PROVIDED IN THIS PROJECT).

NOTE: WATER AND DRAIN CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 22. FOR ADDITIONAL WATER AND DRAIN REQUIREMENTS REFER TO MECHANICAL DRAWINGS.

NOTE: REFER TO ELECTRICAL/MECHANICAL DRAWINGS FOR REQUIREMENTS OF EXHAUST FANS AND MAKE-UP AIR HANDLERS AND LOCATION OF AN INTERLOCK AND START/STOP CONTROLS TO BE LOCATED WITHIN FOOD SERVICE AREA BY DIVISION 26.

4 PLUMBING COORDINATION NOTES
NOT TO SCALE

DIVISION 23 (MECHANICAL) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL MECHANICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL CONNECTION OF MECHANICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR).
7. TESTING AND BALANCING FOR ROOMS AND EXHAUST HOODS TO BE PERFORMED BY MECHANICAL CONTRACTOR. BALANCE REPORT FOR FOOD SERVICE EXHAUST HOODS TO BE PROVIDED TO FOODSERVICE DESIGN PROFESSIONALS (FDP) IMMEDIATELY UPON COMPLETION (SEND TO HOUSTON.SUBMITTAL@FDP.ORG FOR HOUSTON OFFICE AND DALLAS.SUBMITTAL@FDP.ORG FOR DALLAS OFFICE) AND MUST BE SUBMITTED WITH O&M MANUALS.
8. EXHAUST HOODS, CONDENSATE HOODS, FIRE SUPPRESSION SYSTEMS, CONNECTIONS AND CONTROLS (PROVIDE AND INSTALL – *UNLESS OTHERWISE SPECIFIED*). PROVIDE TEMPERED AIR AT ALL SUPPLY DUCTS.
   - A. IF EXHAUST/CONDENSATE HOODS AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED UNDER SECTION 11 40 00, DIVISION 23 IS RESPONSIBLE FOR ALL EXHAUST AND CONDENSATE HOOD CONNECTIONS (PROVIDE AND INSTALL).
9. VFD SYSTEM AND CONTROLLERS, WHEN REQUIRED BY CODE (PROVIDE AND INSTALL).
10. PROVIDE AND INSTALL ALL VENTILATION (DIRECT OR INDIRECT), AIR CONDITIONING AND HEATING SYSTEMS (UNLESS OTHERWISE SPECIFIED).
11. COORDINATE SUPPLY AND RETURN DUCTS ABOVE SERVING COUNTERS OR OPEN-AIR REFRIGERATED MERCHANDISERS. NO COLD AIR TO BLOW DIRECTLY ON HOT FOOD COUNTERS.
12. COORDINATE SUPPLY AND RETURN DUCTS AWAY FROM EQUIPMENT WITH TOP MOUNTED REFRIGERATION. NO COLD AIR TO BLOW DIRECTLY ON COMPRESSORS.
13. MECHANICAL CONTRACTOR TO LOCATE TEMPERATURE MONITORS WITHIN RETURN DUCTS.
14. CIRCULATING AIR ABOVE WALK-IN ASSEMBLIES (PROVIDE AND INSTALL).
15. CIRCULATING AIR ABOVE AND IN AIR GAPS AT WAREHOUSE COLD STORAGE ASSEMBLIES (PROVIDE AND INSTALL).
16. WATER CHILLERS AS REQUIRED (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).
17. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).

3 MECHANICAL COORDINATION NOTES
NOT TO SCALE

GENERAL CONTRACTOR RESPONSIBLE FOR BUT NOT LIMITED TO:

1. ANY WALL PENETRATION REQUIRED FOR FOOD SERVICE EQUIPMENT UTILITIES. ESCUTCHEON PLATES OR S/S SLEEVES TO BE PROVIDED AND INSTALLED AS NEEDED.
2. BULK FREEZER VENTILATION PIPE (IF BULK FREEZER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
3. CORE DRILLING FOR GUIDE RAILS (IF GUIDE RAILS ARE PROVIDED IN THIS PROJECT).
4. REFRIGERATION ROOF CURBS / ROOF JACK (IF REFRIGERATION SYSTEM IS PROVIDED IN THIS PROJECT AND LOCATED ON ROOF).
5. INTERIOR BOLLARDS (IF REQUIRED FOR THIS PROJECT) – TO BE EPOXY PAINTED PER LOCAL CODES (PROVIDE AND INSTALL).
6. FURNISH AND INSTALL 3/4" PLYWOOD BLOCKING IN THE WALL FOR MOUNTING EQUIPMENT FURNISHED BY SECTION 11 40 00 AS REQUIRED.
7. WALK-IN DEPRESSIONS (TO BE DEAD LEVEL) AND SAND LEVELING BED (IF WALK-IN IS PROVIDED IN THIS PROJECT AND RECESS IS SHOWN).
8. STRUCTURAL BRACING FOR BULK WALK-IN CEILING PANELS IF REQUIRED.
9. MENU SYSTEM VIDEO MONITORS IN SERVERY (UNLESS OTHERWISE SPECIFIED).
10. STRUCTURAL BRACING FOR MENU SYSTEM VIDEO MONITORS IF REQUIRED.
11. INTERIOR/EXTERIOR REFRIGERATION PENETRATIONS AND SLEEVES AT BUILDING PENETRATIONS.
12. DOORSCOPE VIEWER (PEEPHOLE) WITH WIDE VIEWING ANGLE AT RECEIVING DOOR.
13. CANOPY AT RECEIVING DOOR. COORDINATE HEIGHT WITH THE HEIGHT OF RECEIVING DOOR (8') AND THE MOUNTING HEIGHT OF AIR SCREEN ABOVE THE DOOR.
14. SOAP AND TOWEL DISPENSER PROVIDED BY OWNER. G.C. RESPONSIBLE FOR INSTALLATION.
15. WASHER AND DRYER (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
16. DWARF WALL AT EXPOSED FRONT/ENDS OF CAFETERIA SERVING COUNTERS WITH FINISH AS SELECTED BY ARCHITECT (IF REQUIRED IN THIS PROJECT).

2 GENERAL CONTRACTOR COORDINATION NOTES
NOT TO SCALE

HEALTH DEPARTMENT REQUIREMENTS (VERIFY WITH LOCAL JURISDICTIONS):

1. FLOORS: VERIFY WITH DIVISION 9. FLOORS TO BE SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT.
2. WALLS: VERIFY WITH ARCHITECTURAL DOCUMENTS. WALLS TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
3. CEILING: LAY-IN TILES. CEILING TILES TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
4. EMPLOYEE TOILET: TO BE LOCATED OFF MAIN CORRIDOR AND ADJACENT TO MAIN KITCHEN. RESTROOM MUST HAVE A VESTIBULE AND NOT OPEN TO KITCHEN / PREP AREAS. TOILETS TO BE WELL VENTILATED.
5. LAVATORIES: WALL HUNG LAVATORIES LOCATED WITHIN ALL FUNCTIONAL WORKING AREAS.
6. UTENSIL CLEANING/SANITIZING: ACCOMPLISHED IN UTENSIL WASH AREA WITH (3) 2'-0" x 2'-2" x 15" MINIMUM DEEP SINKS AND WAREWASH MACHINE.
7. MECHANICAL CLEANING/SANITIZING OF TABLEWARE: ACCOMPLISHED BY WAREWASH MACHINE.
8. STOREROOMS: AMPLE DAILY STORAGE PROVIDED IN ENCLOSED STORE ROOMS. STORE ROOMS TO BE VENTILATED AND MAINTAIN PROPER TEMPERATURE.
9. WATER HEATER: LOCATED IN THE MECHANICAL ROOM ADJACENT TO KITCHEN. TO BE SIZED TO PROVIDE AMPLE WATER TO MAINTAIN PROPER WATER TEMPERATURE THROUGHOUT HOURS OF OPERATION.
10. GREASE TRAP: LOCATED AT EXTERIOR OF BUILDING. REFER TO ENGINEER'S DRAWINGS.
11. FOOD SERVICE EQUIPMENT: ALL FLOOR-MOUNTED EQUIPMENT IS TO BE SEALED TO THE FLOOR TO PROVIDE AN EASILY CLEANABLE SURFACE AND PREVENT SEEPAGE. EQUIPMENT NOT MOUNTED TO THE FLOOR IS TO BE WALL MOUNTED ON WALL CARRIERS, OR ELEVATED ON LEGS TO PROVIDE AT LEAST A SIX-INCH CLEARANCE BETWEEN FLOOR AND EQUIPMENT.
12. MOP SINK: LOCATED IN JANITOR CLOSET OFF MAIN KITCHEN CORRIDOR, AND LOCATED IN CLOSE PROXIMITY TO THE SERVERY WAREWASH AREA.
13. EXHAUST HOODS: EXHAUST HOODS PROVIDED OVER COOKING EQUIPMENT WITH LIQUID CHEMICAL ANSUL FIRE EXTINGUISHING SYSTEM.
14. LIGHTING AND PROTECTIVE SHIELDING: RECESSED CEILING-MOUNTED FLUORESCENT LIGHT FIXTURES FITTED WITH CLEAR LEXAN DIFFUSERS.
15. GARBAGE AND REFUSE: CENTRAL TRASH COLLECTION PROVIDED FOR BUILDING LOCATED NEAR RECEIVING AREA ON SMOOTH CONCRETE SURFACE.
16. POISONOUS AND TOXIC MATERIAL STORAGE: LOCATED IN RESPECTIVE JANITOR CLOSETS WITH LOCKING HARDWARE.

1 HEALTH DEPARTMENT COORDINATION NOTES
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THE ITEMS APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON 07/15/2025

MWA ARCHITECTS
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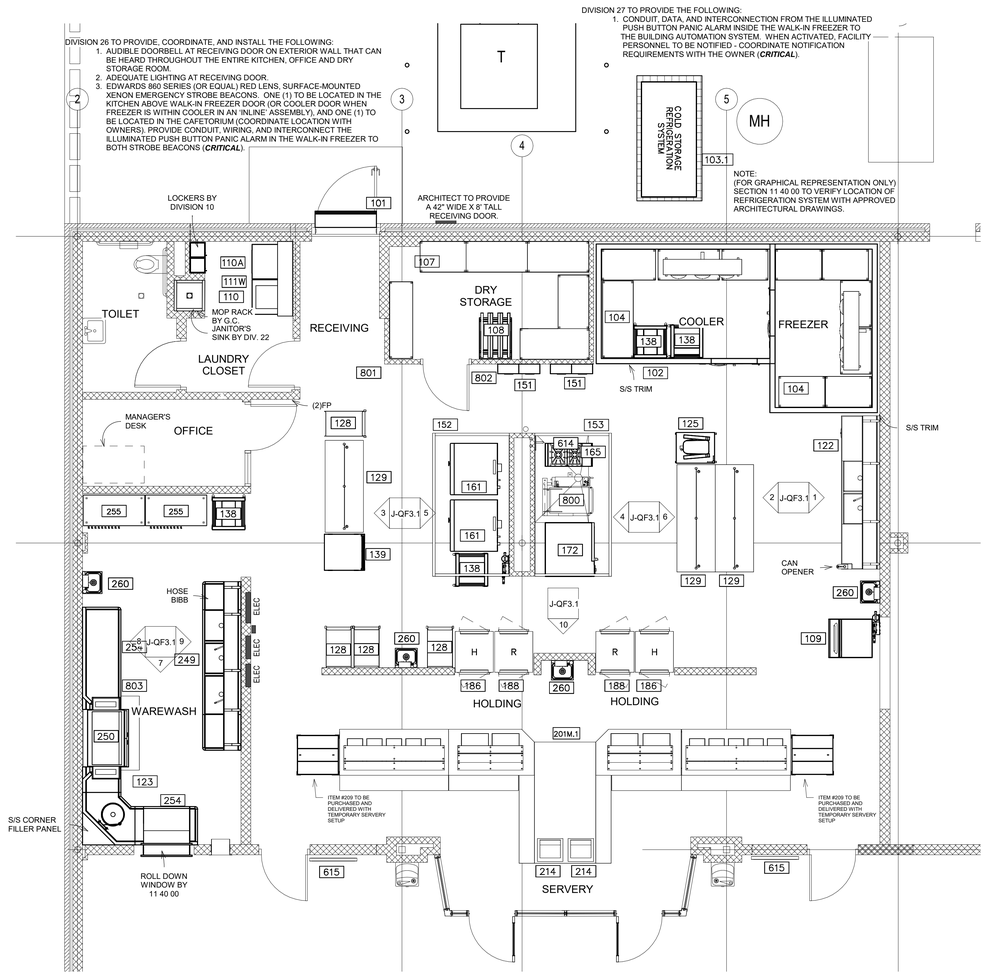
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FS GENERAL COORDINATION NOTES

J-QF0.0

FOOD SERVICE DRAWING INDEX	
FDP SHEET NUMBER	FDP SHEET NAME
J-QF0.0	FS GENERAL COORDINATION NOTES
J-QF1.0	FS EQUIPMENT PLAN
J-QF1.1	FS FACILITY MODEL
J-QF1.2	FS EQUIPMENT MODEL
J-QF1.3	FS SPECIAL CONDITIONS & MECHANICAL PLAN
J-QF1.4	FS PLUMBING PLAN
J-QF1.5	FS ELECTRICAL PLAN
J-QF1.6	FS CONDENSING UNITS
J-QF1.7	FS WALK-INS
J-QF1.8	FS SERVING COUNTERS
J-QF1.9	FS SERVING COUNTERS
J-QF2.0	FS DEMO PLAN
J-QF2.1	FS TEMPORARY SERVING
J-QF3.1	FS ELEVATIONS
J-QF4.1	FS SECTIONS & DETAILS
J-QF4.2	FS DETAILS
J-QF4.3	FS DETAILS



1 FOOD SERVICE EQUIPMENT PLAN
1/4" = 1'-0"

FOOD SERVICE EQUIPMENT SCHEDULE					
REFER TO SHEET QF1 FOR GENERAL CONTRACTOR & HEALTH DEPARTMENT COORDINATION NOTES					
FDP ITEM	FDP QTY	FDP DESCRIPTION	FDP REMARKS	MANUFACTURER	MODEL
101	1	AIR SCREEN		MARS	STD248-1UA-OB
102	1	COLD STORAGE ASSEMBLY		AMERICAN PANEL	
103.1	1	COLD STORAGE REFRIGERATION SYSTEM		RDT	ZS1-02Z-CT3-AST
104	2	COLD STORAGE SHELVING		METRO	METROMAX Q
107	1	DRY STORAGE SHELVING		METRO	METROMAX Q
108	1	CAN RACK		NEW AGE	1250CK
109	1	ICE MACHINE W/ BIN		MANITOWOC	UYF0310A
110	1	CLOTHES WASHER		WHIRLPOOL	RESIDENTIAL
110A	1	CLOTHES DRYER		WHIRLPOOL	RESIDENTIAL
111W	1	WALL MOUNTED OVERSHELF		CUSTOM FABRICATED	
122	1	TWO COMPARTMENT SINK WITHOUT DISPOSER		CUSTOM FABRICATED	
123	1	DISPOSER - 3HP		SALAVHOR	300-CA-18-ARSS-LD
125	1	20 QT. MIXER W/STAND		CUSTOM FABRICATED	
128	4	UTILITY CART		LAKESIDE	522
129	3	WORKTABLE W/S.BAR UT.RACK		CUSTOM FABRICATED	
138	4	PAN RACK		CRES COR	207-UA-13A
139	1	INSUL MOBILE PROOFER		CRES COR	H-137-WSUA-12D
151	2	FIRE PROTECTION SYSTEM		ANSUL	R102
152	1	EXHAUST HOOD	EXISTING		
153	1	EXHAUST HOOD	EXISTING		
161	2	CONVECTION OVEN		BLODGETT	200-DFG DBL
165	1	TWO BURNER RANGE		VULCAN	V2B18B
172	1	COMBI OVEN		RATIONAL	ICP 6-FULL/6-FULL N/G
186	2	PASS-THRU HEATED CABINET-1DR		TRAULSEN	AHF132WP
188	2	PASS-THRU REFRIGERATOR-1DR		TRAULSEN	AHT132WPUT
201M.1	1	SERVING COUNTER-MODULAR		COUNTERCRAFT	SCOL-408-MOD
209	2	DROP FRONT MILK COOLER - 8 CASE		TRAULSEN	RMC34D4
214	2	CASH REGISTER	OWNER FURNISHED		
249	1	THREE COMPARTMENT SINK NO DISPOSER		CUSTOM FABRICATED	
250	1	DISHMACHINE		HOBART	CL44-BAS
254	2	SOILED & CLEAN DISHTABLE		CUSTOM FABRICATED	
255	2	MOBILE DRYING RACK		METRO	PR48VX3
260	4	HAND SINK	FURNISHED & INSTALLED BY DIV. 22		
614	1	FILL FAUCET		T&S	B-0610
615	2	MENU MONITOR	BY OWNER		
800	1	15 GAL. BRAISING PAN		GROEN	BPM-15GA
801	1	S/S CORNER GUARDS	LOCATED ON EVERY EXPOSED CORNER THROUGHOUT KITCHEN	CUSTOM FABRICATED	
802	1	WALL BUMPERS	LOCATED ON ALL EXPOSED BUILDING WALLS	PAWLING	MD-1
803	1	WATER SOFTENER		HOBART	WS-40
804	1	S/S SPLASH GUARDS		CUSTOM FABRICATED	

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2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
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PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ELECTRONICALLY APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO: 48854119 ON: 07/15/2025

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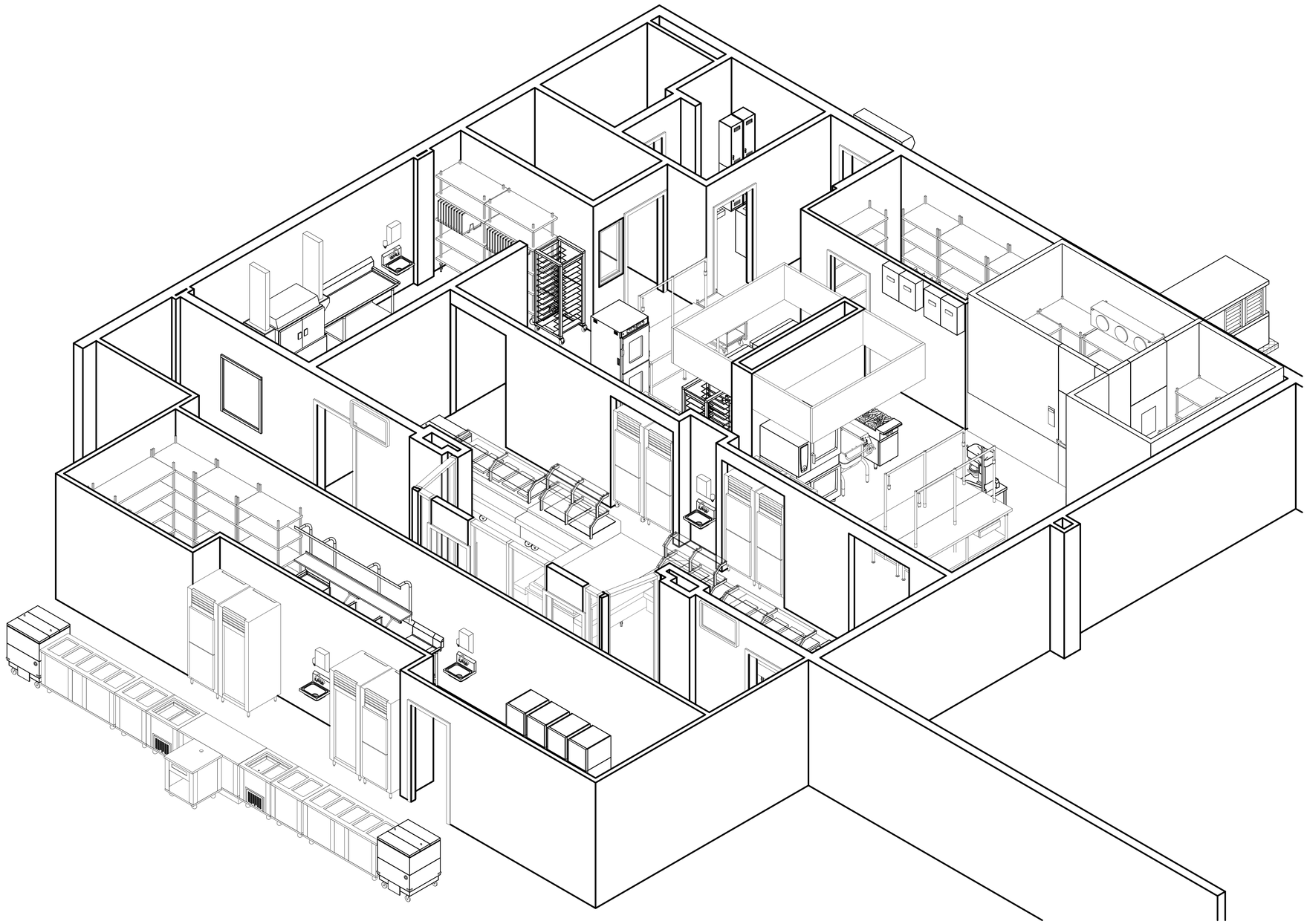
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FS EQUIPMENT PLAN

J-QF1.0

ISOMETRIC VIEWS WITHIN THIS DRAWING ARE NOT TO SCALE AND ARE PROVIDED FOR REFERENCE PURPOSES ONLY. ISOMETRIC VIEWS ARE NOT INTENDED FOR REGULATORY APPROVAL, PERMITTING, NOR CONSTRUCTION. REFER TO FLOOR PLANS AND DETAILS FOR SPECIFIC PROJECT INFORMATION.



1 FS FACILITY MODEL

ISSUE:

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MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THIS ITEM BEARING ON THIS SHEET WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/15/2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FS FACILITY MODEL

J-QF1.1

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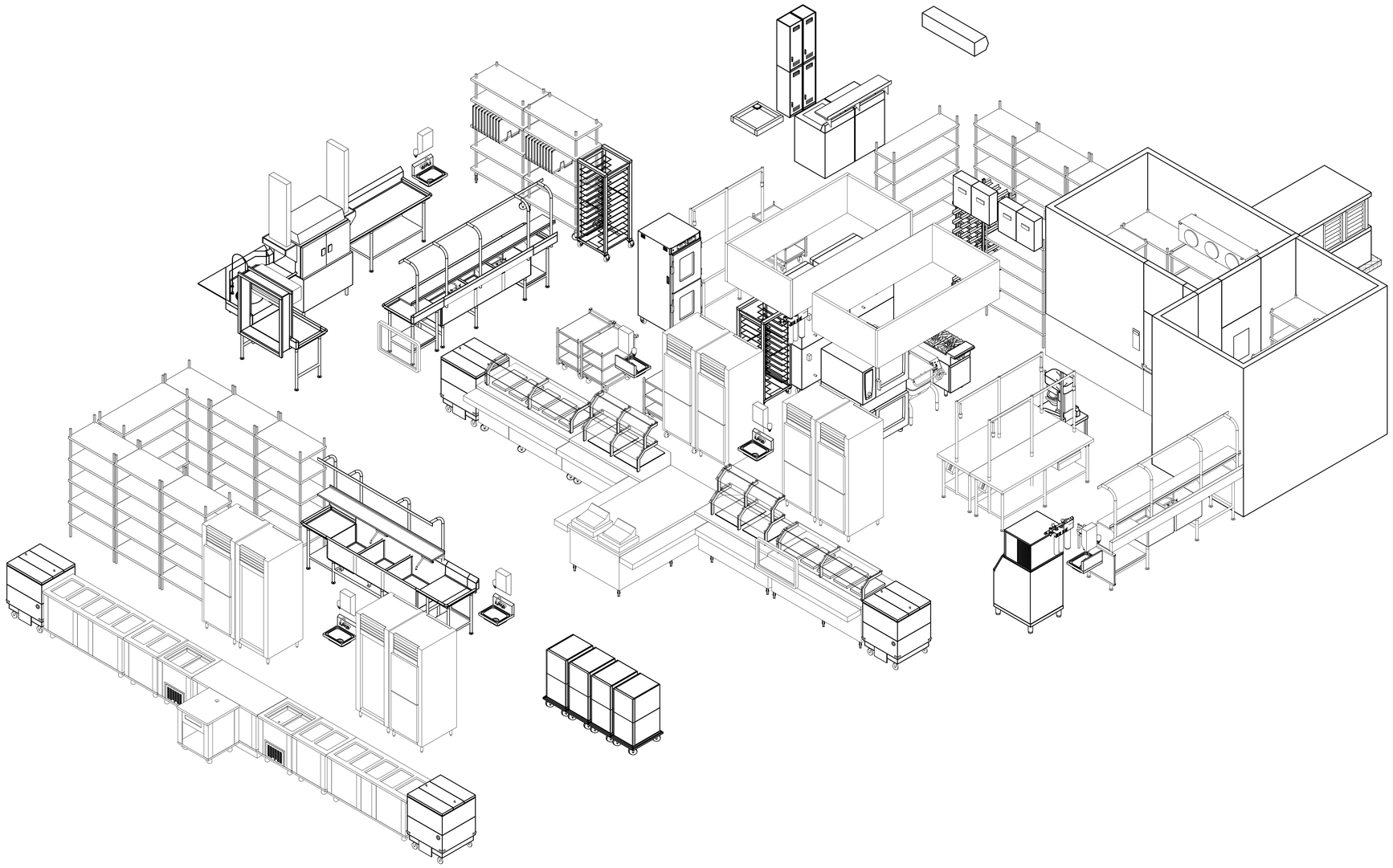

1 FS EQUIPMENT MODEL

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
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FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

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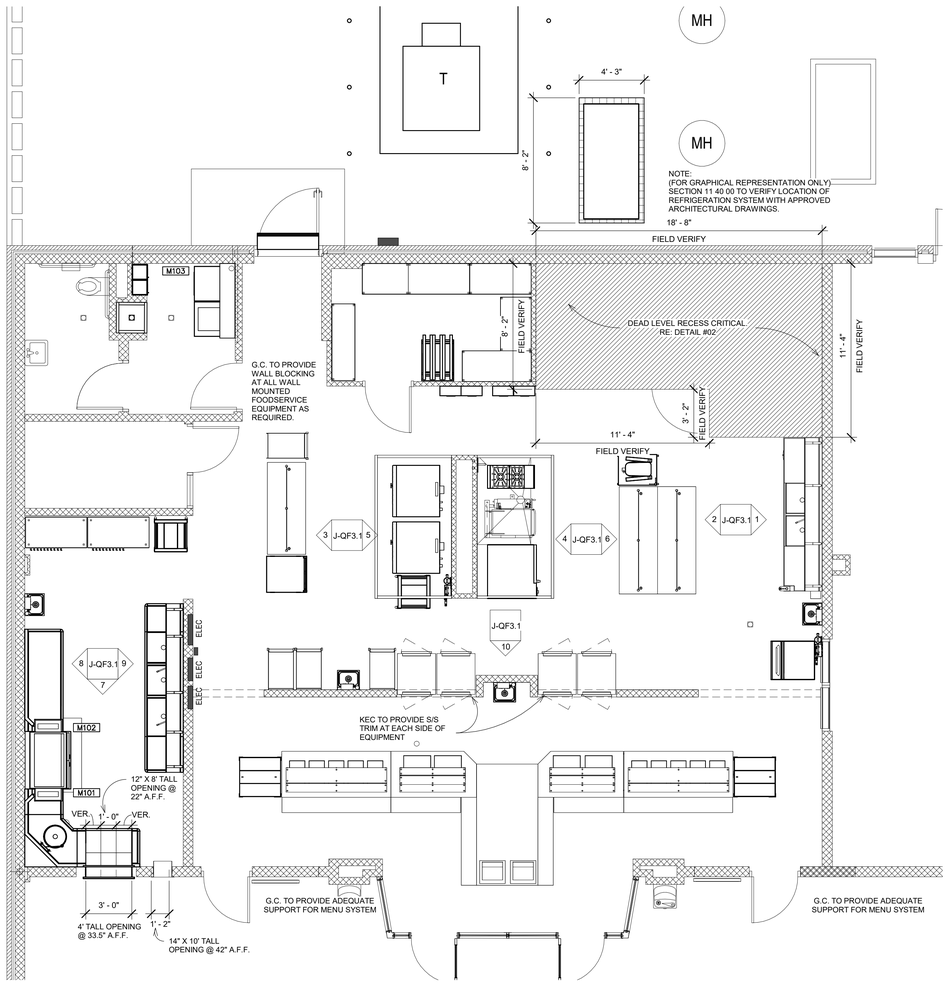
FS EQUIPMENT MODEL

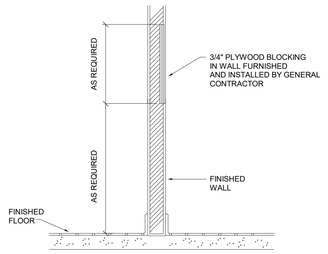
J-QF1.2

FOOD SERVICE MECHANICAL SCHEDULE						
REFER TO SHEET QF1 FOR MECHANICAL COORDINATION NOTES						
FDP NO.	FDP QTY	FDP TYPE	FDP SIZE	FDP LOC	FDP CFM	FDP S.P.
M101	1	EXHAUST	4" X 16"		400	0.30"
M102	1	EXHAUST	4" X 16"		800	0.30"
M103	1	DRYER VENT	6" DIA.		---	---



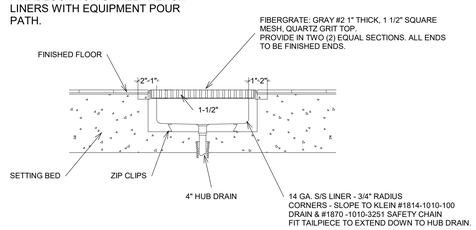
1 FOOD SERVICE SPECIAL CONDITIONS PLAN
1/4" = 1'-0"

NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION AND SIZE OF WALL BLOCKING.

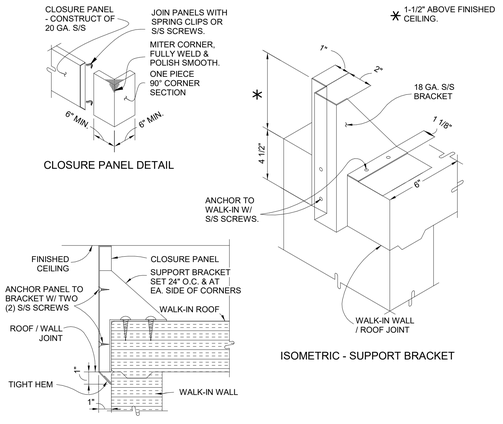


5 WALL BLOCKING DETAIL
NOT TO SCALE

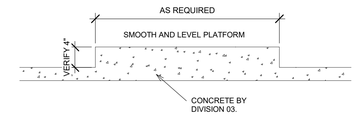
NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION OF ALL TRENCH LINERS WITH EQUIPMENT POUR PATH.



6 TRENCH LINER DETAIL
NOT TO SCALE

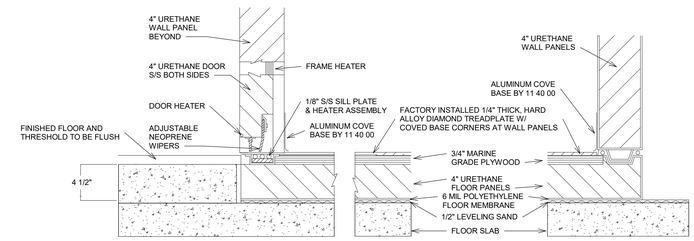


3 COLD STORAGE ASSEMBLY ENCLOSURE PANEL DETAIL
NOT TO SCALE



COLD STORAGE ASSEMBLY REFRIGERATION SYSTEM GROUND MOUNT 4" PLATFORM DETAIL
4 NOT TO SCALE

SLAB TO BE MODIFIED AS REQUIRED TO ALLOW FOR A 4 1/2" DEPRESSION SLAB. PROVIDE NEW LEVEL CONCRETE PAD FOR COLD STORAGE ASSEMBLY.



WALL SECTION @ EXTERIOR DOOR

2 COLD STORAGE ASSEMBLY 4 1/2" DEPRESSION DETAIL
NOT TO SCALE

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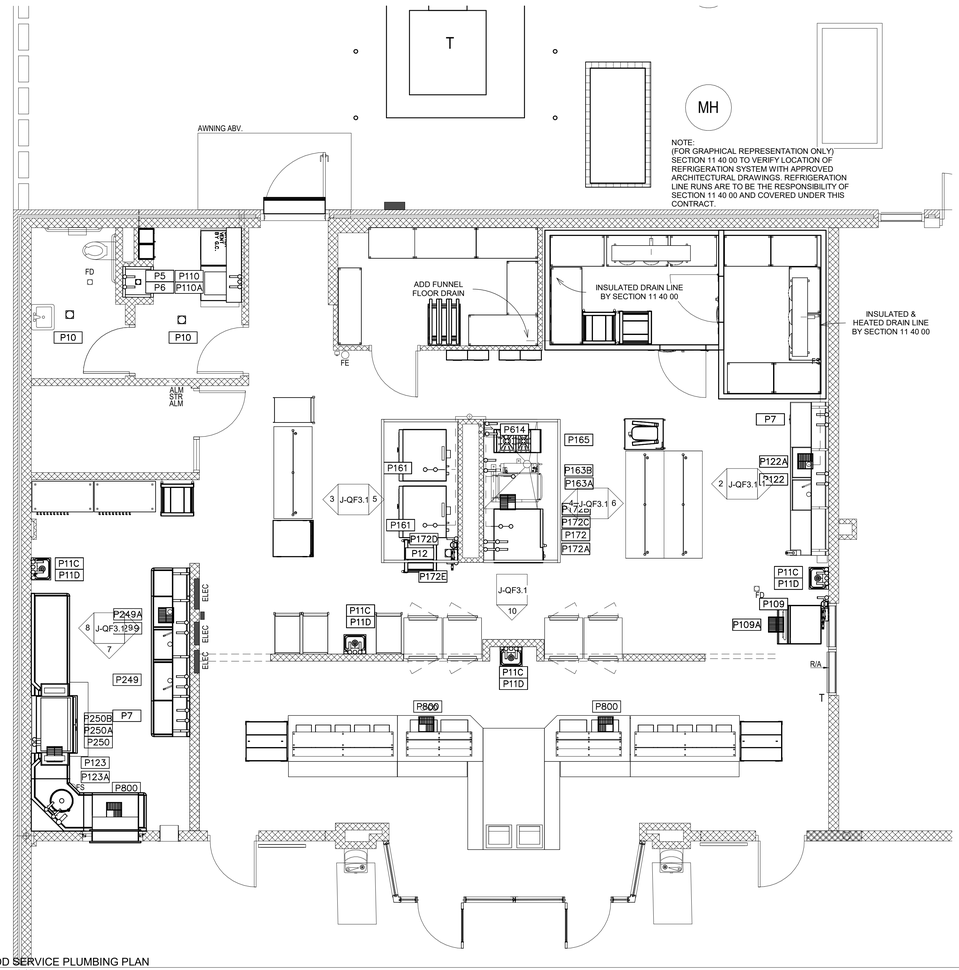
FS SPECIAL CONDITIONS & MECHANICAL PLAN

J-QF1.3

FOOD SERVICE PLUMBING SCHEDULE						
REFER TO SHEET QF1 FOR PLUMBING COORDINATION NOTES						
FDP PNO	FDP PSIZE	FDP PCONN	FDP PSERVICE TO	FDP PLOC	FDP PAFF	FDP PREMARKS
P5	3/4"	H & C WATER	JANITOR SINK	WALL	48"	JANITOR SINK BY PLUMBER
P6	4"	FLOOR DRAIN	JANITOR SINK	FLOOR	VERIFY	JANITOR SINK BY PLUMBER
P7	3/4"	H & C WATER	HOSE BIBB	WALL	18"	BTC
P10	VERIFY	FLOOR DRAIN	GENERAL AREA DRAIN	FLOOR	VERIFY	---
P11C	1/2"	H & C WATER	FAUCET	WALL	18"	FURNISHED & INSTALLED BY DIV. 22
P11D	1 1/2"	DIRECT DRAIN	HAND SINK	WALL	15"	FURNISHED & INSTALLED BY DIV. 22
P12	VERIFY	FLOOR DRAIN	EQUIP. DRAIN	FLOOR	VERIFY	NO SLOPE
P15	4"	FLOOR DRAIN	FUNNEL FLOOR DRAIN	FLOOR	0"	---
P109	3/4"	COLD WATER	WATER/ ICE	WALL	60"	BTC
P109A	12" SQ.	FLOOR SINK	ICE MACHINE	FLOOR	0"	FULL GRATE
P110	3/4"	H & C WATER	CLOTHES WASHER	WALL	48"	BTC; VALVE BOX
P110A	2"	INDIRECT DRAIN	CLOTHES WASHER	WALL	48"	VALVE BOX
P122	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P122A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	3/4 GRATE
P123	3/4"	H & C WATER	FAUCET / DISPOSER	WALL	13"	BTC
P123A	2"	DIRECT DRAIN	DISPOSER	WALL	10"	BTC
P161	(2)3/4"	NATURAL GAS	CONVECTION OVEN	WALL	18"/36"	BTC - 60 MBTU/HR EACH
P163A	3/4"	NATURAL GAS	TILT BRAISING PAN	WALL	18"	BTC - 65 MBTU/HR
P163B	3/4"	H & C WATER	TILT BRAISING PAN	WALL	36"	BTC
P165	1"	NATURAL GAS	RANGE	WALL	18"	BTC - 70 MBTU/HR
P172	(2)3/4"	COLD WATER	COMBI OVEN	WALL	24"/48"	BTC - INTERCONNECT THRU FILTERS
P172A	3/4"	COLD WATER	COMBI OVEN	WALL	48"	BTC
P172B	12"SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE
P172C	(2)3/4"	NATURAL GAS	COMBI OVEN	WALL	18"/36"	BTC - 105 MBTU/HR EACH
P172D	3/4"	COLD WATER	COMBI OVEN	WALL	66"	BTC; INTERCONNECT TO P172
P172E	3/4"	COLD WATER	COMBI OVEN WATER FILTER	WALL	66"	BTC
P249	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P249A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	THREE QUARTER GRATE
P250	12" SQ.	FLOOR SINK	BOOSTER / DISHMACHINE	FLOOR	18"	BTC
P250A	3/4"	HOT WATER	DISHMACHINE	WALL	18"	EXT. THRU W.FILTER TO BOOSTER / DISH MACHINE - 140DEG.MIN.
P250B	3/4"	COLD WATER	DISHMACHINE	WALL	18"	BTC
P614	1/2"	H & C WATER	FILL FAUCET	WALL	42"	BTC
P800	12" SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE



1 FOOD SERVICE PLUMBING PLAN
1/4" = 1'-0"

SECTION 11 40 00 TO PROVIDE LOOSE WITH FOOD SERVICE EQUIPMENT. INSTALLATION BY DIV. 22 & 26.

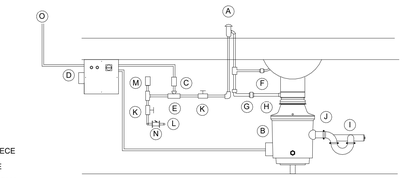
- (A) VACUUM BREAKER
- (B) DISPOSER
- (C) TIME DELAY
- (D) CONTROL PANEL
- (E) SOLENOID VALVE

DIVISION 22 TO PROVIDE AND INSTALL

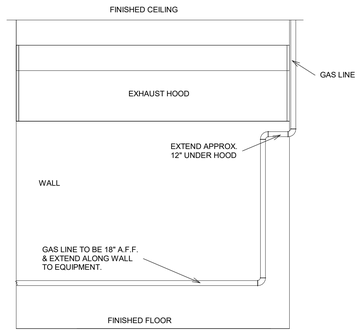
- (F) 1/2" CW INLET
- (G) FLOW CONTROL
- (H) 1/2" CW
- (I) 2" DRAIN LINE WITH P-TRAP & Y ADAPTOR
- (J) 1-1/2" TAILPIECE
- (K) GATE VALVE
- (L) 1/2" CW SUPPLY
- (M) SHOCK STOP
- (N) RPZ BACK FLOW PREVENTOR

DIVISION 26 TO PROVIDE AND INSTALL

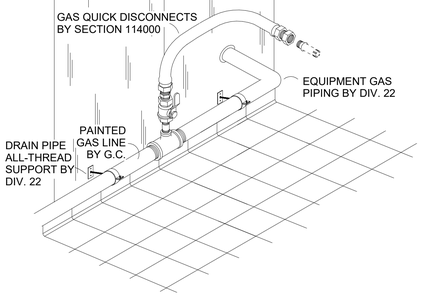
- (O) POWER SUPPLY



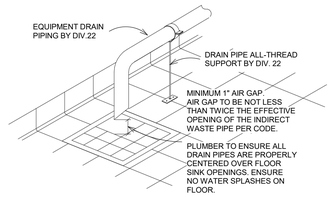
6 DISPOSER WITH VACUUM BREAKER DETAIL
NOT TO SCALE



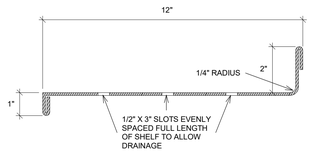
7 EXHAUST HOOD - GAS LINE ROUTING DETAIL
NOT TO SCALE



3 GAS DISCONNECT DETAIL
NOT TO SCALE



5 DRAIN PIPING FASTENER DETAIL
NOT TO SCALE



8 WAREWASH - PERFORATED OVER SHELF DETAIL
NOT TO SCALE

○	HW	HOT WATER	⊡	FFD	FUNNEL FLOOR DRAIN
○	CW	COLD WATER	◣	EVC	EXHAUST VENT CONNECTION
○	HTW	180 F HOT WATER	⋈	SVC	SUPPLY VENT CONNECTION
◎		CHILLED WATER	◔	FR	DIRECT-CONNECTED FLUE RISER
●	W	DIRECT WASTE	◍	PS	PIPE SLEEVE
○	IW	INDIRECT WASTE	⊙		COMPRESSED AIR
⊙		GAS SUPPLY	♦		CO2
◕		STEAM SUPPLY		AFF	ABOVE FINISHED FLOOR
⊗	CR	CONDENSATE RETURN		BTC	BRANCH TO CONN. ON EQUIP
◉	DR	DRAIN		DFA	DROP FROM ABOVE
□	FD	FLOOR DRAIN		CLG	CEILING
▟	FST	FLOOR SINK 3/4 GRATE			
▟	FSH	FLOOR SINK 3/4 GRATE			

2 PLUMBING SYMBOLS
NOT TO SCALE

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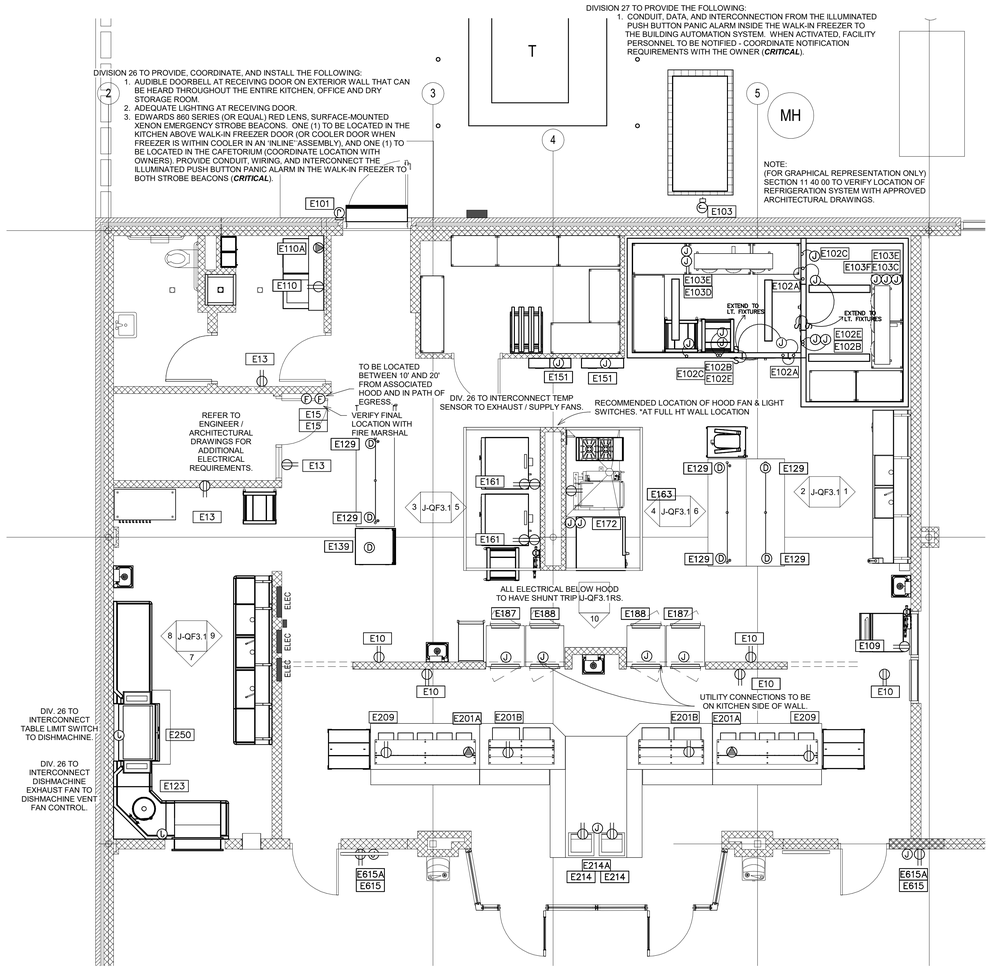
FS PLUMBING PLAN

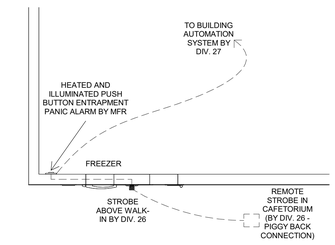
J-QF1.4

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E10	DR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E13	WPR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E15	JB	---	---	---	FIRE PROT. SYSTEM	WALL	48"	RECESSED EMPTY CONDUIT FOR FIRE PULL
E101	JB	5.1A	120	1	AIR SCREEN	WALL	82"	BTC; MAGNETIC REED SWITCH ON DOOR JAMB & DOOR
E102A	JB	16.0A	120	1	DOOR HEATER/LIGHTS	CLG	DFA	BTC
E102B	JB	5.0A	120	1	TEMP. ALARM	CLG	DFA	BTC
E102C	JB	5.0A	120	1	PRESSURE RELIEF PORT	CLG	DFA	BTC
E102E	JB	10.0A	120	1	PANIC ALARM BUTTON	CLG	DFA	BTC-INTERCONNECT TO STROBE LIGHT/HORN ABOVE FREEZER DOOR AND IN CAFETORIUM
E103	JB/DS	38.4A	208	3	REFRIGERATION SYSTEM	VERIFY	VERIFY	BTC - WEATHERPROOF DISCONNECT SWITCH
E103C	JB	13.7A	208	1	FREEZER COIL	CLG	DFA	BTC
E103D	JB	1.8A	120	1	COOLER COIL	CLG	DFA	BTC
E103E	JB	---	---	---	DATA CONNECTION	CLG	DFA	BTC; RUN TO NEAREST IDF / MDF ROOM
E103F	JB	16.0A	120	1	DRAIN LINE HEATER	CLG	DFA	BTC; DEDICATED CIRCUIT
E109	DR	11.9A	120	1	ICE MACHINE	WALL	60"	---
E110	DR	16.0A	120	1	CLOTHES WASHER	WALL	48"	--
E110A	SR	30.0A	208	1	CLOTHES DRYER	WALL	48"	VERIFY NEMA PLUG RECEPTACLE
E123	JB	3.0HP	208	3	DISPOSER	WALL	24"	BTC; CONNECT THRU C.P. TO DISPOSER

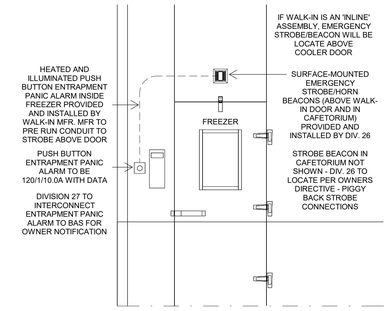
FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E129	DCR	16.0A	120	1	TABLE RECEPTACLE	CLG	84"	TWISTLOCK PLUG & RECEPTACLE
E139	DCR	15.0A	120	1	INSUL. MOBILE PROOFER	CEILING	DFA	--
E151	JB	1.0A	120	1	FIRE PROT. SYSTEM	CLG	DFA	BTC
E161	(2)DR	6.0A EA.	120	1	CONVECTION OVEN	WALL	24"/48"	SHUNT TRIP BREAKER
E163	DR	5.0A	120	1	TILT BRAISING PAN	WALL	24"	SHUNT TRIP BREAKER
E172	(2)JB	15.0A EA.	208	1	COMBI OVEN	WALL	24"/48"	BTC; RE: NOTE #4- SHUNT TRIP BREAKER
E187	JB	15.5A	120/208	1	HEATED CABINET	WALL	96"	BTC; MOUNT ON KITCHEN SIDE
E188	JB	7.2A	120	1	REFRIGERATOR	WALL	96"	BTC; MOUNT ON KITCHEN SIDE-OMIT PLUG, UNIT TO BE HARDWIRED
E201A	PMR	28.0A	208	1	HOT FOOD COUNTER	FLOOR	4.5"	BTC
E201B	PMR	16.0A	120	1	COLD FOOD COUNTER	FLR	4.5"	---
E209	PMR	8.0A	120	1	DROP FRONT MILK COOLER-8 CASE	FLR	4.5"	---
E214	PMR	16.0A	120	1	CASH REGISTER	FLR	4.5"	DEDICATED CIRCUIT
E214A	CS	---	---	---	POS	FLOOR	6"	BTC; CONDUIT W/DATA LINE TO RUN TO MANAGER'S OFFICE OR IDF ROOM-VERIFY
E250	JB/DS-JB	51.7A	480	3	DISHMACHINE	WALL	66"	BTC; EXTEND FROM JB/DS AT NEAREST WALL
E615	DR	5.0A	120	1	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE DCO AT VIDEO LOCATION
E615A	JB	---	---	---	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE JB AT DATA LOCATION

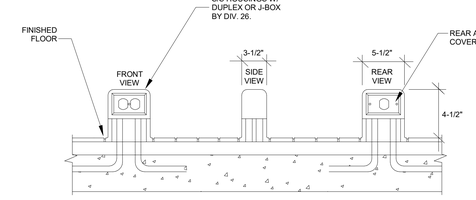


1 FOOD SERVICE ELECTRICAL PLAN
1/4" = 1'-0"

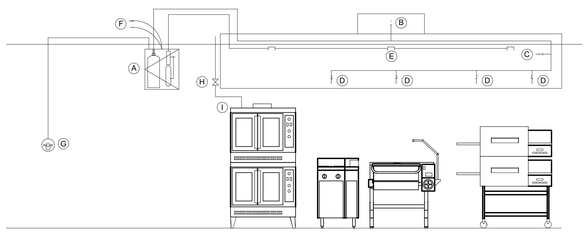


6 COLD STORAGE ASSEMBLY ENTRAPMENT PANIC ALARM DETAIL
NOT TO SCALE

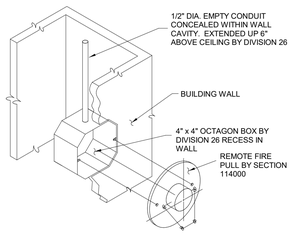




3 PEDESTAL MOUNTED RECEPTACLE DETAIL
NOT TO SCALE



4 FIRE PROTECTION SYSTEM TYPICAL DETAIL
NOT TO SCALE



5 FIRE PROTECTION SYSTEM RECESSED FIRE PULL DETAIL
NOT TO SCALE

	SCR	CONDUIT STUB BTC ON RECEPT FURNISH WITH EQUIPMENT		CC	CONDUIT FOR COMPUTER CABLES
•	CS	CONDUIT STUB UP/OUT FOR DIRECT CONNECTION		BTC	BRANCH TO CONNECTION ON EQUIPMENT
	DR	DUPLEX RECEPTACLE		WPR	WATERPROOF RECEPTACLE (SPRING COVER)
	SR	SINGLE PURPOSE RECEPTACLE-1PH		FPB	FIRE PROTECTION BUZZER
	SR	SINGLE PURPOSE RECPTACLE-3PH		BSC	BEVERAGE SYSTEM CONDUIT
	FR	FLUSH FLOOR RECEPTACLE		DFA	DROP FROM ABOVE
	PMR	PEDESTAL MOUNTED RECEPTACLE		AFF	ABOVE FINISH FLOOR
	DCR	DROP CORD RECEPTACLE		CS/JB	JUNCTION BOX ON PEDESTAL
	JB	JUNCTION BOX ON CEILING		SW	SWITCH
	JB	JUNCTION BOX IN WALL		D	DATA
	JB/DS	JUNCTION BOX WITH DISCONNECT BY DIV.26			

2 ELECTRICAL SYMBOLS
NOT TO SCALE

ISSUE:

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07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
DOCUMENT ADMINISTRATIVELY AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/15/2025

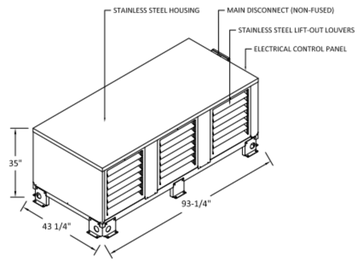
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FS ELECTRICAL PLAN

J-QF1.5

MODEL NO. ZS1-02Z-CT3-EST OUTDOOR AIR COOLED REFRIGERATION SYSTEM
ITEM NO. 103



NOTE:
- CRANKCASE HEATERS
- FAN CYCLING SWITCH
- COATED CONDENSERS
- HEADMASTER CONTROLS
- (2) DOOR SENSORS (SHIPPED LOOSE)

RACK WEIGHT: 775 LBS.

ENGINEERING SUMMARY

POWER SUPPLY: 208-230/60/3
CONNECTED LOAD: 38.4 AMPS

MOPD: 65 AMP
MINIMUM CIRCUIT AMPACITY: 44.4

SYSTEM	FIXTURES: ITEM #	DESCRIPTION	TEMP °F: FIXT.	TEMP °F: SUCT.	REQ'D FIXTURE BTU/H	REFRIG. R-	CONDENSING UNIT: COMPRESSOR: MODEL NO.	RATING @ 60 HZ: RLA	V	PH	BTU CAP @ AMB °F: 110	TYPE	REC. CAP. (lbs)	CONDENSER	EVAPORATOR COILS: ITEM #	MODEL NO.	QTY	FAN MOTORS @ 60 HZ: RLA	V	PH	HEATERS @ 60 HZ: RLA	V	PH	DEFR. TYPE	DEFROST CONTROLLER TYPE	CONTROLLER QTY	ACCESSORIES: TSTAT	SOL. VALVE	EXP. V.LV.	CHECK V.LV.	SHUT-OFF V.LV.	REFRIGERANT LINE SIZES (IN): SUCT.	SUCT. LINE RISER	LIQUID	LINE RUN (FT)	TYPE	TOTAL SYSTEM LOAD
A	102	W/I COOLER	35	25	16420	454A	YS17KSE	10.6	208	3	20000	Z	14.0	L1R	103	BEL0155	1	2.7	115	1				O.C.	ECOSMART	1	F	F	EF	L	L	7/8	7/8	3/8	100	M	10.6
B	102	W/I FREEZER	-10	-20	16521	454A	YF19KAE	27.8	208	3	20600	Z	44.0	L5R	103	BEL0170	1	2.0	208	1	18.3	208	1	ELEC	ECOSMART	1	F	F	EF	L	L	1-1/8	1-1/8	3/8	100	M	27.8

ALL EVAPORATOR COILS WILL REQUIRE A HOUSE POWER SUPPLY

c UL us LISTED

NOTE:
IT IS THE INSTALLING CONTRACTORS RESPONSIBILITY TO FOLLOW ALL APPLICABLE CODES AND CURRENT REFRIGERATION INDUSTRY STANDARDS AND PRACTICES WHEN DETERMINING LINE SIZES, AND INSTALLING AND STARTING UP RDT EQUIPMENT.

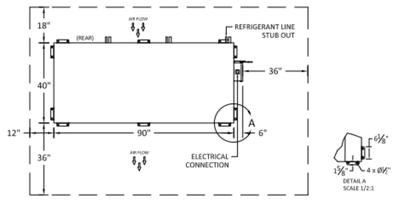
COMPRESSOR TYPE
Z SCROLL
H HERMETIC
S SEMI-HERMETIC
D DISCUS

DEFROST TYPE
O.C. OFF CYCLE
ELEC ELECTRIC

LINE TYPE
M MAIN - UP TO 100'
B BRANCH - UP TO 50'
T TRUNK - UP TO 200'

EVAPORATOR ACCESSORIES
EF EEV FACTORY EQUIPPED ON EVAP
TF TXV FACTORY EQUIPPED ON EVAP
F FACTORY EQUIPPED ON EVAP
O PROVIDED BY OTHERS
L LOOSE (FIELD INSTALLATION)

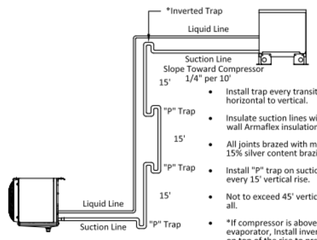
PLANVIEW/ CLEARANCE REQUIREMENTS



NOTE: MINIMUM CLEARANCE REQUIRED FOR PROPER OPERATION

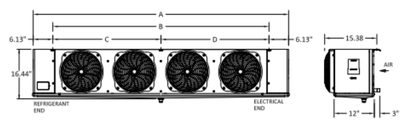
NOTE: ROOF CURB OR GROUND PAD CAN BE SAME SIZE AS OUTDOOR UNIT

SUCTION LINE VERTICAL RISE DETAIL



- Install trap every transition from horizontal to vertical.
- Insulate suction lines with 3/4" wall Armaflex insulation.
- All joints brazed with minimum 15% silver content brazing rod.
- Install "P" trap on suction line every 15' vertical rise.
- Not to exceed 45' vertically over all.
- *If compressor is above the evaporator, Install inverted trap on top of the rise to prevent oil from seeping down when fixture(s) is turned off.

EVAPORATOR DETAILS - MODEL BEL



AIR DEFROST Size	DIMENSIONS A	B	C	D	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps 115V	208V
	Inches	Inches	Inches	Inches							
155	61-1/2	49-3/4	-	-	1/2 OD	7/8 OD	3/4 MPT	67	3	2.7	1.5

ELECTRIC DEFROST	DIMENSIONS A	B	C	D	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps	Heater Amps as wired for 208-230/60/1	208-230/60/3	460/60/3
	Inches	Inches	Inches	Inches									
170	77-1/2	65-1/4	-	-	1/2 OD	7/8 OD	3/4 MPT	91	4	2.0	18.3	11.4	9.1

EACH EVAPORATOR COIL:
- EQUIPPED WITH TWO LEAK SENSORS, PRE-MOUNTED AND PRE-WIRED
- SUPPLIED WITH A LIQUID LINE SHUT-OFF VALVE AND SUCTION LINE CHECK VALVE, SHIPPED LOOSE FOR FIELD INSTALL OUTSIDE OF COMPARTMENTS AND NO MORE THAN 10' FROM EVAPORATOR COIL.

ZS SERIES ENGINEERING SPECIFICATIONS

Multi compressor, outdoor, air cooled. The refrigeration package shall be a pre-engineered and factory-assembled unit, trade name "ZS", as manufactured by Refrigeration Design Technologies, 1808 FM Road 66, P.O. Box 622, Waxahachie, Texas 75168. Phone: (972) 937-3215; Fax: (972) 937-0970.

1. Air-Cooled Refrigeration System
The RDT UL Listed "Air-Cooled" Refrigeration system shall be housed in a weather-protected compact powder coated steel frame. The entire housing shall be brushed stainless steel. The unit shall include an air-cooled aluminum fin copper tube condenser designed to operate at 15 degrees TD. The exterior housing shall feature stainless steel one piece louvers. Lifting points shall be integrated in the framing component. Condenser fan motors shall be mounted within the enclosure. The condenser intake surface shall be protected with stainless steel expanded metal guard to protect against vandalism and hail damage.

Each unit shall be equipped with a ball-bearing fan motor, suction filter, sight glass, liquid filter/drier, liquid line inlet and outlet valve, defrost cycle and high pressure super-hose connections. Each unit shall be equipped with fan cycling controls and/or head pressure regulator where required for low ambient conditions.

Condensing unit shall contain scroll, hermetic, semi-hermetic, and/or discus type compressor(s) assembled to operate with the refrigerant specified for both medium and low temperature applications.

2. Evaporator Coils
A. Evaporator coils shall be direct expansion type fabricated of copper tubes with aluminum fins.
B. All evaporator coils shall be provided with solenoid valve, thermostatic or electronic expansion valve and thermostat.

3. Pre-Piping
All refrigerant lines shall be extended to outside of the housing in a neat and orderly manner. All tubing shall be securely supported and anchored with non-corrosive coated clamps.

All joints must be brazed, not soldered.

All piping and controls shall be factory pressure-tested with dry nitrogen.

4. Control Panel
The package shall have a factory-mounted and pre-wired control panel, with main disconnect (non fused) where required, circuit breakers, contactors wired for single point power connection.

General Information
Contractors shall verify all dimensions onsite and coordinate with other trades.

General contractor shall prepare the platform, curbed openings and weatherproofing the unit after installation.

Refrigeration Contractor
All copper tubing to be refrigerant grade. A.C.R. or type "L".

Brazing should be used for all refrigerant piping. Silver solder or soft solder is not acceptable.

All piping to be pressure tested with nitrogen at 300 psi. After the condensing unit and coil have been connected the balance of the system shall be leak tested with the valves open at 200 psi.

The complete system shall be evacuated with a vacuum pump. Each unit should be charged tested and adjusted to assure operation.

Contractor should provide and install the drain-line heater in freezer. Heater shall be connected by electrical contractor. Seal all penetrations through the walk-in units with foam.

Electrical Contractor
Electrical contractor to provide power for refrigeration package and connect control and defrost system as called for in the wiring diagram.

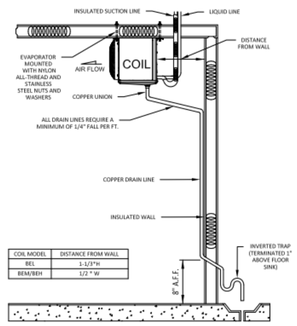
Electrical contractor to connect drain-line heater in the freezer.

All electrical wiring and installation shall be in accordance with the wiring diagram and local codes. Seal all penetrations through the walk-in units with foam.

Plumbing Contractor
Plumbing contractor to provide copper drain lines for walk-in refrigerator and freezer, pitched 1/4" per foot of run. Trap drain-line outside of refrigerated space to avoid entrance of warm, moist air.

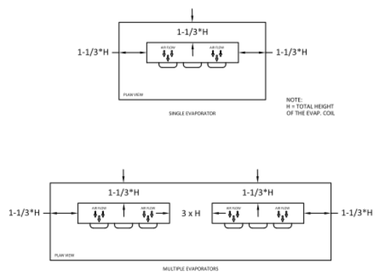
All plumbing installation shall be in accordance with local codes.

EVAPORATOR MOUNTING DETAIL (TYPICAL)



COIL MODEL	DISTANCE FROM WALL
BEL	1-1/3"H
BEM/BEH	1/2 " W

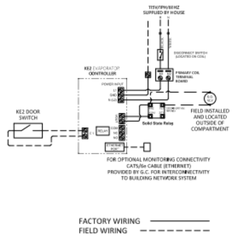
EVAPORATOR PLACEMENT & CLEARANCE REQUIREMENTS LOW PROFILE EVAPORATOR COILS (I.E. - BEL)



WIRING DIAGRAM - ECOSMART - AKEA1AE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN COOLER WITH ONE COIL 115/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW:

ITEM	DESCRIPTION	VOLTAGE
103	W/I COOLER	115/1

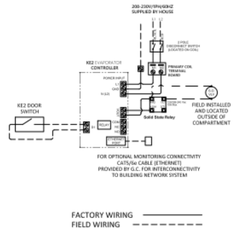


FACTORY WIRING ———
FIELD WIRING - - - - -

WIRING DIAGRAM - ECOSMART - AKEB1EE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN FREEZER WITH ONE COIL 208-230/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW:

ITEM	DESCRIPTION	VOLTAGE
103	W/I FREEZER	208/1



FACTORY WIRING ———
FIELD WIRING - - - - -

APPROVAL STATUS

THIS DRAWING REPRESENTS OUR UNDERSTANDING OF THE SPECIFICATIONS. PLEASE REVIEW IT CAREFULLY FOR ACCURACY. CLEARLY AND IN DETAIL NOTE CHANGES REQUIRED.

MARK APPROPRIATE BOX, SIGN, AND DATE BELOW.

☐ APPROVED FOR FABRICATION NO CHANGES
☐ APPROVED FOR FABRICATION WITH CHANGES NOTED
☐ REVISE AND RE-SUBMIT DRAWING

BY: _____ DATE: _____

NOTICE

THIS DRAWING BEING AN INSTRUMENT OF SERVICE IS AND WILL REMAIN PROPERTY OF REFRIGERATION DESIGN TECHNOLOGIES AND CANNOT BE USED WITHOUT WRITTEN AUTHORIZATION.

No.	Revision/Issue	Date
0	ORIGINAL ISSUE	3/31/22
1	CHANGES PER NEW MOUNTING LOCATION AND CONDENSER REQUIREMENTS	1/27/25
2	A2L COMPLIANT	7/16/25

REFRIGERATION DESIGN TECHNOLOGIES
1808 FM Road 66 / P.O. Box 622
Waxahachie, Texas
(800) 736-9518
www.rdtonline.com

Consultant:
Foodservice Design Professionals
The Woodlands, TX

Dealer
-
-

Highland Hills Elementary School
San Antonio, TX

Project No: 27251
Designed By: L. Aguirre
Drawn By: L. Aguirre

Sheet 1.1 of sheets

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

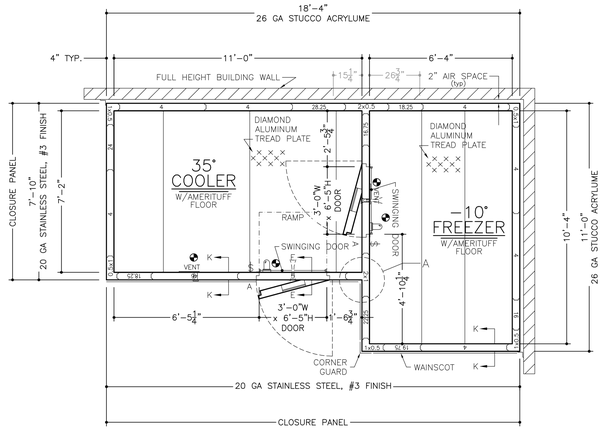
SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
FCSI 48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ITEMS APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/15/2025

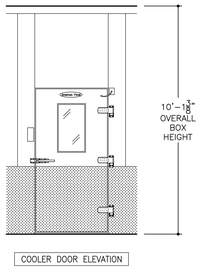
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

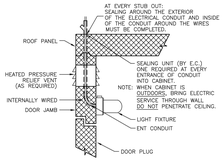
FS CONDENSING UNITS

J-QF1.6

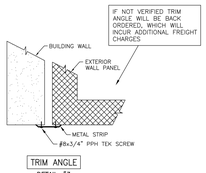




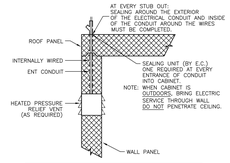
COOLER DOOR ELEVATION



DOOR ELECTRICAL CONNECTION



TRIM ANGLE
DETAIL #3



PANEL MOUNTED ELECTRICAL CONNECTION

~SPECIFICATIONS~

BOX HEIGHT: FREEZER – 10'-2" OVERALL (7'-6 1/4" INTERIOR)
COOLER – 10'-2" OVERALL (7'-6 1/4" INTERIOR)

CONSTRUCTION: FOAMED IN PLACE
NSF LISTED, STANDARD NO. 7

INSULATION: 4" URETHANE, FINISHED PANEL
UL CLASSIFIED FLAME SPREAD 20
CORE SMOKE DEVELOPED 250

INSTALLATION: INDOOR

FLOOR: (SEE DETAILS)
FREEZER – STANDARD W/AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE,
3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)
COOLER – STANDARD W/36" DEEP INTERIOR RAMP & AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE,
3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)

DOOR HARDWARE & ACCESSORIES: (EACH DOOR)
SMOOTH POLISHED DOOR HARDWARE
POWER TO BE STUBBED OUT CEILING PANEL
DRY CONTACT LEADS TO BE STUBBED OUT CEILING PANEL IN A SEPARATE STUB OUT
DEADBOLT HANDLE W/KEYED CYLINDER LOCK, PADLOCK
PROVISION & QUARTER TURN INSIDE RELEASE (EXTERIOR DOOR ONLY)
1/8" STAINLESS STEEL THRESHOLD COVER PLATE
14 GA STAINLESS STEEL SUB THRESHOLD
FRAME HEATER WIRE
HYDRAULIC DOOR CLOSER
IC+ WALK-IN DOOR CONTROLLER AND ALARM SYSTEM INCLUDING:
INTEGRATED LIGHT SWITCH WITH AUTOMATIC LIGHT OFF AND 3-WAY & 4-WAY CAPABILITY
TEMPERATURE MONITOR AND LOGGER WITH HIGH TEMP. AND LOW TEMP. VISUAL AND AUDIO ALARM
F OR C TEMPERATURE SELECTION
INTEGRATED DRY CONTACT FOR ALARM SIGNALING & POWER FAILURE (1A @ 24VAC, 1A @ 30VDC)
DOOR AND WINDOW HEATER CONTROL (WHEN SO EQUIPPED)
HACCP PREVIEW VIA ONBOARD LCD SCREEN
HACCP DOWNLOAD VIA USB
WIFI CONNECTIVITY (INTERNET ENABLED WIFI NETWORK NEEDED)
BATTERY BACKUP
TEMPERATURE ALARM NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES
POWER FAILURE NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES
(FOR THIS FEATURE TO WORK THE LOCAL WIFI NETWORK MUST BE
POWER PROTECTED AND WORKING AT THE TIME OF POWER FAILURE EVENT)
AUTOMATIC AND ON DEMAND TRANSMISSION OF HACCP DATA VIA EMAIL
ADAPTIVE SETTINGS
MOMENTARY BACK-TO-BACK LIGHT SWITCH W/PILOT
25' AIR TEMPERATURE PROBE
25' SECOND PROBE (EXTENDED) FOR MONITORING THE TEMPERATURE AT
A SECOND LOCATION OR FOR MONITORING A SECOND CABINET
DOOR SWITCH TO ENABLE DOOR AJAR ALARM, DOOR AJAR NOTIFICATION VIA EMAIL &/OR
EMAIL TO SMS TEXT MESSAGES, AND AUTOMATIC LIGHTS ON WHEN DOOR OPENS
PANIC ALARM WITH ILLUMINATED PANIC BUTTON, ALARM BUZZER WITH LED,
& NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES (1-COOLER, 2-FREEZER)
KASON SCREW-IN VAPOR PROOF LIGHT FIXTURE
W/8.5 WATT SYLVANIA LED BULB & GLOBE
CCI CLEAR VU SWINGING DOOR
3 – KASON #1346 ADJUSTABLE SPRING LOADED HINGES
HEATED VISION WINDOW (14" x 24")
1/8" DIAMOND ALUMINUM TREAD PLATE KICKPLATES @ 36" HIGH I/S & O/S DOOR & FRAME
KASON 1826 INTELLO-VENT WITH LIGHTS (FREEZER DOOR ONLY) – FIELD INTERCONNECTION REQUIRED

PANEL MOUNTED ACCESSORIES:
1 – KASON 1826 INTELLO-VENT WITH LIGHTS – FIELD INTERCONNECTION REQUIRED
(FOAMED IN PANEL – PER PLAN) (COOLER ONLY)

ACCESSORIES: (SHIPPED LOOSE)
2 – PCS. TRIM ANGLE – 18 GA STAINLESS STEEL, #3 FINISH
CLOSURE PANEL TO AN EXISTING CEILING (PER PLAN) — **VERIFY LENGTH**
18 GA STAINLESS STEEL, #3 FINISH
2 – 48" (1810LC) LED LIGHT FIXTURE(S) @ 40W EACH (LIGHTS TO BE INSTALLED PERPENDICULAR TO COILS)
1/8" DIAMOND ALUMINUM TREAD PLATE WAINSCOT @ 36" HIGH (EXPOSED EXTERIOR ONLY)
1 – 1/8" DIAMOND ALUMINUM TREAD PLATE CORNER GUARD(S) @ 36" HIGH
ALUMINUM COVED BASE MOLDING (COMPLETE INTERIOR ONLY)
ROOF SUPPORT ANGLE W/SEALITY TRIM
2 – BAKELITE LABEL(S) (BLACK) ("FREEZER", "COOLER")
1 – BAKELITE LABEL (YELLOW W/BLACK LETTERING) ("VACUUM PRESSURE RELIEF")
6 MIL POLYETHYLENE VAPOR BARRIER
5 – BELL BOX(ES) & COVER PLATE(S)
2 – DOOR STOP(S)
2 – EDWARDS 860 SERIES STROBE BEACONS
1 – EMERGENCY PRESSURE RELEASE

METAL FINISHES: INTERIOR & EXTERIOR DOOR & FRAME – 18 GA STAINLESS STEEL, #3 FINISH
INTERIOR WALLS & CEILING – WHITE .040 STUCCO ALUMINUM
EXPOSED EXTERIOR – 20 GA STAINLESS STEEL, #3 FINISH
UNEXPOSED EXTERIOR – 26 GA STUCCO ACRYLUME
EXTERIOR FLOOR – 26 GA STUCCO ACRYLUME
EXTERIOR ROOF – 26 GA STUCCO ACRYLUME
INTERIOR FLOOR – AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE,
3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)

REFRIGERATION: BY OTHERS

NOTE: THE LARGEST DOOR PANEL ON THIS JOB IS 57.5" x 114.5".
NOTE: THE LARGEST ROOF/FLOOR PANEL ON THIS JOB IS 46.5" x 129".
CUSTOMER IS TO VERIFY THAT THIS PANEL SIZE WILL NOT CONFLICT WITH ANY JOB SITE RESTRICTIONS.

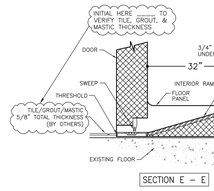
NOTE: CUSTOMER IS TO VERIFY ALL DIMENSIONS, SECTIONS, DETAILS AND SPECIFICATIONS.

NOTE: MAXIMUM LIGHT CIRCUIT LOAD IS 1200W 120VAC TUNGSTEN, 5A 120VAC ELECTRONIC BALLAST. FOR HIGHER LOADS ADDITIONAL LIGHT FIXTURES MUST BE CONTROLLED VIA RELAY (BY OTHERS).

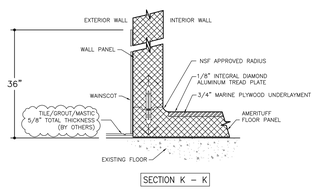
ELECTRICAL DATA
⏚ = POINT OF ELECTRICAL CONNECTIONS.
WALK-IN DOORS: 115v/1ø – 350w*
PANEL MOUNTED ACC: 115v/1ø – 23w (EACH VENT)

*NOTE: ADD WATTAGE FOR EACH ADDITIONAL LIGHT FIXTURE IN ACCESSORIES.

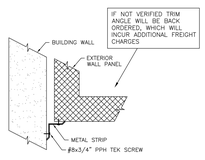
ITEM #102 WALK-IN COOLER/FREEZER



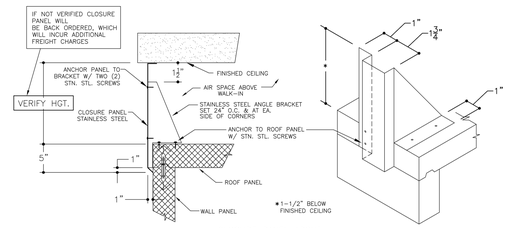
SECTION E – E



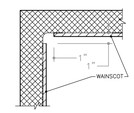
SECTION K – K



TRIM ANGLE
DETAIL #2



CLOSURE PANEL ABOVE WALK-IN DETAIL #4E



DETAIL "A" WAINSCOT AT INTERIOR CORNER

American Panel's walk-in floor panels with AmeriTuff structural support are designed to withstand uniformly distributed stationary loads of 15,000 lbs. per square foot. American Panel's warranty does not cover damage caused by pallet jacks, forklifts or any other form of heavy-duty rolling traffic. A concrete wearing floor must be installed on top of the AmeriTuff walk-in floor panels for those rolling applications.

INSULATION R-VALUES		
PANEL TYPE	COOLER	FREEZER
4" WALLS, ROOFS	R-29	R-32
5" WALLS, ROOFS	R-36	R-40
FLOORS	R-25	R-28
DOORS	R-32	

COOLER DOOR	
DOOR FRAME KWHr/DAY	2.424

FREEZER DOOR	
DOOR FRAME KWHr/DAY	4.392

WALK-IN PANEL R-8967		
BUILDING UNITS	R-8967	37M2
USA		
SURFACE BURNING CHARACTERISTICS		
MATERIAL DETAILS	"FLAME SPREAD"	"SMOKE DEVELOPED"
ALUMINUM PANELS, PAINTED OR UNPAINTED, 5" OR LESS	15	350
"GALVANIZED STEEL OR STAINLESS STEEL PANELS, PAINTED OR UNPAINTED, 5" OR LESS"	10	400 TO 500
CORE MATERIAL, 6" THICK	20	250

AMERICAN PANEL WALK-IN COOLERS AND FREEZERS COMPLY WITH THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC), SECTION C403.11

THIS AMERICAN PANEL WALK-IN WILL BE MANUFACTURED TO UL & NSF REQUIREMENTS. AMERICAN PANEL ACCEPTS NO LIABILITY FOR LOCAL CODE REQUIREMENTS OF WHICH AMERICAN PANEL HAS NOT BEEN MADE AWARE OF IN WRITING PRIOR TO FABRICATION.

1) Please verify that door swing and location are correct.

2) If this walk-in is to be installed in a depression, or quarry tile is to be applied to the interior, depression depths or tile thickness must be specified to insure proper door height.

3) All site preparation, floor or slab construction, plumbing, electrical connections (including control wiring) by others.

4) ⏚ Electrical: 115-60-1 required above latch side of each door, through ceiling, to operate frame heater and light.

5) Special note to General Contractor and his Sub Contractor for quarry tile or concrete wearing floors: the sheet metal panel facings may be susceptible to staining due to excessive moisture created by hydration of concrete type materials. Therefore, it is absolutely necessary that each room be properly ventilated. Also note that special precautions must be taken when using muriatic acid due to effects hydrochloric acid fumes have on aluminum and stainless steel.

6) This drawing and information contained herein are the exclusive property of American Panel Corporation. It shall be returned to American Panel Corporation upon demand and shall not be reproduced in whole or part, disclosed to anyone else, or used without the written consent of American Panel Corporation.

☐ APPROVED
☐ APPROVED AS NOTED
☐ REVISE & RESUBMIT
SIGNATURE _____
PRINT NAME _____
DATE _____

REV.	DATE	DESCRIPTION	REV. BY	CHK'D BY
A	1/22/25	REVISED LAYOUT, SPECS; ADDED DETAIL	DH	WQ

American Panel — AMERICAN PANEL CORPORATION
5800 S.E. 78th St. Ocala, Florida 34472
Ph. (352) 245-7055 Fax (352) 245-0726

CUSTOMER: FOODSERVICE DESIGN PROFESSIONALS
PROJECT: HIGHLAND ES-FBISD – FORT BEND, TX
DATE: 10/7/24 | DRAWN BY: LC/TR | P.O.#:
SCALE: 3/8"=1'-0" | PROPOSAL#: PD213252 | JOB#: | SHEET: 1 of 1

ALL DIMENSIONS MUST BE FIELD VERIFIED PRIOR TO FABRICATION AND INSTALLATION

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FDP
FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL
CONSERVICE CONSULTANTS
MELISSA MOORE
FCSI
488584119
SOCIETY INTERNATIONAL
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THIS DOCUMENT APPEARING ON THIS SHEET WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 488584119 ON: 07/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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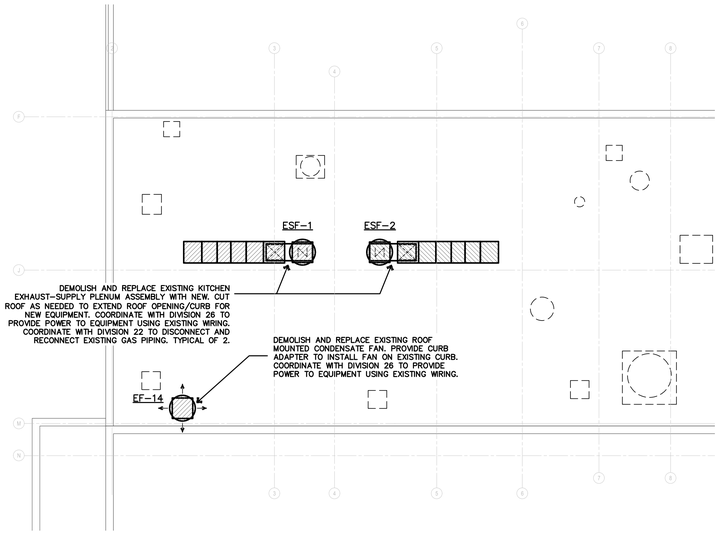
FS WALK-INS

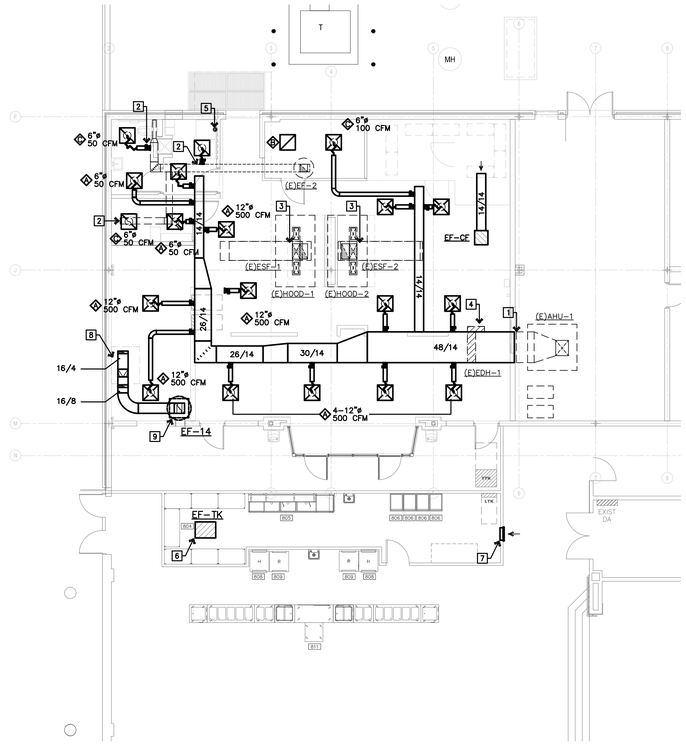
J-QF1.7



3 MECHANICAL ROOF FLOOR PLAN

SCALE: 1/8" = 1'-0"

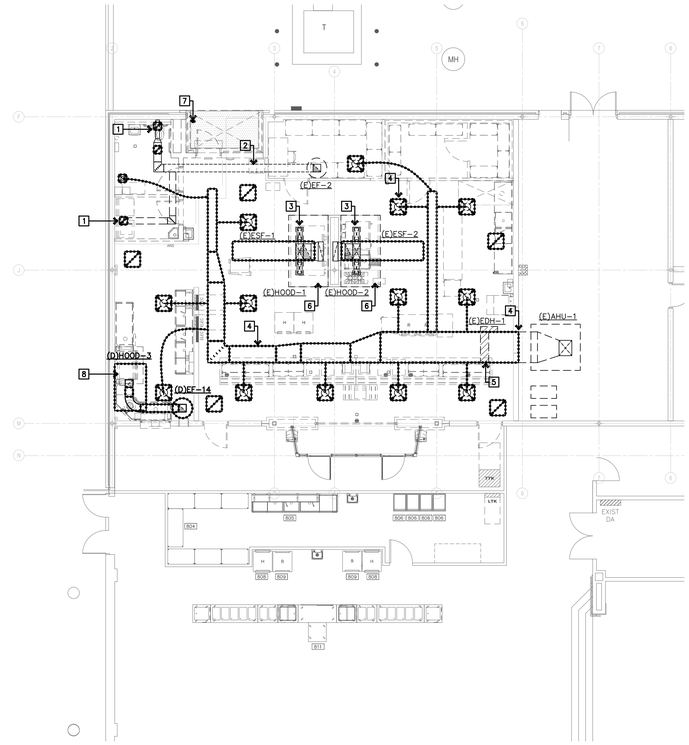
NORTH



2 RENO MECHANICAL FLOOR PLAN - KITCHEN AREA

SCALE: 1/8" = 1'-0"

NORTH



1 DEMO MECHANICAL FLOOR PLAN - KITCHEN AREA

SCALE: 1/8" = 1'-0"

NORTH

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A	CEILING DIFFUSER – 24" X 24" FACE, PATTERN TYPE, STEEL CONSTRUCTION, OBD/RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE SCD A1–12" X 12"
B	CEILING RETURN GRILLE – 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE PDFR B1–12" X 12"
C	CEILING EXHAUST GRILLE – 24" X 24" PERFORATED FACE, STEEL CONST., OBD/RADIATION DAMPER, WHITE FINISH, NECK SIZE SHOWN, U.L. LISTED PRICE PDDR C1–12" X 12"

NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPES FOR AIR DEVICES.

KITCHEN HOOD REFURBISHMENT NOTES

HOOD REFURBISHMENT FOR KITCHEN HOODS (QUANTITY 2):

- STEAM WASH AND DEEP CLEAN STAINLESS STEEL HOOD ASSEMBLY, CASING, AND SUPPLY GRILLES WHERE APPLICABLE.
- REPLACE GREASE FILTER RACKS.
- CLEAN EXISTING MAKE-UP AIR AND GREASE EXHAUST DUCT.
- RELAMP EXISTING LIGHT FIXTURES WITH NEW 4000K BULBS LISTED FOR USE IN AN ENCLOSED KITCHEN HOOD FIXTURE.
- COORDINATE WITH DIVISION 11 FOR REPLACEMENT OF ANSUL FIRE SUPPRESSION SYSTEM.
- HOOD ASSEMBLIES SHALL BE CLEANED TO MEET THE STANDARDS ESTABLISHED IN NFPA STANDARD 96.

KITCHEN HOOD EXHAUST & MAKE-UP AIR UNIT SCHEDULE

MARK	ESF-1,2
SERVES	KITCHEN HOOD-1 & 2
SUPPLY SECTION	
TYPE	INDIRECT GAS-FIRED MAKE-UP AIR UNIT
DRIVE	DIRECT
SPEED CONTROL	VFD
SUPPLY CFM	2250
EXT. S.P. (IN. W.G.)	0.375
HORSEPOWER (WATTS)	1-1/2 HP
VOLTAGE	480V/3-PHASE
UNIT MCA	4.6 A
UNIT MOCP	15 A
HEATING MEDIUM	NATURAL GAS
INPUT/OUTPUT (MBH)	150.0/121.5
TURNDOWN RATIO	4:1
MANUFACTURER	GREENHECK
MODEL	IGX-P109-H12-MF-E
EXHAUST SECTION	
TYPE	UPBLAST BELT DRIVE CENTRIFUGAL
EXHAUST CFM	3600
EXT. S.P. (IN. W.G.)	0.75
HORSEPOWER (WATTS)	1-1/2 HP
VOLTAGE	480V/3-PHASE
UNIT MCA	3.75 A
UNIT MOCP	15 A
MANUFACTURER	GREENHECK
EXHAUST FAN MODEL	CUBE-200-15

NOTES

1. EXHAUST FAN: PROVIDE FAN WITH PRE-FABRICATED ROOF CURB ADAPTER, VENTED CURB EXTENSION, HINGING KIT, HEAT BAFFLE, DRAIN CONNECTION, GREASE TRAP, AND DISCONNECT SWITCH. FANS SHALL BE UL LISTED FOR USE WITH TYPE 1 GREASE HOOD.
2. EXHAUST FAN: PROVIDE NEW MOTOR STARTER, SIZED FOR EXHAUST FAN MOTOR AND INSTALLED IN PLACE OF EXISTING. REFERENCE THE SPECIFICATIONS FOR STARTER REQUIREMENTS. COORDINATE WITH DIV.25 FOR RE-TERMINATION OF PERMISSIVE ON/OFF CONTROL. COORDINATE WITH DIV.26 FOR RE-TERMINATION OF LOCAL HOOD SWITCH INTERLOCK FOR START/STOP CONTROL.
3. SUPPLY FAN/FURNACE: FLUE GAS FROM HEATING COIL SHALL BE POWER VENTED.
4. SUPPLY FAN/FURNACE: WEATHERHOOD WITH ALUMINUM MESH.
5. SUPPLY FAN/FURNACE: 5 YEAR HEAT EXCHANGER WARRANTY.
6. SUPPLY FAN/FURNACE CONTROLS: INTEGRAL HEATER CONTROLS WITH BAS INTERLOCK FOR PERMISSIVE ON/OFF AND LOCAL SWITCH INTERLOCK FOR CONTROL FROM KITCHEN HOOD SWITCH. FURNACE CONTROLS SHALL BE PROGRAMMED FOR 64°F LAT, WITH A LOCKOUT FOR O/A TEMPERATURES ABOVE THE LAT SETPOINT. COORDINATE WITH DIV.25 AND DIV.26 FOR CONTROLS AND SWITCH INTERLOCKS.
7. TWO POINT POWER CONNECTION: ONE FOR EXHAUST FAN AND ONE FOR INTAKE/SUPPLY FAN.
8. INTERLOCK FAN(S) WITH ASSOCIATED COOKING HOOD
9. INTERLOCK FAN WITH SWITCH ON KITCHEN HOOD.
10. UNIT TO BE PROVIDED WITH GALVANIZED STEEL FAN PACK EXTENSION/COMBINATION CURB.
11. REFER TO WRITTEN SPECS FOR ADDITIONAL REQUIREMENTS.

MECHANICAL RENO KEYED NOTES

1. TIE-IN NEW DUCTWORK TO EXISTING DUCTWORK AT WALL PENETRATION.
2. CONNECT NEW AIR DEVICE AND TAP TO EXISTING E/A TRUNK DUCT.
3. REWORK EXISTING EXHAUST AND SUPPLY DUCTWORK FROM EXISTING KITCHEN HOOD UP TO FAN, AS REQUIRED, WITH NEW TRANSITIONS AND SUPPLY AIR DUCTWORK OFFSETS TO MATE WITH NEW FAN CURB.
4. EXISTING ELECTRIC DUCT HEATER TO BE RETAINED FOR RE-INSTALLATION IN RENOVATION PHASE.
5. NEW DRYER VENT DUCT AND VENT CAP.
6. TEMP. KITCHEN – CEILING MOUNTED CABINET EXHAUST FAN.
7. TEMP. KITCHEN – 24"X24" SIDE WALL GRILLE. SURFACE MOUNT OPTIONAL. AUXILIARY FRAME. TITUS CT-700.
8. RECONFIGURE DUCTWORK TO CONNECT TO NEW DISHMACHINE HOOD OUTLETS. REF. KITCHEN CONSULTANT DRAWINGS FOR EXACT DIMENSIONS OF DUCT CONNECTIONS.
9. CONDENSATE EXHAUST DUCT UP THROUGH ROOF TO NEW EXHAUST FAN SET ON NEW ROOF CURB. REUSE EXISTING ROOF PENETRATION.

MECHANICAL DEMO KEYED NOTES

1. DEMOLISH EXISTING AIR DEVICE, BRANCH DUCT, DAMPER AND TAP BACK TO TRUNK DUCT. CAP AND SEAL RESULTING OPENING.
2. EXISTING E/A TRUNK DUCT TO REMAIN.
3. DISCONNECT EXISTING S/A AND E/A DUCTWORK SERVING KITCHEN HOODS FROM FAN ASSEMBLY ON ROOF. DEMOLISH SUPPLY AND EXHAUST FAN PLENUM ASSEMBLY SERVING KITCHEN HOODS, ALONG WITH CURB. NEW CURB TO BE PROVIDED AND INSTALLED AS PART OF RENOVATION.
4. DEMOLISH ALL EXISTING AIR DEVICES, DUCTWORK, AND DUCTWORK ACCESSORIES SERVING KITCHEN AREA BACK TO MECH. ROOM WALL PENETRATION.
5. EXISTING ELECTRIC DUCT HEATER TO BE RETAINED FOR RE-INSTALLATION IN RENOVATION PHASE.
6. REFURBISH EXISTING KITCHEN HOOD. REFER TO "KITCHEN HOOD REFURBISHMENT NOTES".
7. DEMOLISH AND REPLACE EXISTING DRYER EXHAUST DUCT AND FLUE VENT CAP.
8. DEMOLISH EXISTING CONDENSATE HOOD, ASSOCIATED DUCTWORK, AND ROOF EXHAUST FAN.

EXHAUST FAN SCHEDULE

MARK	EF-TK	EF-CF	EF-14
SERVES	TEMPORARY KITCHEN	COOLER/FREEZER	DISH WASHER
TYPE	CEILING CABINET	INLINE FAN	ROOF UPBLAST
DRIVE	DIRECT	DIRECT	DIRECT
SPEED CONTROL	INTEGRAL SPEED CONTROLLER	CONSTANT	CONSTANT
CFM	1055	1000	1200
EXT. S.P. (IN. W.G.)	0.3	0.35	0.60
IMP. SIZE (IN.)	8.0	13.5	
HORSEPOWER (WATTS)	1/3 HP	1/6 HP	1/6 HP
VOLTAGE	120V/1-PHASE	120V/1-PHASE	120V/1-PHASE
MANUFACTURER	COOK	COOK	COOK
MODEL	GC-862	1355QN10D	CUE-140-VG
SONES (MAX.)	15.0	15.0	15.0
NOTES	1 THRU 4	1 THRU 4	1 THRU 4

NOTES

1. STATIC PRESSURE SHOWN IS EXTERNAL TO THE UNIT. MANUFACTURER SHALL ADD DAMPER AND ACCESSORY LOSSES TO THIS VALUE BEFORE SELECTING FAN. FANS SHALL BE CAPABLE OF 120% OF THE SCHEDULED CFM CAPACITY.
2. INTEGRAL DISCONNECT SWITCH.
3. RUBBER IN-SHEAR ISOLATORS.
4. REFER TO WRITTEN SPECS FOR ADDITIONAL REQUIREMENTS.

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FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

STATE OF TEXAS
TYLER W. HERRING
106052
LICENSED PROFESSIONAL ENGINEER
07.18.2025

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11767 KATY FREEWAY, SUITE 430
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PROJ. NO.: 23-25
DATE: 07/18/2025
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KITCHEN AREA MECHANICAL PLANS
J-M1.01

STANTON ENGINEERING GROUP
INFORMATION@STANTON-ENG.COM | (713) 300-4080
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MECHANICAL SYMBOL SCHEDULE

CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
RS	REFRIGERANT SUPPLY
RR	REFRIGERANT RETURN
D	CONDENSATE LINE
	PETE'S PLUG
	ISOLATION VALVE
	ELECTRONIC CONTROL VALVE
	BUTTERFLY VALVE
	BALL VALVE
	UNION OR FLANGE
	STRAINER
	AUTOMATIC AIR VENT
T	LOCAL CONTROL THERMOSTAT
T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
FD	FIRE DAMPER
SD	SMOKE DAMPER
FSD	FIRE/SMOKE COMBINATION DAMPER
MD	MOTORIZED DAMPER
C	CARBON MONOXIDE SENSOR
CO2	CARBON DIOXIDE SENSOR
	SUPPLY AIR DIFFUSER
	RETURN AIR GRILLE
	EXHAUST GRILLE
RA	RETURN AIR OPENING IN WALL
VD	VOLUME DAMPERS
	DUCT ELEVATION CHANGE
	90° DUCT ELBOW WITH TURNING VANES
	FLEXIBLE DUCT
M	DAMPER MOTOR
T	TEMPERATURE TRANSMITTER
FS	FLOW SWITCH
P	DIFFERENTIAL PRESSURE SENSOR
SD	DUCT SMOKE DETECTOR
PS	STATIC PRESSURE SENSOR
PH	STATIC PRESSURE SENSOR HI-LIMIT
AP	ACCESS PANEL

A.P.	ACCESS PANEL
AHU	AIR HANDLING UNIT
B	BOILER
CH	CHILLER
CHP	CHILLED WATER PUMP
CVT	CONSTANT VOLUME TERMINAL
DH	DEHUMIDIFIER
E/A	EXHAUST AIR
EF	EXHAUST FAN
F&B	FACE & BYPASS
FF	FLY FAN
HDT	HORIZONTAL DRAW THROUGH
HWP	HOT WATER PUMP
KEF	KITCHEN EXHAUST FAN
KSF	KITCHEN SUPPLY FAN
O/A	OUTSIDE AIR
OBD	OPPOSED-BLADES DAMPER
PT	PRE-TREAT
R/A	RETURN AIR
RAHU	ROOF-MOUNTED AIR HANDLING UNIT
S/A	SUPPLY AIR
SA	SOUND ATTENUATOR
SF	SUPPLY FAN
SPD	SPILTER DAMPER
SZ	SINGLE ZONE
VAV	VARIABLE AIR VOLUME
VB	VAV BOX
VD	VOLUME DAMPER
VDT	VERTICAL DRAW THROUGH
VFD	VARIABLE FREQUENCY DRIVE
WH	WATER HEATER
⌀	DESIGNATION FOR "ROUND"
⌀	DESIGNATION FOR "OVAL"

GENERAL MECHANICAL NOTES

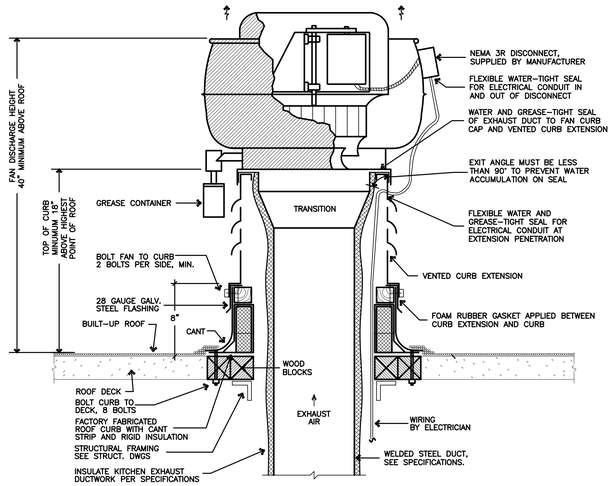
1. REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. COORDINATE INSTALLATION OF EQUIPMENT AND PIPING WITH THE ELECTRICAL CONTRACTOR TO INSURE NEC CLEARANCE (42 INCHES) IN FRONT OF ALL ELECTRICAL PANELS. DO NOT INSTALL DUCTWORK OR WATER PIPING OVER THE TOP OF ELECTRICAL PANELS SEE DETAIL 1/M2.01.
3. DUCT SIZES SHOWN ARE NET FREE AIR PASSAGE DIMENSIONS, DUCTS ARE NOT LINED, BUT ARE EXTERNALLY INSULATED. RUNOUTS TO CEILING OUTLETS SHALL BE EXTERNALLY INSULATED GALVANIZED SHEET METAL WITH SPIN-IN V.D. AT TRUNK TAPS, SEE DETAIL 1 & 2/M2.01.
4. REFER TO ARCHITECTURAL REFLECTED CEILING DRAWINGS FOR EXACT LOCATIONS OF CEILING OUTLETS IN RELATION TO OTHER CEILING ENTITIES. OUTLETS MUST BE COMPATIBLE WITH THE CEILING TYPES FOR THE VARIOUS AREAS.
5. IN AREAS WHERE SUPPLY AIR ENTERS CEILING CAVITY THRU RETURN AIR GRILLES AND FREE RETURNS TO AHU'S VIA CEILING CAVITY, PROVIDE RETURN AIR OPENING IN WALL-TO-DECK ABOVE CEILING THAT BLOCK PATH, REFER TO ARCHITECTURAL DRAWINGS. RETURN AIR ELBOWS SHALL BE SIZED AT 1 SQ. FT PER 400 CFM SUPPLY AIR.
6. ARRANGE PIPING CONNECTIONS TO ALL EQUIPMENT TO ALLOW EASY REMOVAL OF EQUIPMENT, SUB-ASSEMBLIES, COILS, FANS, MOTORS, FILTERS, ACCESS PANELS, ETC... PROVIDE UNIONS, FLANGES AND VALVES AT CONNECTIONS. PROVIDE AND INSTALL VICTAULIC JOINTS AT COILS, REF. SPECIFICATIONS. PLACE STOP VALVES ON SYSTEM SIDE OF REMOVABLE PIPE SECTIONS.
7. CONTRACTOR SHALL FIELD MEASURE STRUCTURAL ELEMENTS AND COORDINATE EQUIPMENT, PIPING AND DUCT ROUTING TO FIT EXISTING CONSTRUCTION. PROVIDE OFFSETS, BOOTS FOR ENVELOP OBSTRUCTIONS THAT CANNOT BE AVOIDED. CONSTRUCTION SHALL BE PER SMACNA FIGURE 2-10.

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A	CEILING DIFFUSER – 24" X 24" FACE, PATTERN TYPE, STEEL CONSTRUCTION, OBD/RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE SCD
B	CEILING RETURN GRILLE – 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE PDFR
C	CEILING EXHAUST GRILLE – 24" X 24" PERFORATED FACE, STEEL CONST., OBD/RADIATION DAMPER, WHITE FINISH, NECK SIZE SHOWN, U.L. LISTED PRICE PDDR

NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPES FOR AIR DEVICES.
2. ALL CEILINGS ARE FIRE RATED PER U.L. LISTINGS ON ARCHITECTURAL DRAWINGS. PROVIDE FIRE PROTECTION FOR ALL CEILING DEVICES PER DETAIL 13/M-17 AND SPECIFICATIONS.

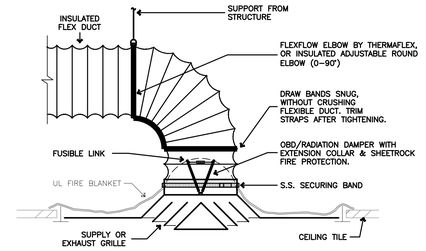


6 KITCHEN UPBLAST EXHAUST FAN DETAIL

NO SCALE

NOTES

1. ARCHITECTURAL ROOF CURB INSTALLATION REQUIREMENTS SHALL SUPERCEDE THIS DETAIL.
2. INSTALL SHEETMETAL COVERING OVER WOOD BLOCKING IN THE AIRSTREAM OR OPEN TO THE CEILING CAVITY.

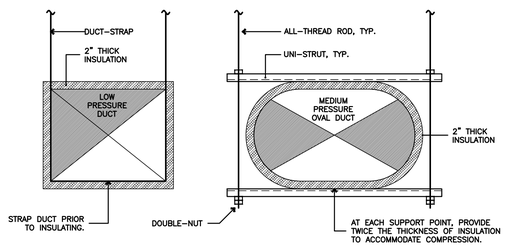


5 AIR DEVICE DETAIL

NO SCALE

NOTES:

1. RADIATION DAMPER SHALL ONLY BE PROVIDED IN CEILING DEVICES INSTALLED IN RATED CEILING ASSEMBLIES. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO DETERMINE WHICH, IF ANY, CEILINGS ARE RATED.
2. REFER TO SPECIFICATIONS OF FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

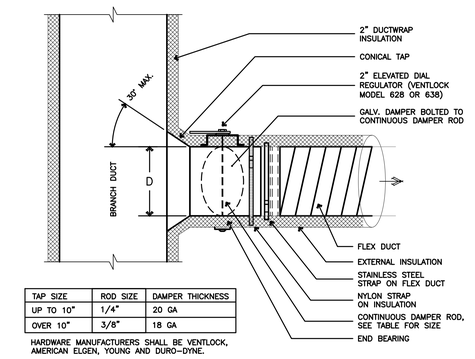


4 EXTERNALLY INSULATED DUCT SUPPORT DETAIL

NO SCALE

NOTES:

1. ROUND MEDIUM PRESSURE DUCT MAY BE SUPPORTED WITH DUCT STRAPS.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



TAP SIZE	ROD SIZE	DAMPER THICKNESS
UP TO 10"	1/4"	20 GA
OVER 10"	3/8"	18 GA

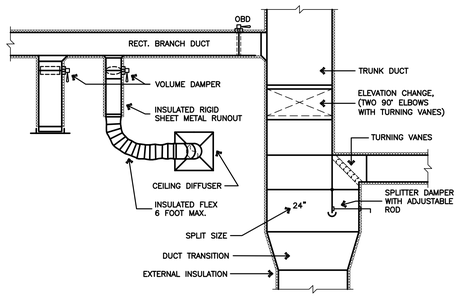
HARDWARE MANUFACTURERS SHALL BE VENTLOCK, AMERICAN ELGEN, YOUNG AND DURO-DYNE.

3 DUCT TAP CONNECTION DETAIL

NO SCALE

NOTES:

1. DELETE CONICAL SECTION IF TOO LARGE FOR THE DUCT.
2. REFER TO SPECIFICATIONS OF FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

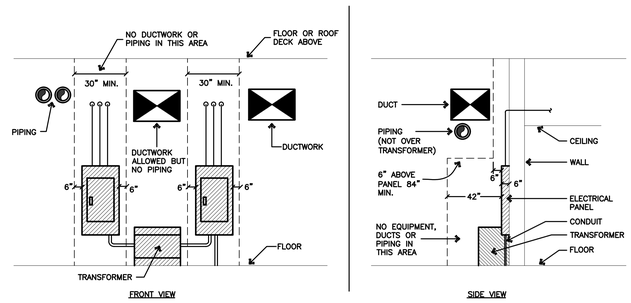


2 DUCTWORK DETAIL

NO SCALE

NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



1 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

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07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

STATE OF TEXAS
TYLER W. HERRING
106052
LICENSED PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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MECHANICAL NOTES AND DETAILS
J-M2.01

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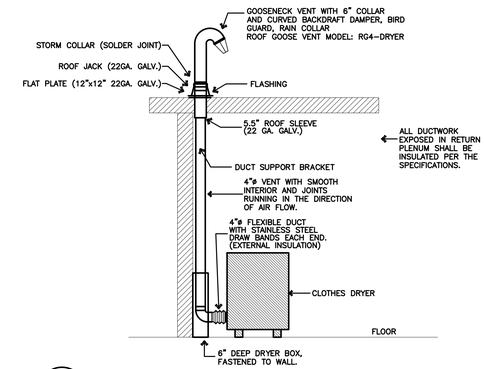
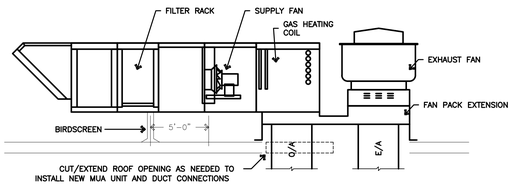


5 RESIDENTIAL CLOTHES DRYER FLUE VENT

NO SCALE

NOTES:

1. VENT TERMINATION AT WALL FOR STACKABLE WASHER/DRYER SHALL BE AT 60" AFF.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

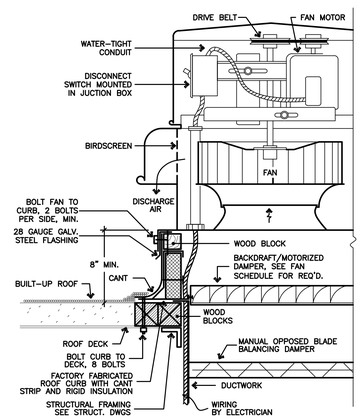


4 SUPPLY/EXHAUST KITCHEN PLENUM DETAIL

NO SCALE

NOTES:

1. xxxxx

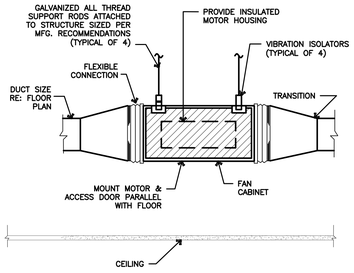


3 ROOF EXHAUST FAN AND VENT DETAIL

NO SCALE

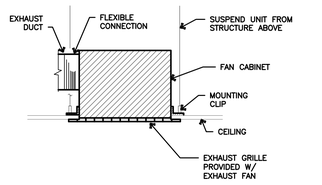
NOTES:

1. NO WOOD BLOCKING SHALL BE LEFT EXPOSED IN THE CEILING PLENUM. COVER ALL EXPOSED WOOD WITH 1/2" SHEETROCK OR 20 GAUGE GALVANIZED SHEETMETAL.
2. ROOF VENT WILL NOT HAVE FAN/MOTOR ASSEMBLY, DISCONNECT SWITCH OR OBD.
3. ARCHITECTURAL ROOF CURB INSTALLATION REQUIREMENTS SHALL SUPERCEDE THIS DETAIL WHERE APPLICABLE.
4. ALL FANS SCHEDULED TO BE PROVIDED WITH 140MPH WIND RATING, INCLUDING FACTORY PROVIDED CURB. CURB INSTALLATION SHALL FOLLOW MANUFACTURER'S REQUIREMENTS FOR SECURING TO ROOF AND EQUIPMENT WHERE IT DIFFERS FROM THE DETAIL.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



2 INLINE EXHAUST FAN DETAIL

NO SCALE



1 CABINET EXHAUST FAN

NO SCALE

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MECHANICAL DETAILS (CONT'D.)

J-M2.02

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ELECTRICAL AND LOW VOLTAGE LEGEND AND SYMBOLS

- TYPE 'A' LIGHT FIXTURE
- LIGHT FIXTURE WITH EMERGENCY BACKUP
- EXIT SIGN/EXIT SIGN WITH DIRECTIONAL ARROW
- EMERGENCY EGRESS LIGHT FIXTURE
- WALL MOUNTED FIXTURE OR SCONCE
- CEILING DOWNLIGHT OR CYLINDER
- WALL PACK FIXTURE
- INV LIGHTING INVERTER
- 20A, 277V TOGGLE/3-WAY/4-WAY SWITCH
- 20A, 277V MOMENTARY 3-POSITION TOGGLE SWITCH
- 20A, 277V, MOMENTARY 3-POSITION KEY SWITCH
- 20A, 277V MAINTAINED 2-POSITION/3-WAY/4-WAY KEY SWITCH
- 20A, 277V TOGGLE SWITCH W/ INTEGRAL NIGHT LIGHT
- MOTOR RATED ON/OFF SWITCH, MP W/ PILOT LIGHT (SWITCH RATING SHALL BE ≥ UPSTREAM OCPD & VOLTAGE)
- DPST$ DOUBLE POLE SINGLE THROW (DPST) SWITCH WITH RED PILOT LIGHT.
- TSW TIMER SWITCH

NETWORK LIGHTING CONTROLS

- #B MULTIBUTTON LOW VOLTAGE LIGHTING SWITCH PROVIDE NUMBER OF BUTTONS INDICATED IN SINGLE PLATE.
- #D MULTIPLE DIMMER SWITCHES PROVIDE NUMBER OF SWITCHES INDICATED IN SINGLE PLATE.
- #K MULTIPLE KEY TYPE SWITCHES PROVIDE NUMBER OF SWITCHES INDICATED IN SINGLE PLATE.
- OC WALL SENSOR SWITCH
- $D 20A, 277V, STANDALONE DIMMER SWITCH (DISPLAY CABINET)
- OC 360° CEILING SENSOR
- OC 180° CEILING SENSOR
- OC CEILING SENSOR
- OC WALL MOUNT SENSOR
- PC DAYLIGHT PHOTOSENSOR
- RC/RCD LIGHTING ROOM CONTROLLER/POWER PACK
- ER EMERGENCY LIGHTING RELAY/CONTROL UNIT
- PLC PLUG LOAD CONTROLLER

- 20A, 125V SIMPLEX/DUPLEX/QUAD RECEPTACLE
- GFI 20A, 125V DUPLEX RECEPTACLE WITH GFCI PROTECTION
- GFI WP 20A, 125V DUPLEX RECEPTACLE WITH GFCI PROTECTION AND WEATHERPROOF COVER.
- GFI REMOTE GFCI DEVICE, REF SPECS AND EDF GFI DETAIL.
- USB 20A, 125V DUPLEX/QUAD RECEPTACLE W/ USB-A PORTS PROVIDE 2-5A PORTS PER DEVICE – HUBBELL USB20A5
- 20A, 125V SIMPLEX/DUPLEX/QUAD IG/COMPUTER RECEPTACLE
- GFI 20A, 125V, IG/COMPUTER DUPLEX RECEPTACLE WITH GFCI
- PLUG LOAD CONTROLLED DUPLEX
- NEMA IEC CS NEMA/IEC/CS NUMBERED POWER OUTLET MATCH PROVIDED EQUIPMENT CONNECTION OR CIRCUIT.
- PROJ TV IM 20A, 125V IG DUPLEX RECEPTACLE AT PROJECTOR, TV, OR INTERACTIVE MEDIA LOCATION.
- LOW VOLTAGE OUTLET
- CEILING MOUNTED RECEPTACLE
- CEILING MOUNTED LOW VOLTAGE OUTLET
- SINGLE SERVICE FLOOR BOX WITH DUPLEX/QUAD REC
- SINGLE SERVICE FLOOR BOX WITH DUPLEX/QUAD IG REC
- SINGLE SERVICE LOW VOLTAGE FLOOR BOXES
- MULTI SERVICE FLOOR BOX WITH QUAD/QUAD IG REC
- CR CORD REEL
- D DROP CORD
- EPO EMERGENCY POWER OFF (EPO) SWITCH
- PB PUSH BUTTON
- SP TELEPOWER POLE
- J J-BOX
- J CEILING MOUNTED J-BOX
- CA J J-BOX FOR ACCESS CONTROL DEVICE
- HD J JUNCTION BOX AND FINAL CONNECTION TO HAND DRYER BY DIVISION 26.
- HDWR J JUNCTION BOX AND FINAL CONNECTION TO ELECTRIFIED DOOR HARDWARE BY DIVISION 26.
- HEAT J JUNCTION BOX AND FINAL CONNECTION TO HEAT TRACE EQUIPMENT BY DIVISION 26.
- WC J JUNCTION BOX AND FINAL CONNECTION TO POWERED PLUMBING EQUIPMENT BY DIVISION 26.
- SF J JUNCTION BOX AND FINAL CONNECTION TO SYSTEM FURNITURE BY DIVISION 26.
- CONTACTOR
- NON-FUSED DISCONNECT SWITCH
- DT NON-FUSED DOUBLE THROW DISCONNECT
- FUSED DISCONNECT SWITCH
- ST DISCONNECT/CB WITH SHUNT TRIP
- CB ENCLOSED CIRCUIT BREAKER
- MOTOR STARTER 'VFD' INDICATES VARIABLE FREQUENCY DRIVE MOTOR STARTER
- MOTOR STARTER WITH INTEGRAL DISCONNECT
- MOTOR
- TC TIME CLOCK
- ELECTRICAL PANELBOARD
- ELECTRICAL METER
- SPD TVSS OR SPD
- GANN GENERATOR REMOTE ANNUNCIATOR
- LOW VOLTAGE CABLING PATHWAY, REF. SPECIFICATIONS

KITCHEN SYMBOL LEGEND

- C LOAD CENTER, BY FOOD SERVICE PROVIDE UNDERGROUND CONDUIT STUBBED UP AT LOAD CENTER LOCATION PER SUBMITTAL SHOP DRAWINGS.
- P POINT OF SALE EQUIPMENT, BY FOOD SERVICE. PROVIDE UNDERGROUND CONDUIT STUBBED UP POS LOCATION PER SUBMITTAL SHOP DRAWINGS.
- F REMOTE FIRE PULL, REFERENCE INSTALLATION DETAIL
- B BELL/BUZZER WITH 120V TO LOW VOLTAGE TRANSFORMER
- D DROP CORD
- DB DOORBELL BUTTON
- V CLR/FRZR CEILING STROBE FOR ENTRAPMENT ALARM
- V CLR/FRZR WALL STROBE FOR ENTRAPMENT ALARM

COORDINATION SYMBOL LEGEND

- DDC HVAC CONTROL PANEL, REQUIRES POWER AND DATA CONNECTIONS WITHIN CABINET COOR EXACT LOCATION AND REQUIREMENTS WITH CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.
- SD SMOKE DAMPER
- FSD FIRE/SMOKE COMBINATION DAMPER
- M / MD MOTORIZED DAMPER

SITE PLAN

- UTILITY POLE
- POLE MOUNTED TRANSFORMER BANK
- SITE POLE LIGHT
- UGE J FLUSH IN GRADE ELECTRICAL PULL BOX
- LV HH J FLUSH IN GRADE, LOW VOLTAGE HAND HOLE
- CONCRETE BOLLARD
- (X)PP POWER POLE
- (X)SP SERVICE POLE OR RACK
- (X)XP XFMR POLE
- (X)LVP LOW VOLTAGE POLE
- (X)TP TRANSITION POLE
- OHP OVERHEAD POWER WIRING
- 480V 480V OVERHEAD POWER WIRING
- UGP UNDERGROUND PRIMARY ELECTRICAL
- UGS UNDERGROUND SECONDARY ELECTRICAL
- UGE UNDERGROUND EMERGENCY ELECTRICAL

DIVISION 28 LEGENDS

FIRE ALARM

- F FIRE ALARM PULL STATION W/ STOPPER II
- F / S WALL FIRE ALARM AUDIO/VISUAL DEVICE
- WP S OUTDOOR WEATHERPROOF FIRE AUDIO/VISUAL DEVICE
- H WALL FIRE ALARM AUDIO DEVICE
- V WALL FIRE ALARM VISUAL DEVICE
- F / S CEILING FIRE ALARM AUDIO/VISUAL DEVICE
- S CEILING FIRE ALARM AUDIO DEVICE
- V CEILING FIRE ALARM VISUAL DEVICE
- DUCT SMOKE DETECTOR
- I / PS CEILING SMOKE DETECTOR
- H CEILING HEAT DETECTOR
- CO CEILING CARBON MONOXIDE DETECTOR
- PS CO CEILING COMBINATION SMOKE/CARBON MONOXIDE DETECTOR
- FR FIRE ALARM RELAY FOR STAGE SOUND RACK OVERRIDE
- BSD BSR BEAM SMOKE DETECTOR
- FANN FIRE ALARM REMOTE ANNUNCIATOR OR LOCAL OPERATOR'S CONSOLE
- FACP FIRE ALARM CONTROL PANEL
- FAPS FIRE ALARM POWER SUPPLY/AMPLIFIER
- G INDICATES DEVICE WITH PROTECTIVE GUARD
- WG INDICATES DEVICE WITH WIRE GUARD
- HC INDICATES DEVICE RATED FOR HAZARDOUS CONDITIONS
- SD SMOKE DAMPER
- FSD FIRE/SMOKE COMBINATION DAMPER

MULTI-SERVICE FLOOR BOX NOTES

FLOOR POWER AND LOW VOLTAGE
PROVIDE HEAVY-DUTY MULTI-GANG FLUSH IN GRADE OR FIRE RATED POKE-THRU OUTLET WITH HEAVY DUTY METAL HINGED COVER WITH CABLE EXIT SLOT.
FLOOR BOX MUST BE RATED FOR INSTALLATION IN GRADE.

FOR EACH FLOOR BOX PROVIDE:
1. PROVIDE:
   - 1.A. ONE QUAD OR TWO DUPLEX RECEPTACLES.
   - 1.B. PROVIDE IG RECEPTACLES WHERE SHOWN.
   - 1.C. POWER CONNECTION TO TABLE (WHERE SHOWN)
2. BLANK STAINLESS STEEL COVER FOR UN-USED GANGS.
3. PROVIDE ONE 3/4"C UNDERGROUND CONDUIT FOR POWER.
4. PROVIDE ONE 1"C UNDERGROUND CONDUIT WITH WATERPROOF INNER DUCT FOR DATA.
5. PROVIDE ONE 1"C UNDERGROUND CONDUIT WITH WATERPROOF INNER DUCT FOR LOW VOLTAGE CABLING
6. PROVIDE DIVIDERS TO MAINTAIN SEPARATION BETWEEN SERVICES.

UNDERGROUND CONDUITS MUST BE WATER TIGHT TO PREVENT MOISTURE ENTERING CONDUITS.
DO NOT COMBINE CONDUIT FOR POWER & LOW VOLTAGE.

REFERENCE FLOOR PLANS AND SPECIFICATIONS FOR QUANTITY OF DATA DROPS AND ADDITIONAL INFORMATION.

COORDINATE WITH ARCHITECT TO PROVIDE COVER/RING TO MATCH FLOOR MATERIAL AND SUBMIT COVER FINISH FOR ARCHITECT TO SELECT PRIOR TO ORDERING.

GENERAL NOTES / TAGS

+18"	INDICATES DEVICES AT +18" AFF
+42"	INDICATES DEVICES AT +42" AFF
+96"	INDICATES DEVICES AT +96" AFF
+12 FT	INDICATES DEVICES AT +12 FT AFF, ETC.
*	INDICATES DEVICES ABOVE COUNTER, REF ARCH
CLG	INDICATES DEVICES AT CEILING
PMR	INDICATES PEDESTAL MOUNTED DEVICE, REF PMR DETAIL
TV	INDICATES DEVICES AT TELEVISION/DISPLAY LOCATION
IM	INDICATES DEVICES AT INTERACTIVE MEDIA LOCATION
PROJ	INDICATES DEVICES AT PROJECTOR LOCATION
S	INDICATES SURFACE MOUNTED DEVICE
IEC	INDICATES IEC POWER OUTLET
NEMA	INDICATES NEMA NUMBERED POWER OUTLET
GFI	INDICATES GROUND FAULT INTERRUPT (GFI) PROTECTION
WP	INDICATES WEATHERPROOF DEVICES
GFI WP	INDICATES GFI PROTECTED WEATHERPROOF DEVICE
G	INDICATES DEVICE WITH PROTECTIVE GUARD
WG	INDICATES DEVICE WITH WIRE GUARD
3R	INDICATES NEMA 3R RATED DEVICE
4XSS	INDICATES NEMA 4XSS RATED DEVICE
EM	INDICATES DEVICE ON EM/STANDBY POWER
VFD	INDICATES VARIABLE FREQUENCY DRIVE (VFD)
E	EXISTING DEVICES TO REMAIN
D	EXISTING DEVICES TO BE DEMO/REMOVED
R	EXISTING DEVICES TO BE RELOCATED
REP	EXISTING DEVICES TO BE REPLACED
	(X) = (E) FOR EXISTING
	(X) = (D) FOR DEMO
	(X) = (R) FOR RELOCATION
	(X) = (N) FOR NEW
→	HOMERUN TO CIRCUIT NOTED

1. RECEPTACLES AND DATA OUTLETS SHALL BE MOUNTED AT +18" AFF UNLESS NOTED ON THE DRAWINGS.
2. REF. SPECIFICATIONS FOR MOUNTING HEIGHT OF OTHER DEVICES.
3. ELECTRICAL RECEPTACLES, TELEPHONES, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
4. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
4. ALL DEVICES SHOWN AT THE SAME LOCATION AND ELEVATION SHALL BE GROUPED TOGETHER AND SPACED 2 INCHES BETWEEN BOXES.
5. PROVIDE SS COVER PLATE FOR ALL EMPTY JBOX.
6. ALL NON-LOCKING 125V AND 250V, 15A AND 20A RECEPTACLES SHALL BE TAMPER RESISTANT TYPE.

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ELECTRICAL AND FIRE ALARM SCHEDULES

j-E.000

PROVIDE CONDUIT & SLEEVES THRU FIRE WALLS, WALLS AND FLOORS FOR LOW VOLTAGE CABLING WIRING, ETC.

ALL CONDUIT & J-BOXES FOR LOW VOLTAGE CABLING SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL LOW VOLTAGE CABLING IN WALLS, EXPOSED AREAS AND ABOVE INACCESSIBLE CEILINGS SHALL REQUIRE CONDUIT AND J-BOXES. REFERENCE SPECIFICATIONS AND TECHNOLOGY DOCUMENTS FOR ADDITIONAL INFORMATION/REQUIREMENTS.

PULL BOXES AND BELOW GRADE CONDUIT FOR LOW VOLTAGE CABLING, WIRING, ETC. BY ELEC CONTRACTOR.

FIRE ALARM SYSTEM DESCRIPTION AND SEQUENCE OF OPERATION

1. FIRE ALARM SYSTEM SHALL BE DESIGNED TO MEET NFPA REQUIREMENTS AS WELL AS CITY AND NATIONAL BUILDING CODES. PROVIDE COMPLETE FIRE ALARM SYSTEM, DEVICES AND WIRING.
2. INSTALL FIRE ALARM CONTROL PANEL IN RECEPTION AREA. INSTALL REMOTE POWER SUPPLY PANELS IN MECHANICAL/ELECTRICAL ROOMS.
3. FIRE ALARM PANEL, POWER SUPPLIES, DEVICES, ETC. SHALL BE MANUFACTURED BY THE SAME MANUFACTURER AS THE FIRE ALARM CONTROL PANEL.
4. FIRE ALARM REMOTE POWER SUPPLIES AND PANELS SHALL BE LOCATED IN MECHANICAL OR ELECTRICAL ROOMS ONLY. DO NOT LOCATE IN STORAGE ROOMS, DATA CLOSETS OR FINISHED SPACES.
4. PROVIDE AUDIBLE, INTELLIGIBLE AND VISUAL ALARM COVERAGE OF THE AREA OF RENOVATION AS REQUIRED BY CODE.
5. PROVIDE SMOKE DETECTORS AT EACH FIRE ALARM PANEL, REMOTE TRANSPONDER PANEL, BOOSTER PANEL AND REMOTE ANNUNCIATOR PER NFPA 72.
6. IN ADDITION TO THE SPECIFIED FIRE ALARM EQUIPMENT, THE FIRE ALARM CONTRACTOR SHALL PROVIDE
   - 6.A. SURGE PROTECTORS FOR ALL NEW 120V POWER CONNECTIONS TO FIRE ALARM EQUIPMENT.
   - 6.B. SURGE PROTECTORS FOR ALL SIGNALING LINE CIRCUITS (SLC), NOTIFICATION CIRCUITS AND INITIATING CIRCUITS CONNECTED TO THE FIRE ALARM CONTROL PANEL WHICH LEAVE THE BUILDING.
7. SHOULD ANY DETECTOR, MONITOR OR PULL STATION ACTIVATE, ALL SPEAKERS SHALL SOUND AND STROBES FLASH. AIR HANDLING EQUIPMENT SHALL BE DEACTIVATED. AN ALARM SIGNAL SHALL BE SENT TO A REMOTE LOCATION VIA AUTOMATIC DIALER. ALSO, DE-ENERGIZE SUPPLY FANS, EXHAUST FANS AND OTHER AIR CIRCULATING DEVICES IF 2000 CFM OR OVER, SERVING THE AREA IN ALARM.
8. ALL LOW VOLTAGE WIRING SHALL BE FPLP RATED WIRE, WITH MINIMUM WIRE SIZE PER SPECIFICATIONS.
   - 8.A. PLENUM RATED CABLE ABOVE ACCESSIBLE CEILING SHALL BE SUPPORTED BY J-HOOKS, SPACED AT FOUR (4) FEET ON CENTER.
   - 8.B. INSTALL FIRE ALARM CABLES IN CONDUIT FOR AREAS WITHOUT CEILING OR ABOVE INACCESSIBLE CEILINGS.
   - 8.C. EXPOSED CONDUIT IN FINISHED SPACES SHALL BE ALLOWED WHERE NO OTHER OPTION EXISTS AND ONLY WITH PRIOR WRITTEN APPROVAL BY THE OWNER. ALL EXPOSED CONDUIT SHALL BE PAINTED TO MATCH.
   - 8.D. ALL CABLING THROUGH WALLS, FIRE WALLS AND FLOORS SHALL BE INSTALLED IN SLEEVES WITH PROTECTIVE BUSHINGS ON BOTH ENDS.
9. FIRE ALARM SYSTEM SHALL BE MONITORED BY A UL LISTED CENTRAL RECEIVING STATION.
10. INTERLOCK LIGHTING CONTROL PANELS WITH FIRE ALARM SYSTEM TO ENABLE ALL LIGHTING UPON ACTIVATION.
11. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

FIRE ALARM SYSTEM NOTES

1. GENERAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL AND FIRE ALARM SUBCONTRACTOR FOR LOCATIONS OF REMOTE POWER SUPPLIES. FIRE ALARM POWER SUPPLIES ARE NOT SHOWN ON THIS DRAWING AND SHALL BE LOCATED BY FIRE ALARM SUBCONTRACTOR IN ORDER TO ACCOMMODATE HIS FIRE ALARM SYSTEM BATTERY AND VOLTAGE DROP CALCULATIONS PER MANUFACTURER'S RECOMMENDATION & NFPA REQUIREMENTS. ELECTRICAL CONTRACTOR SHALL INCLUDE ADDITIONAL DEDICATED 120V CIRCUITS IN BASE BID TO SERVE FIRE ALARM POWER SUPPLIES IN DIFFERENT AREAS. PROVIDE 2-12 +12G, 3/4"C AND SPARE 20A/1P CB(S) IN LOCAL LIFE SAFETY EMERGENCY 120V PANELS TO SERVE FIRE ALARM REMOTE POWER SUPPLIES.
2. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR DESIGN AND FOR FINAL CORRECT LOCATION OF DEVICES TO RELIEVE NUISANCE ALARMS, SUCH AS INSTALLING A HEAT DETECTOR IN FRONT OF AN OVEN WHICH WILL RELEASE STEAM, THUS POTENTIALLY SETTING OFF THE ALARM. ALSO, THE CONTRACTOR IS RESPONSIBLE FOR DETECTORS REQUIRED BY CODE EVEN IF NOT SHOWN ON DRAWING, LIKE A CLOSET. IF THERE IS UNCERTAINTY, BRING UP DURING THE BID PROCESS AND THEY WILL BE ADDRESSED DURING THE BIDDING PROCESS.
3. FIELD VERIFY ENVIRONMENTAL ISSUES THAT CAN ADVERSELY AFFECT OPERATION OF SMOKE DETECTORS. DO NOT LOCATE NEAR AIR FLOW DEVICES LEADING TO PREMATURE BUILD UP OF DUST CAUSING NUISANCE TROUBLE SIGNALS. DEVICE RELOCATION OR TYPE CHANGE WILL BE COVERED UNDER WARRANTY.

FIRE ALARM SCOPE OF WORK

1. THERE IS AN EXISTING FIRE ALARM SYSTEM IN EACH BUILDING.
   - 1.A. TEST THE EXISTING SYSTEM PRIOR TO BEGINNING DEMO. NOTE ANY FAULTS OR TROUBLES AND PROVIDE A WRITTEN REPORT TO THE OWNER.
   - 1.B. EXPAND THE EXISTING SYSTEM AS REQUIRED TO INTEGRATE THE NEW DEVICES IN THE AREA OF RENOVATION.
2. PROVIDE WIRING AND DEVICES AS INDICATED TO PROVIDE COMPLETE AUDIBLE, INTELLIGIBLE AND VISUAL ALARM COVERAGE OF RENOVATED AREAS AS REQUIRED BY CODE.
   - 2.A. PROVIDE SMOKE DETECTOR COVERAGE OF ALL STORAGE ROOMS AND ADDITIONALLY AS SHOWN ON THE DRAWINGS.
   - 2.B. PROVIDE HEAT DETECTOR COVERAGE OF THE KITCHEN, CUSTODIAL ROOMS, AND ADDITIONALLY AS SHOWN ON THE DRAWINGS.
   - 2.C. PROVIDE DUCT MOUNTED DETECTORS AT EACH NEW AIR HANDLING UNIT SUPPLY AND RETURN CONNECTION EXCEEDING 2000 CFM. IF FREE AIR RETURN, PROVIDE FREE AIR DETECTOR COVERAGE OF THE RETURN AIR OPENINGS TO THE MECHANICAL ROOM. ENSURE AIR FLOW CANNOT PREVENT OPERATION OF THE DETECTORS AND PROVIDE ADEQUATE CLEARANCE PER NFPA 72.
   - 2.D. CONTROL RELAYS SHALL BE LOCATED WITHIN 3 FT OF THE CONTROLLED CIRCUIT OR APPLIANCE.
3. PROVIDE SMOKE DETECTORS AT EACH NEW FIRE ALARM PANEL, REMOTE TRANSPONDER PANEL, BOOSTER PANEL AND REMOTE ANNUNCIATOR PER NFPA 72.
4. PROVIDE LED REMOTE ALARM WITH ENGRAVED STAINLESS STEEL PLATE WHERE DUCT DETECTORS ARE NOT LOCATED IN MECHANICAL ROOM, LOCATED ABOVE CEILINGS OR WHERE MOUNTED TOO HIGH OR VIEW IS BLOCKED BY DUCTWORK IN MECHANICAL ROOM.
   - 4.A. REMOTE LED LIGHT INDICATOR FOR DUCT SMOKE DETECTORS SHALL BE MOUNTED FLUSH IN CEILING OR MOUNTED IN WALL AT +7FT.
   - 4.B. STAINLESS STEEL PLATE SHALL BE ENGRAVED WITH THE DUCT SMOKE DETECTOR AS-BUILT IDENTIFICATION NUMBER.
5. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SPARES

1. THE FIRE ALARM CONTRACTOR SHALL INCLUDE IN HIS BID THE COST TO PROVIDE AND INSTALL THE ADDITIONAL SPARE PARTS AND ASSOCIATED CABLING PER THE SPECIFICATIONS. SPARES SHALL BE INSTALLED AS INSTRUCTED BY THE OWNER. UNINSTALLED DEVICES SHALL BE DELIVERED TO THE OWNER AS ATTIC STOCK.

GENERAL RENOVATION AND REMODELING NOTES

1. READ ALL MEP AND ARCH. DRAWINGS TO IDENTIFY AREAS OF RENOVATION AND SCOPE OF WORK.
2. ALL RENOVATION AND DEMOLITION WORK SHALL NOT AFFECT AREAS NOT INCLUDED IN THE AREAS OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUITY OF ALL SERVICES (POWER, TELEPHONE, FIRE ALARM, DATA, SECURITY, ETC.) IN NON-DEMOLITION/RENOVATION AREAS. ALL SERVICES SHALL BE MAINTAINED AT ALL TIMES.
3. ALL OUTAGES AFFECTING NON-DEMOLITION/RENOVATION AREAS SHALL BE SCHEDULED WITH THE OWNER WITH A MINIMUM 2 WEEKS ADVANCE NOTICE. OUTAGES SHALL BE COORDINATED WITH OTHER TRADES TO MINIMIZE THE QUANTITY AND IMPACT ON BUILDING OPERATION.
4. THIS ELECTRICAL DRAWING ONLY SHOWS SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J-BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
5. CONTRACTOR SHALL FIELD VERIFY AND MARK UP THE FOLLOWINGS IN AREAS OF RENOVATION:
   - 5.A. EXISTING DATA, AUDIO, VIDEO, SPEAKERS AND OTHER LOW VOLTAGE OUTLETS AND DEVICES.
   - 5.B. EXISTING CEILING MOUNTED PROJECTORS.
   - 5.C. EXISTING SECURITY, CCTV, ACCESS CONTROL DEVICES.
   - 5.D. EXISTING FIRE ALARM DEVICES.
   - 5.E. EXISTING WIRELESS ACCESS POINTS AND GRID LABELING.
   - 5.F. EXISTING LIGHT FIXTURES AND SWITCHES.
   - 5.G. EXISTING ELECTRICAL DEVICES, J-BOXES, CONDUIT, WIRING, WIRING SUPPORTS, ETC.
   - 5.H. EXISTING ELECTRICAL SWITCHGEAR.
   - 5.I. EXISTING CONTROL PANELS AND CONTROL CIRCUITS.
   - 5.J. EXISTING HANGER WIRE FROM CONC. CEILING.
6. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
7. ALL EXISTING DEVICES SHALL BE REINSTALLED IN NEW CEILINGS AT SAME LOCATION EXCEPT WHERE SHOWN TO BE NEW.
8. CONDUIT/WIRE NOT TO BE REUSED SHALL BE REMOVED ALL THE WAY BACK TO THE UPSTREAM EQUIPMENT.
   - 8.A. PROVIDE ADDITIONAL SUPPORTS FOR EXISTING CONDUIT/WIRE TO REMAIN TO MEET CURRENT CODE REQUIREMENTS.
9. ANY MATERIAL THAT HAS SALVAGE VALUE SHALL BE OFFERED TO THE OWNER, AND IF ACCEPTED, DELIVERED TO HIS WAREHOUSE. IF NOT ACCEPTED IT SHALL BE PROPERLY DISPOSED OF WITH THE OTHER CONSTRUCTION DEBRIS.
10. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITES.
11. WHERE PARTIAL CIRCUITS OR SYSTEMS ARE TO BE REUSED, ENSURE THAT THEY REMAIN ACTIVE. WHERE EXISTING EQUIPMENT IS RELOCATED OR REPLACED WITH NEW. MODIFY, EXTEND AND RELOCATE EXISTING CIRCUIT TO CONNECT TO EQUIPMENT, UNLESS SHOWN TO HAVE NEW CIRCUIT.
12. WHERE AUXILIARY SYSTEMS SUCH AS SECURITY, DATA, SOUND, ETC. INTERFACE WITH EXISTING EQUIPMENT THAT IS REPLACED OR MODIFIED (MECHANICAL, ELECTRICAL OR PLUMBING), DISCONNECT AND RECONNECT THESE SYSTEMS.
13. WHERE NEW CIRCUIT BREAKERS ARE TO BE INSTALLED IN EXISTING PANELS OR SWITCHBOARD, VERIFY THAT THE CIRCUIT BREAKER WILL FIT IN THE ALLOTTED SPACE. PROVIDE NEMA 1 ENCLOSURE ADJACENT TO PANEL & WIRE CONNECT TO BUSSING IF THERE IS INSUFFICIENT SPACE.
14. WHERE PARTIAL CIRCUITS OR SYSTEMS ARE TO BE REUSED, ENSURE THAT THEY REMAIN ACTIVE. WHERE EXISTING EQUIPMENT IS RELOCATED OR REPLACED WITH NEW, MODIFY, EXTEND AND RELOCATE EXISTING CIRCUIT TO CONNECT TO EQUIPMENT, UNLESS SHOWN TO HAVE NEW CIRCUIT.
15. WHEN REPLACING LIGHTS AND CEILINGS, ENSURE THAT EXISTING DATA, TELEVISION AND PA CABLES TO REMAIN CONTINUE TO MEET THE CURRENT STANDARDS. FOR DATA CABLES, THIS IS THE IEEE 802.1. FOR TELEVISION AND PA CABLE, A FOUR INCH DISTANCE IS NEEDED FROM ALL LIGHT FIXTURES. NEW DROP LOCATION SHOULD BE WITHIN THREE FEET OF POWER OUTLET.
16. PAINT NEW AND EXISTING EXPOSED RACEWAY IN AREAS OF RENOVATION TO MATCH FINISHES.
17. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
18. INTERESTED CONTRACTORS MUST VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH THE PROJECT REQUIREMENTS AND EXISTING CONDITIONS AND SHALL INCLUDE IN THEIR PROPOSALS COSTS TO REPAIR, RELOCATE, MODIFY AND REMOVE EXISTING ELEMENTS AS REQUIRED TO COMPLETE INSTALLATION OF ALL SYSTEMS SHOWN ON THESE DRAWINGS.
19. SEE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

ELEC REQUIREMENTS FOR BUILDING RENOVATION

1. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
2. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
3. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
4. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
5. ALL EXISTING DEVICES TO REMAIN SHALL BE REINSTALLED IN NEW CEILINGS AND WALLS EXCEPT WHERE INDICATED TO BE REMOVED/RELOCATED/REPLACED.
6. EXISTING DEVICES IN WALLS TO BE FURRED OUT OR RECEIVE NEW SURFACE TREATMENT SHALL REMAIN. EXTEND JBOX TO NEW WALL SURFACE AND RECONNECT TO EXISTING CIRCUITS. EXTEND WIRING/CABLING FROM NEAREST ACCESSIBLE POINT AS NECESSARY.
7. REINSTALL ALL DEVICES NOT SHOWN TO BE REMOVED.
8. EXISTING LIGHT FIXTURES SHALL REMAIN EXCEPT WHERE SHOWN AS NEW. EXTEND EXIST CONDUIT AND WIRE DOWN TO NEW LIGHT FIXTURES, REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. ALL EXISTING EXIT SIGNS SHALL BE REINSTALLED AND RECONNECTED TO EXISTING CIRCUITS EXCEPT IN CORRIDORS AND AREAS OF RENOVATION SHOWING NEW.
10. ALL NEW DEVICES IN EXISTING WALLS IN FINISHED SPACES SHALL BE INSTALLED FLUSH MOUNTED, NO EXPOSED CONDUIT OR WIREMOLD ALLOWED. CUT EXISTING WALLS AND PATCH/REPAIR TO MATCH EXISTING AS REQUIRED.
    - 10.1. DEVICES/CONDUIT IN CUSTODIAL, MECHANICAL AND ELECTRICAL ROOMS MAY BE EXPOSED AND SURFACE MOUNTED.
11. PROVIDE NEW DIRECTORY FOR ALL EXISTING AND NEW PANELS SHOWING FIELD VERIFIED CIRCUITS.
12. ANY FEEDER AND BRANCH CIRCUIT NOT TO BE REUSED SHALL BE REMOVED COMPLETELY UP TO CB IN EXISTING PANEL.
13. ANY CIRCUIT OR PARTIAL CIRCUIT TO BE REUSED SHALL REMAIN ACTIVE.

GENERAL EQUIPMENT ELECTRICAL NOTE

THE ELECTRICAL DESIGN HAS BEEN COORDINATED FOR SPACE, INSTALLATION AND ELECTRICAL REQUIREMENTS WITH EQUIPMENT THAT IS SCHEDULED BY OTHER DIVISIONS. THE REQUIREMENTS FOR OTHER EQUIPMENT AND MODELS FROM ACCEPTABLE MANUFACTURERS HAVE NOT BEEN VERIFIED OR COORDINATED. THE GENERAL CONTRACTOR SHALL VERIFY THESE REQUIREMENTS PRIOR TO USING OTHER EQUIPMENT IN HIS BID AND INCLUDE ANY ADDITIONAL COSTS FOR INSTALLATION OF THE EQUIPMENT. THIS INCLUDES GENERAL CONSTRUCTION AND MEP COSTS.

ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER/OTHER TRADES FOR EXACT ELECTRICAL REQUIREMENTS OF EQUIPMENT PRIOR TO ORDERING CB(S). FIELD VERIFY EQUIPMENT NAMEPLATE RATINGS AND EQUIPMENT CONNECTION LOCATIONS WITH OTHER TRADES PRIOR TO ROUGH-IN.

TYPICAL OF HVAC EQUIPMENT, SHOP EQUIPMENT, KITCHEN EQUIPMENT, ELECTRIC ROLLUP DOORS, ETC.

GENERAL ELECTRICAL NOTES

1. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. INSTALL SYSTEMS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
3. PROVIDE LIGHT FIXTURE FIRE PROTECTION AND CONDUIT FIRE SEALING TO MAINTAIN FIRE RATING OF WALLS AND CEILINGS PER ARCHITECT'S SCHEDULE. REF. SPECIFICATIONS AND ARCH. DRAWINGS FOR ADDITIONAL INFORMATION.
4. ELECTRICAL RECEPTACLES, TELEPHONES, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
5. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
6. DO NOT INSTALL ELECTRICAL PANELS AND TRANSFORMERS UNTIL 1/4" SCALE DRAWINGS SHOWING LOCATION OF THIS EQUIPMENT RELATIVE TO MECHANICAL/PLUMBING EQUIPMENT, DUCTWORK AND PIPING IS SUBMITTED AND APPROVED. NEC CODE CLEARANCE MUST BE MAINTAINED.
7. ELECTRICAL EQUIPMENT HAS BEEN COORDINATED WITH PIPING AND DUCTWORK. DO NOT RELOCATE PANELS WITHOUT PRIOR APPROVAL.
8. ELECTRICAL DEVICES IN FIRE RATED WALLS SHALL BE A MINIMUM OF 24" AWAY FROM DEVICES ON THE OPPOSITE SIDE OF THE WALL TO MAINTAIN FIRE RATING.
9. MINIMUM SIZE CONDUIT FOR POWER SHALL BE 3/4", MIN. SIZE FLEX CONDUIT MAY BE 1/2". MINIMUM SIZE CONDUIT FOR DATA SHALL BE 1"C. DO NOT COMBINE CONDUIT FOR DATA.
10. MAX. LENGTH FOR FLEX CONDUIT SHALL BE 6 FT. ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
11. LIGHT FIXTURE WHIPS MAY BE MIN. 1/2" FLEX CONDUIT WITH MIN. #12 WIRE. LIGHT FIXTURE WHIPS SHALL BE NO MORE THAN 6 FT LONG.
12. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
13. GROUND TRANSFORMER SECONDARIES TO BUILDING STEEL AND GROUND ROD. PROVIDE CONDUIT TO PROTECT GROUNDING CONDUCTOR AND BOND EACH END OF CONDUIT TO GROUNDING SYSTEM. MIN. SIZE OF CONDUIT FOR GROUND WIRE SHALL BE 3/4"C.
14. PROVIDE J-BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM AND SOUND SYSTEMS WIRINGS, ETC. SEE SPECIFICATIONS.
15. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS.
16. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
17. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12. ALL WIRE SHALL BE STRANDED TYPE THHN OR THWN-2 (WET RATED FOR 90° C). ALL WIRES SHALL BE COLOR CODED WITH SAME COLOR CONNECTED TO SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION.
18. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT. NO SURFACE MOUNTED WIREMOLD SHALL BE ALLOWED IN FINISHED SPACES. MC CABLE SHALL BE ALLOWED INSIDE EXIST STUD WALLS OR CHASE WALLS.
19. PROVIDE AND INSTALL FINAL CONNECTIONS TO ALL EQUIPMENT PROVIDED BY OTHER TRADES AND/OR FURNISHED BY OWNER INCLUDING ALL NECESSARY CONDUIT, CORDS, PLUGS, WHIPS, HARDWIRING, ETC. IN PARTICULAR CONFIRM CONNECTION REQUIREMENTS WITH DELIVERED EQUIPMENT PRIOR TO ROUGH-IN.
20. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

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ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

j

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED PROFESSIONAL ENGINEER
07.18.2025

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11767 KATY FREEWAY, SUITE 430
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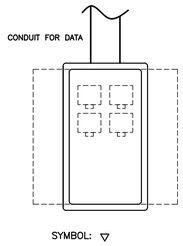
PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL AND FIRE ALARM NOTES

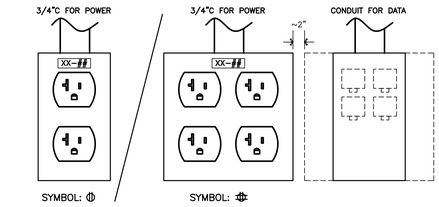
j-E.001



1 TYPICAL DATA OUTLETS

NO SCALE

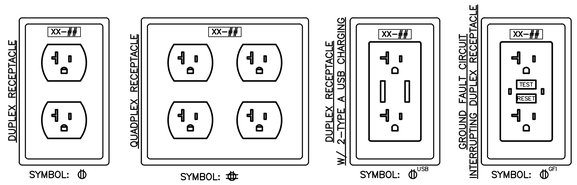
NOTES:
1. PROVIDE DEEP 4 11/16" X 4 11/16" X 2 1/8", 2-GANG BACK BOX FOR ALL DATA OUTLETS.
   1.A. PROVIDE SINGLE GANG MUDRING FOR DATA OUTLETS WITH 1-4 DROPS.
   1.B. PROVIDE PULL STRING IN ALL LOW VOLTAGE CONDUITS.
2. LOW VOLTAGE CABLING AND DEVICES BY DIVISION 27.
3. REFERENCE TECHNOLOGY DRAWINGS FOR ADDITIONAL INFORMATION.



2 TYPICAL POWER & DATA OUTLET DETAIL

NO SCALE

NOTES:
1. LOCATE DEVICES GROUPED TOGETHER AS CLOSELY TOGETHER AS POSSIBLE.
   1.A. USE CADDY TSGB16, RBS16 OR SIMILAR MOUNTING BAR IN SHEETROCK WALLS.



3 TYPICAL ELECTRICAL DEVICES

NO SCALE

NOTES:
1. ALL DEVICES SHALL BE COLOR CODED PER SPECIFICATIONS WITH 302/304 STAINLESS STEEL, STANDARD SIZE, FACEPLATES.
2. ONLY SELECT RECEPTACLES ARE SHOWN HERE. PROVIDE SIMILAR LABELS ON ALL SWITCHES, NEMA POWER OUTLETS, ETC.
3. PROVIDE LABEL WITH RED TEXT READING "EMERGENCY" FOR DEVICES ON GENERATOR FED CIRCUITS.
4. PROVIDE TYPEWRITTEN OR PREMADE CIRCUIT LABELS INDICATING THE ELECTRICAL CIRCUIT ON:
   4.A. INSTALLED WIRING AT EACH SPLICE POINT
   4.B. EACH J-BOX ABOVE CEILING WITH WIRING INSTALLED OR MODIFIED AS PART OF THIS PROJECT.
   4.C. AFFIXED TO THE FRONT OF EACH NEW AND EXISTING DEVICE FACEPLATE IN THE AREA OF RENOVATION.
   CIRCUIT LABEL
   XX-## A. XX = PANEL DESIGNATION
   B. ## = AS-BUILT CIRCUIT DESIGNATION

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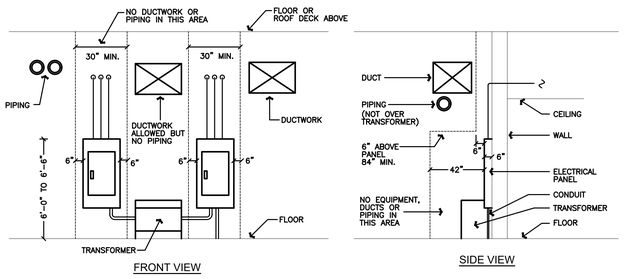
ELECTRICAL DEVICE DETAILS

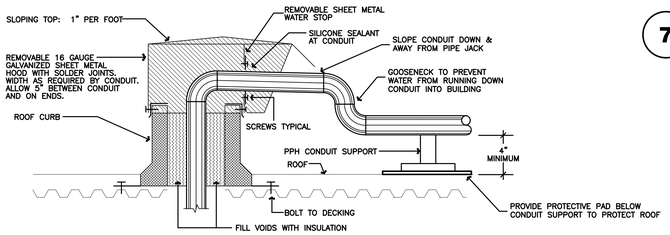
j-E.010



10 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

COORDINATE WITH OTHER TRADES TO ENSURE NO PIPING AND DUCTWORK ABOVE ELECTRICAL EQUIPMENT AS SHOWN. PROVIDE WORKING CLEARANCE IN FRONT OF STARTERS, DISCONNECTS, PANELS, XFMRS AND ADDITIONALLY PER CODE.



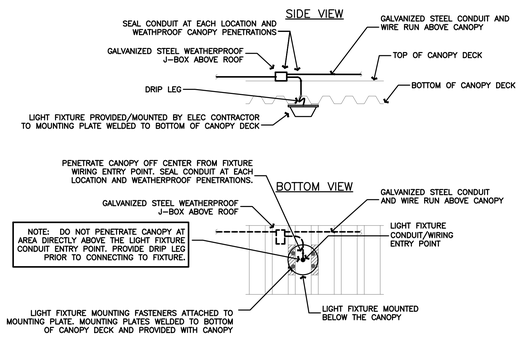
11 CONDUIT ROOF PENETRATION DETAIL

NO SCALE

12 ROOF AND CANOPY CONDUIT SUPPORT DETAIL

NO SCALE

1. COORDINATE WITH ARCHITECTURAL DRAWINGS, DETAILS, SPECIFICATIONS AND OTHER TRADES.

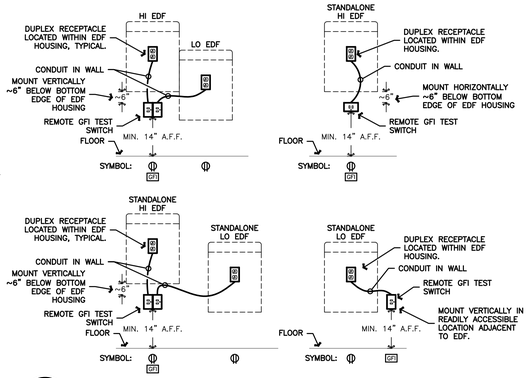


13 CANOPY LIGHT MOUNTING DETAIL TYPE 1

NO SCALE

NOTES:

1. MOUNTING PLATES SHALL BE WELDED TO CANOPY TO MOUNT LIGHT FIXTURES.
2. FOR FIXTURES WITH END CONDUIT ATTACHMENTS ALL CANOPY PENETRATIONS SHALL BE MADE OFF CENTER FROM THE FIXTURE WIRING ENTRY POINT AND SHALL HAVE WEATHERTIGHT SEALING. (SHOWN HERE)
3. CANOPY PENETRATIONS ABOVE FIXTURES SHALL BE PERMITTED ONLY WHERE THE SUPPLIED FIXTURE HAS NO END CONDUIT ATTACHMENTS.
4. CONDUIT SHALL BE SEALED BOTH ABOVE AND BELOW THE CANOPY PENETRATION AND AGAIN AT THE FIXTURE ENTRY POINT TO PREVENT WATER FROM ENTERING THE LIGHTING FIXTURE.
5. CANOPY PENETRATIONS SHALL BE MADE AS CLOSE TO CONDUIT ENTRY PENETRATION POINT AS POSSIBLE AND CONDUIT SHALL BE ROUTED TO MINIMIZE EXPOSED CONDUIT.

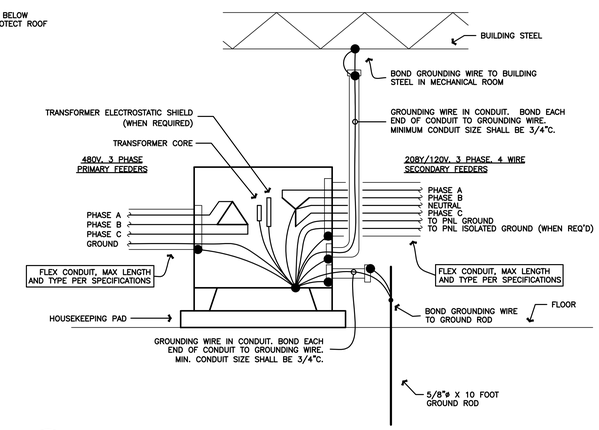


7 EDF GFI PROTECTION DETAIL

NO SCALE

NOTES:

1. MODIFY EXISTING WALL AS NEEDED TO INSTALL NEW RECEPTACLE AND REMOTE GFI TEST SWITCH. PATCH/REPAIR WALL AS NEEDED TO MATCH EXISTING.
2. WIRE NEW RECEPTACLE DOWNSTREAM OF REMOTE GFI TEST SWITCH.
3. REMOTE GFI TEST SWITCH SHALL BE A DEAD FRONT GFI DEVICE TO BE INSTALLED FLUSH MOUNTED IN WALL WITH EDF SERVED AND PROVIDE GFI PROTECTION FOR THE RECEPTACLE LOCATED WITHIN THE EDF HOUSING.
4. GFI TEST SWITCH SHALL BE READILY ACCESSIBLE PER NEC 210.8.
5. COORDINATE RECEPTACLE LOCATION(S) WITHIN EDF HOUSINGS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

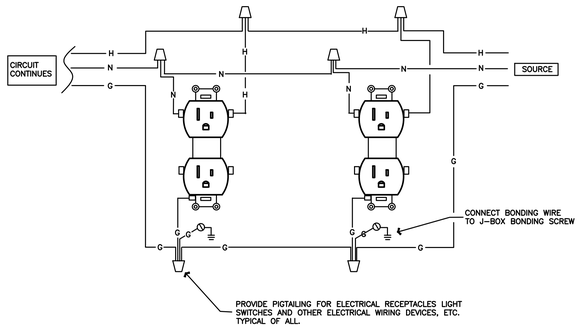


8 TRANSFORMER CONNECTION AND GROUNDING DETAIL

NO SCALE

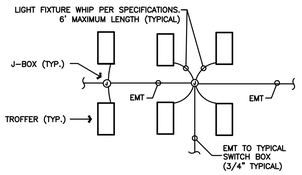
NOTES:

1. INSTALL GROUND ROD ADJACENT TO TRANSFORMER AND SEAL PENETRATION AROUND GROUND ROD.
2. WHERE AN ISOLATED GROUND IS PROVIDED MAKE THE CONNECTION AT THE TRANSFORMER AND RUN DIRECTLY TO THE ISOLATED GROUND BAR IN THE PANELBOARD. DO NOT DEFINE THE ISOLATED GROUND AT THE PANELBOARD.
3. FINAL CONNECTIONS TO TRANSFORMERS SHALL BE MADE IN FLEXIBLE CONDUIT. PROVIDE LIQUID TIGHT CONSTRUCTION AND FITTINGS IN WET, DAMP OR OUTSIDE AREAS EXCEPT WHERE LOCATED IN AIR HANDLING ROOMS. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.



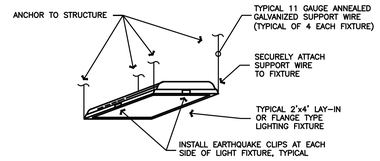
9 PIGTAIL WIRING DETAIL FOR ELECTRICAL DEVICE

NO SCALE



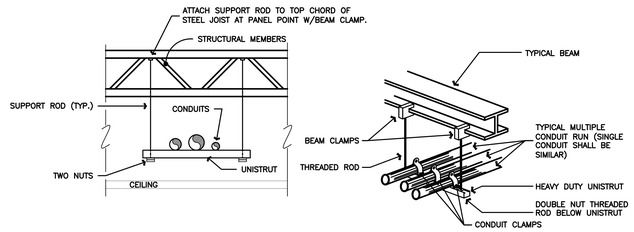
1 CONDUIT/J-BOX DETAIL FOR LIGHT FIXTURES IN LAY-IN CEILING

NO SCALE



2 FIXTURE SUPPORT DETAIL

NO SCALE

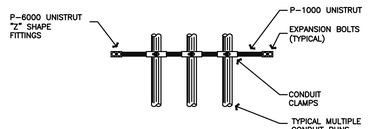


3 TRAPEZE MOUNTED CONDUIT DETAIL

NO SCALE

NOTES:

1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

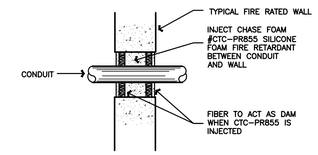


4 WALL MOUNTED CONDUITS

NO SCALE

NOTES:

1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

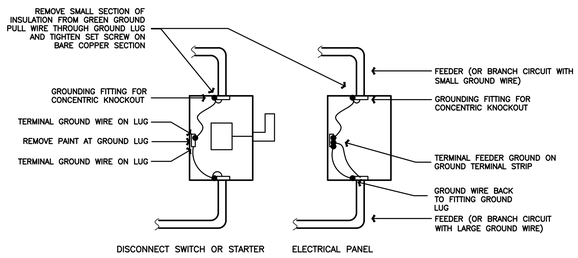


5 FIREWALL PENETRATION DETAIL

NO SCALE

NOTES:

1. FIRE RATING OF COMPLETED FIREPROOFED ASSEMBLY SHALL BE EQUAL OR EXCEED RATING OF WALL.



6 GROUNDING BUSHING WIRING DETAIL

NO SCALE

NOTE:

1. PROVIDE AND INSTALL GROUNDING BUSHINGS FOR DISCONNECT SWITCHES, PANELS AND TRANSFORMERS.

ISSUE:

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03/11/2025	50% CD PKG.
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FORT BEND INDEPENDENT SCHOOL DISTRICT
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2022 COLONIST PARK DRIVE
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SEAL

STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED
PROFESSIONAL ENGINEER
07.18.2025

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ELECTRICAL DETAILS

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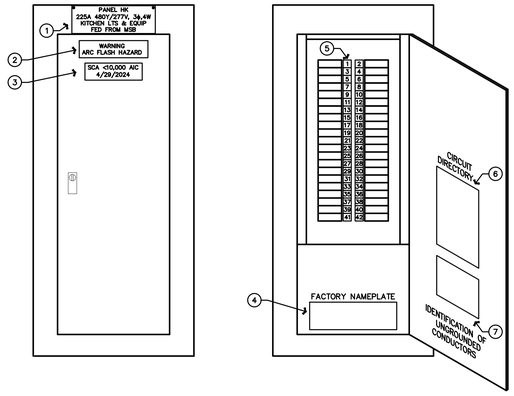


5 TYPICAL BRANCH CIRCUIT PANEL LABELING DETAIL

NO SCALE

NOTES:

1. LAYOUT OF PANELBOARD, INCLUDING LOCATIONS OF NAMEPLATES, CIRCUIT DIRECTORY, AND OTHER LABELING IS SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS.
2. REFERENCE OWNER'S DESIGN GUIDELINES FOR ADDITIONAL LABELING REQUIREMENTS.

(1) PROVIDE LAMACOID NAMEPLATE WITH 5/16" LETTERS SHOWING PANEL NAME, AMPERAGE RATING, VOLTAGE, AND FROM WHERE POWER IS DERIVED. ATTACH WITH MASTIC AND TWO SCREWS. COORDINATE TO GIVE SAME NAME AS PANEL SCHEDULE. IF USED AS MAIN SERVICE PANEL, PROVIDE SHORT CIRCUIT AVAILABLE AND RATING INFORMATION.

(2) PROVIDE PERMANENT ARC FAULT WARNING LABEL.

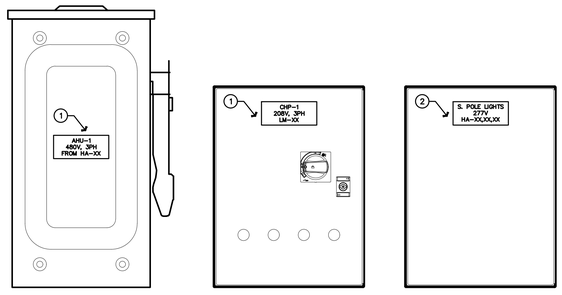
(3) FOR ALL NEW ELECTRICAL EQUIPMENT, PROVIDE PERMANENTLY AFFIXED LABEL STATING FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE MINIMUM 2" X 3" IN SIZE, AND INCLUDE THE DATE OF THE CALCULATION. REFERENCE ELECTRICAL DRAWINGS AND EQUIPMENT SHORT CIRCUIT ANALYSIS TABLE. ATTACH WITH MASTIC AND TWO SCREWS.

(4) PROVIDE INFORMATION PER INDUSTRY STANDARDS, BUT SHALL INCLUDE VOLTAGE, PHASE, BUS AMPERAGE, AND SHORT CIRCUIT RATING

(5) FOR EACH CIRCUIT PROVIDE PERMANENT LABEL INDICATING CIRCUIT BREAKER NUMBER, NUMBER SHALL MATCH CIRCUIT DIRECTORY.

(6) CIRCUIT DIRECTORY TO BE COMPLETED AT END OF JOB, TYPEWRITTEN, STATING EQUIPMENT OR ROOMS SERVED BY CIRCUIT. EVEN CIRCUIT ON RIGHT SIDE OF CARD, ODD ON LEFT. PROVIDE LAMINATED DIRECTORY FOR EXTERIOR OR WET LOCATIONS.

(7) PROVIDE PERMANENT LABEL INDICATING COLOR CODING OF PHASE CONDUCTORS BASED ON VOLTAGE USING BUILDING COLOR SCHEME AS IDENTIFIED IN THE OWNER'S DESIGN GUIDELINES.



1 TYPICAL DISCONNECT, STARTER, & CONTACTOR LABELING DETAIL

NO SCALE

NOTES:

1. LOCATIONS OF NAMEPLATES SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS. REFERENCE OWNER'S DESIGN GUIDELINES FOR ADDITIONAL LABELING REQUIREMENTS.

(1) PROVIDE AN ENGRAVED NAMEPLATE SHOWING LOAD SERVED, EQUIPMENT VOLTAGE, AND CIRCUIT NUMBER MATCHING AS-BUILT CONDITIONS.

(2) PROVIDE AN ENGRAVED NAMEPLATE SHOWING LOADS SERVED, VOLTAGES, AND CIRCUIT NUMBERS MATCHING AS-BUILT CONDITIONS FOR ALL CONTACTOR CIRCUITS. LOADS SERVED SHALL BE "LIGHTING", "FAN", "RECEPTACLES", "PUMP", "WATER HEATER", OR SIMILAR DESCRIPTIVE NOTE.

DISHWASHER
480V, 3PH, 3 WIRE
FROM HK-2/4/6

2 DISCONNECT LABELING

NO SCALE

NOTES:

1. PROVIDE LABEL ON EACH DISCONNECT AND FUSED SWITCH.
   1.1. FOR DISCONNECTS AND FUSED SWITCHES REPLACE "PANEL P1NA" WITH THE LOAD SERVED.
   1.2. REFER TO OWNER'S STANDARDS FOR ADDITIONAL LABEL REQUIREMENTS.
2. PROVIDE LABEL ON ELECTRICAL PANEL AND TRANSFORMER.
   2.1. REPLACE "PANEL P1NA" WITH THE PANEL OR TRANSFORMER NAME BEING LABELED.
3. REPLACE "400A FUSED SWITCH" WITH UPSTREAM SOURCE OR CONNECTION.
   3.1. IF FED FROM A XFMR REPLACE "400A FUSED SWITCH" WITH "XFMR XX" WHERE XX IS THE FIELD VERIFIED XFMR NAME.
4. REPLACE VOLTAGE CONFIGURATION TO MATCH THE EQUIPMENT BEING LABELED.
5. REFERENCE FLOOR PLANS FOR EQUIPMENT LOCATIONS.

⚠ WARNING

Arc Flash and Shock Hazard
Appropriate PPE Required

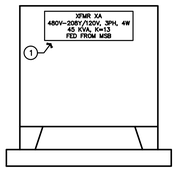
FLASH PROTECTION		SHOCK PROTECTION	
Incident Energy at:	18 in	Shock Risk When Cover is Removed	480 VAC
Min. Arc Rating:	0.45 cal/cm²	Limited Approach	42 in
Arc Flash Boundary:	10 in	Restricted Approach	12 in
PPE: Per NFPA 70E 2015	1	Equipment Name: **PANEL HA** Prot Dev: 225/3 CB from Panel DA	

3 TYPICAL ARC FLASH LABEL DETAIL

NO SCALE

NOTES:

1. VALUES AND NAMES SHOWN HERE ARE FOR REFERENCE ONLY, MODIFY TO REFLECT PROJECT'S ARC FLASH STUDY VALUES AND EQUIPMENT NAMES.
2. IF MIN. ARC RATING IS OVER 40CAL/CM² MODIFY "WARNING" TEXT TO READ "DANGER" AND PROVIDE RED SHADING IN LIEU OF ORANGE SHOWN.



4 TYPICAL TRANSFORMER LABELING DETAIL

NO SCALE

NOTES:

1. LOCATIONS OF NAMEPLATES SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS.

(1) PROVIDE AN ENGRAVED NAMEPLATE SHOWING EQUIPMENT NAME, RATING, VOLTAGE, SOURCE.

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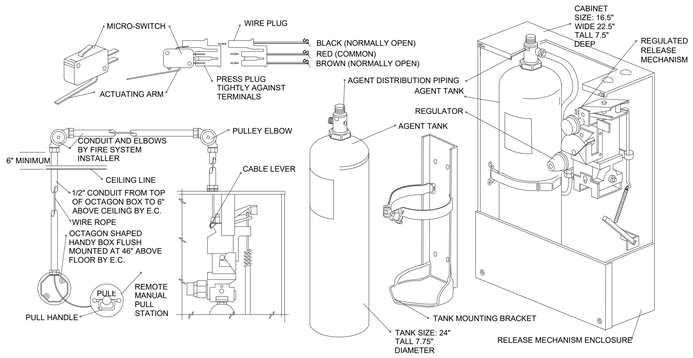
KITCHEN AREA ELECTRICAL NOTES

1. REFER TO KITCHEN CONSULTANTS "FS" DRAWINGS FOR ADDITIONAL REQUIREMENTS PARTICULARLY NOTING MOUNTING HEIGHTS OF EQUIPMENT OUTLETS AND JUNCTION BOXES, AND WHETHER SERVICE IS FROM WALL, FLOOR OR OVERHEAD.
2. SOME RECEPTACLES SHALL BE MOUNTED HORIZONTALLY, REFER TO KITCHEN CONSULTANTS "FS" DRAWINGS.
3. FOR DEVICES WITH SERVICE FROM FLOOR, RUN UNDERGROUND CONDUIT FROM DEVICES TO NEAREST COLUMN OR WALL THEN TURN CONDUIT UP AND RUN CONDUIT IN CEILING CAVITY.
4. LIGHT SWITCHES AND RECEPTACLES NOT SERVING A SPECIFIC PIECE OF EQUIPMENT SHALL BE MOUNTED AT ADA HEIGHTS.
5. CONNECTION TYPE SHOWN ON KITCHEN ELECTRICAL FLOOR PLAN IS FOR BIDDING PURPOSES, COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER FOR FINAL CONNECTIONS:
   - 5.A. OBTAIN WIRING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT FROM EQUIPMENT SUPPLIER PRIOR TO ORDERING WIRING DEVICES AND ROUGH-IN.
   - 5.B. IF EQUIPMENT REQUIRES CORD AND PLUG CONNECTION, CONTRACTOR SHALL PROVIDE NEMA POWER CORD, PLUG, AND RECEPTACLES PER MANUFACTURER'S INSTRUCTION.
   - 5.C. IF EQUIPMENT REQUIRES JUNCTION BOX AND/OR DISCONNECT SWITCH, CONTRACTOR SHALL PROVIDE JUNCTION BOX AND DISCONNECT SWITCH AND CONNECT EQUIPMENT WITH SEALTITE FLEXIBLE CONDUIT.
6. ALL DISCONNECT SWITCHES IN THE KITCHEN AREA SHALL BE NEMA 4XSS STAINLESS STEEL.
7. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
8. FLEXIBLE CONDUIT IN KITCHENS, FOOD PRODUCTION SPLASH ZONES AND WASH DOWN AREAS, FOOD PROCESSING, AND SIMILAR AREAS SHALL BE LIQUID TIGHT CONSTRUCTION INCORPORATING A BACTERIAL GROWTH INHIBITING PVC JACKET THAT MAY BE CLEANED WITHOUT DEGREDATION TO THE JACKET BLEACHING ELEMENTS AND APPROVED FITTINGS FOR WET LOCATION.
   - 8.A. AFC SZ TYPE LFMC OR EQUAL BY KAF-TECH.
9. INTERLOCK KITCHEN EXHAUST HOOD FIRE SYSTEM WITH FIRE ALARM SYSTEM.
10. PROVIDE RELAYS AND INTERLOCK KITCHEN HOOD FANS WITH FIRE ALARM SYSTEM. ACTUATION OF ANY ALARM INITIATING DEVICE SHALL DE-ENERGIZE KITCHEN HOOD FANS.
11. ALL GFI RECEPTACLES IN KITCHEN SHALL BE PASS & SEYMOUR MODEL 2097TRWR-XX TO EXCEED UL943 VOLTAGE SURGE REQUIREMENTS.

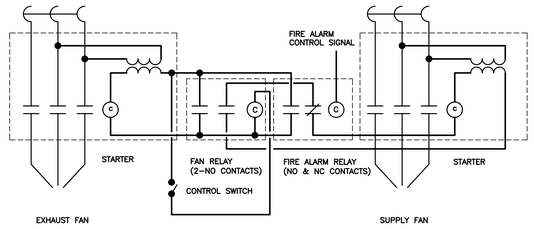


4 FIRE PROTECTION SYSTEM DETAIL

NO SCALE

NOTES:

1. ANSUL MODEL R-120 FIRE PROTECTION SYSTEM AND TANK(S)
2. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL POWER DISCONNECT DEVICES FOR ALL EQUIPMENT BELOW THE HOOD, SHUTTING OFF ALL SERVICE, INCLUDING CONTROL VOLTAGE, UPON ACTIVATION OF THE FIRE PROTECTION SYSTEM.
3. MICRO-SWITCH FURNISHED WITH SYSTEM TO BE INTERWIRED TO THE SHUT-OFF DEVICES FOR THE COOKING EQUIPMENT BY THE ELECTRICAL CONTRACTOR.
4. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL AN OCTAGON SHAPED HANDY BOX FOR THE PULL STATION AT 54" ABOVE THE FLOOR WITH 1/2" CONDUIT FROM THE TOP OF THE BOX TO 6" ABOVE THE CEILING.
5. GAS SHUT-OFF VALVE FURNISHED WITH THE SYSTEM (IF REQUIRED) TO BE INSTALLED IN THE GAS LINE SERVING THE COOKING EQUIPMENT BY THE PLUMBING CONTRACTOR. VERIFY SIZE OF GAS LINE.
6. ALL EXPOSED PIPEWORK TO BE STAINLESS STEEL OR CHROME WHERE EXPOSED.
7. VERIFY LOCATION OF REMOTE MANUAL PULL STATION.
8. UNIT MUST BE PLACED WITHIN EASY ACCESS OF EXIT DOOR.

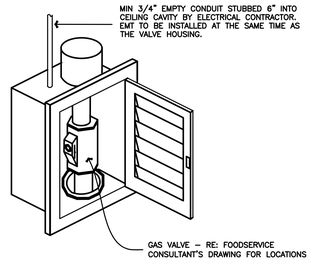


5 KITCHEN HOOD FAN CONTROL SCHEMATIC

NO SCALE

NOTES:

1. THE FANS SHALL BE WIRED SO THAT ONE LOCAL SWITCH TURNS ON ASSOCIATED SUPPLY AND EXHAUST FANS.
2. IF THE FIRE ALARM IS IN ALARM, A FIRE ALARM CONTROL CONTACT SHALL CAUSE THE SUPPLY FAN TO STOP AND THE EXHAUST FAN TO START, EVEN IF THE CONTROL SWITCH IS "OFF".
3. SCHEMATIC IS DIAGRAMMATIC. PROVIDE INTERLOCK WIRING BASED ON EQUIPMENT PROVIDED AND FAN VOLTAGE TO IMPLEMENT THE SEQUENCE SPECIFIED.
4. COORDINATE BETWEEN FIRE ALARM CONTRACTOR, CONTROLS CONTRACTOR AND ELECTRICAL CONTRACTOR TO PROVIDE A COMPLETE INSTALLATION.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

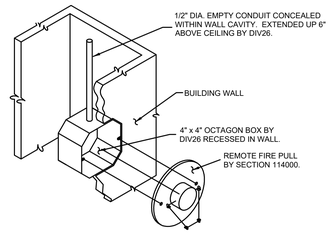


1 GAS VALVE DETAIL

NO SCALE

NOTES:

1. GAS VALVE HOUSINGS ARE NOT SHOWN ON THE ELECTRICAL DRAWING. GC AND ELECTRICAL CONTRACTOR SHALL COORDINATE SIZE AND LOCATION OF GAS VALVE HOUSINGS.
2. SEE FOOD SERVICE CONSULTANT'S DRAWINGS ADDITIONAL INFORMATION AND REQUIREMENTS.
3. PROVIDE MINIMUM 3/4"C AS SHOWN ON THIS DETAIL.

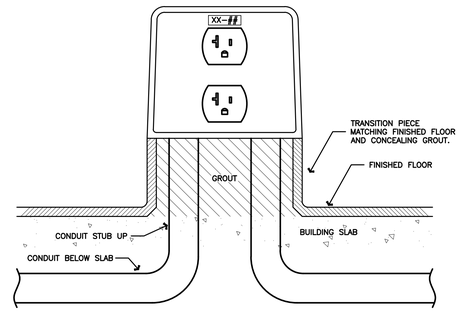


2 RECESSED FIRE PULL DETAILS

NO SCALE

NOTES:

1. VERIFY LOCATION OF REMOTE MANUAL PULL STATION.
   - 1.A. MANUAL PULL STATION MUST BE PLACED WITHIN EASY ACCESS OF EXIT DOOR.
   - 1.B. MANUAL PULL STATION MUST BE PLACED NO LESS THAN 4 FEET AWAY FROM KITCHEN HOOD BUT WITHIN A MAXIMUM OF 20 FEET FROM THE KITCHEN HOOD.



3 TYPICAL PEDESTAL MOUNTED DEVICE

NO SCALE

NOTES:

1. ALL FACEPLATES SHALL BE STAINLESS STEEL.
2. PEDESTAL BOX PROVIDED BY DIVISION 26.
   - 2.A. A STANDARD DUPLEX INSTALLATION IS SHOWN FOR REFERENCE, PROVIDE SIMILAR INSTALLATION FOR QUAD RECEPTACLES, GFI RECEPTACLES, DATA OUTLETS, NEMA POWER OUTLETS, ETC.
   - 2.B. ALL PEDESTAL BOXES TO BE DOUBLE FACED WITH ONE BLANK FACE FOR FUTURE GROWTH. 2-GANG PEDESTALS WITH ONE BLANK FACE FOR QUAD RECEPTACLE LOCATIONS.
   - 2.C. PEDESTAL BOXES TO BE SIZED BY DIVISION 26 TO PROVIDE SCHEDULED DEVICES ON A SINGLE FACE AND SUFFICIENT DEPTH FOR BACK TO BACK DEVICES ON DOUBLE FACED PEDESTALS.
   - 2.D. BASIS OF DESIGN:
     - 2.D.A. 1-GANG ELECTRICAL DEVICES: LEGRAND LBP2 OR WATER SAVER E400SA-WS
     - 2.D.B. 1-GANG LOW VOLTAGE DEVICES: LEGRAND LBP2 OR WATER SAVER E400SA-WS
     - 2.D.C. 2-GANG ELECTRICAL DEVICES: WATER SAVER E600SA-WS
     - 2.D.D. 2-GANG LOW VOLTAGE DEVICES: WATER SAVER E600SA-WS
3. INSTALLATION REQUIREMENTS:
   - 3.A. STUB UP CONDUIT ABOVE FLOOR TO PEDESTAL BOX CONNECTION LOCATION.
   - 3.B. GROUT GAP BETWEEN FINISHED FLOOR AND BOTTOM OF PEDESTAL BOX.
   - 3.C. PROVIDE TRANSITION PIECE TO CONTINUE FINISHED FLOOR TO BOTTOM EDGE OF SERVICE FITTING AND CONCEAL GROUT. TRANSITION PIECE TO MATCH ARCHITECT'S FINISH SCHEDULE.
   - 3.D. PEDESTAL BOX TO BE INSTALLED SQUARE TO THE FINISHED FLOOR.
4. PROVIDE TYPEWRITTEN OR PREMADE CIRCUIT LABELS ON INSTALLED WIRING AT EACH DEVICE AND SPLICE POINT.
5. PROVIDE TYPEWRITTEN LABEL AFFIXED TO THE FRONT OF EACH DEVICE FACEPLATE INDICATING ELECTRICAL CIRCUIT.

CIRCUIT LABEL

XX-##

- A. XX = PANEL DESIGNATION
- B. ## = AS-BUILT CIRCUIT DESIGNATION

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LIGHTING SYSTEM FUNCTIONAL TESTING AND DOCUMENTATION NOTES:

1. PRIOR TO PASSING FINAL INSPECTION, THE CONTRACTOR SHALL PERFORM FUNCTIONAL TESTING IN THE PRESENCE OF THE REGISTERED DESIGN PROFESSIONAL, THE OWNER AND/OR THEIR AGENT. THE FUNCTIONAL TESTING SHALL BE AS REQUIRED BY SECTION C408.3.1 OF THE 2021 IECC.
   1.A. THE FUNCTIONAL TESTING SHALL PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SYSTEMS, INCLUDING BOTH HARDWARE AND SOFTWARE, ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTRUCTIONS.
   1.B. THE FUNCTIONAL TESTING SHALL BE IN ACCORDANCE WITH SECTIONS C408.3.1.1 AND C408.3.1.2 OF THE 2021 IECC FOR THE APPLICABLE CONTROL TYPE.
   1.C. A WRITTEN REPORT SHALL BE GENERATED DOCUMENTING THE FUNCTIONAL TESTING RESULTS IN ACCORDANCE WITH THE 2015 IECC REQUIREMENTS.
2. ALL LIGHTING CONTROLS O&M MANUALS, AS-BUILTS, TESTING REPORTS AND DOCUMENTATION RELATED TO THE LIGHTING CONTROL SYSTEM SHALL BE PROVIDED IN THEIR FINAL AND APPROVED FORM WITHIN 60 DAYS OF THE CERTIFICATE OF OCCUPANCY. ALL DOCUMENTS CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA OF SECTION C405 OF THE 2021 IECC SHALL BE INCLUDED IN THE O&M MANUALS.
3. ALL DOCUMENTS FROM ITEMS #1 AND #2 ABOVE SHALL BE COMBINED AND PROVIDED TO THE OWNER WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

LIGHT FIXTURE SCHEDULE

EXTERIOR LIGHT FIXTURE SCHEDULE

RECESSED 6" DOWNLIGHT WET LOCATION	D5 D5Y	6" DIAMETER RECESSED LED DOWNLIGHT, SPECULAR CLEAR REFLECTOR, MEDIUM (56°) BEAM DISTRIBUTION, 1000 LUMENS, 4000K COLOR TEMPERATURE, 120-277V MULTIVOLT INPUT, 1% 0-10V DIMMING DRIVER. LIGHTOLIER 6R-N / C6L-10-9-40-M-Z10-U / C6-R-DL-CC	9W
RECESSED 6" DOWNLIGHT WET LOCATION	D6 D6Y	6" DIAMETER RECESSED LED DOWNLIGHT, SPECULAR CLEAR REFLECTOR, MEDIUM (56°) BEAM DISTRIBUTION, 2000 LUMENS, 4000K COLOR TEMPERATURE, 120-277V MULTIVOLT INPUT, 1% 0-10V DIMMING DRIVER. LIGHTOLIER 6R-N / C6L-20-9-40-M-Z10-U / C6-R-DL-CC	22W
SURFACE CANOPY SQUARE LED	WC1 WC1X WC1Y	9" SQUARE SURFACE LED CANOPY LIGHT, 4000K COLOR TEMPERATURE, 3500 LUMENS, 120-277V MULTIVOLT INPUT, DARK BRONZE FINISH. EELP VR7-T-28L-QT-40K (EBLED9W)	28W
EXTERIOR WALL PACK	WP1 WP1X WP1Y	7" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 5000 LUMENS, TYPE 3 DISTRIBUTION, 120-277 MULTIVOLT INPUT, WET LOCATION, 10KV KA SURGE PROTECTION. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM SMALL GWS-A04-740-UNV-XX FINISH (EM)	34W
EXTERIOR WALL PACK	WP2 WP2X WP2Y	12" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 8500 LUMENS, TYPE 3 DISTRIBUTION, 120-277 MULTIVOLT INPUT, WET LOCATION. REFER TO ARCH FOR MOUNTING HEIGHT. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM MEDIUM GWM-A11-740-T3M-UNV-XX FINISH (REMOTE EM BATTERY)	52W
EXTERIOR WALL PACK	WP3 WP3X WP3Y	17" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 12500 LUMENS, TYPE 3 DISTRIBUTION, 120-277 MULTIVOLT INPUT, WET LOCATION. REFER TO ARCH FOR MOUNTING HEIGHT. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM MEDIUM GWM-A14-740-T3M-UNV-XX FINISH (REMOTE EM BATTERY)	77W

1. LIGHT FIXTURE CATALOG NUMBERS AND DESCRIPTIONS ARE SCHEDULED FOR ESTABLISHING QUALITY, APPEARANCE AND PERFORMANCE OF THE FIXTURES. EXACT CATALOG NUMBERS DESCRIBING MOUNTING CONDITIONS AND REQUIREMENT RELATED TO TRIM FOR ALL FIXTURES SHALL BE CONFIRMED (BY THE ELECTRICAL CONTRACTOR) WITH THE ROOM FINISH SCHEDULE AND REFLECTED CEILING PLANS ON THE ARCHITECTURAL PLANS PRIOR TO BIDDING AND SUBMITTING LIGHT FIXTURES. PROVIDE DRY WALL KIT AS REQUIRED.
2. ALL 'X', 'Y', AND 'Z' TYPE FIXTURES SHALL HAVE EMERGENCY POWER BACKUP. EMERGENCY POWER SOURCES SHALL MONITOR POWER UPSTREAM OF THE LIGHTING CONTROLS TO SEE IF POWER IS LOST. BATTERY PACKS AND INVERTERS SHALL BE CAPABLE OF POWERING THE DESIGNATED FIXTURE(S) WITH AN OUTPUT OF 1400 LUMENS FOR A MINIMUM OF 90-MINUTES, PROVIDE REMOTE BATTERY PACKS OR INVERTERS AS NECESSARY. EMERGENCY LIGHTS SHALL OPERATE ONLY UPON LOSS OF POWER. ALSO, PROVIDE AND WIRE TEST SWITCH AND LED INDICATOR LIGHT FOR EMERGENCY BATTERY. SEE WIRING INSTRUCTION SUPPLIED BY EMERGENCY BATTERY MANUFACTURER.
   2.A. 'X' TYPE FIXTURES (AX, ETC.) HAVE EMERGENCY GENERATOR POWER LIGHTING TRANSFER DEVICES.
   2.B. 'Y' TYPE FIXTURES (MY, ETC.) HAVE INDIVIDUAL 90-MINUTE EMERGENCY BATTERY POWER.
   2.C. 'Z' TYPE FIXTURES (QTZ, ETC.) HAVE 90-MINUTE INVERTER EMERGENCY BATTERY POWER.
3. PROVIDE BASE COVER FOR ALL LIGHT POLES.
4. ALL EXTERIOR FIXTURES SHALL BE WET RATED WITH COLD WEATHER BALLASTS AND BATTERY PACKS.
5. PROVIDE SPARE FIXTURES AND EMERGENCY DEVICES PER SPECIFICATIONS.
6. WHERE FIXTURE FINISHES ARE INDICATED TO BE SELECTED BY ARCHITECT THE CONTRACTOR SHALL INCLUDE IN THEIR BID ALL AVAILABLE FINISHES. SUBMIT COMPLETE FIXTURE FINISH OPTIONS AS PART OF THE LIGHTING SUBMITTAL PACKAGE.
7. EQUAL BY PHILIPS (CW LIGHTING), COOPER (PUTTERMAN SCHARCK), AND LITHONIA (LESCO) SHALL BE ACCEPTABLE.

INTERIOR LIGHT FIXTURE SCHEDULE

APPLICATION	TYPE	DESCRIPTION	WATTS
1X4 RECESSED LAY-IN CEILING SELECTABLE CCT & LUMENS	A1 A1X A1Y	2X4 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY-IN CEILING, 6000 LUMENS, 4000K COLOR TEMPERATURE, 120-347V MULTIVOLT INPUT, 5% 0-10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (47W). DAYBRITE 2SBP3550L8CS-4-UN3-DIM	47W
1X4 RECESSED LAY-IN CEILING SELECTABLE CCT & LUMENS	B1 B1X B1Y	1X4 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY-IN CEILING, 4500 LUMENS, 4000K COLOR TEMPERATURE, 120-347V MULTIVOLT INPUT, 5% 0-10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE 1SBP3040L8CS-4-UN3-DIM	36W
2X2 RECESSED LAY-IN CEILING SELECTABLE CCT & LUMENS	B2 B2X B2Y	2X2 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY-IN CEILING, 4250 LUMENS, 4000K COLOR TEMPERATURE, 120-347V MULTIVOLT INPUT, 5% 0-10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE 2SBP3040L8CS-2-UN3-DIM	39W
4FT STRIP LED MECHANICAL & STORAGE ROOMS	C CX CY	4 FOOT STRIP LED, STEEL HOUSING, FROSTED ACRYLIC LENS, 4000 LUMENS, 3500K COLOR TEMPERATURE, CHAIN HANGING SET, WIRE GUARD, 120-277V MULTIVOLT INPUT, 0-10V DIMMING DRIVER. PROVIDE CHAIN HANGING SET AND WIREGUARD IN MECHANICAL ROOMS AND AREAS WITHOUT CEILINGS. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE SDS-4-2448L-8CST-UNV-DIM	30W
RECESSED 6" DOWNLIGHT	D1 D1X D1Y	6" DIAMETER RECESSED LED DOWNLIGHT, MATTE WHITE FINISH, WIDE (76°) BEAM DISTRIBUTION, 1000 LUMENS, 4000K COLOR TEMPERATURE, 120-277V MULTIVOLT INPUT, 1% 0-10V DIMMING DRIVER. LIGHTOLIER 6R-N / C6L-10-9-40-W-Z10-U / C6-R-DL-WH	9W
RECESSED 6" DOWNLIGHT	D2 D2X D2Y	6" DIAMETER RECESSED LED DOWNLIGHT, MATTE WHITE FINISH, WIDE (76°) BEAM DISTRIBUTION, 2000 LUMENS, 4000K COLOR TEMPERATURE, 120-277V MULTIVOLT INPUT, 1% 0-10V DIMMING DRIVER. LIGHTOLIER 6R-N / C6L-20-9-40-W-Z10-U / C6-R-DL-WH	22W
EXIT SIGN	XB XS XD	DIE CAST ALUMINUM LED EXIT LIGHT, RED LETTERS, MATTE BLACK HOUSING W/ BRUSHED ALUMINUM FACE, UNIVERSAL ARROWS, 120/277 VOLT DUAL INPUT, 90 MINUTE EMERGENCY BATTERY. VERIFY LETTER AND FACE COLOR WITH OWNER/ARCHITECT PRIOR TO ORDERING. XS=SINGLE FACE, XD=DOUBLE FACE, XB=BACK MOUNTED PHILIPS CHLORIDE ER55L-3-R SURELITES CX7-1/2-R LITHONIA LQC-1/2-R-EL N	5W
EXIT SIGN INTEGRAL BATTERY INTEGRAL EM LIGHT BAR	YB YS YD	THERMOPLASTIC LED EXIT LIGHT WITH INTEGRAL EM LIGHT, RED LETTERS, WHITE HOUSING W/ WHITE FACE, UNIVERSAL ARROWS, 120-277 MULTIVOLT INPUT, 90 MINUTE EMERGENCY BATTERY. VERIFY LETTER AND FACE WITH OWNER/ARCHETICT PRIOR TO ORDERING. YS=SINGLE FACE, YD=DOUBLE FACE, YB=BACK MOUNTED SIGNTEX CLP-BB-U-R-W-DG	5W
TWIN HEAD EM LIGHT INTEGRAL BATTERY WET LOCATION	YT1	TWIN HEAD EM LIGHT, INJECTION-MOLDED THERMOPLASTIC WHITE HOUSING, GASKETED CLEAR POLYCARBONATE COVER, LED LAMPS, 90-MINUTE EMERGENCY BATTERY. CHLORIDE TPU-W-N-LM7-W	7W

LIGHTING CONTROL SEQUENCE OF OPERATIONS

ROOM TYPE	OCCUPANCY SENSOR: AUTO ON	OCCUPANCY SENSOR: MANUAL ON (VACANCY)	OCCUPANCY SENSOR: AUTO OFF (20 MIN MAX)	OCCUPANCY SENSOR: PARTIAL OFF AT NORMAL HOURS	OCCUPANCY SENSOR: AUTO ON AFTER HOURS	OCCUPANCY SENSOR: AUTO OFF AFTER HOURS (20 MIN MAX)	TIME SWITCH/SCHEDULING: TIME ON	TIME SWITCH/SCHEDULING: TIME OFF	TIME SWITCH/SCHEDULING: ASTRONOMIC OR PHOTOCELL ON/OFF	DAYLIGHT CONTROL: AUTO STEP CONTROL WITH OFF	DAYLIGHT CONTROL: AUTO CONTINUOUS DIM WITH OFF	LIGHT REDUCTION: MANUAL BI-LEVEL REDUCTION CONTROL	LIGHT REDUCTION: MANUAL CONTINUOUS DIM CONTROL	MANUAL CONTROL: MANUAL ON/OFF SWITCH	MANUAL CONTROL: MANUAL DIMMER SWITCH	MANUAL CONTROL: DISPLAY, ACCENT, TASK CONTROL	PLUG LOAD CONTROL	SEQUENCE OF OPERATION
Kitchen/Serving							•	•				•		•				LOCAL ON/OFF CONTROLS, LOCAL CONTROLS MAY OVERRIDE BUILDING SCHEDULE AND TURN ALL LIGHTS ON FOR MAXIMUM 2HRS. NETWORK LIGHTING CONTROLS ROOM CONTROLLER CONNECTED TO BUILDING CONTROLS; ON/OFF BASED ON BUILDING SCHEDULE, AFTER HOURS ON/OFF BASED ON OCCUPANCY, COORDINATE SCHEDULING WITH OWNER. WHERE ≥150W IN DAYLIGHT AREA, USE CONTINUOUS DIMMING DAYLIGHTING CONTROL.
Restrooms	100%		20 MIN											•				AUTO ON 100%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Custodial rooms		•	20 MIN											•	•			MANUAL ON, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Storage rooms	50%		20 MIN											•	•			AUTO ON 50%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF/DIMMING CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Private Offices	50%		20 MIN											•	•		•	AUTO ON 50%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF/DIMMING CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Corridors					100%	20 MIN	•	•						•				LOCAL ON/OFF CONTROLS, LOCAL CONTROLS MAY OVERRIDE BUILDING SCHEDULE AND TURN ALL LIGHTS ON FOR MAXIMUM 2HRS. NETWORK LIGHTING CONTROLS ROOM CONTROLLER CONNECTED TO BUILDING CONTROLS; ON/OFF BASED ON BUILDING SCHEDULE, AFTER HOURS ON/OFF BASED ON OCCUPANCY, COORDINATE SCHEDULING WITH OWNER. WHERE ≥150W IN DAYLIGHT AREA, USE CONTINUOUS DIMMING DAYLIGHTING CONTROL.
Electrical Rooms														•				MANUAL ON/OFF; LOCAL CONTROL DEVICE NOT TIED TO LVLCS.
Building Facade/Landscape							•	•										CONNECTED TO BUILDING CONTROLS THROUGH LIGHTING CONTACTOR; ON/OFF BASED ON BUILDING SCHEDULE.

1. DIMMER SWITCHES SHALL ACTIVATE PRESET ALL ON LIGHTING LEVEL WHEN PRESSED IN THE UP POSITION. LIGHTING LEVELS MAY BE RAISED/LOWERED BY HOLDING THE DIMMER PADDLE. WHEN PRESSED IN THE DOWN POSITION ALL LIGHTS SHALL SMOOTHLY DIM TO OFF.
2. AT LEAST 50 PERCENT OF ALL 125V, 15- AND 20-AMP RECEPTACLES INSTALLED IN ENCLOSED OFFICES, CONFERENCE ROOMS, ROOMS USED PRIMARILY FOR COPY OR PRINT FUNCTIONS, BREAKROOMS, CLASSROOMS AND INDIVIDUAL WORKSTATIONS, INCLUDING THOSE INSTALLED IN MODULAR PARTITIONS AND MODULE OFFICE WORKSTATION SYSTEMS SHALL HAVE PLUG LOAD CONTROL PER IECC 2021 C405.11.

LIGHTING CONTACTOR SCHEDULE

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	CONTACTOR LOCATION	CONTACTOR TYPE
CONTACTOR CT1						
CT1-1	KITCHEN/SERVING AREA - ZONE 'a'	HK-3	-	Kitchen-a	CENTRAL PLANT	MAGNETICALLY HELD
CT1-2	SPARE			Kitchen-a	CENTRAL PLANT	MAGNETICALLY HELD
CT1-3	SPARE			Kitchen-a	CENTRAL PLANT	MAGNETICALLY HELD
CONTACTOR CT2						
CT2-1	KITCHEN/SERVING AREA - ZONE 'b'	HK-3	-	Kitchen-b	CENTRAL PLANT	MAGNETICALLY HELD
CT2-2	SPARE			Kitchen-b	CENTRAL PLANT	MAGNETICALLY HELD
CT2-3	SPARE			Kitchen-b	CENTRAL PLANT	MAGNETICALLY HELD
CONTACTOR CT3						
CT3-1	KITCHEN SOFFIT/CANOPY LTS	HK-5	-	Exterior	CENTRAL PLANT	MAGNETICALLY HELD
CT3-2				Exterior	CENTRAL PLANT	MAGNETICALLY HELD
CT3-3				Exterior	CENTRAL PLANT	MAGNETICALLY HELD

1. REFERENCE TYPICAL LIGHTING CONTACTOR WIRING DIAGRAM.
2. EMERGENCY AND NORMAL ZONES WITHIN THE KITCHEN/SERVING SHALL HAVE SEPARATE CONTROLS TO ALLOW FOR LIGHTING REDUCTION CONTROL.
3. LIGHTING CONTACTORS SHALL BE DIN RAIL MOUNTED, MAGNETICALLY HELD TYPE WITH THREE WIRE CONTROL BY THE BAS.
   3.A. PROVIDE CABINET AT EACH LOCATION TO MOUNT ALL CONTACTORS IN A SINGLE ENCLOSURE. ENCLOSURE SIZED BY DIVISION 26.
   3.B. PROVIDE SEPARATE HOA SWITCHES IN THE FRONT COVER OF THE ENCLOSURE WIRED TO CONTROL THE FOLLOWING ZONES SEPARATELY.
      3.B.1. INTERIOR LIGHTING (ALL INTERIOR LIGHTING GROUPS)
      3.B.2. EXTERIOR LIGHTING (ALL EXTERIOR LIGHTING GROUPS)
      3.B.3. HOA SWITCH SHALL PASS THE BAS SIGNALS IN AUTO MODE, DISENGAGE ALL CONTACTORS IN THE OFF POSITION, AND ENGAGE ALL THE CONTACTORS IN THE ON POSITION.
   3.C. SPARE CAPACITY:
      3.C.1. PROVIDE MINIMUM TWO (2) SPARE POLE ON EACH COMBINED TYPE CONTACTOR FOR FUTURE USE.

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PROJ. NO.: 23-25
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LIGHTING SCHEDULES

j-E.060

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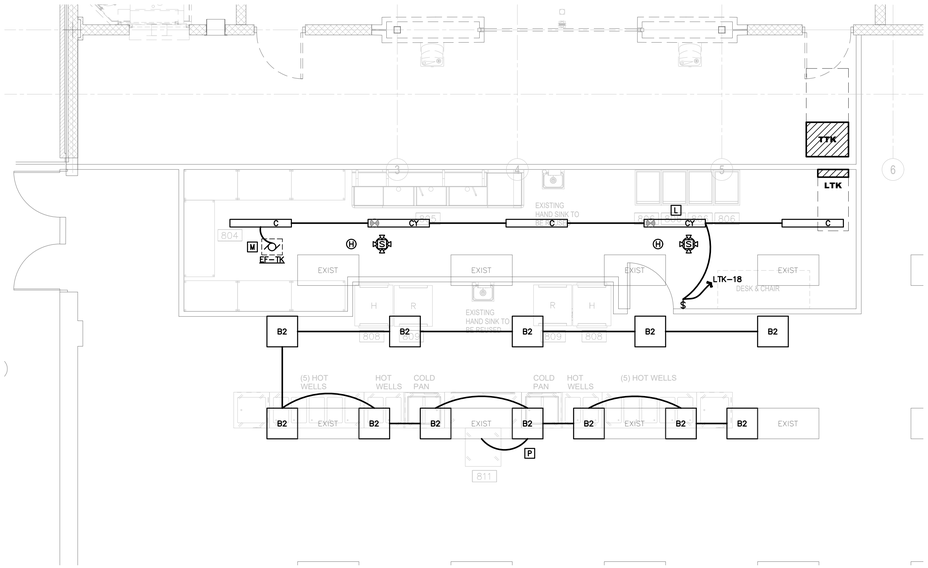
NEW PANEL — TEMP KITCHEN

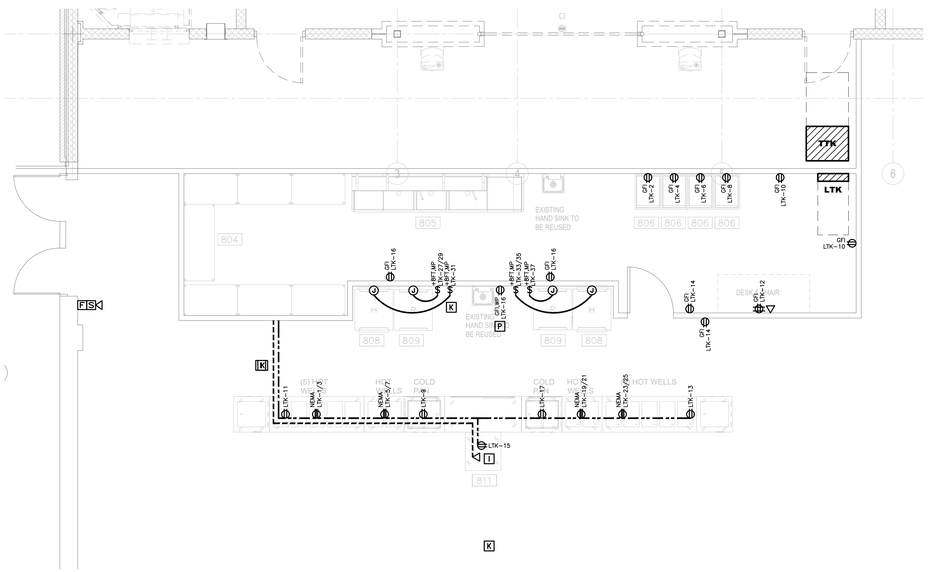
PANEL LTK — 150A MCB, 208Y/120V, 3ϕ, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: SURFACE

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E810	2766	HOT WELLS	2–12	20/2GFI	1	■			2	20/1	3–12	TRANSPORT CART	1920	E806	
	–	–	–	+12G	–	3		■		4	20/1	3–12	TRANSPORT CART	1920	E806	
	E810A	1643	HOT WELLS	2–12	20/2GFI	5			■	6	20/1	3–12	TRANSPORT CART	1920	E806	
	–	–	–	+12G	–	7	■			8	20/1	3–12	TRANSPORT CART	1920	E806	
	E810B	600	COLD PAN	3–12	20/1GFI	9		■		10	20/1	3–12	2 REC	360	E800A	
	E810C	1200	BEVERAGE	3–12	20/1GFI	11			■	12	20/1	3–12	2 REC – DESK	360	E800B	
	E810C	1200	BEVERAGE	3–12	20/1GFI	13	■			14	20/1	3–12	2 REC	360	E800A	
	E811	180	CASH REGISTER	3–12	20/1GFI	15		■		16	20/1	3–12	3 REC	360	E800A	
	E810B	600	COLD PAN	3–12	20/1GFI	17			■	18	20/1	3–12	TEMP. KITCHEN LTS/FAN	566		
	E810A	1643	HOT WELLS	2–12	20/2GFI	19	■			20	20/1		SPARE			
	–	–	–	+12G	–	21		■		22	20/1		SPARE			
	E810	2766	HOT WELLS	2–12	20/2GFI	23			■	24	20/1		SPARE			
	–	–	–	+12G	–	25	■			26	20/1		SPARE			
	E808	1622	HEATED CABINET	2–12	20/2	27		■		28	20/1		SPARE			
	–	–	–	+12N+12G	–	29			■	30	20/1	3–12	EXISTING CIRCUIT	500		3
	E809	984	REFRIGERATOR	3–12	20/1	31	■			32	20/1	3–12	EXISTING CIRCUIT	500		3
	E808	1622	HEATED CABINET	2–12	20/2	33		■		34	15/2	2–12	EXISTING CIRCUIT	1000		3
	–	–	–	+12N+12G	–	35			■	36	–	+12N+12G	–	–		
	E809	984	REFRIGERATOR	3–12	20/1	37	■			38	20/2	2–12	EXISTING CIRCUIT	1000		3
			SPARE		20/1	39		■		40	–	+12N+12G	–	–		
			SPARE		20/1	41			■	42	50/2	2–8	EXISTING CIRCUIT	5000		3
			SPARE		20/1	43	■			44	–	+8N+10G	–	–		
	TOTAL LOAD @ 100% =		35498VA			TOTAL LOAD @ 100% =				99A						

1. REF. KITCHEN CONSULTANT'S "FCS" DRAWINGS FOR KITCHEN EQUIPMENT NUMBERS.
2. A DEMAND FACTOR PERCENT OF 65% HAS BEEN APPLIED TO THE KITCHEN EQUIPMENT LOAD PURSUANT TO NEC 220–20 AND NEC TABLE 220–20.
3. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.



T1 **TEMPORARY KITCHEN - LIGHTING PLAN**
SCALE: 1/4" = 1'– 0"



T2 **TEMPORARY KITCHEN - ELECTRICAL PLAN**
SCALE: 1/4" = 1'– 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

DEMOLITION NOTES:

A. EXISTING STANDBY GENERATOR PANEL TO REMAIN.

B. EXISTING KITCHEN PANELS TO BE REPLACED WITH NEW. MODIFY EXISTING WALLS TO MATCH NEW PANEL LAYOUTS AND DIMENSIONS.

C. EXISTING LIGHTING FIXTURES AND CEILING DEVICES TO BE REMOVED THROUGHOUT.

D. EXISTING WALK–IN COOLER/FREEZER AND ASSOCIATED EQUIPMENT TO BE REMOVED.

E. EXISTING WALL ELECTRICAL DEVICES TO BE REMOVED. EXISTING J–BOXES MAY BE REUSED WHERE NEW DEVICES ARE TO BE INSTALLED AT THE SAME LOCATIONS.

F. EXISTING ELECTRICAL DEVICES TO BE REMOVED.

G. NEW 208Y/120V PANEL AND TRANSFORMER FOR TEMPORARY KITCHEN TO BE INSTALLED PRIOR TO DEMOLITION. PANEL AND TRANSFORMER TO BE REMOVED AT END OF KITCHEN RENOVATION AND TURNED OVER TO THE DISTRICT. INSTALL TRANSFORMER ON PREMADE FIBERCRETE PAD AND WAFFLE TYPE VIBRATION ISOLATION PADS. DO NOT PROVIDE A POURED IN PLACE CONCRETE PAD AT THIS LOCATION.

H. PROVIDE RECEPTACLES AND LIGHT FIXTURES FOR TEMPORARY KITCHEN DURING RENOVATION. ALL TEMPORARY DEVICES AND EQUIPMENT TO BE REMOVED AT END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE.

I. CONDUITS ROUTED FROM TEMPORARY KITCHEN WALL AND BENEATH SERVING LINE. PROVIDE MULTICHANNEL ROLLOVER CABLE PROTECTOR FOR EXPOSED CONDUITS NOT UNDER THE SERVING LINE. ALL CONDUITS UNDER THE SERVING LINE SHALL BE SECURED TO/ROUTED ON TOP OF UNISTRUT AND NOT DIRECTLY ON THE FLOOR. DO NOT ANCHOR UNISTRUT TO THE EXISTING FLOORING. COORDINATE POWER AND DATA OUTLET LOCATIONS WITH OTHER TRADES.

J. REMOVE EXISTING LIGHT FIXTURES ABOVE NEW KITCHEN EXTENSION. MODIFY EXISTING WIRING TO MAINTAIN REMAINING FIXTURE OPERATION.

K. HARDWIRE KITCHEN EQUIPMENT TO LOCAL ON/OFF SWITCH. TYPICAL.

L. SURFACE MOUNT FIXTURES ON TEMPORARY KITCHEN CEILING. TYPICAL.

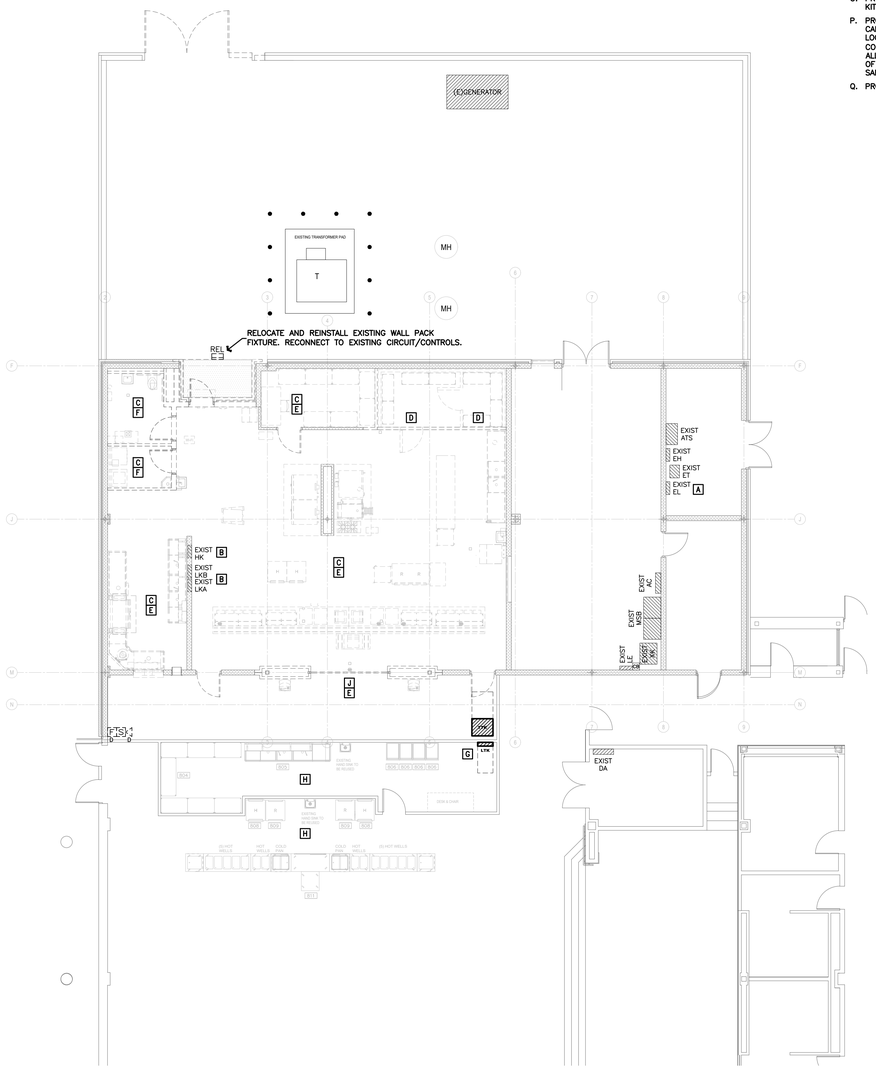
M. WIRE TEMPORARY KITCHEN FAN TO LOCAL LIGHTING CIRCUIT AND CONTROLS. FAN SHALL BE ON/OFF WITH LIGHTS.

N. EXISTING EXTERIOR LIGHT FIXTURES TO BE REMOVED.

O. PROVIDE NEW FIRE ALARM DEVICES AS PART OF THE TEMPORARY KITCHEN BUILDOUT.

P. PROVIDE NEW TEMPORARY LIGHT FIXTURES IN THE EXISTING CAFETERIA CEILING ABOVE THE SERVING LINE. COORDINATE LOCATIONS WITH TEMPORARY SERVING LINE AND EXISTING CONDITIONS. CONNECT TO EXISTING LIGHTING CONTROLS/CIRCUIT. ALL TEMPORARY LIGHT FIXTURES SHALL BE REMOVED AT THE END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE. PROVIDE REPLACEMENT CEILING TILES.

Q. PROVIDE IN–USE WEATHERPROOF COVER FOR RECEPTACLE.



1 **DEMOLITION FLOOR PLAN**
SCALE: 1/8" = 1'– 0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
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STATE OF TEXAS — GEORGE L. STANTON — 38582 — REGISTERED PROFESSIONAL ENGINEER
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ELECTRICAL DEMO AND TEMP PLANS

j-ED.100

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ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

LIGHTING RENOVATION NOTES:

A. KITCHEN LIGHTS TO BE CONTROLLED BY LOCAL MOMENTARY SWITCHES AND BAS. LIGHTING CONTACTOR LOCATIONS SHOWN SCHEMATICALLY ONLY. LOCATE LIGHTING CONTACTOR ENCLOSURE IN THE ADJACENT CENTRAL PLANT SPACE, FIELD VERIFY. REFERENCE LIGHTING CONTROL DETAIL. TYPICAL.

LEFT SWITCH SHALL CONTROL ZONE 'a' NORMAL POWER LIGHTING FIXTURES.

RIGHT SWITCH SHALL CONTROL ZONE 'b' EMERGENCY LIGHTING FIXTURES.

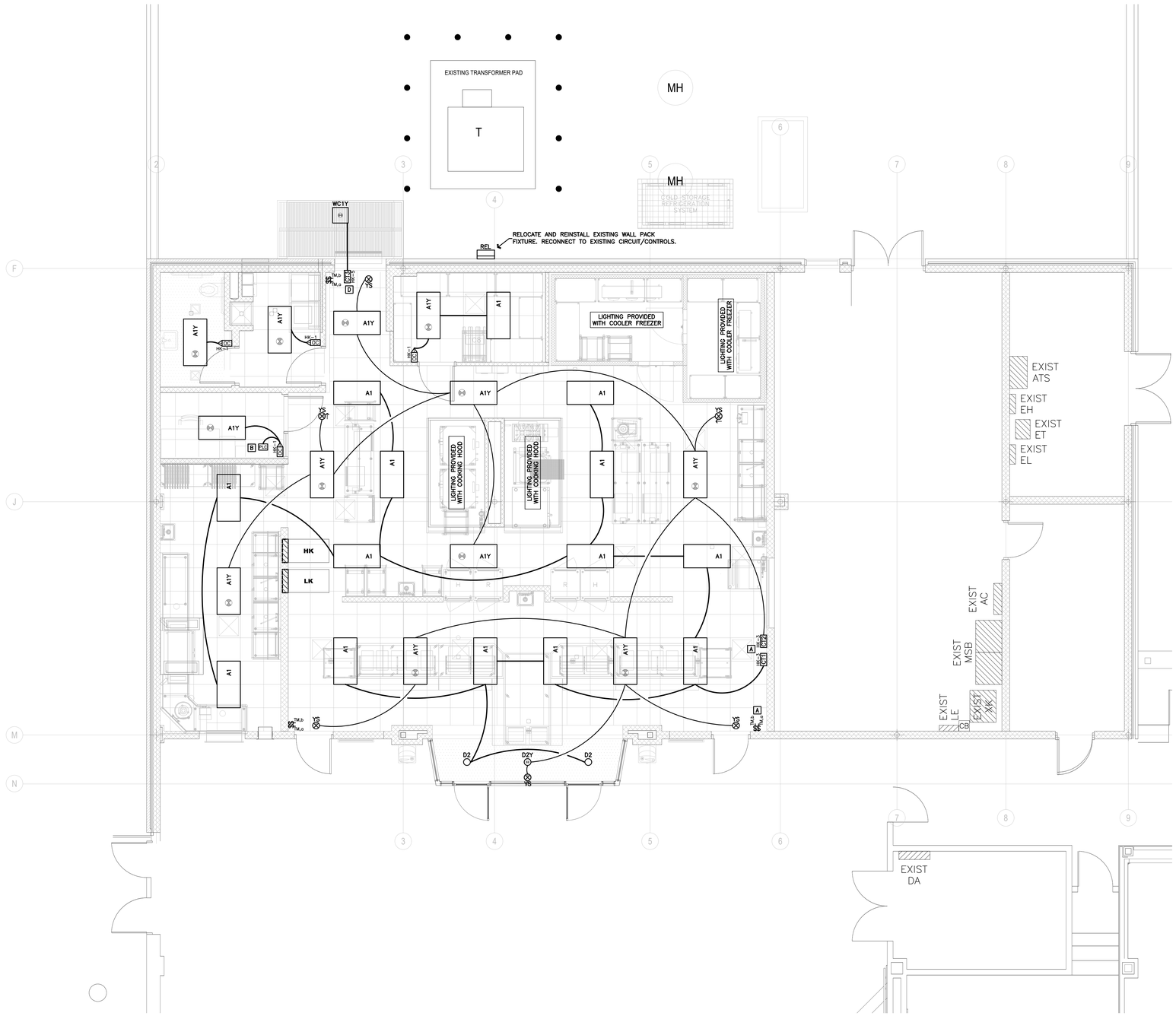
B. PROVIDE PLUG LOAD CONTROLS TIED TO THE LIGHTING IN OFFICE SPACES.

C. WIRE EXIT SIGNS UPSTREAM OF LIGHTING CONTROLS. TYPICAL.

D. EXTERIOR LIGHTS TO BE CONTROLLED BY BAS. LIGHTING CONTACTOR LOCATIONS SHOWN SCHEMATICALLY ONLY. LOCATE LIGHTING CONTACTOR ENCLOSURE IN THE ADJACENT CENTRAL PLANT SPACE, FIELD VERIFY. REFERENCE LIGHTING CONTROL DETAIL. TYPICAL.

E. AFTER REMOVAL OF THE TEMPORARY KITCHEN. PROVIDE NEW EXIT SIGN AT ORIGINAL LOCATION AND RECONNECT TO EXISTING CAFETERIAL LIGHTING CIRCUIT.

F. PATCH/REPAIR EXTERIOR SOFFIT TO ACCOMMODATE NEW SURFACE MOUNTED FIXTURES.



1 **LIGHTING RENOVATION PLAN**

SCALE: 1/4" = 1'- 0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
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LIGHTING FLOOR PLANS

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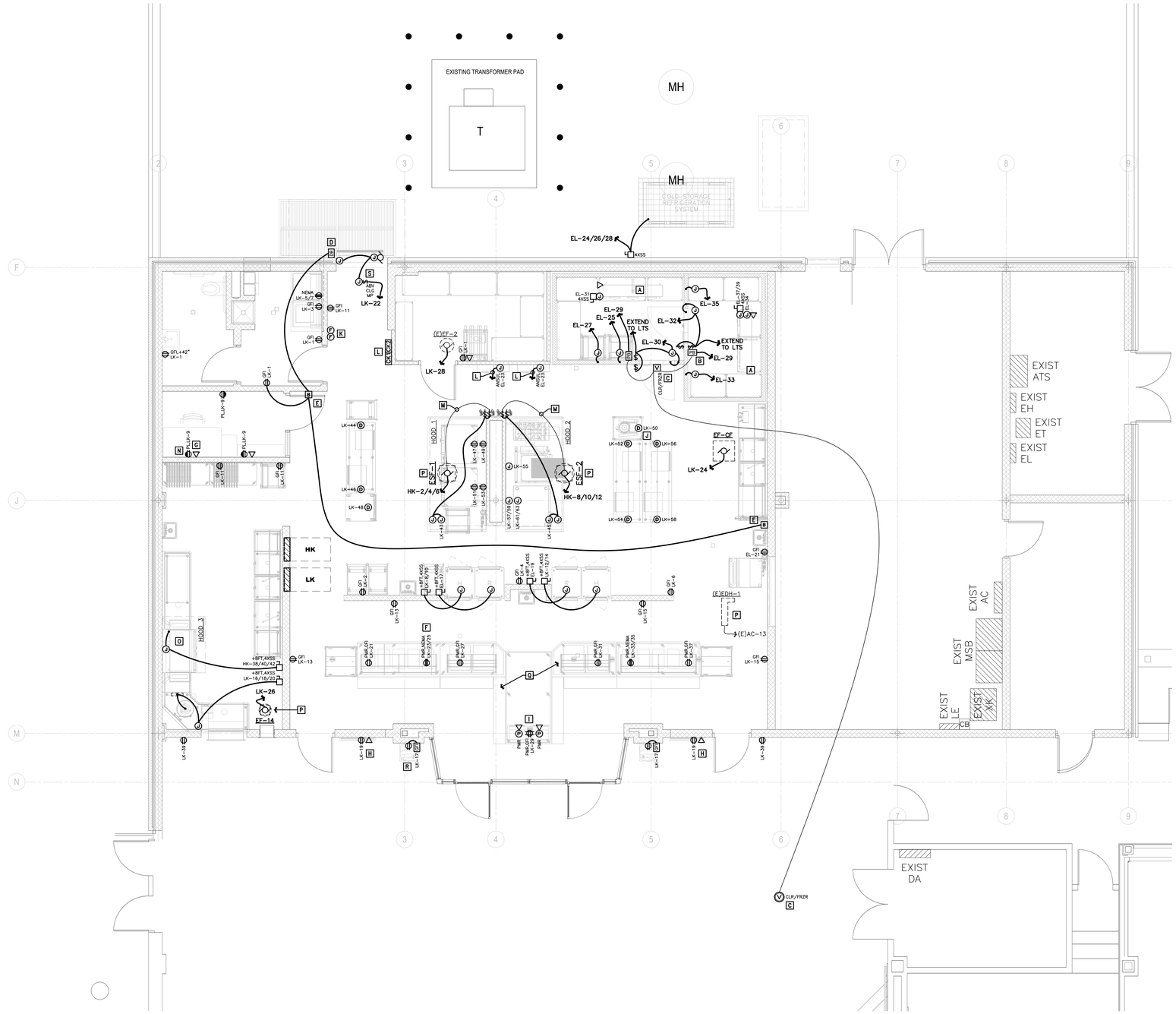

1 ELECTRICAL RENOVATION PLAN

SCALE: 1/4" = 1'- 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

ELECTRICAL RENOVATION NOTES:

A. CONNECT NEW FREEZER/COOLER AND CONDENSER TO EXISTING STANDBY GENERATOR.

B. PROVIDE ILLUMINATED PUSH BUTTON IN COOLER AND FREEZER. WHEN PRESSED RED STROBE DEVICES IN KITCHEN AND CAFETERIA SHALL ACTIVATE. TYPICAL.

C. PROVIDE HORN/STROBE DEVICE TIED TO PUSH BUTTONS IN FREEZER/COOLER.
(EDWARDS 860 SERIES OR EQUAL).

D. PROVIDE NEW DOORBELL BUTTON AT RECEIVING DOOR. DOORBELL BUTTON SHALL BE THE CLOSEST DEVICE TO THE DOOR FRAME.

E. PROVIDE NEW VIBRATING BUZZER TIED TO DOORBELL BUTTON AT RECEIVING DOOR. BUZZER TO BE WALL MOUNTED JUST BELOW THE CEILING.

F. PROVIDE NEW ELECTRICAL DEVICES MATCHING NEW KITCHEN EQUIPMENT AND ROOM LAYOUTS. REFERENCE FOOD SERVICE DRAWINGS. TYPICAL.

G. PROVIDE ROUGH-IN FOR LOW VOLTAGE DEVICES. REFERENCE TECHNOLOGY DRAWINGS, TYPICAL.

H. POWER AND DATA ROUGH-IN FOR KITCHEN MENU BOARD.

I. POWER AND DATA ROUGH-IN FOR POINT OF SALE (POS) LOCATION.

J. PROVIDE DROP CORD RECEPTACLE WITH HUBBELL KELLEMS LIQUIDTIGHT GRIPS FOR STRAIN RELIEF, TYPICAL OF ALL.

K. PROVIDE J-BOXES AND CONDUIT FOR REMOTE FIRE PULLS, SEE FOOD SERVICE DETAIL DRAWING FOR REQUIREMENTS, TYPICAL

L. WIRE ANSUL SYSTEM TO HOOD EQUIPMENT CONTROL CONTRACTOR. UPON ANSUL SYSTEM ACTIVATION ALL POWER TO EQUIPMENT BENEATH THE HOODS SHALL BE DEACTIVATED. MOUNT CONTACTOR CABINET(S) JUST BELOW THE CEILING.

M. PROVIDE SEPARATE SWITCHES TO TURN ON HOOD LIGHTS AND FANS. WIRE HOOD TEMP SENSOR AHEAD OF HOOD LIGHT SWITCH. USE 120V CIRCUIT TO CONTROL HOOD FANS THROUGH EXISTING STARTER. PROVIDE CONTROLS TRANSFORMER AS REQUIRED TO MATCH STARTER CONTROL INPUT VOLTAGE. TYPICAL.

N. PROVIDE PLUG LOAD CONTROLS TIED TO THE LIGHTING IN OFFICE SPACES.

O. INTERCONNECT DISH MACHINE TO VENT CONTROL. INTERCONNECT TABLE LIMIT SWITCH TO DISHMACHINE.

P. EXISTING MECHANICAL EQUIPMENT TO BE REPLACED. CONNECT TO CIRCUIT AS SHOWN. RECONNECT TO EXISTING STARTER/CONTACTORS, FIELD VERIFY.

Q. SAWCUT FLOOR TO INSTALL NEW PEDESTAL MOUNTED DEVICE BENEATH NEW SERVING LINES, DO NOT REUSE EXISTING STUB UPS OR DEVICES. POUR BACK SLAB AND PROVIDE NEW FINISHES, REFERENCE ARCHITECTURAL.

R. REFERENCE EDF GFI PROTECTION DETAIL FOR INSTALLATION REQUIREMENTS, TYPICAL.

S. WIRE MICRO SWITCH IN DOOR FRAME TO AIR SCREEN. COOR W/ FOOD SERVICE CONTRACTOR PRIOR TO ROUGH-IN. LOCATE LOCAL MOTOR RATED SWITCH ABOVE CEILING ADJACENT TO THE AIR SCREEN.

COOLER/FREEZER NOTES:

1. PROVIDE SEALING FOR CONDUIT IN COOLER AND FREEZER. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, CIRCULATION OF AIR FROM WARMER TO A COLDER SECTION SHALL BE PREVENTED PER N.E.C. ARTICLE 300.7 (A).
2. PROVIDE GROUND-FAULT PROTECTION OF EQUIPMENT FOR ELECTRIC HEAT TRACING AND HEATING PANELS IN THE FREEZER PER N.E.C. ARTICLE 427.22.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE LIQUID TIGHT CONDUIT AND WIRING FOR LIGHT FIXTURES AND LIGHT SWITCHES IN WALK-IN COOLER AND FREEZER, SEE FOODSERVICE CONSULTANT'S DRAWINGS.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

j

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

STATE OF TEXAS
GEORGE L. STANTON
38582
LICENSED
PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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ELECTRICAL FLOOR PLANS

j-E.200

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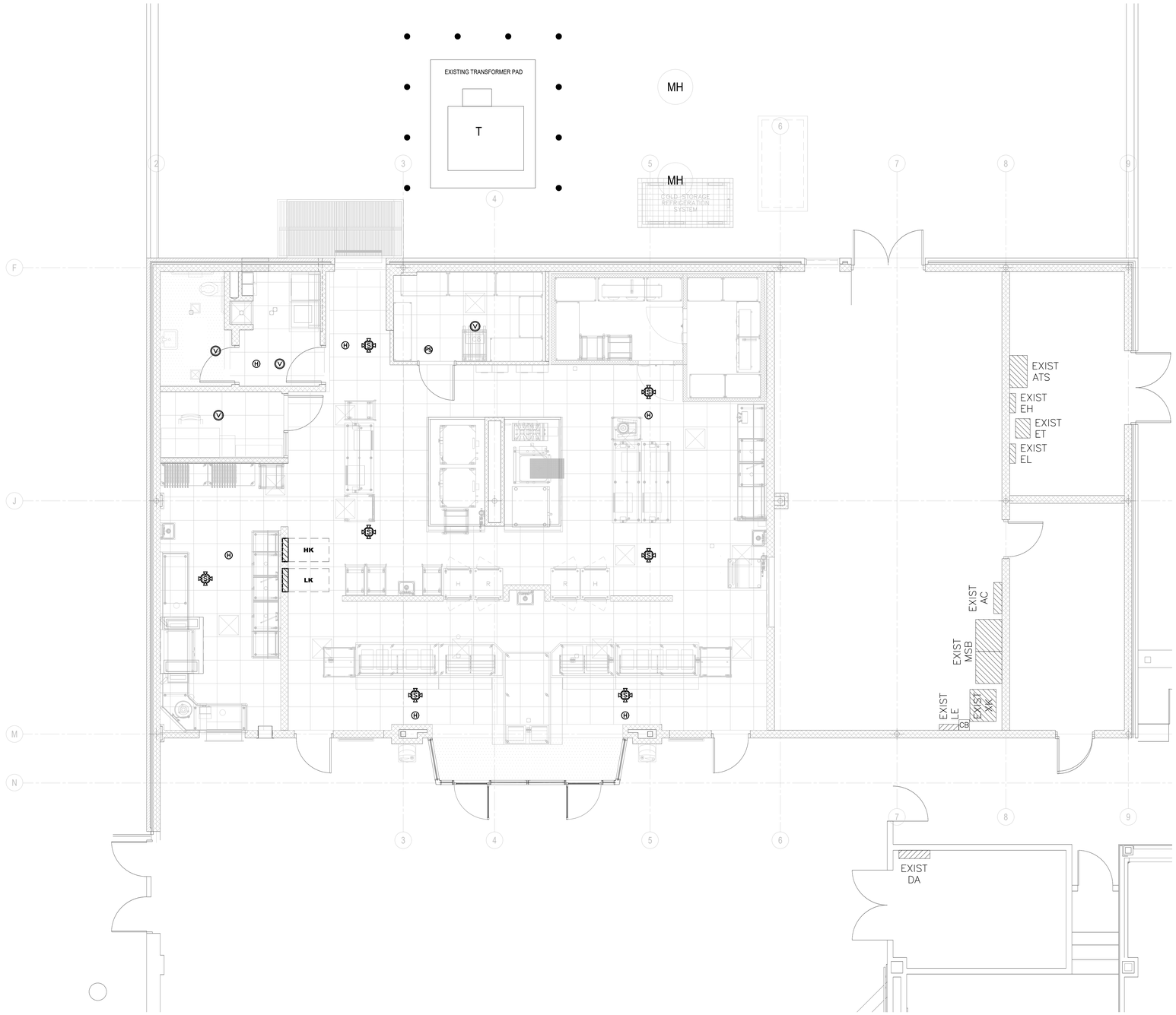

1 **FIRE ALARM RENOVATION PLAN**
SCALE: 1/4" = 1'- 0"

ISSUE:

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FIRE ALARM
FLOOR PLANS

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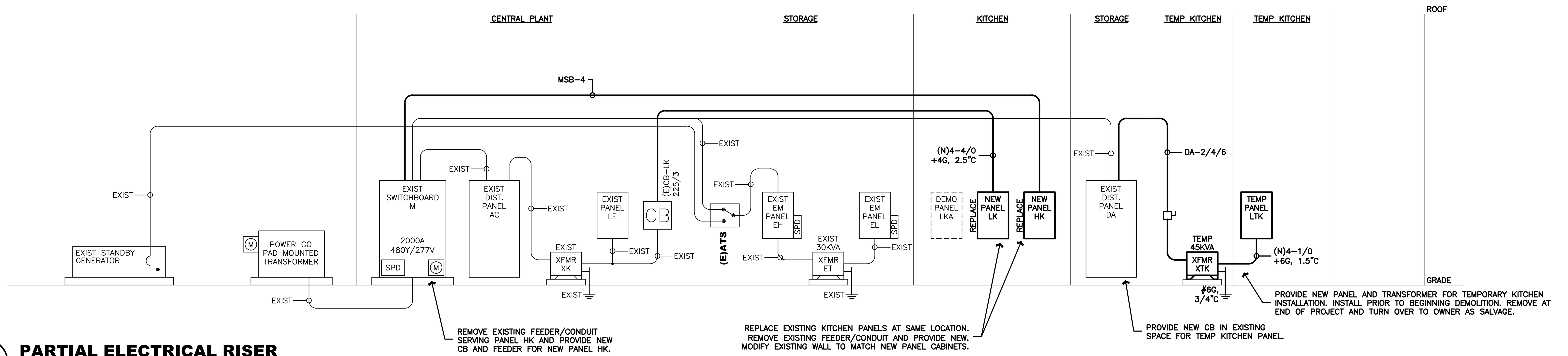

1 PARTIAL ELECTRICAL RISER

NO SCALE

NOTES:
1. FIELD VERIFY ALL EXISTING ELECTRICAL PANELS AND FEEDERS SHOWN ON DRAWINGS.
2. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
3. ALL OUTAGES SHALL BE SCHEDULED/CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
4. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.
5. REFERENCE PANEL SCHEDULES AND SHORT CIRCUIT TABLE FOR AIC AND SCCR VALUES.

NEW KITCHEN PANEL — KITCHEN

PANEL HK

225A MLO, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 20,250A — SCCR & AIC: 25,000A — MOUNTING: RECESSED, STAINLESS STEEL COVER

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
6		376	KITCHEN ROOM LIGHTS	3–12	20/1	1				2	15/3	3–12	ESF–1	4986		
7		1095	KITCHEN LIGHTS	3–12	20/1	3				4	–	+12G	(1.5HP / 1.5HP)	–		
		84	KITCHEN SOFFIT LIGHTS	3–12	20/1	5				6	–	3/4"C	–	–		
			SPARE		20/1	7				8	15/3	3–12	ESF–2	4986		
			SPARE		20/1	9				10	–	+12G	(1.5HP / 1.5HP)	–		
			SPARE		20/1	11				12	–	3/4"C	–	–		
			SPARE		20/1	13				14			SPACE			
			SPARE		20/1	15				16			SPACE			
			SPARE		20/1	17				18			SPACE			
			SPARE		20/1	19				20			SPACE			
			SPARE		20/1	21				22			SPACE			
			SPACE			23				24			SPACE			
			SPACE			25				26			SPACE			
			SPACE			27				28			SPACE			
			SPACE			29				30			SPACE			
			SPACE			31				32			SPACE			
			SPACE			33				34			SPACE			
			SPACE			35				36			SPACE			
			SPACE			37				38	70/3	3–6	DISHMACHINE	42963	E250	
			SPACE			39				40	–	+8G	–	–		
			SPACE			41				42	–	3/4"C	–	–		
		TOTAL LOAD @ 100% =	54490VA		TOTAL LOAD @ 100% =						66A		TOTAL LOAD @ 125% =	82A		

NEW KITCHEN PANEL — KITCHEN

PANEL LK

225A MLO, 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: RECESSED, STAINLESS STEEL COVER

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E10	640	3 REC – RR/STOR/CUST & BELL	3–12	20/1	1				2	20/1	3–12	1 REC – KITCHEN	180	E10	
	E110	1920	WASHING MACHINE	3–12	20/1	3				4	20/1	3–12	1 REC – KITCHEN	180	E10	
	E110A	5000	DRYER	2–10	30/2GFI	5				6	20/1	3–12	1 REC – KITCHEN	180	E10	
	E151	–	–	+10N+10G	3/4"C	7				8	20/2	2–10	HEATED CABINET	3224	E187	
		540	3 REC – OFFICE	3–12	20/1	9				10	3/4"C	+10G	–	–		
	E10	540	3 REC – KITCHEN	3–12	20/1	11				12	20/2	2–10	HEATED CABINET	3224	E187	
	E10	360	2 REC – SERVING LINE	3–12	20/1	13				14	3/4"C	+10G	–	–		
	E10	360	2 REC – SERVING LINE	3–12	20/1	15				16	20/3	3–12	DISPOSER	3960	E123	
		1000	2 EDF – CAFETERIA	3–12	20/1	17				18	–	+12G	(3 HP)	–		
	E615	500	2 MENU BOARDS	3–12	20/1	19				20	–	3/4"C	–	–		
	E209	960	MILK COOLER	3–12	20/1	21				22	20/1	3–12	AIR SCREEN	612	E101	
	E201A	5824	HOT FOOD COUNTER	2–8	35/2	23				24	15/1	3–12	EF–CF (1/6HP)	528		
		–	–	+10G	3/4"C	25				26	15/1	3–12	EF–14 (1/6HP)	528		
	E201B	1920	COLD FOOD COUNTER	3–12	20/1	27				28	20/1	3–12	EF–2 (1/6HP)	528		
	E214	360	CASH REGISTERS	3–12	20/1	29				30	20/1		SPARE			
	E201B	1920	COLD FOOD COUNTER	3–12	20/1	31				32	20/1		SPARE			
	E201A	5824	HOT FOOD COUNTER	2–8	35/2	33				34	20/1		SPARE			
		–	–	+10G	3/4"C	35				36	20/1		SPARE			
	E209	960	MILK COOLER	3–12	20/1	37				38	20/1		SPARE			
		360	2 REC – CAFETERIA	3–12	20/1	39				40	20/1		SPARE			
			SPARE		20/1	41				42	20/1		SPARE			
	E153/E153M	250	HOOD LTS & SENSOR	3–12	20/1	43				44	20/1GFI	3–12	DROP CORD	180	E129	
	E153/E153M	250	HOOD LTS & SENSOR	3–12	20/1	45				46	20/1GFI	3–12	DROP CORD	180	E129	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	47				48	20/1GFI	3–12	MOBILE PROOFER	1800	E139A	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	49				50	20/1GFI	3–12	20QT MIXER	960	E125	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	51				52	20/1GFI	3–12	DROP CORD	180	E129	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	53				54	20/1GFI	3–12	DROP CORD	180	E129	
8	E163	600	TILT BRAISING PAN	3–12	20/1	55				56	20/1GFI	3–12	DROP CORD	180	E129	
8	E172	3120	COMBI OVEN	2–12	20/2	57				58	20/1GFI	3–12	DROP CORD	180	E129	
		–	–	+12G	3/4"C	59				60	20/1	3–12	EXISTING CIRCUIT	500		5
8	E172	3120	COMBI OVEN	2–12	20/2	61				62	20/2	2–12	EXISTING CIRCUIT	1000		5
		–	–	+12G	3/4"C	63				64	–	+12N+12G	–	–		5
		250	EXISTING CIRCUIT	3–12	20/1	65				66	20/2	2–12	EXISTING CIRCUIT	1000		5
9		0	TEMP LOAD CENTER	4–3	100/3	67				68	–	+12N+12G	–	–		5
		–	–	+8G	–	69				70	30/2	2–10	EXISTING CIRCUIT	3000		5
		–	–	1.25"C	–	71				72	–	+10N+10G	–	–		
		TOTAL LOAD @ 100% =	61942VA		TOTAL LOAD @ 100% =						172A		TOTAL LOAD @ 65% =	112A		

KITCHEN HOOD CONTACTOR SCHEDULE

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	EQUIPMENT LOCATION	CONTACTOR TYPE
HOOD 1						
CK1–1	CONVECTION OVEN	LK–47	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–2	CONVECTION OVEN	LK–49	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–3	CONVECTION OVEN	LK–51	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–4	CONVECTION OVEN	LK–53	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–5	SPARE					ELECTRICALLY HELD – NO
CK1–6	SPARE					ELECTRICALLY HELD – NO
CK1–7	SPARE					ELECTRICALLY HELD – NO
CK1–8	SPARE					ELECTRICALLY HELD – NO
HOOD 2						
CK2–1	TILT BRAISING PAN	LK–55	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–2	COMBI–OVEN	LK–57/59	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–3	(2–POLE)	–	–	–	–	ELECTRICALLY HELD – NO
CK2–4	COMBI–OVEN	LK–61/63	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–5	(2–POLE)	–	–	–	–	ELECTRICALLY HELD – NO
CK2–6	SPARE					ELECTRICALLY HELD – NO
CK2–7	SPARE					ELECTRICALLY HELD – NO
CK2–8	SPARE					ELECTRICALLY HELD – NO

1. REFERENCE FLOOR PLANS FOR EQUIPMENT LOCATIONS AND ADDITIONAL INFORMATION.
2. EACH KITCHEN HOOD CONTACTOR HALL BE CONTROLLED ON/OFF BY THE APPROPRIATE HOOD ANSUL SYSTEM. WHEN ACTIVATED ALL POWER WITHIN THE COOKING HOOD SHALL BE DE–ENERGIZED.

EXIST SQUARE D QED SWITCHBOARD — CENTRAL PLANT

(E)SWBD MSB

2000A MCB, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 37,000A — SCCR & AIC: 100,000A — FREE STANDING

NOTES	CIRCUIT	DESCRIPTION	CB	FEEDER SIZE	AMPS
	1	EXTENDED DAY PANEL H	150/3	EXIST FEEDER	
	2	EXIST ATS	250/3	EXIST FEEDER	7A
2	3	EXIST PANEL HK	400/3		
4	4	NEW PANEL HK	225/3	4–4/0 +4G, 2.5"C	53A
	5	EXIST DISTRIBUTION PANEL DA	400/3	EXIST FEEDER	275A
	6	EXIST SPACE	400/3PS	–	
	7	EXIST DISTRIBUTION PANEL DB	400/3	EXIST FEEDER	
	8	EXIST DISTRIBUTION PANEL DC	400/3	EXIST FEEDER	
	9	EXIST DISTRIBUTION PANEL AC	800/3	EXIST FEEDER	
				TOTAL LOAD @ 100% =	336A
				TOTAL LOAD @ 125% =	419A

1. THE EXISTING 2000A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

EXIST GE NHB PANELBOARD — STORAGE ROOM

(E)PANEL DA

400A MLO, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 27,000A — SCCR & AIC: 35,000A — MOUNTING: SURFACE

NOTES	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	NOTES
		SPACE			1				2	70/3	3–6	TEMP KITCHEN PANEL LTK	37918	4
		SPACE			3				4	–	+8G	–	–	
		SPACE			5				6	–	3/4"C	–	–	
		SPACE			7				8			SPACE		
		SPACE			9				10			SPACE		
2		KITCHEN LIGHTS	EXIST	20/1	11				12			SPACE		
1	3100	LIGHTS CAFETORIUM	EXIST	20/1	13				14			SPACE		
1	3370	LIGHTS CAFETORIUM	EXIST	20/1	15				16	20/1	EXIST	OUTSIDE LIGHTS	1000	
1	2300	LIGHTS CAFETORIUM RMS	EXIST	20/1	17				18	20/1	EXIST	EWH–2 IN MECH 404	3000	
	9150	AHU #2	EXIST	20/3	19				20	60/3	EXIST	DUCT HEATER 2	39000	
	–	–	–	–	21				22	–	–	(STAGE)	–	
	–	–	–	–	23				24	–	–	–	–	
	130000	PANEL PA	EXIST	225/3	25				26	–	–	–	–	
	–	(SUBFEED BREAKER)	–	–	27				28	–	–	–	–	
	–	–	–	–	29				30	–	–	–	–	
	TOTAL LOAD @ 100% =	228838VA		TOTAL LOAD @ 100% =						275A		TOTAL LOAD @ 125% =	344A	

1. THE EXISTING 400A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

EXIST EM STANDBY PANELBOARD — STORAGE ROOM

(E)PANEL EL

125A MCB, 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: SURFACE

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
		500	GENERATOR REMOTE	EXIST	20/1	1				2	20/1	EXIST	MDF RM SEC	500		
		500	GENERATOR BATTERY	EXIST	20/1	3				4	20/2	EXIST	MDF RM SERVER 220	2000		
		500	GENERATOR CONTROL	EXIST	20/1	5				6	–	–	–	–		
		500	GENERATOR HEATER	EXIST	20/1	7				8	20/2	EXIST	MDF RM SERVER 220	2000		
		500	RM S125 PA SYSTEM	EXIST	20/1	9				10	–	–	–	–		
		500	RM S125 FA	EXIST	20/1	11				12	20/1		EXIST SPARE			
			EXIST SPARE		20/1	13				14	20/1		EXIST SPARE			
			EXIST SPARE		20/1	15				16	20/1		EXIST SPARE			
4	E188	864	REFRIGERATOR	3–12	20/1	17				18	20/1		EXIST SPARE			
4	E188	864	REFRIGERATOR	3–12	20/1	19				20	20/1		EXIST SPARE			
4	E109	1428	ICE MACHINE	3–12	20/1	21				22	20/1		EXIST SPARE			
4	E151	240	HOOD ANSUL SYSTEMS	3–12	20/1	23				24	25/3	3–10	REFRIGERATION SYSTEM	6192	E103	4
4	E102B	600	COOLER TEMP. ALARM	3–12	20/1	25				26	–	+10G	–	–		
4	E102C	600	COOLER PRESSURE PORT	3–12	20/1	27				28	–	3/4"C	–	–		
4	E102E	120	PANIC ALARM BUTTONS	3–12	20/1	29				30	20/1EGF	3–12	COOLER DOOR HEATER/LTS	600	E102A	4
4	E103D	216	COOLER COIL	3–12	20/1	31				32	20/1EGF	3–12	FREEZER DOOR HEATER/LTS	600	E102A	4
4	E102B	600	FREEZER TEMP. ALARM	3–12	20/1	33				34	20/1EGF	3–12	FREEZER DRAIN LINE HEATER	600	E103F	4
4	E102C	600	FREEZER PRESSURE PORT	3–12	20/1	35				36			SPACE			
4	E103C	1893	FREEZER COIL	2–10	20/2	37				38	30/3	EXIST	SPD	50		
		–	–	+10G	–	39				40	–	–	–	–		
			SPACE			41				42	–	–	–	–		
		TOTAL LOAD @ 100% =	23567VA		TOTAL LOAD @ 100% =						65A		TOTAL LOAD @ 125% =	82A		

1. THE EXISTING 125A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

GENERAL PANEL REQUIREMENTS:
A. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
B. FIELD VERIFY EXISTING CIRCUITS PRIOR TO BEGINNING WORK.
C. ALL OUTAGES SHALL BE SCHEDULED AND CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
D. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.

PANEL NOTES:
1. REVISE/REWORK WIRING/CONDUIT AS REQUIRED TO ADD/REMOVE DEVICES FROM EXISTING CIRCUIT.
2. EXISTING CIRCUIT TO BE DEMO.
3. REUSE EXISTING SPARE CB AND WIRE NEW CIRCUIT.
4. PROVIDE NEW CB & WIRE NEW CIRCUIT.
5. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.
6. KITCHEN LIGHTS TO BE DUAL ZONES WIRED THROUGH LIGHTING CONTACTORS AND CONTROLLED ON/OFF BY THE BAS AND LOCAL LIGHTING SWITCHES.
7. EXTERIOR LIGHTS TO BE WIRED THROUGH LIGHTING CONTACTOR AND CONTROLLED ON/OFF BY THE BAS.

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j

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HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
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SEAL
STATE OF TEXAS — GEORGE L. STANTON — 38582 — REGISTERED PROFESSIONAL ENGINEER
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ELECTRICAL SCHEMATIC

j-E.400

PLUMBING SYMBOLS LEGEND

———	SANITARY WASTE BELOW SLAB	SAN.	SANITARY
———	SANITARY WASTE ABOVE SLAB	CW	DOMESTIC COLD WATER
—— V. ——	VENT PIPING ABOVE SLAB	HW	DOMESTIC HOT WATER
— — — —	VENT PIPING	WC	WATER CLOSET
—— G ——	GAS PIPING, 4–8oz	UR	URINAL
—— GS ——	GAS PIPING, 5LB	LAV	LAVATORY
—·—·—	DOMESTIC COLD WATER PIPING	SK	SINK
—·—·—·—	DOMESTIC HOT WATER PIPING	EDF	ELECTRIC DRINKING FOUNTAIN
—— D ——	DRAIN/RELIEF VENT PIPING	WH	WALL HYDRANT
—⋈—	STOP VALVE	HB	HOSEBIBB
2CO	DOUBLE SAN. CLEANOUT (2–WAY)	CP	HOT WATER CIRCULATOR PUMP
CO	SANITARY SEWER CLEANOUT	FD	FLOOR DRAIN
WCO	WALL CLEANOUT	FSINK	FLOOR SINK
EXIST.	EXISTING		
(R)	REMOVE (DEMOLISH)		
(D)	DEMOLISH (REMOVE)		
(E)	EXISTING – NO WORK		

PLUMBING FIXTURE NOTES

1. ALL FIXTURES SHALL MEET WATER CONSERVATION PERFORMANCE STANDARDS MANDATED BY SENATE BILL 587. ALL FIXTURES SHALL HAVE FLOW RESTRICTION DEVICES (DRINKING FOUNTAINS SHALL BE SELF–CLOSING) TO COMPLY WITH THESE REQUIREMENTS.
2. ALL FIXTURES SHALL HAVE CONTROLS REQUIRING OPERATING FORCE NO GREATER THAN FIVE (5) POUNDS.
3. FOR LAVATORIES AND SINKS, ALL FAUCETS SHALL BE NO–LEAD SOLID BRASS, MEETING ALL REQUIREMENTS OF ANSI/NSF 61, SECTION 9 AND CERTIFIED AS SUCH. ALSO, INSTALL SYMMONS 7–210 MIXING VALVE ON HOT WATER SUPPLY SIDE OF ALL FAUCETS UNLESS HIGH TEMPERATURE LIMIT IS PROVIDED WITH FAUCET. MAXIMUM WATER TEMPERATURE FOR ALL FAUCETS THAT DELIVER HOT OR TEPID WATER SHALL BE 110°F. ALL METERING FAUCETS SHALL HAVE A MINIMUM TEN (10) SECONDS OF WATER FLOW, AND, INSTALL TRUEBRO HANDI LAV–GUARD VANDAL–PROOF INSULATION KITS OVER P–TRAP, SUPPLIES, STOPS AND ALL SHARP EDGES FOR ALL SINKS AND LAVATORIES (TRAP WRAP FROM BROCAR OR PROWRAP FROM McGUIRE SHALL BE ACCEPTABLE).
4. ALL PLUMBING FIXTURES REFERENCED AS "ADA", "TAS" OR "HANDICAP COMPLIANT" SHALL MEET ALL REQUIREMENTS OF THE ADA AND THE TEXAS ACCESSIBILITY STANDARDS. IT SHALL BE THE PLUMBING CONTRACTORS RESPONSIBILITY TO MEET THESE REQUIREMENTS.
5. IN MANY CASES, FIXTURES WITH THE SAME PLUMBING DESIGNATION HAVE DIFFERENT INSTALLATION HEIGHTS – REFERENCE ARCHITECTURAL DRAWINGS FOR ALL INSTALLATION HEIGHTS AND HANDICAP FIXTURE DESIGNATIONS. FIXTURES DESIGNATED AS ADULT HANDICAP SHALL MEET ALL REQUIREMENTS OF THE ADA. FIXTURES DESIGNATED AS CHILD HANDICAP SHALL MEET ALL REQUIREMENTS OF THE TEXAS ACCESSIBILITY STANDARDS FOR THE APPROPRIATE CHILDREN'S AGE GROUP (REF. ARCH. DWGS. AND SPECIFICATIONS).

PLUMBING MATERIALS

SANITARY WASTE AND VENT

BELOW SLAB/GRADE: SCHEDULE 40, DWV PVC

ABOVE SLAB: STANDARD WEIGHT, CAST IRON, NO–HUB PIPING.

STORM DRAIN PIPING

BELOW SLAB/GRADE: SCHEDULE 40, DWV PVC

ABOVE SLAB, 8" AND UNDER: STANDARD WEIGHT, CAST IRON, NO–HUB PIPING.

ABOVE SLAB, 10" AND ABOVE: SERVICE WEIGHT, CAST IRON, BELL & SPIGOT.

NATURAL GAS

BELOW GRADE (OUTSIDE): YELLOW POLYETHYLENE PIPE WITH COATED STEEL RISER AND TRACER WIRE.

ABOVE SLAB: SCHEDULE 40 BLACK STEEL. PIPING 2.5" AND LARGER SHALL BE WELDED. PIPING 2" AND SMALLER SHALL HAVE SCREWED FITTINGS.

DOMESTIC WATER

INTERIOR: TYPE L COPPER WITH SOLDER TYPE WROUGHT COPPER FITTINGS, MADE UP WITH LEAD–FREE SOLDER.

EXTERIOR: TYPE K COPPER WITH SWEAT FITTINGS AND LEAD–FREE SOLDER. BEYOND 5 FEET FROM BUILDING, SCHEDULE 40 PVC.

FIRE SPRINKLER SYSTEM NOTES

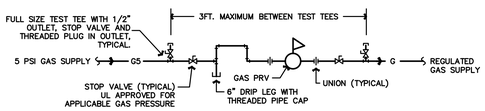
1. THE EXISTING FIRE SPRINKLER SYSTEM SHALL BE MODIFIED AND/OR EXPANDED TO COVER THE AREA OF RENOVATION IN ENTIRETY. ALL NEW AND REVISED PIPING SHALL BE ENGINEERED AND INSTALLED BY A LICENSED FIRE SPRINKLER CONTRACTOR.
2. REFERENCE THE SPECIFICATIONS, DIVISION 21, FOR MORE INFORMATION.

GENERAL PLUMBING NOTES

1. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK DESCRIPTION. SEE THIS SHEET (P4.00) FOR PLUMBING SYMBOLS LEGEND.
2. COORDINATE PLUMBING SYSTEMS INSTALLATION WITH ARCHITECTURAL, STRUCTURAL, HVAC SYSTEMS, ELECTRICAL SYSTEMS, CONDUITS, ETC.... OFFSET PIPING AS REQUIRED TO PROVIDE A FUNCTIONING SYSTEM WITH ADEQUATE SPACE FOR SERVICING AND REPAIRS.
3. MAKE CONNECTIONS OF NEW PIPE SYSTEMS IN TO EXISTING PIPE SYSTEMS WITH THREADED OR SWEAT JOINTS. PROVIDE ELECTROLYSIS ISOLATING UNIONS AS CONNECTION OF DISSIMILAR MATERIALS. REFERENCE THE SPECIFICATIONS.
4. SITE SERVICES ARE SHOWN FOR REFERENCE ONLY. PLUMBING CONTRACTOR SHALL REFERENCE CIVIL DRAWINGS, INCLUDING LOCATIONS OF SERVICES, SIZES OF PIPES, FLOWLINE ELEVATIONS, ETC..
5. DO NOT INSTALL PLUMBING PIPING OVER ANY ELECTRICAL EQUIPMENT. REFERENCE ELECTRICAL DRAWINGS FOR LOCATIONS OF ELECTRICAL EQUIPMENT AND COORDINATE WITH ELECTRICAL SUBCONTRACTORS ACCORDINGLY. SEE DETAIL 2/M6P1. THIS INCLUDES FIRE SPRINKLER PIPING.
6. ALL PIPES THROUGH WALLS OR FLOORS SHALL BE SLEEVED AND SEALED PER DETAIL 5/P4.02. FIRE CAULK WHERE REQUIRED. THIS INCLUDES ALL WALLS, INTERIOR AND EXTERIOR. THIS INCLUDES FIRE SPRINKLER PIPING.
7. ALL CLEANOUTS SHALL BE CONNECTED TO SANITARY LINES USING WYES AND/OR LONG RADIUS ELLS. SANITARY TEES ARE NOT ACCEPTABLE. 2" MINIMUM SIZE. ALL WALL CLEAN OUTS IN VERTICAL RISERS, OR BANKS OF FIXTURES SHALL BE INSTALLED 4" ABOVE THE FLOOD RIM LEVEL OF THE LOWEST CONNECTED FIXTURE AND A MINIMUM OF 24" AFF.
8. ALL WASTE AND VENT PIPING BELOW SLAB SHALL BE 2" MINIMUM.
9. LOCATE PLUMBING VENTS THROUGH ROOF NOT NEARER THAN SIX (6) FEET AWAY FROM EDGE OF BUILDING AND TEN (10) FEET AWAY FROM ANY FRESH AIR INTAKES. OFFSET VENT PIPING, AS REQUIRED, IN CEILING SPACE BETWEEN CEILING AND ROOF TO MEET THESE REQUIREMENTS. SEE DETAIL 3/P4.02.
10. ALL DOMESTIC WATER PIPING (CW, HW AND HWR) SHALL BE INSULATED PER THE WRITTEN SPECIFICATIONS.
11. TOP OF FLOOR DRAINS IN MECHANICAL, AHU AND BOILER ROOMS SHALL BE SET 1–1/2" BELOW FINISHED FLOOR SURFACE. CONCRETE FLOOR SHALL BE SLOPED TO DRAIN, REFERENCE ARCHITECTURAL DRAWINGS. IN ALL OTHER LOCATIONS, FLOOR DRAINS SHALL BE SET FLUSH WITH FINISHED FLOOR, TAKING INTO ACCOUNT ANY FLOOR SLOPE OR FLOOR FINISH (TILE, TERRAZZO, ETC.) AS SHOWN ON ARCHITECTURAL DRAWINGS.
12. PROVIDE AN ISOLATING VALVE AT EACH WATER TAP OFF HOT AND COLD WATER MAINS TO ALLOW FOR SERVICING. VALVE SHALL BE BALL VALVE IF PIPE SIZE IS 2" OR LESS AND GATE VALVE OR BUTTERFLY VALVE IF LARGER THAN 2". SEE WRITTEN SPECIFICATIONS. VALVES SHALL BE EASILY ACCESSIBLE. PROVIDE 18" X 18", FIRE–RATED, STAINLESS STEEL ACCESS PANELS WITH NON–CORROSIVE CYLINDER LOCK DOORS WHERE VALVES ARE INSTALLED ABOVE INACCESSIBLE CEILINGS OR IN WALL CHASES (MIFAB MODEL MPFR–SS–C). BALL VALVES AND BUTTERFLY VALVES INSTALLED ABOVE CEILINGS SHALL BE INSTALLED SUCH THAT HANDLE IS ON BOTTOM OF PIPE. ISOLATING WATER VALVES ABOVE CEILINGS SHALL BE INSTALLED NO MORE THAN 24" ABOVE CEILING. VALVES ABOVE INACCESSIBLE CEILINGS SHALL BE INSTALLED WITHIN REASONABLE REACH OF CEILING MOUNTED ACCESS PANEL.
13. WATER HAMMER ARRESTERS SHALL BE INSTALLED IN ADDITION TO AIR CHAMBERS PER THE RISER DIAGRAMS. SEE SPECIFICATIONS.
14. MECHANICALLY CLEAN ALL WASTE LINES WITH ROTARY MACHINE TO PROVE FREE FLOWING, SEE SPECIFICATIONS.
15. PROVIDE VENTED SLEEVE (2 PIPE SIZES LARGER THAN GAS PIPE UNLESS NOTED OTHERWISE) FOR ALL GAS PIPING IN GROUND BELOW PAVING OR SIDEWALKS AND INSIDE BUILDING IN WALLS AND IN UNVENTILATED CEILING SPACES, SEE SPECIFICATIONS.
16. GAS PIPING SHALL BE 1/2" MINIMUM. TAP GAS PIPING ON TOP OR SIDES ONLY. DO NOT INSTALL VALVES IN CEILING PLENUM OR IN ANY INACCESSIBLE LOCATION. ALL GAS VALVES SHALL BE EASILY ACCESSIBLE. REFER TO DETAIL 9/P4.01 FOR TYPICAL GAS CONNECTION INSTALLATION. REFER TO DETAIL 8/P4.02 FOR TYPICAL PRV INSTALLATION.
17. CENTER WALL HYDRANTS IN BRICK PATTERN OF EXTERIOR WALLS, REFERENCE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
18. ALL REFRIGERATORS WITH ICE MAKERS, COMMERCIAL TYPE COFFEE MAKERS, ICE MAKERS, COFFEE VENDING MACHINES AND OTHER ITEMS PROVIDED BY OTHERS THAT REQUIRE A WATER CONNECTION SHALL HAVE A CW VALVE BOX, "VBOX", INSTALLED TO ALLOW EASY ACCESS AND REMOVAL OF MACHINE. ALSO, INSTALL IN–LINE FILTER IN WATER CONNECTION.
19. REFER TO CIVIL DRAWINGS FOR SITE SANITARY, SITE STORM SEWER, FIRE SERVICE AND DOMESTIC WATER SERVICE. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PIPING INSIDE BUILDING TO OUTSIDE LOCATIONS SHOWN ON PLUMBING DRAWINGS. PLUMBING CONTRACTOR SHALL INCLUDE COST OF FINAL TIE–INS TO SITE SERVICES.
20. PER THE DRAWINGS, ALL DRAINS (FLOOR DRAINS, FLOOR SINKS, HUB DRAINS, KITCHEN DRAINS, SHOWER DRAINS, ETC.) SHALL BE VENTED AND TRAP PRIMED – NO EXCEPTIONS. TRAP PRIMING SHALL BE ACCOMPLISHED USING WATER CLOSET FLUSH VALVE TRAP PRIMING DEVICES OR PROSET SYSTEMS TRAP GUARD SEWER GAS EMISSION PROTECTION, AS SHOWN ON DRAWINGS. REFERENCE PLUMBING FLOOR PLANS AND RISER DIAGRAMS.
21. ALL PIPING LOCATED ON ROOF (GAS PIPING) SHALL BE INSTALLED ON ROOF PIPE SUPPORTS PER DETAIL 10/P4.02, 6–FOOT ON CENTER. INSTALL ROOF PIPE JACK PER DETAIL 9/P4.02 FOR ALL PIPING THROUGH ROOF.
22. COORDINATE LOCATIONS OF ALL ROOF DRAINS AND OVERFLOW ROOF DRAINS WITH ARCHITECTURAL DRAWINGS.
23. FOR COMBINATION WASTE AND VENT SYSTEMS (WHERE APPLICABLE ON DRAWINGS), DRAIN P–TRAPS SHALL BE SIZE OF PIPE SHOWN ON DRAWINGS (I.E. TWO PIPE SIZES LARGER THAN DRAIN SIZE). FOR EXAMPLE, A 4" FLOOR DRAIN SHALL HAVE A 6" P–TRAP.
24. FOR ALL PLUMBING FIXTURES, IF COPPER PIPING IS STUBBED THROUGH WALL FOR DRAIN CONNECTION, INSTALL MARWEL FITTING AT DRAIN CONNECTION FOR EASE OF SERVICING AND REPAIRS. COPPER DRAIN PIPING WILL ONLY BE ALLOWED FOR DIRECT/STRAIGHT STUB–OUT OF FIXTURE DRAIN PIPING THROUGH WALL.
25. DO NOT INSTALL ANY PIPING BENEATH CVT OR VAV BOXES. THIS INCLUDES FIRE SPRINKLER PIPING.
26. WHERE UNDERGROUND VENT PIPE SIZE IS NOT NOTATED, VENT SHALL BE 2" DIAMETER.
27. WHERE UNDERGROUND SANITARY PIPE SIZE IS NOT NOTATED, REFER TO THE RISER DIAGRAMS FOR SIZE. NOT BELOW GRADE SANITARY PIPE SHALL BE SMALLER THAN 2". NO SANITARY LINE OR P–TRAP FOR A DRAIN/FIXTURE SHALL BE SMALLER THAN THE FIXTURE CONNECTION SIZE SHOWN ON THE DRAIN/FIXTURE SCHEDULE.
28. WHERE ABOVE GROUND VENT PIPE SIZE IS NOT NOTATED, REFER TO THE RISER DIAGRAMS FOR VENT SIZE.
29. WHERE CW/HW PIPING SIZE TO THE FIXTURE IS NOT SHOWN ON THE FLOOR PLAN, REFER TO THE RISER DIAGRAMS FOR CW/HW PIPE SIZE. NO PIPING TO FIXTURE SHALL BE SMALLER THAN THE FIXTURE CONNECTION SIZE SHOWN ON THE FIXTURE SCHEDULE.
30. TO INSTALL NEW PLUMBING SYSTEMS BELOW EXISTING CONCRETE SLABS, FIRST PLUMBING CONTRACTOR SHALL LAY OUT CUT. THEN, DEMOLITION CONTRACTOR SHALL SAW CUT SLAB TO CONTROL CRACKING AND REMOVE ALL CONCRETE. PLUMBING CONTRACTOR SHALL THEN EXCAVATE FILL TO PROPER SLOPE, INSTALL NEW PIPING SYSTEMS AS REQUIRED, THEN BACKFILL AND COMPACT TO PROPER DENSITY. THE CONCRETE CONTRACTOR SHALL THEN INSTALL NEW SIX (6) MIL POLYETHYLENE VAPOR BARRIER AND SEAL, INSTALL NEW REINFORCING STEEL AND WELD ON TO EXISTING, THEN RE–POUR CONCRETE TO NEW LEVEL. DO NOT CUT THROUGH GRADE BEAMS WITHOUT APPROVAL FROM THE STRUCTURAL ENGINEER. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
31. ALL ABANDONED FIXTURES, DRAINS AND PIPING (INCLUDING PIPING ABANDONED IN THE PAST) IN AREAS WHERE WORK IS BEING DONE SHALL BE COMPLETELY REMOVED FROM BUILDING (INCLUDING PIPING BELOW SLAB/GRADE – UNLESS SHOWN OTHERWISE ON DRAWINGS). EXISTING WATER PIPING SHALL BE CAPPED AT EXISTING WATER MAIN TAPS AND ALL ABANDONED PIPING REMOVED. ABANDONED VENT PIPING SHALL BE COMPLETELY REMOVED, INCLUDING EXISTING VTR'S NOT RE–USED. PATCH AS REQUIRED. ONLY ACTIVE PIPING, FIXTURES AND DRAINS SHALL REMAIN IN BUILDING WHERE WORK IS BEING DONE.

GAS PRV SCHEDULE

MARK	PRV–K
LOCATION	MECH. YARD
SERVES	KITCHEN
GAS LOAD	585 CFH
DISTANCE FROM METER	150 FT
DISTANCE TO LAST OUTLET	200 FT
INLET (SIZE/PRESSURE)	1" / 5 PSI
OUTLET (SIZE/PRESSURE)	2" / 7–12 IN WC



4 GAS PRESSURE REGULATOR DETAIL (PRV)

NO SCALE

NOTES:
1. GAS REGULATOR SHALL BE ANSI Z21.80 CERTIFIED FOR LINE PRESSURE REGULATION BETWEEN THE SERVICE REGULATOR AND CONNECTED EQUIPMENT.
2. ALL GAS REGULATORS WITH INLET PRESSURE ABOVE 2 PSI SHALL BE EQUIPPED WITH A FACTORY INSTALLED OVERPRESSURE PROTECTION DEVICE, AS PART OF THE ANSI Z21.80 CERTIFICATION.
3. GAS REGULATOR SHALL BE EQUIPPED WITH A VENT LIMITING DEVICE, SIZED IN ACCORDANCE WITH THE REGULATOR OUTLET PRESSURE.
4. ALL REGULATORS INSTALLED OUTDOORS SHALL BE RATED FOR OUTDOOR INSTALLATION.
5. BASIS OF DESIGN IN THE MAXITROL 325–L SERIES OF REGULATORS

PLUMBING DRAINS, CLEANOUTS AND HYDRANTS

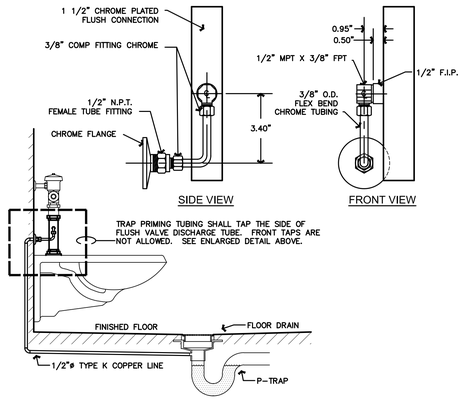
MARK	MIN. CONNECTION SIZES (IN.) SAN	VENT	CW	HW	DESCRIPTION/SPECIFICATION FOR FIXTURE OR EQUIPMENT
FD	4	2	1/2	–	TOILET FLOOR DRAIN – TWO–PIECE CAST IRON WITH SEEPAGE FLANGE, REVERSIBLE CLAMPING COLLAR, 1/2" TRAP PRIMER TAP, 6" SQUARE, NICKEL BRONZE HSTRAINER AND SECURITY SCREWS JR SMITH MODEL 2005–03–K06PB–P050–U.
FD2	4	2	1/2	–	EQUIPMENT FLOOR DRAIN – CAST IRON, MEDIUM DEPTH DRAIN WITH FLANGE, CLAMPING DEVICE, SEEPAGE OPENINGS, DUCTILE IRON TRUE–FIT SEDIMENT BUCKET WITH 12" STAINLESS STEEL RIM LESS GRATE, 1/2" TRAP PRIMER TAP ZURN MODEL ZS–540–U–S DRAIN SHALL BE DESIGNED SUCH THAT GRATE CANNOT BE INSTALLED WITHOUT SEDIMENT BUCKET.
FD3	4	2	1/2	–	GRATED MECHANICAL ROOM FLOOR DRAIN – CAST IRON WITH FLANGE, SEEPAGE OPENINGS, 9" HEAVY–DUTY DUCTILE IRON GRATE WITH STAINLESS STEEL VENEER, CLAMPING DEVICE AND 1/2" TRAP PRIMER TAP ZURN MODEL ZS–550–C–P
FD4	4	2	1/2	–	CANWASH FLOOR DRAIN – ALL GALVANIZED CAST IRON, MEDIUM DEPTH DRAIN WITH FLANGE, CLAMPING DEVICE, SEEPAGE OPENINGS, GALVANIZED SUR–SET SEDIMENT BUCKET WITH 12" GALVANIZED DUCTILE IRON RIM AND GRATE, 1/2" TRAP PRIMER TAP ZURN MODEL ZS–540–P–G–HD. DRAIN SHALL BE DESIGNED SUCH THAT GRATE CANNOT BE INSTALLED WITHOUT SEDIMENT BUCKET.
FD5	4	2	1/2	–	KITCHEN FLOOR DRAINS SHALL BE SIMILAR EXCEPT WITH 7" SQUARE, BRONZE GRATE JR SMITH MODEL 2005–03–K07PB–P050–U. PROVIDE 4" DIAMETER STAINLESS STEEL FUNNEL WHERE SHOWN ON DRAWINGS. REFERENCE KITCHEN CONNECTION SCHEDULE ON PLUMBING RENOVATION FLOOR PLAN SHEET.
FS KITCHEN FS	4	2	1/2	–	FLOOR SINK – CAST IRON, 8" DEEP SUMP, A.R.E. INTERIOR, INTEGRAL FLANGE FOR SUPPORT, CLAMPING DEVICE WHERE VAPOR BARRIER IS INSTALLED BETWEEN SLAB AND CONCRETE BEDDING FOR FLOOR, ALUMINUM SECONDARY DOME STRAINER AND 12" SQUARE HEAVY DUTY STAINLESS STEEL TRACTOR DUTY FRAME WITH 3/4–TRACTOR GRATE AND 1/2" TRAP PRIMER TAP JR SMITH MODEL 3150Y–04–C–13.
CO	VARIES	–	–	–	FLOOR CLEANOUT – ADJUSTABLE EXTENSION HOUSING, CAST IRON FERRULE WITH FULL–LINE–SIZE BRASS PLUG (UP TO 4"), 5" DIAMETER STAINLESS STEEL ACCESS COVER WITH VANDAL–PROOF SECURITY SCREWS, EXCEPTIONAL FRAME AND TOP SIZE COMPATIBLE WITH FLOOR TYPE (REFERENCE ARCHITECTURAL DRAWINGS FOR FLOOR TYPES) ZURN MODEL ZS–1400–VP. PROVIDE CARPET FRAME FOR CARPETED AREAS (CARPET MARKER SHALL NOT BE ACCEPTABLE) AND TERRAZZO RECESS FOR TERRAZZO FLOORS. OUTDOOR CLEANOUT – SAME AS TYPE "CO" EXCEPT WITH HEAVY–DUTY NICKEL BRONZE TOP ZURN MODEL ZN–1400–HD–VP. INSTALL 18" X 18" X 6" THICK CONCRETE PAD AROUND EACH OUTDOOR CLEANOUT.
WCO	VARIES	–	–	–	WALL CLEANOUT – CAST IRON FERRULE WITH COUNTERSUNK HEAD (FULL–LINE–SIZE PVC PLUG UP TO 4") MI–FAB MODEL CM–SD. ACCESS COVER SHALL BE 8" SQUARE, SURFACE MOUNT, FLUSH INSTALLATION, 16–GAUGE STAINLESS STEEL ACCESS DOOR WITH FLANGED FRAME AND VANDAL–PROOF OPTION MI–FAB MODEL UA–SS–VP. ACID WASTE CLEANOUT (AWCO) SHALL BE SAME EXCEPT ACID WASTE PIPING. INSIDE CABINETWORK WHERE CLEANOUT IS NOT VISIBLE, ACCESS PANEL MAY BE ROUND STAINLESS STEEL TYPE WITH VANDAL–PROOF CENTER SCREW MI–FAB MODEL C1450–RD–3–6.
2CO	4	–	–	–	DOUBLE CLEANOUTS – SAME AS OUTDOOR CLEANOUTS. INSTALLED FOR TWO–WAY RODDING. SINGLE CLEANOUT WITH 2–WAY FITTING IS NOT ACCEPTABLE, PROVIDE TWO SEPARATE CLEANOUTS. INSTALL 18" X 18" X 6" THICK CONCRETE PAD AROUND EACH OUTDOOR CLEANOUT.
HB	–	–	3/4	–	HOSEBIBB – 3/4" HOSE THREAD, INTEGRAL VACUUM BREAKER SPOUT, ROUGH CHROME FINISH WITH REMOVABLE KEYED HANDLE, WALL FLANGE CHICAGO MODEL 952.
WH	–	–	3/4	–	RESTROOM WALL HYDRANT – NARROW WALL, WARM CLIMATE TYPE HOSE BOX, QUARTER–TURN WHEEL HANDLE, ASSE APPROVED ANTI–SIPHON INTEGRAL VACUUM BREAKER AND DUAL CHECK VALVE, 3/4" STRAIGHT INLET HOSE CONNECTION, CAST STAINLESS STEEL HYDRANT BOX. FLUSH MOUNTED 16–GAUGE STAINLESS STEEL FRAME AND 180° DROP DOWN DOOR WITH KEY LOCK AND WALL CLAMP JR SMITH MODEL 5518
WH2	–	–	3/4	–	EXTERIOR WALL HYDRANT – NON–FREEZE HOSE BOX, QUARTER–TURN WHEEL HANDLE, ASSE APPROVED ANTI–SIPHON INTEGRAL VACUUM BREAKER AND DUAL CHECK VALVE, 3/4" STRAIGHT INLET HOSE CONNECTION, CAST STAINLESS STEEL HYDRANT BOX, FLUSH MOUNTED 16–GAUGE STAINLESS STEEL FRAME AND 180° DROP DOWN DOOR WITH KEY LOCK AND WALL CLAMP JR SMITH MODEL 5519
WH3	–	–	3/4	3/4	CANWASH WALL HYDRANT – NON–FREEZE HOSE BOX WITH STRAIGHT INLET CONNECTION, HOT AND COLD MIXING, REMOVABLE KEYED HANDLE, ASSE APPROVED ANTI–SIPHON INTEGRAL BACKFLOW PREVENTER WITH 3/4" HOSE CONNECTION, HEAVY DUTY BRASS CASING, POLISHED BRONZE HYDRANT BOX WITH HINGED COVER, "WATER" CAST ON COVER, DRIP LIP AND WALL CLAMP J.R. SMITH MODEL 5560–QT–WC–H–W–PB.
WBOX	2	2	3/4	3/4	CLOTHES WASHER DRAIN/VALVE BOX – HEAVY–GAUGE GALVANIZED STEEL CONSTRUCTION, RECESSED IN WALL VALVE AND DRAIN CONNECTIONS, WATTS DUO–CLOZ VALVE GUY GRAY MODEL WB–200.

PLUMBING FIXTURES AND EQUIPMENT

MARK	MIN. CONNECTION SIZES (IN.) SAN	VENT	CW	HW	DESCRIPTION/SPECIFICATION
WC	4	2	1	–	WATER CLOSET – WALL MOUNTED, WHITE VITREOUS CHINA, SIPHON JET ACTION, 1.28 GPF, ELONGATED BOWL, TOP SPUD, ADA/TAS COMPLIANT, AMERICAN STANDARD AFWALL: SLOAN ROYAL 111–1.28 FLUSH VALVE WITH VANDAL–PROOF FREE–SPINNING TOP CAP, 1.28 GPF, VANDAL–PROOF STOP AND ADA/TAS COMPLIANT LEVER ACTUATOR WITH LEVER INSTALLED ON LEFT SIDE (FOR FIXTURES DESIGNATED AS "HANDICAP"). INSTALL LEVER ON "WIDE–SIDE" OF TOILET STALL): BEMIS 1655–SS/C EXTRA HEAVY DUTY, WHITE, OPEN FRONT SEAT LESS COVER WITH SELF–SUSTAINING, STAINLESS STEEL CHECK HINGE; AND, FLOOR MOUNTED CARRIER.
LV	1–1/4	1–1/4	1/2	1/2	LAVATORY GOOSENECK FAUCET – WALL HUNG, WHITE VITREOUS CHINA, FRONT OVERFLOW, SELF–DRAINING DECK AREA, 21" X 18", ADA/TAS COMPLIANT AMERICAN STANDARD LUCERNE 0355.012; DECK MOUNTED FAUCET, 4" CENTERS, FIXED, CHROME PLATED, 5.25" GOOSENECK SPOUT, PRESSURE COMPENSATING LAMINAR FLOW NON–AERATING 0.5 GPM OUTLET, 4" WRISTBLADE HANDLES, ASSEMBLY/BUILDABLE CARTRIDGES, CHICAGO 895–317GN2AE72ABCP; CHROME PLATED, 17–GAUGE CAST BRASS GRID DRAIN WITH WHEELCHAIR OFFSET FITTING; CHROME PLATED, 17–GAUGE CAST BRASS P–TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; TRUEBRO HANDI LAV–GUARD VANDAL–PROOF, WHITE INSULATION KITS; AND, FLOOR MOUNTED, CONCEALED ARMS CARRIER. PROVIDE ASSE 1070 LISTED MIXING VALVE, LEONARD 170–LF OR EQUAL (MUST BE CAPABLE OF ADJUSTMENT ABOVE 130°F).
LV2	1–1/4	1–1/4	1/2	1/2	LAVATORY – WALL HUNG, WHITE VITREOUS CHINA, FRONT OVERFLOW, SELF–DRAINING DECK AREA, 21" X 18", ADA/TAS COMPLIANT AMERICAN STANDARD LUCERNE 0355.012; CHROME PLATED, ALL CAST BRASS CONSTRUCTION, ADA/TAS COMPLIANT, VANDAL–PROOF FAUCET WITH 4" WRIST BLADE HANDLES, COMPRESSION STYLE CARTRIDGES, CHROME DECK PLATE, VANDAL–PROOF AERATOR, COPPER SUPPLIES AND CERTIFIED FOR MEETING ALL REQUIREMENTS OF NSF 61 SECTION 9 CHICAGO MARATHON MODEL 802–E70–317ABCP; CHROME PLATED, 17–GAUGE CAST BRASS GRID DRAIN WITH WHEELCHAIR OFFSET FITTING; CHROME PLATED, 17–GAUGE CAST BRASS P–TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; TRUEBRO HANDI LAV–GUARD VANDAL–PROOF, WHITE INSULATION KITS; AND, FLOOR MOUNTED, CONCEALED ARMS CARRIER. PROVIDE ASSE 1070 LISTED MIXING VALVE, LEONARD 170–LF OR EQUAL (MUST BE CAPABLE OF ADJUSTMENT ABOVE 130°F).
EDF	1–1/2	1–1/2	1/2	–	BI–LEVEL ELECTRIC DRINKING FOUNTAINS WITH BOTTLE FILLER – WALL MOUNTED, ALL STAINLESS STEEL, ADA AND TAS COMPLIANT FOR ALL AGES, 8 GPH AT ARI STANDARDS, 2–STREAM ALL METAL BUBBLER FITTING WITH VANDAL–RESISTANT KIT AND FRONT PUSH BUTTON ACTUATION, PUSH BUTTON ACTUATED BOTTLE FILLER WITH 1.1GPM FILL AND ANTI–MICROBIAL COATING, INTEGRAL WATER FILTER, LEAD–FREE (CERTIFIED FOR MEETING ALL REQUIREMENTS OF NSF 61 SECTION 9), REFRIGERANT HFC–134a, MAINTENANCE ACCESS PANEL, HALSEY–TAYLOR MODEL HTHBHVR8BL; CHROME PLATED, 17–GAUGE CAST BRASS P–TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; FLOOR MOUNTED CHAIR CARRIER; AND, STAINLESS STEEL ADA APRON FOR LOCATIONS REQUIRED BY ADA OR TAS.
MB	3	2	3/4	3/4	MOP BASIN – 24" X 24" X 12" DEEP TERRAZZO, TWO (2) STAINLESS STEEL SPLASH CATCHER PANELS, 6" DROP FRONT WITH STAINLESS STEEL CAP, CAST BRASS DRAIN WITH STAINLESS STEEL STRAINER STERN WILLIAMS HILOW MODEL HI–1800–BP; FAUCET SHALL BE POLISHED CHROME PLATED SERVICE SINK TYPE WITH VACUUM BREAKER, INTEGRAL SUPPLY CHECK STOPS, SPOUT WITH PAIL HOOK, HOSE END AND TOP BRACE CHICAGO MODEL 897–CCF (INSTALL BACKING/BRACING INSIDE WALL TO SUPPORT FAUCET AND TOP BRACE).
LP–1	3	2	3/4	3/4	LAVATORY PUMP – FACTORY BUILT, LIFT PUMP FOR GRAY WATER WASTE, TOP ACCESS TO INTERNAL 1/5HP PUMP AND FLOAT SWITCH, 1.5" TOP AND SIDE INLETS, 1.5" TOP OUTLET, INTEGRAL CHECK VALVE AT BOTTOM INLET CONNECTIONS, 9FT POWER CORD WITH GROUNDED PLUG; LIBERTY PUMPS MODEL 406

KITCHEN PLUMBING CONNECTION SCHEDULE

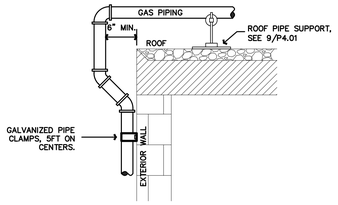
MARK	DESCRIPTION
P5	3/4" CW AND 3/4" HW – IN WALL, 36" AFF, TO MOP BASIN ("MB") FAUCET. REFERENCE PLUMBING FIXTURE SCHEDULE.
P6	3" DRAIN IN FLOOR FOR MOP BASIN ("MB") DRAIN. REFERENCE PLUMBING FIXTURE SCHEDULE.
P7	3/4" CW AND 3/4" HW – IN WALL, 18" AFF, TO HOSE BIBB.
P10	FLOOR DRAIN – 3" OUTLET; FLUSH WITH FLOOR; TWO–PIECE CAST IRON WITH SEEPAGE FLANGE, REVERSIBLE CLAMPING COLLAR, 7" SQUARE HEAVY–DUTY POLISHED BRONZE GRATE, 1/2" TRAP PRIMER TAP, AND TRAP SEAL DEVICE (MODEL 2692) JR SMITH MODEL 2005–03–K07PB–P050–U.
P11C	1/2" CW AND 1/2" HW – IN WALL, FOR HAND LAVATORY WITH FOOT CONTROLS ("LV"). REFERENCE PLUMBING FIXTURE SCHEDULE.
P11D	2" DRAIN – IN WALL, FOR HAND LAVATORY WITH FOOT CONTROLS ("LV"). REFERENCE PLUMBING FIXTURE SCHEDULE.
P12	FLOOR SINK – 4" OUTLET; FLUSH WITH FLOOR; CAST IRON, 8" DEEP SUMP, A.R.E. INTERIOR, INTEGRAL FLANGE FOR SUPPORT, CLAMPING DEVICE WHERE VAPOR BARRIER IS INSTALLED BETWEEN SLAB AND CONCRETE BEDDING FOR FLOOR, ALUMINUM SECONDARY DOME STRAINER AND 12" SQUARE HEAVY DUTY NICKEL BRONZE FR



13 FLUSH VALVE TRAP PRIMING TUBE DETAIL

NO SCALE

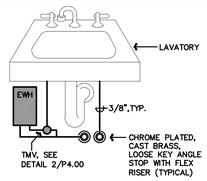
MI-FAB MODEL MI-702-MOD FLUSH VALVE TRAP PRIMER, OR EQUAL



13 GAS PIPING WALL-TO-ROOF TRANSITION DETAIL

NO SCALE

TANKLESS WATER HEATER SCHED.		
MARK	IEWH-1	
SERVES	LAVATORY	
LOCATION	BELOW COUNTER	
HEATER KW	1.8 KW	
TEMP RISE (@ 0.5 GPM)	25°F	
VOLTAGE/PHASE	120V/1PH	
EEMAX MODEL	SPEX1812T	

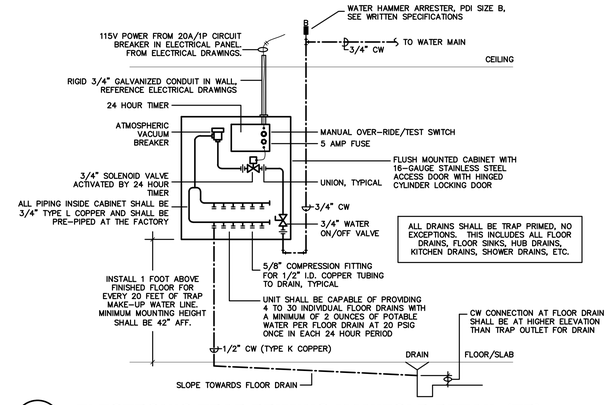


11 TANKLESS WATER HEATER

NO SCALE

NOTES:

1. LOCATION OF VALVE AND PIPING SHALL NOT INTERFERE WITH ANY ADA/HANDICAP KNEE-SPACE CLEARANCE REQUIREMENTS.
2. ALL PIPING SHALL BE CHROME PLATED CAST BRASS AND SHALL BE INSULATED BY TRUEBRO HANDI LAV-GUARD INSULATION KITS. INSULATION KITS SHALL COVER P-TRAP, MIXING VALVE, WATER STOPS, PIPING AND ALL SHARP EDGES (ONLY WHERE CABINETWORK KNEESPACE SCREEN NOT PROVIDED).
3. ALL CW AND HW CONNECTIONS SHALL HAVE COMPRESSION TYPE FITTINGS.
4. FURNISH & INSTALL 0.5-GPM AERATOR ON FAUCET COMPATIBLE WITH TANKLESS EWH REQUIREMENTS.
5. WATER HEATER SHALL HAVE INTEGRAL ASSE-1070 COMPLIANT TEMPERED MIXING VALVE.

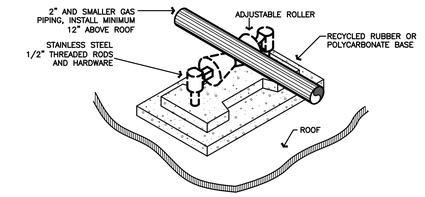


10 ELECTRONIC TRAP PRIMING MANIFOLD DETAIL (TP)

NO SCALE

NOTES:

1. REFERENCE SCHEDULE ON SHEET P3.00

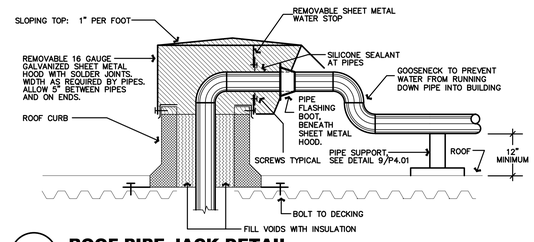


14 GAS PIPING ROOF SUPPORT DETAIL

NO SCALE

NOTES:

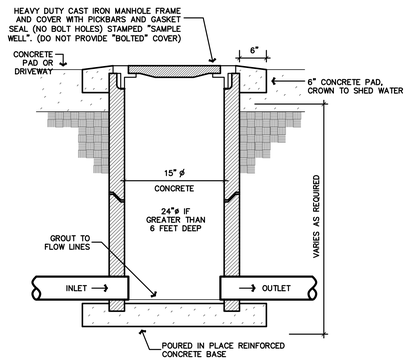
1. GAS PIPING SUPPORT SHALL BE PORTABLE PIPE HANGERS, INC. MODEL PP10-R. PIPING SHALL BE INSTALLED 12" ABOVE FINISHED ROOF. PROVIDE 18" X 18" CAREY TREAD-TYPE MATERIAL BENEATH EACH PIPE SUPPORT.
2. FIELD LOCATE ROOF STRUCTURAL SUPPORTS AND PLACE BASE OF PIPE SUPPORT OVER ROOF SUPPORTS ONLY. PROVIDE BASE OF ADEQUATE LENGTH TO SPAN ROOF JOIST TO PREVENT SUPPORTS SETTING ON ROOF DECK ONLY.
3. INSTALL SIX (6) FOOT-ON-CENTERS.
4. PIPE SUPPORT MANUFACTURER'S REPRESENTATIVE SHALL PERSONALLY INSPECT INSTALLATIONS OF PIPE SUPPORTS AND MAKE CORRECTIONS AND HEIGHT ADJUSTMENTS TO INSTALLATIONS, AS REQUIRED, DURING INSPECTION.



9 ROOF PIPE JACK DETAIL

NO SCALE

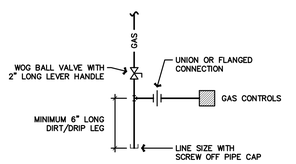
NOTE: COORDINATE WITH ARCHITECTURAL DRAWINGS, DETAILS AND SPECIFICATIONS.



8 SAMPLE TEST WELL DETAIL (STW)

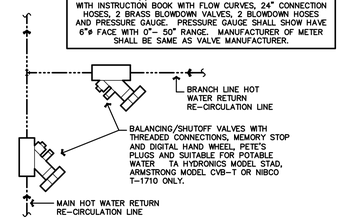
NO SCALE

NOTES:



7 TYPICAL GAS CONNECTION

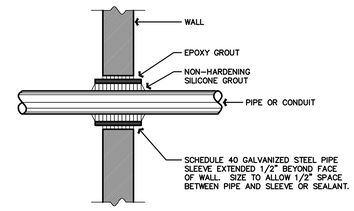
NO SCALE



6 HOT WATER BALANCING STATION

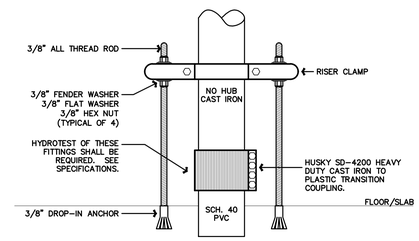
NO SCALE

PROVIDE AT EACH JUNCTION OF BRANCH HOT WATER RETURN LOOPS TO MAIN CIRCULATING HOT WATER LINE, SEE PLUMBING PLANS.



5 WALL PENETRATION DETAIL

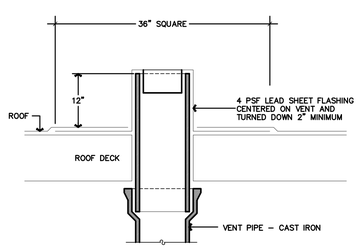
NO SCALE



4 PVC-TO-CAST IRON INSTALLATION DETAIL

NO SCALE

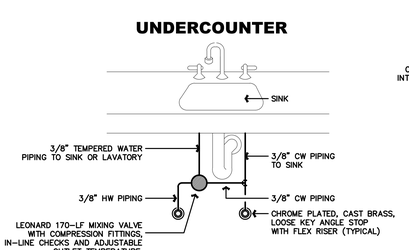
MISSION TRANSITION COUPLING DESIGNED AND CERTIFIED FOR THIS SPECIFIC APPLICATION SHALL BE ACCEPTABLE IN LIEU OF HUSKY COUPLING IN THIS DETAIL.



3 ROOF VENT DETAIL

NO SCALE

COORDINATE WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

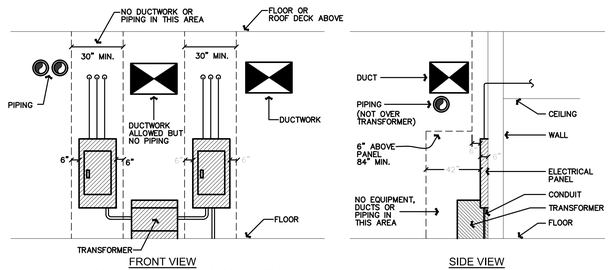


2 MIXING VALVE DETAIL

NO SCALE

NOTES

1. UNDERCOUNTER MIXING VALVE SHALL BE MOUNTED ON WALL IN FIXTURE KNEE-SPACE. LOCATION OF VALVE AND PIPING SHALL NOT INTERFERE WITH ANY ADA/HANDICAP KNEE-SPACE CLEARANCE REQUIREMENTS.
2. ALL PIPING SHALL BE CHROME PLATED CAST BRASS AND SHALL BE INSULATED BY TRUEBRO HANDI LAV-GUARD INSULATION KITS. INSULATION KITS SHALL COVER P-TRAP, MIXING VALVE, WATER STOPS, PIPING AND ALL SHARP EDGES (ONLY WHERE CABINETWORK KNEESPACE SCREEN NOT PROVIDED).
3. ALL CW AND HW CONNECTIONS SHALL HAVE COMPRESSION TYPE FITTINGS.
4. FOR ABOVE CEILING INSTALLATION, VALVE SHALL BE INSTALLED IN AN EASILY/READILY ACCESSIBLE LOCATION. SEE KITCHEN PLUMBING CONNECTION SCHEDULE FOR REQUIRED KITCHEN LOCATIONS.
5. LAVATORY MIXING VALVES SHALL HAVE AN OUTPUT ADJUSTMENT RANGE UP TO OR ABOVE 130°F.
   SINK MIXING VALVES SHALL HAVE AN OUTPUT ADJUSTMENT RANGE UP TO OR ABOVE 140°F.



1 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

DO NOT INSTALL ANY PIPING BENEATH CVT BOXES. DO NOT INSTALL ANY PIPING (EXCEPT FIRE SPRINKLER PIPING AND OTHER PIPES SHOWN SPECIFICALLY ON THE PLUMBING FLOOR PLANS) OVER COMPUTER CLASSROOMS, BOOKROOMS, IDF/MDF/SERVER ROOMS OR OTHER ROOMS NOTED ON THE PLUMBING FLOOR PLANS.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

j

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

STATE OF TEXAS
INTERIM REVIEW
THOMAS J. STANTON
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

PLUMBING SCHEDULES & DETAILS

j-P0.02

PRELIMINARY
NOT FOR CONSTRUCTION OR BIDDING PURPOSES

STANTON ENGINEERING GROUP
INFORMATION@STANTONEG.COM (713) 300-9080
TEXAS ENGINEERING FIRM REG. NO. F-018332 | 1300 W. SAM HOUSTON PARKWAY N., SUITE 125, HOUSTON, TX 77043

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TECHNOLOGY SYMBOLS & LEGEND

VOICE SYMBOLS

▼	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
▼X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
▼	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
▼X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
▼	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
▼X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
▣▼	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X ▣▼	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS PER LOCATION.
W ▼	SINGLE VOICE OUTLET FOR WALL-MOUNTED PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.

DATA SYMBOLS

▽	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X ▽	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
▽	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
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▽	POWER/COMMUNICATIONS POLE WITH A SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X ▽	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF DATA OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
▣	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X ▣	DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
W ▽	SINGLE DATA OUTLET FOR WALL-MOUNTED IP PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X ▽	DATA CABLE FOR COMPUTER ON WHEELS, CABLE TYPE AS SPECIFIED MOUNTED + 18-INCHES A.F.F UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
X	DATA CABLE FOR CEILING MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X	DATA CABLE FOR CEILING MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
	DATA CABLE FOR CEILING MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR CEILING MOUNTED AUDIO/VISUAL EQUIPMENT ENCLOSURE, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X ▽	DATA CABLE FOR WALL MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.

DATA SYMBOLS, CONT.

X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW, REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
X CAMW	DATA CABLE FOR INTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPW	DATA CABLE FOR INTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPE	DATA CABLE FOR EXTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.

CABLE PLANT & RISER DIAGRAM

◯	MAINTENANCE HOLE, SIZE & TYPE AS SPECIFIED.
□	PULLBOX, SIZE AND TYPE AS SPECIFIED.
UGC	DIRECT BURIED COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
AER	AERIAL COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
	CONDUIT, SIZE AND TYPE AS SPECIFIED.

VOICE/DATA SYMBOLS

▼	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X Y ▼	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF VOICE TERMINATIONS , Y = NUMBER OF DATA TERMINATIONS PER LOCATION.
▼	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X Y ▼	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF VOICE OUTLETS AND Y = NUMBER OF DATA OUTLETS PER LOCATION AS INDICATED.
▼	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET AND SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X Y ▼	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
▣▼	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X Y ▣▼	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS PER LOCATION.

FIBER OPTIC SYMBOLS

▽	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X ▽	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
▽	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X ▽	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
▽	POWER/COMMUNICATIONS POLE WITH A SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X ▽	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF FIBER OPTIC OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
▣	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X ▣	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.

ROUGH-IN & MISC. SYMBOLS

R ▽	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
R ▽	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
R ▽	POWER POLE WITH ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
R ▣	ROUGH-IN LOCATION, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
WAP	WIRELESS ACCESS POINT. EQUIPMENT AS SPECIFIED.

GENERAL SYMBOLS

# SHEET DRAWING TITLE SCALE: SCALE	DRAWING TITLE CALLOUT, # = DETAIL NUMBER.
# SHEET	DETAIL CALLOUT, # = DETAIL NUMBER.
# SHEET	SECTION CALLOUT, # = DETAIL NUMBER.
SHEET #	ELEVATION CALLOUT, # = DETAIL NUMBER.
#	KEYED NOTE, # = KEYED NOTE NUMBER.
#	REVISION TRIANGLE, # = REVISION NUMBER (PER SHEET).
TR (IDF XXX)	INDICATES TELECOMMUNICATIONS REGION

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
AER	AERIAL
DEMARC	DEMARCATION POINT
EMT	ELECTRIC METALLIC TUBE
F.O.C.	FIBER OPTIC CABLE
GIP	GALVANIZED IRON PIPE
HE	PAINTERCOM HEAD-END
IMC	INTERMEDIATE METAL CONDUIT
ISP	INSIDE CABLE PLANT
IDF	INTERMEDIATE DISTRIBUTION FRAME
MDF	MAIN DISTRIBUTION FRAME
MH	MAINTENANCE HOLE
MM	MULTIMODE
OSP	OUTSIDE CABLE PLANT
PB	PULLBOX
PR	PAIR
PVC	POLYVINYL CHLORIDE
RSC	RIGID STEEL CONDUIT
SM	SINGLE MODE
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TB	TERMINAL BLOCK
TR	TELECOMMUNICATION REGION
UGC	UNDERGROUND COMMUNICATION
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR

NOTES

1. CONTRACTOR SHALL REVIEW DRAWINGS AND SPECIFICATIONS THAT MAKE UP THE CONTRACT DOCUMENTS AND COMPLETE ALL WORK INCLUDED THEREIN.
2. SCALE OF TECHNOLOGY DRAWINGS IS PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CABLE LENGTHS, SIZE OF PATHWAYS, DIMENSIONS, ETC.
3. TECHNOLOGY DRAWINGS SHALL BE USED TO COMPLEMENT THE WRITTEN SPECIFICATIONS.
4. ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT'S. DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT AND SUBSEQUENTLY CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE ARCHITECT'S/DESIGN CONSULTANT'S INTERPRETATION.

INDEX OF DRAWINGS

j-T000	TECHNOLOGY SYMBOLS & LEGEND
j-TD201	TECHNOLOGY DEMOLITION FLOOR PLAN
j-T200	TECHNOLOGY COMPOSITE FLOOR PLAN
j-T201	TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
j-T202	TECHNOLOGY TEMPORARY KITCHEN FLOOR PLAN
j-T300	TECHNOLOGY ENLARGED VIEWS
j-T400	TECHNOLOGY TYPICAL DETAILS
j-T401	TECHNOLOGY TYPICAL DETAILS
j-T500	TECHNOLOGY TYPICAL LABELING SCHEME

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HOUSTON, TEXAS 77079

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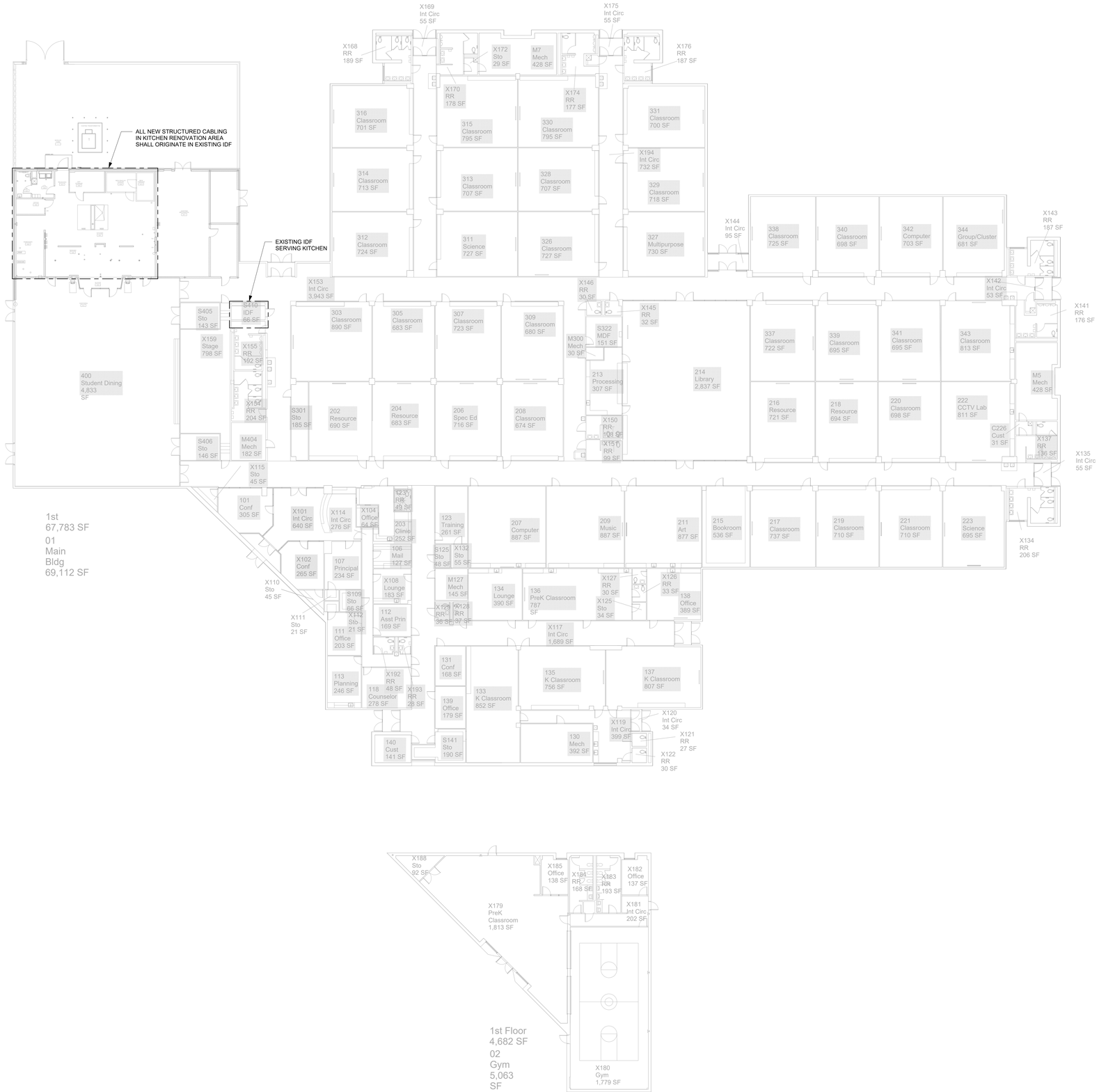
TECHNOLOGY SYMBOLS & LEGEND

SHEET NO.
j-T000



1 TECHNOLOGY COMPOSITE FLOOR PLAN
j-T200 1/16" = 1'-0"

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TECHNOLOGY COMPOSITE FLOOR PLAN

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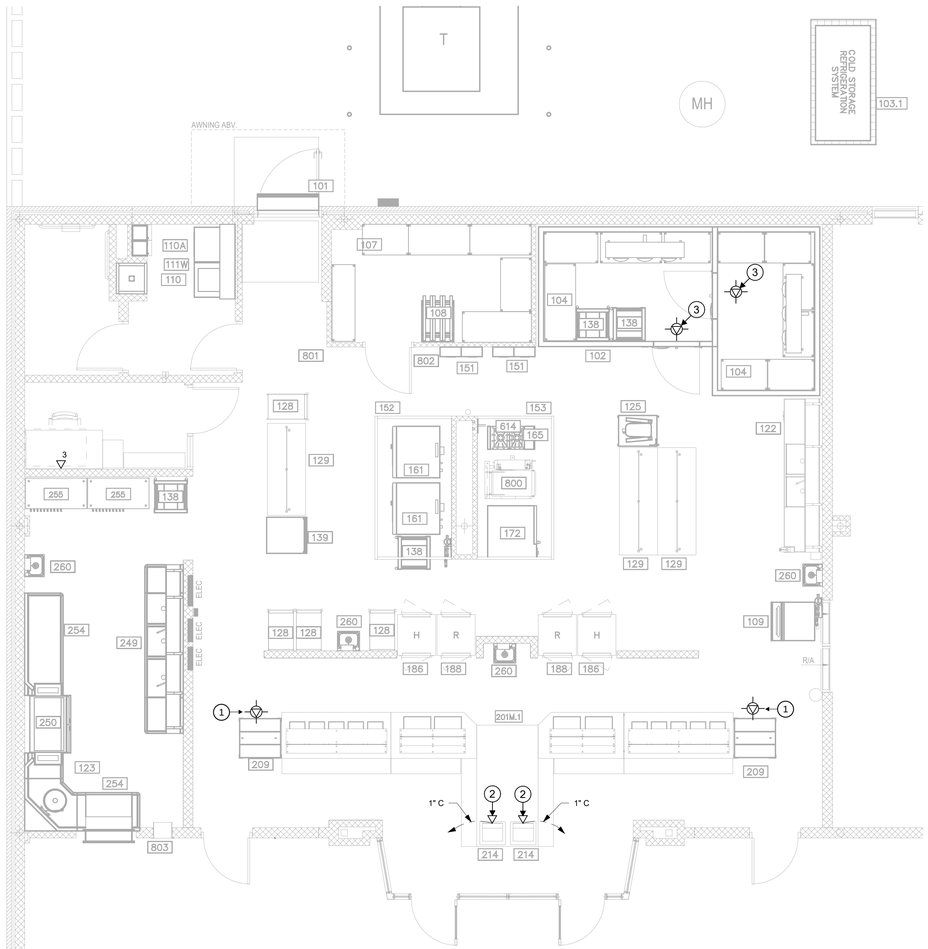

1 j-T201 TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
1/4" = 1'-0"

TECHNOLOGY FLOOR PLANS GENRAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
2. ALL CONDUIT PATHWAYS, ROUGH-INS, BACKBOXES, FLOOR BOXES, CONDUIT SLEEVES, ETC. INDICATED ON THE TECHNOLOGY DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26.
3. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. TECHNOLOGY CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES/ ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM.
14. ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE A LAY-IN TYPE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE A LAY- IN TYPE CEILING TO PREVENT THE CABLES FROM BEING EXPOSED, THE CONDUIT SHALL ROUTE TO THE NEAREST LAY-IN TYPE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. THE CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE MAIN CORRIDOR OR NEAREST MDF/IDF TO MINIMIZE THE CABLE LENGTH ENSURING THE CABLE LENGTH DOES NOT EXCEED 275 FEET. CONDUIT, CONNECTIONS, J-BOXES, SUSPENSION, ANCHORAGES, AND OTHER CONDUIT COMPONENTS EXPOSED TO VIEW IN PUBLIC SPACES SHALL BE ROUTED AND INSTALLED CAREFULLY TO MINIMIZE VISUAL IMPACT AND SHALL BE FULLY PAINTED TO MATCH UNLESS NOTED OTHERWISE.
15. CONDUIT(S) INSTALLED IN-SLAB OR UNDER-SLAB TO FLOOR BOXES, POKE-THURS, AND TO WORKAREA OUTLETS, ETC. SHALL BE INSTALLED WITH WET RATED CABLE(S).
16. NO GRID WIRE SHALL BE UTILIZED FOR SUPPORTS ONLY USE SOLID SUPPORTS (CLIPS, ALL-THREAD, ANCHORS, ETC.).

TECHNOLOGY PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

1. DATA CABLE FOR CONTRACTOR FURNISHED / CONTRACTOR INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.
2. INDOOR / OUTDOOR RATED DATA CABLE FOR POINT OF SALE LOCATION. PROVIDE (1) 1-INCH CONDUIT FOR DATA TO THE WALL BEHIND POINT OF SALE LOCATION AND UP WALL TO ABOVE ACCESSIBLE CEILING. CONDUITS SHALL TERMINATE INSIDE A DOUBLE GANG BOX THAT IS SECURED TO THE POINT OF SALE LOCATION. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.
3. DATA CABLE FOR TEMPERATURE MONITORING OF FREEZER COOLER. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS AND TERMINATION POINT AND CONNECTIVITY NEEDS IN FREEZER / COOLER CONTROL UNIT.
4. DATA CABLE FOR TEMPORARY POINT OF SALES CASH REGISTER. COORDINATE WITH OWNER, ARCHITECT, AND CONSULTANT FOR ROUTING OF CABLES TO POINT OF SALE CASH REGISTER PRIOR TO INSTALLATION

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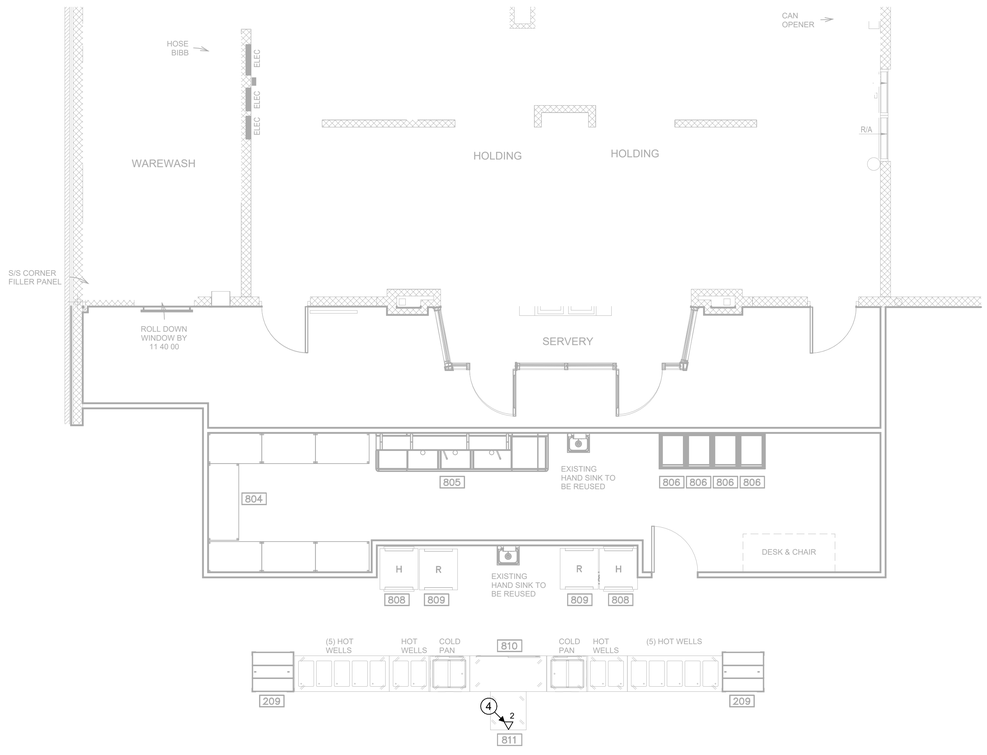
TECHNOLOGY NEW/RENOVATION KITCHEN PLAN

SHEET NO.
j-T201



1 j-T202 TECHNOLOGY TEMPORARY KITCHEN FLOOR PLAN
1/4" = 1'-0"

TECHNOLOGY FLOOR PLANS GENRAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
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TECHNOLOGY PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

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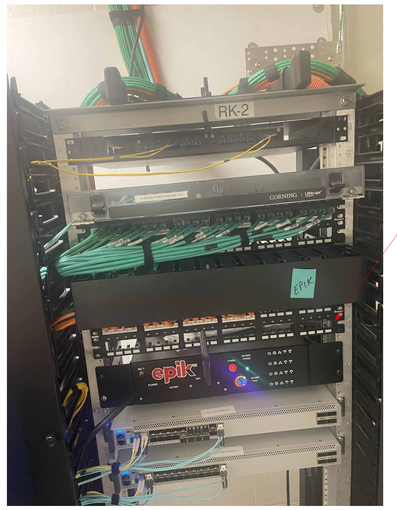
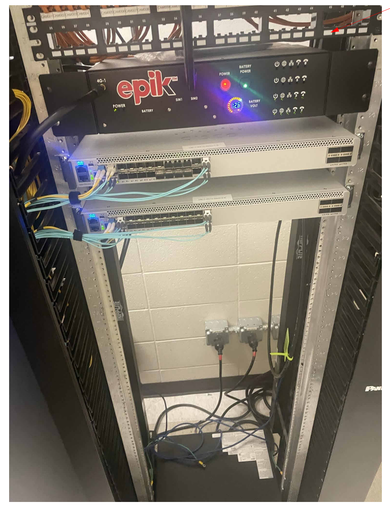
TECHNOLOGY TEMPORARY KITCHEN FLOOR PLAN

SHEET NO.
j-T202



UTILIZE THIS PANEL FOR NEW CABLING

1 j-T300 HIGHLANDS ES EXISTING RACK - TOP PORTION
N.T.S



UTILIZE THIS PANEL FOR NEW CABLING

2 j-T300 HIGHLANDS ES EXISTING RACK - BOTTOM PORTION
N.T.S

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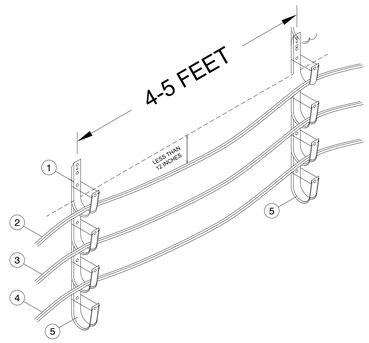
TECHNOLOGY ENLARGED VIEWS

SHEET NO.
j-T300

NOTE TO CONTRACTOR:

UNLESS OTHERWISE NOTED, LOW VOLTAGE CABLING SHALL BE INSTALLED WITHIN 6-INCHES OF THE CEILING AND ACCESSIBLE BY A TECHNICIAN ON A STANDARD A-FRAME LADDER.

CONTRACTOR SHALL MAINTAIN AT LEAST 6-INCHES OF SEPRATION BETWEEN CABLING BUNDLES AND MECHANICAL DUCTWORKS, EQUIPMENT, PIPIING OR OTHER SYSTEMS IN THE CEILING PLENUM.

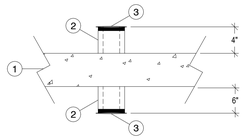


KEYED NOTES:

1. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
2. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
3. A/V CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. SECURITY CABLE ABOVE ACCESSIBLE CEILING (BY DIV 28).
5. SPARE J-HOOK (BY DIV 27).

1 / T400 TYPICAL J-HOOK CABLE PATHWAY

SCALE: N.T.S.

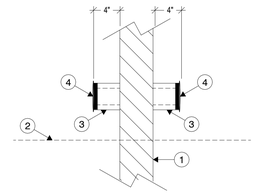


KEYED NOTES:

1. SCHEDULED FLOOR OR DECK.
2. CONDUIT SLEEVE (BY DIV 26).
3. NYLON BUSHING (BY DIV 26).

2 / T400 TYPICAL CONDUIT SLEEVE THROUGH FLOOR OR DECK DETAIL

SCALE: N.T.S.

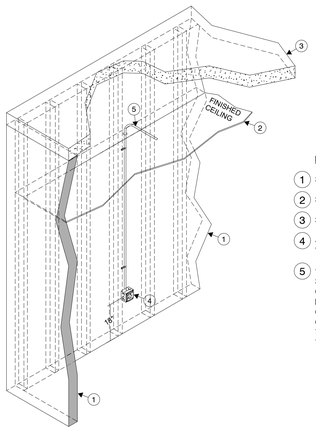


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. CONDUIT SLEEVE (BY DIV 26).
4. NYLON BUSHING (BY DIV 26).

3 / T400 TYPICAL CONDUIT SLEEVE GOING THROUGH WALL

SCALE: N.T.S.

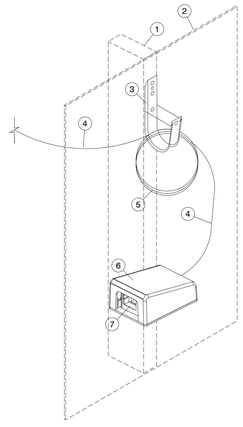


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. SCHEDULED DECK ABOVE.
4. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX WITH DOUBLE GANG PLASTER RING (BY DIV 26).
5. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH. (BY DIV 26).

4 / T400 TYPICAL TECHNOLOGY CONDUIT ROUGH-IN

SCALE: N.T.S.

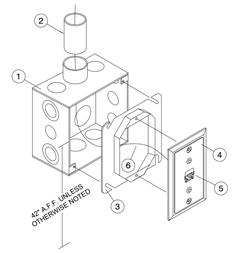


KEYED NOTES:

1. SCHEDULED STUD.
2. SCHEDULED WALL.
3. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
5. 20 FOOT SERVICE LOOP ABOVE ACCESSIBLE CEILING NEATLY COILED AND SECURED TO J-HOOK (BY DIV 27).
6. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BUILDING STRUCTURE (BY DIV 27).
7. DATA INSERT (BY DIV 27).

5 / T400 TYPICAL ABOVE CEILING SINGLE DATA OUTLET (WALL MOUNTED)

SCALE: N.T.S.

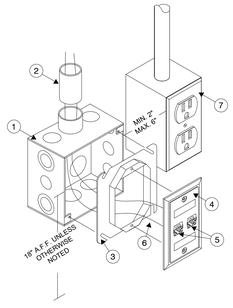


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH PHONE STUDS (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).

6 / T400 TYPICAL WALL PHONE OUTLET CONFIGURATION

SCALE: N.T.S.

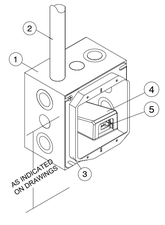


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

7 / T400 TYPICAL DUAL DATA OUTLET CONFIGURATION

SCALE: N.T.S.

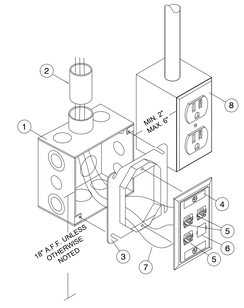


KEYED NOTES:

1. 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. DOUBLE GANG PLASTER RING (BY DIV 26).
4. SURFACE MOUNT BOX INSIDE THE 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH DOUBLE GANG BOX (BY DIV 27).
5. RJ-45 INSERT (BY DIV 27).

8 / T400 TYPICAL WALL-MOUNTED WIRELESS ACCESS POINT

SCALE: N.T.S.



KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

9 / T400 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

J

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzales Jr
BICSI ID # 364970
EXPIRES12-31-25
RCDD

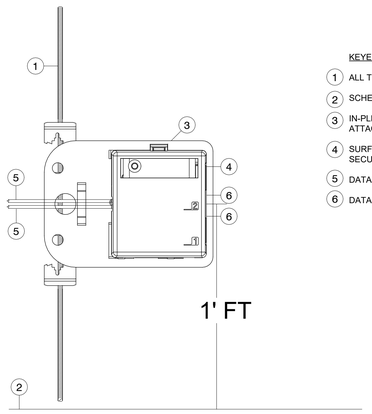
07/18/2025

MVA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

TECHNOLOGY TYPICAL DETAILS

SHEET NO.
j-T400

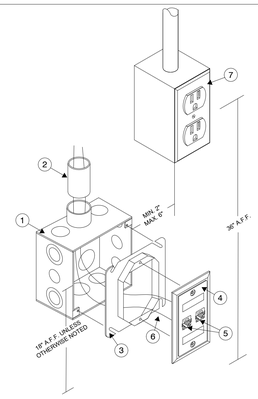


KEYED NOTES:

1. ALL THREAD TO BUILDING STRUCTURE (BY DIV. 27)
2. SCHEDULING CEILING
3. IN-PLENUM CEILING BRACKET PN 49223-CBC ATTACHED TO ALL THREAD (BY DIV. 27)
4. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BRACKET (BY DIV. 27)
5. DATA CABLE (BY DIV. 27)
6. DATA INSERT (BY DIV. 27)

1 / T401 TYPICAL ABOVE CEILING DATA OUTLET

SCALE: N.T.S.

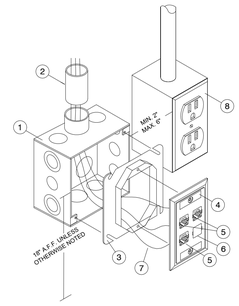


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26). ELECTRICAL RECEPTACLE TO BE INSTALLED AT 36" A.F.F. AND ADJACENT TO COW / SECONDARY TEACHING OUTLET LOCATION.

2 / T401 TYPICAL COW / SECONDARY TEACHER'S DATA OUTLET CONFIGURATION

SCALE: N.T.S.

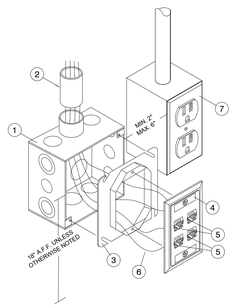


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

3 / T401 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.



KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

4 / T401 TYPICAL FOUR DATA OUTLET CONFIGURATION

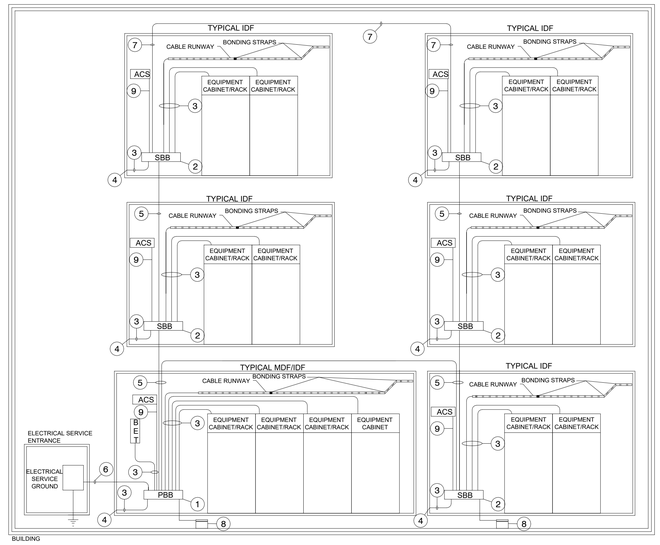
SCALE: N.T.S.

TBB/GE CONDUCTOR SIZING	
LENGTH IN LINEAR M (FT)	SIZE (AWG)
LESS THAN 4 (13)	6
4 - 6 (14-20)	4
6 - 8 (21 - 26)	3
8 - 10 (27 - 33)	2
10 - 13 (34 - 41)	1
13 - 16 (42 - 52)	1/0
16 - 20 (53 - 66)	2/0
20 - 26 (67 - 84)	3/0
26 - 32 (85 - 105)	4/0
32 - 38 (106 - 125)	250 kcmil
38 - 46 (126 - 150)	300 kcmil
46 - 53 (151 - 175)	350 kcmil
53 - 76 (176 - 250)	500 kcmil
76 - 91 (251 - 300)	600 kcmil
GREATER THAN 91 (301)	750 kcmil

ROUTE THE TBB TO EACH TGB IN AS STRAIGHT A PATH AS POSSIBLE. THE TBB SHOULD BE INSTALLED AS A CONTINUOUS CONDUCTOR, AVOIDING SPLICES WHERE POSSIBLE.

5 / T401 TBB CONDUCTOR SIZING

SCALE: N.T.S.

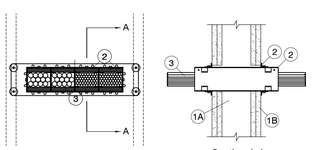


1. TELECOMMUNICATIONS MAIN GROUNDING BUS BAR (PBB)(BY DIV. 27)
2. TELECOMMUNICATIONS GROUNDING BUS BAR (SBB)(BY DIV 27)
3. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 27)
4. CONNECT TO GROUNDED BUILDING STEEL WHEN EXPOSED IN ROOM.
5. TELECOMMUNICATIONS BONDING BACKBONE (TBB). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 26)
6. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). BY ELECTRICAL CONTRACTOR.REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS.
7. GROUNDING EQUALIZER CONDUCTOR (GEC)(BY DIV 26)
8. BOUND WITH GROUDING COLLARS TO EACH CONTINUOUS CONDUIT THAT ENTERS THE TELECOM ROOM. (BY DIV 26).
9. BOND TO EACH ACCESS CONTROL PANEL AND OTHER SECURITY PANELS IN HE TELECOM ROOM. (BY DIV 27)

6 / T401 TYPICAL GROUNDING DIAGRAM

SCALE: N.T.S.

System No. W-L-3218
F Ratings - 1, 2, 3 and 4 Hr (See Items 1 and 3)
T Ratings - 3/4 and 1 Hr (See Item 3)
L Rating At Ambient - Less Than 1, 1.3, 4 or 7 CFM (See Item 3)
L Rating At 400 F - Less Than 1, 2 or 3 CFM (See Item 3)



Section A-A

1. Wall Assembly - The 1, 2, 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described within the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall incorporate the following construction features:
   A. Studs - Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
   B. Gypsum Board* - Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Opening in gypsum board to be max 1/4 in. (6 mm) larger then width and height dimensions of firestop device(s).

   The hourly F Rating of the firestop system is dependent upon the hourly rating of the wall in which it is installed.
2. Firestop Device* - One, two, three, four or seven firestop device modules ganged together. Each firestop device module consists of a 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long galv steel tube with an intumescent material lining. Firestop device modules to be installed in accordance with the accompanying installation instructions. The space between the firestop device module(s) and the periphery of the opening shall be min 0 in. (0 mm, point contact) to max 1/8 in. (3.2 mm). In round openings, the space between the firestop device and the periphery of the opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). Firestop device module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device by means of steel set screws provided with device. Each four- and seven-gang steel wall plate shall be fastened to the studs with steel screws sized to extend through the gypsum board layers and penetrate 1/2 in. (13 mm) into the framing member. Each firestop device module is to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   As an alternate, the four- and seven-gang steel wall plates may be installed directly against the studs for walls having 16 and 24 in. (406 and 610 mm) center-to-center stud spacing, respectively, prior to installation of the gypsum board layers. The steel wall plates shall be secured to the stud by means of steel screws. After installation of the steel wall plates and firestop device modules, the gypsum board shall be installed as specified in the individual U300 or U400 Design with a maximum 1/8 in. (3.2 mm) gap between the firestop device module and the cutout in the gypsum board. Gap between the firestop device module and the cutout in the gypsum board may be filled with gypsum joint compound or fill material (Item 4).

   SPECIFIED TECHNOLOGIES INC - EZ PATH Series 33 Fire Rated Pathway

2A. Firestop Device* - Extension Module - (Optional, Not Shown) - Module attached to ends of 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long firestop device (Item 3) to increase its length to facilitate installation in thicker walls. Each module consists of a 3 by 3 by 6 in. (76 by 76 by 152 mm) long galv steel tube with an intumescent material lining. Extension module to be installed in accordance with the accompanying installation instructions. When module is used, firestop device (Item 2) and extension module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device or extension module(s) by means of steel set screws provided with wall plates. Firestop device and extension module(s) assembly to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   SPECIFIED TECHNOLOGIES INC - EZ PATH Extension

3. Cables - Within the loading area for each firestop device module, the cables may represent a 0 to 100 percent visual fill. Cable fill to be distributed at a uniform height across the width of the firestop device module. Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types of cables may be used:
   A. Max 400 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) jacketing and insulation.
   B. Max 350 kcmil single copper conductor power cable with XLPE jacket and insulation
   C. Max 7/C No. 12 AWG copper conductor control cable with PVC or XLPE jacket and insulation.
   D. Max 3/C No. 10 AWG metal clad or armored cable with steel or aluminum jacket.
   E. Max 3/C No. 8 AWG NM cable (Romex) with PVC insulation and jacket.
   F. Max four pair No. 22 AWG (or smaller) copper conductor data cable with PVC or plenum rated jacketing and insulation.
   G. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
   H. Fiber optic cable with PVC or polyethylene (PE) jacket and insulation having a max diam of 5/8 in. (16 mm).
   I. Optical Fiber Raceway+ - Max 1-1/2 in. (38 mm) diam (or smaller) optical fiber raceway ("innerduct") formed of either PVC or polyvinylidene fluoride (PVDF) with optical fiber cable fill. Raceways installed in accordance with the National Electrical Code (NFPA 70).

   When the hourly rating of the wall assembly is 1 hr, the T Rating is 3/4 hr. When the hourly fire rating of the wall assembly is greater than 1 hr, the T Rating is 3/4 hr when Item 3A, 3B, 3C, 3D or 3E is used. Otherwise the T Rating is 1 hr. When Item 3A, 3B, 3C, 3D or 3E is used, the maximum F Rating is 2 hr. When max 200 pair No. 24 AWG telecommunication cable is used or when Item 3F, 3G, 3H or 3I is used, the maximum F Rating is 4 hr.

   The L Rating for each empty firestop device module is less than 1 cfm at ambient and at 400F. When Item 3A is used, the L Rating for each firestop device module with 100 percent visual fill is 4 cfm at ambient and 3 cfm at 400F. When Item 3F is used, the L Rating for each firestop device module with 100 percent visual fill is 1.3 cfm at ambient and 1 cfm at 400F. When Item 3G or 3H is used, the L Rating for each firestop device module with 100 percent visual fill is 7 cfm at ambient and 2 cfm at 400F.
4. Fill, Void or Cavity Material* - Sealant or Putty - (Not Shown) - As an alternate to gypsum joint compound, the gap between the firestop device module and the cutout in the gypsum board may be sealed with fill material on each side of the wall assembly when four- and seven-gang steel wall plates are installed directly against the wood or steel studs.

   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant, SpecSeal Putty

   *Bearing the UL Classification Mark

7 / T401 TYPICAL STI EZ-PATH SLEEVE DETAIL

SCALE: N.T.S.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

J

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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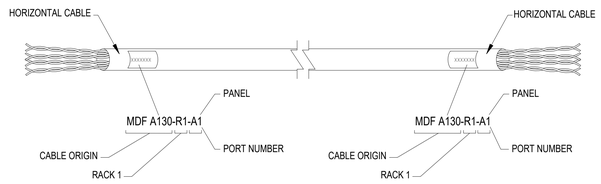
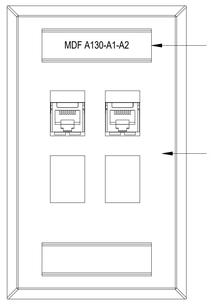
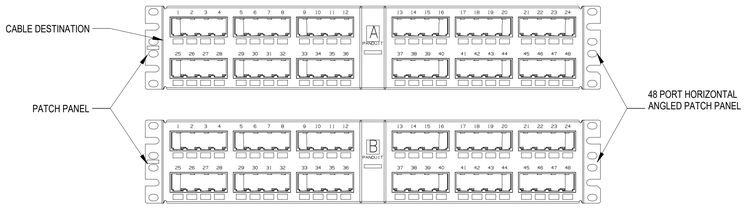
TECHNOLOGY TYPICAL DETAILS

SHEET NO.
j-T401

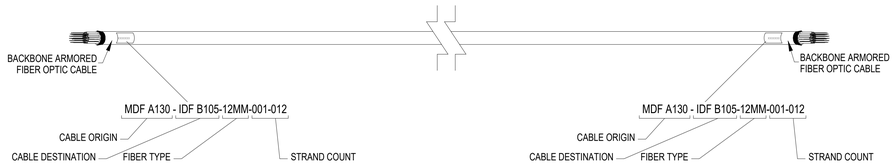


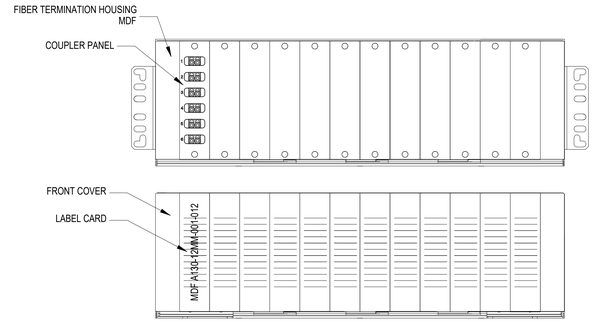


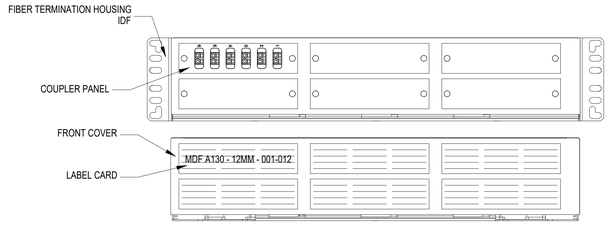


1 T500 TYPICAL HORIZONTAL DATA CABLE LABELING SCHEME

SCALE: N.T.S.

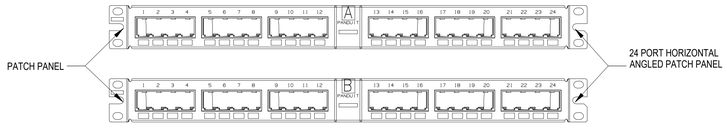






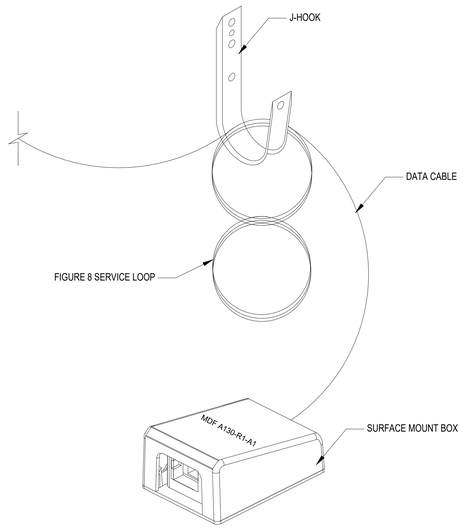
2 T500 TYPICAL FIBER BACKBONE LABELING SCHEME

SCALE: N.T.S.



3 T500 TYPICAL COPPER BACKBONE LABELING SCHEME

SCALE: N.T.S.



4 T500 ABOVE ASSESSIBLE CEILING LABELING SCHEME

SCALE: N.T.S.

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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HIGHLANDS ELEMENTARY SCHOOL
2022 COLONIST PARK DRIVE
SUGAR LAND, TX 77478

SEAL

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Jason Gonzalez Jr
BICSI ID # 364970
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RCDD

07/18/2025

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TECHNOLOGY TYPICAL LABELING SCHEME

SHEET NO.
j-T500

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- AV WALL ROUGH-IN WITH DATA
- KEYNOTE
- Proposed Camera Direction
  SURVEILLANCE CAMERA
  Camera Schedule Number (Floor #-Camera #)
  Camera (N)ew, (E)xisting Rough-in, (D)emo
- Proposed Camera Direction
  PTZ CAMERA
  PTZ
- Proposed Camera Direction
  FIXED SURVEILLANCE CAMERA
- 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Approximate view of lens
  Lens View Angle
  360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
  Lens size
- MICROPHONE WITH AUDIO LINKED TO CAMERA
- CARD READER LINKED TO CAMERA
- SYMBOL TAG
  (#) = DIFFERENT TYPES OF CARD READERS:
  M = MULLION
  W = WIRELESS (Proprietary)
  Wi = Wi-Fi (802.11)
  POE = POWER OVER ETHERNET
- SYMBOL TAG
  (#) = DIFFERENT TYPES OF CARD READERS:
  TS = TOUCHSCREEN
  PU = PUSH BUTTON
- TOP = DETAIL NUMBER
  DETAIL REFERENCE
  BOTTOM = SHEET NUMBER
- NORTH ARROW
- SHEET NUMBER
  SECTION MARKER
  DETAIL NUMBER
- DIRECTION OF ELEVATION
  ELEVATION MARKER
  SHEET NUMBER
  DETAIL NUMBER
- DIRECTION OF ELEVATION
  SHEET NUMBER
  DIRECTION OF ELEVATION
  DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

TRUENORTH A PMY COMPANY

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Highlands Elementary School
2022 Colonist Park Dr, Sugar Land, TX 77478

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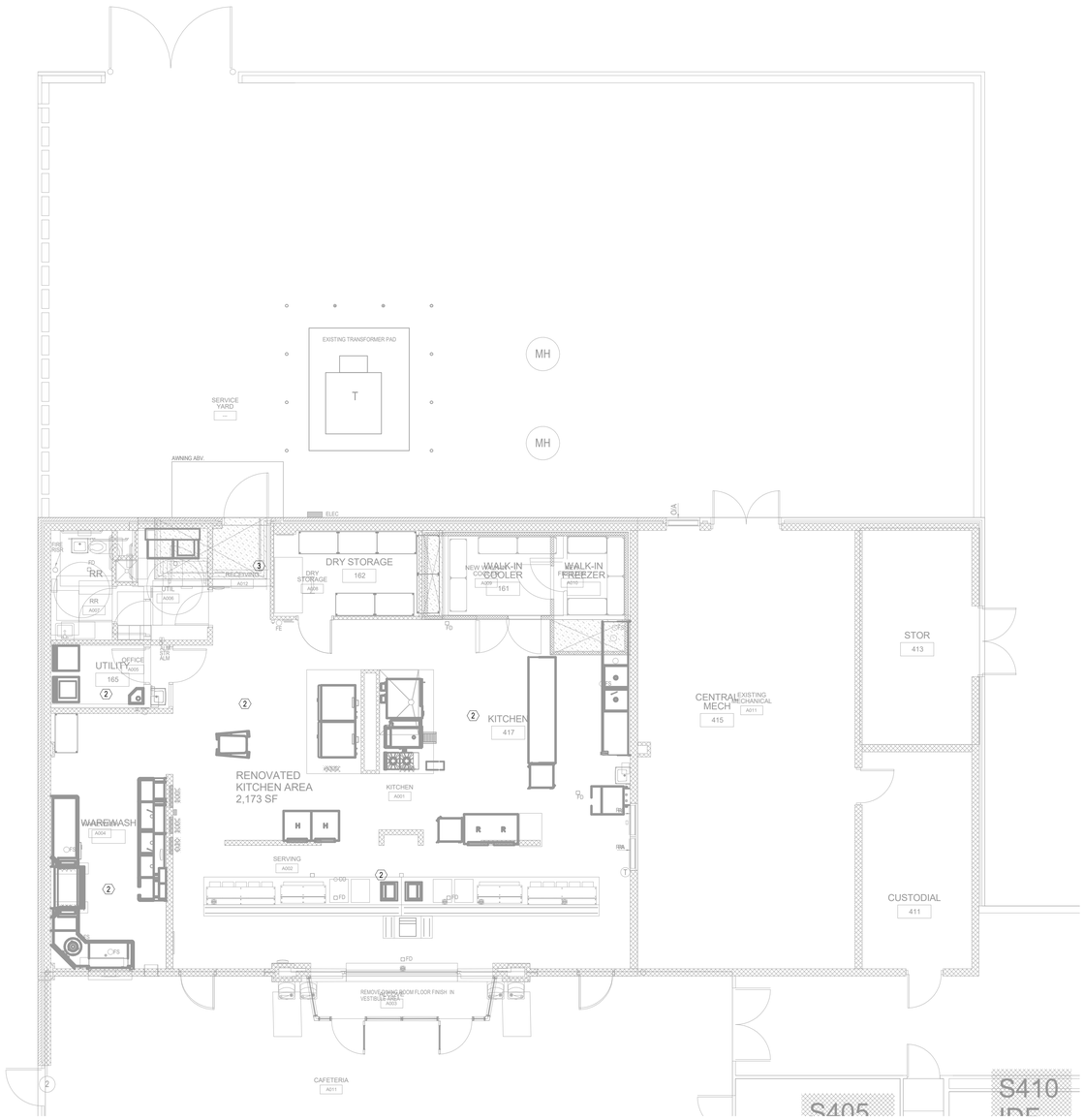
TECHNOLOGY - TITLE SHEET

j-TN000

DEMO KEYNOTES

1. REMOVE, AND PROTECT DURING CONSTRUCTION, INSTALL IN EXISTING LOCATION AFTER NEW ACT GRID IS IN PLACE.
2. DEVICES IN ACT ARE TO BE REMOVED AND PROTECTED DURING CONSTRUCTION AND REINSTALLED IN THE SAME LOCATION AFTER THE NEW CEILING GRID IS IN PLACE. DECIVES INCLUDE: SPEAKERS, ACCESS POINTS AND INTRUSION MOTION DETECTORS.
3. EXISTING CARD READER, DOOR CONTACT, & REX (REQUEST TO EXIT) TO BE DEMOLISHED, REMOVE DEVICES AND PROTECT WIREING.



1 HIGHLAND - DEMO PLAN
SCALE: 3/16" = 1'-0"

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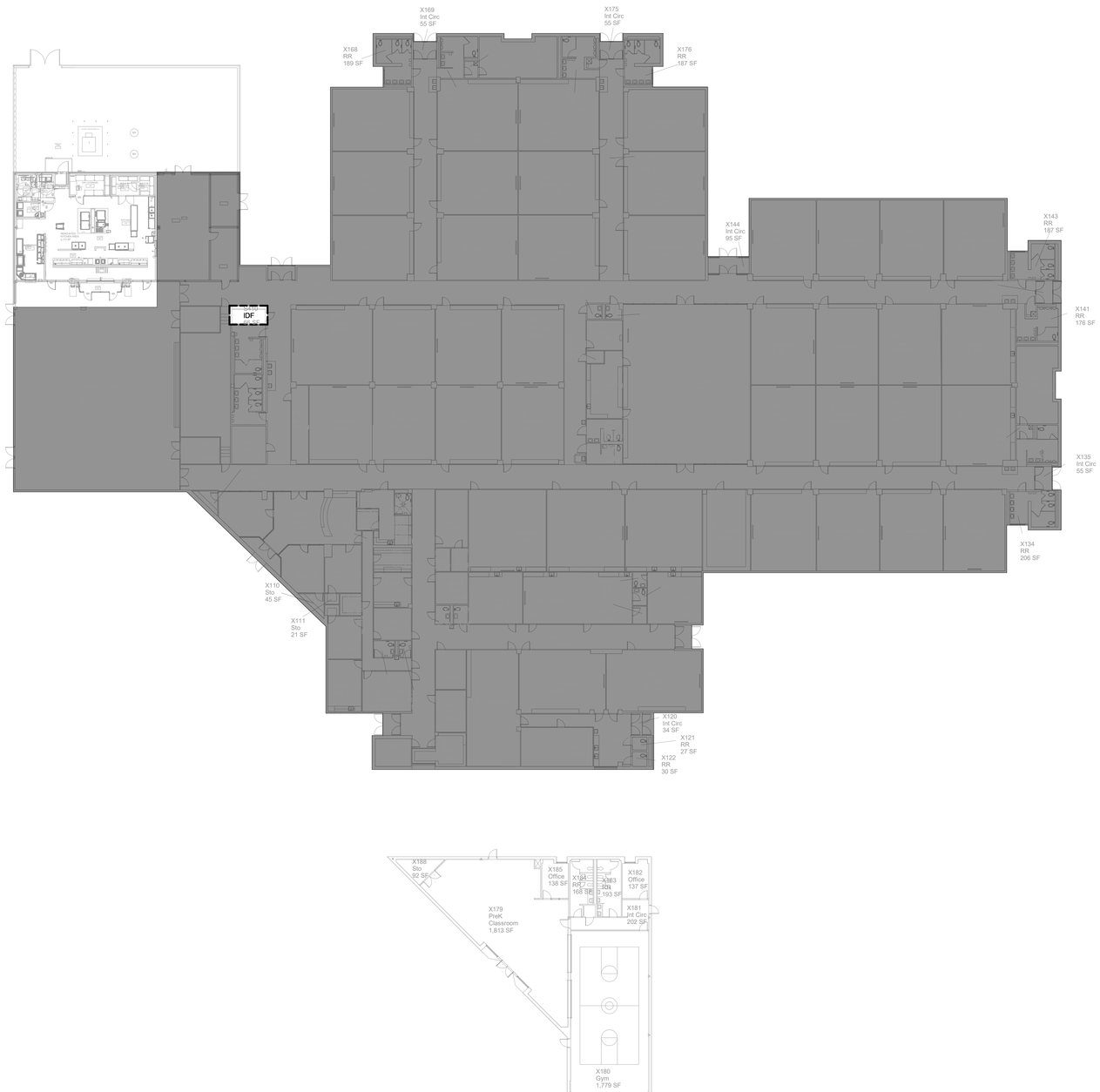
TECHNOLOGY - HIGHLAND ES - DEMO

j-TN.001



1 BACKGROUND 1 (HIGHLAND)
SCALE: 1" = 20'-0"

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.

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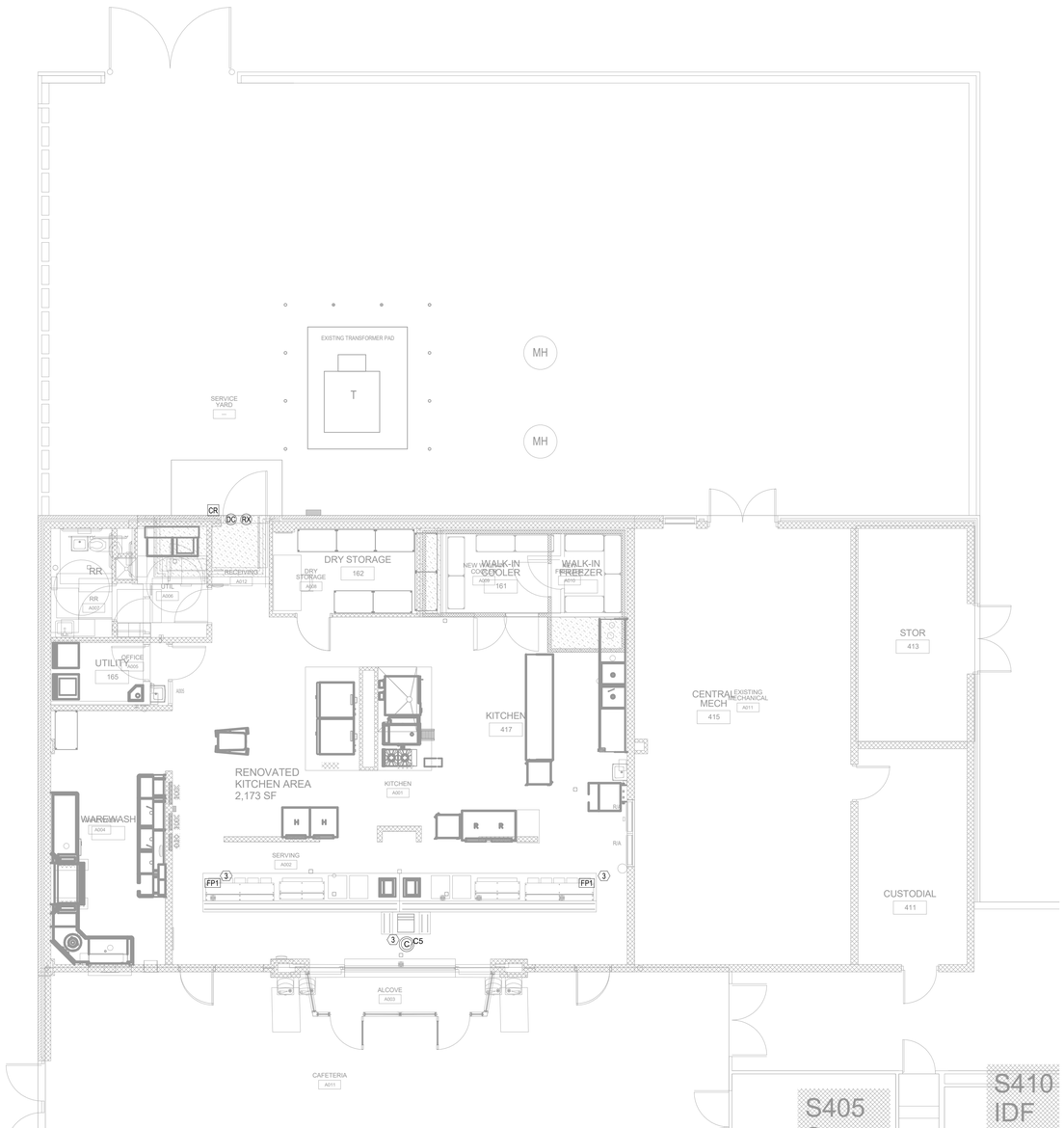
TECHNOLOGY - HIGHLAND ES - OVERALL

j-TN.100

TRUENORTH A PMY COMPANY

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 HIGHLAND - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

TRUENORTH A PWY COMPANY

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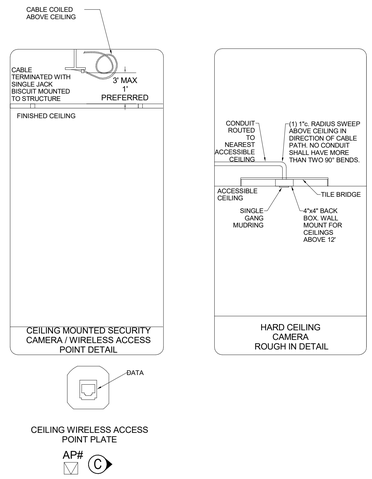
TECHNOLOGY - HIGHLAND ES - KITCHEN

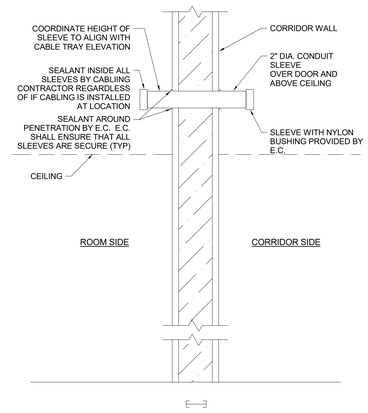
j-TN.101

GENERAL NOTE

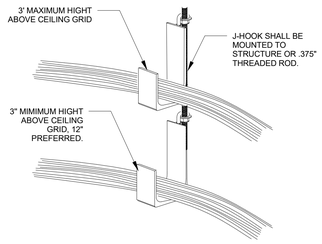
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



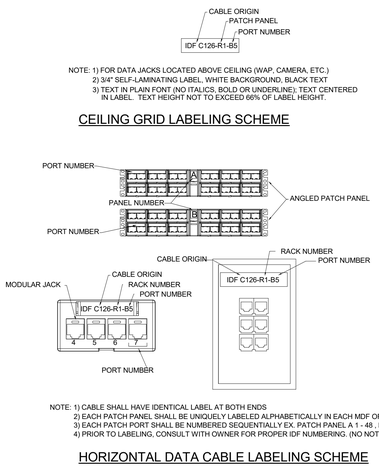
1 DATA ROUGH-IN DETAILS
SCALE: NS



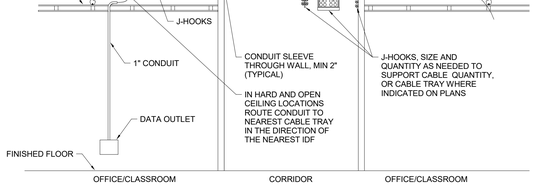
2 TYPICAL CABLING SLEEVE
SCALE: NTS



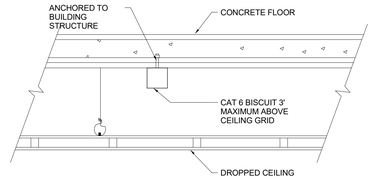
3 PANDUIT J-HOOK DETAIL
SCALE: NTS



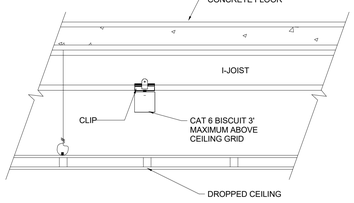
4 LABELING & CABLING SCHEMES
SCALE: NTS



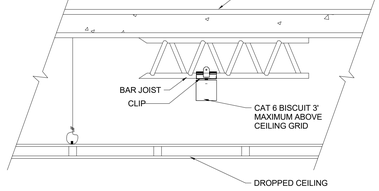
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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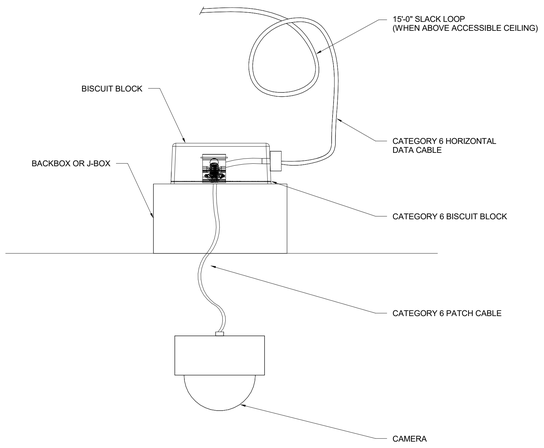
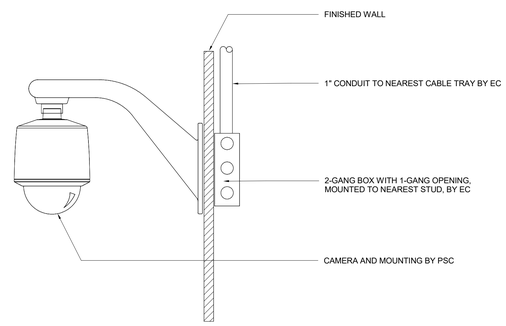
TECHNOLOGY - HIGHLAND ES - DETAILS
j-TN.500

GENERAL NOTES:

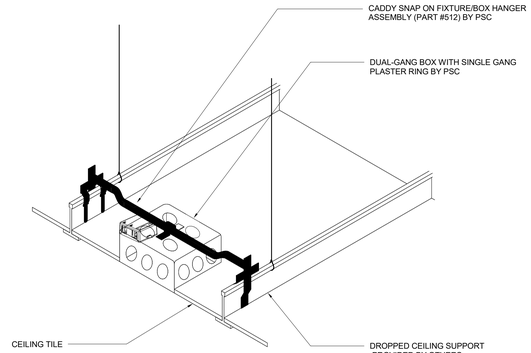
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



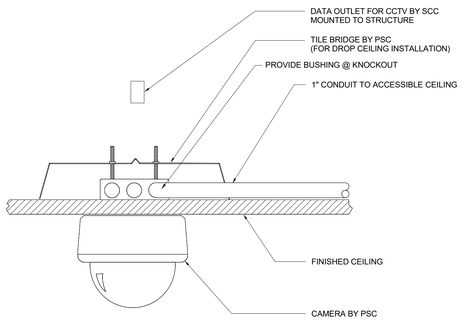
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

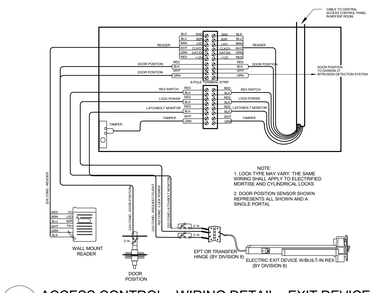


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

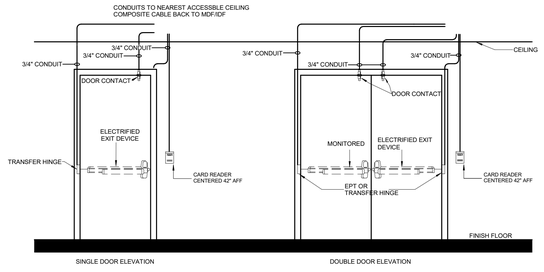
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

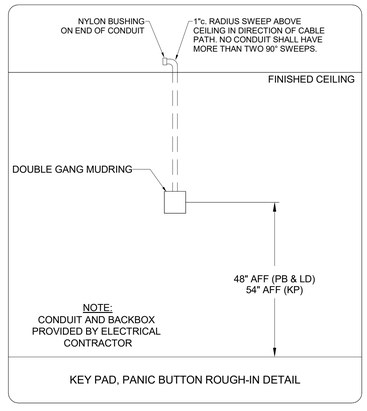
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

TRUENORTH A PMY COMPANY

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

j

FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Highlands Elementary School
2022 Colonist Park Dr, Sugar Land, TX 77478

SEAL



07-18-25

MVA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
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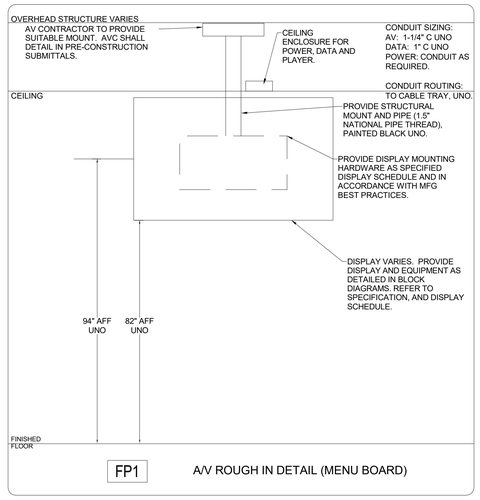
PROJ. NO.: 23-25
DATE: 07-18-25
ISSUED FOR BIDDING
AND
PERMITTING

TECHNOLOGY - HIGHLAND ES - SECURITY DETAILS

j-TN.600



6 CEILING MOUNT DISPLAY - A/V ROUGH-IN DETAIL
SCALE: NTS

TRUENORTH A PMY COMPANY

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

j

FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Highlands Elementary School
2022 Colonist Park Dr, Sugar Land, TX 77478

SEAL

BICSI REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Brian C Porter
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PROJ. NO.: 23-25
DATE: 07-18-25
ISSUED FOR BIDDING AND PERMITTING
TECHNOLOGY - HIGHLAND ES - AV DETAILS
j-TN.700

FBISD BP013 KITCHEN RENOVATIONS ES

HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD, MISSOURI CITY, TX 77489

FORT BEND INDEPENDENT SCHOOL DISTRICT

FORT BEND INDEPENDENT SCHOOL DISTRICT

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

KRISTIN K. TASSIN	PRESIDENT
RICK GARCIA	VICE PRESIDENT
DAVID HAMILTON	SECRETARY
ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

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Houston, Texas 77027
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k-D.101-2	DEMO PLAN PHOTOS
k-D.101-3	DEMO PLAN PHOTOS
k-QF1	FS DEMO PLAN
k-ED.100	ELECTRICAL DEMOLITION AND TEMPORARY KITCHEN PLAN
k-PD1.01	PLUMBING DEMOLITION FLOOR PLAN
k-TD201	TECHNOLOGY DEMOLITION FLOOR PLAN
k-A.101	SITE PLAN
k-A.201	OVERALL FLOOR PLAN
k-A.300	SLAB DIMENSION CONTROL PLAN
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k-M1.01	MECHANICAL PLANS
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E.000	ELECTRICAL AND FIRE ALARM SCHEDULES
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k-TN-500	TECHNOLOGY - DETAILS
k-TN-600	TTECHNOLOGY - SECURITY DETAILS
k-TN-700	TECHNOLOGY - AV DETAILS

REGISTERED ARCHITECT
MICHAEL A. MAGNER
22651
STATE OF TEXAS

18 JULY 2025

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

k

PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.
B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.
C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.
D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.
E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.
F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL, ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.
B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.
B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.
C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.
D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY. IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.

1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.

E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.

B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT. REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.

B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED. CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.

D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

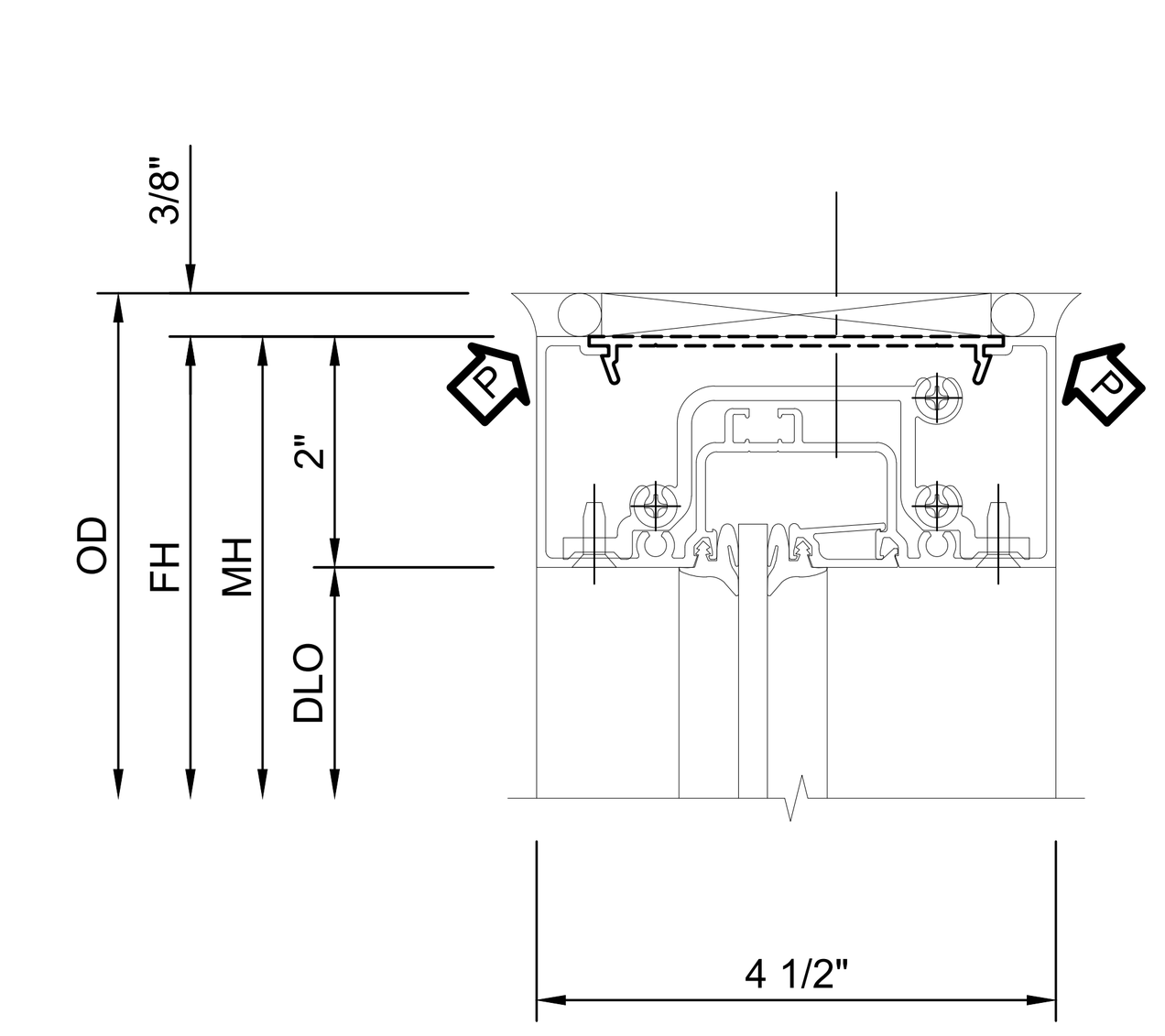
A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

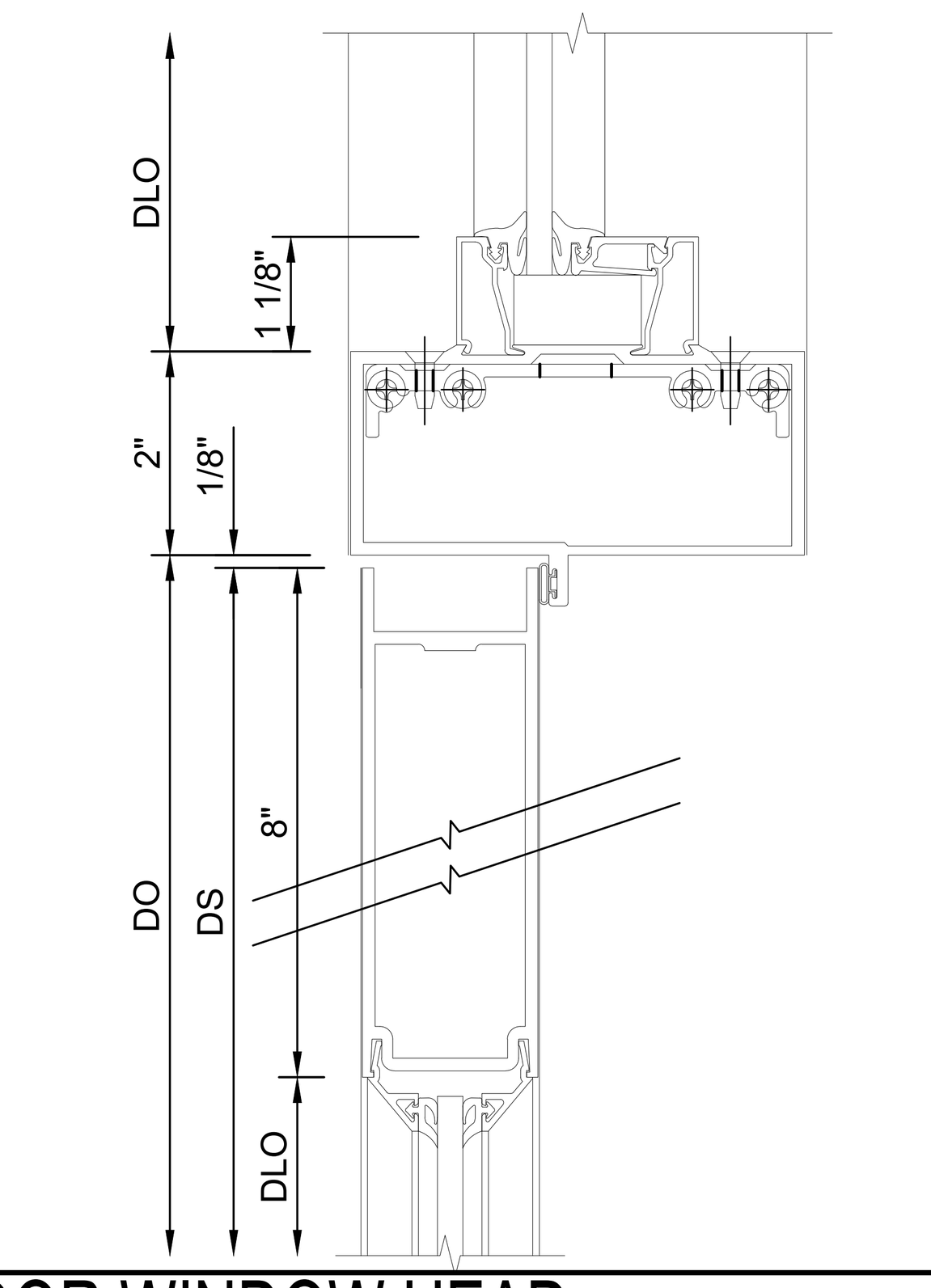
A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

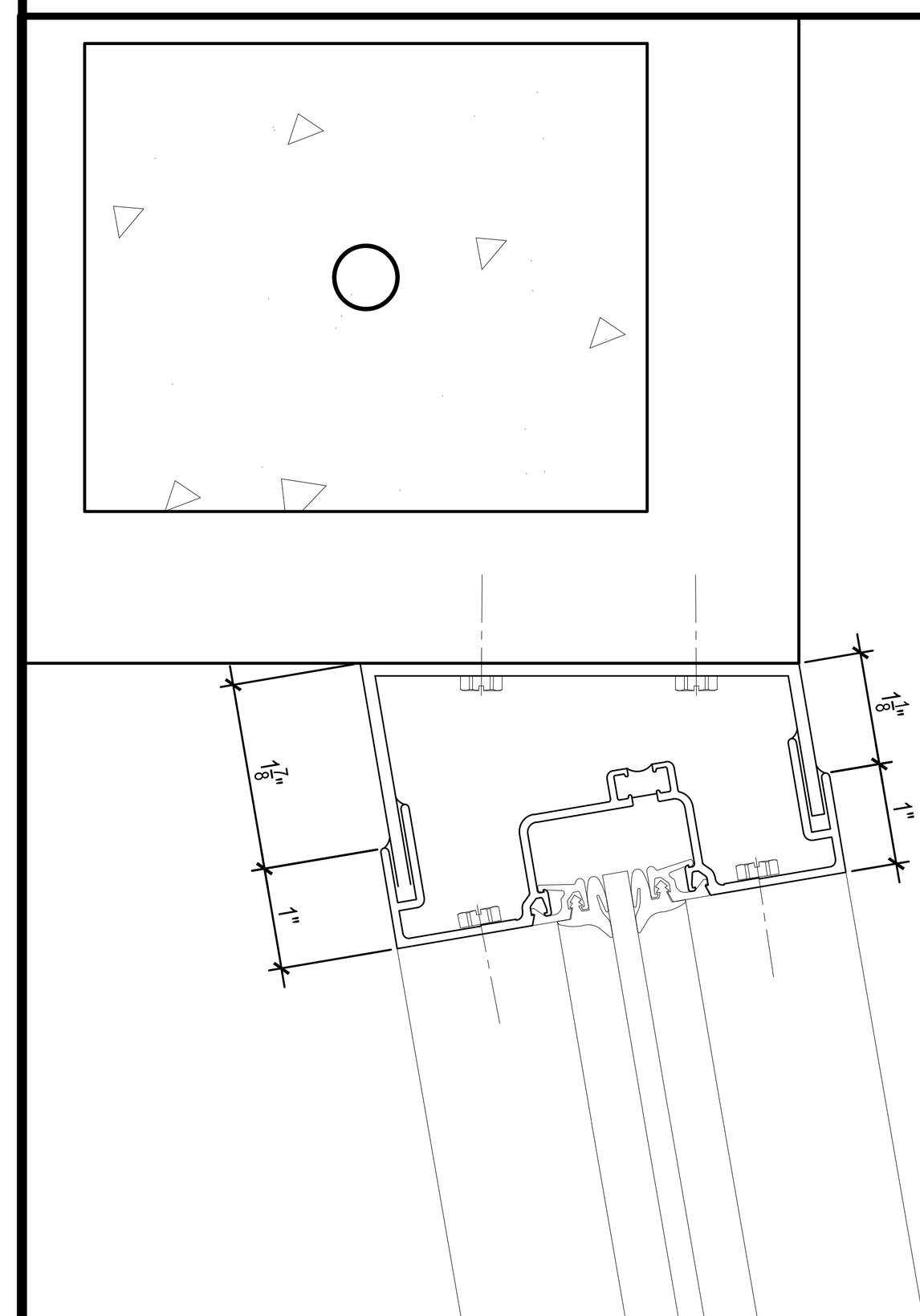
01 GENERAL NOTES



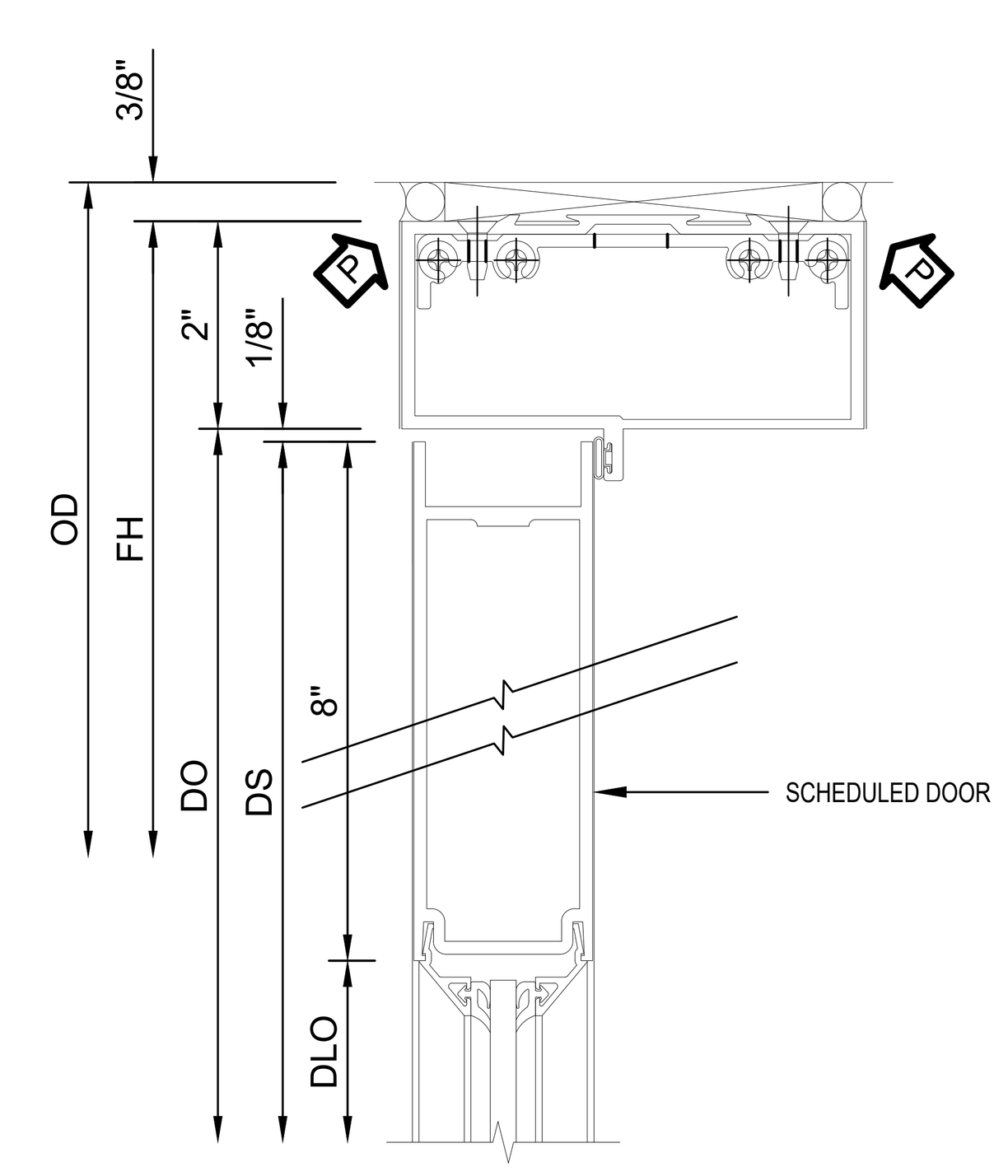
23 WINDOW HEAD
SCALE: 6" = 1'-0"_XREF



24 DOOR WINDOW HEAD
SCALE: 6" = 1'-0"_XREF



15 WINDOW JAMB AT WALL
SCALE: 6" = 1'-0"_XREF



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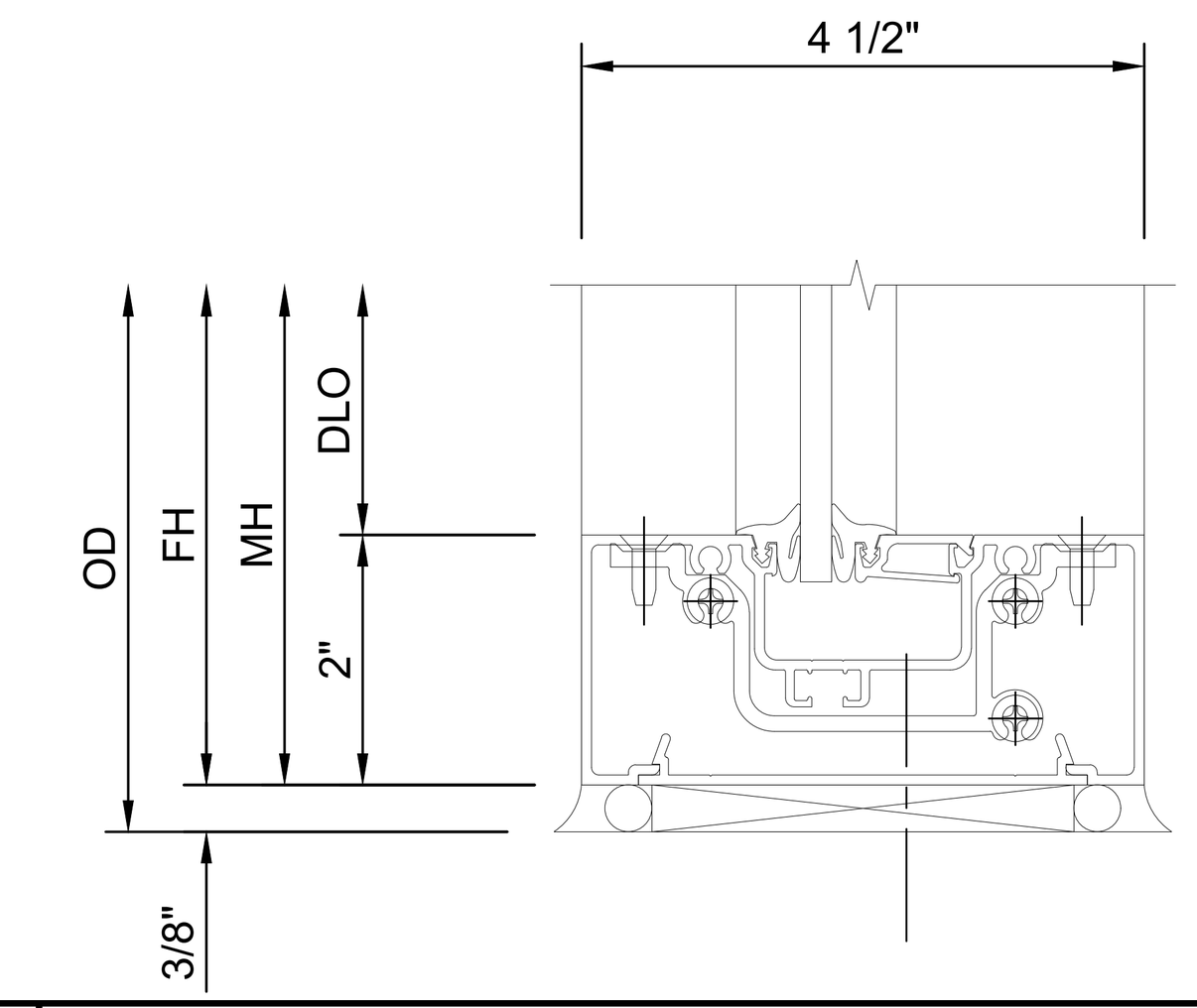

17 WINDOW SILL
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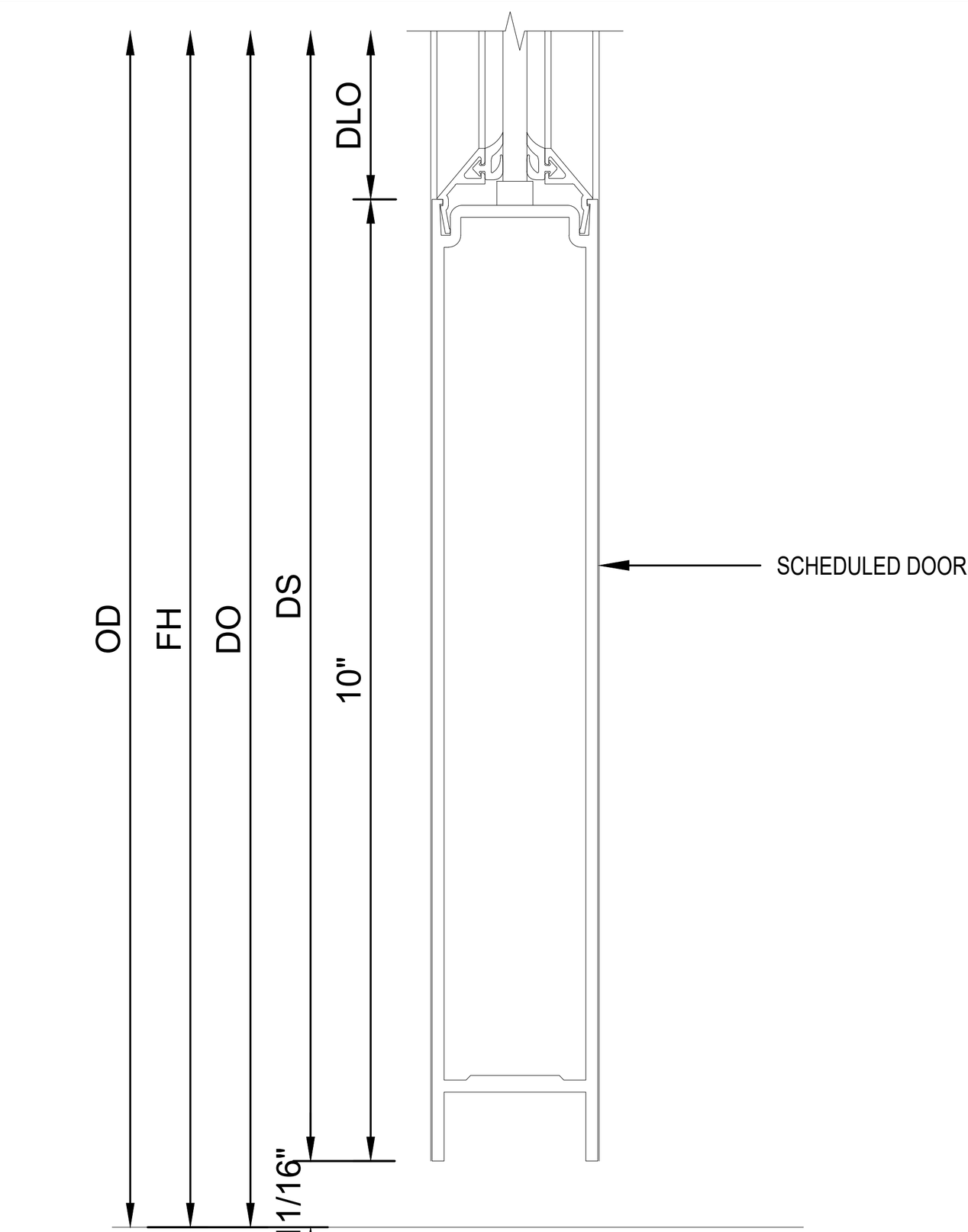

18 DOOR SILL
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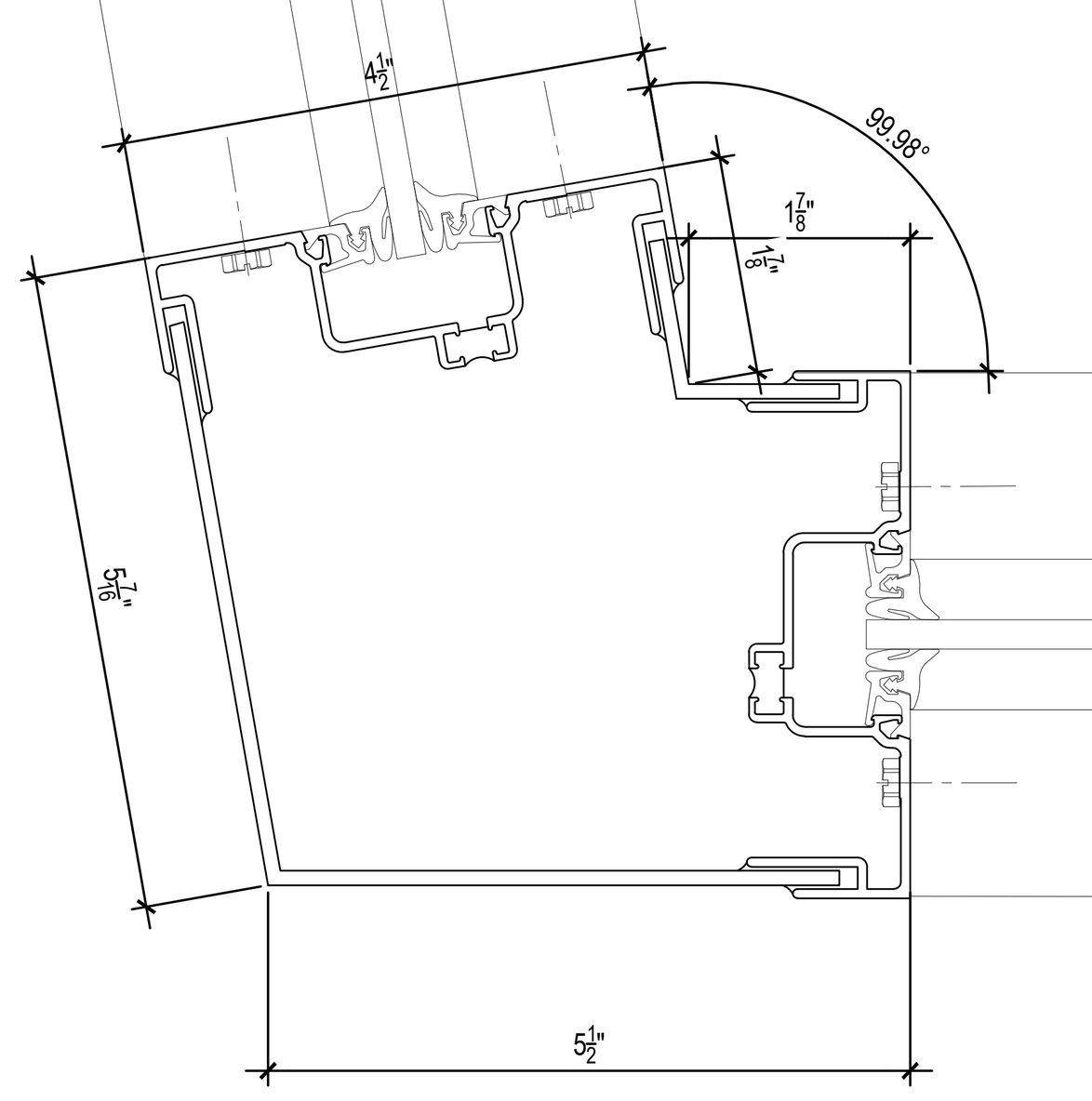

09 WINDOW CORNER
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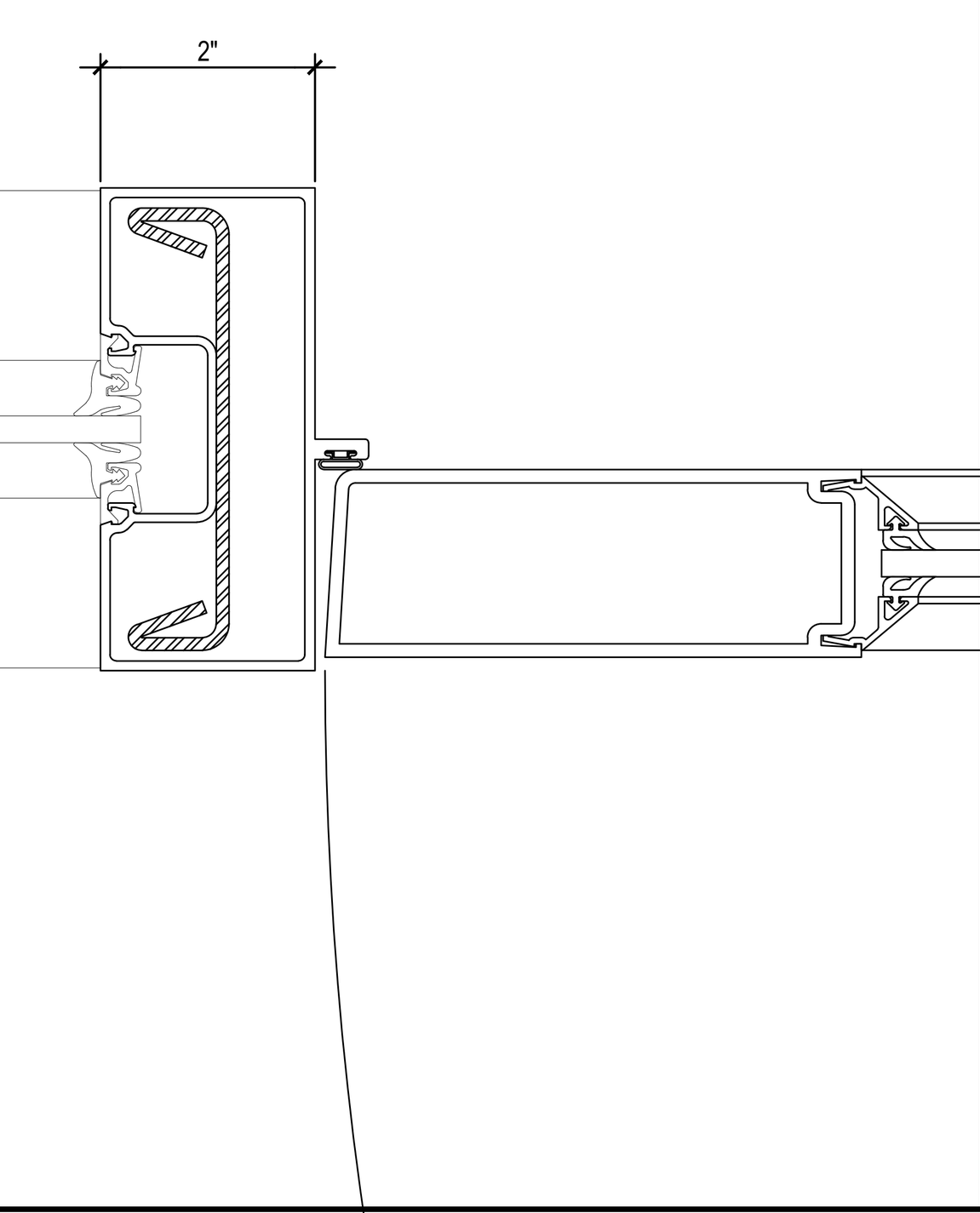
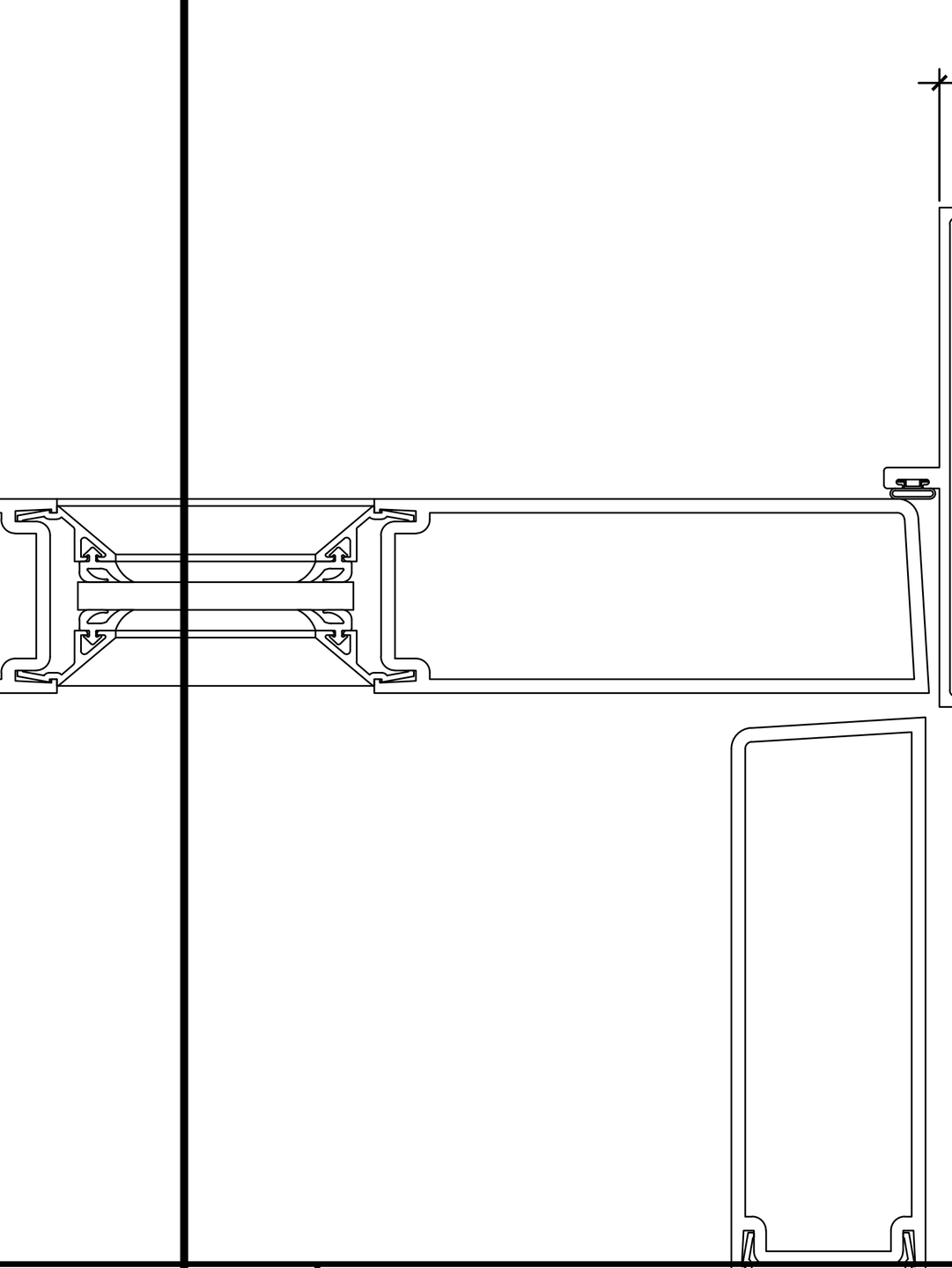
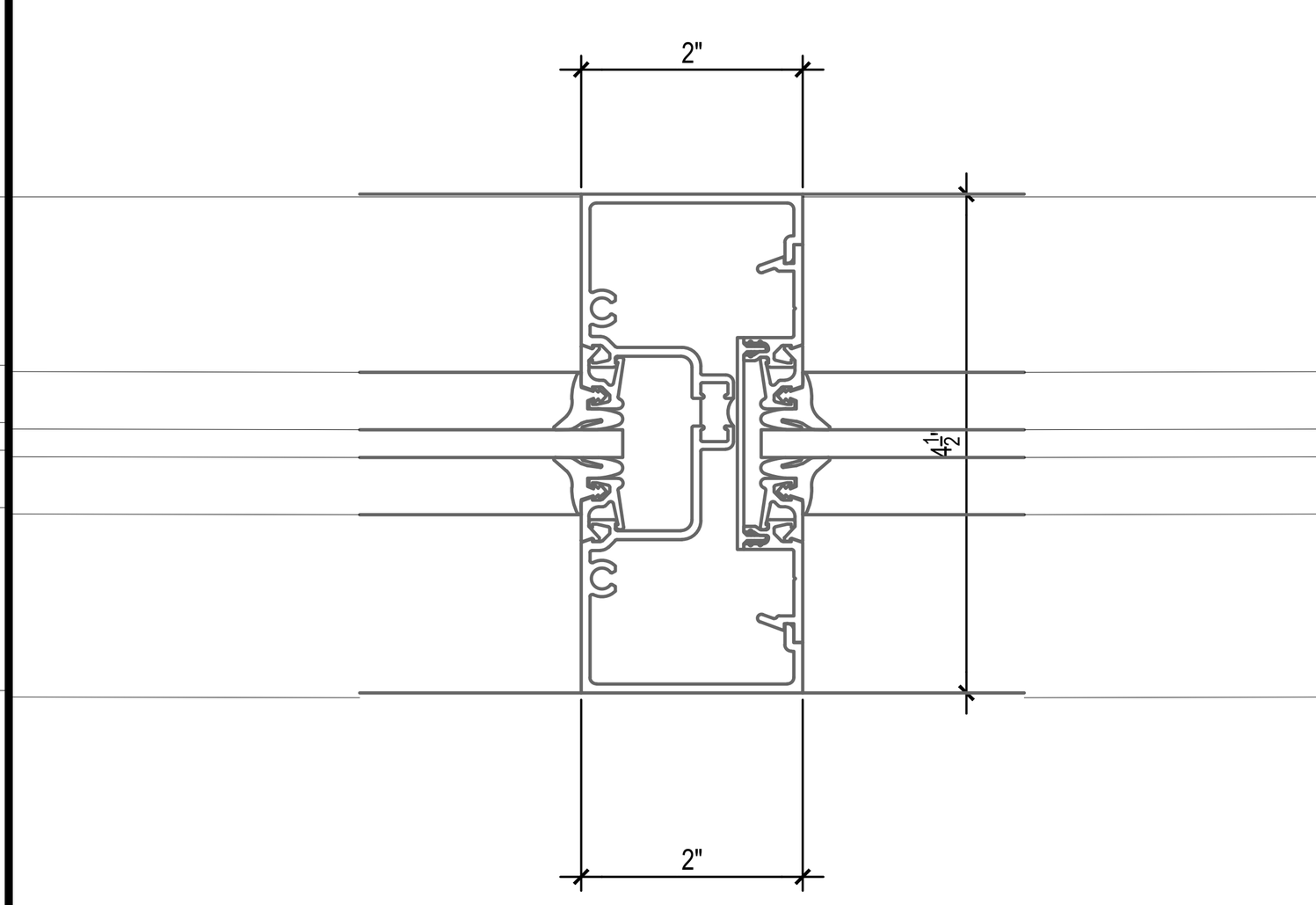


10 DOOR STRIKE JAMB
SCALE: 6" = 1'-0"_XREF



11 DOOR HINGE JAMB
SCALE: 6" = 1'-0"_XREF

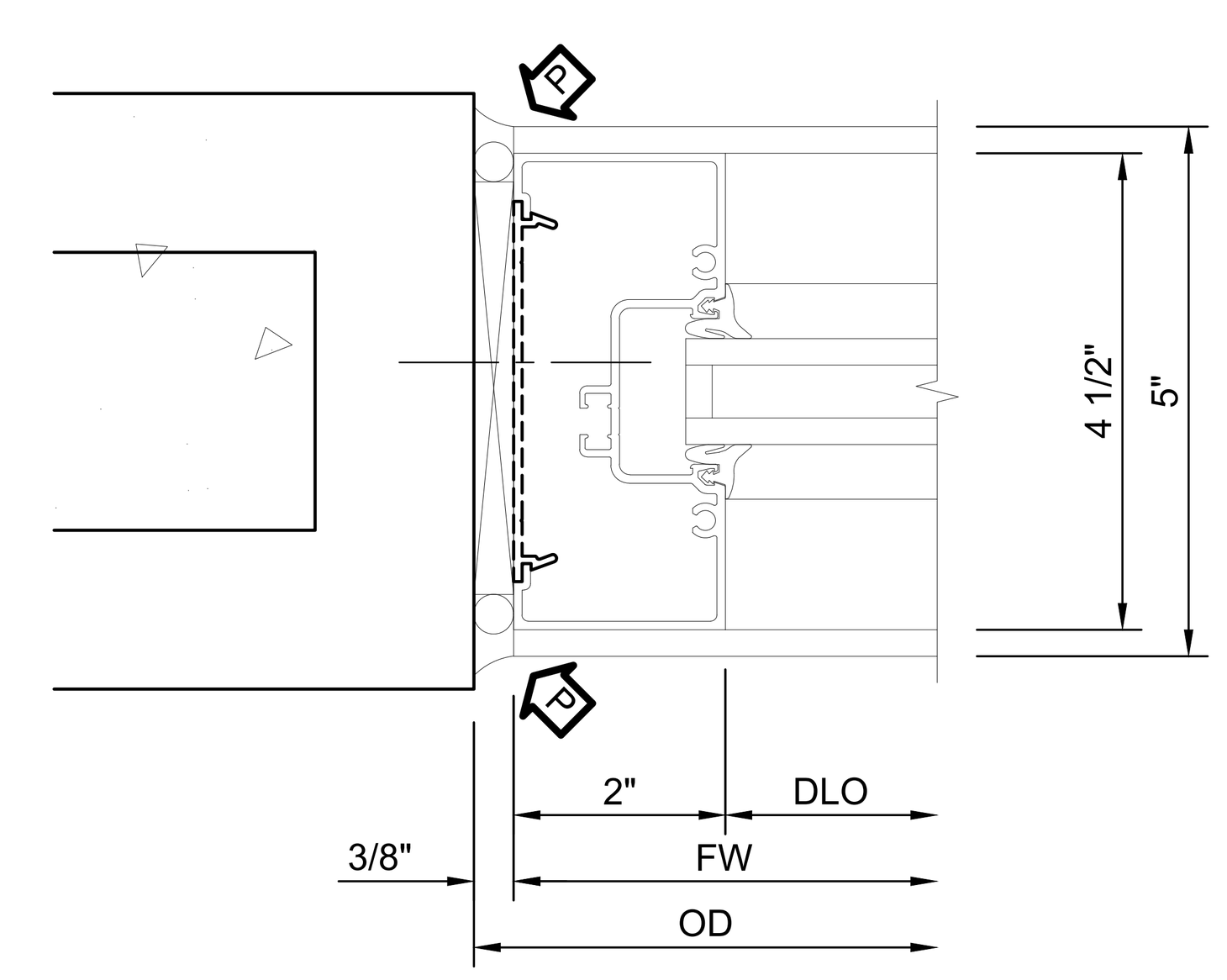


12 WINDOW MULLION
SCALE: 6" = 1'-0"_XREF

SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025) Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

03 PROJECT SCHEDULE



06 WINDOW JAMB
SCALE: 6" = 1'-0"_XREF

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07/18/2025	ISSUED FOR BIDDING AND PERMITTING

k

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL
REGISTERED ARCHITECT
NOE ALMAGUER
22651
STATE OF TEXAS
7/15/2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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GENERAL NOTES AND ABBREVIATIONS

A00-01

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GENERAL DEMOLITION NOTES

(NOT ALL NOTES USED ON EACH SHEET)

1. REFER TO SHEET A00-01 FOR DEMOLITION GENERAL NOTES. THESE NOTES APPLY TO ALL SCHOOL KITCHENS.
2. COORDINATE EXTENT OF SAW CUTTING AREAS WITH NEW RECESSED SLAB FOR COOLER/FREEZER LAYOUTS, NEW SERVICE ENTRANCE FLOOR AND EXISTING KITCHEN LAYOUTS THAT REMAIN. SEE STRUCTURAL DRAWINGS AND SLAB DIMENSION CONTROL PLANS FOR ADDITIONAL SCOPE.
3. REMOVE PROTECT AND REINSTALL ALL EXISTING SURFACE MOUNTED FIRE EXTINGUISHERS (TYPES ABC AND K) AT ALL KITCHENS.
4. SAWCUT AND RE-LOCATE EXPOSED CONDUITS AND WIREMOLD TO INSIDE OF WALLS. PATCH AND PAINT. EXCEPTION: WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS.
5. CONTRACTOR TO RELOCATE EXISTING KITCHEN EQUIPMENT AND OFFICE FURNITURE TO TEMPORARY KITCHEN LAYOUT AS REQUESTED BY KITCHEN MANAGER. ALSO THAT THE IT EQUIPMENT IS PROTECTED DURING RENOVATIONS. ALL EXISTING EQUIPMENT SHALL BE RETURNED TO OWNER.
6. EXISTING TACKBOARDS TO BE REMOVED BY OWNER.
7. IF PRESENT, EXISTING SAFE IN EACH KITCHEN TO BE TEMPORARILY REMOVED DURING RENOVATION AND REINSTALLED IN KITCHEN AREA.
8. ORIGIN POINT OF EXISTING CEILING GRID SHALL BE IDENTIFIED. NEW CEILING WILL BE INSTALLED (AS MUCH AS POSSIBLE) AT THE SAME ORIGIN POINT SO THAT SPRINKLER SYSTEM PIPING CAN REMAIN UNCHANGED.
9. ABOVE-CEILING INFRASTRUCTURE SHALL REMAIN UNDISTURBED AS MUCH AS IS POSSIBLE. CEILING DEVICES ARE TO BE REMOVED FROM EXISTING GRID/TILE THEN DURING RE-INSTALATION OF CEILING DEVICES SHALL BE LOCATED AS CLOSE TO ORIGINAL LOCATION AS POSSIBLE INTO THE NEW GRID/TILE. PROTECT AND STORE EXISTING INFRASTRUCTURE (CABLING, ELECTRICAL POWER, PIPING) DURING CONSTRUCTION.
10. EXISTING HOOD IN WAREWASH AND (2) HOODS IN PRODUCTION AREA ARE TO BE CLEANED, INSPECTED, SERVICED AND REFURBISHED TO A LIKE NEW CONDITION. THEY ARE TO REMAIN IN PLACE.

3 DEMOLITION NOTES

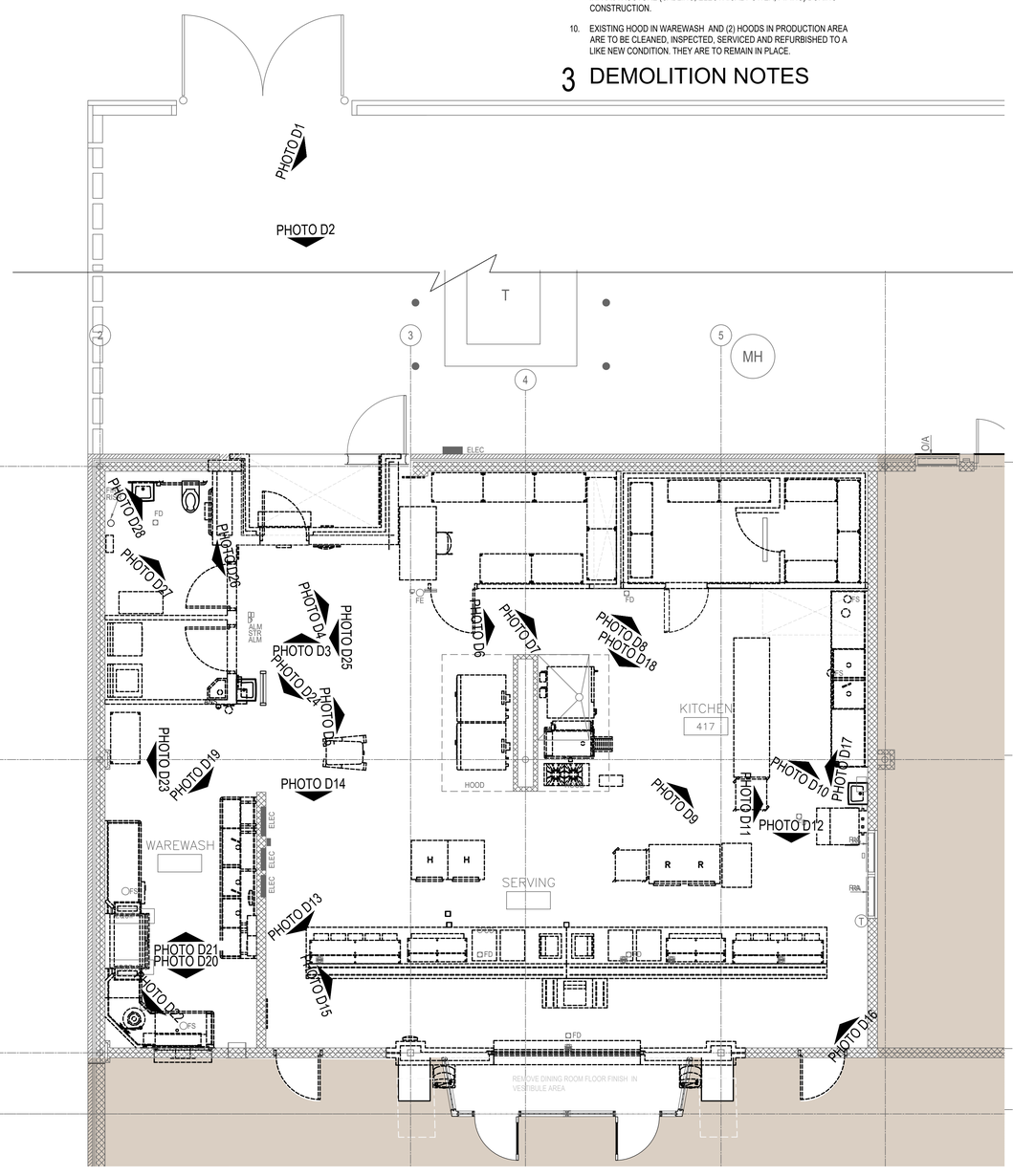
KEYED DEMOLITION NOTES

(NOT ALL NOTES USED ON EACH SHEET)

1. REMOVE EXISTING THINSET SYNTHETIC TERRAZZO FLOOR AND TERRAZZO COVE BASE MATERIAL IF ANY EXISTS THROUGHTOUT KITCHEN AREA. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOOR. RE: FINISH PLAN FOR NEW FLOOR FINISH MATERIAL.
2. REMOVE EXISTING QUARRY TILE FLOORING AND BASE. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOORING. RE: FINISH SCHEDULE FOR NEW FLOOR FINISH MATERIAL.
3. CEILING DEVICES: REMOVE SMOKE DETECTORS, STROBES, EXIT SIGNAGE, MOTION DETECTORS AND CEILING SPEAKERS. PROTECT AND RE-INSTALL AFTER FINISHES ARE APPLIED.
4. REMOVE EXISTING LOCKERS. PROTECT AND RE-INSTALL AFTER FINISHES APPLIED.
5. REMOVE EXISTING WASHER AND DRYER. VERIFY WITH FBISD FOR RELOCATION TO WAREHOUSE.
6. TEMPORARILY REMOVE EXISTING WALL MOUNTED CLOCK AND STORE FOR REINSTALLATION AFTER WALL RECEIVED NEW FINSH.
7. REMOVE EXISTING WALK-IN COOLER/FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT SPACE. MITIGATE ANY MOLD FOUND.
8. REMOVE EXISTING DOOR AND PROTECT EXISTING FRAME TO REMAIN
9. REMOVE EXISTING DOOR AND FRAME, PROTECT FRAME AND OR DOOR IF IT IS SCHEDULED TO REMAIN.
10. REMOVE PARTIAL EXISTING CMU PARTITION FOR NEW DOOR OPENING
11. INSPECT EXISTING WAREWASH COUNTER DOOR AND S.S. PASS-THRU WINDOW CHUTE. REPAIR REPLACE DAMAGED COMPONENTS. CLEAN, LUBRICATE AND RE-INSTALL.
12. EXISTING CARD READER ACCESS TO REMAIN
13. EXISTING WINDOW TO REMAIN
14. REMOVE EXISTING KITCHEN EQUIPMENT THROUGHOUT KITCHEN INCLUDING WALK-IN COOLER / FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT ROOM OR OUTSIDE OF THE BUILDING. VERIFY WITH OWNER FOR RELOCATION TO WAREHOUSE. SOME EQUIPMENT IS TO BE RE-USED IN TEMPORARY SERVING LINES. SEE ALSO GENERAL DEMOLITION NOTE 6.
15. REMOVE EXISTING FRP AND PREP FOR NEW TILE FINISH.
16. COORDINATE REMOVAL AND STORAGE OF ANY EXISTING FURNITURE ITEMS WITH OWNER . SEE ALSO GENERAL DEMOLITION NOTE 5.
17. REMOVE EXISTING SOAP AND PAPER TOWEL DISPENSER AND RETURN TO OWNER
18. EXISTING WALL MOUNTED ACCESSORIES SIGNS, DISPLAY BOARDS, AND MATS TO BE REMOVED BY FORT BEND ISD (VERIFY EQUIPMENT - IF ANY).
19. REMOVE EXISTING SURFACE MOUNTED FIRE EXTINGUISHER. RE-INSTALL AFTER NEW FINISH APPLIED.
20. REMOVE EXISTING ACOUSTIC CEILING TILE CEILNG SYSTEM AND LIGHT FIXTURES, HVAC DEVICES, SENSORS, ETC. THROUGHTOUT RENOVATED AREAS. PREP FOR NEW SUSPENDED CEILING. EXISTING SPRINKLE SYSTEM TO REMAIN AS-IS UNLESS ROOM CONFIGURATION HAS CHANGED IN NEW DESIGN. PROTECT RECESSED SPRINKLER HEADS AND - RE-INSTALL IN NEW CEILING.
21. REMOVE EXISTING CASEWORK/SHELVING
22. EXISTING CERAMIC WALL TILE TO REMAIN. PROTECT FROM DAMAAGE.
23. REMOVE EXISTING COAT HANGER / ROD / SHELF
24. REMOVE EXISTING PLUMBING FIXTURES IN RESTROOMS. RE: PLUMBING FOR NEW FIXTURES.
25. REMOVE EXISTING UTILITY SINK. RE: PLUMBING FOR NEW PLUMBING FIXTURES.
26. REMOVE EXISTING MOP HOLDER. REPLACE WITH NEW UNIT AS SPECIFIED.
27. REMOVE EXISTING WALL MOUNTED CLEANING SOLUTION DISPENSER (BY FBISD VENDOR)
28. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
29. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
30. REMOVE FLOORING IN THIS AREA FOR NOTE 1.
31. REMOVE CARTIDGE FILTER AND WATER PURTICATION CABNET

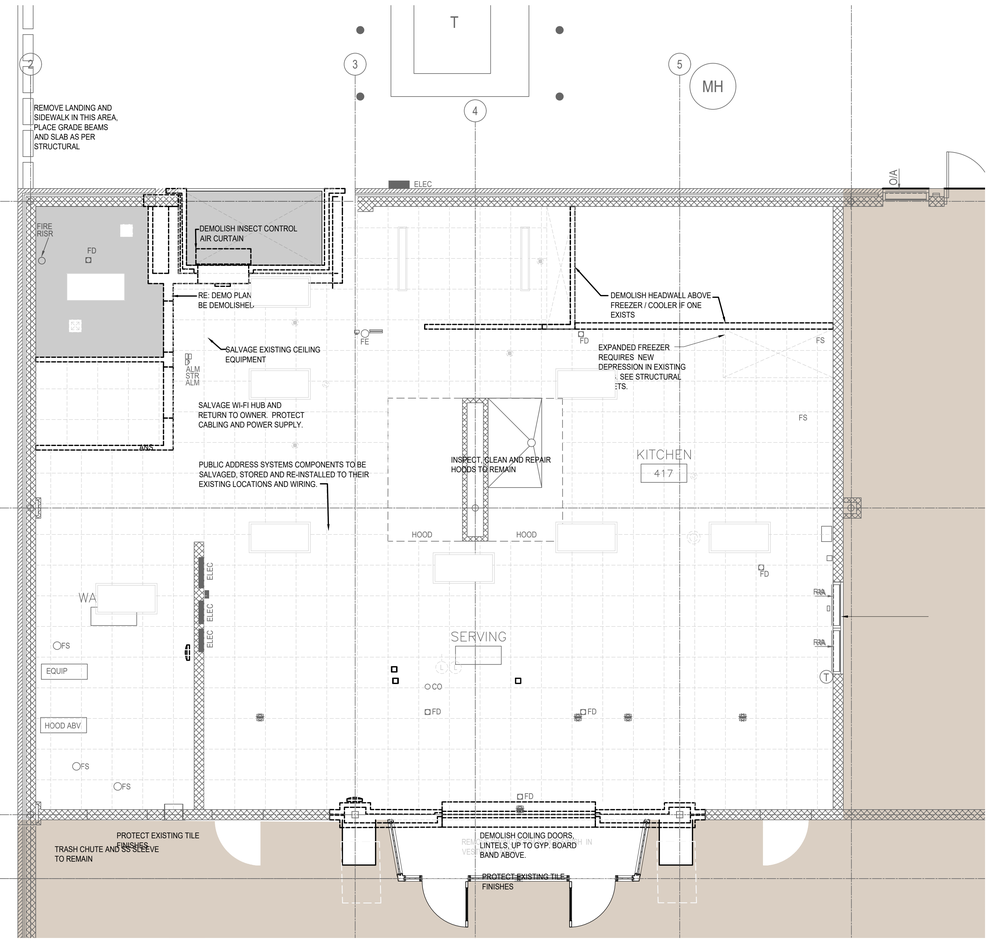
DEMOLITION LEGEND

- EXISTING PARTITION TO REMAIN
- REMOVE EXISTING PARTITION
- EXISTING CMU PARTITION
- REMOVE DOOR AND FRAME TO REMAIN
- REMOVE EXISTING DOOR AND FRAME
- EXISTING PLUMBING FIXTURES (WATER CLOSET, HAND LAVATORY, AND MOP SINK TO BE REMOVED. RE: PLUMBING DRAWINGS.
- EXISTING ACOUSTIC CEILING TILE AND GRID TO BE REMOVED. RE: ELECTRICAL DRAWINGS.
- SPRINKLER HEAD (RECESSED)
- CLOCK
- CEILING MOUNTED SPEAKERS



1 DEMOLITION FLOOR PLAN

SCALE: 1/4" = 1'-0"



2 DEMOLITION REFLECTED CEILING PLAN

SCALE: 1/4" = 1'-0"

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FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

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REGISTERED ARCHITECT MICHAEL A. MAGNUSEN 22651 STATE OF TEXAS

7/15/2025

MWA ARCHITECTS
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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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DEMO PLAN

k-D.101

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PHOTO D1


PHOTO D2

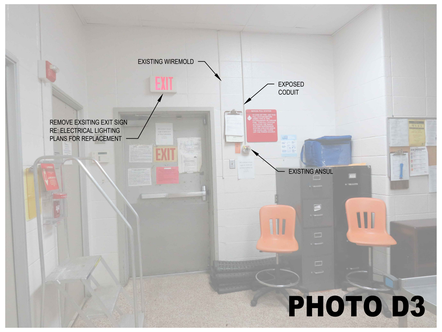


PHOTO D3



PHOTO D4



PHOTO D5



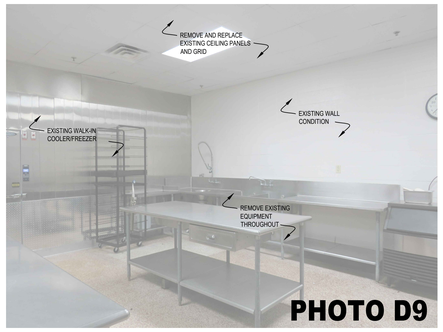
PHOTO D6



PHOTO D7



PHOTO D8



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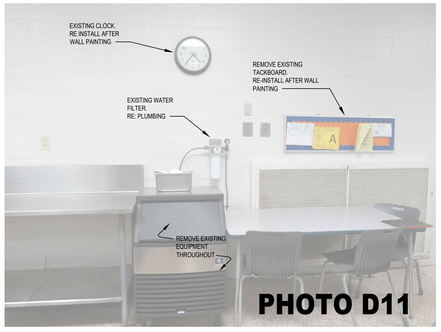

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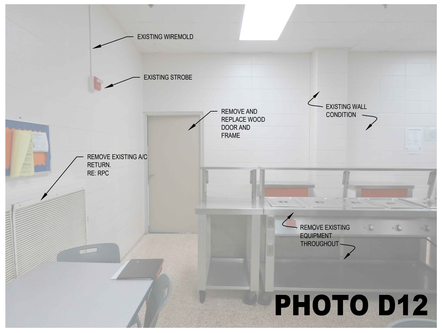

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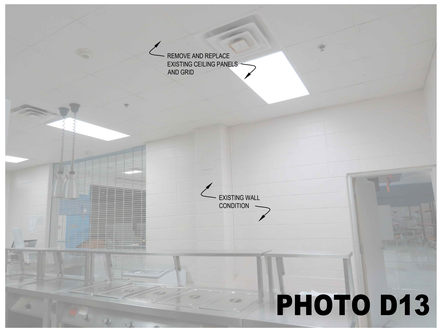

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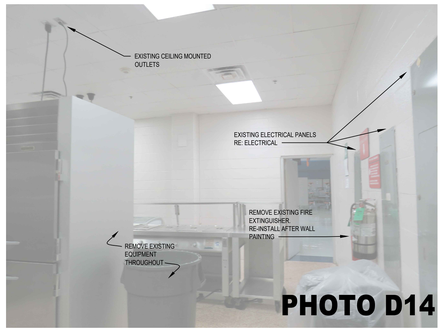

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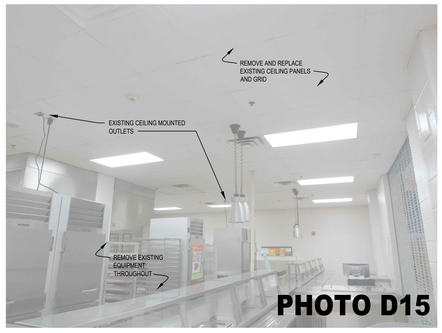

PHOTO D15



PHOTO D16

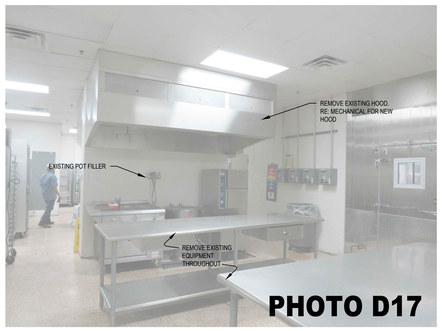

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PHOTO D18

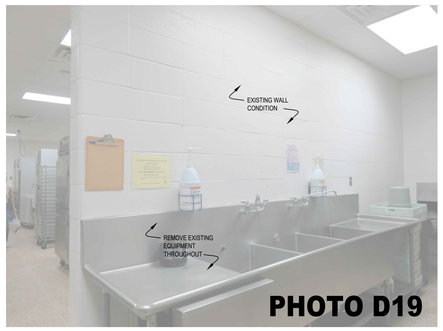

PHOTO D19



PHOTO D20

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7/15/2025

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DEMO PLAN PHOTOS

k-D.101-2

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PHOTO D21



PHOTO D22



PHOTO D23



PHOTO D24



PHOTO D25



PHOTO D26



PHOTO D27



PHOTO D28

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DEMO PLAN PHOTOS

k-D.101-3

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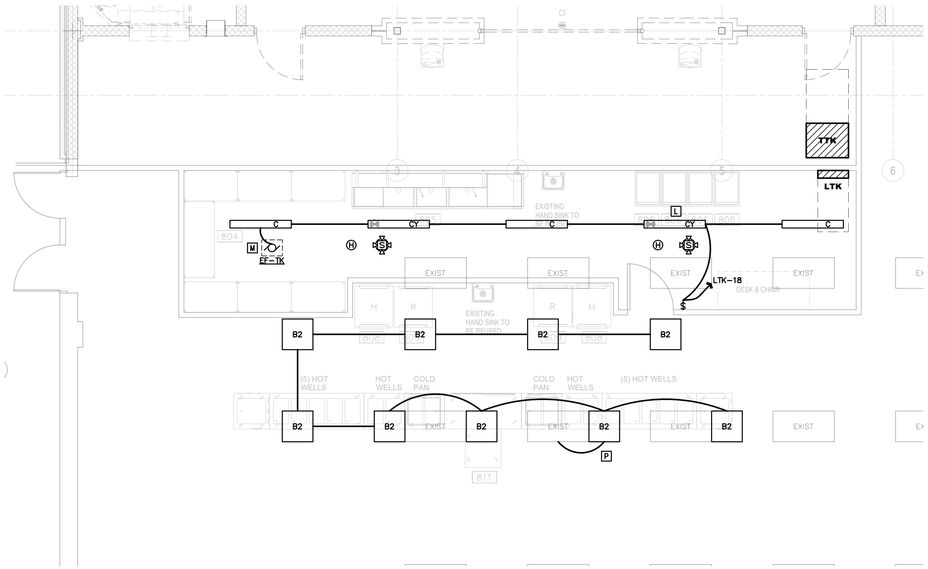
NEW PANEL

TEMP KITCHEN

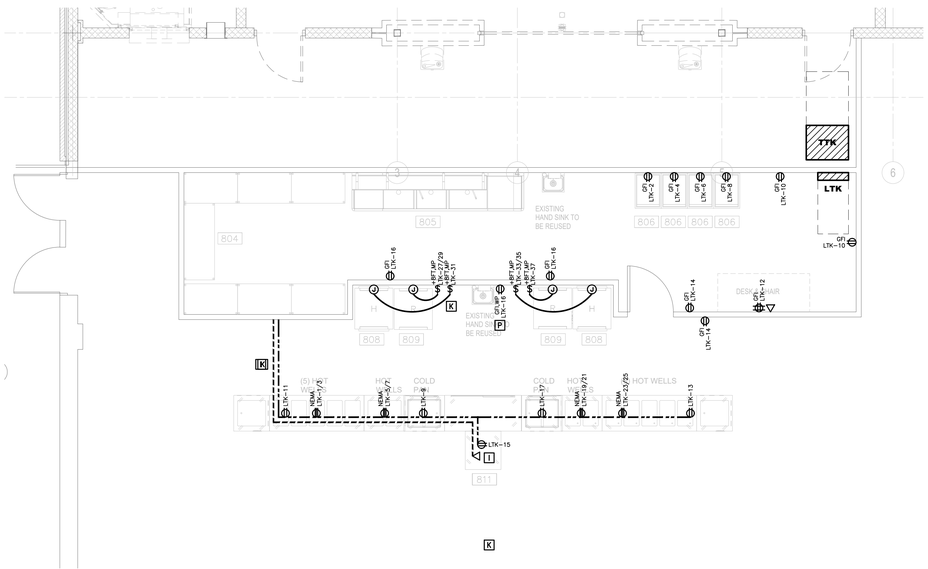
PANEL LTK — 150A MCB, 208Y/120V, 3ϕ, 4 WIRE — AVAILABLE FAULT: <10,000A, SCCR & AIC: 10,000A — MOUNTING: SURFACE

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E810	2766	HOT WELLS	2–12	20/2GFI	1	■			2	20/1	3–12	TRANSPORT CART	1920	E806	
	–	–	–	+12G	–	3		■		4	20/1	3–12	TRANSPORT CART	1920	E806	
	E810A	1643	HOT WELLS	2–12	20/2GFI	5			■	6	20/1	3–12	TRANSPORT CART	1920	E806	
	–	–	–	+12G	–	7	■			8	20/1	3–12	TRANSPORT CART	1920	E806	
	E810B	600	COLD PAN	3–12	20/1GFI	9		■		10	20/1	3–12	2 REC	360	E800A	
	E810C	1200	BEVERAGE	3–12	20/1GFI	11			■	12	20/1	3–12	2 REC – DESK	360	E800B	
	E810C	1200	BEVERAGE	3–12	20/1GFI	13	■			14	20/1	3–12	2 REC	360	E800A	
	E811	180	CASH REGISTER	3–12	20/1GFI	15		■		16	20/1	3–12	3 REC	360	E800A	
	E810B	600	COLD PAN	3–12	20/1GFI	17			■	18	20/1	3–12	TEMP. KITCHEN LTS/FAN	566		
	E810A	1643	HOT WELLS	2–12	20/2GFI	19	■			20	20/1		SPARE			
	–	–	–	+12G	–	21		■		22	20/1		SPARE			
	E810	2766	HOT WELLS	2–12	20/2GFI	23			■	24	20/1		SPARE			
	–	–	–	+12G	–	25	■			26	20/1		SPARE			
	E808	1622	HEATED CABINET	2–12	20/2	27		■		28	20/1		SPARE			
	–	–	–	+12N+12G	–	29			■	30	20/1	3–12	EXISTING CIRCUIT	500		3
	E809	984	REFRIGERATOR	3–12	20/1	31	■			32	20/1	3–12	EXISTING CIRCUIT	500		3
	E808	1622	HEATED CABINET	2–12	20/2	33		■		34	15/2	2–12	EXISTING CIRCUIT	1000		3
	–	–	–	+12N+12G	–	35			■	36	–	+12N+12G	–	–		
	E809	984	REFRIGERATOR	3–12	20/1	37	■			38	20/2	2–12	EXISTING CIRCUIT	1000		3
			SPARE		20/1	39		■		40	–	+12N+12G	–	–		
			SPARE		20/1	41			■	42	50/2	2–8	EXISTING CIRCUIT	5000		3
			SPARE		20/1	43	■			44	–	+8N+10G	–	–		
	TOTAL LOAD @ 100% = 35498VA					TOTAL LOAD @ 100% = 99A										

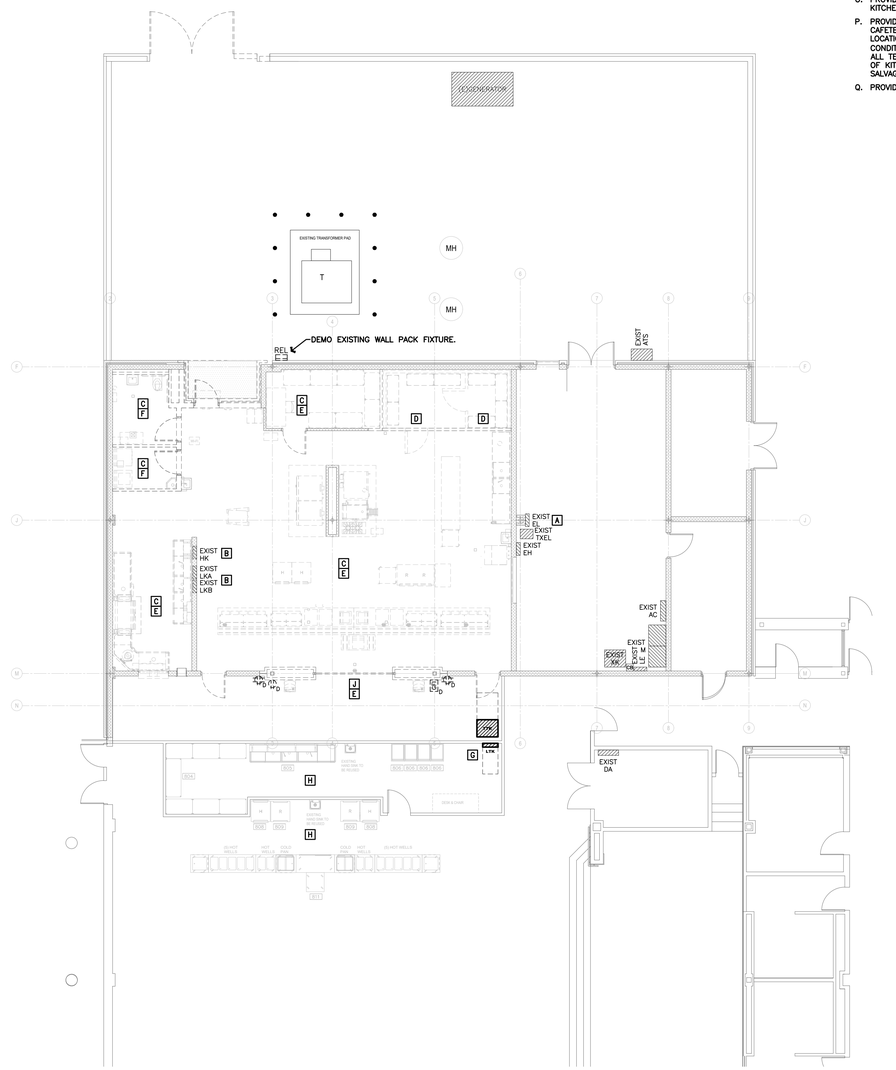
1. REF. KITCHEN CONSULTANT'S "FCS" DRAWINGS FOR KITCHEN EQUIPMENT NUMBERS.
2. A DEMAND FACTOR PERCENT OF 65% HAS BEEN APPLIED TO THE KITCHEN EQUIPMENT LOAD PURSUANT TO NEC 220–20 AND NEC TABLE 220–20.
3. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.



