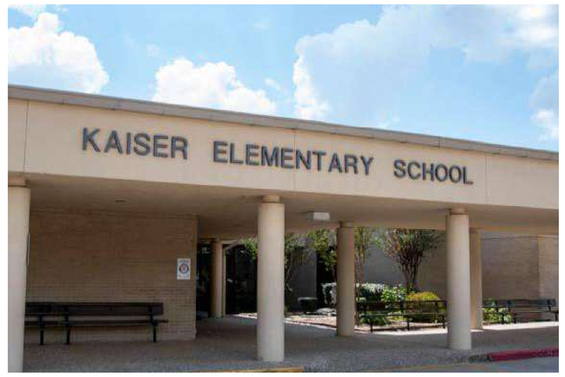
KISD 2025 FRP

KLEIN ISD

KLEIN, TX

Eiland Elementary School
6700 N Klein Cir Dr, Houston, TX 77088

Ehrhardt Elementary School
6603 Rosebrook Ln, Spring, TX 77379



Kaiser Elementary School
13430 Bammel North Houston Rd, Houston, TX 77066

Klenk Elementary School
6111 Bourgeois Rd, Houston, TX 77066

McDougle Elementary School
10410 Kansack Ln, Houston, TX 77086

Nitsch Elementary School
4702 W Mount Houston Rd, Houston, TX 77088

NOTE:

Image is provided for reference only and should not be relied upon to represent the final construction project. Refer to the Construction Documents for actual details, materials, and dimensions for the construction of the project.

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KLEIN ISD
KLEIN, TX

01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
COVER

SHEET NO.

KISD 2025 FRP

COVER

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KISD 2025 FRP

KLEIN ISD

ABBREVIATIONS

A

A.F.F.	ABOVE FINISH FLOOR
A.C.T.	ACOUSTICAL CEILING TILE
ADDL.	ADDITIONAL
A.B.	AIR BARRIER
A.C.M.	ALUMINUM COMPOSITE PANEL
A.D.A.	AMERICANS WITH DISABILITIES ACT
AL./ALUM.	ALUMINUM
APPROX.	APPROXIMATE OR APPROXIMATELY
ARCH.	ARCHITECT OR ARCHITECTURAL
A.W.R.B.	AIR- & WATER-RESISTIVE BARRIER

B

BD.	BOARD
B.O.W.	BOTTOM OF WALL
B.U.R.	BUILT-UP ROOFING
BLDG.	BUILDING

C

℄	CENTER LINE
C.R.	CLASSROOM
C.F.S.	COLD-FORMED STEEL
CONC.	CONCRETE
CMU	CONCRETE MASONRY UNIT
C.M.	CONSTRUCTION MANAGER
CONT.	CONTINUOUS
C.I.	CONTINUOUS INSULATION
C.J.	CONTROL JOINT
COORD.	COORDINATE
CORR.	CORRIDOR

D

DIA.	DIAMETER
D.O.	DOOR OPENING
DN.	DOWN
DS.	DOWNSPOUT

E

EA.	EACH
E.W.	EACH WAY
ELEC.	ELECTRICAL
E.W.C.	ELECTRIC WATER COOLER
ELEV.	ELEVATION
EQ.	EQUAL
EQUIP.	EQUIPMENT
EXIST.	EXISTING
E.J.	EXPANSION JOINT
EXT.	EXTERIOR
EIFS	EXTERIOR INSULATION & FINISH SYSTEM

F

FT.	FEET or FOOT
F.R.P.	FIBERGLASS REINFORCED PLASTIC
F.V.	FIELD-VERIFY
FIN.	FINISH
F.F.	FINISH FLOOR
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER & CABINET
F.H.C.	FIRE HOSE CABINET
F.H.C.S.	FLAT-HEAD COUNTERSUNK
FLR.	FLOOR
F.D.	FLOOR DRAIN
FLUOR.	FLUORESCENT

G / H

GALV.	GALVANIZED
GA.	GAGE
G.C.	GENERAL CONTRACTOR
G.O.	GLAZED OPENING
GYP	GYPSUM
HT.	HEIGHT
H.P.	HIGH POINT
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
H.B.	HORIZONTAL BLINDS
H.D.G.	HOT-DIP GALVANIZED
HR.	HOUR

I / J / K

I.D.	INSIDE DIAMETER
INSUL.	INSULATION
INT.	INTERIOR
I.B.C.	INTERNATIONAL BUILDING CODE

L

LAV.	LAVATORY
L.L.H.	LONG LEG HORIZONTAL
L.L.V.	LONG LEG VERTICAL
L.P.	LOW POINT
L.V.T.	LUXURY VINYL TILE

M

MFR.	MANUFACTURER
MFG.	MANUFACTURING
M.B.	MARKERBOARD
M.O.	MASONRY OPENING
MAX.	MAXIMUM
MECH.	MECHANICAL

M (CONT.)

MOD BIT	MODIFIED BITUMEN
MULL.	MULLION
M.E.P.	MECHANICAL-ELECTRICAL-PLUMBING
M.C.M.	METAL COMPOSITE MATERIAL
MIN.	MINIMUM
MISC.	MISCELLANEOUS

N

NOM.	NOMINAL
N/A	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
NO. or #	NUMBER

O

O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
O.H.	OPPOSITE HAND
OHD.	OVERHEAD
O.F.C.I.	OWNER-FURNISHED, CONTRACTOR-INSTALLED
O.F.O.I.	OWNER-FURNISHED, OWNER INSTALLED

P / Q

PR.	PAIR
P.LAM.	PLASTIC LAMINATE
PL.	PLATE
PLUMB.	PLUMBING
PT.	POINT
P.C.F.	POUNDS PER CUBIC FOOT
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
PREFAB.	PREFABRICATED
PROJ.	PROJECTOR or PROJECTION
Q.T.	QUARRY TILE

R

R.	RADIUS
REBAR	REINFORCING BAR
REF.	REFERENCE or REFER TO
R.C.P.	REFLECTED CEILING PLAN
RE:	REGARDING
REFG.	REFRIGERATOR
REINF.	REINFORCE or REINFORCING
REQD.	REQUIRED
R.	RISER (STAIR)
R.D.	ROOF DRAIN
R.O.	ROUGH OPENING

S

SIM.	SIMILAR
S.C.	SOLID CORE
S.A.B	SOUND ATTENUATION BLANKET
S.A.F.B.	SOUND ATTENUATION FIRE BLANKET
S.T.C.	SOUND TRANSMISSION CLASS
SPEC.	SPECIFICATION
SQ.	SQUARE
S.F.	SQUARE FOOT
S.S.	STAINLESS STEEL
STRUC.	STRUCTURAL
SUSP.	SUSPENDED

T

T.S.	TACKSTRIP
T.W.	TACK WALL
T.C.	TEACHER'S CABINET
T.A.S.	TEXAS ACCESSIBILITY STANDARDS
T.	TREAD (STAIR)
T&B	TOP & BOTTOM
T.O.	TOP OF
T.C.	TOP OF CURB
T.O.D.	TOP OF DECK
T.O.J.	TOP OF JOIST
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL

U / V

U/C	UNDER COUNTER
U.L.	UNDERWRITERS LABORATORY
U.N.O.	UNLESS NOTED OTHERWISE
V.I.F.	VERIFY IN FIELD
VERT.	VERTICAL
V.C.T.	VINYL COMPOSITION TILE
V.W.C.	VINYL WALL COVERING

W / X / Y / Z

W.C.	WATER CLOSET
W.R.B.	WATER-RESISTIVE BARRIER
WT.	WEIGHT
W.	WIDE
W/	WITH
W/O	WITHOUT
W.P.	WORKING POINT
W.W.F.	WELDED WIRE FABRIC

SYMBOLS LEGEND

- ROOM NAME / ROOM NAME & NUMBER (A101)
- DOOR NUMBER (A101)
- ACCESS CONTROL (AC)
- HORIZONTAL BLINDS (HB)
- DEMOLITION KEYNOTE (X1)
- BUILDING ASSEMBLY TYPE (XXX-01)
- BUILDING SECTION (1 / A101)
- WALL SECTION (1 / A101)
- DETAIL CALLOUT (1 / A101)
- DATUM ELEVATION
- ALUMINUM-FRAMED GLAZED OPENING SYSTEM (SXX)
- HOLLOW METAL-FRAMED GLAZED OPENING SYSTEM (G.O. 1)
- LOUVER
- PARTITION TYPE (P1)
- ACCESSORY OR SPECIALTY ITEM (X1)
- PLUMBING FIXTURE/ EQUIPMENT (XXX)
- INTERIOR ELEVATION/ CASEWORK ELEVATION (1/ A101)
- DETAIL SECTION (1/ A101)
- BUILDING ELEVATION (A101)
- NORTH ARROW (N)

MATERIAL LEGEND

- EARTH
- POROUS FILL
- CONCRETE/ GROUT
- BRICK
- CMU (LARGE SCALE)
- MARBLE
- METAL (LARGE SCALE)
- METAL (SMALL SCALE)
- RESILIENT FLOORING
- ACOUSTICAL TILE
- TERRAZZO
- PLASTER, SAND, GROUT, GYPSUM BOARD
- CERAMIC TILE
- GLASS (LARGE SCALE)
- INSULATION (RIGID FOAM BOARD)
- INSULATION (EPS FOAM BOARD)
- INSULATION (BATT/ BLANKET)
- INSULATION (SEMI-RIGID BOARD)
- WOOD, ROUGH (CONTINUOUS)
- WOOD, ROUGH (BLOCKING)
- WOOD, FINISH
- PLYWOOD (LARGE SCALE)
- FIBER CEMENT PANEL
- METAL LATH
- GYPSUM BOARD

PROJECT INFORMATION

PROJECT NAME

KISD 2025 FRP

OWNER

KLEIN I.S.D.

PROJECT LOCATION

SEE SITE LOCATION MAPS

TDLR PROJECT REGISTRATION NUMBER:

TABSXXXXXXXX (TO BE DECIDED)

BUILDING CONSTRUCTION INFORMATION

TYPE OF CONSTRUCTION (TABLE 601 - IBC): TYPE I-B

FIRE PROTECTION SYSTEM: AUTOMATIC SPRINKLER SYSTEM THROUGHOUT

APPROXIMATE BUILDING AREAS

EILAND ELEMENTARY SCHOOL

GROUND LEVEL AREA.:	61,085 S.F.
UPPER LEVEL AREA.:	23,798 S.F.
GYMNASIUM AREA.:	7,590 S.F.
TOTAL BLDG AREA.:	92,473 S.F.
LEGAL DESCRIPTION:	RES A BLOCK 1

GRACE ENGLAND ECC

TOTAL BLDG AREA.:	67,738 S.F.
LEGAL DESCRIPTION:	RES A BLOCK 1

APPROXIMATE BUILDING AREAS

KAISER ELEMENTARY

GROUND LEVEL AREA.:	100,046 S.F.
GYMNASIUM AREA.:	7,502 S.F.
TOTAL BLDG AREA.:	107,548 S.F.
LEGAL DESCRIPTION:	TR 2P ABST 262 J FARWELL

KLENK ELEMENTARY SCHOOL

GROUND LEVEL AREA.:	80,361 S.F.
GYMNASIUM AREA.:	7,571 S.F.
TOTAL BLDG AREA.:	87,932 S.F.

MCDOUGLE ELEMENTARY SCHOOL

GROUND LEVEL AREA.:	85,323 S.F.
GYMNASIUM AREA.:	7,473 S.F.
TOTAL BLDG AREA.:	92,796 S.F.

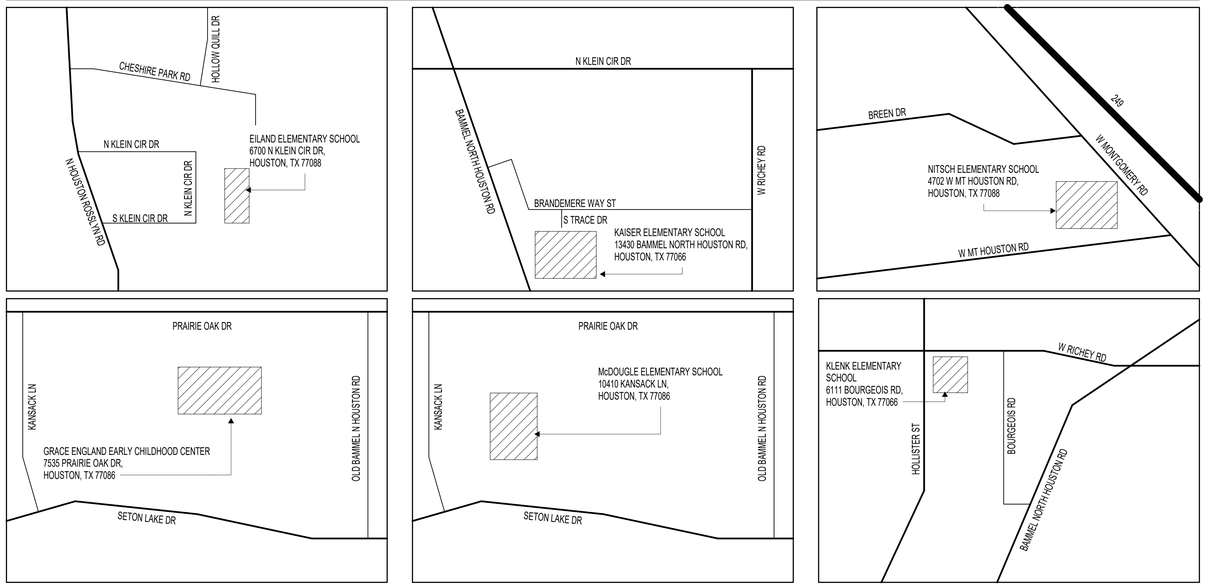
NITSCH ELEMENTARY SCHOOL

GROUND LEVEL AREA.:	83,658 S.F.
GYMNASIUM AREA.:	7,791 S.F.
TOTAL BLDG AREA.:	91,449 S.F.

GENERAL NOTES

1. Refer to the CODE-series sheets tor Code Information, Design Criteria and Fire Protection Requirements.
2. Verify and document existing dimensions and conditions at the site before beginning construction. Notify the Architect of conflicts or variations prior to commencement of construction.
3. Based on the applicable design criteria, submit Shop Drawings of the proposed pattern of control joints in masonry veneer, CMU, gypsum board, plaster and stucco to the Architect for review and approval prior to construction.
4. In case of discrepancies in or between the Contract Documents, the greater quantity or better quality shall be bid. Clarifications regarding the discrepancies shall be requested from the Architect prior to construction, and the resulting interpretations implemented in accordance with the Contract Documents.

SITE LOCATION MAP



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C1.01	HC GENERAL NOTES
C1.02	EROSION CONTROL DETAILS
C1.03	CONSTRUCTION DETAILT (1 OF 2)
C1.04	CONSTRUCTION DETAILS (2 OF 2)
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A23.01	EXTERIOR GLAZING SEALANT ELEVATIONS
E01.01	ELECTRICAL DETAILS AND SCHEDULES
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T400	TECHNOLOGY - ENLARGEMENTS
T500	TECHNOLOGY - DETAILS
T501	TECHNOLOGY - DETAILS
T502	TECHNOLOGY - DETAILS
T601	TECHNOLOGY - SECURITY DETAILS
T700	TECHNOLOGY - AV DETAILS
EHRHARDT	
A71.11	EHRHARDT - SITE PLAN (ALTERNATE)
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EILAND	
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A11.11	EILAND - SITE PLAN
A12.01	EILAND - OVERALL DEMO PLAN - LEVEL ONE
A16.01	EILAND - REFLECTED CEILING PLANS - LEVEL ONE
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A19.12	EILAND - INTERIOR OVERALL FINISH PLAN - LEVEL TWO
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E11.02	ELECTRICAL COMPOSITE PLAN - LEVEL 2 - EILAND ES
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E12.02	ELECTRICAL DEMOLITION FLOOR PLANS - LEVEL 2 - EILAND
E12.03	ELECTRICAL DEMOLITION ROOF PLAN - EILAND
E13.01	ELECTRICAL FLOOR PLANS - LEVEL 1 - EILAND ES
E13.02	ELECTRICAL FLOOR PLANS - LEVEL 2 - EILAND ES
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M12.01	MECHANICAL DEMOLITION ENLARGED PLAN - LEVEL 1 - EILAND
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M12.03	MECHANICAL DEMOLITION ROOF PLAN - EILAND
M13.01	MECHANICAL ENLARGED PLAN - LEVEL 1 - EILAND
M13.02	MECHANICAL ENLARGED PLAN - LEVEL 2 - EILAND
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A31.11	KAISER - SITE PLAN
A32.01	KAISER - OVERALL DEMO PLAN - LEVEL ONE
A32.01E	KAISER - DEMO FLOOR PLAN - LEVEL ONE - UNIT E
A32.11E	KAISER - FLOOR PLAN - LEVEL ONE - UNIT E
A36.01	KAISER - DEMO REFLECTED CEILING PLANS - LEVEL ONE
A36.11	KAISER - REFLECTED CEILING PLAN - LEVEL ONE - UNIT E
A39.11	KAISER - INTERIOR OVERALL FINISH PLAN - LEVEL ONE
E31.01	ELECTRICAL COMPOSITE PLAN - LEVEL 1 - KAISER ES
E32.01	ELECTRICAL FLOOR PLANS & PANELBOARD SCHEDULES - KAISER ES
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A42.01	KLENK - OVERALL DEMO PLAN - LEVEL ONE
A46.11	KLENK - REFLECTED CEILING PLAN - LEVEL ONE
A49.11	KLENK - INTERIOR OVERALL FINISH PLAN - LEVEL ONE
E41.00	ELECTRICAL SITE PLAN - KLENK ES
E41.01	ELECTRICAL COMPOSITE PLAN - LEVEL 1 - KLENK ES
E42.01	ELECTRICAL DEMOLITION FLOOR PLANS - KLENK ES
E43.01	ELECTRICAL FLOOR PLANS - KLENK ES
E44.01	ELECTRICAL PANELBOARD SCHEDULES - KLENK ES
M41.00	MECHANICAL COMPOSITE PLAN - LEVEL 1 - KLENK
M41.01	MECHANICAL COMPOSITE PLAN - LEVEL 2 - KLENK
M42.01	MECHANICAL DEMOLITION ENLARGED PLAN - LEVEL 1 - KLENK
M42.02	MECHANICAL DEMOLITION ENLARGED PLAN - LEVEL 2 - KLENK
M43.01	MECHANICAL ENLARGED PLAN - LEVEL 1 - KLENK
M43.02	MECHANICAL ENLARGED PLAN - LEVEL 2 - KLENK
M44.00	MECHANICAL SCHEDULES - KLENK
P40.01	PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 1 - KLENK
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P50.01	PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 1 - MCDOUGLE
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A63.01	NITSCH - EXTERIOR ELEVATIONS
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E61.01	ELECTRICAL COMPOSITE PLAN - LEVEL 1 - NITSCH ES
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M61.00	MECHANICAL COMPOSITE PLAN - NITSCH
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MELISSA E. FLEMING
68313
STATE OF TEXAS

01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.

25-0225.00

SHEET TITLE

INDEX OF DRAWINGS, GENERAL NOTES & ABBREVIATIONS

SHEET NO.

KISD 2025 FRP

INDEX

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KIMLEY HORN GENERAL NOTES

OVERALL:

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THESE PLANS, CITY (OR TOWN) STANDARD DETAILS AND SPECIFICATIONS, THE FINAL GEOTECHNICAL REPORT AND ALL ISSUED ADDENDA, AND COMMONLY ACCEPTED CONSTRUCTION STANDARDS. THE CITY SPECIFICATIONS SHALL GOVERN WHERE OTHER SPECIFICATIONS DO NOT EXIST. IN CASE OF CONFLICTING SPECIFICATIONS OR DETAILS, THE MORE RESTRICTIVE SPECIFICATION AND DETAIL SHALL BE FOLLOWED.
2. THE CONTRACTOR SHALL COMPLY WITH CITY (OR TOWN) 'GENERAL NOTES' FOR CONSTRUCTION, IF EXISTING AND REQUIRED BY THE CITY. FOR INSTANCES WHERE THEY CONFLICT WITH THESE KIMLEY-HORN GENERAL NOTES, THEN THE MORE RESTRICTIVE SHALL APPLY.
3. THE CONTRACTOR SHALL FURNISH ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE AUTHORITIES' SPECIFICATIONS AND REQUIREMENTS.
4. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO DETERMINE EXISTING CONDITIONS.
5. THE EXISTING CONDITIONS SHOWN ON THESE PLANS WERE PROVIDED BY THE TOPOGRAPHIC SURVEY PREPARED BY THE PROJECT SURVEYOR, AND ARE BASED ON THE BENCHMARKS SHOWN. THE CONTRACTOR SHALL REFERENCE THE SAME BENCHMARKS.
6. THE CONTRACTOR SHALL REVIEW AND VERIFY THE EXISTING TOPOGRAPHIC SURVEY SHOWN ON THE PLANS REPRESENTS EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION, AND SHALL REPORT ANY DISCREPANCIES FOUND TO THE OWNER AND ENGINEER IMMEDIATELY.
7. IF THE CONTRACTOR DOES NOT ACCEPT THE EXISTING TOPOGRAPHIC SURVEY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY AT THEIR OWN EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED PROFESSIONAL LAND SURVEYOR TO THE OWNER AND ENGINEER FOR REVIEW.
8. CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION SURVEYING AND STAKING.
9. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL CONTROL, INCLUDING BENCHMARKS PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS. PROPERTY LINES AND CORNERS SHALL BE HELD AS THE HORIZONTAL CONTROL.
10. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS, ELEVATIONS, AND FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ARCHITECT, ENGINEER, AND IF APPLICABLE THE CITY AND OWNER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE CITY, ENGINEER, AND OWNER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
11. CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL, LANDSCAPE, MEP, ARCHITECTURAL, AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER/ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY PRIOR TO COMMENCING WITH CONSTRUCTION.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK TO HAVE THEM LOCATE THEIR EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE AN ADEQUATE MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.
13. CONTRACTOR SHALL CALL TEXAS 811 AN ADEQUATE AMOUNT OF TIME PRIOR TO COMMENCING CONSTRUCTION OR ANY EXCAVATION.
14. CONTRACTOR SHALL USE EXTREME CAUTION AS THE SITE CONTAINS VARIOUS KNOWN AND UNKNOWN PUBLIC AND PRIVATE UTILITIES.
15. THE LOCATIONS, ELEVATIONS, DEPTH, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE UTILITY COMPANY MAPS AND PLANS, AND ARE CONSIDERED APPROXIMATE AND INCOMPLETE. IT SHALL BE THE CONTRACTORS' RESPONSIBILITY TO VERIFY THE PRESENCE, LOCATION, ELEVATION, DEPTH, AND DIMENSION OF EXISTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION SO THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE ENGINEER SHALL BE NOTIFIED WHEN A PROPOSED IMPROVEMENT CONFLICTS WITH AN EXISTING UTILITY.
16. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ANY ADJUSTMENTS AND RELOCATIONS OF EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, ADJUSTING EXISTING MANHOLES TO MATCH PROPOSED GRADE, RELOCATING EXISTING POLES AND GUY WIRES THAT ARE LOCATED IN PROPOSED DRIVEWAYS, ADJUSTING THE HORIZONTAL OR VERTICAL ALIGNMENT OF EXISTING UNDERGROUND UTILITIES TO ACCOMMODATE PROPOSED CROSSING WITH A PROPOSED UTILITY, AND ANY OTHERS THAT MAY BE ENCOUNTERED THAT ARE UNKNOWN AT THIS TIME AND NOT SHOWN ON THESE PLANS.
17. CONTRACTOR SHALL ARRANGE FOR OR PROVIDE, AT ITS EXPENSE, ALL GAS, TELECOMMUNICATIONS, CABLE, OVERHEAD AND UNDERGROUND POWER LINE, AND UTILITY POLE ADJUSTMENTS NEEDED.
18. CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REMOVAL OF FRANCHISE UTILITIES THAT ARE NECESSARY FOR ON-SITE AND OFF-SITE CONSTRUCTION, AND SERVICE TO THE PROPOSED DEVELOPMENT.
19. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL DAMAGES DUE TO THE CONTRACTORS' FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED BY THE CONTRACTOR AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
20. BRACING OF UTILITY POLES MAY BE REQUIRED BY THE UTILITY COMPANIES WHEN TRENCHING OR EXCAVATING IN CLOSE PROXIMITY TO THE POLES. THE COST OF BRACING POLES WILL BE BORNE BY THE CONTRACTOR, WITH NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL TO THE PAY ITEM.
21. CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND POWER LINES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, FEDERAL AND UTILITY OWNER REGULATIONS PERTAINING TO WORK SETBACKS FROM POWER LINES.
22. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED CONSTRUCTION PERMITS, APPROVALS, AND BONDS PRIOR TO CONSTRUCTION.
23. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES A COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, GEOTECHNICAL REPORT AND ADDENDA, PROJECT AND CITY SPECIFICATIONS, AND SPECIAL CONDITIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP AND INSPECTION REPORTS.
24. ALL SHOP DRAWINGS AND OTHER DOCUMENTS THAT REQUIRE ENGINEER REVIEW SHALL BE SUBMITTED BY THE CONTRACTOR SUFFICIENTLY IN ADVANCE OF CONSTRUCTION SO THAT ITEM, SO THAT NO LESS THAN 10 BUSINESS DAYS ARE REVIEWED AND RESPONSE IS AVAILABLE.
25. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES, AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO USE OF THE FACILITY AND THE FINAL CONNECTION OF SERVICES.
26. CONTRACTOR SHALL ARRANGE FOR REQUIRED CITY INSPECTIONS.
27. CONTRACTOR'S BID PRICE SHALL INCLUDE ALL INSPECTION FEES.
28. ALL SYMBOLS SHOWN ON THESE PLANS (E.G. FIRE HYDRANT, METERS, VALVES, INLETS, ETC…) ARE FOR PRESENTATION PURPOSES ONLY AND ARE NOT TO SCALE. CONTRACTOR SHALL COORDINATE FINAL SIZES AND LOCATIONS WITH THE PROJECT ARCHITECT AND ENGINEER.
29. THE SCOPE OF WORK FOR THE CIVIL IMPROVEMENTS SHOWN ON THESE PLANS TERMINATES 5-FEET FROM THE BUILDING. REFERENCE THE BUILDING PLANS (E.G. ARCHITECTURAL, STRUCTURAL, MEP) FOR AREAS WITHIN 5-FEET OF THE BUILDING AND WITHIN THE BUILDING FOOTPRINT.
30. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR ALL FINAL BUILDING DIMENSIONS.
31. THE PROPOSED BUILDING FOOTPRINT(S) SHOWN IN THESE PLANS WAS PROVIDED TO KIMLEY-HORN AND ASSOCIATES, INC. (KHA) BY THE PROJECT ARCHITECT AT THE TIME THESE PLANS WERE PREPARED. IT MAY NOT BE THE FINAL CORRECT VERSION BECAUSE THE BUILDING DESIGN WAS ONGOING. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFIRMING THE FINAL CORRECT VERSION OF THE BUILDING FOOTPRINT WITH THE ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO LAYOUT. DIMENSIONS AND/OR COORDINATES SHOWN ON THESE PLANS WERE BASED ON THE ABOVE STATED ARCHITECTURAL FOOTPRINT, AND ARE THEREFORE A PRELIMINARY LOCATION OF THE BUILDING. THE CONTRACTOR IS SOLELY RESPONSIBLE TO VERIFY WHAT PART OF THE BUILDING THE ARCHITECT'S FOOTPRINT REPRESENTS (E.G. SLAB, OUTSIDE WALL, MASONRY LEDGE, ETC.), AND TO CONFIRM ITS FINAL POSITION ON THE SITE BASED ON THE FINAL ARCHITECTURAL FOOTPRINT, CIVIL DIMENSION CONTROL PLAN, SURVEY BOUNDARY AND/OR PLAT. ANY DIFFERENCES FOUND SHALL BE REPORTED TO KHA IMMEDIATELY.
32. ALL CONSTRUCTION SHALL COMPLY WITH THE PROJECT'S FINAL GEOTECHNICAL REPORT (OR LATEST EDITION), INCLUDING SUBSEQUENT ADDENDA.
33. CONTRACTOR IS RESPONSIBLE FOR ALL MATERIALS TESTING AND CERTIFICATION, UNLESS SPECIFIED OTHERWISE BY OWNER. ALL MATERIALS TESTING SHALL BE COORDINATED WITH THE APPROPRIATE CITY INSPECTOR AND COMPLY WITH CITY STANDARD SPECIFICATIONS AND GEOTECHNICAL REPORT. TESTING SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY FOR TESTING MATERIALS. OWNER SHALL APPROVE THE AGENCY NOMINATED BY THE CONTRACTOR FOR MATERIALS TESTING.
34. ALL COPIES OF MATERIALS TEST RESULTS SHALL BE SENT TO THE OWNER, ENGINEER AND ARCHITECT DIRECTLY FROM THE TESTING AGENCY.
35. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SHOW, BY THE STANDARD TESTING PROCEDURES OF THE MATERIALS, THAT THE WORK CONSTRUCTED MEETS THE PROJECT REQUIREMENTS AND CITY SPECIFICATIONS.
36. DUE TO THE POTENTIAL FOR DIFFERENTIAL SOIL MOVEMENT ADJACENT TO THE BUILDING, THE CONTRACTOR SHALL ADHERE TO GEOTECHNICAL REPORT'S RECOMMENDATION FOR SUBGRADE PREPARATION SPECIFIC TO FLATWORK ADJACENT TO THE PROPOSED BUILDING. THE OWNER AND CONTRACTOR ARE ADVISED TO OBTAIN A GEOTECHNICAL ENGINEER RECOMMENDATION SPECIFIC TO FLATWORK ADJACENT TO THE BUILDING, IF NONE IS CURRENTLY EXISTING.
37. ALL CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA. NO ENCROACHMENTS OUTSIDE OF THE WORK AREA WILL BE ALLOWED. ANY DAMAGE RESULTING THEREFROM SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY TO REPAIR.
38. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, UTILITIES, MANHOLES, POLES, GUY WIRES, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, COMMUNICATION BOXES/PEDESTALS, AND OTHER FACILITIES TO REMAIN AND SHALL REPAIR ANY DAMAGES AT NO COST TO THE OWNER.
39. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERTY OR PUBLIC IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO: FENCES, WALLS, SIGNS, PAVEMENT, CURBS, UTILITIES, SIDEWALKS, GRASS, TREES, LANDSCAPING, AND IRRIGATION SYSTEMS, ETC., TO THEIR ORIGINAL CONDITION OR BETTER AT NO COST TO THE OWNER.
40. ALL AREAS IN EXISTING RIGHT-OF-WAY DISTURBED BY SITE CONSTRUCTION SHALL BE REPAIRED TO ORIGINAL CONDITION OR BETTER, INCLUDING AS NECESSARY GRADING, LANDSCAPING, CULVERTS, AND PAVEMENT.
41. THE CONTRACTOR SHALL SALVAGE ALL EXISTING POWER POLES, SIGNS, WATER VALVES, FIRE HYDRANTS, METERS, ETC… THAT ARE TO BE RELOCATED DURING CONSTRUCTION.
42. CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION, INCLUDING MAINTAINING EXISTING DITCHES OR CULVERTS FREE OF OBSTRUCTIONS AT ALL TIMES.
43. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND SUBMITTING A TRENCH SAFETY PLAN, PREPARED BY A PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, TO THE CITY PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY, STATE, AND FEDERAL REQUIREMENTS, INCLUDING OSHA FOR ALL TRENCHES. NO OPEN TRENCHES SHALL BE ALLOWED OVERNIGHT WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY.
44. THE CONTRACTOR SHALL KEEP TRENCHES FREE FROM WATER.
45. SITE SAFETY IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
46. THESE PLANS DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE ENGINEER'S SEAL HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF ALL REQUIRED SAFETY PROCEDURES AND PROGRAMS.
47. SIGNS RELATED TO SITE OPERATION OR SAFETY ARE NOT INCLUDED IN THESE PLANS.
48. CONTRACTOR OFFICE AND STAGING AREA SHALL BE AGREED ON BY THE OWNER AND CONTRACTOR PRIOR TO BEGINNING OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITTING REQUIREMENTS FOR THE CONSTRUCTION OFFICE, TRAILER, STORAGE, AND STAGING OPERATIONS AND LOCATIONS.
49. LIGHT POLES, SIGNS, AND OTHER OBSTRUCTIONS SHALL NOT BE PLACED IN ACCESSIBLE ROUTES.
50. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
51. TOP RIM ELEVATIONS OF ALL EXISTING AND PROPOSED MANHOLES SHALL BE COORDINATED WITH TOP OF PAVEMENT OR FINISHED GRADE AND SHALL BE ADJUSTED TO BE FLUSH WITH THE ACTUAL FINISHED GRADE AT THE TIME OF PAVING.
52. CONTRACTOR SHALL ADJUST ALL EXISTING AND PROPOSED VALVES, FIRE HYDRANTS, AND OTHER UTILITY APPURTENANCES TO MATCH ACTUAL FINISHED GRADES AT THE TIME OF PAVING.
53. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION SEQUENCING AND PHASING, AND SHALL CONTACT THE APPROPRIATE CITY OFFICIALS, INCLUDING BUILDING OFFICIAL, ENGINEERING INSPECTOR, AND FIRE MARSHALL, TO LEARN OF ANY REQUIREMENTS.
54. CONTRACTOR IS RESPONSIBLE FOR PREPARATION, SUBMITTAL, AND APPROVAL BY THE CITY OF A TRAFFIC CONTROL PLAN PRIOR TO THE START OF CONSTRUCTION, AND THEN THE IMPLEMENTATION OF THE PLAN.
55. CONTRACTOR SHALL KEEP A NEAT AND ACCURATE RECORD OF CONSTRUCTION, INCLUDING ANY DEVIATIONS OR VARIANCES FROM THE PLANS.
56. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT PLANS TO THE ENGINEER AND CITY IDENTIFYING ALL DEVIATIONS AND VARIATIONS FROM THESE PLANS MADE DURING CONSTRUCTION.
57. CONTRACTOR SHALL KEEP THE CONSTRUCTION SITE SECURE FROM TRESPASSERS AT ALL TIMES.

EROSION CONTROL:

1. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL EROSION CONTROL AND WATER QUALITY REQUIREMENTS, LAWS, AND ORDINANCES THAT APPLY TO THE CONSTRUCTION SITE LAND DISTURBANCE.
2. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE "TCEQ GENERAL PERMIT TO DISCHARGE UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM TXR 150000".
3. EROSION CONTROL DEVICES SHOWN ON THE EROSION CONTROL PLAN FOR THE PROJECT SHALL BE INSTALLED PRIOR TO THE START OF LAND DISTURBANCE.
4. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THE PROJECT.
5. CONTRACTOR IS SOLELY RESPONSIBLE FOR INSTALLATION, IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS OF ALL EROSION CONTROL DEVICES, BEST MANAGEMENT PRACTICES (BMPS), AND FOR UPDATING THE EROSION CONTROL PLAN DURING CONSTRUCTION AS FIELD CONDITIONS CHANGE.
6. CONTRACTOR SHALL DOCUMENT THE DATES OF INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL FOR EACH BMP EMPLOYED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IF APPLICABLE.
7. AS STORM SEWER INLETS ARE INSTALLED ON-SITE, TEMPORARY EROSION CONTROL DEVICES SHALL BE INSTALLED AT EACH INLET PER APPROVED DETAILS.
8. THE EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL THE AREA IT PROTECTS HAS BEEN PERMANENTLY STABILIZED.
9. CONTRACTOR SHALL PROVIDE ADEQUATE EROSION CONTROL DEVICES NEEDED DUE TO PROJECT PHASING.
10. CONTRACTOR SHALL OBSERVE THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES AND MAKE FIELD ADJUSTMENTS AND MODIFICATIONS AS NEEDED TO PREVENT SEDIMENT FROM LEAVING THE SITE. IF THE EROSION CONTROL DEVICES DO NOT EFFECTIVELY CONTROL EROSION AND PREVENT SEDIMENTATION FROM WASHING OFF THE SITE, THEN THE CONTRACTOR SHALL NOTIFY THE ENGINEER.
11. OFF-SITE SOIL BORROW, SPOIL, AND STORAGE AREAS (IF APPLICABLE) ARE CONSIDERED AS PART OF THE PROJECT SITE AND MUST ALSO COMPLY WITH THE EROSION CONTROL REQUIREMENTS FOR THIS PROJECT. THIS INCLUDES THE INSTALLATION OF BMPS TO CONTROL EROSION AND SEDIMENTATION AND THE ESTABLISHMENT OF PERMANENT GROUND COVER ON DISTURBED AREAS PRIOR TO FINAL APPROVAL OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE SWPPP AND EROSION CONTROL PLAN TO INCLUDE BMPS FOR ANY OFF-SITE THAT ARE NOT ANTICIPATED OR SHOWN ON THE EROSION CONTROL PLAN.
12. ALL STAGING, STOCKPILES, SPOIL, AND STORAGE SHALL BE LOCATED SUCH THAT THEY WILL NOT ADVERSELY AFFECT STORM WATER QUALITY. PROTECTIVE MEASURES SHALL BE PROVIDED IF NEEDED TO ACCOMPLISH THIS REQUIREMENT, SUCH AS COVERING OR ENCIRCLING THE AREA WITH AN APPROPRIATE BARRIER.
13. CONTRACTORS SHALL INSPECT ALL EROSION CONTROL DEVICES, BMPS, DISTURBED AREAS, AND VEHICLE ENTRY AND EXIT AREAS WEEKLY AND WITHIN 24 HOURS OF ALL RAINFALL EVENTS OF 0.5 INCHES OR GREATER, AND KEEP A RECORD OF THIS INSPECTION IN THE SWPPP BOOKLET IF APPLICABLE, TO VERIFY THAT THE DEVICES AND EROSION CONTROL PLAN ARE FUNCTIONING PROPERLY.
14. CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT ALL PRIMARY POINTS OF ACCESS IN ACCORDANCE WITH CITY SPECIFICATIONS. CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION TRAFFIC USES THE STABILIZED ENTRANCE AT ALL TIMES FOR ALL INGRESS/EGRESS.
15. SITE ENTRY AND EXITS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING AND FLOWING OF SEDIMENT AND DIRT ONTO OFF-SITE ROADWAYS. ALL SEDIMENT AND DIRT FROM THE SITE THAT IS DEPOSITED ONTO AN OFF-SITE ROADWAY SHALL BE REMOVED IMMEDIATELY.
16. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SILT AND DEBRIS FROM THE AFFECTED OFF-SITE ROADWAYS THAT ARE A RESULT OF THE CONSTRUCTION, AS REQUESTED BY OWNER AND CITY. AT A MINIMUM, THIS SHOULD OCCUR ONCE PER DAY FOR THE OFF-SITE ROADWAYS.
17. WHEN WASHING OF VEHICLES IS REQUIRED TO REMOVE SEDIMENT PRIOR TO EXITING THE SITE, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP BMP.
18. CONTRACTOR SHALL INSTALL A TEMPORARY SEDIMENT BASIN FOR ANY ON-SITE DRAINAGE AREAS THAT ARE GREATER THAN 10 ACRES, PER TCEQ AND CITY STANDARDS. IF NO ENGINEERING DESIGN HAS BEEN PROVIDED FOR A SEDIMENTATION BASIN ON THESE PLANS, THEN THE CONTRACTOR SHALL ARRANGE FOR AN APPROPRIATE DESIGN TO BE PROVIDED.
19. ALL FINES IMPOSED FOR SEDIMENT OR DIRT DISCHARGED FROM THE SITE SHALL BE PAID BY THE RESPONSIBLE CONTRACTOR.
20. WHEN SEDIMENT OR DIRT HAS CLOGGED THE CONSTRUCTION ENTRANCE VOID SPACES BETWEEN STONES OR DIRT IS BEING TRACKED ONTO A ROADWAY, THE AGGREGATE PAD MUST BE WASHED DOWN OR REPLACED. RUNOFF FROM THE WASH-DOWN OPERATION SHALL NOT BE ALLOWED TO DRAIN DIRECTLY OFF SITE WITHOUT FIRST FLOWING THROUGH ANOTHER BMP TO CONTROL SEDIMENTATION.
21. PERIODIC RE-GRADING OR NEW STONE MAY BE REQUIRED TO MAINTAIN THE EFFECTIVENESS OF THE CONSTRUCTION ENTRANCE.
22. TEMPORARY OR PERMANENT SEDIMENT STABILIZATION SHALL BE INITIATED WITHIN 14 DAYS OF THE LAST DISTURBANCE OF ANY AREA, UNLESS ADDITIONAL CONSTRUCTION IN THE AREA IS EXPECTED WITHIN 21 DAYS OF THE LAST DISTURBANCE.
23. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING CONSTRUCTION, ALWAYS CLEANING UP DIRT, LOOSE MATERIAL, AND TRASH AS CONSTRUCTION PROGRESSES.
24. UPON COMPLETION OF FINE GRADING, ALL SURFACES OF DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED. STABILIZATION IS ACHIEVED WHEN THE AREA HAS EITHER BEEN COVERED BY PERMANENT STRUCTURES, SUCH AS BUILDINGS, SIDEWALK, PAVEMENT, OR A UNIFORM PERENNIAL VEGETATIVE COVER.
25. CONTRACTOR SHALL CLEAN, FLUSH AND DRAIN PIPE, CHANNELS, Drainageways AND BORROW DITCHES AFFECTED BY THE CONSTRUCTION SHALL BE DREDGED, AND THE SEDIMENT GENERATED BY THE PROJECT SHALL BE REMOVED AND DISPOSED IN ACCORDANCE WITH APPLICABLE REGULATIONS.
26. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT, TRASH AND LOOSE MATERIALS AS CONSTRUCTION PROGRESSES.

STORM WATER DISCHARGE AUTHORIZATION:

1. CONTRACTOR SHALL COMPLY WITH ALL TCEQ AND EPA STORM WATER POLLUTION PREVENTION REQUIREMENTS.
2. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE TCEQ GENERAL PERMIT TO DISCHARGE UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM TXR 150000.
3. THE CONTRACTOR AND/OR OTHER OPERATORS SUBMIT A NOI TO TCEQ AT LEAST SEVEN DAYS PRIOR TO COMMENCING CONSTRUCTION (IF APPLICABLE), OR IF UTILIZING ELECTRONIC SUBMITTAL, PRIOR TO COMMENCING CONSTRUCTION. ALL PRIMARY OPERATORS SHALL PROVIDE A COPY OF THE SIGNED NOI TO THE OPERATOR OF ANY MS4 (TYPICALLY THE CITY) RECEIVING DISCHARGE FROM THE SITE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IF APPLICABLE, INCLUDING POSTING SITE NOTICE, INSPECTIONS, DOCUMENTATION, AND SUBMISSION OF ANY INFORMATION REQUIRED BY THE TCEQ AND EPA (E.G. NOI).
5. ALL CONTRACTORS AND SUBCONTRACTORS PROVIDING SERVICES RELATED TO THE SWPPP SHALL SIGN THE REQUIRED CONTRACTOR CERTIFICATION STATEMENT ACKNOWLEDGING THEIR RESPONSIBILITIES AS SPECIFIED IN THE SWPPP.
6. A COPY OF THE SWPPP, INCLUDING NOI, SITE NOTICE, CONTRACTOR CERTIFICATIONS, AND ANY REVISIONS, SHALL BE SUBMITTED TO THE CITY BY THE CONTRACTOR AND SHALL BE RETAINED ON-SITE DURING CONSTRUCTION.
7. A NOTICE OF TERMINATION (NOT) SHALL BE SUBMITTED TO TCEQ BY ANY PRIMARY OPERATOR WITHIN 30 DAYS AFTER ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND FINAL STABILIZATION HAS BEEN ESTABLISHED OVER ALL UNPAVED AREAS AND AREAS NOT COVERED BY STRUCTURES, A TRANSFER OF OPERATIONAL CONTROL HAS OCCURRED, OR THE OPERATOR HAS OBTAINED ALTERNATIVE AUTHORIZATION UNDER A DIFFERENT PERMIT. A COPY OF THE NOT SHALL BE PROVIDED TO THE OPERATOR OF ANY MS4 RECEIVING DISCHARGE FROM THE SITE.

DEMOLITION:

1. KHA IS NOT RESPONSIBLE FOR THE MEANS AND METHODS EMPLOYED BY THE CONTRACTOR TO IMPLEMENT THIS DEMOLITION PLAN. THIS PRELIMINARY DEMOLITION PLAN SIMPLY INDICATES THE ANTICIPATED EXTENT OF THE SUBJECT TRACT THAT ARE TO BE DEMOLISHED AND REMOVED FROM THE SITE.
2. KHA DOES NOT WARRANT OR REPRESENT THAT THE PLAN, WHICH WAS PREPARED BASED ON SURVEY AND UTILITY INFORMATION PROVIDED BY OTHERS, SHOWS ALL IMPROVEMENTS AND UTILITIES, THAT THE IMPROVEMENTS AND UTILITIES ARE SHOWN ACCURATELY, OR THAT THE UTILITIES SHOWN CAN BE REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ITS OWN SITE RECONNAISSANCE AND UTILITY RESEARCH TO WORK AND TO COORDINATE WITH THE OWNERS OF IMPROVEMENTS AND/OR UTILITIES IN THE ABANDONMENT AND PROCESS FOR THE REMOVAL OF THEIR FACILITIES.
3. THIS PLAN IS INTENDED TO GIVE A GENERAL GUIDE TO THE CONTRACTOR, NOTHING MORE. THE GOAL OF THE DEMOLITION IS TO LEAVE THE SITE IN A STATE SUITABLE FOR THE CONSTRUCTION OF THE PROPOSED DEVELOPMENT. REMOVAL OR PRESERVATION OF IMPROVEMENTS, UTILITIES, ETC. TO ACCOMPLISH THIS GOAL ARE THE RESPONSIBILITY OF THE CONTRACTOR.
4. CONTRACTOR IS STRONGLY CAUTIONED TO REVIEW THE FOLLOWING REPORTS DESCRIBING SITE CONDITIONS PRIOR TO BIDDING AND IMPLEMENTING THE DEMOLITION PLAN:
   a. ENVIRONMENTAL SITE ASSESSMENT PROVIDED BY THE OWNER.
   b. ASBESTOS BUILDING INSPECTION REPORT(S) PROVIDED BY THE OWNER.
   c. GEOTECHNICAL REPORT PROVIDED BY THE OWNER.
   d. OTHER REPORTS THAT ARE APPLICABLE AND AVAILABLE.
5. CONTRACTOR SHALL CONTACT THE OWNER TO VERIFY WHETHER ADDITIONAL REPORTS OR AMENDMENTS TO THE ABOVE CITED REPORTS HAVE BEEN PREPARED AND TO OBTAIN/REVIEW/AND COMPLY WITH THE RECOMMENDATION OF SUCH STUDIES PRIOR TO STARTING ANY WORK ON THE SITE.
6. CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS REGARDING THE DEMOLITION OF OBJECTS ON THE SITE AND THE DISPOSAL OF THE DEMOLISHED MATERIALS OFF-SITE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO REVIEW THE SITE, DETERMINE THE APPLICABLE REGULATIONS, RECEIVE THE REQUIRED PERMITS AND AUTHORIZATIONS, AND COMPLY.
7. KHA DOES NOT REPRESENT THAT THE REPORTS AND SURVEYS REFERENCED ABOVE ARE ACCURATE, COMPLETE, OR COMPREHENSIVE SHOWING ALL ITEMS THAT WILL NEED TO BE DEMOLISHED AND REMOVED.
8. SURFACE PAVEMENT INDICATED MAY OVERLAY OTHER HIDDEN STRUCTURES, SUCH AS ADDITIONAL LAYERS OF PAVEMENT, FOUNDATIONS OR WALLS, THAT ARE ALSO TO BE REMOVED.

GRADING:

1. THE CONTRACTOR AND GRADING SUBCONTRACTOR SHALL VERIFY THE SUITABILITY OF EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE START OF CONSTRUCTION. THE CIVIL ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
2. CONTRACTOR S

GENERAL

1. THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS BEFORE BEGINNING CONSTRUCTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SECURITY TO PROTECT THE PROJECT SITE, CONTRACTOR PROPERTY, EQUIPMENT, AND WORK.
3. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING STREETS OF CONSTRUCTION DIRT AND DEBRIS AT CLOSE OF EACH WORK DAY.
4. THE CONDITION OF THE ROAD AND/OR RIGHT-OF-WAY, UPON COMPLETION OF THE JOB SHALL BE AS GOOD AS OR BETTER THAN PRIOR TO STARTING WORK.
5. PRIOR TO CONSTRUCTION, THE CONTRACTOR, ALONG WITH CONCURRENCE FROM THE FIELD ENGINEER, SHALL DETERMINE HIS/HER LAY-DOWN AND/OR STAGING AREA LOCATIONS.
6. THE CONTRACTOR SHALL NOTIFY ALL PROPERTY OWNERS A MINIMUM OF 24 HOURS PRIOR TO BLOCKING DRIVEWAYS OR ENTERING UTILITY EASEMENTS.
7. TRAFFIC INGRESS AND EGRESS FOR DRIVEWAYS AND PEDESTRIAN ACCESS FACILITIES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
8. THE CONTRACTOR SHALL REMOVE ANY FENCES, POSTS, MAILBOXES, PLANTERS, PERMANENT TRASH CONTAINERS, CULVERTS, ETC. OR SECTIONS THEREOF, THAT ENCROACH WITHIN THE COUNTY'S RIGHT-OF-WAY. NOTE: PRIOR TO CONSTRUCTION, THE PROPERTY OWNER WAS PAID TO RELOCATE OR REPLACE THESE ITEMS OUTSIDE OF THE COUNTY'S RIGHT-OF-WAY. IF THE OWNER HAS FAILED TO DO SO, THE CONTRACTOR WILL REPLACE THEM WITH THE MINIMUM LEVEL OF QUALITY NEEDED TO SECURE THE PROPERTY AND/OR MAINTAIN MAIL DELIVERY. IN THAT CASE, PAYMENT FOR THESE INSTALLATIONS WILL BE INCLUDED AS EXTRA WORK ITEMS OR AS OVERRUNS TO EXISTING PAY ITEMS.

   ANY DAMAGE CAUSED BY THE CONTRACTOR TO SUCH ITEMS LOCATED OUTSIDE OF THE COUNTY'S RIGHT-OF-WAY, SHALL BE REPLACED WITH LIKE-KIND OR BETTER AT THE CONTRACTOR'S EXPENSE.

   ALSO, IF THESE ITEMS ARE LOCATED WITHIN THE PROJECT RIGHT-OF-WAY AND ARE DESIGNATED TO REMAIN, ANY DAMAGE CAUSED BY THE CONTRACTOR TO SUCH ITEMS, SHALL BE REPLACED WITH LIKE-KIND OR BETTER AT THE CONTRACTOR'S EXPENSE.

   TREES, BUSHES, SHRUBBERY AND OTHER DAMAGED PLANTINGS DESIGNATED TO REMAIN SHALL BE REPLACED WITHIN 72 HOURS OF REMOVAL AND ARE TO BE THOROUGHLY WATERED-IN. NO SEPARATE PAY.
9. PAVED SURFACES, PAVEMENT MARKERS AND MARKINGS SHALL BE PROTECTED FROM DAMAGE BY TRACKED EQUIPMENT.
10. IRON RODS DISTURBED DURING CONSTRUCTION ARE TO BE REPLACED BY A REGISTERED PROFESSIONAL LAND SURVEYOR FOR THE ORIGINAL PROPERTY OWNER AT NO SEPARATE PAY.
11. CONSTRUCTION STAKING WILL BE PROVIDED BY THE CONTRACTOR. TWO COPIES OF STAKING NOTES TO BE PROVIDED TO THE ENGINEER PRIOR TO CONSTRUCTION.
12. THE COUNTY OR THE COUNTY'S SURVEYOR SHALL PROVIDE A BENCHMARK OR TEMPORARY BENCHMARK AND SURVEY CONTROLS.
13. THE CONTRACTOR SHALL MAINTAIN UPDATED RED-LINED RECORD DRAWINGS ON SITE FOR INSPECTION BY THE ENGINEER.
14. MOWING, MAINTENANCE, AND CLEAN-UP OF THE PROJECT SHALL MEET THE REQUIREMENT OF STANDARD SPECIFICATION ITEM 560 (NO SEPARATE PAY). MOWING, MAINTENANCE, AND CLEAN-UP IS REQUIRED FOR THE PROJECT LIMITS AND DURATION, REGARDLESS OF THE CONTRACTOR'S SCOPE OF ACTIVITIES WITHIN THE PROJECT LIMITS.
15. THE REMOVAL OF ANY ABANDONED UTILITIES REQUIRED TO COMPLETE THE WORK SHALL BE INCIDENTAL AND NO SEPARATE PAYMENT SHALL BE MADE.
16. IT IS THE CONTRACTOR'S RESPONSIBILITY TO STOCKPILE NECESSARY MATERIAL ON-SITE OR AT A SECURED OFF-SITE LOCATION AT NO ADDITIONAL EXPENSE TO HARRIS COUNTY. ANY SUITABLE EXCAVATED MATERIAL ON THE PROJECT WHICH IS AVAILABLE AT THE TIME OF NEED; WHETHER FROM STORM SEWER, ROADWAY, AND/OR CHANNEL EXCAVATION, SHALL BE USED BEFORE BORROW IS BROUGHT ON-SITE.
17. MANHOLES, JUNCTION BOXES, INLETS, AND RISERS ARE TO BE PRECAST OR CAST-IN-PLACE.