T1 **TEMPORARY KITCHEN - LIGHTING PLAN**
SCALE: 1/4" = 1'– 0"



T2 **TEMPORARY KITCHEN - ELECTRICAL PLAN**
SCALE: 1/4" = 1'– 0"



1 **DEMOLITION FLOOR PLAN**
SCALE: 1/8" = 1'– 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

DEMOLITION NOTES:

A. EXISTING STANDBY GENERATOR PANEL TO REMAIN.

B. EXISTING KITCHEN PANELS TO BE REPLACED WITH NEW. MODIFY EXISTING WALLS TO MATCH NEW PANEL LAYOUTS AND DIMENSIONS.

C. EXISTING LIGHTING FIXTURES AND CEILING DEVICES TO BE REMOVED THROUGHOUT.

D. EXISTING WALK–IN COOLER/FREEZER AND ASSOCIATED EQUIPMENT TO BE REMOVED.

E. EXISTING WALL ELECTRICAL DEVICES TO BE REMOVED. EXISTING J–BOXES MAY BE REUSED WHERE NEW DEVICES ARE TO BE INSTALLED AT THE SAME LOCATIONS.

F. EXISTING ELECTRICAL DEVICES TO BE REMOVED.

G. NEW 208Y/120V PANEL AND TRANSFORMER FOR TEMPORARY KITCHEN TO BE INSTALLED PRIOR TO DEMOLITION. PANEL AND TRANSFORMER TO BE REMOVED AT END OF KITCHEN RENOVATION AND TURNED OVER TO THE DISTRICT. INSTALL TRANSFORMER ON PREMADE FIBERCRETE PAD AND WAFFLE TYPE VIBRATION ISOLATION PADS. DO NOT PROVIDE A POURED IN PLACE CONCRETE PAD AT THIS LOCATION.

H. PROVIDE RECEPTACLES AND LIGHT FIXTURES FOR TEMPORARY KITCHEN DURING RENOVATION. ALL TEMPORARY DEVICES AND EQUIPMENT TO BE REMOVED AT END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE.

I. CONDUITS ROUTED FROM TEMPORARY KITCHEN WALL AND BENEATH SERVING LINE. PROVIDE MULTICHANNEL ROLLOVER CABLE PROTECTOR FOR EXPOSED CONDUITS NOT UNDER THE SERVING LINE. ALL CONDUITS UNDER THE SERVING LINE SHALL BE SECURED TO/ROUTED ON TOP OF UNISTRUT AND NOT DIRECTLY ON THE FLOOR. DO NOT ANCHOR UNISTRUT TO THE EXISTING FLOORING. COORDINATE POWER AND DATA OUTLET LOCATIONS WITH OTHER TRADES.

J. REMOVE EXISTING LIGHT FIXTURES ABOVE NEW KITCHEN EXTENSION. MODIFY EXISTING WIRING TO MAINTAIN REMAINING FIXTURE OPERATION.

K. HARDWIRE KITCHEN EQUIPMENT TO LOCAL ON/OFF SWITCH. TYPICAL.

L. SURFACE MOUNT FIXTURES ON TEMPORARY KITCHEN CEILING. TYPICAL.

M. WIRE TEMPORARY KITCHEN FAN TO LOCAL LIGHTING CIRCUIT AND CONTROLS. FAN SHALL BE ON/OFF WITH LIGHTS.

N. EXISTING EXTERIOR LIGHT FIXTURES TO BE REMOVED.

O. PROVIDE NEW FIRE ALARM DEVICES AS PART OF THE TEMPORARY KITCHEN BUILDOUT.

P. PROVIDE NEW TEMPORARY LIGHT FIXTURES IN THE EXISTING CAFETERIA CEILING ABOVE THE SERVING LINE. COORDINATE LOCATIONS WITH TEMPORARY SERVING LINE AND EXISTING CONDITIONS. CONNECT TO EXISTING LIGHTING CONTROLS/CIRCUIT. ALL TEMPORARY LIGHT FIXTURES SHALL BE REMOVED AT THE END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE. PROVIDE REPLACEMENT CEILING TILES.

Q. PROVIDE IN–USE WEATHERPROOF COVER FOR RECEPTACLE.

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FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL

STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED
PROFESSIONAL ENGINEER
07.18.2025

ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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ELECTRICAL DEMO AND TEMP PLANS

k-ED.100

STANTON ENGINEERING GROUP
INFO@STANTON–ENG.COM (713) 300–6266
TEXAS ENG. FIRM REG NO. F–21833 | TBPE

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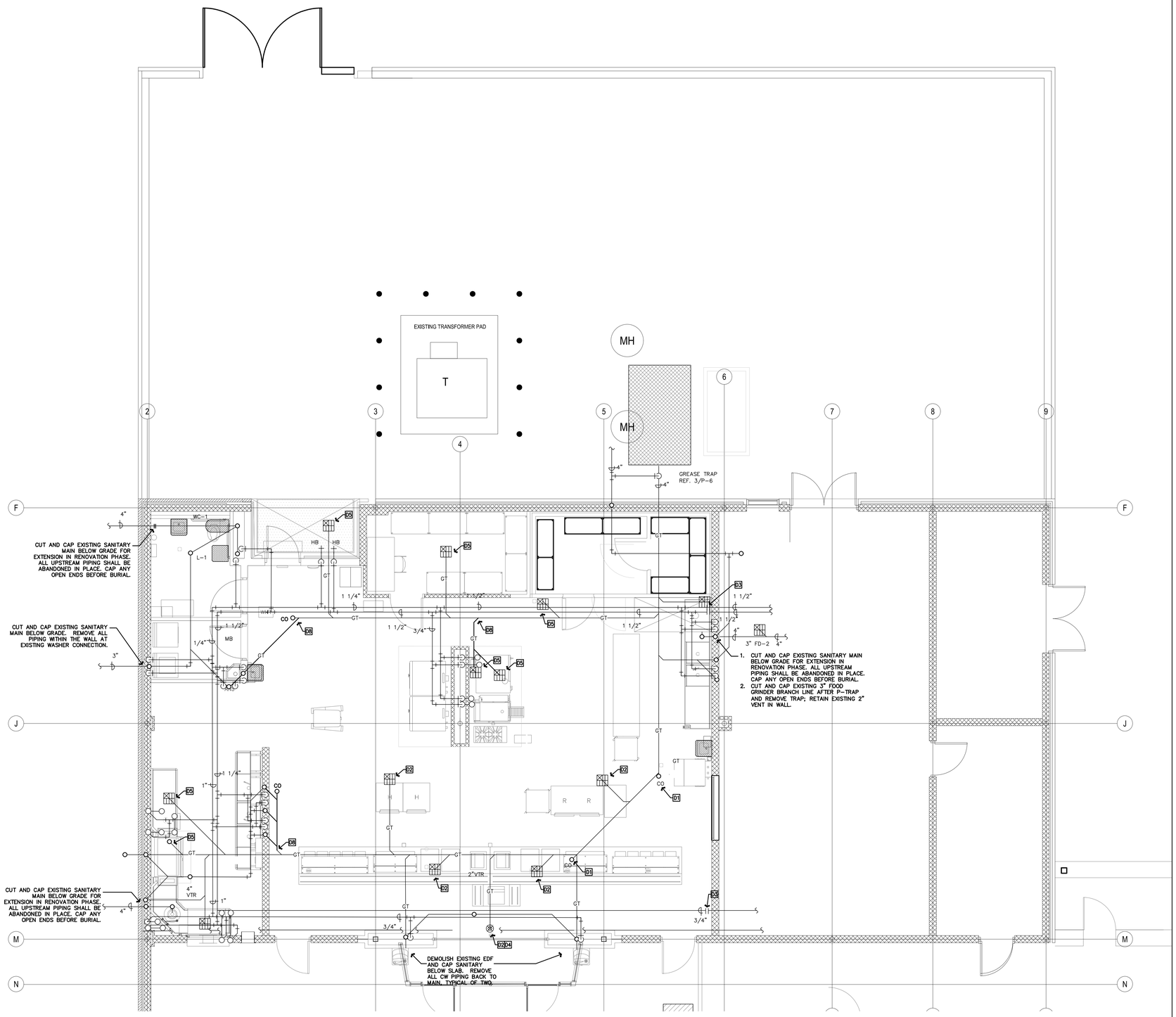

DEMOLITION KEYED NOTES

D1 EXISTING CLEAN OUT SHALL BE REPLACED WITH NEW. CHIP OUT SLAB AROUND CLEANOUT TO REMOVE.

D2 EXISTING FLOOR DRAIN SHALL BE REPLACED WITH NEW, INCLUDING P-TRAP. CHIP OUT SLAB AROUND DRAIN TO REMOVE FLOOR DRAIN AND EXISTING P-TRAP.

D3 CUT AND CAP EXISTING HW/CW FOR FUTURE EXTENSION. DEMOLISH ALL PIPING WITHIN KITCHEN. DEMOLITION SHALL BE DELAYED UNTIL NEW CW MAIN AND HW PIPING LOOP IS INSTALLED IN PARALLEL. CW/HW SERVICE TO THE TEMPORARY KITCHEN SHALL BE UNINTERRUPTED DURING OCCUPIED HOURS. COORDINATE SWITCHOVER FROM EXISTING PIPING TO NEW WITH OCCUPANCY SCHEDULE.

D4 EXISTING FLOOR DRAIN TIED TO GREASE WASTE SYSTEM. DRAIN IS BEING USED FOR TEMPORARY KITCHEN INDIRECT WASTE AND SHALL REMAIN ACTIVE DURING OCCUPIED HOURS. COORDINATE DEMOLITION AND REPLACEMENT WITH TEMPORARY KITCHEN USAGE.

D5 DEMOLISH EXISTING DRAIN A CAP BELOW SLAB.

D6 EXISTING SPACE BEING DEMOLISHED. CAP EXISTING SANITARY MAIN BELOW SLAB AND REMOVE UPSTREAM PIPING. CUT/CHIP OUT SLAB AS REQUIRED AND REPAIR TO MATCH EXISTING.

D7 TEMPORARILY CAP EXISTING SANITARY MAIN BELOW SLAB AND REMOVE UPSTREAM PIPING. CUT/CHIP OUT SLAB AS REQUIRED AND REPAIR TO MATCH EXISTING. PIPING TO BE REPLACED WITH NEW TRUNK AND ADDITIONAL DRAIN BRANCH LINES.

D8 CUT AND CAP EXISTING SANITARY MAIN BELOW GRADE FOR EXTENSION IN RENOVATION PHASE. ALL UPSTREAM PIPING SHALL BE ABANDONED IN PLACE. CAP ANY OPEN ENDS BEFORE BURIAL.

1 PLUMBING DEMOLITION FLOOR PLAN

SCALE: 1/4" = 1'- 0"

STANTON ENGINEERING GROUP

INFORMATION-ENGINEER (713) 300-6092 | TEXAS ENG. FIRM REG. NO. F-0163330 | © 2025 ALL RIGHTS RESERVED 1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

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106052
LICENSED
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PLUMBING DEMOLITION FLOOR PLAN

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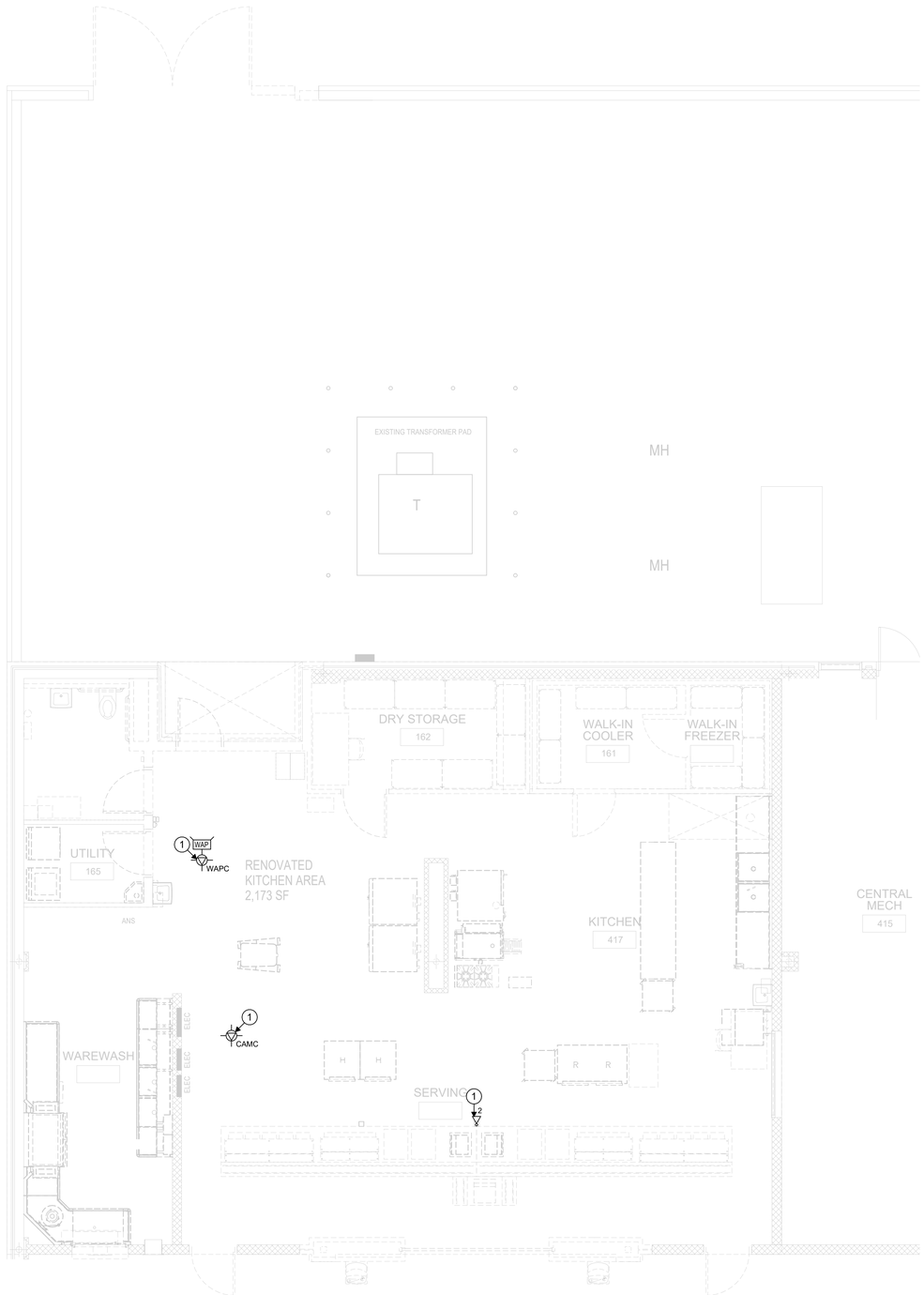

1 k-TD201 TECHNOLOGY DEMOLITION FLOOR PLAN
1/4" = 1'-0"

TECHNOLOGY DEMOLITION PLAN GENERAL NOTES

1. ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS SHALL REMAIN OPERATIONAL AT ALL TIMES DURING BUSINESS HOURS UNLESS OTHERWISE NOTED. ANY SYSTEM DOWNTIME SHALL BE SCHEDULED WITH THE ARCHITECT/ENGINEER AND OWNER AT LEAST TEN (10) WORKING DAYS IN ADVANCE. CONTRACTOR SHALL DEVELOP A PHASING PLAN AND SCHEDULE OF ANY REQUIRED SYSTEM DOWNTIME FOR REVIEW AND APPROVAL BY THE ARCHITECT/ENGINEER AND OWNER PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. OWNER SHALL BE RESPONSIBLE FOR POWER DOWN AND START-UP OF ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT/ENGINEER AND OWNER AND PROVIDE A MINIMUM OF TEN (10) WORKING DAYS NOTICE FOR SCHEDULING OF ANY REQUIRED DOWNTIME.
3. ALL EXISTING WIRELESS ACCESS POINTS ARE TO BE REMOVED AND RETURNED TO OWNER. CONTRACTOR SHALL RE-INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.
4. COORDINATE REMOVAL OF EXISTING CAMERA WITH OWNER/ARCHITECT DURING CONSTRUCTION.

TECHNOLOGY DEMOLITION PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

(1) EXISTING DATA/VOICE/WIRELESS ACCESS POINT OUTLET TO BE REMOVED. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL 4-PAIR CABLES AND WORKSTATION CONNECTING HARDWARE TERMINATED AT THIS LOCATION. IF LOCATION IS NOT RE-USED, CONTRACTOR SHALL SUPPLY AND INSTALL BLANK COVER. CONTRACTOR IS TO REMOVE EACH CABLE TO BE DEMOLISHED FROM THE PATCH PANEL OR TERMINATION BLOCK IN THE TELECOMMUNICATIONS ROOM, REMOVE THE ENTIRE LENGTH OF THE CABLE AND THE CORRESPONDING MODULAR CONNECTOR, FACEPLATE AND ACCESSORIES. NO ABANDONED CABLING IS TO BE LEFT ABOVE CEILING. CONTRACTOR SHALL INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.

(2) EXISTING VIDEO SURVEILLANCE CAMERA. CONTRACTOR SHALL REMOVE AND RETURN TO OWNER.

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HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
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Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

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TECHNOLOGY DEMOLITION FLOOR PLAN

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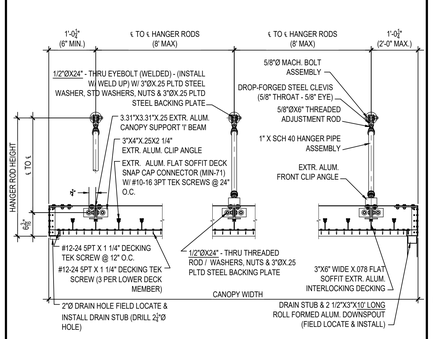
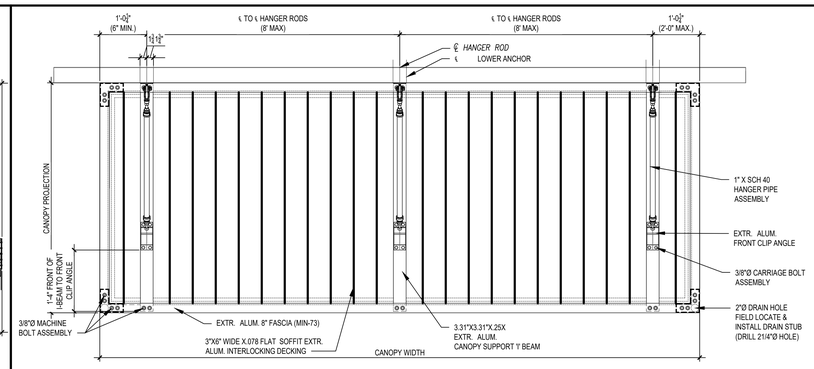
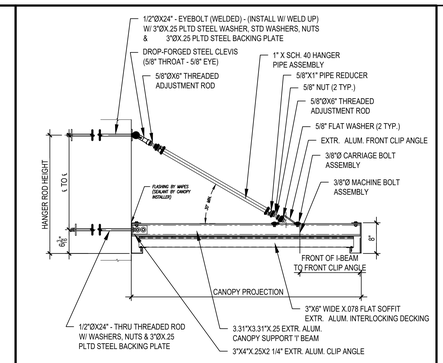
k-TD201



10 CANOPY DETAILS
3/4" = 1'-0"

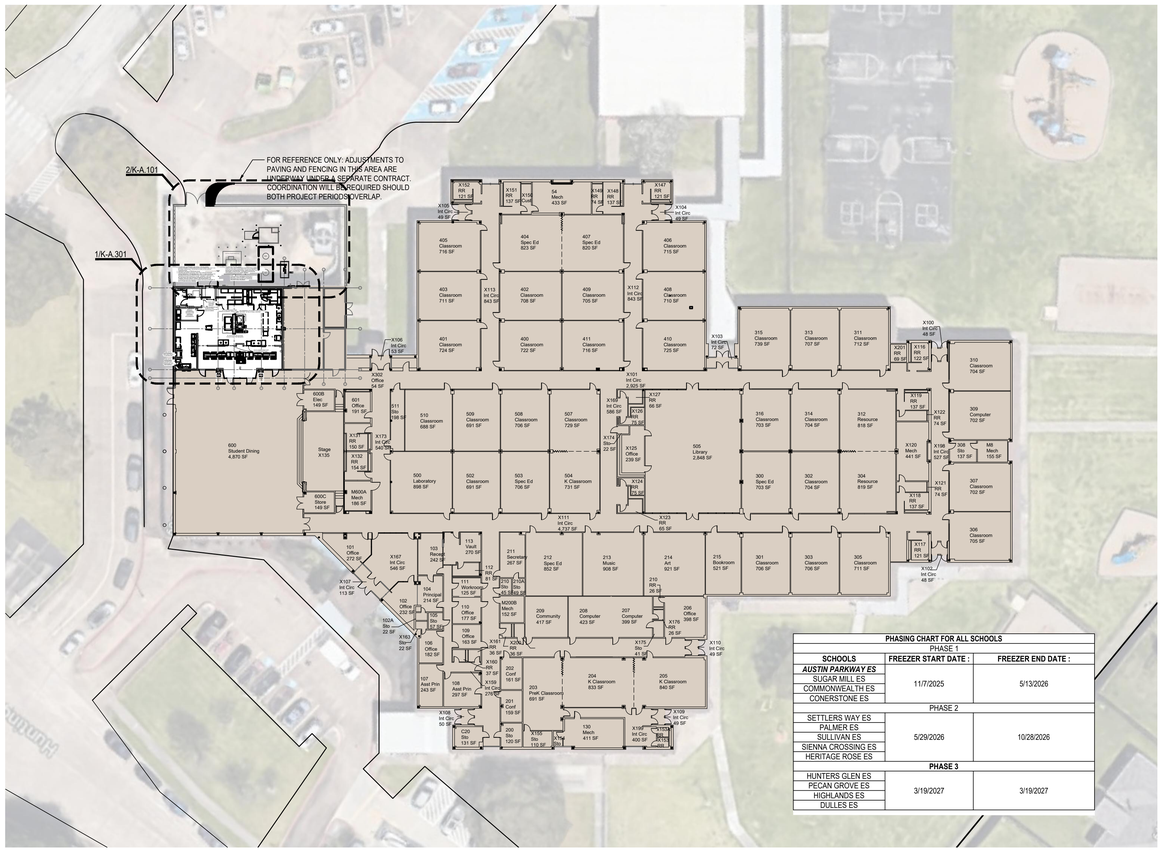


11 CANOPY PLAN
3/4" = 1'-0"



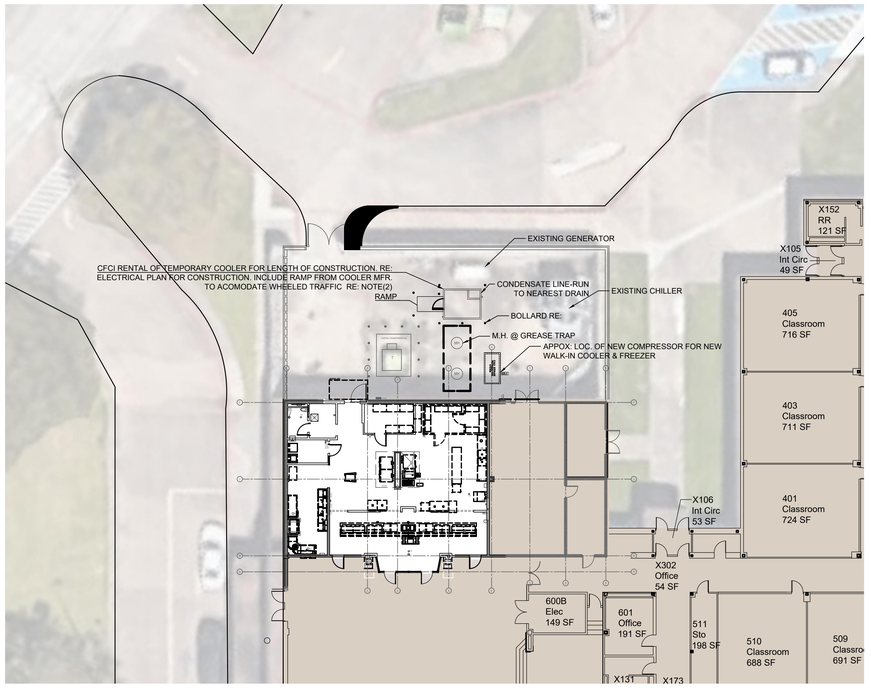
12 CANOPY SECTION
3/4" = 1'-0"

NUMBERED NOTES: FOR 2/a-A.101
1. COOLER RENTAL UNIT; APPROX. 8' X 10' BASIS OF DESIGN: MODEL DT810 BY POLAR LEASING REFRIGERATION RENTAL.
2. INCLUDE OPTIONAL DIAMOND TREAD RAMP SUITABLE FOR WHEELED TRAFFIC
3. LOCATION SHOWN IS SUBJECT TO OWNER APPROX. LOCATION MUST NOT BLOCK DELIVERIES TO REAR DOOR, MUST BE WITH 10' OF AREA DRAIN, AND WITHIN 100' OF ELECTRICAL POWER.
4. CONTRACTOR SHALL SCAN PAVING FOR BURIED UTILITIES BEFOR CUTTING CONC.



PHASING CHART FOR ALL SCHOOLS		
PHASE 1		
SCHOOLS	FREEZER START DATE :	FREEZER END DATE :
AUSTIN PARKWAY ES	11/7/2025	5/13/2026
SUGAR MILL ES		
COMMONWEALTH ES		
CONERSTONE ES		
PHASE 2		
SETTLERS WAY ES	5/29/2026	10/28/2026
PALMER ES		
SULLIVANN ES		
SIENNA CROSSING ES		
HERITAGE ROSE ES		
PHASE 3		
HUNTERS GLEN ES	3/19/2027	3/19/2027
PECAN GROVE ES		
HIGHLANDS ES		
DULLES ES		

1 SITE PLAN
SCALE: 1" = 30'-0"



2 ENLARGED SITE PLAN
SCALE: 1/16"=1'-0"

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SITE PLAN

k-A.101

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\K-Hunters Glen ES\k-A.101 SITE PLAN.dwg, Jul 23, 2025 - 2:04pm

2 CODE ANALYSIS

SCOPE OF WORK: KITCHEN REPLACEMENT OF FLOOR, WALL, AND CEILING FINISHES, AS WELL AS, REPLACEMENT OF KITCHEN EQUIPMENT. PROVIDE ADDITIONAL KITCHEN STORAGE FOR CEP. UPGRADE TO BACK DOOR DELIVERY AREA.

ADOPTED CODES WITH AMMENDMENTS OF CITY OF MISSOURI CITY, TX

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL RESIDENTIAL CODE
- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2023 NATIONAL ELECTRIC CODE NFPA 70
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2021 INTERNATIONAL FUEL GAS CODE
- 2021 INTERNATIONAL FIRE CODE

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY:

SPRINKLERED

INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS **B**

CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS **C**

ROOMS AND ENCLOSED SPACES **C**

FLOORING SHALL BE CLASS II

2021 INTERNATIONAL EXISTING BUILDING CODE

301.3.1 PRESCRIPTIVE COMPLIANCE METHOD. REPAIRS, ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH CHAPTER FIVE OF THIS CODE IN BUILDINGS COMPLYING WITH THE INTERNATIONAL FIRE CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

302.3 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE.

302.4 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED THAT NO UNSAFE CONDITION IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT PERMIT THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

ALTERATION - LEVEL 1 INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES THAT SERVE THE SAME PURPOSE.

ALTERATION - LEVEL 2 INCLUDE THE ADDITION OR ELIMINATION OF ANY DOOR OR WINDOW, THE RECONFIGURATION OR EXTENSION OF ANY SYSTEM, OR THE INSTALLATION OF ANY ADDITIONAL EQUIPMENT, AND SHALL APPLY WHERE THE WORK IS EQUAL TO OR LESS THAN 50% OF THE BUILDING AREA.

THIS BUILDING'S CONSTRUCTION IS TYPE IIB.

THIS BUILDING'S OCCUPANCY IS E.

THIS BUILDING'S IS SPRINKLERED.

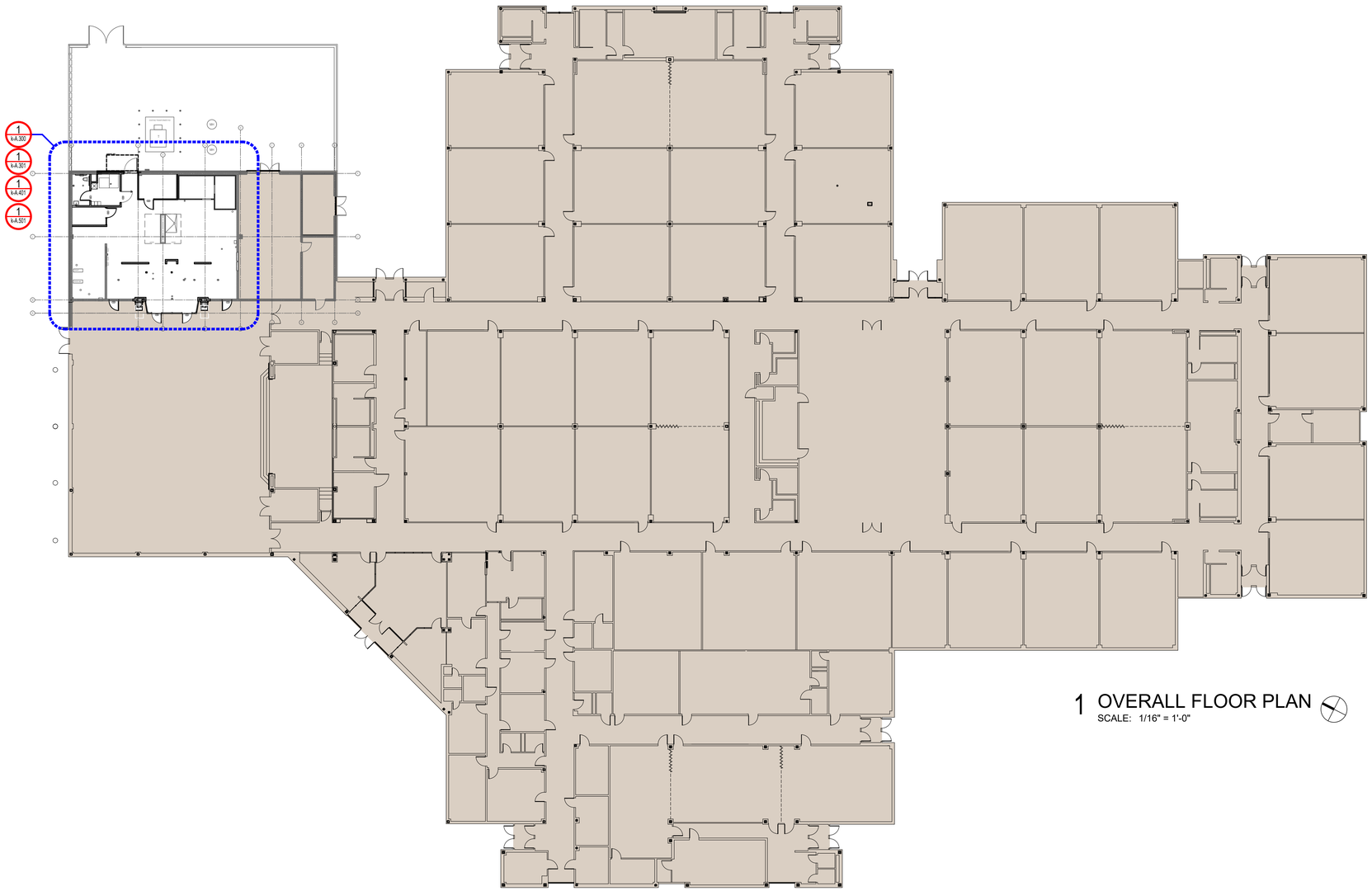
THERE WILL NOT BE ANY MODIFACATIONS TO THE HOOD SYSTEMS IN THE KITCHENS BEYOND REPLACEMENT OF MOTOR FOR LIKE KIND IF NEEDED.

THE BUILDING WILL NOT HAVE ADDITIONAL SQUARE FOOTAGE AS PART OF THE WORK.

NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODES

RESPONSIBILITY MATRIX

ITEM				CONTRACTOR RESPONSIBILITY		OWNER RESPONSIBILITY		NOTES
EQUIPMENT	**MAKE**	**MODEL**	**BASIS OF DESIGN**	FURNISHED	INSTALL	FURNISHED	INSTALL	
MARKERBOARD			MUST BE MAGNETIC, LOW GLOS, WHITE. NO GREY ALLOWED, 5' X 10'	X	X			
MOTORIZED FOLDING PARTITION			TOP SUPPORTED AND CONTINUOUSLY HINGED, MADE OF 3" THICK STEEL WITH FULL SOUND SEALS. THEY FEATURE AUTOMATIC FLOOR SEALS THAT DEPLOY WHEN POSITIONED. MARKERBOARD FINISHES ARE SUGGESTED FOR CLASSROOM USE. LARGE PARTITIONS SHOULD BE ELECTRONICALLY OPERATED, INTEGRATED WITH THE SCHOOL SYSTEM, AND SUPPORTED FROM THE BOTTOM IN A RECESSED MANNER.	X	X			
PAPER TOWEL DISPENSER			1 PAPER TOWEL DISPENSER PER SINK		X	X		
SOAP DISPENSER			1 SOAP DISPENSER PER SINK		X	X		
COMMERCIAL WASHER	GE	GTW750CPLDG	STAINLESS STEEL; ASTM A666, TYPE 304 WITH NUMBER 4 FINISH. ELECTRIC, 480 VOLTS, 40 LB CAPACITY, MINIMUM EXTRACTOR FORCE 140 G FACTOR	X	X			
COMMERCIAL DRYER	GE	GTD75ECPLDG	HEAVY DUTY EMBOSSED STEEL WITH ELECTROSTATICALLY APPLIED BACKED ENAMEL FINISH.	X	X			
MOP RACK			BROOM AND MOP HANGGERS FOR A MINIMUM OF TWELVE (12) HANGERS TO BE PROVIDED IN THE CONTRACT	X	X			
KITCHEN MENU SYSTEM DEVICE			RE: J-QFI 1.0 SF EQUIPMENT PLAN	X	X			REFERED TO IT DRAWINGS
LOCKERS			12"W X 15"D, 2 TIER, 60" HIGH. 16 GA. DOOR WITH 20GA. BODY	X	X			
MIRROR			TOP EDGE 74 INCHES (1880 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND &. BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES (1015 MM) MAXIMUM	X	X			
GRAB BARS			AS REQUIRED BY ADA	X	X			
HOOKS			J-HOOKS	X	X			
TIME CLOCK	KRONOS		EXISTING UNIT		X			COORDINATE HEIGHT, DATA, POWER AND ROUGH-IN REQUIREMENTS WITH FBISD IT. REMOVE, PROTECT & REINSTALL EXISTITNG TIME CLOCK.
KITCHEN OFFICE FURNITURE								
AUSTIN PARKWAY ES						X	X	
PECAN GROVE ES						X	X	
SETTLERS WAY ES						X	X	
SUGAR MILL ES						X	X	
HIGHLANDS ES						X	X	
PALMER ES						X	X	
HUNTERS GLEN ES						X	X	



1 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL

REGISTERED ARCHITECT
ROBERT A. WEAVER
22653
STATE OF TEXAS

7/15/2025

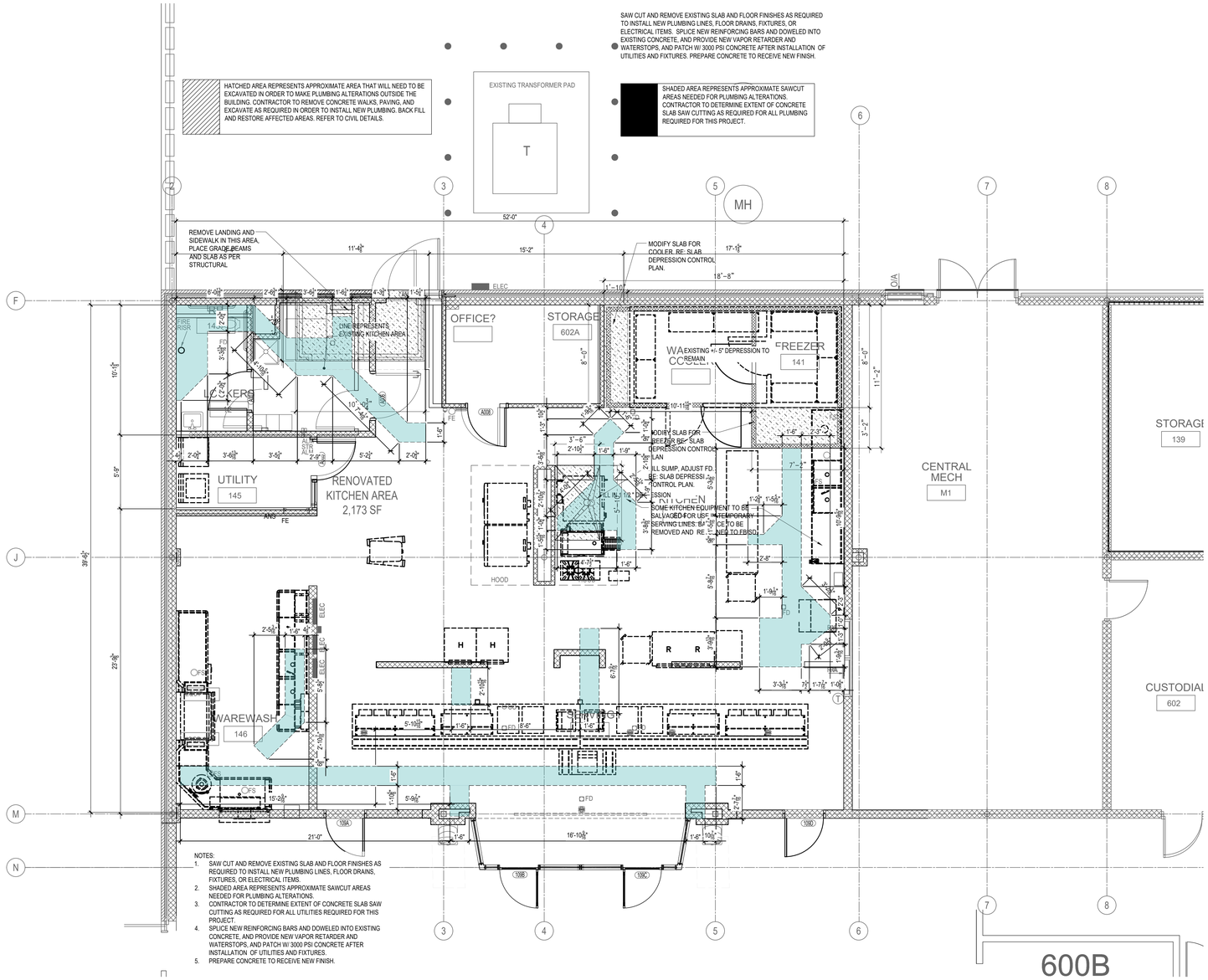
MWA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

OVERALL
FLOOR PLAN

k-A.201

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\K-Hunters Glen ES\k-A.201 FLOOR PLAN.dwg, Jul 23, 2025 - 2:05pm



1 SLAB DEPRESSION PLAN

SCALE: 1/4" = 1'-0"

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\K-Hunters Glen ES\k-A.300 SLAB DIMENSION CONTROL PLAN.dwg Jul 23, 2025 - 2:05pm

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SEAL
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22651
STATE OF TEXAS
7/15/2025

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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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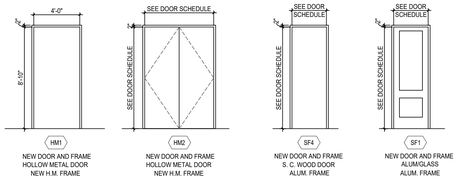
SLAB DEPRESSION PLAN
k-A.200

DOOR SCHEDULE

DOOR #	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FIRE RATING	FRAME THICKNESS	FRAME FINISH	KEY	HARDWARE	DETAILS			REMARKS
											SILL	JAMB	HEAD	
A005	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		103		22/A00-01	16/A00-01	
A006	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501		22/A00-01	16/A00-01	
A007	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		341		22/A00-01	16/A00-01	
A008	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501C		22/A00-01	16/A00-01	
A012	4'-0"	X 7'-0"	HM1	H.M.	PAINT	NR	6"	PAINT HM		715V	21/A00-01	04/A00-01	04/A00-01	
109A	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501H		22/A00-01	16/A00-01	
109B	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ANOD AL	NR	4 1/2"	ANOD AL		C201AH	18/A00-01	10&11/A00-01	23&24/A00-01	CARD READER, CLOSER, BUZZER
109C	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ANOD AL	NR	4 1/2"	ANOD AL		C201AH	18/A00-01	10&11/A00-01	23&24/A00-01	CARD READER, CLOSER, BUZZER
109D	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501H		22/A00-01	16/A00-01	



2 DOOR SCHEDULE

FLOOR PLAN - GENERAL NOTES

1. REFER TO SHEET FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SCHOOL KITCHENS.
2. REFER TO SHEET FOR PARTITION TYPES.
3. EXIXSTING EXPOSED CONDUITS AND DATA CABLING IN WIREMOLD TO BE ROUTED INSIDE WALLS (EXCEPT AT WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS). PATCH AND REPAIR AS REQUIRED TO ACHIEVE SMOOTH CLEAN WALL SURFACE.

PARTITION LEGEND

- EXISTING CMU PARTITION
- NEW CMU SCHEDULED PARTITION
- EXISTING METAL PARTITION
- NEW FRAMED SCHEDULED PARTITION

FLOOR PLAN - KEYED NOTES

(NOT ALL NOTES USED ON EACH SHEET)

01 PROVIDE NEW MOP SINK UTILITY SHELF
RE: PLUMBING FOR MOP SINK
RE: SPEC 10 28 00 FOR UTILITY SHELF

02 REMOVE, STORE & REPLACE WALL MOUNTED FIRE EXTINGUISHER

03 PROVIDE NEW WALL MOUNTED FIRE EXTINGUISHER
RE: SPEC SECTIONS 10 44 13

04 PROVIDE NEW LOCKERS
RE: SPEC 10 51 13.

05 PROVIDE WASHER AND DRYER
RE: SPEC 11 45 20

06 REMOVE, PROTECT & REINSTALL WALL MOUNTED CLOCK.

07 PROVIDE CONDENSING UNIT
FOR WALK-IN COOLER/FREEZER
RE: MECHANICAL AND SPEC 11 40 00

08 PROVIDE POWER AND DATA FOR MENU BOARD.
RE: ELECTRICAL, TECHNOLOGY DRAWINGS & FOOD SEF

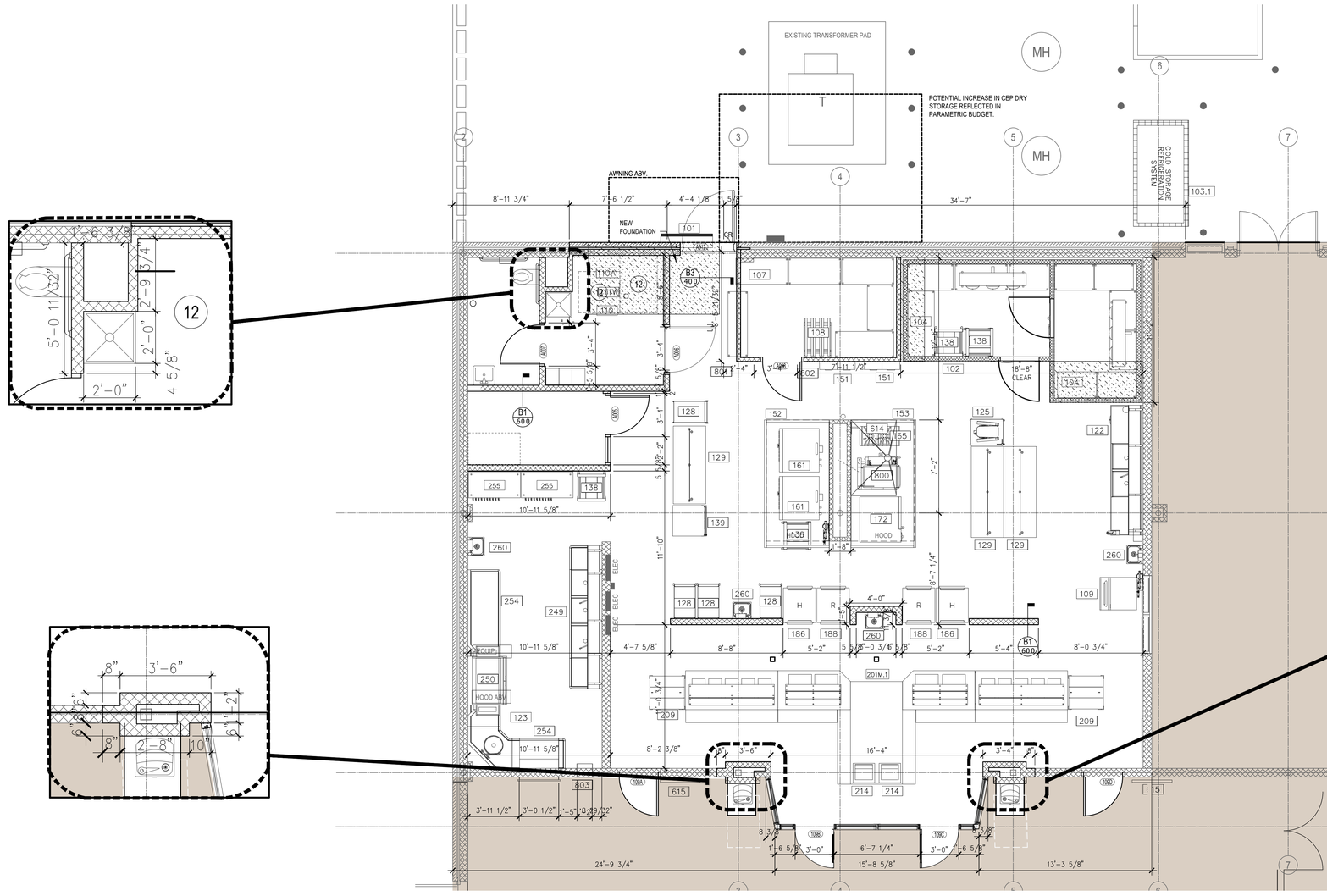
09 PROVIDE P-LAM SHELVING
REFER TO DETAIL FOR BRACKET SUPPORT

10 FURNITURE & NON FOOD SVE EQUIPMENT RETURN TO C
STORAGE

11 INSPECT & SREVICE TOLLING COUNTER DOORS. RETUR
NEW CONDITION.

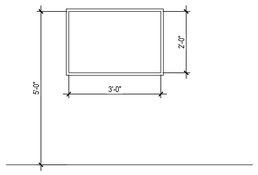
12 COMMERCIAL CLOSED WASHER 40LB CAPACITY.
COMMERCIAL CLOSED DRYER 55LB CAPACITY.
BASIS OF DESIGN: WASHER; SPEED QUEEN SYN040
DRYER; SPEED QUEEN ST055.
REFER TO ELECTRICAL & PLUMBING FOR CONNECTIONS

3 FLOOR PLAN NOTES



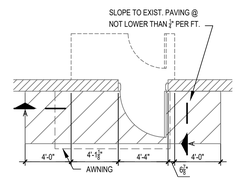
1 KITCHEN PLAN

SCALE: 1/4" = 1'-0"



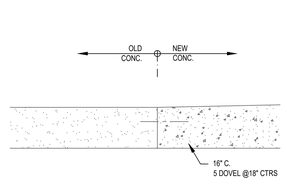
4 MAKERBOARD ELEVATION

SCALE: 1/2"=1'-0"



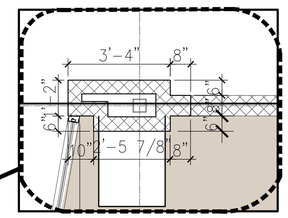
5 RAMP @ REAR DOOR

SCALE: 3/16"=1'-0"



A

SCALE: 1/2"=1'-0"



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FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL
7/15/2025

ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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KITCHEN PLAN

k-A.301

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TEMPORARY KITCHEN FLOOR PLAN KEYED NOTES 05/A-A03-02

01 PROVIDE & INSTALL 555 SF OF RAM BOARD TO PROTECT EXISTING FLOORING. REMOVE AFTER CONSTRUCTION IS COMPLETE. CONTRACTOR MUST REPAIR FLOORING DAMAGED DURING CONSTRUCTION.

02 PROVIDE SCHEDULED PARTITIONS. BUILD PARTITIONS ON TOP OF RAM BOARD. DO NOT ATTACH PARTITIONS TO FLOOR.

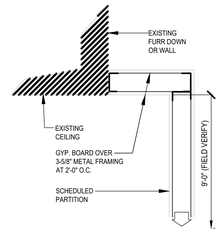
03 ATTACH PARTITIONS TO EXISTING WALL. REPAIR WALL TO MATCH EXISTING AFTER CONSTRUCTION IS COMPLETE.

TEMPORARY KITCHEN RCP KEYED NOTES 03/A-A03-02

04 ALL NEW SCHEDULED PARTITIONS AND CEILINGS FOR TEMPORARY STORAGE LAYOUT TO BE EPOXY PAINTED SW 7014 EIDER WHITE WITH SPECIFIED 4" RUBBER BASE. REMOVE WHEN CONSTRUCTION IS COMPLETED.

05 MOUNT TEMPORARY FLUORESCENT LIGHTS TO TEMPORARY CEILING.

3 KEYED NOTES
SCALE: 1/4"=1'-0"



4 TEMPORARY LAYOUT SECTION
SCALE: 1"=1'-0"

1 TEMPORARY KITCHEN RCP
SCALE: 1/4" = 1'-0"

2 TEMPORARY KITCHEN FLOOR PLAN
SCALE: 1/4" = 1'-0"

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SEAL
REGISTERED ARCHITECT
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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TEMPORARY KITCHEN LAYOUT
k-A.302

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RCP - GENERAL NOTES

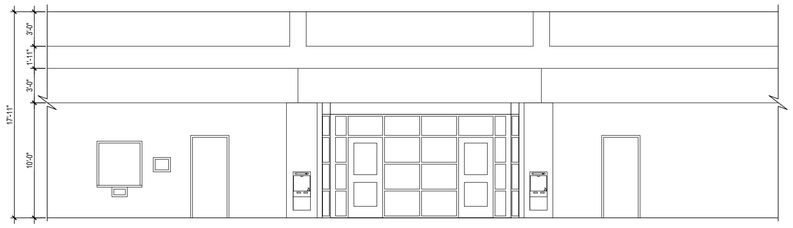
1. CEILING GRID SHALL BE INSTALLED TO MATCH EXISTING GRID'S POINT OF ORIGIN. THIS WILL REDUCE NEED TO RE-LOCATE ABOVE CEILING DUCTS, SPRINKLER PIPING AND OTHER SUPPORT SYSTEMS.
2. REFER TO SHEET A00-01 FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SEVEN SCHOOL KITCHEN REMODELS.
3. LIGHTING LEVELS SHOULD BE 50 FC IN PREPARATION AREAS, WARE WASH AND SERVING LINES, OR MEET MINIMUM HEALTH CODE LEVELS, WHICHEVER ITS GREATER. SEE MEP PLANS
4. REPLACE HVAC DEVICES. REPLACE LIGHTING WITH 24"x24" LED LAY IN LIGHT AS SCHEDULED IN ELECTRICAL PLANS.
5. REFER TO MECHANICAL, ELECTRICAL SHEETS FOR DEVICE SCHEDULES.

RCP - NUMBERED NOTES

01 PROVIDE 30"x30" MIN. ACCESS HATCH IN SOFFIT CENTERED ON MOTOR.

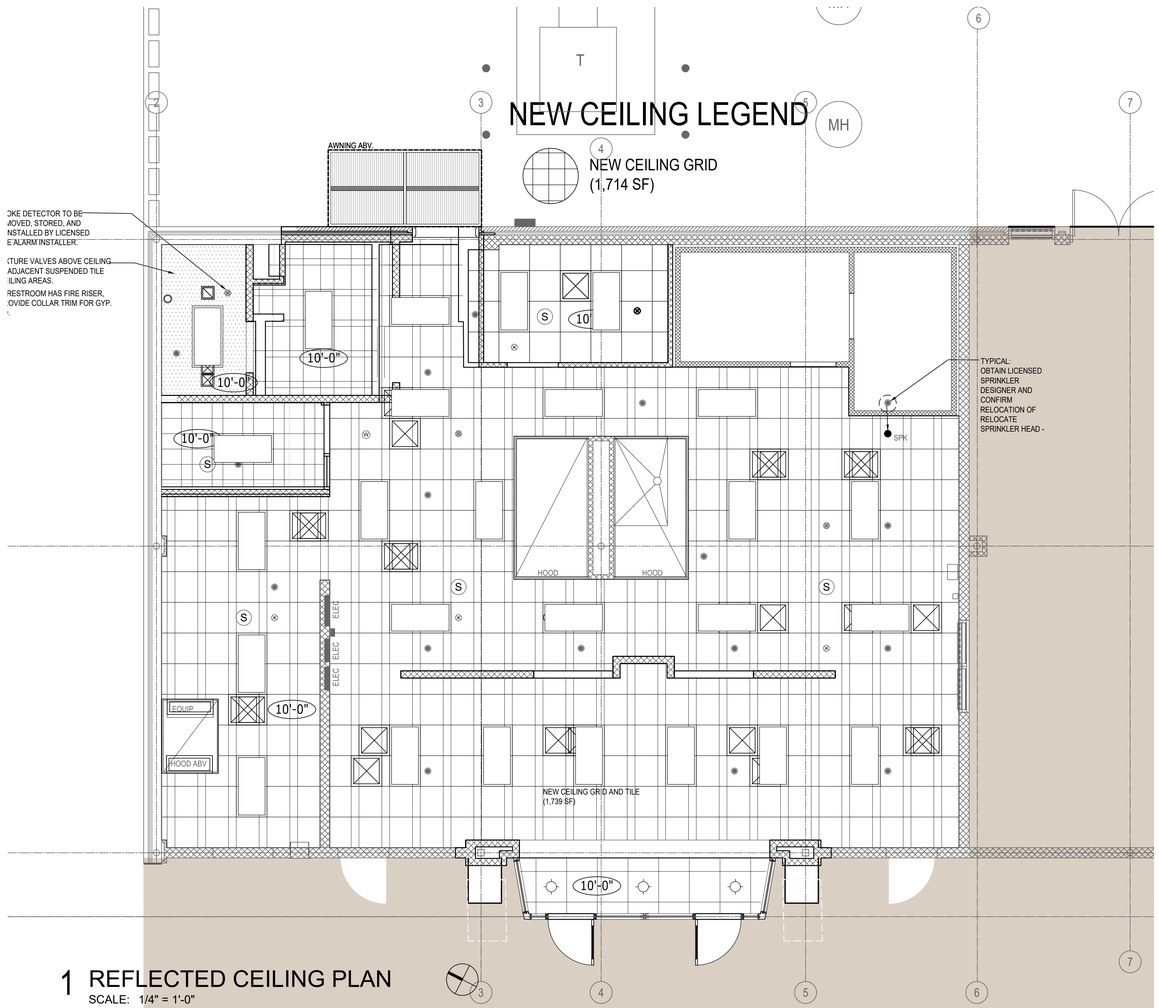
02 AFTER LOWERING THE NEW POWER RETRACTION SYSTEM. REPAIR AND PAINT SOFFITS AND SIDWALLS OF FURR TO MATCH EXISTING.

2 RCP GENERAL NOTES



3 FOOD SERVICE AREA ELEVATION

SCALE: 3/16" = 1'-0"



1 REFLECTED CEILING PLAN

SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
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MISSOURI CITY, TX 77489

SEAL

7/15/2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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REFLECTED CEILING PLAN

k-A.401

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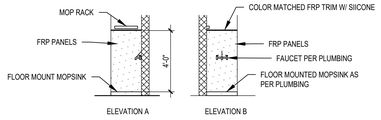
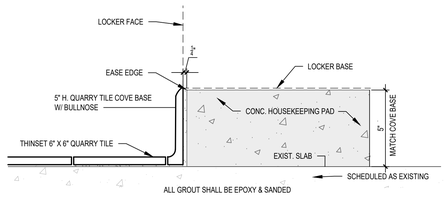


10 MOPSINK ELEVATIONS
SCALE: 1/4"=1'-0"



11 LOCKER HOUSEKEEPING PAD
SCALE: 3"=1'-0"

PAINT COLOR SCHEDULE
UNLESS OTHERWISE INDICATED FIELD COLOR IS PT-1 (SW 7014 EIDER WHITE)

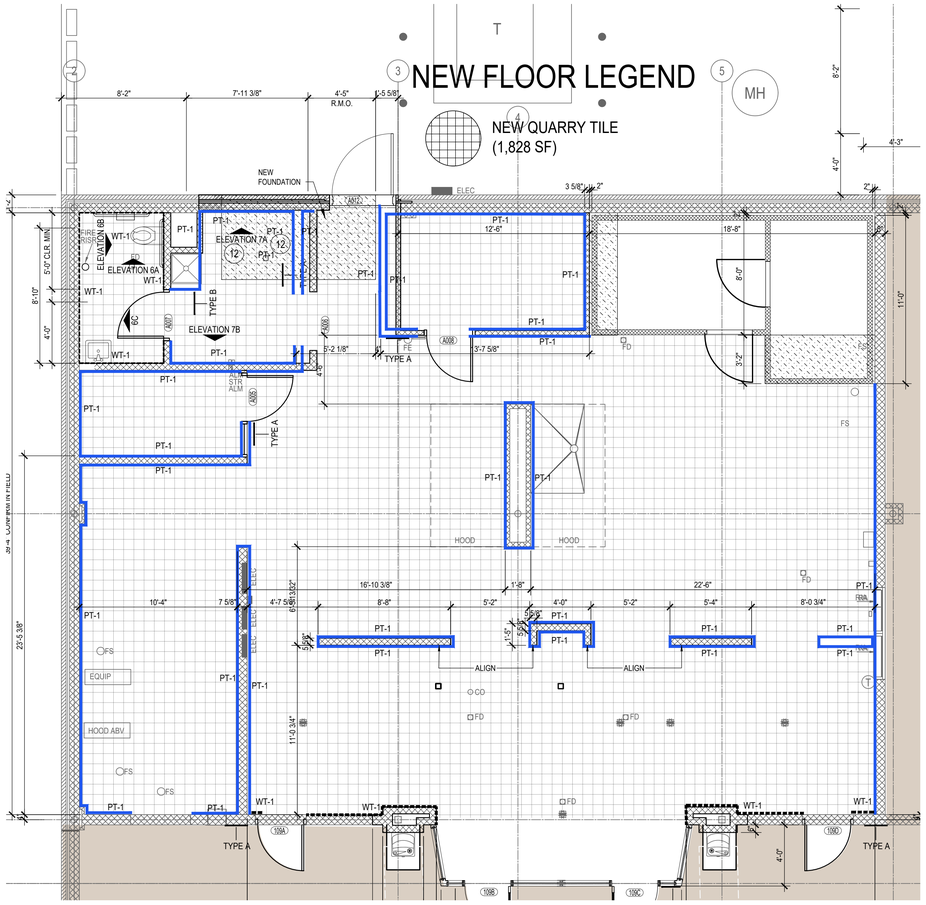
SW 7014 EIDER WHITE (EPOXY PAINT)

WALL TILE
CERAMIC WALL TILE (WT-1)
REFER TO TILE PATTERN AT SERVING AND RESTROOM
FIELD WALL TILE: DALTILE RITTENHOUSE SQUARE K175 BISCUIT (3X6)

QUARRY TILE
QUARRY TILE AND BASE - SURE-STEP II OQ30
TILE COLOR SELECTION TO BE APPROVED BY FBISD
EPOXY GROUT COLOR: STERLING SILVER BY LATICRETE

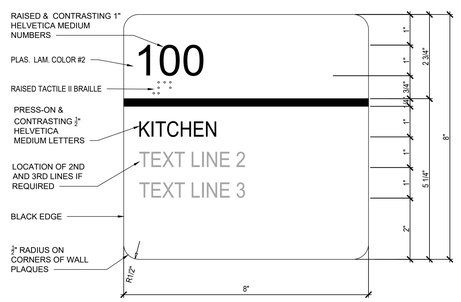
A — PROVIDE ROOM SIGN TO REPLACE EXISTING. SEE LAYOUT FOR TYPE A OR TYPE B SIGN LOCATIONS.

2 FLOOR FINISH LEGEND

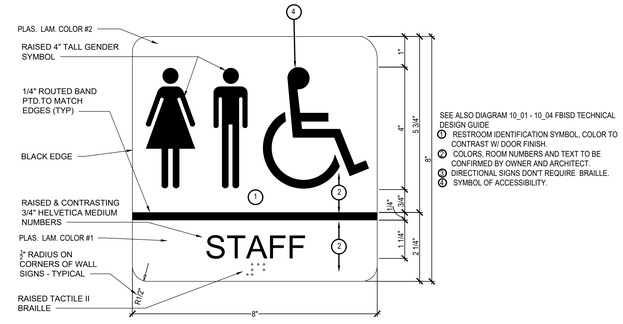


1 FINISH FLOOR PLAN
SCALE: 1/4" = 1'-0"

ALL FINISHED NOT DENOTED IN DRAWINGS SHALL BE SELECTED DURING THE SUBMITTAL PROCESS

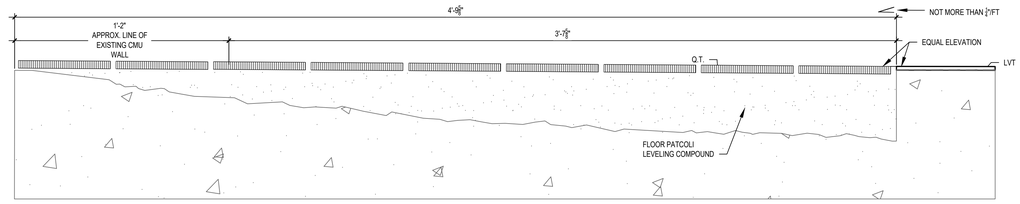


TYPE A
ROOM SIGNAGE - FIXED NAMES

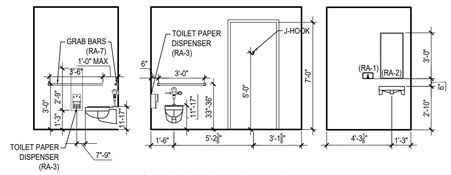


TYPE B
KITCHEN RESTROOM SIGNAGE

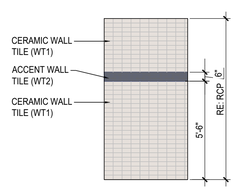
3 ROOM SIGNAGE
SCALE: 6"=1'-0"



5 FLOOR TRANSITION - THRESHOLD
SCALE: 3"=1'-0"

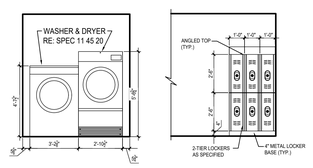


6 RR ELEVATIONS
SCALE: 1/4"=1'0"

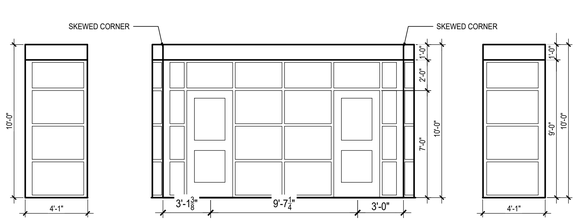


WALL TILE PATTERN - RESTROOM

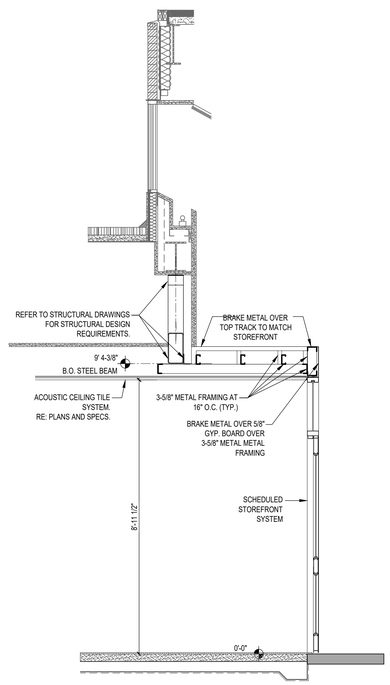
4 WALL TILE PATTERN
SCALE: 1/4"=1'0"



7 UTILITY ELEVATIONS
SCALE: 1/4"=1'0"



8 STOREFRONT ELEVATIONS
SCALE: 1/4"=1'-0"



9 STOREFRONT SECTION
SCALE: 1/2"=1'-0"

ISSUE:

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MISSOURI CITY, TX 77489

SEAL
REGISTERED ARCHITECT
KEITH E. MOORE
22651
STATE OF TEXAS
7/15/2025

ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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FINISH FLOOR PLAN

k-A.501

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1. AT WALLS THAT TERMINATE ABOVE CEILING, CONTRACTOR MAY CONTINUE METAL STUD FRAMED WALLS TO UNDERSIDE OF METAL DECK AND OMIT DIAGONAL BRACING IF HEIGHT DOES NOT EXCEED LIMITING HEIGHT OF METAL STUD AS INDICATED ON CHART BELOW.

2. PROVIDE INTERMEDIATE BRACING AT ALL PARTITIONS THAT EXCEED LIMITING HEIGHT OF METAL STUDS AS INDICATED ON CHART BELOW.

3. ALL BRACING SHALL BE AT STUD POINTS.

CMU PARTITION NOTES:

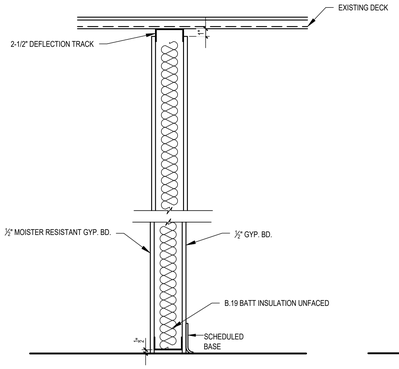
1. MATCH EXISTING CMU COURSING (TYP.):
   BRIARGATE ES (4" CMU STARTER COURSE)
   LAKE OLYMPIA MS (4" CMU STARTER COURSE)
   MISSION BEND ES (8" CMU STARTER COURSE)
   RIDGEMONT ES (8" CMU STARTER COURSE)
   TOWNEWEST ES (8" CMU STARTER COURSE)
2. PROVIDE CMU LINTELS FOR ALL OPENINGS IN INTERIOR CMU PARTITIONS. COORDINATE WITH STRUCTURAL.
3. PROVIDE A 3/4" SPACE BETWEEN TOP OF CMU AND STRUCTURE/DECK FOR POTENTIAL DEFLECTION. SEAL WITH APPROPRIATE CAULK.
4. REFER TO FINISH SCHEDULES FOR CERAMIC TILE LOCATIONS.

GYPSUM WALLBOARD PARTITION NOTES:

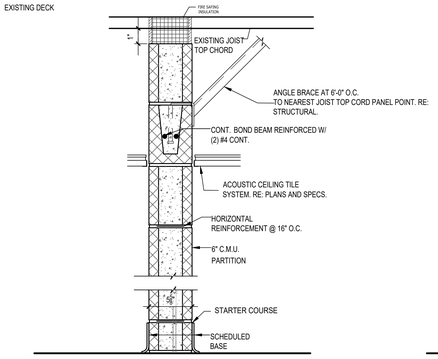
1. ALL METAL STUDS PARTITIONS ARE 25 GAUGE METAL STUDS AT 16" O.C. UNLESS OTHERWISE NOTED. IF THE LIMITING HEIGHT FOR A PARTITION TYPE IS EXCEEDED, INCREASE SIZE AND/OR GAUGE OF METAL STUDS AS INDICATED ON "LIMITING HEIGHT OF METAL STUDS" TABLE. NOTIFY THE ARCHITECT PRIOR TO INSTALLATION.

LIMITING HEIGHT OF METAL STUDS

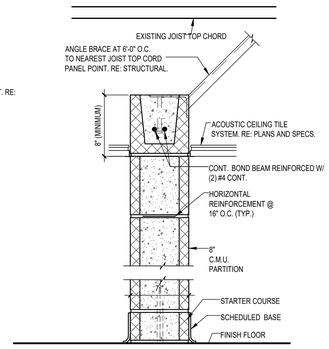
STUD SIZE	SPACING	25 GA	20 GA
2-1/2"	16"	11'-3"	12'-10"
3-5/8"	16"	14'-4"	16'-5"
6"	16"	19'-9"	24'-6"



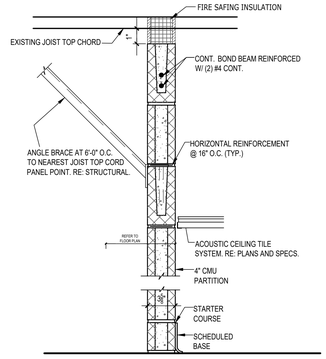
PARTITION A
SCALE: 1-1/2" = 1'-0"



PARTITION B1
SCALE: 1-1/2" = 1'-0"



PARTITION B2
SCALE: 1-1/2" = 1'-0"



PARTITION B3
SCALE: 1-1/2" = 1'-0"

PARTITION B4
SCALE: 1-1/2" = 1'-0"

PARTITION B5
SCALE: 1-1/2" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

k

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL

REGISTERED ARCHITECT
ROBERT A. MAGUIRE
#26511
STATE OF TEXAS

7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

PARTITION SCHEDULE

k-A.502

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\k-A.502 PARTITION SCHEDULE.dwg Jul 30, 2025 - 10:46am

REFER TO FOODSERVICE DESIGN PROFESSIONALS SPECIFICATIONS AND SUBSEQUENT SHEETS FOR ADDITIONAL COORDINATION INFORMATION

EXISTING EQUIPMENT NOTES (IF EXISTING EQUIPMENT IS PROVIDED IN THIS PROJECT):

1. EXISTING EQUIPMENT NOT SCHEDULED FOR RE-USE TO BE RELOCATED BY THE K.E.C. COORDINATE WITH OWNER FOR NEW LOCATION.
2. ALL UTILITIES NOT SCHEDULED FOR RE-USE TO BE CAPPED & COVERED BY REQUIRED DISCIPLINE.
3. K.E.C. TO VERIFY ALL EXISTING UTILITY LOCATIONS & COORDINATE WITH ALL EQUIPMENT AS REQUIRED.

8 EXISTING EQUIPMENT NOTES
NOT TO SCALE

ARCHITECT TO VERIFY/COORDINATE THE AESTHETIC OPTIONS BELOW (FOOD SERVICE COLOR, MATERIAL, OR SIGNAGE SELECTIONS) IF THESE ITEMS ARE PROVIDED IN THIS PROJECT:

1. COUNTERTOPS: STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
2. TRAY SLIDES: CORIAN OR STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
3. COUNTER FRONTS: CERAMIC TILE, 3 FORM, OR PLASTIC LAMINATE.
4. SNEEZE GUARDS: STONE INSETS.
5. GENERAL COLOR, MATERIAL AND GRAPHIC SELECTIONS:
   - A. DISPLAY AIR SCREEN MERCHANDISERS - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - B. BAKERY DISPLAY CASES - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - C. PASS THRU OR REACH IN HOLDING CABINETS - COLOR SELECTION: POWDER COAT (MFG.: TRUE) OR PLASTIC LAMINATE (MFG.: TRAULSEN) (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - D. HANGING HEAT LAMPS - TRACK AND FIXTURE COLOR SELECTION.
   - E. HEATED MERCHANDISERS.
   - F. PORTABLE GUIDE RAILS - STANCHION AND BELT COLOR SELECTION.
   - G. POPCORN MACHINE - SIGNAGE SELECTION.
   - H. BOTTLE COOLER - SIGNAGE SELECTION.
   - I. GRAPHICS PACKAGE INFORMATION.
   - J. HOT FOOD WELL COVERS.
6. ARCHITECT TO VERIFY/COORDINATE THE FINISHES BELOW:
   - A. WALLS: CERAMIC TILE, FLAT FRP, OR MOLDED FRP (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - B. CEILINGS: REMOVABLE VINYL FACE TILE (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - C. FLOORS: TILE, EPOXY, OR RUBBERIZED FLOORING SYSTEM (SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT AS APPROVED BY LOCAL JURISDICTION) (COORDINATE FLOOR TILE TRANSITION AT SERVING LINES).
   - D. FLOORS: WALK-IN ASSEMBLY - EXTEND KITCHEN FLOOR FLUSH INTO WALK-IN ASSEMBLY WITH COVED BASE.
   - E. FURR DOWNS ABOVE SERVING COUNTERS.

5 ARCHITECTURAL COORDINATION NOTES
NOT TO SCALE

CRITICAL NOTES:

1. CONTRACTOR MUST COORDINATE AND VERIFY ALL DIMENSIONS WITH FOOD SERVICE EQUIPMENT SHOP DRAWINGS AND MANUFACTURER'S DATA. DIMENSIONS SHOWN ARE FOR DESIGN AND BIDDING PURPOSES ONLY.
2. WALK-IN ASSEMBLY DOORS MUST BE LEFT OPEN WHILE INTERIOR CONCRETE FLOOR CURES.
3. INSTALL PROTECTIVE COVER ON WALK-IN ASSEMBLY WALL PANELS BEFORE INSTALLING CONCRETE FLOORS AND CURBS.
4. REFER TO GENERAL SPECS - DIVISION 27 TO PROVIDE CONDUIT, DATA, AND INTERCONNECT THE PANIC ALARM INSIDE FREEZER TO THE BUILDING AUTOMATION SYSTEM FOR NOTIFICATION TO DISTRICT PERSONNEL IN THE EVENT OF STAFF ENTRAPMENT.
5. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL (DIV. 22).

7 CRITICAL NOTES
NOT TO SCALE

DIVISION 26 (ELECTRICAL) IS RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL ELECTRICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. ROUGH-IN AND FINAL CONNECTION OF ELECTRICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 26.
6. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
7. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR INTERCONNECT CABLES BETWEEN LAN AND POS TERMINALS, CHANGE-MAKERS, PRE-CHECK UNITS, PRINTERS, CPUS, ETC. DIVISION 26 TO VERIFY WHERE THE CONDUIT IS TO RUN FOR POS SYSTEM (I.E., MANAGER'S OFFICE OR IDF ROOM).
8. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR FIRE SUPPRESSION SYSTEMS. INTERCONNECT FIRE PROTECTION SYSTEM TO PANEL BOX SHUNT TRIPS AND BUILDING ALARM.
9. WALK-IN LIGHT FIXTURE INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF WALK-IN IS PROVIDED IN THIS PROJECT).
10. TABLE LIMIT SWITCH INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF DISHMACHINE IS PROVIDED IN THIS PROJECT).
11. ELECTRICAL MATERIALS AND DEVICES (SHUNT-TRIP BREAKERS, SURGE PROTECTORS, LIGHTING CONTROL DEVICES, CONDUIT, WIRE, ETC.).
12. SWITCHES AND STAINLESS STEEL DISCONNECTS AS REQUIRED (PROVIDE, LOCATE, AND INSTALL – TO BE IN AN ACCESSIBLE LOCATION).
13. CHARGING STATIONS FOR FORKLIFTS, PALLET STACKERS, AND PALLET JACKS (SIZE, PROVIDE, LOCATE, AND INSTALL) (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
14. INTERCONNECTION BETWEEN CONDENSATE FAN AND DISHMACHINE CONTROL PANEL (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
15. INTERCONNECTION BETWEEN EXHAUST HOOD FANS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
16. INTERCONNECTION BETWEEN EXHAUST HOOD LIGHTS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
17. DOOR HEATERS, LIGHTS, COILS, AND PRESSURE RELIEF PORTS PRE-WIRED TO JUNCTION BOX AT TOP OF WALK-IN ASSEMBLIES (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) PROVIDED BY SECTION 11 40 00. FINAL CONNECTION BY DIV. 26.
18. IF ANY ELECTRICAL ACCESSORIES, FITTINGS, AND CORD/PLUGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV.26 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
19. PROVIDE WATERPROOF RECEPTACLES IN WET AREAS.
20. ALL ELECTRICAL CONNECTIONS BENEATH EXHAUST HOODS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) TO EXTEND TO SHUNT TRIP BREAKERS WITH ELECTRICAL PANEL BOX FOR SHUTDOWN DURING FIRE MODE.
21. RECEPTACLES ARE TO BE PRE-WIRED TO THE JUNCTION BOX OR LOAD CENTER FOR FINAL CONNECTION BY DIVISION 26.
22. ALL ELECTRICAL LIGHTING, POWER, AND DISTRIBUTION SYSTEMS.
23. DO NOT INTERCONNECT MORE THAN THREE (3) CONVENIENCE OUTLETS ON ONE (1) BREAKER.
24. OTHER THAN CONVENIENCE OUTLETS, ALL ELECTRICAL CONNECTIONS SHOWN ON FOOD SERVICE PLANS ARE DEDICATED BREAKERS.
25. DOORBELL AT RECEIVING DOOR (PROVIDE AND INSTALL – TO BE AUDIBLE THROUGHOUT KITCHEN, OFFICE, AND DRY STORAGE ROOM).
26. ADEQUATE LIGHTING AT RECEIVING DOOR.
27. PROVIDE AND INSTALL TWO EMERGENCY STROBE BEACONS THAT INTERCONNECT TO PANIC ALARM IN WALK-IN FREEZER. ONE (1) IN KITCHEN ABOVE WALK-IN FREEZER DOOR ONE (1) IN CAFETORIUM (IF WALK-IN IS PROVIDED IN THIS PROJECT). REFER TO GENERAL SPECIFICATIONS FOR ADDITIONAL DETAILS.
28. DEDICATED CIRCUIT FOR HEATED DRAIN LINE CONNECTION IN WALK-IN FREEZER AT EACH COIL (IF WALK-IN IS PROVIDED IN THIS PROJECT).

NOTE: ELECTRICAL CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 26. FOR ADDITIONAL REQUIREMENTS, REFER TO THE ELECTRICAL ENGINEER'S DRAWINGS.

6 ELECTRICAL COORDINATION NOTES
NOT TO SCALE

DIVISION 22 (PLUMBING) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL PLUMBING REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY PVC CONDUIT WITH WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO BEVERAGE LINES, CO2 LINES, AND REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL PLUMBING CONNECTIONS TO FOOD SERVICE EQUIPMENT AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 22. THIS INCLUDES BUT IS NOT LIMITED TO INSTALLATION OF ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), HOSES, GAS DISCONNECTS, AND DRAINS FROM EQUIPMENT POINT OF CONNECTION TO BUILDING PLUMBING SYSTEMS. ALL DRAIN LINES ARE PROVIDED AND INSTALLED BY DIV. 22.
7. KITCHEN EQUIPMENT CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), DRAIN FITTINGS, MIXING VALVES, CONTROL VALVES, WATER PRESSURE REGULATORS, VACUUM BREAKERS, AND ALL ACCESSORIES FOR EQUIPMENT SPECIFIED UNDER 11 40 00. DIVISION 22 IS RESPONSIBLE FOR INSTALLATION.
8. INDIRECT DRAIN LINE RUNS FROM EQUIPMENT TO NEAREST DRAIN OR FLOOR SINK. LINES TO BE TYPE 'K' COPPER.
9. IF ANY PLUMBING ACCESSORIES OR FITTINGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV. 22 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
10. GAS SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
11. WATER SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
12. COMPRESSED AIR SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM (IF REQUIRED FOR THIS PROJECT).
13. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL.
14. FLOOR SINKS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
15. FLOOR DRAINS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
16. TRENCH DRAINS (PROVIDE AND INSTALL). TRENCH LINERS PROVIDED BY 11 40 00. FLANGE AND LINERS TO BE FLUSH WITH FINISHED FLOOR.
17. GREASE TRAPS AS REQUIRED. VERIFY WITH LOCAL CODES TO BYPASS OR PIPE THRU GREASE TRAP AND/OR INTERCEPTOR.
18. P-TRAPS AS REQUIRED (INCLUDING ALL DISPOSERS).
19. INTERCONNECT WATER THRU WATER FILTER (FILTER PROVIDED BY 11 40 00 UNLESS OTHERWISE SPECIFIED) TO EQUIPMENT.
20. GAS QUICK DISCONNECT INSTALLATION (QUICK DISCONNECT PROVIDED BY 11 40 00).
21. SAFETY RESTRAINT CABLE INSTALLATION (SAFETY RESTRAINT CABLE PROVIDED BY 11 40 00).
22. SPECIFIED COUPLINGS AND PIPING TO ALL EQUIPMENT FURNISHED BY 11 40 00.
23. AIR COMPRESSORS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
24. WATER SOFTENERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
25. PRESSURE BOILERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
26. HAND SINKS (PROVIDE (UNLESS OTHERWISE SPECIFIED) AND INSTALL). PROVIDE HOT WATER TEMPERING VALVE IF REQUIRED. WATER TEMPERATURE TO BE AT LEAST 100 DEGREES AND FLOW FOR AT LEAST 20 SECONDS.
27. ICE BIN DRAIN INSULATION (IF ICE MACHINE IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
28. UNIONS AT DISPOSER SOLENOID VALVES (IF DISPOSER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
29. BACK FLOW PREVENTION AS REQUIRED (PROVIDE AND INSTALL - INCLUDING ALL DISPOSERS). BACK- SIPHONAGE SHALL BE INSTALLED AT ALL FIXTURES AND EQUIPMENT WHERE BACKFLOW AND/OR BACK-SIPHONAGE MAY OCCUR AND WHERE A MINIMUM AIR GAP CANNOT BE PROVIDED BETWEEN THE WATER TO THE FIXTURE OR EQUIPMENT AT ITS FLOOD/LEVEL RIM. VACUUM BREAKERS, WHEN FURNISHED WITH EQUIPMENT, SHALL OVERRIDE THE ABOVE, IF ACCEPTABLE WITH APPLICABLE CODES. DIVISION 22 RESPONSIBLE FOR VERIFYING REQUIREMENT WITH LOCAL CODES.
30. JANITOR SINK WITH FAUCET (PROVIDE AND INSTALL).
31. FREEZE PROOF HYDRANT AT EXTERIOR OF BUILDING BY RECEIVING DOOR (PROVIDE AND INSTALL).
32. REVERSE OSMOSIS SYSTEMS (SIZE, PROVIDE (UNLESS OTHERWISE SPECIFIED), LOCATE AND INSTALL).
33. ALL PIPING WITHIN COUNTER BODY OR UNDER FABRICATED COUNTERS TO BE RUN TO A CONNECTION POINT BELOW COUNTER BODY BY SECTION 11 40 00. FINAL CONNECTION BY DIVISION 22.
34. EXHAUST HOOD CONDENSATE DRAIN CONNECTIONS (IF EXHAUST HOOD IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
35. INTERCONNECTION OF 1/2" CW TO PRE-RINSE AND DISPOSERS CONE/BODY INLETS PIPED THROUGH SOLENOID AND VACUUM BREAKER (IF DISPOSER IS PROVIDED IN THIS PROJECT).
36. FIRE SYSTEM PIPING. EXPOSED PIPING TO BE CHROME PLATED.
37. PIPE 1/2" COLD WATER TO SWIRL INLETS AT DISPOSERS (IF DISPOSER IS PROVIDED IN THIS PROJECT).
38. WATER TREATMENT FOR ICE BUILDERS (NON-CHLORINATED WATER WITH A PH LEVEL OF 10 OR HIGHER) AND ANY DRAINS AND OVERFLOWS. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS BY DIV. 23 (IF ICE BUILDERS AND TUMBLE CHILLERS ARE PROVIDED IN THIS PROJECT).

NOTE: WATER AND DRAIN CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 22. FOR ADDITIONAL WATER AND DRAIN REQUIREMENTS REFER TO MECHANICAL DRAWINGS.

NOTE: REFER TO ELECTRICAL/MECHANICAL DRAWINGS FOR REQUIREMENTS OF EXHAUST FANS AND MAKE-UP AIR HANDLERS AND LOCATION OF AN INTERLOCK AND START/STOP CONTROLS TO BE LOCATED WITHIN FOOD SERVICE AREA BY DIVISION 26.

4 PLUMBING COORDINATION NOTES
NOT TO SCALE

DIVISION 23 (MECHANICAL) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL MECHANICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL CONNECTION OF MECHANICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR).
7. TESTING AND BALANCING FOR ROOMS AND EXHAUST HOODS TO BE PERFORMED BY MECHANICAL CONTRACTOR. BALANCE REPORT FOR FOOD SERVICE EXHAUST HOODS TO BE PROVIDED TO FOODSERVICE DESIGN PROFESSIONALS (FDP) IMMEDIATELY UPON COMPLETION (SEND TO HOUSTON.SUBMITTAL@FDP.ORG FOR HOUSTON OFFICE AND DALLAS.SUBMITTAL@FDP.ORG FOR DALLAS OFFICE) AND MUST BE SUBMITTED WITH O&M MANUALS.
8. EXHAUST HOODS, CONDENSATE HOODS, FIRE SUPPRESSION SYSTEMS, CONNECTIONS AND CONTROLS (PROVIDE AND INSTALL – *UNLESS OTHERWISE SPECIFIED*). PROVIDE TEMPERED AIR AT ALL SUPPLY DUCTS.
   - A. IF EXHAUST/CONDENSATE HOODS AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED UNDER SECTION 11 40 00, DIVISION 23 IS RESPONSIBLE FOR ALL EXHAUST AND CONDENSATE HOOD CONNECTIONS (PROVIDE AND INSTALL).
9. VFD SYSTEM AND CONTROLLERS, WHEN REQUIRED BY CODE (PROVIDE AND INSTALL).
10. PROVIDE AND INSTALL ALL VENTILATION (DIRECT OR INDIRECT), AIR CONDITIONING AND HEATING SYSTEMS (UNLESS OTHERWISE SPECIFIED).
11. COORDINATE SUPPLY AND RETURN DUCTS ABOVE SERVING COUNTERS OR OPEN-AIR REFRIGERATED MERCHANDISERS. NO COLD AIR TO BLOW DIRECTLY ON HOT FOOD COUNTERS.
12. COORDINATE SUPPLY AND RETURN DUCTS AWAY FROM EQUIPMENT WITH TOP MOUNTED REFRIGERATION. NO COLD AIR TO BLOW DIRECTLY ON COMPRESSORS.
13. MECHANICAL CONTRACTOR TO LOCATE TEMPERATURE MONITORS WITHIN RETURN DUCTS.
14. CIRCULATING AIR ABOVE WALK-IN ASSEMBLIES (PROVIDE AND INSTALL).
15. CIRCULATING AIR ABOVE AND IN AIR GAPS AT WAREHOUSE COLD STORAGE ASSEMBLIES (PROVIDE AND INSTALL).
16. WATER CHILLERS AS REQUIRED (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).
17. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).

3 MECHANICAL COORDINATION NOTES
NOT TO SCALE

GENERAL CONTRACTOR RESPONSIBLE FOR BUT NOT LIMITED TO:

1. ANY WALL PENETRATION REQUIRED FOR FOOD SERVICE EQUIPMENT UTILITIES. ESCUTCHEON PLATES OR S/S SLEEVES TO BE PROVIDED AND INSTALLED AS NEEDED.
2. BULK FREEZER VENTILATION PIPE (IF BULK FREEZER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
3. CORE DRILLING FOR GUIDE RAILS (IF GUIDE RAILS ARE PROVIDED IN THIS PROJECT).
4. REFRIGERATION ROOF CURBS / ROOF JACK (IF REFRIGERATION SYSTEM IS PROVIDED IN THIS PROJECT AND LOCATED ON ROOF).
5. INTERIOR BOLLARDS (IF REQUIRED FOR THIS PROJECT) – TO BE EPOXY PAINTED PER LOCAL CODES (PROVIDE AND INSTALL).
6. FURNISH AND INSTALL 3/4" PLYWOOD BLOCKING IN THE WALL FOR MOUNTING EQUIPMENT FURNISHED BY SECTION 11 40 00 AS REQUIRED.
7. WALK-IN DEPRESSIONS (TO BE DEAD LEVEL) AND SAND LEVELING BED (IF WALK-IN IS PROVIDED IN THIS PROJECT AND RECESS IS SHOWN).
8. STRUCTURAL BRACING FOR BULK WALK-IN CEILING PANELS IF REQUIRED.
9. MENU SYSTEM VIDEO MONITORS IN SERVERY (UNLESS OTHERWISE SPECIFIED).
10. STRUCTURAL BRACING FOR MENU SYSTEM VIDEO MONITORS IF REQUIRED.
11. INTERIOR/EXTERIOR REFRIGERATION PENETRATIONS AND SLEEVES AT BUILDING PENETRATIONS.
12. DOORSCOPE VIEWER (PEEPHOLE) WITH WIDE VIEWING ANGLE AT RECEIVING DOOR.
13. CANOPY AT RECEIVING DOOR. COORDINATE HEIGHT WITH THE HEIGHT OF RECEIVING DOOR (8') AND THE MOUNTING HEIGHT OF AIR SCREEN ABOVE THE DOOR.
14. SOAP AND TOWEL DISPENSER PROVIDED BY OWNER. G.C. RESPONSIBLE FOR INSTALLATION.
15. WASHER AND DRYER (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
16. DWARF WALL AT EXPOSED FRONT/ENDS OF CAFETERIA SERVING COUNTERS WITH FINISH AS SELECTED BY ARCHITECT (IF REQUIRED IN THIS PROJECT).

2 GENERAL CONTRACTOR COORDINATION NOTES
NOT TO SCALE

HEALTH DEPARTMENT REQUIREMENTS (VERIFY WITH LOCAL JURISDICTIONS):

1. FLOORS: VERIFY WITH DIVISION 9. FLOORS TO BE SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT.
2. WALLS: VERIFY WITH ARCHITECTURAL DOCUMENTS. WALLS TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
3. CEILING: LAY-IN TILES. CEILING TILES TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
4. EMPLOYEE TOILET: TO BE LOCATED OFF MAIN CORRIDOR AND ADJACENT TO MAIN KITCHEN. RESTROOM MUST HAVE A VESTIBULE AND NOT OPEN TO KITCHEN / PREP AREAS. TOILETS TO BE WELL VENTILATED.
5. LAVATORIES: WALL HUNG LAVATORIES LOCATED WITHIN ALL FUNCTIONAL WORKING AREAS.
6. UTENSIL CLEANING/SANITIZING: ACCOMPLISHED IN UTENSIL WASH AREA WITH (3) 2'-0" x 2'-2" x 15" MINIMUM DEEP SINKS AND WAREWASH MACHINE.
7. MECHANICAL CLEANING/SANITIZING OF TABLEWARE: ACCOMPLISHED BY WAREWASH MACHINE.
8. STOREROOMS: AMPLE DAILY STORAGE PROVIDED IN ENCLOSED STORE ROOMS. STORE ROOMS TO BE VENTILATED AND MAINTAIN PROPER TEMPERATURE.
9. WATER HEATER: LOCATED IN THE MECHANICAL ROOM ADJACENT TO KITCHEN. TO BE SIZED TO PROVIDE AMPLE WATER TO MAINTAIN PROPER WATER TEMPERATURE THROUGHOUT HOURS OF OPERATION.
10. GREASE TRAP: LOCATED AT EXTERIOR OF BUILDING. REFER TO ENGINEER'S DRAWINGS.
11. FOOD SERVICE EQUIPMENT: ALL FLOOR-MOUNTED EQUIPMENT IS TO BE SEALED TO THE FLOOR TO PROVIDE AN EASILY CLEANABLE SURFACE AND PREVENT SEEPAGE. EQUIPMENT NOT MOUNTED TO THE FLOOR IS TO BE WALL MOUNTED ON WALL CARRIERS, OR ELEVATED ON LEGS TO PROVIDE AT LEAST A SIX-INCH CLEARANCE BETWEEN FLOOR AND EQUIPMENT.
12. MOP SINK: LOCATED IN JANITOR CLOSET OFF MAIN KITCHEN CORRIDOR, AND LOCATED IN CLOSE PROXIMITY TO THE SERVERY WAREWASH AREA.
13. EXHAUST HOODS: EXHAUST HOODS PROVIDED OVER COOKING EQUIPMENT WITH LIQUID CHEMICAL ANSUL FIRE EXTINGUISHING SYSTEM.
14. LIGHTING AND PROTECTIVE SHIELDING: RECESSED CEILING-MOUNTED FLUORESCENT LIGHT FIXTURES FITTED WITH CLEAR LEXAN DIFFUSERS.
15. GARBAGE AND REFUSE: CENTRAL TRASH COLLECTION PROVIDED FOR BUILDING LOCATED NEAR RECEIVING AREA ON SMOOTH CONCRETE SURFACE.
16. POISONOUS AND TOXIC MATERIAL STORAGE: LOCATED IN RESPECTIVE JANITOR CLOSETS WITH LOCKING HARDWARE.

1 HEALTH DEPARTMENT COORDINATION NOTES
NOT TO SCALE

ISSUE:

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FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

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7/15/2025
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PROJ. NO.: 23-25
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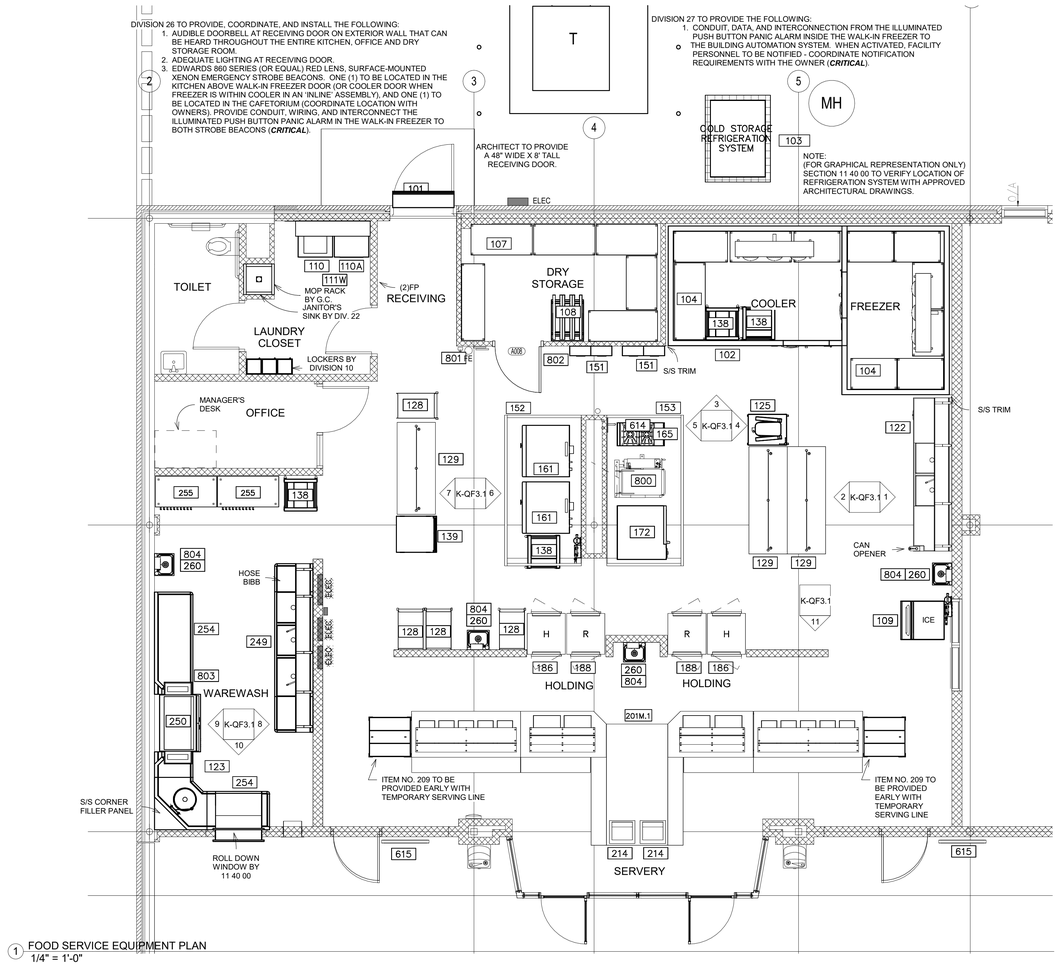
FS GENERAL COORDINATION NOTES

K-QF0.0

FOOD SERVICE DRAWING INDEX	
FDP SHEET NUMBER	FDP SHEET NAME
K-QF0.0	FS GENERAL COORDINATION NOTES
K-QF1.0	FS EQUIPMENT PLAN
K-QF1.1	FS FACILITY MODEL
K-QF1.2	FS EQUIPMENT MODEL
K-QF1.3	FS SPECIAL CONDITIONS & MECHANICAL PLAN
K-QF1.4	FS PLUMBING PLAN
K-QF1.5	FS ELECTRICAL PLAN
K-QF1.6	FS CONDENSING UNITS
K-QF1.7	FS WALK-INS
K-QF1.8	FS SERVING LINE
K-QF1.9	FS SERVING LINE
K-QF2.0	FS DEMO PLAN
K-QF2.1	FS TEMPORARY SERVING
K-QF3.1	FS ELEVATIONS
K-QF4.1	FS SECTIONS & DETAILS
K-QF4.2	FS DETAILS
K-QF4.3	FS DETAILS



1 FOOD SERVICE EQUIPMENT PLAN
1/4" = 1'-0"

FOOD SERVICE EQUIPMENT SCHEDULE					
REFER TO SHEET QF1 FOR GENERAL CONTRACTOR & HEALTH DEPARTMENT COORDINATION NOTES					
FDP ITEM	FDP QTY	FDP DESCRIPTION	FDP REMARKS	MANUFACTURER	MODEL
101	1	AIR SCREEN		MARS	STD248-1U A-OB
102	1	COLD STORAGE ASSEMBLY		AMERICAN PANEL	
103	1	COLD STORAGE REFRIGERATION SYSTEM		RDT	ZS1-02Z-C T3-AST
104	2	COLD STORAGE SHELVING		METRO	METROMA X Q
107	1	DRY STORAGE SHELVING		METRO	METROMA X Q
108	1	CAN RACK		NEW AGE	1250CK
109	1	ICE MACHINE W/ BIN		MANITOWOC	UYF0310A
110	1	CLOTHES WASHER		WHIRLPOOL	RESIDENTIAL
110A	1	CLOTHES DRYER		WHIRLPOOL	RESIDENTIAL
111W	1	WALL MOUNTED OVERSHELF		CUSTOM FABRICATED	
122	1	TWO COMPARTMENT SINK WITHOUT DISPOSER		CUSTOM FABRICATED	
123	1	DISPOSER - 3HP		SALVAJOR	300-CA-18-ARSS-LD
125	1	20 QT. MIXER W/STAND		HOBART	HL2000
128	4	UTILITY CART		LAKESIDE	522
129	3	WORKTABLE W/S.BAR UT.RACK		CUSTOM FABRICATED	
138	4	PAN RACK		CRES COR	207-UA-13 A
139	1	INSUL MOBILE PROOFER		CRES COR	H-137-WS UA-12D
151	2	FIRE PROTECTION SYSTEM		ANSUL	R102
152	1	EXHAUST HOOD	EXISTING		
153	1	EXHAUST HOOD	EXISTING		
161	2	CONVECTION OVEN		BLODGETT	DFG-200 DBL
165	1	TWO BURNER RANGE		VULCAN	V2B18B
172	1	COMBI OVEN		RATIONAL	ICP 6-FULL/6-FULL N/G
186	2	PASS-THRU HEATED CABINET-1DR		TRAULSEN	AHF132WP
188	2	PASS-THRU REFRIGERATOR-1DR		TRAULSEN	AHT132WPUT
201M.1	1	SERVING COUNTER-MODULAR		COUNTERCRAFT	SCOL-408-MOD
214	2	CASH REGISTER	OWNER FURNISHED		
249	1	THREE COMPARTMENT SINK NO DISPOSER		CUSTOM FABRICATED	
250	1	DISHMACHINE		HOBART	CL44-BAS
254	2	SOILED & CLEAN DISHTABLE		CUSTOM FABRICATED	
255	2	MOBILE DRYING RACK		METRO	PR48VX3
260	4	HAND SINK	FURNISHED & INSTALLED BY DIV. 22		
614	1	FILL FAUCET		T&S	B-0610
615	2	MENU MONITOR	BY OWNER		
800	1	15 GAL. BRAISING PAN		GROEN	BPM-15GA
801	1	S/S CORNER GUARDS	LOCATED ON EVERY EXPOSED CORNER THROUGHOUT KITCHEN	CUSTOM FABRICATED	
802	1	WALL BUMPERS	LOCATED ON ALL EXPOSED BUILDING WALLS	PAWLING	MD-1
803	1	WATER SOFTENER		HOBART	WS-40
804	4	S/S SPLASH GUARDS		CUSTOM FABRICATED	

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PROJ. NO.: 23-25
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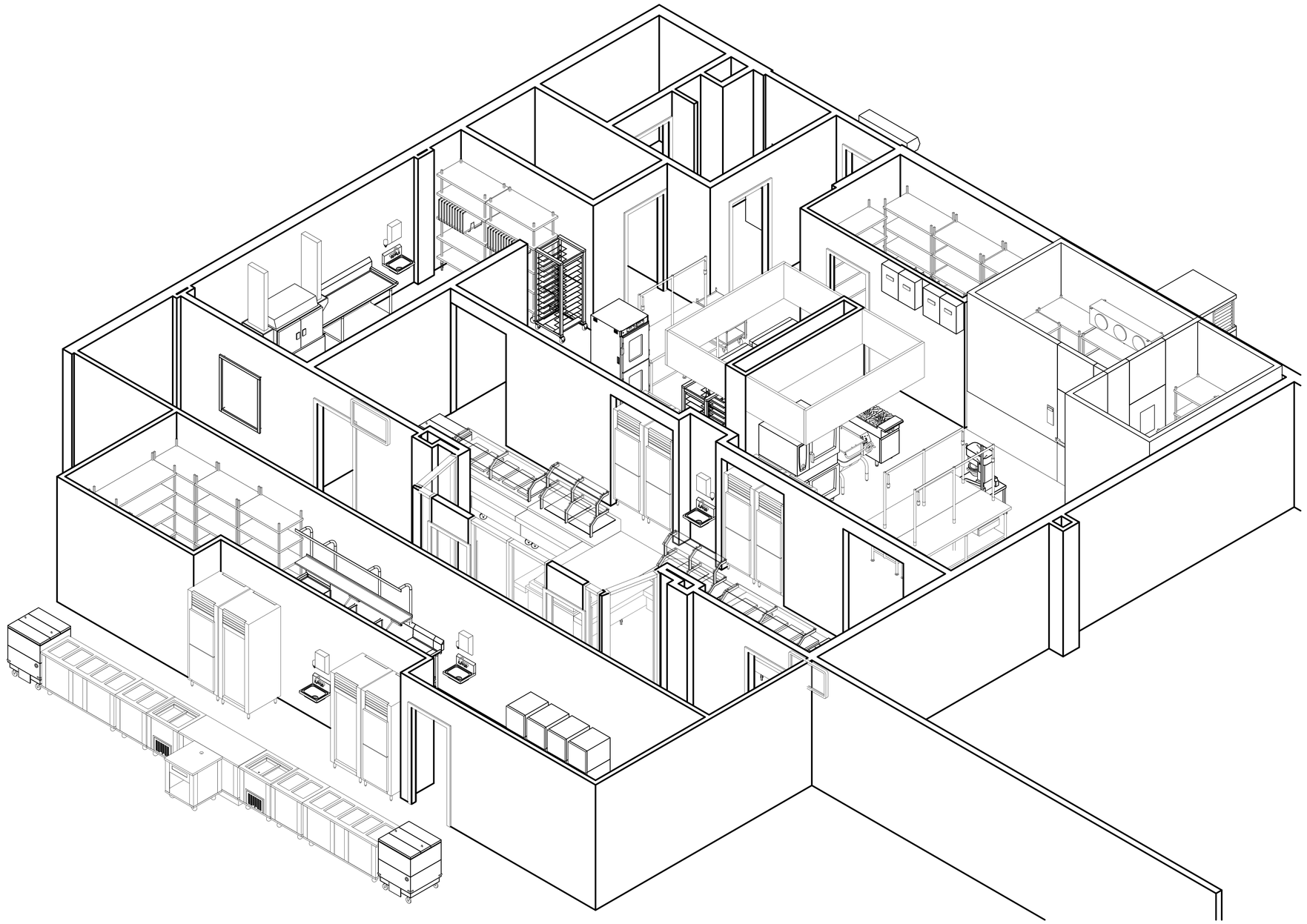
FS EQUIPMENT PLAN

K-QF1.0

ISOMETRIC VIEWS WITHIN THIS DRAWING ARE NOT TO SCALE AND ARE PROVIDED FOR REFERENCE PURPOSES ONLY. ISOMETRIC VIEWS ARE NOT INTENDED FOR REGULATORY APPROVAL, PERMITTING, NOR CONSTRUCTION. REFER TO FLOOR PLANS AND DETAILS FOR SPECIFIC PROJECT INFORMATION.



1 FS FACILITY MODEL

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PROJ. NO.: 23-25
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FS FACILITY MODEL

K-QF1.1

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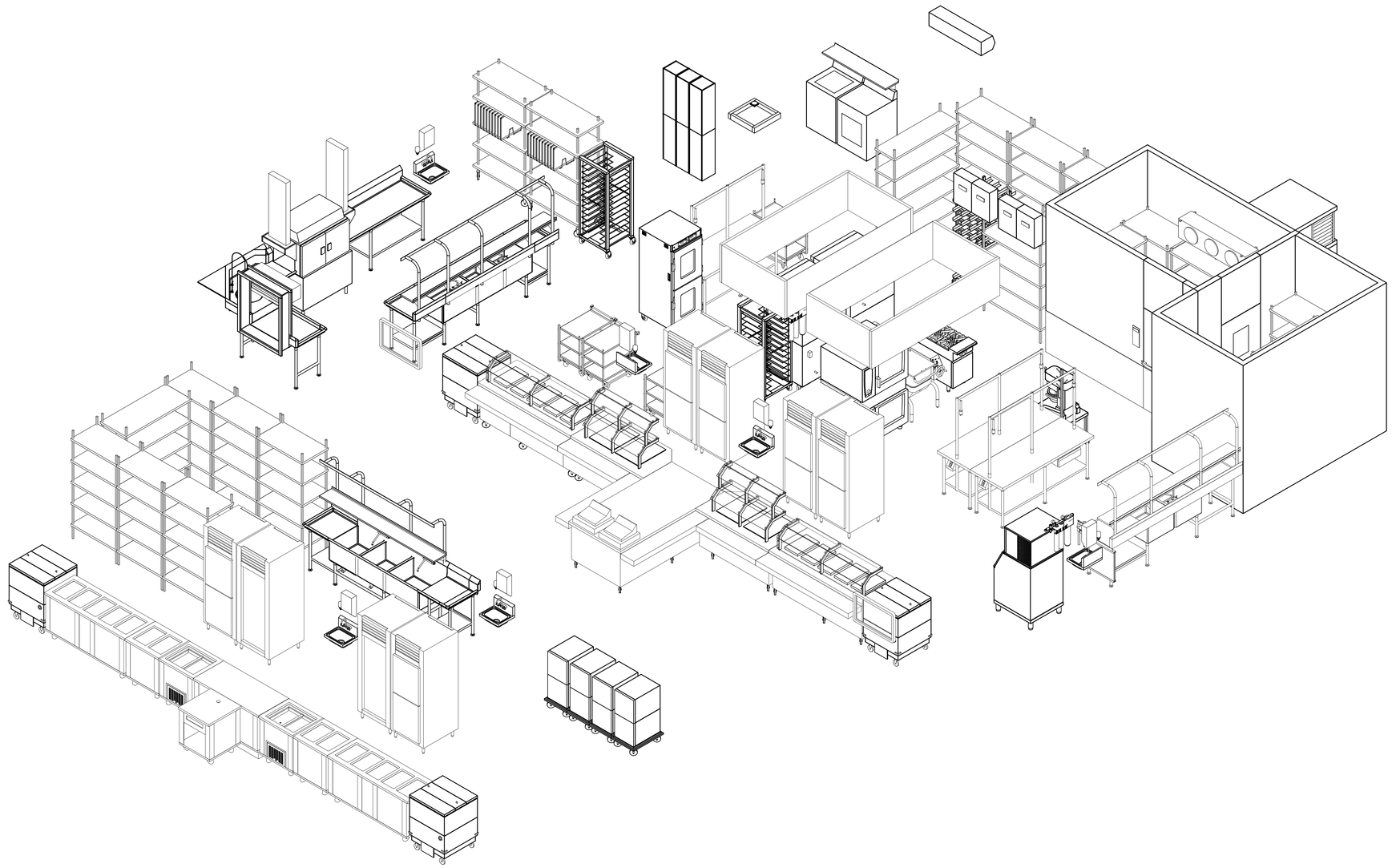

1 FS EQUIPMENT MODEL

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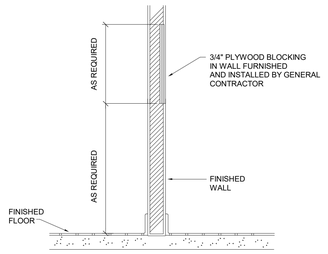
FS EQUIPMENT MODEL

K-QF1.2

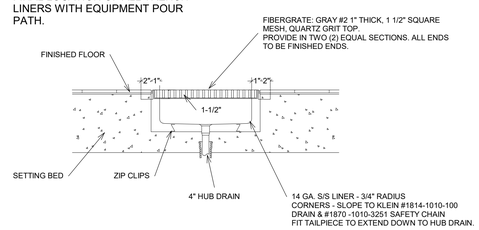
FOOD SERVICE MECHANICAL SCHEDULE						
REFER TO SHEET QF1 FOR MECHANICAL COORDINATION NOTES						
FDP NO.	FDP QTY	FDP TYPE	FDP SIZE	FDP LOC	FDP CFM	FDP S.P.
M101	1	EXHAUST	4" X 16"		400	0.30"
M102	1	EXHAUST	4" X 16"		800	0.30"
M103	1	DRYER VENT	6" DIA.		---	---

NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION AND SIZE OF WALL BLOCKING.

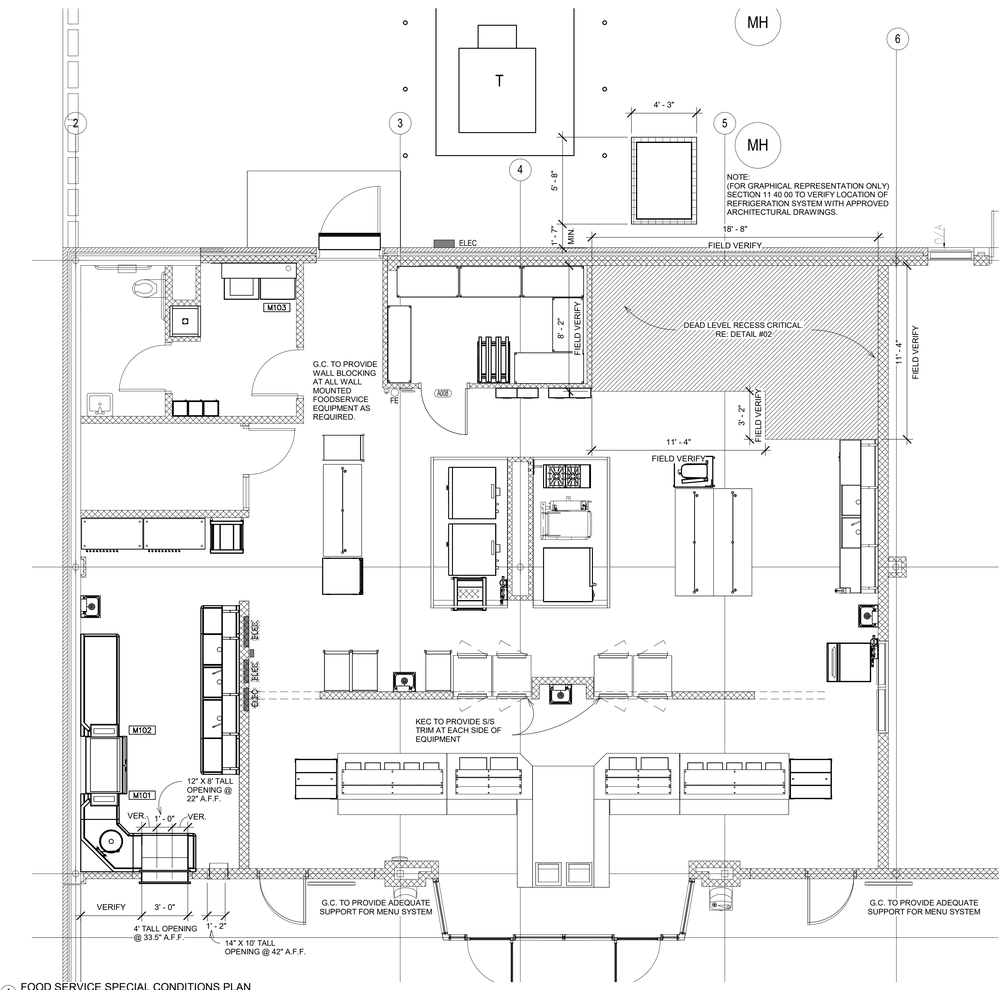


5 WALL BLOCKING DETAIL
NOT TO SCALE

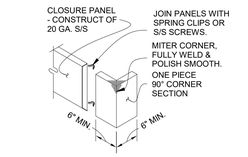
NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION OF ALL TRENCH LINERS WITH EQUIPMENT POUR PATH.



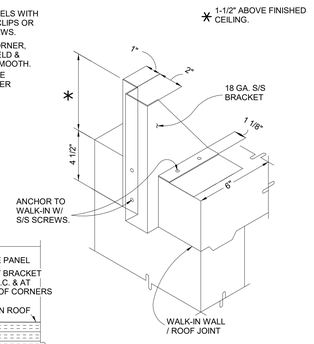
6 TRENCH LINER DETAIL
NOT TO SCALE



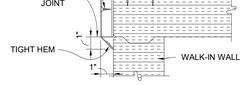
1 FOOD SERVICE SPECIAL CONDITIONS PLAN
1/4" = 1'-0"



CLOSURE PANEL DETAIL

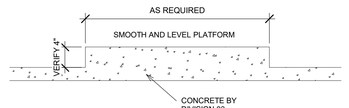


ISOMETRIC - SUPPORT BRACKET



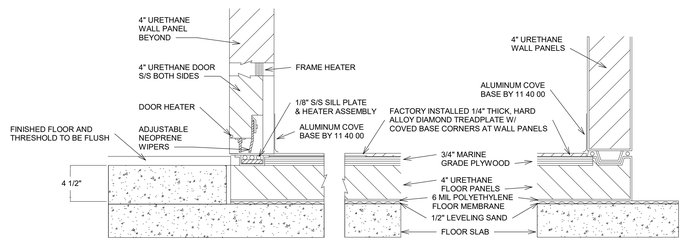
SECTION - CLOSURE PANEL

3 COLD STORAGE ASSEMBLY ENCLOSURE PANEL DETAIL
NOT TO SCALE



COLD STORAGE ASSEMBLY REFRIGERATION SYSTEM GROUND MOUNT 4" PLATFORM DETAIL
4 NOT TO SCALE

SLAB TO BE MODIFIED AS REQUIRED TO ALLOW FOR A 4 1/2" DEPRESSION SLAB. PROVIDE NEW LEVEL CONCRETE PAD FOR COLD STORAGE ASSEMBLY.



WALL SECTION @ EXTERIOR DOOR

2 COLD STORAGE ASSEMBLY 4 1/2" DEPRESSION DETAIL
NOT TO SCALE

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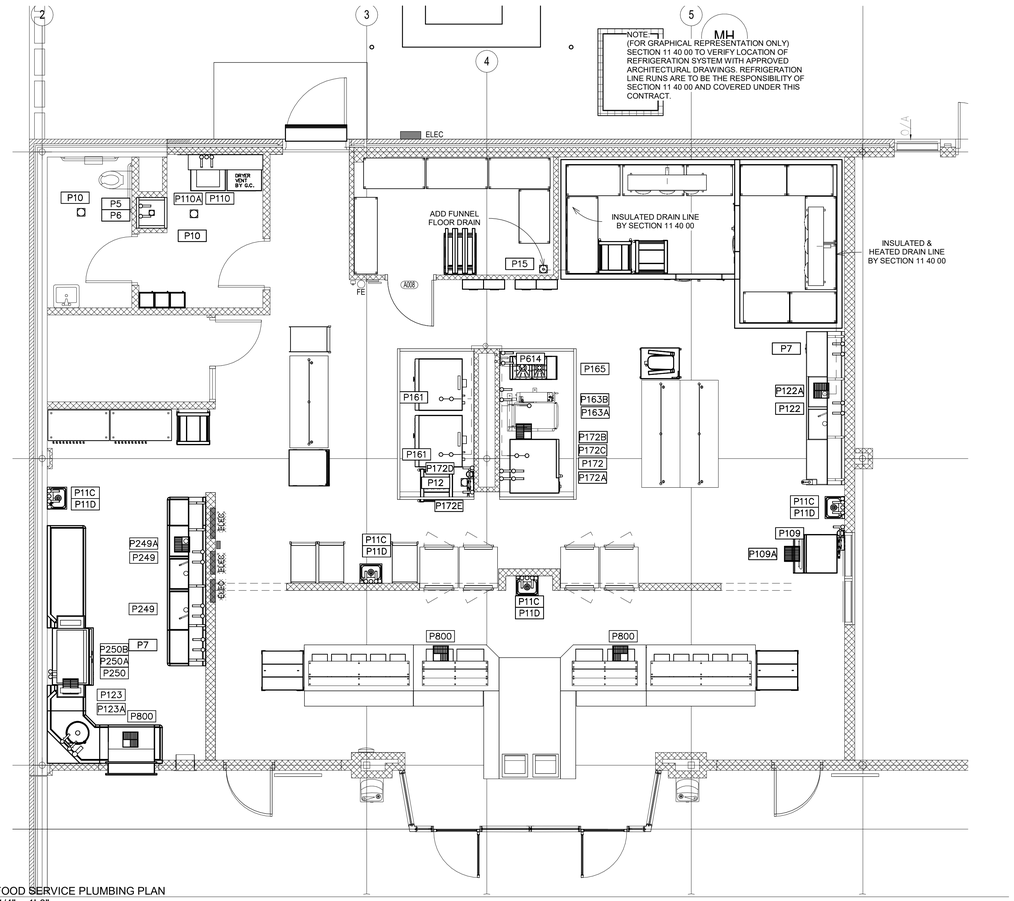
FS SPECIAL CONDITIONS & MECHANICAL PLAN

K-QF1.3

FOOD SERVICE PLUMBING SCHEDULE						
REFER TO SHEET QF1 FOR PLUMBING COORDINATION NOTES						
FDP PNO	FDP PSIZE	FDP PCONN	FDP PSERVICE TO	FDP PLOC	FDP PAFF	FDP PREMARKS
						<varies>
P5	3/4"	H & C WATER	JANITOR SINK	WALL	48"	JANITOR SINK BY PLUMBER
P6	4"	FLOOR DRAIN	JANITOR SINK	FLOOR	VERIFY	JANITOR SINK BY PLUMBER
P7	3/4"	H & C WATER	HOSE BIBB	WALL	18"	BTC
P10	VERIFY	FLOOR DRAIN	GENERAL AREA DRAIN	FLOOR	VERIFY	---
P11C	1/2"	H & C WATER	FAUCET	WALL	18"	FURNISHED & INSTALLED BY DIV. 22
P11D	1 1/2"	DIRECT DRAIN	HAND SINK	WALL	15"	FURNISHED & INSTALLED BY DIV. 22
P12	VERIFY	FLOOR DRAIN	EQUIP. DRAIN	FLOOR	VERIFY	NO SLOPE
P15	4"	FLOOR DRAIN	FUNNEL FLOOR DRAIN	FLOOR	0"	---
P109	3/4"	COLD WATER	WATER/ ICE	WALL	60"	BTC
P109A	12" SQ.	FLOOR SINK	ICE MACHINE	FLOOR	0"	FULL GRATE
P110	3/4"	H & C WATER	CLOTHES WASHER	WALL	48"	BTC; VALVE BOX
P110A	2"	INDIRECT DRAIN	CLOTHES WASHER	WALL	48"	VALVE BOX
P122	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P122A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	3/4 GRATE
P123	3/4"	H & C WATER	FAUCET / DISPOSER	WALL	13"	BTC
P123A	2"	DIRECT DRAIN	DISPOSER	WALL	10"	BTC
P161	(2)3/4"	NATURAL GAS	CONVECTION OVEN	WALL	18"/36"	BTC - 60 MBTU/HR EACH
P163A	3/4"	NATURAL GAS	TILT BRAISING PAN	WALL	18"	BTC - 65 MBTU/HR
P163B	3/4"	H & C WATER	TILT BRAISING PAN	WALL	36"	BTC
P165	1"	NATURAL GAS	RANGE	WALL	18"	BTC - 70 MBTU/HR
P172	(2)3/4"	COLD WATER	COMBI OVEN	WALL	24"/48"	BTC - INTERCONNECT THRU FILTERS
P172A	3/4"	COLD WATER	COMBI OVEN	WALL	48"	BTC
P172B	12"SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE
P172C	(2)3/4"	NATURAL GAS	COMBI OVEN	WALL	18"/36"	BTC - 105 MBTU/HR EACH
P172D	3/4"	COLD WATER	COMBI OVEN	WALL	66"	BTC; INTERCONNECT TO P172
P172E	3/4"	COLD WATER	COMBI OVEN WATER FILTER	WALL	66"	BTC
P249	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P249A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	THREE QUARTER GRATE
P250	12" SQ.	FLOOR SINK	BOOSTER / DISHMACHINE	FLOOR	18"	BTC
P250A	3/4"	HOT WATER	DISHMACHINE	WALL	18"	EXT. THRU W.FILTER TO BOOSTER / DISH MACHINE - 140DEG.MIN.
P250B	3/4"	COLD WATER	DISHMACHINE	WALL	18"	BTC
P614	1/2"	H & C WATER	FILL FAUCET	WALL	42"	BTC
P800	12" SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE



1 FOOD SERVICE PLUMBING PLAN
1/4" = 1'-0"

SECTION 11 40 00 TO PROVIDE LOOSE WITH FOOD SERVICE EQUIPMENT. INSTALLATION BY DIV. 22 & 26.

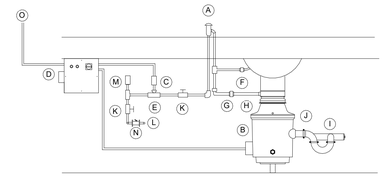
- (A) VACUUM BREAKER
- (B) DISPOSER
- (C) TIME DELAY
- (D) CONTROL PANEL
- (E) SOLENOID VALVE

DIVISION 22 TO PROVIDE AND INSTALL

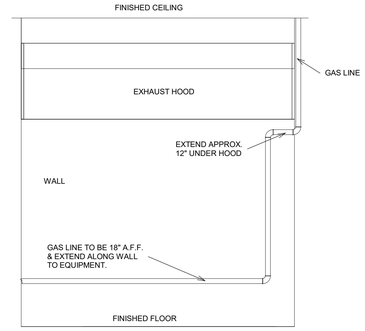
- (F) 1/2" CW INLET
- (G) FLOW CONTROL
- (H) 1/2" CW
- (I) 2" DRAIN LINE WITH P-TRAP & Y ADAPTOR
- (J) 1-1/2" TAILPIECE
- (K) GATE VALVE
- (L) 1/2" CW SUPPLY
- (M) SHOCK STOP
- (N) RPZ BACK FLOW PREVENTOR

DIVISION 26 TO PROVIDE AND INSTALL

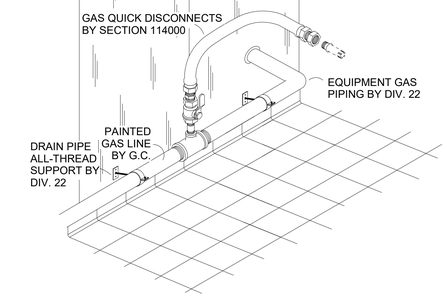
- (O) POWER SUPPLY



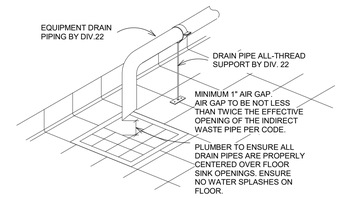
6 DISPOSER WITH VACUUM BREAKER DETAIL
NOT TO SCALE



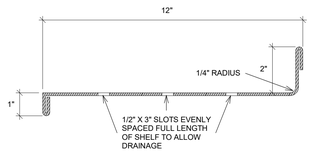
7 EXHAUST HOOD - GAS LINE ROUTING DETAIL
NOT TO SCALE



3 GAS DISCONNECT DETAIL
NOT TO SCALE



5 DRAIN PIPING FASTENER DETAIL
NOT TO SCALE



8 WAREWASH - PERFORATED OVER SHELF DETAIL
NOT TO SCALE

○	HW	HOT WATER	▢	FFD	FUNNEL FLOOR DRAIN
○	CW	COLD WATER	◣	EVC	EXHAUST VENT CONNECTION
○	HTW	180 F HOT WATER	⋈	SVC	SUPPLY VENT CONNECTION
◎		CHILLED WATER	◔	FR	DIRECT-CONNECTED FLUE RISER
●	W	DIRECT WASTE	◍	PS	PIPE SLEEVE
○	IW	INDIRECT WASTE	⊙		COMPRESSED AIR
⊙		GAS SUPPLY	♦		CO2
◕		STEAM SUPPLY		AFF	ABOVE FINISHED FLOOR
⊘	CR	CONDENSATE RETURN		BTC	BRANCH TO CONN. ON EQUIP
◉	DR	DRAIN		DFA	DROP FROM ABOVE
▢	FD	FLOOR DRAIN		CLG	CEILING
▤	FST	FLOOR SINK 3/4 GRATE			
▥	FSH	FLOOR SINK 3/4 GRATE			

2 PLUMBING SYMBOLS
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL

FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
FCS
48834119
PROFESSIONAL MEMBER
7/15/2025
THIS ITEM IS DIGITALLY SIGNED AND SEALED BY MELISSA MOORE, FCSI NO: 48834119 ON: 07/18/2025

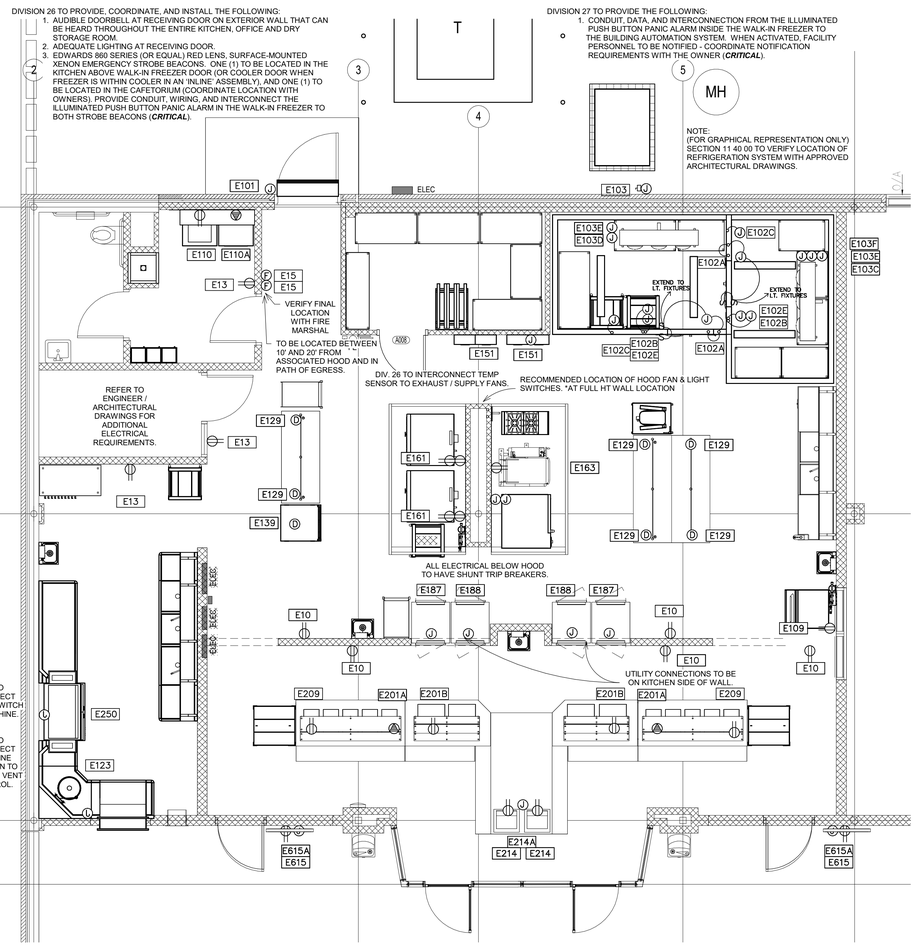
ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS PLUMBING PLAN

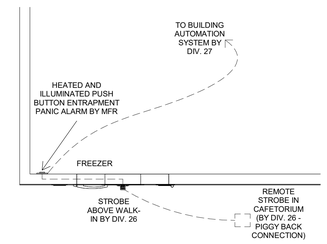
K-QF1.4

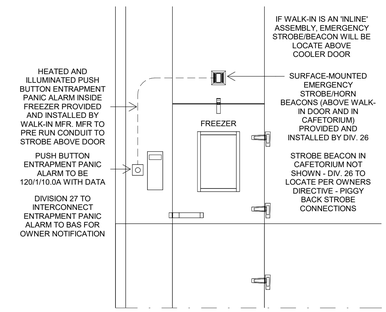
FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E10	DR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E13	WPR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E15	JB	---	---	---	FIRE PROT. SYSTEM	WALL	48"	RECESSED EMPTY CONDUIT FOR FIRE PULL
E101	JB	5.1A	120	1	AIR SCREEN	WALL	82"	BTC; MAGNETIC REED SWITCH ON DOOR JAMB & DOOR
E102A	JB	16.0A	120	1	DOOR HEATER/LIGHTS	CLG	DFA	BTC
E102B	JB	5.0A	120	1	TEMP. ALARM	CLG	DFA	BTC
E102C	JB	5.0A	120	1	PRESSURE RELIEF PORT	CLG	DFA	BTC
E102E	JB	10.0A	120	1	PANIC ALARM BUTTON	CLG	DFA	BTC-INTERCONNECT TO STROBE LIGHT/HORN ABOVE FREEZER DOOR AND IN CAFETORIUM
E103	JB/DS	21.9A	208	3	REFRIGERATION SYSTEM	VERIFY	VERIFY	BTC
E103C	JB	9.1A	208	1	FREEZER COIL	CLG	DFA	BTC
E103D	JB	1.8A	120	1	COOLER COIL	CLG	DFA	BTC
E103E	JB	---	---	---	DATA CONNECTION	CLG	DFA	BTC; RUN TO NEAREST IDF / MDF ROOM
E103F	JB	16.0A	120	1	DRAIN LINE HEATER	CLG	DFA	BTC; DEDICATED CIRCUIT
E109	DR	11.9A	120	1	ICE MACHINE	WALL	60"	---
E110	DR	16.0A	120	1	CLOTHES WASHER	WALL	48"	--
E110A	SR	30.0A	208	1	CLOTHES DRYER	WALL	48"	VERIFY NEMA PLUG RECEPTACLE
E123	JB	3.0HP	208	3	DISPOSER	WALL	24"	BTC; CONNECT THRU C.P. TO DISPOSER

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E129	DCR	16.0A	120	1	TABLE RECEPTACLE	CLG	84"	TWISTLOCK PLUG & RECEPTACLE
E139	DCR	15.0A	120	1	INSUL. MOBILE PROOFER	CEILING	DFA	--
E151	JB	1.0A	120	1	FIRE PROT. SYSTEM	CLG	DFA	BTC
E161	(2)DR	6.0A EA.	120	1	CONVECTION OVEN	WALL	24"/48"	SHUNT TRIP BREAKER
E163	DR	5.0A	120	1	TILT BRAISING PAN	WALL	24"	SHUNT TRIP BREAKER
E187	JB	15.5A	120/208	1	HEATED CABINET	WALL	96"	BTC; MOUNT ON KITCHEN SIDE
E188	JB	7.2A	120	1	REFRIGERATOR	WALL	96"	BTC; MOUNT ON KITCHEN SIDE-OMIT PLUG, UNIT TO BE HARDWIRED
E201A	PMR	28.0A	208	1	HOT FOOD COUNTER	FLOOR	4.5"	BTC
E201B	PMR	16.0A	120	1	COLD FOOD COUNTER	FLR	4.5"	---
E209	PMR	8.0A	120	1	DROP FRONT MILK COOLER-8 CASE	FLR	4.5"	---
E214	PMR	16.0A	120	1	CASH REGISTER	FLR	4.5"	DEDICATED CIRCUIT
E214A	CS	---	---	---	POS	FLOOR	6"	BTC; CONDUIT W/DATA LINE TO RUN TO MANAGER'S OFFICE OR IDF ROOM-VERIFY
E250	JB/DS-JB	51.7A	480	3	DISHMACHINE	WALL	66"	BTC; EXTEND FROM JB/DS AT NEAREST WALL
E615	DR	5.0A	120	1	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE DCO AT VIDEO LOCATION
E615A	JB	---	---	---	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE JB AT DATA LOCATION

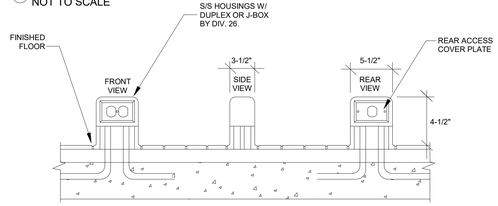


1 FOOD SERVICE ELECTRICAL PLAN
1/4" = 1'-0"

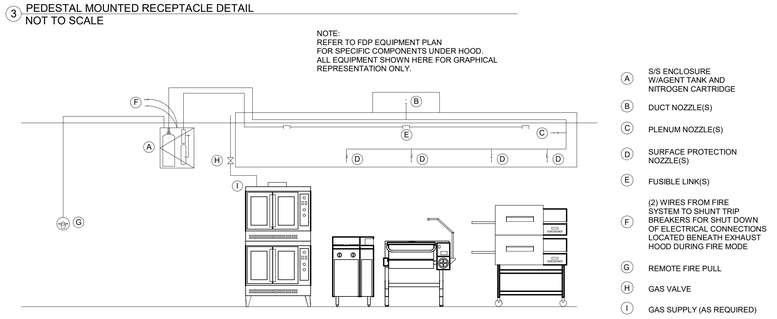




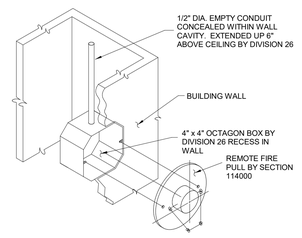
6 COLD STORAGE ASSEMBLY ENTRAPMENT PANIC ALARM DETAIL
NOT TO SCALE



3 PEDESTAL MOUNTED RECEPTACLE DETAIL
NOT TO SCALE



4 FIRE PROTECTION SYSTEM TYPICAL DETAIL
NOT TO SCALE



5 FIRE PROTECTION SYSTEM RECESSED FIRE PULL DETAIL
NOT TO SCALE

	SCR	CONDUIT STUB BTC ON RECEPT FURNISH WITH EQUIPMENT		CC	CONDUIT FOR COMPUTER CABLES
•	CS	CONDUIT STUB UP/OUT FOR DIRECT CONNECTION		BTC	BRANCH TO CONNECTION ON EQUIPMENT
	DR	DUPLEX RECEPTACLE		WPR	WATERPROOF RECEPTACLE (SPRING COVER)
	SR	SINGLE PURPOSE RECEPTACLE-1PH		FPB	FIRE PROTECTION BUZZER
	SR	SINGLE PURPOSE RECPTACLE-3PH		BSC	BEVERAGE SYSTEM CONDUIT
	FR	FLUSH FLOOR RECEPTACLE		DFA	DROP FROM ABOVE
	PMR	PEDESTAL MOUNTED RECEPTACLE		AFF	ABOVE FINISH FLOOR
	DCR	DROP CORD RECEPTACLE		CS/JB	JUNCTION BOX ON PEDESTAL
	JB	JUNCTION BOX ON CEILING		SW	SWITCH
	JB	JUNCTION BOX IN WALL		D	DATA
	JB/DS	JUNCTION BOX WITH DISCONNECT BY DIV.26			

2 ELECTRICAL SYMBOLS
NOT TO SCALE

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MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO: 48854119 ON: 07/18/2025

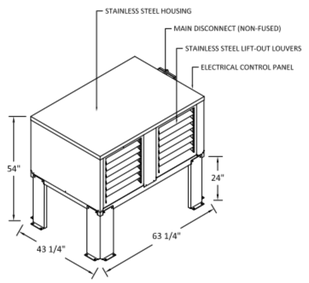
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FS ELECTRICAL PLAN

K-QF1.5

MODEL NO. ZS1-02Z-CT3-EST OUTDOOR AIR COOLED REFRIGERATION SYSTEM
ITEM NO. 103



NOTE:
- CRANKCASE HEATERS
- FAN CYCLING SWITCHES
- 24" STANDS & STAINLESS STEEL SKIRTING TO BE SHIPPED LOOSE FOR FIELD INSTALLATION
- DOOR SENSOR FOR EACH WALK-IN
- REFRIGERANT DETECTION SYSTEM
- CHECK VALVE (SHIPPED LOOSE)
- SHUT OFF VALVE (SHIPPED LOOSE)

RACK WEIGHT: 600 LBS.

ENGINEERING SUMMARY

POWER SUPPLY: 208-230/60/3
CONNECTED LOAD: 21.8 AMPS

MOPD: 30 AMP
MINIMUM CIRCUIT AMPACITY: 24.1

SYSTEM	FIXTURES ITEM #	DESCRIPTION	TEMP °F FIXT.	TEMP °F SUCT.	REQ'D FIXTURE BTU/H	REFRIG. R-	CONDENSING UNIT COMPRESSOR MODEL NO.	RATING @ 60 HZ RLA	V	PH	BTU CAP @ AMB °F 110	TYPE	REC. CAP. (lbs)	CONDENSER	EVAPORATOR COILS ITEM #	MODEL NO.	QTY	FAN MOTORS @ 60 HZ RLA	V	PH	HEATERS @ 60 HZ RLA	V	PH	DEFR. TYPE	DEFROST CONTROLLER TYPE	CONTROLLER QTY	ACCESSORIES TSTAT	SOL. VALVE	EXP. VLV.	REFRIGERANT LINE SIZES (IN) SUCT.	SUCT. LINE RISER	LIQUID	LINE RUN (FT)	TYPE	TOTAL SYSTEM LOAD
A	102	WALK-IN COOLER	35	25	8506	454A	YS11KAE	11.2	208	3	11700	Z	14.0	L1R	-	BEL0095	1	1.8	115	1				O.C.	ECOSMART	1	F	F	EF	5/8	5/8	3/8	100	M	11.2
B	102	WALK-IN FREEZER	-10	-20	7607	454A	YF07KSE	10.6	208	3	7610	Z	14.0	L1R	-	BEL0080	1	1.0	208	1	9.1	208	1	ELEC	ECOSMART	1	F	F	EF	7/8	7/8	3/8	100	M	10.6

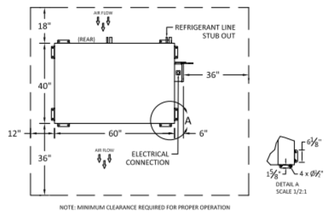
ALL EVAPORATOR COILS WILL REQUIRE A HOUSE POWER SUPPLY

c UL us LISTED

NOTE:
IT IS THE INSTALLING CONTRACTORS RESPONSIBILITY TO FOLLOW ALL APPLICABLE CODES AND CURRENT REFRIGERATION INDUSTRY STANDARDS AND PRACTICES WHEN DETERMINING LINE SIZES, AND INSTALLING AND STARTING UP RDT EQUIPMENT.

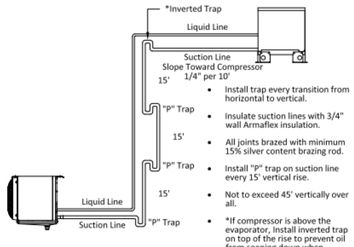
COMPRESSOR TYPE	DEFROST TYPE	LINE TYPE	EVAPORATOR ACCESSORIES
Z SCROLL	O.C. OFF CYCLE ELEC ELECTRIC	M MAIN - UP TO 100'	EF EEV FACTORY EQUIPPED ON EVAP F FACTORY EQUIPPED ON EVAP

PLANVIEW/ CLEARANCE REQUIREMENTS



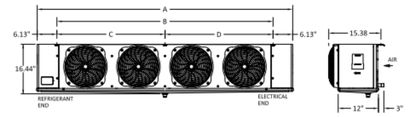
NOTE: MINIMUM CLEARANCE REQUIRED FOR PROPER OPERATION.
NOTE: ROOF CURB OR GROUND PAD CAN BE SAME SIZE AS OUTDOOR UNIT

SUCTION LINE VERTICAL RISE DETAIL



- Install trap every transition from horizontal to vertical.
- Insulate suction lines with 3/4" wall Armaflex insulation.
- All joints brazed with minimum 15% silver content brazing rod.
- Install "P" trap on suction line every 15' vertical rise.
- Not to exceed 45' vertically over all.
- *If compressor is above the evaporator, Install inverted trap on top of the rise to prevent oil from seeping down when fixture(s) is turned off.

EVAPORATOR DETAILS - MODEL BEL



AIR DEFROST Size	DIMENSIONS A (Inches)	B (Inches)	C (Inches)	D (Inches)	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. Lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps 115V	208V
095	45-1/2	33-1/4	-	-	1/2 OD	5/8 OD	3/4 MPT	51	2	1.8	1.0

ELECTRIC DEFROST	DIMENSIONS A (Inches)	B (Inches)	C (Inches)	D (Inches)	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. Lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps	Heater Amps as wired for 208-230/60/1	208-230/60/3	460/60/1
080	45-1/2	33-1/4	-	-	1/2 OD	5/8 OD	3/4 MPT	54	2	1.0	9.1	5.7	4.6

ZS SERIES ENGINEERING SPECIFICATIONS

Multi compressor, outdoor, air cooled. The refrigeration package shall be a pre-engineered and factory-assembled unit, trade name "ZS", as manufactured by Refrigeration Design Technologies, 1808 FM Road 66, P.O. Box 622, Waxahachie, Texas 75168. Phone: (972) 937-3215; Fax: (972) 937-0970.

1. Air-Cooled Refrigeration System
The RDT UL Listed "Air-Cooled" Refrigeration system shall be housed in a weather-protected compact powder coated steel frame. The entire housing shall be brushed stainless steel. The unit shall include an air-cooled aluminum fin copper tube condenser designed to operate at 15 degrees TD. The exterior housing shall feature stainless steel one piece louvers. Lifting points shall be integrated in the framing component. Condenser fan motors shall be mounted within the enclosure. The condenser intake surface shall be protected with stainless steel expanded metal guard to protect against vandalism and hail damage.

Each unit shall be equipped with a ball-bearing fan motor, suction filter, sight glass, liquid filter/drier, liquid line inlet and outlet valve, defrost cycle and high pressure super-hose connections. Each unit shall be equipped with fan cycling controls and/or head pressure regulator where required for low ambient conditions.

Condensing unit shall contain scroll, hermetic, semi-hermetic, and/or discus type compressor(s) assembled to operate with the refrigerant specified for both medium and low temperature applications.

2. Evaporator Coils
A. Evaporator coils shall be direct expansion type fabricated of copper tubes with aluminum fins.
B. All evaporator coils shall be provided with solenoid valve, thermostatic or electronic expansion valve and thermostat.

3. Pre-Piping
All refrigerant lines shall be extended to outside of the housing in a neat and orderly manner. All tubing shall be securely supported and anchored with non-corrosive coated clamps.

All joints must be brazed, not soldered.

All piping and controls shall be factory pressure-tested with dry nitrogen.

4. Control Panel
The package shall have a factory-mounted and pre-wired control panel, with main disconnect (non fused) where required, circuit breakers, contactors wired for single point power connection.

General Information
Contractors shall verify all dimensions onsite and coordinate with other trades.

General contractor shall prepare the platform, curbed openings and weatherproofing the unit after installation.

Refrigeration Contractor
All copper tubing to be refrigerant grade. A.C.R. or type "L".

Brazing should be used for all refrigerant piping. Silver solder or soft solder is not acceptable.

All piping to be pressure tested with nitrogen at 300 psi. After the condensing unit and coil have been connected the balance of the system shall be leak tested with the valves open at 200 psi.

The complete system shall be evacuated with a vacuum pump. Each unit should be charged tested and adjusted to assure operation.

Contractor should provide and install the drain-line heater in freezer. Heater shall be connected by electrical contractor. Seal all penetrations through the walk-in units with foam.

Electrical Contractor
Electrical contractor to provide power for refrigeration package and connect control and defrost system as called for in the wiring diagram.

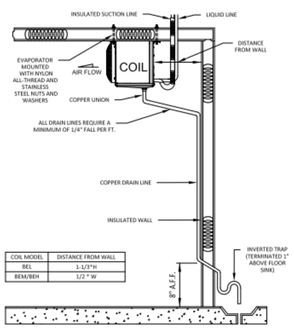
Electrical contractor to connect drain-line heater in the freezer.

All electrical wiring and installation shall be in accordance with the wiring diagram and local codes. Seal all penetrations through the walk-in units with foam.

Plumbing Contractor
Plumbing contractor to provide copper drain lines for walk-in refrigerator and freezer, pitched 1/4" per foot of run. Trap drain-line outside of refrigerated space to avoid entrance of warm, moist air.

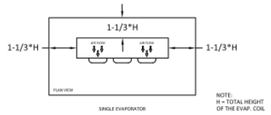
All plumbing installation shall be in accordance with local codes.

EVAPORATOR MOUNTING DETAIL (TYPICAL)



COIL MODEL	DISTANCE FROM WALL
BEL	1-1/3"H
BEM/BEH	1/2 " W

EVAPORATOR PLACEMENT & CLEARANCE REQUIREMENTS LOW PROFILE EVAPORATOR COILS (I.E. - BEL)



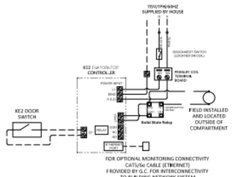
SINGLE EVAPORATOR

NOTE:
H = TOTAL HEIGHT OF THE EVAP. COIL

WIRING DIAGRAM - ECOSMART - AKEA1AE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN COOLER WITH ONE COIL 115/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW.

SYS	DESCRIPTION	VOLTAGE
A	WALK-IN COOLER	115/1

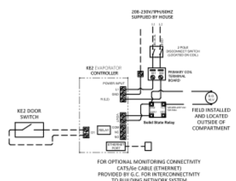


FACTORY WIRING ———
FIELD WIRING - - - - -

WIRING DIAGRAM - ECOSMART - AKEB1EE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN FREEZER WITH ONE COIL 208-230/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW.

SYS	DESCRIPTION	VOLTAGE
B	WALK-IN FREEZER	208/1



FACTORY WIRING ———
FIELD WIRING - - - - -

APPROVAL STATUS

THIS DRAWING REPRESENTS OUR UNDERSTANDING OF THE SPECIFICATIONS. PLEASE REVIEW IT CAREFULLY FOR ACCURACY. CLEARLY AND IN DETAIL NOTE CHANGES REQUIRED.

MARK APPROPRIATE BOX, SIGN, AND DATE BELOW.

- ☐ APPROVED FOR FABRICATION NO CHANGES
- ☐ APPROVED FOR FABRICATION WITH CHANGES NOTED
- ☐ REVISE AND RE-SUBMIT DRAWING

BY: _____ DATE: _____

NOTICE

THIS DRAWING BEING AN INSTRUMENT OF SERVICE IS AND WILL REMAIN PROPERTY OF REFRIGERATION DESIGN TECHNOLOGIES AND CANNOT BE USED WITHOUT WRITTEN AUTHORIZATION.

No.	Revision/Issue	Date
0	ORIGINAL ISSUE	10-3-24
1	CHANGED TO A2L EQUIPMENT	7-16-25

REFRIGERATION DESIGN TECHNOLOGIES
1808 FM Road 66 / P.O. Box 622
Waxahachie, Texas
(800) 736-9518
www.rdtonline.com

Consultant:
Foodservice Design Professionals, LLC
The Woodlands, TX

Dealer
-
-

Hunters Glen Elementary School
Fort Bend ISD

Project No: 31086
Designed By: E. Milligan
Drawn By: A. Rodriguez
Sheet 1.1 of sheets

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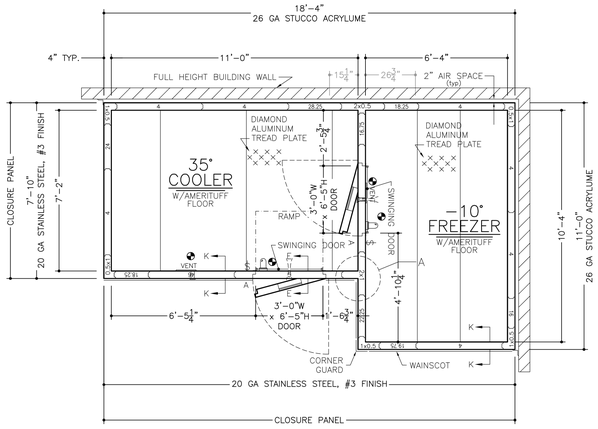
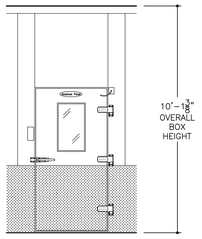
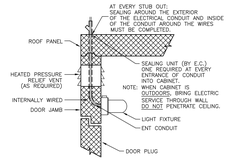
K-QF1.6

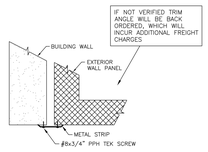




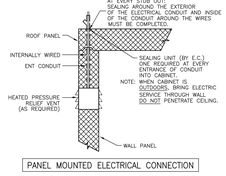
COOLER DOOR ELEVATION



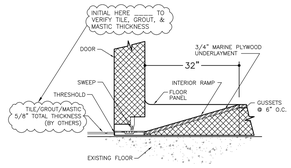
DOOR ELECTRICAL CONNECTION



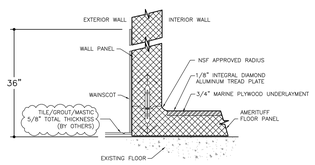
TRIM ANGLE
DETAIL #3



PANEL MOUNTED ELECTRICAL CONNECTION

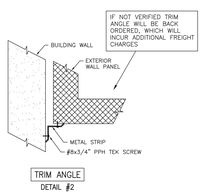


SECTION E – E

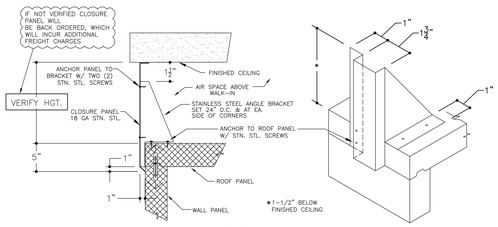


SECTION K – K

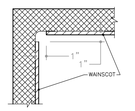
American Panel's walk–in floor panels with AmeriTuff structural support are designed to withstand uniformly distributed stationary loads of 15,000 lbs. per square foot. American Panel's warranty does not cover damage caused by pallet jacks, forklifts or any other form of heavy–duty rolling traffic. A concrete wearing floor must be installed on top of the AmeriTuff walk–in floor panels for those rolling applications.



TRIM ANGLE
DETAIL #2



CLOSURE PANEL ABOVE
WALK–IN DETAIL #4E



DETAIL "A"
WAINSCOT AT
INTERIOR CORNER

INSULATION R–VALUES		
PANEL TYPE	COOLER	FREEZER
4" WALLS, ROOFS	R–29	R–32
5" WALLS, ROOFS	R–36	R–40
FLOORS	R–25	R–28
DOORS	R–32	

COOLER DOOR	
DOOR FRAME KWH/DAY	2.424

FREEZER DOOR	
DOOR FRAME KWH/DAY	4.392

WALK-IN PANEL R-8967		
BUILDING UNITS	R-8967	37X12
USA		
SURFACE BURNING CHARACTERISTICS		
MATERIAL DETAILS	"FLAME SPREAD"	"SMOKE DEVELOPED"
ALUMINUM PANELS, PAINTED OR UNPAINTED, 5" OR LESS	15	350
"GALVANIZED STEEL OR STAINLESS STEEL PANELS, PAINTED OR UNPAINTED, 5" OR LESS"	10	400 TO 500
CORE MATERIAL, 6" THICK	20	250

AMERICAN PANEL WALK–IN COOLERS AND FREEZERS COMPLY WITH THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC), SECTION C403.11

THIS AMERICAN PANEL WALK–IN WILL BE MANUFACTURED TO UL & NSF REQUIREMENTS. AMERICAN PANEL ACCEPTS NO LIABILITY FOR LOCAL CODE REQUIREMENTS OF WHICH AMERICAN PANEL HAS NOT BEEN MADE AWARE OF IN WRITING PRIOR TO FABRICATION.

~SPECIFICATIONS~

BOX HEIGHT: FREEZER – 10'–2" OVERALL (7'–6 1/4" INTERIOR)
COOLER – 10'–2" OVERALL (7'–6 1/4" INTERIOR)

CONSTRUCTION: FOAMED IN PLACE
NSF LISTED, STANDARD NO. 7

INSULATION: 4" URETHANE, FINISHED PANEL
UL CLASSIFIED FLAME SPREAD 20
CORE SMOKE DEVELOPED 250

INSTALLATION: INDOOR

FLOOR: (SEE DETAIL)
FREEZER – STANDARD W/AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE, 3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)
COOLER – STANDARD W/36" DEEP INTERIOR RAMP & AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE, 3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)

DOOR HARDWARE & ACCESSORIES: (EACH DOOR)
SMOOTH POLISHED DOOR HARDWARE
POWER TO BE STUBBED OUT CEILING PANEL
DRY CONTACT LEADS TO BE STUBBED OUT CEILING PANEL IN A SEPARATE STUB OUT
DEADBOLT HANDLE W/KEYED CYLINDER LOCK, PADLOCK
PROVISION & QUARTER TURN INSIDE RELEASE (EXTERIOR DOOR ONLY)
1/8" STAINLESS STEEL THRESHOLD COVER PLATE
14 GA STAINLESS STEEL SUB THRESHOLD
FRAME HEATER WIRE
HYDRAULIC DOOR CLOSER
IC+ WALK–IN DOOR CONTROLLER AND ALARM SYSTEM INCLUDING:
INTEGRATED LIGHT SWITCH WITH AUTOMATIC LIGHT OFF AND 3–WAY & 4–WAY CAPABILITY
TEMPERATURE MONITOR AND LOGGER WITH HIGH TEMP. AND LOW TEMP. VISUAL AND AUDIO ALARM
F OR C TEMPERATURE SELECTION
INTEGRATED DRY CONTACT FOR ALARM SIGNALING & POWER FAILURE (1A @ 24VAC, 1A @ 30VDC)
DOOR AND WINDOW HEATER CONTROL (WHEN SO EQUIPPED)
HACCP PREVIEW VIA ONBOARD LCD SCREEN
HACCP DOWNLOAD VIA USB
WIFI CONNECTIVITY (INTERNET ENABLED WIFI NETWORK NEEDED)
BATTERY BACKUP
TEMPERATURE ALARM NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES
POWER FAILURE NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES
(FOR THIS FEATURE TO WORK THE LOCAL WIFI NETWORK MUST BE POWER PROTECTED AND WORKING AT THE TIME OF POWER FAILURE EVENT)
AUTOMATIC AND ON DEMAND TRANSMISSION OF HACCP DATA VIA EMAIL
ADAPTIVE SETTINGS
MOMENTARY BACK–TO–BACK LIGHT SWITCH W/PILOT
25' AIR TEMPERATURE PROBE
25' SECOND PROBE (EXTENDED) FOR MONITORING THE TEMPERATURE AT A SECOND LOCATION OR FOR MONITORING A SECOND CABINET
DOOR SWITCH TO ENABLE DOOR AJAR ALARM, DOOR AJAR NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES, AND AUTOMATIC LIGHTS ON WHEN DOOR OPENS
PANIC ALARM WITH ILLUMINATED PANIC BUTTON, ALARM BUZZER WITH LED, & NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES (1–COOLER, 2–FREEZER)
KASON SCREW–IN VAPOR PROOF LIGHT FIXTURE
W/8.5 WATT SYLVANIA LED BULB & GLOBE
CCI CLEAR VU SWINGING DOOR
3 – KASON #1346 ADJUSTABLE SPRING LOADED HINGES
HEATED VISION WINDOW (14" x 24")
1/8" DIAMOND ALUMINUM TREAD PLATE KICKPLATES @ 36" HIGH I/S & O/S DOOR & FRAME
KASON 1826 INTELLO–VENT WITH LIGHTS (FREEZER DOOR ONLY) – FIELD INTERCONNECTION REQUIRED

PANEL MOUNTED ACCESSORIES:
1 – KASON 1826 INTELLO–VENT WITH LIGHTS – FIELD INTERCONNECTION REQUIRED (FOAMED IN PANEL – PER PLAN) (COOLER ONLY)

ACCESSORIES: (SHIPPED LOOSE)
2 – PCS. TRIM ANGLE – 18 GA STAINLESS STEEL, #3 FINISH
CLOSURE PANEL TO AN EXISTING CEILING (PER PLAN) — **VERIFY LENGTH**
18 GA STAINLESS STEEL, #3 FINISH
2 – 48" (1810LC) LED LIGHT FIXTURE(S) @ 40W EACH (LIGHTS TO BE INSTALLED PERPENDICULAR TO COILS)
1/8" DIAMOND ALUMINUM TREAD PLATE WAINSCOT @ 36" HIGH (EXPOSED EXTERIOR ONLY)
1 – 1/8" DIAMOND ALUMINUM TREAD PLATE CORNER GUARD(S) @ 36" HIGH
ALUMINUM COVED BASE MOLDING (COMPLETE INTERIOR ONLY)
ROOF SUPPORT ANGLE W/BEAUTY TRIM
2 – BAKELITE LABEL(S) (BLACK) ("FREEZER", "COOLER")
1 – BAKELITE LABEL (YELLOW W/BLACK LETTERING) ("VACUUM PRESSURE RELIEF")
6 MIL POLYETHYLENE VAPOR BARRIER
3 – BELL BOX(ES) & COVER PLATE(S)
2 – DOOR STOP(S)
2 – EDWARDS 960 SERIES STROBE BEACONS
1 – EMERGENCY PRESSURE RELEASE

METAL FINISHES:
INTERIOR & EXTERIOR DOOR & FRAME – 18 GA STAINLESS STEEL, #3 FINISH
INTERIOR WALLS & CEILING – WHITE .040 STUCCO ALUMINUM
EXPOSED EXTERIOR – 20 GA STAINLESS STEEL, #3 FINISH
UNEXPOSED EXTERIOR – 26 GA STUCCO ACRYLUME
EXTERIOR FLOOR – 26 GA STUCCO ACRYLUME
EXTERIOR ROOF – 26 GA STUCCO ACRYLUME
INTERIOR FLOOR – AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE, 3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)

REFRIGERATION: BY OTHERS

NOTE: THE LARGEST DOOR PANEL ON THIS JOB IS 57.5" x 114.5".
NOTE: THE LARGEST ROOF/FLOOR PANEL ON THIS JOB IS 46.5" x 129".
CUSTOMER IS TO VERIFY THAT THIS PANEL SIZE WILL NOT CONFLICT WITH ANY JOB SITE RESTRICTIONS.
NOTE: CUSTOMER IS TO VERIFY ALL DIMENSIONS, SECTIONS, DETAILS AND SPECIFICATIONS
NOTE: MAXIMUM LIGHT CIRCUIT LOAD IS 1200W 120VAC TUNGSTEN, 5A 120VAC ELECTRONIC BALLAST. FOR HIGHER LOADS ADDITIONAL LIGHT FIXTURES MUST BE CONTROLLED VIA RELAY (BY OTHERS).

ELECTRICAL DATA
⚽ = POINT OF ELECTRICAL CONNECTIONS.
WALK–IN DOORS: 115v/1ø – 350w*
PANEL MOUNTED ACC. 115v/1ø – 23w (EACH VENT)

*NOTE: ADD WATTAGE FOR EACH ADDITIONAL LIGHT FIXTURE IN ACCESSORIES.

ITEM #102 WALK–IN COOLER/FREEZER

☐ APPROVED SIGNATURE _____
☐ APPROVED AS NOTED PRINT NAME _____
☐ REVISE & RESUBMIT DATE _____

1) Please verify that door swing and location are correct.
2) If this walk–in is to be installed in a depression, or quarry tile is to be applied to the interior, depression depths or tile thickness must be specified to insure proper door height.
3) All site preparation, floor or slab construction, plumbing, electrical connections (including control wiring) by others.
4) ⚽ Electrical: 115–60–1 required above latch side of each door, through ceiling, to operate frame heater and light.
5) Special note to General Contractor and his Sub Contractor for quarry tile or concrete wearing floors: the sheet metal panel facings may be susceptible to staining due to excessive moisture created by hydration of concrete type materials. Therefore, it is absolutely necessary that each room be properly ventilated. Also note that special precautions must be taken when using muriatic acid due to effects hydrochloric acid fumes have on aluminum and stainless steel.
6) This drawing and information contained herein are the exclusive property of American Panel Corporation. It shall be returned to American Panel Corporation upon demand and shall not be reproduced in whole or part, disclosed to anyone else, or used without the written consent of American Panel Corporation.

REV.	DATE	DESCRIPTION	DR	WQ
A	1/22/25	REVISED LAYOUT, SPECS; ADDED DETAIL	DH	WQ

American Panel — AMERICAN PANEL CORPORATION, 5800 S.E. 78th St. Ocala, Florida 34472, Ph. (352) 245–7055 Fax (352) 245–6726

CUSTOMER: FOODSERVICE DESIGN PROFESSIONALS
PROJECT: HUNTERS GLEN ES–FBSD – FORT BEND, TX
DATE: 10/09/24 | DRAWN BY: JG/TB | P.O.#:
SCALE: 3/8"=1'–0" | PROPOSAL#: PD213275 | JOB#: | SHEET: 1 of 1

ALL DIMENSIONS MUST BE FIELD VERIFIED PRIOR TO FABRICATION AND INSTALLATION

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

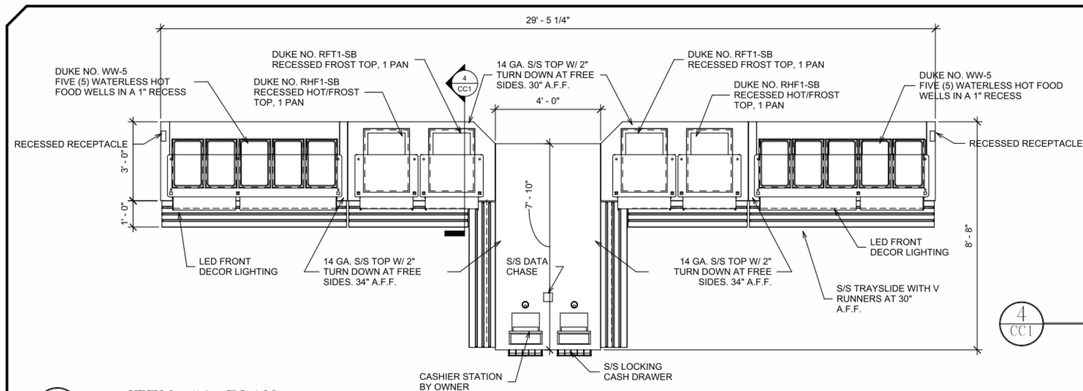
FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL — MELISSA MOORE — FCSI 48854119 — PROFESSIONAL MEMBER
Melissa Moore
7/15/2025 APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07182025

ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

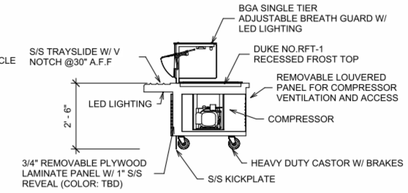
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS WALK-INS

K-QF1.7



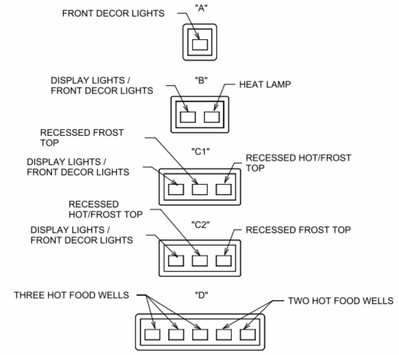
1 CC1 ITEM #1 PLAN

SCALE: 1/2" = 1'-0"



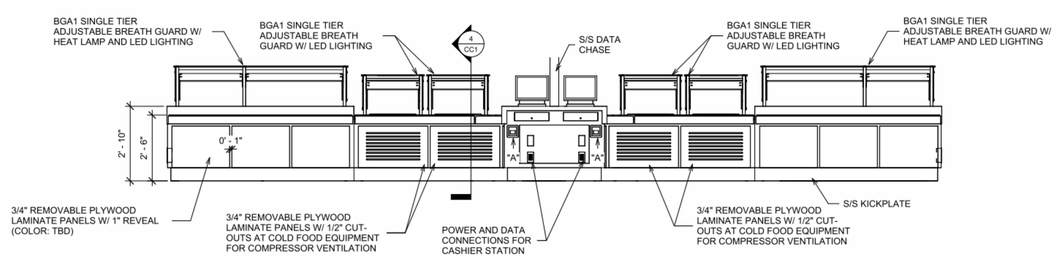
4 CC1 ITEM #1 SECTION VIEW

SCALE: 1/2" = 1'-0"



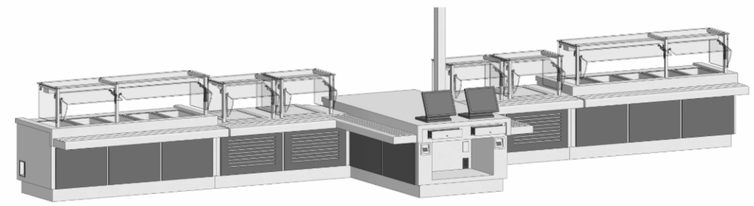
8 CC1 ITEM #1 CONTROL PANEL LAYOUT

SCALE: 1 1/2" = 1'-0"



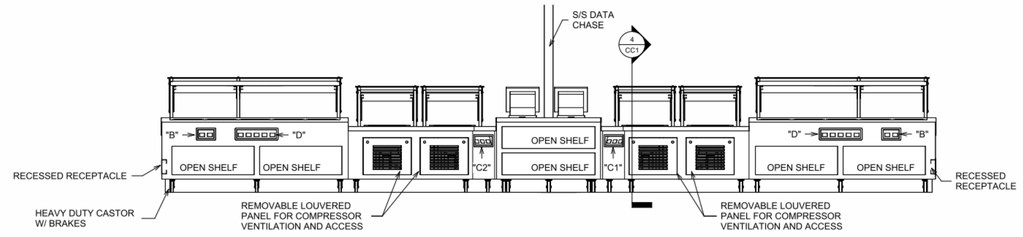
2 CC1 ITEM #1 FRONT ELEVATION

SCALE: 1/2" = 1'-0"



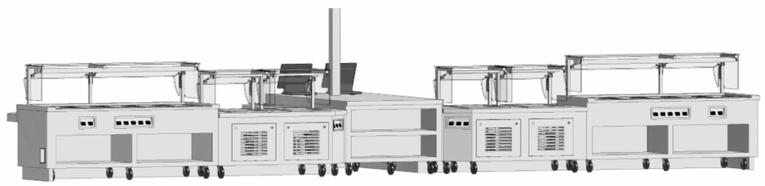
11 CC1 ITEM #1 3D PERSPECTIVE

SCALE:



3 CC1 ITEM #1 REAR ELEVATION

SCALE: 1/2" = 1'-0"



12 CC1 ITEM #1 3D PERSPECTIVE 2

SCALE:

NO	SERVICE	NEMA	L1	TRIP
1	208V CASHIER RECEPTACLE 208v, 1ø	5-20R		20A
2	208V CASHIER RECEPTACLE 208v, 1ø	5-20R		20A
3	LED LIGHTING 208v, 1ø	5-15P		15A

NOTE: THIS IS NOT A LOAD CENTER, THIS IS A JUNCTION/DISTRIBUTION BLOCK INSIDE THE BREAKER BOX

11A CC1 ELECTRICAL SCHEDULE
CASHIER COUNTER

NO	SERVICE	NEMA	L1	L2	L3	TRIP
1	THREE HOT FOOD WELL 208v, 1ø, 30A EA.	THREE 5-30R	10	10	10	30A
2						30A
3	TWO HOT FOOD WELL 208v, 1ø, 30A EA.	TWO 5-30R	10	10		30A
4						30A
5	48" HEAT LAMP 208v, 1ø, 1500W	5-15P	15			15A
6				15		15A
7	LED LIGHTING 208v, 1ø	5-15P			15	15A
8	SPACE					

TOTAL LOAD: 35 | 35 | 25 | 125 AMPS

NOTE: THIS IS NOT A LOAD CENTER, THIS IS A JUNCTION/DISTRIBUTION BLOCK INSIDE THE BREAKER BOX

11B CC1 ELECTRICAL SCHEDULE
HOT FOOD COUNTER #1
(TWO (2) REQUIRED)

NO	SERVICE	NEMA	L1	TRIP
1	RECESSED FROST TOP 208v, 1ø	5-15P	15	15A
2	RECESSED HOT/FROST TOP 208v, 1ø	5-15P	15	15A
3	LED LIGHTING 208v, 1ø	5-15P	15	15A

TOTAL LOAD: 45 | 45

NOTE: THIS IS NOT A LOAD CENTER, THIS IS A JUNCTION/DISTRIBUTION BLOCK INSIDE THE BREAKER BOX

11C CC1 ELECTRICAL SCHEDULE
HOT/FROST COUNTER
(TWO (2) REQUIRED)

EQUIPMENT BY OTHERS

COUNTERCRAFT LAYOUTS, MEPS, AND LOAD CENTERS ARE BASED ON SPECIFIED MANUFACTURERS AND MODELS AS OUTLINED IN THE SPECIFICATIONS IN THE CONTRACT DOCUMENTS. COUNTERCRAFT MUST BE NOTIFIED OF ANY CHANGES TO THE CONTRACT DOCUMENTS IN A TIMELY MANNER.

NO	REVISIONS	DATE	BY
1	PRELIMINARY DWG	12/21/2024	MAX
2	REVISIONS	1/1/2025	MAX
3			
4			
5			
6			
7			
8			
9			

ANOTHER QUALITY PRODUCT FROM
CounterCraft
7007 STEARNS HOUSTON,TEXAS 77021
(713) 747-3611

PROJECT: FBISD Bond Package 013
FOOD SERVICE CONSULTANT: FOODSERVICE DESIGN PROFESSIONALS
PROJECT NO: -
DATE: 11/26/2024
SCALE: As indicated
DRAWN BY: MAX.C
CHECKED BY: E.S
SHEET NO: CC1
OF SHEET

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FDP
FOODSERVICE DESIGN PROFESSIONALS

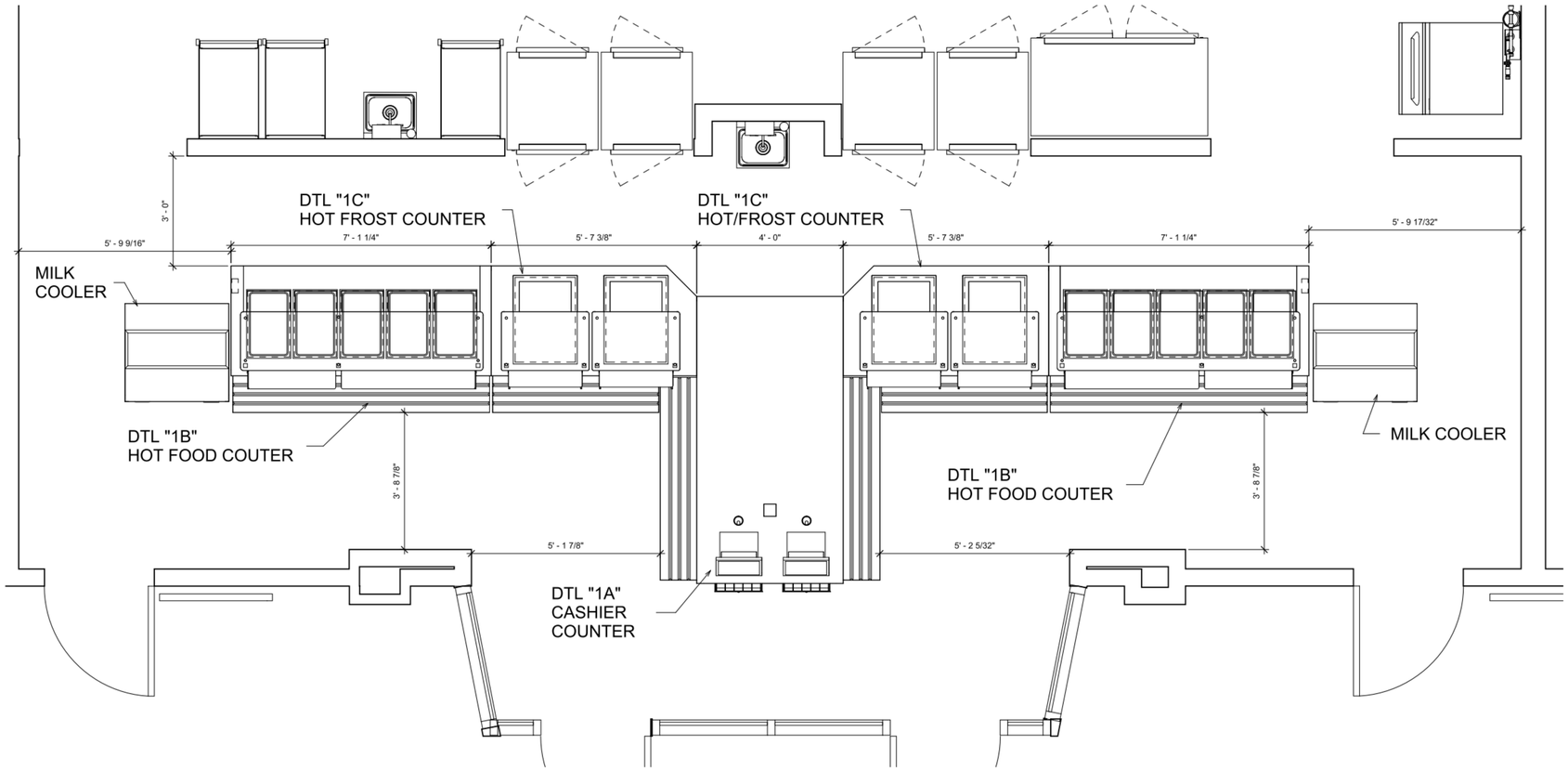
FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ELECTRONIC SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI, FCSI 48854119 ON: 07/18/2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS SERVING LINE

K-QF1.8



2 CC2 LAYOUT

SCALE: 3/4" = 1'-0"

EQUIPMENT BY OTHERS

COUNTERCRAFT LAYOUTS, MEPS, AND LOAD CENTERS ARE BASED ON SPECIFIED MANUFACTURERS AND MODELS AS OUTLINED IN THE SPECIFICATIONS IN THE CONTRACT DOCUMENTS. COUNTERCRAFT MUST BE NOTIFIED OF ANY CHANGES TO THE CONTRACT DOCUMENTS IN A TIMELY MANNER.

NO	REVISIONS	DATE	BY
1	PRELIMINARY DWG	10/21/2024	MAX
2	REVISIONS	11/26/2024	MAX
3			
4			
5			
6			
7			
8			
9			

ANOTHER QUALITY PRODUCT FROM
CounterCraft
7007 STEARNS HOUSTON,TEXAS 77021
(713) 747-3611

PROJECT: FBISD Bond Package 013
FOOD SERVICE CONSULTANT: FOODSERVICE DESIGN PROFESSIONALS

PROJECT NO. -
DATE 11/26/2024
SCALE 3/4" = 1'-0"
DRAWN BY MAX.C
CHECKED BY E.S
SHEET NO. CC2
OF SHEET

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL

FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
FCSI 48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
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MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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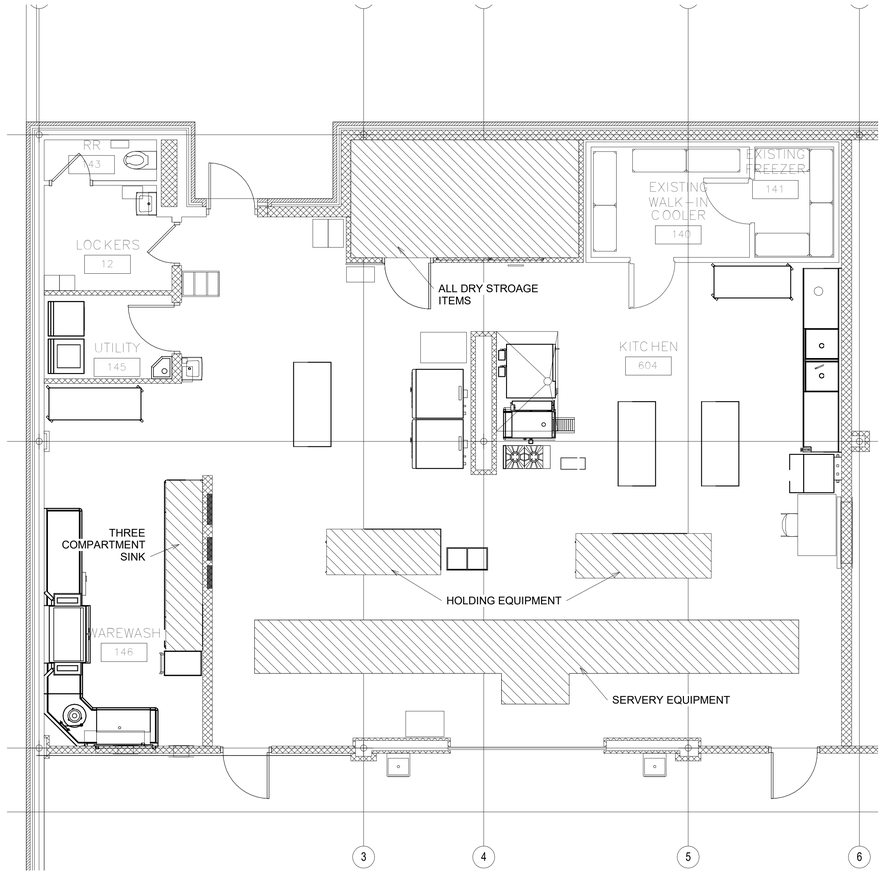
FS SERVING LINE

K-QF1.9



1 FOOD SERVICE EQUIPMENT PLAN - DEMO PLAN
1/4" = 1'-0"

NOTE: ALL EQUIPMENT MAKERED WITH A
DIAGONAL HATCH TO BE RELOCATED
PER TEMPORARY SERVING PLAN SHEET K-QF2.0

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FDP
FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

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FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
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DOCUMENTS APPEARING ON THIS SHEET WERE AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/18/2025

MWA ARCHITECTS
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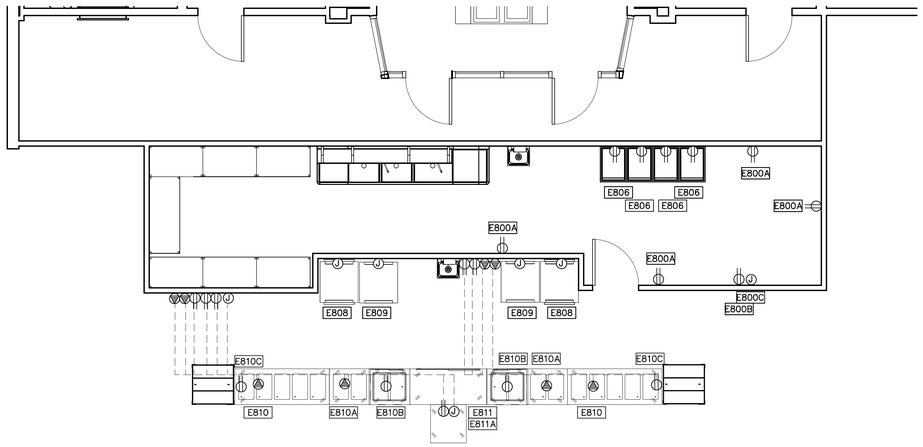
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS DEMO PLAN

K-QF2.0



3 FOOD SERVICE ELECTRICAL PLAN - TEMPORARY SERVING
1/4" = 1'-0"

FOOD SERVICE ELECTRICAL SCHEDULE - TEMPORARY SERVING								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E800A	DR	16.0A	120	1	CONVENIENCE	WALL	24"	---
E800B	DR	16.0A	120	1	CONVENIENCE	WALL	24"	DEDICATED CIRCUIT
E800C	JB	---	---	--	DATA CONNECTION	WALL	24"	---
E806	DR	16.0A	120	1	TRANSPORT CABINET	WALL	24"	---
E808	JB	7.8A	120/208	1	HEATED CABINET	WALL	96"	BTC; OMIT PLUG, UNIT TO BE HARDWIRED
E809	JB	8.2A	120	1	REFRIGERATOR	WALL	96"	BTC; OMIT PLUG, UNIT TO BE HARDWIRED
E810	CS/SR	13.3A	208	1	(4) HOT WELLS	WALL	24"	EXTEND TO EQUIPMENT - CONFIRM NEMA PLUG
E810A	SR	7.9A	208	1	(2) HOT WELLS	WALL	24"	EXTEND TO EQUIPMENT - CONFIRM NEMA PLUG
E810B	DR	5.0A	120	1	COLD PAN	WALL	24"	EXTEND TO EQUIPMENT
E810C	DR	10.0A	120	1	BEVERAGE	WALL	24"	EXTEND TO EQUIPMENT
E811	DR	16.0A	120	1	CASH REGISTER	WALL	24"	DEDICATED CIRCUIT - EXTEND TO EQUIPMENT
E811A	JB	-	---	1	POS	WALL	24"	BTC

	SCR	CONDUIT STUB BTC ON RECEPT FURNISH WITH EQUIPMENT		CC	CONDUIT FOR COMPUTER CABLES
•	CS	CONDUIT STUB UP/OUT FOR DIRECT CONNECTION		BTC	BRANCH TO CONNECTION ON EQUIPMENT
	DR	DUPLEX RECEPTACLE		WPR	WATERPROOF RECEPTACLE (SPRING COVER)
	SR	SINGLE PURPOSE RECEPTACLE-1PH		FPB	FIRE PROTECTION BUZZER
	SR	SINGLE PURPOSE RECPTACLE-3PH		BSC	BEVERAGE SYSTEM CONDUIT
	FR	FLUSH FLOOR RECEPTACLE		DFA	DROP FROM ABOVE
	PMR	PEDESTAL MOUNTED RECEPTACLE		AFF	ABOVE FINISH FLOOR
	DCR	DROP CORD RECEPTACLE		CS/JB	JUNCTION BOX ON PEDESTAL
	JB	JUNCTION BOX ON CEILING		SW	SWITCH
	JB	JUNCTION BOX IN WALL		D	DATA
	JB/DS	JUNCTION BOX WITH DISCONNECT BY DIV.26			

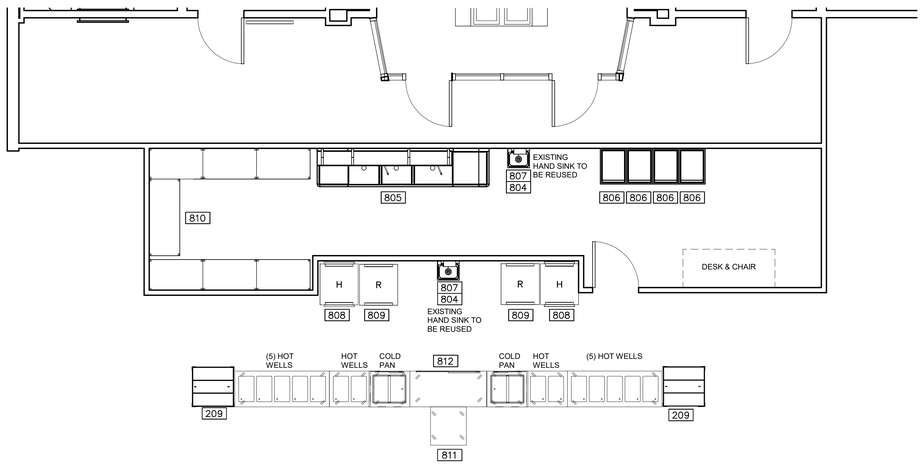
5 ELECTRICAL SYMBOLS 1
NOT TO SCALE

FOOD SERVICE PLUMBING SCHEDULE - TEMPORARY SERVING						
REFER TO SHEET QF1 FOR PLUMBING COORDINATION NOTES						
FDP PNO	FDP PSIZE	FDP PCONN	FDP PSERVICE TO	FDP PLOC	FDP PAFF	FDP PREMARKS
						<varies>
P11C	1/2"	H & C WATER	FAUCET	WALL	18"	FURNISHED & INSTALLED BY DIV. 22
P11D	1 1/2"	DIRECT DRAIN	HAND SINK	WALL	15"	FURNISHED & INSTALLED BY DIV. 22
P249	3/4"	H & C WATER	FAUCET	WALL	13"	BTC

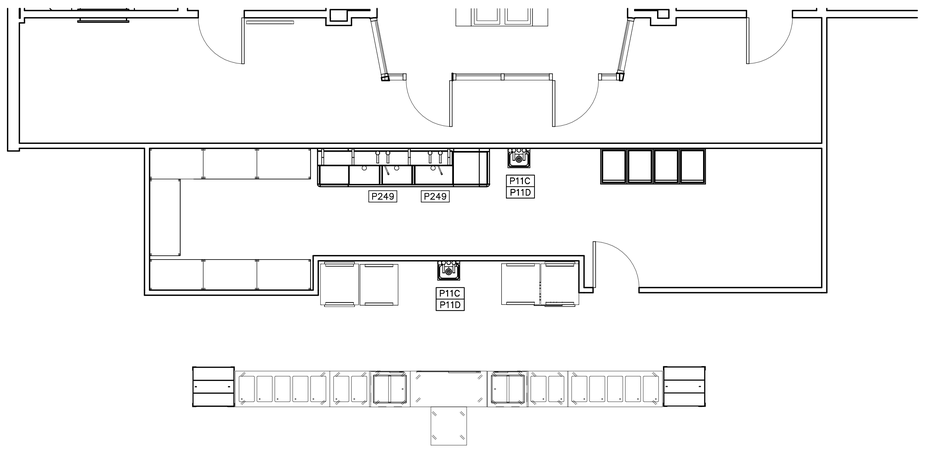
○	HW	HOT WATER	⊡	FFD	FUNNEL FLOOR DRAIN
○	CW	COLD WATER	◣	EVC	EXHAUST VENT CONNECTION
○	HTW	180 F HOT WATER	⋈	SVC	SUPPLY VENT CONNECTION
◍		CHILLED WATER	◔	FR	DIRECT-CONNECTED FLUE RISER
●	W	DIRECT WASTE	◍	PS	PIPE SLEEVE
○	IW	INDIRECT WASTE	⊙		COMPRESSED AIR
⊙		GAS SUPPLY	♦		CO2
◕		STEAM SUPPLY		AFF	ABOVE FINISHED FLOOR
⊗	CR	CONDENSATE RETURN		BTC	BRANCH TO CONN. ON EQUIP
●	DR	DRAIN		DFA	DROP FROM ABOVE
▢	FD	FLOOR DRAIN		CLG	CEILING
▟	FST	FLOOR SINK 3/4 GRATE			
▯	FSH	FLOOR SINK 3/4 GRATE			

4 PLUMBING SYMBOLS 1
NOT TO SCALE

FOOD SERVICE EQUIPMENT SCHEDULE - TEMPORARY SERVING					
REFER TO SHEET QF1 FOR GENERAL CONTRACTOR & HEALTH DEPARTMENT COORDINATION NOTES					
FDP ITEM	FDP QTY	FDP DESCRIPTION	FDP REMARKS	MANUFACTURER	MODEL
209	2	DROP FRONT MILK COOLER - 8 CASE		TRAULSEN	RMC34D4
804	2	S/S SPLASH GUARDS		CUSTOM FABRICATED	
805	1	THREE COMPARTMENT SINK NO DISPOSER	EXISTING		
806	4	TRANSPORT CART	EXISTING		
807	2	HAND LAV	EXISTING		
808	2	REACH IN HEATED CABINET - 1DR	EXISTING		
809	2	REACH IN REFRIGERATOR - 1DR.	EXISTING		
810	1	DRY STORAGE SHELVING	EXISTING		
811	1	CASH REGISTER	OWNER FURNISHED		
812	1	SERVING LINE	EXISTING		



1 FOOD SERVICE EQUIPMENT PLAN - TEMPORARY SERVING
1/4" = 1'-0"



2 FOOD SERVICE PLUMBING PLAN - TEMPORARY SERVING
1/4" = 1'-0"

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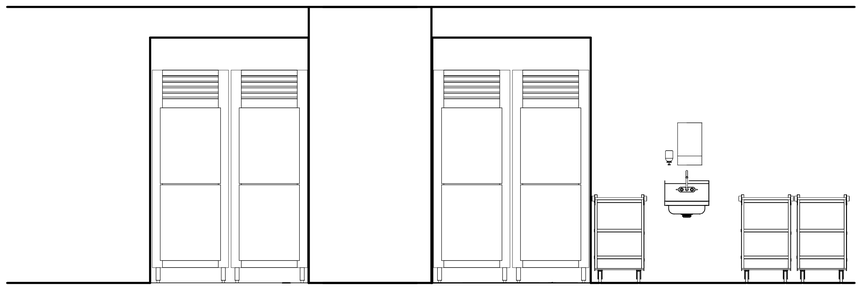
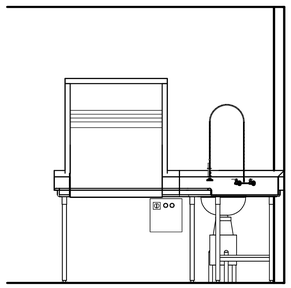
FS TEMPORARY SERVING

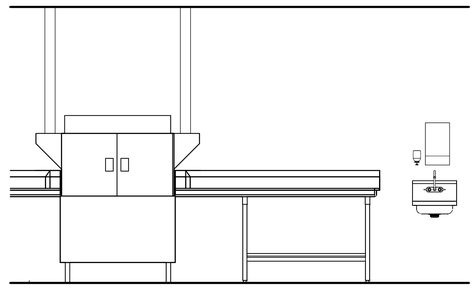
K-QF2.1



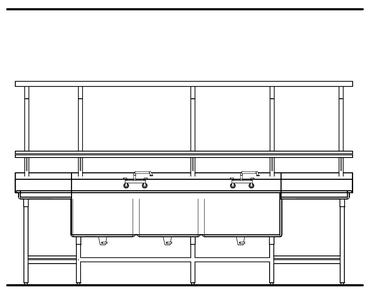
11 ELEVATION @ HOLDING
1/2" = 1'-0"



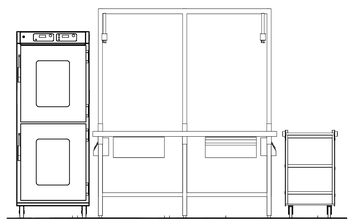
10 ELEVATION @ DISPOSER & TRAY DROP WINDOW
1/2" = 1'-0"



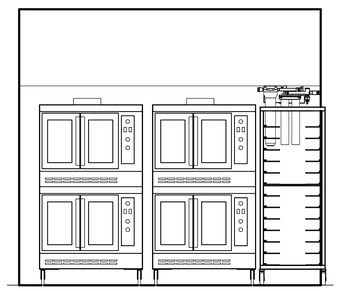
9 ELEVATION @ DISHMACHINE
1/2" = 1'-0"



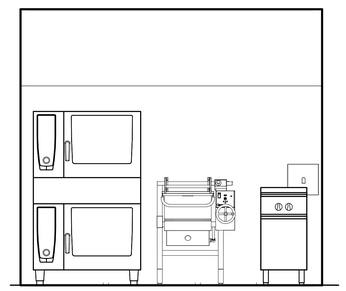
8 ELEVATION @ THREE COMPARTMENT SINK
1/2" = 1'-0"



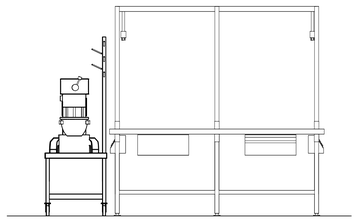
7 ELEVATION @ SETUP TABLE & MOBILE HEATED CABINET
1/2" = 1'-0"



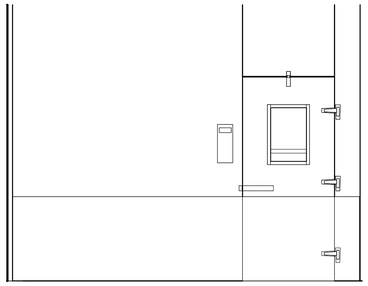
6 ELEVATION @ PRODUCTION 2
1/2" = 1'-0"



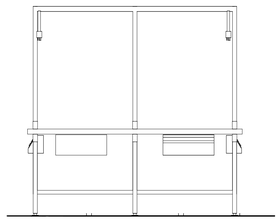
5 ELEVATION @ PRODUCTION 1
1/2" = 1'-0"



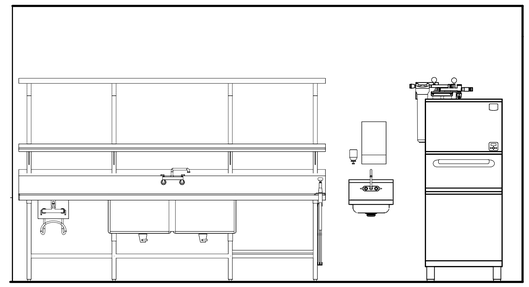
4 ELEVATION @SETUP TABLE & MIXER
1/2" = 1'-0"



3 ELEVATION @ COLD STORAGE ASSEMBLY
1/2" = 1'-0"



2 ELEVATION @ SETUP TABLE
1/2" = 1'-0"



1 ELEVATION @ PREP SINK & ICE MACINE
1/2" = 1'-0"

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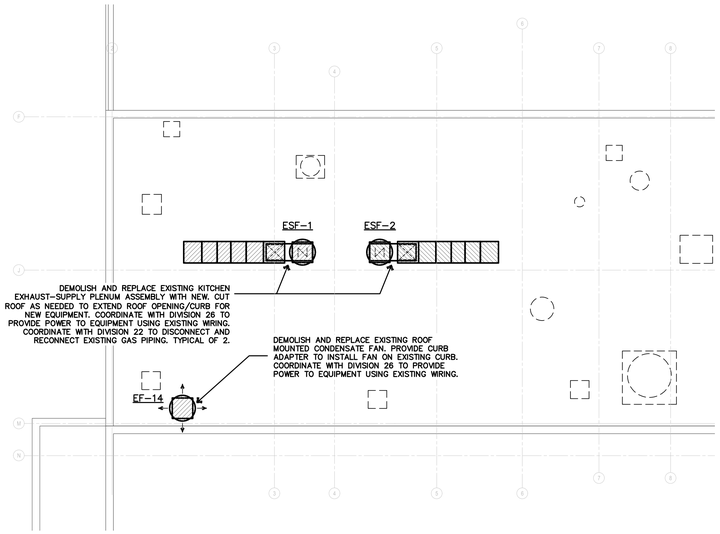
FS ELEVATIONS

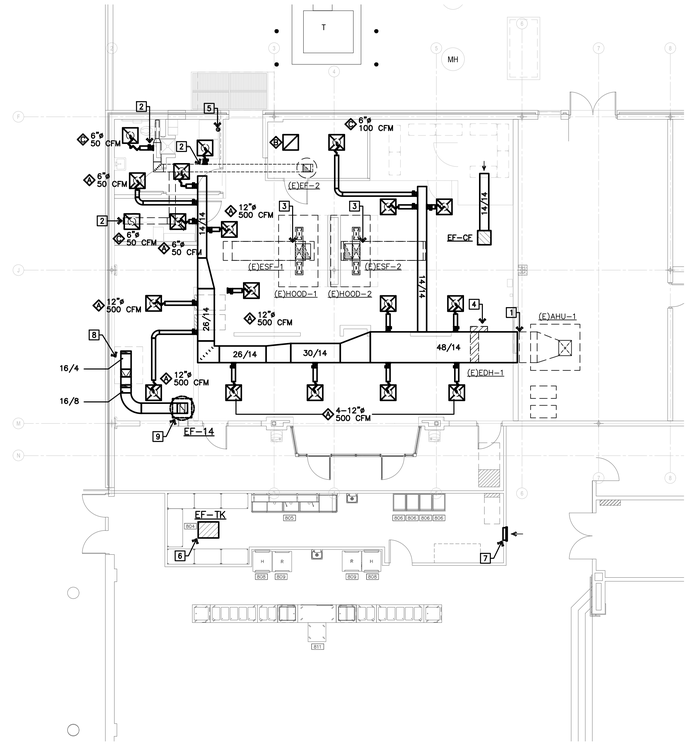
K-QF3.1



3 MECHANICAL ROOF FLOOR PLAN

SCALE: 1/8" = 1'-0"

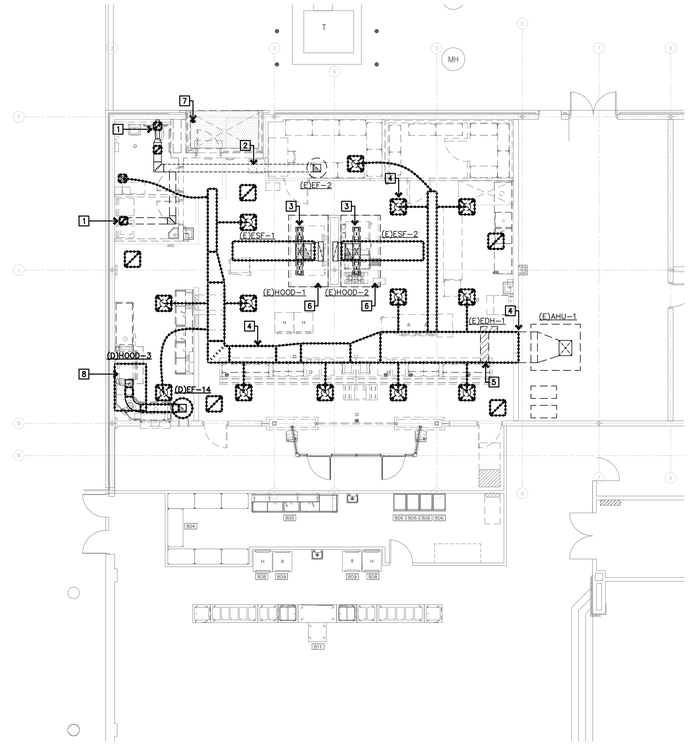
NORTH



2 RENO MECHANICAL FLOOR PLAN - KITCHEN AREA

SCALE: 1/8" = 1'-0"

NORTH



1 DEMO MECHANICAL FLOOR PLAN - KITCHEN AREA

SCALE: 1/8" = 1'-0"

NORTH

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A	CEILING DIFFUSER – 24" X 24" FACE, PATTERN TYPE, STEEL CONSTRUCTION, OBD/RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE SCD A1–12" X 12"
B	CEILING RETURN GRILLE – 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE PDFR B1–12" X 12"
C	CEILING EXHAUST GRILLE – 24" X 24" PERFORATED FACE, STEEL CONST., OBD/RADIATION DAMPER, WHITE FINISH, NECK SIZE SHOWN, U.L. LISTED PRICE PDDR C1–12" X 12"

NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPES FOR AIR DEVICES.

KITCHEN HOOD REFURBISHMENT NOTES

HOOD REFURBISHMENT FOR KITCHEN HOODS (QUANTITY 2):

- STEAM WASH AND DEEP CLEAN STAINLESS STEEL HOOD ASSEMBLY, CASING, AND SUPPLY GRILLES WHERE APPLICABLE.
- REPLACE GREASE FILTER RACKS.
- CLEAN EXISTING MAKE-UP AIR AND GREASE EXHAUST DUCT.
- RELAMP EXISTING LIGHT FIXTURES WITH NEW 4000K BULBS LISTED FOR USE IN AN ENCLOSED KITCHEN HOOD FIXTURE.
- COORDINATE WITH DIVISION 11 FOR REPLACEMENT OF ANSUL FIRE SUPPRESSION SYSTEM.
- HOOD ASSEMBLIES SHALL BE CLEANED TO MEET THE STANDARDS ESTABLISHED IN NFPA STANDARD 96.

KITCHEN HOOD EXHAUST & MAKE-UP AIR UNIT SCHEDULE

MARK	ESF-1,2
SERVES	KITCHEN HOOD-1 & 2
SUPPLY SECTION	
TYPE	INDIRECT GAS-FIRED MAKE-UP AIR UNIT
DRIVE	DIRECT
SPEED CONTROL	VFD
SUPPLY CFM	2250
EXT. S.P. (IN. W.G.)	0.375
HORSEPOWER (WATTS)	1-1/2 HP
VOLTAGE	480V/3-PHASE
UNIT MCA	4.6 A
UNIT MOCP	15 A
HEATING MEDIUM	NATURAL GAS
INPUT/OUTPUT (MBH)	150.0/121.5
TURNDOWN RATIO	4:1
MANUFACTURER	GREENHECK
MODEL	IGX-P109-H12-MF-E
EXHAUST SECTION	
TYPE	UPBLAST BELT DRIVE CENTRIFUGAL
EXHAUST CFM	3600
EXT. S.P. (IN. W.G.)	0.75
HORSEPOWER (WATTS)	1-1/2 HP
VOLTAGE	480V/3-PHASE
UNIT MCA	3.75 A
UNIT MOCP	15 A
MANUFACTURER	GREENHECK
EXHAUST FAN MODEL	CUBE-200-15

NOTES

1. EXHAUST FAN: PROVIDE FAN WITH PRE-FABRICATED ROOF CURB ADAPTER, VENTED CURB EXTENSION, HINGING KIT, HEAT BAFFLE, DRAIN CONNECTION, GREASE TRAP, AND DISCONNECT SWITCH. FANS SHALL BE UL LISTED FOR USE WITH TYPE 1 GREASE HOOD.
2. EXHAUST FAN: PROVIDE NEW MOTOR STARTER, SIZED FOR EXHAUST FAN MOTOR AND INSTALLED IN PLACE OF EXISTING. REFERENCE THE SPECIFICATIONS FOR STARTER REQUIREMENTS. COORDINATE WITH DIV.25 FOR RE-TERMINATION OF PERMISSIVE ON/OFF CONTROL. COORDINATE WITH DIV.26 FOR RE-TERMINATION OF LOCAL HOOD SWITCH INTERLOCK FOR START/STOP CONTROL.
3. SUPPLY FAN/FURNACE: FLUE GAS FROM HEATING COIL SHALL BE POWER VENTED.
4. SUPPLY FAN/FURNACE: WEATHERHOOD WITH ALUMINUM MESH.
5. SUPPLY FAN/FURNACE: 5 YEAR HEAT EXCHANGER WARRANTY.
6. SUPPLY FAN/FURNACE CONTROLS: INTEGRAL HEATER CONTROLS WITH BAS INTERLOCK FOR PERMISSIVE ON/OFF AND LOCAL SWITCH INTERLOCK FOR CONTROL FROM KITCHEN HOOD SWITCH. FURNACE CONTROLS SHALL BE PROGRAMMED FOR 64°F LAT, WITH A LOCKOUT FOR O/A TEMPERATURES ABOVE THE LAT SETPOINT. COORDINATE WITH DIV.25 AND DIV.26 FOR CONTROLS AND SWITCH INTERLOCKS.
7. TWO POINT POWER CONNECTION: ONE FOR EXHAUST FAN AND ONE FOR INTAKE/SUPPLY FAN.
8. INTERLOCK FAN(S) WITH ASSOCIATED COOKING HOOD
9. INTERLOCK FAN WITH SWITCH ON KITCHEN HOOD.
10. UNIT TO BE PROVIDED WITH GALVANIZED STEEL FAN PACK EXTENSION/COMBINATION CURB.
11. REFER TO WRITTEN SPECS FOR ADDITIONAL REQUIREMENTS.

MECHANICAL RENO KEYED NOTES

1. TIE-IN NEW DUCTWORK TO EXISTING DUCTWORK AT WALL PENETRATION.
2. CONNECT NEW AIR DEVICE AND TAP TO EXISTING E/A TRUNK DUCT.
3. REWORK EXISTING EXHAUST AND SUPPLY DUCTWORK FROM EXISTING KITCHEN HOOD UP TO FAN, AS REQUIRED, WITH NEW TRANSITIONS AND SUPPLY AIR DUCTWORK OFFSETS TO MATE WITH NEW FAN CURB.
4. EXISTING ELECTRIC DUCT HEATER TO BE RETAINED FOR RE-INSTALLATION IN RENOVATION PHASE.
5. NEW DRYER VENT DUCT AND VENT CAP.
6. TEMP. KITCHEN – CEILING MOUNTED CABINET EXHAUST FAN.
7. TEMP. KITCHEN – 24"X24" SIDE WALL GRILLE. SURFACE MOUNT OPTIONAL. AUXILIARY FRAME. TITUS CT-700.
8. RECONFIGURE DUCTWORK TO CONNECT TO NEW DISHMACHINE HOOD OUTLETS. REF. KITCHEN CONSULTANT DRAWINGS FOR EXACT DIMENSIONS OF DUCT CONNECTIONS.
9. CONDENSATE EXHAUST DUCT UP THROUGH ROOF TO NEW EXHAUST FAN SET ON NEW ROOF CURB. REUSE EXISTING ROOF PENETRATION.

MECHANICAL DEMO KEYED NOTES

1. DEMOLISH EXISTING AIR DEVICE, BRANCH DUCT, DAMPER AND TAP BACK TO TRUNK DUCT. CAP AND SEAL RESULTING OPENING.
2. EXISTING E/A TRUNK DUCT TO REMAIN.
3. DISCONNECT EXISTING S/A AND E/A DUCTWORK SERVING KITCHEN HOODS FROM FAN ASSEMBLY ON ROOF. DEMOLISH SUPPLY AND EXHAUST FAN PLENUM ASSEMBLY SERVING KITCHEN HOODS, ALONG WITH CURB. NEW CURB TO BE PROVIDED AND INSTALLED AS PART OF RENOVATION.
4. DEMOLISH ALL EXISTING AIR DEVICES, DUCTWORK, AND DUCTWORK ACCESSORIES SERVING KITCHEN AREA BACK TO MECH. ROOM WALL PENETRATION.
5. EXISTING ELECTRIC DUCT HEATER TO BE RETAINED FOR RE-INSTALLATION IN RENOVATION PHASE.
6. REFURBISH EXISTING KITCHEN HOOD. REFER TO "KITCHEN HOOD REFURBISHMENT NOTES".
7. DEMOLISH AND REPLACE EXISTING DRYER EXHAUST DUCT AND FLUE VENT CAP.
8. DEMOLISH EXISTING CONDENSATE HOOD, ASSOCIATED DUCTWORK, AND ROOF EXHAUST FAN.

EXHAUST FAN SCHEDULE

MARK	EF-TK	EF-CF	EF-14
SERVES	TEMPORARY KITCHEN	COOLER/FREEZER	DISH WASHER
TYPE	CEILING CABINET	INLINE FAN	ROOF UPBLAST
DRIVE	DIRECT	DIRECT	DIRECT
SPEED CONTROL	INTEGRAL SPEED CONTROLLER	CONSTANT	CONSTANT
CFM	1055	1000	1200
EXT. S.P. (IN. W.G.)	0.3	0.35	0.60
IMP. SIZE (IN.)	8.0	13.5	
HORSEPOWER (WATTS)	1/3 HP	1/6 HP	1/6 HP
VOLTAGE	120V/1-PHASE	120V/1-PHASE	120V/1-PHASE
MANUFACTURER	COOK	COOK	COOK
MODEL	GC-862	1355QN10D	CUE-140-VG
SONES (MAX.)	15.0	15.0	15.0
NOTES	1 THRU 4	1 THRU 4	1 THRU 4

NOTES

1. STATIC PRESSURE SHOWN IS EXTERNAL TO THE UNIT. MANUFACTURER SHALL ADD DAMPER AND ACCESSORY LOSSES TO THIS VALUE BEFORE SELECTING FAN. FANS SHALL BE CAPABLE OF 120% OF THE SCHEDULED CFM CAPACITY.
2. INTEGRAL DISCONNECT SWITCH.
3. RUBBER IN-SHEAR ISOLATORS.
4. REFER TO WRITTEN SPECS FOR ADDITIONAL REQUIREMENTS.

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FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL



ARCHITECTS
AND PLANNING
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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KITCHEN AREA
MECHANICAL PLANS
K-M1.01

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MECHANICAL SYMBOL SCHEDULE

CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
RS	REFRIGERANT SUPPLY
RR	REFRIGERANT RETURN
D	CONDENSATE LINE
	PETE'S PLUG
	ISOLATION VALVE
	ELECTRONIC CONTROL VALVE
	BUTTERFLY VALVE
	BALL VALVE
	UNION OR FLANGE
	STRAINER
	AUTOMATIC AIR VENT
T	LOCAL CONTROL THERMOSTAT
T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
FD	FIRE DAMPER
SD	SMOKE DAMPER
FSD	FIRE/SMOKE COMBINATION DAMPER
MD	MOTORIZED DAMPER
C	CARBON MONOXIDE SENSOR
CO2	CARBON DIOXIDE SENSOR
	SUPPLY AIR DIFFUSER
	RETURN AIR GRILLE
	EXHAUST GRILLE
RA	RETURN AIR OPENING IN WALL
VD	VOLUME DAMPERS
	DUCT ELEVATION CHANGE
	90° DUCT ELBOW WITH TURNING VANES
	FLEXIBLE DUCT
M	DAMPER MOTOR
T	TEMPERATURE TRANSMITTER
FS	FLOW SWITCH
P	DIFFERENTIAL PRESSURE SENSOR
SD	DUCT SMOKE DETECTOR
PS	STATIC PRESSURE SENSOR
PH	STATIC PRESSURE SENSOR HI-LIMIT
	ACCESS PANEL

A.P.	ACCESS PANEL
AHU	AIR HANDLING UNIT
B	BOILER
CH	CHILLER
CHP	CHILLED WATER PUMP
CVT	CONSTANT VOLUME TERMINAL
DH	DEHUMIDIFIER
E/A	EXHAUST AIR
EF	EXHAUST FAN
F&B	FACE & BYPASS
FF	FLY FAN
HDT	HORIZONTAL DRAW THROUGH
HWP	HOT WATER PUMP
KEF	KITCHEN EXHAUST FAN
KSF	KITCHEN SUPPLY FAN
O/A	OUTSIDE AIR
OBD	OPPOSED-BLADES DAMPER
PT	PRE-TREAT
R/A	RETURN AIR
RAHU	ROOF-MOUNTED AIR HANDLING UNIT
S/A	SUPPLY AIR
SA	SOUND ATTENUATOR
SF	SUPPLY FAN
SPD	SPILTER DAMPER
SZ	SINGLE ZONE
VAV	VARIABLE AIR VOLUME
VB	VAV BOX
VD	VOLUME DAMPER
VDT	VERTICAL DRAW THROUGH
VFD	VARIABLE FREQUENCY DRIVE
WH	WATER HEATER
⌀	DESIGNATION FOR "ROUND"
⌀	DESIGNATION FOR "OVAL"

GENERAL MECHANICAL NOTES

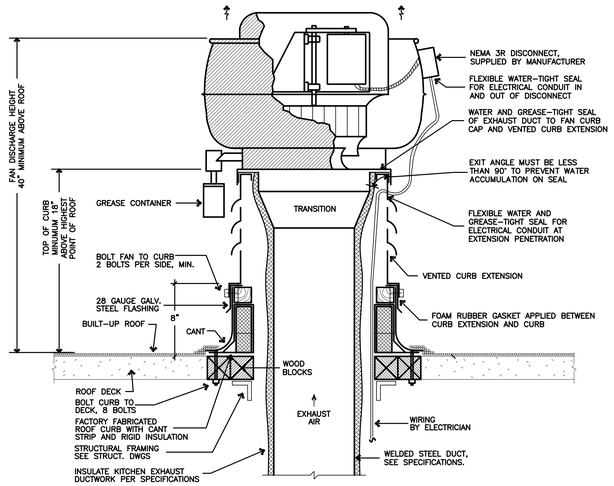
1. REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. COORDINATE INSTALLATION OF EQUIPMENT AND PIPING WITH THE ELECTRICAL CONTRACTOR TO INSURE NEC CLEARANCE (42 INCHES) IN FRONT OF ALL ELECTRICAL PANELS. DO NOT INSTALL DUCTWORK OR WATER PIPING OVER THE TOP OF ELECTRICAL PANELS SEE DETAIL 1/M2.01.
3. DUCT SIZES SHOWN ARE NET FREE AIR PASSAGE DIMENSIONS, DUCTS ARE NOT LINED, BUT ARE EXTERNALLY INSULATED. RUNOUTS TO CEILING OUTLETS SHALL BE EXTERNALLY INSULATED GALVANIZED SHEET METAL WITH SPIN-IN V.D. AT TRUNK TAPS, SEE DETAIL 1 & 2/M2.01.
4. REFER TO ARCHITECTURAL REFLECTED CEILING DRAWINGS FOR EXACT LOCATIONS OF CEILING OUTLETS IN RELATION TO OTHER CEILING ENTITIES. OUTLETS MUST BE COMPATIBLE WITH THE CEILING TYPES FOR THE VARIOUS AREAS.
5. IN AREAS WHERE SUPPLY AIR ENTERS CEILING CAVITY THRU RETURN AIR GRILLES AND FREE RETURNS TO AHU'S VIA CEILING CAVITY, PROVIDE RETURN AIR OPENING IN WALL-TO-DECK ABOVE CEILING THAT BLOCK PATH, REFER TO ARCHITECTURAL DRAWINGS. RETURN AIR ELBOWS SHALL BE SIZED AT 1 SQ. FT PER 400 CFM SUPPLY AIR.
6. ARRANGE PIPING CONNECTIONS TO ALL EQUIPMENT TO ALLOW EASY REMOVAL OF EQUIPMENT, SUB-ASSEMBLIES, COILS, FANS, MOTORS, FILTERS, ACCESS PANELS, ETC... PROVIDE UNIONS, FLANGES AND VALVES AT CONNECTIONS. PROVIDE AND INSTALL VICTAULIC JOINTS AT COILS, REF. SPECIFICATIONS. PLACE STOP VALVES ON SYSTEM SIDE OF REMOVABLE PIPE SECTIONS.
7. CONTRACTOR SHALL FIELD MEASURE STRUCTURAL ELEMENTS AND COORDINATE EQUIPMENT, PIPING AND DUCT ROUTING TO FIT EXISTING CONSTRUCTION. PROVIDE OFFSETS, BOOTS FOR ENVELOP OBSTRUCTIONS THAT CANNOT BE AVOIDED. CONSTRUCTION SHALL BE PER SMACNA FIGURE 2-10.

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A	CEILING DIFFUSER – 24" X 24" FACE, PATTERN TYPE, STEEL CONSTRUCTION, OBD/RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE SCD
B	CEILING RETURN GRILLE – 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE PDFR
C	CEILING EXHAUST GRILLE – 24" X 24" PERFORATED FACE, STEEL CONST., OBD/RADIATION DAMPER, WHITE FINISH, NECK SIZE SHOWN, U.L. LISTED PRICE PDDR

NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPES FOR AIR DEVICES.
2. ALL CEILINGS ARE FIRE RATED PER U.L. LISTINGS ON ARCHITECTURAL DRAWINGS. PROVIDE FIRE PROTECTION FOR ALL CEILING DEVICES PER DETAIL 13/M-17 AND SPECIFICATIONS.

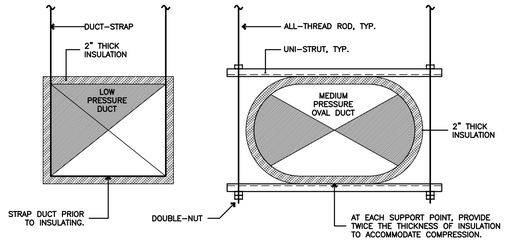


6 KITCHEN UPBLAST EXHAUST FAN DETAIL

NO SCALE

NOTES

1. ARCHITECTURAL ROOF CURB INSTALLATION REQUIREMENTS SHALL SUPERCEDE THIS DETAIL.
2. INSTALL SHEETMETAL COVERING OVER WOOD BLOCKING IN THE AIRSTREAM OR OPEN TO THE CEILING CAVITY.

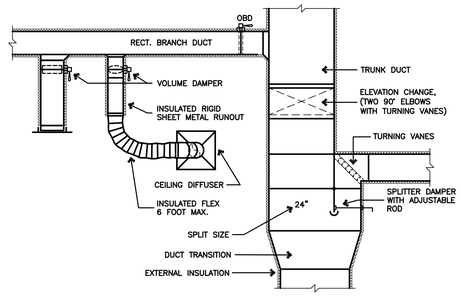


4 EXTERNALLY INSULATED DUCT SUPPORT DETAIL

NO SCALE

NOTES:

1. ROUND MEDIUM PRESSURE DUCT MAY BE SUPPORTED WITH DUCT STRAPS.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

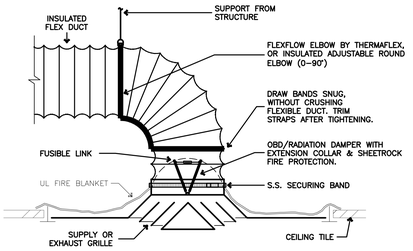


2 DUCTWORK DETAIL

NO SCALE

NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

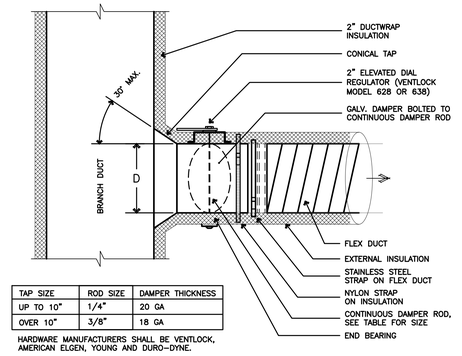


5 AIR DEVICE DETAIL

NO SCALE

NOTES:

1. RADIATION DAMPER SHALL ONLY BE PROVIDED IN CEILING DEVICES INSTALLED IN RATED CEILING ASSEMBLIES. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO DETERMINE WHICH, IF ANY, CEILINGS ARE RATED.
2. REFER TO SPECIFICATIONS OF FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



TAP SIZE	ROD SIZE	DAMPER THICKNESS
UP TO 10"	1/4"	20 GA
OVER 10"	3/8"	18 GA

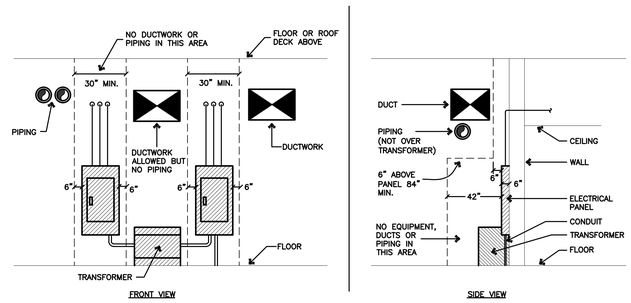
HARDWARE MANUFACTURERS SHALL BE VENTLOCK, AMERICAN ELGEN, YOUNG AND DURO-DYNE.

3 DUCT TAP CONNECTION DETAIL

NO SCALE

NOTES:

1. DELETE CONICAL SECTION IF TOO LARGE FOR THE DUCT.
2. REFER TO SPECIFICATIONS OF FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



1 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

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MECHANICAL NOTES AND DETAILS
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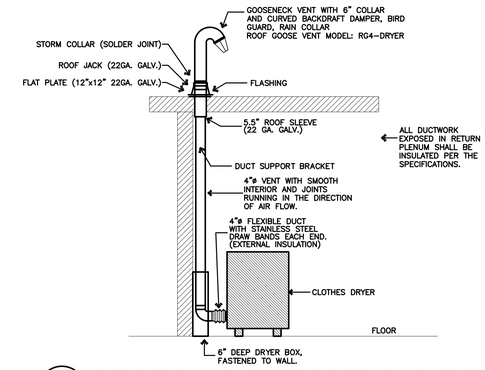
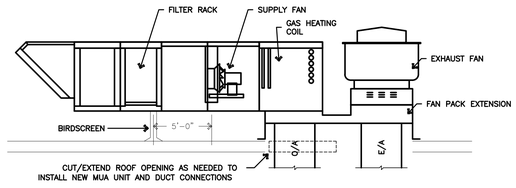


5 RESIDENTIAL CLOTHES DRYER FLUE VENT

NO SCALE

NOTES:

1. VENT TERMINATION AT WALL FOR STACKABLE WASHER/DRYER SHALL BE AT 60" AFF.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

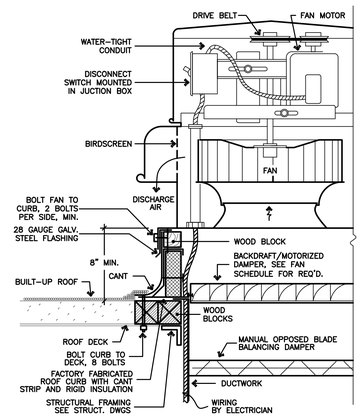


4 SUPPLY/EXHAUST KITCHEN PLENUM DETAIL

NO SCALE

NOTES:

1. xxxxx

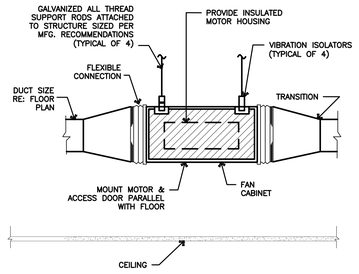


3 ROOF EXHAUST FAN AND VENT DETAIL

NO SCALE

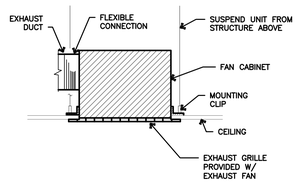
NOTES:

1. NO WOOD BLOCKING SHALL BE LEFT EXPOSED IN THE CEILING PLENUM. COVER ALL EXPOSED WOOD WITH 1/2" SHEETROCK OR 20 GAUGE GALVANIZED SHEETMETAL.
2. ROOF VENT WILL NOT HAVE FAN/MOTOR ASSEMBLY, DISCONNECT SWITCH OR OBD.
3. ARCHITECTURAL ROOF CURB INSTALLATION REQUIREMENTS SHALL SUPERCEDE THIS DETAIL WHERE APPLICABLE.
4. ALL FANS SCHEDULED TO BE PROVIDED WITH 140MPH WIND RATING, INCLUDING FACTORY PROVIDED CURB. CURB INSTALLATION SHALL FOLLOW MANUFACTURER'S REQUIREMENTS FOR SECURING TO ROOF AND EQUIPMENT WHERE IT DIFFERS FROM THE DETAIL.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



2 INLINE EXHAUST FAN DETAIL

NO SCALE



1 CABINET EXHAUST FAN

NO SCALE

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MECHANICAL DETAILS (CONT'D.)

K-M2.02

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ELECTRICAL AND LOW VOLTAGE LEGEND AND SYMBOLS

- TYPE 'A' LIGHT FIXTURE
- LIGHT FIXTURE WITH EMERGENCY BACKUP
- EXIT SIGN/EXIT SIGN WITH DIRECTIONAL ARROW
- EMERGENCY EGRESS LIGHT FIXTURE
- WALL MOUNTED FIXTURE OR SCONCE
- CEILING DOWNLIGHT OR CYLINDER
- WALL PACK FIXTURE
- INV — LIGHTING INVERTER

- 20A, 277V TOGGLE/3-WAY/4-WAY SWITCH
- 20A, 277V MOMENTARY 3-POSITION TOGGLE SWITCH
- 20A, 277V, MOMENTARY 3-POSITION KEY SWITCH
- 20A, 277V MAINTAINED 2-POSITION/3-WAY/4-WAY KEY SWITCH
- 20A, 277V TOGGLE SWITCH W/ INTEGRAL NIGHT LIGHT
- MOTOR RATED ON/OFF SWITCH, MP W/ PILOT LIGHT (SWITCH RATING SHALL BE ≥ UPSTREAM OCPD & VOLTAGE)
- DPST — DOUBLE POLE SINGLE THROW (DPST) SWITCH WITH RED PILOT LIGHT.
- TSW — TIMER SWITCH

NETWORK LIGHTING CONTROLS

- #B — MULTIBUTTON LOW VOLTAGE LIGHTING SWITCH PROVIDE NUMBER OF BUTTONS INDICATED IN SINGLE PLATE.
- #D — MULTIPLE DIMMER SWITCHES PROVIDE NUMBER OF SWITCHES INDICATED IN SINGLE PLATE.
- #K — MULTIPLE KEY TYPE SWITCHES PROVIDE NUMBER OF SWITCHES INDICATED IN SINGLE PLATE.
- OC — WALL SENSOR SWITCH
- $D — 20A, 277V, STANDALONE DIMMER SWITCH (DISPLAY CABINET)
- OC — 360° CEILING SENSOR
- OC — 180° CEILING SENSOR
- OC — CEILING SENSOR
- OC — WALL MOUNT SENSOR
- PC — DAYLIGHT PHOTOSENSOR
- RC / RCD — LIGHTING ROOM CONTROLLER/POWER PACK
- ER — EMERGENCY LIGHTING RELAY/CONTROL UNIT
- PLC — PLUG LOAD CONTROLLER

- 20A, 125V SIMPLEX/DUPLEX/QUAD RECEPTACLE
- GFI — 20A, 125V DUPLEX RECEPTACLE WITH GFCI PROTECTION
- GFI WP — 20A, 125V DUPLEX RECEPTACLE WITH GFCI PROTECTION AND WEATHERPROOF COVER.
- GFI — REMOTE GFCI DEVICE, REF SPECS AND EDF GFI DETAIL.
- USB — 20A, 125V DUPLEX/QUAD RECEPTACLE W/ USB-A PORTS PROVIDE 2-5A PORTS PER DEVICE – HUBBELL USB20A5
- 20A, 125V SIMPLEX/DUPLEX/QUAD IG/COMPUTER RECEPTACLE
- GFI — 20A, 125V, IG/COMPUTER DUPLEX RECEPTACLE WITH GFCI
- PLUG LOAD CONTROLLED DUPLEX
- NEMA IEC CS — NEMA/IEC/CS NUMBERED POWER OUTLET MATCH PROVIDED EQUIPMENT CONNECTION OR CIRCUIT.
- PROJ TV IM — 20A, 125V IG DUPLEX RECEPTACLE AT PROJECTOR, TV, OR INTERACTIVE MEDIA LOCATION.
- LOW VOLTAGE OUTLET
- CEILING MOUNTED RECEPTACLE
- CEILING MOUNTED LOW VOLTAGE OUTLET
- SINGLE SERVICE FLOOR BOX WITH DUPLEX/QUAD REC
- SINGLE SERVICE FLOOR BOX WITH DUPLEX/QUAD IG REC
- SINGLE SERVICE LOW VOLTAGE FLOOR BOXES
- MULTI SERVICE FLOOR BOX WITH QUAD/QUAD IG REC
- CR — CORD REEL
- D — DROP CORD
- EPO — EMERGENCY POWER OFF (EPO) SWITCH
- PB — PUSH BUTTON
- SP — TELEPOWER POLE

- J — J-BOX
- J — CEILING MOUNTED J-BOX
- CA J — J-BOX FOR ACCESS CONTROL DEVICE
- HD J — JUNCTION BOX AND FINAL CONNECTION TO HAND DRYER BY DIVISION 26.
- HDWR J — JUNCTION BOX AND FINAL CONNECTION TO ELECTRIFIED DOOR HARDWARE BY DIVISION 26.
- HEAT J — JUNCTION BOX AND FINAL CONNECTION TO HEAT TRACE EQUIPMENT BY DIVISION 26.
- WC J — JUNCTION BOX AND FINAL CONNECTION TO POWERED PLUMBING EQUIPMENT BY DIVISION 26.
- SF J — JUNCTION BOX AND FINAL CONNECTION TO SYSTEM FURNITURE BY DIVISION 26.

- CONTACTOR
- NON-FUSED DISCONNECT SWITCH
- DT — NON-FUSED DOUBLE THROW DISCONNECT
- FUSED DISCONNECT SWITCH
- ST — DISCONNECT/CB WITH SHUNT TRIP
- CB — ENCLOSED CIRCUIT BREAKER
- MOTOR STARTER 'VFD' INDICATES VARIABLE FREQUENCY DRIVE MOTOR STARTER
- MOTOR STARTER WITH INTEGRAL DISCONNECT
- MOTOR
- TC — TIME CLOCK

- ELECTRICAL PANELBOARD
- ELECTRICAL METER
- SPD — TVSS OR SPD
- GANN — GENERATOR REMOTE ANNUNCIATOR

- LOW VOLTAGE CABLING PATHWAY, REF. SPECIFICATIONS

KITCHEN SYMBOL LEGEND

- C — LOAD CENTER, BY FOOD SERVICE PROVIDE UNDERGROUND CONDUIT STUBBED UP AT LOAD CENTER LOCATION PER SUBMITTAL SHOP DRAWINGS.
- P — POINT OF SALE EQUIPMENT, BY FOOD SERVICE. PROVIDE UNDERGROUND CONDUIT STUBBED UP POS LOCATION PER SUBMITTAL SHOP DRAWINGS.
- F — REMOTE FIRE PULL, REFERENCE INSTALLATION DETAIL
- B — BELL/BUZZER WITH 120V TO LOW VOLTAGE TRANSFORMER
- D — DROP CORD
- DB — DOORBELL BUTTON
- V CLR/FRZR — CEILING STROBE FOR ENTRAPMENT ALARM
- V CLR/FRZR — WALL STROBE FOR ENTRAPMENT ALARM

COORDINATION SYMBOL LEGEND

- DDC — HVAC CONTROL PANEL, REQUIRES POWER AND DATA CONNECTIONS WITHIN CABINET COOR EXACT LOCATION AND REQUIREMENTS WITH CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.
- SD — SMOKE DAMPER
- FSD — FIRE/SMOKE COMBINATION DAMPER
- M / MD — MOTORIZED DAMPER

SITE PLAN

- UTILITY POLE
- POLE MOUNTED TRANSFORMER BANK
- SITE POLE LIGHT
- UGE J — FLUSH IN GRADE ELECTRICAL PULL BOX
- LV HH J — FLUSH IN GRADE, LOW VOLTAGE HAND HOLE
- CONCRETE BOLLARD
- (X)PP — POWER POLE
- (X)SP — SERVICE POLE OR RACK
- (X)XP — XFMR POLE
- (X)LVP — LOW VOLTAGE POLE
- (X)TP — TRANSITION POLE
- OHP — OVERHEAD POWER WIRING
- 480V — 480V OVERHEAD POWER WIRING
- UGP — UNDERGROUND PRIMARY ELECTRICAL
- UGS — UNDERGROUND SECONDARY ELECTRICAL
- UGE — UNDERGROUND EMERGENCY ELECTRICAL

DIVISION 28 LEGENDS

FIRE ALARM

- F — FIRE ALARM PULL STATION W/ STOPPER II
- F / S — WALL FIRE ALARM AUDIO/VISUAL DEVICE
- WP S — OUTDOOR WEATHERPROOF FIRE AUDIO/VISUAL DEVICE
- H — WALL FIRE ALARM AUDIO DEVICE
- V — WALL FIRE ALARM VISUAL DEVICE
- F / S — CEILING FIRE ALARM AUDIO/VISUAL DEVICE
- S — CEILING FIRE ALARM AUDIO DEVICE
- V — CEILING FIRE ALARM VISUAL DEVICE
- DUCT SMOKE DETECTOR
- I / PS — CEILING SMOKE DETECTOR
- H — CEILING HEAT DETECTOR
- CO — CEILING CARBON MONOXIDE DETECTOR
- PS CO — CEILING COMBINATION SMOKE/CARBON MONOXIDE DETECTOR
- FR — FIRE ALARM RELAY FOR STAGE SOUND RACK OVERRIDE
- BSD / BSR — BEAM SMOKE DETECTOR
- FANN — FIRE ALARM REMOTE ANNUNCIATOR OR LOCAL OPERATOR'S CONSOLE
- FACP — FIRE ALARM CONTROL PANEL
- FAPS — FIRE ALARM POWER SUPPLY/AMPLIFIER
- G — INDICATES DEVICE WITH PROTECTIVE GUARD
- WG — INDICATES DEVICE WITH WIRE GUARD
- HC — INDICATES DEVICE RATED FOR HAZARDOUS CONDITIONS
- SD — SMOKE DAMPER
- FSD — FIRE/SMOKE COMBINATION DAMPER

MULTI-SERVICE FLOOR BOX NOTES

FLOOR POWER AND LOW VOLTAGE
PROVIDE HEAVY-DUTY MULTI-GANG FLUSH IN GRADE OR FIRE RATED POKE-THRU OUTLET WITH HEAVY DUTY METAL HINGED COVER WITH CABLE EXIT SLOT.
FLOOR BOX MUST BE RATED FOR INSTALLATION IN GRADE.

FOR EACH FLOOR BOX PROVIDE:
1. PROVIDE:
   1.A. ONE QUAD OR TWO DUPLEX RECEPTACLES.
   1.B. PROVIDE IG RECEPTACLES WHERE SHOWN.
   1.C. POWER CONNECTION TO TABLE (WHERE SHOWN)
2. BLANK STAINLESS STEEL COVER FOR UN-USED GANGS.
3. PROVIDE ONE 3/4"C UNDERGROUND CONDUIT FOR POWER.
4. PROVIDE ONE 1"C UNDERGROUND CONDUIT WITH WATERPROOF INNER DUCT FOR DATA.
5. PROVIDE ONE 1"C UNDERGROUND CONDUIT WITH WATERPROOF INNER DUCT FOR LOW VOLTAGE CABLING
6. PROVIDE DIVIDERS TO MAINTAIN SEPARATION BETWEEN SERVICES.

UNDERGROUND CONDUITS MUST BE WATER TIGHT TO PREVENT MOISTURE ENTERING CONDUITS.
DO NOT COMBINE CONDUIT FOR POWER & LOW VOLTAGE.

REFERENCE FLOOR PLANS AND SPECIFICATIONS FOR QUANTITY OF DATA DROPS AND ADDITIONAL INFORMATION.

COORDINATE WITH ARCHITECT TO PROVIDE COVER/RING TO MATCH FLOOR MATERIAL AND SUBMIT COVER FINISH FOR ARCHITECT TO SELECT PRIOR TO ORDERING.

GENERAL NOTES / TAGS

+18"	INDICATES DEVICES AT +18" AFF
+42"	INDICATES DEVICES AT +42" AFF
+96"	INDICATES DEVICES AT +96" AFF
+12 FT	INDICATES DEVICES AT +12 FT AFF, ETC.
*	INDICATES DEVICES ABOVE COUNTER, REF ARCH
CLG	INDICATES DEVICES AT CEILING
PMR	INDICATES PEDESTAL MOUNTED DEVICE, REF PMR DETAIL
TV	INDICATES DEVICES AT TELEVISION/DISPLAY LOCATION
IM	INDICATES DEVICES AT INTERACTIVE MEDIA LOCATION
PROJ	INDICATES DEVICES AT PROJECTOR LOCATION
S	INDICATES SURFACE MOUNTED DEVICE
IEC	INDICATES IEC POWER OUTLET
NEMA	INDICATES NEMA NUMBERED POWER OUTLET
GFI	INDICATES GROUND FAULT INTERRUPT (GFI) PROTECTION
WP	INDICATES WEATHERPROOF DEVICES
GFI WP	INDICATES GFI PROTECTED WEATHERPROOF DEVICE
G	INDICATES DEVICE WITH PROTECTIVE GUARD
WG	INDICATES DEVICE WITH WIRE GUARD
3R	INDICATES NEMA 3R RATED DEVICE
4XSS	INDICATES NEMA 4XSS RATED DEVICE
EM	INDICATES DEVICE ON EM/STANDBY POWER
VFD	INDICATES VARIABLE FREQUENCY DRIVE (VFD)
E	EXISTING DEVICES TO REMAIN
D	EXISTING DEVICES TO BE DEMO/REMOVED
R	EXISTING DEVICES TO BE RELOCATED
REP	EXISTING DEVICES TO BE REPLACED
	(X) = (E) FOR EXISTING
	(X) = (D) FOR DEMO
	(X) = (R) FOR RELOCATION
	(X) = (N) FOR NEW
→	HOMERUN TO CIRCUIT NOTED

1. RECEPTACLES AND DATA OUTLETS SHALL BE MOUNTED AT +18" AFF UNLESS NOTED ON THE DRAWINGS.
2. REF. SPECIFICATIONS FOR MOUNTING HEIGHT OF OTHER DEVICES.
3. ELECTRICAL RECEPTACLES, TELEPHONES, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
4. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
4. ALL DEVICES SHOWN AT THE SAME LOCATION AND ELEVATION SHALL BE GROUPED TOGETHER AND SPACED 2 INCHES BETWEEN BOXES.
5. PROVIDE SS COVER PLATE FOR ALL EMPTY JBOX.
6. ALL NON-LOCKING 125V AND 250V, 15A AND 20A RECEPTACLES SHALL BE TAMPER RESISTANT TYPE.

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k

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
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MISSOURI CITY, TX 77489

SEAL
STATE OF TEXAS
GEORGE L. STANTON
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07.18.2025

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ELECTRICAL AND FIRE ALARM SCHEDULES
k-E.000

PROVIDE CONDUIT & SLEEVES THRU FIRE WALLS, WALLS AND FLOORS FOR LOW VOLTAGE CABLING WIRING, ETC.

ALL CONDUIT & J-BOXES FOR LOW VOLTAGE CABLING SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL LOW VOLTAGE CABLING IN WALLS, EXPOSED AREAS AND ABOVE INACCESSIBLE CEILINGS SHALL REQUIRE CONDUIT AND J-BOXES. REFERENCE SPECIFICATIONS AND TECHNOLOGY DOCUMENTS FOR ADDITIONAL INFORMATION/REQUIREMENTS.

PULL BOXES AND BELOW GRADE CONDUIT FOR LOW VOLTAGE CABLING, WIRING, ETC. BY ELEC CONTRACTOR.

FIRE ALARM SYSTEM DESCRIPTION AND SEQUENCE OF OPERATION

1. FIRE ALARM SYSTEM SHALL BE DESIGNED TO MEET NFPA REQUIREMENTS AS WELL AS CITY AND NATIONAL BUILDING CODES. PROVIDE COMPLETE FIRE ALARM SYSTEM, DEVICES AND WIRING.
2. INSTALL FIRE ALARM CONTROL PANEL IN RECEPTION AREA. INSTALL REMOTE POWER SUPPLY PANELS IN MECHANICAL/ELECTRICAL ROOMS.
3. FIRE ALARM PANEL, POWER SUPPLIES, DEVICES, ETC. SHALL BE MANUFACTURED BY THE SAME MANUFACTURER AS THE FIRE ALARM CONTROL PANEL.
4. FIRE ALARM REMOTE POWER SUPPLIES AND PANELS SHALL BE LOCATED IN MECHANICAL OR ELECTRICAL ROOMS ONLY. DO NOT LOCATE IN STORAGE ROOMS, DATA CLOSETS OR FINISHED SPACES.
4. PROVIDE AUDIBLE, INTELLIGIBLE AND VISUAL ALARM COVERAGE OF THE AREA OF RENOVATION AS REQUIRED BY CODE.
5. PROVIDE SMOKE DETECTORS AT EACH FIRE ALARM PANEL, REMOTE TRANSPONDER PANEL, BOOSTER PANEL AND REMOTE ANNUNCIATOR PER NFPA 72.
6. IN ADDITION TO THE SPECIFIED FIRE ALARM EQUIPMENT, THE FIRE ALARM CONTRACTOR SHALL PROVIDE
   - 6.A. SURGE PROTECTORS FOR ALL NEW 120V POWER CONNECTIONS TO FIRE ALARM EQUIPMENT.
   - 6.B. SURGE PROTECTORS FOR ALL SIGNALING LINE CIRCUITS (SLC), NOTIFICATION CIRCUITS AND INITIATING CIRCUITS CONNECTED TO THE FIRE ALARM CONTROL PANEL WHICH LEAVE THE BUILDING.
7. SHOULD ANY DETECTOR, MONITOR OR PULL STATION ACTIVATE, ALL SPEAKERS SHALL SOUND AND STROBES FLASH. AIR HANDLING EQUIPMENT SHALL BE DEACTIVATED. AN ALARM SIGNAL SHALL BE SENT TO A REMOTE LOCATION VIA AUTOMATIC DIALER. ALSO, DE-ENERGIZE SUPPLY FANS, EXHAUST FANS AND OTHER AIR CIRCULATING DEVICES IF 2000 CFM OR OVER, SERVING THE AREA IN ALARM,
8. ALL LOW VOLTAGE WIRING SHALL BE FPLP RATED WIRE, WITH MINIMUM WIRE SIZE PER SPECIFICATIONS.
   - 8.A. PLENUM RATED CABLE ABOVE ACCESSIBLE CEILING SHALL BE SUPPORTED BY J-HOOKS, SPACED AT FOUR (4) FEET ON CENTER.
   - 8.B. INSTALL FIRE ALARM CABLES IN CONDUIT FOR AREAS WITHOUT CEILING OR ABOVE INACCESSIBLE CEILINGS.
   - 8.C. EXPOSED CONDUIT IN FINISHED SPACES SHALL BE ALLOWED WHERE NO OTHER OPTION EXISTS AND ONLY WITH PRIOR WRITTEN APPROVAL BY THE OWNER. ALL EXPOSED CONDUIT SHALL BE PAINTED TO MATCH.
   - 8.D. ALL CABLING THROUGH WALLS, FIRE WALLS AND FLOORS SHALL BE INSTALLED IN SLEEVES WITH PROTECTIVE BUSHINGS ON BOTH ENDS.
9. FIRE ALARM SYSTEM SHALL BE MONITORED BY A UL LISTED CENTRAL RECEIVING STATION.
10. INTERLOCK LIGHTING CONTROL PANELS WITH FIRE ALARM SYSTEM TO ENABLE ALL LIGHTING UPON ACTIVATION.
11. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

FIRE ALARM SYSTEM NOTES

1. GENERAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL AND FIRE ALARM SUBCONTRACTOR FOR LOCATIONS OF REMOTE POWER SUPPLIES. FIRE ALARM POWER SUPPLIES ARE NOT SHOWN ON THIS DRAWING AND SHALL BE LOCATED BY FIRE ALARM SUBCONTRACTOR IN ORDER TO ACCOMMODATE HIS FIRE ALARM SYSTEM BATTERY AND VOLTAGE DROP CALCULATIONS PER MANUFACTURER'S RECOMMENDATION & NFPA REQUIREMENTS. ELECTRICAL CONTRACTOR SHALL INCLUDE ADDITIONAL DEDICATED 120V CIRCUITS IN BASE BID TO SERVE FIRE ALARM POWER SUPPLIES IN DIFFERENT AREAS. PROVIDE 2-12 +12G, 3/4"C AND SPARE 20A/1P CB(S) IN LOCAL LIFE SAFETY EMERGENCY 120V PANELS TO SERVE FIRE ALARM REMOTE POWER SUPPLIES.
2. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR DESIGN AND FOR FINAL CORRECT LOCATION OF DEVICES TO RELIEVE NUISANCE ALARMS, SUCH AS INSTALLING A HEAT DETECTOR IN FRONT OF AN OVEN WHICH WILL RELEASE STEAM, THUS POTENTIALLY SETTING OFF THE ALARM. ALSO, THE CONTRACTOR IS RESPONSIBLE FOR DETECTORS REQUIRED BY CODE EVEN IF NOT SHOWN ON DRAWING, LIKE A CLOSET. IF THERE IS UNCERTAINTY, BRING UP DURING THE BID PROCESS AND THEY WILL BE ADDRESSED DURING THE BIDDING PROCESS.
3. FIELD VERIFY ENVIRONMENTAL ISSUES THAT CAN ADVERSELY AFFECT OPERATION OF SMOKE DETECTORS. DO NOT LOCATE NEAR AIR FLOW DEVICES LEADING TO PREMATURE BUILD UP OF DUST CAUSING NUISANCE TROUBLE SIGNALS. DEVICE RELOCATION OR TYPE CHANGE WILL BE COVERED UNDER WARRANTY.

FIRE ALARM SCOPE OF WORK

1. THERE IS AN EXISTING FIRE ALARM SYSTEM IN EACH BUILDING.
   - 1.A. TEST THE EXISTING SYSTEM PRIOR TO BEGINNING DEMO. NOTE ANY FAULTS OR TROUBLES AND PROVIDE A WRITTEN REPORT TO THE OWNER.
   - 1.B. EXPAND THE EXISTING SYSTEM AS REQUIRED TO INTEGRATE THE NEW DEVICES IN THE AREA OF RENOVATION.
2. PROVIDE WIRING AND DEVICES AS INDICATED TO PROVIDE COMPLETE AUDIBLE, INTELLIGIBLE AND VISUAL ALARM COVERAGE OF RENOVATED AREAS AS REQUIRED BY CODE.
   - 2.A. PROVIDE SMOKE DETECTOR COVERAGE OF ALL STORAGE ROOMS AND ADDITIONALLY AS SHOWN ON THE DRAWINGS.
   - 2.B. PROVIDE HEAT DETECTOR COVERAGE OF THE KITCHEN, CUSTODIAL ROOMS, AND ADDITIONALLY AS SHOWN ON THE DRAWINGS.
   - 2.C. PROVIDE DUCT MOUNTED DETECTORS AT EACH NEW AIR HANDLING UNIT SUPPLY AND RETURN CONNECTION EXCEEDING 2000 CFM. IF FREE AIR RETURN, PROVIDE FREE AIR DETECTOR COVERAGE OF THE RETURN AIR OPENINGS TO THE MECHANICAL ROOM. ENSURE AIR FLOW CANNOT PREVENT OPERATION OF THE DETECTORS AND PROVIDE ADEQUATE CLEARANCE PER NFPA 72.
   - 2.D. CONTROL RELAYS SHALL BE LOCATED WITHIN 3 FT OF THE CONTROLLED CIRCUIT OR APPLIANCE.
3. PROVIDE SMOKE DETECTORS AT EACH NEW FIRE ALARM PANEL, REMOTE TRANSPONDER PANEL, BOOSTER PANEL AND REMOTE ANNUNCIATOR PER NFPA 72.
4. PROVIDE LED REMOTE ALARM WITH ENGRAVED STAINLESS STEEL PLATE WHERE DUCT DETECTORS ARE NOT LOCATED IN MECHANICAL ROOM, LOCATED ABOVE CEILINGS OR WHERE MOUNTED TOO HIGH OR VIEW IS BLOCKED BY DUCTWORK IN MECHANICAL ROOM.
   - 4.A. REMOTE LED LIGHT INDICATOR FOR DUCT SMOKE DETECTORS SHALL BE MOUNTED FLUSH IN CEILING OR MOUNTED IN WALL AT +7FT.
   - 4.B. STAINLESS STEEL PLATE SHALL BE ENGRAVED WITH THE DUCT SMOKE DETECTOR AS-BUILT IDENTIFICATION NUMBER.
5. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SPARES

1. THE FIRE ALARM CONTRACTOR SHALL INCLUDE IN HIS BID THE COST TO PROVIDE AND INSTALL THE ADDITIONAL SPARE PARTS AND ASSOCIATED CABLING PER THE SPECIFICATIONS. SPARES SHALL BE INSTALLED AS INSTRUCTED BY THE OWNER. UNINSTALLED DEVICES SHALL BE DELIVERED TO THE OWNER AS ATTIC STOCK.

GENERAL RENOVATION AND REMODELING NOTES

1. READ ALL MEP AND ARCH. DRAWINGS TO IDENTIFY AREAS OF RENOVATION AND SCOPE OF WORK.
2. ALL RENOVATION AND DEMOLITION WORK SHALL NOT AFFECT AREAS NOT INCLUDED IN THE AREAS OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUITY OF ALL SERVICES (POWER, TELEPHONE, FIRE ALARM, DATA, SECURITY, ETC.) IN NON-DEMOLITION/RENOVATION AREAS. ALL SERVICES SHALL BE MAINTAINED AT ALL TIMES.
3. ALL OUTAGES AFFECTING NON-DEMOLITION/RENOVATION AREAS SHALL BE SCHEDULED WITH THE OWNER WITH A MINIMUM 2 WEEKS ADVANCE NOTICE. OUTAGES SHALL BE COORDINATED WITH OTHER TRADES TO MINIMIZE THE QUANTITY AND IMPACT ON BUILDING OPERATION.
4. THIS ELECTRICAL DRAWING ONLY SHOWS SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J-BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
5. CONTRACTOR SHALL FIELD VERIFY AND MARK UP THE FOLLOWINGS IN AREAS OF RENOVATION:
   - 5.A. EXISTING DATA, AUDIO, VIDEO, SPEAKERS AND OTHER LOW VOLTAGE OUTLETS AND DEVICES.
   - 5.B. EXISTING CEILING MOUNTED PROJECTORS.
   - 5.C. EXISTING SECURITY, CCTV, ACCESS CONTROL DEVICES.
   - 5.D. EXISTING FIRE ALARM DEVICES.
   - 5.E. EXISTING WIRELESS ACCESS POINTS AND GRID LABELING.
   - 5.F. EXISTING LIGHT FIXTURES AND SWITCHES.
   - 5.G. EXISTING ELECTRICAL DEVICES, J-BOXES, CONDUIT, WIRING, WIRING SUPPORTS, ETC.
   - 5.H. EXISTING ELECTRICAL SWITCHGEAR.
   - 5.I. EXISTING CONTROL PANELS AND CONTROL CIRCUITS.
   - 5.J. EXISTING HANGER WIRE FROM CONC. CEILING.
6. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
7. ALL EXISTING DEVICES SHALL BE REINSTALLED IN NEW CEILINGS AT SAME LOCATION EXCEPT WHERE SHOWN TO BE NEW.
8. CONDUIT/WIRE NOT TO BE REUSED SHALL BE REMOVED ALL THE WAY BACK TO THE UPSTREAM EQUIPMENT.
   - 8.A. PROVIDE ADDITIONAL SUPPORTS FOR EXISTING CONDUIT/WIRE TO REMAIN TO MEET CURRENT CODE REQUIREMENTS.
9. ANY MATERIAL THAT HAS SALVAGE VALUE SHALL BE OFFERED TO THE OWNER, AND IF ACCEPTED, DELIVERED TO HIS WAREHOUSE. IF NOT ACCEPTED IT SHALL BE PROPERLY DISPOSED OF WITH THE OTHER CONSTRUCTION DEBRIS.
10. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITES.
11. WHERE PARTIAL CIRCUITS OR SYSTEMS ARE TO BE REUSED, ENSURE THAT THEY REMAIN ACTIVE. WHERE EXISTING EQUIPMENT IS RELOCATED OR REPLACED WITH NEW. MODIFY, EXTEND AND RELOCATE EXISTING CIRCUIT TO CONNECT TO EQUIPMENT, UNLESS SHOWN TO HAVE NEW CIRCUIT.
12. WHERE AUXILIARY SYSTEMS SUCH AS SECURITY, DATA, SOUND, ETC. INTERFACE WITH EXISTING EQUIPMENT THAT IS REPLACED OR MODIFIED (MECHANICAL, ELECTRICAL OR PLUMBING), DISCONNECT AND RECONNECT THESE SYSTEMS.
13. WHERE NEW CIRCUIT BREAKERS ARE TO BE INSTALLED IN EXISTING PANELS OR SWITCHBOARD, VERIFY THAT THE CIRCUIT BREAKER WILL FIT IN THE ALLOTTED SPACE. PROVIDE NEMA 1 ENCLOSURE ADJACENT TO PANEL & WIRE CONNECT TO BUSSING IF THERE IS INSUFFICIENT SPACE.
14. WHERE PARTIAL CIRCUITS OR SYSTEMS ARE TO BE REUSED, ENSURE THAT THEY REMAIN ACTIVE. WHERE EXISTING EQUIPMENT IS RELOCATED OR REPLACED WITH NEW, MODIFY, EXTEND AND RELOCATE EXISTING CIRCUIT TO CONNECT TO EQUIPMENT, UNLESS SHOWN TO HAVE NEW CIRCUIT.
15. WHEN REPLACING LIGHTS AND CEILINGS, ENSURE THAT EXISTING DATA, TELEVISION AND PA CABLES TO REMAIN CONTINUE TO MEET THE CURRENT STANDARDS. FOR DATA CABLES, THIS IS THE IEEE 802.1. FOR TELEVISION AND PA CABLE, A FOUR INCH DISTANCE IS NEEDED FROM ALL LIGHT FIXTURES. NEW DROP LOCATION SHOULD BE WITHIN THREE FEET OF POWER OUTLET.
16. PAINT NEW AND EXISTING EXPOSED RACEWAY IN AREAS OF RENOVATION TO MATCH FINISHES.
17. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
18. INTERESTED CONTRACTORS MUST VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH THE PROJECT REQUIREMENTS AND EXISTING CONDITIONS AND SHALL INCLUDE IN THEIR PROPOSALS COSTS TO REPAIR, RELOCATE, MODIFY AND REMOVE EXISTING ELEMENTS AS REQUIRED TO COMPLETE INSTALLATION OF ALL SYSTEMS SHOWN ON THESE DRAWINGS.
19. SEE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

ELEC REQUIREMENTS FOR BUILDING RENOVATION

1. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
2. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
3. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
4. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
5. ALL EXISTING DEVICES TO REMAIN SHALL BE REINSTALLED IN NEW CEILINGS AND WALLS EXCEPT WHERE INDICATED TO BE REMOVED/RELOCATED/REPLACED.
6. EXISTING DEVICES IN WALLS TO BE FURRED OUT OR RECEIVE NEW SURFACE TREATMENT SHALL REMAIN. EXTEND JBOX TO NEW WALL SURFACE AND RECONNECT TO EXISTING CIRCUITS. EXTEND WIRING/CABLING FROM NEAREST ACCESSIBLE POINT AS NECESSARY.
7. REINSTALL ALL DEVICES NOT SHOWN TO BE REMOVED.
8. EXISTING LIGHT FIXTURES SHALL REMAIN EXCEPT WHERE SHOWN AS NEW. EXTEND EXIST CONDUIT AND WIRE DOWN TO NEW LIGHT FIXTURES, REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. ALL EXISTING EXIT SIGNS SHALL BE REINSTALLED AND RECONNECTED TO EXISTING CIRCUITS EXCEPT IN CORRIDORS AND AREAS OF RENOVATION SHOWING NEW.
10. ALL NEW DEVICES IN EXISTING WALLS IN FINISHED SPACES SHALL BE INSTALLED FLUSH MOUNTED, NO EXPOSED CONDUIT OR WIREMOLD ALLOWED. CUT EXISTING WALLS AND PATCH/REPAIR TO MATCH EXISTING AS REQUIRED.
    - 10.1. DEVICES/CONDUIT IN CUSTODIAL, MECHANICAL AND ELECTRICAL ROOMS MAY BE EXPOSED AND SURFACE MOUNTED.
11. PROVIDE NEW DIRECTORY FOR ALL EXISTING AND NEW PANELS SHOWING FIELD VERIFIED CIRCUITS.
12. ANY FEEDER AND BRANCH CIRCUIT NOT TO BE REUSED SHALL BE REMOVED COMPLETELY UP TO CB IN EXISTING PANEL.
13. ANY CIRCUIT OR PARTIAL CIRCUIT TO BE REUSED SHALL REMAIN ACTIVE.

GENERAL EQUIPMENT ELECTRICAL NOTE

THE ELECTRICAL DESIGN HAS BEEN COORDINATED FOR SPACE, INSTALLATION AND ELECTRICAL REQUIREMENTS WITH EQUIPMENT THAT IS SCHEDULED BY OTHER DIVISIONS. THE REQUIREMENTS FOR OTHER EQUIPMENT AND MODELS FROM ACCEPTABLE MANUFACTURERS HAVE NOT BEEN VERIFIED OR COORDINATED. THE GENERAL CONTRACTOR SHALL VERIFY THESE REQUIREMENTS PRIOR TO USING OTHER EQUIPMENT IN HIS BID AND INCLUDE ANY ADDITIONAL COSTS FOR INSTALLATION OF THE EQUIPMENT. THIS INCLUDES GENERAL CONSTRUCTION AND MEP COSTS.

ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER/OTHER TRADES FOR EXACT ELECTRICAL REQUIREMENTS OF EQUIPMENT PRIOR TO ORDERING CB(S). FIELD VERIFY EQUIPMENT NAMEPLATE RATINGS AND EQUIPMENT CONNECTION LOCATIONS WITH OTHER TRADES PRIOR TO ROUGH-IN.

TYPICAL OF HVAC EQUIPMENT, SHOP EQUIPMENT, KITCHEN EQUIPMENT, ELECTRIC ROLLUP DOORS, ETC.

GENERAL ELECTRICAL NOTES

1. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. INSTALL SYSTEMS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
3. PROVIDE LIGHT FIXTURE FIRE PROTECTION AND CONDUIT FIRE SEALING TO MAINTAIN FIRE RATING OF WALLS AND CEILINGS PER ARCHITECT'S SCHEDULE. REF. SPECIFICATIONS AND ARCH. DRAWINGS FOR ADDITIONAL INFORMATION.
4. ELECTRICAL RECEPTACLES, TELEPHONES, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
5. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
6. DO NOT INSTALL ELECTRICAL PANELS AND TRANSFORMERS UNTIL 1/4" SCALE DRAWINGS SHOWING LOCATION OF THIS EQUIPMENT RELATIVE TO MECHANICAL/PLUMBING EQUIPMENT, DUCTWORK AND PIPING IS SUBMITTED AND APPROVED. NEC CODE CLEARANCE MUST BE MAINTAINED.
7. ELECTRICAL EQUIPMENT HAS BEEN COORDINATED WITH PIPING AND DUCTWORK. DO NOT RELOCATE PANELS WITHOUT PRIOR APPROVAL.
8. ELECTRICAL DEVICES IN FIRE RATED WALLS SHALL BE A MINIMUM OF 24" AWAY FROM DEVICES ON THE OPPOSITE SIDE OF THE WALL TO MAINTAIN FIRE RATING.
9. MINIMUM SIZE CONDUIT FOR POWER SHALL BE 3/4", MIN. SIZE FLEX CONDUIT MAY BE 1/2". MINIMUM SIZE CONDUIT FOR DATA SHALL BE 1"C. DO NOT COMBINE CONDUIT FOR DATA.
10. MAX. LENGTH FOR FLEX CONDUIT SHALL BE 6 FT. ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
11. LIGHT FIXTURE WHIPS MAY BE MIN. 1/2" FLEX CONDUIT WITH MIN. #12 WIRE. LIGHT FIXTURE WHIPS SHALL BE NO MORE THAN 6 FT LONG.
12. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
13. GROUND TRANSFORMER SECONDARIES TO BUILDING STEEL AND GROUND ROD. PROVIDE CONDUIT TO PROTECT GROUNDING CONDUCTOR AND BOND EACH END OF CONDUIT TO GROUNDING SYSTEM. MIN. SIZE OF CONDUIT FOR GROUND WIRE SHALL BE 3/4"C.
14. PROVIDE J-BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM AND SOUND SYSTEMS WIRINGS, ETC. SEE SPECIFICATIONS.
15. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS.
16. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
17. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12. ALL WIRE SHALL BE STRANDED TYPE THHN OR THWN-2 (WET RATED FOR 90° C). ALL WIRES SHALL BE COLOR CODED WITH SAME COLOR CONNECTED TO SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION.
18. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT. NO SURFACE MOUNTED WIREMOLD SHALL BE ALLOWED IN FINISHED SPACES. MC CABLE SHALL BE ALLOWED INSIDE EXIST STUD WALLS OR CHASE WALLS.
19. PROVIDE AND INSTALL FINAL CONNECTIONS TO ALL EQUIPMENT PROVIDED BY OTHER TRADES AND/OR FURNISHED BY OWNER INCLUDING ALL NECESSARY CONDUIT, CORDS, PLUGS, WHIPS, HARDWIRING, ETC. IN PARTICULAR CONFIRM CONNECTION REQUIREMENTS WITH DELIVERED EQUIPMENT PRIOR TO ROUGH-IN.
20. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

STANTON ENGINEERING GROUP

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FBISD BP 013 KITCHEN RENOVATIONS
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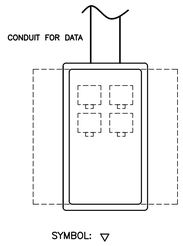
PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL AND FIRE ALARM NOTES

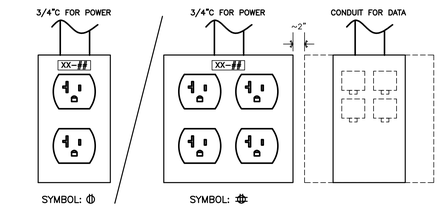
k-E.001



1 TYPICAL DATA OUTLETS

NO SCALE

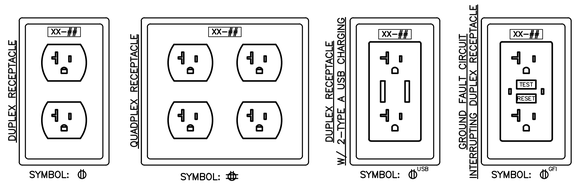
NOTES:
1. PROVIDE DEEP 4 11/16" X 4 11/16" X 2 1/8", 2-GANG BACK BOX FOR ALL DATA OUTLETS.
   1.A. PROVIDE SINGLE GANG MUDRING FOR DATA OUTLETS WITH 1-4 DROPS.
   1.B. PROVIDE PULL STRING IN ALL LOW VOLTAGE CONDUITS.
2. LOW VOLTAGE CABLING AND DEVICES BY DIVISION 27.
3. REFERENCE TECHNOLOGY DRAWINGS FOR ADDITIONAL INFORMATION.



2 TYPICAL POWER & DATA OUTLET DETAIL

NO SCALE

NOTES:
1. LOCATE DEVICES GROUPED TOGETHER AS CLOSELY TOGETHER AS POSSIBLE.
   1.A. USE CADDY TSGB16, RBS16 OR SIMILAR MOUNTING BAR IN SHEETROCK WALLS.



3 TYPICAL ELECTRICAL DEVICES

NO SCALE

NOTES:
1. ALL DEVICES SHALL BE COLOR CODED PER SPECIFICATIONS WITH 302/304 STAINLESS STEEL, STANDARD SIZE, FACEPLATES.
2. ONLY SELECT RECEPTACLES ARE SHOWN HERE. PROVIDE SIMILAR LABELS ON ALL SWITCHES, NEMA POWER OUTLETS, ETC.
3. PROVIDE LABEL WITH RED TEXT READING "EMERGENCY" FOR DEVICES ON GENERATOR FED CIRCUITS.
4. PROVIDE TYPEWRITTEN OR PREMADE CIRCUIT LABELS INDICATING THE ELECTRICAL CIRCUIT ON:
   4.A. INSTALLED WIRING AT EACH SPLICE POINT
   4.B. EACH J-BOX ABOVE CEILING WITH WIRING INSTALLED OR MODIFIED AS PART OF THIS PROJECT.
   4.C. AFFIXED TO THE FRONT OF EACH NEW AND EXISTING DEVICE FACEPLATE IN THE AREA OF RENOVATION.
   CIRCUIT LABEL
   XX-## A. XX = PANEL DESIGNATION
   B. ## = AS-BUILT CIRCUIT DESIGNATION

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HUNTERS GLEN ELEMENTARY SCHOOL
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07.18.2025

MWA ARCHITECTS

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HOUSTON, TEXAS 77079

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ELECTRICAL DEVICE DETAILS

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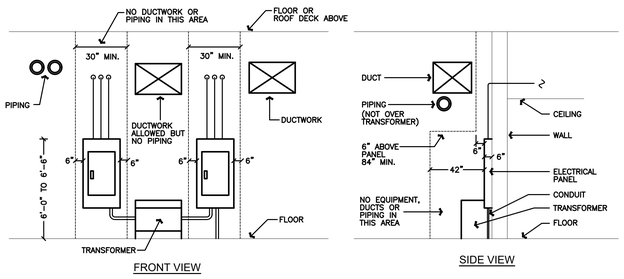
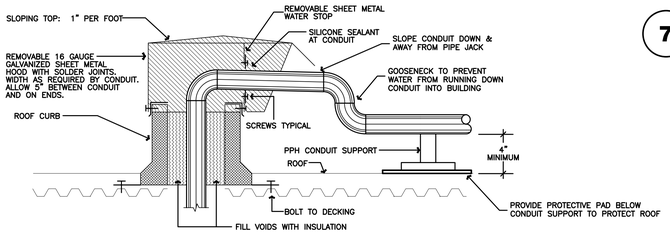


10 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

COORDINATE WITH OTHER TRADES TO ENSURE NO PIPING AND DUCTWORK ABOVE ELECTRICAL EQUIPMENT AS SHOWN. PROVIDE WORKING CLEARANCE IN FRONT OF STARTERS, DISCONNECTS, PANELS, XFMRS AND ADDITIONALLY PER CODE.



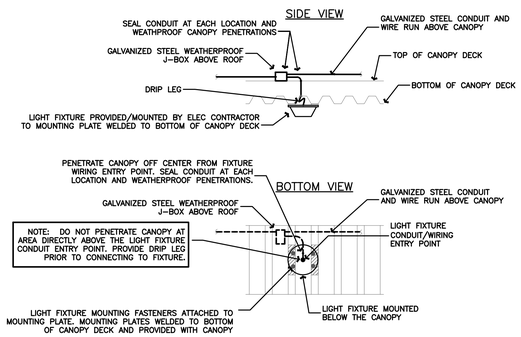
11 CONDUIT ROOF PENETRATION DETAIL

NO SCALE

12 ROOF AND CANOPY CONDUIT SUPPORT DETAIL

NO SCALE

1. COORDINATE WITH ARCHITECTURAL DRAWINGS, DETAILS, SPECIFICATIONS AND OTHER TRADES.

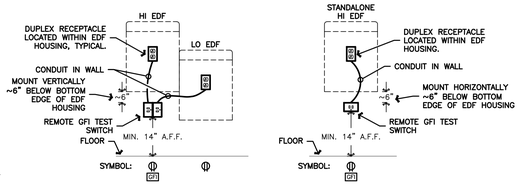


13 CANOPY LIGHT MOUNTING DETAIL TYPE 1

NO SCALE

NOTES:

1. MOUNTING PLATES SHALL BE WELDED TO CANOPY TO MOUNT LIGHT FIXTURES.
2. FOR FIXTURES WITH END CONDUIT ATTACHMENTS ALL CANOPY PENETRATIONS SHALL BE MADE OFF CENTER FROM THE FIXTURE WIRING ENTRY POINT AND SHALL HAVE WEATHERTIGHT SEALING. (SHOWN HERE)
3. CANOPY PENETRATIONS ABOVE FIXTURES SHALL BE PERMITTED ONLY WHERE THE SUPPLIED FIXTURE HAS NO END CONDUIT ATTACHMENTS.
4. CONDUIT SHALL BE SEALED BOTH ABOVE AND BELOW THE CANOPY PENETRATION AND AGAIN AT THE FIXTURE ENTRY POINT TO PREVENT WATER FROM ENTERING THE LIGHTING FIXTURE.
5. CANOPY PENETRATIONS SHALL BE MADE AS CLOSE TO CONDUIT ENTRY PENETRATION POINT AS POSSIBLE AND CONDUIT SHALL BE ROUTED TO MINIMIZE EXPOSED CONDUIT.

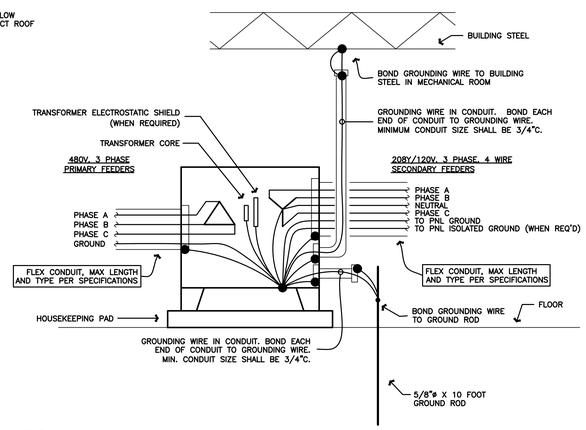


7 EDF GFI PROTECTION DETAIL

NO SCALE

NOTES:

1. MODIFY EXISTING WALL AS NEEDED TO INSTALL NEW RECEPTACLE AND REMOTE GFI TEST SWITCH. PATCH/REPAIR WALL AS NEEDED TO MATCH EXISTING.
2. WIRE NEW RECEPTACLE DOWNSTREAM OF REMOTE GFI TEST SWITCH.
3. REMOTE GFI TEST SWITCH SHALL BE A DEAD FRONT GFI DEVICE TO BE INSTALLED FLUSH MOUNTED IN WALL WITH EDF SERVED AND PROVIDE GFI PROTECTION FOR THE RECEPTACLE LOCATED WITHIN THE EDF HOUSING.
4. GFI TEST SWITCH SHALL BE READILY ACCESSIBLE PER NEC 210.8.
5. COORDINATE RECEPTACLE LOCATION(S) WITHIN EDF HOUSINGS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

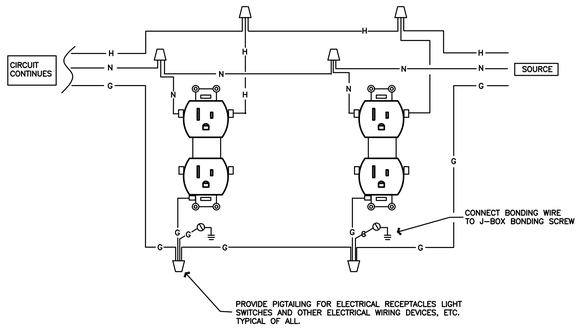


8 TRANSFORMER CONNECTION AND GROUNDING DETAIL

NO SCALE

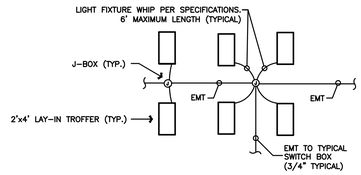
NOTES:

1. INSTALL GROUND ROD ADJACENT TO TRANSFORMER AND SEAL PENETRATION AROUND GROUND ROD.
2. WHERE AN ISOLATED GROUND IS PROVIDED MAKE THE CONNECTION AT THE TRANSFORMER AND RUN DIRECTLY TO THE ISOLATED GROUND BAR IN THE PANELBOARD. DO NOT DEFINE THE ISOLATED GROUND AT THE PANELBOARD.
3. FINAL CONNECTIONS TO TRANSFORMERS SHALL BE MADE IN FLEXIBLE CONDUIT. PROVIDE LIQUID TIGHT CONSTRUCTION AND FITTINGS IN WET, DAMP OR OUTSIDE AREAS EXCEPT WHERE LOCATED IN AIR HANDLING ROOMS. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.



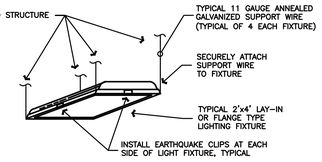
9 PIGTAIL WIRING DETAIL FOR ELECTRICAL DEVICE

NO SCALE



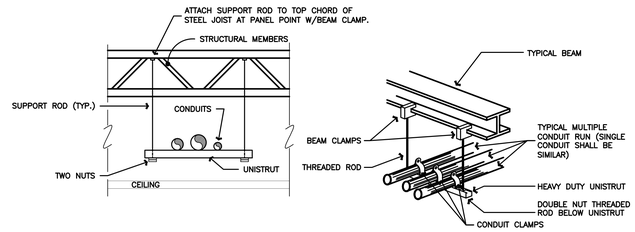
1 CONDUIT/J-BOX DETAIL FOR LIGHT FIXTURES IN LAY-IN CEILING

NO SCALE



2 FIXTURE SUPPORT DETAIL

NO SCALE

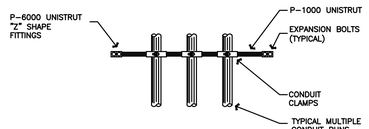


3 TRAPEZE MOUNTED CONDUIT DETAIL

NO SCALE

NOTES:

1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

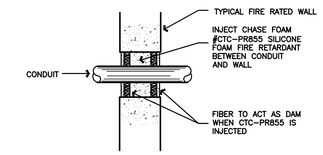


4 WALL MOUNTED CONDUITS

NO SCALE

NOTES:

1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

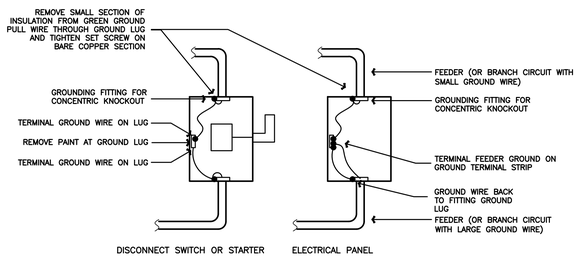


5 FIREWALL PENETRATION DETAIL

NO SCALE

NOTES:

1. FIRE RATING OF COMPLETED FIREPROOFED ASSEMBLY SHALL BE EQUAL OR EXCEED RATING OF WALL.



6 GROUNDING BUSHING WIRING DETAIL

NO SCALE

NOTE:

1. PROVIDE AND INSTALL GROUNDING BUSHINGS FOR DISCONNECT SWITCHES, PANELS AND TRANSFORMERS.

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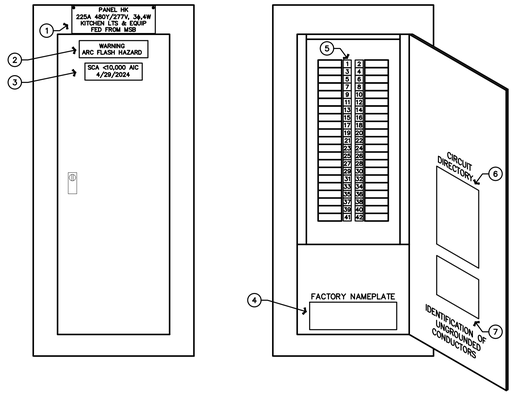


5 TYPICAL BRANCH CIRCUIT PANEL LABELING DETAIL

NO SCALE

NOTES:

1. LAYOUT OF PANELBOARD, INCLUDING LOCATIONS OF NAMEPLATES, CIRCUIT DIRECTORY, AND OTHER LABELING IS SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS.
2. REFERENCE OWNER'S DESIGN GUIDELINES FOR ADDITIONAL LABELING REQUIREMENTS.

(1) PROVIDE LAMACOID NAMEPLATE WITH 5/16" LETTERS SHOWING PANEL NAME, AMPERAGE RATING, VOLTAGE, AND FROM WHERE POWER IS DERIVED. ATTACH WITH MASTIC AND TWO SCREWS. COORDINATE TO GIVE SAME NAME AS PANEL SCHEDULE. IF USED AS MAIN SERVICE PANEL, PROVIDE SHORT CIRCUIT AVAILABLE AND RATING INFORMATION.

(2) PROVIDE PERMANENT ARC FAULT WARNING LABEL.

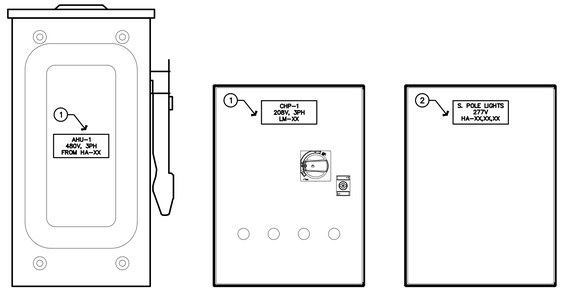
(3) FOR ALL NEW ELECTRICAL EQUIPMENT, PROVIDE PERMANENTLY AFFIXED LABEL STATING FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE MINIMUM 2" X 3" IN SIZE, AND INCLUDE THE DATE OF THE CALCULATION. REFERENCE ELECTRICAL DRAWINGS AND EQUIPMENT SHORT CIRCUIT ANALYSIS TABLE. ATTACH WITH MASTIC AND TWO SCREWS.

(4) PROVIDE INFORMATION PER INDUSTRY STANDARDS, BUT SHALL INCLUDE VOLTAGE, PHASE, BUS AMPERAGE, AND SHORT CIRCUIT RATING

(5) FOR EACH CIRCUIT PROVIDE PERMANENT LABEL INDICATING CIRCUIT BREAKER NUMBER, NUMBER SHALL MATCH CIRCUIT DIRECTORY.

(6) CIRCUIT DIRECTORY TO BE COMPLETED AT END OF JOB, TYPEWRITTEN, STATING EQUIPMENT OR ROOMS SERVED BY CIRCUIT. EVEN CIRCUIT ON RIGHT SIDE OF CARD, ODD ON LEFT. PROVIDE LAMINATED DIRECTORY FOR EXTERIOR OR WET LOCATIONS.

(7) PROVIDE PERMANENT LABEL INDICATING COLOR CODING OF PHASE CONDUCTORS BASED ON VOLTAGE USING BUILDING COLOR SCHEME AS IDENTIFIED IN THE OWNER'S DESIGN GUIDELINES.



1 TYPICAL DISCONNECT, STARTER, & CONTACTOR LABELING DETAIL

NO SCALE

NOTES:

1. LOCATIONS OF NAMEPLATES SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS. REFERENCE OWNER'S DESIGN GUIDELINES FOR ADDITIONAL LABELING REQUIREMENTS.

(1) PROVIDE AN ENGRAVED NAMEPLATE SHOWING LOAD SERVED, EQUIPMENT VOLTAGE, AND CIRCUIT NUMBER MATCHING AS-BUILT CONDITIONS.

(2) PROVIDE AN ENGRAVED NAMEPLATE SHOWING LOADS SERVED, VOLTAGES, AND CIRCUIT NUMBERS MATCHING AS-BUILT CONDITIONS FOR ALL CONTACTOR CIRCUITS. LOADS SERVED SHALL BE "LIGHTING", "FAN", "RECEPTACLES", "PUMP", "WATER HEATER", OR SIMILAR DESCRIPTIVE NOTE.

DISHWASHER
480V, 3PH, 3 WIRE
FROM HK-2/4/6

2 DISCONNECT LABELING

NO SCALE

NOTES:

1. PROVIDE LABEL ON EACH DISCONNECT AND FUSED SWITCH.
   1.1. FOR DISCONNECTS AND FUSED SWITCHES REPLACE "PANEL P1NA" WITH THE LOAD SERVED.
   1.2. REFER TO OWNER'S STANDARDS FOR ADDITIONAL LABEL REQUIREMENTS.
2. PROVIDE LABEL ON ELECTRICAL PANEL AND TRANSFORMER.
   2.1. REPLACE "PANEL P1NA" WITH THE PANEL OR TRANSFORMER NAME BEING LABELED.
3. REPLACE "400A FUSED SWITCH" WITH UPSTREAM SOURCE OR CONNECTION.
   3.1. IF FED FROM A XFMR REPLACE "400A FUSED SWITCH" WITH "XFMR XX" WHERE XX IS THE FIELD VERIFIED XFMR NAME.
4. REPLACE VOLTAGE CONFIGURATION TO MATCH THE EQUIPMENT BEING LABELED.
5. REFERENCE FLOOR PLANS FOR EQUIPMENT LOCATIONS.

⚠ WARNING

Arc Flash and Shock Hazard
Appropriate PPE Required

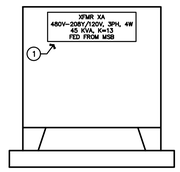
FLASH PROTECTION		SHOCK PROTECTION	
Incident Energy at:	16 in	Shock Risk When Cover is Removed	480 VAC
Min. Arc Rating:	0.45 cal/cm²	Limited Approach	42 in
Arc Flash Boundary:	10 in	Restricted Approach:	12 in
PPE: Per NFPA 70E 2015	1	Equipment Name: **PANEL HA** Prot Dev: 225/3 CB from Panel DA	

3 TYPICAL ARC FLASH LABEL DETAIL

NO SCALE

NOTES:

1. VALUES AND NAMES SHOWN HERE ARE FOR REFERENCE ONLY, MODIFY TO REFLECT PROJECT'S ARC FLASH STUDY VALUES AND EQUIPMENT NAMES.
2. IF MIN. ARC RATING IS OVER 40CAL/CM² MODIFY "WARNING" TEXT TO READ "DANGER" AND PROVIDE RED SHADING IN LIEU OF ORANGE SHOWN.



4 TYPICAL TRANSFORMER LABELING DETAIL

NO SCALE

NOTES:

1. LOCATIONS OF NAMEPLATES SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS.

(1) PROVIDE AN ENGRAVED NAMEPLATE SHOWING EQUIPMENT NAME, RATING, VOLTAGE, SOURCE.

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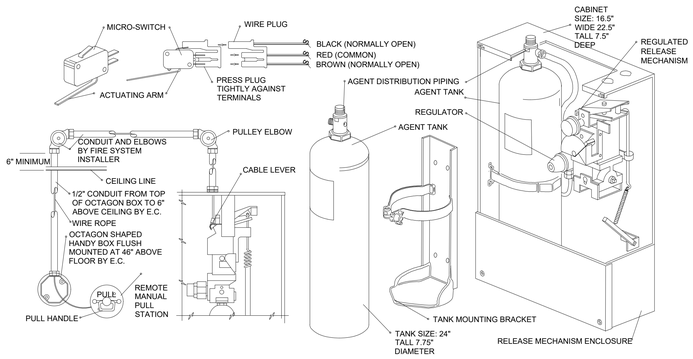
KITCHEN AREA ELECTRICAL NOTES

1. REFER TO KITCHEN CONSULTANTS "FS" DRAWINGS FOR ADDITIONAL REQUIREMENTS PARTICULARLY NOTING MOUNTING HEIGHTS OF EQUIPMENT OUTLETS AND JUNCTION BOXES, AND WHETHER SERVICE IS FROM WALL, FLOOR OR OVERHEAD.
2. SOME RECEPTACLES SHALL BE MOUNTED HORIZONTALLY, REFER TO KITCHEN CONSULTANTS "FS" DRAWINGS.
3. FOR DEVICES WITH SERVICE FROM FLOOR, RUN UNDERGROUND CONDUIT FROM DEVICES TO NEAREST COLUMN OR WALL THEN TURN CONDUIT UP AND RUN CONDUIT IN CEILING CAVITY.
4. LIGHT SWITCHES AND RECEPTACLES NOT SERVING A SPECIFIC PIECE OF EQUIPMENT SHALL BE MOUNTED AT ADA HEIGHTS.
5. CONNECTION TYPE SHOWN ON KITCHEN ELECTRICAL FLOOR PLAN IS FOR BIDDING PURPOSES, COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER FOR FINAL CONNECTIONS:
   - 5.A. OBTAIN WIRING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT FROM EQUIPMENT SUPPLIER PRIOR TO ORDERING WIRING DEVICES AND ROUGH-IN.
   - 5.B. IF EQUIPMENT REQUIRES CORD AND PLUG CONNECTION, CONTRACTOR SHALL PROVIDE NEMA POWER CORD, PLUG, AND RECEPTACLES PER MANUFACTURER'S INSTRUCTION.
   - 5.C. IF EQUIPMENT REQUIRES JUNCTION BOX AND/OR DISCONNECT SWITCH, CONTRACTOR SHALL PROVIDE JUNCTION BOX AND DISCONNECT SWITCH AND CONNECT EQUIPMENT WITH SEALTITE FLEXIBLE CONDUIT.
6. ALL DISCONNECT SWITCHES IN THE KITCHEN AREA SHALL BE NEMA 4XSS STAINLESS STEEL.
7. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
8. FLEXIBLE CONDUIT IN KITCHENS, FOOD PRODUCTION SPLASH ZONES AND WASH DOWN AREAS, FOOD PROCESSING, AND SIMILAR AREAS SHALL BE LIQUID TIGHT CONSTRUCTION INCORPORATING A BACTERIAL GROWTH INHIBITING PVC JACKET THAT MAY BE CLEANED WITHOUT DEGREDATION TO THE JACKET BLEACHING ELEMENTS AND APPROVED FITTINGS FOR WET LOCATION.
   - 8.A. AFC SZ TYPE LFMC OR EQUAL BY KAF-TECH.
9. INTERLOCK KITCHEN EXHAUST HOOD FIRE SYSTEM WITH FIRE ALARM SYSTEM.
10. PROVIDE RELAYS AND INTERLOCK KITCHEN HOOD FANS WITH FIRE ALARM SYSTEM. ACTUATION OF ANY ALARM INITIATING DEVICE SHALL DE-ENERGIZE KITCHEN HOOD FANS.
11. ALL GFI RECEPTACLES IN KITCHEN SHALL BE PASS & SEYMOUR MODEL 2097TRWR-XX TO EXCEED UL943 VOLTAGE SURGE REQUIREMENTS.

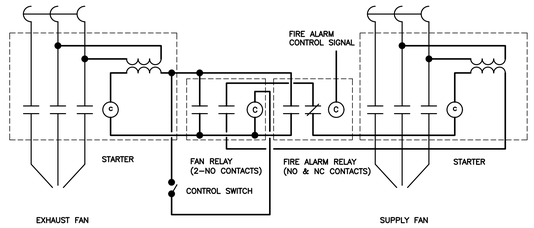


4 FIRE PROTECTION SYSTEM DETAIL

NO SCALE

NOTES:

1. ANSUL MODEL R-120 FIRE PROTECTION SYSTEM AND TANK(S)
2. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL POWER DISCONNECT DEVICES FOR ALL EQUIPMENT BELOW THE HOOD, SHUTTING OFF ALL SERVICE, INCLUDING CONTROL VOLTAGE, UPON ACTIVATION OF THE FIRE PROTECTION SYSTEM.
3. MICRO-SWITCH FURNISHED WITH SYSTEM TO BE INTERWIRED TO THE SHUT-OFF DEVICES FOR THE COOKING EQUIPMENT BY THE ELECTRICAL CONTRACTOR.
4. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL AN OCTAGON SHAPED HANDY BOX FOR THE PULL STATION AT 54" ABOVE THE FLOOR WITH 1/2" CONDUIT FROM THE TOP OF THE BOX TO 6" ABOVE THE CEILING.
5. GAS SHUT-OFF VALVE FURNISHED WITH THE SYSTEM (IF REQUIRED) TO BE INSTALLED IN THE GAS LINE SERVING THE COOKING EQUIPMENT BY THE PLUMBING CONTRACTOR. VERIFY SIZE OF GAS LINE.
6. ALL EXPOSED PIPEWORK TO BE STAINLESS STEEL OR CHROME WHERE EXPOSED.
7. VERIFY LOCATION OF REMOTE MANUAL PULL STATION.
8. UNIT MUST BE PLACED WITHIN EASY ACCESS OF EXIT DOOR.

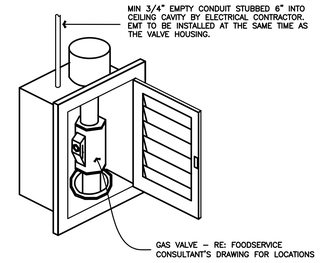


5 KITCHEN HOOD FAN CONTROL SCHEMATIC

NO SCALE

NOTES:

1. THE FANS SHALL BE WIRED SO THAT ONE LOCAL SWITCH TURNS ON ASSOCIATED SUPPLY AND EXHAUST FANS.
2. IF THE FIRE ALARM IS IN ALARM, A FIRE ALARM CONTROL CONTACT SHALL CAUSE THE SUPPLY FAN TO STOP AND THE EXHAUST FAN TO START, EVEN IF THE CONTROL SWITCH IS "OFF".
3. SCHEMATIC IS DIAGRAMMATIC. PROVIDE INTERLOCK WIRING BASED ON EQUIPMENT PROVIDED AND FAN VOLTAGE TO IMPLEMENT THE SEQUENCE SPECIFIED.
4. COORDINATE BETWEEN FIRE ALARM CONTRACTOR, CONTROLS CONTRACTOR AND ELECTRICAL CONTRACTOR TO PROVIDE A COMPLETE INSTALLATION.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

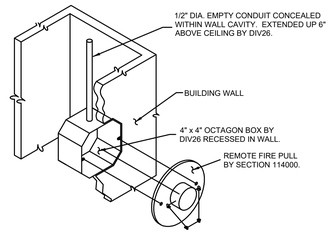


1 GAS VALVE DETAIL

NO SCALE

NOTES:

1. GAS VALVE HOUSINGS ARE NOT SHOWN ON THE ELECTRICAL DRAWING. GC AND ELECTRICAL CONTRACTOR SHALL COORDINATE SIZE AND LOCATION OF GAS VALVE HOUSINGS.
2. SEE FOOD SERVICE CONSULTANT'S DRAWINGS ADDITIONAL INFORMATION AND REQUIREMENTS.
3. PROVIDE MINIMUM 3/4"C AS SHOWN ON THIS DETAIL.

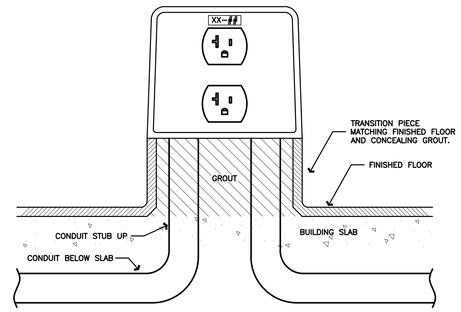


2 RECESSED FIRE PULL DETAILS

NO SCALE

NOTES:

1. VERIFY LOCATION OF REMOTE MANUAL PULL STATION.
   - 1.A. MANUAL PULL STATION MUST BE PLACED WITHIN EASY ACCESS OF EXIT DOOR.
   - 1.B. MANUAL PULL STATION MUST BE PLACED NO LESS THAN 4 FEET AWAY FROM KITCHEN HOOD BUT WITHIN A MAXIMUM OF 20 FEET FROM THE KITCHEN HOOD.



3 TYPICAL PEDESTAL MOUNTED DEVICE

NO SCALE

NOTES:

1. ALL FACEPLATES SHALL BE STAINLESS STEEL.
2. PEDESTAL BOX PROVIDED BY DIVISION 26.
   - 2.A. A STANDARD DUPLEX INSTALLATION IS SHOWN FOR REFERENCE, PROVIDE SIMILAR INSTALLATION FOR QUAD RECEPTACLES, GFI RECEPTACLES, DATA OUTLETS, NEMA POWER OUTLETS, ETC.
   - 2.B. ALL PEDESTAL BOXES TO BE DOUBLE FACED WITH ONE BLANK FACE FOR FUTURE GROWTH. 2-GANG PEDESTALS WITH ONE BLANK FACE FOR QUAD RECEPTACLE LOCATIONS.
   - 2.C. PEDESTAL BOXES TO BE SIZED BY DIVISION 26 TO PROVIDE SCHEDULED DEVICES ON A SINGLE FACE AND SUFFICIENT DEPTH FOR BACK TO BACK DEVICES ON DOUBLE FACED PEDESTALS.
   - 2.D. BASIS OF DESIGN:
     - 2.D.A. 1-GANG ELECTRICAL DEVICES: LEGRAND LBP2 OR WATER SAVER E400SA-WS
     - 2.D.B. 1-GANG LOW VOLTAGE DEVICES: LEGRAND LBP2 OR WATER SAVER E400SA-WS
     - 2.D.C. 2-GANG ELECTRICAL DEVICES: WATER SAVER E600SA-WS
     - 2.D.D. 2-GANG LOW VOLTAGE DEVICES: WATER SAVER E600SA-WS
3. INSTALLATION REQUIREMENTS:
   - 3.A. STUB UP CONDUIT ABOVE FLOOR TO PEDESTAL BOX CONNECTION LOCATION.
   - 3.B. GROUT GAP BETWEEN FINISHED FLOOR AND BOTTOM OF PEDESTAL BOX.
   - 3.C. PROVIDE TRANSITION PIECE TO CONTINUE FINISHED FLOOR TO BOTTOM EDGE OF SERVICE FITTING AND CONCEAL GROUT. TRANSITION PIECE TO MATCH ARCHITECT'S FINISH SCHEDULE.
   - 3.D. PEDESTAL BOX TO BE INSTALLED SQUARE TO THE FINISHED FLOOR.
4. PROVIDE TYPEWRITTEN OR PREMADE CIRCUIT LABELS ON INSTALLED WIRING AT EACH DEVICE AND SPLICE POINT.
5. PROVIDE TYPEWRITTEN LABEL AFFIXED TO THE FRONT OF EACH DEVICE FACEPLATE INDICATING ELECTRICAL CIRCUIT.

   CIRCUIT LABEL

   XX-## — A. XX = PANEL DESIGNATION

   B. ## = AS-BUILT CIRCUIT DESIGNATION

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SEAL

STATE OF TEXAS
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PROJ. NO.: 23-25
DATE: 07/18/2025
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ELECTRICAL
KITCHEN DETAILS

k-E.013

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LIGHTING SYSTEM FUNCTIONAL TESTING AND DOCUMENTATION NOTES:

1. PRIOR TO PASSING FINAL INSPECTION, THE CONTRACTOR SHALL PERFORM FUNCTIONAL TESTING IN THE PRESENCE OF THE REGISTERED DESIGN PROFESSIONAL, THE OWNER AND/OR THEIR AGENT. THE FUNCTIONAL TESTING SHALL BE AS REQUIRED BY SECTION C408.3.1 OF THE 2021 IECC.
   - 1.A. THE FUNCTIONAL TESTING SHALL PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SYSTEMS, INCLUDING BOTH HARDWARE AND SOFTWARE, ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTRUCTIONS.
   - 1.B. THE FUNCTIONAL TESTING SHALL BE IN ACCORDANCE WITH SECTIONS C408.3.1.1 AND C408.3.1.2 OF THE 2021 IECC FOR THE APPLICABLE CONTROL TYPE.
   - 1.C. A WRITTEN REPORT SHALL BE GENERATED DOCUMENTING THE FUNCTIONAL TESTING RESULTS IN ACCORDANCE WITH THE 2015 IECC REQUIREMENTS.
2. ALL LIGHTING CONTROLS O&M MANUALS, AS-BUILTS, TESTING REPORTS AND DOCUMENTATION RELATED TO THE LIGHTING CONTROL SYSTEM SHALL BE PROVIDED IN THEIR FINAL AND APPROVED FORM WITHIN 60 DAYS OF THE CERTIFICATE OF OCCUPANCY. ALL DOCUMENTS CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA OF SECTION C405 OF THE 2021 IECC SHALL BE INCLUDED IN THE O&M MANUALS.
3. ALL DOCUMENTS FROM ITEMS #1 AND #2 ABOVE SHALL BE COMBINED AND PROVIDED TO THE OWNER WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

LIGHT FIXTURE SCHEDULE

EXTERIOR LIGHT FIXTURE SCHEDULE

RECESSED 6" DOWNLIGHT WET LOCATION	D5 D5Y	6" DIAMETER RECESSED LED DOWNLIGHT, SPECULAR CLEAR REFLECTOR, MEDIUM (56°) BEAM DISTRIBUTION, 1000 LUMENS, 4000K COLOR TEMPERATURE, 120-277V MULTIVOLT INPUT, 1% 0-10V DIMMING DRIVER. LIGHTOLIER 6R-N / C6L-10-9-40-M-Z10-U / C6-R-DL-CC	9W
RECESSED 6" DOWNLIGHT WET LOCATION	D6 D6Y	6" DIAMETER RECESSED LED DOWNLIGHT, SPECULAR CLEAR REFLECTOR, MEDIUM (56°) BEAM DISTRIBUTION, 2000 LUMENS, 4000K COLOR TEMPERATURE, 120-277V MULTIVOLT INPUT, 1% 0-10V DIMMING DRIVER. LIGHTOLIER 6R-N / C6L-20-9-40-M-Z10-U / C6-R-DL-CC	22W
SURFACE CANOPY SQUARE LED	WC1 WC1X WC1Y	9" SQUARE SURFACE LED CANOPY LIGHT, 4000K COLOR TEMPERATURE, 3500 LUMENS, 120-277V MULTIVOLT INPUT, DARK BRONZE FINISH. EELP VR7-T-28L-QT-40K (EBLED9W)	28W
EXTERIOR WALL PACK	WP1 WP1X WP1Y	7" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 5000 LUMENS, TYPE 3 DISTRIBUTION, 120-277 MULTIVOLT INPUT, WET LOCATION, 10KV KA SURGE PROTECTION. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM SMALL GWS-A04-740-UNV-XX FINISH (EM)	34W
EXTERIOR WALL PACK	WP2 WP2X WP2Y	12" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 8500 LUMENS, TYPE 3 DISTRIBUTION, 120-277 MULTIVOLT INPUT, WET LOCATION. REFER TO ARCH FOR MOUNTING HEIGHT. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM MEDIUM GWM-A11-740-T3M-UNV-XX FINISH (REMOTE EM BATTERY)	52W
EXTERIOR WALL PACK	WP3 WP3X WP3Y	17" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 12500 LUMENS, TYPE 3 DISTRIBUTION, 120-277 MULTIVOLT INPUT, WET LOCATION. REFER TO ARCH FOR MOUNTING HEIGHT. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM MEDIUM GWM-A14-740-T3M-UNV-XX FINISH (REMOTE EM BATTERY)	77W

1. LIGHT FIXTURE CATALOG NUMBERS AND DESCRIPTIONS ARE SCHEDULED FOR ESTABLISHING QUALITY, APPEARANCE AND PERFORMANCE OF THE FIXTURES. EXACT CATALOG NUMBERS DESCRIBING MOUNTING CONDITIONS AND REQUIREMENT RELATED TO TRIM FOR ALL FIXTURES SHALL BE CONFIRMED (BY THE ELECTRICAL CONTRACTOR) WITH THE ROOM FINISH SCHEDULE AND REFLECTED CEILING PLANS ON THE ARCHITECTURAL PLANS PRIOR TO BIDDING AND SUBMITTING LIGHT FIXTURES. PROVIDE DRY WALL KIT AS REQUIRED.
2. ALL 'X', 'Y', AND 'Z' TYPE FIXTURES SHALL HAVE EMERGENCY POWER BACKUP. EMERGENCY POWER SOURCES SHALL MONITOR POWER UPSTREAM OF THE LIGHTING CONTROLS TO SEE IF POWER IS LOST. BATTERY PACKS AND INVERTERS SHALL BE CAPABLE OF POWERING THE DESIGNATED FIXTURE(S) WITH AN OUTPUT OF 1400 LUMENS FOR A MINIMUM OF 90-MINUTES, PROVIDE REMOTE BATTERY PACKS OR INVERTERS AS NECESSARY. EMERGENCY LIGHTS SHALL OPERATE ONLY UPON LOSS OF POWER. ALSO, PROVIDE AND WIRE TEST SWITCH AND LED INDICATOR LIGHT FOR EMERGENCY BATTERY. SEE WIRING INSTRUCTION SUPPLIED BY EMERGENCY BATTERY MANUFACTURER.
   - 2.A. 'X' TYPE FIXTURES (AX, ETC.) HAVE EMERGENCY GENERATOR POWER LIGHTING TRANSFER DEVICES.
   - 2.B. 'Y' TYPE FIXTURES (MY, ETC.) HAVE INDIVIDUAL 90-MINUTE EMERGENCY BATTERY POWER.
   - 2.C. 'Z' TYPE FIXTURES (QTZ, ETC.) HAVE 90-MINUTE INVERTER EMERGENCY BATTERY POWER.
3. PROVIDE BASE COVER FOR ALL LIGHT POLES.
4. ALL EXTERIOR FIXTURES SHALL BE WET RATED WITH COLD WEATHER BALLASTS AND BATTERY PACKS.
5. PROVIDE SPARE FIXTURES AND EMERGENCY DEVICES PER SPECIFICATIONS.
6. WHERE FIXTURE FINISHES ARE INDICATED TO BE SELECTED BY ARCHITECT THE CONTRACTOR SHALL INCLUDE IN THEIR BID ALL AVAILABLE FINISHES. SUBMIT COMPLETE FIXTURE FINISH OPTIONS AS PART OF THE LIGHTING SUBMITTAL PACKAGE.
7. EQUAL BY PHILIPS (CW LIGHTING), COOPER (PUTTERMAN SCHARCK), AND LITHONIA (LESCO) SHALL BE ACCEPTABLE.

INTERIOR LIGHT FIXTURE SCHEDULE

APPLICATION	TYPE	DESCRIPTION	WATTS
1X4 RECESSED LAY-IN CEILING SELECTABLE CCT & LUMENS	A1 A1X A1Y	2X4 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY-IN CEILING, 6000 LUMENS, 4000K COLOR TEMPERATURE, 120-347V MULTIVOLT INPUT, 5% 0-10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (47W). DAYBRITE 2SBP3550L8CS-4-UN3-DIM	47W
1X4 RECESSED LAY-IN CEILING SELECTABLE CCT & LUMENS	B1 B1X B1Y	1X4 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY-IN CEILING, 4500 LUMENS, 4000K COLOR TEMPERATURE, 120-347V MULTIVOLT INPUT, 5% 0-10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE 1SBP3040L8CS-4-UN3-DIM	36W
2X2 RECESSED LAY-IN CEILING SELECTABLE CCT & LUMENS	B2 B2X B2Y	2X2 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY-IN CEILING, 4250 LUMENS, 4000K COLOR TEMPERATURE, 120-347V MULTIVOLT INPUT, 5% 0-10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE 2SBP3040L8CS-2-UN3-DIM	39W
4FT STRIP LED MECHANICAL & STORAGE ROOMS	C CX CY	4 FOOT STRIP LED, STEEL HOUSING, FROSTED ACRYLIC LENS, 4000 LUMENS, 3500K COLOR TEMPERATURE, CHAIN HANGING SET, WIRE GUARD, 120-277V MULTIVOLT INPUT, 0-10V DIMMING DRIVER. PROVIDE CHAIN HANGING SET AND WIREGUARD IN MECHANICAL ROOMS AND AREAS WITHOUT CEILINGS. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE SDS-4-2448L-8CST-UNV-DIM	30W
RECESSED 6" DOWNLIGHT	D1 D1X D1Y	6" DIAMETER RECESSED LED DOWNLIGHT, MATTE WHITE FINISH, WIDE (76°) BEAM DISTRIBUTION, 1000 LUMENS, 4000K COLOR TEMPERATURE, 120-277V MULTIVOLT INPUT, 1% 0-10V DIMMING DRIVER. LIGHTOLIER 6R-N / C6L-10-9-40-W-Z10-U / C6-R-DL-WH	9W
RECESSED 6" DOWNLIGHT	D2 D2X D2Y	6" DIAMETER RECESSED LED DOWNLIGHT, MATTE WHITE FINISH, WIDE (76°) BEAM DISTRIBUTION, 2000 LUMENS, 4000K COLOR TEMPERATURE, 120-277V MULTIVOLT INPUT, 1% 0-10V DIMMING DRIVER. LIGHTOLIER 6R-N / C6L-20-9-40-W-Z10-U / C6-R-DL-WH	22W
EXIT SIGN	XB XS XD	DIE CAST ALUMINUM LED EXIT LIGHT, RED LETTERS, MATTE BLACK HOUSING W/ BRUSHED ALUMINUM FACE, UNIVERSAL ARROWS, 120/277 VOLT DUAL INPUT, 90 MINUTE EMERGENCY BATTERY. VERIFY LETTER AND FACE COLOR WITH OWNER/ARCHITECT PRIOR TO ORDERING. XS=SINGLE FACE, XD=DOUBLE FACE, XB=BACK MOUNTED PHILIPS CHLORIDE ER55L-3-R SURELITES CX7-1/2-R LITHONIA LQC-1/2-R-EL N	5W
EXIT SIGN INTEGRAL BATTERY INTEGRAL EM LIGHT BAR	YB YS YD	THERMOPLASTIC LED EXIT LIGHT WITH INTEGRAL EM LIGHT, RED LETTERS, WHITE HOUSING W/ WHITE FACE, UNIVERSAL ARROWS, 120-277 MULTIVOLT INPUT, 90 MINUTE EMERGENCY BATTERY. VERIFY LETTER AND FACE WITH OWNER/ARCHETICT PRIOR TO ORDERING. YS=SINGLE FACE, YD=DOUBLE FACE, YB=BACK MOUNTED SIGNTEX CLP-BB-U-R-W-DG	5W
TWIN HEAD EM LIGHT INTEGRAL BATTERY WET LOCATION	YT1	TWIN HEAD EM LIGHT, INJECTION-MOLDED THERMOPLASTIC WHITE HOUSING, GASKETED CLEAR POLYCARBONATE COVER, LED LAMPS, 90-MINUTE EMERGENCY BATTERY. CHLORIDE TPU-W-N-LM7-W	7W

LIGHTING CONTROL SEQUENCE OF OPERATIONS

	AUTO ON	MANUAL ON (VACANCY)	AUTO OFF (20 MIN MAX)	PARTIAL OFF AT NORMAL HOURS	AUTO ON AFTER HOURS	AUTO OFF AFTER HOURS (20 MIN MAX)	TIME ON	TIME OFF	ASTRONOMIC OR PHOTOCELL ON/OFF	AUTO STEP CONTROL WITH OFF	AUTO CONTINUOUS DIM WITH OFF	MANUAL BI-LEVEL REDUCTION CONTROL	MANUAL CONTINUOUS DIM CONTROL	MANUAL ON/OFF SWITCH	MANUAL DIMMER SWITCH	DISPLAY, ACCENT, TASK CONTROL		
ROOM TYPE	**OCCUPANCY SENSOR**						**TIME SWITCH/SCHEDULING**			**DAYLIGHT CONTROL**		**LIGHT REDUCTION**		**MANUAL CONTROL**			**PLUG LOAD CONTROL**	**SEQUENCE OF OPERATION**
Kitchen/Serving							•	•				•		•				LOCAL ON/OFF CONTROLS, LOCAL CONTROLS MAY OVERRIDE BUILDING SCHEDULE AND TURN ALL LIGHTS ON FOR MAXIMUM 2HRS. NETWORK LIGHTING CONTROLS ROOM CONTROLLER CONNECTED TO BUILDING CONTROLS; ON/OFF BASED ON BUILDING SCHEDULE, AFTER HOURS ON/OFF BASED ON OCCUPANCY, COORDINATE SCHEDULING WITH OWNER. WHERE ≥150W IN DAYLIGHT AREA, USE CONTINUOUS DIMMING DAYLIGHTING CONTROL.
Restrooms	100%		20 MIN											•				AUTO ON 100%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Custodial rooms		•	20 MIN											•	•			MANUAL ON, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Storage rooms	50%		20 MIN											•	•			AUTO ON 50%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF/DIMMING CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Private Offices	50%		20 MIN											•	•		•	AUTO ON 50%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF/DIMMING CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Corridors					100%	20 MIN	•	•						•				LOCAL ON/OFF CONTROLS, LOCAL CONTROLS MAY OVERRIDE BUILDING SCHEDULE AND TURN ALL LIGHTS ON FOR MAXIMUM 2HRS. NETWORK LIGHTING CONTROLS ROOM CONTROLLER CONNECTED TO BUILDING CONTROLS; ON/OFF BASED ON BUILDING SCHEDULE, AFTER HOURS ON/OFF BASED ON OCCUPANCY, COORDINATE SCHEDULING WITH OWNER. WHERE ≥150W IN DAYLIGHT AREA, USE CONTINUOUS DIMMING DAYLIGHTING CONTROL.
Electrical Rooms														•				MANUAL ON/OFF; LOCAL CONTROL DEVICE NOT TIED TO LVLCS.
Building Facade/Landscape							•	•										CONNECTED TO BUILDING CONTROLS THROUGH LIGHTING CONTACTOR; ON/OFF BASED ON BUILDING SCHEDULE.

1. DIMMER SWITCHES SHALL ACTIVATE PRESET ALL ON LIGHTING LEVEL WHEN PRESSED IN THE UP POSITION. LIGHTING LEVELS MAY BE RAISED/LOWERED BY HOLDING THE DIMMER PADDLE. WHEN PRESSED IN THE DOWN POSITION ALL LIGHTS SHALL SMOOTHLY DIM TO OFF.
2. AT LEAST 50 PERCENT OF ALL 125V, 15- AND 20-AMP RECEPTACLES INSTALLED IN ENCLOSED OFFICES, CONFERENCE ROOMS, ROOMS USED PRIMARILY FOR COPY OR PRINT FUNCTIONS, BREAKROOMS, CLASSROOMS AND INDIVIDUAL WORKSTATIONS, INCLUDING THOSE INSTALLED IN MODULAR PARTITIONS AND MODULE OFFICE WORKSTATION SYSTEMS SHALL HAVE PLUG LOAD CONTROL PER IECC 2021 C405.11.

LIGHTING CONTACTOR SCHEDULE

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	CONTACTOR LOCATION	CONTACTOR TYPE
CONTACTOR CT1						
CT1-1	KITCHEN/SERVING AREA - ZONE 'a'	HK-3	-	Kitchen-a	CENTRAL PLANT	MAGNETICALLY HELD
CT1-2	SPARE			Kitchen-a	CENTRAL PLANT	MAGNETICALLY HELD
CT1-3	SPARE			Kitchen-a	CENTRAL PLANT	MAGNETICALLY HELD
CONTACTOR CT2						
CT2-1	KITCHEN/SERVING AREA - ZONE 'b'	HK-3	-	Kitchen-b	CENTRAL PLANT	MAGNETICALLY HELD
CT2-2	SPARE			Kitchen-b	CENTRAL PLANT	MAGNETICALLY HELD
CT2-3	SPARE			Kitchen-b	CENTRAL PLANT	MAGNETICALLY HELD
CONTACTOR CT3						
CT3-1	KITCHEN SOFFIT/CANOPY LTS	HK-5	-	Exterior	CENTRAL PLANT	MAGNETICALLY HELD
CT3-2				Exterior	CENTRAL PLANT	MAGNETICALLY HELD
CT3-3				Exterior	CENTRAL PLANT	MAGNETICALLY HELD

1. REFERENCE TYPICAL LIGHTING CONTACTOR WIRING DIAGRAM.
2. EMERGENCY AND NORMAL ZONES WITHIN THE KITCHEN/SERVING SHALL HAVE SEPARATE CONTROLS TO ALLOW FOR LIGHTING REDUCTION CONTROL.
3. LIGHTING CONTACTORS SHALL BE DIN RAIL MOUNTED, MAGNETICALLY HELD TYPE WITH THREE WIRE CONTROL BY THE BAS.
   - 3.A. PROVIDE CABINET AT EACH LOCATION TO MOUNT ALL CONTACTORS IN A SINGLE ENCLOSURE. ENCLOSURE SIZED BY DIVISION 26.
   - 3.B. PROVIDE SEPARATE HOA SWITCHES IN THE FRONT COVER OF THE ENCLOSURE WIRED TO CONTROL THE FOLLOWING ZONES SEPARATELY.
     - 3.B.1. INTERIOR LIGHTING (ALL INTERIOR LIGHTING GROUPS)
     - 3.B.2. EXTERIOR LIGHTING (ALL EXTERIOR LIGHTING GROUPS)
     - 3.B.3. HOA SWITCH SHALL PASS THE BAS SIGNALS IN AUTO MODE, DISENGAGE ALL CONTACTORS IN THE OFF POSITION, AND ENGAGE ALL THE CONTACTORS IN THE ON POSITION.
   - 3.C. SPARE CAPACITY:
     - 3.C.1. PROVIDE MINIMUM TWO (2) SPARE POLE ON EACH COMBINED TYPE CONTACTOR FOR FUTURE USE.

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LIGHTING SCHEDULES

k-E.060

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ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

LIGHTING RENOVATION NOTES:

A. KITCHEN LIGHTS TO BE CONTROLLED BY LOCAL MOMENTARY SWITCHES AND BAS. LIGHTING CONTACTOR LOCATIONS SHOWN SCHEMATICALLY ONLY. LOCATE LIGHTING CONTACTOR ENCLOSURE IN THE ADJACENT CENTRAL PLANT SPACE, FIELD VERIFY. REFERENCE LIGHTING CONTROL DETAIL. TYPICAL.
   LEFT SWITCH SHALL CONTROL ZONE 'a' NORMAL POWER LIGHTING FIXTURES.
   RIGHT SWITCH SHALL CONTROL ZONE 'b' EMERGENCY LIGHTING FIXTURES.

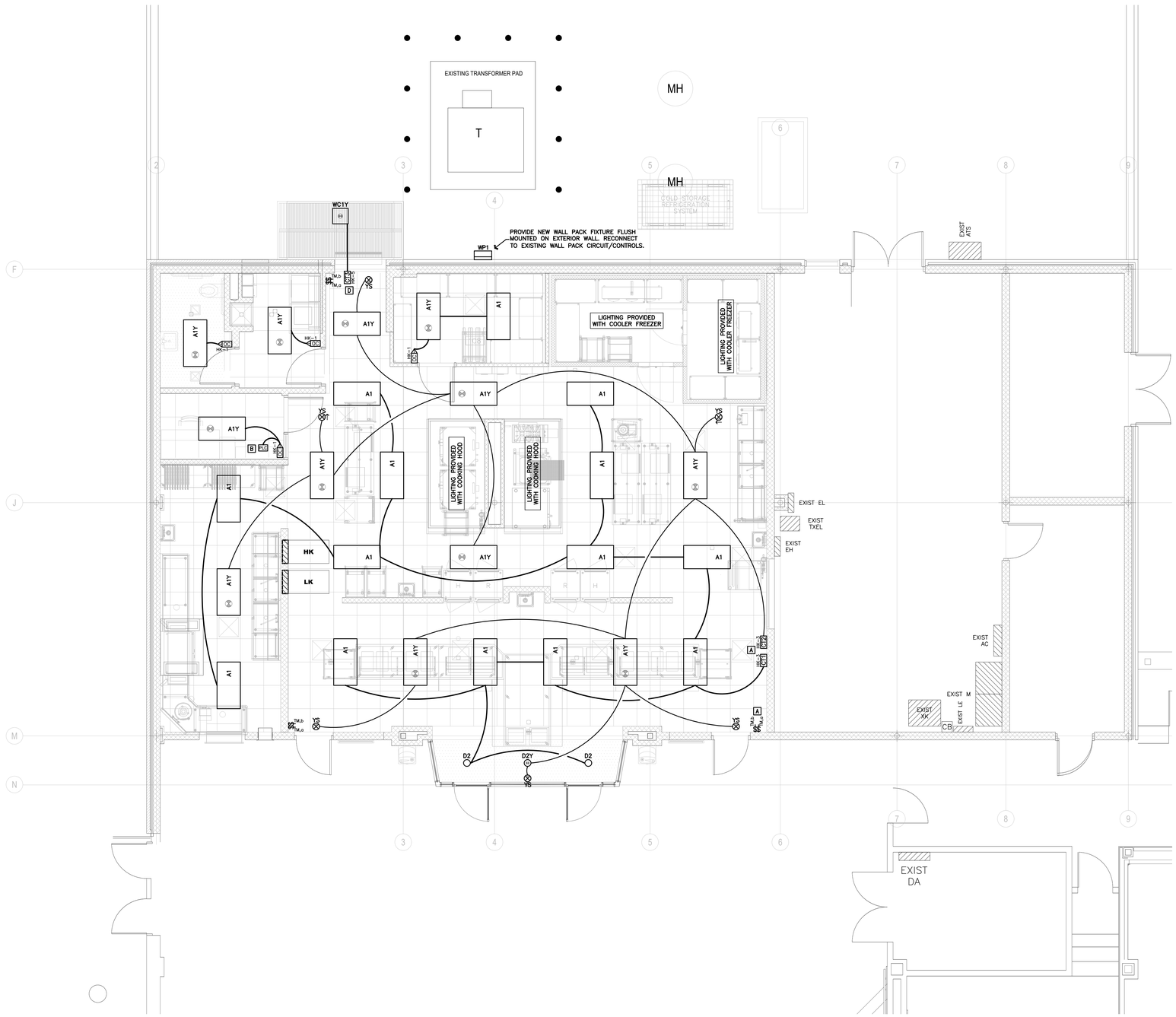
B. PROVIDE PLUG LOAD CONTROLS TIED TO THE LIGHTING IN OFFICE SPACES.

C. WIRE EXIT SIGNS UPSTREAM OF LIGHTING CONTROLS. TYPICAL.

D. EXTERIOR LIGHTS TO BE CONTROLLED BY BAS. LIGHTING CONTACTOR LOCATIONS SHOWN SCHEMATICALLY ONLY. LOCATE LIGHTING CONTACTOR ENCLOSURE IN THE ADJACENT CENTRAL PLANT SPACE, FIELD VERIFY. REFERENCE LIGHTING CONTROL DETAIL. TYPICAL.

E. AFTER REMOVAL OF THE TEMPORARY KITCHEN, PROVIDE NEW EXIT SIGN AT ORIGINAL LOCATION AND RECONNECT TO EXISTING CAFETERIAL LIGHTING CIRCUIT.

F. PATCH/REPAIR EXTERIOR SOFFIT TO ACCOMMODATE NEW SURFACE MOUNTED FIXTURES.



1 LIGHTING RENOVATION PLAN
SCALE: 1/4" = 1'- 0"

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LIGHTING FLOOR PLANS

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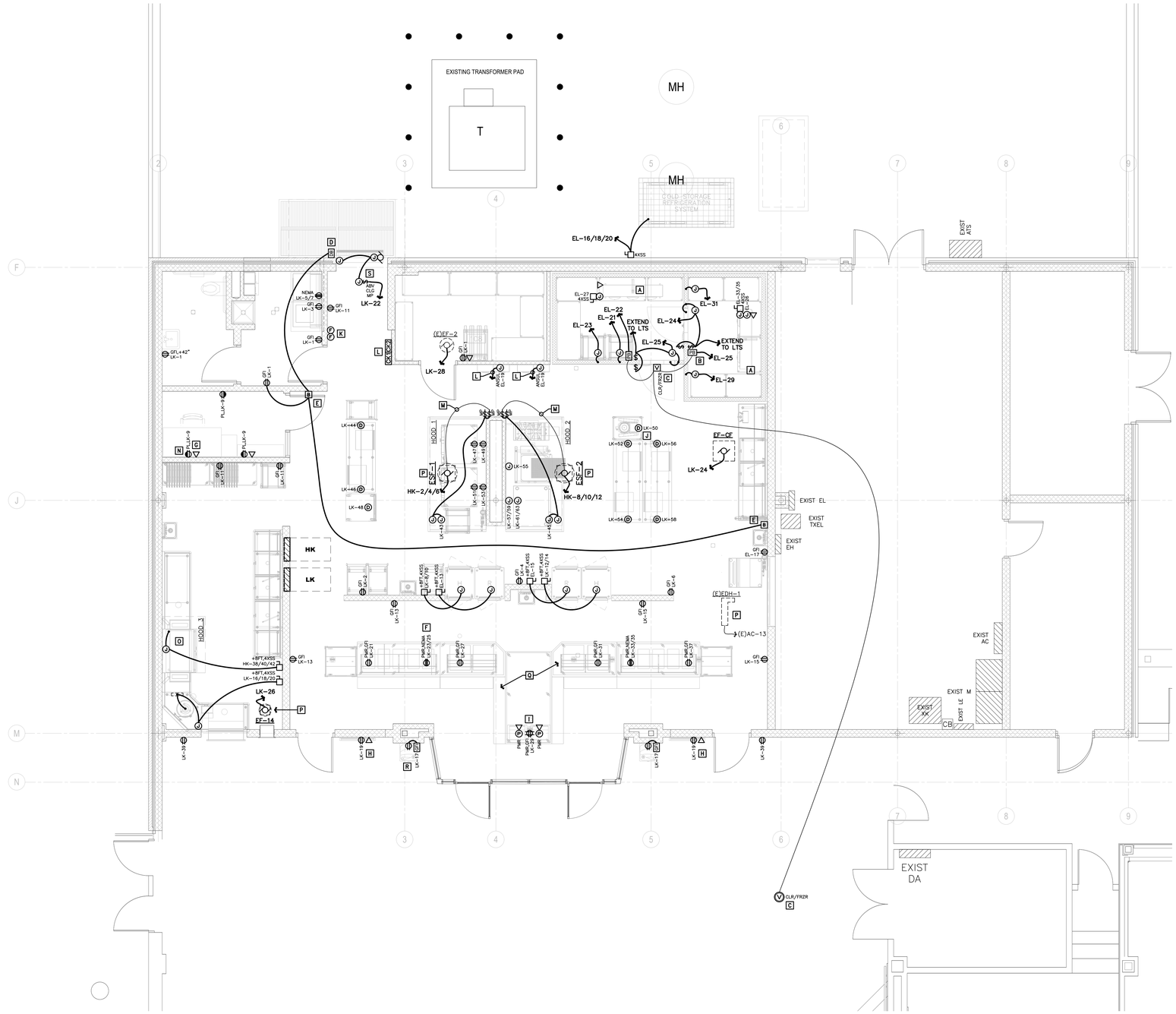

1 ELECTRICAL RENOVATION PLAN

SCALE: 1/4" = 1'- 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

ELECTRICAL RENOVATION NOTES:

A. CONNECT NEW FREEZER/COOLER AND CONDENSER TO EXISTING STANDBY GENERATOR.

B. PROVIDE ILLUMINATED PUSH BUTTON IN COOLER AND FREEZER. WHEN PRESSED RED STROBE DEVICES IN KITCHEN AND CAFETERIA SHALL ACTIVATE. TYPICAL.

C. PROVIDE HORN/STROBE DEVICE TIED TO PUSH BUTTONS IN FREEZER/COOLER.
(EDWARDS 860 SERIES OR EQUAL).

D. PROVIDE NEW DOORBELL BUTTON AT RECEIVING DOOR. DOORBELL BUTTON SHALL BE THE CLOSEST DEVICE TO THE DOOR FRAME.

E. PROVIDE NEW VIBRATING BUZZER TIED TO DOORBELL BUTTON AT RECEIVING DOOR. BUZZER TO BE WALL MOUNTED JUST BELOW THE CEILING.

F. PROVIDE NEW ELECTRICAL DEVICES MATCHING NEW KITCHEN EQUIPMENT AND ROOM LAYOUTS. REFERENCE FOOD SERVICE DRAWINGS. TYPICAL.

G. PROVIDE ROUGH-IN FOR LOW VOLTAGE DEVICES. REFERENCE TECHNOLOGY DRAWINGS, TYPICAL.

H. POWER AND DATA ROUGH-IN FOR KITCHEN MENU BOARD.

I. POWER AND DATA ROUGH-IN FOR POINT OF SALE (POS) LOCATION.

J. PROVIDE DROP CORD RECEPTACLE WITH HUBBELL KELLEMS LIQUIDTIGHT GRIPS FOR STRAIN RELIEF, TYPICAL OF ALL.

K. PROVIDE J-BOXES AND CONDUIT FOR REMOTE FIRE PULLS, SEE FOOD SERVICE DETAIL DRAWING FOR REQUIREMENTS, TYPICAL

L. WIRE ANSUL SYSTEM TO HOOD EQUIPMENT CONTROL CONTRACTOR. UPON ANSUL SYSTEM ACTIVATION ALL POWER TO EQUIPMENT BENEATH THE HOODS SHALL BE DEACTIVATED. MOUNT CONTACTOR CABINET(S) JUST BELOW THE CEILING.

M. PROVIDE SEPARATE SWITCHES TO TURN ON HOOD LIGHTS AND FANS. WIRE HOOD TEMP SENSOR AHEAD OF HOOD LIGHT SWITCH. USE 120V CIRCUIT TO CONTROL HOOD FANS THROUGH EXISTING STARTER. PROVIDE CONTROLS TRANSFORMER AS REQUIRED TO MATCH STARTER CONTROL INPUT VOLTAGE. TYPICAL.

N. PROVIDE PLUG LOAD CONTROLS TIED TO THE LIGHTING IN OFFICE SPACES.

O. INTERCONNECT DISH MACHINE TO VENT CONTROL. INTERCONNECT TABLE LIMIT SWITCH TO DISHMACHINE.

P. EXISTING MECHANICAL EQUIPMENT TO BE REPLACED. CONNECT TO CIRCUIT AS SHOWN. RECONNECT TO EXISTING STARTER/CONTACTORS, FIELD VERIFY.

Q. SAWCUT FLOOR TO INSTALL NEW PEDESTAL MOUNTED DEVICE BENEATH NEW SERVING LINES, DO NOT REUSE EXISTING STUB UPS OR DEVICES. POUR BACK SLAB AND PROVIDE NEW FINISHES, REFERENCE ARCHITECTURAL.

R. REFERENCE EDF GFI PROTECTION DETAIL FOR INSTALLATION REQUIREMENTS, TYPICAL.

S. WIRE MICRO SWITCH IN DOOR FRAME TO AIR SCREEN. COOR W/ FOOD SERVICE CONTRACTOR PRIOR TO ROUGH-IN. LOCATE LOCAL MOTOR RATED SWITCH ABOVE CEILING ADJACENT TO THE AIR SCREEN.

COOLER/FREEZER NOTES:

1. PROVIDE SEALING FOR CONDUIT IN COOLER AND FREEZER. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, CIRCULATION OF AIR FROM WARMER TO A COLDER SECTION SHALL BE PREVENTED PER N.E.C. ARTICLE 300.7 (A).
2. PROVIDE GROUND-FAULT PROTECTION OF EQUIPMENT FOR ELECTRIC HEAT TRACING AND HEATING PANELS IN THE FREEZER PER N.E.C. ARTICLE 427.22.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE LIQUID TIGHT CONDUIT AND WIRING FOR LIGHT FIXTURES AND LIGHT SWITCHES IN WALK-IN COOLER AND FREEZER, SEE FOODSERVICE CONSULTANT'S DRAWINGS.

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL

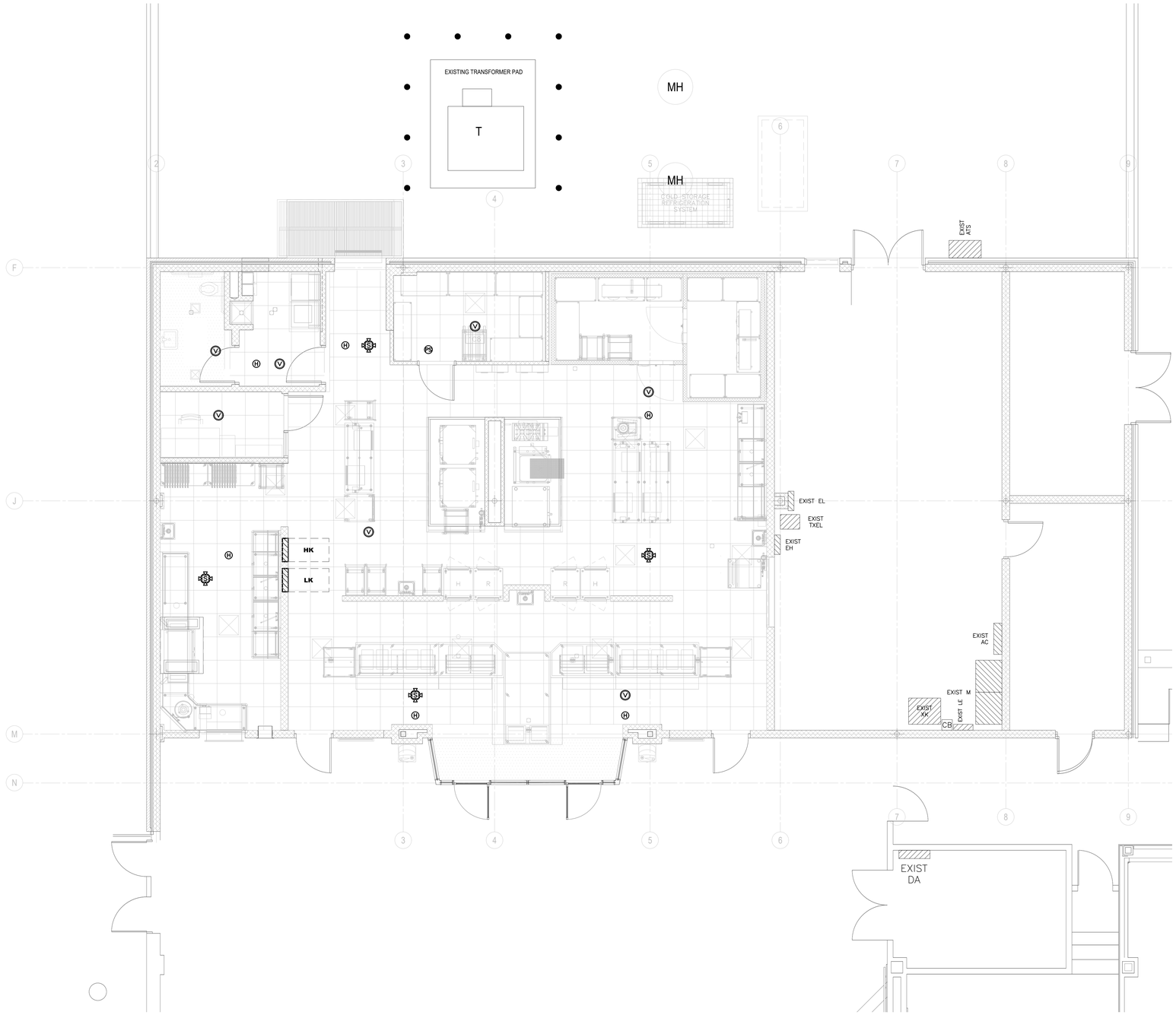
STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED
PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL FLOOR PLANS

k-E.200



1 **FIRE ALARM RENOVATION PLAN**
SCALE: 1/4" = 1'- 0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
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FORT BEND INDEPENDENT SCHOOL DISTRICT
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HOUSTON, TEXAS 77079

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FIRE ALARM FLOOR PLANS

k-E.300

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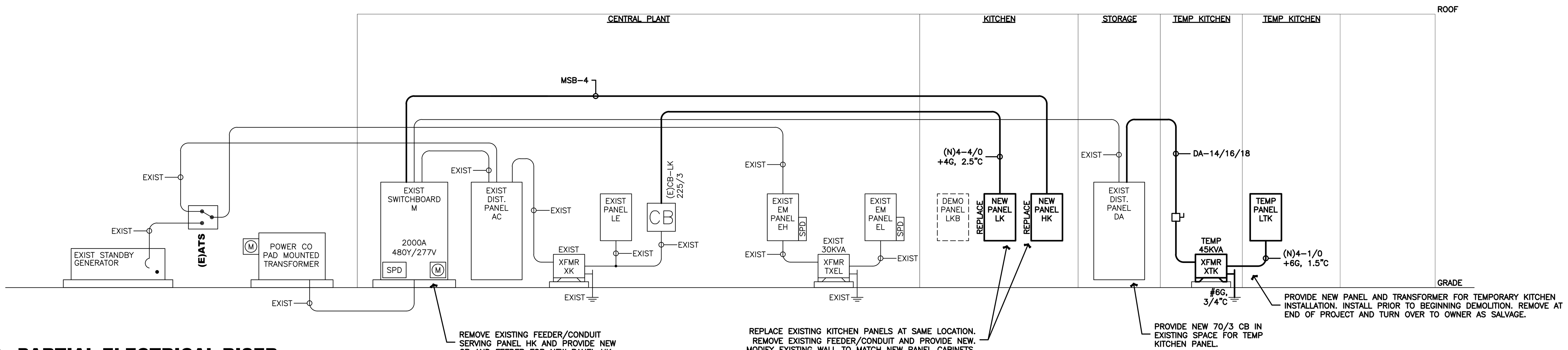

1 PARTIAL ELECTRICAL RISER

NO SCALE

NOTES:
1. FIELD VERIFY ALL EXISTING ELECTRICAL PANELS AND FEEDERS SHOWN ON DRAWINGS.
2. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
3. ALL OUTAGES SHALL BE SCHEDULED/CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
4. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.
5. REFERENCE PANEL SCHEDULES AND SHORT CIRCUIT TABLE FOR AIC AND SCCR VALUES.

NEW KITCHEN PANEL — KITCHEN

PANEL HK

225A MLO, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 20,250A — SCCR & AIC: 25,000A — MOUNTING: RECESSED, STAINLESS STEEL COVER

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
6		376	KITCHEN ROOM LIGHTS	3-12	20/1	1				2	15/3	3-12	ESF-1	4986		
7		1095	KITCHEN LIGHTS	3-12	20/1	3				4	–	+12G	(1.5HP / 1.5HP)	–		
		84	KITCHEN SOFFIT LIGHTS	3-12	20/1	5				6	–	3/4"C	–	–		
			SPARE		20/1	7				8	15/3	3-12	ESF-2	4986		
			SPARE		20/1	9				10	–	+12G	(1.5HP / 1.5HP)	–		
			SPARE		20/1	11				12	–	3/4"C	–	–		
			SPARE		20/1	13				14			SPACE			
			SPARE		20/1	15				16			SPACE			
			SPARE		20/1	17				18			SPACE			
			SPARE		20/1	19				20			SPACE			
			SPARE		20/1	21				22			SPACE			
			SPACE			23				24			SPACE			
			SPACE			25				26			SPACE			
			SPACE			27				28			SPACE			
			SPACE			29				30			SPACE			
			SPACE			31				32			SPACE			
			SPACE			33				34			SPACE			
			SPACE			35				36			SPACE			
			SPACE			37				38	70/3	3-6	DISHMACHINE	42963	E250	
			SPACE			39				40	–	+8G	–	–		
			SPACE			41				42	–	3/4"C	–	–		
	TOTAL LOAD @ 100% =		54490VA		TOTAL LOAD @ 100% =						66A		TOTAL LOAD @ 125% =	82A		

NEW KITCHEN PANEL — KITCHEN

PANEL LK

225A MLO, 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: RECESSED, STAINLESS STEEL COVER

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E10	640	3 REC – RR/STOR/CUST & BELL	3-12	20/1	1				2	20/1	3-12	1 REC – KITCHEN	180	E10	
	E110	1920	WASHING MACHINE	3-12	20/1	3				4	20/1	3-12	1 REC – KITCHEN	180	E10	
	E110A	5000	DRYER	2-10	30/2GFI	5				6	20/1	3-12	1 REC – KITCHEN	180	E10	
	E151	–	–	+10N+10G	3/4"C	7				8	20/2	2-10	HEATED CABINET	3224	E187	
		540	3 REC – OFFICE	3-12	20/1	9				10	3/4"C	+10G	–	–		
	E10	540	3 REC – KITCHEN	3-12	20/1	11				12	20/2	2-10	HEATED CABINET	3224	E187	
	E10	360	2 REC – SERVING LINE	3-12	20/1	13				14	3/4"C	+10G	–	–		
	E10	360	2 REC – SERVING LINE	3-12	20/1	15				16	20/3	3-12	DISPOSER	3960	E123	
		1000	2 EDF – CAFETERIA	3-12	20/1	17				18	–	+12G	(3 HP)	–		
	E615	500	2 MENU BOARDS	3-12	20/1	19				20	–	3/4"C	–	–		
	E209	960	MILK COOLER	3-12	20/1	21				22	20/1	3-12	AIR SCREEN	612	E101	
	E201A	5824	HOT FOOD COUNTER	2-8	35/2	23				24	15/1	3-12	EF-CF (1/6HP)	528		
		–	–	+10G	3/4"C	25				26	15/1	3-12	EF-14 (1/6HP)	528		
	E201B	1920	COLD FOOD COUNTER	3-12	20/1	27				28	20/1	3-12	EF-2 (1/6HP)	528		
	E214	360	CASH REGISTERS	3-12	20/1	29				30	20/1		SPARE			
	E201B	1920	COLD FOOD COUNTER	3-12	20/1	31				32	20/1		SPARE			
	E201A	5824	HOT FOOD COUNTER	2-8	35/2	33				34	20/1		SPARE			
		–	–	+10G	3/4"C	35				36	20/1		SPARE			
	E209	960	MILK COOLER	3-12	20/1	37				38	20/1		SPARE			
		360	2 REC – CAFETERIA	3-12	20/1	39				40	20/1		SPARE			
			SPARE		20/1	41				42	20/1		SPARE			
	E153/E153M	250	HOOD LTS & SENSOR	3-12	20/1	43				44	20/1GFI	3-12	DROP CORD	180	E129	
	E153/E153M	250	HOOD LTS & SENSOR	3-12	20/1	45				46	20/1GFI	3-12	DROP CORD	180	E129	
8	E161	720	CONVECTION OVEN	3-12	20/1GFI	47				48	20/1GFI	3-12	MOBILE PROOFER	1800	E139A	
8	E161	720	CONVECTION OVEN	3-12	20/1GFI	49				50	20/1GFI	3-12	20QT MIXER	960	E125	
8	E161	720	CONVECTION OVEN	3-12	20/1GFI	51				52	20/1GFI	3-12	DROP CORD	180	E129	
8	E161	720	CONVECTION OVEN	3-12	20/1GFI	53				54	20/1GFI	3-12	DROP CORD	180	E129	
8	E163	600	TILT BRAISING PAN	3-12	20/1	55				56	20/1GFI	3-12	DROP CORD	180	E129	
8	E172	3120	COMBI OVEN	2-12	20/2	57				58	20/1GFI	3-12	DROP CORD	180	E129	
		–	–	+12G	3/4"C	59				60	20/1	3-12	EXISTING CIRCUIT	500		5
8	E172	3120	COMBI OVEN	2-12	20/2	61				62	20/2	2-12	EXISTING CIRCUIT	1000		5
		–	–	+12G	3/4"C	63				64	–	+12N+12G	–	–		5
		250	EXISTING CIRCUIT	3-12	20/1	65				66	20/2	2-12	EXISTING CIRCUIT	1000		5
9		0	TEMP LOAD CENTER	4-3	100/3	67				68	–	+12N+12G	–	–		5
		–	–	+8G	–	69				70	30/2	2-10	EXISTING CIRCUIT	3000		5
		–	–	1.25"C	–	71				72	–	+10N+10G	–	–		
	TOTAL LOAD @ 100% =		61942VA		TOTAL LOAD @ 100% =						172A		TOTAL LOAD @ 65% =	112A		

KITCHEN HOOD CONTACTOR SCHEDULE

HOOD 1

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	EQUIPMENT LOCATION	CONTACTOR TYPE
CK1-1	CONVECTION OVEN	LK-47	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1-2	CONVECTION OVEN	LK-49	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1-3	CONVECTION OVEN	LK-51	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1-4	CONVECTION OVEN	LK-53	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1-5	SPARE					ELECTRICALLY HELD – NO
CK1-6	SPARE					ELECTRICALLY HELD – NO
CK1-7	SPARE					ELECTRICALLY HELD – NO
CK1-8	SPARE					ELECTRICALLY HELD – NO

HOOD 2

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	EQUIPMENT LOCATION	CONTACTOR TYPE
CK2-1	TILT BRAISING PAN	LK-55	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2-2	COMBI-OVEN	LK-57/59	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2-3	(2-POLE)	–	–	–	–	ELECTRICALLY HELD – NO
CK2-4	COMBI-OVEN	LK-61/63	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2-5	(2-POLE)	–	–	–	–	ELECTRICALLY HELD – NO
CK2-6	SPARE					ELECTRICALLY HELD – NO
CK2-7	SPARE					ELECTRICALLY HELD – NO
CK2-8	SPARE					ELECTRICALLY HELD – NO

1. REFERENCE FLOOR PLANS FOR EQUIPMENT LOCATIONS AND ADDITIONAL INFORMATION.
2. EACH KITCHEN HOOD CONTACTOR HALL BE CONTROLLED ON/OFF BY THE APPROPRIATE HOOD ANSUL SYSTEM. WHEN ACTIVATED ALL POWER WITHIN THE COOKING HOOD SHALL BE DE-ENERGIZED.

EXIST SQUARE D QED SWITCHBOARD — CENTRAL PLANT

(E)SWBD M

2000A MCB, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 37,000A — SCCR & AIC: 100,000A — FREE STANDING

NOTES	CIRCUIT	DESCRIPTION	CB	FEEDER SIZE	AMPS
	1	EXIST CIRCUIT	60/3	EXIST FEEDER	
	2	EXIST SPD	60/3	EXIST FEEDER	
	3	EXIST DISTRIBUTION PANEL AC	1200/3	EXIST FEEDER	
	4	EXIST DISTRIBUTION PANEL DA	400/3	EXIST FEEDER	314A
	5	EXIST DISTRIBUTION PANEL DC	400/3	EXIST FEEDER	
	6	EXIST DISTRIBUTION PANEL DB	400/3	EXIST FEEDER	
2,4	7	NEW PANEL HK	225/3	4-4/0 +4G, 2.5"C	66A
	8	EXIST CAPACITOR	250/3	EXIST FEEDER	
				TOTAL LOAD @ 100% =	314A
				TOTAL LOAD @ 125% =	393A

1. THE EXISTING 2000A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

EXIST GE NHB PANELBOARD — STORAGE ROOM

(E)PANEL DA

400A MLO, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 27,000A — SCCR & AIC: 35,000A — MOUNTING: SURFACE

NOTES	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	NOTES
	3000	EXIST CIRCUIT	EXIST	20/1	1				2	20/1	EXIST	LIGHTS CAFETORIUM RMS	2300	1
1	3000	LIGHTS CAFETORIUM	EXIST	20/1	3				4	20/1	EXIST	LIGHTS CAFETORIUM	3000	1
	9150	AHU #2	EXIST	20/3	5				6	20/1	EXIST	KITCHEN LIGHTS		2
	–	–	–	–	7				8	60/3	EXIST	DUCT HEATER 3	39000	
	–	–	–	–	9				10	–	–	(STAGE)	–	
	130000	PANEL PA	EXIST	225/3	11				12	–	–	–	–	
	–	–	–	–	13				14	70/3	3-6	TEMP KITCHEN PANEL LTK	37918	4
	–	–	–	–	15				16	–	+8G	–	–	
	33750	XFRMR TLCAB	EXIST	125/3	17				18	–	3/4"C	–	–	
	–	–	–	–	19				20			SPACE		
	–	–	–	–	21				22			SPACE		
		SPACE			23				24			SPACE		
		SPACE			25				26			SPACE		
		SPACE			27				28			SPACE		
		SPACE			29				30			SPACE		
	TOTAL LOAD @ 100% =	261118VA		TOTAL LOAD @ 100% =						314A		TOTAL LOAD @ 125% =	393A	

1. THE EXISTING 400A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

EXIST EM STANDBY PANELBOARD — CENTRAL PLANT

(E)PANEL EL

100A MCB, 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: SURFACE

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
		500	PA SYSTEM	EXIST	20/1	1				2	20/1		EXIST SPARE			
		500	SECURITY SYSTEM	EXIST	20/1	3				4	20/1		EXIST SPARE			
		250	FACP	EXIST	20/1	5				6	20/1		EXIST SPARE			
		250	F/A RPS	EXIST	20/1	7				8	20/1		EXIST SPARE			
		250	F/A RPS	EXIST	20/1	9				10	20/1		EXIST SPARE			
		250	GENERATOR ACCESSORIES	EXIST	20/1	11				12	20/1		EXIST SPARE			
4	E188	864	REFRIGERATOR	3-12	20/1	13				14	20/1		EXIST SPARE			
4	E188	864	REFRIGERATOR	3-12	20/1	15				16	25/3	3-10	REFRIGERATION SYSTEM	6192	E103	4
4	E109	1428	ICE MACHINE	3-12	20/1	17				18	–	+10G	–	–		
4	E151	240	HOOD ANSUL SYSTEMS	3-12	20/1	19				20	–	3/4"C	–	–		
4	E102B	600	COOLER TEMP. ALARM	3-12	20/1	21				22	20/1EGF	3-12	COOLER DOOR HEATER/LTS	600	E102A	4
4	E102C	600	COOLER PRESSURE PORT	3-12	20/1	23				24	20/1EGF	3-12	FREEZER DOOR HEATER/LTS	600	E102A	4
4	E102E	120	PANIC ALARM BUTTONS	3-12	20/1	25				26	20/1EGF	3-12	FREEZER DRAIN LINE HEATER	600	E103F	4
4	E103D	216	COOLER COIL	3-12	20/1	27				28			SPACE			
4	E102B	600	FREEZER TEMP. ALARM	3-12	20/1	29				30			SPACE			
4	E102C	600	FREEZER PRESSURE PORT	3-12	20/1	31				32			SPACE			
4	E103C	1893	FREEZER COIL	2-10	20/2	33				34			SPACE			
		–	–	+10G	–	35				36			SPACE			
			EXIST SPARE		40/3	37				38	30/3	EXIST	SPD	50		
		–	–	–	–	39				40	–	–	–	–		
		–	–	–	–	41				42	–	–	–	–		
	TOTAL LOAD @ 100% =		18067VA		TOTAL LOAD @ 100% =						50A		TOTAL LOAD @ 125% =	63A		

1. THE EXISTING 100A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

GENERAL PANEL REQUIREMENTS:
A. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
B. FIELD VERIFY EXISTING CIRCUITS PRIOR TO BEGINNING WORK.
C. ALL OUTAGES SHALL BE SCHEDULED AND CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
D. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.

PANEL NOTES:
1. REVISE/REWORK WIRING/CONDUIT AS REQUIRED TO ADD/REMOVE DEVICES FROM EXISTING CIRCUIT.
2. EXISTING CIRCUIT TO BE DEMO.
3. REUSE EXISTING SPARE CB AND WIRE NEW CIRCUIT.
4. PROVIDE NEW CB & WIRE NEW CIRCUIT.
5. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.
6. KITCHEN LIGHTS TO BE DUAL ZONES WIRED THROUGH LIGHTING CONTACTORS AND CONTROLLED ON/OFF BY THE BAS AND LOCAL LIGHTING SWITCHES.
7. EXTERIOR LIGHTS TO BE WIRED THROUGH LIGHTING CONTACTOR AND CONTROLLED ON/OFF BY THE BAS.

STANTON ENGINEERING GROUP
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ISSUE:
12/05/2024 DD PACKAGE
03/11/2025 50% CD PKG.
05/23/2025 90% CD PKG.
07/18/2025 ISSUED FOR BIDDING AND PERMITTING

k

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL
STATE OF TEXAS — GEORGE L. STANTON — 38582 — REGISTERED PROFESSIONAL ENGINEER
07.18.2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL SCHEMATIC

k-E.400

PLUMBING SYMBOLS LEGEND

———	SANITARY WASTE BELOW SLAB	SAN.	SANITARY
———	SANITARY WASTE ABOVE SLAB	CW	DOMESTIC COLD WATER
—— V. ——	VENT PIPING ABOVE SLAB	HW	DOMESTIC HOT WATER
———	VENT PIPING	WC	WATER CLOSET
—— G ——	GAS PIPING, 4-8oz	UR	URINAL
—— G5 ——	GAS PIPING, 5LB	LAV	LAVATORY
—·—·—	DOMESTIC COLD WATER PIPING	SK	SINK
—·—·—·—	DOMESTIC HOT WATER PIPING	EDF	ELECTRIC DRINKING FOUNTAIN
—— D ——	DRAIN/RELIEF VENT PIPING	WH	WALL HYDRANT
—⋈—	STOP VALVE	HB	HOSEBIBB
2CO	DOUBLE SAN. CLEANOUT (2-WAY)	CP	HOT WATER CIRCULATOR PUMP
CO	SANITARY SEWER CLEANOUT	FD	FLOOR DRAIN
WCO	WALL CLEANOUT	FSINK	FLOOR SINK
EXIST.	EXISTING		
(R)	REMOVE (DEMOLISH)		
(D)	DEMOLISH (REMOVE)		
(E)	EXISTING — NO WORK		

PLUMBING FIXTURE NOTES

1. ALL FIXTURES SHALL MEET WATER CONSERVATION PERFORMANCE STANDARDS MANDATED BY SENATE BILL 587. ALL FIXTURES SHALL HAVE FLOW RESTRICTION DEVICES (DRINKING FOUNTAINS SHALL BE SELF-CLOSING) TO COMPLY WITH THESE REQUIREMENTS.
2. ALL FIXTURES SHALL HAVE CONTROLS REQUIRING OPERATING FORCE NO GREATER THAN FIVE (5) POUNDS.
3. FOR LAVATORIES AND SINKS, ALL FAUCETS SHALL BE NO-LEAD SOLID BRASS, MEETING ALL REQUIREMENTS OF ANSI/NSF 61, SECTION 9 AND CERTIFIED AS SUCH. ALSO, INSTALL SYMMONS 7-210 MIXING VALVE ON HOT WATER SUPPLY SIDE OF ALL FAUCETS UNLESS HIGH TEMPERATURE LIMIT IS PROVIDED WITH FAUCET. MAXIMUM WATER TEMPERATURE FOR ALL FAUCETS THAT DELIVER HOT OR TEPID WATER SHALL BE 110°F. ALL METERING FAUCETS SHALL HAVE A MINIMUM TEN (10) SECONDS OF WATER FLOW, AND, INSTALL TRUEBRO HANDI LAV-GUARD VANDAL-PROOF INSULATION KITS OVER P-TRAP, SUPPLIES, STOPS AND ALL SHARP EDGES FOR ALL SINKS AND LAVATORIES (TRAP WRAP FROM BROCAR OR PROWRAP FROM McGUIRE SHALL BE ACCEPTABLE).
4. ALL PLUMBING FIXTURES REFERENCED AS "ADA", "TAS" OR "HANDICAP COMPLIANT" SHALL MEET ALL REQUIREMENTS OF THE ADA AND THE TEXAS ACCESSIBILITY STANDARDS. IT SHALL BE THE PLUMBING CONTRACTORS RESPONSIBILITY TO MEET THESE REQUIREMENTS.
5. IN MANY CASES, FIXTURES WITH THE SAME PLUMBING DESIGNATION HAVE DIFFERENT INSTALLATION HEIGHTS — REFERENCE ARCHITECTURAL DRAWINGS FOR ALL INSTALLATION HEIGHTS AND HANDICAP FIXTURE DESIGNATIONS. FIXTURES DESIGNATED AS ADULT HANDICAP SHALL MEET ALL REQUIREMENTS OF THE ADA. FIXTURES DESIGNATED AS CHILD HANDICAP SHALL MEET ALL REQUIREMENTS OF THE TEXAS ACCESSIBILITY STANDARDS FOR THE APPROPRIATE CHILDREN'S AGE GROUP (REF. ARCH. DWGS. AND SPECIFICATIONS).

PLUMBING MATERIALS

SANITARY WASTE AND VENT

BELOW SLAB/GRADE: SCHEDULE 40, DWV PVC

ABOVE SLAB: STANDARD WEIGHT, CAST IRON, NO-HUB PIPING.

STORM DRAIN PIPING

BELOW SLAB/GRADE: SCHEDULE 40, DWV PVC

ABOVE SLAB, 8" AND UNDER: STANDARD WEIGHT, CAST IRON, NO-HUB PIPING.

ABOVE SLAB, 10" AND ABOVE: SERVICE WEIGHT, CAST IRON, BELL & SPIGOT.

NATURAL GAS

BELOW GRADE (OUTSIDE): YELLOW POLYETHYLENE PIPE WITH COATED STEEL RISER AND TRACER WIRE.

ABOVE SLAB: SCHEDULE 40 BLACK STEEL. PIPING 2.5" AND LARGER SHALL BE WELDED. PIPING 2" AND SMALLER SHALL HAVE SCREWED FITTINGS.

DOMESTIC WATER

INTERIOR: TYPE L COPPER WITH SOLDER TYPE WROUGHT COPPER FITTINGS, MADE UP WITH LEAD-FREE SOLDER.

EXTERIOR: TYPE K COPPER WITH SWEAT FITTINGS AND LEAD-FREE SOLDER. BEYOND 5 FEET FROM BUILDING, SCHEDULE 40 PVC.

FIRE SPRINKLER SYSTEM NOTES

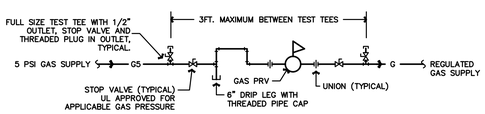
1. THE EXISTING FIRE SPRINKLER SYSTEM SHALL BE MODIFIED AND/OR EXPANDED TO COVER THE AREA OF RENOVATION IN ENTIRETY. ALL NEW AND REVISED PIPING SHALL BE ENGINEERED AND INSTALLED BY A LICENSED FIRE SPRINKLER CONTRACTOR.
2. REFERENCE THE SPECIFICATIONS, DIVISION 21, FOR MORE INFORMATION.

GENERAL PLUMBING NOTES

1. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK DESCRIPTION. SEE THIS SHEET (P4.00) FOR PLUMBING SYMBOLS LEGEND.
2. COORDINATE PLUMBING SYSTEMS INSTALLATION WITH ARCHITECTURAL, STRUCTURAL, HVAC SYSTEMS, ELECTRICAL SYSTEMS, CONDUITS, ETC.... OFFSET PIPING AS REQUIRED TO PROVIDE A FUNCTIONING SYSTEM WITH ADEQUATE SPACE FOR SERVICING AND REPAIRS.
3. MAKE CONNECTIONS OF NEW PIPE SYSTEMS IN TO EXISTING PIPE SYSTEMS WITH THREADED OR SWEAT JOINTS. PROVIDE ELECTROLYSIS ISOLATING UNIONS AT CONNECTION OF DISSIMILAR MATERIALS. REFERENCE THE SPECIFICATIONS.
4. SITE SERVICES ARE SHOWN FOR REFERENCE ONLY. PLUMBING CONTRACTOR SHALL REFERENCE CIVIL DRAWINGS, INCLUDING LOCATIONS OF SERVICES, SIZES OF PIPES, FLOWLINE ELEVATIONS, ETC..
5. DO NOT INSTALL PLUMBING PIPING OVER ANY ELECTRICAL EQUIPMENT. REFERENCE ELECTRICAL DRAWINGS FOR LOCATIONS OF ELECTRICAL EQUIPMENT AND COORDINATE WITH ELECTRICAL SUBCONTRACTORS ACCORDINGLY. SEE DETAIL 2/MEP1. THIS INCLUDES FIRE SPRINKLER PIPING.
6. ALL PIPES THROUGH WALLS OR FLOORS SHALL BE SLEEVED AND SEALED PER DETAIL 5/P4.02. FIRE CAULK WHERE REQUIRED. THIS INCLUDES ALL WALLS, INTERIOR AND EXTERIOR. THIS INCLUDES FIRE SPRINKLER PIPING.
7. ALL CLEANOUTS SHALL BE CONNECTED TO SANITARY LINES USING WYES AND/OR LONG RADIUS ELLS. SANITARY TEES ARE NOT ACCEPTABLE. 2" MINIMUM SIZE. ALL WALL CLEAN OUTS IN VERTICAL RISERS, OR BANKS OF FIXTURES SHALL BE INSTALLED 4" ABOVE THE FLOOD RIM LEVEL OF THE LOWEST CONNECTED FIXTURE AND A MINIMUM OF 24" AFF.
8. ALL WASTE AND VENT PIPING BELOW SLAB SHALL BE 2" MINIMUM.
9. LOCATE PLUMBING VENTS THROUGH ROOF NOT NEARER THAN SIX (6) FEET AWAY FROM EDGE OF BUILDING AND TEN (10) FEET AWAY FROM ANY FRESH AIR INTAKES. OFFSET VENT PIPING, AS REQUIRED, IN CEILING SPACE BETWEEN CEILING AND ROOF TO MEET THESE REQUIREMENTS. SEE DETAIL 3/P4.02.
10. ALL DOMESTIC WATER PIPING (CW, HW AND HWR) SHALL BE INSULATED PER THE WRITTEN SPECIFICATIONS.
11. TOP OF FLOOR DRAINS IN MECHANICAL, AHU AND BOILER ROOMS SHALL BE SET 1-1/2" BELOW FINISHED FLOOR SURFACE. CONCRETE FLOOR SHALL BE SLOPED TO DRAIN, REFERENCE ARCHITECTURAL DRAWINGS. IN ALL OTHER LOCATIONS, FLOOR DRAINS SHALL BE SET FLUSH WITH FINISHED FLOOR, TAKING INTO ACCOUNT ANY FLOOR SLOPE OR FLOOR FINISH (TILE, TERRAZZO, ETC.) AS SHOWN ON ARCHITECTURAL DRAWINGS.
12. PROVIDE AN ISOLATING VALVE AT EACH WATER TAP OFF HOT AND COLD WATER MAINS TO ALLOW FOR SERVICING. VALVE SHALL BE BALL VALVE IF PIPE SIZE IS 2" OR LESS AND GATE VALVE OR BUTTERFLY VALVE IF LARGER THAN 2". SEE WRITTEN SPECIFICATIONS. VALVES SHALL BE EASILY ACCESSIBLE. PROVIDE 18" X 18", FIRE-RATED, STAINLESS STEEL ACCESS PANELS WITH PUSH, QUARTER-TURN CYLINDER LOCK DOORS WHERE VALVES ARE INSTALLED ABOVE INACCESSIBLE CEILINGS OR IN WALL CHASES (MIFAB MODEL MPFR-SS-C). BALL VALVES AND BUTTERFLY VALVES INSTALLED ABOVE CEILINGS SHALL BE INSTALLED SUCH THAT HANDLE IS ON BOTTOM OF PIPE. ISOLATING WATER VALVES ABOVE CEILINGS SHALL BE INSTALLED NO MORE THAN 24" ABOVE CEILING. VALVES ABOVE INACCESSIBLE CEILINGS SHALL BE INSTALLED WITHIN REASONABLE REACH OF CEILING MOUNTED ACCESS PANEL.
13. WATER HAMMER ARRESTERS SHALL BE INSTALLED IN ADDITION TO AIR CHAMBERS PER THE RISER DIAGRAMS. SEE SPECIFICATIONS.
14. MECHANICALLY CLEAN ALL WASTE LINES WITH ROTARY MACHINE TO PROVE FREE FLOWING, SEE SPECIFICATIONS.
15. PROVIDE VENTED SLEEVE (2 PIPE SIZES LARGER THAN GAS PIPE UNLESS NOTED OTHERWISE) FOR ALL GAS PIPING IN GROUND BELOW PAVING OR SIDEWALKS AND INSIDE BUILDING IN WALLS AND IN UNVENTILATED CEILING SPACES, SEE SPECIFICATIONS.
16. GAS PIPING SHALL BE 1/2" MINIMUM. TAP GAS PIPING ON TOP OR SIDES ONLY. DO NOT INSTALL VALVES IN CEILING PLENUM IN ANY INACCESSIBLE LOCATION. ALL GAS VALVES SHALL BE EASILY ACCESSIBLE. REFER TO DETAIL 9/P4.01 FOR TYPICAL GAS CONNECTION INSTALLATION. REFER TO DETAIL 8/P4.02 FOR TYPICAL PRV INSTALLATION.
17. CENTER WALL HYDRANTS IN BRICK PATTERN OF EXTERIOR WALLS, REFERENCE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
18. ALL REFRIGERATORS WITH ICE MAKERS, COMMERCIAL TYPE COFFEE MAKERS, ICE MAKERS, COFFEE VENDING MACHINES AND OTHER ITEMS PROVIDED BY OTHERS THAT REQUIRE A WATER CONNECTION SHALL HAVE A CW VALVE BOX, "VBOX", INSTALLED TO ALLOW EASY ACCESS AND REMOVAL OF MACHINE. ALSO, INSTALL IN-LINE FILTER IN WATER CONNECTION.
19. REFER TO CIVIL DRAWINGS FOR SITE SANITARY, SITE STORM SEWER, FIRE SERVICE AND DOMESTIC WATER SERVICE. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PIPING INSIDE BUILDING TO OUTSIDE LOCATIONS SHOWN ON PLUMBING DRAWINGS. PLUMBING CONTRACTOR SHALL INCLUDE COST OF FINAL TIE-INS TO SITE SERVICES.
20. PER THE DRAWINGS, ALL DRAINS (FLOOR DRAINS, FLOOR SINKS, HUB DRAINS, KITCHEN DRAINS, SHOWER DRAINS, ETC.) SHALL BE VENTED AND TRAP PRIMED — NO EXCEPTIONS. TRAP PRIMING SHALL BE ACCOMPLISHED USING WATER CLOSET FLUSH VALVE TRAP PRIMING DEVICES OR PROSET SYSTEMS TRAP GUARD SEWER GAS EMISSION PROTECTION, AS SHOWN ON DRAWINGS. REFERENCE PLUMBING FLOOR PLANS AND RISER DIAGRAMS.
21. ALL PIPING LOCATED ON ROOF (GAS PIPING) SHALL BE INSTALLED ON ROOF PIPE SUPPORTS PER DETAIL 10/P4.02, 6-FOOT ON CENTER. INSTALL ROOF PIPE JACK PER DETAIL 9/P4.02 FOR ALL PIPING THROUGH ROOF.
22. COORDINATE LOCATIONS OF ALL ROOF DRAINS AND OVERFLOW ROOF DRAINS WITH ARCHITECTURAL DRAWINGS.
23. FOR COMBINATION WASTE AND VENT SYSTEMS (WHERE APPLICABLE ON DRAWINGS), DRAIN P-TRAPS SHALL BE SIZE OF PIPE SHOWN ON DRAWINGS (I.E. TWO PIPE SIZES LARGER THAN DRAIN SIZE). FOR EXAMPLE, A 4" FLOOR DRAIN SHALL HAVE A 6" P-TRAP.
24. FOR ALL PLUMBING FIXTURES, IF COPPER PIPING IS STUBBED THROUGH WALL FOR DRAIN CONNECTION, INSTALL MARWEL FITTING AT DRAIN CONNECTION FOR EASE OF SERVICING AND REPAIRS. COPPER DRAIN PIPING WILL ONLY BE ALLOWED FOR DIRECT/STRAIGHT STUB-OUT OF FIXTURE DRAIN PIPING THROUGH WALL.
25. DO NOT INSTALL ANY PIPING BENEATH CVT OR VAV BOXES. THIS INCLUDES FIRE SPRINKLER PIPING.
26. WHERE UNDERGROUND VENT PIPE SIZE IS NOT NOTATED, VENT SHALL BE 2" DIAMETER.
27. WHERE UNDERGROUND SANITARY PIPE SIZE IS NOT NOTATED, REFER TO THE RISER DIAGRAMS FOR SIZE. NOT BELOW GRADE SANITARY PIPE SHALL BE SMALLER THAN 2". NO SANITARY LINE OR P-TRAP FOR A DRAIN/FIXTURE SHALL BE SMALLER THAN THE FIXTURE CONNECTION SIZE SHOWN ON THE DRAIN/FIXTURE SCHEDULE.
28. WHERE ABOVE GROUND VENT PIPE SIZE IS NOT NOTATED, REFER TO THE RISER DIAGRAMS FOR VENT SIZE.
29. WHERE CW/HW PIPING SIZE TO THE FIXTURE IS NOT SHOWN ON THE FLOOR PLAN, REFER TO THE RISER DIAGRAMS FOR CW/HW PIPE SIZE. NO PIPING TO FIXTURE SHALL BE SMALLER THAN THE FIXTURE CONNECTION SIZE SHOWN ON THE FIXTURE SCHEDULE.
30. TO INSTALL NEW PLUMBING SYSTEMS BELOW EXISTING CONCRETE SLABS, FIRST PLUMBING CONTRACTOR SHALL LAY OUT CUT. THEN, DEMOLITION CONTRACTOR SHALL SAW CUT SLAB TO CONTROL CRACKING AND REMOVE ALL CONCRETE. PLUMBING CONTRACTOR SHALL THEN EXCAVATE FILL TO PROPER SLOPE, INSTALL NEW PIPING SYSTEMS AS REQUIRED, THEN BACKFILL AND COMPACT TO PROPER DENSITY. THE CONCRETE CONTRACTOR SHALL THEN INSTALL NEW SIX (6) MIL POLYETHYLENE VAPOR BARRIER AND SEAL, INSTALL NEW REINFORCING STEEL AND WELD ON TO EXISTING, THEN RE-POUR CONCRETE TO NEW LEVEL. DO NOT CUT THROUGH GRADE BEAMS WITHOUT APPROVAL FROM THE STRUCTURAL ENGINEER. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
31. ALL ABANDONED FIXTURES, DRAINS AND PIPING (INCLUDING PIPING ABANDONED IN THE PAST) IN AREAS WHERE WORK IS BEING DONE SHALL BE COMPLETELY REMOVED FROM BUILDING (INCLUDING PIPING BELOW SLAB/GRADE — UNLESS SHOWN OTHERWISE ON DRAWINGS). EXISTING WATER PIPING SHALL BE CAPPED AT EXISTING WATER MAIN TAPS AND ALL ABANDONED PIPING REMOVED. ABANDONED VENT PIPING SHALL BE COMPLETELY REMOVED, INCLUDING EXISTING VTR'S NOT RE-USED. PATCH AS REQUIRED. ONLY ACTIVE PIPING, FIXTURES AND DRAINS SHALL REMAIN IN BUILDING WHERE WORK IS BEING DONE.

GAS PRV SCHEDULE

MARK	PRV-K
LOCATION	MECH. YARD
SERVES	KITCHEN
GAS LOAD	585 CFH
DISTANCE FROM METER	150 FT
DISTANCE TO LAST OUTLET	200 FT
INLET (SIZE/PRESSURE)	1" / 5 PSI
OUTLET (SIZE/PRESSURE)	2" / 7-12 IN WC



4 GAS PRESSURE REGULATOR DETAIL (PRV)

NO SCALE

NOTES:
1. GAS REGULATOR SHALL BE ANSI Z21.80 CERTIFIED FOR LINE PRESSURE REGULATION BETWEEN THE SERVICE REGULATOR AND CONNECTED EQUIPMENT.
2. ALL GAS REGULATORS WITH INLET PRESSURE ABOVE 2 PSI SHALL BE EQUIPPED WITH A FACTORY INSTALLED OVERPRESSURE PROTECTION DEVICE, AS PART OF THE ANSI Z21.80 CERTIFICATION.
3. GAS REGULATOR SHALL BE EQUIPPED WITH A VENT LIMITING DEVICE, SIZED IN ACCORDANCE WITH THE REGULATOR OUTLET PRESSURE.
4. ALL REGULATORS INSTALLED OUTDOORS SHALL BE RATED FOR OUTDOOR INSTALLATION.
5. BASIS OF DESIGN IN THE MAXITROL 325-L SERIES OF REGULATORS

PLUMBING DRAINS, CLEANOUTS AND HYDRANTS

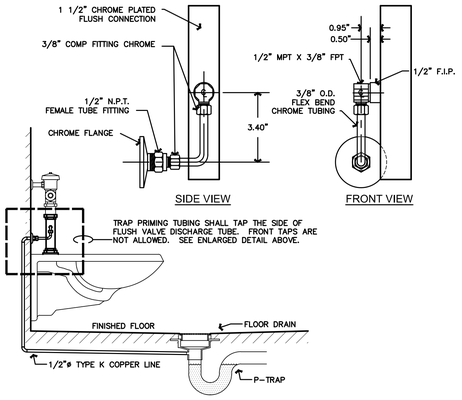
MARK	MIN. CONNECTION SIZES (IN.) SAN	VENT	CW	HW	DESCRIPTION/SPECIFICATION FOR FIXTURE OR EQUIPMENT
FD	4	2	1/2	–	TOILET FLOOR DRAIN — TWO-PIECE CAST IRON WITH SEEPAGE FLANGE, REVERSIBLE CLAMPING COLLAR, 1/2" TRAP PRIMER TAP, 6" SQUARE, NICKEL BRONZE HSTRAINER AND SECURITY SCREWS JR SMITH MODEL 2005-03-K06PB-P050-U
FD2	4	2	1/2	–	EQUIPMENT FLOOR DRAIN — CAST IRON, MEDIUM DEPTH DRAIN WITH FLANGE, CLAMPING DEVICE, SEEPAGE OPENINGS, DUCTILE IRON TRUE-FIT SEDIMENT BUCKET WITH 12" STAINLESS STEEL RIM LESS GRATE, 1/2" TRAP PRIMER TAP ZURN MODEL ZS-540-LC-P DRAIN SHALL BE DESIGNED SUCH THAT GRATE CANNOT BE INSTALLED WITHOUT SEDIMENT BUCKET.
FD3	4	2	1/2	–	GRATED MECHANICAL ROOM FLOOR DRAIN — CAST IRON WITH FLANGE, SEEPAGE OPENINGS, 9" HEAVY-DUTY DUCTILE IRON GRATE WITH STAINLESS STEEL VENEER, CLAMPING DEVICE AND 1/2" TRAP PRIMER TAP ZURN MODEL ZS-550-C-P
FD4	4	2	1/2	–	CANWASH FLOOR DRAIN — ALL GALVANIZED CAST IRON, MEDIUM DEPTH DRAIN WITH FLANGE, CLAMPING DEVICE, SEEPAGE OPENINGS, GALVANIZED SUR-SET SEDIMENT BUCKET WITH 12" GALVANIZED DUCTILE IRON RIM AND GRATE, 1/2" TRAP PRIMER TAP ZURN MODEL ZS-540-P-G-HD. DRAIN SHALL BE DESIGNED SUCH THAT GRATE CANNOT BE INSTALLED WITHOUT SEDIMENT BUCKET.
FD5	4	2	1/2	–	KITCHEN FLOOR DRAINS SHALL BE SIMILAR EXCEPT WITH 7" SQUARE, BRONZE GRATE JR SMITH MODEL 2005-03-K07PB-P050-U PROVIDE 4" DIAMETER STAINLESS STEEL FUNNEL WHERE SHOWN ON DRAWINGS. REFERENCE KITCHEN CONNECTION SCHEDULE ON PLUMBING RENOVATION FLOOR PLAN SHEET.
FS KITCHEN FS	4	2	1/2	–	FLOOR SINK — CAST IRON, 8" DEEP SUMP, A.R.E. INTERIOR, INTEGRAL FLANGE FOR SUPPORT, CLAMPING DEVICE WHERE VAPOR BARRIER IS INSTALLED BETWEEN SLAB AND CONCRETE BEDDING FOR FLOOR, ALUMINUM SECONDARY DOME STRAINER AND 12" SQUARE HEAVY DUTY STAINLESS STEEL TRACTOR DUTY FRAME WITH 3/4-TRACTOR GRATE AND 1/2" TRAP PRIMER TAP JR SMITH MODEL 3150Y-04-C-13.
CO	VARIES	–	–	–	FLOOR CLEANOUT — ADJUSTABLE EXTENSION HOUSING, CAST IRON FERRULE WITH FULL-LINE-SIZE BRASS PLUG (UP TO 4"), 5" DIAMETER STAINLESS STEEL ACCESS COVER WITH VANDAL-PROOF SCREW, ROUND FRAME AND TOP LOAD RATING COMPATIBLE WITH FLOOR TYPE (REFERENCE ARCHITECTURAL DRAWINGS FOR FLOOR TYPES) ZURN MODEL ZS-1400-VP. PROVIDE CARPET FLANGE FOR CARPETED AREAS (CARPET MARKER SHALL NOT BE ACCEPTABLE) AND TERRAZZO RECESS FOR TERRAZZO FLOORS. OUTDOOR CLEANOUT — SAME AS TYPE "CO" EXCEPT WITH HEAVY-DUTY NICKEL BRONZE TOP ZURN MODEL ZN-1400-HD-VP. INSTALL 18" X 18" X 6" THICK CONCRETE PAD AROUND EACH OUTDOOR CLEANOUT.
WCO	VARIES	–	–	–	WALL CLEANOUT — CAST IRON FERRULE WITH COUNTERSUNK HEAD (FULL-LINE-SIZE PVC PLUG UP TO 4") MI-FAB MODEL CM-SD. ACCESS COVER SHALL BE 8" SQUARE, SURFACE MOUNT, FLUSH INSTALLATION, 16-GAUGE STAINLESS STEEL ACCESS DOOR WITH FLANGED FRAME AND VANDAL-PROOF OPTION MI-FAB MODEL UA-SS-VP. ACID WASTE CLEANOUT (AWCO) SHALL BE SAME EXCEPT ACID WASTE PIPING. INSIDE CABINETWORK WHERE CLEANOUT IS NOT VISIBLE, ACCESS PANEL MAY BE ROUND STAINLESS STEEL TYPE WITH VANDAL-PROOF CENTER SCREW MI-FAB MODEL C1450-RD-3-6.
2CO	4	–	–	–	DOUBLE CLEANOUTS — SAME AS OUTDOOR CLEANOUTS. INSTALLED FOR TWO-WAY RODDING. SINGLE CLEANOUT WITH 2-WAY FITTING IS NOT ACCEPTABLE, PROVIDE TWO SEPARATE CLEANOUTS. INSTALL 18" X 18" X 6" THICK CONCRETE PAD AROUND EACH OUTDOOR CLEANOUT.
HB	–	–	3/4	–	HOSEBIBB — 3/4" HOSE THREAD, INTEGRAL VACUUM BREAKER SPOUT, ROUGH CHROME FINISH WITH REMOVABLE KEYED HANDLE, WALL FLANGE CHICAGO MODEL 952.
WH	–	–	3/4	–	RESTROOM WALL HYDRANT — NARROW WALL, WARM CLIMATE TYPE HOSE BOX, QUARTER-TURN WHEEL HANDLE, ASSE APPROVED ANTI-SIPHON INTEGRAL VACUUM BREAKER AND DUAL CHECK VALVE, 3/4" STRAIGHT INLET HOSE CONNECTION, CAST STAINLESS STEEL HYDRANT BOX, FLUSH MOUNTED 16-GAUGE STAINLESS STEEL FRAME AND 180° DROP DOWN DOOR WITH KEY LOCK AND WALL CLAMP JR SMITH MODEL 5518
WH2	–	–	3/4	–	EXTERIOR WALL HYDRANT — NON-FREEZE HOSE BOX, QUARTER-TURN WHEEL HANDLE, ASSE APPROVED ANTI-SIPHON INTEGRAL VACUUM BREAKER AND DUAL CHECK VALVE, 3/4" STRAIGHT INLET HOSE CONNECTION, CAST STAINLESS STEEL HYDRANT BOX, FLUSH MOUNTED 16-GAUGE STAINLESS STEEL FRAME AND 180° DROP DOWN DOOR WITH KEY LOCK AND WALL CLAMP JR SMITH MODEL 5519
WH3	–	–	3/4	3/4	CANWASH WALL HYDRANT — NON-FREEZE HOSE BOX WITH STRAIGHT INLET CONNECTION, HOT AND COLD MIXING, REMOVABLE KEYED HANDLE, ASSE APPROVED ANTI-SIPHON INTEGRAL BACKFLOW PREVENTER WITH 3/4" HOSE CONNECTION, HEAVY DUTY BRASS CASING, POLISHED BRONZE HYDRANT BOX WITH HINGED COVER, "WATER" CAST ON COVER, DRIP LIP AND WALL CLAMP J.R. SMITH MODEL 5560-QT-WC-H-W-PB.
WBOX	2	2	3/4	3/4	CLOTHES WASHER DRAIN/VALVE BOX — HEAVY-GAUGE GALVANIZED STEEL CONSTRUCTION, RECESSED IN WALL VALVE AND DRAIN CONNECTIONS, WATTS DUO-CLOZ VALVE GUY GRAY MODEL WB-200.

PLUMBING FIXTURES AND EQUIPMENT

MARK	MIN. CONNECTION SIZES (IN.) SAN	VENT	CW	HW	DESCRIPTION/SPECIFICATION
WC	4	2	1	–	WATER CLOSET — WALL MOUNTED, WHITE VITREOUS CHINA, SIPHON JET ACTION, 1.28 GPF, ELONGATED BOWL, TOP SPUD, ADA/TAS COMPLIANT, AMERICAN STANDARD AFWALL: SLOAN ROYAL 111-1.28 FLUSH VALVE WITH VANDAL-PROOF FREE-SPINNING TOP CAP, 1.28 GPF, VANDAL-PROOF STOP AND ADA/TAS COMPLIANT LEVER ACTUATOR WITH LEVER INSTALLED ON LEFT SIDE (FOR FIXTURES DESIGNATED AS "HANDICAP"). INSTALL LEVER ON "WIDE-SIDE" OF TOILET STALL): BEMIS 1655-SS/C EXTRA HEAVY DUTY, WHITE, OPEN FRONT SEAT LESS COVER WITH SELF-SUSTAINING, STAINLESS STEEL CHECK HINGE; AND, FLOOR MOUNTED CARRIER.
LV	1-1/4	1-1/4	1/2	1/2	LAVATORY GOOSENECK FAUCET — WALL HUNG, WHITE VITREOUS CHINA, FRONT OVERFLOW, SELF-DRAINING DECK AREA, 21" X 18", ADA/TAS COMPLIANT AMERICAN STANDARD LUCERNE 0355.012; DECK MOUNTED FAUCET, 4" CENTERS, FIXED, CHROME PLATED, 5.25" GOOSENECK SPOUT, PRESSURE COMPENSATING LAMINAR FLOW NON-AERATING 0.5 GPM OUTLET, 4" WRISTBLADE HANDLES, ADJUSTABLE COMPRESSION CARTRIDGES, CHICAGO 895-317GN2AE72ABCP; CHROME PLATED, 17-GAUGE CAST BRASS GRID DRAIN WITH WHEELCHAIR OFFSET FITTING; CHROME PLATED, 17-GAUGE CAST BRASS P-TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; TRUEBRO HANDI LAV-GUARD VANDAL-PROOF, WHITE INSULATION KITS; AND, FLOOR MOUNTED, CONCEALED ARMS CARRIER. PROVIDE ASSE 1070 LISTED MIXING VALVE, LEONARD 170-LF OR EQUAL (MUST BE CAPABLE OF ADJUSTMENT ABOVE 130°F).
LV2	1-1/4	1-1/4	1/2	1/2	LAVATORY — WALL HUNG, WHITE VITREOUS CHINA, FRONT OVERFLOW, SELF-DRAINING DECK AREA, 21" X 18", ADA/TAS COMPLIANT AMERICAN STANDARD LUCERNE 0355.012; CHROME PLATED, ALL CAST BRASS CONSTRUCTION, ADA/TAS COMPLIANT, VANDAL-PROOF FAUCET WITH 4" WRIST BLADE HANDLES, COMPRESSION STYLE CARTRIDGES, CHROME DECK PLATE, VANDAL-PROOF AERATOR, COPPER SUPPLIES AND CERTIFIED FOR MEETING ALL REQUIREMENTS OF NSF 61 SECTION 9 CHICAGO MARATHON MODEL 802-E70-317ABCP; CHROME PLATED, 17-GAUGE CAST BRASS GRID DRAIN WITH WHEELCHAIR OFFSET FITTING; CHROME PLATED, 17-GAUGE CAST BRASS P-TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; TRUEBRO HANDI LAV-GUARD VANDAL-PROOF, WHITE INSULATION KITS; AND, FLOOR MOUNTED, CONCEALED ARMS CARRIER. PROVIDE ASSE 1070 LISTED MIXING VALVE, LEONARD 170-LF OR EQUAL (MUST BE CAPABLE OF ADJUSTMENT ABOVE 130°F).
EDF	1-1/2	1-1/2	1/2	–	BI-LEVEL ELECTRIC DRINKING FOUNTAINS WITH BOTTLE FILLER — WALL MOUNTED, ALL STAINLESS STEEL, ADA AND TAS COMPLIANT FOR ALL AGES, 8 GPH AT ARI STANDARDS, 2-STREAM ALL METAL BUBBLER FITTING WITH VANDAL-RESISTANT KIT AND FRONT PUSH BUTTON ACTUATION, PUSH BUTTON ACTIVATED BOTTLE FILLER WITH 1.1GPM FILL RATE AND ANTI-MICROBIAL COATING, INTEGRAL WATER FILTER, LEAD-FREE (CERTIFIED FOR MEETING ALL REQUIREMENTS OF NSF 61 SECTION 9), REFRIGERANT HFC-134a, MAINTENANCE ACCESS PANEL, HALSEY-TAYLOR MODEL HTHBWVRBBL; CHROME PLATED, 17-GAUGE CAST BRASS P-TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; FLOOR MOUNTED CHAIR CARRIER; AND, STAINLESS STEEL ADA APRON FOR LOCATIONS REQUIRED BY ADA OR TAS.
MB	3	2	3/4	3/4	MOP BASIN — 24" X 24" X 12" DEEP TERRAZZO, TWO (2) STAINLESS STEEL SPLASH CATCHER PANELS, 8" DROP FRONT WITH STAINLESS STEEL CAP, CAST BRASS DRAIN WITH STAINLESS STEEL STRAINER STERN WILLIAMS HILOW MODEL HI-1800-BP; FAUCET SHALL BE POLISHED CHROME PLATED SERVICE SINK TYPE WITH VACUUM BREAKER, INTEGRAL SUPPLY CHECK STOPS, SPOUT WITH PAIL HOOK, HOSE END AND TOP BRACE CHICAGO MODEL 897-CCF (INSTALL BACKING/BRACING INSIDE WALL TO SUPPORT FAUCET AND TOP BRACE).
LP-1	3	2	3/4	3/4	LAVATORY PUMP — FACTORY BUILT, LIFT PUMP FOR GRAY WATER WASTE, TOP ACCESS TO INTERNAL 1/6HP PUMP AND FLOAT SWITCH, 1.5" TOP AND SIDE INLETS, 1.5" TOP OUTLET, INTEGRAL CHECK VALVE AT BOTTOM INLET CONNECTIONS, 9FT POWER CORD WITH GROUNDED PLUG; LIBERTY PUMPS MODEL 406

KITCHEN PLUMBING CONNECTION SCHEDULE

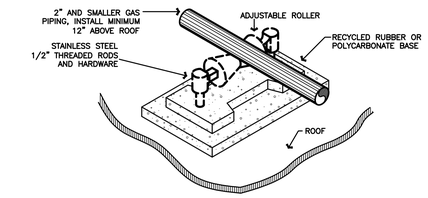
MARK	DESCRIPTION
P5	3/4" CW AND 3/4" HW — IN WALL, 36" AFF, TO MOP BASIN ("MB") FAUCET. REFERENCE PLUMBING FIXTURE SCHEDULE.
P6	3" DRAIN IN FLOOR FOR MOP BASIN ("MB") DRAIN. REFERENCE PLUMBING FIXTURE SCHEDULE.
P7	3/4" CW AND 3/4" HW — IN WALL, 18" AFF, TO HOSE BIBB.
P10	FLOOR DRAIN — 3" OUTLET; FLUSH WITH FLOOR; TWO-PIECE CAST IRON WITH SEEPAGE FLANGE, REVERSIBLE CLAMPING COLLAR, 7" SQUARE HEAVY-DUTY POLISHED BRONZE GRATE, 1/2" TRAP PRIMER TAP, AND TRAP SEAL DEVICE (MODEL 2692) JR SMITH MODEL 2005-03-K07PB-P050-U.
P11C	1/2" CW AND 1/2" HW — IN WALL, FOR HAND LAVATORY WITH FOOT CONTROLS ("LV"). REFERENCE PLUMBING FIXTURE SCHEDULE.
P11D	2" DRAIN — IN WALL, FOR HAND LAVATORY WITH FOOT CONTROLS ("LV"). REFERENCE PLUMBING FIXTURE SCHEDULE.
P12	FLOOR SINK — 4" OUTLET; FLUSH WITH FLOOR; CAST IRON, 8" DEEP SUMP, A.R.E. INTERIOR, INTEGRAL FLANGE FOR SUPPORT, CLAMPING DEVICE WHERE VAPOR BARRIER IS INSTALLED BETWEEN SLAB AND CONCRETE BEDDING FOR FLOOR, ALUMINUM SECONDARY DOME STRAINER AND 12" SQUARE HEAVY DUTY NICKEL BRONZE FRAME W



13 FLUSH VALVE TRAP PRIMING TUBE DETAIL

NO SCALE

MI-FAB MODEL MI-702-MOD FLUSH VALVE TRAP PRIMER, OR EQUAL

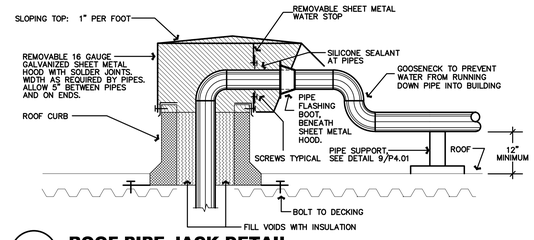


14 GAS PIPING ROOF SUPPORT DETAIL

NO SCALE

NOTES:

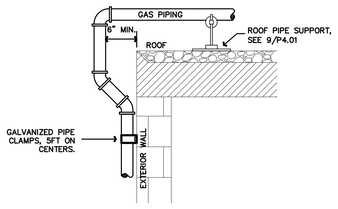
1. GAS PIPING SUPPORT SHALL BE PORTABLE PIPE HANGERS, INC. MODEL PP10-R. PIPING SHALL BE INSTALLED 12" ABOVE FINISHED ROOF. PROVIDE 18" X 18" CAREY TREAD-TYPE MATERIAL BENEATH EACH PIPE SUPPORT.
2. FIELD LOCATE ROOF STRUCTURAL SUPPORTS AND PLACE BASE OF PIPE SUPPORT OVER ROOF SUPPORTS ONLY. PROVIDE BASE OF ADEQUATE LENGTH TO SPAN ROOF JOIST TO PREVENT SUPPORTS SETTING ON ROOF DECK ONLY.
3. INSTALL SIX (6) FOOT-ON-CENTERS.
4. PIPE SUPPORT MANUFACTURER'S REPRESENTATIVE SHALL PERSONALLY INSPECT INSTALLATIONS OF PIPE SUPPORTS AND MAKE CORRECTIONS AND HEIGHT ADJUSTMENTS TO INSTALLATIONS, AS REQUIRED, DURING INSPECTION.



9 ROOF PIPE JACK DETAIL

NO SCALE

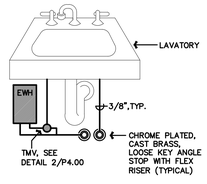
NOTE: COORDINATE WITH ARCHITECTURAL DRAWINGS, DETAILS AND SPECIFICATIONS.



13 GAS PIPING WALL-TO-ROOF TRANSITION DETAIL

NO SCALE

TANKLESS WATER HEATER SCHED.		
MARK	IEWH-1	
SERVES	LAVATORY	
LOCATION	BELOW COUNTER	
HEATER KW	1.8 KW	
TEMP RISE (@ 0.5 GPM)	25°F	
VOLTAGE/PHASE	120V/1PH	
EEMAX MODEL	SPEX1812T	

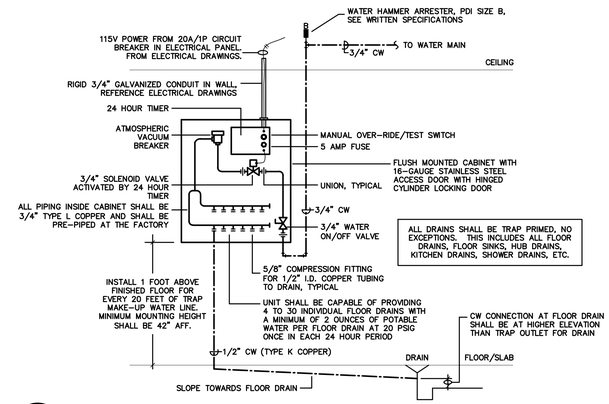


11 TANKLESS WATER HEATER

NO SCALE

NOTES:

1. LOCATION OF VALVE AND PIPING SHALL NOT INTERFERE WITH ANY ADA/HANDICAP KNEE-SPACE CLEARANCE REQUIREMENTS.
2. ALL PIPING SHALL BE CHROME PLATED CAST BRASS AND SHALL BE INSULATED BY TRUEBRO HANDI LAV-GUARD INSULATION KITS. INSULATION KITS SHALL COVER P-TRAP, MIXING VALVE, WATER STOPS, PIPING AND ALL SHARP EDGES (ONLY WHERE CABINETWORK KNEESPACE SCREEN NOT PROVIDED).
3. ALL CW AND HW CONNECTIONS SHALL HAVE COMPRESSION TYPE FITTINGS.
4. FURNISH & INSTALL 0.5-GPM AERATOR ON FAUCET COMPATIBLE WITH TANKLESS EWH REQUIREMENTS.
5. WATER HEATER SHALL HAVE INTEGRAL ASSE-1070 COMPLIANT TEMPERED MIXING VALVE.

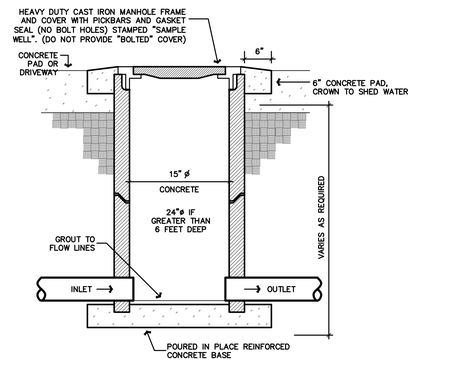


10 ELECTRONIC TRAP PRIMING MANIFOLD DETAIL (TP)

NO SCALE

NOTES:

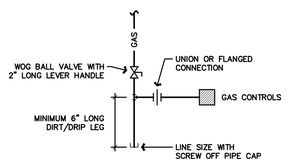
1. REFERENCE SCHEDULE ON SHEET P3.00



8 SAMPLE TEST WELL DETAIL (STW)

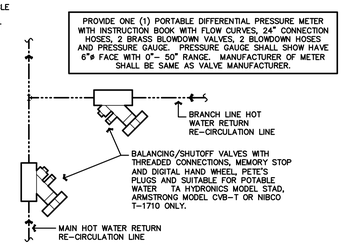
NO SCALE

NOTES:



7 TYPICAL GAS CONNECTION

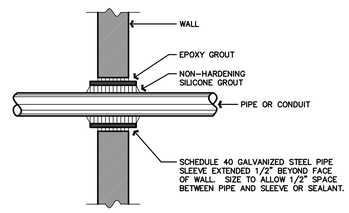
NO SCALE



6 HOT WATER BALANCING STATION

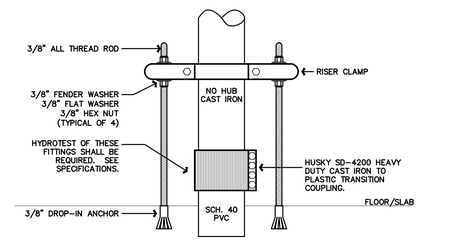
NO SCALE

PROVIDE AT EACH JUNCTION OF BRANCH HOT WATER RETURN LOOPS TO MAIN CIRCULATING HOT WATER LINE, SEE PLUMBING PLANS.



5 WALL PENETRATION DETAIL

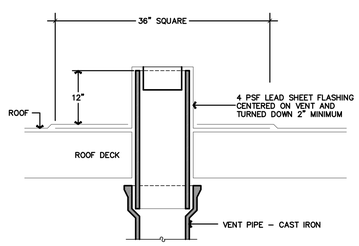
NO SCALE



4 PVC-TO-CAST IRON INSTALLATION DETAIL

NO SCALE

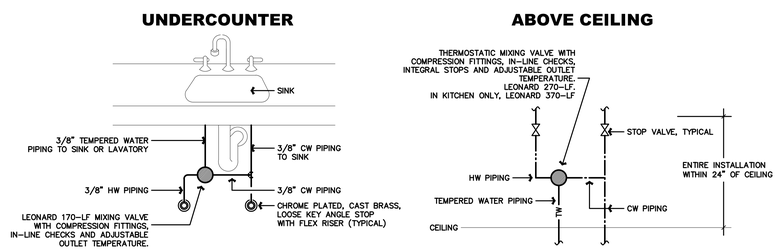
MISSION TRANSITION COUPLING DESIGNED AND CERTIFIED FOR THIS SPECIFIC APPLICATION SHALL BE ACCEPTABLE IN LIEU OF HUSKY COUPLING IN THIS DETAIL.



3 ROOF VENT DETAIL

NO SCALE

COORDINATE WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

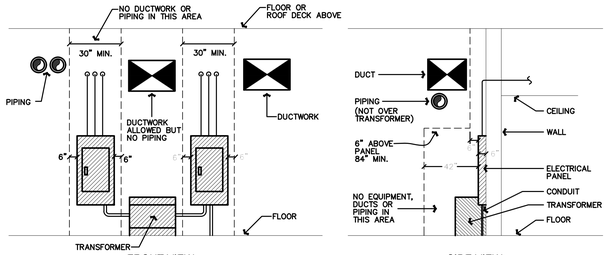


2 MIXING VALVE DETAIL

NO SCALE

NOTES

1. UNDERCOUNTER MIXING VALVE SHALL BE MOUNTED ON WALL IN FIXTURE KNEE-SPACE. LOCATION OF VALVE AND PIPING SHALL NOT INTERFERE WITH ANY ADA/HANDICAP KNEE-SPACE CLEARANCE REQUIREMENTS.
2. ALL PIPING SHALL BE CHROME PLATED CAST BRASS AND SHALL BE INSULATED BY TRUEBRO HANDI LAV-GUARD INSULATION KITS. INSULATION KITS SHALL COVER P-TRAP, MIXING VALVE, WATER STOPS, PIPING AND ALL SHARP EDGES (ONLY WHERE CABINETWORK KNEESPACE SCREEN NOT PROVIDED).
3. ALL CW AND HW CONNECTIONS SHALL HAVE COMPRESSION TYPE FITTINGS.
4. FOR ABOVE CEILING INSTALLATION, VALVE SHALL BE INSTALLED IN AN EASILY/READILY ACCESSIBLE LOCATION. SEE KITCHEN PLUMBING CONNECTION SCHEDULE FOR REQUIRED KITCHEN LOCATIONS.
5. LAVATORY MIXING VALVES SHALL HAVE AN OUTPUT ADJUSTMENT RANGE UP TO OR ABOVE 130°F.
   SINK MIXING VALVES SHALL HAVE AN OUTPUT ADJUSTMENT RANGE UP TO OR ABOVE 140°F.



1 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

DO NOT INSTALL ANY PIPING BENEATH CVT BOXES. DO NOT INSTALL ANY PIPING (EXCEPT FIRE SPRINKLER PIPING AND OTHER PIPES SHOWN SPECIFICALLY ON THE PLUMBING FLOOR PLANS) OVER COMPUTER CLASSROOMS, BOOKROOMS, IDF/MDF/SERVER ROOMS OR OTHER ROOMS NOTED ON THE PLUMBING FLOOR PLANS.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

k

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
6955 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL

STATE OF TEXAS — INTERIM REVIEW — NOT FOR CONSTRUCTION — 07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

PLUMBING SCHEDULES & DETAILS

k-P0.02

PRELIMINARY
NOT FOR CONSTRUCTION OR BIDDING PURPOSES

STANTON ENGINEERING GROUP
INFORMATION@STANTON-ENG.COM | (713) 300-6080
TEXAS ENGINEERING FIRM REG. NO. F-01833 | 1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

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TECHNOLOGY SYMBOLS & LEGEND

VOICE SYMBOLS

	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS PER LOCATION.
W	SINGLE VOICE OUTLET FOR WALL-MOUNTED PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.

VOICE/DATA SYMBOLS

	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF VOICE TERMINATIONS , Y = NUMBER OF DATA TERMINATIONS PER LOCATION.
	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF VOICE OUTLETS AND Y = NUMBER OF DATA OUTLETS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET AND SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X Y	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X Y	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS PER LOCATION.

DATA SYMBOLS

	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF DATA OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
W	SINGLE DATA OUTLET FOR WALL-MOUNTED IP PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA CABLE FOR COMPUTER ON WHEELS, CABLE TYPE AS SPECIFIED MOUNTED + 18-INCHES A.F.F UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
X	DATA CABLE FOR CEILING MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X	DATA CABLE FOR CEILING MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
	DATA CABLE FOR CEILING MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR CEILING MOUNTED AUDIO/VISUAL EQUIPMENT ENCLOSURE, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR WALL MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.

FIBER OPTIC SYMBOLS

	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF FIBER OPTIC OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.

DATA SYMBOLS, CONT.

X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW, REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
X CAMW	DATA CABLE FOR INTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPW	DATA CABLE FOR INTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPE	DATA CABLE FOR EXTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.

ROUGH-IN & MISC. SYMBOLS

R	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
R	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
R	POWER POLE WITH ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
R	ROUGH-IN LOCATION. TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
WAP	WIRELESS ACCESS POINT. EQUIPMENT AS SPECIFIED.

CABLE PLANT & RISER DIAGRAM

	MAINTENANCE HOLE, SIZE & TYPE AS SPECIFIED.
	PULLBOX, SIZE AND TYPE AS SPECIFIED.
UGC	DIRECT BURIED COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
AER	AERIAL COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
	CONDUIT, SIZE AND TYPE AS SPECIFIED.

GENERAL SYMBOLS

# SHEET — DRAWING TITLE SCALE: SCALE	DRAWING TITLE CALLOUT, # = DETAIL NUMBER.
# SHEET	DETAIL CALLOUT, # = DETAIL NUMBER.
# SHEET	SECTION CALLOUT, # = DETAIL NUMBER.
SHEET #	ELEVATION CALLOUT, # = DETAIL NUMBER.
#	KEYED NOTE, # = KEYED NOTE NUMBER.
#	REVISION TRIANGLE, # = REVISION NUMBER (PER SHEET).
TR (IDF XXX)	INDICATES TELECOMMUNICATIONS REGION

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
AER	AERIAL
DEMARC	DEMARCATION POINT
EMT	ELECTRIC METALLIC TUBE
F.O.C.	FIBER OPTIC CABLE
GIP	GALVANIZED IRON PIPE
HE	PAINTERCOM HEAD-END
IMC	INTERMEDIATE METAL CONDUIT
ISP	INSIDE CABLE PLANT
IDF	INTERMEDIATE DISTRIBUTION FRAME
MDF	MAIN DISTRIBUTION FRAME
MH	MAINTENANCE HOLE
MM	MULTIMODE
OSP	OUTSIDE CABLE PLANT
PB	PULLBOX
PR	PAIR
PVC	POLYVINYL CHLORIDE
RSC	RIGID STEEL CONDUIT
SM	SINGLE MODE
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TB	TERMINAL BLOCK
TR	TELECOMMUNICATION REGION
UGC	UNDERGROUND COMMUNICATION
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR

NOTES

1. CONTRACTOR SHALL REVIEW DRAWINGS AND SPECIFICATIONS THAT MAKE UP THE CONTRACT DOCUMENTS AND COMPLETE ALL WORK INCLUDED THEREIN.
2. SCALE OF TECHNOLOGY DRAWINGS IS PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CABLE LENGTHS, SIZE OF PATHWAYS, DIMENSIONS, ETC.
3. TECHNOLOGY DRAWINGS SHALL BE USED TO COMPLEMENT THE WRITTEN SPECIFICATIONS.
4. ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT'S. DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT AND SUBSEQUENTLY CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE ARCHITECT'S/DESIGN CONSULTANT'S INTERPRETATION.

INDEX OF DRAWINGS

k-T000 TECHNOLOGY SYMBOLS & LEGEND
k-TD201 TECHNOLOGY DEMOLITION FLOOR PLAN
k-T200 TECHNOLOGY COMPOSITE FLOOR PLAN
k-T201 TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
k-T202 TECHNOLOGY TEMPORARY KITCHEN PLAN
k-T300 TECHNOLOGY ENLARGED VIEWS
k-T400 TECHNOLOGY TYPICAL DETAILS
k-T401 TECHNOLOGY TYPICAL DETAILS
k-T500 TECHNOLOGY TYPICAL DETAILS

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TECHNOLOGY SYMBOLS & LEGEND

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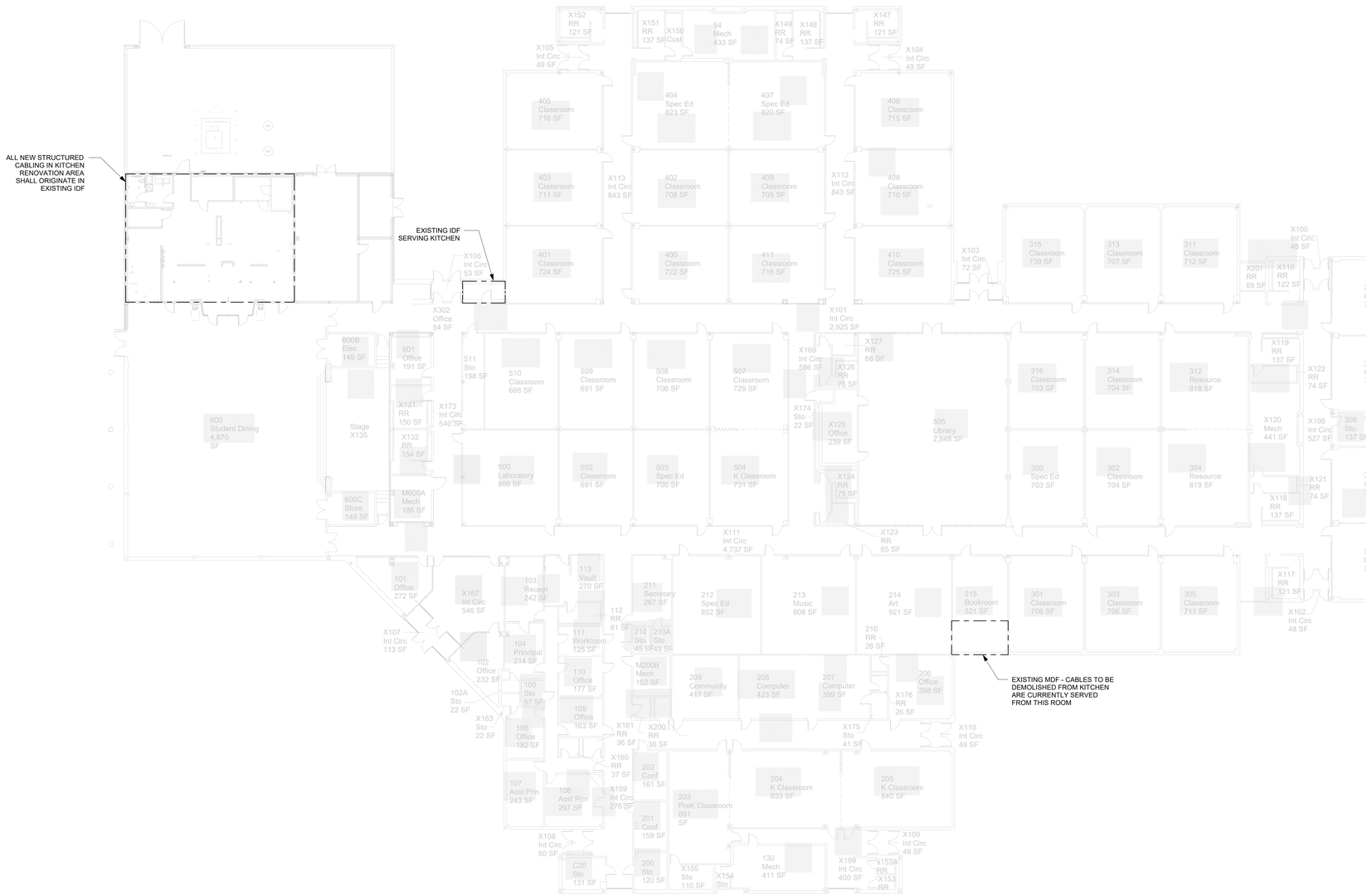
k-T000



1 k-T200 TECHNOLOGY COMPOSITE FLOOR PLAN
1/16" = 1'-0"

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TECHNOLOGY COMPOSITE FLOOR PLAN

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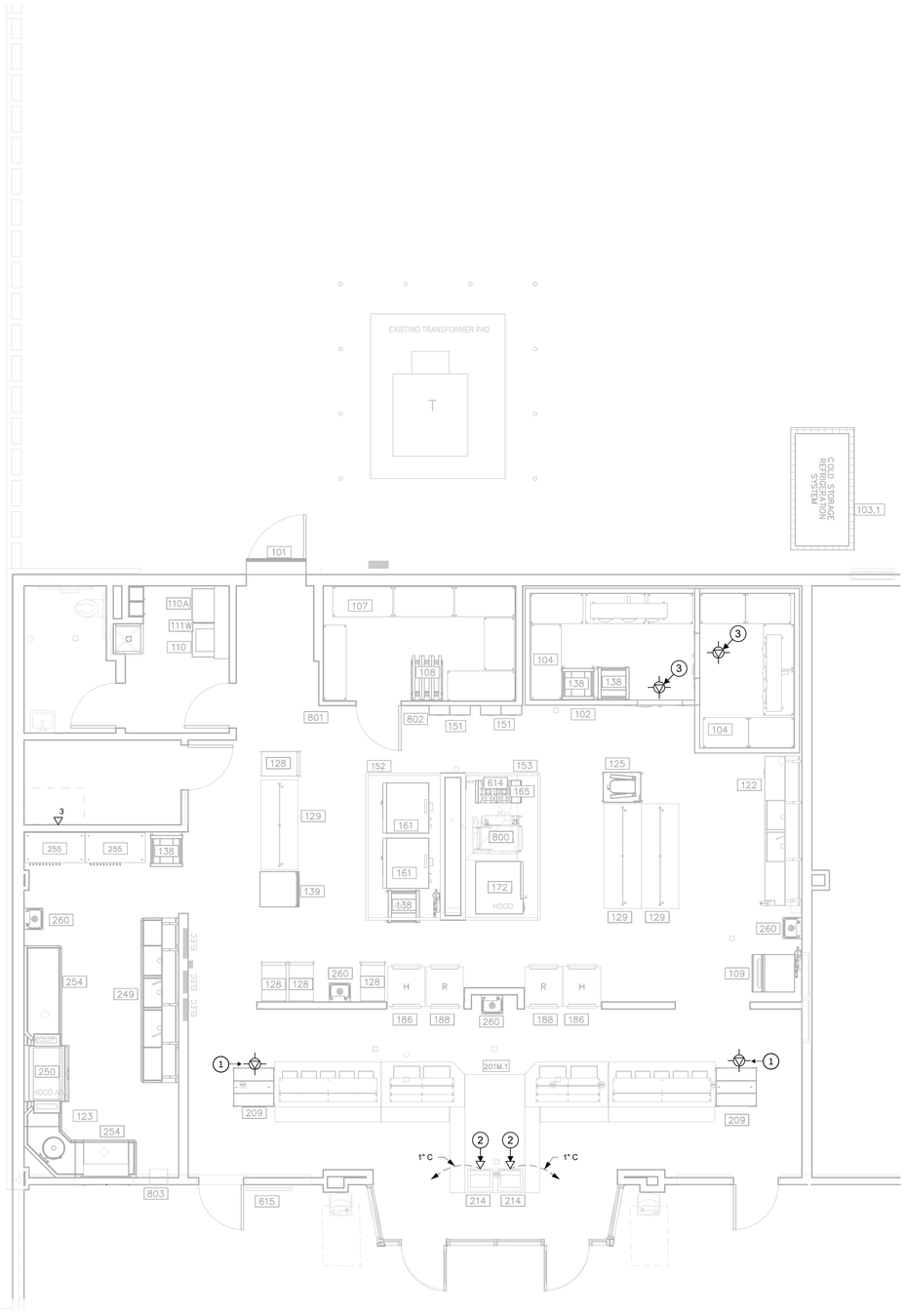
k-T200



1 k-T201 TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
1/4" = 1'-0"

TECHNOLOGY FLOOR PLANS GENRAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
2. ALL CONDUIT PATHWAYS, ROUGH-INS, BACKBOXES, FLOOR BOXES, CONDUIT SLEEVES, ETC. INDICATED ON THE TECHNOLOGY DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26.
3. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. TECHNOLOGY CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES/ ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM.
14. ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE A LAY-IN TYPE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE A LAY- IN TYPE CEILING TO PREVENT THE CABLES FROM BEING EXPOSED, THE CONDUIT SHALL ROUTE TO THE NEAREST LAY-IN TYPE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. THE CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE MAIN CORRIDOR OR NEAREST MDF/IDF TO MINIMIZE THE CABLE LENGTH ENSURING THE CABLE LENGTH DOES NOT EXCEED 275 FEET. CONDUIT, CONNECTIONS, J-BOXES, SUSPENSION, ANCHORAGES, AND OTHER CONDUIT COMPONENTS EXPOSED TO VIEW IN PUBLIC SPACES SHALL BE ROUTED AND INSTALLED CAREFULLY TO MINIMIZE VISUAL IMPACT AND SHALL BE FULLY PAINTED TO MATCH UNLESS NOTED OTHERWISE.
15. CONDUIT(S) INSTALLED IN-SLAB OR UNDER-SLAB TO FLOOR BOXES, POKE-THURS, AND TO WORKAREA OUTLETS, ETC. SHALL BE INSTALLED WITH WET RATED CABLE(S).
16. NO GRID WIRE SHALL BE UTILIZED FOR SUPPORTS ONLY USE SOLID SUPPORTS (CLIPS, ALL-THREAD, ANCHORS, ETC.).

TECHNOLOGY PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

1. DATA CABLE FOR CONTRACTOR FURNISHED / CONTRACTOR INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.
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3. DATA CABLE FOR TEMPERATURE MONITORING OF FREEZER COOLER. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS AND TERMINATION POINT AND CONNECTIVITY NEEDS IN FREEZER / COOLER CONTROL UNIT.
4. DATA CABLE FOR TEMPORARY POINT OF SALES CASH REGISTER. COORDINATE WITH OWNER, ARCHITECT, AND CONSULTANT FOR ROUTING OF CABLES TO POINT OF SALE CASH REGISTER PRIOR TO INSTALLATION

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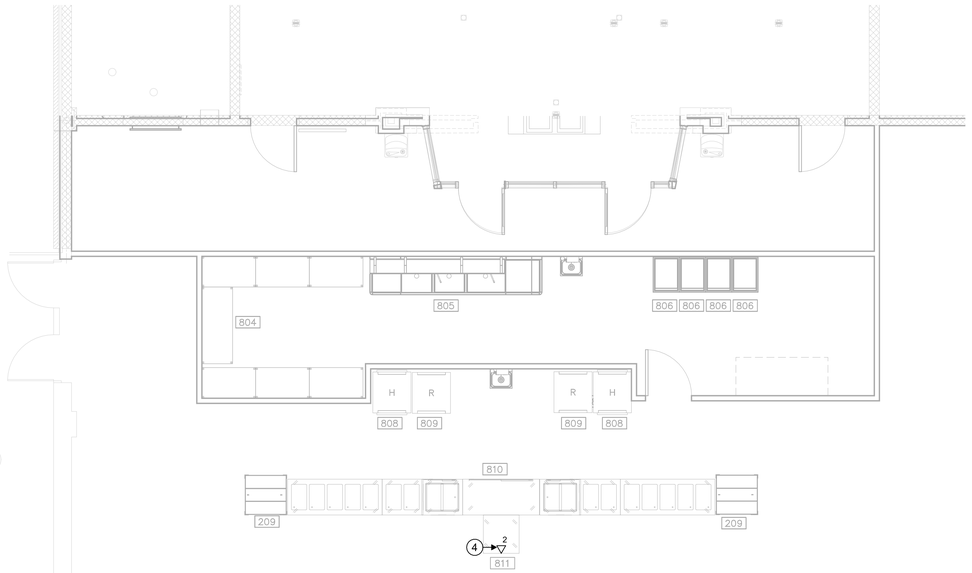
TECHNOLOGY NEW/RENOVATION KITCHEN PLAN

SHEET NO.
k-T201



1 k-T202 TECHNOLOGY TEMPORARY KITCHEN FLOOR PLAN
1/4" = 1'-0"

TECHNOLOGY FLOOR PLANS GENRAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
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7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES/ ROUGH-INS SHALL BE ALLOWED.
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16. NO GRID WIRE SHALL BE UTILIZED FOR SUPPORTS ONLY USE SOLID SUPPORTS (CLIPS, ALL-THREAD, ANCHORS, ETC.).

TECHNOLOGY PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

1. DATA CABLE FOR OWNER FURNISHED / OWNER INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.1.DATA CABLE FOR OWNER FURNISHED / OWNER INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.
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3. DATA CABLE FOR TEMPERATURE MONITORING OF FREEZER COOLER. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS AND TERMINATION POINT AND CONNECTIVITY NEEDS IN FREEZER / COOLER CONTROL UNIT.
4. DATA CABLE FOR TEMPORARY POINT OF SALES CASH REGISTER. COORDINATE WITH OWNER, ARCHITECT, AND CONSULTANT FOR ROUTING OF CABLES TO POINT OF SALE CASH REGISTER PRIOR TO INSTALLATION

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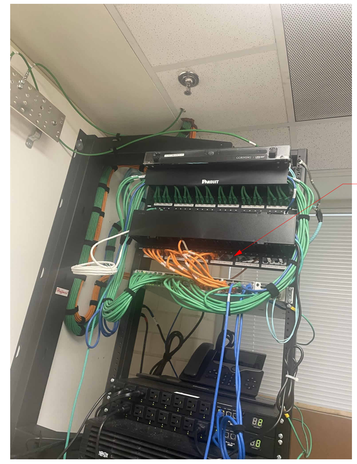
TECHNOLOGY TEMPORARY KITCHEN PLAN

SHEET NO.
k-T202



1 k-T300 HUNTERS GLENN EXISTING IDF WALL RACK
N.T.S.

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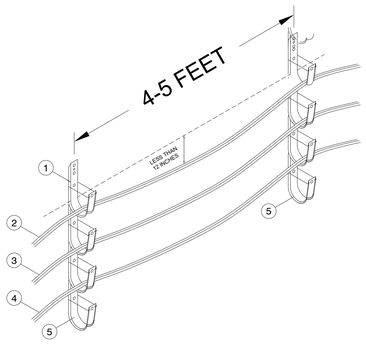
TECHNOLOGY ENLARGED VIEWS

SHEET NO.
k-T300

NOTE TO CONTRACTOR:

UNLESS OTHERWISE NOTED, LOW VOLTAGE CABLING SHALL BE INSTALLED WITHIN 6-INCHES OF THE CEILING AND ACCESSIBLE BY A TECHNICIAN ON A STANDARD A-FRAME LADDER.

CONTRACTOR SHALL MAINTAIN AT LEAST 6-INCHES OF SEPRATION BETWEEN CABLING BUNDLES AND MECHANICAL DUCTWORKS, EQUIPMENT, PIPIING OR OTHER SYSTEMS IN THE CEILING PLENUM.

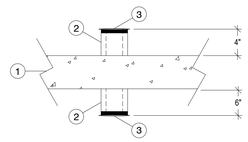


KEYED NOTES:

1. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
2. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
3. A/V CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. SECURITY CABLE ABOVE ACCESSIBLE CEILING (BY DIV 28).
5. SPARE J-HOOK (BY DIV 27).

1 T400 TYPICAL J-HOOK CABLE PATHWAY

SCALE: N.T.S.

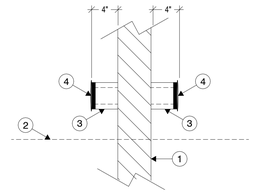


KEYED NOTES:

1. SCHEDULED FLOOR OR DECK.
2. CONDUIT SLEEVE (BY DIV 26).
3. NYLON BUSHING (BY DIV 26).

2 T400 TYPICAL CONDUIT SLEEVE THROUGH FLOOR OR DECK DETAIL

SCALE: N.T.S.

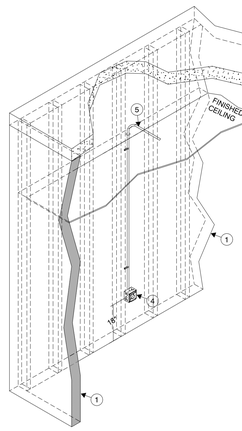


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. CONDUIT SLEEVE (BY DIV 26).
4. NYLON BUSHING (BY DIV 26).

3 T400 TYPICAL CONDUIT SLEEVE GOING THROUGH WALL

SCALE: N.T.S.

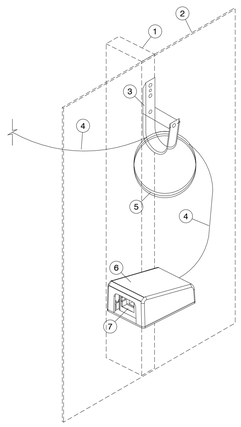


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. SCHEDULED DECK ABOVE.
4. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX WITH DOUBLE GANG PLASTER RING (BY DIV 26).
5. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH. (BY DIV 26).

4 T400 TYPICAL TECHNOLOGY CONDUIT ROUGH-IN

SCALE: N.T.S.

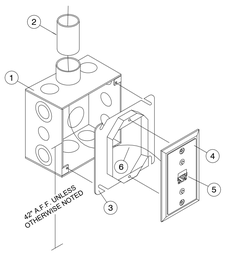


KEYED NOTES:

1. SCHEDULED STUD.
2. SCHEDULED WALL.
3. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
5. 20 FOOT SERVICE LOOP ABOVE ACCESSIBLE CEILING NEATLY COILED AND SECURED TO J-HOOK (BY DIV 27).
6. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BUILDING STRUCTURE (BY DIV 27).
7. DATA INSERT (BY DIV 27).

5 T400 TYPICAL ABOVE CEILING SINGLE DATA OUTLET (WALL MOUNTED)

SCALE: N.T.S.

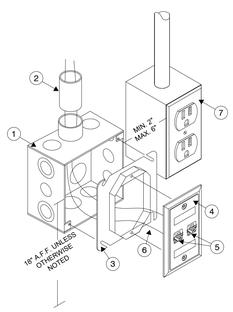


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH PHONE STUDS (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).

6 T400 TYPICAL WALL PHONE OUTLET CONFIGURATION

SCALE: N.T.S.

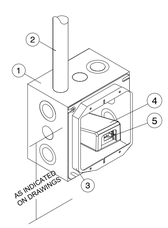


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

7 T400 TYPICAL DUAL DATA OUTLET CONFIGURATION

SCALE: N.T.S.

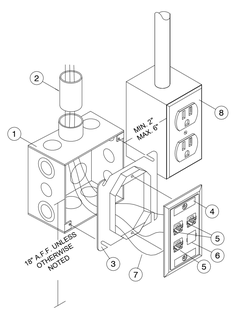


KEYED NOTES:

1. 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. DOUBLE GANG PLASTER RING (BY DIV 26).
4. SURFACE MOUNT BOX INSIDE THE 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH DOUBLE GANG BOX (BY DIV 27).
5. RJ-45 INSERT (BY DIV 27).

8 T400 TYPICAL WALL-MOUNTED WIRELESS ACCESS POINT

SCALE: N.T.S.



KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

9 T400 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

k

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL



07/18/2025

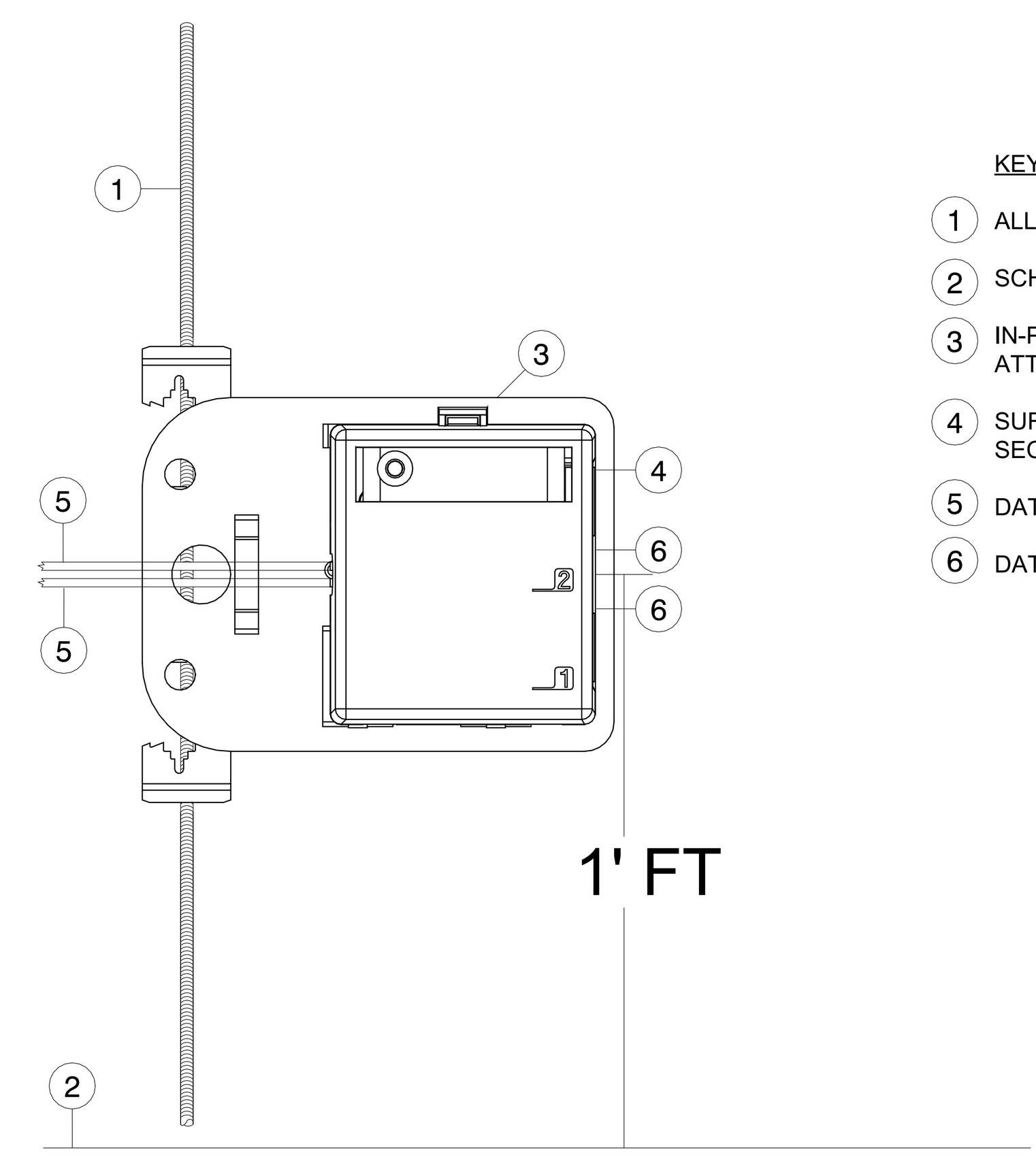
ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

TECHNOLOGY TYPICAL DETAILS

SHEET NO.
k-T400

1 TYPICAL ABOVE CEILING DATA OUTLET

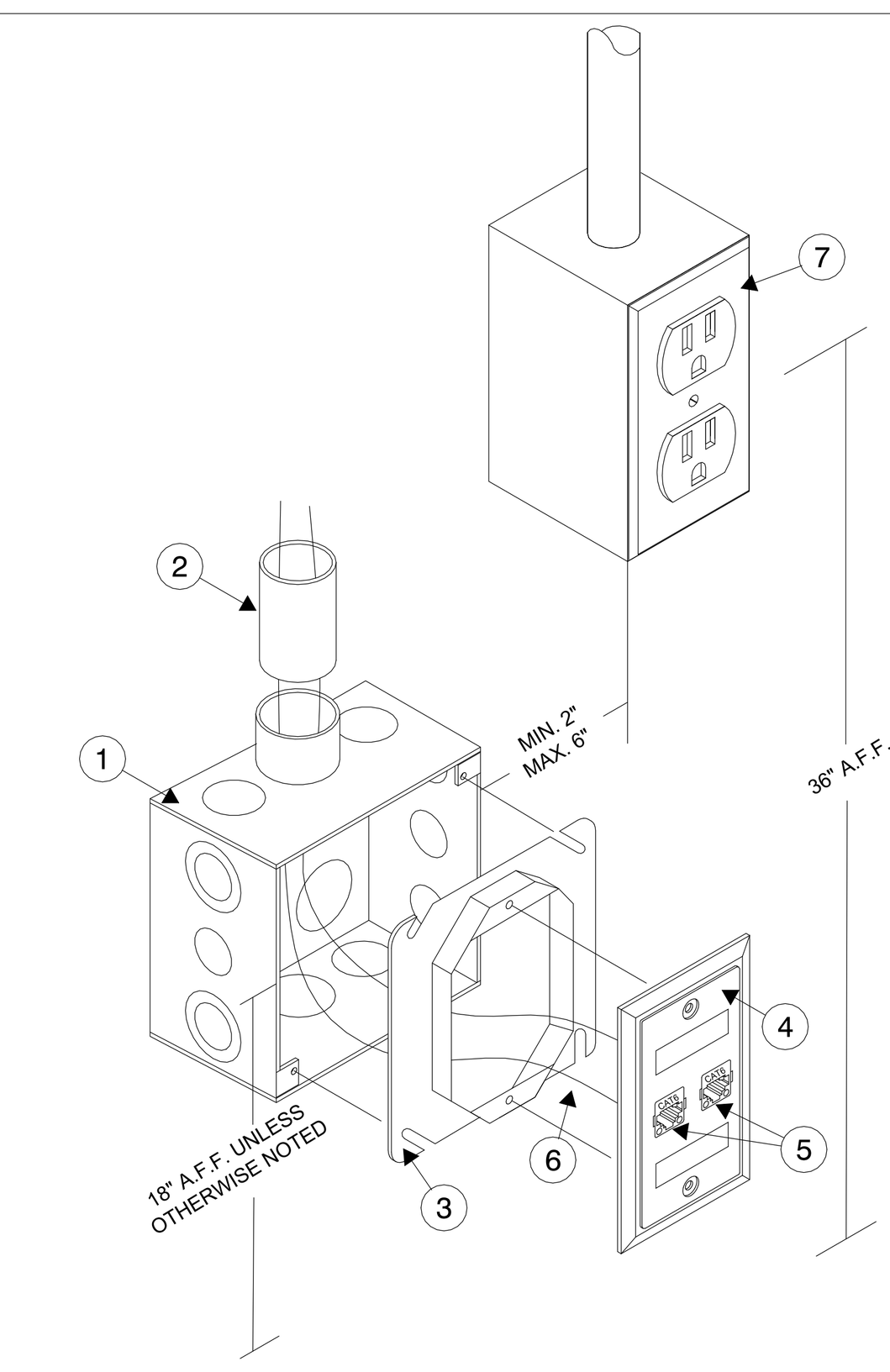


KEYED NOTES:

1. ALL THREAD TO BUILDING STRUCTURE (BY DIV. 27)
2. SCHEDULING CEILING
3. IN-PLENUM CEILING BRACKET PN 49223-CBC ATTACHED TO ALL THREAD (BY DIV. 27)
4. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BRACKET (BY DIV. 27)
5. DATA CABLE (BY DIV. 27)
6. DATA INSERT (BY DIV. 27)

1 / T401 TYPICAL ABOVE CEILING DATA OUTLET
SCALE: N.T.S.

2 TYPICAL COW / SECONDARY TEACHER'S DATA OUTLET CONFIGURATION

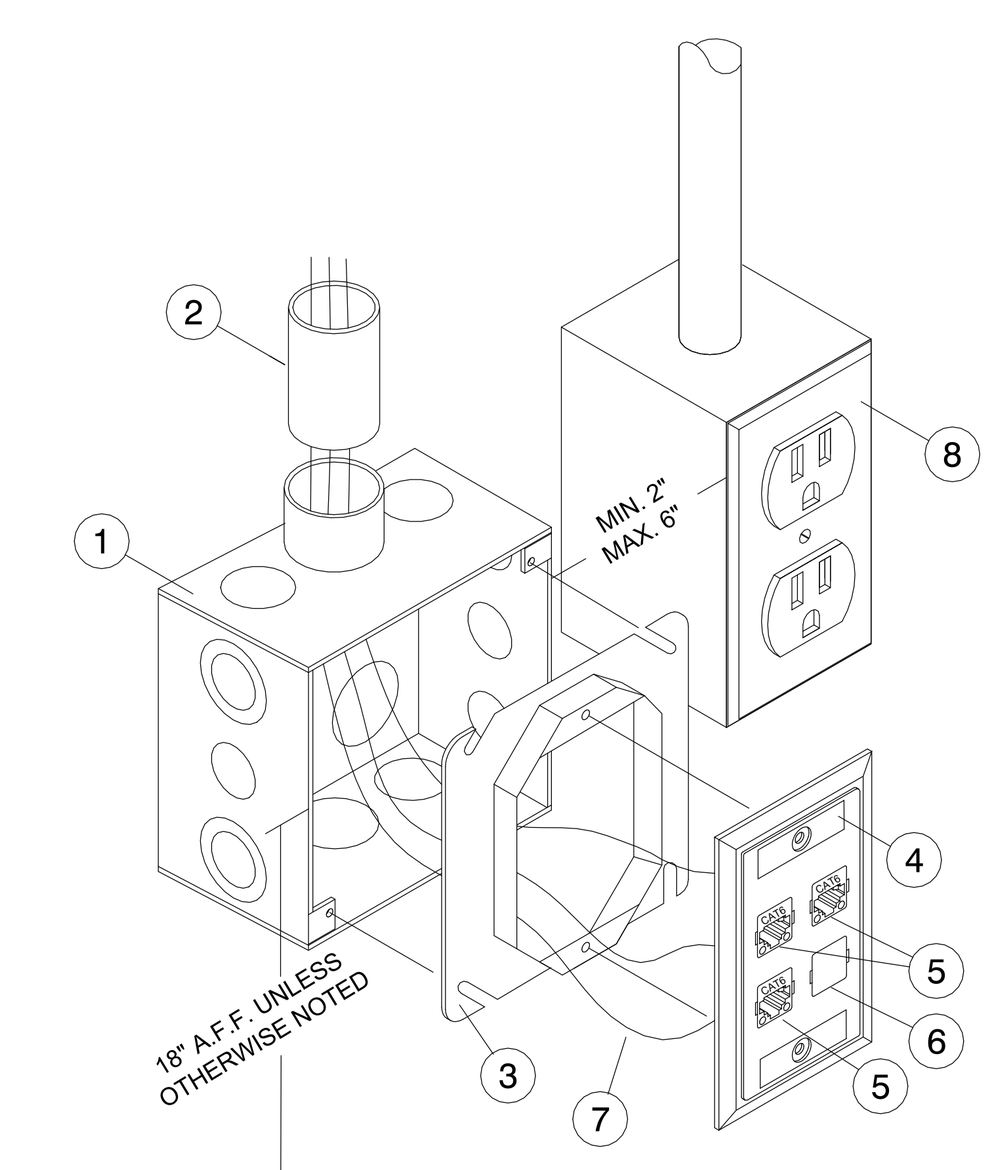


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26). ELECTRICAL RECEPTACLE TO BE INSTALLED AT 36" A.F.F AND ADJACENT TO COW / SECONDARY TEACHING OUTLET LOCATION.

2 / T401 TYPICAL COW / SECONDARY TEACHER'S DATA OUTLET CONFIGURATION
SCALE: N.T.S.

3 TYPICAL THREE DATA OUTLET CONFIGURATION



KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
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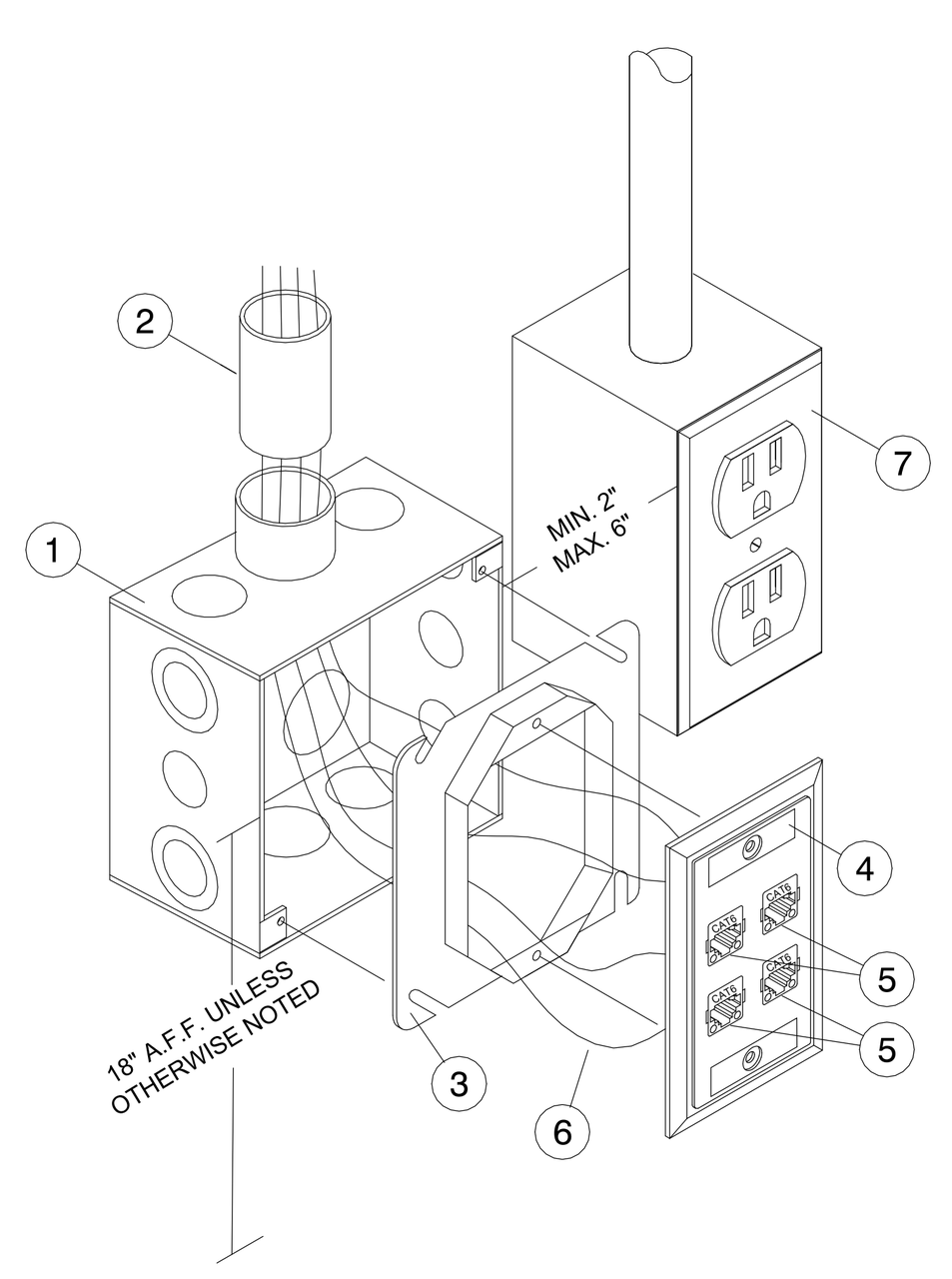
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

3 / T401 TYPICAL THREE DATA OUTLET CONFIGURATION
SCALE: N.T.S.

4 TYPICAL FOUR DATA OUTLET CONFIGURATION



KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

4 / T401 TYPICAL FOUR DATA OUTLET CONFIGURATION
SCALE: N.T.S.

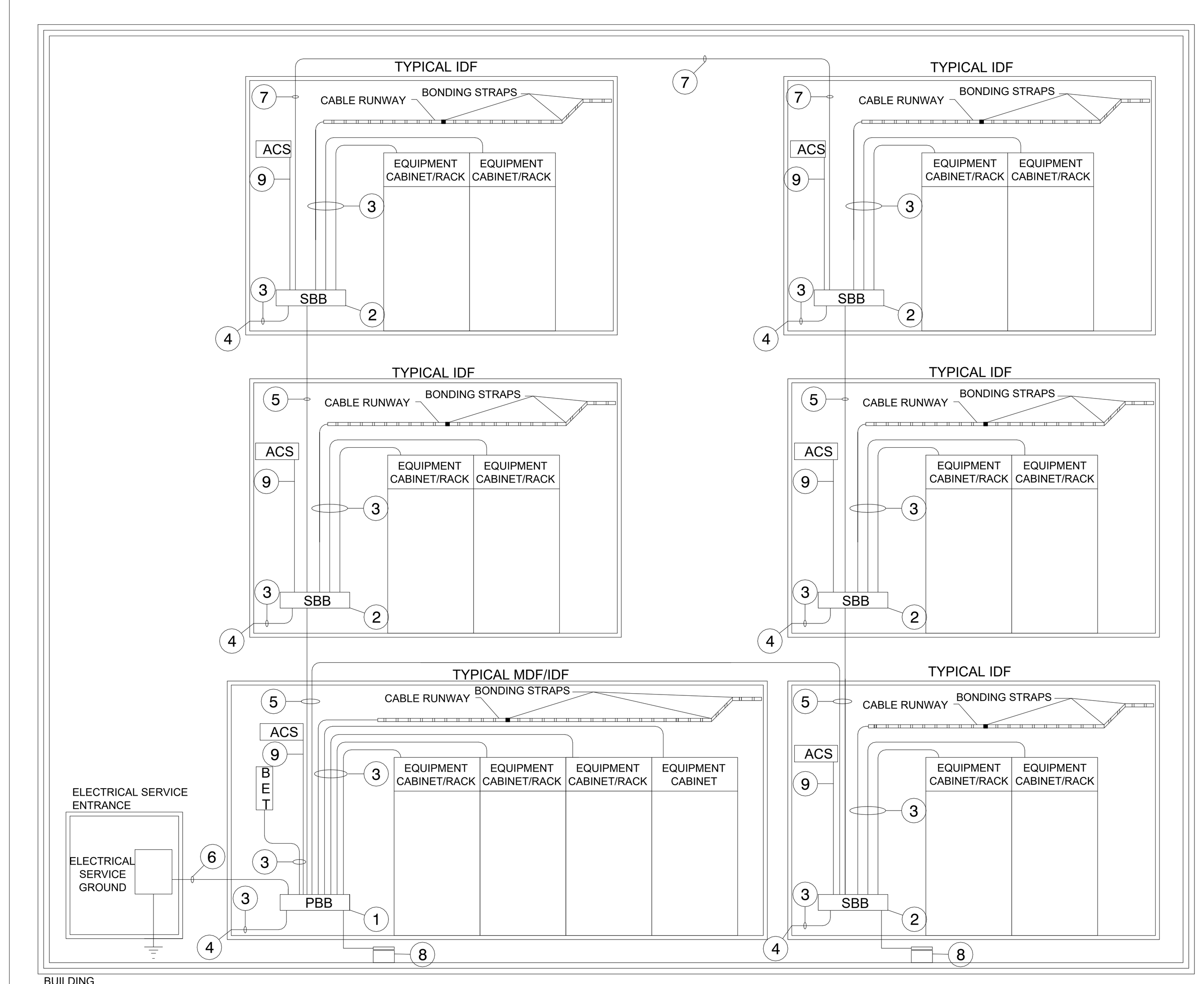
5 TBB CONDUCTOR SIZING

TBB/GE CONDUCTOR SIZING	
LENGTH IN LINEAR M (FT)	SIZE (AWG)
LESS THAN 4 (13)	6
4 - 6 (14-20)	4
6 - 8 (21 - 26)	3
8 - 10 (27 - 33)	2
10 - 13 (34 - 41)	1
13 - 16 (42 - 52)	1/0
16 - 20 (53 - 66)	2/0
20 - 26 (67 - 84)	3/0
26 - 32 (85 - 105)	4/0
32 - 38 (106 - 125)	250 kcmil
38 - 46 (126 - 150)	300 kcmil
46 - 53 (151 - 175)	350 kcmil
53 - 76 (176 - 250)	500 kcmil
76 - 91 (251 - 300)	600 kcmil
GREATER THAN 91 (301)	750 kcmil

ROUTE THE TBB TO EACH TGB IN AS STRAIGHT A PATH AS POSSIBLE. THE TBB SHOULD BE INSTALLED AS A CONTINUOUS CONDUCTOR, AVOIDING SPLICES WHERE POSSIBLE.

5 / T401 TBB CONDUCTOR SIZING
SCALE: N.T.S.

6 TYPICAL GROUNDING DIAGRAM

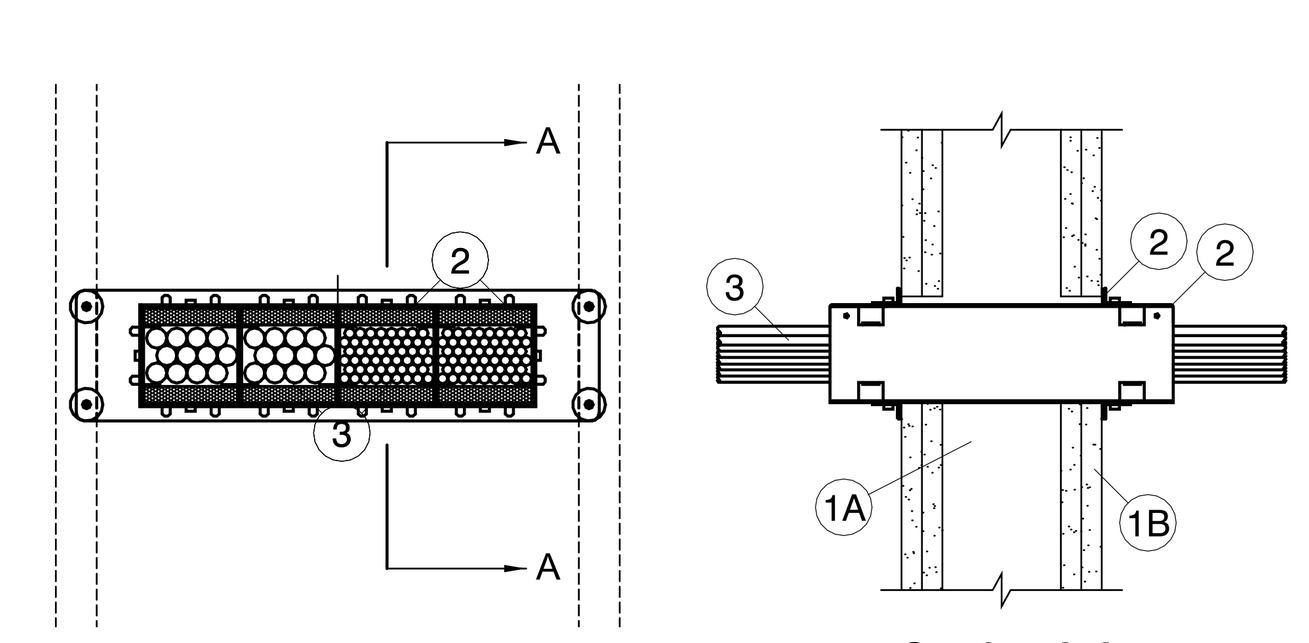


1. TELECOMMUNICATIONS MAIN GROUNDING BUS BAR (PBB)(BY DIV. 27)
2. TELECOMMUNICATIONS GROUNDING BUS BAR (SBB)(BY DIV 27)
3. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 27)
4. CONNECT TO GROUNDED BUILDING STEEL WHEN EXPOSED IN ROOM.
5. TELECOMMUNICATIONS BONDING BACKBONE (TBB). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 26)
6. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). BY ELECTRICAL CONTRACTOR.REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS.
7. GROUNDING EQUALIZER CONDUCTOR (GEC)(BY DIV 26)
8. BOUND WITH GROUDING COLLARS TO EACH CONTINUOUS CONDUIT THAT ENTERS THE TELECOM ROOM. (BY DIV 26).
9. BOND TO EACH ACCESS CONTROL PANEL AND OTHER SECURITY PANELS IN HE TELECOM ROOM. (BY DIV 27)

6 / T401 TYPICAL GROUNDING DIAGRAM
SCALE: N.T.S.

7 TYPICAL STI EZ-PATH SLEEVE DETAIL

System No. W-L-3218
F Ratings - 1, 2, 3 and 4 Hr (See Items 1 and 3)
T Ratings - 3/4 and 1 Hr (See Item 3)
L Rating At Ambient - Less Than 1, 1.3, 4 or 7 CFM (See Item 3)
L Rating At 400 F - Less Than 1, 2 or 3 CFM (See Item 3)



Section A-A

1. Wall Assembly - The 1, 2, 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described within the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall incorporate the following construction features:
   - A. Studs - Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
   - B. Gypsum Board* - Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Opening in gypsum board to be max 1/4 in. (6 mm) larger then width and height dimensions of firestop device(s).

   The hourly F Rating of the firestop system is dependent upon the hourly rating of the wall in which it is installed.
2. Firestop Device* - One, two, three, four or seven firestop device modules ganged together. Each firestop device module consists of a 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long galv steel tube with an intumescent material lining. Firestop device modules to be installed in accordance with the accompanying installation instructions. The space between the firestop device module(s) and the periphery of the opening shall be min 0 in. (0 mm, point contact) to max 1/8 in. (3.2 mm). In round openings, the space between the firestop device and the periphery of the opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). Firestop device module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device by means of steel set screws provided with device. Each four- and seven-gang steel wall plate shall be fastened to the studs with steel screws sized to extend through the gypsum board layers and penetrate 1/2 in. (13 mm) into the framing member. Each firestop device module is to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   As an alternate, the four- and seven-gang steel wall plates may be installed directly against the studs for walls having 16 and 24 in. (406 and 610 mm) center-to-center stud spacing, respectively, prior to installation of the gypsum board layers. The steel wall plates shall be secured to the stud by means of steel screws. After installation of the steel wall plates and firestop device modules, the gypsum board shall be installed as specified in the individual U300 or U400 Design with a maximum 1/8 in. (3.2 mm) gap between the firestop device module and the cutout in the gypsum board. Gap between the firestop device module and the cutout in the gypsum board may be filled with gypsum joint compound or fill material (Item 4).

   SPECIFIED TECHNOLOGIES INC - EZ PATH Series 33 Fire Rated Pathway

2A. Firestop Device* - Extension Module - (Optional, Not Shown) - Module attached to ends of 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long firestop device (Item 3) to increase its length to facilitate installation in thicker walls. Each module consists of a 3 by 3 by 6 in. (76 by 76 by 152 mm) long galv steel tube with an intumescent material lining. Extension module to be installed in accordance with the accompanying installation instructions. When module is used, firestop device (Item 2) and extension module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device or extension module(s) by means of steel set screws provided with wall plates. Firestop device and extension module(s) assembly to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   SPECIFIED TECHNOLOGIES INC - EZ PATH Extension

3. Cables - Within the loading area for each firestop device module, the cables may represent a 0 to 100 percent visual fill. Cable fill to be distributed at a uniform height across the width of the firestop device module. Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types of cables may be used:
   - A. Max 400 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) jacketing and insulation.
   - B. Max 350 kcmil single copper conductor power cable with XLPE jacket and insulation
   - C. Max 7/C No. 12 AWG copper conductor control cable with PVC or XLPE jacket and insulation.
   - D. Max 3/C No. 10 AWG metal clad or armored cable with steel or aluminum jacket.
   - E. Max 3/C No. 8 AWG NM cable (Romex) with PVC insulation and jacket.
   - F. Max four pair No. 22 AWG (or smaller) copper conductor data cable with PVC or plenum rated jacketing and insulation.
   - G. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
   - H. Fiber optic cable with PVC or polyethylene (PE) jacket and insulation having a max diam of 5/8 in. (16 mm).
   - I. Optical Fiber Raceway+ - Max 1-1/2 in. (38 mm) diam (or smaller) optical fiber raceway ("innerduct") formed of either PVC or polyvinylidene fluoride (PVDF) with optical fiber cable fill. Raceways installed in accordance with the National Electrical Code (NFPA 70).

   When the hourly rating of the wall assembly is 1 hr, the T Rating is 3/4 hr. When the hourly fire rating of the wall assembly is greater than 1 hr, the T Rating is 3/4 hr when Item 3A, 3B, 3C, 3D or 3E is used. Otherwise the T Rating is 1 hr. When Item 3A, 3B, 3C, 3D or 3E is used, the maximum F Rating is 2 hr. When max 200 pair No. 24 AWG telecommunication cable is used or when Item 3F, 3G, 3H or 3I is used, the maximum F Rating is 4 hr.

   The L Rating for each empty firestop device module is less than 1 cfm at ambient and at 400F. When Item 3A is used, the L Rating for each firestop device module with 100 percent visual fill is 4 cfm at ambient and 3 cfm at 400F. When Item 3F is used, the L Rating for each firestop device module with 100 percent visual fill is 1.3 cfm at ambient and 1 cfm at 400F. When Item 3G or 3H is used, the L Rating for each firestop device module with 100 percent visual fill is 7 cfm at ambient and 2 cfm at 400F.
4. Fill, Void or Cavity Material* - Sealant or Putty - (Not Shown) - As an alternate to gypsum joint compound, the gap between the firestop device module and the cutout in the gypsum board may be sealed with fill material on each side of the wall assembly when four- and seven-gang steel wall plates are installed directly against the wood or steel studs.

   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant, SpecSeal Putty

*Bearing the UL Classification Mark

7 / T401 TYPICAL STI EZ-PATH SLEEVE DETAIL
SCALE: N.T.S.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

k

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL



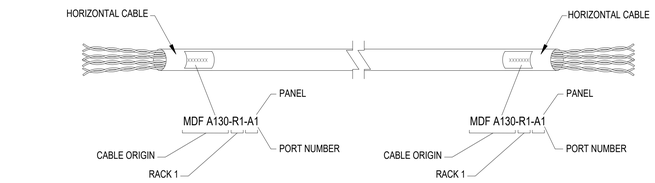
07/18/2025

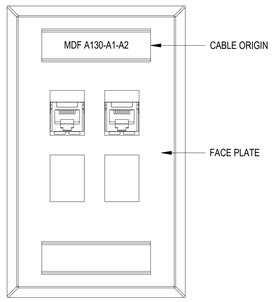
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

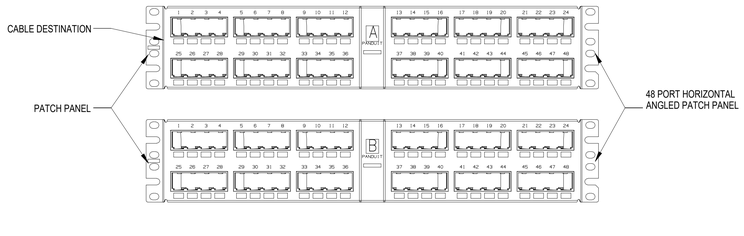
PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

TECHNOLOGY TYPICAL DETAILS

SHEET NO.
k-T401

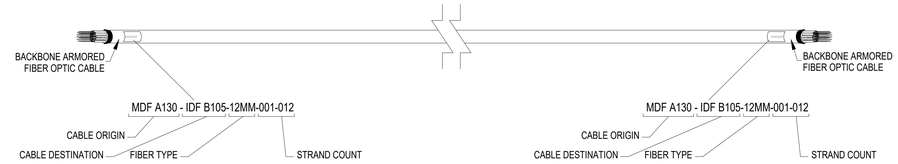


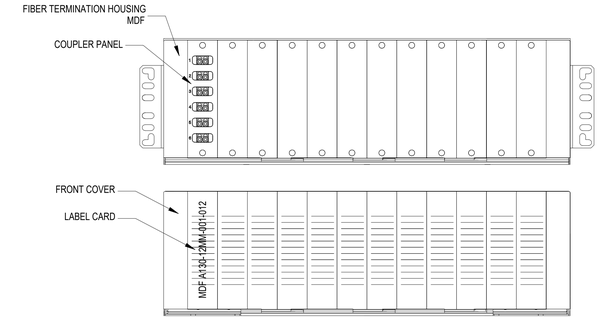


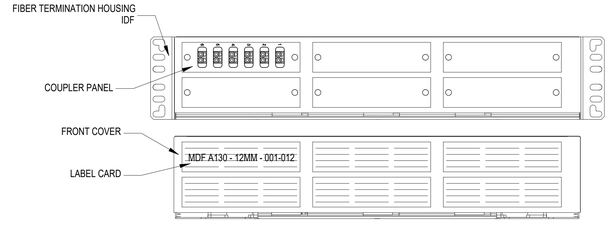


1 T500 TYPICAL HORIZONTAL DATA CABLE LABELING SCHEME

SCALE: N.T.S.

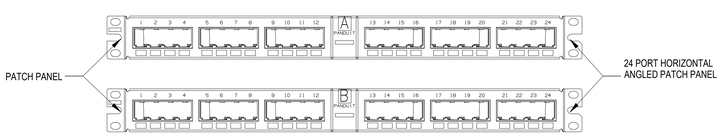






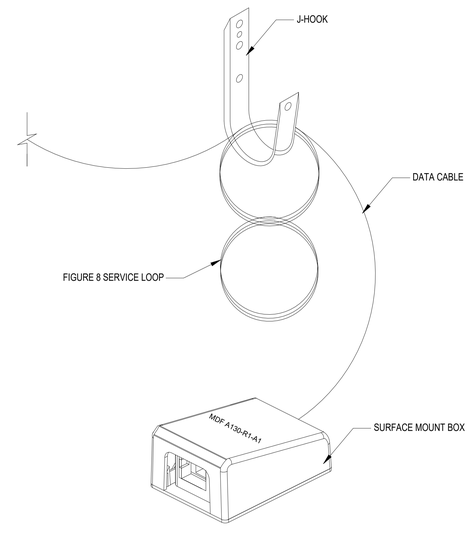
2 T500 TYPICAL FIBER BACKBONE LABELING SCHEME

SCALE: N.T.S.



3 T500 TYPICAL COPPER BACKBONE LABELING SCHEME

SCALE: N.T.S.



4 T500 ABOVE ASSESSIBLE CEILING LABELING SCHEME

SCALE: N.T.S.

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HUNTERS GLEN ELEMENTARY SCHOOL
695 INDEPENDENCE BLVD
MISSOURI CITY, TX 77489

SEAL



07/18/2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
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PROJ. NO.: 23-25

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TECHNOLOGY TYPICAL DETAILS

SHEET NO.

k-T500

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- A## V## — AV WALL ROUGH-IN WITH DATA
- # — KEYNOTE
- C — Proposed Camera Direction — SURVEILLANCE CAMERA
- #-## — Camera Schedule Number (Floor #-Camera #) — Camera (N)ew, (E)xisting Rough-in, (D)emo
- C — Proposed Camera Direction — PTZ CAMERA
- #-## PTZ
- C — Proposed Camera Direction — FIXED SURVEILLANCE CAMERA
- #-##
- C — 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Approximate view of lens
- Lens View Angle
- ##° #mm — C — 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Lens size
- C M — MICROPHONE WITH AUDIO LINKED TO CAMERA
- C CR — CARD READER LINKED TO CAMERA
- SYMBOL TAG — CR # — (#) = DIFFERENT TYPES OF CARD READERS: M = MULLION; W = WIRELESS (Proprietary); Wi = Wi-Fi (802.11); POE = POWER OVER ETHERNET
- SYMBOL TAG — KP # — (#) = DIFFERENT TYPES OF CARD READERS: TS = TOUCHSCREEN; PU = PUSH BUTTON
- TOP = DETAIL NUMBER; # / #### — DETAIL REFERENCE; BOTTOM = SHEET NUMBER
- NORTH ARROW
- SHEET NUMBER; # / #### — SECTION MARKER; DETAIL NUMBER
- DIRECTION OF ELEVATION; # / #### — ELEVATION MARKER; SHEET NUMBER; DETAIL NUMBER
- DIRECTION OF ELEVATION; SHEET NUMBER; # / #### — DIRECTION OF ELEVATION; DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

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Hunters Glen Elementary School
685 Independence Blvd, Missouri City, TX 77489

SEAL

Bicsi — Brian C Porter — BICSI ID # 258657 — EXPIRES 10-31-27 — NCCD

07-18-25

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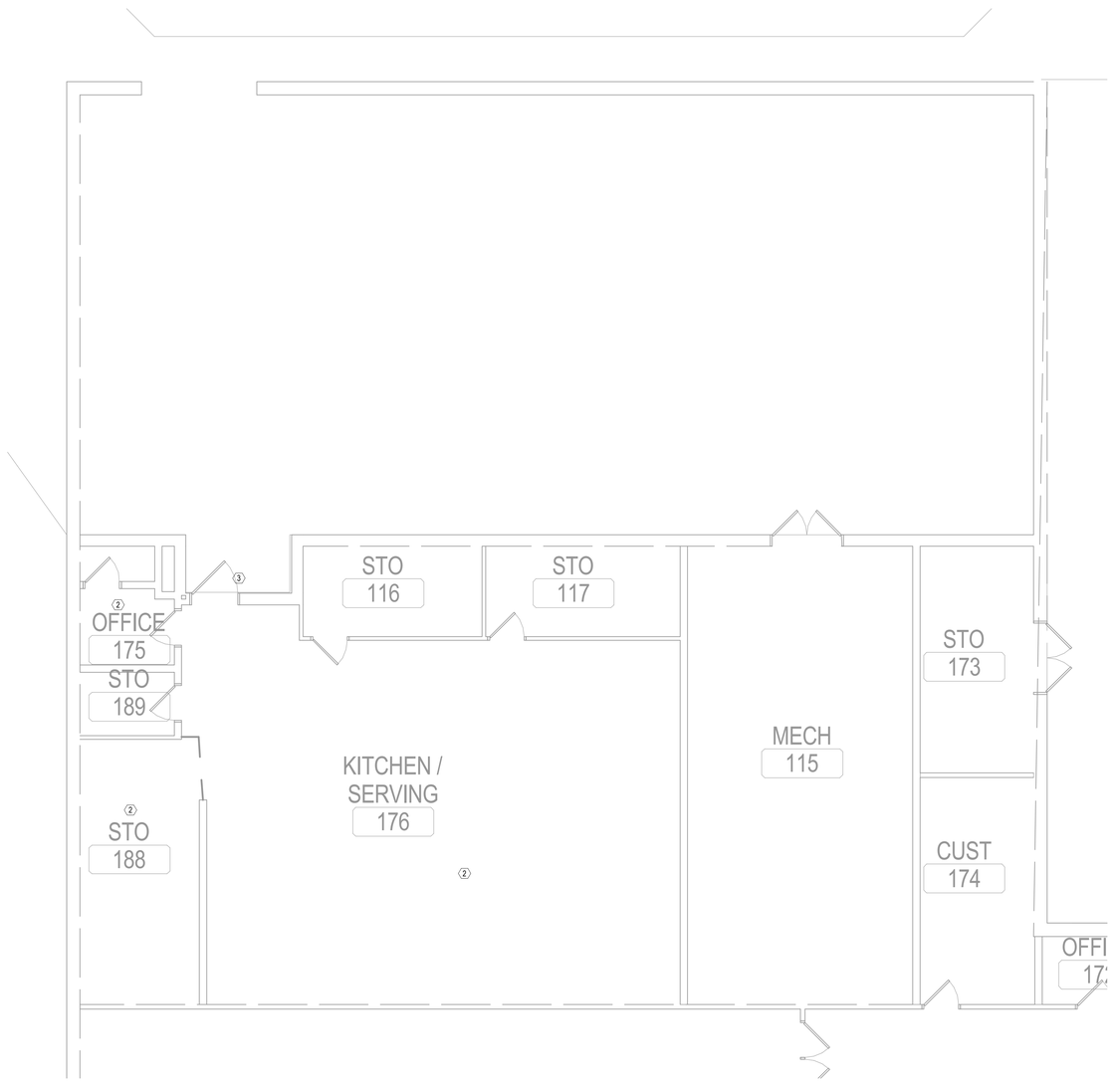
TECHNOLOGY - TITLE SHEET

k-TN000



1 HUNTERS GLEN - DEMO PLAN
SCALE: 3/16" = 1'-0"

DEMO KEYNOTES

1. REMOVE, AND PROTECT DURING CONSTRUCTION, INSTALL IN EXISTING LOCATION AFTER NEW ACT GRID IS IN PLACE.
2. DEVICES IN ACT ARE TO BE REMOVED AND PROTECTED DURING CONSTRUCTION AND REINSTALLED IN THE SAME LOCATION AFTER THE NEW CEILING GRID IS IN PLACE. DECIVES INCLUDE: SPEAKERS, ACCESS POINTS AND INTRUSION MOTION DETECTORS.
3. EXISTING CARD READER, DOOR CONTACT, & REX (REQUEST TO EXIT) TO BE DEMOLISHED, REMOVE DEVICES AND PROTECT WIREING.

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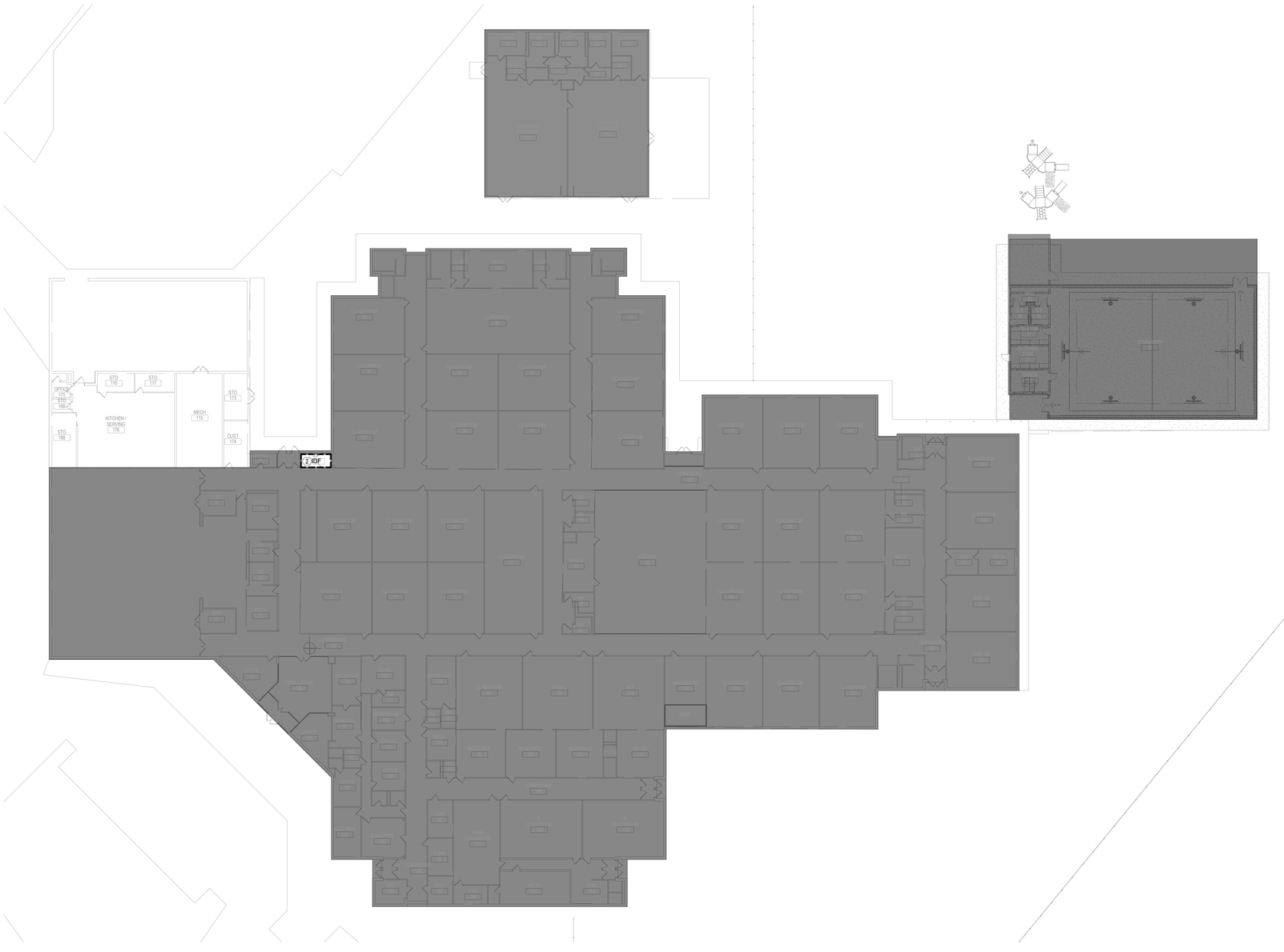
TECHNOLOGY - Hunters Glen ES - DEMO

k-TN.001

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BACKGROUND 1 (HUNTERS GLEN)
SCALE: 1" = 20'-0"

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TECHNOLOGY - Hunters Glen ES - OVERALL

k-TN.100



1 HUNTERS GLEN - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.

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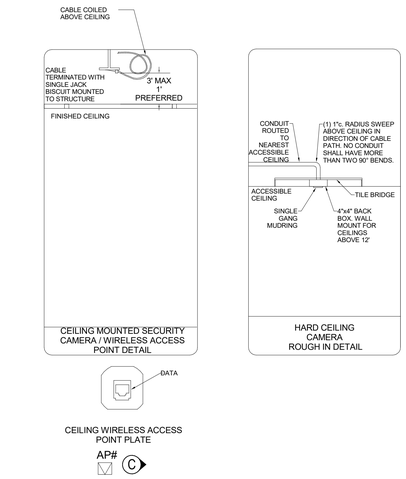
TECHNOLOGY - Hunters Glen
ES - KITCHEN

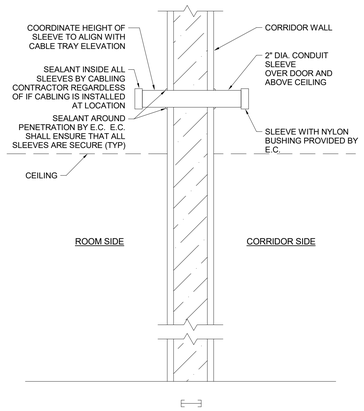
k-TN.101

GENERAL NOTE

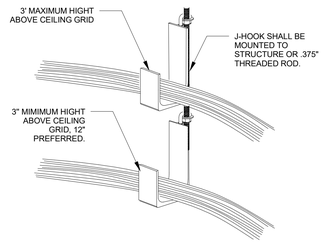
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



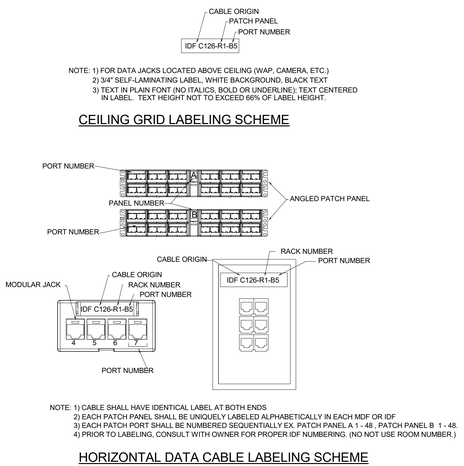
1 DATA ROUGH-IN DETAILS
SCALE: NS



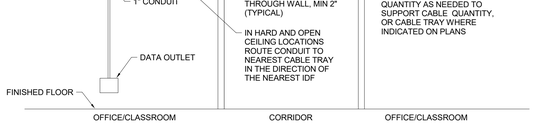
2 TYPICAL CABLING SLEEVE
SCALE: NTS



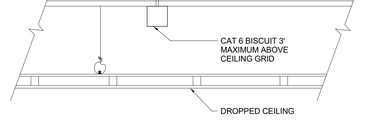
3 PANDUIT J-HOOK DETAIL
SCALE: NTS



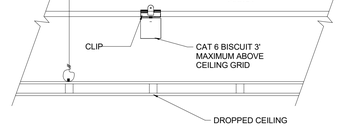
4 LABELING & CABLING SCHEMES
SCALE: NTS



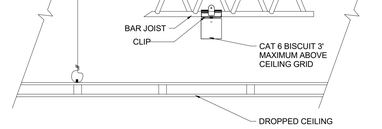
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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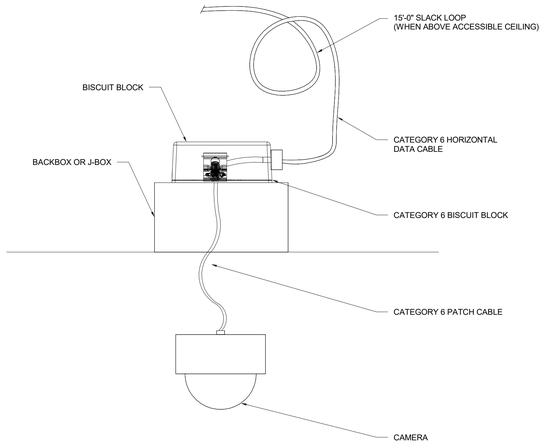
TECHNOLOGY - Hunters Glen ES - DETAILS

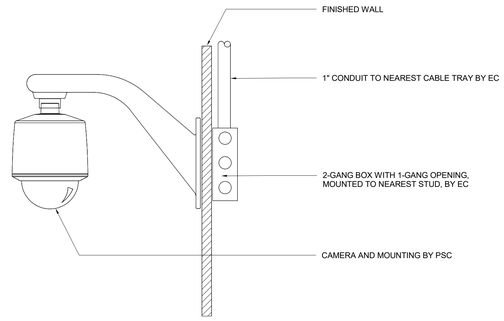
k-TN.500

GENERAL NOTES:

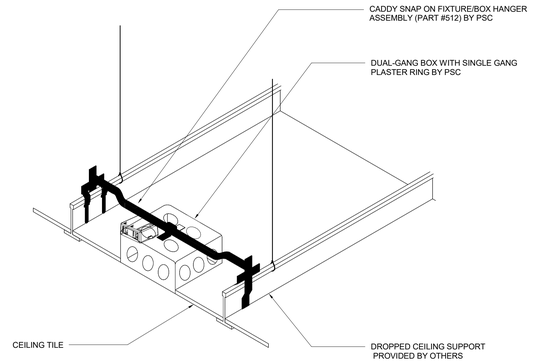
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



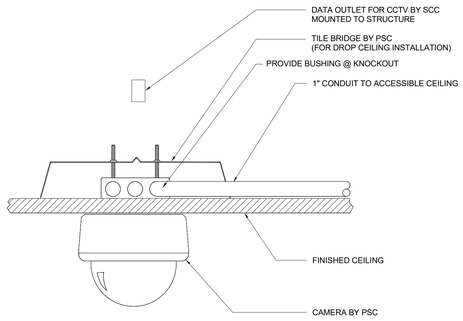
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

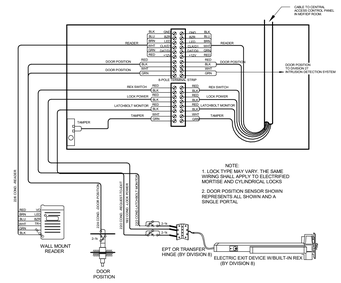


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

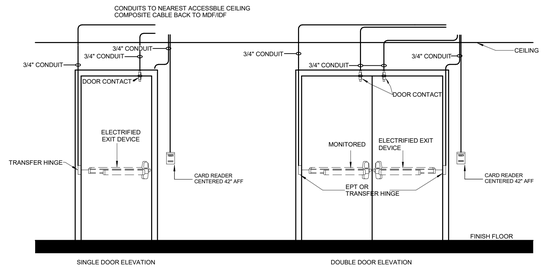
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

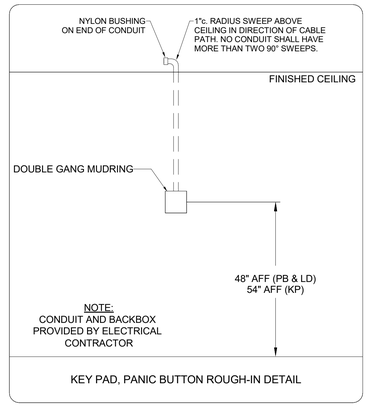
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Hunters Glen Elementary School
6855 Independence Blvd, Missouri City, TX 77489

SEAL



07-18-25

MVA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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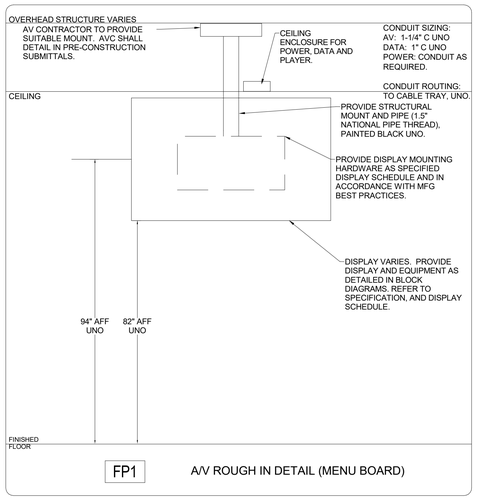
AND
PERMITTING

TECHNOLOGY - Hunters Glen ES - SECURITY DETAILS

k-TN.600



6 CEILING MOUNT DISPLAY - A/V ROUGH-IN DETAIL
SCALE: NTS

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TECHNOLOGY - Hunters Glen ES - AV DETAILS

k-TN.700

FBISD BP013 KITCHEN RENOVATIONS ES

LANTERN LANE ELEMENTARY SCHOOL
3323 MISSION VALEY , MISSOURI CITY, TX 77459

FORT BEND INDEPENDENT SCHOOL DISTRICT BOND 2023

Sheet List Table	
Sheet Number	Sheet Title
School: I-Lantern Lane	
I_A0.00	COVER AND INDEX
I-A.101	Site Plan
I-A.201	Overall Floor Plan
I-A.301	Kitchen Plan
I-A.501	Finish Floor Plan
I-TN-000	TECHNOLOGY - INDEX SHEET
I-TN-100	TECHNOLOGY - OVERALL
I-TN-101	TECHNOLOGY - KITCHEN
I-TN-500	TECHNOLOGY - DETAILS
I-TN-600	TECHNOLOGY - SECURITY DETAILS

REGISTERED ARCHITECT MICHAEL A. MAGNER 22651 STATE OF TEXAS
18 JULY 2025

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

FORT BEND INDEPENDENT SCHOOL DISTRICT

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

KRISTIN K. TASSIN	PRESIDENT
RICK GARCIA	VICE PRESIDENT
DAVID HAMILTON	SECRETARY
ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

PROJECT DESIGN TEAM

PROGRAM MANAGEMENT
FBISD 2023 Bond Team
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Missouri City, TX 77489
Phone Number: 281-327-5481

ARCHITECT
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Houston, Texas 77079
Phone Number: 713-782-8188

FOOD SERVICE
Food Design Professionals
26215 Oak Ridge Drive
The Woodlands, Texas 77380
Phone Number: 281-350-2323

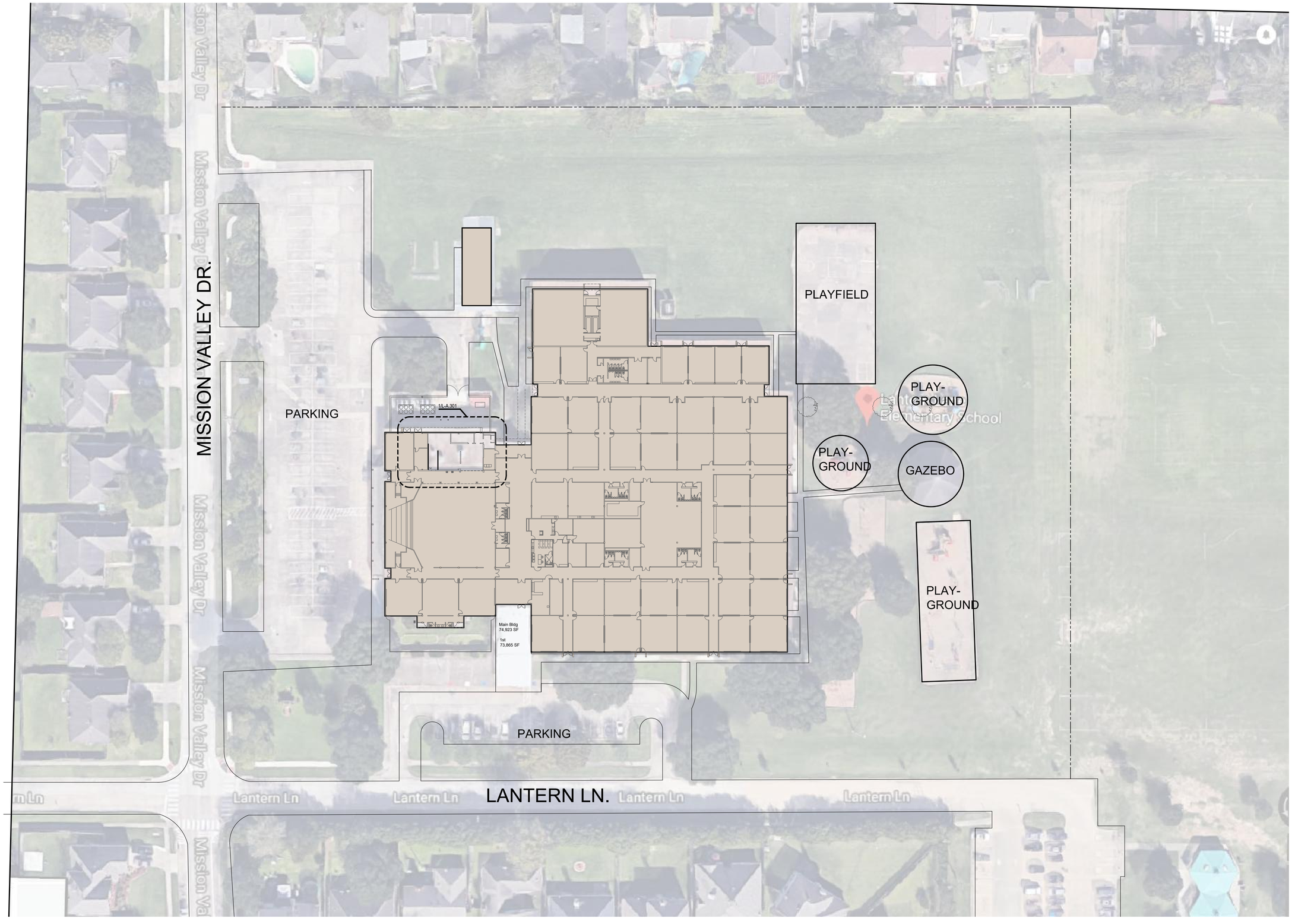
MEP ENGINEERS
Stanton Engineering Group
1300 W. Sam Houston Pkwy South, Suite 121
Houston, Texas 77042
Phone Number: 713-300-9292

STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

INDEX OF DRAWINGS

Sheet List Table

Sheet Number	Sheet Title
I-A.000	COVER SHEET
I-A.101	SITE PLAN
I-A.201	FLOOR PLAN
I-A.301	KITCHEN AREA PLAN
I-A.501	FINISH FLOOR PLAN



1 SITE PLAN
SCALE: 1" = 30'-0"

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FORT BEND INDEPENDENT SCHOOL DISTRICT
LANTERN LANE ELEMENTARY SCHOOL
3323 MISSION VALLEY DRIVE
MISSOURI CITY, TX 77459

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SITE PLAN

I-A.101

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2015 INTERNATIONAL EXISTING BUILDING CODE

301.1.1 PRESCRIPTIVE COMPLIANCE METHOD. REPAIRS, ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH CHAPTER FOUR OF THIS CODE IN BUILDINGS COMPLYING WITH THE INTERNATIONAL FIRE CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

401.2.1 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE PER SECTION 115.

401.2.2 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED NO HAZARD TO LIFE, HEALTH OR PROPERTY IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT PERMIT THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

Area increase due to frontage and fire sprinkler protection TYPE IIIB

$A_a = [A_t + (NS \times I_f)] \times Sa$

ALLOWABLE BUILDING AREA ONE STORY = 58,000 + (14,500 x 1.5) x 1 = 79,750 SF

ONE SINGLE STORY 74,867 SF.

Project Information

PROJECT: LANTERN LANE ELEMENTARY SCHOOL
LOCATION: 3323 MISSION VALLEY DRIVE
MISSOURI CITY, TX 77459
SCOPE OF WORK: ADDITIONAL KITCHEN STORAGE FOR CEP.
SECURITY CAMERAS OVER SERVING LINES.

Missouri City Adopted Building Code

2015 INTERNATIONAL EXISTING BUILDING CODE
2015 INTERNATIONAL BUILDING CODE
2015 INTERNATIONAL FUEL GAS CODE
2015 INTERNATIONAL MECHANICAL CODE
2015 INTERNATIONAL PLUMBING CODE
2014 NATIONAL ELECTRICAL CODE
2015 INTERNATIONAL ENERGY CONSERVATION CODE

Chapter 3 - Use and Occupancy Classification

GROUP E (EDUCATIONAL - IBC 2015 SECTION 305)
EXISTING FULLY SPRINKLERED BUILDING
REVISIONS/UPDATES TO FIRE SPRINKLER, KITCHEN HOOD SUPPRESSION, FIRE ALARM AND CHEMICAL STORAGE WILL REQUIRE AN EVALUATION AND APPROVAL FROM MISSOURI CITY FIRE DEPARTMENT

Chapter 5 - General Building Heights and Area

ALLOWABLE BUILDING HEIGHT:
TWO STORIES W/ 55 FT MAX. HEIGHT FOR GROUP E
(AS ALLOWED BY TABLE 503)

EXISTING BUILDING HEIGHT PROVIDED:
HEIGHT TO ROOF: 15'-0"

INCIDENTAL USE SEPARATION:
SEPARATIONS REQUIRED: INCIDENTAL USE AREAS, AS PER TABLE 509, LAUNDRY ROOMS OVER 100 S.F. ARE REQUIRED TO BE ONE HOUR RATED OR HAVE AUTOMATIC FIRE EXTINGUISHING SYSTEM.

INCIDENTAL USE ROOM AREAS PROVIDED WITH EXISTING AUTOMATIC SPRINKLER SYSTEM.

TOTAL EXISTING BUILDING AREA IS 74,867 SF.

Chapter 6 - Construction Type Fire Resistance Ratings

EXISTING CONSTRUCTION: TYPE IIB

TABLES 601 AND 602

BUILDING ELEMENTS	REQUIRED (FOR TYPE IIB)	PROVIDED
STRUCTURAL FRAME (TABLE 601)	NO RATING	NO RATING
EXTERIOR BEARING WALLS (TABLE 601)	NO RATING	NO RATING
INTERIOR BEARING WALLS (TABLE 601)	NO RATING	NO RATING
EXTERIOR NON-BEARING WALLS (TABLE 602)	NO RATING	NO RATING (WALLS GREATER THAN 30' FROM PROPERTY LINE)
INTERIOR NON-BEARING WALLS (TABLE 601)	NO RATING	NO RATING
FLOOR CONSTRUCTION (TABLE 601)	NO RATING	NO RATING
ROOF CONSTRUCTION (TABLE 601)	NO RATING	NO RATING

Chapter 9 - Fire Protection Systems

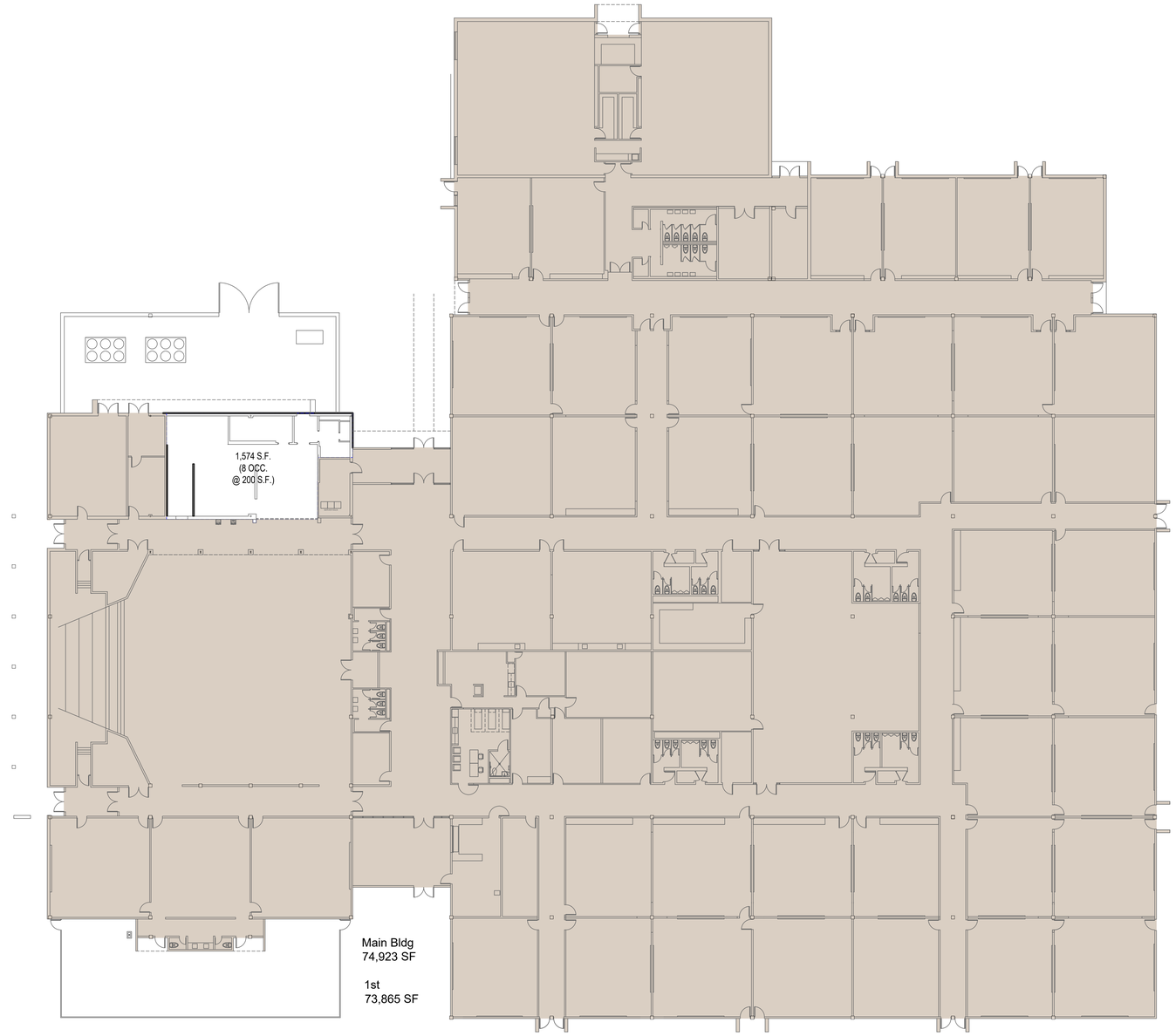
AUTOMATIC SPRINKLER SYSTEM: EXISTING SPRINKLER SYSTEM PROVIDED THROUGHOUT.

Chapter 29 - Plumbing

Fixture Count per Table 2902.1
Occupant Load Basis:

12 Occupants

	Total Fixtures REQUIRED	Total Fixtures PROVIDED
Unisex:		
W.C.	1 per 50	1
lavatories	1 per 50	1
Drinking Fountains	1 per 100	2



1 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

2 CODE ANALYSIS

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FORT BEND INDEPENDENT SCHOOL DISTRICT
LANTERN LANE ELEMENTARY SCHOOL
3323 MISSION VALLEY DRIVE
MISSOURI CITY, TX 77459

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#22651
STATE OF TEXAS
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OVERALL FLOOR PLAN

I-A.201

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FLOOR PLAN - GENERAL NOTES

1. REFER TO SHEET FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SCHOOL KITCHENS.
2. REFER TO SHEET FOR PARTITION TYPES.
3. EXIXSTING EXPOSED CONDUITS AND DATA CABLING IN WIREMOLD TO BE ROUTED INSIDE WALLS (EXCEPT AT WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS). PATCH AND REPAIR AS REQUIRED TO ACHIEVE SMOOTH CLEAN WALL SURFACE.

PARTITION LEGEND

EXISTING CMU PARTITION

NEW CMU SCHEDULED PARTITION

FLOOR PLAN - KEYED NOTES

(NOT ALL NOTES USED ON EACH SHEET)

01 PROVIDE NEW MOP SINK UTILITY SHELF
RE: PLUMBING FOR MOP SINK
RE: SPEC 10 28 00 FOR UTILITY SHELF

02 REMOVE, STORE & REPLACE WALL MOUNTED FIRE EXTINGUISHER

03 PROVIDE NEW WALL MOUNTED FIRE EXTINGUISHER
RE: SPEC SECTIONS 10 44 13

04 PROVIDE NEW LOCKERS
RE: SPEC 10 51 13.

05 PROVIDE WASHER AND DRYER
RE: SPEC 11 45 20

06 REMOVE, PROTECT & REINSTALL WALL MOUNTED CLOCK.

07 PROVIDE CONDENSING UNIT
FOR WALK-IN COOLER/FREEZER
RE: MECHANICAL AND SPEC 11 40 00

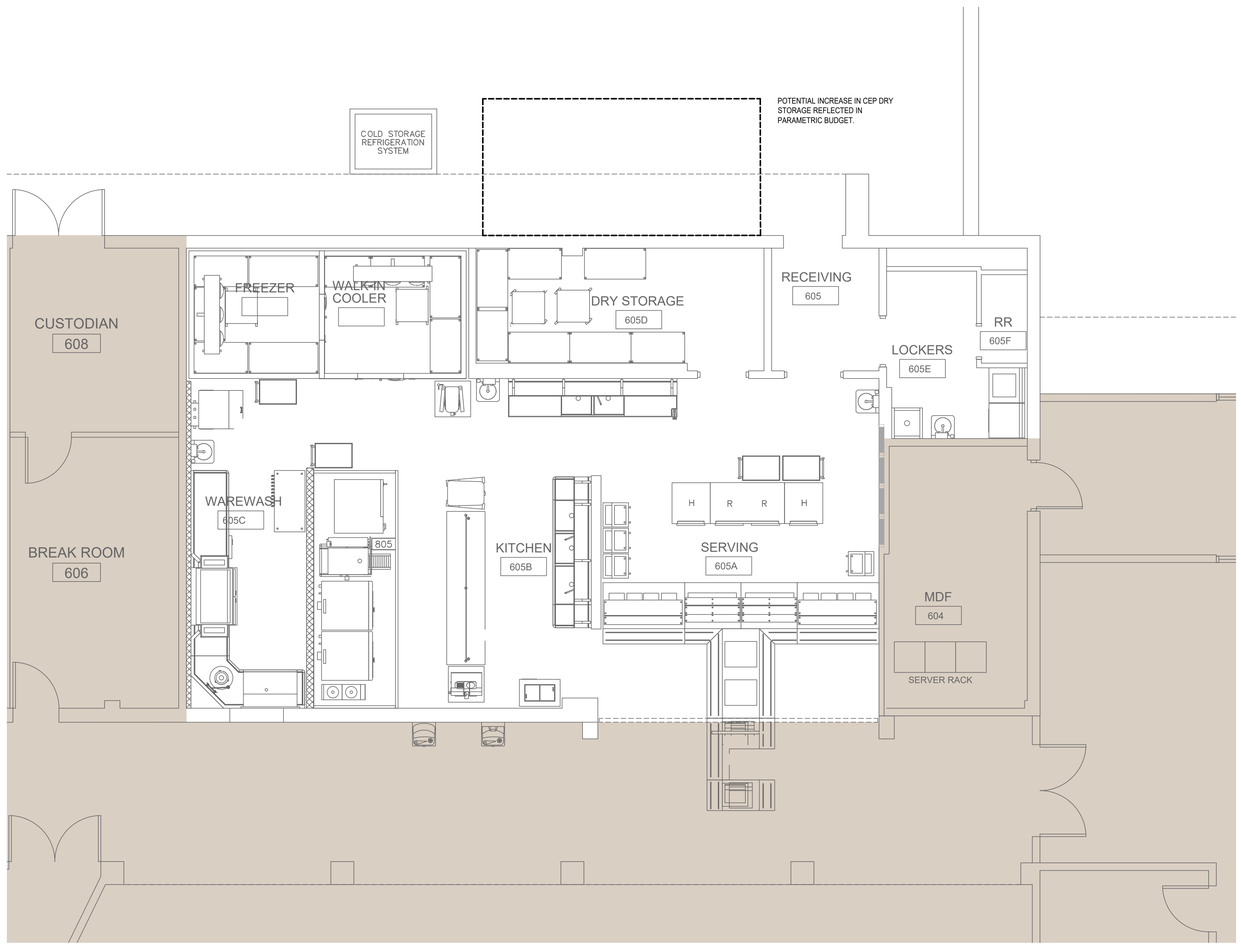
08 PROVIDE POWER AND DATA FOR MENU BOARD.
RE: ELECTRICAL, TECHNOLOGY DRAWINGS & FOOD SERVICE.

09 PROVIDE P-LAM SHELVING
REFER TO DETAIL FOR BRACKET SUPPORT

10 FURNITURE & NON FOOD SVE EQUIPMENT RETURN TO OWNER FO STORAGE

11 INSPECT & SREVICE TOLLING COUNTER DOORS. RETURN TO LIKE NEW CONDITION.

2 FLOOR PLAN NOTES



1 KITCHEN AREA PLAN

SCALE: 1/4" = 1'-0"

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NOE ALMAGUER
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STATE OF TEXAS

7/15/2025

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KITCHEN AREA PLAN

I-A.301

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PAINT COLOR SCHEDULE
UNLESS OTHERWISE INDICATED FIELD COLOR IS PT-1 (SW 7014 EIDER WHITE)

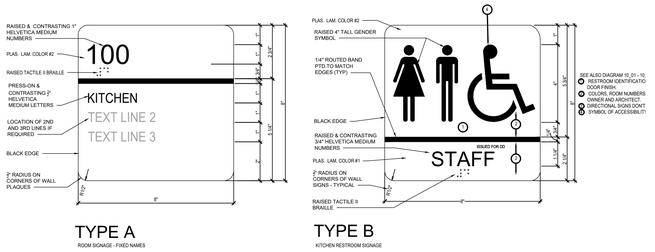
SW 7014 EIDER WHITE (EPOXY PAINT)

WALL TILE

CERAMIC WALL TILE (WT-1)
REFER TO TILE PATTERN AT SERVING AND RESTROOM
FIELD WALL TILE: DALTILE RITTENHOUSE SQUARE K175 BISCUIT (3X6)

A — PROVIDE ROOM SIGN TO REPLACE EXISTING. SEE LAYOUT FOR TYPE A OR TYPE B SIGN LOCATIONS.

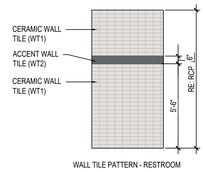
2 FINISH FLOOR LEGEND



TYPE A
ROOM SIGNAGE - FIXED NAMES

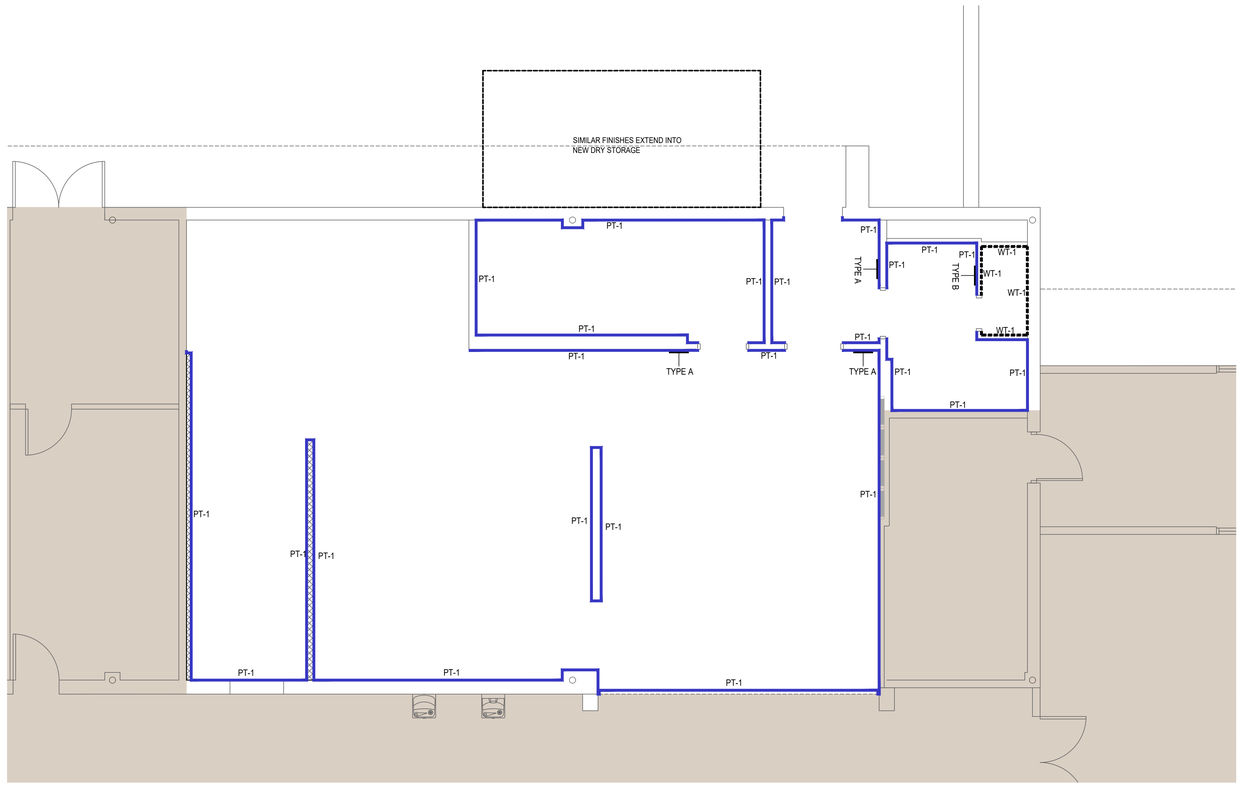
TYPE B
KITCHEN RESTROOM SIGNAGE

3 ROOM SIGNAGE



WALL TILE PATTERN - RESTROOM

4 WALL TILE PATTERN



1 FINISH FLOOR PLAN
SCALE: 1/4" = 1'-0"

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FINISH FLOOR PLAN

I-A.501

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AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- AV WALL ROUGH-IN WITH DATA
- KEYNOTE
- Proposed Camera Direction SURVEILLANCE CAMERA
- Camera Schedule Number (Floor #-Camera #) Camera (N)ew, (E)xisting Rough-in, (D)emo
- Proposed Camera Direction PTZ CAMERA PTZ
- Proposed Camera Direction FIXED SURVEILLANCE CAMERA
- 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Approximate view of lens
- Lens View Angle
- 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Lens size
- MICROPHONE WITH AUDIO LINKED TO CAMERA
- CARD READER LINKED TO CAMERA
- SYMBOL TAG — (#) = DIFFERENT TYPES OF CARD READERS: M = MULLION; W = WIRELESS (Proprietary); Wi = Wi-Fi (802.11); POE = POWER OVER ETHERNET
- SYMBOL TAG — (#) = DIFFERENT TYPES OF CARD READERS: TS = TOUCHSCREEN; PU = PUSH BUTTON
- TOP = DETAIL NUMBER; DETAIL REFERENCE; BOTTOM = SHEET NUMBER
- NORTH ARROW
- SHEET NUMBER; SECTION MARKER; DETAIL NUMBER
- DIRECTION OF ELEVATION; ELEVATION MARKER; SHEET NUMBER; DETAIL NUMBER
- DIRECTION OF ELEVATION; SHEET NUMBER; DIRECTION OF ELEVATION; DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

TRUENORTH A PMY COMPANY

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FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Lanterns Lane Elementary School
3323 Mission Valley Dr, Missouri City, TX 77459

SEAL

BICSI Registered Communications Distribution Designer
Bicsi
Brian C Porter
BICSI ID # 258557
EXPIRES 10-31-27
RCDD

07-18-25

MVA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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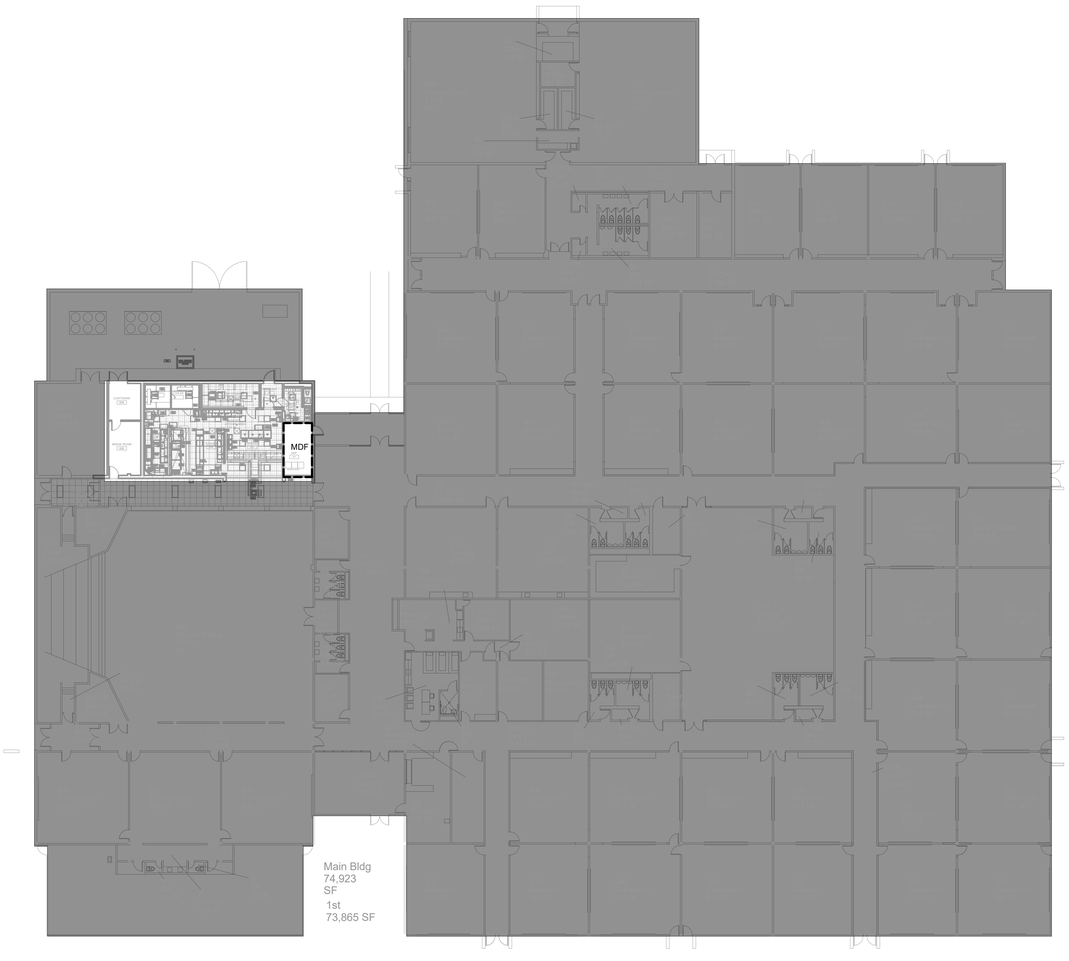
TECHNOLOGY - TITLE SHEET

I-TN000

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 LANTERN LANE (OVERALL)
SCALE: 1" = 20'-0"

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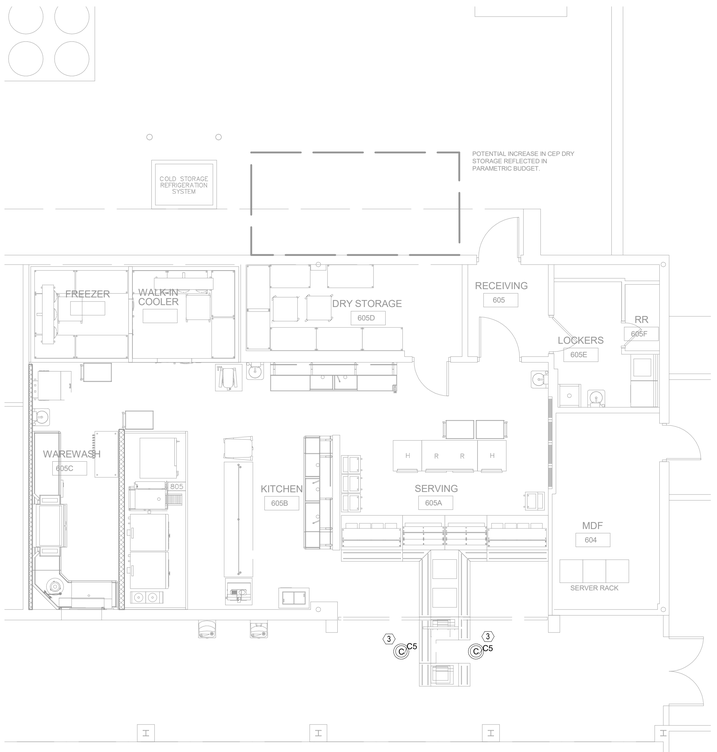
TECHNOLOGY - Lantern Lane ES - OVERALL

I-TN.100

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 LANTERN LANE - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

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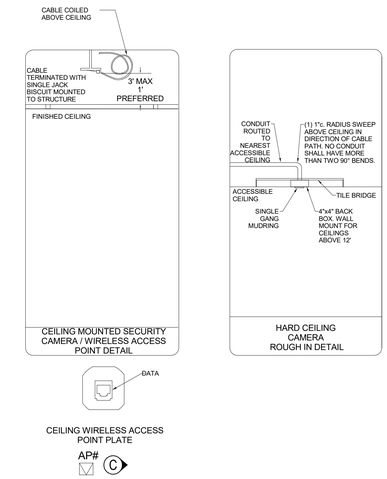
TECHNOLOGY - Lantern Lane ES - KITCHEN

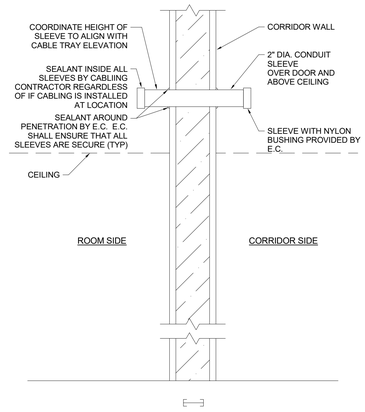
I-TN.101

GENERAL NOTE

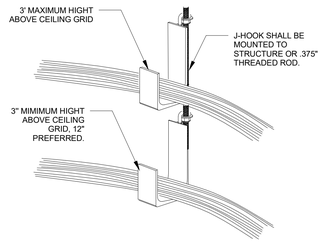
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



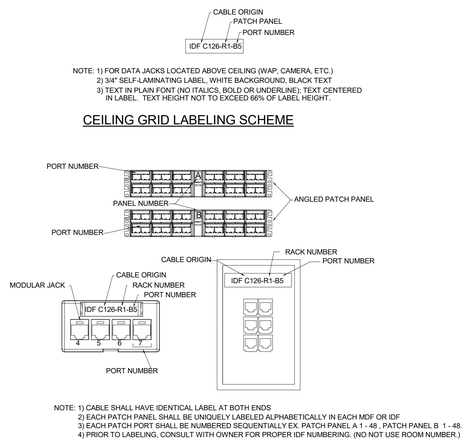
1 DATA ROUGH-IN DETAILS
SCALE: NS



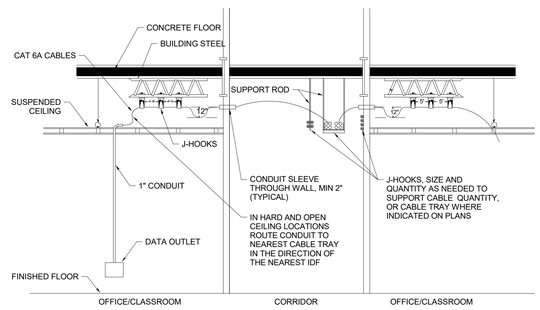
2 TYPICAL CABLING SLEEVE
SCALE: NTS



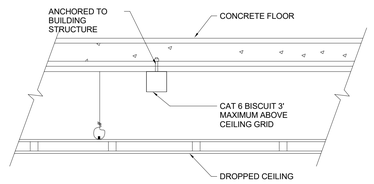
3 PANDUIT J-HOOK DETAIL
SCALE: NTS



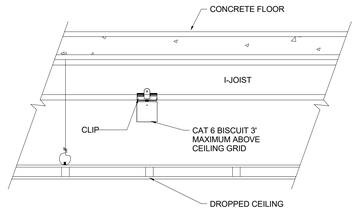
4 LABELING & CABLING SCHEMES
SCALE: NTS



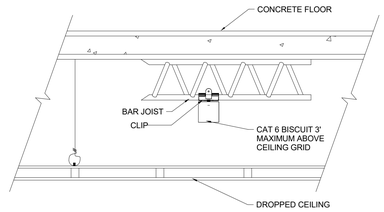
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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07-18-25

MVA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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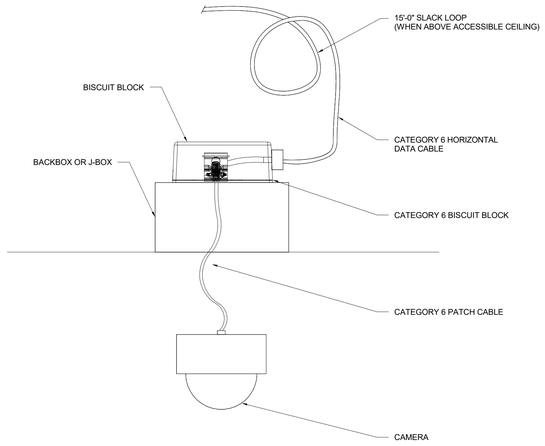
TECHNOLOGY - Lantern Lane ES - DETAILS

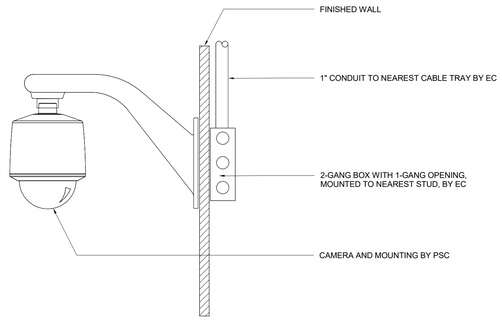
I-TN.500

GENERAL NOTES:

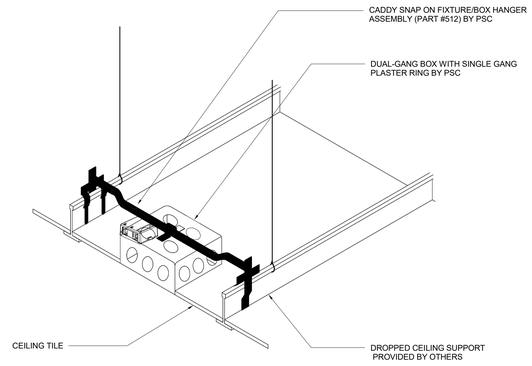
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



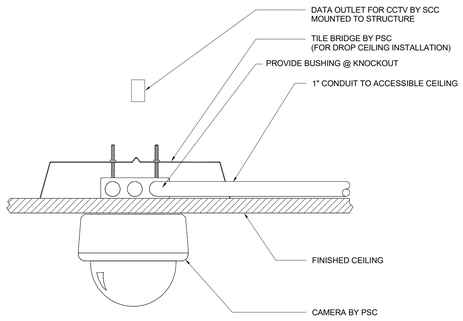
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

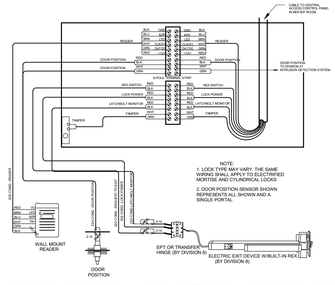


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

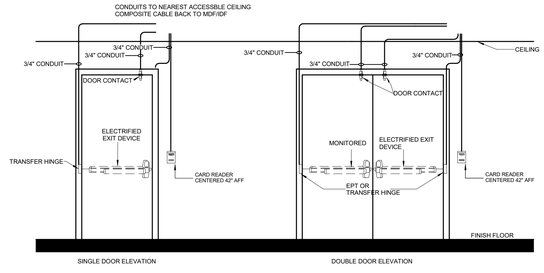
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

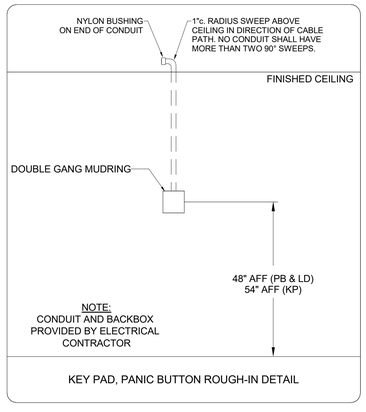
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Lanterns Lane Elementary School
3323 Mission Valley Dr, Missouri City, TX 77459

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
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Brian C Porter
BICSI ID # 256657
EXPIRES 12-31-27
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07-18-25

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AND PLANNING
CONSULTANTS
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HOUSTON, TEXAS 77079

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TECHNOLOGY - Lantern Lane ES - SECURITY DETAILS

I-TN.600

FBISD BP013 KITCHEN RENOVATIONS ES

PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DR, MISSOURI CITY, TX 77459

FORT BEND BOND 2023
INDEPENDENT SCHOOL DISTRICT

FORT BEND INDEPENDENT SCHOOL DISTRICT

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

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DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

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PROGRAM MANAGEMENT
FBISD 2023 Bond Team
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FOOD SERVICE
Food Design Professionals
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The Woodlands, Texas 77380
Phone Number: 281-350-2323

MEP ENGINEERS
Stanton Engineering Group
1300 W. Sam Houston Pkwy South, Suite 121
Houston, Texas 77042
Phone Number: 713-300-9292

STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
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Houston, Texas 77027
Phone Number: 713-776-9433

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o-A00-01	GENERAL NOTES AND ABBREVIATIONS
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o-D.101-2	DEMO PLAN PHOTOS
o-ED.100	ELECTRICAL DEMOLITION AND TEMP PLANS
o-PD1.01	PLUMBING DEMOLITION FLOOR PLAN
o-TD201	TECHNOLOGY DEMOLITION FLOOR PLAN
o-A.101	SITE PLAN
o-A.200	SLAB DIMENSION CONTROL PLAN
o-A.201	FLOOR PLAN
o-A.301	KITCHEN PLAN
o-A.302	TEMPORARY KITCHEN LAYOUT
o-A.401	REFLECTED CEILING PLAN
o-A.501	FINISH FLOOR PLAN
o-A.502	PARTITION SCHEDULE
o-S1	KITCHEN PLAN
o-S2	SECTIONS AND TYPICAL DETAILS
o-QF1	FS GENERAL COORDINATION NOTES
o-QF1.0	FS EQUIPMENT PLAN
o-QF1.1	FS FACILITY MODEL
o-QF1.2	FS EQUIPMENT MODEL
o-QF1.3	FS SPECIAL CONDITIONS & MECHANICAL PLAN
o-QF1.4	FS PLUMBING PLAN
o-QF1.5	FS ELECTRICAL PLAN
o-QF1.6	FS CONDENSING UNITS
o-QF1.7	FS WALK-INS
o-QF2.0	FS TEMPORARY SERVING
o-M1.01	MECHANICAL PLANS
E.000	ELECTRICAL AND FIRE ALARM SCHEDULES
E.001	ELECTRICAL AND FIRE ALARM NOTES
E.010	ELECTRICAL DEVICE DETAILS
E.011	ELECTRICAL DETAILS
E.012	ELECTRICAL DETAILS
E.013	ELECTRICAL KITCHEN DETAILS
E.060	LIGHTING SCHEDULES
o-E.100	LIGHTING FLOOR PLAN
o-E.200	ELECTRICAL FLOOR PLANS
o-E.300	FIRE ALARM FLOOR PLANS
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o-P1.01	PLUMBING FLOOR PLAN
o-P1.02	PLUMBING TEMPORARY KITCHEN PLAN
o-T000	TECHNOLOGY SYMBOLS & LEGEND
o-T200	TECHNOLOGY COMPOSITE FLOOR PLAN
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o-T202	TECHNOLOGY TEMPORARY KITCHEN PLAN
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o-T500	TECHNOLOGY TYPICAL DETAILS
o-TN-000	TECHNOLOGY - INDEX SHEET
o-TN-001	TECHNOLOGY - DEMO
o-TN-100	TECHNOLOGY - OVERALL
o-TN-101	TECHNOLOGY - KITCHEN
o-TN-500	TECHNOLOGY - DETAILS
o-TN-600	TTECHNOLOGY - SECURITY DETAILS
o-TN-700	TECHNOLOGY - AV DETAILS

REGISTERED ARCHITECT
NOE ALMAGUER
22651
STATE OF TEXAS
18 July 2025

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

0

PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.
B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.
C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.
D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.
E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.
F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL, ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.
B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.
B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.
C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.
D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY. IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.

1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.

E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.

B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT. REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.

B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED. CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.

D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

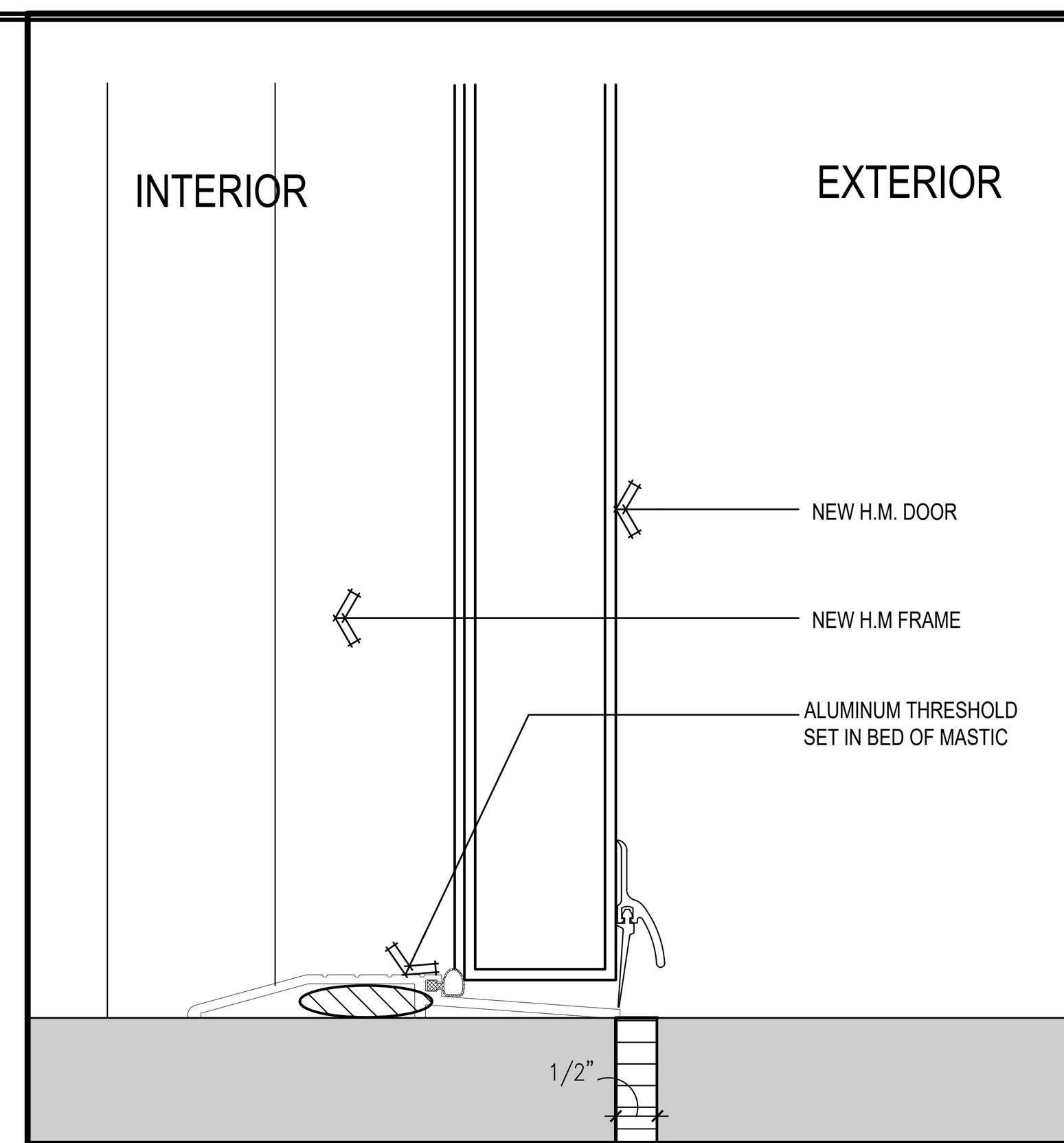
A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

01 GENERAL NOTES



21 EXTERIOR DOOR SILL
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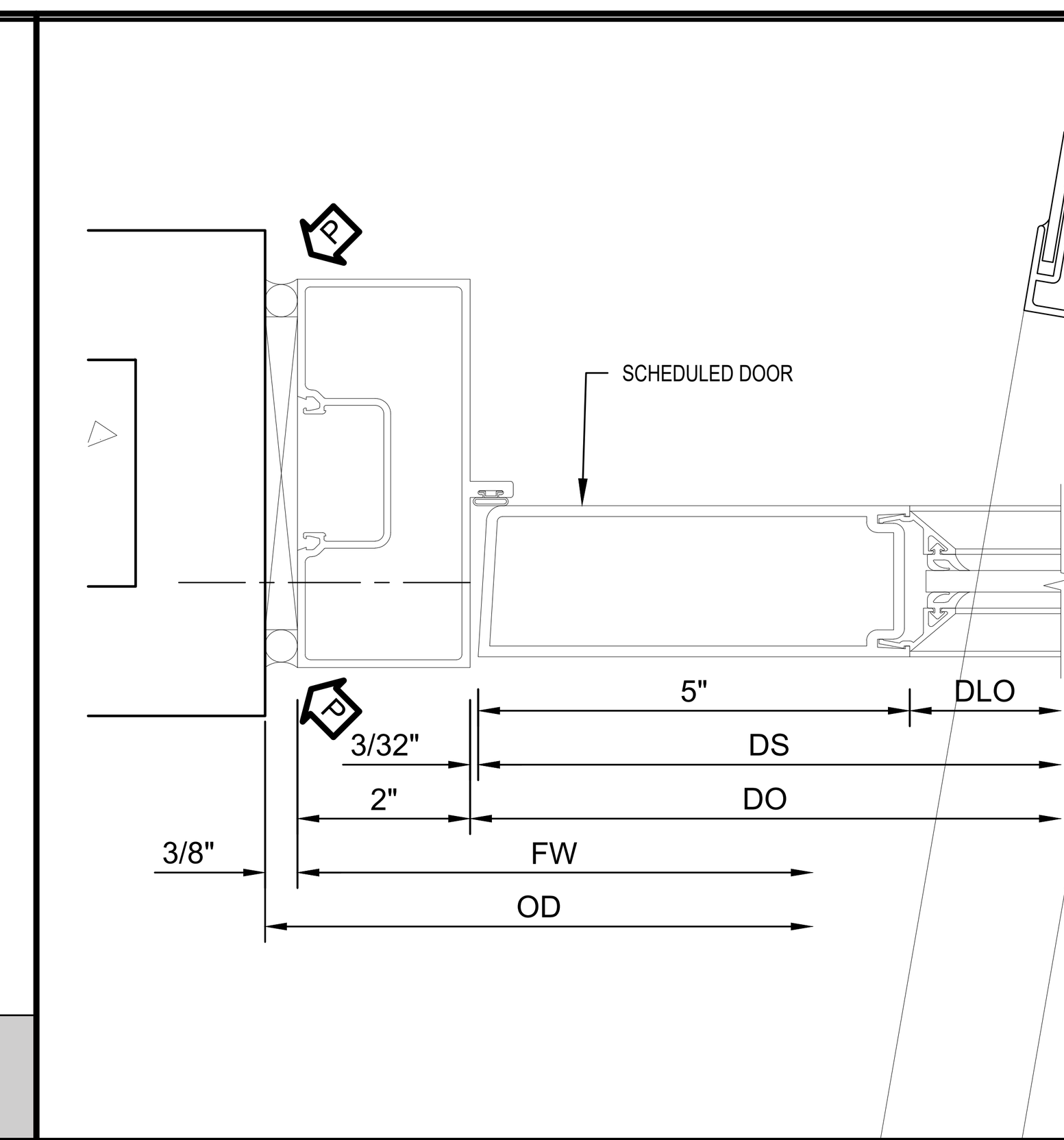

22 DOOR JAMB
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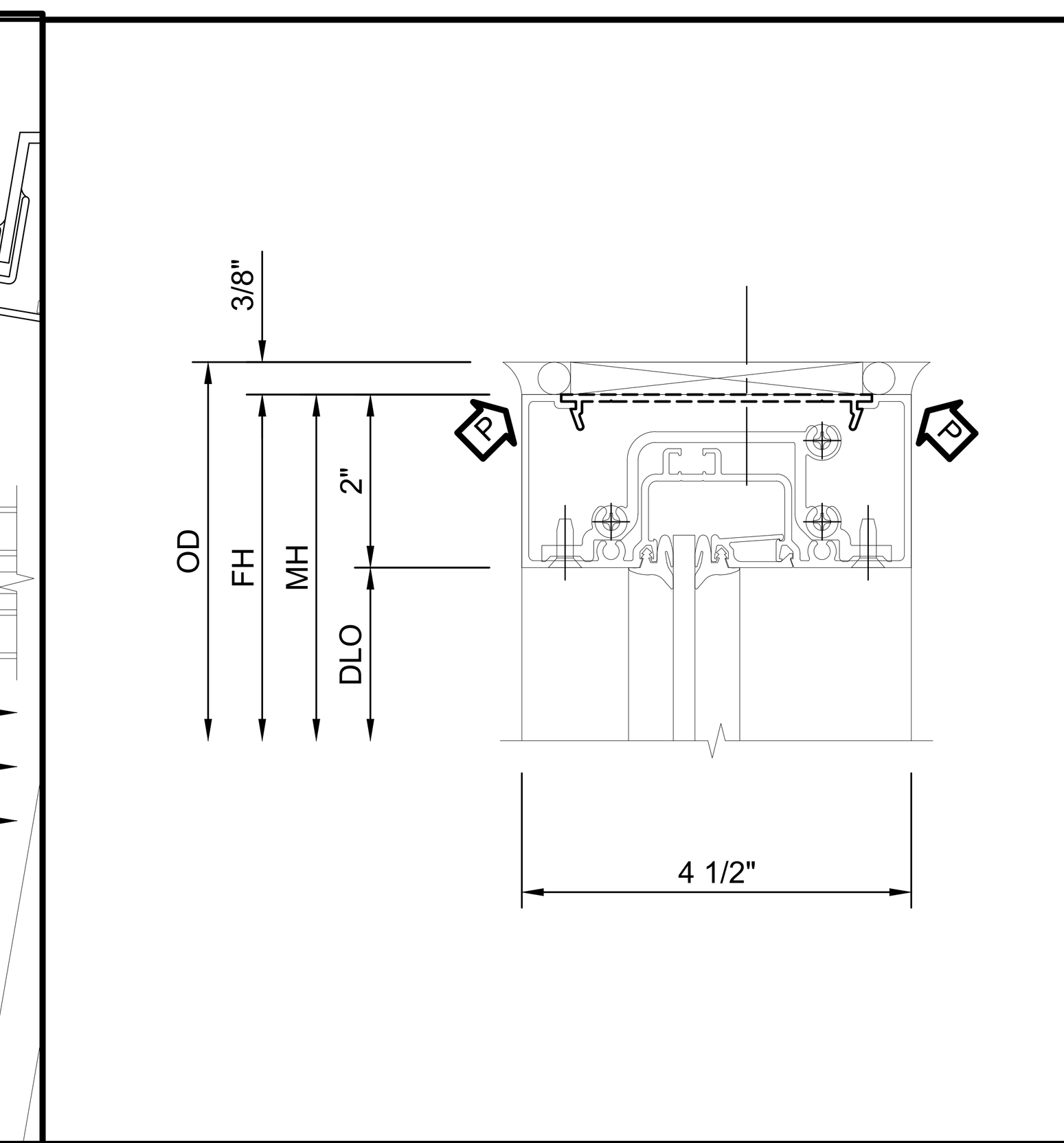
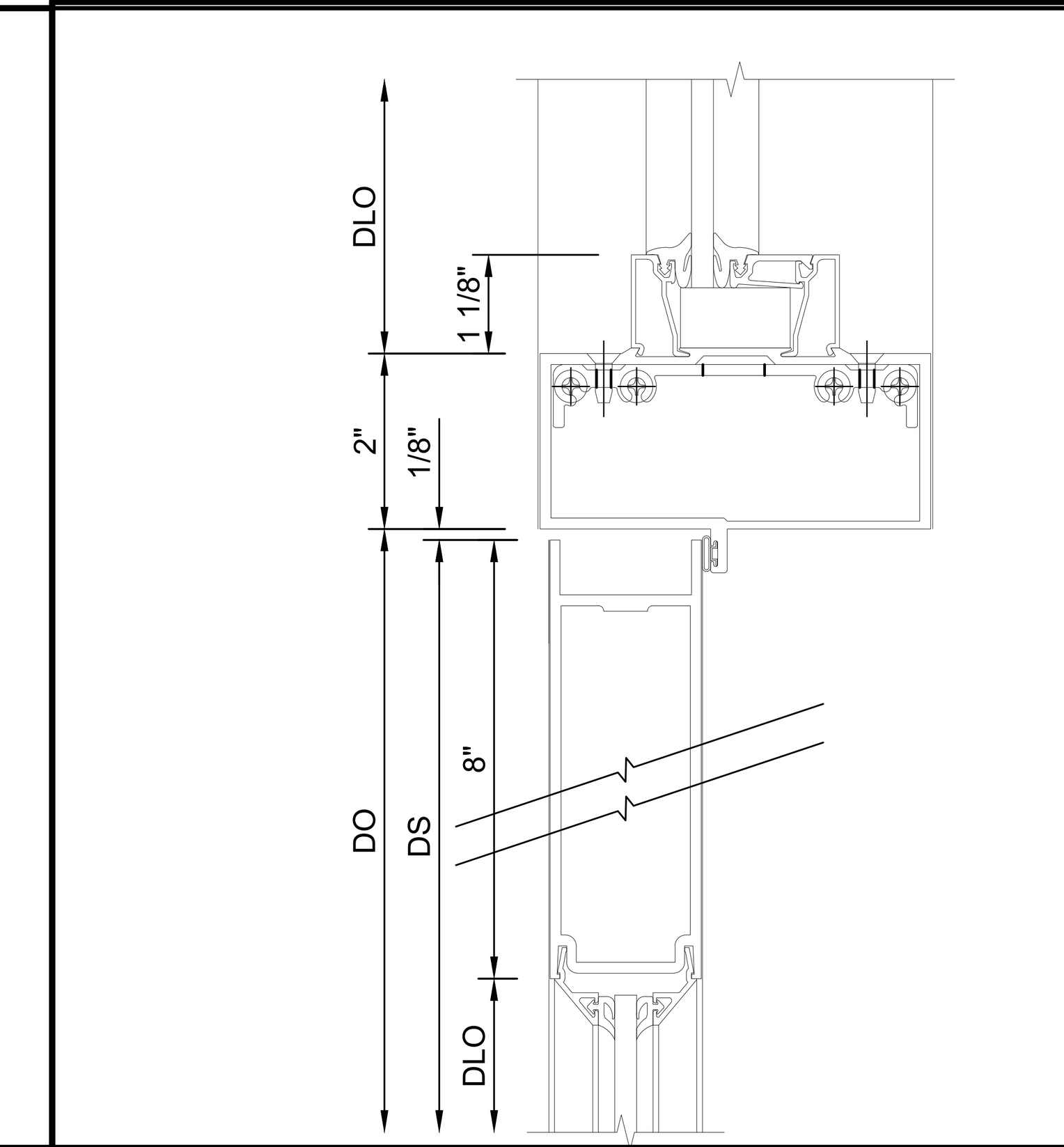


23 WINDOW HEAD
SCALE: 6" = 1'-0"_XREF



24 DOOR WINDOW HEAD
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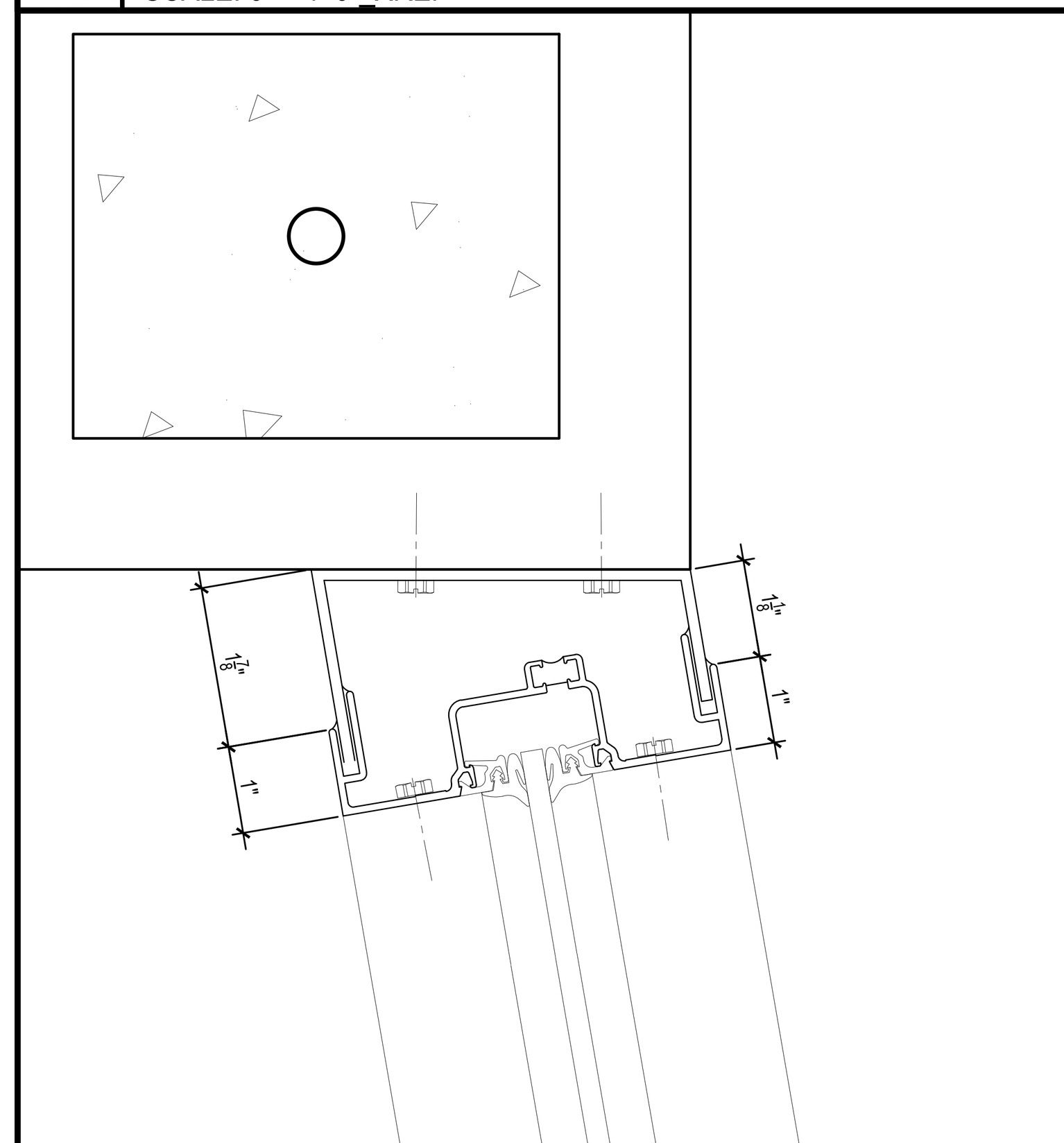

15 WINDOW JAMB AT WALL
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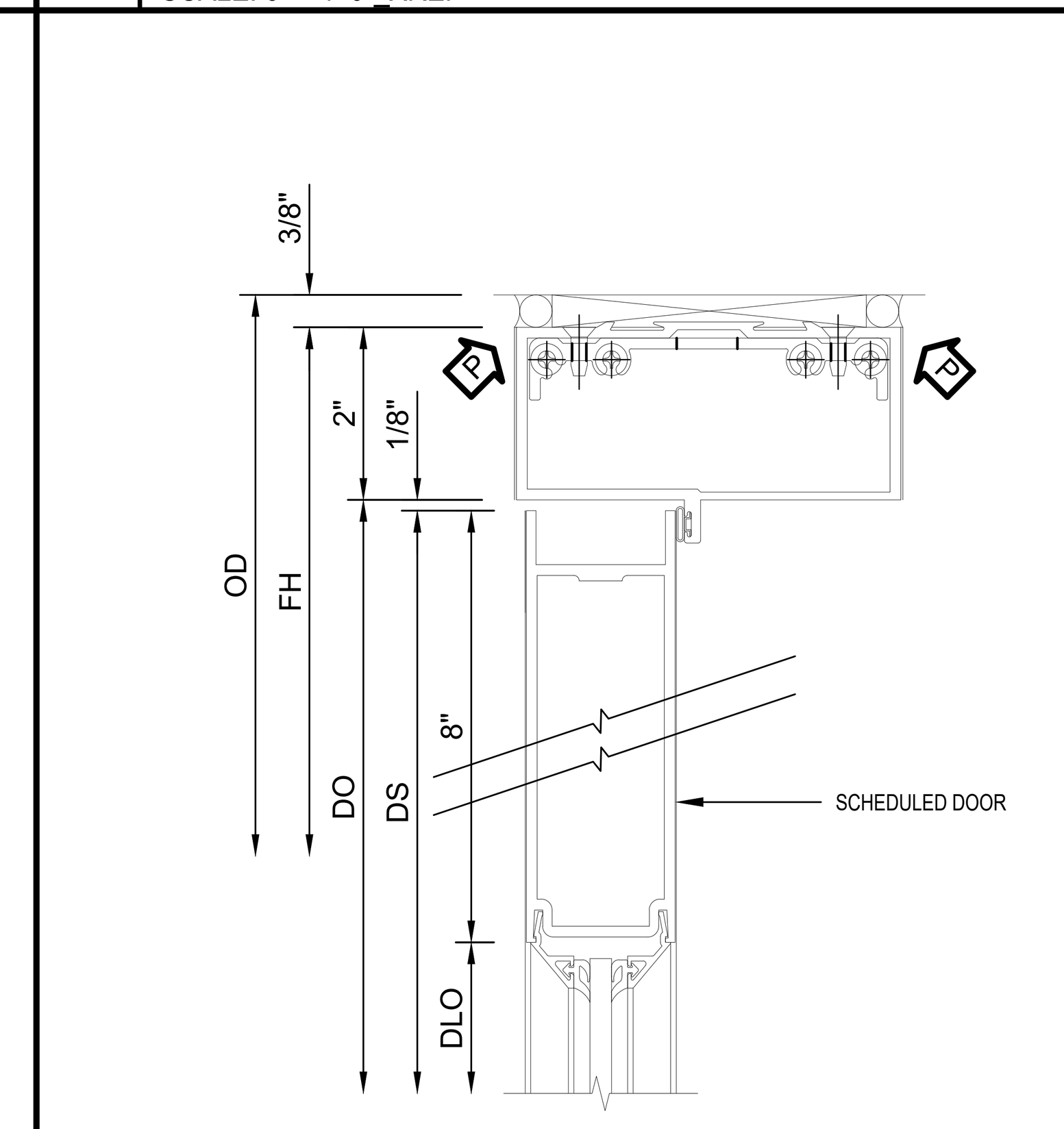

16 DOOR HEAD
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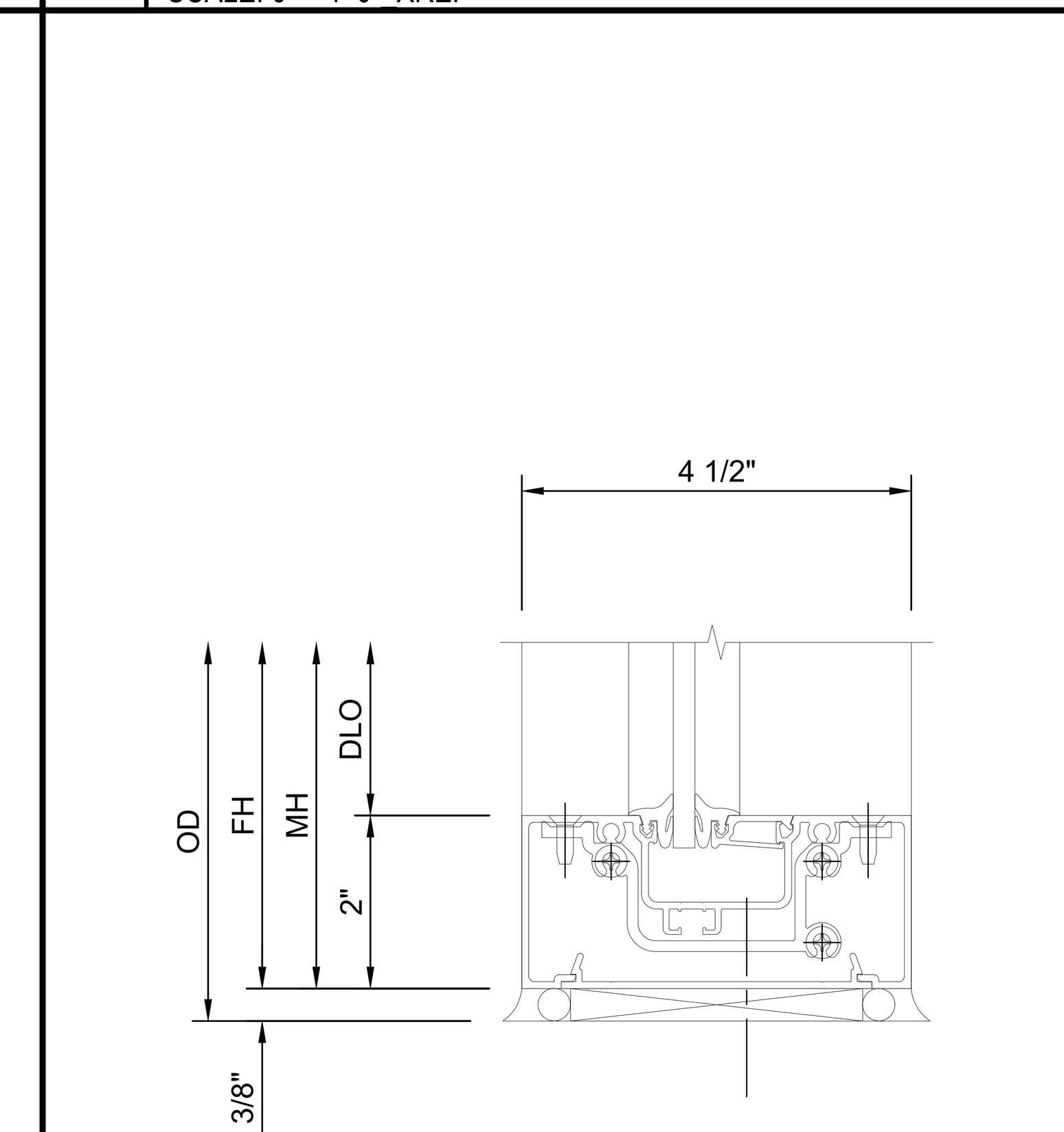

17 WINDOW SILL
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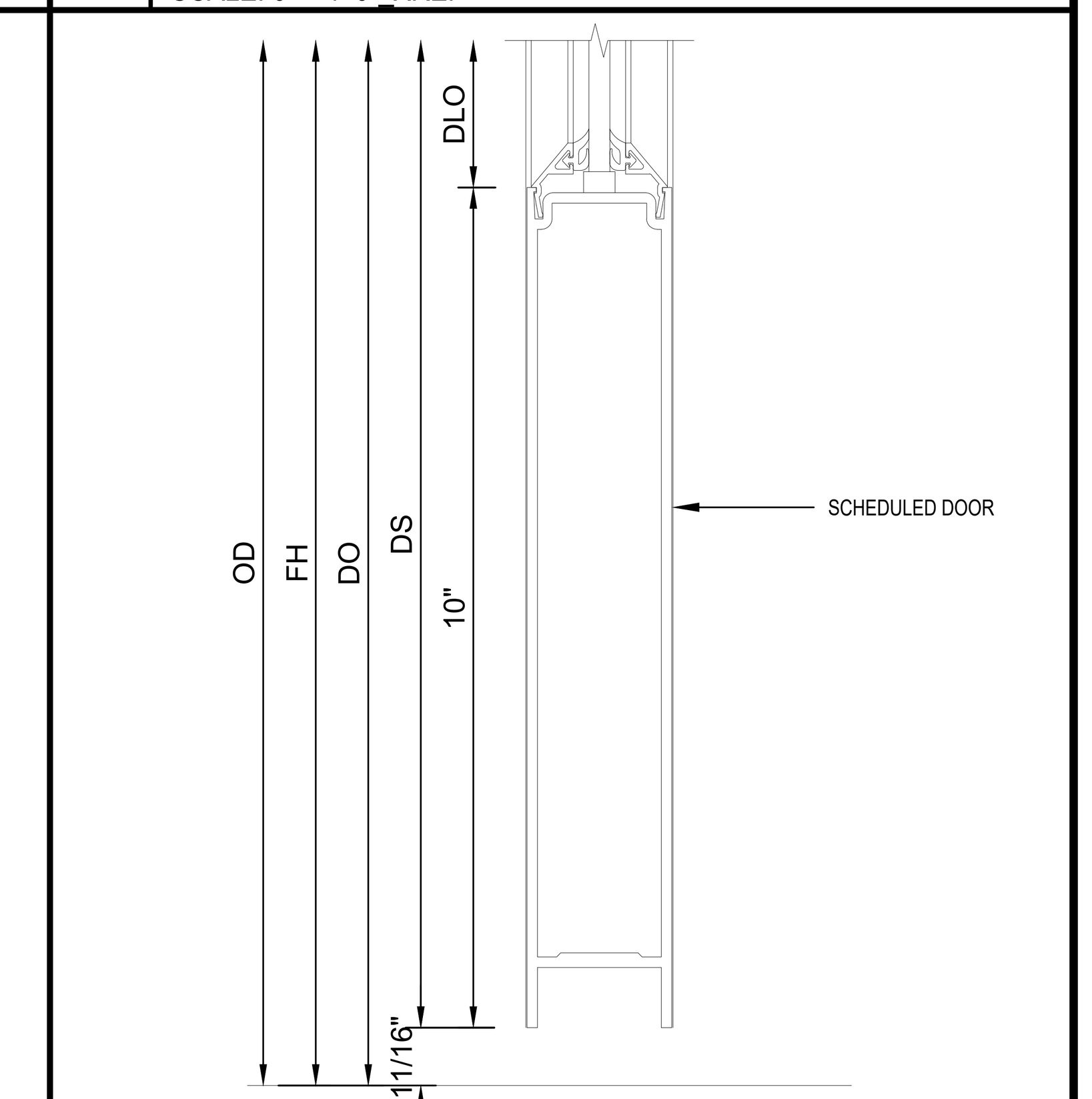

18 DOOR SILL
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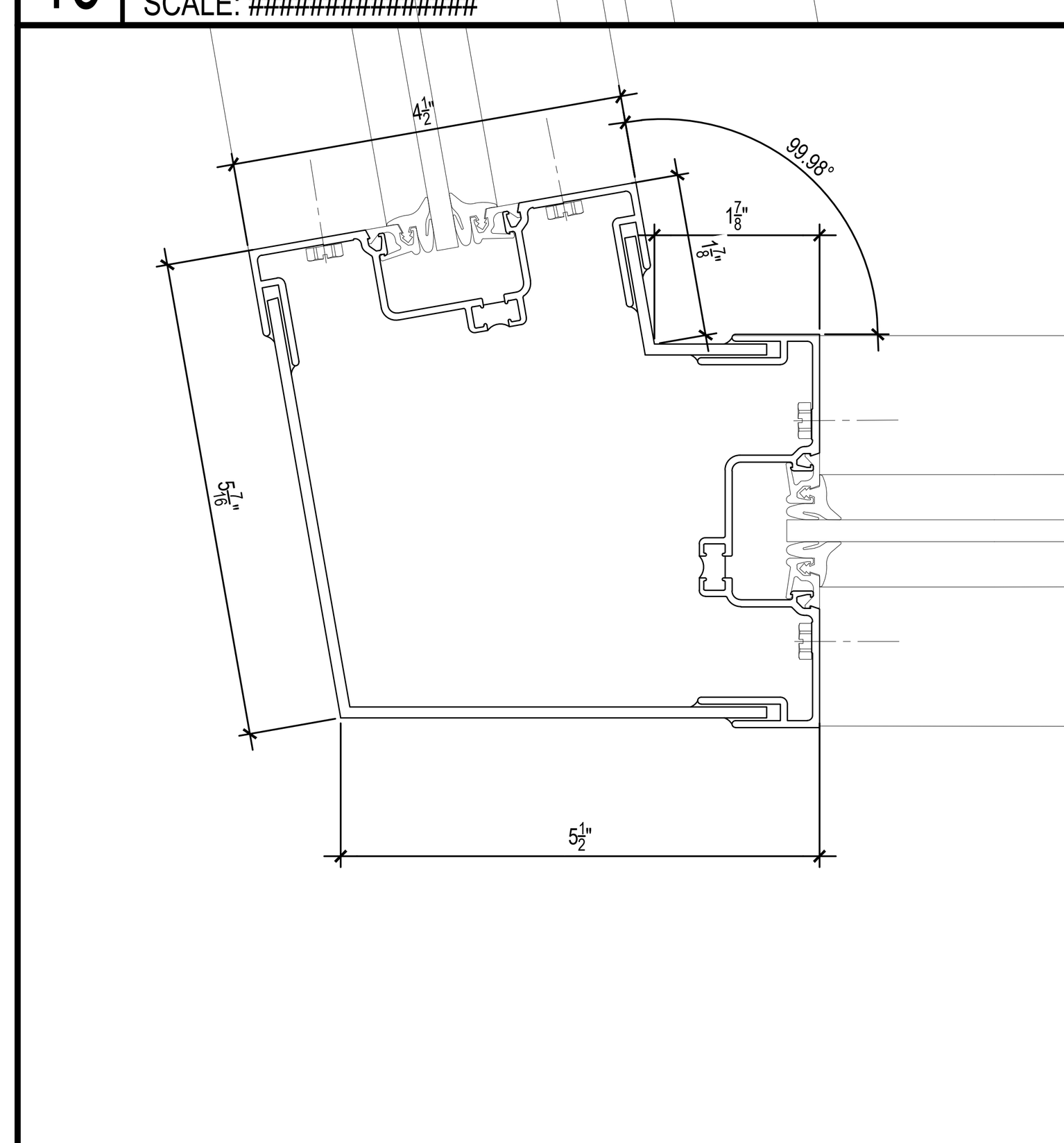

09 WINDOW CORNER
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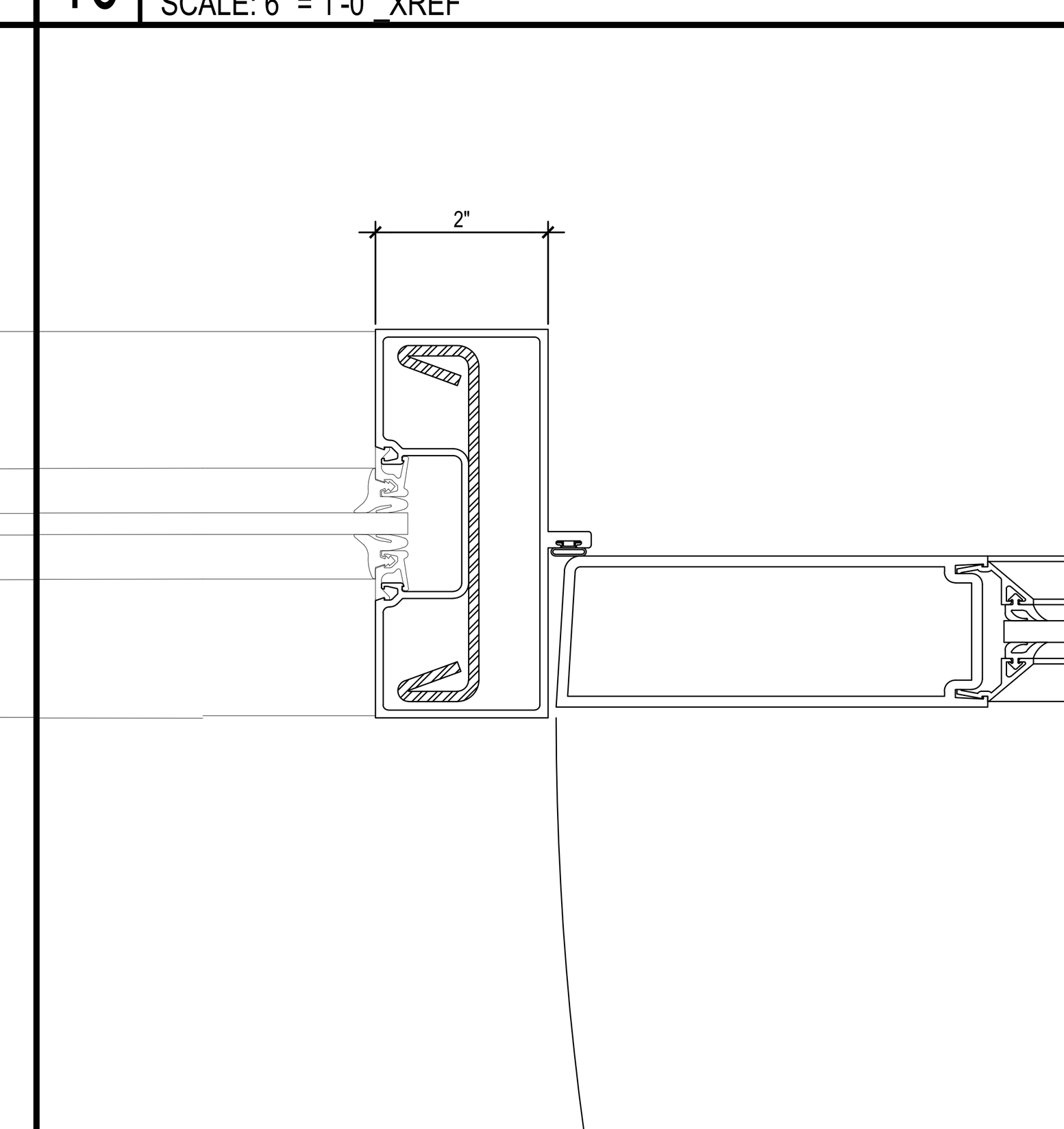

10 DOOR STRIKE JAMB
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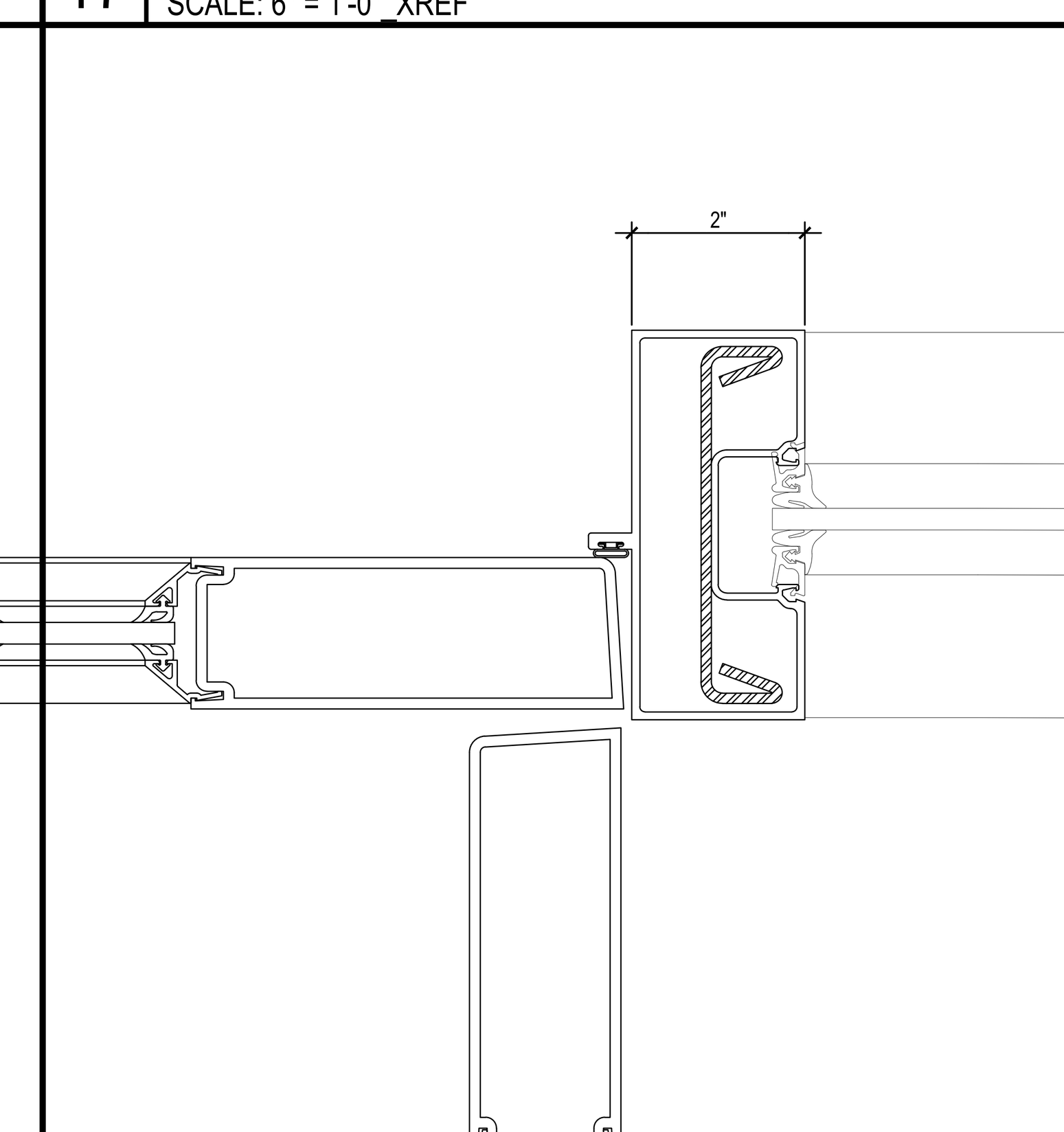

11 DOOR HINGE JAMB
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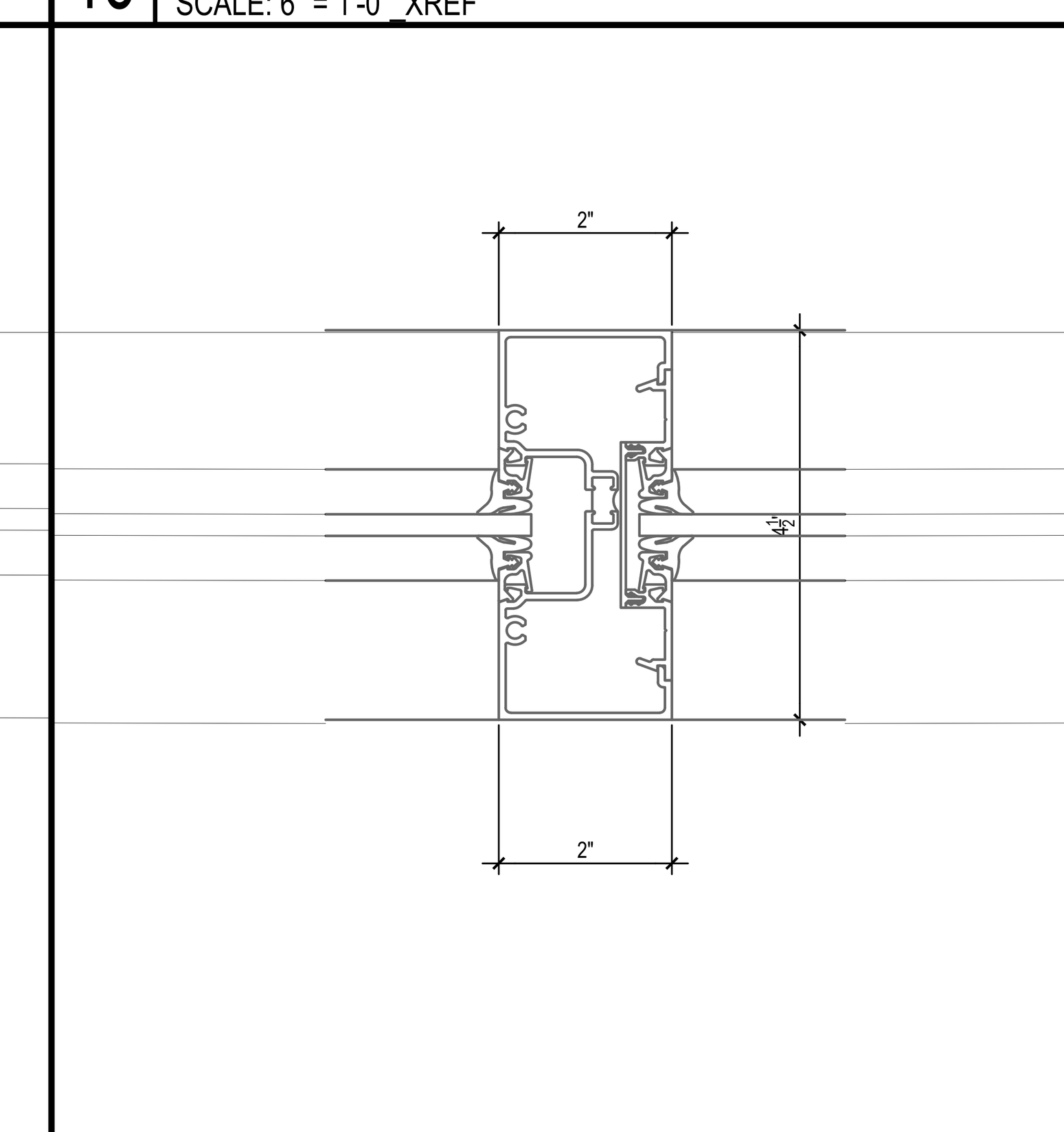
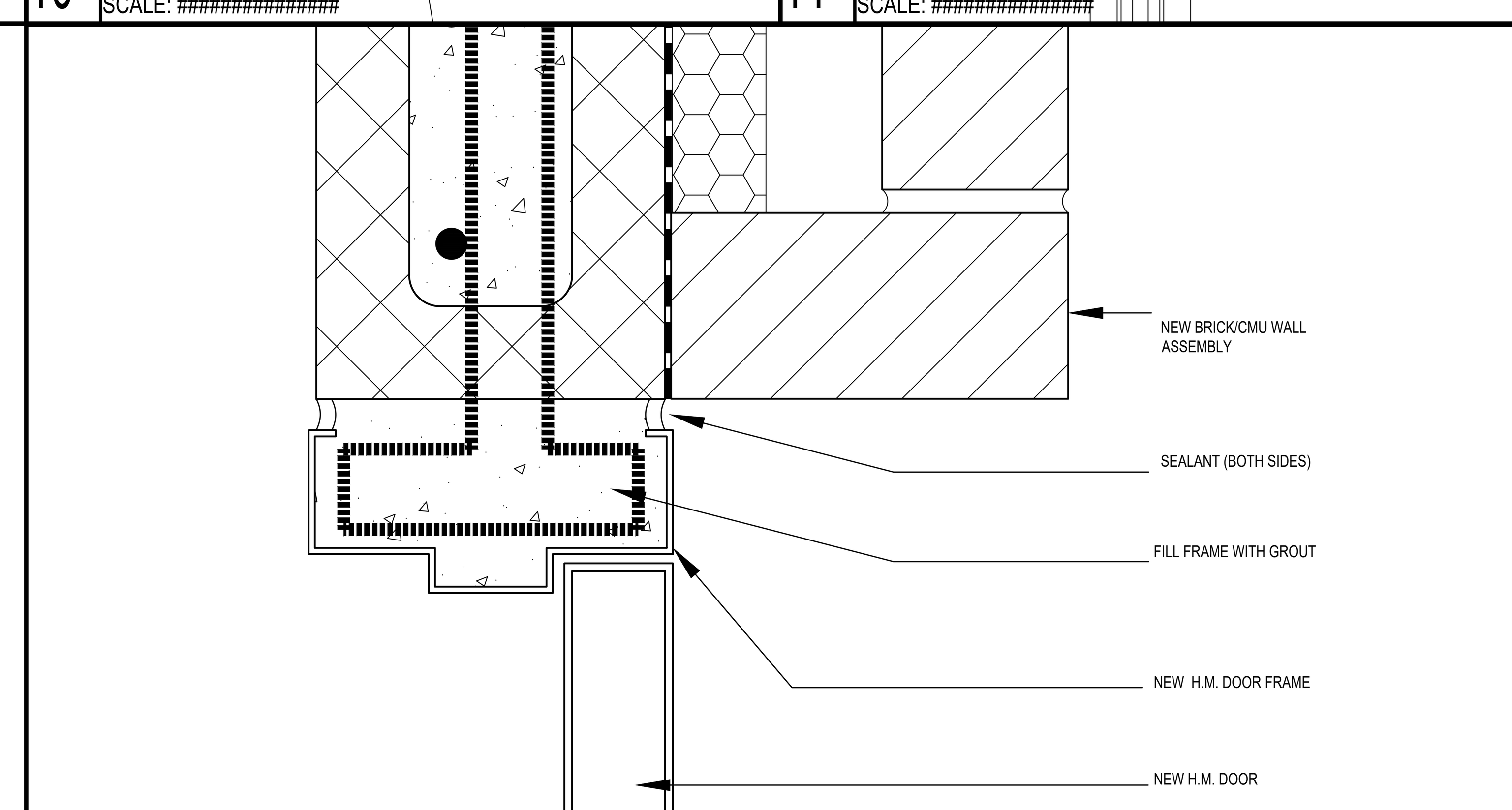


12 WINDOW MULLION
SCALE: ##############

SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025) Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

03 PROJECT SCHEDULE



04 EXTERIOR DOOR HEAD JAMB
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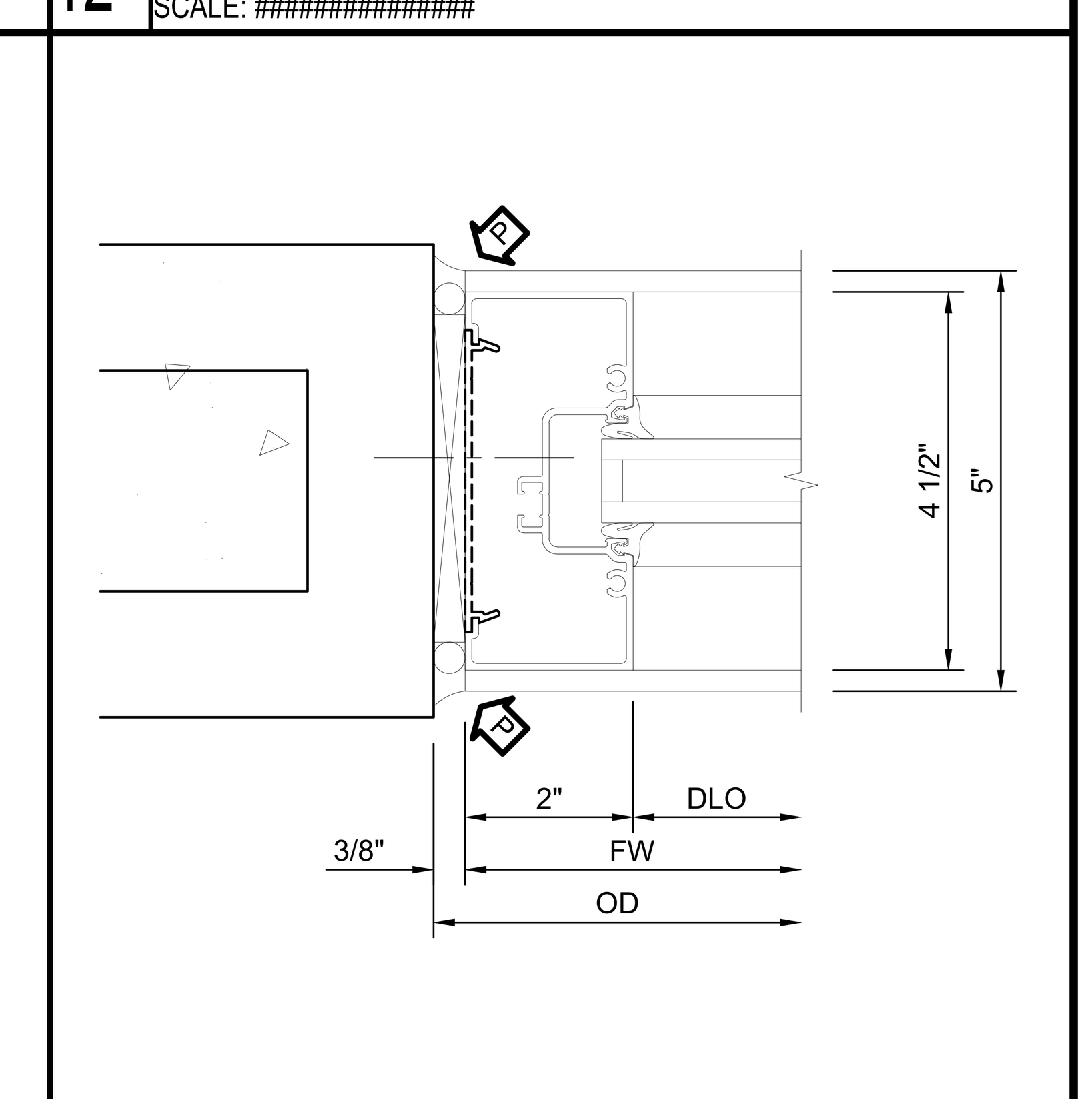


06 WINDOW JAMB
SCALE: 6" = 1'-0"_XREF

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

0

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL
REGISTERED ARCHITECT NOE ALMAGUER 22651 STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
GENERAL NOTES AND ABBREVIATIONS

A00-01

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\A00-01 GENERAL NOTES AND ABBREVIATIONS.dwg Jul 23, 2025 - 4:24pm

GENERAL DEMOLITION NOTES
(NOT ALL NOTES USED ON EACH SHEET)

1. REFER TO SHEET A00-01 FOR DEMOLITION GENERAL NOTES. THESE NOTES APPLY TO ALL SCHOOL KITCHENS.
2. COORDINATE EXTENT OF SAW CUTTING AREAS WITH NEW RECESSED SLAB FOR COOLER/FREEZER LAYOUTS, NEW SERVICE ENTRANCE FLOOR AND EXISTING KITCHEN LAYOUTS THAT REMAIN. SEE STRUCTURAL DRAWINGS AND SLAB DIMENSION CONTROL PLANS FOR ADDITIONAL SCOPE.
3. REMOVE PROTECT AND REINSTALL ALL EXISTING SURFACE MOUNTED FIRE EXTINGUISHERS (TYPES ABC AND K) AT ALL KITCHENS.
4. SAWCUT AND RE-LOCATE EXPOSED CONDUITS AND WIREMOLD TO INSIDE OF WALLS. PATCH AND PAINT. EXCEPTION: WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS.
5. CONTRACTOR TO RELOCATE EXISTING KITCHEN EQUIPMENT AND OFFICE FURNITURE TO TEMPORARY KITCHEN LAYOUT AS REQUESTED BY KITCHEN MANAGER. ALSO THAT THE IT EQUIPMENT IS PROTECTED DURING RENOVATIONS. ALL EXISTING EQUIPMENT SHALL BE RETURNED TO OWNER.
6. EXISTING TACKBOARDS TO BE REMOVED BY OWNER.
7. IF PRESENT, EXISTING SAFE IN EACH KITCHEN TO BE TEMPORARILY REMOVED DURING RENOVATION AND REINSTALLED IN KITCHEN AREA.
8. ORIGIN POINT OF EXISTING CEILING GRID SHALL BE IDENTIFIED. NEW CEILING WILL BE INSTALLED (AS MUCH AS POSSIBLE) AT THE SAME ORIGIN POINT SO THAT SPRINKLER SYSTEM PIPING CAN REMAIN UNCHANGED.
9. ABOVE-CEILING INFRASTRUCTURE SHALL REMAIN UNDISTURBED AS MUCH AS IS POSSIBLE. CEILING DEVICES ARE TO BE REMOVED FROM EXISTING GRID/TILE THEN DURING RE-INSTALATION OF CEILING DEVICES SHALL BE LOCATED AS CLOSE TO ORIGINAL LOCATION AS POSSIBLE INTO THE NEW GRID/TILE. PROTECT AND STORE EXISTING INFRASTRUCTURE (CABLING, ELECTRICAL POWER, PIPING) DURING CONSTRUCTION.
10. EXISTING HOOD IN WAREWASH AND (2) HOODS IN PRODUCTION AREA ARE TO BE CLEANED, INSPECTED, SERVICED AND REFURBISHED TO A LIKE NEW CONDITION. THEY ARE TO REMAIN IN PLACE.

KEYED DEMOLITION NOTES
(NOT ALL NOTES USED ON EACH SHEET)

1. REMOVE EXISTING THINSET SYNTHETIC TERRAZZO FLOOR AND TERRAZZO COVE BASE MATERIAL IF ANY EXISTS THROUGHTOUT KITCHEN AREA. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOOR. RE: FINISH PLAN FOR NEW FLOOR FINISH MATERIAL.
2. REMOVE EXISTING QUARRY TILE FLOORING AND BASE. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOORING. RE: FINISH SCHEDULE FOR NEW FLOOR FINISH MATERIAL.
3. CEILING DEVICES: REMOVE SMOKE DETECTORS, STROBES, EXIT SIGNAGE, MOTION DETECTORS AND CEILING SPEAKERS. PROTECT AND RE-INSTALL AFTER FINISHES ARE APPLIED.
4. REMOVE EXISTING LOCKERS. PROTECT AND RE-INSTALL AFTER FINISHES APPLIED.
5. REMOVE EXISTING WASHER AND DRYER. VERIFY WITH FBISD FOR RELOCATION TO WAREHOUSE.
6. TEMPORARILY REMOVE EXISTING WALL MOUNTED CLOCK AND STORE FOR REINSTALLATION AFTER WALL RECEIVED NEW FINISH.
7. REMOVE EXISTING WALK-IN COOLER/FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT SPACE. MITIGATE ANY MOLD FOUND.
8. REMOVE EXISTING DOOR AND PROTECT EXISTING FRAME TO REMAIN
9. REMOVE EXISTING DOOR AND FRAME. PROTECT FRAME AND OR DOOR IF IT IS SCHEDULED TO REMAIN.
10. REMOVE PARTIAL EXISTING CMU PARTITION FOR NEW DOOR OPENING
11. INSPECT EXISTING WAREWASH COUNTER DOOR AND S.S. PASS-THRU WINDOW CHUTE. REPAIR REPLACE DAMAGED COMPONENTS. CLEAN, LUBRICATE AND RE-INSTALL.
12. EXISTING CARD READER ACCESS TO REMAIN
13. EXISTING WINDOW TO REMAIN
14. REMOVE EXISTING KITCHEN EQUIPMENT THROUGHOUT KITCHEN INCLUDING WALK-IN COOLER / FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT ROOM OR OUTSIDE OF THE BUILDING. VERIFY WITH OWNER FOR RELOCATION TO WAREHOUSE. SOME EQUIPMENT IS TO BE RE-USED IN TEMPORARY SERVING LINES. SEE ALSO GENERAL DEMOLITION NOTE 6.
15. REMOVE EXISTING FRP AND PREP FOR NEW TILE FINISH.
16. COORDINATE REMOVAL AND STORAGE OF ANY EXISTING FURNITURE ITEMS WITH OWNER . SEE ALSO GENERAL DEMOLITION NOTE 5.
17. REMOVE EXISTING SOAP AND PAPER TOWEL DISPENSER AND RETURN TO OWNER
18. EXISTING WALL MOUNTED ACCESSORIES SIGNS, DISPLAY BOARDS, AND MATS TO BE REMOVED BY FORT BEND ISD (VERIFY EQUIPMENT - IF ANY).
19. REMOVE EXISTING SURFACE MOUNTED FIRE EXTINGUISHER. RE-INSTALL AFTER NEW FINISH APPLIED.
20. REMOVE EXISTING ACOUSTIC CEILING TILE CEILNG SYSTEM AND LIGHT FIXTURES, HVAC DEVICES, SENSORS, ETC. THROUGHTOUT RENOVATED AREAS. PREP FOR NEW SUSPENDED CEILING. EXISTING SPRINKLE SYSTEM TO REMAIN AS-IS UNLESS ROOM CONFIGURATION HAS CHANGED IN NEW DESIGN. PROTECT RECESSED SPRINKLER HEADS AND - RE-INSTALL IN NEW CEILING.
21. REMOVE EXISTING CASEWORK/SHELVING
22. EXISTING CERAMIC WALL TILE TO REMAIN. PROTECT FROM DAMAAGE.
23. REMOVE EXISTING COAT HANGER / ROD / SHELF
24. REMOVE EXISTING PLUMBING FIXTURES IN RESTROOMS. RE: PLUMBING FOR NEW FIXTURES.
25. REMOVE EXISTING UTILITY SINK. RE: PLUMBING FOR NEW PLUMBING FIXTURES.
26. REMOVE EXISTING MOP HOLDER. REPLACE WITH NEW UNIT AS SPECIFIED.
27. REMOVE EXISTING WALL MOUNTED CLEANING SOLUTION DISPENSER (BY FBISD VENDOR)
28. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
29. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
30. REMOVE FLOORING IN THIS AREA FOR NOTE 1.
31. REMOVE CARTIDGE FILTER AND WATER PURTICATION CABNET

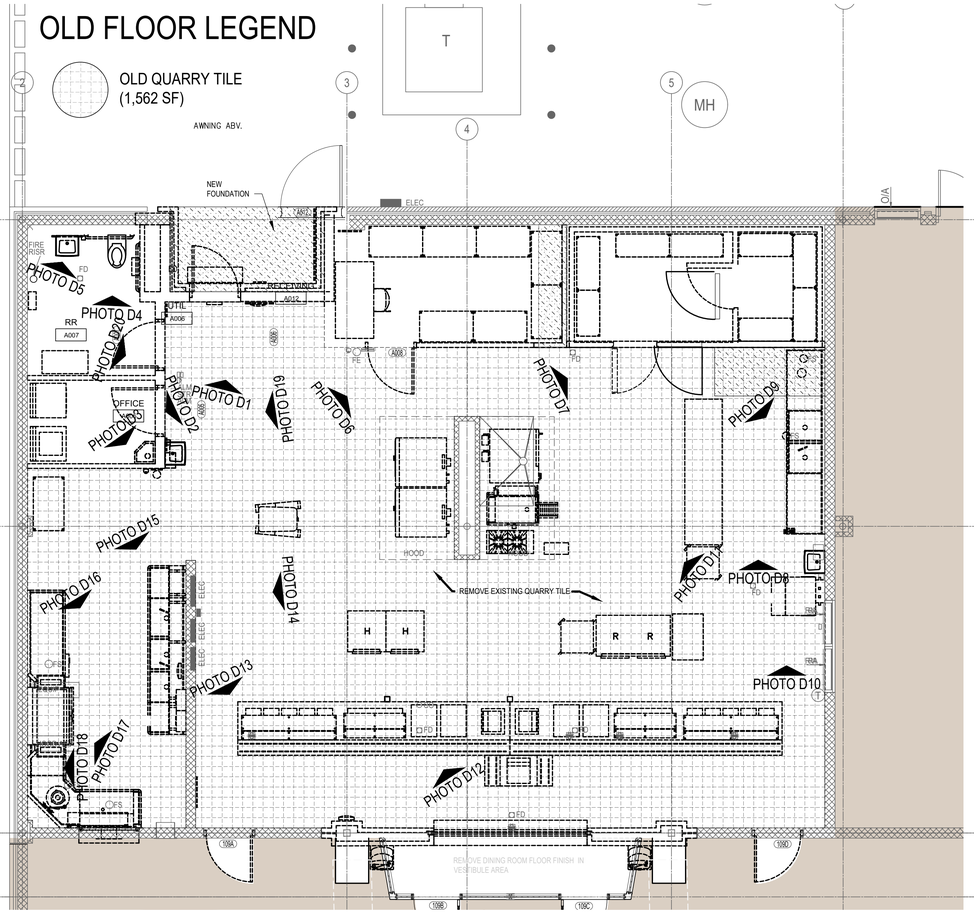
DEMOLITION LEGEND

- EXISTING PARTITION TO REMAIN
- REMOVE EXISTING PARTITION
- EXISTING CMU PARTITION
- REMOVE DOOR AND FRAME TO REMAIN
- REMOVE EXISTING DOOR AND FRAME
- EXISTING PLUMBING FIXTURES (WATER CLOSET, HAND LAVATORY, AND MOP SINK TO BE REMOVED. RE: PLUMBING DRAWINGS.
- EXISTING ACOUSTIC CEILING TILE AND GRID TO BE REMOVED. RE: ELECTRICAL DRAWINGS.
- SPRINKLER HEAD (RECESSED)
- CLOCK
- CEILING MOUNTED SPEAKERS

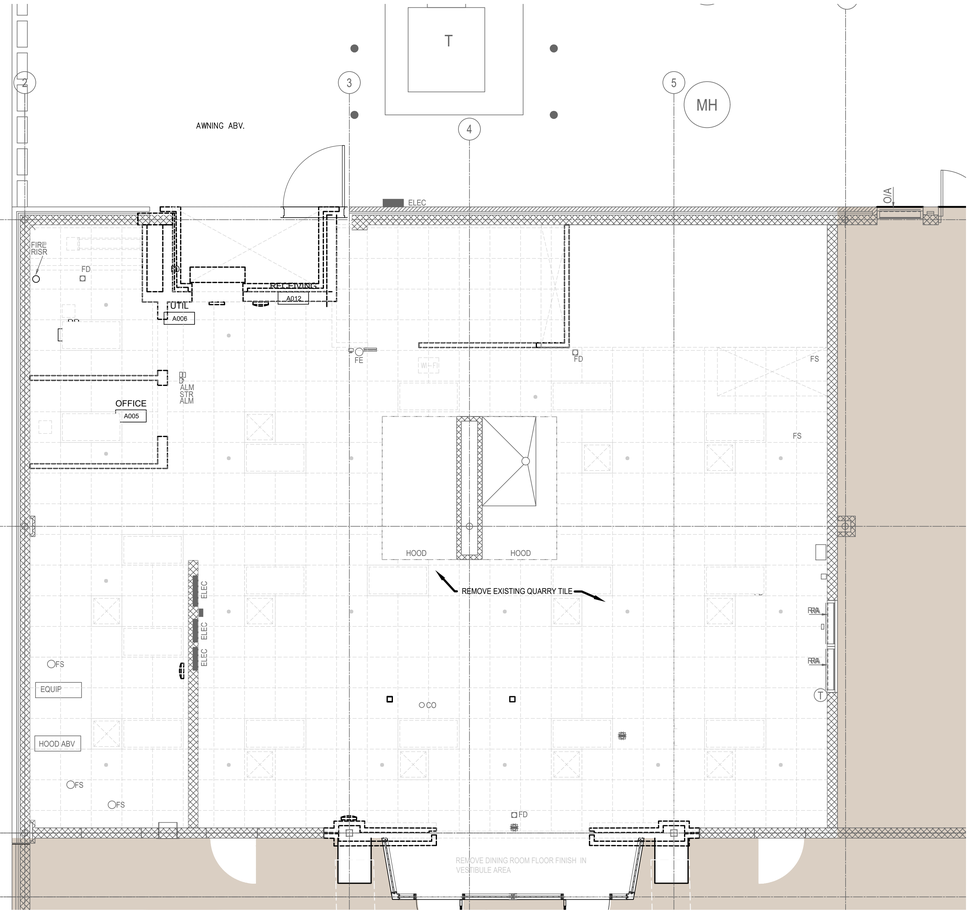
3 DEMOLITION NOTES

OLD FLOOR LEGEND

OLD QUARRY TILE
(1,562 SF)



1 DEMOLITION FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 DEMOLITION REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

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FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

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DEMO PLANS

o-D.101

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\O-Palmer ES\o-D.101 DEMO PLAN.dwg Jul 23, 2025 - 4:24pm

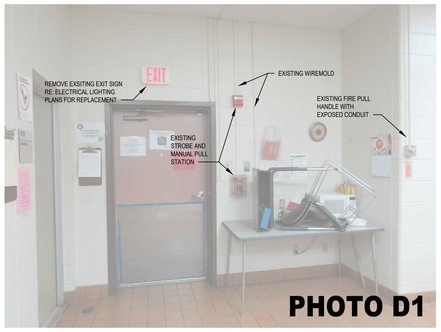
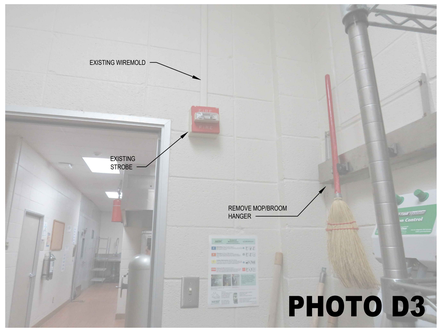


PHOTO D1



PHOTO D2



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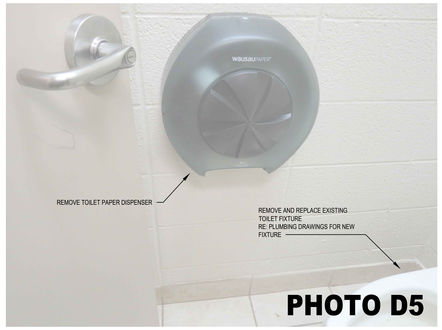

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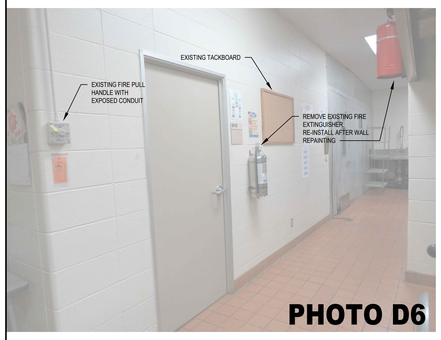


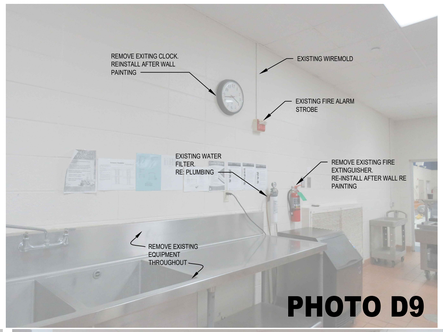
PHOTO D6



PHOTO D7



PHOTO D8



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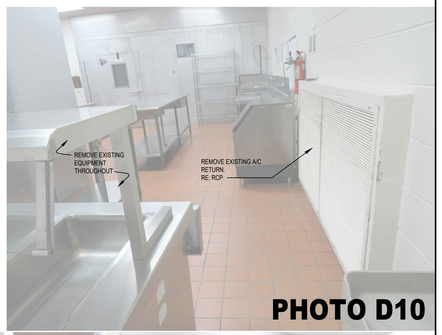
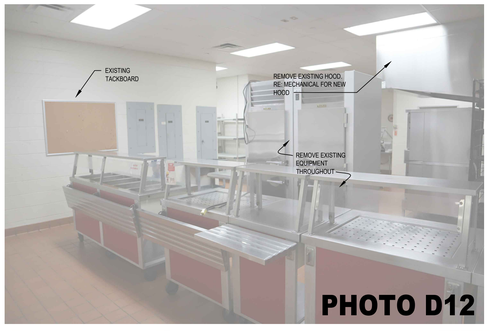


PHOTO D10



PHOTO D11



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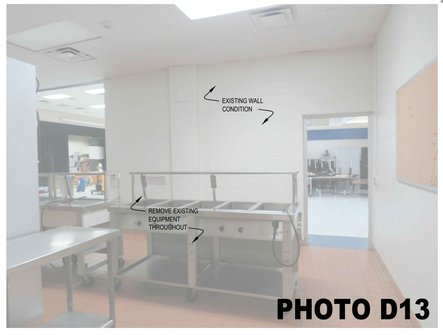
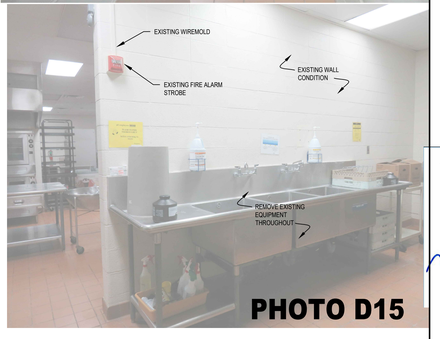


PHOTO D13



PHOTO D14



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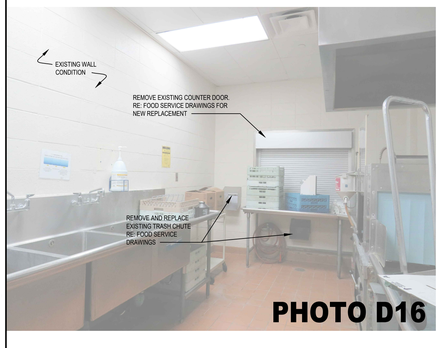

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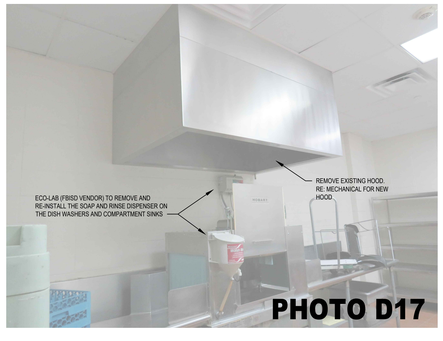

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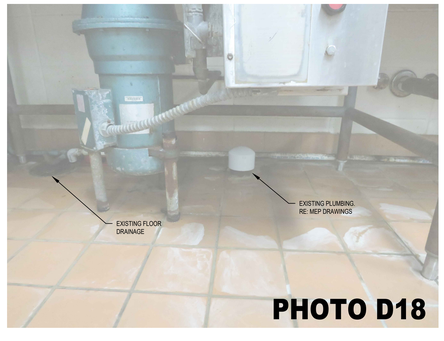

PHOTO D18



PHOTO D19



PHOTO D20

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DEMO PLAN
PHOTOS
o-D.101-2

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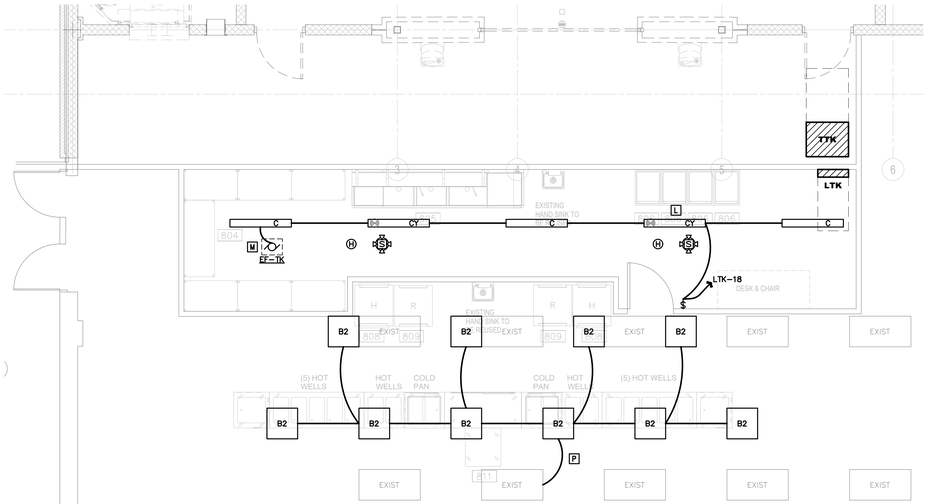
NEW PANEL — TEMP KITCHEN

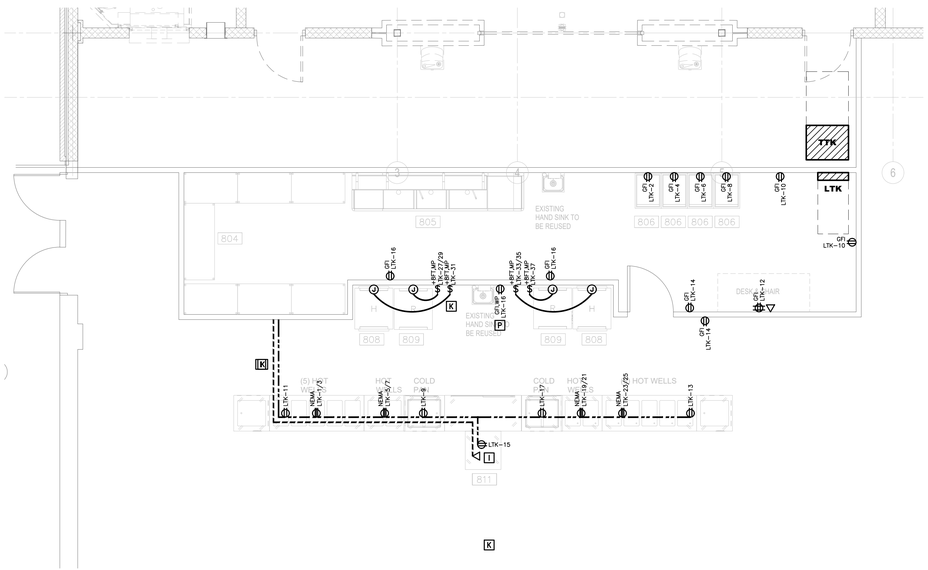
PANEL LTK — 150A MCB, 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: SURFACE

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E810	2766	HOT WELLS	2–12	20/2GFI	1	■			2	20/1	3–12	TRANSPORT CART	1920	E806	
		–	–	+12G	–	3		■		4	20/1	3–12	TRANSPORT CART	1920	E806	
	E810A	1643	HOT WELLS	2–12	20/2GFI	5			■	6	20/1	3–12	TRANSPORT CART	1920	E806	
		–	–	+12G	–	7	■			8	20/1	3–12	TRANSPORT CART	1920	E806	
	E810B	600	COLD PAN	3–12	20/1GFI	9		■		10	20/1	3–12	2 REC	360	E800A	
	E810C	1200	BEVERAGE	3–12	20/1GFI	11			■	12	20/1	3–12	2 REC – DESK	360	E800B	
	E810C	1200	BEVERAGE	3–12	20/1GFI	13	■			14	20/1	3–12	2 REC	360	E800A	
	E811	180	CASH REGISTER	3–12	20/1GFI	15		■		16	20/1	3–12	3 REC	360	E800A	
	E810B	600	COLD PAN	3–12	20/1GFI	17			■	18	20/1	3–12	TEMP. KITCHEN LTS/FAN	566		
	E810A	1643	HOT WELLS	2–12	20/2GFI	19	■			20	20/1		SPARE			
		–	–	+12G	–	21		■		22	20/1		SPARE			
	E810	2766	HOT WELLS	2–12	20/2GFI	23			■	24	20/1		SPARE			
		–	–	+12G	–	25	■			26	20/1		SPARE			
	E808	1622	HEATED CABINET	2–12	20/2	27		■		28	20/1		SPARE			
		–	–	+12N+12G	–	29			■	30	20/1	3–12	EXISTING CIRCUIT	500		3
	E809	984	REFRIGERATOR	3–12	20/1	31	■			32	20/1	3–12	EXISTING CIRCUIT	500		3
	E808	1622	HEATED CABINET	2–12	20/2	33		■		34	15/2	2–12	EXISTING CIRCUIT	1000		3
		–	–	+12N+12G	–	35			■	36	–	+12N+12G	–	–		
	E809	984	REFRIGERATOR	3–12	20/1	37	■			38	20/2	2–12	EXISTING CIRCUIT	1000		3
			SPARE		20/1	39		■		40	–	+12N+12G	–	–		
			SPARE		20/1	41			■	42	50/2	2–8	EXISTING CIRCUIT	5000		3
			SPARE		20/1	43	■			44	–	+8N+10G	–	–		
	TOTAL LOAD @ 100% = 35498VA						TOTAL LOAD @ 100% = 99A									

1. REF. KITCHEN CONSULTANT'S "FCS" DRAWINGS FOR KITCHEN EQUIPMENT NUMBERS.
2. A DEMAND FACTOR PERCENT OF 65% HAS BEEN APPLIED TO THE KITCHEN EQUIPMENT LOAD PURSUANT TO NEC 220–20 AND NEC TABLE 220–20.
3. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMODELED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.



T1 **TEMPORARY KITCHEN - LIGHTING PLAN**
SCALE: 1/4" = 1'– 0"



T2 **TEMPORARY KITCHEN - ELECTRICAL PLAN**
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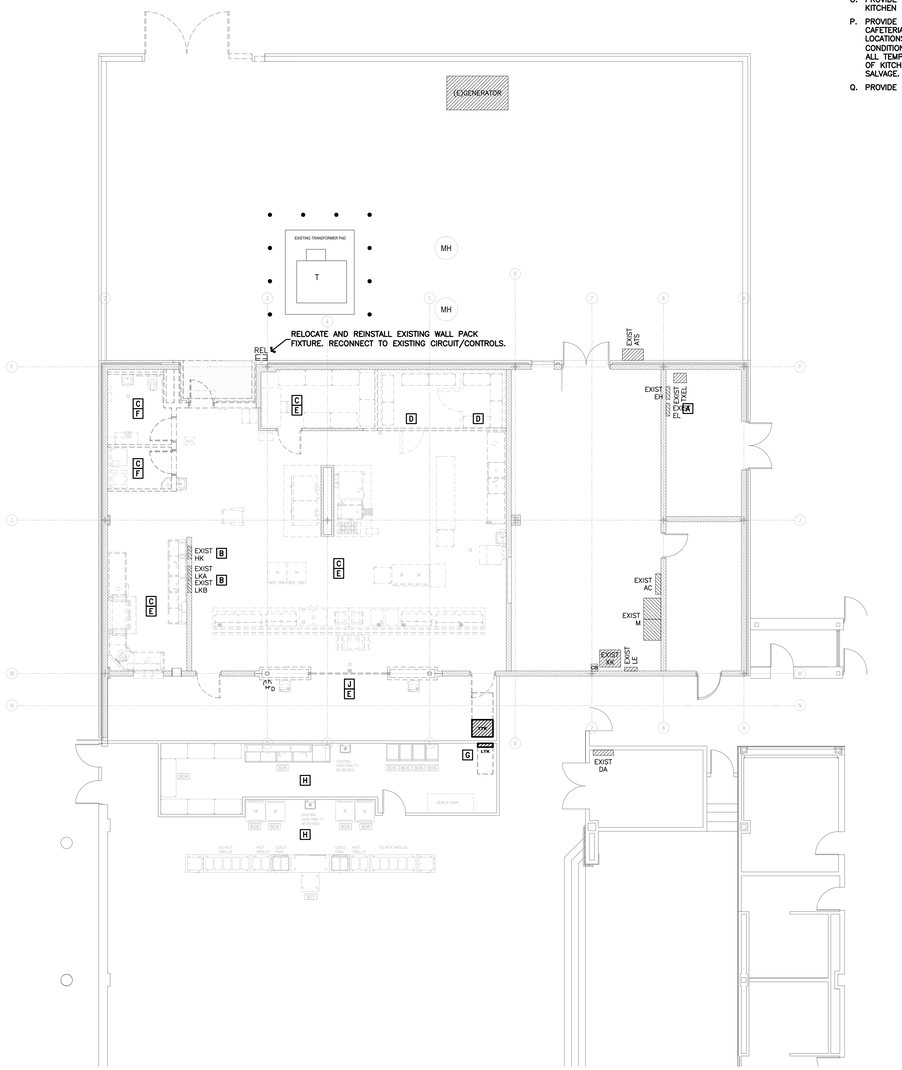

1 **DEMOLITION FLOOR PLAN**
SCALE: 1/8" = 1'– 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

DEMOLITION NOTES:

A. EXISTING STANDBY GENERATOR PANEL TO REMAIN.

B. EXISTING KITCHEN PANELS TO BE REPLACED WITH NEW. MODIFY EXISTING WALLS TO MATCH NEW PANEL LAYOUTS AND DIMENSIONS.

C. EXISTING LIGHTING FIXTURES AND CEILING DEVICES TO BE REMOVED THROUGHOUT.

D. EXISTING WALK–IN COOLER/FREEZER AND ASSOCIATED EQUIPMENT TO BE REMOVED.

E. EXISTING WALL ELECTRICAL DEVICES TO BE REMOVED. EXISTING J–BOXES MAY BE REUSED WHERE NEW DEVICES ARE TO BE INSTALLED AT THE SAME LOCATIONS.

F. EXISTING ELECTRICAL DEVICES TO BE REMOVED.

G. NEW 208Y/120V PANEL AND TRANSFORMER FOR TEMPORARY KITCHEN TO BE INSTALLED PRIOR TO DEMOLITION. PANEL AND TRANSFORMER TO BE REMOVED AT END OF KITCHEN RENOVATION AND TURNED OVER TO THE DISTRICT. INSTALL TRANSFORMER ON PREMADE FIBERCRETE PAD AND WAFFLE TYPE VIBRATION ISOLATION PADS. DO NOT PROVIDE A POURED IN PLACE CONCRETE PAD AT THIS LOCATION.

H. PROVIDE RECEPTACLES AND LIGHT FIXTURES FOR TEMPORARY KITCHEN DURING RENOVATION. ALL TEMPORARY DEVICES AND EQUIPMENT TO BE REMOVED AT END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE.

I. CONDUITS ROUTED FROM TEMPORARY KITCHEN WALL AND BENEATH SERVING LINE. PROVIDE MULTICHANNEL ROLLOVER CABLE PROTECTOR FOR EXPOSED CONDUITS NOT UNDER THE SERVING LINE. ALL CONDUITS UNDER THE SERVING LINE SHALL BE SECURED TO/ROUTED ON TOP OF UNISTRUT AND NOT DIRECTLY ON THE FLOOR. DO NOT ANCHOR UNISTRUT TO THE EXISTING FLOORING. COORDINATE POWER AND DATA OUTLET LOCATIONS WITH OTHER TRADES.

J. REMOVE EXISTING LIGHT FIXTURES ABOVE NEW KITCHEN EXTENSION. MODIFY EXISTING WIRING TO MAINTAIN REMAINING FIXTURE OPERATION.

K. HARDWIRE KITCHEN EQUIPMENT TO LOCAL ON/OFF SWITCH. TYPICAL.

L. SURFACE MOUNT FIXTURES ON TEMPORARY KITCHEN CEILING. TYPICAL.

M. WIRE TEMPORARY KITCHEN FAN TO LOCAL LIGHTING CIRCUIT AND CONTROLS. FAN SHALL BE ON/OFF WITH LIGHTS.

N. EXISTING EXTERIOR LIGHT FIXTURES TO BE REMOVED.

O. PROVIDE NEW FIRE ALARM DEVICES AS PART OF THE TEMPORARY KITCHEN BUILDOUT.

P. PROVIDE NEW TEMPORARY LIGHT FIXTURES IN THE EXISTING CAFETERIA CEILING ABOVE THE SERVING LINE. COORDINATE LOCATIONS WITH TEMPORARY SERVING LINE AND EXISTING CONDITIONS. CONNECT TO EXISTING LIGHTING CONTROLS/CIRCUIT. ALL TEMPORARY LIGHT FIXTURES SHALL BE REMOVED AT THE END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE. PROVIDE REPLACEMENT CEILING TILES.

Q. PROVIDE IN–USE WEATHERPROOF COVER FOR RECEPTACLE.

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FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL

STATE OF TEXAS — GEORGE L. STANTON — 38582 — REGISTERED — PROFESSIONAL ENGINEER
07.18.2025

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PROJ. NO.: 23-25
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ELECTRICAL DEMO AND TEMP PLANS

o-ED.100

STANTON ENGINEERING GROUP
INFORMATION PROVIDED (713) 300–6080 | TEXAS ENGINEERING FIRM REG. NO.F–12322 | 1300 W. SAM HOUSTON PARKWAY S., SUITE 125, HOUSTON, TX 77042

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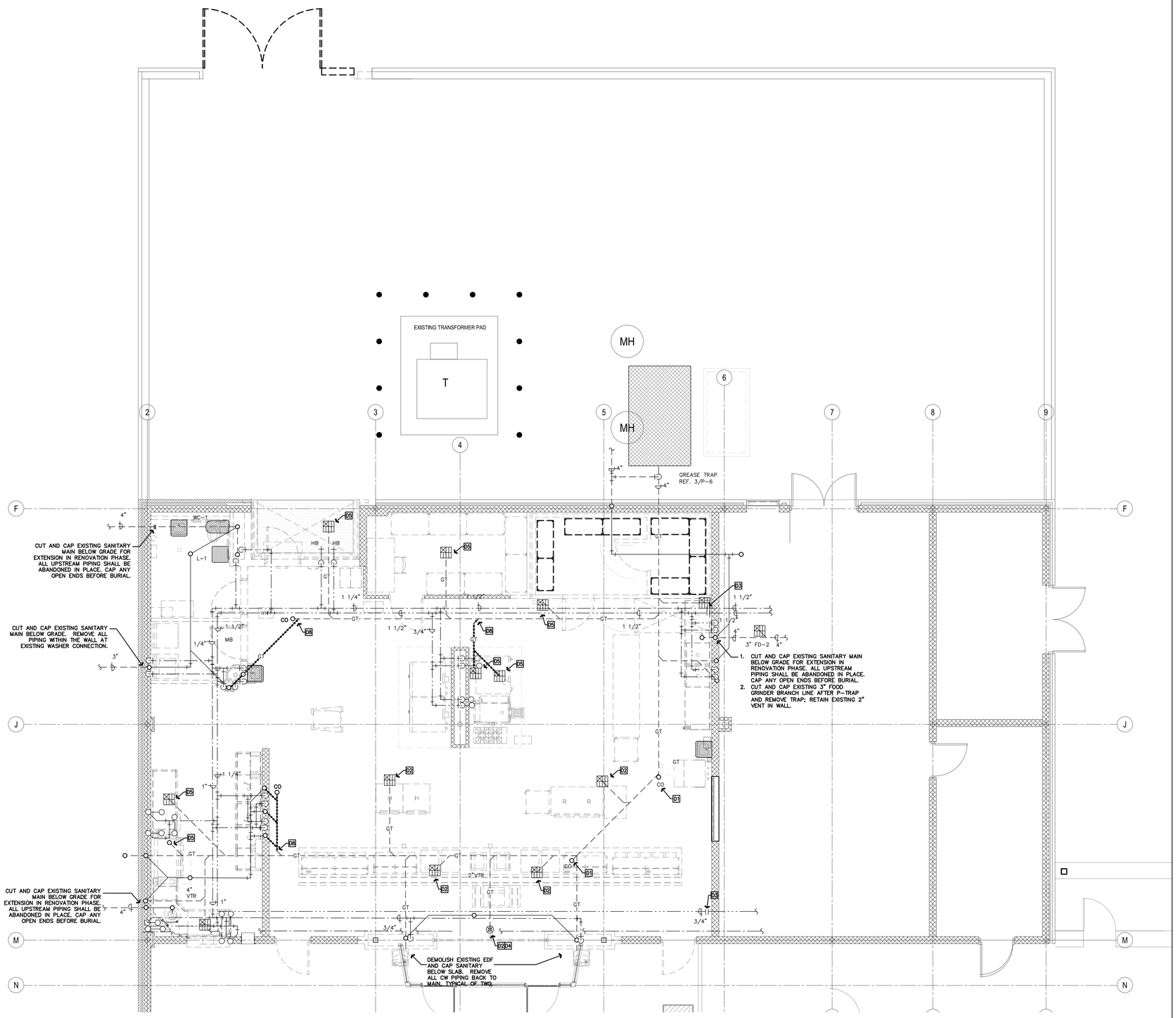

DEMOLITION KEYED NOTES

D1 EXISTING CLEAN OUT SHALL BE REPLACED WITH NEW. CHIP OUT SLAB AROUND CLEANOUT TO REMOVE.

D2 EXISTING FLOOR DRAIN SHALL BE REPLACED WITH NEW, INCLUDING P-TRAP. CHIP OUT SLAB AROUND DRAIN TO REMOVE FLOOR DRAIN AND EXISTING P-TRAP.

D3 CUT AND CAP EXISTING HW/CW FOR FUTURE EXTENSION. DEMOLISH ALL PIPING WITHIN KITCHEN. DEMOLITION SHALL BE DELAYED UNTIL NEW CW MAIN AND HW PIPING LOOP IS INSTALLED IN PARALLEL. CW/HW SERVICE TO THE TEMPORARY KITCHEN SHALL BE UNINTERRUPTED DURING OCCUPIED HOURS. COORDINATE SWITCHOVER FROM EXISTING PIPING TO NEW WITH OCCUPANCY SCHEDULE.

D4 EXISTING FLOOR DRAIN TIED TO GREASE WASTE SYSTEM. DRAIN IS BEING USED FOR TEMPORARY KITCHEN INDIRECT WASTE AND SHALL REMAIN ACTIVE DURING OCCUPIED HOURS. COORDINATE DEMOLITION AND REPLACEMENT WITH TEMPORARY KITCHEN USAGE.

D5 DEMOLISH EXISTING DRAIN A CAP BELOW SLAB.

D6 EXISTING SPACE BEING DEMOLISHED. CAP EXISTING SANITARY MAIN BELOW SLAB AND REMOVE UPSTREAM PIPING. CUT/CHIP OUT SLAB AS REQUIRED AND REPAIR TO MATCH EXISTING.

D7 TEMPORARILY CAP EXISTING SANITARY MAIN BELOW SLAB AND REMOVE UPSTREAM PIPING. CUT/CHIP OUT SLAB AS REQUIRED AND REPAIR TO MATCH EXISTING. PIPING TO BE REPLACED WITH NEW TRUNK AND ADDITIONAL DRAIN BRANCH LINES.

D8 CUT AND CAP EXISTING SANITARY MAIN BELOW GRADE FOR EXTENSION IN RENOVATION PHASE. ALL UPSTREAM PIPING SHALL BE ABANDONED IN PLACE. CAP ANY OPEN ENDS BEFORE BURIAL.

1 PLUMBING DEMOLITION FLOOR PLAN

SCALE: 1/4" = 1'- 0"

STANTON ENGINEERING GROUP

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PLUMBING DEMOLITION FLOOR PLAN

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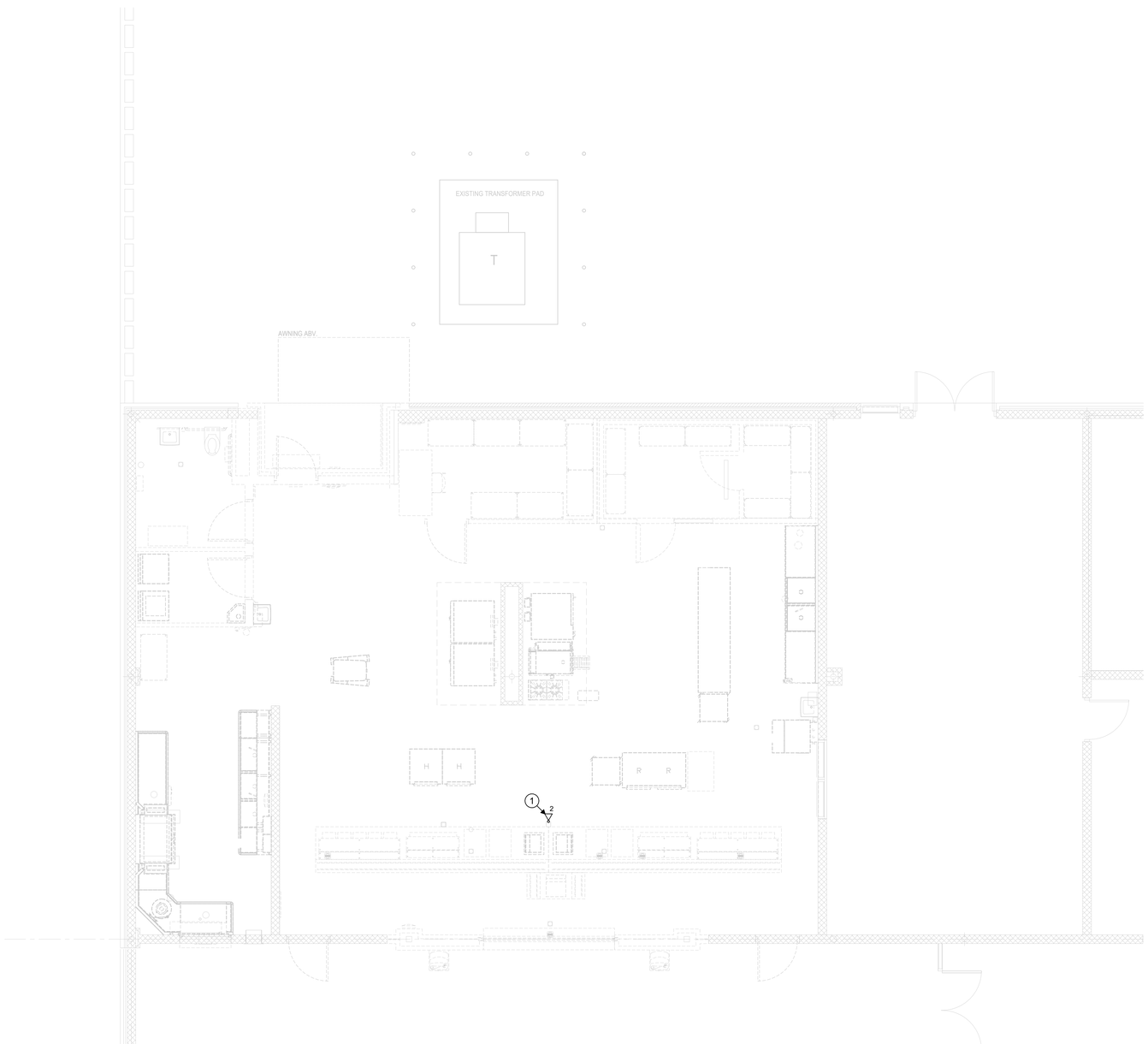

1 TECHNOLOGY DEMOLITION FLOOR PLAN
o-TD201 1/4" = 1'-0"

TECHNOLOGY DEMOLITION PLAN GENERAL NOTES

1. ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS SHALL REMAIN OPERATIONAL AT ALL TIMES DURING BUSINESS HOURS UNLESS OTHERWISE NOTED. ANY SYSTEM DOWNTIME SHALL BE SCHEDULED WITH THE ARCHITECT/ENGINEER AND OWNER AT LEAST TEN (10) WORKING DAYS IN ADVANCE. CONTRACTOR SHALL DEVELOP A PHASING PLAN AND SCHEDULE OF ANY REQUIRED SYSTEM DOWNTIME FOR REVIEW AND APPROVAL BY THE ARCHITECT/ENGINEER AND OWNER PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. OWNER SHALL BE RESPONSIBLE FOR POWER DOWN AND START-UP OF ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT/ENGINEER AND OWNER AND PROVIDE A MINIMUM OF TEN (10) WORKING DAYS NOTICE FOR SCHEDULING OF ANY REQUIRED DOWNTIME.
3. ALL EXISTING WIRELESS ACCESS POINTS ARE TO BE REMOVED AND RETURNED TO OWNER. CONTRACTOR SHALL RE-INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.
4. COORDINATE REMOVAL OF EXISTING CAMERA WITH OWNER/ARCHITECT DURING CONSTRUCTION.

TECHNOLOGY DEMOLITION PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

(1) EXISTING DATA/VOICE/WIRELESS ACCESS POINT OUTLET TO BE REMOVED. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL 4-PAIR CABLES AND WORKSTATION CONNECTING HARDWARE TERMINATED AT THIS LOCATION. IF LOCATION IS NOT RE-USED, CONTRACTOR SHALL SUPPLY AND INSTALL BLANK COVER. CONTRACTOR IS TO REMOVE EACH CABLE TO BE DEMOLISHED FROM THE PATCH PANEL OR TERMINATION BLOCK IN THE TELECOMMUNICATIONS ROOM. REMOVE THE ENTIRE LENGTH OF THE CABLE AND THE CORRESPONDING MODULAR CONNECTOR, FACEPLATE AND ACCESSORIES. NO ABANDONED CABLING IS TO BE LEFT ABOVE CEILING. CONTRACTOR SHALL INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.

(2) EXISTING VIDEO SURVEILLANCE CAMERA. CONTRACTOR SHALL REMOVE AND RETURN TO OWNER.

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03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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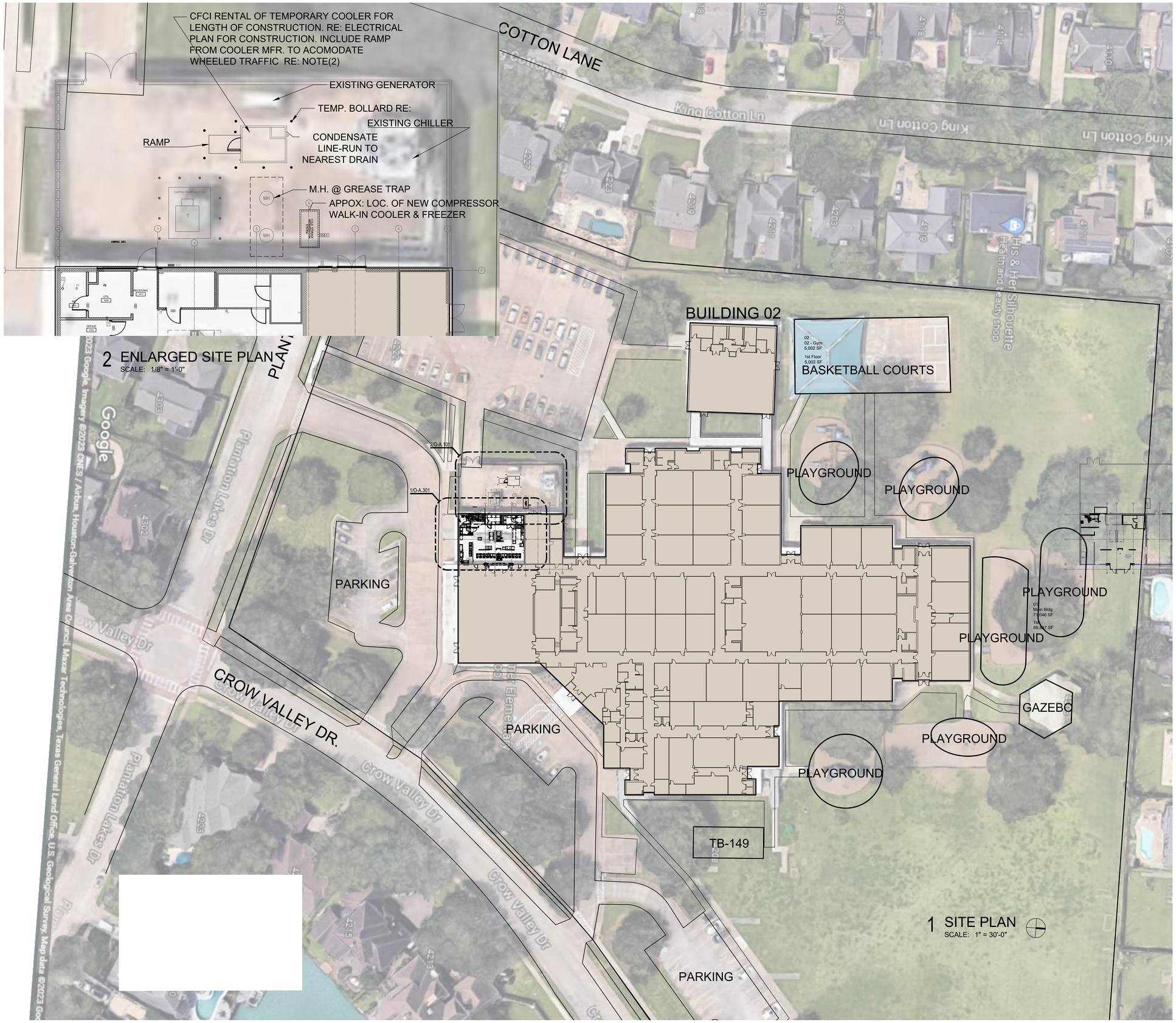
TECHNOLOGY DEMOLITION FLOOR PLAN

SHEET NO.
o-TD201



2 ENLARGED SITE PLAN
SCALE: 1/8" = 1'-0"

1 SITE PLAN
SCALE: 1" = 30'-0"

NUMBERED NOTES: FOR 2/a-A.101

1. COOLER RENTAL UNIT; APPROX. 8' X 10' BASIS OF DESIGN: MODEL DT810 BY POLAR LEASING REFRIGERATION RENTAL
2. INCLUDE OPTIONAL DIAMOND TREAD RAMP SUITABLE FOR WHEELED TRAFFIC
3. LOCATION SHOWN IS SUBJECT TO OWNER APPROX. LOCATION MUST NOT BLOCK DELIVERIES TO REAR DOOR, MUST BE WITH 10' OF AREA DRAIN, AND WITHIN 100' OF ELECTRICAL POWER.
4. CONTRACTOR SHALL SCAN PAVING FOR BURIED UTILITIES BEFOR CUTTING CONC.

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MWA ARCHITECTS
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HOUSTON, TEXAS 77079

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DATE: 07/18/25
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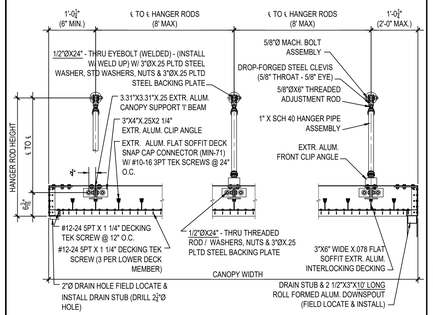
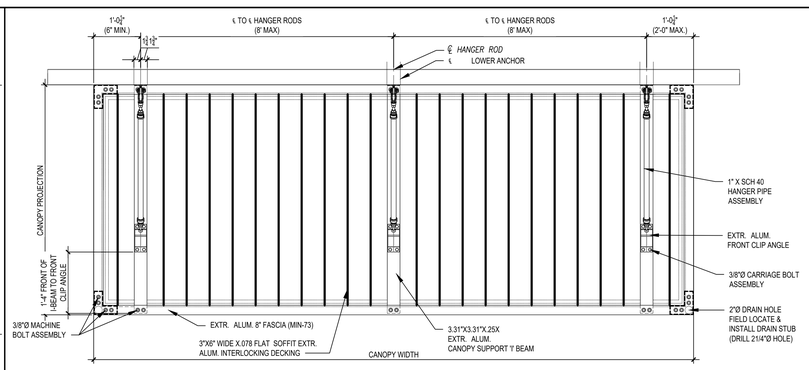
SITE PLAN

o-A.101

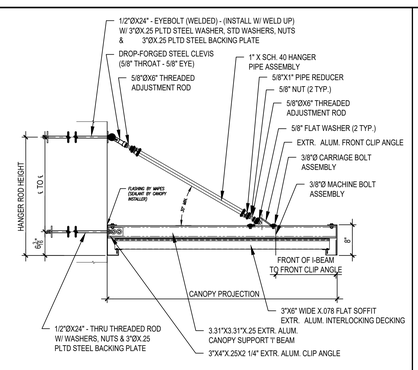
F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\O-Palmer ES\o-A.101 SITE PLAN.dwg Jul 23, 2025 - 4:25pm



10 CANOPY DETAILS
3/4" = 1'-0"



11 CANOPY PLAN
3/4" = 1'-0"



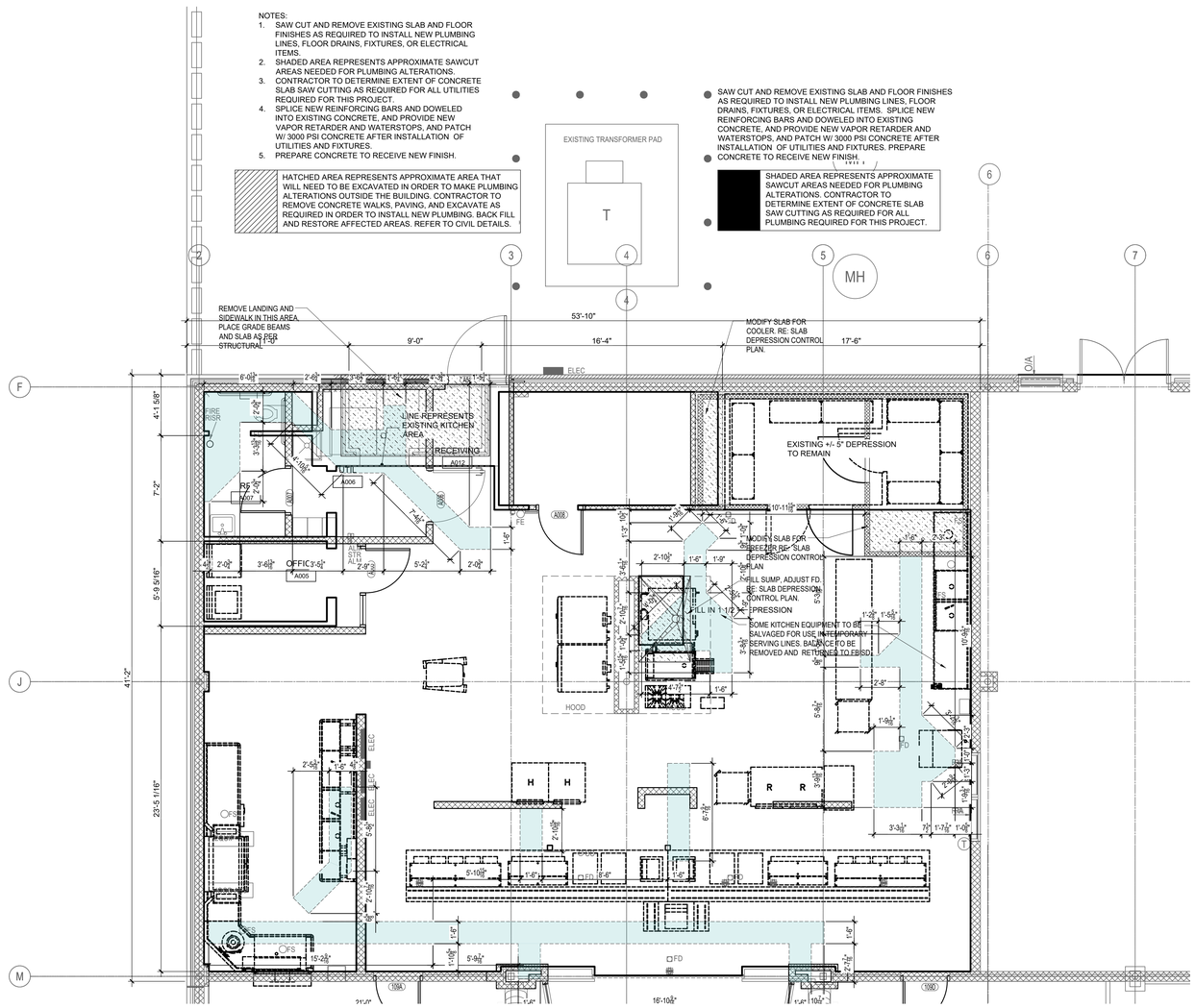
12 CANOPY SECTION
3/4" = 1'-0"

NOTES:
1. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, FIXTURES, OR ELECTRICAL ITEMS.
2. SHADED AREA REPRESENTS APPROXIMATE SAWCUT AREAS NEEDED FOR PLUMBING ALTERATIONS.
3. CONTRACTOR TO DETERMINE EXTENT OF CONCRETE SLAB SAW CUTTING AS REQUIRED FOR ALL UTILITIES REQUIRED FOR THIS PROJECT.
4. SPLICE NEW REINFORCING BARS AND DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES.
5. PREPARE CONCRETE TO RECEIVE NEW FINISH.

HATCHED AREA REPRESENTS APPROXIMATE AREA THAT WILL NEED TO BE EXCAVATED IN ORDER TO MAKE PLUMBING ALTERATIONS OUTSIDE THE BUILDING. CONTRACTOR TO REMOVE CONCRETE WALKS, PAVING, AND EXCAVATE AS REQUIRED IN ORDER TO INSTALL NEW PLUMBING. BACK FILL AND RESTORE AFFECTED AREAS. REFER TO CIVIL DETAILS.

SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS AND DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.

SHADED AREA REPRESENTS APPROXIMATE SAWCUT AREAS NEEDED FOR PLUMBING ALTERATIONS. CONTRACTOR TO DETERMINE EXTENT OF CONCRETE SLAB SAW CUTTING AS REQUIRED FOR ALL PLUMBING REQUIRED FOR THIS PROJECT.



1 SLAB DEPRESSION PLAN
SCALE: 1/4" = 1'-0"

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FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

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7/15/2025

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11767 KATY FREEWAY, SUITE 430
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PROJ. NO.: 23-25
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SLAB DIMENSION CONTROL PLAN

o-A.200

2 CODE ANALYSIS

SCOPE OF WORK: KITCHEN REPLACEMENT OF FLOOR, WALL, AND CEILING FINISHES, AS WELL AS, REPLACEMENT OF KITCHEN EQUIPMENT. PROVIDE ADDITIONAL KITCHEN STORAGE FOR CEP. UPGRADE TO BACK DOOR DELIVERY AREA.

ADOPTED CODES WITH AMMENDMENTS OF CITY OF MISSOURI CITY, TX

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL RESIDENTIAL CODE
- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2023 NATIONAL ELECTRIC CODE NFPA 70
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2021 INTERNATIONAL FUEL GAS CODE
- 2021 INTERNATIONAL FIRE CODE

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY:

SPRINKLERED

INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS **B**

CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS **C**

ROOMS AND ENCLOSED SPACES **C**

FLOORING SHALL BE CLASS II

2021 INTERNATIONAL EXISTING BUILDING CODE

301.3.1 PRESCRIPTIVE COMPLIANCE METHOD. REPAIRS, ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH CHAPTER FIVE OF THIS CODE IN BUILDINGS COMPLYING WITH THE INTERNATIONAL FIRE CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

302.3 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE.

302.4 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED THAT NO UNSAFE CONDITION IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT PERMIT THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

ALTERATION - LEVEL 1 INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES THAT SERVE THE SAME PURPOSE.

ALTERATION - LEVEL 2 INCLUDE THE ADDITION OR ELIMINATION OF ANY DOOR OR WINDOW, THE RECONFIGURATION OR EXTENSION OF ANY SYSTEM, OR THE INSTALLATION OF ANY ADDITIONAL EQUIPMENT, AND SHALL APPLY WHERE THE WORK IS EQUAL TO OR LESS THAN 50% OF THE BUILDING AREA.

THIS BUILDING'S CONSTRUCTION IS TYPE IIB.

THIS BUILDING'S OCCUPANCY IS E.

THIS BUILDING'S IS SPRINKLERED.

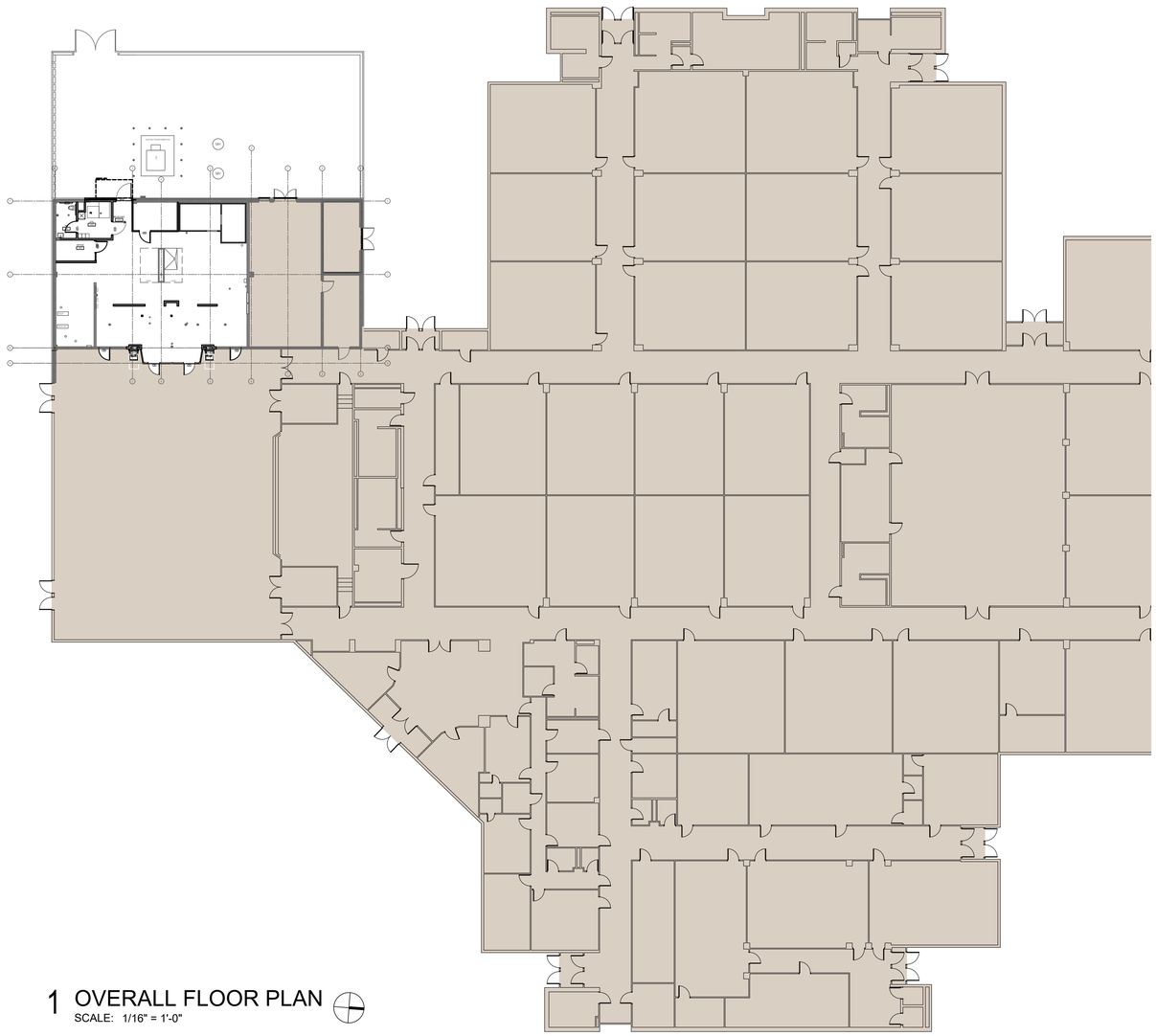
THERE WILL NOT BE ANY MODIFACATIONS TO THE HOOD SYSTEMS IN THE KITCHENS BEYOND REPLACEMENT OF MOTOR FOR LIKE KIND IF NEEDED.

THE BUILDING WILL NOT HAVE ADDITIONAL SQUARE FOOTAGE AS PART OF THE WORK.

NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODES

RESPONSIBILITY MATRIX

ITEM				CONTRACTOR RESPONSIBILITY		OWNER RESPONSIBILITY		NOTES
EQUIPMENT	**MAKE**	**MODEL**	**BASIS OF DESIGN**	FURNISHED	INSTALL	FURNISHED	INSTALL	
MARKERBOARD			MUST BE MAGNETIC; LOW GLOS, WHITE. NO GREY ALLOWED, 5' X 10'	X	X			
MOTORIZED FOLDING PARTITION			TOP SUPPORTED AND CONTINUOUSLY HINGED, MADE OF 3" THICK STEEL WITH FULL SOUND SEALS. THEY FEATURE AUTOMATIC FLOOR SEALS THAT DEPLOY WHEN POSITIONED. MARKERBOARD FINISHES ARE SUGGESTED FOR CLASSROOM USE. LARGE PARTITIONS SHOULD BE ELECTRONICALLY OPERATED, INTEGRATED WITH THE SCHOOL SYSTEM, AND SUPPORTED FROM THE BOTTOM IN A RECESSED MANNER.	X	X			
PAPER TOWEL DISPENSER			1 PAPER TOWEL DISPENSER PER SINK		X	X		
SOAP DISPENSER			1 SOAP DISPENSER PER SINK		X	X		
COMMERCIAL WASHER	GE	GTW760CPLOG	STAINLESS STEEL; ASTM A666, TYPE 304 WITH NUMBER 4 FINISH. ELECTRIC, 480 VOLTS, 40 LB CAPACITY, MINIMUM EXTRACTOR FORCE 140 G FACTOR.	X	X			
COMMERCIAL DRYER	GE	GTD75ECPLDG	HEAVY DUTY EMBOSSED STEEL WITH ELECTROSTATICALLY APPLIED BACKED ENAMEL FINISH.	X	X			
MOP RACK			BROOM AND MOP HANGGERS FOR A MINIMUM OF TWELVE (12) HANGERS TO BE PROVIDED IN THE CONTRACT	X	X			
KITCHEN MENU SYSTEM DEVICE			RE: J-QP1.0 SF EQUIPMENT PLAN	X	X			REFERED TO IT DRAWINGS
LOCKERS			12"W X 15"D, 2 TIER, 60" HIGH. 16 GA. DOOR WITH 20GA. BODY	X	X			
MIRROR			TOP EDGE 74 INCHES (1880 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND & BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES (1015 MM) MAXIMUM	X	X			
GRAB BARS			AS REQUIRED BY ADA	X	X			
HOOKS			J-HOOKS	X	X			
TIME CLOCK	KRONOS		EXISTING UNIT		X			COORDINATE HEIGHT, DATA, POWER AND ROUGH-IN REQUIREMENTS WITH FBISD IT. REMOVE, PROTECT & REINSTALL EXISTING TIME CLOCK.
KITCHEN OFFICE FURNITURE								
AUSTIN PARKWAY ES						X	X	
PECAN GROVE ES						X	X	
SETTLERS WAY ES						X	X	
SUGAR MILL ES						X	X	
HIGHLANDS ES						X	X	
PALMER ES						X	X	
HUNTERS GLEN ES						X	X	



1 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

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SEAL

7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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OVERALL FLOOR PLAN

o-A.201

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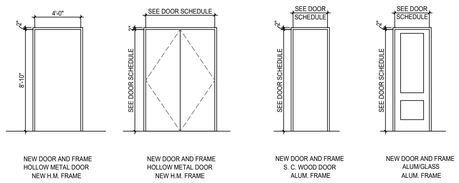
DOOR SCHEDULE

DOOR #	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FIRE RATING	FRAME THICKNESS	FRAME FINISH	KEY	HARDWARE	DETAILS			REMARKS
											SILL	JAMB	HEAD	
A005	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		103		22/A00-01	16/A00-01	
A006	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501		22/A00-01	16/A00-01	
A007	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		341		22/A00-01	16/A00-01	
A008	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501C		22/A00-01	16/A00-01	
A012	4'-0"	X 7'-0"	HM1	H.M.	PAINT	NR	6"	PAINT HM		715V	21/A00-01	04/A00-01	04/A00-01	
109A	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501H		22/A00-01	16/A00-01	
109B	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ANOD AL	NR	4 1/2"	ANOD AL		C201AH	18/A00-01	10&11/A00-01	23&24/A00-01	CARD READER, CLOSER, BUZZER
109C	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ANOD AL	NR	4 1/2"	ANOD AL		C201AH	18/A00-01	10&11/A00-01	23&24/A00-01	CARD READER, CLOSER, BUZZER
109D	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501H		22/A00-01	16/A00-01	



2 DOOR SCHEDULE

FLOOR PLAN - GENERAL NOTES

1. REFER TO SHEET FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SCHOOL KITCHENS.
2. REFER TO SHEET FOR PARTITION TYPES.
3. EXIXSTING EXPOSED CONDUITS AND DATA CABLING IN WIREMOLD TO BE ROUTED INSIDE WALLS (EXCEPT AT WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS). PATCH AND REPAIR AS REQUIRED TO ACHIEVE SMOOTH CLEAN WALL SURFACE.

PARTITION LEGEND

- EXISTING CMU PARTITION
- NEW CMU SCHEDULED PARTITION
- EXISTING METAL PARTITION
- NEW FRAMED SCHEDULED PARTITION

3 FLOOR PLAN NOTES

FLOOR PLAN - KEYED NOTES

(NOT ALL NOTES USED ON EACH SHEET)

01 PROVIDE NEW MOP SINK UTILITY SHELF
RE: PLUMBING FOR MOP SINK
RE: SPEC 10 28 00 FOR UTILITY SHELF

02 REMOVE, STORE & REPLACE WALL MOUNTED FIRE EXTINGUISHER

03 PROVIDE NEW WALL MOUNTED FIRE EXTINGUISHER
RE: SPEC SECTIONS 10 44 13

04 PROVIDE NEW LOCKERS
RE: SPEC 10 51 13.

05 PROVIDE WASHER AND DRYER
RE: SPEC 11 45 20

06 REMOVE, PROTECT & REINSTALL WALL MOUNTED CLOCK.

07 PROVIDE CONDENSING UNIT
FOR WALK-IN COOLER/FREEZER
RE: MECHANICAL AND SPEC 11 40 00

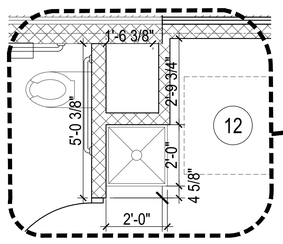
08 PROVIDE POWER AND DATA FOR MENU BOARD.
RE: ELECTRICAL, TECHNOLOGY DRAWINGS & FOOD SI

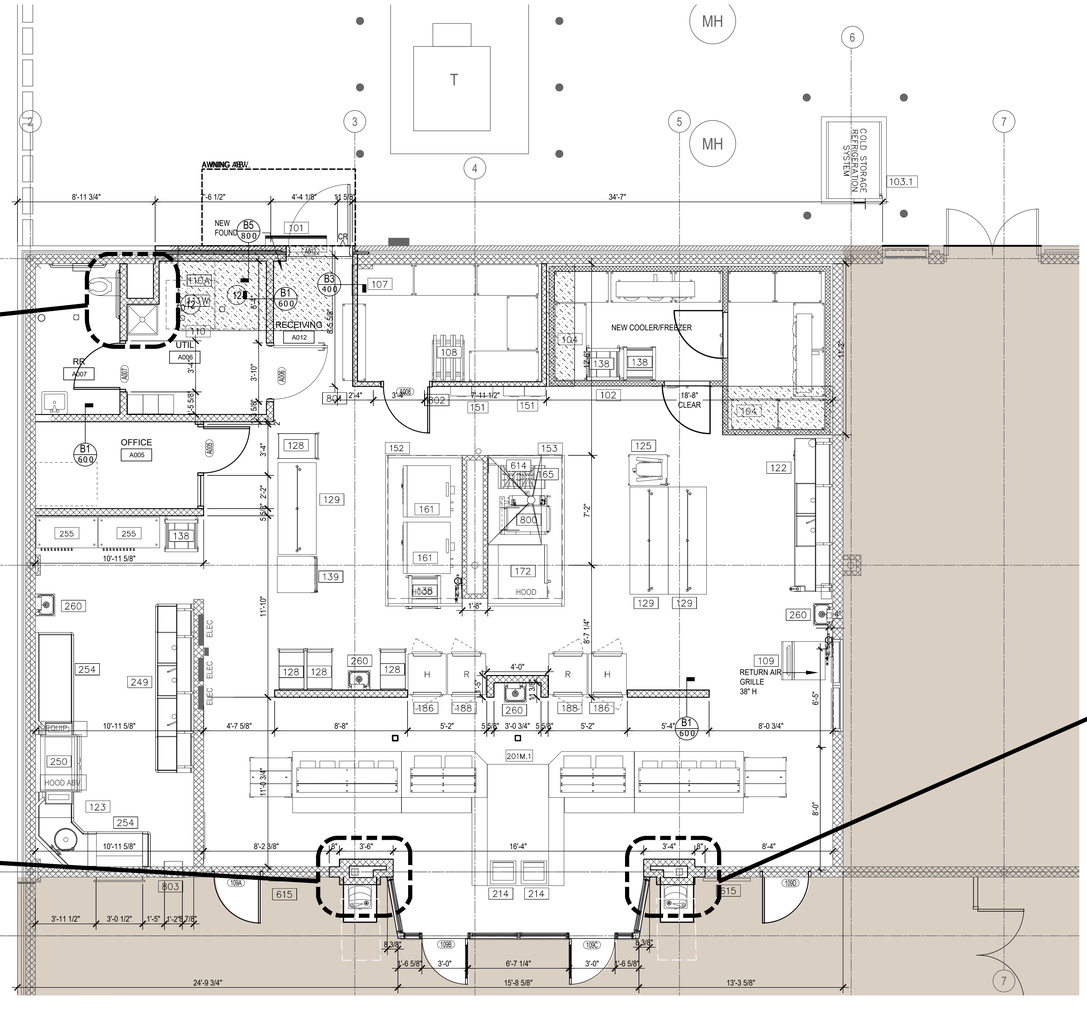
09 PROVIDE P-LAM SHELVING
REFER TO DETAIL FOR BRACKET SUPPORT

10 FURNITURE & NON FOOD SVE EQUIPMENT RETURN TC STORAGE

11 INSPECT & SREVICE TOLLING COUNTER DOORS. RETU NEW CONDITION.

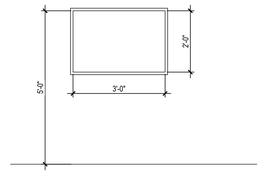
12 COMMERCIAL CLOSED WASHER 40LB CAPACITY.
COMMERCIAL CLOSED DRYER 55LB CAPACITY.
BASIS OF DESIGN: WASHER; SPEED QUEEN SYN040
DRYER; SPEED QUEEN ST055.
REFER TO ELECTRICAL & PLUMBING FOR CONNECTIOI





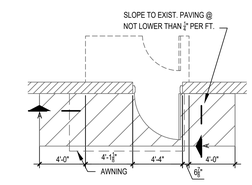
1 KITCHEN PLAN

SCALE: 1/4" = 1'-0"



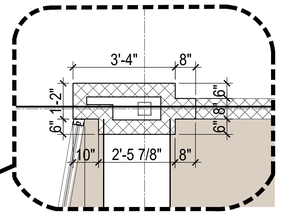
4 MAKERBOARD ELEVATION

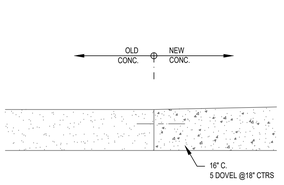
SCALE: 1/2"=1'-0"



5 RAMP @ REAR DOOR

SCALE: 3/16"=1'-0"





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SCALE: 1/2"=1'-0"

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REGISTERED ARCHITECT
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42651
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7/15/2025

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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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KITCHEN PLAN

o-A.301

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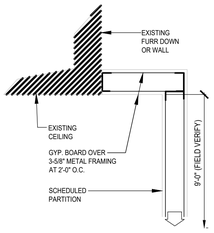


3 TEMPORARY LAYOUT SECTION

SCALE: 1"=1'0"

TEMPORARY KITCHEN FLOOR PLAN KEYED NOTES 05/A-A03-02

01 PROVIDE & INSTALL 555 SF OF RAM BOARD TO PROTECT EXISTING FLOORING. REMOVE AFTER CONSTRUCTION IS COMPLETE. CONTRACTOR MUST REPAIR FLOORING DAMAGED DURING CONSTRUCTION.

02 PROVIDE SCHEDULED PARTITIONS. BUILD PARTITIONS ON TOP OF RAM BOARD. DO NOT ATTACH PARTITIONS TO FLOOR.

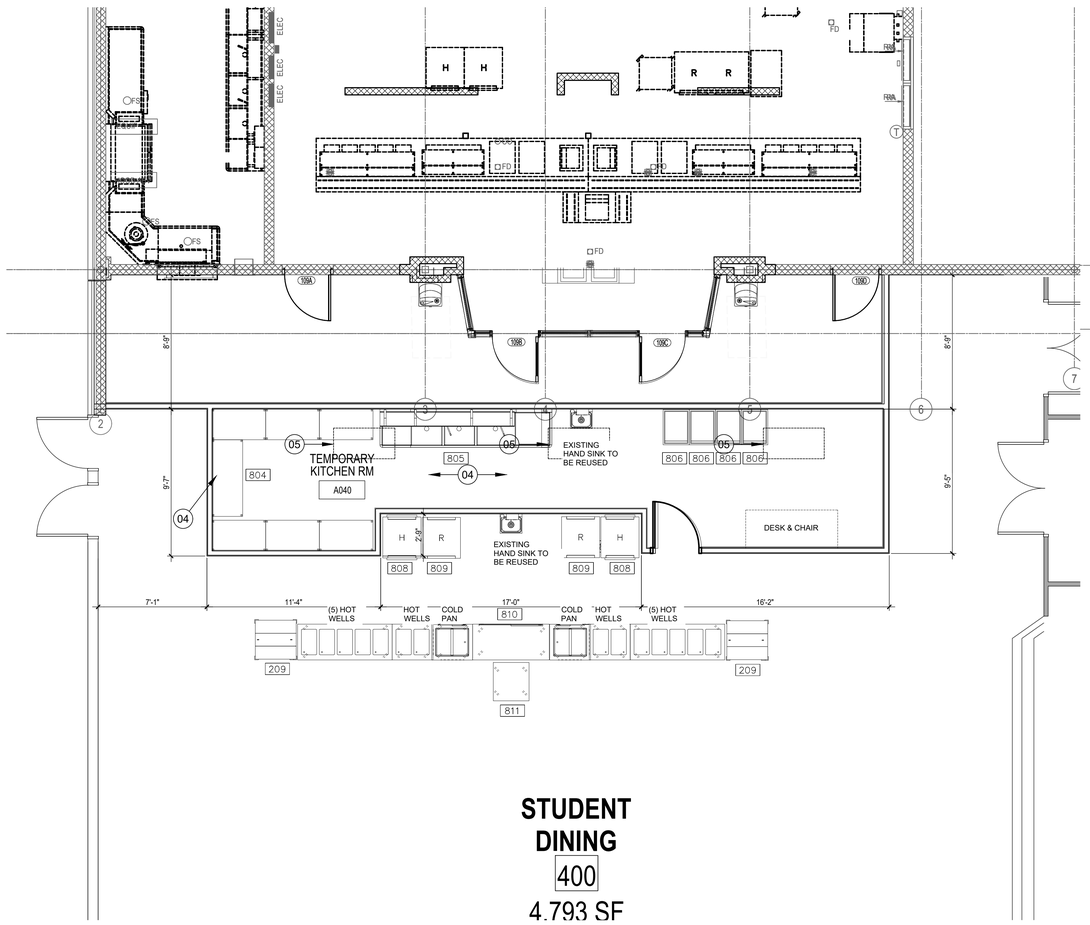
03 ATTACH PARTITIONS TO EXISTING WALL. REPAIR WALL TO MATCH EXISTING AFTER CONSTRUCTION IS COMPLETE.

TEMPORARY KITCHEN RCP KEYED NOTES 03/A-A03-02

04 ALL NEW SCHEDULED PARTITIONS AND CEILINGS FOR TEMPORARY STORAGE LAYOUT TO BE EPOXY PAINTED SW 7014 EIDER WHITE WITH SPECIFIED 4" RUBBER BASE. REMOVE WHEN CONSTRUCTION IS COMPLETED.

05 MOUNT TEMPORARY FLUORESCENT LIGHTS TO TEMPORARY CEILING.

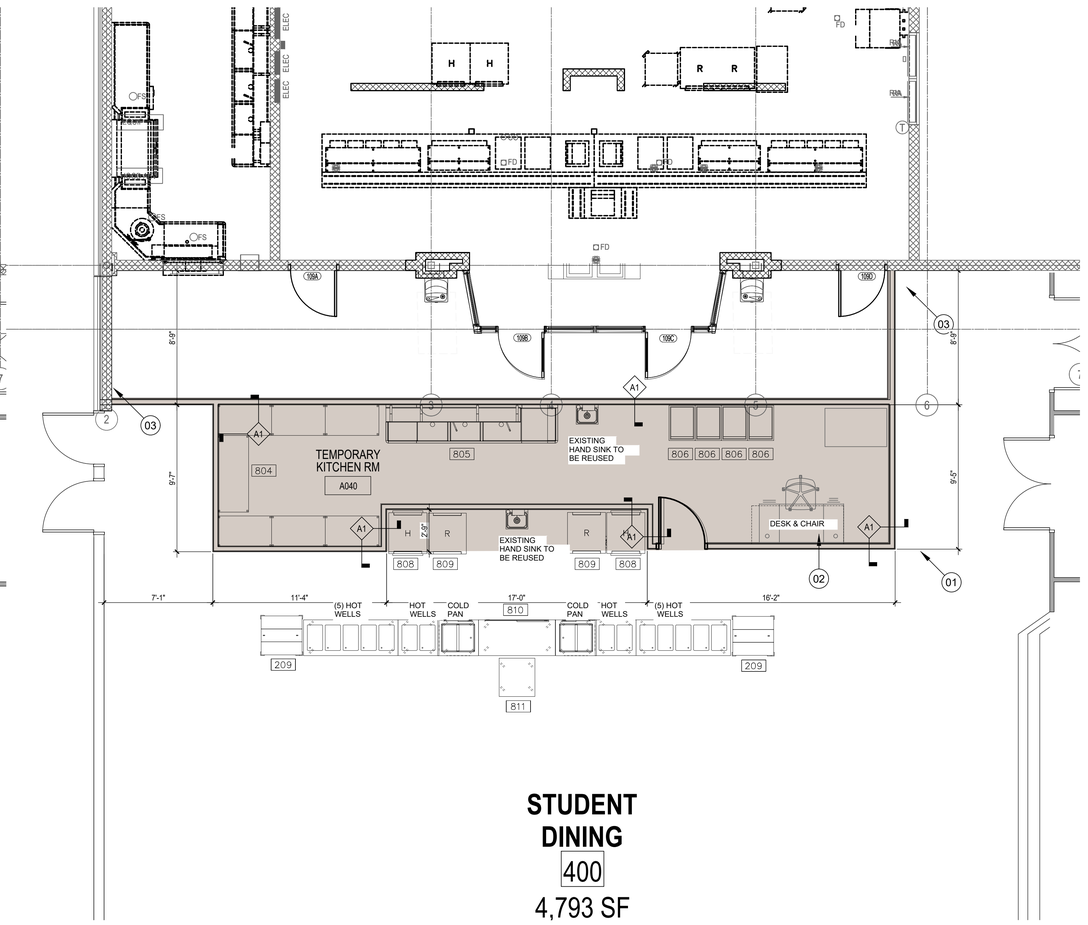
4 KEYED NOTES



STUDENT DINING
400
4,793 SF

1 TEMPORARY KITCHEN RCP

SCALE: 1/4" = 1'-0"



STUDENT DINING
400
4,793 SF

2 TEMPORARY KITCHEN FLOOR PLAN

SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

O

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL
7/15/2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

TEMPORARY KITCHEN LAYOUT
o-A.302

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RCP - GENERAL NOTES

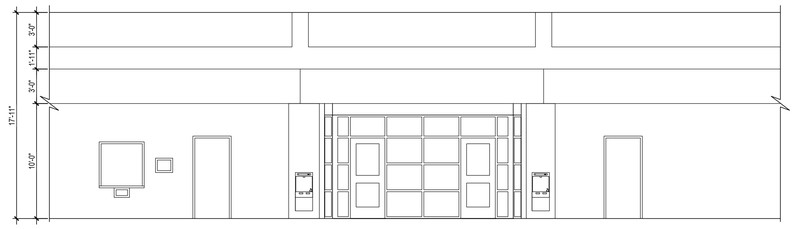
1. CEILING GRID SHALL BE INSTALLED TO MATCH EXISTING GRID'S POINT OF ORIGIN. THIS WILL REDUCE NEED TO RE-LOCATE ABOVE CEILING DUCTS, SPRINKLER PIPING AND OTHER SUPPORT SYSTEMS.
2. REFER TO SHEET A00-01 FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SEVEN SCHOOL KITCHEN REMODELS.
3. LIGHTING LEVELS SHOULD BE 50 FC IN PREPARATION AREAS, WARE WASH AND SERVING LINES, OR MEET MINIMUM HEALTH CODE LEVELS, WHICHEVER ITS GREATER. SEE MEP PLANS
4. REPLACE HVAC DEVICES. REPLACE LIGHTING WITH 24"x24" LED LAY IN LIGHT AS SCHEDULED IN ELECTRICAL PLANS.
5. REFER TO MECHANICAL, ELECTRICAL SHEETS FOR DEVICE SCHEDULES.

RCP - NUMBERED NOTES

(01) PROVIDE 30"x30" MIN. ACCESS HATCH IN SOFFIT CENTERED ON MOTOR.

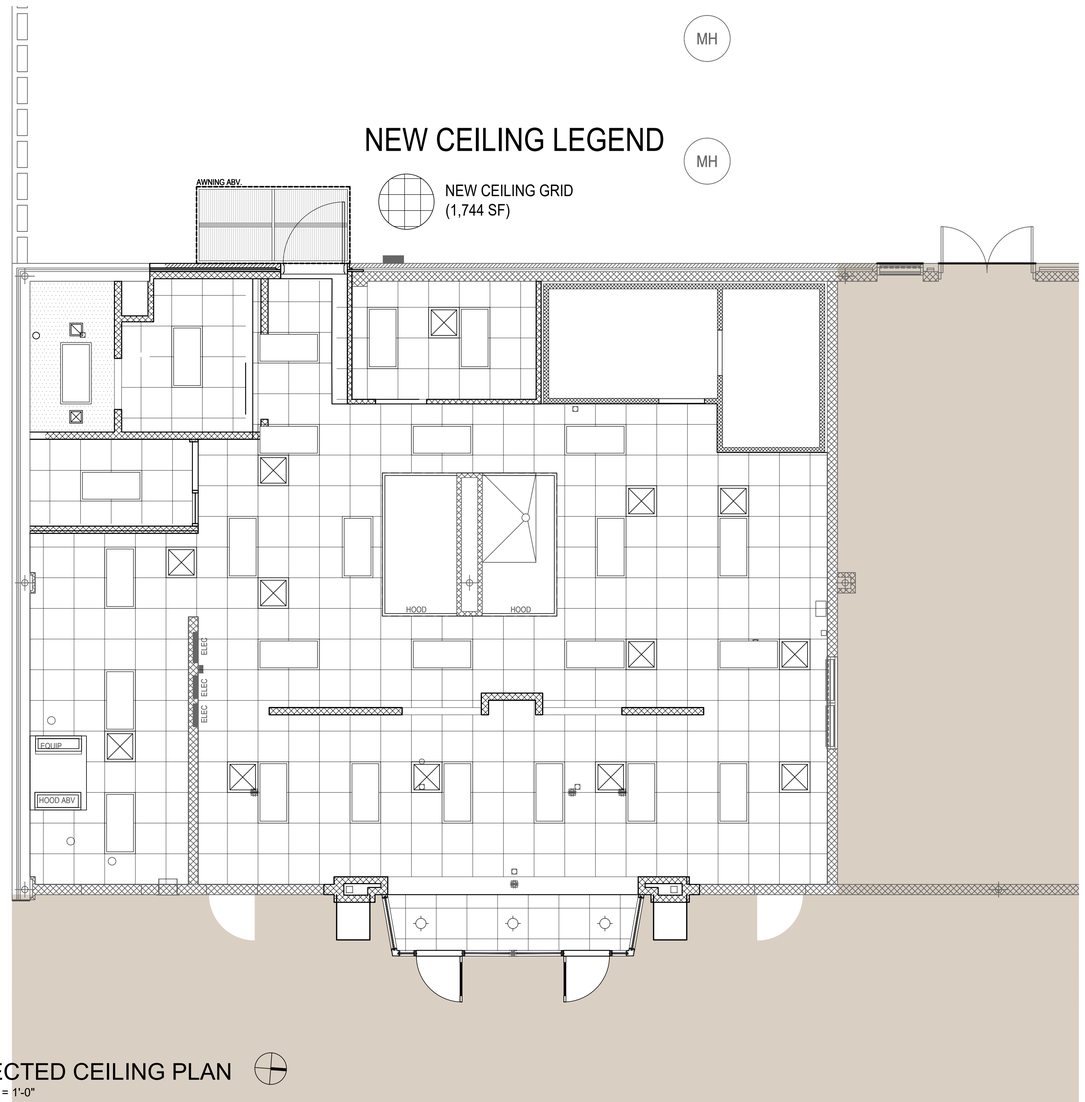
(02) AFTER LOWERING THE NEW POWER RETRACTION SYSTEM. REPAIR AND PAINT SOFFITS AND SIDWALLS OF FURR TO MATCH EXISTING.

2 RCP GENERAL NOTES



3 FOOD SERVICE AREA ELEVATION

SCALE: 3/16" = 1'-0"



1 REFLECTED CEILING PLAN

SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL
REGISTERED ARCHITECT
ROBERT L. MEYER
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
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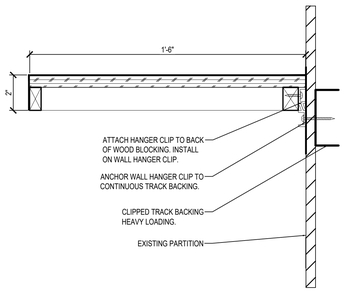
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

REFLECTED CEILING PLAN

o-A.401

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\O-Palmer ES\o-A.401 REFLECTED CEILING PLAN.dwg, Jul 23, 2025 - 4:27pm



3 SHELF SECTION CUT
SCALE: 3"=1'-0"

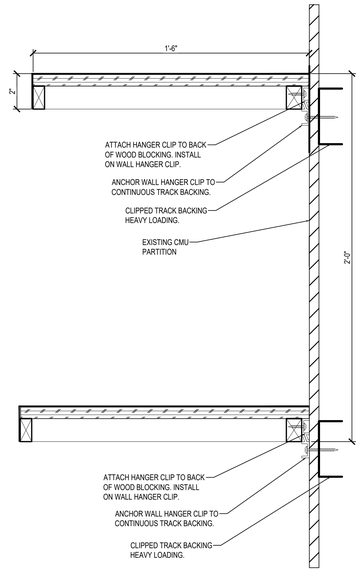
PAINT COLOR SCHEDULE
UNLESS OTHERWISE INDICATED FIELD COLOR IS PT-1 (SW 7014 EIDER WHITE)

SW 7014 EIDER WHITE (EPOXY PAINT)

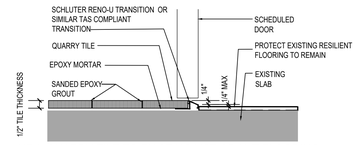
WALL TILE
CERAMIC WALL TILE (WT-1)
REFER TO TILE PATTERN AT SERVING AND RESTROOM
FIELD WALL TILE: DALTILE RITTENHOUSE SQUARE K175 BISCUIT (3X6)

A — PROVIDE ROOM SIGN TO REPLACE EXISTING. SEE LAYOUT FOR TYPE A OR TYPE B SIGN LOCATIONS.

2 FLOOR FINISH LEGEND

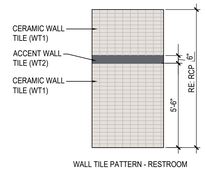


4 SHELF SECTION CUT
SCALE: 3"=1'-0"



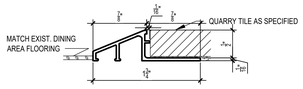
NEW QUARRY TILE TO EXISTING VCT OR LVT FLOORING TRANSITION OCCURS AT CENTERLINE OF DOOR

5 FLOOR TRANSITION - THRESHOLD
SCALE: 3"=1'-0"

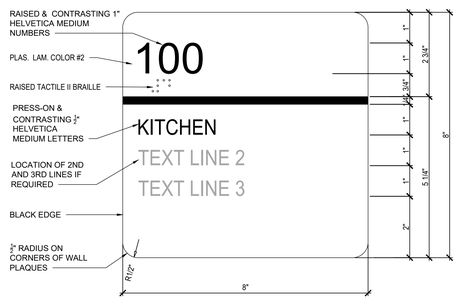


WALL TILE PATTERN - RESTROOM

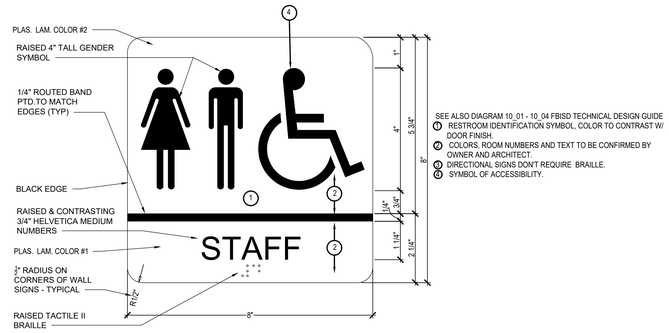
6 WALL TILE PATTERN
SCALE: 1/4"=1'-0"



14 SILL @ KITCHEN/DINING
SCALE: 1:1

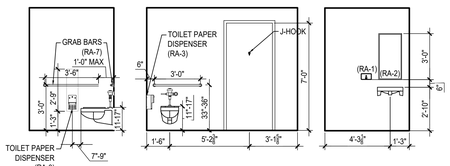


TYPE A
ROOM SIGNAGE - FIXED NAMES

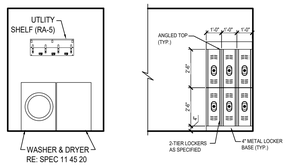


TYPE B
KITCHEN RESTROOM SIGNAGE

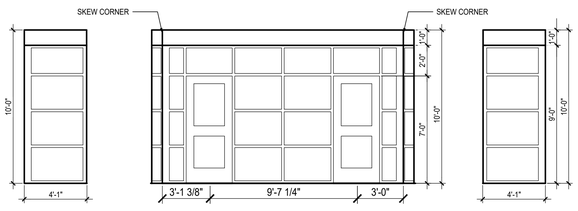
7 ROOM SIGNAGE
SCALE: 6"-1'-0"



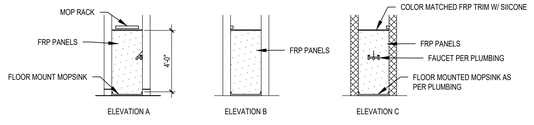
8 RR ELEVATIONS
SCALE: 1/4"=1'-0"



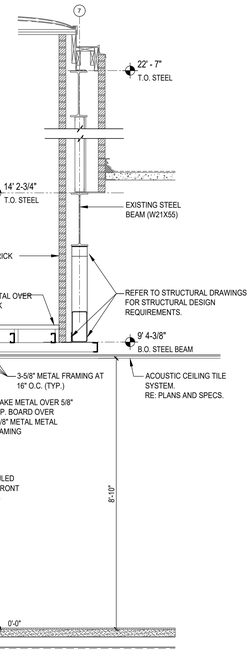
9 UTILITY ELEVATIONS
SCALE: 1/4"=1'-0"



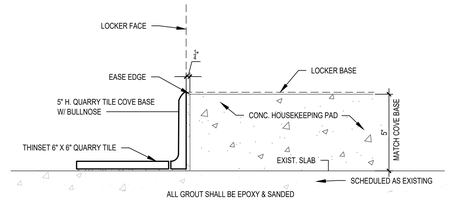
10 STOREFRONT ELEVATIONS
SCALE: 1/4"=1'-0"



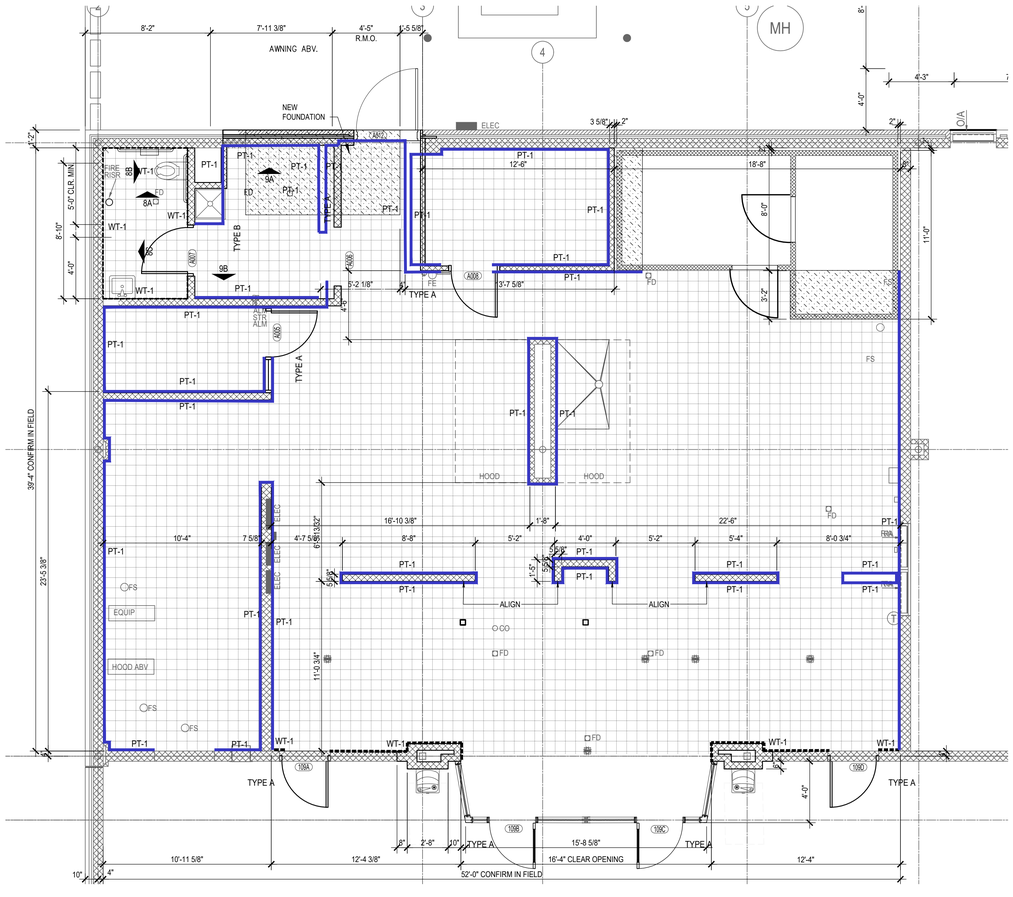
13 MOPSINK ELEVATIONS
SCALE: 1/4"=1'-0"



11 STOREFRONT SECTION
SCALE: 1/2"=1'-0"



12 LOCKER HOUSEKEEPING PAD
SCALE: 3"=1'-0"



1 FINISH FLOOR PLAN
SCALE: 1/4" = 1'-0"

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ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL

REGISTERED ARCHITECT — STATE OF TEXAS — 12651

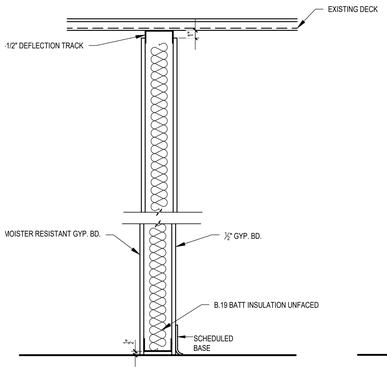
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

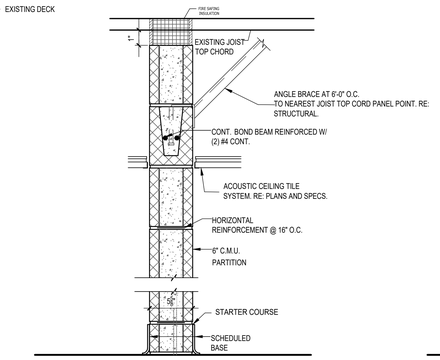
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FINISH FLOOR PLAN

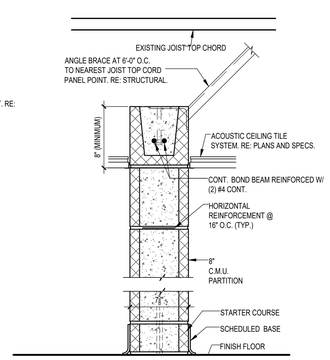
o-A.501



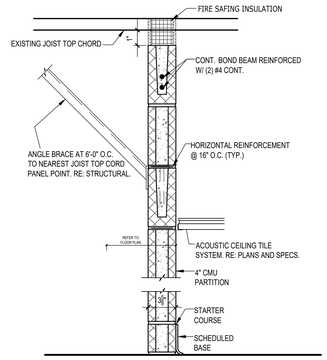
PARTITION A
SCALE: 1-1/2" = 1'-0"



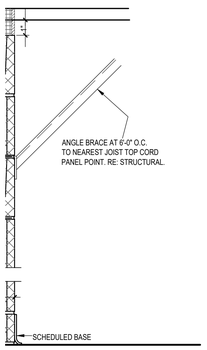
PARTITION B1
SCALE: 1-1/2" = 1'-0"



PARTITION B2
SCALE: 1-1/2" = 1'-0"



PARTITION B3
SCALE: 1-1/2" = 1'-0"



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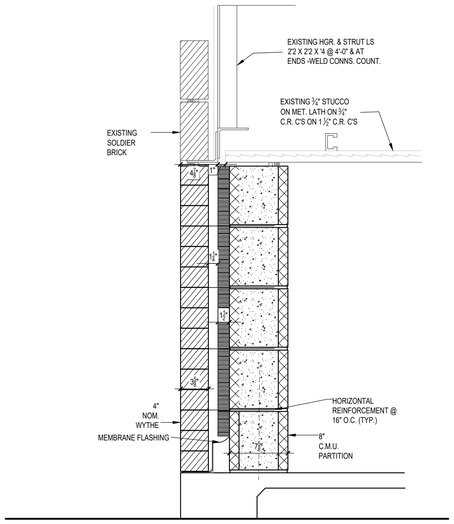


PARTITION B5
SCALE: 1-1/2" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.

0

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL

FOR
INTERIM REVIEW
AND NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 05/23/25

PARTITION SCHEDULE

o-A.502

GENERAL NOTES

1. ALL CONCRETE SHALL TEST 4000 PSI AT 28 DAYS.
2. ALL CONCRETE REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60.
3. DETAILING AND FABRICATION OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL BE IN ACCORDANCE WITH ACI-315 LATEST EDITION.
4. LAP ALL CONTINUOUS REINFORCING BARS 50 DIAMETERS AT SPLICES, TEES, AND CORNERS.
5. THE USE OF HEAT TO FACILITATE THE BENDING OF REINFORCING BARS WILL NOT BE PERMITTED.
6. NO ENGINEERING DRAWING MAY BE REPRODUCED FOR USE AS SHOP DRAWINGS.
7. CONTRACTOR SHALL COORDINATE ALL LOCATIONS OF ALL ANCHOR BOLTS AND OPENINGS FOR MECHANICAL, PIPING, AND ELECTRICAL EQUIPMENT WITH THE RESPECTIVE ENGINEERING AND VENDOR DRAWINGS.

SLAB NOTE

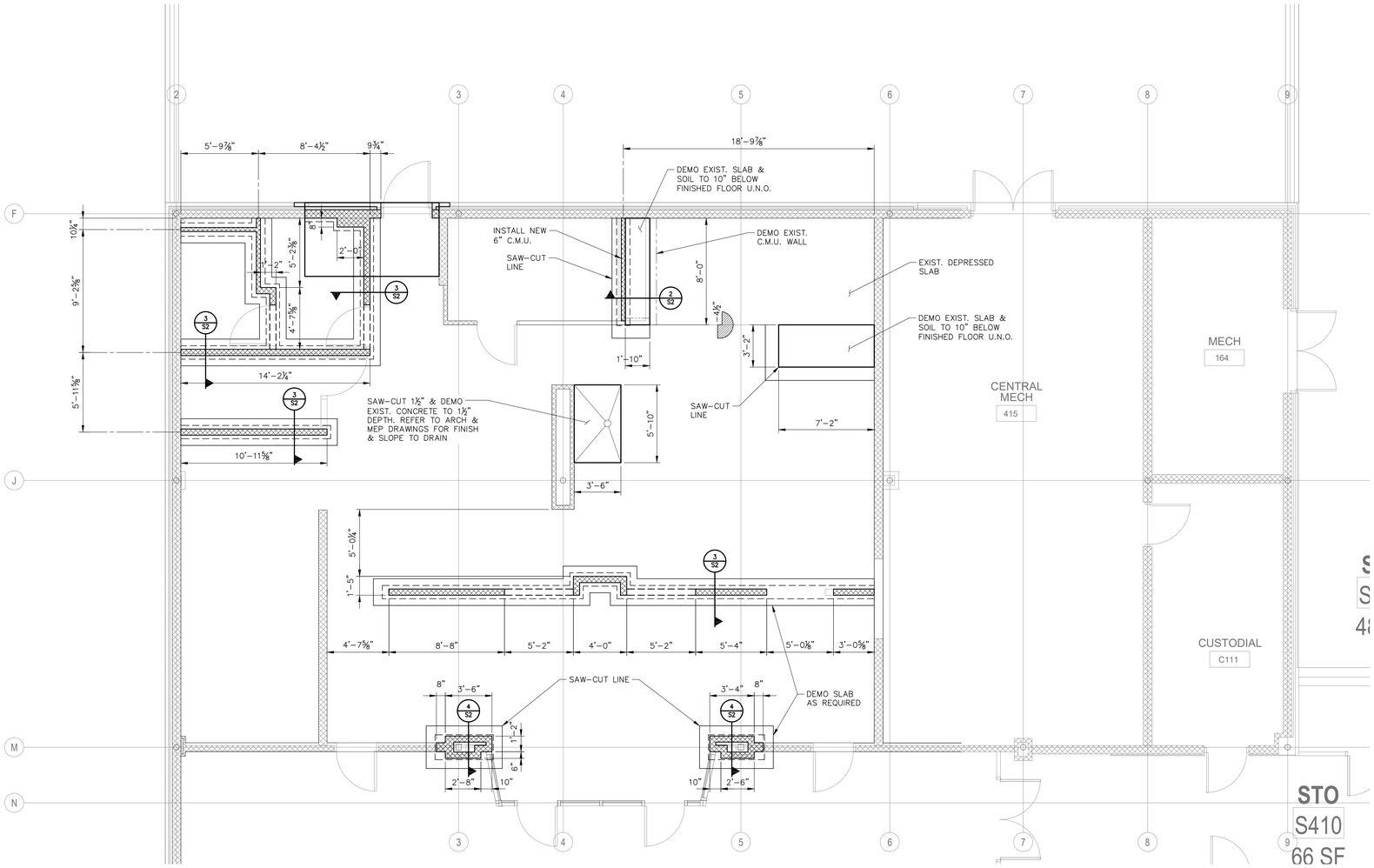
4" CONC. SLAB ON 10 MIL POLY FILM ON 2" MAX. SAND FILL. REINFORCE WITH #3 @ 15"c.c. E.W. IN CENTER OF SLAB.

SLAB SIDEWALK SLAB NOTE

4" CONC. SLAB ON 2" MAX. SAND FILL. REINF. W/ #3 @ 18"c.c. IN CENTER OF SLAB.

GEOTECHNICAL NOTE:

ALLOWABLE BEARING CAPACITY IS ASSUMED TO BE 1500 PSF AND SHALL BE CONFIRMED PRIOR TO CONSTRUCTION.



FOUNDATION PLAN

SCALE: 1/4"=1'-0"

FIELD VERIFICATION NOTE

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR CONSTRUCTION.
2. CONTRACTOR SHALL VERIFY AND NOTIFY ENGINEER OF EXISTING CONDITIONS IN NEED OF REVIEW AND POSSIBLE MODIFICATION PRIOR TO FABRICATION.

ISSUE:

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05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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MISSOURI CITY, TX 77459

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

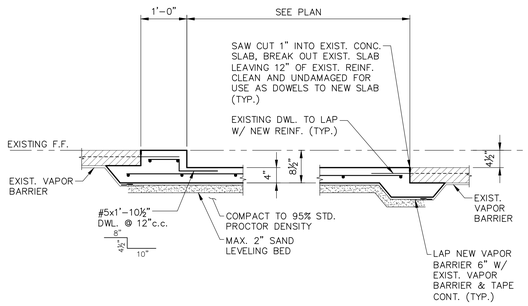
KEN STANLEY
69701
REGISTERED PROFESSIONAL ENGINEER
STATE OF TEXAS
July 17, 2025

STANLEY SPURLING & HAMILTON, INC.
50 Years
Consulting Engineering Services
T.B.P.E. Registration # F-000175
www.sshinc.net
3301 Edloe Street, Suite 200 Houston, Texas 77027 Tel 713-776-9433
E-MAIL: info@sshinc.net | 0002-0256

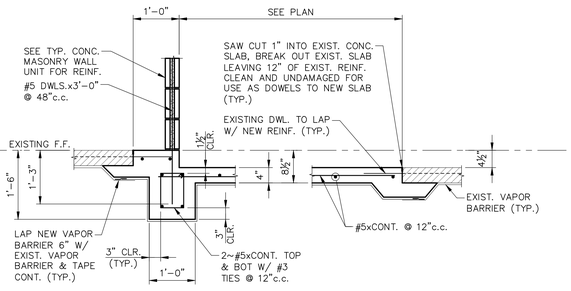
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

KITCHEN PLAN

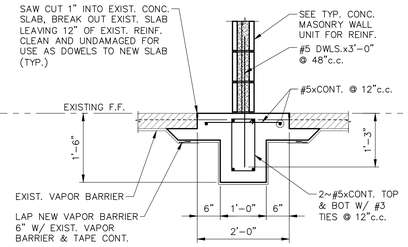
S1



1 SECTION
SCALE: 3/4"=1'-0"



2 SECTION
SCALE: 3/4"=1'-0"



3 SECTION
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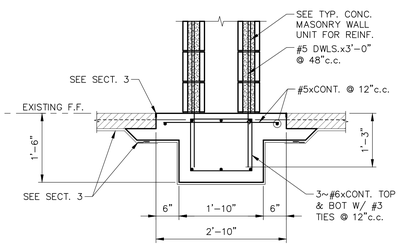
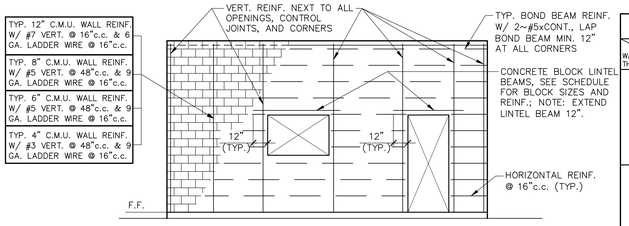


4 SECTION
SCALE: 3/4"=1'-0"



MIN. REBAR LAP SCHEDULE FOR f'm = 1,500 psi

BAR SIZE	6" CMU	8" CMU	10" CMU	12" CMU
#3	12"	12"	12"	12"
#4	20"	15"	12"	12"
#5	32"	23"	18"	15"
#6	54"	43"	34"	28"
#7	NA	60"	46"	38"
#8	NA	72"	71"	57"
#9	NA	NA	82"	74"

CONCRETE MASONRY NOTES

1. CONCRETE MASONRY UNITS AND CONSTRUCTION TO BE PER "NATIONAL CONCRETE MASONRY ASSOCIATION" RECOMMENDATIONS (WHERE NOT COVERED BY THE LOCAL BUILDING CODE).
2. ALL MASONRY GROUT TO BE PER TABLE 1 (THIS SHEET); ALL MORTAR PER TABLE 2 (THIS SHEET).
3. FILL CELLS WITH GROUT AT VERTICAL REINFORCEMENT.
4. CAST-IN-ANCHORS EMBEDDED IN CONCRETE MASONRY SHALL EXTEND BEYOND REINFORCING 1" MIN.
5. COMPRESSIVE STRENGTH OF MASONRY SHALL BE 1500 PSI AT 28 DAYS.
6. CMU SHALL BE PLACED IN A RUNNING BOND PATTERN UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS.
7. CONTROL JOINTS SHALL HAVE NO HORIZONTAL REINFORCING THROUGH THE JOINT AND VERTICAL REINFORCING ON BOTH SIDES OF JOINT. CONTROL JOINTS SHALL BE UNGROUTED WITH A BACKER ROD AND SEALANT ON BOTH SIDES OF WALL.
8. BOND BEAMS AND REINFORCING SHALL BE CONTINUOUS AT CONTROL JOINT WITH BACKER ROD AND SEALANT CONTINUOUS WITH JOINT.

CONCRETE BLOCK LINTEL SCHEDULE

WALL THICKNESS \ MAXIMUM SPAN	4'-6"	9'-0"
4"	GROUT, 1 COURSE 1~#4 CONT.	#3 STIRRUPS @ 16" c.c., GROUT 2 COURSES, 1~#4 CONT.
6" & 8" & 12"	GROUT, 1 COURSE 2~#5 CONT.	#3 STIRRUPS @ 16" c.c., GROUT 2 COURSES, 2~#5 CONT. TOP & BOT.

TABLE 1. GROUT PROPORTIONS BY VOLUME

TYPE	PARTS BY VOLUME OF PORTLAND CEMENT OR PORTLAND BLAST-FURNACE SLAG CEMENT	PARTS BY VOLUME OF HYDRATED LIME OR LIME PUTTY	AGGREGATE MEASURED IN DAMP, LOOSE CONDITION	
			FINE	COARSE
FINE GROUT (<4" WIDE CAVITY)	1	0 TO 1/10	2¼ TO 3 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL	
COARSE GROUT (>4" WIDE CAVITY)	1	0 TO 1/10	2¼ TO 3 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL	1 TO 2 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL

TABLE 2. MORTAR PROPORTIONS BY VOLUME

MATERIAL	TYPE	PORTLAND CEMENT OR BLENDED CEMENT	MASONRY CEMENT	HYDRATED LIME OR LIME PUTTY	AGGREGATE RATIO (MEASURE IN DAMP, LOOSE CONDITION)
CEMENT LIME	S	1	....	OVER ¼ TO ½	NOT LESS THAN 2¼ & NOT MORE THAN 3 TIMES THE SUM OF THE SEPARATE VOLUMES OF CEMENTITIOUS MATERIALS
MASONRY CEMENT	S	1/2	1	....	

LOOSE LINTEL SCHEDULE

SPAN	LINTEL	SPAN	LINTEL
0' TO 6'	L3½x3½x¼	8' TO 9'	L5x3½x5/16
6' TO 7'	L4x3½"x¼	9' TO 10'	L6x3½x5/16
7' TO 8'	L4x3½x5/16	10' TO 12'	L7x4x⅜

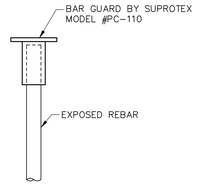
LOOSE LINTEL MIN. BEARING OF 8".

NOTE: CONTROL JOINTS SHALL BE LOCATED AT THE FOLLOWING

1. AT ALL CHANGES IN WALL HEIGHT.
2. AT ALL CHANGES IN WALL THICKNESS SUCH AS CHASES, COLUMNS OR PILASTERS.
3. AT (ABOVE) MOVEMENT JOINTS IN FOUNDATIONS AND FLOORS.
4. AT (BELOW) MOVEMENT JOINTS IN ROOFS AND FLOORS THAT BEAR ON A WALL.
5. ADJACENT TO CORNERS OF WALLS OR INTERSECTIONS WITHIN A DISTANCE OF ONE-HALF THE NORMAL CONTROL JOINT SPACING.
6. CONTROL JOINTS SHALL BE SPACED NO MORE THAN 25'-0" APART.
7. DO NOT PLACE CONTROL JOINT ABOVE OR BELOW OPENINGS.
8. CONTRACTOR SHALL PROVIDE A CONTROL JOINT PLAN PRIOR TO FABRICATION OR CONSTRUCTION.

TYPICAL ELEVATION OF CONCRETE MASONRY WALL AND NOTES

SCALE: N.T.S.



CONTRACTOR SHALL COVER ALL EXPOSED REBAR DURING CONSTRUCTION.

TYPICAL REBAR CAP DETAIL

SCALE: N.T.S.

ISSUE:

03/07/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

SECTIONS AND TYPICAL DETAILS

S2



July 17, 2025

STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.B.P.E. Registration # F-000175
www.sshinc.net
50 Years
3301 Edloe Street, Suite 200 Houston, Texas 77027 Tel 713-776-9433
E-MAIL: info@sshinc.net | 0002-0256

REFER TO FOODSERVICE DESIGN PROFESSIONALS SPECIFICATIONS AND SUBSEQUENT SHEETS FOR ADDITIONAL COORDINATION INFORMATION

EXISTING EQUIPMENT NOTES (IF EXISTING EQUIPMENT IS PROVIDED IN THIS PROJECT):

1. EXISTING EQUIPMENT NOT SCHEDULED FOR RE-USE TO BE RELOCATED BY THE K.E.C. COORDINATE WITH OWNER FOR NEW LOCATION.
2. ALL UTILITIES NOT SCHEDULED FOR RE-USE TO BE CAPPED & COVERED BY REQUIRED DISCIPLINE.
3. K.E.C. TO VERIFY ALL EXISTING UTILITY LOCATIONS & COORDINATE WITH ALL EQUIPMENT AS REQUIRED.

8 EXISTING EQUIPMENT NOTES
NOT TO SCALE

CRITICAL NOTES:

1. CONTRACTOR MUST COORDINATE AND VERIFY ALL DIMENSIONS WITH FOOD SERVICE EQUIPMENT SHOP DRAWINGS AND MANUFACTURER'S DATA. DIMENSIONS SHOWN ARE FOR DESIGN AND BIDDING PURPOSES ONLY.
2. WALK-IN ASSEMBLY DOORS MUST BE LEFT OPEN WHILE INTERIOR CONCRETE FLOOR CURES.
3. INSTALL PROTECTIVE COVER ON WALK-IN ASSEMBLY WALL PANELS BEFORE INSTALLING CONCRETE FLOORS AND CURBS.
4. REFER TO GENERAL SPECS - DIVISION 27 TO PROVIDE CONDUIT, DATA, AND INTERCONNECT THE PANIC ALARM INSIDE FREEZER TO THE BUILDING AUTOMATION SYSTEM FOR NOTIFICATION TO DISTRICT PERSONNEL IN THE EVENT OF STAFF ENTRAPMENT.
5. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL (DIV. 22).

7 CRITICAL NOTES
NOT TO SCALE

DIVISION 26 (ELECTRICAL) IS RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL ELECTRICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. ROUGH-IN AND FINAL CONNECTION OF ELECTRICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 26.
6. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
7. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR INTERCONNECT CABLES BETWEEN LAN AND POS TERMINALS, CHANGE-MAKERS, PRE-CHECK UNITS, PRINTERS, CPUS, ETC. DIVISION 26 TO VERIFY WHERE THE CONDUIT IS TO RUN FOR POS SYSTEM (I.E., MANAGER'S OFFICE OR IDF ROOM).
8. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR FIRE SUPPRESSION SYSTEMS. INTERCONNECT FIRE PROTECTION SYSTEM TO PANEL BOX SHUNT TRIPS AND BUILDING ALARM.
9. WALK-IN LIGHT FIXTURE INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF WALK-IN IS PROVIDED IN THIS PROJECT).
10. TABLE LIMIT SWITCH INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF DISHMACHINE IS PROVIDED IN THIS PROJECT).
11. ELECTRICAL MATERIALS AND DEVICES (SHUNT-TRIP BREAKERS, SURGE PROTECTORS, LIGHTING CONTROL DEVICES, CONDUIT, WIRE, ETC.).
12. SWITCHES AND STAINLESS STEEL DISCONNECTS AS REQUIRED (PROVIDE, LOCATE, AND INSTALL – TO BE IN AN ACCESSIBLE LOCATION).
13. CHARGING STATIONS FOR FORKLIFTS, PALLET STACKERS, AND PALLET JACKS (SIZE, PROVIDE, LOCATE, AND INSTALL) (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
14. INTERCONNECTION BETWEEN CONDENSATE FAN AND DISHMACHINE CONTROL PANEL (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
15. INTERCONNECTION BETWEEN EXHAUST HOOD FANS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
16. INTERCONNECTION BETWEEN EXHAUST HOOD LIGHTS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
17. DOOR HEATERS, LIGHTS, COILS, AND PRESSURE RELIEF PORTS PRE-WIRED TO JUNCTION BOX AT TOP OF WALK-IN ASSEMBLIES (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) PROVIDED BY SECTION 11 40 00. FINAL CONNECTION BY DIV. 26.
18. IF ANY ELECTRICAL ACCESSORIES, FITTINGS, AND CORD/PLUGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV.26 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
19. PROVIDE WATERPROOF RECEPTACLES IN WET AREAS.
20. ALL ELECTRICAL CONNECTIONS BENEATH EXHAUST HOODS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) TO EXTEND TO SHUNT TRIP BREAKERS WITH ELECTRICAL PANEL BOX FOR SHUTDOWN DURING FIRE MODE.
21. RECEPTACLES ARE TO BE PRE-WIRED TO THE JUNCTION BOX OR LOAD CENTER FOR FINAL CONNECTION BY DIVISION 26.
22. ALL ELECTRICAL LIGHTING, POWER, AND DISTRIBUTION SYSTEMS.
23. DO NOT INTERCONNECT MORE THAN THREE (3) CONVENIENCE OUTLETS ON ONE (1) BREAKER.
24. OTHER THAN CONVENIENCE OUTLETS, ALL ELECTRICAL CONNECTIONS SHOWN ON FOOD SERVICE PLANS ARE DEDICATED BREAKERS.
25. DOORBELL AT RECEIVING DOOR (PROVIDE AND INSTALL – TO BE AUDIBLE THROUGHOUT KITCHEN, OFFICE, AND DRY STORAGE ROOM).
26. ADEQUATE LIGHTING AT RECEIVING DOOR.
27. PROVIDE AND INSTALL TWO EMERGENCY STROBE BEACONS THAT INTERCONNECT TO PANIC ALARM IN WALK-IN FREEZER. ONE (1) IN KITCHEN ABOVE WALK-IN FREEZER DOOR ONE (1) IN CAFETORIUM (IF WALK-IN IS PROVIDED IN THIS PROJECT). REFER TO GENERAL SPECIFICATIONS FOR ADDITIONAL DETAILS.
28. DEDICATED CIRCUIT FOR HEATED DRAIN LINE CONNECTION IN WALK-IN FREEZER AT EACH COIL (IF WALK-IN IS PROVIDED IN THIS PROJECT).

NOTE: ELECTRICAL CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 26. FOR ADDITIONAL REQUIREMENTS, REFER TO THE ELECTRICAL ENGINEER'S DRAWINGS.

6 ELECTRICAL COORDINATION NOTES
NOT TO SCALE

ARCHITECT TO VERIFY/COORDINATE THE AESTHETIC OPTIONS BELOW (FOOD SERVICE COLOR, MATERIAL, OR SIGNAGE SELECTIONS) IF THESE ITEMS ARE PROVIDED IN THIS PROJECT:

1. COUNTERTOPS: STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
2. TRAY SLIDES: CORIAN OR STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
3. COUNTER FRONTS: CERAMIC TILE, 3 FORM, OR PLASTIC LAMINATE.
4. SNEEZE GUARDS: STONE INSETS.
5. GENERAL COLOR, MATERIAL AND GRAPHIC SELECTIONS:
   - A. DISPLAY AIR SCREEN MERCHANDISERS - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - B. BAKERY DISPLAY CASES - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - C. PASS THRU OR REACH IN HOLDING CABINETS - COLOR SELECTION: POWDER COAT (MFG.: TRUE) OR PLASTIC LAMINATE (MFG.: TRAULSEN) (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - D. HANGING HEAT LAMPS - TRACK AND FIXTURE COLOR SELECTION.
   - E. HEATED MERCHANDISERS.
   - F. PORTABLE GUIDE RAILS - STANCHION AND BELT COLOR SELECTION.
   - G. POPCORN MACHINE - SIGNAGE SELECTION.
   - H. BOTTLE COOLER - SIGNAGE SELECTION.
   - I. GRAPHICS PACKAGE INFORMATION.
   - J. HOT FOOD WELL COVERS.
6. ARCHITECT TO VERIFY/COORDINATE THE FINISHES BELOW:
   - A. WALLS: CERAMIC TILE, FLAT FRP, OR MOLDED FRP (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - B. CEILINGS: REMOVABLE VINYL FACE TILE (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - C. FLOORS: TILE, EPOXY, OR RUBBERIZED FLOORING SYSTEM (SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT AS APPROVED BY LOCAL JURISDICTION) (COORDINATE FLOOR TILE TRANSITION AT SERVING LINES).
   - D. FLOORS: WALK-IN ASSEMBLY - EXTEND KITCHEN FLOOR FLUSH INTO WALK-IN ASSEMBLY WITH COVED BASE.
   - E. FURR DOWNS ABOVE SERVING COUNTERS.

5 ARCHITECTURAL COORDINATION NOTES
NOT TO SCALE

DIVISION 22 (PLUMBING) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL PLUMBING REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY PVC CONDUIT WITH WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO BEVERAGE LINES, CO2 LINES, AND REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL PLUMBING CONNECTIONS TO FOOD SERVICE EQUIPMENT AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 22. THIS INCLUDES BUT IS NOT LIMITED TO INSTALLATION OF ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), HOSES, GAS DISCONNECTS, AND DRAINS FROM EQUIPMENT POINT OF CONNECTION TO BUILDING PLUMBING SYSTEMS. ALL DRAIN LINES ARE PROVIDED AND INSTALLED BY DIV. 22.
7. KITCHEN EQUIPMENT CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), DRAIN FITTINGS, MIXING VALVES, CONTROL VALVES, WATER PRESSURE REGULATORS, VACUUM BREAKERS, AND ALL ACCESSORIES FOR EQUIPMENT SPECIFIED UNDER 11 40 00. DIVISION 22 IS RESPONSIBLE FOR INSTALLATION.
8. INDIRECT DRAIN LINE RUNS FROM EQUIPMENT TO NEAREST DRAIN OR FLOOR SINK. LINES TO BE TYPE 'K' COPPER.
9. IF ANY PLUMBING ACCESSORIES OR FITTINGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV. 22 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
10. GAS SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
11. WATER SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
12. COMPRESSED AIR SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM (IF REQUIRED FOR THIS PROJECT).
13. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL.
14. FLOOR SINKS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
15. FLOOR DRAINS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
16. TRENCH DRAINS (PROVIDE AND INSTALL). TRENCH LINERS PROVIDED BY 11 40 00. FLANGE AND LINERS TO BE FLUSH WITH FINISHED FLOOR.
17. GREASE TRAPS AS REQUIRED. VERIFY WITH LOCAL CODES TO BYPASS OR PIPE THRU GREASE TRAP AND/OR INTERCEPTOR.
18. P-TRAPS AS REQUIRED (INCLUDING ALL DISPOSERS).
19. INTERCONNECT WATER THRU WATER FILTER (FILTER PROVIDED BY 11 40 00 UNLESS OTHERWISE SPECIFIED) TO EQUIPMENT.
20. GAS QUICK DISCONNECT INSTALLATION (QUICK DISCONNECT PROVIDED BY 11 40 00).
21. SAFETY RESTRAINT CABLE INSTALLATION (SAFETY RESTRAINT CABLE PROVIDED BY 11 40 00).
22. SPECIFIED COUPLINGS AND PIPING TO ALL EQUIPMENT FURNISHED BY 11 40 00.
23. AIR COMPRESSORS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
24. WATER SOFTENERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
25. PRESSURE BOILERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
26. HAND SINKS (PROVIDE (UNLESS OTHERWISE SPECIFIED) AND INSTALL). PROVIDE HOT WATER TEMPERING VALVE IF REQUIRED. WATER TEMPERATURE TO BE AT LEAST 100 DEGREES AND FLOW FOR AT LEAST 20 SECONDS.
27. ICE BIN DRAIN INSULATION (IF ICE MACHINE IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
28. UNIONS AT DISPOSER SOLENOID VALVES (IF DISPOSER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
29. BACK FLOW PREVENTION AS REQUIRED (PROVIDE AND INSTALL - INCLUDING ALL DISPOSERS). BACK- SIPHONAGE SHALL BE INSTALLED AT ALL FIXTURES AND EQUIPMENT WHERE BACKFLOW AND/OR BACK-SIPHONAGE MAY OCCUR AND WHERE A MINIMUM AIR GAP CANNOT BE PROVIDED BETWEEN THE WATER TO THE FIXTURE OR EQUIPMENT AT ITS FLOOD/LEVEL RIM. VACUUM BREAKERS, WHEN FURNISHED WITH EQUIPMENT, SHALL OVERRIDE THE ABOVE, IF ACCEPTABLE WITH APPLICABLE CODES. DIVISION 22 RESPONSIBLE FOR VERIFYING REQUIREMENT WITH LOCAL CODES.
30. JANITOR SINK WITH FAUCET (PROVIDE AND INSTALL).
31. FREEZE PROOF HYDRANT AT EXTERIOR OF BUILDING BY RECEIVING DOOR (PROVIDE AND INSTALL).
32. REVERSE OSMOSIS SYSTEMS (SIZE, PROVIDE (UNLESS OTHERWISE SPECIFIED), LOCATE AND INSTALL).
33. ALL PIPING WITHIN COUNTER BODY OR UNDER FABRICATED COUNTERS TO BE RUN TO A CONNECTION POINT BELOW COUNTER BODY BY SECTION 11 40 00. FINAL CONNECTION BY DIVISION 22.
34. EXHAUST HOOD CONDENSATE DRAIN CONNECTIONS (IF EXHAUST HOOD IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
35. INTERCONNECTION OF 1/2" CW TO PRE-RINSE AND DISPOSERS CONE/BODY INLETS PIPED THROUGH SOLENOID AND VACUUM BREAKER (IF DISPOSER IS PROVIDED IN THIS PROJECT).
36. FIRE SYSTEM PIPING. EXPOSED PIPING TO BE CHROME PLATED.
37. PIPE 1/2" COLD WATER TO SWIRL INLETS AT DISPOSERS (IF DISPOSER IS PROVIDED IN THIS PROJECT).
38. WATER TREATMENT FOR ICE BUILDERS (NON-CHLORINATED WATER WITH A PH LEVEL OF 10 OR HIGHER) AND ANY DRAINS AND OVERFLOWS. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS BY DIV. 23 (IF ICE BUILDERS AND TUMBLE CHILLERS ARE PROVIDED IN THIS PROJECT).

NOTE: WATER AND DRAIN CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 22. FOR ADDITIONAL WATER AND DRAIN REQUIREMENTS REFER TO MECHANICAL DRAWINGS.

NOTE: REFER TO ELECTRICAL/MECHANICAL DRAWINGS FOR REQUIREMENTS OF EXHAUST FANS AND MAKE-UP AIR HANDLERS AND LOCATION OF AN INTERLOCK AND START/STOP CONTROLS TO BE LOCATED WITHIN FOOD SERVICE AREA BY DIVISION 26.

4 PLUMBING COORDINATION NOTES
NOT TO SCALE

DIVISION 23 (MECHANICAL) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL MECHANICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL CONNECTION OF MECHANICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR).
7. TESTING AND BALANCING FOR ROOMS AND EXHAUST HOODS TO BE PERFORMED BY MECHANICAL CONTRACTOR. BALANCE REPORT FOR FOOD SERVICE EXHAUST HOODS TO BE PROVIDED TO FOODSERVICE DESIGN PROFESSIONALS (FDP) IMMEDIATELY UPON COMPLETION (SEND TO HOUSTON.SUBMITTAL@FDP.ORG FOR HOUSTON OFFICE AND DALLAS.SUBMITTAL@FDP.ORG FOR DALLAS OFFICE) AND MUST BE SUBMITTED WITH O&M MANUALS.
8. EXHAUST HOODS, CONDENSATE HOODS, FIRE SUPPRESSION SYSTEMS, CONNECTIONS AND CONTROLS (PROVIDE AND INSTALL – *UNLESS OTHERWISE SPECIFIED*). PROVIDE TEMPERED AIR AT ALL SUPPLY DUCTS.
   - A. IF EXHAUST/CONDENSATE HOODS AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED UNDER SECTION 11 40 00, DIVISION 23 IS RESPONSIBLE FOR ALL EXHAUST AND CONDENSATE HOOD CONNECTIONS (PROVIDE AND INSTALL).
9. VFD SYSTEM AND CONTROLLERS, WHEN REQUIRED BY CODE (PROVIDE AND INSTALL).
10. PROVIDE AND INSTALL ALL VENTILATION (DIRECT OR INDIRECT), AIR CONDITIONING AND HEATING SYSTEMS (UNLESS OTHERWISE SPECIFIED).
11. COORDINATE SUPPLY AND RETURN DUCTS ABOVE SERVING COUNTERS OR OPEN-AIR REFRIGERATED MERCHANDISERS. NO COLD AIR TO BLOW DIRECTLY ON HOT FOOD COUNTERS.
12. COORDINATE SUPPLY AND RETURN DUCTS AWAY FROM EQUIPMENT WITH TOP MOUNTED REFRIGERATION. NO COLD AIR TO BLOW DIRECTLY ON COMPRESSORS.
13. MECHANICAL CONTRACTOR TO LOCATE TEMPERATURE MONITORS WITHIN RETURN DUCTS.
14. CIRCULATING AIR ABOVE WALK-IN ASSEMBLIES (PROVIDE AND INSTALL).
15. CIRCULATING AIR ABOVE AND IN AIR GAPS AT WAREHOUSE COLD STORAGE ASSEMBLIES (PROVIDE AND INSTALL).
16. WATER CHILLERS AS REQUIRED (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).
17. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).

3 MECHANICAL COORDINATION NOTES
NOT TO SCALE

GENERAL CONTRACTOR RESPONSIBLE FOR BUT NOT LIMITED TO:

1. ANY WALL PENETRATION REQUIRED FOR FOOD SERVICE EQUIPMENT UTILITIES. ESCUTCHEON PLATES OR S/S SLEEVES TO BE PROVIDED AND INSTALLED AS NEEDED.
2. BULK FREEZER VENTILATION PIPE (IF BULK FREEZER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
3. CORE DRILLING FOR GUIDE RAILS (IF GUIDE RAILS ARE PROVIDED IN THIS PROJECT).
4. REFRIGERATION ROOF CURBS / ROOF JACK (IF REFRIGERATION SYSTEM IS PROVIDED IN THIS PROJECT AND LOCATED ON ROOF).
5. INTERIOR BOLLARDS (IF REQUIRED FOR THIS PROJECT) – TO BE EPOXY PAINTED PER LOCAL CODES (PROVIDE AND INSTALL).
6. FURNISH AND INSTALL 3/4" PLYWOOD BLOCKING IN THE WALL FOR MOUNTING EQUIPMENT FURNISHED BY SECTION 11 40 00 AS REQUIRED.
7. WALK-IN DEPRESSIONS (TO BE DEAD LEVEL) AND SAND LEVELING BED (IF WALK-IN IS PROVIDED IN THIS PROJECT AND RECESS IS SHOWN).
8. STRUCTURAL BRACING FOR BULK WALK-IN CEILING PANELS IF REQUIRED.
9. MENU SYSTEM VIDEO MONITORS IN SERVERY (UNLESS OTHERWISE SPECIFIED).
10. STRUCTURAL BRACING FOR MENU SYSTEM VIDEO MONITORS IF REQUIRED.
11. INTERIOR/EXTERIOR REFRIGERATION PENETRATIONS AND SLEEVES AT BUILDING PENETRATIONS.
12. DOORSCOPE VIEWER (PEEPHOLE) WITH WIDE VIEWING ANGLE AT RECEIVING DOOR.
13. CANOPY AT RECEIVING DOOR. COORDINATE HEIGHT WITH THE HEIGHT OF RECEIVING DOOR (8') AND THE MOUNTING HEIGHT OF AIR SCREEN ABOVE THE DOOR.
14. SOAP AND TOWEL DISPENSER PROVIDED BY OWNER. G.C. RESPONSIBLE FOR INSTALLATION.
15. WASHER AND DRYER (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
16. DWARF WALL AT EXPOSED FRONT/ENDS OF CAFETERIA SERVING COUNTERS WITH FINISH AS SELECTED BY ARCHITECT (IF REQUIRED IN THIS PROJECT).

2 GENERAL CONTRACTOR COORDINATION NOTES
NOT TO SCALE

HEALTH DEPARTMENT REQUIREMENTS (VERIFY WITH LOCAL JURISDICTIONS):

1. FLOORS: VERIFY WITH DIVISION 9. FLOORS TO BE SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT.
2. WALLS: VERIFY WITH ARCHITECTURAL DOCUMENTS. WALLS TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
3. CEILING: LAY-IN TILES. CEILING TILES TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
4. EMPLOYEE TOILET: TO BE LOCATED OFF MAIN CORRIDOR AND ADJACENT TO MAIN KITCHEN. RESTROOM MUST HAVE A VESTIBULE AND NOT OPEN TO KITCHEN / PREP AREAS. TOILETS TO BE WELL VENTILATED.
5. LAVATORIES: WALL HUNG LAVATORIES LOCATED WITHIN ALL FUNCTIONAL WORKING AREAS.
6. UTENSIL CLEANING/SANITIZING: ACCOMPLISHED IN UTENSIL WASH AREA WITH (3) 2'-0" x 2'-2" x 15" MINIMUM DEEP SINKS AND WAREWASH MACHINE.
7. MECHANICAL CLEANING/SANITIZING OF TABLEWARE: ACCOMPLISHED BY WAREWASH MACHINE.
8. STOREROOMS: AMPLE DAILY STORAGE PROVIDED IN ENCLOSED STORE ROOMS. STORE ROOMS TO BE VENTILATED AND MAINTAIN PROPER TEMPERATURE.
9. WATER HEATER: LOCATED IN THE MECHANICAL ROOM ADJACENT TO KITCHEN. TO BE SIZED TO PROVIDE AMPLE WATER TO MAINTAIN PROPER WATER TEMPERATURE THROUGHOUT HOURS OF OPERATION.
10. GREASE TRAP: LOCATED AT EXTERIOR OF BUILDING. REFER TO ENGINEER'S DRAWINGS.
11. FOOD SERVICE EQUIPMENT: ALL FLOOR-MOUNTED EQUIPMENT IS TO BE SEALED TO THE FLOOR TO PROVIDE AN EASILY CLEANABLE SURFACE AND PREVENT SEEPAGE. EQUIPMENT NOT MOUNTED TO THE FLOOR IS TO BE WALL MOUNTED ON WALL CARRIERS, OR ELEVATED ON LEGS TO PROVIDE AT LEAST A SIX-INCH CLEARANCE BETWEEN FLOOR AND EQUIPMENT.
12. MOP SINK: LOCATED IN JANITOR CLOSET OFF MAIN KITCHEN CORRIDOR, AND LOCATED IN CLOSE PROXIMITY TO THE SERVERY WAREWASH AREA.
13. EXHAUST HOODS: EXHAUST HOODS PROVIDED OVER COOKING EQUIPMENT WITH LIQUID CHEMICAL ANSUL FIRE EXTINGUISHING SYSTEM.
14. LIGHTING AND PROTECTIVE SHIELDING: RECESSED CEILING-MOUNTED FLUORESCENT LIGHT FIXTURES FITTED WITH CLEAR LEXAN DIFFUSERS.
15. GARBAGE AND REFUSE: CENTRAL TRASH COLLECTION PROVIDED FOR BUILDING LOCATED NEAR RECEIVING AREA ON SMOOTH CONCRETE SURFACE.
16. POISONOUS AND TOXIC MATERIAL STORAGE: LOCATED IN RESPECTIVE JANITOR CLOSETS WITH LOCKING HARDWARE.

1 HEALTH DEPARTMENT COORDINATION NOTES
NOT TO SCALE

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FOODSERVICE DESIGN PROFESSIONALS

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FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
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HOUSTON, TEXAS 77079

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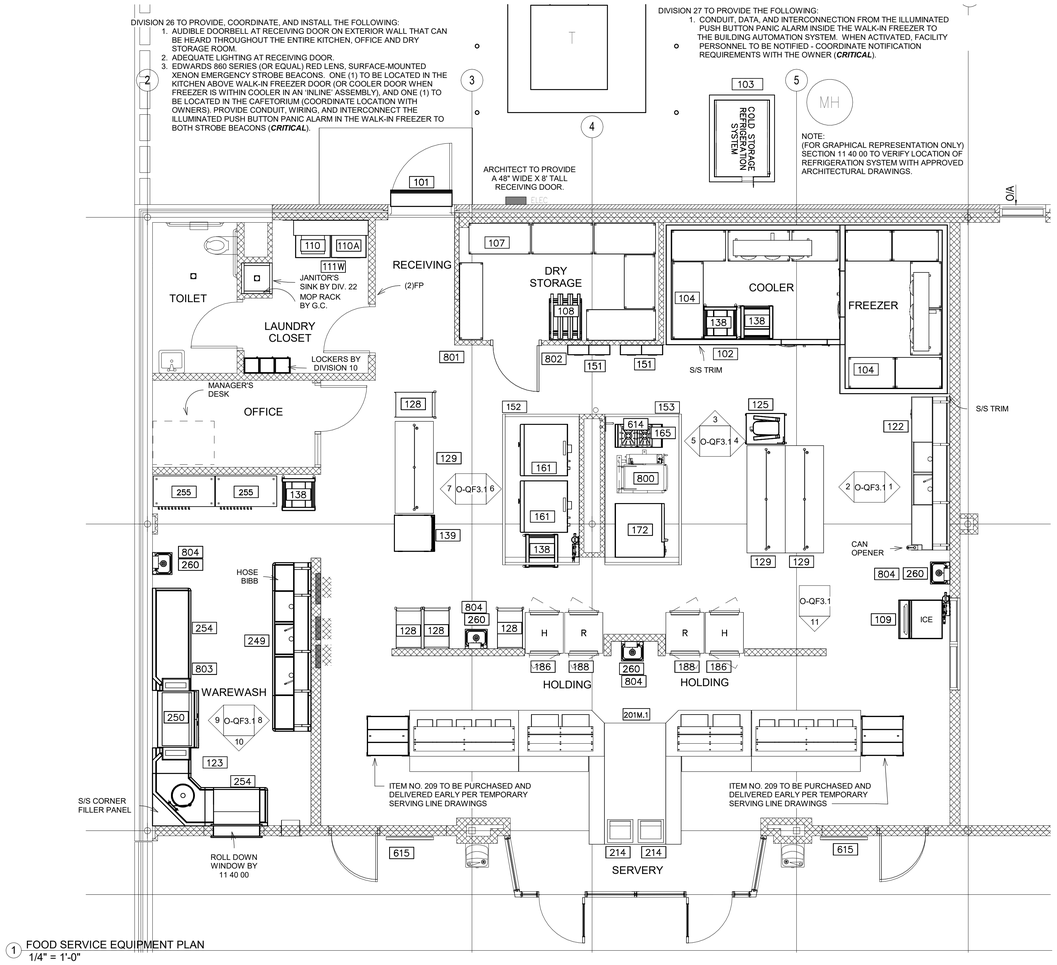
FS GENERAL COORDINATION NOTES

O-QF0.0

FOOD SERVICE DRAWING INDEX	
FDP SHEET NUMBER	FDP SHEET NAME
O-QF0.0	FS GENERAL COORDINATION NOTES
O-QF1.0	FS EQUIPMENT PLAN
O-QF1.1	FS FACILITY MODEL
O-QF1.2	FS EQUIPMENT MODEL
O-QF1.3	FS SPECIAL CONDITIONS & MECHANICAL PLAN
O-QF1.4	FS PLUMBING PLAN
O-QF1.5	FS ELECTRICAL PLAN
O-QF1.6	FS CONDENSING UNITS
O-QF1.7	FS WALK-INS
O-QF1.8	FS SERVING LINE
O-QF1.9	FS SERVING LINE
O-QF2.0	FS DEMO PLAN
O-QF2.1	FS TEMPORARY SERVING
O-QF3.1	FS ELEVATIONS
O-QF4.1	FS SECTIONS & DETAILS
O-QF4.2	FS DETAILS
O-QF4.3	FS DETAILS



1 FOOD SERVICE EQUIPMENT PLAN
1/4" = 1'-0"

FOOD SERVICE EQUIPMENT SCHEDULE					
REFER TO SHEET QF1 FOR GENERAL CONTRACTOR & HEALTH DEPARTMENT COORDINATION NOTES					
FDP ITEM	FDP QTY	FDP DESCRIPTION	FDP REMARKS	MANUFACTURER	MODEL
101	1	AIR SCREEN		MARS	STD248-1UA-O
102	1	COLD STORAGE ASSEMBLY		AMERICAN PANEL	
103	1	COLD STORAGE REFRIGERATION SYSTEM		RDT	ZS1-02Z-CT3-AST
104	2	COLD STORAGE SHELVING		METRO	METROMAX Q
107	1	DRY STORAGE SHELVING		METRO	METROMAX Q
108	1	CAN RACK		NEW AGE	1250CK
109	1	ICE MACHINE W/ BIN		MANITOWOC	UYF0310A
110	1	CLOTHES WASHER		WHIRLPOOL	RESIDENTIAL
110A	1	CLOTHES DRYER		WHIRLPOOL	RESIDENTIAL
111W	1	WALL MOUNTED OVERSHELF		CUSTOM FABRICATED	
122	1	TWO COMPARTMENT SINK WITHOUT DISPOSER		CUSTOM FABRICATED	
123	1	DISPOSER - 3HP		SALVAJOR	300-CA-18-ARSS-LD
125	1	20 QT. MIXER W/STAND		HOBART	HL200
128	4	UTILITY CART		LAKESIDE	522
129	3	WORKTABLE W/S.BAR UT.RACK		CUSTOM FABRICATED	
138	4	PAN RACK		CRES COR	207-UA-13A
139	1	INSUL MOBILE PROOFER		CRES COR	H-137-WSUA-12D
151	2	FIRE PROTECTION SYSTEM		ANSUL	R102
152	1	EXHAUST HOOD	EXISTING		
153	1	EXHAUST HOOD	EXISTING		
161	2	CONVECTION OVEN		BLODGETT	DFP-200 DBL
165	1	TWO BURNER RANGE		VULCAN	V2B18B
172	1	COMBI OVEN		RATIONAL	ICP 6-FULL/6-FULL N/G
186	2	PASS-THRU HEATED CABINET-1DR		TRAULSEN	AHF132WP
188	2	PASS-THRU REFRIGERATOR-1DR		TRAULSEN	AHT132WPUT
201M.1	1	SERVING COUNTER-MODULAR		COUNTERCRAFT	SCOL-408-MOD
214	2	CASH REGISTER	OWNER FURNISHED		
249	1	THREE COMPARTMENT SINK NO DISPOSER		CUSTOM FABRICATED	
250	1	DISHMACHINE		HOBART	CL44-BAS
254	2	SOILED & CLEAN DISHTABLE		CUSTOM FABRICATED	
255	2	MOBILE DRYING RACK		METRO	PR48VX3
260	4	HAND SINK	FURNISHED & INSTALLED BY DIV. 22		
614	1	FILL FAUCET		T&S	B-0610
615	2	MENU MONITOR	BY OWNER		
800	1	15 GAL. BRAISING PAN		GROEN	BPM-15GA
801	1	S/S CORNER GUARDS	LOCATED ON EVERY EXPOSED CORNER THROUGHOUT KITCHEN	CUSTOM FABRICATED	
802	1	WALL BUMPERS	LOCATED ON ALL EXPOSED BUILDING WALLS	PAWLING	MD-1
803	1	WATER SOFTENER		HOBART	WS-40
804	4	S/S SPLASH GUARDS		CUSTOM FABRICATED	

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Melissa Moore
7/15/2025
DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119
ON: 07/18/2025

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FS EQUIPMENT PLAN

O-QF1.0

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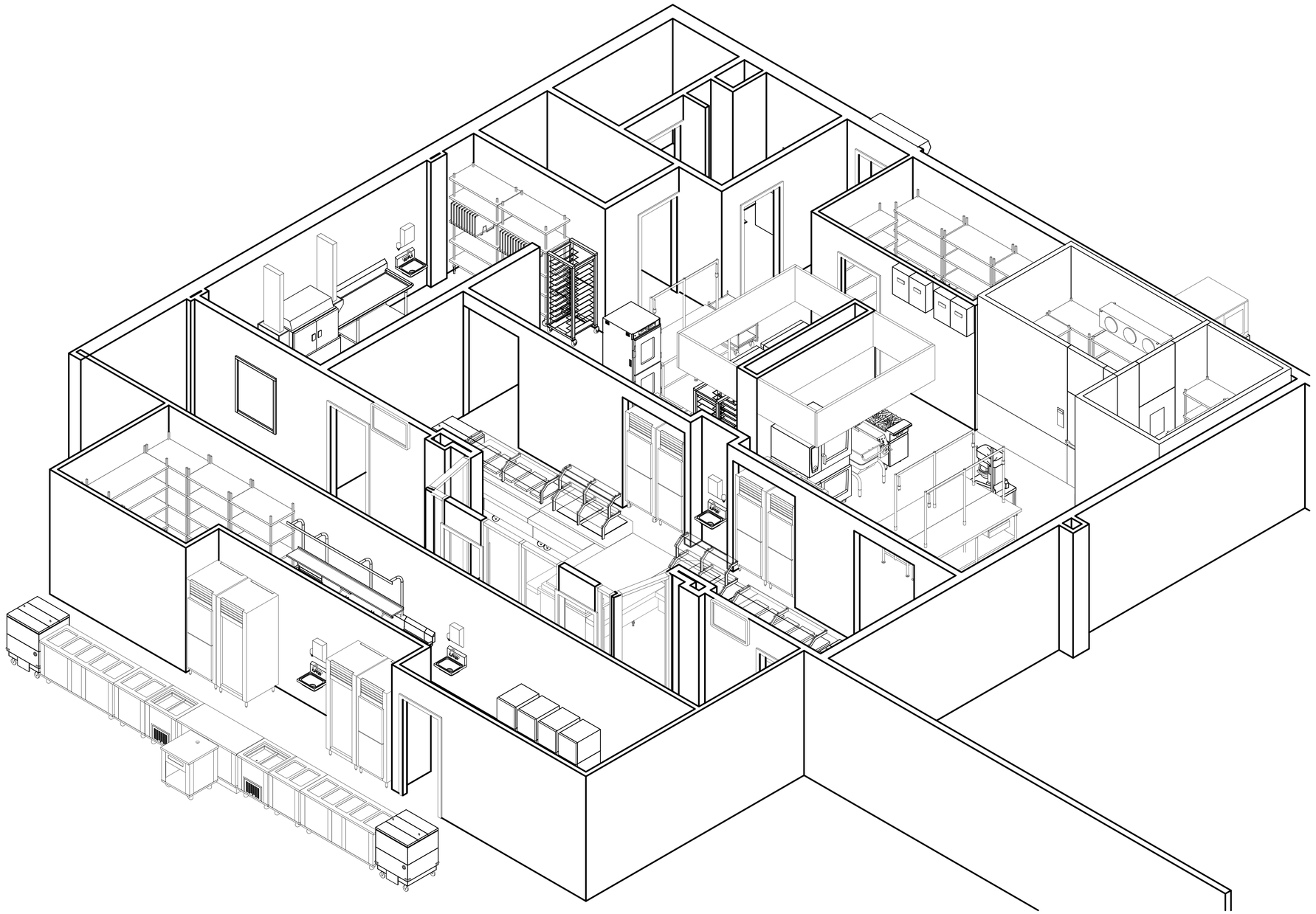

1 FS FACILITY MODEL

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Melissa Moore
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FS FACILITY MODEL

O-QF1.1

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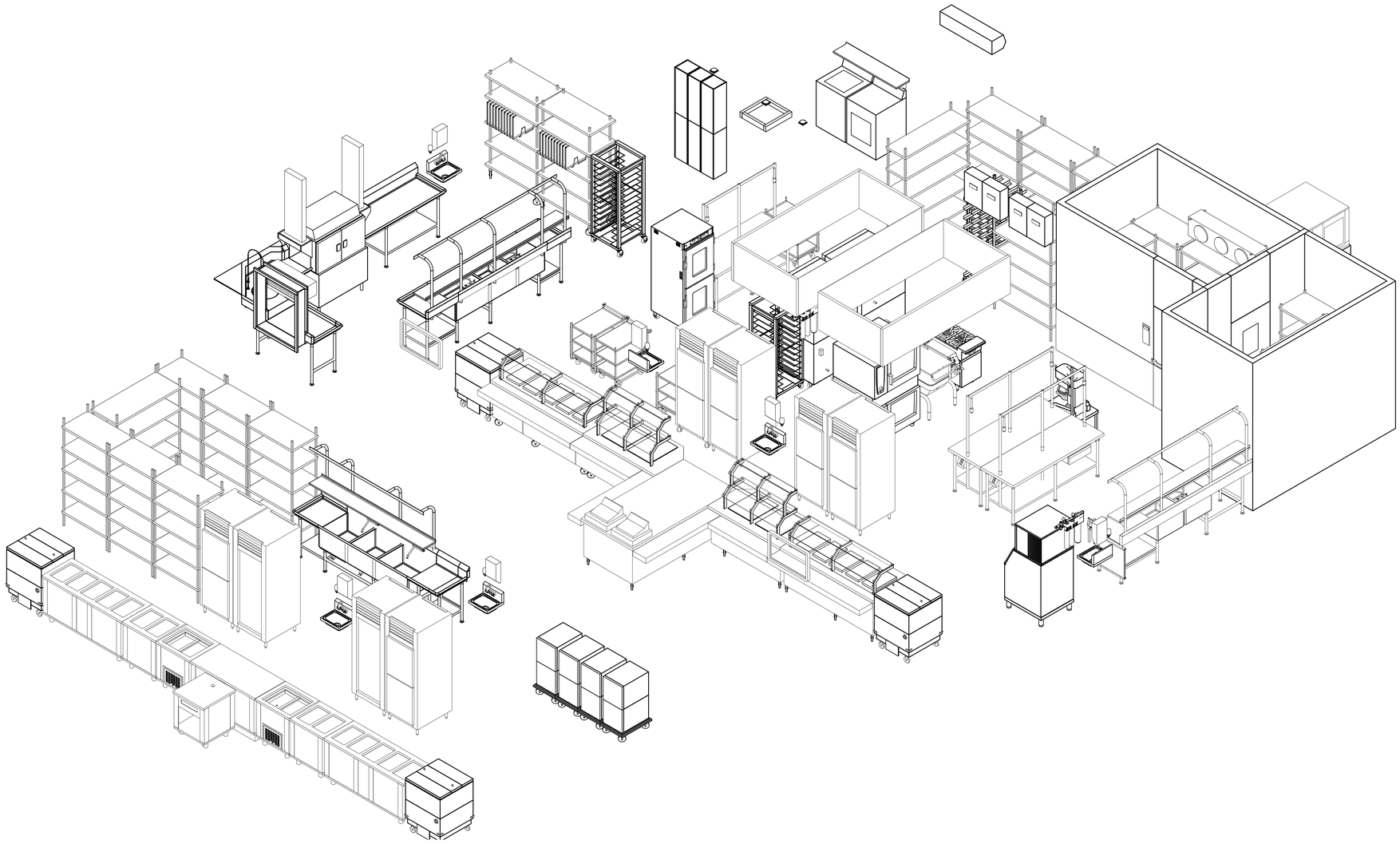

1 FS EQUIPMENT MODEL

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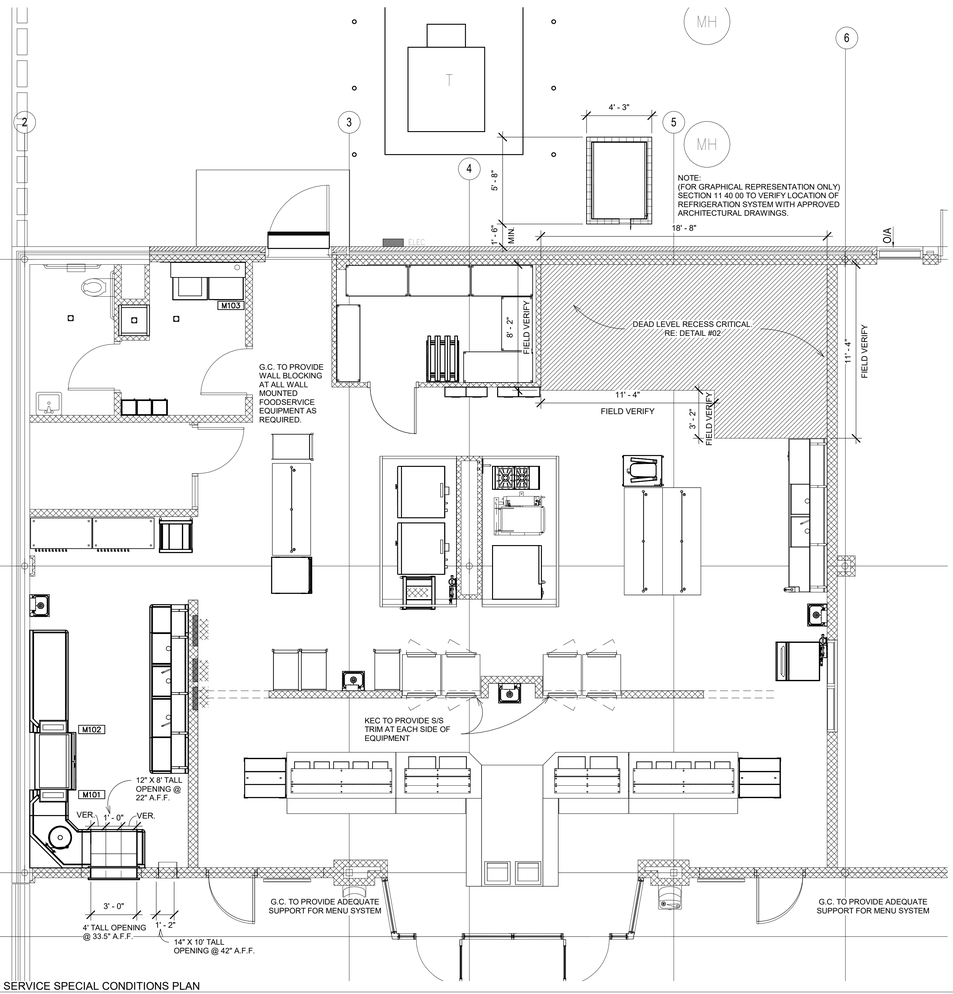
FS EQUIPMENT MODEL

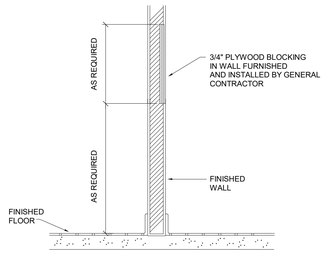
O-QF1.2

FOOD SERVICE MECHANICAL SCHEDULE						
REFER TO SHEET QF1 FOR MECHANICAL COORDINATION NOTES						
FDP NO.	FDP QTY	FDP TYPE	FDP SIZE	FDP LOC	FDP CFM	FDP S.P.
M101	1	EXHAUST	4" X 16"		400	0.30"
M102	1	EXHAUST	4" X 16"		800	0.30"
M103	1	DRYER VENT	6" DIA.		---	---



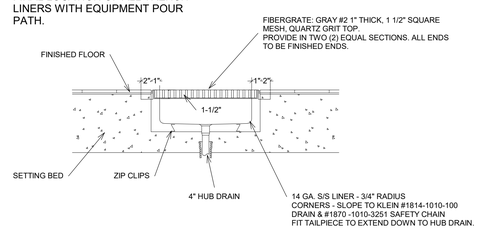
1 FOOD SERVICE SPECIAL CONDITIONS PLAN
1/4" = 1'-0"

NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION AND SIZE OF WALL BLOCKING.

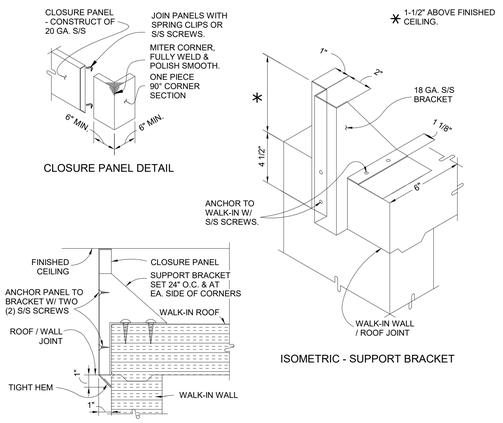


5 WALL BLOCKING DETAIL
NOT TO SCALE

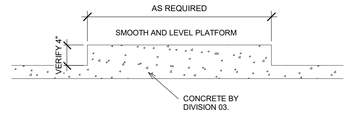
NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION OF ALL TRENCH LINERS WITH EQUIPMENT POUR PATH.



6 TRENCH LINER DETAIL
NOT TO SCALE

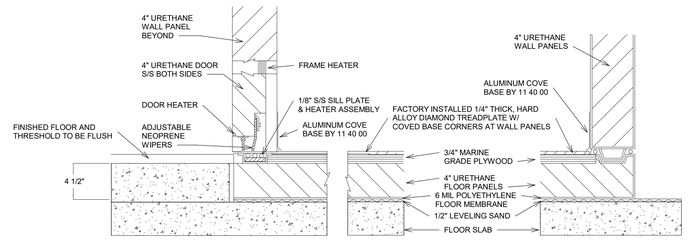


3 COLD STORAGE ASSEMBLY ENCLOSURE PANEL DETAIL
NOT TO SCALE



COLD STORAGE ASSEMBLY REFRIGERATION SYSTEM GROUND MOUNT 4" PLATFORM DETAIL
4 NOT TO SCALE

SLAB TO BE MODIFIED AS REQUIRED TO ALLOW FOR A 4 1/2" DEPRESSION SLAB. PROVIDE NEW LEVEL CONCRETE PAD FOR COLD STORAGE ASSEMBLY.



WALL SECTION @ EXTERIOR DOOR

2 COLD STORAGE ASSEMBLY 4 1/2" DEPRESSION DETAIL
NOT TO SCALE

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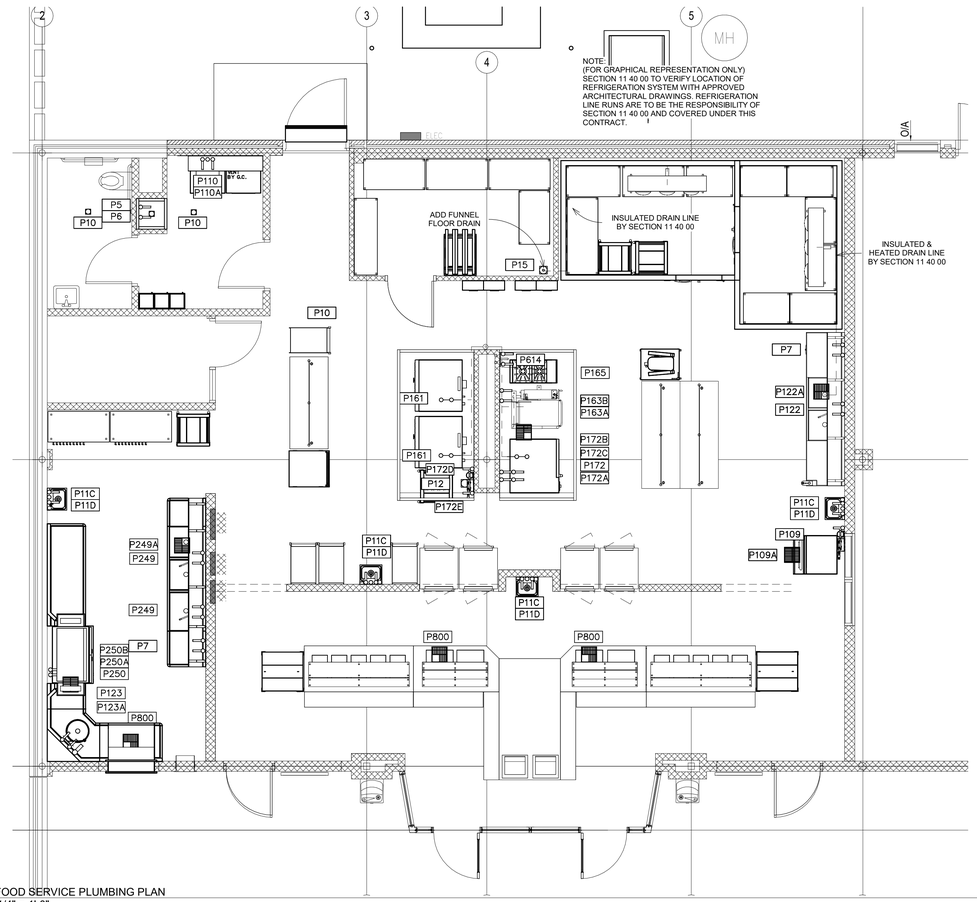
FS SPECIAL CONDITIONS & MECHANICAL PLAN

O-QF1.3

FOOD SERVICE PLUMBING SCHEDULE						
REFER TO SHEET QF1 FOR PLUMBING COORDINATION NOTES						
FDP PNO	FDP PSIZE	FDP PCONN	FDP PSERVICE TO	FDP PLOC	FDP PAFF	FDP PREMARKS
P5	3/4"	H & C WATER	JANITOR SINK	WALL	48"	JANITOR SINK BY PLUMBER
P6	4"	FLOOR DRAIN	JANITOR SINK	FLOOR	VERIFY	JANITOR SINK BY PLUMBER
P7	3/4"	H & C WATER	HOSE BIBB	WALL	18"	BTC
P10	VERIFY	FLOOR DRAIN	GENERAL AREA DRAIN	FLOOR	VERIFY	---
P11C	1/2"	H & C WATER	FAUCET	WALL	18"	FURNISHED & INSTALLED BY DIV. 22
P11D	1 1/2"	DIRECT DRAIN	HAND SINK	WALL	15"	FURNISHED & INSTALLED BY DIV. 22
P12	VERIFY	FLOOR DRAIN	EQUIP. DRAIN	FLOOR	VERIFY	NO SLOPE
P15	4"	FLOOR DRAIN	FUNNEL FLOOR DRAIN	FLOOR	0"	---
P109	3/4"	COLD WATER	WATER/ ICE	WALL	60"	BTC
P109A	12" SQ.	FLOOR SINK	ICE MACHINE	FLOOR	0"	FULL GRATE
P110	3/4"	H & C WATER	CLOTHES WASHER	WALL	48"	BTC; VALVE BOX
P110A	2"	INDIRECT DRAIN	CLOTHES WASHER	WALL	48"	VALVE BOX
P122	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P122A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	3/4 GRATE
P123	3/4"	H & C WATER	FAUCET / DISPOSER	WALL	13"	BTC
P123A	2"	DIRECT DRAIN	DISPOSER	WALL	10"	BTC
P161	(2)3/4"	NATURAL GAS	CONVECTION OVEN	WALL	18"/36"	BTC - 60 MBTU/HR EACH
P163A	3/4"	NATURAL GAS	TILT BRAISING PAN	WALL	18"	BTC - 65 MBTU/HR
P163B	3/4"	H & C WATER	TILT BRAISING PAN	WALL	36"	BTC
P165	1"	NATURAL GAS	RANGE	WALL	18"	BTC - 70 MBTU/HR
P172	(2)3/4"	COLD WATER	COMBI OVEN	WALL	24"/48"	BTC - INTERCONNECT THRU FILTERS
P172A	3/4"	COLD WATER	COMBI OVEN	WALL	48"	BTC
P172B	12"SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE
P172C	(2)3/4"	NATURAL GAS	COMBI OVEN	WALL	18"/36"	BTC: 105 MBTU/HR EACH
P172D	3/4"	COLD WATER	COMBI OVEN	WALL	66"	BTC; INTERCONNECT TO P172
P172E	3/4"	COLD WATER	COMBI OVEN WATER FILTER	WALL	66"	BTC
P249	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P249A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	THREE QUARTER GRATE
P250	12" SQ.	FLOOR SINK	BOOSTER / DISHMACHINE	FLOOR	18"	BTC
P250A	3/4"	HOT WATER	DISHMACHINE	WALL	18"	EXT. THRU W.FILTER TO BOOSTER / DISH MACHINE - 140DEG.MIN.
P250B	3/4"	COLD WATER	DISHMACHINE	WALL	18"	BTC
P614	1/2"	H & C WATER	FILL FAUCET	WALL	42"	BTC
P800	12" SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE



1 FOOD SERVICE PLUMBING PLAN
1/4" = 1'-0"

SECTION 11 40 00 TO PROVIDE LOOSE WITH FOOD SERVICE EQUIPMENT. INSTALLATION BY DIV. 22 & 26.

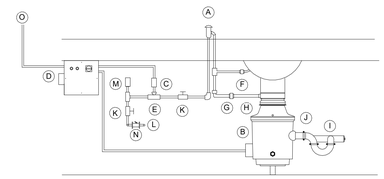
- (A) VACUUM BREAKER
- (B) DISPOSER
- (C) TIME DELAY
- (D) CONTROL PANEL
- (E) SOLENOID VALVE

DIVISION 22 TO PROVIDE AND INSTALL

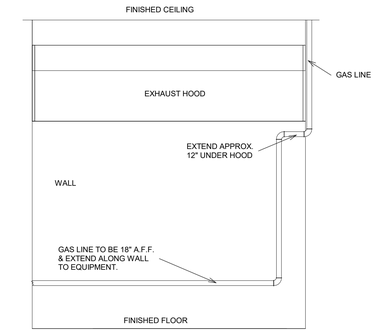
- (F) 1/2" CW INLET
- (G) FLOW CONTROL
- (H) 1/2" CW
- (I) 2" DRAIN LINE WITH P-TRAP & Y ADAPTOR
- (J) 1-1/2" TAILPIECE
- (K) GATE VALVE
- (L) 1/2" CW SUPPLY
- (M) SHOCK STOP
- (N) RPZ BACK FLOW PREVENTOR

DIVISION 26 TO PROVIDE AND INSTALL

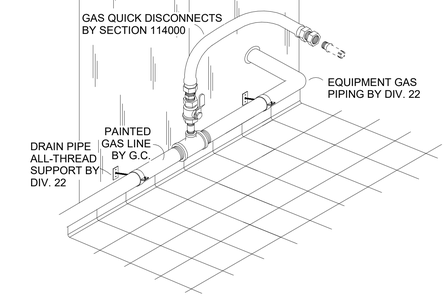
- (O) POWER SUPPLY



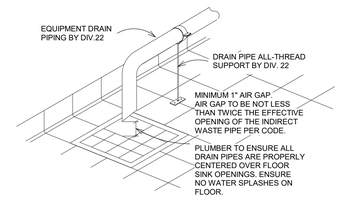
6 DISPOSER WITH VACUUM BREAKER DETAIL
NOT TO SCALE



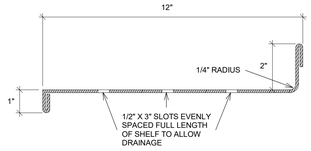
7 EXHAUST HOOD - GAS LINE ROUTING DETAIL
NOT TO SCALE



3 GAS DISCONNECT DETAIL
NOT TO SCALE



5 DRAIN PIPING FASTENER DETAIL
NOT TO SCALE



8 WAREWASH - PERFORATED OVER SHELF DETAIL
NOT TO SCALE

○	HW	HOT WATER	□	FFD	FUNNEL FLOOR DRAIN
○	CW	COLD WATER	◣	EVC	EXHAUST VENT CONNECTION
○	HTW	180 F HOT WATER	⋈	SVC	SUPPLY VENT CONNECTION
⊕		CHILLED WATER	↳	FR	DIRECT-CONNECTED FLUE RISER
●	W	DIRECT WASTE	⊖	PS	PIPE SLEEVE
○	IW	INDIRECT WASTE	⊙		COMPRESSED AIR
⊙		GAS SUPPLY	♦		CO2
◕		STEAM SUPPLY		AFF	ABOVE FINISHED FLOOR
⊗	CR	CONDENSATE RETURN		BTC	BRANCH TO CONN. ON EQUIP
●	DR	DRAIN		DFA	DROP FROM ABOVE
□	FD	FLOOR DRAIN		CLG	CEILING
▦	FST	FLOOR SINK 3/4 GRATE			
▥	FSH	FLOOR SINK 3/4 GRATE			

2 PLUMBING SYMBOLS
NOT TO SCALE

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03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FDP
FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ELECTRONICALLY SIGNING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/18/2025

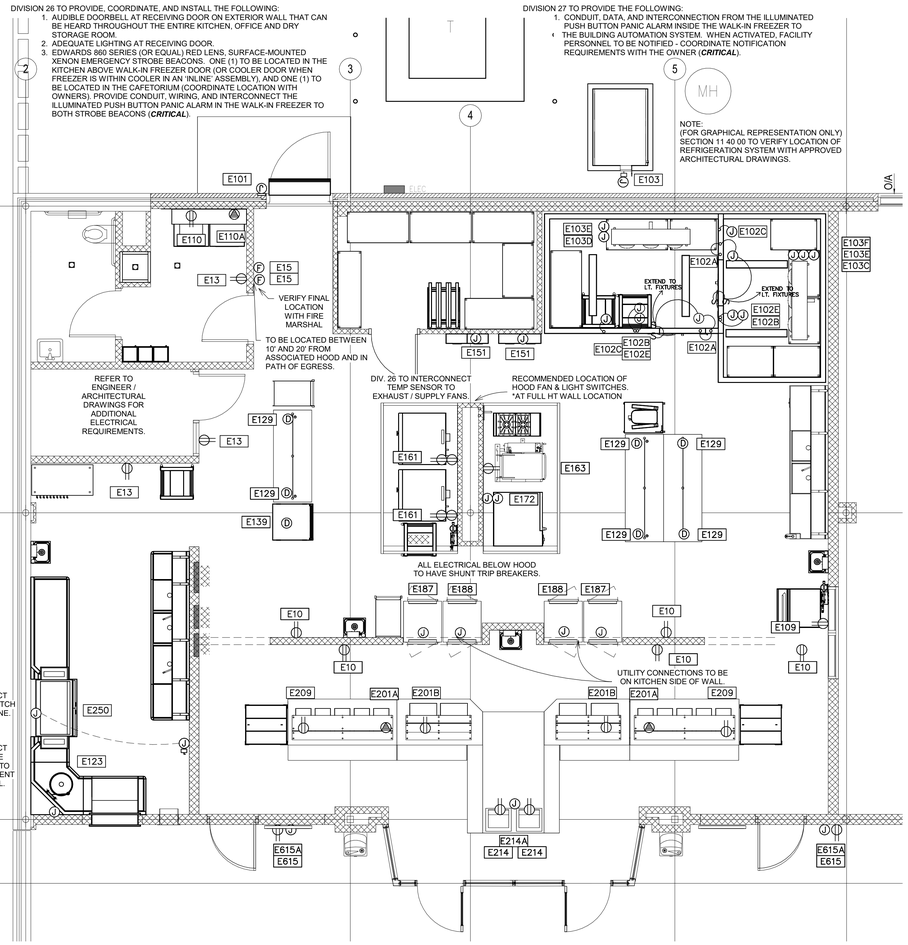
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS PLUMBING PLAN

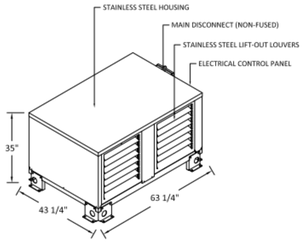
O-QF1.4

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E10	DR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E13	WPR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E15	JB	---	---	---	FIRE PROT. SYSTEM	WALL	48"	RECESSED EMPTY CONDUIT FOR FIRE PULL
E101	JB	5.1A	120	1	AIR SCREEN	WALL	82"	BTC; MAGNETIC REED SWITCH ON DOOR JAMB & DOOR
E102A	JB	16.0A	120	1	DOOR HEATER/LIGHTS	CLG	DFA	BTC
E102B	JB	5.0A	120	1	TEMP. ALARM	CLG	DFA	BTC
E102C	JB	5.0A	120	1	PRESSURE RELIEF PORT	CLG	DFA	BTC
E102E	JB	10.0A	120	1	PANIC ALARM BUTTON	CLG	DFA	BTC-INTERCONNECT TO STROBE LIGHT/HORN ABOVE FREEZER DOOR AND IN CAFETORIUM
E103	JB/DS	25.0A	208	3	REFRIGERATION SYSTEM	VERIFY	VERIFY	BTC - WEATHERPROOF DISCONNECT SWITCH
E103C	JB	9.1A	208	1	FREEZER COIL	CLG	DFA	BTC
E103D	JB	1.8A	120	1	COOLER COIL	CLG	DFA	BTC
E103E	JB	---	---	---	DATA CONNECTION	CLG	DFA	BTC; RUN TO NEAREST IDF / MDF ROOM
E103F	JB	16.0A	120	1	DRAIN LINE HEATER	CLG	DFA	BTC; DEDICATED CIRCUIT
E109	DR	11.9A	120	1	ICE MACHINE	WALL	60"	---
E110	DR	16.0A	120	1	CLOTHES WASHER	WALL	48"	--
E110A	SR	30.0A	208	1	CLOTHES DRYER	WALL	48"	VERIFY NEMA PLUG RECEPTACLE
E123	JB	3.0HP	208	3	DISPOSER	WALL	24"	BTC; CONNECT THRU C.P. TO DISPOSER

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E129	DCR	16.0A	120	1	TABLE RECEPTACLE	CLG	84"	TWISTLOCK PLUG & RECEPTACLE
E139	DCR	15.0A	120	1	INSUL. MOBILE PROOFER	CEILING	DFA	--
E151	JB	1.0A	120	1	FIRE PROT. SYSTEM	CLG	DFA	BTC
E161	(2)DR	6.0A EA.	120	1	CONVECTION OVEN	WALL	24"/48"	SHUNT TRIP BREAKER
E163	DR	5.0A	120	1	TILT BRAISING PAN	WALL	24"	SHUNT TRIP BREAKER
E172	(2)JB	15.0A EA.	208	1	COMBI OVEN	WALL	24"/48"	BTC; RE: NOTE #4- SHUNT TRIP BREAKER
E187	JB	15.5A	120/208	1	HEATED CABINET	WALL	96"	BTC; MOUNT ON KITCHEN SIDE
E188	JB	7.2A	120	1	REFRIGERATOR	WALL	96"	BTC; MOUNT ON KITCHEN SIDE-OMIT PLUG, UNIT TO BE HARDWIRED
E201A	PMR	28.0A	208	1	HOT FOOD COUNTER	FLOOR	4.5"	BTC
E201B	PMR	16.0A	120	1	COLD FOOD COUNTER	FLR	4.5"	---
E209	PMR	8.0A	120	1	DROP FRONT MILK COOLER-8 CASE	FLR	4.5"	---
E214	PMR	16.0A	120	1	CASH REGISTER	FLR	4.5"	DEDICATED CIRCUIT
E214A	CS	---	---	---	POS	FLOOR	6"	BTC; CONDUIT W/DATA LINE TO RUN TO MANAGER'S OFFICE OR IDF ROOM-VERIFY
E250	JB/DS-JB	51.7A	480	3	DISHMACHINE	WALL	66"	BTC; EXTEND FROM JB/DS AT NEAREST WALL
E615	DR	5.0A	120	1	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE DCO AT VIDEO LOCATION
E615A	JB	---	---	---	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE JB AT DATA LOCATION


DIVISION 26 TO PROVIDE, COORDINATE, AND INSTALL THE FOLLOWING:
1. AUDIBLE DOORBELL AT RECEIVING DOOR ON EXTERIOR WALL THAT CAN BE HEARD THROUGHOUT THE ENTIRE KITCHEN, OFFICE AND DRY STORAGE ROOM.
2. ADEQUATE LIGHTING AT RECEIVING DOOR.
3. EDWARDS 860 SERIES (OR EQUAL) RED LENS, SURFACE-MOUNTED XENON EMERGENCY STROBE BEACONS. ONE (1) TO BE LOCATED IN THE KITCHEN ABOVE WALK-IN FREEZER DOOR (OR COOLER DOOR WHEN FREEZER IS WITHIN COOLER IN AN 'INLINE' ASSEMBLY), AND ONE (1) TO BE LOCATED IN THE CAFETORIUM (COORDINATE LOCATION WITH OWNERS). PROVIDE CONDUIT, WIRING, AND INTERCONNECT THE ILLUMINATED PUSH BUTTON PANIC ALARM IN THE WALK-IN FREEZER TO BOTH STROBE BEACONS (CRITICAL).
DIVISION 27 TO PROVIDE THE FOLLOWING:
1. CONDUIT, DATA, AND INTERCONNECTION FROM THE ILLUMINATED PUSH BUTTON PANIC ALARM INSIDE THE WALK-IN FREEZER TO
1 THE BUILDING AUTOMATION SYSTEM. WHEN ACTIVATED, FACILITY PERSONNEL TO BE NOTIFIED - COORDINATE NOTIFICATION REQUIREMENTS WITH THE OWNER (CRITICAL).
NOTE:
(FOR GRAPHICAL REPRESENTATION ONLY)
SECTION 11 40 00 TO VERIFY LOCATION OF REFRIGERATION SYSTEM WITH APPROVED ARCHITECTURAL DRAWINGS.
E101
E110
E110A
E13
E15
E15
VERIFY FINAL LOCATION WITH FIRE MARSHAL.
TO BE LOCATED BETWEEN 10' AND 20' FROM ASSOCIATED HOOD AND IN PATH OF EGRESS.
REFER TO ENGINEER / ARCHITECTURAL DRAWINGS FOR ADDITIONAL ELECTRICAL REQUIREMENTS.
E129
E13
E13
E129
E139
DIV. 26 TO INTERCONNECT TEMP SENSOR TO EXHAUST / SUPPLY FANS.
RECOMMENDED LOCATION OF HOOD FAN & LIGHT SWITCHES. "AT FULL HT WALL LOCATION
E161
E161
E172
E163
E129
E129
E129
E129
ALL ELECTRICAL BELOW HOOD TO HAVE SHUNT TRIP BREAKERS.
E187
E188
E188
E187
E10
E10
E10
E10
E10
E109
UTILITY CONNECTIONS TO BE ON KITCHEN SIDE OF WALL.
DIV. 26 TO INTERCONNECT TABLE LIMIT SWITCH TO DISHMACHINE.
DIV. 26 TO INTERCONNECT DISHMACHINE EXHAUST FAN TO DISHMACHINE VENT FAN CONTROL.
E250
E123
E209
E201A
E201B
E201B
E201A
E209
E214A
E214
E214
E615A
E615
E615A
E615
E103E
E103D
E102C
E102A
E102A
E102E
E102B
E102C
E102E
E102B
E103F
E103E
E103D
EXTEND TO LT. FIXTURES
EXTEND TO LT. FIXTURES
E151
E151
E102A
E102C
E102E
E102B
E103
E103
E103

MODEL NO. ZS1-02Z-CT3-EST OUTDOOR AIR COOLED REFRIGERATION SYSTEM
ITEM NO. 103.1



NOTE:
- CRANKCASE HEATERS
- FAN CYCLING SWITCH
- (2) DOOR SENSORS (SHIPPED LOOSE)
- 24" STAND W/ SKIRTS (SHIPPED LOOSE)
- REFRIGERANT DETECTION SYSTEM
- CHECK VALVE (SHIPPED LOOSE)
- SHUT OFF VALVE (SHIPPED LOOSE)

RACK WEIGHT: 500 LBS.

ENGINEERING SUMMARY

POWER SUPPLY: 208-230/60/3
CONNECTED LOAD: 25 AMPS

MOPD: 35 AMP
MINIMUM CIRCUIT AMPACITY: 28.0

SYSTEM	FIXTURES ITEM #	DESCRIPTION	TEMP °F FIXT.	TEMP °F SUCT.	REQ'D FIXTURE BTU/H	REFRIG. R.	CONDENSING UNIT COMPRESSOR MODEL NO.	H.P.	RATING @ 60 HZ RLA	V	PH	BTU CAP @ AMB °F 110	TYPE	REC. CAP. (lbs)	CONDENSER	EVAPORATOR COILS ITEM #	MODEL NO.	QTY	FAN MOTORS @ 60 HZ RLA	V	PH	HEATERS @ 60 HZ RLA	V	PH	DEFR. TYPE	DEFROST CONTROLLER TYPE	CONTROLLER QTY	ACCESSORIES TSTAT	SOL. VALVE	EXP. V.L.V.	REFRIGERANT LINE SIZES (IN) SUCT.	SUCT. LINE RISER	LIQUID	LINE RUN (FT)	TYPE	TOTAL SYSTEM LOAD
A	102	WALK-IN COOLER	35	25	9798	454A	YS11KAE		11.2	208	3	11700	Z	14.0	L1R		BEL0095	1	1.8	115	1				O.C.	ECOSMART	1	F	F	EF	5/8	5/8	3/8	100	M	11.2
B	102	WALK-IN FREEZER	-10	-20	8924	454A	YF10KAE		13.8	208	3	11050	Z	26.1	L2R		BEL0080	1	1.0	208	1	9.1	208	1	ELEC	ECOSMART	1	F	F	EF	7/8	7/8	3/8	100	M	13.8

ALL EVAPORATOR COILS WILL REQUIRE A HOUSE POWER SUPPLY

c UL us LISTED

NOTE:
IT IS THE INSTALLING CONTRACTORS RESPONSIBILITY TO FOLLOW ALL APPLICABLE CODES AND CURRENT REFRIGERATION INDUSTRY STANDARDS AND PRACTICES WHEN DETERMINING LINE SIZES, AND INSTALLING AND STARTING UP RDT EQUIPMENT.

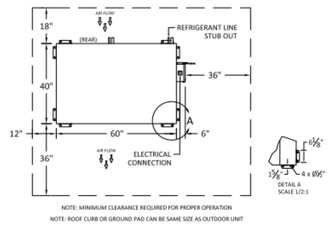
COMPRESSOR TYPE
Z SCROLL
H HERMETIC
S SEMI-HERMETIC
D DISCUS

DEFROST TYPE
O.C. OFF CYCLE
ELEC ELECTRIC

LINE TYPE
M MAIN - UP TO 100'
B BRANCH - UP TO 50'
T TRUNK - UP TO 200'

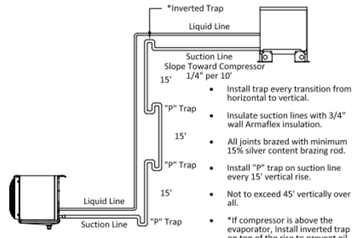
EVAPORATOR ACCESSORIES
EF EEV FACTORY EQUIPPED ON EVAP
TF TXV FACTORY EQUIPPED ON EVAP
F FACTORY EQUIPPED ON EVAP
O PROVIDED BY OTHERS
L LOOSE (FIELD INSTALLATION)

PLANVIEW/ CLEARANCE REQUIREMENTS



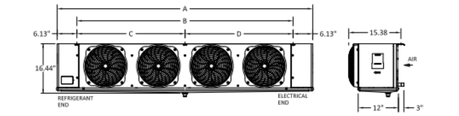
NOTE: MINIMUM CLEARANCE REQUIRED FOR PROPER OPERATION
NOTE: ROOF CURB OR GROUND PAD CAN BE SAME SIZE AS OUTDOOR UNIT

SUCTION LINE VERTICAL RISE DETAIL



- Install trap every transition from horizontal to vertical.
- Insulate suction lines with 3/4" wall Armaflex insulation.
- All joints brazed with minimum 15% silver content brazing rod.
- Install "P" trap on suction line every 15' vertical rise.
- Not to exceed 45' vertically over all.
- *If compressor is above the evaporator, Install inverted trap on top of the rise to prevent oil from seeping down when fixture(s) is turned off.

EVAPORATOR DETAILS - MODEL BEL



AIR DEFROST Size	DIMENSIONS A	B	C	D	CONNECTIONS (Inches) Coil Inlet	Drain	Approx. Net Wt.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps 115V	208V
	Inches	Inches	Inches	Inches						
095	45-1/2	33-1/4	-	-	1/2 OD	3/4 MPT	51	2	1.8	1.0

ELECTRIC DEFROST	DIMENSIONS A	B	C	D	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps	Heater Amps as wired for 208-230/60/1	208-230/60/3	460/60/3
	Inches	Inches	Inches	Inches				Lbs.					
080	45-1/2	33-1/4	-	-	1/2 OD	5/8 OD	3/4 MPT	54	2	1.0	9.1	5.7	4.6

ZS SERIES ENGINEERING SPECIFICATIONS

Multi compressor, outdoor, air cooled. The refrigeration package shall be a pre-engineered and factory-assembled unit, trade name "ZS", as manufactured by Refrigeration Design Technologies, 1808 FM Road 66, P.O. Box 622, Waxahachie, Texas 75168. Phone: (972) 937-3215; Fax: (972) 937-0970.

1. Air-Cooled Refrigeration System
The RDT UL Listed "Air-Cooled" Refrigeration system shall be housed in a weather-protected compact powder coated steel frame. The entire housing shall be brushed stainless steel. The unit shall include an air-cooled aluminum fin copper tube condenser designed to operate at 15 degrees TD. The exterior housing shall feature stainless steel one piece louvers. Lifting points shall be integrated in the framing component. Condenser fan motors shall be mounted within the enclosure. The condenser intake surface shall be protected with stainless steel expanded metal guard to protect against vandalism and hail damage.

Each unit shall be equipped with a ball-bearing fan motor, suction filter, sight glass, liquid filter/drier, liquid line inlet and outlet valve, defrost cycle and high pressure super-hose connections. Each unit shall be equipped with fan cycling controls and/or head pressure regulator where required for low ambient conditions.

Condensing unit shall contain scroll, hermetic, semi-hermetic, and/or discus type compressor(s) assembled to operate with the refrigerant specified for both medium and low temperature applications.

2. Evaporator Coils
A. Evaporator coils shall be direct expansion type fabricated of copper tubes with aluminum fins.
B. All evaporator coils shall be provided with solenoid valve, thermostatic or electronic expansion valve and thermostat.

3. Pre-Piping
All refrigerant lines shall be extended to outside of the housing in a neat and orderly manner. All tubing shall be securely supported and anchored with non-corrosive coated clamps.

All joints must be brazed, not soldered.

All piping and controls shall be factory pressure-tested with dry nitrogen.

4. Control Panel
The package shall have a factory-mounted and pre-wired control panel, with main disconnect (non fused) where required, circuit breakers, contactors wired for single point power connection.

General Information
Contractors shall verify all dimensions onsite and coordinate with other trades.

General contractor shall prepare the platform, curbed openings and weatherproofing the unit after installation.

Refrigeration Contractor
All copper tubing to be refrigerant grade. A.C.R. or type "L".

Brazing should be used for all refrigerant piping. Silver solder or soft solder is not acceptable.

All piping to be pressure tested with nitrogen at 300 psi. After the condensing unit and coil have been connected the balance of the system shall be leak tested with the valves open at 200 psi.

The complete system shall be evacuated with a vacuum pump. Each unit should be charged tested and adjusted to assure operation.

Contractor should provide and install the drain-line heater in freezer. Heater shall be connected by electrical contractor. Seal all penetrations through the walk-in units with foam.

Electrical Contractor
Electrical contractor to provide power for refrigeration package and connect control and defrost system as called for in the wiring diagram.

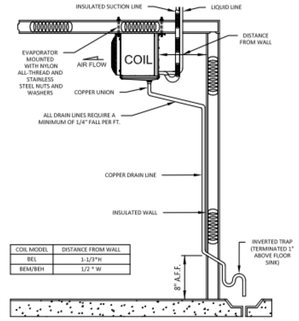
Electrical contractor to connect drain-line heater in the freezer.

All electrical wiring and installation shall be in accordance with the wiring diagram and local codes. Seal all penetrations through the walk-in units with foam.

Plumbing Contractor
Plumbing contractor to provide copper drain lines for walk-in refrigerator and freezer, pitched 1/4" per foot of run. Trap drain-line outside of refrigerated space to avoid entrance of warm, moist air.

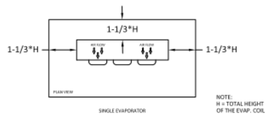
All plumbing installation shall be in accordance with local codes.

EVAPORATOR MOUNTING DETAIL (TYPICAL)



COIL MODEL	DISTANCE FROM WALL
BEL	1-1/3"H
BEM/BEH	1/2 " W

EVAPORATOR PLACEMENT & CLEARANCE REQUIREMENTS LOW PROFILE EVAPORATOR COILS (I.E. - BEL)



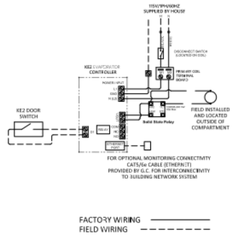
NOTE:
H = TOTAL HEIGHT OF THE EVAP. COIL

SINGLE EVAPORATOR

WIRING DIAGRAM - ECO-SMART - AKOA1AE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN COOLER WITH ONE COIL 115/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW:

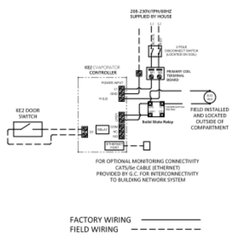
SYS	DESCRIPTION	VOLTAGE
A	WALK-IN COOLER	115/1



WIRING DIAGRAM - ECO-SMART - AKOB1EE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN FREEZER WITH ONE COIL 208-230/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW:

SYS	DESCRIPTION	VOLTAGE
B	WALK-IN FREEZER	208/1



APPROVAL STATUS

THIS DRAWING REPRESENTS OUR UNDERSTANDING OF THE SPECIFICATIONS. PLEASE REVIEW IT CAREFULLY FOR ACCURACY. CLEARLY AND IN DETAIL NOTE CHANGES REQUIRED.

MARK APPROPRIATE BOX, SIGN, AND DATE BELOW.

- ☐ APPROVED FOR FABRICATION NO CHANGES
- ☐ APPROVED FOR FABRICATION WITH CHANGES NOTED
- ☐ REVISE AND RE-SUBMIT DRAWING

BY: _____ DATE: _____

NOTICE

THIS DRAWING BEING AN INSTRUMENT OF SERVICE IS AND WILL REMAIN PROPERTY OF REFRIGERATION DESIGN TECHNOLOGIES AND CANNOT BE USED WITHOUT WRITTEN AUTHORIZATION.

No.	Revision/Issue	Date
0	ORIGINAL ISSUE	10-02-24
1	CHANGED A2L EQUIPMENT	7-16-25

REFRIGERATION DESIGN TECHNOLOGIES
1808 FM Road 66 / P.O. Box 622
Waxahachie, Texas
(800) 736-9518
www.rdtonline.com

Consultant:
Foodservice Design Professionals
Southlake, TX

Dealer
-
-

Palmer Elementary School
Sugar Land, TX

Project No: 31078
Designed By: J GOODWYN
Drawn By: J GOODWYN
Sheet 1.1 of sheets

ISSUE:
12/05/2024 DD PACKAGE
03/11/2025 50% CD PKG.
05/23/2025 90% CD PKG.
07/18/2025 ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
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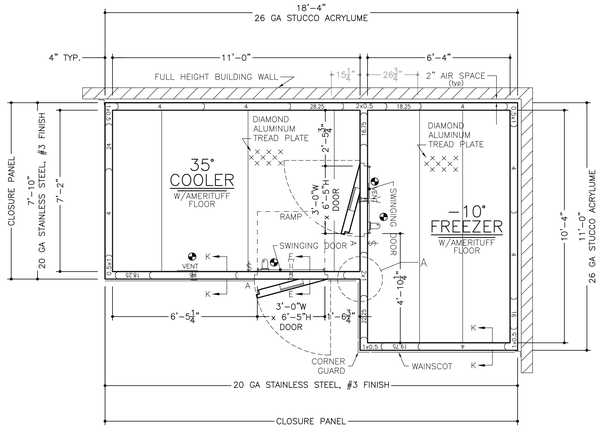
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

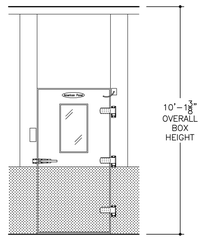
SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ELECTRONICALLY APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/18/2025

ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

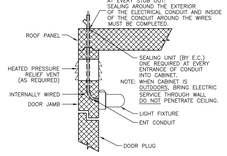
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS CONDENSING UNITS

O-QF1.6

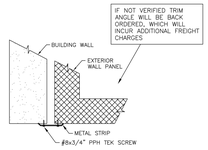




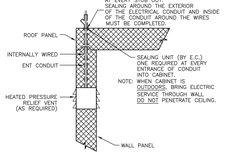
COOLER DOOR ELEVATION



DOOR ELECTRICAL CONNECTION



TRIM ANGLE
DETAIL #3



PANEL MOUNTED ELECTRICAL CONNECTION

~SPECIFICATIONS~

BOX HEIGHT:
FREEZER – 10'-2" OVERALL (7'-6 1/4" INTERIOR)
COOLER – 10'-2" OVERALL (7'-6 1/4" INTERIOR)

CONSTRUCTION:
FOAMED IN PLACE
NSF LISTED, STANDARD NO. 7

INSULATION:
4" URETHANE, FINISHED PANEL
UL CLASSIFIED FLAME SPREAD 20
CORE SMOKE DEVELOPED 250

INSTALLATION:
INDOOR

FLOOR: (SEE DETAILS)
FREEZER – STANDARD W/AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE,
3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)
COOLER – STANDARD W/36" DEEP INTERIOR RAMP & AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE,
3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)

DOOR HARDWARE & ACCESSORIES: (EACH DOOR)
SMOOTH POLISHED DOOR HARDWARE
POWER TO BE STUBBED OUT CEILING PANEL
DRY CONTACT LEADS TO BE STUBBED OUT CEILING PANEL IN A SEPARATE STUB OUT
DEADBOLT HANDLE W/KEYED CYLINDER LOCK, PADLOCK
PROVISION & QUARTER TURN INSIDE RELEASE (EXTERIOR DOOR ONLY)
1/8" STAINLESS STEEL THRESHOLD COVER PLATE
14 GA STAINLESS STEEL SUB THRESHOLD
FRAME HEATER WIRE
HYDRAULIC DOOR CLOSER
IC+ WALK-IN DOOR CONTROLLER AND ALARM SYSTEM INCLUDING:
INTEGRATED LIGHT SWITCH WITH AUTOMATIC LIGHT OFF AND 3-WAY & 4-WAY CAPABILITY
TEMPERATURE MONITOR AND LOGGER WITH HIGH TEMP. AND LOW TEMP. VISUAL AND AUDIO ALARM
F OR C TEMPERATURE SELECTION
INTEGRATED DRY CONTACT FOR ALARM SIGNALING & POWER FAILURE (1A @ 24VAC, 1A @ 30VDC)
DOOR AND WINDOW HEATER CONTROL (WHEN SO EQUIPPED)
HACCP PREVIEW VIA ONBOARD LCD SCREEN
HACCP DOWNLOAD VIA USB
WIFI CONNECTIVITY (INTERNET ENABLED WIFI NETWORK NEEDED)
BATTERY BACKUP
TEMPERATURE ALARM NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES
POWER FAILURE NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES
(FOR THIS FEATURE TO WORK THE LOCAL WIFI NETWORK MUST BE
POWER PROTECTED AND WORKING AT THE TIME OF POWER FAILURE EVENT)
AUTOMATIC AND ON DEMAND TRANSMISSION OF HACCP DATA VIA EMAIL
ADAPTIVE SETTINGS
MOMENTARY BACK-TO-BACK LIGHT SWITCH W/PILOT
25° AIR TEMPERATURE PROBE
25' SECOND PROBE (EXTENDED) FOR MONITORING THE TEMPERATURE AT
A SECOND LOCATION OR FOR MONITORING A SECOND CABINET
DOOR SWITCH TO ENABLE DOOR AJAR ALARM, DOOR AJAR NOTIFICATION VIA EMAIL &/OR
EMAIL TO SMS TEXT MESSAGES, AND AUTOMATIC LIGHTS ON WHEN DOOR OPENS
PANIC ALARM WITH ILLUMINATED PANIC BUTTON, ALARM BUZZER WITH LED,
& NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES (1-COOLER, 2-FREEZER)
KASON SCREW-IN VAPOR PROOF LIGHT FIXTURE
W/8.5 WATT SYLVANIA LED BULB & GLOBE
CCI CLEAR VU SWINGING DOOR
3 – KASON #1346 ADJUSTABLE SPRING LOADED HINGES
HEATED VISION WINDOW (14" x 24")
1/8" DIAMOND ALUMINUM TREAD PLATE KICKPLATES @ 36" HIGH I/S & O/S DOOR & FRAME
KASON 1826 INTELLO-VENT WITH LIGHTS (FREEZER DOOR ONLY) – FIELD INTERCONNECTION REQUIRED

PANEL MOUNTED ACCESSORIES:
1 – KASON 1826 INTELLO-VENT WITH LIGHTS – FIELD INTERCONNECTION REQUIRED
(FOAMED IN PANEL – PER PLAN) (COOLER ONLY)

ACCESSORIES: (SHIPPED LOOSE)
2 – PCS. TRIM ANGLE – 18 GA STAINLESS STEEL, #3 FINISH
CLOSURE PANEL TO AN EXISTING CEILING (PER PLAN) – VERIFY LENGTH
18 GA STAINLESS STEEL, #3 FINISH
2 – 48" (1810LC) LED LIGHT FIXTURE(S) @ 40W EACH, (LIGHTS TO BE INSTALLED PERPENDICULAR TO COILS)
1/8" DIAMOND ALUMINUM TREAD PLATE WAINSCOT @ 36" HIGH (EXPOSED EXTERIOR ONLY)
1 – 1/8" DIAMOND ALUMINUM TREAD PLATE CORNER GUARD(S) @ 36" HIGH
ALUMINUM COVED BASE MOLDING (COMPLETE INTERIOR ONLY)
ROOF SUPPORT ANGLE W/BEAUTY TRIM
2 – BAKELITE LABEL(S) (BLACK) ("FREEZER", "COOLER")
1 – BAKELITE LABEL (YELLOW W/BLACK LETTERING) ("VACUUM PRESSURE RELIEF")
6 MIL POLYETHYLENE VAPOR BARRIER
5 – BELL BOX(ES) & COVER PLATE(S)
2 – DOOR STOP(S)
2 – EDWARDS 880 SERIES STROBE BEACONS
1 – EMERGENCY PRESSURE RELEASE

METAL FINISHES:
INTERIOR & EXTERIOR DOOR & FRAME – 18 GA STAINLESS STEEL, #3 FINISH
INTERIOR WALLS & CEILING – WHITE .040 STUCCO ALUMINUM
EXPOSED EXTERIOR – 20 GA STAINLESS STEEL, #3 FINISH
UNEXPOSED EXTERIOR – 26 GA STUCCO ACRYLUME
EXTERIOR FLOOR – 26 GA STUCCO ACRYLUME
EXTERIOR ROOF – 26 GA STUCCO ACRYLUME
INTERIOR FLOOR – AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE,
3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)

REFRIGERATION: BY OTHERS

NOTE: THE LARGEST DOOR PANEL ON THIS JOB IS 57.5" x 114.5".
NOTE: THE LARGEST ROOF/FLOOR PANEL ON THIS JOB IS 46.5" x 129".
CUSTOMER IS TO VERIFY THAT THIS PANEL SIZE WILL NOT CONFLICT WITH ANY JOB SITE RESTRICTIONS.

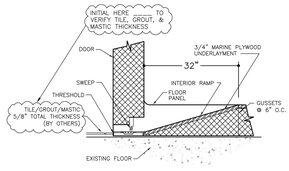
NOTE: CUSTOMER IS TO VERIFY ALL DIMENSIONS, SECTIONS, DETAILS AND SPECIFICATIONS

NOTE: MAXIMUM LIGHT CIRCUIT LOAD IS 1200W 120VAC TUNGSTEN, 5A 120VAC ELECTRONIC BALLAST. FOR HIGHER LOADS ADDITIONAL LIGHT FIXTURES MUST BE CONTROLLED VIA RELAY (BY OTHERS).

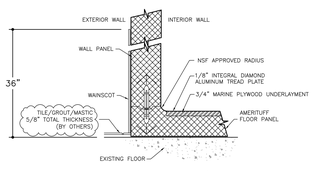
ELECTRICAL DATA
= POINT OF ELECTRICAL CONNECTIONS.
WALK-IN DOORS: 115v/1ø – 350w*
PANEL MOUNTED ACC: 115v/1ø – 23w (EACH VENT)

*NOTE: ADD WATTAGE FOR EACH ADDITIONAL LIGHT FIXTURE IN ACCESSORIES.

ITEM #102 WALK-IN COOLER/FREEZER

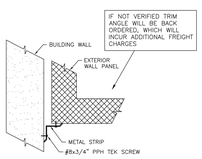


SECTION E – E

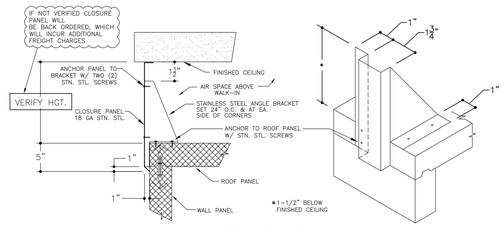


SECTION K – K

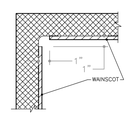
American Panel's walk-in floor panels with AmeriTuff structural support are designed to withstand uniformly distributed stationary loads of 15,000 lbs. per square foot. American Panel's warranty does not cover damage caused by pallet jacks, forklifts or any other form of heavy-duty rolling traffic. A concrete wearing floor must be installed on top of the AmeriTuff walk-in floor panels for those rolling applications.



TRIM ANGLE
DETAIL #2



CLOSURE PANEL ABOVE WALK-IN DETAIL #4E



DETAIL "A" WAINSCOT AT INTERIOR CORNER

INSULATION R-VALUES		
PANEL TYPE	COOLER	FREEZER
4" WALLS, ROOFS	R-29	R-32
5" WALLS, ROOFS	R-36	R-40
FLOORS	R-25	R-28
DOORS	R-32	

COOLER DOOR	
DOOR FRAME KWH/DAY	2.424

FREEZER DOOR	
DOOR FRAME KWH/DAY	4.392

WALK-IN PANEL R-8967		
BUILDING UNITS	R-8967	37M2
USA		
SURFACE BURNING CHARACTERISTICS		
MATERIAL DETAILS	"FLAME SPREAD"	"SMOKE DEVELOPED"
ALUMINUM PANELS, PAINTED OR UNPAINTED, 5" OR LESS	15	350
"GALVANIZED STEEL OR STAINLESS STEEL PANELS, PAINTED OR UNPAINTED, 5" OR LESS"	10	400 TO 500
CORE MATERIAL, 6" THICK	20	250

AMERICAN PANEL WALK-IN COOLERS AND FREEZERS COMPLY WITH THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC), SECTION C403.11

THIS AMERICAN PANEL WALK-IN WILL BE MANUFACTURED TO UL & NSF REQUIREMENTS. AMERICAN PANEL ACCEPTS NO LIABILITY FOR LOCAL CODE REQUIREMENTS OF WHICH AMERICAN PANEL HAS NOT BEEN MADE AWARE OF IN WRITING PRIOR TO FABRICATION.

1) Please verify that door swing and location are correct.

2) If this walk-in is to be installed in a depression, or quarry tile is to be applied to the interior, depression depths or tile thickness must be specified to insure proper door height.

3) All site preparation, floor or slab construction, plumbing, electrical connections (including control wiring) by others.

4) Electrical: 115-60-1 required above latch side of each door, through ceiling, to operate frame heater and light.

5) Special note to General Contractor and his Sub Contractor for quarry tile or concrete wearing floors: the sheet metal panel facings may be susceptible to staining due to excessive moisture created by hydration of concrete type materials. Therefore, it is absolutely necessary that each room be properly ventilated. Also note that special precautions must be taken when using muriatic acid due to effects hydrochloric acid fumes have on aluminum and stainless steel.

6) This drawing and information contained herein are the exclusive property of American Panel Corporation. It shall be returned to American Panel Corporation upon demand and shall not be reproduced in whole or part, disclosed to anyone else, or used without the written consent of American Panel Corporation.

☐ APPROVED
☐ APPROVED AS NOTED
☐ REVISE & RESUBMIT
SIGNATURE _____
PRINT NAME _____
DATE _____

REV.	DATE	DESCRIPTION	REV. BY	OWN'S BY
A	1/22/25	REVISED SPECS	DH	WQ

American Panel
AMERICAN PANEL CORPORATION
5800 S.E. 78th St. Ocala, Florida 34472
Ph. (352) 245-7055 Fax (352) 245-0726

CUSTOMER: FOODSERVICE DESIGN PROFESSIONALS
PROJECT: PALMER ES-FBISD – FORT BEND, TX
DATE: 10/7/24 | DRAWN BY: LC/TR | P.O.#:
SCALE: 3/8"=1'-0" | PROPOSAL#: PD213253 | JOB#: | SHEET 1 of 1

ALL DIMENSIONS MUST BE FIELD VERIFIED PRIOR TO FABRICATION AND INSTALLATION

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

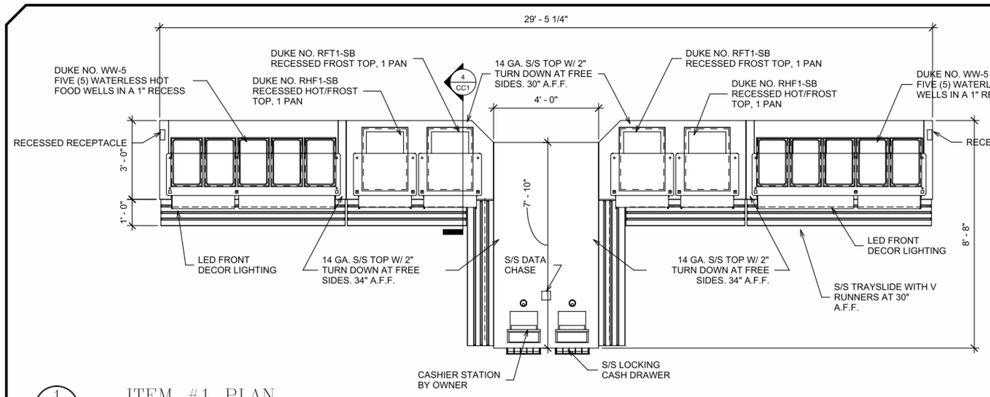
FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
FCSI 48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ELECTRONICALLY APPROVING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/18/2025

ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

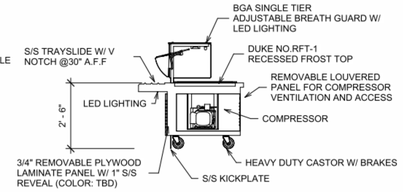
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS WALK-INS

O-QF1.7



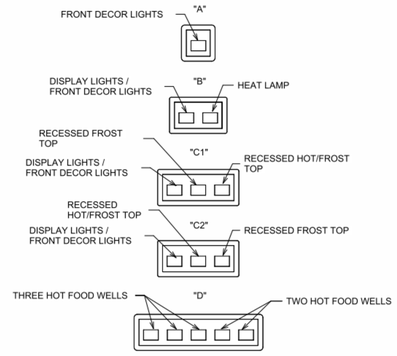
1 CC1 ITEM #1 PLAN

SCALE: 1/2" = 1'-0"



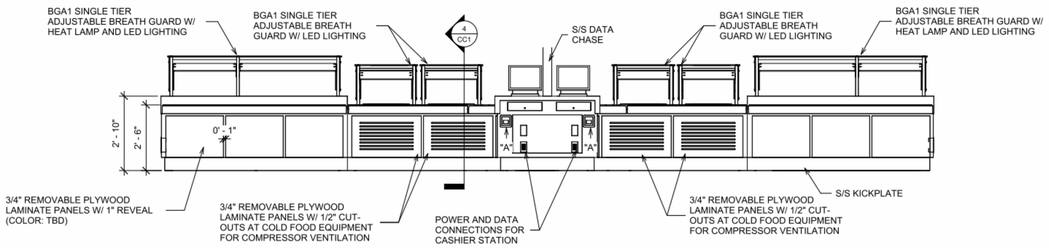
4 CC1 ITEM #1 SECTION VIEW

SCALE: 1/2" = 1'-0"



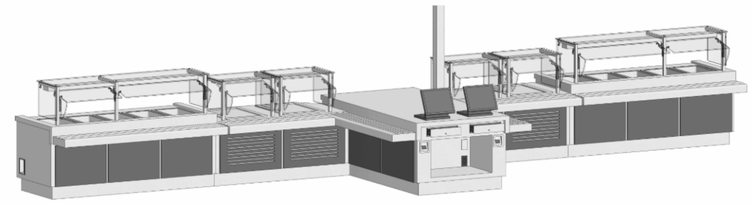
8 CC1 ITEM #1 CONTROL PANEL LAYOUT

SCALE: 1 1/2" = 1'-0"



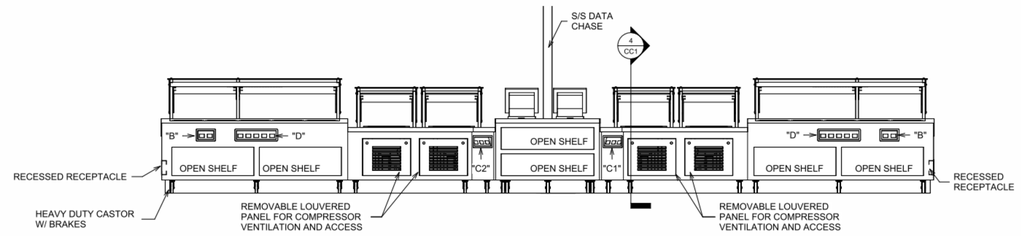
2 CC1 ITEM #1 FRONT ELEVATION

SCALE: 1/2" = 1'-0"



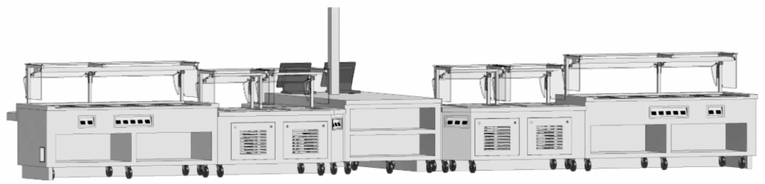
11 CC1 ITEM #1 3D PERSPECTIVE

SCALE:



3 CC1 ITEM #1 REAR ELEVATION

SCALE: 1/2" = 1'-0"



12 CC1 ITEM #1 3D PERSPECTIVE 2

SCALE:



1A CC1 ELECTRICAL SCHEDULE
CASHIER COUNTER

1B CC1 ELECTRICAL SCHEDULE
HOT FOOD COUNTER #1
(TWO (2) REQUIRED)

1C CC1 ELECTRICAL SCHEDULE
HOT/FROST COUNTER
(TWO (2) REQUIRED)

EQUIPMENT BY OTHERS

COUNTERCRAFT LAYOUTS, MEPS, AND LOAD CENTERS ARE BASED ON SPECIFIED MANUFACTURERS AND MODELS AS OUTLINED IN THE SPECIFICATIONS IN THE CONTRACT DOCUMENTS. COUNTERCRAFT MUST BE NOTIFIED OF ANY CHANGES TO THE CONTRACT DOCUMENTS IN A TIMELY MANNER.

NO	REVISIONS	DATE	BY
1	PRELIMINARY DWG	10/21/2024	MAX
2		11/26/2024	MAX
3			
4			
5			
6			
7			
8			
9			

ANOTHER QUALITY PRODUCT FROM
CounterCraft
7007 STEARNS, HOUSTON,TEXAS 77021
(713) 747-5611

PROJECT: FBISD Bond Package 013
FOOD SERVICE CONSULTANT: FOODSERVICE DESIGN PROFESSIONALS

PROJECT NO. -
DATE 11/26/2024
SCALE: As indicated
DRAWN BY: MAX.C
CHECKED BY: E.S
SHEET NO. CC1
OF SHEET

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FDP
FOODSERVICE DESIGN PROFESSIONALS

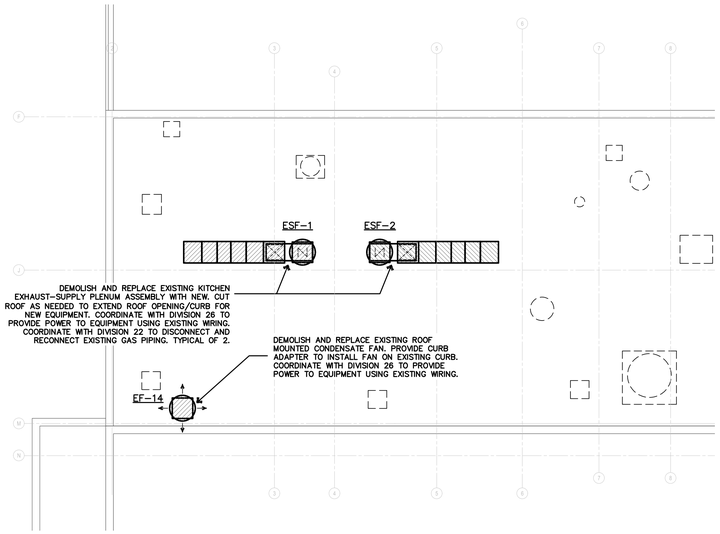
FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
488544119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THE DOCUMENT APPEARING ON THIS SHEET WAS AUTHORIZED BY MELISSA MOORE, FCSI NO: 488544119 ON: 07/15/2025

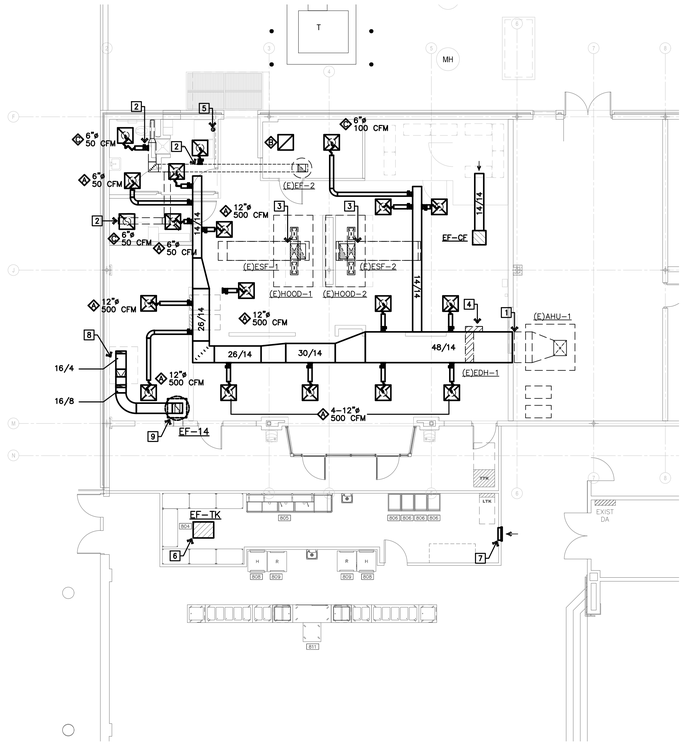
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS SERVING LINE

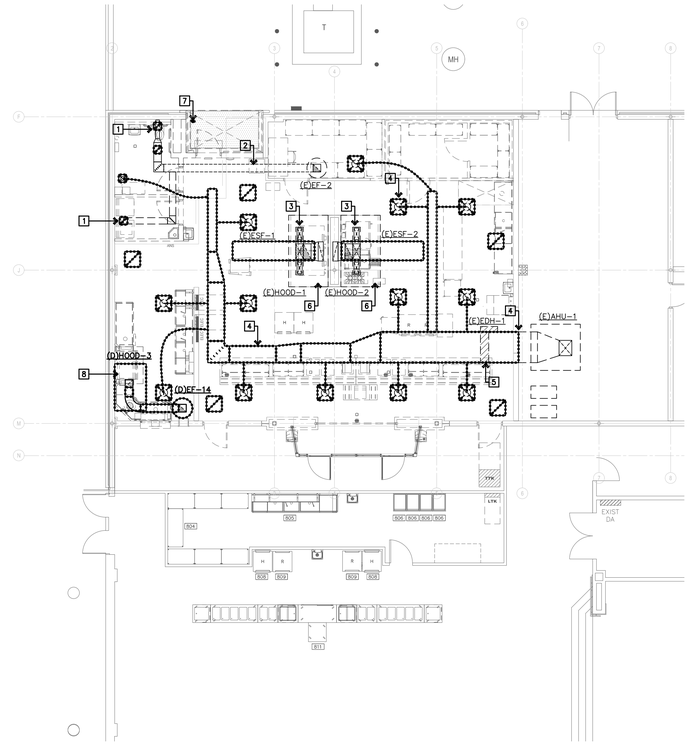
O-QF1.8



3 MECHANICAL ROOF FLOOR PLAN
SCALE: 1/8" = 1'-0"



2 RENO MECHANICAL FLOOR PLAN - KITCHEN AREA
SCALE: 1/8" = 1'-0"



1 DEMO MECHANICAL FLOOR PLAN - KITCHEN AREA
SCALE: 1/8" = 1'-0"

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A	CEILING DIFFUSER – 24" X 24" FACE, PATTERN TYPE, STEEL CONSTRUCTION, OBD/RADIATION DAMPER, WHITE FINISH, U.L LISTED PRICE SCD A1-12" X 12"
B	CEILING RETURN GRILLE – 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE PDFR B1-12" X 12"
C	CEILING EXHAUST GRILLE – 24" X 24" PERFORATED FACE, STEEL CONST., OBD/RADIATION DAMPER, WHITE FINISH, NECK SIZE SHOWN, U.L. LISTED PRICE PDDR C1-12" X 12"

NOTES:
1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPES FOR AIR DEVICES.

KITCHEN HOOD REFURBISHMENT NOTES

HOOD REFURBISHMENT FOR KITCHEN HOODS (QUANTITY 2):
- STEAM WASH AND DEEP CLEAN STAINLESS STEEL HOOD ASSEMBLY, CASING, AND SUPPLY GRILLES WHERE APPLICABLE.
- REPLACE GREASE FILTER RACKS.
- CLEAN EXISTING MAKE-UP AIR AND GREASE EXHAUST DUCT.
- RELAMP EXISTING LIGHT FIXTURES WITH NEW 4000K BULBS LISTED FOR USE IN AN ENCLOSED KITCHEN HOOD FIXTURE.
- COORDINATE WITH DIVISION 11 FOR REPLACEMENT OF ANSUL FIRE SUPPRESSION SYSTEM.
- HOOD ASSEMBLIES SHALL BE CLEANED TO MEET THE STANDARDS ESTABLISHED IN NFPA STANDARD 96.

KITCHEN HOOD EXHAUST & MAKE-UP AIR UNIT SCHEDULE

MARK	ESF-1,2
SERVES	KITCHEN HOOD-1 & 2
SUPPLY SECTION	
TYPE	INDIRECT GAS-FIRED MAKE-UP AIR UNIT
DRIVE	DIRECT
SPEED CONTROL	VFD
SUPPLY CFM	2250
EXT. S.P. (IN. W.G.)	0.375
HORSEPOWER (WATTS)	1-1/2 HP
VOLTAGE	480V/3-PHASE
UNIT MCA	4.6 A
UNIT MOCP	15 A
HEATING MEDIUM	NATURAL GAS
INPUT/OUTPUT (MBH)	150.0/121.5
TURNDOWN RATIO	4:1
MANUFACTURER	GREENHECK
MODEL	IGX-P109-H12-MF-E
EXHAUST SECTION	
TYPE	UPBLAST BELT DRIVE CENTRIFUGAL
EXHAUST CFM	3600
EXT. S.P. (IN. W.G.)	0.75
HORSEPOWER (WATTS)	1-1/2 HP
VOLTAGE	480V/3-PHASE
UNIT MCA	3.75 A
UNIT MOCP	15 A
MANUFACTURER	GREENHECK
EXHAUST FAN MODEL	CUBE-200-15

NOTES
1. EXHAUST FAN: PROVIDE FAN WITH PRE-FABRICATED ROOF CURB ADAPTER, VENTED CURB EXTENSION, HINGING KIT, HEAT BAFFLE, DRAIN CONNECTION, GREASE TRAP, AND DISCONNECT SWITCH. FANS SHALL BE UL LISTED FOR USE WITH TYPE 1 GREASE HOOD.
2. EXHAUST FAN: PROVIDE NEW MOTOR STARTER, SIZED FOR EXHAUST FAN MOTOR AND INSTALLED IN PLACE OF EXISTING. REFERENCE THE SPECIFICATIONS FOR STARTER REQUIREMENTS. COORDINATE WITH DIV.25 FOR RE-TERMINATION OF PERMISSIVE ON/OFF CONTROL. COORDINATE WITH DIV.26 FOR RE-TERMINATION OF LOCAL HOOD SWITCH INTERLOCK FOR START/STOP CONTROL.
3. SUPPLY FAN/FURNACE: FLUE GAS FROM HEATING COIL SHALL BE POWER VENTED.
4. SUPPLY FAN/FURNACE: WEATHERHOOD WITH ALUMINUM MESH.
5. SUPPLY FAN/FURNACE: 5 YEAR HEAT EXCHANGER WARRANTY.
6. SUPPLY FAN/FURNACE CONTROLS: INTEGRAL HEATER CONTROLS WITH BAS INTERLOCK FOR PERMISSIVE ON/OFF AND LOCAL SWITCH INTERLOCK FOR CONTROL FROM KITCHEN HOOD SWITCH. FURNACE CONTROLS SHALL BE PROGRAMMED FOR 64°F LAT, WITH A LOCKOUT FOR O/A TEMPERATURES ABOVE THE LAT SETPOINT. COORDINATE WITH DIV.25 AND DIV.26 FOR CONTROLS AND SWITCH INTERLOCKS.
7. TWO POINT POWER CONNECTION: ONE FOR EXHAUST FAN AND ONE FOR INTAKE/SUPPLY FAN.
8. INTERLOCK FAN(S) WITH ASSOCIATED COOKING HOOD
9. INTERLOCK FAN WITH SWITCH ON KITCHEN HOOD.
10. UNIT TO BE PROVIDED WITH GALVANIZED STEEL FAN PACK EXTENSION/COMBINATION CURB.
11. REFER TO WRITTEN SPECS FOR ADDITIONAL REQUIREMENTS.

MECHANICAL RENO KEYED NOTES

1. TIE-IN NEW DUCTWORK TO EXISTING DUCTWORK AT WALL PENETRATION.
2. CONNECT NEW AIR DEVICE AND TAP TO EXISTING E/A TRUNK DUCT.
3. REWORK EXISTING EXHAUST AND SUPPLY DUCTWORK FROM EXISTING KITCHEN HOOD UP TO FAN, AS REQUIRED, WITH NEW TRANSITIONS AND SUPPLY AIR DUCTWORK OFFSETS TO MATE WITH NEW FAN CURB.
4. EXISTING ELECTRIC DUCT HEATER TO BE RETAINED FOR RE-INSTALLATION IN RENOVATION PHASE.
5. NEW DRYER VENT DUCT AND VENT CAP.
6. TEMP. KITCHEN – CEILING MOUNTED CABINET EXHAUST FAN.
7. TEMP. KITCHEN – 24"X24" SIDE WALL GRILLE. SURFACE MOUNT OPTIONAL. AUXILIARY FRAME. TITUS CT-700.
8. RECONFIGURE DUCTWORK TO CONNECT TO NEW DISHMACHINE HOOD OUTLETS. REF. KITCHEN CONSULTANT DRAWINGS FOR EXACT DIMENSIONS OF DUCT CONNECTIONS.
9. CONDENSATE EXHAUST DUCT UP THROUGH ROOF TO NEW EXHAUST FAN SET ON NEW ROOF CURB. REUSE EXISTING ROOF PENETRATION.

EXHAUST FAN SCHEDULE

MARK	EF-TK	EF-CF	EF-14
SERVES	TEMPORARY KITCHEN	COOLER/FREEZER	DISH WASHER
TYPE	CEILING CABINET	INLINE FAN	ROOF UPBLAST
DRIVE	DIRECT	DIRECT	DIRECT
SPEED CONTROL	INTEGRAL SPEED CONTROLLER	CONSTANT	CONSTANT
CFM	1055	1000	1200
EXT. S.P. (IN. W.G.)	0.3	0.35	0.60
IMP. SIZE (IN.)	8.0	13.5	
HORSEPOWER (WATTS)	1/3 HP	1/6 HP	1/6 HP
VOLTAGE	120V/1-PHASE	120V/1-PHASE	120V/1-PHASE
MANUFACTURER	COOK	COOK	COOK
MODEL	GC-862	1355QN10D	CUE-140-VG
SONES (MAX.)	15.0	15.0	15.0
NOTES	1 THRU 4	1 THRU 4	1 THRU 4

NOTES
1. STATIC PRESSURE SHOWN IS EXTERNAL TO THE UNIT. MANUFACTURER SHALL ADD DAMPER AND ACCESSORY LOSSES TO THIS VALUE BEFORE SELECTING FAN. FANS SHALL BE CAPABLE OF 120% OF THE SCHEDULED CFM CAPACITY.
2. INTEGRAL DISCONNECT SWITCH.
3. RUBBER IN-SHEAR ISOLATORS.
4. REFER TO WRITTEN SPECS FOR ADDITIONAL REQUIREMENTS.

MECHANICAL DEMO KEYED NOTES

1. DEMOLISH EXISTING AIR DEVICE, BRANCH DUCT, DAMPER AND TAP BACK TO TRUNK DUCT. CAP AND SEAL RESULTING OPENING.
2. EXISTING E/A TRUNK DUCT TO REMAIN.
3. DISCONNECT EXISTING S/A AND E/A DUCTWORK SERVING KITCHEN HOODS FROM FAN ASSEMBLY ON ROOF. DEMOLISH SUPPLY AND EXHAUST FAN PLENUM ASSEMBLY SERVING KITCHEN HOODS, ALONG WITH CURB. NEW CURB TO BE PROVIDED AND INSTALLED AS PART OF RENOVATION.
4. DEMOLISH ALL EXISTING AIR DEVICES, DUCTWORK, AND DUCTWORK ACCESSORIES SERVING KITCHEN AREA BACK TO MECH. ROOM WALL PENETRATION.
5. EXISTING ELECTRIC DUCT HEATER TO BE RETAINED FOR RE-INSTALLATION IN RENOVATION PHASE.
6. REFURBISH EXISTING KITCHEN HOOD. REFER TO "KITCHEN HOOD REFURBISHMENT NOTES".
7. DEMOLISH AND REPLACE EXISTING DRYER EXHAUST DUCT AND FLUE VENT CAP.
8. DEMOLISH EXISTING CONDENSATE HOOD, ASSOCIATED DUCTWORK, AND ROOF EXHAUST FAN.

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KITCHEN AREA
MECHANICAL PLANS
O-M1.01

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MECHANICAL SYMBOL SCHEDULE

CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
RS	REFRIGERANT SUPPLY
RR	REFRIGERANT RETURN
D	CONDENSATE LINE
	PETE'S PLUG
	ISOLATION VALVE
	ELECTRONIC CONTROL VALVE
	BUTTERFLY VALVE
	BALL VALVE
	UNION OR FLANGE
	STRAINER
	AUTOMATIC AIR VENT
T	LOCAL CONTROL THERMOSTAT
T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
FD	FIRE DAMPER
SD	SMOKE DAMPER
FSD	FIRE/SMOKE COMBINATION DAMPER
MD	MOTORIZED DAMPER
C	CARBON MONOXIDE SENSOR
C	CARBON DIOXIDE SENSOR
	SUPPLY AIR DIFFUSER
	RETURN AIR GRILLE
	EXHAUST GRILLE
RA	RETURN AIR OPENING IN WALL
VD	VOLUME DAMPERS
	DUCT ELEVATION CHANGE
	90° DUCT ELBOW WITH TURNING VANES
	FLEXIBLE DUCT
M	DAMPER MOTOR
T	TEMPERATURE TRANSMITTER
FS	FLOW SWITCH
P	DIFFERENTIAL PRESSURE SENSOR
SD	DUCT SMOKE DETECTOR
PS	STATIC PRESSURE SENSOR
PH	STATIC PRESSURE SENSOR HI-LIMIT
	ACCESS PANEL

A.P.	ACCESS PANEL
AHU	AIR HANDLING UNIT
B	BOILER
CH	CHILLER
CHP	CHILLED WATER PUMP
CVT	CONSTANT VOLUME TERMINAL
DH	DEHUMIDIFIER
E/A	EXHAUST AIR
EF	EXHAUST FAN
F&B	FACE & BYPASS
FF	FLY FAN
HDT	HORIZONTAL DRAW THROUGH
HWP	HOT WATER PUMP
KEF	KITCHEN EXHAUST FAN
KSF	KITCHEN SUPPLY FAN
O/A	OUTSIDE AIR
OBD	OPPOSED-BLADES DAMPER
PT	PRE-TREAT
R/A	RETURN AIR
RAHU	ROOF-MOUNTED AIR HANDLING UNIT
S/A	SUPPLY AIR
SA	SOUND ATTENUATOR
SF	SUPPLY FAN
SPD	SPILTER DAMPER
SZ	SINGLE ZONE
VAV	VARIABLE AIR VOLUME
VB	VAV BOX
VD	VOLUME DAMPER
VDT	VERTICAL DRAW THROUGH
VFD	VARIABLE FREQUENCY DRIVE
WH	WATER HEATER
⌀	DESIGNATION FOR "ROUND"
⌀	DESIGNATION FOR "OVAL"

GENERAL MECHANICAL NOTES

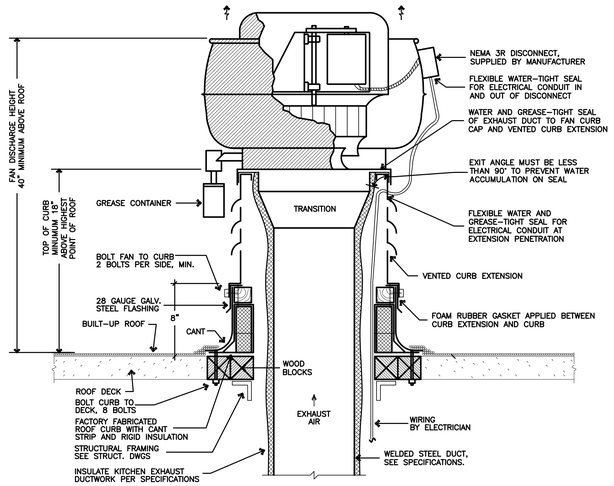
1. REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. COORDINATE INSTALLATION OF EQUIPMENT AND PIPING WITH THE ELECTRICAL CONTRACTOR TO INSURE NEC CLEARANCE (42 INCHES) IN FRONT OF ALL ELECTRICAL PANELS. DO NOT INSTALL DUCTWORK OR WATER PIPING OVER THE TOP OF ELECTRICAL PANELS SEE DETAIL 1/M2.01.
3. DUCT SIZES SHOWN ARE NET FREE AIR PASSAGE DIMENSIONS, DUCTS ARE NOT LINED, BUT ARE EXTERNALLY INSULATED. RUNOUTS TO CEILING OUTLETS SHALL BE EXTERNALLY INSULATED GALVANIZED SHEET METAL WITH SPIN-IN V.D. AT TRUNK TAPS, SEE DETAIL 1 & 2/M2.01.
4. REFER TO ARCHITECTURAL REFLECTED CEILING DRAWINGS FOR EXACT LOCATIONS OF CEILING OUTLETS IN RELATION TO OTHER CEILING ENTITIES. OUTLETS MUST BE COMPATIBLE WITH THE CEILING TYPES FOR THE VARIOUS AREAS.
5. IN AREAS WHERE SUPPLY AIR ENTERS CEILING CAVITY THRU RETURN AIR GRILLES AND FREE RETURNS TO AHU'S VIA CEILING CAVITY, PROVIDE RETURN AIR OPENING IN WALL-TO-DECK ABOVE CEILING THAT BLOCK PATH, REFER TO ARCHITECTURAL DRAWINGS. RETURN AIR ELBOWS SHALL BE SIZED AT 1 SQ. FT PER 400 CFM SUPPLY AIR.
6. ARRANGE PIPING CONNECTIONS TO ALL EQUIPMENT TO ALLOW EASY REMOVAL OF EQUIPMENT, SUB-ASSEMBLIES, COILS, FANS, MOTORS, FILTERS, ACCESS PANELS, ETC... PROVIDE UNIONS, FLANGES AND VALVES AT CONNECTIONS. PROVIDE AND INSTALL VICTAULIC JOINTS AT COILS, REF. SPECIFICATIONS. PLACE STOP VALVES ON SYSTEM SIDE OF REMOVABLE PIPE SECTIONS.
7. CONTRACTOR SHALL FIELD MEASURE STRUCTURAL ELEMENTS AND COORDINATE EQUIPMENT, PIPING AND DUCT ROUTING TO FIT EXISTING CONSTRUCTION. PROVIDE OFFSETS, BOOTS FOR ENVELOP OBSTRUCTIONS THAT CANNOT BE AVOIDED. CONSTRUCTION SHALL BE PER SMACNA FIGURE 2-10.

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A	CEILING DIFFUSER – 24" X 24" FACE, PATTERN TYPE, STEEL CONSTRUCTION, OBD/RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE SCD
B	CEILING RETURN GRILLE – 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE PDFR
C	CEILING EXHAUST GRILLE – 24" X 24" PERFORATED FACE, STEEL CONST., OBD/RADIATION DAMPER, WHITE FINISH, NECK SIZE SHOWN, U.L. LISTED PRICE PDDR

NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPES FOR AIR DEVICES.
2. ALL CEILINGS ARE FIRE RATED PER U.L. LISTINGS ON ARCHITECTURAL DRAWINGS. PROVIDE FIRE PROTECTION FOR ALL CEILING DEVICES PER DETAIL 13/M-17 AND SPECIFICATIONS.

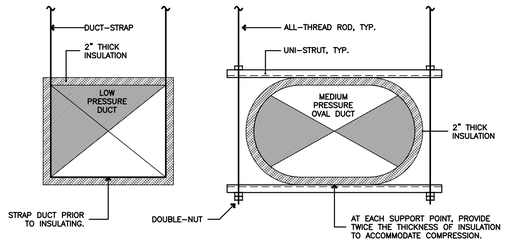


6 KITCHEN UPBLAST EXHAUST FAN DETAIL

NO SCALE

NOTES

1. ARCHITECTURAL ROOF CURB INSTALLATION REQUIREMENTS SHALL SUPERCEDE THIS DETAIL.
2. INSTALL SHEETMETAL COVERING OVER WOOD BLOCKING IN THE AIRSTREAM OR OPEN TO THE CEILING CAVITY.

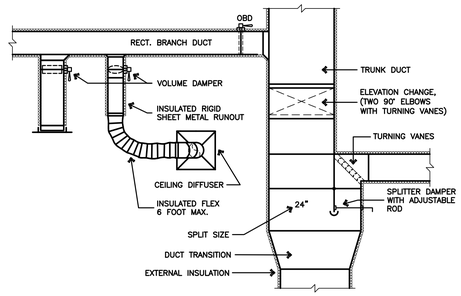


4 EXTERNALLY INSULATED DUCT SUPPORT DETAIL

NO SCALE

NOTES:

1. ROUND MEDIUM PRESSURE DUCT MAY BE SUPPORTED WITH DUCT STRAPS.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

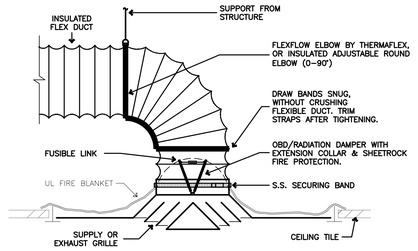


2 DUCTWORK DETAIL

NO SCALE

NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

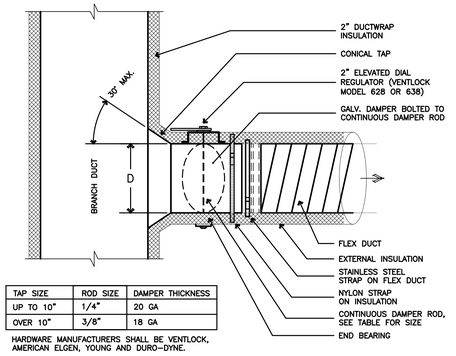


5 AIR DEVICE DETAIL

NO SCALE

NOTES:

1. RADIATION DAMPER SHALL ONLY BE PROVIDED IN CEILING DEVICES INSTALLED IN RATED CEILING ASSEMBLIES. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO DETERMINE WHICH, IF ANY, CEILINGS ARE RATED.
2. REFER TO SPECIFICATIONS OF FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



TAP SIZE	ROD SIZE	DAMPER THICKNESS
UP TO 10"	1/4"	20 GA
OVER 10"	3/8"	18 GA

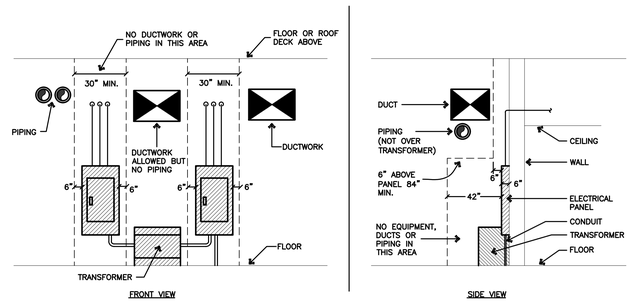
HARDWARE MANUFACTURERS SHALL BE VENTLOCK, AMERICAN ELGEN, YOUNG AND DURO-DYNE.

3 DUCT TAP CONNECTION DETAIL

NO SCALE

NOTES:

1. DELETE CONICAL SECTION IF TOO LARGE FOR THE DUCT.
2. REFER TO SPECIFICATIONS OF FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



1 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

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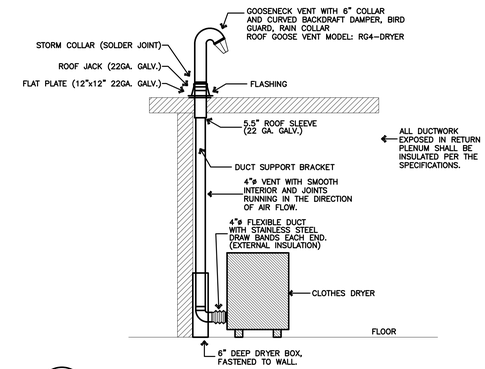
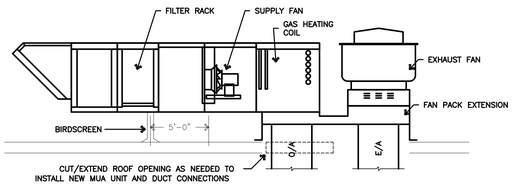


5 RESIDENTIAL CLOTHES DRYER FLUE VENT

NO SCALE

NOTES:

1. VENT TERMINATION AT WALL FOR STACKABLE WASHER/DRYER SHALL BE AT 60" AFF.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

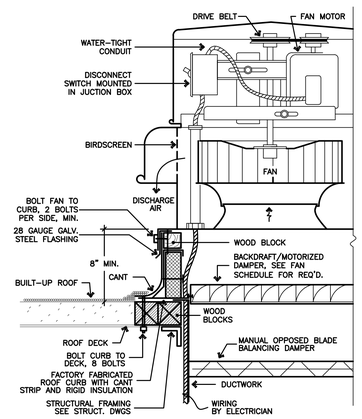


4 SUPPLY/EXHAUST KITCHEN PLENUM DETAIL

NO SCALE

NOTES:

1. xxxxx

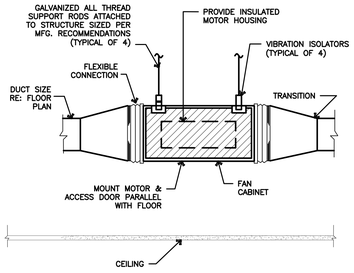


3 ROOF EXHAUST FAN AND VENT DETAIL

NO SCALE

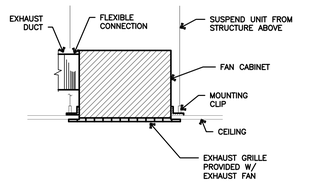
NOTES:

1. NO WOOD BLOCKING SHALL BE LEFT EXPOSED IN THE CEILING PLENUM. COVER ALL EXPOSED WOOD WITH 1/2" SHEETROCK OR 20 GAUGE GALVANIZED SHEETMETAL.
2. ROOF VENT WILL NOT HAVE FAN/MOTOR ASSEMBLY, DISCONNECT SWITCH OR OBD.
3. ARCHITECTURAL ROOF CURB INSTALLATION REQUIREMENTS SHALL SUPERCEDE THIS DETAIL WHERE APPLICABLE.
4. ALL FANS SCHEDULED TO BE PROVIDED WITH 140MPH WIND RATING, INCLUDING FACTORY PROVIDED CURB. CURB INSTALLATION SHALL FOLLOW MANUFACTURER'S REQUIREMENTS FOR SECURING TO ROOF AND EQUIPMENT WHERE IT DIFFERS FROM THE DETAIL.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



2 INLINE EXHAUST FAN DETAIL

NO SCALE



1 CABINET EXHAUST FAN

NO SCALE

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MECHANICAL DETAILS (CONT'D.)

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ELECTRICAL AND LOW VOLTAGE LEGEND AND SYMBOLS

- A — TYPE 'A' LIGHT FIXTURE
- LIGHT FIXTURE WITH EMERGENCY BACKUP
- EXIT SIGN/EXIT SIGN WITH DIRECTIONAL ARROW
- EMERGENCY EGRESS LIGHT FIXTURE
- WALL MOUNTED FIXTURE OR SCONCE
- CEILING DOWNLIGHT OR CYLINDER
- WALL PACK FIXTURE
- INV — LIGHTING INVERTER
- $/$3/$4 — 20A, 277V TOGGLE/3-WAY/4-WAY SWITCH
- 20A, 277V MOMENTARY 3-POSITION TOGGLE SWITCH
- 20A, 277V, MOMENTARY 3-POSITION KEY SWITCH
- $K/$3K/$4K — 20A, 277V MAINTAINED 2-POSITION/3-WAY/4-WAY KEY SWITCH
- $LT — 20A, 277V TOGGLE SWITCH W/ INTEGRAL NIGHT LIGHT
- $M/$MP — MOTOR RATED ON/OFF SWITCH, MP W/ PILOT LIGHT (SWITCH RATING SHALL BE ≥ UPSTREAM OCPD & VOLTAGE)
- DPST$ — DOUBLE POLE SINGLE THROW (DPST) SWITCH WITH RED PILOT LIGHT.
- TSW — TIMER SWITCH

NETWORK LIGHTING CONTROLS

- #B — MULTIBUTTON LOW VOLTAGE LIGHTING SWITCH PROVIDE NUMBER OF BUTTONS INDICATED IN SINGLE PLATE.
- #D — MULTIPLE DIMMER SWITCHES PROVIDE NUMBER OF SWITCHES INDICATED IN SINGLE PLATE.
- #K — MULTIPLE KEY TYPE SWITCHES PROVIDE NUMBER OF SWITCHES INDICATED IN SINGLE PLATE.
- OC — WALL SENSOR SWITCH
- $D — 20A, 277V, STANDALONE DIMMER SWITCH (DISPLAY CABINET)
- OC — 360° CEILING SENSOR
- OC — 180° CEILING SENSOR
- OC — CEILING SENSOR
- OC — WALL MOUNT SENSOR
- PC — DAYLIGHT PHOTOSENSOR
- RC/RCD — LIGHTING ROOM CONTROLLER/POWER PACK
- ER — EMERGENCY LIGHTING RELAY/CONTROL UNIT
- PLC — PLUG LOAD CONTROLLER

(Receptacles and Equipment)

- 20A, 125V SIMPLEX/DUPLEX/QUAD RECEPTACLE
- GFI — 20A, 125V DUPLEX RECEPTACLE WITH GFCI PROTECTION
- GFI WP — 20A, 125V DUPLEX RECEPTACLE WITH GFCI PROTECTION AND WEATHERPROOF COVER.
- GFI — REMOTE GFCI DEVICE, REF SPECS AND EDF GFI DETAIL.
- USB — 20A, 125V DUPLEX/QUAD RECEPTACLE W/ USB-A PORTS PROVIDE 2-5A PORTS PER DEVICE – HUBBELL USB20A5
- 20A, 125V SIMPLEX/DUPLEX/QUAD IG/COMPUTER RECEPTACLE
- GFI — 20A, 125V, IG/COMPUTER DUPLEX RECEPTACLE WITH GFCI
- PLUG LOAD CONTROLLED DUPLEX
- NEMA IEC CS — NEMA/IEC/CS NUMBERED POWER OUTLET MATCH PROVIDED EQUIPMENT CONNECTION OR CIRCUIT.
- PROJ/TV/IM — 20A, 125V IG DUPLEX RECEPTACLE AT PROJECTOR, TV, OR INTERACTIVE MEDIA LOCATION.
- LOW VOLTAGE OUTLET
- CEILING MOUNTED RECEPTACLE
- CEILING MOUNTED LOW VOLTAGE OUTLET
- SINGLE SERVICE FLOOR BOX WITH DUPLEX/QUAD REC
- SINGLE SERVICE FLOOR BOX WITH DUPLEX/QUAD IG REC
- SINGLE SERVICE LOW VOLTAGE FLOOR BOXES
- MULTI SERVICE FLOOR BOX WITH QUAD/QUAD IG REC
- CR — CORD REEL
- D — DROP CORD
- EPO — EMERGENCY POWER OFF (EPO) SWITCH
- PB — PUSH BUTTON
- SP — TELEPOWER POLE
- J — J-BOX
- J — CEILING MOUNTED J-BOX
- CA — J-BOX FOR ACCESS CONTROL DEVICE
- HD — JUNCTION BOX AND FINAL CONNECTION TO HAND DRYER BY DIVISION 26.
- HDWR — JUNCTION BOX AND FINAL CONNECTION TO ELECTRIFIED DOOR HARDWARE BY DIVISION 26.
- HEAT — JUNCTION BOX AND FINAL CONNECTION TO HEAT TRACE EQUIPMENT BY DIVISION 26.
- WC — JUNCTION BOX AND FINAL CONNECTION TO POWERED PLUMBING EQUIPMENT BY DIVISION 26.
- SF — JUNCTION BOX AND FINAL CONNECTION TO SYSTEM FURNITURE BY DIVISION 26.
- CONTACTOR
- NON-FUSED DISCONNECT SWITCH
- DT — NON-FUSED DOUBLE THROW DISCONNECT
- FUSED DISCONNECT SWITCH
- ST — DISCONNECT/CB WITH SHUNT TRIP
- CB — ENCLOSED CIRCUIT BREAKER
- MOTOR STARTER 'VFD' INDICATES VARIABLE FREQUENCY DRIVE MOTOR STARTER
- MOTOR STARTER WITH INTEGRAL DISCONNECT
- MOTOR
- TC — TIME CLOCK
- ELECTRICAL PANELBOARD
- ELECTRICAL METER
- SPD — TVSS OR SPD
- GANN — GENERATOR REMOTE ANNUNCIATOR
- LOW VOLTAGE CABLING PATHWAY, REF. SPECIFICATIONS

KITCHEN SYMBOL LEGEND

- C — LOAD CENTER, BY FOOD SERVICE PROVIDE UNDERGROUND CONDUIT STUBBED UP AT LOAD CENTER LOCATION PER SUBMITTAL SHOP DRAWINGS.
- P — POINT OF SALE EQUIPMENT, BY FOOD SERVICE. PROVIDE UNDERGROUND CONDUIT STUBBED UP POS LOCATION PER SUBMITTAL SHOP DRAWINGS.
- F — REMOTE FIRE PULL, REFERENCE INSTALLATION DETAIL
- B — BELL/BUZZER WITH 120V TO LOW VOLTAGE TRANSFORMER
- D — DROP CORD
- DB — DOORBELL BUTTON
- V CLR/FRZR — CEILING STROBE FOR ENTRAPMENT ALARM
- V CLR/FRZR — WALL STROBE FOR ENTRAPMENT ALARM

COORDINATION SYMBOL LEGEND

- DDC — HVAC CONTROL PANEL, REQUIRES POWER AND DATA CONNECTIONS WITHIN CABINET COOR EXACT LOCATION AND REQUIREMENTS WITH CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.
- SD — SMOKE DAMPER
- FSD — FIRE/SMOKE COMBINATION DAMPER
- M/MD — MOTORIZED DAMPER

SITE PLAN

- UTILITY POLE
- POLE MOUNTED TRANSFORMER BANK
- SITE POLE LIGHT
- UGE J — FLUSH IN GRADE ELECTRICAL PULL BOX
- LV HH J — FLUSH IN GRADE, LOW VOLTAGE HAND HOLE
- CONCRETE BOLLARD
- (X)PP — POWER POLE
- (X)SP — SERVICE POLE OR RACK
- (X)XP — XFMR POLE
- (X)LVP — LOW VOLTAGE POLE
- (X)TP — TRANSITION POLE
- OHP — OVERHEAD POWER WIRING
- 480V — 480V OVERHEAD POWER WIRING
- UGP — UNDERGROUND PRIMARY ELECTRICAL
- UGS — UNDERGROUND SECONDARY ELECTRICAL
- UGE — UNDERGROUND EMERGENCY ELECTRICAL

DIVISION 28 LEGENDS

FIRE ALARM

- F — FIRE ALARM PULL STATION W/ STOPPER II
- F/S — WALL FIRE ALARM AUDIO/VISUAL DEVICE
- WP S — OUTDOOR WEATHERPROOF FIRE AUDIO/VISUAL DEVICE
- H — WALL FIRE ALARM AUDIO DEVICE
- V — WALL FIRE ALARM VISUAL DEVICE
- F/S — CEILING FIRE ALARM AUDIO/VISUAL DEVICE
- S — CEILING FIRE ALARM AUDIO DEVICE
- V — CEILING FIRE ALARM VISUAL DEVICE
- S — DUCT SMOKE DETECTOR
- I/PS — CEILING SMOKE DETECTOR
- H — CEILING HEAT DETECTOR
- CO — CEILING CARBON MONOXIDE DETECTOR
- PS CO — CEILING COMBINATION SMOKE/CARBON MONOXIDE DETECTOR
- FR — FIRE ALARM RELAY FOR STAGE SOUND RACK OVERRIDE
- BSD/BSR — BEAM SMOKE DETECTOR
- FANN — FIRE ALARM REMOTE ANNUNCIATOR OR LOCAL OPERATOR'S CONSOLE
- FACP — FIRE ALARM CONTROL PANEL
- FAPS — FIRE ALARM POWER SUPPLY/AMPLIFIER
- G — INDICATES DEVICE WITH PROTECTIVE GUARD
- WG — INDICATES DEVICE WITH WIRE GUARD
- HC — INDICATES DEVICE RATED FOR HAZARDOUS CONDITIONS
- SD — SMOKE DAMPER
- FSD — FIRE/SMOKE COMBINATION DAMPER

MULTI-SERVICE FLOOR BOX NOTES

FLOOR POWER AND LOW VOLTAGE
PROVIDE HEAVY-DUTY MULTI-GANG FLUSH IN GRADE OR FIRE RATED POKE-THRU OUTLET WITH HEAVY DUTY METAL HINGED COVER WITH CABLE EXIT SLOT.
FLOOR BOX MUST BE RATED FOR INSTALLATION IN GRADE.

FOR EACH FLOOR BOX PROVIDE:
1. PROVIDE:
   1.A. ONE QUAD OR TWO DUPLEX RECEPTACLES.
   1.B. PROVIDE IG RECEPTACLES WHERE SHOWN.
   1.C. POWER CONNECTION TO TABLE (WHERE SHOWN)
2. BLANK STAINLESS STEEL COVER FOR UN-USED GANGS.
3. PROVIDE ONE 3/4"C UNDERGROUND CONDUIT FOR POWER.
4. PROVIDE ONE 1"C UNDERGROUND CONDUIT WITH WATERPROOF INNER DUCT FOR DATA.
5. PROVIDE ONE 1"C UNDERGROUND CONDUIT WITH WATERPROOF INNER DUCT FOR LOW VOLTAGE CABLING
6. PROVIDE DIVIDERS TO MAINTAIN SEPARATION BETWEEN SERVICES.

UNDERGROUND CONDUITS MUST BE WATER TIGHT TO PREVENT MOISTURE ENTERING CONDUITS.
DO NOT COMBINE CONDUIT FOR POWER & LOW VOLTAGE.

REFERENCE FLOOR PLANS AND SPECIFICATIONS FOR QUANTITY OF DATA DROPS AND ADDITIONAL INFORMATION.

COORDINATE WITH ARCHITECT TO PROVIDE COVER/RING TO MATCH FLOOR MATERIAL AND SUBMIT COVER FINISH FOR ARCHITECT TO SELECT PRIOR TO ORDERING.

GENERAL NOTES / TAGS

+18"	INDICATES DEVICES AT +18" AFF
+42"	INDICATES DEVICES AT +42" AFF
+96"	INDICATES DEVICES AT +96" AFF
+12 FT	INDICATES DEVICES AT +12 FT AFF, ETC.
*	INDICATES DEVICES ABOVE COUNTER, REF ARCH
CLG	INDICATES DEVICES AT CEILING
PMR	INDICATES PEDESTAL MOUNTED DEVICE, REF PMR DETAIL
TV	INDICATES DEVICES AT TELEVISION/DISPLAY LOCATION
IM	INDICATES DEVICES AT INTERACTIVE MEDIA LOCATION
PROJ	INDICATES DEVICES AT PROJECTOR LOCATION
S	INDICATES SURFACE MOUNTED DEVICE
IEC	INDICATES IEC POWER OUTLET
NEMA	INDICATES NEMA NUMBERED POWER OUTLET
GFI	INDICATES GROUND FAULT INTERRUPT (GFI) PROTECTION
WP	INDICATES WEATHERPROOF DEVICES
GFI WP	INDICATES GFI PROTECTED WEATHERPROOF DEVICE
G	INDICATES DEVICE WITH PROTECTIVE GUARD
WG	INDICATES DEVICE WITH WIRE GUARD
3R	INDICATES NEMA 3R RATED DEVICE
4XSS	INDICATES NEMA 4XSS RATED DEVICE
EM	INDICATES DEVICE ON EM/STANDBY POWER
VFD	INDICATES VARIABLE FREQUENCY DRIVE (VFD)
E	EXISTING DEVICES TO REMAIN
D	EXISTING DEVICES TO BE DEMO/REMOVED
R	EXISTING DEVICES TO BE RELOCATED
REP	EXISTING DEVICES TO BE REPLACED
	(X) = (E) FOR EXISTING
	(X) = (D) FOR DEMO
	(X) = (R) FOR RELOCATION
	(X) = (N) FOR NEW
→	HOMERUN TO CIRCUIT NOTED

1. RECEPTACLES AND DATA OUTLETS SHALL BE MOUNTED AT +18" AFF UNLESS NOTED ON THE DRAWINGS.
2. REF. SPECIFICATIONS FOR MOUNTING HEIGHT OF OTHER DEVICES.
3. ELECTRICAL RECEPTACLES, TELEPHONES, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
4. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
4. ALL DEVICES SHOWN AT THE SAME LOCATION AND ELEVATION SHALL BE GROUPED TOGETHER AND SPACED 2 INCHES BETWEEN BOXES.
5. PROVIDE SS COVER PLATE FOR ALL EMPTY JBOX.
6. ALL NON-LOCKING 125V AND 250V, 15A AND 20A RECEPTACLES SHALL BE TAMPER RESISTANT TYPE.

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
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SEAL
STATE OF TEXAS — GEORGE L. STANTON — 38582 — REGISTERED PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
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PROJ. NO.: 23-25
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ELECTRICAL AND FIRE ALARM SCHEDULES
o-E.000

PROVIDE CONDUIT & SLEEVES THRU FIRE WALLS, WALLS AND FLOORS FOR LOW VOLTAGE CABLING WIRING, ETC.

ALL CONDUIT & J-BOXES FOR LOW VOLTAGE CABLING SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL LOW VOLTAGE CABLING IN WALLS, EXPOSED AREAS AND ABOVE INACCESSIBLE CEILINGS SHALL REQUIRE CONDUIT AND J-BOXES. REFERENCE SPECIFICATIONS AND TECHNOLOGY DOCUMENTS FOR ADDITIONAL INFORMATION/REQUIREMENTS.

PULL BOXES AND BELOW GRADE CONDUIT FOR LOW VOLTAGE CABLING, WIRING, ETC. BY ELEC CONTRACTOR.

FIRE ALARM SYSTEM DESCRIPTION AND SEQUENCE OF OPERATION

1. FIRE ALARM SYSTEM SHALL BE DESIGNED TO MEET NFPA REQUIREMENTS AS WELL AS CITY AND NATIONAL BUILDING CODES. PROVIDE COMPLETE FIRE ALARM SYSTEM, DEVICES AND WIRING.
2. INSTALL FIRE ALARM CONTROL PANEL IN RECEPTION AREA. INSTALL REMOTE POWER SUPPLY PANELS IN MECHANICAL/ELECTRICAL ROOMS.
3. FIRE ALARM PANEL, POWER SUPPLIES, DEVICES, ETC. SHALL BE MANUFACTURED BY THE SAME MANUFACTURER AS THE FIRE ALARM CONTROL PANEL.
4. FIRE ALARM REMOTE POWER SUPPLIES AND PANELS SHALL BE LOCATED IN MECHANICAL OR ELECTRICAL ROOMS ONLY. DO NOT LOCATE IN STORAGE ROOMS, DATA CLOSETS OR FINISHED SPACES.
4. PROVIDE AUDIBLE, INTELLIGIBLE AND VISUAL ALARM COVERAGE OF THE AREA OF RENOVATION AS REQUIRED BY CODE.
5. PROVIDE SMOKE DETECTORS AT EACH FIRE ALARM PANEL, REMOTE TRANSPONDER PANEL, BOOSTER PANEL AND REMOTE ANNUNCIATOR PER NFPA 72.
6. IN ADDITION TO THE SPECIFIED FIRE ALARM EQUIPMENT, THE FIRE ALARM CONTRACTOR SHALL PROVIDE
   - 6.A. SURGE PROTECTORS FOR ALL NEW 120V POWER CONNECTIONS TO FIRE ALARM EQUIPMENT.
   - 6.B. SURGE PROTECTORS FOR ALL SIGNALING LINE CIRCUITS (SLC), NOTIFICATION CIRCUITS AND INITIATING CIRCUITS CONNECTED TO THE FIRE ALARM CONTROL PANEL WHICH LEAVE THE BUILDING.
7. SHOULD ANY DETECTOR, MONITOR OR PULL STATION ACTIVATE, ALL SPEAKERS SHALL SOUND AND STROBES FLASH. AIR HANDLING EQUIPMENT SHALL BE DEACTIVATED. AN ALARM SIGNAL SHALL BE SENT TO A REMOTE LOCATION VIA AUTOMATIC DIALER. ALSO, DE-ENERGIZE SUPPLY FANS, EXHAUST FANS AND OTHER AIR CIRCULATING DEVICES IF 2000 CFM OR OVER, SERVING THE AREA IN ALARM,
8. ALL LOW VOLTAGE WIRING SHALL BE FPLP RATED WIRE, WITH MINIMUM WIRE SIZE PER SPECIFICATIONS.
   - 8.A. PLENUM RATED CABLE ABOVE ACCESSIBLE CEILING SHALL BE SUPPORTED BY J-HOOKS, SPACED AT FOUR (4) FEET ON CENTER.
   - 8.B. INSTALL FIRE ALARM CABLES IN CONDUIT FOR AREAS WITHOUT CEILING OR ABOVE INACCESSIBLE CEILINGS.
   - 8.C. EXPOSED CONDUIT IN FINISHED SPACES SHALL BE ALLOWED WHERE NO OTHER OPTION EXISTS AND ONLY WITH PRIOR WRITTEN APPROVAL BY THE OWNER. ALL EXPOSED CONDUIT SHALL BE PAINTED TO MATCH.
   - 8.D. ALL CABLING THROUGH WALLS, FIRE WALLS AND FLOORS SHALL BE INSTALLED IN SLEEVES WITH PROTECTIVE BUSHINGS ON BOTH ENDS.
9. FIRE ALARM SYSTEM SHALL BE MONITORED BY A UL LISTED CENTRAL RECEIVING STATION.
10. INTERLOCK LIGHTING CONTROL PANELS WITH FIRE ALARM SYSTEM TO ENABLE ALL LIGHTING UPON ACTIVATION.
11. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

FIRE ALARM SYSTEM NOTES

1. GENERAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL AND FIRE ALARM SUBCONTRACTOR FOR LOCATIONS OF REMOTE POWER SUPPLIES. FIRE ALARM POWER SUPPLIES ARE NOT SHOWN ON THIS DRAWING AND SHALL BE LOCATED BY FIRE ALARM SUBCONTRACTOR IN ORDER TO ACCOMMODATE HIS FIRE ALARM SYSTEM BATTERY AND VOLTAGE DROP CALCULATIONS PER MANUFACTURER'S RECOMMENDATION & NFPA REQUIREMENTS. ELECTRICAL CONTRACTOR SHALL INCLUDE ADDITIONAL DEDICATED 120V CIRCUITS IN BASE BID TO SERVE FIRE ALARM POWER SUPPLIES IN DIFFERENT AREAS. PROVIDE 2-12 +12G, 3/4"C AND SPARE 20A/1P CB(S) IN LOCAL LIFE SAFETY EMERGENCY 120V PANELS TO SERVE FIRE ALARM REMOTE POWER SUPPLIES.
2. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR DESIGN AND FOR FINAL CORRECT LOCATION OF DEVICES TO RELIEVE NUISANCE ALARMS, SUCH AS INSTALLING A HEAT DETECTOR IN FRONT OF AN OVEN WHICH WILL RELEASE STEAM, THUS POTENTIALLY SETTING OFF THE ALARM. ALSO, THE CONTRACTOR IS RESPONSIBLE FOR DETECTORS REQUIRED BY CODE EVEN IF NOT SHOWN ON DRAWING, LIKE A CLOSET. IF THERE IS UNCERTAINTY, BRING UP DURING THE BID PROCESS AND THEY WILL BE ADDRESSED DURING THE BIDDING PROCESS.
3. FIELD VERIFY ENVIRONMENTAL ISSUES THAT CAN ADVERSELY AFFECT OPERATION OF SMOKE DETECTORS. DO NOT LOCATE NEAR AIR FLOW DEVICES LEADING TO PREMATURE BUILD UP OF DUST CAUSING NUISANCE TROUBLE SIGNALS. DEVICE RELOCATION OR TYPE CHANGE WILL BE COVERED UNDER WARRANTY.

FIRE ALARM SCOPE OF WORK

1. THERE IS AN EXISTING FIRE ALARM SYSTEM IN EACH BUILDING.
   - 1.A. TEST THE EXISTING SYSTEM PRIOR TO BEGINNING DEMO. NOTE ANY FAULTS OR TROUBLES AND PROVIDE A WRITTEN REPORT TO THE OWNER.
   - 1.B. EXPAND THE EXISTING SYSTEM AS REQUIRED TO INTEGRATE THE NEW DEVICES IN THE AREA OF RENOVATION.
2. PROVIDE WIRING AND DEVICES AS INDICATED TO PROVIDE COMPLETE AUDIBLE, INTELLIGIBLE AND VISUAL ALARM COVERAGE OF RENOVATED AREAS AS REQUIRED BY CODE.
   - 2.A. PROVIDE SMOKE DETECTOR COVERAGE OF ALL STORAGE ROOMS AND ADDITIONALLY AS SHOWN ON THE DRAWINGS.
   - 2.B. PROVIDE HEAT DETECTOR COVERAGE OF THE KITCHEN, CUSTODIAL ROOMS, AND ADDITIONALLY AS SHOWN ON THE DRAWINGS.
   - 2.C. PROVIDE DUCT MOUNTED DETECTORS AT EACH NEW AIR HANDLING UNIT SUPPLY AND RETURN CONNECTION EXCEEDING 2000 CFM. IF FREE AIR RETURN, PROVIDE FREE AIR DETECTOR COVERAGE OF THE RETURN AIR OPENINGS TO THE MECHANICAL ROOM. ENSURE AIR FLOW CANNOT PREVENT OPERATION OF THE DETECTORS AND PROVIDE ADEQUATE CLEARANCE PER NFPA 72.
   - 2.D. CONTROL RELAYS SHALL BE LOCATED WITHIN 3 FT OF THE CONTROLLED CIRCUIT OR APPLIANCE.
3. PROVIDE SMOKE DETECTORS AT EACH NEW FIRE ALARM PANEL, REMOTE TRANSPONDER PANEL, BOOSTER PANEL AND REMOTE ANNUNCIATOR PER NFPA 72.
4. PROVIDE LED REMOTE ALARM WITH ENGRAVED STAINLESS STEEL PLATE WHERE DUCT DETECTORS ARE NOT LOCATED IN MECHANICAL ROOM, LOCATED ABOVE CEILINGS OR WHERE MOUNTED TOO HIGH OR VIEW IS BLOCKED BY DUCTWORK IN MECHANICAL ROOM.
   - 4.A. REMOTE LED LIGHT INDICATOR FOR DUCT SMOKE DETECTORS SHALL BE MOUNTED FLUSH IN CEILING OR MOUNTED IN WALL AT +7FT.
   - 4.B. STAINLESS STEEL PLATE SHALL BE ENGRAVED WITH THE DUCT SMOKE DETECTOR AS-BUILT IDENTIFICATION NUMBER.
5. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SPARES

1. THE FIRE ALARM CONTRACTOR SHALL INCLUDE IN HIS BID THE COST TO PROVIDE AND INSTALL THE ADDITIONAL SPARE PARTS AND ASSOCIATED CABLING PER THE SPECIFICATIONS. SPARES SHALL BE INSTALLED AS INSTRUCTED BY THE OWNER. UNINSTALLED DEVICES SHALL BE DELIVERED TO THE OWNER AS ATTIC STOCK.