TRAFFIC SIGNAL

1. ALL ITEMS RELATING TO THE CONSTRUCTION OF TRAFFIC SIGNAL INSTALLATIONS, EXCEPT FOR PUNCHLIST ITEMS, SHALL BE COMPLETED PRIOR TO THE ACTIVATION OF THE SIGNAL SYSTEM(S), UNLESS OTHERWISE REQUIRED BY THE CONTRACT.
2. THE CONTRACTOR SHALL MEET WITH THE HARRIS COUNTY TRAFFIC SIGNAL MAINTENANCE GROUPS FIELD INSPECTOR, HEREAFTER REFERRED TO AS THE TRAFFIC INSPECTOR, ONE-WEEK PRIOR TO THE DESIRED ACTIVATION OF ANY NEW TRAFFIC SIGNALS. THE CONTRACTOR SHALL OBTAIN VERBAL CONCURRENCE FROM THE TRAFFIC INSPECTOR THAT ADEQUATE PROGRESS HAS BEEN ACHIEVED AND THAT ADEQUATE PREPARATIONS ARE IN PLACE TO SCHEDULE A PRE-"TURN ON" WALK-THROUGH INSPECTION MEETING. IF IN THE OPINION OF THE TRAFFIC INSPECTOR, REQUIRED PROGRESS AND ADEQUATE PREPARATIONS ARE NOT COMPLETE, THE PRE-"TURN ON" WALK-THROUGH INSPECTION MEETING WILL BE POSTPONED TO ALLOW ADEQUATE TIME FOR INCOMPLETE CONSTRUCTION ITEMS AND PREPARATIONS TO BE COMPLETED. AFTER THE CONTRACTOR HAS COMPLETED ALL INCOMPLETE ITEMS AND PREPARATIONS, THE CONTRACTOR SHALL REQUEST THE TRAFFIC INSPECTOR REVIEW AND APPROVE ITEMS PREVIOUSLY IDENTIFIED. IF, IN THE OPINION OF THE TRAFFIC INSPECTOR, ALL ITEMS HAVE BEEN ADDRESSED SATISFACTORILY, THE DATE OF THE PRE-"TURN ON" WALK-THROUGH INSPECTION SHALL BE ESTABLISHED. TIME EXTENSIONS TO THE CONTRACT TIME WILL NOT BE GRANTED FOR DELAYS CAUSED BY INCOMPLETE CONSTRUCTION OR INADEQUATE CONTRACTOR PREPARATIONS REQUIRED TO COMPLETE TRAFFIC SIGNAL SYSTEM WITHIN THE TIMEFRAME SET FORTH IN THE CONTRACT.
3. PRIOR TO ACTIVATING A NEW TRAFFIC SIGNAL, THE CONTRACTOR SHALL REQUEST A PRE-"TURN ON" WALK-THROUGH INSPECTION MEETING, IN ACCORDANCE WITH ITEM 2. THE PURPOSE OF THE MEETING WILL BE TO ESTABLISH THAT THE TRAFFIC SIGNAL SYSTEM HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT, AND IN A MANNER THAT DOES NOT ADVERSELY IMPACT PUBLIC SAFETY. THIS MEETING SHALL BE ATTENDED BY THE TRAFFIC INSPECTOR, THE ENGINEER OF RECORD, AND THE CONTRACTOR. AS A MINIMUM, ANY DEFICIENCIES THAT ADVERSELY IMPACT PUBLIC SAFETY WILL BE IDENTIFIED FOR CORRECTION PRIOR TO ESTABLISHING THE "TURN ON" DATE FOR THE TRAFFIC SIGNAL SYSTEM. ITEMS THAT HAVE AN IMPACT ON PUBLIC SAFETY INCLUDE, BUT ARE NOT LIMITED TO: PAVEMENT MARKINGS AND SIGNAGE, PROPER AND ACCEPTABLE BONDING OF EARTH GROUNDS, PROPERLY ALIGNED TRAFFIC SIGNALS, FULLY OPERATIONAL VEHICULAR AND PEDESTRIAN DETECTION, COMPLETED CABINET-TO-FIELD WIRING, AND PROPERLY TERMINATED ELECTRICAL SERVICE CONDUCTORS. FAILURE TO ADDRESS THE PUNCHLIST ITEMS IDENTIFIED AS BEING CRITICAL TO PUBLIC SAFETY PRIOR TO THE PRE-"TURN ON" WALK-THROUGH MEETING WILL RESULT IN THE TURN ON BEING POSTPONED TO ALLOW ADEQUATE TIME FOR THE INCOMPLETE ITEMS TO BE COMPLETED. AT SUCH TIME AS MEETING ATTENDEES AGREE THAT THE TRAFFIC SIGNAL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT, AND THAT THE TRAFFIC SIGNAL, AS IT EXISTS, IS NOT A THREAT TO PUBLIC SAFETY, A TURN ON DATE WILL BE ESTABLISHED.
4. THE CONTRACTOR SHALL HAVE 10 DAYS FROM THE DATE THE TRAFFIC SIGNAL SYSTEM IS TURNED ON TO COMPLETE ANY PUNCHLIST ITEMS IDENTIFIED AT THE PRE-"TURN ON" WALK-THROUGH MEETING OR AT THE TIME THE SIGNAL SYSTEM IS ACTIVATED THAT ARE NOT OTHERWISE ADDRESSED PRIOR TO ACTIVATION OF THE TRAFFIC SIGNAL SYSTEM.
5. THE CONTRACTOR'S ATTENTION IS DIRECTED TO STANDARD SPECIFICATION ITEM 690, TRAFFIC SIGNAL INSTALLATION AND MODIFICATION, WHICH INCLUDES PROCEDURES AND REQUIREMENTS REGARDING ACTIVATION OF TRAFFIC SIGNAL CONTROL SYSTEMS. THE PROJECT MANUAL MAY INCLUDE SPECIAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS RELATED TO PROPOSED TRAFFIC CONTROL SIGNAL SYSTEM INSTALLATION(S) AND MODIFICATION(S) REQUIRING THE CONTRACTOR'S ADHERENCE TO DEFINED CHECKLISTS, PROCEDURES AND/OR REPORTS AT NO ADDITIONAL COST TO THE COUNTY BEYOND THE ESTABLISHED BID ITEMS OF THE CONTRACT.

TRAFFIC CONTROL

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE MOST RECENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE APPROVED TRAFFIC CONTROL PLAN.
2. THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE LANE OF TRAFFIC IN EACH DIRECTION DURING WORKING HOURS EXCEPT DURING FLAGGING OPERATION OR PROVIDE DETOURS AROUND THE CONSTRUCTION SITE AND PROVIDE PUBLIC NOTIFICATION.
3. LANE CLOSURES SHALL BE DURING OFF-PEAK HOURS ONLY (MONDAY THROUGH FRIDAY 9 A.M. TO 4 P.M.) UNIFORMED PEACE OFFICERS OR FLAGGERS IN RADIO CONTACT ARE REQUIRED TO DIRECT TRAFFIC DURING LANE CLOSURES.
4. DETOURS REQUIRE PRIOR APPROVAL OF THE FIELD ENGINEER AND PRECINCT. DETOUR PLANS, IF ALLOWED, MUST INCLUDE APPROPRIATE DETOUR SIGNAGE, PUBLIC NOTICE VIA SIGNAGE TWO WEEKS IN ADVANCE STATING THE DATES OF THE AGREED UPON DATE OF CLOSURE AND DATE THE ROAD WILL RE-OPEN TO TRAFFIC. CONTRACTOR TO USE (WITH PRIOR APPROVAL OF THE FIELD ENGINEER) HIGH EARLY STRENGTH CONCRETE AND OTHER RELATED CONSTRUCTION METHODS TO MINIMIZE THE DURATION OF THE DETOUR AND TO ENSURE THAT THE ROADWAY IS OPEN ON, OR PRIOR TO, THE AGREED UPON DATE.
5. ONE DAY PRIOR TO THE IMPLEMENTATION OF A TRAFFIC CONTROL PLAN PHASE OR STEP, OR THE IMPLEMENTATION OF AN ADDITIONAL, REVISED, OR NEW TRAFFIC CONTROL ELEMENT, THE CONTRACTOR SHALL MEET WITH THE ENGINEER TO GIVE A DETAILED DESCRIPTION OF THE CONTRACTOR'S PLAN AND PREPARATIONS. THE CONTRACTOR SHALL OBTAIN WRITTEN CONCURRENCE FROM THE ENGINEER THAT ADEQUATE PROJECT PROGRESS HAS BEEN ACHIEVED AND THAT ADEQUATE PREPARATIONS ARE IN PLACE PRIOR TO SWITCHING TRAFFIC. IF, IN THE OPINION OF THE ENGINEER, REQUIRED PROGRESS AND ADEQUATE PREPARATIONS ARE NOT COMPLETE, THE CONTRACTOR SHALL NOT IMPLEMENT THE NEXT PHASE, STEP, OR ELEMENT OF TRAFFIC CONTROL UNTIL INCOMPLETE CONSTRUCTION ITEMS OR PREPARATIONS ARE COMPLETED. TIME EXTENSIONS WILL NOT BE GRANTED FOR DELAYS CAUSED BY THE INCOMPLETE CONSTRUCTION ITEMS OR INADEQUATE CONTRACTOR PREPARATIONS REQUIRED TO IMPLEMENT TRAFFIC CONTROL.
6. TRAFFIC CONTROL PER THE CONTRACT IS REQUIRED FOR THE ENTIRE DURATION OF THE PROJECT, INCLUDING THE PUNCHLIST PERIOD. PAYMENT FOR TRAFFIC CONTROL THAT IS PROPERLY INSTALLED FOR LESS THAN A FULL MONTH SHALL BE BASED ON A PERCENTAGE BASIS OF THE TIME INSTALLED. TRAFFIC CONTROL PAYMENTS TO THE CONTRACTOR SHALL END 10 DAYS AFTER SUBSTANTIAL COMPLETION, ALTHOUGH PROPER TRAFFIC CONTROL MUST BE MAINTAINED UNTIL PUNCHLIST COMPLETION.
7. THE PURPOSE OF THE CONSTRUCTION SEQUENCE AND TRAFFIC HANDLING OUTLINED HEREIN IS TO DOCUMENT A VIABLE TCP THAT CAN BE UTILIZED TO CONSTRUCT THE PROJECT. IT IS THE BASIS OF ESTIMATION FOR THE TRAFFIC CONTROL BID ITEMS, AND IS TO BE UTILIZED AND IMPLEMENTED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

   IF THE CONTRACTOR CHOOSES TO USE A DIFFERENT TCP, HE/SHE SHALL PREPARE AND SUBMIT THE ALTERNATIVE TCP TO THE COUNTY FOR APPROVAL NO LESS THAN 10 WORKING DAYS PRIOR TO THE PROPOSED IMPLEMENTATION DATE. THE TCP SHALL BE DRAWN TO SCALE AND SIGNED & SEALED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS. UPON APPROVAL BY HARRIS COUNTY, THE ALTERNATIVE PLAN SHALL BECOME THE BASIS FOR A "CHANGE IN CONTRACT" TO REVISE THE TRAFFIC CONTROL BID ITEMS ACCORDINGLY AND BECOME PART OF THE CONTRACT DOCUMENTS.

PRECINCT 3 SPECIFIC NOTES

1. ALL TRAFFIC SIGNS (STOP SIGNS, SPEED LIMIT SIGNS, ETC.) THAT ARE REMOVED IN PRECINCT 3 SHALL BE DELIVERED AT NO EXTRA PAY TO THE SPRING SERVICE CENTER AT 4603 SPRING CYPRESS ROAD, SPRING, TEXAS 77388. CALL 713-274-3100 TO MAKE DELIVERY ARRANGEMENTS. ALL SIGNS MUST BE REMOVED FROM POLES AND RETURNED REASONABLY CLEAN.
2. TREE PRESERVATION – CONTRACTOR SHALL PROVIDE PRECINCT 3 WITH CLEAR ACCESS TO ANY TREE DESIGNATED FOR PRESERVATION. CONTRACTOR IS RESPONSIBLE FOR SUCH TREES. CONTRACTOR SHALL CONTACT PRECINCT 3 PARKS ADMINISTRATION OFFICE AT (713) 274-0930, TWO WEEKS PRIOR TO CONSTRUCTION FOR TREE AND LANDSCAPING RELOCATIONS.
3. PROVIDE PRECINCT 3 WITH A DRAWING OR DESCRIPTION FOR ANY PROPOSED "AS AUTHORIZED BY ENGINEER" OR "EXTRA WORK ITEMS" CONCERNING FENCE OR GATE CONSTRUCTION OR RELOCATION AND OBTAIN WRITTEN PRECINCT APPROVAL FOR THE WORK.
4. MANHOLES SHOULD BE FLUSH TO NO MORE THAN 3" ABOVE SURROUNDING GROUND IN NON-PAVED AREAS.
5. USE THE MAXIMUM ALLOWED SPACING BETWEEN RAIL POSTS WHERE THE COMBINATION OF TRAFFIC AND PEDESTRIAN RAIL IS SPECIFIED.

NO.	REVISIONS	DATE	NAME
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HARRIS COUNTY
ENGINEERING DEPARTMENT

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DOCUMENT INCOMPLETE:
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ENGINEER: NAME
P.E. SERIAL No. NUMBER
DATE: / /

PROJECT TITLE:

SHEET DESCRIPTION: GENERAL NOTES FOR PRECINCT 3

CIVIL STANDARD: GN-3

DRAWN BY: JDZ

DATE: 10/10/23

CK'D BY: PDG

SCALE: NONE

SHEET NO: /

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KLEIN ISD
KLEIN, TX

STATE OF TEXAS
RASHARD D. HARRIS
142467
LICENSED
PROFESSIONAL ENGINEER
01/27/2026

ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	KLM
Project Engineer:	RDH
Project Designer:	RDH
Drawn By:	RDH

PROJECT NO.
25-0225.00

SHEET TITLE
HC GENERAL NOTES

SHEET NO.
C1.01

KISD 2025 FRP

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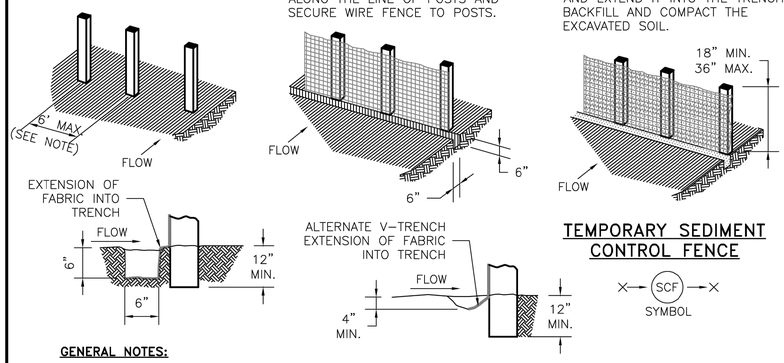
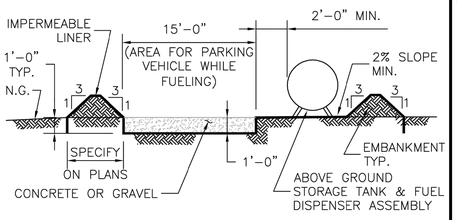


TEMPORARY SEDIMENT CONTROL FENCE

SCF — SYMBOL

GENERAL NOTES:

1. SECURELY FASTEN MESH FENCING TO POSTS WITH STAPLES, TIE WIRES, OR RINGS.
2. SECURELY FASTEN FILTER FABRIC TO MESH FENCING.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, OVERLAP 6 INCHES AT A POST, FOLD TOGETHER, AND ATTACH TO A POST.
4. REMOVE SEDIMENT DEPOSITS WHEN SILT REACHES ONE-THIRD OF THE HEIGHT OF THE FENCE IN DEPTH.

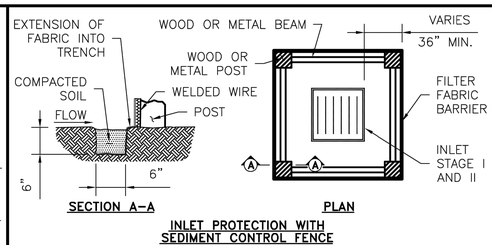


ABOVE GROUND TEMPORARY VEHICLE AND EQUIPMENT FUELING AREA WITH TANK

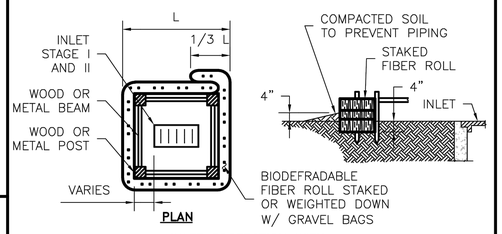
TFA — SYMBOL

GENERAL NOTES:

1. THE SIZE OF TANK FOUNDATION AREA DEPENDS ON THE SIZE OF ABOVE GROUND STORAGE TANK AND DISPENSER ASSEMBLY.
2. PROVIDE A MINIMUM SLOPE OF 2% TOWARD THE SUMP PIT.
3. INSTALL IMPERMEABLE LINER AS PER MANUFACTURER'S RECOMMENDATIONS.



INLET PROTECTION WITH SEDIMENT CONTROL FENCE



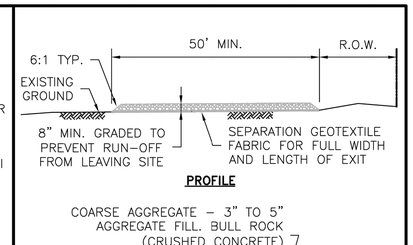
INLET PROTECTION WITH BIODEGRADABLE FILTER ROLLS

GENERAL NOTES:

1. BIODEGRADABLE FIBER ROLLS WILL BE UTILIZED ONLY WHEN SITE CONDITIONS DO NOT PERMIT THE USE OF FILTER FABRIC BARRIER AND AS APPROVED BY THE ENGINEER.

INLET PROTECTION BARRIERS FOR STAGE I INLETS

IPB — SYMBOL

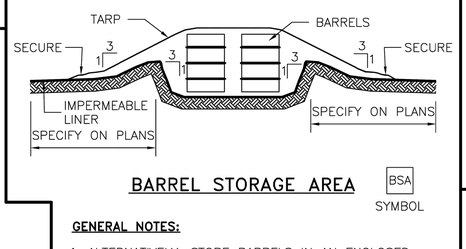


CONSTRUCTION EXIT

CE-1 — SYMBOL

GENERAL NOTES:

1. MINIMUM LENGTH IS AS SHOWN ON CONSTRUCTION DRAWINGS OR 50 FEET, WHICHEVER IS MORE.
2. CONSTRUCT AND MAINTAIN CONSTRUCTION EXIT WITH CONSTANT WIDTH ACROSS ITS LENGTH, INCLUDING ALL POINTS OF INGRESS OR EGRESS.
3. UNLESS SHOWN ON THE CONSTRUCTION DRAWINGS, STABILIZATION FOR OTHER AREAS WILL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE CONSTRUCTION EXIT.
4. WHEN SHOWN ON THE CONSTRUCTION DRAWINGS, WIDEN OR LENGTHEN STABILIZED AREA TO ACCOMMODATE A TRUCK WASHING AREA. PROVIDE OUTLET SEDIMENT TRAP FOR THE TRUCK WASHING AREA.
5. PROVIDE PERIODIC TOP DRESSING WITH ADDITIONAL COARSE AGGREGATE TO MAINTAIN THE REQUIRED DEPTH OR WHEN SURFACE BECOMES PACKED WITH MUD.
6. PERIODICALLY TURN AGGREGATE TO EXPOSE A CLEAN DRIVING SURFACE.
7. MINIMUM 14 FEET WIDTH FOR ONE WAY TRAFFIC AND 20 FEET WIDTH FOR TWO WAY TRAFFIC.

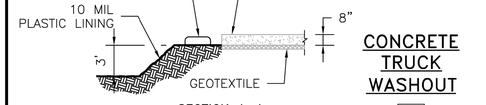


BARREL STORAGE AREA

BSA — SYMBOL

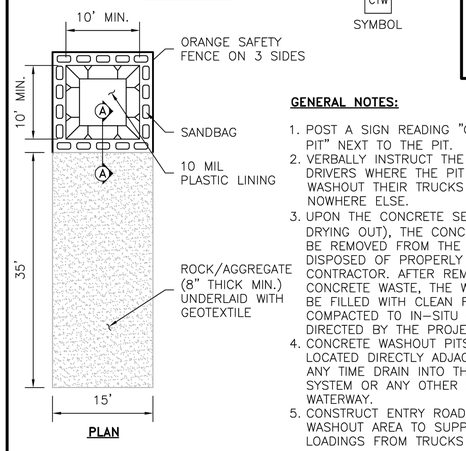
GENERAL NOTES:

1. ALTERNATIVELY, STORE BARRELS IN AN ENCLOSED BUILDING OR SHED.
2. INSTALL IMPERMEABLE LINER AS PER MANUFACTURER'S RECOMMENDATIONS. 60 mil MINIMUM.
3. CONSTRUCT BERMED AREA WITH VOLUME GREATER THAN OR EQUAL TO 110% VOLUME OF BARRELS.



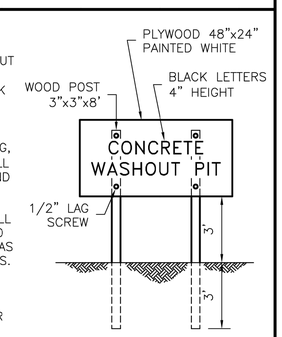
CONCRETE TRUCK WASHOUT

CTW — SYMBOL

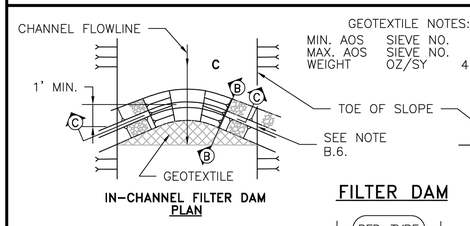


GENERAL NOTES:

1. POST A SIGN READING "CONCRETE WASHOUT PIT" NEXT TO THE PIT.
2. VERBALLY INSTRUCT THE CONCRETE TRUCK DRIVERS WHERE THE PIT IS AND TO WASHOUT THEIR TRUCKS IN THE PIT AND NOWHERE ELSE.
3. UPON THE CONCRETE SETTING UP (CURING, DRYING OUT), THE CONCRETE WASTE SHALL BE REMOVED, FROM THE PROJECT SITE AND DISPOSED OF PROPERLY BY THE CONTRACTOR. AFTER REMOVAL OF THE CONCRETE WASTE, THE WASHOUT PIT SHALL BE FILLED WITH CLEAN FILL MATERIAL AND COMPACTED TO IN-SITU CONDITIONS, OR AS DIRECTED BY THE PROJECT SPECIFICATIONS.
4. CONCRETE WASHOUT PITS SHALL NOT BE LOCATED DIRECTLY ADJACENT TO, NOR AT ANY TIME DRAIN INTO THE STORM SEWER SYSTEM OR ANY OTHER SWALE, DITCH, OR WATERWAY.
5. CONSTRUCT ENTRY ROAD AND BOTTOM OF WASHOUT AREA TO SUPPORT EXPECTED LOADINGS FROM TRUCKS EQUIPMENT.



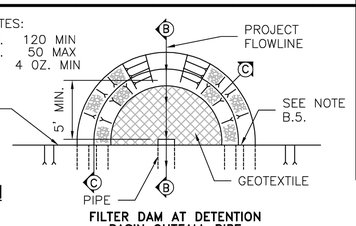
SIGN DETAIL (OR EQUIVALENT)



IN-CHANNEL FILTER DAM PLAN

GEOTEXTILE NOTES:

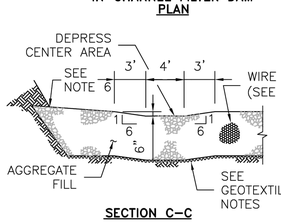
MIN. AOS	SIEVE NO.	120 MIN
MAX. AOS	SIEVE NO.	50 MAX
WEIGHT	OZ/SY	4 OZ. MIN



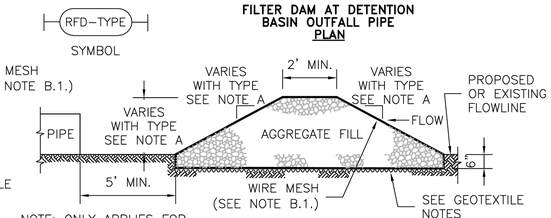
FILTER DAM AT DETENTION BASIN OUTFALL PIPE PLAN

FILTER DAM

RFD-TYPE — SYMBOL



SECTION C-C



NOTE: ONLY APPLIES FOR DETENTION BASIN OUTFALL PIPE PROTECTION.

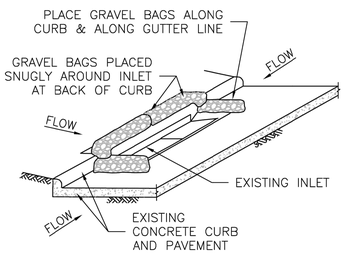
SECTION B-B

A. TYPES OF FILTER DAMS

1. TYPE 1 (NON-REINFORCED)
   a. HEIGHT - 18-24 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH - 2 FEET (MINIMUM)
   c. SLOPES - 2:1 (MAXIMUM).
2. TYPE 2 (REINFORCED).
   a. HEIGHT - 18-36 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH - 2 FEET (MINIMUM).
   c. SLOPES - 2:1 (MAXIMUM).
3. TYPE 3 (REINFORCED)
   a. HEIGHT - 36-48 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH - 2 FEET (MINIMUM).
   c. SLOPES - 3:1 (MAXIMUM).
4. TYPE 4 (GABION)
   a. HEIGHT - 30 INCHES (MINIMUM). MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
   b. TOP WIDTH - 2 FEET (MINIMUM).
5. TYPE 5. AS SHOWN ON THE PLANS.

B. CONSTRUCT FILTER DAMS ACCORDING TO THE FOLLOWING CRITERIA UNLESS SHOWN OTHERWISE ON THE PLANS.

1. TYPE 2 AND 3 FILTER DAMS: SECURE WITH 20 GAUGE GALVANIZED WOVEN WIRE MESH WITH 1 INCH DIAMETER HEXAGONAL OPENINGS.
2. PLACE AGGREGATE FILL ON THE WIRE MESH TO HEIGHT AND SLOPES SHOWN ON PLANS OR AS SPECIFIED BY THE ENGINEER.
   a. 3-5 INCHES FOR ROCK FILTER DAM TYPES 1, 2 AND 4.
   b. 4-8 INCHES FOR ROCK FILTER DAM TYPE 3.
3. FOLD WIRE MESH AT UPSTREAM SIDE OVER AGGREGATE FILL AND TIGHTLY SECURED TO ITSELF ON THE DOWNSTREAM SIDE USING WIRE TIES OR RINGS.
4. IN STREAMS: SECURE OR STAKE MESH TO STREAM BED PRIOR TO AGGREGATE PLACEMENT.
5. EMBED ONE FOOT MINIMUM INTO SLOPE AND RAISE ONE FOOT HIGHER THAN CENTER OF DEPRESSED AREA AT SLOPE.



INLET PROTECTION BARRIERS FOR STAGE II INLETS

IPB-II — SYMBOL

GENERAL NOTES:

1. REMOVE SEDIMENT DEPOSIT WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE BARRIER.
2. GRAVEL BAGS SHALL NOT BLOCK THROAT OF INLET UNLESS DIRECTED BY ENGINEER.

NO.	REVISIONS	DATE	NAME
1			
2			
3			
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5			

HARRIS COUNTY ENGINEERING DEPARTMENT

FOR INTERIM REVIEW ONLY

DOCUMENT INCOMPLETE: NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES

ENGINEER: NAME
P.E. SERIAL No. NUMBER
DATE: / /

PROJECT TITLE:

SHEET DESCRIPTION: STORM WATER POLLUTION PREVENTION

CIVIL STANDARD: SW3P

DRAWN BY: JDZ | CK'D BY: NR | PLAN DETAILS | SCALE: NONE | DATE: 10/10/23 | SHEET NO: /

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CIVIL ENGINEER

Kimley-Horn
11700 Katy Fwy., #800
Houston, Texas 77079
Main Phone: 281.597.9300
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KLEIN ISD
KLEIN, TX

RASHARD D. HARRIS 142467 LICENSED PROFESSIONAL ENGINEER
01/27/2026

ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	KLM
Project Engineer:	RDH
Project Designer:	RDH
Drawn By:	RDH

PROJECT NO.
25-0225.00

SHEET TITLE
EROSION CONTROL DETAILS

SHEET NO.
C1.02

KISD 2025 FRP

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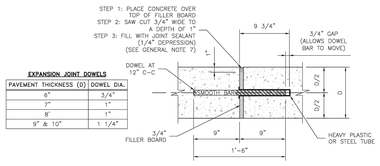


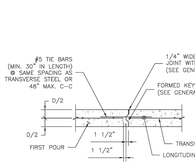
EXPANSION JOINT DOWELS

PAVEMENT THICKNESS (D)	DOWEL DIA.
6"	3/4"
7"	1"
8"	1"
9" & 10"	1 1/4"

DOWEL TYPE EXPANSION JOINT
SCALE: 1" = 1'-0"

NOTES FOR DOWEL EXPANSION JOINT:

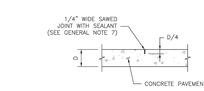
1. EXPANSION JOINT SHALL BE PLACED AT THE END OF EACH CURB RADIUS AND SPACED AT A MAXIMUM DISTANCE OF 160 FEET.
2. CENTER DOWEL HORIZONTALLY ON JOINT.
3. EXPANSION JOINT BARS SHALL BE HELD PARALLEL TO THE FINISHED CONCRETE SURFACE.



LONGITUDINAL CONSTRUCTION JOINT
SCALE: 1" = 1'-6"

NOTES FOR CONSTRUCTION JOINT:

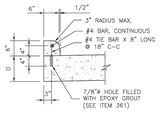
1. SAWED JOINTS SHALL BE CLEANED IN ACCORDANCE WITH SPECIFICATION ITEM 438 "JOINT SEALANTS."
2. JOINT SEALANT SHALL FILL THE JOINT FROM BOTTOM TO 1/4" BELOW CONCRETE PAVEMENT SURFACE.



CONTRACTION JOINT (SAWED)
SCALE: 1" = 1'-6"

NOTES FOR CONTRACTION JOINT:

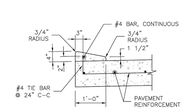
1. 20'-0" MAXIMUM SPACING BETWEEN TRANSVERSE CONTRACTION JOINTS.
2. SAWED JOINTS SHALL BE CLEANED IN ACCORDANCE WITH SPECIFICATION ITEM 438 "JOINT SEALANTS."
3. JOINT SEALANT SHALL FILL THE JOINT FROM BOTTOM TO 1/4" BELOW CONCRETE PAVEMENT SURFACE.



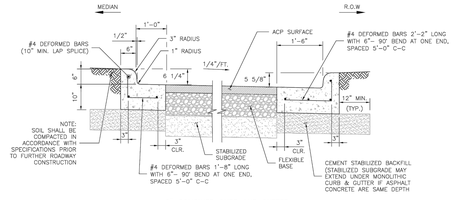
DRILLED-IN CONCRETE CURB FOR CONCRETE PAVEMENT
SCALE: 1" = 1'-0"

NOTES FOR CURB:

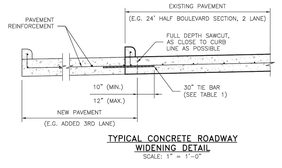
1. AT EACH PAVEMENT CONTRACTION JOINT, PROVIDE A 1/4" THICK PRE-MOLDED EXPANSION JOINT AT THE FULL WIDTH AND HEIGHT OF THE CURB.
2. FOR EACH PAVEMENT EXPANSION JOINT, THE PRE-MOLDED EXPANSION JOINT FILLER MATERIAL SHALL BE THE FULL WIDTH AND HEIGHT OF THE CURB.



4" X 12" CURB
SCALE: 1" = 1'-0"



6" COMBINED CURB AND GUTTER
SCALE: 1" = 1'-0"

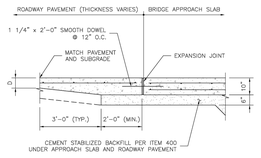


TYPICAL CONCRETE ROADWAY WIDENING DETAIL
SCALE: 1" = 1'-0"

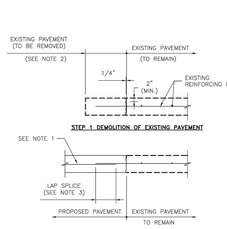
TABLE 1
(CONSTRUCTION JOINT TIE BARS)

TIE BAR SIZE	PAVEMENT DEPTH
#5 BAR	7" AND LESS
#6 BAR	GREATER THAN 7"

TIE BAR SHALL BE DRILLED INTO EXISTING PAVEMENT (MIN. 10", MAX. 12") AND EPOXIED. (SEE ITEM 361)



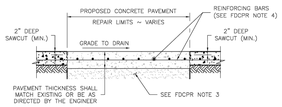
TYPICAL SECTION
PAVING TIE-IN TO BRIDGE APPROACH SLAB
SCALE: 1" = 1'-6"



CONCRETE TO CONCRETE
STANDARD PAVEMENT TIE-IN
SCALE: 1" = 1'-6"

NOTES FOR STANDARD PAVEMENT TIE-IN:

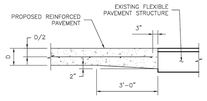
1. REINFORCING CENTERED IN PROPOSED PAVEMENT, 3" CLEAR AT EDGES.
2. SAWCUT 2" DEEP MINIMUM AND REMOVE 2'-0" EXISTING PAVEMENT OR PAVEMENT WITH CURB. EXPOSE AND CLEAN EXISTING REINFORCING.
3. 24 BAR DIAMETER LAP SPLICE OR WELD, IF DIRECTED.
4. IF NO EXPOSED REINFORCING STEEL EXISTS, HORIZONTAL TIE BARS SHALL BE GRADE 60, 30" LONG DRILLED AND EMBEDDED 15" INTO THE CENTER OF THE EXISTING CONCRETE SLAB WITH EPOXY OR APPROVED EQUAL. SIZE OF TIE BARS SHALL CONFORM TO TO TABLE 1. TIE BARS SHALL BE PLACED 24" CENTER TO CENTER.
5. ALTERNATIVELY, THE CONTRACTOR MAY CHOOSE TO USE FULL DEPTH SAWCUT WITH DRILLED IN TIE BARS (AS SHOWN IN THE "TYPICAL CONCRETE ROADWAY WIDENING DETAIL" ON THIS SHEET. IF THE CONTRACTOR SO CHOOSES, THE SAWCUTTING AND TIE BARS WILL BE AT HIS OWN EXPENSE. (THESE ITEMS WILL ONLY BE PAID FOR IF HARRIS COUNTY REQUIRES THE FULL DEPTH SAWCUT AND TIE BARS).



FULL DEPTH CONCRETE PAVEMENT REPAIR
HORIZONTAL SCALE: 1" = 3'-0"
VERTICAL SCALE: 1" = 1'-6"

FULL DEPTH CONCRETE PAVEMENT REPAIR (FDCPR) NOTES:

1. SAWCUT LIMITS SHALL BE AS DIRECTED BY ENGINEER.
2. EXISTING CONCRETE VERTICAL FACES SHALL BE CLEANED OF ALL DELETERIOUS LOOSE MATERIAL PRIOR TO CONCRETE PLACEMENT.
3. FOR REPAIR/REPLACE AREAS, A 6 INCH DEPTH BASE SHALL BE REMOVED AND REPLACED WITH CEMENT STABILIZED BEDDING AND BACKFILL PER ITEM 400.
4. REINFORCEMENT FOR PAVEMENT 7" THICK AND LESS SHALL BE NO. 4 BARS AT 18" SPACING IN EACH DIRECTION. REINFORCEMENT FOR PAVEMENT GREATER THAN 7" THICK SHALL BE NO. 5 BARS AT 18" IN EACH DIRECTION.
5. ALTERNATIVELY, THE CONTRACTOR MAY CHOOSE TO USE FULL DEPTH SAWCUT WITH DRILLED IN TIE BARS (AS SHOWN ON THE "TYPICAL CONCRETE ROADWAY WIDENING DETAIL" DRAWING). IF THE CONTRACTOR SO CHOOSES, THE SAWCUTTING AND TIE BARS WILL BE AT HIS OWN EXPENSE (THESE ITEMS WILL ONLY BE PAID FOR IF HARRIS COUNTY REQUIRES THE FULL DEPTH SAWCUT AND TIE BARS).



TYPICAL PAVING HEADER
SCALE: 1" = 1'-6"

NOTES FOR PAVING HEADER:

1. ADDITIONAL CONCRETE FOR PAVING HEADER SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAVING BID ITEMS.
2. DISTURBED MATERIAL IN THE FLEXIBLE PAVEMENT WILL BE BACKFILLED WITH ASPHALT CONCRETE PAVEMENT (ACP). THE ACP WILL BE CONSIDERED INCIDENTAL TO VARIOUS PAVING BID ITEMS.

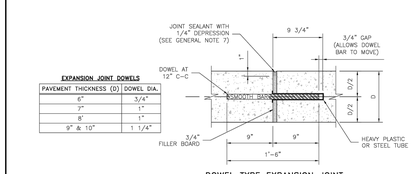
NO.	REVISIONS	DATE	NAME
1			
2			
3			
4			
5			

HARRIS COUNTY ENGINEERING DEPARTMENT

FOR INTERIM REVIEW ONLY
DOCUMENT INCOMPLETE; NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES
ENGINEER: NAME
P.E. SERIAL No.: NUMBER
DATE: / /

PROJECT TITLE:
SHEET DESCRIPTION: CONCRETE PAVEMENT DETAILS
CIVIL STANDARD: CP-13
DESIGN BY: JDZ
DRAWN BY: PDG
SCALE: AS NOTED
DATE: 10/10/23
SHEET NO.: 1 OF 2

J:\Engineering Space\HC Standard Civil Drawings- Master File\2023 Standard Civil Drawings\2-Pavement & Driveway\CP-13_23.10.10.dwg



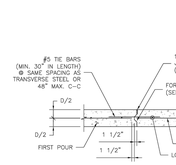
EXPANSION JOINT DOWELS

PAVEMENT THICKNESS (D)	DOWEL DIA.
6"	3/4"
7"	1"
8"	1"
9" & 10"	1 1/4"

DOWEL TYPE EXPANSION JOINT
SCALE: 1" = 1'-0"

NOTES FOR DOWEL EXPANSION JOINT:

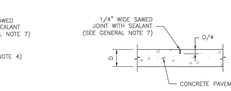
1. EXPANSION JOINT SHALL BE PLACED AT THE END OF EACH CURB RADIUS AND SPACED AT A MAXIMUM DISTANCE OF 80 FEET.
2. CENTER DOWEL HORIZONTALLY ON JOINT.
3. EXPANSION JOINT BARS SHALL BE HELD PARALLEL TO THE FINISHED CONCRETE SURFACE.



LONGITUDINAL CONSTRUCTION JOINT
SCALE: 1" = 1'-6"

NOTES FOR CONSTRUCTION JOINT:

1. SAWED JOINTS SHALL BE CLEANED IN ACCORDANCE WITH SPECIFICATION ITEM 438 "JOINT SEALANTS."
2. JOINT SEALANT SHALL FILL THE JOINT FROM BOTTOM TO 1/4" BELOW CONCRETE PAVEMENT SURFACE.



CONTRACTION JOINT (SAWED)
SCALE: 1" = 1'-6"

NOTES FOR CONTRACTION JOINT:

1. 20'-0" MAXIMUM SPACING BETWEEN TRANSVERSE CONTRACTION JOINTS.
2. SAWED JOINTS SHALL BE CLEANED IN ACCORDANCE WITH SPECIFICATION ITEM 438 "JOINT SEALANTS."
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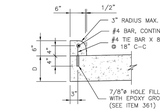
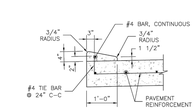


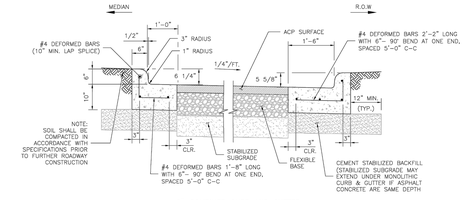
DRILLED-IN CONCRETE CURB FOR CONCRETE PAVEMENT
SCALE: 1" = 1'-0"

NOTES FOR CURB:

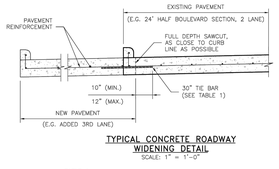
1. AT EACH PAVEMENT CONTRACTION JOINT, PROVIDE A 1/4" THICK PRE-MOLDED EXPANSION JOINT AT THE FULL WIDTH AND HEIGHT OF THE CURB.
2. FOR EACH PAVEMENT EXPANSION JOINT, THE PRE-MOLDED EXPANSION JOINT FILLER MATERIAL SHALL BE THE FULL WIDTH AND HEIGHT OF THE CURB.



4" X 12" CURB
SCALE: 1" = 1'-0"



6" COMBINED CURB AND GUTTER
SCALE: 1" = 1'-0"

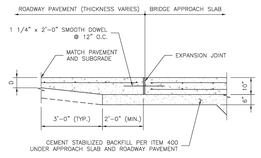


TYPICAL CONCRETE ROADWAY WIDENING DETAIL
SCALE: 1" = 1'-0"

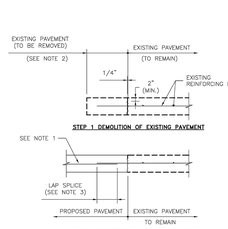
TABLE 1
(CONSTRUCTION JOINT TIE BARS)

TIE BAR SIZE	PAVEMENT DEPTH
#5 BAR	7" AND LESS
#6 BAR	GREATER THAN 7"

TIE BAR SHALL BE DRILLED INTO EXISTING PAVEMENT (MIN. 10", MAX. 12") AND EPOXIED. (SEE ITEM 361)



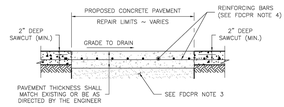
TYPICAL SECTION
PAVING TIE-IN TO BRIDGE APPROACH SLAB
SCALE: 1" = 1'-6"



CONCRETE TO CONCRETE
STANDARD PAVEMENT TIE-IN
SCALE: 1" = 1'-6"

NOTES FOR STANDARD PAVEMENT TIE-IN:

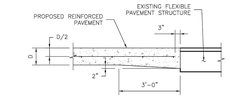
1. REINFORCING CENTERED IN PROPOSED PAVEMENT, 3" CLEAR AT EDGES.
2. SAWCUT 2" DEEP MINIMUM AND REMOVE 2'-0" EXISTING PAVEMENT OR PAVEMENT WITH CURB. EXPOSE AND CLEAN EXISTING REINFORCING.
3. 24 BAR DIAMETER LAP SPLICE OR WELD, IF DIRECTED.
4. IF NO EXPOSED REINFORCING STEEL EXISTS, HORIZONTAL TIE BARS SHALL BE GRADE 60, 30" LONG DRILLED AND EMBEDDED 15" INTO THE CENTER OF THE EXISTING CONCRETE SLAB WITH EPOXY OR APPROVED EQUAL. SIZE OF TIE BARS SHALL CONFORM TO TO TABLE 1. TIE BARS SHALL BE PLACED 24" CENTER TO CENTER.
5. ALTERNATIVELY, THE CONTRACTOR MAY CHOOSE TO USE FULL DEPTH SAWCUT WITH DRILLED IN TIE BARS (AS SHOWN IN THE "TYPICAL CONCRETE ROADWAY WIDENING DETAIL" ON THIS SHEET. IF THE CONTRACTOR SO CHOOSES, THE SAWCUTTING AND TIE BARS WILL BE AT HIS OWN EXPENSE. (THESE ITEMS WILL ONLY BE PAID FOR IF HARRIS COUNTY REQUIRES THE FULL DEPTH SAWCUT AND TIE BARS).



FULL DEPTH CONCRETE PAVEMENT REPAIR
HORIZONTAL SCALE: 1" = 3'-0"
VERTICAL SCALE: 1" = 1'-6"

FULL DEPTH CONCRETE PAVEMENT REPAIR (FDCPR) NOTES:

1. SAWCUT LIMITS SHALL BE AS DIRECTED BY ENGINEER.
2. EXISTING CONCRETE VERTICAL FACES SHALL BE CLEANED OF ALL DELETERIOUS LOOSE MATERIAL PRIOR TO CONCRETE PLACEMENT.
3. FOR REPAIR/REPLACE AREAS, A 6 INCH DEPTH BASE SHALL BE REMOVED AND REPLACED WITH CEMENT STABILIZED BEDDING AND BACKFILL PER ITEM 400.
4. REINFORCEMENT FOR PAVEMENT 7" THICK AND LESS SHALL BE NO. 4 BARS AT 18" SPACING IN EACH DIRECTION. REINFORCEMENT FOR PAVEMENT GREATER THAN 7" THICK SHALL BE NO. 5 BARS AT 18" IN EACH DIRECTION.
5. ALTERNATIVELY, THE CONTRACTOR MAY CHOOSE TO USE FULL DEPTH SAWCUT WITH DRILLED IN TIE BARS (AS SHOWN ON THE "TYPICAL CONCRETE ROADWAY WIDENING DETAIL" DRAWING). IF THE CONTRACTOR SO CHOOSES, THE SAWCUTTING AND TIE BARS WILL BE AT HIS OWN EXPENSE (THESE ITEMS WILL ONLY BE PAID FOR IF HARRIS COUNTY REQUIRES THE FULL DEPTH SAWCUT AND TIE BARS).



TYPICAL PAVING HEADER
SCALE: 1" = 1'-6"

NOTES FOR PAVING HEADER:

1. ADDITIONAL CONCRETE FOR PAVING HEADER SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAVING BID ITEMS.
2. DISTURBED MATERIAL IN THE FLEXIBLE PAVEMENT WILL BE BACKFILLED WITH ASPHALT CONCRETE PAVEMENT (ACP). THE ACP WILL BE CONSIDERED INCIDENTAL TO VARIOUS PAVING BID ITEMS.

NO.	REVISIONS	DATE	NAME
1			
2			
3			
4			
5			

HARRIS COUNTY ENGINEERING DEPARTMENT

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DOCUMENT INCOMPLETE; NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES
ENGINEER: NAME
P.E. SERIAL No.: NUMBER
DATE: / /

PROJECT TITLE:
SHEET DESCRIPTION: CONCRETE PAVEMENT DETAILS
CIVIL STANDARD: CP-24
DESIGN BY: JDZ
DRAWN BY: PDG
SCALE: AS NOTED
DATE: 10/10/23
SHEET NO.: 2 OF 2

J:\Engineering Space\HC Standard Civil Drawings- Master File\2023 Standard Civil Drawings\2-Pavement & Driveway\CP-24_23.10.10.dwg

ARCHITECT

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KLEIN ISD
KLEIN, TX

STATE OF TEXAS
RASHARD D. HARRIS
142467
LICENSED
PROFESSIONAL ENGINEER
01/27/2026

ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	KLM
Project Engineer:	RDH
Project Designer:	RDH
Drawn By:	RDH

PROJECT NO.
25-0225.00

SHEET TITLE
CONSTRUCTION DETAILT (1 OF 2)

SHEET NO.
C1.03

KISD 2025 FRP

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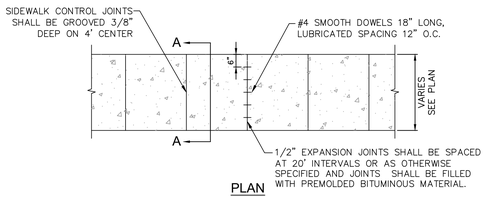
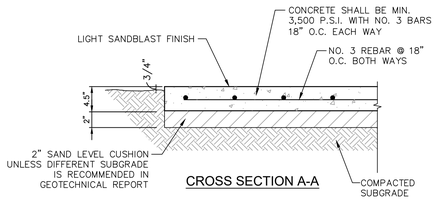


PLAN



CROSS SECTION A-A

CONCRETE SIDEWALK DETAIL

N.T.S.

VLK

ARCHITECT

VLK Architects
20445 State Hwy 249, Suite 350
Houston, Texas 77070
Main Phone: 281.671.2300
www.vlkarchitects.com

CIVIL ENGINEER

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KLEIN ISD
KLEIN, TX

STATE OF TEXAS
RASHARD D. HARRIS
142467
LICENSED
PROFESSIONAL ENGINEER
01/27/2026

ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	KLM
Project Engineer:	RDH
Project Designer:	RDH
Drawn By:	RDH

PROJECT NO.

25-0225.00

SHEET TITLE

CONSTRUCTION DETAILS (2 OF 2)

SHEET NO.

C1.04

KISD 2025 FRP

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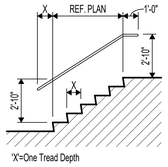
TEXAS ACCESSIBILITY STANDARDS

PROVISIONS FOR ADULTS AND CHILDREN	ADULTS AGES 13 & ABOVE	CHILDREN AGES 12 & UNDER
REACH RANGES		
UNOBSTRUCTED FRONTAL AND SIDE APPROACH	15" MIN. - 48" MAX.	16" MIN. - 44" MAX.
OBSTRUCTED FRONT APPROACH ≤ 20" D. (OPEN UNDER)	48" MAX.	44" MAX.
OBSTRUCTED FRONT APPROACH > 20" D. - 25" D. MAX (OPEN UNDER)	44" MAX.	44" MAX.
OBSTRUCTED SIDE APPROACH ≤ 10" D. - 34" H. MAX	48" MAX.	44" MAX.
OBSTRUCTED SIDE APPROACH > 10" D. - 24" D. MAX & 34" H. MAX	46" MAX.	44" MAX.
RAMPS AND STAIRS		
TOP OF HANDRAIL GRIPPING SURFACE	34" - 38"	34" - 38"
DRINKING FOUNTAINS AND WATER COOLERS		
FRONTAL APPROACH		
SPOUT HEIGHT (TO OUTLET)	36" MAX.	36" MAX.[3]
KNEE CLEARANCE	27" MIN.	27" MIN.[3]
SIDE APPROACH		
SPOUT HEIGHT (TO OUTLET)	USE FRONT APPROACH	USE FRONT APPROACH[3]
KNEE CLEARANCE		
STANDING		
SPOUT HEIGHT (TO OUTLET)	38" MIN. - 43" MAX.	38" MIN. - 43" MAX.[1]
WATER CLOSETS		
CENTERLINE TO WALL OR PARTITION	16" - 18"	12" - 18"
CENTERLINE TO WALL OR PARTITION AT AMBULATORY STALL	17" - 19"	17" - 19"
TOP OF SEAT	17" - 19"	11" - 17"
GRAB BARS (TO TOP OF GRIPPING SURFACE)	33" - 36"	18" - 27"
TOILET TISSUE DISPENSER HEIGHT	15" - 48"	14" - 19"
HAND-OPERATED FLUSH CONTROLS	44" MAX.	36" MAX.
URINALS		
RIM OF BASIN	17" MAX.	17" MAX.[1]
HAND-OPERATED FLUSH CONTROLS	48" MAX.	44" MAX.
LAVATORIES AND SINKS		
RIM OR COUNTER SURFACE	34" MAX.	31" MAX.
KNEE CLEARANCE (LAVATORIES)	27" MIN.	24" MIN.
KNEE CLEARANCE (SINKS)	27" MIN.	24" MIN.
TO FAUCET HANDLES FROM FRONT EDGE	25" MAX.[2]	25" MAX.[1,2]
MIRRORS		
TO TOP OF REFLECTING SURFACE	74" MIN.	74" MIN.
TO BOTTOM OF REFLECTING SURFACE AT LAVS & COUNTERS	40" MAX.	40" MAX.[1]
TO BOTTOM OF REFLECTING SURFACE	35" MAX.	35" MAX.[1]
CONTROLS AND OPERATING MECHANISMS		
HIGHEST OPERABLE PART		
UNOBSTRUCTED FRONTAL AND SIDE APPROACH	48" MAX.	44" MAX.
OBSTRUCTED FRONT APPROACH ≤ 20" D. (OPEN UNDER)	48" MAX.	44" MAX.
OBSTRUCTED FRONT APPROACH > 20" D. - 25" D. MAX. (OPEN UNDER)	44" MAX.	44" MAX.
OBSTRUCTED SIDE APPROACH ≤ 10" D. - 34" D. MAX. & 34" H. MAX.	48" MAX.	44" MAX.
OBSTRUCTED SIDE APPROACH > 10" D. - 24" D. MAX. & 34" H. MAX.	46" MAX.	44" MAX.
FIXED OR BUILT-IN SEATING, TABLES, & WORK STATIONS		
HEIGHT OF TABLES OR COUNTERS	28" - 34"	26" - 30"
KNEE CLEARANCES	27" MIN.	24" MIN.
DRESSING, FITTING & LOCKER ROOMS		
TOP OF BENCH	17" - 19"	17" - 19" [1]
BACK SUPPORT 18" H MIN. OR AFFIX BENCH TO WALL		
FOOD SERVICE LINES		
TOP OF TRAY SLIDE	28" - 34"	28" - 34" [1]

[1] NOTE: Dimension for Children is not specifically addressed in 2012 T.A.S.
[2] NOTE: Faucet handle location cannot be past the back of the allowable toe space, and only 6" deep toe space from the bottom portion of the provided kneespace is allowable for consideration.
[3] NOTE: Where required knee clearance is not provided, spout shall be 30" maximum a.f.f. and no greater than 3 1/2" from front edge/bumper.

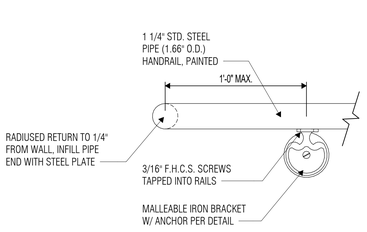
TAS NOTES

1. The dimensional ranges included for items on this sheet are the maximum and minimum dimensions allowed by the Texas Accessibility Standards (TAS). There are no tolerances allowed for these dimensions.

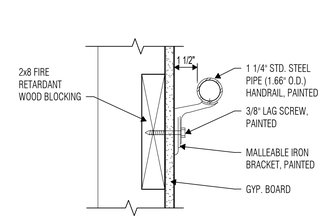


NOTES:
1. Handrails shall be continuous along both sides of stairs. The inside handrail of switchback or dogleg stairs shall always be continuous.
2. If handrails are not continuous, they shall extend at least 12" beyond the top riser and one tread depth beyond the bottom riser. At the top, extension shall be parallel with the floor or ground surface. At the bottom, the handrail shall continue to slope.
3. The clear space between the handrail and the wall shall be 1 1/2".
4. Gripping surfaces shall be continuous.
5. Ends of handrails shall be returned smoothly to floor, wall or post.
6. Handrails shall not rotate in their fittings.

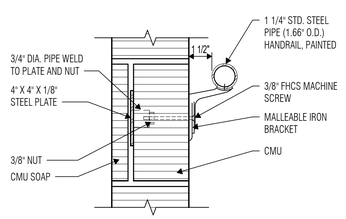
7 TYPICAL STAIR HANDRAIL ELEVATION
SCALE: 1/4" = 1'-0"



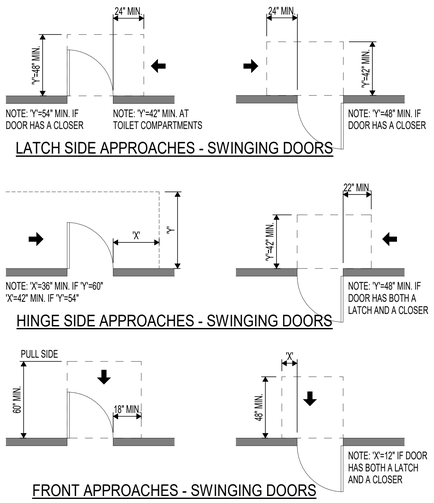
6 HANDRAIL ELEVATION
SCALE: 3" = 1'-0"



5 HANDRAIL DETAIL
STUD WALL
SCALE: 3" = 1'-0"

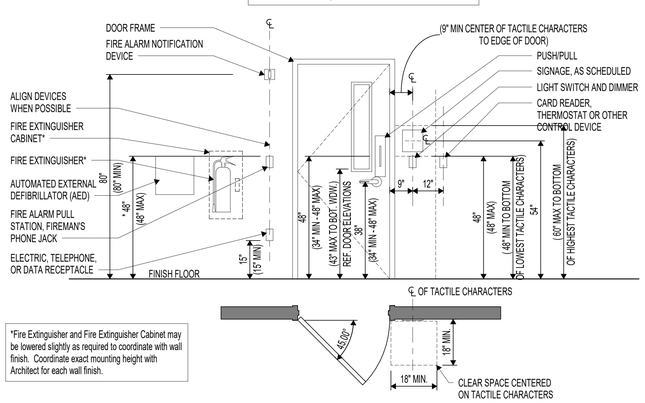


4 HANDRAIL DETAIL
CMU WALL
SCALE: 3" = 1'-0"



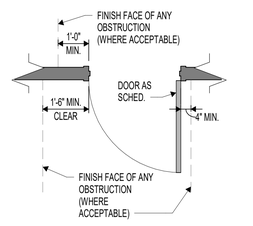
3 MINIMUM MANEUVERING CLEARANCES AT DOORS
SCALE: 1/4" = 1'-0"

NOTES:
1. All items of the same type are to be located at the same height throughout the project, unless noted otherwise. Notify Architect of any discrepancies.
2. Dimensions indicate project requirements. Dimensions in ( ) indicate maximum and/or minimum requirements per Authorities Having Jurisdiction.



*Fire Extinguisher and Fire Extinguisher Cabinet may be lowered slightly as required to coordinate with wall finish. Coordinate exact mounting height with Architect for each wall finish.

2 MISC ACCESSIBLE MOUNTING CRITERIA
SCALE: 1/2" = 1'-0"



NOTES:
1. Confirm compliance of each door clearance prior to the layout or installation of any wall, door, casework or other item which may encroach into the required clearances.
2. Refer to Floor Plans for partition types. This detail applies to all new doors and all existing doors to remain within the areas containing work as defined by the construction documents.

1 TYPICAL DOOR CLEARANCES AT HINGE & STRIKE SIDE
SCALE: 1/2" = 1'-0"

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01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
TEXAS ACCESSIBILITY STANDARDS REQUIREMENTS

SHEET NO.
A0.31

KISD 2025 FRP

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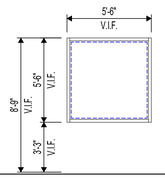
EXT. GLAZING ELEVATION NOTES

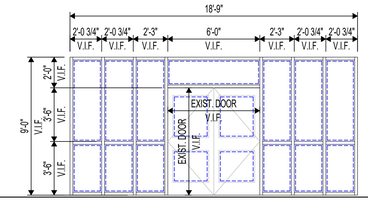
1. Verify and Document Existing Dimensions and Conditions at the Site before Beginning Construction. Notify the Architect of Conflicts or Variations prior to Commencement of Construction.
2. Dimensions on Floor Plans are to face of stud or CMU, U.N.O.
3. Provide 8" Starter Courses at all CMU walls and partitions, U.N.O.
4. Remove and Replace all Caulk and Sealant at Building Facade Joints. G.C. to Confirm Locations and Quantities.

EXT. GLAZING ELEVATION LEGEND

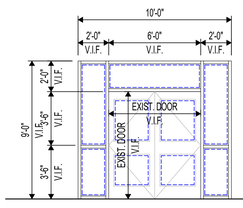
---------- REPLACE WET GLAZE SEALANT AT STOREFRONT / CURTAIN WALL SYSTEM. EXISTING GLAZING TO REMAIN.



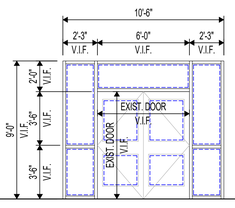
1 MCDOUGLE SEALANT - TYPE P
SCALE: 1/4" = 1'-0"



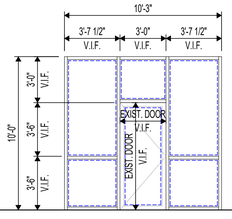
2 MCDOUGLE SEALANT - TYPE S
SCALE: 1/4" = 1'-0"



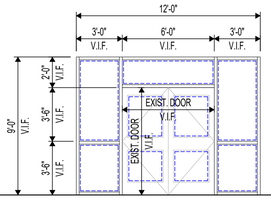
3 MCDOUGLE SEALANT - TYPE T
SCALE: 1/4" = 1'-0"



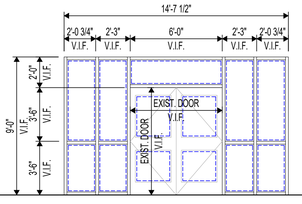
4 MCDOUGLE SEALANT - TYPE Q
SCALE: 1/4" = 1'-0"



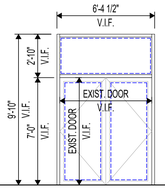
5 NITSCH SEALANT - TYPE U
SCALE: 1/4" = 1'-0"



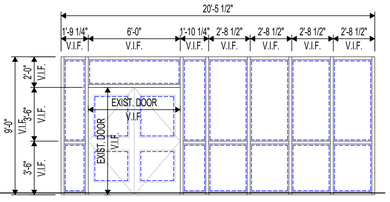
6 NITSCH SEALANT - TYPE W
SCALE: 1/4" = 1'-0"



7 GLAZING SEALANT - TYPE R
SCALE: 1/4" = 1'-0"



8 NITSCH SEALANT - TYPE V
SCALE: 1/4" = 1'-0"



9 NITSCH SEALANT - TYPE Y
SCALE: 1/4" = 1'-0"

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

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SHEET TITLE
EXTERIOR GLAZING SEALANT ELEVATIONS

SHEET NO.
A23.01

KISD 2025 FRP

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ELECTRICAL GENERAL NOTES

1 REMOVE ALL ABANDONED EQUIPMENT, WIRING AND CONDUIT.
2 DISCONNECT AND REMOVE ALL CONDUIT AND WIRE ASSOCIATED WITH HVAC EQUIPMENT BEING REMOVED.
5 THE LOCATIONS OF EXISTING CIRCUITS AND EQUIPMENT ARE SHOWN IN AN APPROXIMATE WAY ONLY & HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING ELECTRICAL DEVICES, EQUIPMENT & WIRING BEFORE COMMENCING WORK & AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTORS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING PORTIONS OF THE ELECTRICAL SYSTEM.
6 THE CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.
7 ALL EQUIPMENT REMOVED THAT IS NOT BEING REUSED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE STORED OR DISPOSED OF AS DIRECTED.
8 EXCEPT AS OTHERWISE NOTED, ALL EXISTING ELECTRICAL WORK WHICH WILL NOT BE RENDERED OBSOLETE & WHICH MAY BE DISTURBED DUE TO ANY CHANGES REQUIRED UNDER THIS CONTRACT, SHALL BE RESTORED TO ITS ORIGINAL OPERATING CONDITION. OTHER ELECTRICAL WORK OR MATERIAL RENDERED OBSOLETE SHALL BE ABANDONED WHERE CONCEALED AND REMOVED WHERE EXPOSED. OLD UNUSED WIRING AND DEVICES SHALL BE REMOVED FROM THE ABANDONED (CONCEALED) CONDUITS. OUTLETS SHALL BE PROVIDED WITH BLANK COVERS. ANY CONDUITS OUT OF MASONRY SURFACE SHALL BE CUT INTO SURFACE AND PATCHED.
9 WHERE EXISTING ELECTRICAL WORK INTERFERES WITH NEW WORK AND WHERE SUCH INSTALLATIONS ARE TO REMAIN IN USE, THE INSTALLATIONS SHALL BE DISCONTINUED AND RELOCATED AND/OR RECONNECTED TO COORDINATE WITH THE WORK INDICATED ON THE CONTRACT DRAWINGS AND AS SPECIFIED.
10 WHERE EXISTING RACEWAYS THAT ARE NOT TO BE REUSED INTERFERE WITH NEW WORK, THESE RACEWAYS SHALL BE REMOVED BACK TO THE NEAREST JUNCTION BOX OR PULL BOX AND THE OPENINGS COVERED.
11 EXISTING RACEWAYS AND/OR WIRING MAY BE REUSED WHERE PRACTICABLE. EXCEPT AS OTHERWISE INDICATED.
12 CONTRACTOR SHALL MAINTAIN CONTINUITY OF BRANCH CIRCUITS SERVING MULTIPLE ITEMS OF WHICH ONE OR MORE ARE BEING DEMOLISHED. CONDUCTORS AND CONDUITS FOR THOSE ITEMS BEING DEMOLISHED SHALL BE REMOVED AS FAR AS PRACTICABLE.
13 IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REMOVE ALL EXISTING ELECTRICAL EQUIPMENT NOT REUSED OR NOT NECESSARY FOR THE COMPLETION OF THIS PROJECT.
14 IF ANY BRANCH CIRCUIT WIRING FEEDING EQUIPMENT TO REMAIN IN PLACE FOR REUSE IS DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE WITH NEW BRANCH CIRCUIT WIRING OF THE SAME SIZE AND TYPE AS EXISTING AT NO COST TO THE OWNER.

CONTACTOR SCHEDULE

CONTACTOR TAG	CIRCUIT NUMBER	CONTROL SOURCE	CONTACTOR LOCATION	LOAD(S) SERVED	120 V CONTROL CIRCUIT
C-MS1	BL1-49,51	BMCS	ADJACENT TO PANEL 'BL1'	MARQUEE SIGN	(E)CONTACTOR CONTROL CIRCUIT

1. CONTRACTOR TO COORDINATE EXACT PROGRAMING OF TIME-SCHEDULE WITH OWNER REPRESENTATIVE.

LIGHTING CONTROLS SCHEDULE

Type	Sensor Operation	# of Lighting Zones	# of Plug Load Zones	# of Total Zones	Description
ER	-	-	-	-	LISTED UL924 EMERGENCY LOAD CONTROL RELAY, PLENUM RATED, 0-10V COMPATIBLE, 16A MINIMUM
RA	NONE	1	-	1	MEPT, ON/OFF SPRING WOUND MECHANICAL TIME SWITCH, 20 AMP, 12-HOUR WITH HOLD. WHERE MULTIPLE SWITCHES ARE USED, THESE SHALL BE LINKED TOGETHER FOR SIMULTANEOUS OPERATION WITHIN THE SPACE.
RB	VACANCY - MANUAL ON / AUTO OFF 20 MINUTES TIMEOUT	1	-	1	ON/OFF SWITCH; NO DIMMING.

1 PER IECC-2015, SECTION C405, AREAS / ROOMS WHERE AUTOMATIC SHUTOFF FOR LIGHTING WOULD ENDANGER OCCUPANT SAFETY ARE EXEMPT FROM AUTOMATIC CONTROLS.
2 PROVIDE PHOTOCELL WITHIN DAYLIGHT ZONE ONLY WHERE SHOWN ON FLOORPLANS. IF SHOWN, A DAYLIGHT ZONE SHALL BE ADDED TO THE TOTAL NUMBER OF ZONES ON LIGHTING CONTROLS SCHEDULE.
4 CONTRACTOR TO COORDINATE EXACT PROGRAMING OF TIME-SCHEDULE WITH OWNER REPRESENTATIVE.

SITE LIGHTING FIXTURE SCHEDULE

Type Mark	CATALOG NUMBER MANUFACTURER	MODEL	MOUNTING	LAMP TYPE	CCT	CRI	VOLTAGE	LOAD	REMARKS
EPA	GARDCO	ECF-S-48L-1-2A-NW-G2-AR-2-UNV-XX / PTFX-1-90-XX	EXISTING POLE 1 @ 90	22,647 LUMENS LED	4000 K	80	277	183 W	TYPE II, LED AREA LUMINAIRE ON EXISTING POLE, BUG RATING B3-U0-G3. DLC CERTIFIED. PROVIDE ALL ACCESSORIES FOR MOUNTING ON EXISTING POLE WITH TENON.
EPB	GARDCO	ECF-S-48L-1-2A-NW-G2-AR-3-UNV-XX / HIS-48-H / PTFX-1-90-XX	EXISTING POLE 1 @ 90	22,156 LUMENS LED	4000 K	80	277	183 W	TYPE III WITH BACK-LIGHT CONTROL, LED AREA LUMINAIRE ON EXISTING POLE, BUG RATING B1-U0-G3. DLC CERTIFIED. PROVIDE ALL ACCESSORIES FOR MOUNTING ON EXISTING POLE WITH TENON.
EPC	GARDCO	ECF-S-48L-1-2A-NW-G2-AR-5W-UNV-XX / PTFX-1-90-XX	EXISTING POLE 1 @ 90	23,040 LUMENS LED	4000 K	80	277	183 W	TYPE V, LED AREA LUMINAIRE ON EXISTING POLE, BUG RATING B5-U0-G3. DLC CERTIFIED. PROVIDE ALL ACCESSORIES FOR MOUNTING ON EXISTING POLE WITH TENON.
EPD	GARDCO	ECF-S-48L-1-2A-NW-G2-AR-5W-UNV-XX / PTFX-2-180-XX	EXISTING POLE 2 @ 180	23,040 LUMENS LED	4000 K	80	277	366 W	TYPE V, LED AREA LUMINAIRE ON EXISTING POLE, BUG RATING B5-U0-G3. DLC CERTIFIED. PROVIDE ALL ACCESSORIES FOR MOUNTING ON EXISTING POLE WITH TENON.
EPE	GARDCO	ECF-S-48L-1-2A-NW-G2-AR-2-UNV-XX	EXISTING POLE 1 @ 90	22,647 LUMENS LED	4000 K	80	277	183 W	TYPE II, LED AREA LUMINAIRE ON EXISTING POLE, BUG RATING B3-U0-G3. DLC CERTIFIED. PROVIDE ALL ACCESSORIES FOR MOUNTING ON EXISTING POLE.
EPF	GARDCO	ECF-S-48L-1-2A-NW-G2-AR-3-UNV-XX	EXISTING POLE 2 @ 180	22,156 LUMENS LED	4000 K	80	277	366 W	TYPE III, LED AREA LUMINAIRE ON EXISTING POLE, BUG RATING B3-U0-G4. DLC CERTIFIED. PROVIDE ALL ACCESSORIES FOR MOUNTING ON EXISTING POLE.
EPG	GARDCO	ECF-S-48L-1-2A-NW-G2-AR-5W-UNV-XX	EXISTING POLE 1 @ 90	23,040 LUMENS LED	4000 K	80	277	183 W	TYPE V, LED AREA LUMINAIRE ON EXISTING POLE, BUG RATING B3-U0-G4. DLC CERTIFIED. PROVIDE ALL ACCESSORIES FOR MOUNTING ON EXISTING POLE.
NPA	GARDCO KW INDUSTRIES	ECF-S-48L-1-2A-NW-G2-AR-3-UNV-XX / HIS-48-H RTSP-30-7.0-11-KZXX-DM10-BC	NEW POLE 1 @ 90	22,156 LUMENS LED	4000 K	80	277	183 W	TYPE III WITH BACK-LIGHT CONTROL, BUG RATING B1-U0-G3. MOUNT ON 30-FEET POWDER COAT OVER GALVANIZING POLE. DLC CERTIFIED.
NPB	GARDCO KW INDUSTRIES	ECF-S-48L-1-2A-NW-G2-AR-3-UNV-XX RTSP-30-7.0-11-KZXX-DM2180-BC	NEW POLE 2 @ 180	22,156 LUMENS LED	4000 K	80	277	366 W	TYPE III LED AREA LUMINAIRE, BUG RATING B3-U0-G4. MOUNT ON 30-FEET POWDER COAT OVER GALVANIZING POLE. DLC CERTIFIED.
NPC	GARDCO KW INDUSTRIES	ECF-S-48L-1-2A-NW-G2-AR-5W-UNV-XX RTSP-30-7.0-11-KZXX-DM2180-BC	NEW POLE 2 @ 180	23,040 LUMENS LED	4000 K	80	277	366 W	TYPE V LED AREA LUMINAIRE, BUG RATING B5-U0-G3. MOUNT ON 30-FEET POWDER COAT OVER GALVANIZING POLE. DLC CERTIFIED.

1 UNLESS OTHERWISE INDICATED ON THE SCHEDULE ABOVE, THE ARCHITECT/OWNER REPRESENTATIVE SHALL SELECT ALL FINISHES, COLORS, AND TRIMS.
2 LIGHTING FIXTURE CATALOG NUMBERS AND DESCRIPTIONS ARE SCHEDULED FOR ESTABLISHING QUALITY, APPEARANCE AND PERFORMANCE OF THE FIXTURES AS REQUIRED BY THE DESIGN. EXACT CATALOG NUMBERS DESCRIBING MOUNTING CONDITIONS, FINISHES AND REQUIREMENTS RELATED TO TRIMS AND LENS FOR ALL FIXTURES SHALL BE CONFIRMED (BY THE CONTRACTOR) WITH THE ROOM FINISH SCHEDULE AND REFLECTED CEILING PLANS, INCLUDING GRID TYPES, ON THE ARCHITECTURAL DRAWINGS PRIOR TO BIDDING. FIXTURES SHALL BE SUBMITTED ACCORDING TO THE CONDITIONS INDICATED ON THE ARCHITECTURAL PLANS. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
3 REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS NOT INDICATED IN THE LIGHTING FIXTURE SCHEDULE. WHERE THERE IS AN INCONSISTENCY BETWEEN THE LIGHTING FIXTURE SCHEDULE AND THE SPECIFICATIONS, THE GREATER QUANTITY OR HIGHER QUALITY OF WORK SHALL BE INCLUDED IN THE PROPOSAL.
4 THE LIGHT FIXTURES SCHEDULED ARE THE BASIS OF DESIGN. IT IS NOT INTENDED TO LIMIT COMPETITION FROM EQUAL MANUFACTURERS. ALL BIDDERS SHALL SUBMIT THEIR PROPOSED LIGHT FIXTURES IN SUBMITTAL FORM A MINIMUM OF 10 BUSINESS DAYS PRIOR TO BID DATE FOR REVIEW. APPROVED LIGHT FIXTURES WILL BE ISSUED IN AN ADDENDUM.
5 THE CONTRACTOR SHALL PROVIDE ALL HARDWARE AND ACCESSORIES AS REQUIRED TO INSTALL FIXTURES IN LOCATIONS AS ILLUSTRATED WITH MOUNTING METHODS DESIRED.
6 WHEN A UNIVERSAL (120-277V) VOLTAGE OPTION IS AVAILABLE, IT SHALL BE PROVIDED. OTHERWISE PROVIDE AS INDICATED IN SCHEDULE.
7 FOR ALL SUSPENDED FIXTURES, COORDINATE THE EXACT MOUNTING ELEVATION ABOVE FINISHED FLOOR WITH ARCHITECT PRIOR TO INSTALLATION. PROVIDE SUSPENSION HARDWARE IN LENGTHS AS REQUIRED.

LIGHTING FIXTURE SCHEDULE

Type Mark	CATALOG NUMBER MANUFACTURER	MODEL	MOUNTING	LAMP TYPE	CCT	CRI	VOLTAGE	LOAD	REMARKS
C1	DAY-BRITE	FSS-4-40L-840-UNV-DIM / FSSWG4	SURFACE / THREADED ROD	4,077 LUMENS LED	4000 K	80	277	30 W	LED 4-FEET STRIP, OPAL ACRYLIC LENS. 0-10V DIMMING DRIVER. DLC CERTIFIED. PROVIDE WITH WIREGUARD.
W1	GARDCO	GWM-A08-740-T3M-UNV-XX	WALL	4,716 LUMENS LED	4000 K	80	277	30 W	LED ARCHITECTURAL WALLPACK, ALUMINUM BODY, FULL CUT-OFF, WET LOCATION RATED. DLC CERTIFIED.
W2	GARDCO	GWM-A06-740-T3M-UNV-XX	WALL	2,968 LUMENS LED	4000 K	80	277	16 W	LED ARCHITECTURAL WALLPACK, ALUMINUM BODY, FULL CUT-OFF, WET LOCATION RATED. DLC CERTIFIED.
W3	KENALL	MR17FL-PP-XX-15L40K-DV	SURFACE	2,125 LUMENS LED	4000 K	80	277	15 W	LED ARCHITECTURAL 15-INCH ROUND FIXTURE. ALUMINUM BODY.
W4	KENALL	MR13FL-PP-XX-20L40K-DV	SURFACE	2,250 LUMENS LED	4000 K	80	277	20 W	LED ARCHITECTURAL 13-INCH ROUND FIXTURE, ALUMINUM BODY.
WC4	AXIS	EX4S-400-80-40-SO-4-XX-UNV-DP-1-SB / EF	SURFACE / AVADEK	400 L/FT LED	4000 K	80	277	20 W	4-INCH x 4-FEET LINEAR LED IN EXTRUDED ALUMINUM PROFILE WITH OPAL ACRYLIC LENS AND END FEED CONNECTION. WET LOCATION RATED. 0-10V DIMMING DRIVER. DLC CERTIFIED. PROVIDE SURFACE MOUNTING BRACKETS AND TIGHT SEAL ALL CANOPY PENETRATIONS.
WQ1	KENALL	MS15FL-PP-XX-15L40K-DV	SURFACE	2,222 LUMENS LED	4000 K	80	277	15 W	LED ARCHITECTURAL 15-INCH SURFACE FIXTURE, ALUMINUM BODY.

1 UNLESS OTHERWISE INDICATED ON THE SCHEDULE ABOVE, THE ARCHITECT/OWNER REPRESENTATIVE SHALL SELECT ALL FINISHES, COLORS, AND TRIMS.
2 LIGHTING FIXTURE CATALOG NUMBERS AND DESCRIPTIONS ARE SCHEDULED FOR ESTABLISHING QUALITY, APPEARANCE AND PERFORMANCE OF THE FIXTURES AS REQUIRED BY THE DESIGN. EXACT CATALOG NUMBERS DESCRIBING MOUNTING CONDITIONS, FINISHES AND REQUIREMENTS RELATED TO TRIMS AND LENS FOR ALL FIXTURES SHALL BE CONFIRMED (BY THE CONTRACTOR) WITH THE ROOM FINISH SCHEDULE AND REFLECTED CEILING PLANS, INCLUDING GRID TYPES, ON THE ARCHITECTURAL DRAWINGS PRIOR TO BIDDING. FIXTURES SHALL BE SUBMITTED ACCORDING TO THE CONDITIONS INDICATED ON THE ARCHITECTURAL PLANS. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
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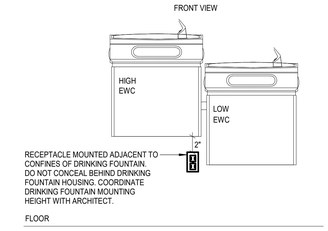
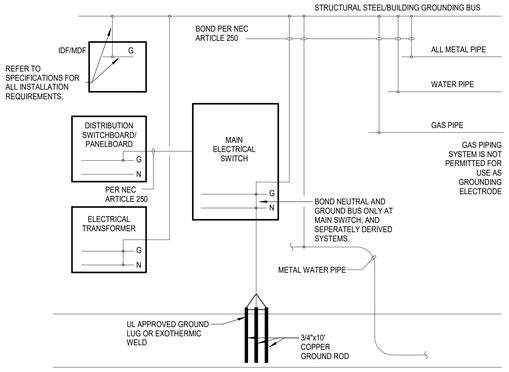
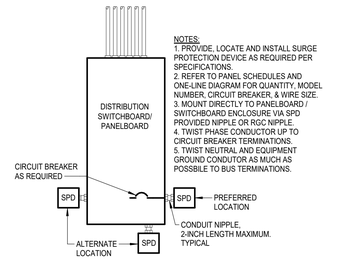


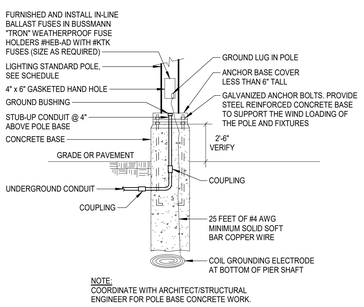
3 DRINKING FOUNTAIN WITH GFCI RECEPTACLE
Scale: NOT TO SCALE



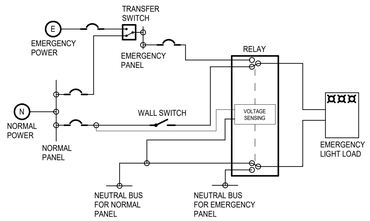
2 SYSTEM GROUNDING
Scale: NOT TO SCALE



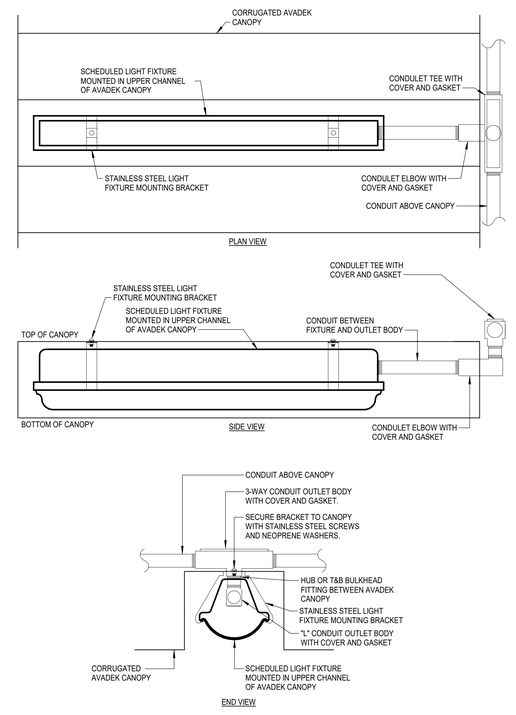
6 SURGE PROTECTION DEVICE
Scale: NOT TO SCALE



5 ELECTRICAL REQUIREMENTS AT POLE BASE
Scale: NOT TO SCALE



4 EMERGENCY LIGHTING LOAD CONTROL RELAY
Scale: NOT TO SCALE



1 AVADEK LIGHT FIXTURE MOUNTING
Scale: NOT TO SCALE

SYMBOL SCHEDULE

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
LIGHTING (LETTER DENOTES TYPE - SEE LIGHT FIXTURE SCHEDULE)	
	LIGHT FIXTURE
	DOWNLIGHT FIXTURE
	LIGHT FIXTURE - WALL MOUNTED
	FIXTURE ON EMERGENCY CIRCUIT
	DOWNLIGHT FIXTURE ON EMERGENCY CIRCUIT
	LIGHT FIXTURE - WALL MOUNTED ON EMERGENCY CIRCUIT
	EXIT LIGHT - UNIVERSAL MOUNTING WITH DIRECTIONAL ARROWS AS REQUIRED
	EXIT LIGHT - WALL MOUNTING WITH DIRECTIONAL ARROWS AS REQUIRED
SWITCHES	
$	LINE VOLTAGE SINGLE POLE SWITCH
$2	LINE VOLTAGE 2-POLE SWITCH
$3	LINE VOLTAGE 3-WAY SWITCH
$4	LINE VOLTAGE 4-WAY SWITCH
$K	LINE VOLTAGE KEYED SWITCH
$3K	LINE VOLTAGE KEYED 3-WAY SWITCH
$D	LINE VOLTAGE WALL DIMMER SWITCH, SIZE AND TYPE AS REQUIRED
$VD	LINE VOLTAGE WALL MOUNTED 0-10V DIMMER SWITCH WITH VACANCY SENSOR. MANUAL ON / AUTO OFF
$V	LINE VOLTAGE WALL MOUNTED SWITCH WITH VACANCY SENSOR. MANUAL ON / AUTO OFF
$OC	LINE VOLTAGE WALL MOUNTED SWITCH WITH OCCUPANCY SENSOR. AUTO ON / AUTO OFF
$OD	LINE VOLTAGE WALL MOUNTED 0-10V DIMMER SWITCH WITH OCCUPANCY SENSOR. AUTO ON / AUTO OFF
$P	LINE VOLTAGE SWITCH WITH PILOT LIGHT
$MC	MOMENTARY CONTACT SWITCH
	PUSH BUTTON
$T	SPRING WOUND MECHANICAL TIME SWITCH, 20 AMP, 12-HOUR NO HOLD, UNLESS NOTED OTHERWISE
$TH	SPRING WOUND MECHANICAL TIME SWITCH, 20 AMP, 12-HOUR WITH HOLD, UNLESS NOTED OTHERWISE
LIGHTING CONTROLS	
$L	LINE VOLTAGE LIGHTING CONTROLLER WALL SWITCH
$R	LOW VOLTAGE LIGHTING CONTROLLER WALL SWITCH
$B	LOCAL BMCS LIGHTING OVERRIDE SWITCH
	CEILING MOUNTED PHOTO SENSOR. HB= HIGH-BAY SENSOR
	CEILING MOUNTED VACANCY SENSOR, MANUAL ON / AUTO OFF. HB= HIGH-BAY SENSOR
	CEILING MOUNTED OCCUPANCY SENSOR, AUTO ON TO 100% / AUTO OFF. HB= HIGH-BAY SENSOR
RX	LIGHTING CONTROLLER. X= DENOTES CONTROL SEQUENCE, REFER TO CONTROL SCHEDULE
ER	LISTED UL924, EMERGENCY LOAD CONTROL RELAY, 0-10V DIMMING COMPATIBLE
ES	LISTED UL1008 EMERGENCY TRANSFER SWITCH, 0-10V DIMMING COMPATIBLE
RECEPTACLES AND OUTLETS	
	SIMPLEX RECEPTACLE
	DUPLEX RECEPTACLE
	POWER POLE
	125/250 VOLT, 1 PHASE, 3-WIRE, 20 AMPS, UNLESS NOTED OTHERWISE
	DOUBLE DUPLEX IN 2-GANG BOX WITH SINGLE COVER PLATE
	DOUBLE DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE IN 2-GANG BOX WITH SINGLE COVER PLATE
	DUPLEX GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE
	CONCEALED SERVICE FLOOR BOX, DUPLEX RECEPTACLE OUTLET
	CONCEALED SERVICE FLOOR BOX, DOUBLE DUPLEX RECEPTACLE OUTLET
	CONCEALED SERVICE MULTI-ACCESS FLOOR BOX WITH WIRING DEVICES AS INDICATED ON DRAWINGS. SIZE TO MATCH DEVICE QUANTITIES
MISCELLANEOUS EQUIPMENT	
FACP	FIRE ALARM CONTROL PANEL
ANNC	FIRE ALARM REMOTE ANNUCIATOR
T	TRANSFORMER FOR DOOR BELL/BUZZER
	CHIME/BUZZER
G	REMOTE BLANK FACE GFCI DEVICE
MOTOR CONTROLLERS AND EQUIPMENT	
	MOTOR, MAKE FINAL MOTOR CONNECTION
	DISCONNECT SWITCH AS REQUIRED
	COMBINATION MOTOR STARTER/DISCONNECT SWITCH AS REQUIRED
	MOTOR STARTER AS REQUIRED
	PREWIRED DEVICE, MAKE ELECTRICAL FINAL CONNECTIONS
	VARIABLE FREQUENCY DRIVE MOTOR CONTROLLER FURNISHED BY DIVISION 23, INSTALLED BY DIVISION 26
ELECTRICAL EQUIPMENT	
	ELECTRICAL DISTRIBUTION OR PANELBOARD
	DRY TYPE TRANSFORMER
CIRCUITING	
	CONDUIT
	CONDUIT BELOW FLOOR, SLAB, OR GRADE
	3/4"C, UNLESS OTHERWISE NOTED; LONG HATCH, NEUTRAL; SHORT HATCH, PHASE; "Z" HATCH OR HOOK, GROUND. ARROW INDICATES HOMERUN
SUBSCRIPTS AND ABBREVIATIONS	
WP	INDICATES WEATHERPROOF
WG	INDICATES WIREGUARD
H	INDICATES HORIZONTAL
TL	INDICATES TWIST LOCK
NL	LIGHT FIXTURE ON NIGHT LIGHT CIRCUIT
(E)	INDICATES EXISTING TO REMAIN
REP	INDICATES REPLACE EXISTING WITH NEW
1L	REFER TO ONE-LINE DIAGRAM
	INDICATES WALL MOUNTED DEVICE
U	INDICATES TO PROVIDE COMBINATION USB/RECEPTACLE DEVICE
SR	SWITCH CONTROLLED RECEPTACLE. RECEPTACLE SHALL BE PERMANENTLY FACTORY MARKED AS CONTROLLED.
SPDX	X = L LOW EXPOSURE SPD; X = M MEDIUM EXPOSURE SPD; X = H HIGH EXPOSURE SPD; X = SEL VERY HIGH EXPOSURE SPD.
•	NEXT TO ANY SYMBOL INDICATES FINAL ROUGH-IN FIELD COORDINATION BY CONTRACTOR WITH ARCHITECTURAL MILLWORK DRAWINGS AND OTHER TRADES

GENERAL NOTES:
-ALL EXTERIOR BUILDING ELECTRICAL EQUIPMENT TO BE WEATHERPROOF NEMA-4X MINIMUM.

BRADLEY KALMANS 128256 LICENSED PROFESSIONAL ENGINEER
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director: MR
Designed By: LT
Checked By: PS
Drawn By: LT

PROJECT NO.
25-0225.00

SHEET TITLE
ELECTRICAL DETAILS AND SCHEDULES

SHEET NO.
E01.01

KISD 2025 FRP

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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#	LOUD SPEAKER, CEILING MOUNTED - # 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
CB	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	360 DEG MOTION DETECTOR (CEILING)
MD	MOTION DETECTOR (WALL)
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
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AC	ABOVE COUNTER
EC	ELECTRICAL CONTRACTOR
UNO	UNLESS NOTED OTHERWISE
ACS	ACCESS CONTROL SYSTEM
VSS	VIDEO SURVEILLANCE SYSTEM

TECHNOLOGY SHEET INDEX

SHEET NUMBER	SHEET NAME
T000	TECHNOLOGY - INDEX SHEET
T101.1	TECHNOLOGY - EILAND LEVEL ONE
T101.2	TECHNOLOGY - EILAND LEVEL TWO
T102.1	TECHNOLOGY - KAISER LEVEL ONE
T103.1	TECHNOLOGY - KLEINK LEVEL ONE
T104.1	TECHNOLOGY - MCDOUGLE LEVEL ONE
T106.1	TECHNOLOGY - NITSCH LEVEL ONE
T400	TECHNOLOGY - ENLARGEMENTS
T500	TECHNOLOGY - DETAILS
T501	TECHNOLOGY - DETAILS
T502	TECHNOLOGY - DETAILS
T601	TECHNOLOGY - SECURITY DETAILS
T700	TECHNOLOGY - AV DETAILS

TECHNOLOGY - GENERAL NOTES

1. EXISTING PA SYSTEM HEAD END, SPEAKERS, AND WIRING TO BE DEMOLISHED IN ENTIRETY.
2. SPEAKERS IN CLASSROOMS TO HAVE TALK-BACK FUNCTIONALITY AND SHALL BE IP- SPEAKERS. ONLY SPED CLASROOMS SHALL HAVE VOLUME CONTROLS AND CALL BUTTONS.
3. SPEAKERS IN NON-CLASSROOM ENVIRONMENTS SHALL BE ANALOG SPEAKERS, WITH ONLY OFFICES AND CONFERENCE ROOMS RECEIVING VOLUME CONTROLS.

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 *#-## PTZ — Proposed Camera Direction; PTZ CAMERA
- C *#-## — Proposed Camera Direction; FIXED SURVEILLANCE CAMERA
- C — 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA
- ##° #mm — Approximate view of lens; Lens View Angle; 360°/MULTI-SENSOR FIXED SURVEILLANCE CAMERA OR FISHEYE LENS CAMERA; Lens size
- C LD — MICROPHONE WITH AUDIO LINKED TO CAMERA
- C CR — CARD READER WITH AUDIO 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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KLEIN ISD
KLEIN, TX

Bicsi — Registered Communications Distribution Designer — Brian C Porter — BICSI ID # 256657 — EXPIRES 12-31-27 — RCDD

ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director: Proj. Director
Project Architect: VLK
Project Designer: Designer
Drawn By: BRL

PROJECT NO.

25-0225.00

SHEET TITLE

TECHNOLOGY - INDEX SHEET

SHEET NO.

T000

KISD 2025 FRP

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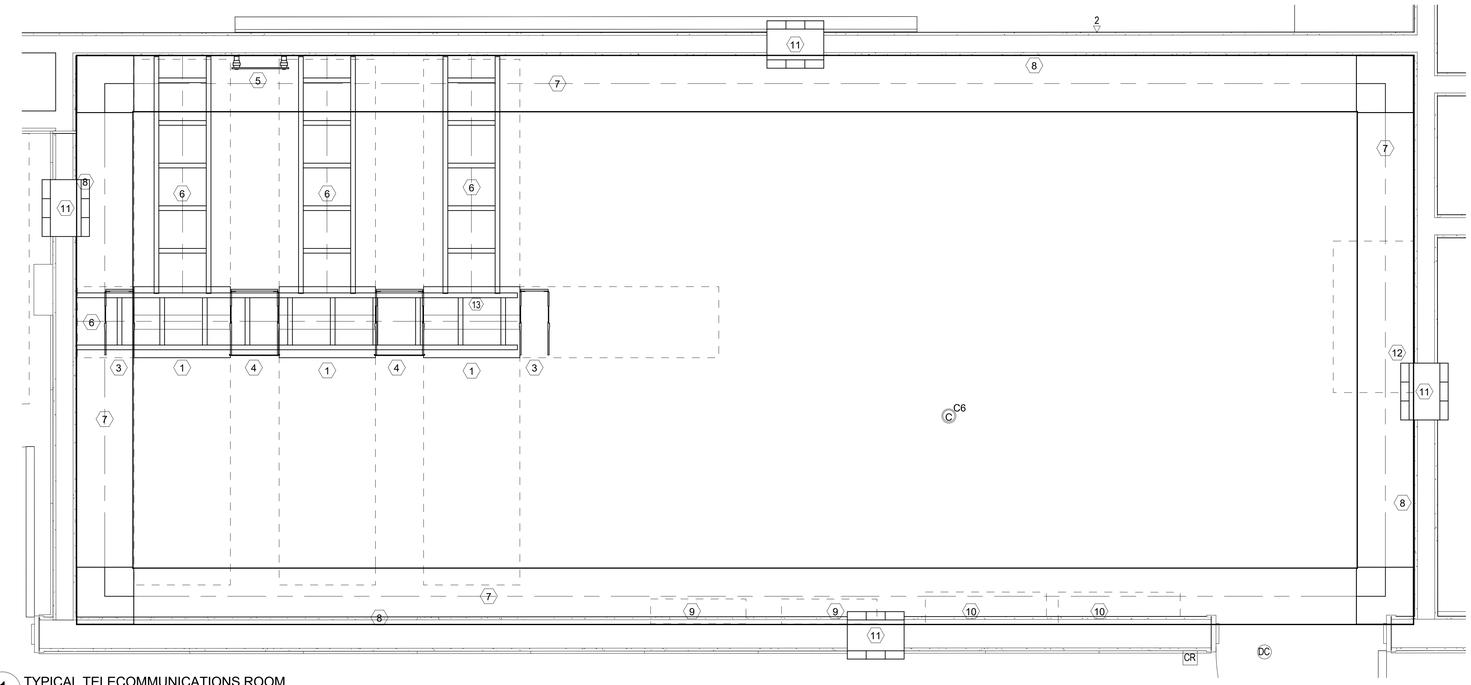

1 TYPICAL TELECOMMUNICATIONS ROOM
SCALE: NTS

ENLARGEMENT KEYNOTES

1. 2-POST RACK, SECURED TO FLOOR WITH EXPANSION ANCHORS, FIRST RACK SHALL BE 6" FROM WALL, IF VERTICAL WIRE PRESENT BETWEEN RACK AND WALL THEN VERTICAL WIRE MANAGER ATTACHED TO WALL SIDE OF RACK SHALL BE 6" FROM WALL. (TYPICAL)
2. 4-POST RACK, SECURED TO FLOOR WITH EXPANSION ANCHORS, FIRST RACK SHALL BE 6" FROM WALL, IF VERTICAL WIRE PRESENT BETWEEN RACK AND WALL THEN VERTICAL WIRE MANAGER ATTACHED TO WALL SIDE OF RACK SHALL BE 6" FROM WALL. (TYPICAL)
3. 6" VERTICAL WIRE MANAGER SECURED TO SIDE OF RACK (TYPICAL)
4. 10" VERTICAL WIRE MANAGER SECURED TO SIDE OF RACK (TYPICAL)
5. GROUND BUS BAR, MOUNTED 6' AFF, ELECTRON PLATED AND PREDRILLED TO ACCEPT STANDARD TWO-HOLE LUGS.
6. 18"x2" LADDER RACK SECURED TO TOP OF RACK WITH LADDER RACK MOUNTING PLATE AND BOLTED TO WALL, WITH WATER FALLS INTO VERTICAL WIRE MANAGERS (TYPICAL)
7. 12"x4" CABLE TRAY (BASKET STYLE) WITH 6" CLEARANCE FROM WALL (TYPICAL)
8. 3/4" FIRED RATED PLYWOOD SECURED TO WALL AT 22" AFF. IF THE PLYWOOD IS PAINTED, THE PAINT SHALL BE FIRE RETARDANT PAINT ON BOTH SIDES AND THE RATING STAMP ON THE PLYWOOD SHALL BE EXPOSED.
9. SPACE RESERVED FOR INTRUSION DETECTION SYSTEM.
10. SPACE RESERVED FOR ACCESS CONTROL SYSTEM.
11. FIRESTOP SLEEVES, STI EZPATH OR HILTI SPEED SLEEVES.
12. SPACE RESERVED FOR HVAC UNIT.
13. THIS RACK IS DEDICATED FOR PUBLIC ADDRESS SYSTEM.

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TRUENORTH A PMY COMPANY

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KLEIN, TX

BICSI REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Brian C Porter
BICSI ID # 256557
EXPIRES 12-31-27

ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	Proj. Director
Project Architect:	VLK
Project Designer:	Designer
Drawn By:	Author

PROJECT NO.
25-0225.00

SHEET TITLE
TECHNOLOGY - ENLARGEMENTS

SHEET NO.
T400

KISD 2025 FRP

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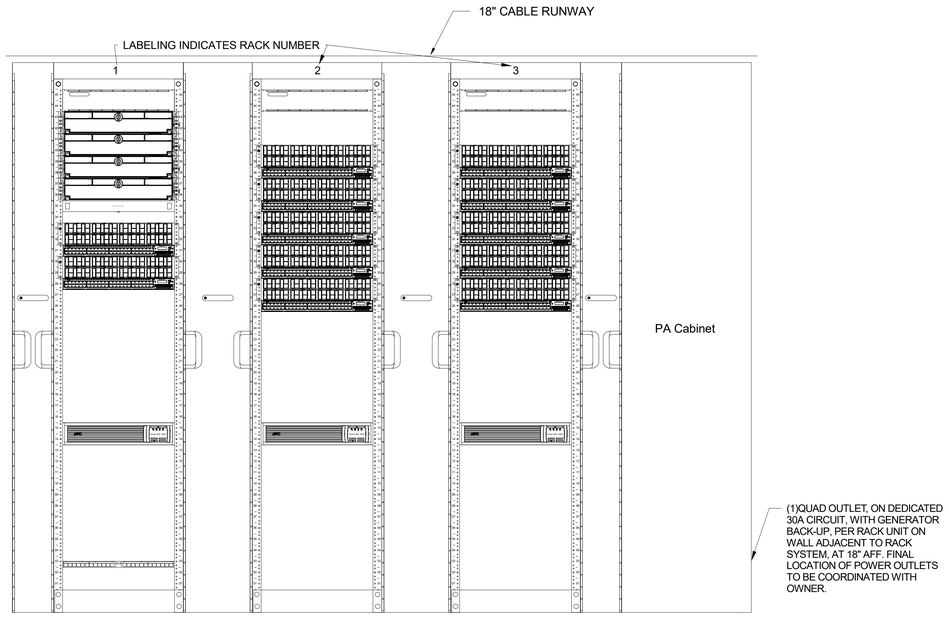
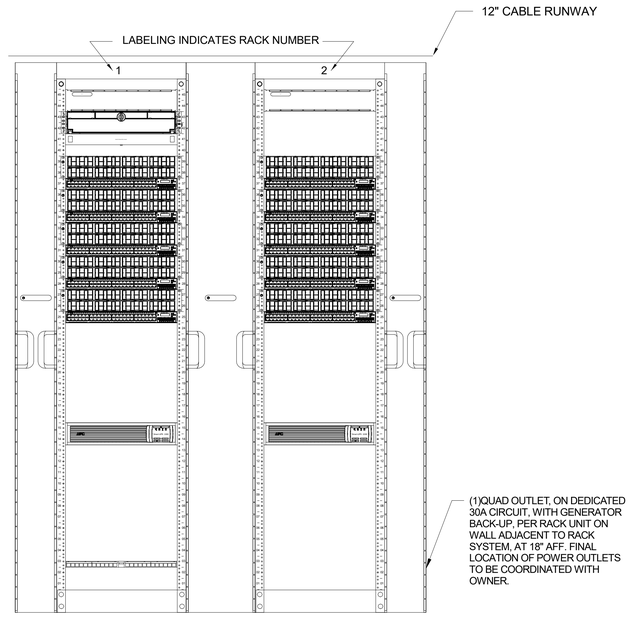


1 TYPICAL MDF RACK ELEVATION
SCALE: NTS

RACK ELEVATIONS ARE PROVIDED AS A MEANS FOR CONTRACTOR REQUIREMENTS; REFERENCE SPECIFICATIONS. REFER TO ACTUAL SITE CONDITIONS AND HARDWARE.
CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED RACK HARDWARE AND ACCESSORIES.
COORDINATE EXACT RACK ELEVATIONS WITH OWNER PRIOR TO INSTALLING DEVICES OR TERMINATING FIBER.



2 TYPICAL IDF RACK ELEVATION
SCALE: NTS

RACK ELEVATIONS ARE PROVIDED AS A MEANS FOR CONTRACTOR REQUIREMENTS; REFERENCE SPECIFICATIONS. REFER TO ACTUAL SITE CONDITIONS AND HARDWARE.
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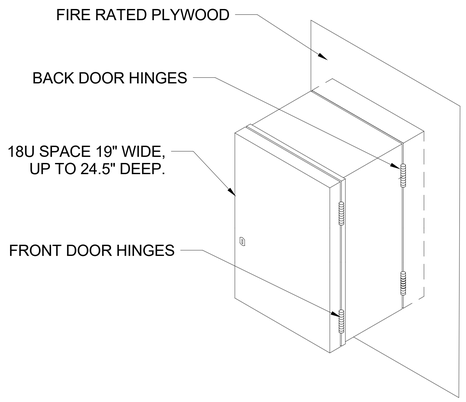

3 EATON WALL MOUNT RACK (SRW18USDP)
SCALE: NTS

NUMBER	MANUFACTURER	MODEL	DESCRIPTION	PAGING	PROGRAM/LOCAL	PROVIDED BY	COMMENTS
S1	VALCOM	V-9022A-2	2X2 LAY-IN CEILING SPEAKER	X		27 51 00	PA COMMON ZONE SPEAKER. IN EACH IDF, PROVIDE EACH COMMON ZONE AREA WITH VALCOM ZONE CONTROLLER, POWER SUPPLY, AND IP INTERFACE. REFER TO ZONES ON FLOOR PLANS. AT MINIMUM, EACH WING SHALL BE A ZONE, AND EACH FLOOR SHALL BE ZONED SEPARATELY.
S2	VALCOM	VE-4022A	2X2 LAY-IN IP CEILING SPEAKER WITH TALKBACK	X		27 51 00	PRIMARY PA SPEAKER. ATTACHED SPEAKER TO SCC. CONNECT TO EXISTING POE DROP AND CONFIGURE FOR SINGLE ZONE.
S3	VALCOM	V-9830	STEALTH HORN - ONE-WAY	X		27 51 00	INDOOR/OUTDOOR - WALL/SURFACE-MOUNTED CONCEALED FLEX-HORN
S4	VALCOM	VIP-430A	IP METAL WALL SPEAKER, ONE-WAY/TALKBACK PROGRAMMABLE, GRAY WITH BLACK GRILLE	X		27 51 00	INDOOR WALL/SURFACE-MOUNTED IP HORN WITH TALKBACK
S5	KDM OCTASOUND	SP840	15 INCH OMNIDIRECTIONAL SPEAKER	X		27 51 00	FOR THE GYM ZONE, THE PA CONTRACTOR SHALL PROVIDE AND INSTALL A VALCOM ZONE CONTROLLER AND INDEPENDENT AMPLIFIER WITH A MINIMUM OF ONE AMPLIFIER CHANNEL. THE PA CONTRACTOR AND AVC SHALL COORDINATE FOR PAGE OVERRIDE FUNCTIONALITY OF THE GYMNASIUM AUDIO SYSTEM.
S6	VALCOM	V-1020A	8" ONE WAY HARD CEILING SPEAKER	X		27 51 00	PA COMMON ZONE SPEAKER. IN EACH IDF, PROVIDE EACH COMMON ZONE AREA WITH VALCOM ZONE CONTROLLER, POWER SUPPLY, AND INTERFACE. REFER TO ZONES ON FLOOR PLANS. AT MINIMUM, EACH WING SHALL BE A ZONE, AND EACH FLOOR SHALL BE ZONED SEPARATELY.