GENERAL RENOVATION AND REMODELING NOTES

1. READ ALL MEP AND ARCH. DRAWINGS TO IDENTIFY AREAS OF RENOVATION AND SCOPE OF WORK.
2. ALL RENOVATION AND DEMOLITION WORK SHALL NOT AFFECT AREAS NOT INCLUDED IN THE AREAS OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUITY OF ALL SERVICES (POWER, TELEPHONE, FIRE ALARM, DATA, SECURITY, ETC.) IN NON-DEMOLITION/RENOVATION AREAS. ALL SERVICES SHALL BE MAINTAINED AT ALL TIMES.
3. ALL OUTAGES AFFECTING NON-DEMOLITION/RENOVATION AREAS SHALL BE SCHEDULED WITH THE OWNER WITH A MINIMUM 2 WEEKS ADVANCE NOTICE. OUTAGES SHALL BE COORDINATED WITH OTHER TRADES TO MINIMIZE THE QUANTITY AND IMPACT ON BUILDING OPERATION.
4. THIS ELECTRICAL DRAWING ONLY SHOWS SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J-BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
5. CONTRACTOR SHALL FIELD VERIFY AND MARK UP THE FOLLOWINGS IN AREAS OF RENOVATION:
   - 5.A. EXISTING DATA, AUDIO, VIDEO, SPEAKERS AND OTHER LOW VOLTAGE OUTLETS AND DEVICES.
   - 5.B. EXISTING CEILING MOUNTED PROJECTORS.
   - 5.C. EXISTING SECURITY, CCTV, ACCESS CONTROL DEVICES.
   - 5.D. EXISTING FIRE ALARM DEVICES.
   - 5.E. EXISTING WIRELESS ACCESS POINTS AND GRID LABELING.
   - 5.F. EXISTING LIGHT FIXTURES AND SWITCHES.
   - 5.G. EXISTING ELECTRICAL DEVICES, J-BOXES, CONDUIT, WIRING, WIRING SUPPORTS, ETC.
   - 5.H. EXISTING ELECTRICAL SWITCHGEAR.
   - 5.I. EXISTING CONTROL PANELS AND CONTROL CIRCUITS.
   - 5.J. EXISTING HANGER WIRE FROM CONC. CEILING.
6. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
7. ALL EXISTING DEVICES SHALL BE REINSTALLED IN NEW CEILINGS AT SAME LOCATION EXCEPT WHERE SHOWN TO BE NEW.
8. CONDUIT/WIRE NOT TO BE REUSED SHALL BE REMOVED ALL THE WAY BACK TO THE UPSTREAM EQUIPMENT.
   - 8.A. PROVIDE ADDITIONAL SUPPORTS FOR EXISTING CONDUIT/WIRE TO REMAIN TO MEET CURRENT CODE REQUIREMENTS.
9. ANY MATERIAL THAT HAS SALVAGE VALUE SHALL BE OFFERED TO THE OWNER, AND IF ACCEPTED, DELIVERED TO HIS WAREHOUSE. IF NOT ACCEPTED IT SHALL BE PROPERLY DISPOSED OF WITH THE OTHER CONSTRUCTION DEBRIS.
10. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITES.
11. WHERE PARTIAL CIRCUITS OR SYSTEMS ARE TO BE REUSED, ENSURE THAT THEY REMAIN ACTIVE. WHERE EXISTING EQUIPMENT IS RELOCATED OR REPLACED WITH NEW. MODIFY, EXTEND AND RELOCATE EXISTING CIRCUIT TO CONNECT TO EQUIPMENT, UNLESS SHOWN TO HAVE NEW CIRCUIT.
12. WHERE AUXILIARY SYSTEMS SUCH AS SECURITY, DATA, SOUND, ETC. INTERFACE WITH EXISTING EQUIPMENT THAT IS REPLACED OR MODIFIED (MECHANICAL, ELECTRICAL OR PLUMBING), DISCONNECT AND RECONNECT THESE SYSTEMS.
13. WHERE NEW CIRCUIT BREAKERS ARE TO BE INSTALLED IN EXISTING PANELS OR SWITCHBOARD, VERIFY THAT THE CIRCUIT BREAKER WILL FIT IN THE ALLOTTED SPACE. PROVIDE NEMA 1 ENCLOSURE ADJACENT TO PANEL & WIRE CONNECT TO BUSSING IF THERE IS INSUFFICIENT SPACE.
14. WHERE PARTIAL CIRCUITS OR SYSTEMS ARE TO BE REUSED, ENSURE THAT THEY REMAIN ACTIVE. WHERE EXISTING EQUIPMENT IS RELOCATED OR REPLACED WITH NEW, MODIFY, EXTEND AND RELOCATE EXISTING CIRCUIT TO CONNECT TO EQUIPMENT, UNLESS SHOWN TO HAVE NEW CIRCUIT.
15. WHEN REPLACING LIGHTS AND CEILINGS, ENSURE THAT EXISTING DATA, TELEVISION AND PA CABLES TO REMAIN CONTINUE TO MEET THE CURRENT STANDARDS. FOR DATA CABLES, THIS IS THE IEEE 802.1. FOR TELEVISION AND PA CABLE, A FOUR INCH DISTANCE IS NEEDED FROM ALL LIGHT FIXTURES. NEW DROP LOCATION SHOULD BE WITHIN THREE FEET OF POWER OUTLET.
16. PAINT NEW AND EXISTING EXPOSED RACEWAY IN AREAS OF RENOVATION TO MATCH FINISHES.
17. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
18. INTERESTED CONTRACTORS MUST VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH THE PROJECT REQUIREMENTS AND EXISTING CONDITIONS AND SHALL INCLUDE IN THEIR PROPOSALS COSTS TO REPAIR, RELOCATE, MODIFY AND REMOVE EXISTING ELEMENTS AS REQUIRED TO COMPLETE INSTALLATION OF ALL SYSTEMS SHOWN ON THESE DRAWINGS.
19. SEE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

ELEC REQUIREMENTS FOR BUILDING RENOVATION

1. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
2. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
3. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
4. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
5. ALL EXISTING DEVICES TO REMAIN SHALL BE REINSTALLED IN NEW CEILINGS AND WALLS EXCEPT WHERE INDICATED TO BE REMOVED/RELOCATED/REPLACED.
6. EXISTING DEVICES IN WALLS TO BE FURRED OUT OR RECEIVE NEW SURFACE TREATMENT SHALL REMAIN. EXTEND JBOX TO NEW WALL SURFACE AND RECONNECT TO EXISTING CIRCUITS. EXTEND WIRING/CABLING FROM NEAREST ACCESSIBLE POINT AS NECESSARY.
7. REINSTALL ALL DEVICES NOT SHOWN TO BE REMOVED.
8. EXISTING LIGHT FIXTURES SHALL REMAIN EXCEPT WHERE SHOWN AS NEW. EXTEND EXIST CONDUIT AND WIRE DOWN TO NEW LIGHT FIXTURES, REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. ALL EXISTING EXIT SIGNS SHALL BE REINSTALLED AND RECONNECTED TO EXISTING CIRCUITS EXCEPT IN CORRIDORS AND AREAS OF RENOVATION SHOWING NEW.
10. ALL NEW DEVICES IN EXISTING WALLS IN FINISHED SPACES SHALL BE INSTALLED FLUSH MOUNTED, NO EXPOSED CONDUIT OR WIREMOLD ALLOWED. CUT EXISTING WALLS AND PATCH/REPAIR TO MATCH EXISTING AS REQUIRED.
    - 10.1. DEVICES/CONDUIT IN CUSTODIAL, MECHANICAL AND ELECTRICAL ROOMS MAY BE EXPOSED AND SURFACE MOUNTED.
11. PROVIDE NEW DIRECTORY FOR ALL EXISTING AND NEW PANELS SHOWING FIELD VERIFIED CIRCUITS.
12. ANY FEEDER AND BRANCH CIRCUIT NOT TO BE REUSED SHALL BE REMOVED COMPLETELY UP TO CB IN EXISTING PANEL.
13. ANY CIRCUIT OR PARTIAL CIRCUIT TO BE REUSED SHALL REMAIN ACTIVE.

GENERAL EQUIPMENT ELECTRICAL NOTE

THE ELECTRICAL DESIGN HAS BEEN COORDINATED FOR SPACE, INSTALLATION AND ELECTRICAL REQUIREMENTS WITH EQUIPMENT THAT IS SCHEDULED BY OTHER DIVISIONS. THE REQUIREMENTS FOR OTHER EQUIPMENT AND MODELS FROM ACCEPTABLE MANUFACTURERS HAVE NOT BEEN VERIFIED OR COORDINATED. THE GENERAL CONTRACTOR SHALL VERIFY THESE REQUIREMENTS PRIOR TO USING OTHER EQUIPMENT IN HIS BID AND INCLUDE ANY ADDITIONAL COSTS FOR INSTALLATION OF THE EQUIPMENT. THIS INCLUDES GENERAL CONSTRUCTION AND MEP COSTS.

ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER/OTHER TRADES FOR EXACT ELECTRICAL REQUIREMENTS OF EQUIPMENT PRIOR TO ORDERING CB(S). FIELD VERIFY EQUIPMENT NAMEPLATE RATINGS AND EQUIPMENT CONNECTION LOCATIONS WITH OTHER TRADES PRIOR TO ROUGH-IN.

TYPICAL OF HVAC EQUIPMENT, SHOP EQUIPMENT, KITCHEN EQUIPMENT, ELECTRIC ROLLUP DOORS, ETC.

GENERAL ELECTRICAL NOTES

1. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. INSTALL SYSTEMS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
3. PROVIDE LIGHT FIXTURE FIRE PROTECTION AND CONDUIT FIRE SEALING TO MAINTAIN FIRE RATING OF WALLS AND CEILINGS PER ARCHITECT'S SCHEDULE. REF. SPECIFICATIONS AND ARCH. DRAWINGS FOR ADDITIONAL INFORMATION.
4. ELECTRICAL RECEPTACLES, TELEPHONES, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
5. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
6. DO NOT INSTALL ELECTRICAL PANELS AND TRANSFORMERS UNTIL 1/4" SCALE DRAWINGS SHOWING LOCATION OF THIS EQUIPMENT RELATIVE TO MECHANICAL/PLUMBING EQUIPMENT, DUCTWORK AND PIPING IS SUBMITTED AND APPROVED. NEC CODE CLEARANCE MUST BE MAINTAINED.
7. ELECTRICAL EQUIPMENT HAS BEEN COORDINATED WITH PIPING AND DUCTWORK. DO NOT RELOCATE PANELS WITHOUT PRIOR APPROVAL.
8. ELECTRICAL DEVICES IN FIRE RATED WALLS SHALL BE A MINIMUM OF 24" AWAY FROM DEVICES ON THE OPPOSITE SIDE OF THE WALL TO MAINTAIN FIRE RATING.
9. MINIMUM SIZE CONDUIT FOR POWER SHALL BE 3/4", MIN. SIZE FLEX CONDUIT MAY BE 1/2". MINIMUM SIZE CONDUIT FOR DATA SHALL BE 1"C. DO NOT COMBINE CONDUIT FOR DATA.
10. MAX. LENGTH FOR FLEX CONDUIT SHALL BE 6 FT. ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
11. LIGHT FIXTURE WHIPS MAY BE MIN. 1/2" FLEX CONDUIT WITH MIN. #12 WIRE. LIGHT FIXTURE WHIPS SHALL BE NO MORE THAN 6 FT LONG.
12. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
13. GROUND TRANSFORMER SECONDARIES TO BUILDING STEEL AND GROUND ROD. PROVIDE CONDUIT TO PROTECT GROUNDING CONDUCTOR AND BOND EACH END OF CONDUIT TO GROUNDING SYSTEM. MIN. SIZE OF CONDUIT FOR GROUND WIRE SHALL BE 3/4"C.
14. PROVIDE J-BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM AND SOUND SYSTEMS WIRINGS, ETC. SEE SPECIFICATIONS.
15. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS.
16. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
17. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12. ALL WIRE SHALL BE STRANDED TYPE THHN OR THWN-2 (WET RATED FOR 90° C). ALL WIRES SHALL BE COLOR CODED WITH SAME COLOR CONNECTED TO SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION.
18. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT. NO SURFACE MOUNTED WIREMOLD SHALL BE ALLOWED IN FINISHED SPACES. MC CABLE SHALL BE ALLOWED INSIDE EXIST STUD WALLS OR CHASE WALLS.
19. PROVIDE AND INSTALL FINAL CONNECTIONS TO ALL EQUIPMENT PROVIDED BY OTHER TRADES AND/OR FURNISHED BY OWNER INCLUDING ALL NECESSARY CONDUIT, CORDS, PLUGS, WHIPS, HARDWIRING, ETC. IN PARTICULAR CONFIRM CONNECTION REQUIREMENTS WITH DELIVERED EQUIPMENT PRIOR TO ROUGH-IN.
20. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

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FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL

STATE OF TEXAS
GEORGE L. STANTON
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REGISTERED PROFESSIONAL ENGINEER
07.18.2025

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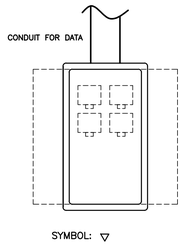
ELECTRICAL AND FIRE ALARM NOTES

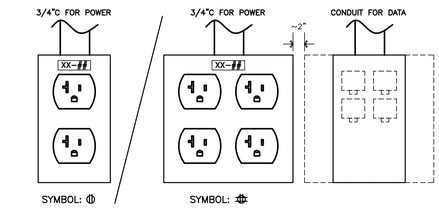
o-E.001



1 TYPICAL DATA OUTLETS

NO SCALE

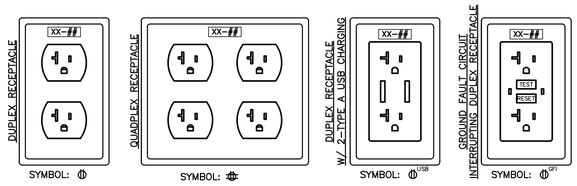
NOTES:
1. PROVIDE DEEP 4 11/16" X 4 11/16" X 2 1/8", 2-GANG BACK BOX FOR ALL DATA OUTLETS.
   1.A. PROVIDE SINGLE GANG MUDRING FOR DATA OUTLETS WITH 1-4 DROPS.
   1.B. PROVIDE PULL STRING IN ALL LOW VOLTAGE CONDUITS.
2. LOW VOLTAGE CABLING AND DEVICES BY DIVISION 27.
3. REFERENCE TECHNOLOGY DRAWINGS FOR ADDITIONAL INFORMATION.



2 TYPICAL POWER & DATA OUTLET DETAIL

NO SCALE

NOTES:
1. LOCATE DEVICES GROUPED TOGETHER AS CLOSELY TOGETHER AS POSSIBLE.
   1.A. USE CADDY TSGB16, RBS16 OR SIMILAR MOUNTING BAR IN SHEETROCK WALLS.



3 TYPICAL ELECTRICAL DEVICES

NO SCALE

NOTES:
1. ALL DEVICES SHALL BE COLOR CODED PER SPECIFICATIONS WITH 302/304 STAINLESS STEEL, STANDARD SIZE, FACEPLATES.
2. ONLY SELECT RECEPTACLES ARE SHOWN HERE. PROVIDE SIMILAR LABELS ON ALL SWITCHES, NEMA POWER OUTLETS, ETC.
3. PROVIDE LABEL WITH RED TEXT READING "EMERGENCY" FOR DEVICES ON GENERATOR FED CIRCUITS.
4. PROVIDE TYPEWRITTEN OR PREMADE CIRCUIT LABELS INDICATING THE ELECTRICAL CIRCUIT ON:
   4.A. INSTALLED WIRING AT EACH SPLICE POINT
   4.B. EACH J-BOX ABOVE CEILING WITH WIRING INSTALLED OR MODIFIED AS PART OF THIS PROJECT.
   4.C. AFFIXED TO THE FRONT OF EACH NEW AND EXISTING DEVICE FACEPLATE IN THE AREA OF RENOVATION.
   CIRCUIT LABEL
   XX-## A. XX = PANEL DESIGNATION
   B. ## = AS-BUILT CIRCUIT DESIGNATION

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ELECTRICAL DEVICE DETAILS

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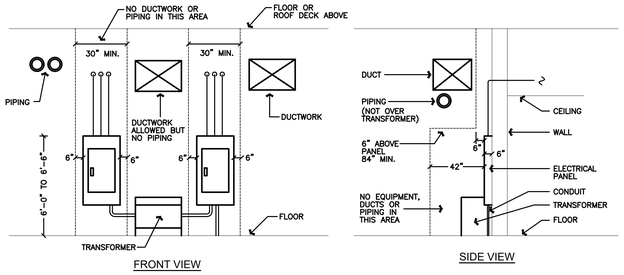
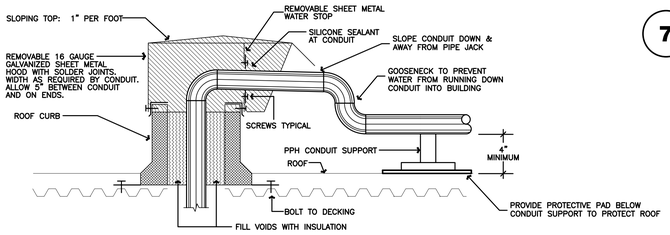


10 MECHANICAL - ELECTRICAL COORDINATION DETAIL

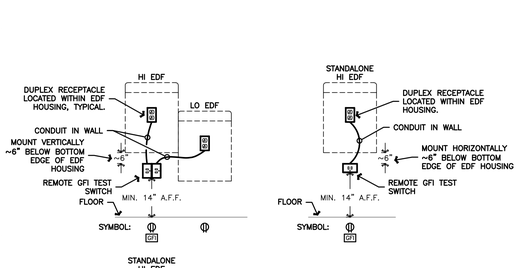
NO SCALE

COORDINATE WITH OTHER TRADES TO ENSURE NO PIPING AND DUCTWORK ABOVE ELECTRICAL EQUIPMENT AS SHOWN. PROVIDE WORKING CLEARANCE IN FRONT OF STARTERS, DISCONNECTS, PANELS, XFMRS AND ADDITIONALLY PER CODE.



11 CONDUIT ROOF PENETRATION DETAIL

NO SCALE

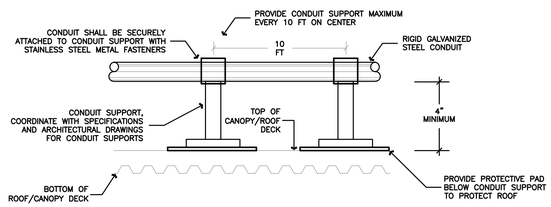


7 EDF GFI PROTECTION DETAIL

NO SCALE

NOTES:

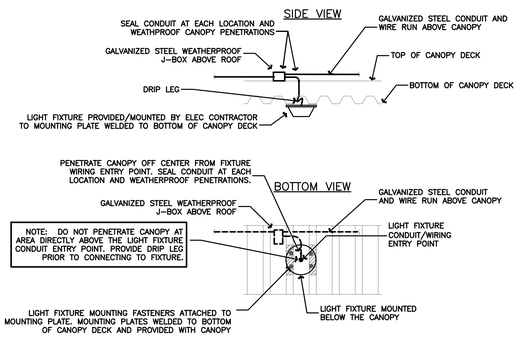
1. MODIFY EXISTING WALL AS NEEDED TO INSTALL NEW RECEPTACLE AND REMOTE GFI TEST SWITCH. PATCH/REPAIR WALL AS NEEDED TO MATCH EXISTING.
2. WIRE NEW RECEPTACLE DOWNSTREAM OF REMOTE GFI TEST SWITCH.
3. REMOTE GFI TEST SWITCH SHALL BE A DEAD FRONT GFI DEVICE TO BE INSTALLED FLUSH MOUNTED IN WALL WITH EDF SERVED AND PROVIDE GFI PROTECTION FOR THE RECEPTACLE LOCATED WITHIN THE EDF HOUSING.
4. GFI TEST SWITCH SHALL BE READILY ACCESSIBLE PER NEC 210.8.
5. COORDINATE RECEPTACLE LOCATION(S) WITHIN EDF HOUSINGS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.



12 ROOF AND CANOPY CONDUIT SUPPORT DETAIL

NO SCALE

1. COORDINATE WITH ARCHITECTURAL DRAWINGS, DETAILS, SPECIFICATIONS AND OTHER TRADES.

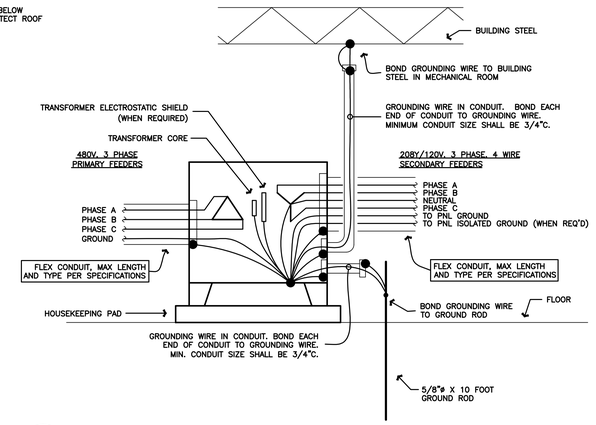


13 CANOPY LIGHT MOUNTING DETAIL TYPE 1

NO SCALE

NOTES:

1. MOUNTING PLATES SHALL BE WELDED TO CANOPY TO MOUNT LIGHT FIXTURES.
2. FOR FIXTURES WITH END CONDUIT ATTACHMENTS ALL CANOPY PENETRATIONS SHALL BE MADE OFF CENTER FROM THE FIXTURE WIRING ENTRY POINT AND SHALL HAVE WEATHERTIGHT SEALING. (SHOWN HERE)
3. CANOPY PENETRATIONS ABOVE FIXTURES SHALL BE PERMITTED ONLY WHERE THE SUPPLIED FIXTURE HAS NO END CONDUIT ATTACHMENTS.
4. CONDUIT SHALL BE SEALED BOTH ABOVE AND BELOW THE CANOPY PENETRATION AND AGAIN AT THE FIXTURE ENTRY POINT TO PREVENT WATER FROM ENTERING THE LIGHTING FIXTURE.
5. CANOPY PENETRATIONS SHALL BE MADE AS CLOSE TO CONDUIT ENTRY PENETRATION POINT AS POSSIBLE AND CONDUIT SHALL BE ROUTED TO MINIMIZE EXPOSED CONDUIT.

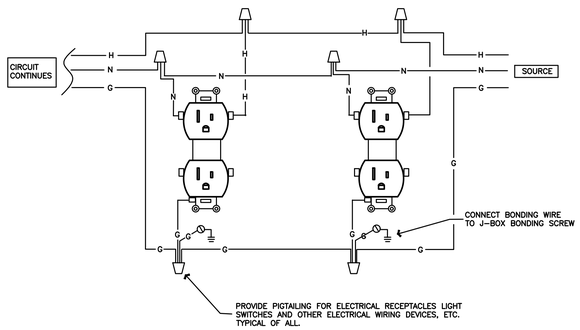


8 TRANSFORMER CONNECTION AND GROUNDING DETAIL

NO SCALE

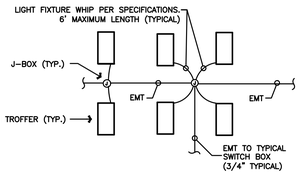
NOTES:

1. INSTALL GROUND ROD ADJACENT TO TRANSFORMER AND SEAL PENETRATION AROUND GROUND ROD.
2. WHERE AN ISOLATED GROUND IS PROVIDED MAKE THE CONNECTION AT THE TRANSFORMER AND RUN DIRECTLY TO THE ISOLATED GROUND BAR IN THE PANELBOARD. DO NOT DEFINE THE ISOLATED GROUND AT THE PANELBOARD.
3. FINAL CONNECTIONS TO TRANSFORMERS SHALL BE MADE IN FLEXIBLE CONDUIT. PROVIDE LIQUID TIGHT CONSTRUCTION AND FITTINGS IN WET, DAMP OR OUTSIDE AREAS EXCEPT WHERE LOCATED IN AIR HANDLING ROOMS. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.



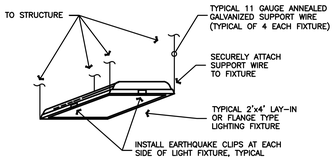
9 PIGTAIL WIRING DETAIL FOR ELECTRICAL DEVICE

NO SCALE



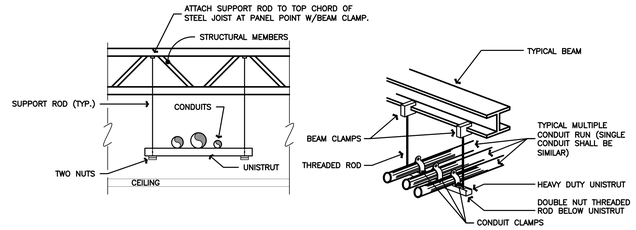
1 CONDUIT/J-BOX DETAIL FOR LIGHT FIXTURES IN LAY-IN CEILING

NO SCALE



2 FIXTURE SUPPORT DETAIL

NO SCALE

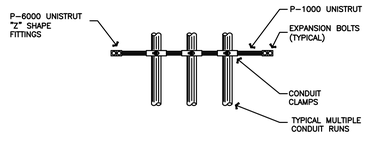


3 TRAPEZE MOUNTED CONDUIT DETAIL

NO SCALE

NOTES:

1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

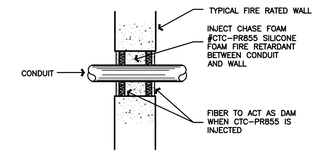


4 WALL MOUNTED CONDUITS

NO SCALE

NOTES:

1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

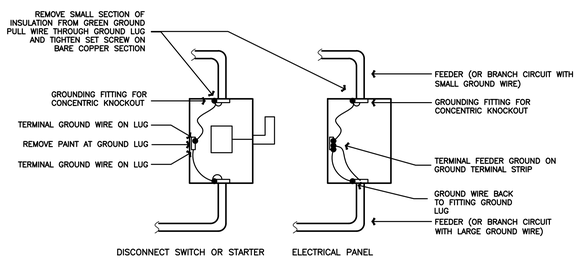


5 FIREWALL PENETRATION DETAIL

NO SCALE

NOTES:

1. FIRE RATING OF COMPLETED FIREPROOFED ASSEMBLY SHALL BE EQUAL OR EXCEED RATING OF WALL.



6 GROUNDING BUSHING WIRING DETAIL

NO SCALE

NOTE:

1. PROVIDE AND INSTALL GROUNDING BUSHINGS FOR DISCONNECT SWITCHES, PANELS AND TRANSFORMERS.

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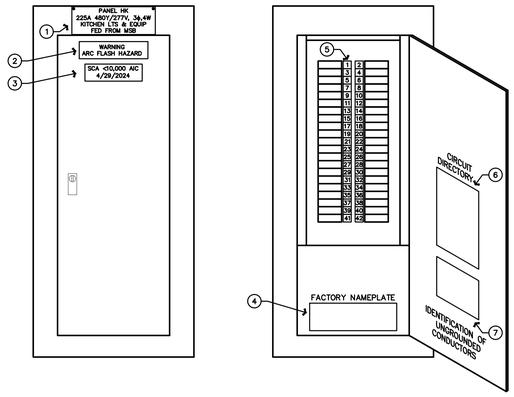


5 TYPICAL BRANCH CIRCUIT PANEL LABELING DETAIL

NO SCALE

NOTES:

1. LAYOUT OF PANELBOARD, INCLUDING LOCATIONS OF NAMEPLATES, CIRCUIT DIRECTORY, AND OTHER LABELING IS SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS.
2. REFERENCE OWNER'S DESIGN GUIDELINES FOR ADDITIONAL LABELING REQUIREMENTS.

(1) PROVIDE LAMACOID NAMEPLATE WITH 5/16" LETTERS SHOWING PANEL NAME, AMPERAGE RATING, VOLTAGE, AND FROM WHERE POWER IS DERIVED. ATTACH WITH MASTIC AND TWO SCREWS. COORDINATE TO GIVE SAME NAME AS PANEL SCHEDULE. IF USED AS MAIN SERVICE PANEL, PROVIDE SHORT CIRCUIT AVAILABLE AND RATING INFORMATION.

(2) PROVIDE PERMANENT ARC FAULT WARNING LABEL.

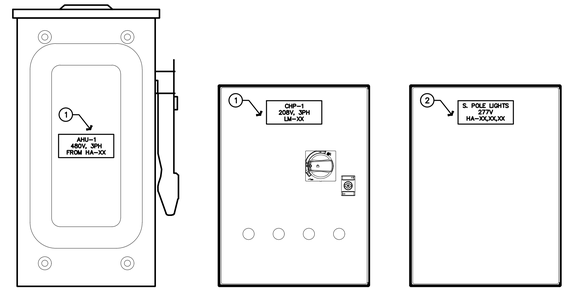
(3) FOR ALL NEW ELECTRICAL EQUIPMENT, PROVIDE PERMANENTLY AFFIXED LABEL STATING FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE MINIMUM 2" X 3" IN SIZE, AND INCLUDE THE DATE OF THE CALCULATION. REFERENCE ELECTRICAL DRAWINGS AND EQUIPMENT SHORT CIRCUIT ANALYSIS TABLE. ATTACH WITH MASTIC AND TWO SCREWS.

(4) PROVIDE INFORMATION PER INDUSTRY STANDARDS, BUT SHALL INCLUDE VOLTAGE, PHASE, BUS AMPERAGE, AND SHORT CIRCUIT RATING

(5) FOR EACH CIRCUIT PROVIDE PERMANENT LABEL INDICATING CIRCUIT BREAKER NUMBER, NUMBER SHALL MATCH CIRCUIT DIRECTORY.

(6) CIRCUIT DIRECTORY TO BE COMPLETED AT END OF JOB, TYPEWRITTEN, STATING EQUIPMENT OR ROOMS SERVED BY CIRCUIT. EVEN CIRCUIT ON RIGHT SIDE OF CARD, ODD ON LEFT. PROVIDE LAMINATED DIRECTORY FOR EXTERIOR OR WET LOCATIONS.

(7) PROVIDE PERMANENT LABEL INDICATING COLOR CODING OF PHASE CONDUCTORS BASED ON VOLTAGE USING BUILDING COLOR SCHEME AS IDENTIFIED IN THE OWNER'S DESIGN GUIDELINES.



1 TYPICAL DISCONNECT, STARTER, & CONTACTOR LABELING DETAIL

NO SCALE

NOTES:

1. LOCATIONS OF NAMEPLATES SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS. REFERENCE OWNER'S DESIGN GUIDELINES FOR ADDITIONAL LABELING REQUIREMENTS.

(1) PROVIDE AN ENGRAVED NAMEPLATE SHOWING LOAD SERVED, EQUIPMENT VOLTAGE, AND CIRCUIT NUMBER MATCHING AS-BUILT CONDITIONS.

(2) PROVIDE AN ENGRAVED NAMEPLATE SHOWING LOADS SERVED, VOLTAGES, AND CIRCUIT NUMBERS MATCHING AS-BUILT CONDITIONS FOR ALL CONTACTOR CIRCUITS. LOADS SERVED SHALL BE "LIGHTING", "FAN", "RECEPTACLES", "PUMP", "WATER HEATER", OR SIMILAR DESCRIPTIVE NOTE.

DISHWASHER
480V, 3PH, 3 WIRE
FROM HK-2/4/6

2 DISCONNECT LABELING

NO SCALE

NOTES:

1. PROVIDE LABEL ON EACH DISCONNECT AND FUSED SWITCH.
   1.1. FOR DISCONNECTS AND FUSED SWITCHES REPLACE "PANEL P1NA" WITH THE LOAD SERVED.
   1.2. REFER TO OWNER'S STANDARDS FOR ADDITIONAL LABEL REQUIREMENTS.
2. PROVIDE LABEL ON ELECTRICAL PANEL AND TRANSFORMER.
   2.1. REPLACE "PANEL P1NA" WITH THE PANEL OR TRANSFORMER NAME BEING LABELED.
3. REPLACE "400A FUSED SWITCH" WITH UPSTREAM SOURCE OR CONNECTION.
   3.1. IF FED FROM A XFMR REPLACE "400A FUSED SWITCH" WITH "XFMR XX" WHERE XX IS THE FIELD VERIFIED XFMR NAME.
4. REPLACE VOLTAGE CONFIGURATION TO MATCH THE EQUIPMENT BEING LABELED.
5. REFERENCE FLOOR PLANS FOR EQUIPMENT LOCATIONS.

⚠ WARNING

Arc Flash and Shock Hazard
Appropriate PPE Required

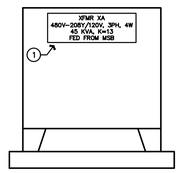
FLASH PROTECTION		SHOCK PROTECTION	
Incident Energy at:	18 in	Shock Risk When Cover is Removed	480 VAC
Min. Arc Rating:	0.45 cal/cm²	Limited Approach	42 in
Arc Flash Boundary:	10 in	Restricted Approach	12 in
PPE: Per NFPA 70E 2015	1	Equipment Name: **PANEL HA** Prot Dev: 225/3 CB from Panel DA	

3 TYPICAL ARC FLASH LABEL DETAIL

NO SCALE

NOTES:

1. VALUES AND NAMES SHOWN HERE ARE FOR REFERENCE ONLY, MODIFY TO REFLECT PROJECT'S ARC FLASH STUDY VALUES AND EQUIPMENT NAMES.
2. IF MIN. ARC RATING IS OVER 40CAL/CM² MODIFY "WARNING" TEXT TO READ "DANGER" AND PROVIDE RED SHADING IN LIEU OF ORANGE SHOWN.



4 TYPICAL TRANSFORMER LABELING DETAIL

NO SCALE

NOTES:

1. LOCATIONS OF NAMEPLATES SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS.

(1) PROVIDE AN ENGRAVED NAMEPLATE SHOWING EQUIPMENT NAME, RATING, VOLTAGE, SOURCE.

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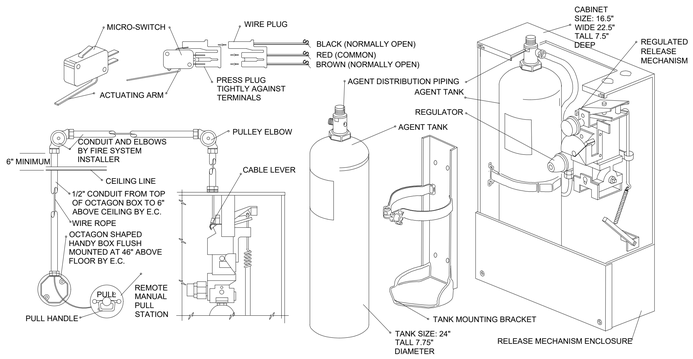
KITCHEN AREA ELECTRICAL NOTES

1. REFER TO KITCHEN CONSULTANTS "FS" DRAWINGS FOR ADDITIONAL REQUIREMENTS PARTICULARLY NOTING MOUNTING HEIGHTS OF EQUIPMENT OUTLETS AND JUNCTION BOXES, AND WHETHER SERVICE IS FROM WALL, FLOOR OR OVERHEAD.
2. SOME RECEPTACLES SHALL BE MOUNTED HORIZONTALLY, REFER TO KITCHEN CONSULTANTS "FS" DRAWINGS.
3. FOR DEVICES WITH SERVICE FROM FLOOR, RUN UNDERGROUND CONDUIT FROM DEVICES TO NEAREST COLUMN OR WALL THEN TURN CONDUIT UP AND RUN CONDUIT IN CEILING CAVITY.
4. LIGHT SWITCHES AND RECEPTACLES NOT SERVING A SPECIFIC PIECE OF EQUIPMENT SHALL BE MOUNTED AT ADA HEIGHTS.
5. CONNECTION TYPE SHOWN ON KITCHEN ELECTRICAL FLOOR PLAN IS FOR BIDDING PURPOSES, COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER FOR FINAL CONNECTIONS:
   - 5.A. OBTAIN WIRING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT FROM EQUIPMENT SUPPLIER PRIOR TO ORDERING WIRING DEVICES AND ROUGH-IN.
   - 5.B. IF EQUIPMENT REQUIRES CORD AND PLUG CONNECTION, CONTRACTOR SHALL PROVIDE NEMA POWER CORD, PLUG, AND RECEPTACLES PER MANUFACTURER'S INSTRUCTION.
   - 5.C. IF EQUIPMENT REQUIRES JUNCTION BOX AND/OR DISCONNECT SWITCH, CONTRACTOR SHALL PROVIDE JUNCTION BOX AND DISCONNECT SWITCH AND CONNECT EQUIPMENT WITH SEALTITE FLEXIBLE CONDUIT.
6. ALL DISCONNECT SWITCHES IN THE KITCHEN AREA SHALL BE NEMA 4XSS STAINLESS STEEL.
7. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
8. FLEXIBLE CONDUIT IN KITCHENS, FOOD PRODUCTION SPLASH ZONES AND WASH DOWN AREAS, FOOD PROCESSING, AND SIMILAR AREAS SHALL BE LIQUID TIGHT CONSTRUCTION INCORPORATING A BACTERIAL GROWTH INHIBITING PVC JACKET THAT MAY BE CLEANED WITHOUT DEGREDATION TO THE JACKET BLEACHING ELEMENTS AND APPROVED FITTINGS FOR WET LOCATION.
   - 8.A. AFC SZ TYPE LFMC OR EQUAL BY KAF-TECH.
9. INTERLOCK KITCHEN EXHAUST HOOD FIRE SYSTEM WITH FIRE ALARM SYSTEM.
10. PROVIDE RELAYS AND INTERLOCK KITCHEN HOOD FANS WITH FIRE ALARM SYSTEM. ACTUATION OF ANY ALARM INITIATING DEVICE SHALL DE-ENERGIZE KITCHEN HOOD FANS.
11. ALL GFI RECEPTACLES IN KITCHEN SHALL BE PASS & SEYMOUR MODEL 2097TRWR-XX TO EXCEED UL943 VOLTAGE SURGE REQUIREMENTS.

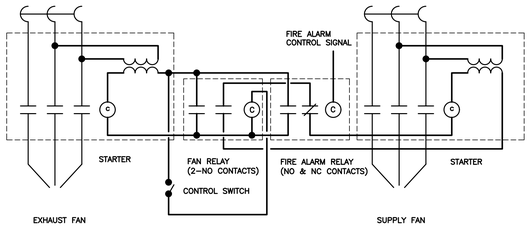


4 FIRE PROTECTION SYSTEM DETAIL

NO SCALE

NOTES:

1. ANSUL MODEL R-120 FIRE PROTECTION SYSTEM AND TANK(S)
2. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL POWER DISCONNECT DEVICES FOR ALL EQUIPMENT BELOW THE HOOD, SHUTTING OFF ALL SERVICE, INCLUDING CONTROL VOLTAGE, UPON ACTIVATION OF THE FIRE PROTECTION SYSTEM.
3. MICRO-SWITCH FURNISHED WITH SYSTEM TO BE INTERWIRED TO THE SHUT-OFF DEVICES FOR THE COOKING EQUIPMENT BY THE ELECTRICAL CONTRACTOR.
4. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL AN OCTAGON SHAPED HANDY BOX FOR THE PULL STATION AT 54" ABOVE THE FLOOR WITH 1/2" CONDUIT FROM THE TOP OF THE BOX TO 6" ABOVE THE CEILING.
5. GAS SHUT-OFF VALVE FURNISHED WITH THE SYSTEM (IF REQUIRED) TO BE INSTALLED IN THE GAS LINE SERVING THE COOKING EQUIPMENT BY THE PLUMBING CONTRACTOR. VERIFY SIZE OF GAS LINE.
6. ALL EXPOSED PIPEWORK TO BE STAINLESS STEEL OR CHROME WHERE EXPOSED.
7. VERIFY LOCATION OF REMOTE MANUAL PULL STATION.
8. UNIT MUST BE PLACED WITHIN EASY ACCESS OF EXIT DOOR.

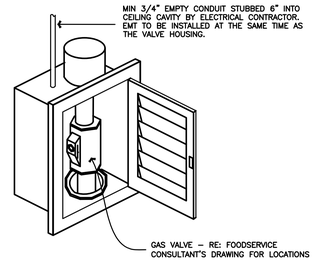


5 KITCHEN HOOD FAN CONTROL SCHEMATIC

NO SCALE

NOTES:

1. THE FANS SHALL BE WIRED SO THAT ONE LOCAL SWITCH TURNS ON ASSOCIATED SUPPLY AND EXHAUST FANS.
2. IF THE FIRE ALARM IS IN ALARM, A FIRE ALARM CONTROL CONTACT SHALL CAUSE THE SUPPLY FAN TO STOP AND THE EXHAUST FAN TO START, EVEN IF THE CONTROL SWITCH IS "OFF".
3. SCHEMATIC IS DIAGRAMMATIC. PROVIDE INTERLOCK WIRING BASED ON EQUIPMENT PROVIDED AND FAN VOLTAGE TO IMPLEMENT THE SEQUENCE SPECIFIED.
4. COORDINATE BETWEEN FIRE ALARM CONTRACTOR, CONTROLS CONTRACTOR AND ELECTRICAL CONTRACTOR TO PROVIDE A COMPLETE INSTALLATION.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

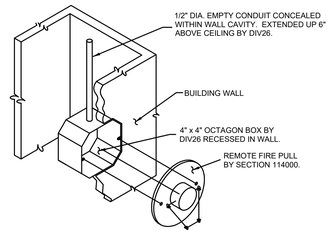


1 GAS VALVE DETAIL

NO SCALE

NOTES:

1. GAS VALVE HOUSINGS ARE NOT SHOWN ON THE ELECTRICAL DRAWING. GC AND ELECTRICAL CONTRACTOR SHALL COORDINATE SIZE AND LOCATION OF GAS VALVE HOUSINGS.
2. SEE FOOD SERVICE CONSULTANT'S DRAWINGS ADDITIONAL INFORMATION AND REQUIREMENTS.
3. PROVIDE MINIMUM 3/4"C AS SHOWN ON THIS DETAIL.

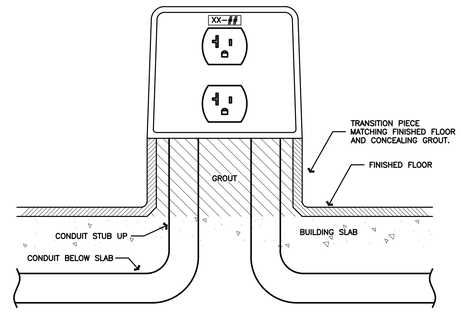


2 RECESSED FIRE PULL DETAILS

NO SCALE

NOTES:

1. VERIFY LOCATION OF REMOTE MANUAL PULL STATION.
   - 1.A. MANUAL PULL STATION MUST BE PLACED WITHIN EASY ACCESS OF EXIT DOOR.
   - 1.B. MANUAL PULL STATION MUST BE PLACED NO LESS THAN 4 FEET AWAY FROM KITCHEN HOOD BUT WITHIN A MAXIMUM OF 20 FEET FROM THE KITCHEN HOOD.



3 TYPICAL PEDESTAL MOUNTED DEVICE

NO SCALE

NOTES:

1. ALL FACEPLATES SHALL BE STAINLESS STEEL.
2. PEDESTAL BOX PROVIDED BY DIVISION 26.
   - 2.A. A STANDARD DUPLEX INSTALLATION IS SHOWN FOR REFERENCE, PROVIDE SIMILAR INSTALLATION FOR QUAD RECEPTACLES, GFI RECEPTACLES, DATA OUTLETS, NEMA POWER OUTLETS, ETC.
   - 2.B. ALL PEDESTAL BOXES TO BE DOUBLE FACED WITH ONE BLANK FACE FOR FUTURE GROWTH. 2-GANG PEDESTALS WITH ONE BLANK FACE FOR QUAD RECEPTACLE LOCATIONS.
   - 2.C. PEDESTAL BOXES TO BE SIZED BY DIVISION 26 TO PROVIDE SCHEDULED DEVICES ON A SINGLE FACE AND SUFFICIENT DEPTH FOR BACK TO BACK DEVICES ON DOUBLE FACED PEDESTALS.
   - 2.D. BASIS OF DESIGN:
     - 2.D.A. 1-GANG ELECTRICAL DEVICES: LEGRAND LBP2 OR WATER SAVER E400SA-WS
     - 2.D.B. 1-GANG LOW VOLTAGE DEVICES: LEGRAND LBP2 OR WATER SAVER E400SA-WS
     - 2.D.C. 2-GANG ELECTRICAL DEVICES: WATER SAVER E600SA-WS
     - 2.D.D. 2-GANG LOW VOLTAGE DEVICES: WATER SAVER E600SA-WS
3. INSTALLATION REQUIREMENTS:
   - 3.A. STUB UP CONDUIT ABOVE FLOOR TO PEDESTAL BOX CONNECTION LOCATION.
   - 3.B. GROUT GAP BETWEEN FINISHED FLOOR AND BOTTOM OF PEDESTAL BOX.
   - 3.C. PROVIDE TRANSITION PIECE TO CONTINUE FINISHED FLOOR TO BOTTOM EDGE OF SERVICE FITTING AND CONCEAL GROUT. TRANSITION PIECE TO MATCH ARCHITECT'S FINISH SCHEDULE.
   - 3.D. PEDESTAL BOX TO BE INSTALLED SQUARE TO THE FINISHED FLOOR.
4. PROVIDE TYPEWRITTEN OR PREMADE CIRCUIT LABELS ON INSTALLED WIRING AT EACH DEVICE AND SPLICE POINT.
5. PROVIDE TYPEWRITTEN LABEL AFFIXED TO THE FRONT OF EACH DEVICE FACEPLATE INDICATING ELECTRICAL CIRCUIT.

   CIRCUIT LABEL

   XX-## — A. XX = PANEL DESIGNATION

   B. ## = AS-BUILT CIRCUIT DESIGNATION

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
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SEAL



07.18.2025

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PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL
KITCHEN DETAILS

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LIGHTING SYSTEM FUNCTIONAL TESTING AND DOCUMENTATION NOTES:

1. PRIOR TO PASSING FINAL INSPECTION, THE CONTRACTOR SHALL PERFORM FUNCTIONAL TESTING IN THE PRESENCE OF THE REGISTERED DESIGN PROFESSIONAL, THE OWNER AND/OR THEIR AGENT. THE FUNCTIONAL TESTING SHALL BE AS REQUIRED BY SECTION C408.3.1 OF THE 2021 IECC.
   - 1.A. THE FUNCTIONAL TESTING SHALL PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SYSTEMS, INCLUDING BOTH HARDWARE AND SOFTWARE, ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTRUCTIONS.
   - 1.B. THE FUNCTIONAL TESTING SHALL BE IN ACCORDANCE WITH SECTIONS C408.3.1.1 AND C408.3.1.2 OF THE 2021 IECC FOR THE APPLICABLE CONTROL TYPE.
   - 1.C. A WRITTEN REPORT SHALL BE GENERATED DOCUMENTING THE FUNCTIONAL TESTING RESULTS IN ACCORDANCE WITH THE 2015 IECC REQUIREMENTS.
2. ALL LIGHTING CONTROLS O&M MANUALS, AS-BUILTS, TESTING REPORTS AND DOCUMENTATION RELATED TO THE LIGHTING CONTROL SYSTEM SHALL BE PROVIDED IN THEIR FINAL AND APPROVED FORM WITHIN 60 DAYS OF THE CERTIFICATE OF OCCUPANCY. ALL DOCUMENTS CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA OF SECTION C405 OF THE 2021 IECC SHALL BE INCLUDED IN THE O&M MANUALS.
3. ALL DOCUMENTS FROM ITEMS #1 AND #2 ABOVE SHALL BE COMBINED AND PROVIDED TO THE OWNER WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

LIGHT FIXTURE SCHEDULE

EXTERIOR LIGHT FIXTURE SCHEDULE

RECESSED 6" DOWNLIGHT WET LOCATION	D5 D5Y	6" DIAMETER RECESSED LED DOWNLIGHT, SPECULAR CLEAR REFLECTOR, MEDIUM (56°) BEAM DISTRIBUTION, 1000 LUMENS, 4000K COLOR TEMPERATURE, 120–277V MULTIVOLT INPUT, 1% 0–10V DIMMING DRIVER. LIGHTOLIER 6R–N / C6L–10–9–40–M–Z10–U / C6–R–DL–CC	9W
RECESSED 6" DOWNLIGHT WET LOCATION	D6 D6Y	6" DIAMETER RECESSED LED DOWNLIGHT, SPECULAR CLEAR REFLECTOR, MEDIUM (56°) BEAM DISTRIBUTION, 2000 LUMENS, 4000K COLOR TEMPERATURE, 120–277V MULTIVOLT INPUT, 1% 0–10V DIMMING DRIVER. LIGHTOLIER 6R–N / C6L–20–9–40–M–Z10–U / C6–R–DL–CC	22W
SURFACE CANOPY SQUARE LED	WC1 WC1X WC1Y	9" SQUARE SURFACE LED CANOPY LIGHT, 4000K COLOR TEMPERATURE, 3500 LUMENS, 120–277V MULTIVOLT INPUT, DARK BRONZE FINISH. EELP VR7–T–28L–QT–40K (EBLED9W)	28W
EXTERIOR WALL PACK	WP1 WP1X WP1Y	7" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 5000 LUMENS, TYPE 3 DISTRIBUTION, 120–277 MULTIVOLT INPUT, WET LOCATION, 10KV KA SURGE PROTECTION. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM SMALL GWS–A04–740–UNV–XX FINISH (EM)	34W
EXTERIOR WALL PACK	WP2 WP2X WP2Y	12" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 8500 LUMENS, TYPE 3 DISTRIBUTION, 120–277 MULTIVOLT INPUT, WET LOCATION. REFER TO ARCH FOR MOUNTING HEIGHT. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM MEDIUM GWM–A11–740–T3M–UNV–XX FINISH (REMOTE EM BATTERY)	52W
EXTERIOR WALL PACK	WP3 WP3X WP3Y	17" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 12500 LUMENS, TYPE 3 DISTRIBUTION, 120–277 MULTIVOLT INPUT, WET LOCATION. REFER TO ARCH FOR MOUNTING HEIGHT. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM MEDIUM GWM–A14–740–T3M–UNV–XX FINISH (REMOTE EM BATTERY)	77W

1. LIGHT FIXTURE CATALOG NUMBERS AND DESCRIPTIONS ARE SCHEDULED FOR ESTABLISHING QUALITY, APPEARANCE AND PERFORMANCE OF THE FIXTURES. EXACT CATALOG NUMBERS DESCRIBING MOUNTING CONDITIONS AND REQUIREMENT RELATED TO TRIM FOR ALL FIXTURES SHALL BE CONFIRMED (BY THE ELECTRICAL CONTRACTOR) WITH THE ROOM FINISH SCHEDULE AND REFLECTED CEILING PLANS ON THE ARCHITECTURAL PLANS PRIOR TO BIDDING AND SUBMITTING LIGHT FIXTURES. PROVIDE DRY WALL KIT AS REQUIRED.
2. ALL 'X', 'Y', AND 'Z' TYPE FIXTURES SHALL HAVE EMERGENCY POWER BACKUP. EMERGENCY POWER SOURCES SHALL MONITOR POWER UPSTREAM OF THE LIGHTING CONTROLS TO SEE IF POWER IS LOST. BATTERY PACKS AND INVERTERS SHALL BE CAPABLE OF POWERING THE DESIGNATED FIXTURE(S) WITH AN OUTPUT OF 1400 LUMENS FOR A MINIMUM OF 90–MINUTES, PROVIDE REMOTE BATTERY PACKS OR INVERTERS AS NECESSARY. EMERGENCY LIGHTS SHALL OPERATE ONLY UPON LOSS OF POWER. ALSO, PROVIDE AND WIRE TEST SWITCH AND LED INDICATOR LIGHT FOR EMERGENCY BATTERY. SEE WIRING INSTRUCTION SUPPLIED BY EMERGENCY BATTERY MANUFACTURER.
   - 2.A. 'X' TYPE FIXTURES (AX, ETC.) HAVE EMERGENCY GENERATOR POWER LIGHTING TRANSFER DEVICES.
   - 2.B. 'Y' TYPE FIXTURES (MY, ETC.) HAVE INDIVIDUAL 90–MINUTE EMERGENCY BATTERY POWER.
   - 2.C. 'Z' TYPE FIXTURES (QTZ, ETC.) HAVE 90–MINUTE INVERTER EMERGENCY BATTERY POWER.
3. PROVIDE BASE COVER FOR ALL LIGHT POLES.
4. ALL EXTERIOR FIXTURES SHALL BE WET RATED WITH COLD WEATHER BALLASTS AND BATTERY PACKS.
5. PROVIDE SPARE FIXTURES AND EMERGENCY DEVICES PER SPECIFICATIONS.
6. WHERE FIXTURE FINISHES ARE INDICATED TO BE SELECTED BY ARCHITECT THE CONTRACTOR SHALL INCLUDE IN THEIR BID ALL AVAILABLE FINISHES. SUBMIT COMPLETE FIXTURE FINISH OPTIONS AS PART OF THE LIGHTING SUBMITTAL PACKAGE.
7. EQUAL BY PHILIPS (CW LIGHTING), COOPER (PUTTERMAN SCHARCK), AND LITHONIA (LESCO) SHALL BE ACCEPTABLE.

INTERIOR LIGHT FIXTURE SCHEDULE

APPLICATION	TYPE	DESCRIPTION	WATTS
1X4 RECESSED LAY–IN CEILING SELECTABLE CCT & LUMENS	A1 A1X A1Y	2X4 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY–IN CEILING, 6000 LUMENS, 4000K COLOR TEMPERATURE, 120–347V MULTIVOLT INPUT, 5% 0–10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (47W). DAYBRITE 2SBP3550L8CS–4–UN3–DIM	47W
1X4 RECESSED LAY–IN CEILING SELECTABLE CCT & LUMENS	B1 B1X B1Y	1X4 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY–IN CEILING, 4500 LUMENS, 4000K COLOR TEMPERATURE, 120–347V MULTIVOLT INPUT, 5% 0–10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE 1SBP3040L8CS–4–UN3–DIM	36W
2X2 RECESSED LAY–IN CEILING SELECTABLE CCT & LUMENS	B2 B2X B2Y	2X2 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY–IN CEILING, 4250 LUMENS, 4000K COLOR TEMPERATURE, 120–347V MULTIVOLT INPUT, 5% 0–10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE 2SBP3040L8CS–2–UN3–DIM	39W
4FT STRIP LED MECHANICAL & STORAGE ROOMS	C CX CY	4 FOOT STRIP LED, STEEL HOUSING, FROSTED ACRYLIC LENS, 4000 LUMENS, 3500K COLOR TEMPERATURE, CHAIN HANGING SET, WIRE GUARD, 120–277V MULTIVOLT INPUT, 0–10V DIMMING DRIVER. PROVIDE CHAIN HANGING SET AND WIREGUARD IN MECHANICAL ROOMS AND AREAS WITHOUT CEILINGS. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE SDS–4–2448L–8CST–UNV–DIM	30W
RECESSED 6" DOWNLIGHT	D1 D1X D1Y	6" DIAMETER RECESSED LED DOWNLIGHT, MATTE WHITE FINISH, WIDE (76°) BEAM DISTRIBUTION, 1000 LUMENS, 4000K COLOR TEMPERATURE, 120–277V MULTIVOLT INPUT, 1% 0–10V DIMMING DRIVER. LIGHTOLIER 6R–N / C6L–10–9–40–W–Z10–U / C6–R–DL–WH	9W
RECESSED 6" DOWNLIGHT	D2 D2X D2Y	6" DIAMETER RECESSED LED DOWNLIGHT, MATTE WHITE FINISH, WIDE (76°) BEAM DISTRIBUTION, 2000 LUMENS, 4000K COLOR TEMPERATURE, 120–277V MULTIVOLT INPUT, 1% 0–10V DIMMING DRIVER. LIGHTOLIER 6R–N / C6L–20–9–40–W–Z10–U / C6–R–DL–WH	22W
EXIT SIGN	XB XS XD	DIE CAST ALUMINUM LED EXIT LIGHT, RED LETTERS, MATTE BLACK HOUSING W/ BRUSHED ALUMINUM FACE, UNIVERSAL ARROWS, 120/277 VOLT DUAL INPUT, 90 MINUTE EMERGENCY BATTERY. VERIFY LETTER AND FACE COLOR WITH OWNER/ARCHITECT PRIOR TO ORDERING. XS=SINGLE FACE, XD=DOUBLE FACE, XB=BACK MOUNTED PHILIPS CHLORIDE ER55L–3–R SURELITES CX7–1/2–R LITHONIA LQC–1/2–R–EL N	5W
EXIT SIGN INTEGRAL BATTERY INTEGRAL EM LIGHT BAR	YB YS YD	THERMOPLASTIC LED EXIT LIGHT WITH INTEGRAL EM LIGHT, RED LETTERS, WHITE HOUSING W/ WHITE FACE, UNIVERSAL ARROWS, 120–277 MULTIVOLT INPUT, 90 MINUTE EMERGENCY BATTERY. VERIFY LETTER AND FACE WITH OWNER/ARCHETICT PRIOR TO ORDERING. YS=SINGLE FACE, YD=DOUBLE FACE, YB=BACK MOUNTED SIGNTEX CLP–BB–U–R–W–DG	5W
TWIN HEAD EM LIGHT INTEGRAL BATTERY WET LOCATION	YT1	TWIN HEAD EM LIGHT, INJECTION–MOLDED THERMOPLASTIC WHITE HOUSING, GASKETED CLEAR POLYCARBONATE COVER, LED LAMPS, 90–MINUTE EMERGENCY BATTERY. CHLORIDE TPU–W–N–LM7–W	7W

LIGHTING CONTROL SEQUENCE OF OPERATIONS

ROOM TYPE	OCCUPANCY SENSOR: AUTO ON	OCCUPANCY SENSOR: MANUAL ON (VACANCY)	OCCUPANCY SENSOR: AUTO OFF (20 MIN MAX)	OCCUPANCY SENSOR: PARTIAL OFF AT NORMAL HOURS	OCCUPANCY SENSOR: AUTO ON AFTER HOURS	OCCUPANCY SENSOR: AUTO OFF AFTER HOURS (20 MIN MAX)	TIME SWITCH/SCHEDULING: TIME ON	TIME SWITCH/SCHEDULING: TIME OFF	TIME SWITCH/SCHEDULING: ASTRONOMIC OR PHOTOCELL ON/OFF	DAYLIGHT CONTROL: AUTO STEP CONTROL WITH OFF	DAYLIGHT CONTROL: AUTO CONTINUOUS DIM WITH OFF	LIGHT REDUCTION: MANUAL BI–LEVEL REDUCTION CONTROL	LIGHT REDUCTION: MANUAL CONTINUOUS DIM CONTROL	MANUAL CONTROL: MANUAL ON/OFF SWITCH	MANUAL CONTROL: MANUAL DIMMER SWITCH	MANUAL CONTROL: DISPLAY, ACCENT, TASK CONTROL	PLUG LOAD CONTROL	SEQUENCE OF OPERATION
Kitchen/Serving							•	•				•		•				LOCAL ON/OFF CONTROLS, LOCAL CONTROLS MAY OVERRIDE BUILDING SCHEDULE AND TURN ALL LIGHTS ON FOR MAXIMUM 2HRS. NETWORK LIGHTING CONTROLS ROOM CONTROLLER CONNECTED TO BUILDING CONTROLS; ON/OFF BASED ON BUILDING SCHEDULE, AFTER HOURS ON/OFF BASED ON OCCUPANCY, COORDINATE SCHEDULING WITH OWNER. WHERE ≥150W IN DAYLIGHT AREA, USE CONTINUOUS DIMMING DAYLIGHTING CONTROL.
Restrooms	100%		20 MIN											•				AUTO ON 100%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Custodial rooms		•	20 MIN											•	•			MANUAL ON, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Storage rooms	50%		20 MIN											•	•			AUTO ON 50%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF/DIMMING CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Private Offices	50%		20 MIN											•	•		•	AUTO ON 50%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF/DIMMING CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Corridors					100%	20 MIN	•	•						•				LOCAL ON/OFF CONTROLS, LOCAL CONTROLS MAY OVERRIDE BUILDING SCHEDULE AND TURN ALL LIGHTS ON FOR MAXIMUM 2HRS. NETWORK LIGHTING CONTROLS ROOM CONTROLLER CONNECTED TO BUILDING CONTROLS; ON/OFF BASED ON BUILDING SCHEDULE, AFTER HOURS ON/OFF BASED ON OCCUPANCY, COORDINATE SCHEDULING WITH OWNER. WHERE ≥150W IN DAYLIGHT AREA, USE CONTINUOUS DIMMING DAYLIGHTING CONTROL.
Electrical Rooms														•				MANUAL ON/OFF; LOCAL CONTROL DEVICE NOT TIED TO LVLCS.
Building Facade/Landscape							•	•										CONNECTED TO BUILDING CONTROLS THROUGH LIGHTING CONTACTOR; ON/OFF BASED ON BUILDING SCHEDULE.

1. DIMMER SWITCHES SHALL ACTIVATE PRESET ALL ON LIGHTING LEVEL WHEN PRESSED IN THE UP POSITION. LIGHTING LEVELS MAY BE RAISED/LOWERED BY HOLDING THE DIMMER PADDLE. WHEN PRESSED IN THE DOWN POSITION ALL LIGHTS SHALL SMOOTHLY DIM TO OFF.
2. AT LEAST 50 PERCENT OF ALL 125V, 15– AND 20–AMP RECEPTACLES INSTALLED IN ENCLOSED OFFICES, CONFERENCE ROOMS, ROOMS USED PRIMARILY FOR COPY OR PRINT FUNCTIONS, BREAKROOMS, CLASSROOMS AND INDIVIDUAL WORKSTATIONS, INCLUDING THOSE INSTALLED IN MODULAR PARTITIONS AND MODULE OFFICE WORKSTATION SYSTEMS SHALL HAVE PLUG LOAD CONTROL PER IECC 2021 C405.11.

LIGHTING CONTACTOR SCHEDULE

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	CONTACTOR LOCATION	CONTACTOR TYPE
CONTACTOR CT1						
CT1–1	KITCHEN/SERVING AREA – ZONE 'a'	HK–3	–	Kitchen–a	CENTRAL PLANT	MAGNETICALLY HELD
CT1–2	SPARE			Kitchen–a	CENTRAL PLANT	MAGNETICALLY HELD
CT1–3	SPARE			Kitchen–a	CENTRAL PLANT	MAGNETICALLY HELD
CONTACTOR CT2						
CT2–1	KITCHEN/SERVING AREA – ZONE 'b'	HK–3	–	Kitchen–b	CENTRAL PLANT	MAGNETICALLY HELD
CT2–2	SPARE			Kitchen–b	CENTRAL PLANT	MAGNETICALLY HELD
CT2–3	SPARE			Kitchen–b	CENTRAL PLANT	MAGNETICALLY HELD
CONTACTOR CT3						
CT3–1	KITCHEN SOFFIT/CANOPY LTS	HK–5	–	Exterior	CENTRAL PLANT	MAGNETICALLY HELD
CT3–2				Exterior	CENTRAL PLANT	MAGNETICALLY HELD
CT3–3				Exterior	CENTRAL PLANT	MAGNETICALLY HELD

1. REFERENCE TYPICAL LIGHTING CONTACTOR WIRING DIAGRAM.
2. EMERGENCY AND NORMAL ZONES WITHIN THE KITCHEN/SERVING SHALL HAVE SEPARATE CONTROLS TO ALLOW FOR LIGHTING REDUCTION CONTROL.
3. LIGHTING CONTACTORS SHALL BE DIN RAIL MOUNTED, MAGNETICALLY HELD TYPE WITH THREE WIRE CONTROL BY THE BAS.
   - 3.A. PROVIDE CABINET AT EACH LOCATION TO MOUNT ALL CONTACTORS IN A SINGLE ENCLOSURE. ENCLOSURE SIZED BY DIVISION 26.
   - 3.B. PROVIDE SEPARATE HOA SWITCHES IN THE FRONT COVER OF THE ENCLOSURE WIRED TO CONTROL THE FOLLOWING ZONES SEPARATELY.
     - 3.B.1. INTERIOR LIGHTING (ALL INTERIOR LIGHTING GROUPS)
     - 3.B.2. EXTERIOR LIGHTING (ALL EXTERIOR LIGHTING GROUPS)
     - 3.B.3. HOA SWITCH SHALL PASS THE BAS SIGNALS IN AUTO MODE, DISENGAGE ALL CONTACTORS IN THE OFF POSITION, AND ENGAGE ALL THE CONTACTORS IN THE ON POSITION.
   - 3.C. SPARE CAPACITY:
     - 3.C.1. PROVIDE MINIMUM TWO (2) SPARE POLE ON EACH COMBINED TYPE CONTACTOR FOR FUTURE USE.

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SEAL

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PROJ. NO.: 23-25
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LIGHTING SCHEDULES

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1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

LIGHTING RENOVATION NOTES:

A. KITCHEN LIGHTS TO BE CONTROLLED BY LOCAL MOMENTARY SWITCHES AND BAS. LIGHTING CONTACTOR LOCATIONS SHOWN SCHEMATICALLY ONLY. LOCATE LIGHTING CONTACTOR ENCLOSURE IN THE ADJACENT CENTRAL PLANT SPACE, FIELD VERIFY. REFERENCE LIGHTING CONTROL DETAIL. TYPICAL.

LEFT SWITCH SHALL CONTROL ZONE 'a' NORMAL POWER LIGHTING FIXTURES.

RIGHT SWITCH SHALL CONTROL ZONE 'b' EMERGENCY LIGHTING FIXTURES.

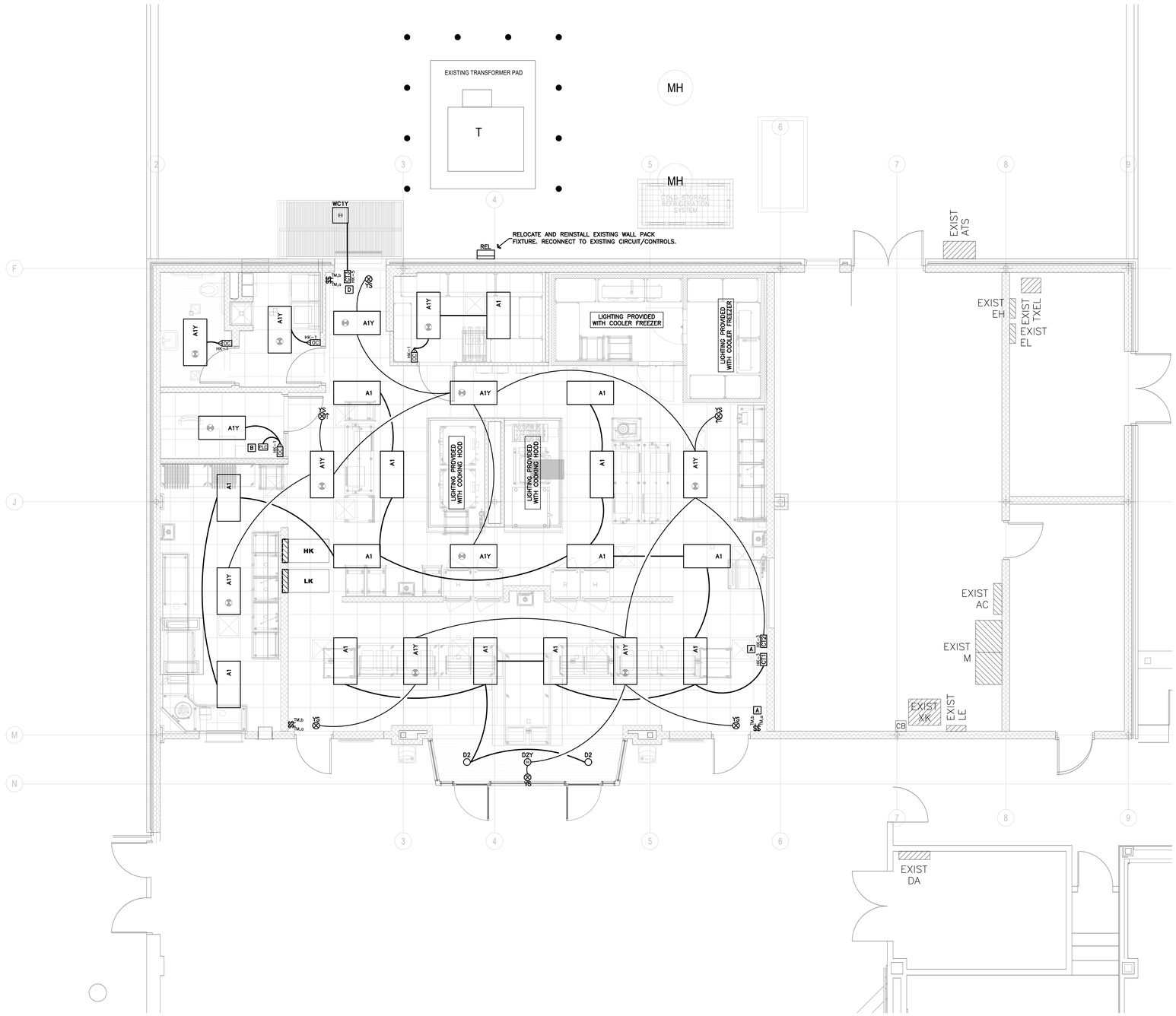
B. PROVIDE PLUG LOAD CONTROLS TIED TO THE LIGHTING IN OFFICE SPACES.

C. WIRE EXIT SIGNS UPSTREAM OF LIGHTING CONTROLS. TYPICAL.

D. EXTERIOR LIGHTS TO BE CONTROLLED BY BAS. LIGHTING CONTACTOR LOCATIONS SHOWN SCHEMATICALLY ONLY. LOCATE LIGHTING CONTACTOR ENCLOSURE IN THE ADJACENT CENTRAL PLANT SPACE, FIELD VERIFY. REFERENCE LIGHTING CONTROL DETAIL. TYPICAL.

E. AFTER REMOVAL OF THE TEMPORARY KITCHEN. PROVIDE NEW EXIT SIGN AT ORIGINAL LOCATION AND RECONNECT TO EXISTING CAFETERIAL LIGHTING CIRCUIT.

F. PATCH/REPAIR EXTERIOR SOFFIT TO ACCOMMODATE NEW SURFACE MOUNTED FIXTURES.



1 **LIGHTING RENOVATION PLAN**

SCALE: 1/4" = 1'- 0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL

STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS

ARCHITECTS AND PLANNING CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

LIGHTING FLOOR PLANS

o-E.100

STANTON ENGINEERING GROUP

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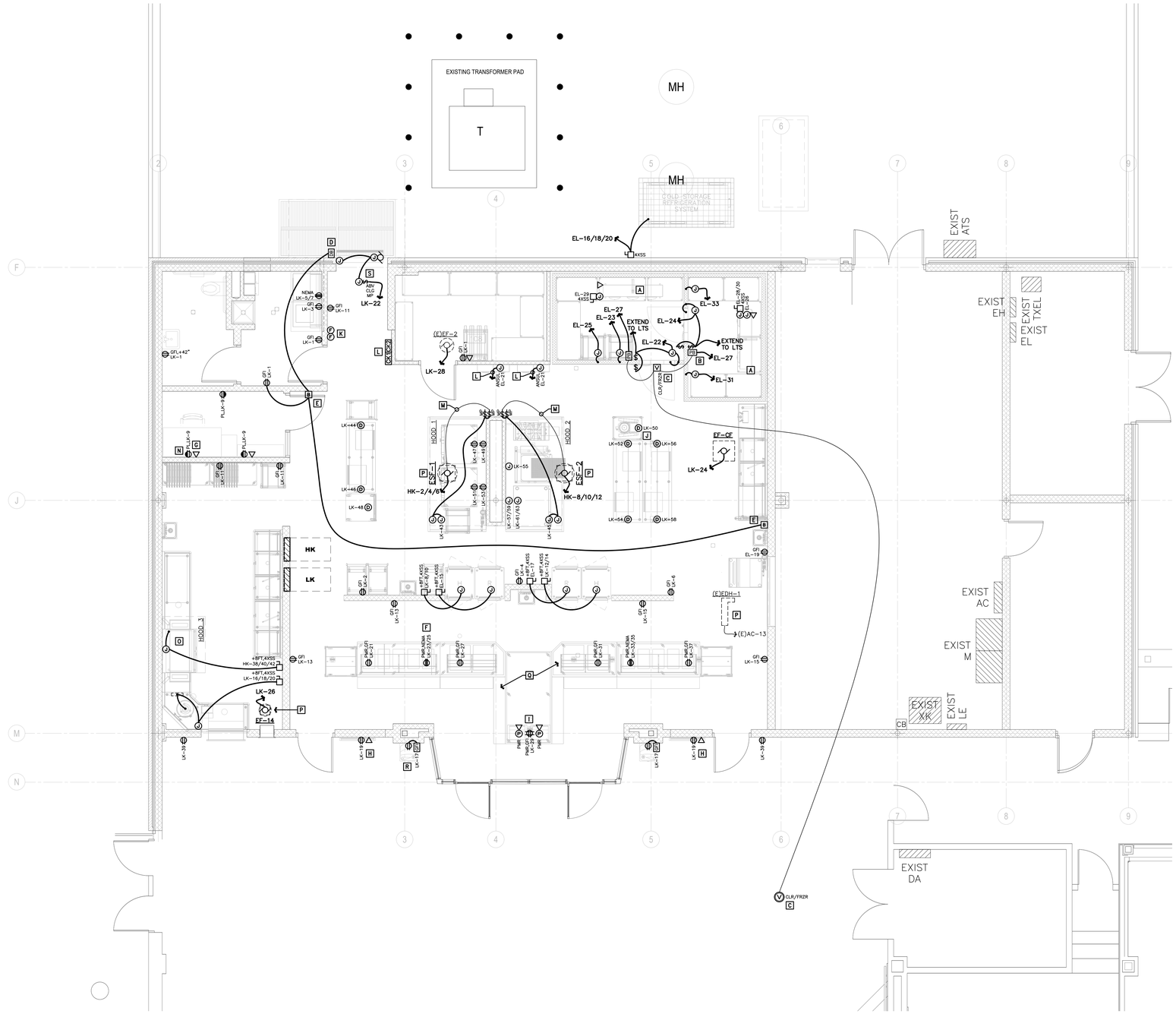
EXISTING TRANSFORMER PAD
T
MH
MH
COLD STORAGE REFRIGERATION SYSTEM
EXIST ATS
EXIST EH
EXIST TXEL
EXIST EL
EXIST AC
EXIST M
EXIST LE
EXIST KK
EXIST DA
CB
EL-16/18/20
LK-22
LK-28
EL-25
EL-23
EL-27
EXTEND TO LTS
EL-22
EL-24
EL-33
EL-31
EL-27
HOOD_1
HOOD_2
HK-2/4/6
HK-8/10/12
LK-24
EF-CF
EF-14
LK-26
HK
LK
(E)EDH-1
(E)AC-13
CLR/FRZR
GFI LK-1
GFI LK-3
GFI LK-11
GFI LK-13
GFI LK-15
GFI EL-19
NEMA LK-7/9
GFI+42" LK-1
PLK-9
FLK-9
LK-39
LK-19
PWR LK-21
PWR LK-23/25
PWR LK-27
PWR LK-29/31
PWR LK-33/35
PWR LK-37
LK-44
LK-46
LK-48
LK-50
LK-52
LK-54
LK-56
LK-58
LK-47
LK-49
LK-51
LK-53
LK-55
LK-57/59
LK-41/43
LK-45
LK-2
LK-4
LK-6
LK-13
LK-15
LK-17
LK-12/14
LK-8/10
LK-16/18/20
LK-38/40/42
+8FT,4XSS
LK-33/35
EL-29/31
EL-21
EL-19
EL-17
EL-15
EL-13
EL-11
EL-9
EL-7
EL-5
EL-3
EL-1
4XSS
6XSS
8XSS
10XSS
12XSS
14XSS
16XSS
18XSS
20XSS
22XSS
24XSS
26XSS
28/30
32/34
36/38
40/42
48/50
52/54
56/58
60/62
64/66
68/70
72/74
76/78
80/82
84/86
88/90
92/94
96/98
100/102
104/106
108/110
112/114
116/118
120/122
124/126
128/130
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136/138
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144/146
148/150
152/154
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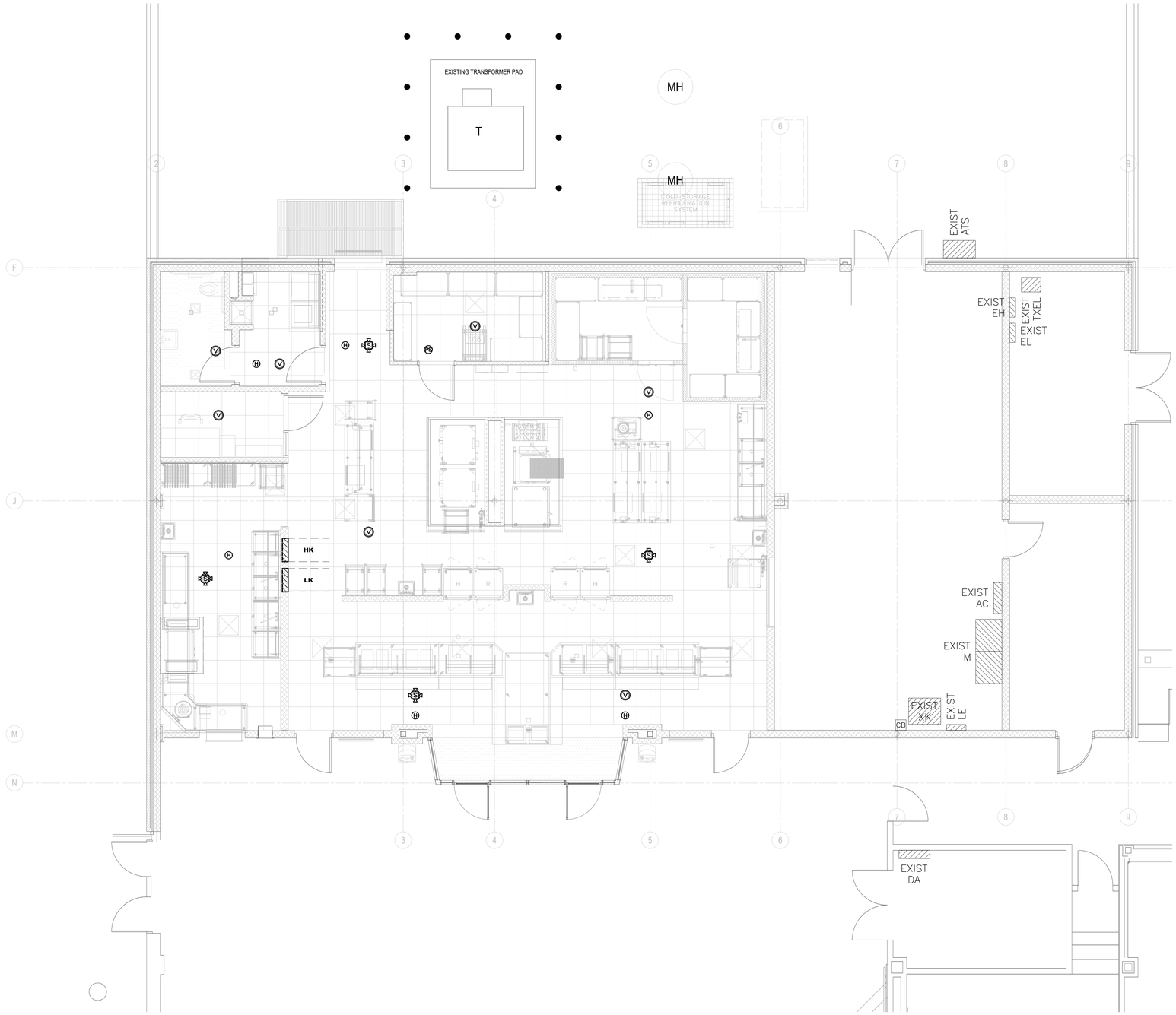
200/202
204/206



1 **FIRE ALARM RENOVATION PLAN**
SCALE: 1/4" = 1'- 0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

FIRE ALARM FLOOR PLANS

o-E.300

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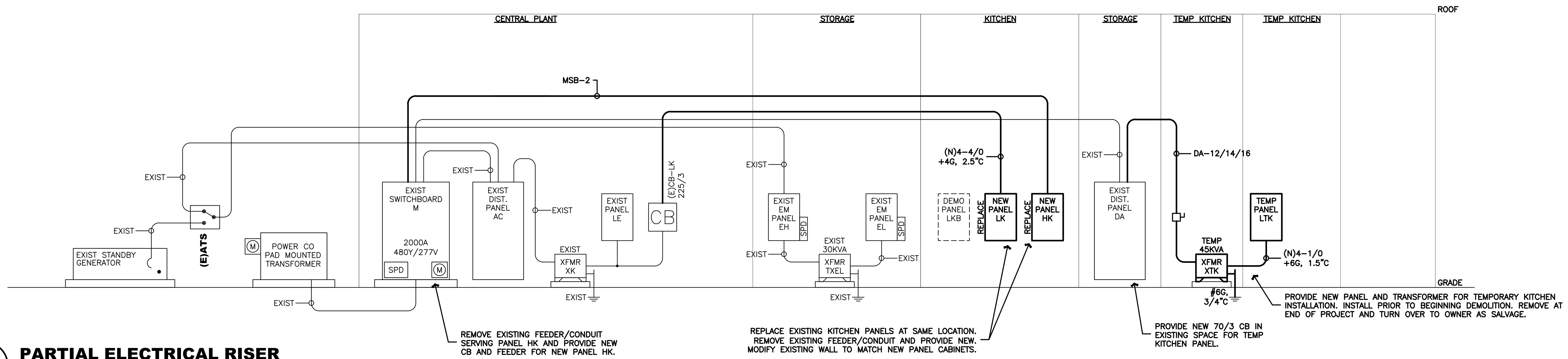

1 PARTIAL ELECTRICAL RISER

NO SCALE

NOTES:

1. FIELD VERIFY ALL EXISTING ELECTRICAL PANELS AND FEEDERS SHOWN ON DRAWINGS.
2. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
3. ALL OUTAGES SHALL BE SCHEDULED/CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
4. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.
5. REFERENCE PANEL SCHEDULES AND SHORT CIRCUIT TABLE FOR AIC AND SCCR VALUES.

NEW KITCHEN PANEL — KITCHEN

PANEL HK

225A MLO, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 20,250A — SCCR & AIC: 25,000A — MOUNTING: RECESSED, STAINLESS STEEL COVER

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
6		376	KITCHEN ROOM LIGHTS	3–12	20/1	1				2	15/3	3–12	ESF–1	4986		
7		1095	KITCHEN LIGHTS	3–12	20/1	3				4	–	+12G	(1.5HP / 1.5HP)	–		
		84	KITCHEN SOFFIT LIGHTS	3–12	20/1	5				6	–	3/4"C	–	–		
			SPARE		20/1	7				8	15/3	3–12	ESF–2	4986		
			SPARE		20/1	9				10	–	+12G	(1.5HP / 1.5HP)	–		
			SPARE		20/1	11				12	–	3/4"C	–	–		
			SPARE		20/1	13				14			SPACE			
			SPARE		20/1	15				16			SPACE			
			SPARE		20/1	17				18			SPACE			
			SPARE		20/1	19				20			SPACE			
			SPARE		20/1	21				22			SPACE			
			SPACE			23				24			SPACE			
			SPACE			25				26			SPACE			
			SPACE			27				28			SPACE			
			SPACE			29				30			SPACE			
			SPACE			31				32			SPACE			
			SPACE			33				34			SPACE			
			SPACE			35				36			SPACE			
			SPACE			37				38	70/3	3–6	DISHMACHINE	42963	E250	
			SPACE			39				40	–	+8G	–	–		
			SPACE			41				42	–	3/4"C	–	–		
	TOTAL LOAD @ 100% =		54490VA		TOTAL LOAD @ 100% =						66A		TOTAL LOAD @ 125% =	82A		

NEW KITCHEN PANEL — KITCHEN

PANEL LK

225A MLO, 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: RECESSED, STAINLESS STEEL COVER

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E10	640	3 REC – RR/STOR/CUST & BELL	3–12	20/1	1				2	20/1	3–12	1 REC – KITCHEN	180	E10	
	E110	1920	WASHING MACHINE	3–12	20/1	3				4	20/1	3–12	1 REC – KITCHEN	180	E10	
	E110A	5000	DRYER	2–10	30/2GFI	5				6	20/1	3–12	1 REC – KITCHEN	180	E10	
	E151	–	–	+10N+10G	3/4"C	7				8	20/2	2–10	HEATED CABINET	3224	E187	
		540	3 REC – OFFICE	3–12	20/1	9				10	3/4"C	+10G	–	–		
	E10	540	3 REC – KITCHEN	3–12	20/1	11				12	20/2	2–10	HEATED CABINET	3224	E187	
	E10	360	2 REC – SERVING LINE	3–12	20/1	13				14	3/4"C	+10G	–	–		
	E10	360	2 REC – SERVING LINE	3–12	20/1	15				16	20/3	3–12	DISPOSER	3960	E123	
		1000	2 EDF – CAFETERIA	3–12	20/1	17				18	–	+12G	(3 HP)	–		
	E615	500	2 MENU BOARDS	3–12	20/1	19				20	–	3/4"C	–	–		
	E209	960	MILK COOLER	3–12	20/1	21				22	20/1	3–12	AIR SCREEN	612	E101	
	E201A	5824	HOT FOOD COUNTER	2–8	35/2	23				24	15/1	3–12	EF–CF (1/6HP)	528		
		–	–	+10G	3/4"C	25				26	15/1	3–12	EF–14 (1/6HP)	528		
	E201B	1920	COLD FOOD COUNTER	3–12	20/1	27				28	20/1	3–12	EF–2 (1/6HP)	528		
	E214	360	CASH REGISTERS	3–12	20/1	29				30	20/1		SPARE			
	E201B	1920	COLD FOOD COUNTER	3–12	20/1	31				32	20/1		SPARE			
	E201A	5824	HOT FOOD COUNTER	2–8	35/2	33				34	20/1		SPARE			
		–	–	+10G	3/4"C	35				36	20/1		SPARE			
	E209	960	MILK COOLER	3–12	20/1	37				38	20/1		SPARE			
		360	2 REC – CAFETERIA	3–12	20/1	39				40	20/1		SPARE			
			SPARE		20/1	41				42	20/1		SPARE			
	E153/E153M	250	HOOD LTS & SENSOR	3–12	20/1	43				44	20/1GFI	3–12	DROP CORD	180	E129	
	E153/E153M	250	HOOD LTS & SENSOR	3–12	20/1	45				46	20/1GFI	3–12	DROP CORD	180	E129	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	47				48	20/1GFI	3–12	MOBILE PROOFER	1800	E139A	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	49				50	20/1GFI	3–12	20QT MIXER	960	E125	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	51				52	20/1GFI	3–12	DROP CORD	180	E129	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	53				54	20/1GFI	3–12	DROP CORD	180	E129	
8	E163	600	TILT BRAISING PAN	3–12	20/1	55				56	20/1GFI	3–12	DROP CORD	180	E129	
8	E172	3120	COMBI OVEN	2–12	20/2	57				58	20/1GFI	3–12	DROP CORD	180	E129	
		–	–	+12G	3/4"C	59				60	20/1	3–12	EXISTING CIRCUIT	500		5
8	E172	3120	COMBI OVEN	2–12	20/2	61				62	20/2	2–12	EXISTING CIRCUIT	1000		5
		–	–	+12G	3/4"C	63				64	–	+12N+12G	–	–		5
		250	EXISTING CIRCUIT	3–12	20/1	65				66	20/2	2–12	EXISTING CIRCUIT	1000		5
9		0	TEMP LOAD CENTER	4–3	100/3	67				68	–	+12N+12G	–	–		5
		–	–	+8G	–	69				70	30/2	2–10	EXISTING CIRCUIT	3000		5
		–	–	1.25"C	–	71				72	–	+10N+10G	–	–		
	TOTAL LOAD @ 100% =		61942VA		TOTAL LOAD @ 100% =						172A		TOTAL LOAD @ 65% =	112A		

KITCHEN HOOD CONTACTOR SCHEDULE

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	EQUIPMENT LOCATION	CONTACTOR TYPE
HOOD 1						
CK1–1	CONVECTION OVEN	LK–47	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–2	CONVECTION OVEN	LK–49	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–3	CONVECTION OVEN	LK–51	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–4	CONVECTION OVEN	LK–53	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–5	SPARE					ELECTRICALLY HELD – NO
CK1–6	SPARE					ELECTRICALLY HELD – NO
CK1–7	SPARE					ELECTRICALLY HELD – NO
CK1–8	SPARE					ELECTRICALLY HELD – NO
HOOD 2						
CK2–1	TILT BRAISING PAN	LK–55	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–2	COMBI–OVEN	LK–57/59	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–3	(2–POLE)	–	–	–	–	ELECTRICALLY HELD – NO
CK2–4	COMBI–OVEN	LK–61/63	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–5	(2–POLE)	–	–	–	–	ELECTRICALLY HELD – NO
CK2–6	SPARE					ELECTRICALLY HELD – NO
CK2–7	SPARE					ELECTRICALLY HELD – NO
CK2–8	SPARE					ELECTRICALLY HELD – NO

1. REFERENCE FLOOR PLANS FOR EQUIPMENT LOCATIONS AND ADDITIONAL INFORMATION.
2. EACH KITCHEN HOOD CONTACTOR HALL BE CONTROLLED ON/OFF BY THE APPROPRIATE HOOD ANSUL SYSTEM. WHEN ACTIVATED ALL POWER WITHIN THE COOKING HOOD SHALL BE DE-ENERGIZED.

EXIST SWITCHBOARD — CENTRAL PLANT

(E)SWBD M

2000A MLO, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 50,000A — SCCR & AIC: 50,000A — FREE STANDING

NOTES	CIRCUIT	DESCRIPTION	CB	FEEDER SIZE	AMPS
	1	EXIST DISTRIBUTION PANEL DC	400/3	EXIST FEEDER	
2,4	2	NEW PANEL HK	225/3	4–4/0 +4G, 2.5"C	66A
	3	EXIST DISTRIBUTION PANEL DA	400/3	EXIST FEEDER	274A
	4	EXIST DISTRIBUTION PANEL DB	400/3	EXIST FEEDER	
	5	EXIST DISTRIBUTION PANEL AC	1200/3	EXIST FEEDER	
				TOTAL LOAD @ 100% =	339A
				TOTAL LOAD @ 125% =	424A

1. THE EXISTING 2000A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

EXIST GE NHB PANELBOARD

(E)PANEL DA

400A MLO, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 27,000A — SCCR & AIC: 35,000A — MOUNTING: SURFACE

NOTES	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	NOTES
	39000	DUCT HEATER 2	EXIST	60/3	1				2	20/3	EXIST	AHU #2	9150	
	–	(STAGE)	–	–	3				4	–	–	–	–	
	–	–	–	–	5				6	–	–	–	–	
2		KITCHEN LIGHTS	EXIST	20/1	7				8	20/1	EXIST	LIGHTS CAFETORIUM RMS	2300	1
1	3000	LIGHTS CAFETORIUM	EXIST	20/1	9				10	20/1	EXIST	EXIST CIRCUIT	3000	
1	3000	LIGHTS CAFETORIUM	EXIST	20/1	11				12	70/3	3–6	TEMP KITCHEN PANEL LTK	37918	4
		SPACE			13				14	–	+8G	–	–	
		SPACE			15				16	–	3/4"C	–	–	
		SPACE			17				18			SPACE		
		SPACE			19				20			SPACE		
		SPACE			21				22			SPACE		
		SPACE			23				24			SPACE		
	130000	PANEL PA	EXIST	225/3	25				26	–	–	–	–	
	–	(SUBFEED BREAKER)	–	–	27				28	–	–	–	–	
	–	–	–	–	29				30	–	–	–	–	
	TOTAL LOAD @ 100% =	227368VA		TOTAL LOAD @ 100% =					274A			TOTAL LOAD @ 125% =	342A	

1. THE EXISTING 400A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

EXIST EM STANDBY PANELBOARD — CENTRAL PLANT

(E)PANEL EL

100A MCB, 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: SURFACE

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
		250	F/A RPS	EXIST	20/1	1				2	20/1	EXIST	F/A RPS	250		
		250	F/A RPS	EXIST	20/1	3				4	20/1	EXIST	F/A RPS	250		
		250	F/A RPS	EXIST	20/1	5				6	20/1	EXIST	F/A RPS	250		
		250	F/A RPS	EXIST	20/1	7				8	20/1	EXIST	GEN JACKET HTR	1000		
		250	GEN ANTI COND	EXIST	20/1	9				10	20/1	EXIST	GEN JACKET HTR	1000		
		250	GEN BATTERY CHARGER	EXIST	20/1	11				12	20/1	EXIST	FACP	250		
		250	SECURITY SYSTEM	EXIST	20/1	13				14	20/1	EXIST	PA SYSTEM	500		
3	E188	864	REFRIGERATOR	3–12	20/1	15				16	25/3	3–10	REFRIGERATION SYSTEM	6192	E103	4
3	E188	864	REFRIGERATOR	3–12	20/1	17				18	–	+10G	–	–		
3	E109	1428	ICE MACHINE	3–12	20/1	19				20	–	3/4"C	–	–		
3	E151	240	HOOD ANSUL SYSTEMS	3–12	20/1	21				22	20/1EGF	3–12	COOLER DOOR HEATER/LTS	600	E102A	4
3	E102B	600	COOLER TEMP. ALARM	3–12	20/1	23				24	20/1EGF	3–12	FREEZER DOOR HEATER/LTS	600	E102A	4
3	E102C	600	COOLER PRESSURE PORT	3–12	20/1	25				26	20/1EGF	3–12	FREEZER DRAIN LINE HEATER	600	E103F	4
3	E102E	120	PANIC ALARM BUTTONS	3–12	20/1	27				28	20/2	2–10	FREEZER COIL	1893	E103C	4
3	E103D	216	COOLER COIL	3–12	20/1	29				30	–	+10G	–	–		
3	E102B	600	FREEZER TEMP. ALARM	3–12	20/1	31				32	20/1		EXIST SPARE			
3	E102C	600	FREEZER PRESSURE PORT	3–12	20/1	33				34	20/1		EXIST SPARE			
			EXIST SPARE		20/1	35				36	20/1		EXIST SPARE			
			EXIST SPARE		20/1	37				38	30/3	EXIST	SPD	50		
			EXIST SPARE		20/1	39				40	–	–	–	–		
			EXIST SPARE		20/1	41				42	–	–	–	–		
	TOTAL LOAD @ 100% =		21317VA		TOTAL LOAD @ 100% =						59A		TOTAL LOAD @ 125% =	74A		

1. THE EXISTING 100A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

GENERAL PANEL REQUIREMENTS:

A. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
B. FIELD VERIFY EXISTING CIRCUITS PRIOR TO BEGINNING WORK.
C. ALL OUTAGES SHALL BE SCHEDULED AND CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
D. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.

PANEL NOTES:

1. REVISE/REWORK WIRING/CONDUIT AS REQUIRED TO ADD/REMOVE DEVICES FROM EXISTING CIRCUIT.
2. EXISTING CIRCUIT TO BE DEMO.
3. REUSE EXISTING SPARE CB AND WIRE NEW CIRCUIT.
4. PROVIDE NEW CB & WIRE NEW CIRCUIT.
5. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.
6. KITCHEN LIGHTS TO BE DUAL ZONES WIRED THROUGH LIGHTING CONTACTORS AND CONTROLLED ON/OFF BY THE BAS AND LOCAL LIGHTING SWITCHES.
7. EXTERIOR LIGHTS TO BE WIRED THROUGH LIGHTING CONTACTOR AND CONTROLLED ON/OFF BY THE BAS.

STANTON ENGINEERING GROUP
INFO@STANTON-ENG.COM (713) 300-9292 | TEXAS ENG. FIRM REG NO. F-016332 | © 2025 ALL RIGHTS RESERVED 1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL

STATE OF TEXAS — GEORGE L. STANTON — 38582 — REGISTERED PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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TECHNOLOGY SYMBOLS & LEGEND

VOICE SYMBOLS

	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS PER LOCATION.
W	SINGLE VOICE OUTLET FOR WALL-MOUNTED PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.

DATA SYMBOLS

	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF DATA OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
W	SINGLE DATA OUTLET FOR WALL-MOUNTED IP PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA CABLE FOR COMPUTER ON WHEELS, CABLE TYPE AS SPECIFIED MOUNTED + 18-INCHES A.F.F UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
X	DATA CABLE FOR CEILING MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X	DATA CABLE FOR CEILING MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
	DATA CABLE FOR CEILING MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR CEILING MOUNTED AUDIO/VISUAL EQUIPMENT ENCLOSURE, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR WALL MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.

DATA SYMBOLS, CONT.

X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW, REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
X CAMW	DATA CABLE FOR INTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPW	DATA CABLE FOR INTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPE	DATA CABLE FOR EXTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.

CABLE PLANT & RISER DIAGRAM

	MAINTENANCE HOLE, SIZE & TYPE AS SPECIFIED.
	PULLBOX, SIZE AND TYPE AS SPECIFIED.
UGC	DIRECT BURIED COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
AER	AERIAL COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
	CONDUIT, SIZE AND TYPE AS SPECIFIED.

VOICE/DATA SYMBOLS

	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF VOICE TERMINATIONS , Y = NUMBER OF DATA TERMINATIONS PER LOCATION.
	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF VOICE OUTLETS AND Y = NUMBER OF DATA OUTLETS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET AND SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X Y	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X Y	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS PER LOCATION.

FIBER OPTIC SYMBOLS

	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF FIBER OPTIC OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.

ROUGH-IN & MISC. SYMBOLS

R	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
R	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
R	POWER POLE WITH ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
R	ROUGH-IN LOCATION. TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
WAP	WIRELESS ACCESS POINT. EQUIPMENT AS SPECIFIED.

GENERAL SYMBOLS

# SHEET — DRAWING TITLE SCALE: SCALE	DRAWING TITLE CALLOUT, # = DETAIL NUMBER.
# SHEET	DETAIL CALLOUT, # = DETAIL NUMBER.
# SHEET	SECTION CALLOUT, # = DETAIL NUMBER.
SHEET #	ELEVATION CALLOUT, # = DETAIL NUMBER.
#	KEYED NOTE, # = KEYED NOTE NUMBER.
#	REVISION TRIANGLE, # = REVISION NUMBER (PER SHEET).
TR (IDF XXX)	INDICATES TELECOMMUNICATIONS REGION

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
AER	AERIAL
DEMARC	DEMARCATION POINT
EMT	ELECTRIC METALLIC TUBE
F.O.C.	FIBER OPTIC CABLE
GIP	GALVANIZED IRON PIPE
HE	PAINTERCOM HEAD-END
IMC	INTERMEDIATE METAL CONDUIT
ISP	INSIDE CABLE PLANT
IDF	INTERMEDIATE DISTRIBUTION FRAME
MDF	MAIN DISTRIBUTION FRAME
MH	MAINTENANCE HOLE
MM	MULTIMODE
OSP	OUTSIDE CABLE PLANT
PB	PULLBOX
PR	PAIR
PVC	POLYVINYL CHLORIDE
RSC	RIGID STEEL CONDUIT
SM	SINGLE MODE
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TB	TERMINAL BLOCK
TR	TELECOMMUNICATION REGION
UGC	UNDERGROUND COMMUNICATION
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR

NOTES

1. CONTRACTOR SHALL REVIEW DRAWINGS AND SPECIFICATIONS THAT MAKE UP THE CONTRACT DOCUMENTS AND COMPLETE ALL WORK INCLUDED THEREIN.
2. SCALE OF TECHNOLOGY DRAWINGS IS PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CABLE LENGTHS, SIZE OF PATHWAYS, DIMENSIONS, ETC.
3. TECHNOLOGY DRAWINGS SHALL BE USED TO COMPLEMENT THE WRITTEN SPECIFICATIONS.
4. ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT'S. DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT AND SUBSEQUENTLY CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE ARCHITECT'S/DESIGN CONSULTANT'S INTERPRETATION.

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o-T200 TECHNOLOGY COMPOSITE FLOOR PLAN
o-T201 TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
o-T202 TECHNOLOGY TEMPORARY KITCHEN PLAN
o-T300 TECHNOLOGY ENLARGED VIEWS
o-T400 TECHNOLOGY TYPICAL DETAILS
o-T401 TECHNOLOGY TYPICAL DETAILS
o-T500 TECHNOLOGY TYPICAL DETAILS

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FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL

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BICSI
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

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TECHNOLOGY SYMBOLS & LEGEND

SHEET NO.
o-T000



1 o-T200 TECHNOLOGY COMPOSITE FLOOR PLAN
1/16" = 1'-0"

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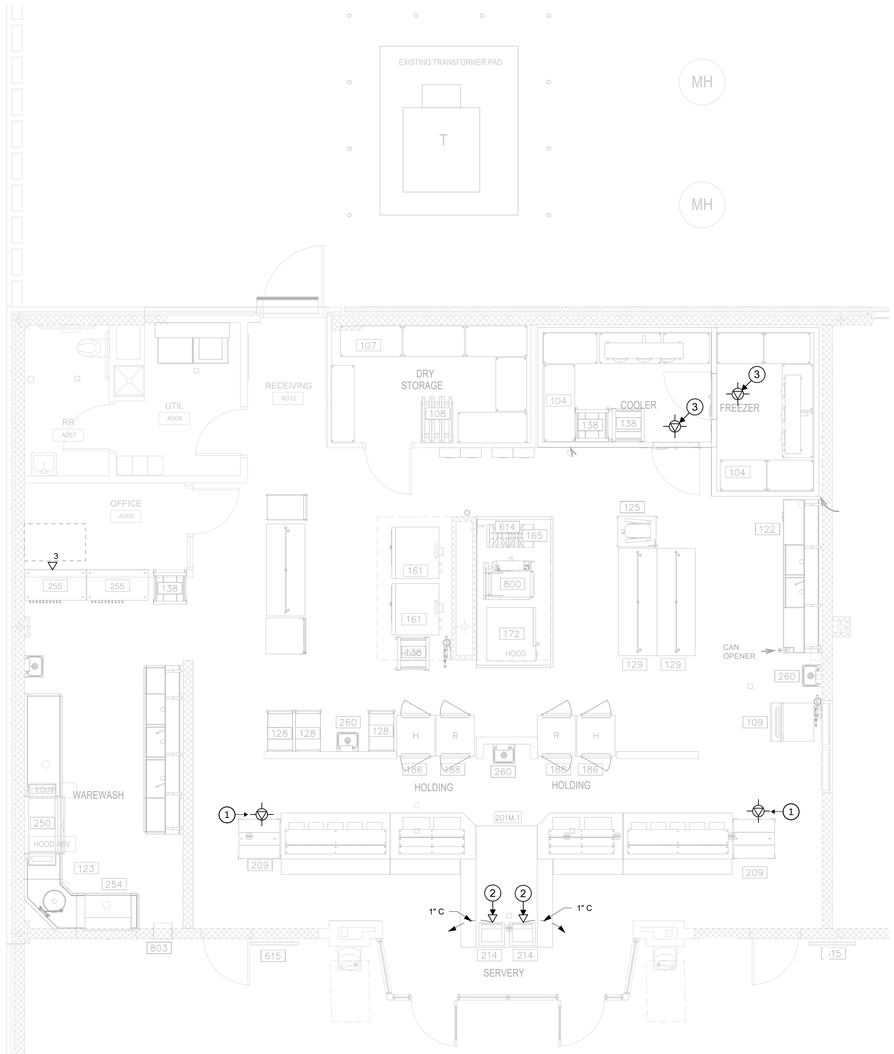
TECHNOLOGY COMPOSITE FLOOR PLAN

SHEET NO.
o-T200



1 / o-T201 TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
1/4" = 1'-0"

TECHNOLOGY FLOOR PLANS GENRAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
2. ALL CONDUIT PATHWAYS, ROUGH-INS, BACKBOXES, FLOOR BOXES, CONDUIT SLEEVES, ETC. INDICATED ON THE TECHNOLOGY DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26.
3. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. TECHNOLOGY CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES/ ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM.
14. ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE A LAY-IN TYPE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE A LAY- IN TYPE CEILING TO PREVENT THE CABLES FROM BEING EXPOSED, THE CONDUIT SHALL ROUTE TO THE NEAREST LAY-IN TYPE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. THE CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE MAIN CORRIDOR OR NEAREST MDF/IDF TO MINIMIZE THE CABLE LENGTH ENSURING THE CABLE LENGTH DOES NOT EXCEED 275 FEET. CONDUIT, CONNECTIONS, J-BOXES, SUSPENSION, ANCHORAGES, AND OTHER CONDUIT COMPONENTS EXPOSED TO VIEW IN PUBLIC SPACES SHALL BE ROUTED AND INSTALLED CAREFULLY TO MINIMIZE VISUAL IMPACT AND SHALL BE FULLY PAINTED TO MATCH UNLESS NOTED OTHERWISE.
15. CONDUIT(S) INSTALLED IN-SLAB OR UNDER-SLAB TO FLOOR BOXES, POKE-THURS, AND TO WORKAREA OUTLETS, ETC. SHALL BE INSTALLED WITH WET RATED CABLE(S).
16. NO GRID WIRE SHALL BE UTILIZED FOR SUPPORTS ONLY USE SOLID SUPPORTS (CLIPS, ALL-THREAD, ANCHORS, ETC.).

TECHNOLOGY PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

(1) DATA CABLE FOR CONTRACTOR FURNISHED / CONTRACTOR INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.

(2) INDOOR / OUTDOOR RATED DATA CABLE FOR POINT OF SALE LOCATION. PROVIDE (1) 1-INCH CONDUIT FOR DATA TO THE WALL BEHIND POINT OF SALE LOCATION AND UP WALL TO ABOVE ACCESSIBLE CEILING. CONDUITS SHALL TERMINATE INSIDE A DOUBLE GANG BOX THAT IS SECURED TO THE POINT OF SALE LOCATION. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.

(3) DATA CABLE FOR TEMPERATURE MONITORING OF FREEZER COOLER. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS AND TERMINATION POINT AND CONNECTIVITY NEEDS IN FREEZER / COOLER CONTROL UNIT.

(4) DATA CABLE FOR TEMPORARY POINT OF SALES CASH REGISTER. COORDINATE WITH OWNER, ARCHITECT, AND CONSULTANT FOR ROUTING OF CABLES TO POINT OF SALE CASH REGISTER PRIOR TO INSTALLATION

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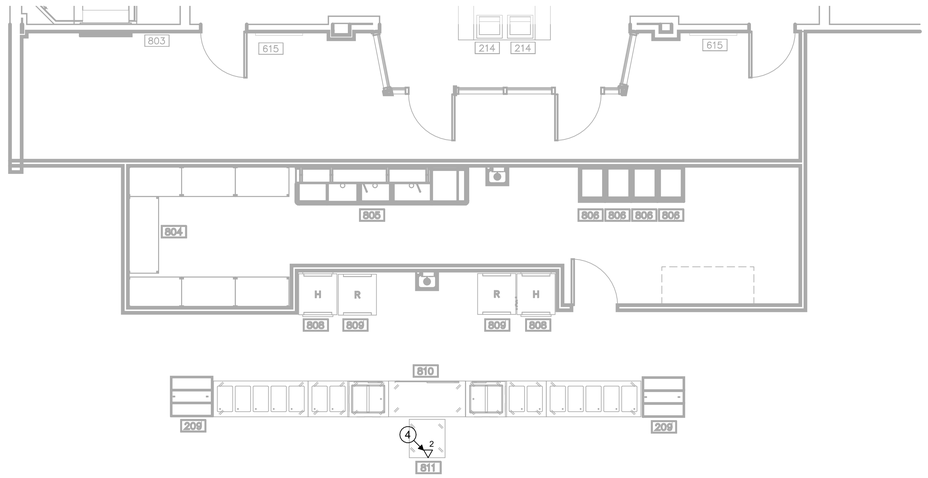
TECHNOLOGY NEW/RENOVATION KITCHEN PLAN

SHEET NO.
o-T201



1 / e-T202 TECHNOLOGY TEMPORARY KITCHEN FLOOR PLAN
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05/16/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

0

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

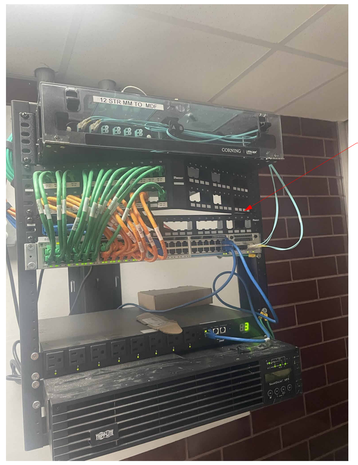
07/18/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

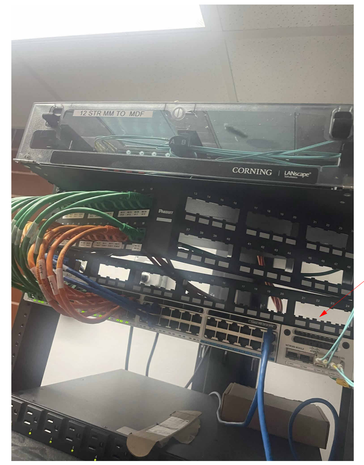
PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

TECHNOLOGY TEMPORARY KITCHEN PLAN

SHEET NO.
o-T202



1 o-T300 PALMER ES EXISTING WALL MOUNTED IDF RACK
N.T.S



2 o-T300 PALMER ES EXISTING WALL MOUNTED IDF RACK - PANEL DETAIL
N.T.S

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

0

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
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4208 CROW VALLEY DRIVE
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CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

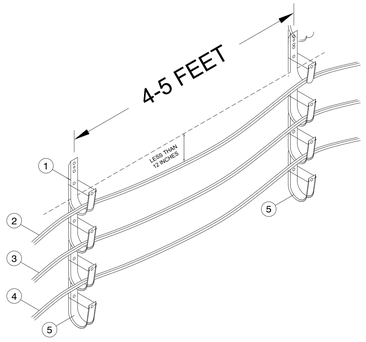
TECHNOLOGY ENLARGED VIEWS

SHEET NO.
o-T300

NOTE TO CONTRACTOR:

UNLESS OTHERWISE NOTED, LOW VOLTAGE CABLING SHALL BE INSTALLED WITHIN 6-INCHES OF THE CEILING AND ACCESSIBLE BY A TECHNICIAN ON A STANDARD A-FRAME LADDER.

CONTRACTOR SHALL MAINTAIN AT LEAST 6-INCHES OF SEPRATION BETWEEN CABLING BUNDLES AND MECHANICAL DUCTWORKS, EQUIPMENT, PIPIING OR OTHER SYSTEMS IN THE CEILING PLENUM.

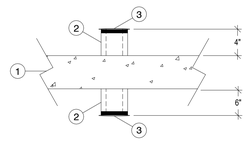


KEYED NOTES:

1. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
2. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
3. A/V CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. SECURITY CABLE ABOVE ACCESSIBLE CEILING (BY DIV 28).
5. SPARE J-HOOK (BY DIV 27).

1 T400 TYPICAL J-HOOK CABLE PATHWAY

SCALE: N.T.S.

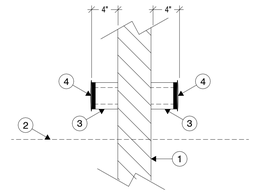


KEYED NOTES:

1. SCHEDULED FLOOR OR DECK.
2. CONDUIT SLEEVE (BY DIV 26).
3. NYLON BUSHING (BY DIV 26).

2 T400 TYPICAL CONDUIT SLEEVE THROUGH FLOOR OR DECK DETAIL

SCALE: N.T.S.

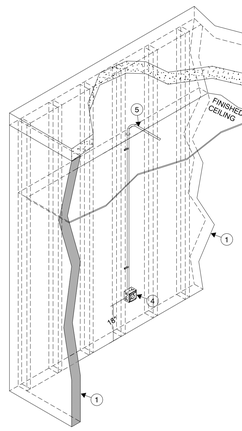


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. CONDUIT SLEEVE (BY DIV 26).
4. NYLON BUSHING (BY DIV 26).

3 T400 TYPICAL CONDUIT SLEEVE GOING THROUGH WALL

SCALE: N.T.S.

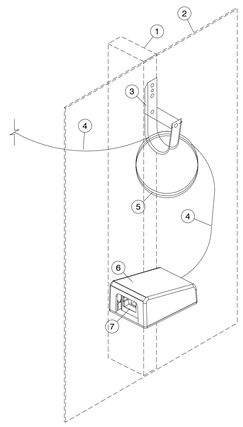


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. SCHEDULED DECK ABOVE.
4. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX WITH DOUBLE GANG PLASTER RING (BY DIV 26).
5. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH. (BY DIV 26).

4 T400 TYPICAL TECHNOLOGY CONDUIT ROUGH-IN

SCALE: N.T.S.

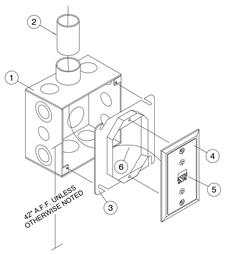


KEYED NOTES:

1. SCHEDULED STUD.
2. SCHEDULED WALL.
3. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
5. 20 FOOT SERVICE LOOP ABOVE ACCESSIBLE CEILING NEATLY COILED AND SECURED TO J-HOOK (BY DIV 27).
6. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BUILDING STRUCTURE (BY DIV 27).
7. DATA INSTER (BY DIV 27).

5 T400 TYPICAL ABOVE CEILING SINGLE DATA OUTLET (WALL MOUNTED)

SCALE: N.T.S.

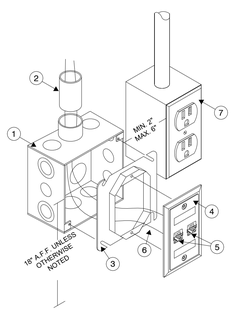


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH PHONE STUDS (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).

6 T400 TYPICAL WALL PHONE OUTLET CONFIGURATION

SCALE: N.T.S.



KEYED NOTES:

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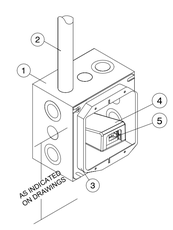
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

7 T400 TYPICAL DUAL DATA OUTLET CONFIGURATION

SCALE: N.T.S.

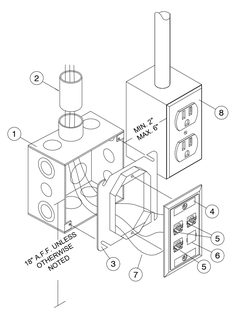


KEYED NOTES:

1. 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. DOUBLE GANG PLASTER RING (BY DIV 26).
4. SURFACE MOUNT BOX INSIDE THE 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH DOUBLE GANG BOX (BY DIV 27).
5. RJ-45 INSERT (BY DIV 27).

8 T400 TYPICAL WALL-MOUNTED WIRELESS ACCESS POINT

SCALE: N.T.S.



KEYED NOTES:

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3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

9 T400 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

O

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL

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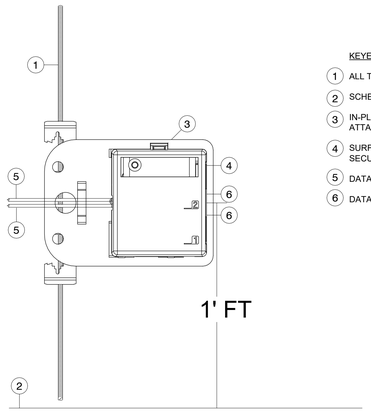
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

TECHNOLOGY TYPICAL DETAILS

SHEET NO.
o-T400

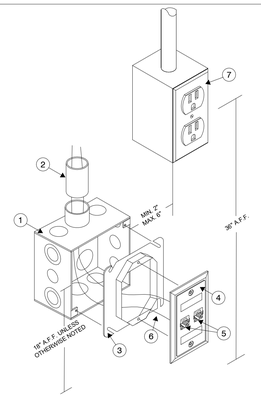


KEYED NOTES:

1. ALL THREAD TO BUILDING STRUCTURE (BY DIV. 27)
2. SCHEDULING CEILING
3. IN-PLENUM CEILING BRACKET PN 49223-CBC ATTACHED TO ALL THREAD (BY DIV. 27)
4. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BRACKET (BY DIV. 27)
5. DATA CABLE (BY DIV. 27)
6. DATA INSERT (BY DIV. 27)

1 / T401 TYPICAL ABOVE CEILING DATA OUTLET

SCALE: N.T.S.

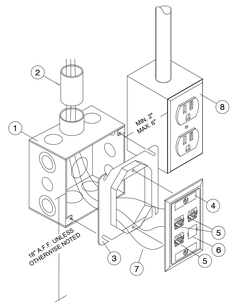


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26). ELECTRICAL RECEPTACLE TO BE INSTALLED AT 36" A.F.F AND ADJACENT TO COW / SECONDARY TEACHING OUTLET LOCATION.

2 / T401 TYPICAL COW / SECONDARY TEACHER'S DATA OUTLET CONFIGURATION

SCALE: N.T.S.



KEYED NOTES:

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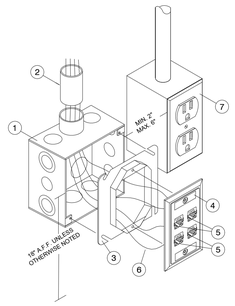
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

3 / T401 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.



KEYED NOTES:

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2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

4 / T401 TYPICAL FOUR DATA OUTLET CONFIGURATION

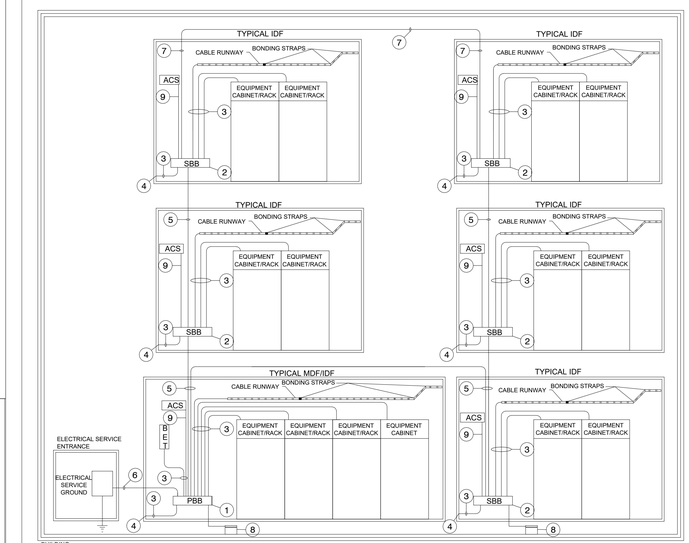
SCALE: N.T.S.

TBB/GE CONDUCTOR SIZING	
LENGTH IN LINEAR M (FT)	SIZE (AWG)
LESS THAN 4 (13)	6
4 - 6 (14-20)	4
6 - 8 (21 - 26)	3
8 - 10 (27 - 33)	2
10 - 13 (34 - 41)	1
13 - 16 (42 - 52)	1/0
16 - 20 (53 - 66)	2/0
20 - 26 (67 - 84)	3/0
26 - 32 (85 - 105)	4/0
32 - 38 (106 - 125)	250 kcmil
38 - 46 (126 - 150)	300 kcmil
46 - 53 (151 - 175)	350 kcmil
53 - 76 (176 - 250)	500 kcmil
76 - 91 (251 - 300)	600 kcmil
GREATER THAN 91 (301)	750 kcmil

ROUTE THE TBB TO EACH TGB IN AS STRAIGHT A PATH AS POSSIBLE. THE TBB SHOULD BE INSTALLED AS A CONTINUOUS CONDUCTOR, AVOIDING SPLICES WHERE POSSIBLE.

5 / T401 TBB CONDUCTOR SIZING

SCALE: N.T.S.

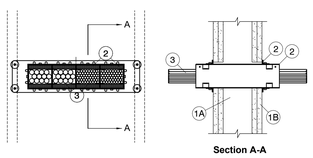


1. TELECOMMUNICATIONS MAIN GROUNDING BUS BAR (PBB)(BY DIV. 27)
2. TELECOMMUNICATIONS GROUNDING BUS BAR (SBB)(BY DIV 27)
3. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 27)
4. CONNECT TO GROUNDED BUILDING STEEL WHEN EXPOSED IN ROOM.
5. TELECOMMUNICATIONS BONDING BACKBONE (TBB). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 26)
6. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). BY ELECTRICAL CONTRACTOR.REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS.
7. GROUNDING EQUALIZER CONDUCTOR (GEC)(BY DIV 26)
8. BOUND WITH GROUDING COLLARS TO EACH CONTINUOUS CONDUIT THAT ENTERS THE TELECOM ROOM. (BY DIV 26).
9. BOND TO EACH ACCESS CONTROL PANEL AND OTHER SECURITY PANELS IN HE TELECOM ROOM. (BY DIV 27)

6 / T401 TYPICAL GROUNDING DIAGRAM

SCALE: N.T.S.

System No. W-L-3218
F Ratings - 1, 2, 3 and 4 Hr (See Items 1 and 3)
T Ratings - 3/4 and 1 Hr (See Item 3)
L Rating At Ambient - Less Than 1, 1.3, 4 or 7 CFM (See Item 3)
L Rating At 400 F - Less Than 1, 2 or 3 CFM (See Item 3)



1. Wall Assembly - The 1, 2, 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described within the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall incorporate the following construction features:
   A. Studs - Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
   B. Gypsum Board* - Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Opening in gypsum board to be max 1/4 in. (6 mm) larger then width and height dimensions of firestop device(s).

   The hourly F Rating of the firestop system is dependent upon the hourly rating of the wall in which it is installed.
2. Firestop Device* - One, two, three, four or seven firestop device modules ganged together. Each firestop device module consists of a 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long galv steel tube with an intumescent material lining. Firestop device modules to be installed in accordance with the accompanying installation instructions. The space between the firestop device module(s) and the periphery of the opening shall be min 0 in. (0 mm, point contact) to max 1/8 in. (3.2 mm). In round openings, the space between the firestop device and the periphery of the opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). Firestop device module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device by means of steel set screws provided with device. Each four- and seven-gang steel wall plate shall be fastened to the studs with steel screws sized to extend through the gypsum board layers and penetrate 1/2 in. (13 mm) into the framing member. Each firestop device module is to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   As an alternate, the four- and seven-gang steel wall plates may be installed directly against the studs for walls having 16 and 24 in. (406 and 610 mm) center-to-center stud spacing, respectively, prior to installation of the gypsum board layers. The steel wall plates shall be secured to the stud by means of steel screws. After installation of the steel wall plates and firestop device modules, the gypsum board shall be installed as specified in the individual U300 or U400 Design with a maximum 1/8 in. (3.2 mm) gap between the firestop device module and the cutout in the gypsum board. Gap between the firestop device module and the cutout in the gypsum board may be filled with gypsum joint compound or fill material (Item 4).

   SPECIFIED TECHNOLOGIES INC - EZ PATH Series 33 Fire Rated Pathway

2A. Firestop Device* - Extension Module - (Optional, Not Shown) - Module attached to ends of 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long firestop device (Item 3) to increase its length to facilitate installation in thicker walls. Each module consists of a 3 by 3 by 6 in. (76 by 76 by 152 mm) long galv steel tube with an intumescent material lining. Extension module to be installed in accordance with the accompanying installation instructions. When module is used, firestop device (Item 2) and extension module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device or extension module(s) by means of steel set screws provided with wall plates. Firestop device and extension module(s) assembly to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   SPECIFIED TECHNOLOGIES INC - EZ PATH Extension

3. Cables - Within the loading area for each firestop device module, the cables may represent a 0 to 100 percent visual fill. Cable fill to be distributed at a uniform height across the width of the firestop device module. Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types of cables may be used:
   A. Max 400 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) jacketing and insulation.
   B. Max 350 kcmil single copper conductor power cable with XLPE jacket and insulation
   C. Max 7/C No. 12 AWG copper conductor control cable with PVC or XLPE jacket and insulation.
   D. Max 3/C No. 10 AWG metal clad or armored cable with steel or aluminum jacket.
   E. Max 3/C No. 8 AWG NM cable (Romex) with PVC insulation and jacket.
   F. Max four pair No. 22 AWG (or smaller) copper conductor data cable with PVC or plenum rated jacketing and insulation.
   G. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
   H. Fiber optic cable with PVC or polyethylene (PE) jacket and insulation having a max diam of 5/8 in. (16 mm).
   I. Optical Fiber Raceway+ - Max 1-1/2 in. (38 mm) diam (or smaller) optical fiber raceway ("innerduct") formed of either PVC or polyvinylidene fluoride (PVDF) with optical fiber cable fill. Raceways installed in accordance with the National Electrical Code (NFPA 70).

   When the hourly rating of the wall assembly is 1 hr, the T Rating is 3/4 hr. When the hourly fire rating of the wall assembly is greater than 1 hr, the T Rating is 3/4 hr when Item 3A, 3B, 3C, 3D or 3E is used. Otherwise the T Rating is 1 hr. When Item 3A, 3B, 3C, 3D or 3E is used, the maximum F Rating is 2 hr. When max 200 pair No. 24 AWG telecommunication cable is used or when Item 3F, 3G, 3H or 3I is used, the maximum F Rating is 4 hr.

   The L Rating for each empty firestop device module is less than 1 cfm at ambient and at 400F. When Item 3A is used, the L Rating for each firestop device module with 100 percent visual fill is 4 cfm at ambient and 3 cfm at 400F. When Item 3F is used, the L Rating for each firestop device module with 100 percent visual fill is 1.3 cfm at ambient and 1 cfm at 400F. When Item 3G or 3H is used, the L Rating for each firestop device module with 100 percent visual fill is 7 cfm at ambient and 2 cfm at 400F.
4. Fill, Void or Cavity Material* - Sealant or Putty - (Not Shown) - As an alternate to gypsum joint compound, the gap between the firestop device module and the cutout in the gypsum board may be sealed with fill material on each side of the wall assembly when four- and seven-gang steel wall plates are installed directly against the wood or steel studs.

   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant, SpecSeal Putty

   *Bearing the UL Classification Mark

7 / T401 TYPICAL STI EZ-PATH SLEEVE DETAIL

SCALE: N.T.S.

ISSUE:

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FORT BEND INDEPENDENT SCHOOL DISTRICT
PALMER ELEMENTARY SCHOOL
4208 CROW VALLEY DRIVE
MISSOURI CITY, TX 77459

SEAL

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Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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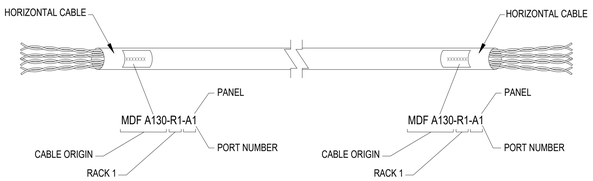
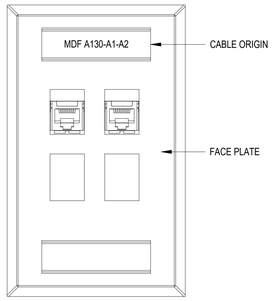
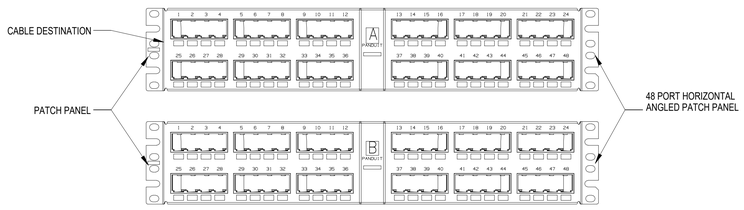
TECHNOLOGY TYPICAL DETAILS

SHEET NO.
o-T401

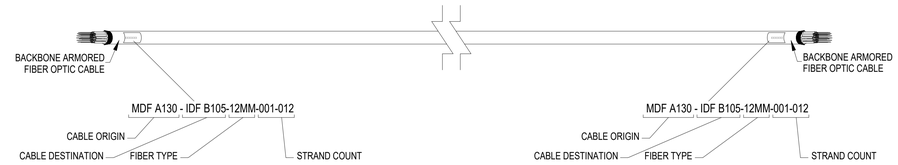


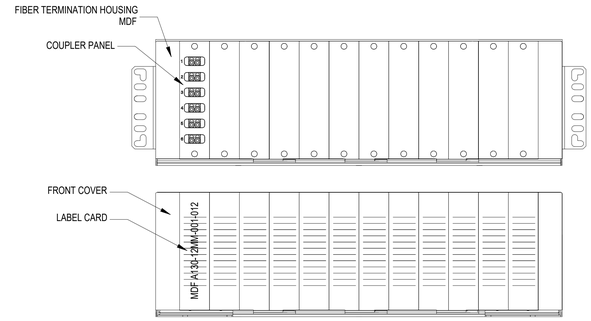


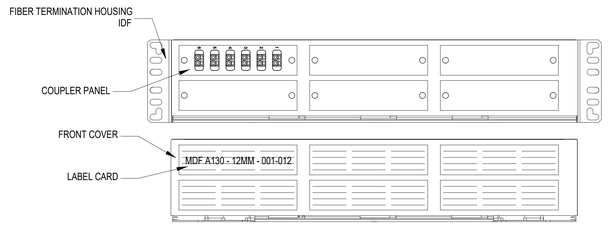


1 T500 TYPICAL HORIZONTAL DATA CABLE LABELING SCHEME

SCALE: N.T.S.

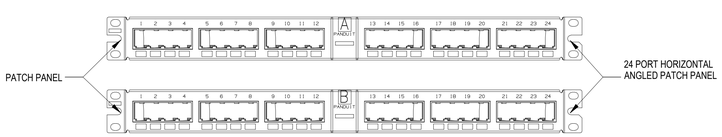






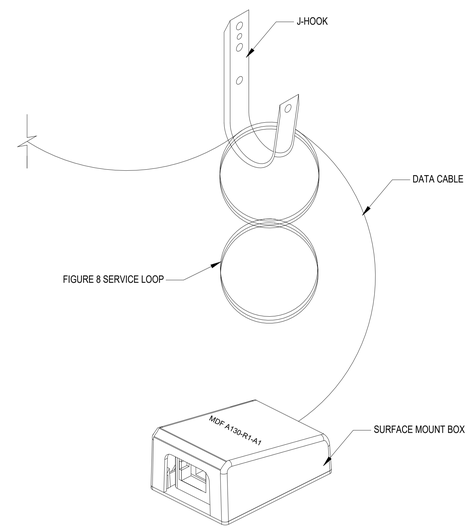
2 T500 TYPICAL FIBER BACKBONE LABELING SCHEME

SCALE: N.T.S.



3 T500 TYPICAL COPPER BACKBONE LABELING SCHEME

SCALE: N.T.S.



4 T500 ABOVE ASSESSIBLE CEILING LABELING SCHEME

SCALE: N.T.S.

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07/18/2025

MWA ARCHITECTS
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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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TECHNOLOGY TYPICAL DETAILS

SHEET NO.
o-T500

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- A## V## — AV WALL ROUGH-IN WITH DATA
- # — KEYNOTE
- C — Proposed Camera Direction — SURVEILLANCE CAMERA
- #-## — Camera Schedule Number (Floor #-Camera #)
- Camera (N)ew, (E)xisting Rough-in, (D)emo
- C — Proposed Camera Direction — PTZ CAMERA
- #-## PTZ
- C — Proposed Camera Direction — FIXED SURVEILLANCE CAMERA
- #-##
- C — 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Approximate view of lens
- Lens View Angle
- ##° #mm — C — 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Lens size
- C M — MICROPHONE WITH AUDIO LINKED TO CAMERA
- C CR — CARD READER LINKED TO CAMERA
- SYMBOL TAG — CR # — (#) = DIFFERENT TYPES OF CARD READERS:
  M = MULLION
  W = WIRELESS (Proprietary)
  Wi = Wi-Fi (802.11)
  POE = POWER OVER ETHERNET
- SYMBOL TAG — KP # — (#) = DIFFERENT TYPES OF CARD READERS:
  TS = TOUCHSCREEN
  PU = PUSH BUTTON
- # / #### — TOP = DETAIL NUMBER / DETAIL REFERENCE / BOTTOM = SHEET NUMBER
- NORTH ARROW
- # / #### — SHEET NUMBER / SECTION MARKER / DETAIL NUMBER
- # / #### — DIRECTION OF ELEVATION / ELEVATION MARKER / SHEET NUMBER / DETAIL NUMBER
- # / #### — DIRECTION OF ELEVATION / SHEET NUMBER / DIRECTION OF ELEVATION / DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

TRUENORTH A PMY COMPANY

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FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Palmer Elementary School
4208 Crow Valley Dr. Missouri City, TX 77459

SEAL

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PROJ. NO.: 23-25
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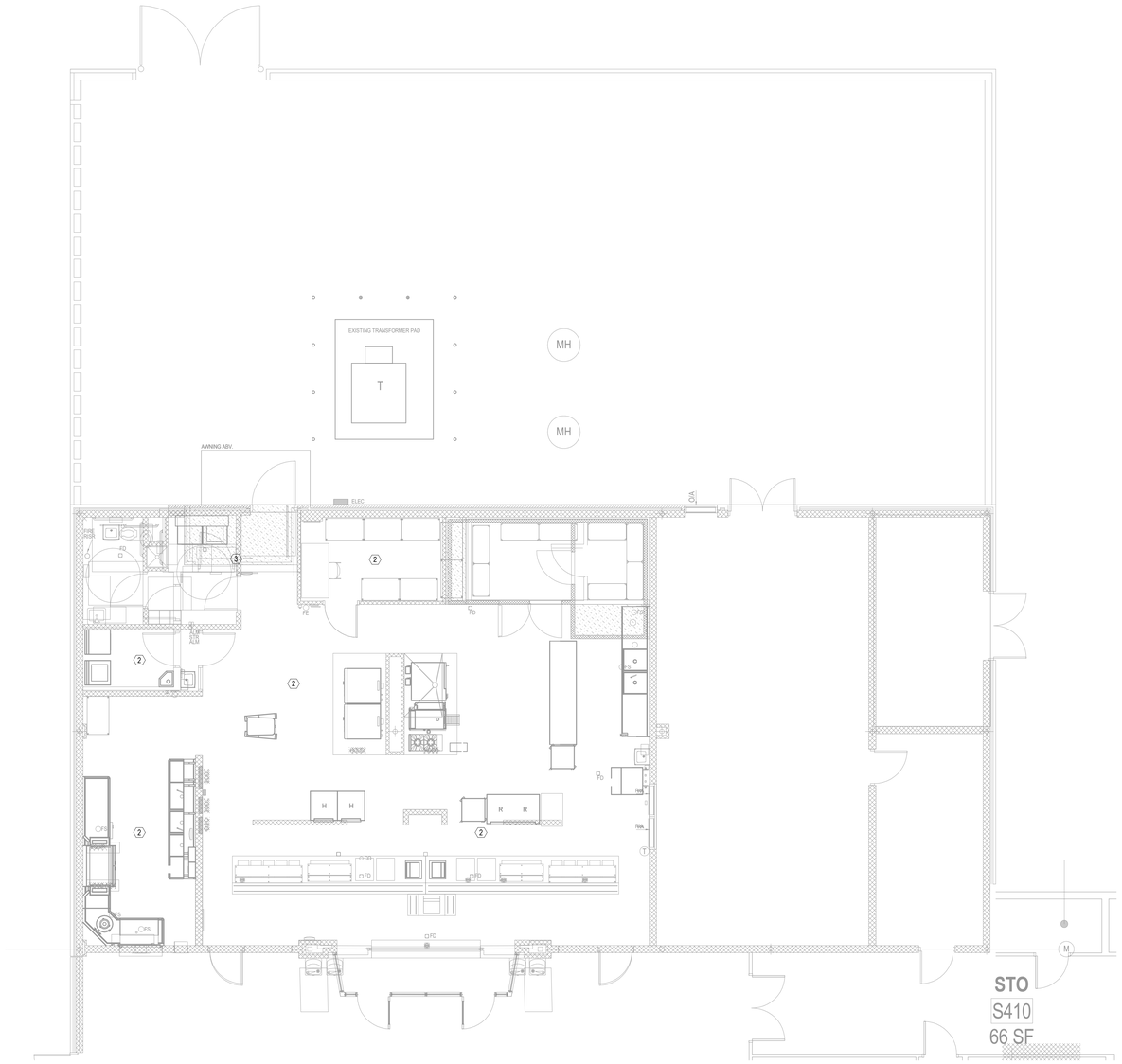
TECHNOLOGY - TITLE SHEET

o-TN000

DEMO KEYNOTES

1. REMOVE, AND PROTECT DURING CONSTRUCTION, INSTALL IN EXISTING LOCATION AFTER NEW ACT GRID IS IN PLACE.
2. DEVICES IN ACT ARE TO BE REMOVED AND PROTECTED DURING CONSTRUCTION AND REINSTALLED IN THE SAME LOCATION AFTER THE NEW CEILING GRID IS IN PLACE. DECIVES INCLUDE: SPEAKERS, ACCESS POINTS AND INTRUSION MOTION DETECTORS.
3. EXISTING CARD READER, DOOR CONTACT, & REX (REQUEST TO EXIT) TO BE DEMOLISHED, REMOVE DEVICES AND PROTECT WIREING.



1 PALMER - DEMO PLAN
SCALE: 3/16" = 1'-0"

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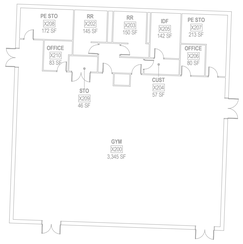
TECHNOLOGY - Palmer ES - DEMO

o-TN.001

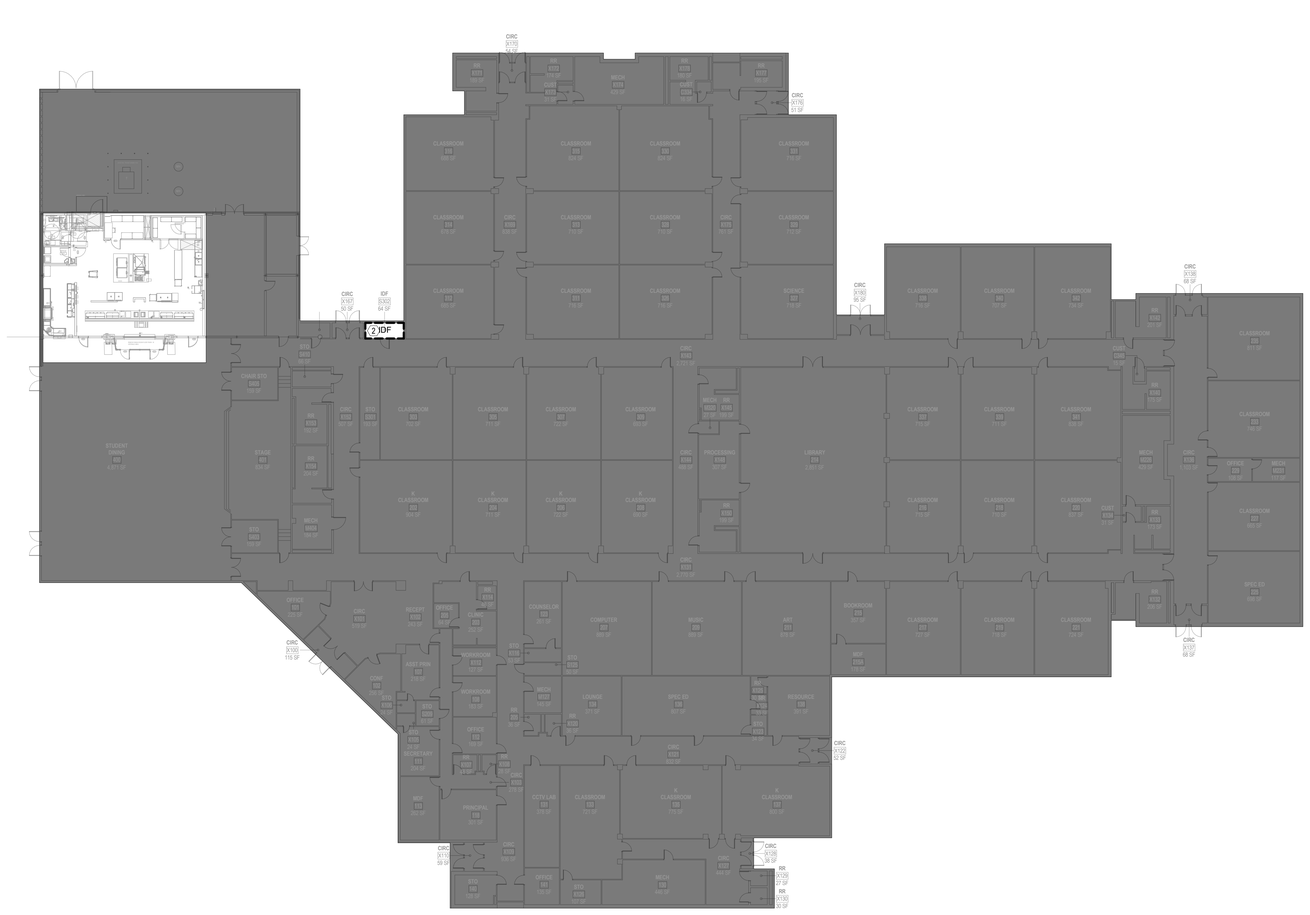
TRUENORTH A PMY COMPANY

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



02
02 - Gym
5,002 SF
1st Floor
5,002 SF



1 BACKGROUND 1 (PALMER ES)
SCALE: 1" = 20'-0"

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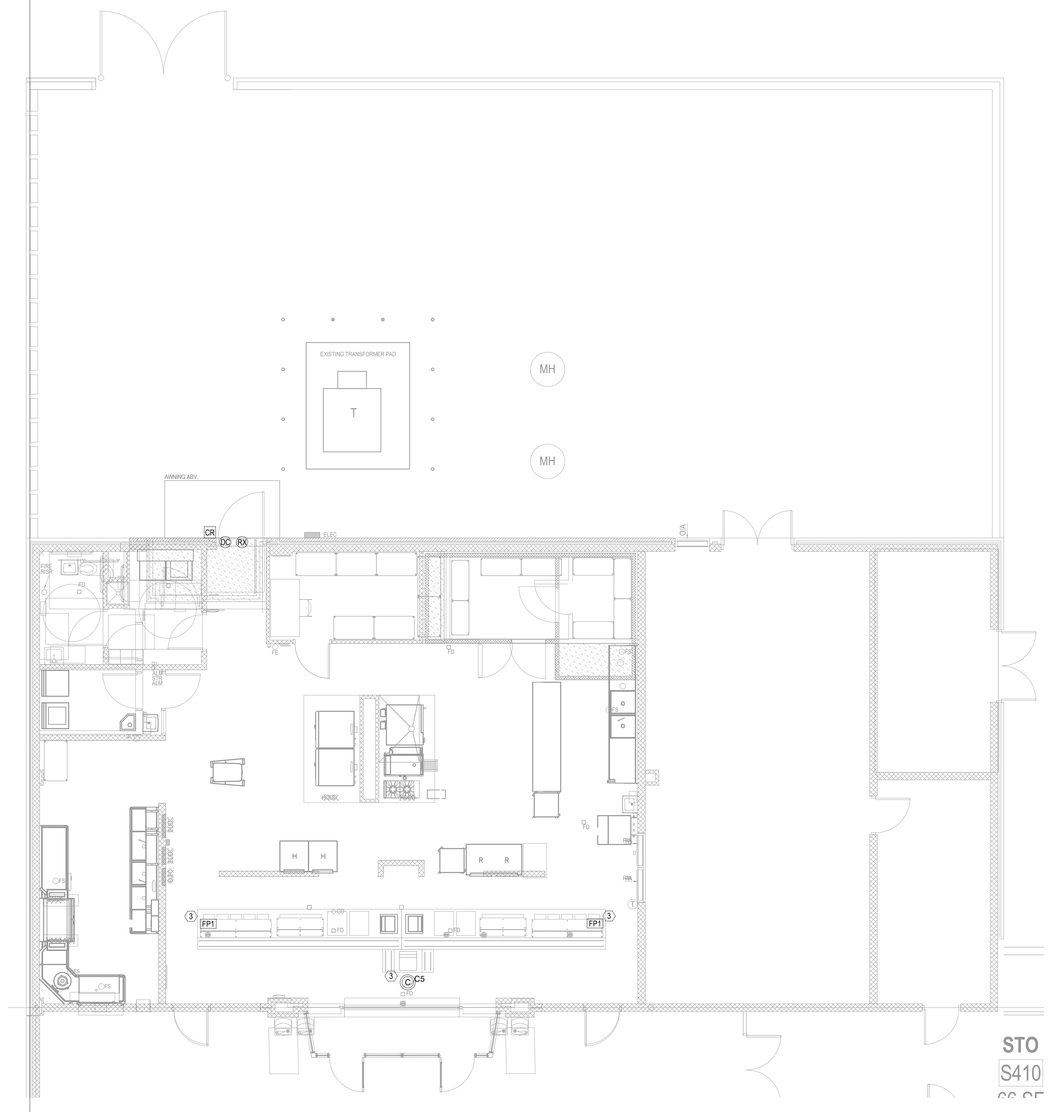
TECHNOLOGY - Palmer ES - OVERALL

o-TN.100



1 PALMER - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.

TRUENORTH A PMY COMPANY

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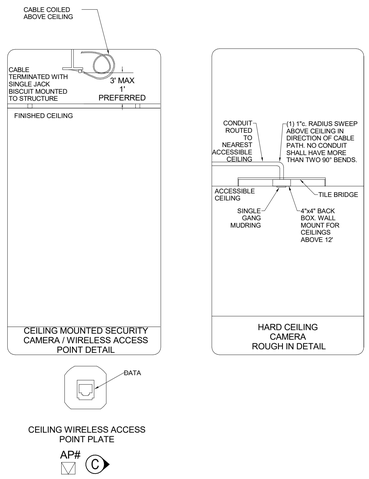
TECHNOLOGY - Palmer ES - KITCHEN

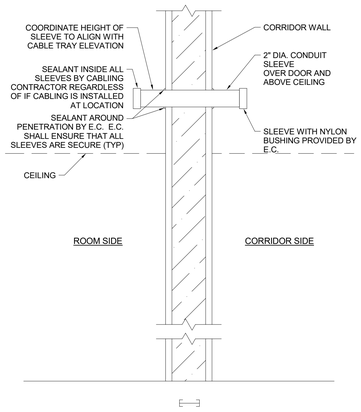
o-TN.101

GENERAL NOTE

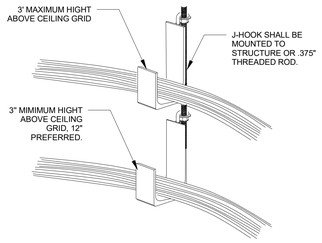
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



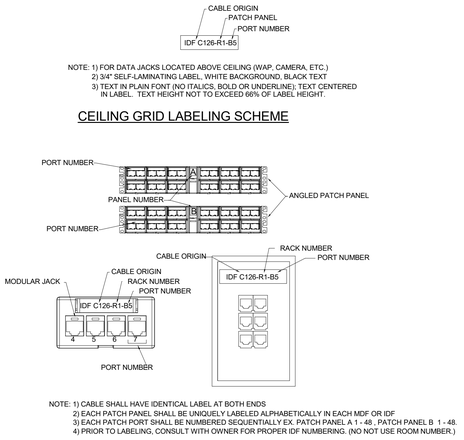
1 DATA ROUGH-IN DETAILS
SCALE: NS



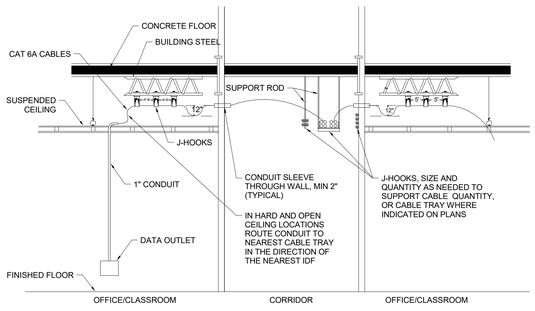
2 TYPICAL CABLING SLEEVE
SCALE: NTS



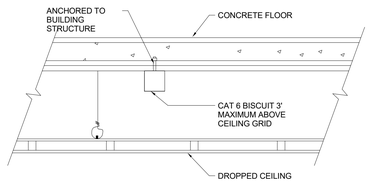
3 PANDUIT J-HOOK DETAIL
SCALE: NTS



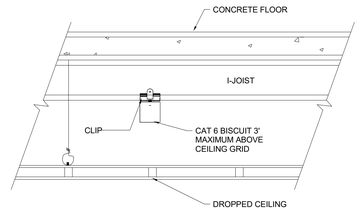
4 LABELING & CABLING SCHEMES
SCALE: NTS



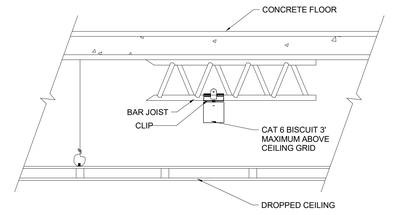
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

TRUENORTH
A PMY COMPANY

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FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Palmer Elementary School
4208 Crow Valley Dr. Missouri City, TX 77459

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Brian C Porter
BICSI ID # 256557
EXPIRES 12-31-27
RCDD

07-18-25

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

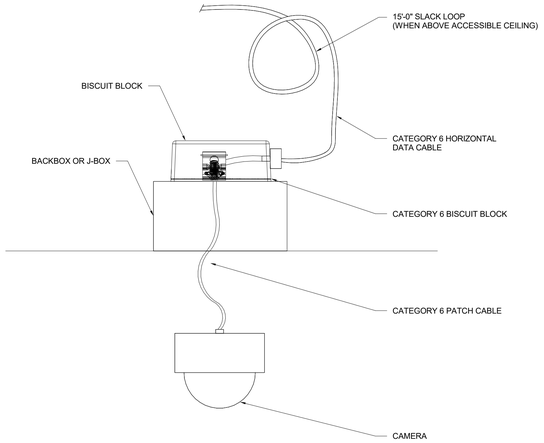
PROJ. NO.: 23-25
DATE: 07-18-25
ISSUED FOR BIDDING AND PERMITTING

TECHNOLOGY - Palmer ES - DETAILS

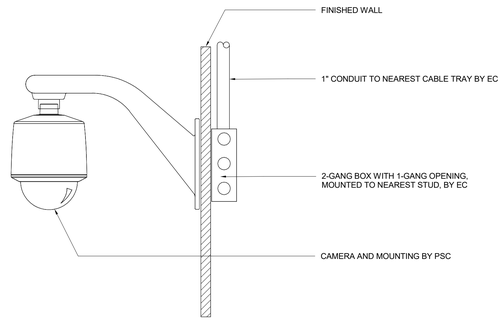
o-TN.500

GENERAL NOTES:

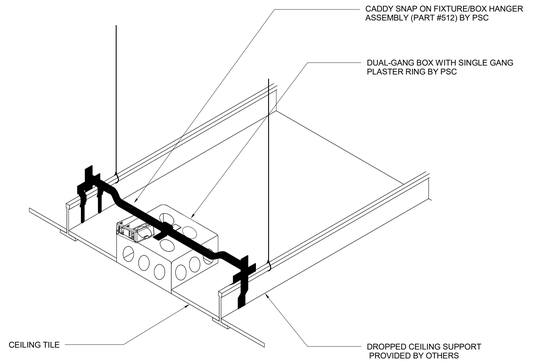
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



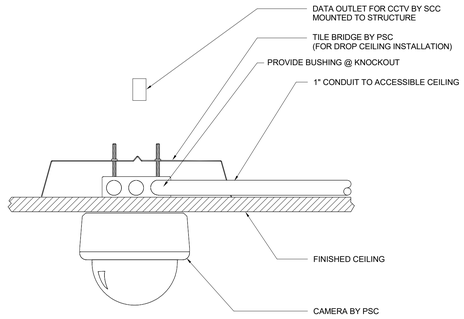
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

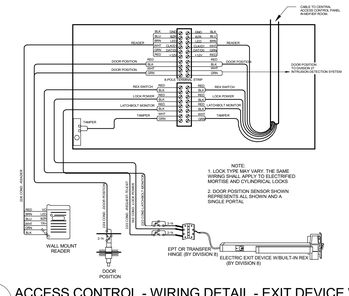


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

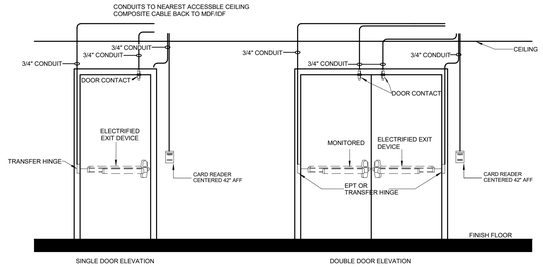
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

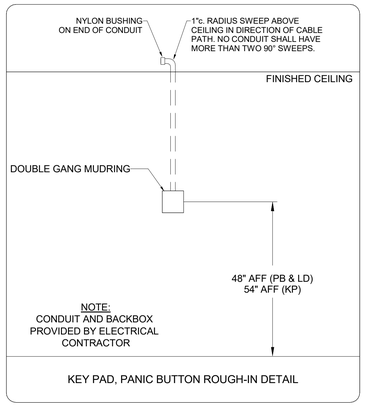
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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SEAL



07-18-25

MWA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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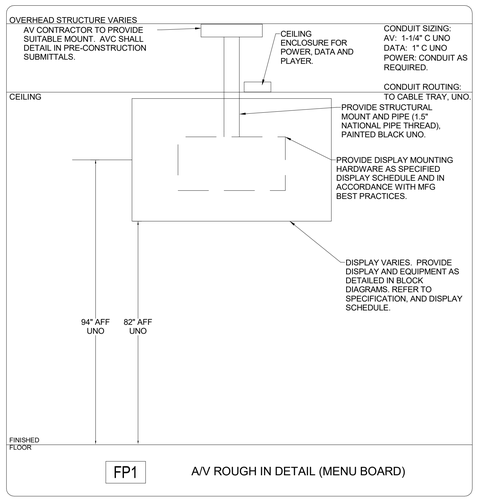
TECHNOLOGY - Palmer ES - SECURITY DETAILS

o-TN.600



6 CEILING MOUNT DISPLAY - A/V ROUGH-IN DETAIL
SCALE: NTS

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SEAL



07-18-25

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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TECHNOLOGY - Palmer ES - AV DETAILS

o-TN.700

FBISD BP013 KITCHEN RENOVATIONS ES

PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DR, RICHMOND, TX 77406

FORT BEND INDEPENDENT SCHOOL DISTRICT

FORT BEND INDEPENDENT SCHOOL DISTRICT

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

KRISTIN K. TASSIN	PRESIDENT
RICK GARCIA	VICE PRESIDENT
DAVID HAMILTON	SECRETARY
ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

PROJECT DESIGN TEAM

PROGRAM MANAGEMENT
FBISD 2023 Bond Team
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Phone Number: 281-327-5481

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Houston, Texas 77079
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Food Design Professionals
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The Woodlands, Texas 77380
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MEP ENGINEERS
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Houston, Texas 77042
Phone Number: 713-300-9292

STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

Sheet List Table	
Sheet Number	Sheet Title
School: p-Pecan Grove ES	
p-A.000	COVER AND INDEX
p-A00-01	GENERAL NOTES AND ABBREVIATIONS
p-D.101	DEMO PLAN
p-D.101-2	DEMO PLAN PHOTOS
p-D.101-3	DEMO PLAN PHOTOS
p-ED.100	ELECTRICAL DEMOLITION AND TEMP PLANS
p-PD1.01	PLUMBING DEMOLITION FLOOR PLAN
p-TD201	TECHNOLOGY DEMOLITION FLOOR PLAN
p-A.101	SITE PLAN
p-A.200	SLAB DIMENSION CONTROL PLAN
p-A.201	OVERALL FLOOR PLAN
p-A.301	KITCHEN PLAN
p-A.302	TEMPORARY KITCHEN LAYOUT
p-A.401	REFLECTED CEILING PLAN
p-A.501	FINISH FLOOR PLAN
p-A.502	PARTITION SCHEDULE
p-S1	KITCHEN PLAN
p-S2	SECTIONS AND TYPICAL DETAILS
p-QF1	FS GENERAL COORDINATION NOTES
p-QF1.0	FS EQUIPMENT PLAN
p-QF1.1	FS FACILITY MODEL
p-QF1.2	FS EQUIPMENT MODEL
p-QF1.3	FS SPECIAL CONDITIONS & MECHANICAL PLAN
p-QF1.4	FS PLUMBING PLAN
p-QF1.5	FS ELECTRICAL PLAN
p-QF1.6	CONDENSING UNITS
p-M1.01	MECHANICAL PLANS
p-M2.01	KITCHEN MECHANICAL DETAILS
E.000	ELECTRICAL AND FIRE ALARM SCHEDULES
E.001	ELECTRICAL AND FIRE ALARM NOTES
E.010	ELECTRICAL DEVICE DETAILS
E.011	ELECTRICAL DETAILS
E.012	ELECTRICAL DETAILS
E.013	ELECTRICAL KITCHEN DETAILS
E.060	LIGHTING SCHEDULES
p-E100	LIGHTING FLOOR PLAN
p-E200	ELECTRICAL FLOOR PLANS
p-E.300	FIRE ALARM FLOOR PLANS
p-E.400	ELECTRICAL SCHEMATIC
p-P0.01	PLUMBING NOTES AND SCHEDULES
p-P0.02	PLUMBING SCHEDULES AND DETAILS
p-P1.01	PLUMBING FLOOR PLAN
p-P1.02	PLUMBING FLOOR PLAN - TEMPORARY KITCHEN PLAN
p-T000	TECHNOLOGY SYMBOLS & LEGEND
p-T200	TECHNOLOGY COMPOSITE FLOOR PLAN
p-T201	TECHNOLOGY NEW_RENOVATION KITCHEN PLAN
p-T202	TECHNOLOGY TEMPORARY KITCHEN PLAN
p-T300	TECHNOLOGY ENLARGED VIEWS
p-T400	TECHNOLOGY TYPICAL DETAILS
p-T401	TECHNOLOGY TYPICAL DETAILS
p-T500	TECHNOLOGY TYPICAL DETAILS
p-TN-000	TECHNOLOGY - INDEX SHEET
p-TN-001	TECHNOLOGY - KITCHEN DEMOLITION
p-TN-100	TECHNOLOGY - OVERALL
p-TN-101	TECHNOLOGY - KITCHEN
p-TN-500	TECHNOLOGY - DETAILS
p-TN-600	TECHNOLOGY - SECURITY DETAILS
p-TN-700	TECHNOLOGY - AV DETAILS

REGISTERED ARCHITECT
MICHAEL A. MAGUIRE
22651
STATE OF TEXAS
18 July 2025

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

p

PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.
B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.
C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.
D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.
E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.
F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL, ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.
B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.
B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.
C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.
D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY. IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.

1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.

E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.

B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT. REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.

B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED. CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.

D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

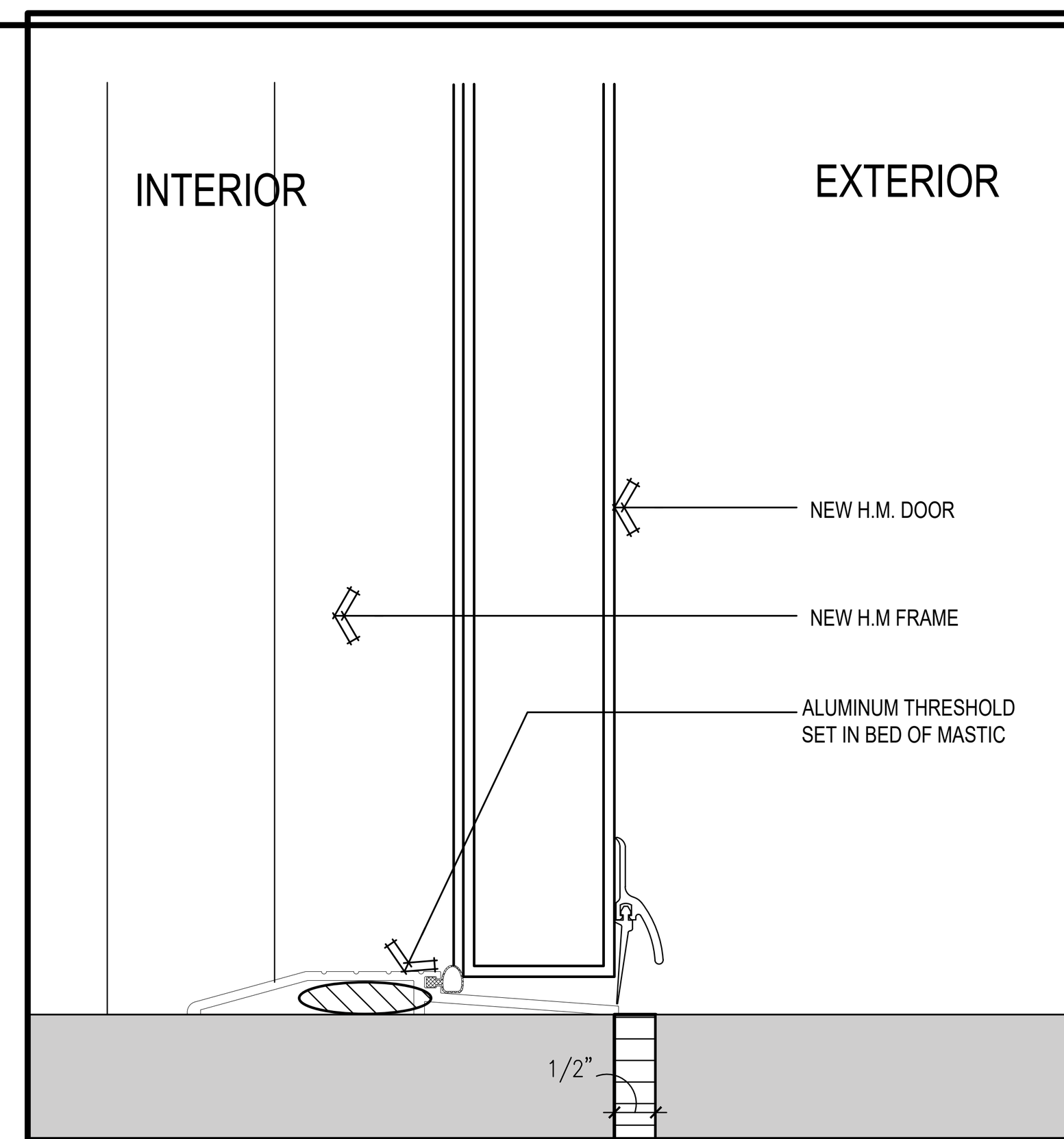
A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

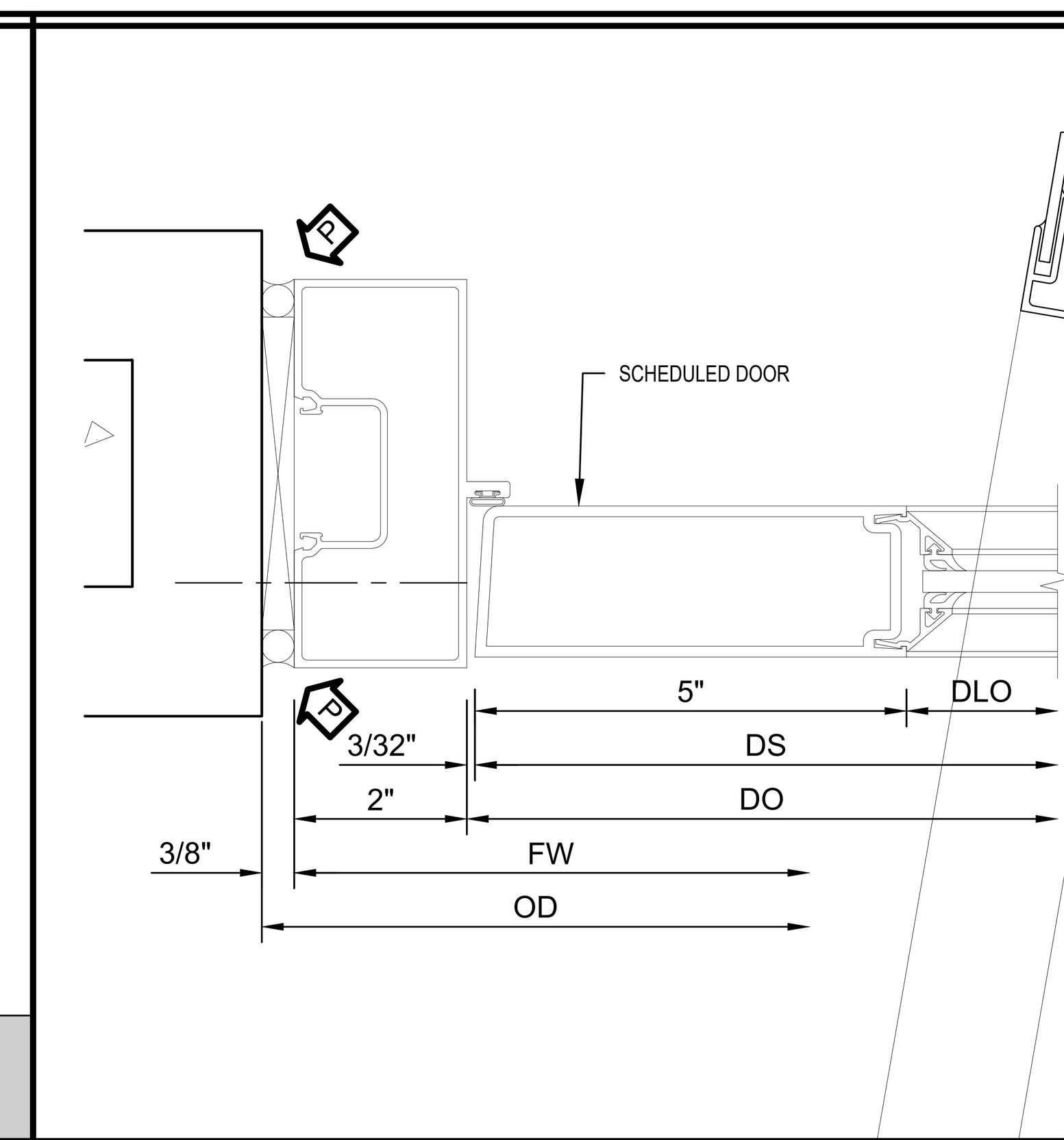
A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

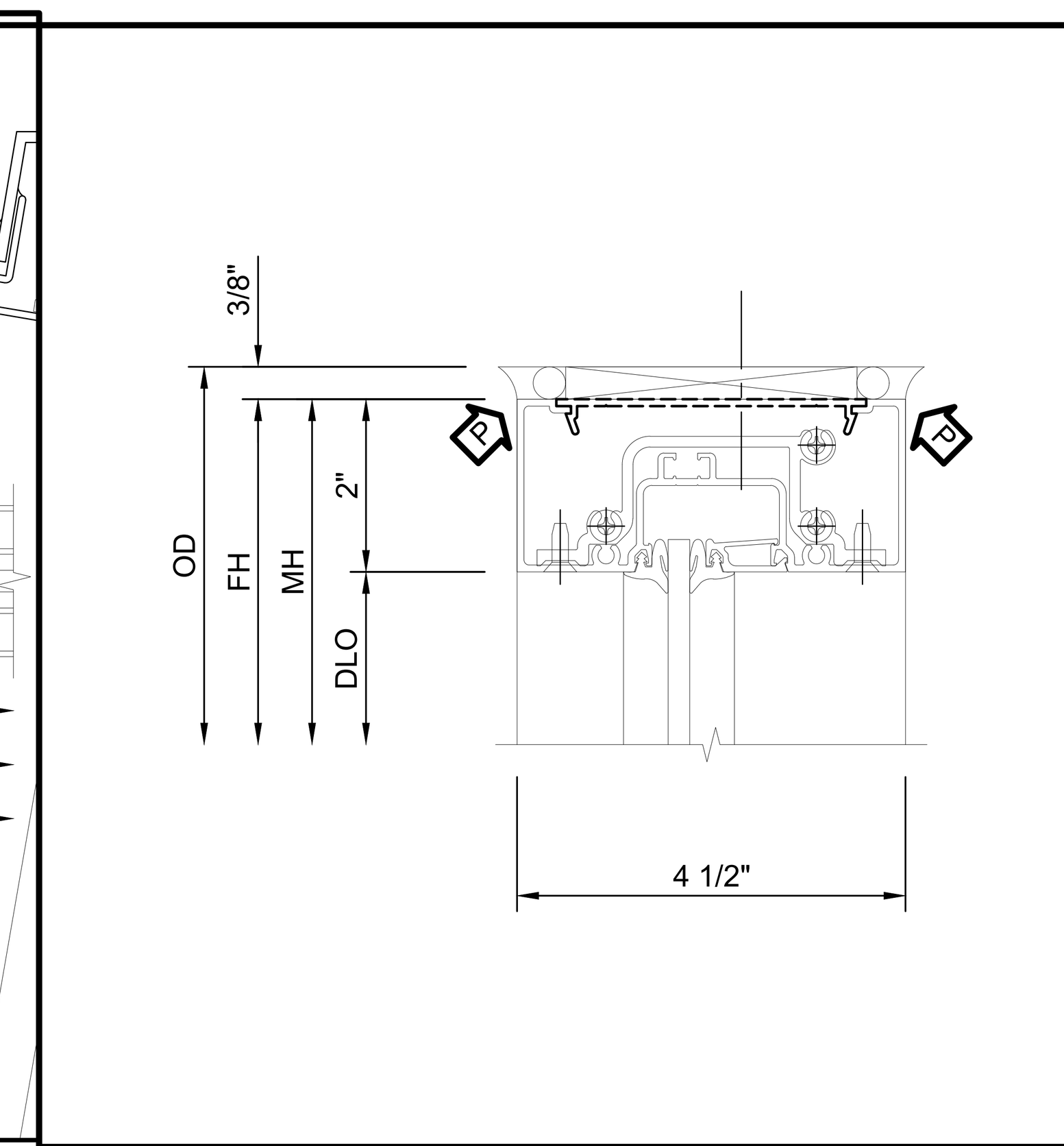
01 GENERAL NOTES



21 EXTERIOR DOOR SILL
SCALE: 6" = 1'-0"_XREF



22 DOOR JAMB
SCALE: 6" = 1'-0"_XREF



23 WINDOW HEAD
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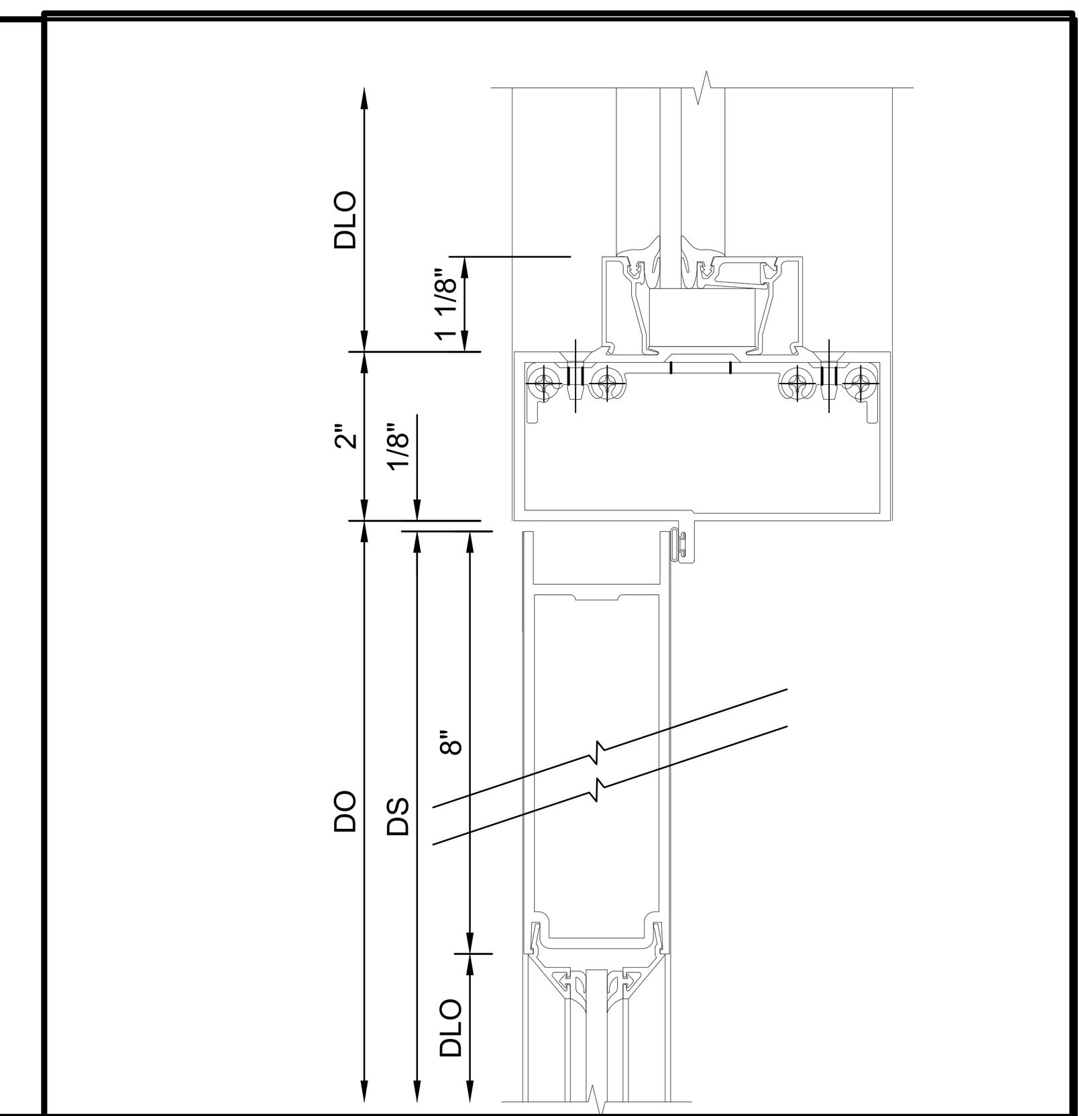

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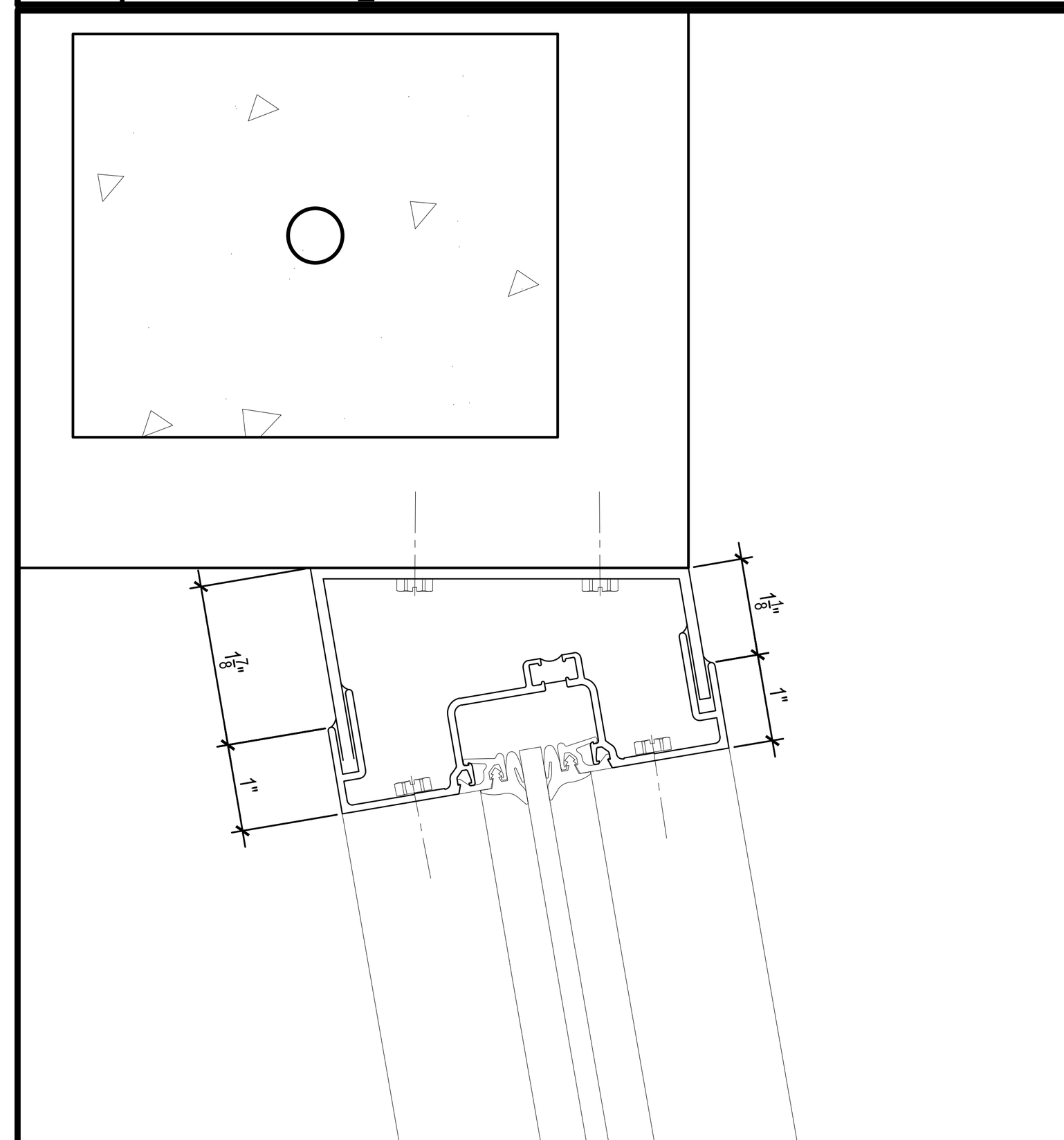
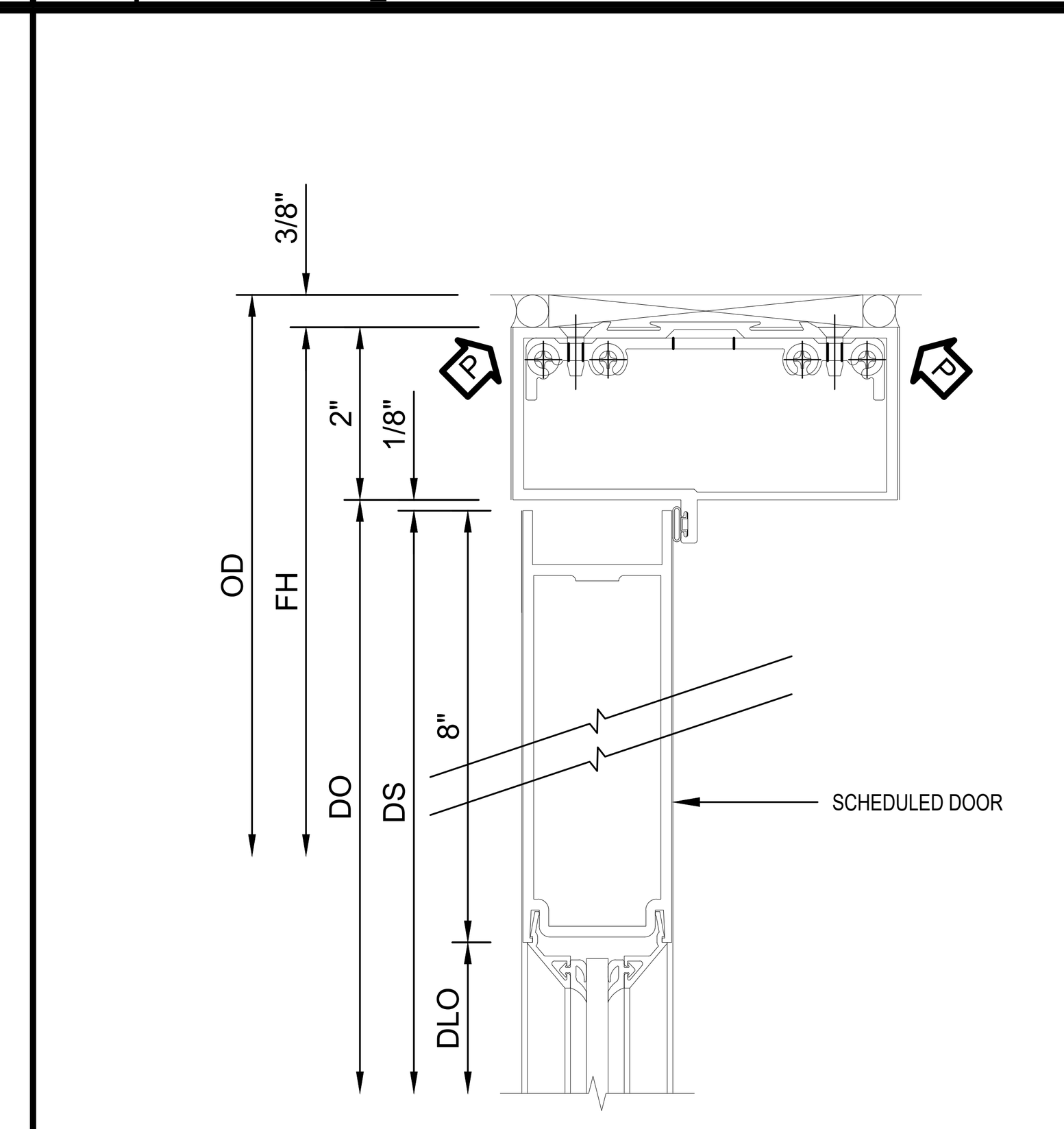
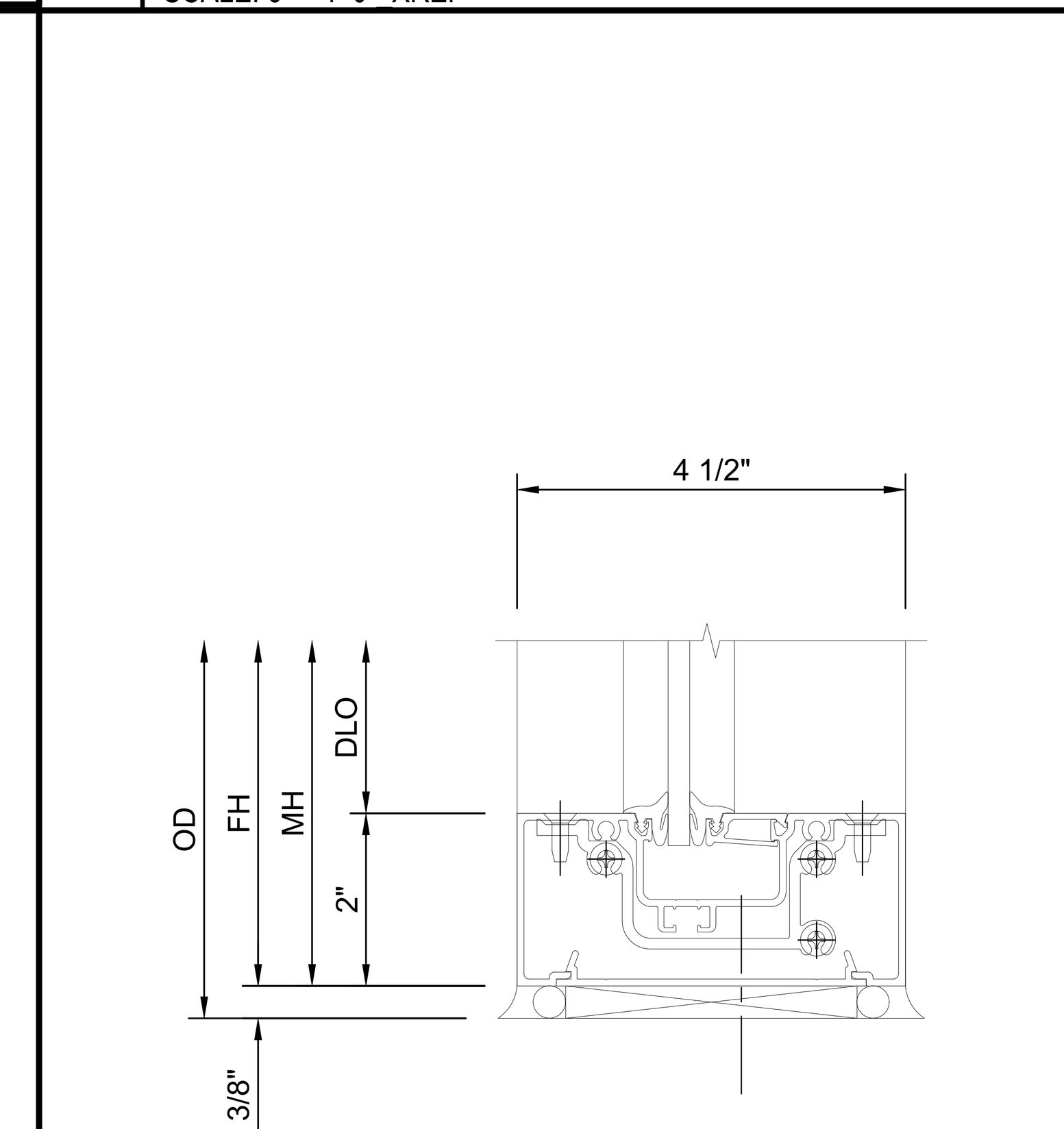


15 WINDOW JAMB AT WALL
SCALE: ##############



16 DOOR HEAD
SCALE: 6" = 1'-0"_XREF



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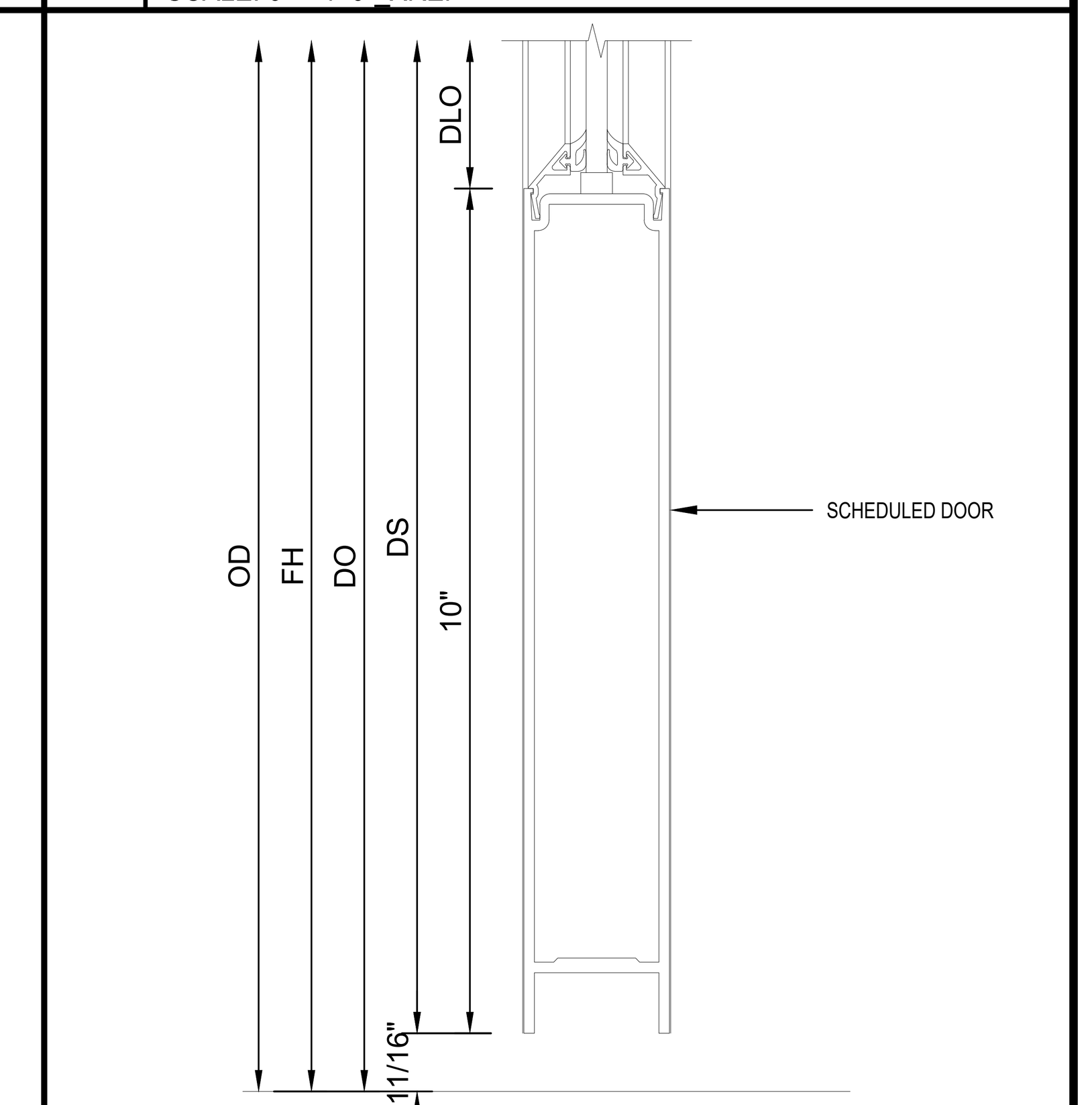

18 DOOR SILL
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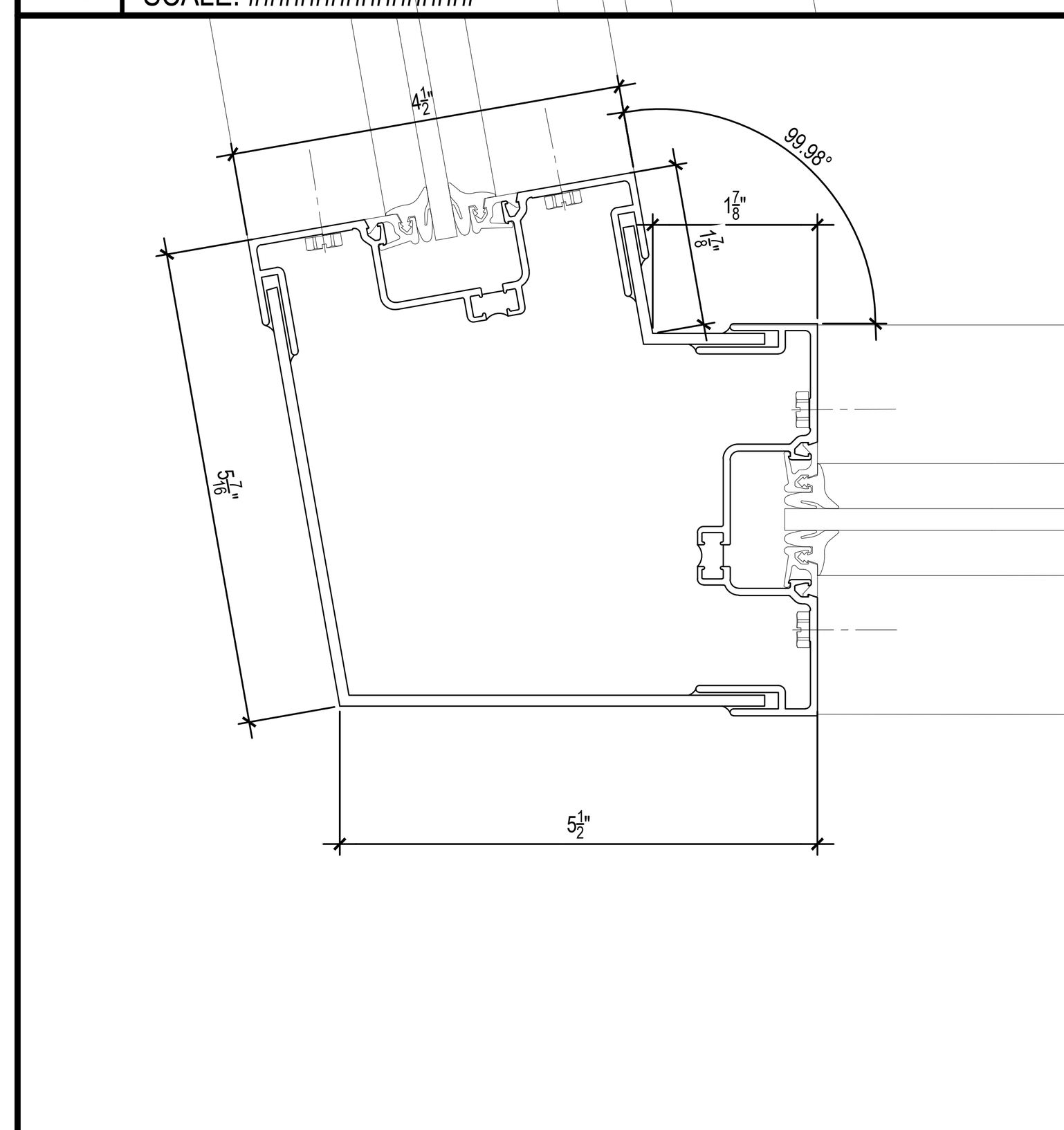

09 WINDOW CORNER
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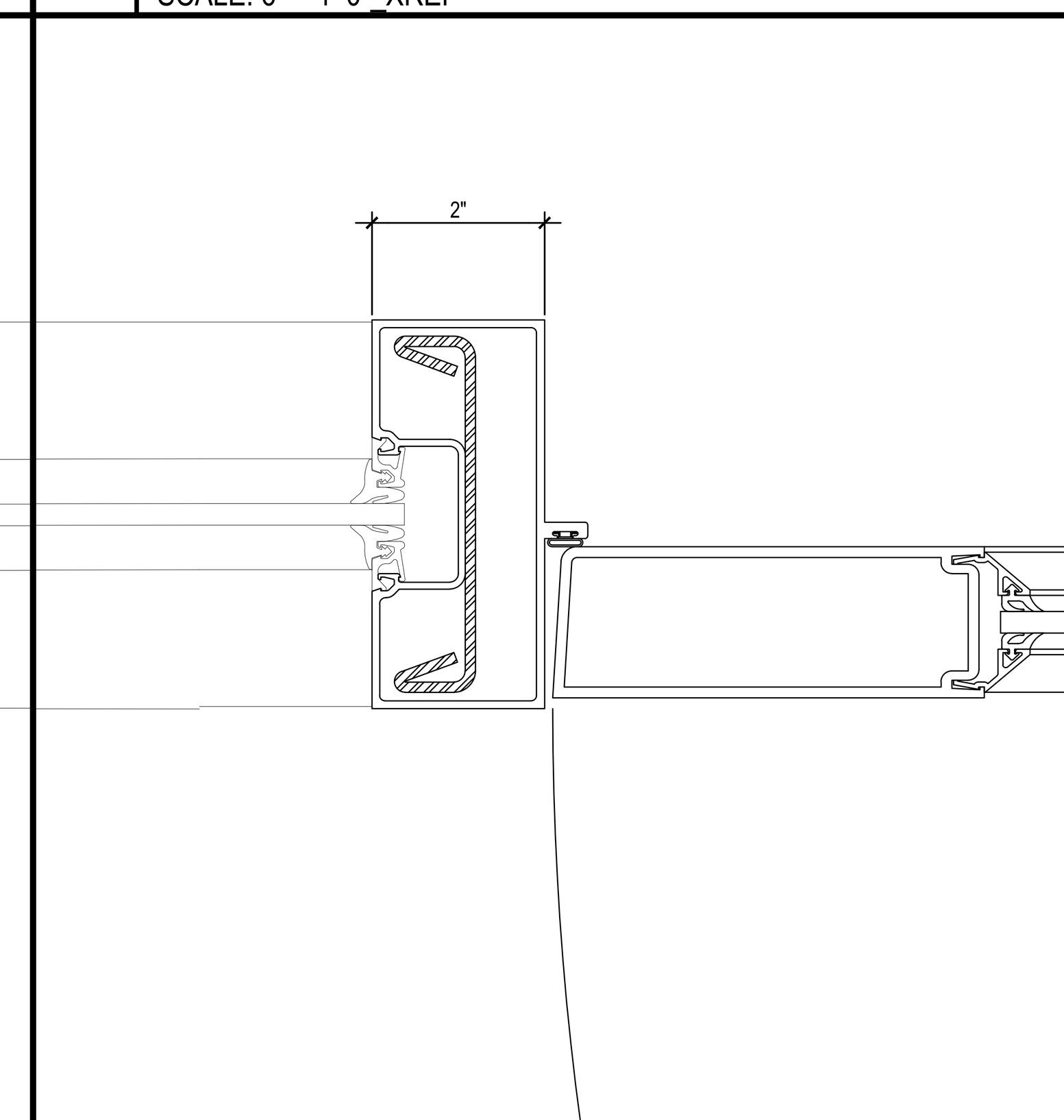
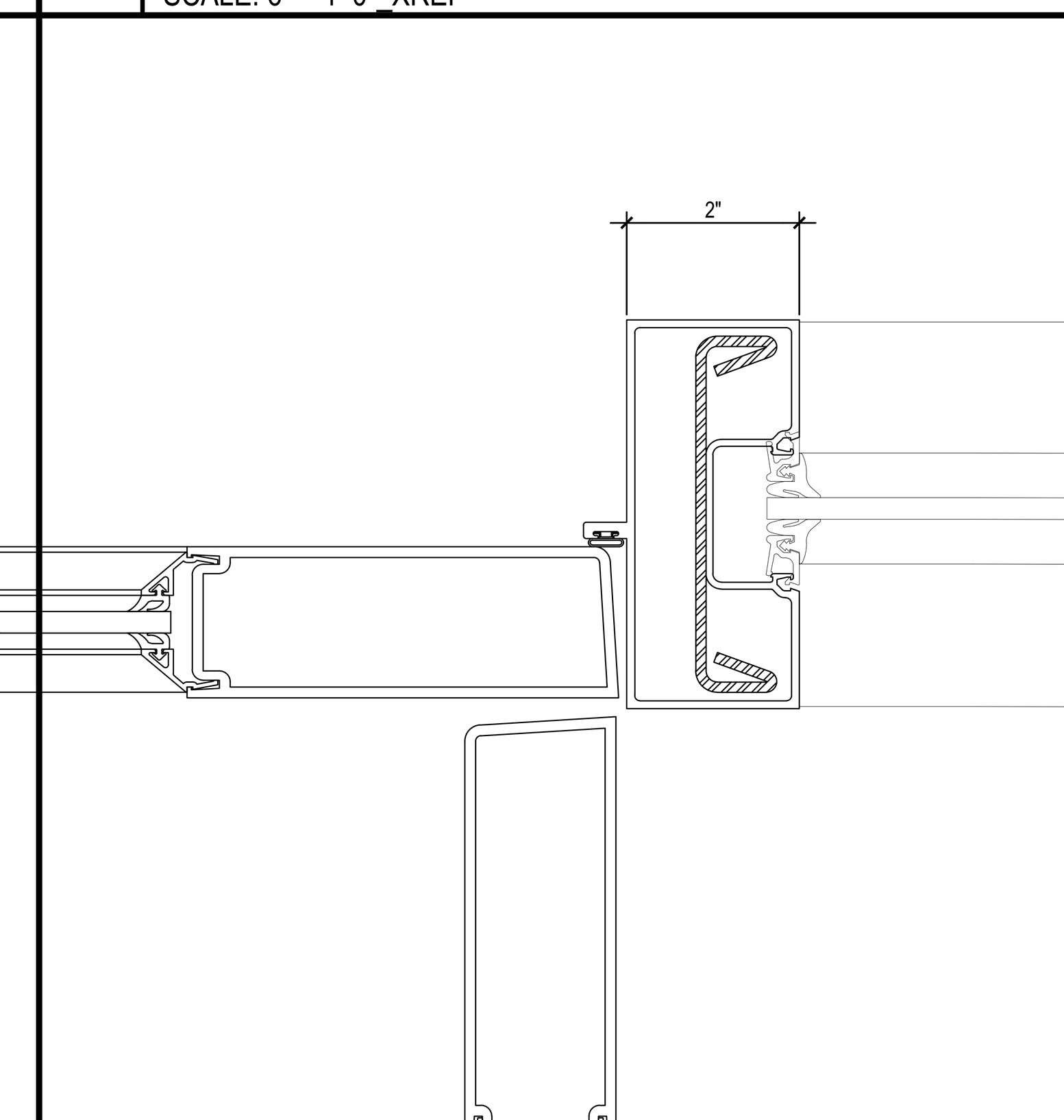
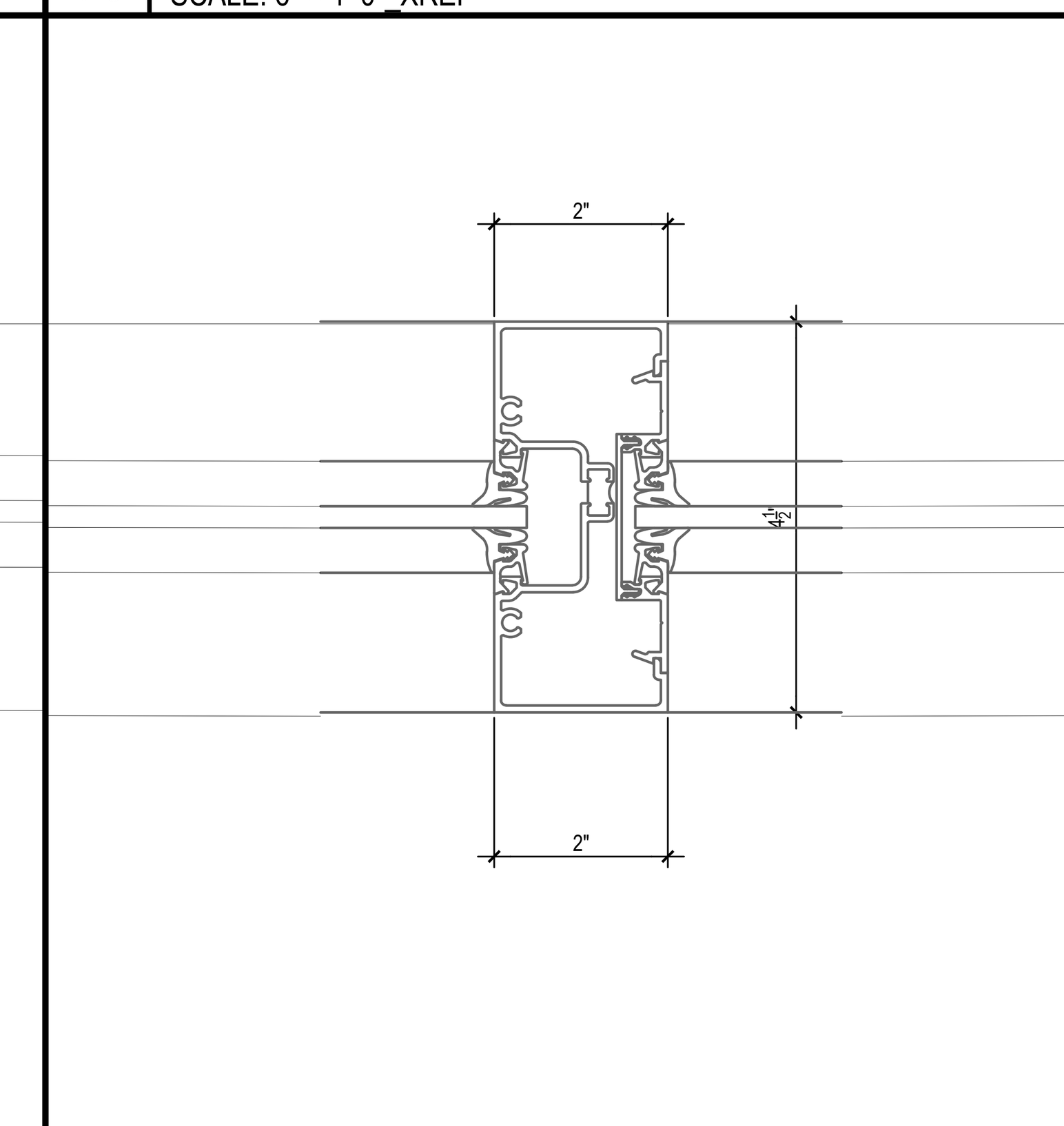


10 DOOR STRIKE JAMB
SCALE: ##############



11 DOOR HINGE JAMB
SCALE: ##############

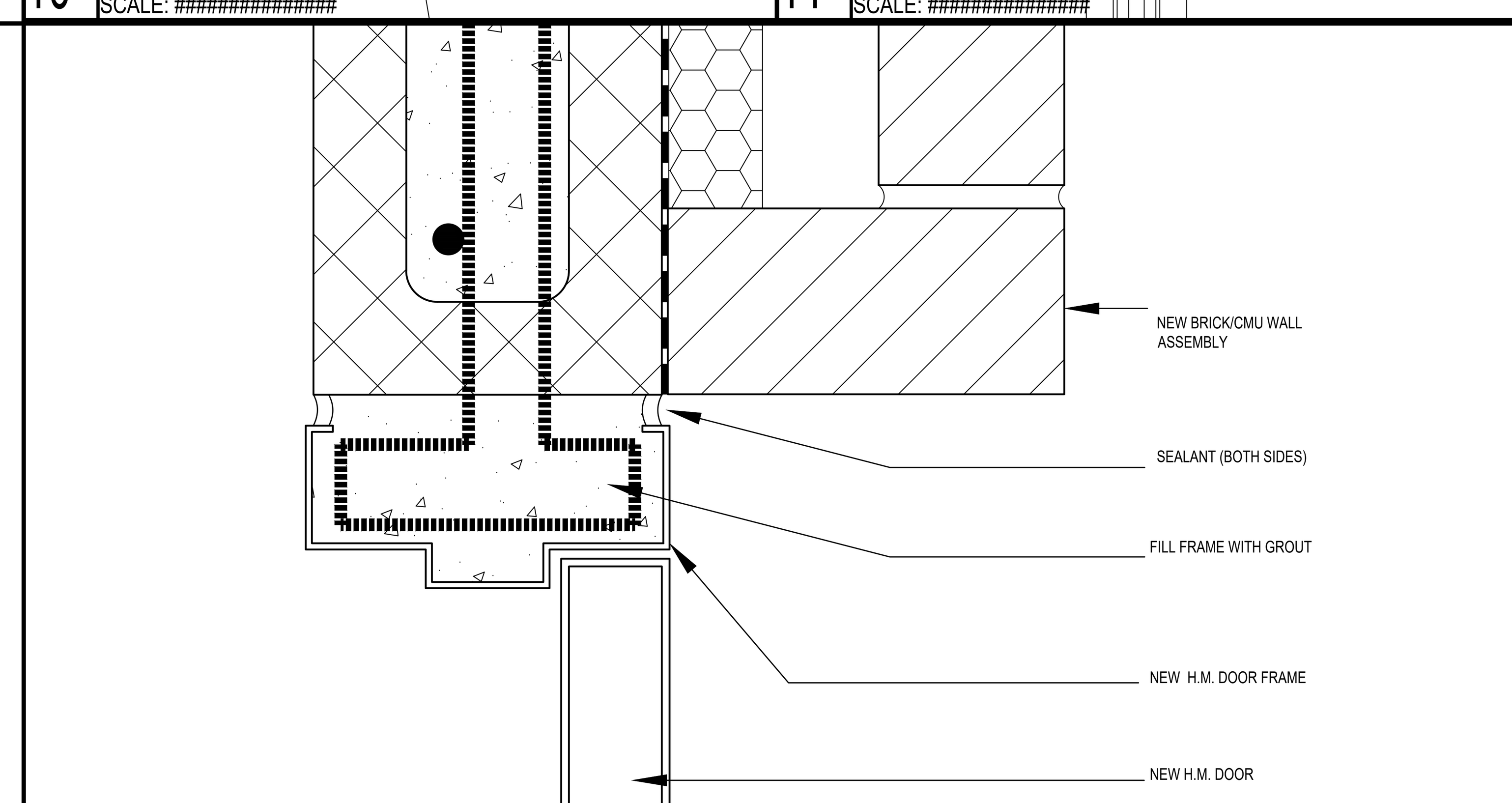


12 WINDOW MULLION
SCALE: ##############

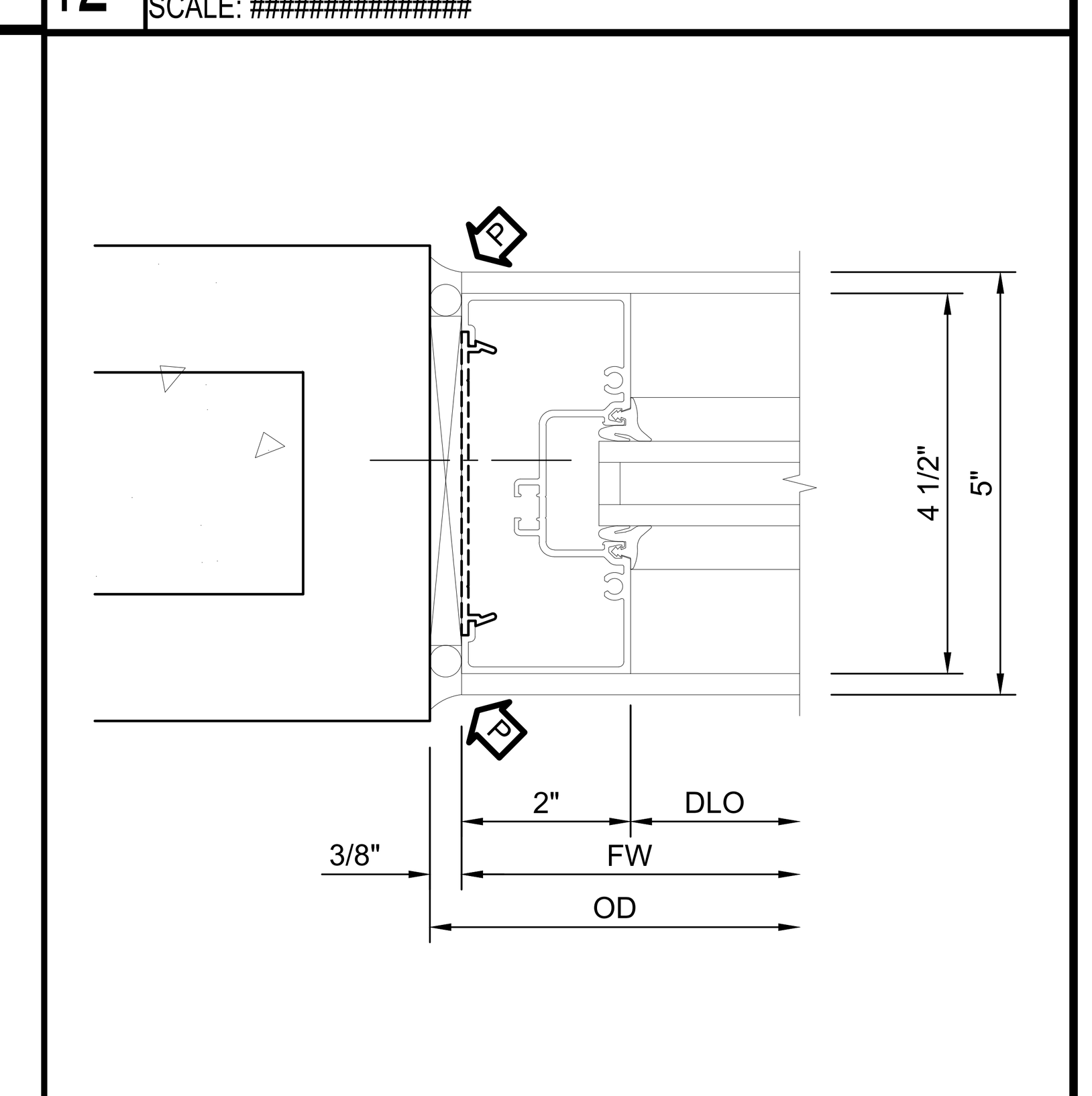
SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025) Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

03 PROJECT SCHEDULE



04 EXTERIOR DOOR HEAD JAMB
SCALE: 6" = 1'-0"_XREF



06 WINDOW JAMB
SCALE: 6" = 1'-0"_XREF

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL
REGISTERED ARCHITECT NOE ALMAGUER 22651 STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
GENERAL NOTES AND ABBREVIATIONS
A00-01

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GENERAL DEMOLITION NOTES
(NOT ALL NOTES USED ON EACH SHEET)

1. REFER TO SHEET A00-01 FOR DEMOLITION GENERAL NOTES. THESE NOTES APPLY TO ALL SCHOOL KITCHENS.
2. COORDINATE EXTENT OF SAW CUTTING AREAS WITH NEW RECESSED SLAB FOR COOLER/FREEZER LAYOUTS, NEW SERVICE ENTRANCE FLOOR AND EXISTING KITCHEN LAYOUTS THAT REMAIN. SEE STRUCTURAL DRAWINGS AND SLAB DIMENSION CONTROL PLANS FOR ADDITIONAL SCOPE.
3. REMOVE PROTECT AND REINSTALL ALL EXISTING SURFACE MOUNTED FIRE EXTINGUISHERS (TYPES ABC AND K) AT ALL KITCHENS.
4. SAWCUT AND RE-LOCATE EXPOSED CONDUITS AND WIREMOLD TO INSIDE OF WALLS. PATCH AND PAINT. EXCEPTION: WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS.
5. CONTRACTOR TO RELOCATE EXISTING KITCHEN EQUIPMENT AND OFFICE FURNITURE TO TEMPORARY KITCHEN LAYOUT AS REQUESTED BY KITCHEN MANAGER. ALSO THAT THE IT EQUIPMENT IS PROTECTED DURING RENOVATIONS. ALL EXISTING EQUIPMENT SHALL BE RETURNED TO OWNER.
6. EXISTING TACKBOARDS TO BE REMOVED BY OWNER.
7. IF PRESENT, EXISTING SAFE IN EACH KITCHEN TO BE TEMPORARILY REMOVED DURING RENOVATION AND REINSTALLED IN KITCHEN AREA.
8. ORIGIN POINT OF EXISTING CEILING GRID SHALL BE IDENTIFIED. NEW CEILING WILL BE INSTALLED (AS MUCH AS POSSIBLE) AT THE SAME ORIGIN POINT SO THAT SPRINKLER SYSTEM PIPING CAN REMAIN UNCHANGED.
9. ABOVE-CEILING INFRASTRUCTURE SHALL REMAIN UNDISTURBED AS MUCH AS IS POSSIBLE. CEILING DEVICES ARE TO BE REMOVED FROM EXISTING GRID/TILE THEN DURING RE-INSTALLATION OF CEILING DEVICES SHALL BE LOCATED AS CLOSE TO ORIGINAL LOCATION AS POSSIBLE INTO THE NEW GRID/TILE. PROTECT AND STORE EXISTING INFRASTRUCTURE (CABLING, ELECTRICAL POWER, PIPING) DURING CONSTRUCTION.
10. EXISTING HOOD IN WAREWASH AND (2) HOODS IN PRODUCTION AREA ARE TO BE CLEANED, INSPECTED, SERVICED AND REFURBISHED TO A LIKE NEW CONDITION. THEY ARE TO REMAIN IN PLACE.

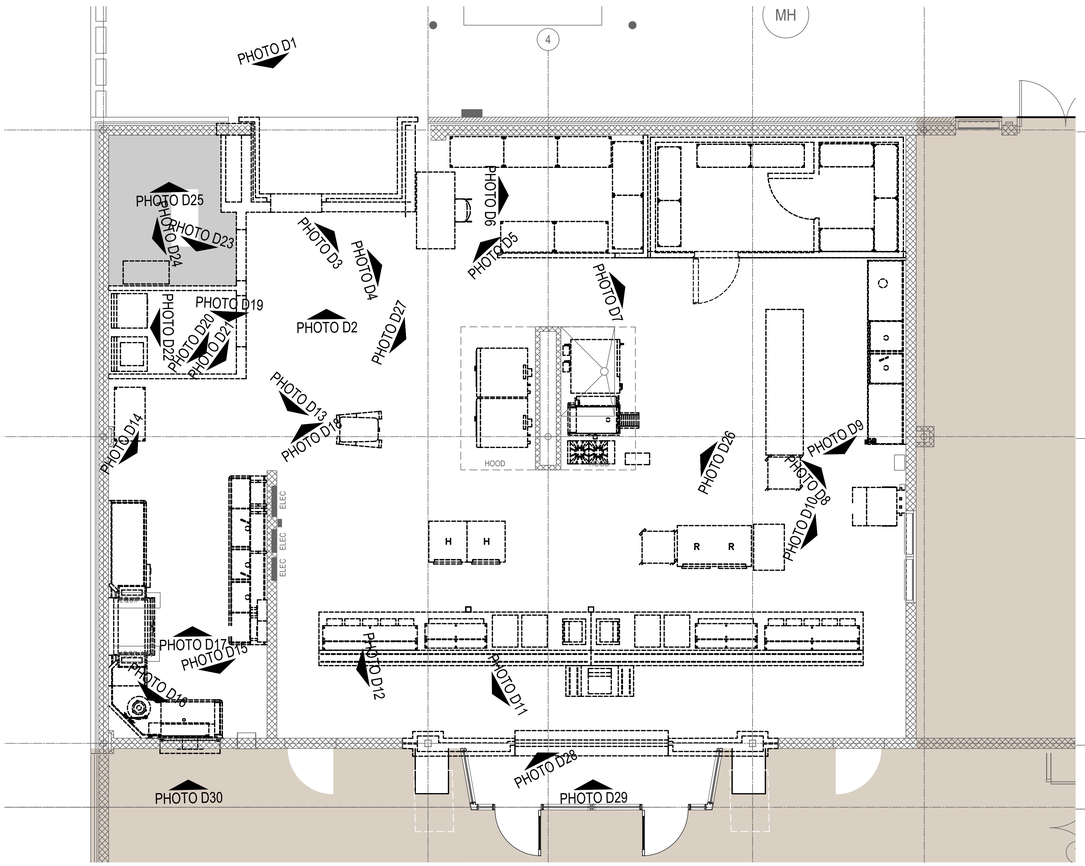
KEYED DEMOLITION NOTES
(NOT ALL NOTES USED ON EACH SHEET)

1. REMOVE EXISTING THINSET SYNTHETIC TERRAZZO FLOOR AND TERRAZZO COVE BASE MATERIAL IF ANY EXISTS THROUGHTOUT KITCHEN AREA. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOOR. RE: FINISH PLAN FOR NEW FLOOR FINISH MATERIAL.
2. REMOVE EXISTING QUARRY TILE FLOORING AND BASE. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOORING. RE: FINISH SCHEDULE FOR NEW FLOOR FINISH MATERIAL.
3. CEILING DEVICES: REMOVE SMOKE DETECTORS, STROBES, EXIT SIGNAGE, MOTION DETECTORS AND CEILING SPEAKERS. PROTECT AND RE-INSTALL AFTER FINISHES ARE APPLIED.
4. REMOVE EXISTING LOCKERS. PROTECT AND RE-INSTALL AFTER FINISHES APPLIED.
5. REMOVE EXISTING WASHER AND DRYER. VERIFY WITH FBISD FOR RELOCATION TO WAREHOUSE.
6. TEMPORARILY REMOVE EXISTING WALL MOUNTED CLOCK AND STORE FOR REINSTALLATION AFTER WALL RECEIVED NEW FINISH.
7. REMOVE EXISTING WALK-IN COOLER/FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT SPACE. MITIGATE ANY MOLD FOUND.
8. REMOVE EXISTING DOOR AND PROTECT EXISTING FRAME TO REMAIN
9. REMOVE EXISTING DOOR AND FRAME, PROTECT FRAME AND OR DOOR IF IT IS SCHEDULED TO REMAIN.
10. REMOVE PARTIAL EXISTING CMU PARTITION FOR NEW DOOR OPENING
11. INSPECT EXISTING WAREWASH COUNTER DOOR AND S.S. PASS-THRU WINDOW CHUTE. REPAIR REPLACE DAMAGED COMPONENTS. CLEAN, LUBRICATE AND RE-INSTALL.
12. EXISTING CARD READER ACCESS TO REMAIN
13. EXISTING WINDOW TO REMAIN
14. REMOVE EXISTING KITCHEN EQUIPMENT THROUGHOUT KITCHEN INCLUDING WALK-IN COOLER / FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT ROOM OR OUTSIDE OF THE BUILDING. VERIFY WITH OWNER FOR RELOCATION TO WAREHOUSE. SOME EQUIPMENT IS TO BE RE-USED IN TEMPORARY SERVING LINES. SEE ALSO GENERAL DEMOLITION NOTE 6.
15. REMOVE EXISTING FRP AND PREP FOR NEW TILE FINISH.
16. COORDINATE REMOVAL AND STORAGE OF ANY EXISTING FURNITURE ITEMS WITH OWNER . SEE ALSO GENERAL DEMOLITION NOTE 5.
17. REMOVE EXISTING SOAP AND PAPER TOWEL DISPENSER AND RETURN TO OWNER
18. EXISTING WALL MOUNTED ACCESSORIES SIGNS, DISPLAY BOARDS, AND MATS TO BE REMOVED BY FORT BEND ISD (VERIFY EQUIPMENT - IF ANY).
19. REMOVE EXISTING SURFACE MOUNTED FIRE EXTINGUISHER. RE-INSTALL AFTER NEW FINISH APPLIED.
20. REMOVE EXISTING ACOUSTIC CEILING TILE CEILNG SYSTEM AND LIGHT FIXTURES, HVAC DEVICES, SENSORS, ETC. THROUGHTOUT RENOVATED AREAS. PREP FOR NEW SUSPENDED CEILING. EXISTING SPRINKLE SYSTEM TO REMAIN AS-IS UNLESS ROOM CONFIGURATION HAS CHANGED IN NEW DESIGN. PROTECT RECESSED SPRINKLER HEADS AND - RE-INSTALL IN NEW CEILING.
21. REMOVE EXISTING CASEWORK/SHELVING
22. EXISTING CERAMIC WALL TILE TO REMAIN. PROTECT FROM DAMAAGE.
23. REMOVE EXISTING COAT HANGER / ROD / SHELF
24. REMOVE EXISTING PLUMBING FIXTURES IN RESTROOMS. RE: PLUMBING FOR NEW FIXTURES.
25. REMOVE EXISTING UTILITY SINK. RE: PLUMBING FOR NEW PLUMBING FIXTURES.
26. REMOVE EXISTING MOP HOLDER. REPLACE WITH NEW UNIT AS SPECIFIED.
27. REMOVE EXISTING WALL MOUNTED CLEANING SOLUTION DISPENSER (BY FBISD VENDOR)
28. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
29. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
30. REMOVE FLOORING IN THIS AREA FOR NOTE 1.
31. REMOVE CARTIDGE FILTER AND WATER PURTICATION CABNET

DEMOLITION LEGEND

- EXISTING PARTITION TO REMAIN
- REMOVE EXISTING PARTITION
- EXISTING CMU PARTITION
- REMOVE DOOR AND FRAME TO REMAIN
- REMOVE EXISTING DOOR AND FRAME
- EXISTING PLUMBING FIXTURES (WATER CLOSET, HAND LAVATORY, AND MOP SINK TO BE REMOVED. RE: PLUMBING DRAWINGS.
- EXISTING ACOUSTIC CEILING TILE AND GRID TO BE REMOVED. RE: ELECTRICAL DRAWINGS.
- SPRINKLER HEAD (RECESSED)
- CLOCK
- CEILING MOUNTED SPEAKERS

3 DEMOLITION NOTES



1 DEMOLITION FLOOR PLAN
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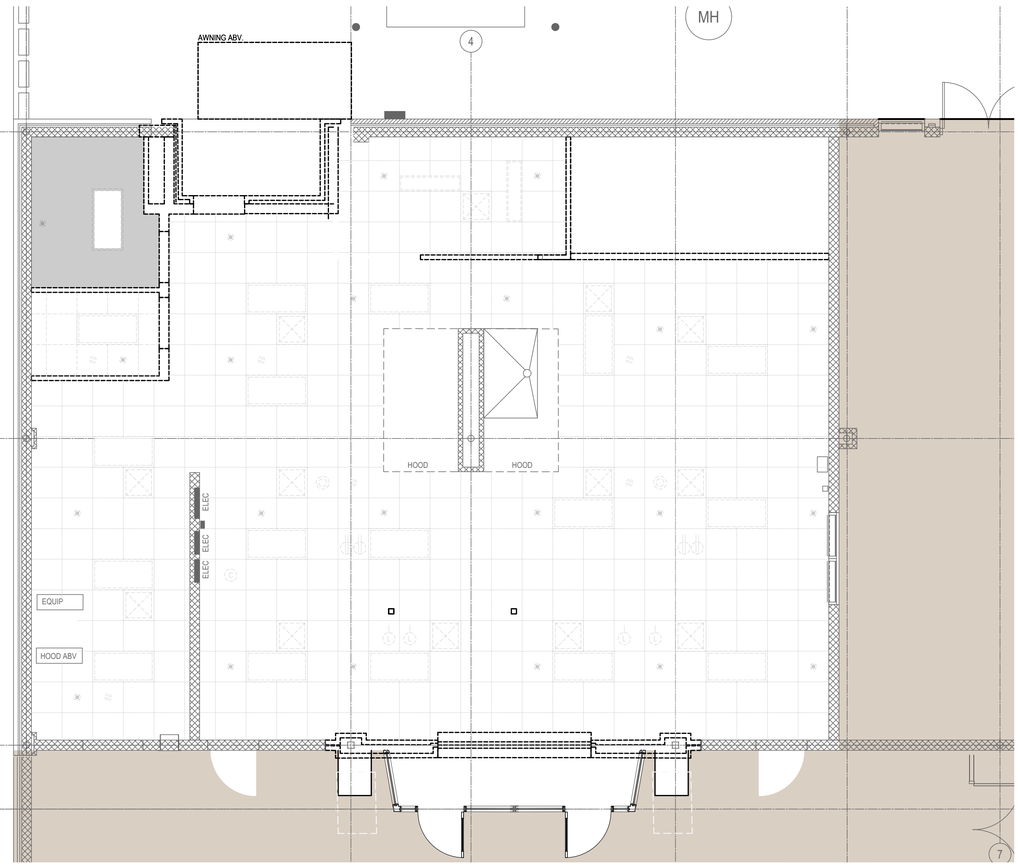

2 DEMOLITION REFLECTED CEILING PLAN
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SEAL
REGISTERED ARCHITECT
ROBERT A. WEBER
22653
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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DEMO PLAN

p-D.101

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PHOTO D1

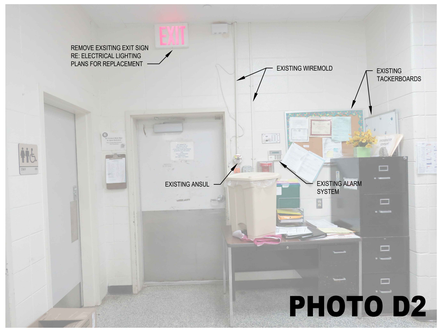


PHOTO D2



PHOTO D3



PHOTO D4



PHOTO D5



PHOTO D6



PHOTO D7

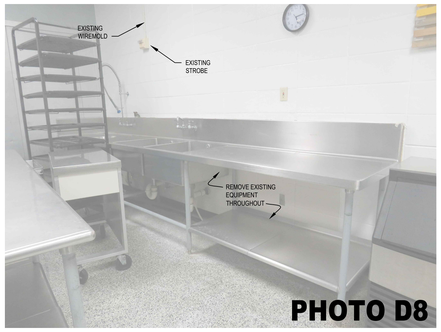
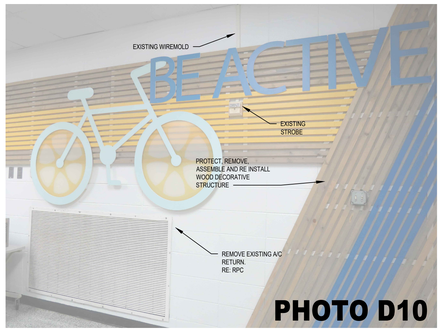


PHOTO D8



PHOTO D9



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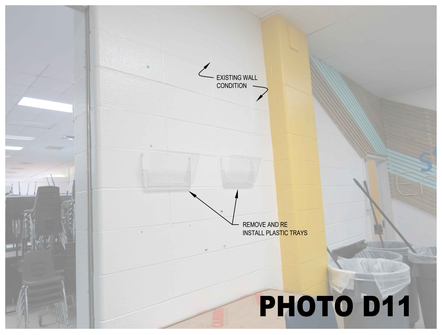

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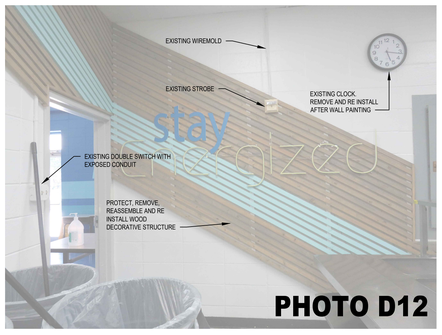

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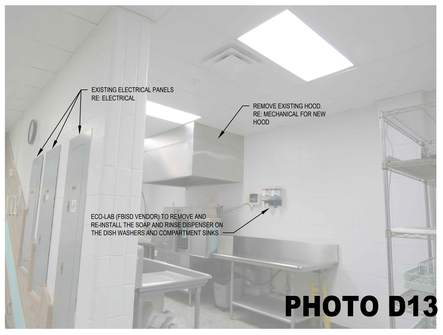

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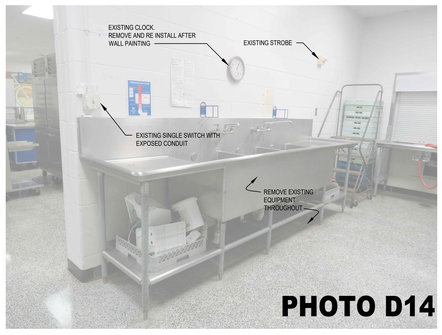


PHOTO D14



PHOTO D15



PHOTO D16



PHOTO D17



PHOTO D18



PHOTO D19



PHOTO D20

stay
Mazzo

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

p

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DR,
RICHMOND, TX 77406

SEAL
REGISTERED ARCHITECT
ANTHONY M. AMARO
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
DEMO PLAN
PHOTOS

p-D.101-2

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\P-Pecan Grove ES\p-D.101-2 DEMO PLAN PHOTOS.dwg Jul 23, 2025 - 4:33pm



PHOTO D21



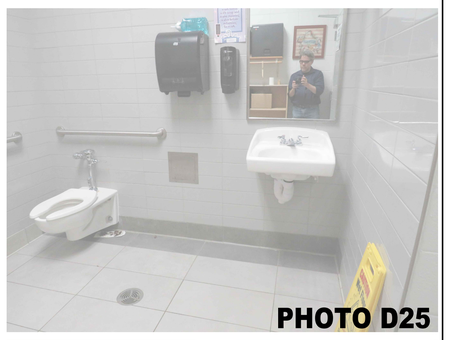
PHOTO D22



PHOTO D23



PHOTO D24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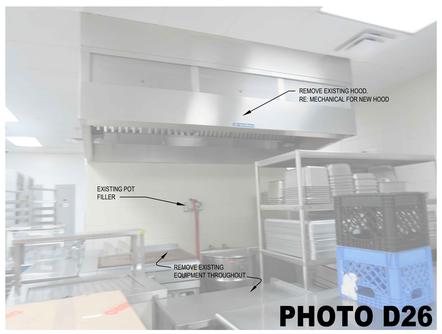

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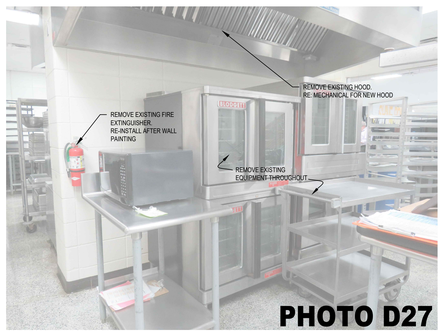

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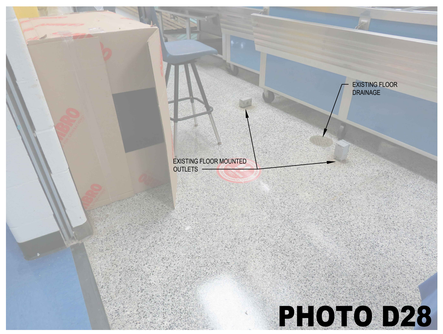

PHOTO D28



PHOTO D29

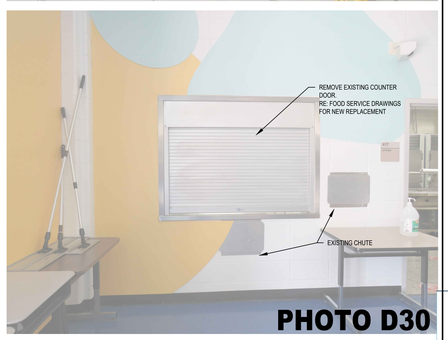

PHOTO D30

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

p

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DR,
RICHMOND, TX 77406

SEAL

REGISTERED ARCHITECT
MIDE ATMAGUER
22651
STATE OF TEXAS

7/15/2025

MWA ARCHITECTS

ARCHITECTS AND PLANNING CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
DEMO PLAN PHOTOS

p-D.101-3

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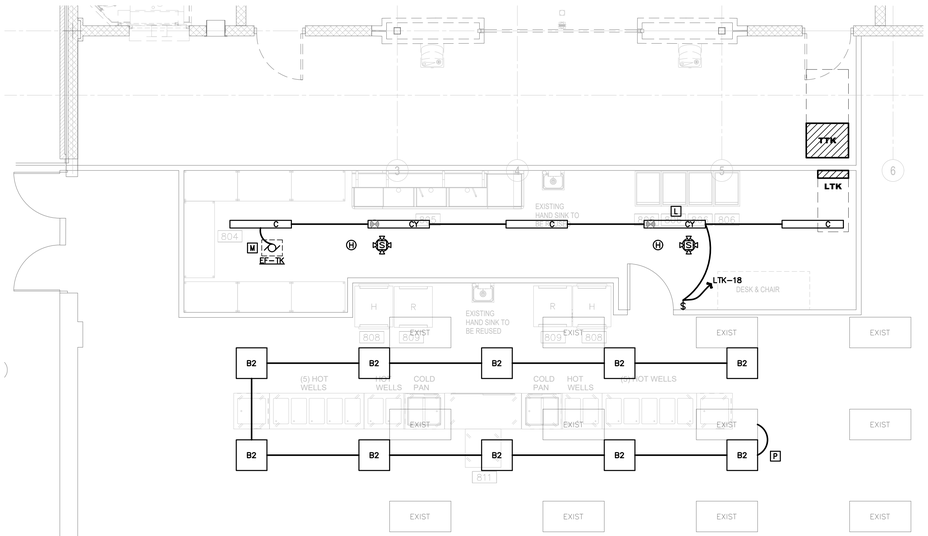
NEW PANEL — TEMP KITCHEN

PANEL LTK — 150A MCB, 208Y/120V, 3ϕ, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: SURFACE

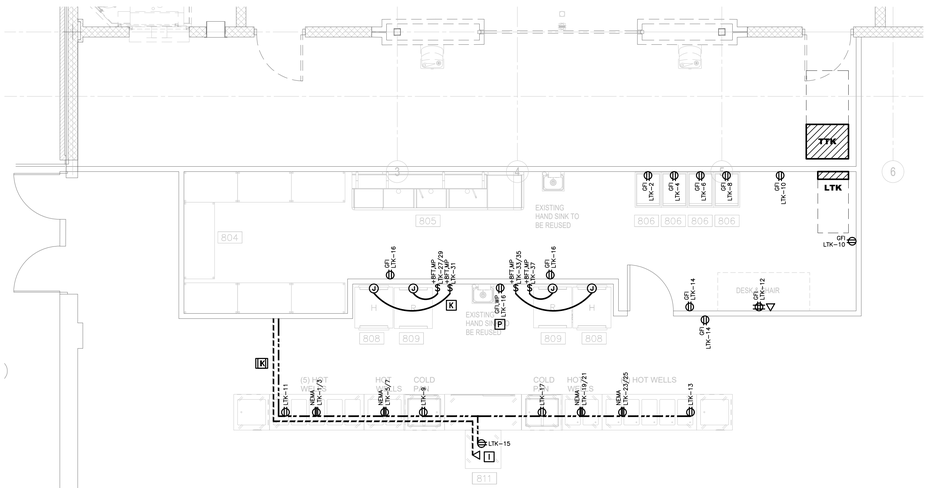
NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E810	2766	HOT WELLS	2–12	20/2GFI	1	■			2	20/1	3–12	TRANSPORT CART	1920	E806	
	–	–	–	+12G	–	3		■		4	20/1	3–12	TRANSPORT CART	1920	E806	
	E810A	1643	HOT WELLS	2–12	20/2GFI	5			■	6	20/1	3–12	TRANSPORT CART	1920	E806	
		–	–	+12G	–	7	■			8	20/1	3–12	TRANSPORT CART	1920	E806	
	E810B	600	COLD PAN	3–12	20/1GFI	9		■		10	20/1	3–12	2 REC	360	E800A	
	E810C	1200	BEVERAGE	3–12	20/1GFI	11			■	12	20/1	3–12	2 REC – DESK	360	E800B	
	E810C	1200	BEVERAGE	3–12	20/1GFI	13	■			14	20/1	3–12	2 REC	360	E800A	
	E811	180	CASH REGISTER	3–12	20/1GFI	15		■		16	20/1	3–12	3 REC	360	E800A	
	E810B	600	COLD PAN	3–12	20/1GFI	17			■	18	20/1	3–12	TEMP. KITCHEN LTS/FAN	566		
	E810A	1643	HOT WELLS	2–12	20/2GFI	19	■			20	20/1		SPARE			
	–	–	–	+12G	–	21		■		22	20/1		SPARE			
	E810	2766	HOT WELLS	2–12	20/2GFI	23			■	24	20/1		SPARE			
	–	–	–	+12G	–	25	■			26	20/1		SPARE			
	E808	1622	HEATED CABINET	2–12	20/2	27		■		28	20/1		SPARE			
	–	–	–	+12N+12G	–	29			■	30	20/1	3–12	EXISTING CIRCUIT	500		3
	E809	984	REFRIGERATOR	3–12	20/1	31	■			32	20/1	3–12	EXISTING CIRCUIT	500		3
	E808	1622	HEATED CABINET	2–12	20/2	33		■		34	15/2	2–12	EXISTING CIRCUIT	1000		3
	–	–	–	+12N+12G	–	35			■	36	–	+12N+12G	–	–		
	E809	984	REFRIGERATOR	3–12	20/1	37	■			38	20/2	2–12	EXISTING CIRCUIT	1000		3
			SPARE		20/1	39		■		40	–	+12N+12G	–	–		
			SPARE		20/1	41			■	42	50/2	2–8	EXISTING CIRCUIT	5000		3
			SPARE		20/1	43	■			44	–	+8N+10G	–	–		
	TOTAL LOAD @ 100% =		35498VA		TOTAL LOAD @ 100% =		99A									

1. REF. KITCHEN CONSULTANT'S "FCS" DRAWINGS FOR KITCHEN EQUIPMENT NUMBERS.
2. A DEMAND FACTOR PERCENT OF 65% HAS BEEN APPLIED TO THE KITCHEN EQUIPMENT LOAD PURSUANT TO NEC 220–20 AND NEC TABLE 220–20.
3. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.



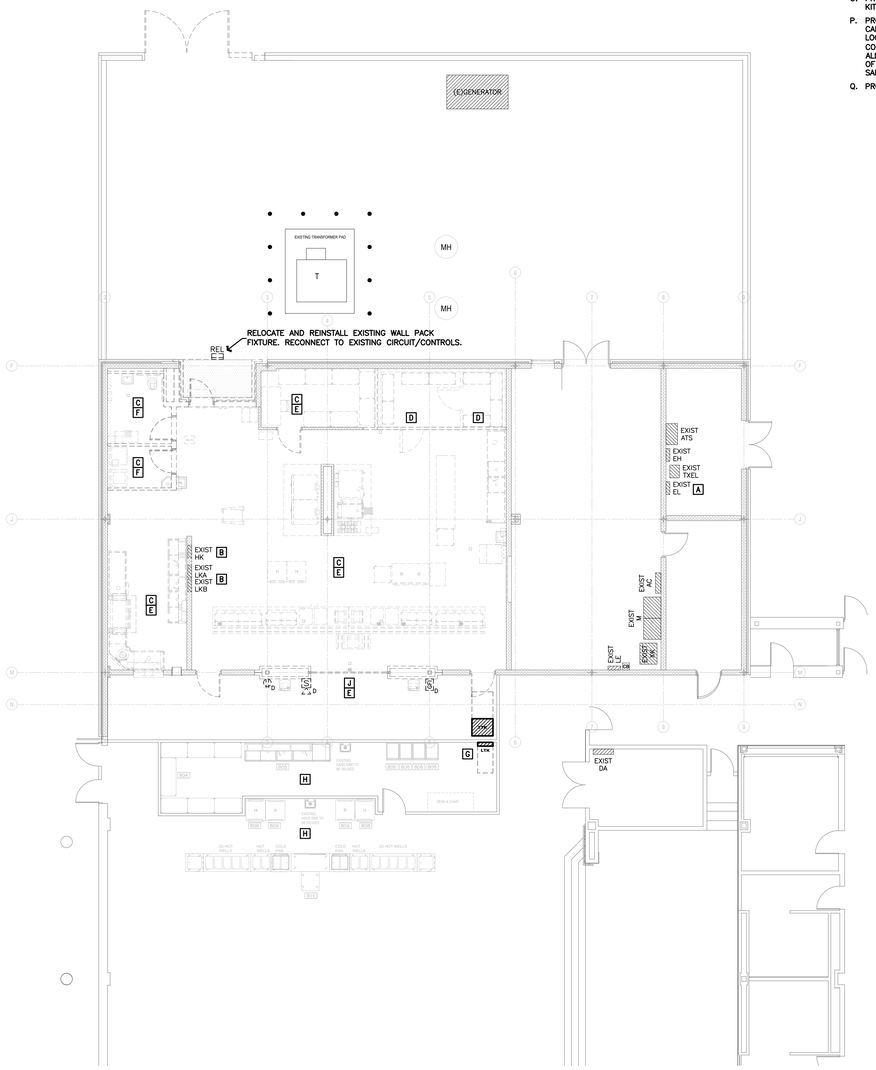
T1 TEMPORARY KITCHEN - LIGHTING PLAN

SCALE: 1/4" = 1'– 0"



T2 TEMPORARY KITCHEN - ELECTRICAL PLAN

SCALE: 1/4" = 1'– 0"


(C)GENERATOR
EXISTING TRANSFORMER PAD
MH
RELOCATE AND REINSTALL EXISTING WALL PACK FIXTURE. RECONNECT TO EXISTING CIRCUIT/CONTROLS.
EXIST ATS
EXIST EH
EXIST TXEL
EXIST EL
EXIST HK
EXIST LKA
EXIST LKB
EXIST AC
EXIST M
EXIST LT
EXIST DA
EXIST WH
EXIST WC
EXIST WC
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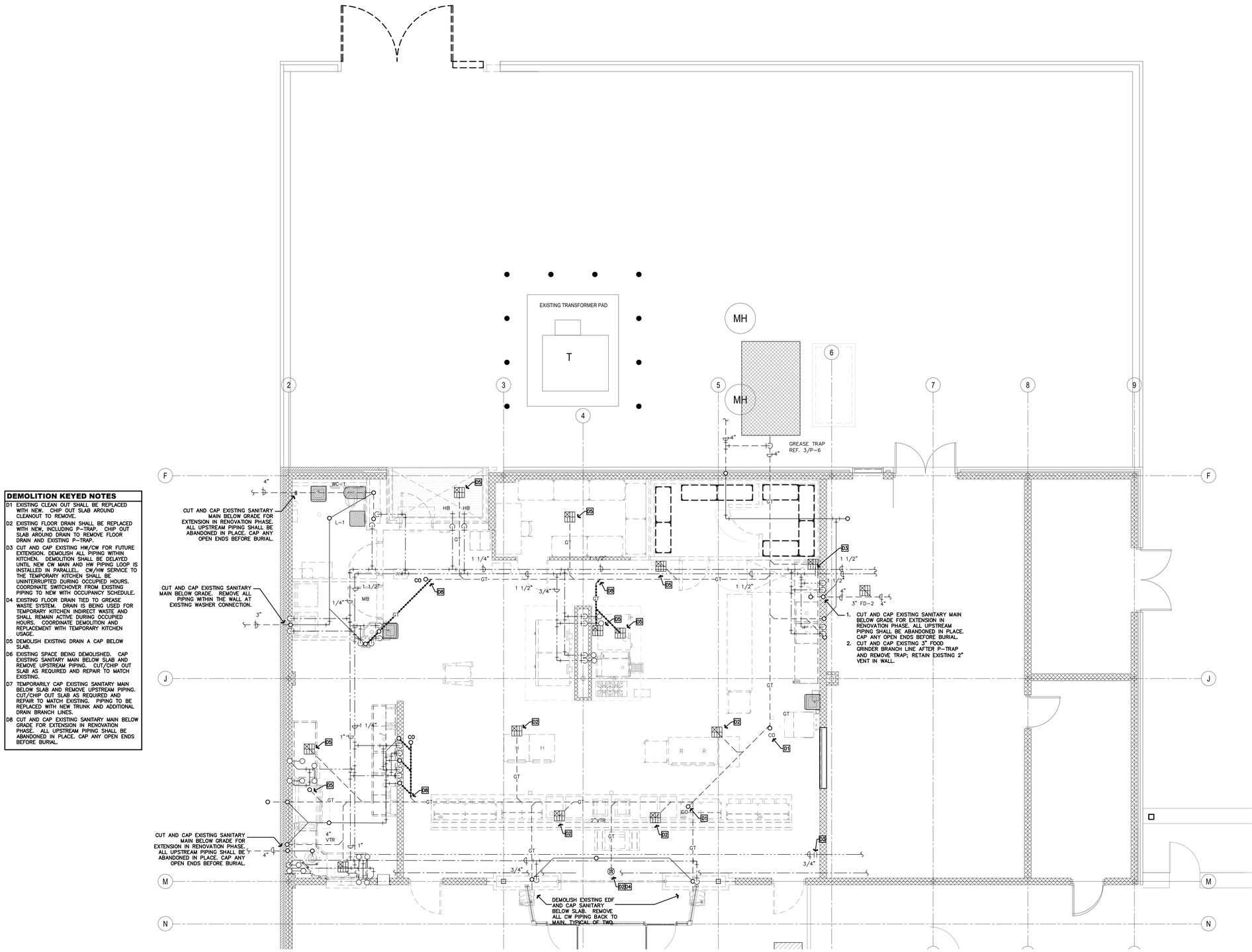

DEMOLITION KEYED NOTES

D1 EXISTING CLEAN OUT SHALL BE REPLACED WITH NEW. CHIP OUT SLAB AROUND CLEANOUT TO REMOVE.

D2 EXISTING FLOOR DRAIN SHALL BE REPLACED WITH NEW, INCLUDING P-TRAP. CHIP OUT SLAB AROUND DRAIN TO REMOVE FLOOR DRAIN AND EXISTING P-TRAP.

D3 CUT AND CAP EXISTING HW/CW FOR FUTURE EXTENSION. DEMOLISH ALL PIPING WITHIN KITCHEN. DEMOLITION SHALL BE DELAYED UNTIL NEW CW MAIN AND HW PIPING LOOP IS INSTALLED IN PARALLEL. CW/HW SERVICE TO THE TEMPORARY KITCHEN SHALL BE UNINTERRUPTED DURING OCCUPIED HOURS. COORDINATE SWITCHOVER FROM EXISTING PIPING TO NEW WITH OCCUPANCY SCHEDULE.

D4 EXISTING FLOOR DRAIN TIED TO GREASE WASTE SYSTEM. DRAIN IS BEING USED FOR TEMPORARY KITCHEN INDIRECT WASTE AND SHALL REMAIN ACTIVE DURING OCCUPIED HOURS. COORDINATE DEMOLITION AND REPLACEMENT WITH TEMPORARY KITCHEN USAGE.

D5 DEMOLISH EXISTING DRAIN A CAP BELOW SLAB.

D6 EXISTING SPACE BEING DEMOLISHED. CAP EXISTING SANITARY MAIN BELOW SLAB AND REMOVE UPSTREAM PIPING. CUT/CHIP OUT SLAB AS REQUIRED AND REPAIR TO MATCH EXISTING.

D7 TEMPORARILY CAP EXISTING SANITARY MAIN BELOW SLAB AND REMOVE UPSTREAM PIPING. CUT/CHIP OUT SLAB AS REQUIRED AND REPAIR TO MATCH EXISTING. PIPING TO BE REPLACED WITH NEW TRUNK AND ADDITIONAL DRAIN BRANCH LINES.

D8 CUT AND CAP EXISTING SANITARY MAIN BELOW GRADE FOR EXTENSION IN RENOVATION PHASE. ALL UPSTREAM PIPING SHALL BE ABANDONED IN PLACE. CAP ANY OPEN ENDS BEFORE BURIAL.

1 PLUMBING DEMOLITION FLOOR PLAN

SCALE: 1/4" = 1'- 0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

p

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD SOUTH DRIVE
RICHMOND, TX 77406

SEAL

STATE OF TEXAS
TYLER W. HERRING
106052
LICENSED
PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

PLUMBING DEMOLITION FLOOR PLAN

p-PD1.01

STANTON ENGINEERING GROUP
INFORMATION PLEASE | TEXAS REGISTERED ENGINEERING FIRM F-12,443 | (713) 300-6080 | 1300 W. SAM HOUSTON PARKWAY S., SUITE 125, HOUSTON, TX 77042

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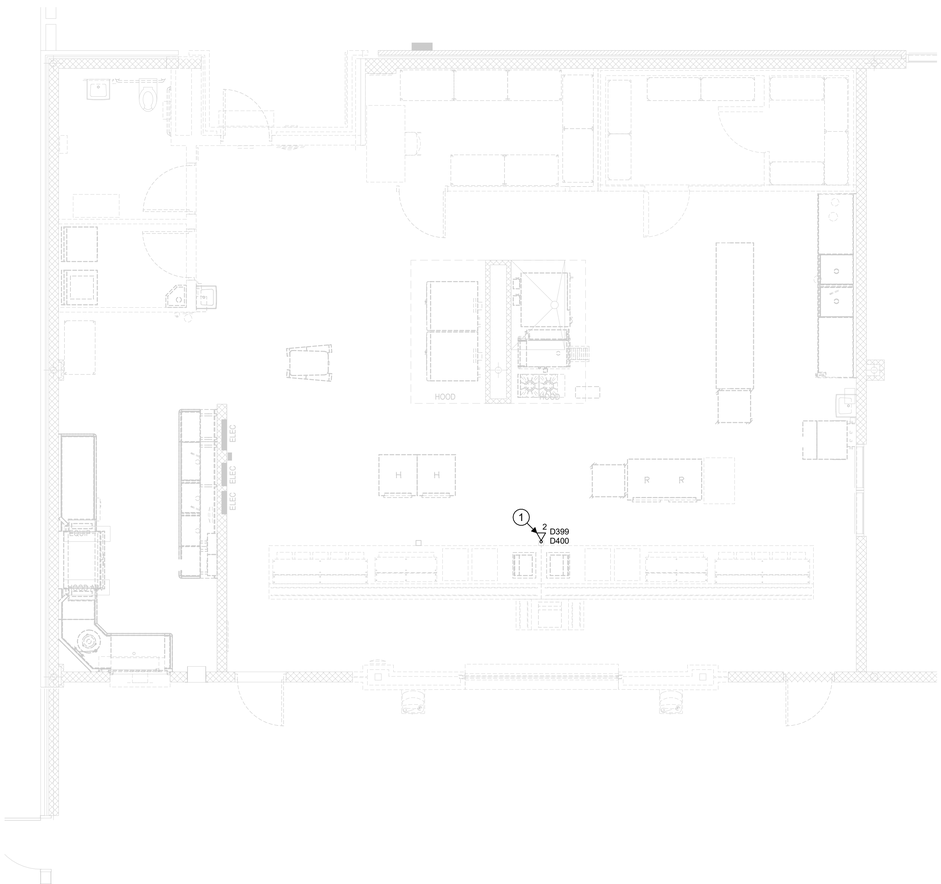

1 TECHNOLOGY DEMOLITION FLOOR PLAN
p-TD201 1/4" = 1'-0"

TECHNOLOGY DEMOLITION PLAN GENERAL NOTES

1. ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS SHALL REMAIN OPERATIONAL AT ALL TIMES DURING BUSINESS HOURS UNLESS OTHERWISE NOTED. ANY SYSTEM DOWNTIME SHALL BE SCHEDULED WITH THE ARCHITECT/ENGINEER AND OWNER AT LEAST TEN (10) WORKING DAYS IN ADVANCE. CONTRACTOR SHALL DEVELOP A PHASING PLAN AND SCHEDULE OF ANY REQUIRED SYSTEM DOWNTIME FOR REVIEW AND APPROVAL BY THE ARCHITECT/ENGINEER AND OWNER PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. OWNER SHALL BE RESPONSIBLE FOR POWER DOWN AND START-UP OF ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT/ENGINEER AND OWNER AND PROVIDE A MINIMUM OF TEN (10) WORKING DAYS NOTICE FOR SCHEDULING OF ANY REQUIRED DOWNTIME.
3. ALL EXISTING WIRELESS ACCESS POINTS ARE TO BE REMOVED AND RETURNED TO OWNER. CONTRACTOR SHALL RE-INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.
4. COORDINATE REMOVAL OF EXISTING CAMERA WITH OWNER/ARCHITECT DURING CONSTRUCTION.

TECHNOLOGY DEMOLITION PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

(1) EXISTING DATA/VOICE/WIRELESS ACCESS POINT OUTLET TO BE REMOVED. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL 4-PAIR CABLES AND WORKSTATION CONNECTING HARDWARE TERMINATED AT THIS LOCATION. IF LOCATION IS NOT RE-USED, CONTRACTOR SHALL SUPPLY AND INSTALL BLANK COVER. CONTRACTOR IS TO REMOVE EACH CABLE TO BE DEMOLISHED FROM THE PATCH PANEL OR TERMINATION BLOCK IN THE TELECOMMUNICATIONS ROOM. REMOVE THE ENTIRE LENGTH OF THE CABLE AND THE CORRESPONDING MODULAR CONNECTOR, FACEPLATE AND ACCESSORIES. NO ABANDONED CABLING IS TO BE LEFT ABOVE CEILING. CONTRACTOR SHALL INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.

(2) EXISTING VIDEO SURVEILLANCE CAMERA. CONTRACTOR SHALL REMOVE AND RETURN TO OWNER.

ISSUE:

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03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD SOUTH DRIVE
RICHMOND, TX 77406

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

MWA ARCHITECTS
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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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TECHNOLOGY DEMOLITION FLOOR PLAN

SHEET NO.
p-TD201

NUMBERED NOTES: FOR 2/a-A.101

1. COOLER RENTAL UNIT; APPROX. 8' X 10' BASIS OF DESIGN: MODEL DT810 BY POLAR LEASING REFRIGERATION RENTAL
2. INCLUDE OPTIONAL DIAMOND TREAD RAMP SUITABLE FOR WHEELED TRAFFIC
3. LOCATION SHOWN IS SUBJECT TO OWNER APPROX. LOCATION MUST NOT BLOCK DELIVERIES TO REAR DOOR, MUST BE WITH 10' OF AREA DRAIN, AND WITHIN 100' OF ELECTRICAL POWER.
4. CONTRACTOR SHALL SCAN PAVING FOR BURIED UTILITIES BEFOR CUTTING CONC.



2 ENLARGED SITE PLAN
SCALE: 1/8" = 1'-0"

1 SITE PLAN
SCALE: 1" = 30'-0"

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL

REGISTERED ARCHITECT
NOE ALMAGUER
22651
STATE OF TEXAS

7/15/2025

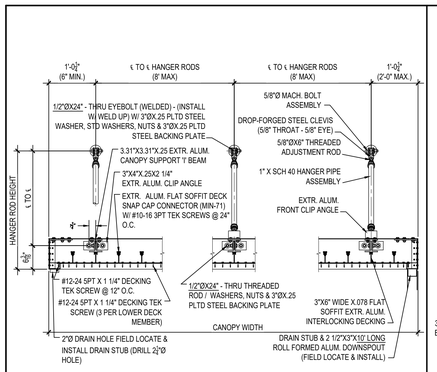
MWA ARCHITECTS

ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

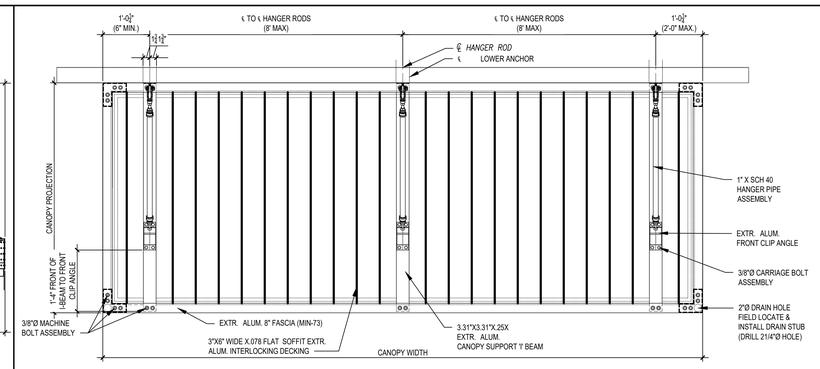
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

SITE PLAN

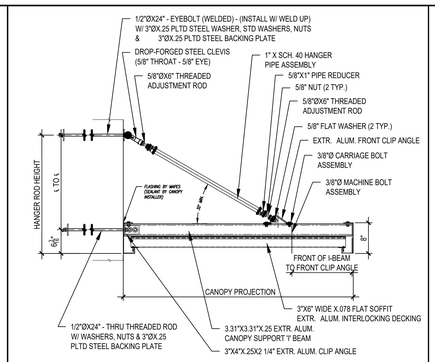
p-A.101



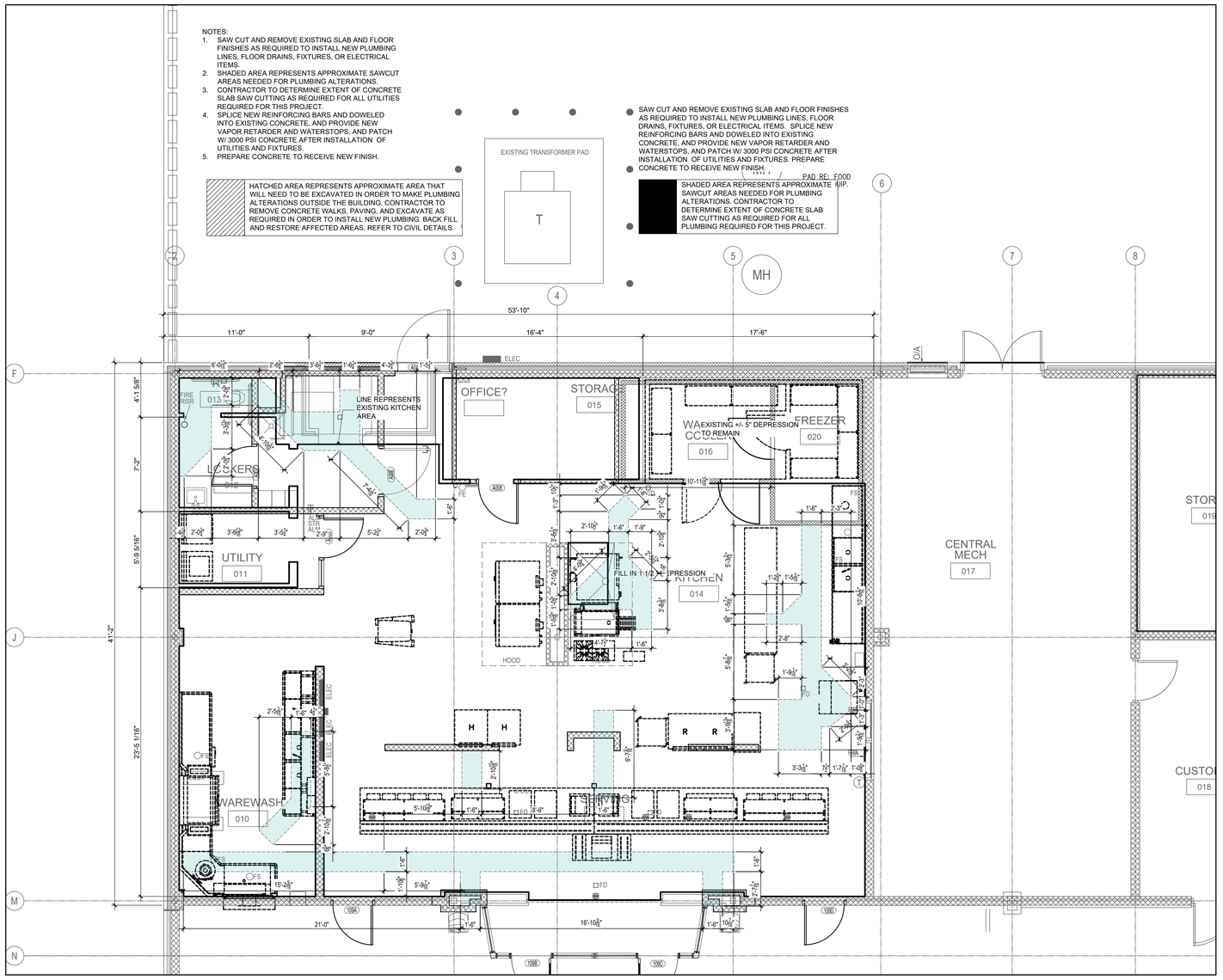
10 CANOPY DETAILS
3/4" = 1'-0"



11 CANOPY PLAN
3/4" = 1'-0"



12 CANOPY SECTION
3/4" = 1'-0"



1 SLAB DEPRESSION PLAN
SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL
REGISTERED ARCHITECT
MICHAEL A. WHITE
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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SLAB DIMENSION CONTROL PLAN
p-A.200

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2 CODE ANALYSIS

SCOPE OF WORK: KITCHEN REPLACEMENT OF FLOOR, WALL, AND CEILING FINISHES, AS WELL AS, REPLACEMENT OF KITCHEN EQUIPMENT. PROVIDE SECURITY CAMERAS OVER SERVING LINE.

FORT BEND COUNTY BUILDING CODES:

- 2021 INTERNATIONAL FIRE CODE

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY:

SPRINKLERED

INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS	**B**
CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS	**C**
ROOMS AND ENCLOSED SPACES	**C**

FLOORING SHALL BE CLASS II

2021 INTERNATIONAL EXISTING BUILDING CODE

301.3.1 PRESCRIPTIVE COMPLIANCE METHOD. REPAIRS, ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH CHAPTER FIVE OF THIS CODE IN BUILDINGS COMPLYING WITH THE INTERNATIONAL FIRE CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

302.3 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE .

302.4 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED THAT NO UNSAFE CONDITION IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT PERMIT THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

ALTERATION - LEVEL 1 INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES THAT SERVE THE SAME PURPOSE.

ALTERATION - LEVEL 2 INCLUDE THE ADDITION OR ELIMINATION OF ANY DOOR OR WINDOW, THE RECONFIGURATION OR EXTENSION OF ANY SYSTEM. OR THE INSTALLATION OF ANY ADDITIONAL EQUIPMENT, AND SHALL APPLY WHERE THE WORK IS EQUAL TO OR LESS THAN 50% OF THE BUILDING AREA.

THIS BUILDING'S CONSTRUCTION IS TYPE IIB.

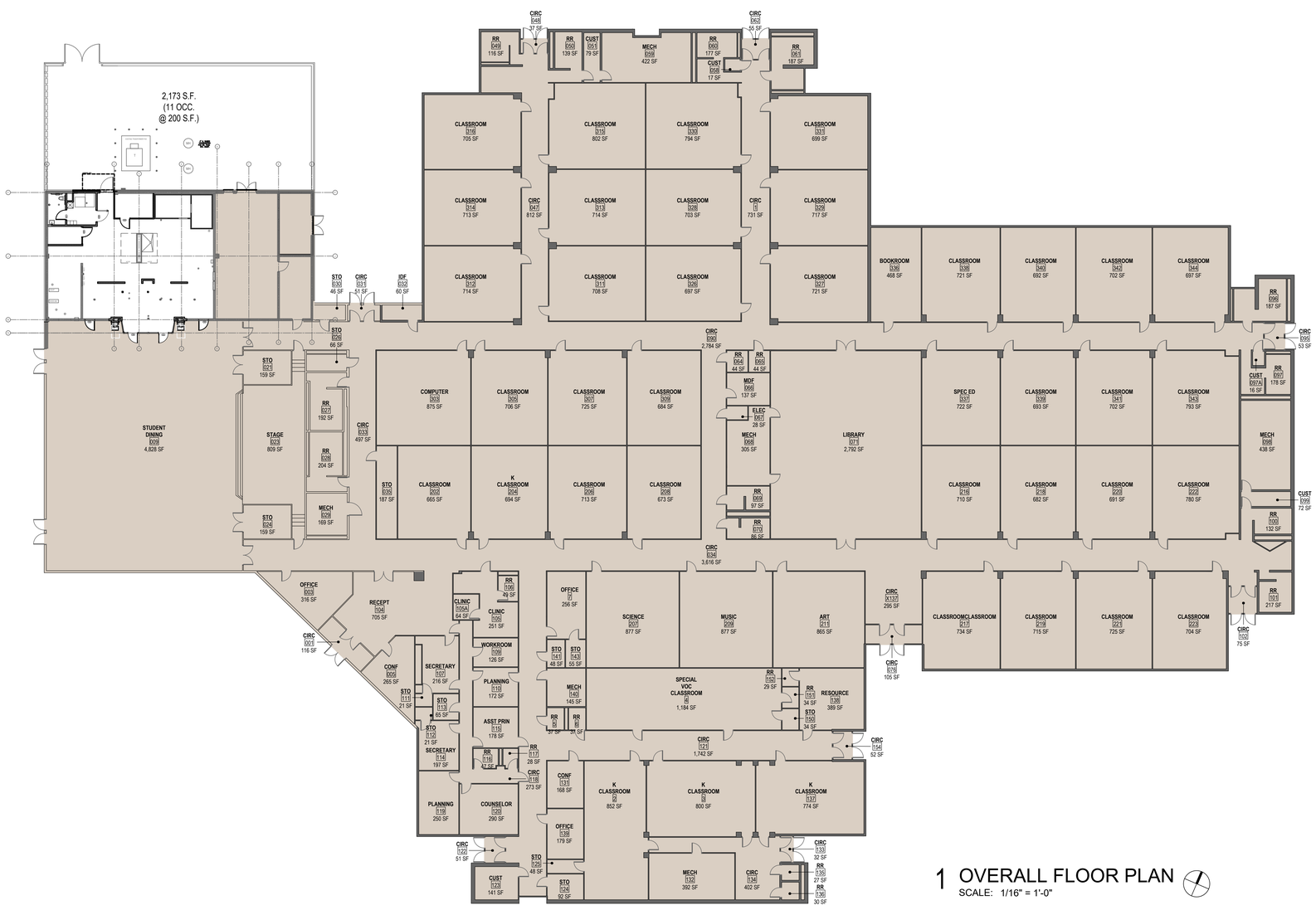
THIS BUILDING'S OCCUPANCY IS E.

THIS BUILDING'S IS SPRINKLERED.

THERE WILL NOT BE ANY MODIFACATIONS TO THE HOOD SYSTEMS IN THE KITCHENS BEYOND REPLACEMENT OF MOTOR FOR LIKE KIND IF NEEDED.

THE BUILDING WILL NOT HAVE ADDITIONAL SQUARE FOOTAGE AS PART OF THE WORK.

NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODES



1 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

ISSUE:
12/05/2024 DD PACKAGE
03/11/2025 50% CD PKG.
05/23/2025 90% CD PKG.
07/18/2025 ISSUED FOR BIDDING AND PERMITTING

p

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL
REGISTERED ARCHITECT
MICHAEL A. WILLIAMS
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

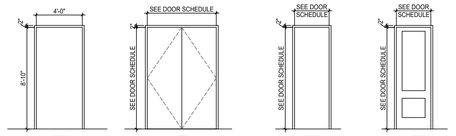
OVERALL FLOOR PLAN

p-A.201

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\P-Pecan Grove ES\p-A.201 FLOOR PLAN.dwg, Jul 23, 2025 - 4:34pm

DOOR SCHEDULE

DOOR #	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FIRE RATING	FRAME THICKNESS	FRAME FINISH	KEY	HARDWARE	DETAILS			REMARKS
											SILL	JAMB	HEAD	
A005	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		103		22/A00-01	16/A00-01	
A006	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501		22/A00-01	16/A00-01	
A007	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		341		22/A00-01	16/A00-01	
A008	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501C		22/A00-01	16/A00-01	
A012	4'-0"	X 7'-0"	HM1	H.M.	PAINT	NR	6"	PAINT HM		715V	21/A00-01	04/A00-01	04/A00-01	
109A	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501H		22/A00-01	16/A00-01	
109B	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ANOD AL	NR	4 1/2"	ANOD AL		C201AH	18/A00-01	10&11/A00-01	23&24/A00-01	CARD READER, CLOSER, BUZZER
109C	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ANOD AL	NR	4 1/2"	ANOD AL		C201AH	18/A00-01	10&11/A00-01	23&24/A00-01	CARD READER, CLOSER, BUZZER
109D	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501H		22/A00-01	16/A00-01	



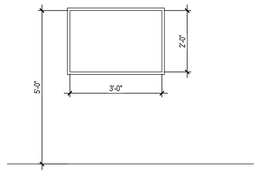
NEW DOOR AND FRAME HOLLOW METAL DOOR NEW H.M. FRAME

NEW DOOR AND FRAME HOLLOW METAL DOOR NEW H.M. FRAME

NEW DOOR AND FRAME S. C. WOOD DOOR ALUM. FRAME

NEW DOOR AND FRAME ALUM/GLASS ALUM. FRAME

3 DOOR SCHEDULE

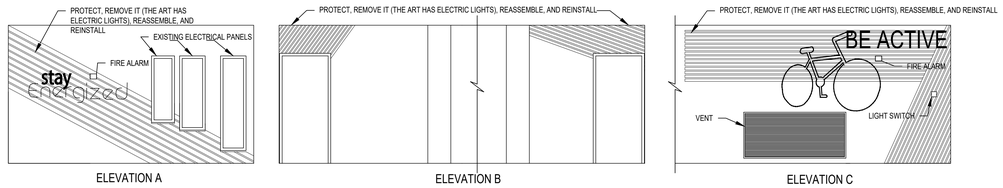


4 MAKERBOARD ELEVATION

SCALE: 1/2"=1'-0"

RESPONSIBILITY MATRIX

ITEM				CONTRACTOR RESPONSIBILITY		OWNER RESPONSIBILITY		NOTES
EQUIPMENT	**MAKE**	**MODEL**	**BASIS OF DESIGN**	FURNISHED	INSTALL	FURNISHED	INSTALL	
MARKERBOARD			MUST BE MAGNETIC; LOW GLOS, WHITE. NO GREY ALLOWED. 5' X 10'	X	X			
MOTORIZED FOLDING PARTITION			TOP SUPPORTED AND CONTINUOUSLY HINGED, MADE OF 3" THICK STEEL WITH FULL SOUND SEALS. THEY FEATURE AUTOMATIC FLOOR SEALS THAT DEPLOY WHEN POSITIONED. MARKERBOARD FINISHES ARE SUGGESTED FOR CLASSROOM USE. LARGE PARTITIONS SHOULD BE ELECTRONICALLY OPERATED, INTEGRATED WITH THE SCHOOL SYSTEM, AND SUPPORTED FROM THE BOTTOM IN A RECESSED MANNER.	X	X			
PAPER TOWEL DISPENSER			1 PAPER TOWEL DISPENSER PER SINK		X	X		
SOAP DISPENSER			1 SOAP DISPENSER PER SINK		X	X		
COMMERCIAL WASHER	GE	GTW750CPLDG	STAINLESS STEEL; ASTM A666, TYPE 304 WITH NUMBER 4 FINISH. ELECTRIC, 480 VOLTS, 40 LB CAPACITY. MINIMUM EXTRACTOR FORCE 140 G FACTOR.	X	X			
COMMERCIAL DRYER	GE	GTD75ECPLDG	HEAVY DUTY EMBOSSED STEEL WITH ELECTROSTATICALLY APPLIED BACKED ENAMEL FINISH.	X	X			
MOP RACK			BROOM AND MOP HANGGERS FOR A MINIMUM OF TWELVE (12) HANGERS TO BE PROVIDED IN THE CONTRACT	X	X			
KITCHEN MENU SYSTEM DEVICE			RE: J-QFI 0 SF EQUIPMENT PLAN	X	X			REFERED TO IT DRAWINGS
LOCKERS			12"W X 15"D, 2 TIER, 60" HIGH. 16 GA. DOOR WITH 20GA. BODY	X	X			
MIRROR			TOP EDGE 74 INCHES (1880 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND & BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES (1015 MM) MAXIMUM	X	X			
GRAB BARS			AS REQUIRED BY ADA	X	X			
HOOKS			J-HOOKS	X	X			
TIME CLOCK	KRONOS		EXISTING UNIT		X			COORDINATE HEIGHT, DATA, POWER AND ROUGH-IN REQUIREMENTS WITH FBISD IT. REMOVE, PROTECT & REINSTALL EXISITING TIME CLOCK.
KITCHEN OFFICE FURNITURE								
AUSTIN PARKWAY ES						X	X	
PECAN GROVE ES						X	X	
SETTLERS WAY ES						X	X	
SUGAR MILL ES						X	X	
HIGHLANDS ES						X	X	
PALMER ES						X	X	
HUNTERS GLEN ES						X	X	



ELEVATION A

ELEVATION B

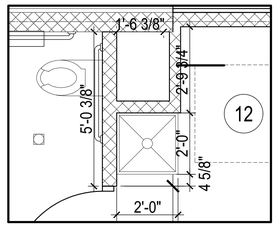
ELEVATION C

5 OWNER PROVIDED ARTWORK IN PLACE NOW

SCALE: 1/4"=1'-0"

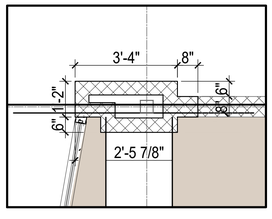
1. INSPECT CURRENT INSTALLATION & PHOTOGRAPH
2. CAREFULLY REMOVE AND STORE ARTWORK IN LOCATION DESIGNATED BY SCHOOL. PROTECT FROM DAMAGE
3. RE-INSTALL AS PER CURRENT CONDITION

NOTE: THIS ARTWORK IS LIGHTED. PERSERVE CIRCUTS



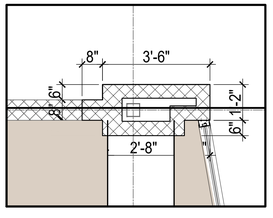
5 ENLARGED VIEW

SCALE: 1/2"=1'-0"



6 ENLARGED VIEW

SCALE: 1/2"=1'-0"



7 ENLARGED VIEW

SCALE: 1/2"=1'-0"

FLOOR PLAN - GENERAL NOTES

1. REFER TO SHEET FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SCHOOL KITCHENS.
2. REFER TO SHEET FOR PARTITION TYPES.
3. EXIXSTING EXPOSED CONDUITS AND DATA CABLING IN WIREMOLD TO BE ROUTED INSIDE WALLS (EXCEPT AT WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS). PATCH AND REPAIR AS REQUIRED TO ACHIEVE SMOOTH CLEAN WALL SURFACE.

PARTITION LEGEND

- EXISTING CMU PARTITION
- NEW CMU SCHEDULED PARTITION
- EXISTING METAL PARTITION
- NEW FRAMED SCHEDULED PARTITION

2 FLOOR PLAN NOTES

FLOOR PLAN - KEYED NOTES

(NOT ALL NOTES USED ON EACH SHEET)

01 PROVIDE NEW MOP SINK UTILITY SHELF
RE: PLUMBING FOR MOP SINK
RE: SPEC 10 28 00 FOR UTILITY SHELF

02 REMOVE, STORE & REPLACE WALL MOUNTED FIRE EXTINGUISHER

03 PROVIDE NEW WALL MOUNTED FIRE EXTINGUISHER
RE: SPEC SECTIONS 10 44 13

04 PROVIDE NEW LOCKERS
RE: SPEC 10 51 13.

05 PROVIDE WASHER AND DRYER
RE: SPEC 11 45 20

06 REMOVE, PROTECT & REINSTALL WALL MOUNTED CLOCK.

07 PROVIDE CONDENSING UNIT
FOR WALK-IN COOLER/FREEZER
RE: MECHANICAL AND SPEC 11 40 00

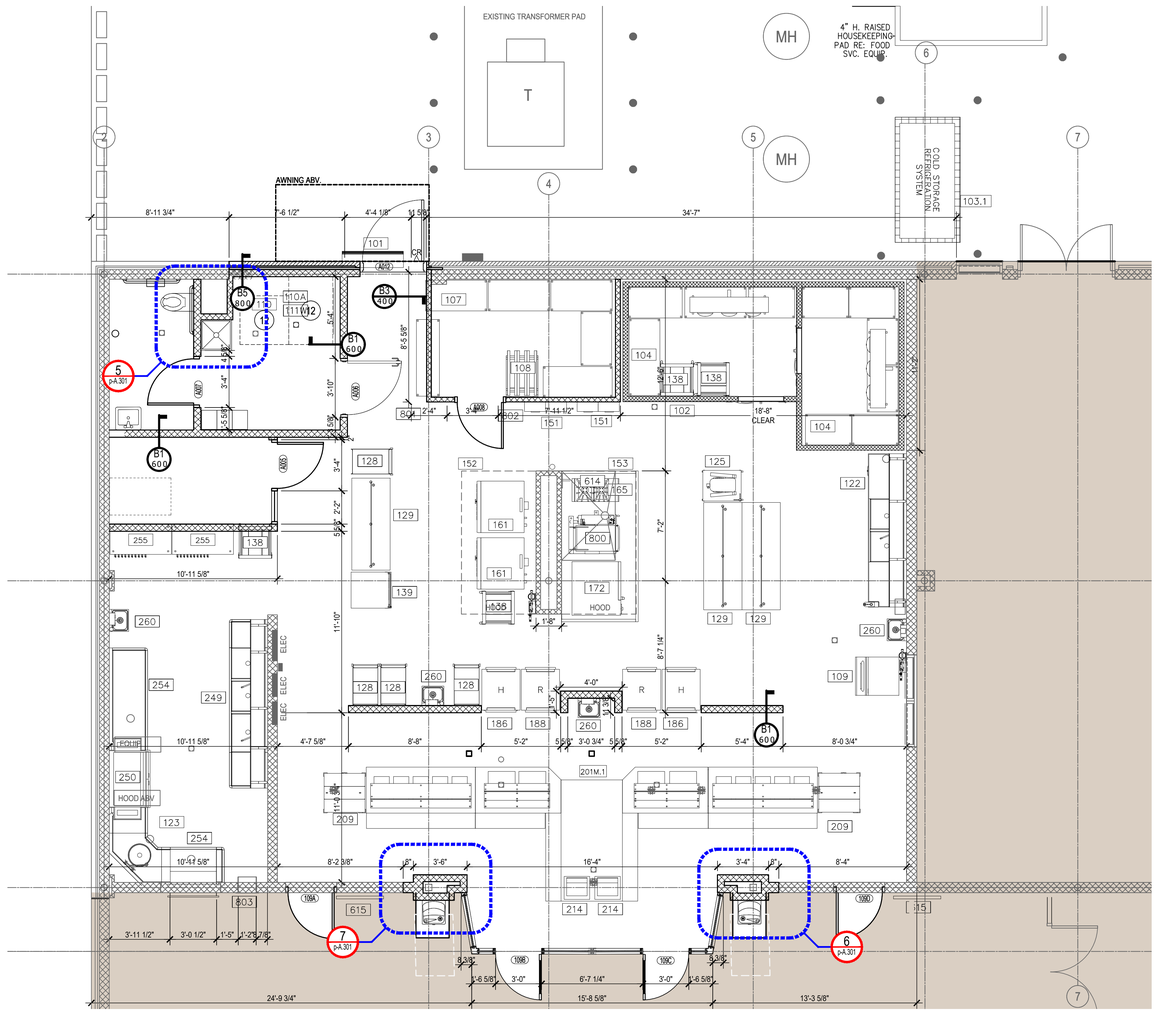
08 PROVIDE POWER AND DATA FOR MENU BOARD.
RE: ELECTRICAL, TECHNOLOGY DRAWINGS & FOOD SI

09 PROVIDE P-LAM SHELVING
REFER TO DETAIL FOR BRACKET SUPPORT

10 FURNITURE & NON FOOD SVE EQUIPMENT RETURN TC STORAGE

11 INSPECT & SREVICE TOLLING COUNTER DOORS. RETU NEW CONDITION.

12 COMMERCIAL CLOSED WASHER 40LB CAPACITY.
COMMERCIAL CLOSED DRYER 55LB CAPACITY.
BASIS OF DESIGN: WASHER; SPEED QUEEN SYN040
DRYER; SPEED QUEEN ST055.
REFER TO ELECTRICAL & PLUMBING FOR CONNECTIOI



1 KITCHEN PLAN

SCALE: 1" = 4'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL

REGISTERED ARCHITECT
KOREY A. NEWMAN
22551
STATE OF TEXAS

7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

KITCHEN PLAN

p-A.301

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TEMPORARY KITCHEN FLOOR PLAN KEYED NOTES 05/A-A03-02

01 PROVIDE & INSTALL 555 SF OF RAM BOARD TO PROTECT EXISTING FLOORING. REMOVE AFTER CONSTRUCTION IS COMPLETE. CONTRACTOR MUST REPAIR FLOORING DAMAGED DURING CONSTRUCTION.

02 PROVIDE SCHEDULED PARTITIONS. BUILD PARTITIONS ON TOP OF RAM BOARD. DO NOT ATTACH PARTITIONS TO FLOOR.

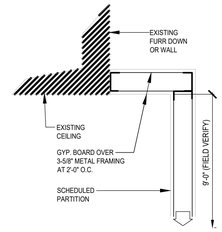
03 ATTACH PARTITIONS TO EXISTING WALL. REPAIR WALL TO MATCH EXISTING AFTER CONSTRUCTION IS COMPLETE.

TEMPORARY KITCHEN RCP KEYED NOTES 03/A-A03-02

04 ALL NEW SCHEDULED PARTITIONS AND CEILINGS FOR TEMPORARY STORAGE LAYOUT TO BE EPOXY PAINTED SW 7014 EIDER WHITE WITH SPECIFIED 4" RUBBER BASE. REMOVE WHEN CONSTRUCTION IS COMPLETED.

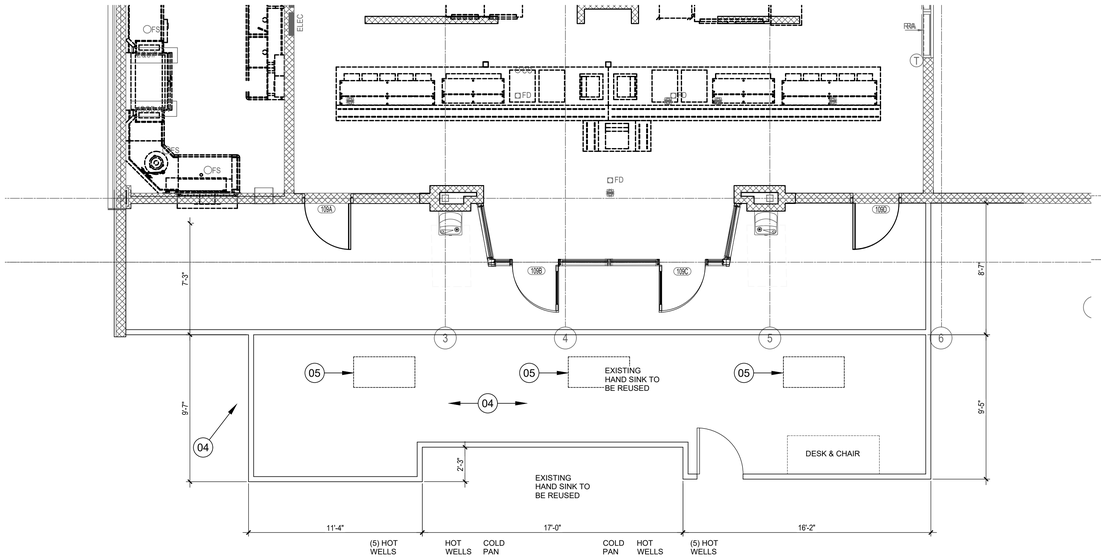
05 MOUNT TEMPORARY FLUORESCENT LIGHTS TO TEMPORARY CEILING.

3 KEYED NOTES



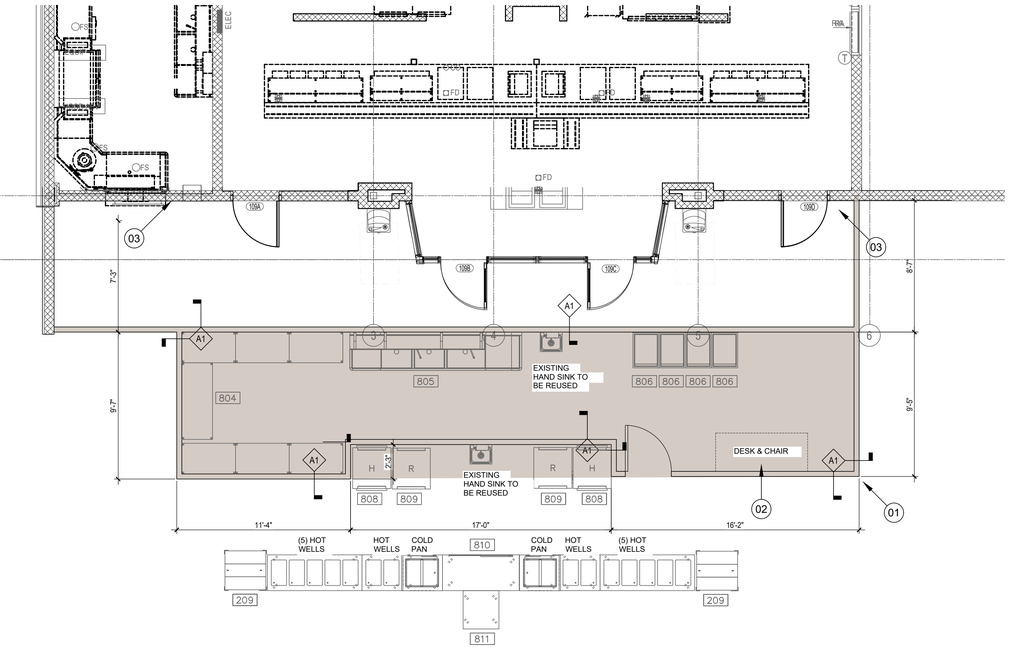
4 TEMPORARY LAYOUT SECTION

SCALE: 1"=1'-0"



1 KITCHEN PLAN

SCALE: 1/4" = 1'-0"



2 TEMPORARY KITCHEN FLOOR PLAN

SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

p

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL

REGISTERED ARCHITECT
MELISSA A. MADDEN
#29651
STATE OF TEXAS

7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

TEMPORARY KITCHEN LAYOUT
p-A.302

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RCP - GENERAL NOTES

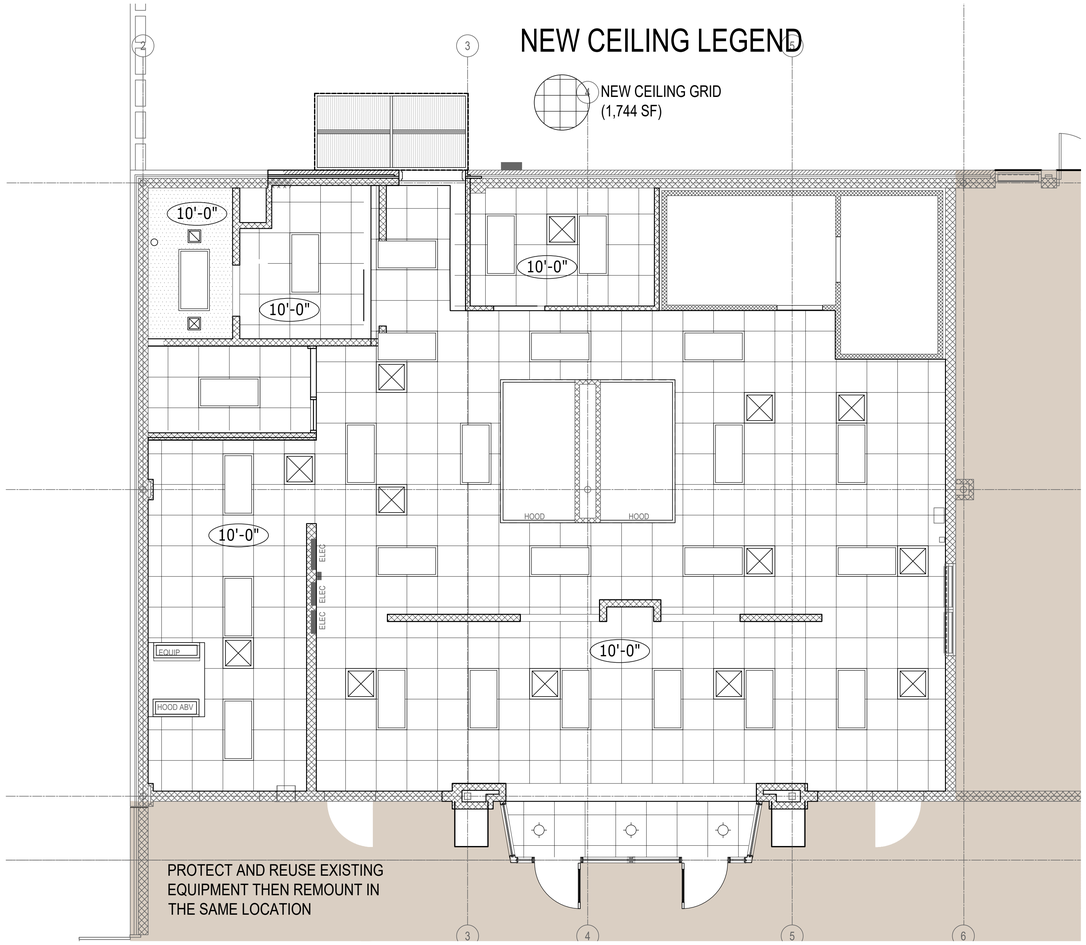
1. CEILING GRID SHALL BE INSTALLED TO MATCH EXISTING GRID'S POINT OF ORIGIN. THIS WILL REDUCE NEED TO RE-LOCATE ABOVE CEILING DUCTS, SPRINKLER PIPING AND OTHER SUPPORT SYSTEMS.
2. REFER TO SHEET A00-01 FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SEVEN SCHOOL KITCHEN REMODELS.
3. LIGHTING LEVELS SHOULD BE 50 FC IN PREPARATION AREAS, WARE WASH AND SERVING LINES, OR MEET MINIMUM HEALTH CODE LEVELS, WHICHEVER ITS GREATER. SEE MEP PLANS
4. REPLACE HVAC DEVICES. REPLACE LIGHTING WITH 24"x24" LED LAY IN LIGHT AS SCHEDULED IN ELECTRICAL PLANS.
5. REFER TO MECHANICAL, ELECTRICAL SHEETS FOR DEVICE SCHEDULES.

RCP - NUMBERED NOTES

01 PROVIDE 30"x30" MIN. ACCESS HATCH IN SOFFIT CENTERED ON MOTOR.

02 AFTER LOWERING THE NEW POWER RETRACTION SYSTEM. REPAIR AND PAINT SOFFITS AND SIDWALLS OF FURR TO MATCH EXISTING.

2 RCP GENERAL NOTES



1 REFLECTED CEILING PLAN

SCALE: 1/4" = 1'-0"



3 FOOD SERVICE AREA ELEVATION

SCALE: 3/16" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
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07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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RICHMOND, TX 77406

SEAL
REGISTERED ARCHITECT
ROBERT W. WILLIAMS
22651
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7/15/2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

REFLECTED CEILING PLAN

p-A.401

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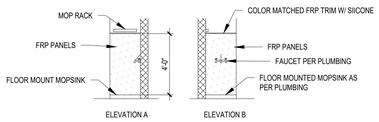
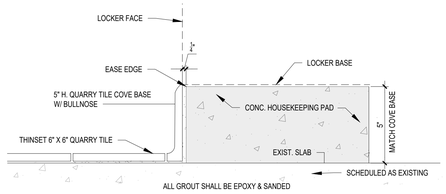
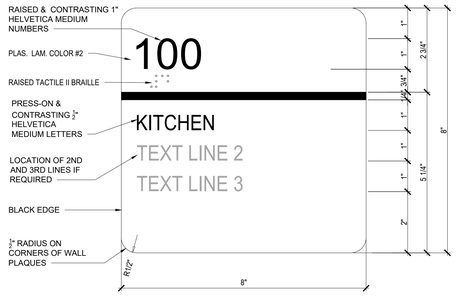


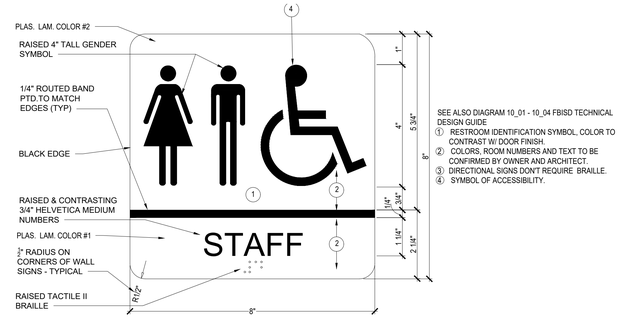
3 MOPSINK ELEVATIONS
SCALE: 1/4"=1'-0"



4 LOCKER HOUSEKEEPING PAD
SCALE: 3"=1'-0"



TYPE A
ROOM SIGNAGE - FIXED NAMES



TYPE B
KITCHEN RESTROOM SIGNAGE

7 ROOM SIGNAGE
SCALE: 6"=1'-0"

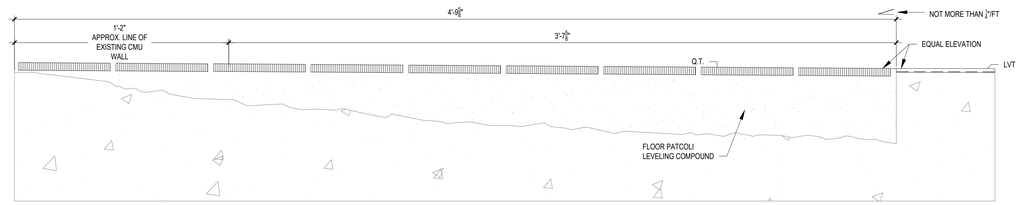
PAINT COLOR SCHEDULE
UNLESS OTHERWISE INDICATED FIELD COLOR IS PT-1 (SW 7014 EIDER WHITE)
SW 7014 EIDER WHITE (EPOXY PAINT)

WALL TILE
CERAMIC WALL TILE (WT-1)
REFER TO TILE PATTERN AT SERVING AND RESTROOM
FIELD WALL TILE: DALTILE RITTENHOUSE SQUARE K175 BISCUIT (3X6)

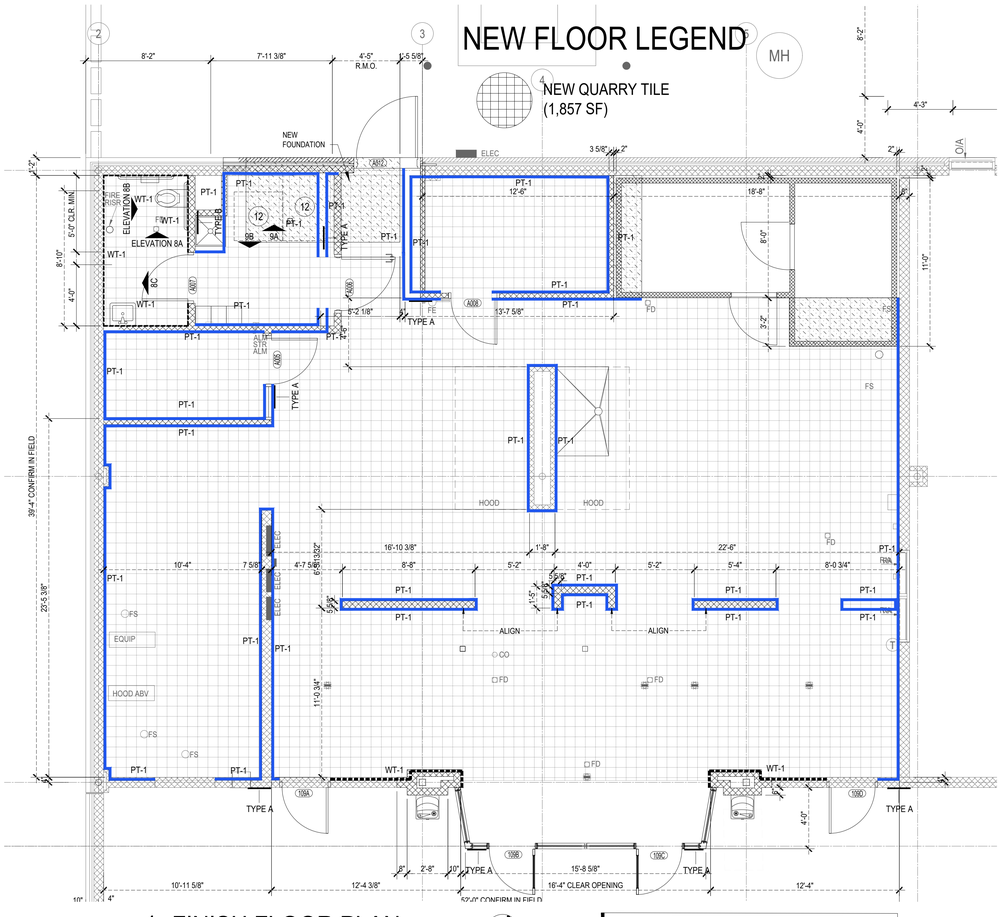
QUARRY TILE
QUARRY TILE AND BASE - SURE-STEP II OQ30
TILE COLOR SELECTION TO BE APPROVED BY FBISD
EPOXY GROUT COLOR: STERLING SILVER BY LATICRETE

A — PROVIDE ROOM SIGN TO REPLACE EXISTING. SEE LAYOUT FOR TYPE A OR TYPE B SIGN LOCATIONS.

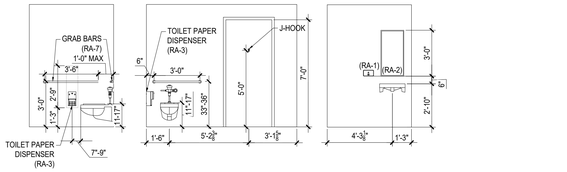
2 FLOOR FINISH LEGEND



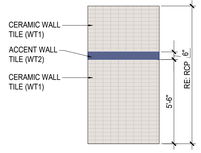
5 FLOOR TRANSITION - THRESHOLD
SCALE: 3"=1'-0"



1 FINISH FLOOR PLAN
SCALE: 1/4" = 1'-0"

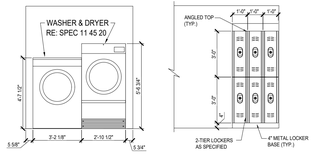


8 RR ELEVATIONS
SCALE: 1/4"=1'-0"

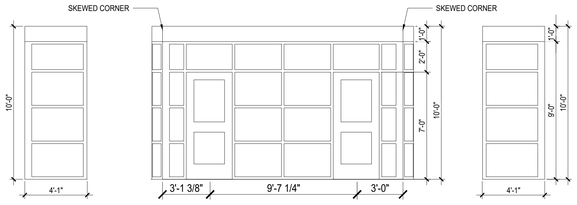


WALL TILE PATTERN - RESTROOM

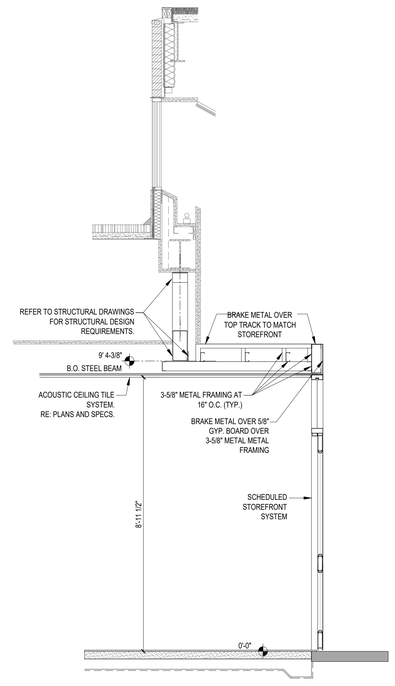
6 WALL TILE PATTERN
SCALE: 1/4"=1'-0"



9 UTILITY ELEVATIONS
SCALE: 1/4"=1'-0"



10 STOREFRONT ELEVATIONS
SCALE: 1/4"=1'-0"



11 STOREFRONT SECTION
SCALE: 1/2"=1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

p

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL
STEPHEN HERRED ARCHITECT
REGISTERED
32651
STATE OF TEXAS
7/15/2025

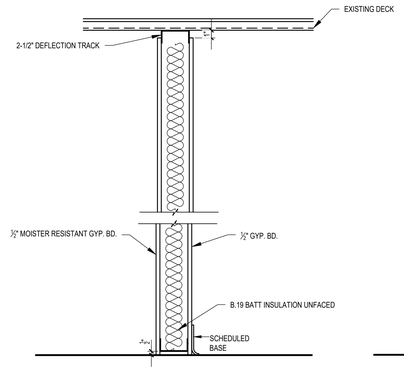
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

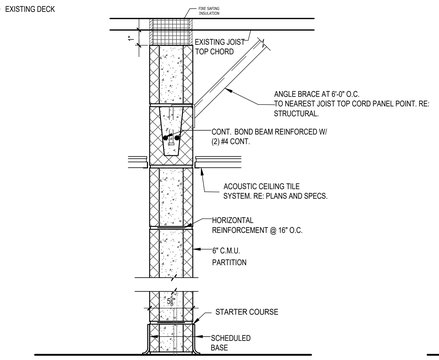
FINISH FLOOR PLAN

p-A.501

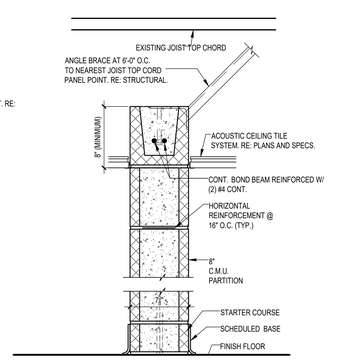
F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\P-Pecan Grove ES\p-A.501 FINISH FLOOR PLAN.dwg Jul 28, 2025 - 6:23pm



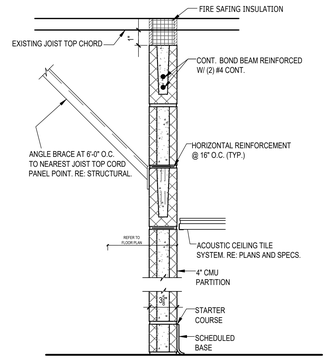
PARTITION A
SCALE: 1-1/2" = 1'-0"



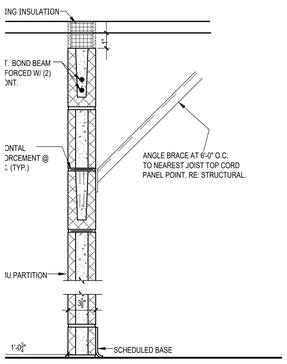
PARTITION B1
SCALE: 1-1/2" = 1'-0"



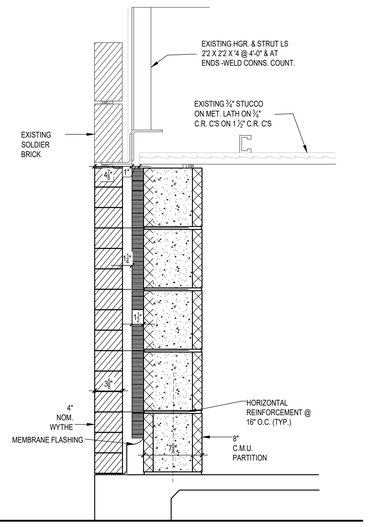
PARTITION B2
SCALE: 1-1/2" = 1'-0"



PARTITION B3
SCALE: 1-1/2" = 1'-0"



RTITION B4
1-1/2" = 1'-0"



PARTITION B5
SCALE: 1-1/2" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.

p

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL

FOR
INTERIM REVIEW
AND NOT INTENDED
FOR CONSTRUCTION,
BIDDING OR PERMIT
PURPOSES.

ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 05/23/25

PARTITION
SCHEDULE

p-A.502

GENERAL NOTES

1. ALL CONCRETE SHALL TEST 4000 PSI AT 28 DAYS.
2. ALL CONCRETE REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60.
3. DETAILING AND FABRICATION OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL BE IN ACCORDANCE WITH ACI-315 LATEST EDITION.
4. LAP ALL CONTINUOUS REINFORCING BARS 50 DIAMETERS AT SPLICES, TEES, AND CORNERS.
5. THE USE OF HEAT TO FACILITATE THE BENDING OF REINFORCING BARS WILL NOT BE PERMITTED.
6. NO ENGINEERING DRAWING MAY BE REPRODUCED FOR USE AS SHOP DRAWINGS.
7. CONTRACTOR SHALL COORDINATE ALL LOCATIONS OF ALL ANCHOR BOLTS AND OPENINGS FOR MECHANICAL, PIPING, AND ELECTRICAL EQUIPMENT WITH THE RESPECTIVE ENGINEERING AND VENDOR DRAWINGS.

SLAB NOTE

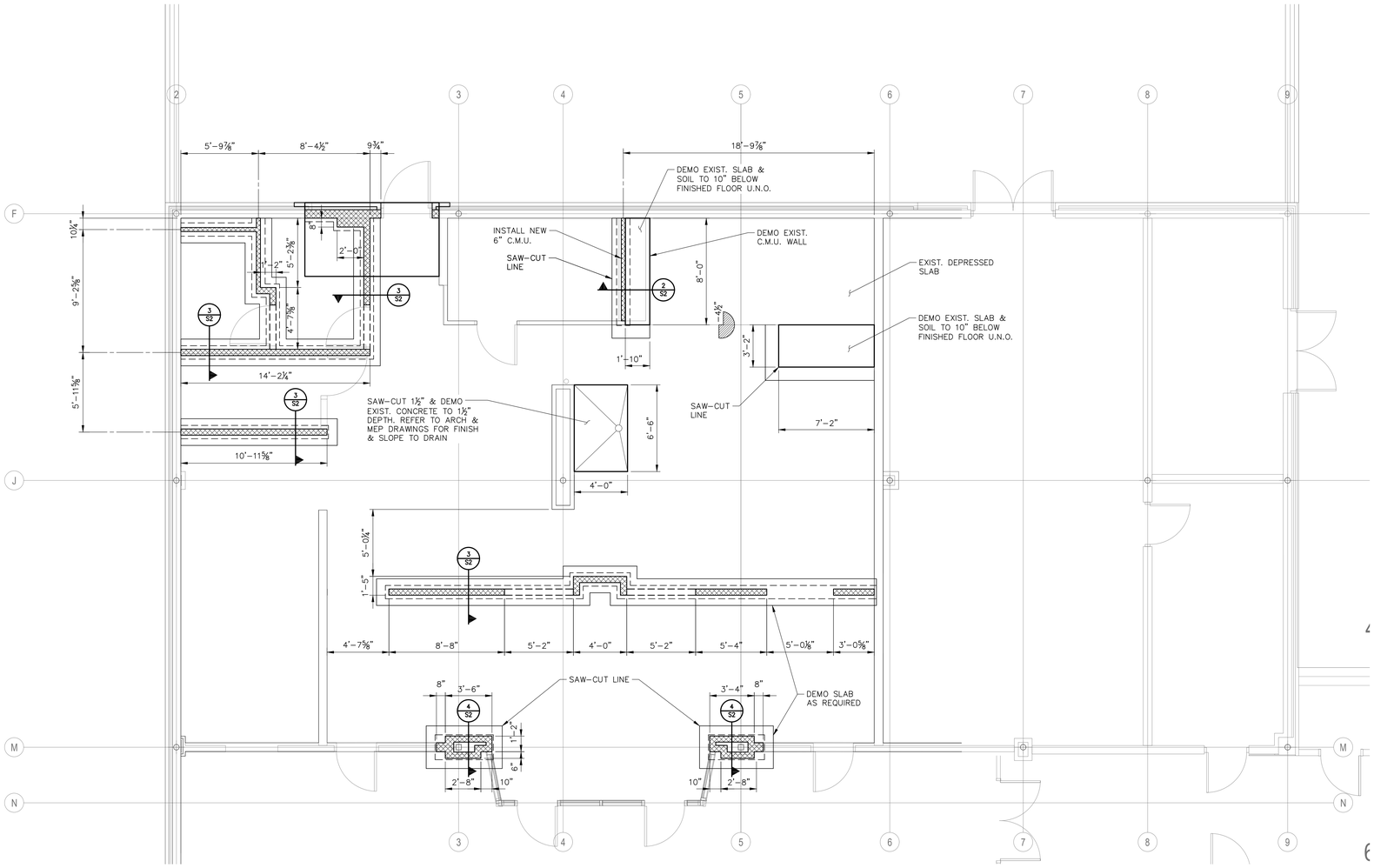
4" CONC. SLAB ON 10 MIL POLY FILM ON 2" MAX. SAND FILL. REINFORCE WITH #3 @ 15"c.c. E.W. IN CENTER OF SLAB.

SLAB SIDEWALK SLAB NOTE

4" CONC. SLAB ON 2" MAX. SAND FILL. REINF. W/ #3 @ 18"c.c. IN CENTER OF SLAB.

GEOTECHNICAL NOTE:

ALLOWABLE BEARING CAPACITY IS ASSUMED TO BE 1500 PSF AND SHALL BE CONFIRMED PRIOR TO CONSTRUCTION.



FOUNDATION PLAN
SCALE: 1/4"=1'-0"

FIELD VERIFICATION NOTE

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR CONSTRUCTION.
2. CONTRACTOR SHALL VERIFY AND NOTIFY ENGINEER OF EXISTING CONDITIONS IN NEED OF REVIEW AND POSSIBLE MODIFICATION PRIOR TO FABRICATION.

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MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

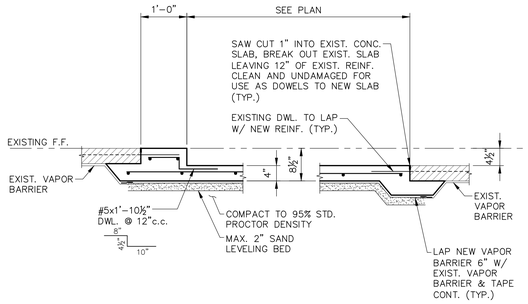
REGISTERED PROFESSIONAL ENGINEER
KEN STANLEY
69701
LICENSED
STATE OF TEXAS
July 17, 2025

STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.B.P.E. Registration # F-000175
www.sshinc.net
3301 Edloe Street, Suite 200 Houston, Texas 77027 Tel 713-776-9433
E-MAIL: info@sshinc.net | 0002-0256

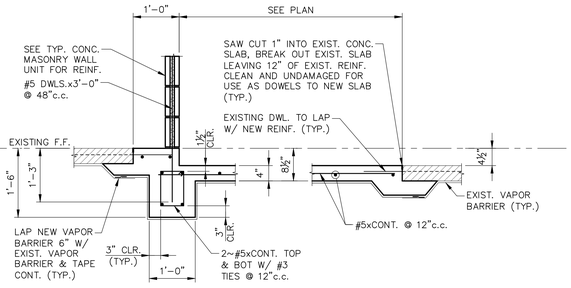
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

KITCHEN PLAN

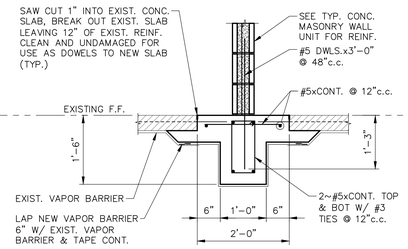
S1



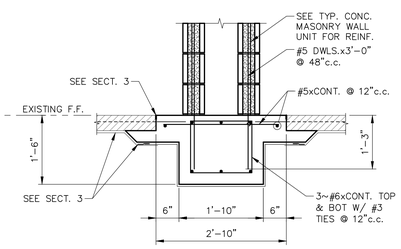
1 SECTION
SCALE: 3/4"=1'-0"



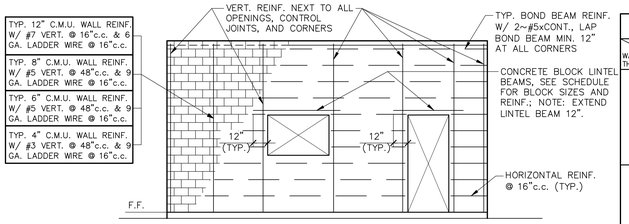
2 SECTION
SCALE: 3/4"=1'-0"



3 SECTION
SCALE: 3/4"=1'-0"



4 SECTION
SCALE: 3/4"=1'-0"



MIN. REBAR LAP SCHEDULE FOR f'm = 1,500 psi

BAR SIZE	6" CMU	8" CMU	10" CMU	12" CMU
#3	12"	12"	12"	12"
#4	20"	15"	12"	12"
#5	32"	23"	18"	15"
#6	54"	43"	34"	28"
#7	NA	60"	46"	38"
#8	NA	72"	71"	57"
#9	NA	NA	82"	74"

CONCRETE MASONRY NOTES

1. CONCRETE MASONRY UNITS AND CONSTRUCTION TO BE PER "NATIONAL CONCRETE MASONRY ASSOCIATION" RECOMMENDATIONS (WHERE NOT COVERED BY THE LOCAL BUILDING CODE).
2. ALL MASONRY GROUT TO BE PER TABLE 1 (THIS SHEET); ALL MORTAR PER TABLE 2 (THIS SHEET).
3. FILL CELLS WITH GROUT AT VERTICAL REINFORCEMENT.
4. CAST-IN-ANCHORS EMBEDDED IN CONCRETE MASONRY SHALL EXTEND BEYOND REINFORCING 1" MIN.
5. COMPRESSIVE STRENGTH OF MASONRY SHALL BE 1500 PSI AT 28 DAYS.
6. CMU SHALL BE PLACED IN A RUNNING BOND PATTERN UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS.
7. CONTROL JOINTS SHALL HAVE NO HORIZONTAL REINFORCING THROUGH THE JOINT AND VERTICAL REINFORCING ON BOTH SIDES OF JOINT. CONTROL JOINTS SHALL BE UNGROUTED WITH A BACKER ROD AND SEALANT ON BOTH SIDES OF WALL.
8. BOND BEAMS AND REINFORCING SHALL BE CONTINUOUS AT CONTROL JOINT WITH BACKER ROD AND SEALANT CONTINUOUS WITH JOINT.

CONCRETE BLOCK LINTEL SCHEDULE

WALL THICKNESS \ MAXIMUM SPAN	4'-6"	9'-0"
4"	GROUT 1 COURSE 1~#4 CONT.	#3 STIRRUPS @ 16" c.c. GROUT 2 COURSES 1~#4 CONT.
6" 8" & 12"	GROUT 1 COURSE 2~#5 CONT.	#3 STIRRUPS @ 16" c.c. GROUT 2 COURSES 2~#5 CONT. TOP & BOT.

TABLE 1. GROUT PROPORTIONS BY VOLUME

TYPE	PARTS BY VOLUME OF PORTLAND CEMENT OR PORTLAND BLAST-FURNACE SLAG CEMENT	PARTS BY VOLUME OF HYDRATED LIME OR LIME PUTTY	AGGREGATE MEASURED IN DAMP, LOOSE CONDITION	
			FINE	COARSE
FINE GROUT (<4" WIDE CAVITY)	1	0 TO 1/10	2¼ TO 3 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL	
COARSE GROUT (>4" WIDE CAVITY)	1	0 TO 1/10	2¼ TO 3 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL	1 TO 2 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL

TABLE 2. MORTAR PROPORTIONS BY VOLUME

MATERIAL	TYPE	PORTLAND CEMENT OR BLENDED CEMENT	MASONRY CEMENT	HYDRATED LIME OR LIME PUTTY	AGGREGATE RATIO (MEASURE IN DAMP, LOOSE CONDITION)
CEMENT LIME	S	1	....	OVER ¼ TO ½	NOT LESS THAN 2¼ & NOT MORE THAN 3 TIMES THE SUM OF THE SEPARATE VOLUMES OF CEMENTITIOUS MATERIALS
MASONRY/ CEMENT	S	1/2	1	....	

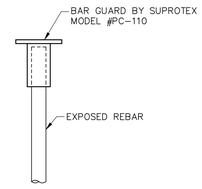
NOTE: CONTROL JOINTS SHALL BE LOCATED AT THE FOLLOWING

1. AT ALL CHANGES IN WALL HEIGHT.
2. AT ALL CHANGES IN WALL THICKNESS SUCH AS CHASES, COLUMNS OR PILASTERS.
3. AT (ABOVE) MOVEMENT JOINTS IN FOUNDATIONS AND FLOORS.
4. AT (BELOW) MOVEMENT JOINTS IN ROOFS AND FLOORS THAT BEAR ON A WALL.
5. ADJACENT TO CORNERS OF WALLS OR INTERSECTIONS WITHIN A DISTANCE OF ONE-HALF THE NORMAL CONTROL JOINT SPACING.
6. CONTROL JOINTS SHALL BE SPACED NO MORE THAN 25'-0" APART.
7. DO NOT PLACE CONTROL JOINT ABOVE OR BELOW OPENINGS.
8. CONTRACTOR SHALL PROVIDE A CONTROL JOINT PLAN PRIOR TO FABRICATION OR CONSTRUCTION.

LOOSE LINTEL SCHEDULE

SPAN	LINTEL	SPAN	LINTEL
0' TO 6'	L3½x3½x5/16	8' TO 9'	L5x3½x5/16
6' TO 7'	L4x3½"x¼	9' TO 10'	L6x3½x5/16
7' TO 8'	L4x3½x5/16	10' TO 12'	L7x4x⅜

LOOSE LINTEL MIN. BEARING OF 8".



CONTRACTOR SHALL COVER ALL EXPOSED REBAR DURING CONSTRUCTION.

TYPICAL REBAR CAP DETAIL
SCALE: N.T.S.

TYPICAL ELEVATION OF CONCRETE MASONRY WALL AND NOTES
SCALE: N.T.S.

ISSUE:

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HOUSTON, TEXAS 77079

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SECTIONS AND TYPICAL DETAILS

S2



July 17, 2025

STANLEY SPURLING & HAMILTON, INC.
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50 Years
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E-MAIL: info@sshinc.net
0002-0256

REFER TO FOODSERVICE DESIGN PROFESSIONALS SPECIFICATIONS AND SUBSEQUENT SHEETS FOR ADDITIONAL COORDINATION INFORMATION

EXISTING EQUIPMENT NOTES (IF EXISTING EQUIPMENT IS PROVIDED IN THIS PROJECT):

1. EXISTING EQUIPMENT NOT SCHEDULED FOR RE-USE TO BE RELOCATED BY THE K.E.C. COORDINATE WITH OWNER FOR NEW LOCATION.
2. ALL UTILITIES NOT SCHEDULED FOR RE-USE TO BE CAPPED & COVERED BY REQUIRED DISCIPLINE.
3. K.E.C. TO VERIFY ALL EXISTING UTILITY LOCATIONS & COORDINATE WITH ALL EQUIPMENT AS REQUIRED.

8 EXISTING EQUIPMENT NOTES
NOT TO SCALE

ARCHITECT TO VERIFY/COORDINATE THE AESTHETIC OPTIONS BELOW (FOOD SERVICE COLOR, MATERIAL, OR SIGNAGE SELECTIONS) IF THESE ITEMS ARE PROVIDED IN THIS PROJECT:

1. COUNTERTOPS: STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
2. TRAY SLIDES: CORIAN OR STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
3. COUNTER FRONTS: CERAMIC TILE, 3 FORM, OR PLASTIC LAMINATE.
4. SNEEZE GUARDS: STONE INSETS.
5. GENERAL COLOR, MATERIAL AND GRAPHIC SELECTIONS:
   - A. DISPLAY AIR SCREEN MERCHANDISERS - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - B. BAKERY DISPLAY CASES - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - C. PASS THRU OR REACH IN HOLDING CABINETS - COLOR SELECTION: POWDER COAT (MFG.: TRUE) OR PLASTIC LAMINATE (MFG.: TRAULSEN) (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - D. HANGING HEAT LAMPS - TRACK AND FIXTURE COLOR SELECTION.
   - E. HEATED MERCHANDISERS.
   - F. PORTABLE GUIDE RAILS - STANCHION AND BELT COLOR SELECTION.
   - G. POPCORN MACHINE - SIGNAGE SELECTION.
   - H. BOTTLE COOLER - SIGNAGE SELECTION.
   - I. GRAPHICS PACKAGE INFORMATION.
   - J. HOT FOOD WELL COVERS.
6. ARCHITECT TO VERIFY/COORDINATE THE FINISHES BELOW:
   - A. WALLS: CERAMIC TILE, FLAT FRP, OR MOLDED FRP (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - B. CEILINGS: REMOVABLE VINYL FACE TILE (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - C. FLOORS: TILE, EPOXY, OR RUBBERIZED FLOORING SYSTEM (SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT AS APPROVED BY LOCAL JURISDICTION) (COORDINATE FLOOR TILE TRANSITION AT SERVING LINES).
   - D. FLOORS: WALK-IN ASSEMBLY - EXTEND KITCHEN FLOOR FLUSH INTO WALK-IN ASSEMBLY WITH COVED BASE.
   - E. FURR DOWNS ABOVE SERVING COUNTERS.

5 ARCHITECTURAL COORDINATION NOTES
NOT TO SCALE

CRITICAL NOTES:

1. CONTRACTOR MUST COORDINATE AND VERIFY ALL DIMENSIONS WITH FOOD SERVICE EQUIPMENT SHOP DRAWINGS AND MANUFACTURER'S DATA. DIMENSIONS SHOWN ARE FOR DESIGN AND BIDDING PURPOSES ONLY.
2. WALK-IN ASSEMBLY DOORS MUST BE LEFT OPEN WHILE INTERIOR CONCRETE FLOOR CURES.
3. INSTALL PROTECTIVE COVER ON WALK-IN ASSEMBLY WALL PANELS BEFORE INSTALLING CONCRETE FLOORS AND CURBS.
4. REFER TO GENERAL SPECS - DIVISION 27 TO PROVIDE CONDUIT, DATA, AND INTERCONNECT THE PANIC ALARM INSIDE FREEZER TO THE BUILDING AUTOMATION SYSTEM FOR NOTIFICATION TO DISTRICT PERSONNEL IN THE EVENT OF STAFF ENTRAPMENT.
5. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL (DIV. 22).

7 CRITICAL NOTES
NOT TO SCALE

DIVISION 26 (ELECTRICAL) IS RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL ELECTRICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. ROUGH-IN AND FINAL CONNECTION OF ELECTRICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 26.
6. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
7. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR INTERCONNECT CABLES BETWEEN LAN AND POS TERMINALS, CHANGE-MAKERS, PRE-CHECK UNITS, PRINTERS, CPUS, ETC. DIVISION 26 TO VERIFY WHERE THE CONDUIT IS TO RUN FOR POS SYSTEM (I.E., MANAGER'S OFFICE OR IDF ROOM).
8. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR FIRE SUPPRESSION SYSTEMS. INTERCONNECT FIRE PROTECTION SYSTEM TO PANEL BOX SHUNT TRIPS AND BUILDING ALARM.
9. WALK-IN LIGHT FIXTURE INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF WALK-IN IS PROVIDED IN THIS PROJECT).
10. TABLE LIMIT SWITCH INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF DISHMACHINE IS PROVIDED IN THIS PROJECT).
11. ELECTRICAL MATERIALS AND DEVICES (SHUNT-TRIP BREAKERS, SURGE PROTECTORS, LIGHTING CONTROL DEVICES, CONDUIT, WIRE, ETC.).
12. SWITCHES AND STAINLESS STEEL DISCONNECTS AS REQUIRED (PROVIDE, LOCATE, AND INSTALL – TO BE IN AN ACCESSIBLE LOCATION).
13. CHARGING STATIONS FOR FORKLIFTS, PALLET STACKERS, AND PALLET JACKS (SIZE, PROVIDE, LOCATE, AND INSTALL) (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
14. INTERCONNECTION BETWEEN CONDENSATE FAN AND DISHMACHINE CONTROL PANEL (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
15. INTERCONNECTION BETWEEN EXHAUST HOOD FANS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
16. INTERCONNECTION BETWEEN EXHAUST HOOD LIGHTS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
17. DOOR HEATERS, LIGHTS, COILS, AND PRESSURE RELIEF PORTS PRE-WIRED TO JUNCTION BOX AT TOP OF WALK-IN ASSEMBLIES (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) PROVIDED BY SECTION 11 40 00. FINAL CONNECTION BY DIV. 26.
18. IF ANY ELECTRICAL ACCESSORIES, FITTINGS, AND CORD/PLUGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV.26 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
19. PROVIDE WATERPROOF RECEPTACLES IN WET AREAS.
20. ALL ELECTRICAL CONNECTIONS BENEATH EXHAUST HOODS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) TO EXTEND TO SHUNT TRIP BREAKERS WITH ELECTRICAL PANEL BOX FOR SHUTDOWN DURING FIRE MODE.
21. RECEPTACLES ARE TO BE PRE-WIRED TO THE JUNCTION BOX OR LOAD CENTER FOR FINAL CONNECTION BY DIVISION 26.
22. ALL ELECTRICAL LIGHTING, POWER, AND DISTRIBUTION SYSTEMS.
23. DO NOT INTERCONNECT MORE THAN THREE (3) CONVENIENCE OUTLETS ON ONE (1) BREAKER.
24. OTHER THAN CONVENIENCE OUTLETS, ALL ELECTRICAL CONNECTIONS SHOWN ON FOOD SERVICE PLANS ARE DEDICATED BREAKERS.
25. DOORBELL AT RECEIVING DOOR (PROVIDE AND INSTALL – TO BE AUDIBLE THROUGHOUT KITCHEN, OFFICE, AND DRY STORAGE ROOM).
26. ADEQUATE LIGHTING AT RECEIVING DOOR.
27. PROVIDE AND INSTALL TWO EMERGENCY STROBE BEACONS THAT INTERCONNECT TO PANIC ALARM IN WALK-IN FREEZER. ONE (1) IN KITCHEN ABOVE WALK-IN FREEZER DOOR ONE (1) IN CAFETORIUM (IF WALK-IN IS PROVIDED IN THIS PROJECT). REFER TO GENERAL SPECIFICATIONS FOR ADDITIONAL DETAILS.
28. DEDICATED CIRCUIT FOR HEATED DRAIN LINE CONNECTION IN WALK-IN FREEZER AT EACH COIL (IF WALK-IN IS PROVIDED IN THIS PROJECT).

NOTE: ELECTRICAL CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 26. FOR ADDITIONAL REQUIREMENTS, REFER TO THE ELECTRICAL ENGINEER'S DRAWINGS.

6 ELECTRICAL COORDINATION NOTES
NOT TO SCALE

DIVISION 22 (PLUMBING) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL PLUMBING REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY PVC CONDUIT WITH WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO BEVERAGE LINES, CO2 LINES, AND REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL PLUMBING CONNECTIONS TO FOOD SERVICE EQUIPMENT AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 22. THIS INCLUDES BUT IS NOT LIMITED TO INSTALLATION OF ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), HOSES, GAS DISCONNECTS, AND DRAINS FROM EQUIPMENT POINT OF CONNECTION TO BUILDING PLUMBING SYSTEMS. ALL DRAIN LINES ARE PROVIDED AND INSTALLED BY DIV. 22.
7. KITCHEN EQUIPMENT CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), DRAIN FITTINGS, MIXING VALVES, CONTROL VALVES, WATER PRESSURE REGULATORS, VACUUM BREAKERS, AND ALL ACCESSORIES FOR EQUIPMENT SPECIFIED UNDER 11 40 00. DIVISION 22 IS RESPONSIBLE FOR INSTALLATION.
8. INDIRECT DRAIN LINE RUNS FROM EQUIPMENT TO NEAREST DRAIN OR FLOOR SINK. LINES TO BE TYPE 'K' COPPER.
9. IF ANY PLUMBING ACCESSORIES OR FITTINGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV. 22 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
10. GAS SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
11. WATER SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
12. COMPRESSED AIR SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM (IF REQUIRED FOR THIS PROJECT).
13. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL.
14. FLOOR SINKS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
15. FLOOR DRAINS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
16. TRENCH DRAINS (PROVIDE AND INSTALL). TRENCH LINERS PROVIDED BY 11 40 00. FLANGE AND LINERS TO BE FLUSH WITH FINISHED FLOOR.
17. GREASE TRAPS AS REQUIRED. VERIFY WITH LOCAL CODES TO BYPASS OR PIPE THRU GREASE TRAP AND/OR INTERCEPTOR.
18. P-TRAPS AS REQUIRED (INCLUDING ALL DISPOSERS).
19. INTERCONNECT WATER THRU WATER FILTER (FILTER PROVIDED BY 11 40 00 UNLESS OTHERWISE SPECIFIED) TO EQUIPMENT.
20. GAS QUICK DISCONNECT INSTALLATION (QUICK DISCONNECT PROVIDED BY 11 40 00).
21. SAFETY RESTRAINT CABLE INSTALLATION (SAFETY RESTRAINT CABLE PROVIDED BY 11 40 00).
22. SPECIFIED COUPLINGS AND PIPING TO ALL EQUIPMENT FURNISHED BY 11 40 00.
23. AIR COMPRESSORS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
24. WATER SOFTENERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
25. PRESSURE BOILERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
26. HAND SINKS (PROVIDE (UNLESS OTHERWISE SPECIFIED) AND INSTALL). PROVIDE HOT WATER TEMPERING VALVE IF REQUIRED. WATER TEMPERATURE TO BE AT LEAST 100 DEGREES AND FLOW FOR AT LEAST 20 SECONDS.
27. ICE BIN DRAIN INSULATION (IF ICE MACHINE IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
28. UNIONS AT DISPOSER SOLENOID VALVES (IF DISPOSER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
29. BACK FLOW PREVENTION AS REQUIRED (PROVIDE AND INSTALL - INCLUDING ALL DISPOSERS). BACK- SIPHONAGE SHALL BE INSTALLED AT ALL FIXTURES AND EQUIPMENT WHERE BACKFLOW AND/OR BACK-SIPHONAGE MAY OCCUR AND WHERE A MINIMUM AIR GAP CANNOT BE PROVIDED BETWEEN THE WATER TO THE FIXTURE OR EQUIPMENT AT ITS FLOOD/LEVEL RIM. VACUUM BREAKERS, WHEN FURNISHED WITH EQUIPMENT, SHALL OVERRIDE THE ABOVE, IF ACCEPTABLE WITH APPLICABLE CODES. DIVISION 22 RESPONSIBLE FOR VERIFYING REQUIREMENT WITH LOCAL CODES.
30. JANITOR SINK WITH FAUCET (PROVIDE AND INSTALL).
31. FREEZE PROOF HYDRANT AT EXTERIOR OF BUILDING BY RECEIVING DOOR (PROVIDE AND INSTALL).
32. REVERSE OSMOSIS SYSTEMS (SIZE, PROVIDE (UNLESS OTHERWISE SPECIFIED), LOCATE AND INSTALL).
33. ALL PIPING WITHIN COUNTER BODY OR UNDER FABRICATED COUNTERS TO BE RUN TO A CONNECTION POINT BELOW COUNTER BODY BY SECTION 11 40 00. FINAL CONNECTION BY DIVISION 22.
34. EXHAUST HOOD CONDENSATE DRAIN CONNECTIONS (IF EXHAUST HOOD IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
35. INTERCONNECTION OF 1/2" CW TO PRE-RINSE AND DISPOSERS CONE/BODY INLETS PIPED THROUGH SOLENOID AND VACUUM BREAKER (IF DISPOSER IS PROVIDED IN THIS PROJECT).
36. FIRE SYSTEM PIPING. EXPOSED PIPING TO BE CHROME PLATED.
37. PIPE 1/2" COLD WATER TO SWIRL INLETS AT DISPOSERS (IF DISPOSER IS PROVIDED IN THIS PROJECT).
38. WATER TREATMENT FOR ICE BUILDERS (NON-CHLORINATED WATER WITH A PH LEVEL OF 10 OR HIGHER) AND ANY DRAINS AND OVERFLOWS. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS BY DIV. 23 (IF ICE BUILDERS AND TUMBLE CHILLERS ARE PROVIDED IN THIS PROJECT).

NOTE: WATER AND DRAIN CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 22. FOR ADDITIONAL WATER AND DRAIN REQUIREMENTS REFER TO MECHANICAL DRAWINGS.

NOTE: REFER TO ELECTRICAL/MECHANICAL DRAWINGS FOR REQUIREMENTS OF EXHAUST FANS AND MAKE-UP AIR HANDLERS AND LOCATION OF AN INTERLOCK AND START/STOP CONTROLS TO BE LOCATED WITHIN FOOD SERVICE AREA BY DIVISION 26.

4 PLUMBING COORDINATION NOTES
NOT TO SCALE

DIVISION 23 (MECHANICAL) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL MECHANICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL CONNECTION OF MECHANICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR).
7. TESTING AND BALANCING FOR ROOMS AND EXHAUST HOODS TO BE PERFORMED BY MECHANICAL CONTRACTOR. BALANCE REPORT FOR FOOD SERVICE EXHAUST HOODS TO BE PROVIDED TO FOODSERVICE DESIGN PROFESSIONALS (FDP) IMMEDIATELY UPON COMPLETION (SEND TO HOUSTON.SUBMITTAL@FDP.ORG FOR HOUSTON OFFICE AND DALLAS.SUBMITTAL@FDP.ORG FOR DALLAS OFFICE) AND MUST BE SUBMITTED WITH O&M MANUALS.
8. EXHAUST HOODS, CONDENSATE HOODS, FIRE SUPPRESSION SYSTEMS, CONNECTIONS AND CONTROLS (PROVIDE AND INSTALL – *UNLESS OTHERWISE SPECIFIED*). PROVIDE TEMPERED AIR AT ALL SUPPLY DUCTS.
   - A. IF EXHAUST/CONDENSATE HOODS AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED UNDER SECTION 11 40 00, DIVISION 23 IS RESPONSIBLE FOR ALL EXHAUST AND CONDENSATE HOOD CONNECTIONS (PROVIDE AND INSTALL).
9. VFD SYSTEM AND CONTROLLERS, WHEN REQUIRED BY CODE (PROVIDE AND INSTALL).
10. PROVIDE AND INSTALL ALL VENTILATION (DIRECT OR INDIRECT), AIR CONDITIONING AND HEATING SYSTEMS (UNLESS OTHERWISE SPECIFIED).
11. COORDINATE SUPPLY AND RETURN DUCTS ABOVE SERVING COUNTERS OR OPEN-AIR REFRIGERATED MERCHANDISERS. NO COLD AIR TO BLOW DIRECTLY ON HOT FOOD COUNTERS.
12. COORDINATE SUPPLY AND RETURN DUCTS AWAY FROM EQUIPMENT WITH TOP MOUNTED REFRIGERATION. NO COLD AIR TO BLOW DIRECTLY ON COMPRESSORS.
13. MECHANICAL CONTRACTOR TO LOCATE TEMPERATURE MONITORS WITHIN RETURN DUCTS.
14. CIRCULATING AIR ABOVE WALK-IN ASSEMBLIES (PROVIDE AND INSTALL).
15. CIRCULATING AIR ABOVE AND IN AIR GAPS AT WAREHOUSE COLD STORAGE ASSEMBLIES (PROVIDE AND INSTALL).
16. WATER CHILLERS AS REQUIRED (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).
17. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).

3 MECHANICAL COORDINATION NOTES
NOT TO SCALE

GENERAL CONTRACTOR RESPONSIBLE FOR BUT NOT LIMITED TO:

1. ANY WALL PENETRATION REQUIRED FOR FOOD SERVICE EQUIPMENT UTILITIES. ESCUTCHEON PLATES OR S/S SLEEVES TO BE PROVIDED AND INSTALLED AS NEEDED.
2. BULK FREEZER VENTILATION PIPE (IF BULK FREEZER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
3. CORE DRILLING FOR GUIDE RAILS (IF GUIDE RAILS ARE PROVIDED IN THIS PROJECT).
4. REFRIGERATION ROOF CURBS / ROOF JACK (IF REFRIGERATION SYSTEM IS PROVIDED IN THIS PROJECT AND LOCATED ON ROOF).
5. INTERIOR BOLLARDS (IF REQUIRED FOR THIS PROJECT) – TO BE EPOXY PAINTED PER LOCAL CODES (PROVIDE AND INSTALL).
6. FURNISH AND INSTALL 3/4" PLYWOOD BLOCKING IN THE WALL FOR MOUNTING EQUIPMENT FURNISHED BY SECTION 11 40 00 AS REQUIRED.
7. WALK-IN DEPRESSIONS (TO BE DEAD LEVEL) AND SAND LEVELING BED (IF WALK-IN IS PROVIDED IN THIS PROJECT AND RECESS IS SHOWN).
8. STRUCTURAL BRACING FOR BULK WALK-IN CEILING PANELS IF REQUIRED.
9. MENU SYSTEM VIDEO MONITORS IN SERVERY (UNLESS OTHERWISE SPECIFIED).
10. STRUCTURAL BRACING FOR MENU SYSTEM VIDEO MONITORS IF REQUIRED.
11. INTERIOR/EXTERIOR REFRIGERATION PENETRATIONS AND SLEEVES AT BUILDING PENETRATIONS.
12. DOORSCOPE VIEWER (PEEPHOLE) WITH WIDE VIEWING ANGLE AT RECEIVING DOOR.
13. CANOPY AT RECEIVING DOOR. COORDINATE HEIGHT WITH THE HEIGHT OF RECEIVING DOOR (8') AND THE MOUNTING HEIGHT OF AIR SCREEN ABOVE THE DOOR.
14. SOAP AND TOWEL DISPENSER PROVIDED BY OWNER. G.C. RESPONSIBLE FOR INSTALLATION.
15. WASHER AND DRYER (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
16. DWARF WALL AT EXPOSED FRONT/ENDS OF CAFETERIA SERVING COUNTERS WITH FINISH AS SELECTED BY ARCHITECT (IF REQUIRED IN THIS PROJECT).

2 GENERAL CONTRACTOR COORDINATION NOTES
NOT TO SCALE

HEALTH DEPARTMENT REQUIREMENTS (VERIFY WITH LOCAL JURISDICTIONS):

1. FLOORS: VERIFY WITH DIVISION 9. FLOORS TO BE SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT.
2. WALLS: VERIFY WITH ARCHITECTURAL DOCUMENTS. WALLS TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
3. CEILING: LAY-IN TILES. CEILING TILES TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
4. EMPLOYEE TOILET: TO BE LOCATED OFF MAIN CORRIDOR AND ADJACENT TO MAIN KITCHEN. RESTROOM MUST HAVE A VESTIBULE AND NOT OPEN TO KITCHEN / PREP AREAS. TOILETS TO BE WELL VENTILATED.
5. LAVATORIES: WALL HUNG LAVATORIES LOCATED WITHIN ALL FUNCTIONAL WORKING AREAS.
6. UTENSIL CLEANING/SANITIZING: ACCOMPLISHED IN UTENSIL WASH AREA WITH (3) 2'-0" x 2'-2" x 15" MINIMUM DEEP SINKS AND WAREWASH MACHINE.
7. MECHANICAL CLEANING/SANITIZING OF TABLEWARE: ACCOMPLISHED BY WAREWASH MACHINE.
8. STOREROOMS: AMPLE DAILY STORAGE PROVIDED IN ENCLOSED STORE ROOMS. STORE ROOMS TO BE VENTILATED AND MAINTAIN PROPER TEMPERATURE.
9. WATER HEATER: LOCATED IN THE MECHANICAL ROOM ADJACENT TO KITCHEN. TO BE SIZED TO PROVIDE AMPLE WATER TO MAINTAIN PROPER WATER TEMPERATURE THROUGHOUT HOURS OF OPERATION.
10. GREASE TRAP: LOCATED AT EXTERIOR OF BUILDING. REFER TO ENGINEER'S DRAWINGS.
11. FOOD SERVICE EQUIPMENT: ALL FLOOR-MOUNTED EQUIPMENT IS TO BE SEALED TO THE FLOOR TO PROVIDE AN EASILY CLEANABLE SURFACE AND PREVENT SEEPAGE. EQUIPMENT NOT MOUNTED TO THE FLOOR IS TO BE WALL MOUNTED ON WALL CARRIERS, OR ELEVATED ON LEGS TO PROVIDE AT LEAST A SIX-INCH CLEARANCE BETWEEN FLOOR AND EQUIPMENT.
12. MOP SINK: LOCATED IN JANITOR CLOSET OFF MAIN KITCHEN CORRIDOR, AND LOCATED IN CLOSE PROXIMITY TO THE SERVERY WAREWASH AREA.
13. EXHAUST HOODS: EXHAUST HOODS PROVIDED OVER COOKING EQUIPMENT WITH LIQUID CHEMICAL ANSUL FIRE EXTINGUISHING SYSTEM.
14. LIGHTING AND PROTECTIVE SHIELDING: RECESSED CEILING-MOUNTED FLUORESCENT LIGHT FIXTURES FITTED WITH CLEAR LEXAN DIFFUSERS.
15. GARBAGE AND REFUSE: CENTRAL TRASH COLLECTION PROVIDED FOR BUILDING LOCATED NEAR RECEIVING AREA ON SMOOTH CONCRETE SURFACE.
16. POISONOUS AND TOXIC MATERIAL STORAGE: LOCATED IN RESPECTIVE JANITOR CLOSETS WITH LOCKING HARDWARE.

1 HEALTH DEPARTMENT COORDINATION NOTES
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THE ITEM APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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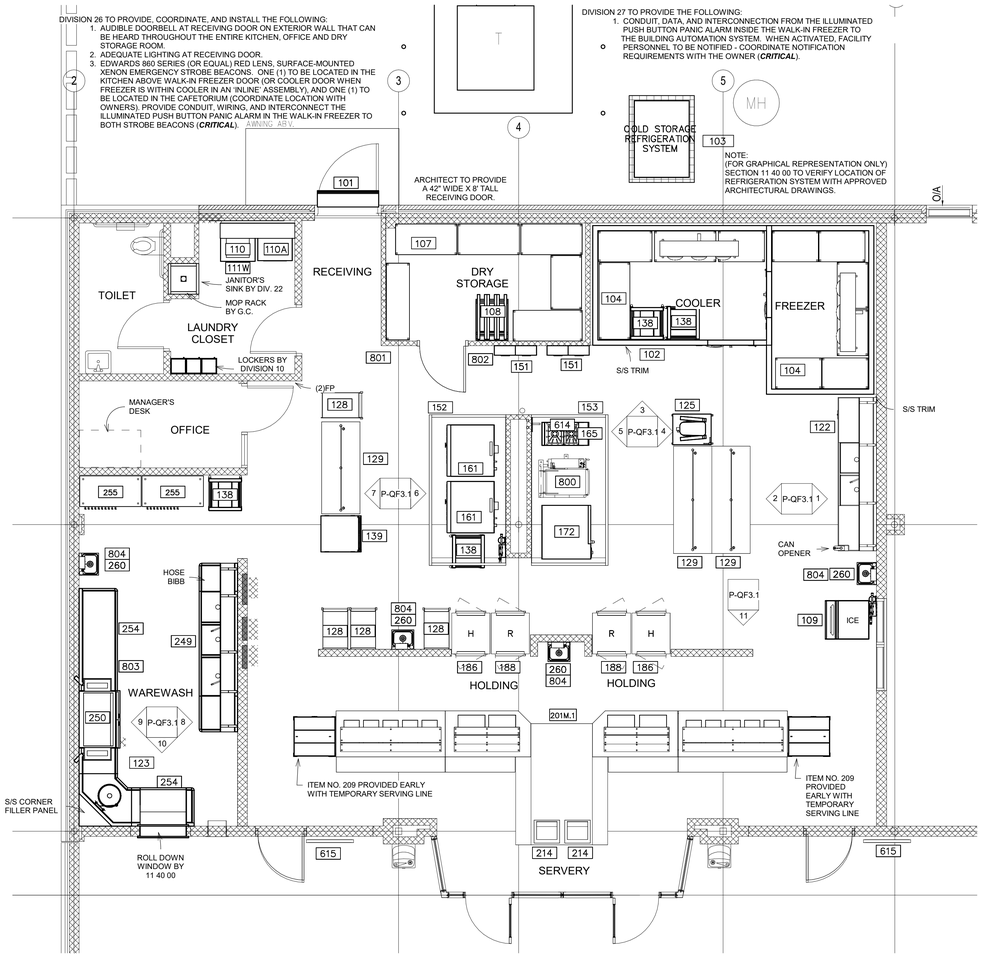
FS GENERAL COORDINATION NOTES

P-QF0.0

FOOD SERVICE DRAWING INDEX	
FDP SHEET NUMBER	FDP SHEET NAME
P-QF0.0	FS GENERAL COORDINATION NOTES
P-QF1.0	FS EQUIPMENT PLAN
P-QF1.1	FS FACILITY MODEL
P-QF1.2	FS EQUIPMENT MODEL
P-QF1.3	FS SPECIAL CONDITIONS & MECHANICAL PLAN
P-QF1.4	FS PLUMBING PLAN
P-QF1.5	FS ELECTRICAL PLAN
P-QF1.6	FS CONDENSING UNITS
P-QF1.7	FS WALK-INS
P-QF1.8	FS SERVING LINE
P-QF1.9	FS SERVING LINE
P-QF2.0	FS DEMO PLAN
P-QF2.1	FS TEMPORARY SERVING
P-QF3.1	FS ELEVATIONS
P-QF4.1	FS SECTIONS & DETAILS
P-QF4.2	FS DETAILS
P-QF4.3	FS DETAILS



1 FOOD SERVICE EQUIPMENT PLAN
1/4" = 1'-0"

FOOD SERVICE EQUIPMENT SCHEDULE					
REFER TO SHEET QF1 FOR GENERAL CONTRACTOR & HEALTH DEPARTMENT COORDINATION NOTES					
FDP ITEM	FDP QTY	FDP DESCRIPTION	FDP REMARKS	MANUFACTURER	MODEL
	355				
101	1	AIR SCREEN		MARS	STD248-1UA-OB
102	1	COLD STORAGE ASSEMBLY		AMERICAN PANEL	
103	1	COLD STORAGE REFRIGERATION SYSTEM			
104	2	COLD STORAGE SHELVING		METRO	METROMAX Q
107	1	DRY STORAGE SHELVING		METRO	METROMAX Q
108	1	CAN RACK		NEW AGE	1250CK
109	1	ICE MACHINE W/ BIN		MANITOWOC	UYF0310A
110	1	CLOTHES WASHER		WHIRLPOOL	RESIDENTIAL
110A	1	CLOTHES DRYER		WHIRLPOOL	RESIDENTIAL
111W	1	WALL MOUNTED OVERSHELF		CUSTOM FABRIACTED	
122	1	TWO COMPARTMENT SINK WITHOUT DISPOSER		CUSTOM FABRIACTED	
123	1	DISPOSER - 3HP		SALVAJOR	300-CA-18-ARSS-LD
125	1	20 QT. MIXER W/STAND		HOBART	HL200
128	4	UTILITY CART		LAKESIDE	522
129	3	WORKTABLE W/S.BAR UT.RACK		CUSTOM FABRIACTED	
138	4	PAN RACK		CRES COR	207-UA-13A
139	1	INSUL MOBILE PROOFER		CRES COR	H-137-WSUA-12D
151	2	FIRE PROTECTION SYSTEM		ANSUL	R102
152	1	EXHAUST HOOD	EXISTING		
153	1	EXHAUST HOOD	EXISTING		
161	2	CONVECTION OVEN		BLODGETT	DFG-200 DBL
165	1	TWO BURNER RANGE		VULCAN	V2B18B
172	1	COMBI OVEN		RATIONAL	ICP 6-FULL/6-FULL N/G
186	2	PASS-THRU HEATED CABINET-1DR		TRAULSEN	AHF132WP
188	2	PASS-THRU REFRIGERATOR-1DR		TRAULSEN	AHT132WPUT
201M.1	1	SERVING COUNTER-MODULAR		COUNTERCRAFT	SCOL-408-MOD
214	2	CASH REGISTER	OWNER FURNISHED		
249	1	THREE COMPARTMENT SINK NO DISPOSER		CUSTOM FABRIACTED	
250	1	DISHMACHINE		HOBART	CL44-BAS
254	2	SOILED & CLEAN DISHTABLE		CUSTOM FABRIACTED	
255	2	MOBILE DRYING RACK		METRO	PR48VX3
260	4	HAND SINK	FURNISHED & INSTALLED BY DIV. 22		
614	1	FILL FAUCET		T&S	B-0610
615	2	MENU MONITOR	BY OWNER		
800	1	15 GAL. BRAISING PAN		GROEN	BPM-15GA
801	1	S/S CORNER GUARDS	LOCATED ON EVERY EXPOSED CORNER THROUGHOUT KITCHEN	CUSTOM FABRIACTED	
802	1	WALL BUMPERS	LOCATED ON ALL EXPOSED BUILDING WALLS	PAWLING	MD-1
803	1	WATER SOFTENER		HOBART	WS-40
804	4	S/S SPLASH GUARDS			

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Melissa Moore
7/15/2025
THE ITEMS APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 88854119 ON: 07/15/2025

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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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FS EQUIPMENT PLAN

P-QF1.0

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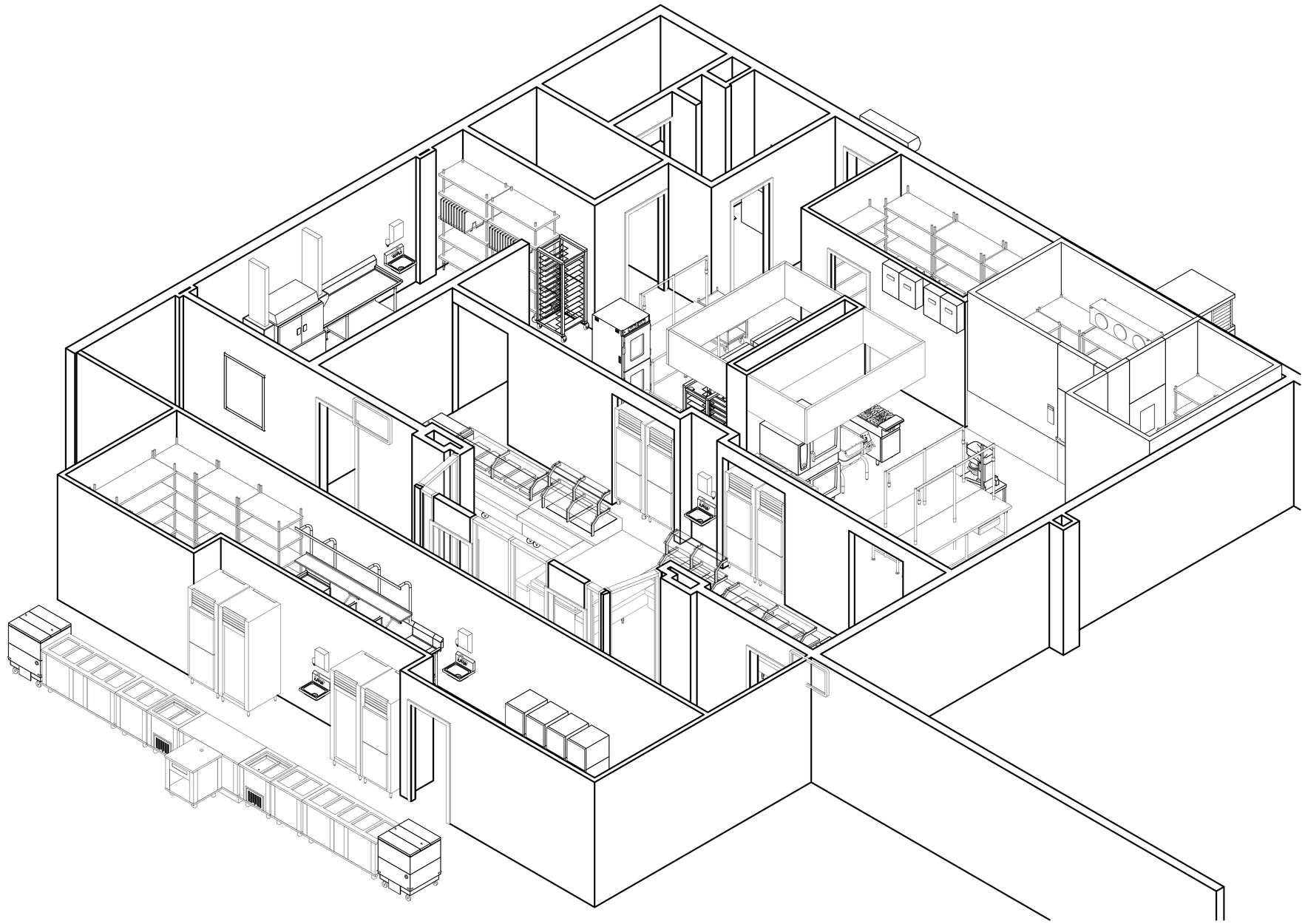

1 FS FACILITY MODEL

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FDP
FOODSERVICE DESIGN PROFESSIONALS

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FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
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SEAL

FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
FCSI
488544119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ITEMS APPEARING ON THIS DOCUMENT WERE AUTHORIZED BY MELISSA MOORE, FCSI NO. 488544119 ON: 07/15/2025

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PROJ. NO.: 23-25
DATE: 07/18/25
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FS FACILITY MODEL

P-QF1.1

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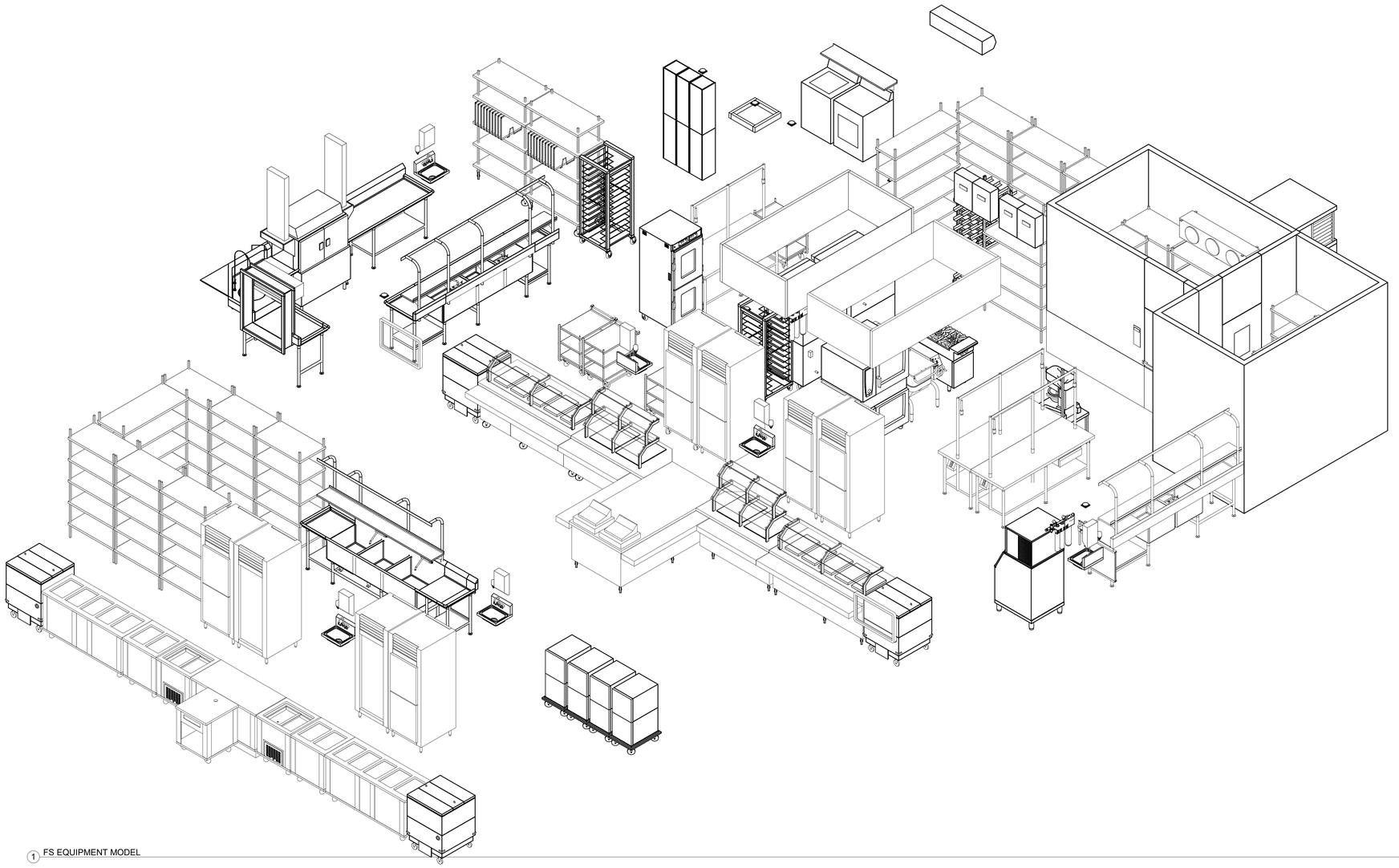

1 FS EQUIPMENT MODEL

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FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL

FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
68854119
PROFESSIONAL MEMBER
7/15/2025
THE ITEM APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 68854119 ON: 07/18/2025

ARCHITECTS
AND PLANNING
CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

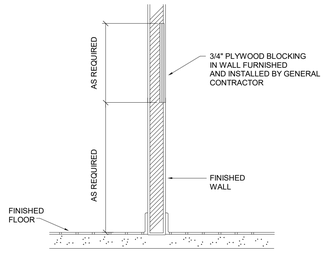
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FS EQUIPMENT MODEL

P-QF1.2

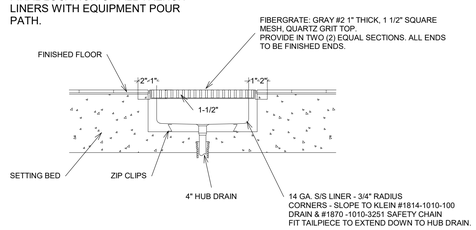
FOOD SERVICE MECHANICAL SCHEDULE						
REFER TO SHEET QF1 FOR MECHANICAL COORDINATION NOTES						
FDP NO.	FDP QTY	FDP TYPE	FDP SIZE	FDP LOC	FDP CFM	FDP S.P.
M101	1	EXHAUST	4" X 16"		400	0.30"
M102	1	EXHAUST	4" X 16"		800	0.30"
M103	1	DRYER VENT	6" DIA.		---	---

NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION AND SIZE OF WALL BLOCKING.



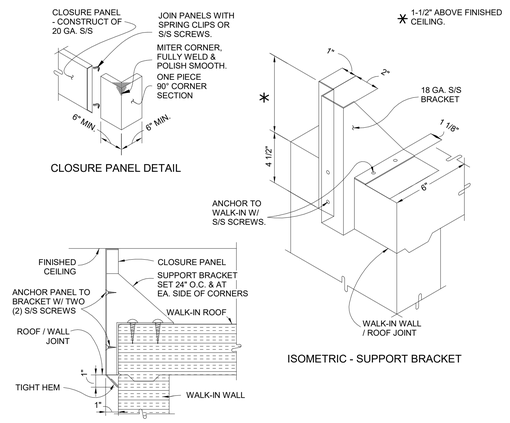
5 WALL BLOCKING DETAIL
NOT TO SCALE

NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION OF ALL TRENCH LINERS WITH EQUIPMENT POUR PATH.

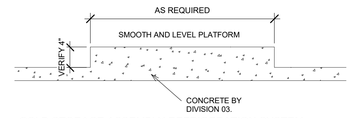


6 TRENCH LINER DETAIL
NOT TO SCALE

1 FOOD SERVICE SPECIAL CONDITIONS PLAN
1/4" = 1'-0"

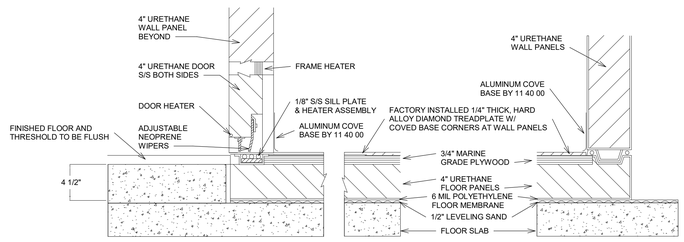


3 COLD STORAGE ASSEMBLY ENCLOSURE PANEL DETAIL
NOT TO SCALE



COLD STORAGE ASSEMBLY REFRIGERATION SYSTEM GROUND MOUNT 4" PLATFORM DETAIL
4 NOT TO SCALE

SLAB TO BE MODIFIED AS REQUIRED TO ALLOW FOR A 4 1/2" DEPRESSION SLAB. PROVIDE NEW LEVEL CONCRETE PAD FOR COLD STORAGE ASSEMBLY.



WALL SECTION @ EXTERIOR DOOR

2 COLD STORAGE ASSEMBLY 4 1/2" DEPRESSION DETAIL
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

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SEAL
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MELISSA MOORE
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Melissa Moore
7/15/2025
DRAWING OR THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 888544119 ON 07/18/2025

ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

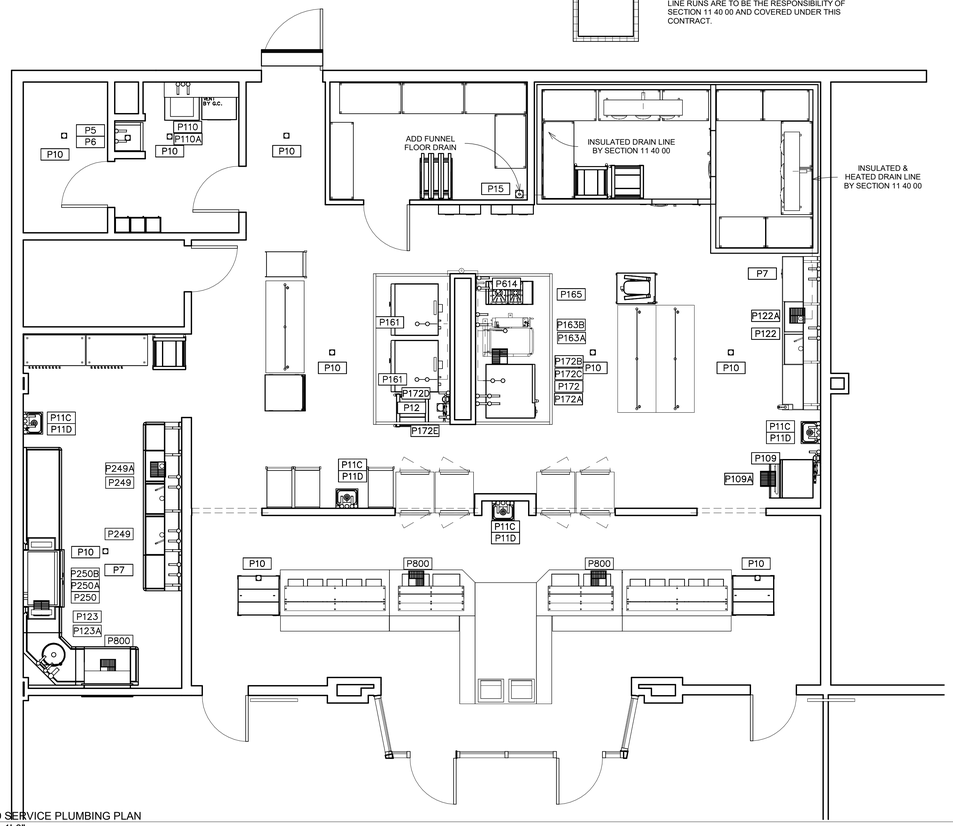
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS SPECIAL CONDITIONS & MECHANICAL PLAN

P-QF1.3

FOOD SERVICE PLUMBING SCHEDULE						
REFER TO SHEET QF1 FOR PLUMBING COORDINATION NOTES						
FDP PNO	FDP PSIZE	FDP PCONN	FDP PSERVICE TO	FDP PLOC	FDP PAFF	FDP PREMARKS
P5	3/4"	H & C WATER	JANITOR SINK	WALL	48"	JANITOR SINK BY PLUMBER
P6	4"	FLOOR DRAIN	JANITOR SINK	FLOOR	VERIFY	JANITOR SINK BY PLUMBER
P7	3/4"	H & C WATER	HOSE BIBB	WALL	18"	BTC
P10	VERIFY	FLOOR DRAIN	GENERAL AREA DRAIN	FLOOR	VERIFY	---
P11C	1/2"	H & C WATER	FAUCET	WALL	18"	FURNISHED & INSTALLED BY DIV. 22
P11D	1 1/2"	DIRECT DRAIN	HAND SINK	WALL	15"	FURNISHED & INSTALLED BY DIV. 22
P12	VERIFY	FLOOR DRAIN	EQUIP. DRAIN	FLOOR	VERIFY	NO SLOPE
P15	4"	FLOOR DRAIN	FUNNEL FLOOR DRAIN	FLOOR	0"	---
P109	3/4"	COLD WATER	WATER/ ICE	WALL	60"	BTC
P109A	12" SQ.	FLOOR SINK	ICE MACHINE	FLOOR	0"	FULL GRATE
P110	3/4"	H & C WATER	CLOTHES WASHER	WALL	48"	BTC; VALVE BOX
P110A	2"	INDIRECT DRAIN	CLOTHES WASHER	WALL	48"	VALVE BOX
P122	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P122A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	3/4 GRATE
P123	3/4"	H & C WATER	FAUCET / DISPOSER	WALL	13"	BTC
P123A	2"	DIRECT DRAIN	DISPOSER	WALL	10"	BTC
P161	(2)3/4"	NATURAL GAS	CONVECTION OVEN	WALL	18"/36"	BTC - 60 MBTU/HR EACH
P163A	3/4"	NATURAL GAS	TILT BRAISING PAN	WALL	18"	BTC - 65 MBTU/HR
P163B	3/4"	H & C WATER	TILT BRAISING PAN	WALL	36"	BTC
P165	1"	NATURAL GAS	RANGE	WALL	18"	BTC - 70 MBTU/HR
P172	(2)3/4"	COLD WATER	COMBI OVEN	WALL	24"/48"	BTC - INTERCONNECT THRU FILTERS
P172A	3/4"	COLD WATER	COMBI OVEN	WALL	48"	BTC
P172B	12"SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE
P172C	(2)3/4"	NATURAL GAS	COMBI OVEN	WALL	18"/36"	BTC - 105 MBTU/HR EACH
P172D	3/4"	COLD WATER	COMBI OVEN	WALL	66"	BTC; INTERCONNECT TO P172
P172E	3/4"	COLD WATER	COMBI OVEN WATER FILTER	WALL	66"	BTC
P249	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P249A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	THREE QUARTER GRATE
P250	12" SQ.	FLOOR SINK	BOOSTER / DISHMACHINE	FLOOR	18"	BTC
P250A	3/4"	HOT WATER	DISHMACHINE	WALL	18"	EXT. THRU W.FILTER TO BOOSTER / DISH MACHINE - 140DEG.MIN.
P250B	3/4"	COLD WATER	DISHMACHINE	WALL	18"	BTC
P614	1/2"	H & C WATER	FILL FAUCET	WALL	42"	BTC
P800	12" SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE



NOTE:
(FOR GRAPHICAL REPRESENTATION ONLY)
SECTION 11 40 00 TO VERIFY LOCATION OF REFRIGERATION SYSTEM WITH APPROVED ARCHITECTURAL DRAWINGS. REFRIGERATION LINE RUNS ARE TO BE THE RESPONSIBILITY OF SECTION 11 40 00 AND COVERED UNDER THIS CONTRACT.



1 FOOD SERVICE PLUMBING PLAN
1/4" = 1'-0"

SECTION 11 40 00 TO PROVIDE LOOSE WITH FOOD SERVICE EQUIPMENT. INSTALLATION BY DIV. 22 & 26.

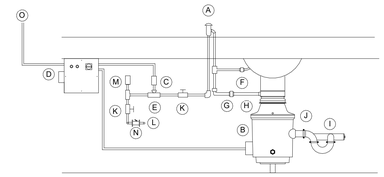
- (A) VACUUM BREAKER
- (B) DISPOSER
- (C) TIME DELAY
- (D) CONTROL PANEL
- (E) SOLENOID VALVE

DIVISION 22 TO PROVIDE AND INSTALL

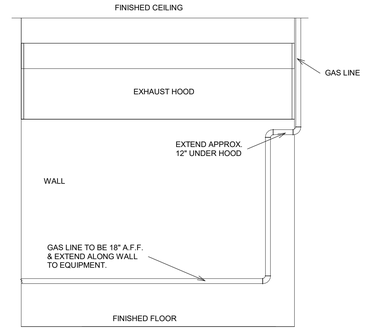
- (F) 1/2" CW INLET
- (G) FLOW CONTROL
- (H) 1/2" CW
- (I) 2" DRAIN LINE WITH P-TRAP & Y ADAPTOR
- (J) 1-1/2" TAILPIECE
- (K) GATE VALVE
- (L) 1/2" CW SUPPLY
- (M) SHOCK STOP
- (N) RPZ BACK FLOW PREVENTOR

DIVISION 26 TO PROVIDE AND INSTALL

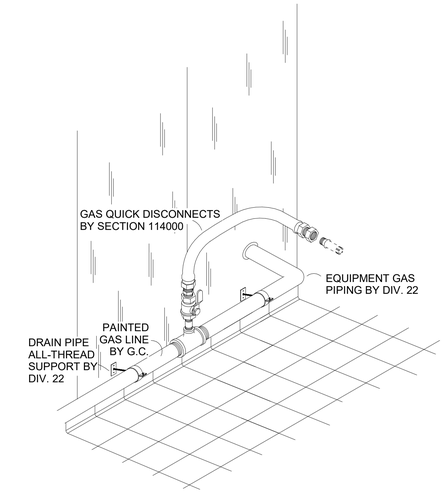
- (O) POWER SUPPLY



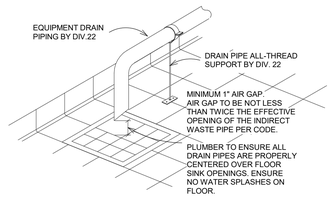
6 DISPOSER WITH VACUUM BREAKER DETAIL
NOT TO SCALE



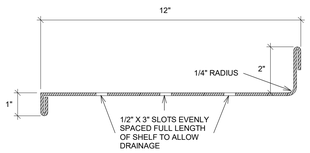
7 EXHAUST HOOD - GAS LINE ROUTING DETAIL
NOT TO SCALE



3 GAS DISCONNECT DETAIL
NOT TO SCALE



5 DRAIN PIPING FASTENER DETAIL
NOT TO SCALE



8 WAREWASH - PERFORATED OVER SHELF DETAIL
NOT TO SCALE

○	HW	HOT WATER	▢	FFD	FUNNEL FLOOR DRAIN
○	CW	COLD WATER	◣	EVC	EXHAUST VENT CONNECTION
○	HTW	180 F HOT WATER	◢	SVC	SUPPLY VENT CONNECTION
◎		CHILLED WATER	◔	FR	DIRECT-CONNECTED FLUE RISER
●	W	DIRECT WASTE	◎	PS	PIPE SLEEVE
○	IW	INDIRECT WASTE	⊙		COMPRESSED AIR
⊙		GAS SUPPLY	♦		CO2
◕		STEAM SUPPLY		AFF	ABOVE FINISHED FLOOR
⊙	CR	CONDENSATE RETURN		BTC	BRANCH TO CONN. ON EQUIP
◉	DR	DRAIN		DFA	DROP FROM ABOVE
▢	FD	FLOOR DRAIN		CLG	CEILING
▟	FST	FLOOR SINK 3/4 GRATE			
▟	FSH	FLOOR SINK 3/4 GRATE			

2 PLUMBING SYMBOLS
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
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ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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ISSUED FOR BIDDING AND PERMITTING
FS PLUMBING PLAN

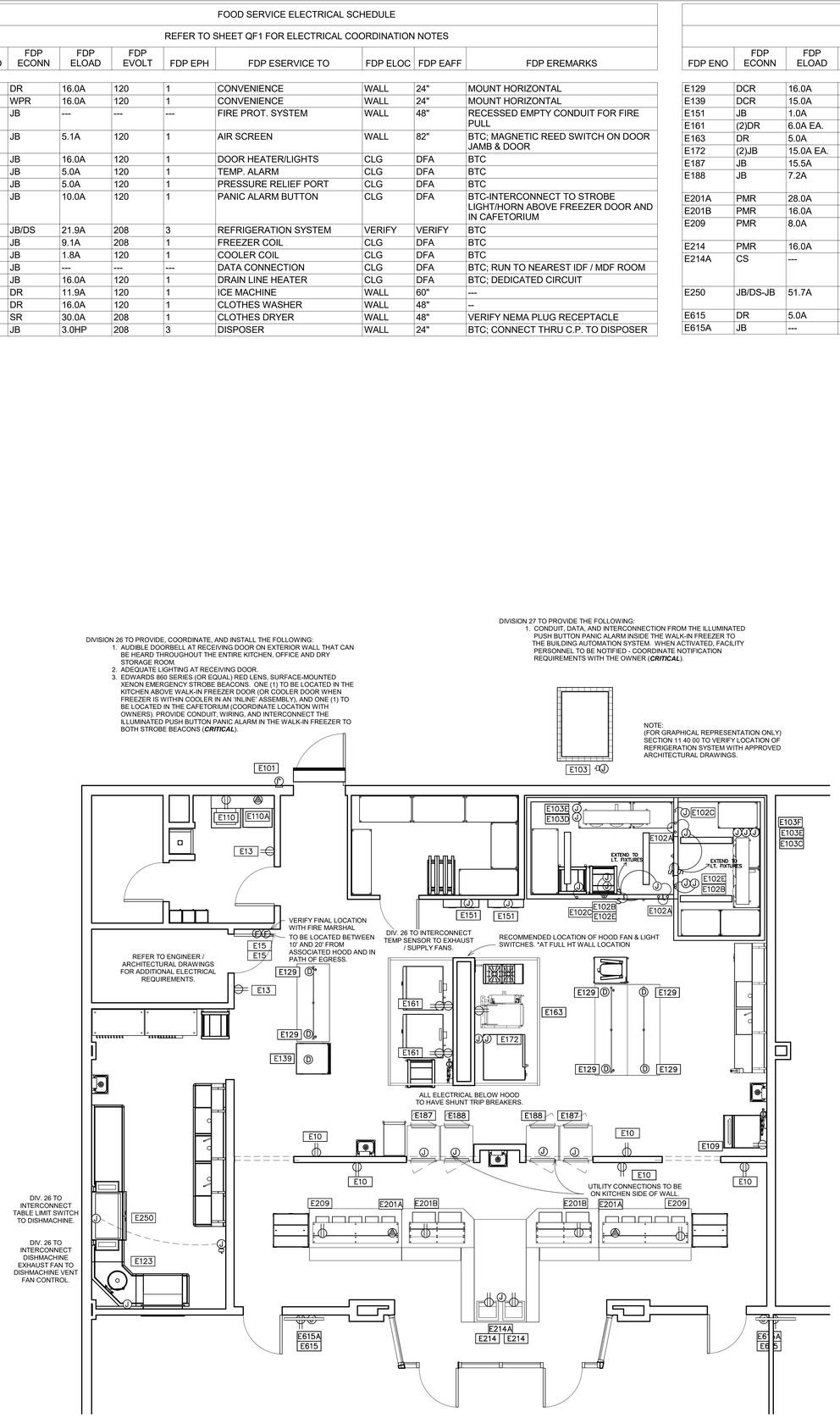
P-QF1.4

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E10	DR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E13	WPR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E15	JB	---	---	---	FIRE PROT. SYSTEM	WALL	48"	RECESSED EMPTY CONDUIT FOR FIRE PULL
E101	JB	5.1A	120	1	AIR SCREEN	WALL	82"	BTC; MAGNETIC REED SWITCH ON DOOR JAMB & DOOR
E102A	JB	16.0A	120	1	DOOR HEATER/LIGHTS	CLG	DFA	BTC
E102B	JB	5.0A	120	1	TEMP. ALARM	CLG	DFA	BTC
E102C	JB	5.0A	120	1	PRESSURE RELIEF PORT	CLG	DFA	BTC
E102E	JB	10.0A	120	1	PANIC ALARM BUTTON	CLG	DFA	BTC-INTERCONNECT TO STROBE LIGHT/HORN ABOVE FREEZER DOOR AND IN CAFETORIUM
E103	JB/DS	21.9A	208	3	REFRIGERATION SYSTEM	VERIFY	VERIFY	BTC
E103C	JB	9.1A	208	1	FREEZER COIL	CLG	DFA	BTC
E103D	JB	1.8A	120	1	COOLER COIL	CLG	DFA	BTC
E103E	JB	---	---	---	DATA CONNECTION	CLG	DFA	BTC; RUN TO NEAREST IDF / MDF ROOM
E103F	JB	16.0A	120	1	DRAIN LINE HEATER	CLG	DFA	BTC; DEDICATED CIRCUIT
E109	DR	11.9A	120	1	ICE MACHINE	WALL	60"	---
E110	DR	16.0A	120	1	CLOTHES WASHER	WALL	48"	--
E110A	SR	30.0A	208	1	CLOTHES DRYER	WALL	48"	VERIFY NEMA PLUG RECEPTACLE
E123	JB	3.0HP	208	3	DISPOSER	WALL	24"	BTC; CONNECT THRU C.P. TO DISPOSER

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E129	DCR	16.0A	120	1	TABLE RECEPTACLE	CLG	84"	TWISTLOCK PLUG & RECEPTACLE
E139	DCR	15.0A	120	1	INSUL. MOBILE PROOFER	CEILING	DFA	--
E151	JB	1.0A	120	1	FIRE PROT. SYSTEM	CLG	DFA	BTC
E161	(2)DR	6.0A EA.	120	1	CONVECTION OVEN	WALL	24"/48"	SHUNT TRIP BREAKER
E163	DR	5.0A	120	1	TILT BRAISING PAN	WALL	24"	SHUNT TRIP BREAKER
E172	(2)JB	15.0A EA.	208	1	COMBI OVEN	WALL	24"/48"	BTC- SHUNT TRIP BREAKER
E187	JB	15.5A	120/208	1	HEATED CABINET	WALL	96"	BTC; MOUNT ON KITCHEN SIDE
E188	JB	7.2A	120	1	REFRIGERATOR	WALL	96"	BTC; MOUNT ON KITCHEN SIDE-OMIT PLUG, UNIT TO BE HARDWIRED
E201A	PMR	28.0A	208	1	HOT FOOD COUNTER	FLOOR	4.5"	BTC
E201B	PMR	16.0A	120	1	COLD FOOD COUNTER	FLR	4.5"	---
E209	PMR	8.0A	120	1	DROP FRONT MILK COOLER-8 CASE	FLR	4.5"	---
E214	PMR	16.0A	120	1	CASH REGISTER	FLR	4.5"	DEDICATED CIRCUIT
E214A	CS	---	---	---	POS	FLOOR	6"	BTC; CONDUIT W/DATA LINE TO RUN TO MANAGER'S OFFICE OR IDF ROOM-VERIFY
E250	JB/DS-JB	51.7A	480	3	DISHMACHINE	WALL	66"	BTC; EXTEND FROM JB/DS AT NEAREST WALL
E615	DR	5.0A	120	1	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE DCO AT VIDEO LOCATION
E615A	JB	---	---	---	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE JB AT DATA LOCATION

DIVISION 26 TO PROVIDE, COORDINATE, AND INSTALL THE FOLLOWING:
1. AUDIBLE DOORBELL AT RECEIVING DOOR ON EXTERIOR WALL THAT CAN BE HEARD THROUGHOUT THE ENTIRE KITCHEN, OFFICE AND DRY STORAGE ROOM.
2. ADEQUATE LIGHTING AT RECEIVING DOOR.
3. EDWARDS 860 SERIES (OR EQUAL) RED LENS, SURFACE-MOUNTED XENON EMERGENCY STROBE BEACONS. ONE (1) TO BE LOCATED IN THE KITCHEN ABOVE WALK-IN FREEZER DOOR (OR COOLER DOOR WHEN FREEZER IS WITHIN COOLER IN AN 'INLINE' ASSEMBLY), AND ONE (1) TO BE LOCATED IN THE CAFETORIUM (COORDINATE LOCATION WITH OWNERS). PROVIDE CONDUIT, WIRING, AND INTERCONNECT THE ILLUMINATED PUSH BUTTON PANIC ALARM IN THE WALK-IN FREEZER TO BOTH STROBE BEACONS (***CRITICAL***).

DIVISION 27 TO PROVIDE THE FOLLOWING:
1. CONDUIT, DATA, AND INTERCONNECTION FROM THE ILLUMINATED PUSH BUTTON PANIC ALARM INSIDE THE WALK-IN FREEZER TO THE BUILDING AUTOMATION SYSTEM. WHEN ACTIVATED, FACILITY PERSONNEL TO BE NOTIFIED - COORDINATE NOTIFICATION REQUIREMENTS WITH THE OWNER (***CRITICAL***).



1 FOOD SERVICE ELECTRICAL PLAN
1/4" = 1'-0"

NOTE:
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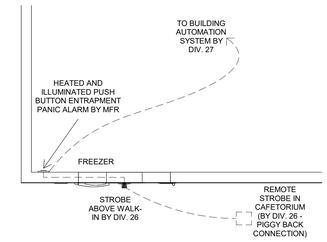
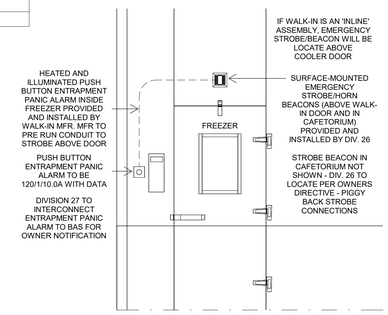
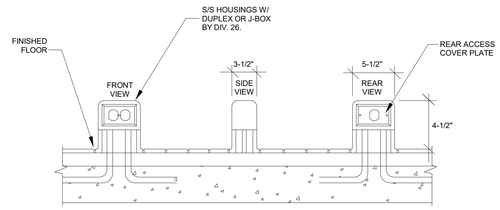
SECTION 11 40 00 TO VERIFY LOCATION OF REFRIGERATION SYSTEM WITH APPROVED ARCHITECTURAL DRAWINGS.



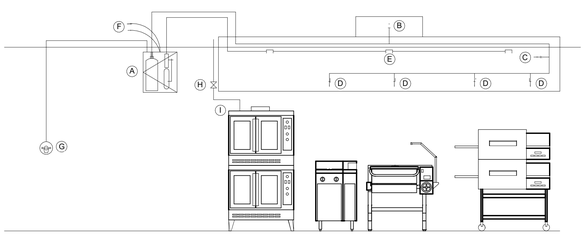


6 COLD STORAGE ASSEMBLY ENTRAPMENT PANIC ALARM DETAIL
NOT TO SCALE



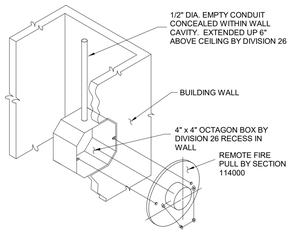
3 PEDESTAL MOUNTED RECEPTACLE DETAIL
NOT TO SCALE

NOTE:
REFER TO FDP EQUIPMENT PLAN FOR SPECIFIC COMPONENTS UNDER HOOD. ALL EQUIPMENT SHOWN HERE FOR GRAPHICAL REPRESENTATION ONLY.



A	S/S ENCLOSURE W/AGENT TANK AND NITROGEN CARTRIDGE
B	DUCT NOZZLE(S)
C	PLENUM NOZZLE(S)
D	SURFACE PROTECTION NOZZLE(S)
E	FUSIBLE LINK(S)
F	(2) WIRES FROM FIRE SYSTEM TO SHUNT TRIP BREAKERS FOR SHUT DOWN OF ELECTRICAL CONNECTIONS LOCATED BENEATH EXHAUST HOOD DURING FIRE MODE
G	REMOTE FIRE PULL
H	GAS VALVE
I	GAS SUPPLY (AS REQUIRED)

4 FIRE PROTECTION SYSTEM TYPICAL DETAIL
NOT TO SCALE



5 FIRE PROTECTION SYSTEM RECESSED FIRE PULL DETAIL
NOT TO SCALE

SCR	CONDUIT STUB BTC ON RECEPT FURNISH WITH EQUIPMENT		CC	CONDUIT FOR COMPUTER CABLES
CS	CONDUIT STUB UP/OUT FOR DIRECT CONNECTION		BTC	BRANCH TO CONNECTION ON EQUIPMENT
DR	DUPLEX RECEPTACLE		WPR	WATERPROOF RECEPTACLE (SPRING COVER)
SR	SINGLE PURPOSE RECEPTACLE-1PH		FPB	FIRE PROTECTION BUZZER
SR	SINGLE PURPOSE RECPTACLE-3PH		BSC	BEVERAGE SYSTEM CONDUIT
FR	FLUSH FLOOR RECEPTACLE		DFA	DROP FROM ABOVE
PMR	PEDESTAL MOUNTED RECEPTACLE		AFF	ABOVE FINISH FLOOR
DCR	DROP CORD RECEPTACLE		CS/JB	JUNCTION BOX ON PEDESTAL
JB	JUNCTION BOX ON CEILING		SW	SWITCH
JB	JUNCTION BOX IN WALL		D	DATA
JB/DS	JUNCTION BOX WITH DISCONNECT BY DIV.26			

2 ELECTRICAL SYMBOLS
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

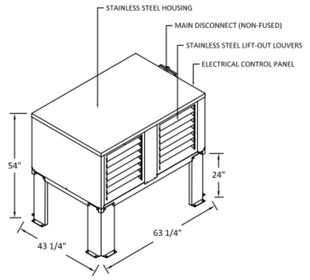
SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
488543119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ELECTRONICALLY SEALING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 488543119 ON 07/18/2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS ELECTRICAL PLAN

P-QF1.5

MODEL NO. ZS1-02Z-CT3-EST OUTDOOR AIR COOLED REFRIGERATION SYSTEM
ITEM NO. 103



NOTE:
- CRANKCASE HEATERS
- FAN CYCLING SWITCHES
- 24" STANDS & STAINLESS STEEL SKIRTING TO BE SHIPPED LOOSE FOR FIELD INSTALLATION
- DOOR SENSOR FOR EACH WALK-IN
- REFRIGERANT DETECTION SYSTEM
- CHECK VALVE (SHIPPED LOOSE)
- SHUT OFF VALVE (SHIPPED LOOSE)

RACK WEIGHT: 600 LBS.

ADT ENGINEERING SUMMARY

POWER SUPPLY: 208-230/60/3
CONNECTED LOAD: 21.8 AMPS

MOPD: 30 AMP
MINIMUM CIRCUIT AMPACITY: 24.1

SYSTEM	ITEM #	DESCRIPTION	FIXTURES: TEMP °F FIXT.	FIXTURES: TEMP °F SUCT.	REQ'D FIXTURE BTU/H	REFRIG.	CONDENSING UNIT: COMPRESSOR MODEL NO.	H.P.	RATING @ 60 HZ RLA	V	PH	BTU CAP @ AMB °F 110	TYPE	REC. CAP. (lbs)	CONDENSER
A	102	WALK-IN COOLER	35	25	8506	454A	YS11KAE		11.2	208	3	11700	Z	14.0	L1R
B	102	WALK-IN FREEZER	-10	-20	7607	454A	YF07KSE		10.6	208	3	7610	Z	14.0	L1R

SYSTEM	ITEM #	MODEL NO.	EVAPORATOR COILS: QTY	FAN MOTORS @ 60 HZ RLA	V	PH	HEATERS @ 60 HZ RLA	V	PH	DEFR. TYPE	DEFROST CONTROLLER TYPE	CONTROLLER QTY	ACCESSORIES TSTAT	SOL. VALVE	EXP. VLV.	REFRIGERANT LINE SIZES (IN) SUCT.	SUCT. LINE RISER	LIQUID	LINE RUN (FT)	TYPE	TOTAL SYSTEM LOAD
A	102	BEL0095	1	1.8	115	1				O.C.	ECOSMART	1	F	F	EF	5/8	5/8	3/8	100	M	11.2
B	102	BEL0065	1	1.0	208	1	9.1	208	1	ELEC	ECOSMART	1	F	F	EF	7/8	7/8	3/8	100	M	10.6

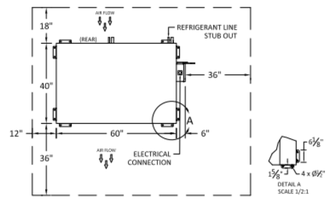
ALL EVAPORATOR COILS WILL REQUIRE A HOUSE POWER SUPPLY

c UL us LISTED

NOTE:
IT IS THE INSTALLING CONTRACTORS RESPONSIBILITY TO FOLLOW ALL APPLICABLE CODES AND CURRENT REFRIGERATION INDUSTRY STANDARDS AND PRACTICES WHEN DETERMINING LINE SIZES, AND INSTALLING AND STARTING UP RDT EQUIPMENT.

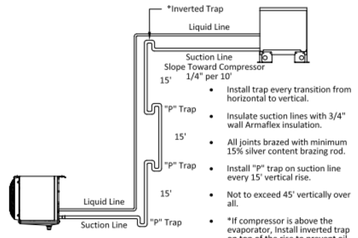
COMPRESSOR TYPE	DEFROST TYPE	LINE TYPE	EVAPORATOR ACCESSORIES
Z SCROLL	O.C. OFF CYCLE ELEC ELECTRIC	M MAIN - UP TO 100'	EF EEV FACTORY EQUIPPED ON EVAP F FACTORY EQUIPPED ON EVAP

PLANVIEW/ CLEARANCE REQUIREMENTS



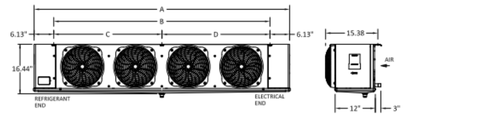
NOTE: MINIMUM CLEARANCE REQUIRED FOR PROPER OPERATION
NOTE: ROOF CURB OR GROUND PAD CAN BE SAME SIZE AS OUTDOOR UNIT

SUCTION LINE VERTICAL RISE DETAIL



- Install trap every transition from horizontal to vertical.
- Insulate suction lines with 3/4" wall Armaflex insulation.
- All joints brazed with minimum 15% silver content brazing rod.
- Install "P" trap on suction line every 15' vertical rise.
- Not to exceed 45' vertically over all.
- *If compressor is above the evaporator, Install inverted trap on top of the rise to prevent oil from seeping down when fixture(s) is turned off.

EVAPORATOR DETAILS - MODEL BEL



AIR DEFROST Size	DIMENSIONS A Inches	B Inches	C Inches	D Inches	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. Lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps 115V	208V
095	45-1/2	33-1/4			1/2 OD	5/8 OD	3/4 MPT	51	2	1.8	1.0

ELECTRIC DEFROST	DIMENSIONS A Inches	B Inches	C Inches	D Inches	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. Lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps	Heater Amps as wired for 208-230/60/1	208-230/60/3	460/60/1
065	45-1/2	33-1/4	-	-	1/2 OD	5/8 OD	3/4 MPT	54	2	1.0	9.1	5.7	4.6

ZS SERIES ENGINEERING SPECIFICATIONS

Multi compressor, outdoor, air cooled. The refrigeration package shall be a pre-engineered and factory-assembled unit, trade name "ZS", as manufactured by Refrigeration Design Technologies, 1808 FM Road 66, P.O. Box 622, Waxahachie, Texas 75168. Phone: (972) 937-3215; Fax: (972) 937-0970.

1. Air-Cooled Refrigeration System
The RDT UL Listed "Air-Cooled" Refrigeration system shall be housed in a weather-protected compact powder coated steel frame. The entire housing shall be brushed stainless steel. The unit shall include an air-cooled aluminum fin copper tube condenser designed to operate at 15 degrees TD. The exterior housing shall feature stainless steel one piece louvers. Lifting points shall be integrated in the framing component. Condenser fan motors shall be mounted within the enclosure. The condenser intake surface shall be protected with stainless steel expanded metal guard to protect against vandalism and hail damage.

Each unit shall be equipped with a ball-bearing fan motor, suction filter, sight glass, liquid filter/drier, liquid line inlet and outlet valve, defrost cycle and high pressure super-hose connections. Each unit shall be equipped with fan cycling controls and/or head pressure regulator where required for low ambient conditions.

Condensing unit shall contain scroll, hermetic, semi-hermetic, and/or discus type compressor(s) assembled to operate with the refrigerant specified for both medium and low temperature applications.

2. Evaporator Coils
A. Evaporator coils shall be direct expansion type fabricated of copper tubes with aluminum fins.
B. All evaporator coils shall be provided with solenoid valve, thermostatic or electronic expansion valve and thermostat.

3. Pre-Piping
All refrigerant lines shall be extended to outside of the housing in a neat and orderly manner. All tubing shall be securely supported and anchored with non-corrosive coated clamps.

All joints must be brazed, not soldered.

All piping and controls shall be factory pressure-tested with dry nitrogen.

4. Control Panel
The package shall have a factory-mounted and pre-wired control panel, with main disconnect (non fused) where required, circuit breakers, contactors wired for single point power connection.

General Information
Contractors shall verify all dimensions onsite and coordinate with other trades.

General contractor shall prepare the platform, curbed openings and weatherproofing the unit after installation.

Refrigeration Contractor
All copper tubing to be refrigerant grade. A.C.R. or type "L".

Brazing should be used for all refrigerant piping. Silver solder or soft solder is not acceptable.

All piping to be pressure tested with nitrogen at 300 psi. After the condensing unit and coil have been connected the balance of the system shall be leak tested with the valves open at 200 psi.

The complete system shall be evacuated with a vacuum pump. Each unit should be charged tested and adjusted to assure operation.

Contractor should provide and install the drain-line heater in freezer. Heater shall be connected by electrical contractor. Seal all penetrations through the walk-in units with foam.

Electrical Contractor
Electrical contractor to provide power for refrigeration package and connect control and defrost system as called for in the wiring diagram.

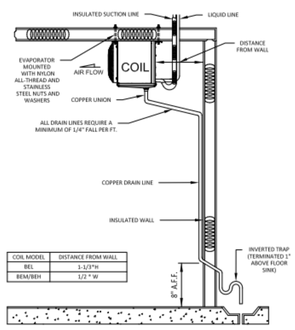
Electrical contractor to connect drain-line heater in the freezer.

All electrical wiring and installation shall be in accordance with the wiring diagram and local codes. Seal all penetrations through the walk-in units with foam.

Plumbing Contractor
Plumbing contractor to provide copper drain lines for walk-in refrigerator and freezer, pitched 1/4" per foot of run. Trap drain-line outside of refrigerated space to avoid entrance of warm, moist air.

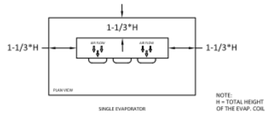
All plumbing installation shall be in accordance with local codes.

EVAPORATOR MOUNTING DETAIL (TYPICAL)



COIL MODEL	DISTANCE FROM WALL
BEL	1-1/3"H
BEM/BEH	1/2 " W

EVAPORATOR PLACEMENT & CLEARANCE REQUIREMENTS LOW PROFILE EVAPORATOR COILS (I.E. - BEL)



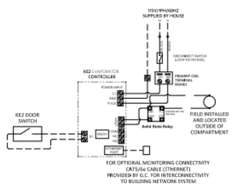
SINGLE EVAPORATOR

NOTE:
H = TOTAL HEIGHT OF THE EVAP. COIL

WIRING DIAGRAM - ECOSMART - AKEA1AE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN COOLER WITH ONE COIL 115/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW.

SYS	DESCRIPTION	VOLTAGE
A	WALK-IN COOLER	115/1

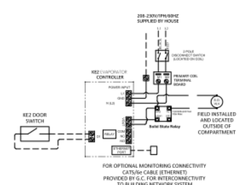


FACTORY WIRING ———
FIELD WIRING - - - -

WIRING DIAGRAM - ECOSMART - AKEB1EE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN FREEZER WITH ONE COIL 208-230/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW.

SYS	DESCRIPTION	VOLTAGE
B	WALK-IN FREEZER	208/1



FACTORY WIRING ———
FIELD WIRING - - - -

APPROVAL STATUS

THIS DRAWING REPRESENTS OUR UNDERSTANDING OF THE SPECIFICATIONS. PLEASE REVIEW IT CAREFULLY FOR ACCURACY. CLEARLY AND IN DETAIL NOTE CHANGES REQUIRED.

MARK APPROPRIATE BOX, SIGN, AND DATE BELOW.

- ☐ APPROVED FOR FABRICATION NO CHANGES
- ☐ APPROVED FOR FABRICATION WITH CHANGES NOTED
- ☐ REVISE AND RE-SUBMIT DRAWING

BY: _____ DATE: _____

NOTICE

THIS DRAWING BEING AN INSTRUMENT OF SERVICE IS AND WILL REMAIN PROPERTY OF REFRIGERATION DESIGN TECHNOLOGIES AND CANNOT BE USED WITHOUT WRITTEN AUTHORIZATION.

No.	Revision/Issue	Date
0	ORIGINAL ISSUE	10-2-24
1	CHANGED TO A2L EQUIPMENT	7-16-25

REFRIGERATION DESIGN TECHNOLOGIES
1808 FM Road 66 / P.O. Box 622
Waxahachie, Texas
(800) 736-9518
www.rdtonline.com

Consultant:
Foodservice Design Professionals, LLC
The Woodlands, TX

Dealer
-
-

Pecan Grove Elementary School
Fort Bend ISD

Project No: 31080
Designed By: E. Milligan
Drawn By: A. Rodriguez
Sheet 1.1 of sheets

ISSUE:
12/05/2024 DD PACKAGE
03/11/2025 50% CD PKG.
05/23/2025 90% CD PKG.
07/18/2025 ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

FOODSERVICE DESIGN PROFESSIONALS

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FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
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68854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 68854119 ON: 07/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS CONDENSING UNITS

P-QF1.6

REFER TO FOODSERVICE DESIGN PROFESSIONALS SPECIFICATIONS AND SUBSEQUENT SHEETS FOR ADDITIONAL COORDINATION INFORMATION

EXISTING EQUIPMENT NOTES (IF EXISTING EQUIPMENT IS PROVIDED IN THIS PROJECT):

1. EXISTING EQUIPMENT NOT SCHEDULED FOR RE-USE TO BE RELOCATED BY THE K.E.C. COORDINATE WITH OWNER FOR NEW LOCATION.
2. ALL UTILITIES NOT SCHEDULED FOR RE-USE TO BE CAPPED & COVERED BY REQUIRED DISCIPLINE.
3. K.E.C. TO VERIFY ALL EXISTING UTILITY LOCATIONS & COORDINATE WITH ALL EQUIPMENT AS REQUIRED.

8 EXISTING EQUIPMENT NOTES
NOT TO SCALE

ARCHITECT TO VERIFY/COORDINATE THE AESTHETIC OPTIONS BELOW (FOOD SERVICE COLOR, MATERIAL, OR SIGNAGE SELECTIONS) IF THESE ITEMS ARE PROVIDED IN THIS PROJECT:

1. COUNTERTOPS: STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
2. TRAY SLIDES: CORIAN OR STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
3. COUNTER FRONTS: CERAMIC TILE, 3 FORM, OR PLASTIC LAMINATE.
4. SNEEZE GUARDS: STONE INSETS.
5. GENERAL COLOR, MATERIAL AND GRAPHIC SELECTIONS:
   - A. DISPLAY AIR SCREEN MERCHANDISERS - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - B. BAKERY DISPLAY CASES - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - C. PASS THRU OR REACH IN HOLDING CABINETS - COLOR SELECTION: POWDER COAT (MFG.: TRUE) OR PLASTIC LAMINATE (MFG.: TRAULSEN) (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - D. HANGING HEAT LAMPS - TRACK AND FIXTURE COLOR SELECTION.
   - E. HEATED MERCHANDISERS.
   - F. PORTABLE GUIDE RAILS - STANCHION AND BELT COLOR SELECTION.
   - G. POPCORN MACHINE - SIGNAGE SELECTION.
   - H. BOTTLE COOLER - SIGNAGE SELECTION.
   - I. GRAPHICS PACKAGE INFORMATION.
   - J. HOT FOOD WELL COVERS.
6. ARCHITECT TO VERIFY/COORDINATE THE FINISHES BELOW:
   - A. WALLS: CERAMIC TILE, FLAT FRP, OR MOLDED FRP (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - B. CEILINGS: REMOVABLE VINYL FACE TILE (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - C. FLOORS: TILE, EPOXY, OR RUBBERIZED FLOORING SYSTEM (SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT AS APPROVED BY LOCAL JURISDICTION) (COORDINATE FLOOR TILE TRANSITION AT SERVING LINES).
   - D. FLOORS: WALK-IN ASSEMBLY - EXTEND KITCHEN FLOOR FLUSH INTO WALK-IN ASSEMBLY WITH COVED BASE.
   - E. FURR DOWNS ABOVE SERVING COUNTERS.

5 ARCHITECTURAL COORDINATION NOTES
NOT TO SCALE

CRITICAL NOTES:

1. CONTRACTOR MUST COORDINATE AND VERIFY ALL DIMENSIONS WITH FOOD SERVICE EQUIPMENT SHOP DRAWINGS AND MANUFACTURER'S DATA. DIMENSIONS SHOWN ARE FOR DESIGN AND BIDDING PURPOSES ONLY.
2. WALK-IN ASSEMBLY DOORS MUST BE LEFT OPEN WHILE INTERIOR CONCRETE FLOOR CURES.
3. INSTALL PROTECTIVE COVER ON WALK-IN ASSEMBLY WALL PANELS BEFORE INSTALLING CONCRETE FLOORS AND CURBS.
4. REFER TO GENERAL SPECS - DIVISION 27 TO PROVIDE CONDUIT, DATA, AND INTERCONNECT THE PANIC ALARM INSIDE FREEZER TO THE BUILDING AUTOMATION SYSTEM FOR NOTIFICATION TO DISTRICT PERSONNEL IN THE EVENT OF STAFF ENTRAPMENT.
5. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL (DIV. 22).

7 CRITICAL NOTES
NOT TO SCALE

DIVISION 26 (ELECTRICAL) IS RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL ELECTRICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. ROUGH-IN AND FINAL CONNECTION OF ELECTRICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 26.
6. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
7. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR INTERCONNECT CABLES BETWEEN LAN AND POS TERMINALS, CHANGE-MAKERS, PRE-CHECK UNITS, PRINTERS, CPUS, ETC. DIVISION 26 TO VERIFY WHERE THE CONDUIT IS TO RUN FOR POS SYSTEM (I.E., MANAGER'S OFFICE OR IDF ROOM).
8. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR FIRE SUPPRESSION SYSTEMS. INTERCONNECT FIRE PROTECTION SYSTEM TO PANEL BOX SHUNT TRIPS AND BUILDING ALARM.
9. WALK-IN LIGHT FIXTURE INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF WALK-IN IS PROVIDED IN THIS PROJECT).
10. TABLE LIMIT SWITCH INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF DISHMACHINE IS PROVIDED IN THIS PROJECT).
11. ELECTRICAL MATERIALS AND DEVICES (SHUNT-TRIP BREAKERS, SURGE PROTECTORS, LIGHTING CONTROL DEVICES, CONDUIT, WIRE, ETC.).
12. SWITCHES AND STAINLESS STEEL DISCONNECTS AS REQUIRED (PROVIDE, LOCATE, AND INSTALL – TO BE IN AN ACCESSIBLE LOCATION).
13. CHARGING STATIONS FOR FORKLIFTS, PALLET STACKERS, AND PALLET JACKS (SIZE, PROVIDE, LOCATE, AND INSTALL) (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
14. INTERCONNECTION BETWEEN CONDENSATE FAN AND DISHMACHINE CONTROL PANEL (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
15. INTERCONNECTION BETWEEN EXHAUST HOOD FANS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
16. INTERCONNECTION BETWEEN EXHAUST HOOD LIGHTS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
17. DOOR HEATERS, LIGHTS, COILS, AND PRESSURE RELIEF PORTS PRE-WIRED TO JUNCTION BOX AT TOP OF WALK-IN ASSEMBLIES (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) PROVIDED BY SECTION 11 40 00. FINAL CONNECTION BY DIV. 26.
18. IF ANY ELECTRICAL ACCESSORIES, FITTINGS, AND CORD/PLUGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV.26 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
19. PROVIDE WATERPROOF RECEPTACLES IN WET AREAS.
20. ALL ELECTRICAL CONNECTIONS BENEATH EXHAUST HOODS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) TO EXTEND TO SHUNT TRIP BREAKERS WITH ELECTRICAL PANEL BOX FOR SHUTDOWN DURING FIRE MODE.
21. RECEPTACLES ARE TO BE PRE-WIRED TO THE JUNCTION BOX OR LOAD CENTER FOR FINAL CONNECTION BY DIVISION 26.
22. ALL ELECTRICAL LIGHTING, POWER, AND DISTRIBUTION SYSTEMS.
23. DO NOT INTERCONNECT MORE THAN THREE (3) CONVENIENCE OUTLETS ON ONE (1) BREAKER.
24. OTHER THAN CONVENIENCE OUTLETS, ALL ELECTRICAL CONNECTIONS SHOWN ON FOOD SERVICE PLANS ARE DEDICATED BREAKERS.
25. DOORBELL AT RECEIVING DOOR (PROVIDE AND INSTALL – TO BE AUDIBLE THROUGHOUT KITCHEN, OFFICE, AND DRY STORAGE ROOM).
26. ADEQUATE LIGHTING AT RECEIVING DOOR.
27. PROVIDE AND INSTALL TWO EMERGENCY STROBE BEACONS THAT INTERCONNECT TO PANIC ALARM IN WALK-IN FREEZER. ONE (1) IN KITCHEN ABOVE WALK-IN FREEZER DOOR ONE (1) IN CAFETORIUM (IF WALK-IN IS PROVIDED IN THIS PROJECT). REFER TO GENERAL SPECIFICATIONS FOR ADDITIONAL DETAILS.
28. DEDICATED CIRCUIT FOR HEATED DRAIN LINE CONNECTION IN WALK-IN FREEZER AT EACH COIL (IF WALK-IN IS PROVIDED IN THIS PROJECT).

NOTE: ELECTRICAL CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 26. FOR ADDITIONAL REQUIREMENTS, REFER TO THE ELECTRICAL ENGINEER'S DRAWINGS.

6 ELECTRICAL COORDINATION NOTES
NOT TO SCALE

DIVISION 22 (PLUMBING) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL PLUMBING REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY PVC CONDUIT WITH WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO BEVERAGE LINES, CO2 LINES, AND REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL PLUMBING CONNECTIONS TO FOOD SERVICE EQUIPMENT AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 22. THIS INCLUDES BUT IS NOT LIMITED TO INSTALLATION OF ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), HOSES, GAS DISCONNECTS, AND DRAINS FROM EQUIPMENT POINT OF CONNECTION TO BUILDING PLUMBING SYSTEMS. ALL DRAIN LINES ARE PROVIDED AND INSTALLED BY DIV. 22.
7. KITCHEN EQUIPMENT CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), DRAIN FITTINGS, MIXING VALVES, CONTROL VALVES, WATER PRESSURE REGULATORS, VACUUM BREAKERS, AND ALL ACCESSORIES FOR EQUIPMENT SPECIFIED UNDER 11 40 00. DIVISION 22 IS RESPONSIBLE FOR INSTALLATION.
8. INDIRECT DRAIN LINE RUNS FROM EQUIPMENT TO NEAREST DRAIN OR FLOOR SINK. LINES TO BE TYPE 'K' COPPER.
9. IF ANY PLUMBING ACCESSORIES OR FITTINGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV. 22 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
10. GAS SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
11. WATER SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
12. COMPRESSED AIR SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM (IF REQUIRED FOR THIS PROJECT).
13. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL.
14. FLOOR SINKS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
15. FLOOR DRAINS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
16. TRENCH DRAINS (PROVIDE AND INSTALL). TRENCH LINERS PROVIDED BY 11 40 00. FLANGE AND LINERS TO BE FLUSH WITH FINISHED FLOOR.
17. GREASE TRAPS AS REQUIRED. VERIFY WITH LOCAL CODES TO BYPASS OR PIPE THRU GREASE TRAP AND/OR INTERCEPTOR.
18. P-TRAPS AS REQUIRED (INCLUDING ALL DISPOSERS).
19. INTERCONNECT WATER THRU WATER FILTER (FILTER PROVIDED BY 11 40 00 UNLESS OTHERWISE SPECIFIED) TO EQUIPMENT.
20. GAS QUICK DISCONNECT INSTALLATION (QUICK DISCONNECT PROVIDED BY 11 40 00).
21. SAFETY RESTRAINT CABLE INSTALLATION (SAFETY RESTRAINT CABLE PROVIDED BY 11 40 00).
22. SPECIFIED COUPLINGS AND PIPING TO ALL EQUIPMENT FURNISHED BY 11 40 00.
23. AIR COMPRESSORS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
24. WATER SOFTENERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
25. PRESSURE BOILERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
26. HAND SINKS (PROVIDE (UNLESS OTHERWISE SPECIFIED) AND INSTALL). PROVIDE HOT WATER TEMPERING VALVE IF REQUIRED. WATER TEMPERATURE TO BE AT LEAST 100 DEGREES AND FLOW FOR AT LEAST 20 SECONDS.
27. ICE BIN DRAIN INSULATION (IF ICE MACHINE IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
28. UNIONS AT DISPOSER SOLENOID VALVES (IF DISPOSER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
29. BACK FLOW PREVENTION AS REQUIRED (PROVIDE AND INSTALL - INCLUDING ALL DISPOSERS). BACK- SIPHONAGE SHALL BE INSTALLED AT ALL FIXTURES AND EQUIPMENT WHERE BACKFLOW AND/OR BACK-SIPHONAGE MAY OCCUR AND WHERE A MINIMUM AIR GAP CANNOT BE PROVIDED BETWEEN THE WATER TO THE FIXTURE OR EQUIPMENT AT ITS FLOOD/LEVEL RIM. VACUUM BREAKERS, WHEN FURNISHED WITH EQUIPMENT, SHALL OVERRIDE THE ABOVE, IF ACCEPTABLE WITH APPLICABLE CODES. DIVISION 22 RESPONSIBLE FOR VERIFYING REQUIREMENT WITH LOCAL CODES.
30. JANITOR SINK WITH FAUCET (PROVIDE AND INSTALL).
31. FREEZE PROOF HYDRANT AT EXTERIOR OF BUILDING BY RECEIVING DOOR (PROVIDE AND INSTALL).
32. REVERSE OSMOSIS SYSTEMS (SIZE, PROVIDE (UNLESS OTHERWISE SPECIFIED), LOCATE AND INSTALL).
33. ALL PIPING WITHIN COUNTER BODY OR UNDER FABRICATED COUNTERS TO BE RUN TO A CONNECTION POINT BELOW COUNTER BODY BY SECTION 11 40 00. FINAL CONNECTION BY DIVISION 22.
34. EXHAUST HOOD CONDENSATE DRAIN CONNECTIONS (IF EXHAUST HOOD IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
35. INTERCONNECTION OF 1/2" CW TO PRE-RINSE AND DISPOSERS CONE/BODY INLETS PIPED THROUGH SOLENOID AND VACUUM BREAKER (IF DISPOSER IS PROVIDED IN THIS PROJECT).
36. FIRE SYSTEM PIPING. EXPOSED PIPING TO BE CHROME PLATED.
37. PIPE 1/2" COLD WATER TO SWIRL INLETS AT DISPOSERS (IF DISPOSER IS PROVIDED IN THIS PROJECT).
38. WATER TREATMENT FOR ICE BUILDERS (NON-CHLORINATED WATER WITH A PH LEVEL OF 10 OR HIGHER) AND ANY DRAINS AND OVERFLOWS. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS BY DIV. 23 (IF ICE BUILDERS AND TUMBLE CHILLERS ARE PROVIDED IN THIS PROJECT).

NOTE: WATER AND DRAIN CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 22. FOR ADDITIONAL WATER AND DRAIN REQUIREMENTS REFER TO MECHANICAL DRAWINGS.

NOTE: REFER TO ELECTRICAL/MECHANICAL DRAWINGS FOR REQUIREMENTS OF EXHAUST FANS AND MAKE-UP AIR HANDLERS AND LOCATION OF AN INTERLOCK AND START/STOP CONTROLS TO BE LOCATED WITHIN FOOD SERVICE AREA BY DIVISION 26.

4 PLUMBING COORDINATION NOTES
NOT TO SCALE

DIVISION 23 (MECHANICAL) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL MECHANICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL CONNECTION OF MECHANICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR).
7. TESTING AND BALANCING FOR ROOMS AND EXHAUST HOODS TO BE PERFORMED BY MECHANICAL CONTRACTOR. BALANCE REPORT FOR FOOD SERVICE EXHAUST HOODS TO BE PROVIDED TO FOODSERVICE DESIGN PROFESSIONALS (FDP) IMMEDIATELY UPON COMPLETION (SEND TO HOUSTON.SUBMITTAL@FDP.ORG FOR HOUSTON OFFICE AND DALLAS.SUBMITTAL@FDP.ORG FOR DALLAS OFFICE) AND MUST BE SUBMITTED WITH O&M MANUALS.
8. EXHAUST HOODS, CONDENSATE HOODS, FIRE SUPPRESSION SYSTEMS, CONNECTIONS AND CONTROLS (PROVIDE AND INSTALL – *UNLESS OTHERWISE SPECIFIED*). PROVIDE TEMPERED AIR AT ALL SUPPLY DUCTS.
   - A. IF EXHAUST/CONDENSATE HOODS AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED UNDER SECTION 11 40 00, DIVISION 23 IS RESPONSIBLE FOR ALL EXHAUST AND CONDENSATE HOOD CONNECTIONS (PROVIDE AND INSTALL).
9. VFD SYSTEM AND CONTROLLERS, WHEN REQUIRED BY CODE (PROVIDE AND INSTALL).
10. PROVIDE AND INSTALL ALL VENTILATION (DIRECT OR INDIRECT), AIR CONDITIONING AND HEATING SYSTEMS (UNLESS OTHERWISE SPECIFIED).
11. COORDINATE SUPPLY AND RETURN DUCTS ABOVE SERVING COUNTERS OR OPEN-AIR REFRIGERATED MERCHANDISERS. NO COLD AIR TO BLOW DIRECTLY ON HOT FOOD COUNTERS.
12. COORDINATE SUPPLY AND RETURN DUCTS AWAY FROM EQUIPMENT WITH TOP MOUNTED REFRIGERATION. NO COLD AIR TO BLOW DIRECTLY ON COMPRESSORS.
13. MECHANICAL CONTRACTOR TO LOCATE TEMPERATURE MONITORS WITHIN RETURN DUCTS.
14. CIRCULATING AIR ABOVE WALK-IN ASSEMBLIES (PROVIDE AND INSTALL).
15. CIRCULATING AIR ABOVE AND IN AIR GAPS AT WAREHOUSE COLD STORAGE ASSEMBLIES (PROVIDE AND INSTALL).
16. WATER CHILLERS AS REQUIRED (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).
17. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).

3 MECHANICAL COORDINATION NOTES
NOT TO SCALE

GENERAL CONTRACTOR RESPONSIBLE FOR BUT NOT LIMITED TO:

1. ANY WALL PENETRATION REQUIRED FOR FOOD SERVICE EQUIPMENT UTILITIES. ESCUTCHEON PLATES OR S/S SLEEVES TO BE PROVIDED AND INSTALLED AS NEEDED.
2. BULK FREEZER VENTILATION PIPE (IF BULK FREEZER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
3. CORE DRILLING FOR GUIDE RAILS (IF GUIDE RAILS ARE PROVIDED IN THIS PROJECT).
4. REFRIGERATION ROOF CURBS / ROOF JACK (IF REFRIGERATION SYSTEM IS PROVIDED IN THIS PROJECT AND LOCATED ON ROOF).
5. INTERIOR BOLLARDS (IF REQUIRED FOR THIS PROJECT) – TO BE EPOXY PAINTED PER LOCAL CODES (PROVIDE AND INSTALL).
6. FURNISH AND INSTALL 3/4" PLYWOOD BLOCKING IN THE WALL FOR MOUNTING EQUIPMENT FURNISHED BY SECTION 11 40 00 AS REQUIRED.
7. WALK-IN DEPRESSIONS (TO BE DEAD LEVEL) AND SAND LEVELING BED (IF WALK-IN IS PROVIDED IN THIS PROJECT AND RECESS IS SHOWN).
8. STRUCTURAL BRACING FOR BULK WALK-IN CEILING PANELS IF REQUIRED.
9. MENU SYSTEM VIDEO MONITORS IN SERVERY (UNLESS OTHERWISE SPECIFIED).
10. STRUCTURAL BRACING FOR MENU SYSTEM VIDEO MONITORS IF REQUIRED.
11. INTERIOR/EXTERIOR REFRIGERATION PENETRATIONS AND SLEEVES AT BUILDING PENETRATIONS.
12. DOORSCOPE VIEWER (PEEPHOLE) WITH WIDE VIEWING ANGLE AT RECEIVING DOOR.
13. CANOPY AT RECEIVING DOOR. COORDINATE HEIGHT WITH THE HEIGHT OF RECEIVING DOOR (8') AND THE MOUNTING HEIGHT OF AIR SCREEN ABOVE THE DOOR.
14. SOAP AND TOWEL DISPENSER PROVIDED BY OWNER. G.C. RESPONSIBLE FOR INSTALLATION.
15. WASHER AND DRYER (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
16. DWARF WALL AT EXPOSED FRONT/ENDS OF CAFETERIA SERVING COUNTERS WITH FINISH AS SELECTED BY ARCHITECT (IF REQUIRED IN THIS PROJECT).

2 GENERAL CONTRACTOR COORDINATION NOTES
NOT TO SCALE

HEALTH DEPARTMENT REQUIREMENTS (VERIFY WITH LOCAL JURISDICTIONS):

1. FLOORS: VERIFY WITH DIVISION 9. FLOORS TO BE SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT.
2. WALLS: VERIFY WITH ARCHITECTURAL DOCUMENTS. WALLS TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
3. CEILING: LAY-IN TILES. CEILING TILES TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
4. EMPLOYEE TOILET: TO BE LOCATED OFF MAIN CORRIDOR AND ADJACENT TO MAIN KITCHEN. RESTROOM MUST HAVE A VESTIBULE AND NOT OPEN TO KITCHEN / PREP AREAS. TOILETS TO BE WELL VENTILATED.
5. LAVATORIES: WALL HUNG LAVATORIES LOCATED WITHIN ALL FUNCTIONAL WORKING AREAS.
6. UTENSIL CLEANING/SANITIZING: ACCOMPLISHED IN UTENSIL WASH AREA WITH (3) 2'-0" x 2'-2" x 15" MINIMUM DEEP SINKS AND WAREWASH MACHINE.
7. MECHANICAL CLEANING/SANITIZING OF TABLEWARE: ACCOMPLISHED BY WAREWASH MACHINE.
8. STOREROOMS: AMPLE DAILY STORAGE PROVIDED IN ENCLOSED STORE ROOMS. STORE ROOMS TO BE VENTILATED AND MAINTAIN PROPER TEMPERATURE.
9. WATER HEATER: LOCATED IN THE MECHANICAL ROOM ADJACENT TO KITCHEN. TO BE SIZED TO PROVIDE AMPLE WATER TO MAINTAIN PROPER WATER TEMPERATURE THROUGHOUT HOURS OF OPERATION.
10. GREASE TRAP: LOCATED AT EXTERIOR OF BUILDING. REFER TO ENGINEER'S DRAWINGS.
11. FOOD SERVICE EQUIPMENT: ALL FLOOR-MOUNTED EQUIPMENT IS TO BE SEALED TO THE FLOOR TO PROVIDE AN EASILY CLEANABLE SURFACE AND PREVENT SEEPAGE. EQUIPMENT NOT MOUNTED TO THE FLOOR IS TO BE WALL MOUNTED ON WALL CARRIERS, OR ELEVATED ON LEGS TO PROVIDE AT LEAST A SIX-INCH CLEARANCE BETWEEN FLOOR AND EQUIPMENT.
12. MOP SINK: LOCATED IN JANITOR CLOSET OFF MAIN KITCHEN CORRIDOR, AND LOCATED IN CLOSE PROXIMITY TO THE SERVERY WAREWASH AREA.
13. EXHAUST HOODS: EXHAUST HOODS PROVIDED OVER COOKING EQUIPMENT WITH LIQUID CHEMICAL ANSUL FIRE EXTINGUISHING SYSTEM.
14. LIGHTING AND PROTECTIVE SHIELDING: RECESSED CEILING-MOUNTED FLUORESCENT LIGHT FIXTURES FITTED WITH CLEAR LEXAN DIFFUSERS.
15. GARBAGE AND REFUSE: CENTRAL TRASH COLLECTION PROVIDED FOR BUILDING LOCATED NEAR RECEIVING AREA ON SMOOTH CONCRETE SURFACE.
16. POISONOUS AND TOXIC MATERIAL STORAGE: LOCATED IN RESPECTIVE JANITOR CLOSETS WITH LOCKING HARDWARE.

1 HEALTH DEPARTMENT COORDINATION NOTES
NOT TO SCALE

ISSUE:

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07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

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7/15/2025
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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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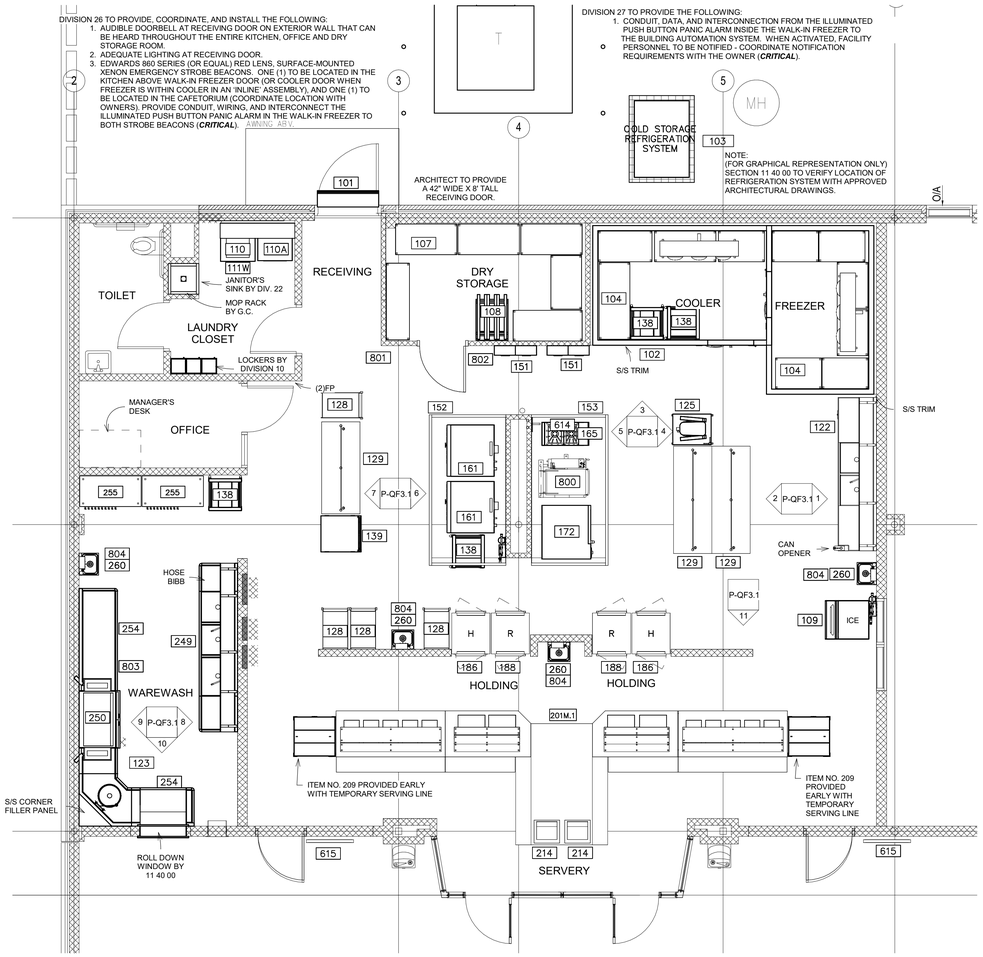
FS GENERAL COORDINATION NOTES

P-QF0.0

FOOD SERVICE DRAWING INDEX	
FDP SHEET NUMBER	FDP SHEET NAME
P-QF0.0	FS GENERAL COORDINATION NOTES
P-QF1.0	FS EQUIPMENT PLAN
P-QF1.1	FS FACILITY MODEL
P-QF1.2	FS EQUIPMENT MODEL
P-QF1.3	FS SPECIAL CONDITIONS & MECHANICAL PLAN
P-QF1.4	FS PLUMBING PLAN
P-QF1.5	FS ELECTRICAL PLAN
P-QF1.6	FS CONDENSING UNITS
P-QF1.7	FS WALK-INS
P-QF1.8	FS SERVING LINE
P-QF1.9	FS SERVING LINE
P-QF2.0	FS DEMO PLAN
P-QF2.1	FS TEMPORARY SERVING
P-QF3.1	FS ELEVATIONS
P-QF4.1	FS SECTIONS & DETAILS
P-QF4.2	FS DETAILS
P-QF4.3	FS DETAILS



1 FOOD SERVICE EQUIPMENT PLAN
1/4" = 1'-0"

FOOD SERVICE EQUIPMENT SCHEDULE					
REFER TO SHEET QF1 FOR GENERAL CONTRACTOR & HEALTH DEPARTMENT COORDINATION NOTES					
FDP ITEM	FDP QTY	FDP DESCRIPTION	FDP REMARKS	MANUFACTURER	MODEL
	355				
101	1	AIR SCREEN		MARS	STD248-1UA-OB
102	1	COLD STORAGE ASSEMBLY		AMERICAN PANEL	
103	1	COLD STORAGE REFRIGERATION SYSTEM			
104	2	COLD STORAGE SHELVING		METRO	METROMAX Q
107	1	DRY STORAGE SHELVING		METRO	METROMAX Q
108	1	CAN RACK		NEW AGE	1250CK
109	1	ICE MACHINE W/ BIN		MANITOWOC	UYF0310A
110	1	CLOTHES WASHER		WHIRLPOOL	RESIDENTIAL
110A	1	CLOTHES DRYER		WHIRLPOOL	RESIDENTIAL
111W	1	WALL MOUNTED OVERSHELF		CUSTOM FABRIACTED	
122	1	TWO COMPARTMENT SINK WITHOUT DISPOSER		CUSTOM FABRIACTED	
123	1	DISPOSER - 3HP		SALVAJOR	300-CA-18-ARSS-LD
125	1	20 QT. MIXER W/STAND		HOBART	HL200
128	4	UTILITY CART		LAKESIDE	522
129	3	WORKTABLE W/S.BAR UT.RACK		CUSTOM FABRIACTED	
138	4	PAN RACK		CRES COR	207-UA-13A
139	1	INSUL MOBILE PROOFER		CRES COR	H-137-WSUA-12D
151	2	FIRE PROTECTION SYSTEM		ANSUL	R102
152	1	EXHAUST HOOD	EXISTING		
153	1	EXHAUST HOOD	EXISTING		
161	2	CONVECTION OVEN		BLODGETT	DFG-200 DBL
165	1	TWO BURNER RANGE		VULCAN	V2B18B
172	1	COMBI OVEN		RATIONAL	ICP 6-FULL/6-FULL N/G
186	2	PASS-THRU HEATED CABINET-1DR		TRAULSEN	AHF132WP
188	2	PASS-THRU REFRIGERATOR-1DR		TRAULSEN	AHT132WPUT
201M.1	1	SERVING COUNTER-MODULAR		COUNTERCRAFT	SCOL-408-MOD
214	2	CASH REGISTER	OWNER FURNISHED		
249	1	THREE COMPARTMENT SINK NO DISPOSER		CUSTOM FABRIACTED	
250	1	DISHMACHINE		HOBART	CL44-BAS
254	2	SOILED & CLEAN DISHTABLE		CUSTOM FABRIACTED	
255	2	MOBILE DRYING RACK		METRO	PR48VX3
260	4	HAND SINK	FURNISHED & INSTALLED BY DIV. 22		
614	1	FILL FAUCET		T&S	B-0610
615	2	MENU MONITOR	BY OWNER		
800	1	15 GAL. BRAISING PAN		GROEN	BPM-15GA
801	1	S/S CORNER GUARDS	LOCATED ON EVERY EXPOSED CORNER THROUGHOUT KITCHEN	CUSTOM FABRIACTED	
802	1	WALL BUMPERS	LOCATED ON ALL EXPOSED BUILDING WALLS	PAWLING	MD-1
803	1	WATER SOFTENER		HOBART	WS-40
804	4	S/S SPLASH GUARDS			

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PROJ. NO.: 23-25
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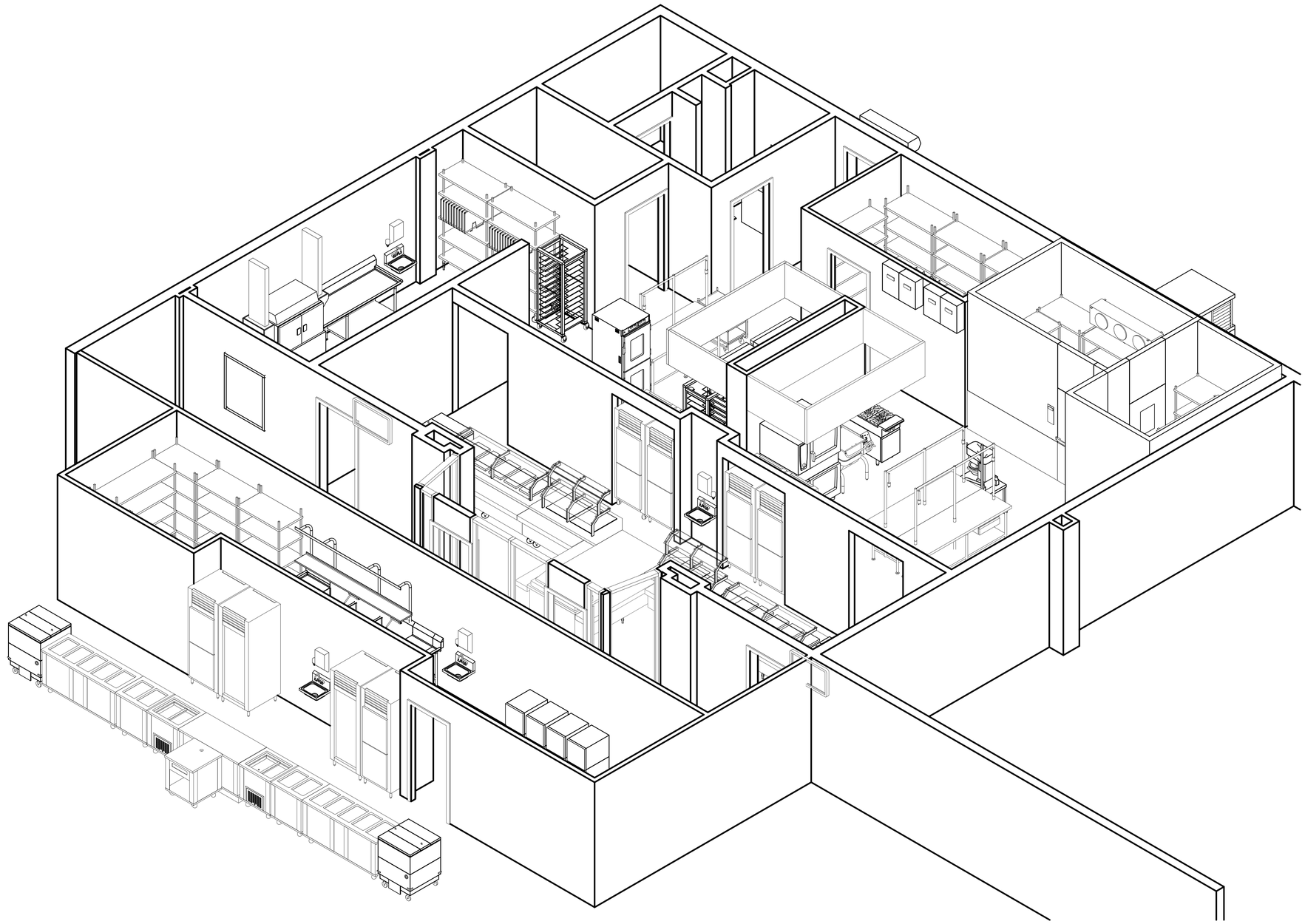
FS EQUIPMENT PLAN

P-QF1.0

ISOMETRIC VIEWS WITHIN THIS DRAWING ARE NOT TO SCALE AND ARE PROVIDED FOR REFERENCE PURPOSES ONLY. ISOMETRIC VIEWS ARE NOT INTENDED FOR REGULATORY APPROVAL, PERMITTING, NOR CONSTRUCTION. REFER TO FLOOR PLANS AND DETAILS FOR SPECIFIC PROJECT INFORMATION.



1 FS FACILITY MODEL

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FDP
FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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FS FACILITY MODEL

P-QF1.1

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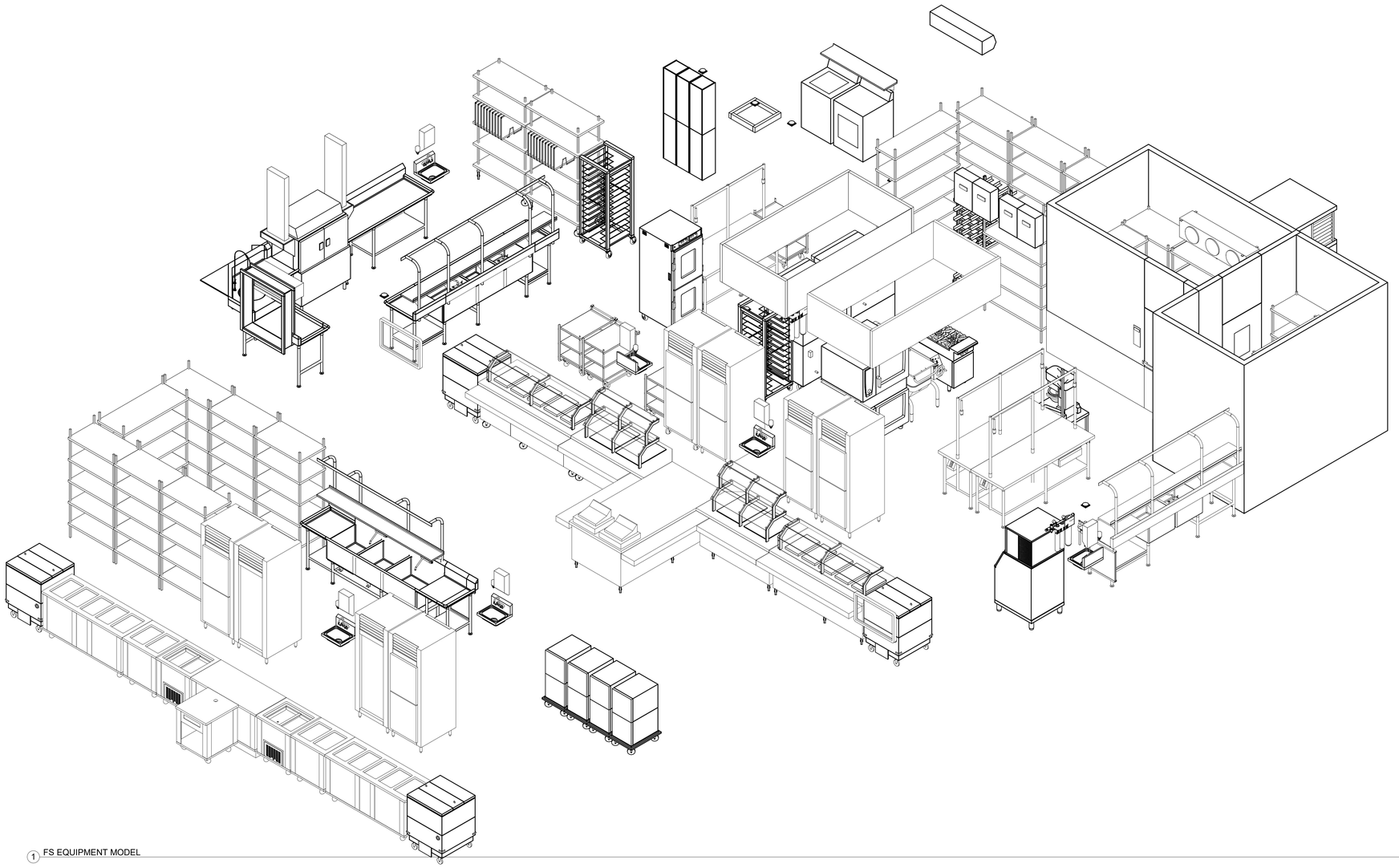

1 FS EQUIPMENT MODEL

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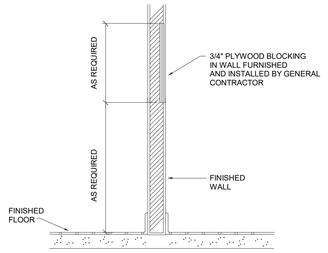
FS EQUIPMENT MODEL

P-QF1.2

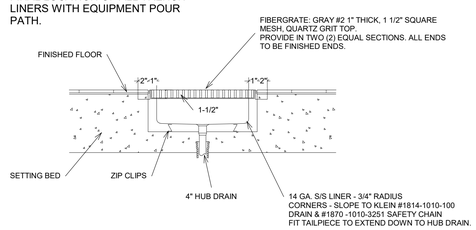
FOOD SERVICE MECHANICAL SCHEDULE						
REFER TO SHEET QF1 FOR MECHANICAL COORDINATION NOTES						
FDP NO.	FDP QTY	FDP TYPE	FDP SIZE	FDP LOC	FDP CFM	FDP S.P.
M101	1	EXHAUST	4" X 16"		400	0.30"
M102	1	EXHAUST	4" X 16"		800	0.30"
M103	1	DRYER VENT	6" DIA.		---	---

NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION AND SIZE OF WALL BLOCKING.



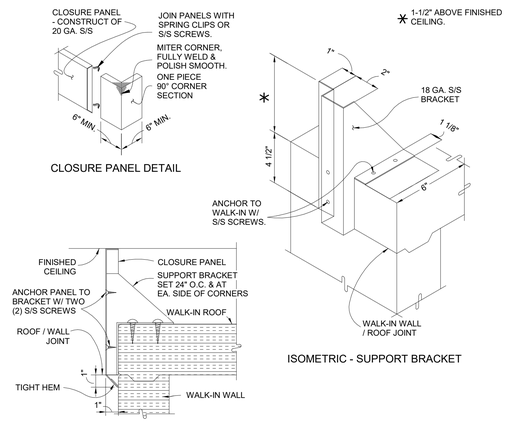
5 WALL BLOCKING DETAIL
NOT TO SCALE

NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION OF ALL TRENCH LINERS WITH EQUIPMENT POUR PATH.

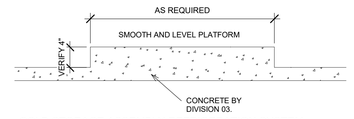


6 TRENCH LINER DETAIL
NOT TO SCALE

1 FOOD SERVICE SPECIAL CONDITIONS PLAN
1/4" = 1'-0"

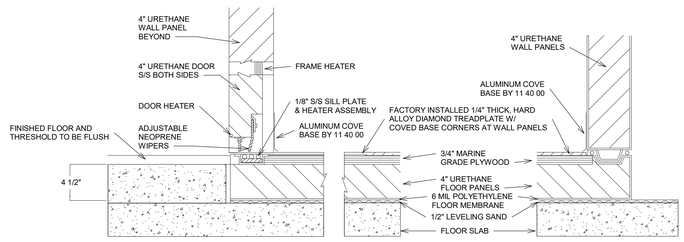


3 COLD STORAGE ASSEMBLY ENCLOSURE PANEL DETAIL
NOT TO SCALE



COLD STORAGE ASSEMBLY REFRIGERATION SYSTEM GROUND MOUNT 4" PLATFORM DETAIL
4 NOT TO SCALE

SLAB TO BE MODIFIED AS REQUIRED TO ALLOW FOR A 4 1/2" DEPRESSION SLAB. PROVIDE NEW LEVEL CONCRETE PAD FOR COLD STORAGE ASSEMBLY.



WALL SECTION @ EXTERIOR DOOR

2 COLD STORAGE ASSEMBLY 4 1/2" DEPRESSION DETAIL
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
FCSI 888544119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
DRAWING OR THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 888544119 ON 07/18/2025

ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

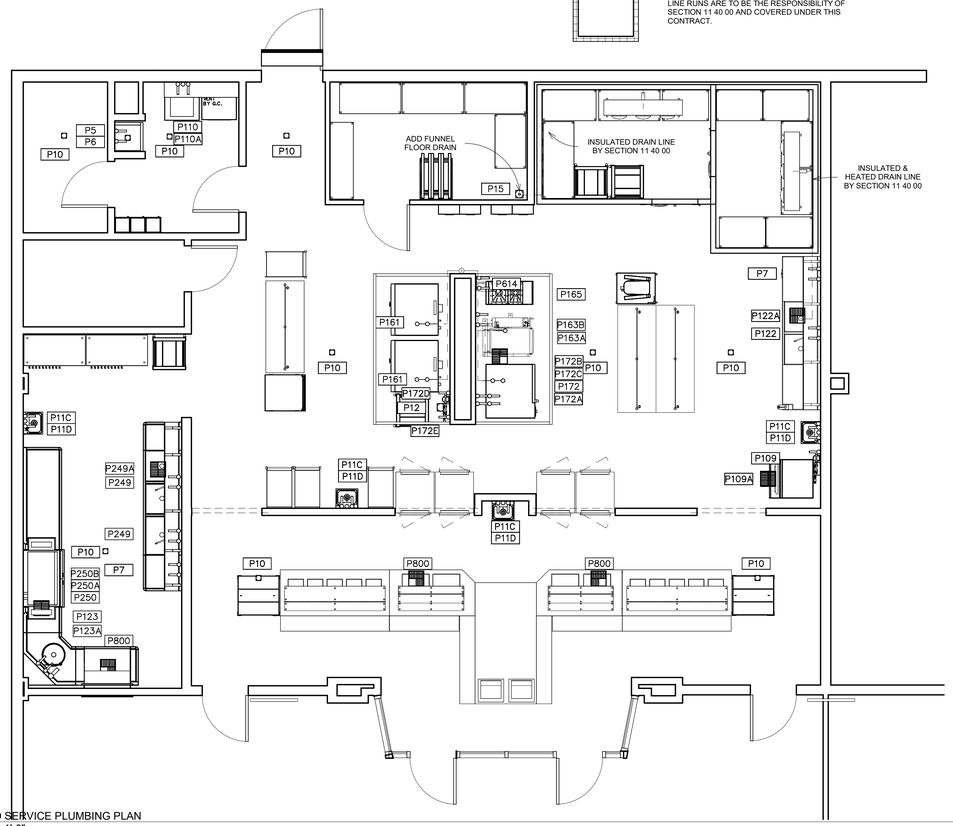
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS SPECIAL CONDITIONS & MECHANICAL PLAN

P-QF1.3

FOOD SERVICE PLUMBING SCHEDULE						
REFER TO SHEET QF1 FOR PLUMBING COORDINATION NOTES						
FDP PNO	FDP PSIZE	FDP PCONN	FDP PSERVICE TO	FDP PLOC	FDP PAFF	FDP PREMARKS
P5	3/4"	H & C WATER	JANITOR SINK	WALL	48"	JANITOR SINK BY PLUMBER
P6	4"	FLOOR DRAIN	JANITOR SINK	FLOOR	VERIFY	JANITOR SINK BY PLUMBER
P7	3/4"	H & C WATER	HOSE BIBB	WALL	18"	BTC
P10	VERIFY	FLOOR DRAIN	GENERAL AREA DRAIN	FLOOR	VERIFY	---
P11C	1/2"	H & C WATER	FAUCET	WALL	18"	FURNISHED & INSTALLED BY DIV. 22
P11D	1 1/2"	DIRECT DRAIN	HAND SINK	WALL	15"	FURNISHED & INSTALLED BY DIV. 22
P12	VERIFY	FLOOR DRAIN	EQUIP. DRAIN	FLOOR	VERIFY	NO SLOPE
P15	4"	FLOOR DRAIN	FUNNEL FLOOR DRAIN	FLOOR	0"	---
P109	3/4"	COLD WATER	WATER/ ICE	WALL	60"	BTC
P109A	12" SQ.	FLOOR SINK	ICE MACHINE	FLOOR	0"	FULL GRATE
P110	3/4"	H & C WATER	CLOTHES WASHER	WALL	48"	BTC; VALVE BOX
P110A	2"	INDIRECT DRAIN	CLOTHES WASHER	WALL	48"	VALVE BOX
P122	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P122A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	3/4 GRATE
P123	3/4"	H & C WATER	FAUCET / DISPOSER	WALL	13"	BTC
P123A	2"	DIRECT DRAIN	DISPOSER	WALL	10"	BTC
P161	(2)3/4"	NATURAL GAS	CONVECTION OVEN	WALL	18"/36"	BTC - 60 MBTU/HR EACH
P163A	3/4"	NATURAL GAS	TILT BRAISING PAN	WALL	18"	BTC - 65 MBTU/HR
P163B	3/4"	H & C WATER	TILT BRAISING PAN	WALL	36"	BTC
P165	1"	NATURAL GAS	RANGE	WALL	18"	BTC - 70 MBTU/HR
P172	(2)3/4"	COLD WATER	COMBI OVEN	WALL	24"/48"	BTC - INTERCONNECT THRU FILTERS
P172A	3/4"	COLD WATER	COMBI OVEN	WALL	48"	BTC
P172B	12"SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE
P172C	(2)3/4"	NATURAL GAS	COMBI OVEN	WALL	18"/36"	BTC - 105 MBTU/HR EACH
P172D	3/4"	COLD WATER	COMBI OVEN	WALL	66"	BTC; INTERCONNECT TO P172
P172E	3/4"	COLD WATER	COMBI OVEN WATER FILTER	WALL	66"	BTC
P249	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P249A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	THREE QUARTER GRATE
P250	12" SQ.	FLOOR SINK	BOOSTER / DISHMACHINE	FLOOR	18"	BTC
P250A	3/4"	HOT WATER	DISHMACHINE	WALL	18"	EXT. THRU W.FILTER TO BOOSTER / DISH MACHINE - 140DEG.MIN.
P250B	3/4"	COLD WATER	DISHMACHINE	WALL	18"	BTC
P614	1/2"	H & C WATER	FILL FAUCET	WALL	42"	BTC
P800	12" SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE



NOTE:
(FOR GRAPHICAL REPRESENTATION ONLY)
SECTION 11 40 00 TO VERIFY LOCATION OF REFRIGERATION SYSTEM WITH APPROVED ARCHITECTURAL DRAWINGS. REFRIGERATION LINE RUNS ARE TO BE THE RESPONSIBILITY OF SECTION 11 40 00 AND COVERED UNDER THIS CONTRACT.



1 FOOD SERVICE PLUMBING PLAN
1/4" = 1'-0"

SECTION 11 40 00 TO PROVIDE LOOSE WITH FOOD SERVICE EQUIPMENT. INSTALLATION BY DIV. 22 & 26.

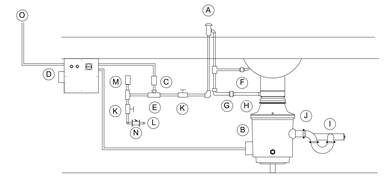
- (A) VACUUM BREAKER
- (B) DISPOSER
- (C) TIME DELAY
- (D) CONTROL PANEL
- (E) SOLENOID VALVE

DIVISION 22 TO PROVIDE AND INSTALL

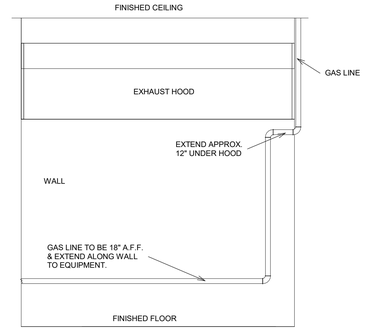
- (F) 1/2" CW INLET
- (G) FLOW CONTROL
- (H) 1/2" CW
- (I) 2" DRAIN LINE WITH P-TRAP & Y ADAPTOR
- (J) 1-1/2" TAILPIECE
- (K) GATE VALVE
- (L) 1/2" CW SUPPLY
- (M) SHOCK STOP
- (N) RPZ BACK FLOW PREVENTOR

DIVISION 26 TO PROVIDE AND INSTALL

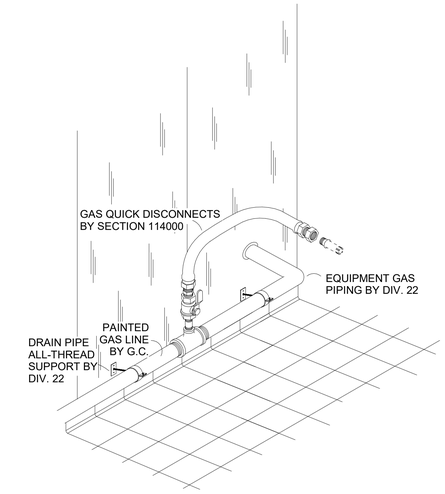
- (O) POWER SUPPLY



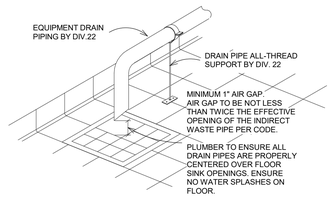
6 DISPOSER WITH VACUUM BREAKER DETAIL
NOT TO SCALE



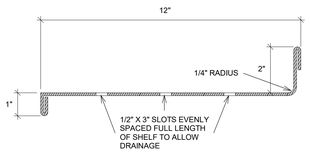
7 EXHAUST HOOD - GAS LINE ROUTING DETAIL
NOT TO SCALE



3 GAS DISCONNECT DETAIL
NOT TO SCALE



5 DRAIN PIPING FASTENER DETAIL
NOT TO SCALE



8 WAREWASH - PERFORATED OVER SHELF DETAIL
NOT TO SCALE

○	HW	HOT WATER	▢	FFD	FUNNEL FLOOR DRAIN
○	CW	COLD WATER	◣	EVC	EXHAUST VENT CONNECTION
○	HTW	180 F HOT WATER	◢	SVC	SUPPLY VENT CONNECTION
◎		CHILLED WATER	◔	FR	DIRECT-CONNECTED FLUE RISER
●	W	DIRECT WASTE	◎	PS	PIPE SLEEVE
○	IW	INDIRECT WASTE	⊙		COMPRESSED AIR
⊙		GAS SUPPLY	♦		CO2
◕		STEAM SUPPLY		AFF	ABOVE FINISHED FLOOR
⊙	CR	CONDENSATE RETURN		BTC	BRANCH TO CONN. ON EQUIP
◉	DR	DRAIN		DFA	DROP FROM ABOVE
▢	FD	FLOOR DRAIN		CLG	CEILING
▟	FST	FLOOR SINK 3/4 GRATE			
▟	FSH	FLOOR SINK 3/4 GRATE			

2 PLUMBING SYMBOLS
NOT TO SCALE

ISSUE:

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05/23/2025	90% CD PKG.
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FDP
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3330 OLD S DRIVE
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SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THE ITEM APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO.-48854119 ON: 07/15/2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS PLUMBING PLAN

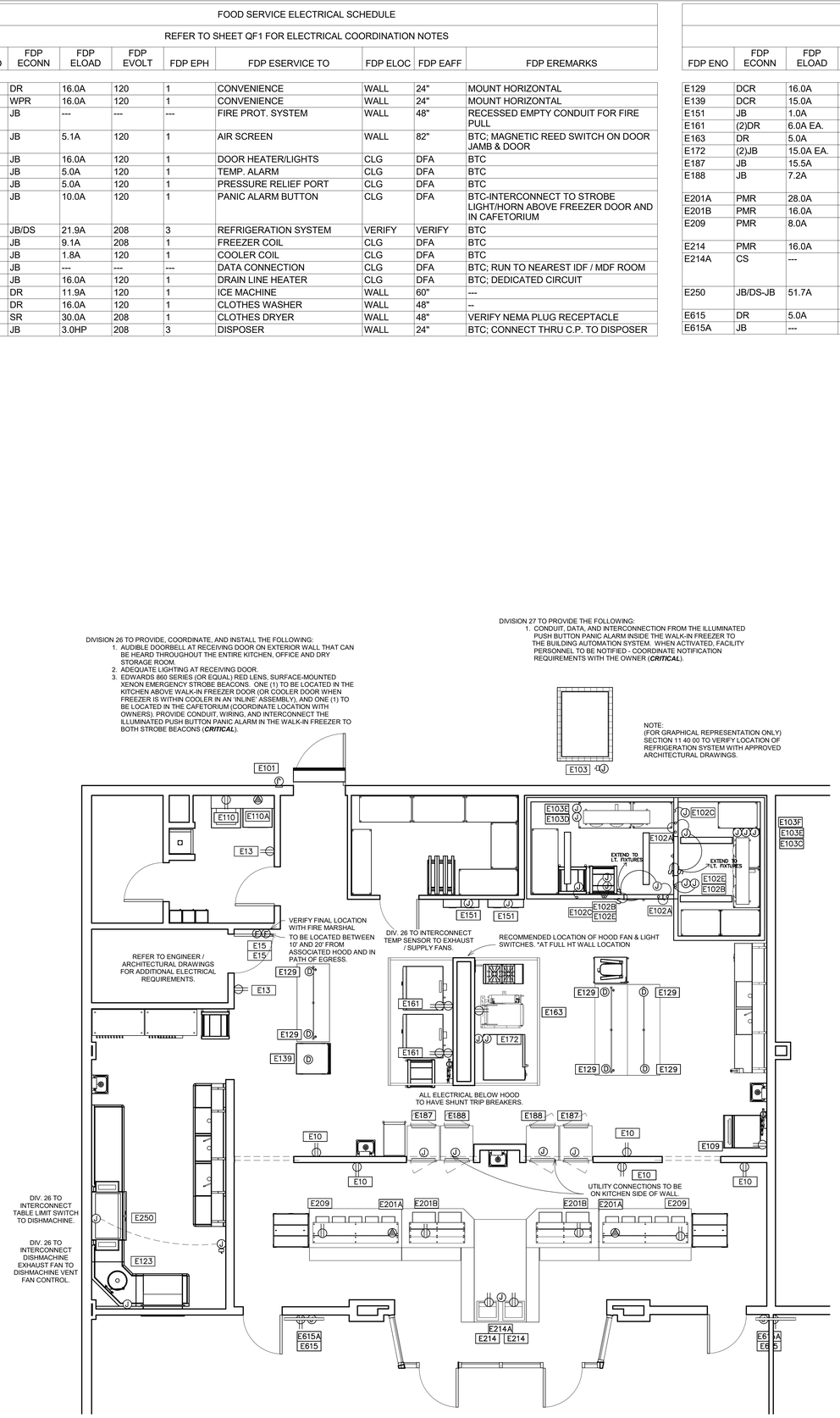
P-QF1.4

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E10	DR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E13	WPR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E15	JB	---	---	---	FIRE PROT. SYSTEM	WALL	48"	RECESSED EMPTY CONDUIT FOR FIRE PULL
E101	JB	5.1A	120	1	AIR SCREEN	WALL	82"	BTC; MAGNETIC REED SWITCH ON DOOR JAMB & DOOR
E102A	JB	16.0A	120	1	DOOR HEATER/LIGHTS	CLG	DFA	BTC
E102B	JB	5.0A	120	1	TEMP. ALARM	CLG	DFA	BTC
E102C	JB	5.0A	120	1	PRESSURE RELIEF PORT	CLG	DFA	BTC
E102E	JB	10.0A	120	1	PANIC ALARM BUTTON	CLG	DFA	BTC-INTERCONNECT TO STROBE LIGHT/HORN ABOVE FREEZER DOOR AND IN CAFETORIUM
E103	JB/DS	21.9A	208	3	REFRIGERATION SYSTEM	VERIFY	VERIFY	BTC
E103C	JB	9.1A	208	1	FREEZER COIL	CLG	DFA	BTC
E103D	JB	1.8A	120	1	COOLER COIL	CLG	DFA	BTC
E103E	JB	---	---	---	DATA CONNECTION	CLG	DFA	BTC; RUN TO NEAREST IDF / MDF ROOM
E103F	JB	16.0A	120	1	DRAIN LINE HEATER	CLG	DFA	BTC; DEDICATED CIRCUIT
E109	DR	11.9A	120	1	ICE MACHINE	WALL	60"	---
E110	DR	16.0A	120	1	CLOTHES WASHER	WALL	48"	--
E110A	SR	30.0A	208	1	CLOTHES DRYER	WALL	48"	VERIFY NEMA PLUG RECEPTACLE
E123	JB	3.0HP	208	3	DISPOSER	WALL	24"	BTC; CONNECT THRU C.P. TO DISPOSER

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E129	DCR	16.0A	120	1	TABLE RECEPTACLE	CLG	84"	TWISTLOCK PLUG & RECEPTACLE
E139	DCR	15.0A	120	1	INSUL. MOBILE PROOFER	CEILING	DFA	--
E151	JB	1.0A	120	1	FIRE PROT. SYSTEM	CLG	DFA	BTC
E161	(2)DR	6.0A EA.	120	1	CONVECTION OVEN	WALL	24"/48"	SHUNT TRIP BREAKER
E163	DR	5.0A	120	1	TILT BRAISING PAN	WALL	24"	SHUNT TRIP BREAKER
E172	(2)JB	15.0A EA.	208	1	COMBI OVEN	WALL	24"/48"	BTC- SHUNT TRIP BREAKER
E187	JB	15.5A	120/208	1	HEATED CABINET	WALL	96"	BTC; MOUNT ON KITCHEN SIDE
E188	JB	7.2A	120	1	REFRIGERATOR	WALL	96"	BTC; MOUNT ON KITCHEN SIDE-OMIT PLUG, UNIT TO BE HARDWIRED
E201A	PMR	28.0A	208	1	HOT FOOD COUNTER	FLOOR	4.5"	BTC
E201B	PMR	16.0A	120	1	COLD FOOD COUNTER	FLR	4.5"	---
E209	PMR	8.0A	120	1	DROP FRONT MILK COOLER-8 CASE	FLR	4.5"	---
E214	PMR	16.0A	120	1	CASH REGISTER	FLR	4.5"	DEDICATED CIRCUIT
E214A	CS	---	---	---	POS	FLOOR	6"	BTC; CONDUIT W/DATA LINE TO RUN TO MANAGER'S OFFICE OR IDF ROOM-VERIFY
E250	JB/DS-JB	51.7A	480	3	DISHMACHINE	WALL	66"	BTC; EXTEND FROM JB/DS AT NEAREST WALL
E615	DR	5.0A	120	1	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE DCO AT VIDEO LOCATION
E615A	JB	---	---	---	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE JB AT DATA LOCATION

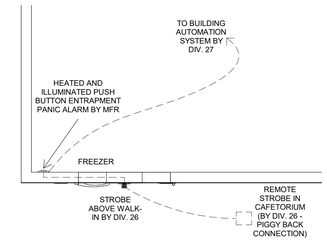
DIVISION 26 TO PROVIDE, COORDINATE, AND INSTALL THE FOLLOWING:
1. AUDIBLE DOORBELL AT RECEIVING DOOR ON EXTERIOR WALL THAT CAN BE HEARD THROUGHOUT THE ENTIRE KITCHEN, OFFICE AND DRY STORAGE ROOM.
2. ADEQUATE LIGHTING AT RECEIVING DOOR.
3. EDWARDS 860 SERIES (OR EQUAL) RED LENS, SURFACE-MOUNTED XENON EMERGENCY STROBE BEACONS. ONE (1) TO BE LOCATED IN THE KITCHEN ABOVE WALK-IN FREEZER DOOR (OR COOLER DOOR WHEN FREEZER IS WITHIN COOLER IN AN 'INLINE' ASSEMBLY), AND ONE (1) TO BE LOCATED IN THE CAFETORIUM (COORDINATE LOCATION WITH OWNERS). PROVIDE CONDUIT, WIRING, AND INTERCONNECT THE ILLUMINATED PUSH BUTTON PANIC ALARM IN THE WALK-IN FREEZER TO BOTH STROBE BEACONS (***CRITICAL***).

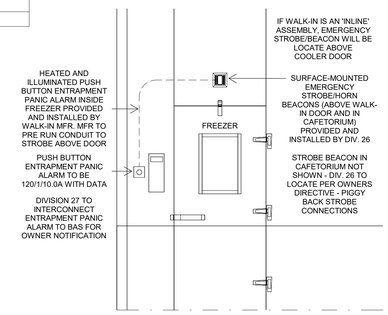
DIVISION 27 TO PROVIDE THE FOLLOWING:
1. CONDUIT, DATA, AND INTERCONNECTION FROM THE ILLUMINATED PUSH BUTTON PANIC ALARM INSIDE THE WALK-IN FREEZER TO THE BUILDING AUTOMATION SYSTEM. WHEN ACTIVATED, FACILITY PERSONNEL TO BE NOTIFIED - COORDINATE NOTIFICATION REQUIREMENTS WITH THE OWNER (***CRITICAL***).



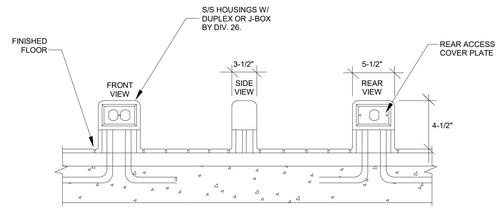
1 FOOD SERVICE ELECTRICAL PLAN
1/4" = 1'-0"

NOTE:
(FOR GRAPHICAL REPRESENTATION ONLY)
SECTION 11 40 00 TO VERIFY LOCATION OF REFRIGERATION SYSTEM WITH APPROVED ARCHITECTURAL DRAWINGS.



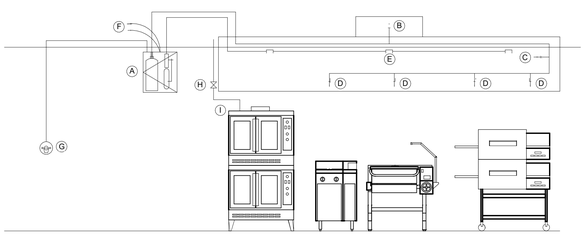


6 COLD STORAGE ASSEMBLY ENTRAPMENT PANIC ALARM DETAIL
NOT TO SCALE



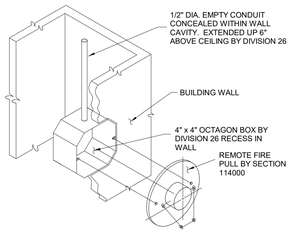
3 PEDESTAL MOUNTED RECEPTACLE DETAIL
NOT TO SCALE

NOTE:
REFER TO FDP EQUIPMENT PLAN FOR SPECIFIC COMPONENTS UNDER HOOD. ALL EQUIPMENT SHOWN HERE FOR GRAPHICAL REPRESENTATION ONLY.



A	S/S ENCLOSURE W/AGENT TANK AND NITROGEN CARTRIDGE
B	DUCT NOZZLE(S)
C	PLENUM NOZZLE(S)
D	SURFACE PROTECTION NOZZLE(S)
E	FUSIBLE LINK(S)
F	(2) WIRES FROM FIRE SYSTEM TO SHUNT TRIP BREAKERS FOR SHUT DOWN OF ELECTRICAL CONNECTIONS LOCATED BENEATH EXHAUST HOOD DURING FIRE MODE
G	REMOTE FIRE PULL
H	GAS VALVE
I	GAS SUPPLY (AS REQUIRED)

4 FIRE PROTECTION SYSTEM TYPICAL DETAIL
NOT TO SCALE



5 FIRE PROTECTION SYSTEM RECESSED FIRE PULL DETAIL
NOT TO SCALE

SCR	CONDUIT STUB BTC ON RECEPT FURNISH WITH EQUIPMENT		CC	CONDUIT FOR COMPUTER CABLES
CS	CONDUIT STUB UP/OUT FOR DIRECT CONNECTION		BTC	BRANCH TO CONNECTION ON EQUIPMENT
DR	DUPLEX RECEPTACLE		WPR	WATERPROOF RECEPTACLE (SPRING COVER)
SR	SINGLE PURPOSE RECEPTACLE-1PH		FPB	FIRE PROTECTION BUZZER
SR	SINGLE PURPOSE RECPTACLE-3PH		BSC	BEVERAGE SYSTEM CONDUIT
FR	FLUSH FLOOR RECEPTACLE		DFA	DROP FROM ABOVE
PMR	PEDESTAL MOUNTED RECEPTACLE		AFF	ABOVE FINISH FLOOR
DCR	DROP CORD RECEPTACLE		CS/JB	JUNCTION BOX ON PEDESTAL
JB	JUNCTION BOX ON CEILING		SW	SWITCH
JB	JUNCTION BOX IN WALL		D	DATA
JB/DS	JUNCTION BOX WITH DISCONNECT BY DIV.26			

2 ELECTRICAL SYMBOLS
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

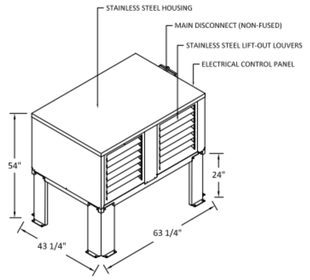
SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
488543119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ELECTRONICALLY SEALING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 488543119 ON 07/18/2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS ELECTRICAL PLAN

P-QF1.5

MODEL NO. ZS1-02Z-CT3-EST OUTDOOR AIR COOLED REFRIGERATION SYSTEM
ITEM NO. 103



NOTE:
- CRANKCASE HEATERS
- FAN CYCLING SWITCHES
- 24" STANDS & STAINLESS STEEL SKIRTING TO BE SHIPPED LOOSE FOR FIELD INSTALLATION
- DOOR SENSOR FOR EACH WALK-IN
- REFRIGERANT DETECTION SYSTEM
- CHECK VALVE (SHIPPED LOOSE)
- SHUT OFF VALVE (SHIPPED LOOSE)

RACK WEIGHT: 600 LBS.

ADT ENGINEERING SUMMARY

POWER SUPPLY: 208-230/60/3
CONNECTED LOAD: 21.8 AMPS

MOPD: 30 AMP
MINIMUM CIRCUIT AMPACITY: 24.1

SYSTEM	ITEM #	DESCRIPTION	FIXTURES: TEMP °F FIXT.	FIXTURES: TEMP °F SUCT.	REQ'D FIXTURE BTU/H	REFRIG.	CONDENSING UNIT: COMPRESSOR MODEL NO.	H.P.	RATING @ 60 HZ RLA	V	PH	BTU CAP @ AMB °F 110	TYPE	REC. CAP. (lbs)	CONDENSER
A	102	WALK-IN COOLER	35	25	8506	454A	YS11KAE		11.2	208	3	11700	Z	14.0	L1R
B	102	WALK-IN FREEZER	-10	-20	7607	454A	YF07KSE		10.6	208	3	7610	Z	14.0	L1R

SYSTEM	ITEM #	MODEL NO.	EVAPORATOR COILS: QTY	FAN MOTORS @ 60 HZ RLA	V	PH	HEATERS @ 60 HZ RLA	V	PH	DEFR. TYPE	DEFROST CONTROLLER TYPE	CONTROLLER QTY	ACCESSORIES TSTAT	SOL. VALVE	EXP. VLV.	REFRIGERANT LINE SIZES (IN) SUCT.	SUCT. LINE RISER	LIQUID	LINE RUN (FT)	TYPE	TOTAL SYSTEM LOAD
A	102	BEL0095	1	1.8	115	1				O.C.	ECOSMART	1	F	F	EF	5/8	5/8	3/8	100	M	11.2
B	102	BEL0065	1	1.0	208	1	9.1	208	1	ELEC	ECOSMART	1	F	F	EF	7/8	7/8	3/8	100	M	10.6

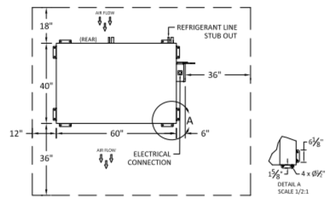
ALL EVAPORATOR COILS WILL REQUIRE A HOUSE POWER SUPPLY

c UL us LISTED

NOTE:
IT IS THE INSTALLING CONTRACTORS RESPONSIBILITY TO FOLLOW ALL APPLICABLE CODES AND CURRENT REFRIGERATION INDUSTRY STANDARDS AND PRACTICES WHEN DETERMINING LINE SIZES, AND INSTALLING AND STARTING UP RDT EQUIPMENT.

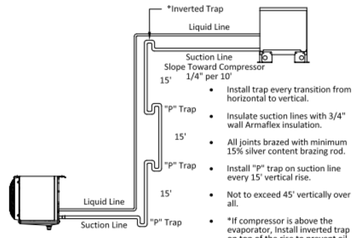
COMPRESSOR TYPE	DEFROST TYPE	LINE TYPE	EVAPORATOR ACCESSORIES
Z SCROLL	O.C. OFF CYCLE ELEC ELECTRIC	M MAIN - UP TO 100'	EF EEV FACTORY EQUIPPED ON EVAP F FACTORY EQUIPPED ON EVAP

PLANVIEW/ CLEARANCE REQUIREMENTS



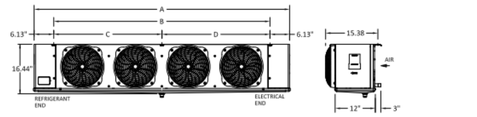
NOTE: MINIMUM CLEARANCE REQUIRED FOR PROPER OPERATION
NOTE: ROOF CURB OR GROUND PAD CAN BE SAME SIZE AS OUTDOOR UNIT

SUCTION LINE VERTICAL RISE DETAIL



- Install trap every transition from horizontal to vertical.
- Insulate suction lines with 3/4" wall Armaflex insulation.
- All joints brazed with minimum 15% silver content brazing rod.
- Install "P" trap on suction line every 15' vertical rise.
- Not to exceed 45' vertically over all.
- *If compressor is above the evaporator, Install inverted trap on top of the rise to prevent oil from seeping down when fixture(s) is turned off.

EVAPORATOR DETAILS - MODEL BEL



AIR DEFROST Size	DIMENSIONS A Inches	B Inches	C Inches	D Inches	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. Lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps 115V	208V
095	45-1/2	33-1/4			1/2 OD	5/8 OD	3/4 MPT	51	2	1.8	1.0

ELECTRIC DEFROST	DIMENSIONS A Inches	B Inches	C Inches	D Inches	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. Lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps	Heater Amps as wired for 208-230/60/1	208-230/60/3	460/60/1
065	45-1/2	33-1/4	-	-	1/2 OD	5/8 OD	3/4 MPT	54	2	1.0	9.1	5.7	4.6

ZS SERIES ENGINEERING SPECIFICATIONS

Multi compressor, outdoor, air cooled. The refrigeration package shall be a pre-engineered and factory-assembled unit, trade name "ZS", as manufactured by Refrigeration Design Technologies, 1808 FM Road 66, P.O. Box 622, Waxahachie, Texas 75168. Phone: (972) 937-3215; Fax: (972) 937-0970.

1. Air-Cooled Refrigeration System
The RDT UL Listed "Air-Cooled" Refrigeration system shall be housed in a weather-protected compact powder coated steel frame. The entire housing shall be brushed stainless steel. The unit shall include an air-cooled aluminum fin copper tube condenser designed to operate at 15 degrees TD. The exterior housing shall feature stainless steel one piece louvers. Lifting points shall be integrated in the framing component. Condenser fan motors shall be mounted within the enclosure. The condenser intake surface shall be protected with stainless steel expanded metal guard to protect against vandalism and hail damage.

Each unit shall be equipped with a ball-bearing fan motor, suction filter, sight glass, liquid filter/drier, liquid line inlet and outlet valve, defrost cycle and high pressure super-hose connections. Each unit shall be equipped with fan cycling controls and/or head pressure regulator where required for low ambient conditions.

Condensing unit shall contain scroll, hermetic, semi-hermetic, and/or discus type compressor(s) assembled to operate with the refrigerant specified for both medium and low temperature applications.

2. Evaporator Coils
A. Evaporator coils shall be direct expansion type fabricated of copper tubes with aluminum fins.
B. All evaporator coils shall be provided with solenoid valve, thermostatic or electronic expansion valve and thermostat.

3. Pre-Piping
All refrigerant lines shall be extended to outside of the housing in a neat and orderly manner. All tubing shall be securely supported and anchored with non-corrosive coated clamps.

All joints must be brazed, not soldered.

All piping and controls shall be factory pressure-tested with dry nitrogen.

4. Control Panel
The package shall have a factory-mounted and pre-wired control panel, with main disconnect (non fused) where required, circuit breakers, contactors wired for single point power connection.

General Information
Contractors shall verify all dimensions onsite and coordinate with other trades.

General contractor shall prepare the platform, curbed openings and weatherproofing the unit after installation.

Refrigeration Contractor
All copper tubing to be refrigerant grade. A.C.R. or type "L".

Brazing should be used for all refrigerant piping. Silver solder or soft solder is not acceptable.

All piping to be pressure tested with nitrogen at 300 psi. After the condensing unit and coil have been connected the balance of the system shall be leak tested with the valves open at 200 psi.

The complete system shall be evacuated with a vacuum pump. Each unit should be charged tested and adjusted to assure operation.

Contractor should provide and install the drain-line heater in freezer. Heater shall be connected by electrical contractor. Seal all penetrations through the walk-in units with foam.

Electrical Contractor
Electrical contractor to provide power for refrigeration package and connect control and defrost system as called for in the wiring diagram.

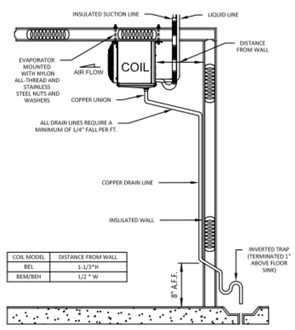
Electrical contractor to connect drain-line heater in the freezer.

All electrical wiring and installation shall be in accordance with the wiring diagram and local codes. Seal all penetrations through the walk-in units with foam.

Plumbing Contractor
Plumbing contractor to provide copper drain lines for walk-in refrigerator and freezer, pitched 1/4" per foot of run. Trap drain-line outside of refrigerated space to avoid entrance of warm, moist air.

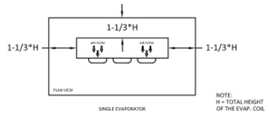
All plumbing installation shall be in accordance with local codes.

EVAPORATOR MOUNTING DETAIL (TYPICAL)



COIL MODEL	DISTANCE FROM WALL
BEL	1-1/3"H
BEM/BEH	1/2 " W

EVAPORATOR PLACEMENT & CLEARANCE REQUIREMENTS LOW PROFILE EVAPORATOR COILS (I.E. - BEL)



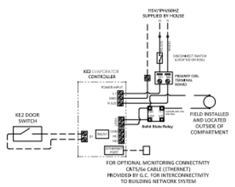
SINGLE EVAPORATOR

NOTE:
H = TOTAL HEIGHT OF THE EVAP. COIL

WIRING DIAGRAM - ECOSMART - AKEA1AE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN COOLER WITH ONE COIL 115/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW.

SYS	DESCRIPTION	VOLTAGE
A	WALK-IN COOLER	115/1

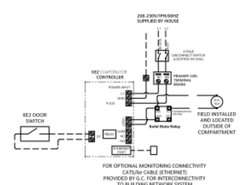


FACTORY WIRING ———
FIELD WIRING - - - -

WIRING DIAGRAM - ECOSMART - AKEB1EE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN FREEZER WITH ONE COIL 208-230/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW.

SYS	DESCRIPTION	VOLTAGE
B	WALK-IN FREEZER	208/1



FACTORY WIRING ———
FIELD WIRING - - - -

APPROVAL STATUS

THIS DRAWING REPRESENTS OUR UNDERSTANDING OF THE SPECIFICATIONS. PLEASE REVIEW IT CAREFULLY FOR ACCURACY. CLEARLY AND IN DETAIL NOTE CHANGES REQUIRED.

MARK APPROPRIATE BOX, SIGN, AND DATE BELOW.

- ☐ APPROVED FOR FABRICATION NO CHANGES
- ☐ APPROVED FOR FABRICATION WITH CHANGES NOTED
- ☐ REVISE AND RE-SUBMIT DRAWING

BY: _____ DATE: _____

NOTICE

THIS DRAWING BEING AN INSTRUMENT OF SERVICE IS AND WILL REMAIN PROPERTY OF REFRIGERATION DESIGN TECHNOLOGIES AND CANNOT BE USED WITHOUT WRITTEN AUTHORIZATION.

No.	Revision/Issue	Date
0	ORIGINAL ISSUE	10-2-24
1	CHANGED TO A2L EQUIPMENT	7-16-25

REFRIGERATION DESIGN TECHNOLOGIES
1808 FM Road 66 / P.O. Box 622
Waxahachie, Texas
(800) 736-9518
www.rdtonline.com

Consultant:
Foodservice Design Professionals, LLC
The Woodlands, TX

Dealer
-
-

Pecan Grove Elementary School
Fort Bend ISD

Project No: 31080
Designed By: E. Milligan
Drawn By: A. Rodriguez
Sheet 1.1 of sheets

ISSUE:
12/05/2024 DD PACKAGE
03/11/2025 50% CD PKG.
05/23/2025 90% CD PKG.
07/18/2025 ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

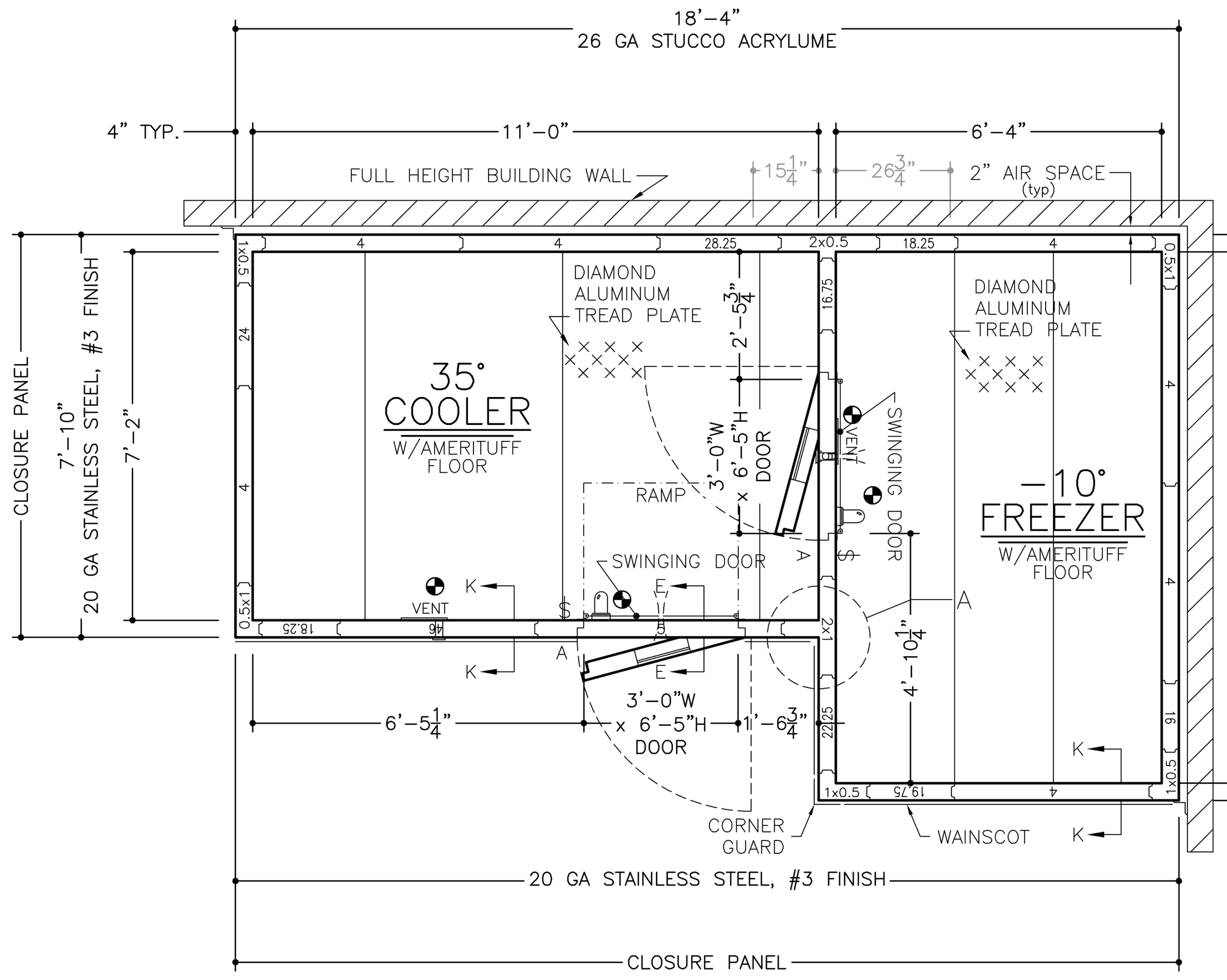
FOODSERVICE DESIGN PROFESSIONALS

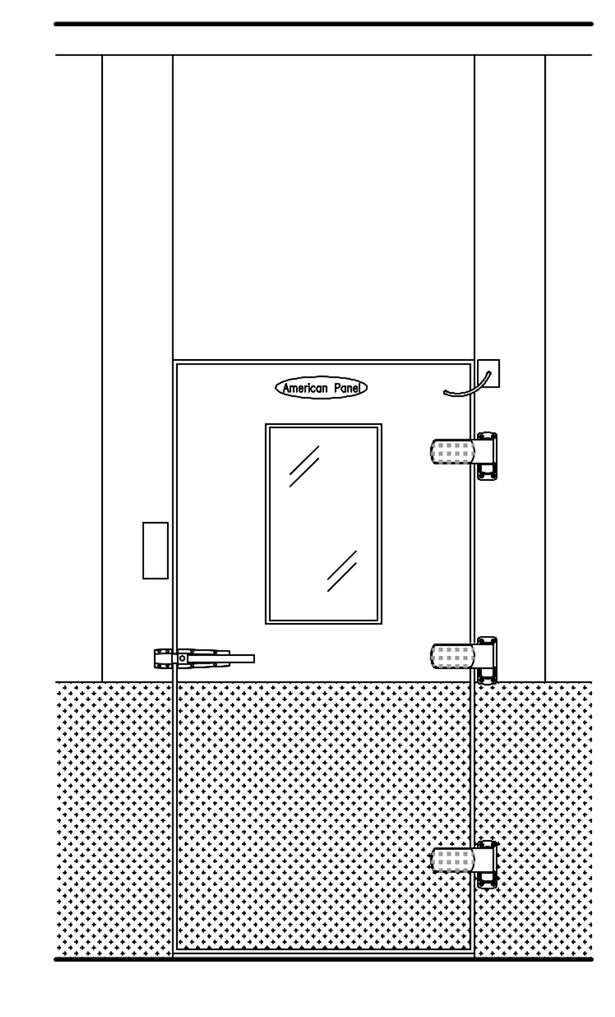
SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
68854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 68854119 ON: 07/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

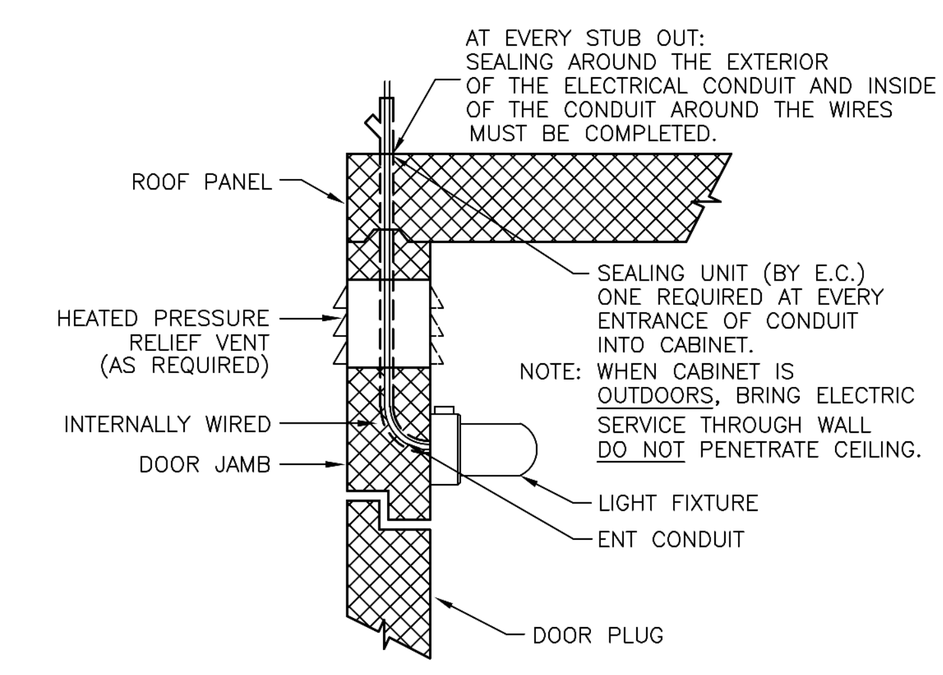
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS CONDENSING UNITS

P-QF1.6

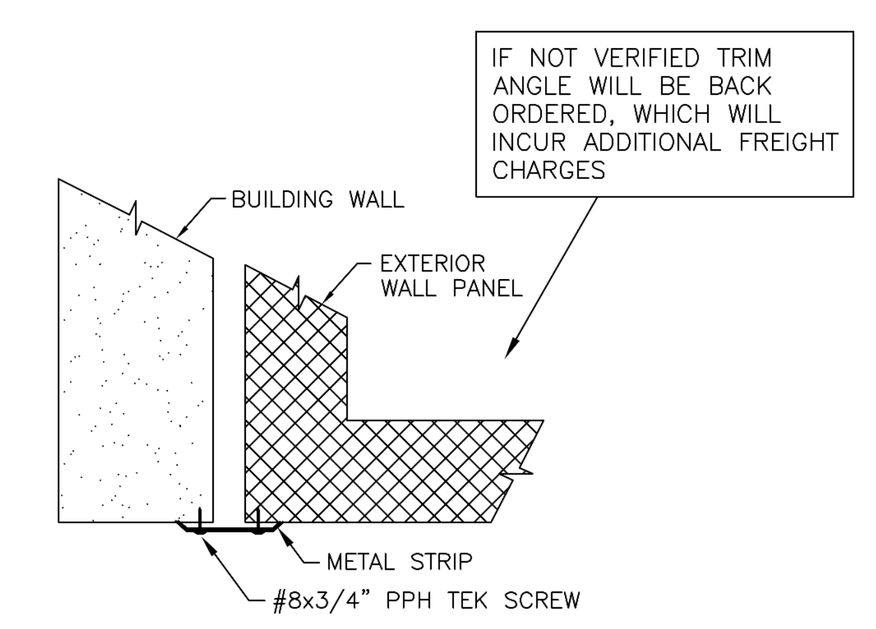




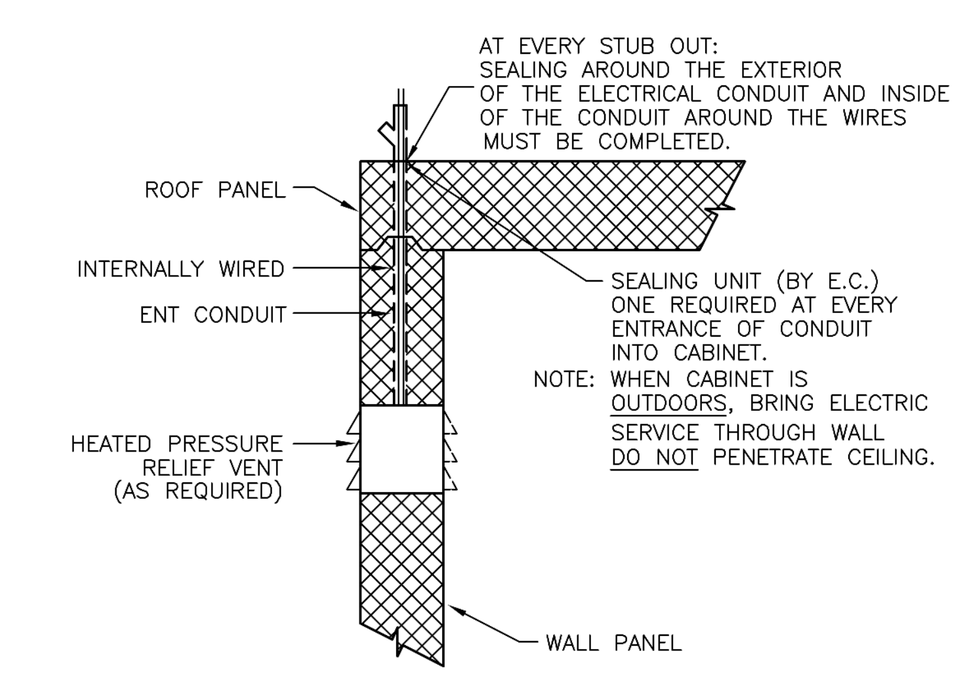
COOLER DOOR ELEVATION



DOOR ELECTRICAL CONNECTION



TRIM ANGLE
DETAIL #3



PANEL MOUNTED ELECTRICAL CONNECTION

~SPECIFICATIONS~

BOX HEIGHT: FREEZER – 10'-2" OVERALL (7'-6 1/4" INTERIOR)
COOLER – 10'-2" OVERALL (7'-6 1/4" INTERIOR)

CONSTRUCTION: FOAMED IN PLACE
NSF LISTED, STANDARD NO. 7

INSULATION: 4" URETHANE, FINISHED PANEL
UL CLASSIFIED FLAME SPREAD 20
CORE SMOKE DEVELOPED 250

INSTALLATION: INDOOR

FLOOR: (SEE DETAILS) FREEZER – STANDARD W/AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE,
3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)
COOLER – STANDARD W/36" DEEP INTERIOR RAMP & AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE,
3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)

DOOR HARDWARE & ACCESSORIES: (EACH DOOR)
SMOOTH POLISHED DOOR HARDWARE
POWER TO BE STUBBED OUT CEILING PANEL
DRY CONTACT LEADS TO BE STUBBED OUT CEILING PANEL IN A SEPARATE STUB OUT
DEADBOLT HANDLE W/KEYED CYLINDER LOCK, PADLOCK
PROVISION & QUARTER TURN INSIDE RELEASE (EXTERIOR DOOR ONLY)
1/8" STAINLESS STEEL THRESHOLD COVER PLATE
14 GA STAINLESS STEEL SUB THRESHOLD
FRAME HEATER WIRE
HYDRAULIC DOOR CLOSER
IC+ WALK-IN DOOR CONTROLLER AND ALARM SYSTEM INCLUDING:
INTEGRATED LIGHT SWITCH WITH AUTOMATIC LIGHT OFF AND 3-WAY & 4-WAY CAPABILITY
TEMPERATURE MONITOR AND LOGGER WITH HIGH TEMP. AND LOW TEMP. VISUAL AND AUDIO ALARM
F OR C TEMPERATURE SELECTION
INTEGRATED DRY CONTACT FOR ALARM SIGNALING & POWER FAILURE (1A @ 24VAC, 1A @ 30VDC)
DOOR AND WINDOW HEATER CONTROL (WHEN SO EQUIPPED)
HACCP PREVIEW VIA ONBOARD LCD SCREEN
HACCP DOWNLOAD VIA USB
WIFI CONNECTIVITY (INTERNET ENABLED WIFI NETWORK NEEDED)
BATTERY BACKUP
TEMPERATURE ALARM NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES
POWER FAILURE NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES
(FOR THIS FEATURE TO WORK THE LOCAL WIFI NETWORK MUST BE
POWER PROTECTED AND WORKING AT THE TIME OF POWER FAILURE EVENT)
AUTOMATIC AND ON DEMAND TRANSMISSION OF HACCP DATA VIA EMAIL
ADAPTIVE SETTINGS
MOMENTARY BACK-TO-BACK LIGHT SWITCH W/PILOT
25' AIR TEMPERATURE PROBE
25' SECOND PROBE (EXTENDED) FOR MONITORING THE TEMPERATURE AT
A SECOND LOCATION OR FOR MONITORING A SECOND CABINET
DOOR SWITCH TO ENABLE DOOR AJAR ALARM, DOOR AJAR NOTIFICATION VIA EMAIL &/OR
EMAIL TO SMS TEXT MESSAGES, AND AUTOMATIC LIGHTS ON WHEN DOOR OPENS
PANIC ALARM WITH ILLUMINATED PANIC BUTTON, ALARM BUZZER WITH LED,
& NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES (1-COOLER, 2-FREEZER)
KASON SCREW-IN VAPOR PROOF LIGHT FIXTURE
W/8.5 WATT SYLVANIA LED BULB & GLOBE
CCI CLEAR VU SWINGING DOOR
3 – KASON #1346 ADJUSTABLE SPRING LOADED HINGES
HEATED VISION WINDOW (14" x 24")
1/8" DIAMOND ALUMINUM TREAD PLATE KICKPLATES @ 36" HIGH I/S & O/S DOOR & FRAME
KASON 1826 INTELLO-VENT WITH LIGHTS (FREEZER DOOR ONLY) – FIELD INTERCONNECTION REQUIRED

PANEL MOUNTED ACCESSORIES: 1 – KASON 1826 INTELLO-VENT WITH LIGHTS – FIELD INTERCONNECTION REQUIRED
(FOAMED IN PANEL – PER PLAN) (COOLER ONLY)

ACCESSORIES: (SHIPPED LOOSE)
2 – PCS. TRIM ANGLE – 18 GA STAINLESS STEEL, #3 FINISH
CLOSURE PANEL TO AN EXISTING CEILING (PER PLAN) ← VERIFY LENGTH
18 GA STAINLESS STEEL, #3 FINISH
2 – 48" (1810LC) LED LIGHT FIXTURE(S) @ 40W EACH (LIGHTS TO BE INSTALLED PERPENDICULAR TO COILS)
1/8" DIAMOND ALUMINUM TREAD PLATE WAINSCOT @ 36" HIGH (EXPOSED EXTERIOR ONLY)
1 – 1/8" DIAMOND ALUMINUM TREAD PLATE CORNER GUARD(S) @ 36" HIGH
ALUMINUM COVED BASE MOLDING (COMPLETE INTERIOR ONLY)
ROOF SUPPORT ANGLE W/BEAUTY TRIM
2 – BAKELITE LABEL(S) (BLACK) ("FREEZER", "COOLER")
1 – BAKELITE LABEL (YELLOW W/BLACK LETTERING) ("VACUUM PRESSURE RELIEF")
6 MIL POLYETHYLENE VAPOR BARRIER
5 – BELL BOX(ES) & COVER PLATE(S)
2 – DOOR STOP(S)
2 – EDWARDS 860 SERIES STROBE BEACONS
1 – EMERGENCY PRESSURE RELEASE

METAL FINISHES: INTERIOR & EXTERIOR DOOR & FRAME – 18 GA STAINLESS STEEL, #3 FINISH
INTERIOR WALLS & CEILING – WHITE .040 STUCCO ALUMINUM
EXPOSED EXTERIOR – 20 GA STAINLESS STEEL, #3 FINISH
UNEXPOSED EXTERIOR – 26 GA STUCCO ACRYLUME
EXTERIOR FLOOR – 26 GA STUCCO ACRYLUME
EXTERIOR ROOF – 26 GA STUCCO ACRYLUME
INTERIOR FLOOR – AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE,
3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)

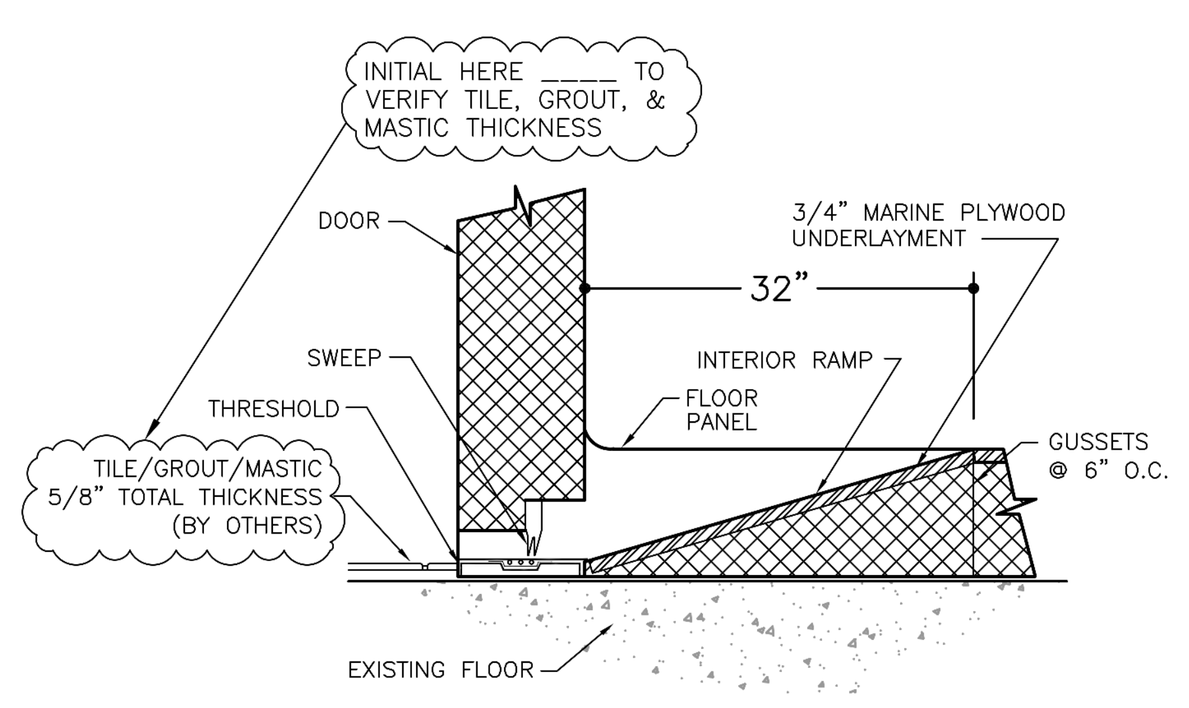
REFRIGERATION: BY OTHERS

NOTE: THE LARGEST DOOR PANEL ON THIS JOB IS 57.5" x 114.5".
NOTE: THE LARGEST ROOF/FLOOR PANEL ON THIS JOB IS 46.5" x 129".
CUSTOMER IS TO VERIFY THAT THIS PANEL SIZE WILL NOT CONFLICT WITH ANY JOB SITE RESTRICTIONS.
NOTE: CUSTOMER IS TO VERIFY ALL DIMENSIONS, SECTIONS, DETAILS AND SPECIFICATIONS
NOTE: MAXIMUM LIGHT CIRCUIT LOAD IS 1200W 120VAC TUNGSTEN, 5A 120VAC ELECTRONIC BALLAST. FOR HIGHER LOADS ADDITIONAL LIGHT FIXTURES MUST BE CONTROLLED VIA RELAY (BY OTHERS).

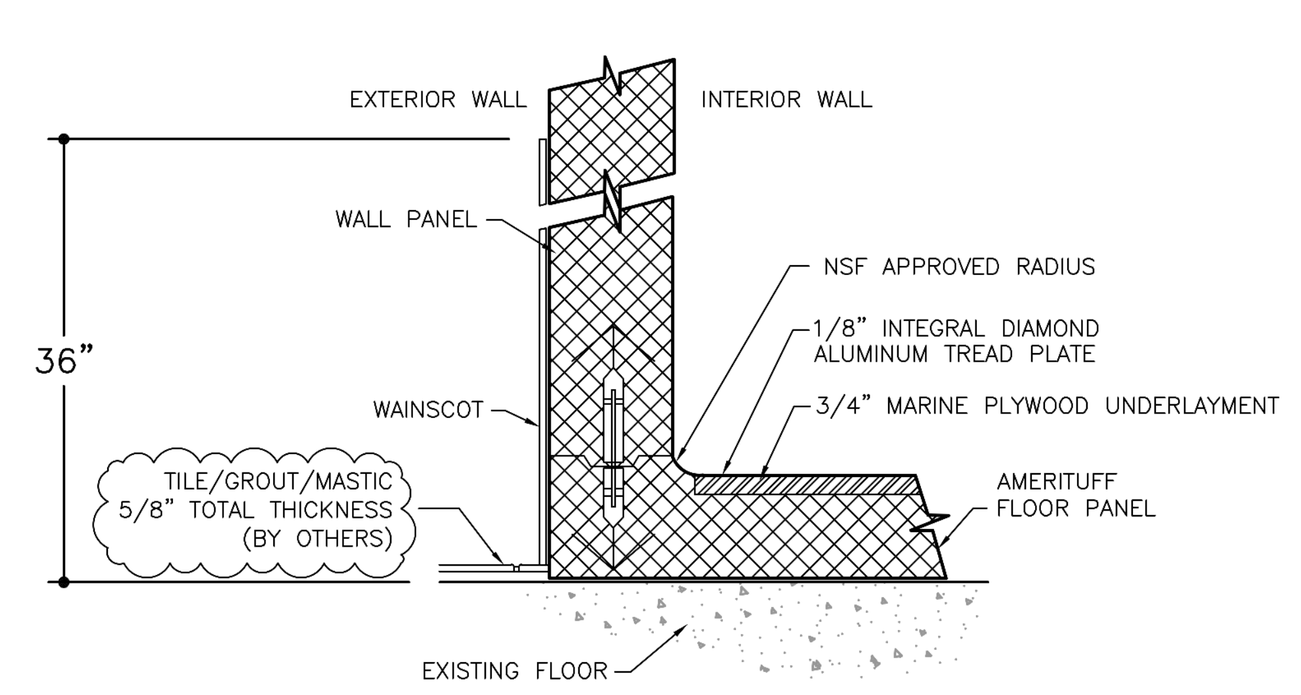
ELECTRICAL DATA
◐ = POINT OF ELECTRICAL CONNECTIONS.
WALK-IN DOORS: 115v/1ø – 350w*
PANEL MOUNTED ACC: 115v/1ø – 23w (EACH VENT)

*NOTE: ADD WATTAGE FOR EACH ADDITIONAL LIGHT FIXTURE IN ACCESSORIES.

ITEM #102 WALK-IN COOLER/FREEZER

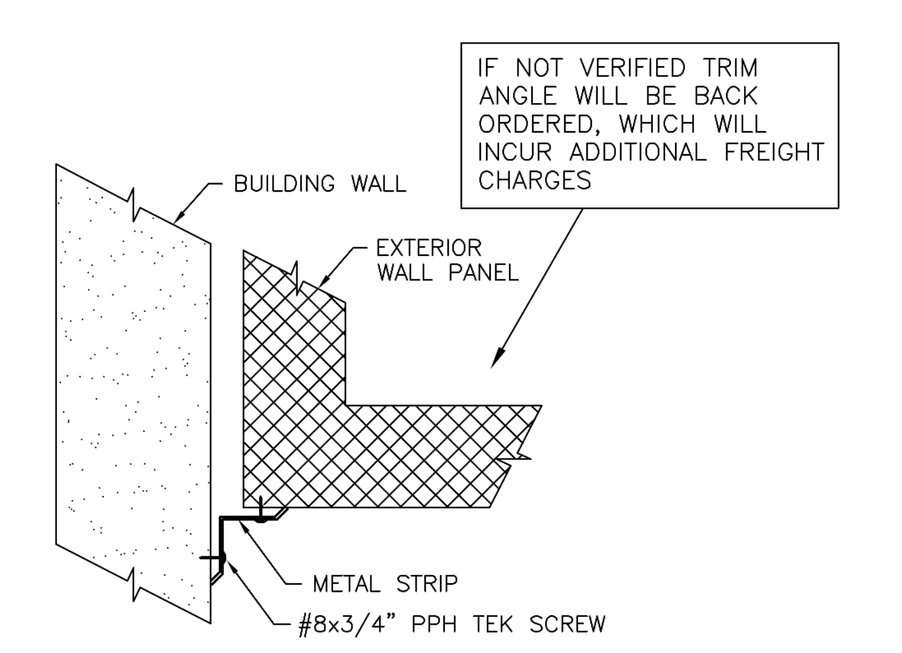


SECTION E – E

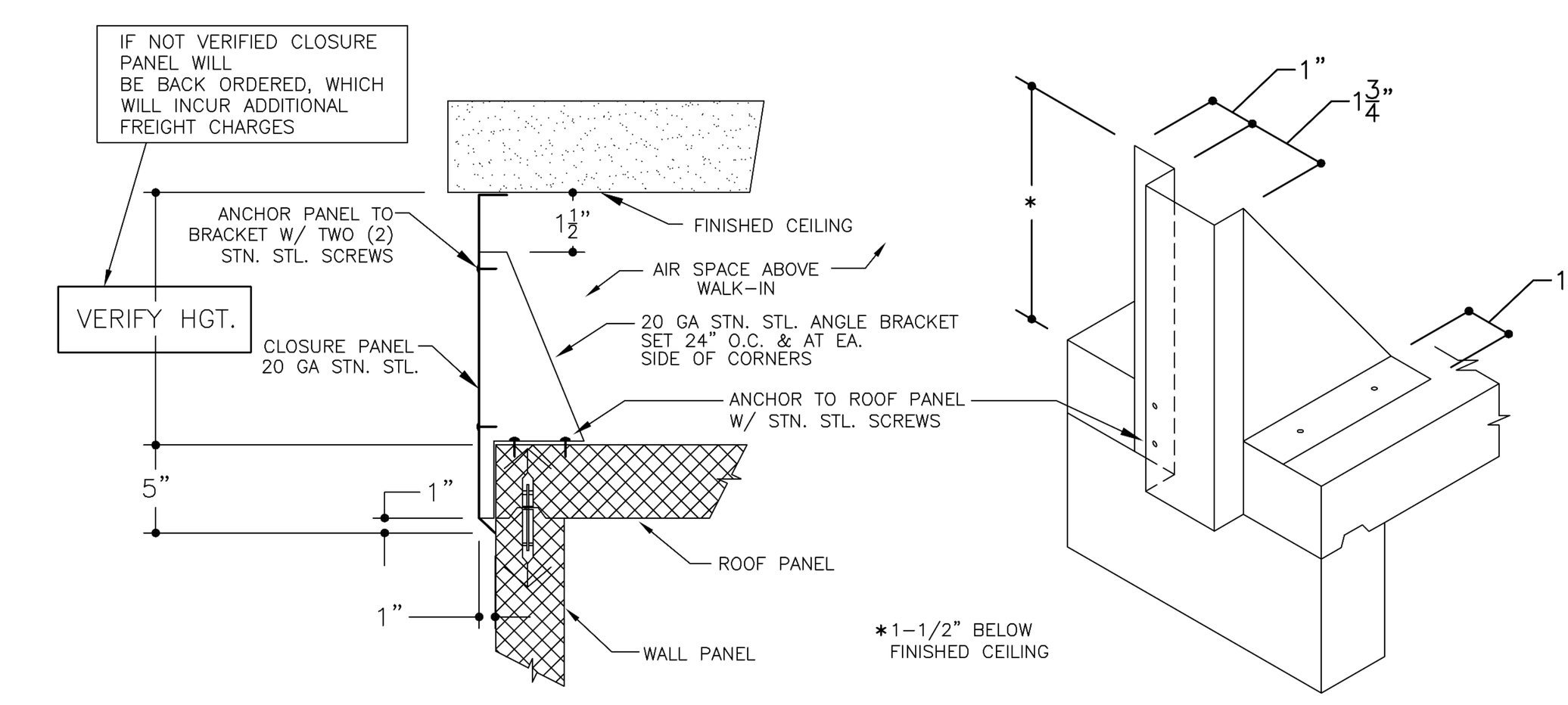


SECTION K – K

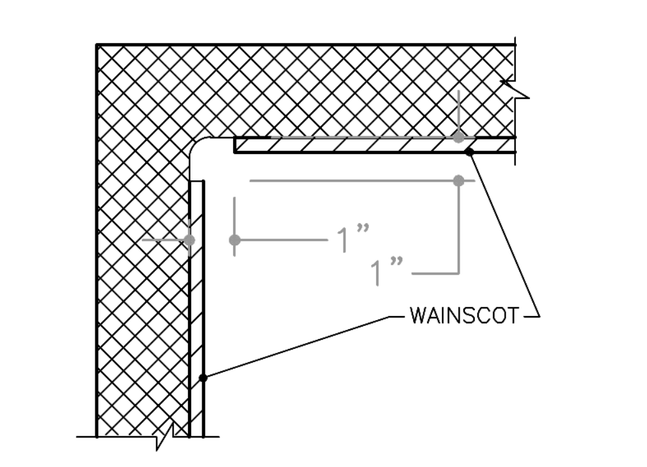
American Panel's walk-in floor panels with AmeriTuff structural support are designed to withstand uniformly distributed stationary loads of 15,000 lbs. per square foot. American Panel's warranty does not cover damage caused by pallet jacks, forklifts or any other form of heavy-duty rolling traffic. A concrete wearing floor must be installed on top of the AmeriTuff walk-in floor panels for those rolling applications.



TRIM ANGLE
DETAIL #2



CLOSURE PANEL ABOVE WALK-IN DETAIL #4E



DETAIL "A"
WAINSCOT AT INTERIOR CORNER

INSULATION R-VALUES		
PANEL TYPE	COOLER	FREEZER
4" WALLS, ROOFS	R-29	R-32
5" WALLS, ROOFS	R-36	R-40
FLOORS	R-25	R-28
DOORS	R-32	

COOLER DOOR	
DOOR FRAME KWHr/DAY	2.424

FREEZER DOOR	
DOOR FRAME KWHr/DAY	4.392

WALK-IN PANEL		
R-8967		
BUILDING UNITS	R-8967	37M2
USA		
SURFACE BURNING CHARACTERISTICS		
MATERIAL DETAILS	"FLAME SPREAD"	"SMOKE DEVELOPED"
ALUMINUM PANELS, PAINTED OR UNPAINTED, 5" OR LESS	15	350
"GALVANIZED STEEL OR STAINLESS STEEL PANELS, PAINTED OR UNPAINTED, 5" OR LESS"	10	400 TO 500
CORE MATERIAL, 6" THICK	20	250

AMERICAN PANEL WALK-IN COOLERS AND FREEZERS COMPLY WITH THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC), SECTION C403.11

THIS AMERICAN PANEL WALK-IN WILL BE MANUFACTURED TO UL & NSF REQUIREMENTS. AMERICAN PANEL ACCEPTS NO LIABILITY FOR LOCAL CODE REQUIREMENTS OF WHICH AMERICAN PANEL HAS NOT BEEN MADE AWARE OF IN WRITING PRIOR TO FABRICATION.

☐ APPROVED SIGNATURE ____________
☐ APPROVED AS NOTED PRINT NAME ____________
☐ REVISE & RESUBMIT DATE ____________

1) Please verify that door swing and location are correct.

2) If this walk-in is to be installed in a depression, or quarry tile is to be applied to the interior, depression depths or tile thickness must be specified to insure proper door height.

3) All site preparation, floor or slab construction, plumbing, electrical connections (including control wiring) by others.

4) ◐ Electrical: 115-60-1 required above latch side of each door, through ceiling, to operate frame heater and light.

5) Special note to General Contractor and his Sub Contractor for quarry tile or concrete wearing floors: the sheet metal panel facings may be susceptible to staining due to excessive moisture created by hydration of concrete type materials. Therefore, it is absolutely necessary that each room be properly ventilated. Also note that special precautions must be taken when using muriatic acid due to effects hydrochloric acid fumes have on aluminum and stainless steel.

6) This drawing and information contained herein are the exclusive property of American Panel Corporation. It shall be returned to American Panel Corporation upon demand and shall not be reproduced in whole or part, disclosed to anyone else, or used without the written consent of American Panel Corporation.

REV.	DATE	DESCRIPTION	REV. BY	CHK'D BY
A	1/22/25	REVISED LAYOUT, SPECS; ADDED DETAIL	DH	WQ

American Panel
AMERICAN PANEL CORPORATION
5800 S.E. 78th St. Ocala, Florida 34472
Ph. (352) 245-7055 Fax (352) 245-0726

CUSTOMER: FOODSERVICE DESIGN PROFESSIONALS
PROJECT: SETTLERS WAY ES-FBISD – FORT BEND, TX
DATE: 10/9/24 | DRAWN BY: PM/TR | P.O.#:
SCALE: 3/8"=1'-0" | PROPOSAL#: PD213271 | JOB#: | SHEET 1 of 1

ALL DIMENSIONS MUST BE FIELD VERIFIED PRIOR TO FABRICATION AND INSTALLATION

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

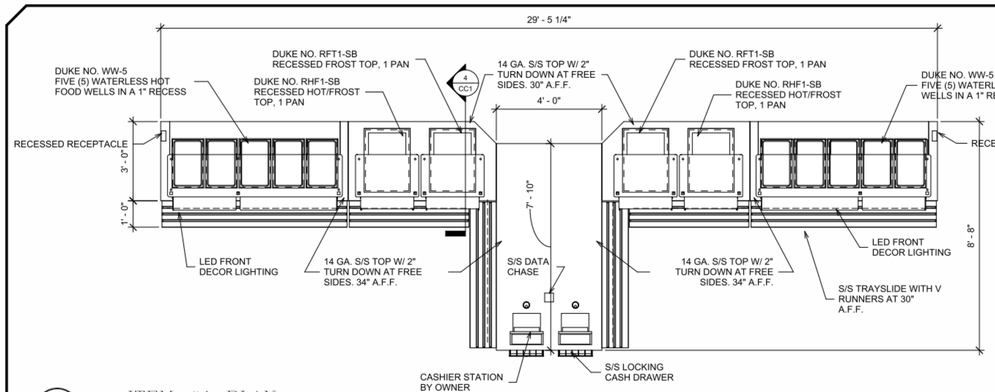
FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL – MELISSA MOORE – 48854119 – PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO: 48854119 ON: 07/18/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

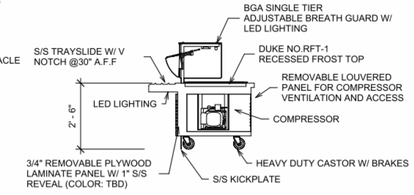
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS WALK-INS

P-QF1.7



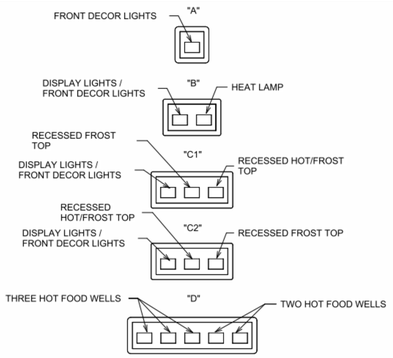
1 CC1 ITEM #1 PLAN

SCALE: 1/2" = 1'-0"



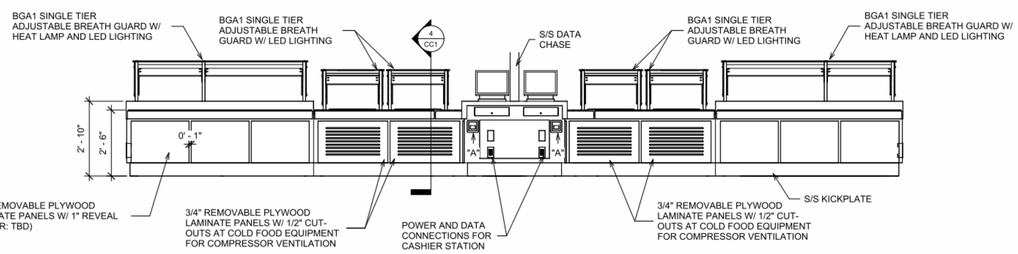
4 CC1 ITEM #1 SECTION VIEW

SCALE: 1/2" = 1'-0"



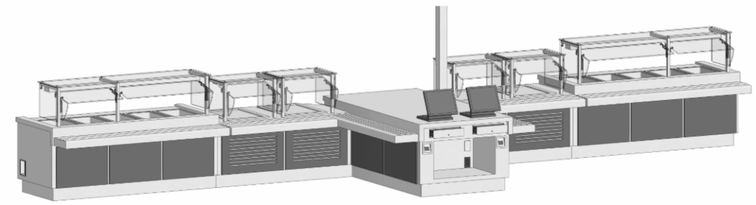
8 CC1 ITEM #1 CONTROL PANEL LAYOUT

SCALE: 1 1/2" = 1'-0"



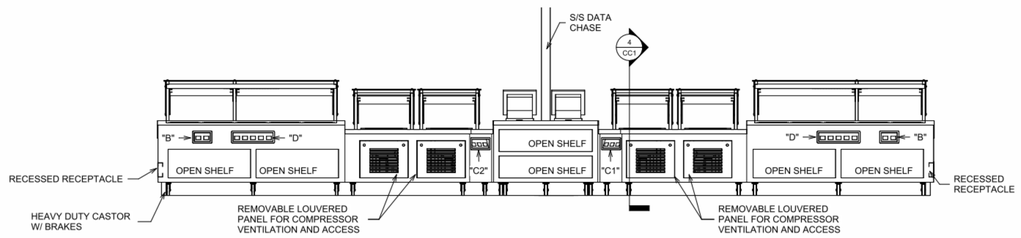
2 CC1 ITEM #1 FRONT ELEVATION

SCALE: 1/2" = 1'-0"



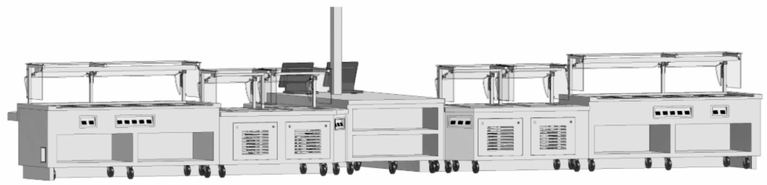
11 CC1 ITEM #1 3D PERSPECTIVE

SCALE:



3 CC1 ITEM #1 REAR ELEVATION

SCALE: 1/2" = 1'-0"



12 CC1 ITEM #1 3D PERSPECTIVE 2

SCALE:

NO	SERVICE	NEMA	L1	TRIP
	THREE HOT FOOD WELL 208v, 1Ø, 900w EA.	THREE 5-20P	7.5	20
	TWO HOT FOOD WELL 208v, 1Ø, 600w EA.	TWO 5-20P	5.0	20
	48" HEAT LAMP 208v, 1Ø, 1180W	6-15P	9.8	20
	LED LIGHTING 208v, 1Ø	5-15P	1.0	15

NOTE: THIS IS NOT A LOAD CENTER, THIS IS A JUNCTION/DISTRIBUTION BLOCK INSIDE THE BREAKER BOX

11A CC1 ELECTRICAL SCHEDULE
CASHIER COUNTER

NO	SERVICE	NEMA	L1	L2	L3	TRIP
	THREE HOT FOOD WELL 208v, 1Ø, 900w EA.	THREE 5-20P	7.5			20
				7.5		20
	TWO HOT FOOD WELL 208v, 1Ø, 600w EA.	TWO 5-20P	5.0			20
				5.0		20
	48" HEAT LAMP 208v, 1Ø, 1180W	6-15P	9.8			20
				9.8		20
	LED LIGHTING 208v, 1Ø	5-15P	1.0			15
				1.0		15
	BACK COOLER 208v, 1Ø	5-15P	1.0			15
				1.0		15
			L1= 27.3	L2= 24.3	L3= 0.0	
			120/208V, 3Ø, 3Ø 4W, 127-220V			

NOTE: THIS IS NOT A LOAD CENTER, THIS IS A JUNCTION/DISTRIBUTION BLOCK INSIDE THE BREAKER BOX

11B CC1 ELECTRICAL SCHEDULE
HOT FOOD COUNTER #1
(TWO (2) REQUIRED)

NO	SERVICE	NEMA	L1	TRIP
	RECESSED FROST TOP 208v, 1Ø	5-15P	5.0	20
			5.0	20
	RECESSED HOT/FROST TOP 208v, 1Ø	5-15P	5.0	20
			5.0	20
	LED LIGHTING 208v, 1Ø	5-15P	1.0	15
			1.0	15
			L1= 17.0	L2= 17.0
			120/208V, 3Ø, 3Ø 4W, 127-220V	

NOTE: THIS IS NOT A LOAD CENTER, THIS IS A JUNCTION/DISTRIBUTION BLOCK INSIDE THE BREAKER BOX

11C CC1 ELECTRICAL SCHEDULE
HOT/FROST COUNTER
(TWO (2) REQUIRED)

EQUIPMENT BY OTHERS

COUNTERCRAFT LAYOUTS, MEPS, AND LOAD CENTERS ARE BASED ON SPECIFIED MANUFACTURERS AND MODELS AS OUTLINED IN THE SPECIFICATIONS IN THE CONTRACT DOCUMENTS. COUNTERCRAFT MUST BE NOTIFIED OF ANY CHANGES TO THE CONTRACT DOCUMENTS IN A TIMELY MANNER.

NO	REVISIONS	DATE	BY
1	PRELIMINARY DWG	10/21/2024	MAX
2	REVISIONS	11/26/2024	MAX
3			
4			
5			
6			
7			
8			
9			

ANOTHER QUALITY PRODUCT FROM
CounterCraft
7007 STEARNS HOUSTON,TEXAS 77021
(713) 747-3611

PROJECT: FBISD Bond Package 013
FOOD SERVICE CONSULTANT: FOODSERVICE DESIGN PROFESSIONALS

PROJECT NO.: -
DATE: 11/26/2024
SCALE: As indicated
DRAWN BY: MAX.C
CHECKED BY: E.S
SHEET NO.: CC1
OF SHEET

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FDP
FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

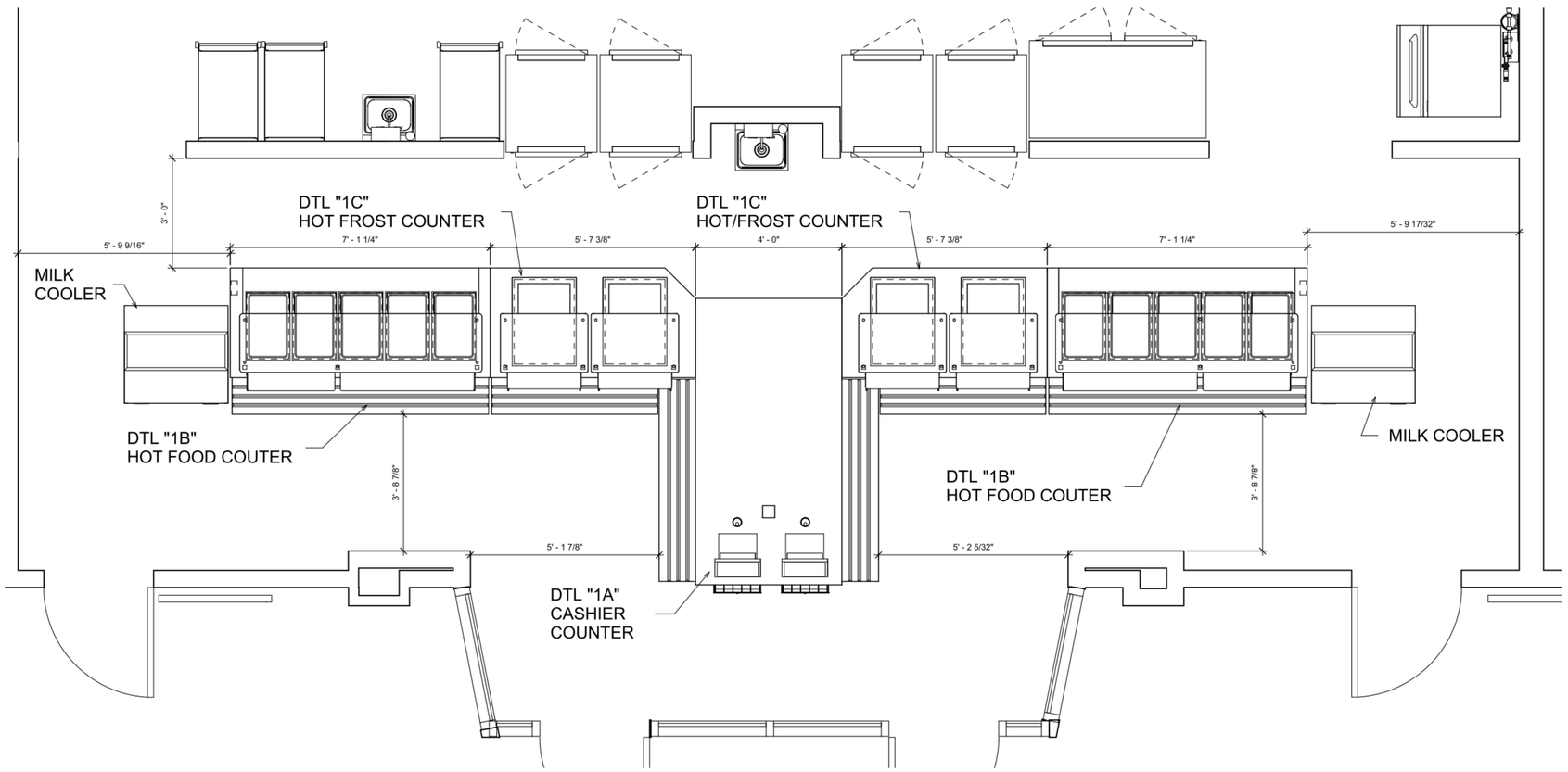
SEAL

FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THE ITEM APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO: 48854119 ON: 07/15/2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS SERVING LINE

P-QF1.8



2 / CC2 LAYOUT

SCALE: 3/4" = 1'-0"

EQUIPMENT BY OTHERS

COUNTERCRAFT LAYOUTS, MEPS, AND LOAD CENTERS ARE BASED ON SPECIFIED MANUFACTURERS AND MODELS AS OUTLINED IN THE SPECIFICATIONS IN THE CONTRACT DOCUMENTS. COUNTERCRAFT MUST BE NOTIFIED OF ANY CHANGES TO THE CONTRACT DOCUMENTS IN A TIMELY MANNER.

NO	REVISIONS / PRELIMINARY/DWG	DATE	BY
1	REVISIONS	12/2/2024	MAX
2		11/26/2024	MAX
3			
4			
5			
6			
7			
8			
9			

ANOTHER QUALITY PRODUCT FROM
CounterCraft
7007 STEARNS HOUSTON,TEXAS 77021
(713) 747-3611

PROJECT: FBISD Bond Package 013
FOOD SERVICE CONSULTANT: FOODSERVICE DESIGN PROFESSIONALS

PROJECT NO: -
DATE: 11/26/2024
SCALE: 3/4" = 1'-0"
DRAWN BY: MAX.C
CHECKED BY: E.S
SHEET NO: CC2
OF SHEET

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FDP
FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
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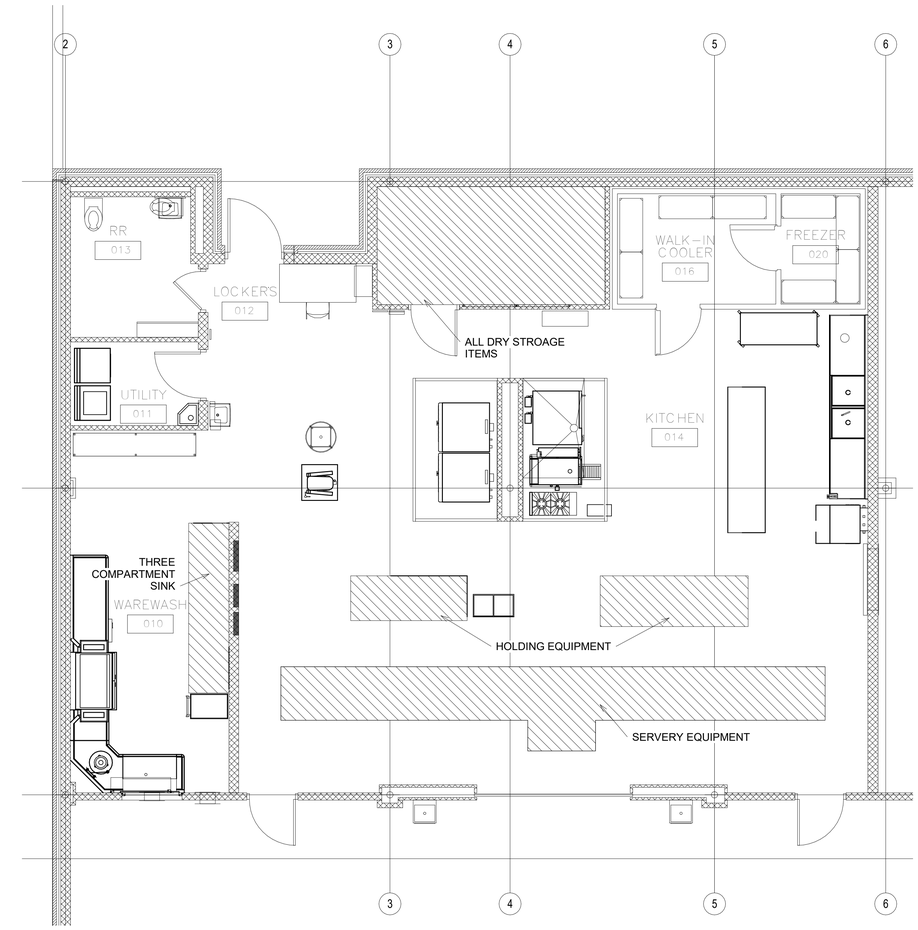
RICHMOND, TX 77406

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
88854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THE ITEM APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 88854119 ON: 07/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS SERVING LINE

P-QF1.9



1 FOOD SERVICE EQUIPMENT PLAN - DEMO PLAN
1/4" = 1'-0"

NOTE: ALL EQUIPMENT MAKERED WITH A DIAGONAL HATCH TO BE RELOCATED PER TEMPORARY SERVING PLAN SHEET P-QF2.0

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FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
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SEAL

FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
FCSI
488544119
PROFESSIONAL MEMBER
7/15/2025
DOCUMENT PREPARING ON THIS SHEET WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 488544119
CPL 07/15/2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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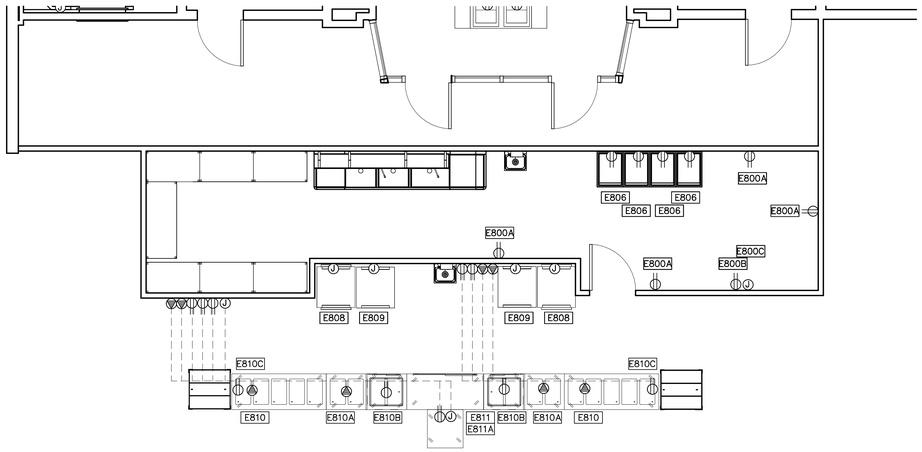
FS DEMO PLAN

P-QF2.0



4 FOOD SERVICE ELECTRICAL PLAN - TEMPORARY SERVING
1/4" = 1'-0"

FOOD SERVICE ELECTRICAL SCHEDULE - TEMPORARY SERVING								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E800A	DR	16.0A	120	1	CONVENIENCE	WALL	24"	---
E800B	DR	16.0A	120	1	CONVENIENCE	WALL	24"	DEDICATED CIRCUIT
E800C	JB	---	---	--	DATA CONNECTION	WALL	24"	---
E806	DR	16.0A	120	1	TRANSPORT CABINET	WALL	24"	---
E808	SR	7.8A	120/208	1	HEATED CABINET	WALL	96"	BTC; OMIT PLUG, UNIT TO BE HARDWIRED
E809	DR	8.2A	120	1	REFRIGERATOR	WALL	96"	BTC; OMIT PLUG, UNIT TO BE HARDWIRED
E810	CS/SR	13.3A	208	1	(4) HOT WELLS	WALL	24"	EXTEND TO EQUIPMENT - CONFIRM NEMA PLUG
E810A	SR	7.9A	208	1	(2) HOT WELLS	WALL	24"	EXTEND TO EQUIPMENT - CONFIRM NEMA PLUG
E810B	DR	5.0A	120	1	COLD PAN	WALL	24"	EXTEND TO EQUIPMENT
E810C	DR	10.0A	120	1	BEVERAGE	WALL	24"	EXTEND TO EQUIPMENT
E811	DR	16.0A	120	1	CASH REGISTER	WALL	24"	DEDICATED CIRCUIT - EXTEND TO EQUIPMENT
E811A	JB	-	---	1	POS	WALL	24"	BTC

	SCR	CONDUIT STUB BTC ON RECEPT FURNISH WITH EQUIPMENT		CC	CONDUIT FOR COMPUTER CABLES
•	CS	CONDUIT STUB UP/OUT FOR DIRECT CONNECTION		BTC	BRANCH TO CONNECTION ON EQUIPMENT
	DR	DUPLEX RECEPTACLE		WPR	WATERPROOF RECEPTACLE (SPRING COVER)
	SR	SINGLE PURPOSE RECEPTACLE-1PH	⟋	FPB	FIRE PROTECTION BUZZER
	SR	SINGLE PURPOSE RECPTACLE-3PH		BSC	BEVERAGE SYSTEM CONDUIT
	FR	FLUSH FLOOR RECEPTACLE		DFA	DROP FROM ABOVE
	PMR	PEDESTAL MOUNTED RECEPTACLE		AFF	ABOVE FINISH FLOOR
	DCR	DROP CORD RECEPTACLE		CS/JB	JUNCTION BOX ON PEDESTAL
	JB	JUNCTION BOX ON CEILING		SW	SWITCH
	JB	JUNCTION BOX IN WALL		D	DATA
	JB/DS	JUNCTION BOX WITH DISCONNECT BY DIV.26			

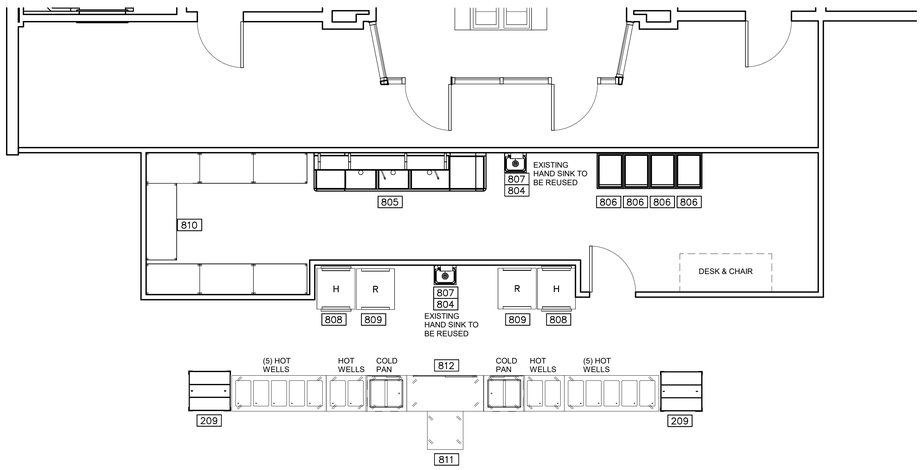
5 ELECTRICAL SYMBOLS 1
NOT TO SCALE

FOOD SERVICE PLUMBING SCHEDULE - TEMPORARY SERVING						
REFER TO SHEET QF1 FOR PLUMBING COORDINATION NOTES						
FDP PNO	FDP PSIZE	FDP PCONN	FDP PSERVICE TO	FDP PLOC	FDP PAFF	FDP PREMARKS
P11C	1/2"	H & C WATER	FAUCET	WALL	18"	FURNISHED & INSTALLED BY DIV. 22
P11D	1 1/2"	DIRECT DRAIN	HAND SINK	WALL	15"	FURNISHED & INSTALLED BY DIV. 22
P249	3/4"	H & C WATER	FAUCET	WALL	13"	BTC

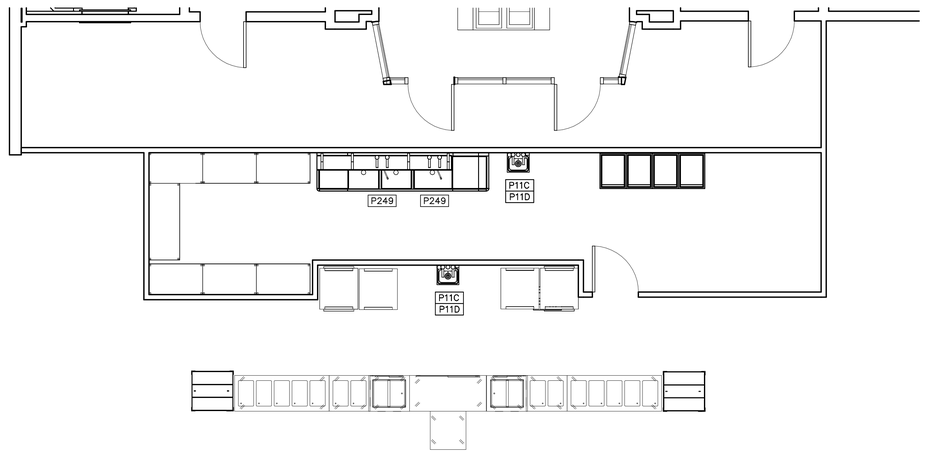
	HW	HOT WATER		FFD	FUNNEL FLOOR DRAIN
	CW	COLD WATER		EVC	EXHAUST VENT CONNECTION
	HTW	180 F HOT WATER		SVC	SUPPLY VENT CONNECTION
		CHILLED WATER		FR	DIRECT-CONNECTED FLUE RISER
	W	DIRECT WASTE		PS	PIPE SLEEVE
	IW	INDIRECT WASTE			COMPRESSED AIR
		GAS SUPPLY			CO2
		STEAM SUPPLY		AFF	ABOVE FINISHED FLOOR
	CR	CONDENSATE RETURN		BTC	BRANCH TO CONN. ON EQUIP
	DR	DRAIN		DFA	DROP FROM ABOVE
	FD	FLOOR DRAIN		CLG	CEILING
	FST	FLOOR SINK 3/4 GRATE			
	FSH	FLOOR SINK 3/4 GRATE			

3 PLUMBING SYMBOLS 1
NOT TO SCALE

FOOD SERVICE EQUIPMENT SCHEDULE - TEMPORARY SERVING					
REFER TO SHEET QF1 FOR GENERAL CONTRACTOR & HEALTH DEPARTMENT COORDINATION NOTES					
FDP ITEM	FDP QTY	FDP DESCRIPTION	FDP REMARKS	MANUFACTURER	MODEL
209	2	DROP FRONT MILK COOLER - 8 CASE		TRAULSEN	RMC34D4
804	2	S/S SPLASH GUARDS		CUSTOM FABRIACTED	
805	1	THREE COMPARTMENT SINK NO DISPOSER	EXISTING		
806	4	TRANSPORT CART	EXISTING		
807	2	HAND LAV	EXISTING		
808	2	REACH IN HEATED CABINET - 1DR	EXISTING		
809	2	REACH IN REFRIGERATOR - 1DR.	EXISTING		
810	1	DRY STORAGE SHELVING	EXISTING		
811	1	CASH REGISTER	OWNER FURNISHED		
812	1	SERVING COUNTER	EXISTING		



1 FOOD SERVICE EQUIPMENT PLAN - TEMPORARY SERVING
1/4" = 1'-0"



2 FOOD SERVICE PLUMBING PLAN - TEMPORARY SERVING
1/4" = 1'-0"

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SEAL

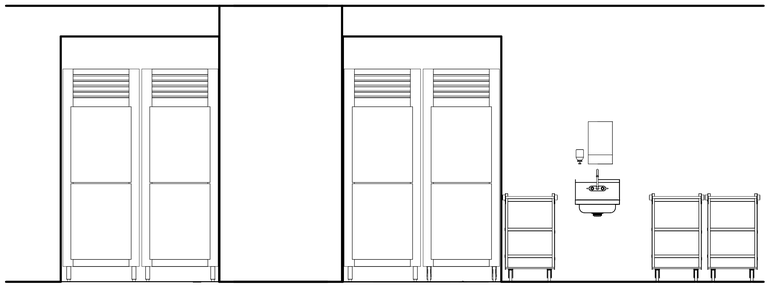
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
888544119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THIS ITEM IS DIGITALLY SIGNED AND SEALED BY MELISSA MOORE, FCSI NO. 888544119
ON: 07/18/2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

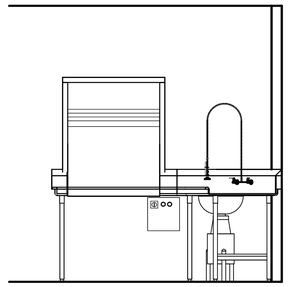
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FS TEMPORARY SERVING

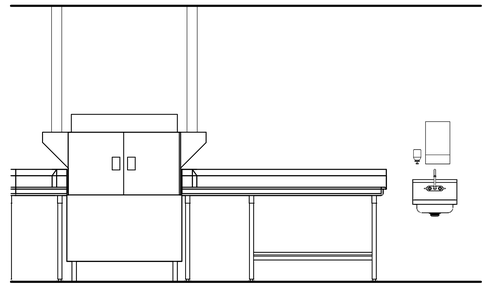
P-QF2.1



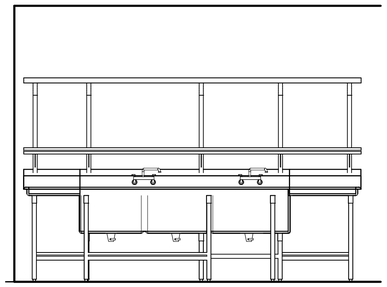
11 ELEVATION @ HOLDING
1/2" = 1'-0"



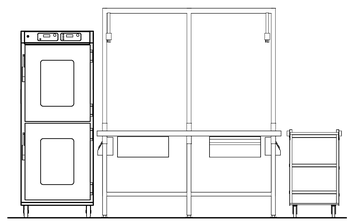
10 ELEVATION @ DISPOSER & TRAY DROP WINDOW
1/2" = 1'-0"



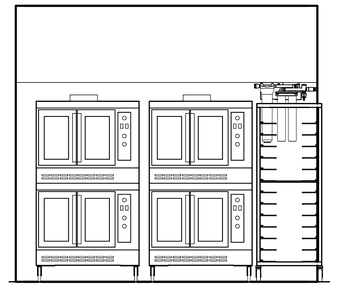
9 ELEVATION @ DISHMACHINE
1/2" = 1'-0"



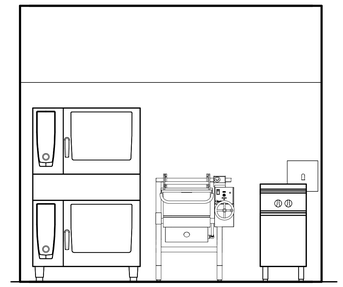
8 ELEVATION @ THREE COMPARTMENT SINK
1/2" = 1'-0"



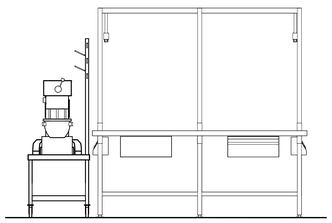
7 ELEVATION @ SETUP TABLE & MOBILE HEATED CABINET
1/2" = 1'-0"



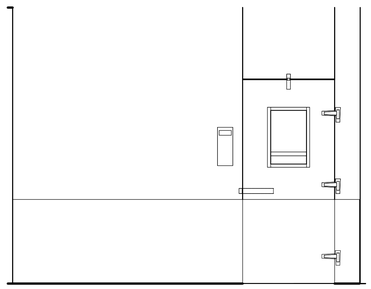
6 ELEVATION @ PRODUCTION 2
1/2" = 1'-0"



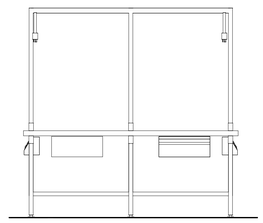
5 ELEVATION @ PRODUCTION 1
1/2" = 1'-0"



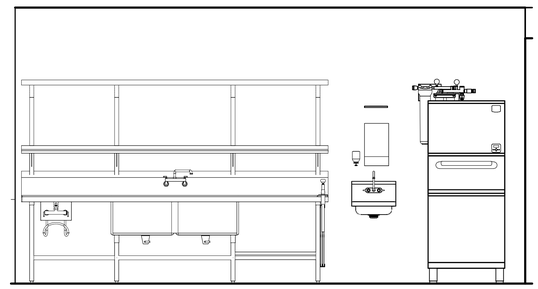
4 ELEVATION @ SETUP TABLE & MIXER
1/2" = 1'-0"



3 ELEVATION @ COLD STORAGE ASSEMBLY
1/2" = 1'-0"



2 ELEVATION @ SETUP TABLE
1/2" = 1'-0"



1 ELEVATION @ PREP SINK & ICE MACHINE
1/2" = 1'-0"

ISSUE:

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05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

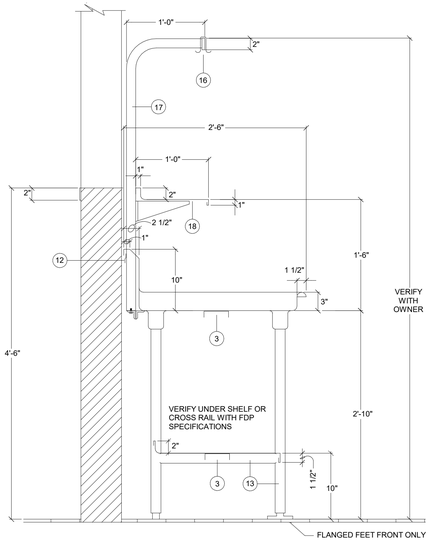
SEAL

FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
46854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
DOCUMENT WAS PREPARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO.-46854119 ON: 07/18/2025

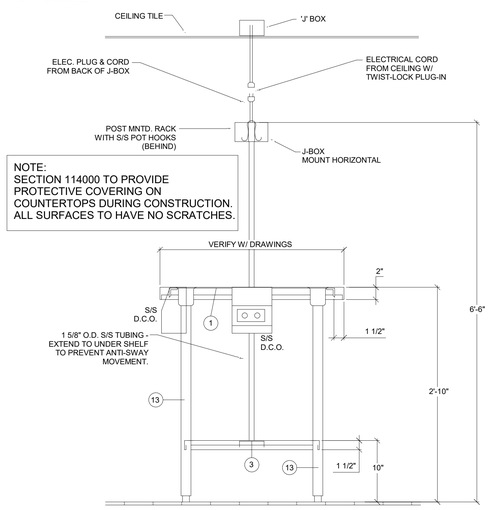
ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS ELEVATIONS

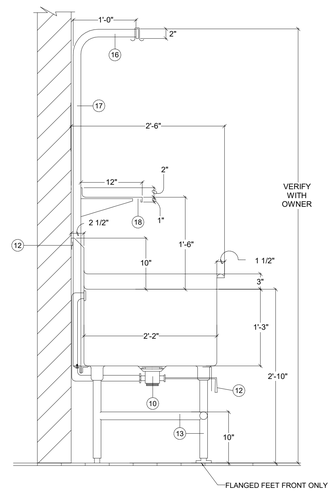
P-QF3.1



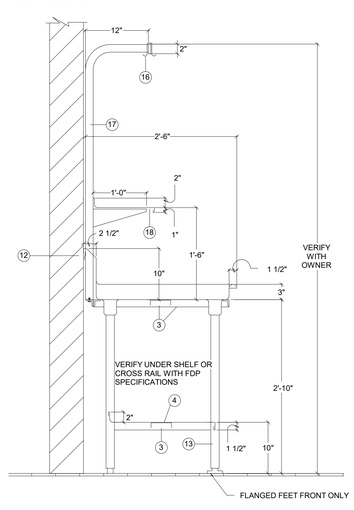
7 DRAINBOARD SECTION
NOT TO SCALE



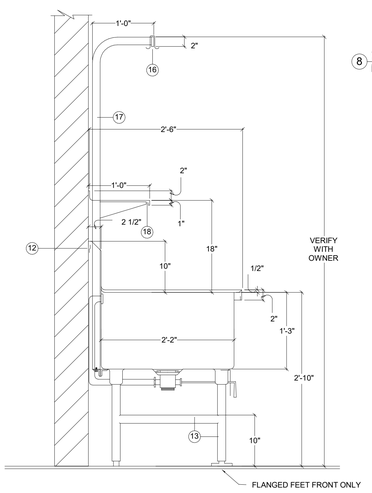
6 WORKTABLE - ISLAND W/ S.BAR UT RACK & END UC DCO SECTION
NOT TO SCALE



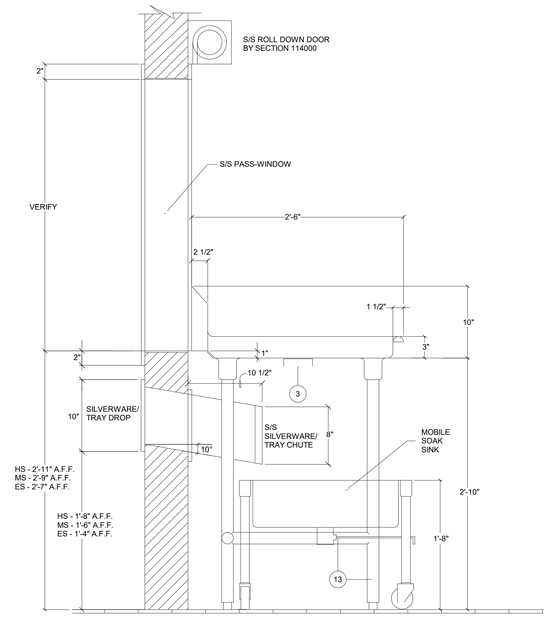
5 SINK - UTENSIL WASH SECTION
NOT TO SCALE



3 DRAINBOARD - UTENSIL WASH SECTION
NOT TO SCALE



4 SINK - PREP TABLE SECTION
NOT TO SCALE



8 WAREWASH - TRAY DROP/SOAK SINK SECTION
NOT TO SCALE

SECTION DETAIL NOTES:

1. 1 1/2" X 1 1/2" X 1/8" GALVANIZED ANGLE IRON.
2. 1" X 4" 14 GAUGE STAINLESS STEEL HAT CHANNEL.
3. 16 GAUGE STAINLESS STEEL C-CHANNEL.
4. 16 GAUGE STAINLESS STEEL UNDER SHELF, COVE UP REAR 2", TURN DOWN FRONT 1 1/2".
5. 1/2" CEMENT BACKERBOARD WITH TILE FRONT BY TRADE CONTRACTOR OR COUNTER MANUFACTURER. VERIFY FINISH WITH ARCHITECTURAL DRAWINGS.
6. COLD PAN - 2" RIGID INSULATION WITH 1" C.P. DRAIN - 16 GAUGE STAINLESS STEEL SECTION FALSE BOTTOM. PERFORATE FALSE BOTTOM WITH 1/4" DIA. HOLES AT 3" O.C.
7. 18 GAUGE STAINLESS STEEL INSULATED DOUBLE PAN DOOR WITH RECESSED PULL.
8. MANIFOLD DRAINS AT HOT FOOD UNITS WITH 1" TYPE 'K' COPPER AND EXTEND TO VALVE IN PLUMBING COMPARTMENT.
9. FINISHED TRUE AND LEVEL MASONRY BASE BY DIVISION 09. CLOSE COUNTER BODY AT BASE AND SEAL BY SECTION 11 40 00.
10. FISHER #22314 DRAIN WITH TAILPIECE AND OVERFLOW.
11. 14 GAUGE STAINLESS STEEL BRACKET WITH DRAIN HANDLE BUSHING.
12. 16 GAUGE STAINLESS STEEL 'Z' CLIP TO WALL AND SEAL.
13. 1 5/8" DIA. 16 GAUGE STAINLESS STEEL LEGS AND CROSS RAILS.
14. 1/2" S/S TUBING DRAIN LINE - STRAP TO SHELF AND WALL - EXTEND DOWN TO TOP OF SPLASH.
15. 1 5/8" DIA. 16 GAUGE STAINLESS STEEL TUBING - SUPPORT FRONT OF SHELF WITH 1/2" ALL-THREAD INSIDE TUBING EXTENDING TO STRUCTURE ABOVE.
16. 1/4" S/S BAR STOCK WELDED TO TOP OF EACH POST - POT HOOKS TO BE COMPONENT HARDWARE #J77-4401 SPACED 8" O.C.
17. 1 5/8" 16 GAUGE STAINLESS STEEL TUBING - BOLT TO ANGLE IRON AND EXTEND UP THRU SPLASH TO 7'-0" A.F.F.
18. OVER SHELF - 16 GAUGE STAINLESS STEEL, COVE UP REAR 2", TURN FRONT AND ENDS DOWN 1", ENDS TO BE CAPPED WITH EASED CORNERS WHERE ADJACENT TO WALL / FIXTURE.
19. 18 GAUGE STAINLESS STEEL LOUVERED PANEL.
20. 18 GAUGE STAINLESS STEEL LOUVERED DOUBLE PAN DOOR WITH RECESSED PULLS.
21. NUMBER NOT USED.
22. 18 GAUGE STAINLESS STEEL INSULATED DOUBLE PAN SLIDING DOOR WITH COMPONENT HARDWARE COMPONENTS

    A. #B57 - (VERIFY LENGTH) EXTRUDED ALUMINUM TRACK.
    B. #B58-5511 & #B58-5521 FRONT & REAR DOOR SHEAVES.
    C. #B62-1093 DOOR GUIDE.
    D. #B60-1086 DOOR STOPS WHERE NEEDED.
    E. #P62-1010 RECESS PULLS.

1 SECTION DETAIL NOTES
NOT TO SCALE

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SEAL

FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
#88554119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
ELECTRONICALLY SEALING ON THIS DOCUMENT BY MELISSA MOORE, FCSI NO. #88554119
ON: 07/18/2025

ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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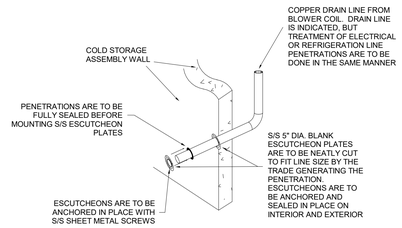
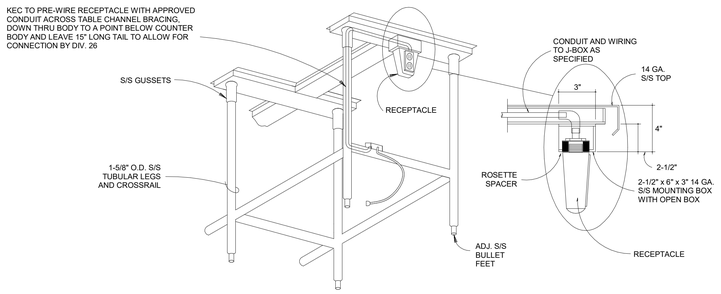
FS SECTIONS & DETAILS

P-QF4.1



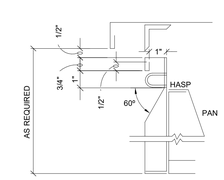
3 COLD STORAGE ASSEMBLY ESCUTCHEON & PENETRATION DETAIL
NOT TO SCALE

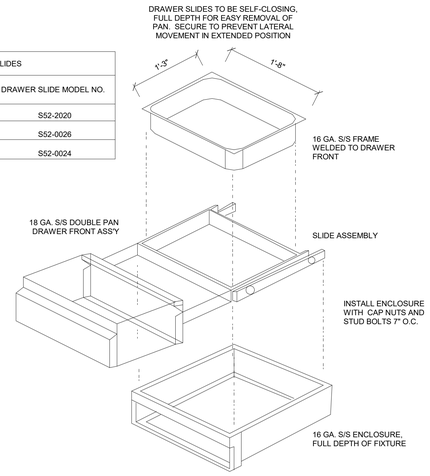
NOTE:
COORDINATE ALL RECEPTACLES WITH ELECTRICAL CONTRACT DRAWING REQUIREMENTS, REFER TO ELECTRICAL PLAN



5 WORKTABLE - ELECTRICAL RECEPTACLE MOUNTED UNDER TOP DETAIL
NOT TO SCALE

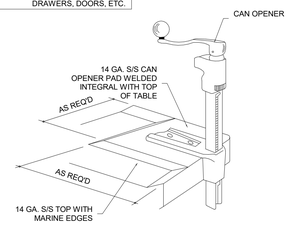
COMPONENT HARDWARE DRAWER PAN AND SLIDES		
TYPE	DRAWER PAN MODEL NO.	DRAWER SLIDE MODEL NO.
UTILITY	S80-2020	S52-2020
BREAD	S83-2020	S52-0026
REFRIGERATOR	S81-1520	S52-0024



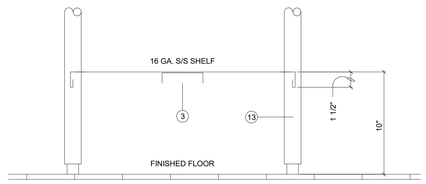


6 DRAWER ASSEMBLY DETAIL
NOT TO SCALE

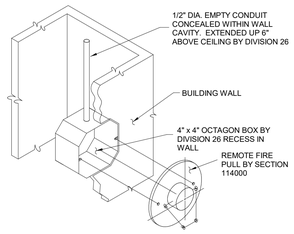
NOTE: DO NOT LOCATE CAN OPENER PAD IN A POSITION THAT WOULD ALLOW CAN OPENER TO OBSTRUCT OPENING OF DRAWERS, DOORS, ETC.



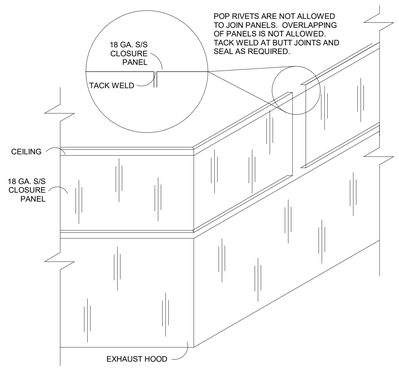
10 SINK - PREP MARINE EDGE CAN OPENER DETAIL
NOT TO SCALE



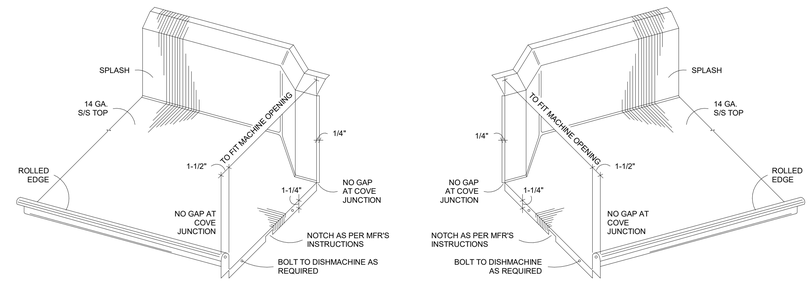
11 UNDER SHELF DETAIL
NOT TO SCALE



12 FIRE PROTECTION SYSTEM FIRE PULL DETAIL
NOT TO SCALE



13 EXHAUST HOOD CLOSURE PANEL DETAIL
NOT TO SCALE



14 DISHTABLE - SOILED & CLEAN CONNECTION DETAIL
NOT TO SCALE

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FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
FCSI 68654119
PROFESSIONAL MEMBER
7/15/2025
ITEMS APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 68654119
ON: 07/15/2025

ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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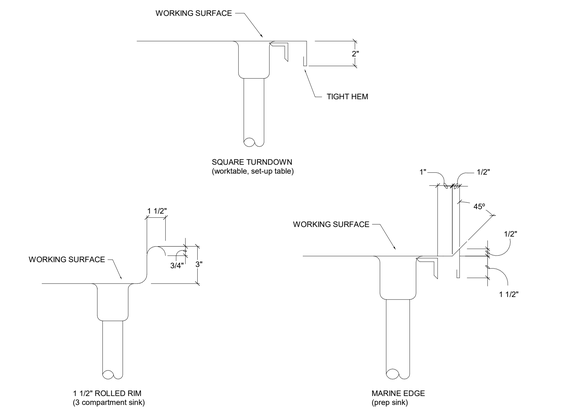
FS DETAILS

P-QF4.2



1 EDGE DETAILS
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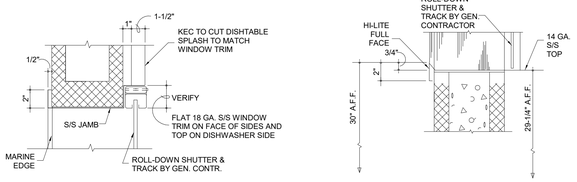
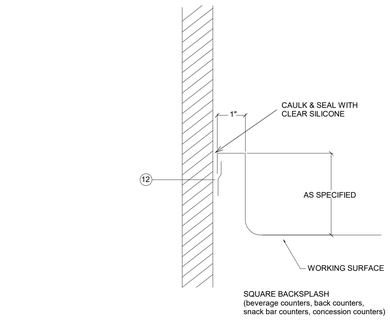
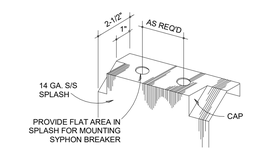


4 WAREWASH - TRAY DROP WINDOW SECTION
NOT TO SCALE

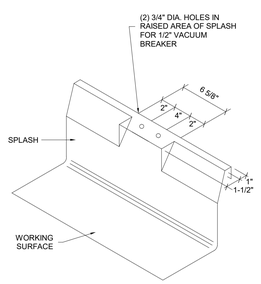
3 WAREWASH - TRAY DROP SECTION
NOT TO SCALE



2 BACKSPLASH DETAILS
NOT TO SCALE



6 SPLASH @ SYPHON BREAKER
NOT TO SCALE



8 VACUUM BREAKER DETAIL
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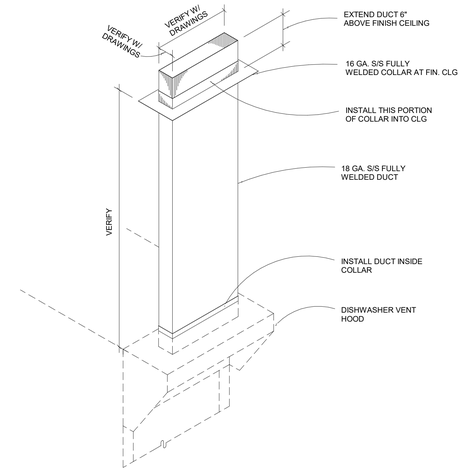
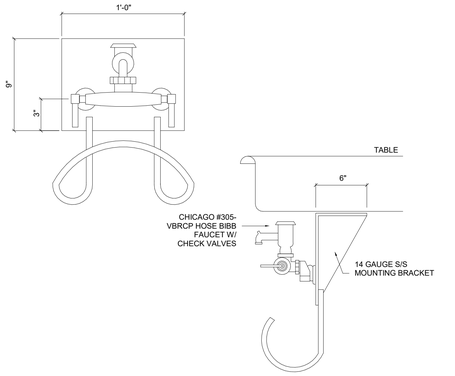
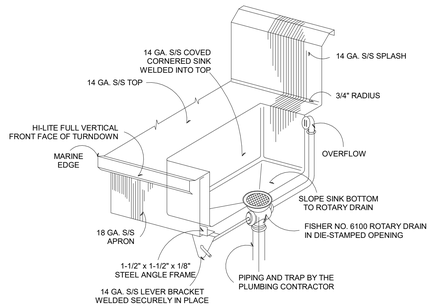


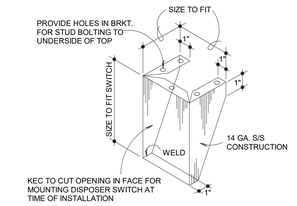
5 DISHMACHINE VENT RISER DETAIL
NOT TO SCALE



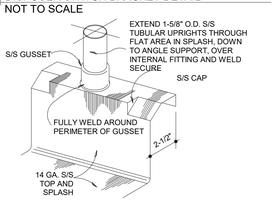
12 HOSE BIBB DETAIL
NOT TO SCALE



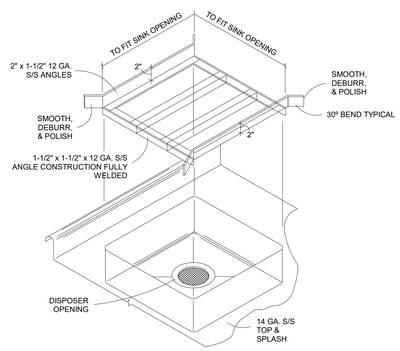
11 SINK ASSEMBLY DETAIL
NOT TO SCALE



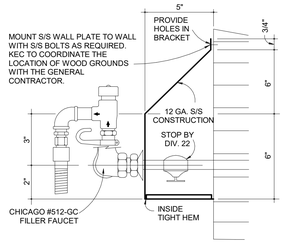
9 DISPOSER SWITCH BRACKET DETAIL
NOT TO SCALE



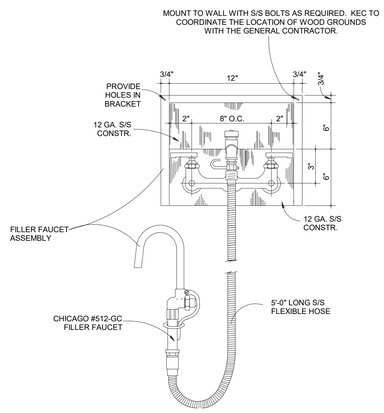
7 SPLASH @ UPRIGHT (DISH TABLE) DETAIL
NOT TO SCALE



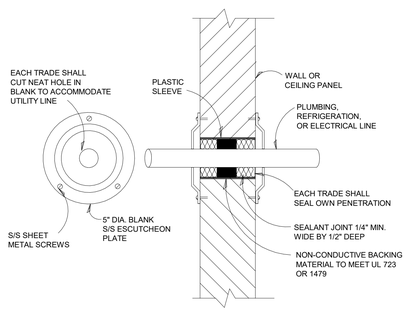
13 SINK - DISPOSER W/ REMOVABLE ANGLED RACK GUIDE DETAIL
NOT TO SCALE



14 FILL FAUCET DETAIL
NOT TO SCALE



15 COLD STORAGE ASSEMBLY WALL PENETRATION DETAIL
NOT TO SCALE



CUSTOM FABRICATION NOTES:

A. WORK SHALL BE DONE IN AN APPROVED WORKMANLIKE MANNER, TO COMPLETE SATISFACTION OF FOODSERVICE DESIGN PROFESSIONALS (FDP).

B. STAINLESS STEEL SHALL BE U.S. STANDARD GAUGES AS CALLED FOR. 18-8, TYPE 304, NOT OVER .012% MAXIMUM CARBON, NO. 4 FINISH.

C. GALVANIZED IRON SHALL BE ARMCO OR EQUAL. FRAMEWORK OF GALVANIZED IRON SHALL BE WELDED CONSTRUCTION, HAVING WELDS SMOOTH, AND WHERE GALVANIZING HAS BURNED OFF, TOUCHED UP WITH HIGH-GRADE ALUMINUM BRONZE.

D. LEGS AND CROSSRAIL SHALL BE CONTINUOUSLY WELDED, UNLESS OTHERWISE NOTED, AND GROUND SMOOTH.

E. BOTTOM OF LEGS AT FLOOR SHALL BE FITTED WITH SANITARY STAINLESS STEEL BULLET-TYPE FOOT, WITH NO LESS THAN 1/2" ADJUSTMENT.

F. LEGS SHALL BE FASTENED TO EQUIPMENT AS FOLLOWS:

01. TO SINKS BY MEANS OF CLOSED GUSSETS. GUSSETS SHALL BE S/S, REINFORCED WITH BUSHING, HAVING SET SCREWS FOR SECURING LEGS.

02. TO TABLES AND DRAINBOARDS WITH CLOSED GUSSETS WHICH SHALL BE WELDED TO GALVANIZED HAT SECTIONS OR CHANNELS, 14 GAUGE OR HEAVIER, EXPOSED HAT SECTIONS HAVING CLOSED ENDS. BRACING SHALL BE UNDERSIDE OF TOPS.

G. CLOSED GUSSETS SHALL BE 3" MINIMUM DIAMETER AT TOP, WELDED TO FRAME MEMBERS OR TO SINK BOTTOM.

H. ROLLS SHALL BE 1 1/2" DIAMETER, EXCEPT AS DETAILED TO THE CONTRARY, WITH CORNERS BULLNOSED, GROUND, AND POLISHED.

I. SEAMS AND JOINTS SHALL BE SHOP-WELDED WHERE POSSIBLE. WELDS TO BE GROUND AND POLISHED TO MATCH ORIGINAL FINISH. MATERIALS 18 GAUGE OR HEAVIER SHALL BE WELDED.

J. METAL TOPS SHALL BE ONE-PIECE WELDED CONSTRUCTION UNLESS SPECIFIED OTHERWISE, REINFORCED ON UNDERSIDE WITH GALVANIZED HAT SECTIONS OR CHANNELS WELDED IN PLACE. CROSSBRACE TO BE NOT MORE THAN 30" ON CENTERS.

K. HARDWARE SHALL BE SOLID MATERIALS AND EXCEPT WHERE EXPOSED OR SPECIFIED TO THE CONTRARY, OF CAST BRASS, CHROME-PLATED. IDENTIFY ALL HARDWARE WITH MANUFACTURER'S NAME AND NUMBER SO THAT BROKEN OR WORN PARTS MAY BE ORDERED AND REPLACED.

L. FABRICATE SINK COMPARTMENTS WITH 3/4" COVED VERTICAL AND HORIZONTAL CORNERS. MULTIPLE- COMPARTMENT PARTITIONS TO BE DOUBLE THICKNESS, CONTINUOUSLY WELDED WHERE SHEETS JOIN AT TOP. FRONT OF MULTIPLE-COMPARTMENT PARTITIONS TO BE CONTINUOUS ON EXTERIOR. BOTTOMS SHALL BE CREASED TO DRAIN.

M. ENDS OF FIXTURES, SPLASHBACKS, SHELVES, ETC., SHALL BE FINISHED FLUSH TO WALLS OR ADJOINING FIXTURES.

N. DISHTABLES, DRAINBOARDS, SPLASHBACKS, AND TURN-UP EDGES SHALL HAVE RADIUS BENDS IN ALL HORIZONTAL AND VERTICAL CORNERS, COVED AT INTERSECTIONS.

O. ROUNDED AND COVED CORNERS OR RADIUS BENDS SHALL BE 1/2" RADIUS OR LONGER.

P. UNDERSIDES OF TOPS TO BE COATED WITH HEAVY-BODIED RESINOUS MATERIAL COMPOUND FOR PERMANENT, NON-FLAKING ADHESION TO METAL, 1/8" THICK, APPLIED AFTER REINFORCING MEMBERS HAVE BEEN INSTALLED, DRYING WITHOUT DIRT-CATCHING CREVICES.

Q. SHELVES ARE TO BE TURNED UP 2" ON THE BACK EDGE. TURN OTHER EDGES DOWN 1 1/2" TO FORM OPEN CHANNELS. REINFORCE SHELF UNITS TO SUPPORT 40 LBS. PER SQUARE FOOT LOADING, PLUS 100% IMPACT LOADING.

R. TRIMWORK AND FRAMING AT MASONRY OPENINGS SHALL BE 18 GAUGE STAINLESS STEEL AND FORMED SO AS TO FIT SNUG TO WALLS AND ADJACENT SURFACES. FRAMING SHALL EXTEND A MINIMUM OF 2" ON EACH SURFACE. SEAL TRIMWORK TO WALLS. REFER TO DRAWINGS.

S. METAL COMPONENTS, UNLESS SPECIFIED OR NOTED OTHERWISE, TO BE THE FOLLOWING GAUGES:

TABLETOPS	14 GAUGE STAINLESS STEEL
WALL SHELVES	16 GAUGE STAINLESS STEEL
UNDER SHELVES	16 GAUGE STAINLESS STEEL
SINKS & DRAINBOARDS	14 GAUGE STAINLESS STEEL
EXHAUST DUCTS	18 GAUGE STAINLESS STEEL
LEGS - 1 5/8" DIA.	16 GAUGE STAINLESS STEEL

10 CUSTOM FAB NOTES
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD S DRIVE
RICHMOND, TX 77406

SEAL

FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
46854119
PROFESSIONAL MEMBER
7/15/2025
THE INDIVIDUAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO.-46854119 ON: 07/15/2025

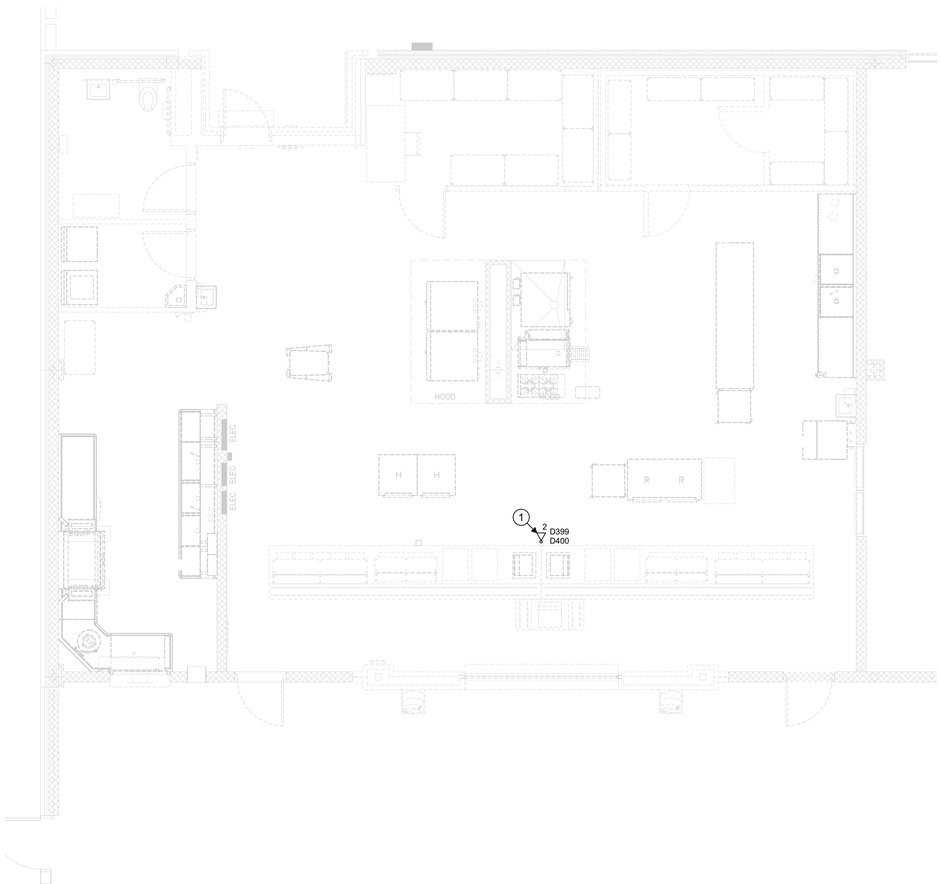
ARCHITECTS

ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FS DETAILS

P-QF4.3



1 TECHNOLOGY DEMOLITION FLOOR PLAN
p-TD201 1/4" = 1'-0"

TECHNOLOGY DEMOLITION PLAN GENERAL NOTES

1. ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS SHALL REMAIN OPERATIONAL AT ALL TIMES DURING BUSINESS HOURS UNLESS OTHERWISE NOTED. ANY SYSTEM DOWNTIME SHALL BE SCHEDULED WITH THE ARCHITECT/ENGINEER AND OWNER AT LEAST TEN (10) WORKING DAYS IN ADVANCE. CONTRACTOR SHALL DEVELOP A PHASING PLAN AND SCHEDULE OF ANY REQUIRED SYSTEM DOWNTIME FOR REVIEW AND APPROVAL BY THE ARCHITECT/ENGINEER AND OWNER PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. OWNER SHALL BE RESPONSIBLE FOR POWER DOWN AND START-UP OF ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT/ENGINEER AND OWNER AND PROVIDE A MINIMUM OF TEN (10) WORKING DAYS NOTICE FOR SCHEDULING OF ANY REQUIRED DOWNTIME.
3. ALL EXISTING WIRELESS ACCESS POINTS ARE TO BE REMOVED AND RETURNED TO OWNER. CONTRACTOR SHALL RE-INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.
4. COORDINATE REMOVAL OF EXISTING CAMERA WITH OWNER/ARCHITECT DURING CONSTRUCTION.

TECHNOLOGY DEMOLITION PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

(1) EXISTING DATA/VOICE/WIRELESS ACCESS POINT OUTLET TO BE REMOVED. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL 4-PAIR CABLES AND WORKSTATION CONNECTING HARDWARE TERMINATED AT THIS LOCATION. IF LOCATION IS NOT RE-USED, CONTRACTOR SHALL SUPPLY AND INSTALL BLANK COVER. CONTRACTOR IS TO REMOVE EACH CABLE TO BE DEMOLISHED FROM THE PATCH PANEL OR TERMINATION BLOCK IN THE TELECOMMUNICATIONS ROOM. REMOVE THE ENTIRE LENGTH OF THE CABLE AND THE CORRESPONDING MODULAR CONNECTOR, FACEPLATE AND ACCESSORIES. NO ABANDONED CABLING IS TO BE LEFT ABOVE CEILING. CONTRACTOR SHALL INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.

(2) EXISTING VIDEO SURVEILLANCE CAMERA. CONTRACTOR SHALL REMOVE AND RETURN TO OWNER.

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FBISD PKG 13 KITCHEN RENOVATIONS
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SEAL

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EXPIRES 12-31-25
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07/18/2025

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PROJ. NO.: 23-25
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TECHNOLOGY DEMOLITION FLOOR PLAN

SHEET NO.
p-TD201

TECHNOLOGY SYMBOLS & LEGEND

VOICE SYMBOLS

	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS PER LOCATION.
W	SINGLE VOICE OUTLET FOR WALL-MOUNTED PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.

DATA SYMBOLS

	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF DATA OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
W	SINGLE DATA OUTLET FOR WALL-MOUNTED IP PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA CABLE FOR COMPUTER ON WHEELS, CABLE TYPE AS SPECIFIED MOUNTED + 18-INCHES A.F.F UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
X	DATA CABLE FOR CEILING MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X	DATA CABLE FOR CEILING MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
	DATA CABLE FOR CEILING MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR CEILING MOUNTED AUDIO/VISUAL EQUIPMENT ENCLOSURE, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR WALL MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.

DATA SYMBOLS, CONT.

X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW, REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
X CAMW	DATA CABLE FOR INTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPW	DATA CABLE FOR INTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPE	DATA CABLE FOR EXTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.

CABLE PLANT & RISER DIAGRAM

	MAINTENANCE HOLE, SIZE & TYPE AS SPECIFIED.
	PULLBOX, SIZE AND TYPE AS SPECIFIED.
UGC	DIRECT BURIED COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
AER	AERIAL COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
	CONDUIT, SIZE AND TYPE AS SPECIFIED.

VOICE/DATA SYMBOLS

	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF VOICE TERMINATIONS , Y = NUMBER OF DATA TERMINATIONS PER LOCATION.
	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF VOICE OUTLETS AND Y = NUMBER OF DATA OUTLETS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET AND SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X Y	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X Y	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS PER LOCATION.

FIBER OPTIC SYMBOLS

	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF FIBER OPTIC OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.

ROUGH-IN & MISC. SYMBOLS

R	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
R	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
R	POWER POLE WITH ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
R	ROUGH-IN LOCATION. TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
WAP	WIRELESS ACCESS POINT. EQUIPMENT AS SPECIFIED.

GENERAL SYMBOLS

# SHEET — DRAWING TITLE — SCALE: SCALE	DRAWING TITLE CALLOUT, # = DETAIL NUMBER.
# SHEET	DETAIL CALLOUT, # = DETAIL NUMBER.
# SHEET	SECTION CALLOUT, # = DETAIL NUMBER.
SHEET #	ELEVATION CALLOUT, # = DETAIL NUMBER.
#	KEYED NOTE, # = KEYED NOTE NUMBER.
#	REVISION TRIANGLE, # = REVISION NUMBER (PER SHEET).
TR (IDF XXX)	INDICATES TELECOMMUNICATIONS REGION

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
AER	AERIAL
DEMARC	DEMARCATION POINT
EMT	ELECTRIC METALLIC TUBE
F.O.C.	FIBER OPTIC CABLE
GIP	GALVANIZED IRON PIPE
HE	PAINTERCOM HEAD-END
IMC	INTERMEDIATE METAL CONDUIT
ISP	INSIDE CABLE PLANT
IDF	INTERMEDIATE DISTRIBUTION FRAME
MDF	MAIN DISTRIBUTION FRAME
MH	MAINTENANCE HOLE
MM	MULTIMODE
OSP	OUTSIDE CABLE PLANT
PB	PULLBOX
PR	PAIR
PVC	POLYVINYL CHLORIDE
RSC	RIGID STEEL CONDUIT
SM	SINGLE MODE
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TB	TERMINAL BLOCK
TR	TELECOMMUNICATION REGION
UGC	UNDERGROUND COMMUNICATION
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR

NOTES

1. CONTRACTOR SHALL REVIEW DRAWINGS AND SPECIFICATIONS THAT MAKE UP THE CONTRACT DOCUMENTS AND COMPLETE ALL WORK INCLUDED THEREIN.
2. SCALE OF TECHNOLOGY DRAWINGS IS PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CABLE LENGTHS, SIZE OF PATHWAYS, DIMENSIONS, ETC.
3. TECHNOLOGY DRAWINGS SHALL BE USED TO COMPLEMENT THE WRITTEN SPECIFICATIONS.
4. ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT'S. DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT AND SUBSEQUENTLY CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE ARCHITECT'S/DESIGN CONSULTANT'S INTERPRETATION.

INDEX OF DRAWINGS

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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD SOUTH DRIVE
RICHMOND, TX 77406

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

ARCHITECTS
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PROJ. NO.: 23-25
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TECHNOLOGY SYMBOLS & LEGEND

SHEET NO.
p-T000



1 p-T200 TECHNOLOGY COMPOSITE FLOOR PLAN
1/16" = 1'-0"

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FBISD PKG 13 KITCHEN RENOVATIONS
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SEAL

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07/18/2025

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PROJ. NO.: 23-25
DATE: 07/18/2025
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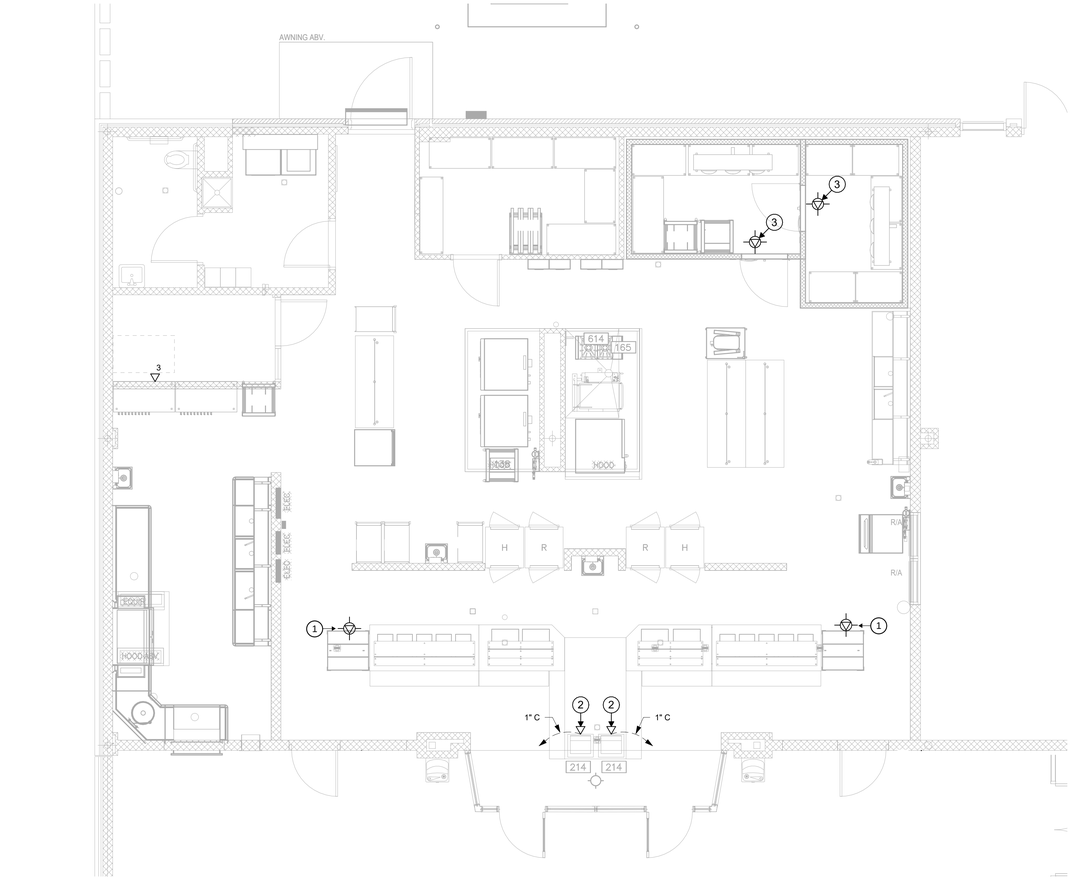
TECHNOLOGY COMPOSITE FLOOR PLAN

SHEET NO.
p-T200



1 TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
p-T201 1/4" = 1'-0"

TECHNOLOGY FLOOR PLANS GENRAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
2. ALL CONDUIT PATHWAYS, ROUGH-INS, BACKBOXES, FLOOR BOXES, CONDUIT SLEEVES, ETC. INDICATED ON THE TECHNOLOGY DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26.
3. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. TECHNOLOGY CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES/ ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM.
14. ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE A LAY-IN TYPE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE A LAY- IN TYPE CEILING TO PREVENT THE CABLES FROM BEING EXPOSED, THE CONDUIT SHALL ROUTE TO THE NEAREST LAY-IN TYPE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. THE CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE MAIN CORRIDOR OR NEAREST MDF/IDF TO MINIMIZE THE CABLE LENGTH ENSURING THE CABLE LENGTH DOES NOT EXCEED 275 FEET. CONDUIT, CONNECTIONS, J-BOXES, SUSPENSION, ANCHORAGES, AND OTHER CONDUIT COMPONENTS EXPOSED TO VIEW IN PUBLIC SPACES SHALL BE ROUTED AND INSTALLED CAREFULLY TO MINIMIZE VISUAL IMPACT AND SHALL BE FULLY PAINTED TO MATCH UNLESS NOTED OTHERWISE.
15. CONDUIT(S) INSTALLED IN-SLAB OR UNDER-SLAB TO FLOOR BOXES, POKE-THURS, AND TO WORKAREA OUTLETS, ETC. SHALL BE INSTALLED WITH WET RATED CABLE(S).
16. NO GRID WIRE SHALL BE UTILIZED FOR SUPPORTS ONLY USE SOLID SUPPORTS (CLIPS, ALL-THREAD, ANCHORS, ETC.).

TECHNOLOGY PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

1. DATA CABLE FOR CONTRACTOR FURNISHED / CONTRACTOR INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.
2. INDOOR / OUTDOOR RATED DATA CABLE FOR POINT OF SALE LOCATION. PROVIDE (1) 1-INCH CONDUIT FOR DATA TO THE WALL BEHIND POINT OF SALE LOCATION AND UP WALL TO ABOVE ACCESSIBLE CEILING. CONDUITS SHALL TERMINATE INSIDE A DOUBLE GANG BOX THAT IS SECURED TO THE POINT OF SALE LOCATION. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.
3. DATA CABLE FOR TEMPERATURE MONITORING OF FREEZER COOLER. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS AND TERMINATION POINT AND CONNECTIVITY NEEDS IN FREEZER / COOLER CONTROL UNIT.
4. DATA CABLE FOR TEMPORARY POINT OF SALES CASH REGISTER. COORDINATE WITH OWNER, ARCHITECT, AND CONSULTANT FOR ROUTING OF CABLES TO POINT OF SALE CASH REGISTER PRIOR TO INSTALLATION

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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD SOUTH DRIVE
RICHMOND, TX 77406

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
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07/18/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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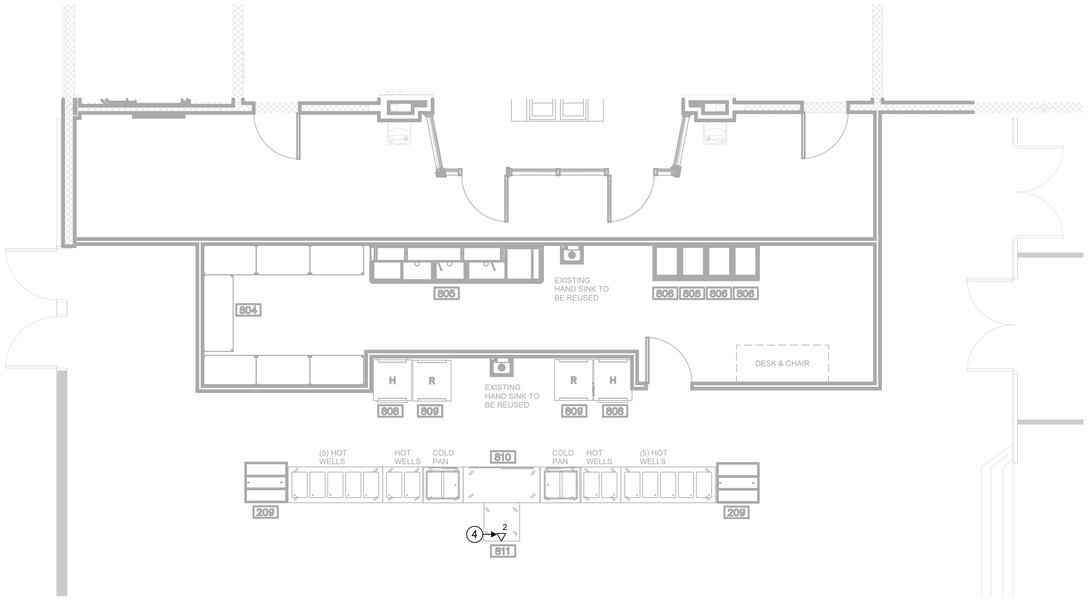
TECHNOLOGY NEW/RENOVATION KITCHEN PLAN

SHEET NO.
p-T201



1 p-T202 TECHNOLOGY TEMPORARY KITCHEN FLOOR PLAN
1/4" = 1'-0"

TECHNOLOGY FLOOR PLANS GENRAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
2. ALL CONDUIT PATHWAYS, ROUGH-INS, BACKBOXES, FLOOR BOXES, CONDUIT SLEEVES, ETC. INDICATED ON THE TECHNOLOGY DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26.
3. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. TECHNOLOGY CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES/ ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM.
14. ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE A LAY-IN TYPE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE A LAY- IN TYPE CEILING TO PREVENT THE CABLES FROM BEING EXPOSED, THE CONDUIT SHALL ROUTE TO THE NEAREST LAY-IN TYPE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF . THE CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE MAIN CORRIDOR OR NEAREST MDF/IDF TO MINIMIZE THE CABLE LENGTH ENSURING THE CABLE LENGTH DOES NOT EXCEED 275 FEET. CONDUIT, CONNECTIONS, J-BOXES, SUSPENSION, ANCHORAGES, AND OTHER CONDUIT COMPONENTS EXPOSED TO VIEW IN PUBLIC SPACES SHALL BE ROUTED AND INSTALLED CAREFULLY TO MINIMIZE VISUAL IMPACT AND SHALL BE FULLY PAINTED TO MATCH UNLESS NOTED OTHERWISE.
15. CONDUIT(S) INSTALLED IN-SLAB OR UNDER-SLAB TO FLOOR BOXES, POKE-THURS, AND TO WORKAREA OUTLETS, ETC. SHALL BE INSTALLED WITH WET RATED CABLE(S).
16. NO GRID WIRE SHALL BE UTILIZED FOR SUPPORTS ONLY USE SOLID SUPPORTS (CLIPS, ALL-THREAD, ANCHORS, ETC.).

TECHNOLOGY PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

(1) DATA CABLE FOR CONTRACTOR FURNISHED / CONTRACTOR INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.

(2) INDOOR / OUTDOOR RATED DATA CABLE FOR POINT OF SALE LOCATION. PROVIDE (1) 1-INCH CONDUIT FOR DATA TO THE WALL BEHIND POINT OF SALE LOCATION AND UP WALL TO ABOVE ACCESSIBLE CEILING. CONDUITS SHALL TERMINATE INSIDE A DOUBLE GANG BOX THAT IS SECURED TO THE POINT OF SALE LOCATION. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.

(3) DATA CABLE FOR TEMPERATURE MONITORING OF FREEZER COOLER. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS AND TERMINATION POINT AND CONNECTIVITY NEEDS IN FREEZER / COOLER CONTROL UNIT.

(4) DATA CABLE FOR TEMPORARY POINT OF SALES CASH REGISTER. COORDINATE WITH OWNER, ARCHITECT, AND CONSULTANT FOR ROUTING OF CABLES TO POINT OF SALE CASH REGISTER PRIOR TO INSTALLATION

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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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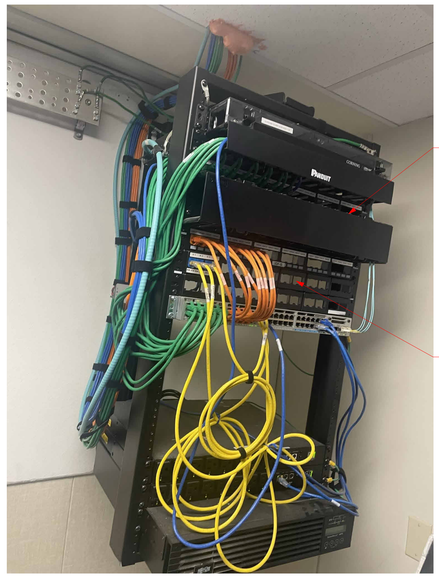
TECHNOLOGY TEMPORARY KITCHEN PLAN

SHEET NO.
p-T202



1 p-T300 PECAN GROVE ES - EXISTING WALL MOUNTED RACK
N.T.S.

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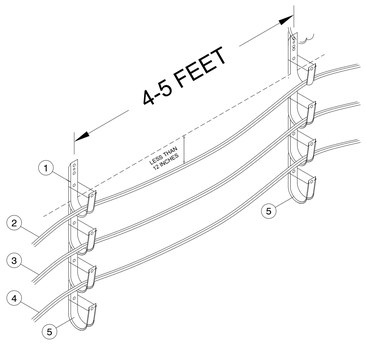
TECHNOLOGY ENLARGED VIEWS

SHEET NO.
p-T300

NOTE TO CONTRACTOR:

UNLESS OTHERWISE NOTED, LOW VOLTAGE CABLING SHALL BE INSTALLED WITHIN 6-INCHES OF THE CEILING AND ACCESSIBLE BY A TECHNICIAN ON A STANDARD A-FRAME LADDER.

CONTRACTOR SHALL MAINTAIN AT LEAST 6-INCHES OF SEPRATION BETWEEN CABLING BUNDLES AND MECHANICAL DUCTWORKS, EQUIPMENT, PIPIING OR OTHER SYSTEMS IN THE CEILING PLENUM.

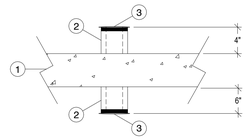


KEYED NOTES:

1. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
2. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
3. A/V CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. SECURITY CABLE ABOVE ACCESSIBLE CEILING (BY DIV 28).
5. SPARE J-HOOK (BY DIV 27).

1 / T400 TYPICAL J-HOOK CABLE PATHWAY

SCALE: N.T.S.

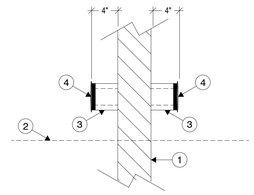


KEYED NOTES:

1. SCHEDULED FLOOR OR DECK.
2. CONDUIT SLEEVE (BY DIV 26).
3. NYLON BUSHING (BY DIV 26).

2 / T400 TYPICAL CONDUIT SLEEVE THROUGH FLOOR OR DECK DETAIL

SCALE: N.T.S.

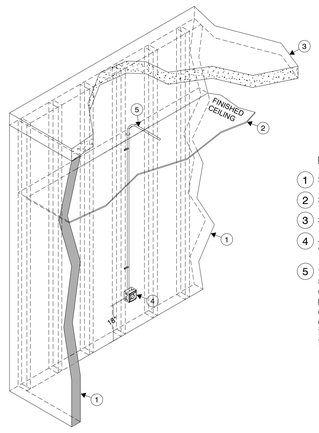


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. CONDUIT SLEEVE (BY DIV 26).
4. NYLON BUSHING (BY DIV 26).

3 / T400 TYPICAL CONDUIT SLEEVE GOING THROUGH WALL

SCALE: N.T.S.

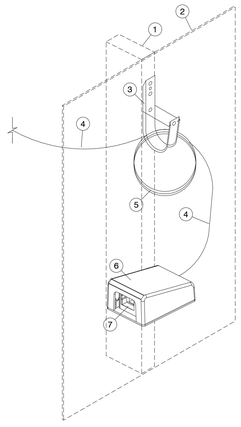


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. SCHEDULED DECK ABOVE.
4. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX WITH DOUBLE GANG PLASTER RING (BY DIV 26).
5. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH. (BY DIV 26).

4 / T400 TYPICAL TECHNOLOGY CONDUIT ROUGH-IN

SCALE: N.T.S.

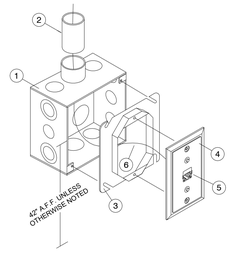


KEYED NOTES:

1. SCHEDULED STUD.
2. SCHEDULED WALL.
3. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
5. 20 FOOT SERVICE LOOP ABOVE ACCESSIBLE CEILING NEATLY COILED AND SECURED TO J-HOOK (BY DIV 27).
6. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BUILDING STRUCTURE (BY DIV 27).
7. DATA INSTER (BY DIV 27).

5 / T400 TYPICAL ABOVE CEILING SINGLE DATA OUTLET (WALL MOUNTED)

SCALE: N.T.S.

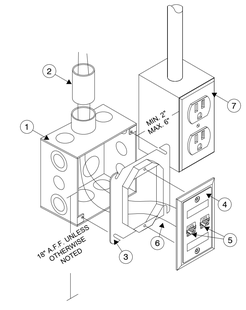


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH PHONE STUDS (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).

6 / T400 TYPICAL WALL PHONE OUTLET CONFIGURATION

SCALE: N.T.S.



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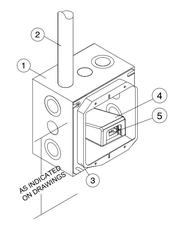
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

7 / T400 TYPICAL DUAL DATA OUTLET CONFIGURATION

SCALE: N.T.S.

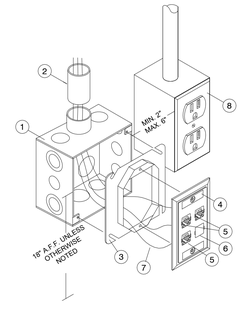


KEYED NOTES:

1. 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. DOUBLE GANG PLASTER RING (BY DIV 26).
4. SURFACE MOUNT BOX INSIDE THE 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH DOUBLE GANG BOX (BY DIV 27).
5. RJ-45 INSERT (BY DIV 27).

8 / T400 TYPICAL WALL-MOUNTED WIRELESS ACCESS POINT

SCALE: N.T.S.



KEYED NOTES:

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3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

9 / T400 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.

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ARCHITECTS
AND PLANNING
CONSULTANTS

11767 KATY FREEWAY, SUITE 430
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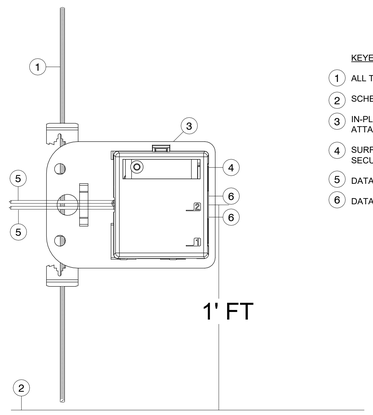
TECHNOLOGY TYPICAL DETAILS

SHEET NO.
p-T400

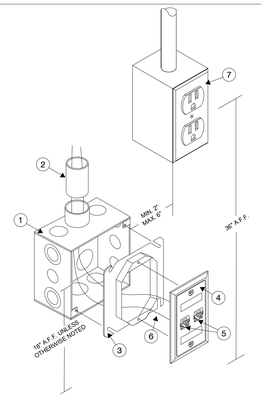


KEYED NOTES:

1. ALL THREAD TO BUILDING STRUCTURE (BY DIV. 27)
2. SCHEDULING CEILING
3. IN-PLENUM CEILING BRACKET PN 49223-CBC ATTACHED TO ALL THREAD (BY DIV. 27)
4. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BRACKET (BY DIV. 27)
5. DATA CABLE (BY DIV. 27)
6. DATA INSERT (BY DIV. 27)

1 T401 TYPICAL ABOVE CEILING DATA OUTLET

SCALE: N.T.S.

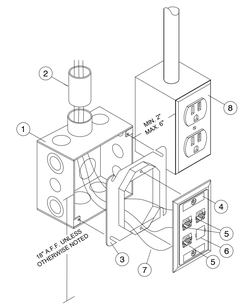


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26). ELECTRICAL RECEPTACLE TO BE INSTALLED AT 36" A.F.F AND ADJACENT TO COW / SECONDARY TEACHING OUTLET LOCATION.

2 T401 TYPICAL COW / SECONDARY TEACHER'S DATA OUTLET CONFIGURATION

SCALE: N.T.S.

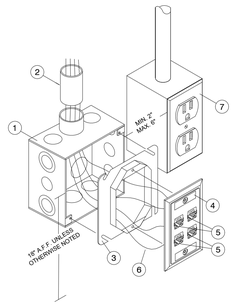


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

3 T401 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.



KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

4 T401 TYPICAL FOUR DATA OUTLET CONFIGURATION

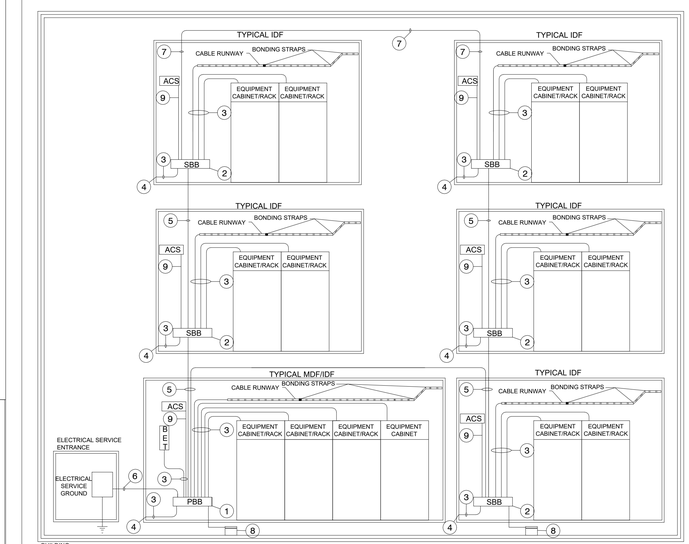
SCALE: N.T.S.

TBB/GE CONDUCTOR SIZING	
LENGTH IN LINEAR M (FT)	SIZE (AWG)
LESS THAN 4 (13)	6
4 - 6 (14-20)	4
6 - 8 (21 - 26)	3
8 - 10 (27 - 33)	2
10 - 13 (34 - 41)	1
13 - 16 (42 - 52)	1/0
16 - 20 (53 - 66)	2/0
20 - 26 (67 - 84)	3/0
26 - 32 (85 - 105)	4/0
32 - 38 (106 - 125)	250 kcmil
38 - 46 (126 - 150)	300 kcmil
46 - 53 (151 - 175)	350 kcmil
53 - 76 (176 - 250)	500 kcmil
76 - 91 (251 - 300)	600 kcmil
GREATER THAN 91 (301)	750 kcmil

ROUTE THE TBB TO EACH TGB IN AS STRAIGHT A PATH AS POSSIBLE. THE TBB SHOULD BE INSTALLED AS A CONTINUOUS CONDUCTOR, AVOIDING SPLICES WHERE POSSIBLE.

5 T401 TBB CONDUCTOR SIZING

SCALE: N.T.S.

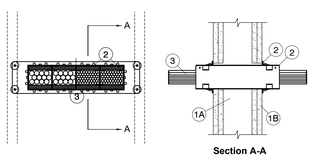


1. TELECOMMUNICATIONS MAIN GROUNDING BUS BAR (PBB)(BY DIV. 27)
2. TELECOMMUNICATIONS GROUNDING BUS BAR (SBB)(BY DIV 27)
3. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 27)
4. CONNECT TO GROUNDED BUILDING STEEL WHEN EXPOSED IN ROOM.
5. TELECOMMUNICATIONS BONDING BACKBONE (TBB). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 26)
6. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). BY ELECTRICAL CONTRACTOR.REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS.
7. GROUNDING EQUALIZER CONDUCTOR (GEC)(BY DIV 26)
8. BOUND WITH GROUDING COLLARS TO EACH CONTINUOUS CONDUIT THAT ENTERS THE TELECOM ROOM. (BY DIV 26).
9. BOND TO EACH ACCESS CONTROL PANEL AND OTHER SECURITY PANELS IN HE TELECOM ROOM. (BY DIV 27)

6 T401 TYPICAL GROUNDING DIAGRAM

SCALE: N.T.S.

System No. W-L-3218
F Ratings - 1, 2, 3 and 4 Hr (See Items 1 and 3)
T Ratings - 3/4 and 1 Hr (See Item 3)
L Rating At Ambient - Less Than 1, 1.3, 4 or 7 CFM (See Item 3)
L Rating At 400 F - Less Than 1, 2 or 3 CFM (See Item 3)



Section A-A

1. Wall Assembly - The 1, 2, 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described within the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall incorporate the following construction features:

   A. Studs - Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.

   B. Gypsum Board* - Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Opening in gypsum board to be max 1/4 in. (6 mm) larger then width and height dimensions of firestop device(s).

   The hourly F Rating of the firestop system is dependent upon the hourly rating of the wall in which it is installed.

2. Firestop Device* - One, two, three, four or seven firestop device modules ganged together. Each firestop device module consists of a 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long galv steel tube with an intumescent material lining. Firestop device modules to be installed in accordance with the accompanying installation instructions. The space between the firestop device module(s) and the periphery of the opening shall be min 0 in. (0 mm, point contact) to max 1/8 in. (3.2 mm). In round openings, the space between the firestop device and the periphery of the opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). Firestop device module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device by means of steel set screws provided with device. Each four- and seven-gang steel wall plate shall be fastened to the studs with steel screws sized to extend through the gypsum board layers and penetrate 1/2 in. (13 mm) into the framing member. Each firestop device module is to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   As an alternate, the four- and seven-gang steel wall plates may be installed directly against the studs for walls having 16 and 24 in. (406 and 610 mm) center-to-center stud spacing, respectively, prior to installation of the gypsum board layers. The steel wall plates shall be secured to the stud by means of steel screws. After installation of the steel wall plates and firestop device modules, the gypsum board shall be installed as specified in the individual U300 or U400 Design with a maximum 1/8 in. (3.2 mm) gap between the firestop device module and the cutout in the gypsum board. Gap between the firestop device module and the cutout in the gypsum board may be filled with gypsum joint compound or fill material (Item 4).

   SPECIFIED TECHNOLOGIES INC - EZ PATH Series 33 Fire Rated Pathway

2A. Firestop Device* - Extension Module - (Optional, Not Shown) - Module attached to ends of 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long firestop device (Item 3) to increase its length to facilitate installation in thicker walls. Each module consists of a 3 by 3 by 6 in. (76 by 76 by 152 mm) long galv steel tube with an intumescent material lining. Extension module to be installed in accordance with the accompanying installation instructions. When module is used, firestop device (Item 2) and extension module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device or extension module(s) by means of steel set screws provided with wall plates. Firestop device and extension module(s) assembly to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   SPECIFIED TECHNOLOGIES INC - EZ PATH Extension

3. Cables - Within the loading area for each firestop device module, the cables may represent a 0 to 100 percent visual fill. Cable fill to be distributed at a uniform height across the width of the firestop device module. Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types of cables may be used:

   A. Max 400 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) jacketing and insulation.
   B. Max 350 kcmil single copper conductor power cable with XLPE jacket and insulation
   C. Max 7/C No. 12 AWG copper conductor control cable with PVC or XLPE jacket and insulation.
   D. Max 3/C No. 10 AWG metal clad or armored cable with steel or aluminum jacket.
   E. Max 3/C No. 8 AWG NM cable (Romex) with PVC insulation and jacket.
   F. Max four pair No. 22 AWG (or smaller) copper conductor data cable with PVC or plenum rated jacketing and insulation.
   G. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
   H. Fiber optic cable with PVC or polyethylene (PE) jacket and insulation having a max diam of 5/8 in. (16 mm).
   I. Optical Fiber Raceway+ - Max 1-1/2 in. (38 mm) diam (or smaller) optical fiber raceway ("innerduct") formed of either PVC or polyvinylidene fluoride (PVDF) with optical fiber cable fill. Raceways installed in accordance with the National Electrical Code (NFPA 70).

   When the hourly rating of the wall assembly is 1 hr, the T Rating is 3/4 hr. When the hourly fire rating of the wall assembly is greater than 1 hr, the T Rating is 3/4 hr when Item 3A, 3B, 3C, 3D or 3E is used. Otherwise the T Rating is 1 hr. When Item 3A, 3B, 3C, 3D or 3E is used, the maximum F Rating is 2 hr. When max 200 pair No. 24 AWG telecommunication cable is used or when Item 3F, 3G, 3H or 3I is used, the maximum F Rating is 4 hr.

   The L Rating for each empty firestop device module is less than 1 cfm at ambient and at 400F. When Item 3A is used, the L Rating for each firestop device module with 100 percent visual fill is 4 cfm at ambient and 3 cfm at 400F. When Item 3F is used, the L Rating for each firestop device module with 100 percent visual fill is 1.3 cfm at ambient and 1 cfm at 400F. When Item 3G or 3H is used, the L Rating for each firestop device module with 100 percent visual fill is 7 cfm at ambient and 2 cfm at 400F.

4. Fill, Void or Cavity Material* - Sealant or Putty - (Not Shown) - As an alternate to gypsum joint compound, the gap between the firestop device module and the cutout in the gypsum board may be sealed with fill material on each side of the wall assembly when four- and seven-gang steel wall plates are installed directly against the wood or steel studs.

   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant, SpecSeal Putty

   *Bearing the UL Classification Mark

7 T401 TYPICAL STI EZ-PATH SLEEVE DETAIL

SCALE: N.T.S.

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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
PECAN GROVE ELEMENTARY SCHOOL
3330 OLD SOUTH DRIVE
RICHMOND, TX 77406

SEAL

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Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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TECHNOLOGY TYPICAL DETAILS

SHEET NO.
p-T401

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
iWB iWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

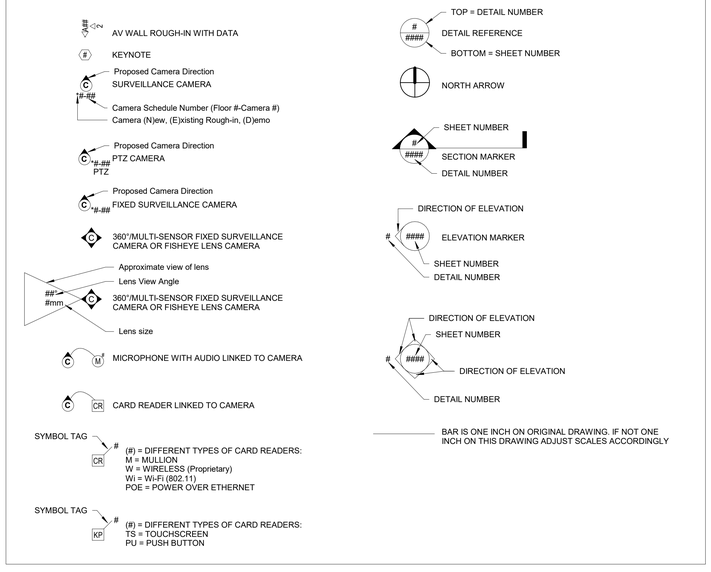
SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED



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Pecan Grove Elementary School
3330 Old S Dr, Richmond, TX 77406

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07-18-25

MVA ARCHITECTS
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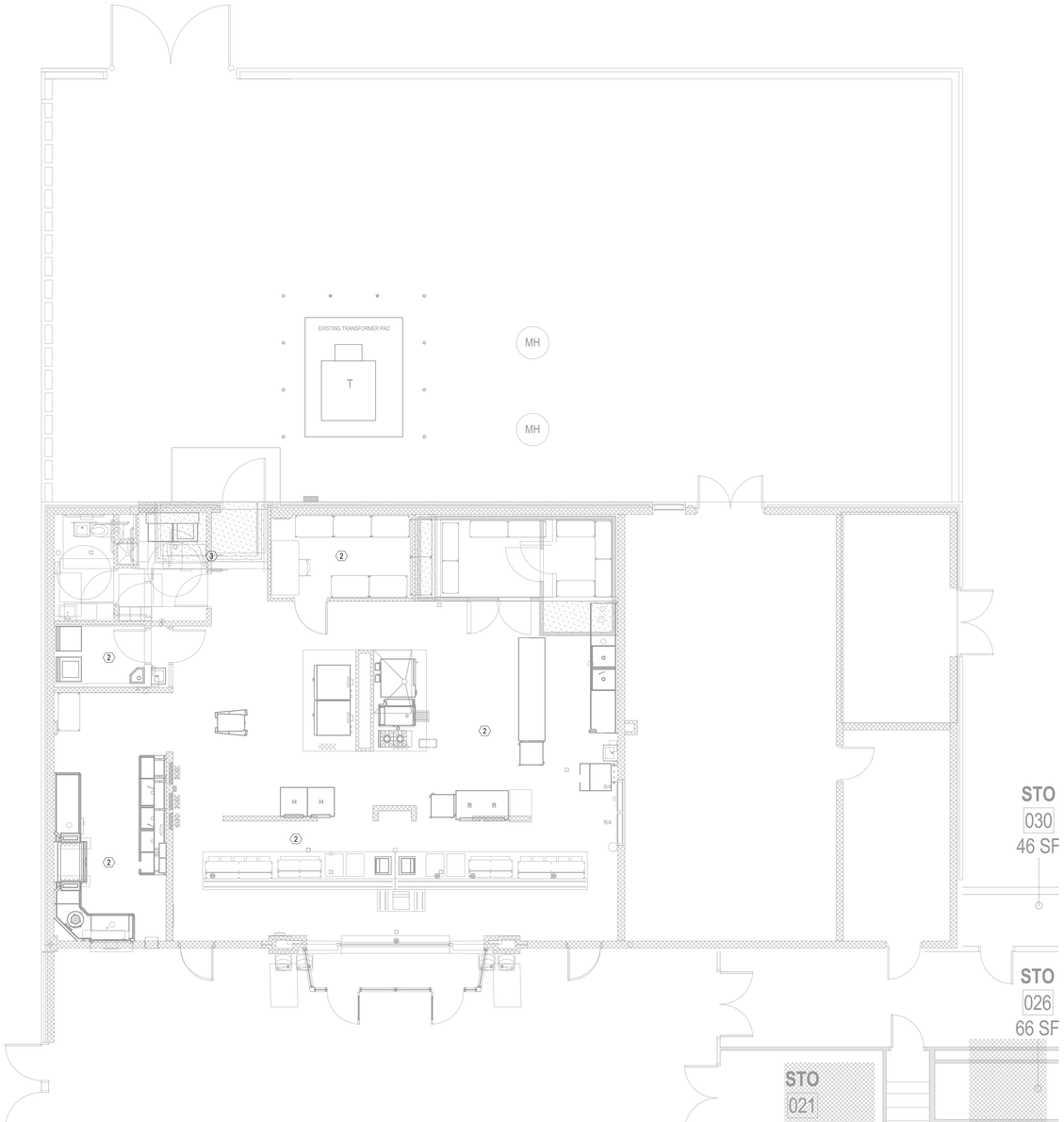
TECHNOLOGY - TITLE SHEET

p-TN000

DEMO KEYNOTES

1. REMOVE, AND PROTECT DURING CONSTRUCTION, INSTALL IN EXISTING LOCATION AFTER NEW ACT GRID IS IN PLACE.
2. DEVICES IN ACT ARE TO BE REMOVED AND PROTECTED DURING CONSTRUCTION AND REINSTALLED IN THE SAME LOCATION AFTER THE NEW CEILING GRID IS IN PLACE. DECIVES INCLUDE: SPEAKERS, ACCESS POINTS AND INTRUSION MOTION DETECTORS.
3. EXISTING CARD READER, DOOR CONTACT, & REX (REQUEST TO EXIT) TO BE DEMOLISHED, REMOVE DEVICES AND PROTECT WIREING.



1 PECAN GROVE - DEMO PLAN
SCALE: 3/16" = 1'-0"

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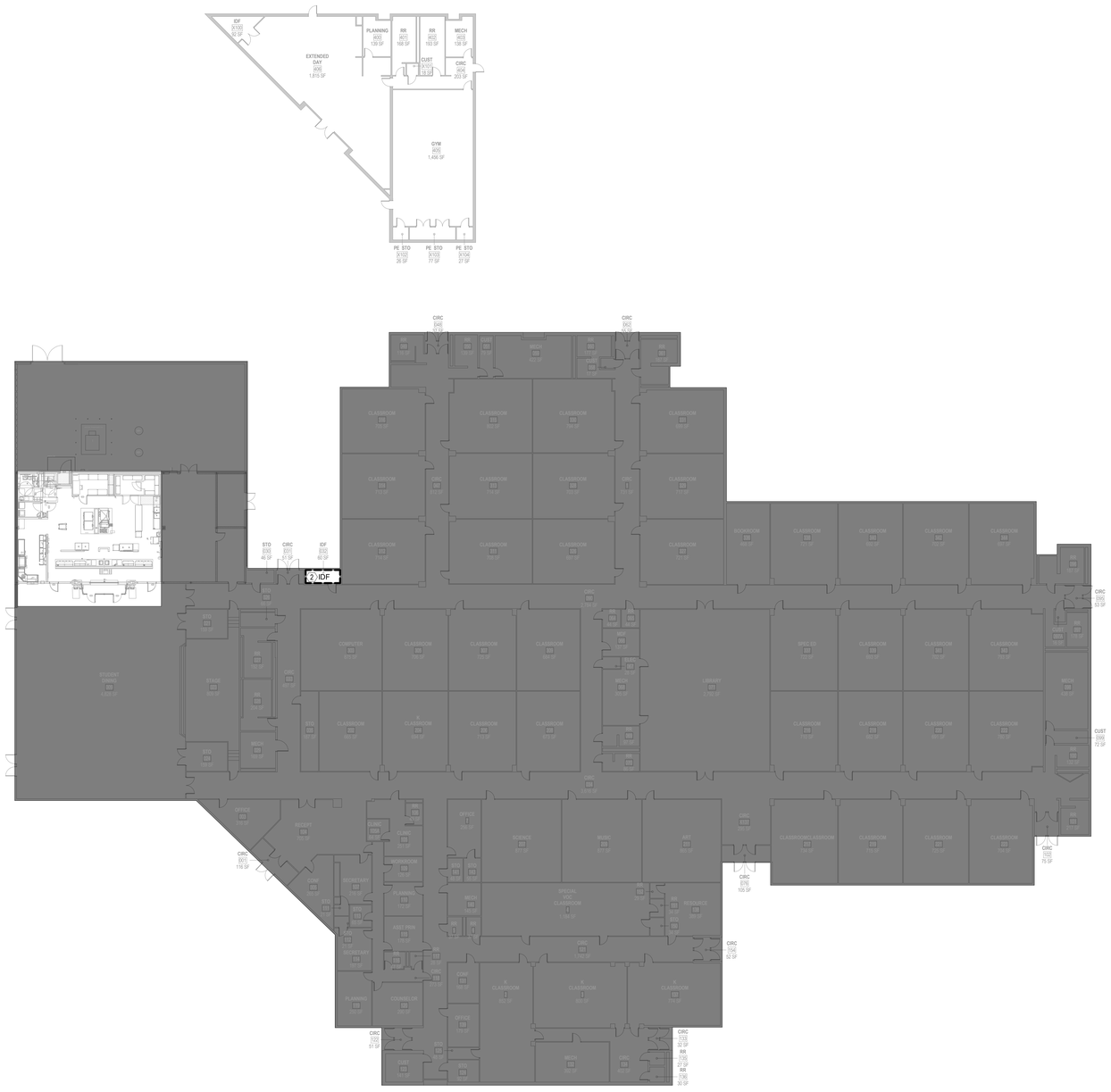
TECHNOLOGY - Pecan Grove ES - DEMO

p-TN.001

TRUENORTH A PMT COMPANY

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BACKGROUND 1 (PECAN GROVE)
SCALE: 1" = 20'-0"

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A PMY COMPANY

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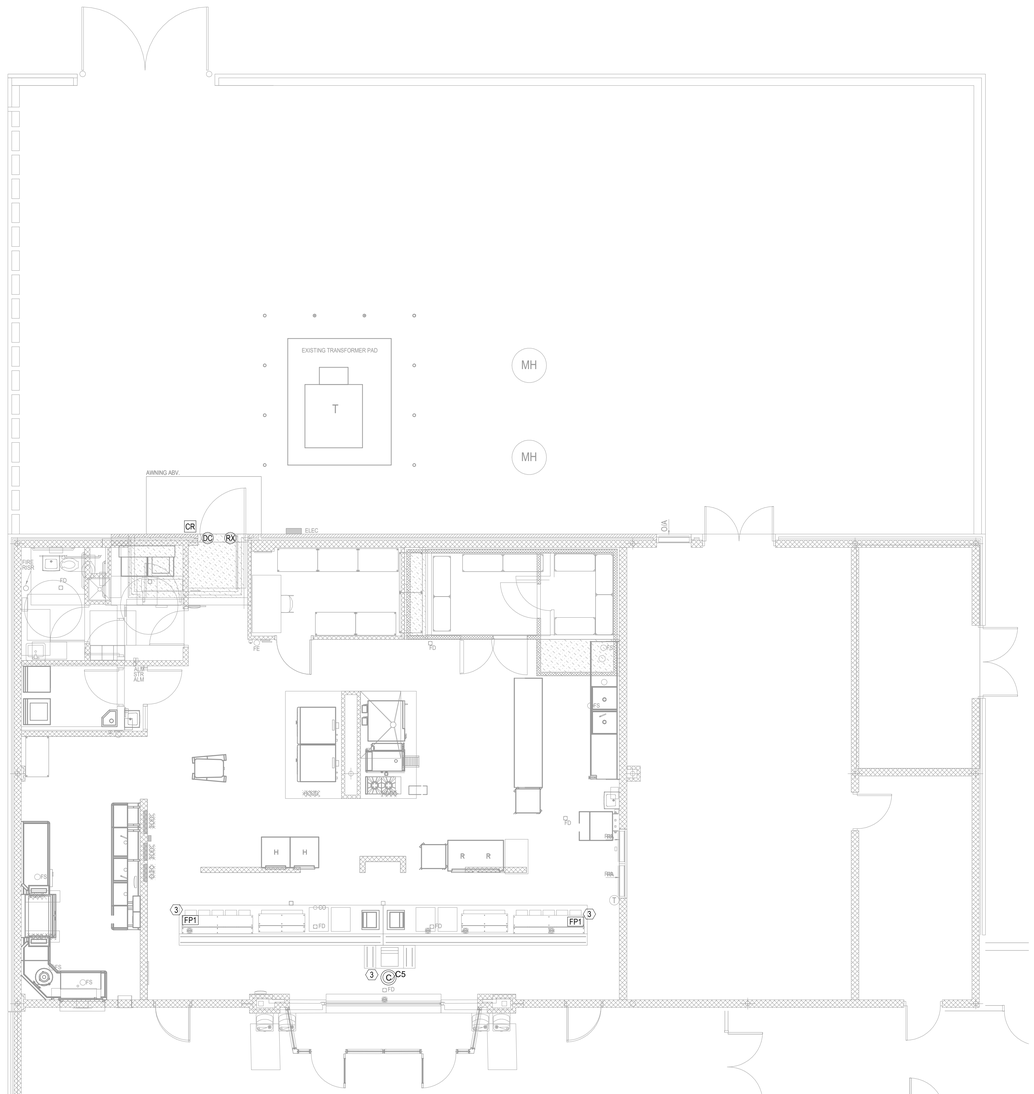
TECHNOLOGY - Pecan Grove ES - OVERALL

p-TN.100

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 PECAN GROVE - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

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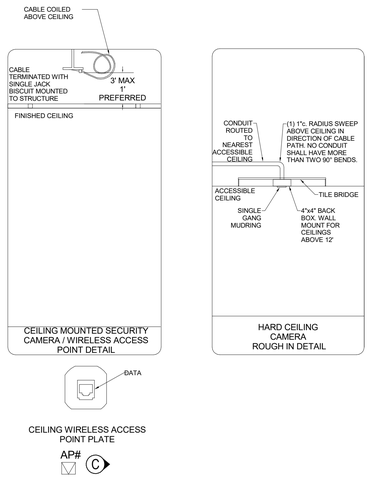
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07-18-25
ISSUED FOR BIDDING AND PERMITTING
TECHNOLOGY - Pecan Grove ES - KITCHEN

p-TN.101

GENERAL NOTE

1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



1 DATA ROUGH-IN DETAILS
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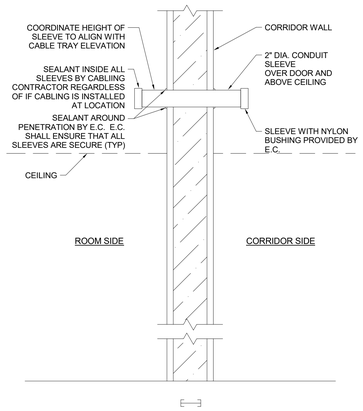
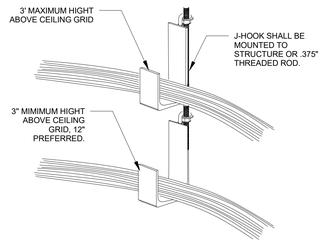
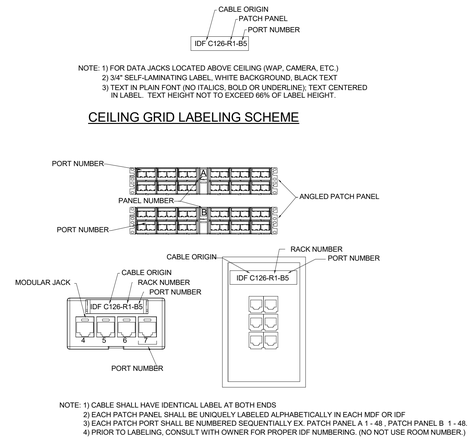


2 TYPICAL CABLING SLEEVE
SCALE: NTS



3 PANDUIT J-HOOK DETAIL
SCALE: NTS



4 LABELING & CABLING SCHEMES
SCALE: NTS

5 CABLE PATHWAY CROSS SECTION
SCALE: NTS

6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS

7 I-JOIST MOUNTING DETAIL
SCALE: NS

8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

TRUENORTH A PMY COMPANY

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Pecan Grove Elementary School
3330 Old S Dr, Richmond, TX 77406

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Brian C Porter
BICSI ID # 256657
EXPIRES 12-31-27
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07-18-25

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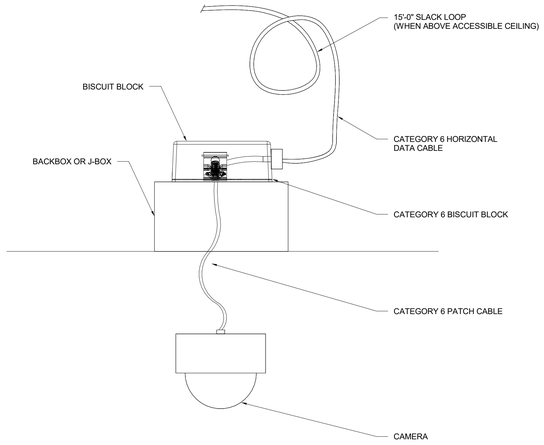
TECHNOLOGY - Pecan Grove ES - DETAILS

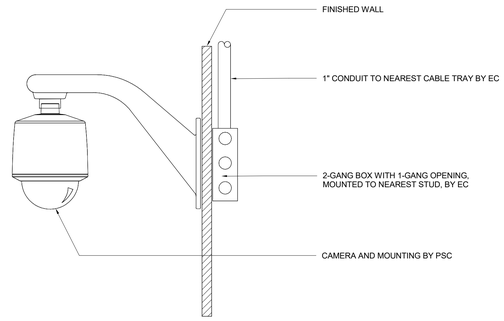
p-TN.500

GENERAL NOTES:

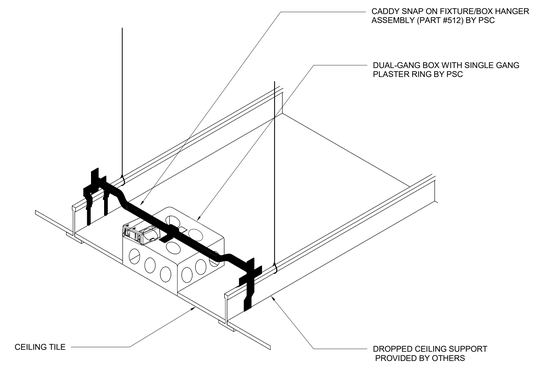
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



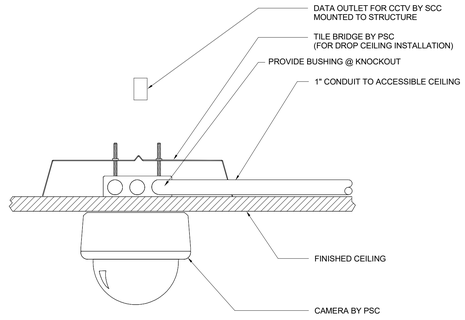
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

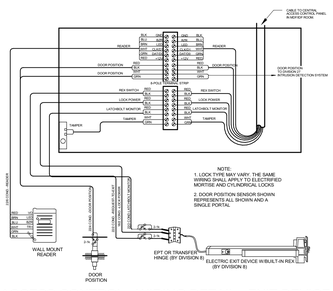


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

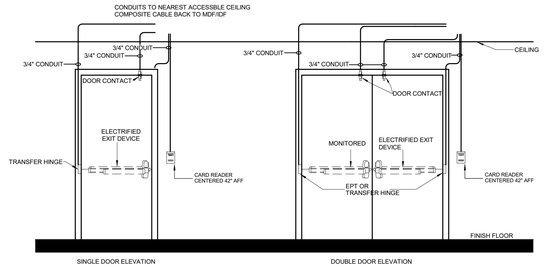
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

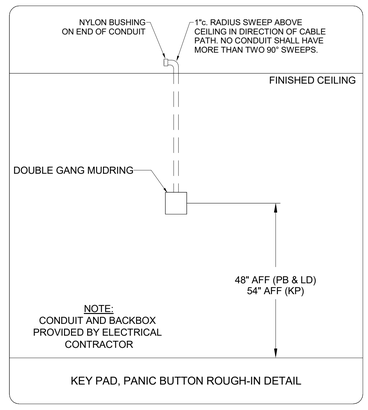
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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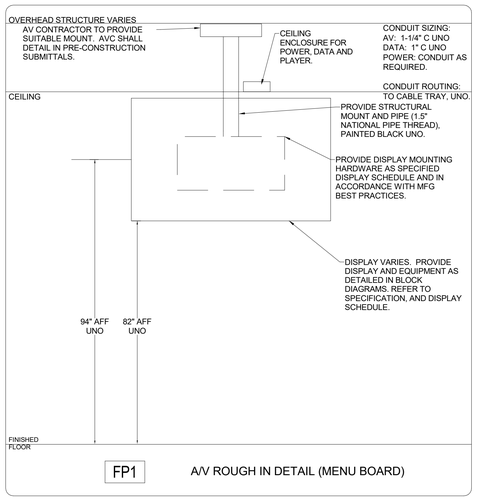
p-TN.600



6 CEILING MOUNT DISPLAY - A/V ROUGH-IN DETAIL
SCALE: NTS

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TECHNOLOGY - Pecan Grove ES - AV DETAILS

p-TN.700

FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
School: q-RIDGEGATE ES	
q-A-000	COVER AND INDEX
q-TN-000	TECHNOLOGY - INDEX SHEET
q-TN-100	TECHNOLOGY - OVERALL
q-TN-101	TECHNOLOGY - KITCHEN
q-TN-500	TECHNOLOGY - DETAILS
q-TN-600	TECHNOLOGY - SECURITY DETAILS



FORT BEND INDEPENDENT SCHOOL DISTRICT

RIDGEGATE ELEMENTARY SCHOOL
6015 W RIDGECREEK DRIVE, HOUSTON, TX 77053

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

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ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

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PROGRAM MANAGEMENT
FBISD 2023 Bond Team
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Missouri City, TX 77489
Phone Number: 281-327-5481

ARCHITECT
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Houston, Texas 77079
Phone Number: 713-782-8188

FOOD SERVICE
Food Design Professionals
26215 Oak Ridge Drive
The Woodlands, Texas 77380
Phone Number: 281-350-2323

MEP ENGINEERS
Stanton Engineering Group
1300 W. Sam Houston Pkwy South, Suite 121
Houston, Texas 77042
Phone Number: 713-300-9292

STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

q

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

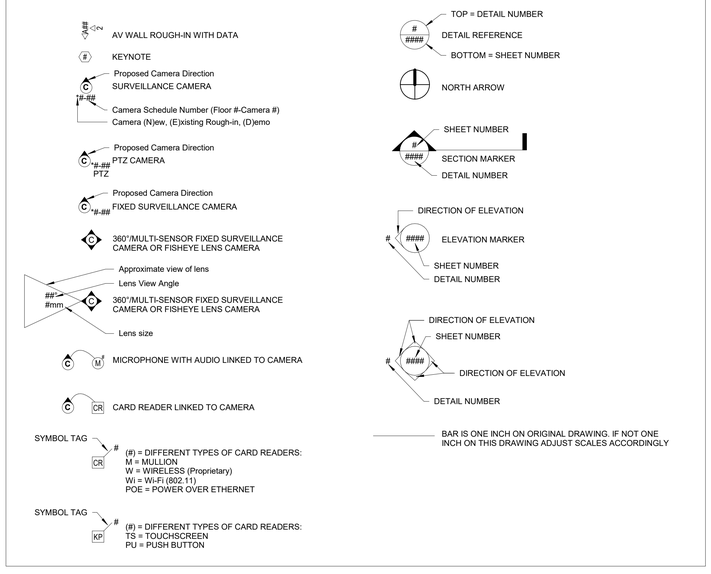
SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED



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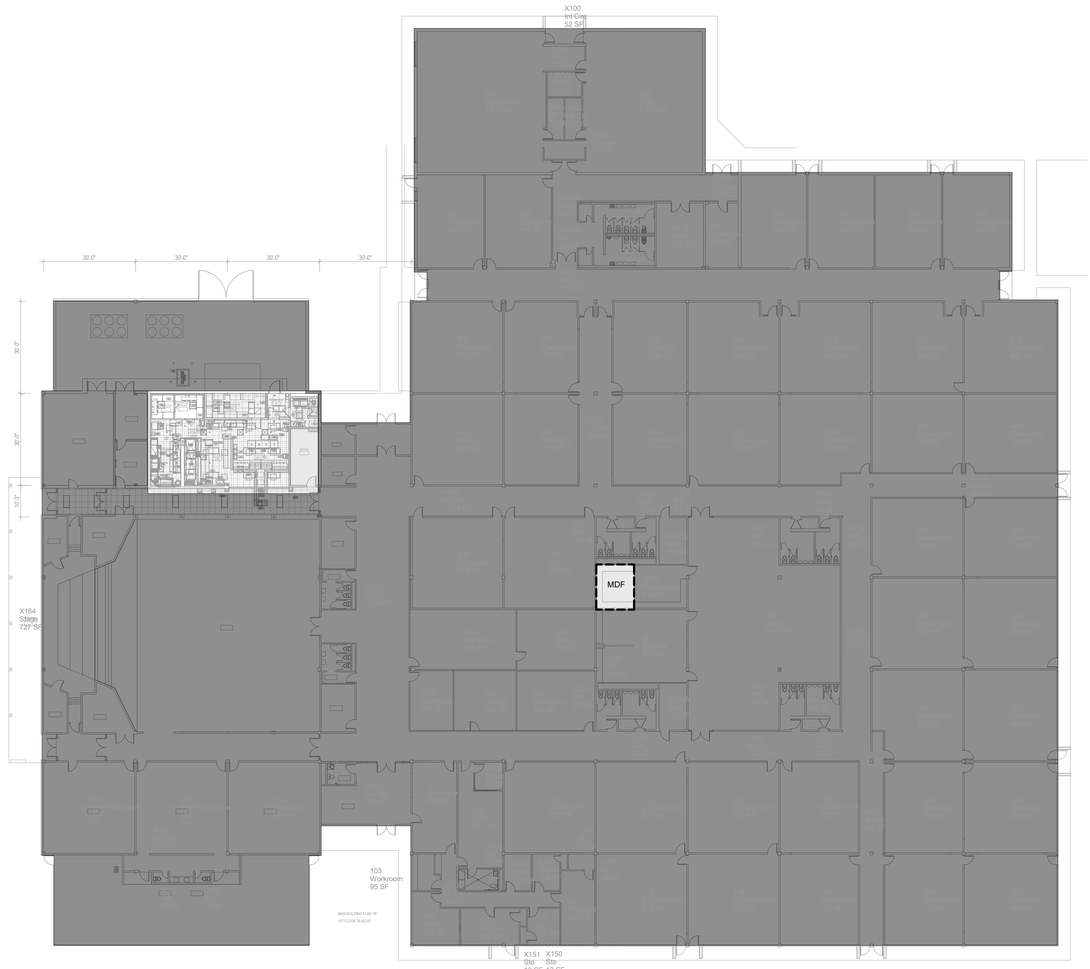
TECHNOLOGY - TITLE SHEET

q-TN000



1 BACKGROUND Q (RIDGEGATE)
SCALE: 1" = 20'-0"

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.

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TECHNOLOGY - Ridgegate ES - OVERALL

q-TN.100

TRUENORTH A PWY COMPANY

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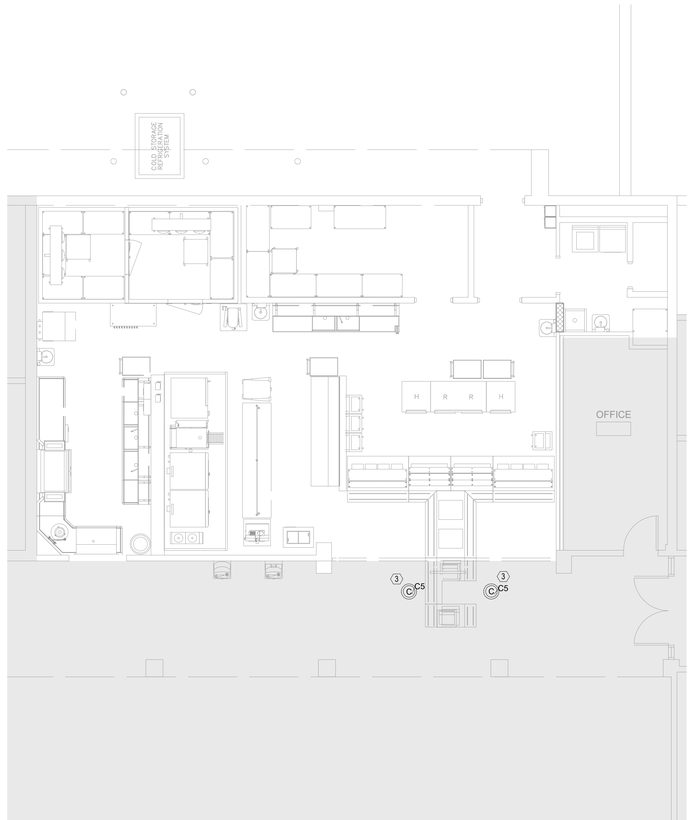

1 RIDGEGATE - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

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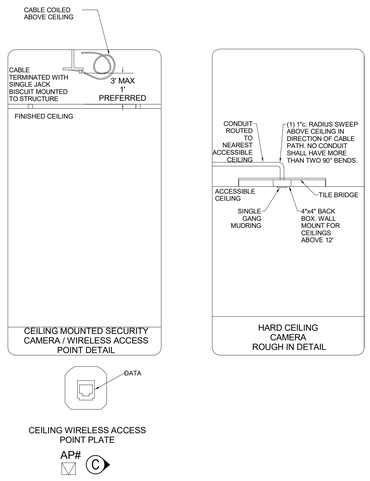

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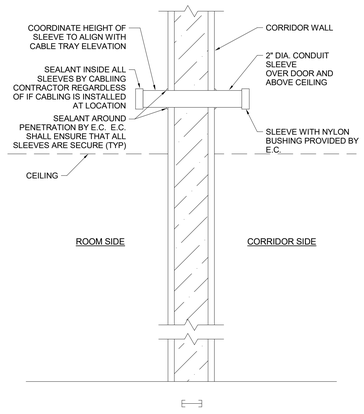

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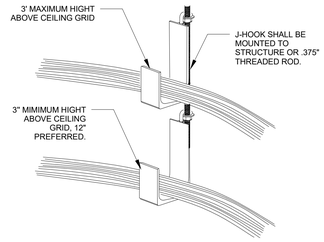

3 PANDUIT J-HOOK DETAIL
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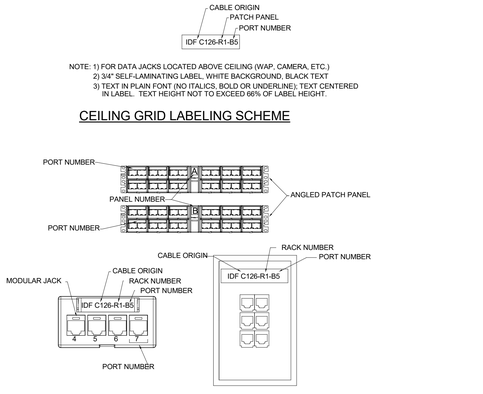

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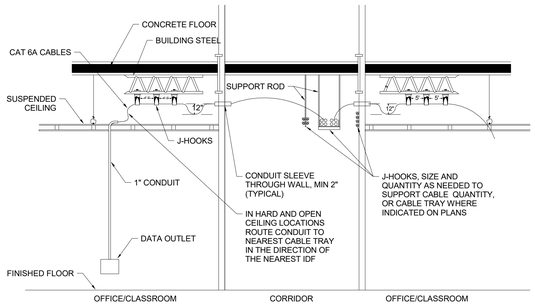
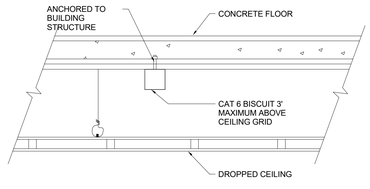
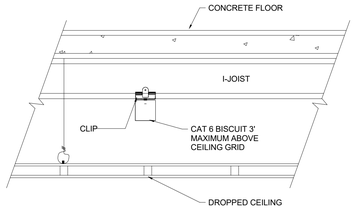


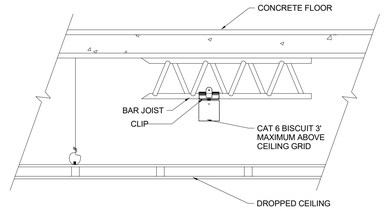
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Ridgegate Elementary School
6015 W Ridgecreek Dr. Houston, TX 77053

SEAL



07-18-25

MVA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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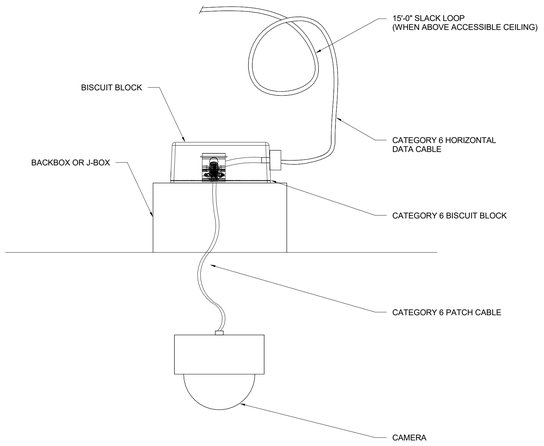
TECHNOLOGY - Ridgegate ES - DETAILS

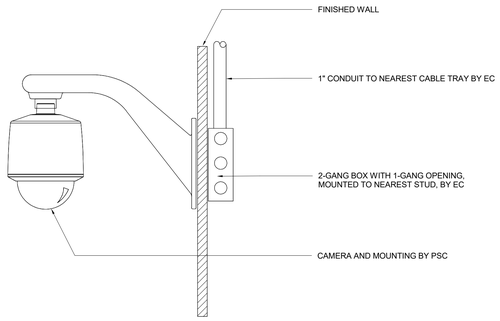
q-TN.500

GENERAL NOTES:

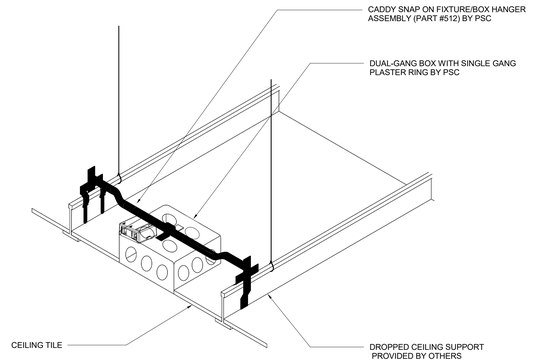
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



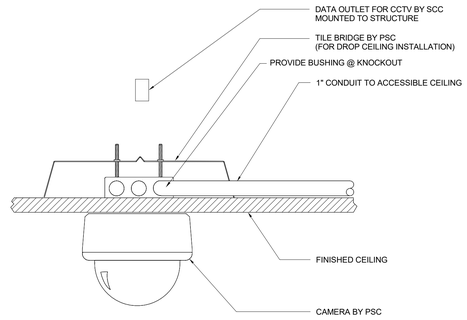
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

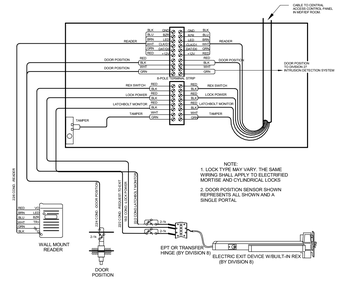


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

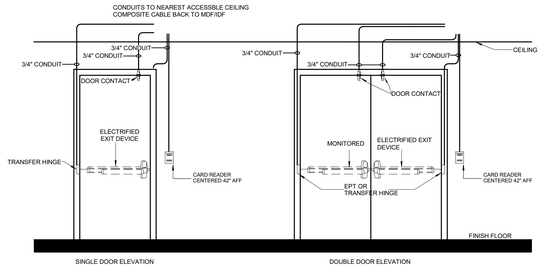
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

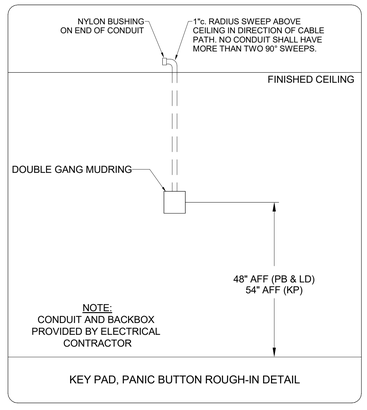
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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TECHNOLOGY - Ridgegate ES
- SECURITY DETAILS

q-TN.600

FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
School: r-RIDGEMONT ES	
r-A-000	COVER AND INDEX
r-TN-000	TECHNOLOGY - INDEX SHEET
r-TN-100	TECHNOLOGY - OVERALL
r-TN-101	TECHNOLOGY - KITCHEN
r-TN-500	TECHNOLOGY - DETAILS
r-TN-600	TECHNOLOGY - SECURITY DETAILS



FORT BEND INDEPENDENT SCHOOL DISTRICT

FORT BEND INDEPENDENT SCHOOL DISTRICT

RIDGEMONT ELEMENTARY SCHOOL
6015 W RAVEN RIDGE DRIVE, HOUSTON, TX 77053

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DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

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DAVID HAMILTON	SECRETARY
ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

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Phone Number: 713-300-9292

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Stanley Spurling & Hamilton
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Houston, Texas 77027
Phone Number: 713-776-9433

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r

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- AV WALL ROUGH-IN WITH DATA
- KEYNOTE
- Proposed Camera Direction
  SURVEILLANCE CAMERA
  Camera Schedule Number (Floor #-Camera #)
  Camera (N)ew, (E)xisting Rough-in, (D)emo
- Proposed Camera Direction
  PTZ CAMERA
  PTZ
- Proposed Camera Direction
  FIXED SURVEILLANCE CAMERA
- 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Approximate view of lens
  Lens View Angle
  360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
  Lens size
- MICROPHONE WITH AUDIO LINKED TO CAMERA
- CARD READER LINKED TO CAMERA
- SYMBOL TAG — (#) = DIFFERENT TYPES OF CARD READERS:
  M = MULLION
  W = WIRELESS (Proprietary)
  Wi = Wi-Fi (802.11)
  POE = POWER OVER ETHERNET
- SYMBOL TAG — (#) = DIFFERENT TYPES OF CARD READERS:
  TS = TOUCHSCREEN
  PU = PUSH BUTTON
- TOP = DETAIL NUMBER
  DETAIL REFERENCE
  BOTTOM = SHEET NUMBER
- NORTH ARROW
- SHEET NUMBER
  SECTION MARKER
  DETAIL NUMBER
- DIRECTION OF ELEVATION
  ELEVATION MARKER
  SHEET NUMBER
  DETAIL NUMBER
- DIRECTION OF ELEVATION
  SHEET NUMBER
  DIRECTION OF ELEVATION
  DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

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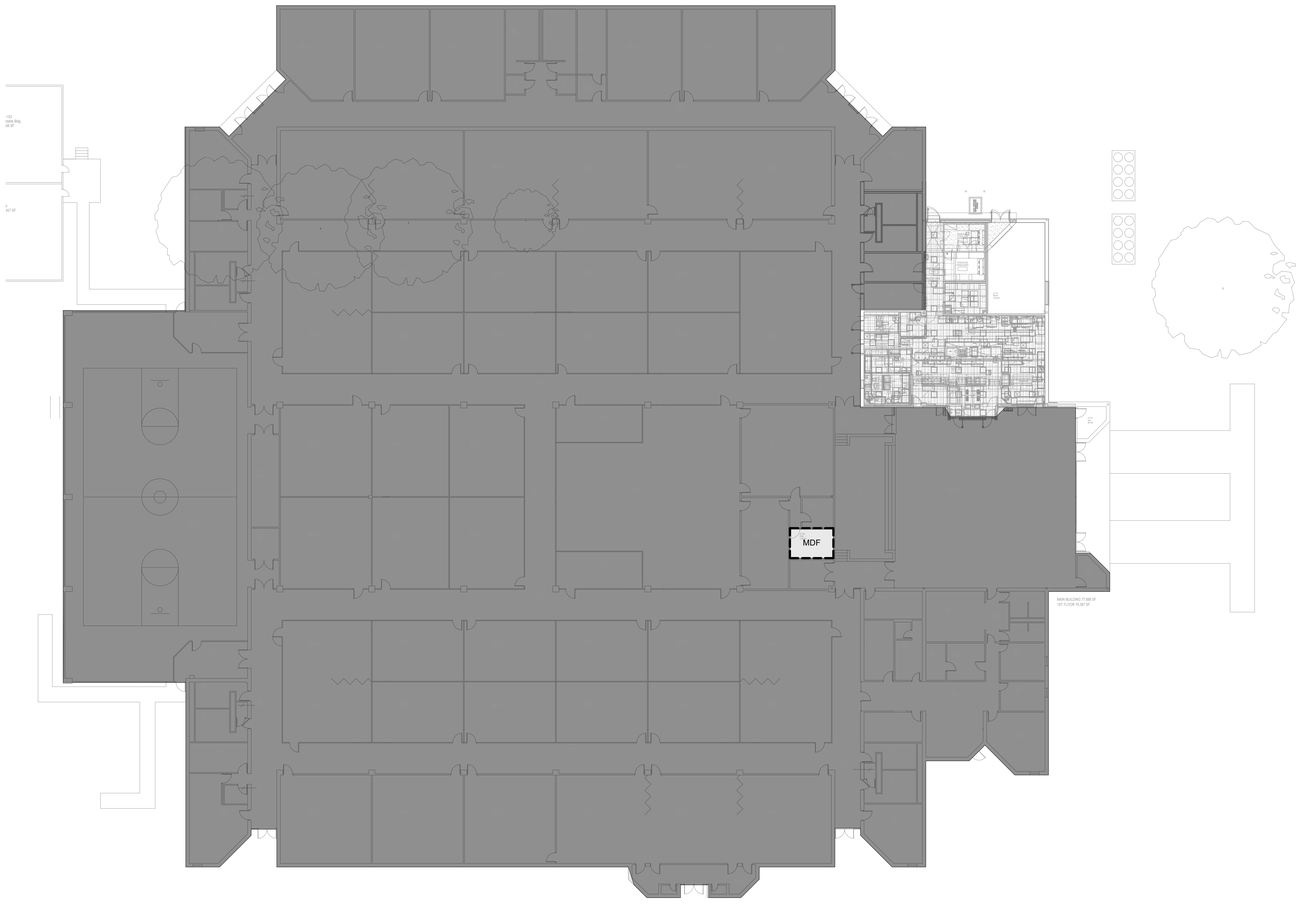
TECHNOLOGY - TITLE SHEET

r-TN000

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BACKGROUND R (RIDGEMONT ES)
SCALE: 1" = 20'-0"

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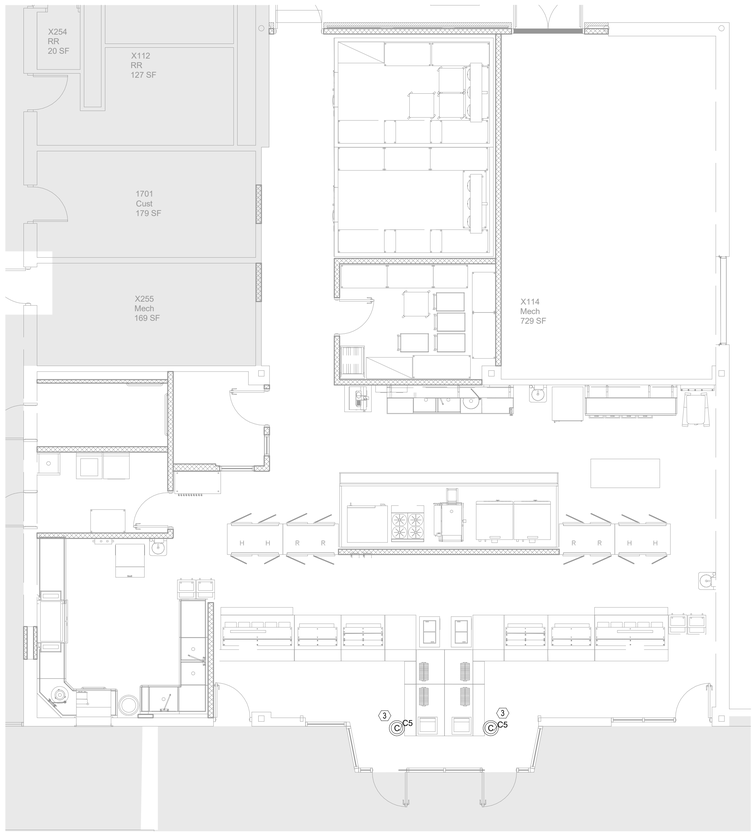
TECHNOLOGY - Ridgemont ES - OVERALL

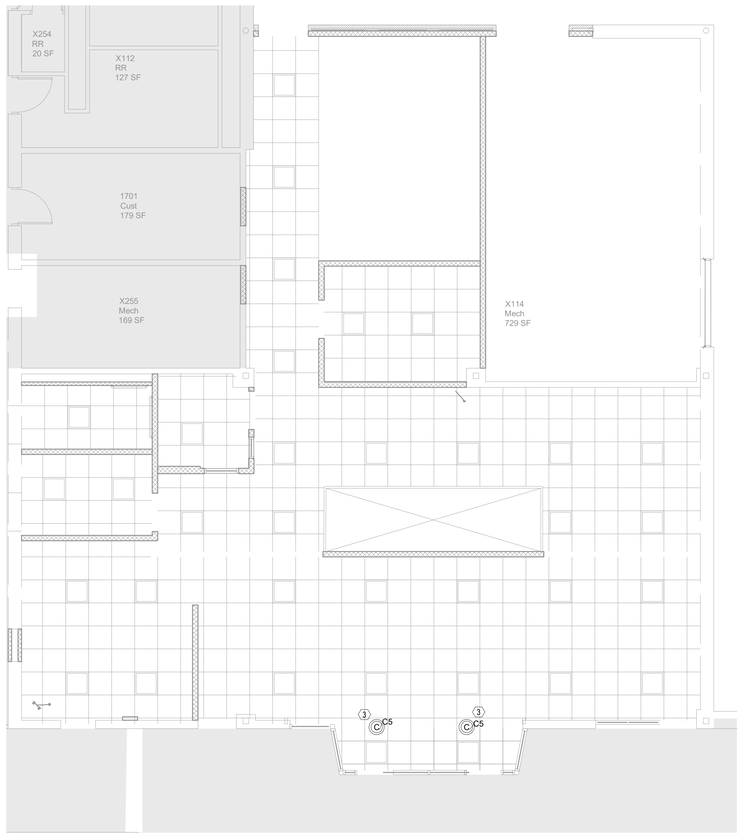
r-TN.100

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 RIDGEMONT - KITCHEN PLAN
SCALE: 3/16" = 1'-0"



2 RIDGEMONT - REFLECTED CEILING PLAN
SCALE: 3/16" = 1'-0"

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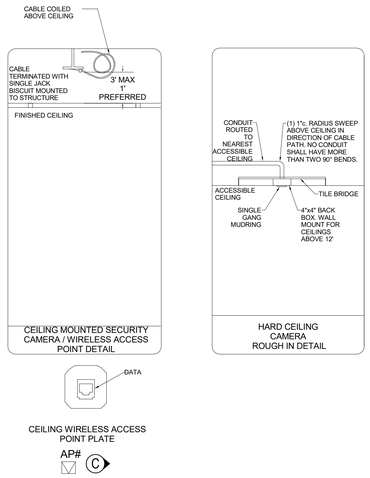
TECHNOLOGY - Ridgemont ES - KITCHEN

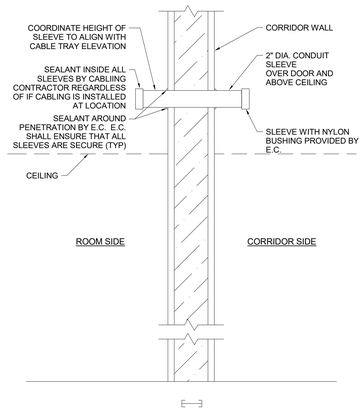
r-TN.101

GENERAL NOTE

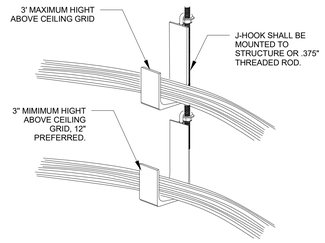
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



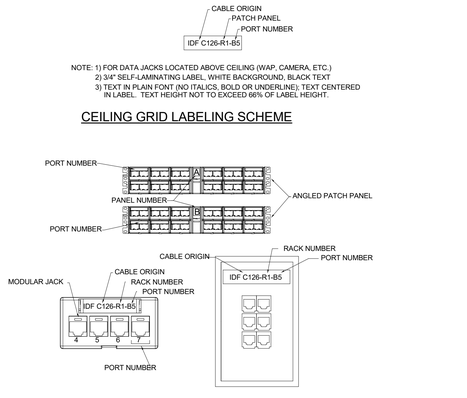
1 DATA ROUGH-IN DETAILS
SCALE: NS



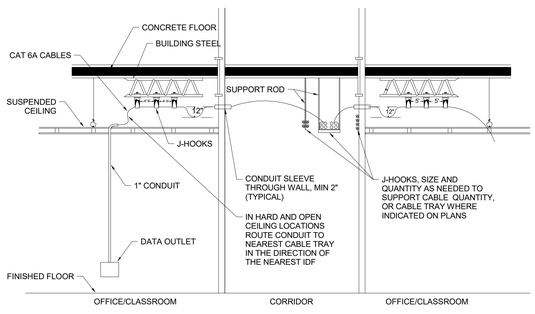
2 TYPICAL CABLING SLEEVE
SCALE: NTS



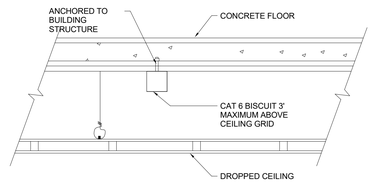
3 PANDUIT J-HOOK DETAIL
SCALE: NTS



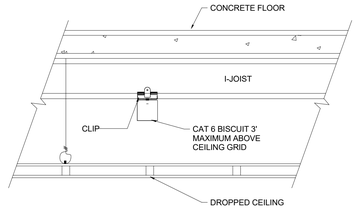
4 LABELING & CABLING SCHEMES
SCALE: NTS



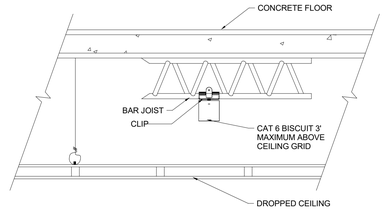
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

TRUENORTH A PMY COMPANY

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

r

FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Ridgemont Elementary School
4910 Raven Ridge Dr., Houston, TX 77053

SEAL



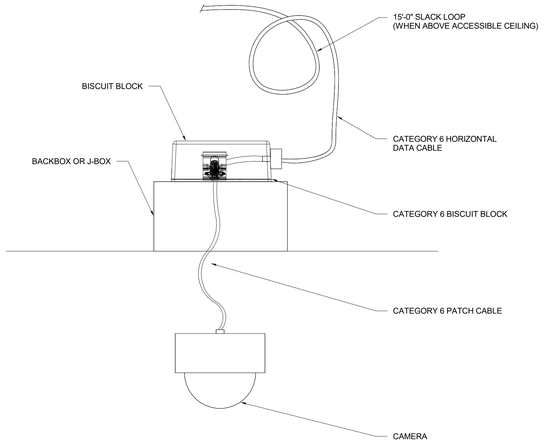
07-18-25

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

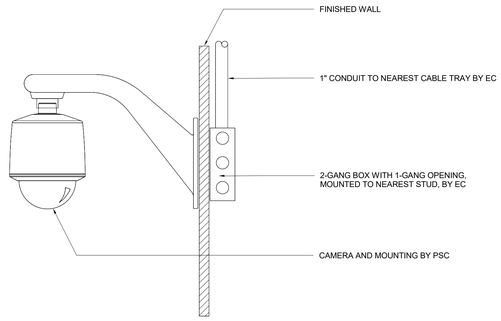
PROJ. NO.: 23-25
DATE: 07-18-25
ISSUED FOR BIDDING AND PERMITTING
TECHNOLOGY - Ridgemont ES - DETAILS
r-TN.500

GENERAL NOTES:

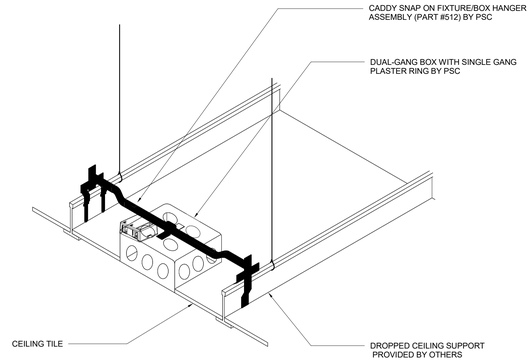
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



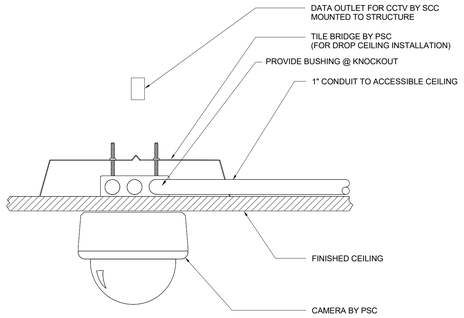
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

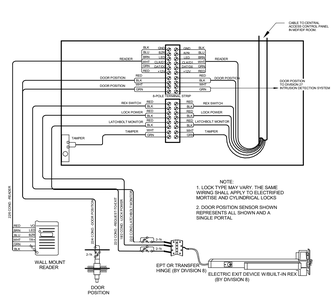


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

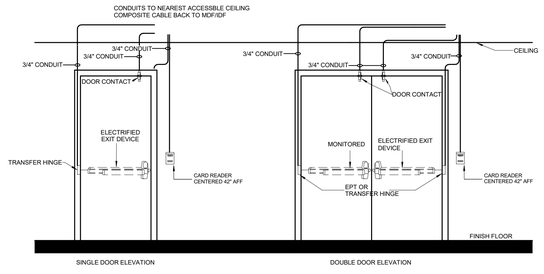
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

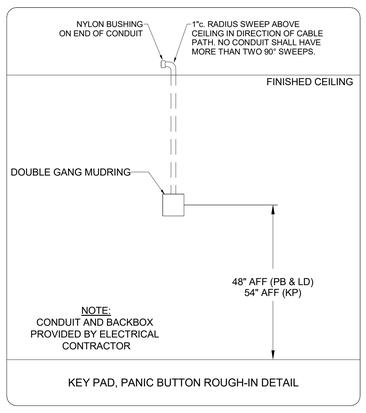
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

TRUENORTH A PMY COMPANY

ISSUE:

12/05/2024	DD PACKAGE
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FORT BEND BP 013 KITCHEN RENOVATIONS
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SEAL



07-18-25

MVA ARCHITECTS
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AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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AND
PERMITTING
TECHNOLOGY - Ridgemont
ES - SECURITY DETAILS

r-TN.600

FBISD BP013 KITCHEN RENOVATIONS ES

SETTLERS WAY ELEMENTARY SCHOOL
SETTLERS WAY PARK, 3015 SETTLERS WAY BLVD,
SUGAR LAND, TX 77479

FORT BEND INDEPENDENT SCHOOL DISTRICT BOND 2023

FORT BEND INDEPENDENT SCHOOL DISTRICT

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

KRISTIN K. TASSIN	PRESIDENT
RICK GARCIA	VICE PRESIDENT
DAVID HAMILTON	SECRETARY
ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

PROJECT DESIGN TEAM

PROGRAM MANAGEMENT
FBISD 2023 Bond Team
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Food Design Professionals
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The Woodlands, Texas 77380
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MEP ENGINEERS
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1300 W. Sam Houston Pkwy South, Suite 121
Houston, Texas 77042
Phone Number: 713-300-9292

STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

Sheet List Table	
Sheet Number	Sheet Title
School: s-Settlers Way ES	
s-A.000	COVER AND INDEX
s-A00-01	GENERAL NOTES AND ABBREVIATIONS
s-D.101	DEMO PLAN
s-D.101-2	DEMO PLAN PHOTOS
s-D.101-3	DEMO PLAN PHOTOS
s-PD1.01	PLUMBING DEMOLITION FLOOR PLAN
s-ED.100	ELECTRICAL DEMOLITION AND TEMPORARY PLANS
s-TD201	TECHNOLOGY DEMOLITION FLOOR PLAN
s-A.101	SITE PLAN
s-A.200	SLAB DIMENSION CONTROL PLAN
s-A.201	OVERALL FLOOR PLAN
s-A.301	KITCHEN PLAN
s-A.302	TEMPORARY KITCHEN LAYOUT
s-A.401	REFLECTED CEILING PLAN
s-A.501	FINISH FLOOR PLAN
s-A.502	PARTITION SCHEDULE
s-S1	KITCHEN PLAN
s-S2	SECTIONS AND TYPICAL DETAILS
s-QF1	FS GENERAL COORDINATION NOTES
s-QF1.0	FS EQUIPMENT PLAN
s-QF1.1	FS FACILITY MODEL
s-QF1.2	FS EQUIPMENT MODEL
s-QF1.3	FS SPECIAL CONDITIONS & MECHANICAL PLAN
s-QF1.4	FS PLUMBING PLAN
s-QF1.5	FS ELECTRICAL PLAN
s-M1.01	MECHANICAL PLANS
s-M2.01	KITCHEN DETAILS
s-E.000	ELECTRICAL AND FIRE ALARM SCHEDULES
s-E.001	ELECTRICAL AND FIRE ALARM NOTES
s-E.010	ELECTRICAL DEVICE DETAILS
E.011	ELECTRICAL DETAILS
E.012	ELECTRICAL DETAILS
E.013	ELECTRICAL KITCHEN DETAILS
E.060	LIGHTING SCHEDULES
s-E.100	LIGHTING FLOOR PLANS
s-E.200	ELECTRICAL FLOOR PLANS
s-E.300	FIRE ALARM FLOOR PLANS
s-E.400	ELECTRICAL SCHEMATIC
s-P0.01	PLUMBING NOTES & SCHEDULES
s-P0.02	PLUMBING SCHEDULES & DETAILS
s-P1.01	PLUMBING FLOOR PLAN
s-P1.02	PLUMBING TEMPORARY KITCHEN PLAN
s-T000	TECHNOLOGY SYMBOLS & LEGEND
s-T200	TECHNOLOGY COMPOSITE FLOOR PLAN
s-T201	TECHNOLOGY NEW RENOVATION KITCHEN PLAN
s-T202	TECHNOLOGY TEMPORARY KITCHEN FLOOR PLAN
s-T300	TECHNOLOGY ENLARGED VIEWS
s-T400	TECHNOLOGY TYPICAL DETAILS
s-T401	TECHNOLOGY TYPICAL DETAILS
s-T500	TECHNOLOGY TYPICAL DETAILS
s-TN-000	TECHNOLOGY - INDEX SHEET
s-TN-001	TECHNOLOGY - KITCHEN DEMOLITION
s-TN-100	TECHNOLOGY - OVERALL
s-TN-101	TECHNOLOGY - KITCHEN
s-TN-500	TECHNOLOGY - DETAILS
s-TN-600	TECHNOLOGY - SECURITY DETAILS
s-TN-700	TECHNOLOGY - AV DETAILS

REGISTERED ARCHITECT MICHAEL A. MAGUIRE 22651 STATE OF TEXAS

18 JULY 2025

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

S

PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.
B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.
C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.
D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.
E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.
F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL, ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.
B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.
B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.
C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.
D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY. IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.

1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.

E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.

B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT. REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.

B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED. CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.

D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

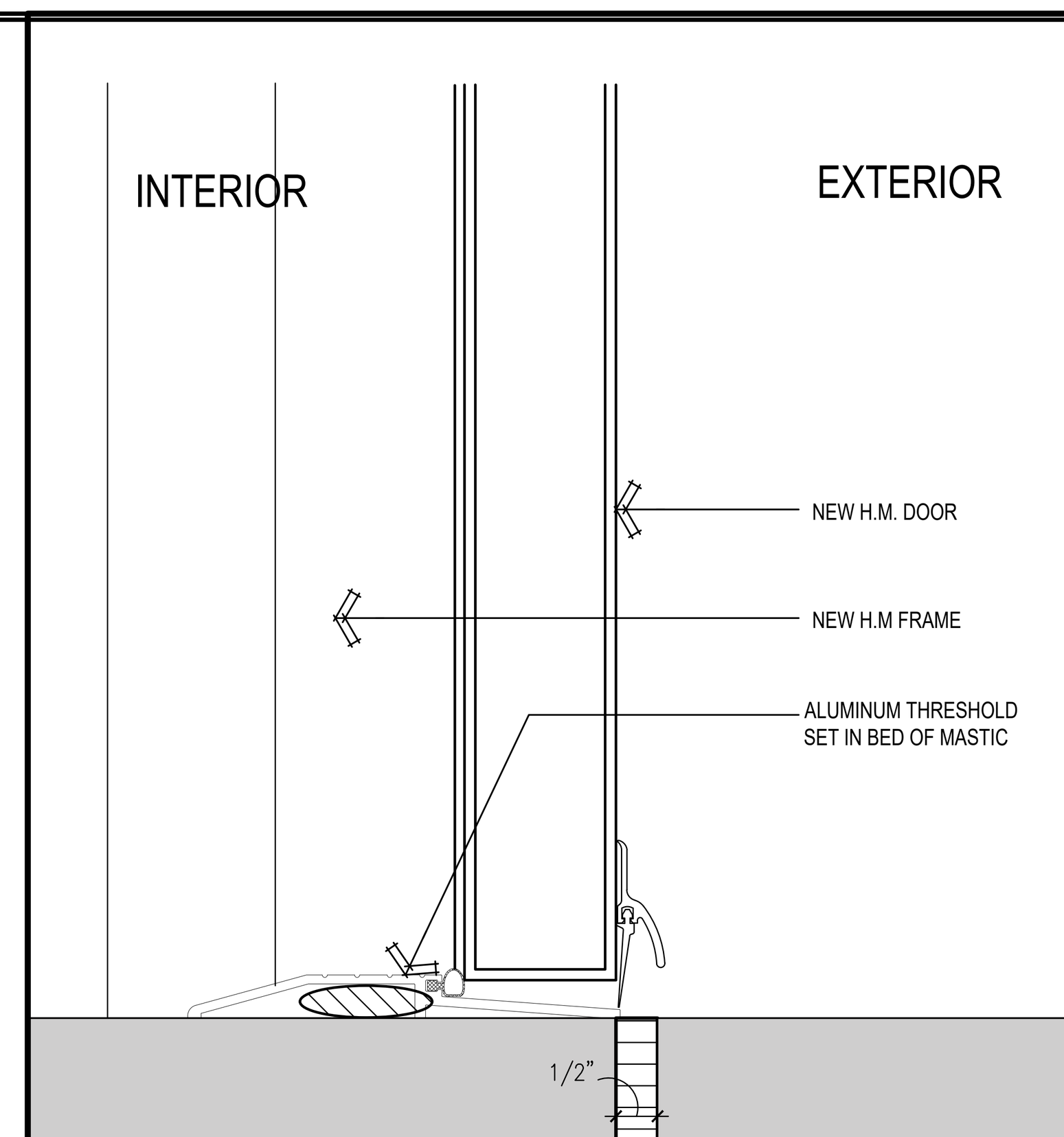
A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

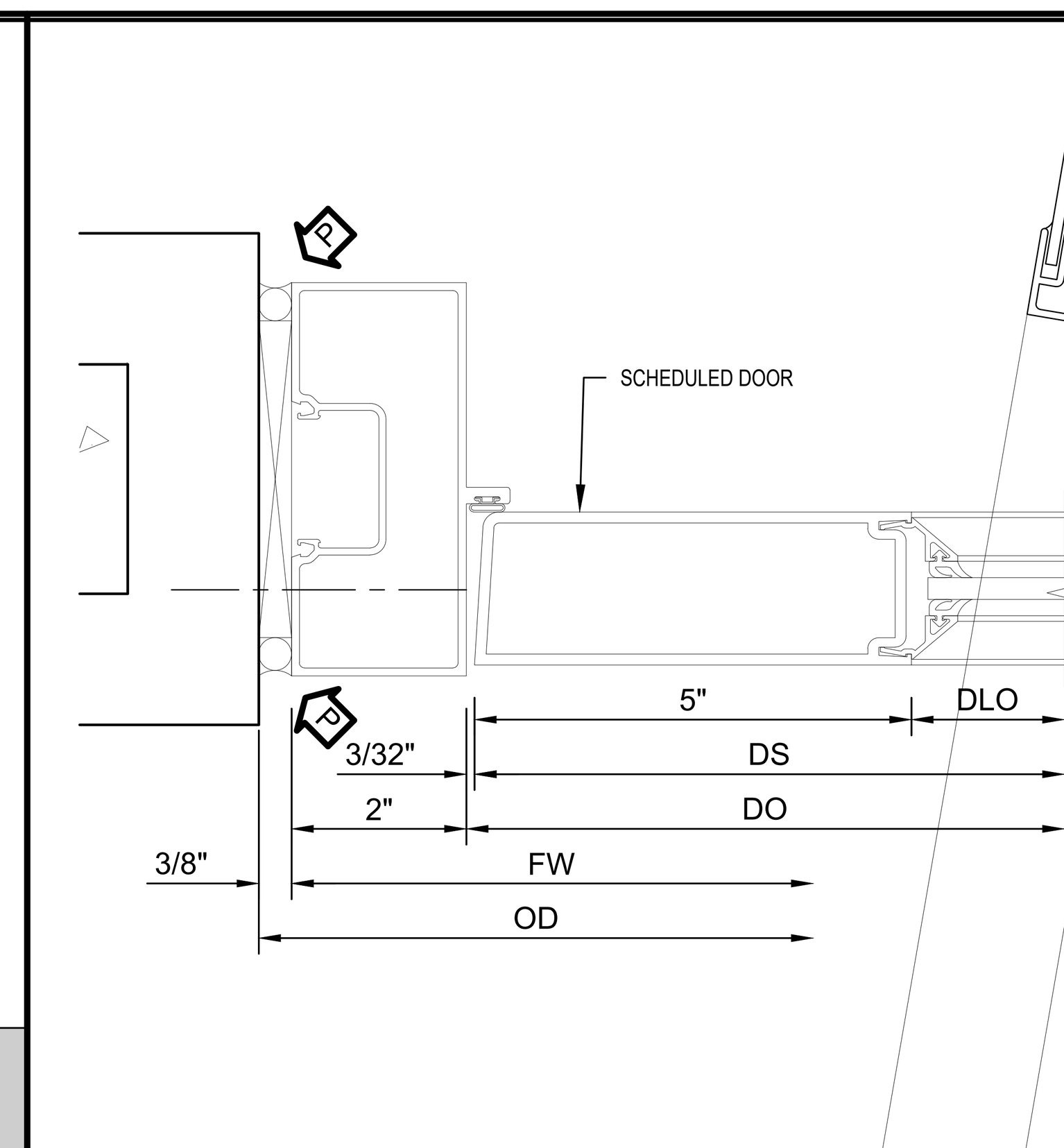
A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

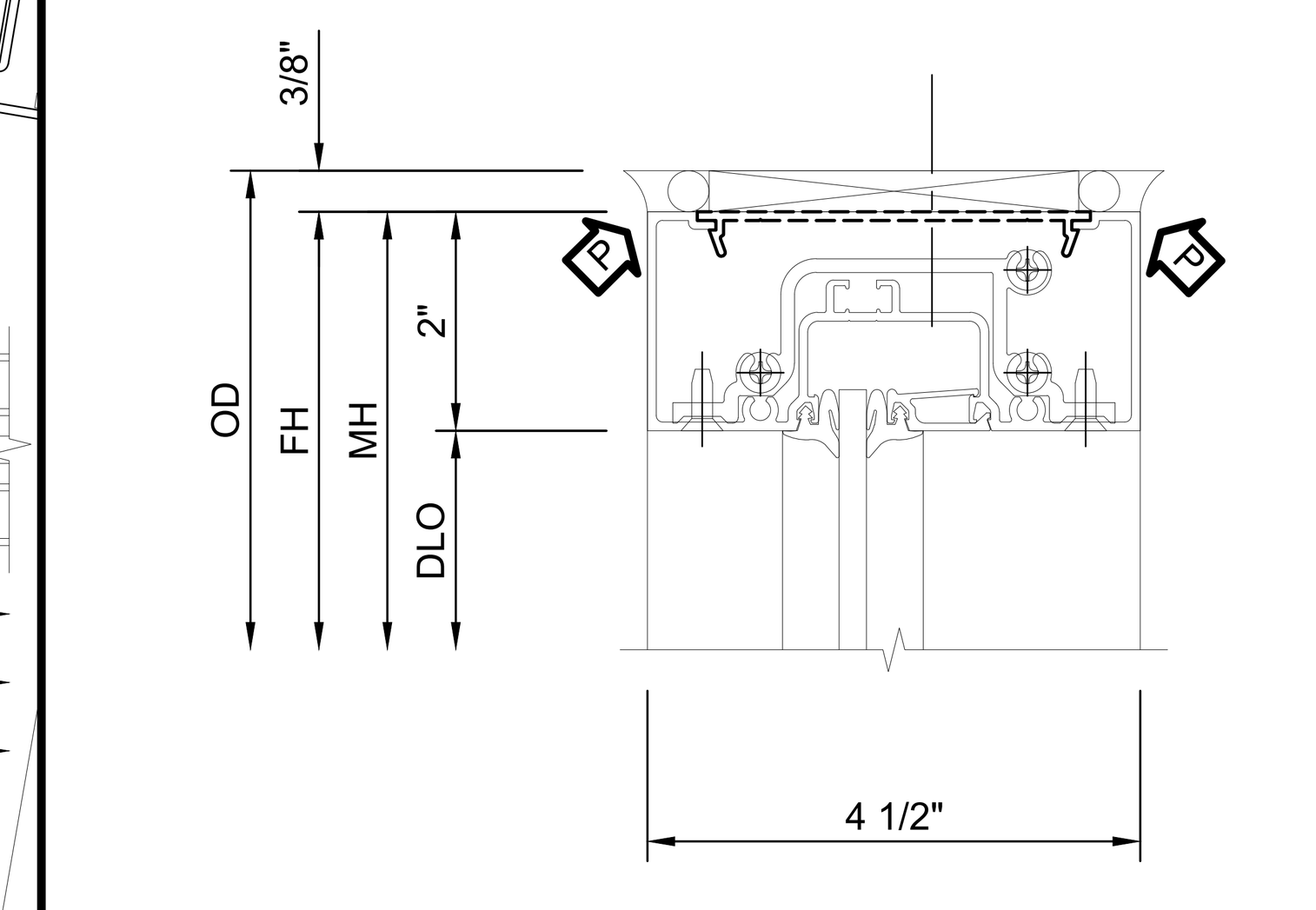
01 GENERAL NOTES



21 EXTERIOR DOOR SILL
SCALE: 6" = 1'-0"_XREF



22 DOOR JAMB
SCALE: 6" = 1'-0"_XREF



23 WINDOW HEAD
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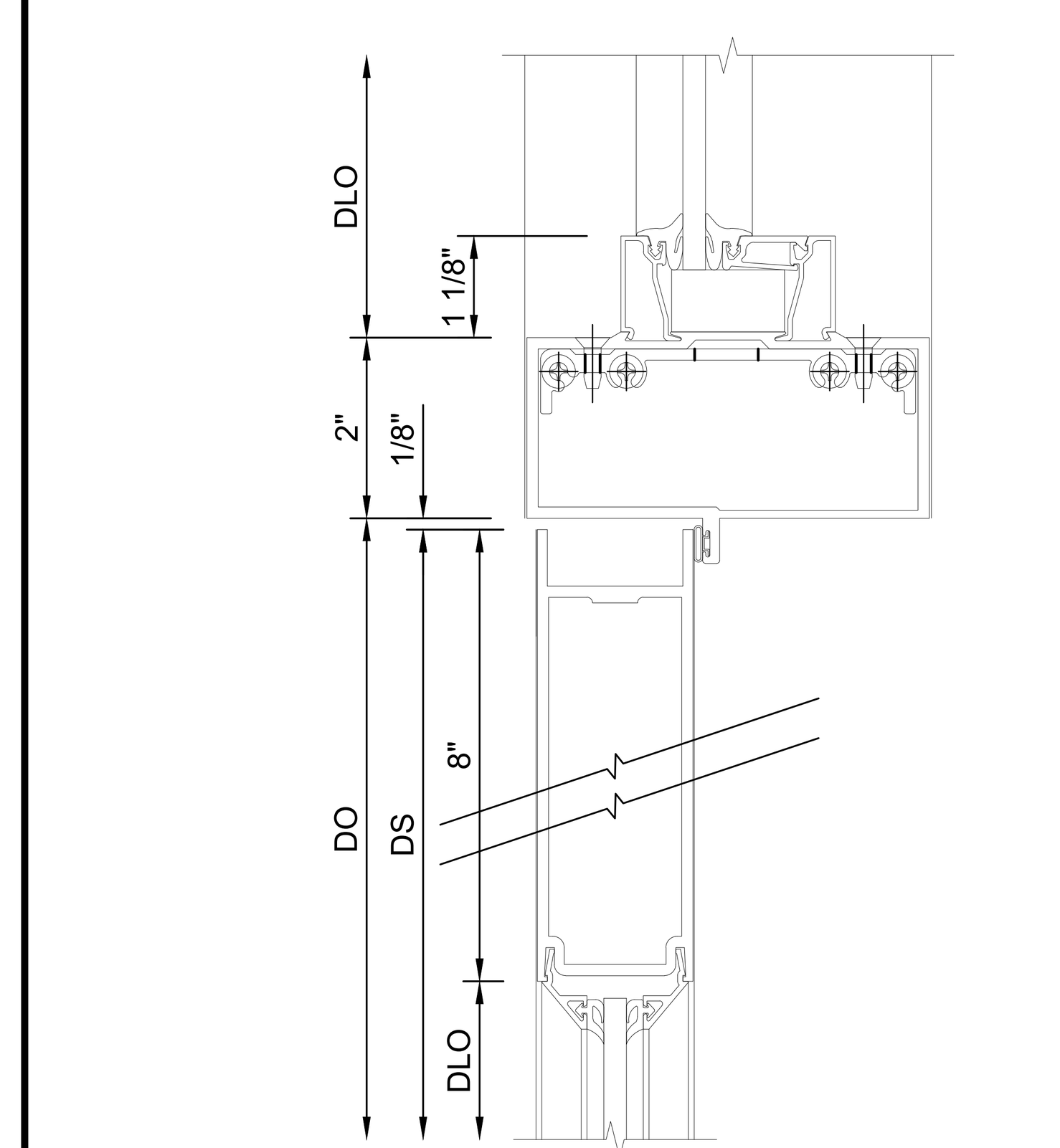

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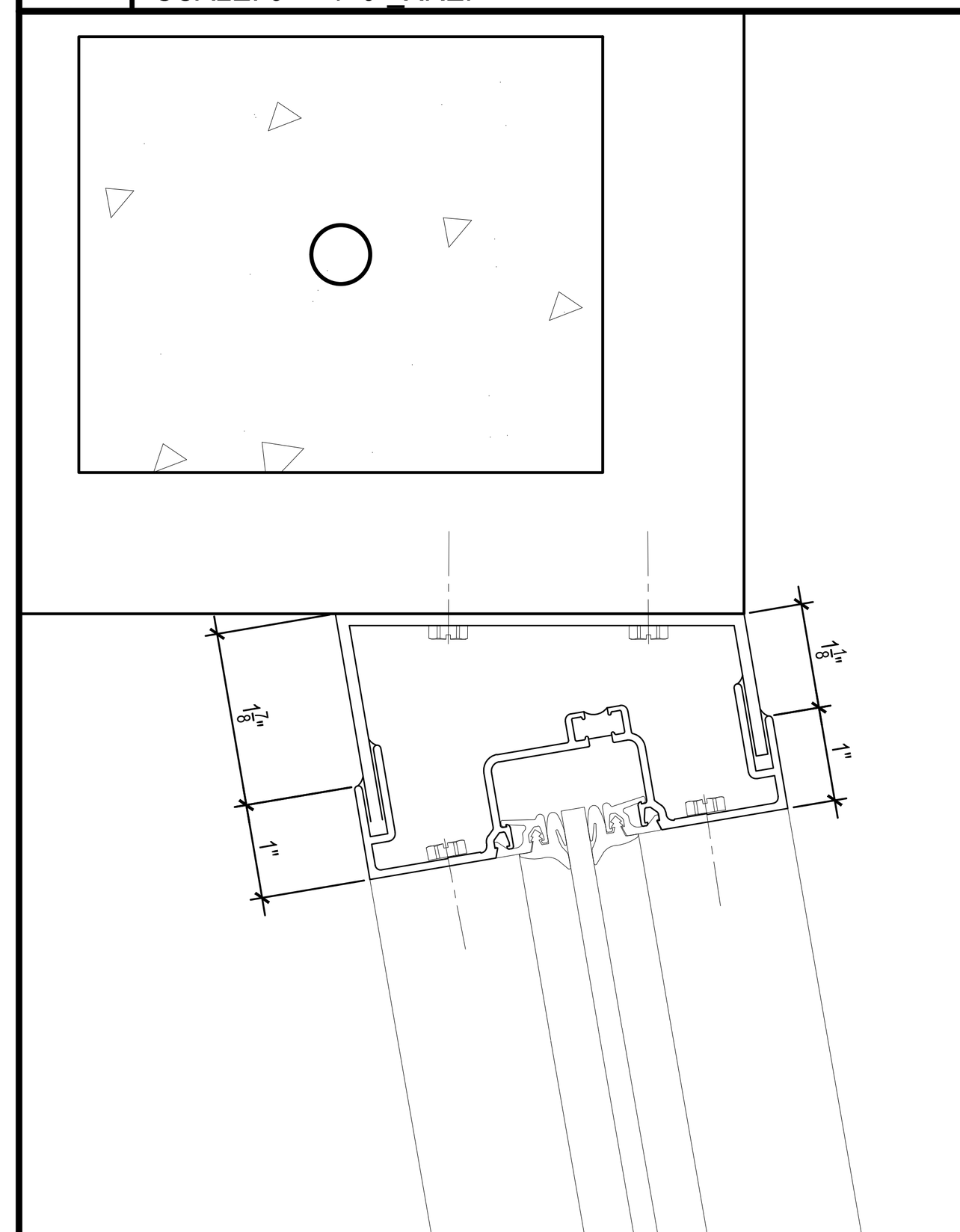
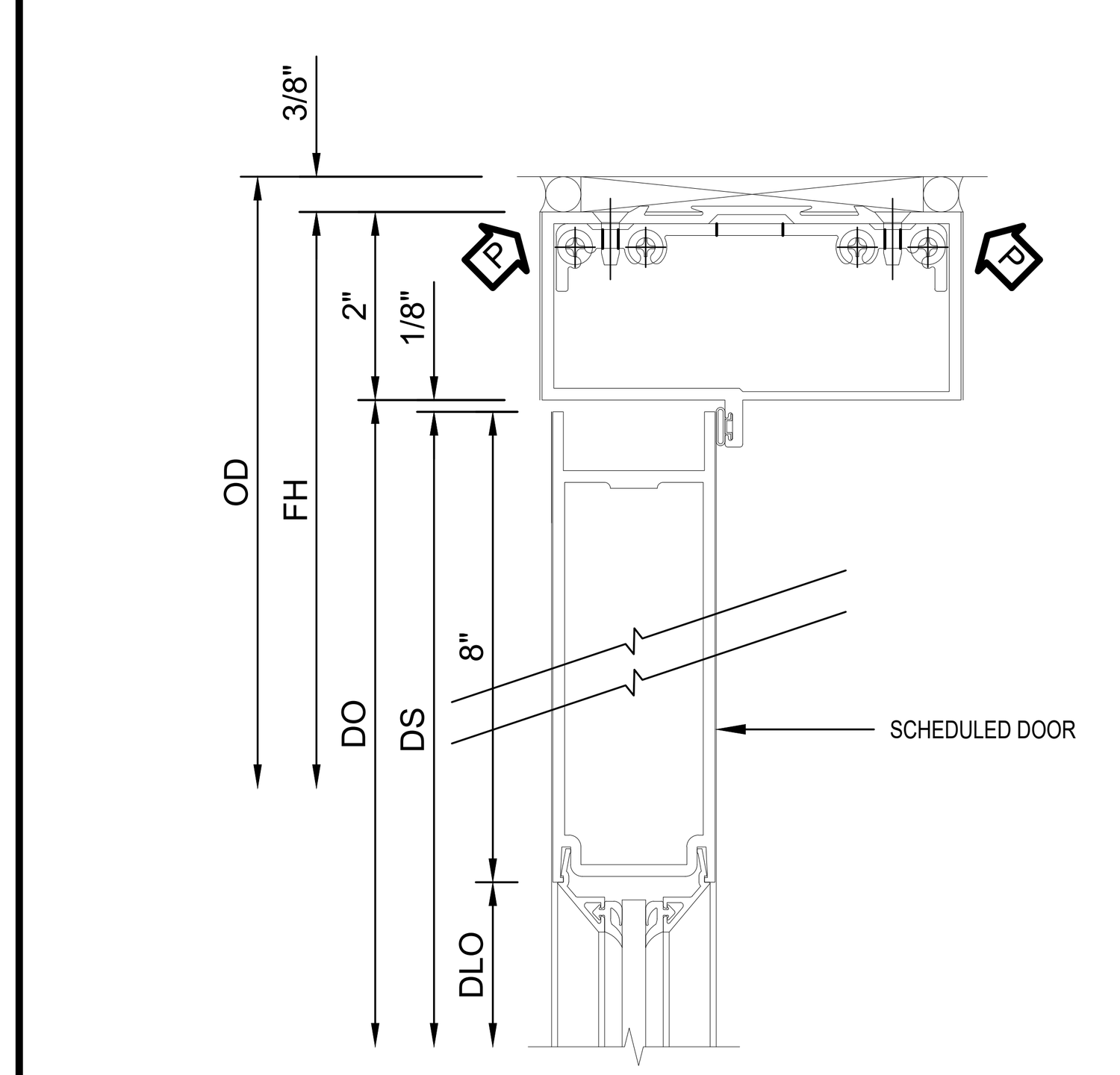


15 WINDOW JAMB AT WALL
SCALE: ##############



16 DOOR HEAD
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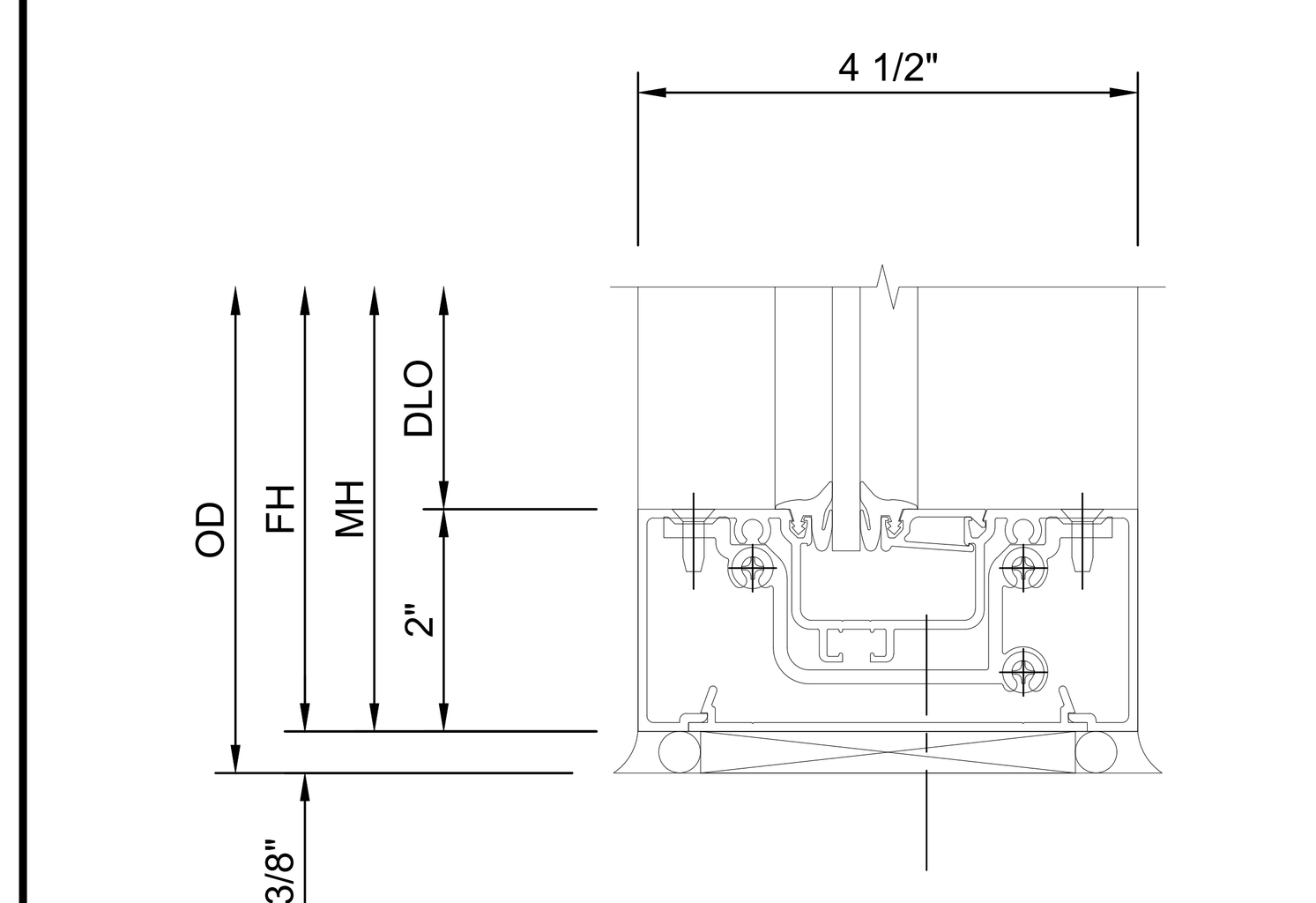

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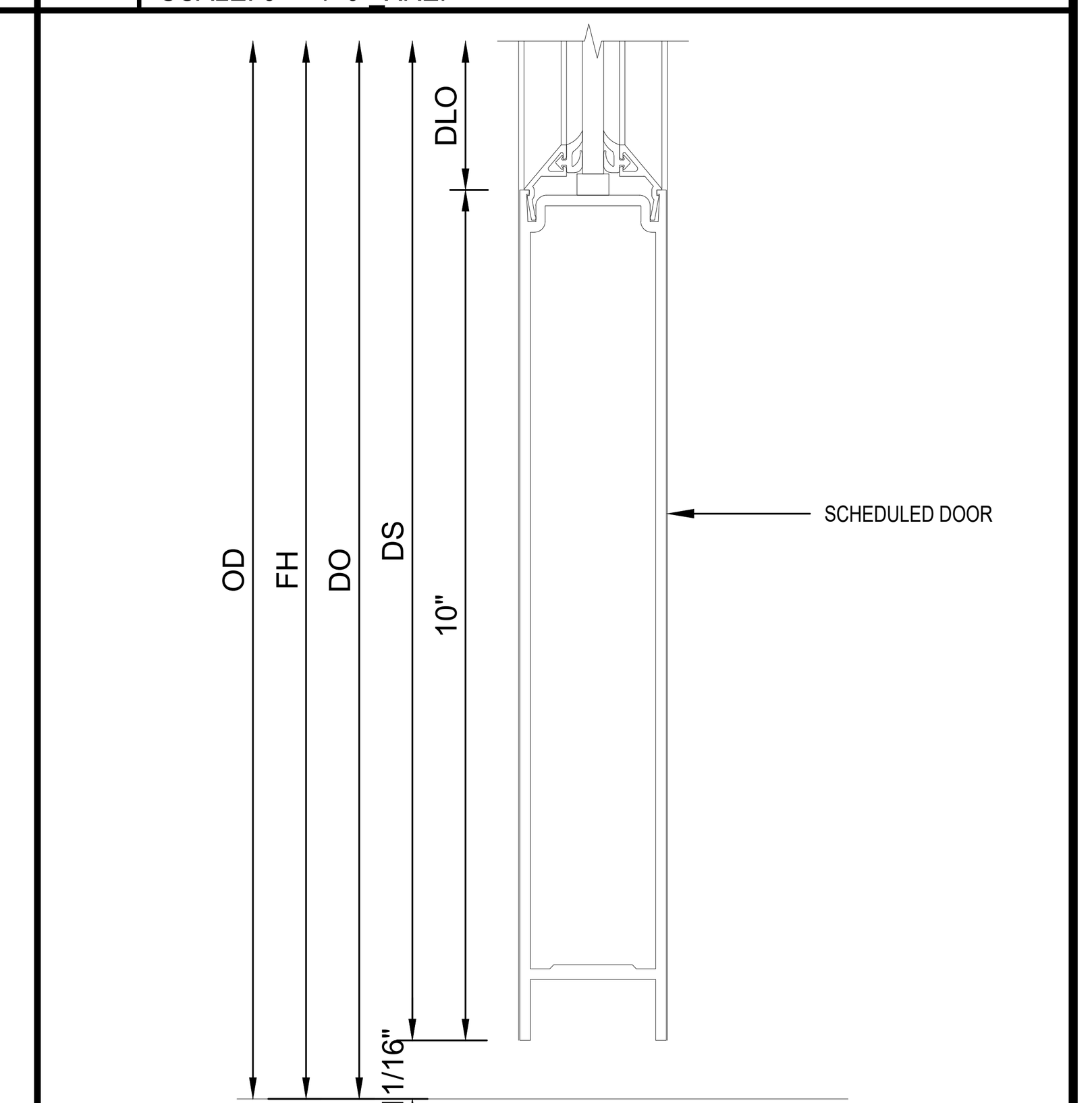

18 DOOR SILL
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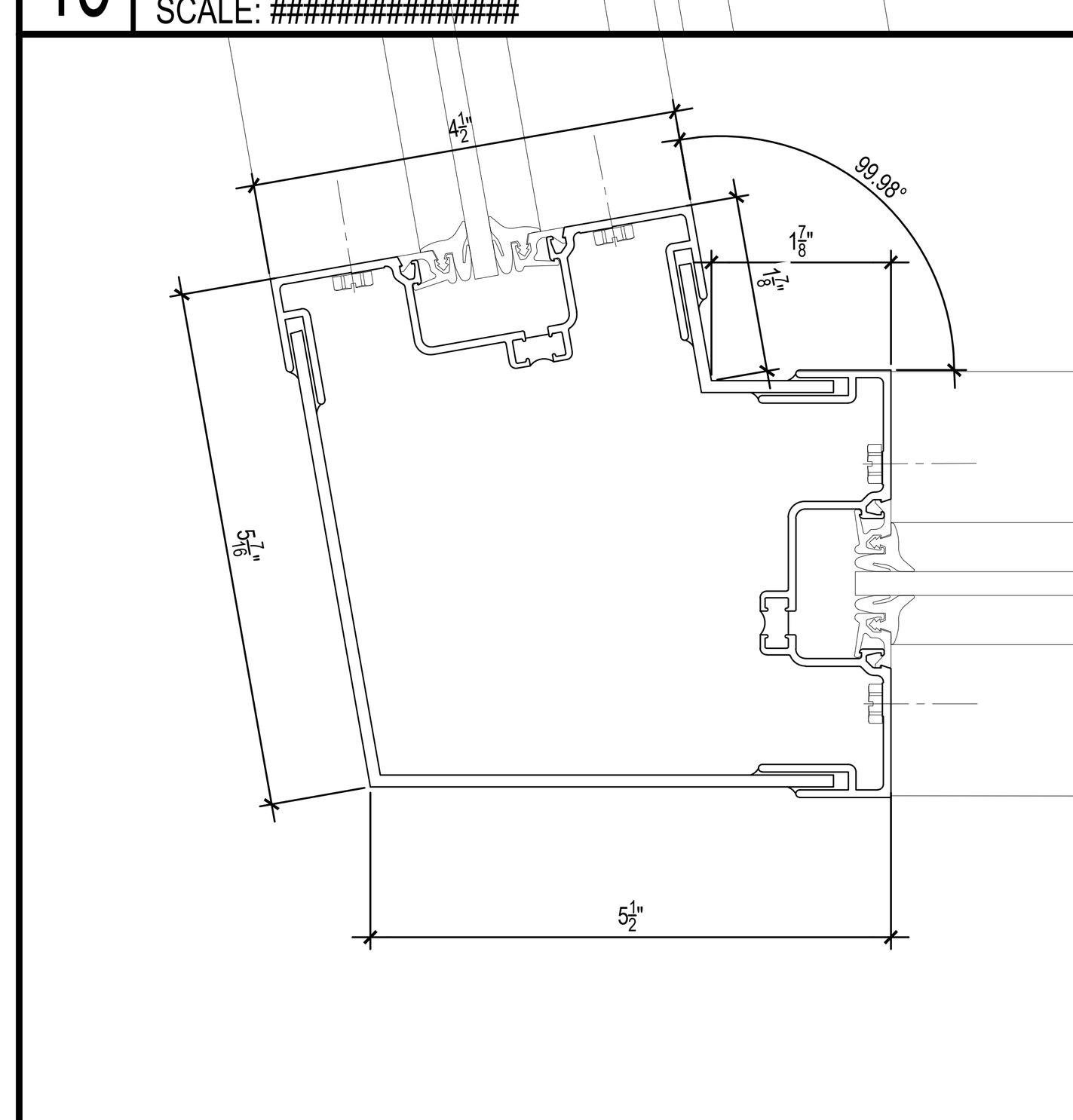

09 WINDOW CORNER
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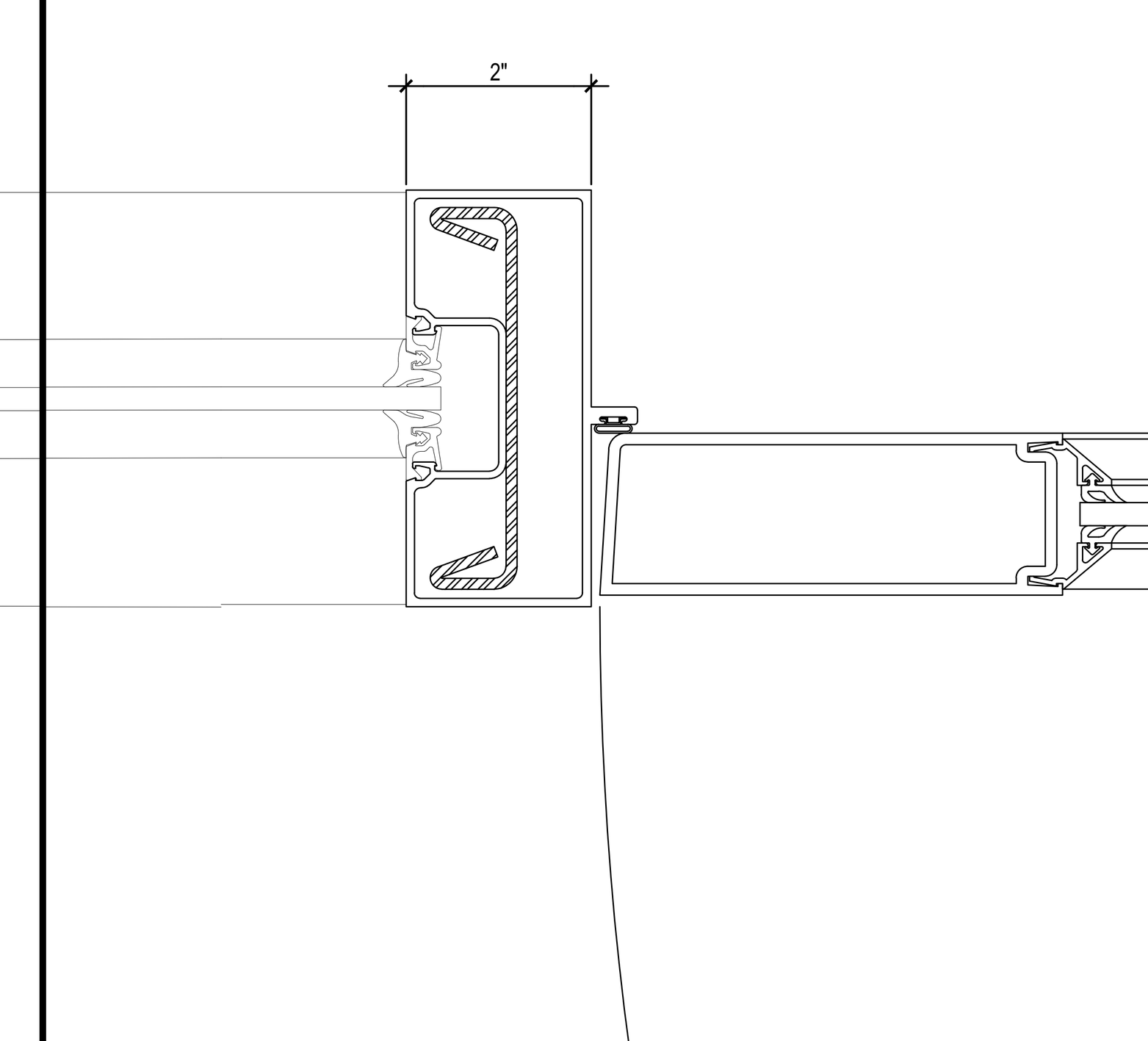
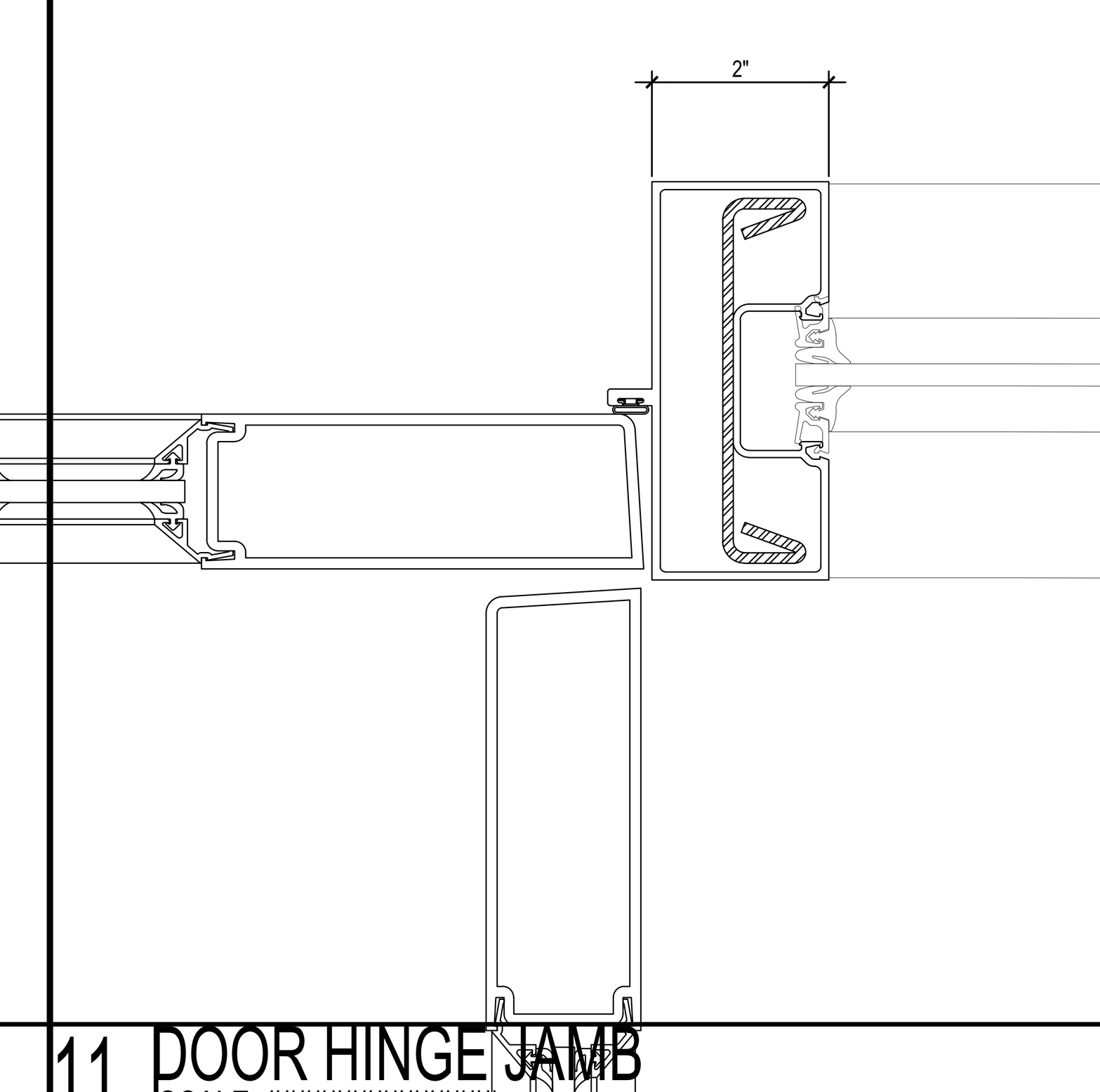
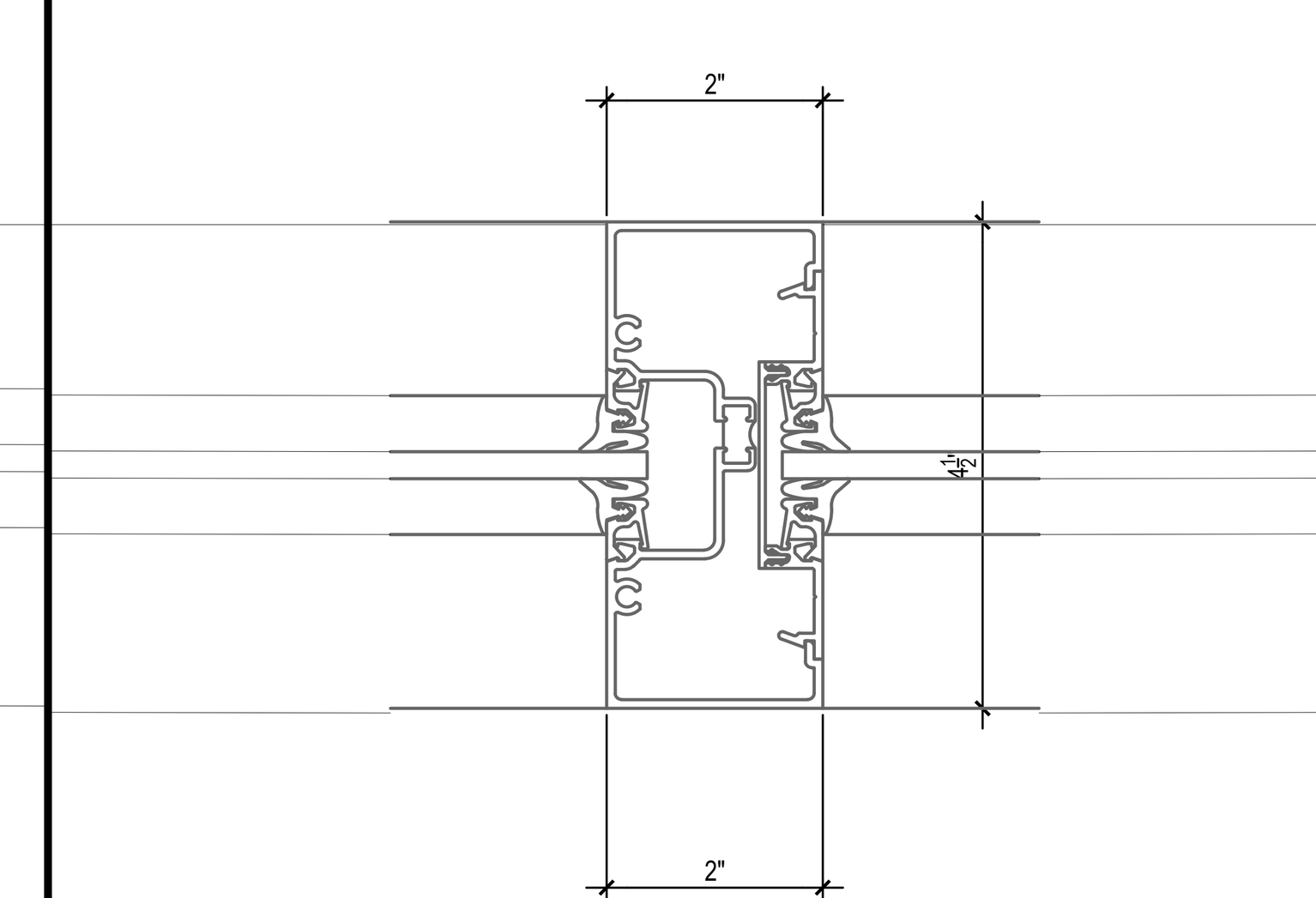


10 DOOR STRIKE JAMB
SCALE: ##############



11 DOOR HINGE JAMB
SCALE: ##############

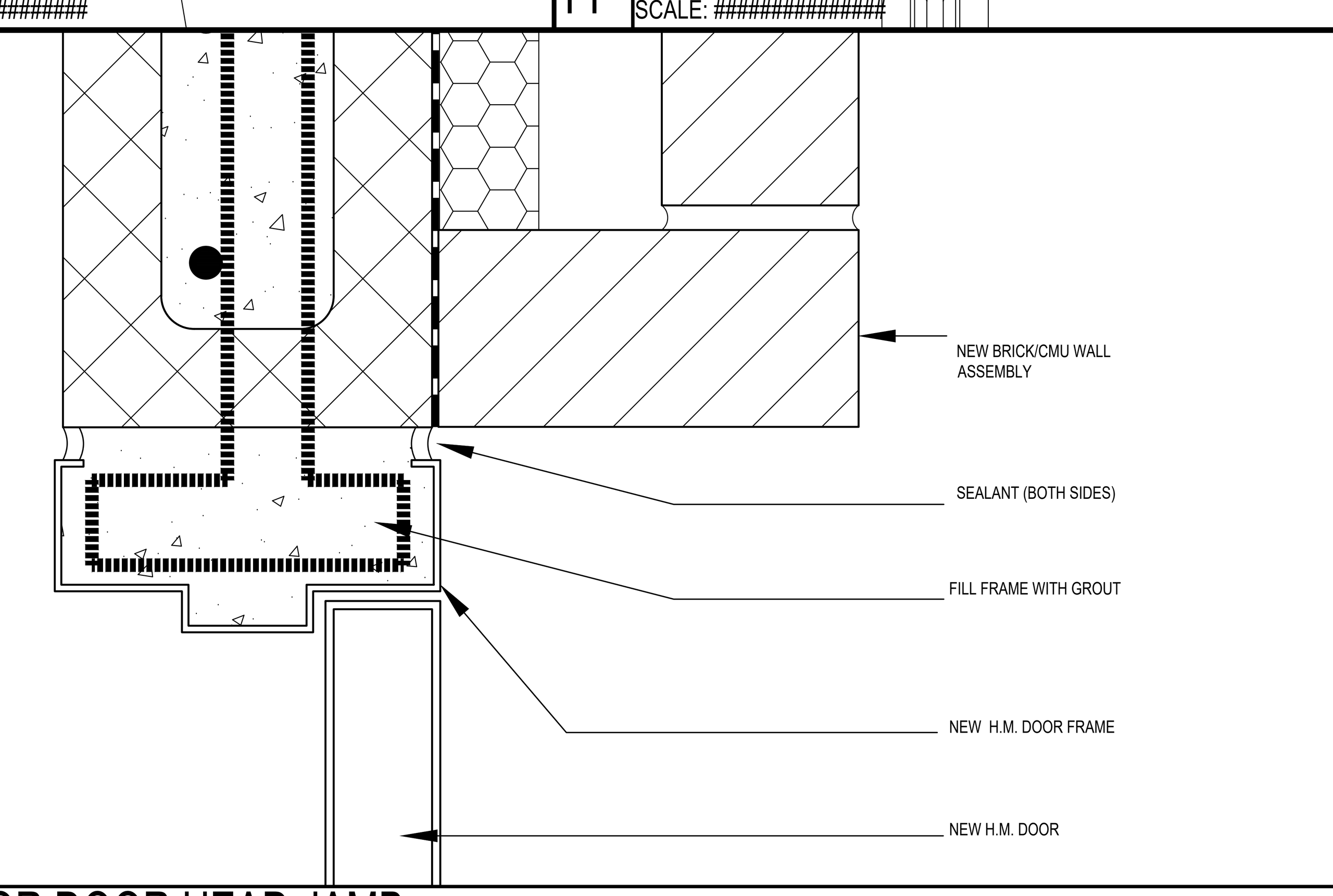


12 WINDOW MULLION
SCALE: ##############

SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025) Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

03 PROJECT SCHEDULE



04 EXTERIOR DOOR HEAD JAMB
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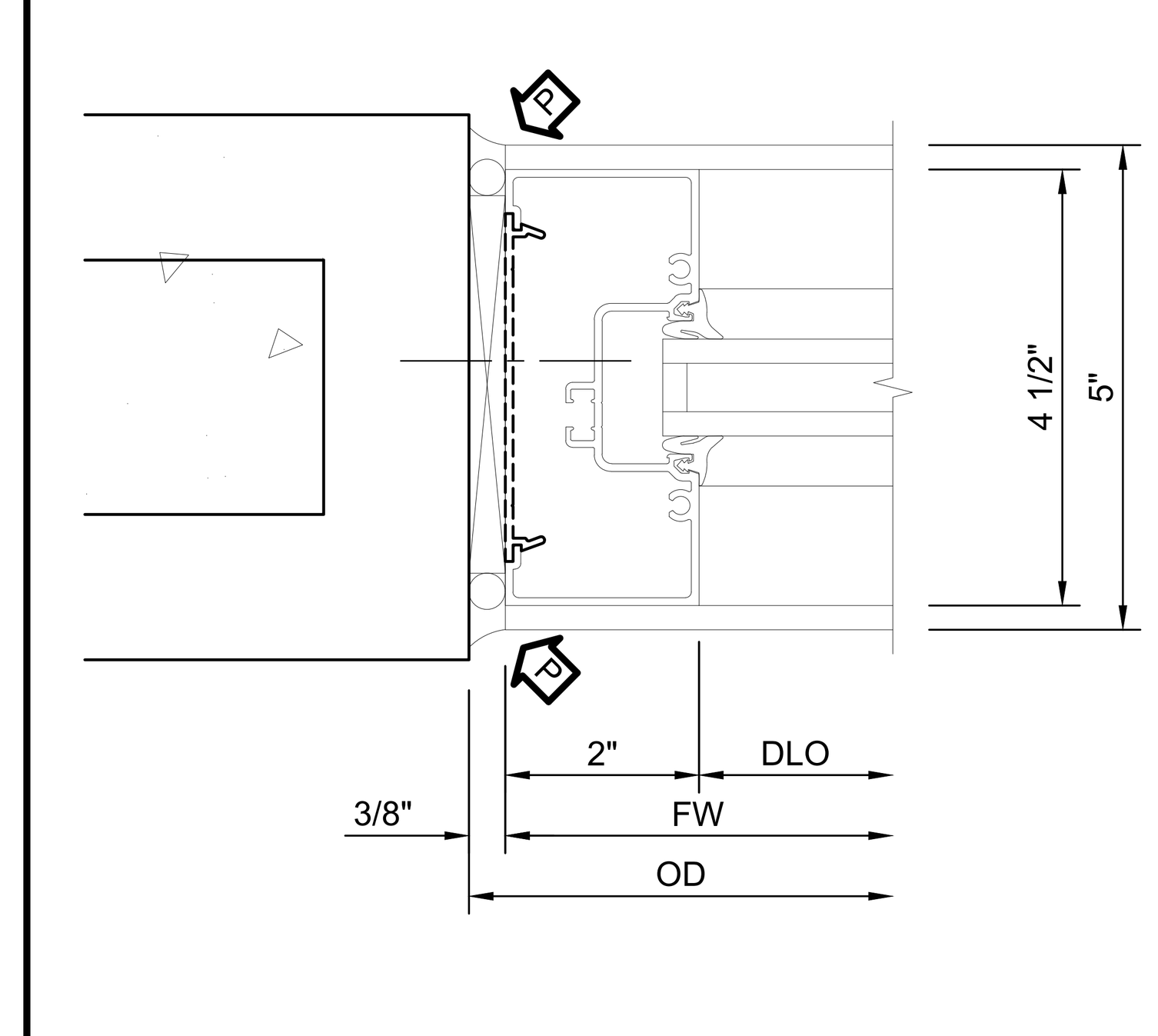

06 WINDOW JAMB
SCALE: 6" = 1'-0"_XREF

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03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 77479

SEAL

REGISTERED ARCHITECT NOE ALMAGUER 22651 STATE OF TEXAS

7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

GENERAL NOTES AND ABBREVIATIONS

A00-01

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\A00-01 GENERAL NOTES AND ABBREVIATIONS.dwg Jul 23, 2025 - 4:45pm

GENERAL DEMOLITION NOTES
(NOT ALL NOTES USED ON EACH SHEET)

1. REFER TO SHEET A00-01 FOR DEMOLITION GENERAL NOTES. THESE NOTES APPLY TO ALL SCHOOL KITCHENS.
2. COORDINATE EXTENT OF SAW CUTTING AREAS WITH NEW RECESSED SLAB FOR COOLER/FREEZER LAYOUTS, NEW SERVICE ENTRANCE FLOOR AND EXISTING KITCHEN LAYOUTS THAT REMAIN. SEE STRUCTURAL DRAWINGS AND SLAB DIMENSION CONTROL PLANS FOR ADDITIONAL SCOPE.
3. REMOVE PROTECT AND REINSTALL ALL EXISTING SURFACE MOUNTED FIRE EXTINGUISHERS (TYPES ABC AND K) AT ALL KITCHENS.
4. SAWCUT AND RE-LOCATE EXPOSED CONDUITS AND WIREMOLD TO INSIDE OF WALLS. PATCH AND PAINT. EXCEPTION: WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS.
5. CONTRACTOR TO RELOCATE EXISTING KITCHEN EQUIPMENT AND OFFICE FURNITURE TO TEMPORARY KITCHEN LAYOUT AS REQUESTED BY KITCHEN MANAGER. ALSO THAT THE IT EQUIPMENT IS PROTECTED DURING RENOVATIONS. ALL EXISTING EQUIPMENT SHALL BE RETURNED TO OWNER.
6. EXISTING TACKBOARDS TO BE REMOVED BY OWNER.
7. IF PRESENT, EXISTING SAFE IN EACH KITCHEN TO BE TEMPORARILY REMOVED DURING RENOVATION AND REINSTALLED IN KITCHEN AREA.
8. ORIGIN POINT OF EXISTING CEILING GRID SHALL BE IDENTIFIED. NEW CEILING WILL BE INSTALLED (AS MUCH AS POSSIBLE) AT THE SAME ORIGIN POINT SO THAT SPRINKLER SYSTEM PIPING CAN REMAIN UNCHANGED.
9. ABOVE-CEILING INFRASTRUCTURE SHALL REMAIN UNDISTURBED AS MUCH AS IS POSSIBLE. CEILING DEVICES ARE TO BE REMOVED FROM EXISTING GRID/TILE THEN DURING RE-INSTALATION OF CEILING DEVICES SHALL BE LOCATED AS CLOSE TO ORIGINAL LOCATION AS POSSIBLE INTO THE NEW GRID/TILE. PROTECT AND STORE EXISTING INFRASTRUCTURE (CABLING, ELECTRICAL POWER, PIPING) DURING CONSTRUCTION.
10. EXISTING HOOD IN WAREWASH AND (2) HOODS IN PRODUCTION AREA ARE TO BE CLEANED, INSPECTED, SERVICED AND REFURBISHED TO A

KEYED DEMOLITION NOTES
(NOT ALL NOTES USED ON EACH SHEET)

1. REMOVE EXISTING THINSET SYNTHETIC TERRAZZO FLOOR AND TERRAZZO COVE BASE MATERIAL IF ANY EXISTS THROUGHTOUT KITCHEN AREA. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOOR. RE: FINISH PLAN FOR NEW FLOOR FINISH MATERIAL.
2. REMOVE EXISTING QUARRY TILE FLOORING AND BASE. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOORING. RE: FINISH SCHEDULE FOR NEW FLOOR FINISH MATERIAL.
3. CEILING DEVICES: REMOVE SMOKE DETECTORS, STROBES, EXIT SIGNAGE, MOTION DETECTORS AND CEILING SPEAKERS. PROTECT AND RE-INSTALL AFTER FINISHES ARE APPLIED.
4. REMOVE EXISTING LOCKERS. PROTECT AND RE-INSTALL AFTER FINISHES APPLIED.
5. REMOVE EXISTING WASHER AND DRYER. VERIFY WITH FBISD FOR RELOCATION TO WAREHOUSE.
6. TEMPORARILY REMOVE EXISTING WALL MOUNTED CLOCK AND STORE FOR REINSTALLATION AFTER WALL RECEIVED NEW FINISH.
7. REMOVE EXISTING WALK-IN COOLER/FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT SPACE. MITIGATE ANY MOLD FOUND.
8. REMOVE EXISTING DOOR AND PROTECT EXISTING FRAME TO REMAIN
9. REMOVE EXISTING DOOR AND FRAME, PROTECT FRAME AND OR DOOR IF IT IS SCHEDULED TO REMAIN.
10. REMOVE PARTIAL EXISTING CMU PARTITION FOR NEW DOOR OPENING
11. INSPECT EXISTING WAREWASH COUNTER DOOR AND S.S. PASS-THRU WINDOW CHUTE. REPAIR REPLACE DAMAGED COMPONENTS. CLEAN, LUBRICATE AND RE-INSTALL.
12. EXISTING CARD READER ACCESS TO REMAIN
13. EXISTING WINDOW TO REMAIN
14. REMOVE EXISTING KITCHEN EQUIPMENT THROUGHOUT KITCHEN INCLUDING WALK-IN COOLER / FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT ROOM OR OUTSIDE OF THE BUILDING. VERIFY WITH OWNER FOR RELOCATION TO WAREHOUSE. SOME EQUIPMENT IS TO BE RE-USED IN TEMPORARY SERVING LINES. SEE ALSO GENERAL DEMOLITION NOTE 6.
15. REMOVE EXISTING FRP AND PREP FOR NEW TILE FINISH.
16. COORDINATE REMOVAL AND STORAGE OF ANY EXISTING FURNITURE ITEMS WITH OWNER . SEE ALSO GENERAL DEMOLITION NOTE 5.
17. REMOVE EXISTING SOAP AND PAPER TOWEL DISPENSER AND RETURN TO OWNER
18. EXISTING WALL MOUNTED ACCESSORIES SIGNS, DISPLAY BOARDS, AND MATS TO BE REMOVED BY FORT BEND ISD (VERIFY EQUIPMENT - IF ANY).
19. REMOVE EXISTING SURFACE MOUNTED FIRE EXTINGUISHER. RE-INSTALL AFTER NEW FINISH APPLIED.
20. REMOVE EXISTING ACOUSTIC CEILING TILE CEILNG SYSTEM AND LIGHT FIXTURES, HVAC DEVICES, SENSORS, ETC. THROUGHTOUT RENOVATED AREAS. PREP FOR NEW SUSPENDED CEILING. EXISTING SPRINKLE SYSTEM TO REMAIN AS-IS UNLESS ROOM CONFIGURATION HAS CHANGED IN NEW DESIGN. PROTECT RECESSED SPRINKLER HEADS AND - RE-INSTALL IN NEW CEILING.
21. REMOVE EXISTING CASEWORK/SHELVING
22. EXISTING CERAMIC WALL TILE TO REMAIN. PROTECT FROM DAMAAGE.
23. REMOVE EXISTING COAT HANGER / ROD / SHELF
24. REMOVE EXISTING PLUMBING FIXTURES IN RESTROOMS. RE: PLUMBING FOR NEW FIXTURES.
25. REMOVE EXISTING UTILITY SINK. RE: PLUMBING FOR NEW PLUMBING FIXTURES.
26. REMOVE EXISTING MOP HOLDER. REPLACE WITH NEW UNIT AS SPECIFIED.
27. REMOVE EXISTING WALL MOUNTED CLEANING SOLUTION DISPENSER (BY FBISD VENDOR)
28. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
29. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
30. REMOVE FLOORING IN THIS AREA FOR NOTE 1.
31. REMOVE CARTIDGE FILTER AND WATER PURTICATION CABNET

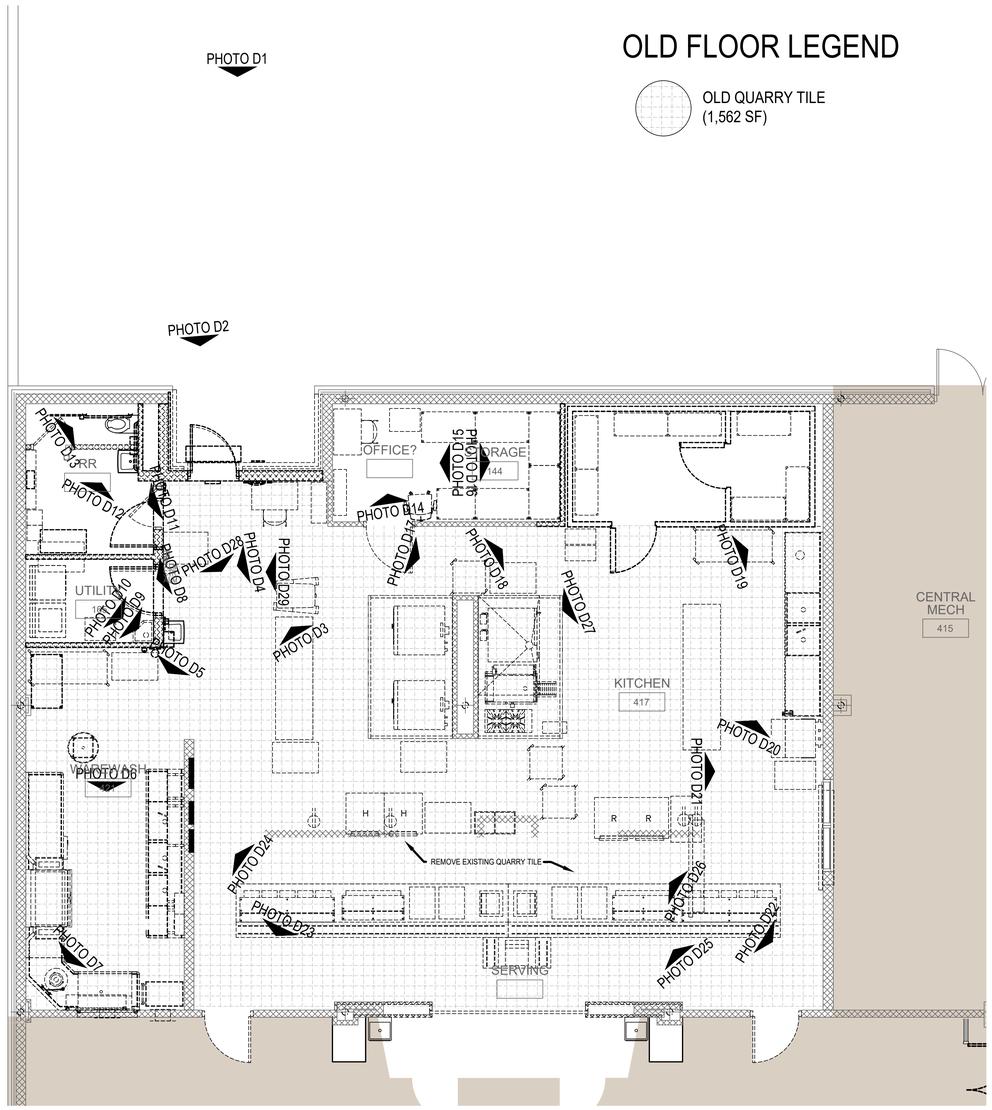
DEMOLITION LEGEND

- EXISTING PARTITION TO REMAIN
- REMOVE EXISTING PARTITION
- EXISTING CMU PARTITION
- REMOVE DOOR AND FRAME TO REMAIN
- REMOVE EXISTING DOOR AND FRAME
- EXISTING PLUMBING FIXTURES (WATER CLOSET, HAND LAVATORY, AND MOP SINK TO BE REMOVED. RE: PLUMBING DRAWINGS.
- EXISTING ACOUSTIC CEILING TILE AND GRID TO BE REMOVED. RE: ELECTRICAL DRAWINGS.
- SPRINKLER HEAD (RECESSED)
- CLOCK
- CEILING MOUNTED SPEAKERS

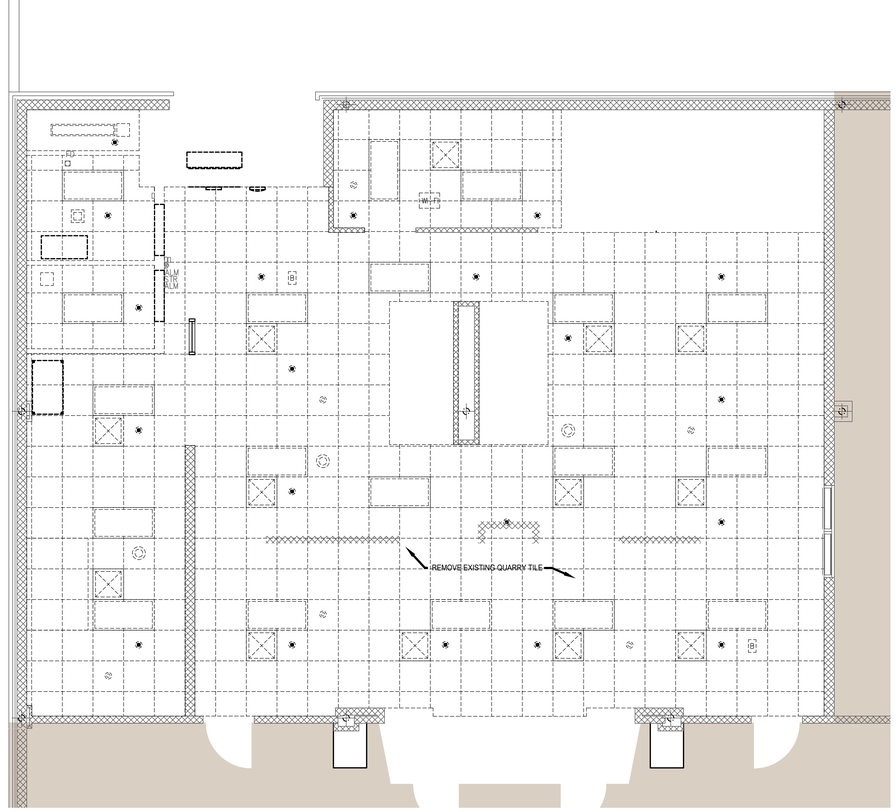
3 DEMOLITION NOTES

OLD FLOOR LEGEND

OLD QUARRY TILE
(1,562 SF)



1 DEMOLITION FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 DEMOLITION REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

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SEAL
REGISTERED ARCHITECT
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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OVERALL FLOOR PLAN

s-A.201

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PHOTO D1


PHOTO D2

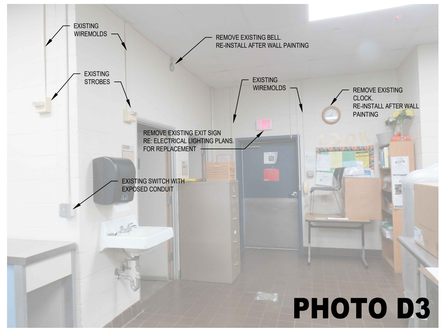


PHOTO D3



PHOTO D4



PHOTO D5

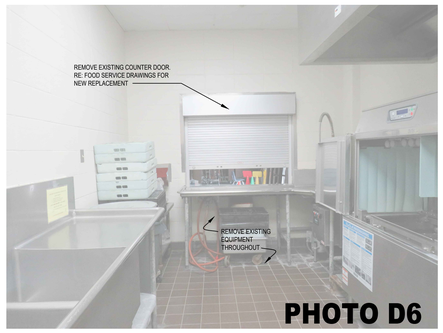


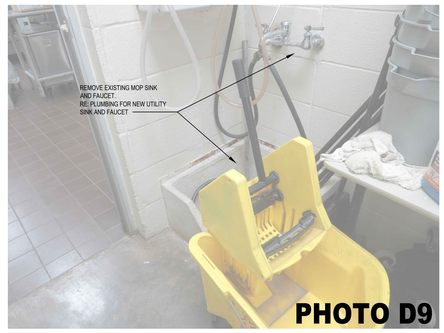
PHOTO D6



PHOTO D7



PHOTO D8



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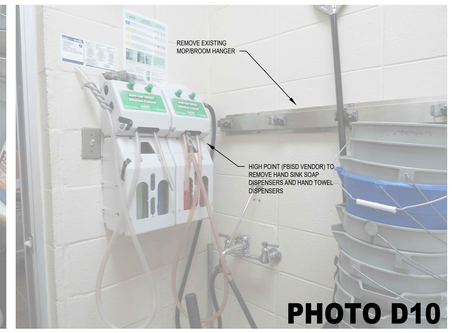

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PHOTO D11

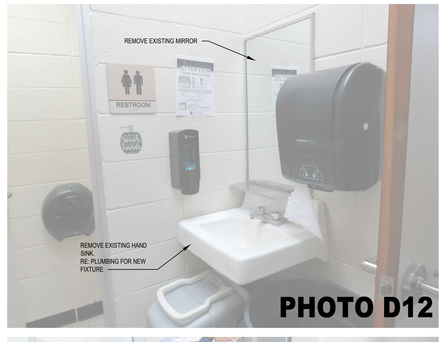

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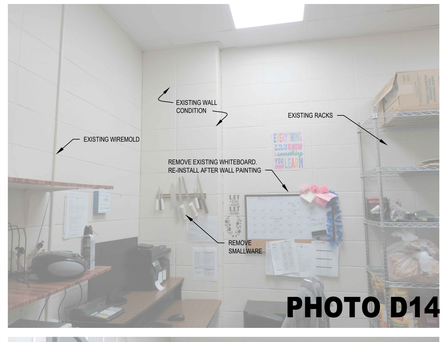
PHOTO D13



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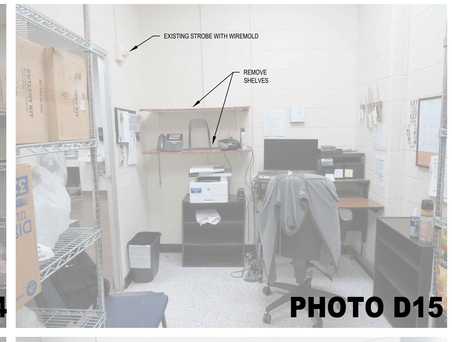

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PHOTO D16



PHOTO D17

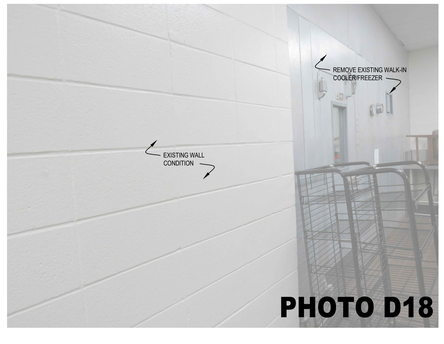

PHOTO D18



PHOTO D19



PHOTO D20

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SETTLERS WAY PAR, 3015 SETTLERS WAY BLVD,
SUGAR LAND, TX 77479

SEAL

REGISTERED ARCHITECT
MICHAEL K. WILLIAMS
#2651
STATE OF TEXAS

7/15/2025

MWA ARCHITECTS

ARCHITECTS
AND PLANNING
CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

DEMO PLAN PHOTOS

s-D.101-2

F:\2022\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\S-Settlers Way ES\s-D.101-2 DEMO PLAN PHOTOS.dwg Jul 23, 2025 - 4:46pm

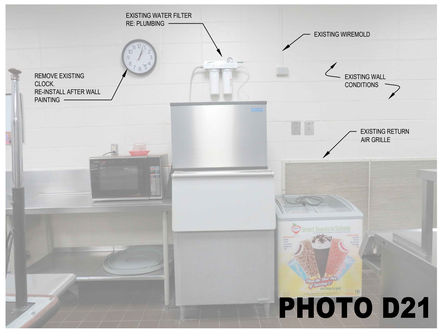

PHOTO D21

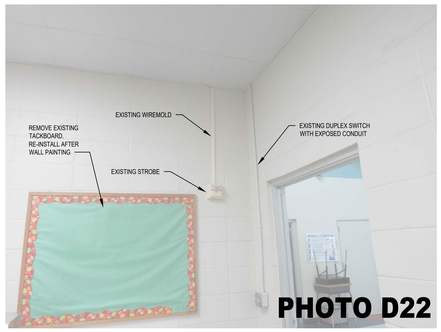

PHOTO D22



PHOTO D23



PHOTO D24

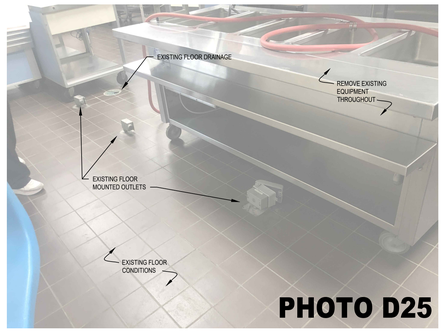

PHOTO D25



PHOTO D26



PHOTO D27



PHOTO D28

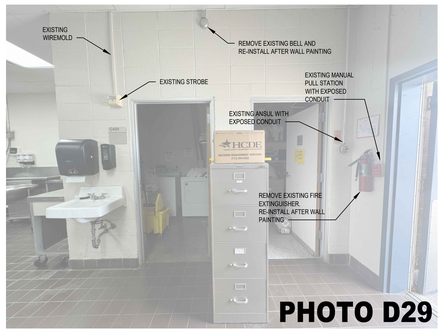

PHOTO D29


PHOTO D30

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
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S

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
SETTLERS WAY PAR, 3015 SETTLERS WAY BLVD,
SUGAR LAND, TX 77479

SEAL

REGISTERED ARCHITECT
ANDREW M. WILLIAMS
23651
STATE OF TEXAS

7/15/2025

MWA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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DEMO PLAN
PHOTOS

s-D.101-3

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\S-Settlers Way ES\s-D.101-3 DEMO PLAN PHOTOS.dwg Jul 23, 2025 - 4:46pm

NEW PANEL

TEMP KITCHEN

PANEL LTK

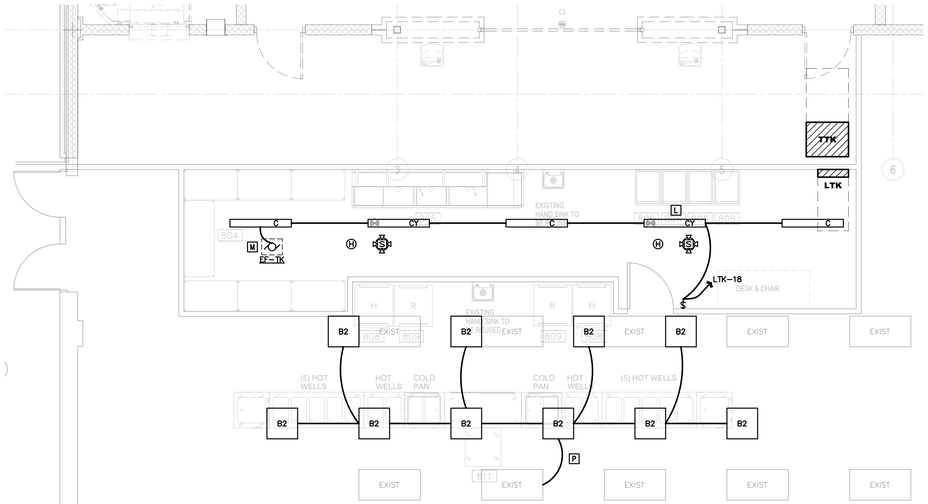
150A MCB
208Y/120V, 3ϕ, 4 WIRE

AVAILABLE FAULT: <10,000A
SCCR & AIC: 10,000A

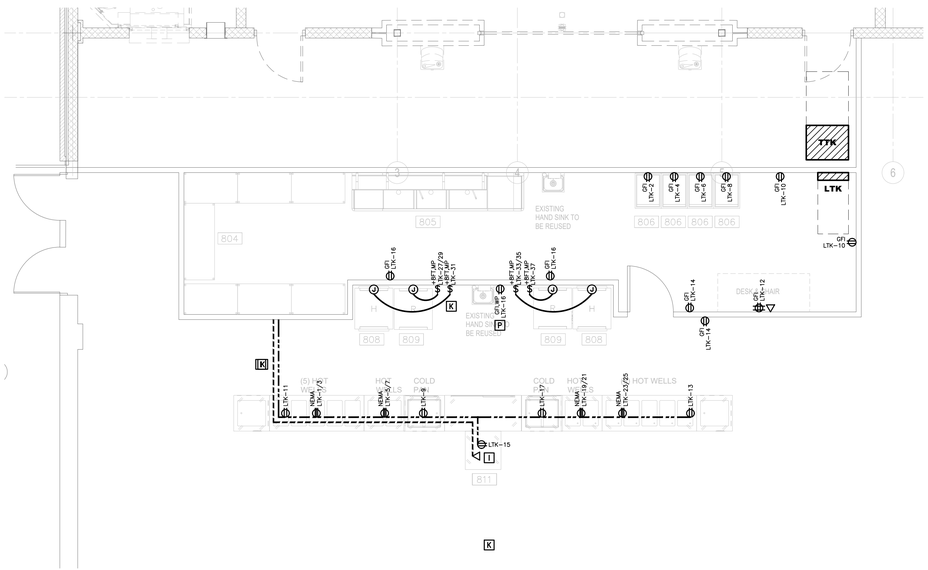
MOUNTING: SURFACE

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E810	2766	HOT WELLS	2–12	20/2GFI	1	■			2	20/1	3–12	TRANSPORT CART	1920	E806	
	–	–	–	+12G	–	3		■		4	20/1	3–12	TRANSPORT CART	1920	E806	
	E810A	1643	HOT WELLS	2–12	20/2GFI	5			■	6	20/1	3–12	TRANSPORT CART	1920	E806	
	–	–	–	+12G	–	7	■			8	20/1	3–12	TRANSPORT CART	1920	E806	
	E810B	600	COLD PAN	3–12	20/1GFI	9		■		10	20/1	3–12	2 REC	360	E800A	
	E810C	1200	BEVERAGE	3–12	20/1GFI	11			■	12	20/1	3–12	2 REC – DESK	360	E800B	
	E810C	1200	BEVERAGE	3–12	20/1GFI	13	■			14	20/1	3–12	2 REC	360	E800A	
	E811	180	CASH REGISTER	3–12	20/1GFI	15		■		16	20/1	3–12	3 REC	360	E800A	
	E810B	600	COLD PAN	3–12	20/1GFI	17			■	18	20/1	3–12	TEMP. KITCHEN LTS/FAN	566		
	E810A	1643	HOT WELLS	2–12	20/2GFI	19	■			20	20/1		SPARE			
	–	–	–	+12G	–	21		■		22	20/1		SPARE			
	E810	2766	HOT WELLS	2–12	20/2GFI	23			■	24	20/1		SPARE			
	–	–	–	+12G	–	25	■			26	20/1		SPARE			
	E808	1622	HEATED CABINET	2–12	20/2	27		■		28	20/1		SPARE			
	–	–	–	+12N+12G	–	29			■	30	20/1	3–12	EXISTING CIRCUIT	500		3
	E809	984	REFRIGERATOR	3–12	20/1	31	■			32	20/1	3–12	EXISTING CIRCUIT	500		3
	E808	1622	HEATED CABINET	2–12	20/2	33		■		34	15/2	2–12	EXISTING CIRCUIT	1000		3
	–	–	–	+12N+12G	–	35			■	36	–	+12N+12G	–	–		
	E809	984	REFRIGERATOR	3–12	20/1	37	■			38	20/2	2–12	EXISTING CIRCUIT	1000		3
			SPARE		20/1	39		■		40	–	+12N+12G	–	–		
			SPARE		20/1	41			■	42	50/2	2–8	EXISTING CIRCUIT	5000		3
			SPARE		20/1	43	■			44	–	+8N+10G	–	–		
	TOTAL LOAD @ 100% = 35498VA						TOTAL LOAD @ 100% = 99A									

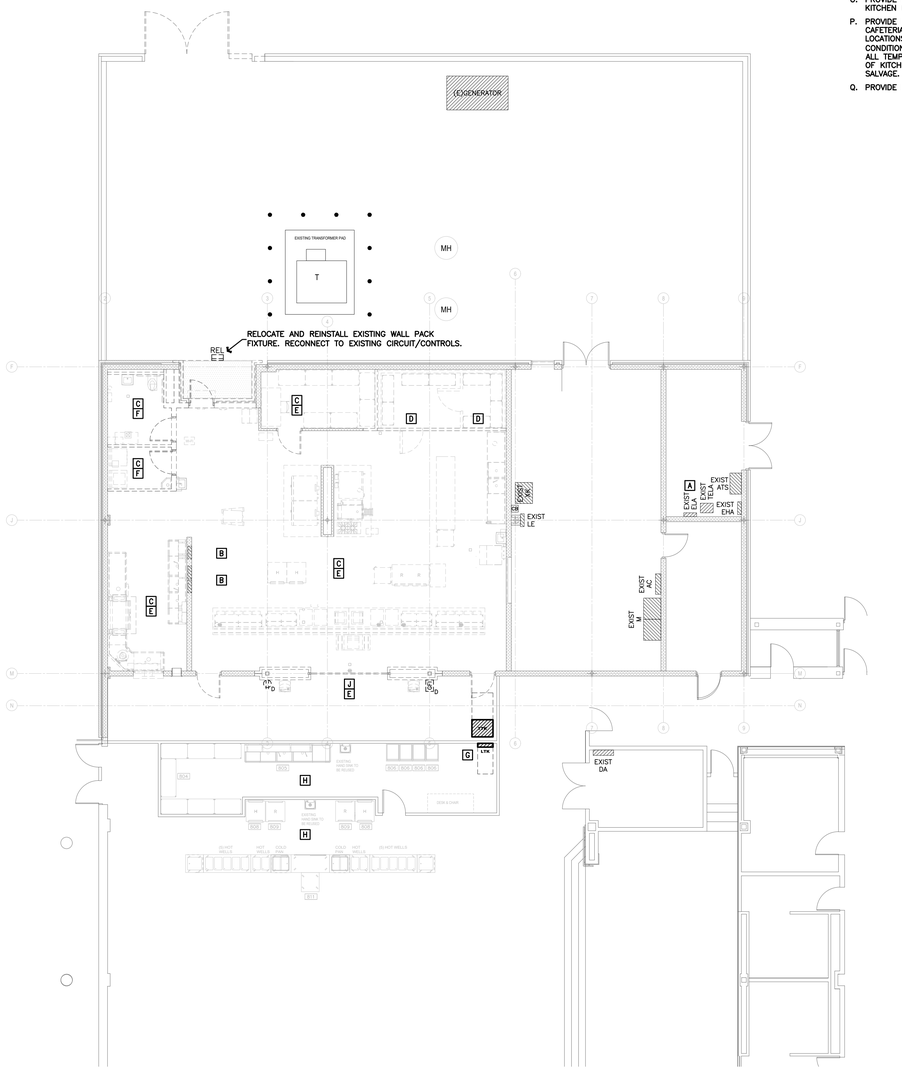
1. REF. KITCHEN CONSULTANT'S "FCS" DRAWINGS FOR KITCHEN EQUIPMENT NUMBERS.
2. A DEMAND FACTOR PERCENT OF 65% HAS BEEN APPLIED TO THE KITCHEN EQUIPMENT LOAD PURSUANT TO NEC 220–20 AND NEC TABLE 220–20.
3. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.



T1 **TEMPORARY KITCHEN - LIGHTING PLAN**
SCALE: 1/4" = 1'– 0"



T2 **TEMPORARY KITCHEN - ELECTRICAL PLAN**
SCALE: 1/4" = 1'– 0"



1 **DEMOLITION FLOOR PLAN**
SCALE: 1/8" = 1'– 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

DEMOLITION NOTES:

A. EXISTING STANDBY GENERATOR PANEL TO REMAIN.

B. EXISTING KITCHEN PANELS TO BE REPLACED WITH NEW. MODIFY EXISTING WALLS TO MATCH NEW PANEL LAYOUTS AND DIMENSIONS.

C. EXISTING LIGHTING FIXTURES AND CEILING DEVICES TO BE REMOVED THROUGHOUT.

D. EXISTING WALK–IN COOLER/FREEZER AND ASSOCIATED EQUIPMENT TO BE REMOVED.

E. EXISTING WALL ELECTRICAL DEVICES TO BE REMOVED. EXISTING J–BOXES MAY BE REUSED WHERE NEW DEVICES ARE TO BE INSTALLED AT THE SAME LOCATIONS.

F. EXISTING ELECTRICAL DEVICES TO BE REMOVED.

G. NEW 208Y/120V PANEL AND TRANSFORMER FOR TEMPORARY KITCHEN TO BE INSTALLED PRIOR TO DEMOLITION. PANEL AND TRANSFORMER TO BE REMOVED AT END OF KITCHEN RENOVATION AND TURNED OVER TO THE DISTRICT. INSTALL TRANSFORMER ON PREMADE FIBERCRETE PAD AND WAFFLE TYPE VIBRATION ISOLATION PADS. DO NOT PROVIDE A POURED IN PLACE CONCRETE PAD AT THIS LOCATION.

H. PROVIDE RECEPTACLES AND LIGHT FIXTURES FOR TEMPORARY KITCHEN DURING RENOVATION. ALL TEMPORARY DEVICES AND EQUIPMENT TO BE REMOVED AT END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE.

I. CONDUITS ROUTED FROM TEMPORARY KITCHEN WALL AND BENEATH SERVING LINE. PROVIDE MULTICHANNEL ROLLOVER CABLE PROTECTOR FOR EXPOSED CONDUITS NOT UNDER THE SERVING LINE. ALL CONDUITS UNDER THE SERVING LINE SHALL BE SECURED TO/ROUTED ON TOP OF UNISTRUT AND NOT DIRECTLY ON THE FLOOR. DO NOT ANCHOR UNISTRUT TO THE EXISTING FLOORING. COORDINATE POWER AND DATA OUTLET LOCATIONS WITH OTHER TRADES.

J. REMOVE EXISTING LIGHT FIXTURES ABOVE NEW KITCHEN EXTENSION. MODIFY EXISTING WIRING TO MAINTAIN REMAINING FIXTURE OPERATION.

K. HARDWIRE KITCHEN EQUIPMENT TO LOCAL ON/OFF SWITCH. TYPICAL.

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P. PROVIDE NEW TEMPORARY LIGHT FIXTURES IN THE EXISTING CAFETERIA CEILING ABOVE THE SERVING LINE. COORDINATE LOCATIONS WITH TEMPORARY SERVING LINE AND EXISTING CONDITIONS. CONNECT TO EXISTING LIGHTING CONTROLS/CIRCUIT. ALL TEMPORARY LIGHT FIXTURES SHALL BE REMOVED AT THE END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE. PROVIDE REPLACEMENT CEILING TILES.

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SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD.
SUGAR LAND, TX 77479

SEAL

STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED
PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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ELECTRICAL DEMO AND TEMP PLANS

s-ED.100

STANTON ENGINEERING GROUP
INFO@STANTON-TX.COM | (713) 300–6080

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12800 W. SAM HOUSTON PARKWAY N., SUITE 125, HOUSTON, TX 77043

NEW PANEL

TEMP KITCHEN

PANEL LTK

150A MCB
208Y/120V, 3ϕ, 4 WIRE

AVAILABLE FAULT: <10,000A
SCCR & AIC: 10,000A

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	–	–	–	+12N+12G	–	29			■	30	20/1	3–12	EXISTING CIRCUIT	500		3
	E809	984	REFRIGERATOR	3–12	20/1	31	■			32	20/1	3–12	EXISTING CIRCUIT	500		3
	E808	1622	HEATED CABINET	2–12	20/2	33		■		34	15/2	2–12	EXISTING CIRCUIT	1000		3
	–	–	–	+12N+12G	–	35			■	36	–	+12N+12G	–	–		
	E809	984	REFRIGERATOR	3–12	20/1	37	■			38	20/2	2–12	EXISTING CIRCUIT	1000		3
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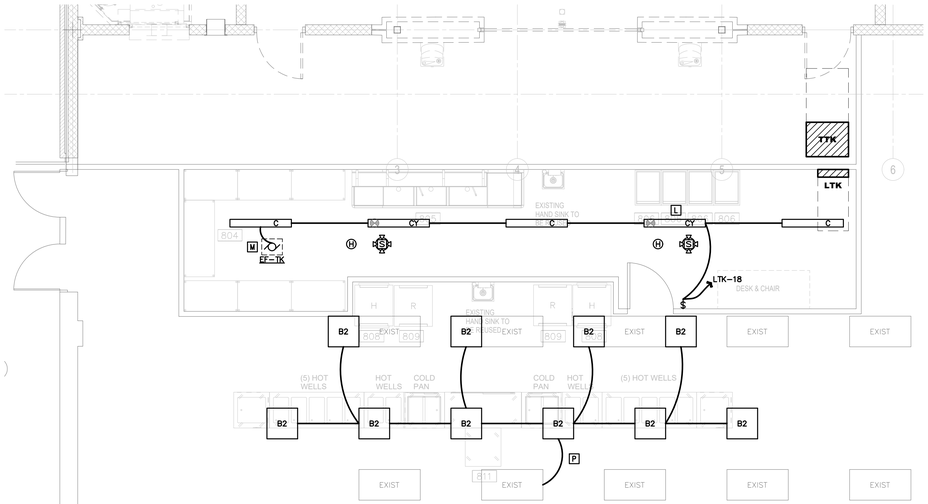

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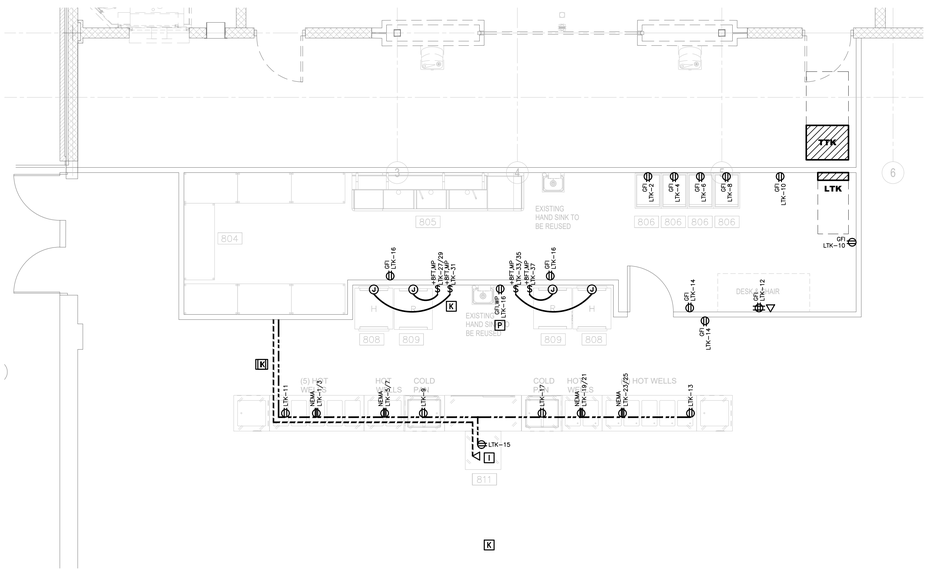

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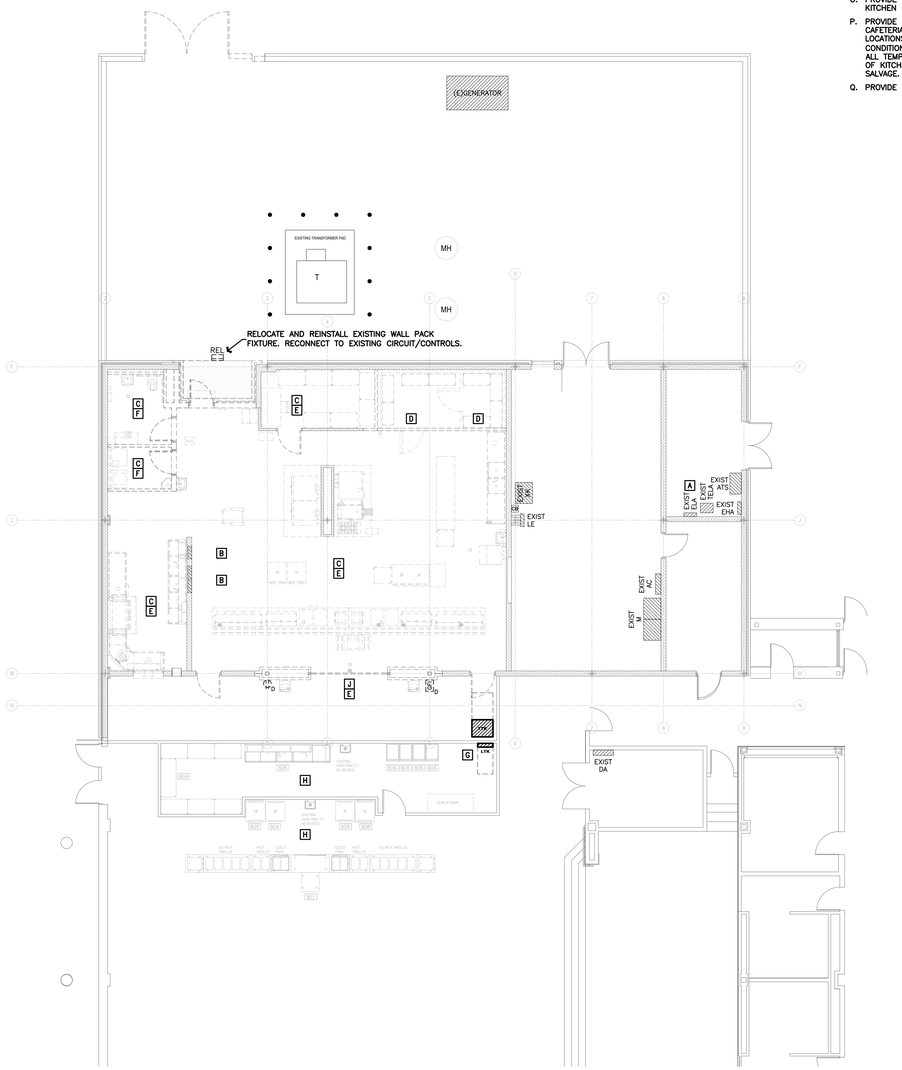

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ELECTRICAL KEYED NOTES

GENERAL NOTES:

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38582
REGISTERED
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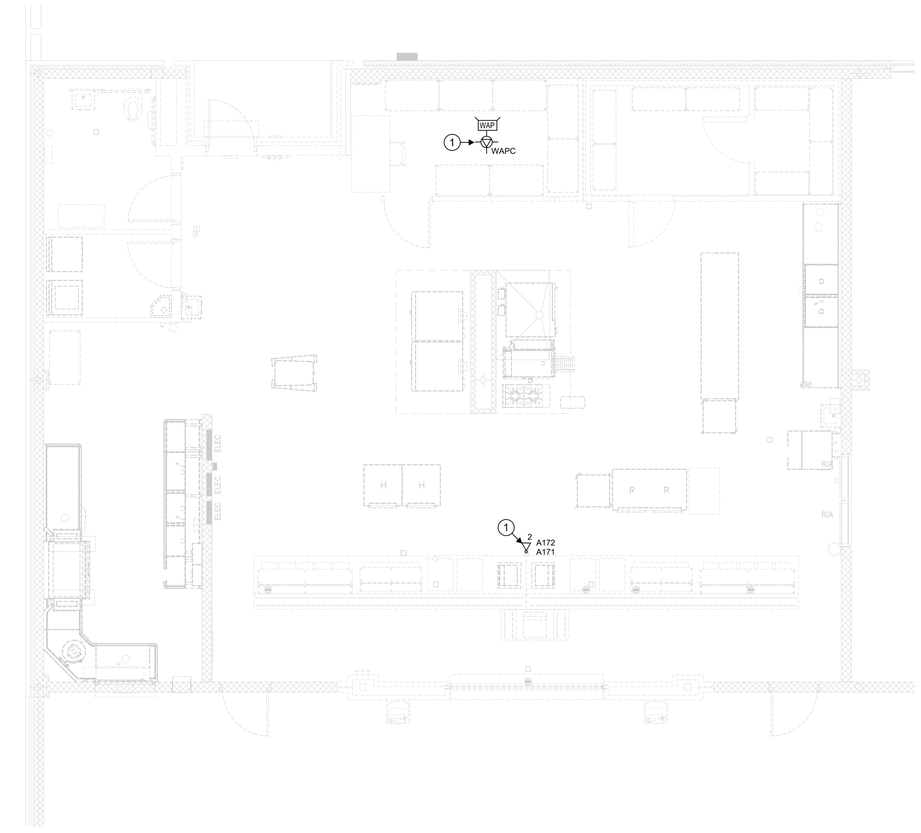

1 TECHNOLOGY DEMOLITION FLOOR PLAN
s-TD201 1/4" = 1'-0"

TECHNOLOGY DEMOLITION PLAN GENERAL NOTES

1. ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS SHALL REMAIN OPERATIONAL AT ALL TIMES DURING BUSINESS HOURS UNLESS OTHERWISE NOTED. ANY SYSTEM DOWNTIME SHALL BE SCHEDULED WITH THE ARCHITECT/ENGINEER AND OWNER AT LEAST TEN (10) WORKING DAYS IN ADVANCE. CONTRACTOR SHALL DEVELOP A PHASING PLAN AND SCHEDULE OF ANY REQUIRED SYSTEM DOWNTIME FOR REVIEW AND APPROVAL BY THE ARCHITECT/ENGINEER AND OWNER PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. OWNER SHALL BE RESPONSIBLE FOR POWER DOWN AND START-UP OF ALL DATA, VOICE, VIDEO AND SECURITY SYSTEMS. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT/ENGINEER AND OWNER AND PROVIDE A MINIMUM OF TEN (10) WORKING DAYS NOTICE FOR SCHEDULING OF ANY REQUIRED DOWNTIME.
3. ALL EXISTING WIRELESS ACCESS POINTS ARE TO BE REMOVED AND RETURNED TO OWNER. CONTRACTOR SHALL RE-INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.
4. COORDINATE REMOVAL OF EXISTING CAMERA WITH OWNER/ARCHITECT DURING CONSTRUCTION.

TECHNOLOGY DEMOLITION PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

(1) EXISTING DATA/VOICE/WIRELESS ACCESS POINT OUTLET TO BE REMOVED. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL 4-PAIR CABLES AND WORKSTATION CONNECTING HARDWARE TERMINATED AT THIS LOCATION. IF LOCATION IS NOT RE-USED, CONTRACTOR SHALL SUPPLY AND INSTALL BLANK COVER. CONTRACTOR IS TO REMOVE EACH CABLE TO BE DEMOLISHED FROM THE PATCH PANEL OR TERMINATION BLOCK IN THE TELECOMMUNICATIONS ROOM. REMOVE THE ENTIRE LENGTH OF THE CABLE AND THE CORRESPONDING MODULAR CONNECTOR, FACEPLATE AND ACCESSORIES. NO ABANDONED CABLING IS TO BE LEFT ABOVE CEILING. CONTRACTOR SHALL INSTALL ALL EXISTING AND NEW WIRELESS ACCESS POINTS AT COMPLETION OF PROJECT.

(2) EXISTING VIDEO SURVEILLANCE CAMERA. CONTRACTOR SHALL REMOVE AND RETURN TO OWNER.

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07/18/2025	ISSUED FOR BIDDING AND PERMITTING

S

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 774

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

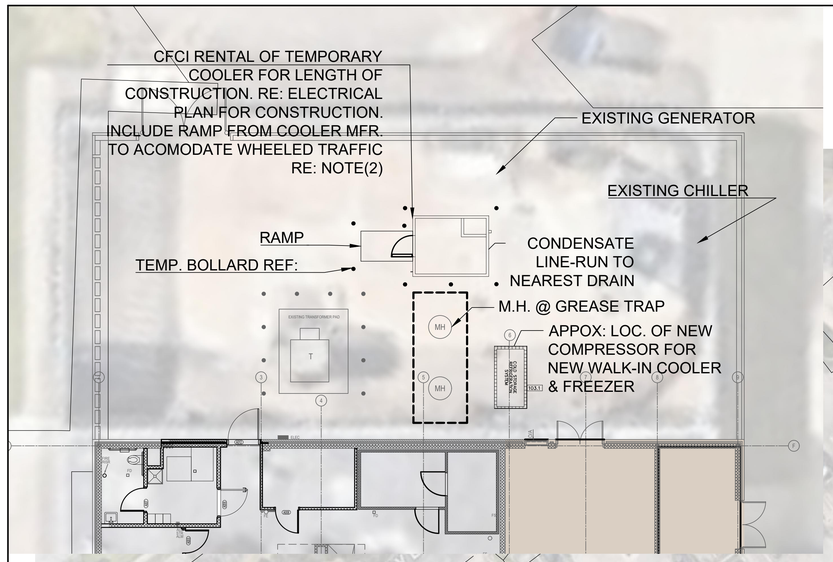
07/18/2025

MWA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

TECHNOLOGY DEMOLITION FLOOR PLAN

SHEET NO.
s-TD201



2 ENLARGED SITE PLAN
SCALE: 1/8" = 1'-0"

NUMBERED NOTES: FOR 2/a-A.101

1. COOLER RENTAL UNIT; APPROX. 8' X 10' BASIS OF DESIGN: MODEL DT810 BY POLAR LEASING REFRIGERATION RENTAL
2. INCLUDE OPTIONAL DIAMOND TREAD RAMP SUITABLE FOR WHEELED TRAFFIC
3. LOCATION SHOWN IS SUBJECT TO OWNER APPROX. LOCATION MUST NOT BLOCK DELIVERIES TO REAR DOOR, MUST BE WITH 10' OF AREA DRAIN, AND WITHIN 100' OF ELECTRICAL POWER.
4. CONTRACTOR SHALL SCAN PAVING FOR BURIED UTILITIES BEFOR CUTTING CONC.

1 SITE PLAN
SCALE: 1" = 30'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
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FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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SITE PLAN

s-A.101

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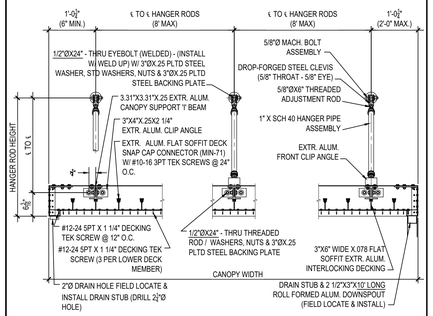
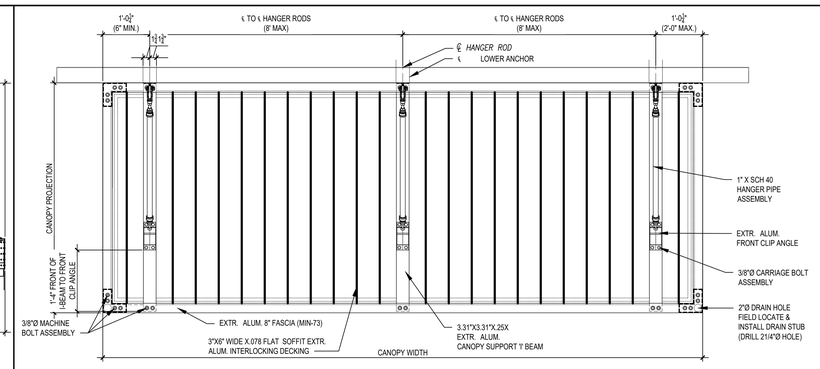
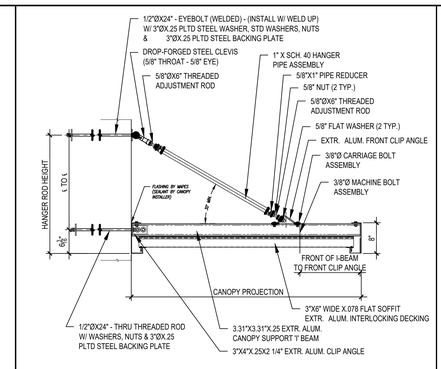


10 CANOPY DETAILS
3/4" = 1'-0"



11 CANOPY PLAN
3/4" = 1'-0"



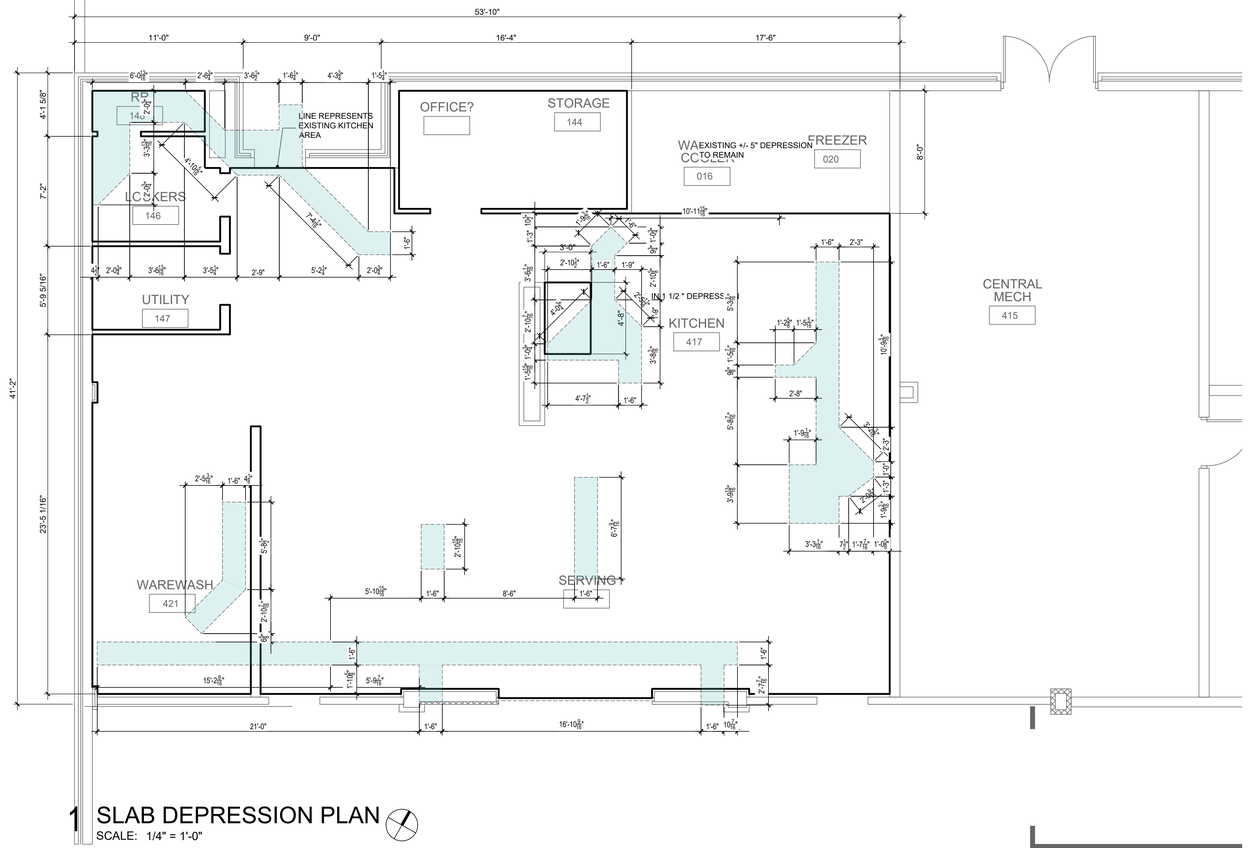
12 CANOPY SECTION
3/4" = 1'-0"

NOTES:
1. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, FIXTURES, OR ELECTRICAL ITEMS.
2. SHADED AREA REPRESENTS APPROXIMATE SAWCUT AREAS NEEDED FOR PLUMBING ALTERATIONS.
3. CONTRACTOR TO DETERMINE EXTENT OF CONCRETE SLAB SAW CUTTING AS REQUIRED FOR ALL UTILITIES REQUIRED FOR THIS PROJECT.
4. SPLICE NEW REINFORCING BARS AND DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES.
5. PREPARE CONCRETE TO RECEIVE NEW FINISH.

HATCHED AREA REPRESENTS APPROXIMATE AREA THAT WILL NEED TO BE EXCAVATED IN ORDER TO MAKE PLUMBING ALTERATIONS OUTSIDE THE BUILDING. CONTRACTOR TO REMOVE CONCRETE WALKS, PAVING, AND EXCAVATE AS REQUIRED IN ORDER TO INSTALL NEW PLUMBING. BACK FILL AND RESTORE AFFECTED AREAS. REFER TO CIVIL DETAILS.

SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS AND DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.

SHADED AREA REPRESENTS APPROXIMATE SAWCUT AREAS NEEDED FOR PLUMBING ALTERATIONS. CONTRACTOR TO DETERMINE EXTENT OF CONCRETE SLAB SAW CUTTING AS REQUIRED FOR ALL PLUMBING REQUIRED FOR THIS PROJECT.



1 SLAB DEPRESSION PLAN
SCALE: 1/4" = 1'-0"

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FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 77479

SEAL
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STATE OF TEXAS
7/15/2025

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HOUSTON, TEXAS 77079

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SLAB DIMENSION CONTROL PLAN

s-A.200

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SCOPE OF WORK: KITCHEN REPLACEMENT OF FLOOR, WALL, AND CEILING FINISHES, AS WELL AS, REPLACEMENT OF KITCHEN EQUIPMENT. PROVIDE ADDITIONAL KITCHEN STORAGE FOR CEP. UPGRADE TO BACK DOOR DELIVERY AREA.

ADOPTED CODES W/ AMENDMENTS OF

CITY OF MISSOURI CITY, TX

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL RESIDENTIAL CODE
- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2023 NATIONAL ELECTRIC CODE NFPA 70
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2021 INTERNATIONAL FUEL GAS CODE
- 2021 INTERNATIONAL FIRE CODE

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY E:

NON SPRINKLED

INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS **A**

CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS **B**

ROOMS AND ENCLOSED SPACES **C**

FLOORING SHALL BE CLASS II

2021 INTERNATIONAL EXISTING BUILDING CODE

301.3.1 PRESCRIPTIVE COMPLIANCE METHOD. REPAIRS, ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH CHAPTER FIVE OF THIS CODE IN BUILDINGS COMPLYING WITH THE INTERNATIONAL FIRE CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

302.3 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE .

302.4 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED THAT NO UNSAFE CONDITION IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT PERMIT THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

ALTERATION - LEVEL 1 INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES THAT SERVE THE SAME PURPOSE.

ALTERATION - LEVEL 2 INCLUDE THE ADDITION OR ELIMINATION OF ANY DOOR OR WINDOW, THE RECONFIGURATION OR EXTENSION OF ANY SYSTEM, OR THE INSTALLATION OF ANY ADDITIONAL EQUIPMENT, AND SHALL APPLY WHERE THE WORK IS EQUAL TO OR LESS THAN 50% OF THE BUILDING AREA.

THIS BUILDING'S CONSTRUCTION IS TYPE IIB.

THIS BUILDING'S OCCUPANCY IS E.

THIS BUILDING'S IS NON-SPRINKLED.

THERE WILL NOT BE ANY MODIFICATIONS TO THE HOOD SYSTEMS IN THE KITCHENS BEYOND REPLACEMENT OF MOTOR FOR LIKE KIND IF NEEDED.

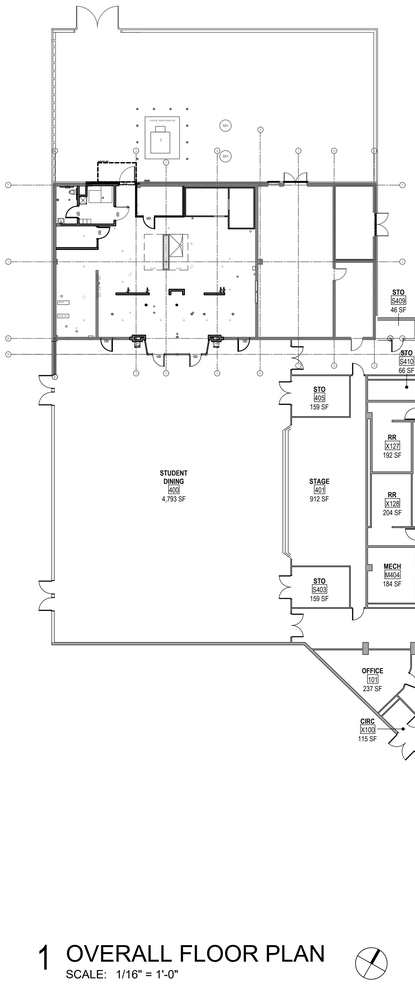
THE BUILDING WILL NOT HAVE ADDITIONAL SQUARE FOOTAGE AS PART OF THE WORK.

NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODES

RESPONSIBILITY MATRIX

ITEM				CONTRACTOR RESPONSIBILITY		OWNER RESPONSIBILITY		NOTES
EQUIPMENT	**MAKE**	**MODEL**	**BASIS OF DESIGN**	FURNISHED	INSTALL	FURNISHED	INSTALL	
MARKERBOARD			MUST BE MAGNETIC, LOW GLOS, WHITE. NO GREY ALLOWED. 5' X 10'	X	X			
MOTORIZED FOLDING PARTITION			TOP SUPPORTED AND CONTINUOUSLY HINGED. MADE OF 3" THICK STEEL WITH FULL SOUND SEALS. THEY FEATURE AUTOMATIC FLOOR SEALS THAT DEPLOY WHEN POSITIONED. MARKERBOARD FINISHES ARE SUGGESTED FOR CLASSROOM USE. LARGE PARTITIONS SHOULD BE ELECTRONICALLY OPERATED, INTEGRATED WITH THE SCHOOL SYSTEM, AND SUPPORTED FROM THE BOTTOM IN A RECESSED MANNER.	X	X			
PAPER TOWEL DISPENSER			1 PAPER TOWEL DISPENSER PER SINK			X	X	
SOAP DISPENSER			1 SOAP DISPENSER PER SINK			X	X	
COMMERCIAL WASHER	GE	GTWI750CPLDG	STAINLESS STEEL; ASTM A898, TYPE 304 WITH NUMBER 4 FINISH; ELECTRIC; 480 VOLTS, 40 LB CAPACITY, MINIMUM EXTRACTOR FORCE 140 G FACTOR.	X	X			
COMMERCIAL DRYER	GE	GTD75ECPLDG	HEAVY DUTY EMBOSSED STEEL WITH ELECTROSTATICALLY APPLIED BACKED ENAMEL FINISH.	X	X			
MOP RACK			BROOM AND MOP HANGGERS FOR A MINIMUM OF TWELVE (12) HANGERS TO BE PROVIDED IN THE CONTRACT	X	X			
KITCHEN MENU SYSTEM DEVICE			RE: J-QF1.0 SF EQUIPMENT PLAN	X	X			REFERED TO IT DRAWINGS
LOCKERS			12"W X 15"D, 2 TIER, 60" HIGH. 16 GA. DOOR WITH 20GA. BODY	X	X			
MIRROR			TOP EDGE 74 INCHES (1880 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND & BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES (1015 MM) MAXIMUM	X	X			
GRAB BARS			AS REQUIRED BY ADA	X	X			
HOOKS			J-HOOKS	X	X			
TIME CLOCK	KRONOS		EXISTING UNIT		X			COORDINATE HEIGHT, DATA, POWER AND ROUGH-IN REQUIREMENTS WITH FIISD IT. REMOVE, PROTECT & REINSTALL EXISTITING TIME CLOCK.
KITCHEN OFFICE FURNITURE								
AUSTIN PARKWAY ES						X	X	
PECAN GROVE ES						X	X	
SETTLERS WAY ES						X	X	
SUGAR MILL ES						X	X	
HIGHLANDS ES						X	X	
PALMER ES						X	X	
HUNTERS GLEN ES						X	X	

2 CODE ANALYSIS



1 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

ISSUE:

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FORT BEND INDEPENDENT SCHOOL DISTRICT

SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 77479

SEAL

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STATE OF TEXAS

7/15/2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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OVERALL FLOOR PLAN

s-A.201

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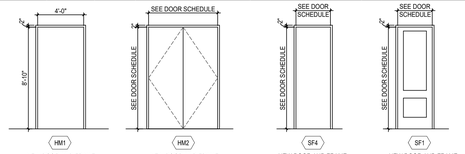
DOOR SCHEDULE

DOOR #	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FIRE RATING	FRAME THICKNESS	FRAME FINISH	KEY	HARDWARE	DETAILS			REMARKS
											SILL	JAMB	HEAD	
A005	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		103		22/A00-01	16/A00-01	
A006	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501		22/A00-01	16/A00-01	
A007	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		341		22/A00-01	16/A00-01	
A008	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501C		22/A00-01	16/A00-01	
A012	4'-0"	X 7'-0"	HM1	H.M.	PAINT	NR	6"	PAINT HM		715V	21/A00-01	04/A00-01	04/A00-01	
109A	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501H		22/A00-01	16/A00-01	
109B	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ANOD AL	NR	4 1/2"	ANOD AL		C201AH	18/A00-01	10&11/A00-01	23&24/A00-01	CARD READER, CLOSER, BUZZER
109C	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ANOD AL	NR	4 1/2"	ANOD AL		C201AH	18/A00-01	10&11/A00-01	23&24/A00-01	CARD READER, CLOSER, BUZZER
109D	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501H		22/A00-01	16/A00-01	



NEW DOOR AND FRAME HOLLOW METAL DOOR NEW H.M. FRAME

NEW DOOR AND FRAME HOLLOW METAL DOOR NEW H.M. FRAME

NEW DOOR AND FRAME S. C. WOOD DOOR ALUM. FRAME

NEW DOOR AND FRAME ALUM/GLASS ALUM. FRAME

2 DOOR SCHEDULE

FLOOR PLAN - GENERAL NOTES

1. REFER TO SHEET FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SCHOOL KITCHENS.
2. REFER TO SHEET FOR PARTITION TYPES.
3. EXIXSTING EXPOSED CONDUITS AND DATA CABLING IN WIREMOLD TO BE ROUTED INSIDE WALLS (EXCEPT AT WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS), PATCH AND REPAIR AS REQUIRED TO ACHIEVE SMOOTH CLEAN WALL SURFACE.

PARTITION LEGEND

- EXISTING CMU PARTITION
- NEW CMU SCHEDULED PARTITION
- EXISTING METAL PARTITION
- NEW FRAMED SCHEDULED PARTITION

3 FLOOR PLAN NOTES

FLOOR PLAN - KEYED NOTES

(NOT ALL NOTES USED ON EACH SHEET)

01 PROVIDE NEW MOP SINK UTILITY SHELF
RE: PLUMBING FOR MOP SINK
RE: SPEC 10 28 00 FOR UTILITY SHELF

02 REMOVE, STORE & REPLACE WALL MOUNTED FIRE EXTINGUISHER

03 PROVIDE NEW WALL MOUNTED FIRE EXTINGUISHER
RE: SPEC SECTIONS 10 44 13

04 PROVIDE NEW LOCKERS
RE: SPEC 10 51 13.

05 PROVIDE WASHER AND DRYER
RE: SPEC 11 45 20

06 REMOVE, PROTECT & REINSTALL WALL MOUNTED CLOCK.

07 PROVIDE CONDENSING UNIT
FOR WALK-IN COOLER/FREEZER
RE: MECHANICAL AND SPEC 11 40 00

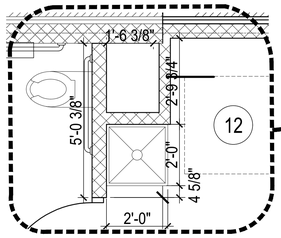
08 PROVIDE POWER AND DATA FOR MENU BOARD.
RE: ELECTRICAL, TECHNOLOGY DRAWINGS & FOOD SERVICE.

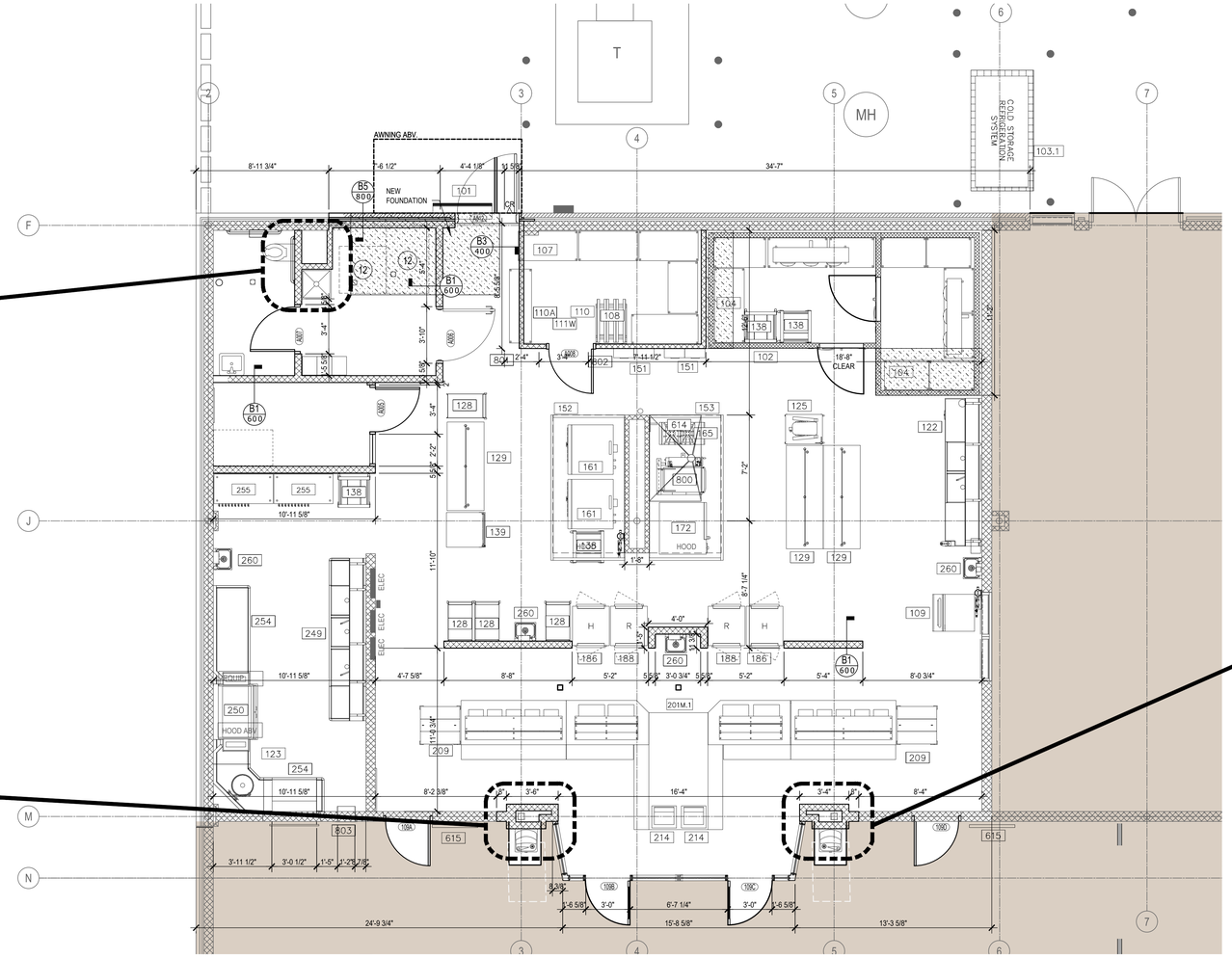
09 PROVIDE P-LAM SHELVING
REFER TO DETAIL FOR BRACKET SUPPORT

10 FURNITURE & NON FOOD SVE EQUIPMENT RETURN TO OWNER FO STORAGE

11 INSPECT & SREVICE TOLLING COUNTER DOORS. RETURN TO LIKE NEW CONDITION.

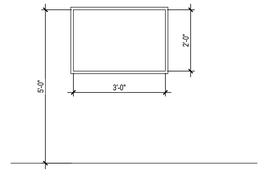
12 COMMERCIAL CLOSED WASHER 40LB CAPACITY .
COMMERCIAL CLOSED DRYER 55LB CAPACITY.
BASIS OF DESIGN: WASHER; SPEED QUEEN SYN040
DRYER; SPEED QUEEN ST055.
REFER TO ELECTRICAL & PLUMBING FOR CONNECTIONS.





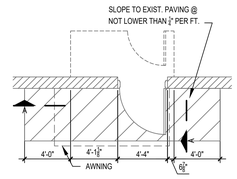
1 KITCHEN PLAN

SCALE: 1/16" = 1'-0"



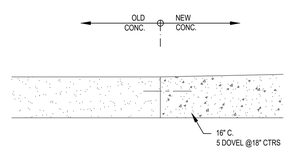
4 MAKERBOARD ELEVATION

SCALE: 1/2"=1'-0"



5 RAMP @ REAR DOOR

SCALE: 3/16"=1'-0"



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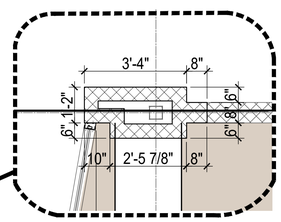
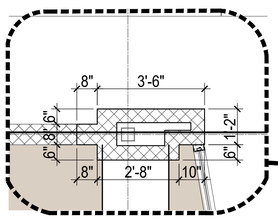
SCALE: 1/2"=1'-0"





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SEAL

REGISTERED ARCHITECT
ROY T. MOORE
43651
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7/15/2025

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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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KITCHEN PLAN

s-A.301

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TEMPORARY KITCHEN FLOOR PLAN KEYED NOTES 05/A-A03-02

01 PROVIDE & INSTALL 555 SF OF RAM BOARD TO PROTECT EXISTING FLOORING. REMOVE AFTER CONSTRUCTION IS COMPLETE. CONTRACTOR MUST REPAIR FLOORING DAMAGED DURING CONSTRUCTION.

02 PROVIDE SCHEDULED PARTITIONS. BUILD PARTITIONS ON TOP OF RAM BOARD. DO NOT ATTACH PARTITIONS TO FLOOR.

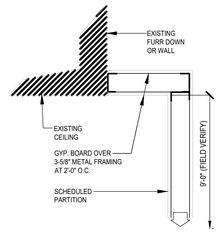
03 ATTACH PARTITIONS TO EXISTING WALL. REPAIR WALL TO MATCH EXISTING AFTER CONSTRUCTION IS COMPLETE.

TEMPORARY KITCHEN RCP KEYED NOTES 03/A-A03-02

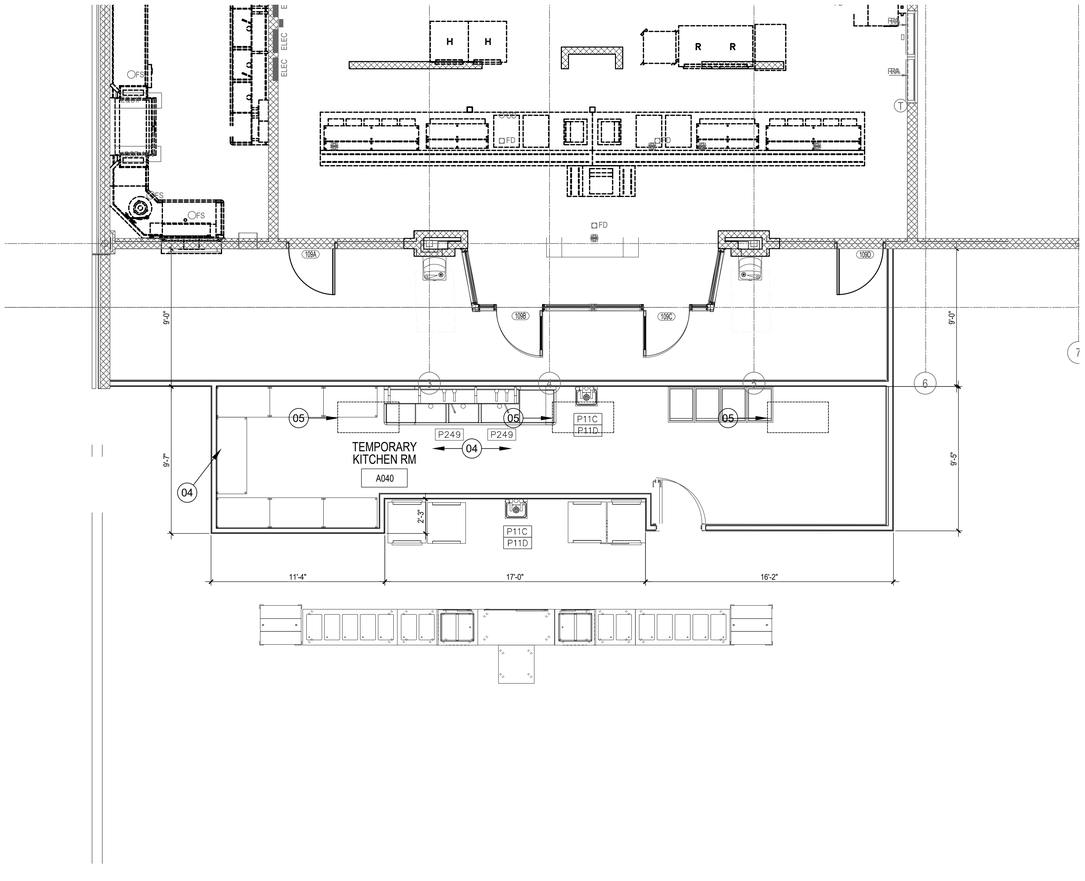
04 ALL NEW SCHEDULED PARTITIONS AND CEILINGS FOR TEMPORARY STORAGE LAYOUT TO BE EPOXY PAINTED SW 7014 EIDER WHITE WITH SPECIFIED 4" RUBBER BASE. REMOVE WHEN CONSTRUCTION IS COMPLETED.

05 MOUNT TEMPORARY FLUORESCENT LIGHTS TO TEMPORARY CEILING.

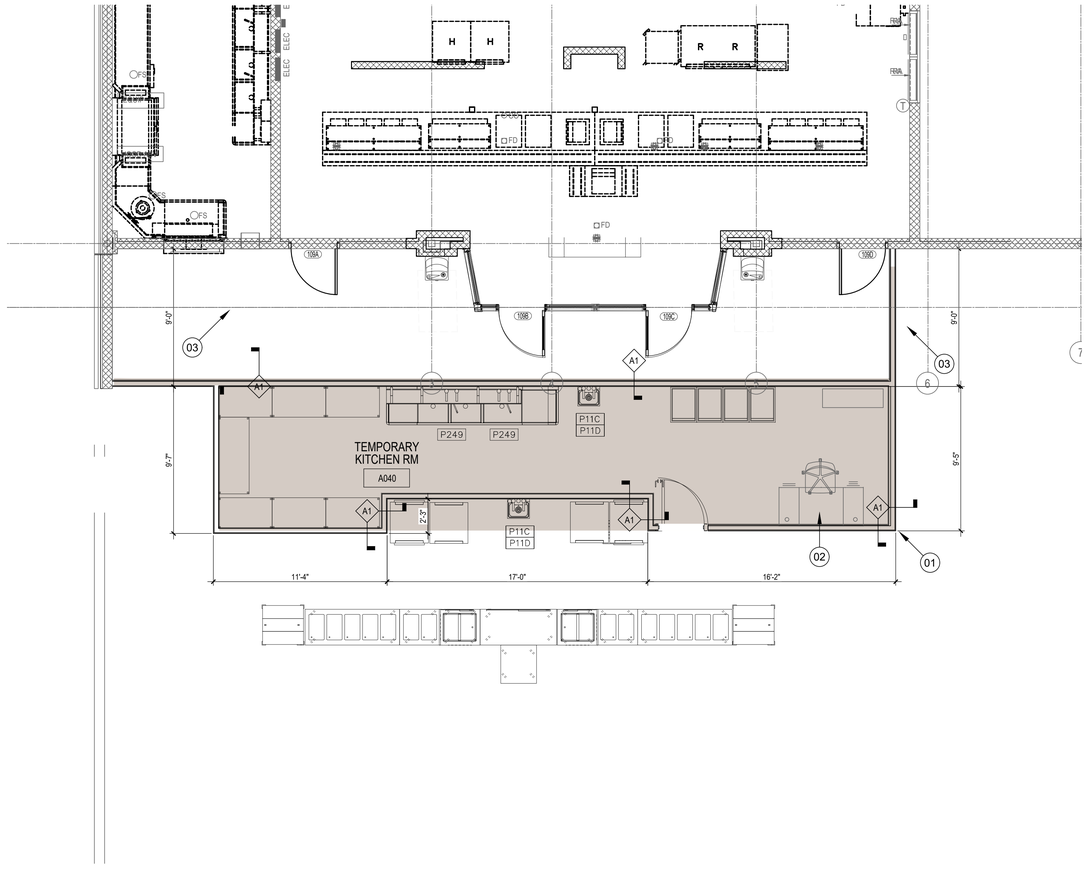
3 KEYED NOTES



4 TEMPORARY LAYOUT SECTION
SCALE: 1"=1'-0"



1 KITCHEN PLAN
SCALE: 1/4" = 1'-0"



2 TEMPORARY KITCHEN FLOOR PLAN
SCALE: 1/4" = 1'-0"

ISSUE:
12/05/2024 DD PACKAGE
03/11/2025 50% CD PKG.
05/23/2025 90% CD PKG.
07/18/2025 ISSUED FOR BIDDING AND PERMITTING

S

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

TEMPORARY KITCHEN LAYOUT
s-A.302

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RCP - GENERAL NOTES

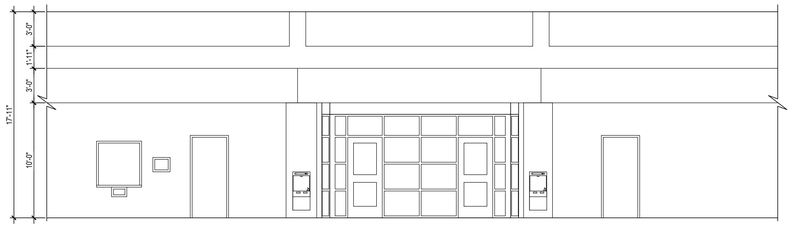
1. CEILING GRID SHALL BE INSTALLED TO MATCH EXISTING GRID'S POINT OF ORIGIN. THIS WILL REDUCE NEED TO RE-LOCATE ABOVE CEILING DUCTS, SPRINKLER PIPING AND OTHER SUPPORT SYSTEMS.
2. REFER TO SHEET A00-01 FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SEVEN SCHOOL KITCHEN REMODELS.
3. LIGHTING LEVELS SHOULD BE 50 FC IN PREPARATION AREAS, WARE WASH AND SERVING LINES, OR MEET MINIMUM HEALTH CODE LEVELS, WHICHEVER ITS GREATER. SEE MEP PLANS
4. REPLACE HVAC DEVICES. REPLACE LIGHTING WITH 24"x24" LED LAY IN LIGHT AS SCHEDULED IN ELECTRICAL PLANS.
5. REFER TO MECHANICAL, ELECTRICAL SHEETS FOR DEVICE SCHEDULES.

RCP - NUMBERED NOTES

01 PROVIDE 30"x30" MIN. ACCESS HATCH IN SOFFIT CENTERED ON MOTOR.

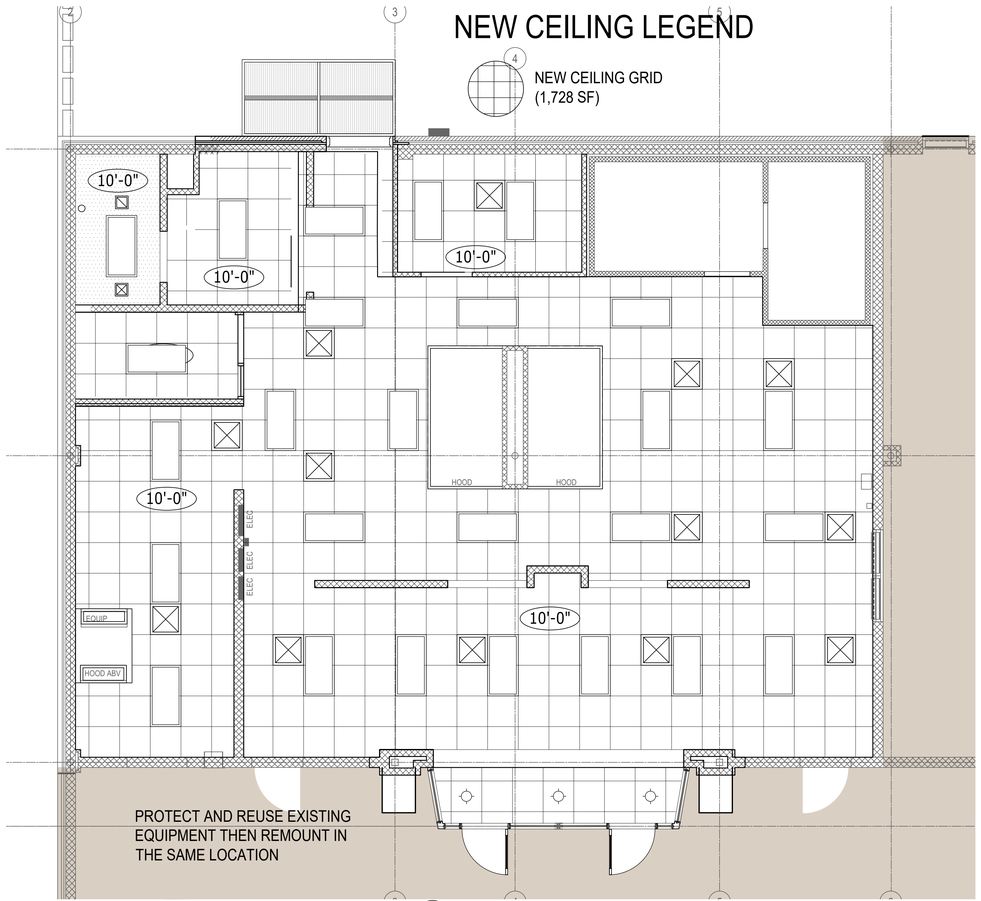
02 AFTER LOWERING THE NEW POWER RETRACTION SYSTEM. REPAIR AND PAINT SOFFITS AND SIDWALLS OF FURR TO MATCH EXISTING.

2 RCP GENERAL NOTES



3 FOOD SERVICE AREA ELEVATION

SCALE: 3/16" = 1'-0"



1 REFLECTED CEILING PLAN

SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT
ANIL K. KHANDHADIA
22651
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PROJ. NO.: 23-25
DATE: 07/18/25
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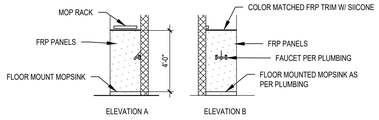
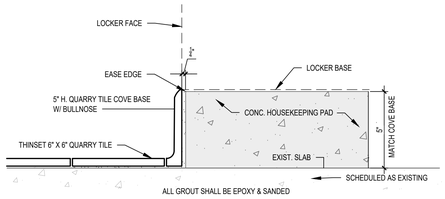
REFLECTED CEILING PLAN

s-A.401

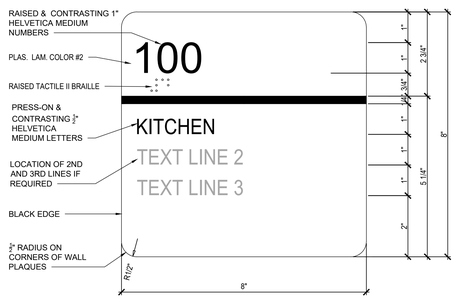
F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\S-Settlers Way ES\s-A.401 REFLECTED CEILING PLAN.dwg Jul 23, 2025 - 4:48pm

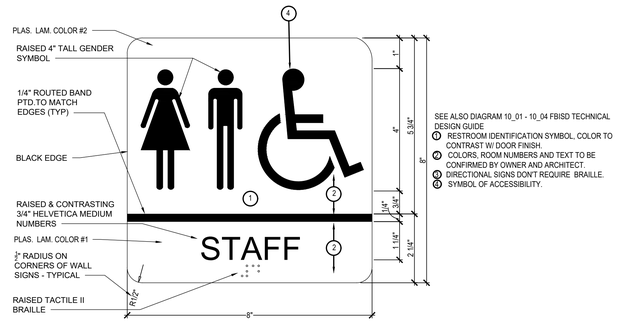


3 MOPSINK ELEVATIONS
SCALE: 1/4"=1'-0"



12 4
SCALE: 3"=1'-0"





TYPE B
KITCHEN RESTROOM SIGNAGE

7 ROOM SIGNAGE
SCALE: 6"=1'-0"

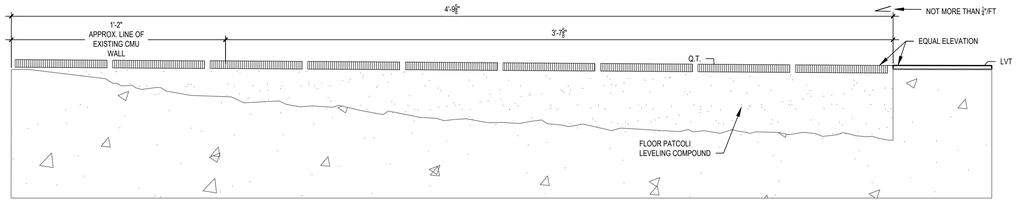
PAINT COLOR SCHEDULE
UNLESS OTHERWISE INDICATED FIELD COLOR IS PT-1 (SW 7014 EIDER WHITE)

SW 7014 EIDER WHITE (EPOXY PAINT)

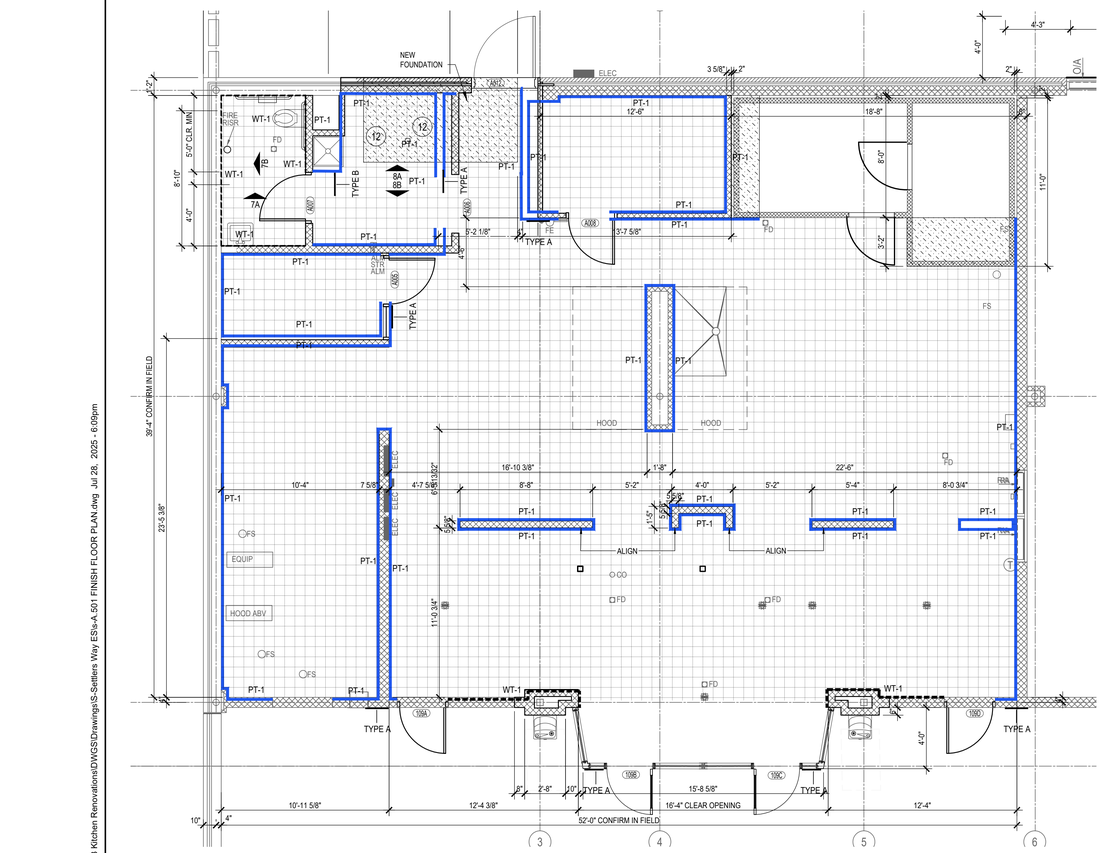
WALL TILE
CERAMIC WALL TILE (WT-1)
REFER TO TILE PATTERN AT SERVING AND RESTROOM
FIELD WALL TILE: DALTILE RITTENHOUSE SQUARE K175 BISCUIT (3X6)

A — PROVIDE ROOM SIGN TO REPLACE EXISTING. SEE LAYOUT FOR TYPE A OR TYPE B SIGN LOCATIONS.

2 FLOOR FINISH LEGEND

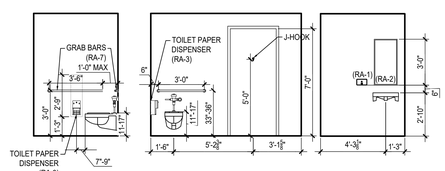


5 FLOOR TRANSITION THRESHOLD
SCALE: 3"=1'-0"

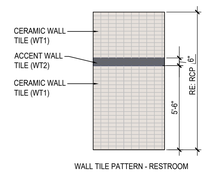


1 FINISH FLOOR PLAN
SCALE: 1/4" = 1'-0"

ALL FINISHED NOT DENOTED IN DRAWINGS SHALL BE SELECTED DURING THE SUBMITTAL PROCESS

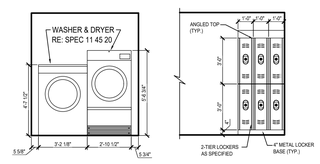


8 RR ELEVATIONS
SCALE: 1/4"=1'-0"

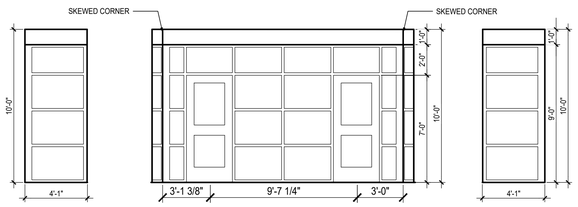


WALL TILE PATTERN - RESTROOM

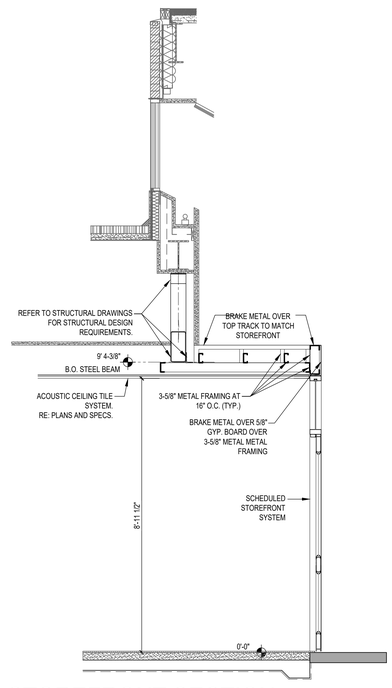
6 WALL TILE PATTERN
SCALE: 1/4"=1'-0"



9 UTILITY ELEVATIONS
SCALE: 1/4"=1'-0"



10 STOREFRONT ELEVATIONS
SCALE: 1/4"=1'-0"



11 STOREFRONT SECTION
SCALE: 1/2"=1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT
MICHAEL WILLIAM ANDERSON
42651
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7/15/2025

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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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FINISH FLOOR PLAN

s-A.501

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1. AT WALLS THAT TERMINATE ABOVE CEILING, CONTRACTOR MAY CONTINUE METAL STUD FRAMED WALLS TO UNDERSIDE OF METAL DECK AND OMIT DIAGONAL BRACING IF HEIGHT DOES NOT EXCEED LIMITING HEIGHT OF METAL STUD AS INDICATED ON CHART BELOW.

2. PROVIDE INTERMEDIATE BRACING AT ALL PARTITIONS THAT EXCEED LIMITING HEIGHT OF METAL STUDS AS INDICATED ON CHART BELOW.

3. ALL BRACING SHALL BE AT STUD POINTS.

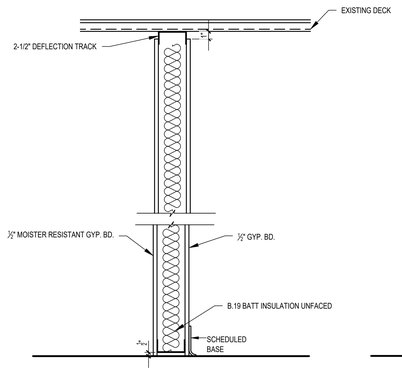
CMU PARTITION NOTES:

1. MATCH EXISTING CMU COURSING (TYP.):
   BRIARGATE ES (4" CMU STARTER COURSE)
   LAKE OLYMPIA MS (4" CMU STARTER COURSE)
   MISSION BEND ES (8" CMU STARTER COURSE)
   RIDGEMONT ES (8" CMU STARTER COURSE)
   TOWNEWEST ES (8" CMU STARTER COURSE)
2. PROVIDE CMU LINTELS FOR ALL OPENINGS IN INTERIOR CMU PARTITIONS. COORDINATE WITH STRUCTURAL.
3. PROVIDE A 3/4" SPACE BETWEEN TOP OF CMU AND STRUCTURE/DECK FOR POTENTIAL DEFLECTION. SEAL WITH APPROPRIATE CAULK.
4. REFER TO FINISH SCHEDULES FOR CERAMIC TILE LOCATIONS.

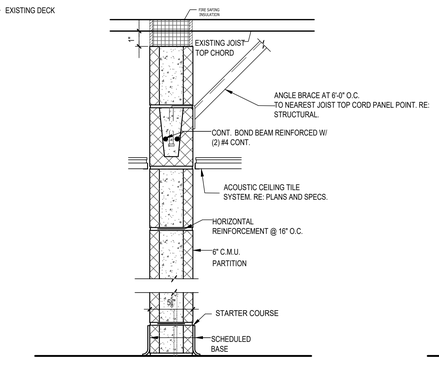
GYPSUM WALLBOARD PARTITION NOTES:

1. ALL METAL STUDS PARTITIONS ARE 25 GAUGE METAL STUDS AT 16" O.C. UNLESS OTHERWISE NOTED. IF THE LIMITING HEIGHT FOR A PARTITION TYPE IS EXCEEDED, INCREASE SIZE AND/OR GAUGE OF METAL STUDS AS INDICATED ON "LIMITING HEIGHT OF METAL STUDS" TABLE. NOTIFY THE ARCHITECT PRIOR TO INSTALLATION.

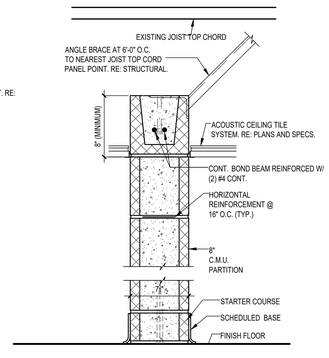
LIMITING HEIGHT OF METAL STUDS			
STUD SIZE	SPACING	25 GA.	20 GA.
2-1/2"	16"	11'-3"	12'-10"
3-5/8"	16"	14'-4"	16'-5"
6"	16"	19'-9"	24'-6"



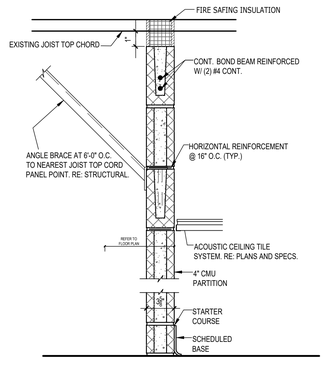
PARTITION A
SCALE: 1-1/2" = 1'-0"



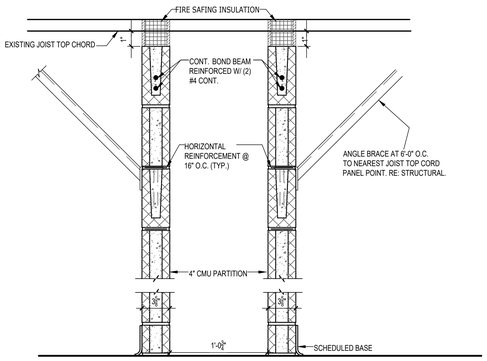
PARTITION B1
SCALE: 1-1/2" = 1'-0"



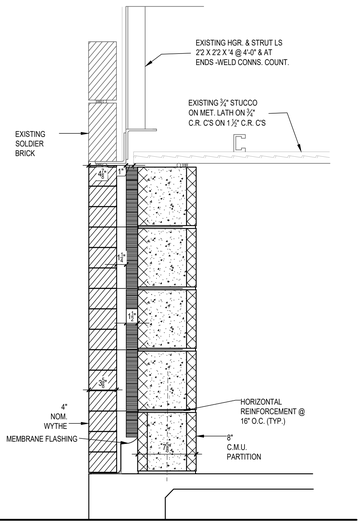
PARTITION B2
SCALE: 1-1/2" = 1'-0"



PARTITION B3
SCALE: 1-1/2" = 1'-0"



PARTITION B4
SCALE: 1-1/2" = 1'-0"



PARTITION B5
SCALE: 1-1/2" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 77479

SEAL

REGISTERED ARCHITECT
KEITH A. MAGNUSON
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STATE OF TEXAS

7/15/2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

PARTITION SCHEDULE

s-A.502

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GENERAL NOTES

1. ALL CONCRETE SHALL TEST 4000 PSI AT 28 DAYS.
2. ALL CONCRETE REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60.
3. DETAILING AND FABRICATION OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL BE IN ACCORDANCE WITH ACI-315 LATEST EDITION.
4. LAP ALL CONTINUOUS REINFORCING BARS 50 DIAMETERS AT SPLICES, TEES, AND CORNERS.
5. THE USE OF HEAT TO FACILITATE THE BENDING OF REINFORCING BARS WILL NOT BE PERMITTED.
6. NO ENGINEERING DRAWING MAY BE REPRODUCED FOR USE AS SHOP DRAWINGS.
7. CONTRACTOR SHALL COORDINATE ALL LOCATIONS OF ALL ANCHOR BOLTS AND OPENINGS FOR MECHANICAL, PIPING, AND ELECTRICAL EQUIPMENT WITH THE RESPECTIVE ENGINEERING AND VENDOR DRAWINGS.

SLAB NOTE

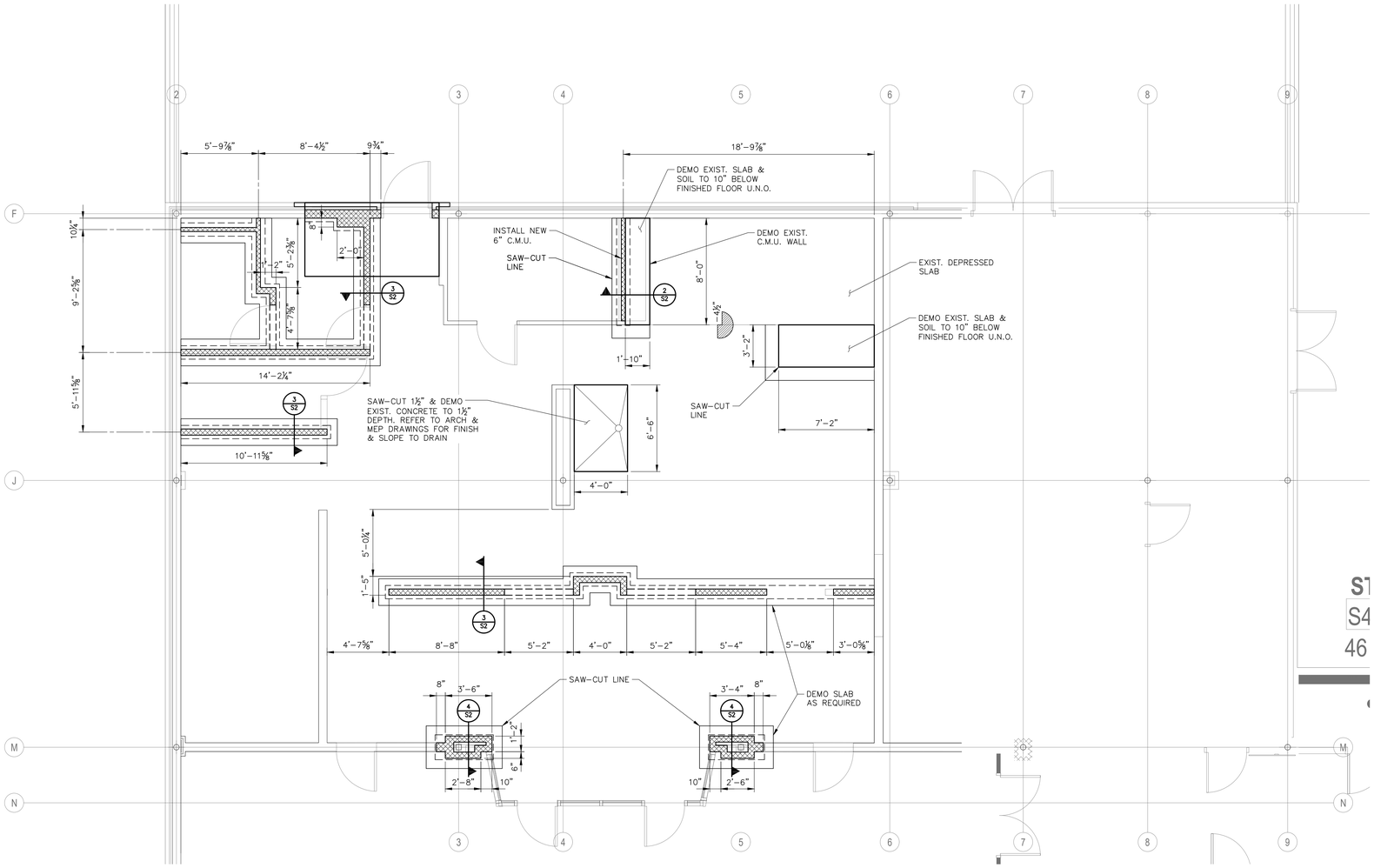
4" CONC. SLAB ON 10 MIL POLY FILM ON 2" MAX. SAND FILL. REINFORCE WITH #3 @ 15"c.c. E.W. IN CENTER OF SLAB.

SLAB SIDEWALK SLAB NOTE

4" CONC. SLAB ON 2" MAX. SAND FILL. REINF. W/ #3 @ 18"c.c. IN CENTER OF SLAB.

GEOTECHNICAL NOTE:

ALLOWABLE BEARING CAPACITY IS ASSUMED TO BE 1500 PSF AND SHALL BE CONFIRMED PRIOR TO CONSTRUCTION.



FOUNDATION PLAN

SCALE: 1/4"=1'-0"

FIELD VERIFICATION NOTE

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR CONSTRUCTION.
2. CONTRACTOR SHALL VERIFY AND NOTIFY ENGINEER OF EXISTING CONDITIONS IN NEED OF REVIEW AND POSSIBLE MODIFICATION PRIOR TO FABRICATION.

ISSUE:

03/07/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
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July 17, 2025

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50 Years
Consulting Engineering Services
T.B.P.E. Registration # F-000175
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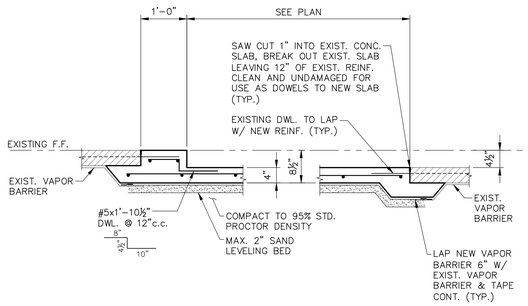
E-MAIL: info@sshinc.net | 0002-0256

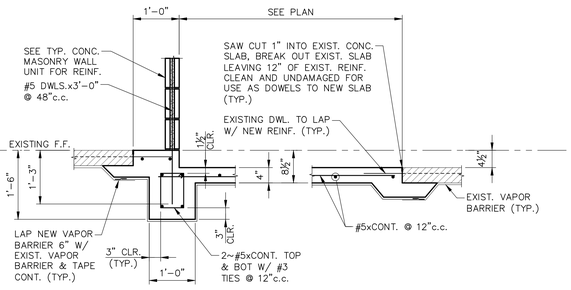
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

KITCHEN PLAN

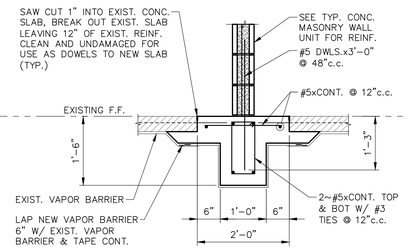
S1



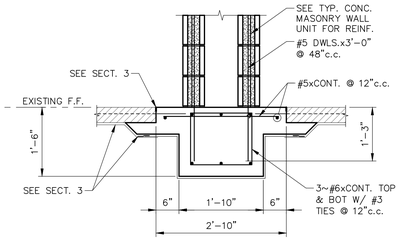
1 SECTION
SCALE: 3/4"=1'-0"



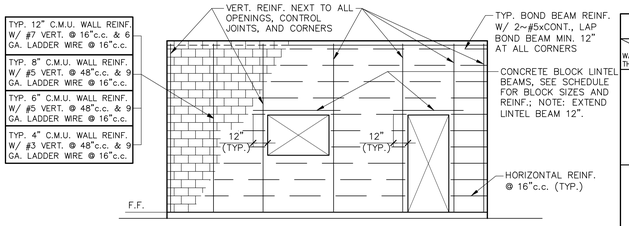
2 SECTION
SCALE: 3/4"=1'-0"



3 SECTION
SCALE: 3/4"=1'-0"



4 SECTION
SCALE: 3/4"=1'-0"



MIN. REBAR LAP SCHEDULE FOR f'm = 1,500 psi

BAR SIZE	6" CMU	8" CMU	10" CMU	12" CMU
#3	12"	12"	12"	12"
#4	20"	15"	12"	12"
#5	32"	23"	18"	15"
#6	54"	43"	34"	28"
#7	NA	60"	46"	38"
#8	NA	72"	71"	57"
#9	NA	NA	82"	74"

CONCRETE MASONRY NOTES

1. CONCRETE MASONRY UNITS AND CONSTRUCTION TO BE PER "NATIONAL CONCRETE MASONRY ASSOCIATION" RECOMMENDATIONS (WHERE NOT COVERED BY THE LOCAL BUILDING CODE).
2. ALL MASONRY GROUT TO BE PER TABLE 1 (THIS SHEET); ALL MORTAR PER TABLE 2 (THIS SHEET).
3. FILL CELLS WITH GROUT AT VERTICAL REINFORCEMENT.
4. CAST-IN-ANCHORS EMBEDDED IN CONCRETE MASONRY SHALL EXTEND BEYOND REINFORCING 1" MIN.
5. COMPRESSIVE STRENGTH OF MASONRY SHALL BE 1500 PSI AT 28 DAYS.
6. CMU SHALL BE PLACED IN A RUNNING BOND PATTERN UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS.
7. CONTROL JOINTS SHALL HAVE NO HORIZONTAL REINFORCING THROUGH THE JOINT AND VERTICAL REINFORCING ON BOTH SIDES OF JOINT. CONTROL JOINTS SHALL BE UNGROUTED WITH A BACKER ROD AND SEALANT ON BOTH SIDES OF WALL.
8. BOND BEAMS AND REINFORCING SHALL BE CONTINUOUS AT CONTROL JOINT WITH BACKER ROD AND SEALANT CONTINUOUS WITH JOINT.

CONCRETE BLOCK LINTEL SCHEDULE

WALL THICKNESS \ MAXIMUM SPAN	4'-6"	9'-0"
4"	GROUT 1 COURSE 1~#4 CONT.	#3 STIRRUPS @ 16" c.c. GROUT 2 COURSES 1~#4 CONT.
6" & 8" & 12"	GROUT 1 COURSE 2~#5 CONT.	#3 STIRRUPS @ 16" c.c. GROUT 2 COURSES 2~#5 CONT. TOP & BOT.

TABLE 1. GROUT PROPORTIONS BY VOLUME

TYPE	PARTS BY VOLUME OF PORTLAND CEMENT OR PORTLAND BLAST-FURNACE SLAG CEMENT	PARTS BY VOLUME OF HYDRATED LIME OR LIME PUTTY	AGGREGATE MEASURED IN DAMP, LOOSE CONDITION	
			FINE	COARSE
FINE GROUT (<4" WIDE CAVITY)	1	0 TO 1/10	2¼ TO 3 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL	
COARSE GROUT (>4" WIDE CAVITY)	1	0 TO 1/10	2¼ TO 3 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL	1 TO 2 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL

TABLE 2. MORTAR PROPORTIONS BY VOLUME

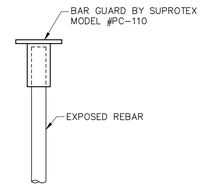
MATERIAL	TYPE	PORTLAND CEMENT OR BLENDED CEMENT	MASONRY CEMENT	HYDRATED LIME OR LIME PUTTY	AGGREGATE RATIO (MEASURE IN DAMP, LOOSE CONDITION)
CEMENT LIME	S	1	....	OVER ¼ TO ½	NOT LESS THAN 2¼ & NOT MORE THAN 3 TIMES THE SUM OF THE SEPARATE VOLUMES OF CEMENTITIOUS MATERIALS
MASONRY/ CEMENT	S	1/2	1	....	

NOTE: CONTROL JOINTS SHALL BE LOCATED AT THE FOLLOWING

1. AT ALL CHANGES IN WALL HEIGHT.
2. AT ALL CHANGES IN WALL THICKNESS SUCH AS CHASES, COLUMNS OR PILASTERS.
3. AT (ABOVE) MOVEMENT JOINTS IN FOUNDATIONS AND FLOORS.
4. AT (BELOW) MOVEMENT JOINTS IN ROOFS AND FLOORS THAT BEAR ON A WALL.
5. ADJACENT TO CORNERS OF WALLS OR INTERSECTIONS WITHIN A DISTANCE OF ONE-HALF THE NORMAL CONTROL JOINT SPACING.
6. CONTROL JOINTS SHALL BE SPACED NO MORE THAN 25'-0" APART.
7. DO NOT PLACE CONTROL JOINT ABOVE OR BELOW OPENINGS.
8. CONTRACTOR SHALL PROVIDE A CONTROL JOINT PLAN PRIOR TO FABRICATION OR CONSTRUCTION.

LOOSE LINTEL SCHEDULE

SPAN	LINTEL	SPAN	LINTEL
0' TO 6'	L3½x3½x¼	8' TO 9'	L5x3½x5/16
6' TO 7'	L4x3½"x¼	9' TO 10'	L6x3½x5/16
7' TO 8'	L4x3½x5/16	10' TO 12'	L7x4x⅜
LOOSE LINTEL MIN. BEARING OF 8".			



CONTRACTOR SHALL COVER ALL EXPOSED REBAR DURING CONSTRUCTION.

TYPICAL ELEVATION OF CONCRETE MASONRY WALL AND NOTES

SCALE: N.T.S.

TYPICAL REBAR CAP DETAIL

SCALE: N.T.S.

ISSUE:

03/07/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 77479

ARCHITECTS
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KEN STANLEY
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LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
July 17, 2025

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PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

SECTIONS AND TYPICAL DETAILS

S2

REFER TO FOODSERVICE DESIGN PROFESSIONALS SPECIFICATIONS AND SUBSEQUENT SHEETS FOR ADDITIONAL COORDINATION INFORMATION

EXISTING EQUIPMENT NOTES (IF EXISTING EQUIPMENT IS PROVIDED IN THIS PROJECT):

1. EXISTING EQUIPMENT NOT SCHEDULED FOR RE-USE TO BE RELOCATED BY THE K.E.C. COORDINATE WITH OWNER FOR NEW LOCATION.
2. ALL UTILITIES NOT SCHEDULED FOR RE-USE TO BE CAPPED & COVERED BY REQUIRED DISCIPLINE.
3. K.E.C. TO VERIFY ALL EXISTING UTILITY LOCATIONS & COORDINATE WITH ALL EQUIPMENT AS REQUIRED.

8 EXISTING EQUIPMENT NOTES
NOT TO SCALE

ARCHITECT TO VERIFY/COORDINATE THE AESTHETIC OPTIONS BELOW (FOOD SERVICE COLOR, MATERIAL, OR SIGNAGE SELECTIONS) IF THESE ITEMS ARE PROVIDED IN THIS PROJECT:

1. COUNTERTOPS: STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
2. TRAY SLIDES: CORIAN OR STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
3. COUNTER FRONTS: CERAMIC TILE, 3 FORM, OR PLASTIC LAMINATE.
4. SNEEZE GUARDS: STONE INSETS.
5. GENERAL COLOR, MATERIAL AND GRAPHIC SELECTIONS:
   - A. DISPLAY AIR SCREEN MERCHANDISERS - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - B. BAKERY DISPLAY CASES - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - C. PASS THRU OR REACH IN HOLDING CABINETS - COLOR SELECTION: POWDER COAT (MFG.: TRUE) OR PLASTIC LAMINATE (MFG.: TRAULSEN) (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - D. HANGING HEAT LAMPS - TRACK AND FIXTURE COLOR SELECTION.
   - E. HEATED MERCHANDISERS.
   - F. PORTABLE GUIDE RAILS - STANCHION AND BELT COLOR SELECTION.
   - G. POPCORN MACHINE - SIGNAGE SELECTION.
   - H. BOTTLE COOLER - SIGNAGE SELECTION.
   - I. GRAPHICS PACKAGE INFORMATION.
   - J. HOT FOOD WELL COVERS.
6. ARCHITECT TO VERIFY/COORDINATE THE FINISHES BELOW:
   - A. WALLS: CERAMIC TILE, FLAT FRP, OR MOLDED FRP (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - B. CEILINGS: REMOVABLE VINYL FACE TILE (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - C. FLOORS: TILE, EPOXY, OR RUBBERIZED FLOORING SYSTEM (SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT AS APPROVED BY LOCAL JURISDICTION) (COORDINATE FLOOR TILE TRANSITION AT SERVING LINES).
   - D. FLOORS: WALK-IN ASSEMBLY - EXTEND KITCHEN FLOOR FLUSH INTO WALK-IN ASSEMBLY WITH COVED BASE.
   - E. FURR DOWNS ABOVE SERVING COUNTERS.

5 ARCHITECTURAL COORDINATION NOTES
NOT TO SCALE

CRITICAL NOTES:

1. CONTRACTOR MUST COORDINATE AND VERIFY ALL DIMENSIONS WITH FOOD SERVICE EQUIPMENT SHOP DRAWINGS AND MANUFACTURER'S DATA. DIMENSIONS SHOWN ARE FOR DESIGN AND BIDDING PURPOSES ONLY.
2. WALK-IN ASSEMBLY DOORS MUST BE LEFT OPEN WHILE INTERIOR CONCRETE FLOOR CURES.
3. INSTALL PROTECTIVE COVER ON WALK-IN ASSEMBLY WALL PANELS BEFORE INSTALLING CONCRETE FLOORS AND CURBS.
4. REFER TO GENERAL SPECS - DIVISION 27 TO PROVIDE CONDUIT, DATA, AND INTERCONNECT THE PANIC ALARM INSIDE FREEZER TO THE BUILDING AUTOMATION SYSTEM FOR NOTIFICATION TO DISTRICT PERSONNEL IN THE EVENT OF STAFF ENTRAPMENT.
5. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL (DIV. 22).

7 CRITICAL NOTES
NOT TO SCALE

DIVISION 26 (ELECTRICAL) IS RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL ELECTRICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. ROUGH-IN AND FINAL CONNECTION OF ELECTRICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 26.
6. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
7. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR INTERCONNECT CABLES BETWEEN LAN AND POS TERMINALS, CHANGE-MAKERS, PRE-CHECK UNITS, PRINTERS, CPUS, ETC. DIVISION 26 TO VERIFY WHERE THE CONDUIT IS TO RUN FOR POS SYSTEM (I.E., MANAGER'S OFFICE OR IDF ROOM).
8. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR FIRE SUPPRESSION SYSTEMS. INTERCONNECT FIRE PROTECTION SYSTEM TO PANEL BOX SHUNT TRIPS AND BUILDING ALARM.
9. WALK-IN LIGHT FIXTURE INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF WALK-IN IS PROVIDED IN THIS PROJECT).
10. TABLE LIMIT SWITCH INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF DISHMACHINE IS PROVIDED IN THIS PROJECT).
11. ELECTRICAL MATERIALS AND DEVICES (SHUNT-TRIP BREAKERS, SURGE PROTECTORS, LIGHTING CONTROL DEVICES, CONDUIT, WIRE, ETC.).
12. SWITCHES AND STAINLESS STEEL DISCONNECTS AS REQUIRED (PROVIDE, LOCATE, AND INSTALL – TO BE IN AN ACCESSIBLE LOCATION).
13. CHARGING STATIONS FOR FORKLIFTS, PALLET STACKERS, AND PALLET JACKS (SIZE, PROVIDE, LOCATE, AND INSTALL) (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
14. INTERCONNECTION BETWEEN CONDENSATE FAN AND DISHMACHINE CONTROL PANEL (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
15. INTERCONNECTION BETWEEN EXHAUST HOOD FANS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
16. INTERCONNECTION BETWEEN EXHAUST HOOD LIGHTS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
17. DOOR HEATERS, LIGHTS, COILS, AND PRESSURE RELIEF PORTS PRE-WIRED TO JUNCTION BOX AT TOP OF WALK-IN ASSEMBLIES (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) PROVIDED BY SECTION 11 40 00. FINAL CONNECTION BY DIV. 26.
18. IF ANY ELECTRICAL ACCESSORIES, FITTINGS, AND CORD/PLUGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV.26 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
19. PROVIDE WATERPROOF RECEPTACLES IN WET AREAS.
20. ALL ELECTRICAL CONNECTIONS BENEATH EXHAUST HOODS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) TO EXTEND TO SHUNT TRIP BREAKERS WITH ELECTRICAL PANEL BOX FOR SHUTDOWN DURING FIRE MODE.
21. RECEPTACLES ARE TO BE PRE-WIRED TO THE JUNCTION BOX OR LOAD CENTER FOR FINAL CONNECTION BY DIVISION 26.
22. ALL ELECTRICAL LIGHTING, POWER, AND DISTRIBUTION SYSTEMS.
23. DO NOT INTERCONNECT MORE THAN THREE (3) CONVENIENCE OUTLETS ON ONE (1) BREAKER.
24. OTHER THAN CONVENIENCE OUTLETS, ALL ELECTRICAL CONNECTIONS SHOWN ON FOOD SERVICE PLANS ARE DEDICATED BREAKERS.
25. DOORBELL AT RECEIVING DOOR (PROVIDE AND INSTALL – TO BE AUDIBLE THROUGHOUT KITCHEN, OFFICE, AND DRY STORAGE ROOM).
26. ADEQUATE LIGHTING AT RECEIVING DOOR.
27. PROVIDE AND INSTALL TWO EMERGENCY STROBE BEACONS THAT INTERCONNECT TO PANIC ALARM IN WALK-IN FREEZER. ONE (1) IN KITCHEN ABOVE WALK-IN FREEZER DOOR ONE (1) IN CAFETORIUM (IF WALK-IN IS PROVIDED IN THIS PROJECT). REFER TO GENERAL SPECIFICATIONS FOR ADDITIONAL DETAILS.
28. DEDICATED CIRCUIT FOR HEATED DRAIN LINE CONNECTION IN WALK-IN FREEZER AT EACH COIL (IF WALK-IN IS PROVIDED IN THIS PROJECT).

NOTE: ELECTRICAL CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 26. FOR ADDITIONAL REQUIREMENTS, REFER TO THE ELECTRICAL ENGINEER'S DRAWINGS.

6 ELECTRICAL COORDINATION NOTES
NOT TO SCALE

DIVISION 22 (PLUMBING) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL PLUMBING REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY PVC CONDUIT WITH WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO BEVERAGE LINES, CO2 LINES, AND REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL PLUMBING CONNECTIONS TO FOOD SERVICE EQUIPMENT AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 22. THIS INCLUDES BUT IS NOT LIMITED TO INSTALLATION OF ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), HOSES, GAS DISCONNECTS, AND DRAINS FROM EQUIPMENT POINT OF CONNECTION TO BUILDING PLUMBING SYSTEMS. ALL DRAIN LINES ARE PROVIDED AND INSTALLED BY DIV. 22.
7. KITCHEN EQUIPMENT CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), DRAIN FITTINGS, MIXING VALVES, CONTROL VALVES, WATER PRESSURE REGULATORS, VACUUM BREAKERS, AND ALL ACCESSORIES FOR EQUIPMENT SPECIFIED UNDER 11 40 00. DIVISION 22 IS RESPONSIBLE FOR INSTALLATION.
8. INDIRECT DRAIN LINE RUNS FROM EQUIPMENT TO NEAREST DRAIN OR FLOOR SINK. LINES TO BE TYPE 'K' COPPER.
9. IF ANY PLUMBING ACCESSORIES OR FITTINGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV. 22 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
10. GAS SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
11. WATER SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
12. COMPRESSED AIR SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM (IF REQUIRED FOR THIS PROJECT).
13. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL.
14. FLOOR SINKS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
15. FLOOR DRAINS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
16. TRENCH DRAINS (PROVIDE AND INSTALL). TRENCH LINERS PROVIDED BY 11 40 00. FLANGE AND LINERS TO BE FLUSH WITH FINISHED FLOOR.
17. GREASE TRAPS AS REQUIRED. VERIFY WITH LOCAL CODES TO BYPASS OR PIPE THRU GREASE TRAP AND/OR INTERCEPTOR.
18. P-TRAPS AS REQUIRED (INCLUDING ALL DISPOSERS).
19. INTERCONNECT WATER THRU WATER FILTER (FILTER PROVIDED BY 11 40 00 UNLESS OTHERWISE SPECIFIED) TO EQUIPMENT.
20. GAS QUICK DISCONNECT INSTALLATION (QUICK DISCONNECT PROVIDED BY 11 40 00).
21. SAFETY RESTRAINT CABLE INSTALLATION (SAFETY RESTRAINT CABLE PROVIDED BY 11 40 00).
22. SPECIFIED COUPLINGS AND PIPING TO ALL EQUIPMENT FURNISHED BY 11 40 00.
23. AIR COMPRESSORS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
24. WATER SOFTENERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
25. PRESSURE BOILERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
26. HAND SINKS (PROVIDE (UNLESS OTHERWISE SPECIFIED) AND INSTALL). PROVIDE HOT WATER TEMPERING VALVE IF REQUIRED. WATER TEMPERATURE TO BE AT LEAST 100 DEGREES AND FLOW FOR AT LEAST 20 SECONDS.
27. ICE BIN DRAIN INSULATION (IF ICE MACHINE IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
28. UNIONS AT DISPOSER SOLENOID VALVES (IF DISPOSER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
29. BACK FLOW PREVENTION AS REQUIRED (PROVIDE AND INSTALL - INCLUDING ALL DISPOSERS). BACK- SIPHONAGE SHALL BE INSTALLED AT ALL FIXTURES AND EQUIPMENT WHERE BACKFLOW AND/OR BACK-SIPHONAGE MAY OCCUR AND WHERE A MINIMUM AIR GAP CANNOT BE PROVIDED BETWEEN THE WATER TO THE FIXTURE OR EQUIPMENT AT ITS FLOOD/LEVEL RIM. VACUUM BREAKERS, WHEN FURNISHED WITH EQUIPMENT, SHALL OVERRIDE THE ABOVE, IF ACCEPTABLE WITH APPLICABLE CODES. DIVISION 22 RESPONSIBLE FOR VERIFYING REQUIREMENT WITH LOCAL CODES.
30. JANITOR SINK WITH FAUCET (PROVIDE AND INSTALL).
31. FREEZE PROOF HYDRANT AT EXTERIOR OF BUILDING BY RECEIVING DOOR (PROVIDE AND INSTALL).
32. REVERSE OSMOSIS SYSTEMS (SIZE, PROVIDE (UNLESS OTHERWISE SPECIFIED), LOCATE AND INSTALL).
33. ALL PIPING WITHIN COUNTER BODY OR UNDER FABRICATED COUNTERS TO BE RUN TO A CONNECTION POINT BELOW COUNTER BODY BY SECTION 11 40 00. FINAL CONNECTION BY DIVISION 22.
34. EXHAUST HOOD CONDENSATE DRAIN CONNECTIONS (IF EXHAUST HOOD IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
35. INTERCONNECTION OF 1/2" CW TO PRE-RINSE AND DISPOSERS CONE/BODY INLETS PIPED THROUGH SOLENOID AND VACUUM BREAKER (IF DISPOSER IS PROVIDED IN THIS PROJECT).
36. FIRE SYSTEM PIPING. EXPOSED PIPING TO BE CHROME PLATED.
37. PIPE 1/2" COLD WATER TO SWIRL INLETS AT DISPOSERS (IF DISPOSER IS PROVIDED IN THIS PROJECT).
38. WATER TREATMENT FOR ICE BUILDERS (NON-CHLORINATED WATER WITH A PH LEVEL OF 10 OR HIGHER) AND ANY DRAINS AND OVERFLOWS. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS BY DIV. 23 (IF ICE BUILDERS AND TUMBLE CHILLERS ARE PROVIDED IN THIS PROJECT).