4 SPEAKER SCHEDULE
SCALE: NTS

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EXPIRES 12-31-27

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Project Architect: VLK
Project Designer: Designer
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SHEET TITLE
TECHNOLOGY - DETAILS

SHEET NO.
T500

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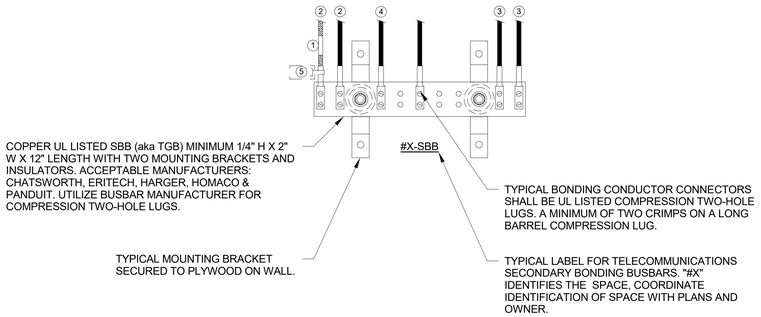
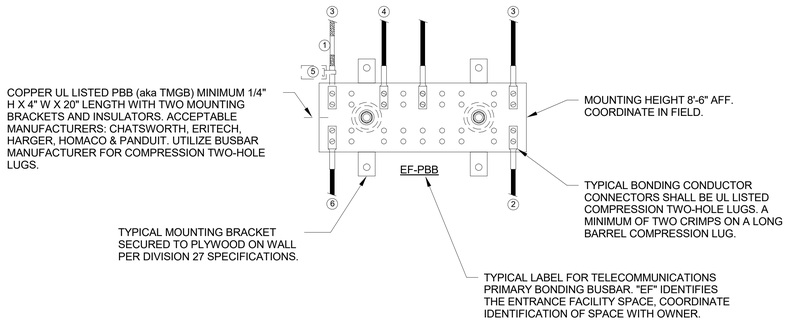


SBB GROUNDING & BONDING NOTES

1. TYPICAL OF ALL BONDING CONDUCTORS CABLE IDENTIFIER/ LABEL.
2. TBC TO TELECOMMUNICATIONS CABLE RUNWAYS(S), RACK(S), CABINET(S) AND APPLICABLE EQUIPMENT. DAISY CHAINING OF TBC AT RELAY RACKS IS NOT ACCEPTABLE. EACH RACK IS TO HAVE A TBC TO A COMPRESSION LUGTAP TO DEDICATED HOME RUN BACK TO THE SBB. SEE DETAILS.
3. TYPICAL TBB(S) THAT INTERCONNECTS ALL IDF SBB(S) WITH THE PBB.
4. BONDING CONDUCTOR TO EACH ARMORED FIBER JACKET. IDF SIDE ONLY.
5. TYPICAL OF ALL BONDING CONDUCTORS WITH IDENTIFICATION LABEL NOTED BELOW AND SECURED WITH CABLE TIE TO EACH CONDUCTOR. (ANSI J-STD-607-D) "IF THIS CONNECTOR OR CABLE IS LOOSE OR MUST BE REMOVED, PLEASE CALL THE BUILDING TELECOMMUNICATIONS MANAGER".

BONDING CONDUCTOR SIZING CHART

LENGTH (FEET)	SIZE (AWG)
LESS THAN (<) 13'	# 6
14' - 20'	# 4
21' - 26'	# 3
27' - 33'	# 2
34' - 41'	# 1
42' - 52'	# 1/0
53' - 66'	# 2/0
GREATER THAN (>) 66'	# 3/0



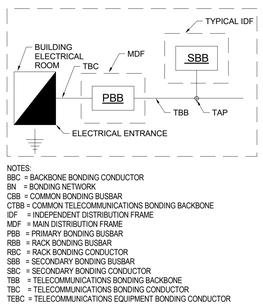
PBB GROUNDING & BONDING RISER NOTES

1. TYPICAL OF ALL BONDING CONDUCTORS CABLE IDENTIFIER/ LABEL.
2. TBC TO NEAREST BUILDING STEEL STRUCTURE. IF APPLICABLE UTILIZED EXOTHERMIC WELDING CONNECTION TO BUILDING STEEL.
3. TELECOMMUNICATIONS BONDING BACKBONE (TBB) FOR BACKBONE BONDING CONDUCTOR (BBC), IF APPLICABLE.
4. TYPICAL TBB(S) THAT INTERCONNECTS ALL SBB(S) WITH THE PBB.
5. TYPICAL OF ALL BONDING CONDUCTORS WITH IDENTIFICATION LABEL NOTED BELOW AND SECURED WITH CABLE TIE TO EACH CONDUCTOR. (ANSI J-STD-607-D) "IF THIS CONNECTOR OR CABLE IS LOOSE OR MUST BE REMOVED, PLEASE CALL THE BUILDING TELECOMMUNICATIONS MANAGER".
6. BONDING CONDUCTOR FOR TELECOMMUNICATIONS (TBC) TO BUILDING GROUNDING ELECTRODE. TBC SHALL NOT BE SMALLER THEN THE TBB.

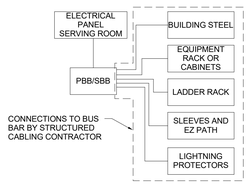
GROUNDING & BONDING GENERAL NOTES

1. ELECTRICAL CONTRACTOR RESPONSIBILITY -PRIMARY BONDING BUSBAR (PBB), SECONDARY BONDING BUSBAR(S) (SBB), AND THE BONDING CONDUCTORS TO THE BUILDING GROUNDING ELECTRODE, BUILDING STRUCTURAL STEEL, AND BONDING OF ALL SBB(S) TO THE PBB SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
2. ALL GROUNDING OF OF EQUIPMENT, RACKS, CABINETS, AND DEVICES SHALL BE THE RESPONSIBILITY OF THE DIVISION 27 TECHNOLOGY CONTRACTOR.
3. FASTENING BONDING CONNECTOR TWO-HOLE LUGS TO ALL BUSBARS SHALL BE CLEANED AND APPLY A COPPER ANTI-OXIDANT TO THE CONTACT AREA OF BOTH THE CONNECTOR LUG AND THE BUSBAR.
4. BONDING CONDUCTORS AND BUSBARS SHALL BE LABELED. WITH IDENTIFICATION IN ACCORDANCE WITH THE REQUIREMENTS OF ANSI/TIA/EIA-606-C.
5. BONDING CONDUCTORS SHALL BE LABELED WITH IDENTIFICATION LABEL NOTED BELOW AND SECURED WITH CABLE TIE TO EACH CONDUCTOR. (ANSI J-STD-607-D) "IF THIS CONNECTOR OR CABLE IS LOOSE OR MUST BE REMOVED, PLEASE CALL THE BUILDING TELECOMMUNICATIONS MANAGER".
6. STRUCTURED CABLING CONTRACTOR SHALL PERFORM CONTINUITY TESTING MEASUREMENTS OF THE GROUNDING RESISTANCE TO NOT EXCEED 0.1 OHM BETWEEN:
   - A. THE TMGB AND THE NEAREST GROUNDING ELECTRODE.
   - B. THE TGB AND THE NEAREST GROUNDING ELECTRODE.
   - C. EACH TGB AND THE PATHWAY(S), RACK(S), CABINETS(S) AND APPLICABLE EQUIPMENT .

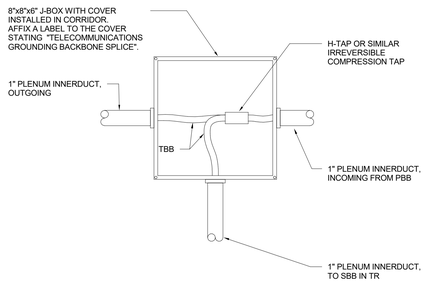
1 GROUNDING AND BONDING DETAIL
SCALE: NS



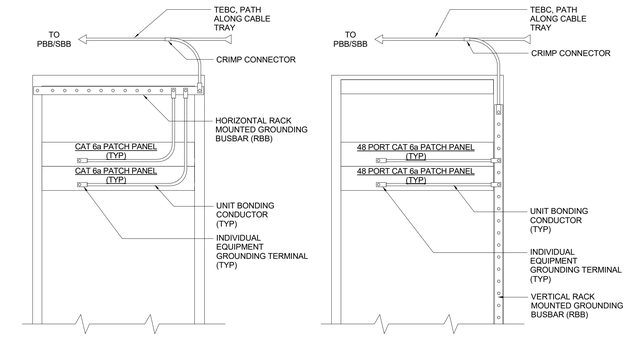
2 TYPICAL GROUNDING FLOW DIAGRAM
SCALE: NS



3 TELECOM ROOM BONDING DIAGRAM
SCALE: NS



4 TELECOM BONDING BACKBONE SPLICE DETAIL
SCALE: NS



5 RACK MOUNTED GROUNDING BAR DETAIL
SCALE: NS

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Project Designer: Designer
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SHEET TITLE
TECHNOLOGY - DETAILS

SHEET NO.
T501

KISD 2025 FRP

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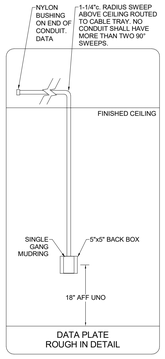
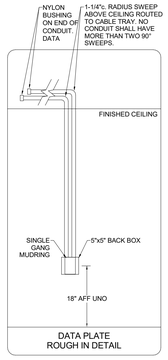
GENERAL NOTE

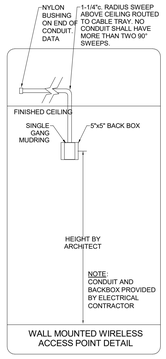
1. FACE PLATE DETAIL FOR OUTLET CONFIGURATION PURPOSES ONLY. CONTRACTOR TO SELECT TYPE OF FACE PLATE TO MATCH CONNECTIVITY HARDWARE. FLOOR BOX AND/OR MODULAR FURNITURE OPENING.



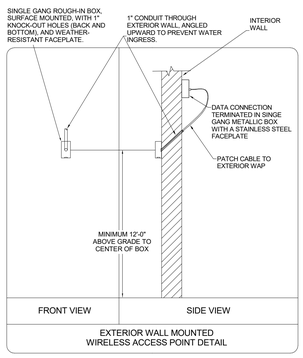
DATA PLATE ROUGH IN DETAIL



DATA PLATE ROUGH IN DETAIL

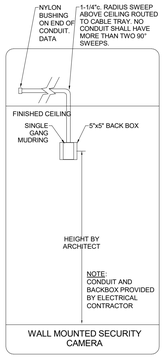


WALL MOUNTED WIRELESS ACCESS POINT DETAIL

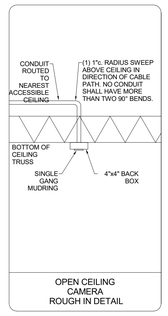


EXTERIOR WALL MOUNTED WIRELESS ACCESS POINT DETAIL

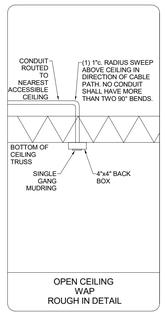
CEILING MOUNTED SECURITY CAMERA / WIRELESS ACCESS POINT DETAIL



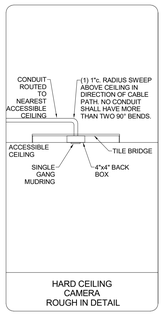
WALL MOUNTED SECURITY CAMERA



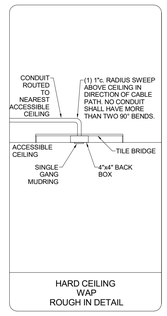
OPEN CEILING CAMERA ROUGH IN DETAIL



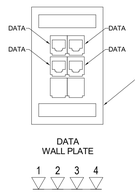
OPEN CEILING WAP ROUGH IN DETAIL



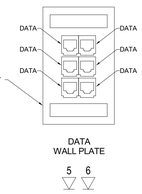
HARD CEILING CAMERA ROUGH IN DETAIL



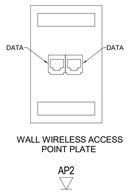
HARD CEILING WAP ROUGH IN DETAIL



DATA WALL PLATE



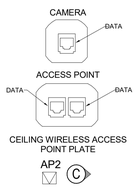
DATA WALL PLATE



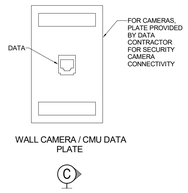
WALL WIRELESS ACCESS POINT PLATE

EXTERIOR WALL WIRELESS ACCESS POINT PLATE

AP2



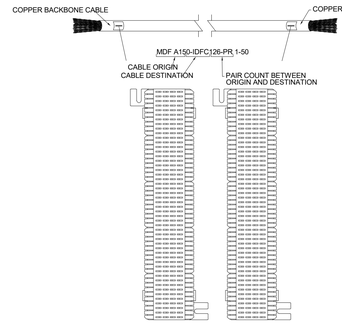
CEILING WIRELESS ACCESS POINT PLATE



WALL CAMERA / CMU DATA PLATE

1 DATA ROUGH-IN DETAILS
SCALE: NS

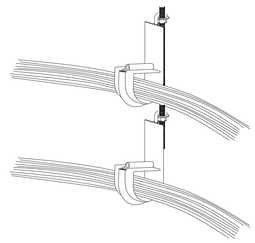
2 HARD AND OPEN CEILING DETAILS FOR CAMERAS AND DATA OUTLETS
SCALE: NTS



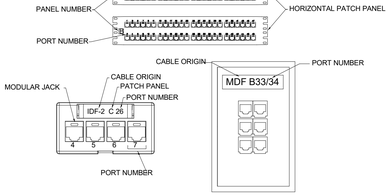
NOTE: 1) PA CONTRACTOR SHALL ENSURE THAT CABLE AND 66 BLOCK SHALL HAVE IDENTICAL LABEL AT BOTH ENDS

PA SYSTEM COPPER BACKBONE LABELING SCHEME

3 TYPICAL CABLING SLEEVE
SCALE: NTS

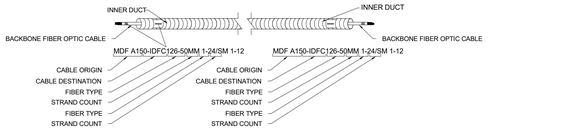


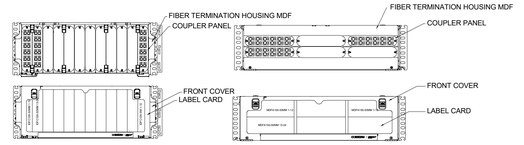
4 J-HOOK DETAIL
SCALE: NTS



CEILING GRID LABELING SCHEME

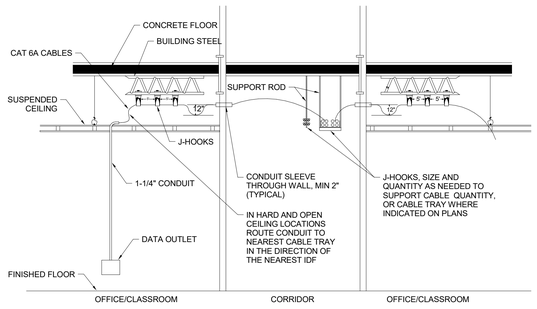
HORIZONTAL DATA CABLE LABELING SCHEME



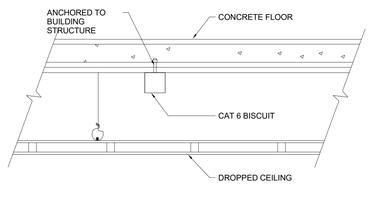


FIBER BACKBONE LABELING SCHEME

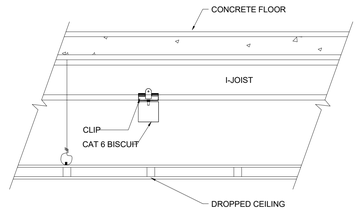
5 LABELING & CABLING SCHEMES
SCALE: NTS



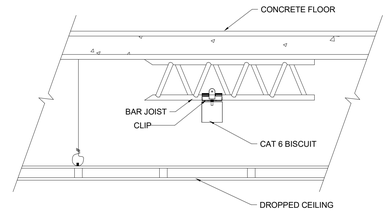
6 CABLE PATHWAY CROSS SECTION
SCALE: NTS



7 DROPPED CEILING MOUNTING DETAIL
SCALE: NS



8 I-JOIST MOUNTING DETAIL
SCALE: NS



9 BAR JOIST MOUNTING DETAIL
SCALE: NS

VLK

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TECHNOLOGY

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TRUENORTH A PMY COMPANY

KLEIN ISD
KLEIN, TX

BICSI REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Brian C Porter
BICSI ID # 256657
EXPIRES 12-31-27

ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	Proj. Director
Project Architect:	VLK
Project Designer:	Designer
Drawn By:	Author

PROJECT NO.
25-0225.00

SHEET TITLE
TECHNOLOGY - DETAILS

SHEET NO.
T502

KISD 2025 FRP

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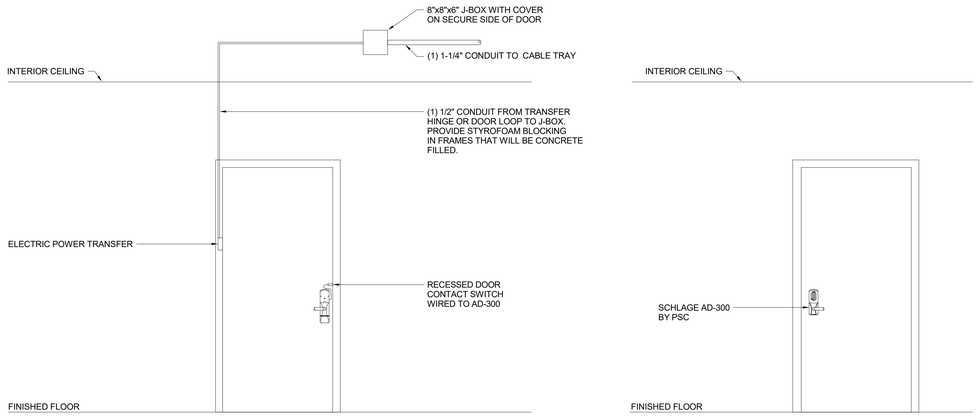
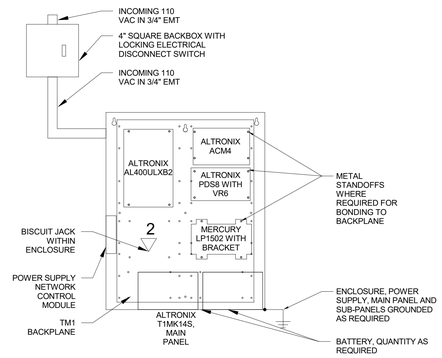
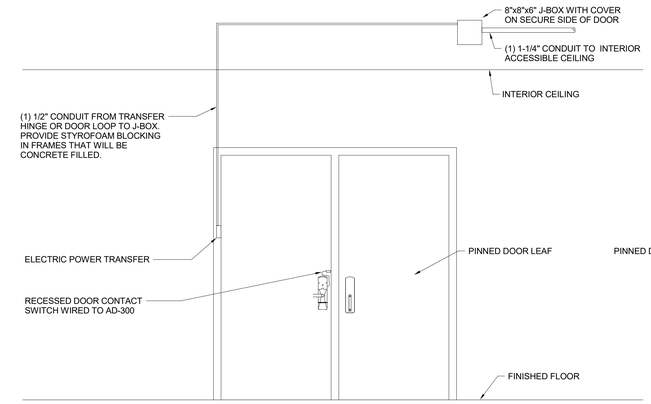


1 TYPICAL UNIVERSAL DOUBLE DOOR ROUGH-IN DETAIL
SCALE: NTS

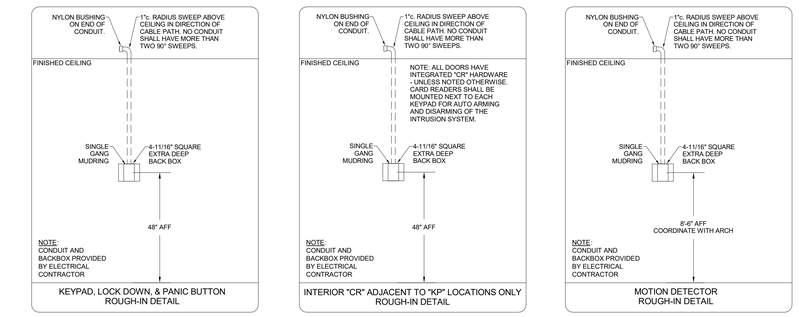
GENERAL NOTES:
1. REFER TO SECURITY SCHEDULE AND WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. DOOR DETAIL INDICATES DOOR HANDLE OR CRASHBAR ON SECURED SIDE OF DOOR FOR REFERENCE ONLY. REFER TO DOOR HARDWARE DIVISION SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. LOCK POWER WILL VARY DEPENDING ON LOCK TYPE AND DOOR HARDWARE. REFER TO SECURITY SCHEDULES/SPECIFICATIONS FOR COORDINATED POWER REQUIREMENTS. CONTRACTOR SHALL CROSS REFERENCE WITH OFFICIAL DOOR HARDWARE SCHEDULE/SPECIFICATIONS TO CONFIRM FINAL REQUIREMENTS.



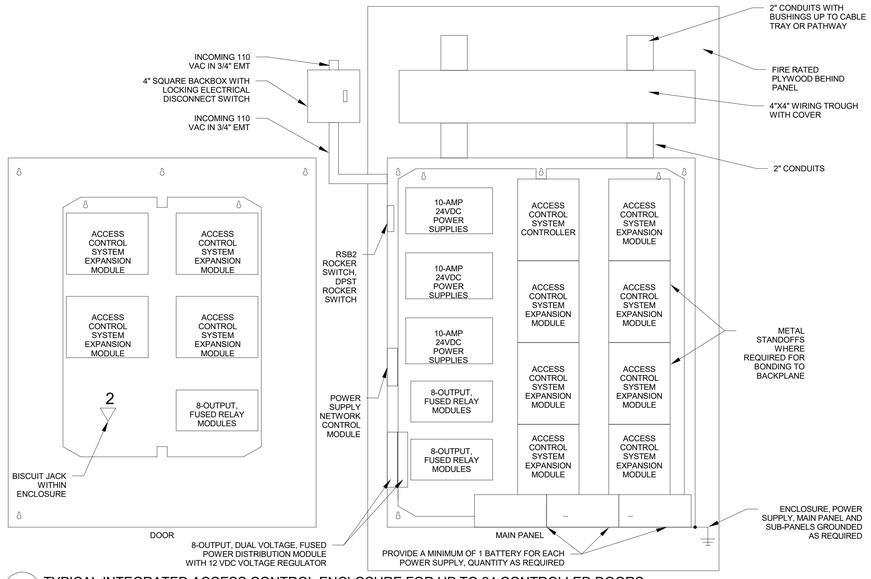
2 SINGLE DOOR CONTROLLER WITH POWER SUPPLY
SCALE: NTS



3 TYPICAL UNIVERSAL SINGLE DOOR ROUGH-IN DETAIL CR
SCALE: NTS

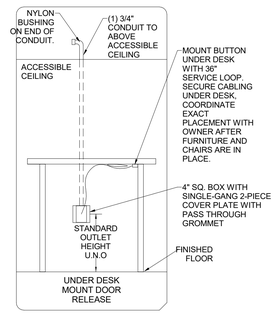


4 ROUGH-IN DETAILS
SCALE: NTS



5 INTRUSION CONTROL PANEL LAYOUT
SCALE: NTS

6 TYPICAL INTEGRATED ACCESS CONTROL ENCLOSURE FOR UP TO 24 CONTROLLED DOORS
SCALE: NTS



7 UNDER DESK MOUNT DOOR RELEASE BUTTON DETAIL
SCALE: NTS

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ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director: Proj. Director
Project Architect: VLK
Project Designer: Designer
Drawn By: Author

PROJECT NO.
25-0225.00

SHEET TITLE
TECHNOLOGY - SECURITY DETAILS

SHEET NO.
T601

KISD 2025 FRP

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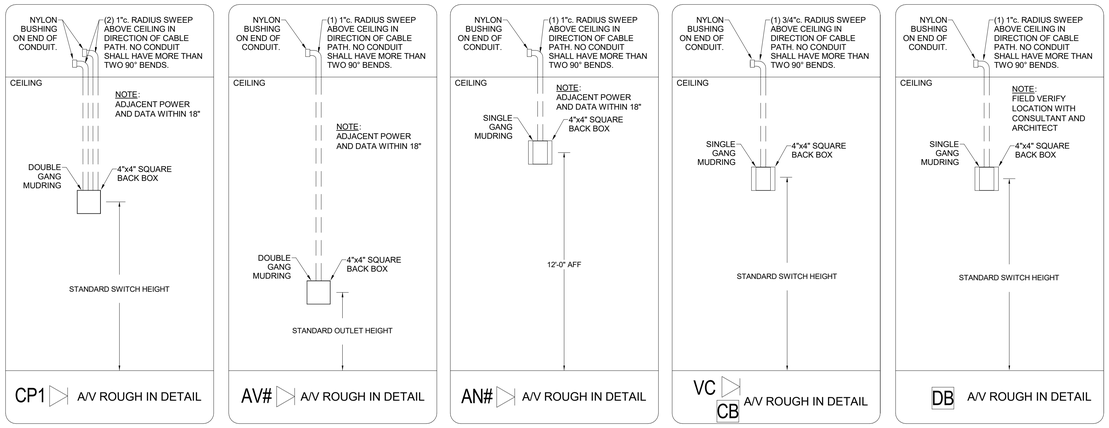
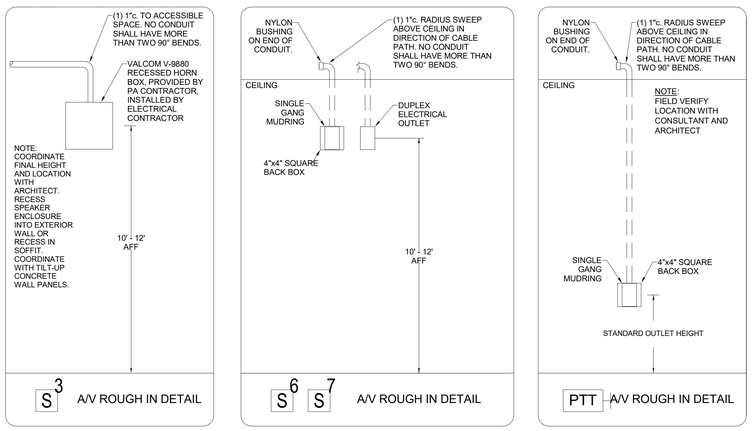
AS PERMITTED BY WALL THICKNESS, ALL JUNCTION BOXES TO HAVE NOMINAL DEPTH OF 3-1/2" UNLESS NOTED OTHERWISE

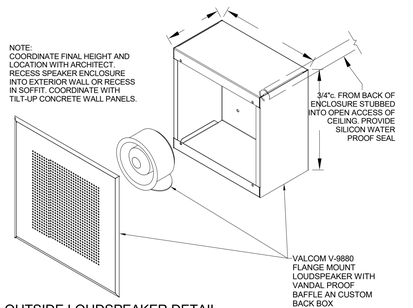


1 A/V ROUGH-IN DETAILS, PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR UNLESS NOTED OTHERWISE
SCALE: NTS

AS PERMITTED BY WALL THICKNESS, ALL JUNCTION BOXES TO HAVE NOMINAL DEPTH OF 3-1/2" UNLESS NOTED OTHERWISE



2 A/V ROUGH-IN DETAILS, PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR UNLESS NOTED OTHERWISE
SCALE: NTS



3 OUTSIDE LOUDSPEAKER DETAIL
SCALE: NTS

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ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director: Proj. Director
Project Architect: VLK
Project Designer: Designer
Drawn By: Author

PROJECT NO.
25-0225.00

SHEET TITLE
TECHNOLOGY - AV DETAILS

SHEET NO.
T700

KISD 2025 FRP

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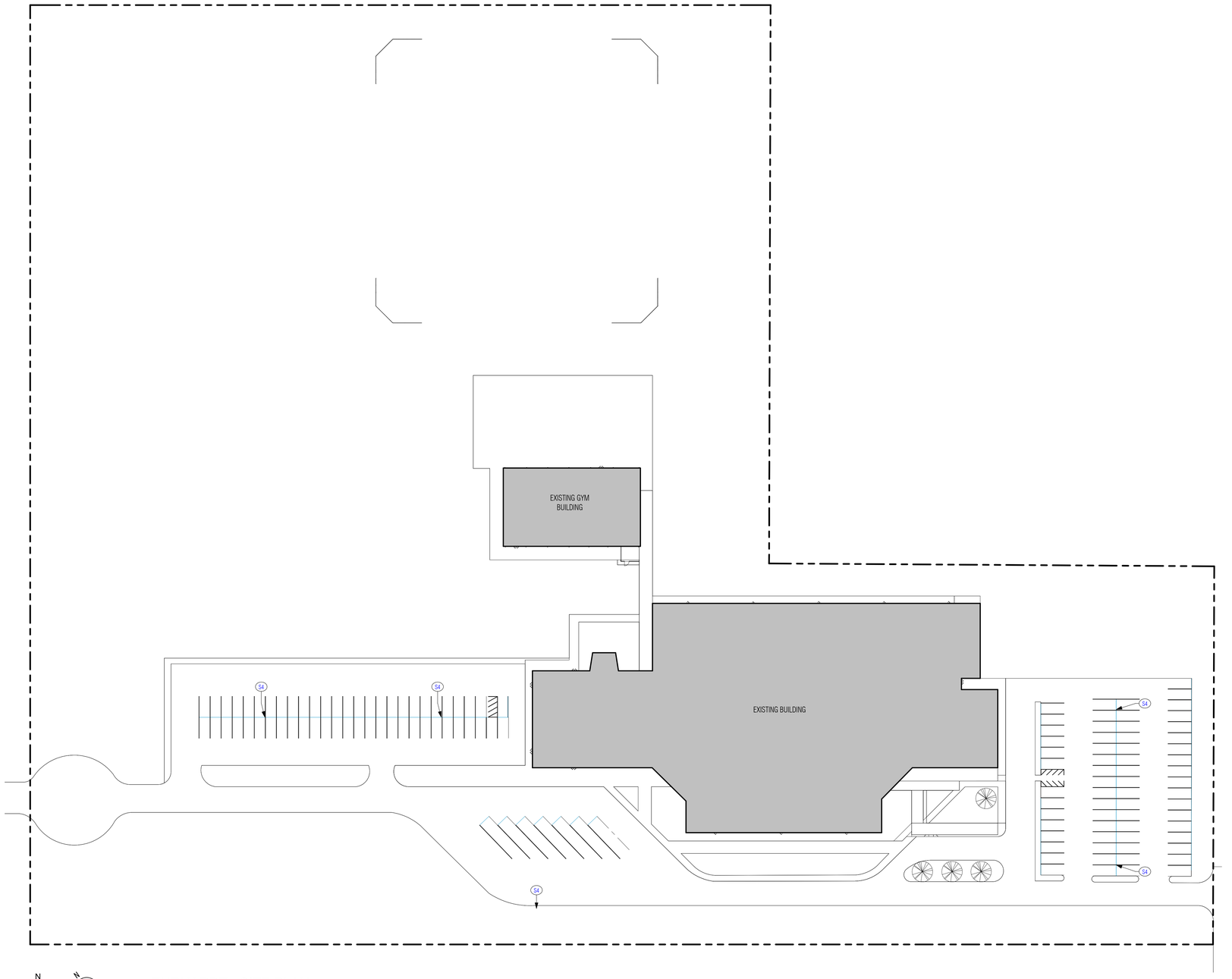

1 EHRHARDT - SITE PLAN
SCALE: 1" = 40'-0"

SITE PLAN NOTES

1. Verify and document existing dimensions and conditions at the site before beginning construction. Notify the Architect of conflicts or variations prior to commencement of construction.
2. To prevent damage to existing trees and shrubs in proximity to the Work, provide and maintain protective barriers around those items in accordance with the specified procedures, or in the absence of those procedures, with recognized landscaping and horticultural practices.

ALTERNATE #5	
Key Value	Keynote Text
S4	REMOVE AND REPLACE EXTERIOR LIGHTING. REF: E71.00

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
EHRHARDT - SITE PLAN (ALTERNATE)

SHEET NO.
A71.11

KISD 2025 FRP

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Houston, TX 77064
Registration: F-4111
Project No: 2500-02120-00

VLK

LINETYPE LEGEND

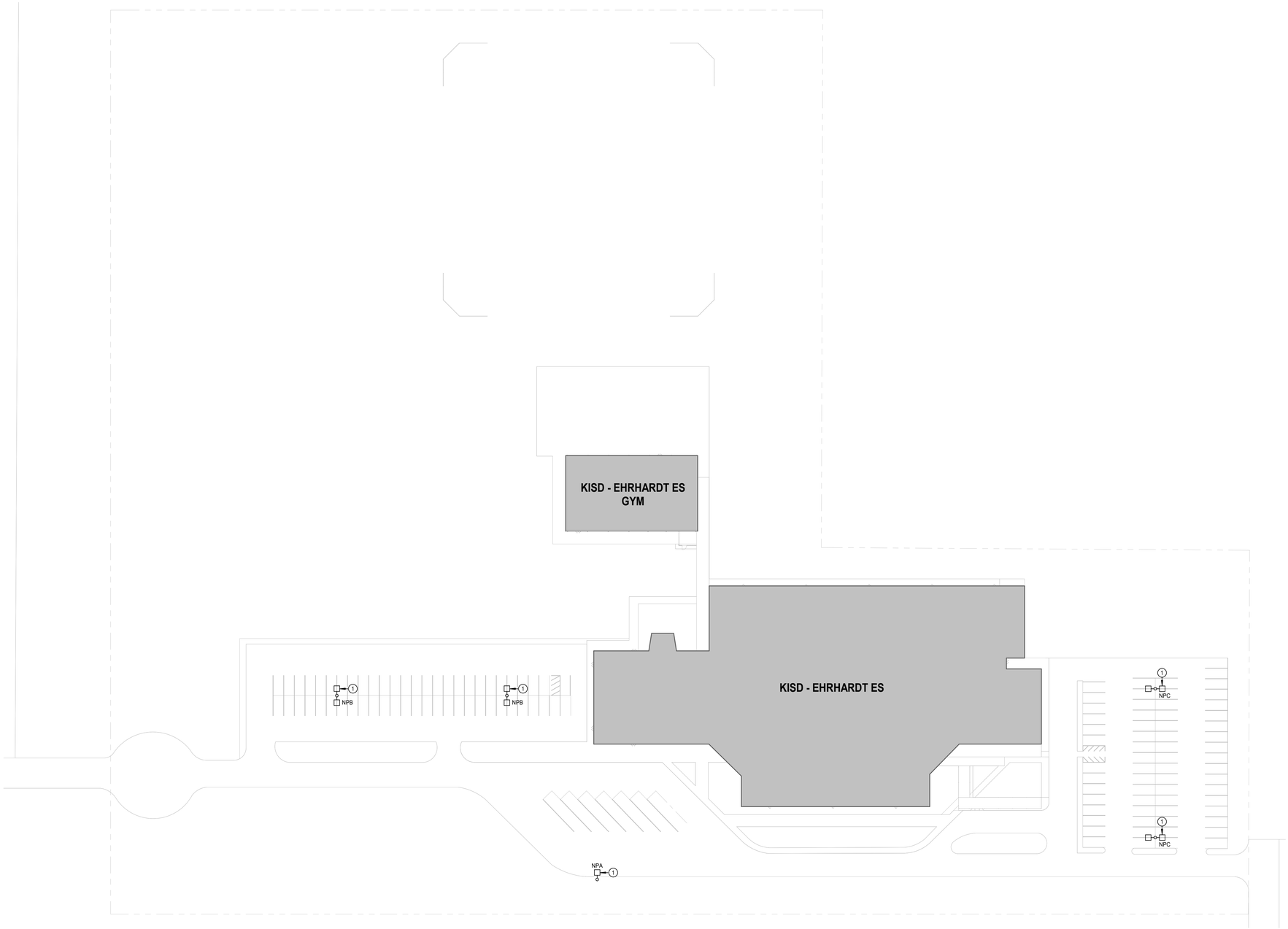
———	EXISTING TO REMAIN
– – – –	DISCONNECT AND REMOVE
———	NEW WORK

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

ELECTRICAL KEYED NOTES

1 AS PART OF ALTERNATE, REMOVE EXISTING SITE LIGHTING FIXTURE AND POLE AND REPLACE WITH NEW AS SCHEDULED, EXISTING CONCRETE BASE TO REMAIN. PROVIDE ANCHOR BOLT BASE ADAPTER AND ALL MOUNTING ACCESSORIES TO ACCOMMODATE REPLACEMENT POLE ON EXISTING CONCRETE BASE. EXTEND CONDUCTORS WITH MATCHING SIZE TO REPLACEMENT FIXTURE.



N

1 **ELECTRICAL SITE PLAN - ALTERNATE - EHRHARDT ES**
Scale: 1" = 40'-0"

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	LT
Checked By:	PS
Drawn By:	LT

PROJECT NO.
25-0225.00

SHEET TITLE
ELECTRICAL SITE PLAN - ALTERNATE - EHRHARDT ES

SHEET NO.
E71.00

KISD 2025 FRP

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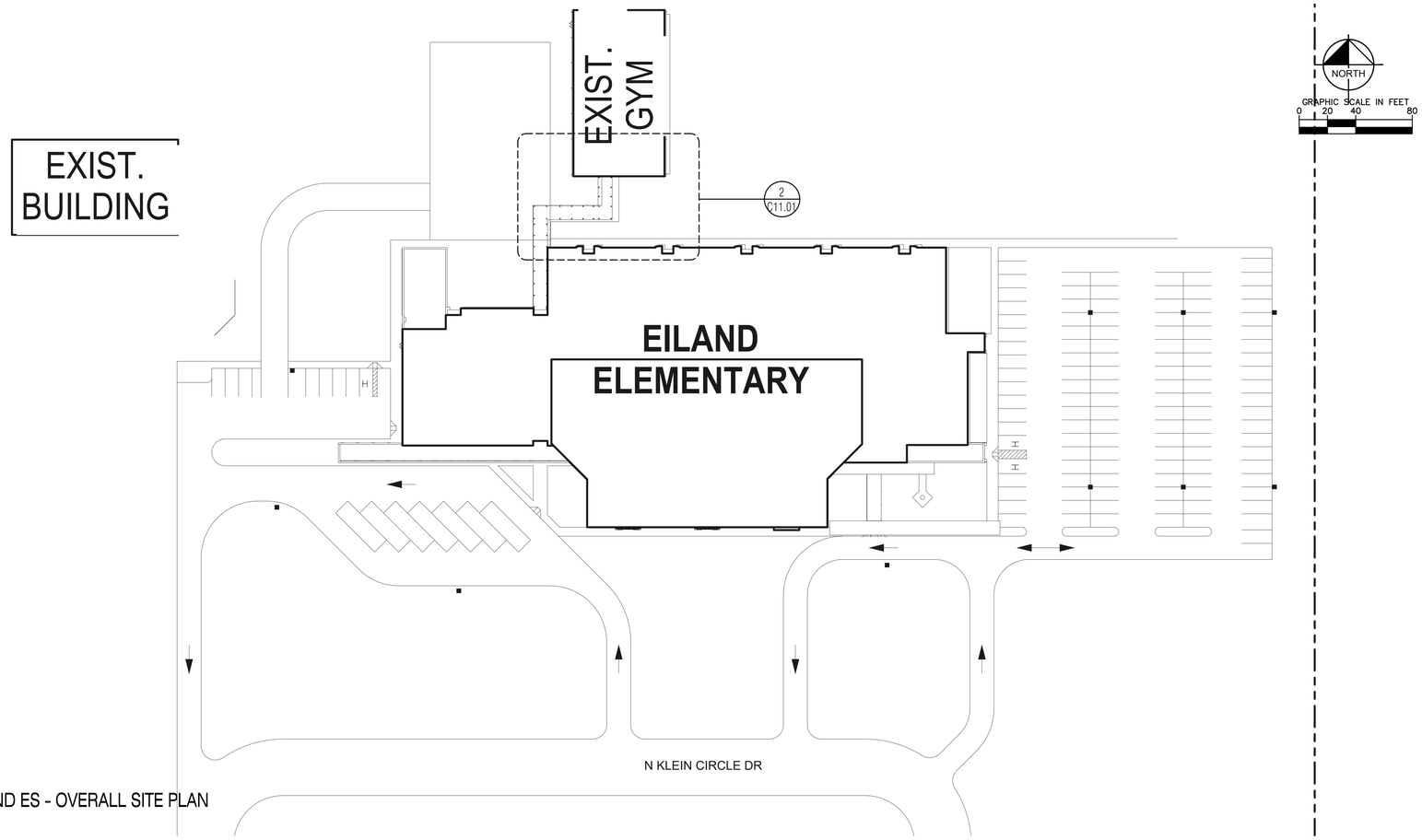


1 - EILAND ES - OVERALL SITE PLAN

LEGEND	
	PROPERTY LINE
	PROP. CANOPY (REF ARCH FOR DETAILS)
	CURB RAMP NOT IN PUBLIC ROW
PAVING MATERIAL LEGEND	
	PROP. SIDEWALK

KEYED NOTES	
1	PROP. SAWCUT/MATCH EXISTING PAVEMENT LINE
2	ACCESSIBLE RAMP
3	4" SOLID WHITE STRIPING, 2'-0" O.C. @ 45°
4	PROP. 10" HDPE STORM CONNECTION TO CANOPY DOWNSPOUT. STORM TO BE ROUTED TO NEAREST INLET.
5	PROP. 10" 45° BEND
6	PROP. 10" WYE

GENERAL NOTES

1. DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

2. ALL RADII 2' UNLESS OTHERWISE NOTED.

3. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING POLES AND FIXTURES AND ELECTRICAL PLAN PRIOR TO PLACING PAVEMENT.

4. REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.

5. SIDEWALKS TO HAVE A 5% MAXIMUM RUNNING SLOPE AND A 2% MAXIMUM CROSS SLOPE IN ACCORDANCE WITH ADA REQUIREMENTS.

6. FIELD VERIFY ADA GRADES PRIOR TO PLACING PAVEMENT. CONTRACTOR SHALL CONSTRUCT ALL ACCESSIBLE ROUTES IN ACCORDANCE WITH ADA STANDARDS AND TAS.

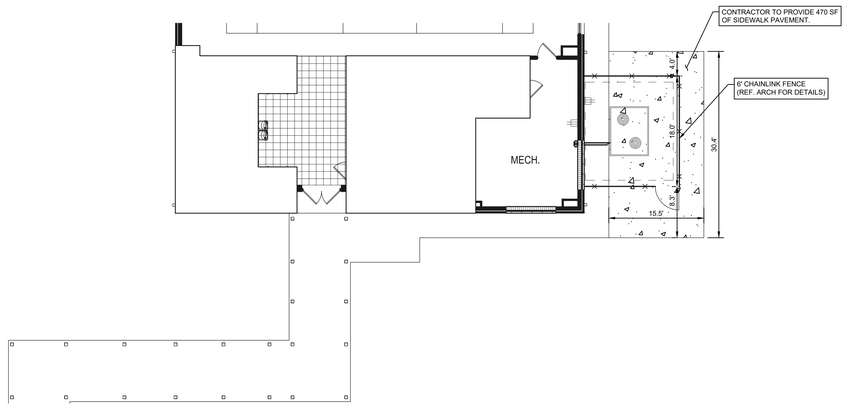
7. REF. IRRIGATION PLANS PRIOR TO PLACING PAVEMENT.

8. CONTRACTOR SHALL BUDGET FOR ACCESSIBLE STALL STRIPING, FIRE LANE STRIPING, DIRECTIONAL ARROWS, ETC.

9. SITE LIGHTING IS BY OTHERS. REF. SITE LIGHTING PLANS FOR LOCATIONS AND DETAILS PRIOR TO PLACING PAVEMENT.

10. REF. BUILDING PLANS FOR ALL EXTERIOR STAIR DETAILS.

11. CONTRACTOR TO ADJUST EXISTING SANITARY SEWER MANHOLES, STORM SEWER MANHOLES, ELECTRICAL MANHOLES, FIRE HYDRANTS, VALVE BOXES, WATER METERS, ETC. TO MATCH PROPOSED FINISHED GRADES IF NECESSARY.



2 - EILAND ES - ENLARGED CIVIL PLAN

GRAPHIC SCALE IN FEET
0 5 10 20

Know what's below. Call before you dig.

CAUTION!!

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

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01/27/2026

ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	KLM
Project Engineer:	RDH
Project Designer:	RDH
Drawn By:	RDH

PROJECT NO.
25-0225.00

SHEET TITLE
EILAND
DIMENSION
CONTROL PLAN

SHEET NO.
C11.01

KISD 2025 FRP

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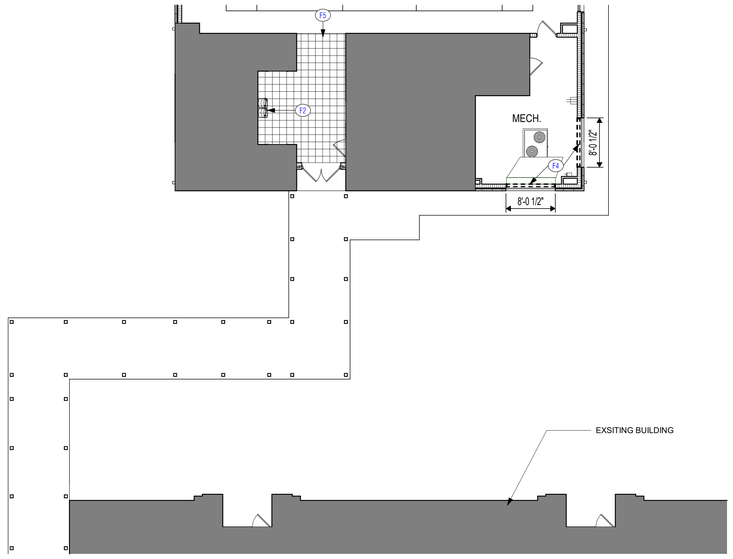
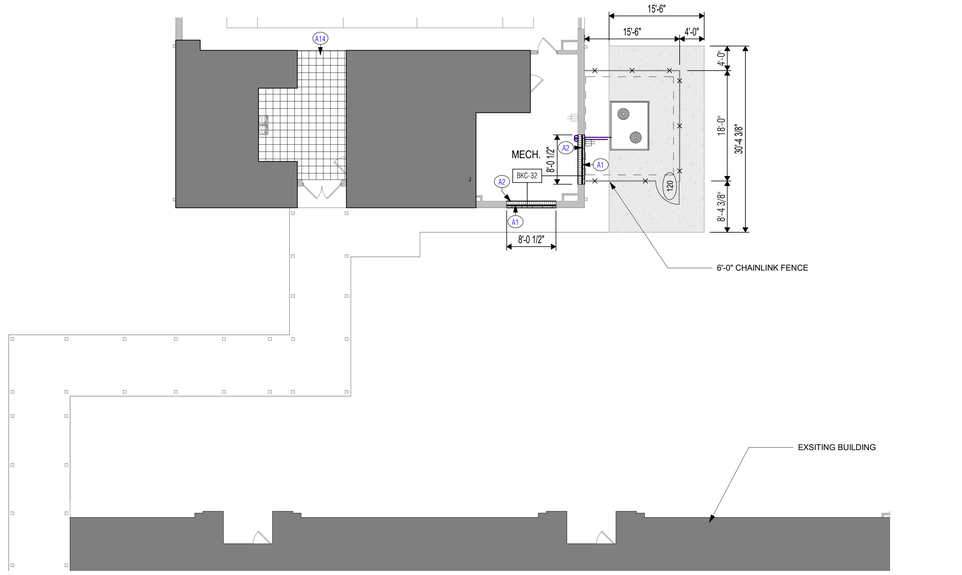


1 GYMNASIUM ENLARGED DEMO PLAN
SCALE: 1" = 10'-0"



2 GYMNASIUM ENLARGED PLAN
SCALE: 1" = 10'-0"

SITE PLAN NOTES

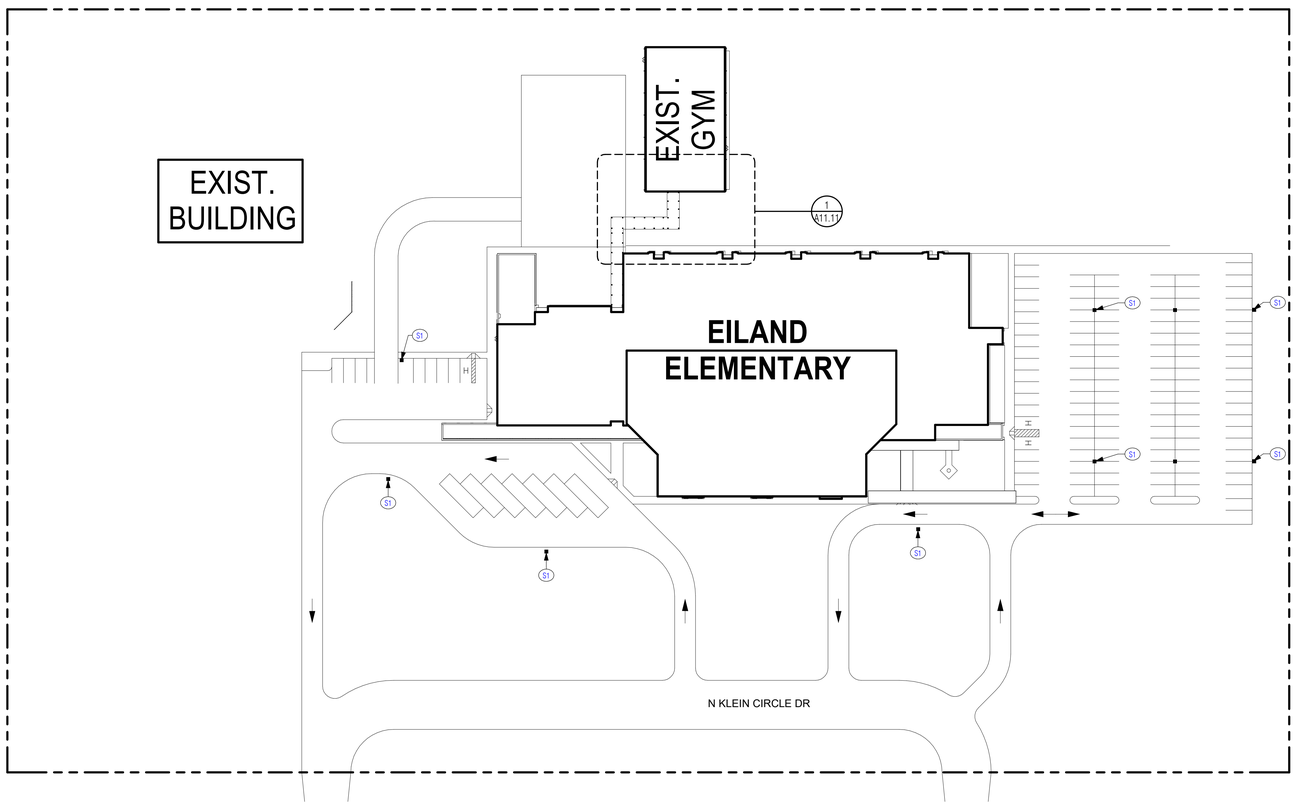
1. Verify and document existing dimensions and conditions at the site before beginning construction. Notify the Architect of conflicts or variations prior to commencement of construction.
2. To prevent damage to existing trees and shrubs in proximity to the Work, provide and maintain protective barriers around those items in accordance with the specified procedures, or in the absence of those procedures, with recognized landscaping and horticultural practices.

SITE PLAN LEGEND

—X—X—X— CHAIN LINK FENCE, See Plan for Heights

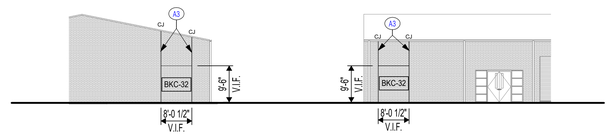
REMOVE AND REPLACE EXISTING BUILDING FOUNDATION SEALANT JOINTS.

Keynote Legend	
Key Value	Keynote Text
A1	INFILL WALL OPENING WITH WALL ASSEMBLY SPECIFIED.
A2	PAINT ENTIRE LENGTH OF CMU WALL INCLUDING COLUMN FURR OUT.
A3	REMOVE AND REPLACE EXISTING BUILDING SEALANT AT CONTROL JOINT.
A14	REINSTALL CEILING GRID AND TILES.
F2	REMOVE & REPLACE DRINKING FOUNTAIN. REF: PLUMBING.
F4	REMOVE EXISTING LOUVERS AND PATCH HOLES IN WALL. PREPARE OPENING TO RECIEVE WALL INFILL.
F5	REMOVE AND REINSTALL CEILING GRID AND TILES FOR INSTALLATION OF THE AHU.
S1	REMOVE & REPLACE ALL EXTERIOR LIGHT POLE HEADS ONLY. REF: ELECTRICAL.