NOTE: WATER AND DRAIN CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 22. FOR ADDITIONAL WATER AND DRAIN REQUIREMENTS REFER TO MECHANICAL DRAWINGS.

NOTE: REFER TO ELECTRICAL/MECHANICAL DRAWINGS FOR REQUIREMENTS OF EXHAUST FANS AND MAKE-UP AIR HANDLERS AND LOCATION OF AN INTERLOCK AND START/STOP CONTROLS TO BE LOCATED WITHIN FOOD SERVICE AREA BY DIVISION 26.

4 PLUMBING COORDINATION NOTES
NOT TO SCALE

DIVISION 23 (MECHANICAL) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL MECHANICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL CONNECTION OF MECHANICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR).
7. TESTING AND BALANCING FOR ROOMS AND EXHAUST HOODS TO BE PERFORMED BY MECHANICAL CONTRACTOR. BALANCE REPORT FOR FOOD SERVICE EXHAUST HOODS TO BE PROVIDED TO FOODSERVICE DESIGN PROFESSIONALS (FDP) IMMEDIATELY UPON COMPLETION (SEND TO HOUSTON.SUBMITTAL@FDP.ORG FOR HOUSTON OFFICE AND DALLAS.SUBMITTAL@FDP.ORG FOR DALLAS OFFICE) AND MUST BE SUBMITTED WITH O&M MANUALS.
8. EXHAUST HOODS, CONDENSATE HOODS, FIRE SUPPRESSION SYSTEMS, CONNECTIONS AND CONTROLS (PROVIDE AND INSTALL – *UNLESS OTHERWISE SPECIFIED*). PROVIDE TEMPERED AIR AT ALL SUPPLY DUCTS.
   - A. IF EXHAUST/CONDENSATE HOODS AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED UNDER SECTION 11 40 00, DIVISION 23 IS RESPONSIBLE FOR ALL EXHAUST AND CONDENSATE HOOD CONNECTIONS (PROVIDE AND INSTALL).
9. VFD SYSTEM AND CONTROLLERS, WHEN REQUIRED BY CODE (PROVIDE AND INSTALL).
10. PROVIDE AND INSTALL ALL VENTILATION (DIRECT OR INDIRECT), AIR CONDITIONING AND HEATING SYSTEMS (UNLESS OTHERWISE SPECIFIED).
11. COORDINATE SUPPLY AND RETURN DUCTS ABOVE SERVING COUNTERS OR OPEN-AIR REFRIGERATED MERCHANDISERS. NO COLD AIR TO BLOW DIRECTLY ON HOT FOOD COUNTERS.
12. COORDINATE SUPPLY AND RETURN DUCTS AWAY FROM EQUIPMENT WITH TOP MOUNTED REFRIGERATION. NO COLD AIR TO BLOW DIRECTLY ON COMPRESSORS.
13. MECHANICAL CONTRACTOR TO LOCATE TEMPERATURE MONITORS WITHIN RETURN DUCTS.
14. CIRCULATING AIR ABOVE WALK-IN ASSEMBLIES (PROVIDE AND INSTALL).
15. CIRCULATING AIR ABOVE AND IN AIR GAPS AT WAREHOUSE COLD STORAGE ASSEMBLIES (PROVIDE AND INSTALL).
16. WATER CHILLERS AS REQUIRED (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).
17. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).

3 MECHANICAL COORDINATION NOTES
NOT TO SCALE

GENERAL CONTRACTOR RESPONSIBLE FOR BUT NOT LIMITED TO:

1. ANY WALL PENETRATION REQUIRED FOR FOOD SERVICE EQUIPMENT UTILITIES. ESCUTCHEON PLATES OR S/S SLEEVES TO BE PROVIDED AND INSTALLED AS NEEDED.
2. BULK FREEZER VENTILATION PIPE (IF BULK FREEZER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
3. CORE DRILLING FOR GUIDE RAILS (IF GUIDE RAILS ARE PROVIDED IN THIS PROJECT).
4. REFRIGERATION ROOF CURBS / ROOF JACK (IF REFRIGERATION SYSTEM IS PROVIDED IN THIS PROJECT AND LOCATED ON ROOF).
5. INTERIOR BOLLARDS (IF REQUIRED FOR THIS PROJECT) – TO BE EPOXY PAINTED PER LOCAL CODES (PROVIDE AND INSTALL).
6. FURNISH AND INSTALL 3/4" PLYWOOD BLOCKING IN THE WALL FOR MOUNTING EQUIPMENT FURNISHED BY SECTION 11 40 00 AS REQUIRED.
7. WALK-IN DEPRESSIONS (TO BE DEAD LEVEL) AND SAND LEVELING BED (IF WALK-IN IS PROVIDED IN THIS PROJECT AND RECESS IS SHOWN).
8. STRUCTURAL BRACING FOR BULK WALK-IN CEILING PANELS IF REQUIRED.
9. MENU SYSTEM VIDEO MONITORS IN SERVERY (UNLESS OTHERWISE SPECIFIED).
10. STRUCTURAL BRACING FOR MENU SYSTEM VIDEO MONITORS IF REQUIRED.
11. INTERIOR/EXTERIOR REFRIGERATION PENETRATIONS AND SLEEVES AT BUILDING PENETRATIONS.
12. DOORSCOPE VIEWER (PEEPHOLE) WITH WIDE VIEWING ANGLE AT RECEIVING DOOR.
13. CANOPY AT RECEIVING DOOR. COORDINATE HEIGHT WITH THE HEIGHT OF RECEIVING DOOR (8') AND THE MOUNTING HEIGHT OF AIR SCREEN ABOVE THE DOOR.
14. SOAP AND TOWEL DISPENSER PROVIDED BY OWNER. G.C. RESPONSIBLE FOR INSTALLATION.
15. WASHER AND DRYER (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
16. DWARF WALL AT EXPOSED FRONT/ENDS OF CAFETERIA SERVING COUNTERS WITH FINISH AS SELECTED BY ARCHITECT (IF REQUIRED IN THIS PROJECT).

2 GENERAL CONTRACTOR COORDINATION NOTES
NOT TO SCALE

HEALTH DEPARTMENT REQUIREMENTS (VERIFY WITH LOCAL JURISDICTIONS):

1. FLOORS: VERIFY WITH DIVISION 9. FLOORS TO BE SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT.
2. WALLS: VERIFY WITH ARCHITECTURAL DOCUMENTS. WALLS TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
3. CEILING: LAY-IN TILES. CEILING TILES TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
4. EMPLOYEE TOILET: TO BE LOCATED OFF MAIN CORRIDOR AND ADJACENT TO MAIN KITCHEN. RESTROOM MUST HAVE A VESTIBULE AND NOT OPEN TO KITCHEN / PREP AREAS. TOILETS TO BE WELL VENTILATED.
5. LAVATORIES: WALL HUNG LAVATORIES LOCATED WITHIN ALL FUNCTIONAL WORKING AREAS.
6. UTENSIL CLEANING/SANITIZING: ACCOMPLISHED IN UTENSIL WASH AREA WITH (3) 2'-0" x 2'-2" x 15" MINIMUM DEEP SINKS AND WAREWASH MACHINE.
7. MECHANICAL CLEANING/SANITIZING OF TABLEWARE: ACCOMPLISHED BY WAREWASH MACHINE.
8. STOREROOMS: AMPLE DAILY STORAGE PROVIDED IN ENCLOSED STORE ROOMS. STORE ROOMS TO BE VENTILATED AND MAINTAIN PROPER TEMPERATURE.
9. WATER HEATER: LOCATED IN THE MECHANICAL ROOM ADJACENT TO KITCHEN. TO BE SIZED TO PROVIDE AMPLE WATER TO MAINTAIN PROPER WATER TEMPERATURE THROUGHOUT HOURS OF OPERATION.
10. GREASE TRAP: LOCATED AT EXTERIOR OF BUILDING. REFER TO ENGINEER'S DRAWINGS.
11. FOOD SERVICE EQUIPMENT: ALL FLOOR-MOUNTED EQUIPMENT IS TO BE SEALED TO THE FLOOR TO PROVIDE AN EASILY CLEANABLE SURFACE AND PREVENT SEEPAGE. EQUIPMENT NOT MOUNTED TO THE FLOOR IS TO BE WALL MOUNTED ON WALL CARRIERS, OR ELEVATED ON LEGS TO PROVIDE AT LEAST A SIX-INCH CLEARANCE BETWEEN FLOOR AND EQUIPMENT.
12. MOP SINK: LOCATED IN JANITOR CLOSET OFF MAIN KITCHEN CORRIDOR, AND LOCATED IN CLOSE PROXIMITY TO THE SERVERY WAREWASH AREA.
13. EXHAUST HOODS: EXHAUST HOODS PROVIDED OVER COOKING EQUIPMENT WITH LIQUID CHEMICAL ANSUL FIRE EXTINGUISHING SYSTEM.
14. LIGHTING AND PROTECTIVE SHIELDING: RECESSED CEILING-MOUNTED FLUORESCENT LIGHT FIXTURES FITTED WITH CLEAR LEXAN DIFFUSERS.
15. GARBAGE AND REFUSE: CENTRAL TRASH COLLECTION PROVIDED FOR BUILDING LOCATED NEAR RECEIVING AREA ON SMOOTH CONCRETE SURFACE.
16. POISONOUS AND TOXIC MATERIAL STORAGE: LOCATED IN RESPECTIVE JANITOR CLOSETS WITH LOCKING HARDWARE.

1 HEALTH DEPARTMENT COORDINATION NOTES
NOT TO SCALE

ISSUE:

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FDP
FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 77479

SEAL
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48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/15/2025

MWA ARCHITECTS
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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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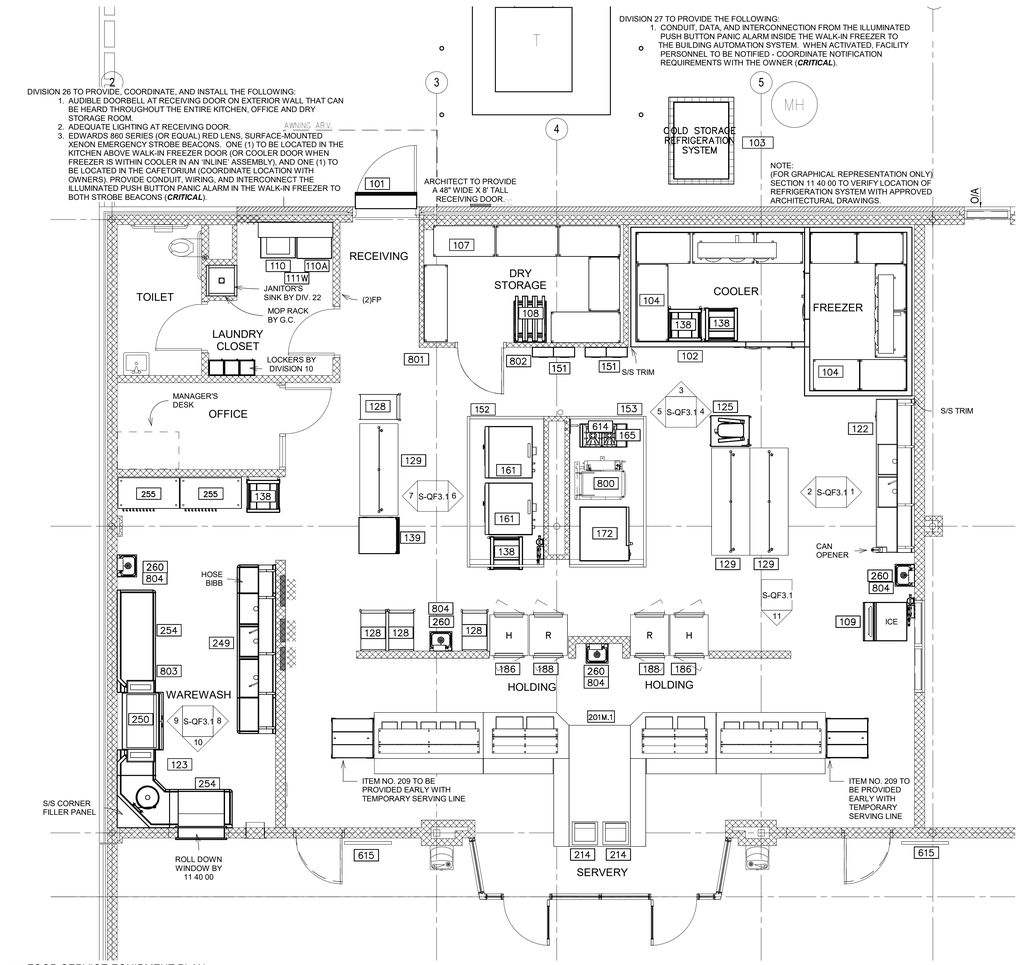
FS GENERAL COORDINATION NOTES

S-QF0.0

FOOD SERVICE DRAWING INDEX	
FDP SHEET NUMBER	FDP SHEET NAME
S-QF0.0	FS GENERAL COORDINATION NOTES
S-QF1.0	FS EQUIPMENT PLAN
S-QF1.1	FS FACILITY MODEL
S-QF1.2	FS EQUIPMENT MODEL
S-QF1.3	FS SPECIAL CONDITIONS & MECHANICAL PLAN
S-QF1.4	FS PLUMBING PLAN
S-QF1.5	FS ELECTRICAL PLAN
S-QF1.6	FS CONDENSING UNITS
S-QF1.7	FS WALK-INS
S-QF1.8	FS SERVING LINE
S-QF1.9	FS SERVING LINE
S-QF2.0	FS DEMO PLAN
S-QF2.1	FS TEMPORARY SERVING
S-QF3.1	FS ELEVATIONS
S-QF4.1	FS SECTIONS & DETAILS
S-QF4.2	FS DETAILS
S-QF4.3	FS DETAILS



1 FOOD SERVICE EQUIPMENT PLAN
1/4" = 1'-0"

FOOD SERVICE EQUIPMENT SCHEDULE					
REFER TO SHEET QF1 FOR GENERAL CONTRACTOR & HEALTH DEPARTMENT COORDINATION NOTES					
FDP ITEM	FDP QTY	FDP DESCRIPTION	FDP REMARKS	MANUFACTURER	MODEL
101	1	AIR SCREEN		MARS	STD248-1UA-OB
102	1	COLD STORAGE ASSEMBLY		AMERICAN PANEL	
103	1	COLD STORAGE REFRIGERATION SYSTEM		RDT	ZS1-02Z-CT3-AST
104	2	COLD STORAGE SHELVING		METRO	METROMAX Q
107	1	DRY STORAGE SHELVING		METRO	METROMAX Q
108	1	CAN RACK		NEW AGE	1250CK
109	1	ICE MACHINE W/ BIN		MAITOWOC	UYF0310A
110	1	CLOTHES WASHER		WHIRLPOOL	RESIDENTIAL
110A	1	CLOTHES DRYER		WHIRLPOOL	RESIDENTIAL
111W	1	WALL MOUNTED OVERSHELF		CUSTOM FABRICATED	
122	1	TWO COMPARTMENT SINK WITHOUT DISPOSER		CUSTOM FABRICATED	
123	1	DISPOSER - 3HP		SALVAJOR	300-CA-18-ARSS-LD
125	1	20 QT. MIXER W/STAND		HOBART	HL200
128	4	UTILITY CART		LAKESIDE	522
129	3	WORKTABLE W/S.BAR UT.RACK		CUSTOM FABRICATED	
138	4	PAN RACK		CRES COR	207-UA-13A
139	1	INSUL MOBILE PROOFER		CRES COR	H-137-WSUA-12D
151	2	FIRE PROTECTION SYSTEM		ANSUL	R102
152	1	EXHAUST HOOD	EXISTING		
153	1	EXHAUST HOOD	EXISTING		
161	2	CONVECTION OVEN		BLODGETT	DFG-200 DBL
165	1	TWO BURNER RANGE		VULCAN	V2B18B
172	1	COMBI OVEN		RATIONAL	ICP 6-FULL/6-FULL N/G
186	2	PASS-THRU HEATED CABINET-1DR		TRAULSEN	AHF132WP
188	2	PASS-THRU REFRIGERATOR-1DR		TRAULSEN	AHT132WPUT
201M.1	1	SERVING COUNTER-MODULAR		COUNTERCRAFT	SCOL-408-MOD
214	2	CASH REGISTER	OWNER FURNISHED		
249	1	THREE COMPARTMENT SINK NO DISPOSER		CUSTOM FABRICATED	
250	1	DISHMACHINE		HOBART	CL44-BAS
254	2	SOILED & CLEAN DISHTABLE		CUSTOM FABRICATED	
255	2	MOBILE DRYING RACK		METRO	PR48VX3
260	4	HAND SINK	FURNISHED & INSTALLED BY DIV. 22		
614	1	FILL FAUCET		T&S	B-0610
615	2	MENU MONITOR	BY OWNER		
800	1	15 GAL. BRAISING PAN		GROEN	BPM-15GA
801	1	S/S CORNER GUARDS	LOCATED ON EVERY EXPOSED CORNER THROUGHOUT KITCHEN	CUSTOM FABRICATED	
802	1	WALL BUMPERS	LOCATED ON ALL EXPOSED BUILDING WALLS	PAWLING	MD-1
803	1	WATER SOFTENER		HOBART	WS-40
804	4	S/S SPLASH GUARDS		CUSTOM FABRICATED	

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PROJ. NO.: 23-25
DATE: 07/18/25
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FS EQUIPMENT PLAN

S-QF1.0

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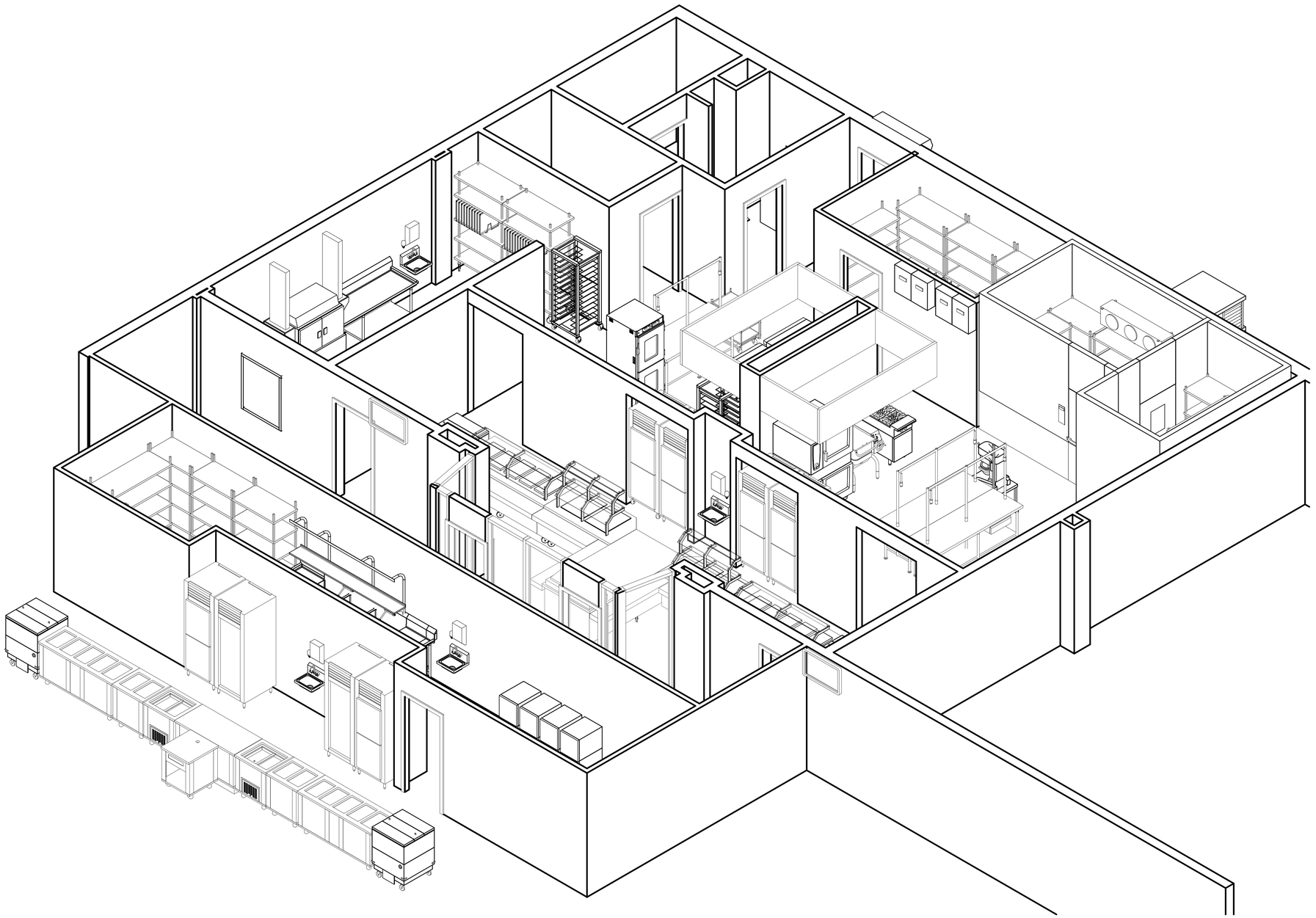

1 FS FACILITY MODEL

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FS FACILITY MODEL

S-QF1.1

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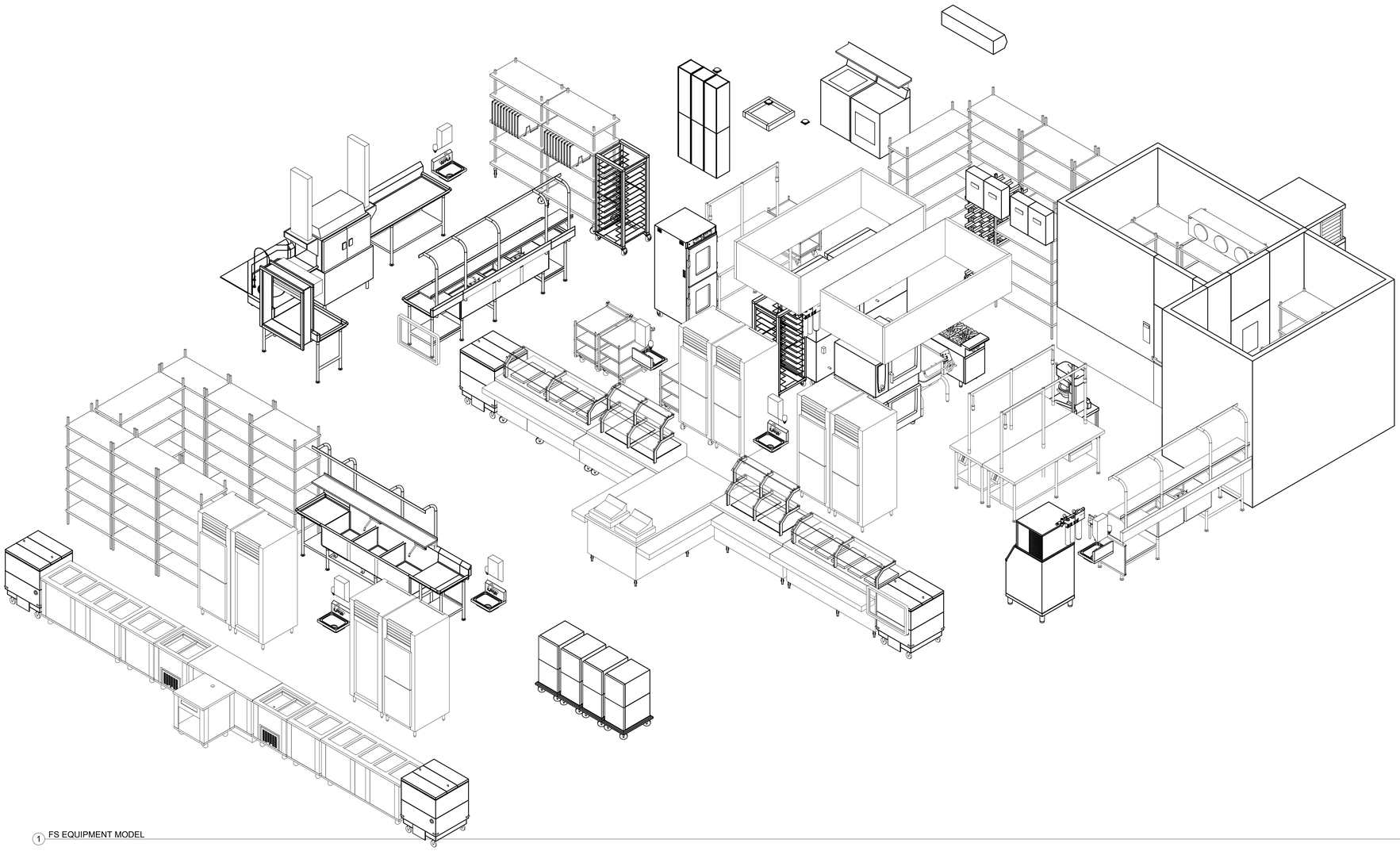

1 FS EQUIPMENT MODEL

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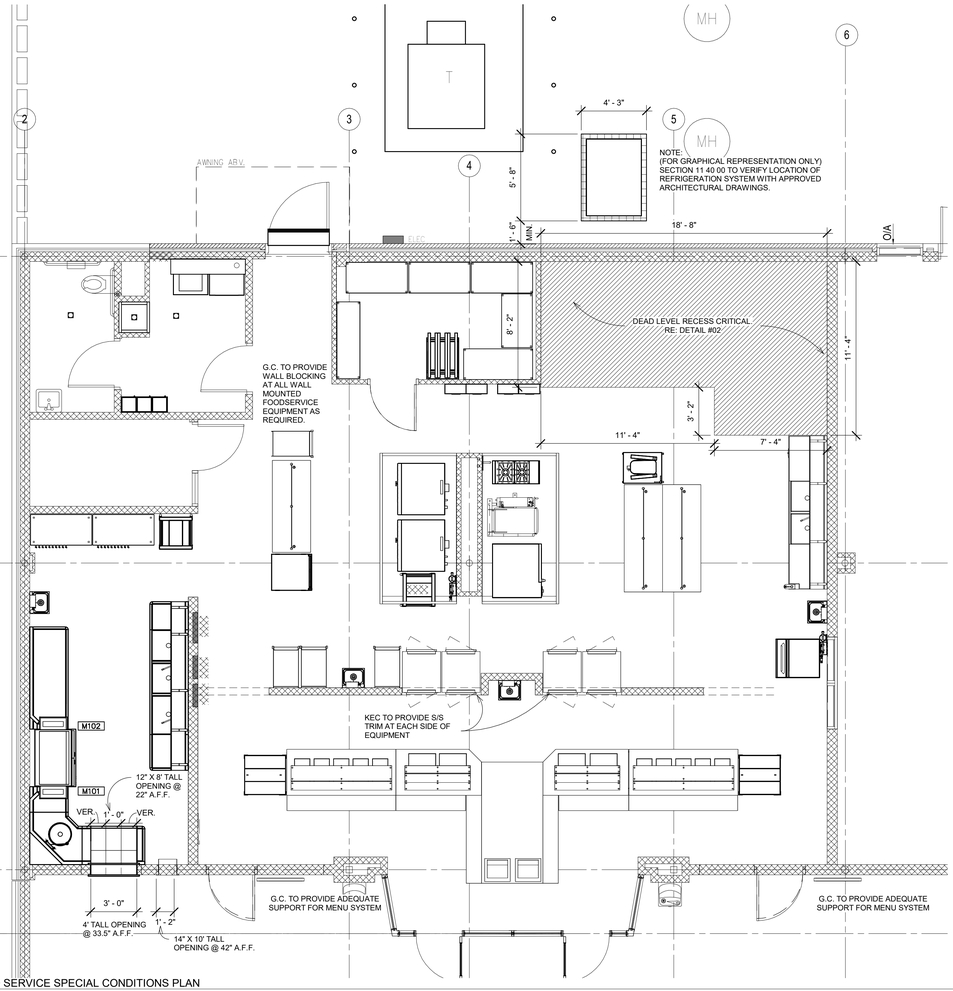
FS EQUIPMENT MODEL

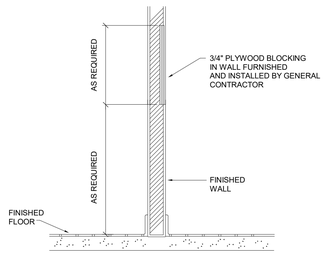
S-QF1.2

FOOD SERVICE MECHANICAL SCHEDULE						
REFER TO SHEET QF1 FOR MECHANICAL COORDINATION NOTES						
FDP NO.	FDP QTY	FDP TYPE	FDP SIZE	FDP LOC	FDP CFM	FDP S.P.
M101	1	EXHAUST	4" X 16"		400	.030"
M102	1	EXHAUST	4" X 16"		800	.030"
M103	1	DRYER VENT	6" DIA.		---	---



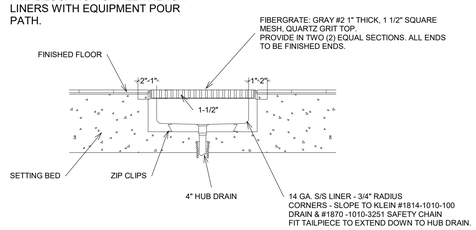
1 FOOD SERVICE SPECIAL CONDITIONS PLAN
1/4" = 1'-0"

NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION AND SIZE OF WALL BLOCKING.

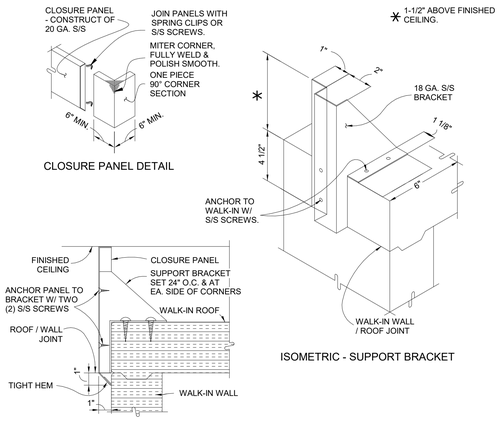


5 WALL BLOCKING DETAIL
NOT TO SCALE

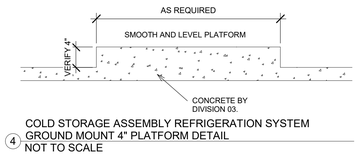
NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION OF ALL TRENCH LINERS WITH EQUIPMENT POUR PATH.



6 TRENCH LINER DETAIL
NOT TO SCALE

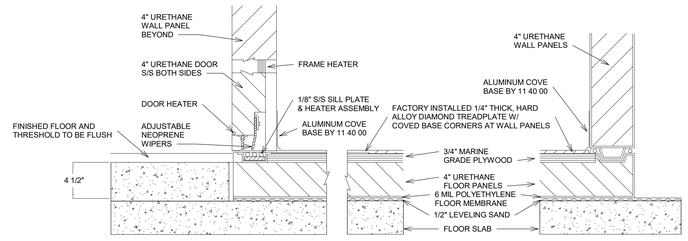


3 COLD STORAGE ASSEMBLY ENCLOSURE PANEL DETAIL
NOT TO SCALE



4 COLD STORAGE ASSEMBLY REFRIGERATION SYSTEM GROUND MOUNT 4" PLATFORM DETAIL
NOT TO SCALE

SLAB TO BE MODIFIED AS REQUIRED TO ALLOW FOR A 4 1/2" DEPRESSION SLAB. PROVIDE NEW LEVEL CONCRETE PAD FOR COLD STORAGE ASSEMBLY.



2 COLD STORAGE ASSEMBLY 4 1/2" DEPRESSION DETAIL
NOT TO SCALE

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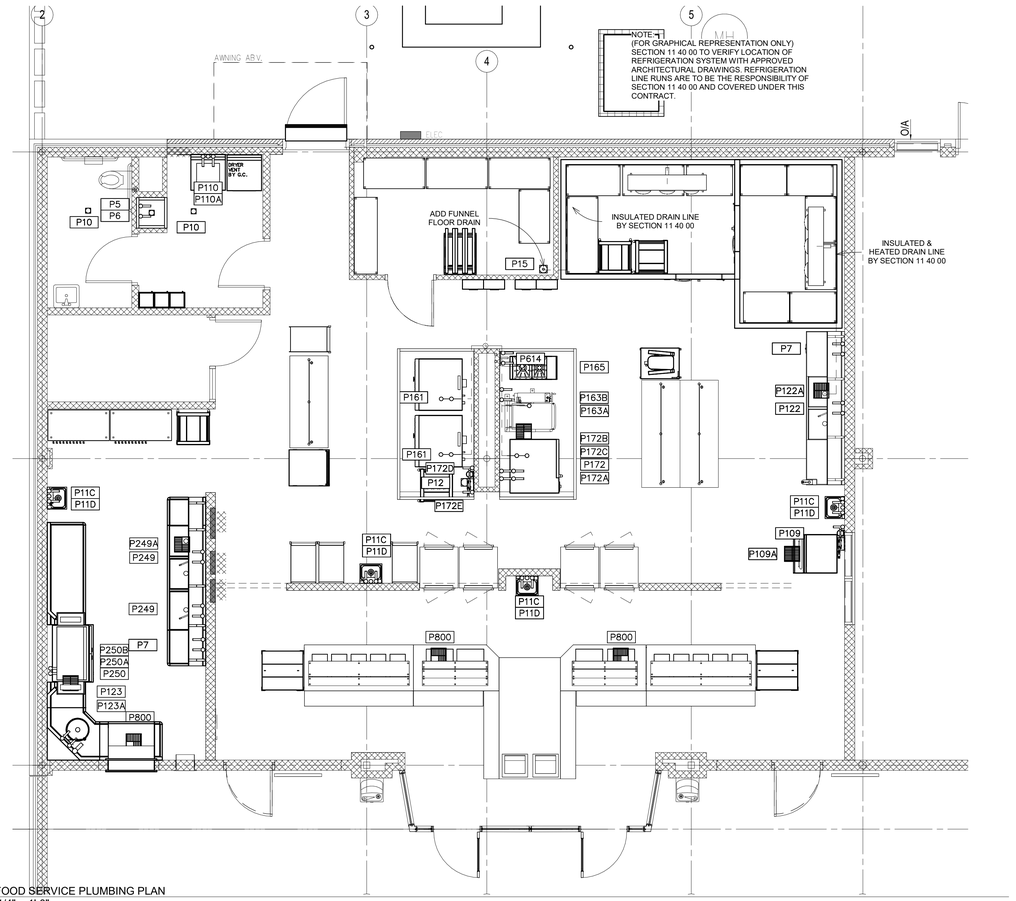
FS SPECIAL CONDITIONS & MECHANICAL PLAN

S-QF1.3

FOOD SERVICE PLUMBING SCHEDULE						
REFER TO SHEET QF1 FOR PLUMBING COORDINATION NOTES						
FDP PNO	FDP PSIZE	FDP PCONN	FDP PSERVICE TO	FDP PLOC	FDP PAFF	FDP PREMARKS
P5	3/4"	H & C WATER	JANITOR SINK	WALL	48"	JANITOR SINK BY PLUMBER
P6	4"	FLOOR DRAIN	JANITOR SINK	FLOOR	VERIFY	JANITOR SINK BY PLUMBER
P7	3/4"	H & C WATER	HOSE BIBB	WALL	18"	BTC
P10	VERIFY	FLOOR DRAIN	GENERAL AREA DRAIN	FLOOR	VERIFY	---
P11C	1/2"	H & C WATER	FAUCET	WALL	18"	FURNISHED & INSTALLED BY DIV. 22
P11D	1 1/2"	DIRECT DRAIN	HAND SINK	WALL	15"	FURNISHED & INSTALLED BY DIV. 22
P12	VERIFY	FLOOR DRAIN	EQUIP. DRAIN	FLOOR	VERIFY	NO SLOPE
P15	4"	FLOOR DRAIN	FUNNEL FLOOR DRAIN	FLOOR	0"	---
P109	3/4"	COLD WATER	WATER/ ICE	WALL	60"	BTC
P109A	12" SQ.	FLOOR SINK	ICE MACHINE	FLOOR	0"	FULL GRATE
P110	3/4"	H & C WATER	CLOTHES WASHER	WALL	48"	BTC; VALVE BOX
P110A	2"	INDIRECT DRAIN	CLOTHES WASHER	WALL	48"	VALVE BOX
P122	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P122A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	3/4 GRATE
P123	3/4"	H & C WATER	FAUCET / DISPOSER	WALL	13"	BTC
P123A	2"	DIRECT DRAIN	DISPOSER	WALL	10"	BTC
P161	(2)3/4"	NATURAL GAS	CONVECTION OVEN	WALL	18"/36"	BTC - 60 MBTU/HR EACH
P163A	3/4"	NATURAL GAS	TILT BRAISING PAN	WALL	18"	BTC - 65 MBTU/HR
P163B	3/4"	H & C WATER	TILT BRAISING PAN	WALL	36"	BTC
P165	1"	NATURAL GAS	RANGE	WALL	18"	BTC - 70 MBTU/HR
P172	(2)3/4"	COLD WATER	COMBI OVEN	WALL	24"/48"	BTC - INTERCONNECT THRU FILTERS
P172A	3/4"	COLD WATER	COMBI OVEN	WALL	48"	BTC
P172B	12"SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE
P172C	(2)3/4"	NATURAL GAS	COMBI OVEN	WALL	18"/36"	BTC - 105 MBTU/HR EACH
P172D	3/4"	COLD WATER	COMBI OVEN	WALL	66"	BTC; INTERCONNECT TO P172
P172E	3/4"	COLD WATER	COMBI OVEN WATER FILTER	WALL	66"	BTC
P249	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P249A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	THREE QUARTER GRATE
P250	12" SQ.	FLOOR SINK	BOOSTER / DISHMACHINE	FLOOR	18"	BTC
P250A	3/4"	HOT WATER	DISHMACHINE	WALL	18"	EXT. THRU W.FILTER TO BOOSTER / DISH MACHINE - 140DEG.MIN.
P250B	3/4"	COLD WATER	DISHMACHINE	WALL	18"	BTC
P614	1/2"	H & C WATER	FILL FAUCET	WALL	42"	BTC
P800	12" SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE



1 FOOD SERVICE PLUMBING PLAN
1/4" = 1'-0"

SECTION 11 40 00 TO PROVIDE LOOSE WITH FOOD SERVICE EQUIPMENT. INSTALLATION BY DIV. 22 & 26.

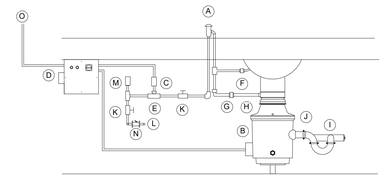
- (A) VACUUM BREAKER
- (B) DISPOSER
- (C) TIME DELAY
- (D) CONTROL PANEL
- (E) SOLENOID VALVE

DIVISION 22 TO PROVIDE AND INSTALL

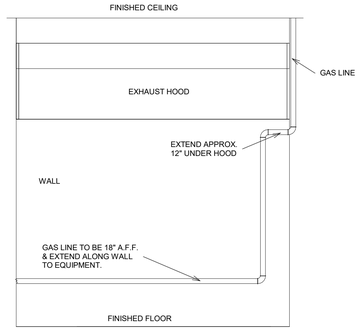
- (F) 1/2" CW INLET
- (G) FLOW CONTROL
- (H) 1/2" CW
- (I) 2" DRAIN LINE WITH P-TRAP & Y ADAPTOR
- (J) 1-1/2" TAILPIECE
- (K) GATE VALVE
- (L) 1/2" CW SUPPLY
- (M) SHOCK STOP
- (N) RPZ BACK FLOW PREVENTOR

DIVISION 26 TO PROVIDE AND INSTALL

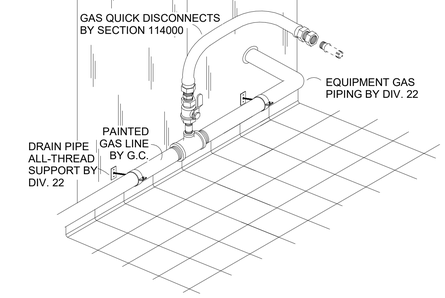
- (O) POWER SUPPLY



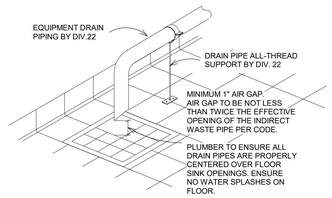
6 DISPOSER WITH VACUUM BREAKER DETAIL
NOT TO SCALE



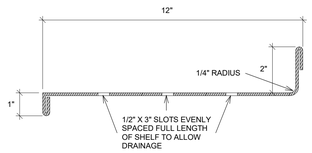
7 EXHAUST HOOD - GAS LINE ROUTING DETAIL
NOT TO SCALE



3 GAS DISCONNECT DETAIL
NOT TO SCALE



5 DRAIN PIPING FASTENER DETAIL
NOT TO SCALE



8 WAREWASH - PERFORATED OVER SHELF DETAIL
NOT TO SCALE

○	HW	HOT WATER	▢	FFD	FUNNEL FLOOR DRAIN
○	CW	COLD WATER	◣	EVC	EXHAUST VENT CONNECTION
○	HTW	180 F HOT WATER	⋈	SVC	SUPPLY VENT CONNECTION
◎		CHILLED WATER	◔	FR	DIRECT-CONNECTED FLUE RISER
●	W	DIRECT WASTE	◎	PS	PIPE SLEEVE
○	IW	INDIRECT WASTE	⊙		COMPRESSED AIR
⊙		GAS SUPPLY	♦		CO2
◕		STEAM SUPPLY		AFF	ABOVE FINISHED FLOOR
⊘	CR	CONDENSATE RETURN		BTC	BRANCH TO CONN. ON EQUIP
◉	DR	DRAIN		DFA	DROP FROM ABOVE
▢	FD	FLOOR DRAIN		CLG	CEILING
▟	FST	FLOOR SINK 3/4 GRATE			
▟	FSH	FLOOR SINK 3/4 GRATE			

2 PLUMBING SYMBOLS
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FDP
FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 77479

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THIS ITEM WAS ELECTRONICALLY APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/15/2025

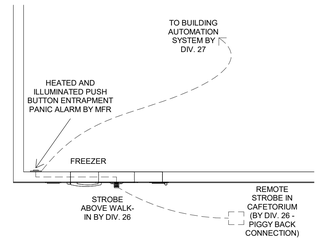
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS PLUMBING PLAN

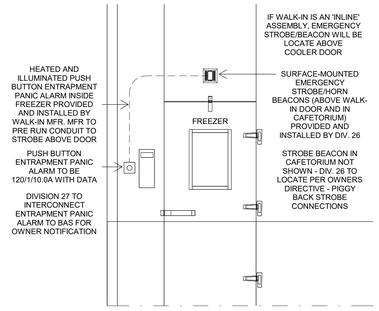
S-QF1.4

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E10	DR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E13	WPR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E15	JB	---	---	---	FIRE PROT. SYSTEM	WALL	48"	RECESSED EMPTY CONDUIT FOR FIRE PULL
E101	JB	5.1A	120	1	AIR SCREEN	WALL	82"	BTC; MAGNETIC REED SWITCH ON DOOR JAMB & DOOR
E102A	JB	16.0A	120	1	DOOR HEATER/LIGHTS	CLG	DFA	BTC
E102B	JB	5.0A	120	1	TEMP. ALARM	CLG	DFA	BTC
E102C	JB	5.0A	120	1	PRESSURE RELIEF PORT	CLG	DFA	BTC
E102E	JB	10.0A	120	1	PANIC ALARM BUTTON	CLG	DFA	BTC-INTERCONNECT TO STROBE LIGHT/HORN ABOVE FREEZER DOOR AND IN CAFETORIUM
E103	JB/DS	25.0A	208	3	REFRIGERATION SYSTEM	VERIFY	VERIFY	BTC
E103C	JB	9.1A	208	1	FREEZER COIL	CLG	DFA	BTC
E103D	JB	1.8A	120	1	COOLER COIL	CLG	DFA	BTC
E103E	JB	---	---	---	DATA CONNECTION	CLG	DFA	BTC; RUN TO NEAREST IDF / MDF ROOM
E103F	JB	16.0A	120	1	DRAIN LINE HEATER	CLG	DFA	BTC; DEDICATED CIRCUIT
E109	DR	11.9A	120	1	ICE MACHINE	WALL	60"	---
E110	DR	16.0A	120	1	CLOTHES WASHER	WALL	48"	--
E110A	SR	30.0A	208	1	CLOTHES DRYER	WALL	48"	VERIFY NEMA PLUG RECEPTACLE
E123	JB	3.0HP	208	3	DISPOSER	WALL	24"	BTC; CONNECT THRU C.P. TO DISPOSER

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E129	DCR	16.0A	120	1	TABLE RECEPTACLE	CLG	84"	TWISTLOCK PLUG & RECEPTACLE
E139	DCR	15.0A	120	1	INSUL. MOBILE PROOFER	CEILING	DFA	--
E151	JB	1.0A	120	1	FIRE PROT. SYSTEM	CLG	DFA	BTC
E161	(2)DR	6.0A EA.	120	1	CONVECTION OVEN	WALL	24"/48"	SHUNT TRIP BREAKER
E163	DR	5.0A	120	1	TILT BRAISING PAN	WALL	24"	SHUNT TRIP BREAKER
E172	(2)JB	15.0A EA.	208	1	COMBI OVEN	WALL	24"/48"	BTC - SHUNT TRIP BREAKER
E187	JB	15.5A	120/208	1	HEATED CABINET	WALL	96"	BTC; MOUNT ON KITCHEN SIDE
E188	JB	7.2A	120	1	REFRIGERATOR	WALL	96"	BTC; MOUNT ON KITCHEN SIDE-OMIT PLUG, UNIT TO BE HARDWIRED
E201A	PMR	28.0A	208	1	HOT FOOD COUNTER	FLOOR	4.5"	BTC
E201B	PMR	16.0A	120	1	COLD FOOD COUNTER	FLR	4.5"	---
E209	PMR	8.0A	120	1	DROP FRONT MILK COOLER-8 CASE	FLR	4.5"	---
E214	PMR	16.0A	120	1	CASH REGISTER	FLR	4.5"	DEDICATED CIRCUIT
E214A	CS	---	---	---	POS	FLOOR	6"	BTC; CONDUIT W/DATA LINE TO RUN TO MANAGER'S OFFICE OR IDF ROOM-VERIFY
E250	JB/DS-JB	51.7A	480	3	DISHMACHINE	WALL	66"	BTC; EXTEND FROM JB/DS AT NEAREST WALL
E615	DR	5.0A	120	1	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE DCO AT VIDEO LOCATION
E615A	JB	---	---	---	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE JB AT DATA LOCATION

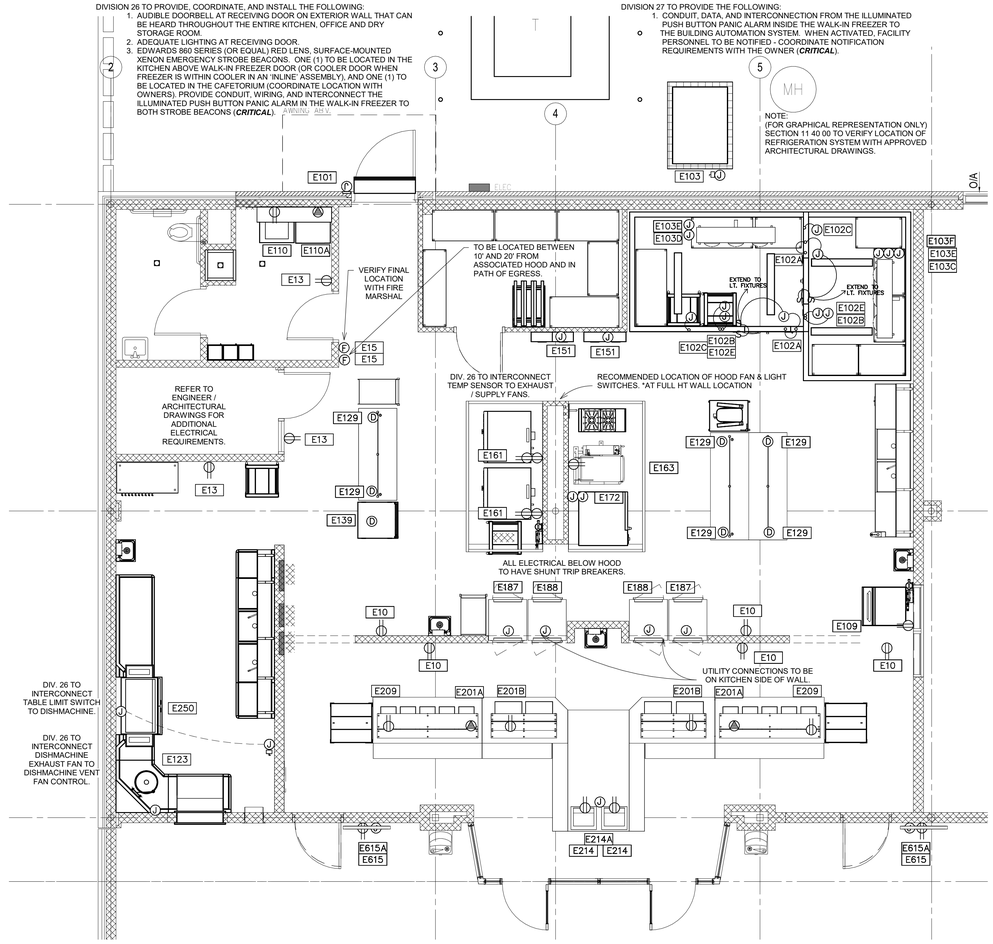


6 COLD STORAGE ASSEMBLY ENTRAPMENT PANIC ALARM DETAIL
NOT TO SCALE

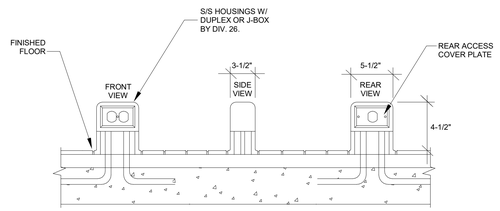


DIVISION 26 TO PROVIDE, COORDINATE, AND INSTALL THE FOLLOWING:
1. AUDIBLE DOORBELL AT RECEIVING DOOR ON EXTERIOR WALL THAT CAN BE HEARD THROUGHOUT THE ENTIRE KITCHEN, OFFICE AND DRY STORAGE ROOM.
2. ADEQUATE LIGHTING AT RECEIVING DOOR.
3. EDWARDS 860 SERIES (OR EQUAL) RED LENS, SURFACE-MOUNTED XENON EMERGENCY STROBE BEACONS. ONE (1) TO BE LOCATED IN THE KITCHEN ABOVE WALK-IN FREEZER DOOR (OR COOLER DOOR WHEN FREEZER IS WITHIN COOLER IN AN 'INLINE' ASSEMBLY), AND ONE (1) TO BE LOCATED IN THE CAFETORIUM (COORDINATE LOCATION WITH OWNERS). PROVIDE CONDUIT, WIRING, AND INTERCONNECT THE ILLUMINATED PUSH BUTTON PANIC ALARM IN THE WALK-IN FREEZER TO BOTH STROBE BEACONS (***CRITICAL***).

DIVISION 27 TO PROVIDE THE FOLLOWING:
1. CONDUIT, DATA, AND INTERCONNECTION FROM THE ILLUMINATED PUSH BUTTON PANIC ALARM INSIDE THE WALK-IN FREEZER TO THE BUILDING AUTOMATION SYSTEM. WHEN ACTIVATED, FACILITY PERSONNEL TO BE NOTIFIED - COORDINATE NOTIFICATION REQUIREMENTS WITH THE OWNER (***CRITICAL***).

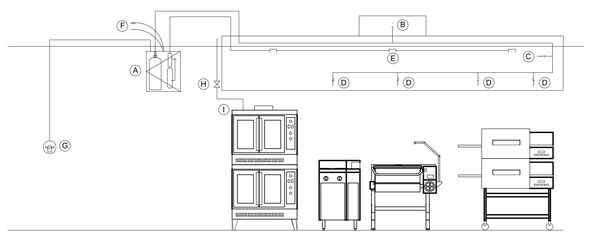


1 FOOD SERVICE ELECTRICAL PLAN
1/4" = 1'-0"



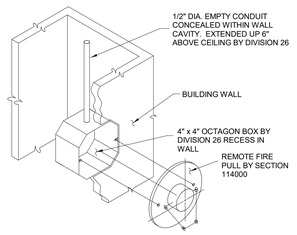
3 PEDESTAL MOUNTED RECEPTACLE DETAIL
NOT TO SCALE

NOTE:
REFER TO FDP EQUIPMENT PLAN FOR SPECIFIC COMPONENTS UNDER HOOD. ALL EQUIPMENT SHOWN HERE FOR GRAPHICAL REPRESENTATION ONLY.



- (A) S/S ENCLOSURE W/AGENT TANK AND NITROGEN CARTRIDGE
- (B) DUCT NOZZLE(S)
- (C) PLENUM NOZZLE(S)
- (D) SURFACE PROTECTION NOZZLE(S)
- (E) FUSIBLE LINK(S)
- (F) (2) WIRES FROM FIRE SYSTEM TO SHUNT TRIP BREAKERS FOR SHUT DOWN OF ELECTRICAL CONNECTIONS LOCATED BENEATH EXHAUST HOOD DURING FIRE MODE
- (G) REMOTE FIRE PULL
- (H) GAS VALVE
- (I) GAS SUPPLY (AS REQUIRED)

4 FIRE PROTECTION SYSTEM TYPICAL DETAIL
NOT TO SCALE



5 FIRE PROTECTION SYSTEM RECESSED FIRE PULL DETAIL
NOT TO SCALE

	SCR	CONDUIT STUB BTC ON RECEPT FURNISH WITH EQUIPMENT		CC	CONDUIT FOR COMPUTER CABLES
•	CS	CONDUIT STUB UP/OUT FOR DIRECT CONNECTION		BTC	BRANCH TO CONNECTION ON EQUIPMENT
	DR	DUPLEX RECEPTACLE		WPR	WATERPROOF RECEPTACLE (SPRING COVER)
	SR	SINGLE PURPOSE RECEPTACLE-1PH		FPB	FIRE PROTECTION BUZZER
	SR	SINGLE PURPOSE RECPTACLE-3PH		BSC	BEVERAGE SYSTEM CONDUIT
	FR	FLUSH FLOOR RECEPTACLE		DFA	DROP FROM ABOVE
	PMR	PEDESTAL MOUNTED RECEPTACLE		AFF	ABOVE FINISH FLOOR
	DCR	DROP CORD RECEPTACLE		CSJB	JUNCTION BOX ON PEDESTAL
	JB	JUNCTION BOX ON CEILING		SW	SWITCH
	JB	JUNCTION BOX IN WALL		D	DATA
	JB/DS	JUNCTION BOX WITH DISCONNECT BY DIV.26			

2 ELECTRICAL SYMBOLS
NOT TO SCALE

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PROFESSIONAL MEMBER
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ARCHITECTS AND PLANNING CONSULTANTS
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HOUSTON, TEXAS 77079

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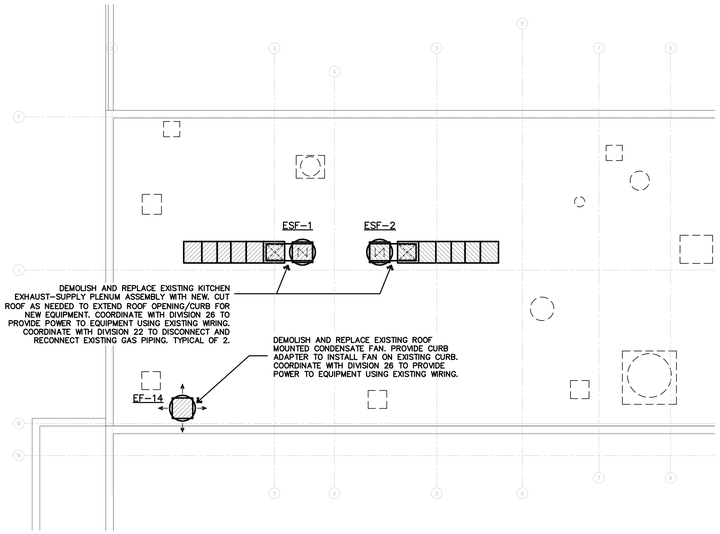
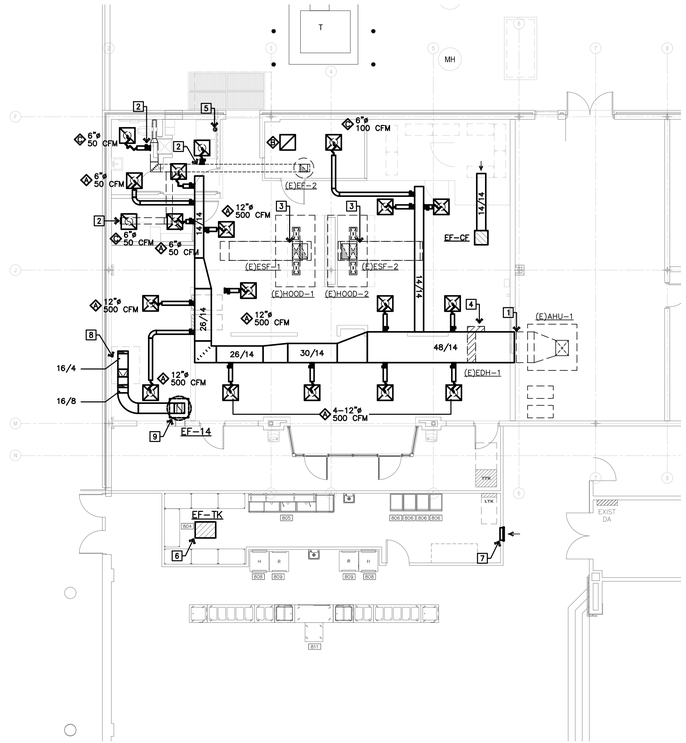
FS ELECTRICAL PLAN

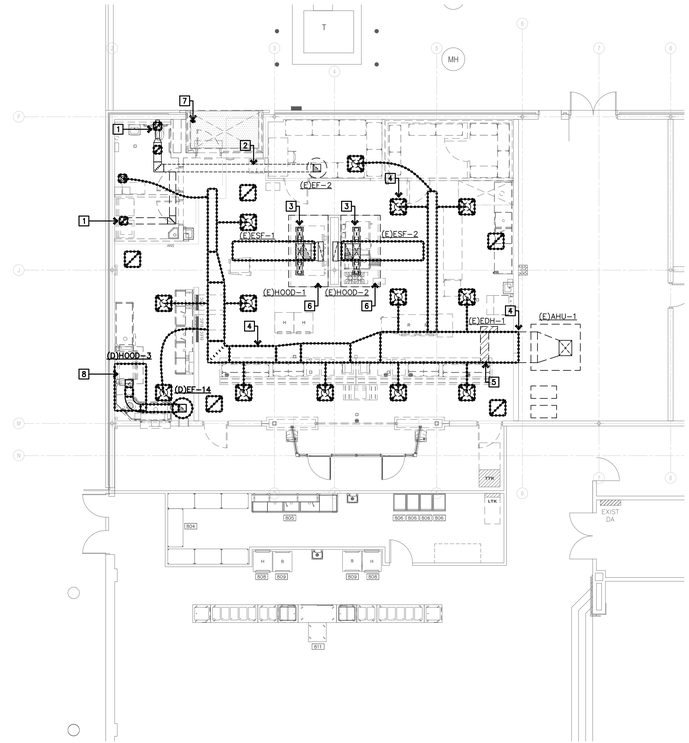
S-QF1.5



3 MECHANICAL ROOF FLOOR PLAN
SCALE: 1/8" = 1'-0"



2 RENO MECHANICAL FLOOR PLAN - KITCHEN AREA
SCALE: 1/8" = 1'-0"



1 DEMO MECHANICAL FLOOR PLAN - KITCHEN AREA
SCALE: 1/8" = 1'-0"

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A	CEILING DIFFUSER – 24" X 24" FACE, PATTERN TYPE, STEEL CONSTRUCTION, OBD/RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE SCD A1–12" X 12"
B	CEILING RETURN GRILLE – 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE PDFR B1–12" X 12"
C	CEILING EXHAUST GRILLE – 24" X 24" PERFORATED FACE, STEEL CONST., OBD/RADIATION DAMPER, WHITE FINISH, NECK SIZE SHOWN, U.L. LISTED PRICE PDDR C1–12" X 12"

NOTES:
1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPES FOR AIR DEVICES.

KITCHEN HOOD REFURBISHMENT NOTES

HOOD REFURBISHMENT FOR KITCHEN HOODS (QUANTITY 2):
- STEAM WASH AND DEEP CLEAN STAINLESS STEEL HOOD ASSEMBLY, CASING, AND SUPPLY GRILLES WHERE APPLICABLE.
- REPLACE GREASE FILTER RACKS.
- CLEAN EXISTING MAKE-UP AIR AND GREASE EXHAUST DUCT.
- RELAMP EXISTING LIGHT FIXTURES WITH NEW 4000K BULBS LISTED FOR USE IN AN ENCLOSED KITCHEN HOOD FIXTURE.
- COORDINATE WITH DIVISION 11 FOR REPLACEMENT OF ANSUL FIRE SUPPRESSION SYSTEM.
- HOOD ASSEMBLIES SHALL BE CLEANED TO MEET THE STANDARDS ESTABLISHED IN NFPA STANDARD 96.

KITCHEN HOOD EXHAUST & MAKE-UP AIR UNIT SCHEDULE

MARK	ESF-1,2
SERVES	KITCHEN HOOD-1 & 2
SUPPLY SECTION	
TYPE	INDIRECT GAS-FIRED MAKE-UP AIR UNIT
DRIVE	DIRECT
SPEED CONTROL	VFD
SUPPLY CFM	2250
EXT. S.P. (IN. W.G.)	0.375
HORSEPOWER (WATTS)	1-1/2 HP
VOLTAGE	480V/3-PHASE
UNIT MCA	4.6 A
UNIT MOCP	15 A
HEATING MEDIUM	NATURAL GAS
INPUT/OUTPUT (MBH)	150.0/121.5
TURNDOWN RATIO	4:1
MANUFACTURER	GREENHECK
MODEL	IGX-P109-H12-MF-E
EXHAUST SECTION	
TYPE	UPBLAST BELT DRIVE CENTRIFUGAL
EXHAUST CFM	3600
EXT. S.P. (IN. W.G.)	0.75
HORSEPOWER (WATTS)	1-1/2 HP
VOLTAGE	480V/3-PHASE
UNIT MCA	3.75 A
UNIT MOCP	15 A
MANUFACTURER	GREENHECK
EXHAUST FAN MODEL	CUBE-200-15

NOTES
1. EXHAUST FAN: PROVIDE FAN WITH PRE-FABRICATED ROOF CURB ADAPTER, VENTED CURB EXTENSION, HINGING KIT, HEAT BAFFLE, DRAIN CONNECTION, GREASE TRAP, AND DISCONNECT SWITCH. FANS SHALL BE UL LISTED FOR USE WITH TYPE 1 GREASE HOOD.
2. EXHAUST FAN: PROVIDE NEW MOTOR STARTER, SIZED FOR EXHAUST FAN MOTOR AND INSTALLED IN PLACE OF EXISTING. REFERENCE THE SPECIFICATIONS FOR STARTER REQUIREMENTS. COORDINATE WITH DIV.25 FOR RE-TERMINATION OF PERMISSIVE ON/OFF CONTROL. COORDINATE WITH DIV.26 FOR RE-TERMINATION OF LOCAL HOOD SWITCH INTERLOCK FOR START/STOP CONTROL.
3. SUPPLY FAN/FURNACE: FLUE GAS FROM HEATING COIL SHALL BE POWER VENTED.
4. SUPPLY FAN/FURNACE: WEATHERHOOD WITH ALUMINUM MESH.
5. SUPPLY FAN/FURNACE: 5 YEAR HEAT EXCHANGER WARRANTY.
6. SUPPLY FAN/FURNACE CONTROLS: INTEGRAL HEATER CONTROLS WITH BAS INTERLOCK FOR PERMISSIVE ON/OFF AND LOCAL SWITCH INTERLOCK FOR CONTROL FROM KITCHEN HOOD SWITCH. FURNACE CONTROLS SHALL BE PROGRAMMED FOR 64°F LAT, WITH A LOCKOUT FOR O/A TEMPERATURES ABOVE THE LAT SETPOINT. COORDINATE WITH DIV.25 AND DIV.26 FOR CONTROLS AND SWITCH INTERLOCKS.
7. TWO POINT POWER CONNECTION: ONE FOR EXHAUST FAN AND ONE FOR INTAKE/SUPPLY FAN.
8. INTERLOCK FAN(S) WITH ASSOCIATED COOKING HOOD
9. INTERLOCK FAN WITH SWITCH ON KITCHEN HOOD.
10. UNIT TO BE PROVIDED WITH GALVANIZED STEEL FAN PACK EXTENSION/COMBINATION CURB.
11. REFER TO WRITTEN SPECS FOR ADDITIONAL REQUIREMENTS.

MECHANICAL RENO KEYED NOTES

1. TIE-IN NEW DUCTWORK TO EXISTING DUCTWORK AT WALL PENETRATION.
2. CONNECT NEW AIR DEVICE AND TAP TO EXISTING E/A TRUNK DUCT.
3. REWORK EXISTING EXHAUST AND SUPPLY DUCTWORK FROM EXISTING KITCHEN HOOD UP TO FAN, AS REQUIRED, WITH NEW TRANSITIONS AND SUPPLY AIR DUCTWORK OFFSETS TO MATE WITH NEW FAN CURB.
4. EXISTING ELECTRIC DUCT HEATER TO BE RETAINED FOR RE-INSTALLATION IN RENOVATION PHASE.
5. NEW DRYER VENT DUCT AND VENT CAP.
6. TEMP. KITCHEN – CEILING MOUNTED CABINET EXHAUST FAN.
7. TEMP. KITCHEN – 24"X24" SIDE WALL GRILLE. SURFACE MOUNT OPTIONAL. AUXILIARY FRAME. TITUS CT-700.
8. RECONFIGURE DUCTWORK TO CONNECT TO NEW DISHMACHINE HOOD OUTLETS. REF. KITCHEN CONSULTANT DRAWINGS FOR EXACT DIMENSIONS OF DUCT CONNECTIONS.
9. CONDENSATE EXHAUST DUCT UP THROUGH ROOF TO NEW EXHAUST FAN SET ON NEW ROOF CURB. REUSE EXISTING ROOF PENETRATION.

MECHANICAL DEMO KEYED NOTES

1. DEMOLISH EXISTING AIR DEVICE, BRANCH DUCT, DAMPER AND TAP BACK TO TRUNK DUCT. CAP AND SEAL RESULTING OPENING.
2. EXISTING E/A TRUNK DUCT TO REMAIN.
3. DISCONNECT EXISTING S/A AND E/A DUCTWORK SERVING KITCHEN HOODS FROM FAN ASSEMBLY ON ROOF. DEMOLISH SUPPLY AND EXHAUST FAN PLENUM ASSEMBLY SERVING KITCHEN HOODS, ALONG WITH CURB. NEW CURB TO BE PROVIDED AND INSTALLED AS PART OF RENOVATION.
4. DEMOLISH ALL EXISTING AIR DEVICES, DUCTWORK, AND DUCTWORK ACCESSORIES SERVING KITCHEN AREA BACK TO MECH. ROOM WALL PENETRATION.
5. EXISTING ELECTRIC DUCT HEATER TO BE RETAINED FOR RE-INSTALLATION IN RENOVATION PHASE.
6. REFURBISH EXISTING KITCHEN HOOD. REFER TO "KITCHEN HOOD REFURBISHMENT NOTES".
7. DEMOLISH AND REPLACE EXISTING DRYER EXHAUST DUCT AND FLUE VENT CAP.
8. DEMOLISH EXISTING CONDENSATE HOOD, ASSOCIATED DUCTWORK, AND ROOF EXHAUST FAN.

EXHAUST FAN SCHEDULE

MARK	EF-TK	EF-CF	EF-14
SERVES	TEMPORARY KITCHEN	COOLER/FREEZER	DISH WASHER
TYPE	CEILING CABINET	INLINE FAN	ROOF UPBLAST
DRIVE	DIRECT	DIRECT	DIRECT
SPEED CONTROL	INTEGRAL SPEED CONTROLLER	CONSTANT	CONSTANT
CFM	1055	1000	1200
EXT. S.P. (IN. W.G.)	0.3	0.35	0.60
IMP. SIZE (IN.)	8.0	13.5	
HORSEPOWER (WATTS)	1/3 HP	1/6 HP	1/6 HP
VOLTAGE	120V/1-PHASE	120V/1-PHASE	120V/1-PHASE
MANUFACTURER	COOK	COOK	COOK
MODEL	GC-862	1355QN10D	CUE-140-VG
SONES (MAX.)	15.0	15.0	15.0
NOTES	1 THRU 4	1 THRU 4	1 THRU 4

NOTES
1. STATIC PRESSURE SHOWN IS EXTERNAL TO THE UNIT. MANUFACTURER SHALL ADD DAMPER AND ACCESSORY LOSSES TO THIS VALUE BEFORE SELECTING FAN. FANS SHALL BE CAPABLE OF 120% OF THE SCHEDULED CFM CAPACITY.
2. INTEGRAL DISCONNECT SWITCH.
3. RUBBER IN-SHEAR ISOLATORS.
4. REFER TO WRITTEN SPECS FOR ADDITIONAL REQUIREMENTS.

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SEAL



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ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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KITCHEN AREA MECHANICAL PLANS
S-M1.01

STANTON ENGINEERING GROUP
INFO@STANTON-ENG.COM (713) 300-6092 | TEXAS ENG. FIRM REG. NO. F-018332-0 | 1300 W. SAM HOUSTON PARKWAY N., SUITE 121, HOUSTON, TX 77043
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MECHANICAL SYMBOL SCHEDULE

CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
RS	REFRIGERANT SUPPLY
RR	REFRIGERANT RETURN
D	CONDENSATE LINE
	PETE'S PLUG
	ISOLATION VALVE
	ELECTRONIC CONTROL VALVE
	BUTTERFLY VALVE
	BALL VALVE
	UNION OR FLANGE
	STRAINER
	AUTOMATIC AIR VENT
T	LOCAL CONTROL THERMOSTAT
T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
FD	FIRE DAMPER
SD	SMOKE DAMPER
FSD	FIRE/SMOKE COMBINATION DAMPER
MD	MOTORIZED DAMPER
C	CARBON MONOXIDE SENSOR
C	CARBON DIOXIDE SENSOR
	SUPPLY AIR DIFFUSER
	RETURN AIR GRILLE
	EXHAUST GRILLE
RA	RETURN AIR OPENING IN WALL
VD	VOLUME DAMPERS
	DUCT ELEVATION CHANGE
	90° DUCT ELBOW WITH TURNING VANES
	FLEXIBLE DUCT
M	DAMPER MOTOR
T	TEMPERATURE TRANSMITTER
FS	FLOW SWITCH
P	DIFFERENTIAL PRESSURE SENSOR
SD	DUCT SMOKE DETECTOR
PS	STATIC PRESSURE SENSOR
PH	STATIC PRESSURE SENSOR HI-LIMIT
	ACCESS PANEL

A.P.	ACCESS PANEL
AHU	AIR HANDLING UNIT
B	BOILER
CH	CHILLER
CHP	CHILLED WATER PUMP
CVT	CONSTANT VOLUME TERMINAL
DH	DEHUMIDIFIER
E/A	EXHAUST AIR
EF	EXHAUST FAN
F&B	FACE & BYPASS
FF	FLY FAN
HDT	HORIZONTAL DRAW THROUGH
HWP	HOT WATER PUMP
KEF	KITCHEN EXHAUST FAN
KSF	KITCHEN SUPPLY FAN
O/A	OUTSIDE AIR
OBD	OPPOSED-BLADES DAMPER
PT	PRE-TREAT
R/A	RETURN AIR
RAHU	ROOF-MOUNTED AIR HANDLING UNIT
S/A	SUPPLY AIR
SA	SOUND ATTENUATOR
SF	SUPPLY FAN
SPD	SPILTER DAMPER
SZ	SINGLE ZONE
VAV	VARIABLE AIR VOLUME
VB	VAV BOX
VD	VOLUME DAMPER
VDT	VERTICAL DRAW THROUGH
VFD	VARIABLE FREQUENCY DRIVE
WH	WATER HEATER
⌀	DESIGNATION FOR "ROUND"
⌀	DESIGNATION FOR "OVAL"

GENERAL MECHANICAL NOTES

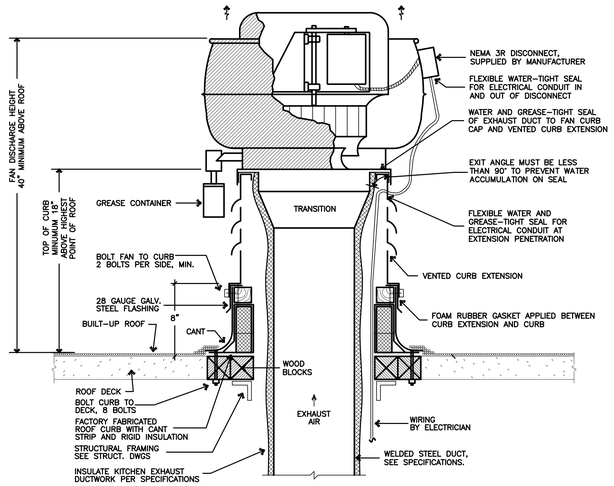
1. REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. COORDINATE INSTALLATION OF EQUIPMENT AND PIPING WITH THE ELECTRICAL CONTRACTOR TO INSURE NEC CLEARANCE (42 INCHES) IN FRONT OF ALL ELECTRICAL PANELS. DO NOT INSTALL DUCTWORK OR WATER PIPING OVER THE TOP OF ELECTRICAL PANELS SEE DETAIL 1/M2.01.
3. DUCT SIZES SHOWN ARE NET FREE AIR PASSAGE DIMENSIONS, DUCTS ARE NOT LINED, BUT ARE EXTERNALLY INSULATED. RUNOUTS TO CEILING OUTLETS SHALL BE EXTERNALLY INSULATED GALVANIZED SHEET METAL WITH SPIN-IN V.D. AT TRUNK TAPS, SEE DETAIL 1 & 2/M2.01.
4. REFER TO ARCHITECTURAL REFLECTED CEILING DRAWINGS FOR EXACT LOCATIONS OF CEILING OUTLETS IN RELATION TO OTHER CEILING ENTITIES. OUTLETS MUST BE COMPATIBLE WITH THE CEILING TYPES FOR THE VARIOUS AREAS.
5. IN AREAS WHERE SUPPLY AIR ENTERS CEILING CAVITY THRU RETURN AIR GRILLES AND FREE RETURNS TO AHU'S VIA CEILING CAVITY, PROVIDE RETURN AIR OPENING IN WALL-TO-DECK ABOVE CEILING THAT BLOCK PATH, REFER TO ARCHITECTURAL DRAWINGS. RETURN AIR ELBOWS SHALL BE SIZED AT 1 SQ. FT PER 400 CFM SUPPLY AIR.
6. ARRANGE PIPING CONNECTIONS TO ALL EQUIPMENT TO ALLOW EASY REMOVAL OF EQUIPMENT, SUB-ASSEMBLIES, COILS, FANS, MOTORS, FILTERS, ACCESS PANELS, ETC... PROVIDE UNIONS, FLANGES AND VALVES AT CONNECTIONS. PROVIDE AND INSTALL VICTAULIC JOINTS AT COILS, REF. SPECIFICATIONS. PLACE STOP VALVES ON SYSTEM SIDE OF REMOVABLE PIPE SECTIONS.
7. CONTRACTOR SHALL FIELD MEASURE STRUCTURAL ELEMENTS AND COORDINATE EQUIPMENT, PIPING AND DUCT ROUTING TO FIT EXISTING CONSTRUCTION. PROVIDE OFFSETS, BOOTS FOR ENVELOP OBSTRUCTIONS THAT CANNOT BE AVOIDED. CONSTRUCTION SHALL BE PER SMACNA FIGURE 2-10.

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A	CEILING DIFFUSER – 24" X 24" FACE, PATTERN TYPE, STEEL CONSTRUCTION, OBD/RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE SCD
B	CEILING RETURN GRILLE – 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE PDFR
C	CEILING EXHAUST GRILLE – 24" X 24" PERFORATED FACE, STEEL CONST., OBD/RADIATION DAMPER, WHITE FINISH, NECK SIZE SHOWN, U.L. LISTED PRICE PDDR

NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPES FOR AIR DEVICES.
2. ALL CEILINGS ARE FIRE RATED PER U.L. LISTINGS ON ARCHITECTURAL DRAWINGS. PROVIDE FIRE PROTECTION FOR ALL CEILING DEVICES PER DETAIL 13/M-17 AND SPECIFICATIONS.

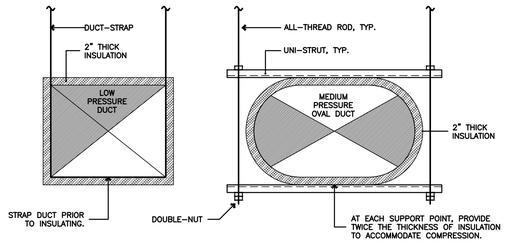


6 KITCHEN UPBLAST EXHAUST FAN DETAIL

NO SCALE

NOTES

1. ARCHITECTURAL ROOF CURB INSTALLATION REQUIREMENTS SHALL SUPERCEDE THIS DETAIL.
2. INSTALL SHEETMETAL COVERING OVER WOOD BLOCKING IN THE AIRSTREAM OR OPEN TO THE CEILING CAVITY.

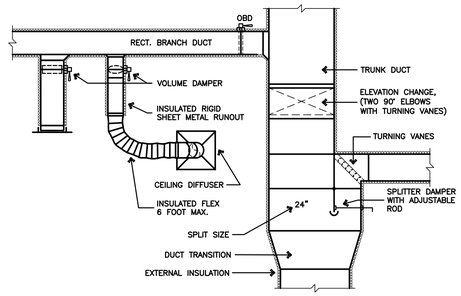


4 EXTERNALLY INSULATED DUCT SUPPORT DETAIL

NO SCALE

NOTES:

1. ROUND MEDIUM PRESSURE DUCT MAY BE SUPPORTED WITH DUCT STRAPS.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

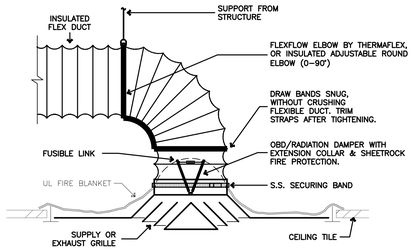


2 DUCTWORK DETAIL

NO SCALE

NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

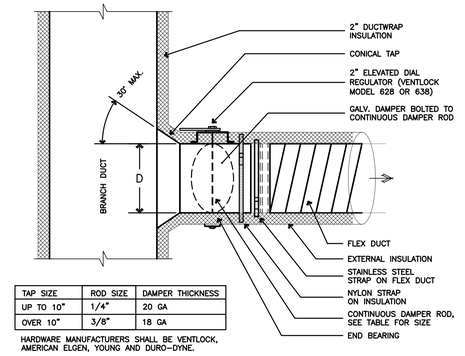


5 AIR DEVICE DETAIL

NO SCALE

NOTES:

1. RADIATION DAMPER SHALL ONLY BE PROVIDED IN CEILING DEVICES INSTALLED IN RATED CEILING ASSEMBLIES. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO DETERMINE WHICH, IF ANY, CEILINGS ARE RATED.
2. REFER TO SPECIFICATIONS OF FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



TAP SIZE	ROD SIZE	DAMPER THICKNESS
UP TO 10"	1/4"	20 GA
OVER 10"	3/8"	18 GA

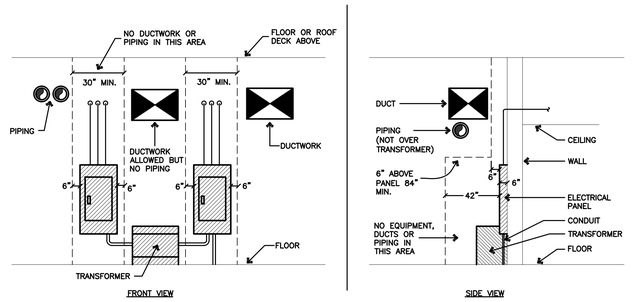
HARDWARE MANUFACTURERS SHALL BE VENTLOCK, AMERICAN ELGEN, YOUNG AND DURO-DYNE.

3 DUCT TAP CONNECTION DETAIL

NO SCALE

NOTES:

1. DELETE CONICAL SECTION IF TOO LARGE FOR THE DUCT.
2. REFER TO SPECIFICATIONS OF FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



1 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

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FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD.
SUGAR LAND, TX 77479

SEAL

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07.18.2025

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MECHANICAL NOTES AND DETAILS
S-M2.01

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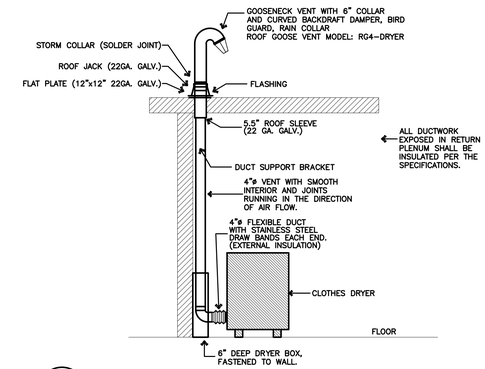
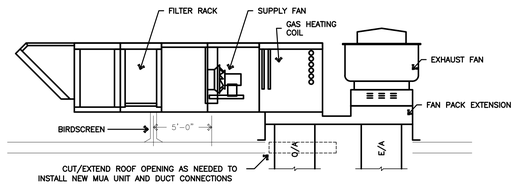


5 RESIDENTIAL CLOTHES DRYER FLUE VENT

NO SCALE

NOTES:

1. VENT TERMINATION AT WALL FOR STACKABLE WASHER/DRYER SHALL BE AT 60" AFF.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

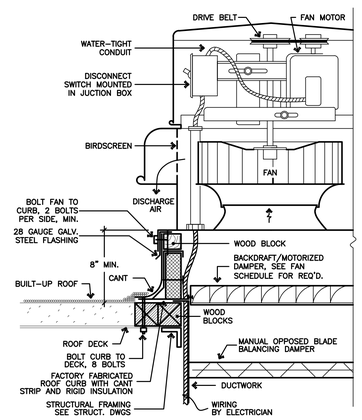


4 SUPPLY/EXHAUST KITCHEN PLENUM DETAIL

NO SCALE

NOTES:

1. xxxxx

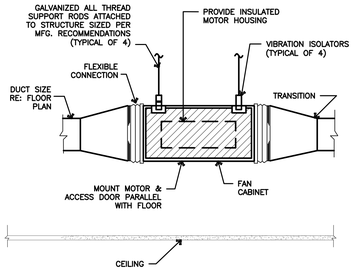


3 ROOF EXHAUST FAN AND VENT DETAIL

NO SCALE

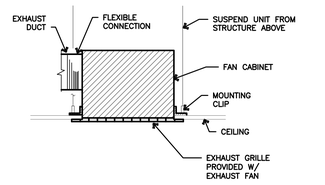
NOTES:

1. NO WOOD BLOCKING SHALL BE LEFT EXPOSED IN THE CEILING PLENUM. COVER ALL EXPOSED WOOD WITH 1/2" SHEETROCK OR 20 GAUGE GALVANIZED SHEETMETAL.
2. ROOF VENT WILL NOT HAVE FAN/MOTOR ASSEMBLY, DISCONNECT SWITCH OR OBD.
3. ARCHITECTURAL ROOF CURB INSTALLATION REQUIREMENTS SHALL SUPERCEDE THIS DETAIL WHERE APPLICABLE.
4. ALL FANS SCHEDULED TO BE PROVIDED WITH 140MPH WIND RATING, INCLUDING FACTORY PROVIDED CURB. CURB INSTALLATION SHALL FOLLOW MANUFACTURER'S REQUIREMENTS FOR SECURING TO ROOF AND EQUIPMENT WHERE IT DIFFERS FROM THE DETAIL.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



2 INLINE EXHAUST FAN DETAIL

NO SCALE



1 CABINET EXHAUST FAN

NO SCALE

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MECHANICAL DETAILS (CONT'D.)

S-M2.02

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ELECTRICAL AND LOW VOLTAGE LEGEND AND SYMBOLS

TYPE 'A' LIGHT FIXTURE
LIGHT FIXTURE WITH EMERGENCY BACKUP
EXIT SIGN/EXIT SIGN WITH DIRECTIONAL ARROW
EMERGENCY EGRESS LIGHT FIXTURE
WALL MOUNTED FIXTURE OR SCONCE
CEILING DOWNLIGHT OR CYLINDER
WALL PACK FIXTURE
INV — LIGHTING INVERTER

20A, 277V TOGGLE/3-WAY/4-WAY SWITCH
20A, 277V MOMENTARY 3-POSITION TOGGLE SWITCH
20A, 277V, MOMENTARY 3-POSITION KEY SWITCH
20A, 277V MAINTAINED 2-POSITION/3-WAY/4-WAY KEY SWITCH
20A, 277V TOGGLE SWITCH W/ INTEGRAL NIGHT LIGHT
MOTOR RATED ON/OFF SWITCH, MP W/ PILOT LIGHT (SWITCH RATING SHALL BE ≥ UPSTREAM OCPD & VOLTAGE)
DPST — DOUBLE POLE SINGLE THROW (DPST) SWITCH WITH RED PILOT LIGHT.
TSW — TIMER SWITCH

NETWORK LIGHTING CONTROLS

MULTIBUTTON LOW VOLTAGE LIGHTING SWITCH PROVIDE NUMBER OF BUTTONS INDICATED IN SINGLE PLATE.
MULTIPLE DIMMER SWITCHES PROVIDE NUMBER OF SWITCHES INDICATED IN SINGLE PLATE.
MULTIPLE KEY TYPE SWITCHES PROVIDE NUMBER OF SWITCHES INDICATED IN SINGLE PLATE.
WALL SENSOR SWITCH
20A, 277V, STANDALONE DIMMER SWITCH (DISPLAY CABINET)
360° CEILING SENSOR
180° CEILING SENSOR
CEILING SENSOR
WALL MOUNT SENSOR
DAYLIGHT PHOTOSENSOR
RC / RCD — LIGHTING ROOM CONTROLLER/POWER PACK
ER — EMERGENCY LIGHTING RELAY/CONTROL UNIT
PLC — PLUG LOAD CONTROLLER

20A, 125V SIMPLEX/DUPLEX/QUAD RECEPTACLE
GFI — 20A, 125V DUPLEX RECEPTACLE WITH GFCI PROTECTION
GFI WP — 20A, 125V DUPLEX RECEPTACLE WITH GFCI PROTECTION AND WEATHERPROOF COVER.
GFI — REMOTE GFCI DEVICE, REF SPECS AND EDF GFI DETAIL.
USB — 20A, 125V DUPLEX/QUAD RECEPTACLE W/ USB-A PORTS PROVIDE 2-5A PORTS PER DEVICE – HUBBELL USB20A5
20A, 125V SIMPLEX/DUPLEX/QUAD IG/COMPUTER RECEPTACLE
GFI — 20A, 125V, IG/COMPUTER DUPLEX RECEPTACLE WITH GFCI
PLUG LOAD CONTROLLED DUPLEX
NEMA IEC CS — NEMA/IEC/CS NUMBERED POWER OUTLET MATCH PROVIDED EQUIPMENT CONNECTION OR CIRCUIT.
PROJ TV IM — 20A, 125V IG DUPLEX RECEPTACLE AT PROJECTOR, TV, OR INTERACTIVE MEDIA LOCATION.
LOW VOLTAGE OUTLET
CEILING MOUNTED RECEPTACLE
CEILING MOUNTED LOW VOLTAGE OUTLET
SINGLE SERVICE FLOOR BOX WITH DUPLEX/QUAD REC
SINGLE SERVICE FLOOR BOX WITH DUPLEX/QUAD IG REC
SINGLE SERVICE LOW VOLTAGE FLOOR BOXES
MULTI SERVICE FLOOR BOX WITH QUAD/QUAD IG REC
CR — CORD REEL
D — DROP CORD
EPO — EMERGENCY POWER OFF (EPO) SWITCH
PB — PUSH BUTTON
SP — TELEPOWER POLE

J — J-BOX
CEILING MOUNTED J-BOX
CA — J-BOX FOR ACCESS CONTROL DEVICE
HD — JUNCTION BOX AND FINAL CONNECTION TO HAND DRYER BY DIVISION 26.
HDWR — JUNCTION BOX AND FINAL CONNECTION TO ELECTRIFIED DOOR HARDWARE BY DIVISION 26.
HEAT — JUNCTION BOX AND FINAL CONNECTION TO HEAT TRACE EQUIPMENT BY DIVISION 26.
WC — JUNCTION BOX AND FINAL CONNECTION TO POWERED PLUMBING EQUIPMENT BY DIVISION 26.
SF — JUNCTION BOX AND FINAL CONNECTION TO SYSTEM FURNITURE BY DIVISION 26.

CONTACTOR
NON-FUSED DISCONNECT SWITCH
DT — NON-FUSED DOUBLE THROW DISCONNECT
FUSED DISCONNECT SWITCH
ST — DISCONNECT/CB WITH SHUNT TRIP
CB — ENCLOSED CIRCUIT BREAKER
MOTOR STARTER 'VFD' INDICATES VARIABLE FREQUENCY DRIVE MOTOR STARTER
MOTOR STARTER WITH INTEGRAL DISCONNECT
MOTOR
TC — TIME CLOCK

ELECTRICAL PANELBOARD
ELECTRICAL METER
SPD — TVSS OR SPD
GANN — GENERATOR REMOTE ANNUNCIATOR

LOW VOLTAGE CABLING PATHWAY, REF. SPECIFICATIONS

KITCHEN SYMBOL LEGEND

C — LOAD CENTER, BY FOOD SERVICE PROVIDE UNDERGROUND CONDUIT STUBBED UP AT LOAD CENTER LOCATION PER SUBMITTAL SHOP DRAWINGS.
P — POINT OF SALE EQUIPMENT, BY FOOD SERVICE. PROVIDE UNDERGROUND CONDUIT STUBBED UP POS LOCATION PER SUBMITTAL SHOP DRAWINGS.
F — REMOTE FIRE PULL, REFERENCE INSTALLATION DETAIL
B — BELL/BUZZER WITH 120V TO LOW VOLTAGE TRANSFORMER
D — DROP CORD
DB — DOORBELL BUTTON
V CLR/FRZR — CEILING STROBE FOR ENTRAPMENT ALARM
V CLR/FRZR — WALL STROBE FOR ENTRAPMENT ALARM

COORDINATION SYMBOL LEGEND

DDC — HVAC CONTROL PANEL, REQUIRES POWER AND DATA CONNECTIONS WITHIN CABINET COOR EXACT LOCATION AND REQUIREMENTS WITH CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.
SD — SMOKE DAMPER
FSD — FIRE/SMOKE COMBINATION DAMPER
M / MD — MOTORIZED DAMPER

SITE PLAN

UTILITY POLE
POLE MOUNTED TRANSFORMER BANK
SITE POLE LIGHT
UGE J — FLUSH IN GRADE ELECTRICAL PULL BOX
LV HH J — FLUSH IN GRADE, LOW VOLTAGE HAND HOLE
CONCRETE BOLLARD

(X)PP	POWER POLE
(X)SP	SERVICE POLE OR RACK
(X)XP	XFMR POLE
(X)LVP	LOW VOLTAGE POLE
(X)TP	TRANSITION POLE
OHP	OVERHEAD POWER WIRING
480V	480V OVERHEAD POWER WIRING
UGP	UNDERGROUND PRIMARY ELECTRICAL
UGS	UNDERGROUND SECONDARY ELECTRICAL
UGE	UNDERGROUND EMERGENCY ELECTRICAL

DIVISION 28 LEGENDS

FIRE ALARM

F — FIRE ALARM PULL STATION W/ STOPPER II
F / S — WALL FIRE ALARM AUDIO/VISUAL DEVICE
WP S — OUTDOOR WEATHERPROOF FIRE AUDIO/VISUAL DEVICE
H — WALL FIRE ALARM AUDIO DEVICE
V — WALL FIRE ALARM VISUAL DEVICE
F / S — CEILING FIRE ALARM AUDIO/VISUAL DEVICE
S — CEILING FIRE ALARM AUDIO DEVICE
V — CEILING FIRE ALARM VISUAL DEVICE
DUCT SMOKE DETECTOR
I / PS — CEILING SMOKE DETECTOR
H — CEILING HEAT DETECTOR
CO — CEILING CARBON MONOXIDE DETECTOR
PS CO — CEILING COMBINATION SMOKE/CARBON MONOXIDE DETECTOR
FR — FIRE ALARM RELAY FOR STAGE SOUND RACK OVERRIDE
BSD — BSR — BEAM SMOKE DETECTOR
FANN — FIRE ALARM REMOTE ANNUNCIATOR OR LOCAL OPERATOR'S CONSOLE
FACP — FIRE ALARM CONTROL PANEL
FAPS — FIRE ALARM POWER SUPPLY/AMPLIFIER
G — INDICATES DEVICE WITH PROTECTIVE GUARD
WG — INDICATES DEVICE WITH WIRE GUARD
HC — INDICATES DEVICE RATED FOR HAZARDOUS CONDITIONS
SD — SMOKE DAMPER
FSD — FIRE/SMOKE COMBINATION DAMPER

MULTI-SERVICE FLOOR BOX NOTES

FLOOR POWER AND LOW VOLTAGE
PROVIDE HEAVY-DUTY MULTI-GANG FLUSH IN GRADE OR FIRE RATED POKE-THRU OUTLET WITH HEAVY DUTY METAL HINGED COVER WITH CABLE EXIT SLOT.
FLOOR BOX MUST BE RATED FOR INSTALLATION IN GRADE.

FOR EACH FLOOR BOX PROVIDE:
1. PROVIDE:
   1.A. ONE QUAD OR TWO DUPLEX RECEPTACLES.
   1.B. PROVIDE IG RECEPTACLES WHERE SHOWN.
   1.C. POWER CONNECTION TO TABLE (WHERE SHOWN)
2. BLANK STAINLESS STEEL COVER FOR UN-USED GANGS.
3. PROVIDE ONE 3/4"C UNDERGROUND CONDUIT FOR POWER.
4. PROVIDE ONE 1"C UNDERGROUND CONDUIT WITH WATERPROOF INNER DUCT FOR DATA.
5. PROVIDE ONE 1"C UNDERGROUND CONDUIT WITH WATERPROOF INNER DUCT FOR LOW VOLTAGE CABLING
6. PROVIDE DIVIDERS TO MAINTAIN SEPARATION BETWEEN SERVICES.

UNDERGROUND CONDUITS MUST BE WATER TIGHT TO PREVENT MOISTURE ENTERING CONDUITS.
DO NOT COMBINE CONDUIT FOR POWER & LOW VOLTAGE.

REFERENCE FLOOR PLANS AND SPECIFICATIONS FOR QUANTITY OF DATA DROPS AND ADDITIONAL INFORMATION.

COORDINATE WITH ARCHITECT TO PROVIDE COVER/RING TO MATCH FLOOR MATERIAL AND SUBMIT COVER FINISH FOR ARCHITECT TO SELECT PRIOR TO ORDERING.

GENERAL NOTES / TAGS

+18"	INDICATES DEVICES AT +18" AFF
+42"	INDICATES DEVICES AT +42" AFF
+96"	INDICATES DEVICES AT +96" AFF
+12 FT	INDICATES DEVICES AT +12 FT AFF, ETC.
*	INDICATES DEVICES ABOVE COUNTER, REF ARCH
CLG	INDICATES DEVICES AT CEILING
PMR	INDICATES PEDESTAL MOUNTED DEVICE, REF PMR DETAIL
TV	INDICATES DEVICES AT TELEVISION/DISPLAY LOCATION
IM	INDICATES DEVICES AT INTERACTIVE MEDIA LOCATION
PROJ	INDICATES DEVICES AT PROJECTOR LOCATION
S	INDICATES SURFACE MOUNTED DEVICE
IEC	INDICATES IEC POWER OUTLET
NEMA	INDICATES NEMA NUMBERED POWER OUTLET
GFI	INDICATES GROUND FAULT INTERRUPT (GFI) PROTECTION
WP	INDICATES WEATHERPROOF DEVICES
GFI WP	INDICATES GFI PROTECTED WEATHERPROOF DEVICE
G	INDICATES DEVICE WITH PROTECTIVE GUARD
WG	INDICATES DEVICE WITH WIRE GUARD
3R	INDICATES NEMA 3R RATED DEVICE
4XSS	INDICATES NEMA 4XSS RATED DEVICE
EM	INDICATES DEVICE ON EM/STANDBY POWER
VFD	INDICATES VARIABLE FREQUENCY DRIVE (VFD)
E	EXISTING DEVICES TO REMAIN
D	EXISTING DEVICES TO BE DEMO/REMOVED
R	EXISTING DEVICES TO BE RELOCATED
REP	EXISTING DEVICES TO BE REPLACED
	(X) = (E) FOR EXISTING
	(X) = (D) FOR DEMO
	(X) = (R) FOR RELOCATION
	(X) = (N) FOR NEW
→	HOMERUN TO CIRCUIT NOTED

1. RECEPTACLES AND DATA OUTLETS SHALL BE MOUNTED AT +18" AFF UNLESS NOTED ON THE DRAWINGS.
2. REF. SPECIFICATIONS FOR MOUNTING HEIGHT OF OTHER DEVICES.
3. ELECTRICAL RECEPTACLES, TELEPHONES, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
4. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
4. ALL DEVICES SHOWN AT THE SAME LOCATION AND ELEVATION SHALL BE GROUPED TOGETHER AND SPACED 2 INCHES BETWEEN BOXES.
5. PROVIDE SS COVER PLATE FOR ALL EMPTY JBOX.
6. ALL NON-LOCKING 125V AND 250V, 15A AND 20A RECEPTACLES SHALL BE TAMPER RESISTANT TYPE.

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ELECTRICAL AND FIRE ALARM SCHEDULES
s-E.000

PROVIDE CONDUIT & SLEEVES THRU FIRE WALLS, WALLS AND FLOORS FOR LOW VOLTAGE CABLING WIRING, ETC.

ALL CONDUIT & J-BOXES FOR LOW VOLTAGE CABLING SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL LOW VOLTAGE CABLING IN WALLS, EXPOSED AREAS AND ABOVE INACCESSIBLE CEILINGS SHALL REQUIRE CONDUIT AND J-BOXES. REFERENCE SPECIFICATIONS AND TECHNOLOGY DOCUMENTS FOR ADDITIONAL INFORMATION/REQUIREMENTS.

PULL BOXES AND BELOW GRADE CONDUIT FOR LOW VOLTAGE CABLING, WIRING, ETC. BY ELEC CONTRACTOR.

FIRE ALARM SYSTEM DESCRIPTION AND SEQUENCE OF OPERATION

1. FIRE ALARM SYSTEM SHALL BE DESIGNED TO MEET NFPA REQUIREMENTS AS WELL AS CITY AND NATIONAL BUILDING CODES. PROVIDE COMPLETE FIRE ALARM SYSTEM, DEVICES AND WIRING.
2. INSTALL FIRE ALARM CONTROL PANEL IN RECEPTION AREA. INSTALL REMOTE POWER SUPPLY PANELS IN MECHANICAL/ELECTRICAL ROOMS.
3. FIRE ALARM PANEL, POWER SUPPLIES, DEVICES, ETC. SHALL BE MANUFACTURED BY THE SAME MANUFACTURER AS THE FIRE ALARM CONTROL PANEL.
4. FIRE ALARM REMOTE POWER SUPPLIES AND PANELS SHALL BE LOCATED IN MECHANICAL OR ELECTRICAL ROOMS ONLY. DO NOT LOCATE IN STORAGE ROOMS, DATA CLOSETS OR FINISHED SPACES.
4. PROVIDE AUDIBLE, INTELLIGIBLE AND VISUAL ALARM COVERAGE OF THE AREA OF RENOVATION AS REQUIRED BY CODE.
5. PROVIDE SMOKE DETECTORS AT EACH FIRE ALARM PANEL, REMOTE TRANSPONDER PANEL, BOOSTER PANEL AND REMOTE ANNUNCIATOR PER NFPA 72.
6. IN ADDITION TO THE SPECIFIED FIRE ALARM EQUIPMENT, THE FIRE ALARM CONTRACTOR SHALL PROVIDE
   6.A. SURGE PROTECTORS FOR ALL NEW 120V POWER CONNECTIONS TO FIRE ALARM EQUIPMENT.
   6.B. SURGE PROTECTORS FOR ALL SIGNALING LINE CIRCUITS (SLC), NOTIFICATION CIRCUITS AND INITIATING CIRCUITS CONNECTED TO THE FIRE ALARM CONTROL PANEL WHICH LEAVE THE BUILDING.
7. SHOULD ANY DETECTOR, MONITOR OR PULL STATION ACTIVATE, ALL SPEAKERS SHALL SOUND AND STROBES FLASH. AIR HANDLING EQUIPMENT SHALL BE DEACTIVATED. AN ALARM SIGNAL SHALL BE SENT TO A REMOTE LOCATION VIA AUTOMATIC DIALER. ALSO, DE-ENERGIZE SUPPLY FANS, EXHAUST FANS AND OTHER AIR CIRCULATING DEVICES IF 2000 CFM OR OVER, SERVING THE AREA IN ALARM,
8. ALL LOW VOLTAGE WIRING SHALL BE FPLP RATED WIRE, WITH MINIMUM WIRE SIZE PER SPECIFICATIONS.
   8.A. PLENUM RATED CABLE ABOVE ACCESSIBLE CEILING SHALL BE SUPPORTED BY J-HOOKS, SPACED AT FOUR (4) FEET ON CENTER.
   8.B. INSTALL FIRE ALARM CABLES IN CONDUIT FOR AREAS WITHOUT CEILING OR ABOVE INACCESSIBLE CEILINGS.
   8.C. EXPOSED CONDUIT IN FINISHED SPACES SHALL BE ALLOWED WHERE NO OTHER OPTION EXISTS AND ONLY WITH PRIOR WRITTEN APPROVAL BY THE OWNER. ALL EXPOSED CONDUIT SHALL BE PAINTED TO MATCH.
   8.D. ALL CABLING THROUGH WALLS, FIRE WALLS AND FLOORS SHALL BE INSTALLED IN SLEEVES WITH PROTECTIVE BUSHINGS ON BOTH ENDS.
9. FIRE ALARM SYSTEM SHALL BE MONITORED BY A UL LISTED CENTRAL RECEIVING STATION.
10. INTERLOCK LIGHTING CONTROL PANELS WITH FIRE ALARM SYSTEM TO ENABLE ALL LIGHTING UPON ACTIVATION.
11. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

FIRE ALARM SYSTEM NOTES

1. GENERAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL AND FIRE ALARM SUBCONTRACTOR FOR LOCATIONS OF REMOTE POWER SUPPLIES. FIRE ALARM POWER SUPPLIES ARE NOT SHOWN ON THIS DRAWING AND SHALL BE LOCATED BY FIRE ALARM SUBCONTRACTOR IN ORDER TO ACCOMMODATE HIS FIRE ALARM SYSTEM BATTERY AND VOLTAGE DROP CALCULATIONS PER MANUFACTURER'S RECOMMENDATION & NFPA REQUIREMENTS. ELECTRICAL CONTRACTOR SHALL INCLUDE ADDITIONAL DEDICATED 120V CIRCUITS IN BASE BID TO SERVE FIRE ALARM POWER SUPPLIES IN DIFFERENT AREAS. PROVIDE 2-12 +12G, 3/4"C AND SPARE 20A/1P CB(S) IN LOCAL LIFE SAFETY EMERGENCY 120V PANELS TO SERVE FIRE ALARM REMOTE POWER SUPPLIES.
2. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR DESIGN AND FOR FINAL CORRECT LOCATION OF DEVICES TO RELIEVE NUISANCE ALARMS, SUCH AS INSTALLING A HEAT DETECTOR IN FRONT OF AN OVEN WHICH WILL RELEASE STEAM, THUS POTENTIALLY SETTING OFF THE ALARM. ALSO, THE CONTRACTOR IS RESPONSIBLE FOR DETECTORS REQUIRED BY CODE EVEN IF NOT SHOWN ON DRAWING, LIKE A CLOSET. IF THERE IS UNCERTAINTY, BRING UP DURING THE BID PROCESS AND THEY WILL BE ADDRESSED DURING THE BIDDING PROCESS.
3. FIELD VERIFY ENVIRONMENTAL ISSUES THAT CAN ADVERSELY AFFECT OPERATION OF SMOKE DETECTORS. DO NOT LOCATE NEAR AIR FLOW DEVICES LEADING TO PREMATURE BUILD UP OF DUST CAUSING NUISANCE TROUBLE SIGNALS. DEVICE RELOCATION OR TYPE CHANGE WILL BE COVERED UNDER WARRANTY.

FIRE ALARM SCOPE OF WORK

1. THERE IS AN EXISTING FIRE ALARM SYSTEM IN EACH BUILDING.
   1.A. TEST THE EXISTING SYSTEM PRIOR TO BEGINNING DEMO. NOTE ANY FAULTS OR TROUBLES AND PROVIDE A WRITTEN REPORT TO THE OWNER.
   1.B. EXPAND THE EXISTING SYSTEM AS REQUIRED TO INTEGRATE THE NEW DEVICES IN THE AREA OF RENOVATION.
2. PROVIDE WIRING AND DEVICES AS INDICATED TO PROVIDE COMPLETE AUDIBLE, INTELLIGIBLE AND VISUAL ALARM COVERAGE OF RENOVATED AREAS AS REQUIRED BY CODE.
   2.A. PROVIDE SMOKE DETECTOR COVERAGE OF ALL STORAGE ROOMS AND ADDITIONALLY AS SHOWN ON THE DRAWINGS.
   2.B. PROVIDE HEAT DETECTOR COVERAGE OF THE KITCHEN, CUSTODIAL ROOMS, AND ADDITIONALLY AS SHOWN ON THE DRAWINGS.
   2.C. PROVIDE DUCT MOUNTED DETECTORS AT EACH NEW AIR HANDLING UNIT SUPPLY AND RETURN CONNECTION EXCEEDING 2000 CFM. IF FREE AIR RETURN, PROVIDE FREE AIR DETECTOR COVERAGE OF THE RETURN AIR OPENINGS TO THE MECHANICAL ROOM. ENSURE AIR FLOW CANNOT PREVENT OPERATION OF THE DETECTORS AND PROVIDE ADEQUATE CLEARANCE PER NFPA 72.
   2.D. CONTROL RELAYS SHALL BE LOCATED WITHIN 3 FT OF THE CONTROLLED CIRCUIT OR APPLIANCE.
3. PROVIDE SMOKE DETECTORS AT EACH NEW FIRE ALARM PANEL, REMOTE TRANSPONDER PANEL, BOOSTER PANEL AND REMOTE ANNUNCIATOR PER NFPA 72.
4. PROVIDE LED REMOTE ALARM WITH ENGRAVED STAINLESS STEEL PLATE WHERE DUCT DETECTORS ARE NOT LOCATED IN MECHANICAL ROOM, LOCATED ABOVE CEILINGS OR WHERE MOUNTED TOO HIGH OR VIEW IS BLOCKED BY DUCTWORK IN MECHANICAL ROOM.
   4.A. REMOTE LED LIGHT INDICATOR FOR DUCT SMOKE DETECTORS SHALL BE MOUNTED FLUSH IN CEILING OR MOUNTED IN WALL AT +7FT.
   4.B. STAINLESS STEEL PLATE SHALL BE ENGRAVED WITH THE DUCT SMOKE DETECTOR AS-BUILT IDENTIFICATION NUMBER.
5. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SPARES

1. THE FIRE ALARM CONTRACTOR SHALL INCLUDE IN HIS BID THE COST TO PROVIDE AND INSTALL THE ADDITIONAL SPARE PARTS AND ASSOCIATED CABLING PER THE SPECIFICATIONS. SPARES SHALL BE INSTALLED AS INSTRUCTED BY THE OWNER. UNINSTALLED DEVICES SHALL BE DELIVERED TO THE OWNER AS ATTIC STOCK.

GENERAL RENOVATION AND REMODELING NOTES

1. READ ALL MEP AND ARCH. DRAWINGS TO IDENTIFY AREAS OF RENOVATION AND SCOPE OF WORK.
2. ALL RENOVATION AND DEMOLITION WORK SHALL NOT AFFECT AREAS NOT INCLUDED IN THE AREAS OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUITY OF ALL SERVICES (POWER, TELEPHONE, FIRE ALARM, DATA, SECURITY, ETC.) IN NON-DEMOLITION/RENOVATION AREAS. ALL SERVICES SHALL BE MAINTAINED AT ALL TIMES.
3. ALL OUTAGES AFFECTING NON-DEMOLITION/RENOVATION AREAS SHALL BE SCHEDULED WITH THE OWNER WITH A MINIMUM 2 WEEKS ADVANCE NOTICE. OUTAGES SHALL BE COORDINATED WITH OTHER TRADES TO MINIMIZE THE QUANTITY AND IMPACT ON BUILDING OPERATION.
4. THIS ELECTRICAL DRAWING ONLY SHOWS SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J-BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
5. CONTRACTOR SHALL FIELD VERIFY AND MARK UP THE FOLLOWINGS IN AREAS OF RENOVATION:
   5.A. EXISTING DATA, AUDIO, VIDEO, SPEAKERS AND OTHER LOW VOLTAGE OUTLETS AND DEVICES.
   5.B. EXISTING CEILING MOUNTED PROJECTORS.
   5.C. EXISTING SECURITY, CCTV, ACCESS CONTROL DEVICES.
   5.D. EXISTING FIRE ALARM DEVICES.
   5.E. EXISTING WIRELESS ACCESS POINTS AND GRID LABELING.
   5.F. EXISTING LIGHT FIXTURES AND SWITCHES.
   5.G. EXISTING ELECTRICAL DEVICES, J-BOXES, CONDUIT, WIRING, WIRING SUPPORTS, ETC.
   5.H. EXISTING ELECTRICAL SWITCHGEAR.
   5.I. EXISTING CONTROL PANELS AND CONTROL CIRCUITS.
   5.J. EXISTING HANGER WIRE FROM CONC. CEILING.
6. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
7. ALL EXISTING DEVICES SHALL BE REINSTALLED IN NEW CEILINGS AT SAME LOCATION EXCEPT WHERE SHOWN TO BE NEW.
8. CONDUIT/WIRE NOT TO BE REUSED SHALL BE REMOVED ALL THE WAY BACK TO THE UPSTREAM EQUIPMENT.
   8.A. PROVIDE ADDITIONAL SUPPORTS FOR EXISTING CONDUIT/WIRE TO REMAIN TO MEET CURRENT CODE REQUIREMENTS.
9. ANY MATERIAL THAT HAS SALVAGE VALUE SHALL BE OFFERED TO THE OWNER, AND IF ACCEPTED, DELIVERED TO HIS WAREHOUSE. IF NOT ACCEPTED IT SHALL BE PROPERLY DISPOSED OF WITH THE OTHER CONSTRUCTION DEBRIS.
10. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITES.
11. WHERE PARTIAL CIRCUITS OR SYSTEMS ARE TO BE REUSED, ENSURE THAT THEY REMAIN ACTIVE. WHERE EXISTING EQUIPMENT IS RELOCATED OR REPLACED WITH NEW. MODIFY, EXTEND AND RELOCATE EXISTING CIRCUIT TO CONNECT TO EQUIPMENT, UNLESS SHOWN TO HAVE NEW CIRCUIT.
12. WHERE AUXILIARY SYSTEMS SUCH AS SECURITY, DATA, SOUND, ETC. INTERFACE WITH EXISTING EQUIPMENT THAT IS REPLACED OR MODIFIED (MECHANICAL, ELECTRICAL OR PLUMBING), DISCONNECT AND RECONNECT THESE SYSTEMS.
13. WHERE NEW CIRCUIT BREAKERS ARE TO BE INSTALLED IN EXISTING PANELS OR SWITCHBOARD, VERIFY THAT THE CIRCUIT BREAKER WILL FIT IN THE ALLOTTED SPACE. PROVIDE NEMA 1 ENCLOSURE ADJACENT TO PANEL & WIRE CONNECT TO BUSSING IF THERE IS INSUFFICIENT SPACE.
14. WHERE PARTIAL CIRCUITS OR SYSTEMS ARE TO BE REUSED, ENSURE THAT THEY REMAIN ACTIVE. WHERE EXISTING EQUIPMENT IS RELOCATED OR REPLACED WITH NEW, MODIFY, EXTEND AND RELOCATE EXISTING CIRCUIT TO CONNECT TO EQUIPMENT, UNLESS SHOWN TO HAVE NEW CIRCUIT.
15. WHEN REPLACING LIGHTS AND CEILINGS, ENSURE THAT EXISTING DATA, TELEVISION AND PA CABLES TO REMAIN CONTINUE TO MEET THE CURRENT STANDARDS. FOR DATA CABLES, THIS IS THE IEEE 802.1. FOR TELEVISION AND PA CABLE, A FOUR INCH DISTANCE IS NEEDED FROM ALL LIGHT FIXTURES. NEW DROP LOCATION SHOULD BE WITHIN THREE FEET OF POWER OUTLET.
16. PAINT NEW AND EXISTING EXPOSED RACEWAY IN AREAS OF RENOVATION TO MATCH FINISHES.
17. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
18. INTERESTED CONTRACTORS MUST VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH THE PROJECT REQUIREMENTS AND EXISTING CONDITIONS AND SHALL INCLUDE IN THEIR PROPOSALS COSTS TO REPAIR, RELOCATE, MODIFY AND REMOVE EXISTING ELEMENTS AS REQUIRED TO COMPLETE INSTALLATION OF ALL SYSTEMS SHOWN ON THESE DRAWINGS.
19. SEE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

ELEC REQUIREMENTS FOR BUILDING RENOVATION

1. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
2. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
3. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
4. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
5. ALL EXISTING DEVICES TO REMAIN SHALL BE REINSTALLED IN NEW CEILINGS AND WALLS EXCEPT WHERE INDICATED TO BE REMOVED/RELOCATED/REPLACED.
6. EXISTING DEVICES IN WALLS TO BE FURRED OUT OR RECEIVE NEW SURFACE TREATMENT SHALL REMAIN. EXTEND JBOX TO NEW WALL SURFACE AND RECONNECT TO EXISTING CIRCUITS. EXTEND WIRING/CABLING FROM NEAREST ACCESSIBLE POINT AS NECESSARY.
7. REINSTALL ALL DEVICES NOT SHOWN TO BE REMOVED.
8. EXISTING LIGHT FIXTURES SHALL REMAIN EXCEPT WHERE SHOWN AS NEW. EXTEND EXIST CONDUIT AND WIRE DOWN TO NEW LIGHT FIXTURES, REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. ALL EXISTING EXIT SIGNS SHALL BE REINSTALLED AND RECONNECTED TO EXISTING CIRCUITS EXCEPT IN CORRIDORS AND AREAS OF RENOVATION SHOWING NEW.
10. ALL NEW DEVICES IN EXISTING WALLS IN FINISHED SPACES SHALL BE INSTALLED FLUSH MOUNTED, NO EXPOSED CONDUIT OR WIREMOLD ALLOWED. CUT EXISTING WALLS AND PATCH/REPAIR TO MATCH EXISTING AS REQUIRED.
   10.1. DEVICES/CONDUIT IN CUSTODIAL, MECHANICAL AND ELECTRICAL ROOMS MAY BE EXPOSED AND SURFACE MOUNTED.
11. PROVIDE NEW DIRECTORY FOR ALL EXISTING AND NEW PANELS SHOWING FIELD VERIFIED CIRCUITS.
12. ANY FEEDER AND BRANCH CIRCUIT NOT TO BE REUSED SHALL BE REMOVED COMPLETELY UP TO CB IN EXISTING PANEL.
13. ANY CIRCUIT OR PARTIAL CIRCUIT TO BE REUSED SHALL REMAIN ACTIVE.

GENERAL EQUIPMENT ELECTRICAL NOTE

THE ELECTRICAL DESIGN HAS BEEN COORDINATED FOR SPACE, INSTALLATION AND ELECTRICAL REQUIREMENTS WITH EQUIPMENT THAT IS SCHEDULED BY OTHER DIVISIONS. THE REQUIREMENTS FOR OTHER EQUIPMENT AND MODELS FROM ACCEPTABLE MANUFACTURERS HAVE NOT BEEN VERIFIED OR COORDINATED. THE GENERAL CONTRACTOR SHALL VERIFY THESE REQUIREMENTS PRIOR TO USING OTHER EQUIPMENT IN HIS BID AND INCLUDE ANY ADDITIONAL COSTS FOR INSTALLATION OF THE EQUIPMENT. THIS INCLUDES GENERAL CONSTRUCTION AND MEP COSTS.

ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER/OTHER TRADES FOR EXACT ELECTRICAL REQUIREMENTS OF EQUIPMENT PRIOR TO ORDERING CB(S). FIELD VERIFY EQUIPMENT NAMEPLATE RATINGS AND EQUIPMENT CONNECTION LOCATIONS WITH OTHER TRADES PRIOR TO ROUGH-IN.

TYPICAL OF HVAC EQUIPMENT, SHOP EQUIPMENT, KITCHEN EQUIPMENT, ELECTRIC ROLLUP DOORS, ETC.

GENERAL ELECTRICAL NOTES

1. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. INSTALL SYSTEMS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
3. PROVIDE LIGHT FIXTURE FIRE PROTECTION AND CONDUIT FIRE SEALING TO MAINTAIN FIRE RATING OF WALLS AND CEILINGS PER ARCHITECT'S SCHEDULE. REF. SPECIFICATIONS AND ARCH. DRAWINGS FOR ADDITIONAL INFORMATION.
4. ELECTRICAL RECEPTACLES, TELEPHONES, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
5. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
6. DO NOT INSTALL ELECTRICAL PANELS AND TRANSFORMERS UNTIL 1/4" SCALE DRAWINGS SHOWING LOCATION OF THIS EQUIPMENT RELATIVE TO MECHANICAL/PLUMBING EQUIPMENT, DUCTWORK AND PIPING IS SUBMITTED AND APPROVED. NEC CODE CLEARANCE MUST BE MAINTAINED.
7. ELECTRICAL EQUIPMENT HAS BEEN COORDINATED WITH PIPING AND DUCTWORK. DO NOT RELOCATE PANELS WITHOUT PRIOR APPROVAL.
8. ELECTRICAL DEVICES IN FIRE RATED WALLS SHALL BE A MINIMUM OF 24" AWAY FROM DEVICES ON THE OPPOSITE SIDE OF THE WALL TO MAINTAIN FIRE RATING.
9. MINIMUM SIZE CONDUIT FOR POWER SHALL BE 3/4", MIN. SIZE FLEX CONDUIT MAY BE 1/2". MINIMUM SIZE CONDUIT FOR DATA SHALL BE 1"C. DO NOT COMBINE CONDUIT FOR DATA.
10. MAX. LENGTH FOR FLEX CONDUIT SHALL BE 6 FT. ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
11. LIGHT FIXTURE WHIPS MAY BE MIN. 1/2" FLEX CONDUIT WITH MIN. #12 WIRE. LIGHT FIXTURE WHIPS SHALL BE NO MORE THAN 6 FT LONG.
12. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
13. GROUND TRANSFORMER SECONDARIES TO BUILDING STEEL AND GROUND ROD. PROVIDE CONDUIT TO PROTECT GROUNDING CONDUCTOR AND BOND EACH END OF CONDUIT TO GROUNDING SYSTEM. MIN. SIZE OF CONDUIT FOR GROUND WIRE SHALL BE 3/4"C.
14. PROVIDE J-BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM AND SOUND SYSTEMS WIRINGS, ETC. SEE SPECIFICATIONS.
15. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS.
16. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
17. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12. ALL WIRE SHALL BE STRANDED TYPE THHN OR THWN-2 (WET RATED FOR 90° C). ALL WIRES SHALL BE COLOR CODED WITH SAME COLOR CONNECTED TO SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION.
18. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT. NO SURFACE MOUNTED WIREMOLD SHALL BE ALLOWED IN FINISHED SPACES. MC CABLE SHALL BE ALLOWED INSIDE EXIST STUD WALLS OR CHASE WALLS.
19. PROVIDE AND INSTALL FINAL CONNECTIONS TO ALL EQUIPMENT PROVIDED BY OTHER TRADES AND/OR FURNISHED BY OWNER INCLUDING ALL NECESSARY CONDUIT, CORDS, PLUGS, WHIPS, HARDWIRING, ETC. IN PARTICULAR CONFIRM CONNECTION REQUIREMENTS WITH DELIVERED EQUIPMENT PRIOR TO ROUGH-IN.
20. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

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12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD.
SUGAR LAND, TX 77479

SEAL

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ELECTRICAL AND FIRE ALARM NOTES

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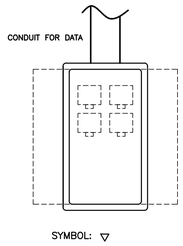
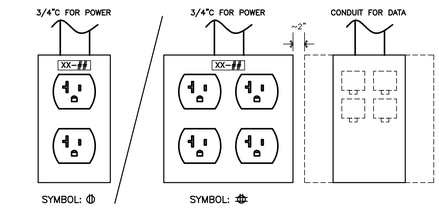


1 TYPICAL DATA OUTLETS

NO SCALE

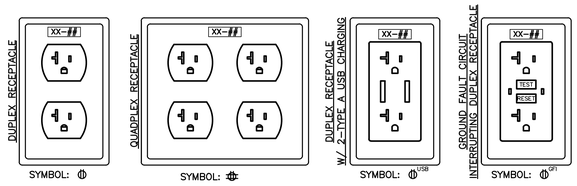
NOTES:
1. PROVIDE DEEP 4 11/16" X 4 11/16" X 2 1/8", 2-GANG BACK BOX FOR ALL DATA OUTLETS.
   1.A. PROVIDE SINGLE GANG MUDRING FOR DATA OUTLETS WITH 1-4 DROPS.
   1.B. PROVIDE PULL STRING IN ALL LOW VOLTAGE CONDUITS.
2. LOW VOLTAGE CABLING AND DEVICES BY DIVISION 27.
3. REFERENCE TECHNOLOGY DRAWINGS FOR ADDITIONAL INFORMATION.



2 TYPICAL POWER & DATA OUTLET DETAIL

NO SCALE

NOTES:
1. LOCATE DEVICES GROUPED TOGETHER AS CLOSELY TOGETHER AS POSSIBLE.
   1.A. USE CADDY TSGB16, RBS16 OR SIMILAR MOUNTING BAR IN SHEETROCK WALLS.



3 TYPICAL ELECTRICAL DEVICES

NO SCALE

NOTES:
1. ALL DEVICES SHALL BE COLOR CODED PER SPECIFICATIONS WITH 302/304 STAINLESS STEEL, STANDARD SIZE, FACEPLATES.
2. ONLY SELECT RECEPTACLES ARE SHOWN HERE. PROVIDE SIMILAR LABELS ON ALL SWITCHES, NEMA POWER OUTLETS, ETC.
3. PROVIDE LABEL WITH RED TEXT READING "EMERGENCY" FOR DEVICES ON GENERATOR FED CIRCUITS.
4. PROVIDE TYPEWRITTEN OR PREMADE CIRCUIT LABELS INDICATING THE ELECTRICAL CIRCUIT ON:
   4.A. INSTALLED WIRING AT EACH SPLICE POINT
   4.B. EACH J-BOX ABOVE CEILING WITH WIRING INSTALLED OR MODIFIED AS PART OF THIS PROJECT.
   4.C. AFFIXED TO THE FRONT OF EACH NEW AND EXISTING DEVICE FACEPLATE IN THE AREA OF RENOVATION.
   CIRCUIT LABEL
   XX-## A. XX = PANEL DESIGNATION
   B. ## = AS-BUILT CIRCUIT DESIGNATION

STANTON ENGINEERING GROUP

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SEAL



07.18.2025

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ELECTRICAL DEVICE DETAILS

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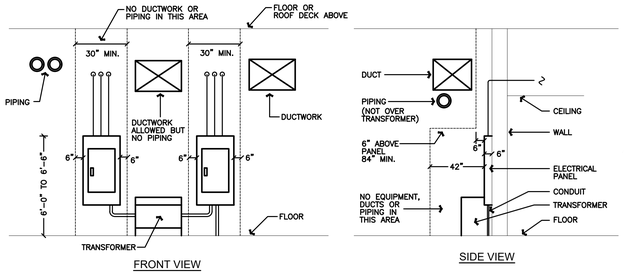
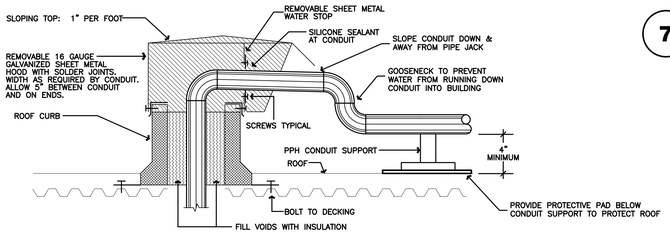


10 MECHANICAL - ELECTRICAL COORDINATION DETAIL

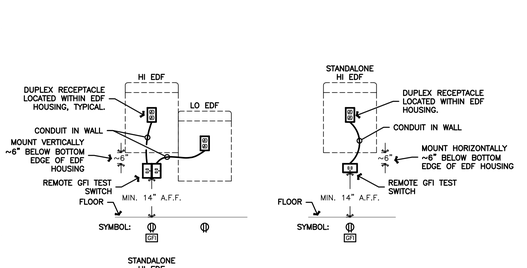
NO SCALE

COORDINATE WITH OTHER TRADES TO ENSURE NO PIPING AND DUCTWORK ABOVE ELECTRICAL EQUIPMENT AS SHOWN. PROVIDE WORKING CLEARANCE IN FRONT OF STARTERS, DISCONNECTS, PANELS, XFMRS AND ADDITIONALLY PER CODE.



11 CONDUIT ROOF PENETRATION DETAIL

NO SCALE

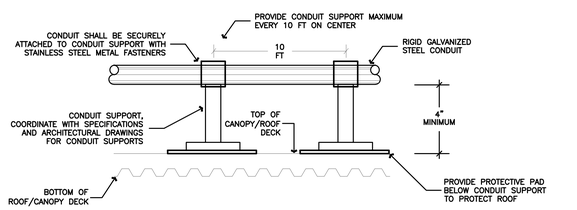


7 EDF GFI PROTECTION DETAIL

NO SCALE

NOTES:

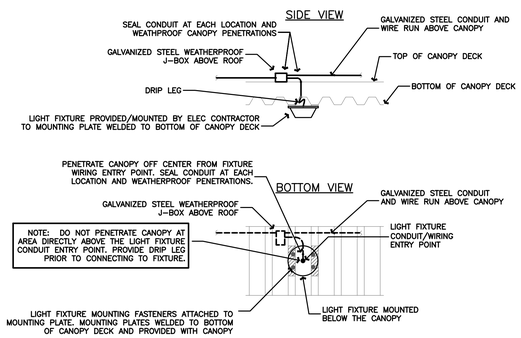
1. MODIFY EXISTING WALL AS NEEDED TO INSTALL NEW RECEPTACLE AND REMOTE GFI TEST SWITCH. PATCH/REPAIR WALL AS NEEDED TO MATCH EXISTING.
2. WIRE NEW RECEPTACLE DOWNSTREAM OF REMOTE GFI TEST SWITCH.
3. REMOTE GFI TEST SWITCH SHALL BE A DEAD FRONT GFI DEVICE TO BE INSTALLED FLUSH MOUNTED IN WALL WITH EDF SERVED AND PROVIDE GFI PROTECTION FOR THE RECEPTACLE LOCATED WITHIN THE EDF HOUSING.
4. GFI TEST SWITCH SHALL BE READILY ACCESSIBLE PER NEC 210.8.
5. COORDINATE RECEPTACLE LOCATION(S) WITHIN EDF HOUSINGS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.



12 ROOF AND CANOPY CONDUIT SUPPORT DETAIL

NO SCALE

1. COORDINATE WITH ARCHITECTURAL DRAWINGS, DETAILS, SPECIFICATIONS AND OTHER TRADES.

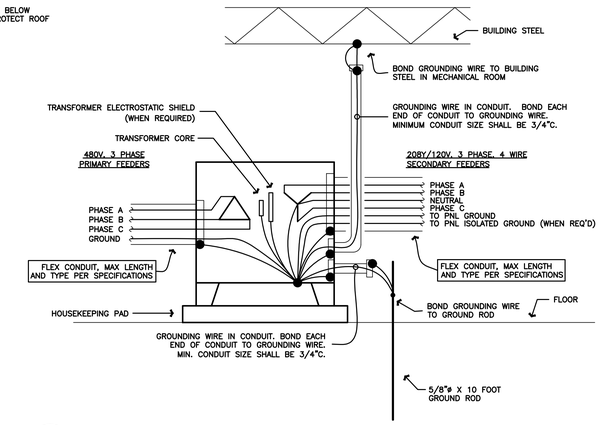


13 CANOPY LIGHT MOUNTING DETAIL TYPE 1

NO SCALE

NOTES:

1. MOUNTING PLATES SHALL BE WELDED TO CANOPY TO MOUNT LIGHT FIXTURES.
2. FOR FIXTURES WITH END CONDUIT ATTACHMENTS ALL CANOPY PENETRATIONS SHALL BE MADE OFF CENTER FROM THE FIXTURE WIRING ENTRY POINT AND SHALL HAVE WEATHERTIGHT SEALING. (SHOWN HERE)
3. CANOPY PENETRATIONS ABOVE FIXTURES SHALL BE PERMITTED ONLY WHERE THE SUPPLIED FIXTURE HAS NO END CONDUIT ATTACHMENTS.
4. CONDUIT SHALL BE SEALED BOTH ABOVE AND BELOW THE CANOPY PENETRATION AND AGAIN AT THE FIXTURE ENTRY POINT TO PREVENT WATER FROM ENTERING THE LIGHTING FIXTURE.
5. CANOPY PENETRATIONS SHALL BE MADE AS CLOSE TO CONDUIT ENTRY PENETRATION POINT AS POSSIBLE AND CONDUIT SHALL BE ROUTED TO MINIMIZE EXPOSED CONDUIT.

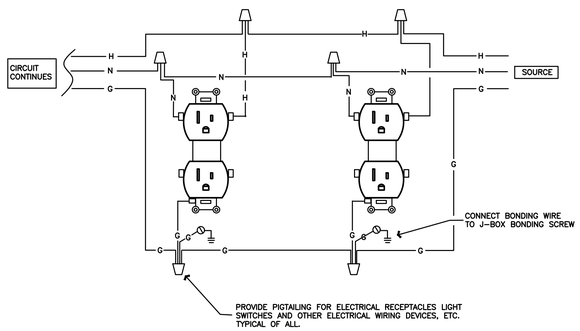


8 TRANSFORMER CONNECTION AND GROUNDING DETAIL

NO SCALE

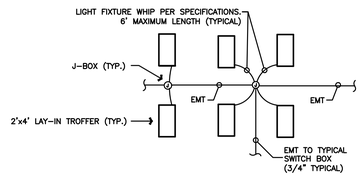
NOTES:

1. INSTALL GROUND ROD ADJACENT TO TRANSFORMER AND SEAL PENETRATION AROUND GROUND ROD.
2. WHERE AN ISOLATED GROUND IS PROVIDED MAKE THE CONNECTION AT THE TRANSFORMER AND RUN DIRECTLY TO THE ISOLATED GROUND BAR IN THE PANELBOARD. DO NOT DEFINE THE ISOLATED GROUND AT THE PANELBOARD.
3. FINAL CONNECTIONS TO TRANSFORMERS SHALL BE MADE IN FLEXIBLE CONDUIT. PROVIDE LIQUID TIGHT CONSTRUCTION AND FITTINGS IN WET, DAMP OR OUTSIDE AREAS EXCEPT WHERE LOCATED IN AIR HANDLING ROOMS. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.



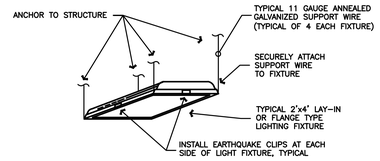
9 PIGTAIL WIRING DETAIL FOR ELECTRICAL DEVICE

NO SCALE



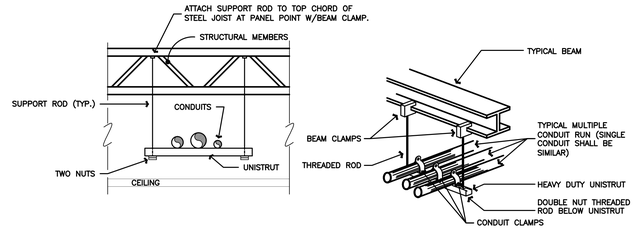
1 CONDUIT/J-BOX DETAIL FOR LIGHT FIXTURES IN LAY-IN CEILING

NO SCALE



2 FIXTURE SUPPORT DETAIL

NO SCALE

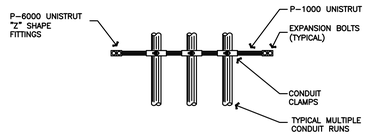


3 TRAPEZE MOUNTED CONDUIT DETAIL

NO SCALE

NOTES:

1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

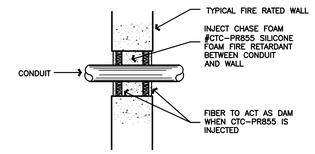


4 WALL MOUNTED CONDUITS

NO SCALE

NOTES:

1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

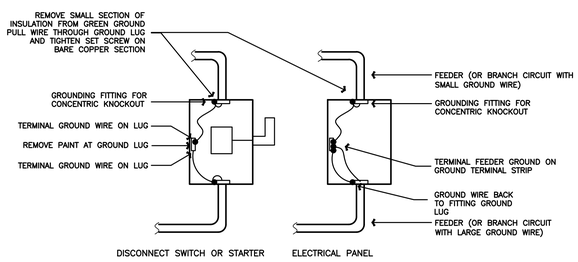


5 FIREWALL PENETRATION DETAIL

NO SCALE

NOTES:

1. FIRE RATING OF COMPLETED FIREPROOFED ASSEMBLY SHALL BE EQUAL OR EXCEED RATING OF WALL.



6 GROUNDING BUSHING WIRING DETAIL

NO SCALE

NOTE:

1. PROVIDE AND INSTALL GROUNDING BUSHINGS FOR DISCONNECT SWITCHES, PANELS AND TRANSFORMERS.

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3015 SETTLERS WAY BLVD.
SUGAR LAND, TX 77479

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07.18.2025

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11767 KATY FREEWAY, SUITE 430
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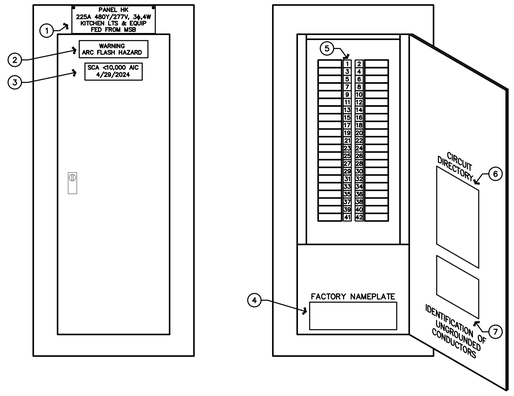


5 TYPICAL BRANCH CIRCUIT PANEL LABELING DETAIL

NO SCALE

NOTES:

1. LAYOUT OF PANELBOARD, INCLUDING LOCATIONS OF NAMEPLATES, CIRCUIT DIRECTORY, AND OTHER LABELING IS SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS.
2. REFERENCE OWNER'S DESIGN GUIDELINES FOR ADDITIONAL LABELING REQUIREMENTS.

(1) PROVIDE LAMACOID NAMEPLATE WITH 5/16" LETTERS SHOWING PANEL NAME, AMPERAGE RATING, VOLTAGE, AND FROM WHERE POWER IS DERIVED. ATTACH WITH MASTIC AND TWO SCREWS. COORDINATE TO GIVE SAME NAME AS PANEL SCHEDULE. IF USED AS MAIN SERVICE PANEL, PROVIDE SHORT CIRCUIT AVAILABLE AND RATING INFORMATION.

(2) PROVIDE PERMANENT ARC FAULT WARNING LABEL.

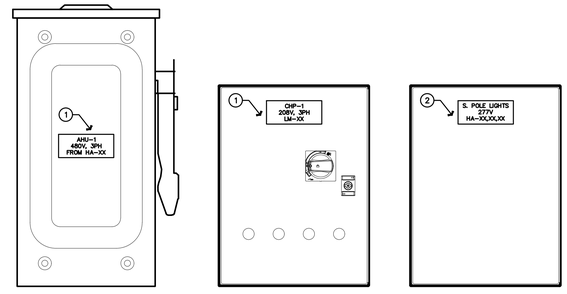
(3) FOR ALL NEW ELECTRICAL EQUIPMENT, PROVIDE PERMANENTLY AFFIXED LABEL STATING FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE MINIMUM 2" X 3" IN SIZE, AND INCLUDE THE DATE OF THE CALCULATION. REFERENCE ELECTRICAL DRAWINGS AND EQUIPMENT SHORT CIRCUIT ANALYSIS TABLE. ATTACH WITH MASTIC AND TWO SCREWS.

(4) PROVIDE INFORMATION PER INDUSTRY STANDARDS, BUT SHALL INCLUDE VOLTAGE, PHASE, BUS AMPERAGE, AND SHORT CIRCUIT RATING

(5) FOR EACH CIRCUIT PROVIDE PERMANENT LABEL INDICATING CIRCUIT BREAKER NUMBER, NUMBER SHALL MATCH CIRCUIT DIRECTORY.

(6) CIRCUIT DIRECTORY TO BE COMPLETED AT END OF JOB, TYPEWRITTEN, STATING EQUIPMENT OR ROOMS SERVED BY CIRCUIT. EVEN CIRCUIT ON RIGHT SIDE OF CARD, ODD ON LEFT. PROVIDE LAMINATED DIRECTORY FOR EXTERIOR OR WET LOCATIONS.

(7) PROVIDE PERMANENT LABEL INDICATING COLOR CODING OF PHASE CONDUCTORS BASED ON VOLTAGE USING BUILDING COLOR SCHEME AS IDENTIFIED IN THE OWNER'S DESIGN GUIDELINES.



1 TYPICAL DISCONNECT, STARTER, & CONTACTOR LABELING DETAIL

NO SCALE

NOTES:

1. LOCATIONS OF NAMEPLATES SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS. REFERENCE OWNER'S DESIGN GUIDELINES FOR ADDITIONAL LABELING REQUIREMENTS.

(1) PROVIDE AN ENGRAVED NAMEPLATE SHOWING LOAD SERVED, EQUIPMENT VOLTAGE, AND CIRCUIT NUMBER MATCHING AS-BUILT CONDITIONS.

(2) PROVIDE AN ENGRAVED NAMEPLATE SHOWING LOADS SERVED, VOLTAGES, AND CIRCUIT NUMBERS MATCHING AS-BUILT CONDITIONS FOR ALL CONTACTOR CIRCUITS. LOADS SERVED SHALL BE "LIGHTING", "FAN", "RECEPTACLES", "PUMP", "WATER HEATER", OR SIMILAR DESCRIPTIVE NOTE.

DISHWASHER
480V, 3PH, 3 WIRE
FROM HK-2/4/6

2 DISCONNECT LABELING

NO SCALE

NOTES:

1. PROVIDE LABEL ON EACH DISCONNECT AND FUSED SWITCH.
   1.1. FOR DISCONNECTS AND FUSED SWITCHES REPLACE "PANEL P1NA" WITH THE LOAD SERVED.
   1.2. REFER TO OWNER'S STANDARDS FOR ADDITIONAL LABEL REQUIREMENTS.
2. PROVIDE LABEL ON ELECTRICAL PANEL AND TRANSFORMER.
   2.1. REPLACE "PANEL P1NA" WITH THE PANEL OR TRANSFORMER NAME BEING LABELED.
3. REPLACE "400A FUSED SWITCH" WITH UPSTREAM SOURCE OR CONNECTION.
   3.1. IF FED FROM A XFMR REPLACE "400A FUSED SWITCH" WITH "XFMR XX" WHERE XX IS THE FIELD VERIFIED XFMR NAME.
4. REPLACE VOLTAGE CONFIGURATION TO MATCH THE EQUIPMENT BEING LABELED.
5. REFERENCE FLOOR PLANS FOR EQUIPMENT LOCATIONS.

⚠ WARNING

Arc Flash and Shock Hazard
Appropriate PPE Required

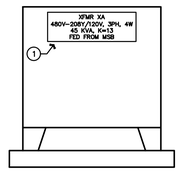
FLASH PROTECTION		SHOCK PROTECTION	
Incident Energy at:	18 in	Shock Risk When Cover is Removed	480 VAC
Min. Arc Rating:	0.45 cal/cm²	Limited Approach	42 in
Arc Flash Boundary:	10 in	Restricted Approach	12 in
PPE: Per NFPA 70E 2015	1	Equipment Name: **PANEL HA** Prot Dev: 225/3 CB from Panel DA	

3 TYPICAL ARC FLASH LABEL DETAIL

NO SCALE

NOTES:

1. VALUES AND NAMES SHOWN HERE ARE FOR REFERENCE ONLY, MODIFY TO REFLECT PROJECT'S ARC FLASH STUDY VALUES AND EQUIPMENT NAMES.
2. IF MIN. ARC RATING IS OVER 40CAL/CM² MODIFY "WARNING" TEXT TO READ "DANGER" AND PROVIDE RED SHADING IN LIEU OF ORANGE SHOWN.



4 TYPICAL TRANSFORMER LABELING DETAIL

NO SCALE

NOTES:

1. LOCATIONS OF NAMEPLATES SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS.

(1) PROVIDE AN ENGRAVED NAMEPLATE SHOWING EQUIPMENT NAME, RATING, VOLTAGE, SOURCE.

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GEORGE L. STANTON
38582
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PROFESSIONAL ENGINEER
07.18.2025

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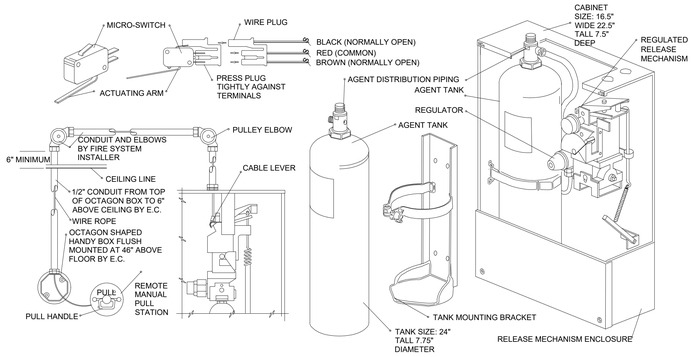
KITCHEN AREA ELECTRICAL NOTES

1. REFER TO KITCHEN CONSULTANTS "FS" DRAWINGS FOR ADDITIONAL REQUIREMENTS PARTICULARLY NOTING MOUNTING HEIGHTS OF EQUIPMENT OUTLETS AND JUNCTION BOXES, AND WHETHER SERVICE IS FROM WALL, FLOOR OR OVERHEAD.
2. SOME RECEPTACLES SHALL BE MOUNTED HORIZONTALLY, REFER TO KITCHEN CONSULTANTS "FS" DRAWINGS.
3. FOR DEVICES WITH SERVICE FROM FLOOR, RUN UNDERGROUND CONDUIT FROM DEVICES TO NEAREST COLUMN OR WALL THEN TURN CONDUIT UP AND RUN CONDUIT IN CEILING CAVITY.
4. LIGHT SWITCHES AND RECEPTACLES NOT SERVING A SPECIFIC PIECE OF EQUIPMENT SHALL BE MOUNTED AT ADA HEIGHTS.
5. CONNECTION TYPE SHOWN ON KITCHEN ELECTRICAL FLOOR PLAN IS FOR BIDDING PURPOSES, COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER FOR FINAL CONNECTIONS:
   - 5.A. OBTAIN WIRING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT FROM EQUIPMENT SUPPLIER PRIOR TO ORDERING WIRING DEVICES AND ROUGH-IN.
   - 5.B. IF EQUIPMENT REQUIRES CORD AND PLUG CONNECTION, CONTRACTOR SHALL PROVIDE NEMA POWER CORD, PLUG, AND RECEPTACLES PER MANUFACTURER'S INSTRUCTION.
   - 5.C. IF EQUIPMENT REQUIRES JUNCTION BOX AND/OR DISCONNECT SWITCH, CONTRACTOR SHALL PROVIDE JUNCTION BOX AND DISCONNECT SWITCH AND CONNECT EQUIPMENT WITH SEALTITE FLEXIBLE CONDUIT.
6. ALL DISCONNECT SWITCHES IN THE KITCHEN AREA SHALL BE NEMA 4XSS STAINLESS STEEL.
7. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
8. FLEXIBLE CONDUIT IN KITCHENS, FOOD PRODUCTION SPLASH ZONES AND WASH DOWN AREAS, FOOD PROCESSING, AND SIMILAR AREAS SHALL BE LIQUID TIGHT CONSTRUCTION INCORPORATING A BACTERIAL GROWTH INHIBITING PVC JACKET THAT MAY BE CLEANED WITHOUT DEGREDATION TO THE JACKET BLEACHING ELEMENTS AND APPROVED FITTINGS FOR WET LOCATION.
   - 8.A. AFC SZ TYPE LFMC OR EQUAL BY KAF-TECH.
9. INTERLOCK KITCHEN EXHAUST HOOD FIRE SYSTEM WITH FIRE ALARM SYSTEM.
10. PROVIDE RELAYS AND INTERLOCK KITCHEN HOOD FANS WITH FIRE ALARM SYSTEM. ACTUATION OF ANY ALARM INITIATING DEVICE SHALL DE-ENERGIZE KITCHEN HOOD FANS.
11. ALL GFI RECEPTACLES IN KITCHEN SHALL BE PASS & SEYMOUR MODEL 2097TRWR-XX TO EXCEED UL943 VOLTAGE SURGE REQUIREMENTS.

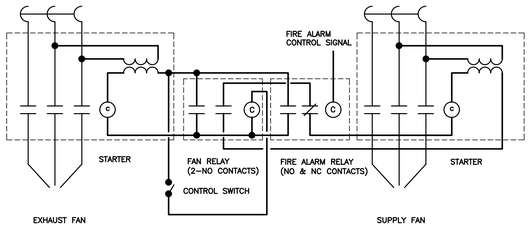


4 FIRE PROTECTION SYSTEM DETAIL

NO SCALE

NOTES:

1. ANSUL MODEL R-120 FIRE PROTECTION SYSTEM AND TANK(S)
2. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL POWER DISCONNECT DEVICES FOR ALL EQUIPMENT BELOW THE HOOD, SHUTTING OFF ALL SERVICE, INCLUDING CONTROL VOLTAGE, UPON ACTIVATION OF THE FIRE PROTECTION SYSTEM.
3. MICRO-SWITCH FURNISHED WITH SYSTEM TO BE INTERWIRED TO THE SHUT-OFF DEVICES FOR THE COOKING EQUIPMENT BY THE ELECTRICAL CONTRACTOR.
4. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL AN OCTAGON SHAPED HANDY BOX FOR THE PULL STATION AT 54" ABOVE THE FLOOR WITH 1/2" CONDUIT FROM THE TOP OF THE BOX TO 6" ABOVE THE CEILING.
5. GAS SHUT-OFF VALVE FURNISHED WITH THE SYSTEM (IF REQUIRED) TO BE INSTALLED IN THE GAS LINE SERVING THE COOKING EQUIPMENT BY THE PLUMBING CONTRACTOR. VERIFY SIZE OF GAS LINE.
6. ALL EXPOSED PIPEWORK TO BE STAINLESS STEEL OR CHROME WHERE EXPOSED.
7. VERIFY LOCATION OF REMOTE MANUAL PULL STATION.
8. UNIT MUST BE PLACED WITHIN EASY ACCESS OF EXIT DOOR.

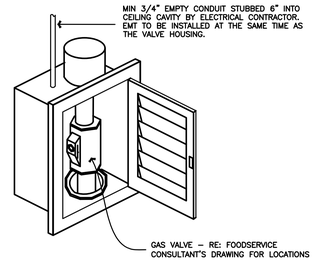


5 KITCHEN HOOD FAN CONTROL SCHEMATIC

NO SCALE

NOTES:

1. THE FANS SHALL BE WIRED SO THAT ONE LOCAL SWITCH TURNS ON ASSOCIATED SUPPLY AND EXHAUST FANS.
2. IF THE FIRE ALARM IS IN ALARM, A FIRE ALARM CONTROL CONTACT SHALL CAUSE THE SUPPLY FAN TO STOP AND THE EXHAUST FAN TO START, EVEN IF THE CONTROL SWITCH IS "OFF".
3. SCHEMATIC IS DIAGRAMMATIC. PROVIDE INTERLOCK WIRING BASED ON EQUIPMENT PROVIDED AND FAN VOLTAGE TO IMPLEMENT THE SEQUENCE SPECIFIED.
4. COORDINATE BETWEEN FIRE ALARM CONTRACTOR, CONTROLS CONTRACTOR AND ELECTRICAL CONTRACTOR TO PROVIDE A COMPLETE INSTALLATION.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

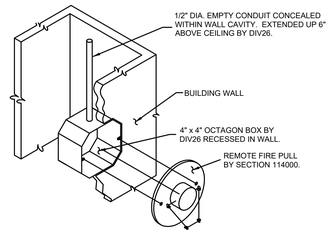


1 GAS VALVE DETAIL

NO SCALE

NOTES:

1. GAS VALVE HOUSINGS ARE NOT SHOWN ON THE ELECTRICAL DRAWING. GC AND ELECTRICAL CONTRACTOR SHALL COORDINATE SIZE AND LOCATION OF GAS VALVE HOUSINGS.
2. SEE FOOD SERVICE CONSULTANT'S DRAWINGS ADDITIONAL INFORMATION AND REQUIREMENTS.
3. PROVIDE MINIMUM 3/4"C AS SHOWN ON THIS DETAIL.

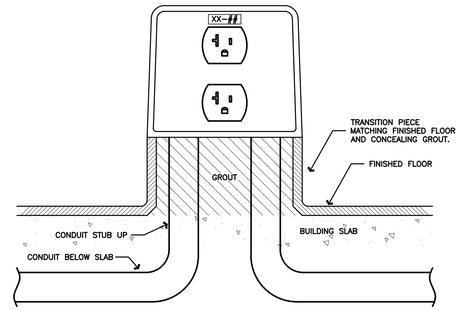


2 RECESSED FIRE PULL DETAILS

NO SCALE

NOTES:

1. VERIFY LOCATION OF REMOTE MANUAL PULL STATION.
   - 1.A. MANUAL PULL STATION MUST BE PLACED WITHIN EASY ACCESS OF EXIT DOOR.
   - 1.B. MANUAL PULL STATION MUST BE PLACED NO LESS THAN 4 FEET AWAY FROM KITCHEN HOOD BUT WITHIN A MAXIMUM OF 20 FEET FROM THE KITCHEN HOOD.



3 TYPICAL PEDESTAL MOUNTED DEVICE

NO SCALE

NOTES:

1. ALL FACEPLATES SHALL BE STAINLESS STEEL.
2. PEDESTAL BOX PROVIDED BY DIVISION 26.
   - 2.A. A STANDARD DUPLEX INSTALLATION IS SHOWN FOR REFERENCE. PROVIDE SIMILAR INSTALLATION FOR QUAD RECEPTACLES, GFI RECEPTACLES, DATA OUTLETS, NEMA POWER OUTLETS, ETC.
   - 2.B. ALL PEDESTAL BOXES TO BE DOUBLE FACED WITH ONE BLANK FACE FOR FUTURE GROWTH. 2-GANG PEDESTALS WITH ONE BLANK FACE FOR QUAD RECEPTACLE LOCATIONS.
   - 2.C. PEDESTAL BOXES TO BE SIZED BY DIVISION 26 TO PROVIDE SCHEDULED DEVICES ON A SINGLE FACE AND SUFFICIENT DEPTH FOR BACK TO BACK DEVICES ON DOUBLE FACED PEDESTALS.
   - 2.D. BASIS OF DESIGN:
     - 2.D.A. 1-GANG ELECTRICAL DEVICES: LEGRAND LBP2 OR WATER SAVER E400SA-WS
     - 2.D.B. 1-GANG LOW VOLTAGE DEVICES: LEGRAND LBP2 OR WATER SAVER E400SA-WS
     - 2.D.C. 2-GANG ELECTRICAL DEVICES: WATER SAVER E600SA-WS
     - 2.D.D. 2-GANG LOW VOLTAGE DEVICES: WATER SAVER E600SA-WS
3. INSTALLATION REQUIREMENTS:
   - 3.A. STUB UP CONDUIT ABOVE FLOOR TO PEDESTAL BOX CONNECTION LOCATION.
   - 3.B. GROUT GAP BETWEEN FINISHED FLOOR AND BOTTOM OF PEDESTAL BOX.
   - 3.C. PROVIDE TRANSITION PIECE TO CONTINUE FINISHED FLOOR TO BOTTOM EDGE OF SERVICE FITTING AND CONCEAL GROUT. TRANSITION PIECE TO MATCH ARCHITECT'S FINISH SCHEDULE.
   - 3.D. PEDESTAL BOX TO BE INSTALLED SQUARE TO THE FINISHED FLOOR.
4. PROVIDE TYPEWRITTEN OR PREMADE CIRCUIT LABELS ON INSTALLED WIRING AT EACH DEVICE AND SPLICE POINT.
5. PROVIDE TYPEWRITTEN LABEL AFFIXED TO THE FRONT OF EACH DEVICE FACEPLATE INDICATING ELECTRICAL CIRCUIT.

XX-## CIRCUIT LABEL

- A. XX = PANEL DESIGNATION
- B. ## = AS-BUILT CIRCUIT DESIGNATION

ISSUE:

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD.
SUGAR LAND, TX 77479

SEAL

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PROJ. NO.: 23-25
DATE: 07/18/2025
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ELECTRICAL KITCHEN DETAILS

s-E.013

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LIGHTING SYSTEM FUNCTIONAL TESTING AND DOCUMENTATION NOTES:

1. PRIOR TO PASSING FINAL INSPECTION, THE CONTRACTOR SHALL PERFORM FUNCTIONAL TESTING IN THE PRESENCE OF THE REGISTERED DESIGN PROFESSIONAL, THE OWNER AND/OR THEIR AGENT. THE FUNCTIONAL TESTING SHALL BE AS REQUIRED BY SECTION C408.3.1 OF THE 2021 IECC.
   1.A. THE FUNCTIONAL TESTING SHALL PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SYSTEMS, INCLUDING BOTH HARDWARE AND SOFTWARE, ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTRUCTIONS.
   1.B. THE FUNCTIONAL TESTING SHALL BE IN ACCORDANCE WITH SECTIONS C408.3.1.1 AND C408.3.1.2 OF THE 2021 IECC FOR THE APPLICABLE CONTROL TYPE.
   1.C. A WRITTEN REPORT SHALL BE GENERATED DOCUMENTING THE FUNCTIONAL TESTING RESULTS IN ACCORDANCE WITH THE 2015 IECC REQUIREMENTS.
2. ALL LIGHTING CONTROLS O&M MANUALS, AS-BUILTS, TESTING REPORTS AND DOCUMENTATION RELATED TO THE LIGHTING CONTROL SYSTEM SHALL BE PROVIDED IN THEIR FINAL AND APPROVED FORM WITHIN 60 DAYS OF THE CERTIFICATE OF OCCUPANCY. ALL DOCUMENTS CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA OF SECTION C405 OF THE 2021 IECC SHALL BE INCLUDED IN THE O&M MANUALS.
3. ALL DOCUMENTS FROM ITEMS #1 AND #2 ABOVE SHALL BE COMBINED AND PROVIDED TO THE OWNER WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

LIGHT FIXTURE SCHEDULE

EXTERIOR LIGHT FIXTURE SCHEDULE

RECESSED 6" DOWNLIGHT WET LOCATION	D5 D5Y	6" DIAMETER RECESSED LED DOWNLIGHT, SPECULAR CLEAR REFLECTOR, MEDIUM (56') BEAM DISTRIBUTION, 1000 LUMENS, 4000K COLOR TEMPERATURE, 120-277V MULTIVOLT INPUT, 1% 0-10V DIMMING DRIVER. LIGHTOLIER 6R-N / C6L-10-9-40-M-Z10-U / C6-R-DL-CC	9W
RECESSED 6" DOWNLIGHT WET LOCATION	D6 D6Y	6" DIAMETER RECESSED LED DOWNLIGHT, SPECULAR CLEAR REFLECTOR, MEDIUM (56') BEAM DISTRIBUTION, 2000 LUMENS, 4000K COLOR TEMPERATURE, 120-277V MULTIVOLT INPUT, 1% 0-10V DIMMING DRIVER. LIGHTOLIER 6R-N / C6L-20-9-40-M-Z10-U / C6-R-DL-CC	22W
SURFACE CANOPY SQUARE LED	WC1 WC1X WC1Y	9" SQUARE SURFACE LED CANOPY LIGHT, 4000K COLOR TEMPERATURE, 3500 LUMENS, 120-277V MULTIVOLT INPUT, DARK BRONZE FINISH. EELP VR7-T-28L-QT-40K (EBLED9W)	28W
EXTERIOR WALL PACK	WP1 WP1X WP1Y	7" WDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 5000 LUMENS, TYPE 3 DISTRIBUTION, 120-277 MULTIVOLT INPUT, WET LOCATION, 10KV KA SURGE PROTECTION. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM SMALL GWS-A04-740-UNV-XX FINISH (EM)	34W
EXTERIOR WALL PACK	WP2 WP2X WP2Y	12" WDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 8500 LUMENS, TYPE 3 DISTRIBUTION, 120-277 MULTIVOLT INPUT, WET LOCATION. REFER TO ARCH FOR MOUNTING HEIGHT. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM MEDIUM GWM-A11-740-T3M-UNV-XX FINISH (REMOTE EM BATTERY)	52W
EXTERIOR WALL PACK	WP3 WP3X WP3Y	17" WDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 12500 LUMENS, TYPE 3 DISTRIBUTION, 120-277 MULTIVOLT INPUT, WET LOCATION. REFER TO ARCH FOR MOUNTING HEIGHT. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM MEDIUM GWM-A14-740-T3M-UNV-XX FINISH (REMOTE EM BATTERY)	77W

1. LIGHT FIXTURE CATALOG NUMBERS AND DESCRIPTIONS ARE SCHEDULED FOR ESTABLISHING QUALITY, APPEARANCE AND PERFORMANCE OF THE FIXTURES. EXACT CATALOG NUMBERS DESCRIBING MOUNTING CONDITIONS AND REQUIREMENT RELATED TO TRIM FOR ALL FIXTURES SHALL BE CONFIRMED (BY THE ELECTRICAL CONTRACTOR) WITH THE ROOM FINISH SCHEDULE AND REFLECTED CEILING PLANS ON THE ARCHITECTURAL PLANS PRIOR TO BIDDING AND SUBMITTING LIGHT FIXTURES. PROVIDE DRY WALL KIT AS REQUIRED.
2. ALL 'X', 'Y', AND 'Z' TYPE FIXTURES SHALL HAVE EMERGENCY POWER BACKUP. EMERGENCY POWER SOURCES SHALL MONITOR POWER UPSTREAM OF THE LIGHTING CONTROLS TO SEE IF POWER IS LOST. BATTERY PACKS AND INVERTERS SHALL BE CAPABLE OF POWERING THE DESIGNATED FIXTURE(S) WITH AN OUTPUT OF 1400 LUMENS FOR A MINIMUM OF 90-MINUTES. PROVIDE REMOTE BATTERY PACKS OR INVERTERS AS NECESSARY. EMERGENCY LIGHTS SHALL OPERATE ONLY UPON LOSS OF POWER; ALSO, PROVIDE AND WIRE TEST SWITCH AND LED INDICATOR LIGHT FOR EMERGENCY BATTERY. SEE WIRING INSTRUCTION SUPPLIED BY EMERGENCY BATTERY MANUFACTURER.
   2.A. 'X' TYPE FIXTURES (AX, ETC.) HAVE EMERGENCY GENERATOR POWER LIGHTING TRANSFER DEVICES.
   2.B. 'Y' TYPE FIXTURES (MY, ETC.) HAVE INDIVIDUAL 90-MINUTE EMERGENCY BATTERY POWER.
   2.C. 'Z' TYPE FIXTURES (GTZ, ETC.) HAVE 90-MINUTE INVERTER EMERGENCY BATTERY POWER.
3. PROVIDE BASE COVER FOR ALL LIGHT POLES.
4. ALL EXTERIOR FIXTURES SHALL BE WET RATED WITH COLD WEATHER BALLASTS AND BATTERY PACKS.
5. PROVIDE SPARE FIXTURES AND EMERGENCY DEVICES PER SPECIFICATIONS.
6. WHERE FIXTURE FINISHES ARE INDICATED TO BE SELECTED BY ARCHITECT THE CONTRACTOR SHALL INCLUDE IN THEIR BID ALL AVAILABLE FINISHES. SUBMIT COMPLETE FIXTURE FINISH OPTIONS AS PART OF THE LIGHTING SUBMITTAL PACKAGE.
7. EQUAL BY PHILIPS (CW LIGHTING), COOPER (PUTTERMAN SCHAROK), AND LITHONIA (LESCO) SHALL BE ACCEPTABLE.

INTERIOR LIGHT FIXTURE SCHEDULE

APPLICATION	TYPE	DESCRIPTION	WATTS
1X4 RECESSED LAY-IN CEILING SELECTABLE CCT & LUMENS	A1 A1X A1Y	2X4 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY-IN CEILING, 6000 LUMENS, 4000K COLOR TEMPERATURE, 120-347V MULTIVOLT INPUT, 5% 0-10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (47W). DAYBRITE 2SBP3550L8CS-4-UNJ-DIM	47W
1X4 RECESSED LAY-IN CEILING SELECTABLE CCT & LUMENS	B1 B1X B1Y	1X4 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY-IN CEILING, 4500 LUMENS, 4000K COLOR TEMPERATURE, 120-347V MULTIVOLT INPUT, 5% 0-10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE 1SBP3040L8CS-4-UNJ-DIM	36W
2X2 RECESSED LAY-IN CEILING SELECTABLE CCT & LUMENS	B2 B2X B2Y	2X2 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY-IN CEILING, 4250 LUMENS, 4000K COLOR TEMPERATURE, 120-347V MULTIVOLT INPUT, 5% 0-10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE 2SBP3040L8CS-2-UNJ-DIM	39W
4FT STRIP LED MECHANICAL & STORAGE ROOMS	C CX CY	4 FOOT STRIP LED, STEEL HOUSING, FROSTED ACRYLIC LENS, 4000 LUMENS, 3500K COLOR TEMPERATURE, CHAIN HANGING SET, WIRE GUARD, 120-277V MULTIVOLT INPUT, 0-10V DIMMING DRIVER. PROVIDE CHAIN HANGING SET AND WIREGUARD IN MECHANICAL ROOMS AND AREAS WITHOUT CEILINGS. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE SDS-4-2448L-8CST-UNV-DIM	30W
RECESSED 6" DOWNLIGHT	D1 D1X D1Y	6" DIAMETER RECESSED LED DOWNLIGHT, MATTE WHITE FINISH, WIDE (76') BEAM DISTRIBUTION, 1000 LUMENS, 4000K COLOR TEMPERATURE, 120-277V MULTIVOLT INPUT, 1% 0-10V DIMMING DRIVER. LIGHTOLIER 6R-N / C6L-10-9-40-W-Z10-U / C6-R-DL-WH	9W
RECESSED 6" DOWNLIGHT	D2 D2X D2Y	6" DIAMETER RECESSED LED DOWNLIGHT, MATTE WHITE FINISH, WIDE (76') BEAM DISTRIBUTION, 2000 LUMENS, 4000K COLOR TEMPERATURE, 120-277V MULTIVOLT INPUT, 1% 0-10V DIMMING DRIVER. LIGHTOLIER 6R-N / C6L-20-9-40-W-Z10-U / C6-R-DL-WH	22W
EXIT SIGN	XB XS XD	DIE CAST ALUMINUM LED EXIT LIGHT, RED LETTERS, MATTE BLACK HOUSING W/ BRUSHED ALUMINUM FACE, UNIVERSAL ARROWS, 120/277 VOLT DUAL INPUT, 90 MINUTE EMERGENCY BATTERY. VERIFY LETTER AND FACE COLOR WITH OWNER/ARCHITECT PRIOR TO ORDERING. XS=SINGLE FACE, XD=DOUBLE FACE, XB=BACK MOUNTED PHILIPS CHLORIDE ER55L-3-R SURELITES CX7-1/2-R LITHONIA LQC-1/2-R-EL N	5W
EXIT SIGN INTEGRAL BATTERY INTEGRAL EM LIGHT BAR	YB YS YD	THERMOPLASTIC LED EXIT LIGHT WITH INTEGRAL EM LIGHT, RED LETTERS, WHITE HOUSING W/ WHITE FACE, UNIVERSAL ARROWS, 120-277 MULTIVOLT INPUT, 90 MINUTE EMERGENCY BATTERY. VERIFY LETTER AND FACE WITH OWNER/ARCHETICT PRIOR TO ORDERING. YS=SINGLE FACE, YD=DOUBLE FACE, YB=BACK MOUNTED SIGNTEX CLP-BB-U-R-W-DG	5W
TWIN HEAD EM LIGHT INTEGRAL BATTERY WET LOCATION	YT1	TWIN HEAD EM LIGHT, INJECTION-MOLDED THERMOPLASTIC WHITE HOUSING, GASKETED CLEAR POLYCARBONATE COVER, LED LAMPS, 90-MINUTE EMERGENCY BATTERY. CHLORIDE TPU-W-N-LM7-W	7W

LIGHTING CONTROL SEQUENCE OF OPERATIONS

ROOM TYPE	AUTO ON	MANUAL ON (VACANCY)	AUTO OFF (20 MIN MAX)	PARTIAL OFF AT NORMAL HOURS	AUTO ON AFTER HOURS	AUTO OFF AFTER HOURS (20 MIN MAX)	TIME ON	TIME OFF	ASTRONOMIC OR PHOTOCELL ON/OFF	AUTO STEP CONTROL WITH OFF	AUTO CONTINUOUS DIM WITH OFF	MANUAL BI-LEVEL REDUCTION CONTROL	MANUAL CONTINUOUS DIM CONTROL	MANUAL ON/OFF SWITCH	MANUAL DIMMER SWITCH	DISPLAY, ACCENT, TASK CONTROL	PLUG LOAD CONTROL	SEQUENCE OF OPERATION
	OCCUPANCY SENSOR						TIME SWITCH/SCHEDULING			DAYLIGHT CONTROL		LIGHT REDUCTION		MANUAL CONTROL				
Kitchen/Serving							•	•				•		•				LOCAL ON/OFF CONTROLS, LOCAL CONTROLS MAY OVERRIDE BUILDING SCHEDULE AND TURN ALL LIGHTS ON FOR MAXIMUM 2HRS. NETWORK LIGHTING CONTROLS ROOM CONTROLLER CONNECTED TO BUILDING CONTROLS; ON/OFF BASED ON BUILDING SCHEDULE, AFTER HOURS ON/OFF BASED ON OCCUPANCY, COORDINATE SCHEDULING WITH OWNER. WHERE ≥150W IN DAYLIGHT AREA, USE CONTINUOUS DIMMING DAYLIGHTING CONTROL.
Restrooms	100%		20 MIN											•				AUTO ON 100%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Custodial rooms		•	20 MIN											•	•			MANUAL ON, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Storage rooms	50%		20 MIN											•	•			AUTO ON 50%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF/DIMMING CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Private Offices	50%		20 MIN											•	•		•	AUTO ON 50%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF/DIMMING CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Corridors					100%	20 MIN	•	•						•				LOCAL ON/OFF CONTROLS, LOCAL CONTROLS MAY OVERRIDE BUILDING SCHEDULE AND TURN ALL LIGHTS ON FOR MAXIMUM 2HRS. NETWORK LIGHTING CONTROLS ROOM CONTROLLER CONNECTED TO BUILDING CONTROLS; ON/OFF BASED ON BUILDING SCHEDULE, AFTER HOURS ON/OFF BASED ON OCCUPANCY, COORDINATE SCHEDULING WITH OWNER. WHERE ≥150W IN DAYLIGHT AREA, USE CONTINUOUS DIMMING DAYLIGHTING CONTROL.
Electrical Rooms														•				MANUAL ON/OFF; LOCAL CONTROL DEVICE NOT TIED TO LVLCS.
Building Facade/Landscape							•	•										CONNECTED TO BUILDING CONTROLS THROUGH LIGHTING CONTACTOR; ON/OFF BASED ON BUILDING SCHEDULE.

1. DIMMER SWITCHES SHALL ACTIVATE PRESET ALL ON LIGHTING LEVEL WHEN PRESSED IN THE UP POSITION. LIGHTING LEVELS MAY BE RAISED/LOWERED BY HOLDING THE DIMMER PADDLE. WHEN PRESSED IN THE DOWN POSITION ALL LIGHTS SHALL SMOOTHLY DIM TO OFF.
2. AT LEAST 50 PERCENT OF ALL 125V, 15- AND 20-AMP RECEPTACLES INSTALLED IN ENCLOSED OFFICES, CONFERENCE ROOMS, ROOMS USED PRIMARILY FOR COPY OR PRINT FUNCTIONS, BREAKROOMS, CLASSROOMS AND INDIVIDUAL WORKSTATIONS, INCLUDING THOSE INSTALLED IN MODULAR PARTITIONS AND MODULE OFFICE WORKSTATION SYSTEMS SHALL HAVE PLUG LOAD CONTROL PER IECC 2021 C405.11.

LIGHTING CONTACTOR SCHEDULE

CONTACTOR CT1

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	CONTACTOR LOCATION	CONTACTOR TYPE
CT1-1	KITCHEN/SERVING AREA - ZONE 'a'	HK-3	-	Kitchen-a	CENTRAL PLANT	MAGNETICALLY HELD
CT1-2	SPARE			Kitchen-a	CENTRAL PLANT	MAGNETICALLY HELD
CT1-3	SPARE			Kitchen-a	CENTRAL PLANT	MAGNETICALLY HELD

CONTACTOR CT2

CT2-1	KITCHEN/SERVING AREA - ZONE 'b'	HK-3	-	Kitchen-b	CENTRAL PLANT	MAGNETICALLY HELD
CT2-2	SPARE			Kitchen-b	CENTRAL PLANT	MAGNETICALLY HELD
CT2-3	SPARE			Kitchen-b	CENTRAL PLANT	MAGNETICALLY HELD

CONTACTOR CT3

CT3-1	KITCHEN SOFFIT/CANOPY LTS	HK-5	-	Exterior	CENTRAL PLANT	MAGNETICALLY HELD
CT3-2				Exterior	CENTRAL PLANT	MAGNETICALLY HELD
CT3-3				Exterior	CENTRAL PLANT	MAGNETICALLY HELD

1. REFERENCE TYPICAL LIGHTING CONTACTOR WIRING DIAGRAM.
2. EMERGENCY AND NORMAL ZONES WITHIN THE KITCHEN/SERVING SHALL HAVE SEPARATE CONTROLS TO ALLOW FOR LIGHTING REDUCTION CONTROL.
3. LIGHTING CONTACTORS SHALL BE DIN RAIL MOUNTED, MAGNETICALLY HELD TYPE WITH THREE WIRE CONTROL BY THE BAS.
   3.A. PROVIDE CABINET AT EACH LOCATION TO MOUNT ALL CONTACTORS IN A SINGLE ENCLOSURE. ENCLOSURE SIZED BY DIVISION 26.
   3.B. PROVIDE SEPARATE HOA SWITCHES IN THE FRONT COVER OF THE ENCLOSURE WIRED TO CONTROL THE FOLLOWING ZONES SEPARATELY.
      3.B.1. INTERIOR LIGHTING (ALL INTERIOR LIGHTING GROUPS)
      3.B.2. EXTERIOR LIGHTING (ALL EXTERIOR LIGHTING GROUPS)
      3.B.3. HOA SWITCH SHALL PASS THE BAS SIGNALS IN AUTO MODE, DISENGAGE ALL CONTACTORS IN THE OFF POSITION, AND ENGAGE ALL THE CONTACTORS IN THE ON POSITION.
   3.C. SPARE CAPACITY:
      3.C.1. PROVIDE MINIMUM TWO (2) SPARE POLE ON EACH COMBINED TYPE CONTACTOR FOR FUTURE USE.

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LIGHTING SCHEDULES

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ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

LIGHTING RENOVATION NOTES:

A. KITCHEN LIGHTS TO BE CONTROLLED BY LOCAL MOMENTARY SWITCHES AND BAS. LIGHTING CONTACTOR LOCATIONS SHOWN SCHEMATICALLY ONLY. LOCATE LIGHTING CONTACTOR ENCLOSURE IN THE ADJACENT CENTRAL PLANT SPACE, FIELD VERIFY. REFERENCE LIGHTING CONTROL DETAIL. TYPICAL.

LEFT SWITCH SHALL CONTROL ZONE 'a' NORMAL POWER LIGHTING FIXTURES.

RIGHT SWITCH SHALL CONTROL ZONE 'b' EMERGENCY LIGHTING FIXTURES.

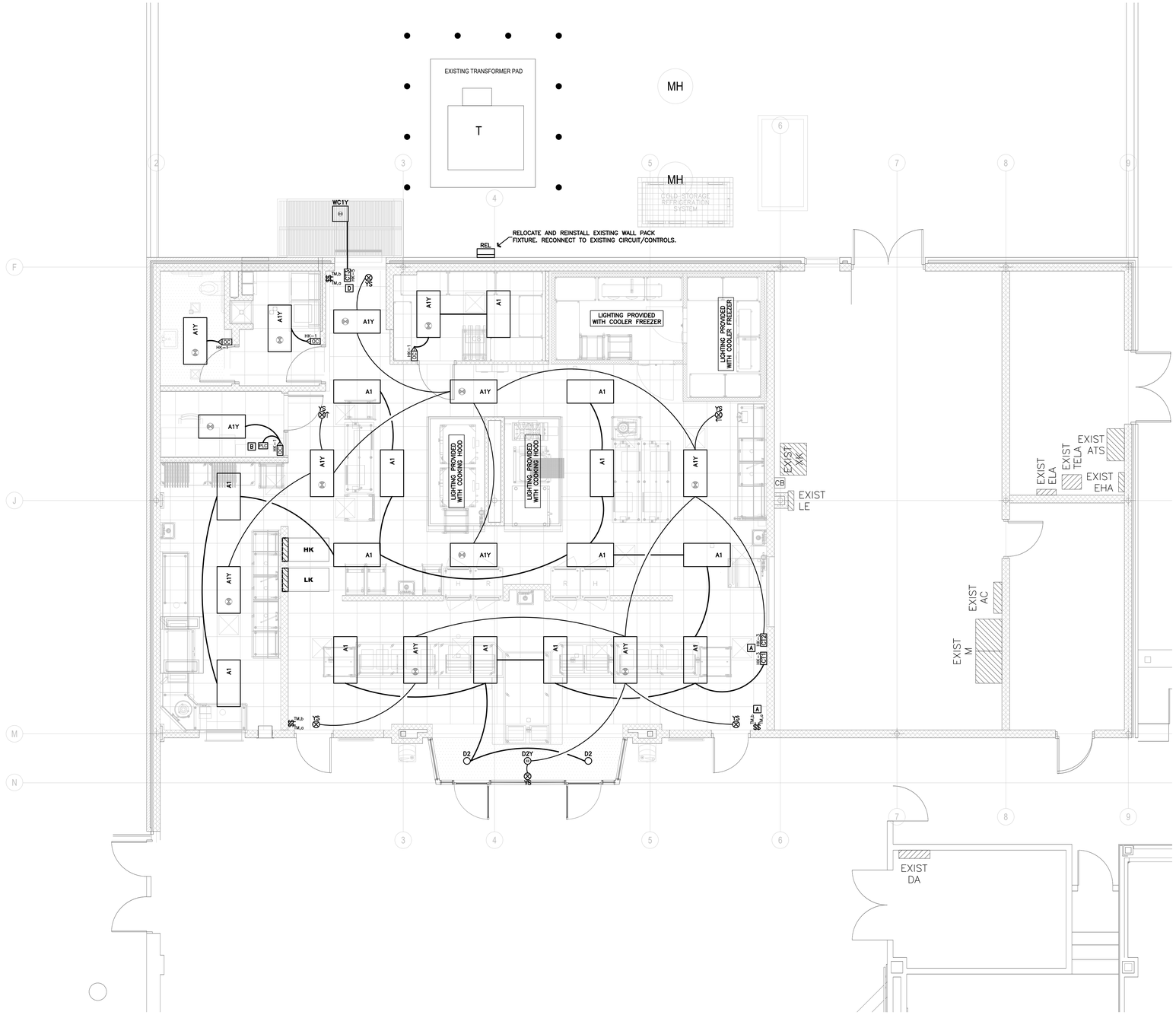
B. PROVIDE PLUG LOAD CONTROLS TIED TO THE LIGHTING IN OFFICE SPACES.

C. WIRE EXIT SIGNS UPSTREAM OF LIGHTING CONTROLS. TYPICAL.

D. EXTERIOR LIGHTS TO BE CONTROLLED BY BAS. LIGHTING CONTACTOR LOCATIONS SHOWN SCHEMATICALLY ONLY. LOCATE LIGHTING CONTACTOR ENCLOSURE IN THE ADJACENT CENTRAL PLANT SPACE, FIELD VERIFY. REFERENCE LIGHTING CONTROL DETAIL. TYPICAL.

E. AFTER REMOVAL OF THE TEMPORARY KITCHEN. PROVIDE NEW EXIT SIGN AT ORIGINAL LOCATION AND RECONNECT TO EXISTING CAFETERIAL LIGHTING CIRCUIT.

F. PATCH/REPAIR EXTERIOR SOFFIT TO ACCOMMODATE NEW SURFACE MOUNTED FIXTURES.



1 **LIGHTING RENOVATION PLAN**

SCALE: 1/4" = 1'- 0"

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LIGHTING FLOOR PLANS

s-E.100

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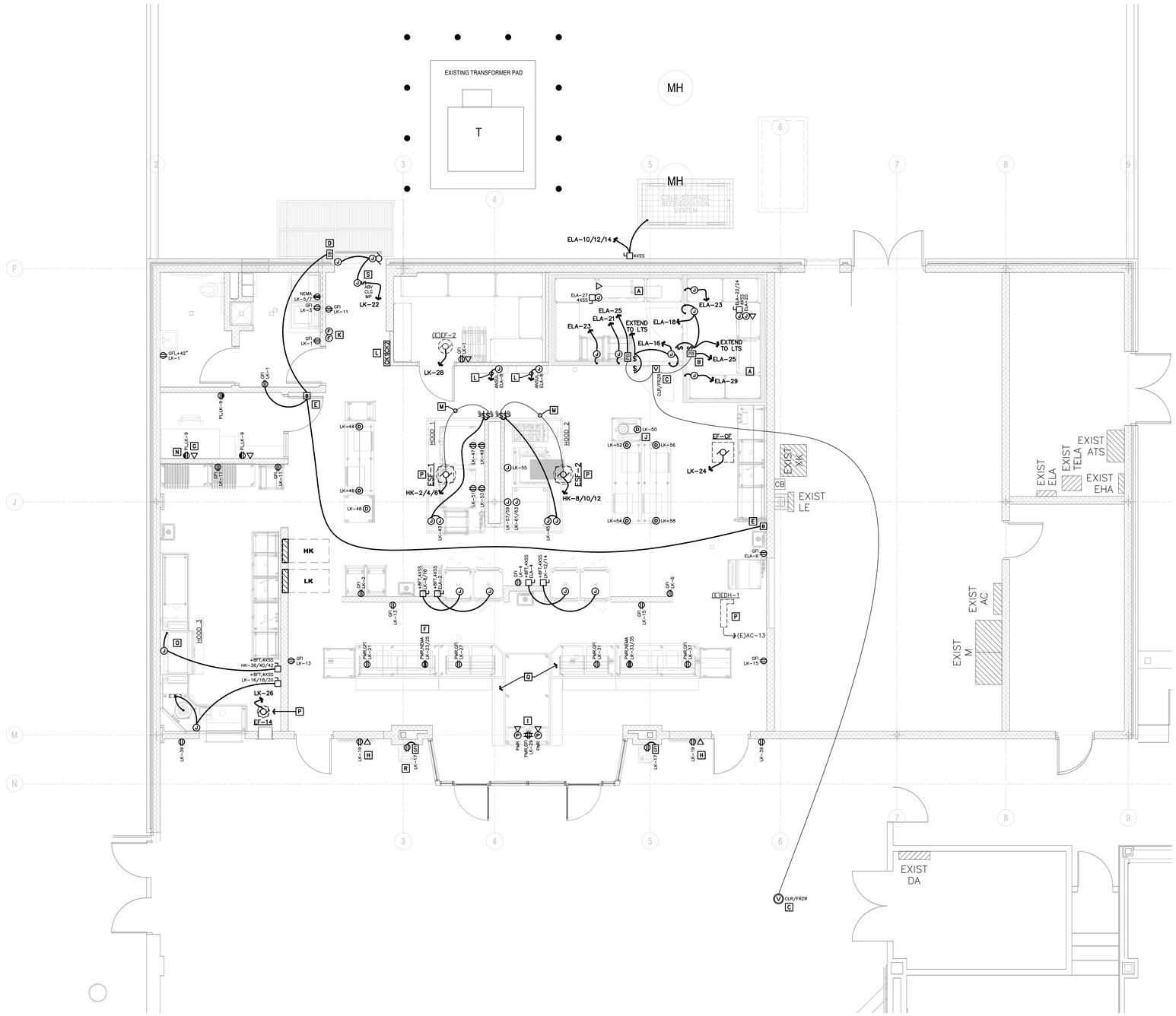

1 ELECTRICAL RENOVATION PLAN

SCALE: 1/4" = 1'- 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

ELECTRICAL RENOVATION NOTES:

A. CONNECT NEW FREEZER/COOLER AND CONDENSER TO EXISTING STANDBY GENERATOR.

B. PROVIDE ILLUMINATED PUSH BUTTON IN COOLER AND FREEZER. WHEN PRESSED RED STROBE DEVICES IN KITCHEN AND CAFETERIA SHALL ACTIVATE. TYPICAL.

C. PROVIDE HORN/STROBE DEVICE TIED TO PUSH BUTTONS IN FREEZER/COOLER.
(EDWARDS 860 SERIES OR EQUAL).

D. PROVIDE NEW DOORBELL BUTTON AT RECEIVING DOOR. DOORBELL BUTTON SHALL BE THE CLOSEST DEVICE TO THE DOOR FRAME.

E. PROVIDE NEW VIBRATING BUZZER TIED TO DOORBELL BUTTON AT RECEIVING DOOR. BUZZER TO BE WALL MOUNTED JUST BELOW THE CEILING.

F. PROVIDE NEW ELECTRICAL DEVICES MATCHING NEW KITCHEN EQUIPMENT AND ROOM LAYOUTS. REFERENCE FOOD SERVICE DRAWINGS. TYPICAL.

G. PROVIDE ROUGH-IN FOR LOW VOLTAGE DEVICES. REFERENCE TECHNOLOGY DRAWINGS, TYPICAL.

H. POWER AND DATA ROUGH-IN FOR KITCHEN MENU BOARD.

I. POWER AND DATA ROUGH-IN FOR POINT OF SALE (POS) LOCATION.

J. PROVIDE DROP CORD RECEPTACLE WITH HUBBELL KELLEMS LIQUIDTIGHT GRIPS FOR STRAIN RELIEF, TYPICAL OF ALL.

K. PROVIDE J-BOXES AND CONDUIT FOR REMOTE FIRE PULLS, SEE FOOD SERVICE DETAIL DRAWING FOR REQUIREMENTS, TYPICAL

L. WIRE ANSUL SYSTEM TO HOOD EQUIPMENT CONTROL CONTRACTOR. UPON ANSUL SYSTEM ACTIVATION ALL POWER TO EQUIPMENT BENEATH THE HOODS SHALL BE DEACTIVATED. MOUNT CONTACTOR CABINET(S) JUST BELOW THE CEILING.

M. PROVIDE SEPARATE SWITCHES TO TURN ON HOOD LIGHTS AND FANS. WIRE HOOD TEMP SENSOR AHEAD OF HOOD LIGHT SWITCH. USE 120V CIRCUIT TO CONTROL HOOD FANS THROUGH EXISTING STARTER. PROVIDE CONTROLS TRANSFORMER AS REQUIRED TO MATCH STARTER CONTROL INPUT VOLTAGE. TYPICAL.

N. PROVIDE PLUG LOAD CONTROLS TIED TO THE LIGHTING IN OFFICE SPACES.

O. INTERCONNECT DISH MACHINE TO VENT CONTROL. INTERCONNECT TABLE LIMIT SWITCH TO DISHMACHINE.

P. EXISTING MECHANICAL EQUIPMENT TO BE REPLACED. CONNECT TO CIRCUIT AS SHOWN. RECONNECT TO EXISTING STARTER/CONTACTORS, FIELD VERIFY.

Q. SAWCUT FLOOR TO INSTALL NEW PEDESTAL MOUNTED DEVICE BENEATH NEW SERVING LINES, DO NOT REUSE EXISTING STUB UPS OR DEVICES. POUR BACK SLAB AND PROVIDE NEW FINISHES, REFERENCE ARCHITECTURAL.

R. REFERENCE EDF GFI PROTECTION DETAIL FOR INSTALLATION REQUIREMENTS, TYPICAL.

S. WIRE MICRO SWITCH IN DOOR FRAME TO AIR SCREEN. COOR W/ FOOD SERVICE CONTRACTOR PRIOR TO ROUGH-IN. LOCATE LOCAL MOTOR RATED SWITCH ABOVE CEILING ADJACENT TO THE AIR SCREEN.

COOLER/FREEZER NOTES:

1. PROVIDE SEALING FOR CONDUIT IN COOLER AND FREEZER. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, CIRCULATION OF AIR FROM WARMER TO A COLDER SECTION SHALL BE PREVENTED PER N.E.C. ARTICLE 300.7 (A).
2. PROVIDE GROUND-FAULT PROTECTION OF EQUIPMENT FOR ELECTRIC HEAT TRACING AND HEATING PANELS IN THE FREEZER PER N.E.C. ARTICLE 427.22.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE LIQUID TIGHT CONDUIT AND WIRING FOR LIGHT FIXTURES AND LIGHT SWITCHES IN WALK-IN COOLER AND FREEZER, SEE FOODSERVICE CONSULTANT'S DRAWINGS.

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S

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD.
SUGAR LAND, TX 77479

SEAL

STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED
PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL FLOOR PLANS

s-E.200

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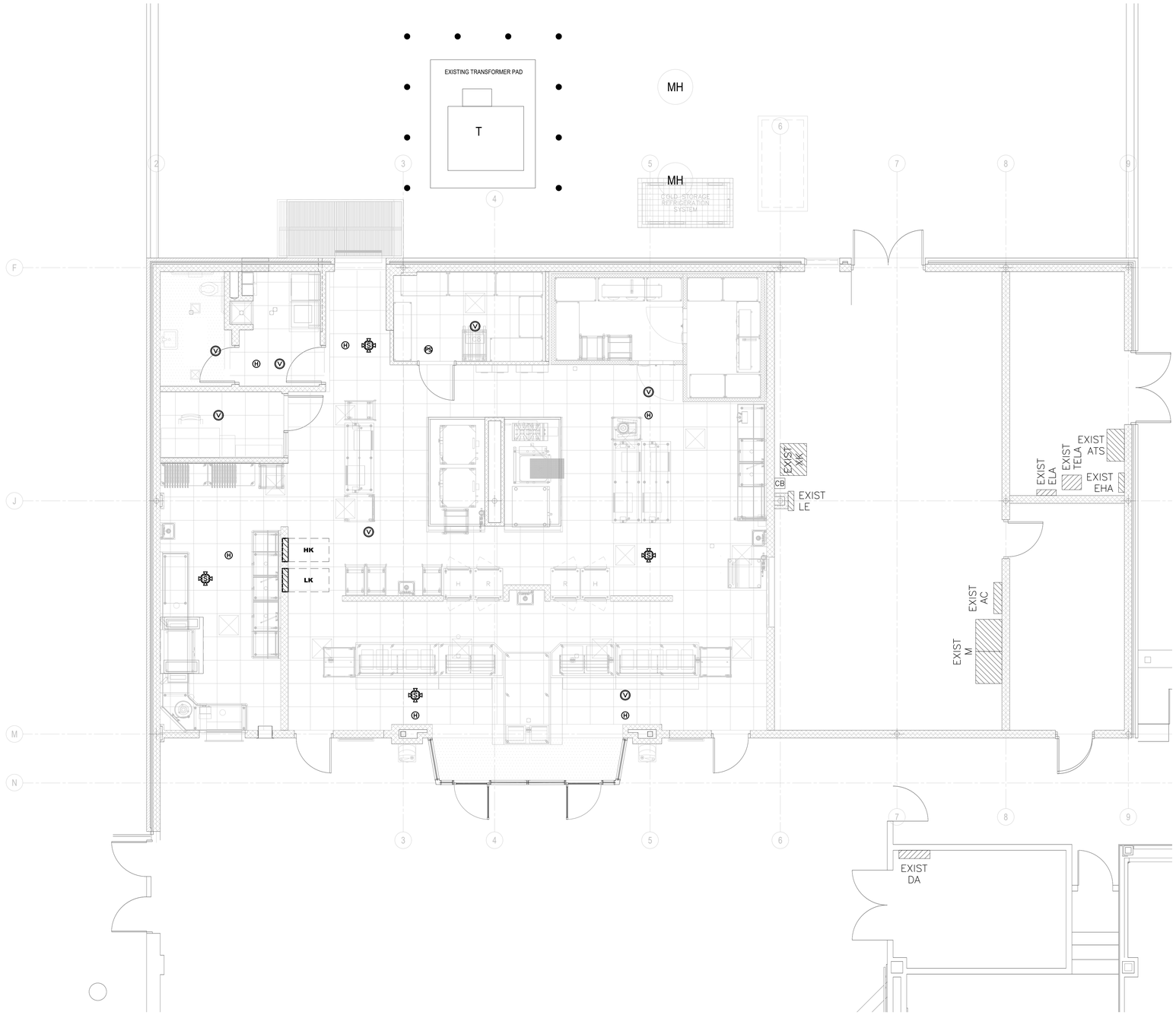

1 **FIRE ALARM RENOVATION PLAN**
SCALE: 1/4" = 1'- 0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
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FIRE ALARM FLOOR PLANS

s-E.300

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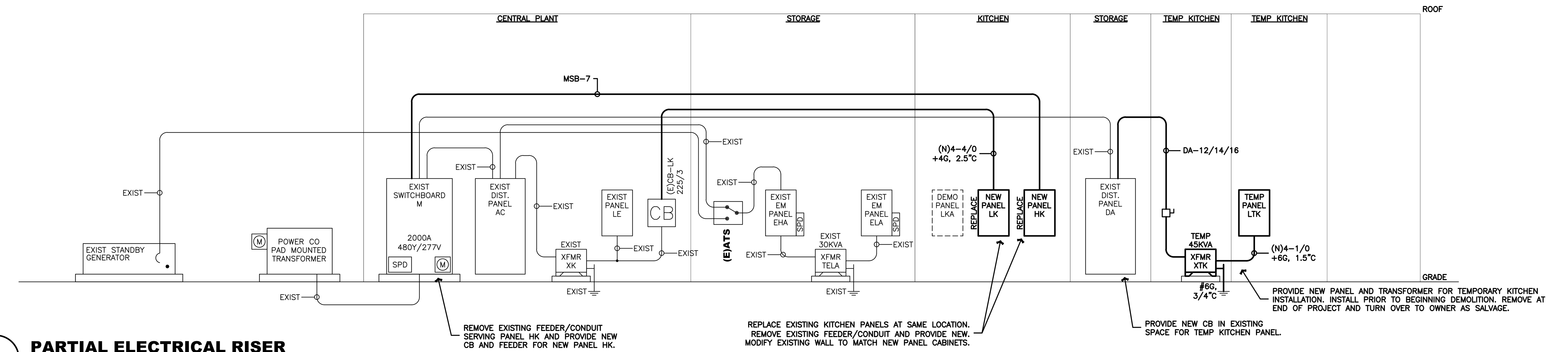

1 PARTIAL ELECTRICAL RISER

NO SCALE

NOTES:
1. FIELD VERIFY ALL EXISTING ELECTRICAL PANELS AND FEEDERS SHOWN ON DRAWINGS.
2. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
3. ALL OUTAGES SHALL BE SCHEDULED/CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
4. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.
5. REFERENCE PANEL SCHEDULES AND SHORT CIRCUIT TABLE FOR AIC AND SCCR VALUES.

NEW KITCHEN PANEL — KITCHEN

PANEL HK

225A MLO, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 20,250A — SCCR & AIC: 25,000A — MOUNTING: RECESSED, STAINLESS STEEL COVER

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
6		376	KITCHEN ROOM LIGHTS	3–12	20/1	1				2	15/3	3–12	ESF–1	4986		
7		1095	KITCHEN LIGHTS	3–12	20/1	3				4	–	+12G	(1.5HP / 1.5HP)	–		
		84	KITCHEN SOFFIT LIGHTS	3–12	20/1	5				6	–	3/4"C	–	–		
			SPARE		20/1	7				8	15/3	3–12	ESF–2	4986		
			SPARE		20/1	9				10	–	+12G	(1.5HP / 1.5HP)	–		
			SPARE		20/1	11				12	–	3/4"C	–	–		
			SPARE		20/1	13				14			SPACE			
			SPARE		20/1	15				16			SPACE			
			SPARE		20/1	17				18			SPACE			
			SPARE		20/1	19				20			SPACE			
			SPARE		20/1	21				22			SPACE			
			SPACE			23				24			SPACE			
			SPACE			25				26			SPACE			
			SPACE			27				28			SPACE			
			SPACE			29				30			SPACE			
			SPACE			31				32			SPACE			
			SPACE			33				34			SPACE			
			SPACE			35				36			SPACE			
			SPACE			37				38	70/3	3–6	DISHMACHINE	42963	E250	
			SPACE			39				40	–	+8G	–	–		
			SPACE			41				42	–	3/4"C	–	–		
		TOTAL LOAD @ 100% =	54490VA		TOTAL LOAD @ 100% =						66A		TOTAL LOAD @ 125% =	82A		

NEW KITCHEN PANEL — KITCHEN

PANEL LK

225A MLO, 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: RECESSED, STAINLESS STEEL COVER

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E10	640	3 REC – RR/STOR/CUST & BELL	3–12	20/1	1				2	20/1	3–12	1 REC – KITCHEN	180	E10	
	E110	1920	WASHING MACHINE	3–12	20/1	3				4	20/1	3–12	1 REC – KITCHEN	180	E10	
	E110A	5000	DRYER	2–10	30/2GFI	5				6	20/1	3–12	1 REC – KITCHEN	180	E10	
	E151	–	–	+10N+10G	3/4"C	7				8	20/2	2–10	HEATED CABINET	3224	E187	
		540	3 REC – OFFICE	3–12	20/1	9				10	3/4"C	+10G	–	–		
	E10	540	3 REC – KITCHEN	3–12	20/1	11				12	20/2	2–10	HEATED CABINET	3224	E187	
	E10	360	2 REC – SERVING LINE	3–12	20/1	13				14	3/4"C	+10G	–	–		
	E10	360	2 REC – SERVING LINE	3–12	20/1	15				16	20/3	3–12	DISPOSER	3960	E123	
		1000	2 EDF – CAFETERIA	3–12	20/1	17				18	–	+12G	(3 HP)	–		
	E615	500	2 MENU BOARDS	3–12	20/1	19				20	–	3/4"C	–	–		
	E209	960	MILK COOLER	3–12	20/1	21				22	20/1	3–12	AIR SCREEN	612	E101	
	E201A	5824	HOT FOOD COUNTER	2–8	35/2	23				24	15/1	3–12	EF–CF (1/6HP)	528		
		–	–	+10G	3/4"C	25				26	15/1	3–12	EF–14 (1/6HP)	528		
	E201B	1920	COLD FOOD COUNTER	3–12	20/1	27				28	20/1	3–12	EF–2 (1/6HP)	528		
	E214	360	CASH REGISTERS	3–12	20/1	29				30	20/1		SPARE			
	E201B	1920	COLD FOOD COUNTER	3–12	20/1	31				32	20/1		SPARE			
	E201A	5824	HOT FOOD COUNTER	2–8	35/2	33				34	20/1		SPARE			
		–	–	+10G	3/4"C	35				36	20/1		SPARE			
	E209	960	MILK COOLER	3–12	20/1	37				38	20/1		SPARE			
		360	2 REC – CAFETERIA	3–12	20/1	39				40	20/1		SPARE			
			SPARE		20/1	41				42	20/1		SPARE			
	E153/E153M	250	HOOD LTS & SENSOR	3–12	20/1	43				44	20/1GFI	3–12	DROP CORD	180	E129	
	E153/E153M	250	HOOD LTS & SENSOR	3–12	20/1	45				46	20/1GFI	3–12	DROP CORD	180	E129	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	47				48	20/1GFI	3–12	MOBILE PROOFER	1800	E139A	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	49				50	20/1GFI	3–12	20QT MIXER	960	E125	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	51				52	20/1GFI	3–12	DROP CORD	180	E129	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	53				54	20/1GFI	3–12	DROP CORD	180	E129	
8	E163	600	TILT BRAISING PAN	3–12	20/1	55				56	20/1GFI	3–12	DROP CORD	180	E129	
8	E172	3120	COMBI OVEN	2–12	20/2	57				58	20/1GFI	3–12	DROP CORD	180	E129	
		–	–	+12G	3/4"C	59				60	20/1	3–12	EXISTING CIRCUIT	500		5
8	E172	3120	COMBI OVEN	2–12	20/2	61				62	20/2	2–12	EXISTING CIRCUIT	1000		5
		–	–	+12G	3/4"C	63				64	–	+12N+12G	–	–		5
		250	EXISTING CIRCUIT	3–12	20/1	65				66	20/2	2–12	EXISTING CIRCUIT	1000		5
9		0	TEMP LOAD CENTER	4–3	100/3	67				68	–	+12N+12G	–	–		5
		–	–	+8G	–	69				70	30/2	2–10	EXISTING CIRCUIT	3000		5
		–	–	1.25"C	–	71				72	–	+10N+10G	–	–		
		TOTAL LOAD @ 100% =	61942VA		TOTAL LOAD @ 100% =						172A		TOTAL LOAD @ 65% =	112A		

KITCHEN HOOD CONTACTOR SCHEDULE

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	EQUIPMENT LOCATION	CONTACTOR TYPE
HOOD 1						
CK1–1	CONVECTION OVEN	LK–47	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–2	CONVECTION OVEN	LK–49	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–3	CONVECTION OVEN	LK–51	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–4	CONVECTION OVEN	LK–53	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–5	SPARE					ELECTRICALLY HELD – NO
CK1–6	SPARE					ELECTRICALLY HELD – NO
CK1–7	SPARE					ELECTRICALLY HELD – NO
CK1–8	SPARE					ELECTRICALLY HELD – NO
HOOD 2						
CK2–1	TILT BRAISING PAN	LK–55	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–2	COMBI–OVEN	LK–57/59	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–3	(2–POLE)	–	–	–	–	ELECTRICALLY HELD – NO
CK2–4	COMBI–OVEN	LK–61/63	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–5	(2–POLE)	–	–	–	–	ELECTRICALLY HELD – NO
CK2–6	SPARE					ELECTRICALLY HELD – NO
CK2–7	SPARE					ELECTRICALLY HELD – NO
CK2–8	SPARE					ELECTRICALLY HELD – NO

1. REFERENCE FLOOR PLANS FOR EQUIPMENT LOCATIONS AND ADDITIONAL INFORMATION.
2. EACH KITCHEN HOOD CONTACTOR HALL BE CONTROLLED ON/OFF BY THE APPROPRIATE HOOD ANSUL SYSTEM. WHEN ACTIVATED ALL POWER WITHIN THE COOKING HOOD SHALL BE DE–ENERGIZED.

EXIST GE SWITCHBOARD — CENTRAL PLANT

(E)SWBD MSB

1600A MCB, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 37,000A — SCCR & AIC: 100,000A — FREE STANDING

NOTES	CIRCUIT	DESCRIPTION	CB	FEEDER SIZE	AMPS
	1	EXTENDED DAY PANEL H	200/3	EXIST FEEDER	
	2	PFCC	200/3	EXIST FEEDER	
	3	EXIST DISTRIBUTION PANEL DA	400/3	EXIST FEEDER	275A
	4	EXIST DISTRIBUTION PANEL DB	400/3	EXIST FEEDER	
	5	EXIST DISTRIBUTION PANEL AC	800/3	EXIST FEEDER	
	6	EXIST DISTRIBUTION PANEL DC	400/3	EXIST FEEDER	
2,3	7	NEW PANEL HK	225/3	4–4/0 +4G, 2.5"C	66A
	8	XFMR TLCAB	125/3	EXIST FEEDER	
	9	SPD	60/3	EXIST FEEDER	
				TOTAL LOAD @ 100% =	275A
				TOTAL LOAD @ 125% =	344A

1. THE EXISTING 2000A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

EXIST WESTINGHOUSE PANELBOARD — STORAGE ROOM

(E)PANEL DA

400A MLO, 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 27,000A — SCCR & AIC: 35,000A — MOUNTING: SURFACE

NOTES	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	NOTES
	9150	AHU #2	EXIST	20/3	1				2	60/3	EXIST	DUCT HEATER 3	39000	
	–	–	–	–	3				4	–	–	(STAGE)	–	
	–	–	–	–	5				6	–	–	–	–	
	2300	LIGHTS CAFETORIUM RMS	EXIST	20/1	7				8	20/1	EXIST	LTS KITCHEN		2
	3000	LIGHTS CAFETORIUM	EXIST	20/1	9				10	20/1	EXIST	LIGHTS CAFETORIUM RMS	3000	
	4500	HWH MECH RM 029	EXIST	25/1	11				12	70/3	3–6	TEMP KITCHEN PANEL LTK	37918	4
		SPACE			13				14	–	+8G	–	–	
		SPACE			15				16	–	3/4"C	–	–	
		SPACE			17				18			SPACE		
		SPACE			19				20			SPACE		
		SPACE			21				22			SPACE		
		SPACE			23				24			SPACE		
	130000	PANEL PA	EXIST	225/3	25				26	–	–	–	–	
	–	(SUBFEED BREAKER)	–	–	27				28	–	–	–	–	
	–	–	–	–	29				30	–	–	–	–	
	TOTAL LOAD @ 100% =	228868VA		TOTAL LOAD @ 100% =						275A		TOTAL LOAD @ 125% =	344A	

1. THE EXISTING 400A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

EXIST EM STANDBY PANELBOARD — STORAGE ROOM

(E)PANEL ELA

60A MCB, 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: SURFACE

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
		250	FACP	EXIST	20/1	1				2	20/1	3–12	REFRIGERATOR	864	E188	3
		250	FACP	EXIST	20/1	3				4	20/1	3–12	REFRIGERATOR	864	E188	3
		250	FACP	EXIST	20/1	5				6	20/1	3–12	ICE MACHINE	1428	E109	3
		250	FACP	EXIST	20/1	7				8	20/1	3–12	HOOD ANSUL SYSTEMS	240	E151	4
		250	PA SYSTEM	EXIST	20/1	9				10	25/3	3–10	REFRIGERATION SYSTEM	6192	E103	4
		250	SECURITY PANEL	EXIST	20/1	11				12	–	+10G	–	–		
		120	GEN BATTERY CHARGER	EXIST	20/1	13				14	–	3/4"C	–	–		
		1000	GEN COOLANT HEATER	EXIST	20/1	15				16	20/1EGF	3–12	COOLER DOOR HEATER/LTS	600	E102A	4
		300	GEN HEATER	EXIST	20/1	17				18	20/1EGF	3–12	FREEZER DOOR HEATER/LTS	600	E102A	4
		180	GEN RECEPTACLE	EXIST	20/1	19				20	20/1EGF	3–12	FREEZER DRAIN LINE HEATER	600	E103F	4
3	E102B	600	COOLER TEMP. ALARM	3–12	20/1	21				22	20/2	2–10	FREEZER COIL	1893	E103C	4
3	E102C	600	COOLER/FRZR PRESSURE PORT	3–12	20/1	23				24	–	+10G	–	–		
3	E102E	120	PANIC ALARM BUTTONS	3–12	20/1	25				26	30/3	EXIST	SPD	50		
3	E103D	216	COOLER COIL	3–12	20/1	27				28	–	–	–	–		
3	E102B	600	FREEZER TEMP. ALARM	3–12	20/1	29				30	–	–	–	–		
		TOTAL LOAD @ 100% =	18567VA		TOTAL LOAD @ 100% =						52A		NEC DIVERSIFIED LOAD =	56A		

1. THE EXISTING 60A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

GENERAL PANEL REQUIREMENTS:
A. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
B. FIELD VERIFY EXISTING CIRCUITS PRIOR TO BEGINNING WORK.
C. ALL OUTAGES SHALL BE SCHEDULED AND CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
D. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.

PANEL NOTES:
1. REVISE/REWORK WIRING/CONDUIT AS REQUIRED TO ADD/REMOVE DEVICES FROM EXISTING CIRCUIT.
2. EXISTING CIRCUIT TO BE DEMO.
3. REUSE EXISTING SPARE CB AND WIRE NEW CIRCUIT.
4. PROVIDE NEW CB & WIRE NEW CIRCUIT.
5. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.
6. KITCHEN LIGHTS TO BE DUAL ZONES WIRED THROUGH LIGHTING CONTACTORS AND CONTROLLED ON/OFF BY THE BAS AND LOCAL LIGHTING SWITCHES.
7. EXTERIOR LIGHTS TO BE WIRED THROUGH LIGHTING CONTACTOR AND CONTROLLED ON/OFF BY THE BAS.

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05/23/2025 90% CD PKG.
07/18/2025 ISSUED FOR BIDDING AND PERMITTING

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PROJ. NO.: 23-25
DATE: 07/18/2025
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ELECTRICAL SCHEMATIC

s-E.400

PLUMBING SYMBOLS LEGEND

———	SANITARY WASTE BELOW SLAB	SAN.	SANITARY
———	SANITARY WASTE ABOVE SLAB	CW	DOMESTIC COLD WATER
—— V. ——	VENT PIPING ABOVE SLAB	HW	DOMESTIC HOT WATER
— — — —	VENT PIPING	WC	WATER CLOSET
—— G ——	GAS PIPING, 4–8oz	UR	URINAL
—— G5 ——	GAS PIPING, 5LB	LAV	LAVATORY
—·—·—	DOMESTIC COLD WATER PIPING	SK	SINK
—·—·—·—	DOMESTIC HOT WATER PIPING	EDF	ELECTRIC DRINKING FOUNTAIN
—— D ——	DRAIN/RELIEF VENT PIPING	WH	WALL HYDRANT
—⋈—	STOP VALVE	HB	HOSEBIBB
2CO	DOUBLE SAN. CLEANOUT (2–WAY)	CP	HOT WATER CIRCULATOR PUMP
CO	SANITARY SEWER CLEANOUT	FD	FLOOR DRAIN
WCO	WALL CLEANOUT	FSINK	FLOOR SINK
EXIST.	EXISTING		
(R)	REMOVE (DEMOLISH)		
(D)	DEMOLISH (REMOVE)		
(E)	EXISTING – NO WORK		

PLUMBING FIXTURE NOTES

1. ALL FIXTURES SHALL MEET WATER CONSERVATION PERFORMANCE STANDARDS MANDATED BY SENATE BILL 587. ALL FIXTURES SHALL HAVE FLOW RESTRICTION DEVICES (DRINKING FOUNTAINS SHALL BE SELF–CLOSING) TO COMPLY WITH THESE REQUIREMENTS.
2. ALL FIXTURES SHALL HAVE CONTROLS REQUIRING OPERATING FORCE NO GREATER THAN FIVE (5) POUNDS.
3. FOR LAVATORIES AND SINKS, ALL FAUCETS SHALL BE NO–LEAD SOLID BRASS, MEETING ALL REQUIREMENTS OF ANSI/NSF 61, SECTION 9 AND CERTIFIED AS SUCH. ALSO, INSTALL SYMMONS 7–210 MIXING VALVE ON HOT WATER SUPPLY SIDE OF ALL FAUCETS UNLESS HIGH TEMPERATURE LIMIT IS PROVIDED WITH FAUCET. MAXIMUM WATER TEMPERATURE FOR ALL FAUCETS THAT DELIVER HOT OR TEPID WATER SHALL BE 110°F. ALL METERING FAUCETS SHALL HAVE A MINIMUM TEN (10) SECONDS OF WATER FLOW, AND, INSTALL TRUEBRO HANDI LAV–GUARD VANDAL–PROOF INSULATION KITS OVER P–TRAP, SUPPLIES, STOPS AND ALL SHARP EDGES FOR ALL SINKS AND LAVATORIES (TRAP WRAP FROM BROCAR OR PROWRAP FROM McGUIRE SHALL BE ACCEPTABLE).
4. ALL PLUMBING FIXTURES REFERENCED AS "ADA", "TAS" OR "HANDICAP COMPLIANT" SHALL MEET ALL REQUIREMENTS OF THE ADA AND THE TEXAS ACCESSIBILITY STANDARDS. IT SHALL BE THE PLUMBING CONTRACTORS RESPONSIBILITY TO MEET THESE REQUIREMENTS.
5. IN MANY CASES, FIXTURES WITH THE SAME PLUMBING DESIGNATION HAVE DIFFERENT INSTALLATION HEIGHTS – REFERENCE ARCHITECTURAL DRAWINGS FOR ALL INSTALLATION HEIGHTS AND HANDICAP FIXTURE DESIGNATIONS. FIXTURES DESIGNATED AS ADULT HANDICAP SHALL MEET ALL REQUIREMENTS OF THE ADA. FIXTURES DESIGNATED AS CHILD HANDICAP SHALL MEET ALL REQUIREMENTS OF THE TEXAS ACCESSIBILITY STANDARDS FOR THE APPROPRIATE CHILDREN'S AGE GROUP (REF. ARCH. DWGS. AND SPECIFICATIONS).

PLUMBING MATERIALS

SANITARY WASTE AND VENT

BELOW SLAB/GRADE: SCHEDULE 40, DWV PVC

ABOVE SLAB: STANDARD WEIGHT, CAST IRON, NO–HUB PIPING.

STORM DRAIN PIPING

BELOW SLAB/GRADE: SCHEDULE 40, DWV PVC

ABOVE SLAB, 8" AND UNDER: STANDARD WEIGHT, CAST IRON, NO–HUB PIPING.

ABOVE SLAB, 10" AND ABOVE: SERVICE WEIGHT, CAST IRON, BELL & SPIGOT.

NATURAL GAS

BELOW GRADE (OUTSIDE): YELLOW POLYETHYLENE PIPE WITH COATED STEEL RISER AND TRACER WIRE.

ABOVE SLAB: SCHEDULE 40 BLACK STEEL. PIPING 2.5" AND LARGER SHALL BE WELDED. PIPING 2" AND SMALLER SHALL HAVE SCREWED FITTINGS.

DOMESTIC WATER

INTERIOR: TYPE L COPPER WITH SOLDER TYPE WROUGHT COPPER FITTINGS, MADE UP WITH LEAD–FREE SOLDER.

EXTERIOR: TYPE K COPPER WITH SWEAT FITTINGS AND LEAD–FREE SOLDER. BEYOND 5 FEET FROM BUILDING, SCHEDULE 40 PVC.

FIRE SPRINKLER SYSTEM NOTES

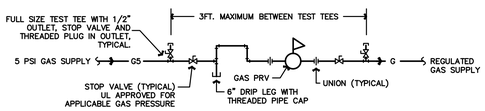
1. THE EXISTING FIRE SPRINKLER SYSTEM SHALL BE MODIFIED AND/OR EXPANDED TO COVER THE AREA OF RENOVATION IN ENTIRETY. ALL NEW AND REVISED PIPING SHALL BE ENGINEERED AND INSTALLED BY A LICENSED FIRE SPRINKLER CONTRACTOR.
2. REFERENCE THE SPECIFICATIONS, DIVISION 21, FOR MORE INFORMATION.

GENERAL PLUMBING NOTES

1. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK DESCRIPTION. SEE THIS SHEET (P4.00) FOR PLUMBING SYMBOLS LEGEND.
2. COORDINATE PLUMBING SYSTEMS INSTALLATION WITH ARCHITECTURAL, STRUCTURAL, HVAC SYSTEMS, ELECTRICAL SYSTEMS, CONDUITS, ETC.... OFFSET PIPING AS REQUIRED TO PROVIDE A FUNCTIONING SYSTEM WITH ADEQUATE SPACE FOR SERVICING AND REPAIRS.
3. MAKE CONNECTIONS OF NEW PIPE SYSTEMS IN TO EXISTING PIPE SYSTEMS WITH THREADED OR SWEAT JOINTS. PROVIDE ELECTROLYSIS ISOLATING UNIONS AT CONNECTION OF DISSIMILAR MATERIALS. REFERENCE THE SPECIFICATIONS.
4. SITE SERVICES ARE SHOWN FOR REFERENCE ONLY. PLUMBING CONTRACTOR SHALL REFERENCE CIVIL DRAWINGS, INCLUDING LOCATIONS OF SERVICES, SIZES OF PIPES, FLOWLINE ELEVATIONS, ETC..
5. DO NOT INSTALL PLUMBING PIPING OVER ANY ELECTRICAL EQUIPMENT. REFERENCE ELECTRICAL DRAWINGS FOR LOCATIONS OF ELECTRICAL EQUIPMENT AND COORDINATE WITH ELECTRICAL SUBCONTRACTORS ACCORDINGLY. SEE DETAIL 2/MEP1. THIS INCLUDES FIRE SPRINKLER PIPING.
6. ALL PIPES THROUGH WALLS OR FLOORS SHALL BE SLEEVED AND SEALED PER DETAIL 5/P4.02. FIRE CAULK WHERE REQUIRED. THIS INCLUDES ALL WALLS, INTERIOR AND EXTERIOR. THIS INCLUDES FIRE SPRINKLER PIPING.
7. ALL CLEANOUTS SHALL BE CONNECTED TO SANITARY LINES USING WYES AND/OR LONG RADIUS ELLS. SANITARY TEES ARE NOT ACCEPTABLE. 2" MINIMUM SIZE. ALL WALL CLEAN OUTS IN VERTICAL RISERS, OR BANKS OF FIXTURES SHALL BE INSTALLED 4" ABOVE THE FLOOD RIM LEVEL OF THE LOWEST CONNECTED FIXTURE AND A MINIMUM OF 24" AFF.
8. ALL WASTE AND VENT PIPING BELOW SLAB SHALL BE 2" MINIMUM.
9. LOCATE PLUMBING VENTS THROUGH ROOF NOT NEARER THAN SIX (6) FEET AWAY FROM EDGE OF BUILDING AND TEN (10) FEET AWAY FROM ANY FRESH AIR INTAKES. OFFSET VENT PIPING, AS REQUIRED, IN CEILING SPACE BETWEEN CEILING AND ROOF TO MEET THESE REQUIREMENTS. SEE DETAIL 3/P4.02.
10. ALL DOMESTIC WATER PIPING (CW, HW AND HWR) SHALL BE INSULATED PER THE WRITTEN SPECIFICATIONS.
11. TOP OF FLOOR DRAINS IN MECHANICAL, AHU AND BOILER ROOMS SHALL BE SET 1–1/2" BELOW FINISHED FLOOR SURFACE. CONCRETE FLOOR SHALL BE SLOPED TO DRAIN, REFERENCE ARCHITECTURAL DRAWINGS. IN ALL OTHER LOCATIONS, FLOOR DRAINS SHALL BE SET FLUSH WITH FINISHED FLOOR, TAKING INTO ACCOUNT ANY FLOOR SLOPE OR FLOOR FINISH (TILE, TERRAZZO, ETC.) AS SHOWN ON ARCHITECTURAL DRAWINGS.
12. PROVIDE AN ISOLATING VALVE AT EACH WATER TAP OFF HOT AND COLD WATER MAINS TO ALLOW FOR SERVICING. VALVE SHALL BE BALL VALVE IF PIPE SIZE IS 2" OR LESS AND GATE VALVE OR BUTTERFLY VALVE IF LARGER THAN 2". SEE WRITTEN SPECIFICATIONS. VALVES SHALL BE EASILY ACCESSIBLE. PROVIDE 18" X 18", FIRE–RATED, STAINLESS STEEL ACCESS PANELS WITH HINGED, CYLINDRICAL LOCK DOORS WHERE VALVES ARE INSTALLED ABOVE INACCESSIBLE CEILINGS OR IN WALL CHASES (MIFAB MODEL MPFR–SS–C). BALL VALVES AND BUTTERFLY VALVES INSTALLED ABOVE CEILINGS SHALL BE INSTALLED SUCH THAT HANDLE IS ON BOTTOM OF PIPE. ISOLATING WATER VALVES ABOVE CEILINGS SHALL BE INSTALLED NO MORE THAN 24" ABOVE CEILING. VALVES ABOVE INACCESSIBLE CEILINGS SHALL BE INSTALLED WITHIN REASONABLE REACH OF CEILING MOUNTED ACCESS PANEL.
13. WATER HAMMER ARRESTERS SHALL BE INSTALLED IN ADDITION TO AIR CHAMBERS PER THE RISER DIAGRAMS. SEE SPECIFICATIONS.
14. MECHANICALLY CLEAN ALL WASTE LINES WITH ROTARY MACHINE TO PROVE FREE FLOWING, SEE SPECIFICATIONS.
15. PROVIDE VENTED SLEEVE (2 PIPE SIZES LARGER THAN GAS PIPE UNLESS NOTED OTHERWISE) FOR ALL GAS PIPING IN GROUND BELOW PAVING OR SIDEWALKS AND INSIDE BUILDING IN WALLS AND IN UNVENTILATED CEILING SPACES, SEE SPECIFICATIONS.
16. GAS PIPING SHALL BE 1/2" MINIMUM. TAP GAS PIPING ON TOP OR SIDES ONLY. DO NOT INSTALL VALVES IN CEILING PLENUM OR IN ANY INACCESSIBLE LOCATION. ALL GAS VALVES SHALL BE EASILY ACCESSIBLE. REFER TO DETAIL 9/P4.01 FOR TYPICAL GAS CONNECTION INSTALLATION. REFER TO DETAIL 8/P4.02 FOR TYPICAL PRV INSTALLATION.
17. CENTER WALL HYDRANTS IN BRICK PATTERN OF EXTERIOR WALLS, REFERENCE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
18. ALL REFRIGERATORS WITH ICE MAKERS, COMMERCIAL TYPE COFFEE MAKERS, ICE MAKERS, COFFEE VENDING MACHINES AND OTHER ITEMS PROVIDED THAT REQUIRE A WATER CONNECTION SHALL HAVE A CW VALVE BOX, "VBOX", INSTALLED TO ALLOW EASY ACCESS AND REMOVAL OF MACHINE. ALSO, INSTALL IN–LINE FILTER IN WATER CONNECTION.
19. REFER TO CIVIL DRAWINGS FOR SITE SANITARY, SITE STORM SEWER, FIRE SERVICE AND DOMESTIC WATER SERVICE. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PIPING INSIDE BUILDING TO OUTSIDE LOCATIONS SHOWN ON PLUMBING DRAWINGS. PLUMBING CONTRACTOR SHALL INCLUDE COST OF FINAL TIE–INS TO SITE SERVICES.
20. PER THE DRAWINGS, ALL DRAINS (FLOOR DRAINS, FLOOR SINKS, HUB DRAINS, KITCHEN DRAINS, SHOWER DRAINS, ETC.) SHALL BE VENTED AND TRAP PRIMED – NO EXCEPTIONS. TRAP PRIMING SHALL BE ACCOMPLISHED USING WATER CLOSET FLUSH VALVE TRAP PRIMING DEVICES OR PROSET SYSTEMS TRAP GUARD SEWER GAS EMISSION PROTECTION, AS SHOWN ON DRAWINGS. REFERENCE PLUMBING FLOOR PLANS AND RISER DIAGRAMS.
21. ALL PIPING LOCATED ON ROOF (GAS PIPING) SHALL BE INSTALLED ON ROOF PIPE SUPPORTS PER DETAIL 10/P4.02, 6–FOOT ON CENTER. INSTALL ROOF PIPE JACK PER DETAIL 9/P4.02 FOR ALL PIPING THROUGH ROOF.
22. COORDINATE LOCATIONS OF ALL ROOF DRAINS AND OVERFLOW ROOF DRAINS WITH ARCHITECTURAL DRAWINGS.
23. FOR COMBINATION WASTE AND VENT SYSTEMS (WHERE APPLICABLE ON DRAWINGS), DRAIN P–TRAPS SHALL BE SIZE OF PIPE SHOWN ON DRAWINGS (I.E. TWO PIPE SIZES LARGER THAN DRAIN SIZE). FOR EXAMPLE, A 4" FLOOR DRAIN SHALL HAVE A 6" P–TRAP.
24. FOR ALL PLUMBING FIXTURES, IF COPPER PIPING IS STUBBED THROUGH WALL FOR DRAIN CONNECTION, INSTALL MARVEL FITTING AT DRAIN CONNECTION FOR EASE OF SERVICING AND REPAIRS. COPPER DRAIN PIPING WILL ONLY BE ALLOWED FOR DIRECT/STRAIGHT STUB–OUT OF FIXTURE DRAIN PIPING THROUGH WALL.
25. DO NOT INSTALL ANY PIPING BENEATH CVT OR VAV BOXES. THIS INCLUDES FIRE SPRINKLER PIPING.
26. WHERE UNDERGROUND VENT PIPE SIZE IS NOT NOTATED, VENT SHALL BE 2" DIAMETER.
27. WHERE UNDERGROUND SANITARY PIPE SIZE IS NOT NOTATED, REFER TO THE RISER DIAGRAMS FOR SIZE. NOT BELOW GRADE SANITARY PIPE SHALL BE SMALLER THAN 2". NO SANITARY LINE OR P–TRAP FOR A DRAIN/FIXTURE SHALL BE SMALLER THAN THE FIXTURE CONNECTION SIZE SHOWN ON THE DRAIN/FIXTURE SCHEDULE.
28. WHERE ABOVE GROUND VENT PIPE SIZE IS NOT NOTATED, REFER TO THE RISER DIAGRAMS FOR VENT SIZE.
29. WHERE CW/HW PIPING SIZE TO THE FIXTURE IS NOT SHOWN ON THE FLOOR PLAN, REFER TO THE RISER DIAGRAMS FOR CW/HW PIPE SIZE. NO PIPING TO FIXTURE SHALL BE SMALLER THAN THE FIXTURE CONNECTION SIZE SHOWN ON THE FIXTURE SCHEDULE.
30. TO INSTALL NEW PLUMBING SYSTEMS BELOW EXISTING CONCRETE SLABS, FIRST PLUMBING CONTRACTOR SHALL LAY OUT CUT. THEN, DEMOLITION CONTRACTOR SHALL SAW CUT SLAB TO CONTROL CRACKING AND REMOVE ALL CONCRETE. PLUMBING CONTRACTOR SHALL THEN EXCAVATE FILL TO PROPER SLOPE, INSTALL NEW PIPING SYSTEMS AS REQUIRED, THEN BACKFILL AND COMPACT TO PROPER DENSITY. THE CONCRETE CONTRACTOR SHALL THEN INSTALL NEW SIX (6) MIL POLYETHYLENE VAPOR BARRIER AND SEAL, INSTALL NEW REINFORCING STEEL AND WELD ON TO EXISTING, THEN RE–POUR CONCRETE TO NEW LEVEL. DO NOT CUT THROUGH GRADE BEAMS WITHOUT APPROVAL FROM THE STRUCTURAL ENGINEER. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
31. ALL ABANDONED FIXTURES, DRAINS AND PIPING (INCLUDING PIPING ABANDONED IN THE PAST) IN AREAS WHERE WORK IS BEING DONE SHALL BE COMPLETELY REMOVED FROM BUILDING (INCLUDING PIPING BELOW SLAB/GRADE – UNLESS SHOWN OTHERWISE ON DRAWINGS). EXISTING WATER PIPING SHALL BE CAPPED AT EXISTING WATER MAIN TAPS AND ALL ABANDONED PIPING REMOVED. ABANDONED VENT PIPING SHALL BE COMPLETELY REMOVED, INCLUDING EXISTING VTR'S NOT RE–USED. PATCH AS REQUIRED. ONLY ACTIVE PIPING, FIXTURES AND DRAINS SHALL REMAIN IN BUILDING WHERE WORK IS BEING DONE.

GAS PRV SCHEDULE

MARK	PRV–K
LOCATION	MECH. YARD
SERVES	KITCHEN
GAS LOAD	585 CFH
DISTANCE FROM METER	150 FT
DISTANCE TO LAST OUTLET	200 FT
INLET (SIZE/PRESSURE)	1" / 5 PSI
OUTLET (SIZE/PRESSURE)	2" / 7–12 IN WC



4 GAS PRESSURE REGULATOR DETAIL (PRV)

NO SCALE

NOTES:
1. GAS REGULATOR SHALL BE ANSI Z21.80 CERTIFIED FOR LINE PRESSURE REGULATION BETWEEN THE SERVICE REGULATOR AND CONNECTED EQUIPMENT.
2. ALL GAS REGULATORS WITH INLET PRESSURE ABOVE 2 PSI SHALL BE EQUIPPED WITH A FACTORY INSTALLED OVERPRESSURE PROTECTION DEVICE, AS PART OF THE ANSI Z21.80 CERTIFICATION.
3. GAS REGULATOR SHALL BE EQUIPPED WITH A VENT LIMITING DEVICE, SIZED IN ACCORDANCE WITH THE REGULATOR OUTLET PRESSURE.
4. ALL REGULATORS INSTALLED OUTDOORS SHALL BE RATED FOR OUTDOOR INSTALLATION.
5. BASIS OF DESIGN IN THE MAXITROL 325–L SERIES OF REGULATORS

PLUMBING DRAINS, CLEANOUTS AND HYDRANTS

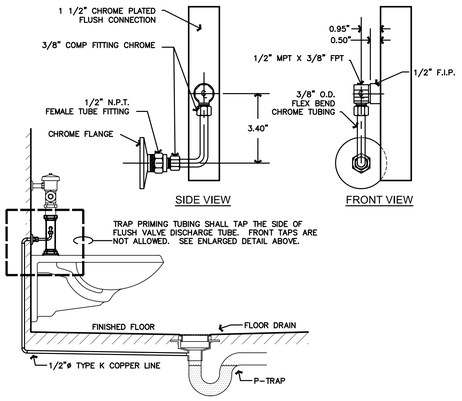
MARK	MIN. CONNECTION SIZES (IN.) SAN	VENT	CW	HW	DESCRIPTION/SPECIFICATION FOR FIXTURE OR EQUIPMENT
FD	4	2	1/2	–	TOILET FLOOR DRAIN – TWO–PIECE CAST IRON WITH SEEPAGE FLANGE, REVERSIBLE CLAMPING COLLAR, 1/2" TRAP PRIMER TAP, 6" SQUARE, NICKEL BRONZE HISTRAINER AND SECURITY SCREWS JR SMITH MODEL 2005–03–K06PB–P050–U.
FD2	4	2	1/2	–	EQUIPMENT FLOOR DRAIN – CAST IRON, MEDIUM DEPTH DRAIN WITH FLANGE, CLAMPING DEVICE, SEEPAGE OPENINGS, DUCTILE IRON TRUE–FIT SEDIMENT BUCKET WITH 12" STAINLESS STEEL RIM LESS GRATE, 1/2" TRAP PRIMER TAP ZURN MODEL ZS–540–U–P DRAIN SHALL BE DESIGNED SUCH THAT GRATE CANNOT BE INSTALLED WITHOUT SEDIMENT BUCKET.
FD3	4	2	1/2	–	GRATED MECHANICAL ROOM FLOOR DRAIN – CAST IRON WITH FLANGE, SEEPAGE OPENINGS, 9" HEAVY–DUTY DUCTILE IRON GRATE WITH STAINLESS STEEL VENEER, CLAMPING DEVICE AND 1/2" TRAP PRIMER TAP ZURN MODEL ZS–550–C–P
FD4	4	2	1/2	–	CANWASH FLOOR DRAIN – ALL GALVANIZED CAST IRON, MEDIUM DEPTH DRAIN WITH FLANGE, CLAMPING DEVICE, SEEPAGE OPENINGS, GALVANIZED SUR–SET SEDIMENT BUCKET WITH 12" GALVANIZED DUCTILE IRON RIM AND GRATE, 1/2" TRAP PRIMER TAP ZURN MODEL ZS–540–P–G–HD. DRAIN SHALL BE DESIGNED SUCH THAT GRATE CANNOT BE INSTALLED WITHOUT SEDIMENT BUCKET.
FD5	4	2	1/2	–	KITCHEN FLOOR DRAINS SHALL BE SIMILAR EXCEPT WITH 7" SQUARE, BRONZE GRATE JR SMITH MODEL 2005–03–K07PB–P050–U PROVIDE 4" DIAMETER STAINLESS STEEL FUNNEL WHERE SHOWN ON DRAWINGS. REFERENCE KITCHEN CONNECTION SCHEDULE ON PLUMBING RENOVATION FLOOR PLAN SHEET.
FS KITCHEN FS	4	2	1/2	–	FLOOR SINK – CAST IRON, 8" DEEP SUMP, A.R.E. INTERIOR, INTEGRAL FLANGE FOR SUPPORT, CLAMPING DEVICE WHERE VAPOR BARRIER IS INSTALLED BETWEEN SLAB AND CONCRETE BEDDING FOR FLOOR, ALUMINUM SECONDARY DOME STRAINER AND 12" SQUARE HEAVY DUTY STAINLESS STEEL TRACTOR DUTY FRAME WITH 3/4–TRACTOR GRATE AND 1/2" TRAP PRIMER TAP JR SMITH MODEL 3150Y–04–C–13.
CO	VARIES	–	–	–	FLOOR CLEANOUT – ADJUSTABLE EXTENSION HOUSING, CAST IRON FERRULE WITH FULL–LINE–SIZE BRASS PLUG (UP TO 4"), 5" DIAMETER STAINLESS STEEL ACCESS COVER WITH VANDAL–PROOF SCREW, ROUND FRAME AND TOP LOAD RATING COMPATIBLE WITH FLOOR TYPE (REFERENCE ARCHITECTURAL DRAWINGS FOR FLOOR TYPES) ZURN MODEL ZS–1400–VP. PROVIDE CARPET FRANGE FOR CARPETED AREAS (CARPET MARKER SHALL NOT BE ACCEPTABLE) AND TERRAZZO RECESS FOR TERRAZZO FLOORS. OUTDOOR CLEANOUT – SAME AS TYPE "CO" EXCEPT WITH HEAVY–DUTY NICKEL BRONZE TOP ZURN MODEL ZN–1400–HD–VP. INSTALL 18" X 18" X 6" THICK CONCRETE PAD AROUND EACH OUTDOOR CLEANOUT.
WCO	VARIES	–	–	–	WALL CLEANOUT – CAST IRON FERRULE WITH COUNTERSUNK HEAD (FULL–LINE–SIZE PVC PLUG UP TO 4") MI–FAB MODEL CMSD. ACCESS COVER SHALL BE 8" SQUARE, SURFACE MOUNT, FLUSH INSTALLATION, 16–GAUGE STAINLESS STEEL ACCESS DOOR WITH FLANGED FRAME AND VANDAL–PROOF OPTION MI–FAB MODEL UA–SS–VP. ACID WASTE CLEANOUT (AWCO) SHALL BE SAME EXCEPT ACID WASTE PIPING. INSIDE CABINETWORK WHERE CLEANOUT IS NOT VISIBLE, ACCESS PANEL MAY BE ROUND STAINLESS STEEL TYPE WITH VANDAL–PROOF CENTER SCREW MI–FAB MODEL C1450–RD–3–6.
2CO	4	–	–	–	DOUBLE CLEANOUTS – SAME AS OUTDOOR CLEANOUTS. INSTALLED FOR TWO–WAY RODDING. SINGLE CLEANOUT WITH 2–WAY FITTING IS NOT ACCEPTABLE, PROVIDE TWO SEPARATE CLEANOUTS. INSTALL 18" X 18" X 6" THICK CONCRETE PAD AROUND EACH OUTDOOR CLEANOUT.
HB	–	–	3/4	–	HOSEBIBB – 3/4" HOSE THREAD, INTEGRAL VACUUM BREAKER SPOUT, ROUGH CHROME FINISH WITH REMOVABLE KEYED HANDLE, WALL FLANGE CHICAGO MODEL 952.
WH	–	–	3/4	–	RESTROOM WALL HYDRANT – NARROW WALL, WARM CLIMATE TYPE HOSE BOX, QUARTER–TURN WHEEL HANDLE, ASSE APPROVED ANTI–SIPHON INTEGRAL VACUUM BREAKER AND DUAL CHECK VALVE, 3/4" STRAIGHT INLET HOSE CONNECTION, CAST STAINLESS STEEL HYDRANT BOX, FLUSH MOUNTED 16–GAUGE STAINLESS STEEL FRAME AND 180° DROP DOWN DOOR WITH KEY LOCK AND WALL CLAMP JR SMITH MODEL 5518
WH2	–	–	3/4	–	EXTERIOR WALL HYDRANT – NON–FREEZE HOSE BOX, QUARTER–TURN WHEEL HANDLE, ASSE APPROVED ANTI–SIPHON INTEGRAL VACUUM BREAKER AND DUAL CHECK VALVE, 3/4" STRAIGHT INLET HOSE CONNECTION, CAST STAINLESS STEEL HYDRANT BOX, FLUSH MOUNTED 16–GAUGE STAINLESS STEEL FRAME AND 180° DROP DOWN DOOR WITH KEY LOCK AND WALL CLAMP JR SMITH MODEL 5519
WH3	–	–	3/4	3/4	CANWASH WALL HYDRANT – NON–FREEZE HOSE BOX WITH STRAIGHT INLET CONNECTION, HOT AND COLD MIXING, REMOVABLE KEYED HANDLE, ASSE APPROVED ANTI–SIPHON INTEGRAL BACKFLOW PREVENTER WITH 3/4" HOSE CONNECTION, HEAVY DUTY BRASS CASING, POLISHED BRONZE HYDRANT BOX WITH HINGED COVER, "WATER" CAST ON COVER, DRIP LIP AND WALL CLAMP J.R. SMITH MODEL 5560–QT–WC–H–W–PB.
WBOX	2	2	3/4	3/4	CLOTHES WASHER DRAIN/VALVE BOX – HEAVY–GAUGE GALVANIZED STEEL CONSTRUCTION, RECESSED IN WALL, VALVE AND DRAIN CONNECTIONS, WATTS DUO–CLOZ VALVE GUY GRAY MODEL WB–200.

PLUMBING FIXTURES AND EQUIPMENT

MARK	MIN. CONNECTION SIZES (IN.) SAN	VENT	CW	HW	DESCRIPTION/SPECIFICATION
WC	4	2	1	–	WATER CLOSET – WALL MOUNTED, WHITE VITREOUS CHINA, SIPHON JET ACTION, 1.28 GPF, ELONGATED BOWL, TOP SPUD, ADA/TAS COMPLIANT, AMERICAN STANDARD AFWALL: SLOAN ROYAL 111–1.28 FLUSH VALVE WITH VANDAL–PROOF FREE–SPINNING TOP CAP, 1.28 GPF, VANDAL–PROOF STOP AND ADA/TAS COMPLIANT LEVER ACTUATOR WITH LEVER INSTALLED ON LEFT SIDE (FOR FIXTURES DESIGNATED AS "HANDICAP"), INSTALL LEVER ON "WIDE–SIDE" OF TOILET STALL); BEMIS 1655–SS/C EXTRA HEAVY DUTY, WHITE, OPEN FRONT SEAT LESS COVER WITH SELF–SUSTAINING, STAINLESS STEEL CHECK HINGE; AND, FLOOR MOUNTED CARRIER.
LV	1–1/4	1–1/4	1/2	1/2	LAVATORY GOOSENECK FAUCET – WALL HUNG, WHITE VITREOUS CHINA, FRONT OVERFLOW, SELF–DRAINING DECK AREA, 21" X 18", ADA/TAS COMPLIANT AMERICAN STANDARD LUCERNE 0355.012; DECK MOUNTED FAUCET, 4" CENTERS, FIXED, CHROME PLATED, 5.25" GOOSENECK SPOUT, PRESSURE COMPENSATING LAMINAR FLOW NON–AERATING 0.5 GPM OUTLET, 4" WRISTBLADE HANDLES, REPLACEABLE COMPRESSION CARTRIDGES, CHICAGO 895–317GN2AE72ABCP; CHROME PLATED, 17–GAUGE CAST BRASS GRID DRAIN WITH WHEELCHAIR OFFSET FITTING; CHROME PLATED, 17–GAUGE CAST BRASS P–TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; TRUEBRO HANDI LAV–GUARD VANDAL–PROOF, WHITE INSULATION KITS; AND, FLOOR MOUNTED, CONCEALED ARMS CARRIER. PROVIDE ASSE 1070 LISTED MIXING VALVE, LEONARD 170–LF OR EQUAL (MUST BE CAPABLE OF ADJUSTMENT ABOVE 130°F).
LV2	1–1/4	1–1/4	1/2	1/2	LAVATORY – WALL HUNG, WHITE VITREOUS CHINA, FRONT OVERFLOW, SELF–DRAINING DECK AREA, 21" X 18", ADA/TAS COMPLIANT AMERICAN STANDARD LUCERNE 0355.012; CHROME PLATED, ALL CAST BRASS CONSTRUCTION, ADA/TAS COMPLIANT, VANDAL–PROOF FAUCET WITH 4" WRIST BLADE HANDLES, COMPRESSION STYLE CARTRIDGES, CHROME DECK PLATE, VANDAL–PROOF AERATOR, COPPER SUPPLIES AND CERTIFIED FOR MEETING ALL REQUIREMENTS OF NSF 61 SECTION 9 CHICAGO MARATHON MODEL 802–E70–317ABCP; CHROME PLATED, 17–GAUGE CAST BRASS GRID DRAIN WITH WHEELCHAIR OFFSET FITTING; CHROME PLATED, 17–GAUGE CAST BRASS P–TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; TRUEBRO HANDI LAV–GUARD VANDAL–PROOF, WHITE INSULATION KITS; AND, FLOOR MOUNTED, CONCEALED ARMS CARRIER. PROVIDE ASSE 1070 LISTED MIXING VALVE, LEONARD 170–LF OR EQUAL (MUST BE CAPABLE OF ADJUSTMENT ABOVE 130°F).
EDF	1–1/2	1–1/2	1/2	–	BI–LEVEL ELECTRIC DRINKING FOUNTAINS WITH BOTTLE FILLER – WALL MOUNTED, ALL STAINLESS STEEL, ADA AND TAS COMPLIANT FOR ALL AGES, 8 GPH AT ARI STANDARDS, 2–STREAM ALL METAL BUBBLER FITTING WITH VANDAL–RESISTANT KIT AND FRONT PUSH BUTTON ACTUATION, PUSH BUTTON ACTIVATED BOTTLE FILLER WITH 1.1GPM FILL RATE AND ANTI–MICROBIAL COATING, INTEGRAL WATER FILTER, LEAD–FREE (CERTIFIED FOR MEETING ALL REQUIREMENTS OF NSF 61 SECTION 9), REFRIGERANT HFC–134a, MAINTENANCE ACCESS PANEL, HALSEY–TAYLOR MODEL HTHBHVR8EC WITH CHROME PLATED, 17–GAUGE CAST BRASS P–TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; FLOOR MOUNTED CHAIR CARRIER; AND, STAINLESS STEEL ADA APRON FOR LOCATIONS REQUIRED BY ADA OR TAS.
MB	3	2	3/4	3/4	MOP BASIN – 24" X 24" X 12" DEEP TERRAZZO, TWO (2) STAINLESS STEEL SPLASH CATCHER PANELS, 8" DROP FRONT WITH STAINLESS STEEL CAP, CAST BRASS DRAIN WITH STAINLESS STEEL STRAINER STERN WILLIAMS HILOW MODEL HI1800–BP; FAUCET SHALL BE POLISHED CHROME PLATED SERVICE SINK TYPE WITH VACUUM BREAKER, INTEGRAL SUPPLY CHECK STOPS, SPOUT WITH PAIL HOOK, HOSE END AND TOP BRACE CHICAGO MODEL 897–CCF (INSTALL BACKING/BRACING INSIDE WALL TO SUPPORT FAUCET AND TOP BRACE).
LP–1	3	2	3/4	3/4	LAVATORY PUMP – FACTORY BUILT, LIFT PUMP FOR GRAY WATER WASTE, TOP ACCESS TO INTERNAL 1/6HP PUMP AND FLOAT SWITCH, 1.5" TOP AND SIDE INLETS, 1.5" TOP OUTLET, INTEGRAL CHECK VALVE AT BOTTOM INLET CONNECTIONS, 9FT POWER CORD WITH GROUNDED PLUG; LIBERTY PUMPS MODEL 406

KITCHEN PLUMBING CONNECTION SCHEDULE

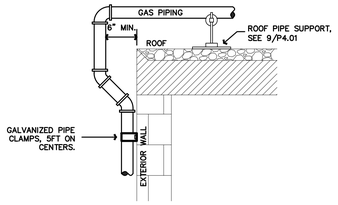
MARK	DESCRIPTION
P5	3/4" CW AND 3/4" HW – IN WALL, 36" AFF, TO MOP BASIN ("MB") FAUCET. REFERENCE PLUMBING FIXTURE SCHEDULE.
P6	3" DRAIN IN FLOOR FOR MOP BASIN ("MB") DRAIN. REFERENCE PLUMBING FIXTURE SCHEDULE.
P7	3/4" CW AND 3/4" HW – IN WALL, 18" AFF, TO HOSE BIBB.
P10	FLOOR DRAIN – 3" OUTLET; FLUSH WITH FLOOR; TWO–PIECE CAST IRON WITH SEEPAGE FLANGE, REVERSIBLE CLAMPING COLLAR, 7" SQUARE HEAVY–DUTY POLISHED BRONZE GRATE, 1/2" TRAP PRIMER TAP, AND TRAP SEAL DEVICE (MODEL 2692) JR SMITH MODEL 2005–03–K07PB–P050–U.
P11C	1/2" CW AND 1/2" HW – IN WALL, FOR HAND LAVATORY WITH FOOT CONTROLS ("LV"). REFERENCE PLUMBING FIXTURE SCHEDULE.
P11D	2" DRAIN – IN WALL, FOR HAND LAVATORY WITH FOOT CONTROLS ("LV"). REFERENCE PLUMBING FIXTURE SCHEDULE.
P12	FLOOR SINK – 4" OUTLET; FLUSH WITH FLOOR; CAST IRON, 8" DEEP SUMP, A.R.E. INTERIOR, INTEGRAL FLANGE FOR SUPPORT, CLAMPING DEVICE WHERE VAPOR BARRIER IS INSTALLED BETWEEN SLAB AND CONCRETE BEDDING FOR FLOOR, ALUMINUM SECONDARY DOME STRAINER AND 12" SQUARE HEAVY DUTY NICKEL BRONZE FRAME WITH 3/4–TRAC



13 FLUSH VALVE TRAP PRIMING TUBE DETAIL

NO SCALE

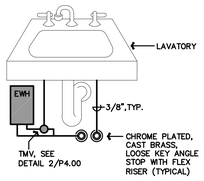
MI-FAB MODEL MI-702-MOD FLUSH VALVE TRAP PRIMER, OR EQUAL



13 GAS PIPING WALL-TO-ROOF TRANSITION DETAIL

NO SCALE

TANKLESS WATER HEATER SCHED.		
MARK	IEWH-1	
SERVES	LAVATORY	
LOCATION	BELOW COUNTER	
HEATER KW	1.8 KW	
TEMP RISE (@ 0.5 GPM)	25°F	
VOLTAGE/PHASE	120V/1PH	
EEMAX MODEL	SPEX1812T	

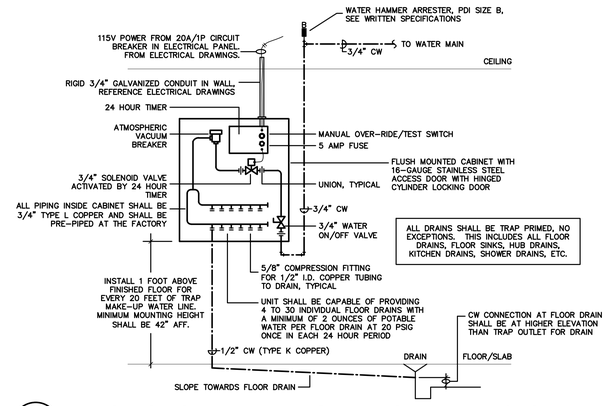


11 TANKLESS WATER HEATER

NO SCALE

NOTES:

1. LOCATION OF VALVE AND PIPING SHALL NOT INTERFERE WITH ANY ADA/HANDICAP KNEE-SPACE CLEARANCE REQUIREMENTS.
2. ALL PIPING SHALL BE CHROME PLATED CAST BRASS AND SHALL BE INSULATED BY TRUEBRO HANDI LAV-GUARD INSULATION KITS. INSULATION KITS SHALL COVER P-TRAP, MIXING VALVE, WATER STOPS, PIPING AND ALL SHARP EDGES (ONLY WHERE CABINETWORK KNEESPACE SCREEN NOT PROVIDED).
3. ALL CW AND HW CONNECTIONS SHALL HAVE COMPRESSION TYPE FITTINGS.
4. FURNISH & INSTALL 0.5-GPM AERATOR ON FAUCET COMPATIBLE WITH TANKLESS EWH REQUIREMENTS.
5. WATER HEATER SHALL HAVE INTEGRAL ASSE-1070 COMPLIANT TEMPERED MIXING VALVE.

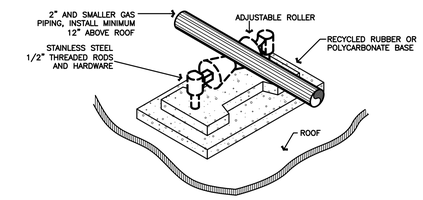


10 ELECTRONIC TRAP PRIMING MANIFOLD DETAIL (TP)

NO SCALE

NOTES:

1. REFERENCE SCHEDULE ON SHEET P3.00

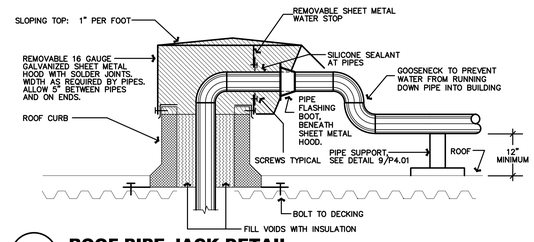


14 GAS PIPING ROOF SUPPORT DETAIL

NO SCALE

NOTES:

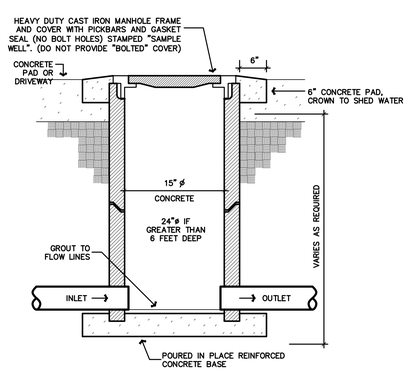
1. GAS PIPING SUPPORT SHALL BE PORTABLE PIPE HANGERS, INC. MODEL PP10-R. PIPING SHALL BE INSTALLED 12" ABOVE FINISHED ROOF. PROVIDE 18" X 18" CAREY TREAD-TYPE MATERIAL BENEATH EACH PIPE SUPPORT.
2. FIELD LOCATE ROOF STRUCTURAL SUPPORTS AND PLACE BASE OF PIPE SUPPORT OVER ROOF SUPPORTS ONLY. PROVIDE BASE OF ADEQUATE LENGTH TO SPAN ROOF JOIST TO PREVENT SUPPORTS SETTING ON ROOF DECK ONLY.
3. INSTALL SIX (6) FOOT-ON-CENTERS.
4. PIPE SUPPORT MANUFACTURER'S REPRESENTATIVE SHALL PERSONALLY INSPECT INSTALLATIONS OF PIPE SUPPORTS AND MAKE CORRECTIONS AND HEIGHT ADJUSTMENTS TO INSTALLATIONS, AS REQUIRED, DURING INSPECTION.



9 ROOF PIPE JACK DETAIL

NO SCALE

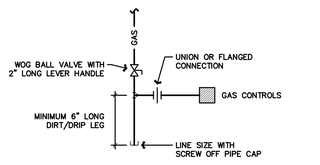
NOTE: COORDINATE WITH ARCHITECTURAL DRAWINGS, DETAILS AND SPECIFICATIONS.



8 SAMPLE TEST WELL DETAIL (STW)

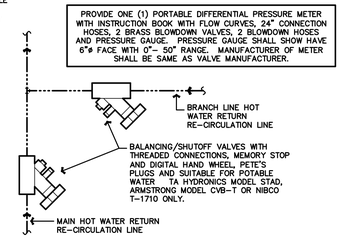
NO SCALE

NOTES:



7 TYPICAL GAS CONNECTION

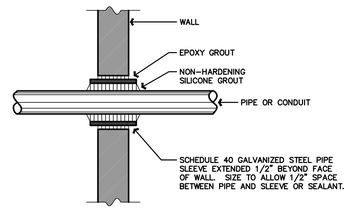
NO SCALE



6 HOT WATER BALANCING STATION

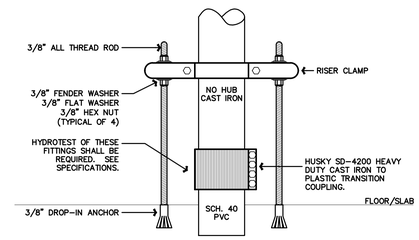
NO SCALE

PROVIDE AT EACH JUNCTION OF BRANCH HOT WATER RETURN LOOPS TO MAIN CIRCULATING HOT WATER LINE, SEE PLUMBING PLANS.



5 WALL PENETRATION DETAIL

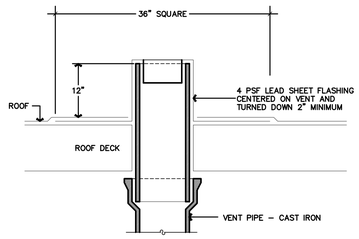
NO SCALE



4 PVC-TO-CAST IRON INSTALLATION DETAIL

NO SCALE

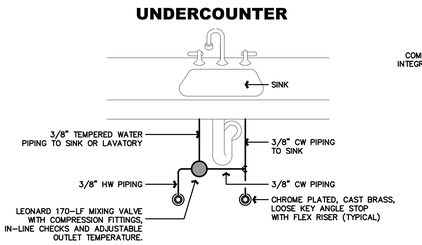
MISSION TRANSITION COUPLING DESIGNED AND CERTIFIED FOR THIS SPECIFIC APPLICATION SHALL BE ACCEPTABLE IN LIEU OF HUSKY COUPLING IN THIS DETAIL.



3 ROOF VENT DETAIL

NO SCALE

COORDINATE WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

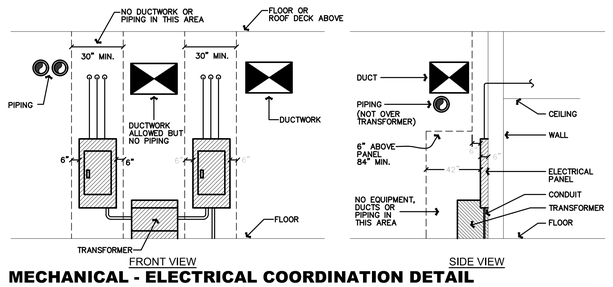


2 MIXING VALVE DETAIL

NO SCALE

NOTES

1. UNDERCOUNTER MIXING VALVE SHALL BE MOUNTED ON WALL IN FIXTURE KNEE-SPACE. LOCATION OF VALVE AND PIPING SHALL NOT INTERFERE WITH ANY ADA/HANDICAP KNEE-SPACE CLEARANCE REQUIREMENTS.
2. ALL PIPING SHALL BE CHROME PLATED CAST BRASS AND SHALL BE INSULATED BY TRUEBRO HANDI LAV-GUARD INSULATION KITS. INSULATION KITS SHALL COVER P-TRAP, MIXING VALVE, WATER STOPS, PIPING AND ALL SHARP EDGES (ONLY WHERE CABINETWORK KNEESPACE SCREEN NOT PROVIDED).
3. ALL CW AND HW CONNECTIONS SHALL HAVE COMPRESSION TYPE FITTINGS.
4. FOR ABOVE CEILING INSTALLATION, VALVE SHALL BE INSTALLED IN AN EASILY/READILY ACCESSIBLE LOCATION. SEE KITCHEN PLUMBING CONNECTION SCHEDULE FOR REQUIRED KITCHEN LOCATIONS.
5. LAVATORY MIXING VALVES SHALL HAVE AN OUTPUT ADJUSTMENT RANGE UP TO OR ABOVE 130°F.
   SINK MIXING VALVES SHALL HAVE AN OUTPUT ADJUSTMENT RANGE UP TO OR ABOVE 140°F.



1 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

DO NOT INSTALL ANY PIPING BENEATH CVT BOXES. DO NOT INSTALL ANY PIPING (EXCEPT FIRE SPRINKLER PIPING AND OTHER PIPES SHOWN SPECIFICALLY ON THE PLUMBING FLOOR PLANS) OVER COMPUTER CLASSROOMS, BOOKROOMS, IDF/MDF/SERVER ROOMS OR OTHER ROOMS NOTED ON THE PLUMBING FLOOR PLANS.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

S

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD.
SUGAR LAND, TX 77479

SEAL

STATE OF TEXAS — INTERIM REVIEW — 07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

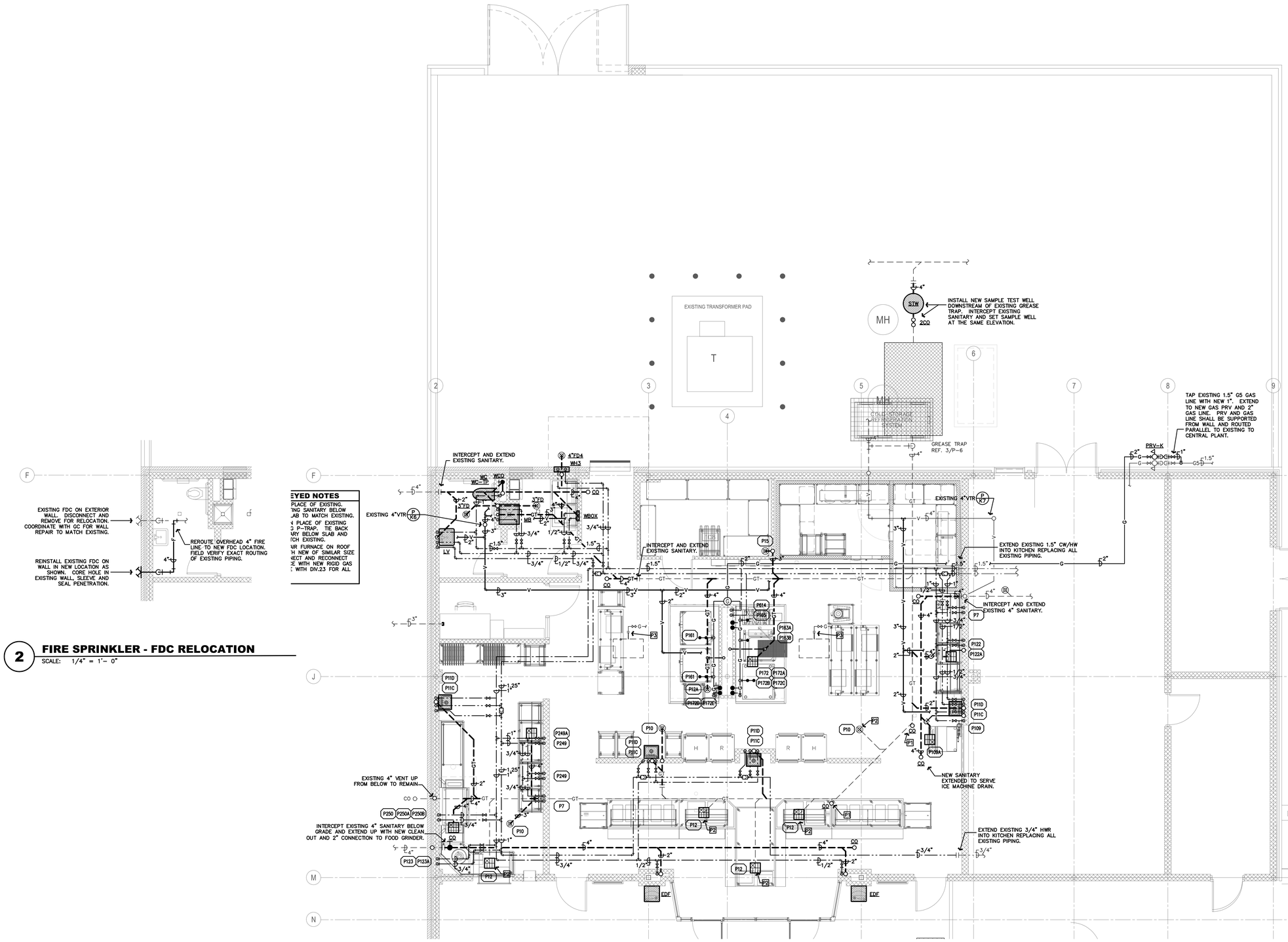
PLUMBING SCHEDULES & DETAILS

s-P0.02

PRELIMINARY
NOT FOR CONSTRUCTION OR BIDDING PURPOSES

STANTON ENGINEERING GROUP
INFORMATION-CHECKER (713) 300-60982
TEXAS ENG. FIRM REG NO. F-019332 | 1300 W. SAM HOUSTON PARKWAY N., SUITE 121, HOUSTON, TX 77043

2025 ALL RIGHTS RESERVED



2 FIRE SPRINKLER - FDC RELOCATION
SCALE: 1/4" = 1'- 0"

1 PLUMBING RENOVATION FLOOR PLAN
SCALE: 1/4" = 1'- 0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
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S

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
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SUGAR LAND, TX 77479

SEAL

STATE OF TEXAS
TYLER W. HERRING
106052
LICENSED PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

PLUMBING FLOOR PLAN
s-P1.01

STANTON ENGINEERING GROUP

TECHNOLOGY SYMBOLS & LEGEND

VOICE SYMBOLS

	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS PER LOCATION.
W	SINGLE VOICE OUTLET FOR WALL-MOUNTED PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.

VOICE/DATA SYMBOLS

	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF VOICE TERMINATIONS , Y = NUMBER OF DATA TERMINATIONS PER LOCATION.
	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF VOICE OUTLETS AND Y = NUMBER OF DATA OUTLETS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET AND SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X Y	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X Y	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS PER LOCATION.

DATA SYMBOLS

	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF DATA OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
W	SINGLE DATA OUTLET FOR WALL-MOUNTED IP PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA CABLE FOR COMPUTER ON WHEELS, CABLE TYPE AS SPECIFIED MOUNTED + 18-INCHES A.F.F UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
X	DATA CABLE FOR CEILING MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X	DATA CABLE FOR CEILING MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
	DATA CABLE FOR CEILING MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR CEILING MOUNTED AUDIO/VISUAL EQUIPMENT ENCLOSURE, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR WALL MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.

FIBER OPTIC SYMBOLS

	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF FIBER OPTIC OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.

DATA SYMBOLS, CONT.

X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW, REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
X CAMW	DATA CABLE FOR INTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPW	DATA CABLE FOR INTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPE	DATA CABLE FOR EXTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.

ROUGH-IN & MISC. SYMBOLS

R	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
R	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
R	POWER POLE WITH ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
R	ROUGH-IN LOCATION. TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
WAP	WIRELESS ACCESS POINT. EQUIPMENT AS SPECIFIED.

CABLE PLANT & RISER DIAGRAM

	MAINTENANCE HOLE, SIZE & TYPE AS SPECIFIED.
	PULLBOX, SIZE AND TYPE AS SPECIFIED.
UGC	DIRECT BURIED COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
AER	AERIAL COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
	CONDUIT, SIZE AND TYPE AS SPECIFIED.

GENERAL SYMBOLS

# SHEET — DRAWING TITLE SCALE: SCALE	DRAWING TITLE CALLOUT, # = DETAIL NUMBER.
# SHEET	DETAIL CALLOUT, # = DETAIL NUMBER.
# SHEET	SECTION CALLOUT, # = DETAIL NUMBER.
SHEET #	ELEVATION CALLOUT, # = DETAIL NUMBER.
#	KEYED NOTE, # = KEYED NOTE NUMBER.
#	REVISION TRIANGLE, # = REVISION NUMBER (PER SHEET).
TR (IDF XXX)	INDICATES TELECOMMUNICATIONS REGION

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
AER	AERIAL
DEMARC	DEMARCATION POINT
EMT	ELECTRIC METALLIC TUBE
F.O.C.	FIBER OPTIC CABLE
GIP	GALVANIZED IRON PIPE
HE	PAINTERCOM HEAD-END
IMC	INTERMEDIATE METAL CONDUIT
ISP	INSIDE CABLE PLANT
IDF	INTERMEDIATE DISTRIBUTION FRAME
MDF	MAIN DISTRIBUTION FRAME
MH	MAINTENANCE HOLE
MM	MULTIMODE
OSP	OUTSIDE CABLE PLANT
PB	PULLBOX
PR	PAIR
PVC	POLYVINYL CHLORIDE
RSC	RIGID STEEL CONDUIT
SM	SINGLE MODE
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TB	TERMINAL BLOCK
TR	TELECOMMUNICATION REGION
UGC	UNDERGROUND COMMUNICATION
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR

NOTES

1. CONTRACTOR SHALL REVIEW DRAWINGS AND SPECIFICATIONS THAT MAKE UP THE CONTRACT DOCUMENTS AND COMPLETE ALL WORK INCLUDED THEREIN.
2. SCALE OF TECHNOLOGY DRAWINGS IS PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CABLE LENGTHS, SIZE OF PATHWAYS, DIMENSIONS, ETC.
3. TECHNOLOGY DRAWINGS SHALL BE USED TO COMPLEMENT THE WRITTEN SPECIFICATIONS.
4. ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT'S. DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT AND SUBSEQUENTLY CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE ARCHITECT'S/DESIGN CONSULTANT'S INTERPRETATION.

INDEX OF DRAWINGS

s-T000 TECHNOLOGY SYMBOLS & LEGEND
s-TD201 TECHNOLOGY DEMOLITION FLOOR PLAN
s-T200 TECHNOLOGY COMPOSITE FLOOR PLAN
s-T201 TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
s-T202 TECHNOLOGY TEMPORARY KITCHEN FLOOR PLAN
s-T300 TECHNOLOGY ENLARGED VIEWS
s-T400 TECHNOLOGY TYPICAL DETAILS
s-T401 TECHNOLOGY TYPICAL DETAILS
s-T500 TECHNOLOGY TYPICAL DETAILS

ISSUE:

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03/11/2025	50% CD PKG.
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S

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 774

SEAL

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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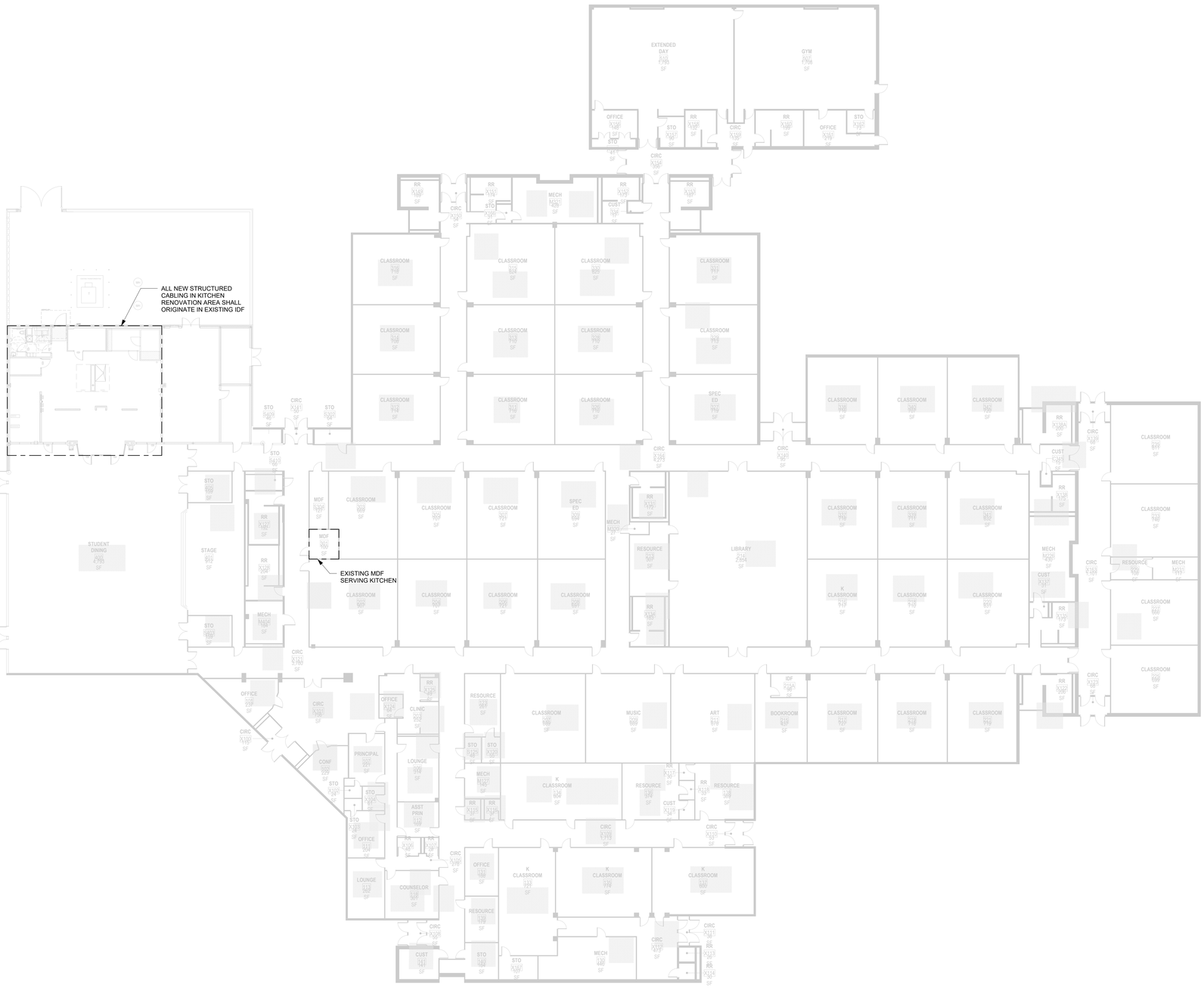
TECHNOLOGY SYMBOLS & LEGEND

SHEET NO.
s-T000



1 TECHNOLOGY COMPOSITE FLOOR PLAN
s-T200 1/16" = 1'-0"

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TECHNOLOGY COMPOSITE FLOOR PLAN

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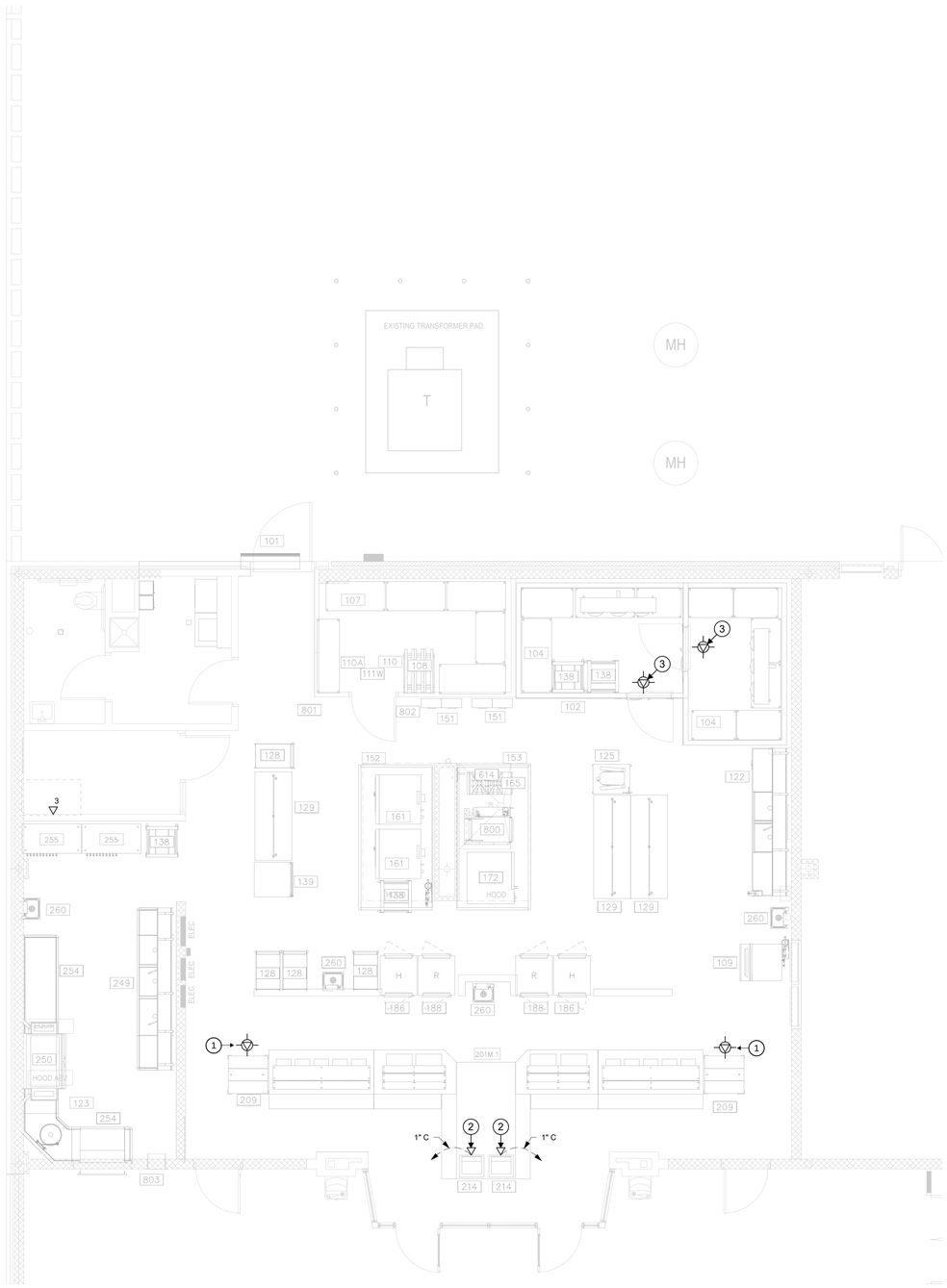

1 s-T201 TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
1/4" = 1'-0"

TECHNOLOGY FLOOR PLANS GENRAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
2. ALL CONDUIT PATHWAYS, ROUGH-INS, BACKBOXES, FLOOR BOXES, CONDUIT SLEEVES, ETC. INDICATED ON THE TECHNOLOGY DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26.
3. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. TECHNOLOGY CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES/ ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM.
14. ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE A LAY-IN TYPE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE A LAY- IN TYPE CEILING TO PREVENT THE CABLES FROM BEING EXPOSED, THE CONDUIT SHALL ROUTE TO THE NEAREST LAY-IN TYPE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. THE CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE MAIN CORRIDOR OR NEAREST MDF/IDF TO MINIMIZE THE CABLE LENGTH ENSURING THE CABLE LENGTH DOES NOT EXCEED 275 FEET. CONDUIT, CONNECTIONS, J-BOXES, SUSPENSION, ANCHORAGES, AND OTHER CONDUIT COMPONENTS EXPOSED TO VIEW IN PUBLIC SPACES SHALL BE ROUTED AND INSTALLED CAREFULLY TO MINIMIZE VISUAL IMPACT AND SHALL BE FULLY PAINTED TO MATCH UNLESS NOTED OTHERWISE.
15. CONDUIT(S) INSTALLED IN-SLAB OR UNDER-SLAB TO FLOOR BOXES, POKE-THURS, AND TO WORKAREA OUTLETS, ETC. SHALL BE INSTALLED WITH WET RATED CABLE(S).
16. NO GRID WIRE SHALL BE UTILIZED FOR SUPPORTS ONLY USE SOLID SUPPORTS (CLIPS, ALL-THREAD, ANCHORS, ETC.).

TECHNOLOGY PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

1. DATA CABLE FOR CONTRACTOR FURNISHED / CONTRACTOR INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.
2. INDOOR / OUTDOOR RATED DATA CABLE FOR POINT OF SALE LOCATION. PROVIDE (1) 1-INCH CONDUIT FOR DATA TO THE WALL BEHIND POINT OF SALE LOCATION AND UP WALL TO ABOVE ACCESSIBLE CEILING. CONDUITS SHALL TERMINATE INSIDE A DOUBLE GANG BOX THAT IS SECURED TO THE POINT OF SALE LOCATION. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.
3. DATA CABLE FOR TEMPERATURE MONITORING OF FREEZER COOLER. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS AND TERMINATION POINT AND CONNECTIVITY NEEDS IN FREEZER / COOLER CONTROL UNIT.
4. DATA CABLE FOR TEMPORARY POINT OF SALES CASH REGISTER. COORDINATE WITH OWNER, ARCHITECT, AND CONSULTANT FOR ROUTING OF CABLES TO POINT OF SALE CASH REGISTER PRIOR TO INSTALLATION

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SEAL

BICSI Jason Gonzalez Jr BICSI ID # 364970 Expires 12-31-25 RCDD

07/18/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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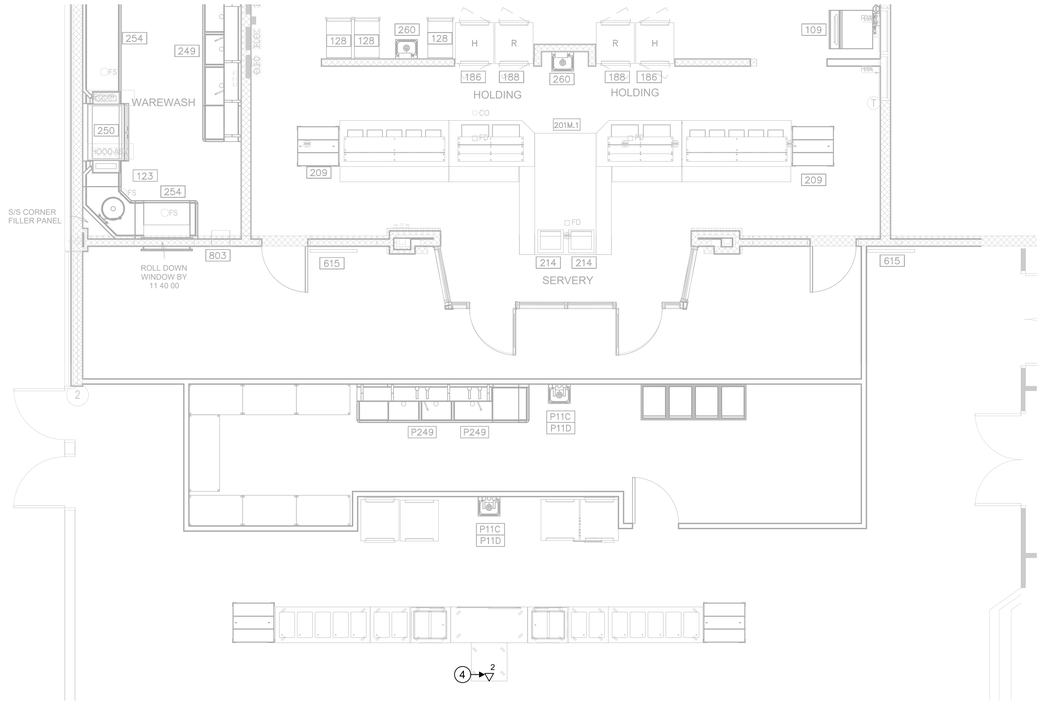
TECHNOLOGY NEW/RENOVATION KITCHEN PLAN

SHEET NO.
s-T201



1 TECHNOLOGY TEMPORARY KITCHEN FLOOR PLAN
s-T202 1/4" = 1'-0"

TECHNOLOGY FLOOR PLANS GENRAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
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3. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. TECHNOLOGY CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES/ ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM.
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15. CONDUIT(S) INSTALLED IN-SLAB OR UNDER-SLAB TO FLOOR BOXES, POKE-THURS, AND TO WORKAREA OUTLETS, ETC. SHALL BE INSTALLED WITH WET RATED CABLE(S).
16. NO GRID WIRE SHALL BE UTILIZED FOR SUPPORTS ONLY USE SOLID SUPPORTS (CLIPS, ALL-THREAD, ANCHORS, ETC.).

TECHNOLOGY PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

1. DATA CABLE FOR CONTRACTOR FURNISHED / CONTRACTOR INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.
2. INDOOR / OUTDOOR RATED DATA CABLE FOR POINT OF SALE LOCATION. PROVIDE (1) 1-INCH CONDUIT FOR DATA TO THE WALL BEHIND POINT OF SALE LOCATION AND UP WALL TO ABOVE ACCESSIBLE CEILING. CONDUITS SHALL TERMINATE INSIDE A DOUBLE GANG BOX THAT IS SECURED TO THE POINT OF SALE LOCATION. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.
3. DATA CABLE FOR TEMPERATURE MONITORING OF FREEZER COOLER. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS AND TERMINATION POINT AND CONNECTIVITY NEEDS IN FREEZER / COOLER CONTROL UNIT.
4. DATA CABLE FOR TEMPORARY POINT OF SALES CASH REGISTER. COORDINATE WITH OWNER, ARCHITECT, AND CONSULTANT FOR ROUTING OF CABLES TO POINT OF SALE CASH REGISTER PRIOR TO INSTALLATION

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SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 774

SEAL

CERTIFIED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

MWA ARCHITECTS

ARCHITECTS
AND PLANNING
CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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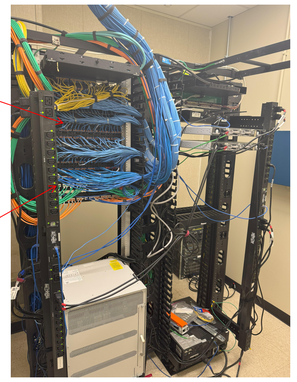
TECHNOLOGY TEMPORARY KITCHEN FLOOR PLAN

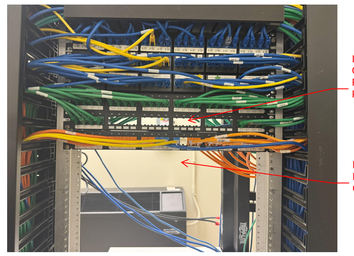
SHEET NO.
s-T202

REMOVE EXISTING CABLING THAT IS CURRENTLY TERMINATED IN KITCHEN DEMOLTION AREA FROM RACK. UTILZE PORT MADE AVAIBLE FROM DEMOLITION FOR NEW CABLING TO BE INSTALLED TO RENOVATION CABLING OUTLETS

RACK 1 PATCH PANEL RE: 2/T300



1/T300 REAR OF EXISTING IDF RACK SYSETM
NTS



ISNTALL NEW WAP CABLING TO OPEN PORTS ON THIS PATCH PANEL

PROVIDE NEW PATCH PANEL FOR CAMERAS

2/T300 RACK 1 PATCH PANEL CLOSEUP
NTS

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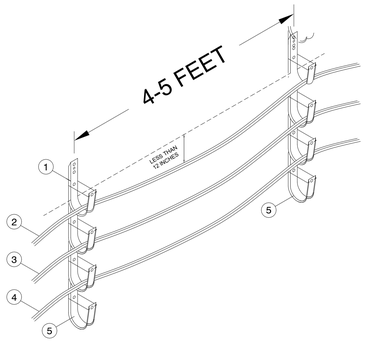
TECHNOLOGY ENLARGED VIEWS

SHEET NO.
s-T300

NOTE TO CONTRACTOR:

UNLESS OTHERWISE NOTED, LOW VOLTAGE CABLING SHALL BE INSTALLED WITHIN 6-INCHES OF THE CEILING AND ACCESSIBLE BY A TECHNICIAN ON A STANDARD A-FRAME LADDER.

CONTRACTOR SHALL MAINTAIN AT LEAST 6-INCHES OF SEPRATION BETWEEN CABLING BUNDLES AND MECHANICAL DUCTWORKS, EQUIPMENT, PIPIING OR OTHER SYSTEMS IN THE CEILING PLENUM.

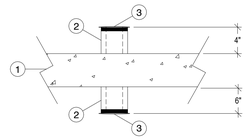


KEYED NOTES:

1. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
2. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
3. A/V CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. SECURITY CABLE ABOVE ACCESSIBLE CEILING (BY DIV 28).
5. SPARE J-HOOK (BY DIV 27).

1 T400 TYPICAL J-HOOK CABLE PATHWAY

SCALE: N.T.S.

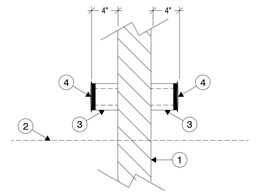


KEYED NOTES:

1. SCHEDULED FLOOR OR DECK.
2. CONDUIT SLEEVE (BY DIV 26).
3. NYLON BUSHING (BY DIV 26).

2 T400 TYPICAL CONDUIT SLEEVE THROUGH FLOOR OR DECK DETAIL

SCALE: N.T.S.

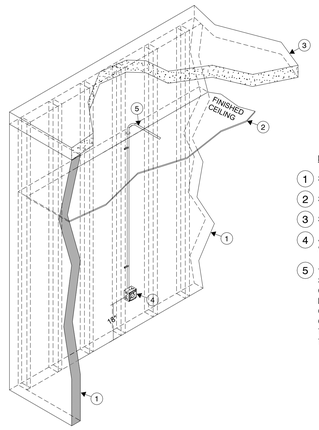


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. CONDUIT SLEEVE (BY DIV 26).
4. NYLON BUSHING (BY DIV 26).

3 T400 TYPICAL CONDUIT SLEEVE GOING THROUGH WALL

SCALE: N.T.S.

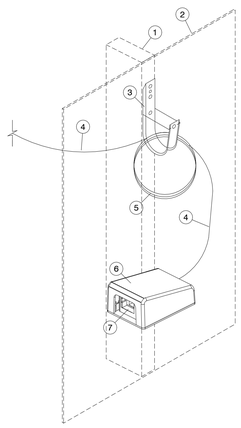


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. SCHEDULED DECK ABOVE.
4. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX WITH DOUBLE GANG PLASTER RING (BY DIV 26).
5. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH. (BY DIV 26).

4 T400 TYPICAL TECHNOLOGY CONDUIT ROUGH-IN

SCALE: N.T.S.

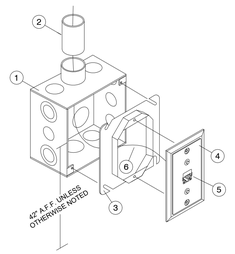


KEYED NOTES:

1. SCHEDULED STUD.
2. SCHEDULED WALL.
3. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
5. 20 FOOT SERVICE LOOP ABOVE ACCESSIBLE CEILING NEATLY COILED AND SECURED TO J-HOOK (BY DIV 27).
6. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BUILDING STRUCTURE (BY DIV 27).
7. DATA INSTER (BY DIV 27).

5 T400 TYPICAL ABOVE CEILING SINGLE DATA OUTLET (WALL MOUNTED)

SCALE: N.T.S.

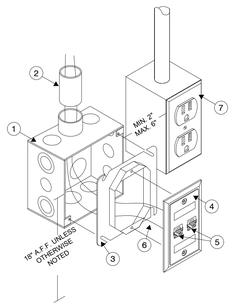


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH PHONE STUDS (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).

6 T400 TYPICAL WALL PHONE OUTLET CONFIGURATION

SCALE: N.T.S.

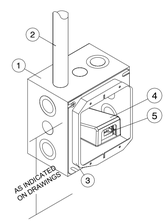


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

7 T400 TYPICAL DUAL DATA OUTLET CONFIGURATION

SCALE: N.T.S.

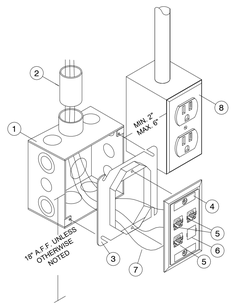


KEYED NOTES:

1. 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. DOUBLE GANG PLASTER RING (BY DIV 26).
4. SURFACE MOUNT BOX INSIDE THE 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH DOUBLE GANG BOX (BY DIV 27).
5. RJ-45 INSERT (BY DIV 27).

8 T400 TYPICAL WALL-MOUNTED WIRELESS ACCESS POINT

SCALE: N.T.S.



KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

9 T400 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.
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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SETTLERS WAY ELEMENTARY SCHOOL
3015 SETTLERS WAY BLVD
SUGAR LAND, TX 774

SEAL

RECOGNIZED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Jason Gonzalez Jr
BICSI ID # 364970
EXPIRES 12-31-25
RCDD

07/18/2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
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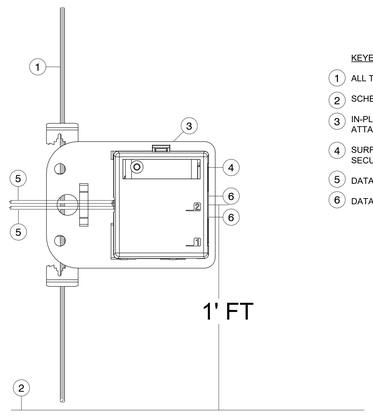
PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

TECHNOLOGY TYPICAL DETAILS

SHEET NO.
s-T400

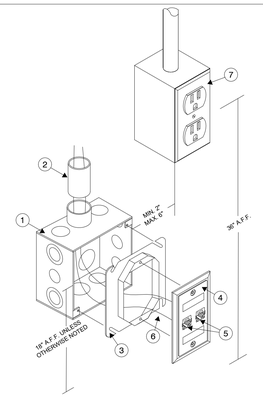


KEYED NOTES:

1. ALL THREAD TO BUILDING STRUCTURE (BY DIV. 27)
2. SCHEDULING CEILING
3. IN-PLENUM CEILING BRACKET PN 49223-CBC ATTACHED TO ALL THREAD (BY DIV. 27)
4. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BRACKET (BY DIV. 27)
5. DATA CABLE (BY DIV. 27)
6. DATA INSERT (BY DIV. 27)

1 T401 TYPICAL ABOVE CEILING DATA OUTLET

SCALE: N.T.S.

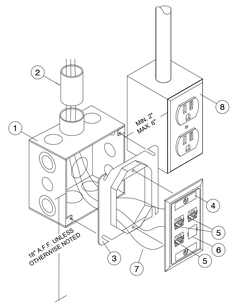


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26). ELECTRICAL RECEPTACLE TO BE INSTALLED AT 36" A.F.F AND ADJACENT TO COW / SECONDARY TEACHING OUTLET LOCATION.

2 T401 TYPICAL COW / SECONDARY TEACHER'S DATA OUTLET CONFIGURATION

SCALE: N.T.S.

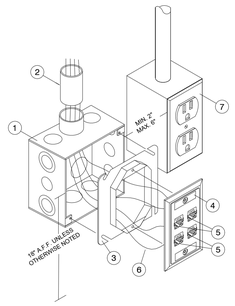


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

3 T401 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.



KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

4 T401 TYPICAL FOUR DATA OUTLET CONFIGURATION

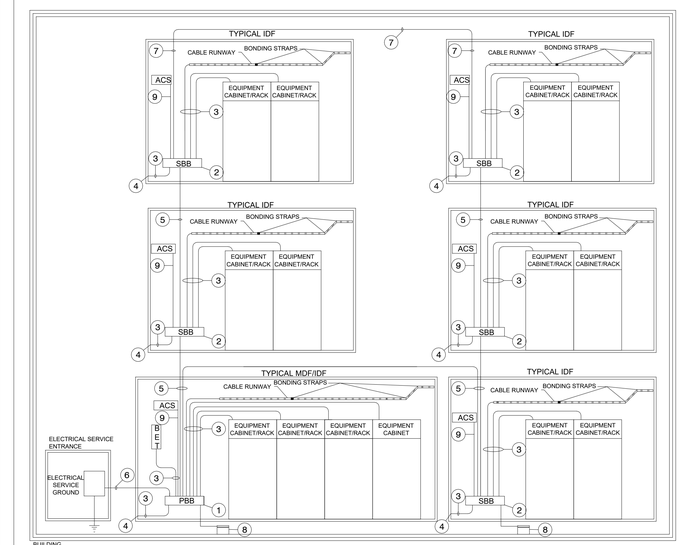
SCALE: N.T.S.

TBB/GE CONDUCTOR SIZING	
LENGTH IN LINEAR M (FT)	SIZE (AWG)
LESS THAN 4 (13)	6
4 - 6 (14-20)	4
6 - 8 (21 - 26)	3
8 - 10 (27 - 33)	2
10 - 13 (34 - 41)	1
13 - 16 (42 - 52)	1/0
16 - 20 (53 - 66)	2/0
20 - 26 (67 - 84)	3/0
26 - 32 (85 - 105)	4/0
32 - 38 (106 - 125)	250 kcmil
38 - 46 (126 - 150)	300 kcmil
46 - 53 (151 - 175)	350 kcmil
53 - 76 (176 - 250)	500 kcmil
76 - 91 (251 - 300)	600 kcmil
GREATER THAN 91 (301)	750 kcmil

ROUTE THE TBB TO EACH TGB IN AS STRAIGHT A PATH AS POSSIBLE. THE TBB SHOULD BE INSTALLED AS A CONTINUOUS CONDUCTOR, AVOIDING SPLICES WHERE POSSIBLE.

5 T401 TBB CONDUCTOR SIZING

SCALE: N.T.S.

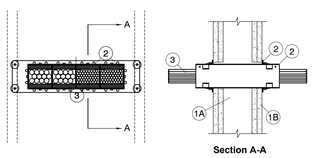


1. TELECOMMUNICATIONS MAIN GROUNDING BUS BAR (PBB)(BY DIV. 27)
2. TELECOMMUNICATIONS GROUNDING BUS BAR (SBB)(BY DIV 27)
3. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 27)
4. CONNECT TO GROUNDED BUILDING STEEL WHEN EXPOSED IN ROOM.
5. TELECOMMUNICATIONS BONDING BACKBONE (TBB). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 26)
6. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). BY ELECTRICAL CONTRACTOR.REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS.
7. GROUNDING EQUALIZER CONDUCTOR (GEC)(BY DIV 26)
8. BOUND WITH GROUDING COLLARS TO EACH CONTINUOUS CONDUIT THAT ENTERS THE TELECOM ROOM. (BY DIV 26).
9. BOND TO EACH ACCESS CONTROL PANEL AND OTHER SECURITY PANELS IN HE TELECOM ROOM. (BY DIV 27)

6 T401 TYPICAL GROUNDING DIAGRAM

SCALE: N.T.S.

System No. W-L-3218
F Ratings - 1, 2, 3 and 4 Hr (See Items 1 and 3)
T Ratings - 3/4 and 1 Hr (See Item 3)
L Rating At Ambient - Less Than 1, 1.3, 4 or 7 CFM (See Item 3)
L Rating At 400 F - Less Than 1, 2 or 3 CFM (See Item 3)



Section A-A

1. Wall Assembly - The 1, 2, 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described within the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall incorporate the following construction features:

   A. Studs - Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.

   B. Gypsum Board* - Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Opening in gypsum board to be max 1/4 in. (6 mm) larger then width and height dimensions of firestop device(s).

   The hourly F Rating of the firestop system is dependent upon the hourly rating of the wall in which it is installed.

2. Firestop Device* - One, two, three, four or seven firestop device modules ganged together. Each firestop device module consists of a 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long galv steel tube with an intumescent material lining. Firestop device modules to be installed in accordance with the accompanying installation instructions. The space between the firestop device module(s) and the periphery of the opening shall be min 0 in. (0 mm, point contact) to max 1/8 in. (3.2 mm). In round openings, the space between the firestop device and the periphery of the opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). Firestop device module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device by means of steel set screws provided with device. Each four- and seven-gang steel wall plate shall be fastened to the studs with steel screws sized to extend through the gypsum board layers and penetrate 1/2 in. (13 mm) into the framing member. Each firestop device module is to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   As an alternate, the four- and seven-gang steel wall plates may be installed directly against the studs for walls having 16 and 24 in. (406 and 610 mm) center-to-center stud spacing, respectively, prior to installation of the gypsum board layers. The steel wall plates shall be secured to the stud by means of steel screws. After installation of the steel wall plates and firestop device modules, the gypsum board shall be installed as specified in the individual U300 or U400 Design with a maximum 1/8 in. (3.2 mm) gap between the firestop device module and the cutout in the gypsum board. Gap between the firestop device module and the cutout in the gypsum board may be filled with gypsum joint compound or fill material (Item 4).

   SPECIFIED TECHNOLOGIES INC - EZ PATH Series 33 Fire Rated Pathway

2A. Firestop Device* - Extension Module - (Optional, Not Shown) - Module attached to ends of 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long firestop device (Item 3) to increase its length to facilitate installation in thicker walls. Each module consists of a 3 by 3 by 6 in. (76 by 76 by 152 mm) long galv steel tube with an intumescent material lining. Extension module to be installed in accordance with the accompanying installation instructions. When module is used, firestop device (Item 2) and extension module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device or extension module(s) by means of steel set screws provided with wall plates. Firestop device and extension module(s) assembly to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   SPECIFIED TECHNOLOGIES INC - EZ PATH Extension

3. Cables - Within the loading area for each firestop device module, the cables may represent a 0 to 100 percent visual fill. Cable fill to be distributed at a uniform height across the width of the firestop device module. Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types of cables may be used:

   A. Max 400 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) jacketing and insulation.
   B. Max 350 kcmil single copper conductor power cable with XLPE jacket and insulation
   C. Max 7/C No. 12 AWG copper conductor control cable with PVC or XLPE jacket and insulation.
   D. Max 3/C No. 10 AWG metal clad or armored cable with steel or aluminum jacket.
   E. Max 3/C No. 8 AWG NM cable (Romex) with PVC insulation and jacket.
   F. Max four pair No. 22 AWG (or smaller) copper conductor data cable with PVC or plenum rated jacketing and insulation.
   G. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
   H. Fiber optic cable with PVC or polyethylene (PE) jacket and insulation having a max diam of 5/8 in. (16 mm).
   I. Optical Fiber Raceway+ - Max 1-1/2 in. (38 mm) diam (or smaller) optical fiber raceway ("innerduct") formed of either PVC or polyvinylidene fluoride (PVDF) with optical fiber cable fill. Raceways installed in accordance with the National Electrical Code (NFPA 70).

   When the hourly rating of the wall assembly is 1 hr, the T Rating is 3/4 hr. When the hourly fire rating of the wall assembly is greater than 1 hr, the T Rating is 3/4 hr when Item 3A, 3B, 3C, 3D or 3E is used. Otherwise the T Rating is 1 hr. When Item 3A, 3B, 3C, 3D or 3E is used, the maximum F Rating is 2 hr. When max 200 pair No. 24 AWG telecommunication cable is used or when Item 3F, 3G, 3H or 3I is used, the maximum F Rating is 4 hr.

   The L Rating for each empty firestop device module is less than 1 cfm at ambient and at 400F. When Item 3A is used, the L Rating for each firestop device module with 100 percent visual fill is 4 cfm at ambient and 3 cfm at 400F. When Item 3F is used, the L Rating for each firestop device module with 100 percent visual fill is 1.3 cfm at ambient and 1 cfm at 400F. When Item 3G or 3H is used, the L Rating for each firestop device module with 100 percent visual fill is 7 cfm at ambient and 2 cfm at 400F.

4. Fill, Void or Cavity Material* - Sealant or Putty - (Not Shown) - As an alternate to gypsum joint compound, the gap between the firestop device module and the cutout in the gypsum board may be sealed with fill material on each side of the wall assembly when four- and seven-gang steel wall plates are installed directly against the wood or steel studs.

   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant, SpecSeal Putty

   *Bearing the UL Classification Mark

7 T401 TYPICAL STI EZ-PATH SLEEVE DETAIL

SCALE: N.T.S.

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TECHNOLOGY TYPICAL DETAILS

SHEET NO.
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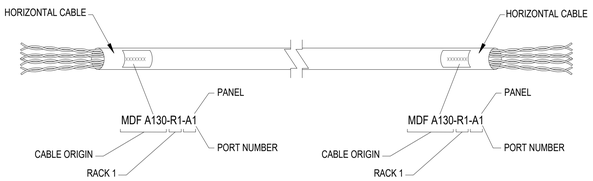
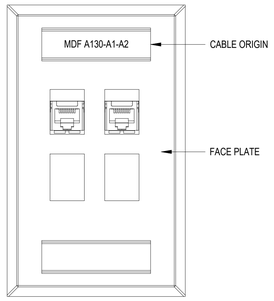
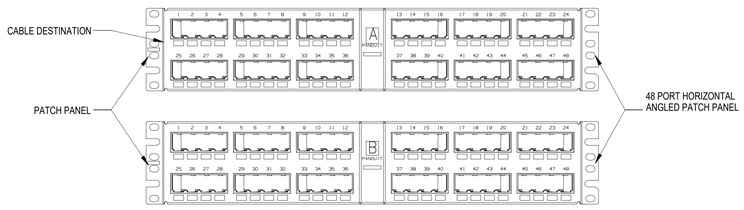
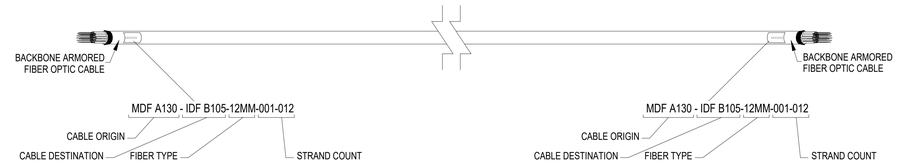


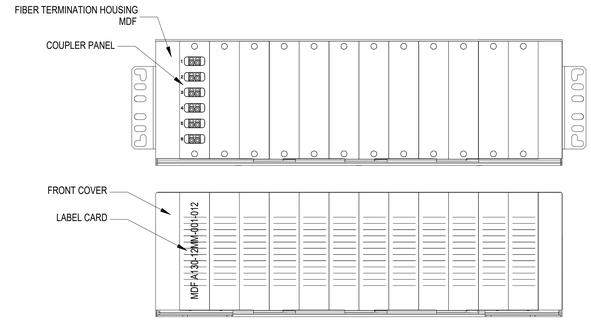




1 T500 TYPICAL HORIZONTAL DATA CABLE LABELING SCHEME

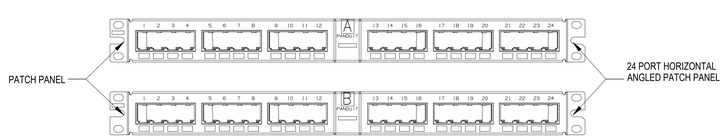
SCALE: N.T.S.





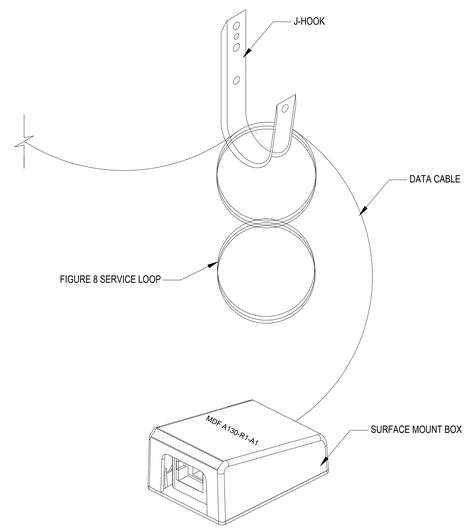
2 T500 TYPICAL FIBER BACKBONE LABELING SCHEME

SCALE: N.T.S.



3 T500 TYPICAL COPPER BACKBONE LABELING SCHEME

SCALE: N.T.S.



4 T500 ABOVE ASSESSIBLE CEILING LABELING SCHEME

SCALE: N.T.S.

ISSUE:

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TECHNOLOGY TYPICAL DETAILS

SHEET NO.
s-T500

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- AV WALL ROUGH-IN WITH DATA
- KEYNOTE
- Proposed Camera Direction SURVEILLANCE CAMERA
- Camera Schedule Number (Floor #-Camera #) Camera (N)ew, (E)xisting Rough-in, (D)emo
- Proposed Camera Direction PTZ CAMERA
- PTZ
- Proposed Camera Direction FIXED SURVEILLANCE CAMERA
- 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Approximate view of lens
- Lens View Angle
- 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Lens size
- MICROPHONE WITH AUDIO LINKED TO CAMERA
- CARD READER LINKED TO CAMERA
- SYMBOL TAG — (#) = DIFFERENT TYPES OF CARD READERS: M = MULLION; W = WIRELESS (Proprietary); Wi = Wi-Fi (802.11); POE = POWER OVER ETHERNET
- SYMBOL TAG — (#) = DIFFERENT TYPES OF CARD READERS: TS = TOUCHSCREEN; PU = PUSH BUTTON
- TOP = DETAIL NUMBER; DETAIL REFERENCE; BOTTOM = SHEET NUMBER
- NORTH ARROW
- SHEET NUMBER; SECTION MARKER; DETAIL NUMBER
- DIRECTION OF ELEVATION; ELEVATION MARKER; SHEET NUMBER; DETAIL NUMBER
- DIRECTION OF ELEVATION; SHEET NUMBER; DIRECTION OF ELEVATION; DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

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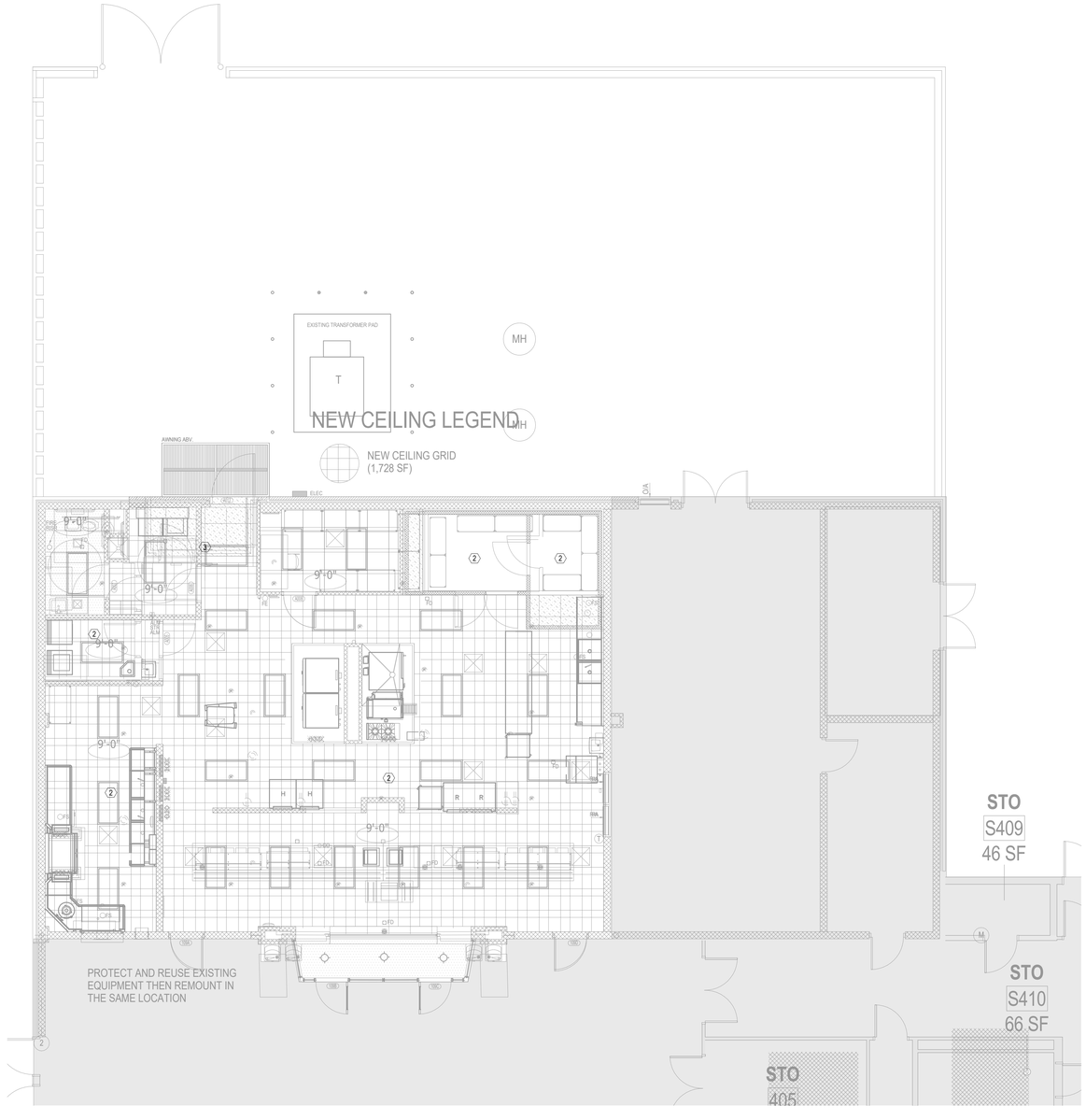
TECHNOLOGY - TITLE SHEET

s-TN000

DEMO KEYNOTES

1. REMOVE, AND PROTECT DURING CONSTRUCTION, INSTALL IN EXISTING LOCATION AFTER NEW ACT GRID IS IN PLACE.
2. DEVICES IN ACT ARE TO BE REMOVED AND PROTECTED DURING CONSTRUCTION AND REINSTALLED IN THE SAME LOCATION AFTER THE NEW CEILING GRID IS IN PLACE. DECIVES INCLUDE: SPEAKERS, ACCESS POINTS AND INTRUSION MOTION DETECTORS.
3. EXISTING CARD READER, DOOR CONTACT, & REX (REQUEST TO EXIT) TO BE DEMOLISHED, REMOVE DEVICES AND PROTECT WIREING.



1 SETTLERS WAY - DEMO PLAN
SCALE: 3/16" = 1'-0"

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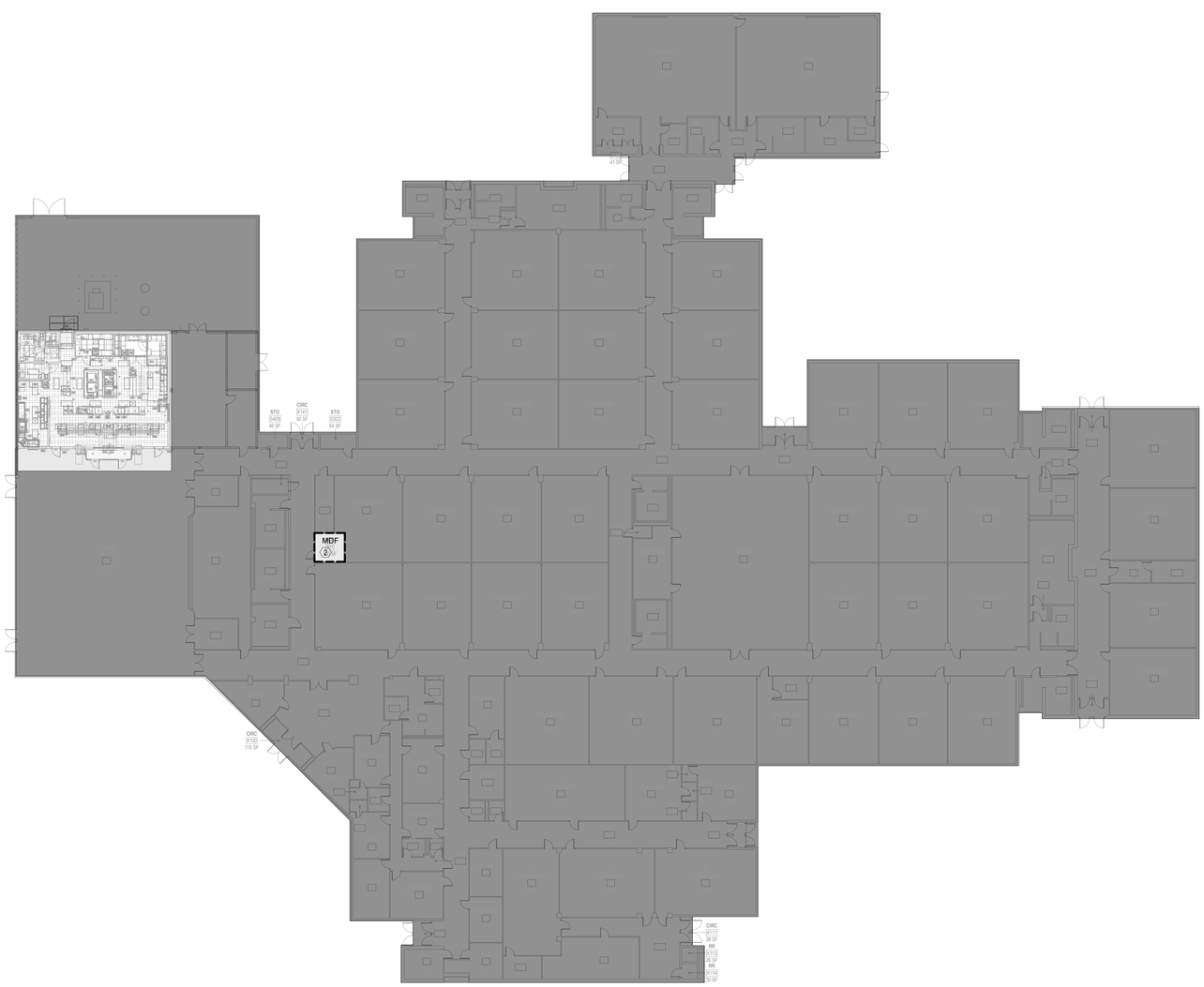
TECHNOLOGY - Settlers Way ES - DEMO

s-TN.001

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BACKGROUND S (SETTLER'S WAY ES)
SCALE: 1" = 20'-0"

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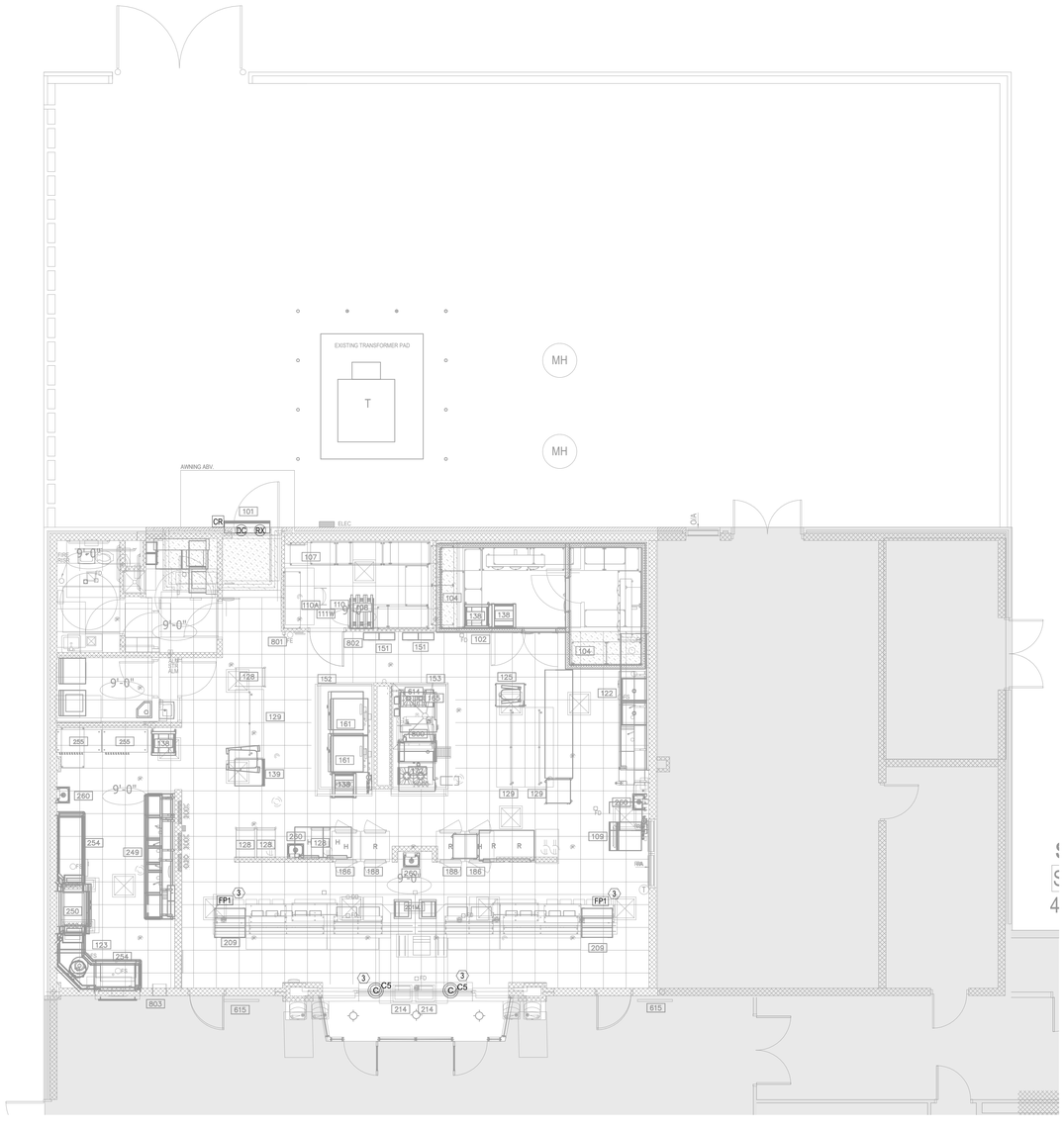
TECHNOLOGY - Settlers Way ES - OVERALL

s-TN.100

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 SETTLERS WAY - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

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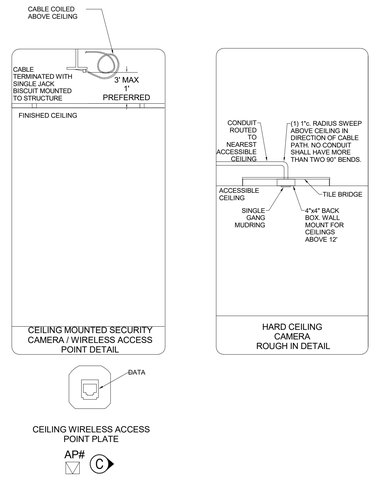
TECHNOLOGY - Settlers Way ES - KITCHEN

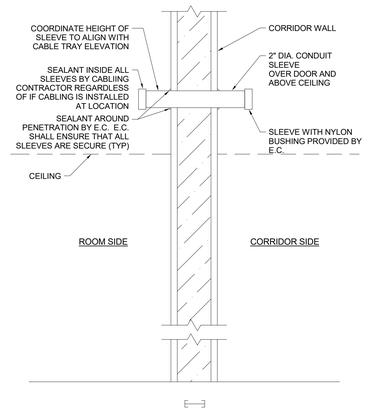
s-TN.101

GENERAL NOTE

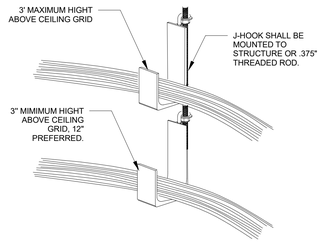
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



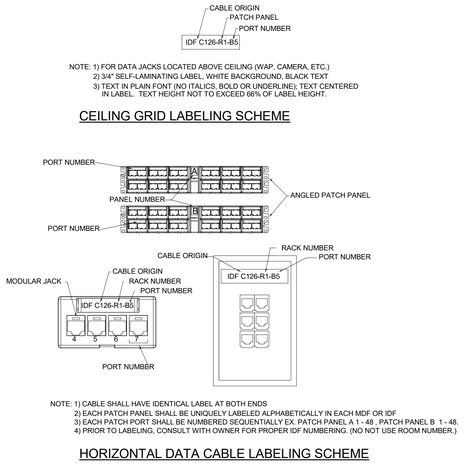
1 DATA ROUGH-IN DETAILS
SCALE: NS



2 TYPICAL CABLING SLEEVE
SCALE: NTS



3 PANDUIT J-HOOK DETAIL
SCALE: NTS



4 LABELING & CABLING SCHEMES
SCALE: NTS

5 CABLE PATHWAY CROSS SECTION
SCALE: NTS

6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS

7 I-JOIST MOUNTING DETAIL
SCALE: NS

8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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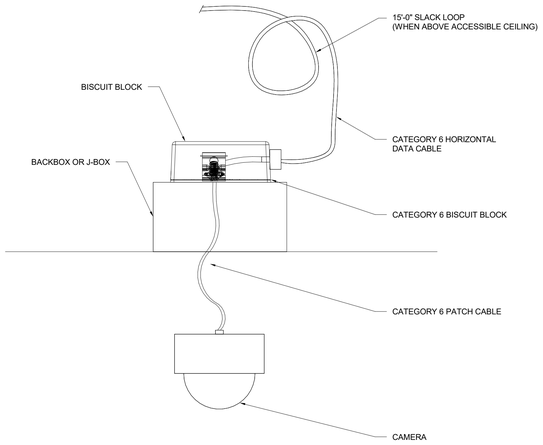
TECHNOLOGY - Settlers Way ES - DETAILS

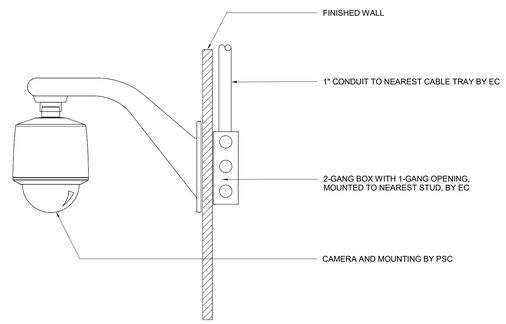
s-TN.500

GENERAL NOTES:

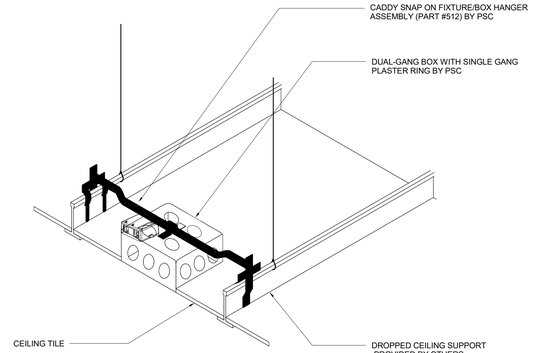
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



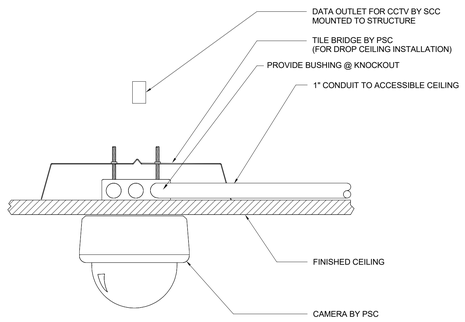
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

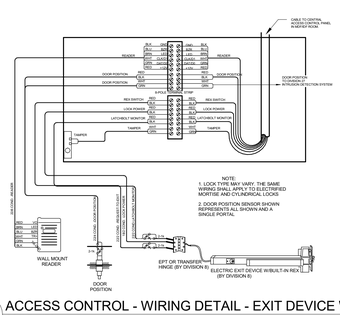


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

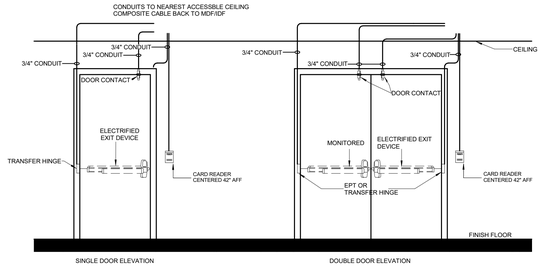
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

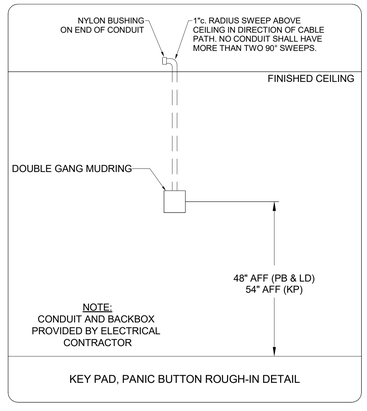
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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TECHNOLOGY - Settlers Way
ES - SECURITY DETAILS

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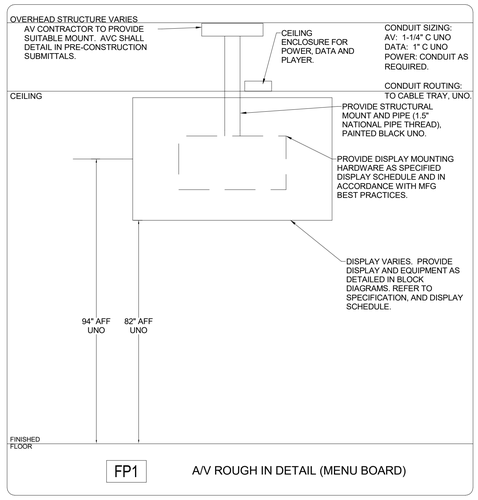

6 CEILING MOUNT DISPLAY - A/V ROUGH-IN DETAIL
SCALE: NTS

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TECHNOLOGY - Settlers Way ES - AV DETAILS

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FBISD BP013 KITCHEN RENOVATIONS ES

SIENNA CROSSING ELEMENTARY SCHOOL
10011 STEEP BANK TRCE, MISSOURI CITY, TX 77459

Sheet List Table	
Sheet Number	Sheet Title
School: t-Sienna Crossing ES	
t-A.000	COVER AND INDEX
t-A00-01	GENERAL NOTES AND ABBREVIATIONS
t-A.201	FLOOR PLAN
t-A.301	KITCHEN PLAN
t-A.401	REFLECTED CEILING PLAN
t-A.501	FINISH FLOOR PLAN
t-E.200	ELECTRICAL PLAN AND SCHEDULES
t-TN-000	TECHNOLOGY - INDEX SHEET
t-TN-100	TECHNOLOGY - OVERALL
t-TN-101	TECHNOLOGY - KITCHEN
t-TN-500	TECHNOLOGY - DETAILS
t-TN-600	TECHNOLOGY - SECURITY DETAILS



FORT BEND INDEPENDENT SCHOOL DISTRICT

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DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

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SONYA JONES	BOARD MEMBER

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STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
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Houston, Texas 77027
Phone Number: 713-776-9433

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t

PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.
B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.
C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.
D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.
E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.
F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL, ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.
B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.
B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.
C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.
D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY. IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.

1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.

E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.

B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT. REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.

B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED. CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.

D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

01 GENERAL NOTES

SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025) Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

03 PROJECT SCHEDULE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SIENNA CROSSING ELEMENTARY SCHOOL
10011 STEEP BANK TRACE
MISSOURI CITY, TX 77459

SEAL

REGISTERED ARCHITECT NOE ALMAGUER 22651 STATE OF TEXAS

7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

GENERAL NOTES AND ABBREVIATIONS

A00-01

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SCOPE OF WORK: SECURITY CAMERAS OVER SERVING LINES.
RENOVATE, RECONFIGURE, AND EXPAND EXISTING CAFETERIA.

ADOPTED CODES WITH AMMENDMENTS OF CITY OF MISSOURI CITY, TX

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL RESIDENTIAL CODE
- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2023 NATIONAL ELECTRIC CODE NFPA 70
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2021 INTERNATIONAL FUEL GAS CODE
- 2021 INTERNATIONAL FIRE CODE

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY:

SPRINKLERED

INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS	B
CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS	C
ROOMS AND ENCLOSED SPACES	C

FLOORING SHALL BE CLASS II

2021 INTERNATIONAL EXISTING BUILDING CODE

301.3.1 PRESCRIPTIVE COMPLIANCE METHOD. REPAIRS, ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH CHAPTER FIVE OF THIS CODE IN BUILDINGS COMPLYING WITH THE INTERNATIONAL FIRE CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

302.3 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE .

302.4 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED THAT NO UNSAFE CONDITION IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT PERMIT THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

ALTERATION - LEVEL 1 INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES THAT SERVE THE SAME PURPOSE.

ALTERATION - LEVEL 2 INCLUDE THE ADDITION OR ELIMINATION OF ANY DOOR OR WINDOW, THE RECONFIGURATION OR EXTENSION OF ANY SYSTEM, OR THE INSTALLATION OF ANY ADDITIONAL EQUIPMENT, AND SHALL APPLY WHERE THE WORK IS EQUAL TO OR LESS THAN 50% OF THE BUILDING AREA.

THIS BUILDING'S CONSTRUCTION IS TYPE IIB.

THIS BUILDING'S OCCUPANCY IS E.

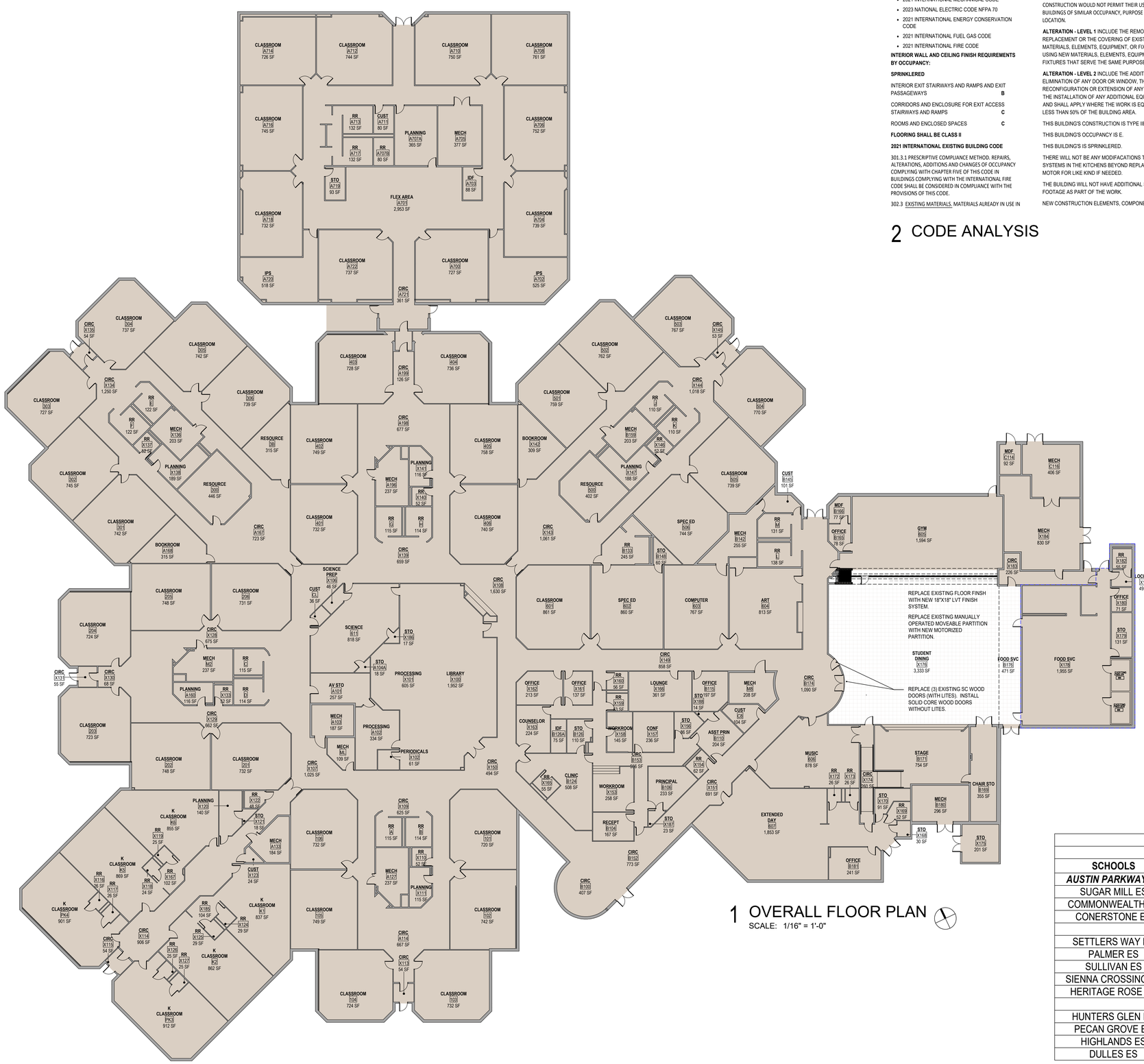
THIS BUILDING'S IS SPRINKLERED.

THERE WILL NOT BE ANY MODIFACATIONS TO THE HOOD SYSTEMS IN THE KITCHENS BEYOND REPLACEMENT OF MOTOR FOR LIKE KIND IF NEEDED.

THE BUILDING WILL NOT HAVE ADDITIONAL SQUARE FOOTAGE AS PART OF THE WORK.

NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODES

2 CODE ANALYSIS



1 OVERALL FLOOR PLAN

SCALE: 1/16" = 1'-0"

PHASING CHART FOR ALL SCHOOLS		
PHASE 1		
SCHOOLS	**FREEZER START DATE :**	**FREEZER END DATE :**
AUSTIN PARKWAY ES	11/7/2025	5/13/2026
SUGAR MILL ES		
COMMONWEALTH ES		
CONERSTONE ES		
PHASE 2		
SETTLERS WAY ES	5/29/2026	10/28/2026
PALMER ES		
SULLIVAN ES		
SIENNA CROSSING ES		
HERITAGE ROSE ES		
PHASE 3		
HUNTERS GLEN ES	3/19/2027	3/19/2027
PECAN GROVE ES		
HIGHLANDS ES		
DULLES ES		

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SIENNA CROSSING ELEMENTARY SCHOOL
10011 STEEP BANK TRACE
MISSOURI CITY, TX 77459

SEAL
R. RICHARD ARCHITECT
REGISTERED
23201
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

OVERALL FLOOR PLAN

t-A.201

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DOOR SCHEDULE

DOOR #	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FIRE RATING	FRAME THICKNESS	FRAME FINISH	DETAILS SILL	DETAILS JAMB	DETAILS HEAD	REMARKS
A1	-		-	-	-	-	-	-	-	-	-	REFERENCE ONLY - NO WORK THIS DOOR.
A2	-		-	-	-	-	-	-	-	-	-	REFERENCE ONLY - NO WORK THIS DOOR.
A3	-		-	-	-	-	-	-	-	-	-	REFERENCE ONLY - NO WORK THIS DOOR.
A4	3'-0"	X ___"	—	S.C. WOOD	S.C. WOOD	NR	4 7/8"*	ALUM				REPLACE EXISTING WITH SOLID DOOR WITHOUT LITES
A5	PR. 3'-0"	X ___"	——	S.C. WOOD	S.C. WOOD	NR	4 7/8"*	ALUM				REPLACE EXISTING WITH SOLID DOOR WITHOUT LITES
A6	-		-	-	-	-	-	-	-	-	-	REFERENCE ONLY - NO WORK THIS DOOR.
A7	-		-	-	-	-	-	-	-	-	-	REFERENCE ONLY - NO WORK THIS DOOR.
A8	-		-	-	-	-	-	-	-	-	-	REFERENCE ONLY - NO WORK THIS DOOR.

2 DOOR SCHEDULE

FLOOR PLAN - GENERAL NOTES

1. REFER TO SHEET FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SCHOOL KITCHENS.
2. REFER TO SHEET FOR PARTITION TYPES.
3. EXIXSTING EXPOSED CONDUITS AND DATA CABLING IN WIREMOLD TO BE ROUTED INSIDE WALLS (EXCEPT AT WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS). PATCH AND REPAIR AS REQUIRED TO ACHIEVE SMOOTH CLEAN WALL SURFACE.

PARTITION LEGEND

- EXISTING CMU PARTITION
- NEW CMU SCHEDULED PARTITION
- EXISTING METAL PARTITION
- NEW FRAMED SCHEDULED PARTITION

REFER TO SHEET FOR PARTITION TYPES

FLOOR PLAN - KEYED NOTES

(NOT ALL NOTES USED ON EACH SHEET)

01 PROVIDE NEW MOP SINK UTILITY SHELF
RE: PLUMBING FOR MOP SINK
RE: SPEC 10 28 00 FOR UTILITY SHELF

02 REMOVE, STORE & REPLACE WALL MOUNTED FIRE EXTINGUISHER

03 PROVIDE NEW WALL MOUNTED FIRE EXTINGUISHER
RE: SPEC SECTIONS 10 44 13

04 PROVIDE NEW LOCKERS
RE: SPEC 10 51 13.

05 PROVIDE WASHER AND DRYER
RE: SPEC 11 45 20

06 REMOVE, PROTECT & REINSTALL WALL MOUNTED CLOCK.

07 PROVIDE CONDENSING UNIT
FOR WALK-IN COOLER/FREEZER
RE: MECHANICAL AND SPEC 11 40 00

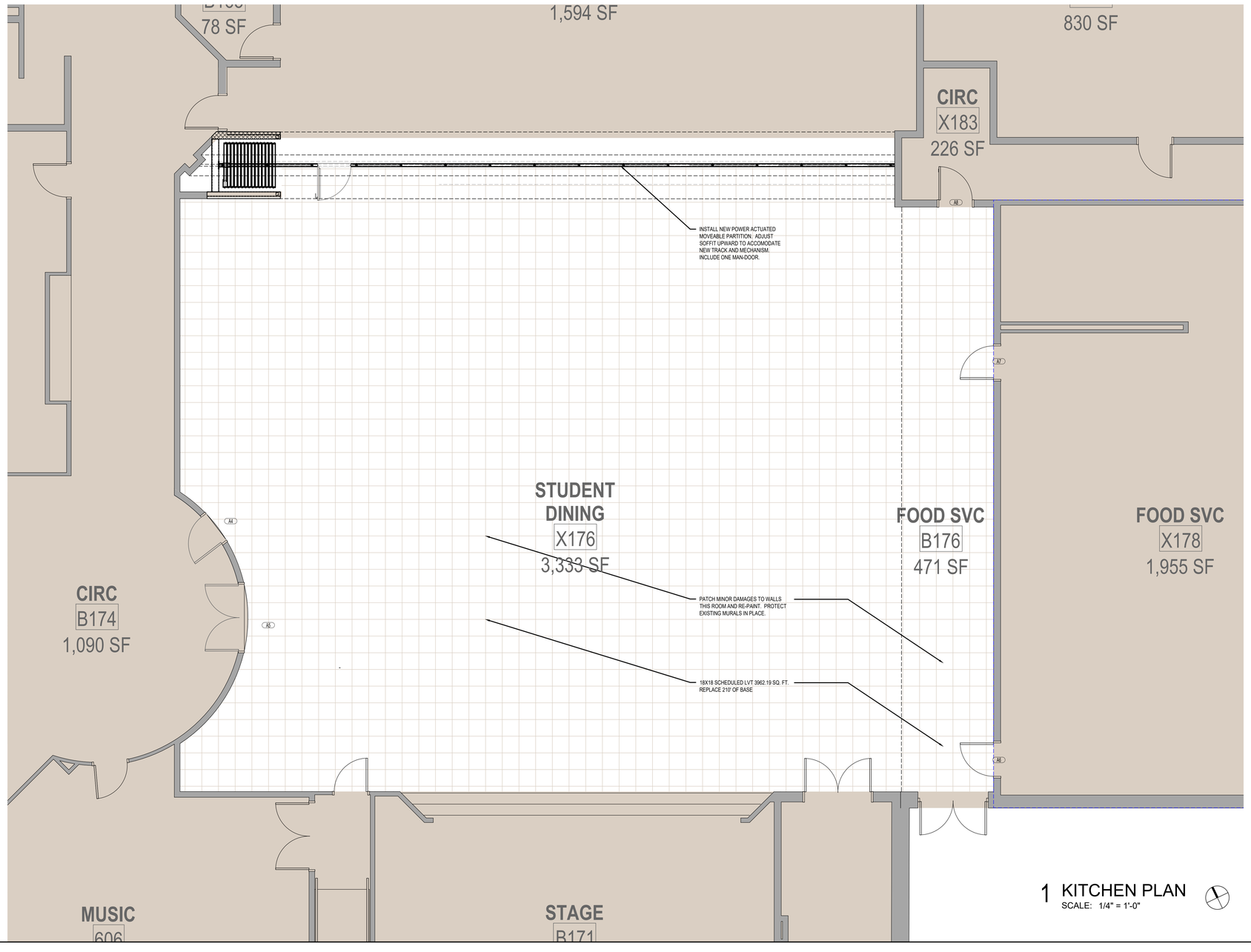
08 PROVIDE POWER AND DATA FOR MENU BOARD.
RE: ELECTRICAL, TECHNOLOGY DRAWINGS & FOOD SERVICE.

09 PROVIDE P-LAM SHELVING
REFER TO DETAIL FOR BRACKET SUPPORT

10 FURNITURE & NON FOOD SVE EQUIPMENT RETURN TO OWNER FOI STORAGE

11 INSPECT & SREVICE TOLLING COUNTER DOORS. RETURN TO LIKE NEW CONDITION.

3 FLOOR PLAN NOTES



1 KITCHEN PLAN

SCALE: 1/4" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SIENNA CROSSING ELEMENTARY SCHOOL
10011 STEEP BANK TRACE
MISSOURI CITY, TX 77459

SEAL
REGISTERED ARCHITECT
MICHAEL W. WILLIAMS
22651
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7/15/2025

MWA ARCHITECTS
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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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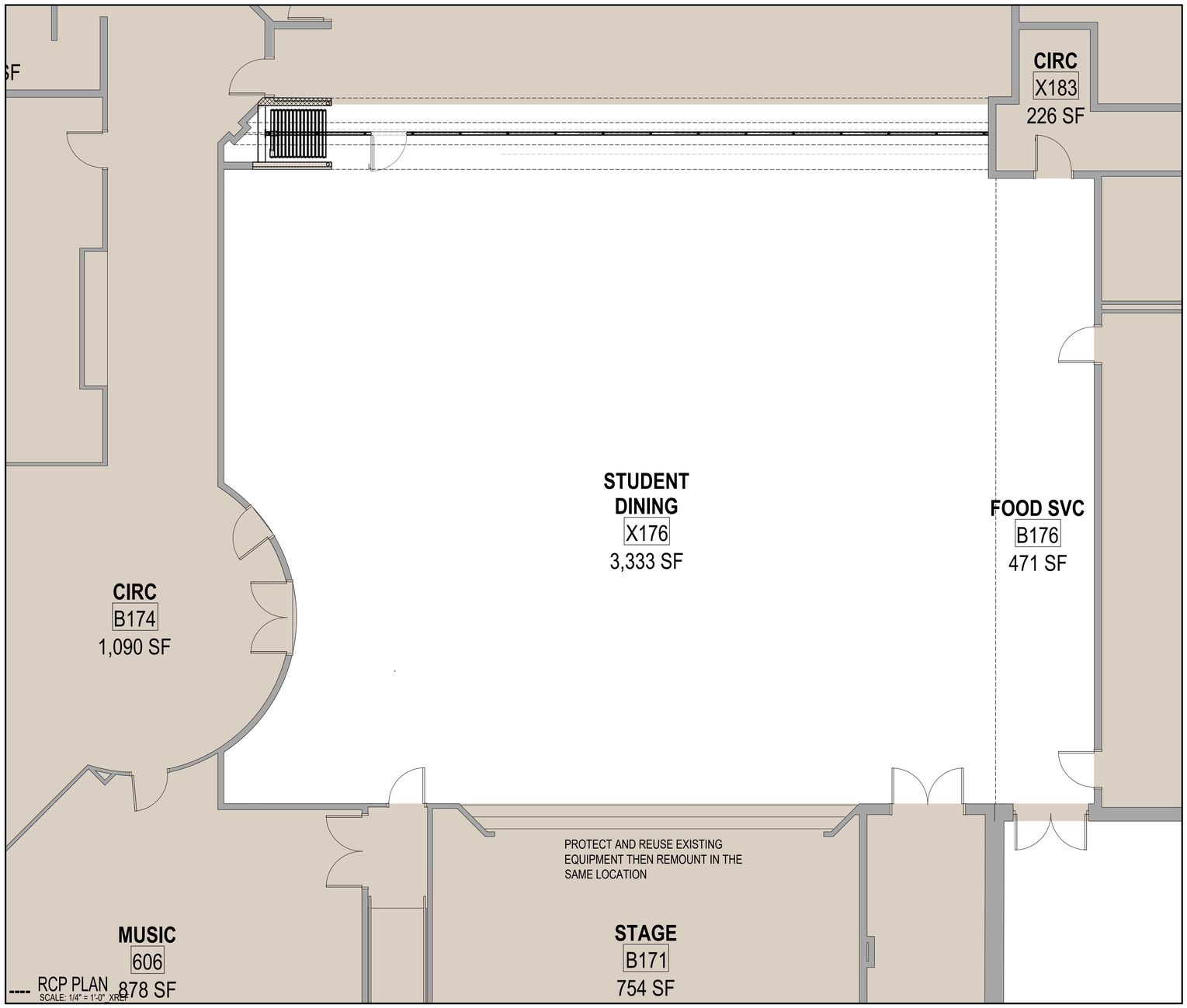
KITCHEN PLAN

t-A.301

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\T-Sienna Crossing ES\t-A.301 KITCHEN PLAN.dwg Jul 23, 2025 - 4:53pm



---- RCP PLAN
SCALE: 1/4" = 1'-0" XREF

RCP - GENERAL NOTES

1. CEILING GRID SHALL BE INSTALLED TO MATCH EXISTING GRID'S POINT OF OR THIS WILL REDUCE NEED TO RE-LOCATE ABOVE CEILING DUCTS, SPRINKLER AND OTHER SUPPORT SYSTEMS.
2. REFER TO SHEET A00-01 FOR GENERAL NOTES. GENERAL NOTES APPLY TO SEVEN SCHOOL KITCHEN REMODELS.
3. LIGHTING LEVELS SHOULD BE 50 FC IN PREPARATION AREAS, WARE WASH A SERVING LINES, OR MEET MINIMUM HEALTH CODE LEVELS, WHICHEVER ITS SEE MEP PLANS
4. REPLACE HVAC DEVICES. REPLACE LIGHTING WITH 24"x24" LED LAY IN LIGH SCHEDULED IN ELECTRICAL PLANS.
5. REFER TO MECHANICAL, ELECTRICAL SHEETS FOR DEVICE SCHEDULES.

RCP - NUMBERED NOTES

01 PROVIDE 30"x30" MIN. ACCESS HATCH IN SOFFIT CENTERED ON MOTOR.

02 AFTER LOWERING THE NEW POWER RETRACTION SYSTEM. REPAIR AND PAINT SOFFITS AND SIDWALLS OF FURR TO MATCH EXISTING.

---- RCP NOTES
SCALE: 1/4" = 1'-0" XREF

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

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7/15/2025

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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

REFLECTED CEILING PLAN

T-A.401

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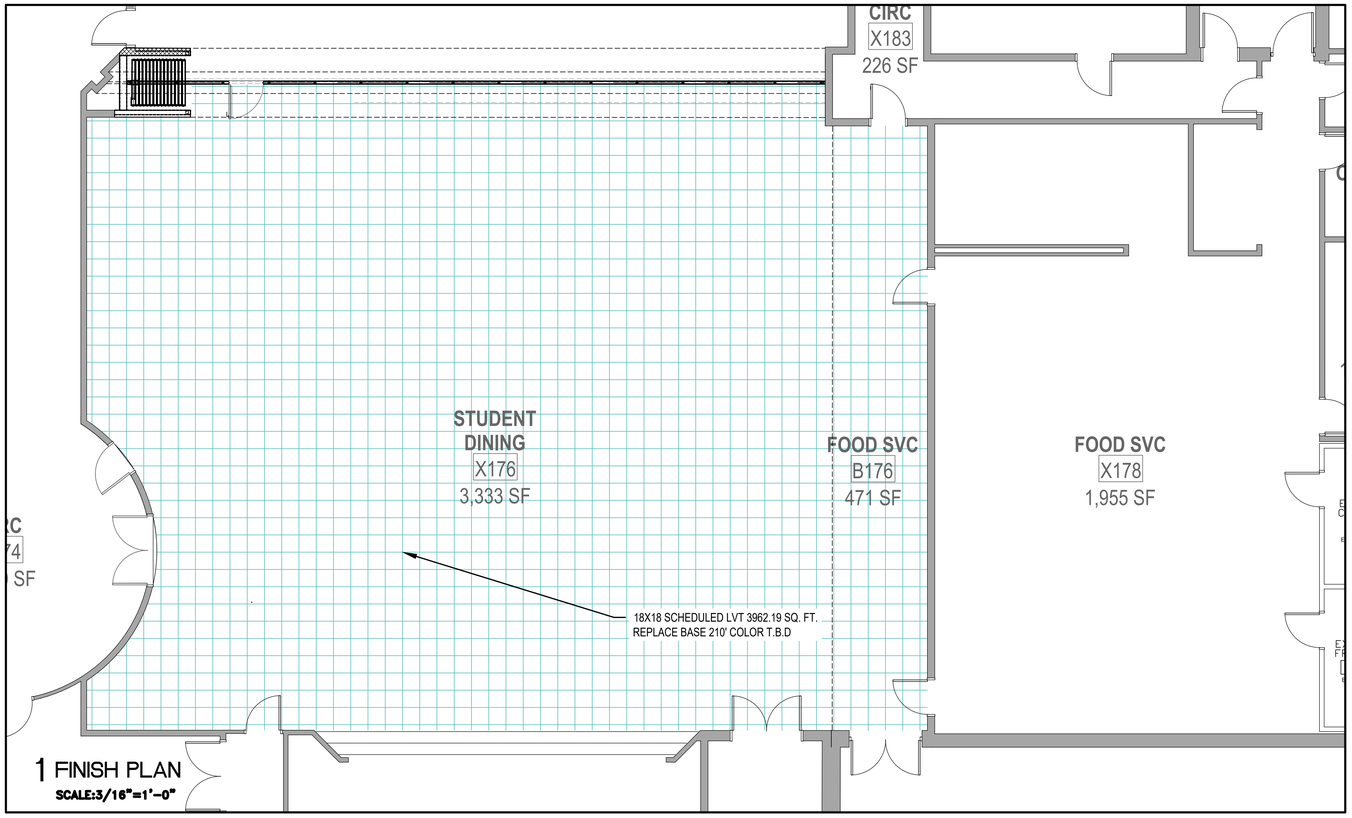


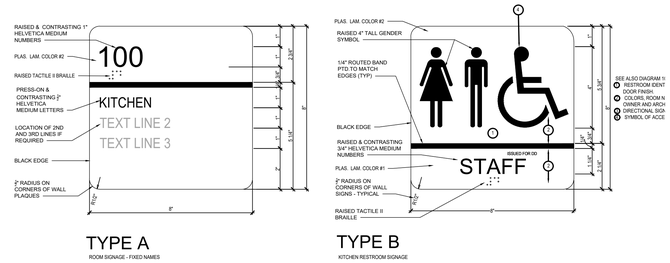
1 FINISH PLAN
SCALE:3/16"=1'-0"

PAINT COLOR SCHEDULE
UNLESS OTHERWISE INDICATED FIELD COLOR IS PT-1 (SW 7014 EIDER WHITE)
SW 7014 EIDER WHITE (EPOXY PAINT)

WALL TILE
CERAMIC WALL TILE (WT-1)
REFER TO TILE PATTERN AT SERVING AND RESTROOM
FIELD WALL TILE: DALTILE RITTENHOUSE SQUARE K175 BISCUIT (3X6)

A PROVIDE ROOM SIGN TO REPLACE EXISTING. SEE LAYOUT FOR TYPE A OR TYPE B SIGN LOCATIONS.

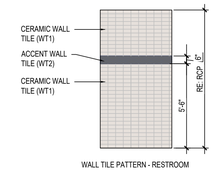
2 FINISH FLOOR LEGEND



TYPE A
ROOM SIGNAGE - FIXED NAMES

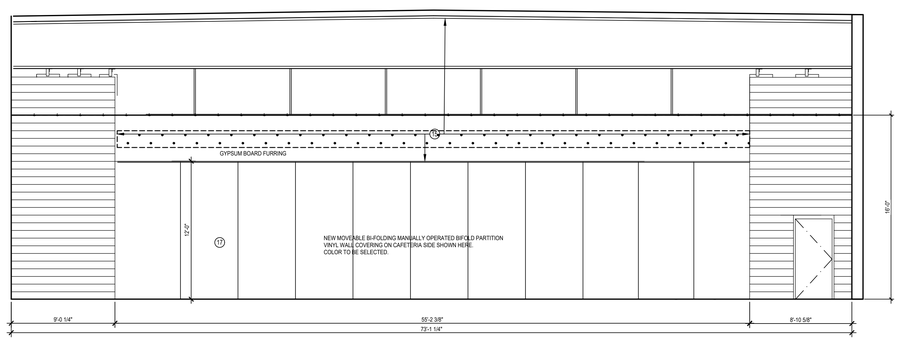
TYPE B
KITCHEN RESTROOM SIGNAGE

3 ROOM SIGNAGE

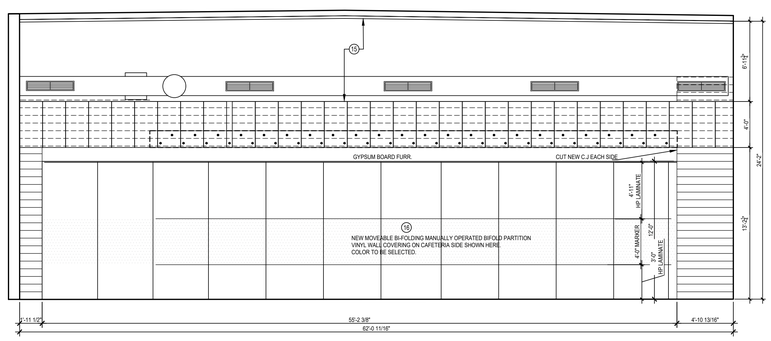


WALL TILE PATTERN - RESTROOM

4 WALL TILE PATTERN



5 CAFETERIA SIDE OF WALL (NEW CONSTRUCTION)
SCALE: 3/16 = 1'-0"



6 GYM SIDE OF WALL (NEW CONSTRUCTION)
SCALE: 3/16" = 1'-0"

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

SEAL
REGISTERED ARCHITECT
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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FINISH FLOOR PLAN

t-A.501

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\T-Sienna Crossing ES\t-A.501 FINISH FLOOR PLAN.dwg Jul 23, 2025 - 4:54pm

SYMBOL LEGEND

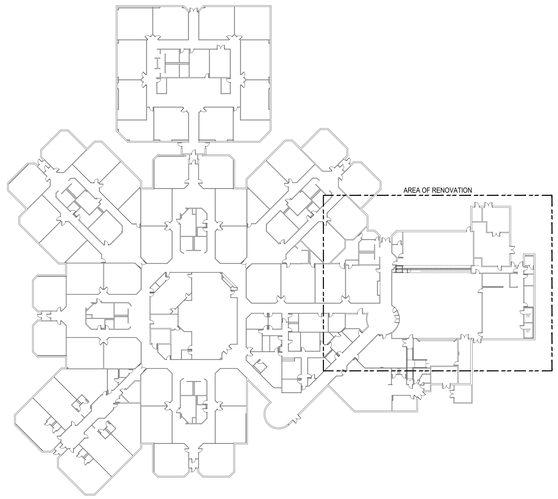
	SIMPLEX/DUPLEX/QUAD – 5361/2 REC
GFI	DUPLEX W/ GFCI PROTECTION–P&S 2097
	J–BOX
	CEILING MOUNTED J–BOX
	MOTOR
	HEAVY DUTY, NON–FUSED DISCONNECT. MIN RATING OF CIRCUIT OCPD/VOLTAGE.
	ELECTRICAL PANEL
	HOMERUN TO CIRCUIT NOTED
E	EXISTING DEVICES TO REMAIN
R	EXISTING DEVICES TO BE RELOCATED
D	EXISTING DEVICES TO BE DEMO/REMOVED
REP	EXISTING DEVICES TO BE REPLACED
S	INDICATES SURFACE MOUNTED
SR	INDICATES SURFACE RACEWAY
+	INDICATES ABOVE COUNTER DEVICE
+	INDICATES DEVICE AT +30–60"
++	INDICATES DEVICE AT +80–96"
CLG	INDICATES DEVICES MOUNTED IN CEILING
WP	INDICATES WEATHERPROOF COVER
3R	INDICATES 3R RATED DEVICE
(E)LA–X	CONNECT(ED) TO EXIST CIRCUIT LA–X
(D)LA–X	DEMO PORTION OF EXIST CIRCUIT LA–X
(N)LA–X	CONNECT(ED) TO NEW CIRCUIT LA–X

GENERAL ELECTRICAL NOTES:

1. INSTALL SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ALL AMENDMENTS.
2. PROVIDE CONDUIT FOR ALL DEVICES INSTALLED IN WALLS.
   - 2.A. 3/4"C FOR POWER AND 1"C FOR LOW VOLTAGE/DATA UNLESS NOTED OTHERWISE.
   - 2.B. PROVIDE PROTECTIVE BUSHING ON END OF ALL LOW VOLTAGE CONDUITS.
   - 2.C. ALL ELECTRICAL HOMERUNS SHALL BE IN CONDUIT, MIN 3/4"C.
   - 2.D. USE INSULATED THROAT FITTINGS FOR CONNECTIONS TO HOUSINGS, BOXES, ENCLOSURES, ETC.
   - 2.E. MAX LENGTH FOR FLEX CONDUIT SHALL BE 6FT AND MIN. SIZE SHALL BE 1/2". ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
3. CONDUIT TYPES:
   - 3.A. INSIDE BUILDINGS: GALVANIZED STEEL EMT.
     - 3.A.A. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT IN EXPOSED CEILING AREAS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
     - 3.A.B. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT ABOVE INACCESSIBLE CEILINGS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
   - 3.B. NO MC CABLE SHALL BE ALLOWED.
   - 3.C. PROVIDE FLEXIBLE CONNECTIONS TO MOTORS, PUMPS, TRANSFORMERS, OR SIMILAR EQUIPMENT.
4. PROVIDE GALVANIZED STEEL, ONE–PIECE CONSTRUCTION, OUTLET BOXES IN ALL CASES SUITABLE FOR INTENDED USE.
   - 4.A. BOXES OUTSIDE SHALL BE STEEL NEMA 3 TYPE.
   - 4.B. PROVIDE CEILING BRACKET TO SUPPORT CEILING MOUNTED DEVICES FROM CEILING TEES.
5. 20 AMP, SINGLE PHASE BRANCH CIRCUITS SERVING LIGHTING AND GENERAL RECEPTACLES MAY BE GROUPED IN A SINGLE RACEWAY PROVIDED A NEUTRAL CONDUCTOR IS INSTALLED FOR EACH CIRCUIT REQUIRING A NEUTRAL.
   - 5.A. DO NOT INSTALL MORE THAN FOUR CURRENT CARRYING CONDUCTORS IN A CONDUIT EXCEPT SIX #12 OR #10 CURRENT CARRYING CONDUCTORS MAY BE INSTALLED IN 3/4" OR LARGER CONDUIT FOR 20A CIRCUITS.
   - 5.B. DO NOT INSTALL 480/277 VOLT CONDUCTORS IN THE SAME CONDUIT WITH 240/208/120 VOLT CONDUCTORS.
   - 5.C. DO NOT COMBINE NEUTRALS. PROVIDE DEDICATED NEUTRALS FOR EACH BRANCH CIRCUIT.
   - 5.D. MULTIPLE DEVICES ON A CIRCUIT SUCH AS RECEPTACLES SHALL BE WIRED WITH A PIGTAIL SO THE DEVICE DOES NOT PROVIDE THE CONTINUITY PATH. FEED THROUGH CONNECTIONS FOR GFCI RECEPTACLES SHALL NOT BE USED FOR PROTECTION OF DOWNSTREAM DEVICES.
6. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
7. PROVIDE J–BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM, SOUND SYSTEM, LOW VOLTAGE WIRING, ETC. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF ALL LOW VOLTAGE CONDUITS.
8. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS. ALL JUNCTION/PULL BOXES INSTALLED ABOVE ACCESSIBLE CEILINGS SHALL BE MOUNTED SO THAT THE ACCESS PANEL IS NO HIGHER THAN 18" ABOVE THE CEILING.
9. PROVIDE CIRCUIT LABELS IN PERMANENT MARKER ON ALL NEW AND EXISTING J–BOX COVERS UTILIZED IN THE AREA OF RENOVATION.
10. PROVIDE CIRCUIT LABEL ON ALL ABOVE CEILING J–BOXES, EQUIPMENT, ETC. IDENTIFYING THE CIRCUITS CONTAINED/CONNECTED.
11. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12.
    - 11.A. TYPICAL BUILDING WIRE SHALL BE STRANDED TYPE THHN, THWN–2 (WET RATED FOR 90°C), OR XHHW–2. MINIMUM WIRE SIZE SHALL BE #12.
    - 11.B. ALL BUILDING WIRE SHALL BE COLOR CODED WITH THE SAME COLOR CONNECTED TO THE SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION MATCHING THE EXISTING BUILDING COLOR CODE SCHEME.
12. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEAL PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO COOLER SECTIONS.
13. DRAWINGS, SCHEDULES, NOTES, AND DETAILS ARE INTENDED TO BE COMPLIMENTARY. ANY WORK DESCRIBED IN ANY OF THEM, WILL BE WORK REQUIRED UNDER THIS CONTRACT. WHERE THERE IS A CONFLICT BETWEEN DIFFERENT PORTIONS OF THE DESIGN DOCUMENTS IT SHALL BE CLARIFIED BY RFI. BARRING CLARIFICATION PRIOR TO BIDDING THE MOST EXPENSIVE OPTION SHALL BE INCLUDED AND CLARIFICATION SHALL BE MADE DURING CONSTRUCTION.
14. SHOULD ANY WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS BE IN VIOLATION OF ANY FEDERAL, STATE, COUNTY OR CITY LAWS, ORDINANCE OR REGULATION, THOSE LAWS AND REGULATIONS SHALL PREVAIL, AND SHALL BE COMPLIED WITH BY THE CONTRACTOR AS A PART OF THIS WORK WITH NO EXTRA COMPENSATION.
15. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

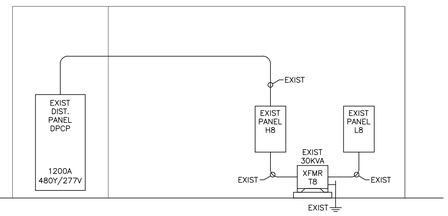
GENERAL RENOVATION AND REMODELING NOTES:

1. THESE ELECTRICAL DRAWINGS ONLY SHOW SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J–BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
2. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
3. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. RESUPPORT EXISTING CABLING/CONDUIT TO REMAIN TO MEET CURRENTLY ADOPTED CODE REQUIREMENTS. REMOVE ALL ABANDONED CONDUIT AND WIRE. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITIES.
4. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
5. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
6. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
7. ANY CIRCUIT OR PATCH, CIRCUIT TO REMAIN OR BE REUSED SHALL REMAIN ACTIVE.
8. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
9. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
10. AT THE END OF THE PROJECT, PROVIDE A NEW TYPEWRITTEN AS–BUILT PANEL SCHEDULE FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT USING BUILDING ROOM NUMBERS.



2 OVERALL FLOOR PLAN

SCALE: 1" = 50'– 0"

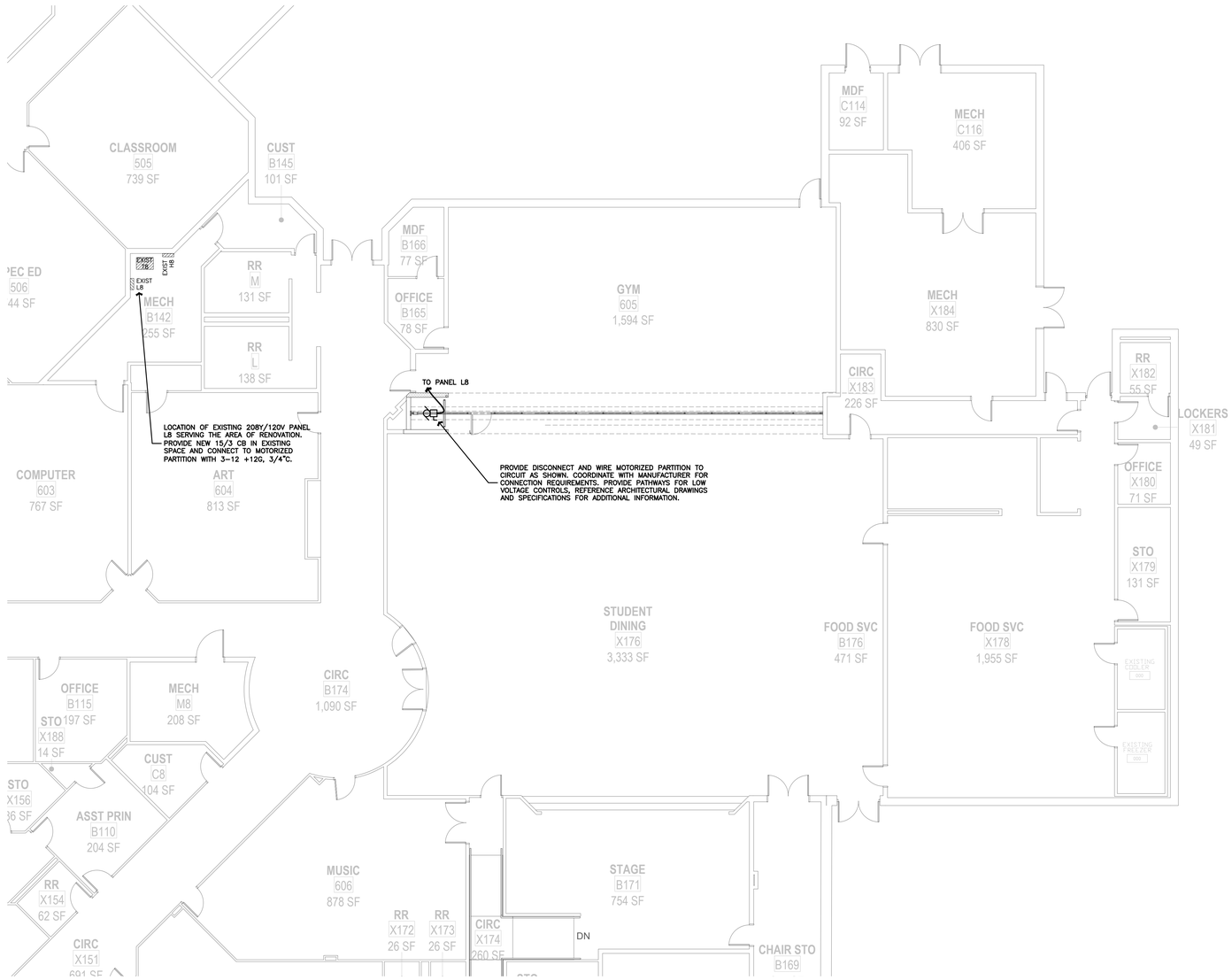


3 PARTIAL ELECTRICAL RISER - SULLIVAN CROSSING ES

NO SCALE

NOTES:

1. FIELD VERIFY ALL EXISTING ELECTRICAL PANELS AND FEEDERS SHOWN ON DRAWINGS.
2. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
3. ALL OUTAGES SHALL BE SCHEDULED/CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
4. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.
5. REFERENCE PANEL SCHEDULES AND SHORT CIRCUIT TABLE FOR AIC AND SCCR VALUES.



1 ELECTRICAL RENOVATION PLAN

SCALE: 1/8" = 1'– 0"

ISSUE:	
12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SIENNA CROSSING ELEMENTARY SCHOOL
10011 STEEP BANK TRACE
MISSOURI CITY, TX 77459

SEAL



MWA ARCHITECTS
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PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL FLOOR PLAN & SCHEDULES

t-E.200

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(713) 300–60360 | 13999 W. SAM HOUSTON PARKWAY N., SUITE 125, HOUSTON, TX 77040

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

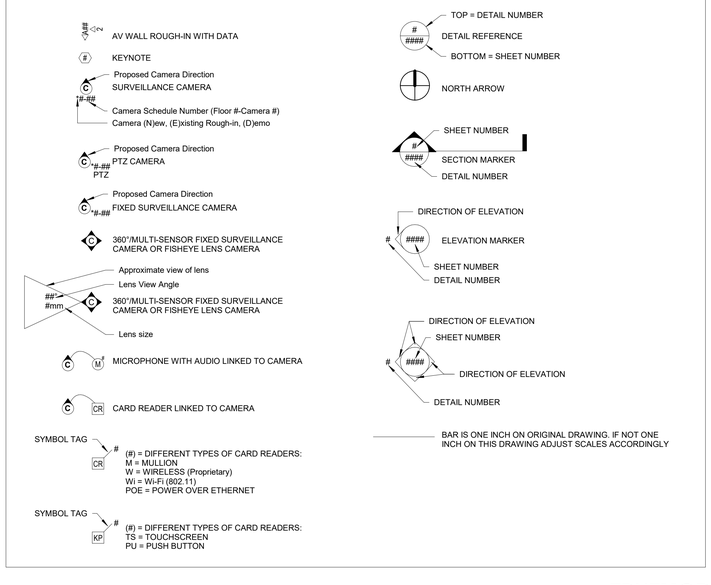
SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED



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FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Sienna Crossing Elementary School
10011 Steep Bank Trce, Missouri City, TX 77459

SEAL

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BICSI ID # 295857
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07-18-25

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ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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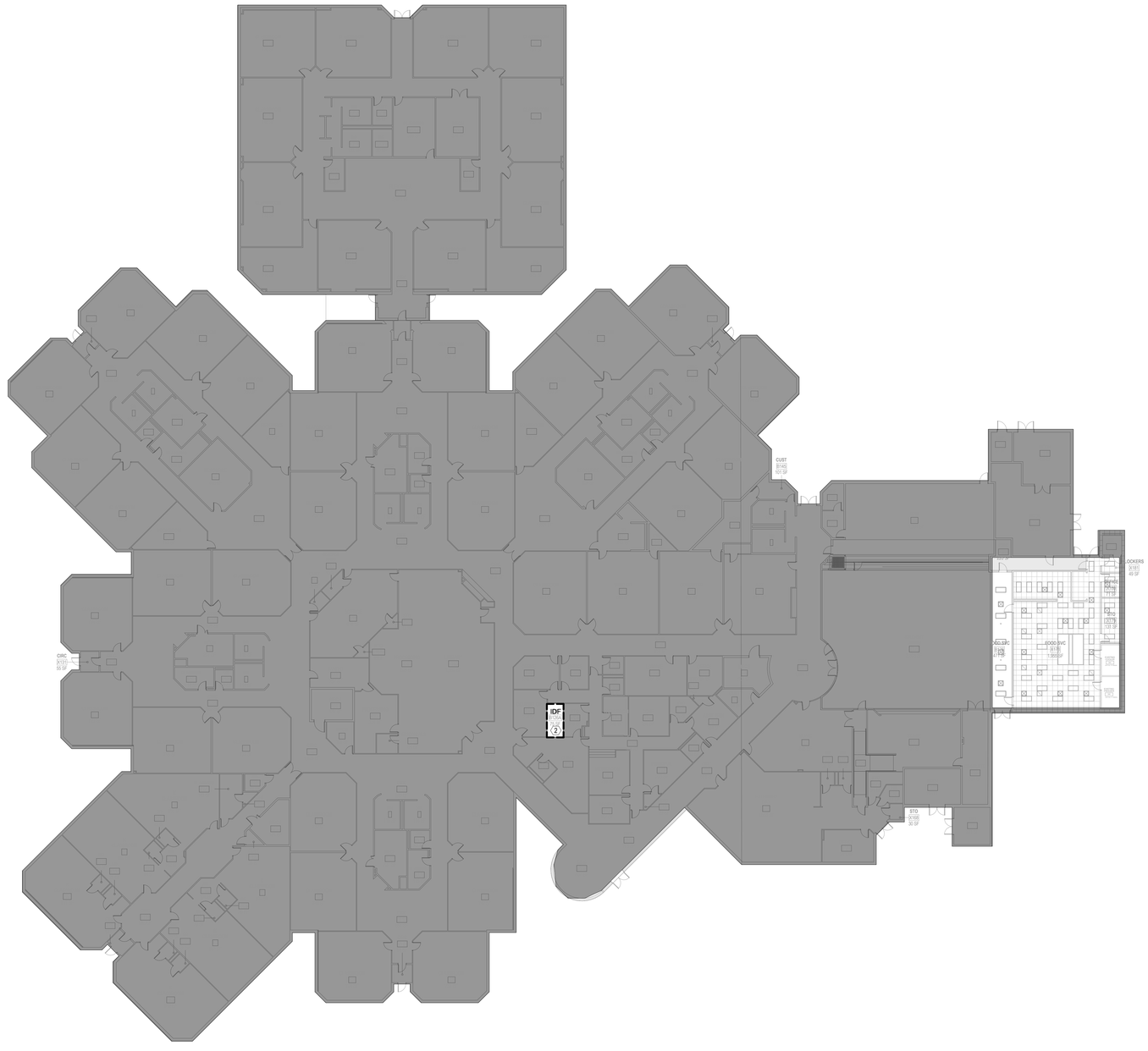
TECHNOLOGY - TITLE SHEET

t-TN000

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BACKGROUND T (SIENNA CROSSING ES)
SCALE: 1" = 20'-0"

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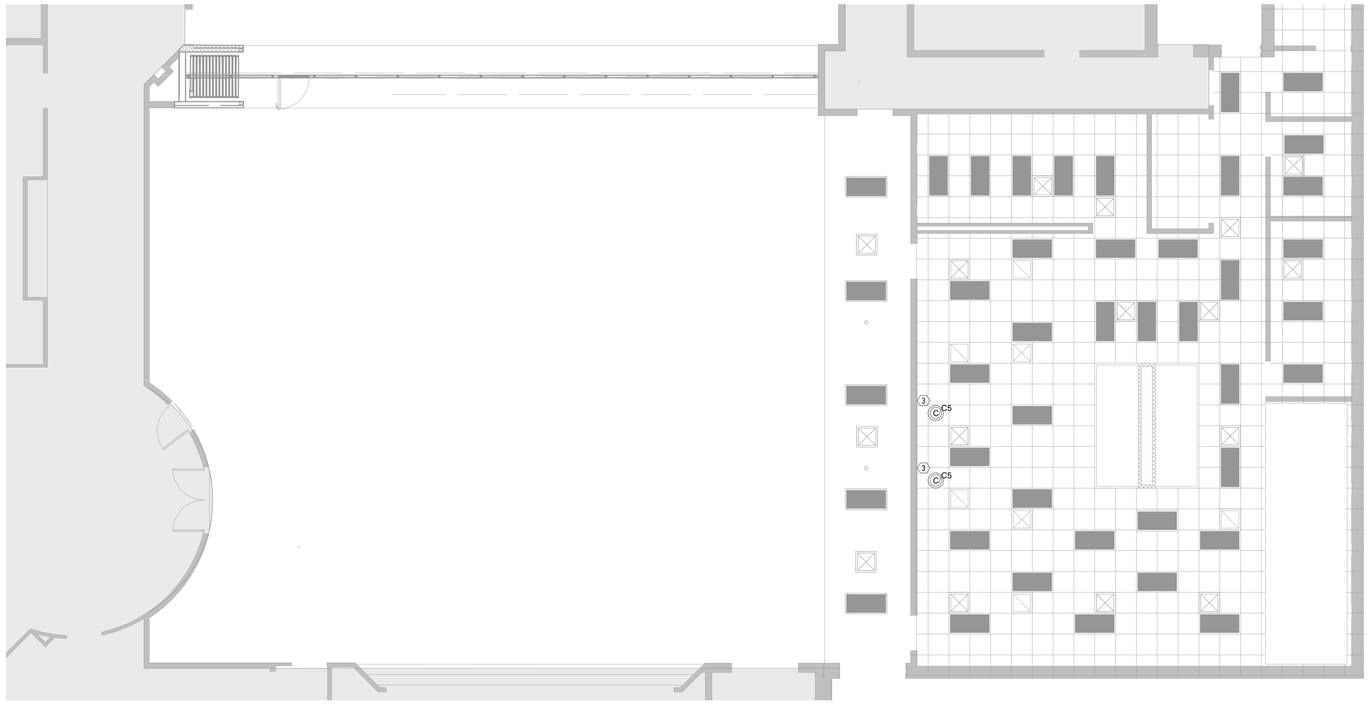
TECHNOLOGY - Sienna Crossing ES - OVERALL

t-TN.100

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



2 SIENNA CROSSING - REFLECTED CEILING PLAN
SCALE: 3/16" = 1'-0"

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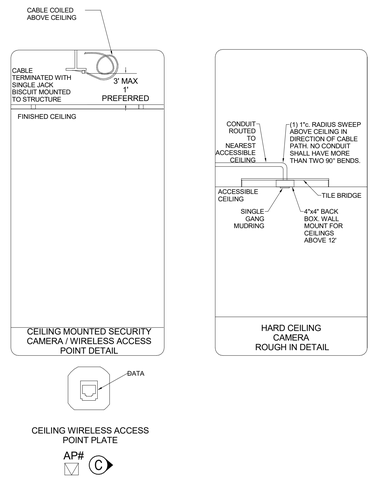
TECHNOLOGY - Sienna Crossing ES - KITCHEN

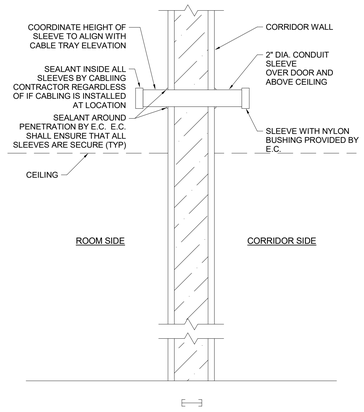
t-TN.101

GENERAL NOTE

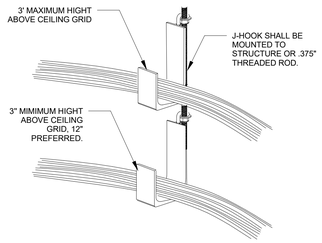
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



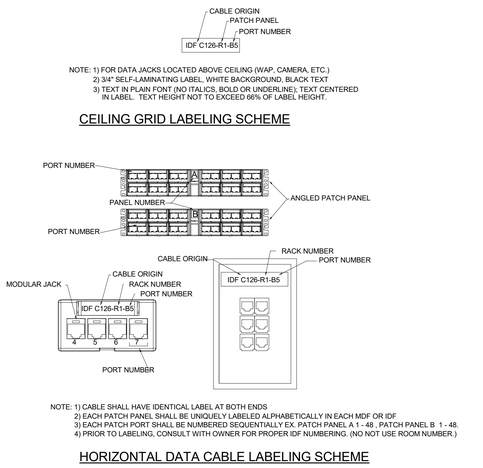
1 DATA ROUGH-IN DETAILS
SCALE: NS



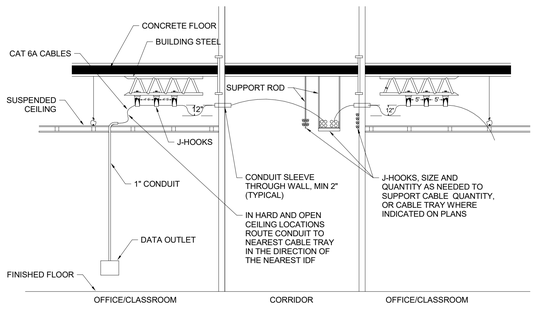
2 TYPICAL CABLING SLEEVE
SCALE: NTS



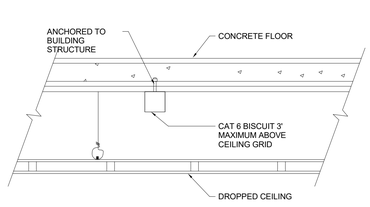
3 PANDUIT J-HOOK DETAIL
SCALE: NTS



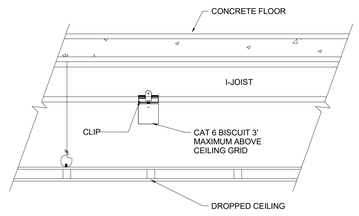
4 LABELING & CABLING SCHEMES
SCALE: NTS



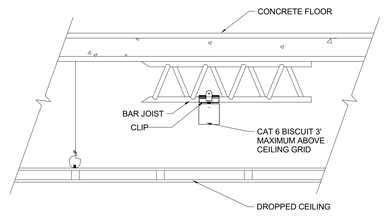
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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10011 Steep Bank Trce, Missouri City, TX 77459

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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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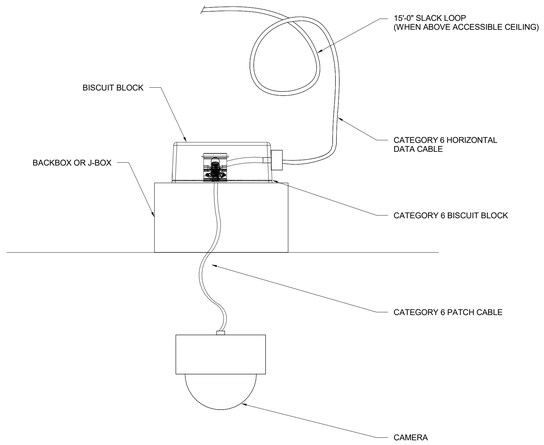
TECHNOLOGY - Sienna Crossing ES - DETAILS

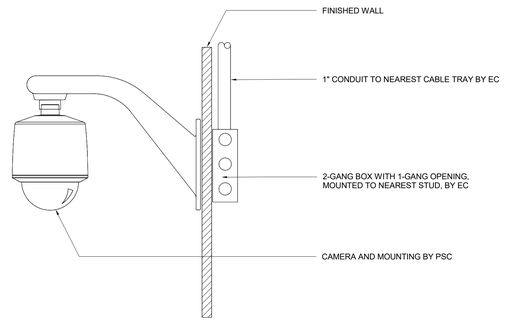
t-TN.500

GENERAL NOTES:

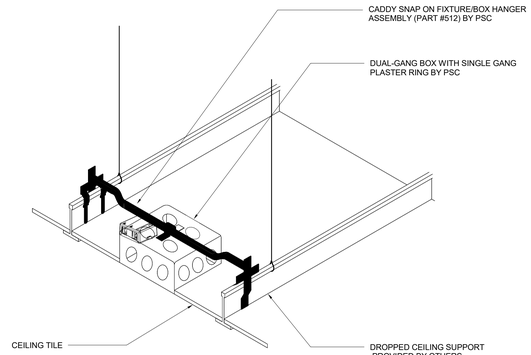
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



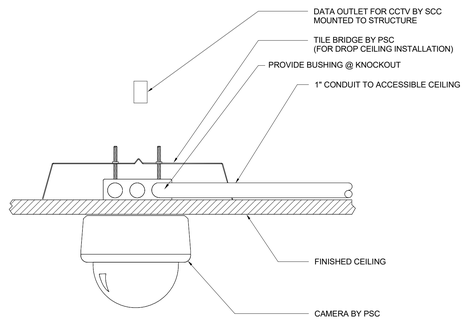
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

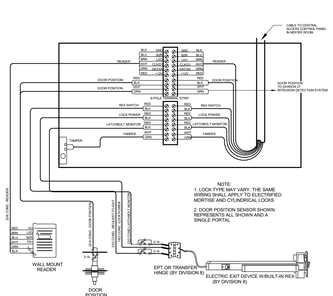


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

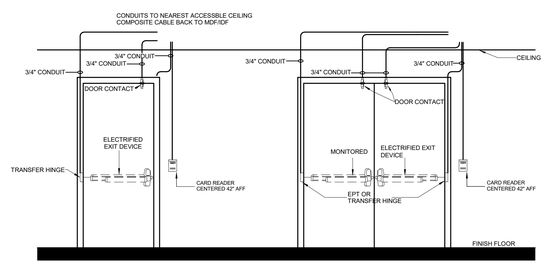
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

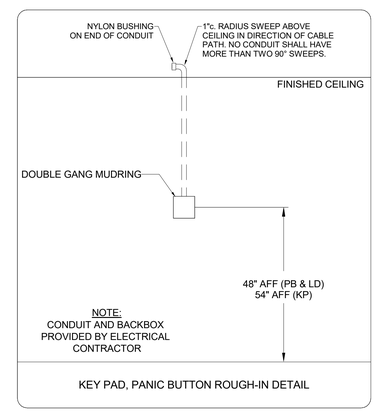
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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TECHNOLOGY - Sienna Crossing ES - SECURITY DETAILS

t-TN.600

FBISD BP013 KITCHEN RENOVATIONS ES

SUGAR MILL ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD, SUGAR LAND, TX 77498

FORT BEND INDEPENDENT SCHOOL DISTRICT

FORT BEND INDEPENDENT SCHOOL DISTRICT

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DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

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STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
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Houston, Texas 77027
Phone Number: 713-776-9433

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u-A.000	COVER AND INDEX
u-A00-01	GENERAL NOTES AND ABBREVIATIONS
u-A.D.101	DEMO PLAN
u-D.101-2	REFERENCE PHOTOS FLOOR PLAN
u-D.101-3	DEMO PLAN PHOTOS
u-ED.100	ELECTRICAL DEMO AND TEMP PLANS
u-PD1.01	PLUMBING DEMOLITION FLOOR PLAN
u-TD201	TECHNOLOGY DEMOLITION FLOOR PLAN
u-A.101	SITE PLAN
u-A.200	SLAB DIMENSION CONTROL PLAN
u-A.201	FLOOR PLAN
u-A.301	KITCHEN PLAN
u-A.302	TEMPORARY KITCHEN LAYOUT
u-A.401	REFLECTED CEILING PLAN
u-A.501	FINISH FLOOR PLAN
u-A.502	PARTITION SCHEDULE
u-S1	KITCHEN PLAN
u-S2	SECTIONS AND TYPICAL DETAILS
u-C1.0	GRADING & PAVING PLAN
u-QF1	FS GENERAL COORDINATION NOTES
u-QF1.0	FS EQUIPMENT PLAN
u-QF1.1	FS FACILITY MODEL
u-QF1.2	FS EQUIPMENT MODEL
u-QF1.3	QF SPECIAL CONDITIONS & MECHANICAL PLAN
u-QF1.4	FS PLUMBING PLAN
u-QF1.5	FS ELECTRICAL PLAN
u-QF1.6	FS CONDENSING UNITS
u-QF1.7	FS WALK-INS
U-QF2.0	FS TEMPORARY SERVING
u-M1.01	MECHANICAL PLANS
M2.01	KITCHEN MECHANICAL DETAILS
u-M2.02	MECHANICAL DETAILS
E.000	ELECTRICAL AND FIRE ALARM SCHEDULES
E.001	ELECTRICAL AND FIRE ALARM NOTES
E.010	ELECTRICAL DEVICE DETAILS
E.011	ELECTRICAL DETAILS
E.012	ELECTRICAL DETAILS
E.013	ELECTRICAL KITCHEN DETAILS
E.060	LIGHTING SCHEDULES
u-E.100	LIGHTING FLOOR PLAN
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u-T000	TECHNOLOGY SYMBOLS & LEGEND
u-T200	TECHNOLOGY COMPOSITE FLOOR PLAN
u-T201	TECHNOLOGY NEW_RENOVATION KITCHEN PLAN
u-T202	TECHNOLOGY TEMPORARY KITCHEN PLAN
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u-T500	TECHNOLOGY TYPICAL DETAILS
u-TN-000	TECHNOLOGY - INDEX SHEET
u-TN-001	TECHNOLOGY - KITCHEN DEMOLITION
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u-TN-600	TECHNOLOGY - SECURITY DETAILS
u-TN-700	TECHNOLOGY - AV DETAILS

REGISTERED ARCHITECT MIKE ANAGNOS 22651 STATE OF TEXAS

18 JULY 2025

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

u

PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.
B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.
C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.
D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.
E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.
F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL, ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.
B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.
B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.
C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.
D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY. IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.

1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.

E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.

B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT. REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.

B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED. CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.

D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

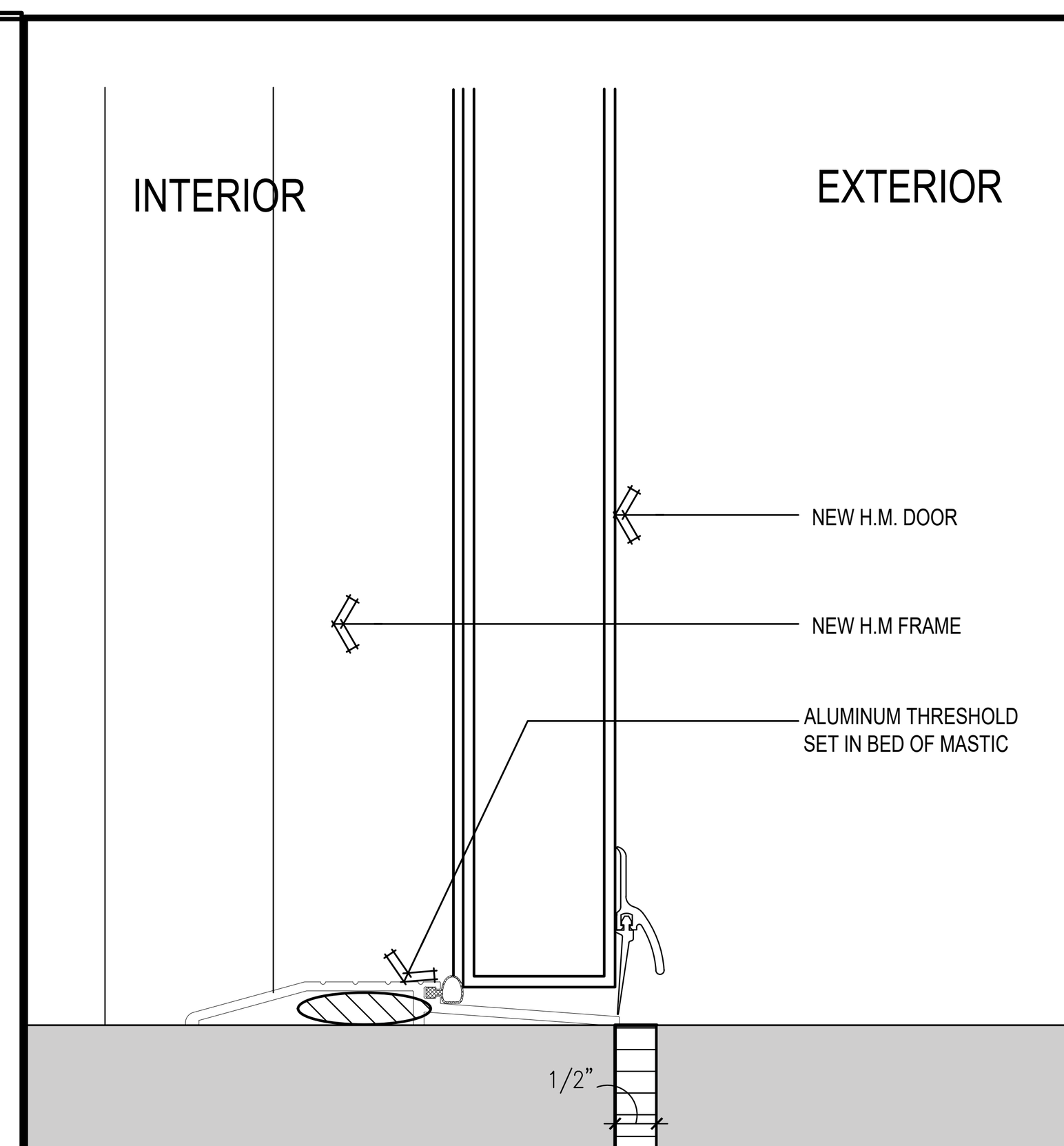
A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

01 GENERAL NOTES



21 EXTERIOR DOOR SILL
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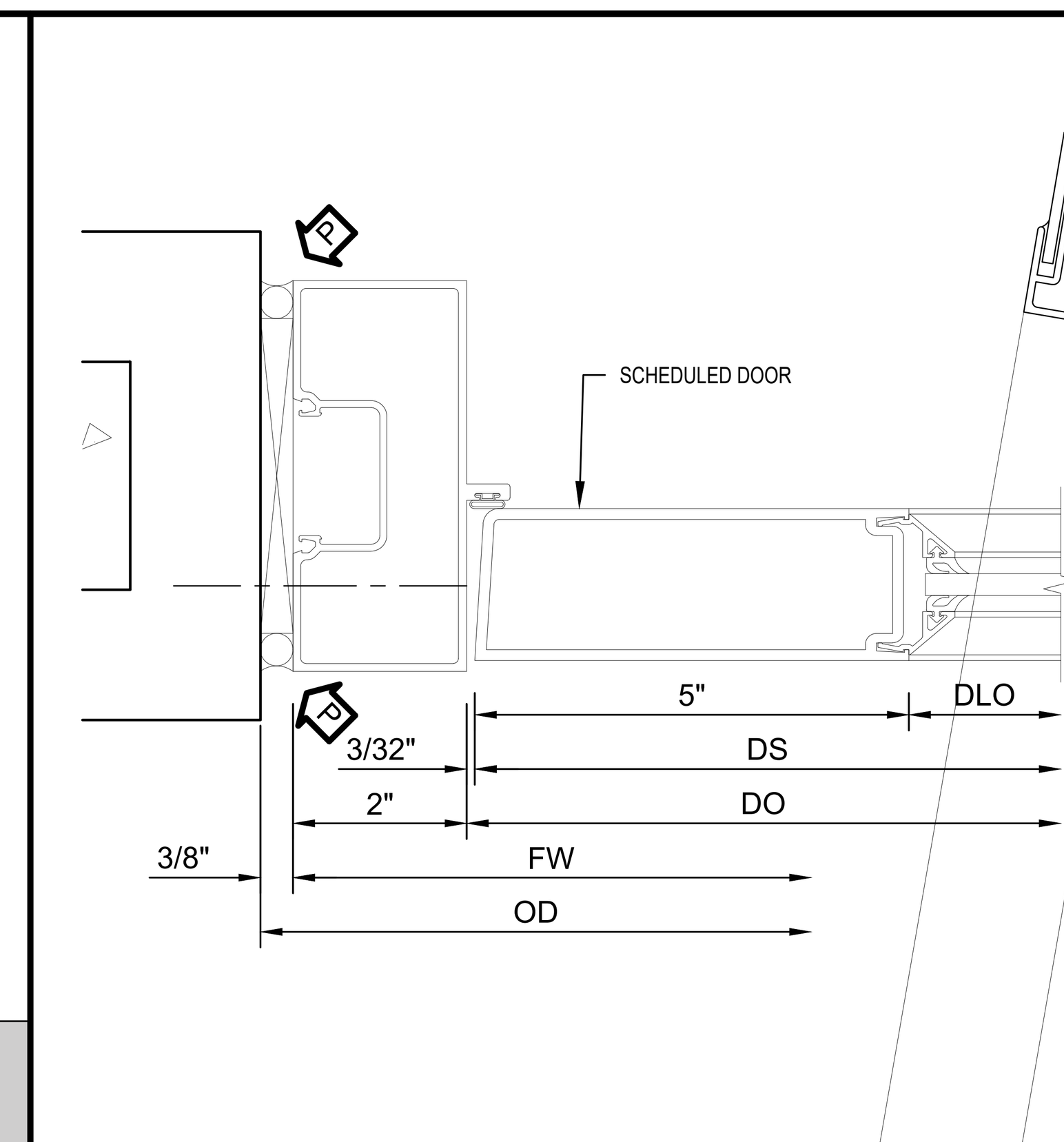

22 DOOR JAMB
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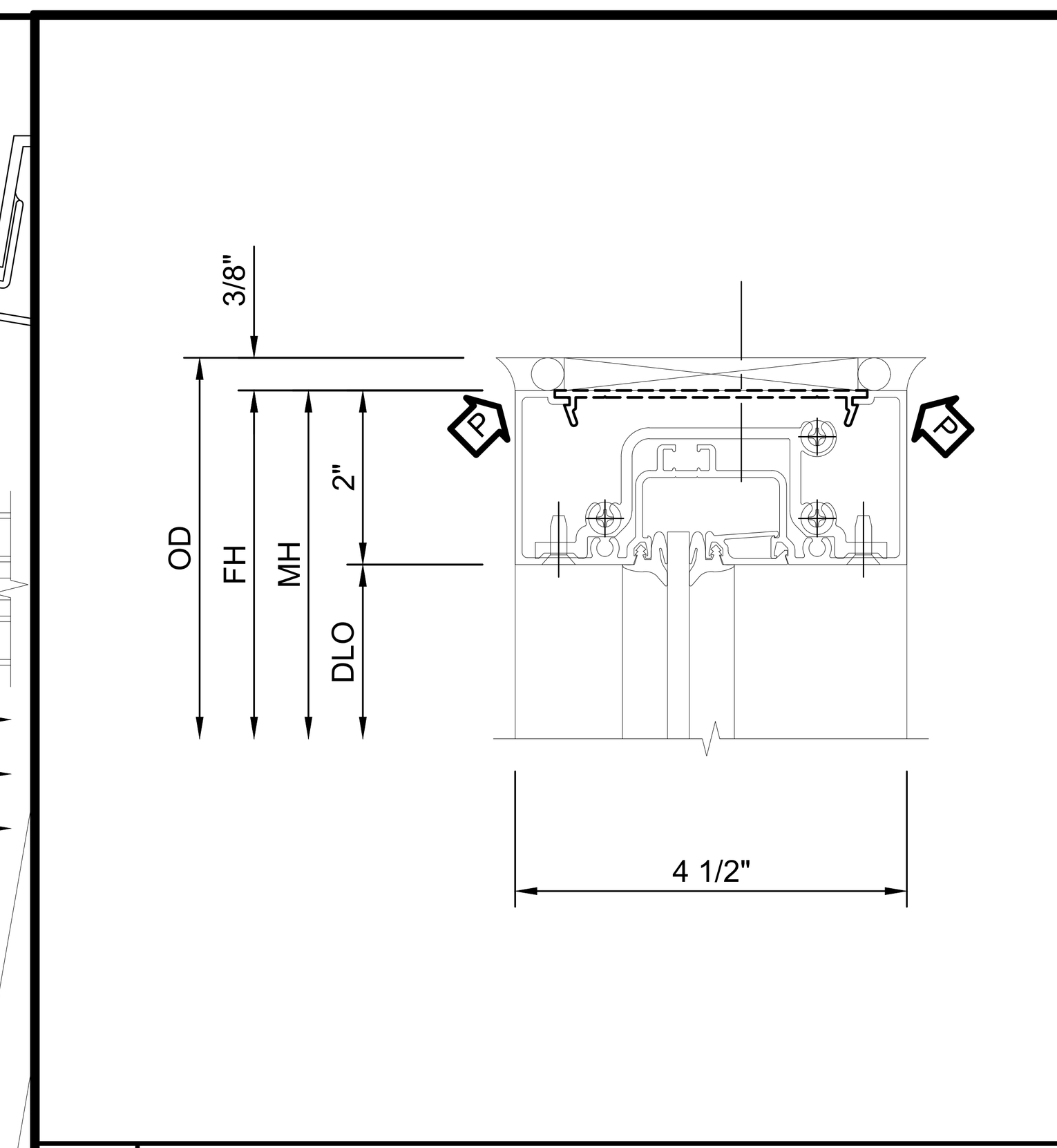

23 WINDOW HEAD
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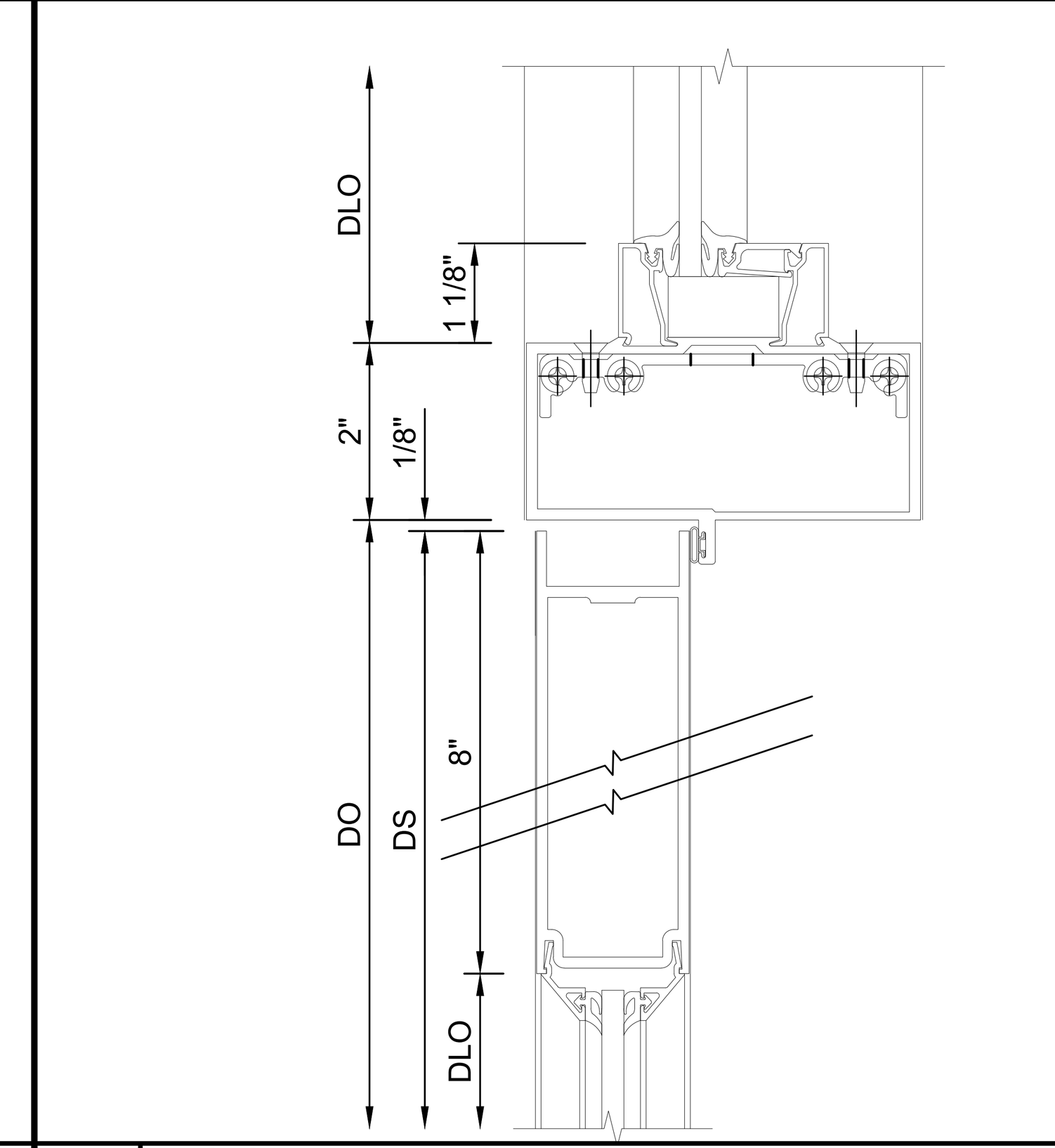

24 DOOR WINDOW HEAD
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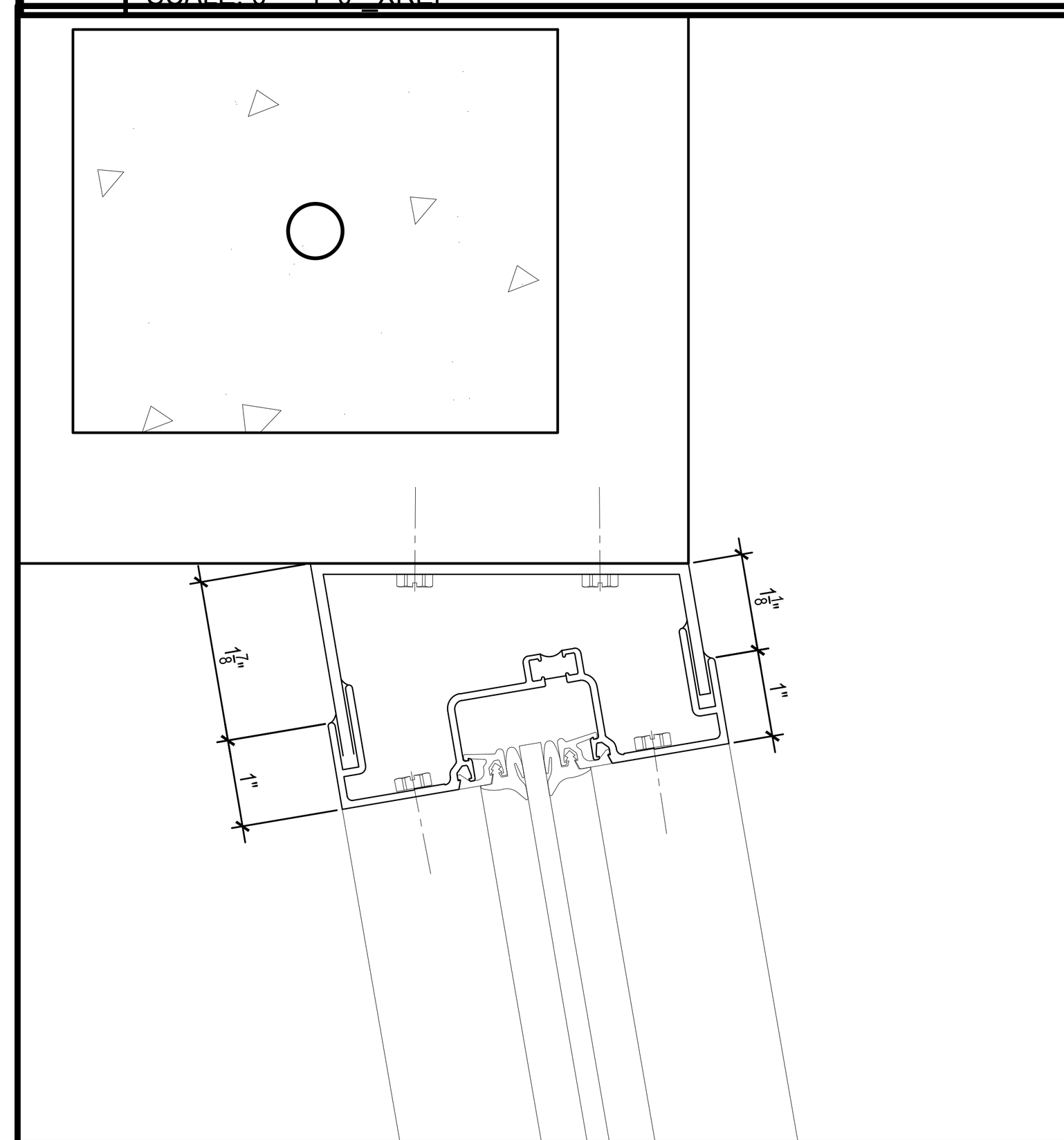

15 WINDOW JAMB AT WALL
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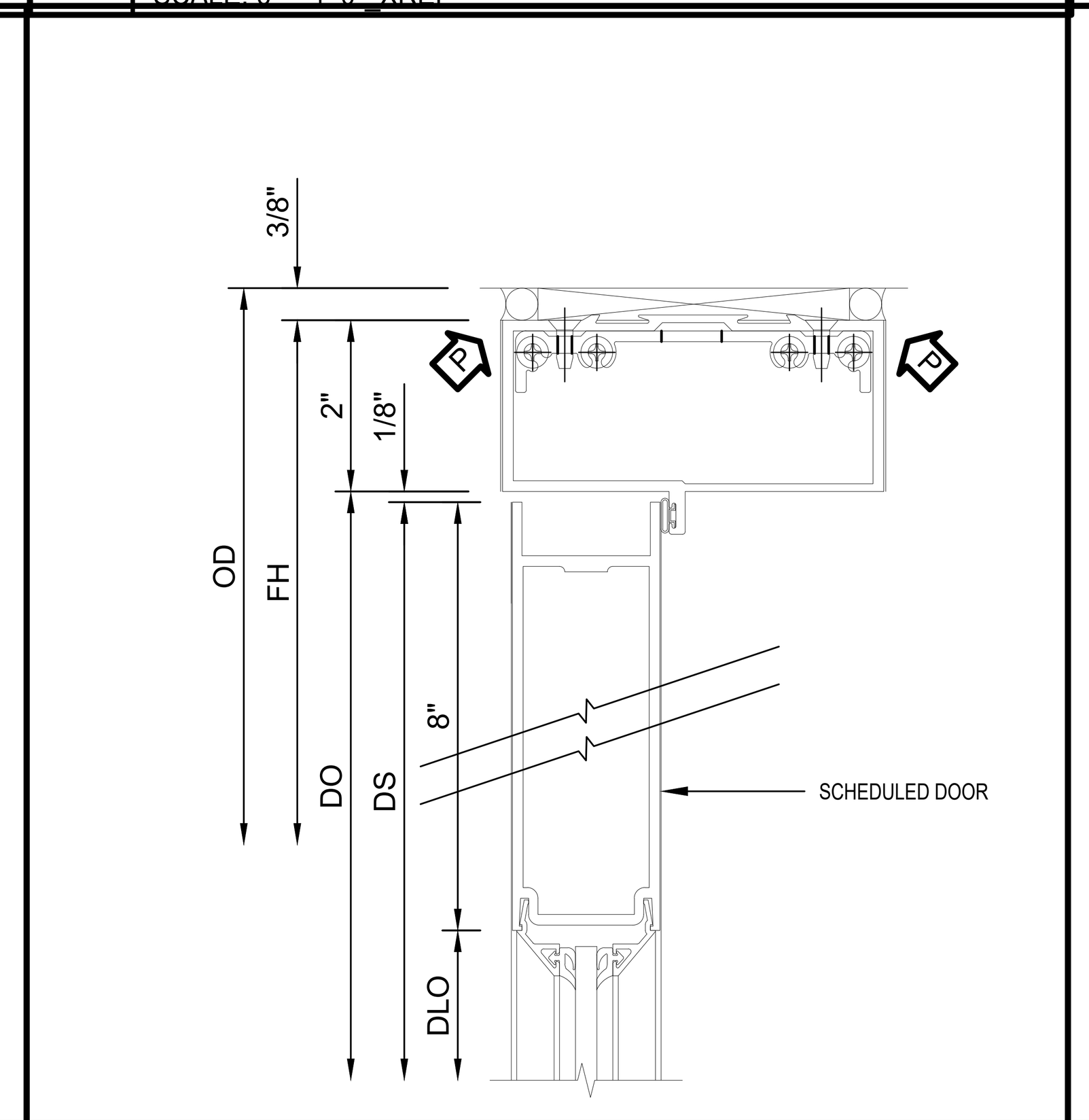

16 DOOR HEAD
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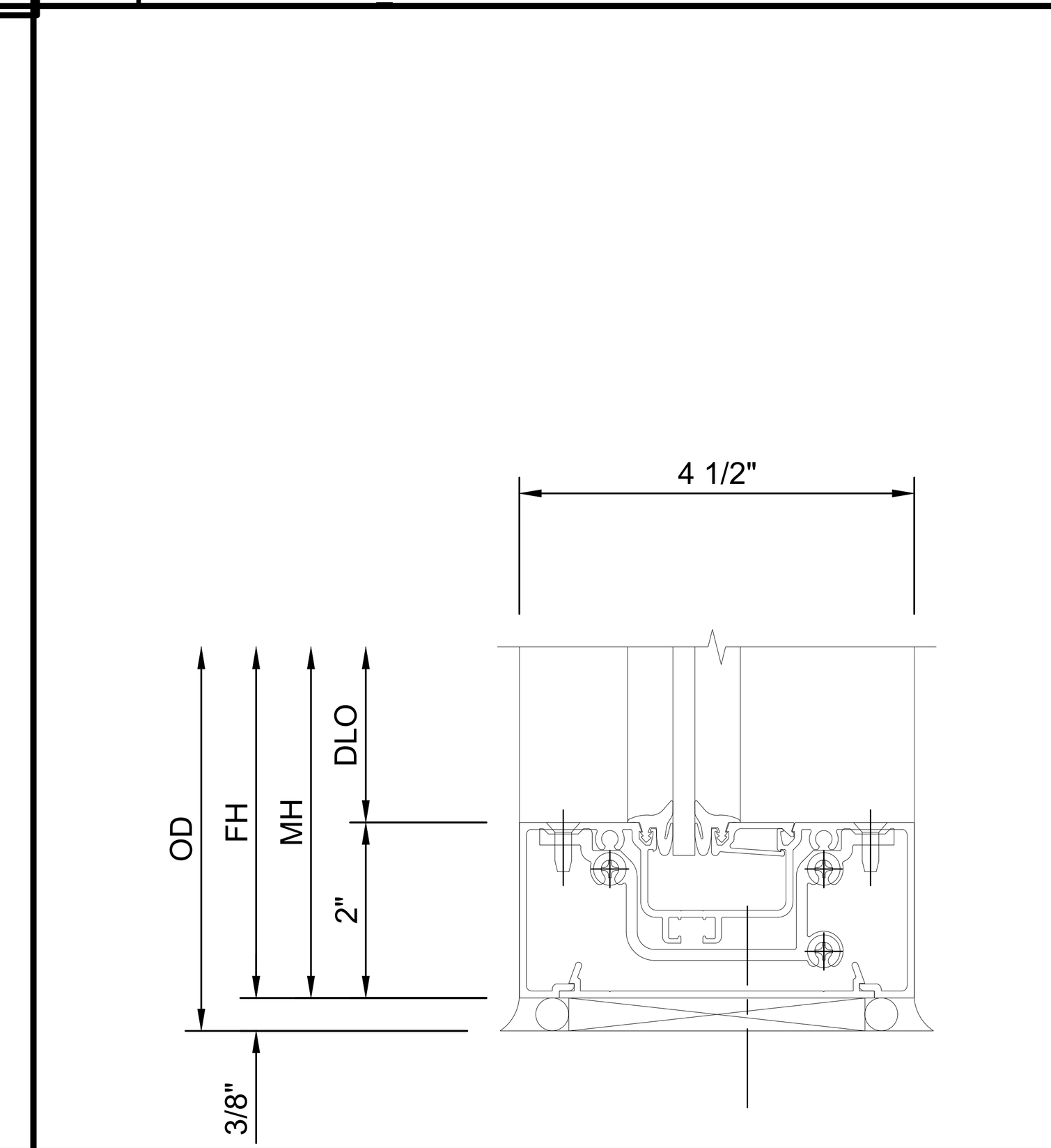

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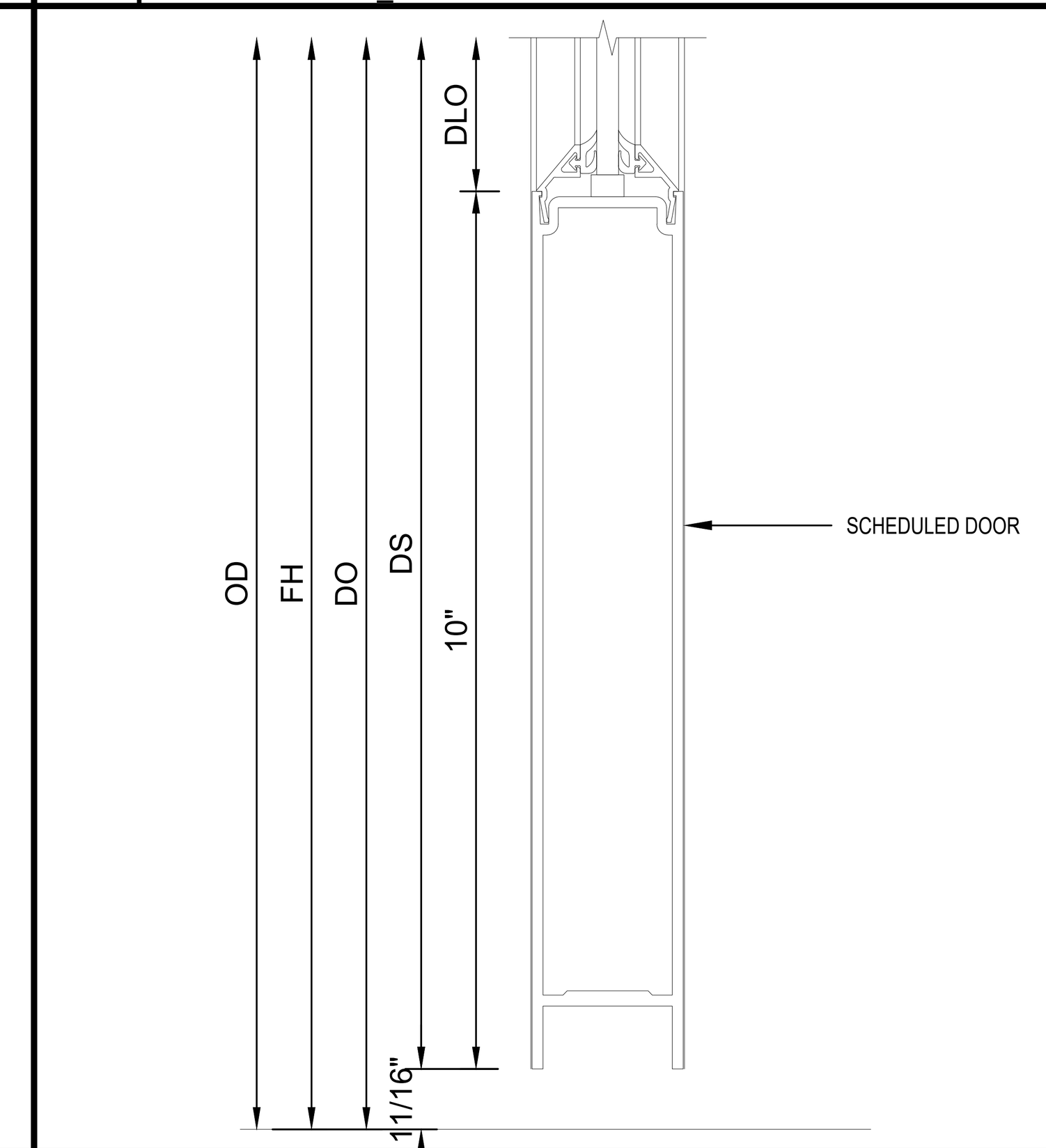

18 DOOR SILL
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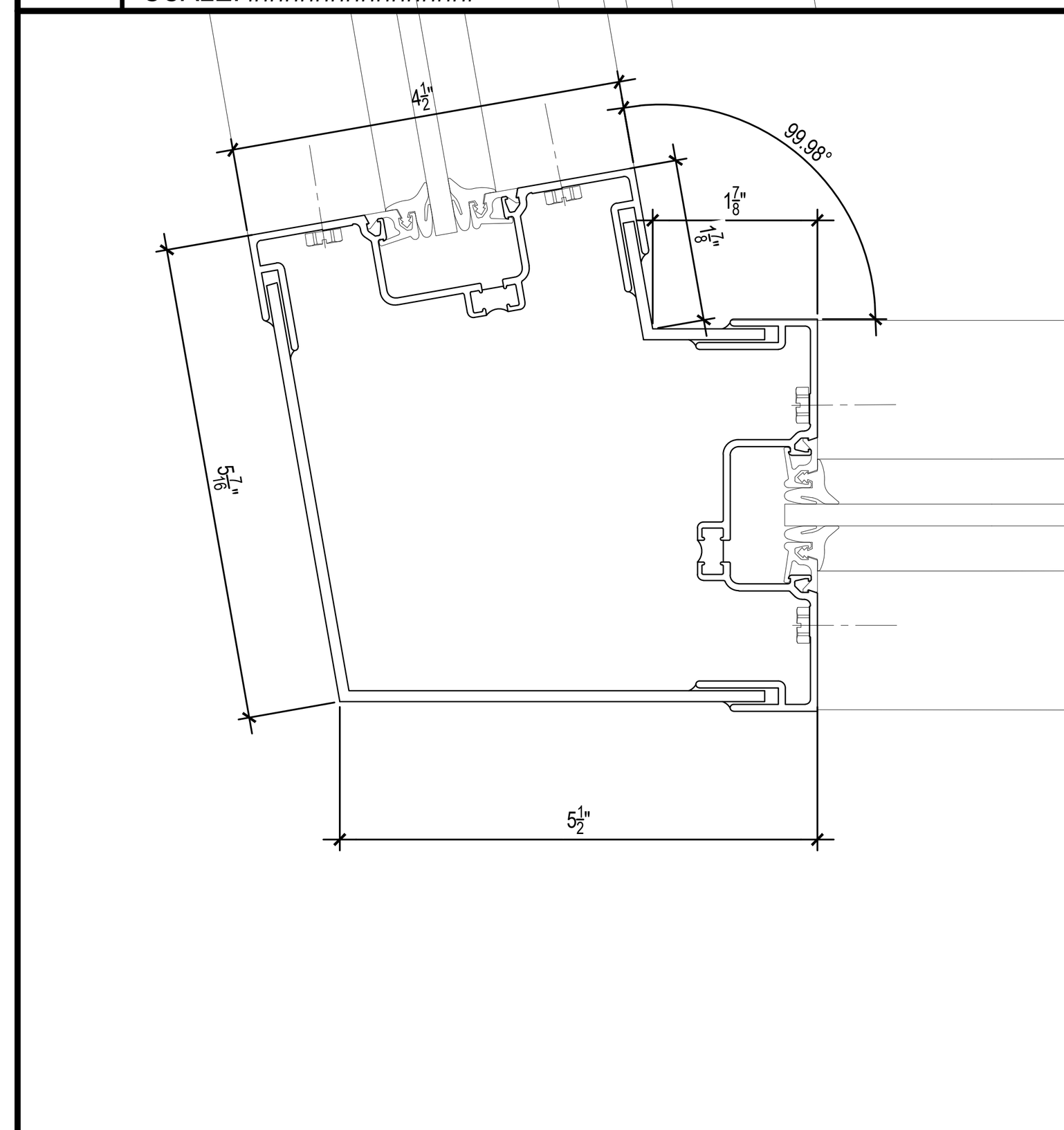

09 WINDOW CORNER
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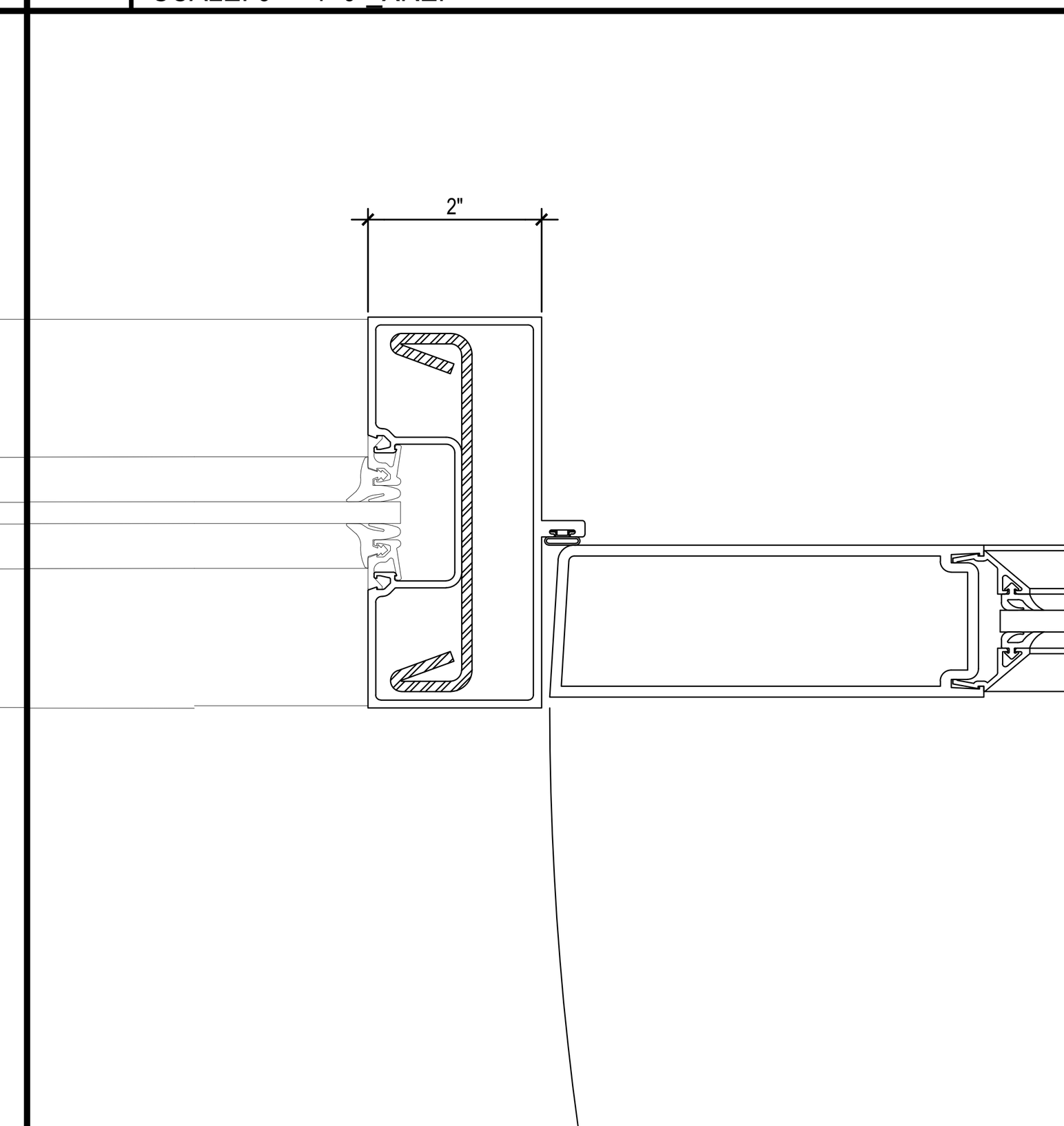

10 DOOR STRIKE JAMB
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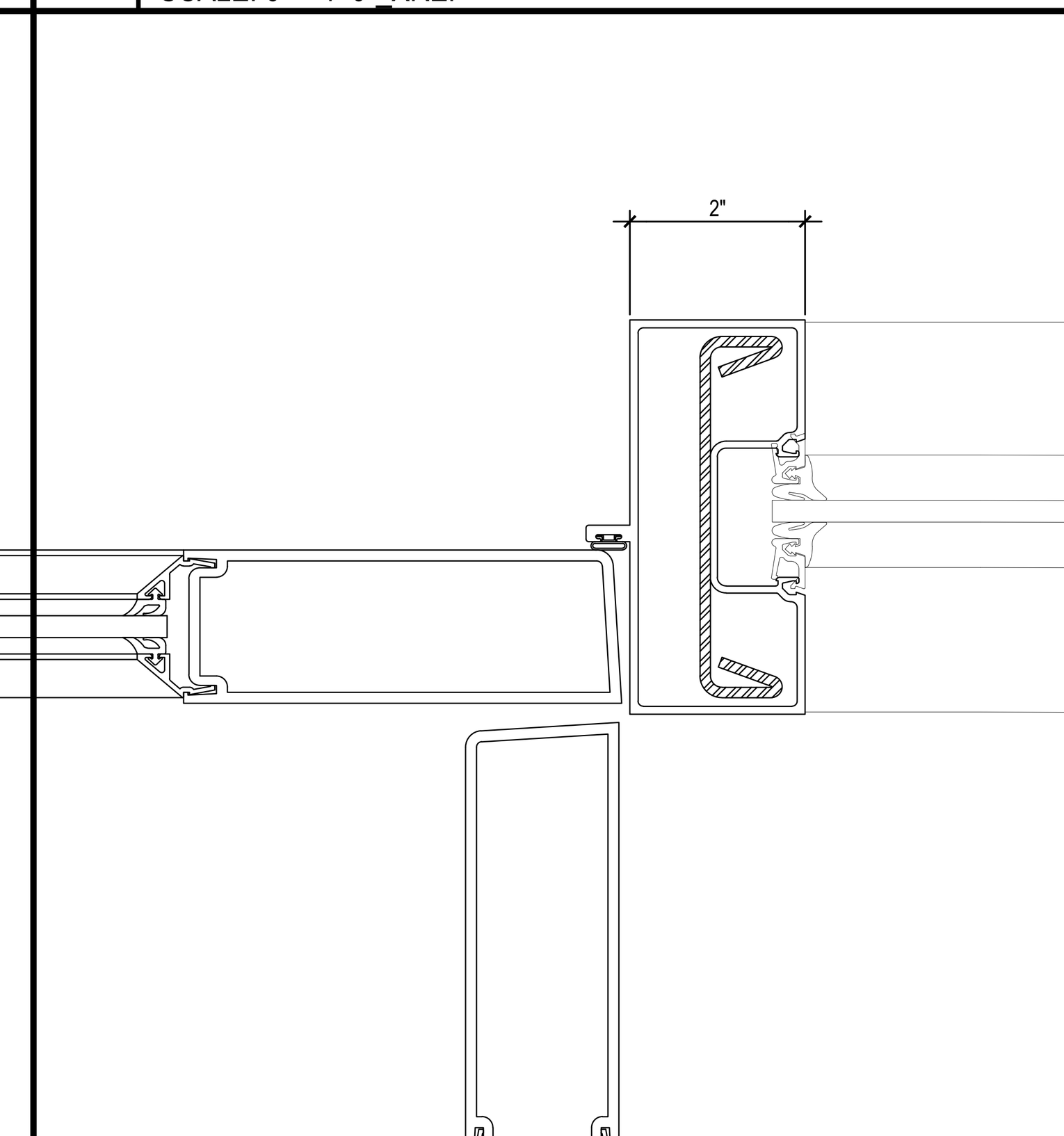

11 DOOR HINGE JAMB
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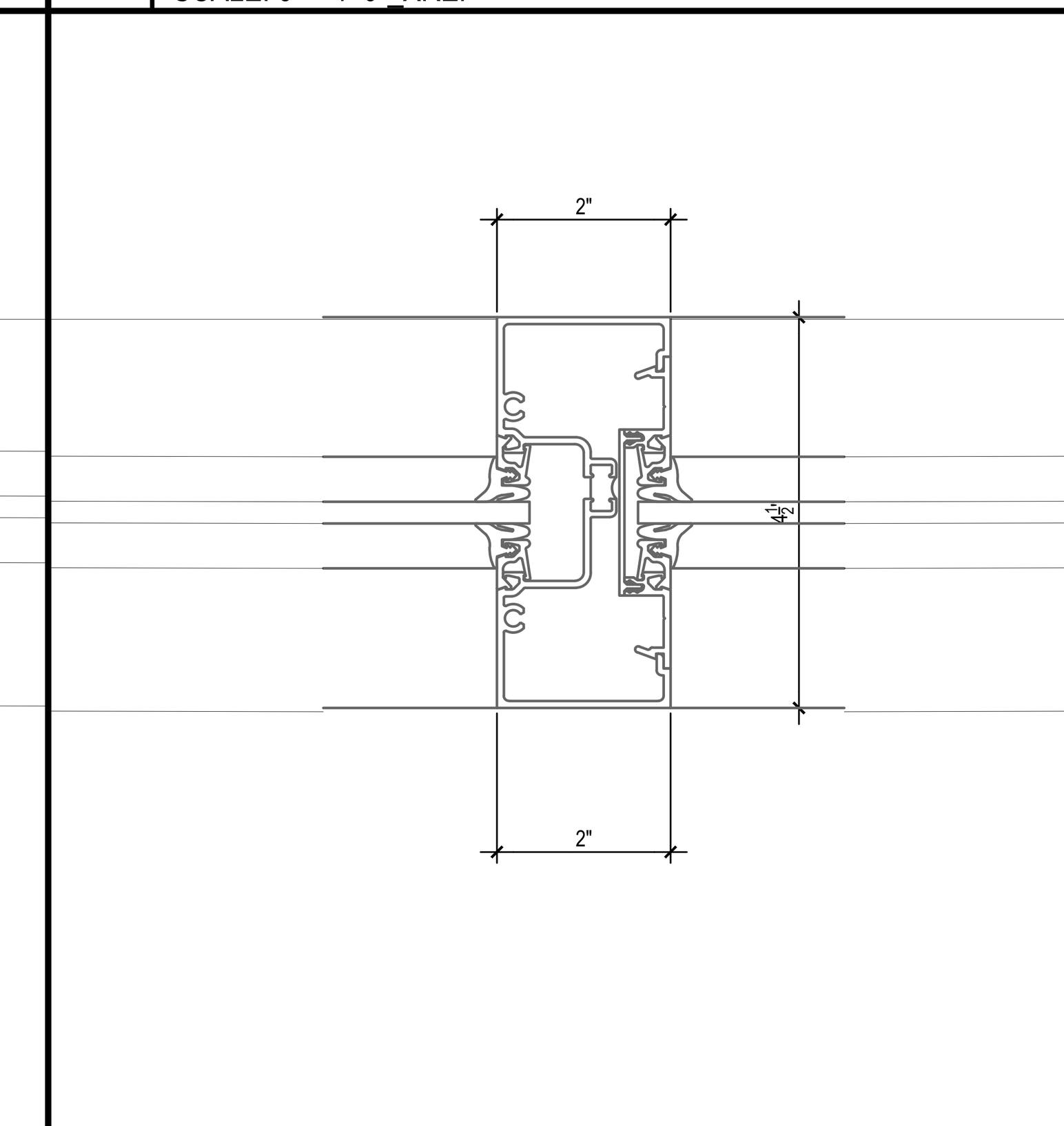
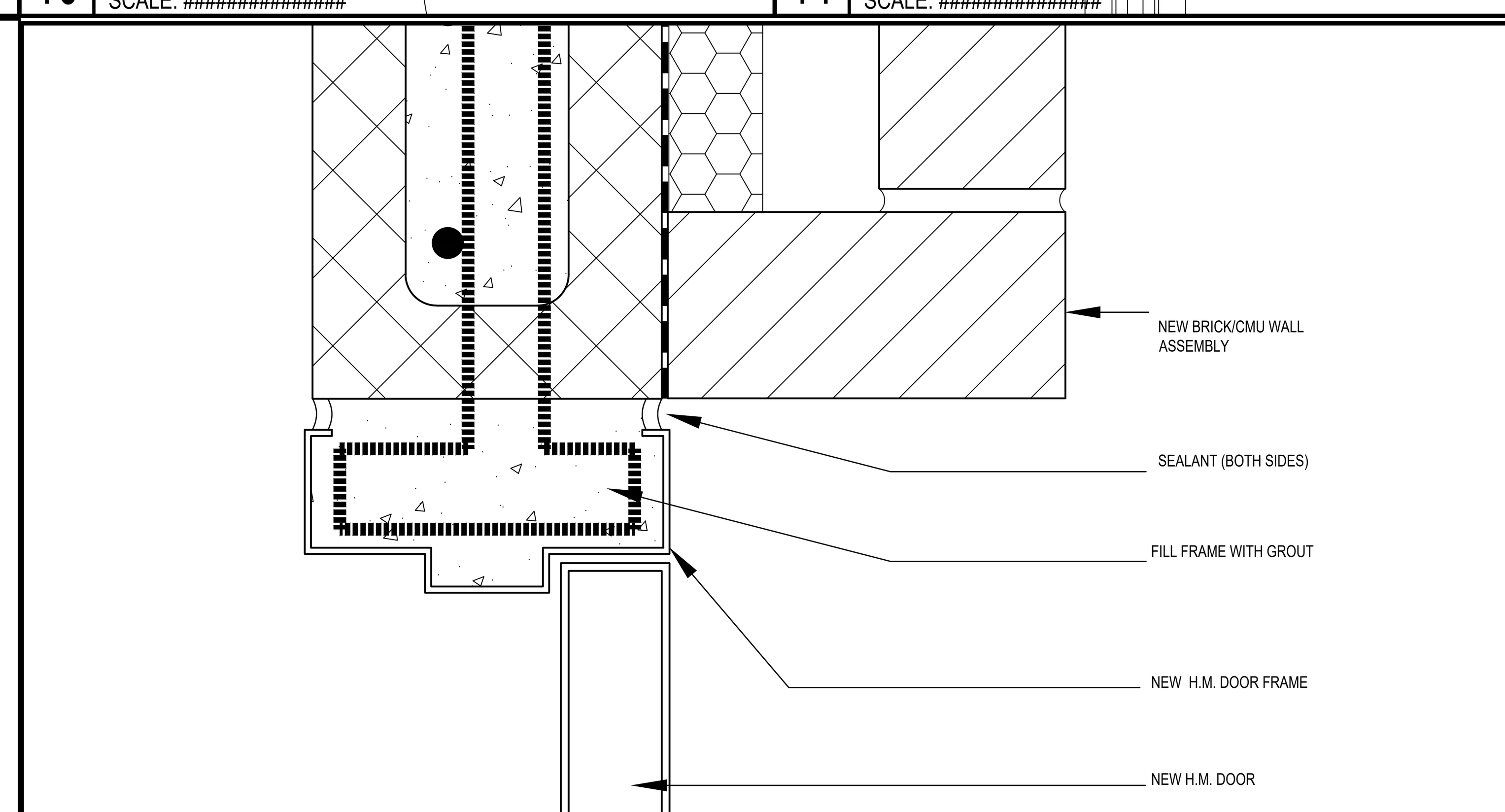


12 WINDOW MULLION
SCALE: ##############

SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025) Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

03 PROJECT SCHEDULE



04 EXTERIOR DOOR HEAD JAMB
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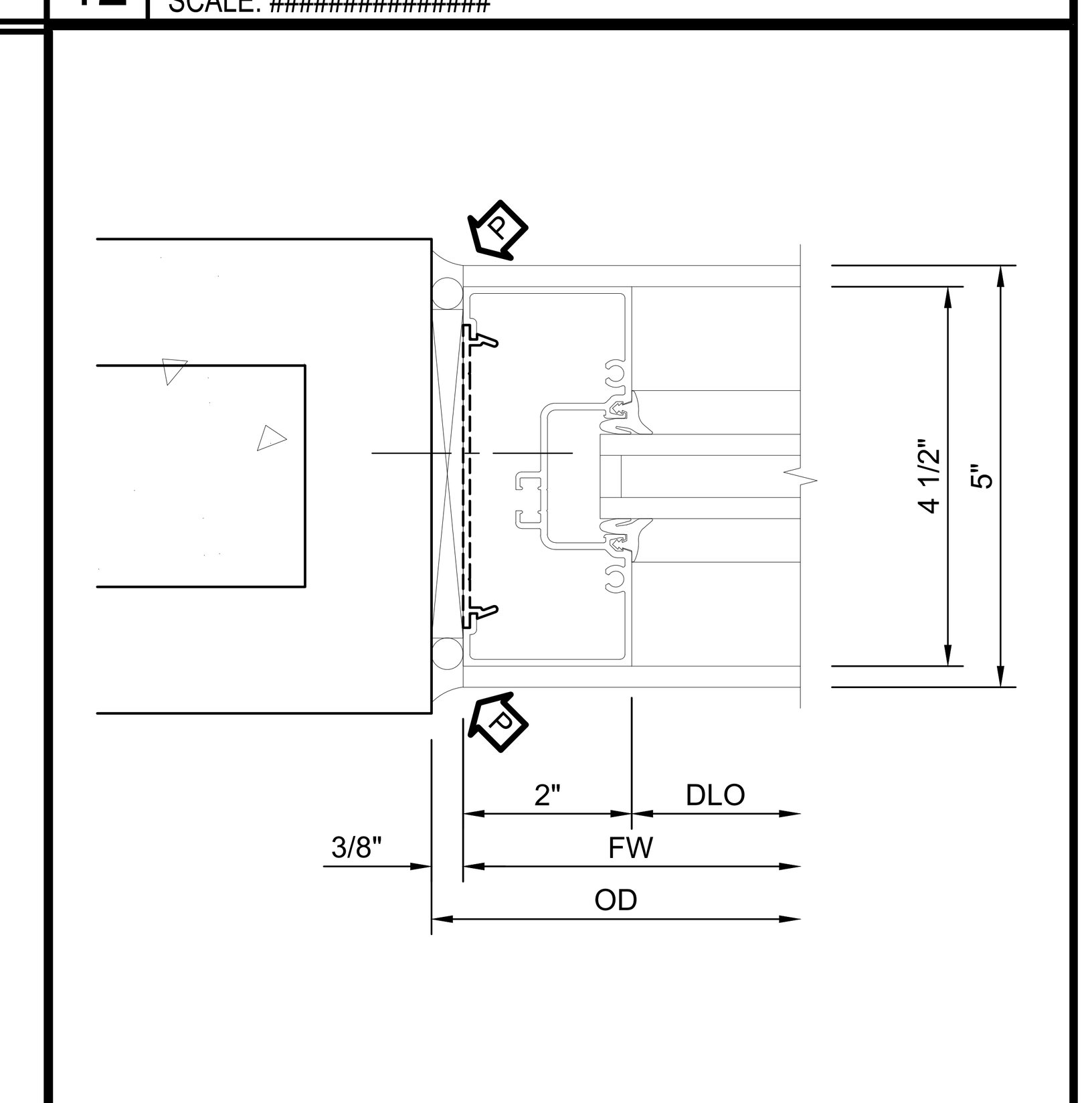


06 WINDOW JAMB
SCALE: 6" = 1'-0"_XREF

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

U

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

SEAL
REGISTERED ARCHITECT NOE ALMAGUER 22651 STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
GENERAL NOTES AND ABBREVIATIONS

A00-01

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\A00-01 GENERAL NOTES AND ABBREVIATIONS.dwg Jul 23, 2025 - 4:56pm

GENERAL DEMOLITION NOTES
(NOT ALL NOTES USED ON EACH SHEET)

1. REFER TO SHEET A00-01 FOR DEMOLITION GENERAL NOTES. THESE NOTES APPLY TO ALL SCHOOL KITCHENS.
2. COORDINATE EXTENT OF SAW CUTTING AREAS WITH NEW RECESSED SLAB FOR COOLER/FREEZER LAYOUTS, NEW SERVICE ENTRANCE FLOOR AND EXISTING KITCHEN LAYOUTS THAT REMAIN. SEE STRUCTURAL DRAWINGS AND SLAB DIMENSION CONTROL PLANS FOR ADDITIONAL SCOPE.
3. REMOVE PROTECT AND REINSTALL ALL EXISTING SURFACE MOUNTED FIRE EXTINGUISHERS (TYPES ABC AND K) AT ALL KITCHENS.
4. SAWCUT AND RE-LOCATE EXPOSED CONDUITS AND WIREMOLD TO INSIDE OF WALLS. PATCH AND PAINT. EXCEPTION: WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS.
5. CONTRACTOR TO RELOCATE EXISTING KITCHEN EQUIPMENT AND OFFICE FURNITURE TO TEMPORARY KITCHEN LAYOUT AS REQUESTED BY KITCHEN MANAGER. ALSO THAT THE IT EQUIPMENT IS PROTECTED DURING RENOVATIONS. ALL EXISTING EQUIPMENT SHALL BE RETURNED TO OWNER.
6. EXISTING TACKBOARDS TO BE REMOVED BY OWNER.
7. IF PRESENT, EXISTING SAFE IN EACH KITCHEN TO BE TEMPORARILY REMOVED DURING RENOVATION AND REINSTALLED IN KITCHEN AREA.
8. ORIGIN POINT OF EXISTING CEILING GRID SHALL BE IDENTIFIED. NEW CEILING WILL BE INSTALLED (AS MUCH AS POSSIBLE) AT THE SAME ORIGIN POINT SO THAT SPRINKLER SYSTEM PIPING CAN REMAIN UNCHANGED.
9. ABOVE-CEILING INFRASTRUCTURE SHALL REMAIN UNDISTURBED AS MUCH AS IS POSSIBLE. CEILING DEVICES ARE TO BE REMOVED FROM EXISTING GRID/TILE THEN DURING RE-INSTALATION OF CEILING DEVICES SHALL BE LOCATED AS CLOSE TO ORIGINAL LOCATION AS POSSIBLE INTO THE NEW GRID/TILE. PROTECT AND STORE EXISTING INFRASTRUCTURE (CABLING, ELECTRICAL POWER, PIPING) DURING CONSTRUCTION.
10. EXISTING HOOD IN WAREWASH AND (2) HOODS IN PRODUCTION AREA ARE TO BE CLEANED, INSPECTED, SERVICED AND REFURBISHED TO A LIKE NEW CONDITION. THEY ARE TO REMAIN IN PLACE.

KEYED DEMOLITION NOTES
(NOT ALL NOTES USED ON EACH SHEET)

1. REMOVE EXISTING THINSET SYNTHETIC TERRAZZO FLOOR AND TERRAZZO COVE BASE MATERIAL IF ANY EXISTS THROUGHTOUT KITCHEN AREA. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOOR. RE: FINISH PLAN FOR NEW FLOOR FINISH MATERIAL.
2. REMOVE EXISTING QUARRY TILE FLOORING AND BASE. CLEAN AND PREPARE SUBFLOOR TO RECEIVE NEW FLOORING. RE: FINISH SCHEDULE FOR NEW FLOOR FINISH MATERIAL.
3. CEILING DEVICES: REMOVE SMOKE DETECTORS, STROBES, EXIT SIGNAGE, MOTION DETECTORS AND CEILING SPEAKERS. PROTECT AND RE-INSTALL AFTER FINISHES ARE APPLIED.
4. REMOVE EXISTING LOCKERS. PROTECT AND RE-INSTALL AFTER FINISHES APPLIED.
5. REMOVE EXISTING WASHER AND DRYER. VERIFY WITH FBISD FOR RELOCATION TO WAREHOUSE.
6. TEMPORARILY REMOVE EXISTING WALL MOUNTED CLOCK AND STORE FOR REINSTALLATION AFTER WALL RECEIVED NEW FINSH.
7. REMOVE EXISTING WALK-IN COOLER/FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT SPACE. MITIGATE ANY MOLD FOUND.
8. REMOVE EXISTING DOOR AND PROTECT EXISTING FRAME TO REMAIN
9. REMOVE EXISTING DOOR AND FRAME, PROTECT FRAME AND OR DOOR IF IT IS SCHEDULED TO REMAIN.
10. REMOVE PARTIAL EXISTING CMU PARTITION FOR NEW DOOR OPENING
11. INSPECT EXISTING WAREWASH COUNTER DOOR AND S.S. PASS-THRU WINDOW CHUTE. REPAIR REPLACE DAMAGED COMPONENTS. CLEAN, LUBRICATE AND RE-INSTALL.
12. EXISTING CARD READER ACCESS TO REMAIN
13. EXISTING WINDOW TO REMAIN
14. REMOVE EXISTING KITCHEN EQUIPMENT THROUGHOUT KITCHEN INCLUDING WALK-IN COOLER / FREEZER AND CONDENSING UNIT LOCATED IN ADJACENT ROOM OR OUTSIDE OF THE BUILDING. VERIFY WITH OWNER FOR RELOCATION TO WAREHOUSE. SOME EQUIPMENT IS TO BE RE-USED IN TEMPORARY SERVING LINES. SEE ALSO GENERAL DEMOLITION NOTE 6.
15. REMOVE EXISTING FRP AND PREP FOR NEW TILE FINISH.
16. COORDINATE REMOVAL AND STORAGE OF ANY EXISTING FURNITURE ITEMS WITH OWNER. SEE ALSO GENERAL DEMOLITION NOTE 5.
17. REMOVE EXISTING SOAP AND PAPER TOWEL DISPENSER AND RETURN TO OWNER
18. EXISTING WALL MOUNTED ACCESSORIES SIGNS, DISPLAY BOARDS, AND MATS TO BE REMOVED BY FORT BEND ISD (VERIFY EQUIPMENT - IF ANY).
19. REMOVE EXISTING SURFACE MOUNTED FIRE EXTINGUISHER. RE-INSTALL AFTER NEW FINISH APPLIED.
20. REMOVE EXISTING ACOUSTIC CEILING TILE CEILNG SYSTEM AND LIGHT FIXTURES, HVAC DEVICES, SENSORS, ETC. THROUGHTOUT RENOVATED AREAS. PREP FOR NEW SUSPENDED CEILING. EXISTING SPRINKLE SYSTEM TO REMAIN AS-IS UNLESS ROOM CONFIGURATION HAS CHANGED IN NEW DESIGN. PROTECT RECESSED SPRINKLER HEADS AND - RE-INSTALL IN NEW CEILING.
21. REMOVE EXISTING CASEWORK/SHELVING
22. EXISTING CERAMIC WALL TILE TO REMAIN. PROTECT FROM DAMAAGE.
23. REMOVE EXISTING COAT HANGER / ROD / SHELF
24. REMOVE EXISTING PLUMBING FIXTURES IN RESTROOMS. RE: PLUMBING FOR NEW FIXTURES.
25. REMOVE EXISTING UTILITY SINK. RE: PLUMBING FOR NEW PLUMBING FIXTURES.
26. REMOVE EXISTING MOP HOLDER. REPLACE WITH NEW UNIT AS SPECIFIED.
27. REMOVE EXISTING WALL MOUNTED CLEANING SOLUTION DISPENSER (BY FBISD VENDOR)
28. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
29. HOOD TO REMAIN - SEE GENERAL DEMOLITION NOTE 10.
30. REMOVE FLOORING IN THIS AREA FOR NOTE 1.
31. REMOVE CARTIDGE FILTER AND WATER PURTICATION CABNET

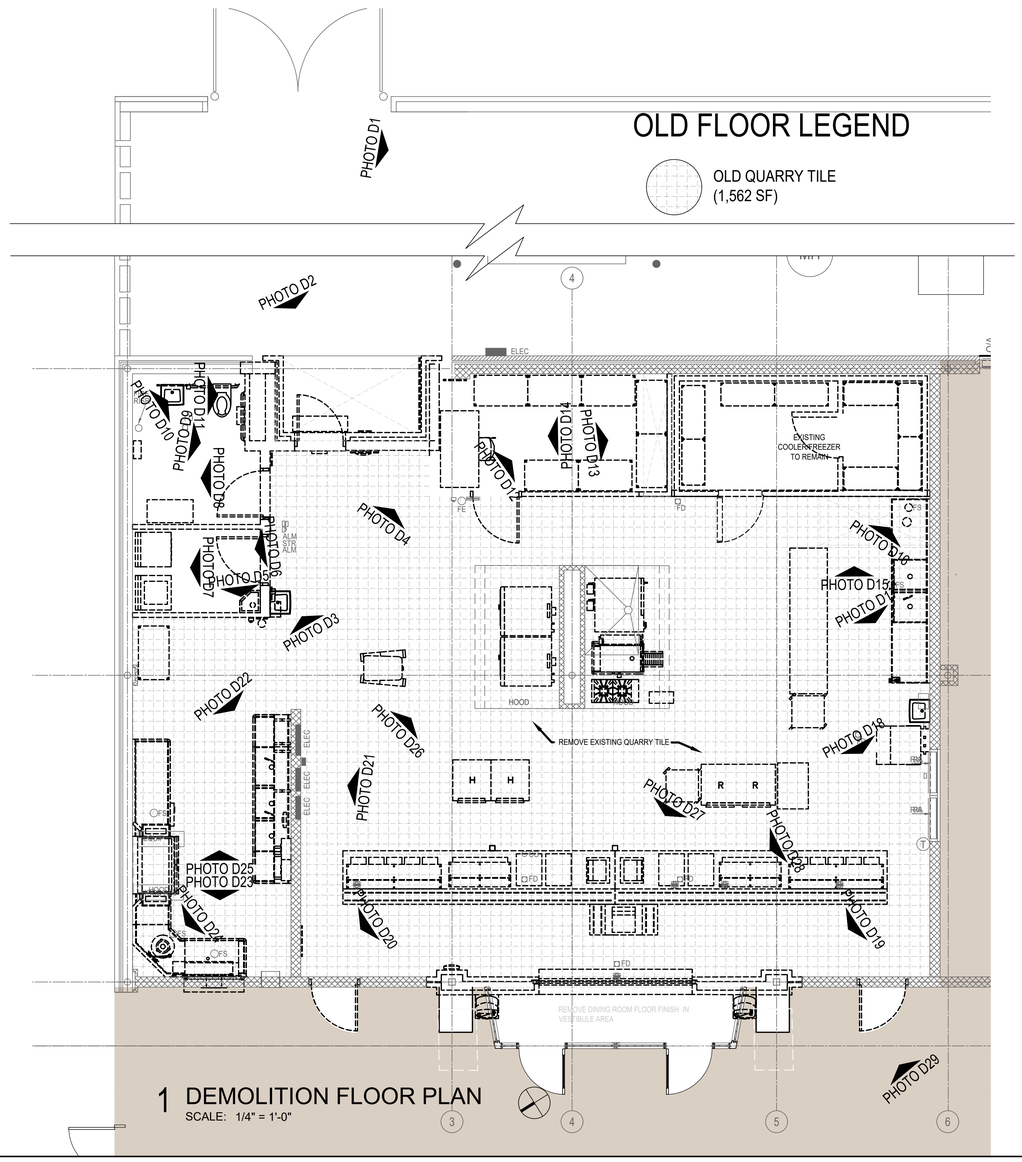
DEMOLITION LEGEND

- EXISTING PARTITION TO REMAIN
- REMOVE EXISTING PARTITION
- EXISTING CMU PARTITION
- REMOVE DOOR AND FRAME TO REMAIN
- REMOVE EXISTING DOOR AND FRAME
- EXISTING PLUMBING FIXTURES (WATER CLOSET, HAND LAVATORY, AND MOP SINK TO BE REMOVED. RE: PLUMBING DRAWINGS.
- EXISTING ACOUSTIC CEILING TILE AND GRID TO BE REMOVED. RE: ELECTRICAL DRAWINGS.
- SPRINKLER HEAD (RECESSED)
- CLOCK
- CEILING MOUNTED SPEAKERS

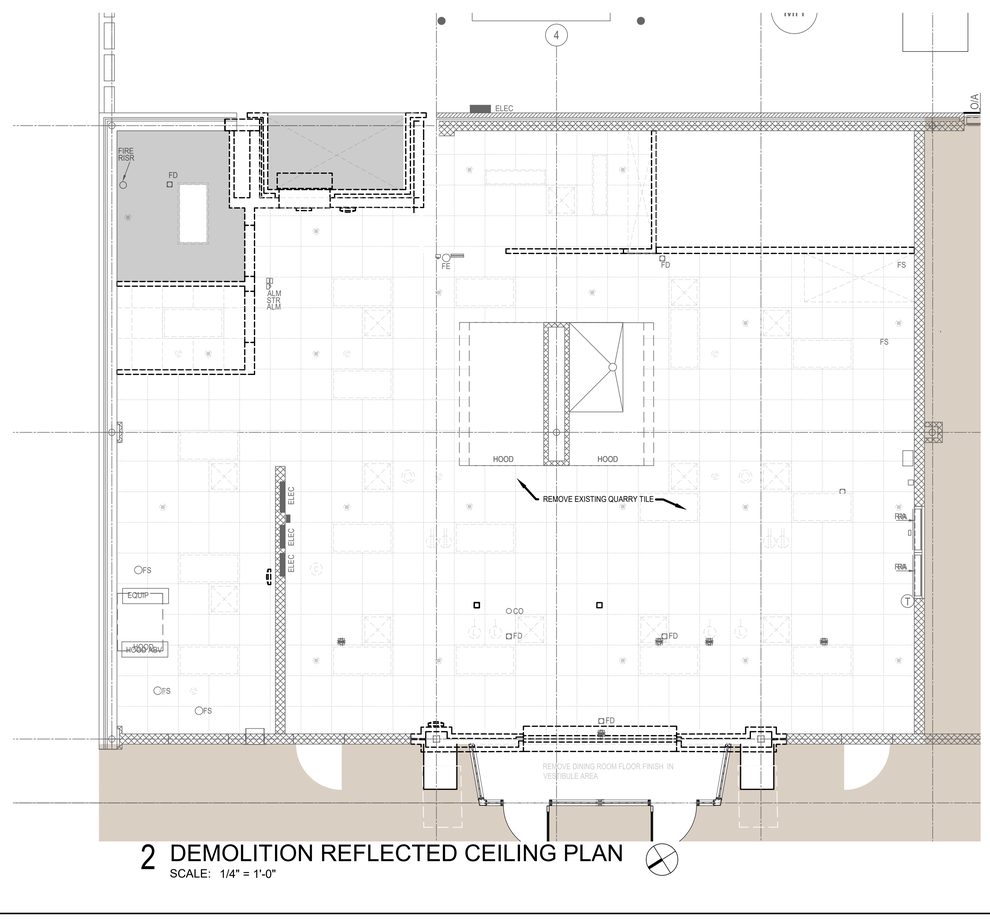
3 DEMOLITION NOTES

OLD FLOOR LEGEND

OLD QUARRY TILE
(1,562 SF)



1 DEMOLITION FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 DEMOLITION REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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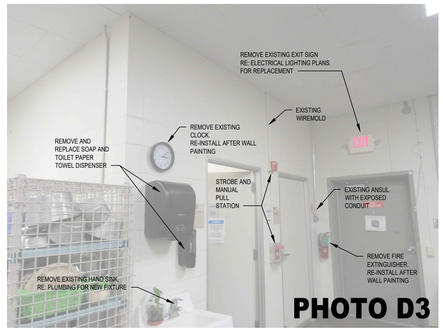
DEMO PLAN

u-D.101

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\U-Sugar Mill ESIu-A D.101 DEMO PLAN.dwg Jul 23, 2025 - 4:57pm


PHOTO D1


PHOTO D2



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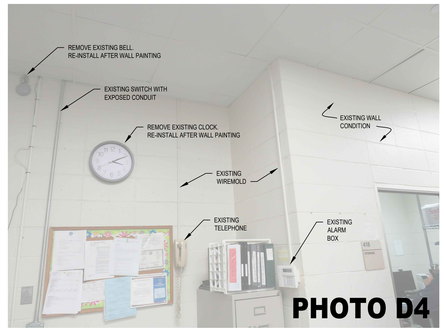


PHOTO D4



PHOTO D5

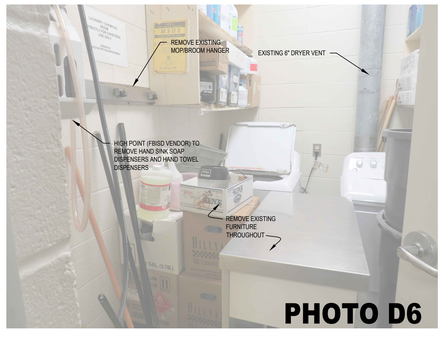


PHOTO D6



PHOTO D7


PHOTO D8



PHOTO D9



PHOTO D10



PHOTO D11



PHOTO D12

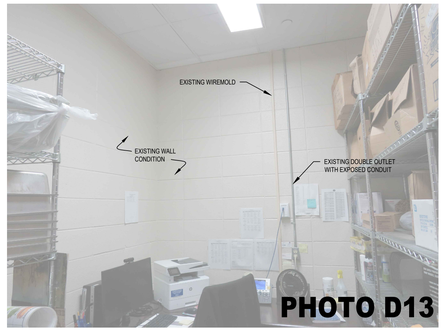


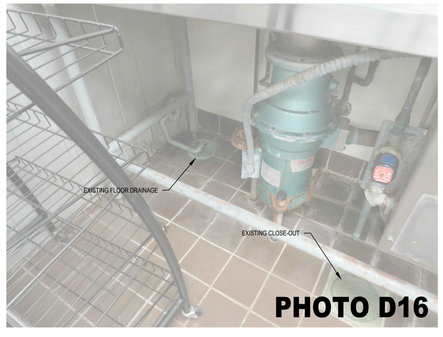
PHOTO D13



PHOTO D14



PHOTO D15



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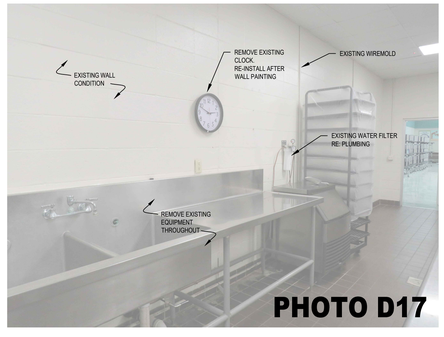

PHOTO D17



PHOTO D18



PHOTO D19



PHOTO D20

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FORT BEND INDEPENDENT SCHOOL DISTRICT
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DEMO PLAN PHOTOS
u-D.101-2

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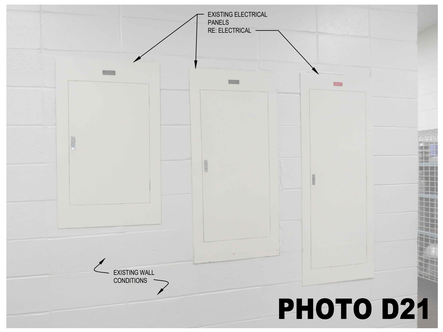

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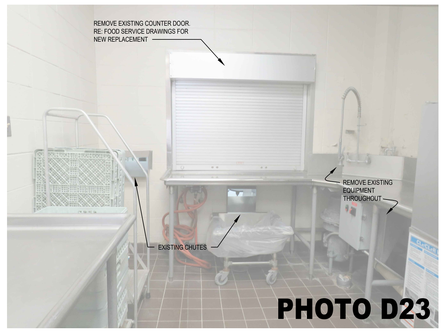

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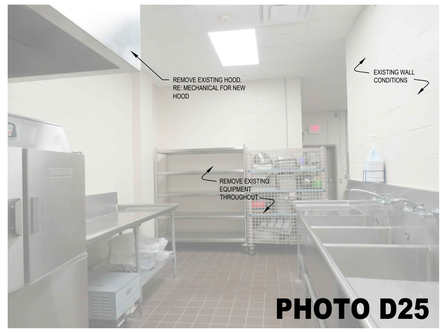

PHOTO D25



PHOTO D26



PHOTO D27



PHOTO D28

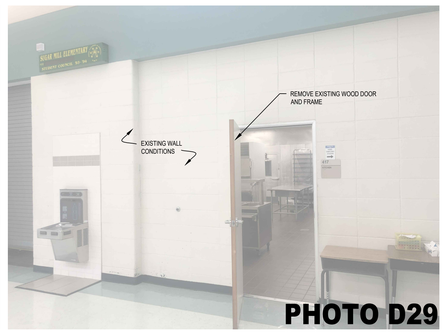

PHOTO D29


PHOTO D30

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FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILL ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD,
SUGAR LAND, TX 77498

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22651
STATE OF TEXAS

7/15/2025

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DEMO PLAN PHOTOS

u-D.101-3

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NEW PANEL

TEMP KITCHEN

PANEL LTK

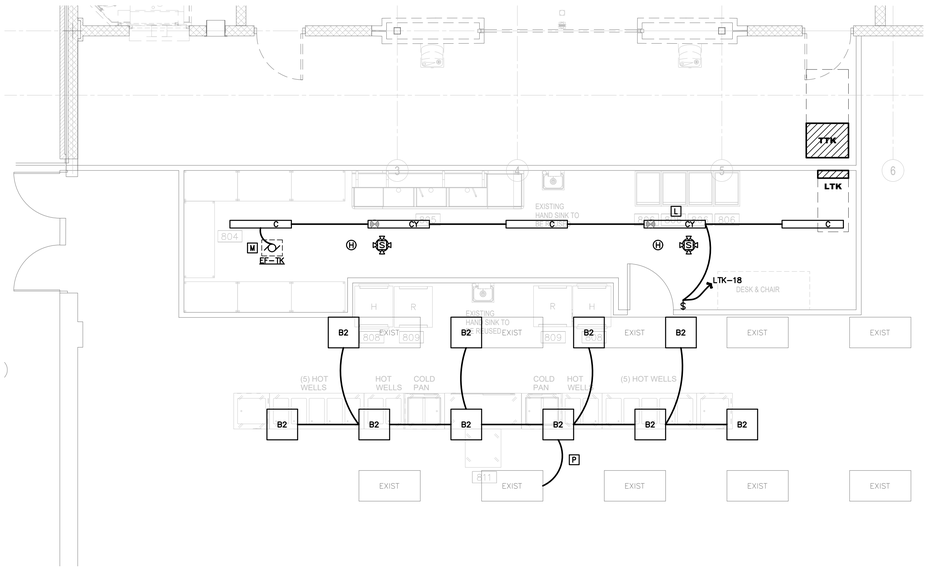
150A MCB
208Y/120V, 3ϕ, 4 WIRE

AVAILABLE FAULT: <10,000A
SCCR & AIC: 10,000A

MOUNTING: SURFACE

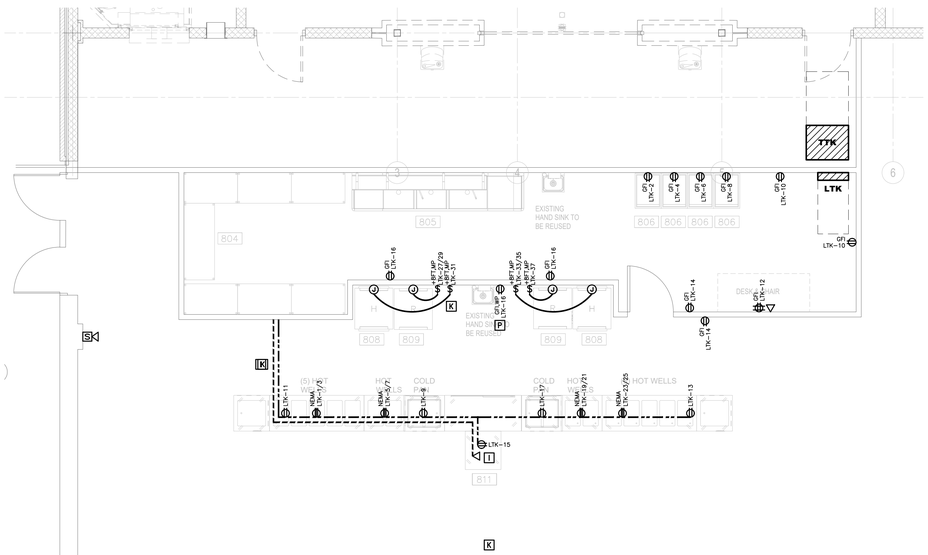
NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E810	2766	HOT WELLS	2–12	20/2GFI	1	■			2	20/1	3–12	TRANSPORT CART	1920	E806	
		–	–	+12G	–	3		■		4	20/1	3–12	TRANSPORT CART	1920	E806	
	E810A	1643	HOT WELLS	2–12	20/2GFI	5			■	6	20/1	3–12	TRANSPORT CART	1920	E806	
		–	–	+12G	–	7	■			8	20/1	3–12	TRANSPORT CART	1920	E806	
	E810B	600	COLD PAN	3–12	20/1GFI	9		■		10	20/1	3–12	2 REC	360	E800A	
	E810C	1200	BEVERAGE	3–12	20/1GFI	11			■	12	20/1	3–12	2 REC – DESK	360	E800B	
	E810C	1200	BEVERAGE	3–12	20/1GFI	13	■			14	20/1	3–12	2 REC	360	E800A	
	E811	180	CASH REGISTER	3–12	20/1GFI	15		■		16	20/1	3–12	3 REC	360	E800A	
	E810B	600	COLD PAN	3–12	20/1GFI	17			■	18	20/1	3–12	TEMP. KITCHEN LTS/FAN	566		
	E810A	1643	HOT WELLS	2–12	20/2GFI	19	■			20	20/1		SPARE			
		–	–	+12G	–	21		■		22	20/1		SPARE			
	E810	2766	HOT WELLS	2–12	20/2GFI	23			■	24	20/1		SPARE			
		–	–	+12G	–	25	■			26	20/1		SPARE			
	E808	1622	HEATED CABINET	2–12	20/2	27		■		28	20/1		SPARE			
		–	–	+12N+12G	–	29			■	30	20/1	3–12	EXISTING CIRCUIT	500		3
	E809	984	REFRIGERATOR	3–12	20/1	31	■			32	20/1	3–12	EXISTING CIRCUIT	500		3
	E808	1622	HEATED CABINET	2–12	20/2	33		■		34	15/2	2–12	EXISTING CIRCUIT	1000		3
		–	–	+12N+12G	–	35			■	36	–	+12N+12G	–	–		
	E809	984	REFRIGERATOR	3–12	20/1	37	■			38	20/2	2–12	EXISTING CIRCUIT	1000		3
			SPARE		20/1	39		■		40	–	+12N+12G	–	–		
			SPARE		20/1	41			■	42	50/2	2–8	EXISTING CIRCUIT	5000		3
			SPARE		20/1	43	■			44	–	+8N+10G	–	–		
			TOTAL LOAD @ 100% = 35498VA								TOTAL LOAD @ 100% = 99A					

1. REF. KITCHEN CONSULTANT'S "FCS" DRAWINGS FOR KITCHEN EQUIPMENT NUMBERS.
2. A DEMAND FACTOR PERCENT OF 65% HAS BEEN APPLIED TO THE KITCHEN EQUIPMENT LOAD PURSUANT TO NEC 220–20 AND NEC TABLE 220–20.
3. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.



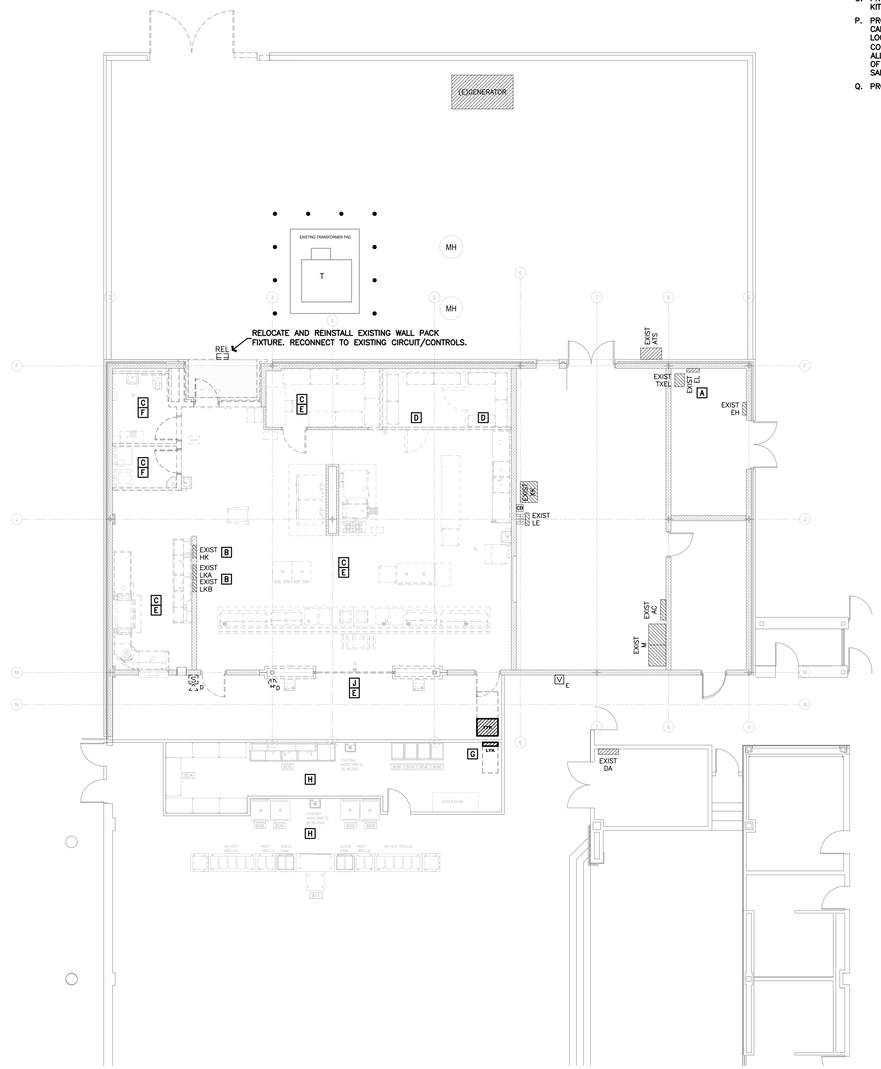
T1 TEMPORARY KITCHEN - LIGHTING PLAN

SCALE: 1/4" = 1'– 0"



T2 TEMPORARY KITCHEN - ELECTRICAL PLAN

SCALE: 1/4" = 1'– 0"



1 DEMOLITION FLOOR PLAN

SCALE: 1/8" = 1'– 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

DEMOLITION NOTES:

A. EXISTING STANDBY GENERATOR PANEL TO REMAIN.

B. EXISTING KITCHEN PANELS TO BE REPLACED WITH NEW. MODIFY EXISTING WALLS TO MATCH NEW PANEL LAYOUTS AND DIMENSIONS.

C. EXISTING LIGHTING FIXTURES AND CEILING DEVICES TO BE REMOVED THROUGHOUT.

D. EXISTING WALK–IN COOLER/FREEZER AND ASSOCIATED EQUIPMENT TO BE REMOVED.

E. EXISTING WALL ELECTRICAL DEVICES TO BE REMOVED. EXISTING J–BOXES MAY BE REUSED WHERE NEW DEVICES ARE TO BE INSTALLED AT THE SAME LOCATIONS.

F. EXISTING ELECTRICAL DEVICES TO BE REMOVED.

G. NEW 208Y/120V PANEL AND TRANSFORMER FOR TEMPORARY KITCHEN TO BE INSTALLED PRIOR TO DEMOLITION. PANEL AND TRANSFORMER TO BE REMOVED AT END OF KITCHEN RENOVATION AND TURNED OVER TO THE DISTRICT. INSTALL TRANSFORMER ON PREMADE FIBERCRETE PAD AND WAFFLE TYPE VIBRATION ISOLATION PADS. DO NOT PROVIDE A POURED IN PLACE CONCRETE PAD AT THIS LOCATION.

H. PROVIDE RECEPTACLES AND LIGHT FIXTURES FOR TEMPORARY KITCHEN DURING RENOVATION. ALL TEMPORARY DEVICES AND EQUIPMENT TO BE REMOVED AT END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE.

I. CONDUITS ROUTED FROM TEMPORARY KITCHEN WALL AND BENEATH SERVING LINE. PROVIDE MULTICHANNEL ROLLOVER CABLE PROTECTOR FOR EXPOSED CONDUITS NOT UNDER THE SERVING LINE. ALL CONDUITS UNDER THE SERVING LINE SHALL BE SECURED TO/ROUTED ON TOP OF UNISTRUT AND NOT DIRECTLY ON THE FLOOR. DO NOT ANCHOR UNISTRUT TO THE EXISTING FLOORING. COORDINATE POWER AND DATA OUTLET LOCATIONS WITH OTHER TRADES.

J. REMOVE EXISTING LIGHT FIXTURES ABOVE NEW KITCHEN EXTENSION. MODIFY EXISTING WIRING TO MAINTAIN REMAINING FIXTURE OPERATION.

K. HARDWIRE KITCHEN EQUIPMENT TO LOCAL ON/OFF SWITCH. TYPICAL.

L. SURFACE MOUNT FIXTURES ON TEMPORARY KITCHEN CEILING. TYPICAL.

M. WIRE TEMPORARY KITCHEN FAN TO LOCAL LIGHTING CIRCUIT AND CONTROLS. FAN SHALL BE ON/OFF WITH LIGHTS.

N. EXISTING EXTERIOR LIGHT FIXTURES TO BE REMOVED.

O. PROVIDE NEW FIRE ALARM DEVICES AS PART OF THE TEMPORARY KITCHEN BUILDOUT.

P. PROVIDE NEW TEMPORARY LIGHT FIXTURES IN THE EXISTING CAFETERIA CEILING ABOVE THE SERVING LINE. COORDINATE LOCATIONS WITH TEMPORARY SERVING LINE AND EXISTING CONDITIONS. CONNECT TO EXISTING LIGHTING CONTROLS/CIRCUIT. ALL TEMPORARY LIGHT FIXTURES SHALL BE REMOVED AT THE END OF KITCHEN RENOVATION AND OFFERED TO THE OWNER AS SALVAGE. PROVIDE REPLACEMENT CEILING TILES.

Q. PROVIDE IN–USE WEATHERPROOF COVER FOR RECEPTACLE.

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FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILL ELEMENTARY SCHOOL
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PROJ. NO.: 23-25
DATE: 07/18/2025
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ELECTRICAL DEMO AND TEMP PLANS

u-ED.100

STANTON ENGINEERING GROUP
INFO@STANTON–ENG.COM (713) 300–6282 | TEXAS ENG. FIRM REG. NO. F–018332 | 1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

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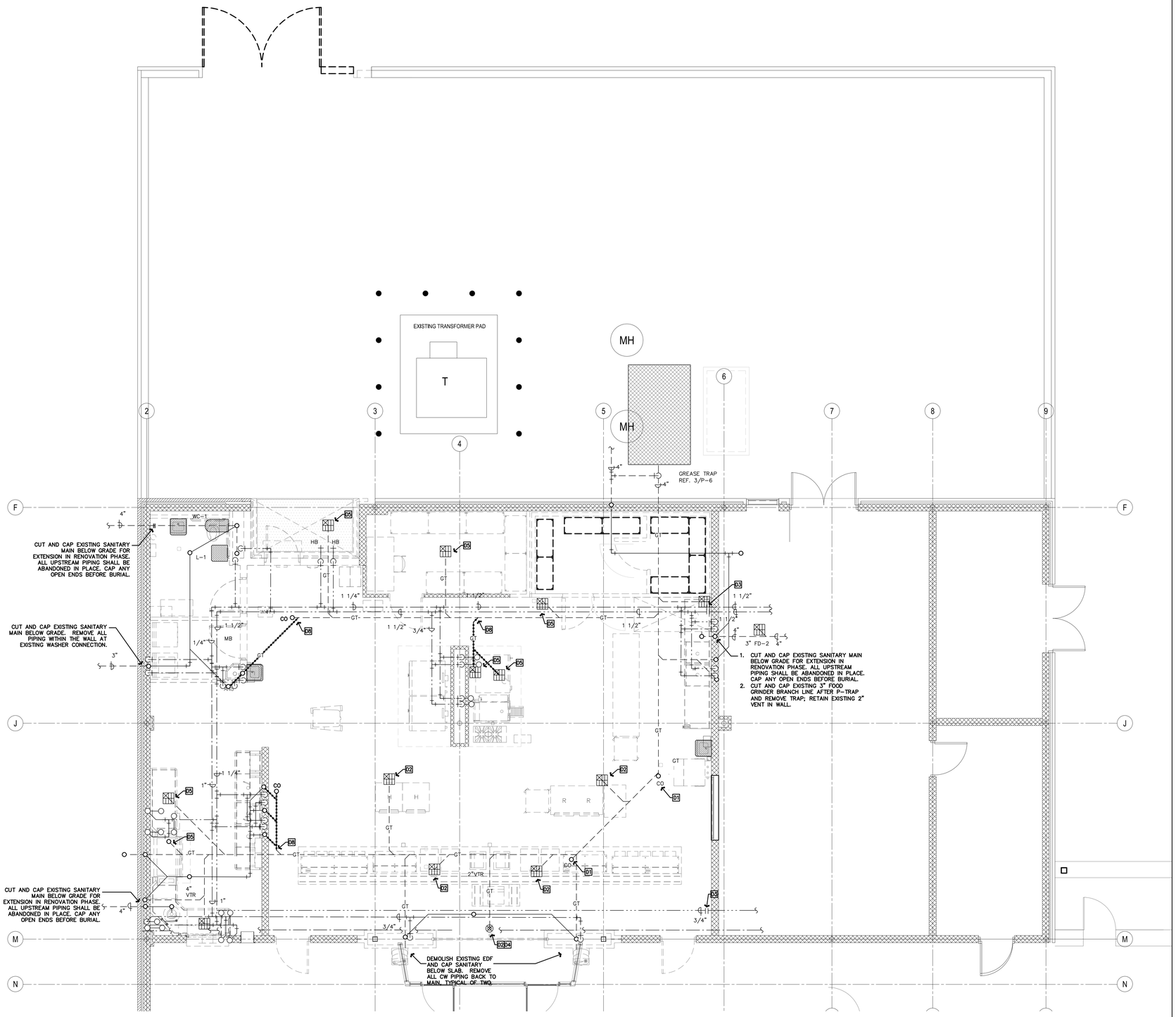

DEMOLITION KEYED NOTES

D1 EXISTING CLEAN OUT SHALL BE REPLACED WITH NEW. CHIP OUT SLAB AROUND CLEANOUT TO REMOVE.

D2 EXISTING FLOOR DRAIN SHALL BE REPLACED WITH NEW, INCLUDING P-TRAP. CHIP OUT SLAB AROUND DRAIN TO REMOVE FLOOR DRAIN AND EXISTING P-TRAP.

D3 CUT AND CAP EXISTING HW/CW FOR FUTURE EXTENSION. DEMOLISH ALL PIPING WITHIN KITCHEN. DEMOLITION SHALL BE DELAYED UNTIL NEW CW MAIN AND HW PIPING LOOP IS INSTALLED IN PARALLEL. CW/HW SERVICE TO THE TEMPORARY KITCHEN SHALL BE UNINTERRUPTED DURING OCCUPIED HOURS. COORDINATE SWITCHOVER FROM EXISTING PIPING TO NEW WITH OCCUPANCY SCHEDULE.

D4 EXISTING FLOOR DRAIN TIED TO GREASE WASTE SYSTEM. DRAIN IS BEING USED FOR TEMPORARY KITCHEN INDIRECT WASTE AND SHALL REMAIN ACTIVE DURING OCCUPIED HOURS. COORDINATE DEMOLITION AND REPLACEMENT WITH TEMPORARY KITCHEN USAGE.

D5 DEMOLISH EXISTING DRAIN A CAP BELOW SLAB.

D6 EXISTING SPACE BEING DEMOLISHED. CAP EXISTING SANITARY MAIN BELOW SLAB AND REMOVE UPSTREAM PIPING. CUT/CHIP OUT SLAB AS REQUIRED AND REPAIR TO MATCH EXISTING.

D7 TEMPORARILY CAP EXISTING SANITARY MAIN BELOW SLAB AND REMOVE UPSTREAM PIPING. CUT/CHIP OUT SLAB AS REQUIRED AND REPAIR TO MATCH EXISTING. PIPING TO BE REPLACED WITH NEW TRUNK AND ADDITIONAL DRAIN BRANCH LINES.

D8 CUT AND CAP EXISTING SANITARY MAIN BELOW GRADE FOR EXTENSION IN RENOVATION PHASE. ALL UPSTREAM PIPING SHALL BE ABANDONED IN PLACE. CAP ANY OPEN ENDS BEFORE BURIAL.

1 PLUMBING DEMOLITION FLOOR PLAN

SCALE: 1/4" = 1'- 0"

STANTON ENGINEERING GROUP

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SUGAR LAND, TX 77498

SEAL

STATE OF TEXAS
TYLER W. HERRING
106052
LICENSED
PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS

ARCHITECTS AND PLANNING CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

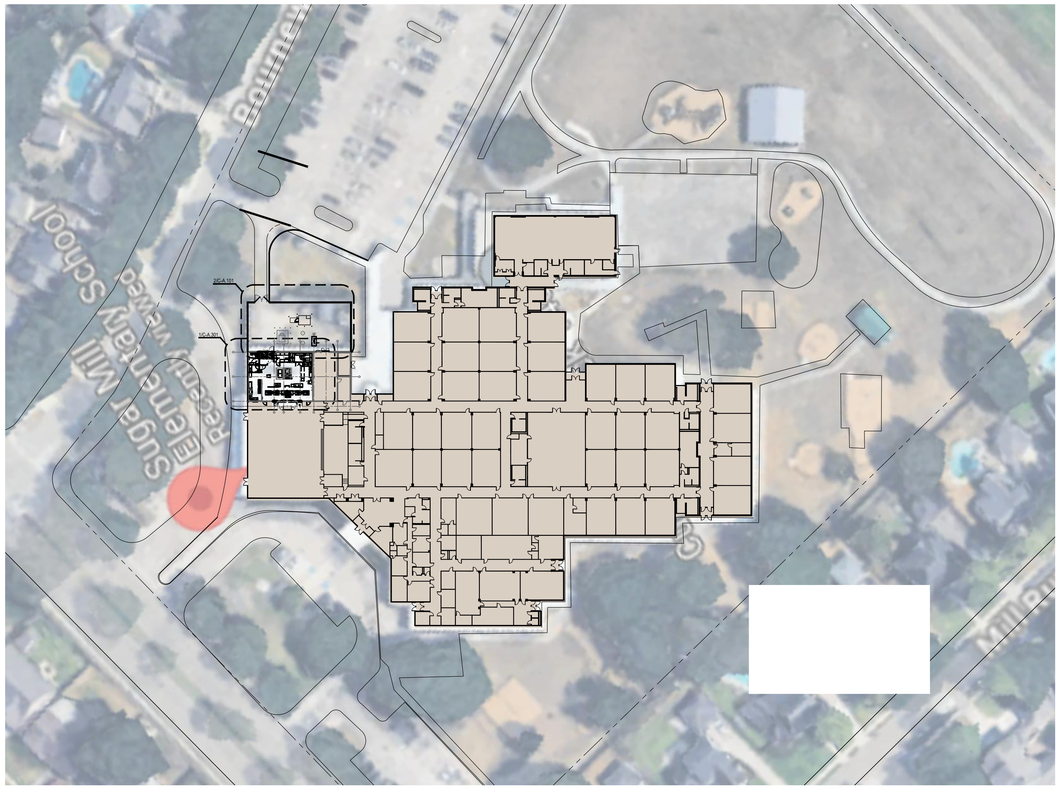
PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

PLUMBING DEMOLITION FLOOR PLAN

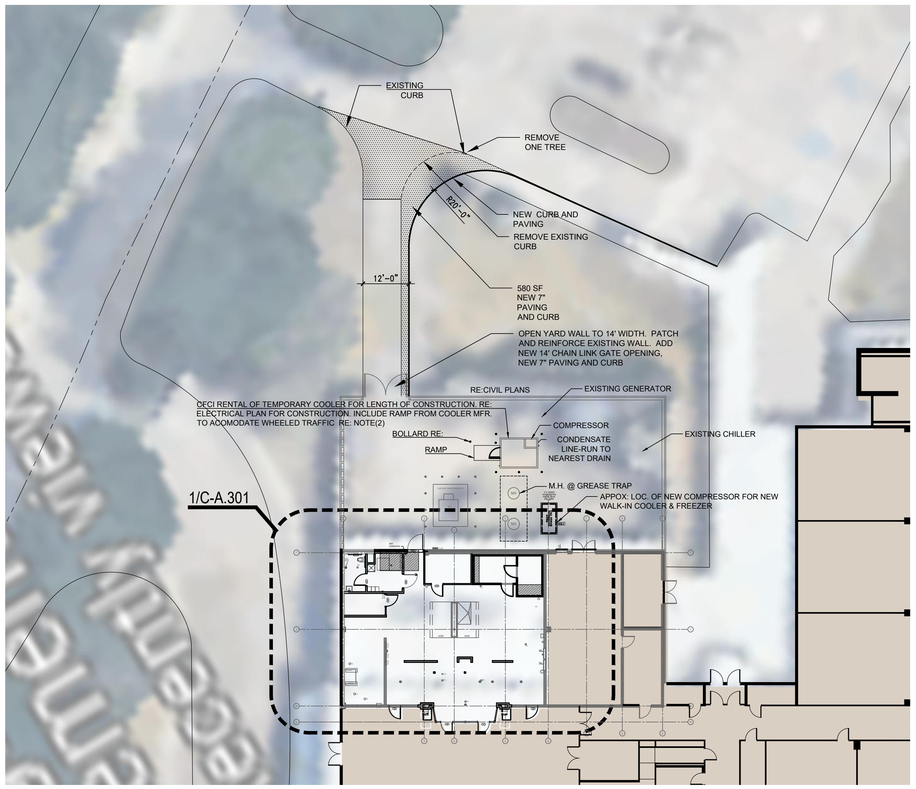
u-PD1.01

NUMBERED NOTES: FOR 2/a-A.101

1. COOLER RENTAL UNIT; APPROX. 8' X 10' BASIS OF DESIGN: MODEL DT810 BY POLAR LEASING REFRIGERATION RENTAL
2. INCLUDE OPTIONAL DIAMOND TREAD RAMP SUITABLE FOR WHEELED TRAFFIC
3. LOCATION SHOWN IS SUBJECT TO OWNER APPROX. LOCATION MUST NOT BLOCK DELIVERIES TO REAR DOOR. MUST BE WITH 10' OF AREA DRAIN, AND WITHIN 100' OF ELECTRICAL POWER.
4. CONTRACTOR SHALL SCAN PAVING FOR BURIED UTILITIES BEFOR CUTTING CONC.



1 SITE PLAN
SCALE: 1" = 30'-0"



2 ENLARGED SITE PLAN
SCALE: 1/16" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

SEAL
REGISTERED ARCHITECT
ROBERT A. MEYER
23621
STATE OF TEXAS
7/15/2025

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SITE PLAN

u-A.101

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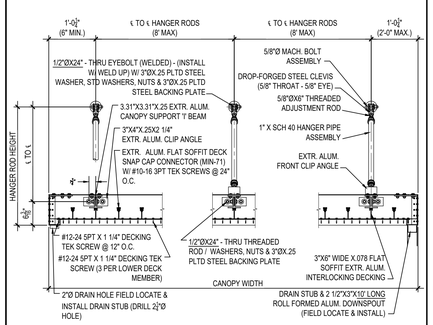
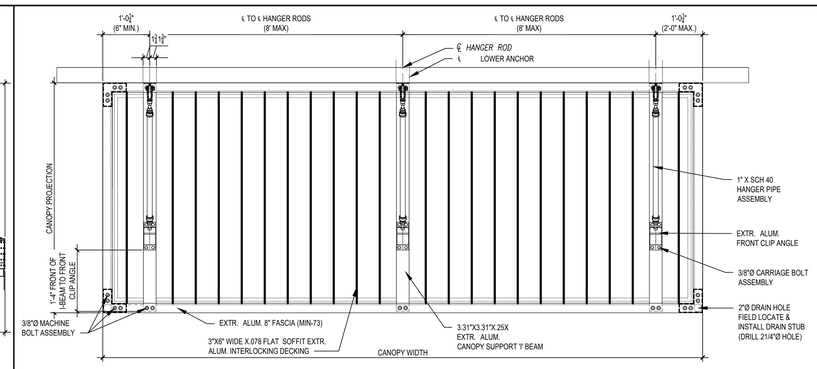
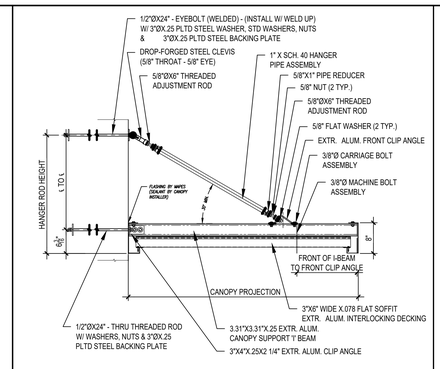


10 CANOPY DETAILS
3/4" = 1'-0"



11 CANOPY PLAN
3/4" = 1'-0"



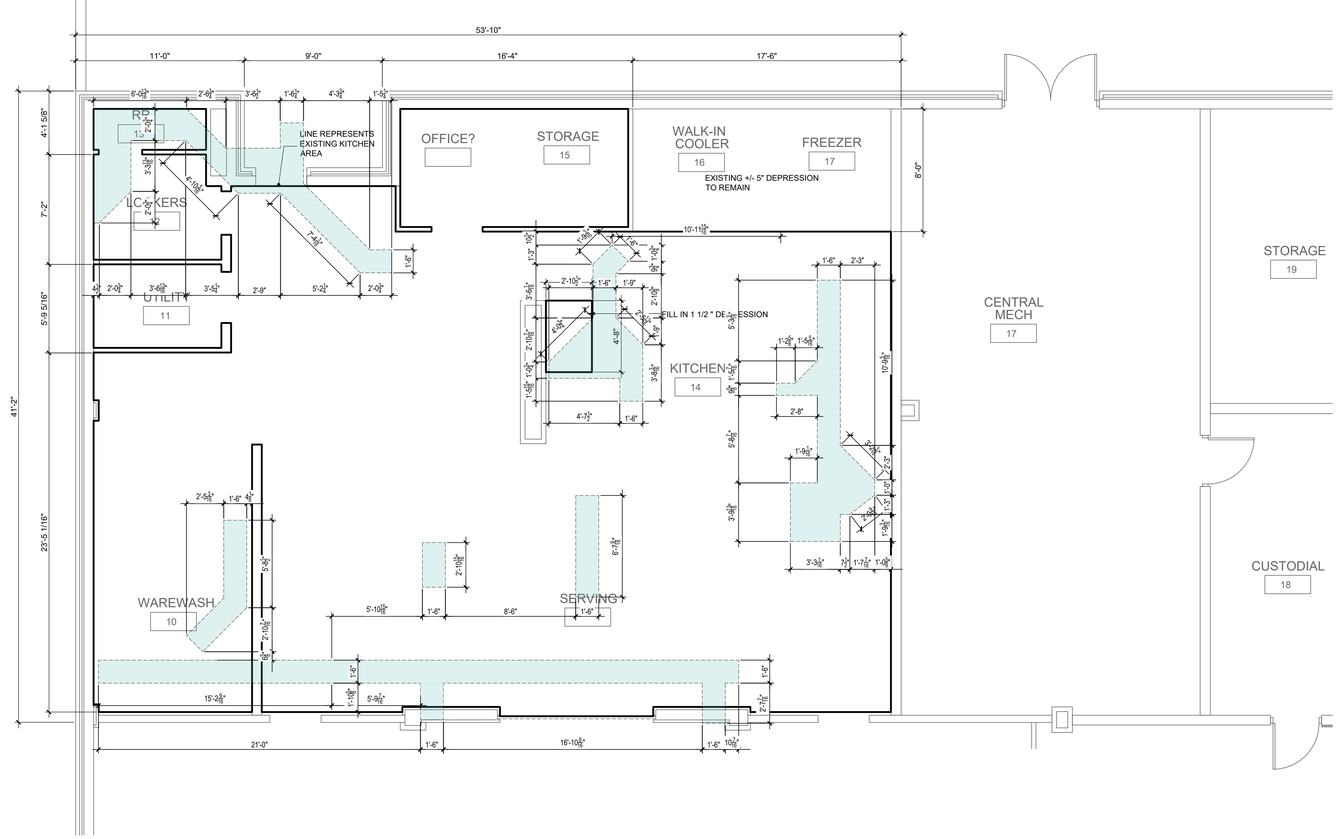
12 CANOPY SECTION
3/4" = 1'-0"

NOTES:
1. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, FIXTURES, OR ELECTRICAL ITEMS.
2. SHADED AREA REPRESENTS APPROXIMATE SAWCUT AREAS NEEDED FOR PLUMBING ALTERATIONS.
3. CONTRACTOR TO DETERMINE EXTENT OF CONCRETE SLAB SAW CUTTING AS REQUIRED FOR ALL UTILITIES REQUIRED FOR THIS PROJECT.
4. SPLICE NEW REINFORCING BARS AND DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES.
5. PREPARE CONCRETE TO RECEIVE NEW FINISH.

HATCHED AREA REPRESENTS APPROXIMATE AREA THAT WILL NEED TO BE EXCAVATED IN ORDER TO MAKE PLUMBING ALTERATIONS OUTSIDE THE BUILDING. CONTRACTOR TO REMOVE CONCRETE WALKS, PAVING, AND EXCAVATE AS REQUIRED IN ORDER TO INSTALL NEW PLUMBING. BACK FILL AND RESTORE AFFECTED AREAS. REFER TO CIVIL DETAILS.

SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS AND DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.

SHADED AREA REPRESENTS APPROXIMATE SAWCUT AREAS NEEDED FOR PLUMBING ALTERATIONS. CONTRACTOR TO DETERMINE EXTENT OF CONCRETE SLAB SAW CUTTING AS REQUIRED FOR ALL PLUMBING REQUIRED FOR THIS PROJECT.



1 SLAB DEPRESSION PLAN
SCALE: 1/4" = 1'-0"

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\u-Sugar Mill ES\u-A 200 SLAB DIMENSION CONTROL PLAN.dwg Jul 23, 2025 - 4:59pm

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SUGAR LAND, TX 77498

SEAL
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MICHAEL K. WILLIAMS
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STATE OF TEXAS
7/15/2025

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SLAB DIMENSION CONTROL PLAN

u-A.200

SCOPE OF WORK: KITCHEN REPLACEMENT OF FLOOR, WALL, AND CEILING FINISHES, AS WELL AS, REPLACEMENT OF KITCHEN EQUIPMENT. PROVIDE ADDITIONAL KITCHEN STORAGE FOR CEP. UPGRADE TO BACK DOOR DELIVERY AREA.

ADOPTED CODES WITH AMMENDMENTS OF CITY OF MISSOURI CITY, TX

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL RESIDENTIAL CODE
- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2023 NATIONAL ELECTRIC CODE NFPA 70
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2021 INTERNATIONAL FUEL GAS CODE
- 2021 INTERNATIONAL FIRE CODE

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY:

SPRINKLERED

INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS	**B**
CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS	**C**
ROOMS AND ENCLOSED SPACES	**C**

FLOORING SHALL BE CLASS II

2021 INTERNATIONAL EXISTING BUILDING CODE

301.3.1 PRESCRIPTIVE COMPLIANCE METHOD. REPAIRS, ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH CHAPTER FIVE OF THIS CODE IN BUILDINGS COMPLYING WITH THE INTERNATIONAL FIRE CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

302.3 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE .

302.4 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED THAT NO UNSAFE CONDITION IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT PERMIT THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

ALTERATION - LEVEL 1 INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES THAT SERVE THE SAME PURPOSE.

ALTERATION - LEVEL 2 INCLUDE THE ADDITION OR ELIMINATION OF ANY DOOR OR WINDOW, THE RECONFIGURATION OR EXTENSION OF ANY SYSTEM, OR THE INSTALLATION OF ANY ADDITIONAL EQUIPMENT, AND SHALL APPLY WHERE THE WORK IS EQUAL TO OR LESS THAN 50% OF THE BUILDING AREA.

THIS BUILDING'S CONSTRUCTION IS TYPE IIB.

THIS BUILDING'S OCCUPANCY IS E.

THIS BUILDING'S IS SPRINKLERED.

THERE WILL NOT BE ANY MODIFACATIONS TO THE HOOD SYSTEMS IN THE KITCHENS BEYOND REPLACEMENT OF MOTOR FOR LIKE KIND IF NEEDED.

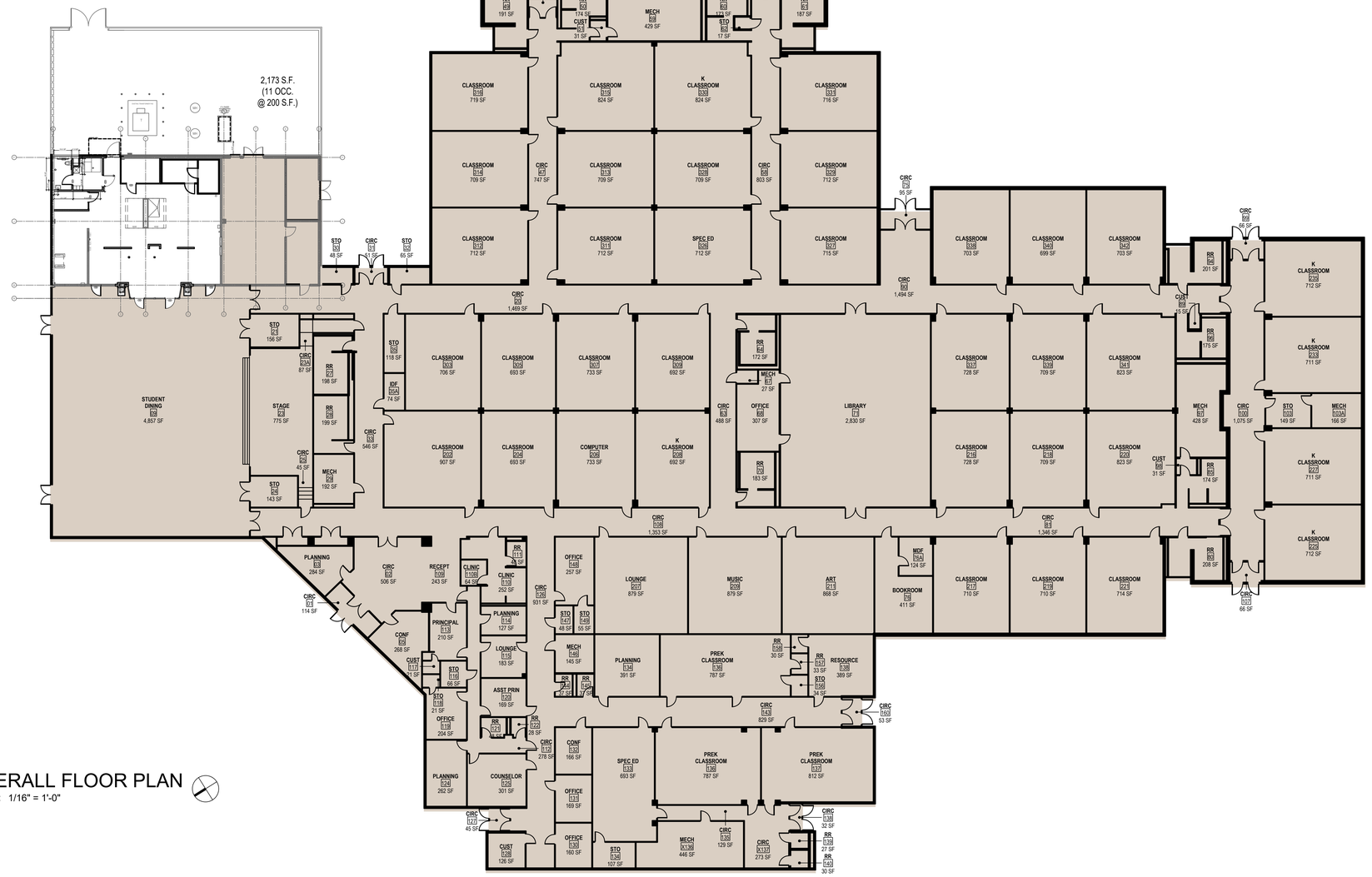
THE BUILDING WILL NOT HAVE ADDITIONAL SQUARE FOOTAGE AS PART OF THE WORK.

NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODES

2 CODE ANALYSIS

RESPONSIBILITY MATRIX

ITEM				CONTRACTOR RESPONSIBILITY		OWNER RESPONSIBILITY		NOTES
EQUIPMENT	**MAKE**	**MODEL**	**BASIS OF DESIGN**	FURNISHED	INSTALL	FURNISHED	INSTALL	
MARKERBOARD			MUST BE MAGNETIC; LOW GLOS, WHITE. NO GREY ALLOWED. 5' X 10'	X	X			
MOTORIZED FOLDING PARTITION			TOP SUPPORTED AND CONTINUOUSLY HINGED, MADE OF 3" THICK STEEL WITH FULL SOUND SEALS. THEY FEATURE AUTOMATIC FLOOR SEALS THAT DEPLOY WHEN POSITIONED. MARKERBOARD FINISHES ARE SUGGESTED FOR CLASSROOM USE. LARGE PARTITIONS SHOULD BE ELECTRONICALLY OPERATED, INTEGRATED WITH THE SCHOOL SYSTEM, AND SUPPORTED FROM THE BOTTOM IN A RECESSED MANNER.	X	X			
PAPER TOWEL DISPENSER			1 PAPER TOWEL DISPENSER PER SINK		X	X		
SOAP DISPENSER			1 SOAP DISPENSER PER SINK		X	X		
COMMERCIAL WASHER	GE	GTW75CPLDG	STAINLESS STEEL; ASTM A666, TYPE 304 WITH NUMBER 4 FINISH. ELECTRIC, 480 VOLTS, 40 LB CAPACITY, MINIMUM EXTRACTOR FORCE: 140 G FACTOR.	X	X			
COMMERCIAL DRYER	GE	GTD75ECPLDG	HEAVY DUTY EMBOSSED STEEL WITH ELECTROSTATICALLY APPLIED BACKED ENAMEL FINISH.	X	X			
MOP RACK			BROOM AND MOP HANGGERS FOR A MINIMUM OF TWELVE (12) HANGERS TO BE PROVIDED IN THE CONTRACT	X	X			
KITCHEN MENU SYSTEM DEVICE			RE: A-GF1.0 SF EQUIPMENT PLAN	X	X			REFERED TO IT DRAWINGS
LOCKERS			12"W X 15"D, 3 TIER, 60" HIGH. 16 GA. DOOR WITH 20GA. BODY	X	X			
MIRROR			TOP EDGE 74 INCHES (1880 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND & BOTTOM EDGE OF THE REFLECTING SURFACE 40 INCHES (1015 MM) MAXIMUM	X	X			
GRAB BARS			AS REQUIRED BY ADA	X	X			
HOOKS			J-HOOKS	X	X			
TIME CLOCK	KRONOS		EXISTING UNIT		X			COORDINATE HEIGHT, DATA, POWER AND ROUGH-IN REQUIREMENTS WITH FBISD IT. REMOVE, PROTECT & REINSTALL EXISITING TIME CLOCK.
KITCHEN OFFICE FURNITURE								
AUSTIN PARKWAY ES						X	X	
PECAN GROVE ES						X	X	
SETTLERS WAY ES						X	X	
SUGAR MILL ES						X	X	
HIGHLANDS ES						X	X	
PALMER ES						X	X	
HUNTERS GLEN ES						X	X	



1 OVERALL FLOOR PLAN

SCALE: 1/16" = 1'-0"

ISSUE:

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OVERALL FLOOR PLAN

u-A.201

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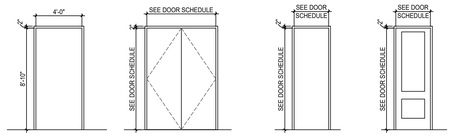
DOOR SCHEDULE

DOOR #	DOOR WIDTH	DOOR HEIGHT	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FIRE RATING	FRAME THICKNESS	FRAME FINISH	KEY	HARDWARE	DETAILS			REMARKS
											SILL	JAMB	HEAD	
A005	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		103		22/A00-01	16/A00-01	
A006	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501		22/A00-01	16/A00-01	
A007	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		341		22/A00-01	16/A00-01	
A008	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501C		22/A00-01	16/A00-01	
A012	4'-0"	X 7'-0"	HM1	H.M.	PAINT	NR	6"	PAINT HM		715V	21/A00-01	04/A00-01	04/A00-01	
109A	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501H		22/A00-01	16/A00-01	
109B	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ANOD AL	NR	4 1/2"	ANOD AL		C201AH	18/A00-01	10&11/A00-01	23&24/A00-01	CARD READER, CLOSER, BUZZER
109C	3'-0"	X 7'-0"	SF1	ALUM/GLASS	ANOD AL	NR	4 1/2"	ANOD AL		C201AH	18/A00-01	10&11/A00-01	23&24/A00-01	CARD READER, CLOSER, BUZZER
109D	3'-0"	X 7'-0"	SF4	SOLID CORE	P LAM	NR	4 1/2"	ANOD AL		501H		22/A00-01	16/A00-01	



NEW DOOR AND FRAME HOLLOW METAL DOOR NEW H.M. FRAME

NEW DOOR AND FRAME HOLLOW METAL DOOR NEW H.M. FRAME

NEW DOOR AND FRAME S. C. WOOD DOOR ALUM. FRAME

NEW DOOR AND FRAME ALUM/GLASS ALUM. FRAME

2 DOOR SCHEDULE

FLOOR PLAN - GENERAL NOTES

1. REFER TO SHEET FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SCHOOL KITCHENS.
2. REFER TO SHEET FOR PARTITION TYPES.
3. EXIXSTING EXPOSED CONDUITS AND DATA CABLING IN WIREMOLD TO BE ROUTED INSIDE WALLS (EXCEPT AT WAREWASH AREA BELOW TABLE HEIGHT AND DRY STORAGE ROOMS). PATCH AND REPAIR AS REQUIRED TO ACHIEVE SMOOTH CLEAN WALL SURFACE.

PARTITION LEGEND

- EXISTING CMU PARTITION
- NEW CMU SCHEDULED PARTITION
- EXISTING METAL PARTITION
- NEW FRAMED SCHEDULED PARTITION

3 FLOOR PLAN NOTES

FLOOR PLAN - KEYED NOTES

(NOT ALL NOTES USED ON EACH SHEET)

01 PROVIDE NEW MOP SINK UTILITY SHELF
RE: PLUMBING FOR MOP SINK
RE: SPEC 10 28 00 FOR UTILITY SHELF

02 REMOVE, STORE & REPLACE WALL MOUNTED FIRE EXTINGUISHER

03 PROVIDE NEW WALL MOUNTED FIRE EXTINGUISHER
RE: SPEC SECTIONS 10 44 13

04 PROVIDE NEW LOCKERS
RE: SPEC 10 51 13.

05 PROVIDE WASHER AND DRYER
RE: SPEC 11 45 20

06 REMOVE, PROTECT & REINSTALL WALL MOUNTED CLOCK.

07 PROVIDE CONDENSING UNIT
FOR WALK-IN COOLER/FREEZER
RE: MECHANICAL AND SPEC 11 40 00

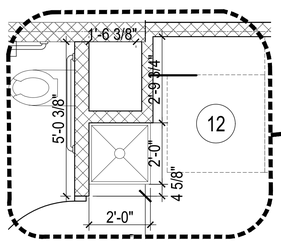
08 PROVIDE POWER AND DATA FOR MENU BOARD.
RE: ELECTRICAL, TECHNOLOGY DRAWINGS & FOOD SE

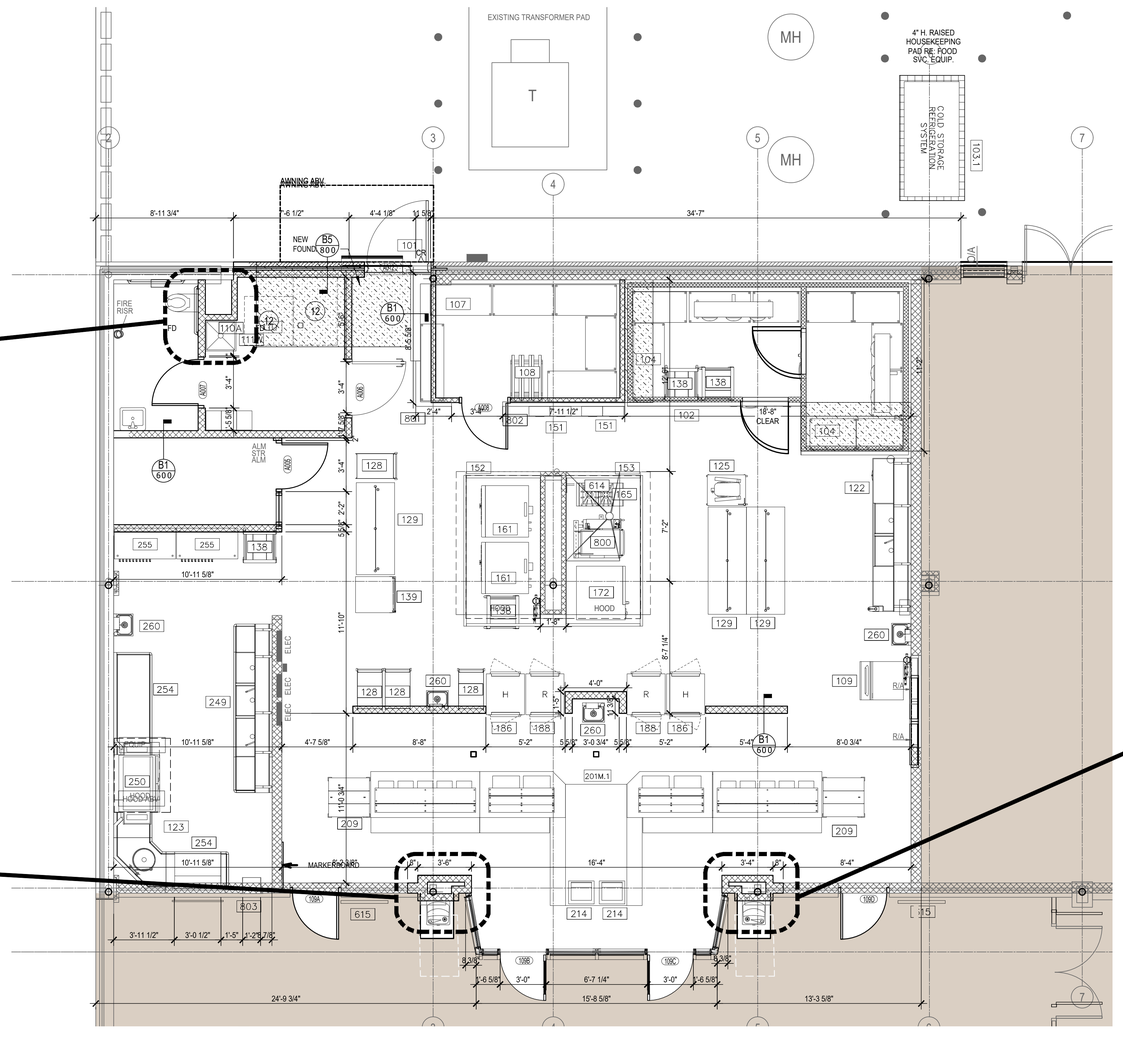
09 PROVIDE P-LAM SHELVING
REFER TO DETAIL FOR BRACKET SUPPORT

10 FURNITURE & NON FOOD SVE EQUIPMENT RETURN TO STORAGE

11 INSPECT & SREVICE TOLLING COUNTER DOORS. RETU NEW CONDITION.

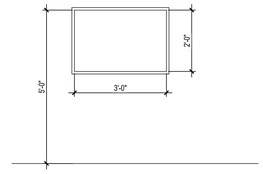
12 COMMERCIAL CLOSED WASHER 40LB CAPACITY.
COMMERCIAL CLOSED DRYER 55LB CAPACITY.
BASIS OF DESIGN: WASHER; SPEED QUEEN SYN040
DRYER; SPEED QUEEN ST055.
REFER TO ELECTRICAL & PLUMBING FOR CONNECTION





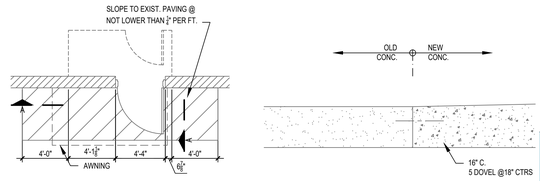
1 KITCHEN PLAN

SCALE: 1/4" = 1'-0"



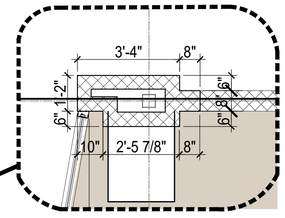
4 MAKERBOARD ELEVATION

SCALE: 1/2"=1'-0"



5 RAMP @ REAR DOOR

SCALE: 3/16"=1'-0"



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SCALE: 1/2"=1'-0"

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KITCHEN PLAN

u-A.301

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TEMPORARY KITCHEN FLOOR PLAN KEYED NOTES 05/A-A03-02

01 PROVIDE & INSTALL 555 SF OF RAM BOARD TO PROTECT EXISTING FLOORING. REMOVE AFTER CONSTRUCTION IS COMPLETE. CONTRACTOR MUST REPAIR FLOORING DAMAGED DURING CONSTRUCTION.

02 PROVIDE SCHEDULED PARTITIONS. BUILD PARTITIONS ON TOP OF RAM BOARD. DO NOT ATTACH PARTITIONS TO FLOOR.

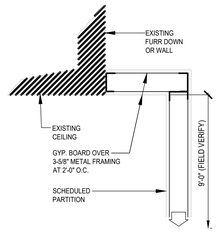
03 ATTACH PARTITIONS TO EXISTING WALL. REPAIR WALL TO MATCH EXISTING AFTER CONSTRUCTION IS COMPLETE.

TEMPORARY KITCHEN RCP KEYED NOTES 03/A-A03-02

04 ALL NEW SCHEDULED PARTITIONS AND CEILINGS FOR TEMPORARY STORAGE LAYOUT TO BE EPOXY PAINTED SW 7014 EIDER WHITE WITH SPECIFIED 4" RUBBER BASE. REMOVE WHEN CONSTRUCTION IS COMPLETED.

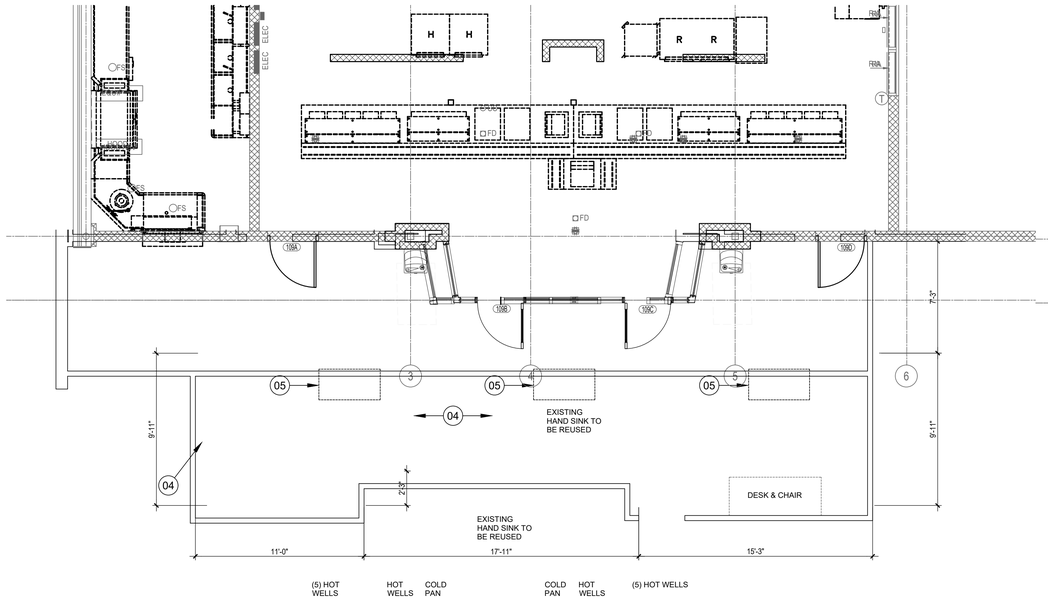
05 MOUNT TEMPORARY FLUORESCENT LIGHTS TO TEMPORARY CEILING.

3 KEYED NOTES



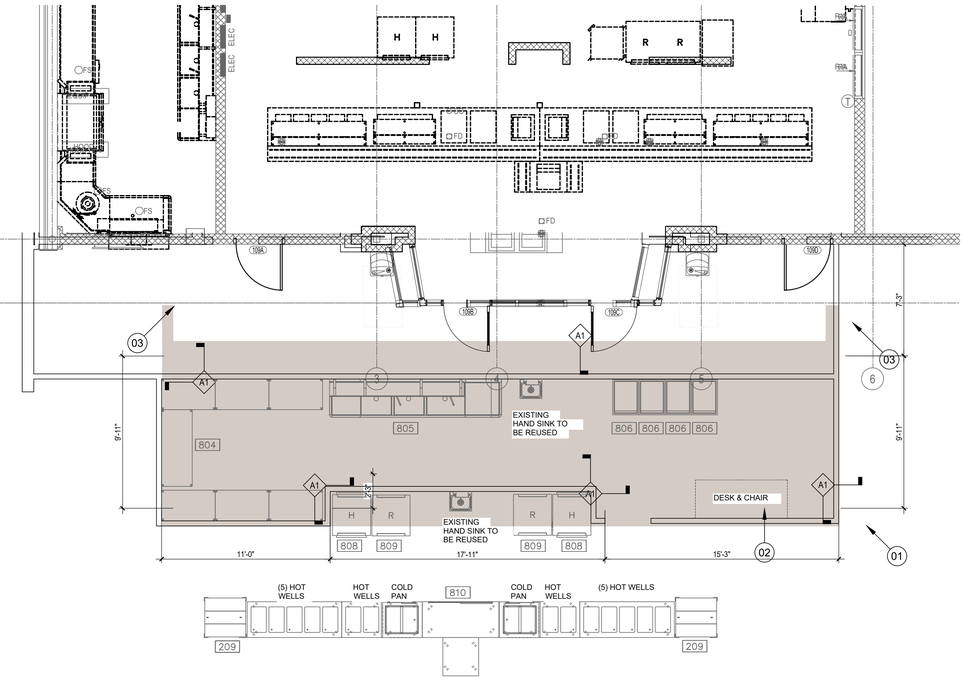
4 TEMPORARY LAYOUT SECTION

SCALE: 1"=1'-0"



1 TEMPORARY KITCHEN RCP

SCALE: 1/4" = 1'-0"



2 TEMPORARY KITCHEN FLOOR PLAN

SCALE: 1/4" = 1'-0"

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12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

u

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

SEAL

REGISTERED ARCHITECT
MICHAEL W. ALLEN
#22651
STATE OF TEXAS

7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

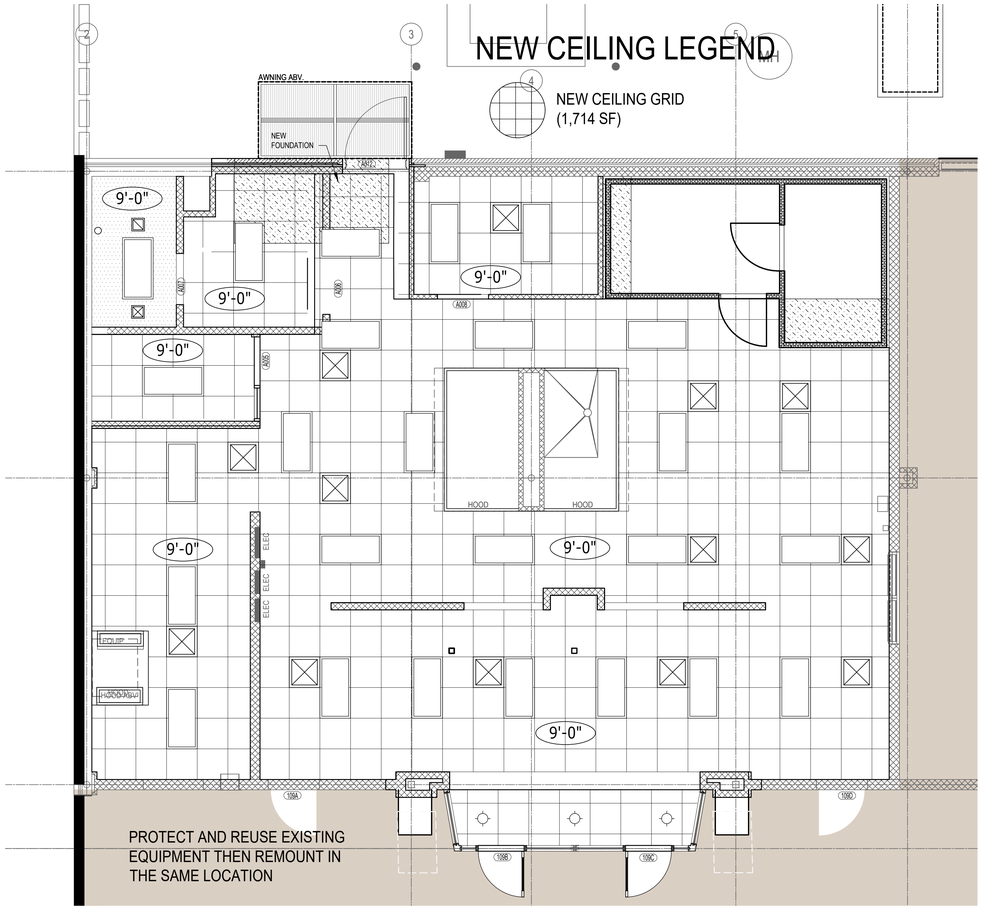
TEMPORARY KITCHEN LAYOUT
u-A.302

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings\U-Sugar Mill ES\u-A.302 TEMPORARY KITCHEN LAYOUT.dwg Jul 23, 2025 - 5:00pm

RCP - GENERAL NOTES

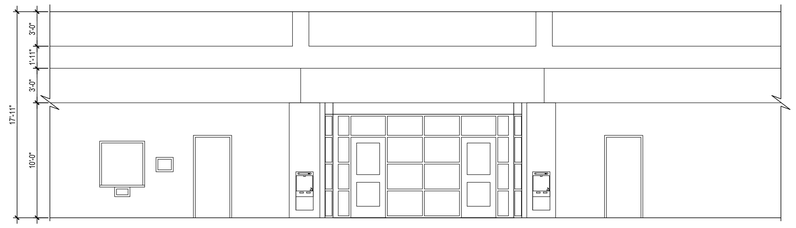
1. CEILING GRID SHALL BE INSTALLED TO MATCH EXISTING GRID'S POINT OF ORIGIN. THIS WILL REDUCE NEED TO RE-LOCATE ABOVE CEILING DUCTS, SPRINKLER PIPING AND OTHER SUPPORT SYSTEMS.
2. REFER TO SHEET A00-01 FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SEVEN SCHOOL KITCHEN REMODELS.
3. LIGHTING LEVELS SHOULD BE 50 FC IN PREPARATION AREAS, WARE WASH AND SERVING LINES, OR MEET MINIMUM HEALTH CODE LEVELS, WHICHEVER ITS GREATER. SEE MEP PLANS
4. REPLACE HVAC DEVICES. REPLACE LIGHTING WITH 24"x24" LED LAY IN LIGHT AS SCHEDULED IN ELECTRICAL PLANS.
5. REFER TO MECHANICAL, ELECTRICAL SHEETS FOR DEVICE SCHEDULES.

2 RCP GENERAL NOTES



1 REFLECTED CEILING PLAN

SCALE: 1/4" = 1'-0"



3 FOOD SERVICE AREA ELEVATION

SCALE: 3/16" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

SEAL

REGISTERED ARCHITECT
MELVIN WILLIAMS
#2651
STATE OF TEXAS

7/15/2025

MWA ARCHITECTS

ARCHITECTS AND PLANNING CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25

DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

REFLECTED CEILING PLAN

u-A.401

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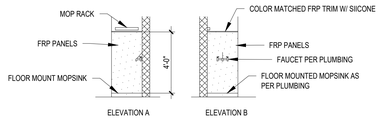
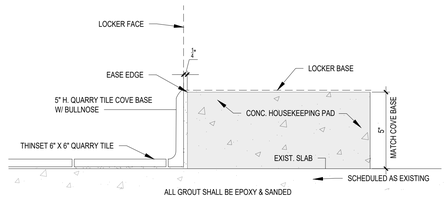
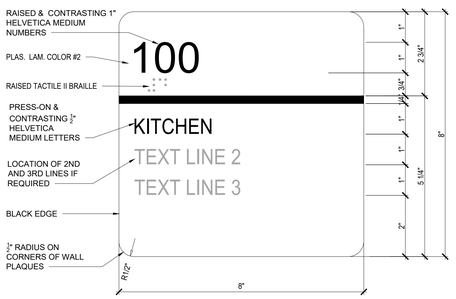


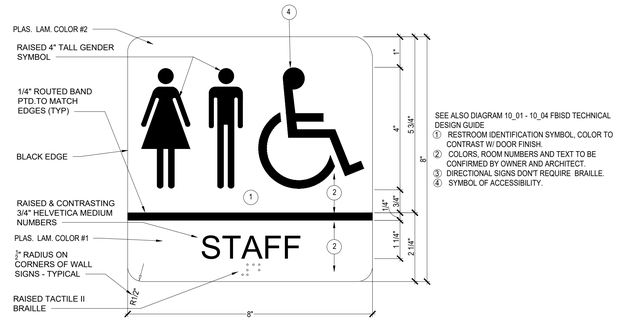
12 MOPSINK ELEVATIONS
SCALE: 1/4"=1'-0"



11 LOCKER HOUSEKEEPING PAD
SCALE: 3"=1'-0"



TYPE A
ROOM SIGNAGE - FIXED NAMES



TYPE B
KITCHEN RESTROOM SIGNAGE

4 ROOM SIGNAGE
SCALE: 6"=1'-0"

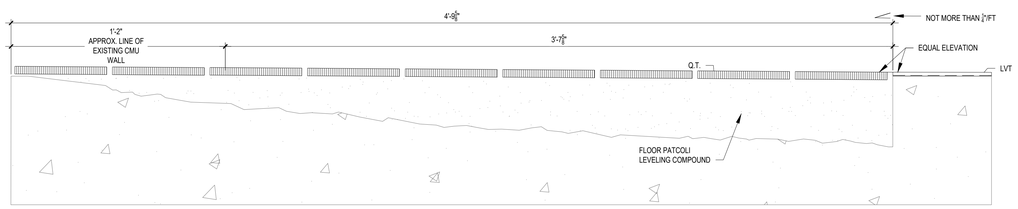
PAINT COLOR SCHEDULE
UNLESS OTHERWISE INDICATED FIELD COLOR IS PT-1 (SW 7014 EIDER WHITE)

SW 7014 EIDER WHITE (EPOXY PAINT)

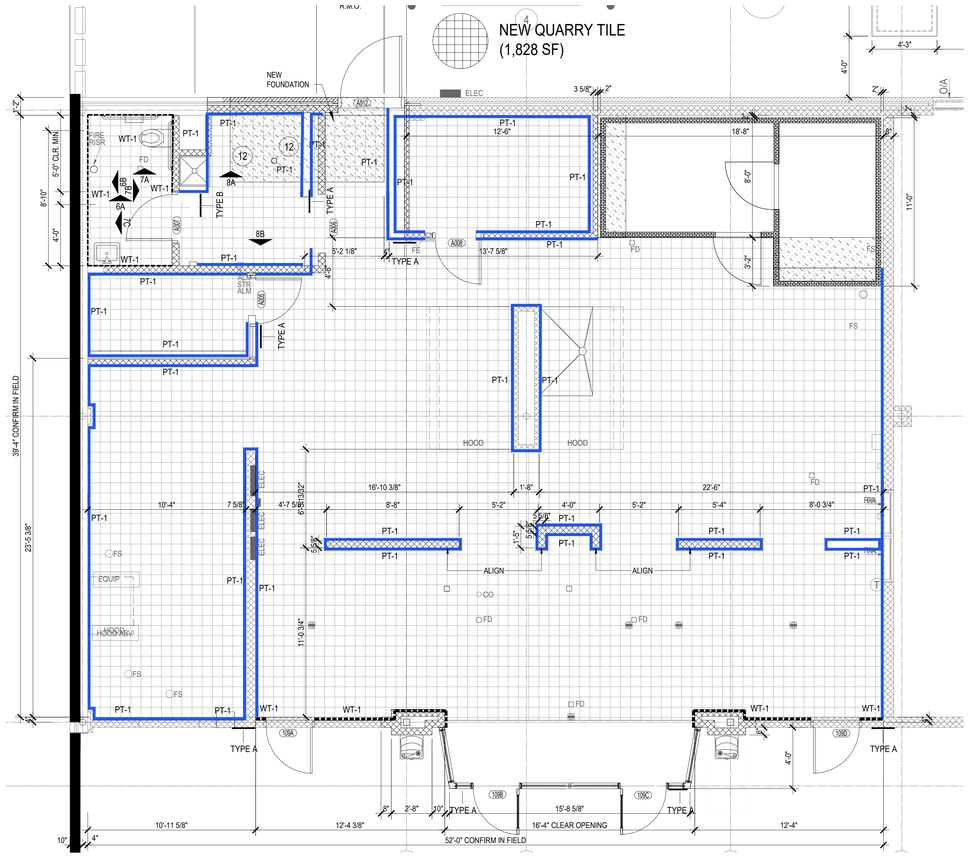
WALL TILE
CERAMIC WALL TILE (WT-1)
REFER TO TILE PATTERN AT SERVING AND RESTROOM
FIELD WALL TILE: DALTILE RITTENHOUSE SQUARE K175 BISCUIT (3X6)

A — PROVIDE ROOM SIGN TO REPLACE EXISTING. SEE LAYOUT FOR TYPE A OR TYPE B SIGN LOCATIONS.

2 FLOOR FINISH LEGEND

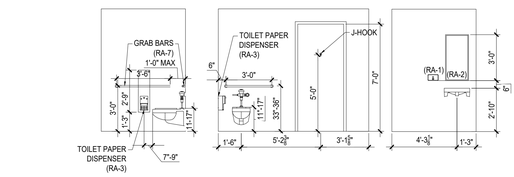


5 FLOOR TRANSITION THRESHOLD
SCALE: 3"=1'-0"

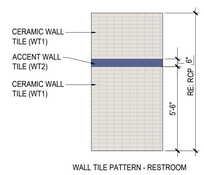


1 FINISH FLOOR PLAN
SCALE: 1/4" = 1'-0"

ALL FINISHED NOT DENOTED IN DRAWINGS SHALL BE SELECTED DURING THE SUBMITTAL PROCESS

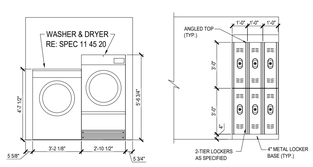


7 RR ELEVATIONS
SCALE: 1/4"=1'-0"

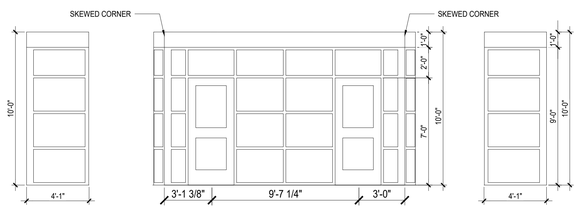


WALL TILE PATTERN - RESTROOM

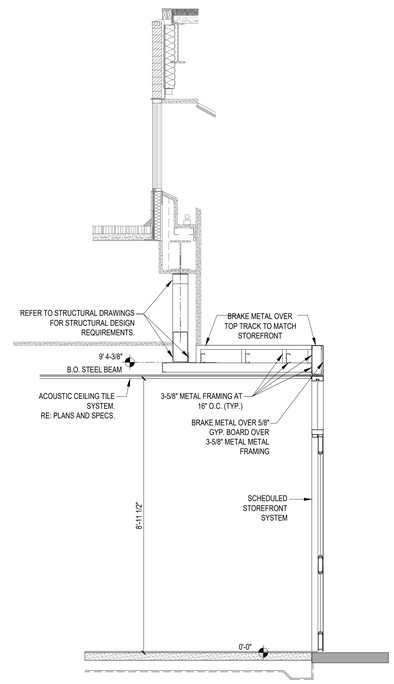
3 WALL TILE PATTERN
SCALE: 1/4"=1'-0"



8 UTILITY ELEVATIONS
SCALE: 1/4"=1'-0"



9 STOREFRONT ELEVATIONS
SCALE: 1/4"=1'-0"



10 STOREFRONT SECTION
SCALE: 1/2"=1'-0"

ISSUE:

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03/11/2025	50% CD PKG.
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07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

SEAL
REGISTERED ARCHITECT
ANGIE MAGUIRE
42651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

FINISH FLOOR PLAN

u-A.501

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1. AT WALLS THAT TERMINATE ABOVE CEILING, CONTRACTOR MAY CONTINUE METAL STUD FRAMED WALLS TO UNDERSIDE OF METAL DECK AND OMIT DIAGONAL BRACING IF HEIGHT DOES NOT EXCEED LIMITING HEIGHT OF METAL STUD AS INDICATED ON CHART BELOW.

2. PROVIDE INTERMEDIATE BRACING AT ALL PARTITIONS THAT EXCEED LIMITING HEIGHT OF METAL STUDS AS INDICATED ON CHART BELOW.

3. ALL BRACING SHALL BE AT STUD POINTS.

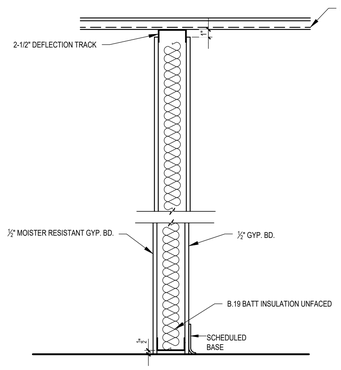
CMU PARTITION NOTES:

1. MATCH EXISTING CMU COURSING (TYP.):
   BRIARGATE ES (4" CMU STARTER COURSE)
   LAKE OLYMPIA MS (4" CMU STARTER COURSE)
   MISSION BEND ES (8" CMU STARTER COURSE)
   RIDGEMONT ES (8" CMU STARTER COURSE)
   TOWNEWEST ES (8" CMU STARTER COURSE)
2. PROVIDE CMU LINTELS FOR ALL OPENINGS IN INTERIOR CMU PARTITIONS. COORDINATE WITH STRUCTURAL.
3. PROVIDE A 3/4" SPACE BETWEEN TOP OF CMU AND STRUCTURE/DECK FOR POTENTIAL DEFLECTION. SEAL WITH APPROPRIATE CAULK.
4. REFER TO FINISH SCHEDULES FOR CERAMIC TILE LOCATIONS.

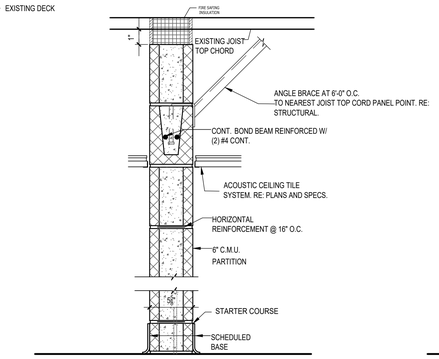
GYPSUM WALLBOARD PARTITION NOTES:

1. ALL METAL STUDS PARTITIONS ARE 25 GAUGE METAL STUDS AT 16" O.C. UNLESS OTHERWISE NOTED. IF THE LIMITING HEIGHT FOR A PARTITION TYPE IS EXCEEDED, INCREASE SIZE AND/OR GAUGE OF METAL STUDS AS INDICATED ON "LIMITING HEIGHT OF METAL STUDS" TABLE. NOTIFY THE ARCHITECT PRIOR TO INSTALLATION.

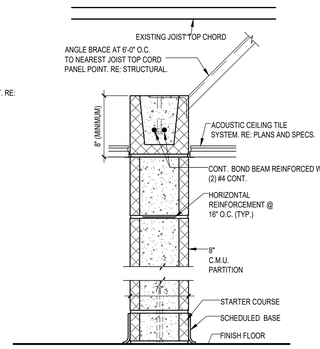
LIMITING HEIGHT OF METAL STUDS			
STUD SIZE	SPACING	25 GA	20 GA.
2-1/2"	16"	11'-3"	12'-10"
3-5/8"	16"	14'-4"	16'-5"
6"	16"	19'-9"	24'-6"



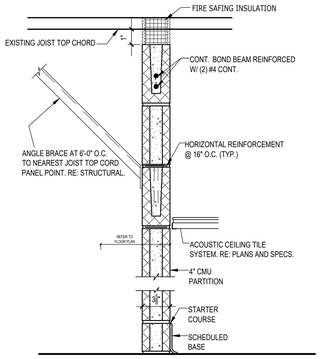
PARTITION A
SCALE: 1-1/2" = 1'-0"



PARTITION B1
SCALE: 1-1/2" = 1'-0"



PARTITION B2
SCALE: 1-1/2" = 1'-0"



PARTITION B3
SCALE: 1-1/2" = 1'-0"

PARTITION B4
SCALE: 1-1/2" = 1'-0"

PARTITION B5
SCALE: 1-1/2" = 1'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.

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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

SEAL

FOR
INTERIM REVIEW
AND NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 05/23/25

PARTITION SCHEDULE

u-A.502

GENERAL NOTES

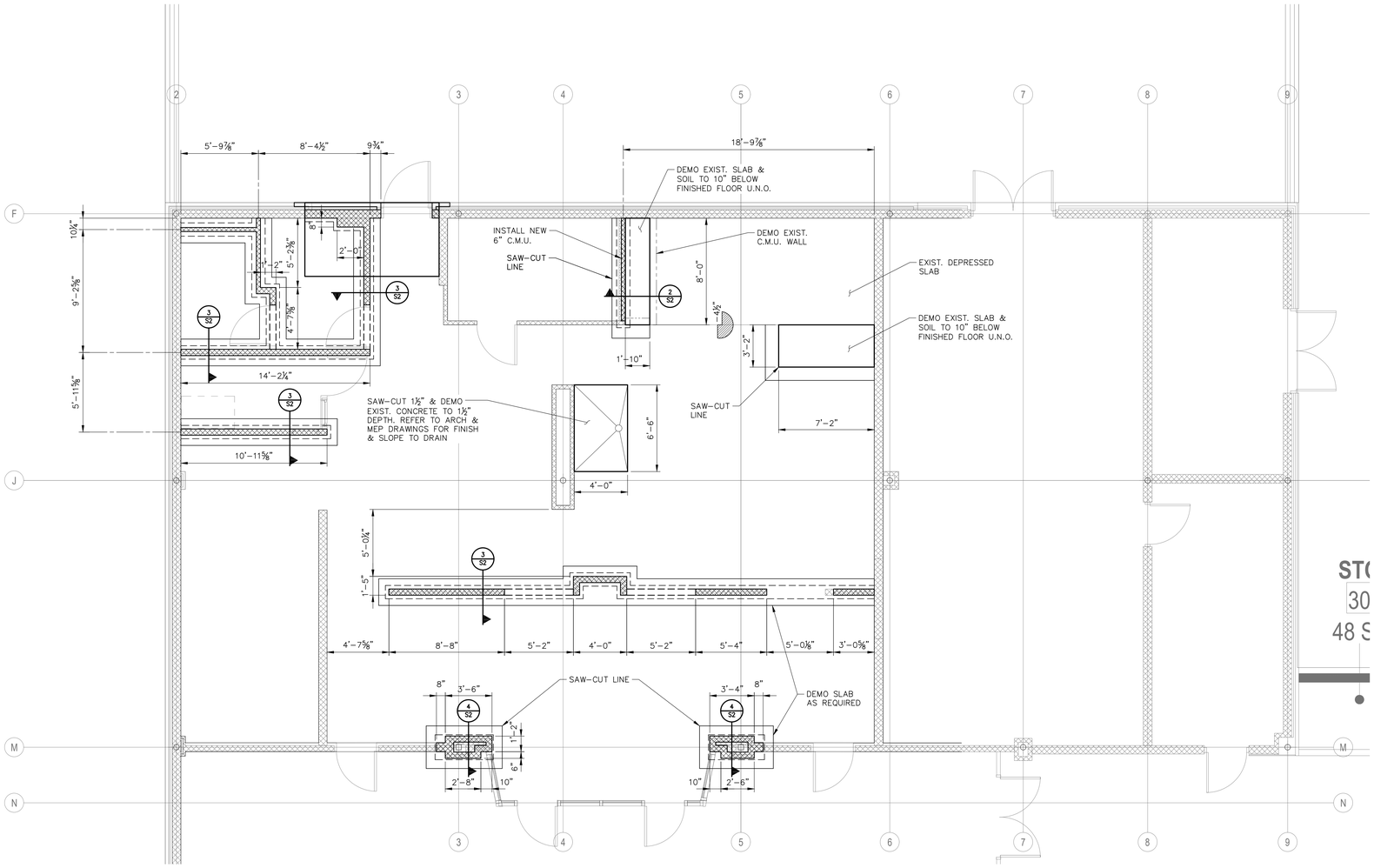
1. ALL CONCRETE SHALL TEST 4000 PSI AT 28 DAYS.
2. ALL CONCRETE REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60.
3. DETAILING AND FABRICATION OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL BE IN ACCORDANCE WITH ACI-315 LATEST EDITION.
4. LAP ALL CONTINUOUS REINFORCING BARS 50 DIAMETERS AT SPLICES, TEES, AND CORNERS.
5. THE USE OF HEAT TO FACILITATE THE BENDING OF REINFORCING BARS WILL NOT BE PERMITTED.
6. NO ENGINEERING DRAWING MAY BE REPRODUCED FOR USE AS SHOP DRAWINGS.
7. CONTRACTOR SHALL COORDINATE ALL LOCATIONS OF ALL ANCHOR BOLTS AND OPENINGS FOR MECHANICAL, PIPING, AND ELECTRICAL EQUIPMENT WITH THE RESPECTIVE ENGINEERING AND VENDOR DRAWINGS.

SLAB NOTE

4" CONC. SLAB ON 10 MIL POLY FILM ON 2" MAX. SAND FILL. REINFORCE WITH #3 @ 15"c.c. E.W. IN CENTER OF SLAB. FOR SUBGRADE PREPARATION REFER TO GEOTECHNICAL INVESTIGATION BY PARADIGM CONSULTANTS, INC. REPORT NUMBER 24-1067, DATED DEC. 2024.

SLAB SIDEWALK SLAB NOTE

4" CONC. SLAB ON 2" MAX. SAND FILL. REINF. W/ #3 @ 18"c.c. IN CENTER OF SLAB.



FOUNDATION PLAN

SCALE: 1/4"=1'-0"

FIELD VERIFICATION NOTE

1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR CONSTRUCTION.
2. CONTRACTOR SHALL VERIFY AND NOTIFY ENGINEER OF EXISTING CONDITIONS IN NEED OF REVIEW AND POSSIBLE MODIFICATION PRIOR TO FABRICATION.

ISSUE:

03/07/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
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SUGAR LAND, TX 77498

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079



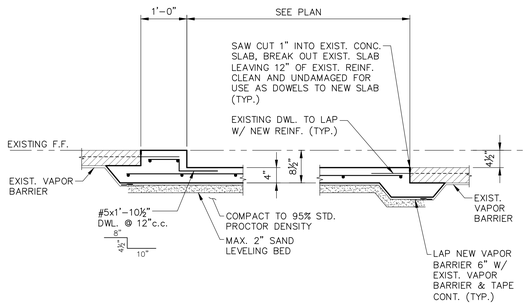
July 17, 2025

STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.B.P.E. Registration # F-000175
www.sshinc.net
50 Years
3301 Edloe Street, Suite 200 Houston, Texas 77027 Tel 713-776-9433
E-MAIL: info@sshinc.net | 0002-0256

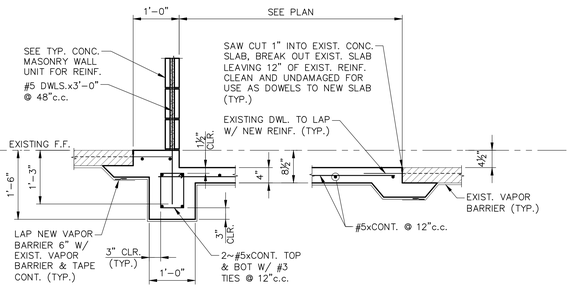
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

KITCHEN PLAN

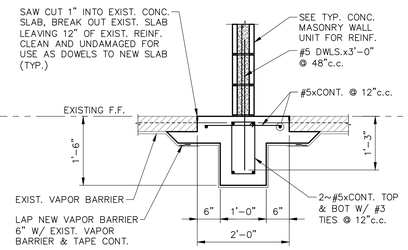
S1



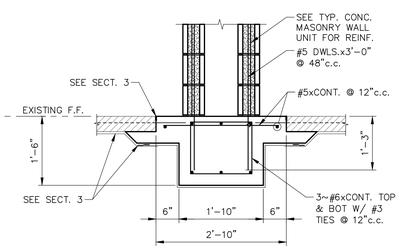
1 SECTION
SCALE: 3/4"=1'-0"



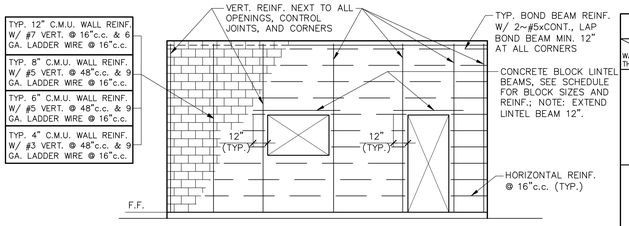
2 SECTION
SCALE: 3/4"=1'-0"



3 SECTION
SCALE: 3/4"=1'-0"



4 SECTION
SCALE: 3/4"=1'-0"



MIN. REBAR LAP SCHEDULE FOR f'm = 1,500 psi

BAR SIZE	6" CMU	8" CMU	10" CMU	12" CMU
#3	12"	12"	12"	12"
#4	20"	15"	12"	12"
#5	32"	23"	18"	15"
#6	54"	43"	34"	28"
#7	NA	60"	46"	38"
#8	NA	72"	71"	57"
#9	NA	NA	82"	74"

CONCRETE MASONRY NOTES

1. CONCRETE MASONRY UNITS AND CONSTRUCTION TO BE PER "NATIONAL CONCRETE MASONRY ASSOCIATION" RECOMMENDATIONS (WHERE NOT COVERED BY THE LOCAL BUILDING CODE).
2. ALL MASONRY GROUT TO BE PER TABLE 1 (THIS SHEET); ALL MORTAR PER TABLE 2 (THIS SHEET).
3. FILL CELLS WITH GROUT AT VERTICAL REINFORCEMENT.
4. CAST-IN-ANCHORS EMBEDDED IN CONCRETE MASONRY SHALL EXTEND BEYOND REINFORCING 1" MIN.
5. COMPRESSIVE STRENGTH OF MASONRY SHALL BE 1500 PSI AT 28 DAYS.
6. CMU SHALL BE PLACED IN A RUNNING BOND PATTERN UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS.
7. CONTROL JOINTS SHALL HAVE NO HORIZONTAL REINFORCING THROUGH THE JOINT AND VERTICAL REINFORCING ON BOTH SIDES OF JOINT. CONTROL JOINTS SHALL BE UNGROUTED WITH A BACKER ROD AND SEALANT ON BOTH SIDES OF WALL.
8. BOND BEAMS AND REINFORCING SHALL BE CONTINUOUS AT CONTROL JOINT WITH BACKER ROD AND SEALANT CONTINUOUS WITH JOINT.

CONCRETE BLOCK LINTEL SCHEDULE

WALL THICKNESS \ MAXIMUM SPAN	4'-6"	9'-0"
4"	GROUT 1 COURSE 1~#4 CONT.	#3 STIRRUPS @ 16" c.c. GROUT 2 COURSES 1~#4 CONT.
6" 8" & 12"	GROUT 1 COURSE 2~#5 CONT.	#3 STIRRUPS @ 16" c.c. GROUT 2 COURSES 2~#5 CONT. TOP & BOT.

TABLE 1. GROUT PROPORTIONS BY VOLUME

TYPE	PARTS BY VOLUME OF PORTLAND CEMENT OR PORTLAND BLAST-FURNACE SLAG CEMENT	PARTS BY VOLUME OF HYDRATED LIME OR LIME PUTTY	AGGREGATE MEASURED IN DAMP, LOOSE CONDITION	
			FINE	COARSE
FINE GROUT (<4" WIDE CAVITY)	1	0 TO 1/10	2¼ TO 3 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL	
COARSE GROUT (>4" WIDE CAVITY)	1	0 TO 1/10	2¼ TO 3 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL	1 TO 2 TIMES THE SUM OF THE VOLUMES OF THE CEMENTITIOUS MATERIAL

TABLE 2. MORTAR PROPORTIONS BY VOLUME

MATERIAL	TYPE	PORTLAND CEMENT OR BLENDED CEMENT	MASONRY CEMENT	HYDRATED LIME OR LIME PUTTY	AGGREGATE RATIO (MEASURE IN DAMP, LOOSE CONDITION)
CEMENT LIME	S	1	....	OVER ¼ TO ½	NOT LESS THAN 2¼ & NOT MORE THAN 3 TIMES THE SUM OF THE SEPARATE VOLUMES OF CEMENTITIOUS MATERIALS
MASONRY/ CEMENT	S	1/2	1	....	

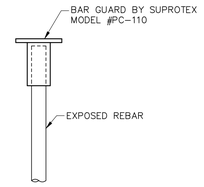
NOTE: CONTROL JOINTS SHALL BE LOCATED AT THE FOLLOWING

1. AT ALL CHANGES IN WALL HEIGHT.
2. AT ALL CHANGES IN WALL THICKNESS SUCH AS CHASES, COLUMNS OR PILASTERS.
3. AT (ABOVE) MOVEMENT JOINTS IN FOUNDATIONS AND FLOORS.
4. AT (BELOW) MOVEMENT JOINTS IN ROOFS AND FLOORS THAT BEAR ON A WALL.
5. ADJACENT TO CORNERS OF WALLS OR INTERSECTIONS WITHIN A DISTANCE OF ONE-HALF THE NORMAL CONTROL JOINT SPACING.
6. CONTROL JOINTS SHALL BE SPACED NO MORE THAN 25'-0" APART.
7. DO NOT PLACE CONTROL JOINT ABOVE OR BELOW OPENINGS.
8. CONTRACTOR SHALL PROVIDE A CONTROL JOINT PLAN PRIOR TO FABRICATION OR CONSTRUCTION.

LOOSE LINTEL SCHEDULE

SPAN	LINTEL	SPAN	LINTEL
0' TO 6'	L3½x3½x¼	8' TO 9'	L5x3½x5/16
6' TO 7'	L4x3½"x¼	9' TO 10'	L6x3½x5/16
7' TO 8'	L4x3½x5/16	10' TO 12'	L7x4x⅜

LOOSE LINTEL MIN. BEARING OF 8".



CONTRACTOR SHALL COVER ALL EXPOSED REBAR DURING CONSTRUCTION.

TYPICAL ELEVATION OF CONCRETE MASONRY WALL AND NOTES

SCALE: N.T.S.

TYPICAL REBAR CAP DETAIL

SCALE: N.T.S.

ISSUE:

03/07/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

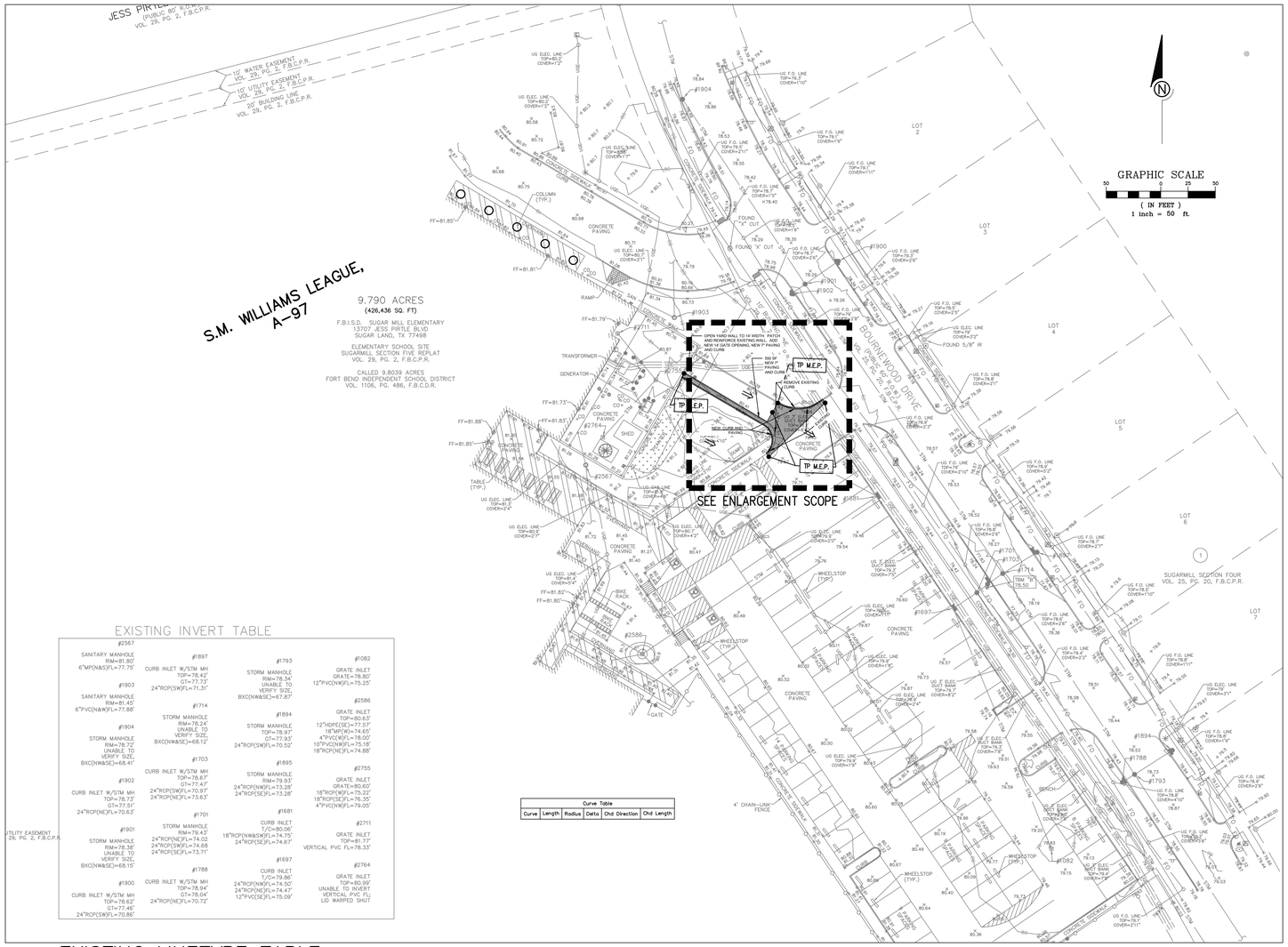
SECTIONS AND TYPICAL DETAILS

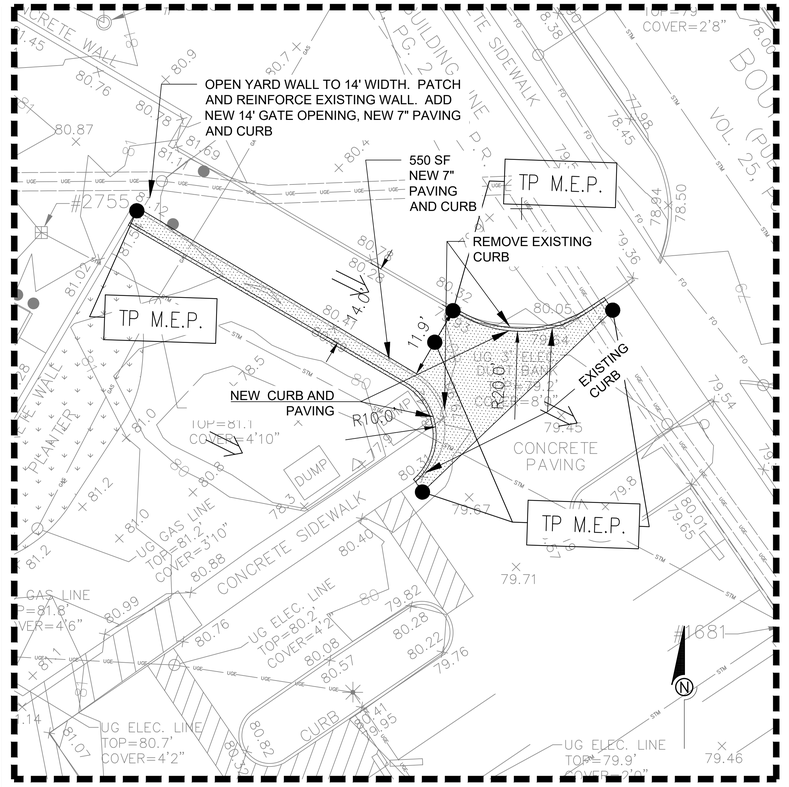
S2



July 17, 2025

STANLEY SPURLING & HAMILTON, INC.
50 Years
Consulting Engineering Services
T.B.P.E. Registration # F-000175
www.sshinc.net
3301 Edloe Street, Suite 200 Houston, Texas 77027 Tel 713-776-9433
E-MAIL: info@sshinc.net | 0002-0256





ENLARGEMENT SCOPE

EXISTING INVERT TABLE

#2567
SANITARY MANHOLE RIM=81.80' 6"WP(N&S)FL=77.75'

#1903
SANITARY MANHOLE RIM=81.45' 6"PVC(N&W)FL=77.88'

#1904
STORM MANHOLE RIM=78.72' UNABLE TO VERIFY SIZE, BXC(N/W&SE)=68.41'

#1902
CURB INLET W/STM MH TOP=78.73' GT=77.51' 24"RCP(NE)FL=70.63'

#1901
STORM MANHOLE RIM=78.38' UNABLE TO VERIFY SIZE, BXC(N/W&SE)=68.15'

#1900
CURB INLET W/STM MH TOP=78.62' GT=77.46' 24"RCP(SW)FL=70.86'

#1897
CURB INLET W/STM MH TOP=78.42' GT=77.23' 24"RCP(SW)FL=71.31'

#1714
STORM MANHOLE RIM=78.24' UNABLE TO VERIFY SIZE, BXC(N/W&SE)=68.12'

#1703
CURB INLET W/STM MH TOP=78.67' GT=77.47' 24"RCP(SW)FL=70.97' 24"RCP(NE)FL=73.63'

#1701
STORM MANHOLE RIM=79.43' 24"RCP(SE)FL=74.02' 24"RCP(SW)FL=74.68' 24"RCP(SE)FL=73.71'

#1788
CURB INLET W/STM MH TOP=78.94' GT=78.04' 24"RCP(NE)FL=70.72'

#1793
STORM MANHOLE RIM=78.34' UNABLE TO VERIFY SIZE, BXC(NW&SE)=67.87'

#1894
STORM MANHOLE TOP=78.93' GT=77.93' 24"RCP(SW)FL=70.52'

#1695
STORM MANHOLE RIM=79.93' 24"RCP(N)FL=73.28' 24"RCP(SE)FL=73.28'

#1681
CURB INLET T/C=80.06' 18"RCP(N/W&SW)FL=74.75' 24"RCP(SE)FL=74.67'

#1697
CURB INLET T/C=79.86' 24"RCP(N/W)FL=74.50' 24"RCP(NE)FL=74.47' 12"PVC(SE)FL=75.09'

#1082
GRATE INLET GRATE=79.80' 12"PVC(NW)FL=75.25'

#2586
GRATE INLET GRATE=78.80' 12"HDPE(SE)=77.53' 18"RP(W)=74.65' 4"PVC(W)FL=78.00' 10"PVC(W)FL=75.18' 18"RCP(NE)FL=74.88'

#2755
GRATE INLET GRATE=80.60' 18"RCP(W)FL=75.22' 18"RCP(SE)FL=76.35' 4"PVC(NW)FL=79.05'

#2711
GRATE INLET TOP=81.73' VERTICAL PVC FL=78.33'

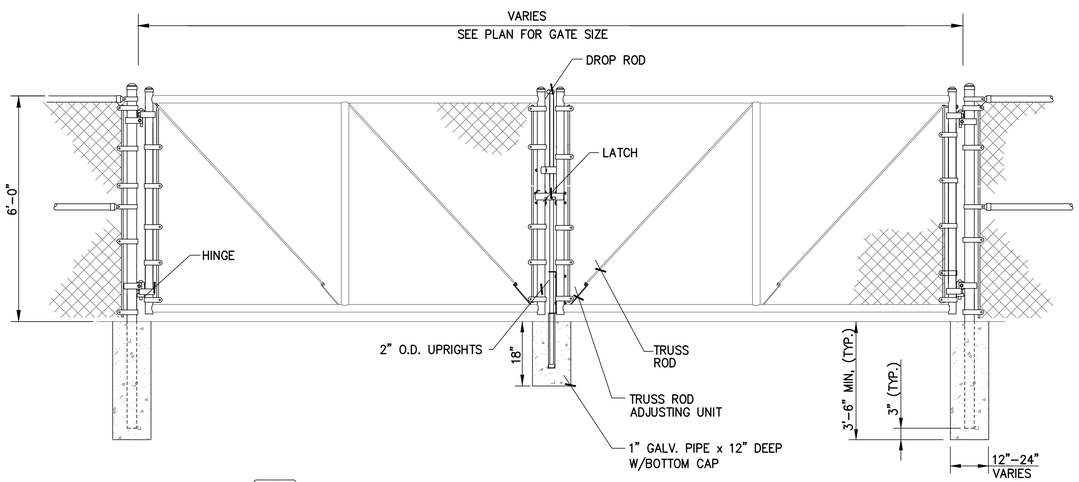
#2764
GRATE INLET TOP=80.99' UNABLE TO INVERT VERTICAL PVC FL; LID WARPED SHUT

Curve Table					
Curve	Length	Radius	Delta	Chd Direction	Chd Length

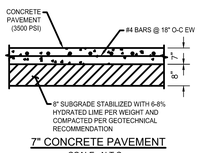
EXISTING LINETYPE TABLE

- = ADJOINER LINE
- = BOUNDARY LINE
- = EASEMENT LINE
- = CURB AND GUTTER LINE
- = EDGE OF RAIL
- = EDGE OF BRICK
- = EDGE OF CONCRETE
- = EDGE OF ASPHALT
- = EDGE OF GRAVEL
- = FENCE (BARBED-WIRE)
- = FENCE (CHAIN-LINK)
- = FENCE (WOOD)
- = FENCE (WROUGHT-IRON)
- = GRADE BREAK
- = HIGH BANK
- OH = OVERHEAD ELECTRIC
- = PAVING STRIPES
- = STORM LINE CULVERT
- = TOE SLOPE
- = TREE LINE
- UGE = UNDERGROUND ELECTRIC LINE
- GAS = UNDERGROUND GAS LINE
- FO = UNDERGROUND FIBER OPTIC LINE
- TEL = UNDERGROUND TELEPHONE LINE
- STM = UNDERGROUND STORM LINE
- RLS = UNDERGROUND STORM LINE (REV)
- SAN = UNDERGROUND SANITARY LINE
- VAS = UNDERGROUND SANITARY LINE (REV)
- WL = UNDERGROUND WATER LINE

SUGAR MILL ELEMENTARY SCHOOL



2 NO SCALE SWING GATE DETAIL



7" CONCRETE PAVEMENT
SCALE: N.T.S.

LEGEND		
DESCRIPTION	EXISTING	NEW
PROPERTY LINE		
STORM SEWER LINE		
SANITARY SEWER LINE		
WATER LINE		
GAS LINE		
STORM SEWER INLET	□	■
MANHOLE	○	●
FIRE HYDRANT	⊹	
CONTOUR LINE	85	93
SPOT ELEVATION	79.9	TC 50.00 TOP OF CURB TP 45.00 TOP OF PAVEMENT
SPOT ELEVATION		TP 40.00 TOP OF PAVEMENT
SPOT ELEVATION		TW 35.90 TOP OF WALK
SPOT ELEVATION		EL 35.00 TOP OF GROUND
SPOT ELEVATION		TW 50.00 TOP OF WALK TP 45.00 TOP OF PAVEMENT
DRAINAGE FLOW		⇒
EXTREME EVENT FLOW		⇨
DRAINAGE DIVIDE		
DRAINAGE AREA		0.05 AC
FENCE		—o—o—

PAVEMENT NOTES

1. ALL PAVING SLOPES FROM SPOT ELEVATION TO SPOT ELEVATION AND SHALL BE UNIFORM AND CONSTANT.
2. PAVEMENT GRADES IN HANDICAP PARKING, LOADING/UNLOADING AREAS SHALL BE SLOPED AT 2.0% OR LESS.
3. ALL RAMPS DESIGNATED AS HANDICAP RAMPS SHALL BE SLOPED AT 8.33% (MAX)
4. CONCRETE PAVEMENT SHALL BE MINIMUM 3500 PSI AT 28 DAYS WITH A MINIMUM FLEXURAL STRENGTH OF 600 PSI AT 28 DAYS.
5. CONCRETE PAVEMENT SHALL HAVE A BROOM FINISH SURFACE BY DRAWING A FINE HAIR BROOM ACROSS CONCRETE SURFACE PERPENDICULAR TO LINE OF TRAFFIC.
6. CONCRETE SHALL BE CURED BY PROTECTING IT AGAINST LOSS OF MOISTURE, RAPID TEMPERATURE CHANGE, FOR AT LEAST 3 DAYS AFTER PLACEMENT. A LIQUID MEMBRANE-FORMING COMPOUND SHALL BE UNIFORMLY SPRAYED ON ALL EXPOSED SURFACES.

PAVEMENT JOINTS

CONTRACTOR SHALL SUBMIT A CONCRETE JOINT LAYOUT PLAN FOR APPROVAL PRIOR TO PLACING CONCRETE PAVEMENT.

STATE OF TEXAS
F. H. RADFORD, III
61636
LICENSED PROFESSIONAL ENGINEER
07/18/2024

STANLEY SPURLING & HAMILTON, INC.
Consulting Engineering Services
T.B.P.E. Registration # F-000175
www.sshinc.net
3301 Edloe Street, Suite 200 Houston, Texas 77027 Tel 713-776-9433
E-MAIL: info@sshinc.net
0002-0255

SCALE: _____ DGN. BY: _____
DATE: _____ DWN. BY: _____
JOB NO. _____ DWG. NO. _____

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	100% CD PKG.

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

SUGAR MILL ELEMENTARY SCHOOL
13707 Jess Pirtle Blvd, Sugar Land, TX 77498

SEAL

FOR
INTERIM REVIEW
AND NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 05/23/25

GRADING & PAVING PLAN

C1.0

Q:\0000\0002\0002-0255\CIVIL DWGS\C1.0 - GRADING AND SITE PLAN.dwg, Jul 15, 2025 - 1:47pm

REFER TO FOODSERVICE DESIGN PROFESSIONALS SPECIFICATIONS AND SUBSEQUENT SHEETS FOR ADDITIONAL COORDINATION INFORMATION

EXISTING EQUIPMENT NOTES (IF EXISTING EQUIPMENT IS PROVIDED IN THIS PROJECT):

1. EXISTING EQUIPMENT NOT SCHEDULED FOR RE-USE TO BE RELOCATED BY THE K.E.C. COORDINATE WITH OWNER FOR NEW LOCATION.
2. ALL UTILITIES NOT SCHEDULED FOR RE-USE TO BE CAPPED & COVERED BY REQUIRED DISCIPLINE.
3. K.E.C. TO VERIFY ALL EXISTING UTILITY LOCATIONS & COORDINATE WITH ALL EQUIPMENT AS REQUIRED.

8 EXISTING EQUIPMENT NOTES
NOT TO SCALE

ARCHITECT TO VERIFY/COORDINATE THE AESTHETIC OPTIONS BELOW (FOOD SERVICE COLOR, MATERIAL, OR SIGNAGE SELECTIONS) IF THESE ITEMS ARE PROVIDED IN THIS PROJECT:

1. COUNTERTOPS: STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
2. TRAY SLIDES: CORIAN OR STONE (STAINLESS STEEL IS PROVIDED UNLESS OTHERWISE SPECIFIED).
3. COUNTER FRONTS: CERAMIC TILE, 3 FORM, OR PLASTIC LAMINATE.
4. SNEEZE GUARDS: STONE INSETS.
5. GENERAL COLOR, MATERIAL AND GRAPHIC SELECTIONS:
   - A. DISPLAY AIR SCREEN MERCHANDISERS - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - B. BAKERY DISPLAY CASES - COLOR SELECTION: POWDER COAT OR PLASTIC LAMINATE (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - C. PASS THRU OR REACH IN HOLDING CABINETS - COLOR SELECTION: POWDER COAT (MFG.: TRUE) OR PLASTIC LAMINATE (MFG.: TRAULSEN) (S/S IS PROVIDED UNLESS OTHERWISE SPECIFIED).
   - D. HANGING HEAT LAMPS - TRACK AND FIXTURE COLOR SELECTION.
   - E. HEATED MERCHANDISERS.
   - F. PORTABLE GUIDE RAILS - STANCHION AND BELT COLOR SELECTION.
   - G. POPCORN MACHINE - SIGNAGE SELECTION.
   - H. BOTTLE COOLER - SIGNAGE SELECTION.
   - I. GRAPHICS PACKAGE INFORMATION.
   - J. HOT FOOD WELL COVERS.
6. ARCHITECT TO VERIFY/COORDINATE THE FINISHES BELOW:
   - A. WALLS: CERAMIC TILE, FLAT FRP, OR MOLDED FRP (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - B. CEILINGS: REMOVABLE VINYL FACE TILE (SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE AS APPROVED BY LOCAL JURISDICTION).
   - C. FLOORS: TILE, EPOXY, OR RUBBERIZED FLOORING SYSTEM (SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT AS APPROVED BY LOCAL JURISDICTION) (COORDINATE FLOOR TILE TRANSITION AT SERVING LINES).
   - D. FLOORS: WALK-IN ASSEMBLY - EXTEND KITCHEN FLOOR FLUSH INTO WALK-IN ASSEMBLY WITH COVED BASE.
   - E. FURR DOWNS ABOVE SERVING COUNTERS.

5 ARCHITECTURAL COORDINATION NOTES
NOT TO SCALE

CRITICAL NOTES:

1. CONTRACTOR MUST COORDINATE AND VERIFY ALL DIMENSIONS WITH FOOD SERVICE EQUIPMENT SHOP DRAWINGS AND MANUFACTURER'S DATA. DIMENSIONS SHOWN ARE FOR DESIGN AND BIDDING PURPOSES ONLY.
2. WALK-IN ASSEMBLY DOORS MUST BE LEFT OPEN WHILE INTERIOR CONCRETE FLOOR CURES.
3. INSTALL PROTECTIVE COVER ON WALK-IN ASSEMBLY WALL PANELS BEFORE INSTALLING CONCRETE FLOORS AND CURBS.
4. REFER TO GENERAL SPECS - DIVISION 27 TO PROVIDE CONDUIT, DATA, AND INTERCONNECT THE PANIC ALARM INSIDE FREEZER TO THE BUILDING AUTOMATION SYSTEM FOR NOTIFICATION TO DISTRICT PERSONNEL IN THE EVENT OF STAFF ENTRAPMENT.
5. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL (DIV. 22).

7 CRITICAL NOTES
NOT TO SCALE

DIVISION 26 (ELECTRICAL) IS RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL ELECTRICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. ROUGH-IN AND FINAL CONNECTION OF ELECTRICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 26.
6. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
7. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR INTERCONNECT CABLES BETWEEN LAN AND POS TERMINALS, CHANGE-MAKERS, PRE-CHECK UNITS, PRINTERS, CPUS, ETC. DIVISION 26 TO VERIFY WHERE THE CONDUIT IS TO RUN FOR POS SYSTEM (I.E., MANAGER'S OFFICE OR IDF ROOM).
8. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR FIRE SUPPRESSION SYSTEMS. INTERCONNECT FIRE PROTECTION SYSTEM TO PANEL BOX SHUNT TRIPS AND BUILDING ALARM.
9. WALK-IN LIGHT FIXTURE INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF WALK-IN IS PROVIDED IN THIS PROJECT).
10. TABLE LIMIT SWITCH INSTALLATION (PROVIDED LOOSE BY SECTION 11 40 00) (IF DISHMACHINE IS PROVIDED IN THIS PROJECT).
11. ELECTRICAL MATERIALS AND DEVICES (SHUNT-TRIP BREAKERS, SURGE PROTECTORS, LIGHTING CONTROL DEVICES, CONDUIT, WIRE, ETC.).
12. SWITCHES AND STAINLESS STEEL DISCONNECTS AS REQUIRED (PROVIDE, LOCATE, AND INSTALL – TO BE IN AN ACCESSIBLE LOCATION).
13. CHARGING STATIONS FOR FORKLIFTS, PALLET STACKERS, AND PALLET JACKS (SIZE, PROVIDE, LOCATE, AND INSTALL) (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
14. INTERCONNECTION BETWEEN CONDENSATE FAN AND DISHMACHINE CONTROL PANEL (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
15. INTERCONNECTION BETWEEN EXHAUST HOOD FANS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
16. INTERCONNECTION BETWEEN EXHAUST HOOD LIGHTS AND SWITCH (IF EQUIPMENT IS PROVIDED IN THIS PROJECT).
17. DOOR HEATERS, LIGHTS, COILS, AND PRESSURE RELIEF PORTS PRE-WIRED TO JUNCTION BOX AT TOP OF WALK-IN ASSEMBLIES (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) PROVIDED BY SECTION 11 40 00. FINAL CONNECTION BY DIV. 26.
18. IF ANY ELECTRICAL ACCESSORIES, FITTINGS, AND CORD/PLUGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV.26 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
19. PROVIDE WATERPROOF RECEPTACLES IN WET AREAS.
20. ALL ELECTRICAL CONNECTIONS BENEATH EXHAUST HOODS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) TO EXTEND TO SHUNT TRIP BREAKERS WITH ELECTRICAL PANEL BOX FOR SHUTDOWN DURING FIRE MODE.
21. RECEPTACLES ARE TO BE PRE-WIRED TO THE JUNCTION BOX OR LOAD CENTER FOR FINAL CONNECTION BY DIVISION 26.
22. ALL ELECTRICAL LIGHTING, POWER, AND DISTRIBUTION SYSTEMS.
23. DO NOT INTERCONNECT MORE THAN THREE (3) CONVENIENCE OUTLETS ON ONE (1) BREAKER.
24. OTHER THAN CONVENIENCE OUTLETS, ALL ELECTRICAL CONNECTIONS SHOWN ON FOOD SERVICE PLANS ARE DEDICATED BREAKERS.
25. DOORBELL AT RECEIVING DOOR (PROVIDE AND INSTALL – TO BE AUDIBLE THROUGHOUT KITCHEN, OFFICE, AND DRY STORAGE ROOM).
26. ADEQUATE LIGHTING AT RECEIVING DOOR.
27. PROVIDE AND INSTALL TWO EMERGENCY STROBE BEACONS THAT INTERCONNECT TO PANIC ALARM IN WALK-IN FREEZER. ONE (1) IN KITCHEN ABOVE WALK-IN FREEZER DOOR ONE (1) IN CAFETORIUM (IF WALK-IN IS PROVIDED IN THIS PROJECT). REFER TO GENERAL SPECIFICATIONS FOR ADDITIONAL DETAILS.
28. DEDICATED CIRCUIT FOR HEATED DRAIN LINE CONNECTION IN WALK-IN FREEZER AT EACH COIL (IF WALK-IN IS PROVIDED IN THIS PROJECT).

NOTE: ELECTRICAL CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 26. FOR ADDITIONAL REQUIREMENTS, REFER TO THE ELECTRICAL ENGINEER'S DRAWINGS.

6 ELECTRICAL COORDINATION NOTES
NOT TO SCALE

DIVISION 22 (PLUMBING) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL PLUMBING REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY PVC CONDUIT WITH WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO BEVERAGE LINES, CO2 LINES, AND REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL PLUMBING CONNECTIONS TO FOOD SERVICE EQUIPMENT AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR). ACCESSORIES PROVIDED LOOSE WITH FOOD SERVICE EQUIPMENT BY SECTION 11 40 00 TO BE FIELD INSTALLED BY DIVISION 22. THIS INCLUDES BUT IS NOT LIMITED TO INSTALLATION OF ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), HOSES, GAS DISCONNECTS, AND DRAINS FROM EQUIPMENT POINT OF CONNECTION TO BUILDING PLUMBING SYSTEMS. ALL DRAIN LINES ARE PROVIDED AND INSTALLED BY DIV. 22.
7. KITCHEN EQUIPMENT CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL FAUCETS (WATER FILL FAUCETS, PRE-RINSE FAUCETS, ETC.), DRAIN FITTINGS, MIXING VALVES, CONTROL VALVES, WATER PRESSURE REGULATORS, VACUUM BREAKERS, AND ALL ACCESSORIES FOR EQUIPMENT SPECIFIED UNDER 11 40 00. DIVISION 22 IS RESPONSIBLE FOR INSTALLATION.
8. INDIRECT DRAIN LINE RUNS FROM EQUIPMENT TO NEAREST DRAIN OR FLOOR SINK. LINES TO BE TYPE 'K' COPPER.
9. IF ANY PLUMBING ACCESSORIES OR FITTINGS ARE PROVIDED LOOSE WITH EQUIPMENT BY 11 40 00, DIV. 22 IS TO ATTACH TO EQUIPMENT AND PROVIDE FINAL CONNECTION.
10. GAS SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
11. WATER SUPPLY SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM.
12. COMPRESSED AIR SYSTEMS WITH ALL COMPONENTS AND FITTINGS AS REQUIRED FOR A COMPLETE SYSTEM (IF REQUIRED FOR THIS PROJECT).
13. PIPING AND DRAINAGE SYSTEMS (SANITARY AND GREASE-LADEN). SYSTEMS MUST BE CLEANED AND FLUSHED BEFORE THE FINAL CONNECTION WITH FOOD SERVICE EQUIPMENT - CRITICAL.
14. FLOOR SINKS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
15. FLOOR DRAINS (PROVIDE AND INSTALL). FLANGE AND GRATES TO BE FLUSH WITH FINISHED FLOOR.
16. TRENCH DRAINS (PROVIDE AND INSTALL). TRENCH LINERS PROVIDED BY 11 40 00. FLANGE AND LINERS TO BE FLUSH WITH FINISHED FLOOR.
17. GREASE TRAPS AS REQUIRED. VERIFY WITH LOCAL CODES TO BYPASS OR PIPE THRU GREASE TRAP AND/OR INTERCEPTOR.
18. P-TRAPS AS REQUIRED (INCLUDING ALL DISPOSERS).
19. INTERCONNECT WATER THRU WATER FILTER (FILTER PROVIDED BY 11 40 00 UNLESS OTHERWISE SPECIFIED) TO EQUIPMENT.
20. GAS QUICK DISCONNECT INSTALLATION (QUICK DISCONNECT PROVIDED BY 11 40 00).
21. SAFETY RESTRAINT CABLE INSTALLATION (SAFETY RESTRAINT CABLE PROVIDED BY 11 40 00).
22. SPECIFIED COUPLINGS AND PIPING TO ALL EQUIPMENT FURNISHED BY 11 40 00.
23. AIR COMPRESSORS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
24. WATER SOFTENERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
25. PRESSURE BOILERS (IF REQUIRED FOR THIS PROJECT) (SIZE, PROVIDE, AND INSTALL, UNLESS OTHERWISE SPECIFIED).
26. HAND SINKS (PROVIDE (UNLESS OTHERWISE SPECIFIED) AND INSTALL). PROVIDE HOT WATER TEMPERING VALVE IF REQUIRED. WATER TEMPERATURE TO BE AT LEAST 100 DEGREES AND FLOW FOR AT LEAST 20 SECONDS.
27. ICE BIN DRAIN INSULATION (IF ICE MACHINE IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
28. UNIONS AT DISPOSER SOLENOID VALVES (IF DISPOSER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
29. BACK FLOW PREVENTION AS REQUIRED (PROVIDE AND INSTALL - INCLUDING ALL DISPOSERS). BACK- SIPHONAGE SHALL BE INSTALLED AT ALL FIXTURES AND EQUIPMENT WHERE BACKFLOW AND/OR BACK-SIPHONAGE MAY OCCUR AND WHERE A MINIMUM AIR GAP CANNOT BE PROVIDED BETWEEN THE WATER TO THE FIXTURE OR EQUIPMENT AT ITS FLOOD/LEVEL RIM. VACUUM BREAKERS, WHEN FURNISHED WITH EQUIPMENT, SHALL OVERRIDE THE ABOVE, IF ACCEPTABLE WITH APPLICABLE CODES. DIVISION 22 RESPONSIBLE FOR VERIFYING REQUIREMENT WITH LOCAL CODES.
30. JANITOR SINK WITH FAUCET (PROVIDE AND INSTALL).
31. FREEZE PROOF HYDRANT AT EXTERIOR OF BUILDING BY RECEIVING DOOR (PROVIDE AND INSTALL).
32. REVERSE OSMOSIS SYSTEMS (SIZE, PROVIDE (UNLESS OTHERWISE SPECIFIED), LOCATE AND INSTALL).
33. ALL PIPING WITHIN COUNTER BODY OR UNDER FABRICATED COUNTERS TO BE RUN TO A CONNECTION POINT BELOW COUNTER BODY BY SECTION 11 40 00. FINAL CONNECTION BY DIVISION 22.
34. EXHAUST HOOD CONDENSATE DRAIN CONNECTIONS (IF EXHAUST HOOD IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL).
35. INTERCONNECTION OF 1/2" CW TO PRE-RINSE AND DISPOSERS CONE/BODY INLETS PIPED THROUGH SOLENOID AND VACUUM BREAKER (IF DISPOSER IS PROVIDED IN THIS PROJECT).
36. FIRE SYSTEM PIPING. EXPOSED PIPING TO BE CHROME PLATED.
37. PIPE 1/2" COLD WATER TO SWIRL INLETS AT DISPOSERS (IF DISPOSER IS PROVIDED IN THIS PROJECT).
38. WATER TREATMENT FOR ICE BUILDERS (NON-CHLORINATED WATER WITH A PH LEVEL OF 10 OR HIGHER) AND ANY DRAINS AND OVERFLOWS. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS BY DIV. 23 (IF ICE BUILDERS AND TUMBLE CHILLERS ARE PROVIDED IN THIS PROJECT).

NOTE: WATER AND DRAIN CONNECTIONS INDICATED ARE THOSE REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND THOSE REQUIRED FOR SUPPORT EQUIPMENT FURNISHED BY DIVISION 22. FOR ADDITIONAL WATER AND DRAIN REQUIREMENTS REFER TO MECHANICAL DRAWINGS.

NOTE: REFER TO ELECTRICAL/MECHANICAL DRAWINGS FOR REQUIREMENTS OF EXHAUST FANS AND MAKE-UP AIR HANDLERS AND LOCATION OF AN INTERLOCK AND START/STOP CONTROLS TO BE LOCATED WITHIN FOOD SERVICE AREA BY DIVISION 26.

4 PLUMBING COORDINATION NOTES
NOT TO SCALE

DIVISION 23 (MECHANICAL) RESPONSIBLE FOR BUT NOT LIMITED TO:

1. **DO NOT ROUGH-IN FROM FDP DRAWINGS. REFER TO THE KITCHEN EQUIPMENT CONTRACTOR'S DIMENSIONED SHOP DRAWINGS. DIMENSIONS INDICATED ARE TO BE VERIFIED BY KITCHEN EQUIPMENT CONTRACTOR AND ADJUSTED AS REQUIRED BY EQUIPMENT AND/OR FIELD CONDITIONS.**
2. SECTION 11 40 00 TO VERIFY UTILITY REQUIREMENTS OF ANY EXISTING EQUIPMENT.
3. ALL CONNECTIONS SHALL BE MADE FOLLOWING LOCAL CODES AND NATIONAL STANDARDS, EXCEPT WHERE PLANS AND SPECIFICATIONS EXCEED THOSE CODES AND STANDARDS.
4. VERIFY ALL MECHANICAL REQUIREMENTS WITH ENGINEERING DRAWINGS.
5. EMPTY EMT CONDUIT WITH PULL-WIRE AND WIDE-SWEEP BENDS FOR REFRIGERANT PIPING TO REMOTE FOOD SERVICE EQUIPMENT REFRIGERATION SYSTEMS.
6. ROUGH-IN AND FINAL CONNECTION OF MECHANICAL SYSTEMS TO FOOD SERVICE EQUIPMENT, WALK-IN ASSEMBLIES, AND BETWEEN COMPONENTS (INCLUDING MATERIALS AND LABOR).
7. TESTING AND BALANCING FOR ROOMS AND EXHAUST HOODS TO BE PERFORMED BY MECHANICAL CONTRACTOR. BALANCE REPORT FOR FOOD SERVICE EXHAUST HOODS TO BE PROVIDED TO FOODSERVICE DESIGN PROFESSIONALS (FDP) IMMEDIATELY UPON COMPLETION (SEND TO HOUSTON.SUBMITTAL@FDP.ORG FOR HOUSTON OFFICE AND DALLAS.SUBMITTAL@FDP.ORG FOR DALLAS OFFICE) AND MUST BE SUBMITTED WITH O&M MANUALS.
8. EXHAUST HOODS, CONDENSATE HOODS, FIRE SUPPRESSION SYSTEMS, CONNECTIONS AND CONTROLS (PROVIDE AND INSTALL – *UNLESS OTHERWISE SPECIFIED*). PROVIDE TEMPERED AIR AT ALL SUPPLY DUCTS.
   - A. IF EXHAUST/CONDENSATE HOODS AND FIRE SUPPRESSION SYSTEMS ARE SPECIFIED UNDER SECTION 11 40 00, DIVISION 23 IS RESPONSIBLE FOR ALL EXHAUST AND CONDENSATE HOOD CONNECTIONS (PROVIDE AND INSTALL).
9. VFD SYSTEM AND CONTROLLERS, WHEN REQUIRED BY CODE (PROVIDE AND INSTALL).
10. PROVIDE AND INSTALL ALL VENTILATION (DIRECT OR INDIRECT), AIR CONDITIONING AND HEATING SYSTEMS (UNLESS OTHERWISE SPECIFIED).
11. COORDINATE SUPPLY AND RETURN DUCTS ABOVE SERVING COUNTERS OR OPEN-AIR REFRIGERATED MERCHANDISERS. NO COLD AIR TO BLOW DIRECTLY ON HOT FOOD COUNTERS.
12. COORDINATE SUPPLY AND RETURN DUCTS AWAY FROM EQUIPMENT WITH TOP MOUNTED REFRIGERATION. NO COLD AIR TO BLOW DIRECTLY ON COMPRESSORS.
13. MECHANICAL CONTRACTOR TO LOCATE TEMPERATURE MONITORS WITHIN RETURN DUCTS.
14. CIRCULATING AIR ABOVE WALK-IN ASSEMBLIES (PROVIDE AND INSTALL).
15. CIRCULATING AIR ABOVE AND IN AIR GAPS AT WAREHOUSE COLD STORAGE ASSEMBLIES (PROVIDE AND INSTALL).
16. WATER CHILLERS AS REQUIRED (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).
17. PIPING FROM ICE BUILDERS TO TUMBLE CHILLERS (IF EQUIPMENT IS PROVIDED IN THIS PROJECT) (PROVIDE, SIZE AND LOCATE).

3 MECHANICAL COORDINATION NOTES
NOT TO SCALE

GENERAL CONTRACTOR RESPONSIBLE FOR BUT NOT LIMITED TO:

1. ANY WALL PENETRATION REQUIRED FOR FOOD SERVICE EQUIPMENT UTILITIES. ESCUTCHEON PLATES OR S/S SLEEVES TO BE PROVIDED AND INSTALLED AS NEEDED.
2. BULK FREEZER VENTILATION PIPE (IF BULK FREEZER IS PROVIDED IN THIS PROJECT) (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
3. CORE DRILLING FOR GUIDE RAILS (IF GUIDE RAILS ARE PROVIDED IN THIS PROJECT).
4. REFRIGERATION ROOF CURBS / ROOF JACK (IF REFRIGERATION SYSTEM IS PROVIDED IN THIS PROJECT AND LOCATED ON ROOF).
5. INTERIOR BOLLARDS (IF REQUIRED FOR THIS PROJECT) – TO BE EPOXY PAINTED PER LOCAL CODES (PROVIDE AND INSTALL).
6. FURNISH AND INSTALL 3/4" PLYWOOD BLOCKING IN THE WALL FOR MOUNTING EQUIPMENT FURNISHED BY SECTION 11 40 00 AS REQUIRED.
7. WALK-IN DEPRESSIONS (TO BE DEAD LEVEL) AND SAND LEVELING BED (IF WALK-IN IS PROVIDED IN THIS PROJECT AND RECESS IS SHOWN).
8. STRUCTURAL BRACING FOR BULK WALK-IN CEILING PANELS IF REQUIRED.
9. MENU SYSTEM VIDEO MONITORS IN SERVERY (UNLESS OTHERWISE SPECIFIED).
10. STRUCTURAL BRACING FOR MENU SYSTEM VIDEO MONITORS IF REQUIRED.
11. INTERIOR/EXTERIOR REFRIGERATION PENETRATIONS AND SLEEVES AT BUILDING PENETRATIONS.
12. DOORSCOPE VIEWER (PEEPHOLE) WITH WIDE VIEWING ANGLE AT RECEIVING DOOR.
13. CANOPY AT RECEIVING DOOR. COORDINATE HEIGHT WITH THE HEIGHT OF RECEIVING DOOR (8') AND THE MOUNTING HEIGHT OF AIR SCREEN ABOVE THE DOOR.
14. SOAP AND TOWEL DISPENSER PROVIDED BY OWNER. G.C. RESPONSIBLE FOR INSTALLATION.
15. WASHER AND DRYER (PROVIDE AND INSTALL, UNLESS OTHERWISE SPECIFIED).
16. DWARF WALL AT EXPOSED FRONT/ENDS OF CAFETERIA SERVING COUNTERS WITH FINISH AS SELECTED BY ARCHITECT (IF REQUIRED IN THIS PROJECT).

2 GENERAL CONTRACTOR COORDINATION NOTES
NOT TO SCALE

HEALTH DEPARTMENT REQUIREMENTS (VERIFY WITH LOCAL JURISDICTIONS):

1. FLOORS: VERIFY WITH DIVISION 9. FLOORS TO BE SMOOTH, IMPERVIOUS, EASILY CLEANABLE AND SLIP RESISTANT.
2. WALLS: VERIFY WITH ARCHITECTURAL DOCUMENTS. WALLS TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
3. CEILING: LAY-IN TILES. CEILING TILES TO BE SMOOTH, IMPERVIOUS, AND EASILY CLEANABLE.
4. EMPLOYEE TOILET: TO BE LOCATED OFF MAIN CORRIDOR AND ADJACENT TO MAIN KITCHEN. RESTROOM MUST HAVE A VESTIBULE AND NOT OPEN TO KITCHEN / PREP AREAS. TOILETS TO BE WELL VENTILATED.
5. LAVATORIES: WALL HUNG LAVATORIES LOCATED WITHIN ALL FUNCTIONAL WORKING AREAS.
6. UTENSIL CLEANING/SANITIZING: ACCOMPLISHED IN UTENSIL WASH AREA WITH (3) 2'-0" x 2'-2" x 15" MINIMUM DEEP SINKS AND WAREWASH MACHINE.
7. MECHANICAL CLEANING/SANITIZING OF TABLEWARE: ACCOMPLISHED BY WAREWASH MACHINE.
8. STOREROOMS: AMPLE DAILY STORAGE PROVIDED IN ENCLOSED STORE ROOMS. STORE ROOMS TO BE VENTILATED AND MAINTAIN PROPER TEMPERATURE.
9. WATER HEATER: LOCATED IN THE MECHANICAL ROOM ADJACENT TO KITCHEN. TO BE SIZED TO PROVIDE AMPLE WATER TO MAINTAIN PROPER WATER TEMPERATURE THROUGHOUT HOURS OF OPERATION.
10. GREASE TRAP: LOCATED AT EXTERIOR OF BUILDING. REFER TO ENGINEER'S DRAWINGS.
11. FOOD SERVICE EQUIPMENT: ALL FLOOR-MOUNTED EQUIPMENT IS TO BE SEALED TO THE FLOOR TO PROVIDE AN EASILY CLEANABLE SURFACE AND PREVENT SEEPAGE. EQUIPMENT NOT MOUNTED TO THE FLOOR IS TO BE WALL MOUNTED ON WALL CARRIERS, OR ELEVATED ON LEGS TO PROVIDE AT LEAST A SIX-INCH CLEARANCE BETWEEN FLOOR AND EQUIPMENT.
12. MOP SINK: LOCATED IN JANITOR CLOSET OFF MAIN KITCHEN CORRIDOR, AND LOCATED IN CLOSE PROXIMITY TO THE SERVERY WAREWASH AREA.
13. EXHAUST HOODS: EXHAUST HOODS PROVIDED OVER COOKING EQUIPMENT WITH LIQUID CHEMICAL ANSUL FIRE EXTINGUISHING SYSTEM.
14. LIGHTING AND PROTECTIVE SHIELDING: RECESSED CEILING-MOUNTED FLUORESCENT LIGHT FIXTURES FITTED WITH CLEAR LEXAN DIFFUSERS.
15. GARBAGE AND REFUSE: CENTRAL TRASH COLLECTION PROVIDED FOR BUILDING LOCATED NEAR RECEIVING AREA ON SMOOTH CONCRETE SURFACE.
16. POISONOUS AND TOXIC MATERIAL STORAGE: LOCATED IN RESPECTIVE JANITOR CLOSETS WITH LOCKING HARDWARE.

1 HEALTH DEPARTMENT COORDINATION NOTES
NOT TO SCALE

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FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
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PROJ. NO.: 23-25
DATE: 07/18/25
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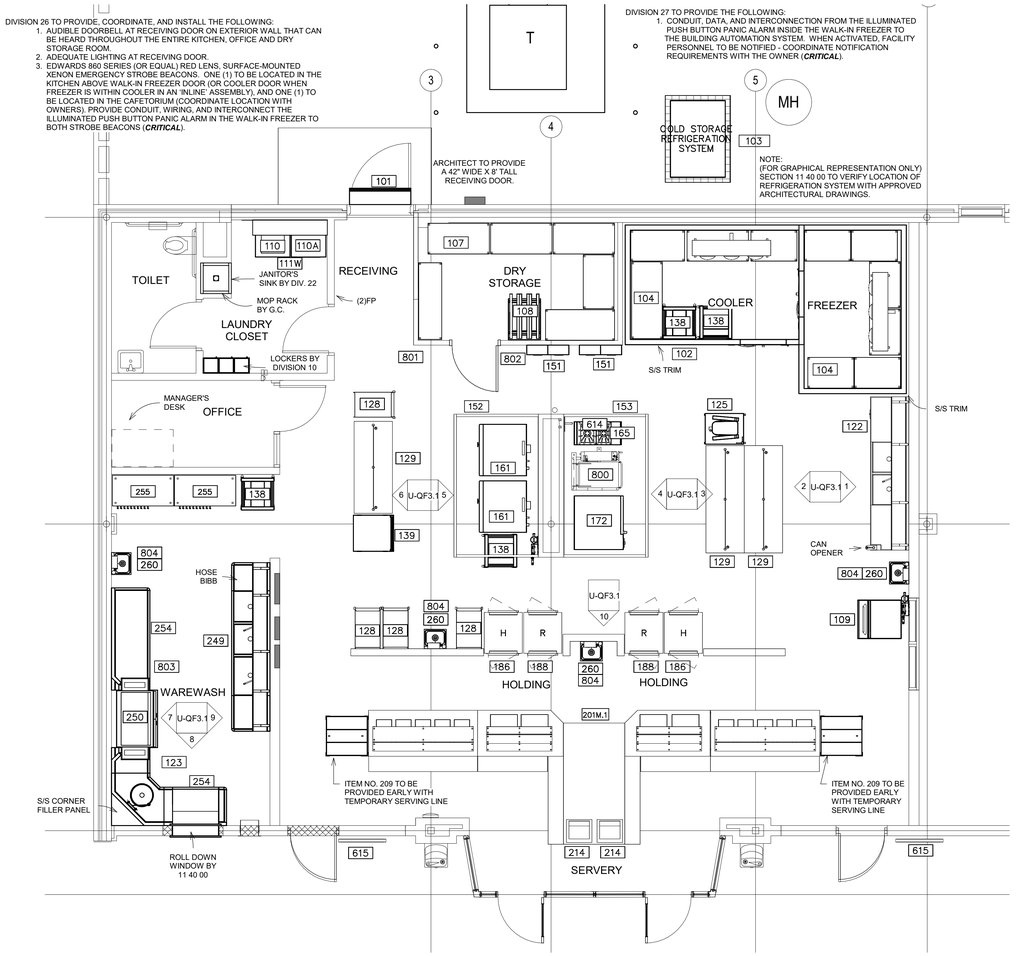
FS GENERAL COORDINATION NOTES

U-QF0.0

FOOD SERVICE DRAWING INDEX	
FDP SHEET NUMBER	FDP SHEET NAME
U-QF0.0	FS GENERAL COORDINATION NOTES
U-QF1.0	FS EQUIPMENT PLAN
U-QF1.1	FS FACILITY MODEL
U-QF1.2	FS EQUIPMENT MODEL
U-QF1.3	FS SPECIAL CONDITIONS & MECHANICAL PLAN
U-QF1.4	FS PLUMBING PLAN
U-QF1.5	FS ELECTRICAL PLAN
U-QF1.6	FS CONDENSING UNITS
U-QF1.7	FS WALK-INS
U-QF1.8	FS SERVING COUNTERS
U-QF1.9	FS SERVING COUNTERS
U-QF2.0	FS DEMO PLAN
U-QF2.1	FS TEMPORARY SERVING
U-QF3.1	FS ELEVATIONS
U-QF4.1	FS SECTIONS & DETAILS
U-QF4.2	FS DETAILS
U-QF4.3	FS DETAILS



1 FOOD SERVICE EQUIPMENT PLAN
1/4" = 1'-0"

FOOD SERVICE EQUIPMENT SCHEDULE					
REFER TO SHEET QF1 FOR GENERAL CONTRACTOR & HEALTH DEPARTMENT COORDINATION NOTES					
FDP ITEM	FDP QTY	FDP DESCRIPTION	FDP REMARKS	MANUFACTURER	MODEL
101	1	AIR SCREEN		MARS	STD248-1UA-OB
102	1	COLD STORAGE ASSEMBLY		AMERICAN PANEL	
103	1	COLD STORAGE REFRIGERATION SYSTEM			
104	2	COLD STORAGE SHELVING		METRO	METROMAX Q
107	1	DRY STORAGE SHELVING		METRO	METROMAX Q
108	1	CAN RACK		NEW AGE	1250CK
109	1	ICE MACHINE W/ BIN		MANITOWOC	UYF0310A
110	1	CLOTHES WASHER		WHIRLPOOL	RESIDENTIAL
110A	1	CLOTHES DRYER		WHIRLPOOL	RESIDENTIAL
111W	1	WALL MOUNTED OVERSHELF		CUSTOM FABRICATED	
122	1	TWO COMPARTMENT SINK WITHOUT DISPOSER		CUSTOM FABRICATED	
123	1	DISPOSER - 3HP		SALVAJOR	300-CA-18-ASRR-LD
125	1	20 QT. MIXER W/STAND		HOBART	HL200
128	4	UTILITY CART		LAKESIDE	522
129	3	WORKTABLE W/S.BAR UT.RACK		CUSTOM FABRICATED	
138	4	PAN RACK		CRES COR	207-UA-13A
139	1	INSUL MOBILE PROOFER		CRES COR	H-137-WSUA-12D
151	2	FIRE PROTECTION SYSTEM		ANSUL	R102
152	1	EXHAUST HOOD	EXISTING		
153	1	EXHAUST HOOD	EXISTING		
161	2	CONVECTION OVEN		BLODGETT	DFG-200 DBL
165	1	TWO BURNER RANGE		VULCAN	V2B18B
172	1	COMBI OVEN		RATIONAL	ICP 6-FULL/6-FULL N/G
186	2	PASS-THRU HEATED CABINET-1DR		TRAULSEN	AHF132WP
188	2	PASS-THRU REFRIGERATOR-1DR		TRAULSEN	AHT132WPUT
201M.1	1	SERVING COUNTER-MODULAR		COUNTERCRAFT	SCOL-408-MOD
214	2	CASH REGISTER	OWNER FURNISHED		
249	1	THREE COMPARTMENT SINK NO DISPOSER		CUSTOM FABRICATED	
250	1	DISHMACHINE		HOBART	CL44-BAS
254	2	SOILED & CLEAN DISHTABLE		CUSTOM FABRICATED	
255	2	MOBILE DRYING RACK		METRO	PR48VX3
260	4	HAND SINK	FURNISHED & INSTALLED BY DIV. 22		
614	1	FILL FAUCET		T&S	B-0610
615	2	MENU MONITOR	BY OWNER		
800	1	15 GAL. BRAISING PAN		GROEN	BPM-15GA
801	1	S/S CORNER GUARDS	LOCATED ON EVERY EXPOSED CORNER THROUGHOUT KITCHEN	CUSTOM FABRICATED	
802	1	WALL BUMPERS	LOCATED ON ALL EXPOSED BUILDING WALLS	PAWLING	MD-1
803	1	WATER SOFTENER		HOBART	WS-40
804	4	S/S SPLASH GUARDS		CUSTOM FABRICATED	

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FOODSERVICE DESIGN PROFESSIONALS

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FORT BEND INDEPENDENT SCHOOL DISTRICT
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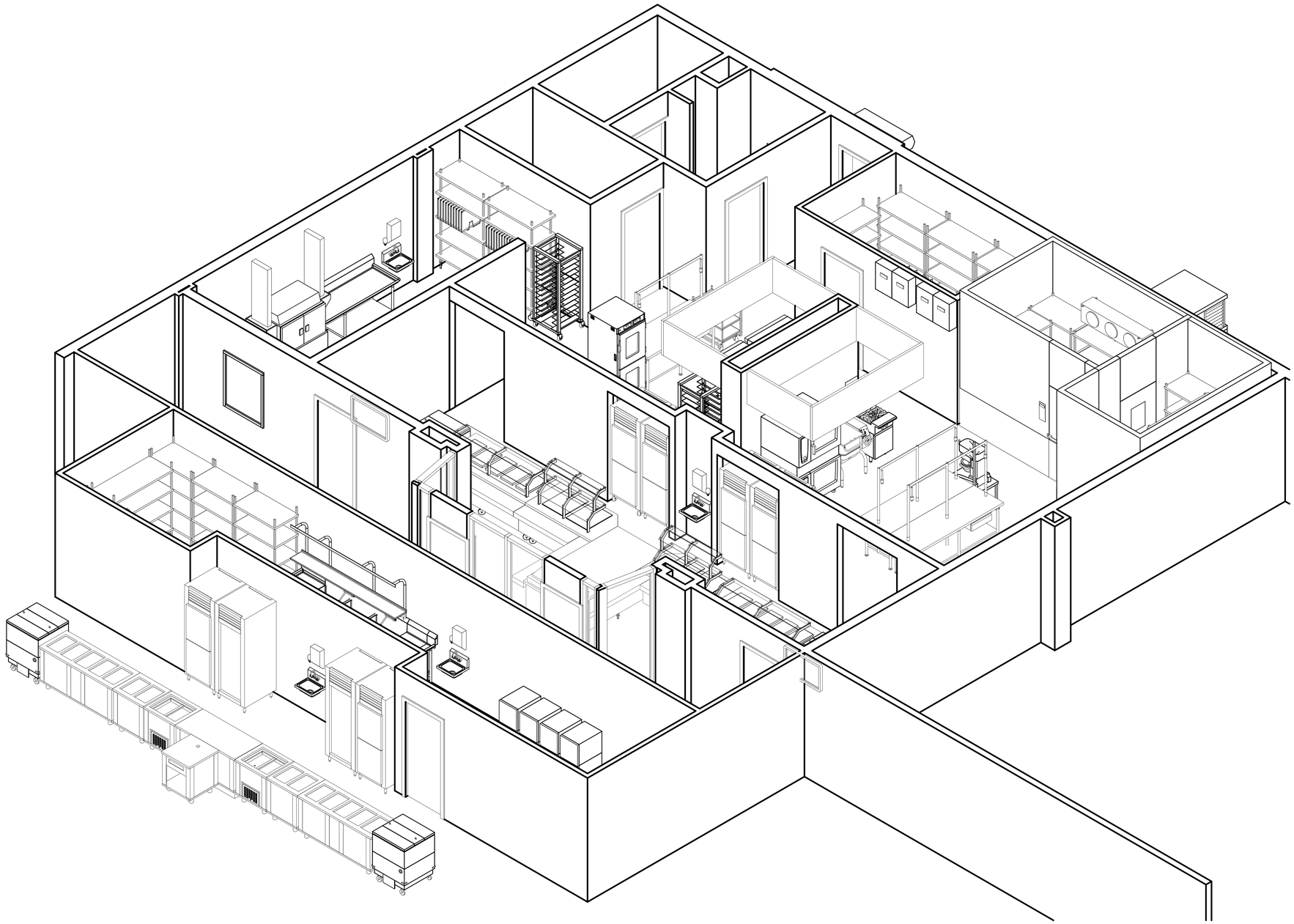
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS EQUIPMENT PLAN

U-QF1.0

ISOMETRIC VIEWS WITHIN THIS DRAWING ARE NOT TO SCALE AND ARE PROVIDED FOR REFERENCE PURPOSES ONLY. ISOMETRIC VIEWS ARE NOT INTENDED FOR REGULATORY APPROVAL, PERMITTING, NOR CONSTRUCTION. REFER TO FLOOR PLANS AND DETAILS FOR SPECIFIC PROJECT INFORMATION.



1 FS FACILITY MODEL

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FS FACILITY MODEL

U-QF1.1

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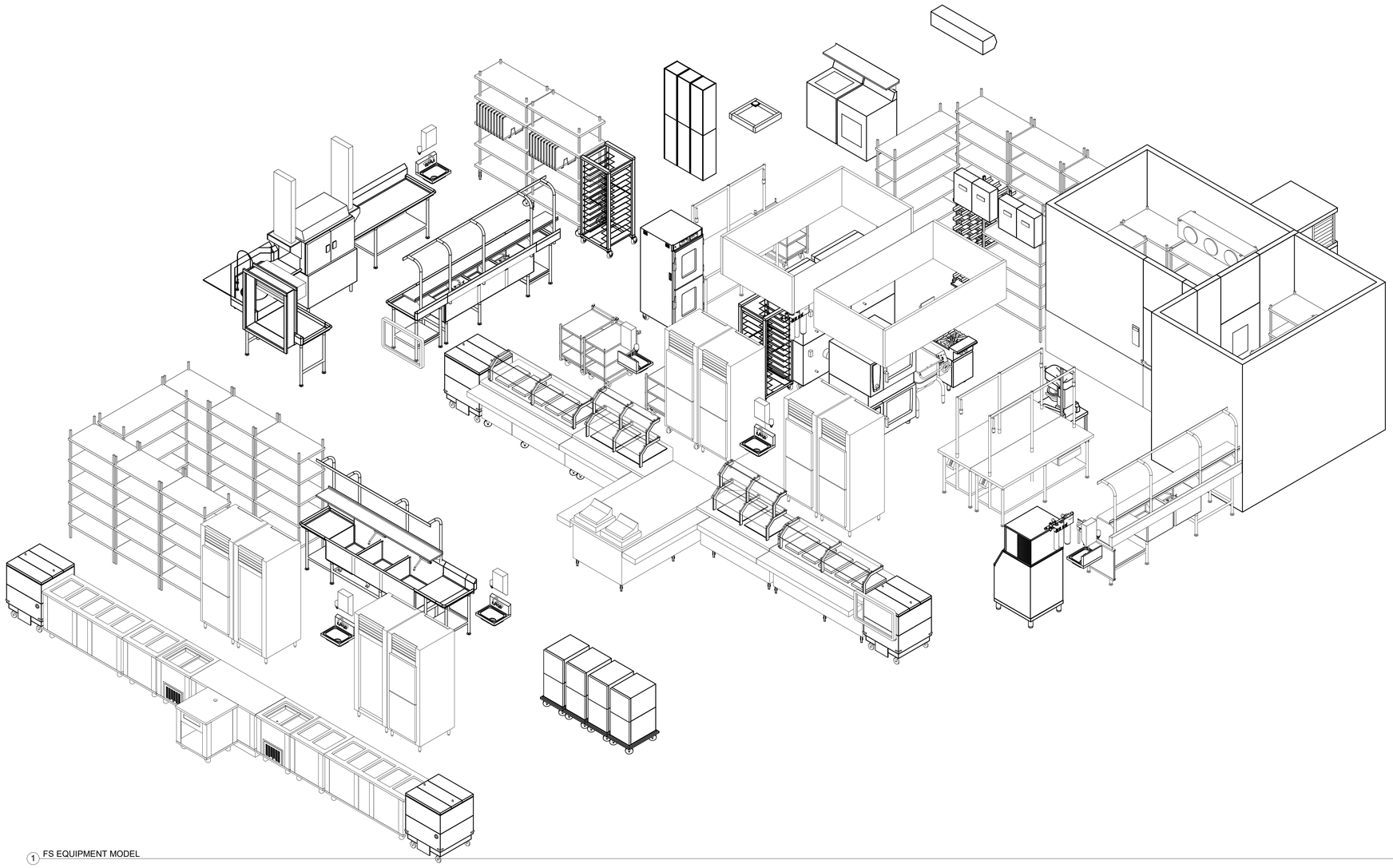

1 FS EQUIPMENT MODEL

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FDP
FOODSERVICE DESIGN PROFESSIONALS

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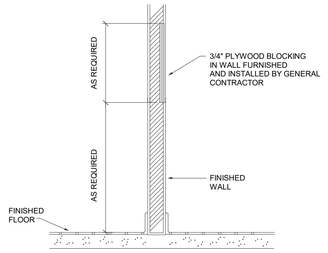
FS EQUIPMENT MODEL

U-QF1.2

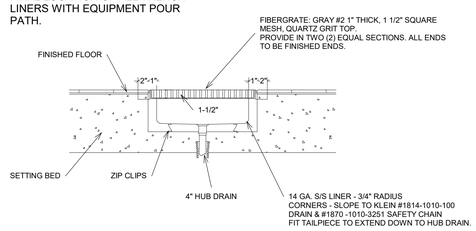
FOOD SERVICE MECHANICAL SCHEDULE						
REFER TO SHEET QF1 FOR MECHANICAL COORDINATION NOTES						
FDP NO.	FDP QTY	FDP TYPE	FDP SIZE	FDP LOC	FDP CFM	FDP S.P.
M101	1	EXHAUST	4" X 16"		400	0.30"
M102	1	EXHAUST	4" X 16"		800	0.30"
M103	1	DRYER VENT	6" DIA.		---	---

NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION AND SIZE OF WALL BLOCKING.

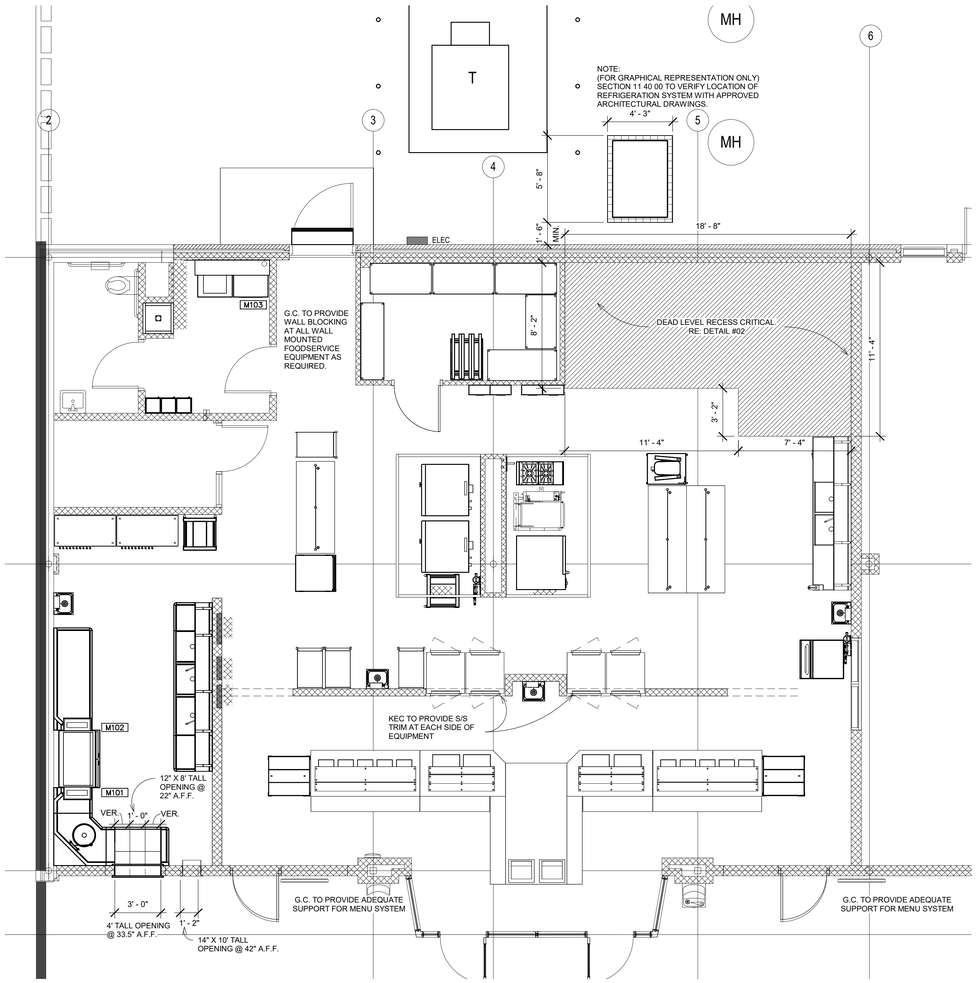


5 WALL BLOCKING DETAIL
NOT TO SCALE

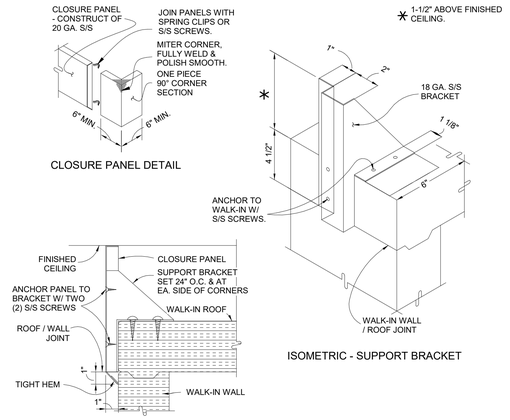
NOTE:
SECTION 11 40 00 TO COORDINATE FINAL LOCATION OF ALL TRENCH LINERS WITH EQUIPMENT POUR PATH.



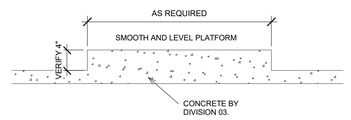
6 TRENCH LINER DETAIL
NOT TO SCALE



1 FOOD SERVICE SPECIAL CONDITIONS PLAN
1/4" = 1'-0"

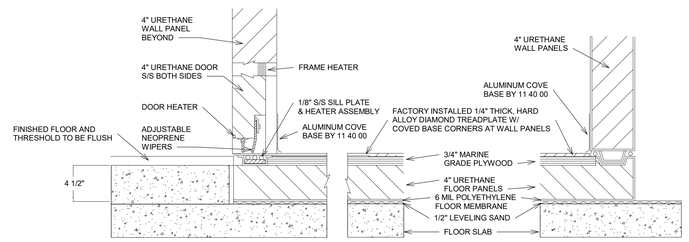


3 COLD STORAGE ASSEMBLY ENCLOSURE PANEL DETAIL
NOT TO SCALE



COLD STORAGE ASSEMBLY REFRIGERATION SYSTEM GROUND MOUNT 4" PLATFORM DETAIL
4 NOT TO SCALE

SLAB TO BE MODIFIED AS REQUIRED TO ALLOW FOR A 4 1/2" DEPRESSION SLAB. PROVIDE NEW LEVEL CONCRETE PAD FOR COLD STORAGE ASSEMBLY.



WALL SECTION @ EXTERIOR DOOR

2 COLD STORAGE ASSEMBLY 4 1/2" DEPRESSION DETAIL
NOT TO SCALE

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7/15/2025
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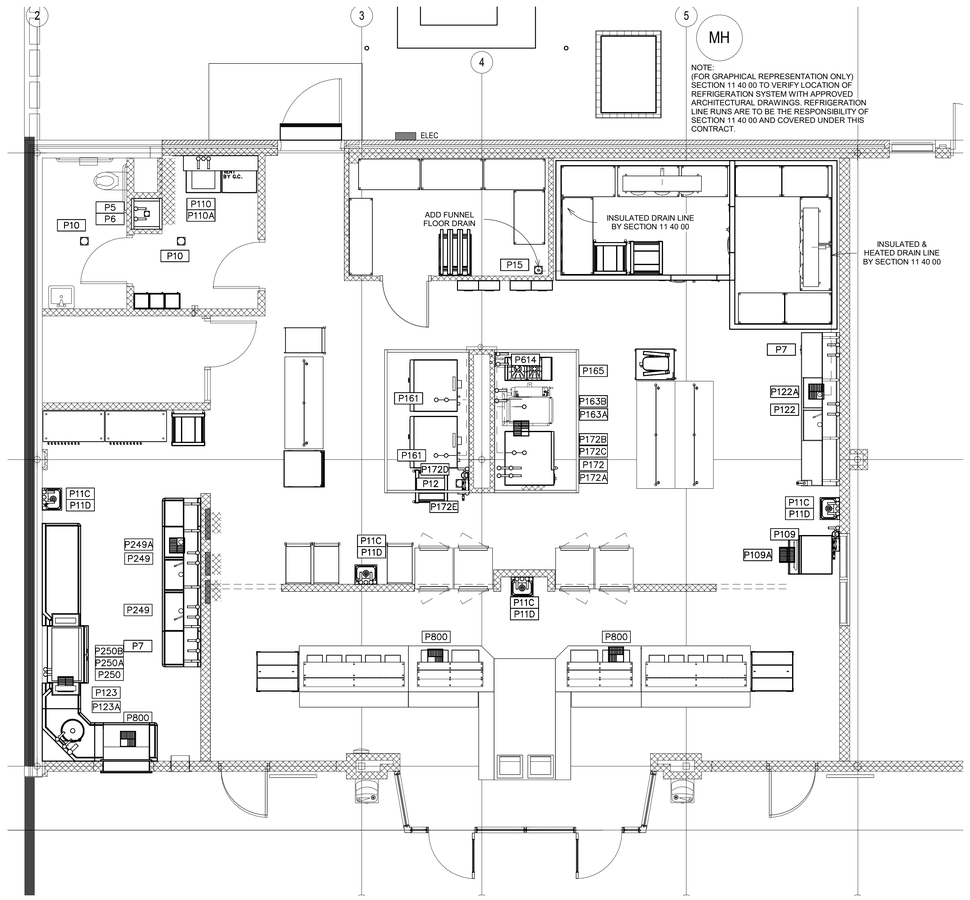
FS SPECIAL CONDITIONS & MECHANICAL PLAN

U-QF1.3

FOOD SERVICE PLUMBING SCHEDULE						
REFER TO SHEET QF1 FOR PLUMBING COORDINATION NOTES						
FDP PNO	FDP PSIZE	FDP PCONN	FDP PSERVICE TO	FDP PLOC	FDP PAFF	FDP PREMARKS
P5	3/4"	H & C WATER	JANITOR SINK	WALL	48"	JANITOR SINK BY PLUMBER
P6	4"	FLOOR DRAIN	JANITOR SINK	FLOOR	VERIFY	JANITOR SINK BY PLUMBER
P7	3/4"	H & C WATER	HOSE BIBB	WALL	18"	BTC
P10	VERIFY	FLOOR DRAIN	GENERAL AREA DRAIN	FLOOR	VERIFY	---
P11C	1/2"	H & C WATER	FAUCET	WALL	18"	FURNISHED & INSTALLED BY DIV. 22
P11D	1 1/2"	DIRECT DRAIN	HAND SINK	WALL	15"	FURNISHED & INSTALLED BY DIV. 22
P12	VERIFY	FLOOR DRAIN	EQUIP. DRAIN	FLOOR	VERIFY	NO SLOPE
P15	4"	FLOOR DRAIN	FUNNEL FLOOR DRAIN	FLOOR	0"	---
P109	3/4"	COLD WATER	WATER/ ICE	WALL	60"	BTC
P109A	12" SQ.	FLOOR SINK	ICE MACHINE	FLOOR	0"	FULL GRATE
P110	3/4"	H & C WATER	CLOTHES WASHER	WALL	48"	BTC; VALVE BOX
P110A	2"	INDIRECT DRAIN	CLOTHES WASHER	WALL	48"	VALVE BOX
P122	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P122A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	3/4 GRATE
P123	3/4"	H & C WATER	FAUCET / DISPOSER	WALL	13"	BTC
P123A	2"	DIRECT DRAIN	DISPOSER	WALL	10"	BTC
P161	(2)3/4"	NATURAL GAS	CONVECTION OVEN	WALL	18"/36"	BTC - 60 MBTU/HR EACH
P163A	3/4"	NATURAL GAS	TILT BRAISING PAN	WALL	18"	BTC - 65 MBTU/HR
P163B	3/4"	H & C WATER	TILT BRAISING PAN	WALL	36"	BTC
P165	1"	NATURAL GAS	RANGE	WALL	18"	BTC - 70 MBTU/HR
P172	(2)3/4"	COLD WATER	COMBI OVEN	WALL	24"/48"	BTC - INTERCONNECT THRU FILTERS
P172A	3/4"	COLD WATER	COMBI OVEN	WALL	48"	BTC
P172B	12"SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE
P172C	(2)3/4"	NATURAL GAS	COMBI OVEN	WALL	18"/36"	BTC: 105 MBTU/HR EACH
P172D	3/4"	COLD WATER	COMBI OVEN	WALL	66"	BTC; INTERCONNECT TO P172
P172E	3/4"	COLD WATER	COMBI OVEN WATER FILTER	WALL	66"	BTC
P249	3/4"	H & C WATER	FAUCET	WALL	13"	BTC
P249A	12" SQ.	FLOOR SINK	SINK	FLOOR	0"	THREE QUARTER GRATE
P250	12" SQ.	FLOOR SINK	BOOSTER / DISHMACHINE	FLOOR	18"	BTC
P250A	3/4"	HOT WATER	DISHMACHINE	WALL	18"	EXT. THRU W.FILTER TO BOOSTER / DISH MACHINE - 140DEG.MIN.
P250B	3/4"	COLD WATER	DISHMACHINE	WALL	18"	BTC
P614	1/2"	H & C WATER	FILL FAUCET	WALL	42"	BTC
P800	12" SQ.	FLOOR SINK	EQUIPMENT	FLOOR	0"	3/4 GRATE



1 FOOD SERVICE PLUMBING PLAN
1/4" = 1'-0"

SECTION 11 40 00 TO PROVIDE LOOSE WITH FOOD SERVICE EQUIPMENT. INSTALLATION BY DIV. 22 & 26.

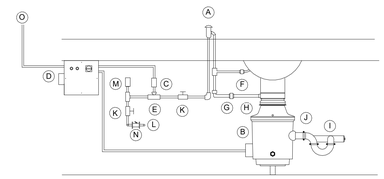
- (A) VACUUM BREAKER
- (B) DISPOSER
- (C) TIME DELAY
- (D) CONTROL PANEL
- (E) SOLENOID VALVE

DIVISION 22 TO PROVIDE AND INSTALL

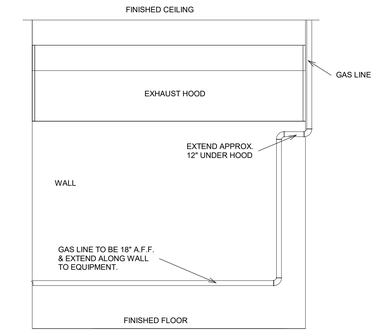
- (F) 1/2" CW INLET
- (G) FLOW CONTROL
- (H) 1/2" CW
- (I) 2" DRAIN LINE WITH P-TRAP & Y ADAPTOR
- (J) 1-1/2" TAILPIECE
- (K) GATE VALVE
- (L) 1/2" CW SUPPLY
- (M) SHOCK STOP
- (N) RPZ BACK FLOW PREVENTOR

DIVISION 26 TO PROVIDE AND INSTALL

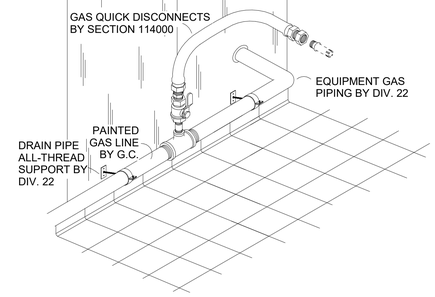
- (O) POWER SUPPLY



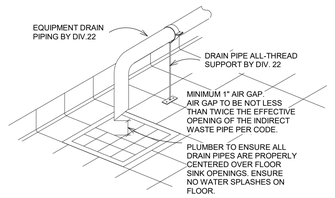
6 DISPOSER WITH VACUUM BREAKER DETAIL
NOT TO SCALE



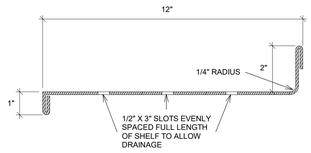
7 EXHAUST HOOD - GAS LINE ROUTING DETAIL
NOT TO SCALE



3 GAS DISCONNECT DETAIL
NOT TO SCALE



5 DRAIN PIPING FASTENER DETAIL
NOT TO SCALE



8 WAREWASH - PERFORATED OVER SHELF DETAIL
NOT TO SCALE

HW	HOT WATER	FFD	FUNNEL FLOOR DRAIN		
CW	COLD WATER	EVC	EXHAUST VENT CONNECTION		
HTW	180 F HOT WATER	SVC	SUPPLY VENT CONNECTION		
	CHILLED WATER	FR	DIRECT-CONNECTED FLUE RISER		
W	DIRECT WASTE	PS	PIPE SLEEVE		
IW	INDIRECT WASTE		COMPRESSED AIR		
	GAS SUPPLY		CO2		
	STEAM SUPPLY	AFF	ABOVE FINISHED FLOOR		
CR	CONDENSATE RETURN	BTC	BRANCH TO CONN. ON EQUIP		
DR	DRAIN	DFA	DROP FROM ABOVE		
FD	FLOOR DRAIN	CLG	CEILING		
FST	FLOOR SINK 3/4 GRATE				
FSH	FLOOR SINK 3/4 GRATE				

2 PLUMBING SYMBOLS
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FDP
FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
FCSI 48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/18/2025

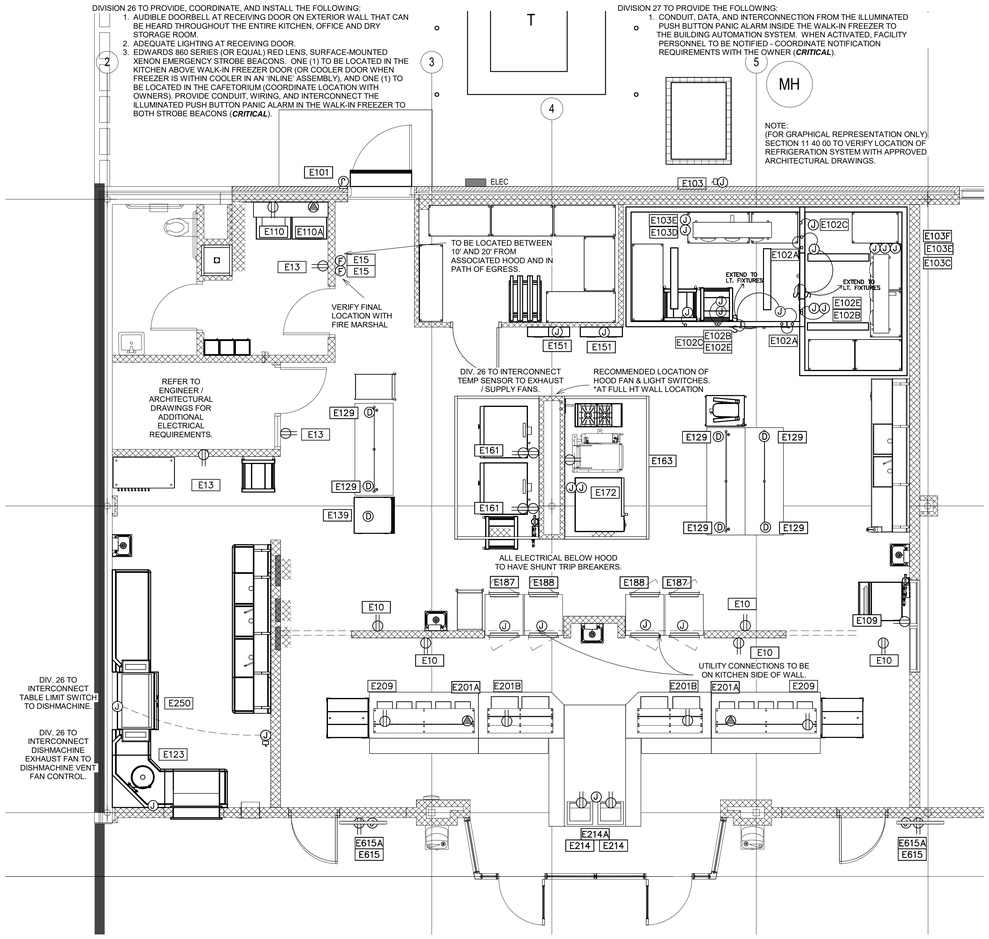
ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS PLUMBING PLAN

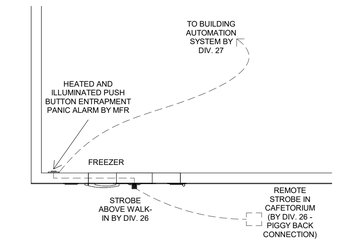
U-QF1.4

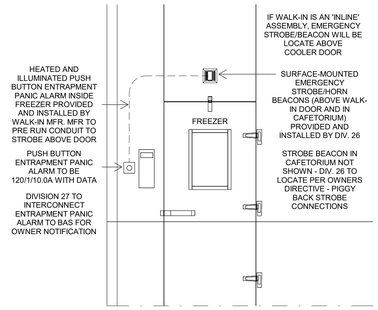
FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E10	DR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E13	WPR	16.0A	120	1	CONVENIENCE	WALL	24"	MOUNT HORIZONTAL
E15	JB	---	---	---	FIRE PROT. SYSTEM	WALL	48"	RECESSED EMPTY CONDUIT FOR FIRE PULL
E101	JB	5.1A	120	1	AIR SCREEN	WALL	82"	BTC; MAGNETIC REED SWITCH ON DOOR JAMB & DOOR
E102A	JB	16.0A	120	1	DOOR HEATER/LIGHTS	CLG	DFA	BTC
E102B	JB	5.0A	120	1	TEMP. ALARM	CLG	DFA	BTC
E102C	JB	5.0A	120	1	PRESSURE RELIEF PORT	CLG	DFA	BTC
E102E	JB	10.0A	120	1	PANIC ALARM BUTTON	CLG	DFA	BTC-INTERCONNECT TO STROBE LIGHT/HORN ABOVE FREEZER DOOR AND IN CAFETORIUM
E103	JB/DS	21.9A	208	3	REFRIGERATION SYSTEM	VERIFY	VERIFY	BTC
E103C	JB	9.1A	208	1	FREEZER COIL	CLG	DFA	BTC
E103D	JB	1.8A	120	1	COOLER COIL	CLG	DFA	BTC
E103E	JB	---	---	---	DATA CONNECTION	CLG	DFA	BTC; RUN TO NEAREST IDF / MDF ROOM
E103F	JB	16.0A	120	1	DRAIN LINE HEATER	CLG	DFA	BTC; DEDICATED CIRCUIT
E109	DR	11.9A	120	1	ICE MACHINE	WALL	60"	---
E110	DR	16.0A	120	1	CLOTHES WASHER	WALL	48"	--
E110A	SR	30.0A	208	1	CLOTHES DRYER	WALL	48"	VERIFY NEMA PLUG RECEPTACLE

FOOD SERVICE ELECTRICAL SCHEDULE								
REFER TO SHEET QF1 FOR ELECTRICAL COORDINATION NOTES								
FDP ENO	FDP ECONN	FDP ELOAD	FDP EVOLT	FDP EPH	FDP ESERVICE TO	FDP ELOC	FDP EAFF	FDP EREMARKS
E123	JB	3.0HP	208	3	DISPOSER	WALL	24"	BTC; CONNECT THRU C.P. TO DISPOSER
E129	DCR	16.0A	120	1	TABLE RECEPTACLE	CLG	84"	TWISTLOCK PLUG & RECEPTACLE
E139	DCR	15.0A	120	1	INSUL. MOBILE PROOFER	CEILING	DFA	--
E151	JB	1.0A	120	1	FIRE PROT. SYSTEM	CLG	DFA	BTC; RE: NOTE #4, #6, #9 & #11
E161	(2)DR	6.0A EA.	120	1	CONVECTION OVEN	WALL	24"/48"	SHUNT TRIP BREAKER
E163	DR	5.0A	120	1	TILT BRAISING PAN	WALL	24"	SHUNT TRIP BREAKER
E172	(2)JB	15.0A EA.	208	1	COMBI OVEN	WALL	24"/48"	BTC- SHUNT TRIP BREAKER
E187	JB	15.5A	120/208	1	HEATED CABINET	WALL	96"	BTC; MOUNT ON KITCHEN SIDE
E188	JB	7.2A	120	1	REFRIGERATOR	WALL	96"	BTC; MOUNT ON KITCHEN SIDE-OMIT PLUG, UNIT TO BE HARDWIRED
E201A	PMR	28.0A	208	1	HOT FOOD COUNTER	FLOOR	4.5"	BTC
E201B	PMR	16.0A	120	1	COLD FOOD COUNTER	FLR	4.5"	---
E209	PMR	8.0A	120	1	DROP FRONT MILK COOLER-8 CASE	FLR	4.5"	---
E214	PMR	16.0A	120	1	CASH REGISTER	FLR	4.5"	DEDICATED CIRCUIT
E214A	CS	---	---	---	POS	FLOOR	6"	BTC; CONDUIT W/DATA LINE TO RUN TO MANAGER'S OFFICE OR IDF ROOM-VERIFY
E250	JB/DS-JB	51.7A	480	3	DISHMACHINE	WALL	66"	BTC; EXTEND FROM JB/DS AT NEAREST WALL
E615	DR	5.0A	120	1	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE DCO AT VIDEO LOCATION
E615A	JB	---	---	---	VIDEO / DATA SYSTEM	CLG	VERIFY	PROVIDE JB AT DATA LOCATION

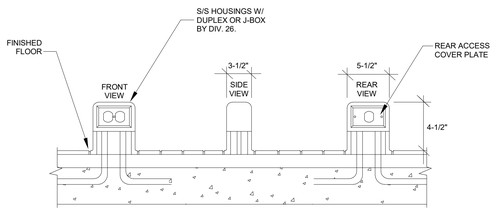


1 FOOD SERVICE ELECTRICAL PLAN
1/4" = 1'-0"

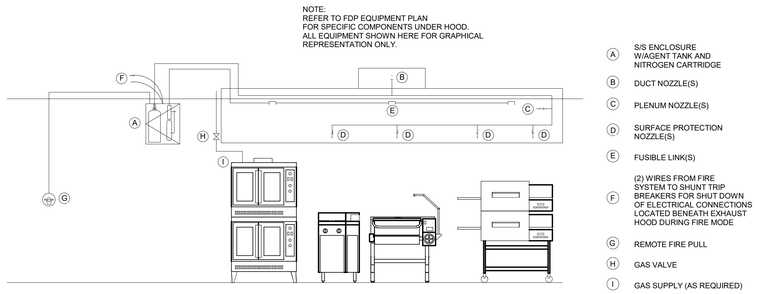




6 COLD STORAGE ASSEMBLY ENTRAPMENT PANIC ALARM DETAIL
NOT TO SCALE

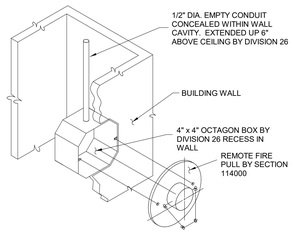


3 PEDESTAL MOUNTED RECEPTACLE DETAIL
NOT TO SCALE



A	S/S ENCLOSURE W/AGENT TANK AND NITROGEN CARTRIDGE
B	DUCT NOZZLE(S)
C	PLENUM NOZZLE(S)
D	SURFACE PROTECTION NOZZLE(S)
E	FUSIBLE LINK(S)
F	(2) WIRES FROM FIRE SYSTEM TO SHUNT TRIP BREAKERS FOR SHUT DOWN OF ELECTRICAL CONNECTIONS LOCATED BENEATH EXHAUST HOOD DURING FIRE MODE
G	REMOTE FIRE PULL
H	GAS VALVE
I	GAS SUPPLY (AS REQUIRED)

4 FIRE PROTECTION SYSTEM TYPICAL DETAIL
NOT TO SCALE



5 FIRE PROTECTION SYSTEM RECESSED FIRE PULL DETAIL
NOT TO SCALE

	SCR	CONDUIT STUB BTC ON RECEPT FURNISH WITH EQUIPMENT		CC	CONDUIT FOR COMPUTER CABLES
•	CS	CONDUIT STUB UP/OUT FOR DIRECT CONNECTION		BTC	BRANCH TO CONNECTION ON EQUIPMENT
	DR	DUPLEX RECEPTACLE		WPR	WATERPROOF RECEPTACLE (SPRING COVER)
	SR	SINGLE PURPOSE RECEPTACLE-1PH	/	FPB	FIRE PROTECTION BUZZER
	SR	SINGLE PURPOSE RECPTACLE-3PH		BSC	BEVERAGE SYSTEM CONDUIT
	FR	FLUSH FLOOR RECEPTACLE		DFA	DROP FROM ABOVE
	PMR	PEDESTAL MOUNTED RECEPTACLE		AFF	ABOVE FINISH FLOOR
	DCR	DROP CORD RECEPTACLE		CS/JB	JUNCTION BOX ON PEDESTAL
	JB	JUNCTION BOX ON CEILING		SW	SWITCH
	JB	JUNCTION BOX IN WALL		D	DATA
	JB/DS	JUNCTION BOX WITH DISCONNECT BY DIV.26			

2 ELECTRICAL SYMBOLS
NOT TO SCALE

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

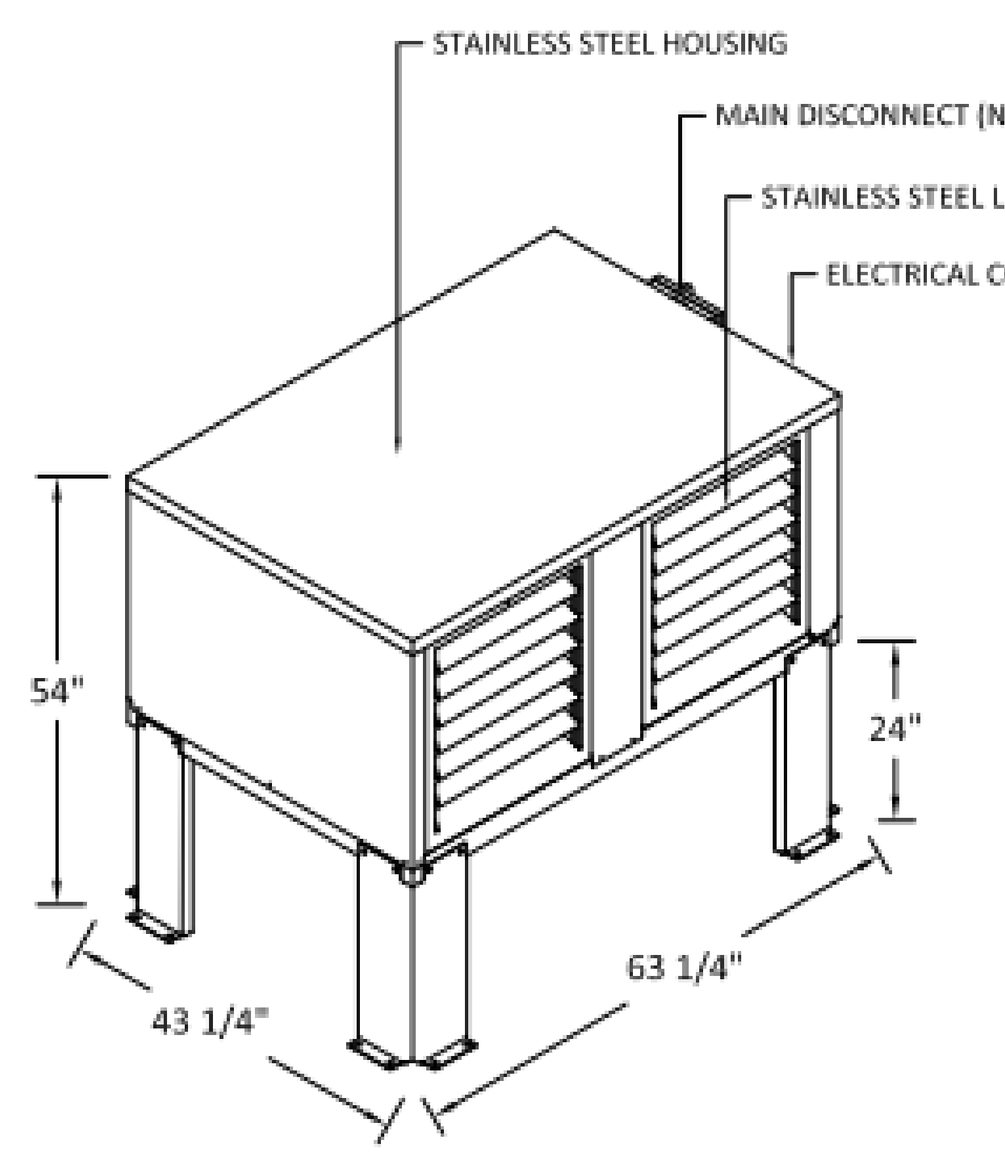
SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL
MELISSA MOORE
48854119
PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
THIS DOCUMENT APPEARING ON THIS SEAL IS AUTHORIZED BY MELISSA MOORE ON 7/15/2025 48854119 ON: 07182025

ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS ELECTRICAL PLAN

U-QF1.5

MODEL NO. ZS1-02Z-CT3-EST OUTDOOR AIR COOLED REFRIGERATION SYSTEM
ITEM NO. 103



NOTE:
- CRANKCASE HEATERS
- FAN CYCLING SWITCHES
- 24" STANDS & STAINLESS STEEL SKIRTING TO BE SHIPPED LOOSE FOR FIELD INSTALLATION
- DOOR SENSOR FOR EACH WALK-IN
- REFRIGERANT DETECTION SYSTEM
- CHECK VALVE (SHIPPED LOOSE)
- SHUT OFF VALVE (SHIPPED LOOSE)

RACK WEIGHT: 600 LBS.

RDT ENGINEERING SUMMARY

POWER SUPPLY: 208-230/60/3
CONNECTED LOAD: 21.8 AMPS

MOPD: 30 AMP
MINIMUM CIRCUIT AMPACITY: 24.1

SYSTEM	FIXTURES: ITEM #	FIXTURES: DESCRIPTION	TEMP °F: FIXT.	TEMP °F: SUCT.	REQ'D FIXTURE BTU/H	REFRIG. R-	CONDENSING UNIT: COMPRESSOR MODEL NO.	H.P.	RATING @ 60 HZ: RLA	RATING @ 60 HZ: V	RATING @ 60 HZ: PH	BTU CAP @ AMB °F: 110	TYPE	REC. CAP. (lbs)	CONDENSER	EVAPORATOR COILS: ITEM #	MODEL NO.	QTY	FAN MOTORS @ 60 HZ: RLA	FAN MOTORS: V	FAN MOTORS: PH	HEATERS @ 60 HZ: RLA	HEATERS: V	HEATERS: PH	DEFR. TYPE	DEFROST CONTROLLER TYPE	CONTROLLER QTY	ACCESSORIES: TSTAT	SOL. VALVE	EXP. VLV.	REFRIGERANT LINE SIZES (IN): SUCT.	SUCT. LINE RISER	LIQUID	LINE RUN (FT)	TYPE	TOTAL SYSTEM LOAD
A	102	WALK-IN COOLER	35	25	8506	454A	YS11KAE		11.2	208	3	11700	Z	14.0	L1R	-	BEL0095	1	1.8	115	1				O.C.	ECOSMART	1	F	F	EF	5/8	5/8	3/8	100	M	11.2
B	102	WALK-IN FREEZER	-10	-20	7607	454A	YF07KSE		10.6	208	3	7610	Z	14.0	L1R	-	BEL0080	1	1.0	208	1	9.1	208	1	ELEC	ECOSMART	1	F	F	EF	7/8	7/8	3/8	100	M	10.6

ALL EVAPORATOR COILS WILL REQUIRE A HOUSE POWER SUPPLY

c UL us LISTED

NOTE:
IT IS THE INSTALLING CONTRACTORS RESPONSIBILITY TO FOLLOW ALL APPLICABLE CODES AND CURRENT REFRIGERATION INDUSTRY STANDARDS AND PRACTICES WHEN DETERMINING LINE SIZES, AND INSTALLING AND STARTING UP RDT EQUIPMENT.

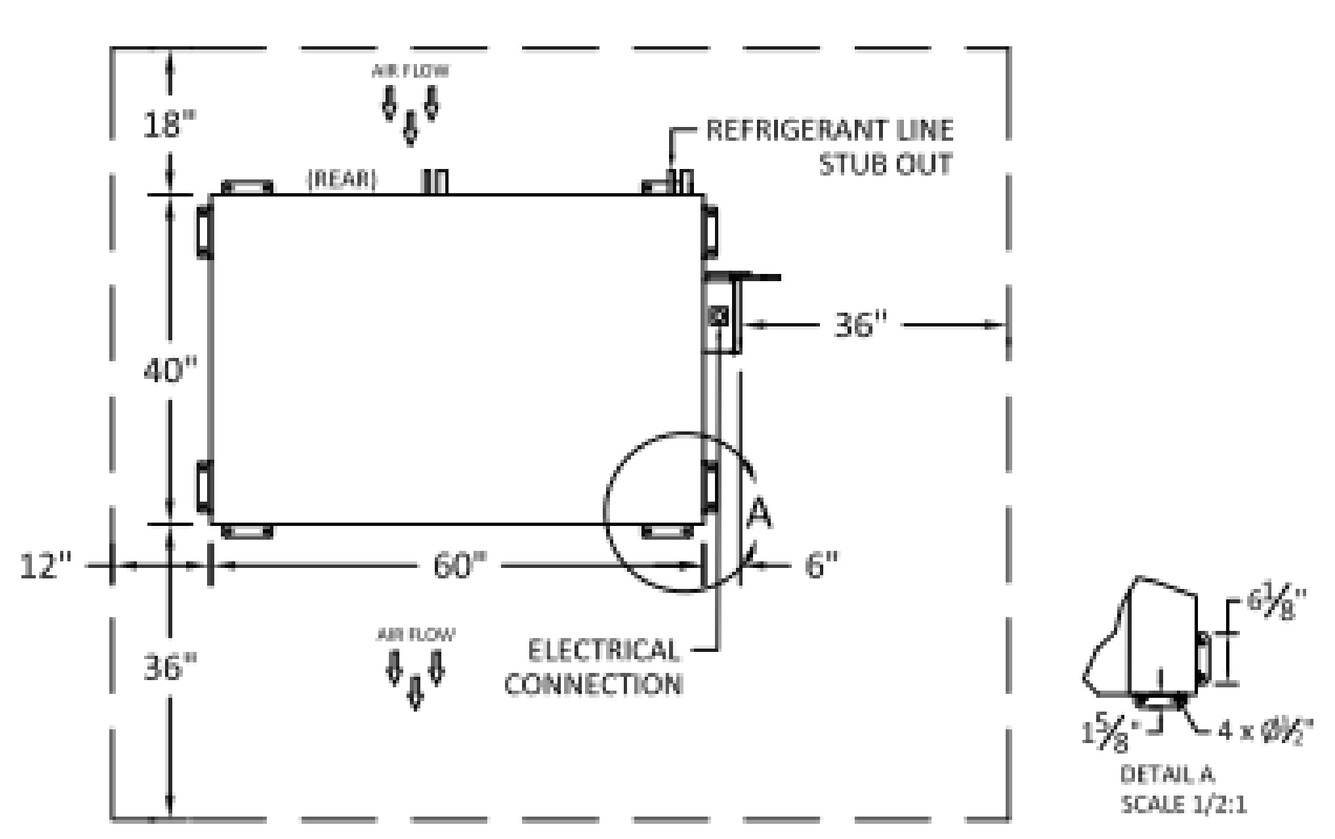
COMPRESSOR TYPE
Z SCROLL

DEFROST TYPE
O.C. OFF CYCLE
ELEC ELECTRIC

LINE TYPE
M MAIN - UP TO 100'

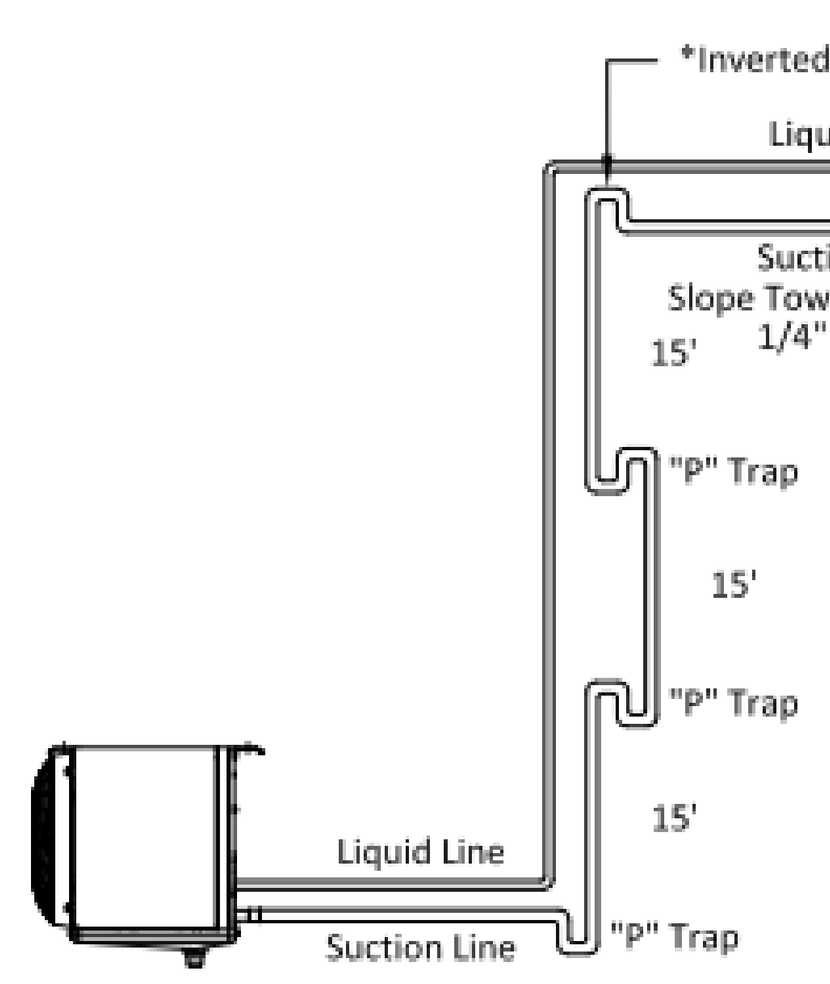
EVAPORATOR ACCESSORIES
EF EEV FACTORY EQUIPPED ON EVAP
F FACTORY EQUIPPED ON EVAP

PLANVIEW/ CLEARANCE REQUIREMENTS



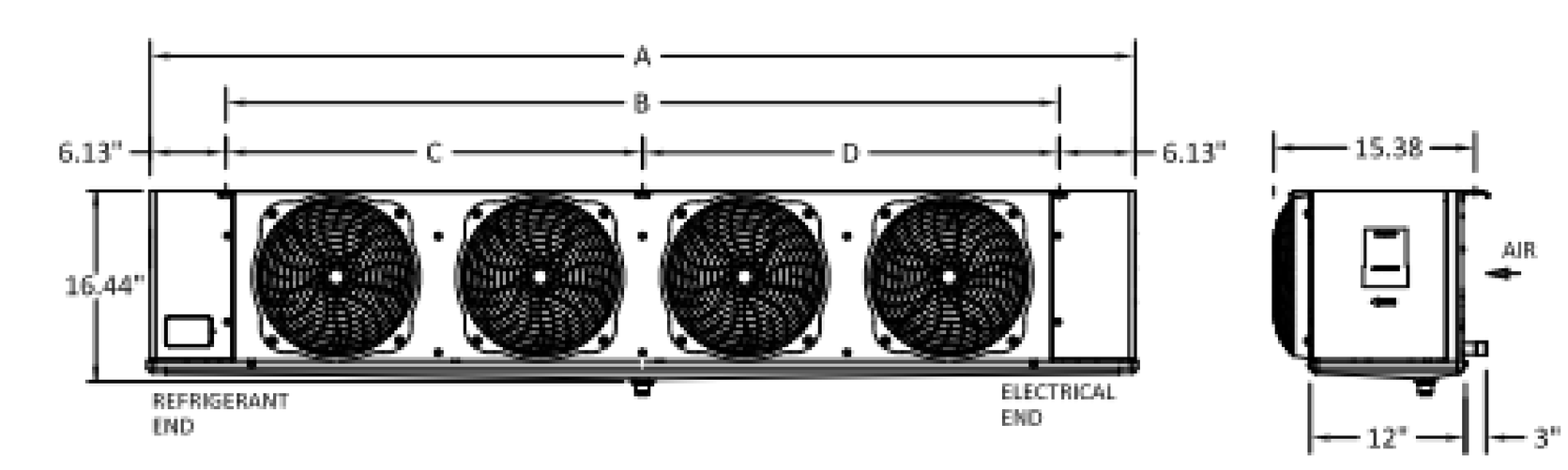
NOTE: MINIMUM CLEARANCE REQUIRED FOR PROPER OPERATION
NOTE: ROOF CURB OR GROUND PAD CAN BE SAME SIZE AS OUTDOOR UNIT

SUCTION LINE VERTICAL RISE DETAIL



- Install trap every transition from horizontal to vertical.
- Insulate suction lines with 3/4" wall Armaflex insulation.
- All joints brazed with minimum 15% silver content brazing rod.
- Install "P" trap on suction line every 15' vertical rise.
- Not to exceed 45' vertically over all.
- *If compressor is above the evaporator, Install inverted trap on top of the rise to prevent oil from seeping down when fixture(s) is turned off.

EVAPORATOR DETAILS - MODEL BEL



AIR DEFROST Size	DIMENSIONS A Inches	B Inches	C Inches	D Inches	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. Lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps 115V	208V
095	45-1/2	33-1/4	-	-	1/2 OD	5/8 OD	3/4 MPT	51	2	1.8	1.0

ELECTRIC DEFROST	DIMENSIONS A Inches	B Inches	C Inches	D Inches	CONNECTIONS (Inches) Coil Inlet	Suction	Drain	Approx. Net Wt. Lbs.	ELECTRICAL DATA Qty. Motors	EC Motor Fan Amps	Heater Amps as wired for 208-230/60/1	208-230/60/3	460/60/1
080	45-1/2	33-1/4	-	-	1/2 OD	5/8 OD	3/4 MPT	54	2	1.0	9.1	5.7	4.6

ZS SERIES ENGINEERING SPECIFICATIONS

Multi compressor, outdoor, air cooled. The refrigeration package shall be a pre-engineered and factory-assembled unit, trade name "ZS", as manufactured by Refrigeration Design Technologies, 1808 FM Road 66, P.O. Box 622, Waxahachie, Texas 75168. Phone: (972) 937-3215; Fax: (972) 937-0970.

1. Air-Cooled Refrigeration System
The RDT UL Listed "Air-Cooled" Refrigeration system shall be housed in a weather-protected compact powder coated steel frame. The entire housing shall be brushed stainless steel. The unit shall include an air-cooled aluminum fin copper tube condenser designed to operate at 15 degrees TD. The exterior housing shall feature stainless steel one piece louvers. Lifting points shall be integrated in the framing component. Condenser fan motors shall be mounted within the enclosure. The condenser intake surface shall be protected with stainless steel expanded metal guard to protect against vandalism and hail damage.

Each unit shall be equipped with a ball-bearing fan motor, suction filter, sight glass, liquid filter/drier, liquid line inlet and outlet valve, defrost cycle and high pressure super-hose connections. Each unit shall be equipped with fan cycling controls and/or head pressure regulator where required for low ambient conditions.

Condensing unit shall contain scroll, hermetic, semi-hermetic, and/or discus type compressor(s) assembled to operate with the refrigerant specified for both medium and low temperature applications.

2. Evaporator Coils
A. Evaporator coils shall be direct expansion type fabricated of copper tubes with aluminum fins.
B. All evaporator coils shall be provided with solenoid valve, thermostatic or electronic expansion valve and thermostat.

3. Pre-Piping
All refrigerant lines shall be extended to outside of the housing in a neat and orderly manner. All tubing shall be securely supported and anchored with non-corrosive coated clamps.

All joints must be brazed, not soldered.

All piping and controls shall be factory pressure-tested with dry nitrogen.

4. Control Panel
The package shall have a factory-mounted and pre-wired control panel, with main disconnect (non fused) where required, circuit breakers, contactors wired for single point power connection.

General Information
Contractors shall verify all dimensions onsite and coordinate with other trades.

General contractor shall prepare the platform, curbed openings and weatherproofing the unit after installation.

Refrigeration Contractor
All copper tubing to be refrigerant grade. A.C.R. or type "L".

Brazing should be used for all refrigerant piping. Silver solder or soft solder is not acceptable.

All piping to be pressure tested with nitrogen at 300 psi. After the condensing unit and coil have been connected the balance of the system shall be leak tested with the valves open at 200 psi.

The complete system shall be evacuated with a vacuum pump. Each unit should be charged tested and adjusted to assure operation.

Contractor should provide and install the drain-line heater in freezer. Heater shall be connected by electrical contractor. Seal all penetrations through the walk-in units with foam.

Electrical Contractor
Electrical contractor to provide power for refrigeration package and connect control and defrost system as called for in the wiring diagram.

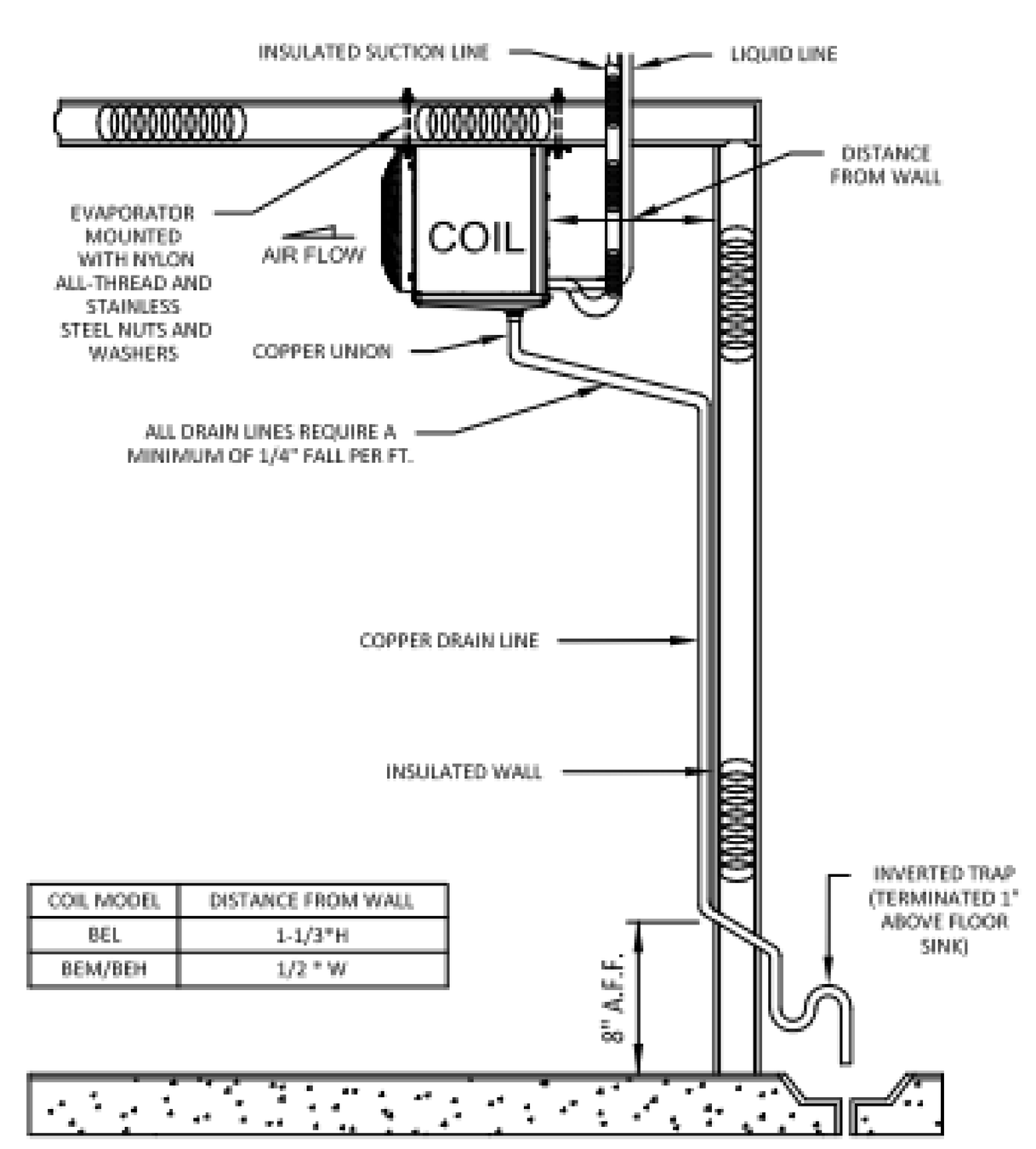
Electrical contractor to connect drain-line heater in the freezer.

All electrical wiring and installation shall be in accordance with the wiring diagram and local codes. Seal all penetrations through the walk-in units with foam.

Plumbing Contractor
Plumbing contractor to provide copper drain lines for walk-in refrigerator and freezer, pitched 1/4" per foot of run. Trap drain-line outside of refrigerated space to avoid entrance of warm, moist air.

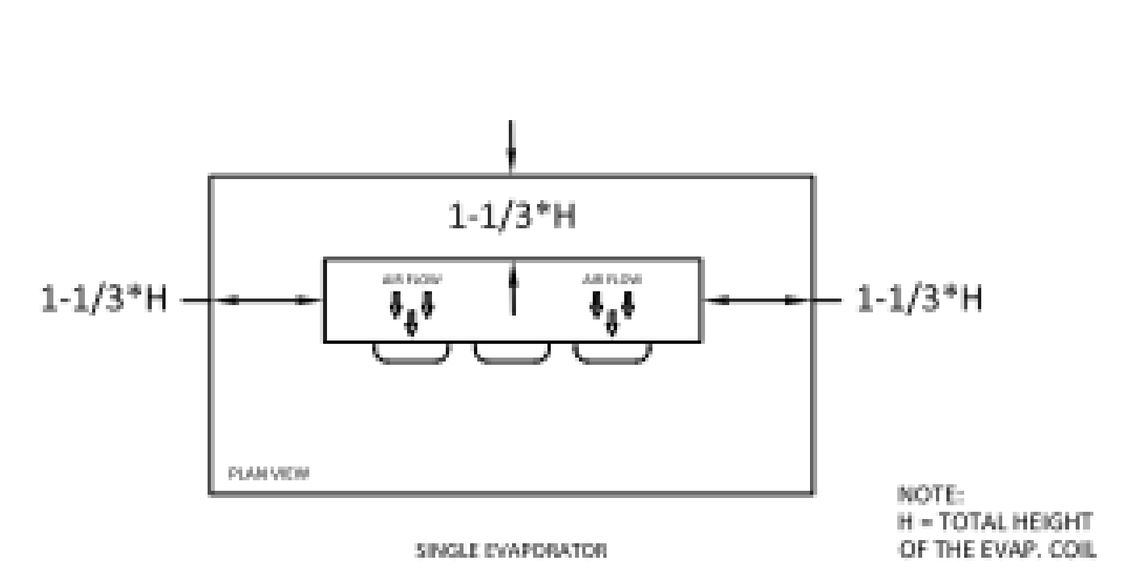
All plumbing installation shall be in accordance with local codes.

EVAPORATOR MOUNTING DETAIL (TYPICAL)



COIL MODEL	DISTANCE FROM WALL
BEL	1-1/3*H
BEM/BEH	1/2 * W

EVAPORATOR PLACEMENT & CLEARANCE REQUIREMENTS LOW PROFILE EVAPORATOR COILS (I.E. - BEL)

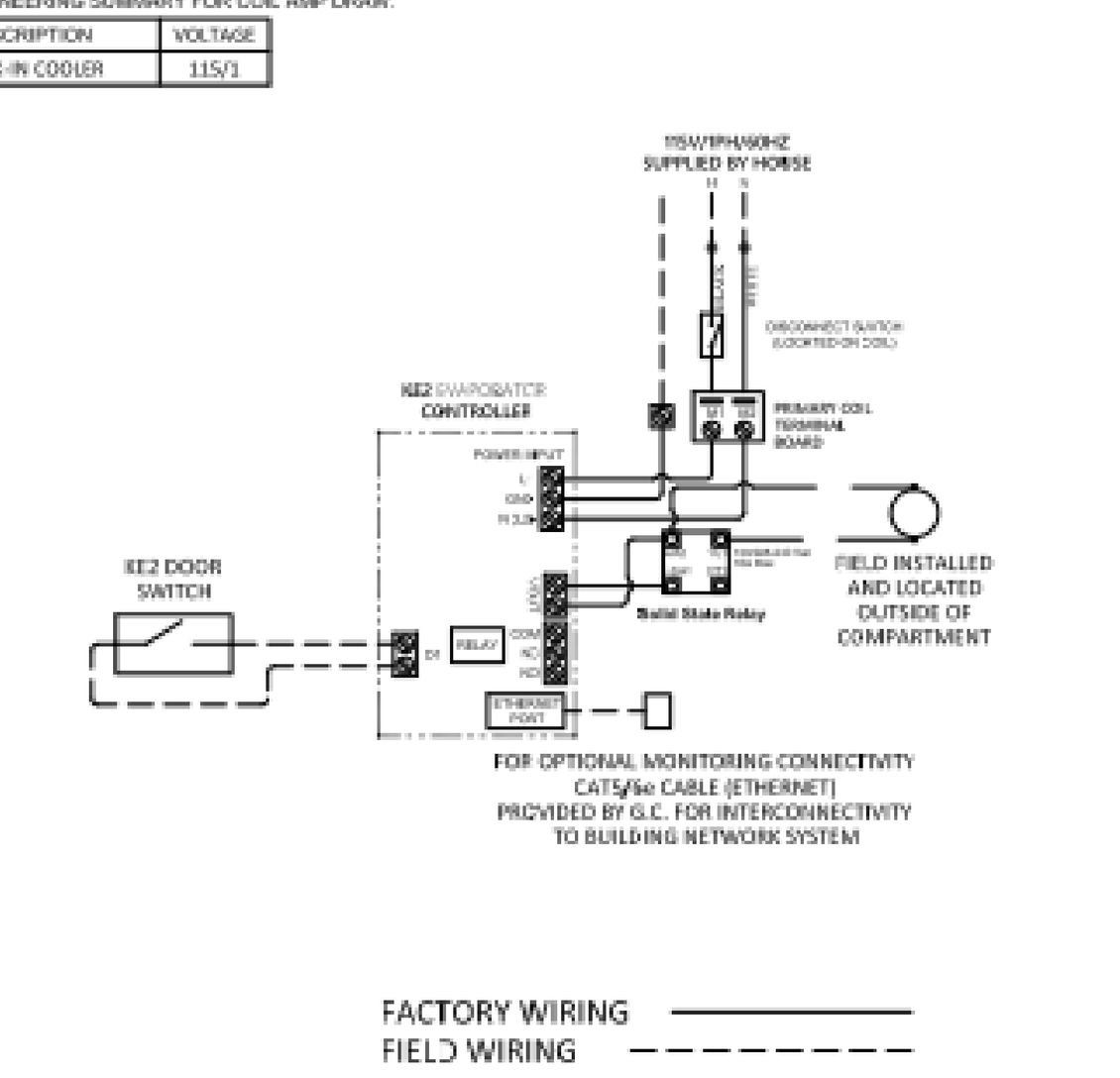


NOTE:
H = TOTAL HEIGHT OF THE EVAP. COIL

WIRING DIAGRAM - ECOSMART - AKEA1AE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN COOLER WITH ONE COIL 115/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW.

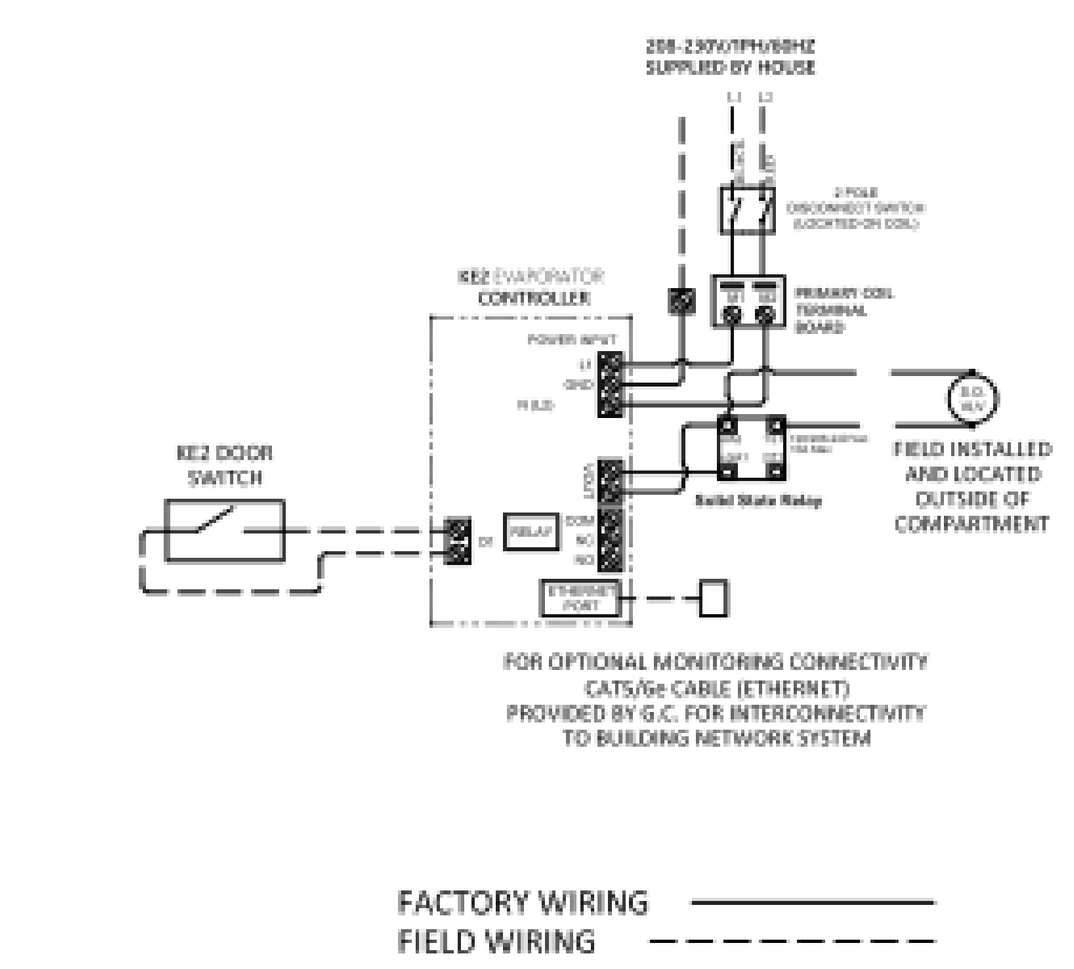
SYS	DESCRIPTION	VOLTAGE
A	WALK-IN COOLER	115/1



WIRING DIAGRAM - ECOSMART - AKEB1EE DEMAND DEFROST W/KE2 DOOR SWITCH FOR WALK-IN FREEZER WITH ONE COIL 208-230/60/1

*REFERENCE ENGINEERING SUMMARY FOR COIL AMP DRAW.

SYS	DESCRIPTION	VOLTAGE
B	WALK-IN FREEZER	208/1



APPROVAL STATUS

THIS DRAWING REPRESENTS OUR UNDERSTANDING OF THE SPECIFICATIONS. PLEASE REVIEW IT CAREFULLY FOR ACCURACY. CLEARLY AND IN DETAIL NOTE CHANGES REQUIRED.

MARK APPROPRIATE BOX, SIGN, AND DATE BELOW.

- ☐ APPROVED FOR FABRICATION NO CHANGES
- ☐ APPROVED FOR FABRICATION WITH CHANGES NOTED
- ☐ REVISE AND RE-SUBMIT DRAWING

BY: ________________ DATE: ________________

NOTICE

THIS DRAWING BEING AN INSTRUMENT OF SERVICE IS AND WILL REMAIN PROPERTY OF REFRIGERATION DESIGN TECHNOLOGIES AND CANNOT BE USED WITHOUT WRITTEN AUTHORIZATION.

No.	Revision/Issue	Date
0	ORIGINAL ISSUE	10-3-24
1	CHANGED TO A2L EQUIPMENT	7-16-25

RDT REFRIGERATION DESIGN TECHNOLOGIES
1808 FM Road 66 / P.O. Box 622
Waxahachie, Texas
(800) 736-9518
www.rdtonline.com

Consultant:
Foodservice Design Professionals, LLC
The Woodlands, TX

Dealer
-
-

Sugar Mill Elementary School
Fort Bend ISD

Project No: 31085
Designed By: E. Milligan
Drawn By: A. Rodriguez
Sheet 1.1 of sheets

ISSUE:
12/05/2024 DD PACKAGE
03/11/2025 50% CD PKG.
05/23/2025 90% CD PKG.
07/18/2025 ISSUED FOR BIDDING AND PERMITTING

FDP FOODSERVICE DESIGN PROFESSIONALS

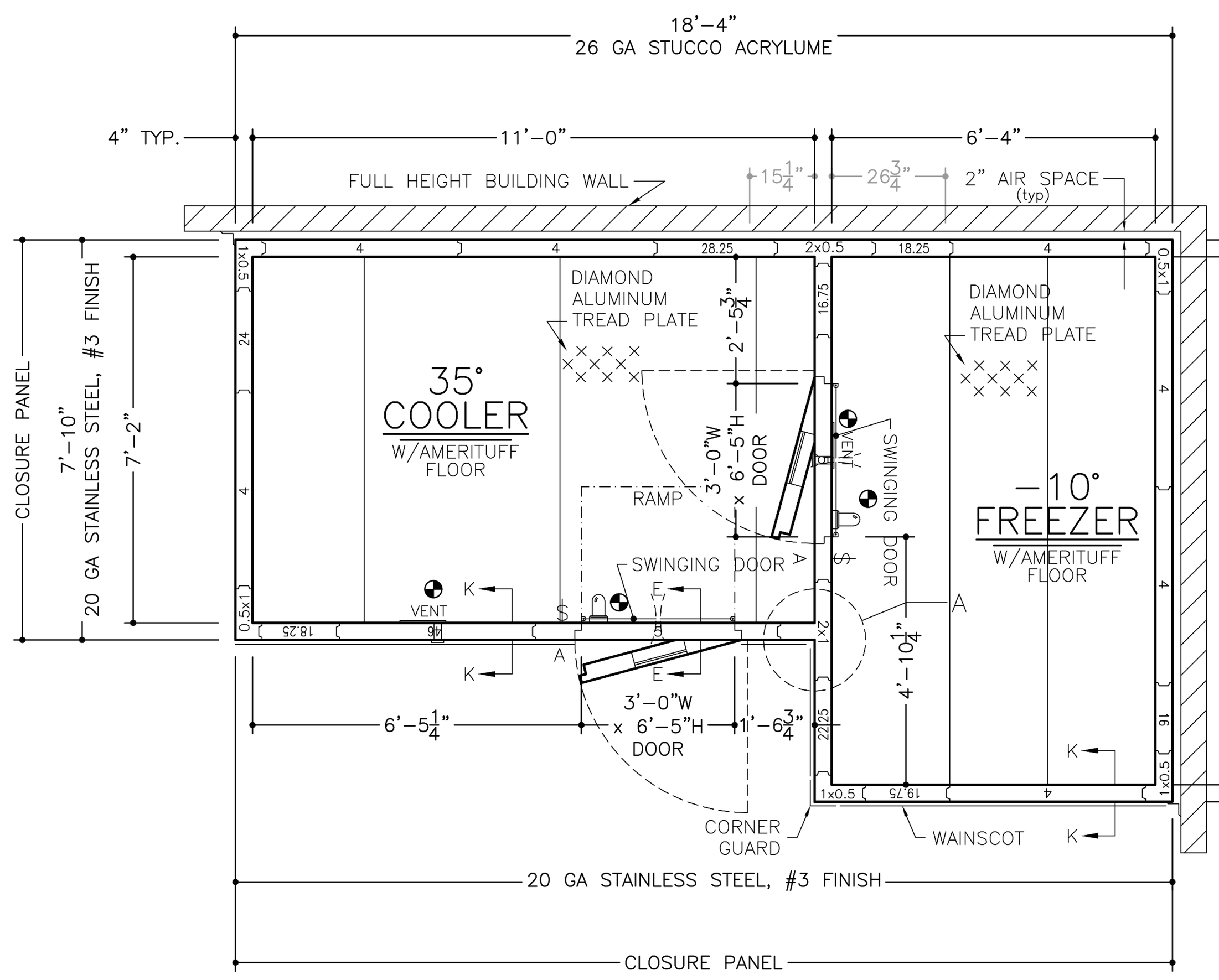
FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

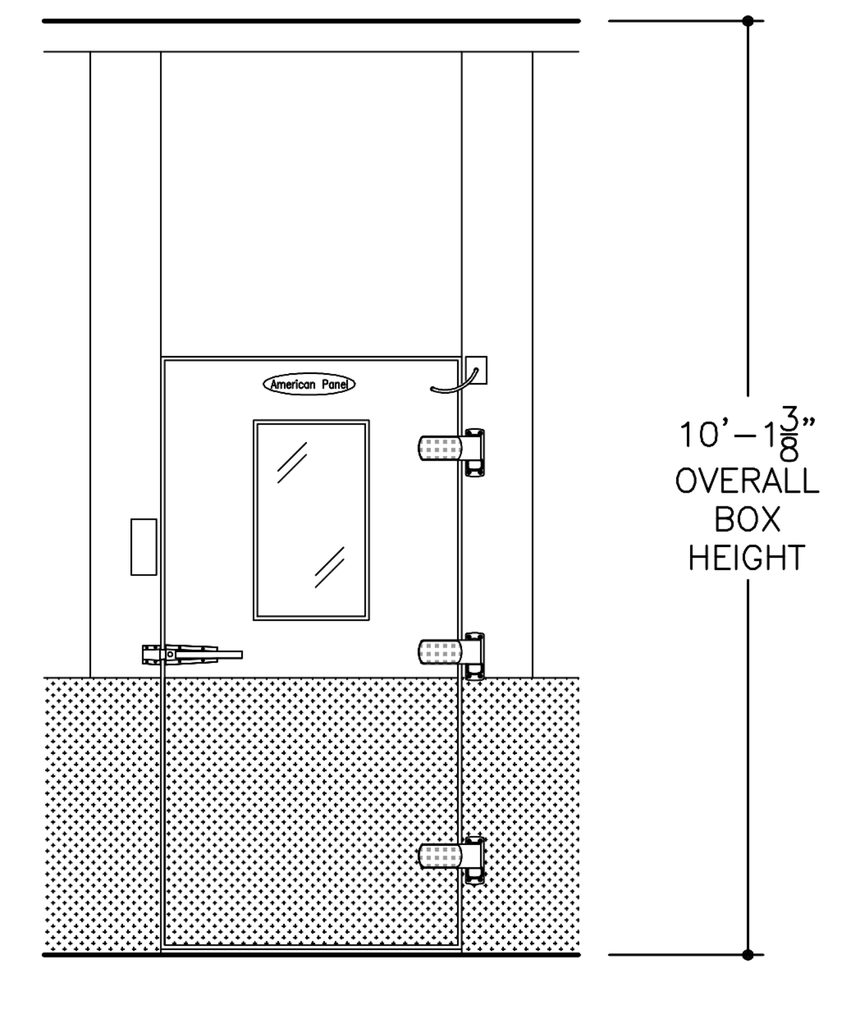
SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL FCSI MELISSA MOORE 48854119 PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO: 48854119 ON: 07/18/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

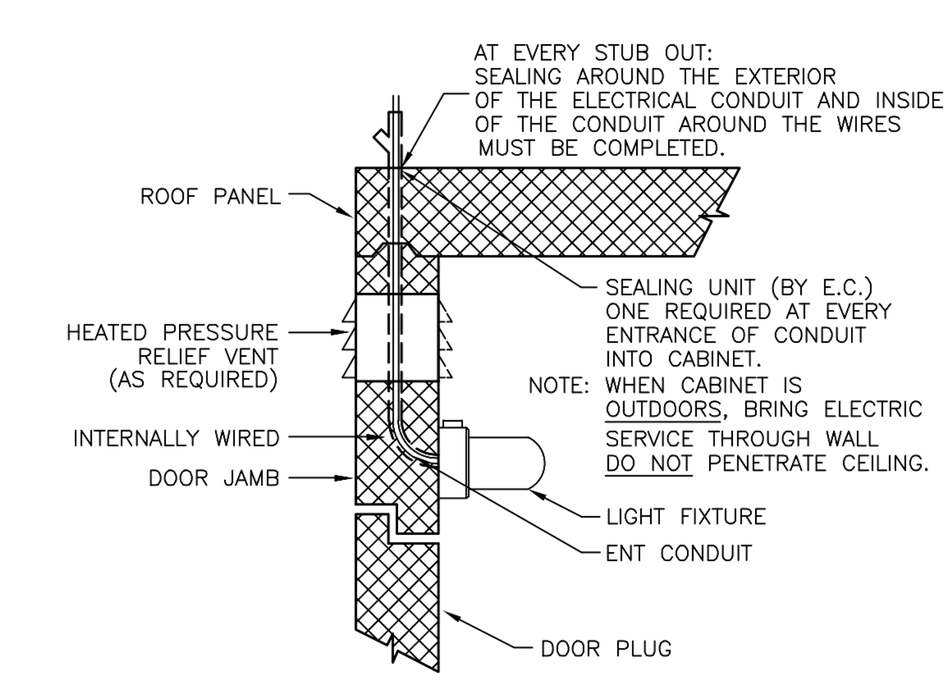
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS CONDENSING UNITS

U-QF1.6

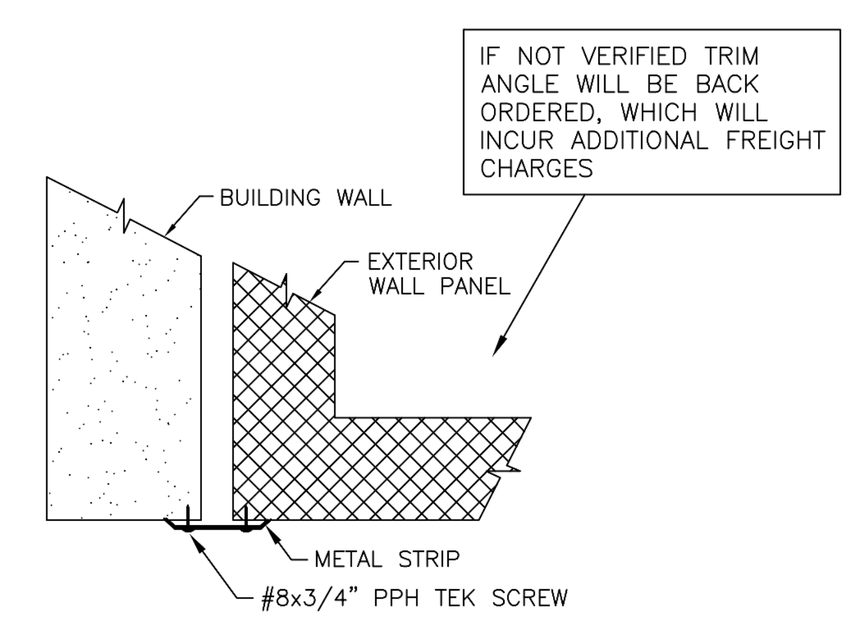




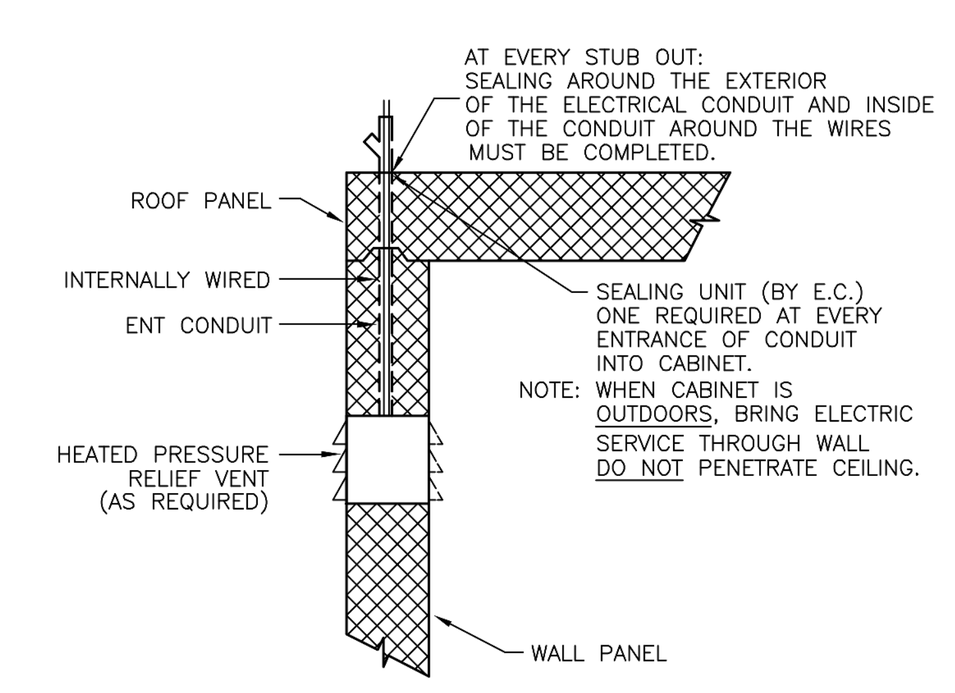
COOLER DOOR ELEVATION



DOOR ELECTRICAL CONNECTION



TRIM ANGLE
DETAIL #3



PANEL MOUNTED ELECTRICAL CONNECTION

~SPECIFICATIONS~

BOX HEIGHT: FREEZER – 10'-2" OVERALL (7'-6 1/4" INTERIOR)
COOLER – 10'-2" OVERALL (7'-6 1/4" INTERIOR)

CONSTRUCTION: FOAMED IN PLACE
NSF LISTED, STANDARD NO. 7

INSULATION: 4" URETHANE, FINISHED PANEL
UL CLASSIFIED FLAME SPREAD 20
CORE SMOKE DEVELOPED 250

INSTALLATION: INDOOR

FLOOR: (SEE DETAILS) FREEZER – STANDARD W/AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE,
3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)
COOLER – STANDARD W/36" DEEP INTERIOR RAMP & AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE,
3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)

DOOR HARDWARE & ACCESSORIES: (EACH DOOR)
SMOOTH POLISHED DOOR HARDWARE
POWER TO BE STUBBED OUT CEILING PANEL
DRY CONTACT LEADS TO BE STUBBED OUT CEILING PANEL IN A SEPARATE STUB OUT
DEADBOLT HANDLE W/KEYED CYLINDER LOCK, PADLOCK
PROVISION & QUARTER TURN INSIDE RELEASE (EXTERIOR DOOR ONLY)
1/8" STAINLESS STEEL THRESHOLD COVER PLATE
14 GA STAINLESS STEEL SUB THRESHOLD
FRAME HEATER WIRE
HYDRAULIC DOOR CLOSER
IC+ WALK-IN DOOR CONTROLLER AND ALARM SYSTEM INCLUDING:
INTEGRATED LIGHT SWITCH WITH AUTOMATIC LIGHT OFF AND 3-WAY & 4-WAY CAPABILITY
TEMPERATURE MONITOR AND LOGGER WITH HIGH TEMP. AND LOW TEMP. VISUAL AND AUDIO ALARM
F OR C TEMPERATURE SELECTION
INTEGRATED DRY CONTACT FOR ALARM SIGNALING & POWER FAILURE (1A @ 24VAC, 1A @ 30VDC)
DOOR AND WINDOW HEATER CONTROL (WHEN SO EQUIPPED)
HACCP PREVIEW VIA ONBOARD LCD SCREEN
HACCP DOWNLOAD VIA USB
WIFI CONNECTIVITY (INTERNET ENABLED WIFI NETWORK NEEDED)
BATTERY BACKUP
TEMPERATURE ALARM NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES
POWER FAILURE NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES
(FOR THIS FEATURE TO WORK THE LOCAL WIFI NETWORK MUST BE
POWER PROTECTED AND WORKING AT THE TIME OF POWER FAILURE EVENT)
AUTOMATIC AND ON DEMAND TRANSMISSION OF HACCP DATA VIA EMAIL
ADAPTIVE SETTINGS
MOMENTARY BACK-TO-BACK LIGHT SWITCH W/PILOT
25' AIR TEMPERATURE PROBE
25' SECOND PROBE (EXTENDED) FOR MONITORING THE TEMPERATURE AT
A SECOND LOCATION OR FOR MONITORING A SECOND CABINET
DOOR SWITCH TO ENABLE DOOR AJAR ALARM, DOOR AJAR NOTIFICATION VIA EMAIL &/OR
EMAIL TO SMS TEXT MESSAGES, AND AUTOMATIC LIGHTS ON WHEN DOOR OPENS
PANIC ALARM WITH ILLUMINATED PANIC BUTTON, ALARM BUZZER WITH LED,
& NOTIFICATION VIA EMAIL &/OR EMAIL TO SMS TEXT MESSAGES (1-COOLER, 2-FREEZER)
KASON SCREW-IN VAPOR PROOF LIGHT FIXTURE
W/8.5 WATT SYLVANIA LED BULB & GLOBE
CCI CLEAR VU SWINGING DOOR
3 – KASON #1346 ADJUSTABLE SPRING LOADED HINGES
HEATED VISION WINDOW (14" x 24")
1/8" DIAMOND ALUMINUM TREAD PLATE KICKPLATES @ 36" HIGH I/S & O/S DOOR & FRAME
KASON 1826 INTELLO-VENT WITH LIGHTS (FREEZER DOOR ONLY) – FIELD INTERCONNECTION REQUIRED

PANEL MOUNTED ACCESSORIES: 1 – KASON 1826 INTELLO-VENT WITH LIGHTS – FIELD INTERCONNECTION REQUIRED
(FOAMED IN PANEL – PER PLAN) (COOLER ONLY)

ACCESSORIES: (SHIPPED LOOSE)
2 – PCS. TRIM ANGLE – 18 GA STAINLESS STEEL, #3 FINISH
CLOSURE PANEL TO AN EXISTING CEILING (PER PLAN) ← VERIFY LENGTH
18 GA STAINLESS STEEL, #3 FINISH
2 – 48" (1810LC) LED LIGHT FIXTURE(S) @ 40W EACH (LIGHTS TO BE INSTALLED PERPENDICULAR TO COILS)
1/8" DIAMOND ALUMINUM TREAD PLATE WAINSCOT @ 36" HIGH (EXPOSED EXTERIOR ONLY)
1 – 1/8" DIAMOND ALUMINUM TREAD PLATE CORNER GUARD(S) @ 36" HIGH
ALUMINUM COVED BASE MOLDING (COMPLETE INTERIOR ONLY)
ROOF SUPPORT ANGLE W/BEAUTY TRIM
2 – BAKELITE LABEL(S) (BLACK) ("FREEZER", "COOLER")
1 – BAKELITE LABEL (YELLOW W/BLACK LETTERING) ("VACUUM PRESSURE RELIEF")
6 MIL POLYETHYLENE VAPOR BARRIER
5 – BELL BOX(ES) & COVER PLATE(S)
2 – DOOR STOP(S)
2 – EDWARDS 860 SERIES STROBE BEACONS
1 – EMERGENCY PRESSURE RELEASE

METAL FINISHES: INTERIOR & EXTERIOR DOOR & FRAME – 18 GA STAINLESS STEEL, #3 FINISH
INTERIOR WALLS & CEILING – WHITE .040 STUCCO ALUMINUM
EXPOSED EXTERIOR – 20 GA STAINLESS STEEL, #3 FINISH
UNEXPOSED EXTERIOR – 26 GA STUCCO ACRYLUME
EXTERIOR FLOOR – 26 GA STUCCO ACRYLUME
EXTERIOR ROOF – 26 GA STUCCO ACRYLUME
INTERIOR FLOOR – AMERITUFF STRUCTURAL FLOOR
(1/8" INTEGRAL DIAMOND ALUMINUM TREAD PLATE,
3/4" MARINE PLYWOOD UNDERLAYMENT, FIBERGLASS GRATING SUPPORT)

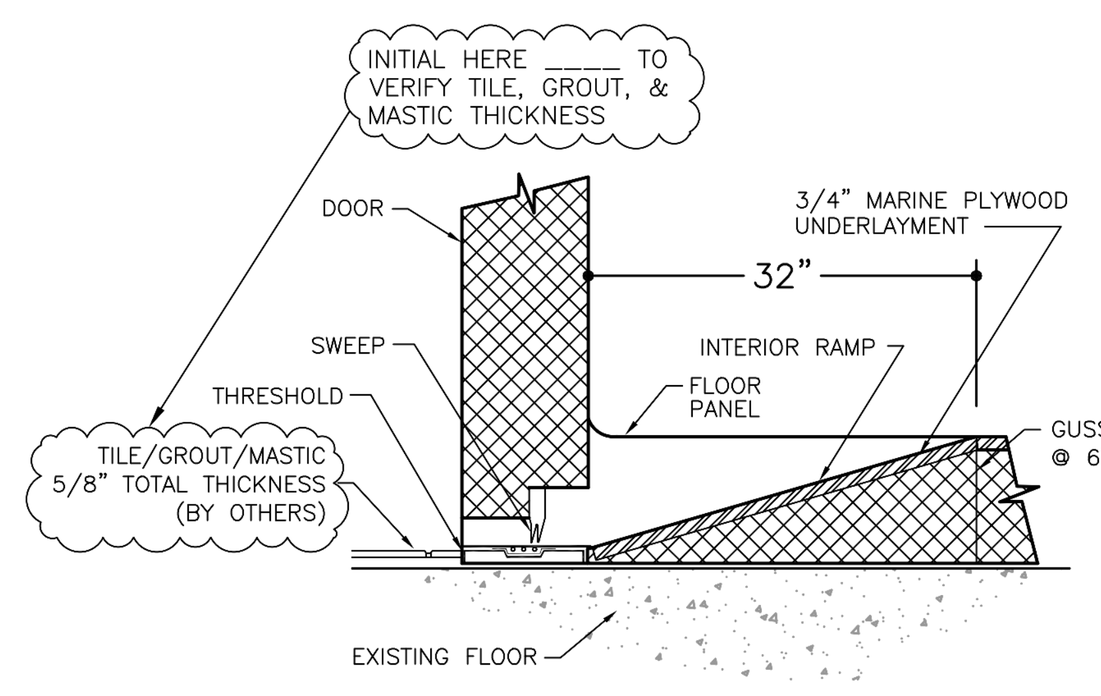
REFRIGERATION: BY OTHERS

NOTE: THE LARGEST DOOR PANEL ON THIS JOB IS 57.5" x 114.5".
NOTE: THE LARGEST ROOF/FLOOR PANEL ON THIS JOB IS 46.5" x 129".
CUSTOMER IS TO VERIFY THAT THIS PANEL SIZE
WILL NOT CONFLICT WITH ANY JOB SITE RESTRICTIONS.
NOTE: CUSTOMER IS TO VERIFY ALL DIMENSIONS,
SECTIONS, DETAILS AND SPECIFICATIONS
NOTE: MAXIMUM LIGHT CIRCUIT LOAD IS 1200W 120VAC TUNGSTEN,
5A 120VAC ELECTRONIC BALLAST. FOR HIGHER LOADS ADDITIONAL
LIGHT FIXTURES MUST BE CONTROLLED VIA RELAY (BY OTHERS).

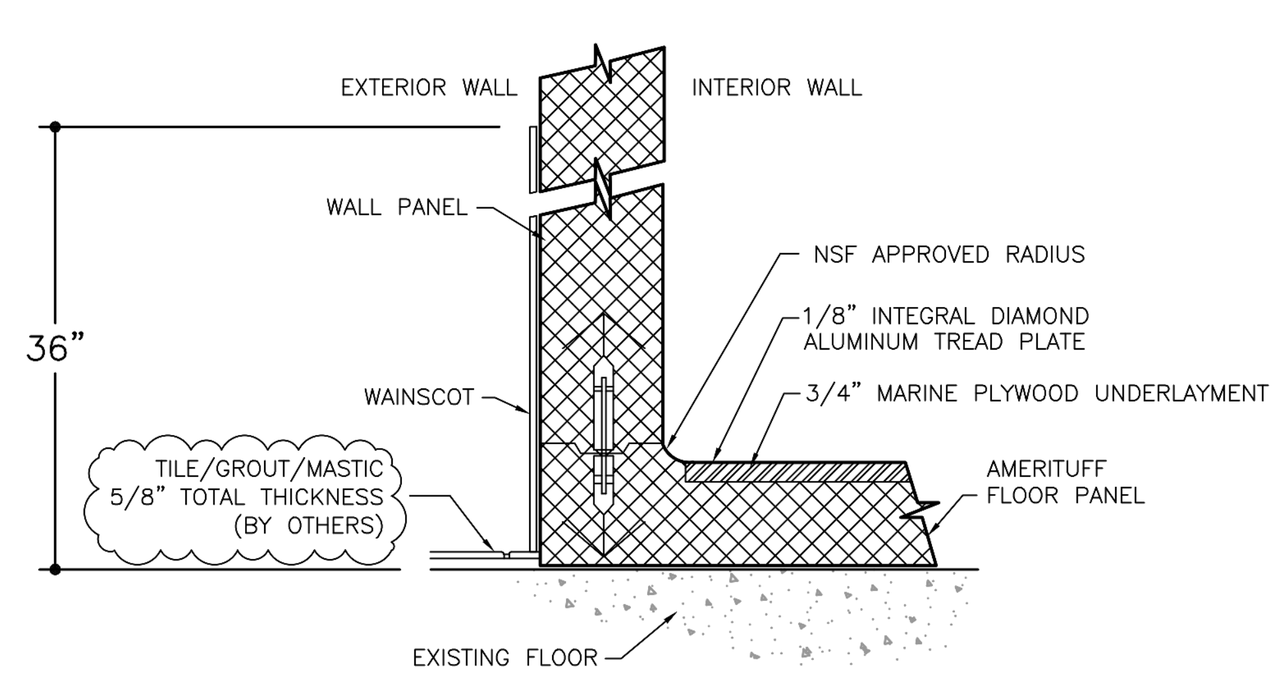
ELECTRICAL DATA
⊕ = POINT OF ELECTRICAL CONNECTIONS.
WALK-IN DOORS: 115v/1ø – 350w*
PANEL MOUNTED ACC: 115v/1ø – 23w (EACH VENT)

*NOTE: ADD WATTAGE FOR EACH ADDITIONAL LIGHT FIXTURE IN ACCESSORIES.

ITEM #102 WALK-IN COOLER/FREEZER

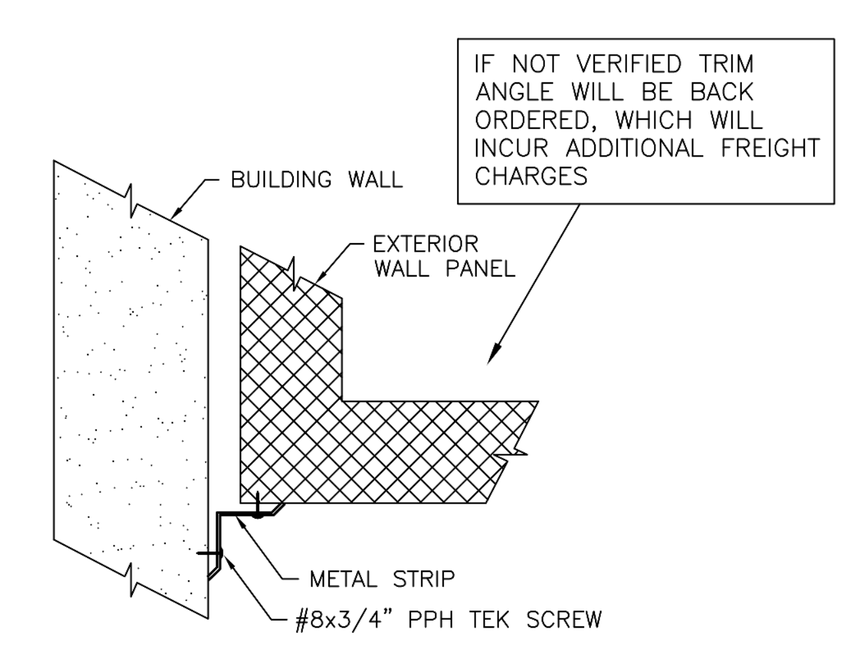


SECTION E – E

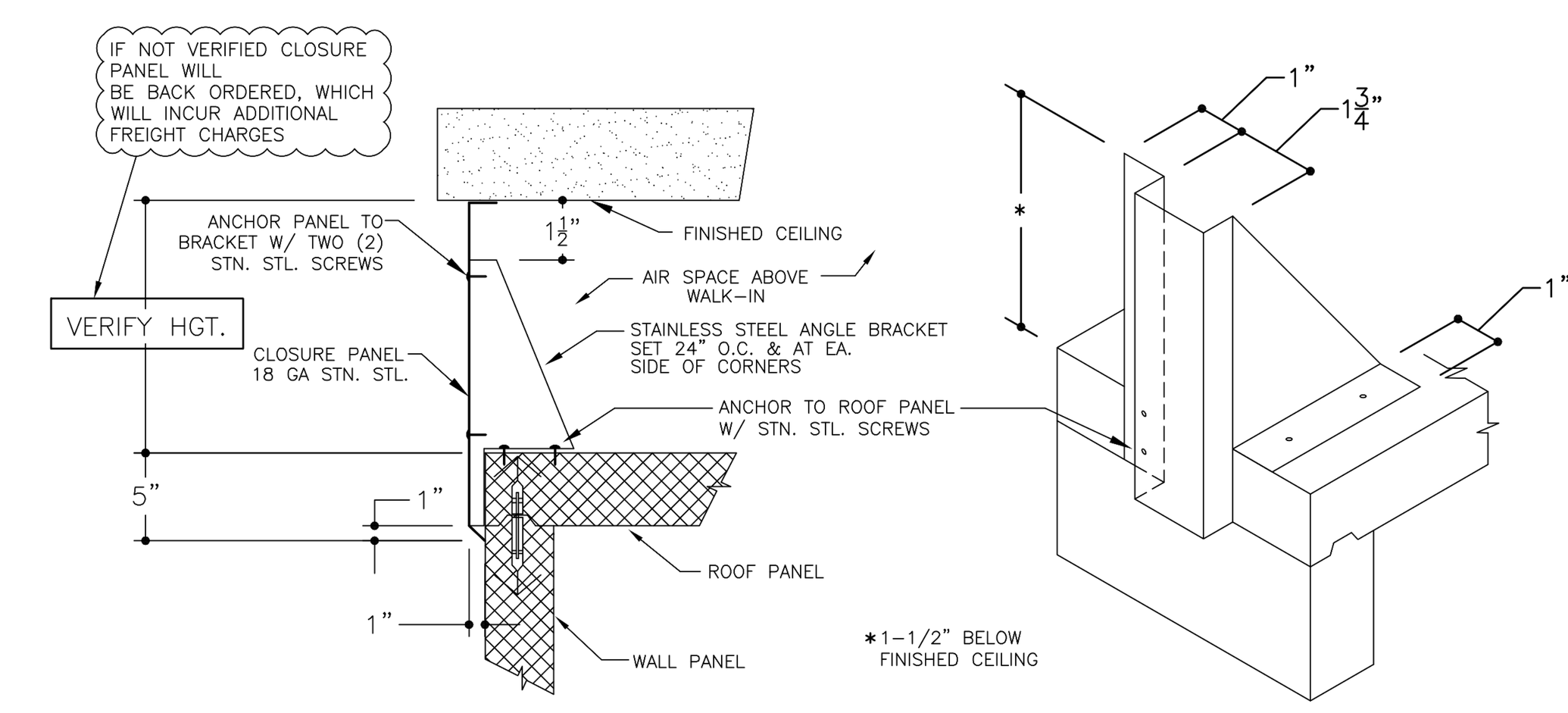


SECTION K – K

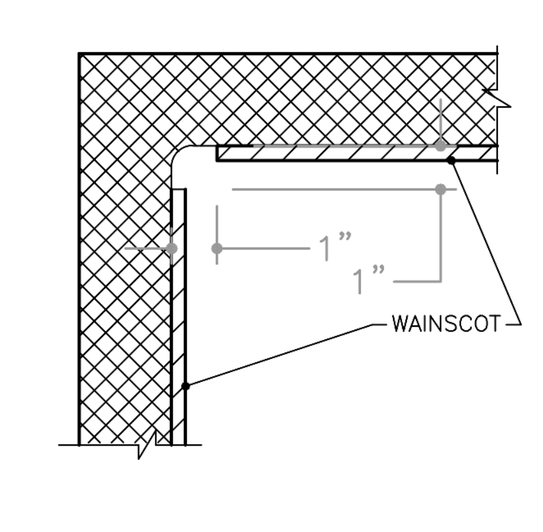
American Panel's walk-in floor panels with AmeriTuff structural support are designed to withstand uniformly distributed stationary loads of 15,000 lbs. per square foot. American Panel's warranty does not cover damage caused by pallet jacks, forklifts or any other form of heavy-duty rolling traffic. A concrete wearing floor must be installed on top of the AmeriTuff walk-in floor panels for those rolling applications.



TRIM ANGLE
DETAIL #2



CLOSURE PANEL ABOVE
WALK-IN DETAIL #4E



DETAIL "A"
WAINSCOT AT
INTERIOR CORNER

INSULATION R-VALUES		
PANEL TYPE	COOLER	FREEZER
4" WALLS, ROOFS	R-29	R-32
5" WALLS, ROOFS	R-36	R-40
FLOORS	R-25	R-28
DOORS	R-32	

COOLER DOOR	
DOOR FRAME KWHr/DAY	2.424

FREEZER DOOR	
DOOR FRAME KWHr/DAY	4.392

WALK-IN PANEL		
R-8967		
BUILDING UNITS	R-8967	37M2
USA		
SURFACE BURNING CHARACTERISTICS		
MATERIAL DETAILS	"FLAME SPREAD"	"SMOKE DEVELOPED"
ALUMINUM PANELS, PAINTED OR UNPAINTED, 5" OR LESS	15	350
"GALVANIZED STEEL OR STAINLESS STEEL PANELS, PAINTED OR UNPAINTED, 5" OR LESS"	10	400 TO 500
CORE MATERIAL, 6" THICK	20	250

AMERICAN PANEL WALK-IN COOLERS AND FREEZERS COMPLY WITH THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC), SECTION C403.11

THIS AMERICAN PANEL WALK-IN WILL BE MANUFACTURED TO UL & NSF REQUIREMENTS. AMERICAN PANEL ACCEPTS NO LIABILITY FOR LOCAL CODE REQUIREMENTS OF WHICH AMERICAN PANEL HAS NOT BEEN MADE AWARE OF IN WRITING PRIOR TO FABRICATION.

☐ APPROVED — SIGNATURE ____________
☐ APPROVED AS NOTED — PRINT NAME ____________
☐ REVISE & RESUBMIT — DATE ____________

1) Please verify that door swing and location are correct.
2) If this walk-in is to be installed in a depression, or quarry tile is to be applied to the interior, depression depths or tile thickness must be specified to insure proper door height.
3) All site preparation, floor or slab construction, plumbing, electrical connections (including control wiring) by others.
4) ⊕ Electrical: 115-60-1 required above latch side of each door, through ceiling, to operate frame heater and light.
5) Special note to General Contractor and his Sub Contractor for quarry tile or concrete wearing floors: the sheet metal panel facings may be susceptible to staining due to excessive moisture created by hydration of concrete type materials. Therefore, it is absolutely necessary that each room be properly ventilated. Also note that special precautions must be taken when using muriatic acid due to effects hydrochloric acid fumes have on aluminum and stainless steel.
6) This drawing and information contained herein are the exclusive property of American Panel Corporation. It shall be returned to American Panel Corporation upon demand and shall not be reproduced in whole or part, disclosed to anyone else, or used without the written consent of American Panel Corporation.

REV.	DATE	DESCRIPTION	REV. BY	CHK'D BY
A	1/22/25	REVISED LAYOUT, SPECS; ADDED DETAIL	DH	WQ

American Panel
AMERICAN PANEL CORPORATION
5800 S.E. 78th St. Ocala, Florida 34472
Ph. (352) 245-7055 Fax (352) 245-0726

CUSTOMER: FOODSERVICE DESIGN PROFESSIONALS
PROJECT: SUGAR MILL ES-FBISD – FORT BEND, TX
DATE: 10/09/24 DRAWN BY: JG/TR P.O.#:
SCALE: 3/8"=1'-0" PROPOSAL#: PD213269 JOB#: SHEET 1 of 1

ALL DIMENSIONS MUST BE FIELD VERIFIED PRIOR TO FABRICATION AND INSTALLATION

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

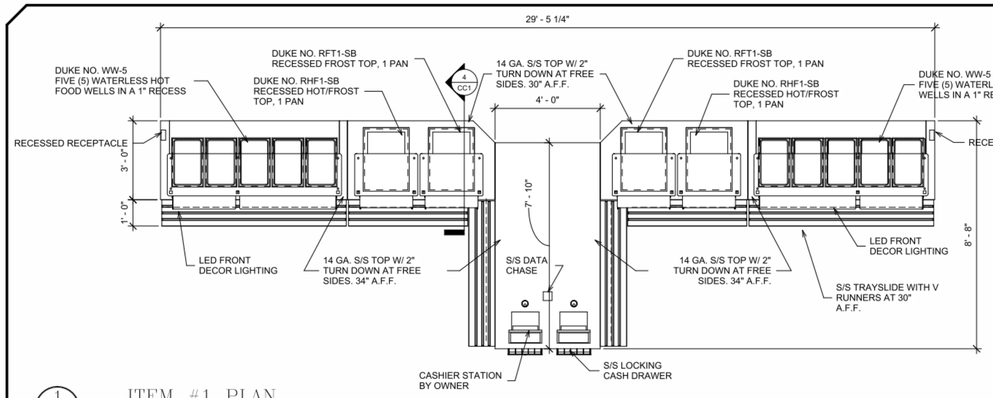
FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

SEAL
FOODSERVICE CONSULTANTS SOCIETY INTERNATIONAL — MELISSA MOORE — FCSI 48854119 — PROFESSIONAL MEMBER
Melissa Moore
7/15/2025
SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO: 48854119 ON: 07/18/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

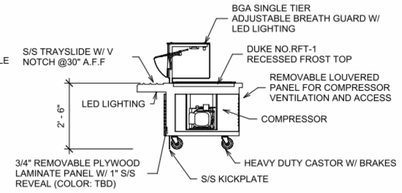
PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
FS WALK-INS

U-QF1.7



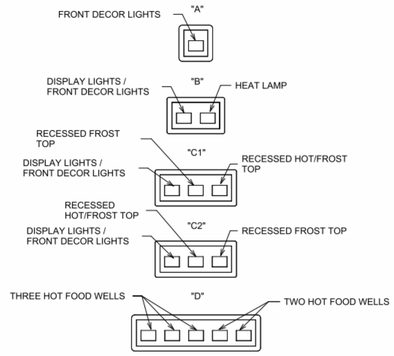
1 CC1 ITEM #1 PLAN

SCALE: 1/2" = 1'-0"



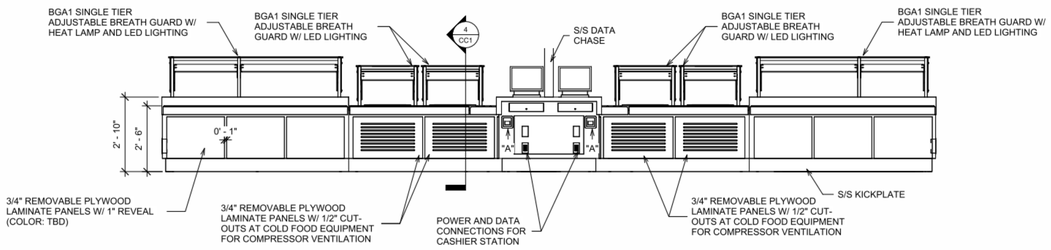
4 CC1 ITEM #1 SECTION VIEW

SCALE: 1/2" = 1'-0"



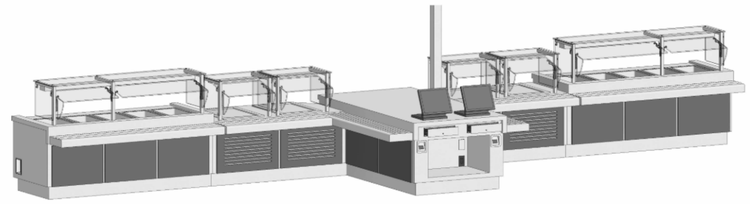
8 CC1 ITEM #1 CONTROL PANEL LAYOUT

SCALE: 1 1/2" = 1'-0"



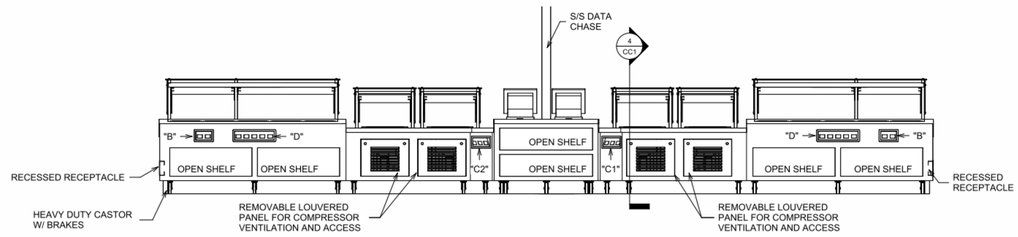
2 CC1 ITEM #1 FRONT ELEVATION

SCALE: 1/2" = 1'-0"



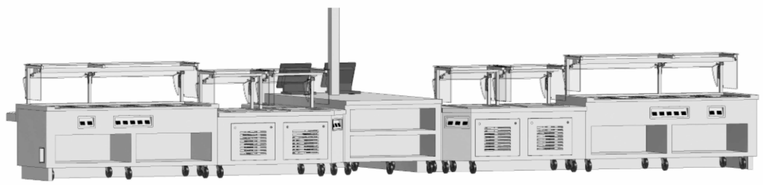
11 CC1 ITEM #1 3D PERSPECTIVE

SCALE:



3 CC1 ITEM #1 REAR ELEVATION

SCALE: 1/2" = 1'-0"



12 CC1 ITEM #1 3D PERSPECTIVE 2

SCALE:



13 CC1 ELECTRICAL SCHEDULE

CASHIER COUNTER

10 CC1 ELECTRICAL SCHEDULE

HOT FOOD COUNTER #1
(TWO (2) REQUIRED)

15 CC1 ELECTRICAL SCHEDULE

HOT/FROST COUNTER
(TWO (2) REQUIRED)

EQUIPMENT BY OTHERS

COUNTERCRAFT LAYOUTS, MEPS, AND LOAD CENTERS ARE BASED ON SPECIFIED MANUFACTURERS AND MODELS AS OUTLINED IN THE SPECIFICATIONS IN THE CONTRACT DOCUMENTS. COUNTERCRAFT MUST BE NOTIFIED OF ANY CHANGES TO THE CONTRACT DOCUMENTS IN A TIMELY MANNER.

NO	REVISIONS	DATE	BY
1	PRICING SET-DWG	10/07/2024	MAX
2	REVISIONS	11/26/2024	MAX
3			
4			
5			
6			
7			
8			
9			

ANOTHER QUALITY PRODUCT FROM
CounterCraft
7007 STEARNS HOUSTON,TEXAS 77021
(713) 747-3611

PROJECT: FBISD Bond Package 013
FOOD SERVICE CONSULTANT: FOODSERVICE DESIGN PROFESSIONALS
PROJECT NO. -
DATE: 11/26/2024
SCALE: As indicated
DRAWN BY: MAX.C
CHECKED BY: E.S
SHEET NO.: CC1
OF SHEET

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

FOODSERVICE DESIGN PROFESSIONALS

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILLS ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD
SUGAR LAND, TX 77498

SEAL
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7/15/2025 APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MELISSA MOORE, FCSI NO. 48854119 ON: 07/15/2025

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DATE: 07/18/25
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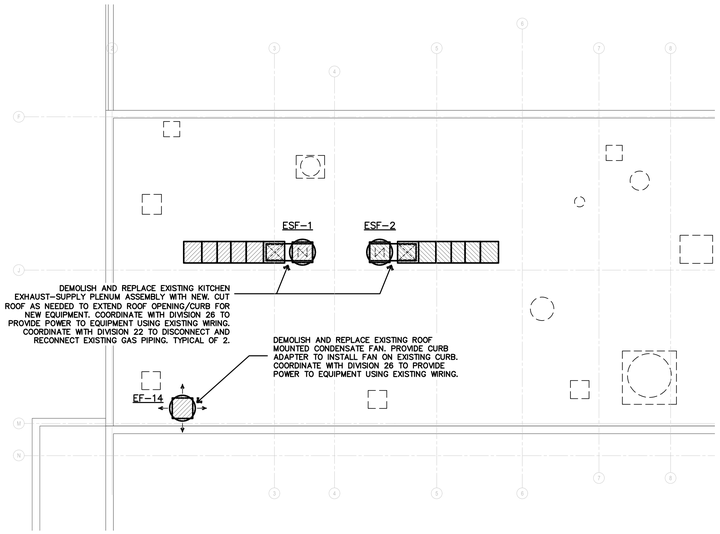
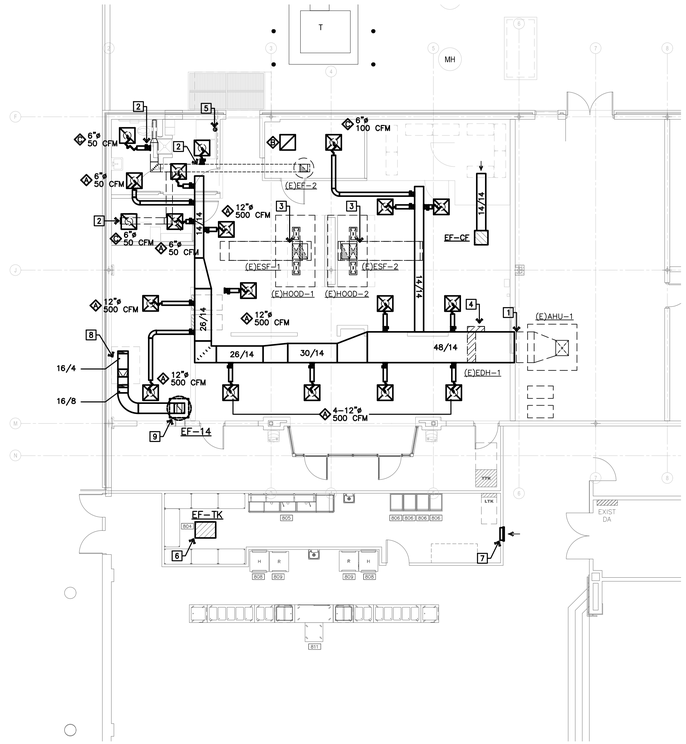


3 MECHANICAL ROOF FLOOR PLAN

SCALE: 1/8" = 1'-0"

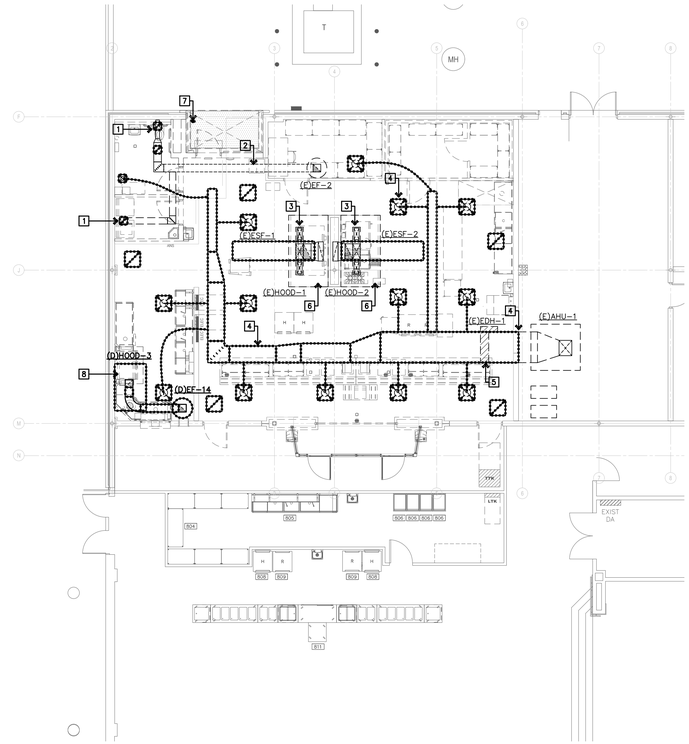
NORTH



2 RENO MECHANICAL FLOOR PLAN - KITCHEN AREA

SCALE: 1/8" = 1'-0"

NORTH



1 DEMO MECHANICAL FLOOR PLAN - KITCHEN AREA

SCALE: 1/8" = 1'-0"

NORTH

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A	CEILING DIFFUSER – 24" X 24" FACE, PATTERN TYPE, STEEL CONSTRUCTION, OBD/RADIATION DAMPER, WHITE FINISH, U.L LISTED PRICE SCD A1–12" X 12"
B	CEILING RETURN GRILLE – 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE PDRR B1–12" X 12"
C	CEILING EXHAUST GRILLE – 24" X 24" PERFORATED FACE, STEEL CONST., OBD/RADIATION DAMPER, WHITE FINISH, NECK SIZE SHOWN, U.L. LISTED PRICE PDDR C1–12" X 12"

NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPES FOR AIR DEVICES.

KITCHEN HOOD REFURBISHMENT NOTES

HOOD REFURBISHMENT FOR KITCHEN HOODS (QUANTITY 2):

- STEAM WASH AND DEEP CLEAN STAINLESS STEEL HOOD ASSEMBLY, CASING, AND SUPPLY GRILLES WHERE APPLICABLE.
- REPLACE GREASE FILTER RACKS.
- CLEAN EXISTING MAKE-UP AIR AND GREASE EXHAUST DUCT.
- RELAMP EXISTING LIGHT FIXTURES WITH NEW 4000K BULBS LISTED FOR USE IN AN ENCLOSED KITCHEN HOOD FIXTURE.
- COORDINATE WITH DIVISION 11 FOR REPLACEMENT OF ANSUL FIRE SUPPRESSION SYSTEM.
- HOOD ASSEMBLIES SHALL BE CLEANED TO MEET THE STANDARDS ESTABLISHED IN NFPA STANDARD 96.

KITCHEN HOOD EXHAUST & MAKE-UP AIR UNIT SCHEDULE

MARK	ESF-1,2
SERVES	KITCHEN HOOD-1 & 2
SUPPLY SECTION	
TYPE	INDIRECT GAS-FIRED MAKE-UP AIR UNIT
DRIVE	DIRECT
SPEED CONTROL	VFD
SUPPLY CFM	2250
EXT. S.P. (IN. W.G.)	0.375
HORSEPOWER (WATTS)	1-1/2 HP
VOLTAGE	480V/3-PHASE
UNIT MCA	4.6 A
UNIT MOCP	15 A
HEATING MEDIUM	NATURAL GAS
INPUT/OUTPUT (MBH)	150.0/121.5
TURNDOWN RATIO	4:1
MANUFACTURER	GREENHECK
MODEL	IGX-P109-H12-MF-E
EXHAUST SECTION	
TYPE	UPBLAST BELT DRIVE CENTRIFUGAL
EXHAUST CFM	3600
EXT. S.P. (IN. W.G.)	0.75
HORSEPOWER (WATTS)	1-1/2 HP
VOLTAGE	480V/3-PHASE
UNIT MCA	3.75 A
UNIT MOCP	15 A
MANUFACTURER	GREENHECK
EXHAUST FAN MODEL	CUBE-200-15

NOTES

1. EXHAUST FAN: PROVIDE FAN WITH PRE-FABRICATED ROOF CURB ADAPTER, VENTED CURB EXTENSION, HINGING KIT, HEAT BAFFLE, DRAIN CONNECTION, GREASE TRAP, AND DISCONNECT SWITCH. FANS SHALL BE UL LISTED FOR USE WITH TYPE 1 GREASE HOOD.
2. EXHAUST FAN: PROVIDE NEW MOTOR STARTER, SIZED FOR EXHAUST FAN MOTOR AND INSTALLED IN PLACE OF EXISTING. REFERENCE THE SPECIFICATIONS FOR STARTER REQUIREMENTS. COORDINATE WITH DIV.25 FOR RE-TERMINATION OF PERMISSIVE ON/OFF CONTROL. COORDINATE WITH DIV.26 FOR RE-TERMINATION OF LOCAL HOOD SWITCH INTERLOCK FOR START/STOP CONTROL.
3. SUPPLY FAN/FURNACE: FLUE GAS FROM HEATING COIL SHALL BE POWER VENTED.
4. SUPPLY FAN/FURNACE: WEATHERHOOD WITH ALUMINUM MESH.
5. SUPPLY FAN/FURNACE: 5 YEAR HEAT EXCHANGER WARRANTY.
6. SUPPLY FAN/FURNACE CONTROLS: INTEGRAL HEATER CONTROLS WITH BAS INTERLOCK FOR PERMISSIVE ON/OFF AND LOCAL SWITCH INTERLOCK FOR CONTROL FROM KITCHEN HOOD SWITCH. FURNACE CONTROLS SHALL BE PROGRAMMED FOR 64°F LAT, WITH A LOCKOUT FOR O/A TEMPERATURES ABOVE THE LAT SETPOINT. COORDINATE WITH DIV.25 AND DIV.26 FOR CONTROLS AND SWITCH INTERLOCKS.
7. TWO POINT POWER CONNECTION: ONE FOR EXHAUST FAN AND ONE FOR INTAKE/SUPPLY FAN.
8. INTERLOCK FAN(S) WITH ASSOCIATED COOKING HOOD
9. INTERLOCK FAN WITH SWITCH ON KITCHEN HOOD.
10. UNIT TO BE PROVIDED WITH GALVANIZED STEEL FAN PACK EXTENSION/COMBINATION CURB.
11. REFER TO WRITTEN SPECS FOR ADDITIONAL REQUIREMENTS.

MECHANICAL RENO KEYED NOTES

1. TIE-IN NEW DUCTWORK TO EXISTING DUCTWORK AT WALL PENETRATION.
2. CONNECT NEW AIR DEVICE AND TAP TO EXISTING E/A TRUNK DUCT.
3. REWORK EXISTING EXHAUST AND SUPPLY DUCTWORK FROM EXISTING KITCHEN HOOD UP TO FAN, AS REQUIRED, WITH NEW TRANSITIONS AND SUPPLY AIR DUCTWORK OFFSETS TO MATE WITH NEW FAN CURB.
4. EXISTING ELECTRIC DUCT HEATER TO BE RETAINED FOR RE-INSTALLATION IN RENOVATION PHASE.
5. NEW DRYER VENT DUCT AND VENT CAP.
6. TEMP. KITCHEN – CEILING MOUNTED CABINET EXHAUST FAN.
7. TEMP. KITCHEN – 24"X24" SIDE WALL GRILLE. SURFACE MOUNT OPTIONAL. AUXILIARY FRAME. TITUS CT-700.
8. RECONFIGURE DUCTWORK TO CONNECT TO NEW DISHMACHINE HOOD OUTLETS. REF. KITCHEN CONSULTANT DRAWINGS FOR EXACT DIMENSIONS OF DUCT CONNECTIONS.
9. CONDENSATE EXHAUST DUCT UP THROUGH ROOF TO NEW EXHAUST FAN SET ON NEW ROOF CURB. REUSE EXISTING ROOF PENETRATION.

EXHAUST FAN SCHEDULE

MARK	EF-TK	EF-CF	EF-14
SERVES	TEMPORARY KITCHEN	COOLER/FREEZER	DISH WASHER
TYPE	CEILING CABINET	INLINE FAN	ROOF UPBLAST
DRIVE	DIRECT	DIRECT	DIRECT
SPEED CONTROL	INTEGRAL SPEED CONTROLLER	CONSTANT	CONSTANT
CFM	1055	1000	1200
EXT. S.P. (IN. W.G.)	0.3	0.35	0.60
IMP. SIZE (IN.)	8.0	13.5	
HORSEPOWER (WATTS)	1/3 HP	1/6 HP	1/6 HP
VOLTAGE	120V/1-PHASE	120V/1-PHASE	120V/1-PHASE
MANUFACTURER	COOK	COOK	COOK
MODEL	GC-862	13SSDN10D	CUE-140-VG
SONES (MAX.)	15.0	15.0	15.0
NOTES	1 THRU 4	1 THRU 4	1 THRU 4

NOTES

1. STATIC PRESSURE SHOWN IS EXTERNAL TO THE UNIT. MANUFACTURER SHALL ADD DAMPER AND ACCESSORY LOSSES TO THIS VALUE BEFORE SELECTING FAN. FANS SHALL BE CAPABLE OF 120% OF THE SCHEDULED CFM CAPACITY.
2. INTEGRAL DISCONNECT SWITCH.
3. RUBBER IN-SHEAR ISOLATORS.
4. REFER TO WRITTEN SPECS FOR ADDITIONAL REQUIREMENTS.

MECHANICAL DEMO KEYED NOTES

1. DEMOLISH EXISTING AIR DEVICE, BRANCH DUCT, DAMPER AND TAP BACK TO TRUNK DUCT. CAP AND SEAL RESULTING OPENING.
2. EXISTING E/A TRUNK DUCT TO REMAIN.
3. DISCONNECT EXISTING S/A AND E/A DUCTWORK SERVING KITCHEN HOODS FROM FAN ASSEMBLY ON ROOF. DEMOLISH SUPPLY AND EXHAUST FAN PLENUM ASSEMBLY SERVING KITCHEN HOODS, ALONG WITH CURB. NEW CURB TO BE PROVIDED AND INSTALLED AS PART OF RENOVATION.
4. DEMOLISH ALL EXISTING AIR DEVICES, DUCTWORK, AND DUCTWORK ACCESSORIES SERVING KITCHEN AREA BACK TO MECH. ROOM WALL PENETRATION.
5. EXISTING ELECTRIC DUCT HEATER TO BE RETAINED FOR RE-INSTALLATION IN RENOVATION PHASE.
6. REFURBISH EXISTING KITCHEN HOOD. REFER TO "KITCHEN HOOD REFURBISHMENT NOTES".
7. DEMOLISH AND REPLACE EXISTING DRYER EXHAUST DUCT AND FLUE VENT CAP.
8. DEMOLISH EXISTING CONDENSATE HOOD, ASSOCIATED DUCTWORK, AND ROOF EXHAUST FAN.

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FBISD BP 013 KITCHEN RENOVATIONS
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KITCHEN AREA MECHANICAL PLANS
U-M1.01

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MECHANICAL SYMBOL SCHEDULE

CWS	CONDENSER WATER SUPPLY
CWR	CONDENSER WATER RETURN
CHS	CHILLED WATER SUPPLY
CHR	CHILLED WATER RETURN
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
RS	REFRIGERANT SUPPLY
RR	REFRIGERANT RETURN
D	CONDENSATE LINE
	PETE'S PLUG
	ISOLATION VALVE
	ELECTRONIC CONTROL VALVE
	BUTTERFLY VALVE
	BALL VALVE
	UNION OR FLANGE
	STRAINER
	AUTOMATIC AIR VENT
T	LOCAL CONTROL THERMOSTAT
T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
FD	FIRE DAMPER
SD	SMOKE DAMPER
FSD	FIRE/SMOKE COMBINATION DAMPER
MD	MOTORIZED DAMPER
C	CARBON MONOXIDE SENSOR
C	CARBON DIOXIDE SENSOR
	SUPPLY AIR DIFFUSER
	RETURN AIR GRILLE
	EXHAUST GRILLE
RA	RETURN AIR OPENING IN WALL
VD	VOLUME DAMPERS
	DUCT ELEVATION CHANGE
	90° DUCT ELBOW WITH TURNING VANES
	FLEXIBLE DUCT
M	DAMPER MOTOR
T	TEMPERATURE TRANSMITTER
FS	FLOW SWITCH
P	DIFFERENTIAL PRESSURE SENSOR
SD	DUCT SMOKE DETECTOR
PS	STATIC PRESSURE SENSOR
PH	STATIC PRESSURE SENSOR HI-LIMIT
	ACCESS PANEL

A.P.	ACCESS PANEL
AHU	AIR HANDLING UNIT
B	BOILER
CH	CHILLER
CHP	CHILLED WATER PUMP
CVT	CONSTANT VOLUME TERMINAL
DH	DEHUMIDIFIER
E/A	EXHAUST AIR
EF	EXHAUST FAN
F&B	FACE & BYPASS
FF	FLY FAN
HDT	HORIZONTAL DRAW THROUGH
HWP	HOT WATER PUMP
KEF	KITCHEN EXHAUST FAN
KSF	KITCHEN SUPPLY FAN
O/A	OUTSIDE AIR
OBD	OPPOSED-BLADES DAMPER
PT	PRE-TREAT
R/A	RETURN AIR
RAHU	ROOF-MOUNTED AIR HANDLING UNIT
S/A	SUPPLY AIR
SA	SOUND ATTENUATOR
SF	SUPPLY FAN
SPD	SPILTER DAMPER
SZ	SINGLE ZONE
VAV	VARIABLE AIR VOLUME
VB	VAV BOX
VD	VOLUME DAMPER
VDT	VERTICAL DRAW THROUGH
VFD	VARIABLE FREQUENCY DRIVE
WH	WATER HEATER
⌀	DESIGNATION FOR "ROUND"
⌀	DESIGNATION FOR "OVAL"

GENERAL MECHANICAL NOTES

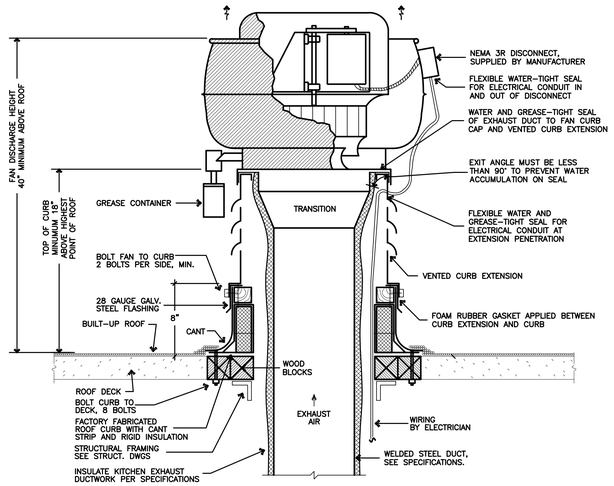
1. REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. COORDINATE INSTALLATION OF EQUIPMENT AND PIPING WITH THE ELECTRICAL CONTRACTOR TO INSURE NEC CLEARANCE (42 INCHES) IN FRONT OF ALL ELECTRICAL PANELS. DO NOT INSTALL DUCTWORK OR WATER PIPING OVER THE TOP OF ELECTRICAL PANELS SEE DETAIL 1/M2.01.
3. DUCT SIZES SHOWN ARE NET FREE AIR PASSAGE DIMENSIONS, DUCTS ARE NOT LINED, BUT ARE EXTERNALLY INSULATED. RUNOUTS TO CEILING OUTLETS SHALL BE EXTERNALLY INSULATED GALVANIZED SHEET METAL WITH SPIN-IN V.D. AT TRUNK TAPS, SEE DETAIL 1 & 2/M2.01.
4. REFER TO ARCHITECTURAL REFLECTED CEILING DRAWINGS FOR EXACT LOCATIONS OF CEILING OUTLETS IN RELATION TO OTHER CEILING ENTITIES. OUTLETS MUST BE COMPATIBLE WITH THE CEILING TYPES FOR THE VARIOUS AREAS.
5. IN AREAS WHERE SUPPLY AIR ENTERS CEILING CAVITY THRU RETURN AIR GRILLES AND FREE RETURNS TO AHU'S VIA CEILING CAVITY, PROVIDE RETURN AIR OPENING IN WALL-TO-DECK ABOVE CEILING THAT BLOCK PATH, REFER TO ARCHITECTURAL DRAWINGS. RETURN AIR ELBOWS SHALL BE SIZED AT 1 SQ. FT PER 400 CFM SUPPLY AIR.
6. ARRANGE PIPING CONNECTIONS TO ALL EQUIPMENT TO ALLOW EASY REMOVAL OF EQUIPMENT, SUB-ASSEMBLIES, COILS, FANS, MOTORS, FILTERS, ACCESS PANELS, ETC... PROVIDE UNIONS, FLANGES AND VALVES AT CONNECTIONS. PROVIDE AND INSTALL VICTAULIC JOINTS AT COILS, REF. SPECIFICATIONS. PLACE STOP VALVES ON SYSTEM SIDE OF REMOVABLE PIPE SECTIONS.
7. CONTRACTOR SHALL FIELD MEASURE STRUCTURAL ELEMENTS AND COORDINATE EQUIPMENT, PIPING AND DUCT ROUTING TO FIT EXISTING CONSTRUCTION. PROVIDE OFFSETS, BOOTS FOR ENVELOP OBSTRUCTIONS THAT CANNOT BE AVOIDED. CONSTRUCTION SHALL BE PER SMACNA FIGURE 2-10.

AIR DEVICE SCHEDULE

MARK	DESCRIPTION
A	CEILING DIFFUSER – 24" X 24" FACE, PATTERN TYPE, STEEL CONSTRUCTION, OBD/RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE SCD
B	CEILING RETURN GRILLE – 24" X 24" PERFORATED FACE, STEEL CONSTRUCTION, RADIATION DAMPER, WHITE FINISH, U.L. LISTED PRICE PDFR
C	CEILING EXHAUST GRILLE – 24" X 24" PERFORATED FACE, STEEL CONST., OBD/RADIATION DAMPER, WHITE FINISH, NECK SIZE SHOWN, U.L. LISTED PRICE PDDR

NOTES:

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO VERIFY CEILING TYPES FOR AIR DEVICES.
2. ALL CEILINGS ARE FIRE RATED PER U.L. LISTINGS ON ARCHITECTURAL DRAWINGS. PROVIDE FIRE PROTECTION FOR ALL CEILING DEVICES PER DETAIL 13/M-17 AND SPECIFICATIONS.

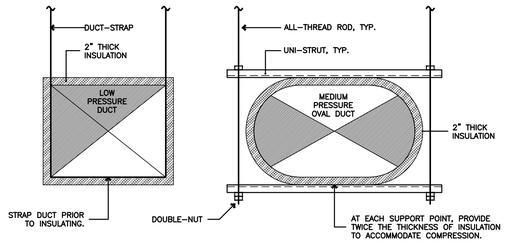


6 KITCHEN UPBLAST EXHAUST FAN DETAIL

NO SCALE

NOTES

1. ARCHITECTURAL ROOF CURB INSTALLATION REQUIREMENTS SHALL SUPERCEDE THIS DETAIL.
2. INSTALL SHEETMETAL COVERING OVER WOOD BLOCKING IN THE AIRSTREAM OR OPEN TO THE CEILING CAVITY.

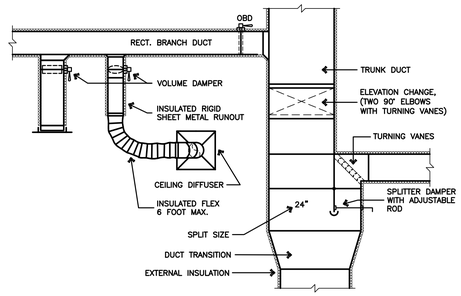


4 EXTERNALLY INSULATED DUCT SUPPORT DETAIL

NO SCALE

NOTES:

1. ROUND MEDIUM PRESSURE DUCT MAY BE SUPPORTED WITH DUCT STRAPS.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

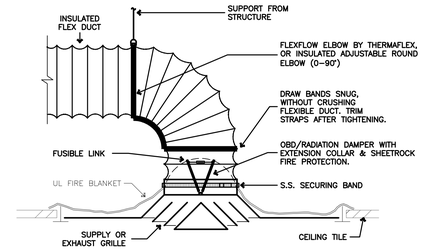


2 DUCTWORK DETAIL

NO SCALE

NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

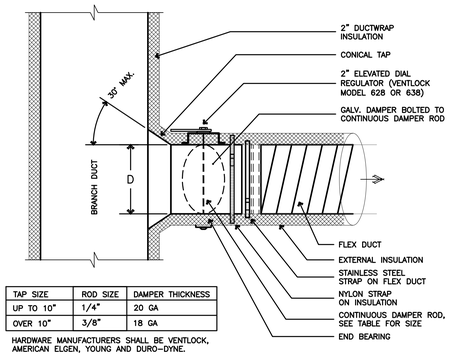


5 AIR DEVICE DETAIL

NO SCALE

NOTES:

1. RADIATION DAMPER SHALL ONLY BE PROVIDED IN CEILING DEVICES INSTALLED IN RATED CEILING ASSEMBLIES. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN TO DETERMINE WHICH, IF ANY, CEILINGS ARE RATED.
2. REFER TO SPECIFICATIONS OF FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



TAP SIZE	ROD SIZE	DAMPER THICKNESS
UP TO 10"	1/4"	20 GA
OVER 10"	3/8"	18 GA

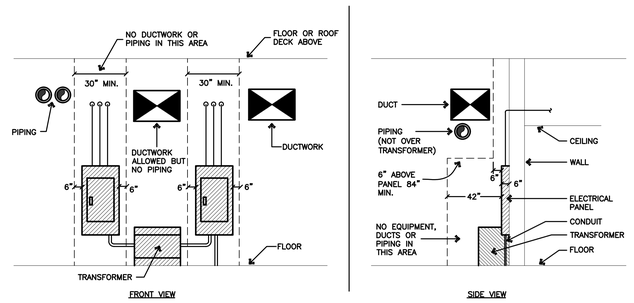
HARDWARE MANUFACTURERS SHALL BE VENTLOCK, AMERICAN ELGEN, YOUNG AND DURO-DYNE.

3 DUCT TAP CONNECTION DETAIL

NO SCALE

NOTES:

1. DELETE CONICAL SECTION IF TOO LARGE FOR THE DUCT.
2. REFER TO SPECIFICATIONS OF FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



1 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

NOTES:

1. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

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MECHANICAL NOTES AND DETAILS

U-M2.01

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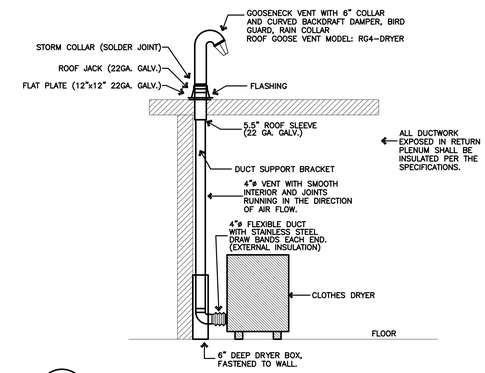
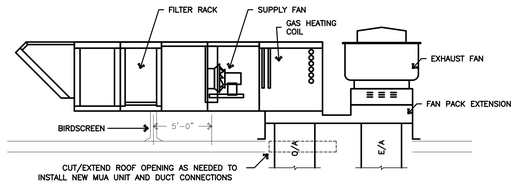


5 RESIDENTIAL CLOTHES DRYER FLUE VENT

NO SCALE

NOTES:

1. VENT TERMINATION AT WALL FOR STACKABLE WASHER/DRYER SHALL BE AT 60" AFF.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

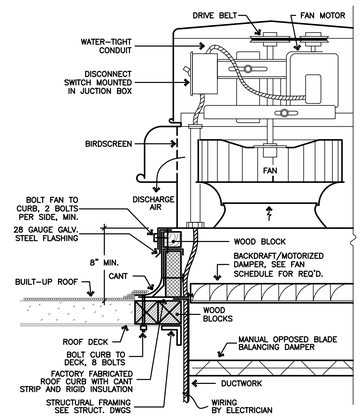


4 SUPPLY/EXHAUST KITCHEN PLENUM DETAIL

NO SCALE

NOTES:

1. xxxxx

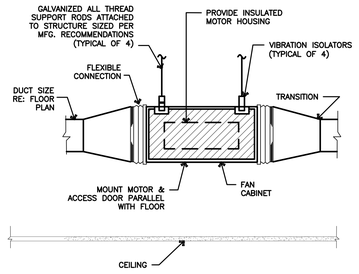


3 ROOF EXHAUST FAN AND VENT DETAIL

NO SCALE

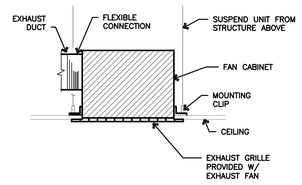
NOTES:

1. NO WOOD BLOCKING SHALL BE LEFT EXPOSED IN THE CEILING PLENUM. COVER ALL EXPOSED WOOD WITH 1/2" SHEETROCK OR 20 GAUGE GALVANIZED SHEETMETAL.
2. ROOF VENT WILL NOT HAVE FAN/MOTOR ASSEMBLY, DISCONNECT SWITCH OR OBD.
3. ARCHITECTURAL ROOF CURB INSTALLATION REQUIREMENTS SHALL SUPERCEDE THIS DETAIL WHERE APPLICABLE.
4. ALL FANS SCHEDULED TO BE PROVIDED WITH 140MPH WIND RATING, INCLUDING FACTORY PROVIDED CURB. CURB INSTALLATION SHALL FOLLOW MANUFACTURER'S REQUIREMENTS FOR SECURING TO ROOF AND EQUIPMENT WHERE IT DIFFERS FROM THE DETAIL.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



2 INLINE EXHAUST FAN DETAIL

NO SCALE



1 CABINET EXHAUST FAN

NO SCALE

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05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

SUGAR MILL ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD.
SUGAR LAND, TX 77498

SEAL

STATE OF TEXAS
TYLER W. HERRING
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07.18.2025

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PROJ. NO.: 23-25
DATE: 07/18/2025
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MECHANICAL DETAILS (CONT'D.)

U-M2.02

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ELECTRICAL AND LOW VOLTAGE LEGEND AND SYMBOLS

- TYPE 'A' LIGHT FIXTURE
- LIGHT FIXTURE WITH EMERGENCY BACKUP
- EXIT SIGN/EXIT SIGN WITH DIRECTIONAL ARROW
- EMERGENCY EGRESS LIGHT FIXTURE
- WALL MOUNTED FIXTURE OR SCONCE
- CEILING DOWNLIGHT OR CYLINDER
- WALL PACK FIXTURE
- INV — LIGHTING INVERTER
- $/$3/$4 — 20A, 277V TOGGLE/3-WAY/4-WAY SWITCH
- 20A, 277V MOMENTARY 3-POSITION TOGGLE SWITCH
- 20A, 277V, MOMENTARY 3-POSITION KEY SWITCH
- $K/$3K/$4K — 20A, 277V MAINTAINED 2-POSITION/3-WAY/4-WAY KEY SWITCH
- $LT — 20A, 277V TOGGLE SWITCH W/ INTEGRAL NIGHT LIGHT
- $M/$MP — MOTOR RATED ON/OFF SWITCH, MP W/ PILOT LIGHT (SWITCH RATING SHALL BE ≥ UPSTREAM OCPD & VOLTAGE)
- DPST$ — DOUBLE POLE SINGLE THROW (DPST) SWITCH WITH RED PILOT LIGHT.
- TSW — TIMER SWITCH

NETWORK LIGHTING CONTROLS

- #B — MULTIBUTTON LOW VOLTAGE LIGHTING SWITCH PROVIDE NUMBER OF BUTTONS INDICATED IN SINGLE PLATE.
- #D — MULTIPLE DIMMER SWITCHES PROVIDE NUMBER OF SWITCHES INDICATED IN SINGLE PLATE.
- #K — MULTIPLE KEY TYPE SWITCHES PROVIDE NUMBER OF SWITCHES INDICATED IN SINGLE PLATE.
- OC — WALL SENSOR SWITCH
- $D — 20A, 277V, STANDALONE DIMMER SWITCH (DISPLAY CABINET)
- OC — 360° CEILING SENSOR
- OC — 180° CEILING SENSOR
- OC — CEILING SENSOR
- OC — WALL MOUNT SENSOR
- PC — DAYLIGHT PHOTOSENSOR
- RC/RCD — LIGHTING ROOM CONTROLLER/POWER PACK
- ER — EMERGENCY LIGHTING RELAY/CONTROL UNIT
- PLC — PLUG LOAD CONTROLLER

- 20A, 125V SIMPLEX/DUPLEX/QUAD RECEPTACLE
- GFI — 20A, 125V DUPLEX RECEPTACLE WITH GFCI PROTECTION
- GFI WP — 20A, 125V DUPLEX RECEPTACLE WITH GFCI PROTECTION AND WEATHERPROOF COVER.
- GFI — REMOTE GFCI DEVICE, REF SPECS AND EDF GFI DETAIL.
- USB — 20A, 125V DUPLEX/QUAD RECEPTACLE W/ USB-A PORTS PROVIDE 2-5A PORTS PER DEVICE – HUBBELL USB20A5
- 20A, 125V SIMPLEX/DUPLEX/QUAD IG/COMPUTER RECEPTACLE
- GFI — 20A, 125V, IG/COMPUTER DUPLEX RECEPTACLE WITH GFCI
- PLUG LOAD CONTROLLED DUPLEX
- NEMA IEC CS — NEMA/IEC/CS NUMBERED POWER OUTLET MATCH PROVIDED EQUIPMENT CONNECTION OR CIRCUIT.
- PROJ TV IM — 20A, 125V IG DUPLEX RECEPTACLE AT PROJECTOR, TV, OR INTERACTIVE MEDIA LOCATION.
- LOW VOLTAGE OUTLET
- CEILING MOUNTED RECEPTACLE
- CEILING MOUNTED LOW VOLTAGE OUTLET
- SINGLE SERVICE FLOOR BOX WITH DUPLEX/QUAD REC
- SINGLE SERVICE FLOOR BOX WITH DUPLEX/QUAD IG REC
- SINGLE SERVICE LOW VOLTAGE FLOOR BOXES
- MULTI SERVICE FLOOR BOX WITH QUAD/QUAD IG REC
- CR — CORD REEL
- D — DROP CORD
- EPO — EMERGENCY POWER OFF (EPO) SWITCH
- PB — PUSH BUTTON
- SP — TELEPOWER POLE
- J — J-BOX
- J — CEILING MOUNTED J-BOX
- CA J — J-BOX FOR ACCESS CONTROL DEVICE
- HD J — JUNCTION BOX AND FINAL CONNECTION TO HAND DRYER BY DIVISION 26.
- HDWR J — JUNCTION BOX AND FINAL CONNECTION TO ELECTRIFIED DOOR HARDWARE BY DIVISION 26.
- HEAT J — JUNCTION BOX AND FINAL CONNECTION TO HEAT TRACE EQUIPMENT BY DIVISION 26.
- WC J — JUNCTION BOX AND FINAL CONNECTION TO POWERED PLUMBING EQUIPMENT BY DIVISION 26.
- SF J — JUNCTION BOX AND FINAL CONNECTION TO SYSTEM FURNITURE BY DIVISION 26.
- CONTACTOR
- NON-FUSED DISCONNECT SWITCH
- DT — NON-FUSED DOUBLE THROW DISCONNECT
- FUSED DISCONNECT SWITCH
- ST — DISCONNECT/CB WITH SHUNT TRIP
- CB — ENCLOSED CIRCUIT BREAKER
- MOTOR STARTER 'VFD' INDICATES VARIABLE FREQUENCY DRIVE MOTOR STARTER
- MOTOR STARTER WITH INTEGRAL DISCONNECT
- MOTOR
- TC — TIME CLOCK
- ELECTRICAL PANELBOARD
- ELECTRICAL METER
- SPD — TVSS OR SPD
- GANN — GENERATOR REMOTE ANNUNCIATOR
- LOW VOLTAGE CABLING PATHWAY, REF. SPECIFICATIONS

KITCHEN SYMBOL LEGEND

- C — LOAD CENTER, BY FOOD SERVICE PROVIDE UNDERGROUND CONDUIT STUBBED UP AT LOAD CENTER LOCATION PER SUBMITTAL SHOP DRAWINGS.
- P — POINT OF SALE EQUIPMENT, BY FOOD SERVICE. PROVIDE UNDERGROUND CONDUIT STUBBED UP POS LOCATION PER SUBMITTAL SHOP DRAWINGS.
- F — REMOTE FIRE PULL, REFERENCE INSTALLATION DETAIL
- B — BELL/BUZZER WITH 120V TO LOW VOLTAGE TRANSFORMER
- D — DROP CORD
- DB — DOORBELL BUTTON
- V CLR/FRZR — CEILING STROBE FOR ENTRAPMENT ALARM
- V CLR/FRZR — WALL STROBE FOR ENTRAPMENT ALARM

COORDINATION SYMBOL LEGEND

- DDC — HVAC CONTROL PANEL, REQUIRES POWER AND DATA CONNECTIONS WITHIN CABINET COOR EXACT LOCATION AND REQUIREMENTS WITH CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.
- SD — SMOKE DAMPER
- FSD — FIRE/SMOKE COMBINATION DAMPER
- M / MD — MOTORIZED DAMPER

SITE PLAN

- UTILITY POLE
- POLE MOUNTED TRANSFORMER BANK
- SITE POLE LIGHT
- UGE J — FLUSH IN GRADE ELECTRICAL PULL BOX
- LV HH J — FLUSH IN GRADE, LOW VOLTAGE HAND HOLE
- CONCRETE BOLLARD
- (X)PP — POWER POLE
- (X)SP — SERVICE POLE OR RACK
- (X)XP — XFMR POLE
- (X)LVP — LOW VOLTAGE POLE
- (X)TP — TRANSITION POLE
- OHP — OVERHEAD POWER WIRING
- 480V — 480V OVERHEAD POWER WIRING
- UGP — UNDERGROUND PRIMARY ELECTRICAL
- UGS — UNDERGROUND SECONDARY ELECTRICAL
- UGE — UNDERGROUND EMERGENCY ELECTRICAL

DIVISION 28 LEGENDS

FIRE ALARM

- F — FIRE ALARM PULL STATION W/ STOPPER II
- F / S — WALL FIRE ALARM AUDIO/VISUAL DEVICE
- WP S — OUTDOOR WEATHERPROOF FIRE AUDIO/VISUAL DEVICE
- H — WALL FIRE ALARM AUDIO DEVICE
- V — WALL FIRE ALARM VISUAL DEVICE
- F / S — CEILING FIRE ALARM AUDIO/VISUAL DEVICE
- S — CEILING FIRE ALARM AUDIO DEVICE
- V — CEILING FIRE ALARM VISUAL DEVICE
- DUCT SMOKE DETECTOR
- I / PS — CEILING SMOKE DETECTOR
- H — CEILING HEAT DETECTOR
- CO — CEILING CARBON MONOXIDE DETECTOR
- PS CO — CEILING COMBINATION SMOKE/CARBON MONOXIDE DETECTOR
- FR — FIRE ALARM RELAY FOR STAGE SOUND RACK OVERRIDE
- BSD / BSR — BEAM SMOKE DETECTOR
- FANN — FIRE ALARM REMOTE ANNUNCIATOR OR LOCAL OPERATOR'S CONSOLE
- FACP — FIRE ALARM CONTROL PANEL
- FAPS — FIRE ALARM POWER SUPPLY/AMPLIFIER
- G — INDICATES DEVICE WITH PROTECTIVE GUARD
- WG — INDICATES DEVICE WITH WIRE GUARD
- HC — INDICATES DEVICE RATED FOR HAZARDOUS CONDITIONS
- SD — SMOKE DAMPER
- FSD — FIRE/SMOKE COMBINATION DAMPER

MULTI-SERVICE FLOOR BOX NOTES

FLOOR POWER AND LOW VOLTAGE
PROVIDE HEAVY-DUTY MULTI-GANG FLUSH IN GRADE OR FIRE RATED POKE-THRU OUTLET WITH HEAVY DUTY METAL HINGED COVER WITH CABLE EXIT SLOT.
FLOOR BOX MUST BE RATED FOR INSTALLATION IN GRADE.

FOR EACH FLOOR BOX PROVIDE:
1. PROVIDE:
   1.A. ONE QUAD OR TWO DUPLEX RECEPTACLES.
   1.B. PROVIDE IG RECEPTACLES WHERE SHOWN.
   1.C. POWER CONNECTION TO TABLE (WHERE SHOWN)
2. BLANK STAINLESS STEEL COVER FOR UN-USED GANGS.
3. PROVIDE ONE 3/4"C UNDERGROUND CONDUIT FOR POWER.
4. PROVIDE ONE 1"C UNDERGROUND CONDUIT WITH WATERPROOF INNER DUCT FOR DATA.
5. PROVIDE ONE 1"C UNDERGROUND CONDUIT WITH WATERPROOF INNER DUCT FOR LOW VOLTAGE CABLING
6. PROVIDE DIVIDERS TO MAINTAIN SEPARATION BETWEEN SERVICES.

UNDERGROUND CONDUITS MUST BE WATER TIGHT TO PREVENT MOISTURE ENTERING CONDUITS.
DO NOT COMBINE CONDUIT FOR POWER & LOW VOLTAGE.

REFERENCE FLOOR PLANS AND SPECIFICATIONS FOR QUANTITY OF DATA DROPS AND ADDITIONAL INFORMATION.

COORDINATE WITH ARCHITECT TO PROVIDE COVER/RING TO MATCH FLOOR MATERIAL AND SUBMIT COVER FINISH FOR ARCHITECT TO SELECT PRIOR TO ORDERING.

GENERAL NOTES / TAGS

+18"	INDICATES DEVICES AT +18" AFF
+42"	INDICATES DEVICES AT +42" AFF
+96"	INDICATES DEVICES AT +96" AFF
+12 FT	INDICATES DEVICES AT +12 FT AFF, ETC.
*	INDICATES DEVICES ABOVE COUNTER, REF ARCH
CLG	INDICATES DEVICES AT CEILING
PMR	INDICATES PEDESTAL MOUNTED DEVICE, REF PMR DETAIL
TV	INDICATES DEVICES AT TELEVISION/DISPLAY LOCATION
IM	INDICATES DEVICES AT INTERACTIVE MEDIA LOCATION
PROJ	INDICATES DEVICES AT PROJECTOR LOCATION
S	INDICATES SURFACE MOUNTED DEVICE
IEC	INDICATES IEC POWER OUTLET
NEMA	INDICATES NEMA NUMBERED POWER OUTLET
GFI	INDICATES GROUND FAULT INTERRUPT (GFI) PROTECTION
WP	INDICATES WEATHERPROOF DEVICES
GFI WP	INDICATES GFI PROTECTED WEATHERPROOF DEVICE
G	INDICATES DEVICE WITH PROTECTIVE GUARD
WG	INDICATES DEVICE WITH WIRE GUARD
3R	INDICATES NEMA 3R RATED DEVICE
4XSS	INDICATES NEMA 4XSS RATED DEVICE
EM	INDICATES DEVICE ON EM/STANDBY POWER
VFD	INDICATES VARIABLE FREQUENCY DRIVE (VFD)
E	EXISTING DEVICES TO REMAIN
D	EXISTING DEVICES TO BE DEMO/REMOVED
R	EXISTING DEVICES TO BE RELOCATED
REP	EXISTING DEVICES TO BE REPLACED
	(X) = (E) FOR EXISTING
	(X) = (D) FOR DEMO
	(X) = (R) FOR RELOCATION
	(X) = (N) FOR NEW
→	HOMERUN TO CIRCUIT NOTED

1. RECEPTACLES AND DATA OUTLETS SHALL BE MOUNTED AT +18" AFF UNLESS NOTED ON THE DRAWINGS.
2. REF. SPECIFICATIONS FOR MOUNTING HEIGHT OF OTHER DEVICES.
3. ELECTRICAL RECEPTACLES, TELEPHONES, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
4. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
4. ALL DEVICES SHOWN AT THE SAME LOCATION AND ELEVATION SHALL BE GROUPED TOGETHER AND SPACED 2 INCHES BETWEEN BOXES.
5. PROVIDE SS COVER PLATE FOR ALL EMPTY JBOX.
6. ALL NON-LOCKING 125V AND 250V, 15A AND 20A RECEPTACLES SHALL BE TAMPER RESISTANT TYPE.

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ELECTRICAL AND FIRE ALARM SCHEDULES
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PROVIDE CONDUIT & SLEEVES THRU FIRE WALLS, WALLS AND FLOORS FOR LOW VOLTAGE CABLING WIRING, ETC.

ALL CONDUIT & J-BOXES FOR LOW VOLTAGE CABLING SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL LOW VOLTAGE CABLING IN WALLS, EXPOSED AREAS AND ABOVE INACCESSIBLE CEILINGS SHALL REQUIRE CONDUIT AND J-BOXES. REFERENCE SPECIFICATIONS AND TECHNOLOGY DOCUMENTS FOR ADDITIONAL INFORMATION/REQUIREMENTS.

PULL BOXES AND BELOW GRADE CONDUIT FOR LOW VOLTAGE CABLING, WIRING, ETC. BY ELEC CONTRACTOR.

FIRE ALARM SYSTEM DESCRIPTION AND SEQUENCE OF OPERATION

1. FIRE ALARM SYSTEM SHALL BE DESIGNED TO MEET NFPA REQUIREMENTS AS WELL AS CITY AND NATIONAL BUILDING CODES. PROVIDE COMPLETE FIRE ALARM SYSTEM, DEVICES AND WIRING.
2. INSTALL FIRE ALARM CONTROL PANEL IN RECEPTION AREA. INSTALL REMOTE POWER SUPPLY PANELS IN MECHANICAL/ELECTRICAL ROOMS.
3. FIRE ALARM PANEL, POWER SUPPLIES, DEVICES, ETC. SHALL BE MANUFACTURED BY THE SAME MANUFACTURER AS THE FIRE ALARM CONTROL PANEL.
4. FIRE ALARM REMOTE POWER SUPPLIES AND PANELS SHALL BE LOCATED IN MECHANICAL OR ELECTRICAL ROOMS ONLY. DO NOT LOCATE IN STORAGE ROOMS, DATA CLOSETS OR FINISHED SPACES.
4. PROVIDE AUDIBLE, INTELLIGIBLE AND VISUAL ALARM COVERAGE OF THE AREA OF RENOVATION AS REQUIRED BY CODE.
5. PROVIDE SMOKE DETECTORS AT EACH FIRE ALARM PANEL, REMOTE TRANSPONDER PANEL, BOOSTER PANEL AND REMOTE ANNUNCIATOR PER NFPA 72.
6. IN ADDITION TO THE SPECIFIED FIRE ALARM EQUIPMENT, THE FIRE ALARM CONTRACTOR SHALL PROVIDE
   - 6.A. SURGE PROTECTORS FOR ALL NEW 120V POWER CONNECTIONS TO FIRE ALARM EQUIPMENT.
   - 6.B. SURGE PROTECTORS FOR ALL SIGNALING LINE CIRCUITS (SLC), NOTIFICATION CIRCUITS AND INITIATING CIRCUITS CONNECTED TO THE FIRE ALARM CONTROL PANEL WHICH LEAVE THE BUILDING.
7. SHOULD ANY DETECTOR, MONITOR OR PULL STATION ACTIVATE, ALL SPEAKERS SHALL SOUND AND STROBES FLASH. AIR HANDLING EQUIPMENT SHALL BE DEACTIVATED. AN ALARM SIGNAL SHALL BE SENT TO A REMOTE LOCATION VIA AUTOMATIC DIALER. ALSO, DE-ENERGIZE SUPPLY FANS, EXHAUST FANS AND OTHER AIR CIRCULATING DEVICES IF 2000 CFM OR OVER, SERVING THE AREA IN ALARM.
8. ALL LOW VOLTAGE WIRING SHALL BE FPLP RATED WIRE, WITH MINIMUM WIRE SIZE PER SPECIFICATIONS.
   - 8.A. PLENUM RATED CABLE ABOVE ACCESSIBLE CEILING SHALL BE SUPPORTED BY J-HOOKS, SPACED AT FOUR (4) FEET ON CENTER.
   - 8.B. INSTALL FIRE ALARM CABLES IN CONDUIT FOR AREAS WITHOUT CEILING OR ABOVE INACCESSIBLE CEILINGS.
   - 8.C. EXPOSED CONDUIT IN FINISHED SPACES SHALL BE ALLOWED WHERE NO OTHER OPTION EXISTS AND ONLY WITH PRIOR WRITTEN APPROVAL BY THE OWNER. ALL EXPOSED CONDUIT SHALL BE PAINTED TO MATCH.
   - 8.D. ALL CABLING THROUGH WALLS, FIRE WALLS AND FLOORS SHALL BE INSTALLED IN SLEEVES WITH PROTECTIVE BUSHINGS ON BOTH ENDS.
9. FIRE ALARM SYSTEM SHALL BE MONITORED BY A UL LISTED CENTRAL RECEIVING STATION.
10. INTERLOCK LIGHTING CONTROL PANELS WITH FIRE ALARM SYSTEM TO ENABLE ALL LIGHTING UPON ACTIVATION.
11. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

FIRE ALARM SYSTEM NOTES

1. GENERAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL AND FIRE ALARM SUBCONTRACTOR FOR LOCATIONS OF REMOTE POWER SUPPLIES. FIRE ALARM POWER SUPPLIES ARE NOT SHOWN ON THIS DRAWING AND SHALL BE LOCATED BY FIRE ALARM SUBCONTRACTOR IN ORDER TO ACCOMMODATE HIS FIRE ALARM SYSTEM BATTERY AND VOLTAGE DROP CALCULATIONS PER MANUFACTURER'S RECOMMENDATION & NFPA REQUIREMENTS. ELECTRICAL CONTRACTOR SHALL INCLUDE ADDITIONAL DEDICATED 120V CIRCUITS IN BASE BID TO SERVE FIRE ALARM POWER SUPPLIES IN DIFFERENT AREAS. PROVIDE 2-12 +12G, 3/4"C AND SPARE 20A/1P CB(S) IN LOCAL LIFE SAFETY EMERGENCY 120V PANELS TO SERVE FIRE ALARM REMOTE POWER SUPPLIES.
2. FIRE ALARM CONTRACTOR IS RESPONSIBLE FOR DESIGN AND FOR FINAL CORRECT LOCATION OF DEVICES TO RELIEVE NUISANCE ALARMS, SUCH AS INSTALLING A HEAT DETECTOR IN FRONT OF AN OVEN WHICH WILL RELEASE STEAM, THUS POTENTIALLY SETTING OFF THE ALARM. ALSO, THE CONTRACTOR IS RESPONSIBLE FOR DETECTORS REQUIRED BY CODE EVEN IF NOT SHOWN ON DRAWING, LIKE A CLOSET. IF THERE IS UNCERTAINTY, BRING UP DURING THE BID PROCESS AND THEY WILL BE ADDRESSED DURING THE BIDDING PROCESS.
3. FIELD VERIFY ENVIRONMENTAL ISSUES THAT CAN ADVERSELY AFFECT OPERATION OF SMOKE DETECTORS. DO NOT LOCATE NEAR AIR FLOW DEVICES LEADING TO PREMATURE BUILD UP OF DUST CAUSING NUISANCE TROUBLE SIGNALS. DEVICE RELOCATION OR TYPE CHANGE WILL BE COVERED UNDER WARRANTY.

FIRE ALARM SCOPE OF WORK

1. THERE IS AN EXISTING FIRE ALARM SYSTEM IN EACH BUILDING.
   - 1.A. TEST THE EXISTING SYSTEM PRIOR TO BEGINNING DEMO. NOTE ANY FAULTS OR TROUBLES AND PROVIDE A WRITTEN REPORT TO THE OWNER.
   - 1.B. EXPAND THE EXISTING SYSTEM AS REQUIRED TO INTEGRATE THE NEW DEVICES IN THE AREA OF RENOVATION.
2. PROVIDE WIRING AND DEVICES AS INDICATED TO PROVIDE COMPLETE AUDIBLE, INTELLIGIBLE AND VISUAL ALARM COVERAGE OF RENOVATED AREAS AS REQUIRED BY CODE.
   - 2.A. PROVIDE SMOKE DETECTOR COVERAGE OF ALL STORAGE ROOMS AND ADDITIONALLY AS SHOWN ON THE DRAWINGS.
   - 2.B. PROVIDE HEAT DETECTOR COVERAGE OF THE KITCHEN, CUSTODIAL ROOMS, AND ADDITIONALLY AS SHOWN ON THE DRAWINGS.
   - 2.C. PROVIDE DUCT MOUNTED DETECTORS AT EACH NEW AIR HANDLING UNIT SUPPLY AND RETURN CONNECTION EXCEEDING 2000 CFM. IF FREE AIR RETURN, PROVIDE FREE AIR DETECTOR COVERAGE OF THE RETURN AIR OPENINGS TO THE MECHANICAL ROOM. ENSURE AIR FLOW CANNOT PREVENT OPERATION OF THE DETECTORS AND PROVIDE ADEQUATE CLEARANCE PER NFPA 72.
   - 2.D. CONTROL RELAYS SHALL BE LOCATED WITHIN 3 FT OF THE CONTROLLED CIRCUIT OR APPLIANCE.
3. PROVIDE SMOKE DETECTORS AT EACH NEW FIRE ALARM PANEL, REMOTE TRANSPONDER PANEL, BOOSTER PANEL AND REMOTE ANNUNCIATOR PER NFPA 72.
4. PROVIDE LED REMOTE ALARM WITH ENGRAVED STAINLESS STEEL PLATE WHERE DUCT DETECTORS ARE NOT LOCATED IN MECHANICAL ROOM, LOCATED ABOVE CEILINGS OR WHERE MOUNTED TOO HIGH OR VIEW IS BLOCKED BY DUCTWORK IN MECHANICAL ROOM.
   - 4.A. REMOTE LED LIGHT INDICATOR FOR DUCT SMOKE DETECTORS SHALL BE MOUNTED FLUSH IN CEILING OR MOUNTED IN WALL AT +7FT.
   - 4.B. STAINLESS STEEL PLATE SHALL BE ENGRAVED WITH THE DUCT SMOKE DETECTOR AS-BUILT IDENTIFICATION NUMBER.
5. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

SPARES

1. THE FIRE ALARM CONTRACTOR SHALL INCLUDE IN HIS BID THE COST TO PROVIDE AND INSTALL THE ADDITIONAL SPARE PARTS AND ASSOCIATED CABLING PER THE SPECIFICATIONS. SPARES SHALL BE INSTALLED AS INSTRUCTED BY THE OWNER. UNINSTALLED DEVICES SHALL BE DELIVERED TO THE OWNER AS ATTIC STOCK.

GENERAL RENOVATION AND REMODELING NOTES

1. READ ALL MEP AND ARCH. DRAWINGS TO IDENTIFY AREAS OF RENOVATION AND SCOPE OF WORK.
2. ALL RENOVATION AND DEMOLITION WORK SHALL NOT AFFECT AREAS NOT INCLUDED IN THE AREAS OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUITY OF ALL SERVICES (POWER, TELEPHONE, FIRE ALARM, DATA, SECURITY, ETC.) IN NON-DEMOLITION/RENOVATION AREAS. ALL SERVICES SHALL BE MAINTAINED AT ALL TIMES.
3. ALL OUTAGES AFFECTING NON-DEMOLITION/RENOVATION AREAS SHALL BE SCHEDULED WITH THE OWNER WITH A MINIMUM 2 WEEKS ADVANCE NOTICE. OUTAGES SHALL BE COORDINATED WITH OTHER TRADES TO MINIMIZE THE QUANTITY AND IMPACT ON BUILDING OPERATION.
4. THIS ELECTRICAL DRAWING ONLY SHOWS SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J-BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
5. CONTRACTOR SHALL FIELD VERIFY AND MARK UP THE FOLLOWINGS IN AREAS OF RENOVATION:
   - 5.A. EXISTING DATA, AUDIO, VIDEO, SPEAKERS AND OTHER LOW VOLTAGE OUTLETS AND DEVICES.
   - 5.B. EXISTING CEILING MOUNTED PROJECTORS.
   - 5.C. EXISTING SECURITY, CCTV, ACCESS CONTROL DEVICES.
   - 5.D. EXISTING FIRE ALARM DEVICES.
   - 5.E. EXISTING WIRELESS ACCESS POINTS AND GRID LABELING.
   - 5.F. EXISTING LIGHT FIXTURES AND SWITCHES.
   - 5.G. EXISTING ELECTRICAL DEVICES, J-BOXES, CONDUIT, WIRING, WIRING SUPPORTS, ETC.
   - 5.H. EXISTING ELECTRICAL SWITCHGEAR.
   - 5.I. EXISTING CONTROL PANELS AND CONTROL CIRCUITS.
   - 5.J. EXISTING HANGER WIRE FROM CONC. CEILING.
6. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
7. ALL EXISTING DEVICES SHALL BE REINSTALLED IN NEW CEILINGS AT SAME LOCATION EXCEPT WHERE SHOWN TO BE NEW.
8. CONDUIT/WIRE NOT TO BE REUSED SHALL BE REMOVED ALL THE WAY BACK TO THE UPSTREAM EQUIPMENT.
   - 8.A. PROVIDE ADDITIONAL SUPPORTS FOR EXISTING CONDUIT/WIRE TO REMAIN TO MEET CURRENT CODE REQUIREMENTS.
9. ANY MATERIAL THAT HAS SALVAGE VALUE SHALL BE OFFERED TO THE OWNER, AND IF ACCEPTED, DELIVERED TO HIS WAREHOUSE. IF NOT ACCEPTED IT SHALL BE PROPERLY DISPOSED OF WITH THE OTHER CONSTRUCTION DEBRIS.
10. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITES.
11. WHERE PARTIAL CIRCUITS OR SYSTEMS ARE TO BE REUSED, ENSURE THAT THEY REMAIN ACTIVE. WHERE EXISTING EQUIPMENT IS RELOCATED OR REPLACED WITH NEW. MODIFY, EXTEND AND RELOCATE EXISTING CIRCUIT TO CONNECT TO EQUIPMENT, UNLESS SHOWN TO HAVE NEW CIRCUIT.
12. WHERE AUXILIARY SYSTEMS SUCH AS SECURITY, DATA, SOUND, ETC. INTERFACE WITH EXISTING EQUIPMENT THAT IS REPLACED OR MODIFIED (MECHANICAL, ELECTRICAL OR PLUMBING), DISCONNECT AND RECONNECT THESE SYSTEMS.
13. WHERE NEW CIRCUIT BREAKERS ARE TO BE INSTALLED IN EXISTING PANELS OR SWITCHBOARD, VERIFY THAT THE CIRCUIT BREAKER WILL FIT IN THE ALLOTTED SPACE. PROVIDE NEMA 1 ENCLOSURE ADJACENT TO PANEL & WIRE CONNECT TO BUSSING IF THERE IS INSUFFICIENT SPACE.
14. WHERE PARTIAL CIRCUITS OR SYSTEMS ARE TO BE REUSED, ENSURE THAT THEY REMAIN ACTIVE. WHERE EXISTING EQUIPMENT IS RELOCATED OR REPLACED WITH NEW, MODIFY, EXTEND AND RELOCATE EXISTING CIRCUIT TO CONNECT TO EQUIPMENT, UNLESS SHOWN TO HAVE NEW CIRCUIT.
15. WHEN REPLACING LIGHTS AND CEILINGS, ENSURE THAT EXISTING DATA, TELEVISION AND PA CABLES TO REMAIN CONTINUE TO MEET THE CURRENT STANDARDS. FOR DATA CABLES, THIS IS THE IEEE 802.1. FOR TELEVISION AND PA CABLE, A FOUR INCH DISTANCE IS NEEDED FROM ALL LIGHT FIXTURES. NEW DROP LOCATION SHOULD BE WITHIN THREE FEET OF POWER OUTLET.
16. PAINT NEW AND EXISTING EXPOSED RACEWAY IN AREAS OF RENOVATION TO MATCH FINISHES.
17. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
18. INTERESTED CONTRACTORS MUST VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH THE PROJECT REQUIREMENTS AND EXISTING CONDITIONS AND SHALL INCLUDE IN THEIR PROPOSALS COSTS TO REPAIR, RELOCATE, MODIFY AND REMOVE EXISTING ELEMENTS AS REQUIRED TO COMPLETE INSTALLATION OF ALL SYSTEMS SHOWN ON THESE DRAWINGS.
19. SEE DRAWINGS FOR ADDITIONAL REQUIREMENTS.

ELEC REQUIREMENTS FOR BUILDING RENOVATION

1. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
2. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
3. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
4. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
5. ALL EXISTING DEVICES TO REMAIN SHALL BE REINSTALLED IN NEW CEILINGS AND WALLS EXCEPT WHERE INDICATED TO BE REMOVED/RELOCATED/REPLACED.
6. EXISTING DEVICES IN WALLS TO BE FURRED OUT OR RECEIVE NEW SURFACE TREATMENT SHALL REMAIN. EXTEND JBOX TO NEW WALL SURFACE AND RECONNECT TO EXISTING CIRCUITS. EXTEND WIRING/CABLING FROM NEAREST ACCESSIBLE POINT AS NECESSARY.
7. REINSTALL ALL DEVICES NOT SHOWN TO BE REMOVED.
8. EXISTING LIGHT FIXTURES SHALL REMAIN EXCEPT WHERE SHOWN AS NEW. EXTEND EXIST CONDUIT AND WIRE DOWN TO NEW LIGHT FIXTURES, REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. ALL EXISTING EXIT SIGNS SHALL BE REINSTALLED AND RECONNECTED TO EXISTING CIRCUITS EXCEPT IN CORRIDORS AND AREAS OF RENOVATION SHOWING NEW.
10. ALL NEW DEVICES IN EXISTING WALLS IN FINISHED SPACES SHALL BE INSTALLED FLUSH MOUNTED, NO EXPOSED CONDUIT OR WIREMOLD ALLOWED. CUT EXISTING WALLS AND PATCH/REPAIR TO MATCH EXISTING AS REQUIRED.
    - 10.1. DEVICES/CONDUIT IN CUSTODIAL, MECHANICAL AND ELECTRICAL ROOMS MAY BE EXPOSED AND SURFACE MOUNTED.
11. PROVIDE NEW DIRECTORY FOR ALL EXISTING AND NEW PANELS SHOWING FIELD VERIFIED CIRCUITS.
12. ANY FEEDER AND BRANCH CIRCUIT NOT TO BE REUSED SHALL BE REMOVED COMPLETELY UP TO CB IN EXISTING PANEL.
13. ANY CIRCUIT OR PARTIAL CIRCUIT TO BE REUSED SHALL REMAIN ACTIVE.

GENERAL EQUIPMENT ELECTRICAL NOTE

THE ELECTRICAL DESIGN HAS BEEN COORDINATED FOR SPACE, INSTALLATION AND ELECTRICAL REQUIREMENTS WITH EQUIPMENT THAT IS SCHEDULED BY OTHER DIVISIONS. THE REQUIREMENTS FOR OTHER EQUIPMENT AND MODELS FROM ACCEPTABLE MANUFACTURERS HAVE NOT BEEN VERIFIED OR COORDINATED. THE GENERAL CONTRACTOR SHALL VERIFY THESE REQUIREMENTS PRIOR TO USING OTHER EQUIPMENT IN HIS BID AND INCLUDE ANY ADDITIONAL COSTS FOR INSTALLATION OF THE EQUIPMENT. THIS INCLUDES GENERAL CONSTRUCTION AND MEP COSTS.

ELECTRICAL CONTRACTOR SHALL COORDINATE WITH OWNER/OTHER TRADES FOR EXACT ELECTRICAL REQUIREMENTS OF EQUIPMENT PRIOR TO ORDERING CB(S). FIELD VERIFY EQUIPMENT NAMEPLATE RATINGS AND EQUIPMENT CONNECTION LOCATIONS WITH OTHER TRADES PRIOR TO ROUGH-IN.

TYPICAL OF HVAC EQUIPMENT, SHOP EQUIPMENT, KITCHEN EQUIPMENT, ELECTRIC ROLLUP DOORS, ETC.

GENERAL ELECTRICAL NOTES

1. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. INSTALL SYSTEMS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.
3. PROVIDE LIGHT FIXTURE FIRE PROTECTION AND CONDUIT FIRE SEALING TO MAINTAIN FIRE RATING OF WALLS AND CEILINGS PER ARCHITECT'S SCHEDULE. REF. SPECIFICATIONS AND ARCH. DRAWINGS FOR ADDITIONAL INFORMATION.
4. ELECTRICAL RECEPTACLES, TELEPHONES, ETC... ARE SHOWN FOR GENERAL LOCATION. HEIGHTS ARE NOTED SO THE ESTIMATOR WILL KNOW WHETHER THEY ARE ABOVE OR BELOW COUNTERS. PRIOR TO INSTALLATION, REVIEW THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF CONFLICT, THE ARCHITECT'S LOCATION WILL GENERALLY PREVAIL BUT SHOULD BE CLARIFIED BY RFI. PROVIDE DEVICES SHOWN ON THE ELECTRICAL DRAWING EVEN IF NOT SHOWN ON ARCHITECTURAL DRAWINGS.
5. COORDINATE POWER AND DATA WITH THE FURNITURE SUPPLIER PRIOR TO ROUGH-IN. AT CASEWORK WITH KNEE SPACE, MOUNT RECEPTACLES AND DATA OUTLETS IN KNEE SPACE. COORDINATE WITH ARCHITECT AND FURNITURE SUPPLIER TO ENSURE THAT PROTECTIVE GROMMETS ARE PROVIDED IN THE COUNTER.
6. DO NOT INSTALL ELECTRICAL PANELS AND TRANSFORMERS UNTIL 1/4" SCALE DRAWINGS SHOWING LOCATION OF THIS EQUIPMENT RELATIVE TO MECHANICAL/PLUMBING EQUIPMENT, DUCTWORK AND PIPING IS SUBMITTED AND APPROVED. NEC CODE CLEARANCE MUST BE MAINTAINED.
7. ELECTRICAL EQUIPMENT HAS BEEN COORDINATED WITH PIPING AND DUCTWORK. DO NOT RELOCATE PANELS WITHOUT PRIOR APPROVAL.
8. ELECTRICAL DEVICES IN FIRE RATED WALLS SHALL BE A MINIMUM OF 24" AWAY FROM DEVICES ON THE OPPOSITE SIDE OF THE WALL TO MAINTAIN FIRE RATING.
9. MINIMUM SIZE CONDUIT FOR POWER SHALL BE 3/4", MIN. SIZE FLEX CONDUIT MAY BE 1/2". MINIMUM SIZE CONDUIT FOR DATA SHALL BE 1"C. DO NOT COMBINE CONDUIT FOR DATA.
10. MAX. LENGTH FOR FLEX CONDUIT SHALL BE 6 FT. ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
11. LIGHT FIXTURE WHIPS MAY BE MIN. 1/2" FLEX CONDUIT WITH MIN. #12 WIRE. LIGHT FIXTURE WHIPS SHALL BE NO MORE THAN 6 FT LONG.
12. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
13. GROUND TRANSFORMER SECONDARIES TO BUILDING STEEL AND GROUND ROD. PROVIDE CONDUIT TO PROTECT GROUNDING CONDUCTOR AND BOND EACH END OF CONDUIT TO GROUNDING SYSTEM. MIN. SIZE OF CONDUIT FOR GROUND WIRE SHALL BE 3/4"C.
14. PROVIDE J-BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM AND SOUND SYSTEMS WIRINGS, ETC. SEE SPECIFICATIONS.
15. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS.
16. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
17. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12. ALL WIRE SHALL BE STRANDED TYPE THHN OR THWN-2 (WET RATED FOR 90° C). ALL WIRES SHALL BE COLOR CODED WITH SAME COLOR CONNECTED TO SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION.
18. ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT. NO SURFACE MOUNTED WIREMOLD SHALL BE ALLOWED IN FINISHED SPACES. MC CABLE SHALL BE ALLOWED INSIDE EXIST STUD WALLS OR CHASE WALLS.
19. PROVIDE AND INSTALL FINAL CONNECTIONS TO ALL EQUIPMENT PROVIDED BY OTHER TRADES AND/OR FURNISHED BY OWNER INCLUDING ALL NECESSARY CONDUIT, CORDS, PLUGS, WHIPS, HARDWIRING, ETC. IN PARTICULAR CONFIRM CONNECTION REQUIREMENTS WITH DELIVERED EQUIPMENT PRIOR TO ROUGH-IN.
20. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

STANTON ENGINEERING GROUP

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13707 JESS PIRTLE BLVD.
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STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED PROFESSIONAL ENGINEER
07.18.2025

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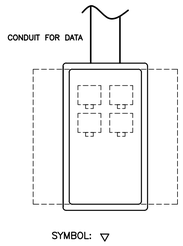
ELECTRICAL AND FIRE ALARM NOTES

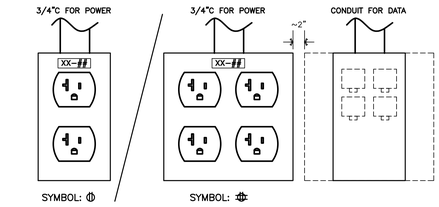
u-E.001



1 TYPICAL DATA OUTLETS

NO SCALE

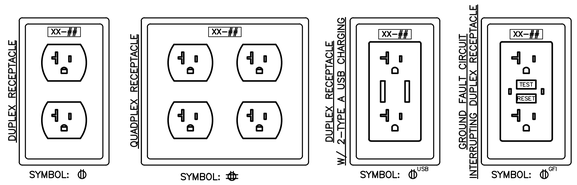
NOTES:
1. PROVIDE DEEP 4 11/16" X 4 11/16" X 2 1/8", 2-GANG BACK BOX FOR ALL DATA OUTLETS.
   1.A. PROVIDE SINGLE GANG MUDRING FOR DATA OUTLETS WITH 1-4 DROPS.
   1.B. PROVIDE PULL STRING IN ALL LOW VOLTAGE CONDUITS.
2. LOW VOLTAGE CABLING AND DEVICES BY DIVISION 27.
3. REFERENCE TECHNOLOGY DRAWINGS FOR ADDITIONAL INFORMATION.



2 TYPICAL POWER & DATA OUTLET DETAIL

NO SCALE

NOTES:
1. LOCATE DEVICES GROUPED TOGETHER AS CLOSELY TOGETHER AS POSSIBLE.
   1.A. USE CADDY TSGB16, RBS16 OR SIMILAR MOUNTING BAR IN SHEETROCK WALLS.



3 TYPICAL ELECTRICAL DEVICES

NO SCALE

NOTES:
1. ALL DEVICES SHALL BE COLOR CODED PER SPECIFICATIONS WITH 302/304 STAINLESS STEEL, STANDARD SIZE, FACEPLATES.
2. ONLY SELECT RECEPTACLES ARE SHOWN HERE. PROVIDE SIMILAR LABELS ON ALL SWITCHES, NEMA POWER OUTLETS, ETC.
3. PROVIDE LABEL WITH RED TEXT READING "EMERGENCY" FOR DEVICES ON GENERATOR FED CIRCUITS.
4. PROVIDE TYPEWRITTEN OR PREMADE CIRCUIT LABELS INDICATING THE ELECTRICAL CIRCUIT ON:
   4.A. INSTALLED WIRING AT EACH SPLICE POINT
   4.B. EACH J-BOX ABOVE CEILING WITH WIRING INSTALLED OR MODIFIED AS PART OF THIS PROJECT.
   4.C. AFFIXED TO THE FRONT OF EACH NEW AND EXISTING DEVICE FACEPLATE IN THE AREA OF RENOVATION.

XX-## CIRCUIT LABEL
A. XX = PANEL DESIGNATION
B. ## = AS-BUILT CIRCUIT DESIGNATION

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ELECTRICAL DEVICE DETAILS

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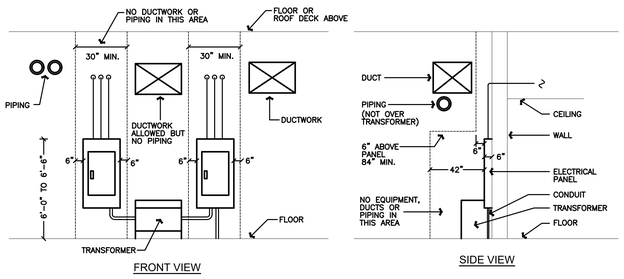
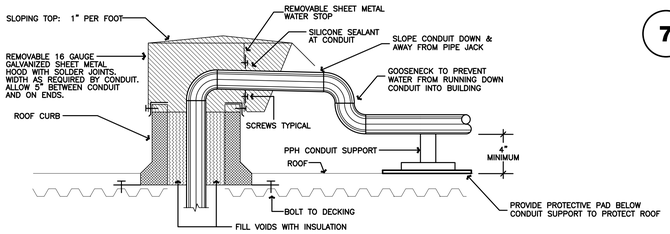


10 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

COORDINATE WITH OTHER TRADES TO ENSURE NO PIPING AND DUCTWORK ABOVE ELECTRICAL EQUIPMENT AS SHOWN. PROVIDE WORKING CLEARANCE IN FRONT OF STARTERS, DISCONNECTS, PANELS, XFMRS AND ADDITIONALLY PER CODE.



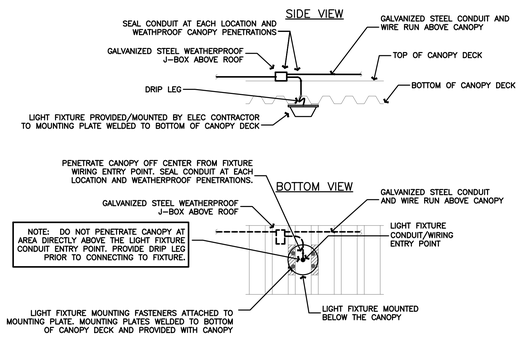
11 CONDUIT ROOF PENETRATION DETAIL

NO SCALE

12 ROOF AND CANOPY CONDUIT SUPPORT DETAIL

NO SCALE

1. COORDINATE WITH ARCHITECTURAL DRAWINGS, DETAILS, SPECIFICATIONS AND OTHER TRADES.

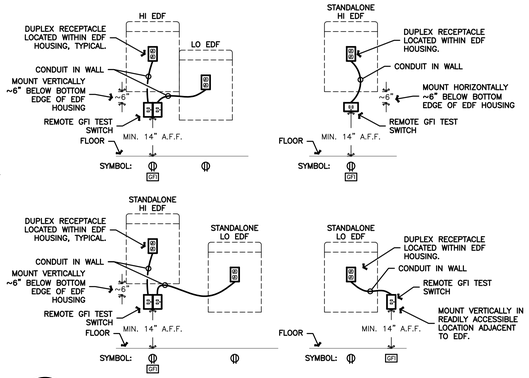


13 CANOPY LIGHT MOUNTING DETAIL TYPE 1

NO SCALE

NOTES:

1. MOUNTING PLATES SHALL BE WELDED TO CANOPY TO MOUNT LIGHT FIXTURES.
2. FOR FIXTURES WITH END CONDUIT ATTACHMENTS ALL CANOPY PENETRATIONS SHALL BE MADE OFF CENTER FROM THE FIXTURE WIRING ENTRY POINT AND SHALL HAVE WEATHERTIGHT SEALING. (SHOWN HERE)
3. CANOPY PENETRATIONS ABOVE FIXTURES SHALL BE PERMITTED ONLY WHERE THE SUPPLIED FIXTURE HAS NO END CONDUIT ATTACHMENTS.
4. CONDUIT SHALL BE SEALED BOTH ABOVE AND BELOW THE CANOPY PENETRATION AND AGAIN AT THE FIXTURE ENTRY POINT TO PREVENT WATER FROM ENTERING THE LIGHTING FIXTURE.
5. CANOPY PENETRATIONS SHALL BE MADE AS CLOSE TO CONDUIT ENTRY PENETRATION POINT AS POSSIBLE AND CONDUIT SHALL BE ROUTED TO MINIMIZE EXPOSED CONDUIT.

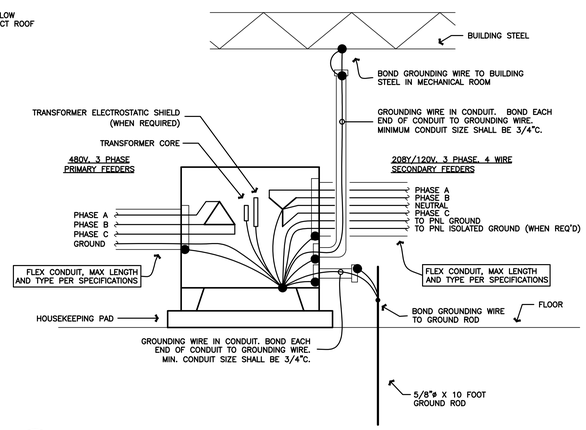


7 EDF GFI PROTECTION DETAIL

NO SCALE

NOTES:

1. MODIFY EXISTING WALL AS NEEDED TO INSTALL NEW RECEPTACLE AND REMOTE GFI TEST SWITCH. PATCH/REPAIR WALL AS NEEDED TO MATCH EXISTING.
2. WIRE NEW RECEPTACLE DOWNSTREAM OF REMOTE GFI TEST SWITCH.
3. REMOTE GFI TEST SWITCH SHALL BE A DEAD FRONT GFI DEVICE TO BE INSTALLED FLUSH MOUNTED IN WALL WITH EDF SERVED AND PROVIDE GFI PROTECTION FOR THE RECEPTACLE LOCATED WITHIN THE EDF HOUSING.
4. GFI TEST SWITCH SHALL BE READILY ACCESSIBLE PER NEC 210.8.
5. COORDINATE RECEPTACLE LOCATION(S) WITHIN EDF HOUSINGS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

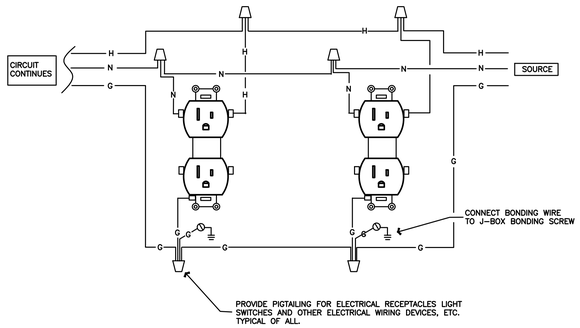


8 TRANSFORMER CONNECTION AND GROUNDING DETAIL

NO SCALE

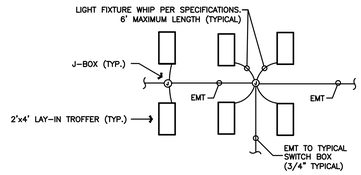
NOTES:

1. INSTALL GROUND ROD ADJACENT TO TRANSFORMER AND SEAL PENETRATION AROUND GROUND ROD.
2. WHERE AN ISOLATED GROUND IS PROVIDED MAKE THE CONNECTION AT THE TRANSFORMER AND RUN DIRECTLY TO THE ISOLATED GROUND BAR IN THE PANELBOARD. DO NOT DEFINE THE ISOLATED GROUND AT THE PANELBOARD.
3. FINAL CONNECTIONS TO TRANSFORMERS SHALL BE MADE IN FLEXIBLE CONDUIT. PROVIDE LIQUID TIGHT CONSTRUCTION AND FITTINGS IN WET, DAMP OR OUTSIDE AREAS EXCEPT WHERE LOCATED IN AIR HANDLING ROOMS. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.



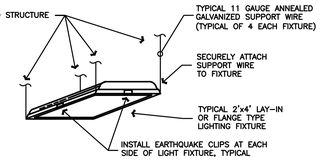
9 PIGTAIL WIRING DETAIL FOR ELECTRICAL DEVICE

NO SCALE



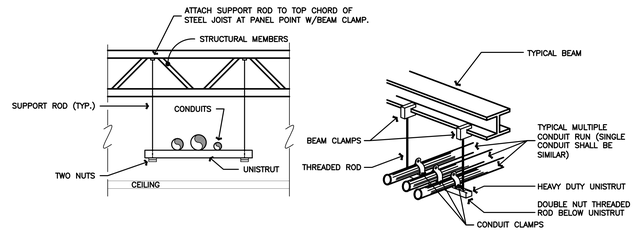
1 CONDUIT/J-BOX DETAIL FOR LIGHT FIXTURES IN LAY-IN CEILING

NO SCALE



2 FIXTURE SUPPORT DETAIL

NO SCALE

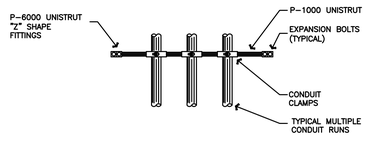


3 TRAPEZE MOUNTED CONDUIT DETAIL

NO SCALE

NOTES:

1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

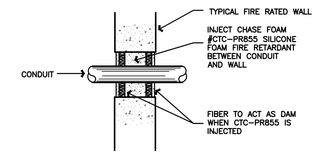


4 WALL MOUNTED CONDUITS

NO SCALE

NOTES:

1. ALL SUPPORT DEVICES SHALL BE UL LISTED AND NEC APPROVED.
2. REFER TO NEC FOR CONDUIT SUPPORT SPACING.

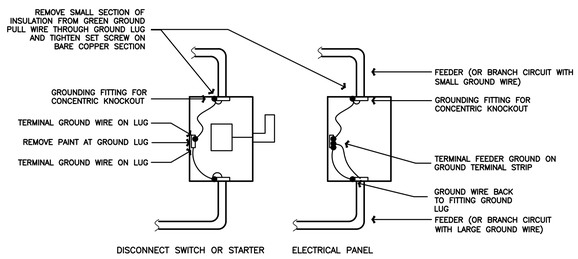


5 FIREWALL PENETRATION DETAIL

NO SCALE

NOTES:

1. FIRE RATING OF COMPLETED FIREPROOFED ASSEMBLY SHALL BE EQUAL OR EXCEED RATING OF WALL.



6 GROUNDING BUSHING WIRING DETAIL

NO SCALE

NOTE:

1. PROVIDE AND INSTALL GROUNDING BUSHINGS FOR DISCONNECT SWITCHES, PANELS AND TRANSFORMERS.

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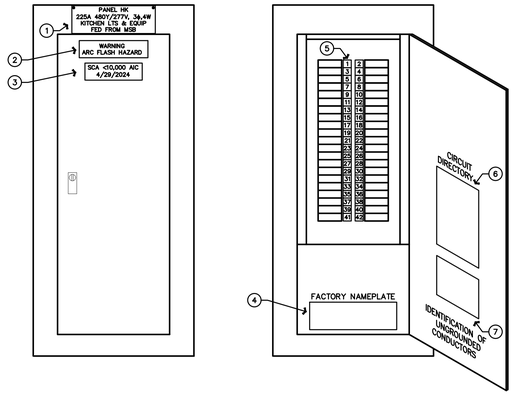


5 TYPICAL BRANCH CIRCUIT PANEL LABELING DETAIL

NO SCALE

NOTES:

1. LAYOUT OF PANELBOARD, INCLUDING LOCATIONS OF NAMEPLATES, CIRCUIT DIRECTORY, AND OTHER LABELING IS SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS.
2. REFERENCE OWNER'S DESIGN GUIDELINES FOR ADDITIONAL LABELING REQUIREMENTS.

(1) PROVIDE LAMACOID NAMEPLATE WITH 5/16" LETTERS SHOWING PANEL NAME, AMPERAGE RATING, VOLTAGE, AND FROM WHERE POWER IS DERIVED. ATTACH WITH MASTIC AND TWO SCREWS. COORDINATE TO GIVE SAME NAME AS PANEL SCHEDULE. IF USED AS MAIN SERVICE PANEL, PROVIDE SHORT CIRCUIT AVAILABLE AND RATING INFORMATION.

(2) PROVIDE PERMANENT ARC FAULT WARNING LABEL.

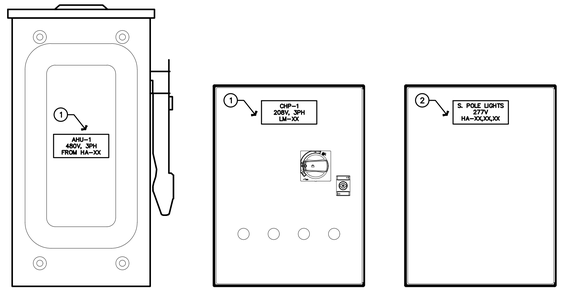
(3) FOR ALL NEW ELECTRICAL EQUIPMENT, PROVIDE PERMANENTLY AFFIXED LABEL STATING FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE MINIMUM 2" X 3" IN SIZE, AND INCLUDE THE DATE OF THE CALCULATION. REFERENCE ELECTRICAL DRAWINGS AND EQUIPMENT SHORT CIRCUIT ANALYSIS TABLE. ATTACH WITH MASTIC AND TWO SCREWS.

(4) PROVIDE INFORMATION PER INDUSTRY STANDARDS, BUT SHALL INCLUDE VOLTAGE, PHASE, BUS AMPERAGE, AND SHORT CIRCUIT RATING

(5) FOR EACH CIRCUIT PROVIDE PERMANENT LABEL INDICATING CIRCUIT BREAKER NUMBER, NUMBER SHALL MATCH CIRCUIT DIRECTORY.

(6) CIRCUIT DIRECTORY TO BE COMPLETED AT END OF JOB, TYPEWRITTEN, STATING EQUIPMENT OR ROOMS SERVED BY CIRCUIT. EVEN CIRCUIT ON RIGHT SIDE OF CARD, ODD ON LEFT. PROVIDE LAMINATED DIRECTORY FOR EXTERIOR OR WET LOCATIONS.

(7) PROVIDE PERMANENT LABEL INDICATING COLOR CODING OF PHASE CONDUCTORS BASED ON VOLTAGE USING BUILDING COLOR SCHEME AS IDENTIFIED IN THE OWNER'S DESIGN GUIDELINES.



1 TYPICAL DISCONNECT, STARTER, & CONTACTOR LABELING DETAIL

NO SCALE

NOTES:

1. LOCATIONS OF NAMEPLATES SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS. REFERENCE OWNER'S DESIGN GUIDELINES FOR ADDITIONAL LABELING REQUIREMENTS.

(1) PROVIDE AN ENGRAVED NAMEPLATE SHOWING LOAD SERVED, EQUIPMENT VOLTAGE, AND CIRCUIT NUMBER MATCHING AS-BUILT CONDITIONS.

(2) PROVIDE AN ENGRAVED NAMEPLATE SHOWING LOADS SERVED, VOLTAGES, AND CIRCUIT NUMBERS MATCHING AS-BUILT CONDITIONS FOR ALL CONTACTOR CIRCUITS. LOADS SERVED SHALL BE "LIGHTING", "FAN", "RECEPTACLES", "PUMP", "WATER HEATER", OR SIMILAR DESCRIPTIVE NOTE.

DISHWASHER
480V, 3PH, 3 WIRE
FROM HK-2/4/6

2 DISCONNECT LABELING

NO SCALE

NOTES:

1. PROVIDE LABEL ON EACH DISCONNECT AND FUSED SWITCH.
   1.1. FOR DISCONNECTS AND FUSED SWITCHES REPLACE "PANEL P1NA" WITH THE LOAD SERVED.
   1.2. REFER TO OWNER'S STANDARDS FOR ADDITIONAL LABEL REQUIREMENTS.
2. PROVIDE LABEL ON ELECTRICAL PANEL AND TRANSFORMER.
   2.1. REPLACE "PANEL P1NA" WITH THE PANEL OR TRANSFORMER NAME BEING LABELED.
3. REPLACE "400A FUSED SWITCH" WITH UPSTREAM SOURCE OR CONNECTION.
   3.1. IF FED FROM A XFMR REPLACE "400A FUSED SWITCH" WITH "XFMR XX" WHERE XX IS THE FIELD VERIFIED XFMR NAME.
4. REPLACE VOLTAGE CONFIGURATION TO MATCH THE EQUIPMENT BEING LABELED.
5. REFERENCE FLOOR PLANS FOR EQUIPMENT LOCATIONS.

⚠ WARNING

Arc Flash and Shock Hazard
Appropriate PPE Required

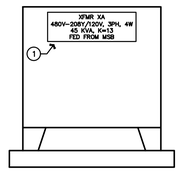
FLASH PROTECTION		SHOCK PROTECTION	
Incident Energy at:	16 in	Shock Risk When Cover is Removed	480 VAC
Min. Arc Rating:	0.45 cal/cm²	Limited Approach	42 in
Arc Flash Boundary:	10 in	Restricted Approach:	12 in
PPE: Per NFPA 70E 2015	1	Equipment Name: **PANEL HA** Prot Dev: 225/3 CB from Panel DA	

3 TYPICAL ARC FLASH LABEL DETAIL

NO SCALE

NOTES:

1. VALUES AND NAMES SHOWN HERE ARE FOR REFERENCE ONLY, MODIFY TO REFLECT PROJECT'S ARC FLASH STUDY VALUES AND EQUIPMENT NAMES.
2. IF MIN. ARC RATING IS OVER 40CAL/CM² MODIFY "WARNING" TEXT TO READ "DANGER" AND PROVIDE RED SHADING IN LIEU OF ORANGE SHOWN.



4 TYPICAL TRANSFORMER LABELING DETAIL

NO SCALE

NOTES:

1. LOCATIONS OF NAMEPLATES SHOWN FOR REFERENCE ONLY, FIELD LOCATE AS NEEDED BASED ON TRUE EQUIPMENT LAYOUT AND DIMENSIONS.

(1) PROVIDE AN ENGRAVED NAMEPLATE SHOWING EQUIPMENT NAME, RATING, VOLTAGE, SOURCE.

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13707 JESS PIRTLE BLVD.
SUGAR LAND, TX 77498

SEAL

STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED
PROFESSIONAL ENGINEER
07.18.2025

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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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ELECTRICAL DETAILS

u-E.012

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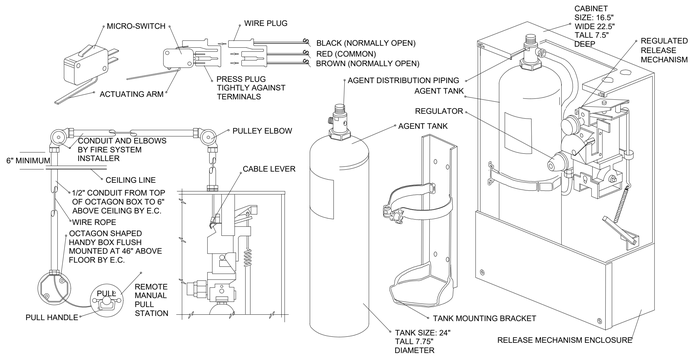
KITCHEN AREA ELECTRICAL NOTES

1. REFER TO KITCHEN CONSULTANTS "FS" DRAWINGS FOR ADDITIONAL REQUIREMENTS PARTICULARLY NOTING MOUNTING HEIGHTS OF EQUIPMENT OUTLETS AND JUNCTION BOXES, AND WHETHER SERVICE IS FROM WALL, FLOOR OR OVERHEAD.
2. SOME RECEPTACLES SHALL BE MOUNTED HORIZONTALLY, REFER TO KITCHEN CONSULTANTS "FS" DRAWINGS.
3. FOR DEVICES WITH SERVICE FROM FLOOR, RUN UNDERGROUND CONDUIT FROM DEVICES TO NEAREST COLUMN OR WALL THEN TURN CONDUIT UP AND RUN CONDUIT IN CEILING CAVITY.
4. LIGHT SWITCHES AND RECEPTACLES NOT SERVING A SPECIFIC PIECE OF EQUIPMENT SHALL BE MOUNTED AT ADA HEIGHTS.
5. CONNECTION TYPE SHOWN ON KITCHEN ELECTRICAL FLOOR PLAN IS FOR BIDDING PURPOSES, COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER FOR FINAL CONNECTIONS:
   - 5.A. OBTAIN WIRING INSTRUCTIONS FOR EACH PIECE OF EQUIPMENT FROM EQUIPMENT SUPPLIER PRIOR TO ORDERING WIRING DEVICES AND ROUGH-IN.
   - 5.B. IF EQUIPMENT REQUIRES CORD AND PLUG CONNECTION, CONTRACTOR SHALL PROVIDE NEMA POWER CORD, PLUG, AND RECEPTACLES PER MANUFACTURER'S INSTRUCTION.
   - 5.C. IF EQUIPMENT REQUIRES JUNCTION BOX AND/OR DISCONNECT SWITCH, CONTRACTOR SHALL PROVIDE JUNCTION BOX AND DISCONNECT SWITCH AND CONNECT EQUIPMENT WITH SEALTITE FLEXIBLE CONDUIT.
6. ALL DISCONNECT SWITCHES IN THE KITCHEN AREA SHALL BE NEMA 4XSS STAINLESS STEEL.
7. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEALING PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO A COOLER SECTION.
8. FLEXIBLE CONDUIT IN KITCHENS, FOOD PRODUCTION SPLASH ZONES AND WASH DOWN AREAS, FOOD PROCESSING, AND SIMILAR AREAS SHALL BE LIQUID TIGHT CONSTRUCTION INCORPORATING A BACTERIAL GROWTH INHIBITING PVC JACKET THAT MAY BE CLEANED WITHOUT DEGREDATION TO THE JACKET BLEACHING ELEMENTS AND APPROVED FITTINGS FOR WET LOCATION.
   - 8.A. AFC SZ TYPE LFMC OR EQUAL BY KAF-TECH.
9. INTERLOCK KITCHEN EXHAUST HOOD FIRE SYSTEM WITH FIRE ALARM SYSTEM.
10. PROVIDE RELAYS AND INTERLOCK KITCHEN HOOD FANS WITH FIRE ALARM SYSTEM. ACTUATION OF ANY ALARM INITIATING DEVICE SHALL DE-ENERGIZE KITCHEN HOOD FANS.
11. ALL GFI RECEPTACLES IN KITCHEN SHALL BE PASS & SEYMOUR MODEL 2097TRWR-XX TO EXCEED UL943 VOLTAGE SURGE REQUIREMENTS.

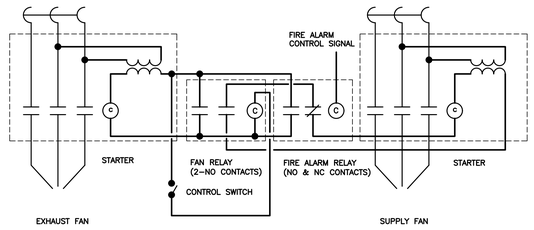


4 FIRE PROTECTION SYSTEM DETAIL

NO SCALE

NOTES:

1. ANSUL MODEL R-120 FIRE PROTECTION SYSTEM AND TANK(S)
2. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL POWER DISCONNECT DEVICES FOR ALL EQUIPMENT BELOW THE HOOD, SHUTTING OFF ALL SERVICE, INCLUDING CONTROL VOLTAGE, UPON ACTIVATION OF THE FIRE PROTECTION SYSTEM.
3. MICRO-SWITCH FURNISHED WITH SYSTEM TO BE INTERWIRED TO THE SHUT-OFF DEVICES FOR THE COOKING EQUIPMENT BY THE ELECTRICAL CONTRACTOR.
4. ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL AN OCTAGON SHAPED HANDY BOX FOR THE PULL STATION AT 54" ABOVE THE FLOOR WITH 1/2" CONDUIT FROM THE TOP OF THE BOX TO 6" ABOVE THE CEILING.
5. GAS SHUT-OFF VALVE FURNISHED WITH THE SYSTEM (IF REQUIRED) TO BE INSTALLED IN THE GAS LINE SERVING THE COOKING EQUIPMENT BY THE PLUMBING CONTRACTOR. VERIFY SIZE OF GAS LINE.
6. ALL EXPOSED PIPEWORK TO BE STAINLESS STEEL OR CHROME WHERE EXPOSED.
7. VERIFY LOCATION OF REMOTE MANUAL PULL STATION.
8. UNIT MUST BE PLACED WITHIN EASY ACCESS OF EXIT DOOR.

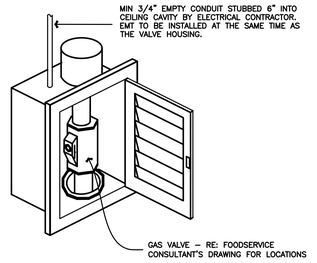


5 KITCHEN HOOD FAN CONTROL SCHEMATIC

NO SCALE

NOTES:

1. THE FANS SHALL BE WIRED SO THAT ONE LOCAL SWITCH TURNS ON ASSOCIATED SUPPLY AND EXHAUST FANS.
2. IF THE FIRE ALARM IS IN ALARM, A FIRE ALARM CONTROL CONTACT SHALL CAUSE THE SUPPLY FAN TO STOP AND THE EXHAUST FAN TO START, EVEN IF THE CONTROL SWITCH IS "OFF".
3. SCHEMATIC IS DIAGRAMMATIC. PROVIDE INTERLOCK WIRING BASED ON EQUIPMENT PROVIDED AND FAN VOLTAGE TO IMPLEMENT THE SEQUENCE SPECIFIED.
4. COORDINATE BETWEEN FIRE ALARM CONTRACTOR, CONTROLS CONTRACTOR AND ELECTRICAL CONTRACTOR TO PROVIDE A COMPLETE INSTALLATION.
5. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

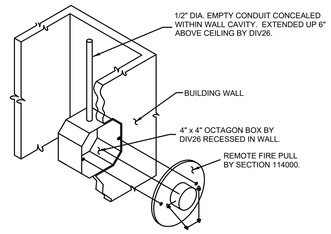


1 GAS VALVE DETAIL

NO SCALE

NOTES:

1. GAS VALVE HOUSINGS ARE NOT SHOWN ON THE ELECTRICAL DRAWING. GC AND ELECTRICAL CONTRACTOR SHALL COORDINATE SIZE AND LOCATION OF GAS VALVE HOUSINGS.
2. SEE FOOD SERVICE CONSULTANT'S DRAWINGS ADDITIONAL INFORMATION AND REQUIREMENTS.
3. PROVIDE MINIMUM 3/4"C AS SHOWN ON THIS DETAIL.

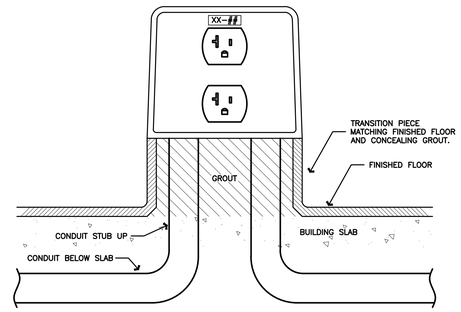


2 RECESSED FIRE PULL DETAILS

NO SCALE

NOTES:

1. VERIFY LOCATION OF REMOTE MANUAL PULL STATION.
   - 1.A. MANUAL PULL STATION MUST BE PLACED WITHIN EASY ACCESS OF EXIT DOOR.
   - 1.B. MANUAL PULL STATION MUST BE PLACED NO LESS THAN 4 FEET AWAY FROM KITCHEN HOOD BUT WITHIN A MAXIMUM OF 20 FEET FROM THE KITCHEN HOOD.



3 TYPICAL PEDESTAL MOUNTED DEVICE

NO SCALE

NOTES:

1. ALL FACEPLATES SHALL BE STAINLESS STEEL.
2. PEDESTAL BOX PROVIDED BY DIVISION 26.
   - 2.A. A STANDARD DUPLEX INSTALLATION IS SHOWN FOR REFERENCE, PROVIDE SIMILAR INSTALLATION FOR QUAD RECEPTACLES, GFI RECEPTACLES, DATA OUTLETS, NEMA POWER OUTLETS, ETC.
   - 2.B. ALL PEDESTAL BOXES TO BE DOUBLE FACED WITH ONE BLANK FACE FOR FUTURE GROWTH. 2-GANG PEDESTALS WITH ONE BLANK FACE FOR QUAD RECEPTACLE LOCATIONS.
   - 2.C. PEDESTAL BOXES TO BE SIZED BY DIVISION 26 TO PROVIDE SCHEDULED DEVICES ON A SINGLE FACE AND SUFFICIENT DEPTH FOR BACK TO BACK DEVICES ON DOUBLE FACED PEDESTALS.
   - 2.D. BASIS OF DESIGN:
     - 2.D.A. 1-GANG ELECTRICAL DEVICES: LEGRAND LBP2 OR WATER SAVER E400SA-WS
     - 2.D.B. 1-GANG LOW VOLTAGE DEVICES: LEGRAND LBP2 OR WATER SAVER E400SA-WS
     - 2.D.C. 2-GANG ELECTRICAL DEVICES: WATER SAVER E600SA-WS
     - 2.D.D. 2-GANG LOW VOLTAGE DEVICES: WATER SAVER E600SA-WS
3. INSTALLATION REQUIREMENTS:
   - 3.A. STUB UP CONDUIT ABOVE FLOOR TO PEDESTAL BOX CONNECTION LOCATION.
   - 3.B. GROUT GAP BETWEEN FINISHED FLOOR AND BOTTOM OF PEDESTAL BOX.
   - 3.C. PROVIDE TRANSITION PIECE TO CONTINUE FINISHED FLOOR TO BOTTOM EDGE OF SERVICE FITTING AND CONCEAL GROUT. TRANSITION PIECE TO MATCH ARCHITECT'S FINISH SCHEDULE.
   - 3.D. PEDESTAL BOX TO BE INSTALLED SQUARE TO THE FINISHED FLOOR.
4. PROVIDE TYPEWRITTEN OR PREMADE CIRCUIT LABELS ON INSTALLED WIRING AT EACH DEVICE AND SPLICE POINT.
5. PROVIDE TYPEWRITTEN LABEL AFFIXED TO THE FRONT OF EACH DEVICE FACEPLATE INDICATING ELECTRICAL CIRCUIT.

CIRCUIT LABEL

XX-##
- A. XX = PANEL DESIGNATION
- B. ## = AS-BUILT CIRCUIT DESIGNATION

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ELECTRICAL
KITCHEN DETAILS

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LIGHTING SYSTEM FUNCTIONAL TESTING AND DOCUMENTATION NOTES:

1. PRIOR TO PASSING FINAL INSPECTION, THE CONTRACTOR SHALL PERFORM FUNCTIONAL TESTING IN THE PRESENCE OF THE REGISTERED DESIGN PROFESSIONAL, THE OWNER AND/OR THEIR AGENT. THE FUNCTIONAL TESTING SHALL BE AS REQUIRED BY SECTION C408.3.1 OF THE 2021 IECC.
   - 1.A. THE FUNCTIONAL TESTING SHALL PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SYSTEMS, INCLUDING BOTH HARDWARE AND SOFTWARE, ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTRUCTIONS.
   - 1.B. THE FUNCTIONAL TESTING SHALL BE IN ACCORDANCE WITH SECTIONS C408.3.1.1 AND C408.3.1.2 OF THE 2021 IECC FOR THE APPLICABLE CONTROL TYPE.
   - 1.C. A WRITTEN REPORT SHALL BE GENERATED DOCUMENTING THE FUNCTIONAL TESTING RESULTS IN ACCORDANCE WITH THE 2015 IECC REQUIREMENTS.
2. ALL LIGHTING CONTROLS O&M MANUALS, AS–BUILTS, TESTING REPORTS AND DOCUMENTATION RELATED TO THE LIGHTING CONTROL SYSTEM SHALL BE PROVIDED IN THEIR FINAL AND APPROVED FORM WITHIN 60 DAYS OF THE CERTIFICATE OF OCCUPANCY. ALL DOCUMENTS CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA OF SECTION C405 OF THE 2021 IECC SHALL BE INCLUDED IN THE O&M MANUALS.
3. ALL DOCUMENTS FROM ITEMS #1 AND #2 ABOVE SHALL BE COMBINED AND PROVIDED TO THE OWNER WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

LIGHT FIXTURE SCHEDULE

EXTERIOR LIGHT FIXTURE SCHEDULE

RECESSED 6" DOWNLIGHT WET LOCATION	D5 D5Y	6" DIAMETER RECESSED LED DOWNLIGHT, SPECULAR CLEAR REFLECTOR, MEDIUM (56°) BEAM DISTRIBUTION, 1000 LUMENS, 4000K COLOR TEMPERATURE, 120–277V MULTIVOLT INPUT, 1% 0–10V DIMMING DRIVER. LIGHTOLIER 6R–N / C6L–10–9–40–M–Z10–U / C6–R–DL–CC	9W
RECESSED 6" DOWNLIGHT WET LOCATION	D6 D6Y	6" DIAMETER RECESSED LED DOWNLIGHT, SPECULAR CLEAR REFLECTOR, MEDIUM (56°) BEAM DISTRIBUTION, 2000 LUMENS, 4000K COLOR TEMPERATURE, 120–277V MULTIVOLT INPUT, 1% 0–10V DIMMING DRIVER. LIGHTOLIER 6R–N / C6L–20–9–40–M–Z10–U / C6–R–DL–CC	22W
SURFACE CANOPY SQUARE LED	WC1 WC1X WC1Y	9" SQUARE SURFACE LED CANOPY LIGHT, 4000K COLOR TEMPERATURE, 3500 LUMENS, 120–277V MULTIVOLT INPUT, DARK BRONZE FINISH. EELP VR7–T–28L–QT–40K (EBLED9W)	28W
EXTERIOR WALL PACK	WP1 WP1X WP1Y	7" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 5000 LUMENS, TYPE 3 DISTRIBUTION, 120–277 MULTIVOLT INPUT, WET LOCATION, 10KV KA SURGE PROTECTION. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM SMALL GWS–A04–740–UNV–XX FINISH (EM)	34W
EXTERIOR WALL PACK	WP2 WP2X WP2Y	12" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 8500 LUMENS, TYPE 3 DISTRIBUTION, 120–277 MULTIVOLT INPUT, WET LOCATION. REFER TO ARCH FOR MOUNTING HEIGHT. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM MEDIUM GWM–A11–740–T3M–UNV–XX FINISH (REMOTE EM BATTERY)	52W
EXTERIOR WALL PACK	WP3 WP3X WP3Y	17" WIDE WALL MOUNTED LED, 4000K COLOR TEMPERATURE, 12500 LUMENS, TYPE 3 DISTRIBUTION, 120–277 MULTIVOLT INPUT, WET LOCATION. REFER TO ARCH FOR MOUNTING HEIGHT. REFER TO ARCH FOR MOUNTING HEIGHT. FINISH TO BE SELECTED BY ARCHITECT FROM ALL AVAILABLE FINISHES. GARDCO GEOFORM MEDIUM GWM–A14–740–T3M–UNV–XX FINISH (REMOTE EM BATTERY)	77W

1. LIGHT FIXTURE CATALOG NUMBERS AND DESCRIPTIONS ARE SCHEDULED FOR ESTABLISHING QUALITY, APPEARANCE AND PERFORMANCE OF THE FIXTURES. EXACT CATALOG NUMBERS DESCRIBING MOUNTING CONDITIONS AND REQUIREMENT RELATED TO TRIM FOR ALL FIXTURES SHALL BE CONFIRMED (BY THE ELECTRICAL CONTRACTOR) WITH THE ROOM FINISH SCHEDULE AND REFLECTED CEILING PLANS ON THE ARCHITECTURAL PLANS PRIOR TO BIDDING AND SUBMITTING LIGHT FIXTURES. PROVIDE DRY WALL KIT AS REQUIRED.
2. ALL 'X', 'Y', AND 'Z' TYPE FIXTURES SHALL HAVE EMERGENCY POWER BACKUP. EMERGENCY POWER SOURCES SHALL MONITOR POWER UPSTREAM OF THE LIGHTING CONTROLS TO SEE IF POWER IS LOST. BATTERY PACKS AND INVERTERS SHALL BE CAPABLE OF POWERING THE DESIGNATED FIXTURE(S) WITH AN OUTPUT OF 1400 LUMENS FOR A MINIMUM OF 90–MINUTES, PROVIDE REMOTE BATTERY PACKS OR INVERTERS AS NECESSARY. EMERGENCY LIGHTS SHALL OPERATE ONLY UPON LOSS OF POWER. ALSO, PROVIDE AND WIRE TEST SWITCH AND LED INDICATOR LIGHT FOR EMERGENCY BATTERY. SEE WIRING INSTRUCTION SUPPLIED BY EMERGENCY BATTERY MANUFACTURER.
   - 2.A. 'X' TYPE FIXTURES (AX, ETC.) HAVE EMERGENCY GENERATOR POWER LIGHTING TRANSFER DEVICES.
   - 2.B. 'Y' TYPE FIXTURES (MY, ETC.) HAVE INDIVIDUAL 90–MINUTE EMERGENCY BATTERY POWER.
   - 2.C. 'Z' TYPE FIXTURES (QTZ, ETC.) HAVE 90–MINUTE INVERTER EMERGENCY BATTERY POWER.
3. PROVIDE BASE COVER FOR ALL LIGHT POLES.
4. ALL EXTERIOR FIXTURES SHALL BE WET RATED WITH COLD WEATHER BALLASTS AND BATTERY PACKS.
5. PROVIDE SPARE FIXTURES AND EMERGENCY DEVICES PER SPECIFICATIONS.
6. WHERE FIXTURE FINISHES ARE INDICATED TO BE SELECTED BY ARCHITECT THE CONTRACTOR SHALL INCLUDE IN THEIR BID ALL AVAILABLE FINISHES. SUBMIT COMPLETE FIXTURE FINISH OPTIONS AS PART OF THE LIGHTING SUBMITTAL PACKAGE.
7. EQUAL BY PHILIPS (CW LIGHTING), COOPER (PUTTERMAN SCHARCK), AND LITHONIA (LESCO) SHALL BE ACCEPTABLE.

INTERIOR LIGHT FIXTURE SCHEDULE

APPLICATION	TYPE	DESCRIPTION	WATTS
1X4 RECESSED LAY–IN CEILING SELECTABLE CCT & LUMENS	A1 A1X A1Y	2X4 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY–IN CEILING, 6000 LUMENS, 4000K COLOR TEMPERATURE, 120–347V MULTIVOLT INPUT, 5% 0–10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (47W). DAYBRITE 2SBP3550L8CS–4–UN3–DIM	47W
1X4 RECESSED LAY–IN CEILING SELECTABLE CCT & LUMENS	B1 B1X B1Y	1X4 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY–IN CEILING, 4500 LUMENS, 4000K COLOR TEMPERATURE, 120–347V MULTIVOLT INPUT, 5% 0–10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE 1SBP3040L8CS–4–UN3–DIM	36W
2X2 RECESSED LAY–IN CEILING SELECTABLE CCT & LUMENS	B2 B2X B2Y	2X2 RECESSED LED, SMOOTH FROSTED ACRYLIC LENS, EXTRUDED ALUMINUM FRAME, WHITE FINISH, LAY–IN CEILING, 4250 LUMENS, 4000K COLOR TEMPERATURE, 120–347V MULTIVOLT INPUT, 5% 0–10V DIMMING. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE 2SBP3040L8CS–2–UN3–DIM	39W
4FT STRIP LED MECHANICAL & STORAGE ROOMS	C CX CY	4 FOOT STRIP LED, STEEL HOUSING, FROSTED ACRYLIC LENS, 4000 LUMENS, 3500K COLOR TEMPERATURE, CHAIN HANGING SET, WIRE GUARD, 120–277V MULTIVOLT INPUT, 0–10V DIMMING DRIVER. PROVIDE CHAIN HANGING SET AND WIREGUARD IN MECHANICAL ROOMS AND AREAS WITHOUT CEILINGS. SET FIELD SELECTABLE SWITCHES TO NEUTRAL WHITE (4000K) AND HIGH (36W). DAYBRITE SDS–4–2448L–8CST–UNV–DIM	30W
RECESSED 6" DOWNLIGHT	D1 D1X D1Y	6" DIAMETER RECESSED LED DOWNLIGHT, MATTE WHITE FINISH, WIDE (76°) BEAM DISTRIBUTION, 1000 LUMENS, 4000K COLOR TEMPERATURE, 120–277V MULTIVOLT INPUT, 1% 0–10V DIMMING DRIVER. LIGHTOLIER 6R–N / C6L–10–9–40–W–Z10–U / C6–R–DL–WH	9W
RECESSED 6" DOWNLIGHT	D2 D2X D2Y	6" DIAMETER RECESSED LED DOWNLIGHT, MATTE WHITE FINISH, WIDE (76°) BEAM DISTRIBUTION, 2000 LUMENS, 4000K COLOR TEMPERATURE, 120–277V MULTIVOLT INPUT, 1% 0–10V DIMMING DRIVER. LIGHTOLIER 6R–N / C6L–20–9–40–W–Z10–U / C6–R–DL–WH	22W
EXIT SIGN	XB XS XD	DIE CAST ALUMINUM LED EXIT LIGHT, RED LETTERS, MATTE BLACK HOUSING W/ BRUSHED ALUMINUM FACE, UNIVERSAL ARROWS, 120/277 VOLT DUAL INPUT, 90 MINUTE EMERGENCY BATTERY. VERIFY LETTER AND FACE COLOR WITH OWNER/ARCHITECT PRIOR TO ORDERING. XS=SINGLE FACE, XD=DOUBLE FACE, XB=BACK MOUNTED PHILIPS CHLORIDE ER55L–3–R SURELITES CX7–1/2–R LITHONIA LQC–1/2–R–EL N	5W
EXIT SIGN INTEGRAL BATTERY INTEGRAL EM LIGHT BAR	YB YS YD	THERMOPLASTIC LED EXIT LIGHT WITH INTEGRAL EM LIGHT, RED LETTERS, WHITE HOUSING W/ WHITE FACE, UNIVERSAL ARROWS, 120–277 MULTIVOLT INPUT, 90 MINUTE EMERGENCY BATTERY. VERIFY LETTER AND FACE WITH OWNER/ARCHETICT PRIOR TO ORDERING. YS=SINGLE FACE, YD=DOUBLE FACE, YB=BACK MOUNTED SIGNTEX CLP–BB–U–R–W–DG	5W
TWIN HEAD EM LIGHT INTEGRAL BATTERY WET LOCATION	YT1	TWIN HEAD EM LIGHT, INJECTION–MOLDED THERMOPLASTIC WHITE HOUSING, GASKETED CLEAR POLYCARBONATE COVER, LED LAMPS, 90–MINUTE EMERGENCY BATTERY. CHLORIDE TPU–W–N–LM7–W	7W

LIGHTING CONTROL SEQUENCE OF OPERATIONS

	AUTO ON	MANUAL ON (VACANCY)	AUTO OFF (20 MIN MAX)	PARTIAL OFF AT NORMAL HOURS	AUTO ON AFTER HOURS	AUTO OFF AFTER HOURS (20 MIN MAX)	TIME ON	TIME OFF	ASTRONOMIC OR PHOTOCELL ON/OFF	AUTO STEP CONTROL WITH OFF	AUTO CONTINUOUS DIM WITH OFF	MANUAL BI–LEVEL REDUCTION CONTROL	MANUAL CONTINUOUS DIM CONTROL	MANUAL ON/OFF SWITCH	MANUAL DIMMER SWITCH	DISPLAY, ACCENT, TASK CONTROL		
ROOM TYPE	**OCCUPANCY SENSOR**						**TIME SWITCH/SCHEDULING**			**DAYLIGHT CONTROL**		**LIGHT REDUCTION**		**MANUAL CONTROL**			**PLUG LOAD CONTROL**	**SEQUENCE OF OPERATION**
Kitchen/Serving							•	•				•		•				LOCAL ON/OFF CONTROLS, LOCAL CONTROLS MAY OVERRIDE BUILDING SCHEDULE AND TURN ALL LIGHTS ON FOR MAXIMUM 2HRS. NETWORK LIGHTING CONTROLS ROOM CONTROLLER CONNECTED TO BUILDING CONTROLS; ON/OFF BASED ON BUILDING SCHEDULE, AFTER HOURS ON/OFF BASED ON OCCUPANCY, COORDINATE SCHEDULING WITH OWNER. WHERE ≥150W IN DAYLIGHT AREA, USE CONTINUOUS DIMMING DAYLIGHTING CONTROL.
Restrooms	100%		20 MIN											•				AUTO ON 100%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Custodial rooms		•	20 MIN											•	•			MANUAL ON, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Storage rooms	50%		20 MIN											•	•			AUTO ON 50%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF/DIMMING CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Private Offices	50%		20 MIN											•	•		•	AUTO ON 50%, AUTO OFF BY LOCAL OCCUPANCY SENSOR. LOCAL ON/OFF/DIMMING CONTROLS ONLY, NO FULLY NETWORKED SYSTEM.
Corridors					100%	20 MIN	•	•						•				LOCAL ON/OFF CONTROLS, LOCAL CONTROLS MAY OVERRIDE BUILDING SCHEDULE AND TURN ALL LIGHTS ON FOR MAXIMUM 2HRS. NETWORK LIGHTING CONTROLS ROOM CONTROLLER CONNECTED TO BUILDING CONTROLS; ON/OFF BASED ON BUILDING SCHEDULE, AFTER HOURS ON/OFF BASED ON OCCUPANCY, COORDINATE SCHEDULING WITH OWNER. WHERE ≥150W IN DAYLIGHT AREA, USE CONTINUOUS DIMMING DAYLIGHTING CONTROL.
Electrical Rooms														•				MANUAL ON/OFF; LOCAL CONTROL DEVICE NOT TIED TO LVLCS.
Building Facade/Landscape							•	•										CONNECTED TO BUILDING CONTROLS THROUGH LIGHTING CONTACTOR; ON/OFF BASED ON BUILDING SCHEDULE.

1. DIMMER SWITCHES SHALL ACTIVATE PRESET ALL ON LIGHTING LEVEL WHEN PRESSED IN THE UP POSITION. LIGHTING LEVELS MAY BE RAISED/LOWERED BY HOLDING THE DIMMER PADDLE. WHEN PRESSED IN THE DOWN POSITION ALL LIGHTS SHALL SMOOTHLY DIM TO OFF.
2. AT LEAST 50 PERCENT OF ALL 125V, 15– AND 20–AMP RECEPTACLES INSTALLED IN ENCLOSED OFFICES, CONFERENCE ROOMS, ROOMS USED PRIMARILY FOR COPY OR PRINT FUNCTIONS, BREAKROOMS, CLASSROOMS AND INDIVIDUAL WORKSTATIONS, INCLUDING THOSE INSTALLED IN MODULAR PARTITIONS AND MODULE OFFICE WORKSTATION SYSTEMS SHALL HAVE PLUG LOAD CONTROL PER IECC 2021 C405.11.

LIGHTING CONTACTOR SCHEDULE

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	CONTACTOR LOCATION	CONTACTOR TYPE
CONTACTOR CT1						
CT1–1	KITCHEN/SERVING AREA – ZONE 'a'	HK–3	–	Kitchen–a	CENTRAL PLANT	MAGNETICALLY HELD
CT1–2	SPARE			Kitchen–a	CENTRAL PLANT	MAGNETICALLY HELD
CT1–3	SPARE			Kitchen–a	CENTRAL PLANT	MAGNETICALLY HELD
CONTACTOR CT2						
CT2–1	KITCHEN/SERVING AREA – ZONE 'b'	HK–3	–	Kitchen–b	CENTRAL PLANT	MAGNETICALLY HELD
CT2–2	SPARE			Kitchen–b	CENTRAL PLANT	MAGNETICALLY HELD
CT2–3	SPARE			Kitchen–b	CENTRAL PLANT	MAGNETICALLY HELD
CONTACTOR CT3						
CT3–1	KITCHEN SOFFIT/CANOPY LTS	HK–5	–	Exterior	CENTRAL PLANT	MAGNETICALLY HELD
CT3–2				Exterior	CENTRAL PLANT	MAGNETICALLY HELD
CT3–3				Exterior	CENTRAL PLANT	MAGNETICALLY HELD

1. REFERENCE TYPICAL LIGHTING CONTACTOR WIRING DIAGRAM.
2. EMERGENCY AND NORMAL ZONES WITHIN THE KITCHEN/SERVING SHALL HAVE SEPARATE CONTROLS TO ALLOW FOR LIGHTING REDUCTION CONTROL.
3. LIGHTING CONTACTORS SHALL BE DIN RAIL MOUNTED, MAGNETICALLY HELD TYPE WITH THREE WIRE CONTROL BY THE BAS.
   - 3.A. PROVIDE CABINET AT EACH LOCATION TO MOUNT ALL CONTACTORS IN A SINGLE ENCLOSURE. ENCLOSURE SIZED BY DIVISION 26.
   - 3.B. PROVIDE SEPARATE HOA SWITCHES IN THE FRONT COVER OF THE ENCLOSURE WIRED TO CONTROL THE FOLLOWING ZONES SEPARATELY.
     - 3.B.1. INTERIOR LIGHTING (ALL INTERIOR LIGHTING GROUPS)
     - 3.B.2. EXTERIOR LIGHTING (ALL EXTERIOR LIGHTING GROUPS)
     - 3.B.3. HOA SWITCH SHALL PASS THE BAS SIGNALS IN AUTO MODE, DISENGAGE ALL CONTACTORS IN THE OFF POSITION, AND ENGAGE ALL THE CONTACTORS IN THE ON POSITION.
   - 3.C. SPARE CAPACITY:
     - 3.C.1. PROVIDE MINIMUM TWO (2) SPARE POLE ON EACH COMBINED TYPE CONTACTOR FOR FUTURE USE.

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SUGAR MILL ELEMENTARY SCHOOL
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PROJ. NO.: 23-25
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LIGHTING SCHEDULES

u-E.060

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

LIGHTING RENOVATION NOTES:

A. KITCHEN LIGHTS TO BE CONTROLLED BY LOCAL MOMENTARY SWITCHES AND BAS. LIGHTING CONTACTOR LOCATIONS SHOWN SCHEMATICALLY ONLY. LOCATE LIGHTING CONTACTOR ENCLOSURE IN THE ADJACENT CENTRAL PLANT SPACE, FIELD VERIFY. REFERENCE LIGHTING CONTROL DETAIL. TYPICAL.

LEFT SWITCH SHALL CONTROL ZONE 'a' NORMAL POWER LIGHTING FIXTURES.

RIGHT SWITCH SHALL CONTROL ZONE 'b' EMERGENCY LIGHTING FIXTURES.

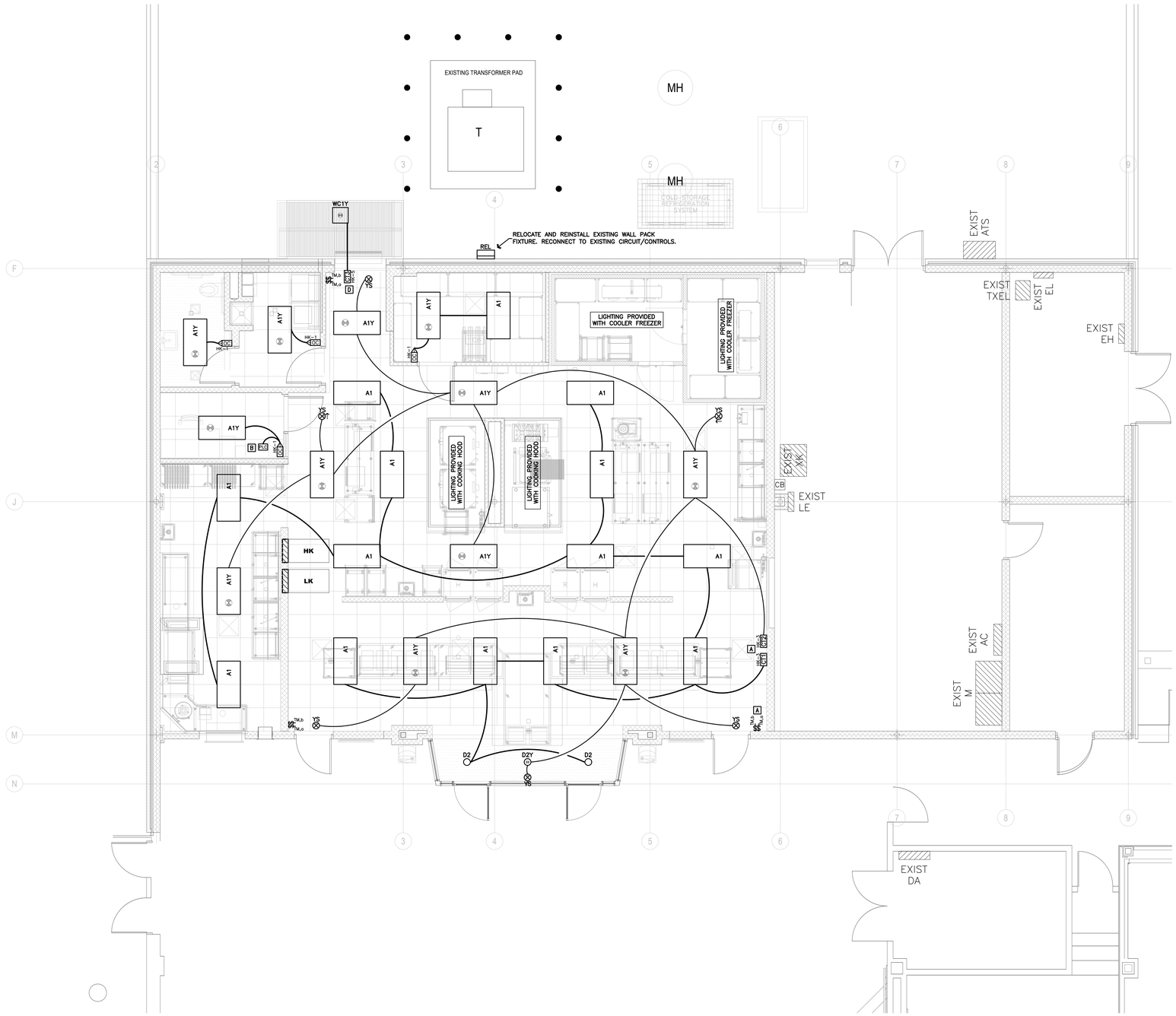
B. PROVIDE PLUG LOAD CONTROLS TIED TO THE LIGHTING IN OFFICE SPACES.

C. WIRE EXIT SIGNS UPSTREAM OF LIGHTING CONTROLS. TYPICAL.

D. EXTERIOR LIGHTS TO BE CONTROLLED BY BAS. LIGHTING CONTACTOR LOCATIONS SHOWN SCHEMATICALLY ONLY. LOCATE LIGHTING CONTACTOR ENCLOSURE IN THE ADJACENT CENTRAL PLANT SPACE, FIELD VERIFY. REFERENCE LIGHTING CONTROL DETAIL. TYPICAL.

E. AFTER REMOVAL OF THE TEMPORARY KITCHEN. PROVIDE NEW EXIT SIGN AT ORIGINAL LOCATION AND RECONNECT TO EXISTING CAFETERIAL LIGHTING CIRCUIT.

F. PATCH/REPAIR EXTERIOR SOFFIT TO ACCOMMODATE NEW SURFACE MOUNTED FIXTURES.



1 **LIGHTING RENOVATION PLAN**

SCALE: 1/4" = 1'- 0"

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LIGHTING FLOOR PLANS

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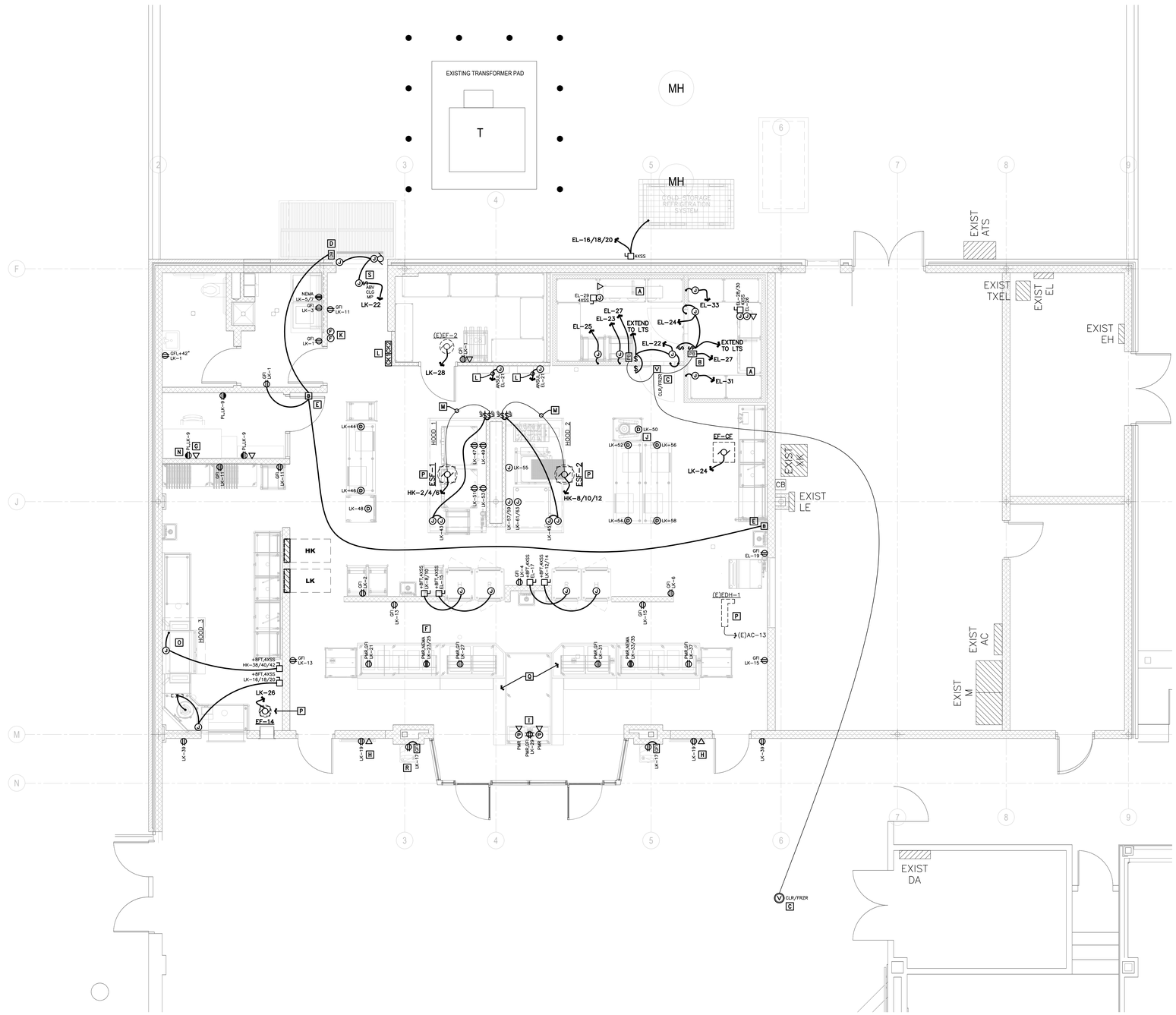

1 ELECTRICAL RENOVATION PLAN

SCALE: 1/4" = 1'- 0"

ELECTRICAL KEYED NOTES

GENERAL NOTES:

- CUT WALLS AS REQUIRED TO FLUSH MOUNT NEW DEVICES IN EXISTING WALLS. PATCH/REPAIR WALLS TO MATCH.

ELECTRICAL RENOVATION NOTES:

A. CONNECT NEW FREEZER/COOLER AND CONDENSER TO EXISTING STANDBY GENERATOR.

B. PROVIDE ILLUMINATED PUSH BUTTON IN COOLER AND FREEZER. WHEN PRESSED RED STROBE DEVICES IN KITCHEN AND CAFETERIA SHALL ACTIVATE. TYPICAL.

C. PROVIDE HORN/STROBE DEVICE TIED TO PUSH BUTTONS IN FREEZER/COOLER.
(EDWARDS 860 SERIES OR EQUAL).

D. PROVIDE NEW DOORBELL BUTTON AT RECEIVING DOOR. DOORBELL BUTTON SHALL BE THE CLOSEST DEVICE TO THE DOOR FRAME.

E. PROVIDE NEW VIBRATING BUZZER TIED TO DOORBELL BUTTON AT RECEIVING DOOR. BUZZER TO BE WALL MOUNTED JUST BELOW THE CEILING.

F. PROVIDE NEW ELECTRICAL DEVICES MATCHING NEW KITCHEN EQUIPMENT AND ROOM LAYOUTS. REFERENCE FOOD SERVICE DRAWINGS. TYPICAL.