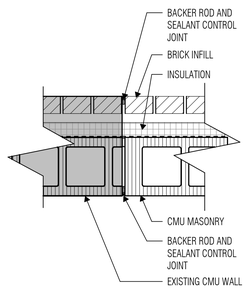
N
PLAN NORTH
TRUE NORTH

3 EILAND - SITE PLAN
SCALE: 1" = 50'-0"

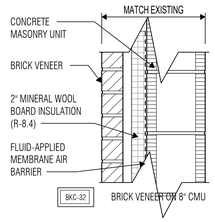


4 GYM EAST ELEVATION
SCALE: 1/16" = 1'-0"

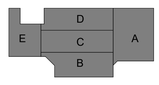
5 GYM NORTH ELEVATION
SCALE: 1/16" = 1'-0"



6 CMU CJ - PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



7 WALL TYPE
SCALE: 1 1/2" = 1'-0"



KEY PLAN

VLK

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KISD 2025 FRP

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STATE OF TEXAS

01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
EILAND - SITE PLAN

SHEET NO.
A11.11

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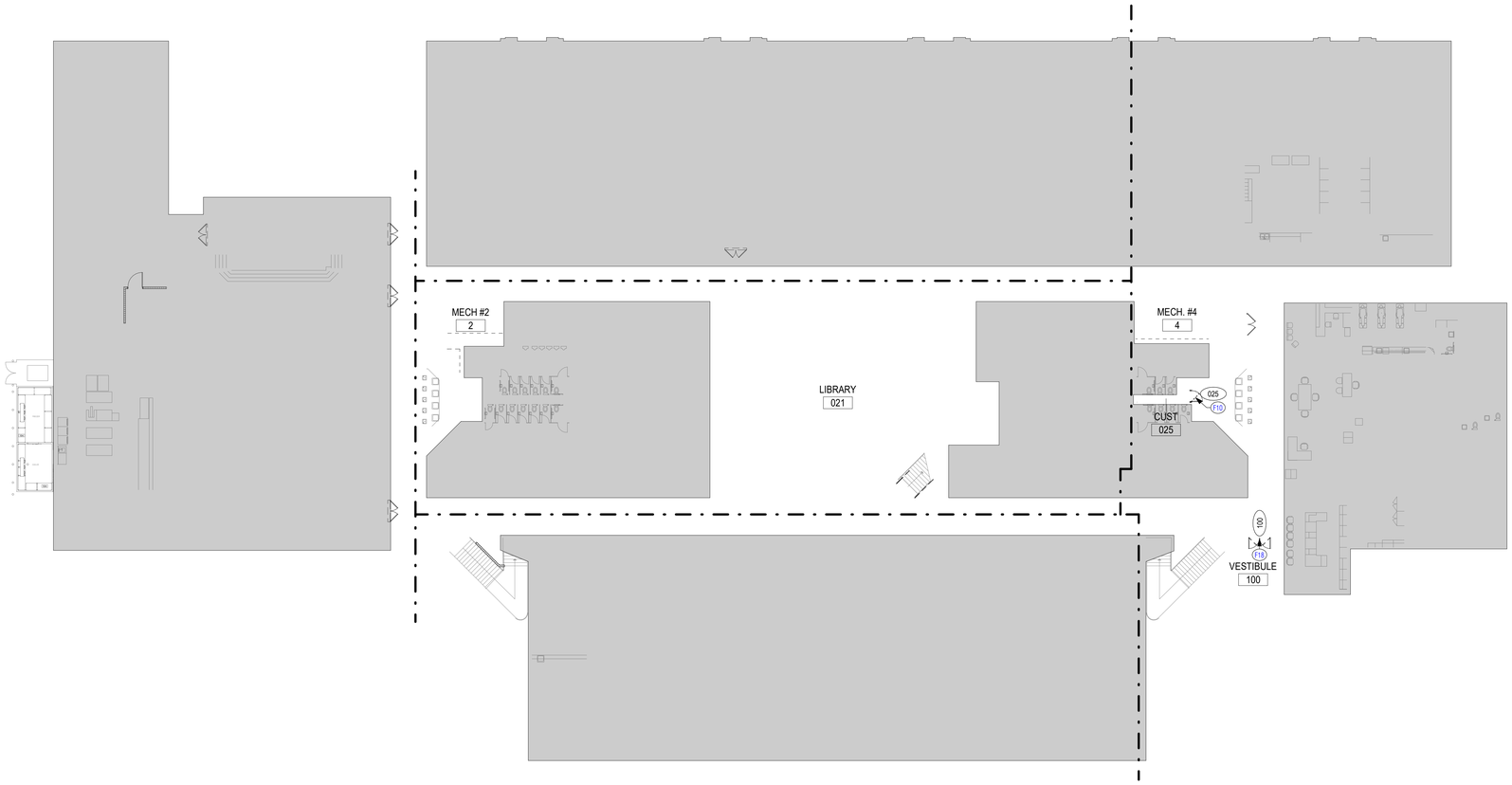
DEMOLITION NOTES

1. Drawings show the general extent of demolition work, however it is impractical to indicate or note every item of demolition. Any items shown dashed are to be removed to make way for new construction, unless noted otherwise.
2. Existing materials containing asbestos to be removed under separate contract prior to construction by Owner's asbestos abatement contractor.
3. Contact the Owner prior to the start of demolition to determine items to be salvaged and returned to Owner.
4. Protect items to remain from damage during demolition.
5. Properly protect and store items to be removed and reinstalled or relocated.
6. Repair or replace at no cost to the Owner any damages to the existing building and site as a result of construction activities.
7. Refer to electrical and mechanical demolition plan for additional information.
8. Patch/repair flooring to match existing at all removed or demolished doors, windows, walls, millwork, lockers and similar items.

GENERAL KEYNOTE LEGEND

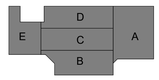
1. ALL EXISTING PUBLIC ANNOUNCMENT (PA) HEADS TO BE REMOVED AND PREP SURFACE FOR INSTALL OF NEW SYSTEM.
2. ALL EXISTING FIRE ALARMS TO BE REMOVED AND PREP SURFACE FOR INSTALL OF NEW SYSTEM.

Keynote Legend	
Key Value	Keynote Text
F10	REMOVE EXISTING H.M. DOOR FRAME AND PREP AREA FOR INSTALLATION OF DOOR FRAME AS SCHEDULED. EXISTING P-LAM DOOR TO BE REMOVED AND REINSTALLED; SALVAGE ALL HARDWARE FOR REUSE, REPLACE DOOR HINGES.
F18	REMOVE EXISTING H.M. DOOR FRAME & DOOR. PREP AREA FOR INSTALLATION OF DOOR FRAME, DOOR, & HARDWARE AS SCHEDULED.



N
PLAN NORTH TRUE NORTH

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



KEY PLAN

VLK

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01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
EILAND - OVERALL DEMO PLAN - LEVEL ONE

SHEET NO.
A12.01

KISD 2025 FRP

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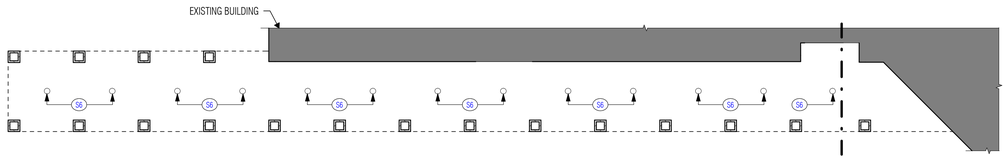
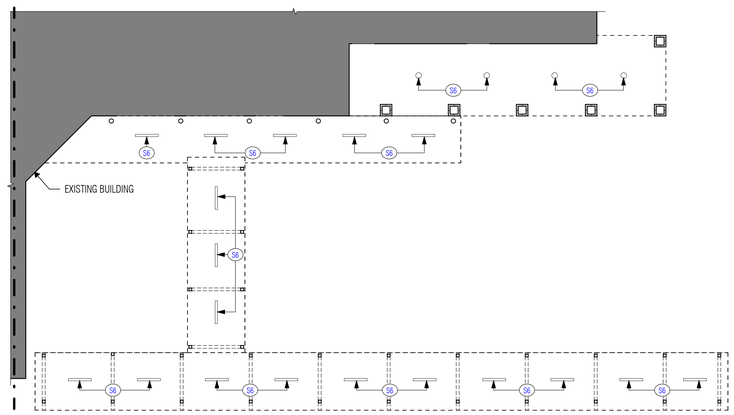
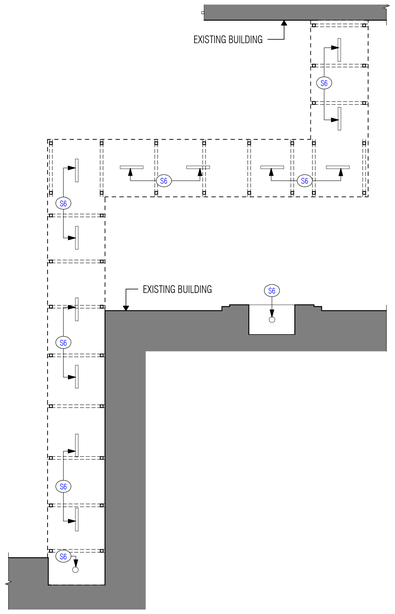


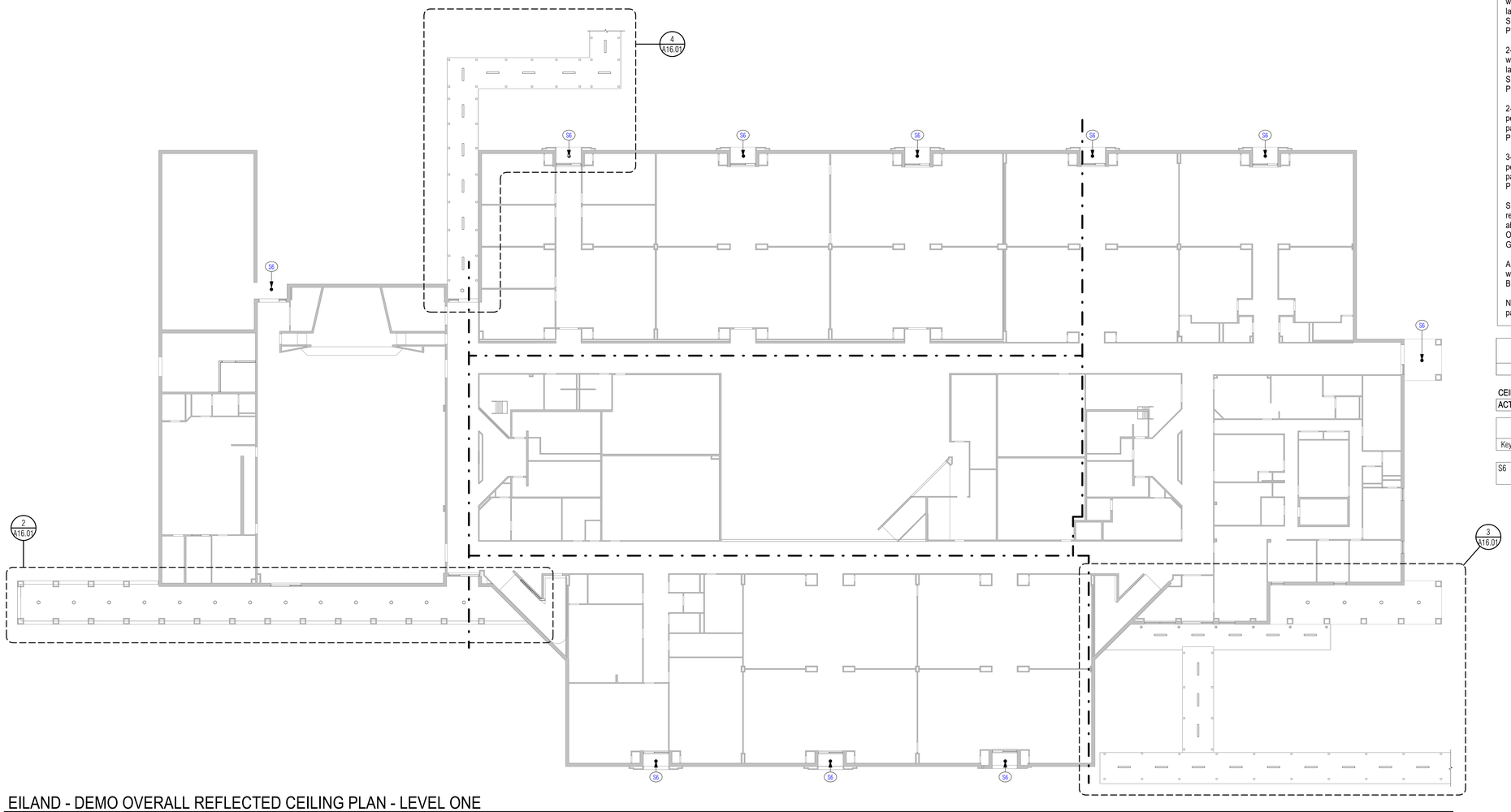
2 EILAND - SOFFIT 1
SCALE: 3/32" = 1'-0"



3 EILAND - CANOPY 1
SCALE: 3/32" = 1'-0"



4 EILAND - CANOPY 2
SCALE: 3/32" = 1'-0"



1 EILAND - DEMO OVERALL REFLECTED CEILING PLAN - LEVEL ONE
SCALE: 1/16" = 1'-0"

REFLECTED CEILING PLAN NOTES

1. All ceiling heights shall be [9'-1 1/8"] [8'-11 3/4"] [other] A.F.F. unless noted otherwise.
2. Refer to Detail -/--- for Typical Gypsum Board Ceiling Control Joint Detail.
3. Refer to Detail -/--- for Typical Plaster Ceiling Control Joint Detail.
4. Provide vented reveals at perimeter of all non-insulated exterior plaster soffits. Provide venting strips or perforated panels at perimeter of all non-insulated metal panel soffits (refer to Detail -/---). Venting at non-insulated soffits shall be provided whether specifically indicated on the drawings or not.
5. Provide partition to deck (PTD) at walls surrounding spaces with exposed structure. Refer to Reflected Ceiling Plan Legend for PTD requirements.
6. Provide hold-down clips for all acoustic lay-in ceiling panels at vestibules, at sloped ceilings, at fire-rated ceilings, and within 6 feet of exterior doors without vestibules.
7. At ceiling furring details, the suspended assemblies, bracing, blocking, etc. shown on the details are for schematic representation only. Provide stable, secure and permanent assemblies at these locations in accordance with recommended light-gage steel framing installation practices.
8. At partitions that do not extend to deck above, extend partition 4" minimum above highest adjacent ceiling and brace per Floor Plan Legend and Floor Plan Notes.

REFLECTED CEILING PLAN LEGEND

- PYRAMID CEILING DIFFUSER PANELS (SIZE)
- H.V.A.C. SUPPLY & RETURN GRILLES Shown for location purposes only. Refer to Mechanical Drawings.
- LIGHT FIXTURES. Refer to Electrical Drawings.
- 1-HOUR FIRE BARRIER PARTITION
- 2-HOUR FIRE BARRIER PARTITION
- 2-HOUR FIRE WALL
- 3-HOUR FIRE WALL
- SMOKE PARTITION
- ACOUSTICAL/SOUND PARTITION
- NONRATED PARTITION TO DECK

1-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: '1-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'. Brace partitions per Floor Plan General Notes.

2-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: '2-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'. Brace partitions per Floor Plan General Notes.

2-HOUR FIRE WALL. Extend wall to or through deck above and support wall per UL Design requirements, wall sections and details. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: '2-HOUR FIRE WALL - PROTECT ALL OPENINGS'.

3-HOUR FIRE WALL. Extend wall to or through deck above and support wall per UL Design requirements, wall sections and details. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: '3-HOUR FIRE WALL - PROTECT ALL OPENINGS'.

SMOKE PARTITION. Extend partition to deck above and seal with sealant as required to resist the passage of smoke. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: 'SMOKE BARRIER - PROTECT ALL OPENINGS'. Seal all joints and penetrations. Brace partitions per Floor Plan General Notes.

ACOUSTICAL/SOUND PARTITION. Extend partition to deck above and seal with acoustical sealant. Seal all joints and penetrations with acoustical sealant. Brace partitions per Floor Plan General Notes.

NONRATED PARTITION TO DECK. Extend partition to deck above. Brace partitions per Floor Plan General Notes.

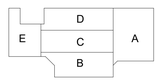
CEILING SCHEDULE

MARK	DESCRIPTION

CEILING FINISH

ACT-01	Acoustic Ceiling Tile (24X24)

Keynote Legend	
Key Value	Keynote Text
S6	REMOVE EXISTING LIGHT FIXTURE AND PREP AREA FOR INSTALLATION OF FIXTURE AS SCHEDULED. REF: ELECTRICAL.



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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.

25-0225.00

SHEET TITLE

EILAND - REFLECTED CEILING PLANS - LEVEL ONE

SHEET NO.

A16.01

KISD 2025 FRP

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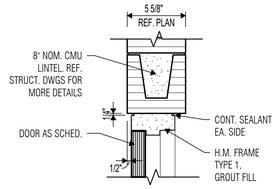
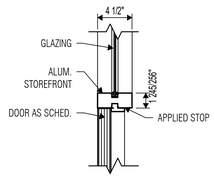
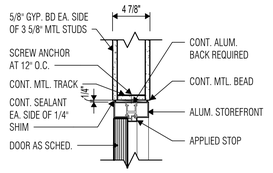


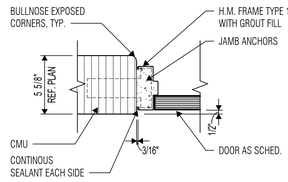
8 HEAD DETAIL H.M.
SCALE: 1 1/2" = 1'-0"



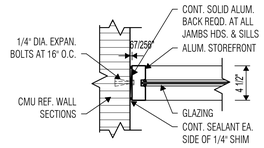
9 STOREFRONT HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



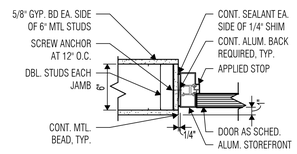
10 HEAD DETAIL ALUM.
SCALE: 1 1/2" = 1'-0"



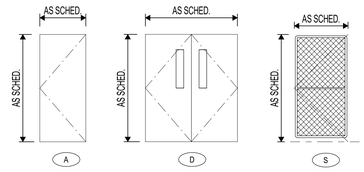
4 JAMB DETAIL H.M.
SCALE: 1 1/2" = 1'-0"



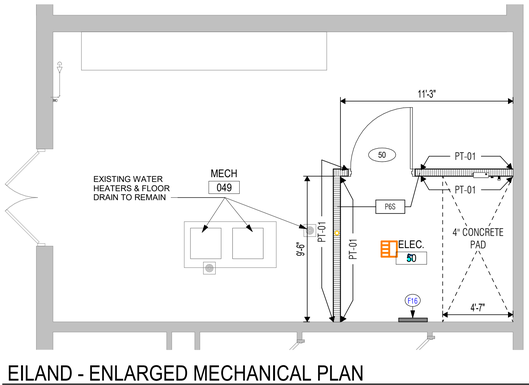
5 STOREFRONT JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



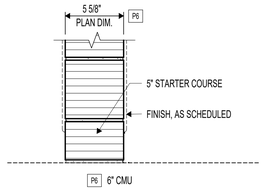
6 JAMB DETAIL ALUM.
SCALE: 1 1/2" = 1'-0"



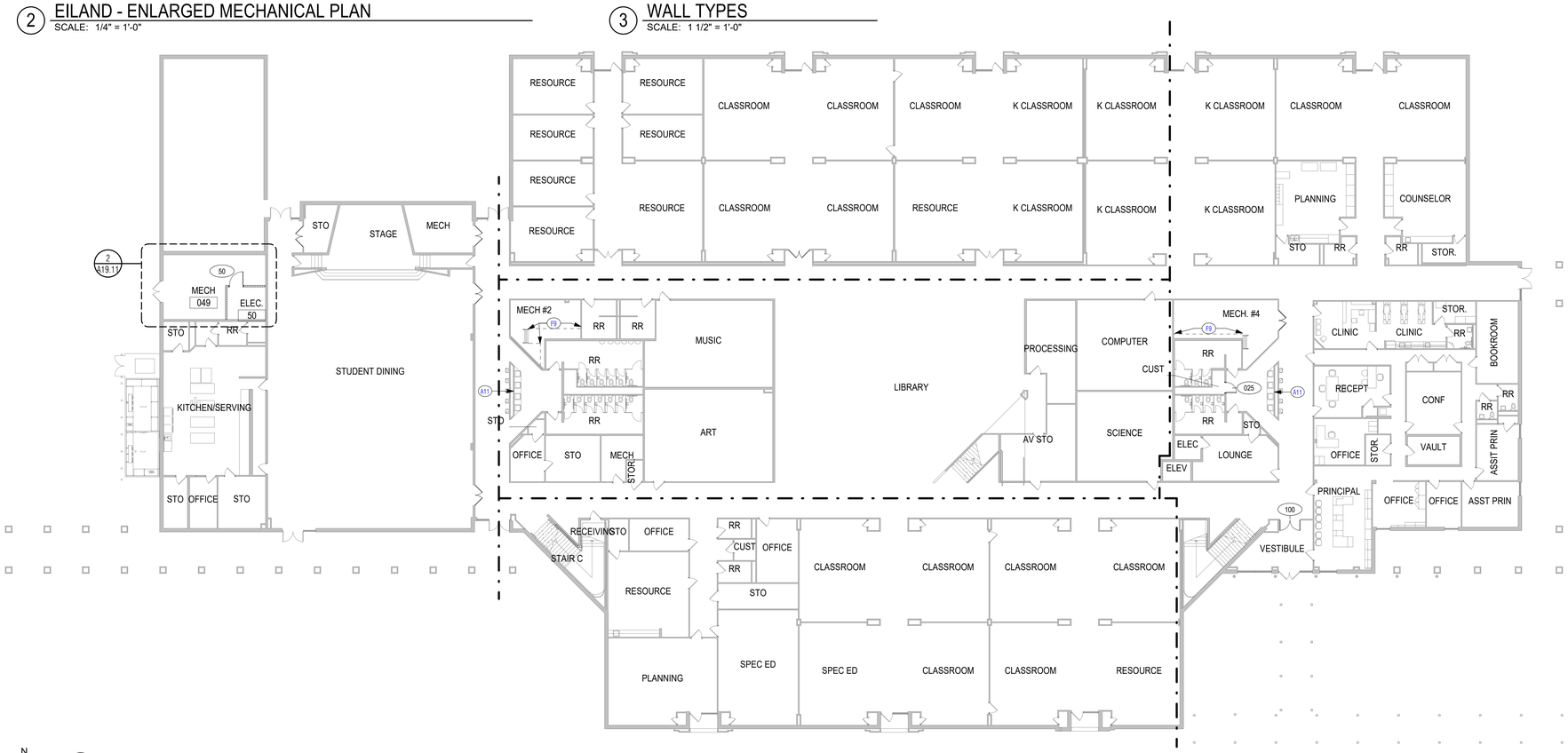
7 DOOR TYPES
SCALE: 1/4" = 1'-0"



2 EILAND - ENLARGED MECHANICAL PLAN
SCALE: 1/4" = 1'-0"



3 WALL TYPES
SCALE: 1 1/2" = 1'-0"



1 EILAND - OVERALL INTERIOR FINISH PLAN - LEVEL ONE
SCALE: 1/16" = 1'-0"

N
PLAN NORTH
TRUE NORTH

EILAND - DOOR SCHEDULE

DOOR NO.	DOOR TYPE	DOOR MATERIAL	FRAME TYPE	DOOR OPENING		DETAIL - REF. A7.11 U.N.O.			FIRE RATING	HARDWARE SET	KEYNOTES	REMARKS
				WIDTH	HEIGHT	HEAD	JAMB	SILL				
025	A	4	HM	3'-0"	7'-0"	4/A19.11	5/A19.11					EXISTING P-LAM DOOR TO BE REMOVED AND REINSTALLED; SALVAGE ALL HARDWARE FOR REUSE, REPLACE DOOR HINGES
50	A	4	HM	4'-0"	7'-0"	8/A19.11	9/A19.11					
100	D	4	HM	6'-0"	7'-0"	6/A19.11	7/A19.11					
115	A	4	HM	3'-0"	7'-0"	4/A19.11	5/A19.11					EXISTING P-LAM DOOR TO BE REMOVED AND REINSTALLED; SALVAGE ALL HARDWARE FOR REUSE, REPLACE DOOR HINGES
120	S	-	-	4'-0"	7'-0"	-	-	-				CHAINLINK

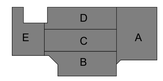
Keynote Legend	
Key Value	Keynote Text
A11	INSTALLATION OF DRINKING FOUNTAIN (W/BOTTLE FILLER).
F9	REMOVE AND REINSTALL HANDRAILS FROM SHIPS LADDER & MEZZANINE FOR INSTALL OF AHU AS NEEDED.
F16	REMOVE EXISTING RACK UNIT. REF: ELECTRICAL

DOOR SCHEDULE KEYNOTES

KEY NUMBER	KEYED NOTES
DS7	Access Control / Card Reader

DOOR MATERIAL NOTES

MARK	PANEL MATERIAL
1	Plastic Laminate
4	Painted Hollow Metal



KEY PLAN

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REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
EILAND - INTERIOR OVERALL FINISH PLAN - LEVEL ONE

SHEET NO.
A19.11

KISD 2025 FRP

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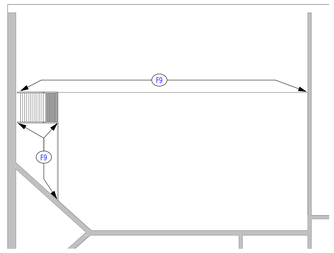
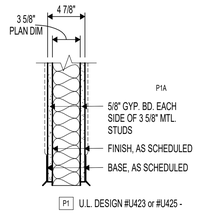
Keynote Legend	
Key Value	Keynote Text
A11	INSTALLATION OF DRINKING FOUNTAIN (W/BOTTLE FILLER).
F9	REMOVE AND REINSTALL HANDRAILS FROM SHIPS LADDER & MEZZANINE FOR INSTALL OF AHU AS NEEDED.
F11	7'X7' UP TO DECK OF EXISTING MEZZANINE CMU PARTITION WILL NEED TO BE REMOVED AND REINSTALLED FOR INSTALL OF AHU. WALL IN ITS ENTIRETY TO BE PAINTED FOLLOWING GYP. BOARD PATCH.
F25	ALTERNATE LOCATION TO KEYNOTE F11.

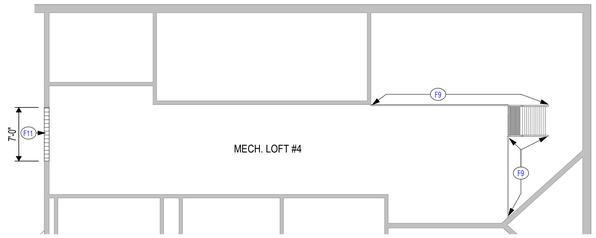


12 MECH. MEZZANINE 2
SCALE: 1/8" = 1'-0"

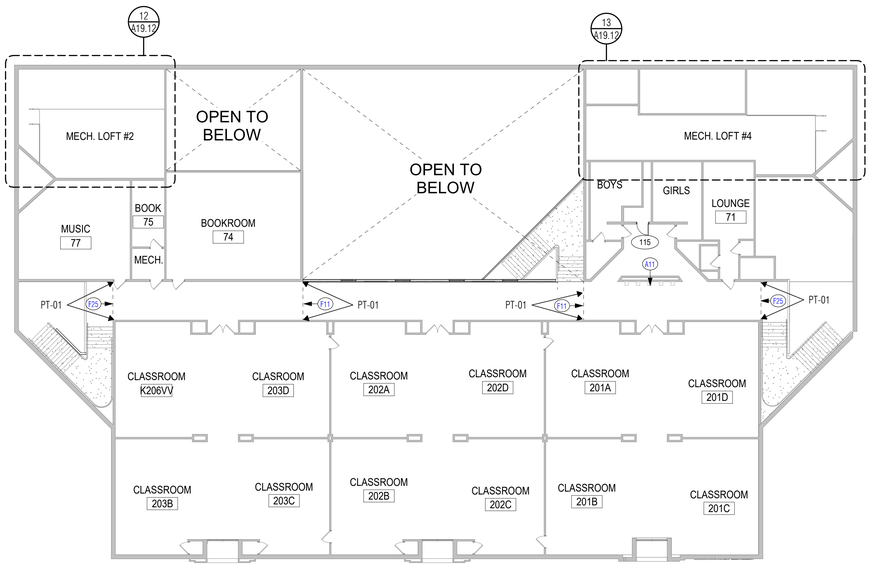


P1 U.L. DESIGN #U423 or #U425 -

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



13 MECH. MEZZANINE 4
SCALE: 1/8" = 1'-0"



N
PLAN NORTH
TRUE NORTH

1 EILAND - INTERIOR OVERALL FINISH PLAN - LEVEL TWO
SCALE: 1/16" = 1'-0"

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REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

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25-0225.00

SHEET TITLE
EILAND - INTERIOR OVERALL FINISH PLAN - LEVEL TWO

SHEET NO.
A19.12

KISD 2025 FRP

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Project No: 2500-02120-00

VLK

LINETYPE LEGEND

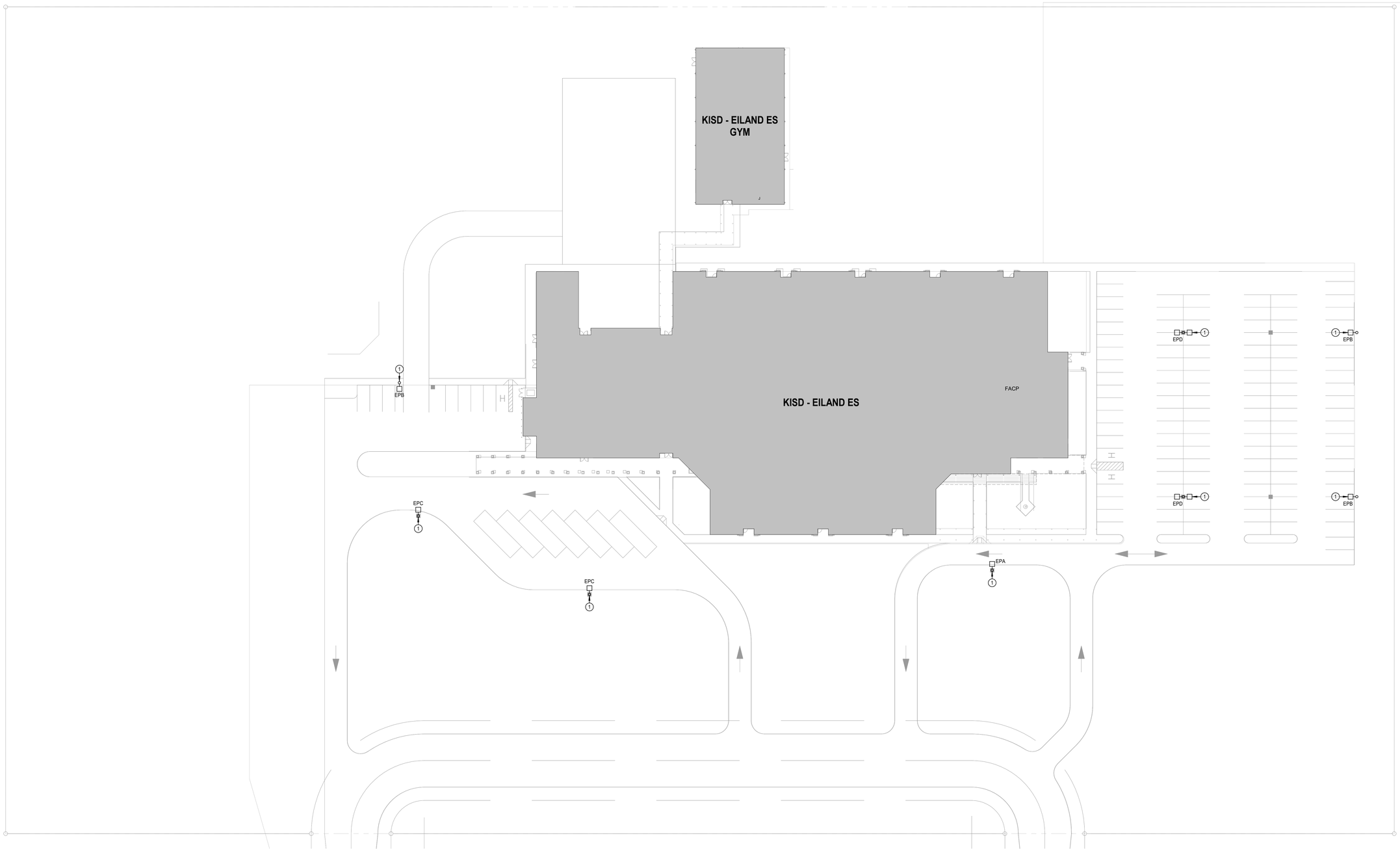
———	EXISTING TO REMAIN
– – – –	DISCONNECT AND REMOVE
———	NEW WORK

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

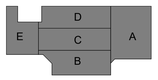
ELECTRICAL KEYED NOTES

1 REMOVE EXISTING SITE LIGHTING FIXTURE AND REPLACE WITH NEW AS SCHEDULED, RE-USE EXISTING POLE AND CONCRETE BASE. PROVIDE ALL MOUNTING ACCESSORIES TO ACCOMMODATE REPLACEMENT FIXTURE ON EXISTING POLE. EXTEND CONDUCTORS WITH MATCHING SIZE TO REPLACEMENT FIXTURE.



N

1 **ELECTRICAL SITE PLAN - EILAND ES**
Scale: 1" = 30'-0"



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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	LT
Checked By:	PS
Drawn By:	LT

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SHEET TITLE
ELECTRICAL SITE PLAN - EILAND ES

SHEET NO.
E11.00

KISD 2025 FRP

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Registration: F-4111
Project No: 2500-02120-00

LINETYPE LEGEND

————	EXISTING TO REMAIN
- - - -	DISCONNECT AND REMOVE
————	NEW WORK

FIRE ALARM NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY, FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

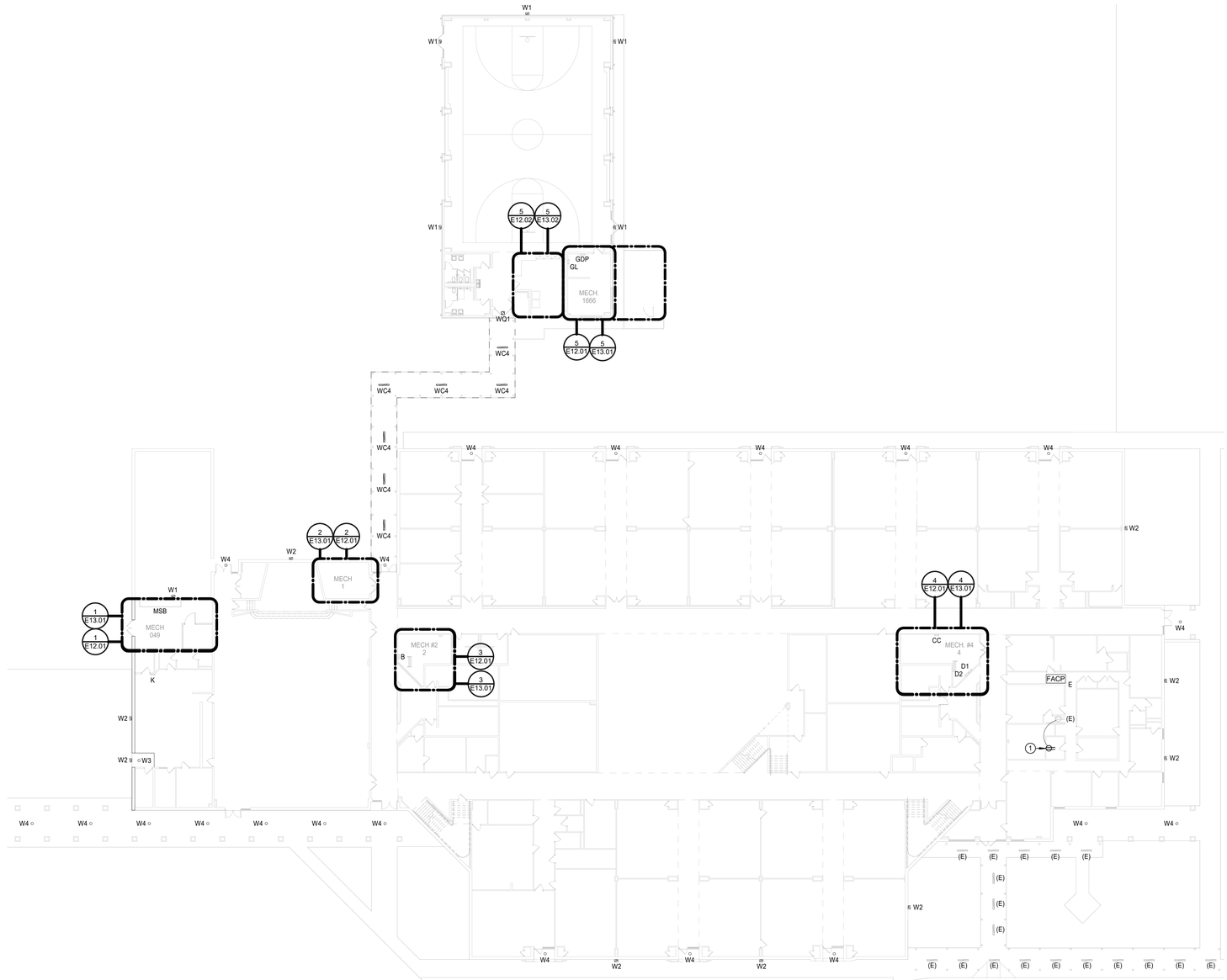
LIGHTING GENERAL NOTES

1 UNLESS NOTED OTHERWISE, DISCONNECT AND REMOVE EXISTING EXTERIOR LIGHTING FIXTURES FOR REPLACEMENT. EXISTING CIRCUITS TO REMAIN IN PLACE FOR RE-USE.

2 CONNECT NEW LIGHT FIXTURES TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO EXISTING LOCATION AND/OR NEW FIXTURES.

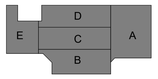
ELECTRICAL KEYED NOTES

1 NEW PA SYSTEM HEAD END. PROVIDE NEW RECEPTACLE AS SHOWN AND CONNECT TO EXISTING CIRCUIT SERVING EXISTING PA SYSTEM HEAD END LEFT IN PLACE AFTER DEMOLITION. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO NEW LOCATION. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 1500 W @ 120 V. COORDINATE FINAL PA SYSTEM LOCATION.



N

1 **ELECTRICAL COMPOSTIE PLAN - LEVEL 1 - EILAND ES**
Scale: 1" = 20'-0"



KEY PLAN

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KLEIN, TX

STATE OF TEXAS
BRADLEY KALMANS
98259
LICENSED
PROFESSIONAL ENGINEER
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director: MR
Designed By: LT
Checked By: PS
Drawn By: LT

PROJECT NO.
25-0225.00

SHEET TITLE
ELECTRICAL COMPOSITE PLAN - LEVEL 1 - EILAND ES

SHEET NO.
E11.01

KISD 2025 FRP

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Registration: F-4111
Project No: 2550-02120-00

LINETYPE LEGEND

———	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
———	NEW WORK

FIRE ALARM NOTES

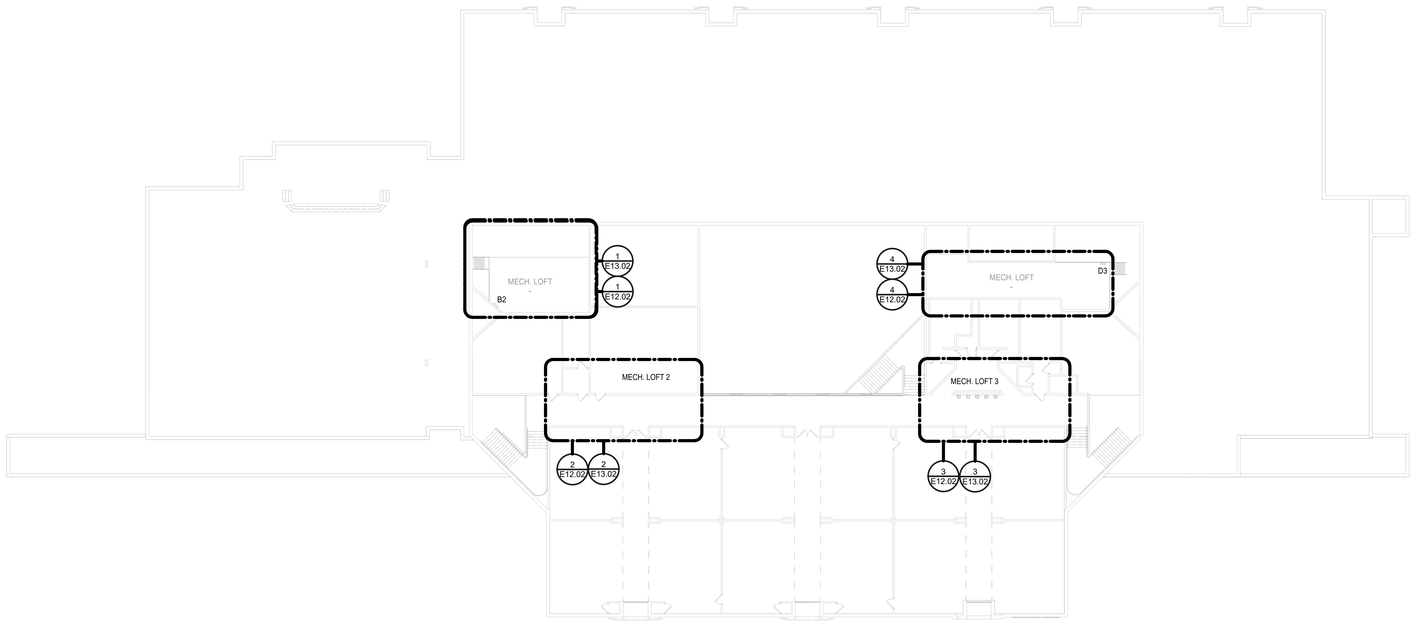
A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY. FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

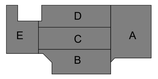
DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.



N

1 **ELECTRICAL COMPOSITE PLAN - LEVEL 2 - EILAND ES**
Scale: 1" = 20'-0"



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SHEET TITLE
ELECTRICAL COMPOSITE PLAN - LEVEL 2 - EILAND ES

SHEET NO.
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LINETYPE LEGEND

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———	NEW WORK

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ELECTRICAL KEYED NOTES

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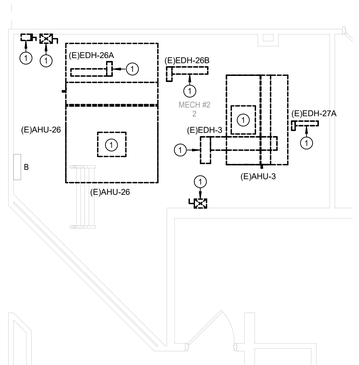
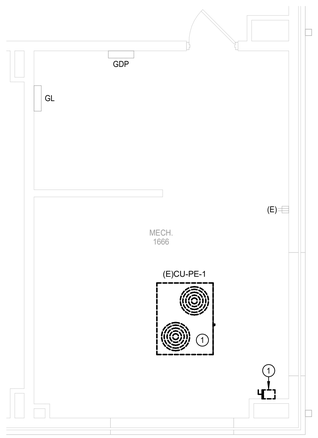


N
3 **ELECTRICAL DEMOLITION FLOOR PLAN - MECH 2 - EILAND ES**
Scale: 1/4" = 1'-0"



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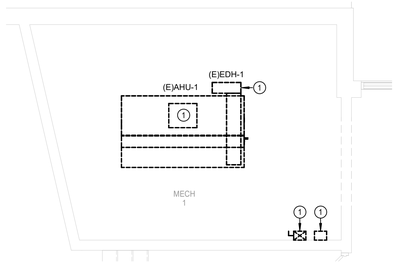
Scale: 1/4" = 1'-0"



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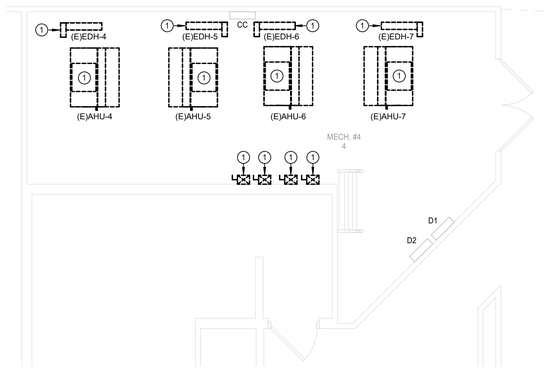
2 **ELECTRICAL DEMOLITION FLOOR PLAN - MECH 1 - EILAND ES**
Scale: 1/4" = 1'-0"



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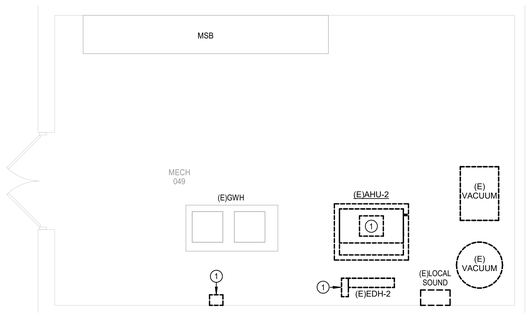
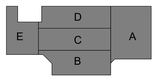
4 **ELECTRICAL DEMOLITION FLOOR PLAN - MECH 4 - EILAND ES**
Scale: 1/4" = 1'-0"



N
1 **ELECTRICAL DEMOLITION FLOOR PLAN - MAIN ELEC. - EILAND ES**
Scale: 1/4" = 1'-0"



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KLEIN, TX

ISSUED: JANUARY 27, 2026

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Revision No.	Revision Date

Project Director:	MR
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SHEET TITLE
ELECTRICAL DEMOLITION FLOOR PLANS - LEVEL 1 - EILAND

SHEET NO.
E12.01

KISD 2025 FRP

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Project No: 2500-02120-00

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LINETYPE LEGEND

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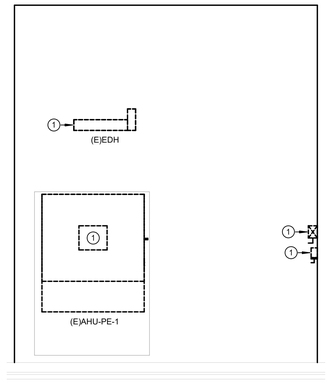
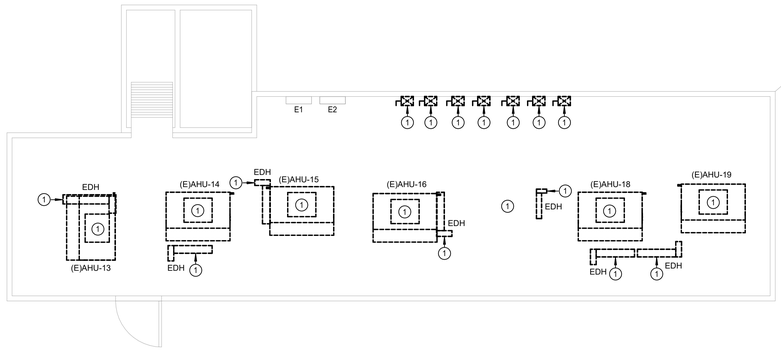


N
5 **ELECTRICAL DEMOLITION FLOOR PLAN - MEZZ GYM - EILAND ES**
Scale: 1/4" = 1'-0"



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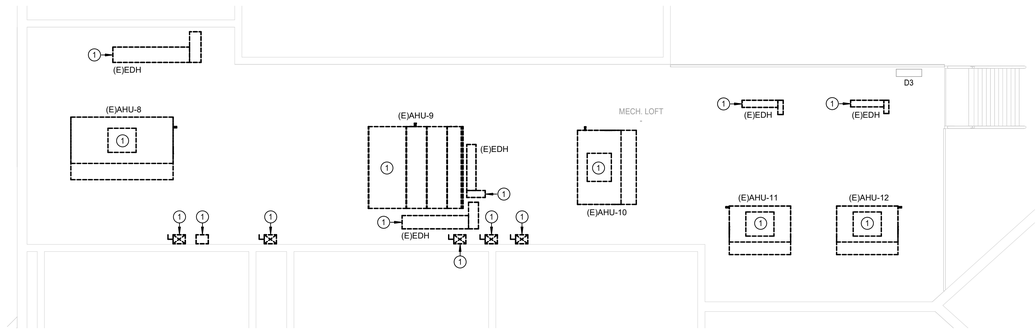
2 **ELECTRICAL DEMOLITION FLOOR PLAN - MECH LOFT 2 - EILAND ES**
Scale: 1/4" = 1'-0"



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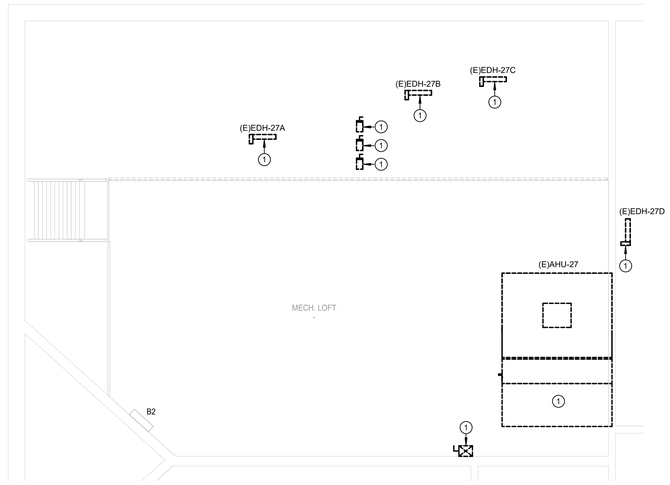
4 **ELECTRICAL DEMOLITION FLOOR PLAN - MECH LOFT 4 - EILAND ES**
Scale: 1/4" = 1'-0"



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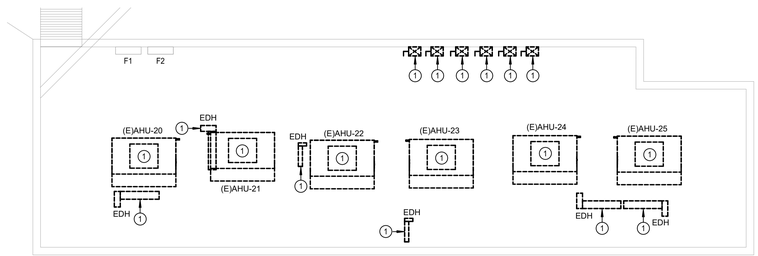
Scale: 1/4" = 1'-0"



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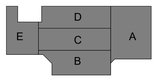
Scale: 1/4" = 1'-0"



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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	LT
Checked By:	PS
Drawn By:	LT

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25-0225.00

SHEET TITLE
ELECTRICAL DEMOLITION FLOOR PLANS - LEVEL 2 - EILAND

SHEET NO.
E12.02

KISD 2025 FRP

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Project No: 2550-02120-00

VLK

LINETYPE LEGEND

———	EXISTING TO REMAIN
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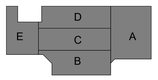
REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

ELECTRICAL KEYED NOTES

1 DISCONNECT EXISTING MECHANICAL EQUIPMENT AND REMOVE ASSOCIATED DISCONNECT/CONTROLLER FOR MECHANICAL EQUIPMENT REPLACEMENT AND NEW DISCONNECT/CONTROLLER. REMOVE EXISTING CIRCUIT BACK TO SOURCE OR NEXT DEVICE TO REMAIN. EXISTING 120V ACCESSORY CIRCUIT, IF ANY, SHALL BE LEFT IN PLACE FOR RE-USE.

N

1 **ELECTRICAL DEMOLITION ROOF PLAN - EILAND**
Scale: 1/16" = 1'-0"



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KLEIN, TX

ISSUED: JANUARY 27, 2026

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SHEET TITLE
ELECTRICAL DEMOLITION ROOF PLAN - EILAND

SHEET NO.
E12.03

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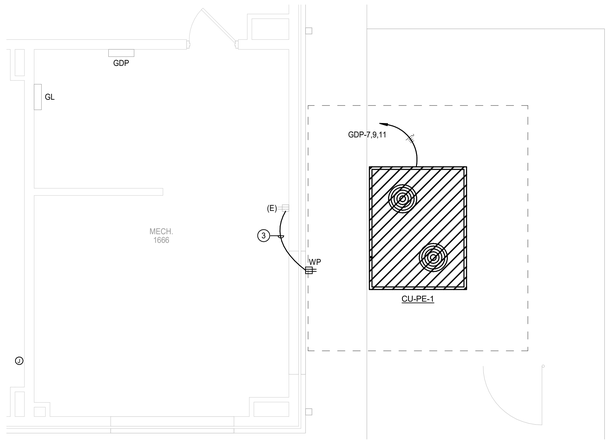
ELECTRICAL KEYED NOTES

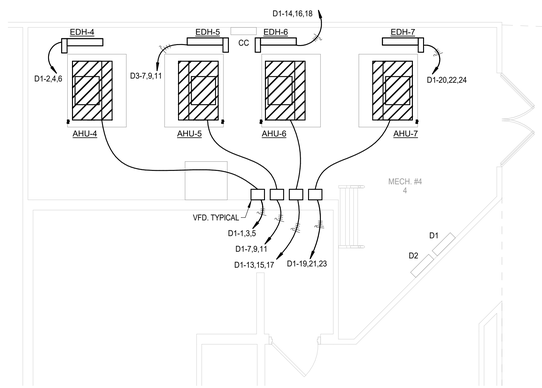
1 CONNECT TO EXISTING NORMAL AND EMERGENCY CIRCUITS IN ADJACENT MECH 049 SPACE. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE. REFER TO SPECIFICATIONS AND DETAIL SHEETS.

2 CONNECT NEW ELECTRIC DUCT HEATER TO EXISTING MSB 30A FUSED POSITION LEFT IN PLACE AFTER DEMOLITION. PROVIDE NEW 30A/3P FUSES IN EXISTING SPACE AND PROVIDE NEW 3#10, 1#10G. 3/4"C.

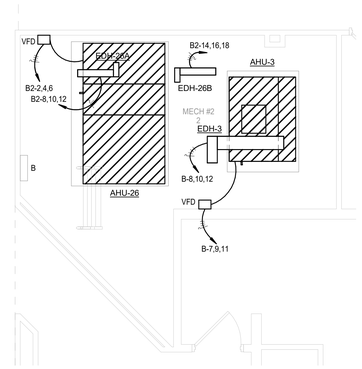
3 PROVIDE NEW RECEPTACLES AS SHOWN AND CONNECT TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION, EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO NEW LOCATION. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 1500 W @ 120 V.