G. PROVIDE ROUGH-IN FOR LOW VOLTAGE DEVICES. REFERENCE TECHNOLOGY DRAWINGS, TYPICAL.

H. POWER AND DATA ROUGH-IN FOR KITCHEN MENU BOARD.

I. POWER AND DATA ROUGH-IN FOR POINT OF SALE (POS) LOCATION.

J. PROVIDE DROP CORD RECEPTACLE WITH HUBBELL KELLEMS LIQUIDTIGHT GRIPS FOR STRAIN RELIEF, TYPICAL OF ALL.

K. PROVIDE J-BOXES AND CONDUIT FOR REMOTE FIRE PULLS, SEE FOOD SERVICE DETAIL DRAWING FOR REQUIREMENTS, TYPICAL

L. WIRE ANSUL SYSTEM TO HOOD EQUIPMENT CONTROL CONTRACTOR. UPON ANSUL SYSTEM ACTIVATION ALL POWER TO EQUIPMENT BENEATH THE HOODS SHALL BE DEACTIVATED. MOUNT CONTACTOR CABINET(S) JUST BELOW THE CEILING.

M. PROVIDE SEPARATE SWITCHES TO TURN ON HOOD LIGHTS AND FANS. WIRE HOOD TEMP SENSOR AHEAD OF HOOD LIGHT SWITCH. USE 120V CIRCUIT TO CONTROL HOOD FANS THROUGH EXISTING STARTER. PROVIDE CONTROLS TRANSFORMER AS REQUIRED TO MATCH STARTER CONTROL INPUT VOLTAGE. TYPICAL.

N. PROVIDE PLUG LOAD CONTROLS TIED TO THE LIGHTING IN OFFICE SPACES.

O. INTERCONNECT DISH MACHINE TO VENT CONTROL. INTERCONNECT TABLE LIMIT SWITCH TO DISHMACHINE.

P. EXISTING MECHANICAL EQUIPMENT TO BE REPLACED. CONNECT TO CIRCUIT AS SHOWN. RECONNECT TO EXISTING STARTER/CONTACTORS, FIELD VERIFY.

Q. SAWCUT FLOOR TO INSTALL NEW PEDESTAL MOUNTED DEVICE BENEATH NEW SERVING LINES, DO NOT REUSE EXISTING STUB UPS OR DEVICES. POUR BACK SLAB AND PROVIDE NEW FINISHES, REFERENCE ARCHITECTURAL.

R. REFERENCE EDF GFI PROTECTION DETAIL FOR INSTALLATION REQUIREMENTS, TYPICAL.

S. WIRE MICRO SWITCH IN DOOR FRAME TO AIR SCREEN. COOR W/ FOOD SERVICE CONTRACTOR PRIOR TO ROUGH-IN. LOCATE LOCAL MOTOR RATED SWITCH ABOVE CEILING ADJACENT TO THE AIR SCREEN.

COOLER/FREEZER NOTES:

1. PROVIDE SEALING FOR CONDUIT IN COOLER AND FREEZER. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, CIRCULATION OF AIR FROM WARMER TO A COLDER SECTION SHALL BE PREVENTED PER N.E.C. ARTICLE 300.7 (A).
2. PROVIDE GROUND-FAULT PROTECTION OF EQUIPMENT FOR ELECTRIC HEAT TRACING AND HEATING PANELS IN THE FREEZER PER N.E.C. ARTICLE 427.22.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE LIQUID TIGHT CONDUIT AND WIRING FOR LIGHT FIXTURES AND LIGHT SWITCHES IN WALK-IN COOLER AND FREEZER, SEE FOODSERVICE CONSULTANT'S DRAWINGS.

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ELECTRICAL FLOOR PLANS

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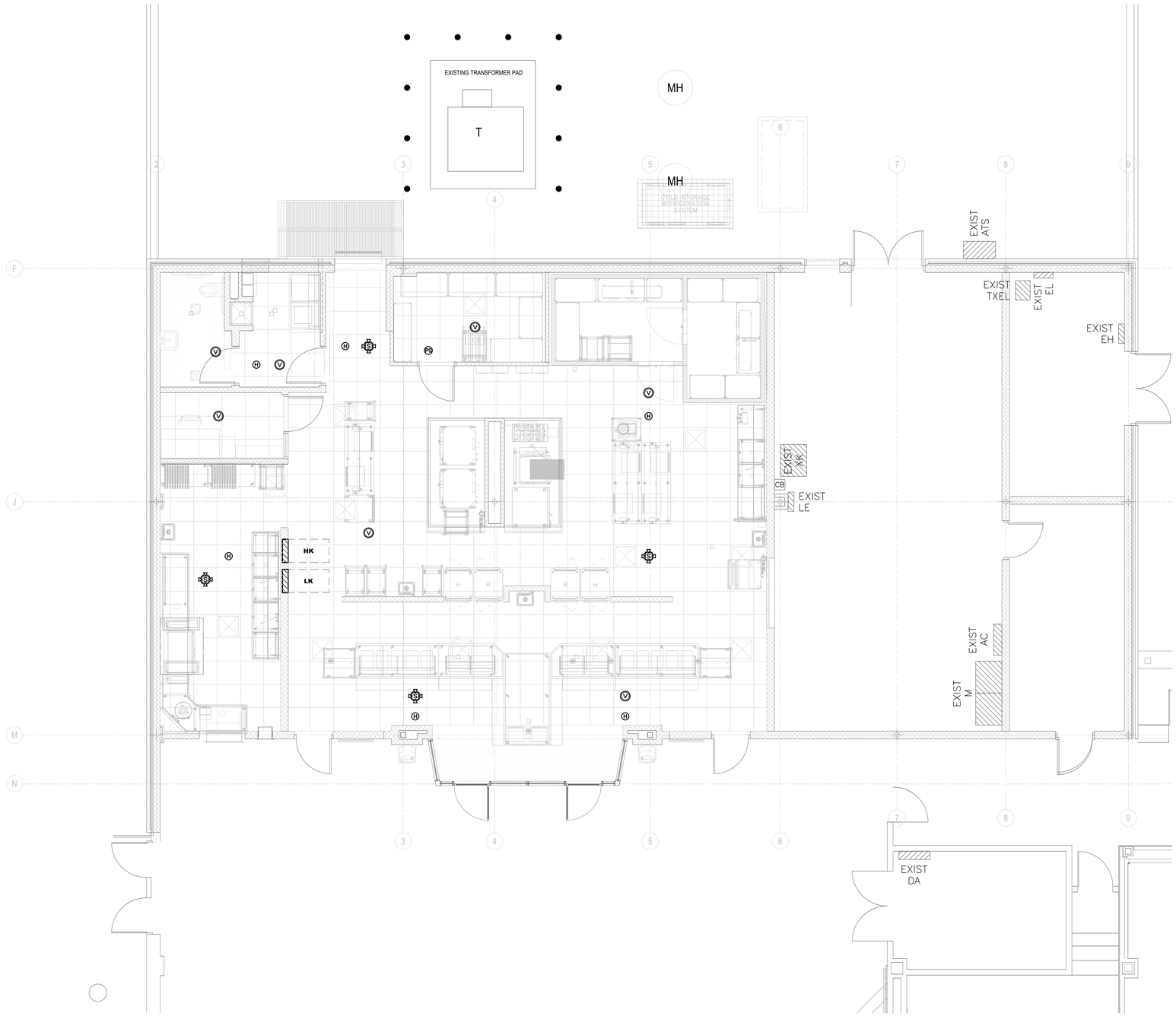

1 **FIRE ALARM RENOVATION PLAN**
SCALE: 1/4" = 1'- 0"

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FIRE ALARM FLOOR PLANS

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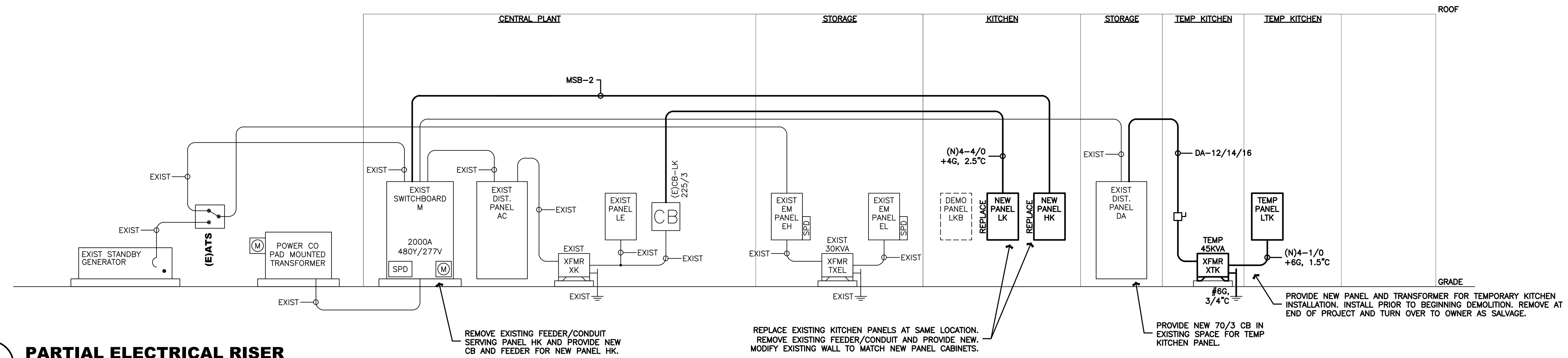

1 PARTIAL ELECTRICAL RISER

NO SCALE

NOTES:

1. FIELD VERIFY ALL EXISTING ELECTRICAL PANELS AND FEEDERS SHOWN ON DRAWINGS.
2. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
3. ALL OUTAGES SHALL BE SCHEDULED/CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
4. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.
5. REFERENCE PANEL SCHEDULES AND SHORT CIRCUIT TABLE FOR AIC AND SCCR VALUES.

NEW KITCHEN PANEL — KITCHEN

PANEL HK

225A MLO 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 20,250A — SCCR & AIC: 25,000A — MOUNTING: RECESSED STAINLESS STEEL COVER

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
6		376	KITCHEN ROOM LIGHTS	3–12	20/1	1				2	15/3	3–12	ESF–1	4986		
7		1095	KITCHEN LIGHTS	3–12	20/1	3				4	–	+12G	(1.5HP / 1.5HP)	–		
		84	KITCHEN SOFFIT LIGHTS	3–12	20/1	5				6	–	3/4"C	–	–		
			SPARE		20/1	7				8	15/3	3–12	ESF–2	4986		
			SPARE		20/1	9				10	–	+12G	(1.5HP / 1.5HP)	–		
			SPARE		20/1	11				12	–	3/4"C	–	–		
			SPARE		20/1	13				14			SPACE			
			SPARE		20/1	15				16			SPACE			
			SPARE		20/1	17				18			SPACE			
			SPARE		20/1	19				20			SPACE			
			SPARE		20/1	21				22			SPACE			
			SPACE			23				24			SPACE			
			SPACE			25				26			SPACE			
			SPACE			27				28			SPACE			
			SPACE			29				30			SPACE			
			SPACE			31				32			SPACE			
			SPACE			33				34			SPACE			
			SPACE			35				36			SPACE			
			SPACE			37				38	70/3	3–6	DISHMACHINE	42963	E250	
			SPACE			39				40	–	+8G	–	–		
			SPACE			41				42	–	3/4"C	–	–		
		TOTAL LOAD @ 100% =	54490VA		TOTAL LOAD @ 100% =						66A		TOTAL LOAD @ 125% =	82A		

NEW KITCHEN PANEL — KITCHEN

PANEL LK

225A MLO 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: RECESSED STAINLESS STEEL COVER

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
	E10	640	3 REC – RR/STOR/CUST & BELL	3–12	20/1	1				2	20/1	3–12	1 REC – KITCHEN	180	E10	
	E110	1920	WASHING MACHINE	3–12	20/1	3				4	20/1	3–12	1 REC – KITCHEN	180	E10	
	E110A	5000	DRYER	2–10	30/2GFI	5				6	20/1	3–12	1 REC – KITCHEN	180	E10	
	E151	–	–	+10N+10G	3/4"C	7				8	20/2	2–10	HEATED CABINET	3224	E187	
		540	3 REC – OFFICE	3–12	20/1	9				10	3/4"C	+10G	–	–		
	E10	540	3 REC – KITCHEN	3–12	20/1	11				12	20/2	2–10	HEATED CABINET	3224	E187	
	E10	360	2 REC – SERVING LINE	3–12	20/1	13				14	3/4"C	+10G	–	–		
	E10	360	2 REC – SERVING LINE	3–12	20/1	15				16	20/3	3–12	DISPOSER	3960	E123	
		1000	2 EDF – CAFETERIA	3–12	20/1	17				18	–	+12G	(3 HP)	–		
	E615	500	2 MENU BOARDS	3–12	20/1	19				20	–	3/4"C	–	–		
	E209	960	MILK COOLER	3–12	20/1	21				22	20/1	3–12	AIR SCREEN	612	E101	
	E201A	5824	HOT FOOD COUNTER	2–8	35/2	23				24	15/1	3–12	EF–CF (1/6HP)	528		
		–	–	+10G	3/4"C	25				26	15/1	3–12	EF–14 (1/6HP)	528		
	E201B	1920	COLD FOOD COUNTER	3–12	20/1	27				28	20/1	3–12	EF–2 (1/6HP)	528		
	E214	360	CASH REGISTERS	3–12	20/1	29				30	20/1		SPARE			
	E201B	1920	COLD FOOD COUNTER	3–12	20/1	31				32	20/1		SPARE			
	E201A	5824	HOT FOOD COUNTER	2–8	35/2	33				34	20/1		SPARE			
		–	–	+10G	3/4"C	35				36	20/1		SPARE			
	E209	960	MILK COOLER	3–12	20/1	37				38	20/1		SPARE			
		360	2 REC – CAFETERIA	3–12	20/1	39				40	20/1		SPARE			
			SPARE		20/1	41				42	20/1		SPARE			
	E153/E153M	250	HOOD LTS & SENSOR	3–12	20/1	43				44	20/1GFI	3–12	DROP CORD	180	E129	
	E153/E153M	250	HOOD LTS & SENSOR	3–12	20/1	45				46	20/1GFI	3–12	DROP CORD	180	E129	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	47				48	20/1GFI	3–12	MOBILE PROOFER	1800	E139A	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	49				50	20/1GFI	3–12	20QT MIXER	960	E125	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	51				52	20/1GFI	3–12	DROP CORD	180	E129	
8	E161	720	CONVECTION OVEN	3–12	20/1GFI	53				54	20/1GFI	3–12	DROP CORD	180	E129	
8	E163	600	TILT BRAISING PAN	3–12	20/1	55				56	20/1GFI	3–12	DROP CORD	180	E129	
8	E172	3120	COMBI OVEN	2–12	20/2	57				58	20/1GFI	3–12	DROP CORD	180	E129	
		–	–	+12G	3/4"C	59				60	20/1	3–12	EXISTING CIRCUIT	500		5
8	E172	3120	COMBI OVEN	2–12	20/2	61				62	20/2	2–12	EXISTING CIRCUIT	1000		5
		–	–	+12G	3/4"C	63				64	–	+12N+12G	–	–		5
		250	EXISTING CIRCUIT	3–12	20/1	65				66	20/2	2–12	EXISTING CIRCUIT	1000		5
9		0	TEMP LOAD CENTER	4–3	100/3	67				68	–	+12N+12G	–	–		5
		–	–	+8G	–	69				70	30/2	2–10	EXISTING CIRCUIT	3000		5
		–	–	1.25"C	–	71				72	–	+10N+10G	–	–		
		TOTAL LOAD @ 100% =	61942VA		TOTAL LOAD @ 100% =						172A		TOTAL LOAD @ 65% =	112A		

KITCHEN HOOD CONTACTOR SCHEDULE

POLE	DESCRIPTION	NORMAL CKT	EM CKT	CONTROL ZONE	EQUIPMENT LOCATION	CONTACTOR TYPE
HOOD 1						
CK1–1	CONVECTION OVEN	LK–47	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–2	CONVECTION OVEN	LK–49	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–3	CONVECTION OVEN	LK–51	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–4	CONVECTION OVEN	LK–53	–	HOOD 1	KITCHEN	ELECTRICALLY HELD – NO
CK1–5	SPARE					ELECTRICALLY HELD – NO
CK1–6	SPARE					ELECTRICALLY HELD – NO
CK1–7	SPARE					ELECTRICALLY HELD – NO
CK1–8	SPARE					ELECTRICALLY HELD – NO
HOOD 2						
CK2–1	TILT BRAISING PAN	LK–55	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–2	COMBI–OVEN	LK–57/59	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–3	(2–POLE)	–	–	–	–	ELECTRICALLY HELD – NO
CK2–4	COMBI–OVEN	LK–61/63	–	HOOD 2	KITCHEN	ELECTRICALLY HELD – NO
CK2–5	(2–POLE)	–	–	–	–	ELECTRICALLY HELD – NO
CK2–6	SPARE					ELECTRICALLY HELD – NO
CK2–7	SPARE					ELECTRICALLY HELD – NO
CK2–8	SPARE					ELECTRICALLY HELD – NO

1. REFERENCE FLOOR PLANS FOR EQUIPMENT LOCATIONS AND ADDITIONAL INFORMATION.
2. EACH KITCHEN HOOD CONTACTOR HALL BE CONTROLLED ON/OFF BY THE APPROPRIATE HOOD ANSUL SYSTEM. WHEN ACTIVATED ALL POWER WITHIN THE COOKING HOOD SHALL BE DE–ENERGIZED.

EXIST GE SWITCHBOARD — CENTRAL PLANT

(E)SWBD MM

2000A MCB 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 37,000A — SCCR & AIC: 100,000A — FREE STANDING

NOTES	CIRCUIT	DESCRIPTION	CB	FEEDER SIZE	AMPS
	1	EXIST PANEL H	225/3	EXIST FEEDER	
	2	EXIST ATS	70/3	EXIST FEEDER	29A
	3	EXIST DISTRIBUTION PANEL DB	400/3	EXIST FEEDER	
	4	EXIST DISTRIBUTION PANEL DA	400/3	EXIST FEEDER	274A
	5	EXIST DISTRIBUTION PANEL AC	800/3	EXIST FEEDER	
	6	EXIST DISTRIBUTION PANEL DC	400/3	EXIST FEEDER	
2,3	7	NEW PANEL HK	225/3	4–4/0 +4G, 2.5"C	66A
	8	XFMR TLCAB	125/3	EXIST FEEDER	
	9	SPD	60/3	EXIST FEEDER	
				TOTAL LOAD @ 100% =	302A
				TOTAL LOAD @ 125% =	378A

1. THE EXISTING 2000A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

EXIST WESTINGHOUSE PANELBOARD

(E)PANEL DA

400A MLO 480Y/277V, 3ø, 4 WIRE — AVAILABLE FAULT: 27,000A — SCCR & AIC: 35,000A — MOUNTING: SURFACE

NOTES	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	NOTES
	9150	AHU #2	EXIST	20/3	1				2	60/3	EXIST	DUCT HEATER 2	39000	
	–	–	–	–	3				4	–	–	(STAGE)	–	
	–	–	–	–	5				6	–	–	–	–	
2		KITCHEN LTS	EXIST	20/1	7				8	20/1	EXIST	EXIST CIRCUIT	3000	
	3000	CAFETERIA LTS	EXIST	20/1	9				10	70/3	3–6	TEMP KITCHEN PANEL LTK	37918	4
	2300	CUSTODIAN LTS	EXIST	20/1	11				12	–	+8G	–	–	
	3000	STAGE/RR/STOR LTS	EXIST	20/1	13				14	–	3/4"C	–	–	
		SPACE			15				16			SPACE		
		SPACE			17				18			SPACE		
		SPACE			19				20			SPACE		
		SPACE			21				22			SPACE		
		SPACE			23				24			SPACE		
	130000	PANEL PA	EXIST	225/3	25				26	–	–	–	–	
	–	(SUBFEED BREAKER)	–	–	27				28	–	–	–	–	
	–	–	–	–	29				30	–	–	–	–	
	TOTAL LOAD @ 100% =	227368VA		TOTAL LOAD @ 100% =						274A		TOTAL LOAD @ 125% =	342A	

1. THE EXISTING 400A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

EXIST EM STANDBY PANELBOARD — CENTRAL PLANT

(E)PANEL EL

100A MCB 208Y/120V, 3ø, 4 WIRE — AVAILABLE FAULT: <10,000A — SCCR & AIC: 10,000A — MOUNTING: SURFACE

NOTES	EQUIP. NO.	LOAD	DESCRIPTION	WIRE	CB	CKT	A	B	C	CKT	CB	WIRE	DESCRIPTION	LOAD	EQUIP. NO.	NOTES
		500	PA SYSTEM	EXIST	20/1	1				2	20/1	EXIST	F/A RPS	250		
		250	SECURITY SYSTEM	EXIST	20/1	3				4	20/1	EXIST	F/A RPS	250		
		250	FACP	EXIST	20/1	5				6	20/1	EXIST	F/A RPS	250		
		250	F/A RPS	EXIST	20/1	7				8	20/1	EXIST	F/A RPS	250		
		250	F/A RPS	EXIST	20/1	9				10	20/1	EXIST	F/A RPS	250		
			EXIST SPARE		20/1	11				12	20/1		EXIST SPARE			
			EXIST SPARE		20/1	13				14	20/1		EXIST SPARE			
3	E188	864	REFRIGERATOR	3–12	20/1	15				16	25/3	3–10	REFRIGERATION SYSTEM	6192	E103	4
3	E188	864	REFRIGERATOR	3–12	20/1	17				18	–	+10G	–	–		
3	E109	1428	ICE MACHINE	3–12	20/1	19				20	–	3/4"C	–	–		
3	E151	240	HOOD ANSUL SYSTEMS	3–12	20/1	21				22	20/1EGF	3–12	COOLER DOOR HEATER/LTS	600	E102A	4
3	E102B	600	COOLER TEMP. ALARM	3–12	20/1	23				24	20/1EGF	3–12	FREEZER DOOR HEATER/LTS	600	E102A	4
3	E102C	600	COOLER PRESSURE PORT	3–12	20/1	25				26	20/1EGF	3–12	FREEZER DRAIN LINE HEATER	600	E103F	4
3	E102E	120	PANIC ALARM BUTTONS	3–12	20/1	27				28	20/2	2–10	FREEZER COIL	1893	E103C	4
3	E103D	216	COOLER COIL	3–12	20/1	29				30	–	+10G	–	–		
3	E102B	600	FREEZER TEMP. ALARM	3–12	20/1	31				32	20/1		EXIST SPARE			
3	E102C	600	FREEZER PRESSURE PORT	3–12	20/1	33				34	20/1		EXIST SPARE			
		300	GENERATOR ANTI COND HTR	EXIST	20/1	35				36	20/1		EXIST SPARE			
		250	GENERATOR BATTERY CHRGR	EXIST	20/1	37				38	30/3	EXIST	SPD	50		
		4500	GEN JACKET HTR	EXIST	30/2	39				40	–	–	–	–		
		–	–	–	–	41				42	–	–	–	–		
		TOTAL LOAD @ 100% =	23867VA		TOTAL LOAD @ 100% =						66A		TOTAL LOAD @ 125% =	83A		

1. THE EXISTING 100A FEEDER IS SUFFICIENT FOR THE REVISED LOAD.
2. UPDATE PANEL SCHEDULE TO MATCH REVISED EQUIPMENT DESCRIPTION.

GENERAL PANEL REQUIREMENTS:

A. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
B. FIELD VERIFY EXISTING CIRCUITS PRIOR TO BEGINNING WORK.
C. ALL OUTAGES SHALL BE SCHEDULED AND CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
D. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.

PANEL NOTES:

1. REVISE/REWORK WIRING/CONDUIT AS REQUIRED TO ADD/REMOVE DEVICES FROM EXISTING CIRCUIT.
2. EXISTING CIRCUIT TO BE DEMO.
3. REUSE EXISTING SPARE CB AND WIRE NEW CIRCUIT.
4. PROVIDE NEW CB & WIRE NEW CIRCUIT.
5. IDENTIFY ANY CIRCUITS OR PARTIAL CIRCUITS THAT EXTEND BEYOND THE AREA OF RENOVATION. PROVIDE TEMPORARY FEED TO MAINTAIN ALL CIRCUITS SERVING ELEMENTS/SPACES NOT TO BE REMOVED DURING CONSTRUCTION. RECONNECT EXISTING CIRCUITS/DEVICES TO REMAIN TO TEMPORARY KITCHEN PANEL ONCE AVAILABLE USING CB(S) PROVIDED. ALL PARTIAL CIRCUITS SHALL REMAIN AND REMAIN ACTIVE BOTH DURING AND AFTER CONSTRUCTION.
6. KITCHEN LIGHTS TO BE DUAL ZONES WIRED THROUGH LIGHTING CONTACTORS AND CONTROLLED ON/OFF BY THE BAS AND LOCAL LIGHTING SWITCHES.
7. EXTERIOR LIGHTS TO BE WIRED THROUGH LIGHTING CONTACTOR AND CONTROLLED ON/OFF BY THE BAS.

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ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILL ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD.
SUGAR LAND, TX 77498

SEAL

STATE OF TEXAS — GEORGE L. STANTON — 38582 — REGISTERED PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL SCHEMATIC

u-E.400

PLUMBING SYMBOLS LEGEND

———————	SANITARY WASTE BELOW SLAB	SAN.	SANITARY
———	SANITARY WASTE ABOVE SLAB	CW	DOMESTIC COLD WATER
—— V. ——	VENT PIPING ABOVE SLAB	HW	DOMESTIC HOT WATER
— — — —	VENT PIPING	WC	WATER CLOSET
—— G ——	GAS PIPING, 4-8oz	UR	URINAL
—— G5 ——	GAS PIPING, 5LB	LAV	LAVATORY
—·—·—	DOMESTIC COLD WATER PIPING	SK	SINK
—··—··—	DOMESTIC HOT WATER PIPING	EDF	ELECTRIC DRINKING FOUNTAIN
—— D ——	DRAIN/RELIEF VENT PIPING	WH	WALL HYDRANT
——⋈——	STOP VALVE	HB	HOSEBIBB
2CO	DOUBLE SAN. CLEANOUT (2-WAY)	CP	HOT WATER CIRCULATOR PUMP
CO	SANITARY SEWER CLEANOUT	FD	FLOOR DRAIN
WCO	WALL CLEANOUT	FSINK	FLOOR SINK
EXIST.	EXISTING		
(R)	REMOVE (DEMOLISH)		
(D)	DEMOLISH (REMOVE)		
(E)	EXISTING — NO WORK		

PLUMBING FIXTURE NOTES

1. ALL FIXTURES SHALL MEET WATER CONSERVATION PERFORMANCE STANDARDS MANDATED BY SENATE BILL 587. ALL FIXTURES SHALL HAVE FLOW RESTRICTION DEVICES (DRINKING FOUNTAINS SHALL BE SELF-CLOSING) TO COMPLY WITH THESE REQUIREMENTS.
2. ALL FIXTURES SHALL HAVE CONTROLS REQUIRING OPERATING FORCE NO GREATER THAN FIVE (5) POUNDS.
3. FOR LAVATORIES AND SINKS, ALL FAUCETS SHALL BE NO-LEAD SOLID BRASS, MEETING ALL REQUIREMENTS OF ANSI/NSF 61, SECTION 9 AND CERTIFIED AS SUCH. ALSO, INSTALL SYMMONS 7-210 MIXING VALVE ON HOT WATER SUPPLY SIDE OF ALL FAUCETS UNLESS HIGH TEMPERATURE LIMIT IS PROVIDED WITH FAUCET. MAXIMUM WATER TEMPERATURE FOR ALL FAUCETS THAT DELIVER HOT OR TEPID WATER SHALL BE 110°F. ALL METERING FAUCETS SHALL HAVE A MINIMUM TEN (10) SECONDS OF WATER FLOW, AND, INSTALL TRUEBRO HANDI LAV-GUARD VANDAL-PROOF INSULATION KITS OVER P-TRAP, SUPPLIES, STOPS AND ALL SHARP EDGES FOR ALL SINKS AND LAVATORIES (TRAP WRAP FROM BROCAR OR PROWRAP FROM McGUIRE SHALL BE ACCEPTABLE).
4. ALL PLUMBING FIXTURES REFERENCED AS "ADA", "TAS" OR "HANDICAP COMPLIANT" SHALL MEET ALL REQUIREMENTS OF THE ADA AND THE TEXAS ACCESSIBILITY STANDARDS. IT SHALL BE THE PLUMBING CONTRACTORS RESPONSIBILITY TO MEET THESE REQUIREMENTS.
5. IN MANY CASES, FIXTURES WITH THE SAME PLUMBING DESIGNATION HAVE DIFFERENT INSTALLATION HEIGHTS — REFERENCE ARCHITECTURAL DRAWINGS FOR ALL INSTALLATION HEIGHTS AND HANDICAP FIXTURE DESIGNATIONS. FIXTURES DESIGNATED AS ADULT HANDICAP SHALL MEET ALL REQUIREMENTS OF THE ADA. FIXTURES DESIGNATED AS CHILD HANDICAP SHALL MEET ALL REQUIREMENTS OF THE TEXAS ACCESSIBILITY STANDARDS FOR THE APPROPRIATE CHILDREN'S AGE GROUP (REF. ARCH. DWGS. AND SPECIFICATIONS).

PLUMBING MATERIALS

SANITARY WASTE AND VENT

BELOW SLAB/GRADE: SCHEDULE 40, DWV PVC

ABOVE SLAB: STANDARD WEIGHT, CAST IRON, NO-HUB PIPING.

STORM DRAIN PIPING

BELOW SLAB/GRADE: SCHEDULE 40, DWV PVC

ABOVE SLAB, 8" AND UNDER: STANDARD WEIGHT, CAST IRON, NO-HUB PIPING.

ABOVE SLAB, 10" AND ABOVE: SERVICE WEIGHT, CAST IRON, BELL & SPIGOT.

NATURAL GAS

BELOW GRADE (OUTSIDE): YELLOW POLYETHYLENE PIPE WITH COATED STEEL RISER AND TRACER WIRE.

ABOVE SLAB: SCHEDULE 40 BLACK STEEL. PIPING 2.5" AND LARGER SHALL BE WELDED. PIPING 2" AND SMALLER SHALL HAVE SCREWED FITTINGS.

DOMESTIC WATER

INTERIOR: TYPE L COPPER WITH SOLDER TYPE WROUGHT COPPER FITTINGS, MADE UP WITH LEAD-FREE SOLDER.

EXTERIOR: TYPE K COPPER WITH SWEAT FITTINGS AND LEAD-FREE SOLDER. BEYOND 5 FEET FROM BUILDING, SCHEDULE 40 PVC.

FIRE SPRINKLER SYSTEM NOTES

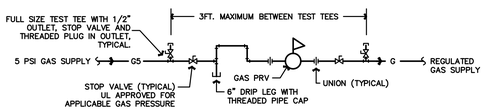
1. THE EXISTING FIRE SPRINKLER SYSTEM SHALL BE MODIFIED AND/OR EXPANDED TO COVER THE AREA OF RENOVATION IN ENTIRETY. ALL NEW AND REVISED PIPING SHALL BE ENGINEERED AND INSTALLED BY A LICENSED FIRE SPRINKLER CONTRACTOR.
2. REFERENCE THE SPECIFICATIONS, DIVISION 21, FOR MORE INFORMATION.

GENERAL PLUMBING NOTES

1. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL WORK DESCRIPTION. SEE THIS SHEET (P4.00) FOR PLUMBING SYMBOLS LEGEND.
2. COORDINATE PLUMBING SYSTEMS INSTALLATION WITH ARCHITECTURAL, STRUCTURAL, HVAC SYSTEMS, ELECTRICAL SYSTEMS, CONDUITS, ETC.... OFFSET PIPING AS REQUIRED TO PROVIDE A FUNCTIONING SYSTEM WITH ADEQUATE SPACE FOR SERVICING AND REPAIRS.
3. MAKE CONNECTIONS OF NEW PIPE SYSTEMS IN TO EXISTING PIPE SYSTEMS WITH THREADED OR SWEAT JOINTS. PROVIDE ELECTROLYSIS ISOLATING UNIONS AT CONNECTION OF DISSIMILAR MATERIALS. REFERENCE THE SPECIFICATIONS.
4. SITE SERVICES ARE SHOWN FOR REFERENCE ONLY. PLUMBING CONTRACTOR SHALL REFERENCE CIVIL DRAWINGS, INCLUDING LOCATIONS OF SERVICES, SIZES OF PIPES, FLOWLINE ELEVATIONS, ETC..
5. DO NOT INSTALL PLUMBING PIPING OVER ANY ELECTRICAL EQUIPMENT. REFERENCE ELECTRICAL DRAWINGS FOR LOCATIONS OF ELECTRICAL EQUIPMENT AND COORDINATE WITH ELECTRICAL SUBCONTRACTORS ACCORDINGLY. SEE DETAIL 2/MEP1. THIS INCLUDES FIRE SPRINKLER PIPING.
6. ALL PIPES THROUGH WALLS OR FLOORS SHALL BE SLEEVED AND SEALED PER DETAIL 5/P4.02. FIRE CAULK WHERE REQUIRED. THIS INCLUDES ALL WALLS, INTERIOR AND EXTERIOR. THIS INCLUDES FIRE SPRINKLER PIPING.
7. ALL CLEANOUTS SHALL BE CONNECTED TO SANITARY LINES USING WYES AND/OR LONG RADIUS ELLS. SANITARY TEES ARE NOT ACCEPTABLE. 2" MINIMUM SIZE. ALL WALL CLEAN OUTS IN VERTICAL RISERS, OR BANKS OF FIXTURES SHALL BE INSTALLED 4" ABOVE THE FLOOD RIM LEVEL OF THE LOWEST CONNECTED FIXTURE AND A MINIMUM OF 24" AFF.
8. ALL WASTE AND VENT PIPING BELOW SLAB SHALL BE 2" MINIMUM.
9. LOCATE PLUMBING VENTS THROUGH ROOF NOT NEARER THAN SIX (6) FEET AWAY FROM EDGE OF BUILDING AND TEN (10) FEET AWAY FROM ANY FRESH AIR INTAKES. OFFSET VENT PIPING, AS REQUIRED, IN CEILING SPACE BETWEEN CEILING AND ROOF TO MEET THESE REQUIREMENTS. SEE DETAIL 3/P4.02.
10. ALL DOMESTIC WATER PIPING (CW, HW AND HWR) SHALL BE INSULATED PER THE WRITTEN SPECIFICATIONS.
11. TOP OF FLOOR DRAINS IN MECHANICAL, AHU AND BOILER ROOMS SHALL BE SET 1-1/2" BELOW FINISHED FLOOR SURFACE. CONCRETE FLOOR SHALL BE SLOPED TO DRAIN, REFERENCE ARCHITECTURAL DRAWINGS. IN ALL OTHER LOCATIONS, FLOOR DRAINS SHALL BE SET FLUSH WITH FINISHED FLOOR, TAKING INTO ACCOUNT ANY FLOOR SLOPE OR FLOOR FINISH (TILE, TERRAZZO, ETC.) AS SHOWN ON ARCHITECTURAL DRAWINGS.
12. PROVIDE AN ISOLATING VALVE AT EACH WATER TAP OFF HOT AND COLD WATER MAINS TO ALLOW FOR SERVICING. VALVE SHALL BE BALL VALVE IF PIPE SIZE IS 2" OR LESS AND GATE VALVE OR BUTTERFLY VALVE IF LARGER THAN 2". SEE WRITTEN SPECIFICATIONS. VALVES SHALL BE EASILY ACCESSIBLE. PROVIDE 18" X 18", FIRE-RATED, STAINLESS STEEL ACCESS PANELS WITH HINGED, SECURITY LOCKING DOORS WHERE VALVES ARE INSTALLED ABOVE INACCESSIBLE CEILINGS OR IN WALL CHASES (MIFAB MODEL MPFR-SS-C). BALL VALVES AND BUTTERFLY VALVES INSTALLED ABOVE CEILINGS SHALL BE INSTALLED SUCH THAT HANDLE IS ON BOTTOM OF PIPE. ISOLATING WATER VALVES ABOVE CEILINGS SHALL BE INSTALLED NO MORE THAN 24" ABOVE CEILING. VALVES ABOVE INACCESSIBLE CEILINGS SHALL BE INSTALLED WITHIN REASONABLE REACH OF CEILING MOUNTED ACCESS PANEL.
13. WATER HAMMER ARRESTERS SHALL BE INSTALLED IN ADDITION TO AIR CHAMBERS PER THE RISER DIAGRAMS. SEE SPECIFICATIONS.
14. MECHANICALLY CLEAN ALL WASTE LINES WITH ROTARY MACHINE TO PROVE FREE FLOWING, SEE SPECIFICATIONS.
15. PROVIDE VENTED SLEEVE (2 PIPE SIZES LARGER THAN GAS PIPE UNLESS NOTED OTHERWISE) FOR ALL GAS PIPING IN GROUND BELOW PAVING OR SIDEWALKS AND INSIDE BUILDING IN WALLS AND IN UNVENTILATED CEILING SPACES, SEE SPECIFICATIONS.
16. GAS PIPING SHALL BE 1/2" MINIMUM. TAP GAS PIPING ON TOP OR SIDES ONLY. DO NOT INSTALL VALVES IN CEILING PLENUM OR IN ANY INACCESSIBLE LOCATION. ALL GAS VALVES SHALL BE EASILY ACCESSIBLE. REFER TO DETAIL 9/P4.01 FOR TYPICAL GAS CONNECTION INSTALLATION. REFER TO DETAIL 8/P4.02 FOR TYPICAL PRV INSTALLATION.
17. CENTER WALL HYDRANTS IN BRICK PATTERN OF EXTERIOR WALLS, REFERENCE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
18. ALL REFRIGERATORS WITH ICE MAKERS, COMMERCIAL TYPE COFFEE MAKERS, ICE MAKERS, COFFEE VENDING MACHINES AND OTHER ITEMS REQUIRED IN OTHERS THAT REQUIRE A WATER CONNECTION SHALL HAVE A CW VALVE BOX, "VBOX", INSTALLED TO ALLOW EASY ACCESS AND REMOVAL OF MACHINE. ALSO, INSTALL IN-LINE FILTER IN WATER CONNECTION.
19. REFER TO CIVIL DRAWINGS FOR SITE SANITARY, SITE STORM SEWER, FIRE SERVICE AND DOMESTIC WATER SERVICE. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PIPING INSIDE BUILDING TO OUTSIDE LOCATIONS SHOWN ON PLUMBING DRAWINGS. PLUMBING CONTRACTOR SHALL INCLUDE COST OF FINAL TIE-INS TO SITE SERVICES.
20. PER THE DRAWINGS, ALL DRAINS (FLOOR DRAINS, FLOOR SINKS, HUB DRAINS, KITCHEN DRAINS, SHOWER DRAINS, ETC.) SHALL BE VENTED AND TRAP PRIMED — NO EXCEPTIONS. TRAP PRIMING SHALL BE ACCOMPLISHED USING WATER CLOSET FLUSH VALVE TRAP PRIMING DEVICES OR PROSET SYSTEMS TRAP GUARD SEWER GAS EMISSION PROTECTION, AS SHOWN ON DRAWINGS. REFERENCE PLUMBING FLOOR PLANS AND RISER DIAGRAMS.
21. ALL PIPING LOCATED ON ROOF (GAS PIPING) SHALL BE INSTALLED ON ROOF PIPE SUPPORTS PER DETAIL 10/P4.02, 6-FOOT ON CENTER. INSTALL ROOF PIPE JACK PER DETAIL 9/P4.02 FOR ALL PIPING THROUGH ROOF.
22. COORDINATE LOCATIONS OF ALL ROOF DRAINS AND OVERFLOW ROOF DRAINS WITH ARCHITECTURAL DRAWINGS.
23. FOR COMBINATION WASTE AND VENT SYSTEMS (WHERE APPLICABLE ON DRAWINGS), DRAIN P-TRAPS SHALL BE SIZE OF PIPE SHOWN ON DRAWINGS (I.E. TWO PIPE SIZES LARGER THAN DRAIN SIZE). FOR EXAMPLE, A 4" FLOOR DRAIN SHALL HAVE A 6" P-TRAP.
24. FOR ALL PLUMBING FIXTURES, IF COPPER PIPING IS STUBBED THROUGH WALL FOR DRAIN CONNECTION, INSTALL MARVEL FITTING AT DRAIN CONNECTION FOR EASE OF SERVICING AND REPAIRS. COPPER DRAIN PIPING WILL ONLY BE ALLOWED FOR DIRECT/STRAIGHT STUB-OUT OF FIXTURE DRAIN PIPING THROUGH WALL.
25. DO NOT INSTALL ANY PIPING BENEATH CVT OR VAV BOXES. THIS INCLUDES FIRE SPRINKLER PIPING.
26. WHERE UNDERGROUND VENT PIPE SIZE IS NOT NOTATED, VENT SHALL BE 2" DIAMETER.
27. WHERE UNDERGROUND SANITARY PIPE SIZE IS NOT NOTATED, REFER TO THE RISER DIAGRAMS FOR SIZE. NOT BELOW GRADE SANITARY PIPE SHALL BE SMALLER THAN 2". NO SANITARY LINE OR P-TRAP FOR A DRAIN/FIXTURE SHALL BE SMALLER THAN THE FIXTURE CONNECTION SIZE SHOWN ON THE DRAIN/FIXTURE SCHEDULE.
28. WHERE ABOVE GROUND VENT PIPE SIZE IS NOT NOTATED, REFER TO THE RISER DIAGRAMS FOR VENT SIZE.
29. WHERE CW/HW PIPING SIZE TO THE FIXTURE IS NOT SHOWN ON THE FLOOR PLAN, REFER TO THE RISER DIAGRAMS FOR CW/HW PIPE SIZE. NO PIPING TO FIXTURE SHALL BE SMALLER THAN THE FIXTURE CONNECTION SIZE SHOWN ON THE FIXTURE SCHEDULE.
30. TO INSTALL NEW PLUMBING SYSTEMS BELOW EXISTING CONCRETE SLABS, FIRST PLUMBING CONTRACTOR SHALL LAY OUT CUT. THEN, DEMOLITION CONTRACTOR SHALL SAW CUT SLAB TO CONTROL CRACKING AND REMOVE ALL CONCRETE. PLUMBING CONTRACTOR SHALL THEN EXCAVATE FILL TO PROPER SLOPE, INSTALL NEW PIPING SYSTEMS AS REQUIRED, THEN BACKFILL AND COMPACT TO PROPER DENSITY. THE CONCRETE CONTRACTOR SHALL THEN INSTALL NEW SIX (6) MIL POLYETHYLENE VAPOR BARRIER AND SEAL, INSTALL NEW REINFORCING STEEL AND WELD ON TO EXISTING, THEN RE-POUR CONCRETE TO NEW LEVEL. DO NOT CUT THROUGH GRADE BEAMS WITHOUT APPROVAL FROM THE STRUCTURAL ENGINEER. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
31. ALL ABANDONED FIXTURES, DRAINS AND PIPING (INCLUDING PIPING ABANDONED IN THE PAST) IN AREAS WHERE WORK IS BEING DONE SHALL BE COMPLETELY REMOVED FROM BUILDING (INCLUDING PIPING BELOW SLAB/GRADE — UNLESS SHOWN OTHERWISE ON DRAWINGS). EXISTING WATER PIPING SHALL BE CAPPED AT EXISTING WATER MAIN TAPS AND ALL ABANDONED PIPING REMOVED. ABANDONED VENT PIPING SHALL BE COMPLETELY REMOVED, INCLUDING EXISTING VTR'S NOT RE-USED. PATCH AS REQUIRED. ONLY ACTIVE PIPING, FIXTURES AND DRAINS SHALL REMAIN IN BUILDING WHERE WORK IS BEING DONE.

GAS PRV SCHEDULE

MARK	PRV-K
LOCATION	MECH. YARD
SERVES	KITCHEN
GAS LOAD	585 CFH
DISTANCE FROM METER	150 FT
DISTANCE TO LAST OUTLET	200 FT
INLET (SIZE/PRESSURE)	1" / 5 PSI
OUTLET (SIZE/PRESSURE)	2" / 7-12 IN WC



4 GAS PRESSURE REGULATOR DETAIL (PRV)

NO SCALE

NOTES:
1. GAS REGULATOR SHALL BE ANSI Z21.80 CERTIFIED FOR LINE PRESSURE REGULATION BETWEEN THE SERVICE REGULATOR AND CONNECTED EQUIPMENT.
2. ALL GAS REGULATORS WITH INLET PRESSURE ABOVE 2 PSI SHALL BE EQUIPPED WITH A FACTORY INSTALLED OVERPRESSURE PROTECTION DEVICE, AS PART OF THE ANSI Z21.80 CERTIFICATION.
3. GAS REGULATOR SHALL BE EQUIPPED WITH A VENT LIMITING DEVICE, SIZED IN ACCORDANCE WITH THE REGULATOR OUTLET PRESSURE.
4. ALL REGULATORS INSTALLED OUTDOORS SHALL BE RATED FOR OUTDOOR INSTALLATION.
5. BASIS OF DESIGN IN THE MAXITROL 325-L SERIES OF REGULATORS

PLUMBING DRAINS, CLEANOUTS AND HYDRANTS

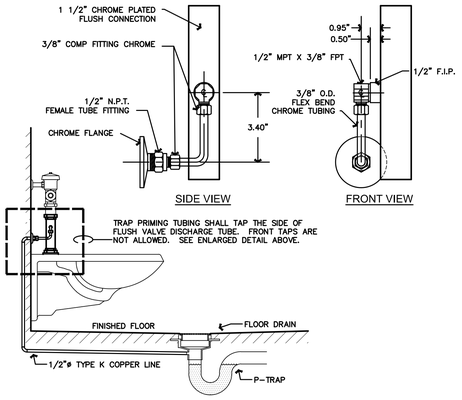
MARK	MIN. CONNECTION SIZES (IN.) SAN	VENT	CW	HW	DESCRIPTION/SPECIFICATION FOR FIXTURE OR EQUIPMENT
FD	4	2	1/2	–	TOILET FLOOR DRAIN — TWO-PIECE CAST IRON WITH SEEPAGE FLANGE, REVERSIBLE CLAMPING COLLAR, 1/2" TRAP PRIMER TAP, 6" SQUARE, NICKEL BRONZE HSTRAINER AND SECURITY SCREWS JR SMITH MODEL 2005-03-K06PB-P050-U.
FD2	4	2	1/2	–	EQUIPMENT FLOOR DRAIN — CAST IRON, MEDIUM DEPTH DRAIN WITH FLANGE, CLAMPING DEVICE, SEEPAGE OPENINGS, DUCTILE IRON TRUE-FIT SEDIMENT BUCKET WITH 12" STAINLESS STEEL RIM LESS GRATE, 1/2" TRAP PRIMER TAP ZURN MODEL ZS-540-U-P DRAIN SHALL BE DESIGNED SUCH THAT GRATE CANNOT BE INSTALLED WITHOUT SEDIMENT BUCKET.
FD3	4	2	1/2	–	GRATED MECHANICAL ROOM FLOOR DRAIN — CAST IRON WITH FLANGE, SEEPAGE OPENINGS, 9" HEAVY-DUTY DUCTILE IRON GRATE WITH STAINLESS STEEL VENEER, CLAMPING DEVICE AND 1/2" TRAP PRIMER TAP ZURN MODEL ZS-550-C-P
FD4	4	2	1/2	–	CANWASH FLOOR DRAIN — ALL GALVANIZED CAST IRON, MEDIUM DEPTH DRAIN WITH FLANGE, CLAMPING DEVICE, SEEPAGE OPENINGS, GALVANIZED SUR-SET SEDIMENT BUCKET WITH 12" GALVANIZED DUCTILE IRON RIM AND GRATE, 1/2" TRAP PRIMER TAP ZURN MODEL ZS-540-P-G-HD. DRAIN SHALL BE DESIGNED SUCH THAT GRATE CANNOT BE INSTALLED WITHOUT SEDIMENT BUCKET.
FD5	4	2	1/2	–	KITCHEN FLOOR DRAINS SHALL BE SIMILAR EXCEPT WITH 7" SQUARE, BRONZE GRATE JR SMITH MODEL 2005-03-K07PB-P050-U PROVIDE 4" DIAMETER STAINLESS STEEL FUNNEL WHERE SHOWN ON DRAWINGS. REFERENCE KITCHEN CONNECTION SCHEDULE ON PLUMBING RENOVATION FLOOR PLAN SHEET.
FS KITCHEN FS	4	2	1/2	–	FLOOR SINK — CAST IRON, 8" DEEP SUMP, A.R.E. INTERIOR, INTEGRAL FLANGE FOR SUPPORT, CLAMPING DEVICE WHERE VAPOR BARRIER IS INSTALLED BETWEEN SLAB AND CONCRETE BEDDING FOR FLOOR, ALUMINUM SECONDARY DOME STRAINER AND 12" SQUARE HEAVY DUTY STAINLESS STEEL TRACTOR DUTY FRAME WITH 3/4-TRACTOR GRATE AND 1/2" TRAP PRIMER TAP JR SMITH MODEL 3150Y-04-C-13.
CO	VARIES	–	–	–	FLOOR CLEANOUT — ADJUSTABLE EXTENSION HOUSING, CAST IRON FERRULE WITH FULL-LINE-SIZE BRASS PLUG (UP TO 4"), 5" DIAMETER STAINLESS STEEL ACCESS COVER WITH VANDAL-PROOF SCREW, ROUND NICKEL BRONZE FRAME AND TOP (NOT COMPATIBLE WITH FLOOR TYPE (REFERENCE ARCHITECTURAL DRAWINGS FOR FLOOR TYPES)) ZURN MODEL ZS-1400-VP. PROVIDE CARPET FLANGE FOR CARPETED AREAS (CARPET MARKER SHALL NOT BE ACCEPTABLE) AND TERRAZZO RECESS FOR TERRAZZO FLOORS. OUTDOOR CLEANOUT — SAME AS TYPE "CO" EXCEPT WITH HEAVY-DUTY NICKEL BRONZE TOP ZURN MODEL ZN-1400-HD-VP. INSTALL 18" X 18" X 6" THICK CONCRETE PAD AROUND EACH OUTDOOR CLEANOUT.
WCO	VARIES	–	–	–	WALL CLEANOUT — CAST IRON FERRULE WITH COUNTERSUNK HEAD (FULL-LINE-SIZE PVC PLUG UP TO 4") MIFAB MODEL C1400. ACCESS COVER SHALL BE 8" SQUARE, SURFACE MOUNT, FLUSH INSTALLATION, 16-GAUGE STAINLESS STEEL ACCESS DOOR WITH FLANGED FRAME AND VANDAL-PROOF OPTION MI-FAB MODEL UA-SS-VP. ACID WASTE CLEANOUT (AWCO) SHALL BE SAME EXCEPT ACID WASTE PIPING. INSIDE CABINETWORK WHERE CLEANOUT IS NOT VISIBLE, ACCESS PANEL MAY BE ROUND STAINLESS STEEL TYPE WITH VANDAL-PROOF CENTER SCREW MI-FAB MODEL C1450-RD-3-6.
2CO	4	–	–	–	DOUBLE CLEANOUTS — SAME AS OUTDOOR CLEANOUTS. INSTALLED FOR TWO-WAY RODDING. SINGLE CLEANOUT WITH 2-WAY FITTING IS NOT ACCEPTABLE, PROVIDE TWO SEPARATE CLEANOUTS. INSTALL 18" X 18" X 6" THICK CONCRETE PAD AROUND EACH OUTDOOR CLEANOUT.
HB	–	–	3/4	–	HOSEBIBB — 3/4" HOSE THREAD, INTEGRAL VACUUM BREAKER SPOUT, ROUGH CHROME FINISH WITH REMOVABLE KEYED HANDLE, WALL FLANGE CHICAGO MODEL 952.
WH	–	–	3/4	–	RESTROOM WALL HYDRANT — NARROW WALL, WARM CLIMATE TYPE HOSE BOX, QUARTER-TURN WHEEL HANDLE, ASSE APPROVED ANTI-SIPHON INTEGRAL VACUUM BREAKER AND DUAL CHECK VALVE, 3/4" STRAIGHT INLET HOSE CONNECTION, CAST STAINLESS STEEL HYDRANT BOX, FLUSH MOUNTED 16-GAUGE STAINLESS STEEL FRAME AND 180° DROP DOWN DOOR WITH KEY LOCK AND WALL CLAMP JR SMITH MODEL 5518
WH2	–	–	3/4	–	EXTERIOR WALL HYDRANT — NON-FREEZE HOSE BOX, QUARTER-TURN WHEEL HANDLE, ASSE APPROVED ANTI-SIPHON INTEGRAL VACUUM BREAKER AND DUAL CHECK VALVE, 3/4" STRAIGHT INLET HOSE CONNECTION, CAST STAINLESS STEEL HYDRANT BOX, FLUSH MOUNTED 16-GAUGE STAINLESS STEEL FRAME AND 180° DROP DOWN DOOR WITH KEY LOCK AND WALL CLAMP JR SMITH MODEL 5519
WH3	–	–	3/4	3/4	CANWASH WALL HYDRANT — NON-FREEZE HOSE BOX WITH STRAIGHT INLET CONNECTION, HOT AND COLD MIXING, REMOVABLE KEYED HANDLE, ASSE APPROVED ANTI-SIPHON INTEGRAL BACKFLOW PREVENTER WITH 3/4" HOSE CONNECTION, HEAVY DUTY BRASS CASING, POLISHED BRONZE HYDRANT BOX WITH HINGED COVER, "WATER" CAST ON COVER, DRIP LIP AND WALL CLAMP J.R. SMITH MODEL 5560-QT-WC-H-W-PB.
WBOX	2	2	3/4	3/4	CLOTHES WASHER DRAIN/VALVE BOX — HEAVY-GAUGE GALVANIZED STEEL CONSTRUCTION, RECESSED IN WALL, VALVE AND DRAIN CONNECTIONS, WATTS DUO-CLOZ VALVE GUY GRAY MODEL WB-200.

PLUMBING FIXTURES AND EQUIPMENT

MARK	MIN. CONNECTION SIZES (IN.) SAN	VENT	CW	HW	DESCRIPTION/SPECIFICATION
WC	4	2	1	–	WATER CLOSET — WALL MOUNTED, WHITE VITREOUS CHINA, SIPHON JET ACTION, 1.28 GPF, ELONGATED BOWL, TOP SPUD, ADA/TAS COMPLIANT, AMERICAN STANDARD AFWALL: SLOAN ROYAL 111-1.28 FLUSH VALVE WITH VANDAL-PROOF FREE-SPINNING TOP CAP, 1.28 GPF, VANDAL-PROOF STOP AND ADA/TAS COMPLIANT LEVER ACTUATOR WITH LEVER INSTALLED ON LEFT SIDE (FOR FIXTURES DESIGNATED AS "HANDICAP"), INSTALL LEVER ON "WIDE-SIDE" OF TOILET STALL); BEMIS 1655-SS/C EXTRA HEAVY DUTY, WHITE, OPEN FRONT SEAT LESS COVER WITH SELF-SUSTAINING, STAINLESS STEEL CHECK HINGE; AND, FLOOR MOUNTED CARRIER.
LV	1-1/4	1-1/4	1/2	1/2	LAVATORY GOOSENECK FAUCET — WALL HUNG, WHITE VITREOUS CHINA, FRONT OVERFLOW, SELF-DRAINING DECK AREA, 21" X 18", ADA/TAS COMPLIANT AMERICAN STANDARD LUCERNE 0355.012; DECK MOUNTED FAUCET, 4" CENTERS, FIXED, CHROME PLATED, 5.25" GOOSENECK SPOUT, PRESSURE COMPENSATING LAMINAR FLOW NON-AERATING 0.5 GPM OUTLET, 4" WRISTBLADE HANDLES, INTERCHANGEABLE COMPRESSION CARTRIDGES, CHICAGO 895-317GNAE72ABCP; CHROME PLATED, 17-GAUGE CAST BRASS GRID DRAIN WITH WHEELCHAIR OFFSET FITTING; CHROME PLATED, 17-GAUGE CAST BRASS P-TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; TRUEBRO HANDI LAV-GUARD VANDAL-PROOF, WHITE INSULATION KITS; AND, FLOOR MOUNTED, CONCEALED ARMS CARRIER. PROVIDE ASSE 1070 LISTED MIXING VALVE, LEONARD 170-LF OR EQUAL (MUST BE CAPABLE OF ADJUSTMENT ABOVE 130°F).
LV2	1-1/4	1-1/4	1/2	1/2	LAVATORY — WALL HUNG, WHITE VITREOUS CHINA, FRONT OVERFLOW, SELF-DRAINING DECK AREA, 21" X 18", ADA/TAS COMPLIANT AMERICAN STANDARD LUCERNE 0355.012; CHROME PLATED, ALL CAST BRASS CONSTRUCTION, ADA/TAS COMPLIANT, VANDAL-PROOF FAUCET WITH 4" WRIST BLADE HANDLES, COMPRESSION STYLE CARTRIDGES, CHROME DECK PLATE, VANDAL-PROOF AERATOR, COPPER SUPPLIES AND CERTIFIED FOR MEETING ALL REQUIREMENTS OF NSF 61 SECTION 9 CHICAGO MARATHON MODEL 802-E70-317ABCP; CHROME PLATED, 17-GAUGE CAST BRASS GRID DRAIN WITH WHEELCHAIR OFFSET FITTING; CHROME PLATED, 17-GAUGE CAST BRASS P-TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; TRUEBRO HANDI LAV-GUARD VANDAL-PROOF, WHITE INSULATION KITS; AND, FLOOR MOUNTED, CONCEALED ARMS CARRIER. PROVIDE ASSE 1070 LISTED MIXING VALVE, LEONARD 170-LF OR EQUAL (MUST BE CAPABLE OF ADJUSTMENT ABOVE 130°F).
EDF	1-1/2	1-1/2	1/2	–	BI-LEVEL ELECTRIC DRINKING FOUNTAINS WITH BOTTLE FILLER — WALL MOUNTED, ALL STAINLESS STEEL, ADA AND TAS COMPLIANT FOR ALL AGES, 8 GPH AT ARI STANDARDS, 2-STREAM ALL METAL BUBBLER FITTING WITH VANDAL-RESISTANT KIT AND FRONT PUSH BUTTON ACTUATION, PUSH BUTTON ACTIVATED BOTTLE FILLER WITH 1.1GPM FILL RATE AND ANTI-MICROBIAL COATING, INTEGRAL WATER FILTER, LEAD-FREE (CERTIFIED FOR MEETING ALL REQUIREMENTS OF NSF 61 SECTION 9), REFRIGERANT HFC-134a, MAINTENANCE ACCESS PANEL, HALSEY-TAYLOR MODEL HTHBWVR8BL; CHROME PLATED, 17-GAUGE CAST BRASS P-TRAP WITH CLEANOUT PLUG; CHROME PLATED, CAST BRASS, LOOSE KEY ANGLE STOP WITH CHROME PLATED COPPER RISER; FLOOR MOUNTED CHAIR CARRIER; AND, STAINLESS STEEL ADA APRON FOR LOCATIONS REQUIRED BY ADA OR TAS.
MB	3	2	3/4	3/4	MOP BASIN — 24" X 24" X 12" DEEP TERRAZZO, TWO (2) STAINLESS STEEL SPLASH CATCHER PANELS, 8" DROP FRONT WITH STAINLESS STEEL CAP, CAST BRASS DRAIN WITH STAINLESS STEEL STRAINER STERN WILLIAMS HILOW MODEL HI-1800-BP; FAUCET SHALL BE POLISHED CHROME PLATED SERVICE SINK TYPE WITH VACUUM BREAKER, INTEGRAL SUPPLY CHECK STOPS, SPOUT WITH PAIL HOOK, HOSE END AND TOP BRACE CHICAGO MODEL 897-CCF (INSTALL BACKING/BRACING INSIDE WALL TO SUPPORT FAUCET AND TOP BRACE).
LP-1	3	2	3/4	3/4	LAVATORY PUMP — FACTORY BUILT, LIFT PUMP FOR GRAY WATER WASTE, TOP ACCESS TO INTERNAL 1/6HP PUMP AND FLOAT SWITCH, 1.5" TOP AND SIDE INLETS, 1.5" TOP OUTLET, INTEGRAL CHECK VALVE AT BOTTOM INLET CONNECTIONS, 9FT POWER CORD WITH GROUNDED PLUG; LIBERTY PUMPS MODEL 406

KITCHEN PLUMBING CONNECTION SCHEDULE

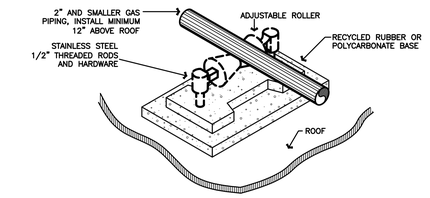
MARK	DESCRIPTION
P5	3/4" CW AND 3/4" HW — IN WALL, 36" AFF, TO MOP BASIN ("MB") FAUCET. REFERENCE PLUMBING FIXTURE SCHEDULE.
P6	3" DRAIN IN FLOOR FOR MOP BASIN ("MB") DRAIN. REFERENCE PLUMBING FIXTURE SCHEDULE.
P7	3/4" CW AND 3/4" HW — IN WALL, 18" AFF, TO HOSE BIBB.
P10	FLOOR DRAIN — 3" OUTLET; FLUSH WITH FLOOR; TWO-PIECE CAST IRON WITH SEEPAGE FLANGE, REVERSIBLE CLAMPING COLLAR, 7" SQUARE HEAVY-DUTY POLISHED BRONZE GRATE, 1/2" TRAP PRIMER TAP, AND TRAP SEAL DEVICE (MODEL 2692) JR SMITH MODEL 2005-03-K07PB-P050-U.
P11C	1/2" CW AND 1/2" HW — IN WALL, FOR HAND LAVATORY WITH FOOT CONTROLS ("LV"). REFERENCE PLUMBING FIXTURE SCHEDULE.
P11D	2" DRAIN — IN WALL, FOR HAND LAVATORY WITH FOOT CONTROLS ("LV"). REFERENCE PLUMBING FIXTURE SCHEDULE.
P12	FLOOR SINK — 4" OUTLET; FLUSH WITH FLOOR; CAST IRON, 8" DEEP SUMP, A.R.E. INTERIOR, INTEGRAL FLANGE FOR SUPPORT, CLAMPING DEVICE WHERE VAPOR BARRIER IS INSTALLED BETWEEN SLAB AND CONCRETE BEDDING FOR FLOOR, ALUMINUM SECONDARY DOME STRAINER AND 12" SQUARE HEAVY DUTY NICKEL BRONZE FRA



13 FLUSH VALVE TRAP PRIMING TUBE DETAIL

NO SCALE

MI-FAB MODEL MI-702-MOD FLUSH VALVE TRAP PRIMER, OR EQUAL

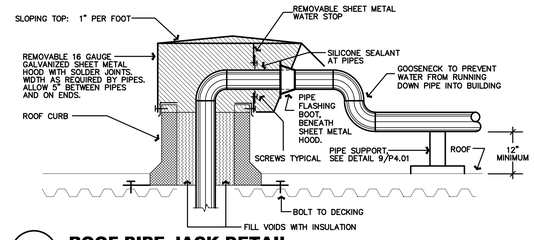


14 GAS PIPING ROOF SUPPORT DETAIL

NO SCALE

NOTES:

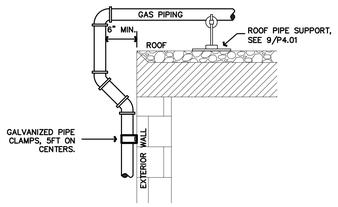
1. GAS PIPING SUPPORT SHALL BE PORTABLE PIPE HANGERS, INC. MODEL PP10-R. PIPING SHALL BE INSTALLED 12" ABOVE FINISHED ROOF. PROVIDE 18" X 18" CAREY TREAD-TYPE MATERIAL BENEATH EACH PIPE SUPPORT.
2. FIELD LOCATE ROOF STRUCTURAL SUPPORTS AND PLACE BASE OF PIPE SUPPORT OVER ROOF SUPPORTS ONLY. PROVIDE BASE OF ADEQUATE LENGTH TO SPAN ROOF JOIST TO PREVENT SUPPORTS SETTING ON ROOF DECK ONLY.
3. INSTALL SIX (6) FOOT-ON-CENTERS.
4. PIPE SUPPORT MANUFACTURER'S REPRESENTATIVE SHALL PERSONALLY INSPECT INSTALLATIONS OF PIPE SUPPORTS AND MAKE CORRECTIONS AND HEIGHT ADJUSTMENTS TO INSTALLATIONS, AS REQUIRED, DURING INSPECTION.



9 ROOF PIPE JACK DETAIL

NO SCALE

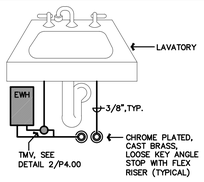
NOTE: COORDINATE WITH ARCHITECTURAL DRAWINGS, DETAILS AND SPECIFICATIONS.



13 GAS PIPING WALL-TO-ROOF TRANSITION DETAIL

NO SCALE

TANKLESS WATER HEATER SCHED.		
MARK	IEWH-1	
SERVES	LAVATORY	
LOCATION	BELOW COUNTER	
HEATER KW	1.8 KW	
TEMP RISE (@ 0.5 GPM)	25°F	
VOLTAGE/PHASE	120V/1PH	
EEMAX MODEL	SPEX1812T	

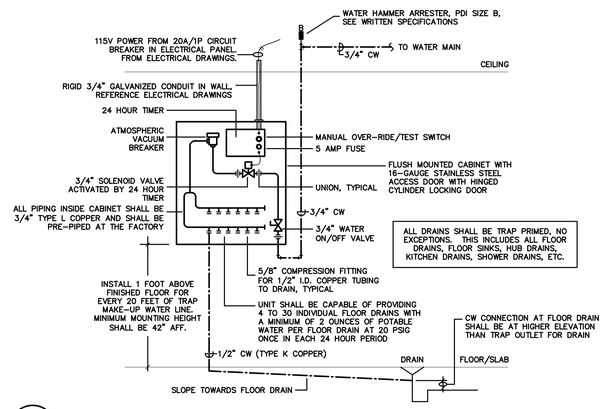


11 TANKLESS WATER HEATER

NO SCALE

NOTES:

1. LOCATION OF VALVE AND PIPING SHALL NOT INTERFERE WITH ANY ADA/HANDICAP KNEE-SPACE CLEARANCE REQUIREMENTS.
2. ALL PIPING SHALL BE CHROME PLATED CAST BRASS AND SHALL BE INSULATED BY TRUEBRO HANDI LAV-GUARD INSULATION KITS. INSULATION KITS SHALL COVER P-TRAP, MIXING VALVE, WATER STOPS, PIPING AND ALL SHARP EDGES (ONLY WHERE CABINETWORK KNEESPACE SCREEN NOT PROVIDED).
3. ALL CW AND HW CONNECTIONS SHALL HAVE COMPRESSION TYPE FITTINGS.
4. FURNISH & INSTALL 0.5-GPM AERATOR ON FAUCET COMPATIBLE WITH TANKLESS EWH REQUIREMENTS.
5. WATER HEATER SHALL HAVE INTEGRAL ASSE-1070 COMPLIANT TEMPERED MIXING VALVE.

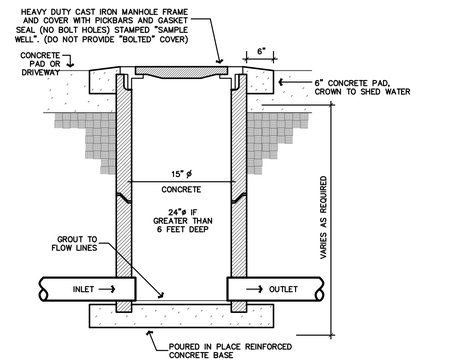


10 ELECTRONIC TRAP PRIMING MANIFOLD DETAIL (TP)

NO SCALE

NOTES:

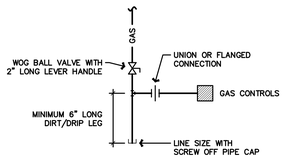
1. REFERENCE SCHEDULE ON SHEET P3.00



8 SAMPLE TEST WELL DETAIL (STW)

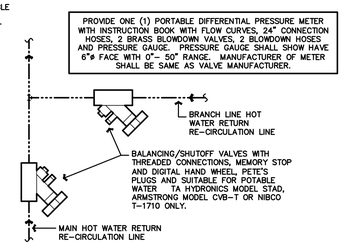
NO SCALE

NOTES:



7 TYPICAL GAS CONNECTION

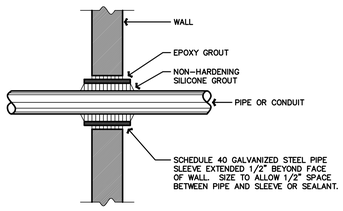
NO SCALE



6 HOT WATER BALANCING STATION

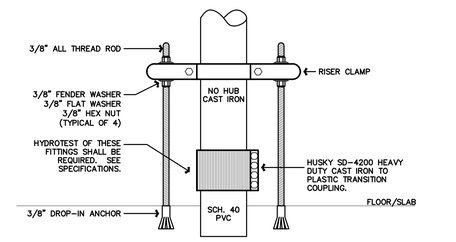
NO SCALE

PROVIDE AT EACH JUNCTION OF BRANCH HOT WATER RETURN LOOPS TO MAIN CIRCULATING HOT WATER LINE, SEE PLUMBING PLANS.



5 WALL PENETRATION DETAIL

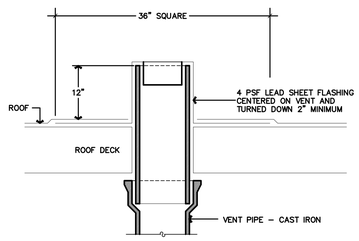
NO SCALE



4 PVC-TO-CAST IRON INSTALLATION DETAIL

NO SCALE

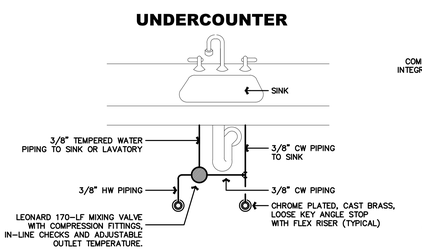
MISSION TRANSITION COUPLING DESIGNED AND CERTIFIED FOR THIS SPECIFIC APPLICATION SHALL BE ACCEPTABLE IN LIEU OF HUSKY COUPLING IN THIS DETAIL.



3 ROOF VENT DETAIL

NO SCALE

COORDINATE WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

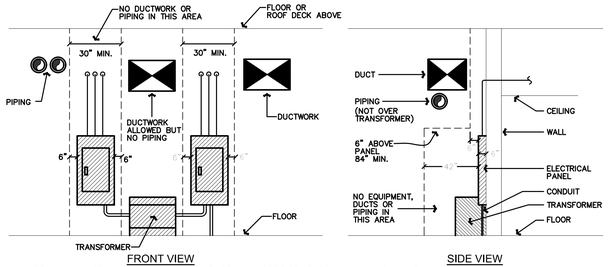


2 MIXING VALVE DETAIL

NO SCALE

NOTES

1. UNDERCOUNTER MIXING VALVE SHALL BE MOUNTED ON WALL IN FIXTURE KNEE-SPACE. LOCATION OF VALVE AND PIPING SHALL NOT INTERFERE WITH ANY ADA/HANDICAP KNEE-SPACE CLEARANCE REQUIREMENTS.
2. ALL PIPING SHALL BE CHROME PLATED CAST BRASS AND SHALL BE INSULATED BY TRUEBRO HANDI LAV-GUARD INSULATION KITS. INSULATION KITS SHALL COVER P-TRAP, MIXING VALVE, WATER STOPS, PIPING AND ALL SHARP EDGES (ONLY WHERE CABINETWORK KNEESPACE SCREEN NOT PROVIDED).
3. ALL CW AND HW CONNECTIONS SHALL HAVE COMPRESSION TYPE FITTINGS.
4. FOR ABOVE CEILING INSTALLATION, VALVE SHALL BE INSTALLED IN AN EASILY/READILY ACCESSIBLE LOCATION. SEE KITCHEN PLUMBING CONNECTION SCHEDULE FOR REQUIRED KITCHEN LOCATIONS.
5. LAVATORY MIXING VALVES SHALL HAVE AN OUTPUT ADJUSTMENT RANGE UP TO OR ABOVE 130°F.
   SINK MIXING VALVES SHALL HAVE AN OUTPUT ADJUSTMENT RANGE UP TO OR ABOVE 140°F.



1 MECHANICAL - ELECTRICAL COORDINATION DETAIL

NO SCALE

DO NOT INSTALL ANY PIPING BENEATH CVT BOXES. DO NOT INSTALL ANY PIPING (EXCEPT FIRE SPRINKLER PIPING AND OTHER PIPES SHOWN SPECIFICALLY ON THE PLUMBING FLOOR PLANS) OVER COMPUTER CLASSROOMS, BOOKROOMS, IDF/MDF/SERVER ROOMS OR OTHER ROOMS NOTED ON THE PLUMBING FLOOR PLANS.

ISSUE:

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03/11/2025	50% CD PKG.
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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT

SEAL

STATE OF TEXAS
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ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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PLUMBING SCHEDULES & DETAILS

u-P0.02

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STANTON ENGINEERING GROUP
INFORMATION-CHECKED | TEXAS ENG. FIRM REG. NO. F-01833 | (713) 300-6080 | 1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

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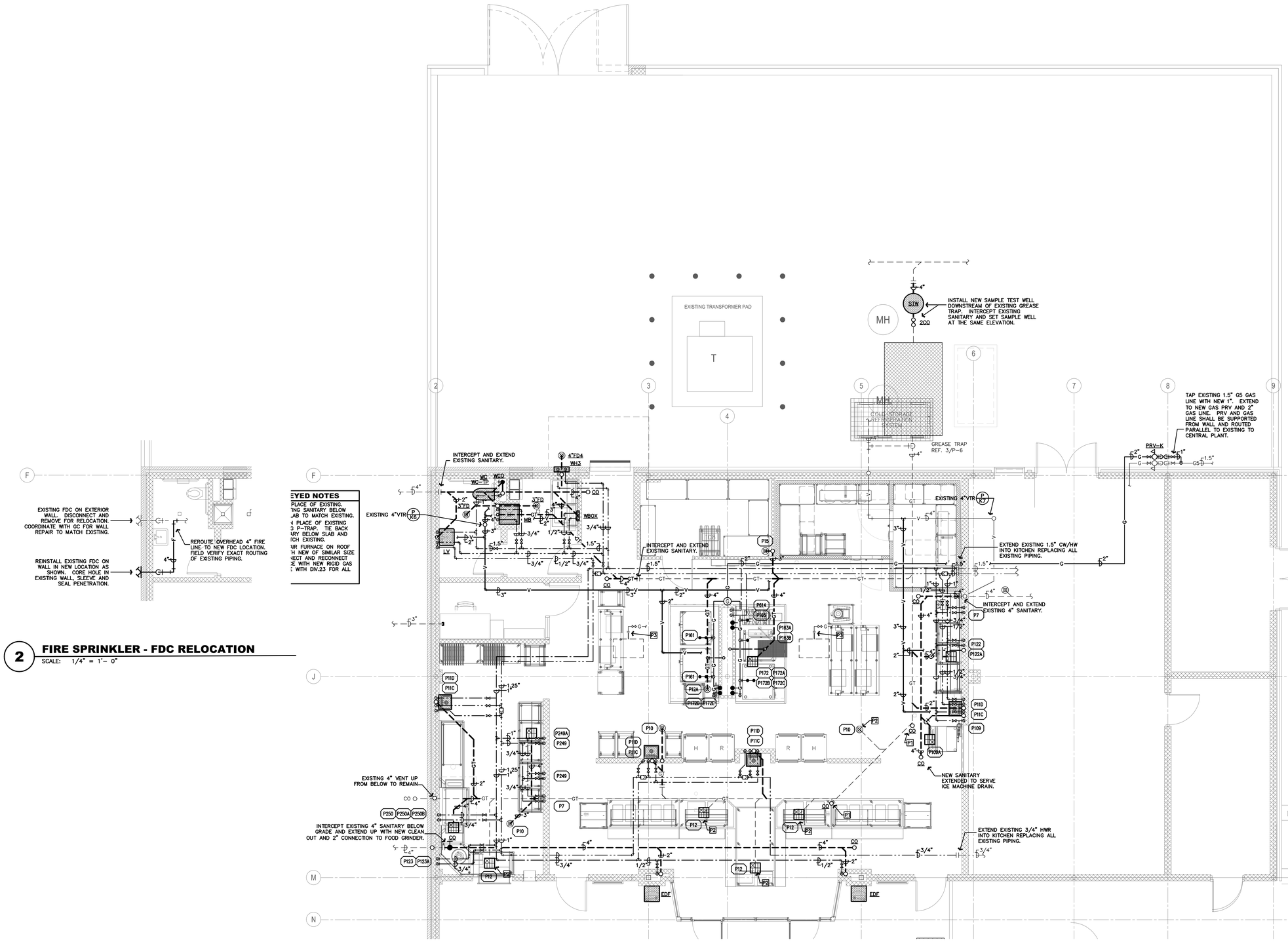

2 FIRE SPRINKLER - FDC RELOCATION
SCALE: 1/4" = 1'- 0"

1 PLUMBING RENOVATION FLOOR PLAN
SCALE: 1/4" = 1'- 0"

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FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILL ELEMENTARY SCHOOL
13707 JESS PIRTLE BLVD.
SUGAR LAND, TX 77498

SEAL

STATE OF TEXAS
TYLER W. HERRING
106052
LICENSED PROFESSIONAL ENGINEER
07.18.2025

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ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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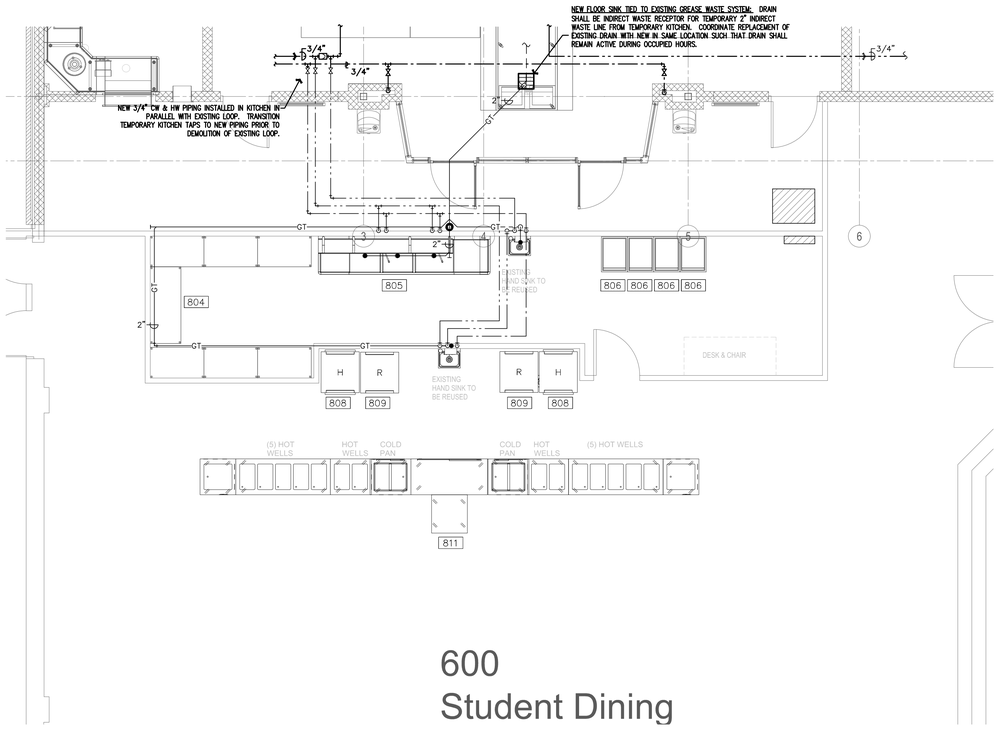
PLUMBING FLOOR PLAN
u-P1.01

STANTON ENGINEERING GROUP



600
Student Dining

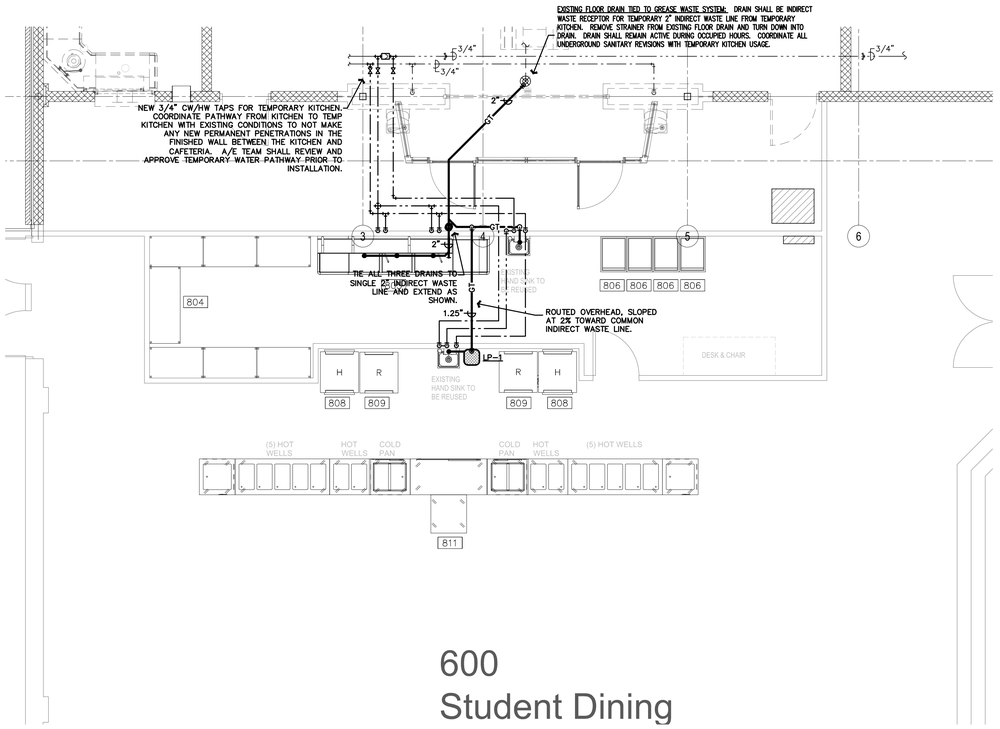
2 PLUMBING TEMPORARY KITCHEN PLAN - POST DEMO

SCALE: 1/4" = 1'-0"

NORTH

NOTES:

1. AFTER DEMOLITION OF EXISTING KITCHEN AND DURING CONSTRUCTION OF NEW KITCHEN, EXISTING TEMPORARY KITCHEN SHALL REMAIN ACTIVE.
2. ALL SANITARY, CW AND HW CONNECTIONS SHALL REMAIN ACTIVE DURING ALL TIMES WHEN TEMPORARY KITCHEN IS ACTIVE.
3. UPON COMPLETION OF NEW KITCHEN, EXISTING TEMPORARY KITCHEN SHALL BE DEMOLISHED AND ALL TEMPORARILY UTILITIES SHALL BE REMOVED AND TEMPORARY WATER TAPS CAPPED AT MAIN LINE TAP.
4. ALL DEMOLISHED LAVATORIES AND FAUCETS SHALL BE PERMITTED TO BE RELOCATED ACROSS TEMPORARY KITCHENS WITHIN THE PROJECT BASED ON AVAILABILITY/PROJECT PHASING SCHEDULE. AT THE END OF THE PROJECT, REMOVE FIXTURES AND OFFER TO OWNER AS SALVAGE. IF NOT ACCEPTED, ALL FIXTURES SHALL BE DISPOSED OF BY THE CONTRACTOR.



600
Student Dining

1 PLUMBING TEMPORARY KITCHEN PLAN - PRE DEMO

SCALE: 1/4" = 1'-0"

NORTH

NOTES:

1. BEFORE DEMOLITION OF THE EXISTING KITCHEN BEGINS, INSTALL ALL NEW PLUMBING FIXTURES AND UTILITIES FOR TEMPORARY KITCHEN.

STANTON ENGINEERING GROUP

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SEAL

STATE OF TEXAS
TYLER W. HERRING
106052
LICENSED PROFESSIONAL ENGINEER
07.18.2025

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ARCHITECTS AND PLANNING CONSULTANTS

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HOUSTON, TEXAS 77079

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PLUMBING FLOOR PLAN - TEMP KITCHEN

u-P1.02

TECHNOLOGY SYMBOLS & LEGEND

VOICE SYMBOLS

	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS PER LOCATION.
W	SINGLE VOICE OUTLET FOR WALL-MOUNTED PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.

VOICE/DATA SYMBOLS

	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF VOICE TERMINATIONS , Y = NUMBER OF DATA TERMINATIONS PER LOCATION.
	SINGLE VOICE & SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X Y	VOICE & DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF VOICE OUTLETS AND Y = NUMBER OF DATA OUTLETS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE VOICE OUTLET AND SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X Y	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X Y	VOICE OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF VOICE TERMINATIONS, Y = NUMBER OF DATA TERMINATIONS PER LOCATION.

DATA SYMBOLS

	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF DATA OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	DATA OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
W	SINGLE DATA OUTLET FOR WALL-MOUNTED IP PHONE, CABLE TYPE AS SPECIFIED, MOUNTED +52-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	DATA CABLE FOR COMPUTER ON WHEELS, CABLE TYPE AS SPECIFIED MOUNTED + 18-INCHES A.F.F UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
X	DATA CABLE FOR CEILING MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X	DATA CABLE FOR CEILING MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
	DATA CABLE FOR CEILING MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR CEILING MOUNTED AUDIO/VISUAL EQUIPMENT ENCLOSURE, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.
X	DATA CABLE FOR WALL MOUNTED PROJECTOR, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A BLUE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW. REFER TO AUDIO/VISUAL DRAWINGS PRIOR TO INSTALLATION.

FIBER OPTIC SYMBOLS

	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED. X = NUMBER OF CABLE TERMINATIONS PER LOCATION.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED, X = NUMBER OF CABLE TERMINATIONS PER LOCATION AS INDICATED.
	POWER/COMMUNICATIONS POLE WITH A SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
X	POWER/COMMUNICATIONS POLE WITH X = NUMBER OF FIBER OPTIC OUTLETS, CABLE TYPE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
	SINGLE FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
X	FIBER OPTIC OUTLET, CABLE TYPE AS SPECIFIED, TERMINATED IN FLOOR BOX/POKE -THRU AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION.

DATA SYMBOLS, CONT.

X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED VIDEO SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW, REFER TO SECURITY DRAWINGS PRIOR TO INSTALLATION.
X CAMW	DATA CABLE FOR INTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X CAME	DATA CABLE FOR EXTERIOR WALL MOUNTED SURVEILLANCE CAMERA, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A ORANGE ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPW	DATA CABLE FOR INTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.
X WAPE	DATA CABLE FOR EXTERIOR WALL MOUNTED WIRELESS ACCESS POINT, CABLE TYPE AS SPECIFIED WITH X = NUMBER OF CABLE TERMINATIONS PER LOCATION WITH 20-FEET OF SLACK NEATLY COILED AND STORED ON J-HOOK ABOVE ACCESSIBLE CEILING. PLACE A GREEN ADHESIVE DOT AND LABEL MIRRORING THE LABEL ON THE SURFACE MOUNTED BOX ON THE CEILING GRID DIRECTLY BELOW.

ROUGH-IN & MISC. SYMBOLS

R	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +18-INCHES A.F.F. UNLESS OTHERWISE NOTED.
R	ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED +6-INCHES ABOVE COUNTER OR BACKSPLASH UNLESS OTHERWISE NOTED.
R	POWER POLE WITH ROUGH-IN LOCATION, INFRASTRUCTURE AS SPECIFIED, MOUNTED AT 18" A.F.F. UNLESS OTHERWISE NOTED.
R	ROUGH-IN LOCATION. TERMINATED IN FLOOR BOX/POKE-THRU AS SPECIFIED.
WAP	WIRELESS ACCESS POINT. EQUIPMENT AS SPECIFIED.

CABLE PLANT & RISER DIAGRAM

	MAINTENANCE HOLE, SIZE & TYPE AS SPECIFIED.
	PULLBOX, SIZE AND TYPE AS SPECIFIED.
UGC	DIRECT BURIED COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
AER	AERIAL COMMUNICATIONS, CABLE TYPE AS SPECIFIED.
	CONDUIT, SIZE AND TYPE AS SPECIFIED.

GENERAL SYMBOLS

# SHEET — DRAWING TITLE SCALE: SCALE	DRAWING TITLE CALLOUT, # = DETAIL NUMBER.
# SHEET	DETAIL CALLOUT, # = DETAIL NUMBER.
# SHEET	SECTION CALLOUT, # = DETAIL NUMBER.
SHEET #	ELEVATION CALLOUT, # = DETAIL NUMBER.
#	KEYED NOTE, # = KEYED NOTE NUMBER.
#	REVISION TRIANGLE, # = REVISION NUMBER (PER SHEET).
TR (IDF XXX)	INDICATES TELECOMMUNICATIONS REGION

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
A.F.G.	ABOVE FINISHED GRADE
AER	AERIAL
DEMARC	DEMARCATION POINT
EMT	ELECTRIC METALLIC TUBE
F.O.C.	FIBER OPTIC CABLE
GIP	GALVANIZED IRON PIPE
HE	PAINTERCOM HEAD-END
IMC	INTERMEDIATE METAL CONDUIT
ISP	INSIDE CABLE PLANT
IDF	INTERMEDIATE DISTRIBUTION FRAME
MDF	MAIN DISTRIBUTION FRAME
MH	MAINTENANCE HOLE
MM	MULTIMODE
OSP	OUTSIDE CABLE PLANT
PB	PULLBOX
PR	PAIR
PVC	POLYVINYL CHLORIDE
RSC	RIGID STEEL CONDUIT
SM	SINGLE MODE
SP	SERVICE PROVIDER
STP	SHIELDED TWISTED PAIR
TB	TERMINAL BLOCK
TR	TELECOMMUNICATION REGION
UGC	UNDERGROUND COMMUNICATION
UON	UNLESS OTHERWISE NOTED
UTP	UNSHIELDED TWISTED PAIR

NOTES

1. CONTRACTOR SHALL REVIEW DRAWINGS AND SPECIFICATIONS THAT MAKE UP THE CONTRACT DOCUMENTS AND COMPLETE ALL WORK INCLUDED THEREIN.
2. SCALE OF TECHNOLOGY DRAWINGS IS PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER CABLE LENGTHS, SIZE OF PATHWAYS, DIMENSIONS, ETC.
3. TECHNOLOGY DRAWINGS SHALL BE USED TO COMPLEMENT THE WRITTEN SPECIFICATIONS.
4. ANY DISCREPANCY OR CONFLICT WITHIN OR BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT'S. DISCREPANCIES OR CONFLICTS NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGN CONSULTANT AND SUBSEQUENTLY CLARIFIED DURING THE BIDDING OF THE PROJECT WILL BE DEEMED TO HAVE BEEN BID OR PROPOSED IN THE MORE COSTLY OR DIFFICULT MANNER, AND THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE ARCHITECT'S/DESIGN CONSULTANT'S INTERPRETATION.

INDEX OF DRAWINGS

T000	TECHNOLOGY SYMBOLS & LEGEND
T0201	TECHNOLOGY DEMOLITION FLOOR PLAN
T200	TECHNOLOGY COMPOSITE FLOOR PLAN
T201	TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
T202	TECHNOLOGY TEMPORARY KITCHEN PLAN
T300	TECHNOLOGY ENLARGED VIEWS
T400	TECHNOLOGY TYPICAL DETAILS
T401	TECHNOLOGY TYPICAL DETAILS
T500	TECHNOLOGY TYPICAL DETAILS

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FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILL ELEMENTARY SCHOOL
3707 JESS PIRTLE BLVD.
SUGAR LAND, TX 77498

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ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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TECHNOLOGY SYMBOLS & LEGEND

SHEET NO.
T000

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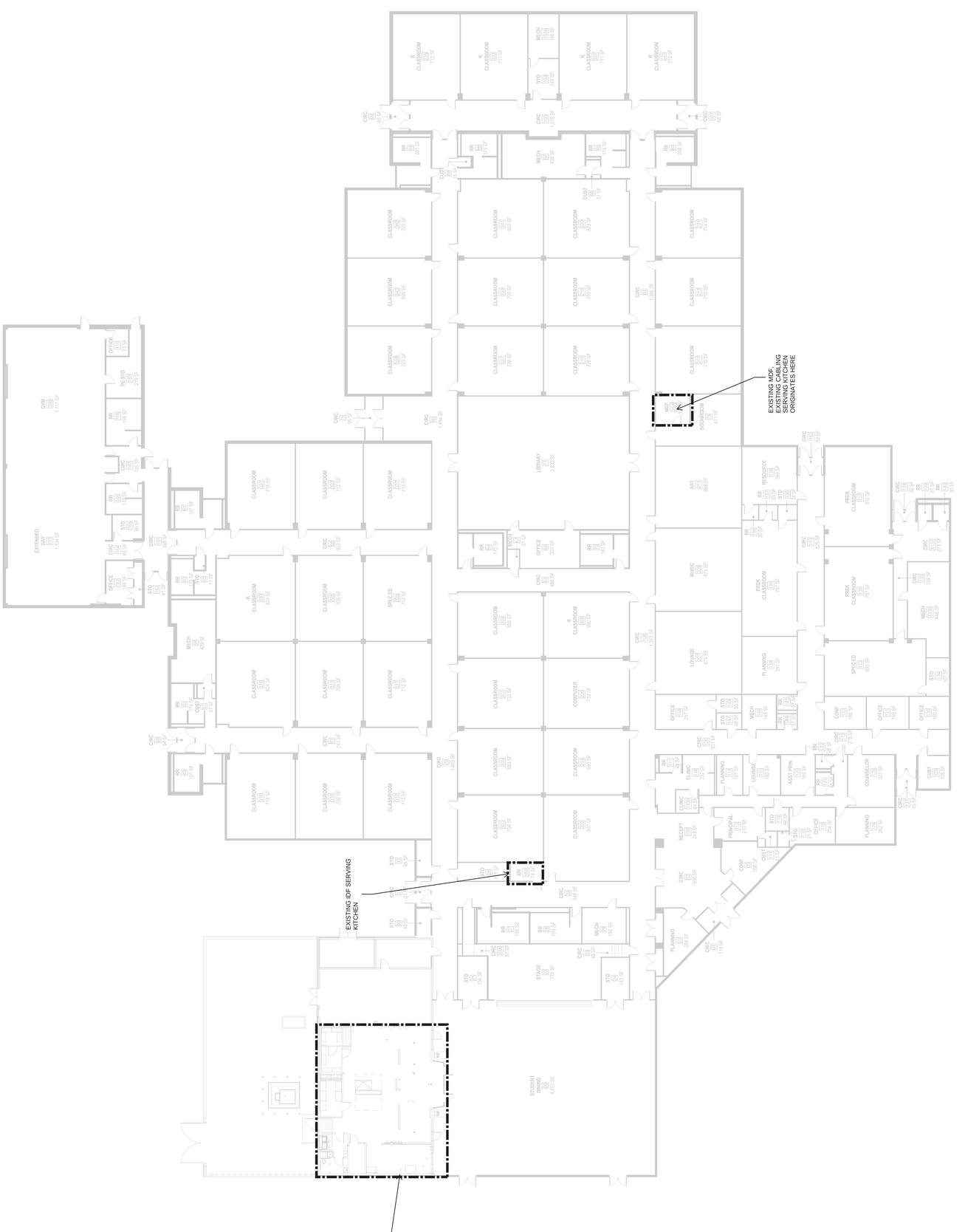
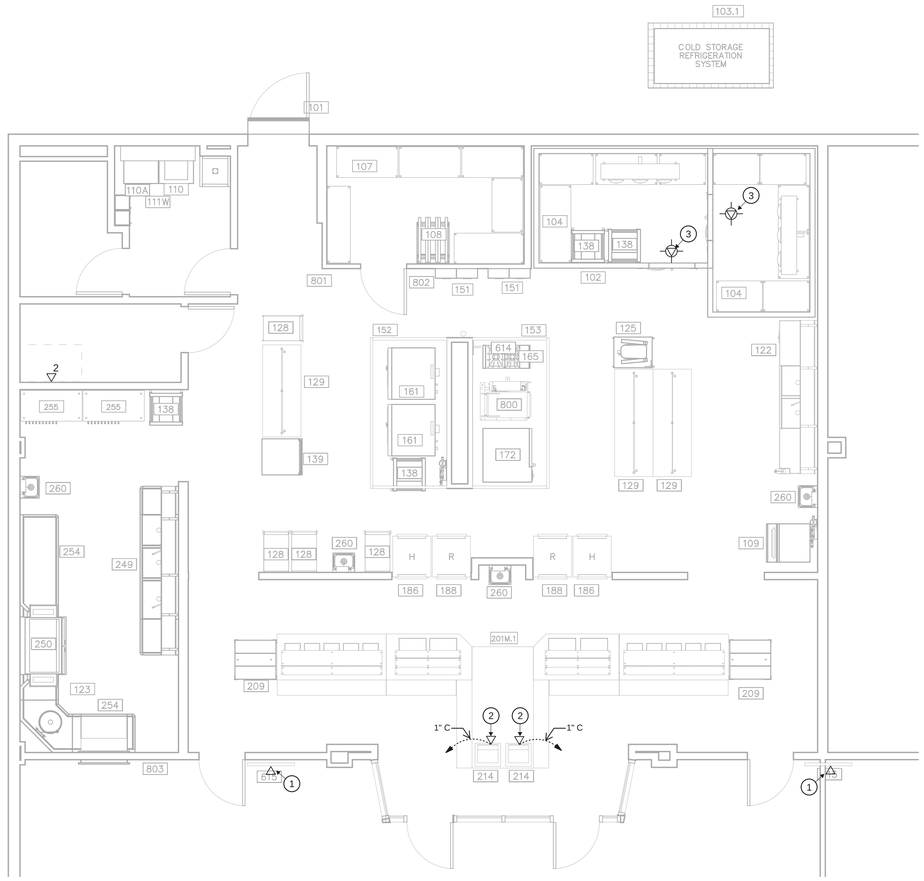
TECHNOLOGY COMPOSITE FLOOR PLAN
SHEET NO.
T200



1 T200 TECHNOLOGY COMPOSITE FLOOR PLAN
1/16" = 1'-0"



1 / T201 TECHNOLOGY NEW/RENOVATION KITCHEN PLAN
1/4" = 1'-0"

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TECHNOLOGY FLOOR PLANS GENERAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
2. ALL CONDUIT PATHWAYS, ROUGH-INS, BACKBOXES, FLOOR BOXES, CONDUIT SLEEVES, ETC. INDICATED ON THE TECHNOLOGY DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26.
3. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. TECHNOLOGY CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES / ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM.
14. ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE IN TYPE CEILING TO PREVENT THE CABLES FROM BEING EXPOSED, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE IN TYPE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. THE CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE MAIN CORRIDOR OR NEAREST MDF/IDF TO MINIMIZE THE CABLE LENGTH ENSURING THE CABLE LENGTH DOES NOT EXCEED 275 FEET. CONDUIT, CONNECTIONS, J-BOXES, SUSPENSION, AND ANY OTHER CONDUIT COMPONENTS EXPOSED TO VIEW IN PUBLIC SPACES SHALL BE ROUTED AND INSTALLED CAREFULLY TO MINIMIZE VISUAL IMPACT AND SHALL BE FULLY PAINTED TO MATCH UNLESS NOTED OTHERWISE.
15. CONDUIT(S) INSTALLED IN-SLAB OR UNDER-SLAB TO FLOOR BOXES, POKE-THURS, AND TO WORKAREA OUTLETS, ETC. SHALL BE INSTALLED WITH WET RATED CABLE(S).
16. NO GRID WIRE SHALL BE UTILIZED FOR SUPPORT. ONLY USE SOLID SUPPORTS (CLIPS, ALL-THREAD, ANCHORS, ETC.).

TECHNOLOGY PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

1. DATA CABLE FOR OWNER FURNISHED / OWNER INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.1.DATA CABLE FOR OWNER FURNISHED / OWNER INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.
2. INDOOR / OUTDOOR RATED DATA CABLE FOR POINT OF SALE LOCATION. PROVIDE (1) 1-INCH CONDUIT FOR DATA TO THE WALL BEHIND POINT OF SALE LOCATION AND UP WALL TO ABOVE ACCESSIBLE CEILING. CONDUITS SHALL TERMINATE INSIDE A DOUBLE GANG BOX THAT IS SECURED TO THE POINT OF SALE LOCATION. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.
3. DATA CABLE FOR TEMPERATURE MONITORING OF FREEZER COOLER. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS AND TERMINATION POINT AND CONNECTIVITY NEEDS IN FREEZER / COOLER CONTROL UNIT.
4. DATA CABLE FOR TEMPORARY POINT OF SALES CASH REGISTER. COORDINATE WITH OWNER, ARCHITECT, AND CONSULTANT FOR ROUTING OF CABLES TO POINT OF SALE CASH REGISTER PRIOR TO INSTALLATION

FBISD 2024 - 33 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILL ELEMENTARY SCHOOL
3707 JESS PIRTLE BLVD.
SUGAR LAND, TX 77498

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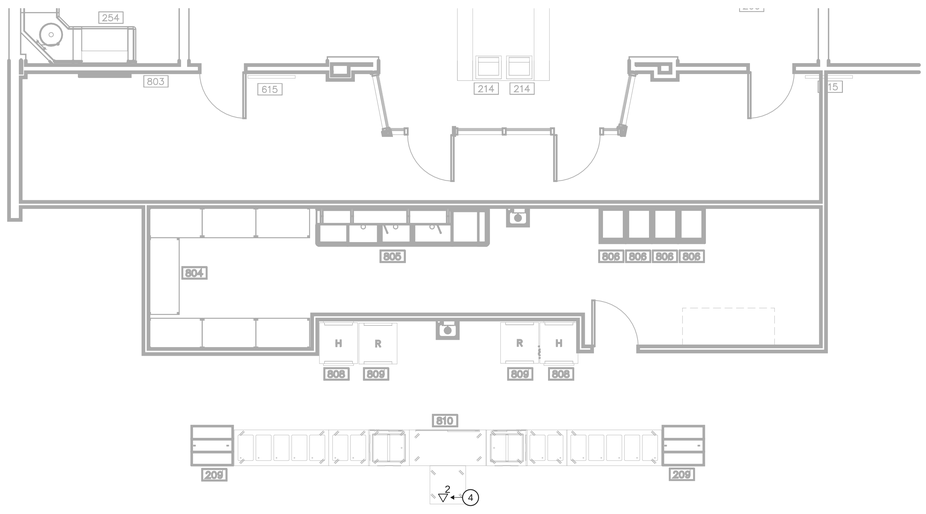
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 05/16/25

TECHNOLOGY
NEW/RENOVATION KITCHEN
PLAN

SHEET NO.
T201



1 T202 TECHNOLOGY TEMPORARY KITCHEN FLOOR PLAN
1/4" = 1'-0"

TECHNOLOGY FLOOR PLANS GENERAL NOTES:

1. THE TECHNOLOGY REGION / WIRING BOUNDARIES ARE IDENTIFIED ON THE OVERALL SHEETS ONLY AND NOT ON THE ENLARGED SHEETS. CONTRACTOR SHALL REFER TO THE OVERALL SHEETS FOR ALL TECHNOLOGY REGIONS / WIRING BOUNDARIES.
2. ALL CONDUIT PATHWAYS, ROUGH-INS, BACKBOXES, FLOOR BOXES, CONDUIT SLEEVES, ETC. INDICATED ON THE TECHNOLOGY DRAWINGS ARE TO BE PROVIDED AND INSTALLED BY DIVISION 26.
3. ALL POWER INDICATED ON THE TECHNOLOGY DRAWINGS IS TO BE PROVIDED AND INSTALLED BY DIVISION 26.
4. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH FIRE RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING BACK TO THE ORIGINAL RATING.
5. CONTRACTOR SHALL RESTORE ALL PENETRATIONS PROVIDED THROUGH NON-RATED WALLS/STRUCTURES FOR TECHNOLOGY CABLING FOR SOUND TO REDUCE NOISE TRAVELING THROUGH PENETRATIONS.
6. TECHNOLOGY CABLING SHALL BE ROUTED IN SEPARATE PATHWAYS IN J-HOOKS, CONDUITS, CONDUIT SLEEVES, CORES, ETC. THROUGHOUT THE ENTIRE PATHWAY. DIFFERENT MEDIA TYPES (DATA, VIDEO, SECURITY, ETC.) SHALL NOT SHARE THE SAME J-HOOK, CONDUIT, CONDUIT SLEEVE, CORE, ETC.
7. UNLESS NOTED OTHERWISE, ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE AN ACCESSIBLE CEILING (AN OPEN CEILING OR CLOUD TYPE CEILING IS NOT CONSIDERED AN ACCESSIBLE CEILING) IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF / IDF ROOM TO MINIMIZE THE CABLE LENGTH ENSURING CABLE LENGTH DOES NOT EXCEED 275 FEET.
8. UNLESS NOTED OTHERWISE ALL CONDUITS SHALL BE HOMERUN FROM THE DEVICE LOCATION AND NO DAISY CHAINING OF DEVICES / ROUGH-INS SHALL BE ALLOWED.
9. CONDUIT SEGMENTS SHALL BE NO MORE THAN 100-FEET IN LENGTH WITH NO MORE THAN THE EQUIVALENT OF (2) 90 DEGREE BENDS BETWEEN PULLING POINTS.
10. CONDUITS SHALL MAINTAIN A BEND RADIUS OF 6 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS 2-INCHES OR SMALLER AND 10 TIMES THE DIAMETER OF THE CONDUIT FOR CONDUITS GREATER THAN 2-INCHES.
11. ALL CONDUITS SHALL HAVE A PULL STRING INSTALLED FOR PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
12. ALL SPARE CONDUITS OR CONDUITS FILLED WITH LESS THAN THE MAXIMUM ALLOWED FILL RATIO SHALL HAVE A PULL STRING INSTALLED AND LEFT FOR FUTURE PULLING OF CABLE. CLEARLY LABEL AS "PULL STRING" INDICATING OPPOSITE END LOCATION.
13. EQUIPMENT NOT RELATED TO THE SUPPORT OF THE TELECOMMUNICATIONS ROOM (E.G., PIPING, DUCTWORK, PNEUMATIC TUBING) SHALL NOT BE INSTALLED IN, PASS THROUGH, OR ENTER THE TELECOMMUNICATIONS ROOM.
14. ALL CONDUITS FOR TECHNOLOGY DEVICES SHALL ROUTE FROM THE DEVICE LOCATION AND TERMINATE ABOVE A LAY- IN TYPE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE A LAY-IN TYPE CEILING TO PREVENT THE CABLES FROM BEING EXPOSED, THE CONDUIT SHALL ROUTE TO THE NEAREST LAY-IN TYPE CEILING OFF A MAIN CORRIDOR OR NEAREST MDF/IDF. THE CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE MAIN CORRIDOR OR NEAREST MDF/IDF TO MINIMIZE THE CABLE LENGTH ENSURING THE CABLE LENGTH DOES NOT EXCEED 275 FEET. CONDUIT, CONNECTIONS, J-BOXES, SUSPENSION, ANCHORAGES, AND OTHER CONDUIT COMPONENTS EXPOSED TO VIEW IN PUBLIC SPACES SHALL BE ROUTED AND INSTALLED CAREFULLY TO MINIMIZE VISUAL IMPACT AND SHALL BE FULLY PAINTED TO MATCH UNLESS NOTED OTHERWISE.
15. CONDUIT(S) INSTALLED IN-SLAB OR UNDER-SLAB TO FLOOR BOXES, POKE-THURS, AND TO WORKAREA OUTLETS, ETC. SHALL BE INSTALLED WITH WET RATED CABLE(S).
16. NO GRID WIRE SHALL BE UTILIZED FOR SUPPORTS ONLY USE SOLID SUPPORTS (CLIPS, ALL-THREAD, ANCHORS, ETC.).

TECHNOLOGY PLAN KEYED NOTES

NOT ALL KEYED BELOW APPLY TO THIS SHEET

(1) DATA CABLE FOR OWNER FURNISHED / OWNER INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.1.DATA CABLE FOR OWNER FURNISHED / OWNER INSTALLED MENU BOARD. REFERENCE ARCHITECTURAL AND FOOD SERVICE DRAWINGS FOR MOUNTING HEIGHT AND ADDITIONAL INFORMATION. BUILDING POWER ADJACENT TO DATA RECEPTACLE IS REQUIRED.

(2) INDOOR / OUTDOOR RATED DATA CABLE FOR POINT OF SALE LOCATION. PROVIDE (1) 1-INCH CONDUIT FOR DATA TO THE WALL BEHIND POINT OF SALE LOCATION AND UP WALL TO ABOVE ACCESSIBLE CEILING. CONDUITS SHALL TERMINATE INSIDE A DOUBLE GANG BOX THAT IS SECURED TO THE POINT OF SALE LOCATION. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS.

(3) DATA CABLE FOR TEMPERATURE MONITORING OF FREEZER COOLER. REFER TO FOOD SERVICE / KITCHEN DRAWINGS FOR EXACT LOCATION AND CONDUIT ROUGH-IN REQUIREMENTS AND TERMINATION POINT AND CONNECTIVITY NEEDS IN FREEZER / COOLER CONTROL UNIT.

(4) DATA CABLE FOR TEMPORARY POINT OF SALES CASH REGISTER. COORDINATE WITH OWNER, ARCHITECT, AND CONSULTANT FOR ROUTING OF CABLES TO POINT OF SALE CASH REGISTER PRIOR TO INSTALLATION

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12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILL ELEMENTARY SCHOOL
3707 JESS PIRTLE BLVD.
SUGAR LAND, TX 77498

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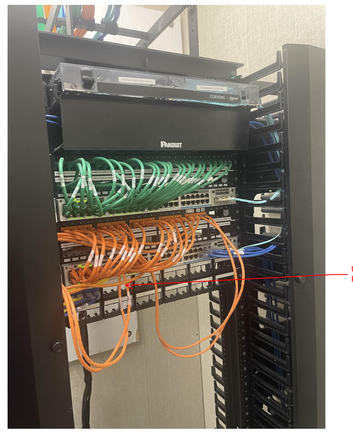
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 05/16/25

TECHNOLOGY TEMPORARY KITCHEN PLAN

SHEET NO.
T202



1 / T300 SUGAR MILL ES EXISTING IDF RACK
NTS

ISSUE:

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03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.

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CONSULTANTS
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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 05/16/25

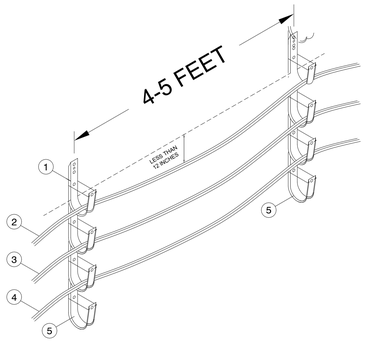
TECHNOLOGY ENLARGED VIEWS

SHEET NO.
T300

NOTE TO CONTRACTOR:

UNLESS OTHERWISE NOTED, LOW VOLTAGE CABLING SHALL BE INSTALLED WITHIN 6-INCHES OF THE CEILING AND ACCESSIBLE BY A TECHNICIAN ON A STANDARD A-FRAME LADDER.

CONTRACTOR SHALL MAINTAIN AT LEAST 6-INCHES OF SEPRATION BETWEEN CABLING BUNDLES AND MECHANICAL DUCTWORKS, EQUIPMENT, PIPIING OR OTHER SYSTEMS IN THE CEILING PLENUM.

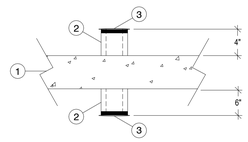


KEYED NOTES:

1. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
2. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
3. A/V CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. SECURITY CABLE ABOVE ACCESSIBLE CEILING (BY DIV 28).
5. SPARE J-HOOK (BY DIV 27).

1 T400 TYPICAL J-HOOK CABLE PATHWAY

SCALE: N.T.S.

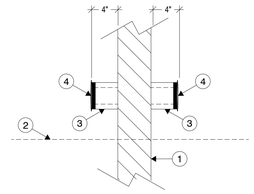


KEYED NOTES:

1. SCHEDULED FLOOR OR DECK.
2. CONDUIT SLEEVE (BY DIV 26).
3. NYLON BUSHING (BY DIV 26).

2 T400 TYPICAL CONDUIT SLEEVE THROUGH FLOOR OR DECK DETAIL

SCALE: N.T.S.

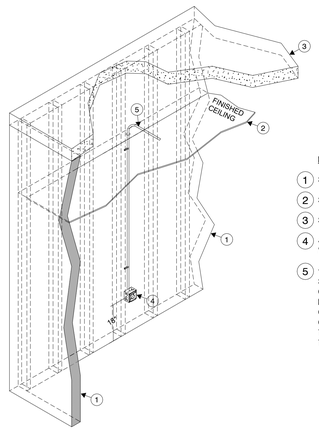


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. CONDUIT SLEEVE (BY DIV 26).
4. NYLON BUSHING (BY DIV 26).

3 T400 TYPICAL CONDUIT SLEEVE GOING THROUGH WALL

SCALE: N.T.S.

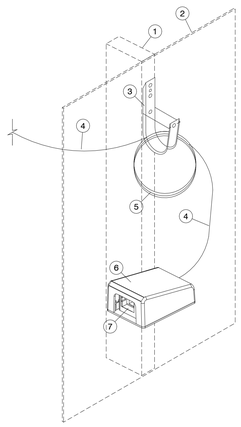


KEYED NOTES:

1. SCHEDULED WALL.
2. SCHEDULED CEILING.
3. SCHEDULED DECK ABOVE.
4. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX WITH DOUBLE GANG PLASTER RING (BY DIV 26).
5. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH. (BY DIV 26).

4 T400 TYPICAL TECHNOLOGY CONDUIT ROUGH-IN

SCALE: N.T.S.

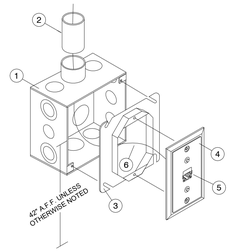


KEYED NOTES:

1. SCHEDULED STUD.
2. SCHEDULED WALL.
3. J-HOOK WITH RETAINER CLIP ABOVE ACCESSIBLE CEILING (BY DIV 27).
4. DATA CABLE ABOVE ACCESSIBLE CEILING (BY DIV 27).
5. 20 FOOT SERVICE LOOP ABOVE ACCESSIBLE CEILING NEATLY COILED AND SECURED TO J-HOOK (BY DIV 27).
6. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BUILDING STRUCTURE (BY DIV 27).
7. DATA INSERT (BY DIV 27).

5 T400 TYPICAL ABOVE CEILING SINGLE DATA OUTLET (WALL MOUNTED)

SCALE: N.T.S.

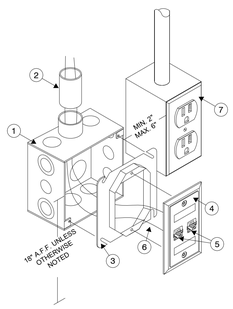


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH PHONE STUDS (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).

6 T400 TYPICAL WALL PHONE OUTLET CONFIGURATION

SCALE: N.T.S.

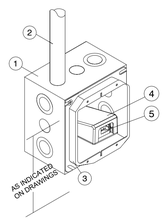


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

7 T400 TYPICAL DUAL DATA OUTLET CONFIGURATION

SCALE: N.T.S.

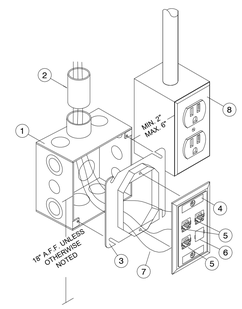


KEYED NOTES:

1. 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. DOUBLE GANG PLASTER RING (BY DIV 26).
4. SURFACE MOUNT BOX INSIDE THE 4 11/16-INCH X 4 11/16-INCH X 2 1/8-INCH DOUBLE GANG BOX (BY DIV 27).
5. RJ-45 INSERT (BY DIV 27).

8 T400 TYPICAL WALL-MOUNTED WIRELESS ACCESS POINT

SCALE: N.T.S.



KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

9 T400 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.

ISSUE:

12/05/2024	DD PACKAGE
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FBISD PKG 13 KITCHEN RENOVATIONS
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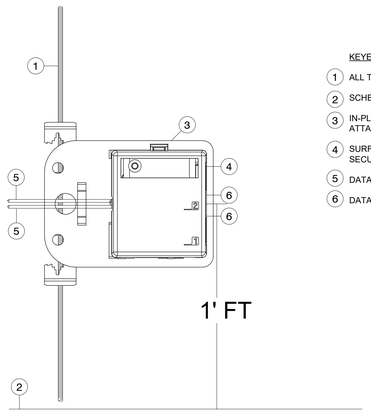
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 05/16/25

TECHNOLOGY TYPICAL DETAILS

SHEET NO.
T400

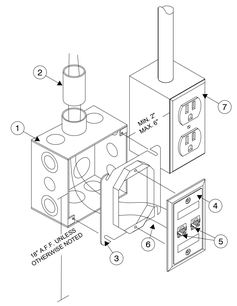


KEYED NOTES:

1. ALL THREAD TO BUILDING STRUCTURE (BY DIV. 27)
2. SCHEDULING CEILING
3. IN-PLENUM CEILING BRACKET PN 49223-CBC ATTACHED TO ALL THREAD (BY DIV. 27)
4. SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING SECURED TO BRACKET (BY DIV. 27)
5. DATA CABLE (BY DIV. 27)
6. DATA INSERT (BY DIV. 27)

1 T401 TYPICAL ABOVE CEILING DATA OUTLET

SCALE: N.T.S.

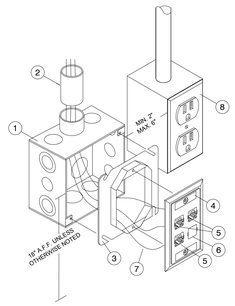


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

2 T401 TYPICAL COW DATA OUTLET CONFIGURATION

SCALE: N.T.S.

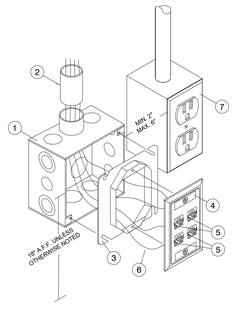


KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. BLANK INSERT (BY DIV 27).
7. CABLE AS SPECIFIED (BY DIV 27).
8. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

3 T401 TYPICAL THREE DATA OUTLET CONFIGURATION

SCALE: N.T.S.



KEYED NOTES:

1. 4 11/16-INCH x 4 11/16-INCH x 2 1/8-INCH RECESSED DOUBLE GANG BOX (BY DIV 26).
2. 1-INCH EMT CONDUIT FROM DOUBLE GANG BOX WITH 200 LBS PULL STRING AND NYLON BUSHING STUBBED OUT ABOVE ACCESSIBLE CEILING IN THE SAME ROOM WHERE THE DEVICE IS LOCATED. IF THE ROOM WHERE THE DEVICE IS LOCATED DOES NOT HAVE AN ACCESSIBLE CEILING, THE CONDUIT SHALL ROUTE TO THE NEAREST ACCESSIBLE CEILING OFF OF A MAIN CORRIDOR. CONDUIT PATHWAY SHALL TAKE THE SHORTEST ROUTE TO THE APPLICABLE MDF/IDF ROOM TO MINIMIZE THE CABLE LENGTH (BY DIV 26).
3. SINGLE GANG REDUCER RING (BY DIV 26).
4. SINGLE GANG WALL PLATE WITH DESIGNATION IN WINDOW (BY DIV 27).
5. DATA INSERT (BY DIV 27).
6. CABLE AS SPECIFIED (BY DIV 27).
7. ELECTRICAL RECEPTACLE, GANG BOX AND CONDUIT SHOWN FOR REFERENCE ONLY (REFER TO DIV 26).

4 T401 TYPICAL FOUR DATA OUTLET CONFIGURATION

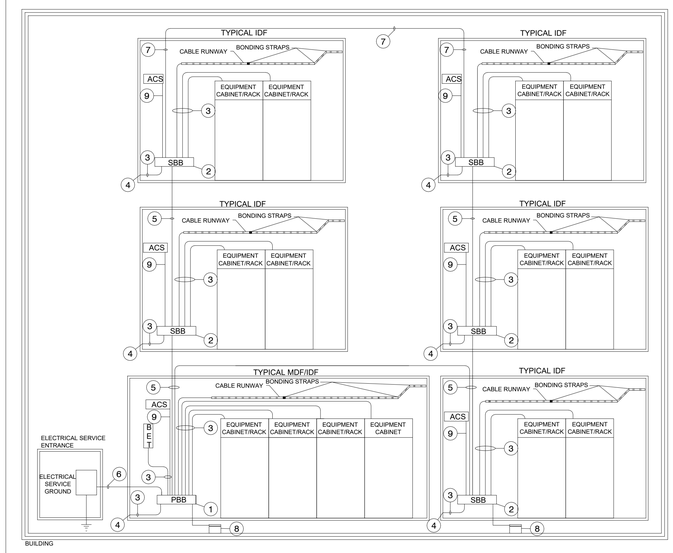
SCALE: N.T.S.

TBB/GE CONDUCTOR SIZING	
LENGTH IN LINEAR M (FT)	SIZE (AWG)
LESS THAN 4 (13)	6
4 - 6 (14-20)	4
6 - 8 (21 - 26)	3
8 - 10 (27 - 33)	2
10 - 13 (34 - 41)	1
13 - 16 (42 - 52)	1/0
16 - 20 (53 - 66)	2/0
20 - 26 (67 - 84)	3/0
26 - 32 (85 - 105)	4/0
32 - 38 (106 - 125)	250 kcmil
38 - 46 (126 - 150)	300 kcmil
46 - 53 (151 - 175)	350 kcmil
53 - 76 (176 - 250)	500 kcmil
76 - 91 (251 - 300)	600 kcmil
GREATER THAN 91 (301)	750 kcmil

ROUTE THE TBB TO EACH TGB IN AS STRAIGHT A PATH AS POSSIBLE. THE TBB SHOULD BE INSTALLED AS A CONTINUOUS CONDUCTOR, AVOIDING SPLICES WHERE POSSIBLE.

5 T401 TBB CONDUCTOR SIZING

SCALE: N.T.S.

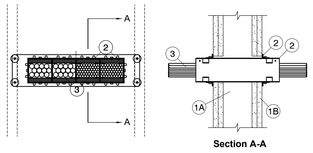


1. TELECOMMUNICATIONS MAIN GROUNDING BUS BAR (PBB)(BY DIV. 27)
2. TELECOMMUNICATIONS GROUNDING BUS BAR (SBB)(BY DIV 27)
3. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 27)
4. CONNECT TO GROUNDED BUILDING STEEL WHEN EXPOSED IN ROOM.
5. TELECOMMUNICATIONS BONDING BACKBONE (TBB). REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS (BY DIV 26)
6. TELECOMMUNICATIONS BONDING CONDUCTOR (TBC). BY ELECTRICAL CONTRACTOR.REFER TO CONDUCTOR SIZING CHART FOR EXACT SIZE REQUIREMENTS.
7. GROUNDING EQUALIZER CONDUCTOR (GEC)(BY DIV 26)
8. BOUND WITH GROUDING COLLARS TO EACH CONTINUOUS CONDUIT THAT ENTERS THE TELECOM ROOM. (BY DIV 26).
9. BOND TO EACH ACCESS CONTROL PANEL AND OTHER SECURITY PANELS IN HE TELECOM ROOM. (BY DIV 27)

6 T401 TYPICAL GROUNDING DIAGRAM

SCALE: N.T.S.

System No. W-L-3218
F Ratings - 1, 2, 3 and 4 Hr (See Items 1 and 3)
T Ratings - 3/4 and 1 Hr (See Item 3)
L Rating At Ambient - Less Than 1, 1.3, 4 or 7 CFM (See Item 3)
L Rating At 400 F - Less Than 1, 2 or 3 CFM (See Item 3)



Section A-A

1. Wall Assembly - The 1, 2, 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described within the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall incorporate the following construction features:
   A. Studs - Wall framing shall consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced max 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
   B. Gypsum Board* - Thickness, type, number of layers and fasteners as specified in the individual Wall and Partition Design. Opening in gypsum board to be max 1/4 in. (6 mm) larger then width and height dimensions of firestop device(s).

   The hourly F Rating of the firestop system is dependent upon the hourly rating of the wall in which it is installed.
2. Firestop Device* - One, two, three, four or seven firestop device modules ganged together. Each firestop device module consists of a 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long galv steel tube with an intumescent material lining. Firestop device modules to be installed in accordance with the accompanying installation instructions. The space between the firestop device module(s) and the periphery of the opening shall be min 0 in. (0 mm, point contact) to max 1/8 in. (3.2 mm). In round openings, the space between the firestop device and the periphery of the opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). Firestop device module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device by means of steel set screws provided with device. Each four- and seven-gang steel wall plate shall be fastened to the studs with steel screws sized to extend through the gypsum board layers and penetrate 1/2 in. (13 mm) into the framing member. Each firestop device module is to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   As an alternate, the four- and seven-gang steel wall plates may be installed directly against the studs for walls having 16 and 24 in. (406 and 610 mm) center-to-center stud spacing, respectively, prior to installation of the gypsum board layers. The steel wall plates shall be secured to the stud by means of steel screws. After installation of the steel wall plates and firestop device modules, the gypsum board shall be installed as specified in the individual U300 or U400 Design with a maximum 1/8 in. (3.2 mm) gap between the firestop device module and the cutout in the gypsum board. Gap between the firestop device module and the cutout in the gypsum board may be filled with gypsum joint compound or fill material (Item 4).

   SPECIFIED TECHNOLOGIES INC - EZ PATH Series 33 Fire Rated Pathway

2A. Firestop Device* - Extension Module - (Optional, Not Shown) - Module attached to ends of 3 by 3 by 10-1/2 in. (76 by 76 by 267 mm) long firestop device (Item 3) to increase its length to facilitate installation in thicker walls. Each module consists of a 3 by 3 by 6 in. (76 by 76 by 152 mm) long galv steel tube with an intumescent material lining. Extension module to be installed in accordance with the accompanying installation instructions. When module is used, firestop device (Item 2) and extension module(s) secured in place by means of steel wall plates installed with gasketing material supplied with product. Steel wall plates installed on both sides of wall and secured to each device or extension module(s) by means of steel set screws provided with wall plates. Firestop device and extension module(s) assembly to be installed with ends projecting an equal distance beyond each surface of the wall assembly.

   SPECIFIED TECHNOLOGIES INC - EZ PATH Extension

3. Cables - Within the loading area for each firestop device module, the cables may represent a 0 to 100 percent visual fill. Cable fill to be distributed at a uniform height across the width of the firestop device module. Cables to be rigidly supported on both sides of the wall assembly. Any combination of the following types of cables may be used:
   A. Max 400 pair No. 24 AWG (or smaller) copper conductor telecommunication cable with polyvinyl chloride (PVC) jacketing and insulation.
   B. Max 350 kcmil single copper conductor power cable with XLPE jacket and insulation
   C. Max 7/C No. 12 AWG copper conductor control cable with PVC or XLPE jacket and insulation.
   D. Max 3/C No. 10 AWG metal clad or armored cable with steel or aluminum jacket.
   E. Max 3/C No. 8 AWG NM cable (Romex) with PVC insulation and jacket.
   F. Max four pair No. 22 AWG (or smaller) copper conductor data cable with PVC or plenum rated jacketing and insulation.
   G. Max RG/U coaxial cable with fluorinated ethylene insulation and jacketing.
   H. Fiber optic cable with PVC or polyethylene (PE) jacket and insulation having a max diam of 5/8 in. (16 mm).
   I. Optical Fiber Raceway+ - Max 1-1/2 in. (38 mm) diam (or smaller) optical fiber raceway ("innerduct") formed of either PVC or polyvinylidene fluoride (PVDF) with optical fiber cable fill. Raceways installed in accordance with the National Electrical Code (NFPA 70).

   When the hourly rating of the wall assembly is 1 hr, the T Rating is 3/4 hr. When the hourly fire rating of the wall assembly is greater than 1 hr, the T Rating is 3/4 hr when Item 3A, 3B, 3C, 3D or 3E is used. Otherwise the T Rating is 1 hr. When Item 3A, 3B, 3C, 3D or 3E is used, the maximum F Rating is 2 hr. When max 200 pair No. 24 AWG telecommunication cable is used or when Item 3F, 3G, 3H or 3I is used, the maximum F Rating is 4 hr.

   The L Rating for each empty firestop device module is less than 1 cfm at ambient and at 400F. When Item 3A is used, the L Rating for each firestop device module with 100 percent visual fill is 4 cfm at ambient and 3 cfm at 400F. When Item 3F is used, the L Rating for each firestop device module with 100 percent visual fill is 1.3 cfm at ambient and 1 cfm at 400F. When Item 3G or 3H is used, the L Rating for each firestop device module with 100 percent visual fill is 7 cfm at ambient and 2 cfm at 400F.
4. Fill, Void or Cavity Material* - Sealant or Putty - (Not Shown) - As an alternate to gypsum joint compound, the gap between the firestop device module and the cutout in the gypsum board may be sealed with fill material on each side of the wall assembly when four- and seven-gang steel wall plates are installed directly against the wood or steel studs.

   SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant, SpecSeal LCI Sealant, SpecSeal Putty

   *Bearing the UL Classification Mark

7 T401 TYPICAL STI EZ-PATH SLEEVE DETAIL

SCALE: N.T.S.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SUGAR MILL ELEMENTARY SCHOOL
3707 JESS PIRTLE BLVD.
SUGAR LAND, TX 77498

SEAL

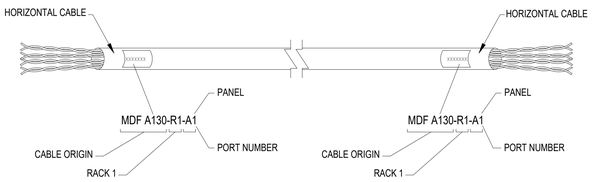
FOR
INTERIM REVIEW
AND NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

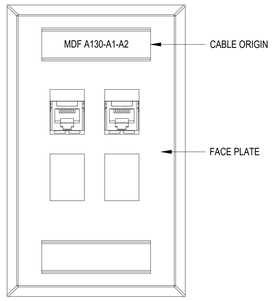
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

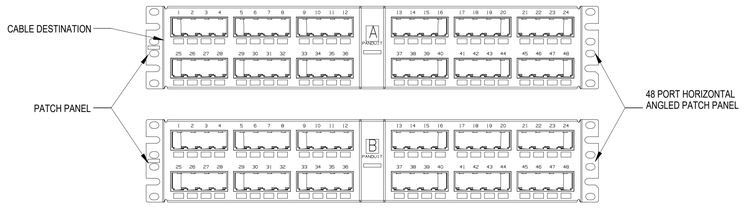
PROJ. NO.: 23-25
DATE: 05/16/25

TECHNOLOGY TYPICAL DETAILS

SHEET NO.
T401

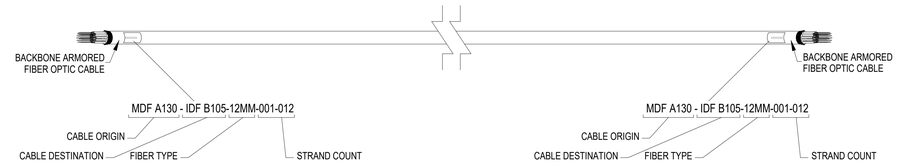


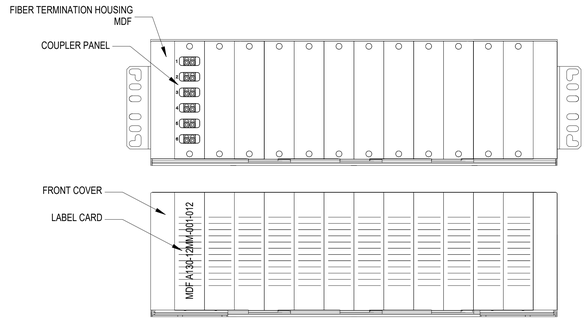




1 T500 TYPICAL HORIZONTAL DATA CABLE LABELING SCHEME

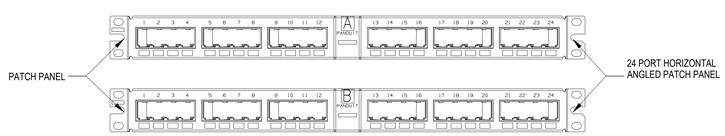
SCALE: N.T.S.





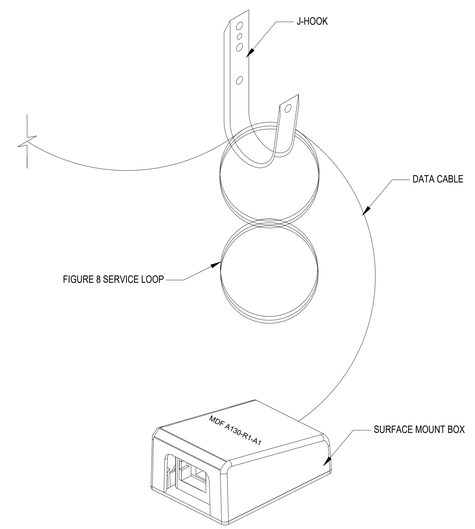
2 T500 TYPICAL FIBER BACKBONE LABELING SCHEME

SCALE: N.T.S.



3 T500 TYPICAL COPPER BACKBONE LABELING SCHEME

SCALE: N.T.S.



4 T500 ABOVE ASSESSIBLE CEILING LABELING SCHEME

SCALE: N.T.S.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/16/2025	90% CD PKG.

FBISD PKG 13 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
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HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 05/16/25

TECHNOLOGY TYPICAL
DETAILS

SHEET NO.
T500

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- A## V## — AV WALL ROUGH-IN WITH DATA
- # — KEYNOTE
- C — Proposed Camera Direction — SURVEILLANCE CAMERA
- #-## — Camera Schedule Number (Floor #-Camera #) — Camera (N)ew, (E)xisting Rough-in, (D)emo
- C — Proposed Camera Direction — PTZ CAMERA
- #-## — PTZ
- C — Proposed Camera Direction — FIXED SURVEILLANCE CAMERA
- #-##
- C — 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Approximate view of lens
- Lens View Angle
- ##° — #mm — C — 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Lens size
- C M — MICROPHONE WITH AUDIO LINKED TO CAMERA
- C CR — CARD READER LINKED TO CAMERA
- SYMBOL TAG — CR # — (#) = DIFFERENT TYPES OF CARD READERS: M = MULLION; W = WIRELESS (Proprietary); Wi = Wi-Fi (802.11); POE = POWER OVER ETHERNET
- SYMBOL TAG — KP # — (#) = DIFFERENT TYPES OF CARD READERS: TS = TOUCHSCREEN; PU = PUSH BUTTON
- TOP = DETAIL NUMBER
- # / #### — DETAIL REFERENCE
- BOTTOM = SHEET NUMBER
- NORTH ARROW
- SHEET NUMBER
- # / #### — SECTION MARKER
- DETAIL NUMBER
- DIRECTION OF ELEVATION
- # / #### — ELEVATION MARKER
- SHEET NUMBER
- DETAIL NUMBER
- DIRECTION OF ELEVATION
- SHEET NUMBER
- # / #### — DIRECTION OF ELEVATION
- DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Sugar Mill Elementary School
13707 Jess Pirtle Blvd, Sugar Land, TX 77498

SEAL

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Bicsi
Brian C Porter
BICSI ID # 258557
EXPIRES 10-31-27
RCDD

07-18-25

MVA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07-18-25
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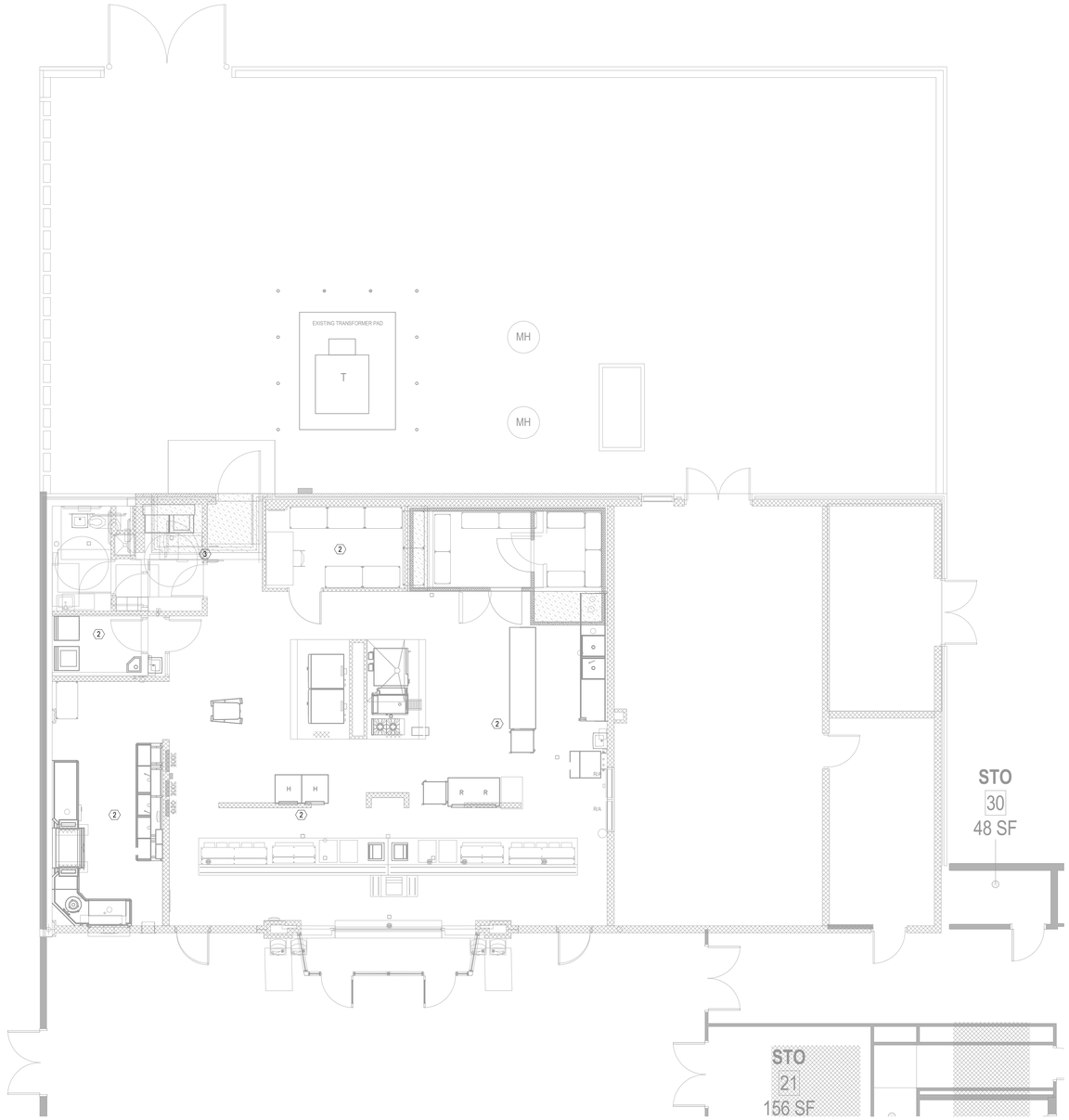
TECHNOLOGY - TITLE SHEET

u-TN000

DEMO KEYNOTES

1. REMOVE, AND PROTECT DURING CONSTRUCTION, INSTALL IN EXISTING LOCATION AFTER NEW ACT GRID IS IN PLACE.
2. DEVICES IN ACT ARE TO BE REMOVED AND PROTECTED DURING CONSTRUCTION AND REINSTALLED IN THE SAME LOCATION AFTER THE NEW CEILING GRID IS IN PLACE. DECIVES INCLUDE: SPEAKERS, ACCESS POINTS AND INTRUSION MOTION DETECTORS.
3. EXISTING CARD READER, DOOR CONTACT, & REX (REQUEST TO EXIT) TO BE DEMOLISHED, REMOVE DEVICES AND PROTECT WIREING.



1 SUGAR MILL - DEMO PLAN
SCALE: 3/16" = 1'-0"

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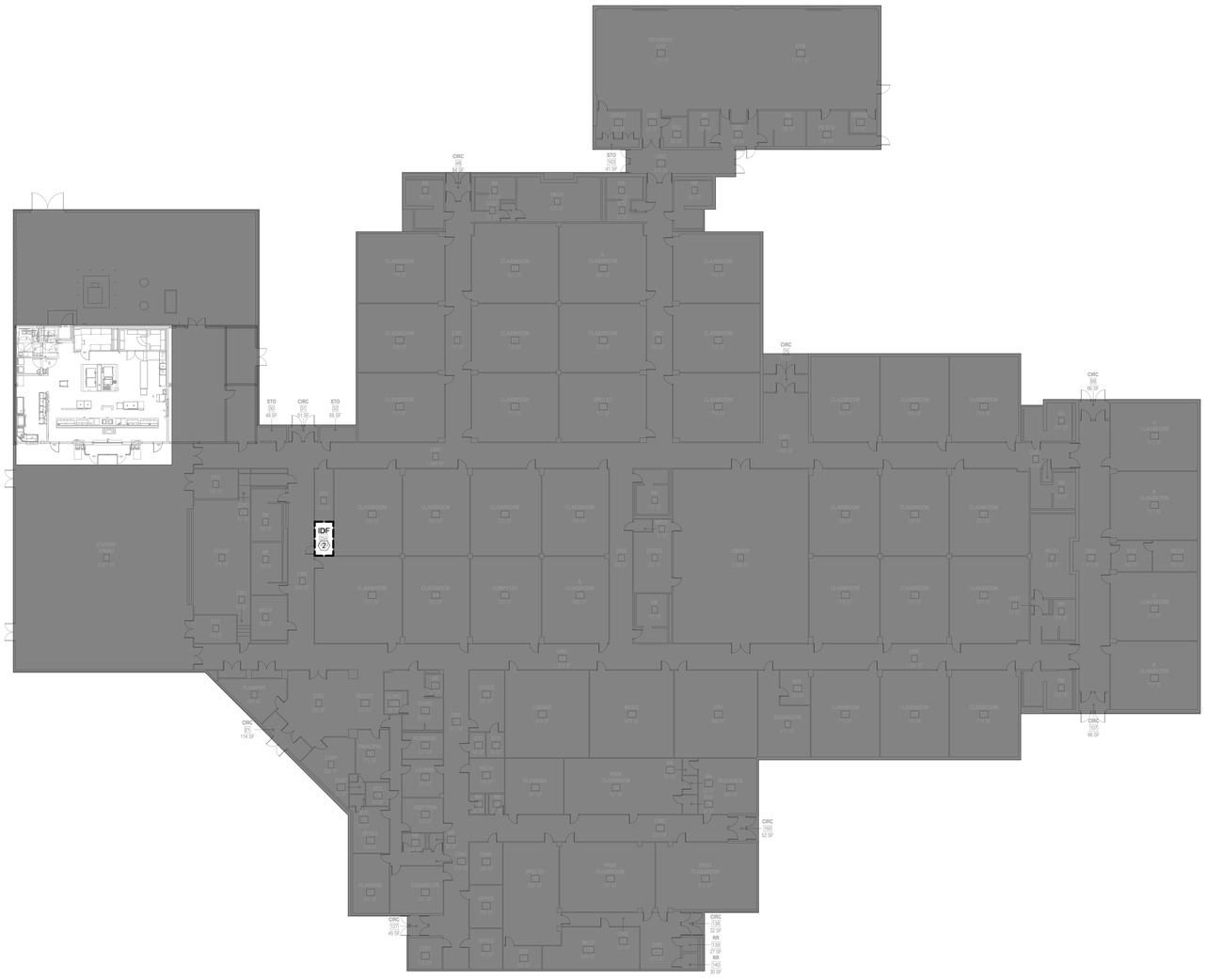
TECHNOLOGY - Sugar Mill ES - DEMO

u-TN.001

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BACKGROUND 1 (SUGAR MILL)
SCALE: 1" = 20'-0"

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TECHNOLOGY - Sugar Mill ES - OVERALL

u-TN.100



1 SUGAR MILL - KITCHEN PLAN
SCALE: 3/16" = 1'-0"

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.

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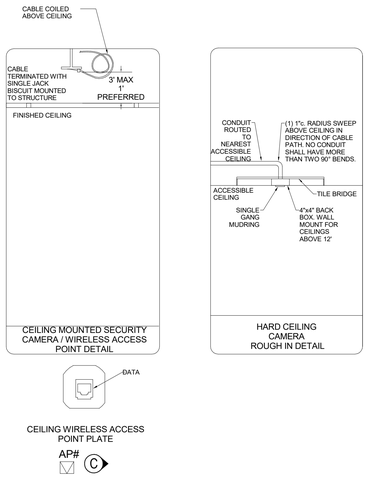
TECHNOLOGY - Sugar Mill ES - KITCHEN

u-TN.101

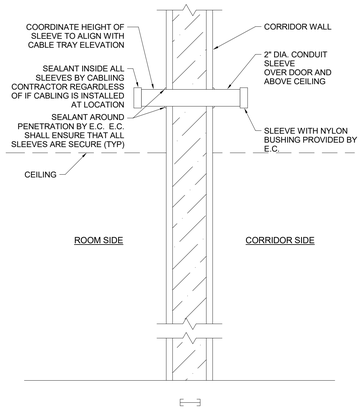
TRUENORTH A PMY COMPANY

GENERAL NOTE

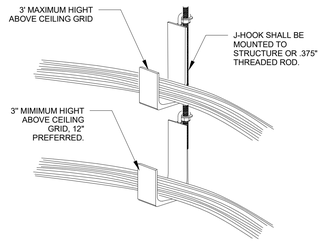
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



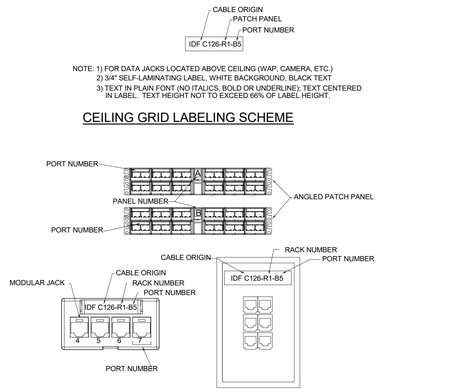
1 DATA ROUGH-IN DETAILS
SCALE: NS



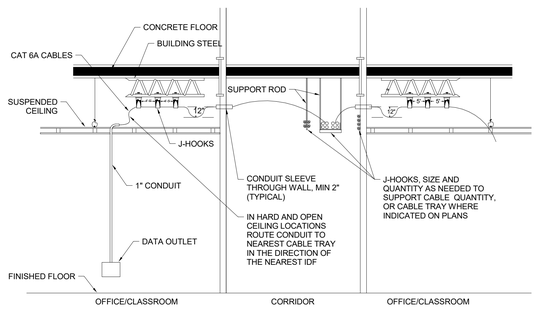
2 TYPICAL CABLING SLEEVE
SCALE: NTS



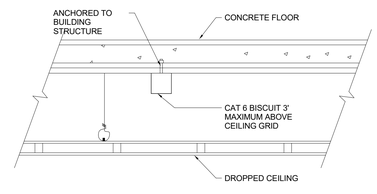
3 PANDUIT J-HOOK DETAIL
SCALE: NTS



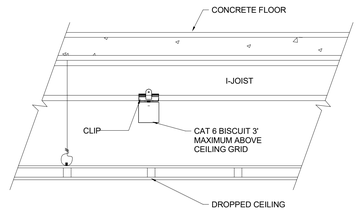
4 LABELING & CABLING SCHEMES
SCALE: NTS



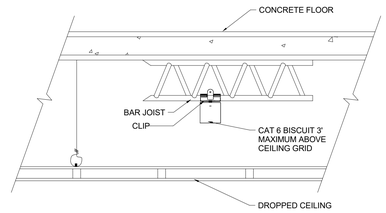
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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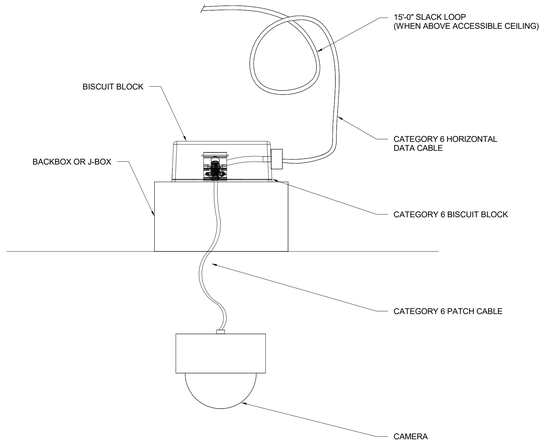
TECHNOLOGY - Sugar Mill ES - DETAILS

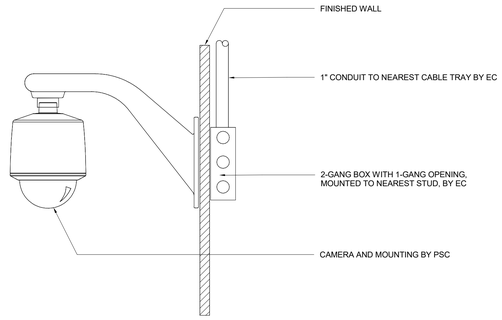
u-TN.500

GENERAL NOTES:

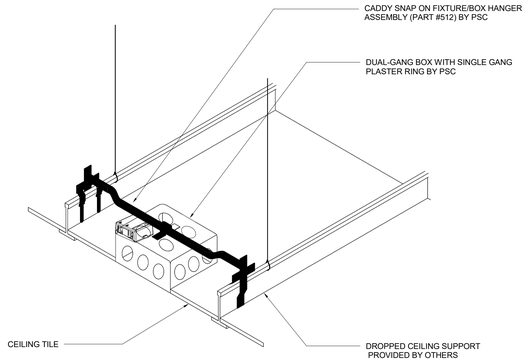
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



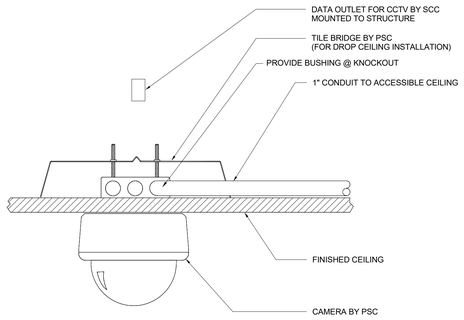
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

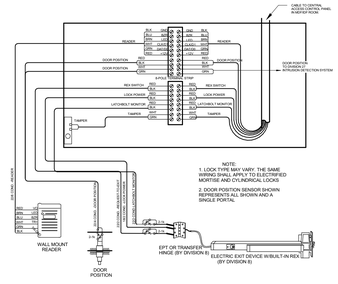


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

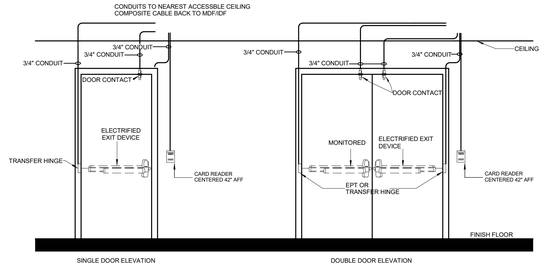
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

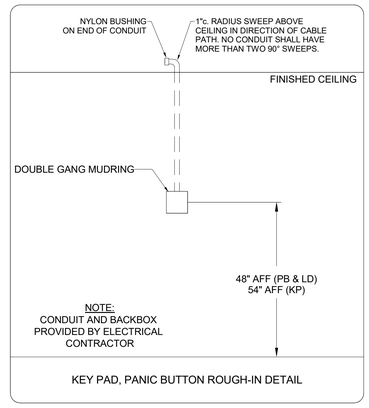
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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- SECURITY DETAILS

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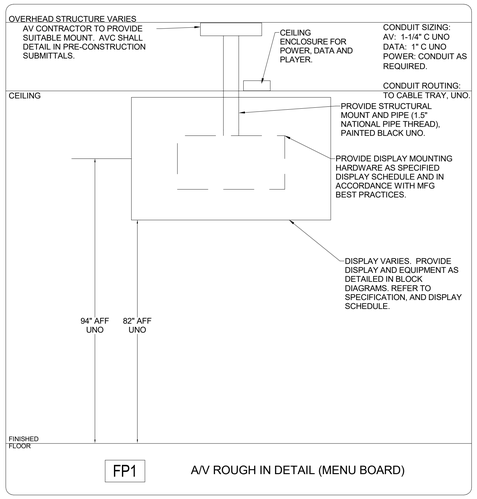

6 CEILING MOUNT DISPLAY - A/V ROUGH-IN DETAIL
SCALE: NTS

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TECHNOLOGY - Sugar Mill ES - AV DETAILS

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FBISD BP013 KITCHEN RENOVATIONS ES

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v-D.101	REFERENCE PHOTOS PLAN
v-A.101	SITE PLAN
v-A.201	OVERALL FLOOR PLAN
v-A.301	CAFETERIA PLAN
v-A.501	FINISH FLOOR PLAN
v-E.000	ELECTRICAL AND FIRE ALARM SCHEDULES
v-E.001	ELECTRICAL AND FIRE ALARM NOTES
v-E.200	ELECTRICAL FLOOR PLAN & SCHEDULE
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V-TN-101	TECHNOLOGY - KITCHEN
V-TN-500	TECHNOLOGY - DETAILS
V-TN-600	TECHNOLOGY - SECURITY DETAILS



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ANNE SULLIVAN ELEMENTARY SCHOOL
17828 WINDING WATERS LN, SUGAR LAND, TX 77479

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DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

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SONYA JONES	BOARD MEMBER

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Phone Number: 281-350-2323

MEP ENGINEERS
Stanton Engineering Group
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Houston, Texas 77042
Phone Number: 713-300-9292

STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

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V

PART 1 - GENERAL

1.1 GENERAL DEMOLITION NOTES

A. VERIFY EXISTING SITE AND BUILDING CONDITIONS IN FIELD PRIOR TO BIDDING. NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BIDDING.

B. CONTRACTOR SHALL COORDINATE WITH OWNER THE SALVAGE OF ITEMS, FURNITURE AND EQUIPMENT INDICATED TO BE REMOVED.

C. CLAIMS FOR ADDITIONAL COST OR TIME DUE TO EXISTING CONDITIONS THAT COULD HAVE BEEN REASONABLY ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR PRIOR TO BIDDING WILL NOT BE APPROVED.

D. PROTECT EXISTING FINISHES SHOWN TO REMAIN DURING CONSTRUCTION TO PREVENT DAMAGE. REPAIR OR REPLACE DAMAGED MATERIALS AND FINISHES TO MATCH EXISTING AT NO ADDITIONAL COST TO FORT BEND ISD (OWNER).

E. EXISTING AREAS REQUIRING MINOR DEMOLITION OR REPAIR FOR EXECUTION OF WORK SHALL BE REPAIRED TO MATCH EXISTING ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.

F. DO NOT DAMAGE CASEWORK AND EQUIPMENT NOT DESIGNATED TO BE REMOVED OR RELOCATED.EXISTING CASEWORK SHALL REMAIN THE PROPERTY OF THE OWNER.

G. CONTRACTOR TO VERIFY LOCATION OF ELEC. SWITCHES, OUTLETS, GRILLES, CLEAN-OUTS, COVER PLATES, ACCESS DOORS, AND OTHER EQUIPMENT AND DEVICES THAT MAY CONFLICT WITH THE RENOVATION AND NEW CONSTRUCTION OF WALLS, FLOORS, AND CEILINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL LIKEWISE CONFIRM THAT ELECTRICAL CONDUIT ROUTING SHALL BE CONCEALED WITHIN WALLS. NOTIFY ARCHITECT IF WALL THICKNESS WILL NOT ALLOW FOR CONCEALMENT.

H. REMOVE ANY EXISTING CORNER GUARDS IN THE KITCHEN AREA.

I. PRIOR TO EXECUTION OF DEMOLITION WORK, SCHEDULE A WALK-THROUGH WITH OWNER AND ARCHITECT TO CONFIRM SCOPE OF WORK AND TO REVIEW EXISTING CONDITIONS.

J. EXISTING FLOOR FINISHES AND ACOUSTIC CEILING TILE TO BE REMOVED THROUGHOUT.

K. REFER TO MEP DRAWINGS FOR DEMOLITION AND ALTERATION OF UTILITIES.

L. AT ALL EXISTING WALLS REQUIRING DEMOLITION TO INSTALL NEW PIPING BEHIND SINKS, CUT AND PATCH WALLS AS REQUIRED TO MATCH ADJACENT SURFACE.

M. CLEAN AND PREPARE SUBFLOOR FOR INSTALLATION OF NEW FLOOR FINISH.

N. DEMOLITION ACTIVITIES SHALL BE PERFORMED AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY OCCUPANTS. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST.

O. ASBESTOS-CONTAINING MATERIALS. REFER TO SPECIFICATION 02 26 23 FOR ASBESTOS INFORMATION APPLICABLE TO KITCHEN AREAS. FORT BEND ISD HAS RETAINED A SEPARATE ENVIRONMENTAL CONSULTANT FOR THE REMOVAL OF ASBESTOS. GC TO COORDINATE WITH ENVIRONMENTAL CONSULTANT TO CARRY OUT ASBESTOS ABATEMENT FOR ALL AFFECTED KITCHEN AREAS.

1.2 FLOOR PLAN GENERAL NOTES

A. FIELD VERIFY EXISTING CONDITIONS PRIOR TO GENERATING SHOP DRAWINGS AND FABRICATION OF EQUIPMENT.
B. FLOOR FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCERS STRIPS.
C. DOORS THAT ARE TO BE REPLACED AND INSTALLED IN EXISTING FRAMES SHALL BE MACHINED FOR HARDWARE DIMENSIONS AT EXISTING FRAMES, CONTRACTOR SHALL FIELD VERIFY FRAME CONDITIONS AND DIMENSIONS.
D. CONTRACTOR TO PROVIDE SHEET METAL REINFORCING STRAP AS REQUIRED FOR MOUNTING OF ALL GRAB BARS, CABINETS, MIRRORS, SHELVING, ETC.
E. SAW CUT AND REMOVE EXISTING SLAB AND FLOOR FINISHES AS REQUIRED TO INSTALL NEW PLUMBING LINES, FLOOR DRAINS, PLUMBING FIXTURES, OR ELECTRICAL ITEMS. SPLICE NEW REINFORCING BARS DOWELED INTO EXISTING CONCRETE, AND PROVIDE NEW VAPOR RETARDER AND WATERSTOPS, AND PATCH W/ 3000 PSI CONCRETE AFTER INSTALLATION OF UTILITIES AND FIXTURES. PREPARE CONCRETE TO RECEIVE NEW FINISH.
F. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED. HOUSEKEEPING PADS SHALL BE A MIN. OF 4" THICK REINF. W/ #3 BARS AT 15" O.C. BOTH WAYS. PROVIDE 1" BY 45-DEGREE CHAMFERED EDGES.

1.3 COMPLETE PERFORMANCE

L. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH AND INSTALL ALL ITEMS NECESSARY TO MAKE THE SYSTEMS FUNCTION WHICH MAY BE REASONABLY IMPLIED AS ESSENTIAL, WHETHER MENTIONED IN THE CONTRACT DOCUMENTS OR NOT.

M. WORK SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL AND WORKMANLIKE MANNER BY COMPETENT WORKMEN.

1.4 SITE FAMILIARIZATION

A. GENERAL: BECOME FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS, EXAMINE THE PREMISES, AND UNDERSTAND THE CONDITIONS UNDER WHICH THE CONTRACT SHALL BE PERFORMED, PRIOR TO SUBMITTING A BID.

B. SITE: BE INFORMED OF THE SITE CONDITIONS, VERIFY LOCATIONS OF NEW AND EXISTING EQUIPMENT, AND DETERMINE EXACT REQUIREMENTS FOR CONNECTIONS.

C. COORDINATION: TENDER OF A PROPOSAL FOR THIS PROJECT INFERS THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS BECOME FAMILIAR WITH THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS AND HAS INCLUDED IN HIS PROPOSAL, ALL WORK NECESSARY TO PROPERLY INSTALL COMPLETE AND FUNCTIONING SYSTEMS ON THE PROJECT. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

1.5 CODES AND STANDARDS

A. GENERAL: ALL WORK SHALL COMPLY WITH THE MOST RECENTLY REVISED VERSIONS OF ALL APPLICABLE LAWS, RULES, REGULATIONS AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES AND APPLICABLE UTILITIES. NONE OF THE TERMS OR PROVISIONS OF THIS SPECIFICATION SHALL BE CONSTRUED AS WAIVING ANY PART OF THE LAWS, RULES, REGULATIONS OR REQUIREMENTS OF THESE AUTHORITIES.

B. CONFLICT: IN THE EVENT OF CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE LOCAL ENFORCING AUTHORITY, THE LATTER SHALL RULE. ANY MODIFICATIONS RESULTING THEREFROM SHALL BE MADE WITHOUT ANY ADDITIONAL COST TO THE OWNER OR ARCHITECT. THIS CONTRACTOR SHALL REPORT ANY SUCH MODIFICATIONS TO THE ARCHITECT AND SECURE HIS APPROVAL PRIOR TO PROCEEDING WITH THE WORK.

C. PRECEDENCE: WHERE CONTRACT DOCUMENT REQUIREMENTS EXCEED THE REQUIREMENTS OF THE CODES AND STANDARDS, THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THEY ARE NOT IN CONFLICT WITH THOSE CODES AND STANDARDS.

D. APPROVAL LABELS: ALL ITEMS OF EQUIPMENT AND ALL MATERIALS FOR WHICH APPROVED STANDARDS HAVE BEEN ESTABLISHED BY UNDERWRITERS' LABORATORIES, INC. (UL), FACTORY MUTUAL (FM), CERTIFIED BALLAST MANUFACTURER (CBM), ELECTRICAL TESTING LABORATORY (ETL), NATIONAL MANUFACTURERS ASSOCIATION (NEMA), AMERICAN STANDARD CODES, ASME, AGA, AMCA, ASA, ANSI, ASHRAE, AND ARI SHALL BE SO APPROVED AND SHALL BEAR APPROVAL LABELS ATTESTING TO SAME.

1.6 DRAWINGS AND SPECIFICATIONS

A. DRAWINGS: THE SET OF ORIGINAL DRAWINGS HAS BEEN MODIFIED AND INDICATE APPROXIMATE EXISTING LOCATIONS OF THE FLOOR FINISH ITEMS. ALL ITEMS ARE SHOWN APPROXIMATELY TO SCALE. FIELD VERIFY CONDITIONS.

B. SPECIFICATIONS: THE SPECIFICATIONS ARE INTENDED TO SUPPLEMENT THE DRAWINGS AND IT IS NOT IN THE SCOPE OF THE SPECIFICATIONS TO MENTION ANY PART OF THE WORK THAT THE DRAWINGS ARE COMPETENT TO FULLY EXPLAIN. CONVERSELY, ANY PART OF THE WORK THAT THE SPECIFICATIONS ARE COMPETENT TO FULLY EXPLAIN MAY NOT BE MENTIONED ON THE DRAWINGS. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY/SUPPLEMENTARY DOCUMENTS TO EACH OTHER.

C. DISAGREEMENT: DISAGREEMENT BETWEEN THE DRAWINGS AND SPECIFICATIONS OR WITHIN THE DRAWINGS OR SPECIFICATIONS SHALL BE ESTIMATED AND/OR BID USING THE BETTER QUALITY OR GREATER QUANTITY OF MATERIAL OR INSTALLATION, AND A CLARIFICATION REQUEST FOR INFORMATION SHALL BE MADE TO THE ARCHITECT IN A TIMELY MANNER AFTER THE PROJECT IS UNDER CONTRACT.

1.7 DISCREPANCIES

A. CLARIFICATION: CLARIFICATION OF SIGNIFICANT COST MATTERS SHALL BE OBTAINED BEFORE SUBMITTING A PROPOSAL FOR THE WORK AS TO DISCREPANCIES OR OMISSIONS FROM THE CONTRACT DOCUMENTS OR QUESTIONS AS TO THE INTENT THEREOF.

B. INTERPRETATIONS: SHOULD ANY DOUBT OR QUESTION ARISE RESPECTING THE TRUE MEANING OF DRAWINGS OR SPECIFICATIONS, REFERENCE SHALL BE MADE TO THE ARCHITECT, WHOSE WRITTEN DECISION SHALL BE FINAL AND CONCLUSIVE. NO ALLEGED STATEMENT BY THE ARCHITECT WILL BE ACCEPTED AS AN EXCUSE FOR NON-COMPLIANCE OR INFERIOR WORK.

C. CONTRACTOR AGREEMENT: CONSIDERATION WILL NOT BE GRANTED FOR MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF A PROPOSAL CONVEYS FULL CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED, SHOWN, SCHEDULED, OR REQUIRED BY THE NATURE OF THE PROJECT, AND ALL COSTS ARE INCLUDED IN THE PROPOSAL.

1.8 REQUESTS FOR INFORMATION (RFI)

A. GENERAL: SUBMIT ALL CONTRACTOR REQUESTS FOR INFORMATION (RFI) IN WRITING TO THE ARCHITECT FOR RESPONSE. SUBMIT RFI ON A STANDARD FORM THAT HAS A SPACE FOR THE REQUESTED INFORMATION AND THE ARCHITECT'S RESPONSE.
B. SOLUTION PROPOSAL: IN GENERAL, THE CONTRACTOR SHALL PROPOSE SOLUTIONS TO IDENTIFY PROBLEMS FOR REVIEW AND APPROVAL OF THE ARCHITECT. THE RFI SHALL INCLUDE HAND SKETCHES, MARKED DRAWING PRINTS, EQUIPMENT CUTSHEETS, DRAWING AND SPECIFICATION REFERENCES, AND ANY OTHER BACK-UP INFORMATION, ETC., AS REQUIRED TO SUFFICIENTLY EXPLAIN THE PROBLEM AND PROPOSED SOLUTION.

1.9 QUALITY ASSURANCE

A. GENERAL: MATERIALS AND EQUIPMENT SHALL BE NEW, OF BEST GRADE AND QUALITY, AND STANDARD PRODUCTS OF REPUTABLE MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS AND EQUIPMENT.
B. WORKMANSHIP: WORK SHALL BE EXECUTED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE BEST PRACTICE OF THE TRADES IN A THOROUGH, SUBSTANTIAL, WORKMANLIKE MANNER BY COMPETENT WORKMEN, PRESENTING A NEAT APPEARANCE WHEN COMPLETED.
C. JUDGMENT: IN ALL CASES, THE ARCHITECT SHALL BE THE SOLE JUDGE OF THE QUALITY AND EQUIVALENCE OF MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS.
D. MANUFACTURERS/PRODUCTS/MATERIALS/METHODS: MANUFACTURERS, PRODUCTS, MATERIALS, AND METHODS DESCRIBED IN THE VARIOUS SECTIONS OF THE SPECIFICATIONS AND INDICATED ON THE DRAWINGS ARE INTENDED TO ESTABLISH A STANDARD OF QUALITY ONLY. IT IS NOT THE INTENTION OF THE ARCHITECT TO DISCRIMINATE AGAINST ANY MANUFACTURER, PRODUCT, MATERIAL, OR METHOD THAT IS EQUAL TO THE STANDARDS AS INDICATED AND/OR SPECIFIED, NOR IS IT INTENDED TO PRECLUDE OPEN, COMPETITIVE BIDDING. THE FACT THAT A SPECIFIC MANUFACTURER IS LISTED AS AN ACCEPTABLE MANUFACTURER SHALL NOT BE INTERPRETED TO MEAN THAT THE MANUFACTURER'S STANDARD PRODUCT WILL MEET THE REQUIREMENTS OF THE PROJECT DESIGN, SPECIFICATIONS, AND SPACE CONSTRAINTS.

1. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AND THERE IS NOT A STATEMENT THAT ANOTHER MANUFACTURER, PRODUCT, MATERIAL, OR METHOD WILL BE ACCEPTABLE, IT IS THE INTENTION OF THE ARCHITECT THAT THE SPECIFIED MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS THE ONLY ONE THAT SHALL BE USED WITHOUT PRIOR APPROVAL.
2. WHEREVER A DEFINITE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD IS SPECIFIED AS "NO SUBSTITUTE", IT IS THE INTENTION OF THE ARCHITECT THAT THE LISTED ITEM IS THE ONLY ONE ACCEPTABLE.

E. COORDINATION: WHERE EQUIPMENT IS USED ON THE PROJECT, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR INVOLVED TO VERIFY THAT THE EQUIPMENT WILL FIT IN THE SPACE AVAILABLE, INCLUDING ALL REQUIRED CODE AND MAINTENANCE CLEARANCES, AND TO COORDINATE ALL EQUIPMENT REQUIREMENTS AND PROVISIONS WITH THE SYSTEM DESIGN, ALL AFFECTED DIVISIONS, AND ALL OTHER CONTRACTORS. WHERE THE USE OF ALTERNATE OR SUBSTITUTE MATERIALS AFFECTS THE COST OF PROVISIONS MADE BY OTHER CONTRACTORS, THE CONTRACTOR PROVIDING THE ALTERNATE OR SUBSTITUTE SHALL BE RESPONSIBLE FOR THE OTHER CONTRACTOR'S COST ADJUSTMENT. THERE SHALL BE NO ADDITIONAL COST TO THE OWNER OR ARCHITECT DUE TO THE USE OR ACCEPTANCE OF ANY ALTERNATE OR SUBSTITUTE MANUFACTURER, PRODUCT, MATERIAL, OR METHOD.

1.10 PRIOR APPROVAL

A. SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES: THE CONTRACTOR'S SUBMITTAL AND ARCHITECT'S ACCEPTANCE OF SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES THAT RELATE TO CONSTRUCTION ACTIVITIES NOT COMPLYING WITH THE CONTRACT DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTABLE OR VALID REQUEST FOR SUBSTITUTION, NOR DOES IT CONSTITUTE APPROVAL.

1.11 COORDINATION

A. BY SUBMITTING SHOP DRAWINGS ON THE PROJECT, THIS CONTRACTOR IS INDICATING THAT ALL NECESSARY COORDINATION HAS BEEN COMPLETED AND THAT THE SYSTEMS, PRODUCTS AND EQUIPMENT SUBMITTED CAN BE INSTALLED IN THE BUILDING AND WILL OPERATE AS SPECIFIED AND INTENDED, IN FULL COORDINATION WITH ALL OTHER DISCIPLINES.

1.12 SHOP DRAWINGS AND SUBMITTALS

A. GENERAL: AFTER THE CONTRACT IS AWARDED BUT PRIOR TO PROCEEDING WITH THE WORK REQUIRING SHOP DRAWING REVIEW, THE CONTRACTOR SHALL OBTAIN COMPLETE SHOP DRAWINGS AND PRODUCT DATA FROM THE MANUFACTURERS, SUPPLIERS, VENDORS, AND SUB- CONTRACTORS FOR ALL MATERIALS AND EQUIPMENT SPECIFIED HEREIN, AND MAKE FORMAL SUBMISSION TO THE ARCHITECT. A MINIMUM PERIOD OF TWO (2) WEEKS SHOULD BE ALLOWED IN THE CONSTRUCTION SCHEDULE EXCLUSIVE OF TRAVEL TIME FOR THE ARCHITECTS REVIEW.

B. CERTIFICATION: EACH CONTRACTOR RESPONSIBLE FOR THE WORK SHALL REVIEW AND CERTIFY THE SHOP DRAWING, SUBMITTAL AND/OR PRODUCT DATA TO BE IN FULL COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. THE ARCHITECTS REVIEW OF SHOP DRAWINGS AND SUBMITTAL DATA SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR DIMENSIONS OR ERRORS THAT MAY BE CONTAINED THEREIN, OR FOR DEVIATIONS FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. IT SHALL BE CLEARLY UNDERSTOOD THAT THE ARCHITECTS NOTING SOME ERRORS BUT OVERLOOKING SOME OTHERS DOES NOT GRANT THE CONTRACTOR PERMISSION TO PROCEED IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWING OR PRODUCT DATA, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK AND ARE NEITHER WAIVED NOR SUPERSEDED IN ANY WAY BY THE REVIEW OF SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.

1.13 EXECUTION AND COORDINATION OF WORK

A. MANUFACTURER'S RECOMMENDATIONS: WITH EXCEPTIONS AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS OR IN THE SPECIFICATIONS, APPLY, INSTALL, ERECT, USE, CLEAN, AND CONDITION, MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT PER MANUFACTURER'S CURRENT PRINTED RECOMMENDATIONS. KEEP COPIES OF SUCH PRINTED RECOMMENDATIONS AT JOB SITE AND MAKE THEM AVAILABLE AS REQUIRED.

1.14 SUPERVISION

A. A COMPETENT SUPERINTENDENT APPROVED BY THE ARCHITECT, SHALL BE KEPT BY THE CONTRACTOR AT THE BUILDING TO RECEIVE INSTRUCTIONS AND TO ACT FOR THE CONTRACTOR. ONCE THE SUPERINTENDENT HAS BEEN APPROVED, NO CHANGE SHALL BE MADE WITHOUT APPROVAL OF ARCHITECT. REPRESENTATIVES OF THE OWNER, ARCHITECT SHALL HAVE THE RIGHT TO OBSERVE THE WORK AT ANY TIME. THE CONTRACTOR SHALL HAVE A REPRESENTATIVE AVAILABLE WHEN HIS WORK IS BEING OBSERVED AND HE SHALL GIVE ASSISTANCE AS MAY BE REQUIRED TO THE ARCHITECT'S REPRESENTATIVE.

B. THE PROJECT SHALL BE CONSTRUCTED BY EMPLOYEES OF THE CONTRACTOR OR BY WORKERS UNDER HIS SUPERVISION. ANY SUBCONTRACTORS EMPLOYED BY THE CONTRACTOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EQUIPMENT, MATERIAL AND WORK PERFORMED BY ANY SUBCONTRACTOR.

1.15 STORAGE AND PROTECTION OF MATERIALS

A. THE CONTRACTOR SHALL PROPERLY STORE ALL MATERIAL AND EQUIPMENT AT THE JOBSITE AND PROTECT IT FROM THE ELEMENTS AND FROM DAMAGE. ANY EQUIPMENT DAMAGED DUE TO IMPROPER PROTECTION SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

B. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIAL OF ALL OTHER TRADES FROM DAMAGE BY HIS WORK OR OTHER WORKMEN, AND SHALL MAKE GOOD ALL DAMAGE THUS CAUSED.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINALLY INSPECTED, TESTED, AND ACCEPTED; PROTECT WORK AGAINST THEFT, INJURY OR DAMAGE; AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH ARE NOT IMMEDIATELY INSTALLED. CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT ENTRY OF OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL COVER AND PROTECT IN AN ACCEPTABLE MANNER TO THE OWNER, EXISTING REMAINING EQUIPMENT AND MATERIALS.

D. IF ANY MATERIAL OR EQUIPMENT IS RECEIVED PRIOR TO THE TIME IT IS REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS PROPER STORAGE AND PROTECTION UNTIL SUCH TIME AS IT MAY BE REQUIRED. THE CONTRACTOR SHALL PAY FOR ALL COSTS OF DEMURRAGE OR STORAGE.

1.16 DRAYAGE AND HAULING

A. THE CONTRACTOR SHALL KEEP THE JOBSITE FREE FROM THE ACCUMULATION OF TRASH AND CONSTRUCTION DEBRIS, REGARDLESS OF WHICH SUBCONTRACTOR MAY BE RESPONSIBLE.

1.17 CUTTING AND PATCHING

A. WHERE IT BECOMES NECESSARY TO CUT THROUGH ANY WALL, FLOOR OR CEILING TO PERMIT THE INSTALLATION OF ANY WORK, OR TO REPAIR ANY DEFECTS THAT MAY APPEAR, THE CUTTING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE GENERAL CONTRACTOR. INFORM THE OWNER'S REPRESENTATIVE BEFORE ANY WORK COMMENCES. NO STRUCTURAL MEMBER SHALL BE ALTERED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.

B. VERIFICATION: SHOULD A QUESTION ARISE REGARDING THE ACCEPTABLE LEVEL OF NOISE OR VIBRATION IN A PARTICULAR SPACE OR PIECE OF EQUIPMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE SERVICES OF AN APPROVED ACOUSTICAL CONSULTANT TO DETERMINE ACTUAL NOISE/VIBRATION CONDITIONS.

01 GENERAL NOTES

SEQUENCE OF CONSTRUCTION (AS OF 01/27/2025) Schools will be renovated in groups as shown. These groups contain two or three major kitchen renovations and some cafeteria/miscellaneous renovations. This sequencing is critical for FBISD food service to provide the uninterrupted meal services to their schools.

GROUPING 1	AUSTIN PARKWAY ES + SUGAR MILL ES, kitchen renovations. *Plus: COMMON WEALTH ES, CONERSTONE ES misc. renovations.*
GROUPING 2	SETTLERS WAY ES + PALMER ES kitchen renovations. *Plus: SULLIVAN ES, SIENNA CROSSING ES, HERITAGE ROSE ES misc. renovations*
GROUPING 3	HUNTER'S GLEN ES + HIGHLANDS ES + PECAN GROVE ES kitchen renovations. *Plus: RIDGEGATE ES, DULLES ES misc. renovations.*

03 PROJECT SCHEDULE

ISSUE:
12/05/2024 DD PACKAGE
03/11/2025 50% CD PKG.
05/23/2025 90% CD PKG.
07/18/2025 ISSUED FOR BIDDING AND PERMITTING

V

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SULLIVAN ELEMENTARY SCHOOL
17828 WINDING WATERS LANE
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT NOE ALMAGUER 22651 STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING
GENERAL NOTES AND ABBREVIATIONS

A00-01

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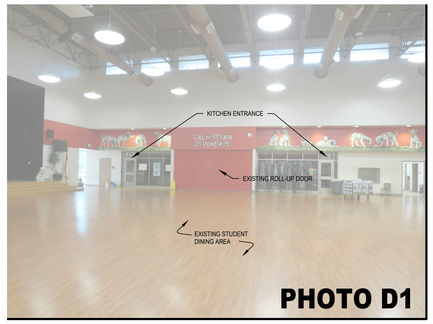

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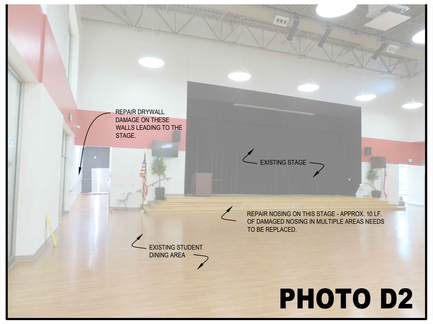

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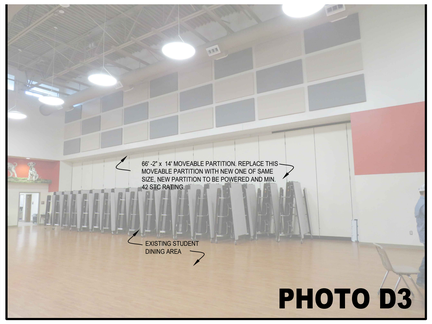

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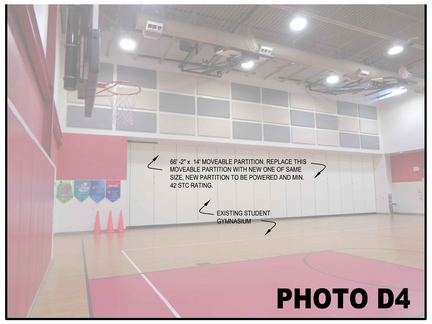

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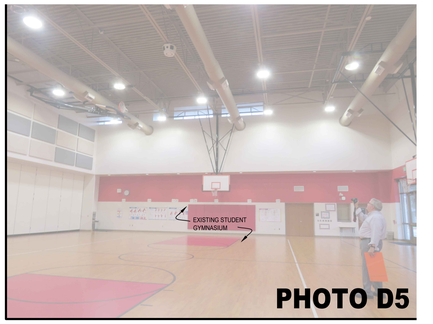

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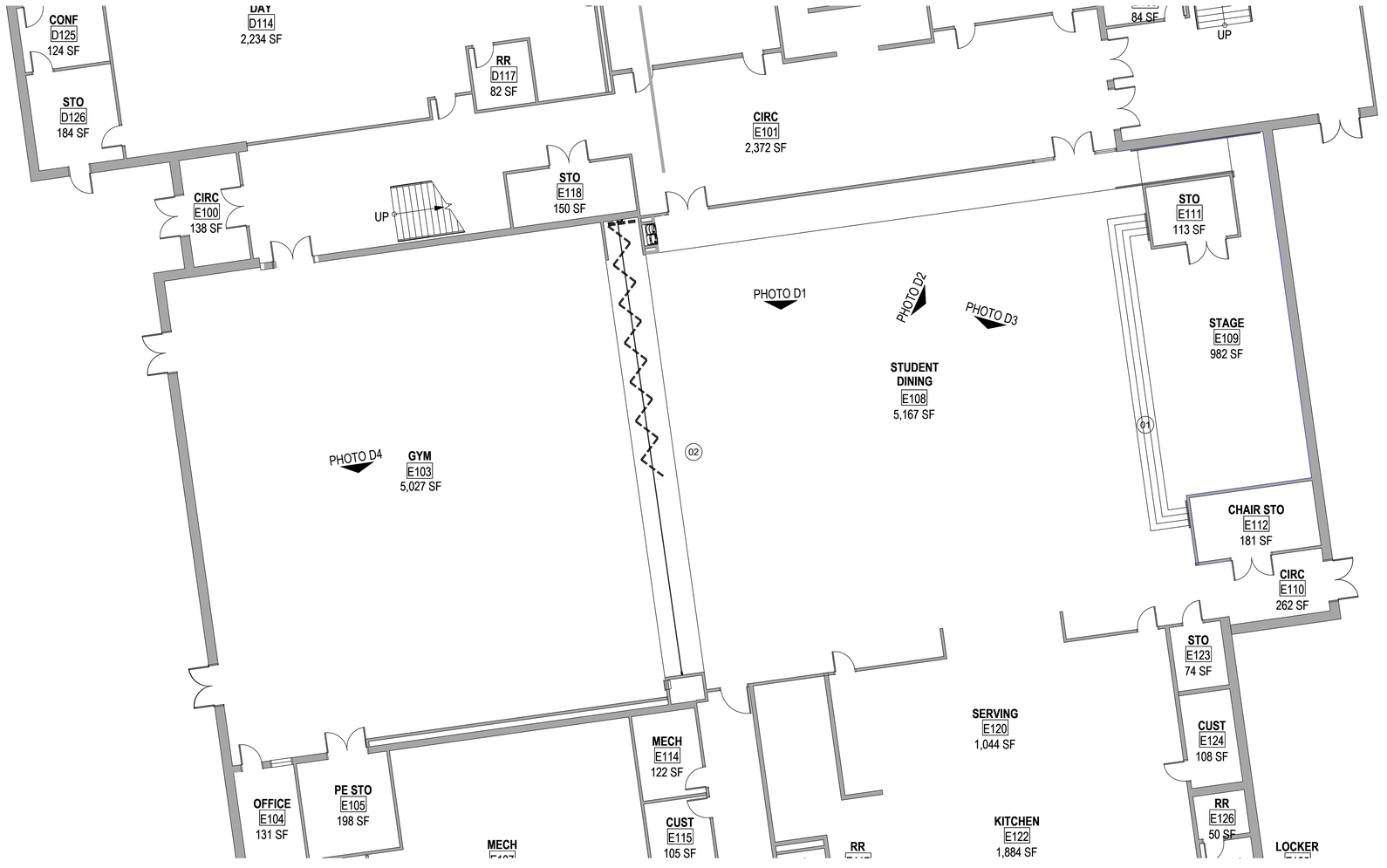

1 DEMOLITION REFERENCE AND PHOTOS FLOOR PLAN
SCALE: 1/8" = 1'-0"

DEMOLITION FLOOR PLAN - KEYED NOTES

01 REPAIR BROKEN WOOD NOSINGS / RISERS ON STEPS LEADING TO STAGE AREA. MATCH SPECIES AND FINISH. APPROX. 20 LF WILL BE REPLACED.

02 REMOVE EXISTING MOVEABLE PANELS AND TRACK AND DISCARD.
- a. REMOVE EXISTING SOFFIT FRAMING AND FINISH TO THE EXTENT REQUIRED TO IN INSTALL A NEW POWERED MOVEABLE PANEL SYSTEM.
- b. APPROX. 7" - 10" IN HEIGHT WILL BE LOST.
- c. EXISTING BEAM SHALL REMAIN IN PLACE WHERE POSSIBLE. LOWER THE BLOCKING TO THIS NEW HEIGHT AND ATTACH NEW TRACK AND POWER ACTUATION SYSTEM.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

V

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SULLIVAN ELEMENTARY SCHOOL
17828 WINDING WATERS LANE
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT
KIM A. MCKINNEY
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

REFERENCE PHOTOS FLOOR PLAN
v-D.101

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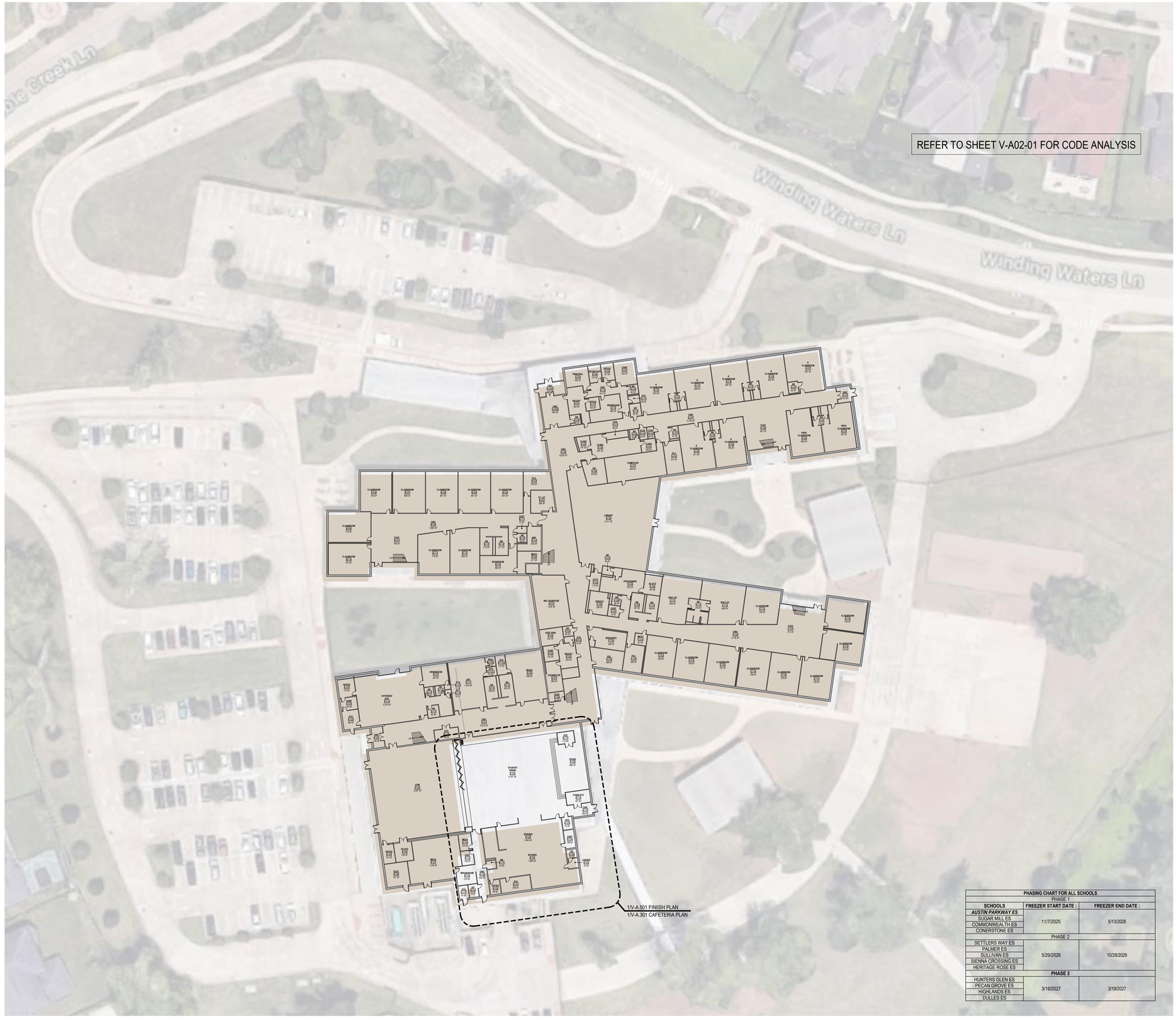

PHASING CHART FOR ALL SCHOOLS		
PHASE 1		
SCHOOLS	**FREEZER START DATE :**	**FREEZER END DATE :**
AUSTIN PARKWAY ES		
SUGAR MILL ES	11/7/2025	5/13/2026
COMMONWEALTH ES		
CONERSTONE ES		
PHASE 2		
SETTLERS WAY ES		
PALMER ES		
SULLIVAN ES	5/29/2026	10/28/2026
SIENNA CROSSING ES		
HERITAGE ROSE ES		
PHASE 3		
HUNTERS GLEN ES		
PECAN GROVE ES	3/19/2027	3/19/2027
HIGHLANDS ES		
DULLES ES		

1 SITE PLAN
SCALE: 1" = 30'-0"

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

V

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
SULLIVAN ELEMENTARY SCHOOL
17828 WINDING WATERS LANE
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SEAL
REGISTERED ARCHITECT
MOHAMMAD A. MOMIN
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
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11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

SITE PLAN

v-A.101

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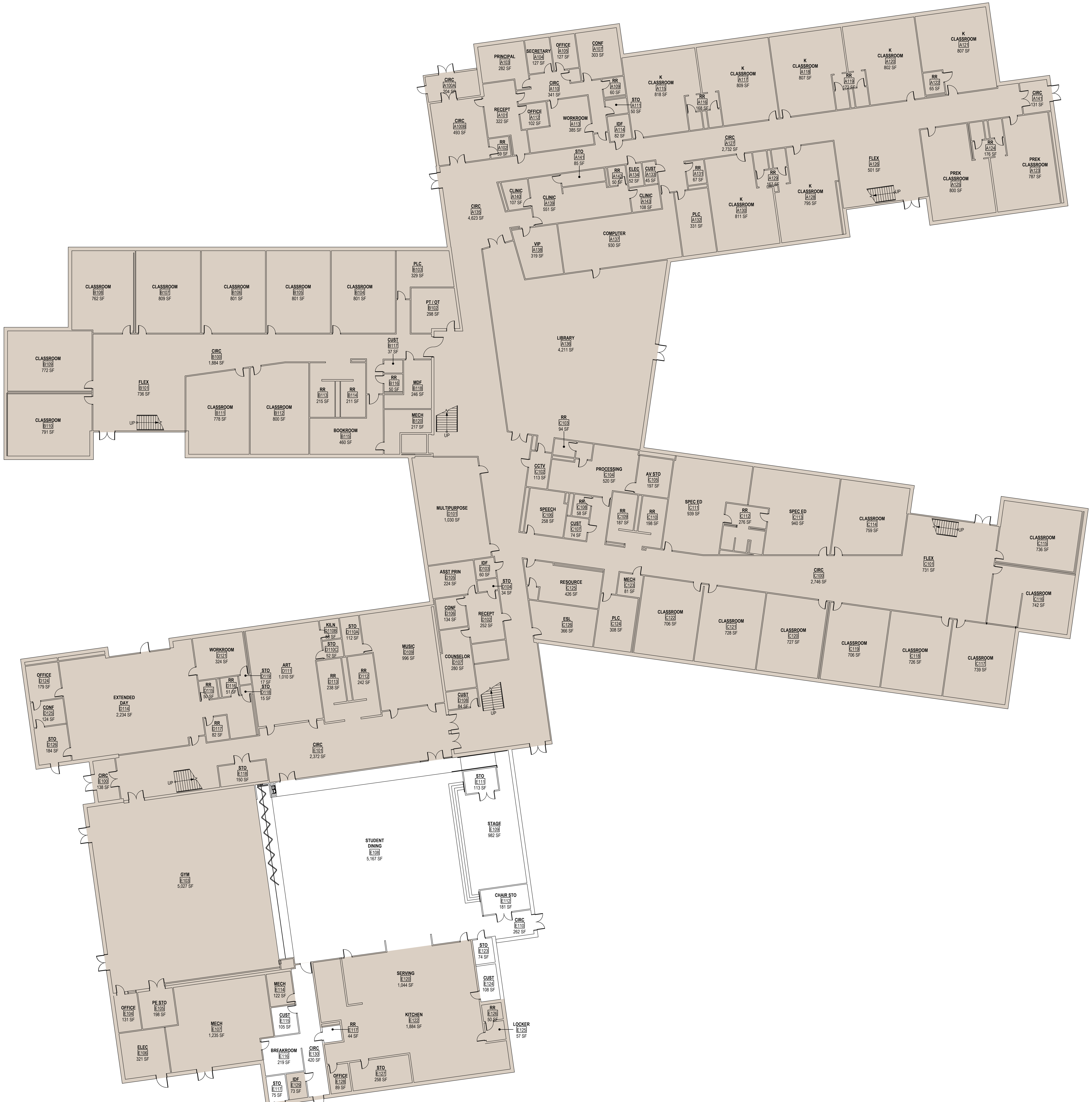

1 OVERALL FLOOR PLAN
SCALE: 1/16" = 1'-0"

SCOPE OF WORK: SECURITY CAMERAS OVER SERVING LINES.
RENOVATE, CONFIGURE AND EXPAND EXISTING CAFETERIA.

FORT BEND COUNTY BUILDING CODES:

2021 INTERNATIONAL FIRE CODE

INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY:

SPRINKLERED

INTERIOR EXIT STAIRWAYS AND RAMPS AND EXIT PASSAGEWAYS	**B**
CORRIDORS AND ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND RAMPS	**C**
ROOMS AND ENCLOSED SPACES	**C**

FLOORING SHALL BE CLASS II

2021 INTERNATIONAL EXISTING BUILDING CODE

301.3.1 PRESCRIPTIVE COMPLIANCE METHOD. REPAIRS, ALTERATIONS, ADDITIONS AND CHANGES OF OCCUPANCY COMPLYING WITH CHAPTER FIVE OF THIS CODE IN BUILDINGS COMPLYING WITH THE INTERNATIONAL FIRE CODE SHALL BE CONSIDERED IN COMPLIANCE WITH THE PROVISIONS OF THIS CODE.

302.3 EXISTING MATERIALS. MATERIALS ALREADY IN USE IN A BUILDING IN COMPLIANCE WITH REQUIREMENTS OR APPROVALS IN EFFECT AT THE TIME OF THEIR ERECTION OR INSTALLATION SHALL BE PERMITTED TO REMAIN IN USE UNLESS DETERMINED BY THE BUILDING OFFICIAL TO BE UNSAFE .

302.4 NEW AND REPLACEMENT MATERIALS. EXCEPT AS OTHERWISE REQUIRED OR PERMITTED BY THIS CODE, MATERIALS PERMITTED BY THE APPLICABLE CODE FOR NEW CONSTRUCTION SHALL BE USED. LIKE MATERIALS SHALL BE PERMITTED FOR REPAIRS AND ALTERATIONS, PROVIDED THAT NO UNSAFE CONDITION IS CREATED. HAZARDOUS MATERIALS SHALL NOT BE USED WHERE THE CODE FOR NEW CONSTRUCTION WOULD NOT PERMIT THEIR USE IN BUILDINGS OF SIMILAR OCCUPANCY, PURPOSE AND LOCATION.

SECTION 402 ADDITIONS.

402.1 GENERAL. ADDITIONS TO ANY BUILDING OR STRUCTURE SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE FOR NEW CONSTRUCTION. ALTERATIONS TO THE EXISTING BUILDING OR STRUCTURE SHALL BE MADE TO ENSURE THAT THE EXISTING OR STRUCTURE TOGETHER WITH THE ADDITION ARE NO LESS CONFORMING TO THE PROVISIONS OF THE INTERNATIONAL BUILDING CODE THAN THE EXISTING BUILDING OR STRUCTURE WAS PRIOR TO THE ADDITION. AN EXISTING BUILDING TOGETHER WITH ITS ADDITIONS SHALL COMPLY WITH THE HEIGHT AND AREA PROVISIONS OF CHAPTER FIVE OF THE INTERNATIONAL BUILDING CODE.

402.3 EXISTING STRUCTURAL ELEMENTS CARRYING GRAVITY LOAD. ANY EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENT FOR WHICH AN ADDITION AND ITS RELATED ALTERATIONS CAUSE AN INCREASE IN DESIGN GRAVITY LOAD OF MORE THAN FIVE PERCENT SHALL BE STRENGTHENED, SUPPLEMENTED, REPLACED OR OTHERWISE ALTERED AS NEEDED TO CARRY THE INCREASED GRAVITY LOAD REQUIRED BY THE INTERNATIONAL BUILDING CODE FOR NEW STRUCTURES. ANY EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENT WHOSE GRAVITY LOAD-CARRYING CAPACITY IS DECREASED SHALL BE CONSIDERED AN ALTERED ELEMENT SUBJECT SUBJECTED TO THE REQUIREMENTS OF SECTION 403.3. ANY EXISTING ELEMENT THAT WILL FORM PART OF THE LATERAL LOAD PATH FOR ANY PART OF THE ADDITION SHALL BE CONSIDERED AN EXISTING LATERAL LOAD-CARRYING STRUCTURAL ELEMENT SUBJECT SUBJECTED TO THE REQUIREMENTS OF SECTION 402.4.

402.3.1 DESIGN LIVE LOAD. WHERE THE ADDITION DOES NOT RESULT IN INCREASED DESIGN LIVE LOAD, EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENTS SHALL BE PERMITTED TO BE EVALUATED AND DESIGNED FOR LIVE LOADS APPROVED PRIOR TO THE ADDITION. IF THE APPROVED LIVE LOAD IS LESS THAN THAT REQUIRED BY SECTION 1607 OF THE INTERNATIONAL BUILDING CODE, THE AREA DESIGNATED FOR THE NONCONFORMING LIVE LOAD SHALL BE POSTED WITH PLACARDS OF APPROVED DESIGN INDICATING THE APPROVED LIVE LOAD. WHERE THE ADDITION DOES NOT RESULT IN INCREASED DESIGN LIVE LOAD, THE LIVE LOAD REQUIRED BY SECTION 1607 OF THE INTERNATIONAL BUILDING CODE SHALL BE USED.

402.4 EXISTING STRUCTURAL ELEMENTS CARRYING LATERAL LOADS. WHERE THE ADDITION IS STRUCTURALLY INDEPENDENT OF THE EXISTING STRUCTURE, EXISTING LATERAL LOAD-CARRYING STRUCTURAL ELEMENTS SHALL BE PERMITTED TO REMAIN UNALTERED. WHERE THE ADDITION IS NOT STRUCTURALLY INDEPENDENT OF THE EXISTING STRUCTURE, THE EXISTING STRUCTURE AND ITS ADDITION ACTING TOGETHER AS A SINGLE STRUCTURE SHALL BE SHOWN TO MEET THE REQUIREMENTS OF SECTION 1609 AND 1613 OF THE INTERNATIONAL BUILDING CODE. FOR PURPOSES OF THIS SECTION, COMPLIANCE WITH ASCE 41,USING A TIER 3 PROCEDURE AND THE TWO-LEVEL PERFORMANCE OBJECTIVE IN TABLE 301.1.4.1 FOR THE APPLICABLE RISK CATEGORY, SHALL BE DEEMED TO MEET THE REQUIREMENTS OF SECTION 1613.

403.1 GENERAL. ALTERATIONS TO ANY BUILDING OR STRUCTURE SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE FOR NEW CONSTRUCTION. ALTERATIONS SHALL BE SUCH THAT THE EXISTING BUILDING OR STRUCTURE IS NO LESS CONFORMING TO THE PROVISIONS OF THE INTERNATIONAL BUILDING CODE THAN THE EXISTING BUILDING OR STRUCTURE WAS PRIOR TO THE ALTERATION.

403.3 EXISTING STRUCTURAL ELEMENTS CARRYING GRAVITY LOAD. ANY EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENT FOR WHICH AN ALTERATIONS CAUSE AN INCREASE IN DESIGN GRAVITY LOAD OF MORE THAN FIVE PERCENT SHALL BE STRENGTHENED, SUPPLEMENTED, REPLACED OR OTHERWISE ALTERED AS NEEDED TO CARRY THE INCREASED GRAVITY LOAD REQUIRED BY THE INTERNATIONAL BUILDING CODE FOR NEW STRUCTURES. ANY EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENT WHOSE GRAVITY LOAD-CARRYING CAPACITY IS DECREASED AS PART OF THE ALTERATION SHALL BE SHOWN TO HAVE THE CAPACITY TO RESIST THE APPLICABLE DESIGN GRAVITY LOADS REQUIRED BY THE INTERNATIONAL BUILDING CODE FOR NEW STRUCTURES.

403.3.1 DESIGN LIVE LOAD. WHERE THE ALTERATION DOES NOT RESULT IN INCREASED DESIGN LIVE LOAD, EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENTS SHALL BE PERMITTED TO BE EVALUATED AND DESIGNED FOR LIVE LOADS APPROVED PRIOR TO THE ALTERATION. IF THE APPROVED LIVE LOAD IS LESS THAN THAT REQUIRED BY SECTION 1607 OF THE INTERNATIONAL BUILDING CODE, THE AREA DESIGNATED FOR THE NONCONFORMING LIVE LOAD SHALL BE POSTED WITH PLACARDS OF APPROVED DESIGN INDICATING THE APPROVED LIVE LOAD. WHERE THE ALTERATION DOES NOT RESULT IN INCREASED DESIGN LIVE LOAD, THE LIVE LOAD REQUIRED BY SECTION 1607 OF THE INTERNATIONAL BUILDING CODE SHALL BE USED.

403.4 EXISTING STRUCTURAL ELEMENTS CARRYING LATERAL LOADS. WHERE THE ALTERATION IS STRUCTURALLY INDEPENDENT OF THE EXISTING STRUCTURE, EXISTING LATERAL LOAD-CARRYING STRUCTURAL ELEMENTS SHALL BE PERMITTED TO REMAIN UNALTERED. WHERE THE ALTERATION IS NOT STRUCTURALLY INDEPENDENT OF THE EXISTING STRUCTURE, THE EXISTING STRUCTURE AND ITS ADDITION ACTING TOGETHER AS A SINGLE STRUCTURE SHALL BE SHOWN TO MEET THE REQUIREMENTS OF SECTION 1609 AND 1613 OF THE INTERNATIONAL BUILDING CODE. FOR PURPOSES OF THIS SECTION, COMPLIANCE WITH ASCE 41,USING A TIER 3 PROCEDURE AND THE TWO-LEVEL PERFORMANCE OBJECTIVE IN TABLE 301.1.4.1 FOR THE APPLICABLE RISK CATEGORY, SHALL BE DEEMED TO MEET THE REQUIREMENTS OF SECTION 1613 OF THE INTERNATIONAL BUILDING CODE.

ALTERATION - LEVEL 1 INCLUDE THE REMOVAL AND REPLACEMENT OR THE COVERING OF EXISTING MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES USING NEW MATERIALS, ELEMENTS, EQUIPMENT, OR FIXTURES THAT SERVE THE SAME PURPOSE.

ALTERATION - LEVEL 2 INCLUDE THE ADDITION OR ELIMINATION OF ANY DOOR OR WINDOW, THE RECONFIGURATION OR EXTENSION OF ANY SYSTEM, OR THE INSTALLATION OF ANY ADDITIONAL EQUIPMENT, AND SHALL APPLY WHERE THE WORK IS EQUAL TO OR LESS THAN 50% OF THE BUILDING AREA.

THIS BUILDING'S CONSTRUCTION IS TYPE IIB.

THIS BUILDING'S OCCUPANCY IS E.

THIS BUILDING'S IS SPRINKLERED.

THERE WILL NOT BE ANY MODIFACATIONS TO THE HOOD SYSTEMS IN THE KITCHENS BEYOND REPLACEMENT OF MOTOR FOR LIKE KIND IF NEEDED.

THE BUILDING WILL NOT HAVE ADDITIONAL SQUARE FOOTAGE AS PART OF THE WORK.

NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODES

2 CODE ANALYSIS

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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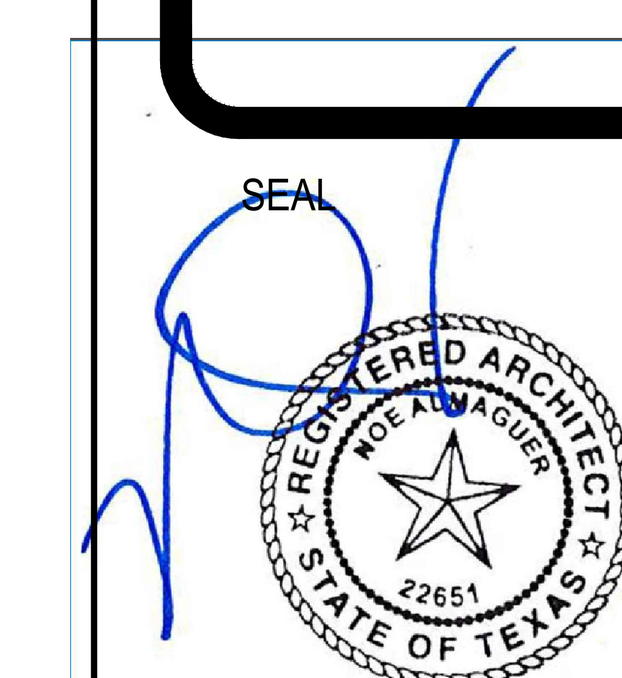
FORT BEND INDEPENDENT SCHOOL DISTRICT
SULLIVAN ELEMENTARY SCHOOL
17828 WINDING WATERS LANE
SUGAR LAND, TX 77479

SEAL



7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
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OVERALL FLOOR PLAN

v-A.201

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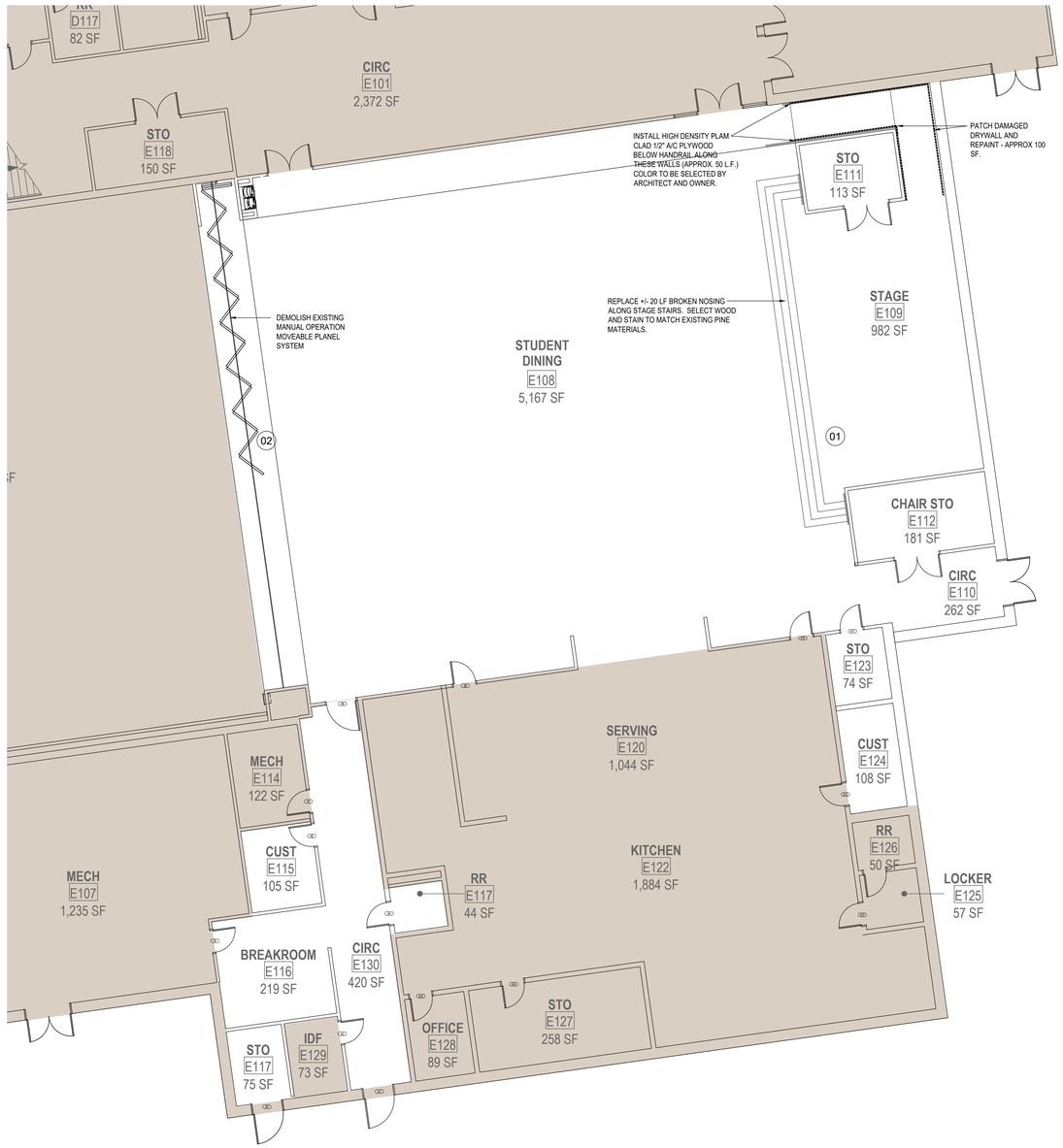


1 CAFETERIA FLOOR PLAN

SCALE: 1/8" = 1'-0"

FLOOR PLAN - GENERAL NOTES

1. REFER TO SHEET A00-01 FOR GENERAL NOTES. GENERAL NOTES APPLY TO ALL SCHOOLS.
2. SULLIVAN HAS NO KITCHEN WORK SCHEDULED IN THIS PROJECT. THE CAFETERIA AND STAGE AREAS, WITH SOME SMALL AREA (250 SF) OF EXTERIOR PAINTING WILL BE REQUIRED. SEE FLOOR PLAN AND FINISH PLAN..

FLOOR PLAN - KEYED NOTES

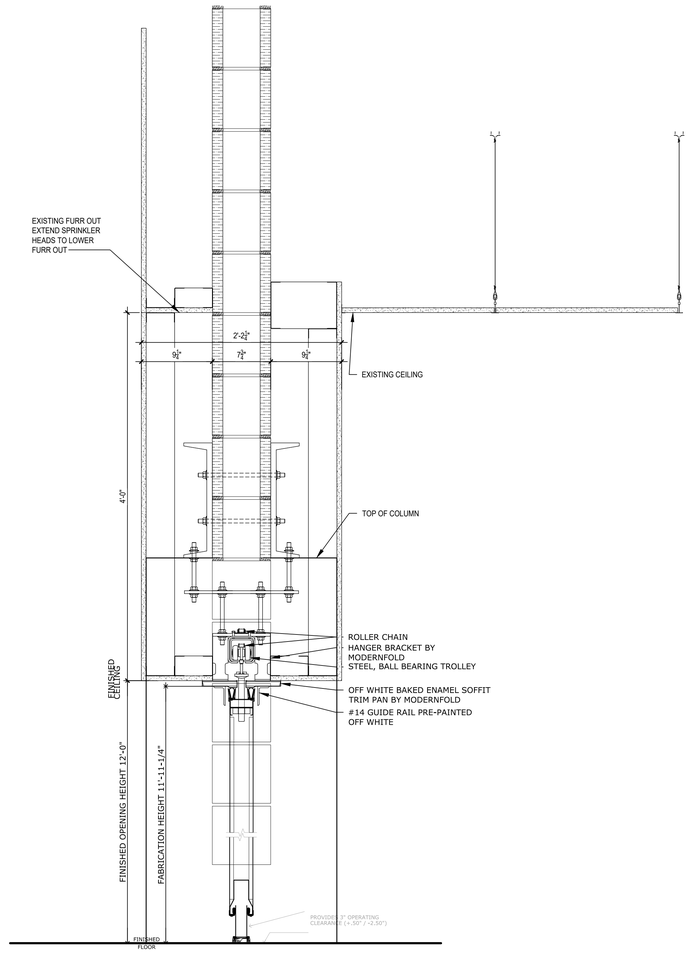
01 REPAIR BROKEN WOOD NOSINGS / RISERS ON STEPS LEADING TO STAGE AREA. MATCH SPECIES AND FINISH. APPROX. 20 LF WILL BE REPLACED.

02 REMOVE EXISTING TRACK, PANELS, AND A PORTION OF THE HEAD AND SOFFIT SIDEWALLS.

03 EXTERIOR PAINTING REQUIRED FOR APPROX. 250 SF OF STUCCO WALL SURFACE.

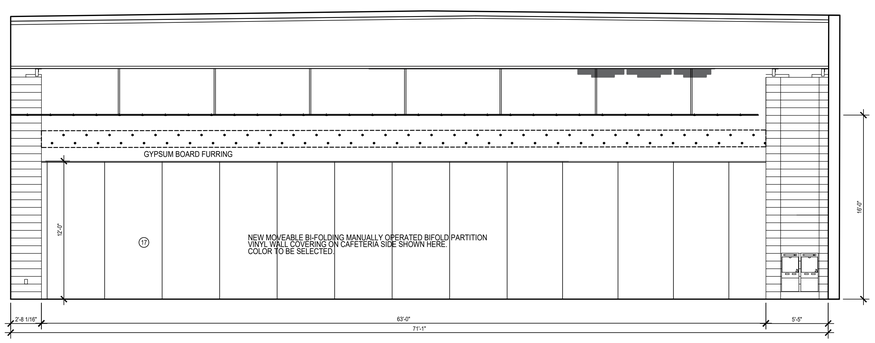
04 INSTALL NEW POWERED MOVEABLE PARTITION SYSTEM.
- a. THE NEW PANEL WILL BE LOWER TO ACCOMODATE DRIVE AND TRACK MECHANISMS PLACED IN THE EXSITING SOFFIT
- b. 208/230V 3PH 60 HZ. 1 HP MOTOR SHALL BE INSTALLED ABOVE EXISTING STACK SPACE. CONFIRM THIS SIZE WITH MANUFACTURER.
- c. RUN POWER FROM NEAREST AVAILABLE POWER PANEL - SEE ELECTRICAL.

3 FLOOR PLAN NOTES



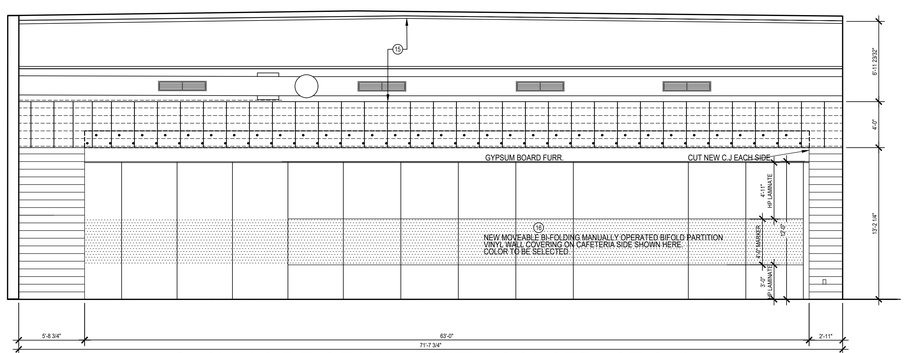
4 SECTION AT FOLDING PARTITION

SCALE: 1-1/2" = 1'-0"



5 CAFETERIA SIDE OF WALL (NEW CONSTRUCTION)

SCALE: 3/16 = 1'-0"



6 GYM SIDE OF WALL (NEW CONSTRUCTION)

SCALE: 3/16" = 1'-0"

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SEAL
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STATE OF TEXAS
22651
7/15/2025

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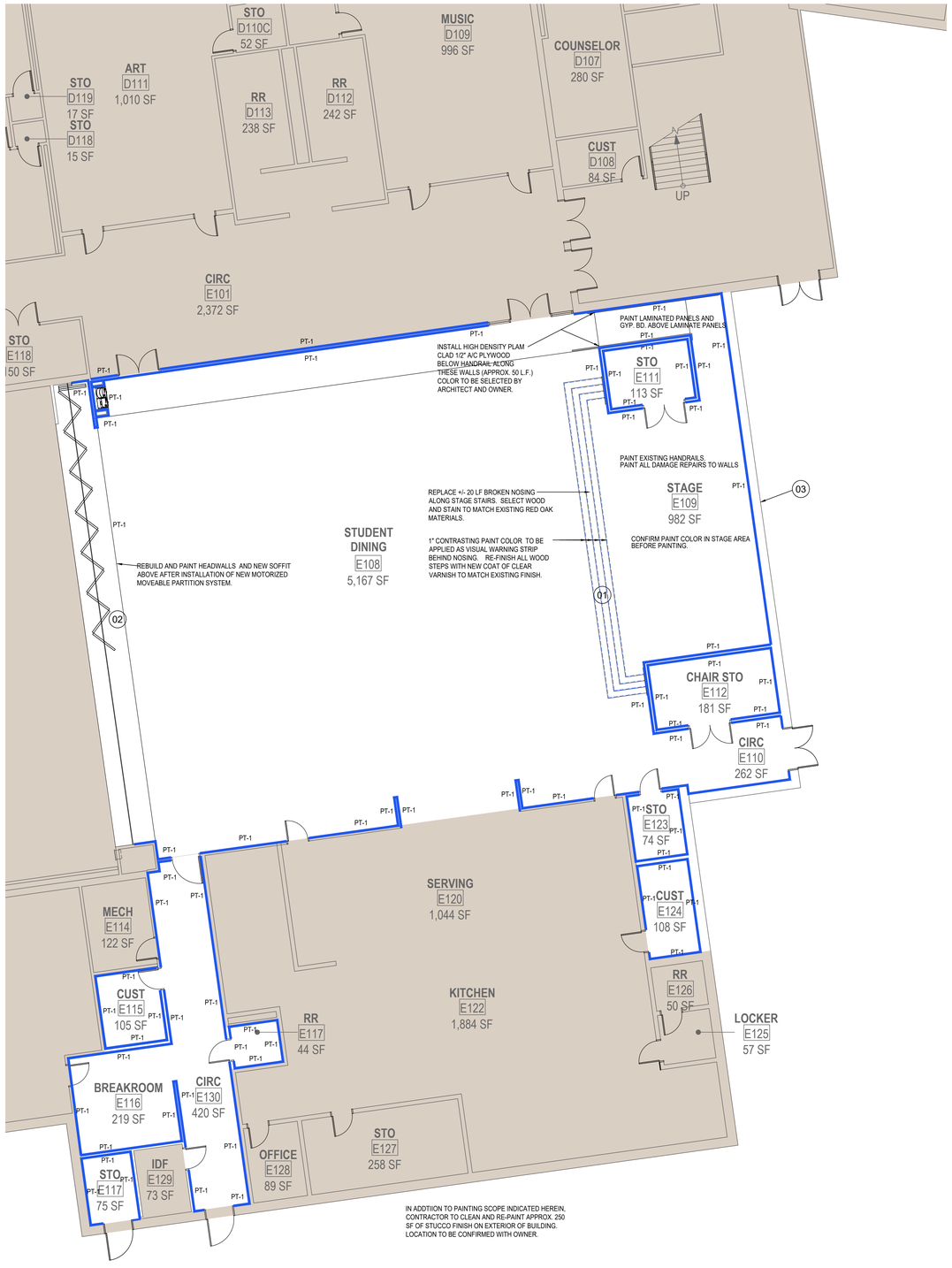
CAFETERIA PLAN

v-A.301



1 FINISH FLOOR PLAN
SCALE: 1/8" = 1'-0"

PAINT COLOR SCHEDULE

UNLESS OTHERWISE INDICATED FIELD COLOR IS PT-1 TO MATCH EXISTING COLOR AND SHEEN.

FOR PRICING, USE

SW 7014 EIDER WHITE, INTERIOR/EXTERIOR PAINT FOR ACCENT COLORS, SUBMIT SELECTION SAMPLES TO EXISTING ACCENT COLORS.

WALL PAINT FINISH LEGEND

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REGISTERED ARCHITECT
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7/15/2025

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FINISH FLOOR PLAN

v-A.501

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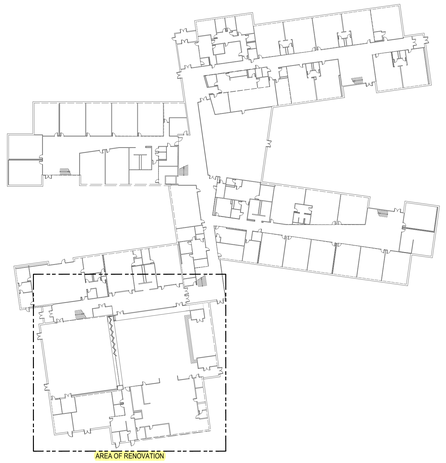


2 OVERALL FLOOR PLAN

SCALE: 1" = 60'- 0"

SYMBOL LEGEND

ⓓ/ⓓ/ⓓ:	SIMPLEX/DUPLEX/QUAD – 5361/2 REC
GFI ⓓ	DUPLEX W/ GFCI PROTECTION–P&S 2097
J	J–BOX
	CEILING MOUNTED J–BOX
M	MOTOR
	HEAVY DUTY, NON–FUSED DISCONNECT. MIN RATING OF CIRCUIT OCPD/VOLTAGE.
	ELECTRICAL PANEL
	HOMERUN TO CIRCUIT NOTED
E	EXISTING DEVICES TO REMAIN
R	EXISTING DEVICES TO BE RELOCATED
D	EXISTING DEVICES TO BE DEMO/REMOVED
RDP	EXISTING DEVICES TO BE REPLACED
S	INDICATES SURFACE MOUNTED
SR	INDICATES SURFACE RACEWAY
*	INDICATES ABOVE COUNTER DEVICE
+	INDICATES DEVICE AT +30–60"
++	INDICATES DEVICE AT +80–96"
CLG	INDICATES DEVICES MOUNTED IN CEILING
WP	INDICATES WEATHERPROOF COVER
3R	INDICATES 3R RATED DEVICE
(E)LA–X	CONNECT(ED) TO EXIST CIRCUIT LA–X
(D)LA–X	DEMO PORTION OF EXIST CIRCUIT LA–X
(N)LA–X	CONNECT(ED) TO NEW CIRCUIT LA–X

GENERAL ELECTRICAL NOTES:

1. INSTALL SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ALL AMENDMENTS.
2. PROVIDE CONDUIT FOR ALL DEVICES INSTALLED IN WALLS.
   - 2.A. 3/4"C. FOR POWER AND 1"C. FOR LOW VOLTAGE/DATA UNLESS NOTED OTHERWISE.
   - 2.B. PROVIDE PROTECTIVE BUSHING ON END OF ALL LOW VOLTAGE CONDUITS.
   - 2.C. ALL ELECTRICAL HOMERUNS SHALL BE IN CONDUIT, MIN 3/4"C.
   - 2.D. USE INSULATED THROAT FITTINGS FOR CONNECTIONS TO HOUSINGS, BOXES, ENCLOSURES, ETC.
   - 2.E. MAX LENGTH FOR FLEX CONDUIT SHALL BE 6FT AND MIN. SIZE SHALL BE 1/2". ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
3. CONDUIT TYPES:
   - 3.A. INSIDE BUILDINGS: GALVANIZED STEEL EMT.
     - 3.A.A. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT IN EXPOSED CEILING AREAS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
     - 3.A.B. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT ABOVE INACCESSIBLE CEILINGS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
   - 3.B. NO MC CABLE SHALL BE ALLOWED.
   - 3.C. PROVIDE FLEXIBLE CONNECTIONS TO MOTORS, PUMPS, TRANSFORMERS, OR SIMILAR EQUIPMENT.
4. PROVIDE GALVANIZED STEEL, ONE–PIECE CONSTRUCTION, OUTLET BOXES IN ALL CASES SUITABLE FOR INTENDED USE.
   - 4.A. BOXES OUTSIDE SHALL BE STEEL, NEMA 3 TYPE.
   - 4.B. PROVIDE CEILING BRACKET TO SUPPORT CEILING MOUNTED DEVICES FROM CEILING TEES.
5. 20 AMP. SINGLE PHASE BRANCH CIRCUITS SERVING LIGHTING AND GENERAL RECEPTACLES MAY BE GROUPED IN A SINGLE RACEWAY PROVIDED A NEUTRAL CONDUCTOR IS INSTALLED FOR EACH CIRCUIT REQUIRING A NEUTRAL.
   - 5.A. DO NOT INSTALL MORE THAN FOUR CURRENT CARRYING CONDUCTORS IN A CONDUIT EXCEPT SIX #12 OR #10 CURRENT CARRYING CONDUCTORS MAY BE INSTALLED IN 3/4" OR LARGER CONDUIT FOR 20A CIRCUITS.
   - 5.B. DO NOT INSTALL 480/277 VOLT CONDUCTORS IN THE SAME CONDUIT WITH 240/208/120 VOLT CONDUCTORS.
   - 5.C. DO NOT COMBINE NEUTRALS. PROVIDE DEDICATED NEUTRALS FOR EACH BRANCH CIRCUIT.
   - 5.D. MULTIPLE DEVICES ON A CIRCUIT SUCH AS RECEPTACLES SHALL BE WIRED WITH A PIGTAIL SO THE DEVICE DOES NOT PROVIDE THE CONTINUITY PATH. FEED THROUGH CONNECTIONS FOR GFCI RECEPTACLES SHALL NOT BE USED FOR PROTECTION OF DOWNSTREAM DEVICES.
6. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
7. PROVIDE J–BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM, SOUND SYSTEM, LOW VOLTAGE WIRING, ETC. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF ALL LOW VOLTAGE CONDUITS.
8. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS. ALL JUNCTION/PULL BOXES INSTALLED ABOVE ACCESSIBLE CEILINGS SHALL BE MOUNTED SO THAT THE ACCESS PANEL IS NO HIGHER THAN 18" ABOVE THE CEILING.
9. PROVIDE CIRCUIT LABELS IN PERMANENT MARKER ON ALL NEW AND EXISTING J–BOX COVERS UTILIZED IN THE AREA OF RENOVATION.
10. PROVIDE CIRCUIT LABEL ON ALL ABOVE CEILING J–BOXES, EQUIPMENT, ETC. IDENTIFYING THE CIRCUITS CONTAINED/CONNECTED.
11. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12.
    - 11.A. TYPICAL BUILDING WIRE SHALL BE STRANDED TYPE THHN, THWN–2 (WET RATED FOR 90?C), OR XHHW–2. MINIMUM WIRE SIZE SHALL BE #12.
    - 11.B. ALL BUILDING WIRE SHALL BE COLOR CODED WITH THE SAME COLOR CONNECTED TO THE SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION MATCHING THE EXISTING BUILDING COLOR CODE SCHEME.
12. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEAL PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO COOLER SECTIONS.
13. DRAWINGS, SCHEDULES, NOTES, AND DETAILS ARE INTENDED TO BE COMPLIMENTARY. ANY WORK DESCRIBED IN ANY OF THEM, WILL BE WORK REQUIRED UNDER THIS CONTRACT. WHERE THERE IS A CONFLICT BETWEEN DIFFERENT PORTIONS OF THE DESIGN DOCUMENTS IT SHALL BE CLARIFIED BY RFI. BIDDING CLARIFICATION PRIOR TO BIDDING THE MOST EXPENSIVE OPTION SHALL BE INCLUDED AND CLARIFICATION SHALL BE MADE DURING CONSTRUCTION.
14. SHOULD ANY WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS BE IN VIOLATION OF ANY FEDERAL, STATE, COUNTY OR CITY LAWS, ORDINANCE OR REGULATION, THOSE LAWS AND REGULATIONS SHALL PREVAIL, AND SHALL BE COMPLIED WITH BY THE CONTRACTOR AS A PART OF THIS WORK WITH NO EXTRA COMPENSATION.
15. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

GENERAL RENOVATION AND REMODELING NOTES:

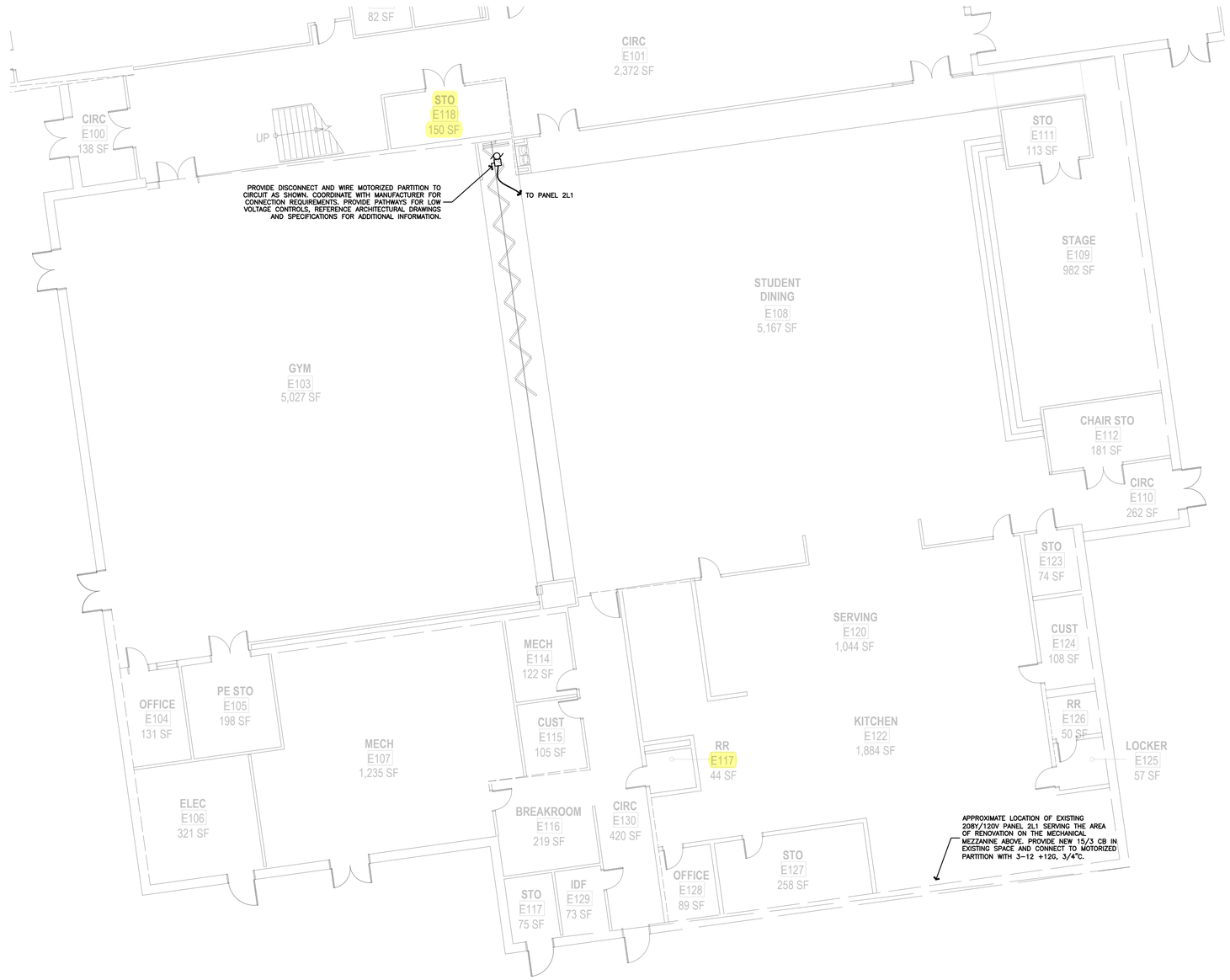
1. THESE ELECTRICAL DRAWINGS ONLY SHOW SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J–BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
2. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
3. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. RESUPPORT EXISTING CABLING/CONDUIT TO REMAIN TO MEET CURRENTLY ADOPTED CODE REQUIREMENTS. REMOVE ALL ABANDONED CONDUIT AND WIRE. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITIES.
4. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
5. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
6. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
7. ANY CIRCUIT OR PARTIAL CIRCUIT TO REMAIN OR BE REUSED SHALL REMAIN ACTIVE.
8. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
9. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
10. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN AS–BUILT PANEL SCHEDULE FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT USING BUILDING ROOM NUMBERS.

3 PARTIAL ELECTRICAL RISER - SULLIVAN ELEMENTARY

NO SCALE

NOTES:

1. FIELD VERIFY ALL EXISTING ELECTRICAL PANELS AND FEEDERS SHOWN ON DRAWINGS.
2. REF ELECTRICAL FLOOR PLANS FOR PANEL LOCATIONS.
3. ALL OUTAGES SHALL BE SCHEDULED/CONFIRMED IN WRITING WITH THE OWNER A MINIMUM OF TWO WEEKS PRIOR TO ANY OUTAGE.
4. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN PANEL SCHEDULE USING BUILDING ROOM NUMBERS FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT.
5. REFERENCE PANEL SCHEDULES AND SHORT CIRCUIT TABLE FOR AIC AND SCCR VALUES.



1 ELECTRICAL RENOVATION PLAN

SCALE: 1/8" = 1'- 0"

ISSUE:

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HOUSTON, TEXAS 77079

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ELECTRICAL FLOOR PLAN & SCHEDULES

v-E.200

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1300 W. SAM HOUSTON PARKWAY S., SUITE 125, HOUSTON, TX 77042

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
CP#	CONTROL PANEL
TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
VC	VOLUME CONTROL
WB	WALL BOX ENCLOSURE
D1 A1	D1 = DIGITAL SINGLE SIDED CLOCK / A1 = ANALOG SINGLE SIDED CLOCK
D2 A2	D2 = DIGITAL DOUBLE SIDED CLOCK / A2 = ANALOG DOUBLE SIDED CLOCK
ENC	CEILING AV ENCLOSURE
C C	PRESENTATION CAMERA - CEILING - WALL MOUNTED

PREMISE SECURITY LEGEND

SYMBOL	DESCRIPTION
CR	CARD READER
CR M	CARD READER MULLION
KP	INTRUSION DETECTION KEYPAD
IC	INTERCOM (1 DATA CABLE)
IC MS	INTERCOM MASTER STATION (1 DATA CABLE)
PB	PANIC/DURESS BUTTON
LD	LOCK DOWN BUTTON
MD	MOTION DETECTOR
GB	ACCOUSTICAL GLASS BREAK SENSOR
BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
DB	DOORBELL
DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
DC	DOOR CONTACT / MONITOR
ES EL EH	ELECTRIFIED STRIKE - ELECTRIFIED LATCH - ELECTRIFIED HARDWARE (REFER TO SCHEDULES)
C C	STANDARD IP SURVEILLANCE CAMERA, (1) CABLE
C C C	180° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° MULTI-IMAGER IP SURVEILLANCE CAMERA, (1) CABLE
C	360° FISHEYE LENS CAMERA
IR	IR ILLUMINATOR

STRUCTURED CABLING LEGEND

SYMBOL	DESCRIPTION
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF DATA CABLE(S)/JACK(S)
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S)
#	TELECOMMUNICATIONS OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S), SURFACE MOUNT
#/#	TELECOMMUNICATIONS OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S), SURFACE MOUNT
W	WALL MOUNT PHONE (1 CABLE/JACK)
W	WALL MOUNT PHONE, SURFACE MOUNT (1 CABLE/JACK)
#	FLOOR MOUNTED OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#/#	FLOOR MOUNTED OUTLET, #/# = NUMBER OF VOICE CABLE(S)/JACK(S) AND NUMBER OF DATA CABLE(S)/JACK(S) (FLOOR BOX BY E.C.)
#	CEILING MOUNTED DATA OUTLET, # =NUMBER OF VOICE/DATA CABLE(S)/JACK(S)
AP#	CEILING MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
AP#	WALL MOUNTED OUTLET FOR WIRELESS ACCESS POINT #=NUMBER OF CABLE(S)/JACK(S)
	CABLING SLEEVE(S)
	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

GENERAL ANNOTATION LEGEND

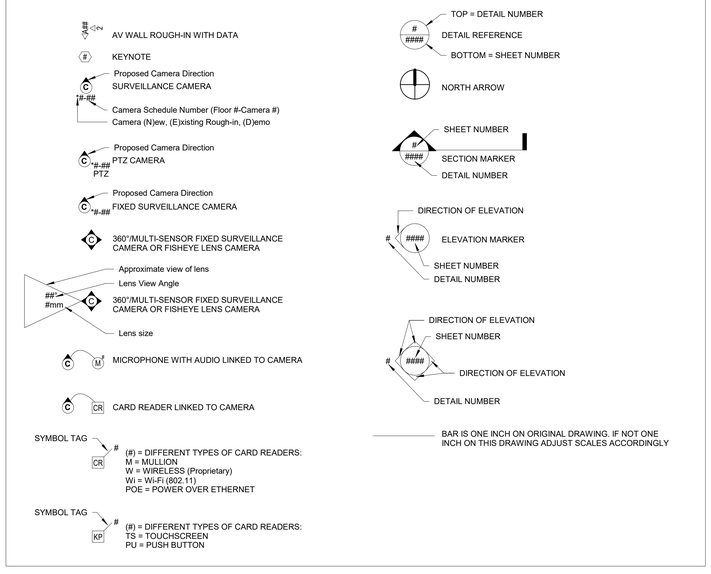
SYMBOL	DESCRIPTION
MER	MAIN EQUIPMENT ROOM
TR	TELECOMMUNICATION ROOM
MDF	MAIN DISTRIBUTION FRAME
IDF	INTERMEDIATE DISTRIBUTION FRAME
ETR	EXISTING TO REMAIN
PBO	PROVIDED BY OTHERS
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
PSC	PREMISE SECURITY CONTRACTOR
SCC	STRUCTURAL CABLING CONTRACTOR
AVC	AV/MULTIMEDIA CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY - GENERAL NOTES

1. EACH KEYNOTE MAY NOT BE UTILIZED ON EVERY SHEET.
2. ALL CONDUIT MEASUREMENTS REFER TO STANDARD CONDUIT TRADE SIZES.
3. ALL CABLES SHALL BE CONCEALED.
4. EACH CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY SLEEVES, WHETHER OR NOT SPECIFICALLY NOTED ON PROJECT DRAWINGS. ALL SLEEVES SHALL BE 2" UNLESS NOTED OTHERWISE ON THE DRAWINGS. CABLE FILL PERCENTAGE SHALL COMPLY WITH NEC.
5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED



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FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Sullivan Elementary School
17828 Winding Waters Ln, Sugar Land, TX 77479

SEAL



07-18-25

MVA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07-18-25
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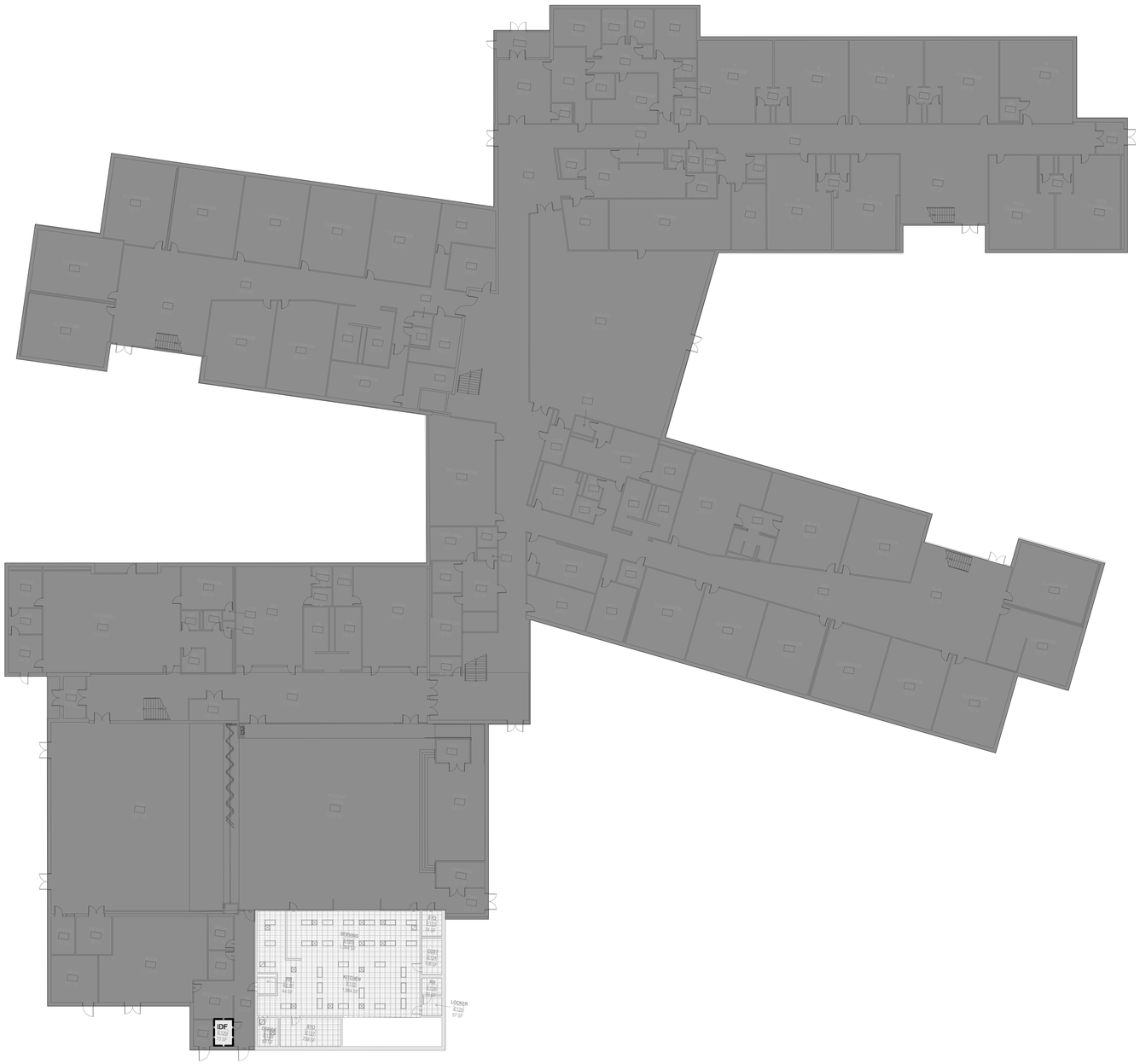
TECHNOLOGY - TITLE SHEET

v-TN000

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BACKGROUND V (SULLIVAN ES)
SCALE: 1" = 20'-0"

TRUENORTH A PMY COMPANY

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BICSI ID # 256657
EXPIRES 12-31-27
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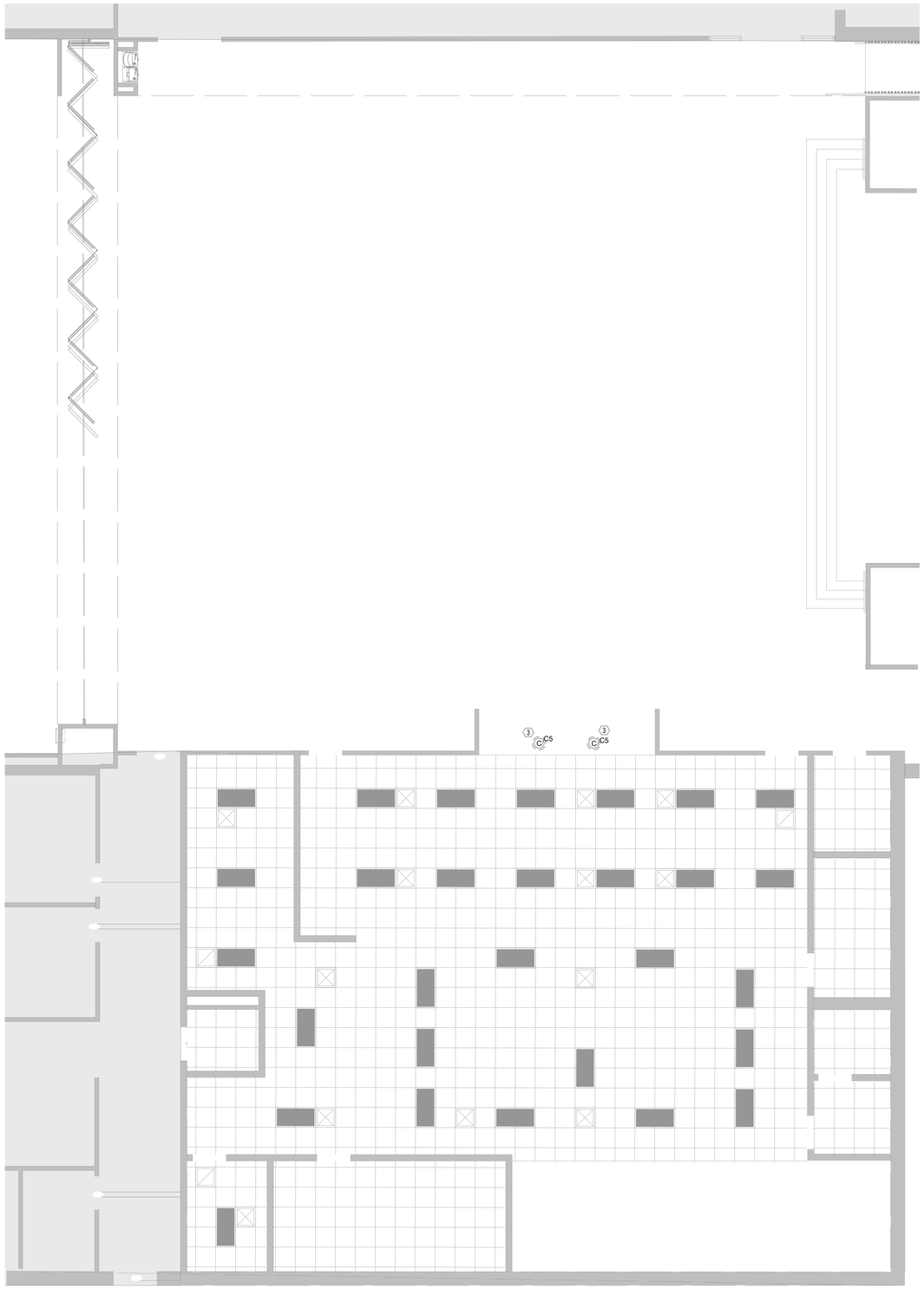
TECHNOLOGY - Sullivan ES - OVERALL

v-TN.100



1 SULLIVAN - REFLECTED CEILING PLAN
SCALE: 3/16" = 1'-0"

TECHNOLOGY KEYNOTES

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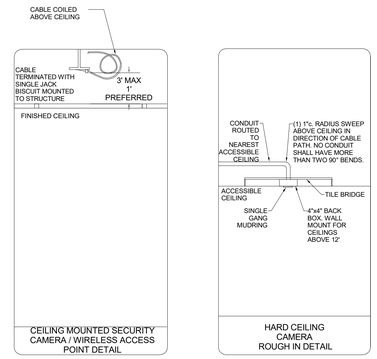
TECHNOLOGY - Sullivan ES - KITCHEN

v-TN.101

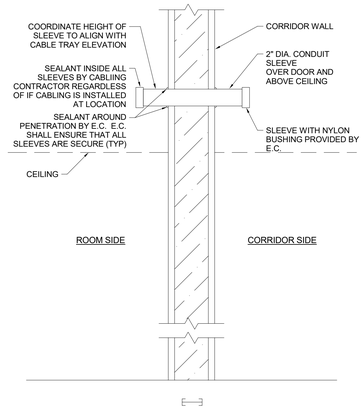
TRUENORTH A PMY COMPANY

GENERAL NOTE

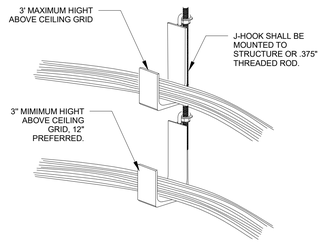
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



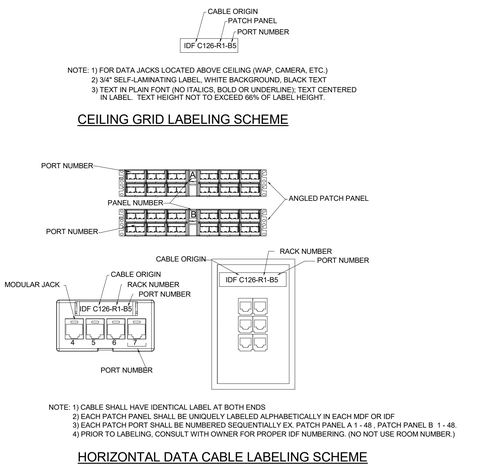
1 DATA ROUGH-IN DETAILS
SCALE: NS



2 TYPICAL CABLING SLEEVE
SCALE: NTS



3 PANDUIT J-HOOK DETAIL
SCALE: NTS



4 LABELING & CABLING SCHEMES
SCALE: NTS

5 CABLE PATHWAY CROSS SECTION
SCALE: NTS

6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS

7 I-JOIST MOUNTING DETAIL
SCALE: NS

8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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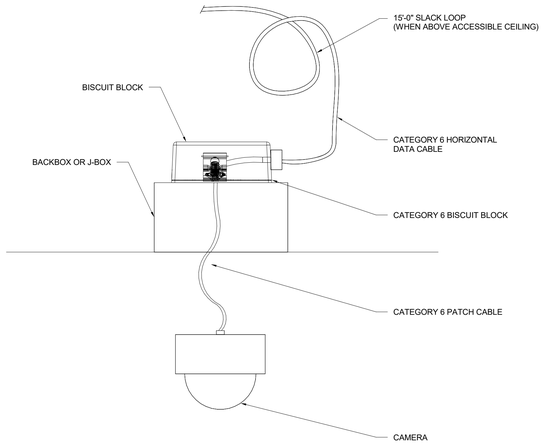
TECHNOLOGY - Sullivan ES - DETAILS

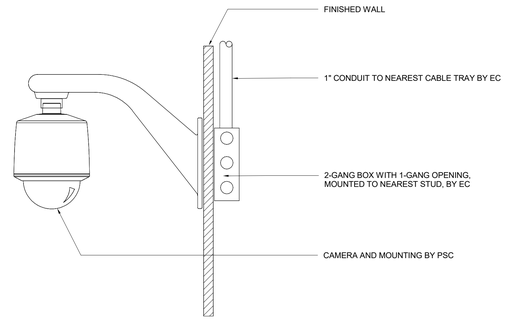
v-TN.500

GENERAL NOTES:

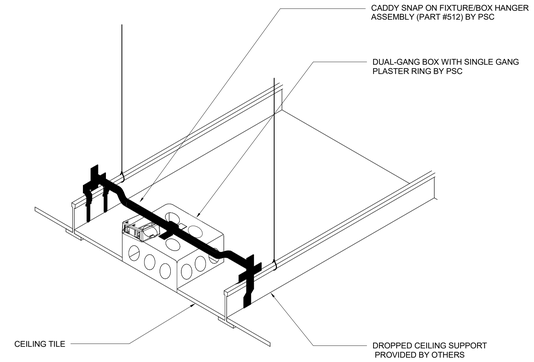
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



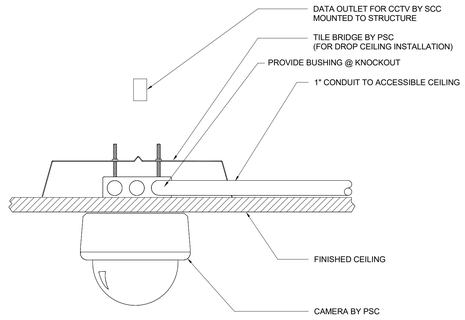
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

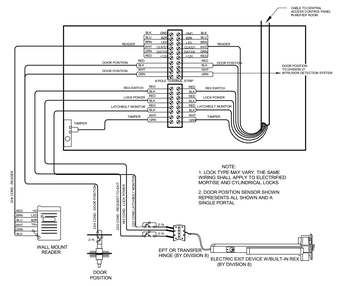


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

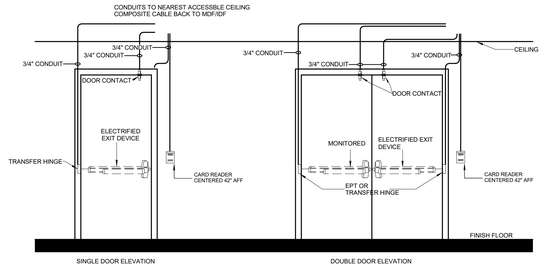
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

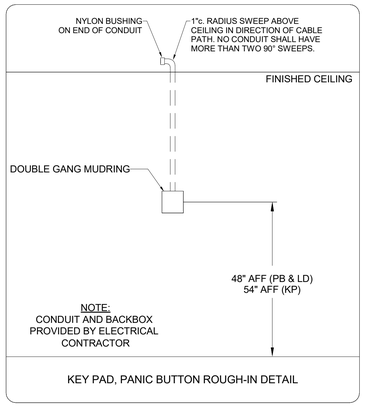
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

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TECHNOLOGY - Sullivan ES - SECURITY DETAILS

v-TN.600

FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
School: w-TOWNEWEST ES	
W-A.000	COVER AND INDEX
w-TN-000	TECHNOLOGY - INDEX SHEET
w-TN-100	TECHNOLOGY - OVERALL
w-TN-101	TECHNOLOGY - KITCHEN
w-TN-501	TECHNOLOGY - DETAILS
w-TN-600	TECHNOLOGY - SECURITY DETAILS



FORT BEND INDEPENDENT SCHOOL DISTRICT 2023 BOND

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

FORT BEND INDEPENDENT SCHOOL DISTRICT

TOWNEWEST ELEMENTARY SCHOOL
13927 OLD RICHMOND ROAD, SUGAR LAND, TX 77498

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

KRISTIN K. TASSIN	PRESIDENT
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DAVID HAMILTON	SECRETARY
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ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

PROJECT DESIGN TEAM

PROGRAM MANAGEMENT
FBISD 2023 Bond Team
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Missouri City, TX 77489
Phone Number: 281-327-5481

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11767 Katy Freeway, Suite 430
Houston, Texas 77079
Phone Number: 713-782-8188

FOOD SERVICE
Food Design Professionals
26215 Oak Ridge Drive
The Woodlands, Texas 77380
Phone Number: 281-350-2323

MEP ENGINEERS
Stanton Engineering Group
1300 W. Sam Houston Pkwy South, Suite 121
Houston, Texas 77042
Phone Number: 713-300-9292

STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

W

AUDIO/VISUAL MULTIMEDIA LEGEND

SYMBOL	DESCRIPTION
A## V##	WALL AV ROUGH-IN DETAIL
A## V##	CEILING AV ROUGH-IN DETAIL
A## V##	FLOOR AV ROUGH-IN DETAIL
IWB IWB	INTERACTIVE WHITE BOARD - WALL - CEILING
PJ PJ	MULTIMEDIA PROJECTOR
FP# FP#	MULTIMEDIA FLAT PANEL DISPLAY
S S	LOUDSPEAKER, WALL MOUNTED AND CEILING MOUNTED RESPECTIVELY - # INDICATES TYPE
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TP#	TOUCH PANEL
M	MICROPHONE, CEILING MOUNTED - # INDICATES TYPE
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BM	BIOMETRIC READER
RX	REQUEST TO EXIT - SURFACE PIR
KS	KEY SWITCH
LA	LOCAL ALARM SOUNDER
RG	RED/GREEN INDICATOR LIGHT
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DH	MAGNETIC DOOR HOLD
DR	DOOR RELEASE
RX	REQUEST TO EXIT - INTEGRAL TO DOOR HARDWARE
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	TYPICAL LADDER RACK
	TYPICAL CABLE TRAY, BASKET STYLE

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AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
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SCC	STRUCTURAL CABLING CONTRACTOR
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5. DEVICE LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL REVIEW CONDITIONS AND COORDINATE WITH OTHER TRADES AS NECESSARY FOR EXACT PLACEMENT.

TECHNOLOGY SYMBOLS LEGEND

NOT ALL SYMBOLS ARE USED

- AV WALL ROUGH-IN WITH DATA
- KEYNOTE
- Proposed Camera Direction
  SURVEILLANCE CAMERA
  Camera Schedule Number (Floor #-Camera #)
  Camera (N)ew, (E)xisting Rough-in, (D)emo
- Proposed Camera Direction
  PTZ CAMERA
  PTZ
- Proposed Camera Direction
  FIXED SURVEILLANCE CAMERA
- 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- Approximate view of lens
  Lens View Angle
  360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
  Lens size
- MICROPHONE WITH AUDIO LINKED TO CAMERA
- CARD READER LINKED TO CAMERA
- SYMBOL TAG
  (#) = DIFFERENT TYPES OF CARD READERS:
  M = MULLION
  W = WIRELESS (Proprietary)
  Wi = Wi-Fi (802.11)
  POE = POWER OVER ETHERNET
- SYMBOL TAG
  (#) = DIFFERENT TYPES OF CARD READERS:
  TS = TOUCHSCREEN
  PU = PUSH BUTTON
- TOP = DETAIL NUMBER
  DETAIL REFERENCE
  BOTTOM = SHEET NUMBER
- NORTH ARROW
- SHEET NUMBER
  SECTION MARKER
  DETAIL NUMBER
- DIRECTION OF ELEVATION
  ELEVATION MARKER
  SHEET NUMBER
  DETAIL NUMBER
- DIRECTION OF ELEVATION
  SHEET NUMBER
  DIRECTION OF ELEVATION
  DETAIL NUMBER
- BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS DRAWING ADJUST SCALES ACCORDINGLY

TRUENORTH
A PMY COMPANY

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W

FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Townewest Elementary School
13927 Old Richmond Rd West, Sugar Land, TX 77498

SEAL

Bicsi
Brian C Porter
BICSI ID # 258657
EXPIRES 10-31-27
NCCD

07-18-25

MVA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07-18-25
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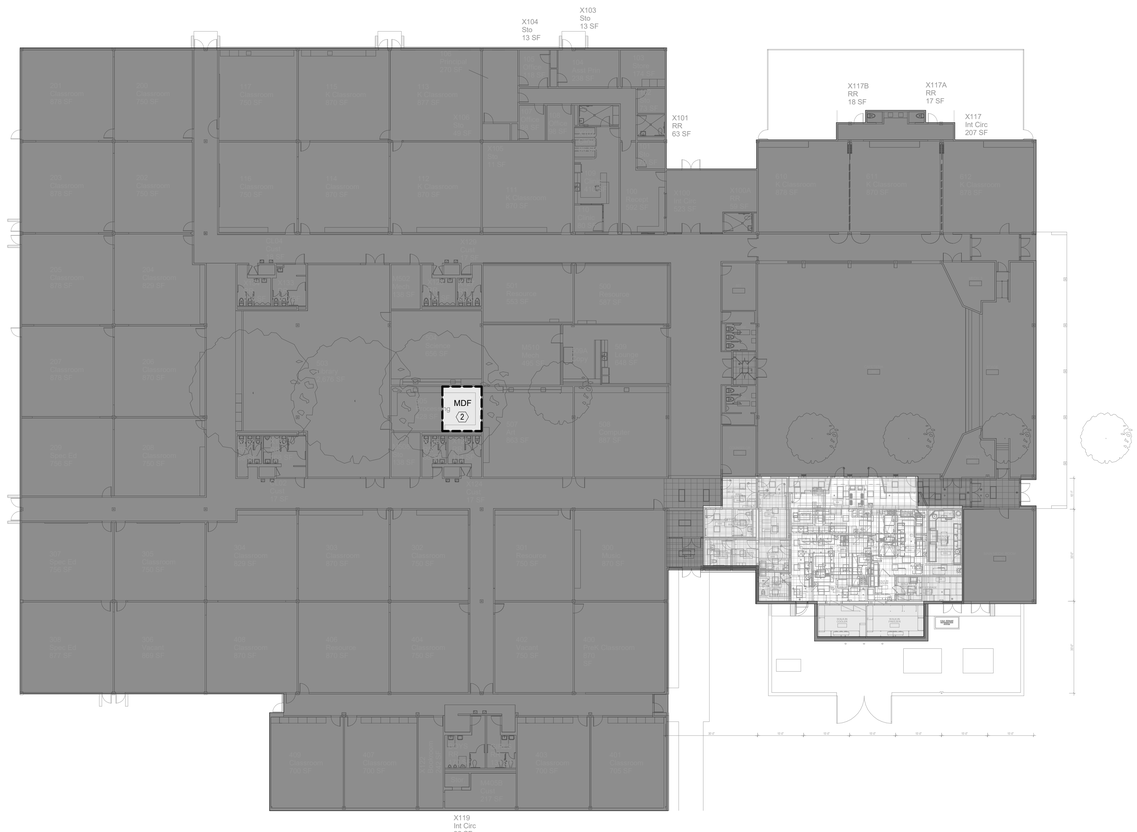
TECHNOLOGY - TITLE SHEET

w-TN000

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.



1 BACKGROUND W (TOWNEWEST ES)
SCALE: 1" = 20'-0"

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Townewest Elementary School
13927 Old Richmond Rd West, Sugar Land, TX 77498

SEAL

BICSI REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Brian C Porter
BICSI ID # 256557
EXPIRES 12-31-27

07-18-25

MVA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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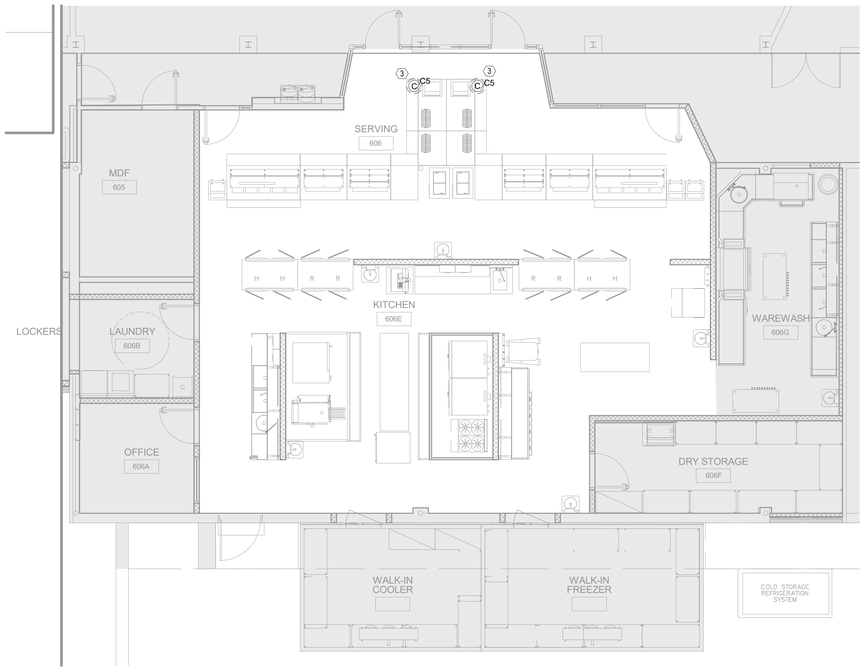
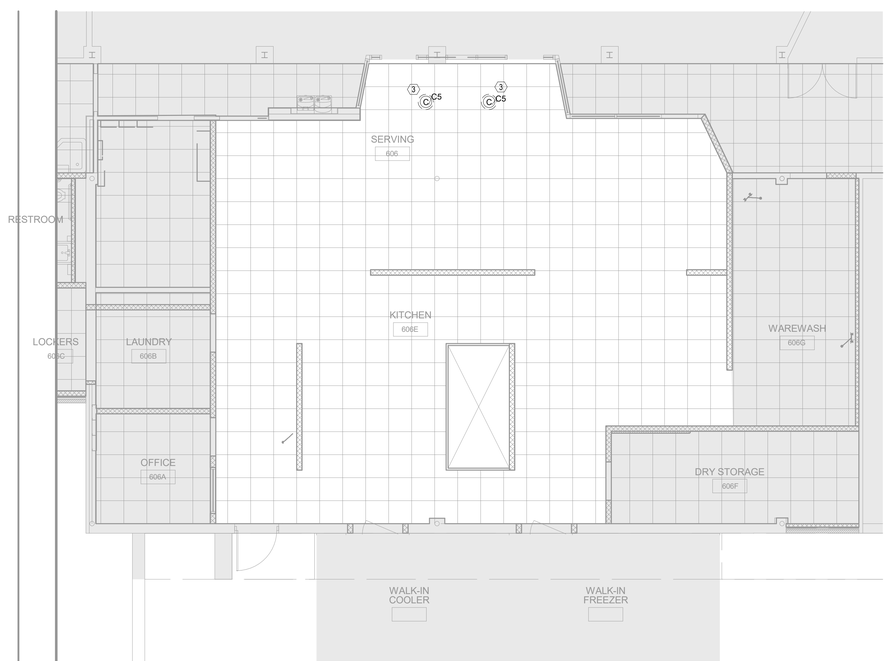
TECHNOLOGY - TOWNEWEST ES - OVERALL

w-TN.100



1 TOWNEWEST - KITCHEN PLAN
SCALE: 3/16" = 1'-0"



2 TOWNEWEST - REFLECTED CEILING PLAN
SCALE: 3/16" = 1'-0"

TECHNOLOGY KEYNOTES

1. IDF WILL REQUIRE ADDITIONAL HARDWARE TO SUPPORT THE ADDED CAMERA CABLES.
2. CONTRACTOR TO VERIFY WEITHER ADDITIONAL HARDWARE WILL BE NEEDED TO SUPPORT ADDITIONAL CAMAERA CABLES.
3. CONTRACTOR TO COORDINATE FINAL DEVICE LOCATION AND POSITIONING WITH FBISD.

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Townewest Elementary School
13927 Old Richmond Rd West, Sugar Land, TX 77498

SEAL



07-18-25

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

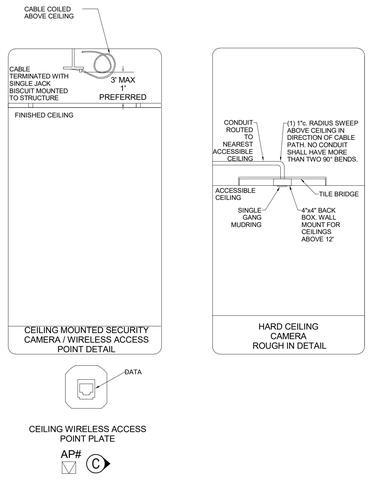
PROJ. NO.: 23-25
DATE: 07-18-25
ISSUED FOR BIDDING AND PERMITTING
TECHNOLOGY - TOWNEWEST ES - KITCHEN

w-TN.101

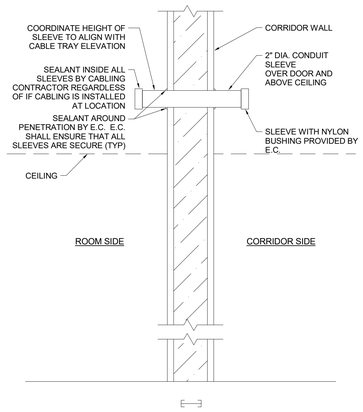
TRUENORTH A PMY COMPANY

GENERAL NOTE

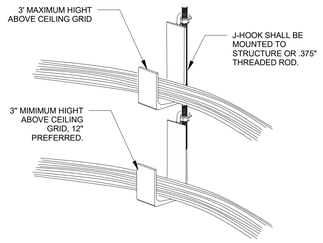
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE, FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



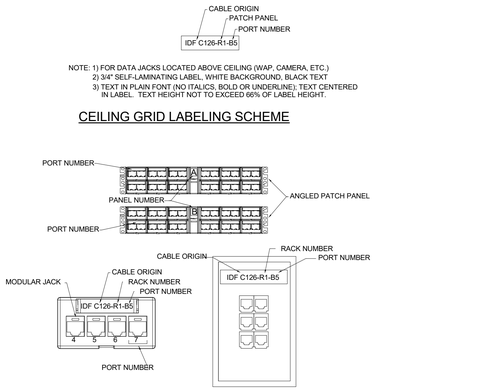
1 DATA ROUGH-IN DETAILS
SCALE: NS



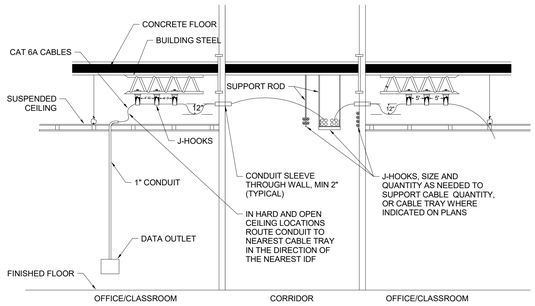
2 TYPICAL CABLING SLEEVE
SCALE: NTS



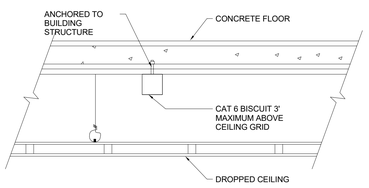
3 PANDUIT J-HOOK DETAIL
SCALE: NTS



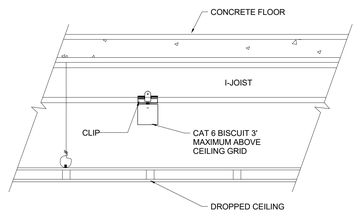
4 LABELING & CABLING SCHEMES
SCALE: NTS



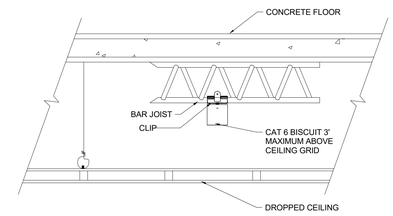
5 CABLE PATHWAY CROSS SECTION
SCALE: NTS



6 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



7 I-JOIST MOUNTING DETAIL
SCALE: NS



8 BAR JOIST MOUNTING DETAIL
SCALE: NS

CAMERA TYPE	MANUFACTURER	MODEL NUMBER	GENERAL DESCRIPTION
C1	iPro	WV-S8574L	4x4K (33MP) EXTERIOR MULTI-SENSOR - PARKING LOTS, STADIUM
C2	iPro	WV-S8544L	4x4MP (16MP) EXTERIOR MULTI-SENSOR - BUILDING PERIMETER
C3	iPro	WV-S25500-V3LN	5MP EXTERIOR VANDAL DOME
C4	iPro	WV-S22500-V3L	5MP INTERIOR VANDAL DOME - CORR., COMMON, SPED
C5	iPro	WV-S4156A	5MP 360 (FISHEYE) - STAIRWELLS

9 CAMERA SCHEDULE
SCALE: NTS

Symbol	Purpose	Size	Mount	Backbox	Notes
FP1	Digital Signage/Menu Boards	+49"	Ceiling Pole	N/A	Data and Power Outlets on ceiling

10 DISPLAY SCHEDULE
SCALE: NTS

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FORT BEND INDEPENDENT SCHOOL DISTRICT
Townewest Elementary School
13927 Old Richmond Rd West, Sugar Land, TX 77498

SEAL

BICSI REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Brian C Porter
BICSI ID # 256557
EXPIRES 12-31-27
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ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
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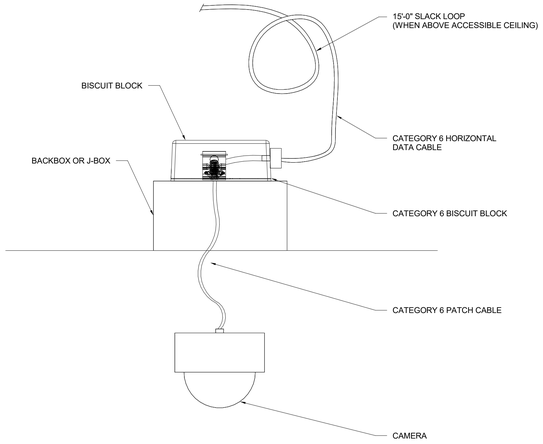
TECHNOLOGY - TOWNEWEST ES - DETAILS

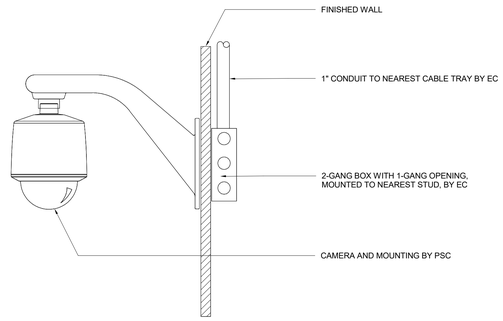
w-TN.500

GENERAL NOTES:

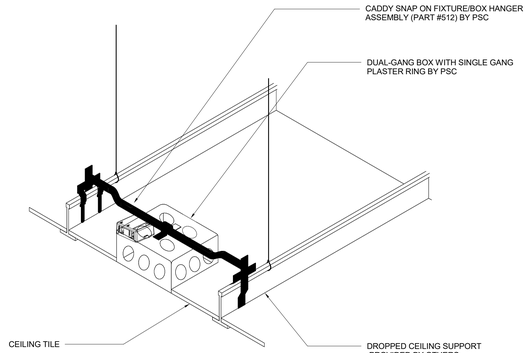
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL MOUNTING DETAILS ARE REFERENCE FOR ALL FIXED DOME, 180°, 360°, PTZ, AND "BULLET/BOX" CAMERAS.



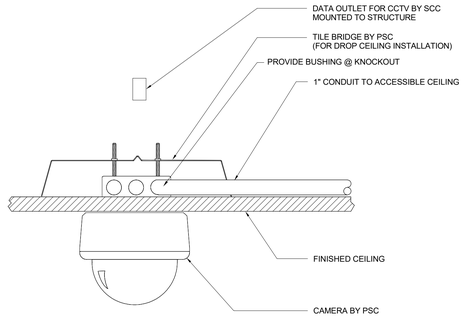
1 TYPICAL CAMERA INSTALLATION SECTION DETAIL
SCALE: NS



6 WALL MOUNTED CAMERA DETAIL
SCALE: NS



4 TILE BRIDGE DETAIL
SCALE: NS

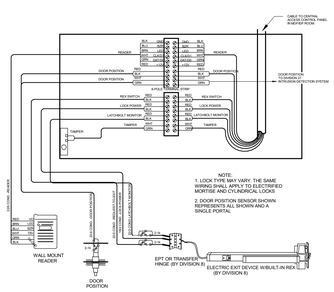


5 CEILING MOUNTED CAMERA DETAIL
SCALE: NS

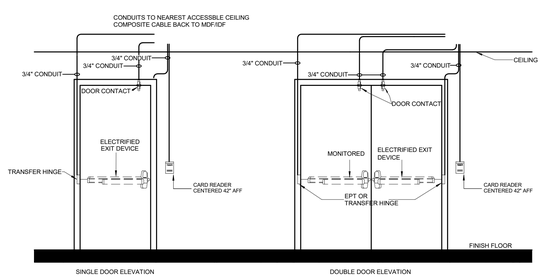
ACCESS CONROL DETAILS AND GENERAL NOTES:

1. CONDUIT ROUGH-IN IS A GUIDE FOR WHAT WILL BE REQUIRED FOR EACH DOOR. AS DOOR COMPONENTS CHANGE, EXACT CONDUIT LOCATION WILL ALSO NEED TO BE ADJUSTED.

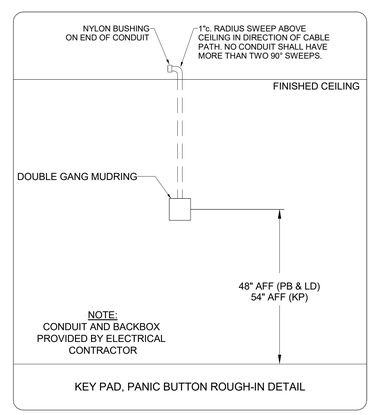
2. PROTECT EXISTING-TO-REMAIN ACCESS CONTROL DEVICES AND CABLE THROUGHOUT RENOVATION WORK. IF CABLE AND/OR DEVICES ARE DAMAGED, SECURITY CONTRACTOR TO REPLACE WITH NEW.



1 ACCESS CONTROL - WIRING DETAIL - EXIT DEVICE W/ BUILT-IN REX
SCALE: NTS



2 ACCESS CONTROL - STEEL/HOLLOW METAL DOOR.
SCALE: NTS



KP PB LD

3 ROUGH-IN DETAILS: KP, PB, LD
SCALE: NTS

TRUENORTH A PMY COMPANY

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FORT BEND BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
Townewest Elementary School
13927 Old Richmond Rd West, Sugar Land, TX 77498

SEAL



07-18-25

MWA ARCHITECTS
ARCHITECTS
AND PLANNING
CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

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TECHNOLOGY -
TOWNEWEST ES - SECURITY
DETAILS
w-TN.600

FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
School: aa-First Colony MS	
aa-A.00	COVER AND INDEX
aa-A.101	TEMPORARY COOKING LOCATION SITE PLAN
aa-E.200	ELECTRICAL FLOOR PLAN & SCHEDULES



FORT BEND INDEPENDENT SCHOOL DISTRICT

FIRST COLONY ELEMENTARY SCHOOL
2720 PLANTERS STREET, SUGAR LAND, TX 77479

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

KRISTIN K. TASSIN	PRESIDENT
RICK GARCIA	VICE PRESIDENT
DAVID HAMILTON	SECRETARY
ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

PROJECT DESIGN TEAM

PROGRAM MANAGEMENT
FBISD 2023 Bond Team
2323 Texas Parkway
Missouri City, TX 77489
Phone Number: 281-327-5481

ARCHITECT
MWA Architects
11767 Katy Freeway, Suite 430
Houston, Texas 77079
Phone Number: 713-782-8188

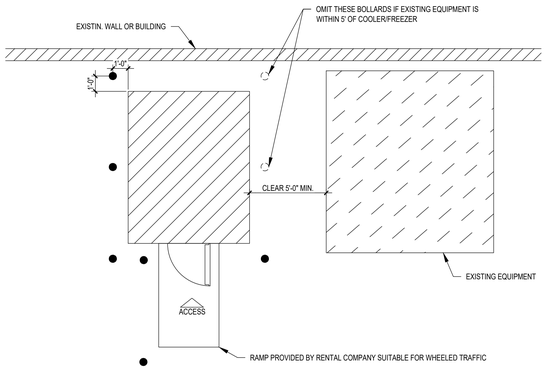
FOOD SERVICE
Food Design Professionals
26215 Oak Ridge Drive
The Woodlands, Texas 77380
Phone Number: 281-350-2323

MEP ENGINEERS
Stanton Engineering Group
1300 W. Sam Houston Pkwy South, Suite 121
Houston, Texas 77042
Phone Number: 713-300-9292

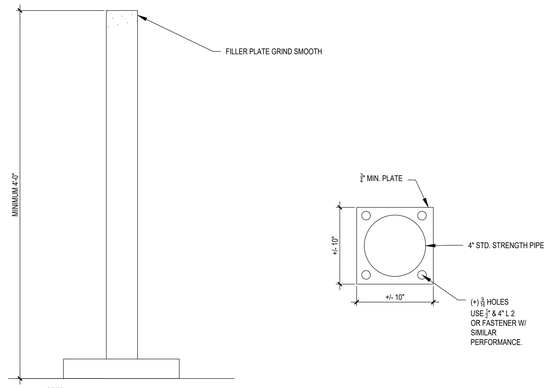
STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

aa



2 SCHEMATIC LAYOUT

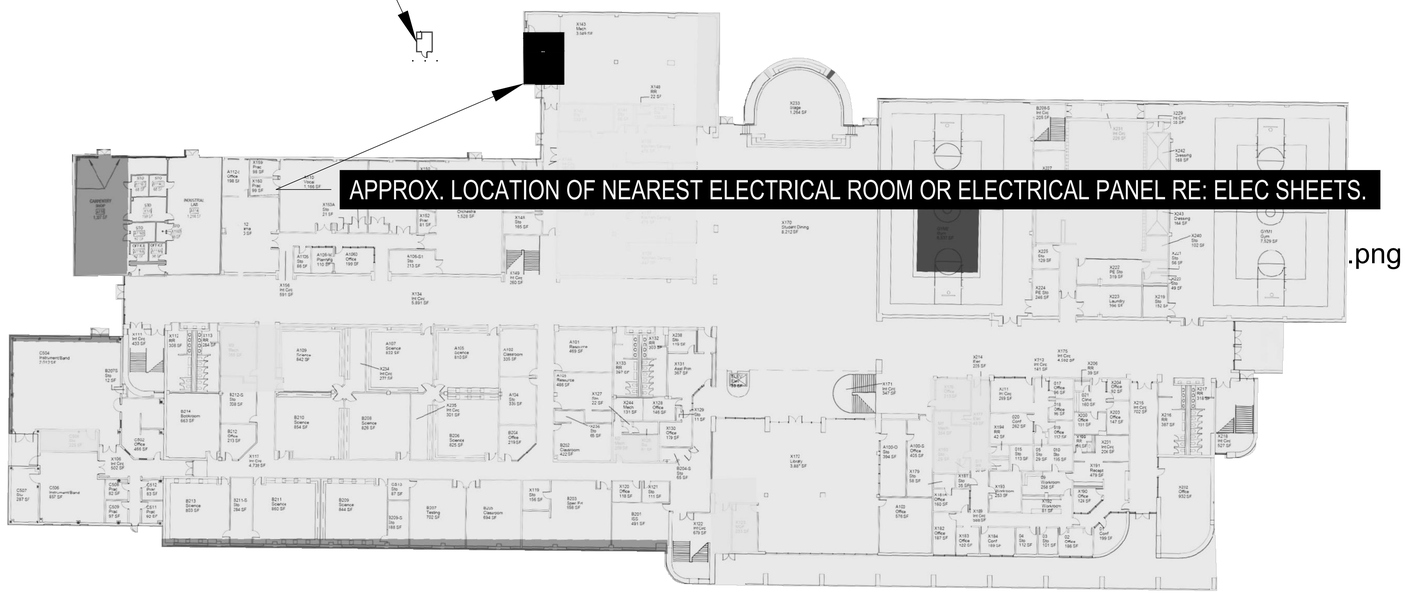


NOTES:
1. ALL TO BE GALV. & PAINTED SAFETY YELLOW
2. PROVIDE PLAN & DETAILS IN SUBMITTAL FOR LOCATION AND ARCH. APPROVAL
3. MOUNT BOLLARD PLUMB.

3 BOLLARD
SCALE: 1- 1/2"=1'-0"

PROPOSED TEMPORARY FREEZER LOCATION. CONFFIRM WITH ARCH. BEFORE INSTALLING

APPROX. LOCATION OF NEAREST ELECTRICAL ROOM OR ELECTRICAL PANEL RE: ELEC SHEETS.



1 SITE PLAN
SCALE: 1"=30'-0"

GENERAL NOTES:
- A. TEMPARAY RENTAL FREEZER, CONTRACTOR FURNISHED & CONTRACTOR INSTALLED. COORDINATE W/ ARCHITECT FOR PROCUREMENT, DELIVERY AND CONNECTION TO POWER CANENSATE DISCHARGE. BASIS OF DESIGN SHALL BE POLAR LEASING DT180 (OTHER MODLES TO BE ACCEPTED WITH ARCHITECT APPROVAL)
- B. CONTRACTOR SHALL FURNISH ELECT. REQUIREMENTS: MIN. 30A, 220V, AS MINIMUM PRICING. SEE ELECTRICAL FOR ADDITIONAL IFORMATION.
- C. LOCATED UNIT WITHIN 100' (APPROX.) OF EXISTING ELECTRICAL ROOM.
- D. INSTALL 1" CONDENSATE DRAIN, CONNECT TO UNIT AS PER PROVIDER INSTRUCTS. KEEP DRAIN LINE AWAY FROM TRAFFIC AREAS. DISCHARGE AS PER PLUMBING DRAWINGS A LOCAL CODES.
- E. PROVIDE EIGHT 4'/ 48" ABV. PAVING BOLT-DOWN TEMPORARY BOLLARDS AROUND UNIT. PATCH HOLES UPON REMOVAL.
- F. SUBMIT LOCATION PLAN IN SUBMITTAL FOR LACATION APPROVAL BY ARCHITECTS.
- G. LOCATE UNIT IN AREA THAT:
  - G.1. HAS BEEN APPROVED INSURMITTAL
  - G.2. WITHIN 100' OF ELECT. CONNECTION
  - G.3. WILL NOT BLOCK WATER FLOW
  - G.4. AWAY FROM EXISTING AREAS SUBJECT TO STANDING WATER

PHASING CHART FOR ALL SCHOOLS		
PHASE 1		
SCHOOLS	**FREEZER START DATE :**	**FREEZER END DATE :**
FIRST COLONY MS		
LAKEVIEW ES	11/7/2025	EST. END DATE IS 5/13/2026 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE
PHASE 2		
FIRST COLONY MS		
LAKE OLYMPIA MS	5/29/2026	EST. END DATE IS 10/28/2026 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE
PHASE 3		
MARSHAL HS		
TRAVIS HS	3/19/2027	EST. END DATE IS 3/19/2027 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE
DULLES HS		

NOTES:
1. FREEZER SHALL STAY IN OPERATION UNTIL ALL SCHOOLS BEING SERVED FROM THIS LOCATION HAVE ACHIVED SUBSTANTIAL COMPLETION

THIS SCHOOL WILL SUPPLY FOOD SERVICES DURING PHASE 1 & 2

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
FIRST COLONY MIDDLE SCHOOL
3225 AUSTIN PARKWAY
SUGAR LAND, TX 77479

SEAL
REGISTERED ARCHITECT
KEITH ALEXANDER
#22657
STATE OF TEXAS
7/15/2025

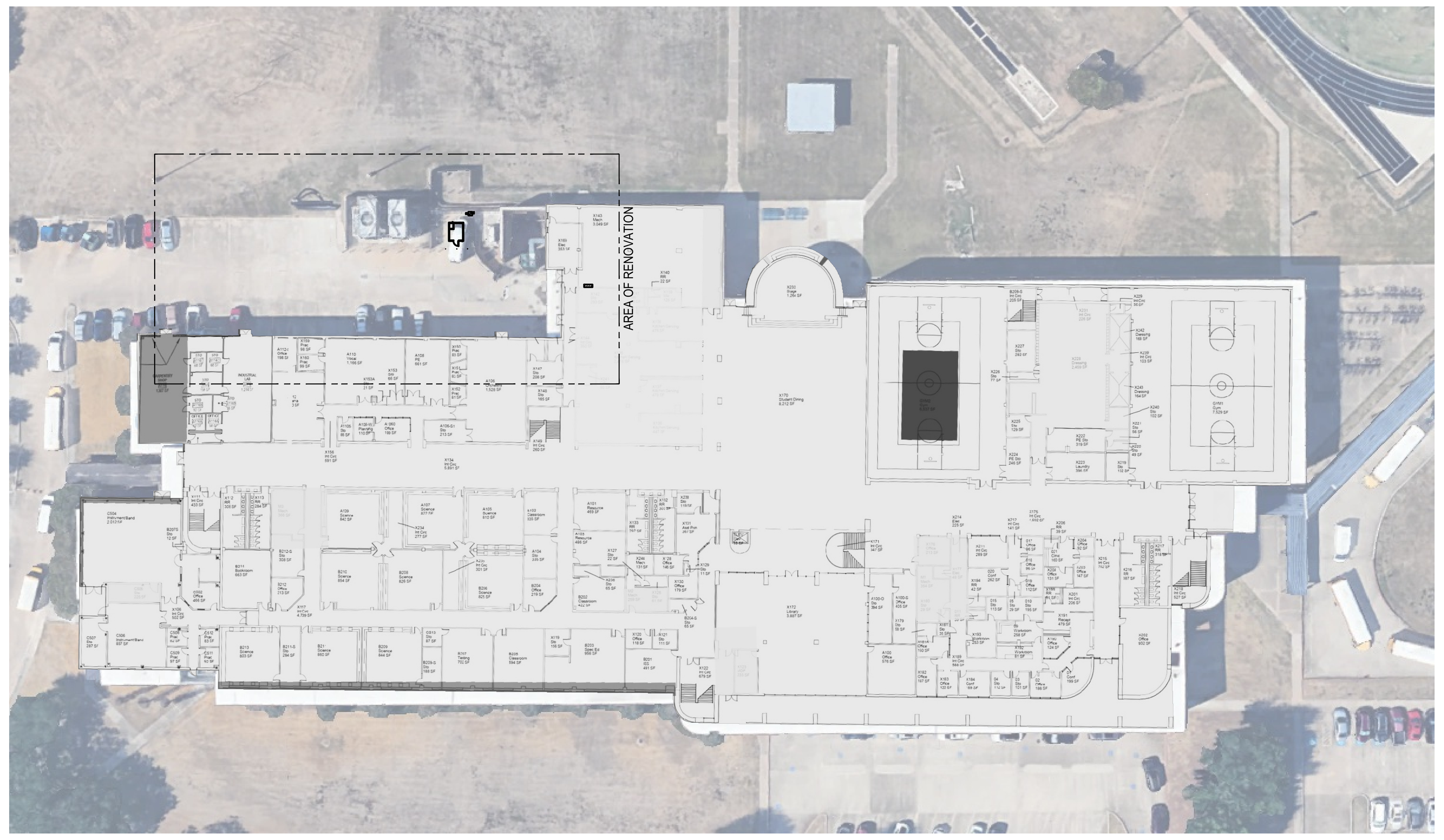
MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

TEMPORARY COOKING LOCATION SITE PLAN

aa-A.101

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings_TEMPORARY COOKING SITES\FirstColonyMiddleSchoolSitePlan.dwg, Jul 28, 2025 - 4:20pm



2 **OVERALL FLOOR PLAN - FIRST COLONY MS**
SCALE: 1" = 50'- 0"

SYMBOL LEGEND

Symbol	Description
	SIMPLEX/DUPLEX/QUAD – 5361/2 REC
GFI	DUPLEX W/ GFCI PROTECTION–P&S 2097
	J–BOX
	CEILING MOUNTED J–BOX
	MOTOR
	HEAVY DUTY, NON–FUSED DISCONNECT. MIN RATING OF CIRCUIT OCPD/VOLTAGE.
	ELECTRICAL PANEL
	HOMERUN TO CIRCUIT NOTED
E	EXISTING DEVICES TO REMAIN
R	EXISTING DEVICES TO BE RELOCATED
D	EXISTING DEVICES TO BE DEMO/REMOVED
REP	EXISTING DEVICES TO BE REPLACED
S	INDICATES SURFACE MOUNTED
SR	INDICATES SURFACE RACEWAY
*	INDICATES ABOVE COUNTER DEVICE
+	INDICATES DEVICE AT +30–60"
++	INDICATES DEVICE AT +80–96"
CLG	INDICATES DEVICES MOUNTED IN CEILING
WP	INDICATES WEATHERPROOF COVER
3R	INDICATES 3R RATED DEVICE
(E)LA–X	CONNECT(ED) TO EXIST CIRCUIT LA–X
(D)LA–X	DEMO PORTION OF EXIST CIRCUIT LA–X
(N)LA–X	CONNECT(ED) TO NEW CIRCUIT LA–X

GENERAL ELECTRICAL NOTES:
1. INSTALL SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ALL AMENDMENTS.
2. PROVIDE CONDUIT FOR ALL DEVICES INSTALLED IN WALLS.
   2.A. 3/4"C FOR POWER AND 1"C FOR LOW VOLTAGE/DATA UNLESS NOTED OTHERWISE.
   2.B. PROVIDE PROTECTIVE BUSHING ON END OF ALL LOW VOLTAGE CONDUITS.
   2.C. ALL ELECTRICAL HOMERUNS SHALL BE IN CONDUIT, MIN 3/4"C.
   2.D. USE INSULATED THROAT FITTINGS FOR CONNECTIONS TO HOUSINGS, BOXES, ENCLOSURES, ETC.
   2.E. MAX LENGTH FOR FLEX CONDUIT SHALL BE 6FT AND MIN. SIZE SHALL BE 1/2". ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
3. CONDUIT TYPES:
   3.A. INSIDE BUILDINGS: GALVANIZED STEEL EMT.
      3.A.A. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT IN EXPOSED CEILING AREAS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
      3.A.B. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT ABOVE INACCESSIBLE CEILINGS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
   3.B. NO MC CABLE SHALL BE ALLOWED.
   3.C. PROVIDE FLEXIBLE CONNECTIONS TO MOTORS, PUMPS, TRANSFORMERS, OR SIMILAR EQUIPMENT.
4. PROVIDE GALVANIZED STEEL, ONE–PIECE CONSTRUCTION, OUTLET BOXES IN ALL CASES SUITABLE FOR INTENDED USE.
   4.A. BOXES OUTSIDE SHALL BE STEEL NEMA 3 TYPE.
   4.B. PROVIDE CEILING BRACKET TO SUPPORT CEILING MOUNTED DEVICES FROM CEILING TEES.
5. 20 AMP, SINGLE PHASE BRANCH CIRCUITS SERVING LIGHTING AND GENERAL RECEPTACLES MAY BE GROUPED IN A SINGLE RACEWAY PROVIDED A NEUTRAL CONDUCTOR IS INSTALLED FOR EACH CIRCUIT REQUIRING A NEUTRAL.
   5.A. DO NOT INSTALL MORE THAN FOUR CURRENT CARRYING CONDUCTORS IN A CONDUIT EXCEPT SIX #12 OR #10 CURRENT CARRYING CONDUCTORS MAY BE INSTALLED IN 3/4" OR LARGER CONDUIT FOR 20A CIRCUITS.
   5.B. DO NOT INSTALL 480/277 VOLT CONDUCTORS IN THE SAME CONDUIT WITH 240/208/120 VOLT CONDUCTORS.
   5.C. DO NOT COMBINE NEUTRALS. PROVIDE DEDICATED NEUTRALS FOR EACH BRANCH CIRCUIT.
   5.D. MULTIPLE DEVICES ON A CIRCUIT SUCH AS RECEPTACLES SHALL BE WIRED WITH A PIGTAIL SO THE DEVICE DOES NOT PROVIDE THE CONTINUITY PATH. FEED THROUGH CONNECTIONS FOR GFCI RECEPTACLES SHALL NOT BE USED FOR PROTECTION OF DOWNSTREAM DEVICES.
6. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
7. PROVIDE J–BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM, SOUND SYSTEM, LOW VOLTAGE WIRING, ETC. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF ALL LOW VOLTAGE CONDUITS.
8. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS. ALL JUNCTION/PULL BOXES INSTALLED ABOVE ACCESSIBLE CEILINGS SHALL BE MOUNTED SO THAT THE ACCESS PANEL IS NO HIGHER THAN 18" ABOVE THE CEILING.
9. PROVIDE CIRCUIT LABELS IN PERMANENT MARKER ON ALL NEW AND EXISTING J–BOX COVERS UTILIZED IN THE AREA OF RENOVATION.
10. PROVIDE CIRCUIT LABEL ON ALL ABOVE CEILING J–BOXES, EQUIPMENT, ETC. IDENTIFYING THE CIRCUITS CONTAINED/CONNECTED.
11. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12.
   11.A. TYPICAL BUILDING WIRE SHALL BE STRANDED TYPE THHN, THWN–2 (WET RATED FOR 90°C), OR XHHW–2. MINIMUM WIRE SIZE SHALL BE #12.
   11.B. ALL BUILDING WIRE SHALL BE COLOR CODED WITH THE SAME COLOR CONNECTED TO THE SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION MATCHING THE EXISTING BUILDING COLOR CODE SCHEME.
12. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEAL PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO COOLER SECTIONS.
13. DRAWINGS, SCHEDULES, NOTES, AND DETAILS ARE INTENDED TO BE COMPLIMENTARY. ANY WORK DESCRIBED IN ANY OF THEM, WILL BE WORK REQUIRED UNDER THIS CONTRACT. WHERE THERE IS A CONFLICT BETWEEN DIFFERENT PORTIONS OF THE DESIGN DOCUMENTS IT SHALL BE CLARIFIED BY RFI. BARRING CLARIFICATION PRIOR TO BIDDING THE MOST EXPENSIVE OPTION SHALL BE INCLUDED AND CLARIFICATION SHALL BE MADE DURING CONSTRUCTION.
14. SHOULD ANY WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS BE IN VIOLATION OF ANY FEDERAL, STATE, COUNTY OR CITY LAWS, ORDINANCE OR REGULATION, THOSE LAWS AND REGULATIONS SHALL PREVAIL, AND SHALL BE COMPLIED WITH BY THE CONTRACTOR AS A PART OF THIS WORK WITH NO EXTRA COMPENSATION.
15. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

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2. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
3. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. RESUPPORT EXISTING CABLING/CONDUIT TO REMAIN TO MEET CURRENTLY ADOPTED CODE REQUIREMENTS. REMOVE ALL ABANDONED CONDUIT AND WIRE. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITIES.
4. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
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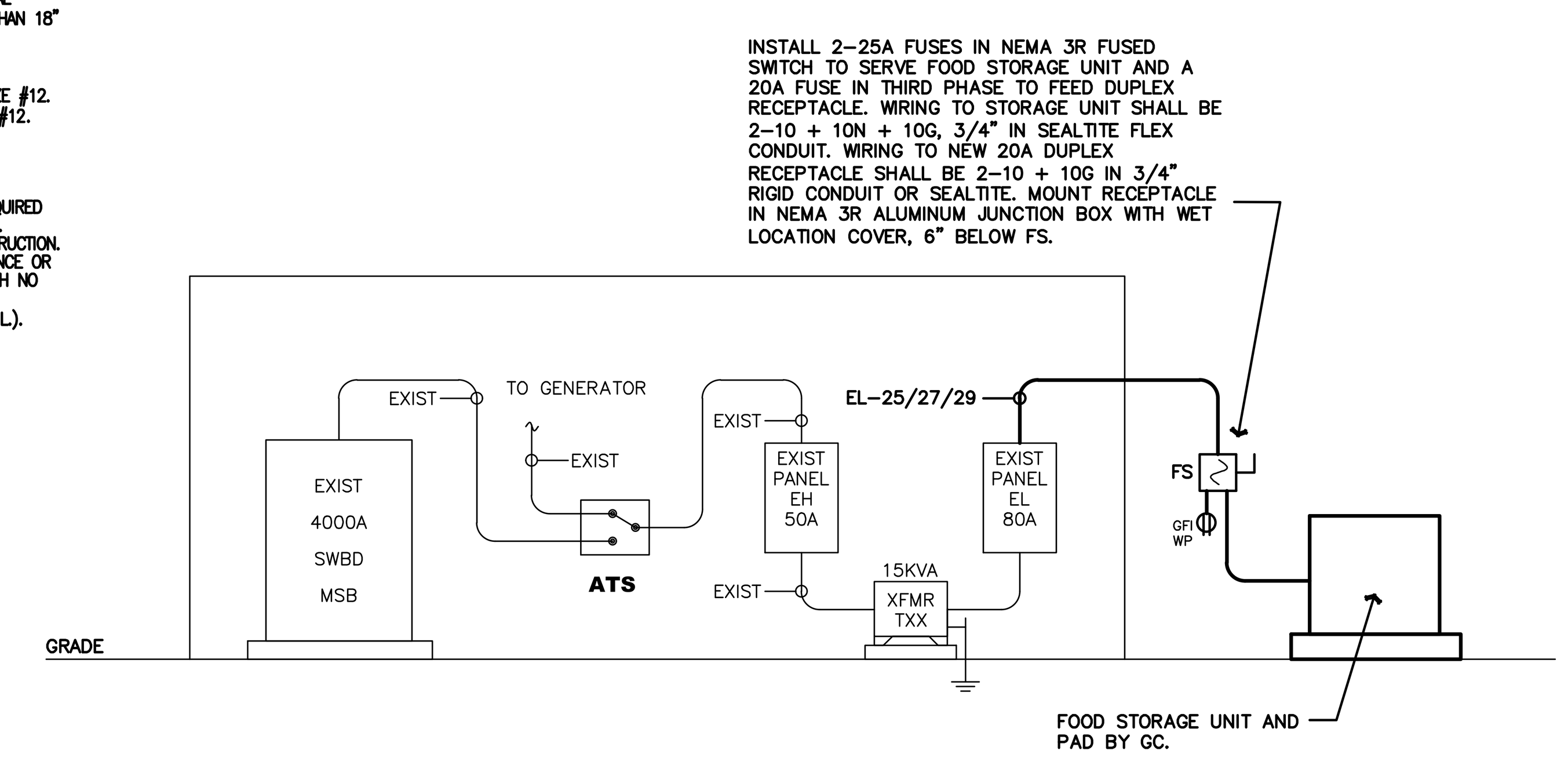
7. ANY CIRCUIT OR PARTIAL CIRCUIT TO REMAIN OR BE REUSED SHALL REMAIN ACTIVE.
8. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
9. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
10. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN AS–BUILT PANEL SCHEDULE FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT USING BUILDING ROOM NUMBERS.

EXIST TO REMAIN

PANEL EL — 80A MCB, 208Y/120V, 3ø, 4 WIRE — MOUNTING: SURFACE — AVAILABLE FAULT: SCCR & AIC:

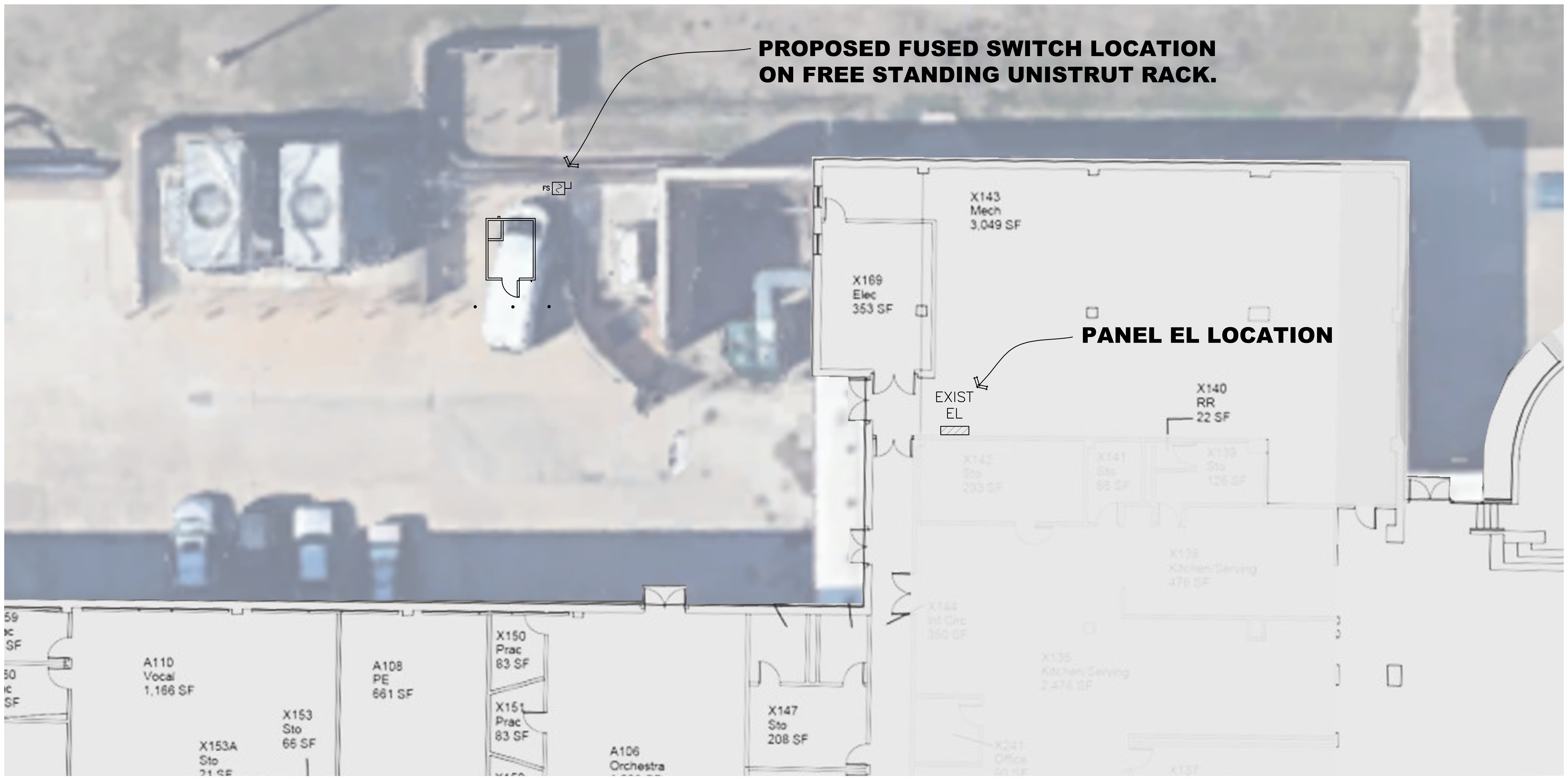
	LOAD	DESCRIPTION ROOM	WIRE	CB	CKT	A B C	CKT	CB	WIRE	DESCRIPTION ROOM	LOAD
	500	INTRUSION DETECTION	EXIST	20/1	1		2			SPACE	
	500	FIRE ALARM	EXIST	20/1	3		4			SPACE	
	500	PA SYSTEM	EXIST	20/1	5		6	60/2	EXIST	SPD	1
	1000	120 FOR GENERATOR	EXIST	20/1	7		8	–		–	
		EXIST SPARE		20/1	9		10			SPACE	
		EXIST SPARE		20/1	11		12			SPACE	
		EXIST SPARE		20/1	13		14			SPACE	
		EXIST SPARE		20/1	15		16			SPACE	
		EXIST SPARE		20/1	17		18			SPACE	
		EXIST SPARE		20/1	19		20	30/3	EXIST	SPD	1
		EXIST SPARE		20/1	21		22	–		–	
		EXIST SPARE		20/1	23		24	–		–	
NOTE 1	3100	FOOD STORAGE UNIT	3–10	30/3	25		26			SPACE	
	–	–	+10N+10G	–	27		28			SPACE	
	180	NEW DUPLEX REC	3/4"C	–	29		30			SPACE	
	TOTAL LOAD @ 100% =	5782VA		TOTAL LOAD @ 100% =			16A		TOTAL LOAD @ 125% =		20A

1. PROVIDE NEW CB & WIRE NEW CIRCUIT.



3 **FIRST COLONY MS PARTIAL ELECTRICAL RISER**
NO SCALE

NOTES:
1. ALL PANELS, TRANSFORMER, SWITCHBOARD AND TRANSFER SWITCH ARE EXISTING. ADD 30/3 CB TO PANEL XXX AND EXTEND 3–10+10N+10G, 3/4"C TO NEW FUSED SWITCH.



1 **ELECTRICAL RENOVATION PLAN - FIRST COLONY MS**
SCALE: 1/8" = 1'– 0"

ISSUE:
12/05/2024 DD PACKAGE
03/11/2025 50% CD PKG.
05/23/2025 90% CD PKG.
07/18/2025 ISSUED FOR BIDDING AND PERMITTING

aa

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
FIRST COLONY MIDDLE SCHOOL
3225 AUSTIN PARKWAY
SUGAR LAND, TX 77049

SEAL
STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

STANTON ENGINEERING GROUP
INFO@STANTON–ENG.COM (713) 300–9292
TEXAS ENG. FIRM REG NO. F–016332 | © 2025 ALL RIGHTS RESERVED
1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL FLOOR PLAN & SCHEDULES

aa-E.200

FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
School: bb-Lakeview ES	
bb-A.000	COVER AND INDEX
bb-A.101	TEMPORARY COOKING LOCATION SITE PLAN
bb-E.200	ELECTRICAL FLOOR PLAN & SCHEDULES



FORT BEND INDEPENDENT SCHOOL DISTRICT

LAKEVIEW ELEMENTARY SCHOOL
314 LIKEVIEW DRIVE, SUGAR LAND, TX 77498

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

KRISTIN K. TASSIN	PRESIDENT
RICK GARCIA	VICE PRESIDENT
DAVID HAMILTON	SECRETARY
ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

PROJECT DESIGN TEAM

PROGRAM MANAGEMENT
FBISD 2023 Bond Team
2323 Texas Parkway
Missouri City, TX 77489
Phone Number: 281-327-5481

ARCHITECT
MWA Architects
11767 Katy Freeway, Suite 430
Houston, Texas 77079
Phone Number: 713-782-8188

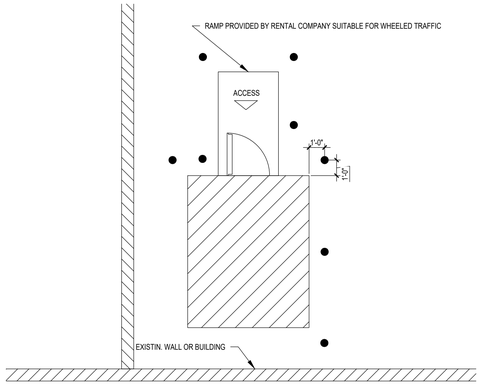
FOOD SERVICE
Food Design Professionals
26215 Oak Ridge Drive
The Woodlands, Texas 77380
Phone Number: 281-350-2323

MEP ENGINEERS
Stanton Engineering Group
1300 W. Sam Houston Pkwy South, Suite 121
Houston, Texas 77042
Phone Number: 713-300-9292

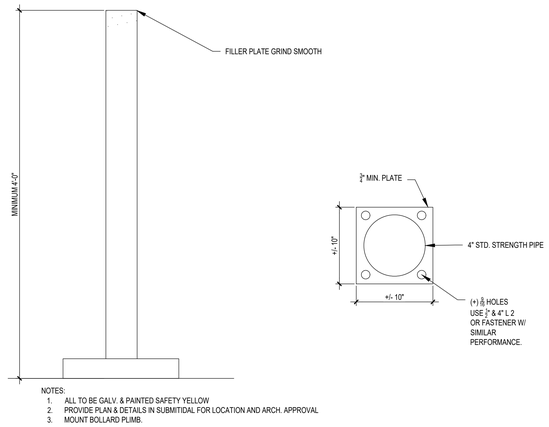
STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

bb



2 SCHEMATIC LAYOUT



NOTES:
1. ALL TO BE GALV. & PAINTED SAFETY YELLOW
2. PROVIDE PLAN & DETAILS IN SUBMITIDAL FOR LOCATION AND ARCH. APPROVAL
3. MOUNT BOLLARD PLIMB.

3 BOLLARD
SCALE: 1- 1/2"=1'-0"



1 SITE PLAN
SCALE: 1"=30'-0"

GENERAL NOTES:
A. TEMPARAY RENTAL FREEZER, CONTRACTOR FURNISHED & CONTRACTOR INSTALLED. COORDINATE W/ ARCHITECT FOR PROCUREMENT, DELIVERY AND CONNECTION TO POWER CANENSATE DISCHARGE. BASIS OF DESIGN SHALL BE POLAR LEASING DT180 (OTHER MODLES TO BE ACCEPTED WITH ARCHITECT APPROVAL)
B. CONTRACTOR SHALL FURNISH ELECT. REQUIREMENTS: MIN. 30A, 220V, AS MINIMUM PRICING. SEE ELECTRICAL FOR ADDITIONAL IFORMATION.
C. LOCATED UNIT WITHIN 100' (APPROX.) OF EXISTING ELECTRICAL ROOM.
D. INSTALL 1" CONDENSATE DRAIN, CONNECT TO UNIT AS PER PROVIDER INSTRUCTS. KEEP DRAIN LINE AWAY FROM TRAFFIC AREAS. DISCHARGE AS PER PLUMBING DRAWINGS A LOCAL CODES.
E. PROVIDE EIGHT 4'/ 48" ABV. PAVING BOLT-DOWN TEMPORARY BOLLARDS AROUND UNIT. PATCH HOLES UPON REMOVAL.
F. SUBMIT LOCATION PLAN IN SUBMITTAL FOR LACATION APPROVAL BY ARCHITECTS.
G. LOCATE UNIT IN AREA THAT:
G.1. HAS BEEN APPROVED INSURMITTAL
G.2. WITHIN 100' OF ELECT. CONNECTION
G.3. WILL NOT BLOCK WATER FLOW
G.4. AWAY FROM EXISTING AREAS SUBJECT TO STANDING WATER

PHASING CHART FOR ALL SCHOOLS		
PHASE 1		
SCHOOLS	FREEZER START DATE :	FREEZER END DATE :
FIRST COLONY MS *LAKEVIEW ES*	11/7/2025	EST. END DATE IS 5/13/2026 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIAILLY COMPLETE
PHASE 2		
FIRST COLONY MS LAKE OLYMPIA MS	5/29/2026	EST. END DATE IS 10/28/2026 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIAILLY COMPLETE
PHASE 3		
MARSHAL HS TRAVIS HS DULLES HS	3/19/2027	EST. END DATE IS 3/19/2027 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIAILLY COMPLETE

NOTES:
1. FREEZER SHALL STAY IN OPERATION UNTIL ALL SCHOOLS BEING SERVED FROM THIS LOCATION HAVE ACHIVED SUBSTANTIAL COMPLETION

THIS SCHOOL WILL SUPPLY FOOD SERVICES DURING PHASE 1

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

bb

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
LAKEVIEW ELEMENTARY SCHOOL
314 LAKEVIEW DR
SUGAR LAND, TX 77498

SEAL
REGISTERED ARCHITECT
NOEL ALEJANDRO
22651
STATE OF TEXAS
7/15/2025

WA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

TEMPORARY COOKING LOCATION SITE PLAN

bb-A.101

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings_TEMPORARY COOKING SITES\Lakeview\Elementary\SchoolSitePlan.dwg Jul 28, 2025 - 4:22pm



2 OVERALL FLOOR PLAN - LAKEVIEW ES

SCALE: 1" = 50'– 0"

SYMBOL LEGEND

(simplex/duplex/quad symbols)	SIMPLEX/DUPLEX/QUAD – 5361/2 REC
GFI	DUPLEX W/ GFCI PROTECTION–P&S 2097
(J)	J–BOX
(J)	CEILING MOUNTED J–BOX
(motor symbol)	MOTOR
(disconnect symbol)	HEAVY DUTY, NON–FUSED DISCONNECT. MIN RATING OF CIRCUIT OCPD/VOLTAGE.
(panel symbol)	ELECTRICAL PANEL
(arrow)	HOMERUN TO CIRCUIT NOTED
E	EXISTING DEVICES TO REMAIN
R	EXISTING DEVICES TO BE RELOCATED
D	EXISTING DEVICES TO BE DEMO/REMOVED
REP	EXISTING DEVICES TO BE REPLACED
S	INDICATES SURFACE MOUNTED
SR	INDICATES SURFACE RACEWAY
*	INDICATES ABOVE COUNTER DEVICE
+	INDICATES DEVICE AT +30–60"
++	INDICATES DEVICE AT +80–96"
CLG	INDICATES DEVICES MOUNTED IN CEILING
WP	INDICATES WEATHERPROOF COVER
3R	INDICATES 3R RATED DEVICE
(E)LA–X	CONNECT(ED) TO EXIST CIRCUIT LA–X
(D)LA–X	DEMO PORTION OF EXIST CIRCUIT LA–X
(N)LA–X	CONNECT(ED) TO NEW CIRCUIT LA–X

GENERAL ELECTRICAL NOTES:

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   - 2.A. 3/4"C FOR POWER AND 1"C FOR LOW VOLTAGE/DATA UNLESS NOTED OTHERWISE.
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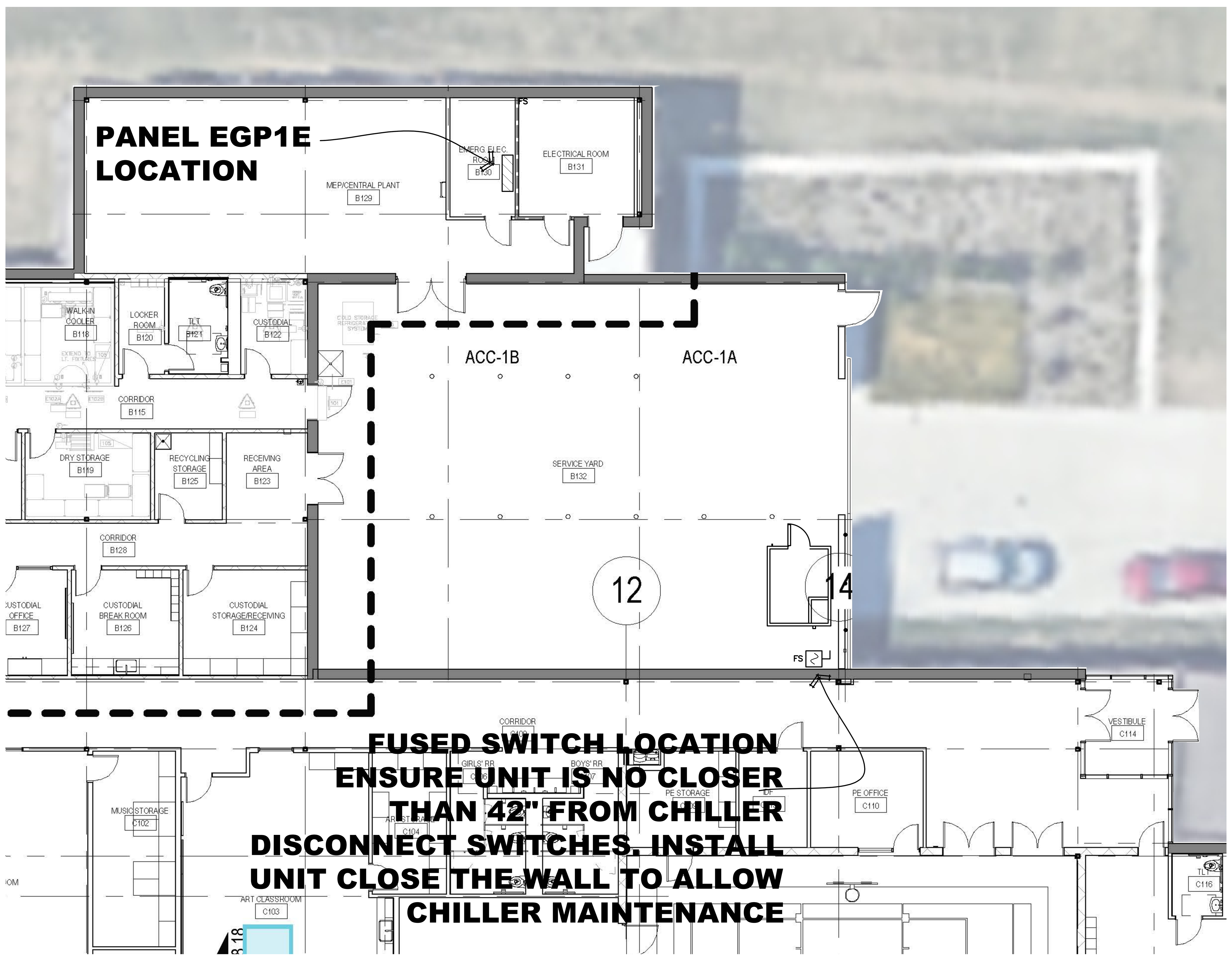
8. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
9. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
10. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN AS–BUILT PANEL SCHEDULE FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT USING BUILDING ROOM NUMBERS.

EXISTING TO REMAIN

PANEL EGP1E — 150A MCB; 208Y/120V, 3ø, 4 WIRE; MOUNTING: SURFACE; DOOR–IN–DOOR HINGE TO BOX; AVAILABLE FAULT: SCCR & AIC:

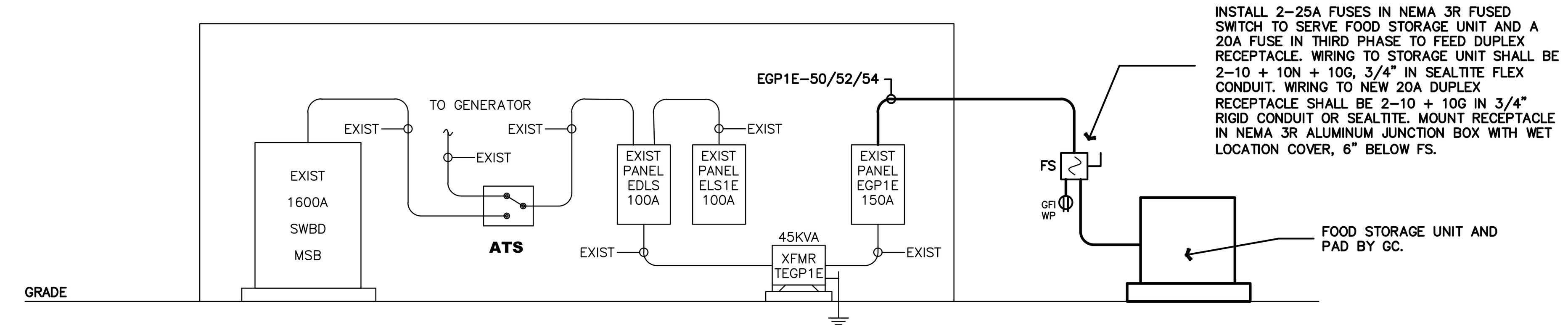
LOAD	DESCRIPTION	WIRE	CB	CKT	A B C	CKT	CB	WIRE	DESCRIPTION	LOAD	
6000	E103 REFRIGERATION SYS	EXIST	40/3	1		2	20/1	EXIST	E102C PRESS RELIEF	50	
–	–	EXIST	–	3		4	20/1	EXIST	E102C PRESS RELIEF	50	
–	–	EXIST	–	5		6	20/2	EXIST	E103C FREEZER COIL	500	
500	E103D COOLER COIL	EXIST	20/1	7		8	–	–	–	–	
500	TF–1 B118	EXIST	20/1	9		10	20/1	EXIST	E102B TEMP ALARM	100	
200	E102B TEMP ALARM B116	EXIST	20/1	11		12	20/1	EXIST	E102 DOOR HTR/LTS	500	
500	E102 DOOR HTR/LTS	EXIST	20/1	13		14	20/1	EXIST	IDF REC C113	800	
	SPACE			15		16	30/1	EXIST	IDF RACK C113	1800	
800	IDF RACK C113	EXIST	30/1	17		18			SPACE		
	SPACE			19		20	20/1	EXIST	IDF REC C113	800	
1800	IDF RACK C113	EXIST	30/1	21		22	20/1	EXIST	IDF INTRUSION C113	100	
800	IDF RACK C113	EXIST	20/1	23		24	20/1	EXIST	IDF ACCESS CTRL C113	100	
50	LIGHTING CONTACTOR	EXIST	20/1	25		26	20/1	EXIST	OSX SECURITY ACCESS	300	
540	REC MECH B129,B130,131	EXIST	20/1	27		28	20/1	EXIST	UNIFY PANEL AREA D	500	
800	IDF C113	EXIST	20/1	29		30	20/1	EXIST	F/A PANEL AREA E C111	500	
800	IDF C113	EXIST	20/1	31		32	20/1		EXIST SPARE		
	SPACE			33		34			SPACE		
	EXIST SPARE		30/1	35		36	20/1		EXIST SPARE		
	EXIST SPARE		20/1	37		38	20/1	EXIST	F/A PUMP	500	
	SPACE			39		40	20/1	EXIST	F/A PUMP	500	
	SPACE			41		42			SPACE		
	SPACE			43		44			SPACE		
	SPACE			45		46			SPACE		
	SPACE			47		48			SPACE		
	SPD	EXIST	30/3	49		50	30/3	3–10	FOOD STORAGE UNIT	3100	NOTE 1
	–	–	–	51		52	–	+10N+10G	–	–	
	–	–	–	53		54	–	3/4"C	NEW DUPLEX REC	180	
TOTAL LOAD @ 100% =	23670VA		TOTAL LOAD @ 100% =			66A			TOTAL LOAD @ 125% =	82A	

1. PROVIDE NEW CB & WIRE NEW CIRCUIT.



1 ELECTRICAL RENOVATION PLAN - LAKEVIEW ES

SCALE: 1/8" = 1'– 0"



3 LAKEVIEW ES PARTIAL ELECTRICAL RISER

NO SCALE

NOTES:

1. ALL PANELS, TRANSFORMER, SWITCHBOARD AND TRANSFER SWITCH ARE EXISTING. ADD 30/3 CB TO PANEL EGP1E AND EXTEND 3–10+10N+10G, 3/4"C TO NEW FUSED SWITCH.

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05/23/2025	90% CD PKG.
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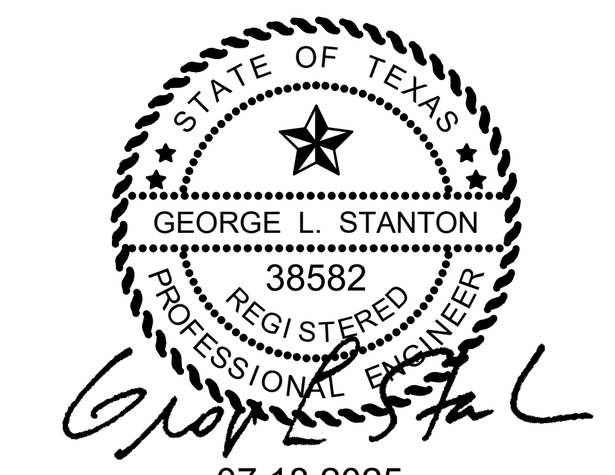
FBISD BP 013 KITCHEN RENOVATIONS

FORT BEND INDEPENDENT SCHOOL DISTRICT

LAKEVIEW ELEMENTARY SCHOOL

314 LAKEVIEW DR
SUGAR LAND, TX 77498

SEAL



07.18.2025

MWA ARCHITECTS

ARCHITECTS AND PLANNING CONSULTANTS

11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
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ELECTRICAL FLOOR PLAN & SCHEDULES

bb-E.200

FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
School: cc-Lake Olympia MS	
cc-A.00	COVER AND INDEX
cc-A.101	TEMPORARY COOKING LOCATION SITE PLAN
cc-E.200	ELECTRICAL FLOOR PLAN & SCHEDULES



FORT BEND INDEPENDENT SCHOOL DISTRICT

LAKE OLYMPIA ELEMENTARY SCHOOL
3100 LAKE OLYMPIA DRIVE, SUGAR LAND, TX 77498

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

KRISTIN K. TASSIN	PRESIDENT
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ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

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FBISD 2023 Bond Team
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Stanley Spurling & Hamilton
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Houston, Texas 77027
Phone Number: 713-776-9433

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

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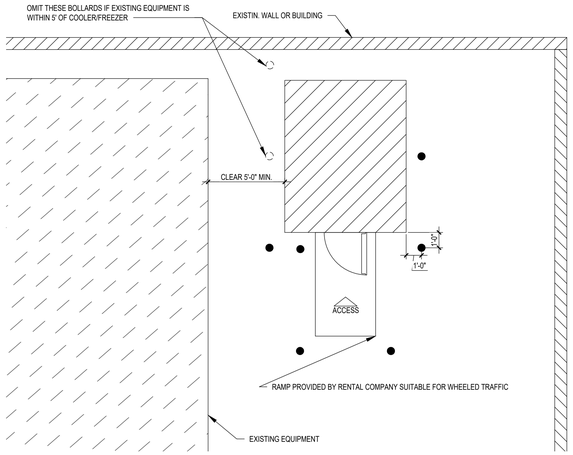
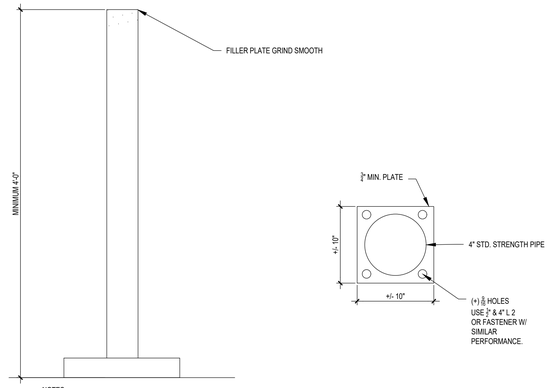
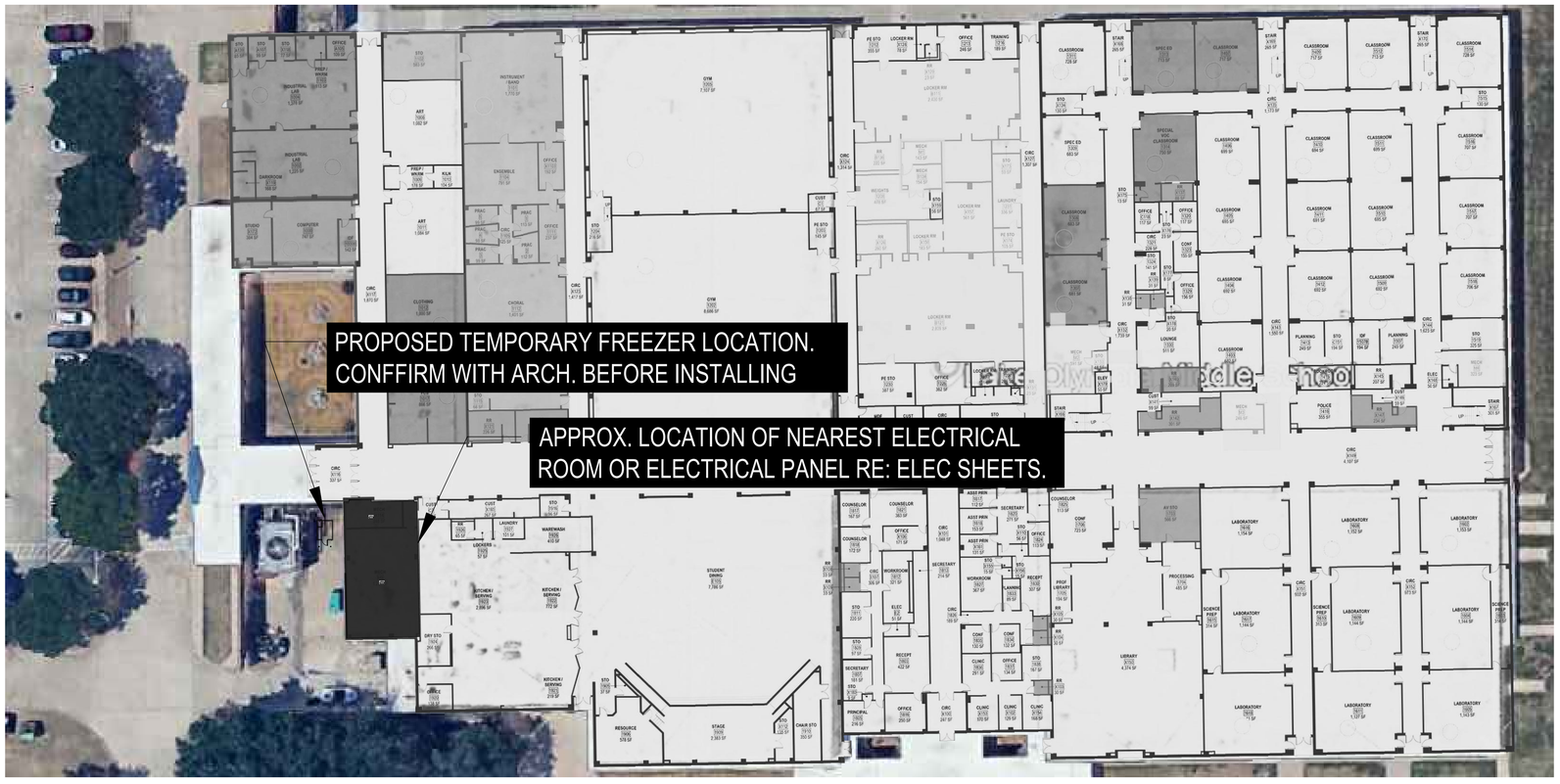


2 SCHEMATIC LAYOUT



NOTES:
1. ALL TO BE GALV. & PAINTED SAFETY YELLOW
2. PROVIDE PLAN & DETAILS IN SUBMITIDAL FOR LOCATION AND ARCH. APPROVAL
3. MOUNT BOLLARD PLIMB.

3 BOLLARD
SCALE: 1- 1/2"=1'-0"



1 SITE PLAN
SCALE: 1"=10'-0"

GENERAL NOTES:
- A. TEMPARAY RENTAL FREEZER, CONTRACTOR FURNISHED & CONTRACTOR INSTALLED. COORDINATE W/ ARCHITECT FOR PROCUREMENT, DELIVERY AND CONNECTION TO POWER CANENSATE DISCHARGE. BASIS OF DESIGN SHALL BE POLAR LEASING DT180 (OTHER MODLES TO BE ACCEPTED WITH ARCHITECT APPROVAL)
- B. CONTRACTOR SHALL FURNISH ELECT. REQUIREMENTS: MIN. 30A, 220V. AS MINIMUM PRICING. SEE ELECTRICAL FOR ADDITIONAL IFORMATION.
- C. LOCATED UNIT WITHIN 100' (APPROX.) OF EXISTING ELECTRICAL ROOM.
- D. INSTALL 1" CONDENSATE DRAIN, CONNECT TO UNIT AS PER PROVIDER INSTRUCTS. KEEP DRAIN LINE AWAY FROM TRAFFIC AREAS. DISCHARGE AS PER PLUMBING DRAWINGS A LOCAL CODES.
- E. PROVIDE EIGHT 4'/ 48" ABV. PAVING BOLT-DOWN TEMPORARY BOLLARDS AROUND UNIT. PATCH HOLES UPON REMOVAL.
- F. SUBMIT LOCATION PLAN IN SUBMITTAL FOR LACATION APPROVAL BY ARCHITECTS.
- G. LOCATE UNIT IN AREA THAT:
  - G.1. HAS BEEN APPROVED INSURMITTAL
  - G.2. WITHIN 100' OF ELECT. CONNECTION
  - G.3. WILL NOT BLOCK WATER FLOW
  - G.4. AWAY FROM EXISTING AREAS SUBJECT TO STANDING WATER

PHASING CHART FOR ALL SCHOOLS		
PHASE 1		
SCHOOLS	**FREEZER START DATE :**	**FREEZER END DATE :**
FIRST COLONY MS	11/7/2025	EST. END DATE IS 5/13/2026 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE
LAKEVIEW ES		
PHASE 2		
FIRST COLONY MS	5/29/2026	EST. END DATE IS 10/28/2026 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE
LAKE OLYMPIA MS		
PHASE 3		
MARSHAL HS	3/19/2027	EST. END DATE IS 3/19/2027 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE
TRAVIS HS		
DULLES HS		

NOTES:
1. FREEZER SHALL STAY IN OPERATION UNTIL ALL SCHOOLS BEING SERVED FROM THIS LOCATION HAVE ACHIVED SUBSTANTIAL COMPLETION

THIS SCHOOL WILL SUPPLY FOOD SERVICES DURING PHASE 2

ISSUE:

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
LAKE OLYMPIA MIDDLE SCHOOL
3100 LAKE OLYMPIA PARKWAY
MISSOURI CITY, TX 77459

SEAL
REGISTERED ARCHITECT
PAUL A. MAYER
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

TEMPORARY COOKING LOCATION SITE PLAN

cc-A.101

F:\2023\23-25 FBISD Package 13 Kitchen Renovations\DWGS\Drawings_TEMPORARY COOKING SITES\LakeOlympiaMiddleSchoolSitePlan.dwg Jul 28, 2025 - 4:26pm



2 OVERALL FLOOR PLAN - LAKE OLYMPIA MS
SCALE: 1" = 50'- 0"

SYMBOL LEGEND

Symbol	Description
	SIMPLEX/DUPLEX/QUAD – 5361/2 REC
GFI	DUPLEX W/ GFCI PROTECTION–P&S 2097
J	J–BOX
J	CEILING MOUNTED J–BOX
	MOTOR
	HEAVY DUTY, NON–FUSED DISCONNECT. MIN RATING OF CIRCUIT OCPD/VOLTAGE.
	ELECTRICAL PANEL
	HOMERUN TO CIRCUIT NOTED
E	EXISTING DEVICES TO REMAIN
R	EXISTING DEVICES TO BE RELOCATED
D	EXISTING DEVICES TO BE DEMO/REMOVED
REP	EXISTING DEVICES TO BE REPLACED
S	INDICATES SURFACE MOUNTED
SR	INDICATES SURFACE RACEWAY
*	INDICATES ABOVE COUNTER DEVICE
+	INDICATES DEVICE AT +30–60"
++	INDICATES DEVICE AT +80–96"
CLG	INDICATES DEVICES MOUNTED IN CEILING
WP	INDICATES WEATHERPROOF COVER
3R	INDICATES 3R RATED DEVICE
(E)LA–X	CONNECT(ED) TO EXIST CIRCUIT LA–X
(D)LA–X	DEMO PORTION OF EXIST CIRCUIT LA–X
(N)LA–X	CONNECT(ED) TO NEW CIRCUIT LA–X

GENERAL ELECTRICAL NOTES:

1. INSTALL SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ALL AMENDMENTS.
2. PROVIDE CONDUIT FOR ALL DEVICES INSTALLED IN WALLS.
   - 2.A. 3/4"C FOR POWER AND 1"C FOR LOW VOLTAGE/DATA UNLESS NOTED OTHERWISE.
   - 2.B. PROVIDE PROTECTIVE BUSHING ON END OF ALL LOW VOLTAGE CONDUITS.
   - 2.C. ALL ELECTRICAL HOMERUNS SHALL BE IN CONDUIT, MIN 3/4"C.
   - 2.D. USE INSULATED THROAT FITTINGS FOR CONNECTIONS TO HOUSINGS, BOXES, ENCLOSURES, ETC.
   - 2.E. MAX LENGTH FOR FLEX CONDUIT SHALL BE 6FT AND MIN. SIZE SHALL BE 1/2". ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
3. CONDUIT TYPES:
   - 3.A. INSIDE BUILDINGS: GALVANIZED STEEL EMT.
     - 3.A.A. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT IN EXPOSED CEILING AREAS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
     - 3.A.B. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT ABOVE INACCESSIBLE CEILINGS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
   - 3.B. NO MC CABLE SHALL BE ALLOWED.
   - 3.C. PROVIDE FLEXIBLE CONNECTIONS TO MOTORS, PUMPS, TRANSFORMERS, OR SIMILAR EQUIPMENT.
4. PROVIDE GALVANIZED STEEL, ONE–PIECE CONSTRUCTION, OUTLET BOXES IN ALL CASES SUITABLE FOR INTENDED USE.
   - 4.A. BOXES OUTSIDE SHALL BE STEEL NEMA 3 TYPE.
   - 4.B. PROVIDE CEILING BRACKET TO SUPPORT CEILING MOUNTED DEVICES FROM CEILING TEES.
5. 20 AMP, SINGLE PHASE BRANCH CIRCUITS SERVING LIGHTING AND GENERAL RECEPTACLES MAY BE GROUPED IN A SINGLE RACEWAY PROVIDED A NEUTRAL CONDUCTOR IS INSTALLED FOR EACH CIRCUIT REQUIRING A NEUTRAL.
   - 5.A. DO NOT INSTALL MORE THAN FOUR CURRENT CARRYING CONDUCTORS IN A CONDUIT EXCEPT SIX #12 OR #10 CURRENT CARRYING CONDUCTORS MAY BE INSTALLED IN 3/4" OR LARGER CONDUIT FOR 20A CIRCUITS.
   - 5.B. DO NOT INSTALL 480/277 VOLT CONDUCTORS IN THE SAME CONDUIT WITH 240/208/120 VOLT CONDUCTORS.
   - 5.C. DO NOT COMBINE NEUTRALS. PROVIDE DEDICATED NEUTRALS FOR EACH BRANCH CIRCUIT.
   - 5.D. MULTIPLE DEVICES ON A CIRCUIT SUCH AS RECEPTACLES SHALL BE WIRED WITH A PIGTAIL SO THE DEVICE DOES NOT PROVIDE THE CONTINUITY PATH. FEED THROUGH CONNECTIONS FOR GFCI RECEPTACLES SHALL NOT BE USED FOR PROTECTION OF DOWNSTREAM DEVICES.
6. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
7. PROVIDE J–BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM, SOUND SYSTEM, LOW VOLTAGE WIRING, ETC. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF ALL LOW VOLTAGE CONDUITS.
8. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS. ALL JUNCTION/PULL BOXES INSTALLED ABOVE ACCESSIBLE CEILINGS SHALL BE MOUNTED SO THAT THE ACCESS PANEL IS NO HIGHER THAN 18" ABOVE THE CEILING.
9. PROVIDE CIRCUIT LABELS IN PERMANENT MARKER ON ALL NEW AND EXISTING J–BOX COVERS UTILIZED IN THE AREA OF RENOVATION.
10. PROVIDE CIRCUIT LABEL ON ALL ABOVE CEILING J–BOXES, EQUIPMENT, ETC. IDENTIFYING THE CIRCUITS CONTAINED/CONNECTED.
11. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12.
    - 11.A. TYPICAL BUILDING WIRE SHALL BE STRANDED TYPE THHN, THWN–2 (WET RATED FOR 90°C), OR XHHW–2. MINIMUM WIRE SIZE SHALL BE #12.
    - 11.B. ALL BUILDING WIRE SHALL BE COLOR CODED WITH THE SAME COLOR CONNECTED TO THE SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION MATCHING THE EXISTING BUILDING COLOR CODE SCHEME.
12. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEAL PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO COOLER SECTIONS.
13. DRAWINGS, SCHEDULES, NOTES, AND DETAILS ARE INTENDED TO BE COMPLIMENTARY. ANY WORK DESCRIBED IN ANY OF THEM, WILL BE WORK REQUIRED UNDER THIS CONTRACT. WHERE THERE IS A CONFLICT BETWEEN DIFFERENT PORTIONS OF THE DESIGN DOCUMENTS IT SHALL BE CLARIFIED BY RFI. BARRING CLARIFICATION PRIOR TO BIDDING THE MOST EXPENSIVE OPTION SHALL BE INCLUDED AND CLARIFICATION SHALL BE MADE DURING CONSTRUCTION.
14. SHOULD ANY WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS BE IN VIOLATION OF ANY FEDERAL, STATE, COUNTY OR CITY LAWS, ORDINANCE OR REGULATION, THOSE LAWS AND REGULATIONS SHALL PREVAIL, AND SHALL BE COMPLIED WITH BY THE CONTRACTOR AS A PART OF THIS WORK WITH NO EXTRA COMPENSATION.
15. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

GENERAL RENOVATION AND REMODELING NOTES:

1. THESE ELECTRICAL DRAWINGS ONLY SHOW SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J–BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
2. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
3. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. RESUPPORT EXISTING CABLING/CONDUIT TO REMAIN TO MEET CURRENTLY ADOPTED CODE REQUIREMENTS. REMOVE ALL ABANDONED CONDUIT AND WIRE. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITIES.
4. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
5. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
6. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
7. ANY CIRCUIT OR PARTIAL CIRCUIT TO REMAIN OR BE REUSED SHALL REMAIN ACTIVE.
8. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
9. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
10. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN AS–BUILT PANEL SCHEDULE FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT USING BUILDING ROOM NUMBERS.



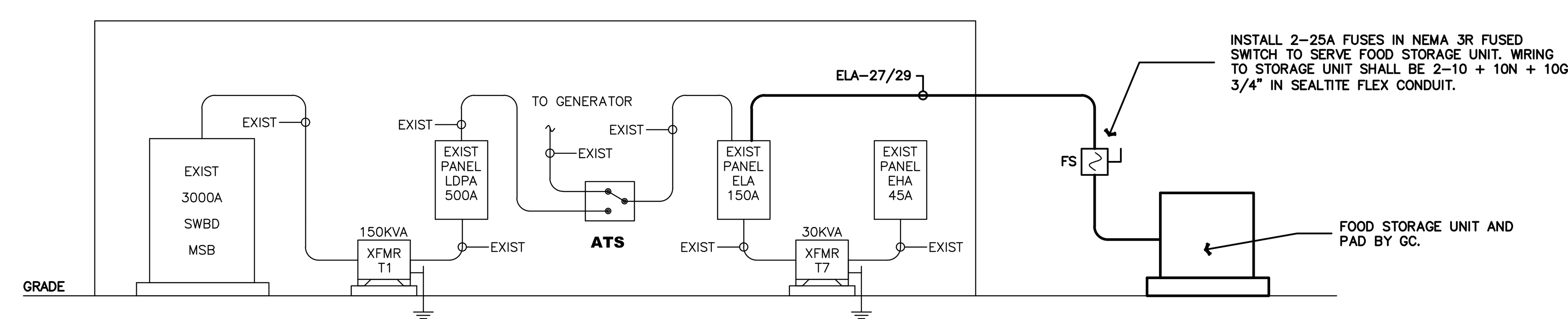
1 ELECTRICAL RENOVATION PLAN - LAKE OLYMPIA MS
SCALE: 1/8" = 1'- 0"

EXIST TO REMAIN

PANEL ELA — 150A MCB; 208Y/120V, 3ø, 4 WIRE; MOUNTING: SURFACE; AVAILABLE FAULT: SCCR & AIC:

	LOAD	DESCRIPTION	ROOM	WIRE	CB	CKT	A B C	CKT	CB	WIRE	DESCRIPTION	ROOM	LOAD
	500	BOILER 1 PUMPS		EXIST	20/1	1		2	20/3	EXIST	REFRIGERATION RACK		4000
	500	BOILER 2 PUMPS		EXIST	20/1	3		4	–	–	–		–
		EXIST SPARE		EXIST	20/1	5		6	–	–	–		–
	1500	FREEZER COIL		EXIST	20/3	7		8	20/3	EXIST	COOLER COIL		4000
	–	–		–	–	9		10	–	–	–		–
	–	–		–	–	11		12	–	–	–		–
		EXIST SPARE			20/1	13		14	20/1		EXIST SPARE		
	500	COOLER & FREEZER LTS		EXIST	20/1	15		16	20/1	EXIST	CONDENSATE DRAIN SYS		500
	500	KIT FIRE SYSTEM		EXIST	20/1	17		18	20/1	EXIST	EXIST SPARE		
		EXIST SPARE			20/1	19		20	100/3	EXIST	TRANSFORMER T–7		15000
	500	BOILER 2		EXIST	20/1	21		22	–	–	–		–
	500	BOILER 1		EXIST	20/1	23		24	–	–	–		–
NOTE 2	500	EXIST CKT		EXIST	20/1	25		26	60/3		EXIST SPARE		
NOTE 1	3100	FOOD STORAGE UNIT		2–10	30/2	27		28	–		–		
	–	–		+10N+10G	3/4"C	29		30	–		–		
	TOTAL LOAD @ 100% =	31600VA					TOTAL LOAD @ 100% =		88A		TOTAL LOAD @ 125% =		110A

1. PROVIDE NEW CB & WIRE NEW CIRCUIT.
2. RELOCATE 20/1 CB IN CKT 27 TO CKT 25 TO ALLOW INSTALLATION OF NEW 30/2P CIRCUIT BREAKER.



3 LAKE OLYMPIA MS PARTIAL ELECTRICAL RISER
NO SCALE

NOTES:
1. ALL PANELS, TRANSFORMERS, SWITCHBOARD AND TRANSFER SWITCH ARE EXISTING. ADD 30/2 CB TO PANEL ELA AND EXTEND 3–10+10N+10G, 3/4"C TO NEW FUSED SWITCH.
2. RELOCATE ONE EXISTING CIRCUIT IN PANEL ELA TO ALLOW FOR TWO POLE CIRCUIT BREAKER.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

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FORT BEND INDEPENDENT SCHOOL DISTRICT
LAKE OLYMPIA MIDDLE SCHOOL
3100 LAKE OLYMPIA PARKWAY
MISSOURI CITY, TX 77459

SEAL
STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED PROFESSIONAL ENGINEER
07.18.2025

ARCHITECTS
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HOUSTON, TEXAS 77079

STANTON ENGINEERING GROUP
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ELECTRICAL FLOOR PLAN & SCHEDULES

cc-E.200

FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
School: dd-Marshall HS	
ds-A.000	COVER AND INDEX
ds-A.101	TEMPORARY COOKING LOCATION SITE PLAN
ds-E.200	ELECTRICAL FLOOR PLAN & SCHEDULES



FORT BEND INDEPENDENT SCHOOL DISTRICT

THURGOOD MARSHALL HIGH SCHOOL
1220 BUFFALO RUN, MISSOURI CITY, TX 77489

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

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PROJECT DESIGN TEAM

PROGRAM MANAGEMENT
FBISD 2023 Bond Team
2323 Texas Parkway
Missouri City, TX 77489
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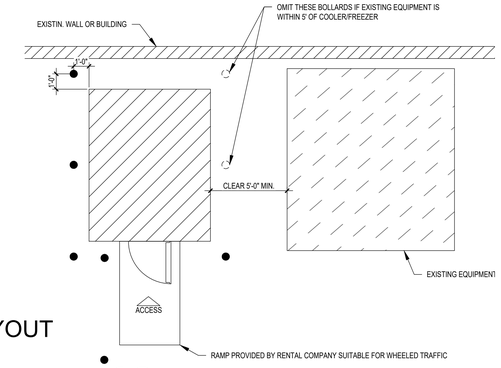
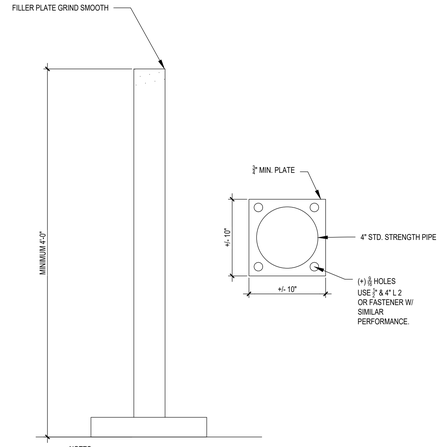
ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

dd



2 SCHEMATIC LAYOUT

PROPOSED TEMPORARY FREEZER LOCATION. CONFFIRM WITH ARCH. BEFORE INSTALLING



NOTES:
1. ALL TO BE GALV. & PAINTED SAFETY YELLOW
2. PROVIDE PLAN & DETAILS IN SUBMITIDAL FOR LOCATION AND ARCH. APPROVAL
3. MOUNT BOLLARD PLIMB.

3 BOLLARD
SCALE: 1- 1/2"=1'-0"

APPROX. LOCATION OF NEAREST ELECTRICAL ROOM OR ELECTRICAL PANEL RE: ELEC SHEETS.



1 SITE PLAN
SCALE: 1"=30'-0"

THIS SCHOOL WILL SUPPLY FOOD SERVICES DURING PHASE 3

GENERAL NOTES:
- A. TEMPARAY RENTAL FREEZER, CONTRACTOR FURNISHED & CONTRACTOR INSTALLED. COORDINATE W/ ARCHITECT FOR PROCUREMENT, DELIVERY AND CONNECTION TO POWER CANENSATE DISCHARGE. BASIS OF DESIGN SHALL BE POLAR LEASING DT180 (OTHER MODLES TO BE ACCEPTED WITH ARCHITECT APPROVAL)
- B. CONTRACTOR SHALL FURNISH ELECT. REQUIREMENTS: MIN. 30A, 220V, AS MINIMUM PRICING. SEE ELECTRICAL FOR ADDITIONAL IFORMATION.
- C. LOCATED UNIT WITHIN 100' (APPROX.) OF EXISTING ELECTRICAL ROOM.
- D. INSTALL 1" CONDENSATE DRAIN, CONNECT TO UNIT AS PER PROVIDER INSTRUCTS. KEEP DRAIN LINE AWAY FROM TRAFFIC AREAS. DISCHARGE AS PER PLUMBING DRAWINGS A LOCAL CODES.
- E. PROVIDE EIGHT 4'/ 48" ABV. PAVING BOLT-DOWN TEMPORARY BOLLARDS AROUND UNIT. PATCH HOLES UPON REMOVAL.
- F. SUBMIT LOCATION PLAN IN SUBMITTAL FOR LACATION APPROVAL BY ARCHITECTS.
- G. LOCATE UNIT IN AREA THAT:
  - G.1. HAS BEEN APPROVED INSURMITTAL
  - G.2. WITHIN 100' OF ELECT. CONNECTION
  - G.3. WILL NOT BLOCK WATER FLOW
  - G.4. AWAY FROM EXISTING AREAS SUBJECT TO STANDING WATER

PHASING CHART FOR ALL SCHOOLS		
PHASE 1		
SCHOOLS	FREEZER START DATE :	FREEZER END DATE :
FIRST COLONY MS	3/19/2025	EST. END DATE IS 5/13/2026 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE
LAKEVIEW ES		
PHASE 2		
FIRST COLONY MS	5/13/2026	EST. END DATE IS 10/28/2026 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE
LAKE OLYMPIA MS		
PHASE 3		
MARSHAL HS	3/19/2027	EST. END DATE IS 3/19/2027 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE
TRAVIS HS		
DULLES HS		

NOTES:
1. FREEZER SHALL STAY IN OPERATION UNTIL ALL SCHOOLS BEING SERVED FROM THIS LOCATION HAVE ACHIVED SUBSTANTIAL COMPLETION

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ISSUE:

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05/23/2025	90% CD PKG.
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dd

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
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MISSOUR CITY, TX 77489

SEAL



7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

TEMPORARY COOKING LOCATION SITE PLAN

dd-A.101

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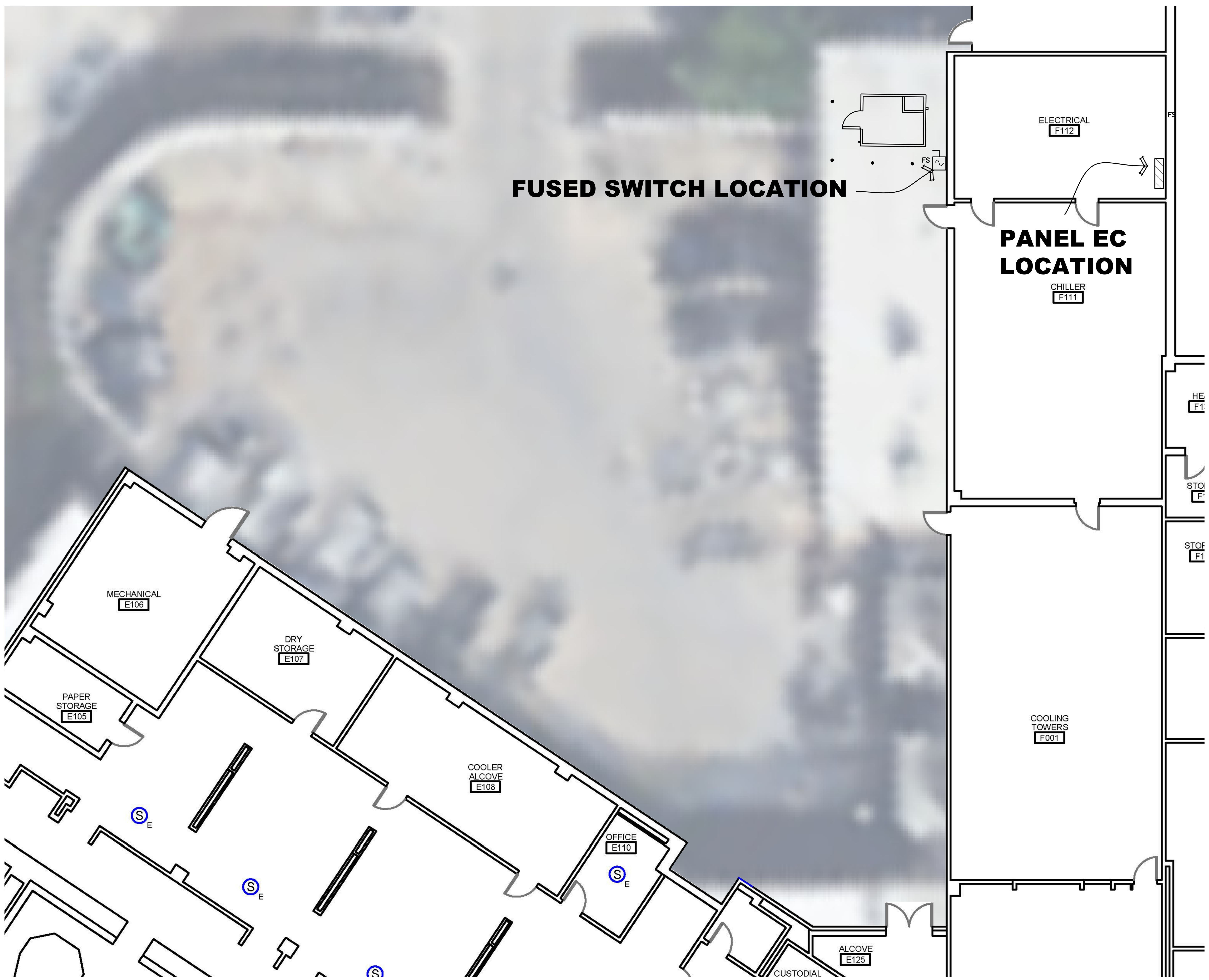
2 OVERALL FLOOR PLAN - THURGOOD MARSHALL HS
SCALE: 1" = 100'- 0"

SYMBOL LEGEND

⏀/⏀/⏀	SIMPLEX/DUPLEX/QUAD – 5361/2 REC
GFI ⏀	DUPLEX W/ GFCI PROTECTION–P&S 2097
Ⓙ	J–BOX
Ⓙ	CEILING MOUNTED J–BOX
	MOTOR
	HEAVY DUTY, NON–FUSED DISCONNECT. MIN RATING OF CIRCUIT OCPD/VOLTAGE.
	ELECTRICAL PANEL
	HOMERUN TO CIRCUIT NOTED
E	EXISTING DEVICES TO REMAIN
R	EXISTING DEVICES TO BE RELOCATED
D	EXISTING DEVICES TO BE DEMO/REMOVED
REP	EXISTING DEVICES TO BE REPLACED
S	INDICATES SURFACE MOUNTED
SR	INDICATES SURFACE RACEWAY
*	INDICATES ABOVE COUNTER DEVICE
+	INDICATES DEVICE AT +30–60"
++	INDICATES DEVICE AT +80–96"
CLG	INDICATES DEVICES MOUNTED IN CEILING
WP	INDICATES WEATHERPROOF COVER
3R	INDICATES 3R RATED DEVICE
(E)LA–X	CONNECT(ED) TO EXIST CIRCUIT LA–X
(D)LA–X	DEMO PORTION OF EXIST CIRCUIT LA–X
(N)LA–X	CONNECT(ED) TO NEW CIRCUIT LA–X

GENERAL ELECTRICAL NOTES:
1. INSTALL SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ALL AMENDMENTS.
2. PROVIDE CONDUIT FOR ALL DEVICES INSTALLED IN WALLS.
   - 2.A. 3/4"C FOR POWER AND 1"C FOR LOW VOLTAGE/DATA UNLESS NOTED OTHERWISE.
   - 2.B. PROVIDE PROTECTIVE BUSHING ON END OF ALL LOW VOLTAGE CONDUITS.
   - 2.C. ALL ELECTRICAL HOMERUNS SHALL BE IN CONDUIT, MIN 3/4"C.
   - 2.D. USE INSULATED THROAT FITTINGS FOR CONNECTIONS TO HOUSINGS, BOXES, ENCLOSURES, ETC.
   - 2.E. MAX LENGTH FOR FLEX CONDUIT SHALL BE 6FT AND MIN. SIZE SHALL BE 1/2". ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
3. CONDUIT TYPES:
   - 3.A. INSIDE BUILDINGS: GALVANIZED STEEL EMT.
     - 3.A.A. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT IN EXPOSED CEILING AREAS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
     - 3.A.B. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT ABOVE INACCESSIBLE CEILINGS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
   - 3.B. NO MC CABLE SHALL BE ALLOWED.
   - 3.C. PROVIDE FLEXIBLE CONNECTIONS TO MOTORS, PUMPS, TRANSFORMERS, OR SIMILAR EQUIPMENT.
4. PROVIDE GALVANIZED STEEL, ONE–PIECE CONSTRUCTION, OUTLET BOXES IN ALL CASES SUITABLE FOR INTENDED USE.
   - 4.A. BOXES OUTSIDE SHALL BE STEEL NEMA 3 TYPE.
   - 4.B. PROVIDE CEILING BRACKET TO SUPPORT CEILING MOUNTED DEVICES FROM CEILING TEES.
5. 20 AMP, SINGLE PHASE BRANCH CIRCUITS SERVING LIGHTING AND GENERAL RECEPTACLES MAY BE GROUPED IN A SINGLE RACEWAY PROVIDED A NEUTRAL CONDUCTOR IS INSTALLED FOR EACH CIRCUIT REQUIRING A NEUTRAL.
   - 5.A. DO NOT INSTALL MORE THAN FOUR CURRENT CARRYING CONDUCTORS IN A CONDUIT EXCEPT SIX #12 OR #10 CURRENT CARRYING CONDUCTORS MAY BE INSTALLED IN 3/4" OR LARGER CONDUIT FOR 20A CIRCUITS.
   - 5.B. DO NOT INSTALL 480/277 VOLT CONDUCTORS IN THE SAME CONDUIT WITH 240/208/120 VOLT CONDUCTORS.
   - 5.C. DO NOT COMBINE NEUTRALS. PROVIDE DEDICATED NEUTRALS FOR EACH BRANCH CIRCUIT.
   - 5.D. MULTIPLE DEVICES ON A CIRCUIT SUCH AS RECEPTACLES SHALL BE WIRED WITH A PIGTAIL SO THE DEVICE DOES NOT PROVIDE THE CONTINUITY PATH. FEED THROUGH CONNECTIONS FOR GFCI RECEPTACLES SHALL NOT BE USED FOR PROTECTION OF DOWNSTREAM DEVICES.
6. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
7. PROVIDE J–BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM, SOUND SYSTEM, LOW VOLTAGE WIRING, ETC. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF ALL LOW VOLTAGE CONDUITS.
8. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS. ALL JUNCTION/PULL BOXES INSTALLED ABOVE ACCESSIBLE CEILINGS SHALL BE MOUNTED SO THAT THE ACCESS PANEL IS NO HIGHER THAN 18" ABOVE THE CEILING.
9. PROVIDE CIRCUIT LABELS IN PERMANENT MARKER ON ALL NEW AND EXISTING J–BOX COVERS UTILIZED IN THE AREA OF RENOVATION.
10. PROVIDE CIRCUIT LABEL ON ALL ABOVE CEILING J–BOXES, EQUIPMENT, ETC. IDENTIFYING THE CIRCUITS CONTAINED/CONNECTED.
11. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12.
    - 11.A. TYPICAL BUILDING WIRE SHALL BE STRANDED TYPE THHN, THWN–2 (WET RATED FOR 90°C), OR XHHW–2. MINIMUM WIRE SIZE SHALL BE #12.
    - 11.B. ALL BUILDING WIRE SHALL BE COLOR CODED WITH THE SAME COLOR CONNECTED TO THE SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION MATCHING THE EXISTING BUILDING COLOR CODE SCHEME.
12. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEAL PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO COOLER SECTIONS.
13. DRAWINGS, SCHEDULES, NOTES, AND DETAILS ARE INTENDED TO BE COMPLIMENTARY. ANY WORK DESCRIBED IN ANY OF THEM, WILL BE WORK REQUIRED UNDER THIS CONTRACT. WHERE THERE IS A CONFLICT BETWEEN DIFFERENT PORTIONS OF THE DESIGN DOCUMENTS IT SHALL BE CLARIFIED BY RFI. BARRING CLARIFICATION PRIOR TO BIDDING THE MOST EXPENSIVE OPTION SHALL BE INCLUDED AND CLARIFICATION SHALL BE MADE DURING CONSTRUCTION.
14. SHOULD ANY WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS BE IN VIOLATION OF ANY FEDERAL, STATE, COUNTY OR CITY LAWS, ORDINANCE OR REGULATION, THOSE LAWS AND REGULATIONS SHALL PREVAIL, AND SHALL BE COMPLIED WITH BY THE CONTRACTOR AS A PART OF THIS WORK WITH NO EXTRA COMPENSATION.
15. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

GENERAL RENOVATION AND REMODELING NOTES:
1. THESE ELECTRICAL DRAWINGS ONLY SHOW SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J–BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
2. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
3. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. RESUPPORT EXISTING CABLING/CONDUIT TO REMAIN TO MEET CURRENTLY ADOPTED CODE REQUIREMENTS. REMOVE ALL ABANDONED CONDUIT AND WIRE. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITIES.
4. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
5. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
6. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
7. ANY CIRCUIT OR PARTIAL CIRCUIT TO REMAIN OR BE REUSED SHALL REMAIN ACTIVE.
8. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
9. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
10. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN AS–BUILT PANEL SCHEDULE FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT USING BUILDING ROOM NUMBERS.



1 ELECTRICAL RENOVATION PLAN - THURGOOD MARSHALL HS
SCALE: 1/8" = 1'- 0"

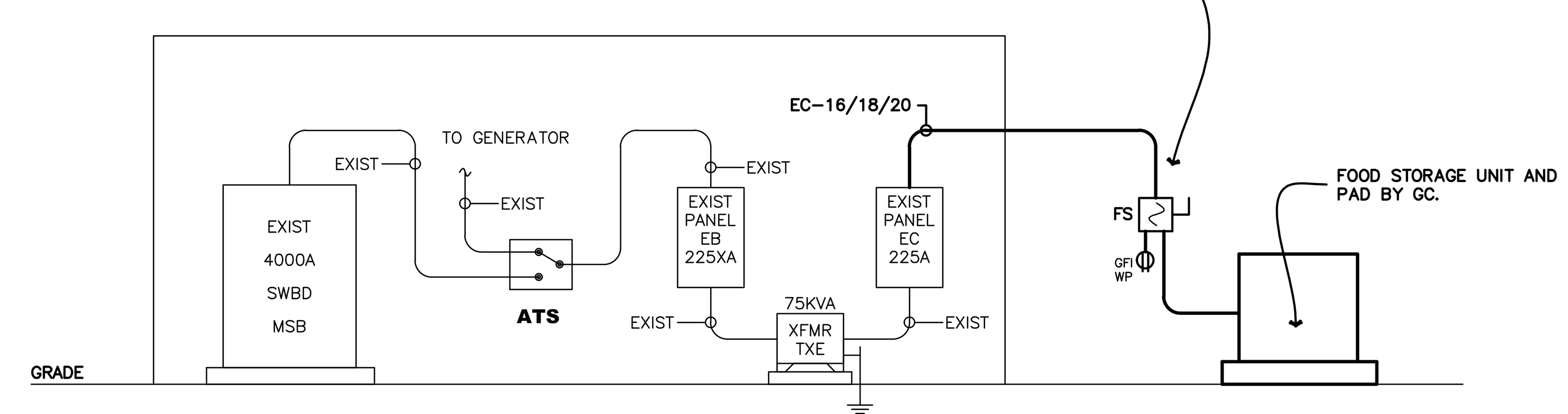
EXIST TO REMAIN

PANEL EC — 225A MLO, 208Y/120V, 3Ø, 4 WIRE — MOUNTING: SURFACE — AVAILABLE FAULT: SCCR & AIC:

LOAD	DESCRIPTION ROOM	WIRE	CB	CKT	A B C	CKT	CB	WIRE	DESCRIPTION ROOM	LOAD	
500	FIRE ALARM PANEL	EXIST	20/1	1		2	60/3	EXIST	REFRIGERATION RACK	10000	
500	TELEPHONE T3	EXIST	20/1	3		4	–	–	–	–	
500	TELEPHONE T3	EXIST	20/1	5		6	–	–	–	–	
500	TELEPHONE T3	EXIST	20/1	7		8	30/1	EXIST	KITCHEN REFRIG	1200	
500	MAIN SOUND SYSTEM T3	EXIST	20/1	9		10	30/1	EXIST	KITCHEN REFRIG	1200	
500	PRO GYM SOUND SYSTEM	EXIST	20/1	11		12	30/1	EXIST	KITCHEN REFRIG	1200	
500	AUX GYM SOUND SYSTEM	EXIST	20/1	13		14	30/1	EXIST	KITCHEN REFRIG	1200	
500	SECURITY PANEL M210	EXIST	20/1	15		16	**30/3**	**3–10**	**FOOD STORAGE UNIT**	**3100**	NOTE 1
500	SECURITY MONITOR M210	EXIST	20/1	17		18	–	**+10N+10G**	–	–	
800	BATTERY CHARGER M10	EXIST	20/1	19		20	–	**3/4"C**	**NEW DUPLEX REC**	**180**	
1200	AUDITORIUM LTS SEATING	EXIST	20/1	21		22			SPACE		
1200	AUDITORIUM LTS SEATING	EXIST	20/1	23		24			SPACE		
1200	AUDITORIUM LTS SEATING	EXIST	20/1	25		26			SPACE		
500	COMMONS AMP	EXIST	20/1	27		28			SPACE		
200	SMOKE LOUVERS, S STRT	EXIST	20/1	29		30			SPACE		
200	SMOKE LOUVERS, S STRT	EXIST	20/1	31		32			SPACE		
500	VOICE EVAC AUDITORIUM	EXIST	20/1	33		34			SPACE		
500	VOICE EVAC GYM	EXIST	20/1	35		36			SPACE		
	SPACE		20/1	37		38			SPACE		
	SPACE		20/1	39		40			SPACE		
	SPACE		20/1	41		42			SPACE		
TOTAL LOAD @ 100% = 28880VA					TOTAL LOAD @ 100% =	80A			TOTAL LOAD @ 125% =	100A	

1. PROVIDE NEW CB & WIRE NEW CIRCUIT.

INSTALL 2–25A FUSES IN NEMA 3R FUSED SWITCH TO SERVE FOOD STORAGE UNIT AND A 20A FUSE IN THIRD PHASE TO FEED DUPLEX RECEPTACLE. WIRING TO STORAGE UNIT SHALL BE 2–10 +10N + 10G, 3/4" IN SEALTITE FLEX CONDUIT. WIRING TO NEW 20A DUPLEX RECEPTACLE SHALL BE 2–10 + 10G IN 3/4" RIGID CONDUIT OR SEALTITE. MOUNT RECEPTACLE IN NEMA 3R ALUMINUM JUNCTION BOX WITH WET LOCATION COVER, 6" BELOW FS.



1 MARSHALL HS PARTIAL ELECTRICAL RISER
NO SCALE

NOTES:
1. ALL PANELS, TRANSFORMER, SWITCHBOARD AND TRANSFER SWITCH ARE EXISTING. ADD 30/3 CB TO PANEL XXX AND EXTEND 3–10+10N+10G, 3/4"C TO NEW FUSED SWITCH.

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

dd

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
THURGOOD MARSHALL HIGH SCHOOL
1220 BUFFALO RUN
MISSOURI CITY, TX 77489

SEAL
STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

STANTON ENGINEERING GROUP
INFO@STANTON-ENG.COM (713) 300-9292 | TEXAS ENG. FIRM REG NO. F-016332
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1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL FLOOR PLAN & SCHEDULES

dd-E.200

FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
School: ee-Travis HS	
ee-A.000	COVER AND INDEX
ee-A.101	TEMPORARY COOKING LOCATION SITE PLAN
ee-E.200	ELECTRICAL FLOOR PLAN & SCHEDULES



FORT BEND INDEPENDENT SCHOOL DISTRICT

WILLIAM B. TRAVIS HIGH SCHOOL
11111 HARLEM ROAD, RICHMOND, TX 77406

ADMINISTRATION

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ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

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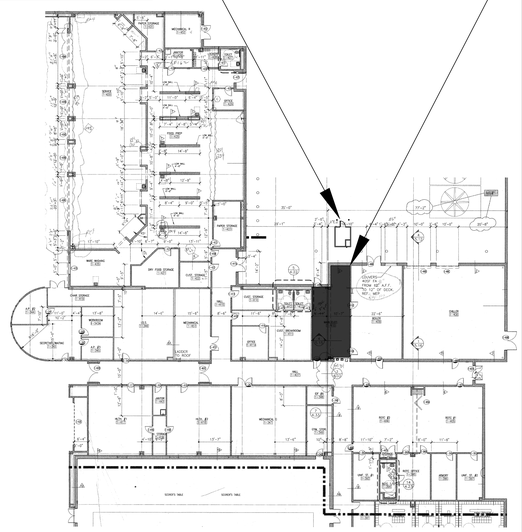
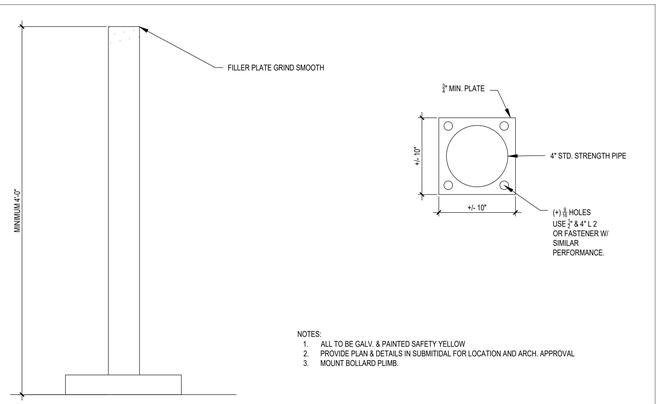
APPROX. LOCATION OF NEAREST ELECTRICAL ROOM OR ELECTRICAL PANEL RE: ELEC SHEETS.

PROPOSED TEMPORARY FREEZER LOCATION. CONFFIRM WITH ARCH. BEFORE INSTALLING





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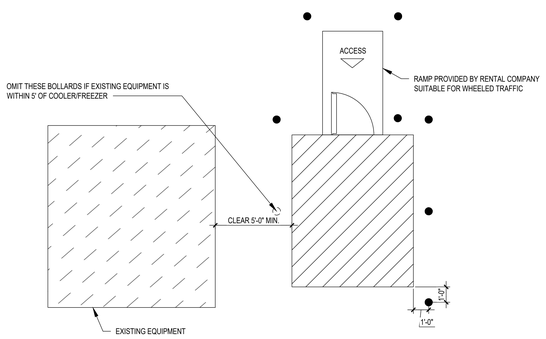

2 SCHEMATIC LAYOUT

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SCALE: 1"=30'-0"

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THIS SCHOOL WILL SUPPLY FOOD SERVICES DURING PHASE 3

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LAKE OLYMPIA MS		
PHASE 3		
MARSHAL HS	3/19/2027	EST. END DATE IS 3/19/2027 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE
TRAVIS HS		
DULLES HS		

NOTES:
1. FREEZER SHALL STAY IN OPERATION UNTIL ALL SCHOOLS BEING SERVED FROM THIS LOCATION HAVE ACHIVED SUBSTANTIAL COMPLETION

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

ee

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
TRAVIS HIGH SCHOOL
11111 HARLEM RD
RICHMOND, TX 77406

SEAL
REGISTERED ARCHITECT
ANDREW J. TORRES
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

TEMPORARY COOKING LOCATION SITE PLAN

ee-A.101

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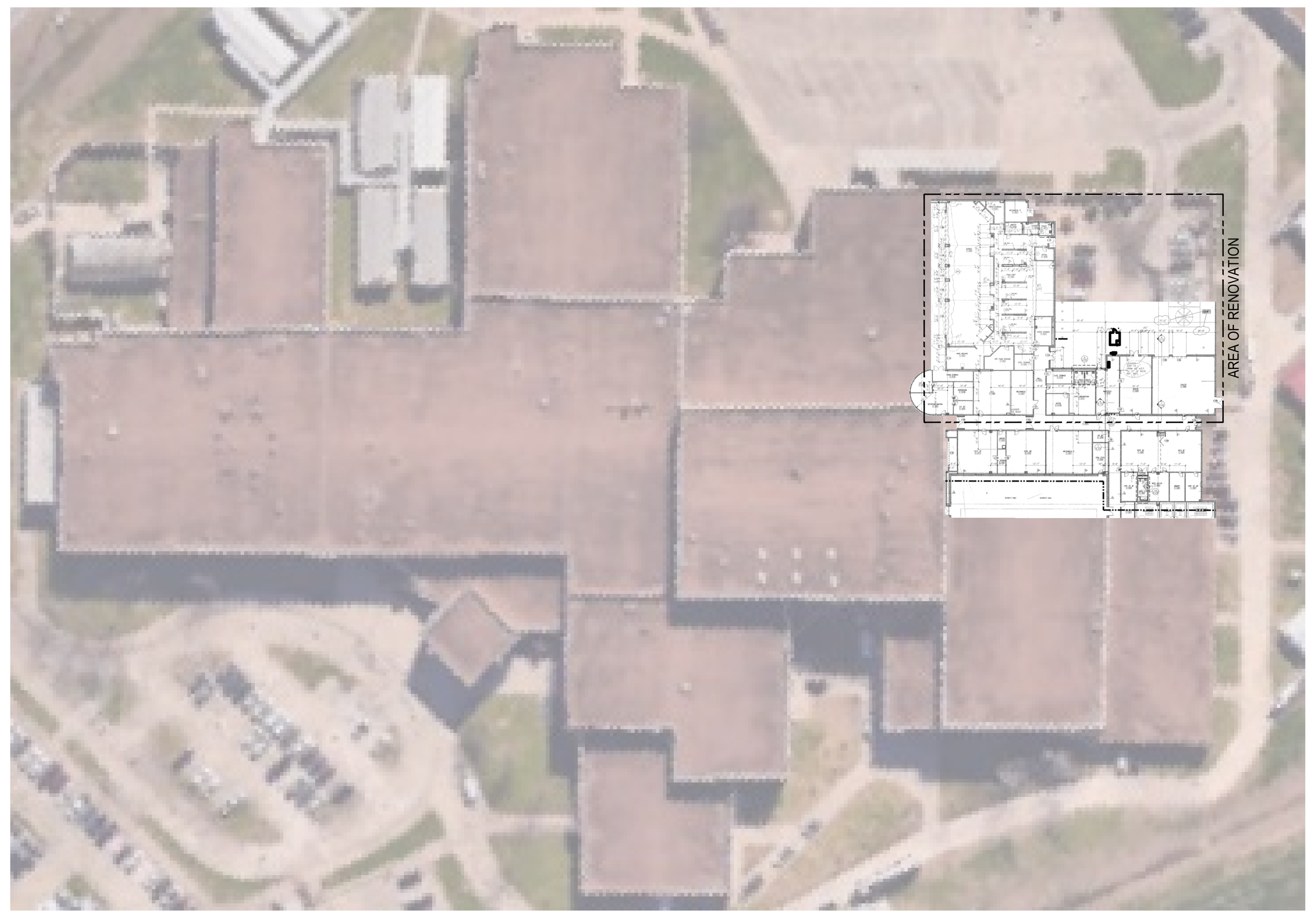


2 OVERALL FLOOR PLAN - TRAVIS HS

SCALE: 1" = 100'- 0"

SYMBOL LEGEND

⏀/⏀/⏀	SIMPLEX/DUPLEX/QUAD – 5361/2 REC
GFI ⏀	DUPLEX W/ GFCI PROTECTION–P&S 2097
Ⓙ	J–BOX
Ⓙ	CEILING MOUNTED J–BOX
	MOTOR
	HEAVY DUTY, NON–FUSED DISCONNECT. MIN RATING OF CIRCUIT OCPD/VOLTAGE.
	ELECTRICAL PANEL
	HOMERUN TO CIRCUIT NOTED
E	EXISTING DEVICES TO REMAIN
R	EXISTING DEVICES TO BE RELOCATED
D	EXISTING DEVICES TO BE DEMO/REMOVED
REP	EXISTING DEVICES TO BE REPLACED
S	INDICATES SURFACE MOUNTED
SR	INDICATES SURFACE RACEWAY
*	INDICATES ABOVE COUNTER DEVICE
+	INDICATES DEVICE AT +30–60"
++	INDICATES DEVICE AT +80–96"
CLG	INDICATES DEVICES MOUNTED IN CEILING
WP	INDICATES WEATHERPROOF COVER
3R	INDICATES 3R RATED DEVICE
(E)LA–X	CONNECT(ED) TO EXIST CIRCUIT LA–X
(D)LA–X	DEMO PORTION OF EXIST CIRCUIT LA–X
(N)LA–X	CONNECT(ED) TO NEW CIRCUIT LA–X

GENERAL ELECTRICAL NOTES:

1. INSTALL SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION INCLUDING ALL AMENDMENTS.
2. PROVIDE CONDUIT FOR ALL DEVICES INSTALLED IN WALLS.
   - 2.A. 3/4"C FOR POWER AND 1"C FOR LOW VOLTAGE/DATA UNLESS NOTED OTHERWISE.
   - 2.B. PROVIDE PROTECTIVE BUSHING ON END OF ALL LOW VOLTAGE CONDUITS.
   - 2.C. ALL ELECTRICAL HOMERUNS SHALL BE IN CONDUIT, MIN 3/4"C.
   - 2.D. USE INSULATED THROAT FITTINGS FOR CONNECTIONS TO HOUSINGS, BOXES, ENCLOSURES, ETC.
   - 2.E. MAX LENGTH FOR FLEX CONDUIT SHALL BE 6FT AND MIN. SIZE SHALL BE 1/2". ALL FLEX CONDUIT SHALL BE LISTED FOR GROUNDING.
3. CONDUIT TYPES:
   - 3.A. INSIDE BUILDINGS: GALVANIZED STEEL EMT.
     - 3.A.A. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT IN EXPOSED CEILING AREAS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
     - 3.A.B. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN CONDUIT ABOVE INACCESSIBLE CEILINGS. ROUTE TO NEAREST ACCESSIBLE CEILING WITH CONTINUOUS PATHWAYS TO LOW VOLTAGE SOURCE/DEVICE.
   - 3.B. NO MC CABLE SHALL BE ALLOWED.
   - 3.C. PROVIDE FLEXIBLE CONNECTIONS TO MOTORS, PUMPS, TRANSFORMERS, OR SIMILAR EQUIPMENT.
4. PROVIDE GALVANIZED STEEL, ONE–PIECE CONSTRUCTION, OUTLET BOXES IN ALL CASES SUITABLE FOR INTENDED USE.
   - 4.A. BOXES OUTSIDE SHALL BE STEEL NEMA 3 TYPE.
   - 4.B. PROVIDE CEILING BRACKET TO SUPPORT CEILING MOUNTED DEVICES FROM CEILING TEES.
5. 20 AMP, SINGLE PHASE BRANCH CIRCUITS SERVING LIGHTING AND GENERAL RECEPTACLES MAY BE GROUPED IN A SINGLE RACEWAY PROVIDED A NEUTRAL CONDUCTOR IS INSTALLED FOR EACH CIRCUIT REQUIRING A NEUTRAL.
   - 5.A. DO NOT INSTALL MORE THAN FOUR CURRENT CARRYING CONDUCTORS IN A CONDUIT EXCEPT SIX #12 OR #10 CURRENT CARRYING CONDUCTORS MAY BE INSTALLED IN 3/4" OR LARGER CONDUIT FOR 20A CIRCUITS.
   - 5.B. DO NOT INSTALL 480/277 VOLT CONDUCTORS IN THE SAME CONDUIT WITH 240/208/120 VOLT CONDUCTORS.
   - 5.C. DO NOT COMBINE NEUTRALS. PROVIDE DEDICATED NEUTRALS FOR EACH BRANCH CIRCUIT.
   - 5.D. MULTIPLE DEVICES ON A CIRCUIT SUCH AS RECEPTACLES SHALL BE WIRED WITH A PIGTAIL SO THE DEVICE DOES NOT PROVIDE THE CONTINUITY PATH. FEED THROUGH CONNECTIONS FOR GFCI RECEPTACLES SHALL NOT BE USED FOR PROTECTION OF DOWNSTREAM DEVICES.
6. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
7. PROVIDE J–BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM, SOUND SYSTEM, LOW VOLTAGE WIRING, ETC. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF ALL LOW VOLTAGE CONDUITS.
8. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS. ALL JUNCTION/PULL BOXES INSTALLED ABOVE ACCESSIBLE CEILINGS SHALL BE MOUNTED SO THAT THE ACCESS PANEL IS NO HIGHER THAN 18" ABOVE THE CEILING.
9. PROVIDE CIRCUIT LABELS IN PERMANENT MARKER ON ALL NEW AND EXISTING J–BOX COVERS UTILIZED IN THE AREA OF RENOVATION.
10. PROVIDE CIRCUIT LABEL ON ALL ABOVE CEILING J–BOXES, EQUIPMENT, ETC. IDENTIFYING THE CIRCUITS CONTAINED/CONNECTED.
11. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12.
    - 11.A. TYPICAL BUILDING WIRE SHALL BE STRANDED TYPE THHN, THWN–2 (WET RATED FOR 90°C), OR XHHW–2. MINIMUM WIRE SIZE SHALL BE #12.
    - 11.B. ALL BUILDING WIRE SHALL BE COLOR CODED WITH THE SAME COLOR CONNECTED TO THE SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION MATCHING THE EXISTING BUILDING COLOR CODE SCHEME.
12. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEAL PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO COOLER SECTIONS.
13. DRAWINGS, SCHEDULES, NOTES, AND DETAILS ARE INTENDED TO BE COMPLIMENTARY. ANY WORK DESCRIBED IN ANY OF THEM, WILL BE WORK REQUIRED UNDER THIS CONTRACT. WHERE THERE IS A CONFLICT BETWEEN DIFFERENT PORTIONS OF THE DESIGN DOCUMENTS IT SHALL BE CLARIFIED BY RFI. BARRING CLARIFICATION PRIOR TO BIDDING THE MOST EXPENSIVE OPTION SHALL BE INCLUDED AND CLARIFICATION SHALL BE MADE DURING CONSTRUCTION.
14. SHOULD ANY WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS BE IN VIOLATION OF ANY FEDERAL, STATE, COUNTY OR CITY LAWS, ORDINANCE OR REGULATION, THOSE LAWS AND REGULATIONS SHALL PREVAIL, AND SHALL BE COMPLIED WITH BY THE CONTRACTOR AS A PART OF THIS WORK WITH NO EXTRA COMPENSATION.
15. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

GENERAL RENOVATION AND REMODELING NOTES:

1. THESE ELECTRICAL DRAWINGS ONLY SHOW SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J–BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
2. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
3. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. RESUPPORT EXISTING CABLING/CONDUIT TO REMAIN TO MEET CURRENTLY ADOPTED CODE REQUIREMENTS. REMOVE ALL ABANDONED CONDUIT AND WIRE. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITIES.
4. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
5. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
6. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
7. ANY CIRCUIT OR PARTIAL CIRCUIT TO REMAIN OR BE REUSED SHALL REMAIN ACTIVE.
8. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
9. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
10. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN AS–BUILT PANEL SCHEDULE FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT USING BUILDING ROOM NUMBERS.



1 ELECTRICAL RENOVATION PLAN - TRAVIS HS

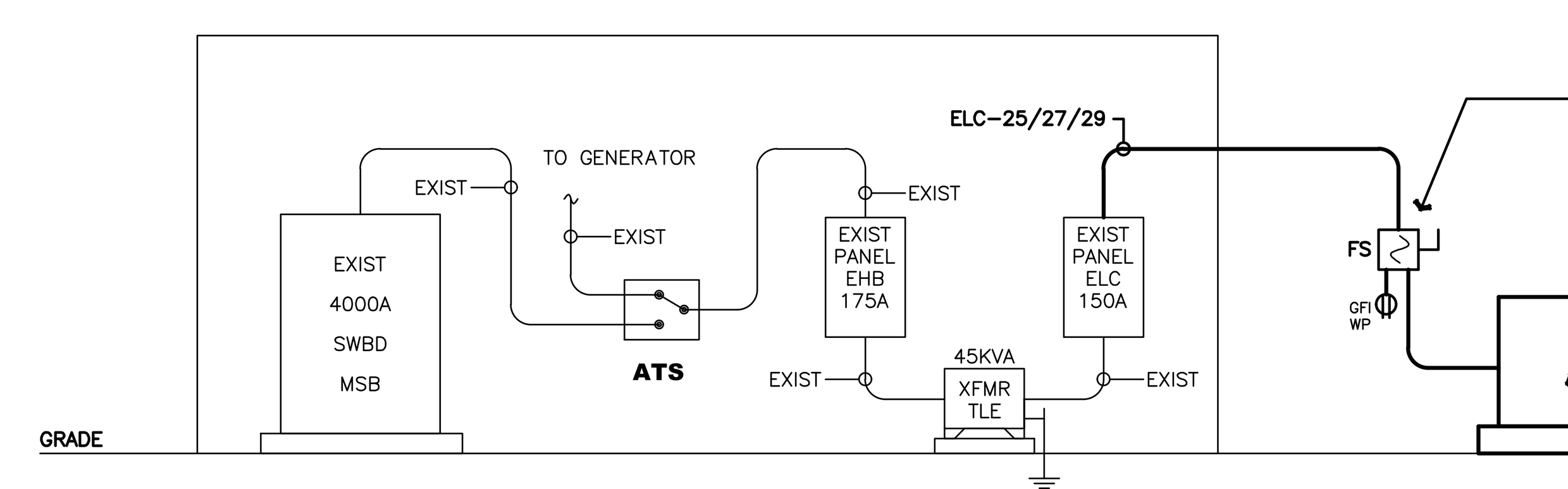
SCALE: 1/8" = 1'- 0"

EXIST TO REMAIN

PANEL ELC — 80A MCB, 208Y/120V, 3ø, 4 WIRE — MOUNTING: SURFACE — AVAILABLE FAULT: — SCCR & AIC:

	LOAD	DESCRIPTION ROOM	WIRE	CB	CKT	A B C	CKT	CB	WIRE	DESCRIPTION ROOM	LOAD
	500	FIRE ALARM PANEL	EXIST	20/1	1		2	50/3	EXIST	REFRIGERATION	10000
		SPARE		20/1	3		4	–	EXIST	RACK	–
	500	TELEPHONE	EXIST	20/1	5		6	–	EXIST	–	–
		SPARE		30/1	7		8	20/1		SPARE	
		SPARE		30/1	9		10	20/1		SPARE	
		SPARE		20/1	11		12	20/1		SPARE	
		SPARE		20/1	13		14	20/1		SPARE	
	1000	AUDITORIUM LIGHTS	EXIST	20/1	15		16	20/1		SPARE	
	1000	AUDITORIUM LIGHTS	EXIST	20/1	17		18	20/1		SPARE	
		SPARE		20/1	19		20			SPACE	
	500	CLINIC RECEPTACLE	EXIST	20/1	21		22			SPACE	
	500	CLINIC RECEPTACLE	EXIST	20/1	23		24			SPACE	
NOTE 1	3100	FOOD STORAGE UNIT	3–10	30/3	25		26			SPACE	
	–	–	+10N+10G	–	27		28			SPACE	
	180	NEW DUPLEX REC	3/4"C	–	29		30			SPACE	
	TOTAL LOAD @ 100% =	17280VA			TOTAL LOAD @ 100% =		48A		TOTAL LOAD @ 125% =		60A

1. PROVIDE NEW CB & WIRE NEW CIRCUIT.



INSTALL 2–25A FUSES IN NEMA 3R FUSED SWITCH TO SERVE FOOD STORAGE UNIT AND A 20A FUSE IN THIRD PHASE TO FEED DUPLEX RECEPTACLE. WIRING TO STORAGE UNIT SHALL BE 2–10 + 10N + 10G, 3/4" IN SEALTITE FLEX CONDUIT. WIRING TO NEW 20A DUPLEX RECEPTACLE SHALL BE 2–10 + 10G IN 3/4" RIGID CONDUIT OR SEALTITE. MOUNT RECEPTACLE IN NEMA 3R ALUMINUM JUNCTION BOX WITH WET LOCATION COVER, 6" BELOW FS.

FOOD STORAGE UNIT AND PAD BY GC.

3 TRAVIS HS PARTIAL ELECTRICAL RISER

NO SCALE

NOTES:

1. ALL PANELS, TRANSFORMER, SWITCHBOARD AND TRANSFER SWITCH ARE EXISTING. ADD 30/3 CB TO PANEL ELC AND EXTEND 3–10+10N+10G, 3/4"C TO NEW FUSED SWITCH.

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ee

FBISD BP 013 KITCHEN RENOVATIONS

FORT BEND INDEPENDENT SCHOOL DISTRICT

TRAVIS HIGH SCHOOL

11111 HARLEM RD
RICHMOND, TX 77406

SEAL

STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED PROFESSIONAL ENGINEER
07.18.2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL FLOOR PLAN & SCHEDULES

ee-E.200

STANTON ENGINEERING GROUP
INFO@STANTON-ENG.COM (713) 300-9292
TEXAS ENG. FIRM REG NO. F-016332
1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

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FBISD BP013 KITCHEN RENOVATIONS ES

Sheet List Table	
Sheet Number	Sheet Title
School: ff-Dulles HS	
ff-A.000	COVER AND INDEX
ff-A.101	TEMPORARY COOKING LOCATION SITE PLAN
ff-E.200	ELECTRICAL FLOOR PLAN & SCHEDULES

REGISTERED ARCHITECT
NOE ALMAGUER
22651
STATE OF TEXAS
18 July 2025

FORT BEND BOND 2023
INDEPENDENT SCHOOL DISTRICT

FORT BEND INDEPENDENT SCHOOL DISTRICT

DULLES HIGH SCHOOL
550 DULLES AVE., SUGAR LAND, TX 77478

ADMINISTRATION

DR. MARCELL SMITH	SUPERINTENDENT OF FBISD
DR. ANDRIA SCHUR, Ed.D.	CHIEF OF SCHOOLS

BOARD OF TRUSTEES

KRISTIN K. TASSIN	PRESIDENT
RICK GARCIA	VICE PRESIDENT
DAVID HAMILTON	SECRETARY
ANGIE HANAN	BOARD MEMBER
ADAM SCHOOF	BOARD MEMBER
DR. SHIRLEY ROSE-GILLIAM	BOARD MEMBER
SONYA JONES	BOARD MEMBER

PROJECT DESIGN TEAM

PROGRAM MANAGEMENT
FBISD 2023 Bond Team
2323 Texas Parkway
Missouri City, TX 77489
Phone Number: 281-327-5481

ARCHITECT
MWA Architects
11767 Katy Freeway, Suite 430
Houston, Texas 77079
Phone Number: 713-782-8188

FOOD SERVICE
Food Design Professionals
26215 Oak Ridge Drive
The Woodlands, Texas 77380
Phone Number: 281-350-2323

MEP ENGINEERS
Stanton Engineering Group
1300 W. Sam Houston Pkwy South, Suite 121
Houston, Texas 77042
Phone Number: 713-300-9292

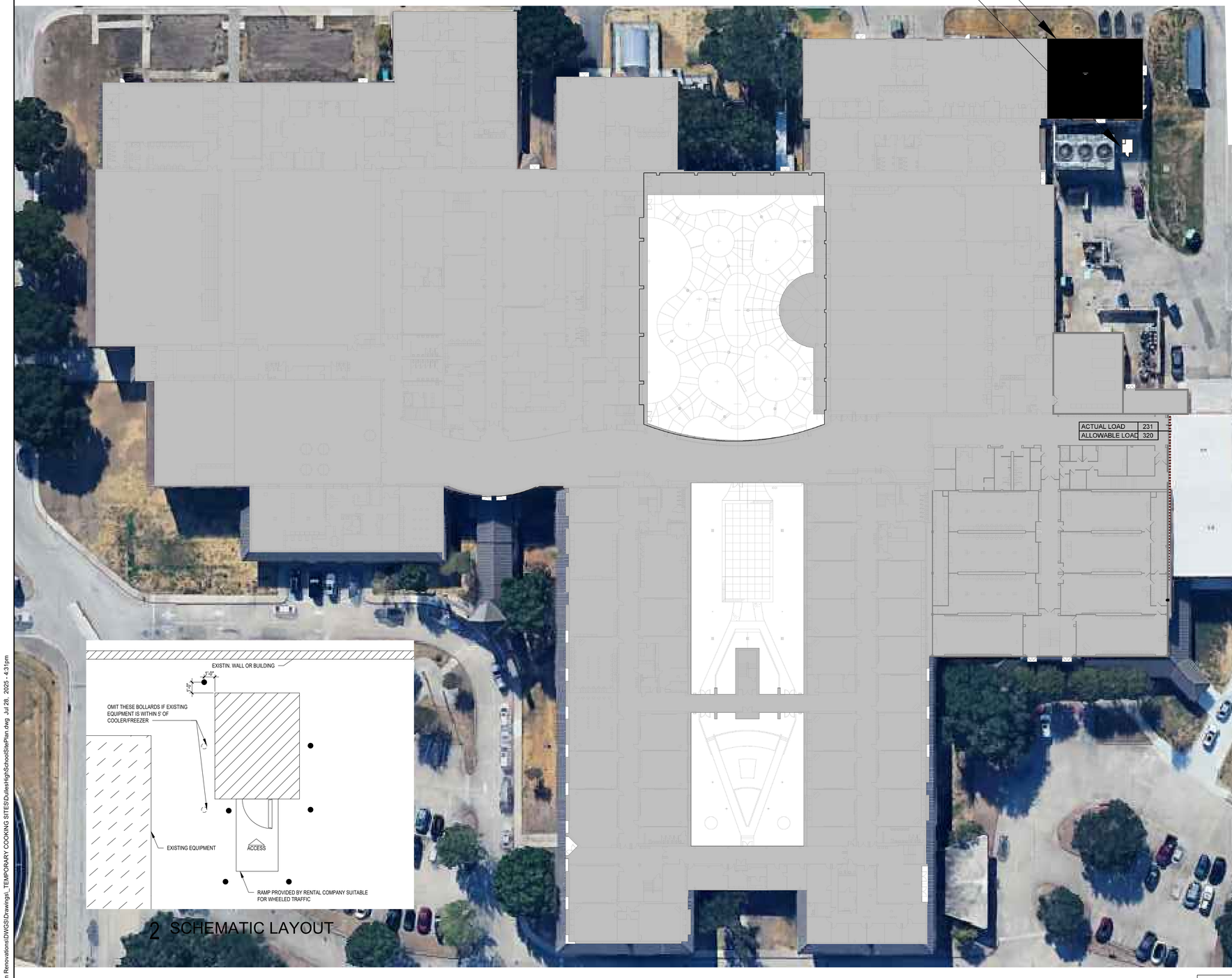
STRUCTURAL ENGINEER
Stanley Spurling & Hamilton
3301 Edloe Street, Suite 200
Houston, Texas 77027
Phone Number: 713-776-9433

ISSUED FOR PERMIT AND BIDDING - JULY 18, 2025

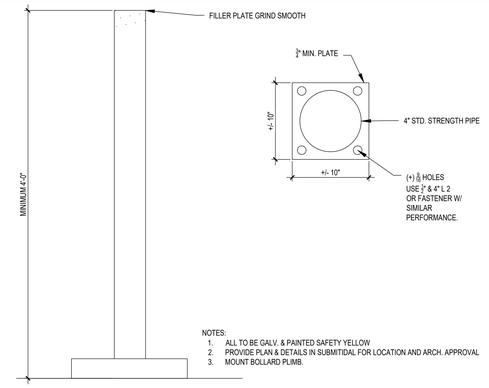
ff

APPROX. LOCATION OF NEAREST ELECTRICAL ROOM OR ELECTRICAL PANEL RE: ELEC SHEETS.

PROPOSED TEMPORARY FREEZER LOCATION. CONFFIRM WITH ARCH. BEFORE INSTALLING



2 SCHEMATIC LAYOUT



NOTES:
1. ALL TO BE GALV. & PAINTED SAFETY YELLOW
2. PROVIDE PLAN & DETAILS IN SUBMITIDAL FOR LOCATION AND ARCH. APPROVAL
3. MOUNT BOLLARD PLIMB.

3 BOLLARD
SCALE: 1- 1/2"=1'-0"



GENERAL NOTES:
- A. TEMPARAY RENTAL FREEZER, CONTRACTOR FURNISHED & CONTRACTOR INSTALLED. COORDINATE W/ ARCHITECT FOR PROCUREMENT, DELIVERY AND CONNECTION TO POWER CANENSATE DISCHARGE. BASIS OF DESIGN SHALL BE POLAR (LEASING DT180 (OTHER MODLES TO BE ACCEPTED WITH ARCHITECT APPROVAL)
- B. CONTRACTOR SHALL FURNISH ELECT. REQUIREMENTS: MIN. 30A, 220V, AS MINIMUM PRICING. SEE ELECTRICAL FOR ADDITIONAL IFORMATION.
- C. LOCATED UNIT WITHIN 100' (APPROX.) OF EXISTING ELECTRICAL ROOM.
- D. INSTALL 1" CONDENSATE DRAIN, CONNECT TO UNIT AS PER PROVIDER INSTRUCTS. KEEP DRAIN LINE AWAY FROM TRAFFIC AREAS. DISCHARGE AS PER PLUMBING DRAWINGS A LOCAL CODES.
- E. PROVIDE EIGHT 4'/ 48" ABV. PAVING BOLT-DOWN TEMPORARY BOLLARDS AROUND UNIT. PATCH HOLES UPON REMOVAL.
- F. SUBMIT LOCATION PLAN IN SUBMITTAL FOR LACATION APPROVAL BY ARCHITECTS.
- G. LOCATE UNIT IN AREA THAT:
  - G.1. HAS BEEN APPROVED INSURMITTAL
  - G.2. WITHIN 100' OF ELECT. CONNECTION
  - G.3. WILL NOT BLOCK WATER FLOW
  - G.4. AWAY FROM EXISTING AREAS SUBJECT TO STANDING WATER

1 SITE PLAN
SCALE: 1"=30'-0"

THIS SCHOOL WILL SUPPLY FOOD SERVICES DURING PHASE 3

PHASING CHART FOR ALL SCHOOLS		
PHASE 1		
SCHOOLS	**FREEZER START DATE :**	**FREEZER END DATE :**
FIRST COLONY MS LAKEVIEW ES	11/7/2025	EST. END DATE IS 5/13/2026 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE
PHASE 2		
FIRST COLONY MS LAKE OLYMPIA MS	5/29/2026	EST. END DATE IS 10/28/2026 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE
PHASE 3		
MARSHAL HS TRAVIS HS ***DULLES HS***	3/19/2027	EST. END DATE IS 3/19/2027 BUT ALL SCHOOLS BEING SERVED MUST BE SUBSTATIALLY COMPLETE

NOTES:
1. FREEZER SHALL STAY IN OPERATION UNTIL ALL SCHOOLS BEING SERVED FROM THIS LOCATION HAVE ACHIVED SUBSTANTIAL COMPLETION

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FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
DULLES HIGH SCHOOL
550 DULLES AVE
SUGAR LAND, TX 77478

SEAL
REGISTERED ARCHITECT
ROBERT A. MEYER
22651
STATE OF TEXAS
7/15/2025

MWA ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
HOUSTON, TEXAS 77079

PROJ. NO.: 23-25
DATE: 07/18/25
ISSUED FOR BIDDING AND PERMITTING

TEMPORARY COOKING LOCATION SITE PLAN

ff-A.101

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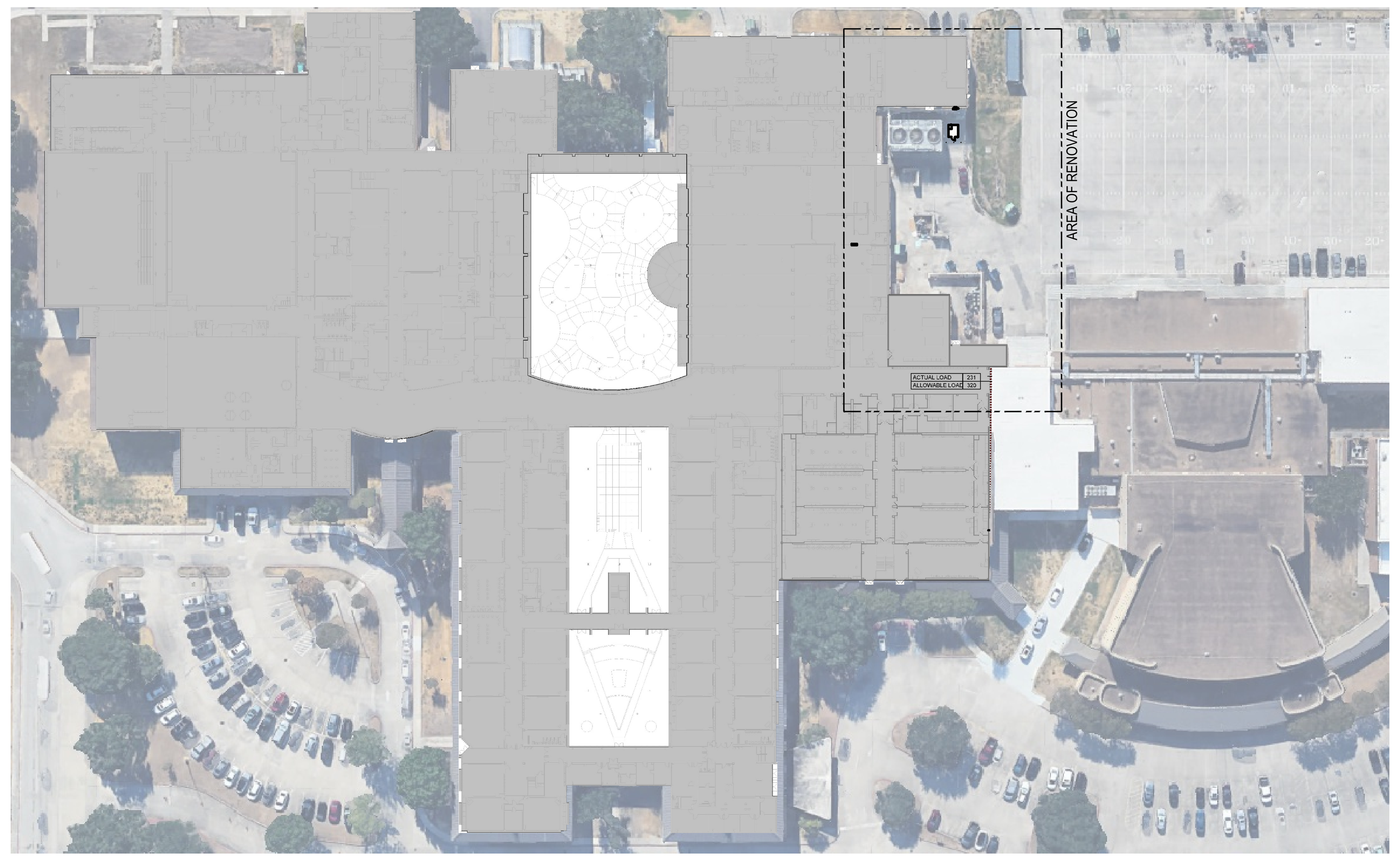

2 OVERALL FLOOR PLAN - DULLES HS

SCALE: 1" = 100'- 0"

SYMBOL LEGEND

(symbols)	SIMPLEX/DUPLEX/QUAD – 5361/2 REC
GFI	DUPLEX W/ GFCI PROTECTION–P&S 2097
(J)	J–BOX
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   - 2.A. 3/4"C FOR POWER AND 1"C FOR LOW VOLTAGE/DATA UNLESS NOTED OTHERWISE.
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   - 2.C. ALL ELECTRICAL HOMERUNS SHALL BE IN CONDUIT, MIN 3/4"C.
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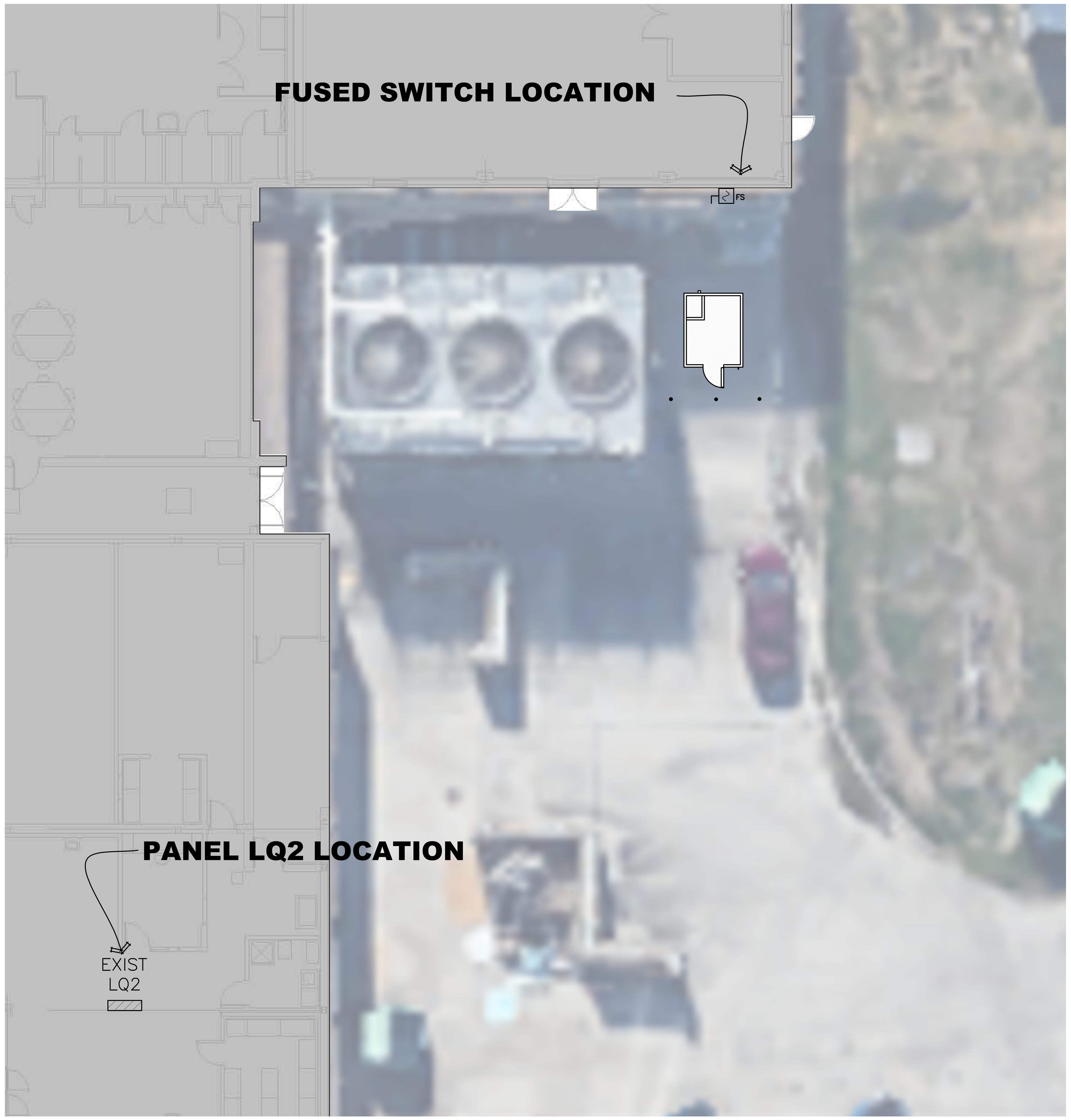
   - 5.D. MULTIPLE DEVICES ON A CIRCUIT SUCH AS RECEPTACLES SHALL BE WIRED WITH A PIGTAIL SO THE DEVICE DOES NOT PROVIDE THE CONTINUITY PATH. FEED THROUGH CONNECTIONS FOR GFCI RECEPTACLES SHALL NOT BE USED FOR PROTECTION OF DOWNSTREAM DEVICES.
6. PROVIDE GREEN GROUND WIRE WITH ALL CIRCUITS SIZED PER NEC. BOND GREEN GROUND WIRE TO EACH END OF CONDUIT.
7. PROVIDE J–BOXES, CONDUIT AND SLEEVES THRU ALL FIRE WALLS FOR DATA, TELEPHONE, SECURITY, FIRE ALARM, SOUND SYSTEM, LOW VOLTAGE WIRING, ETC. PROVIDE PROTECTIVE BUSHINGS ON ENDS OF ALL LOW VOLTAGE CONDUITS.
8. PROVIDE PULL BOXES, JUNCTION BOXES, WIRING TROUGHS AND CABINETS WHEREVER REQUIRED FOR PROPER INSTALLATION OF VARIOUS ELECTRICAL SYSTEMS. ALL JUNCTION/PULL BOXES INSTALLED ABOVE ACCESSIBLE CEILINGS SHALL BE MOUNTED SO THAT THE ACCESS PANEL IS NO HIGHER THAN 18" ABOVE THE CEILING.
9. PROVIDE CIRCUIT LABELS IN PERMANENT MARKER ON ALL NEW AND EXISTING J–BOX COVERS UTILIZED IN THE AREA OF RENOVATION.
10. PROVIDE CIRCUIT LABEL ON ALL ABOVE CEILING J–BOXES, EQUIPMENT, ETC. IDENTIFYING THE CIRCUITS CONTAINED/CONNECTED.
11. ALL WIRING SHALL BE 600 VOLT, SOFT DRAWN ANNEALED COPPER, 98% CONDUCTIVITY, CONTINUOUS FROM OUTLET TO OUTLET. MINIMUM WIRE SIZE #12.
    - 11.A. TYPICAL BUILDING WIRE SHALL BE STRANDED TYPE THHN, THWN–2 (WET RATED FOR 90°C), OR XHHW–2. MINIMUM WIRE SIZE SHALL BE #12.
    - 11.B. ALL BUILDING WIRE SHALL BE COLOR CODED WITH THE SAME COLOR CONNECTED TO THE SAME UNGROUNDED PHASE THROUGHOUT THE INSTALLATION MATCHING THE EXISTING BUILDING COLOR CODE SCHEME.
12. WHERE PORTIONS OF INTERIOR RACEWAY SYSTEM ARE EXPOSED TO WIDELY DIFFERENT TEMPERATURES, PROVIDE AIR SEAL PER NEC TO PREVENT CIRCULATION OF AIR FROM WARMER TO COOLER SECTIONS.
13. DRAWINGS, SCHEDULES, NOTES, AND DETAILS ARE INTENDED TO BE COMPLIMENTARY. ANY WORK DESCRIBED IN ANY OF THEM, WILL BE WORK REQUIRED UNDER THIS CONTRACT. WHERE THERE IS A CONFLICT BETWEEN DIFFERENT PORTIONS OF THE DESIGN DOCUMENTS IT SHALL BE CLARIFIED BY RFI. BARRING CLARIFICATION PRIOR TO BIDDING THE MOST EXPENSIVE OPTION SHALL BE INCLUDED AND CLARIFICATION SHALL BE MADE DURING CONSTRUCTION.
14. SHOULD ANY WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS BE IN VIOLATION OF ANY FEDERAL, STATE, COUNTY OR CITY LAWS, ORDINANCE OR REGULATION, THOSE LAWS AND REGULATIONS SHALL PREVAIL, AND SHALL BE COMPLIED WITH BY THE CONTRACTOR AS A PART OF THIS WORK WITH NO EXTRA COMPENSATION.
15. ALL MATERIAL MUST BE NEW AND OF GOOD QUALITY AND SHALL BEAR THE STAMP OF APPROVAL OF THE UNDERWRITERS' LABORATORIES, INC. (U.L.).

GENERAL RENOVATION AND REMODELING NOTES:

1. THESE ELECTRICAL DRAWINGS ONLY SHOW SOME EXISTING ELECTRICAL PANELS, DEVICES AND LIGHT FIXTURES IN AREAS OF RENOVATION. ALL OTHER ELECTRICAL EQUIPMENT, WIRING DEVICES, LOW VOLTAGE SYSTEMS, J–BOXES AND CONDUITS SHALL BE LOCATED AND FIELD VERIFIED BY CONTRACTOR.
2. ALL REMOVED DEVICES SHALL BE OFFERED TO THE OWNER AS SALVAGE.
3. RELOCATE CONDUIT AS NECESSARY TO ALLOW NEW OR MODIFIED CONSTRUCTION. RESUPPORT EXISTING CABLING/CONDUIT TO REMAIN TO MEET CURRENTLY ADOPTED CODE REQUIREMENTS. REMOVE ALL ABANDONED CONDUIT AND WIRE. REPAIR EXISTING ELECTRICAL SYSTEMS DAMAGED BY CONSTRUCTION ACTIVITIES.
4. ANY DAMAGE TO EXISTING BUILDING, ELECTRICAL EQUIPMENT, WIRING DEVICES, CONDUIT, WIRING, ETC. SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER. ALL MATERIALS USED FOR THE REPLACEMENT MUST MEET RENOVATION PROJECT STANDARDS.
5. ELECTRICAL CONTRACTOR SHALL BEGIN FIELD VERIFYING ALL EXISTING BRANCH CIRCUITS FOR EXISTING AREAS TO BE RENOVATED IMMEDIATELY AFTER THE CONTRACT IS ISSUED.
6. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING CIRCUITS WITH OWNER'S MAINTENANCE PERSONNEL AFTER NORMAL BUILDING HOURS AS REQUIRED.
7. ANY CIRCUIT OR PARTIAL CIRCUIT TO REMAIN OR BE REUSED SHALL REMAIN ACTIVE.
8. ELECTRICAL CONTRACTOR SHALL INCLUDE COST RELATED TO FIELD VERIFY EXISTING CIRCUITS IN BASE PROPOSAL.
9. FIND AND RECORD ALL EXISTING DEVICES IN CEILINGS, WALLS AND CASEWORK IN AREAS TO BE RENOVATED. PROVIDE A COPY OF THE FIELD VERIFIED DEVICE DRAWINGS TO OWNER PRIOR TO BEGINNING WORK.
10. AT THE END OF THE PROJECT PROVIDE A NEW TYPEWRITTEN AS–BUILT PANEL SCHEDULE FOR ALL PANELS WITH CIRCUITS ADDED, REMOVED, OR MODIFIED AS PART OF THE PROJECT USING BUILDING ROOM NUMBERS.



1 ELECTRICAL RENOVATION PLAN - DULLES HS

SCALE: 1/8" = 1'- 0"

EXISTING TO REMAIN

PANEL LQ-2 — 225A MLO, 208Y/120V, 3ø, 4 WIRE — MOUNTING: RECESSED — AVAILABLE FAULT: — SCCR & AIC:

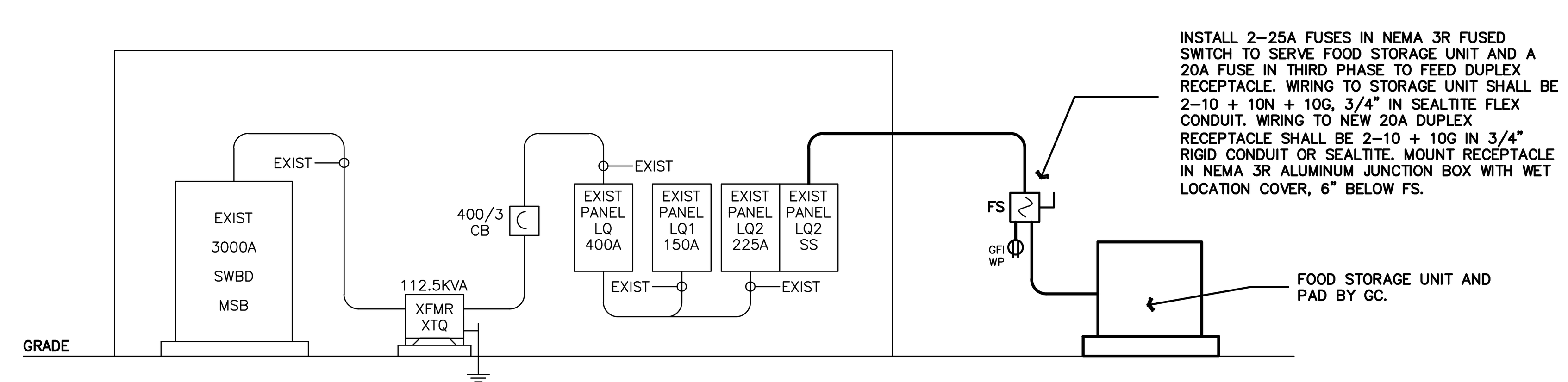
LOAD	DESCRIPTION	WIRE	CB	CKT	A B C	CKT	CB	WIRE	DESCRIPTION	LOAD
500	EXIST CIRCUIT	EXIST	20/1	1		2	70/3	EXIST	REFRIGERATION RACK	10000
500	EXIST CIRCUIT	EXIST	20/1	3		4	–	–	–	–
800	REC'S AND HOOD LIGHT	EXIST	20/1	5		6	–	–	–	–
800	REC'S AND HOOD LIGHT	EXIST	20/1	7		8	20/3	EXIST	DISPOSER	800
540	RECEPTACLES	EXIST	20/1	9		10	–	–	–	–
300	FREEZE/COOLER LTS	EXIST	20/1	11		12	–	–	–	–
300	FREEZER/COOLER LTS	EXIST	20/1	13		14	20/1	EXIST	EXIST CKT	500
300	FREEZER/COOLER LTS	EXIST	20/1	15		16	30/3	EXIST	EXIST CKT	1200
3000	DRYER	EXIST	40/2	17		18	–	–	–	–
–	–	–	–	19		20	–	–	–	–
800	WASHING MACHINE	EXIST	20/1	21		22	20/1	EXIST	EXIST CKT	500
1200	ICE MAKER	EXIST	30/2	23		24	20/1	EXIST	EXIST CKT	500
–	–	–	–	25		26	20/1	EXIST	EXIST CKT	500
100	CLOCK	EXIST	20/1	27		28	20/1	EXIST	EXIST CKT	500
540	MANAGERS OFFICE RECS	EXIST	20/1	29		30	20/1	EXIST	VENDING MACHINE	500
500	PREP RM FLOOR REC	EXIST	20/1	31		32	20/1	EXIST	VENDING MACHINE	500
	SPARE		20/1	33		34	20/1	EXIST	VENDING MACHINE	500
	SPARE		20/1	35		36	20/1	EXIST	VENDING MACHINE	500
	SPARE		20/1	37		38	20/1	EXIST	VENDING MACHINE	500
	SPARE		20/1	39		40	20/1	EXIST	VENDING MACHINE	500
	SPARE		20/1	41		42	20/1	EXIST	VENDING MACHINE	500

2ND SECTION — 225A MLO, 208Y/120V, 3ø, 4 WIRE — MOUNTING: RECESSED — AVAILABLE FAULT: — SCCR & AIC:

	LOAD	DESCRIPTION	WIRE	CB	CKT	A B C	CKT	CB	WIRE	DESCRIPTION	LOAD
	8000	HOT FOOD UNIT	EXIST	35/3	1		2	35/3	EXIST	HOT FOOD UNIT	8000
	–	–	–	–	3		4	–	–	–	–
	–	–	–	–	5		6	–	–	–	–
		EXIST SPARE	EXIST	20/1	7		8	20/1	EXIST	EXIST SPARE	
		EXIST SPARE	EXIST	20/1	9		10	20/1	EXIST	ROLL UP DOOR	500
	500	E2 REC	EXIST	20/1	11		12	20/1	EXIST	ROLL UP DOOR	500
		SPACE			13		14	20/1	EXIST	ROLL UP DOOR	500
	500	HWCP–2	EXIST	20/1	15		16	20/1	EXIST	ROLL UP DOOR	500
	500	HWCP–1	EXIST	20/1	17		18	20/1	EXIST	ROLL UP DOOR	500
	500	GWH–2	EXIST	20/1	19		20	20/1	EXIST	ROLL UP DOOR	500
	400	MENU BOARD	EXIST	20/1	21		22	20/1	EXIST	ROLL UP DOOR	500
		SPACE			23		24			SPACE	
		EXIST SPARE	EXIST	20/1	25		26			SPACE	
		EXIST SPARE	EXIST	20/1	27		28			SPACE	
	740	REC'S & MENU BOARD	EXIST	20/1	29		30			SPACE	
		SPACE			31		32			SPACE	
		SPACE			33		34			SPACE	
		SPACE			35		36			SPACE	
NOTE 1	**3100**	**FOOD STORAGE UNIT**	**3–10**	**30/3**	37		38			SPACE	
	–	–	**+10N+10G**	–	39		40			SPACE	
	180	**DUPLEX REC**	**3/4"C**	–	41		42			SPACE	

TOTAL LOAD @ 100% = 54100VA — TOTAL LOAD @ 100% = 150A — TOTAL LOAD @ 125% = 188A

1. PROVIDE NEW CB & WIRE NEW CIRCUIT.



3 DULLES HS PARTIAL ELECTRICAL RISER

NO SCALE

NOTES:

1. ALL PANELS, TRANSFORMER AND SWITCHBOARD ARE EXISTING. ADD 30/3 CB TO PANEL LQ2 AND EXTEND 3–10+10N+10G, 3/4"C TO NEW FUSED SWITCH.
2. THERE IS NO AVAILABLE EMERGENCY POWER AT THIS SCHOOL

ISSUE:

12/05/2024	DD PACKAGE
03/11/2025	50% CD PKG.
05/23/2025	90% CD PKG.
07/18/2025	ISSUED FOR BIDDING AND PERMITTING

ff

FBISD BP 013 KITCHEN RENOVATIONS
FORT BEND INDEPENDENT SCHOOL DISTRICT
DULLES HIGH SCHOOL
550 DULLES AVE
SUGAR LAND, TX 77478

SEAL

STATE OF TEXAS
GEORGE L. STANTON
38582
REGISTERED PROFESSIONAL ENGINEER
07.18.2025

ARCHITECTS
ARCHITECTS AND PLANNING CONSULTANTS
11767 KATY FREEWAY, SUITE 430
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INFO@STANTON-ENG.COM (713) 300-9292 | TEXAS ENG. FIRM REG NO. F-016332 | © 2025 ALL RIGHTS RESERVED 1300 W. SAM HOUSTON PARKWAY S., SUITE 121, HOUSTON, TX 77042

PROJ. NO.: 23-25
DATE: 07/18/2025
ISSUED FOR BIDDING AND PERMITTING

ELECTRICAL FLOOR PLAN & SCHEDULES

ff-E.200