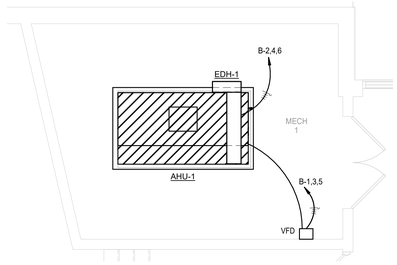
N 5 **ELECTRICAL FLOOR PLAN - MECH GYM - EILAND ES**
Scale: 1/4" = 1'-0"



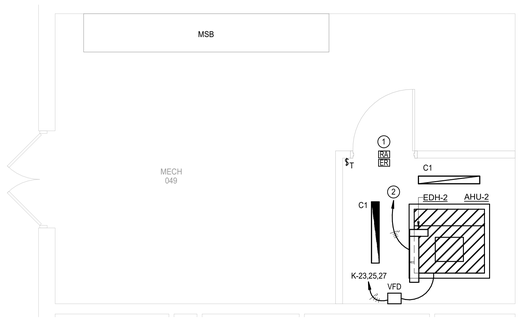
N 4 **ELECTRICAL FLOOR PLAN - MECH 4 - EILAND ES**
Scale: 1/4" = 1'-0"



N 3 **ELECTRICAL FLOOR PLAN - MECH 2 - EILAND ES**
Scale: 1/4" = 1'-0"



N 2 **ELECTRICAL FLOOR PLAN - MECH 1 - EILAND ES**
Scale: 1/4" = 1'-0"



N 1 **ELECTRICAL FLOOR PLAN - MAIN ELEC. - EILAND ES**
Scale: 1/4" = 1'-0"

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ISSUED: JANUARY 27, 2026

REVISIONS

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SHEET TITLE
ELECTRICAL FLOOR PLANS - LEVEL 1 - EILAND ES

SHEET NO.
E13.01

KISD 2025 FRP

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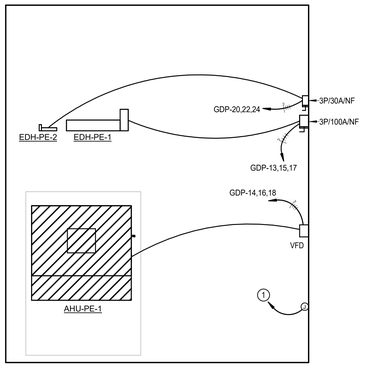
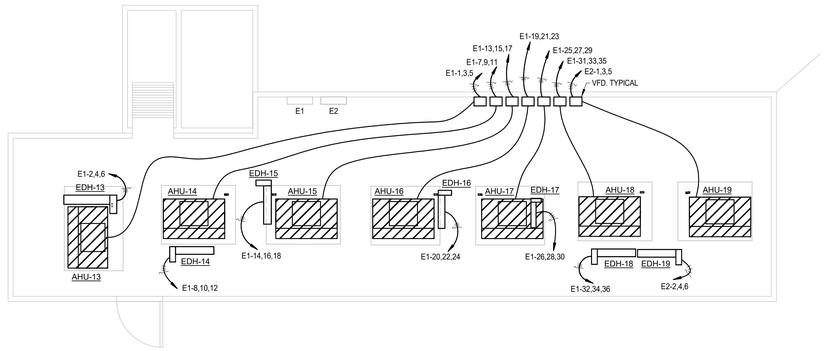
REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

ELECTRICAL KEYED NOTES

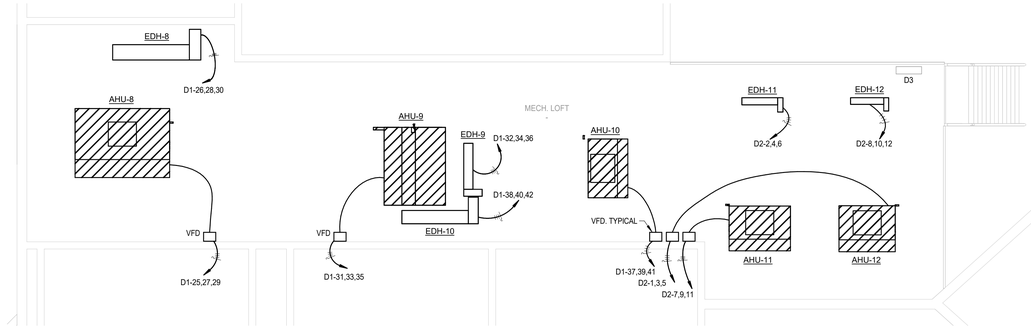
1 LEAK DETECTION. COORDINATE FINAL LOCATION WITH DIVISION 23. PROVIDE NEW BRANCH BREAKER IN EXISTING PANEL 'GL', 20A/1P, 2#12, 1#12G, 3/4"C.



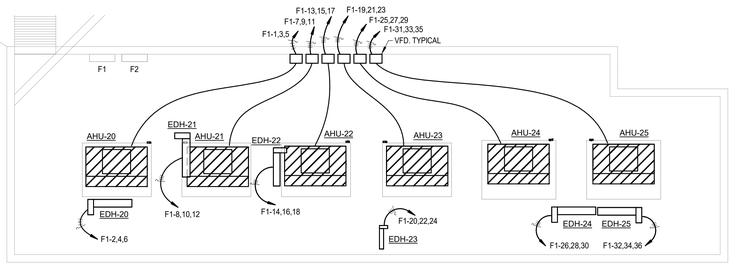
N 5 **ELECTRICAL FLOOR PLAN - MEZZ GYM - EILAND ES**
Scale: 1/4" = 1'-0"



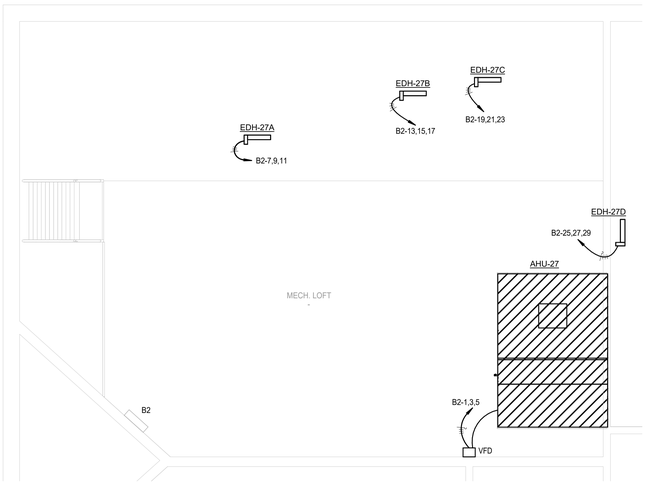
N 2 **ELECTRICAL FLOOR PLAN - MECH LOFT 2 - EILAND ES**
Scale: 1/4" = 1'-0"



N 4 **ELECTRICAL FLOOR PLAN - MECH LOFT 4 - EILAND ES**
Scale: 1/4" = 1'-0"



N 3 **ELECTRICAL FLOOR PLAN - MECH LOFT 3 - EILAND**
Scale: 1/4" = 1'-0"



N 1 **ELECTRICAL FLOOR PLAN - MECH LOFT 1 -EILAND ES**
Scale: 1/4" = 1'-0"

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KLEIN, TX

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01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	LT
Checked By:	PS
Drawn By:	LT

PROJECT NO.
25-0225.00

SHEET TITLE
ELECTRICAL FLOOR PLANS - LEVEL 2 - EILAND ES

SHEET NO.
E13.02

KISD 2025 FRP

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KLEIN, TX

LINETYPE LEGEND

———	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
———	NEW WORK

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

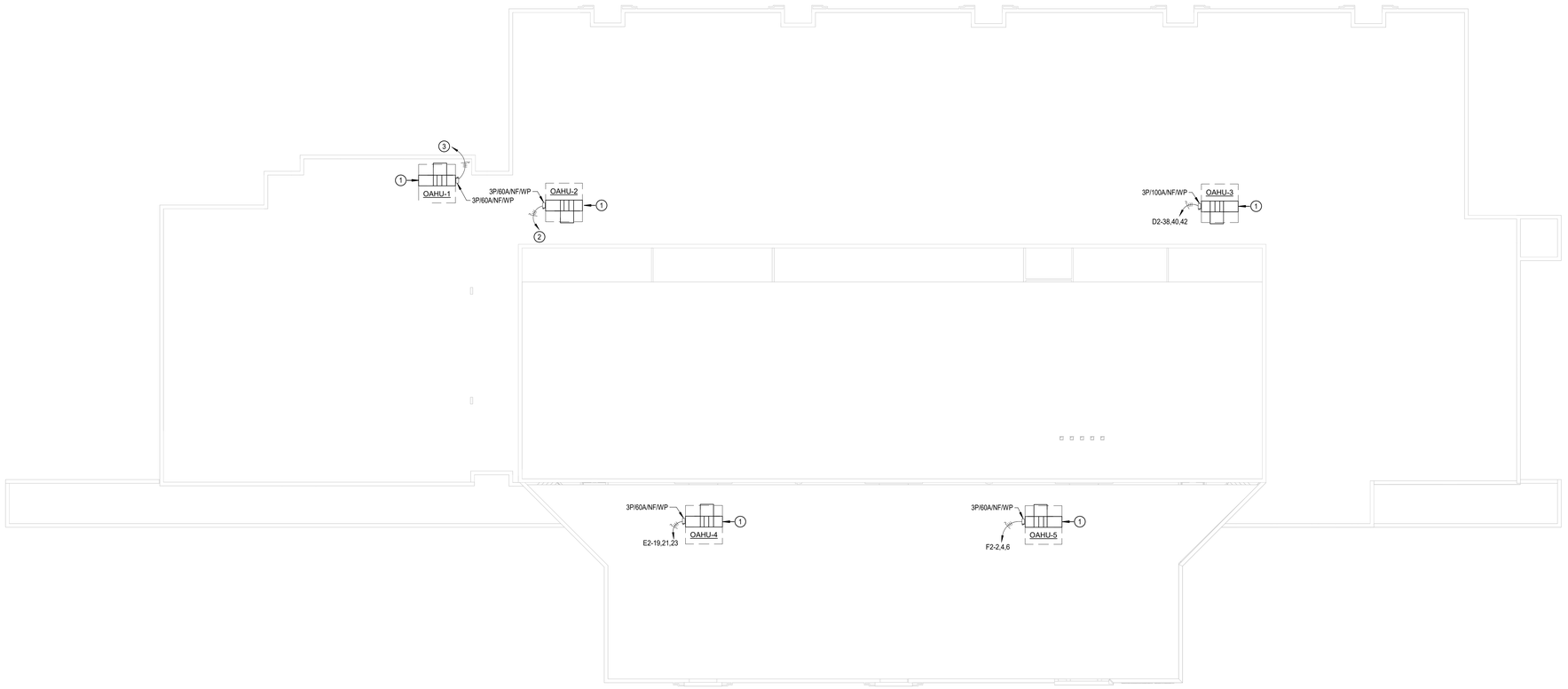
REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

ELECTRICAL KEYED NOTES

1 MAKE FINAL CONNECTION TO REPLACEMENT 120V ACCESSORY CIRCUIT, IF ANY, WITH MATCHING CONDUCTORS/CONDUIT SIZE.

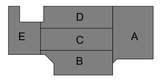
2 CONNECT ROOF MOUNTED MECHANICAL UNIT TO EXISTING MSB 100A FUSED POSITION LEFT IN PLACE AFTER DEMOLITION. PROVIDE NEW 60A/3P FUSES IN EXISTING SPACE AND PROVIDE NEW 3#6, 1#10G, 3/4"C. MAKE FINAL CONNECTION TO REPLACEMENT 120V ACCESSORY CIRCUIT, IF ANY, WITH MATCHING CONDUCTORS/CONDUIT SIZE.

3 CONNECT ROOF MOUNTED MECHANICAL UNIT TO EXISTING PANEL SOURCE. PROVIDE NEW 40A/3P BREAKER/FUSES IN EXISTING SPACE AND PROVIDE NEW 3#8, 1#10G, 3/4"C.. MAKE FINAL CONNECTION TO REPLACEMENT 120V ACCESSORY CIRCUIT, IF ANY, WITH MATCHING CONDUCTORS/CONDUIT SIZE.



N

1 **ELECTRICAL ROOF PLAN - EILAND**
Scale: 1/16" = 1'-0"



KEY PLAN

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LICENSED
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STATE OF TEXAS
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	LT
Checked By:	PS
Drawn By:	LT

PROJECT NO.
25-0225.00

SHEET TITLE
ELECTRICAL ROOF PLAN - EILAND

SHEET NO.
E13.03

KISD 2025 FRP

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PANELBOARD CIRCUIT DIRECTORY:

CONTRACTOR SHALL RECORD AND/OR PRESERVE THE EXISTING CIRCUIT DIRECTORY, IF ANY, FOR THE SOLE PURPOSE UPON COMPLETION OF NEW WORK OF PRODUCING A NEW CIRCUIT DIRECTORY.

CONTRACTOR SHALL PROVIDE AS PART OF THE CONSTRUCTION DOCUMENTS A NEW, NEATLY TYPED DIRECTORY. CONTRACTOR SHALL LEGIBLY IDENTIFY AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE, LOADS SERVED AND LOCATION AND/OR THE PANELBOARD SCHEDULE ON THE DRAWINGS. THE WORD "EXISTING" SHALL NOT BE USED ON PANELBOARD DIRECTORIES. SPARE BREAKERS ARE TO BE LISTED AS "SPARE". SPACES WITH NO BREAKERS ARE TO BE LEFT BLANK. REFER TO NEC-2023: 408.4(A) FOR DETAILS.

CONTRACTOR SHALL PERMANENTLY LABEL AS PART OF THE CONSTRUCTION DOCUMENTS ALL SWITCHBOARDS, SWITCHGEAR AND PANELBOARDS TO INDICATE EACH POWER SOURCE. REFER TO NEC-2023: 408.4(B) FOR DETAILS.

CONTRACTOR TO FIELD VERIFY INTERRUPTING FAULT CURRENT CAPACITY OF EXISTING PANELS AND/OR SWITCHBOARDS AND TO PROVIDE NEW BREAKERS/FUSES TO MATCH EXISTING.

Branch Panel: F1 — Campus: Eiland ES — EXISTING PANEL

Location: **Supply From:** **Mounting:** Surface
Volts: 277/480 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: Existing **Enclosure:** Type 1 **Mains:** 225A MLO
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				0.9 / 4.0						2	
1	3	AHU-20	#12	20 3		0.9 / 4.0		3	20 #12	EDH-20	4	1
	5						0.9 / 4.0				6	
	7				0.9 / 2.0						8	
1	9	AHU-21	#12	20 3		0.9 / 2.0		3	20 #12	EDH-21	10	1
	11						0.9 / 2.0				12	
	13				0.9 / 4.0						14	
1	15	AHU-22	#12	20 3		0.9 / 4.0		3	20 #12	EDH-22	16	1
	17						0.9 / 4.0				18	
	19				0.9 / 2.0						20	
1	21	AHU-23	#12	20 3		0.9 / 2.0		3	20 #12	EDH-23	22	1
	23						0.9 / 2.0				24	
	25				0.9 / 5.0						26	
1	27	AHU-24	#12	20 3		0.9 / 5.0		3	30 #10	EDH-24	28	1
	29						0.9 / 5.0				30	
	31				0.9 / 3.0						32	
1	33	AHU-25	#12	20 3		0.9 / 3.0		3	20 #12	EDH-25	34	1
	35						0.9 / 3.0				36	
					Total Load:	28.9 kVA	28.9 kVA	27.9 kVA				
					Total Amps:	105 A	105 A	101 A				

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	80.8 kVA	100.00%	80.8 kVA		
Miscellaneous	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	85.8 kVA
Existing	5.0 kVA	125.00%	6.3 kVA	**Total Est. Demand:**	87.0 kVA
				Total Conn. Current:	103 A
				Total Est. Demand...	105 A

Notes:
1. New circuit and breaker.

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: E2 — Campus: Eiland ES — EXISTING PANEL

Location: **Supply From:** E1 **Mounting:** Surface
Volts: 277/480 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: Existing **Enclosure:** Type 1 **Mains:** 225A MLO
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				1.5 / 5.0						2	
1	3	AHU-19	#12	20 3		1.5 / 5.0		3	30 #10	EDH-19	4	1
	5						1.5 / 5.0				6	
--	7	Space	--	-- 1	0.0 / 1.0			1	20 --	Existing lighting	8	--
--	9	Space	--	-- 1		0.0 / 1.0		1	20 --	Existing lighting	10	--
--	11	Existing lighting	--	20 1			1.0 / 1.0	1	20 --	Existing lighting	12	--
	13				6.0 / 1.0			1	20 --	Existing lighting	14	--
--	15	Existing XFMR 'CB'	--	50 3		6.0 / 1.0		1	20 --	Existing lighting	16	--
	17						6.0 / 1.0	1	20 --	Existing lighting	18	--
	19				1.2 / 0.0			1	-- --	Space	20	--
1	21	OAHU-4 (on roof)	#8	50 3		1.2 / 2.0		2	30 --	Existing XFMR 'TE'	22	--
	23						1.2 / 2.0				24	
					Total Load:	15.8 kVA	17.8 kVA	18.8 kVA				
					Total Amps:	57 A	65 A	69 A				

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	23.4 kVA	100.00%	23.4 kVA		
Miscellaneous	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	52.4 kVA
Existing	29.0 kVA	125.00%	36.3 kVA	**Total Est. Demand:**	59.6 kVA
				Total Conn. Current:	63 A
				Total Est. Demand...	72 A

Notes:
1. New circuit and breaker.

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: E1 — Campus: Eiland ES — EXISTING PANEL

Location: **Supply From:** **Mounting:** Surface
Volts: 277/480 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: Existing **Enclosure:** Type 1 **Mains:** 225A MLO
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				1.5 / 4.3						2	
1	3	AHU-13	#12	20 3		1.5 / 4.3		3	20 #12	EDH-13	4	1
	5						1.5 / 4.3				6	
	7				1.5 / 3.0						8	
1	9	AHU-14	#12	20 3		1.5 / 3.0		3	20 #12	EDH-14	10	1
	11						1.5 / 3.0				12	
	13				1.5 / 5.0						14	
1	15	AHU-15	#12	20 3		1.5 / 5.0		3	30 #12	EDH-15	16	1
	17						1.5 / 5.0				18	
	19				1.5 / 4.0						20	
1	21	AHU-16	#12	20 3		1.5 / 4.0		3	20 #12	EDH-16	22	1
	23						1.5 / 4.0				24	
	25				0.7 / 1.0						26	
1	27	AHU-17	#12	20 3		0.7 / 1.0		3	20 #12	EDH-17	28	1
	29						0.7 / 1.0				30	
	31				1.5 / 3.0						32	
1	33	AHU-18	#12	20 3		1.5 / 3.0		3	20 #12	EDH-18	34	1
	35						1.5 / 3.0				36	
					Total Load:	44.6 kVA	46.6 kVA	47.6 kVA				
					Total Amps:	161 A	169 A	173 A				

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	109.7 kVA	100.00%	109.7 kVA		
Miscellaneous	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	138.7 kVA
Existing	29.0 kVA	125.00%	36.3 kVA	**Total Est. Demand:**	145.9 kVA
				Total Conn. Current:	167 A
				Total Est. Demand...	176 A

Notes:
1. New circuit and breaker.

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: D3 — Campus: Eiland ES — EXISTING PANEL

Location: MECH. LOFT - **Supply From:** D1 **Mounting:** Surface
Volts: 277/480 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: Existing **Enclosure:** Type 1 **Mains:** 100A MLO
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				1.0 / 1.0						2	
--	3	Existing FCU#1	--	20 3		1.0 / 1.0		3	20 --	Existing	4	--
	5						1.0 / 1.0				6	
	7				5.0 / 0.0			1	-- --	Space	8	--
1	9	EDH-5	#10	30 3		5.0 / 0.0		1	-- --	Space	10	--
	11						5.0 / 0.0	1	-- --	Space	12	--
--	13	Space	--	-- 1	0.0 / 0.0						14	
--	15	Space	--	-- 1		0.0 / 0.0		3	30 --	Existing SPD	16	--
--	17	Space	--	-- 1			0.0 / 0.0				18	
					Total Load:	7.0 kVA	7.0 kVA	7.0 kVA				
					Total Amps:	25 A	25 A	25 A				

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	15.0 kVA	100.00%	15.0 kVA		
Existing	6.0 kVA	125.00%	7.5 kVA	**Total Conn. Load:**	21.0 kVA
				Total Est. Demand:	22.5 kVA
				Total Conn. Current:	25 A
				Total Est. Demand...	27 A

Notes:
1. New circuit and breaker.

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: D2 — Campus: Eiland ES — EXISTING PANEL

Location: MECH. #4 4 **Supply From:** D1 **Mounting:** Surface
Volts: 277/480 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: Existing **Enclosure:** Type 1 **Mains:** 400A MLO
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				1.5 / 6.0						2	
1	3	AHU-11	#12	20 3		1.5 / 6.0		3	30 #10	EDH-11	4	1
	5						1.5 / 6.0				6	
	7				0.9 / 2.0						8	
1	9	AHU-12	#12	20 3		0.9 / 2.0		3	20 #12	EDH-12	10	1
	11						0.9 / 2.0				12	
	13				5.0 / 15.0						14	
--	15	Existing elevator	--	60 3		5.0 / 15.0		3	100 --	Existing XFMR 'TD'	16	--
	17						5.0 / 15.0				18	
--	19	Existing lighting	--	20 1	1.0 / 1.0			1	20 --	Existing lighting	20	--
--	21	Existing lighting	--	20 1		1.0 / 1.0		1	20 --	Existing lighting	22	--
--	23	Existing lighting	--	20 1			1.0 / 1.0	1	20 --	Existing lighting	24	--
--	25	Existing lighting	--	20 1	1.0 / 1.0			1	20 --	Existing lighting	26	--
--	27	Existing lighting	--	20 1		1.0 / 1.0		1	20 --	Existing lighting	28	--
--	29	Existing lighting	--	20 1			1.0 / 1.0	1	20 --	Existing lighting	30	--
	31	Temp. Building	--	60 2	3.0 / 5.0						32	
--	33					3.0 / 5.0		3	50 --	Existing XFMR 'CC'	34	--
	35						3.0 / 5.0				36	
--	37	Temp. Building	--	60 2	3.0 / 1.2						38	
--	39	Space	--	-- 1		0.0 / 1.2		3	70 #4	OAHU-3 (on roof)	40	1
--	41	Space	--	-- 1			0.0 / 1.2				42	
					Total Load:	46.7 kVA	43.7 kVA	43.7 kVA				
					Total Amps:	169 A	158 A	158 A				

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	35.2 kVA	100.00%	35.2 kVA		
Miscellaneous	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	134.2 kVA
Existing	99.0 kVA	125.00%	123.8 kVA	**Total Est. Demand:**	159.0 kVA
				Total Conn. Current:	161 A
				Total Est. Demand...	191 A

Notes:
1. New circuit and breaker.

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: D1 — Campus: Eiland ES — EXISTING PANEL

Location: MECH. #4 4 **Supply From:** **Mounting:** Surface
Volts: 277/480 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: Existing **Enclosure:** Type 1 **Mains:** 400A MLO
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				1.5 / 4.0						2	
1	3	AHU-4	#12	20 3		1.5 / 4.0		3	20 #12	EDH-4	4	1
	5						1.5 / 4.0				6	
	7				1.9 / 7.0						8	
1	9	AHU-5	#12	20 3		1.9 / 7.0		3	60 Exis.	Existing D3	10	
	11						1.9 / 7.0				12	
	13				1.5 / 5.0						14	
1	15	AHU-6	#12	20 3		1.5 / 5.0		3	30 #10	EDH-6	16	1
	17						1.5 / 5.0				18	
	19				1.5 / 5.0						20	
1	21	AHU-7	#12	20 3		1.5 / 5.0		3	30 #10	EDH-7	22	1
	23						1.5 / 5.0				24	
	25				3.1 / 11.0						26	
1	27	AHU-8	#10	30 3		3.1 / 11.0		3	50 #8	EDH-8	28	1
	29						3.1 / 11.0				30	
	31				1.6 / 3.3						32	
1	33	AHU-9	#12	20 3		1.6 / 3.3		3	20 #12	EDH-9	34	1
	35						1.6 / 3.3				36	
	37				1.7 / 3.3						38	
1	39	AHU-10	#12	20 3		1.7 / 3.3		3	20 #12	EDH-10	40	1
	41						1.7 / 3.3				42	
					Total Load:	98.5 kVA	95.5 kVA	95.5 kVA				
					Total Amps:	355 A	345 A	345 A				

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	184.4 kVA	100.00%	184.4 kVA		
Miscellaneous	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	289.4 kVA
Existing	105.0 kVA	125.00%	131.3 kVA	**Total Est. Demand:**	315.7 kVA
				Total Conn. Current:	348 A
				Total Est. Demand...	380 A

Notes:
1. New circuit and breaker.

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: B2 — Campus: Eiland ES — EXISTING PANEL

Location: MECH. LOFT - **Supply From:** **Mounting:** Surface
Volts: 277/480 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: Existing **Enclosure:** Type 1 **Mains:** 225A MLO
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				3.1 / 1.7						2	
1	3	AHU-27	#10	30 3		3.1 / 1.7		3	20 #12	AHU-26	4	1
	5						3.1 / 1.7				6	
	7				4.3 / 4.3						8	
1	9	EDH-27A	#12	20 3		4.3 / 4.3		3	20 #12	EDH-26A	10	1
	11						4.3 / 4.3				12	
	13				4.3 / 4.3						14	
1	15	EDH-27B	#12	20 3		4.3 / 4.3		3	20 #12	EDH-26B	16	1
	17						4.3 / 4.3				18	
	19				4.3 / 1.0			1	20 --	Existing lighting	20	--
1	21	EDH-27C	#12	20 3		4.3 / 1.0		1	20 --	Existing lighting	22	--
	23						4.3 / 1.0	1	20 --	Existing lighting	24	--
	25				4.3 / 1.0			1	20 --	Existing lighting	26	--
1	27	EDH-27D	#12	20 3		4.3 / 1.0		1	20 --	Existing lighting	28	--
	29						4.3 / 1.0	1	20 --	Existing lighting	30	--
--	31	Spare	--	20 1	0.0 / 7.0						32	
--	33	Spare	--	20 1		0.0 / 7.0		3	70 --	Existing XFMR	34	--
--	35	Spare	--	20 1			0.0 / 7.0				36	
	37				5.0 / 0.0			1	20 --	Spare	38	--
--	39	Existing XFMR 'XN'	--	50 3		5.0 / 0.0		1	20 --	Spare	40	--
	41						5.0 / 0.0	1	20 --	Spare	42	--
					Total Load:	44.8 kVA	44.8 kVA	44.8 kVA				
					Total Amps:	162 A	162 A	162 A				

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	92.4 kVA	100.00%	92.4 kVA		
Existing	42.0 kVA	125.00%	52.5 kVA	**Total Conn. Load:**	134.4 kVA
				Total Est. Demand:	144.9 kVA
				Total Conn. Current:	162 A
				Total Est. Demand...	174 A

Notes:
1. New circuit and breaker.

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: B — Campus: Eiland ES — EXISTING PANEL

Location: MECH #2 2 **Supply From:** **Mounting:** Surface
Volts: 277/480 Wye **Phases:** 3 **Wires:** 4
A.I.C. Rating: Existing **Enclosure:** Type 1 **Mains:** 225A MLO
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				6.5 / 19.7						2	
1	3	AHU-1	#6	60 3		6.5 / 19.7		3	90 #3	EDH-1	4	1
	5						6.5 / 19.7				6	
	7				2.4 / 7.0						8	
1	9	AHU-3	#12	20 3		2.4 / 7.0		3	40 #8	EDH-3	10	1
	11						2.4 / 7.0				12	
--	13	Existing lighting	--	20 1	1.0 / 0.0			1	-- --	Space	14	--
--	15	Existing lighting	--	20 1		1.0 / 3.0		2	60 --	Existing T-building	16	--
--	17	Existing lighting	--	20 1			1.0 / 3.0				18	
--	19	Existing lighting	--	20 1	1.0 / 3.0			2	60 --	Existing T-building	20	--
--	21	Existing T-building	--	60 2		3.0 / 3.0					22	--
	23						3.0 / 0.0	1	-- --	Space	24	--
--	25	Space	--	-- 1	0.0 / 0.0			1	-- --	Space	26	--
--	27	Space	--	-- 1		0.0 / 0.0		1	-- --	Space	28	--
--	29	Space	--	-- 1			0.0 / 0.0	1	-- --	Space	30	--
					Total Load:	40.5 kVA	45.5 kVA	42.5 kVA				
					Total Amps:	146 A	165 A	155 A				

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	106.6 kVA	100.00%	106.6 kVA		
Existing	22.0 kVA	125.00%	27.5 kVA	**Total Conn. Load:**	128.6 kVA
				Total Est. Demand:	134.1 kVA
				Total Conn. Current:	155 A
				Total Est. Demand...	161 A

Notes:
1. New circuit and breaker.

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

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BRADLEY KALMANS
STATE OF TEXAS
68259
LICENSED
ELECTRICAL ENGINEER
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director: MR
Designed By: LT
Checked By: PS
Drawn By: LT

PROJECT NO.
25-0225.00

SHEET TITLE
ELECTRICAL PANELBOARD SCHEDULES - EILAND

SHEET NO.
E14.01

KISD 2025 FRP

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Houston, TX 77064
Registration: F-4111
Project No: 2500-02120-00

PANELBOARD CIRCUIT DIRECTORY:

CONTRACTOR SHALL RECORD AND/OR PRESERVE THE EXISTING CIRCUIT DIRECTORY, IF ANY, FOR THE SOLE PURPOSE UPON COMPLETION OF NEW WORK OF PRODUCING A NEW CIRCUIT DIRECTORY.

CONTRACTOR SHALL PROVIDE AS PART OF THE CONSTRUCTION DOCUMENTS A NEW, NEATLY TYPED DIRECTORY. CONTRACTOR SHALL LEGIBLY IDENTIFY AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE, LOADS SERVED AND LOCATION AND/OR THE PANELBOARD SCHEDULE ON THE DRAWINGS. THE WORD "EXISTING" SHALL NOT BE USED ON PANELBOARD DIRECTORIES. SPARE BREAKERS ARE TO BE LISTED AS "SPARE". SPACES WITH NO BREAKERS ARE TO BE LEFT BLANK. REFER TO NEC-2023: 408.4(A) FOR DETAILS.

CONTRACTOR SHALL PERMANENTLY LABEL AS PART OF THE CONSTRUCTION DOCUMENTS ALL SWITCHBOARDS, SWITCHGEAR AND PANELBOARDS TO INDICATE EACH POWER SOURCE. REFER TO NEC-2023: 408.4(B) FOR DETAILS.

CONTRACTOR TO FIELD VERIFY INTERRUPTING FAULT CURRENT CAPACITY OF EXISTING PANELS AND/OR SWITCHBOARDS AND TO PROVIDE NEW BREAKERS/FUSES TO MATCH EXISTING.

Branch Panel: GDP — Campus: Eiland ES — EXISTING PANEL

Location: Room 1647 | **Volts:** 277/480 Wye | **A.I.C. Rating:** Existing
Supply From: | **Phases:** 3 | **Enclosure:** Type 1
Mounting: Surface | **Wires:** 4 | **Mains:** 400A MCB
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				10.0 / 8.0						2	
--	3	GH	--	100	3	10.0 / 8.0		3	70	-- XFMR GT	4	--
	5						10.0 / 8.0				6	
	7				14.3 / 0.0			1	--	-- Space	8	--
1	9	CU-PE-1	#4	80	3	14.3 / 0.0		1	--	-- Space	10	--
	11						14.3 / 0.0	1	--	-- Space	12	--
	13				14.3 / -0.2						14	
1	15	EDH-PE-1	#4	70	3	14.3 / -0.2		3	20	#12 AHU-PE-1	16	1
	17						14.3 / -0.2				18	
	19				0.0 / 1.3						20	
--	21	Spare	--	70	3	0.0 / 1.3		3	20	#12 EDH-PE-2	22	1
	23						0.0 / 1.3				24	
	25				0.0 / 0.0						26	
--	27	Spare	--	30	3	0.0 / 0.0		3	100	-- Spare	28	--
	29						0.0 / 0.0				30	
			Total Load:		47.7 kVA	47.7 kVA	47.7 kVA					
			Total Amps:		172 A	172 A	172 A					

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	89.1 kVA	100.00%	89.1 kVA		
Miscellaneous	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	143.1 kVA
Existing	54.0 kVA	125.00%	67.5 kVA	**Total Est. Demand:**	156.6 kVA
				Total Conn. Current:	172 A
				Total Est. Demand...	188 A

Notes:
1. New circuit and breaker.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: K — Campus: Eiland ES — EXISTING PANEL

Location: KITCHEN/SERVING 052 | **Volts:** 277/480 Wye | **A.I.C. Rating:** Existing
Supply From: | **Phases:** 3 | **Enclosure:** Type 1
Mounting: Surface | **Wires:** 4 | **Mains:** 250A MLO
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
--	1	Existing lighting	--	20	1	1.5 / 12.0					2	
	3						2.5 / 12.0	3	70	-- Existing Dish Machine	4	--
--	5	Existing disposal	--	15	3						6	
	7					2.5 / 0.0					8	
	9						1.0 / 0.0	3	40	-- Spare	10	--
--	11	Existing EF-A1	--	20	3						12	
	13					1.0 / 0.0		1	--	-- Space	14	--
--	15	Space	--	--	1		0.0 / 0.0	1	--	-- Space	16	--
	17						1.0 / 0.0	1	--	-- Space	18	--
--	19	Existing EF-A2	--	20	3	1.0 / 0.0		1	--	-- Space	20	--
	21						1.0 / 0.0	1	--	-- Space	22	--
	23							1	--	-- Space	24	--
1	25	AHU-2	#12	20	3	2.0 / 0.0		1	--	-- Space	26	--
	27						2.0 / 0.0	1	--	-- Space	28	--
--	29	Space	--	--	1			1	--	-- Space	30	--
			Total Load:			20.0 kVA	18.5 kVA	18.5 kVA				
			Total Amps:			72 A	67 A	67 A				

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	6.0 kVA	100.00%	6.0 kVA		
Existing	51.0 kVA	125.00%	63.8 kVA	**Total Conn. Load:**	57.0 kVA
				Total Est. Demand:	69.7 kVA
				Total Conn. Current:	69 A
				Total Est. Demand...	84 A

Notes:
1. New circuit and breaker.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: F2 — Campus: — EXISTING PANEL

Location: | **Volts:** 277/480 Wye | **A.I.C. Rating:** Existing
Supply From: F1 | **Phases:** 3 | **Enclosure:** Type 1
Mounting: Surface | **Wires:** 4 | **Mains:** 225A MLO
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
--	1	Existing XFMR 'TF'	--	60	2	0.0 / 1.2					2	
	3						0.0 / 1.2	3	40	#8 OAHU-5 (on roof)	4	1
--	5	Space	--	--	1						6	
--	7	Existing lighting	--	20	1	1.0 / 1.0		1	20	-- Existing lighting	8	--
--	9	Existing lighting	--	20	1		1.0 / 1.0	1	20	-- Existing lighting	10	--
--	11	Space	--	--	1			1	20	-- Existing lighting	12	--
--	13	Space	--	--	1	0.0 / 0.0		1	--	-- Space	14	--
--	15	Space	--	--	1		0.0 / 0.0	1	--	-- Space	16	--
--	17	Space	--	--	1			1	--	-- Space	18	--
--	19	Space	--	--	1	0.0 / 0.0		1	--	-- Space	20	--
--	21	Space	--	--	1		0.0 / 0.0	1	--	-- Space	22	--
--	23	Space	--	--	1			1	--	-- Space	24	--
			Total Load:			3.2 kVA	3.2 kVA	2.2 kVA				
			Total Amps:			12 A	12 A	8 A				

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	3.7 kVA	100.00%	3.7 kVA		
Miscellaneous	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	8.7 kVA
Existing	5.0 kVA	125.00%	6.3 kVA	**Total Est. Demand:**	10.0 kVA
				Total Conn. Current:	10 A
				Total Est. Demand...	12 A

Notes:
1. New circuit and breaker.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
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BRADLEY KALMANS 142222 LICENSED PROFESSIONAL ENGINEER
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director: MR
Designed By: LT
Checked By: PS
Drawn By: LT

PROJECT NO.
25-0225.00

SHEET TITLE
ELECTRICAL PANELBOARD SCHEDULES - EILAND

SHEET NO.
E14.02

KISD 2025 FRP

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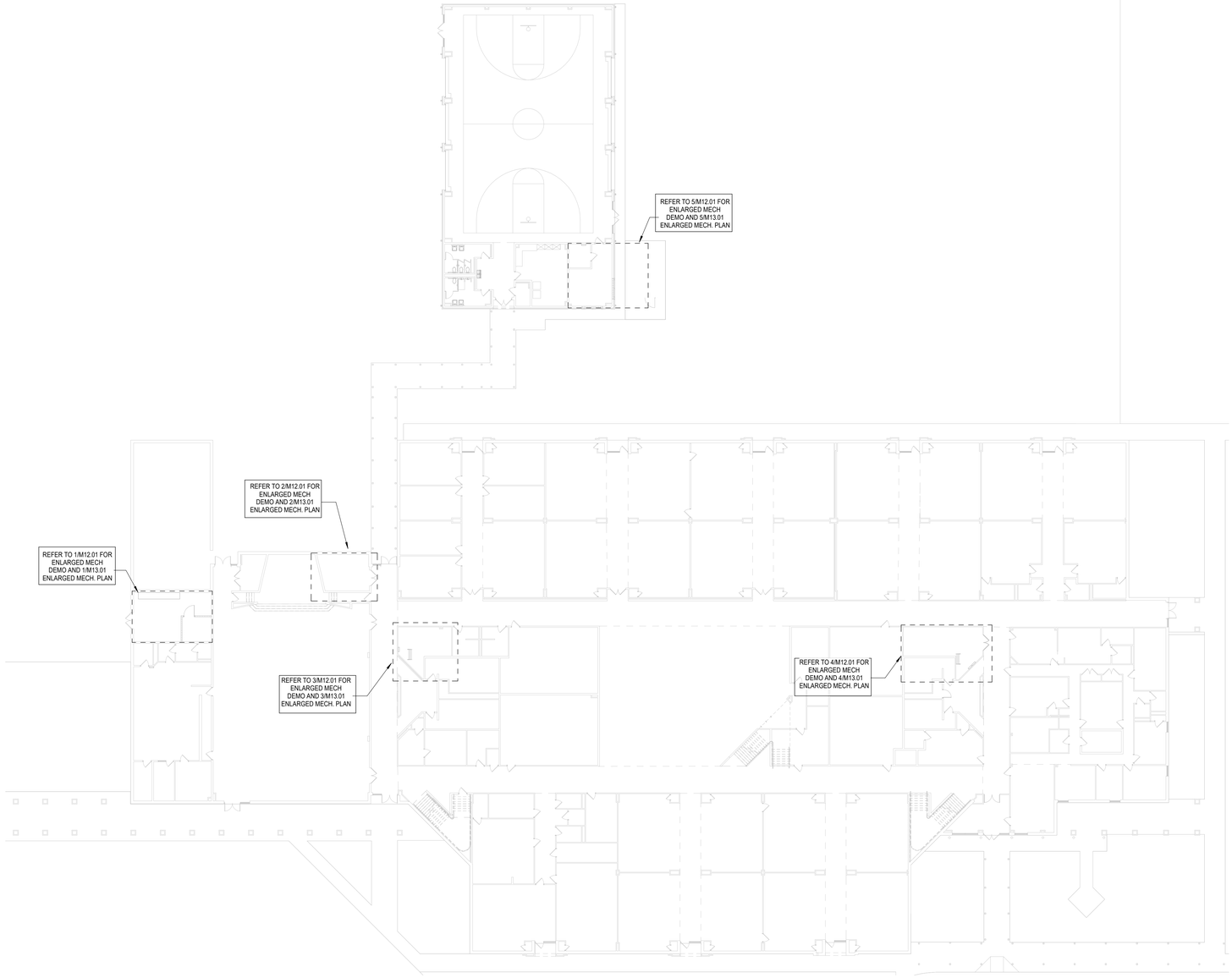
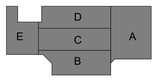


1 **MECHANICAL COMPOSITE PLAN - LEVEL 1 - EILAND**
Scale: 1" = 20'-0"



KEY PLAN

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BRADLEY KALMANS
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

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Checked By:	VP
Drawn By:	IP

PROJECT NO.
25-0225.00

SHEET TITLE
MECHANICAL COMPOSITE PLAN - LEVEL 1 - EILAND

SHEET NO.
M11.01

KISD 2025 FRP

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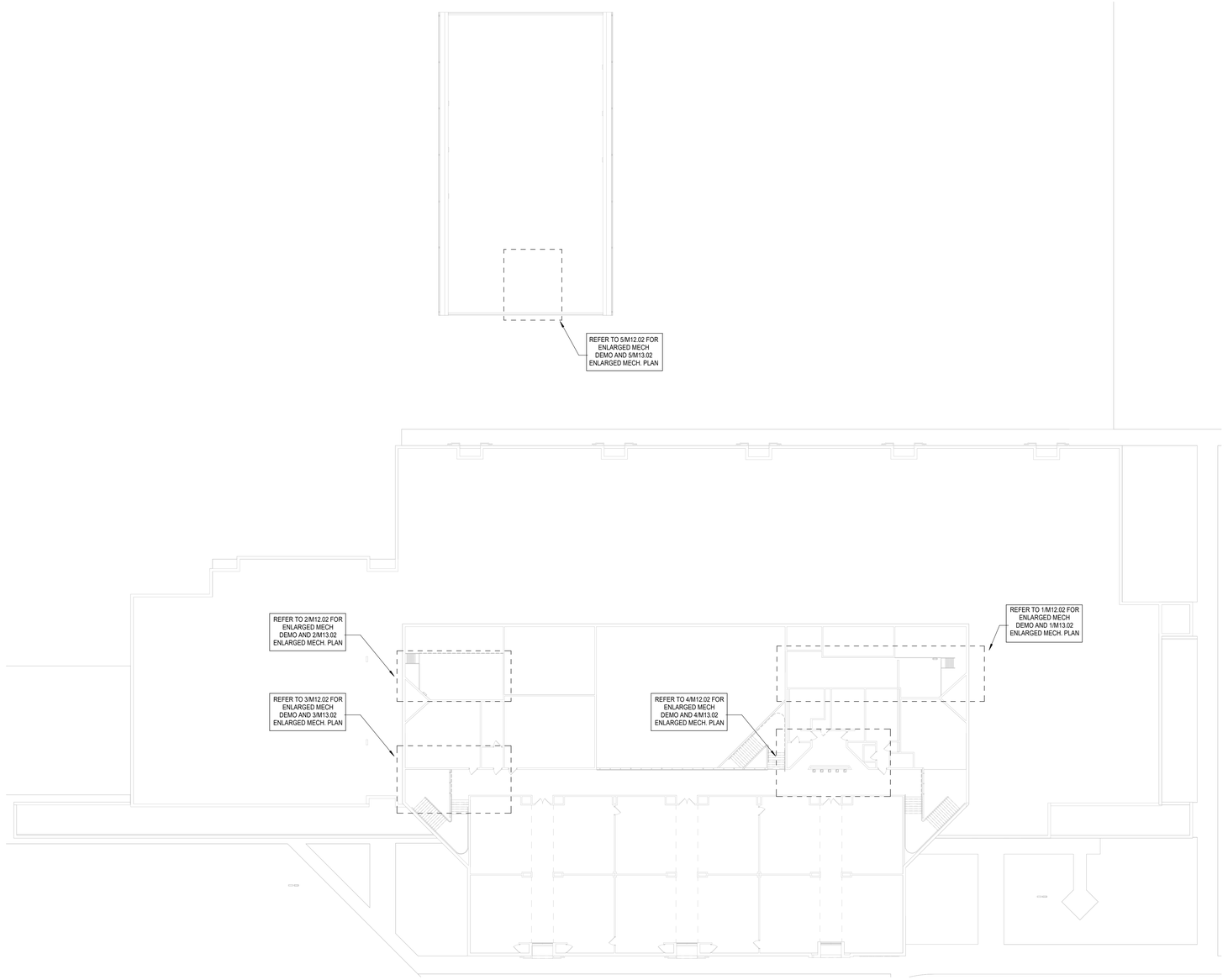
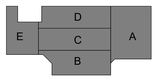
Project No: 2500-02120-00



1 **MECHANICAL COMPOSITE PLAN - LEVEL 2 - EILAND**
Scale: 1" = 20'-0"



KEY PLAN

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	IP
Checked By:	VP
Drawn By:	IP

PROJECT NO.
25-0225.00

SHEET TITLE
MECHANICAL COMPOSITE PLAN - LEVEL 2 - EILAND

SHEET NO.
M11.02

KISD 2025 FRP

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GENERAL NOTES:

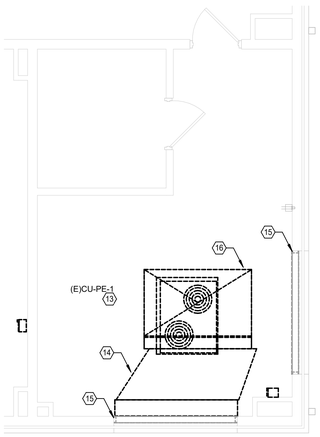
1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITHED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

SYMBOL LEGEND

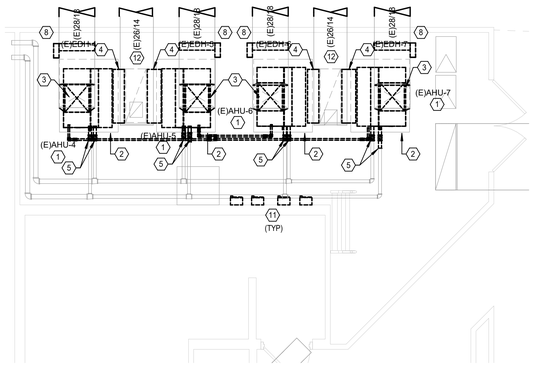
SYMBOL	DESCRIPTION
RENOVATIONS	
⊕	POINT OF CONNECTION FROM NEW TO EXISTING
▭	ITEM TO REMAIN
▭ (dashed)	ITEM TO BE REMOVED

DEMOLITION KEYED NOTES:

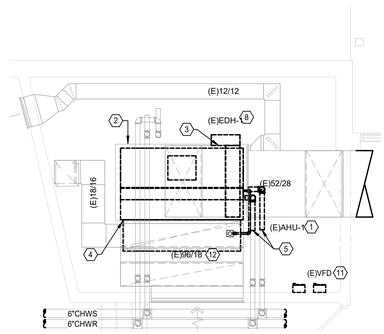
1. REMOVE EXISTING AIR HANDLING UNIT AND ASSOCIATED CONDENSATE PIPING. EXISTING DUCTWORK SHALL REMAIN AND REUSED.
2. EXISTING CONCRETE PAD SHALL REMAIN AND BE REUSED.
3. REMOVE EXISTING SUPPLY DUCTWORK UP TO THIS POINT.
4. REMOVE EXISTING RETURN PLENUM.
5. REMOVE EXISTING CHWS&R PIPING BACK TO THIS POINT.
6. REMOVE EXISTING VACUUM SYSTEM.
7. EXISTING EQUIPMENT TO REMAIN AND BE REUSED.
8. REMOVE EXISTING ELECTRIC DUCT HEATER. EXISTING DUCTWORK SHALL REMAIN AND REUSED.
9. REMOVE EXISTING RETURN DUCTWORK UP TO THIS POINT.
10. REMOVE EXISTING OUTSIDE AIR DUCTWORK UP TO THIS POINT.
11. REMOVE EXISTING VFD.
12. EXISTING RETURN DUCTWORK TO REMAIN AND BE REUSED.
13. REMOVE EXISTING CONDENSER UNIT AND ASSOCIATED REFRIGERANT LINES.
14. REMOVE EXISTING CONDENSER UNIT PLENUM AIR AND ASSOCIATED DUCTWORK.
15. REMOVE EXISTING WALL LOUVER. EXISTING OPENING SHALL BE SEALED TO MATCH EXISTING WALL FINISH.
16. REMOVE EXISTING CONCRETE PAD.



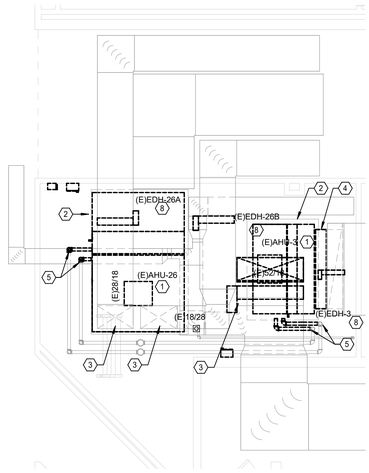
5 MECHANICAL DEMOLITION ENLARGED PLAN - EILAND - MECH GYM
Scale: 1/4" = 1'-0"



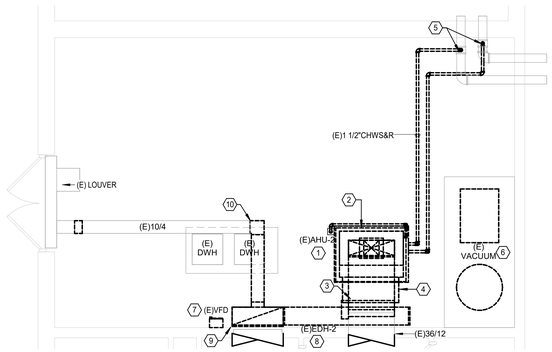
4 MECHANICAL DEMOLITION ENLARGED PLAN - EILAND - MECH B143
Scale: 1/4" = 1'-0"



2 MECHANICAL DEMOLITION ENLARGED PLAN - EILAND - MECH A108b
Scale: 1/4" = 1'-0"



3 MECHANICAL DEMOLITION ENLARGED PLAN - EILAND - MECH A112
Scale: 1/4" = 1'-0"



1 MECHANICAL DEMOLITION ENLARGED PLAN - EILAND - MECH A100
Scale: 1/4" = 1'-0"

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REGISTERED PROFESSIONAL ENGINEER
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	IP
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SHEET TITLE
MECHANICAL DEMOLITION ENLARGED PLAN - LEVEL 1 - EILAND

SHEET NO.
M12.01

KISD 2025 FRP

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GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITHED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT AON ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FIELD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

SYMBOL LEGEND

SYMBOL	DESCRIPTION
RENOVATIONS	
	POINT OF CONNECTION FROM NEW TO EXISTING
	ITEM TO REMAIN
	ITEM TO BE REMOVED

DEMOLITION KEYED NOTES:

1. REMOVE EXISTING AIR HANDLING UNIT AND ASSOCIATED CONDENSATE PIPING. EXISTING DUCTWORK SHALL REMAIN AND REUSED.
2. EXISTING CONCRETE PAD SHALL REMAIN AND BE REUSED.
3. REMOVE EXISTING SUPPLY DUCTWORK UP TO THIS POINT.
4. REMOVE EXISTING RETURN PLENUM.
5. REMOVE EXISTING CHWS&R PIPING BACK TO THIS POINT.
6. REMOVE EXISTING CONDENSATE PIPING BACK TO THIS POINT.
7. EXISTING EQUIPMENT TO REMAIN AND BE REUSED.
8. REMOVE EXISTING ELECTRIC DUCT HEATER. EXISTING DUCTWORK SHALL REMAIN AND REUSED.
9. REMOVE EXISTING RETURN DUCTWORK UP TO THIS POINT.
10. EXISTING RETURN DUCTWORK TO REMAIN AND BE REUSED.
11. REMOVE EXISTING OUTSIDE AIR DUCTWORK UP TO THIS POINT.
12. REMOVE EXISTING VFD.
13. REMOVE EXISTING REFRIGERANT LINES.

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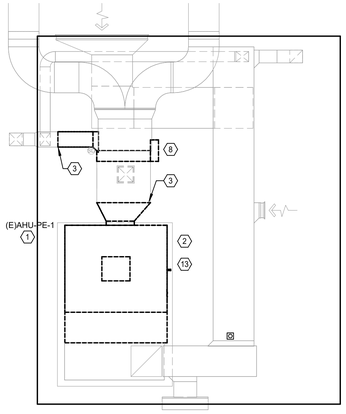
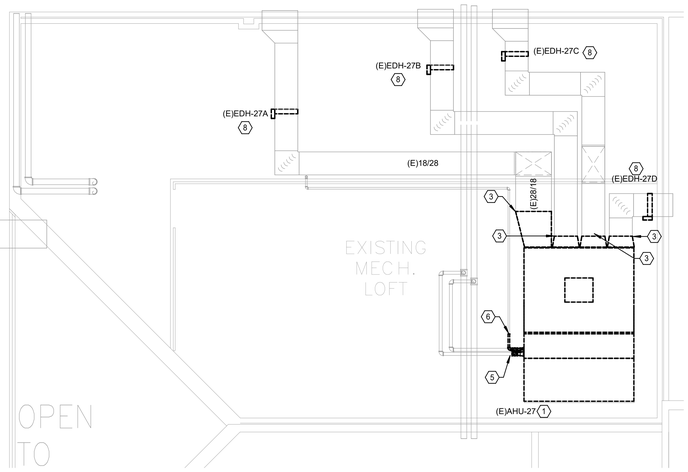
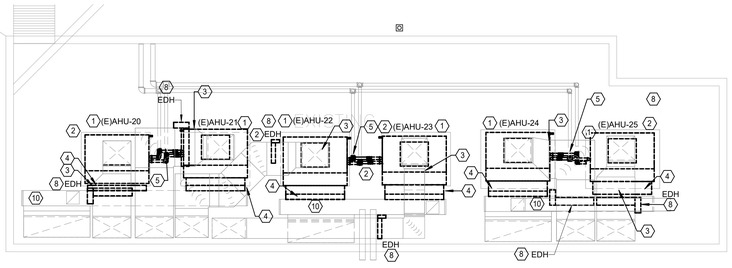


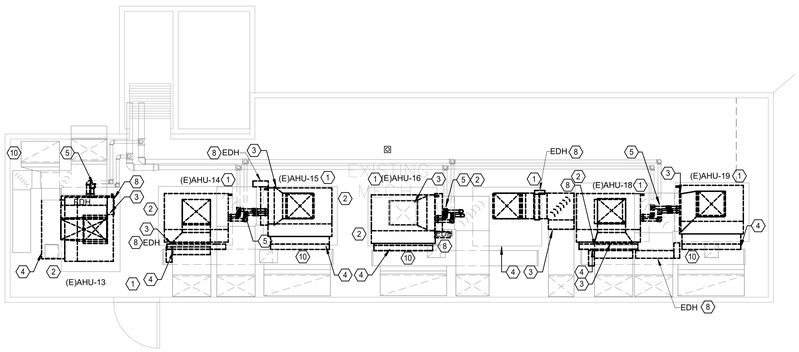
5 MECHANICAL DEMOLITION ENLARGED PLAN - EILAND - MEZZ GYM
Scale: 1/4" = 1'-0"



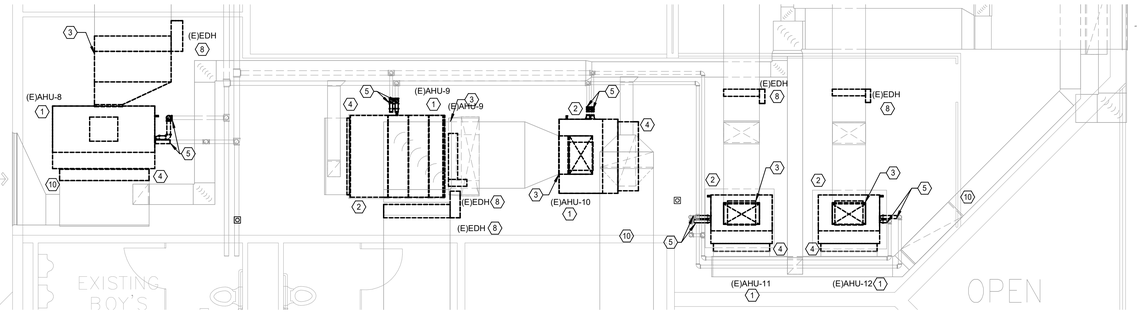
2 MECHANICAL DEMOLITION ENLARGED PLAN - EILAND - MECH LOFT A200
Scale: 1/4" = 1'-0"



4 MECHANICAL DEMOLITION ENLARGED PLAN - EILAND - MECH LOFT B301
Scale: 1/4" = 1'-0"



3 MECHANICAL DEMOLITION ENLARGED PLAN - EILAND - MECH LOFT A300
Scale: 1/4" = 1'-0"



1 MECHANICAL DEMOLITION ENLARGED PLAN - EILAND - MECH LOFT B208
Scale: 1/4" = 1'-0"

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BRADLEY R. VALMANS 96333 LICENSED PROFESSIONAL ENGINEER
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	IP
Checked By:	VP
Drawn By:	IP

PROJECT NO.
25-0225.00

SHEET TITLE
MECHANICAL DEMOLITION ENLARGED PLAN - LEVEL 2 - EILAND

SHEET NO.
M12.02

KISD 2025 FRP

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GENERAL NOTES:

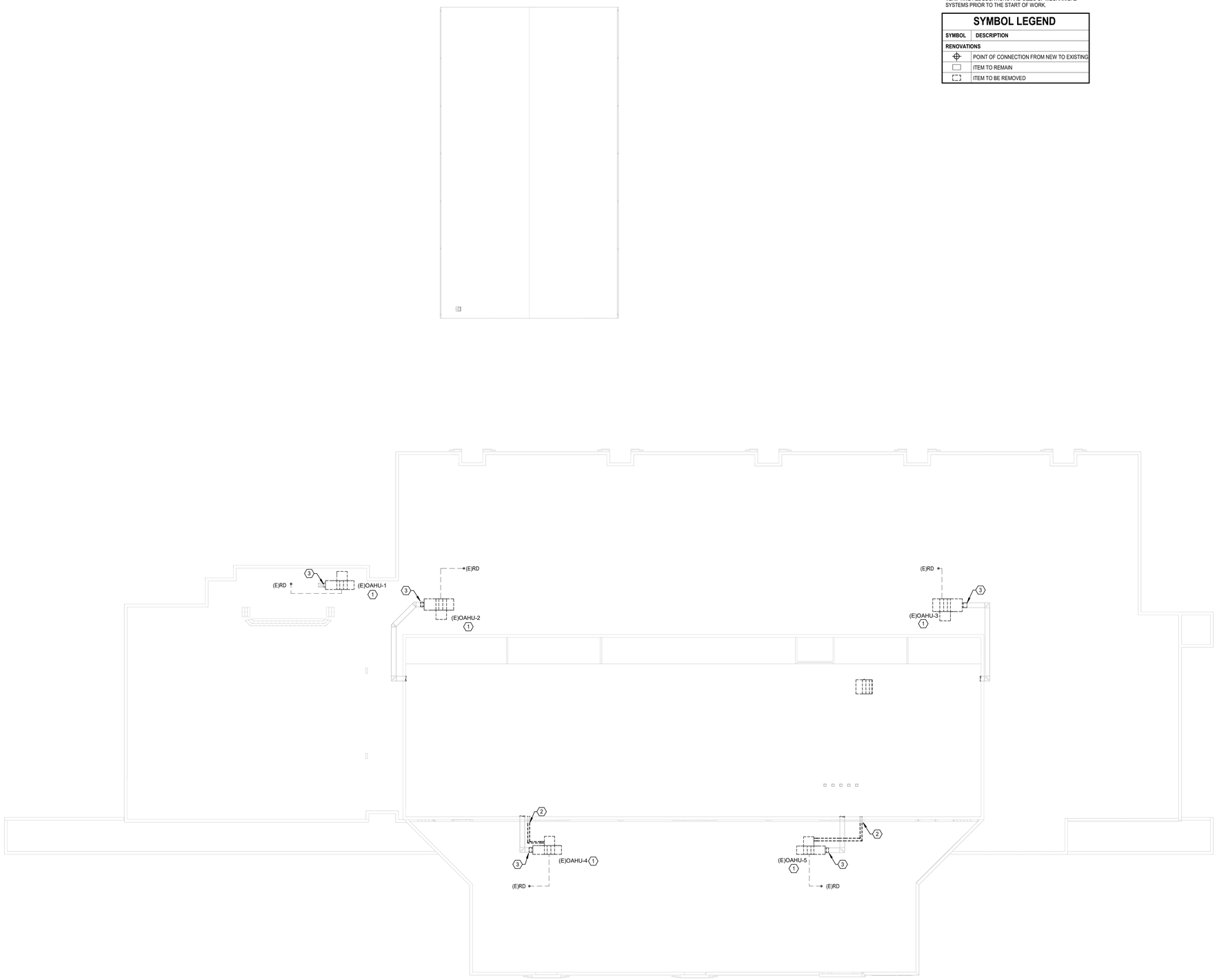
1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITHED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

SYMBOL LEGEND

SYMBOL	DESCRIPTION
RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
▭	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

DEMOLITION KEYED NOTES:

1. REMOVE EXISTING ROOF MOUNTED OAHU AND ASSOCIATED CHILLED PIPING AND CONDENSATE PIPING. EXISTING ROOF CURB SHALL REMAIN AND BE REUSED.
2. REMOVE EXISTING CHWS&R PIPING BACK TO THIS POINT.
3. REMOVE EXISTING SUPPLY DUCTWORK UP TO THIS POINT.



1 **MECHANICAL DEMOLITION ROOF PLAN - EILAND**
Scale: 1/16" = 1'-0"

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REVISIONS

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Project Director:	MR
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SHEET TITLE
MECHANICAL DEMOLITION ROOF PLAN - EILAND

SHEET NO.
M12.03

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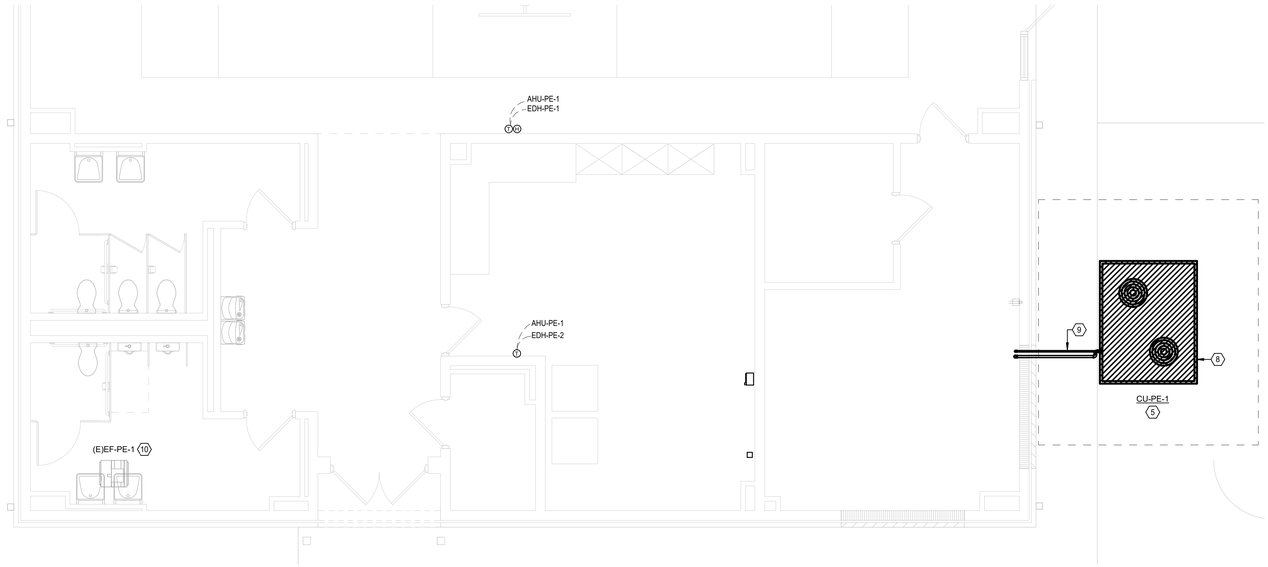
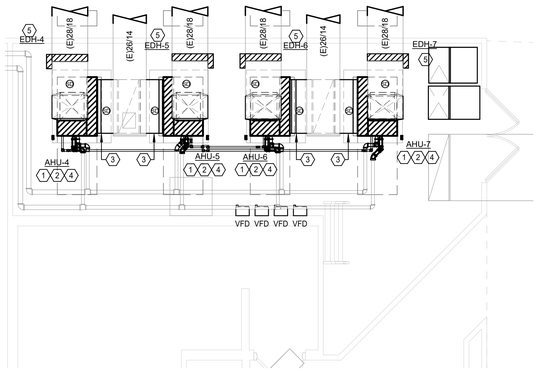
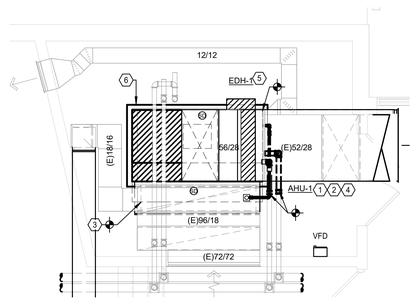


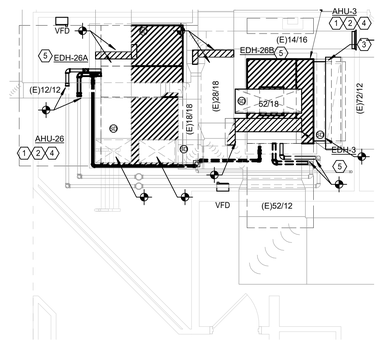
5 **MECHANICAL ENLARGED PLAN - EILAND - GYM MECH**
Scale: 1/4" = 1'-0"



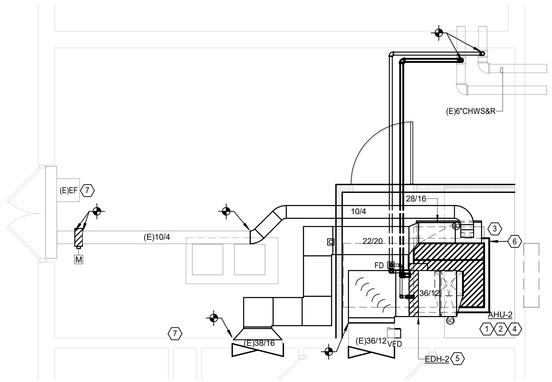
4 **MECHANICAL ENLARGED PLAN - EILAND - MECH B143**
Scale: 1/4" = 1'-0"



2 **MECHANICAL ENLARGED PLAN - EILAND - MECH A108b**
Scale: 1/4" = 1'-0"



3 **MECHANICAL ENLARGED PLAN - EILAND - MECH A112**
Scale: 1/4" = 1'-0"



1 **MECHANICAL ENLARGED PLAN - EILAND - MECH A100**
Scale: 1/4" = 1'-0"

GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

KEYED NOTES:

1. VERIFY SERVICE CLEARANCE FOR FAN SHAFT AND COIL REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2. VERIFY SERVICE CLEARANCE FOR AIR FILTER REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
3. SHEET METAL PLENUM, FULL SIZE OF UNIT RETURN AIR OPENING, LENGTH AS REQUIRED FOR ALL DUCT CONNECTIONS SHOWN.
4. ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO EXISTING FLOOR DRAIN LOCATED IN THIS ROOM.
5. VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
6. NEW AIR HANDLING SHALL BE INSTALLED ON EXISTING CONCRETE PAD. EXTEND AS REQUIRED FOR NEW UNIT.
7. EXISTING EQUIPMENT TO REMAIN AND BE REUSED.
8. PROVIDE 4" THICK CONCRETE HOUSEKEEPING PAD.
9. ROUTE REFRIGERANT LINES UP TP AHU-PE-1 ON MECHANICAL MEZZANINE. SIZE LINE PER MANUFACTURER'S RECOMMENDATIONS
10. INTERLOCK EXISTING EXHAUST FAN WITH NEW AIR HANDLING UNIT.

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	IP
Checked By:	VP
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PROJECT NO.
25-0225.00

SHEET TITLE
MECHANICAL ENLARGED PLAN - LEVEL 1 - EILAND

SHEET NO.
M13.01

KISD 2025 FRP

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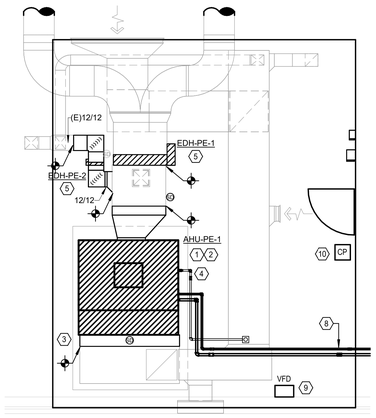


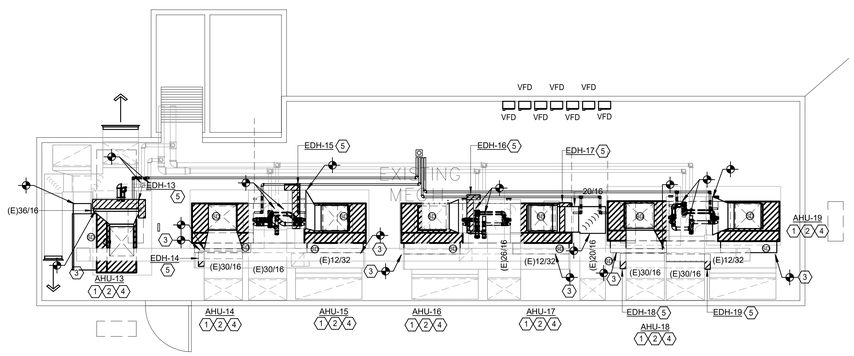
5 MECHANICAL ENLARGED PLAN - EILAND - GYM MEZZ
Scale: 1/4" = 1'-0"

GENERAL NOTES:

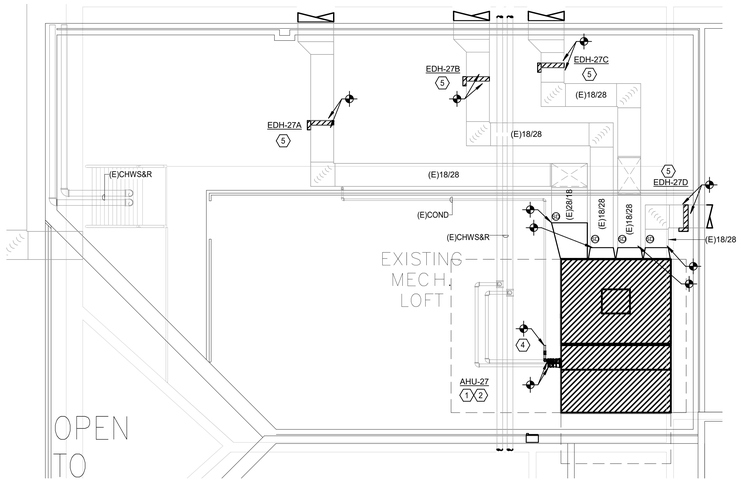
1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

KEYED NOTES:

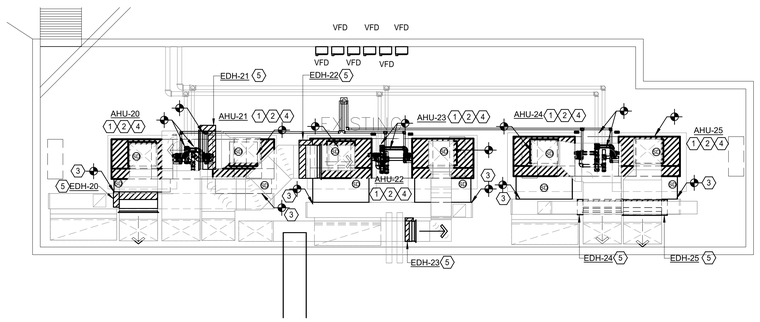
1. VERIFY SERVICE CLEARANCE FOR FAN SHAFT AND COIL REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2. VERIFY SERVICE CLEARANCE FOR AIR FILTER REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
3. SHEET METAL PLENUM. FULL SIZE OF UNIT RETURN AIR OPENING, LENGTH AS REQUIRED FOR ALL DUCT CONNECTIONS SHOWN.
4. ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO EXISTING FLOOR DRAIN LOCATED IN THIS ROOM.
5. VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
6. NEW AIR HANDLING SHALL BE INSTALLED ON EXISTING CONCRETE PAD. EXTEND AS REQUIRED FOR NEW UNIT.
7. EXISTING EQUIPMENT TO REMAIN AND BE REUSED.
8. ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.
9. CONNECT NEW VFD TO EXISTING FIRE ALARM WIRING, RECOMMISION FIRE ALARM SYSTEM TO ENSURE AHU SHUTS DOWN WHEN SIGNALED BY THE FIRE ALARM SYSTEM,
10. ADD NEW NETWORK CARD TO EXISTING BMCS PANEL.



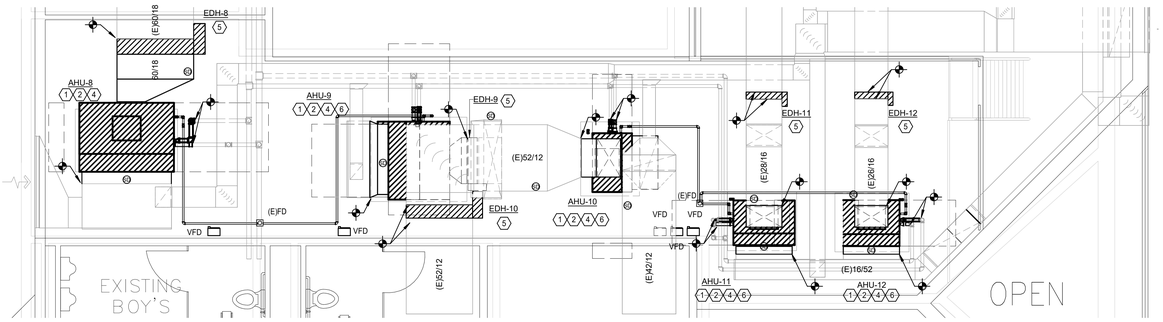
4 MECHANICAL ENLARGED PLAN - EILAND - MECH LOFT B301
Scale: 1/4" = 1'-0"



2 MECHANICAL ENLARGED PLAN - EILAND - MECH LOFT A200
Scale: 1/4" = 1'-0"



3 MECHANICAL ENLARGED PLAN - EILAND - MECH LOFT A300
Scale: 1/4" = 1'-0"



1 MECHANICAL ENLARGED PLAN - EILAND - MECH LOFT B208
Scale: 1/4" = 1'-0"

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BRADLEY KALMANS 140114 LICENSED PROFESSIONAL ENGINEER
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	IP
Checked By:	VP
Drawn By:	IP

PROJECT NO.
25-0225.00

SHEET TITLE
MECHANICAL ENLARGED PLAN - LEVEL 2 - EILAND

SHEET NO.
M13.02

KISD 2025 FRP

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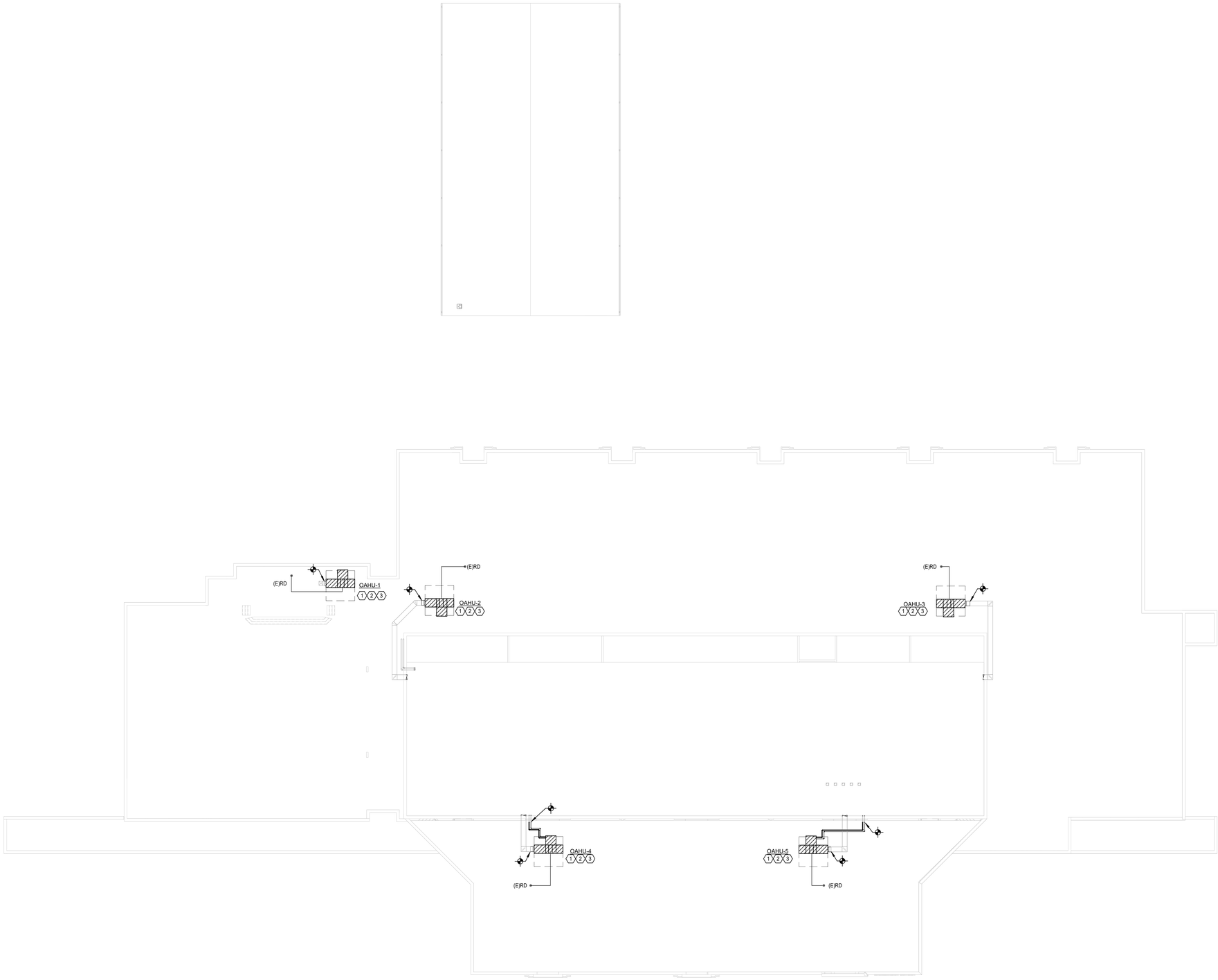
GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

KEYED NOTES:

1. VERIFY SERVICE CLEARANCE FOR FAN SHAFT AND COIL REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2. VERIFY SERVICE CLEARANCE FOR AIR FILTER REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
3. ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO EXISTING FLOOR DRAIN LOCATED IN THIS ROOM.



1 **MECHANICAL ROOF PLAN - EILAND**
Scale: 1/16" = 1'-0"

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SHEET TITLE
MECHANICAL ROOF PLAN - EILAND

SHEET NO.
M13.03

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OUTSIDE AIR HANDLING UNIT- ELECTRIC HEAT

MARK	FAN					COOLING							HEATING					PIPE SIZE TO COIL (IN.)	REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHARAC.	AIR TEMPERATURE (°F)				WATER			ENTERING AIR TEMPERATURE (°F)	MINIMUM CAPACITY (BTUH)	KW	NUMBER OF STAGES	CURRENT CHARAC.	CHILLED WATER	
						ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	LEAVING WET BULB	ENTERING TEMP. (°F)	GPM	MAX. PRESSURE DROP (FT.)							
OAU-1	1,400	1,400	0.6	2	480/3/60	98	79	52.5	52.0	45.0	23	10.0	27	61,419	18	SCR	480/3/60	2	(1,2,3,4,5,6,7)
OAU-2	2,000	2,000	0.6	2	480/3/60	98	79	52.5	52.0	45.0	34	10.0	27	85,304	25	SCR	480/3/60	2	(1,2,3,4,5,6,7)
OAU-3	3,200	3,200	0.6	5	480/3/60	98	79	52.5	52.0	45.0	54	10.0	27	136,486	40	SCR	480/3/60	2-1/2	(1,2,3,4,5,6,7)
OAU-4	1,900	1,900	0.6	2	480/3/60	98	79	52.5	52.0	45.0	33	10.0	27	81,891	24	SCR	480/3/60	2	(1,2,3,4,5,6,7)
OAU-5	1,400	1,400	0.6	2	480/3/60	98	79	52.5	52.0	45.0	23	10.0	27	61,419	18	SCR	480/3/60	2	(1,2,3,4,5,6,7)

GENERAL NOTES:

1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.
3. UNIT SHALL FIT WITHIN EXISTING AVAILABLE SPACE. MANUFACTURER SHALL FIELD VERIFY PRIOR TO ORDERING. PROVIDE SHIPPING SPLITS AS REQUIRED.

REMARKS:

1. VELOCITY NOT TO EXCEED 450 FPM ON COOLING COIL.
2. HORIZONTAL DRAW THROUGH UNIT WITH FRONT DISCHARGE AND VARIABLE FREQUENCY DRIVE.
3. PROVIDE LOW VELOCITY ANGLED FILTER SECTION.
4. ELECTRIC HEAT IN PRE-HEAT POSITION.
5. PROVIDE UNIT WITH WEATHERHOOD AND MIXING BOX SECTION WITH OUTSIDE AIR DAMPER.
6. ROOF MOUNTED WEATHERPROOF OUTSIDE AIR UNIT WITH PROVIDE 24" MINIMUM DEEP PIPING VESTIBULE WITH FULL WIDTH ACCESS DOOR.
7. PROVIDE WITH WIND RESISTANT ROOF CURB.

MULTI-ZONE AIR HANDLING UNIT

MARK	FAN				CURRENT CHARAC.			COOLING								PIPE SIZE TO COIL (IN.)	REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C)	HORSE POWER	V	PH	F	AIR TEMPERATURE (°F)				WATER					
								ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	LEAVING WET BULB	ENTERING TEMP (°F)	LEAVING TEMP (°F)	GPM	PRESSURE DROP (FT.)		
AHU-26	4,000	500	0.8	5.0	480	3	60	79.4	66.0	54.0	52.8	45	57	29	10	2"	(1,2,3,5,6,7,8)
AHU-27	8,000	1,000	0.8	10	480	3	60	79.4	66.0	54.0	52.8	45	57	57	10	2 1/2"	(1,2,4,5,6,7,9)

GENERAL NOTES :

1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

3UNIT SHALL FIT WITHIN EXISTING AVAILABLE SPACE. MANUFACTURER SHALL FIELD VERIFY PRIOR TO ORDERING. PROVIDE SHIPPING SPLITS AS REQUIRED.

REMARKS :

1. VELOCITY NOT TO EXCEED 500 FPM ON COOLING COIL.
2. HORIZONTAL BLOW THRU MULTIZONE UNIT WITH DIRECT DRIVE FAN AND WITH VARIABLE FREQUENCY DRIVE.
3. TOP DISCHARGE.
4. FRONT DISCHARGE.
5. LOW VELOCITY ANGLED FILTER SECTION WITH TOP INLET.
6. HEATING BY ELECTRIC DUCT HEATERS.
7. UNIT HEIGHT MUST NOT EXCEED 84".
8. UNIT LENGTH MUST NOT EXCEED 110".
9. UNIT LENGTH MUST NOT EXCEED 120".

AHU ZONES

ZONE NUMBER	LOCATION	SUPPLY CFM
Z-26-1	EXISTING ROOM	2,000
Z-26-2	EXISTING ROOM	2,000
AHU-26		4,000
Z-27-1	EXISTING ROOM	2,000
Z-27-2	EXISTING ROOM	2,000
Z-27-3	EXISTING ROOM	2,000
Z-27-4	EXISTING ROOM	2,000
AHU-27		8,000

AIR HANDLING UNIT

MARK	FAN					COOLING							PIPE SIZE TO COIL (IN.) CHILLED WATER	REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHARAC.	AIR TEMPERATURE (°F)				WATER				
						ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	LEAVING WET BULB	ENTERING TEMP. (°F)	GPM	MAX. PRESSURE DROP (FT.)		
AHU-1	14,400	1,400	1.5	15	480/3/60	78	67	55	54	45	91	10	3	(1,2,3,5,7,8,9,10)
AHU-2	3,650	300	1.5	5.0	480/3/60	78	67	55	54	45	24	10	2	(1,2,3,5,7,8,9)
AHU-3	5,300	500	1.5	7.5	480/3/60	78	67	55	54	45	34	10	2	(1,2,3,5,7,8,9,12)
AHU-4	3,600	300	1.5	5.0	480/3/60	78	67	55	54	45	23	10	2	(1,2,3,5,7,8,9,11)
AHU-5	3,300	300	1.5	5.0	480/3/60	78	67	55	54	45	21	10	2	(1,2,3,5,7,8,9,11)
AHU-6	3,600	300	1.5	5.0	480/3/60	78	67	55	54	45	23	10	2	(1,2,3,5,7,8,9,11)
AHU-7	3,600	300	1.5	5.0	480/3/60	78	67	55	54	45	23	10	2	(1,2,3,5,7,8,9,11)
AHU-8	8,750	800	1.5	10	480/3/60	78	67	55	54	45	56	10	2-1/2	(1,2,3,6,7,8,9,13)
AHU-9	4,600	400	1.5	5.0	480/3/60	78	67	55	54	45	28	10	2	(1,2,4,6,7,8,9,14)
AHU-10	3,600	300	1.5	5.0	480/3/60	78	67	55	54	45	23	10	2	(1,2,3,5,7,8,9)
AHU-11	3,200	300	1.5	5.0	480/3/60	78	67	55	54	45	21	10	2	(1,2,3,5,7,8,9)
AHU-12	2,600	200	1.5	3.0	480/3/60	78	67	55	54	45	17	10	1-1/2	(1,2,3,5,7,8,9)
AHU-13	4,000	400	1.5	5.0	480/3/60	78	67	55	54	45	26	10	2	(1,2,3,5,7,8,9,15)
AHU-14	3,150	300	1.5	5.0	480/3/60	78	67	55	54	45	20	10	2	(1,2,3,5,7,8,9,15)
AHU-15	3,150	300	1.5	5.0	480/3/60	78	67	55	54	45	20	10	2	(1,2,3,5,7,8,9,15)
AHU-16	2,600	200	1.5	2.0	480/3/60	78	67	55	54	45	17	10	1-1/2	(1,2,3,5,7,8,9,15)
AHU-17	1,800	100	1.5	2.0	480/3/60	78	67	55	54	45	12	10	1-1/2	(1,2,3,5,7,8,9,15)
AHU-18	3,150	300	1.5	5.0	480/3/60	78	67	55	54	45	20	10	2	(1,2,3,5,7,8,9,15)
AHU-19	3,150	300	1.5	5.0	480/3/60	78	67	55	54	45	20	10	2	(1,2,3,5,7,8,9,15)
AHU-20	2,400	200	1.5	3.0	480/3/60	78	67	55	54	45	16	10	1-1/2	(1,2,3,5,7,8,9,15)
AHU-21	2,250	200	1.5	3.0	480/3/60	78	67	55	54	45	15	10	1-1/2	(1,2,3,5,7,8,9,15)
AHU-22	2,520	200	1.5	3.0	480/3/60	78	67	55	54	45	15	10	1-1/2	(1,2,3,5,7,8,9,15)
AHU-23	2,250	200	1.5	3.0	480/3/60	78	67	55	54	45	16	10	1-1/2	(1,2,3,5,7,8,9,15)
AHU-24	3,150	300	1.5	5.0	480/3/60	78	67	55	54	45	20	10	2	(1,2,3,5,7,8,9,15)
AHU-25	3,150	300	1.5	5.0	480/3/60	78	67	55	54	45	20	10	2	(1,2,3,5,7,8,9,15)

GENERAL NOTES:

1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.
3. UNIT SHALL FIT WITHIN EXISTING AVAILABLE SPACE. MANUFACTURER SHALL FIELD VERIFY PRIOR TO ORDERING. PROVIDE SHIPPING SPLITS AS REQUIRED.

REMARKS:

1. VELOCITY NOT TO EXCEED 500 FPM ON COOLING COIL.
2. DIRECT DRIVE FAN.
3. VERTICAL DRAW THROUGH UNIT WITH VARIABLE FREQUENCY DRIVE.
4. HORIZONTAL DRAW THROUGH UNIT WITH VARIABLE FREQUENCY DRIVE.
5. TOP DISCHARGE.
6. FRONT DISCHARGE.
7. CONSTANT VOLUME UNIT.
8. FLAT FILTER SECTION
9. HEATING BY ELECTRIC DUCT HEATERS.
10. UNIT HEIGHT MUST NOT EXCEED 108".
11. UNIT LENGTH MUST NOT EXCEED 40".
12. UNIT LENGTH MUST NOT EXCEED 56".
13. UNIT HEIGHT MUST NOT EXCEED 90".
14. UNIT LENGTH MUST NOT EXCEED 75".
15. UNIT HEIGHT MUST NOT EXCEED 62".

DX-AIR HANDLING UNIT

MARK	FAN					COOLING						REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHARAC.	AIR TEMPERATURE (°F)		MIN. TOTAL CAPACITY. (BTUH)	MIN. SENSIBLE CAPACITY (BTUH)	MINIMUM EER/ SEER	NUMBER OF STAGES	
						ENTERING DRY BULB	ENTERING WET BULB					
AHU-PE-1	8,300	1,200	0.75	10	460/3/60	78.2	65.2	336,150	234,860	10.0/-	2	(1,2,3,4,5,6,7)

GENERAL NOTES:

1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:

1. FACE VELOCITY ACROSS COOLING COIL SHALL NOT EXCEED 500 FPM.
2. CONSTANT VOLUME UNIT WITH VARIABLE FREQUENCY DRIVE..
3. PROVIDE VERTICAL FRONT DISCHARGE UNIT.
4. PROVIDE ANGLE FILTER SECTION.
5. HEATING BY ELECTRIC DUCT HEATERS.
6. UNIT HEIGHT MUST NOT EXCEED 100"
7. PROVIDE WITH FACTORY A2L REFRIGERANT LEAK DETECTION SYSTEM CERTIFIED TO UL 60335-2-40 AS SPECIFIED.

AIR COOLED CONDENSING UNIT

MARK	MIN. TOTAL CAPACITY (BTUH)	OUTDOOR AIR TEMP (°F)	MINIMUM EER/ SEER	NUMBER OF STAGES	CURRENT CHARAC.	RELATED UNIT MARK	REMARKS
CU-PE-1	336,150	95	10.0/-	2	460/3/60	AHU-PE-1	(1,2,3,4)

GENERAL NOTES:

1. MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 24 INCHES ON NON-SERVICE SIDES AND 36 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE FOR CONDENSER AIR FLOW AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:

1. DISCONNECT SWITCH PROVIDED AND INSTALLED BY ELECTRICIAN.
2. PROVIDE WITH LOW AMBIENT KIT.
3. REFRIGERANT LINES TO BE SIZED PER MANUFACTURER'S REQUIREMENTS.
4. PROVIDE WITH FACTORY A2L REFRIGERANT LEAK DETECTION SYSTEM CERTIFIED TO UL 60335-2-40 AS SPECIFIED.

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KLEIN ISD
KLEIN, TX

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	IP
Checked By:	VP
Drawn By:	IP

PROJECT NO.
25-0225.00

SHEET TITLE
MECHANICAL SCHEDULES - EILAND

SHEET NO.
M14.00

KISD 2025 FRP

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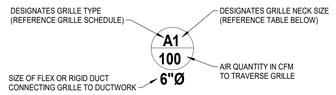
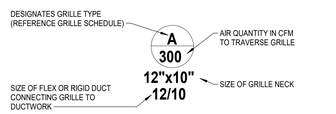
GRILLE SIZING SCHEDULE

STANDARD GRILLE



ALL GRILLES SHOWN SHALL BE FOUR-WAY THROW UNLESS OTHERWISE SHOWN.

REGISTER OR NONSTANDARD GRILLE



ALL GRILLES SHOWN SHALL BE FOUR-WAY THROW UNLESS OTHERWISE SHOWN. ALL REGISTERS SHALL HAVE A 45° HORIZONTAL DEFLECTION UNLESS OTHERWISE SHOWN.

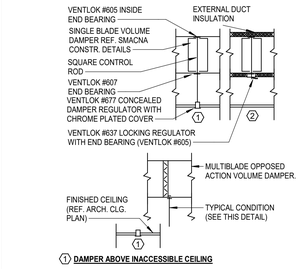
GRILLE SIZE DESIGNATION	GRILLE NECK SIZE	GRILLE SIZE DESIGNATION	GRILLE NECK SIZE
1	6" x 6"	7	15" x 15"
2	8" x 8"	8	16" x 16"
3	9" x 9"	9	18" x 18"
4	10" x 10"	10	20" x 20"
5	12" x 12"	11	22" x 22"
6	14" x 14"	12	24" x 24"

ELECTRIC DUCT HEATER

MARK	CFM	ENTERING AIR TEMP.(°F)	MINIMUM CAPACITY (BTUH)	KW	PRESSURE DROP (IN. W.G.)	NUMBER OF STAGES	CURRENT V	P	F	REMARKS
EDH-1	14,400	70	202,176	59	0.25	SCR	480	3	60	(1)
EDH-2	3,650	72	53,217	16	0.25	SCR	480	3	60	(1)
EDH-3	5,300	70	72,695	21	0.25	SCR	480	3	60	(1)
EDH-4	3,600	70	40,824	12	0.25	SCR	480	3	60	(1)
EDH-5	3,300	70	51,322	15	0.25	SCR	480	3	60	(1)
EDH-6	3,600	72	50,544	15	0.25	SCR	480	3	60	(1)
EDH-7	3,600	72	50,544	15	0.25	SCR	480	3	60	(1)
EDH-8	8,700	70	111,812	33	0.25	SCR	480	3	60	(1)
EDH-9	4,700	70	33,502	10	0.25	SCR	480	3	60	(1)
EDH-10	3,600	70	40,824	12	0.25	SCR	480	3	60	(1)
EDH-11	3,200	70	61,517	18	0.25	SCR	480	3	60	(1)
EDH-12	2,600	70	20,498	6	0.25	SCR	480	3	60	(1)
EDH-13	4,000	70	43,200	13	0.25	SCR	480	3	60	(1)
EDH-14	3,150	70	30,618	9	0.25	SCR	480	3	60	(1)
EDH-15	3,150	70	51,030	15	0.25	SCR	480	3	60	(1)
EDH-16	2,600	70	40,716	12	0.25	SCR	480	3	60	(1)
EDH-17	1,800	70	10,692	3	0.25	SCR	480	3	60	(1)
EDH-18	3,150	70	30,618	9	0.25	SCR	480	3	60	(1)
EDH-19	3,150	70	51,030	15	0.25	SCR	480	3	60	(1)
EDH-20	2,400	70	40,176	12	0.25	SCR	480	3	60	(1)
EDH-21	2,250	70	19,440	6	0.25	SCR	480	3	60	(1)
EDH-22	2,520	70	39,463	12	0.25	SCR	480	3	60	(1)
EDH-23	2,250	70	20,655	6	0.25	SCR	480	3	60	(1)
EDH-24	3,150	70	51,030	15	0.25	SCR	480	3	60	(1)
EDH-25	3,150	70	30,618	9	0.25	SCR	480	3	60	(1)
EDH-26A	2,000	71	44,906	13	0.25	SCR	480	3	60	(1)
EDH-26B	2,000	71	44,906	13	0.25	SCR	480	3	60	(1)
EDH-27A	2,000	72	42,746	13	0.25	SCR	480	3	60	(1)
EDH-27B	2,000	72	42,746	13	0.25	SCR	480	3	60	(1)
EDH-27C	2,000	72	42,746	13	0.25	SCR	480	3	60	(1)
EDH-27D	2,000	72	42,746	13	0.25	SCR	480	3	60	(1)
EDH-PE-1	7,575	67	147,258	43	0.25	SCR	480	3	60	(1)
EDH-PE-2	725	67	14,094	4	0.25	SCR	480	3	60	(1)

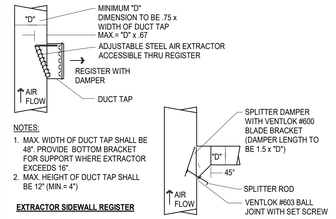
REMARKS
1. PROVIDE WITH FLANGE FOR MOUNTING IN DUCTWORK.

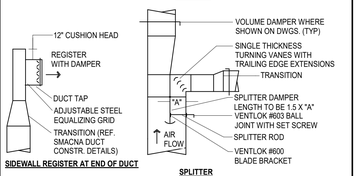
DUCTWORK CONSTRUCTION DETAILS



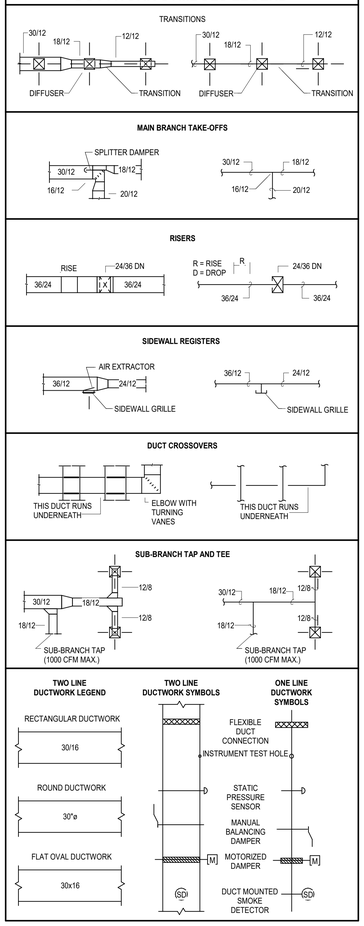
1 **DAMPER ABOVE INACCESSIBLE CEILING**

2 **DAMPER ABOVE LIFT-OUT CEILING**

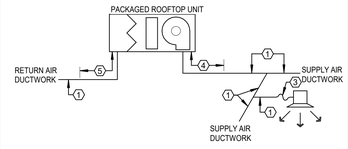




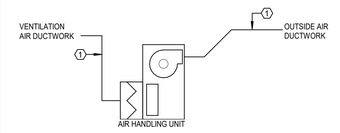
DUCTWORK SYMBOLS LEGEND



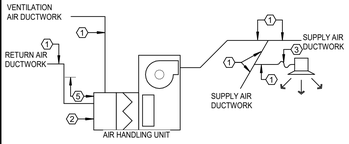
DUCT LINER AND INSULATION



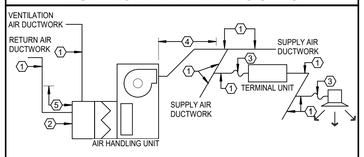
PACKAGED ROOFTOP UNIT



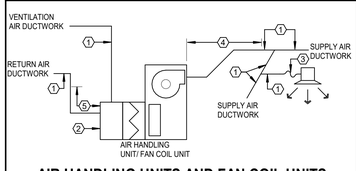
OUTSIDE AIR PRETREATMENT UNIT



MULTI-ZONE AIR HANDLING UNITS



VARIABLE AIR VOLUME AIR HANDLING UNITS



AIR HANDLING UNITS AND FAN COIL UNITS

KEYED NOTES:

1. SHEETMETAL DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED.
2. SHEETMETAL DUCTWORK RETURN AIR PLENUM WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED.
3. FLEXIBLE DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED.
4. SHEETMETAL DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED AND 1" THICK 1-1/2 LB LINER AS SPECIFIED FROM AIR HANDLING UNIT DISCHARGE TO 10'-0" DOWNSTREAM.
5. SHEETMETAL DUCTWORK WITH EXTERNAL DUCTWORK INSULATION AS SPECIFIED AND 1" THICK 1-1/2 LB LINER AS SPECIFIED FROM AIR HANDLING UNIT INLET TO 10'-0" UPSTREAM.
6. EXHAUST DUCTWORK AS SPECIFIED WITH FIREBOARD INSULATION AS SPECIFIED.
7. SHEETMETAL DUCTWORK ONLY. NO INSULATION REQUIRED.

SYMBOL LEGEND

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
GENERAL	
(#)	KEY NOTE TAG
	REVISION TAG
	NEW EQUIPMENT
DUCTWORK	
	SUPPLY AIR DUCTWORK
	RETURN AIR AND OUTSIDE AIR DUCTWORK
	EXHAUST AIR DUCTWORK
	FLEXIBLE DUCTWORK
	SUPPLY AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	RETURN AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	EXHAUST AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	FIRE DAMPER (VERTICAL)
	FIRE DAMPER (HORIZONTAL)
S	SMOKE DAMPER (VERTICAL)
S	SMOKE DAMPER (HORIZONTAL)
FS	COMBINATION FIRE & SMOKE DAMPER (VERTICAL)
FS	COMBINATION FIRE & SMOKE DAMPER (HORIZONTAL)
	MANUAL BALANCING DAMPER (SEE DAMPER SCHEDULE)
M	MOTORIZED DAMPER (SEE DAMPER SCHEDULE)
SENSORS	
T	THERMOSTAT AND TEMPERATURE SENSOR
H	HUMIDISTAT
SDI	SMOKE DETECTOR
HD	HEAT DETECTOR
AIR DEVICES	
	GRILLE SIZE TAG (REFER TO GRILLE SIZE LEGEND)
	SUPPLY AIR GRILLE WITH FOUR-WAY THROW
	SUPPLY AIR GRILLE WITH THREE-WAY THROW
	SUPPLY AIR GRILLE WITH TWO-WAY THROW
	SUPPLY AIR GRILLE WITH TWO-WAY CORNER THROW
	SUPPLY AIR GRILLE WITH ONE-WAY THROW
	RETURN AIR GRILLE
	RETURN AIR GRILLE WITH SOUND BOOT
	EXHAUST AIR GRILLE
	SUPPLY AIR SIDEWALL GRILLE
	RETURN AIR SIDEWALL GRILLE
20X12	RETURN AIR OPENING ABOVE CEILING
PIPING	
–CWS&R–	CONDENSER WATER SUPPLY & RETURN (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
–CWS–	CONDENSER WATER SUPPLY
–CWR–	CONDENSER WATER RETURN
–CHWS&R–	CHILLED WATER SUPPLY & RETURN (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
–CHWS–	CHILLED WATER SUPPLY
–CHWR–	CHILLED WATER RETURN
—D—	CONDENSATE DRAIN LINE
—AD—	AUXILIARY CONDENSATE DRAIN LINE
—RLR—	REFRIGERANT LIQUID & GAS RECIRCULATION LINE (TOTAL OF TWO PIPES, ONLY ONE PIPE SHOWN FOR DRAWING CLARITY)
—RL—	REFRIGERANT LIQUID LINE
—HG—	REFRIGERANT HOT GAS LINE
—RS—	REFRIGERANT SUCTION LINE
	ELBOW UP
	ELBOW DOWN
	90° ELBOW
	45° ELBOW
	TEE
	TEE DOWN
	TEE UP
	TOP BRANCH CONNECTION
	BOTTOM BRANCH CONNECTION
	FLANGE
	CAP
	CONTINUATION
	FLOOR DRAIN (REFER TO PLUMBING DRAWINGS)
	GATE VALVE
	GLOBE VALVE
	CHECK VALVE
	BUTTERFLY VALVE
	BUTTERFLY VALVE WITH OPERATOR
	PLUG VALVE
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	PRESSURE REDUCING VALVE
PR	PRESSURE RELIEF VALVE
	BALL VALVE
	STRAINER
	UNION
	THERMOMETER WELL
	PETE'S PLUG
	PRESSURE GAUGE
	TEMPERATURE SENSOR IN PIPE
	VENTURI FLOW METER
	FLOW SWITCH
FM	FLOW MEASURING STATION
	EXPANSION JOINT
	FLEXIBLE CONNECTION
G.C.	GAUGE COCK
	SITE GLASS
	DIFFERENTIAL PRESSURE SENSOR
	TURBINE FLOW METER
	ANCHOR
	PIPE GUIDE
SUBSCRIPTS AND ABBREVIATIONS	
AFF	ABOVE FINISHED FLOOR
BBS	BELOW BOTTOM OF STRUCTURE
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
CA	COMBUSTION AIR
CFM	CUBIC FEET PER MINUTE
EA	EXHAUST AIR
FPM	FEET PER MINUTE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR
RENOVATIONS	
	POINT OF CONNECTION FROM NEW TO EXISTING
	ITEM TO REMAIN
	ITEM TO BE REMOVED

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01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

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Designed By: Designer
Checked By: Checker
Drawn By: Author

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SHEET TITLE
MECHANICAL SCHEDULES AND DETAILS - EILAND

SHEET NO.
M14.01

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PLUMBING GENERAL NOTES

1. CONTRACT DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. CONTRACTOR TO VERIFY AT SITE EXACT LOCATIONS, AND SIZES OF EXISTING PIPING. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
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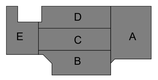
4. ANY OTHER ITEMS NOT REFERENCED WHICH ARE LOCATED IN THE DEMOLISHED SPACE (VENT, WASTE, WATER HEATER, PLUMBING FIXTURE, ETC.) THAT ARE IDENTIFIED OR DISCOVERED DURING DEMOLITION WHICH WILL NOT BE USED FOR THIS PROJECT, SHALL BE DEMOLISHED BACK TO THE MAIN SOURCE OR RISER, AND DEVICES SHALL BE RETAINED TO THE OWNER STORAGE AS DIRECTED BY THE ARCHITECT/OWNER.
5. OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL PLUMBING FIXTURES/ EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT NOT LIMITED TO PUMPS, HEATERS, AND STAINLESS STEEL SINKS. CONTRACTOR TO NOTIFY DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.

PLUMBING KEYED NOTES

1 EXISTING BI-LEVEL ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO BE REMOVED AND REPLACED WITH A NEW ONE. MAINTAIN EXISTING UTILITIES/ROUGH-IN TO SERVE NEW FIXTURE(S). FIELD VERIFY THE EXACT LOCATION, SIZE, AND CONDITION OF EXISTING PIPING. REPAIR EXISTING PIPING IF NEEDED AND PREPARE FOR NEW CONNECTION.
2 EXISTING SINGLE ELECTRIC DRINKING FOUNTAIN WITH BOTTLE FILLING STATION TO REMAIN.
3 EXISTING SINGLE ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO REMAIN.

1 **PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 1 - EILAND**
Scale: 1" = 20'-0"



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REVISIONS

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Designed By:	AA
Checked By:	EH
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PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 1 - EILAND

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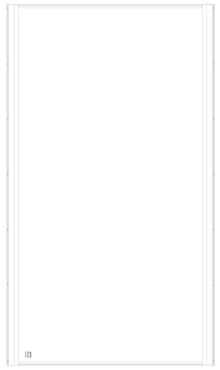
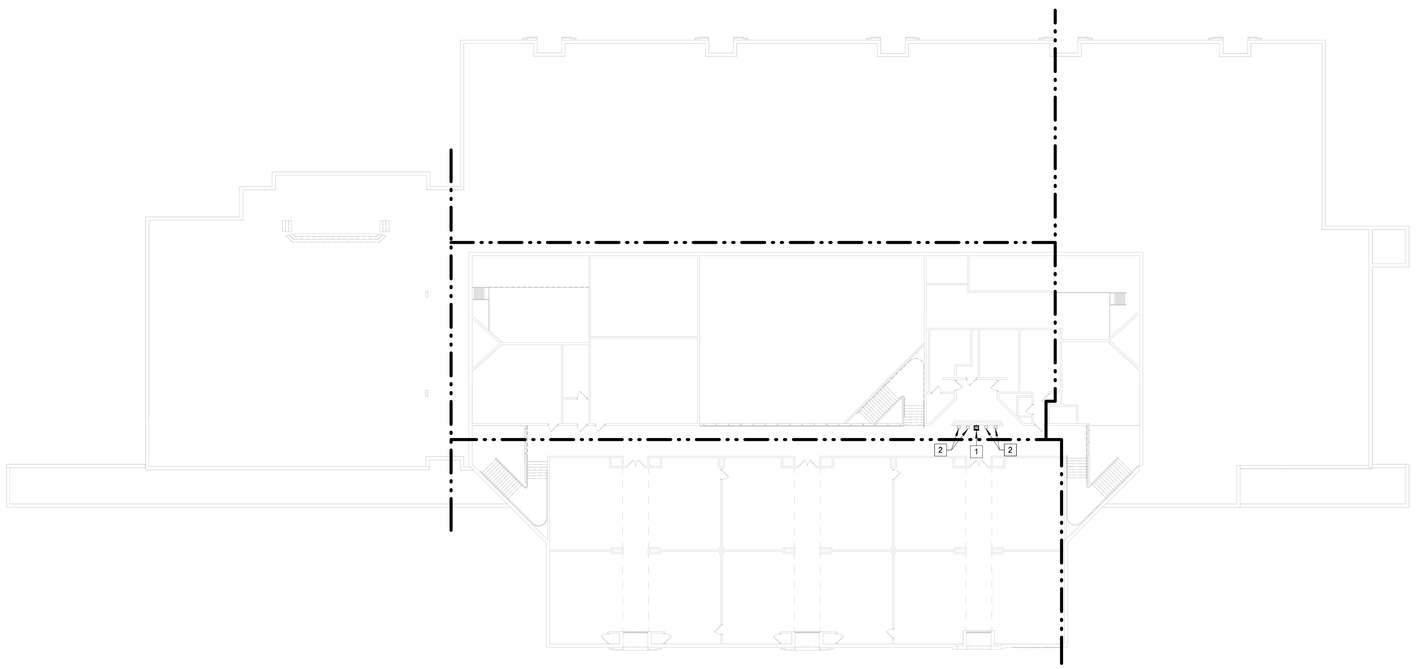
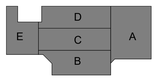




1 **PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 2 - EILAND**
Scale: 1" = 20'-0"



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PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 2 - EILAND

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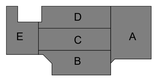
6. REFER TO PLUMBING DETAILS AND SCHEDULES SHEET(S).

PLUMBING KEYED NOTES

1 PROVIDE AND INSTALL NEW PLUMBING FIXTURE(S) AS INDICATED. CONNECT TO EXISTING UTILITIES, CW, SANITARY AND VENT.

N

1 **PLUMBING COMPOSITE PLAN - LEVEL 1 - EILAND**
Scale: 1" = 20'-0"



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Drawn By:	AA

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PLUMBING COMPOSITE PLAN - LEVEL 1 - EILAND

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Project No: 2500-02120-00

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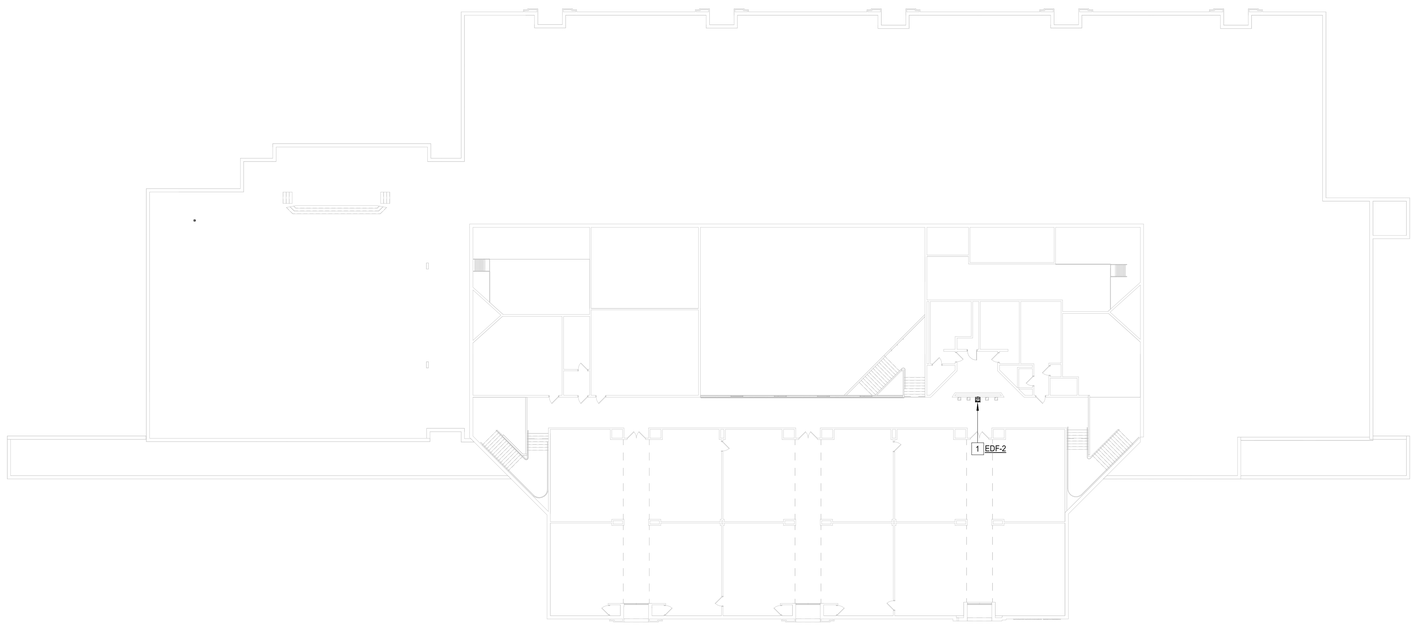
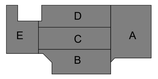


1 **PLUMBING COMPOSITE PLAN - LEVEL 2 - EILAND**
Scale: 1" = 20'-0"



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01-27-2026

ISSUED: JANUARY 27, 2026

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Designed By:	AA
Checked By:	EH
Drawn By:	AA

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SHEET TITLE
PLUMBING COMPOSITE PLAN - LEVEL 2 - EILAND

SHEET NO.
P11.02

KISD 2025 FRP

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Project No: 2500-02120-00

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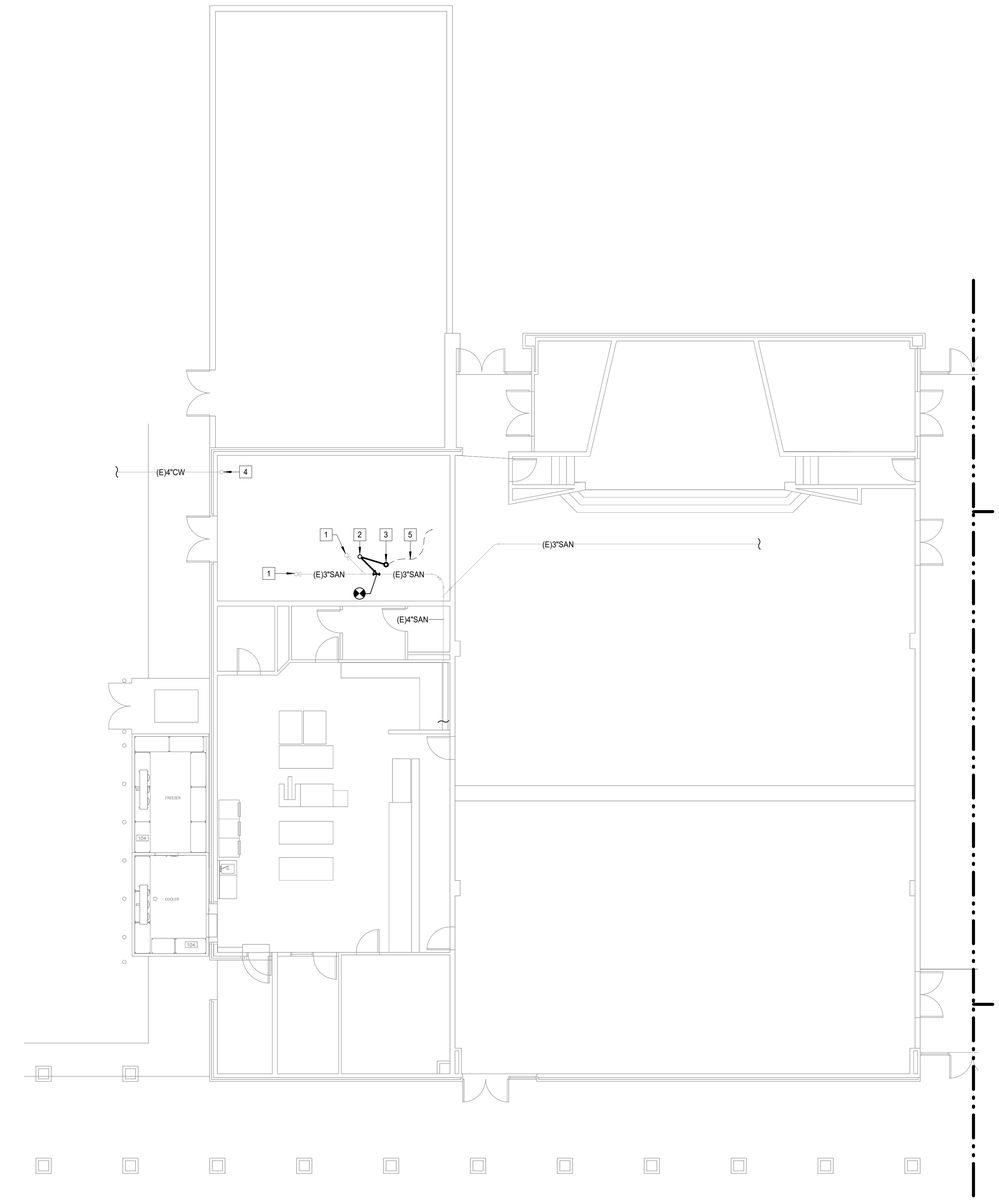
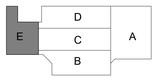
5. SAWCUT EXISTING SLAB AS REQUIRED TO INSTALL NEW PIPING BELOW FLOOR, CONTRACTOR TO SEAL AND PATCH FLOOR TO MATCH EXISTING UPON COMPLETION, CONTRACTOR TO JET AND CAMERA FROM POINT OF CONNECTION TO EXIT POINT OUTSIDE OF BUILDING

PLUMBING KEYED NOTES

1 EXISTING 3" SAN FROM EXISTING FLOOR DRAIN ABOVE.
2 3" SANITARY DOWN, 2" VENT UP.
3 3" SANITARY FROM FLOOR SINK ABOVE.
4 EXISTING 4" WATER SERVICE UP.
5 1/2" PRESSURIZED WATER LINE FROM TRAP PRIMER RUNNING BELOW SLAB, SERVING FLOOR DRAINS/SINKS.



1 **PLUMBING UNDERFLOOR PLAN - EILAND - EILAND UNIT E**
Scale: 1/8" = 1'-0"



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KLEIN, TX

ISSUED: JANUARY 27, 2026

REVISIONS

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Designed By:	Designer
Checked By:	Checker
Drawn By:	Author

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SHEET TITLE
PLUMBING UNDERFLOOR PLAN - AREA E - EILAND

SHEET NO.
P14.01

KISD 2025 FRP

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Project No: 2550-02120-00

VLK

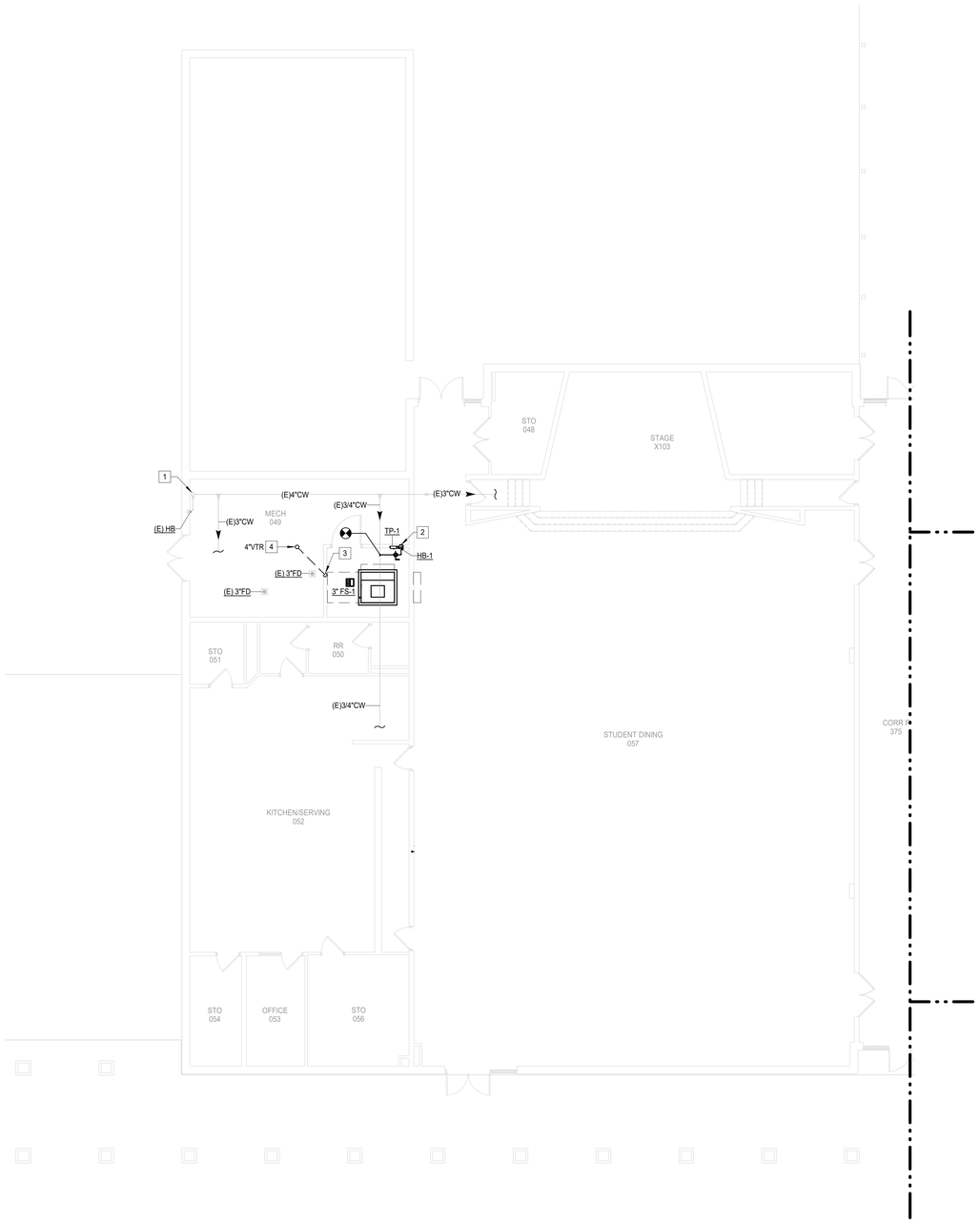
FIRE SPRINKLER SYSTEM NOTES

A. EXISTING FIRE SPRINKLER SYSTEM TO BE MAINTAINED IN FULL OPERATING ORDER FOR ENTIRE BUILDING AT ALL TIMES. LICENSED SPRINKLER ENGINEER OR LICENSED SPRINKLER CONTRACTOR, TO PROVIDE DRAWINGS AND HYDRAULIC CALCULATIONS FOR CHANGES TO EXISTING SYSTEM AND TO COMPLY WITH NEW SPACE LAYOUT, NFPA 13, ALL STATE AND LOCAL REQUIRMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

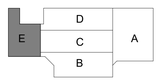
B. REFER TO SPECIFICATIONS FOR PIPE MATERIALS.

PLUMBING KEYED NOTES

1 EXISTING 4" WATER SERVICE FROM BELOW.
2 3/4" CW DOWN TO SERVE PLUMBING FIXTURE(S).
3 3" SANITARY DOWN, 2" VENT UP.
4 2" VENT UP TO 4" VTR.



1 **PLUMBING PLAN - LEVEL 1 - EILAND UNIT E**
Scale: 1/8" = 1'-0"



KEY PLAN

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	Approver
Designed By:	Designer
Checked By:	Checker
Drawn By:	Author

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SHEET TITLE
PLUMBING PLAN - LEVEL 1 - AREA E - EILAND

SHEET NO.
P14.02

KISD 2025 FRP

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PLUMBING GENERAL NOTES

1. WITHIN THE EXISTING BUILDING, EXISTING WATER, WASTE AND VENT SERVICES ARE TO BE MODIFIED AS REQUIRED AND REUSED FOR THE INSTALLATION OF NEW AND/OR RELOCATED PLUMBING FIXTURES. REFER TO PLUMBING FLOOR PLANS FOR POINTS OF CONNECTION.
2. WITHIN THE EXISTING BUILDING, SAWCUT AND REMOVE EXISTING FLOOR SLAB AS REQUIRED TO PROVIDE NEW AND/OR RELOCATED PLUMBING FIXTURES, CLEANOUTS, AND UNDERSLAB WASTE AND VENT PIPING. PATCH AND REFINISH FLOOR TO MATCH EXISTING.
3. IN AREAS WHERE THE FLOOR SLAB IS REMOVED, CONTRACTOR SHALL ALSO REMOVE UNDERSLAB WASTE AND VENT PIPING WHICH SERVES FIXTURES DESIGNATED FOR REMOVAL. PRIOR TO ANY REMOVAL, FIELD VERIFY THAT LINES TO BE REMOVED DO NOT SERVE ANY EXISTING FIXTURES TO REMAIN OR NEW FIXTURES TO BE INSTALLED.
4. IN AREAS WHERE THE FLOOR SLAB IS NOT REMOVED, CONTRACTOR SHALL ABANDON IN PLACE ANY UNDERSLAB WASTE AND VENT PIPING NO LONGER NEEDED, UNLESS THE PIPING MUST BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION. IF NEW WORK DOES NOT NECESSITATE THEIR REMOVAL, CUT AND PLUG SUCH LINES BELOW SLAB, AND PATCH FLOOR TO MATCH EXISTING.
5. FIELD VERIFY EXACT LOCATION, SIZE, DEPTH, DIRECTION OF FLOW, CAPACITY, PIPE MATERIAL AND CONDITION OF EXISTING WASTE PIPING PRIOR TO BEGINNING CONSTRUCTION. ENSURE THAT PROPER CONNECTIONS TO AND EXTENSION OF SUCH UTILITIES CAN BE MADE.
6. WASTE LINES TO BE RE-USED OR RECONNECTED TO SHALL BE THOROUGHLY RODDED OUT AND FLUSHED TO ENSURE THEY ARE FREE FROM BLOCKAGES.
7. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.
8. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT. SHOULD A CONFLICT OCCUR THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.
9. CONTRACTOR TO COORDINATE ALL REMODEL WORK WITH THE WORK OF OTHER TRADES TO AVOID CONFLICTS AND TO MINIMIZE INTERRUPTION OF SERVICES.
10. COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST ARCHITECTURAL DRAWINGS AND SPECIFICATIONS PRIOR TO ANY ROUGH-INS.
11. DO NOT ROUGH-IN FROM THESE DRAWINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS.
12. CONTRACTOR TO FIELD VERIFY AS NECESSARY THE EXACT ROUTING AND SIZES OF ALL PIPING.
13. ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE, INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
14. THE PROPER INSTALLATION OF NEW FIXTURES AND THE PROPER CONTINUED OPERATION OF EXISTING FIXTURES TO REMAIN SHALL DETERMINE THE EXTENT AND NATURE OF PLUMBING REMODEL WORK.
15. EACH VENT SHALL TERMINATE VERTICALLY NOT LESS THAN 6" ABOVE ROOF, MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN VENT TERMINALS THROUGH ROOF AND ALL FRESH AIR INTAKES, AND A MINIMUM 5'-0" FROM ANY EXTERIOR WALL.
16. PRIOR TO BEGINNING CONSTRUCTION, COORDINATE BUILDING BACKFLOW PREVENTION REQUIREMENTS WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PROVIDE AS DIRECTED.

SHOCK ARRESTOR SCHEDULE

P.D.I. SYMBOLS:	FIXTURE UNITS:	THREADED CONNECTION	CERTIFICATION
A	1 - 11	1/2"	ASSE 1010
B	12 - 32	3/4"	ASSE 1010
C	33 - 60	1"	ASSE 1010
D	61 - 113	1"	ASSE 1010
E	114 - 154	1"	ASSE 1010
F	155 - 330	1"	ASSE 1010

PLUMBING FIXTURE SCHEDULE

TYPE: EDF-1 (T.A.S. COMPLIANT) - INTERIOR WITH BOTTLE FILLER
DESCRIPTION: WALL HUNG, BARRIER FREE, SELF-CONTAINED, VANDAL RESISTANT BOTTLE FILLING STATION AND BI-LEVEL ADA COOLER, NON-FILTERED REFRIGERATED STAINLESS. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50F DRINKING WATER, BASED ON 80F INLET WATER AND 90F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE GREEN COUNTER, LAMINAR FLOW, REAL DRAIN, VANDAL RESISTANT. FURNISHED WITH VANDAL RESISTANT BUBBLER. ELECTRONIC BOTTLE FILLER BUTTON WITH MECHANICAL FRONT BUBBLER BUTTON ACTIVATION. PROVIDE CANE TOUCH APRON IN ALL STAINLESS STEEL ON ALL UNITS MOUNTED WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH.
HALSEY TAYLOR #HTHB-HVR6BL-NF WITH APRON #98324C.
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE #8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE #403-BL-BFS.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: EDF-2 (T.A.S. COMPLIANT) - INTERIOR WITH BOTTLE FILLER.
DESCRIPTION: WALL HUNG, BARRIER FREE, SELF-CONTAINED,VANDAL RESISTANT BOTTLE FILLING STATION AND SINGLE ADA COOLER, NON-FILTERED REFRIGERATED STAINLESS. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50F DRINKING WATER, BASED ON 80F INLET WATER AND 90F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE GREEN COUNTER, LAMINAR FLOW, REAL DRAIN, VANDAL RESISTANT. FURNISHED WITH VANDAL RESISTANT BUBBLER. ELECTRONIC BOTTLE FILLER BUTTON WITH MECHANICAL FRONT BUBBLER BUTTON ACTIVATION. PROVIDE CANE TOUCH APRON IN ALL STAINLESS STEEL ON ALL UNITS MOUNTED WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH.
HALSEY TAYLOR #HTHB-HVR8-NF WITH APRON #98324C.
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE #8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE #403-BFS.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: FS-1
SERVICE: NEW MECHANICAL ROOM. EQUIPMENT CONDENSATE.
DESCRIPTION: A.R.E. COATED CAST IRON BODY 12" SQUARE FLOOR SINK WITH 8" DEEP SUMP, BOTTOM OUTLET, LOOSE SET CAST IRON SECONDARY STRAINER, CLAMPING DEVICE, STAINLESS STEEL HALF TOP GRATE, BOTTOM OUTLET WITH 1/2" TRAP PRIMER CONNECTION. WADE #9140-B5-6-15-26.
TRAP PRIMER: SERVED BY ELECTRONIC TRAP PRIMER, REFER TO PLANS.
ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION WITH EQUIPMENT PLACEMENT.

TYPE: TP-1 (FLUSH MOUNT)
SERVICE: NEW MECHANICAL ROOM.
DESCRIPTION: ELECTRONIC TRAP PRIMER WITH SOLENOID VALVE, AIR GAP, CIRCUIT BREAKER, TEST SWITCH AND TIMER. 120V. PRECISION PLUMBING PRODUCTS MINI-PRIME MP-500-120V WITH STAINLESS STEEL ACCESS DOOR AND DISTRIBUTION UNIT.
ROUGH-IN: 3/4" COLD WATER.

TYPE: HB-1 - COLD WATER
SERVICE: NEW MECHANICAL ROOM.
DESCRIPTION: HOSE BIBB. EXPOSED TYPE, MILD CLIMATE, WALL-MOUNTED FAUCET WITH 3/4" F.P.T. INLET, 3/4" MALE HOSE THREAD OUTLET AND SELF-DRAINING ANTI SIPHON VACUUM BREAKER. CHROME PLATED BRASS FINISH WITH REMOVABLE TEE HANDLE. CHICAGO #952-CP.
ROUGH-IN: 3/4" COLD WATER. INSTALL WITH OUTLET AT 18" A.F.F. OR AS DIRECTED BY ARCHITECT/OWNER.

GENERAL NOTES

ALL LAVATORIES AND SINKS SHALL BE SUPPLIED WITH HOT AND COLD WATER (UNLESS NOTED TO BE COLD WATER ONLY) TO FAUCETS AS INDICATED ON PLANS AND FIXTURE SCHEDULE. PROVIDE CHROME PLATED BRASS SUPPLY STOPS WITH LOOSE KEYS AND WALL ESCUTCHEONS. PROVIDE CHROME PLATED FLEXIBLE RISERS OF SIZE REQUIRED TO PROPERLY CONNECT FIXTURES. PROVIDE 17 GAUGE CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON (UNLESS NOTED TO BE AN ACID WASTE FIXTURE). REFER TO FIXTURE SCHEDULE FOR MINIMUM SIZES OF PLUMBING FIXTURE ROUGH-INS.

INSULATION KITS AT ALL LAVATORIES AND SINKS REQUIRED TO BE T.A.S. ACCESSIBLE (MCGUIRE OR TRUEBRO). ALL SUCH FIXTURES AND FINAL INSTALLATIONS SHALL COMPLY WITH THE STATE ACCESSIBILITY STANDARDS REQUIREMENTS.

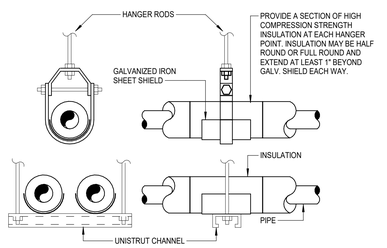
INSERT TRAP GUARDS AFTER FINAL RODDING OF DRAINS. INSTALL TRAP GUARD WITH CLEAR SILICONE CAULK FOR GAS-TIGHT SEAL. FOR DRAIN RODDING AFTER INSTALLATION. INSERT SEWER TAPE THROUGH LIGHTLY GREASED 1-1/2" PVC PIPE TO PROTECT TRAP GUARD.

PLUMBING PIPING LEGEND

SYMBOLS	DESCRIPTION
SAN	SANITARY OR WASTE PIPING ABOVE GRADE (SAN)
SAN	SANITARY OR WASTE PIPING BELOW GRADE (SAN)
GW	GREASE WASTE PIPING (GW)
GW	GREASE WASTE PIPING BELOW GRADE (GW)
SD	STORM DRAIN PIPING (SD)
SD	STORM DRAIN PIPING BELOW GRADE (GW)
SSD	SUB-SOIL DRAIN OR FOOTING DRAIN (SSD)
AW	ACID WASTE PIPING (AW)
AW	ACID WASTE PIPING BELOW GRADE (AW)
PD	PUMPED DISCHARGE (PD)
CD	CONDENSTATE DRAIN PIPING (CD)
D	CONDENSTATE - INDIRECT DRAIN PIPING (D)
	VENT PIPING (V)
CW	COLD WATER PIPING (CW)
HW	HOT WATER PIPING (HW)
HWR	HOT WATER RETURN PIPING (HWR)
SCW	SOFT COLD WATER PIPING (SCW)
CDW	CHILLED DRINKING WATER PIPING (CDW)
TP	TRAP PRIMER LINE (TP)
F	FIRE PROTECTION PIPING (F)
AS	AUTOMATIC SPRINKLER PIPING (AS)
GAS	NATURAL GAS PIPING (G)
GV	GAS VENT PIPING (GV)
AIR	COMPRESSED AIR PIPING (A)
	FLOW DIRECTIONAL ARROW
	SHUT-OFF VALVE
BV	BALANCING VALVE (BV)
SV	SOLENOID VALVE (SV)
BV	BALL VALVE (BV)
	BUTTERFLY VALVE
PC	LUBRICATED PACKED PLUG STOP STOP COCK (PC)
	HORIZONTAL SWING CHECK
	UNION
	HORIZONTAL SWING CHECK
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
RPBFP	REDUCED PRESSURE BACKFLOW PREVENTER (RPBFP)
	PIPING DOWN
	RISE OR DROP PIPING
	PIPING UP -OR- PIPING UP & DOWN
	CAP ON END OF PIPE
CO	CLEANOUT (WALL OR CEILING) (CO)
FCO	FLOOR CLEANOUT (FCO)
ECO	EXTERIOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO)
	TWO-WAY CLEANOUT (PROVIDE 18"x24"x4" CONCRETE PAD OUTSIDE)
	FIRE DEPARTMENT VALVE AT RISER
	FIRE HYDRANT
	FIRE DEPARTMENT CONNECTION
PRV	PRESSURE REDUCING VALVE (PRV)
	BRANCH CONNECTION OUT OF TOP
	BRANCH CONNECTION OUT OF BOTTOM
	BRANCH CONNECTION OUT OF SIDE
	WYE & 1/8TH BEND BRANCH CONNECTION
	WYE BRANCH CONNECTION
	HOSE BIBB
	PRESSURE GAUGE WITH COCK
	THERMOMETER
	GAS PRESSURE REGULATOR
	TEST COCK
	GAS METER
	WALL HYDRANT
	VALVE IN RISE
	ASME TEMPERATURE & PRESSURE RELIEF VALVE
	VACUUM RELIEF VALVE
	ANGLE VALVE
	OS&Y VALVE
	ROOF DRAIN
1	REFER TO KEYED NOTE
FS	FLOW SWITCH
	FLOOR SINK (FS)
	FLOOR DRAIN (FD)
	FLOOR DRAIN WITH P-TRAP (FD)
	FLOOR DRAIN WITH P-TRAP AT 45° ANGLE (FD)
	HUB DRAIN (HD)
	ACCESS PANEL FOR TRAP PRIMER OR SHOCK ABSORBER
AP	ACCESS PANEL LOCATION SYMBOL
A	SHOCK ABSORBER
	AIR CHAMBER
(E)	EXISTING
(N)	NEW
N.C.	NORMALLY CLOSED
VTR	VENT THRU ROOF
B.F.F.	BELOW FINISHED FLOOR
A.F.F.	ABOVE FINISHED FLOOR
	NEW CONNECTION
IE=100.00'	INVERT ELEVATION
1	DELTA CHANGE SYMBOL
P 1	RISER FLAG

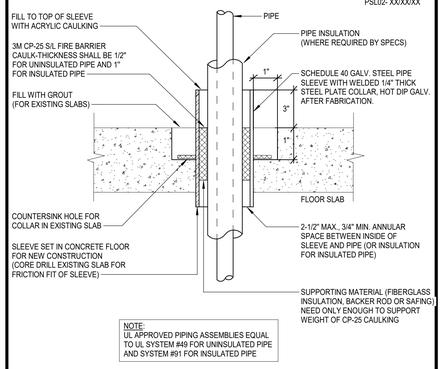
PP01 - XX/XX/XX

MINIMUM DIMENSIONS OF GALVANIZED SHEETMETAL PROTECTION SHIELDS AT PIPE HANGERS		
NOMINAL SIZE PIPE	SHIELD LENGTH (IN.)	GAUGE THICKNESS
1/2" & 3/4"	12	18
1" - 2-1/2"	12	18
3" - 4"	16	18
6"	18	16



5 **PIPE SHIELDS FOR INSULATED PIPING**
SCALE: NONE

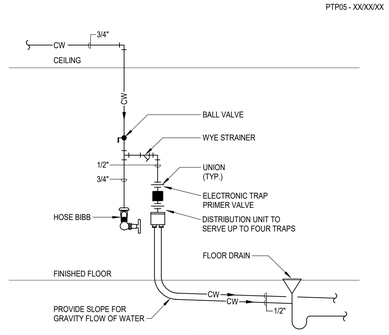
PSL02- XX/XX/XX



NOTE:
UL APPROVED PIPING ASSEMBLIES EQUAL TO UL SYSTEM #49 FOR UNINSULATED PIPE AND SYSTEM #91 FOR INSULATED PIPE

4 **INTERIOR FLOOR PENETRATION**
SCALE: NONE

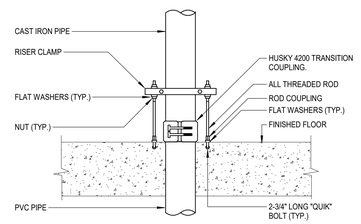
PTP05 - XX/XX/XX



NOTE: OMIT HOSE BIBB WHEN IN JANITOR'S CLOSET

2 **ELECTRONIC TRAP PRIMER IN MECHANICAL ROOM/JANITOR CLOSET**
SCALE: NONE

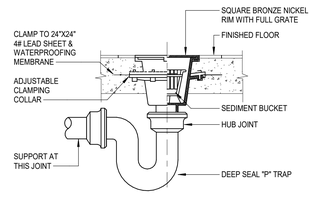
PSAN12- 05/16/24



NOTE:
1. MAKE CONNECTION FROM PVC BELOW SLAB TO CAST IRON ABOVE SLAB WITH HUSKY 4200 TRANSITION COUPLING.
2. THERE IS TO BE NO EXPOSED PVC ABOVE SLAB.

3 **CAST IRON TO PVC TRANSITION**
SCALE: NONE

PSAN08- XX/XX/XX



1 **FLOOR SINK**
SCALE: NONE

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ISSUED: JANUARY 27, 2026

REVISIONS

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Project Director:	MR
Designed By:	AA
Checked By:	EH
Drawn By:	AA

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25-0225.00

SHEET TITLE
PLUMBING SCHEDULES AND DETAILS - EILAND

SHEET NO.
P15.01

KISD 2025 FRP

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ALTERNATES

1. CAMPUS PA SYSTEM HEAD END TO BE REPLACED AT ALL CAMPUSES. PROVIDE PRICING PER CAMPUS AS AN ALTERNATE TO REPLACE ALL SPEAKERS AND CABLING FOR THE FOLLOWING CAMPUSES: EILAND, KLENK, MCDOUGLE, AND NITSCH. PRICING SHOULD INCLUDE ALL GATEWAYS, AMPLIFIERS, POWER SUPPLIES, AND UPS. REQUIRED TO CREATE A DISTRIBUTED ANALOG COMMON ZONE THROUGHOUT BUILDING CORIDORS AND COMMON AREAS. PER SHEET KEYNOTES SPEAKERS IN CLASSROOMS SHALL BE IP.
2. REPLACEMENT OF ENTIRE CAMPUS PA SYSTEM, INCLUDING SPEAKERS AND CABLING FOR KAISER ES SHALL BE INCLUDED IN BASE BID ALL COMMON ZONE SPEAKERS SHOULD BE DISTRIBUTD UTILIZING GATEWAYS, AMPLIFIERS, POWER SUPPLIES, AND UPS AS NEEDED. ALL CLASSROOMS SHALL UTILIZE IP SPEAKERS CONNECTED TO CATEGORY CABLING AS PER KEYNOTES ON PLANS.

TECHNOLOGY - GENERAL NOTES

1. EXISTING PA SYSTEM HEAD END, SPEAKERS, AND WIRING TO BE DEMOLISHED IN ENTIRETY.
2. SPEAKERS IN CLASSROOMS TO HAVE TALK-BACK FUNCTIONALITY AND SHALL BE IP- SPEAKERS. ONLY SPED CLASROOMS SHALL HAVE VOLUME CONTROLS AND CALL BUTTONS.
3. SPEAKERS IN NON-CLASSROOM ENVIRONMENTS SHALL BE ANALOG SPEAKERS, WITH ONLY OFFICES AND CONFERENCE ROOMS RECEIVING VOLUME CONTROLS.

TECHNOLOGY KEYNOTES

1. UTILIZE EXISTING CAT6 CABLE FOR NEW PA SYSTEM HEAD END.
2. DEMOLISH EXISTING PA SYSTEM HEAD END AT THIS LOCATION, INCLUDING 66-BLOCKS AND PLAYWOOD BACKBOARD. PATCH AND PAINT HOLES, AS NEEDED TO PROVIDE A FINISHED LOOK FOR THE WALL.
3. LOCATION OF NEW PA SYSTEM HEAD END.
4. RELOCATE EXISTING CAT6 DATA OUTLET FROM EXSITNG PA HEAD END TO THIS LOCATION.
5. PROVIDE AND INSTALL VALCOM IP GATEWAY, AS NEEDED, FOR CONNECTION OF ANALOG SPEAKERS TO PA SYSTEM. FOR EACH GATEWAY, ALSO PROVIDE AMPLIFIER, POWER SUPPLY AND BATTERY BACK-UP/UPS. PROVIDE NEW CAT6 CONNECTION TO OWNER NETWORK.
6. UTILIZE EXISTING BLUE CAT6 CABLE/DATA OUTLET (ABOVE CEILING) FOR NEW IP SPEAKER.
7. UTILIZE EXISTING CAT6 CABLE/DATA OUTLET (ABOVE CEILING) FOR NEW IP SPEAKER.
8. PROVIDE AND INSTALL PA OVERRIDE FOR LOCAL SOUND SYSTEM.
9. ESTIMATED SPEAKER LOCATION. PROVIDE AND INSTALL TO MATCH EXISTING QUANTITIES ON THE BUILDING.
10. PROVIDE AND INSTALL DUAL DATA OUTLET IN GYM MECHANICAL MEZZANINE, CONNECTED TO EXISTING SWITCH IN GYM OFFICE. COORDINATE EXACT LOCATION REQUIRED FOR DATA OUTLET WITH BAS CONTRACTOR.

1 Eiland ES LEVEL ONE
SCALE: 1/16" = 1'-0"

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Project Architect:	VLK
Project Designer:	Designer
Drawn By:	Author

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25-0225.00

SHEET TITLE
TECHNOLOGY - EILAND LEVEL ONE

SHEET NO.
T101.1

KISD 2025 FRP

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ALTERNATES

1. CAMPUS PA SYSTEM HEAD END TO BE REPLACED AT ALL CAMPUSES. PROVIDE PRICING PER CAMPUS AS AN ALTERNATE TO REPLACE ALL SPEAKERS AND CABLING FOR THE FOLLOWING CAMPUSES: EILAND, KLEINK, MCDOUGLE, AND NITSCH. PRICING SHOULD INCLUDE ALL GATEWAYS, AMPLIFIERS, POWER SUPPLIES, AND UPS REQUIRED TO CREATE A DISTRIBUTED ANALOG COMMON ZONE THROUGHOUT BUILDING CORIDORS AND COMMON AREAS. PER SHEET KEYNOTES SPEAKERS IN CLASSROOMS SHALL BE IP.
2. REPLACEMENT OF ENTIRE CAMPUS PA SYSTEM, INCLUDING SPEAKERS AND CABLING FOR KAISER ES SHALL BE INCLUDED IN BASE BID ALL COMMON ZONE SPEAKERS SHOULD BE DISTRIBUTD UTILIZING GATEWAYS, AMPLIFIERS, POWER SUPPLIES, AND UPS AS NEEDED. ALL CLASSROOMS SHALL UTILIZE IP SPEAKERS CONNECTED TO CATEGORY CABLING AS PER KEYNOTES ON PLANS.

TECHNOLOGY - GENERAL NOTES

1. EXISTING PA SYSTEM HEAD END, SPEAKERS, AND WIRING TO BE DEMOLISHED IN ENTIRETY.
2. SPEAKERS IN CLASSROOMS TO HAVE TALK-BACK FUNCTIONALITY AND SHALL BE IP- SPEAKERS. ONLY SPED CLASROOMS SHALL HAVE VOLUME CONTROLS AND CALL BUTTONS.
3. SPEAKERS IN NON-CLASSROOM ENVIRONMENTS SHALL BE ANALOG SPEAKERS, WITH ONLY OFFICES AND CONFERENCE ROOMS RECEIVING VOLUME CONTROLS.

TECHNOLOGY KEYNOTES

1. UTILIZE EXISTING CAT6 CABLE FOR NEW PA SYSTEM HEAD END.
2. DEMOLISH EXISTING PA SYSTEM HEAD END AT THIS LOCATION, INCLUDING 66-BLOCKS AND PLAYWOOD BACKBOARD. PATCH AND PAINT HOLES, AS NEEDED TO PROVIDE A FINISHED LOOK FOR THE WALL.
3. LOCATION OF NEW PA SYSTEM HEAD END.
4. RELOCATE EXISTING CAT6 DATA OUTLET FROM EXSITNG PA HEAD END TO THIS LOCATION.
5. PROVIDE AND INSTALL VALCOM IP GATEWAY, AS NEEDED, FOR CONNECTION OF ANALOG SPEAKERS TO PA SYSTEM. FOR EACH GATEWAY, ALSO PROVIDE AMPLIFIER, POWER SUPPLY AND BATTERY BACK-UP/UPS. PROVIDE NEW CAT6 CONNECTION TO OWNER NETWORK.
6. UTILIZE EXISTING BLUE CAT6 CABLE/DATA OUTLET (ABOVE CEILING) FOR NEW IP SPEAKER.
7. UTILIZE EXISTING CAT6 CABLE/DATA OUTLET (ABOVE CEILING) FOR NEW IP SPEAKER.
8. PROVIDE AND INSTALL PA OVERRIDE FOR LOCAL SOUND SYSTEM.
9. ESTIMATED SPEAKER LOCATION. PROVIDE AND INSTALL TO MATCH EXISTING QUANTITIES ON THE BUILDING.
10. PROVIDE AND INSTALL DUAL DATA OUTLET IN GYM MECHANICAL MEZZANINE, CONNECTED TO EXISTING SWITCH IN GYM OFFICE. COORDINATE EXACT LOCATION REQUIRED FOR DATA OUTLET WITH BAS CONTRACTOR.

1 Eiland ES LEVEL TWO
SCALE: 1/8" = 1'-0"

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ISSUED: January 27, 2026

REVISIONS

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Project Director: Proj. Director
Project Architect: VLK
Project Designer: Designer
Drawn By: Author

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SHEET TITLE
TECHNOLOGY - EILAND LEVEL TWO

SHEET NO.
T101.2

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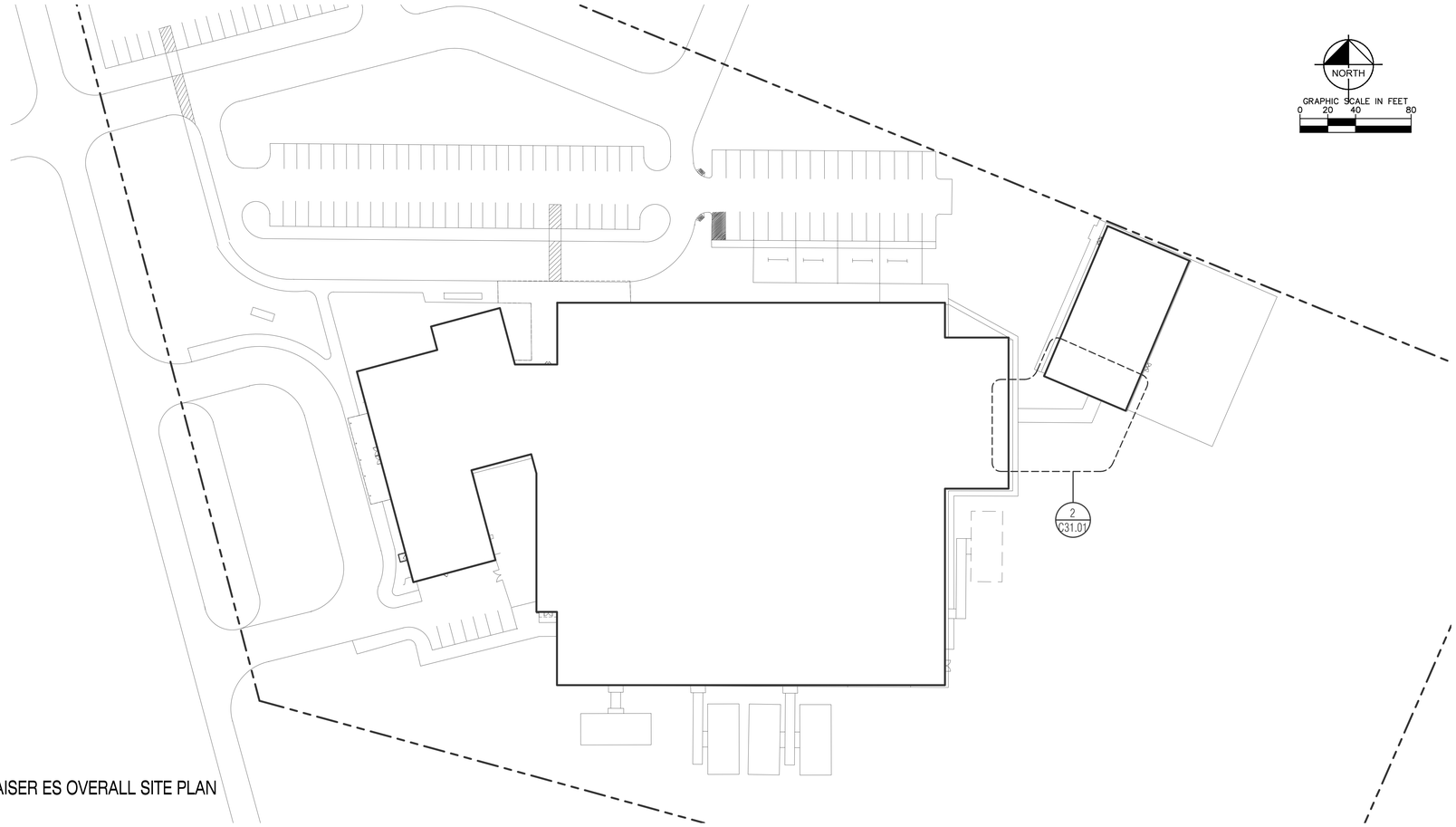


1 - KAISER ES OVERALL SITE PLAN

LEGEND	
	PROPERTY LINE
	PROP. CANOPY (REF ARCH FOR DETAILS)
	CURB RAMP NOT IN PUBLIC ROW
PAVING MATERIAL LEGEND	
	PROP. SIDEWALK

KEYED NOTES	
1	PROP. SAWCUT/MATCH EXISTING PAVEMENT LINE
2	ACCESSIBLE RAMP
3	4" SOLID WHITE STRIPING, 2'-0" O.C. @ 45°
4	PROP. 10" HDPE STORM CONNECTION TO CANOPY DOWNSPOUT. STORM TO BE ROUTED TO NEAREST INLET.
5	PROP. 10" 45° BEND
6	PROP. 10" WYE

GENERAL NOTES

1. DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

2. ALL RADII 2' UNLESS OTHERWISE NOTED.

3. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING POLES AND FIXTURES AND ELECTRICAL PLAN PRIOR TO PLACING PAVEMENT.

4. REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.

5. SIDEWALKS TO HAVE A 5% MAXIMUM RUNNING SLOPE AND A 2% MAXIMUM CROSS SLOPE IN ACCORDANCE WITH ADA REQUIREMENTS.

6. FIELD VERIFY ADA GRADES PRIOR TO PLACING PAVEMENT. CONTRACTOR SHALL CONSTRUCT ALL ACCESSIBLE ROUTES IN ACCORDANCE WITH ADA STANDARDS AND TAS.

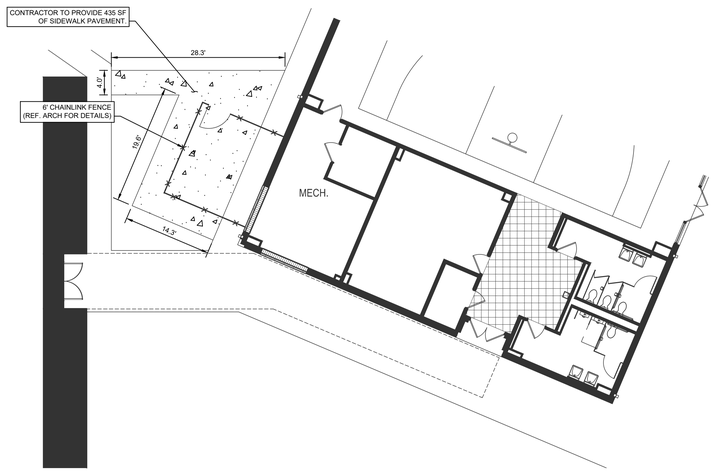
7. REF. IRRIGATION PLANS PRIOR TO PLACING PAVEMENT.

8. CONTRACTOR SHALL BUDGET FOR ACCESSIBLE STALL STRIPING, FIRE LANE STRIPING, DIRECTIONAL ARROWS, ETC.

9. SITE LIGHTING IS BY OTHERS. REF. SITE LIGHTING PLANS FOR LOCATIONS AND DETAILS PRIOR TO PLACING PAVEMENT.

10. REF. BUILDING PLANS FOR ALL EXTERIOR STAIR DETAILS.

11. CONTRACTOR TO ADJUST EXISTING SANITARY SEWER MANHOLES, STORM SEWER MANHOLES, ELECTRICAL MANHOLES, FIRE HYDRANTS, VALVE BOXES, WATER METERS, ETC. TO MATCH PROPOSED FINISHED GRADES IF NECESSARY.



2 - KAISER ES ENLARGED CIVIL PLAN

GRAPHIC SCALE IN FEET
0 5 10 20

811 Know what's below. Call before you dig.

CAUTION!!

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

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ISSUED: January 27, 2026

REVISIONS

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Project Director:	KLM
Project Engineer:	RDH
Project Designer:	RDH
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SHEET TITLE
KAISER
DIMENSION
CONTROL PLAN

SHEET NO.
C31.01

KISD 2025 FRP

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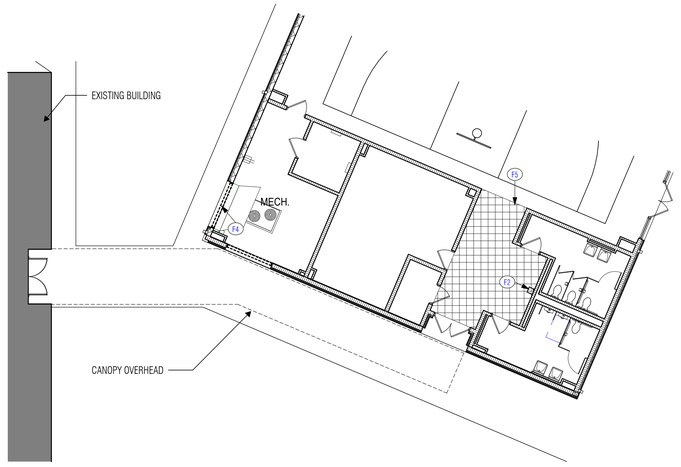
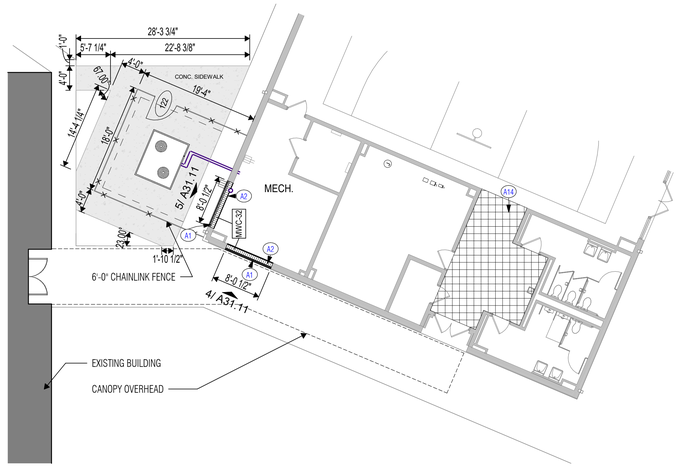
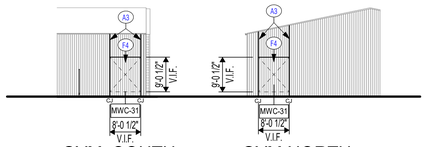


7 GYMNASIUM ENLARGED DEMO PLAN
SCALE: 1" = 10'-0"

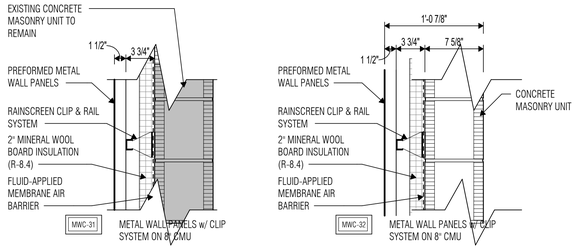


6 GYMNASIUM ENLARGED PLAN
SCALE: 1" = 10'-0"

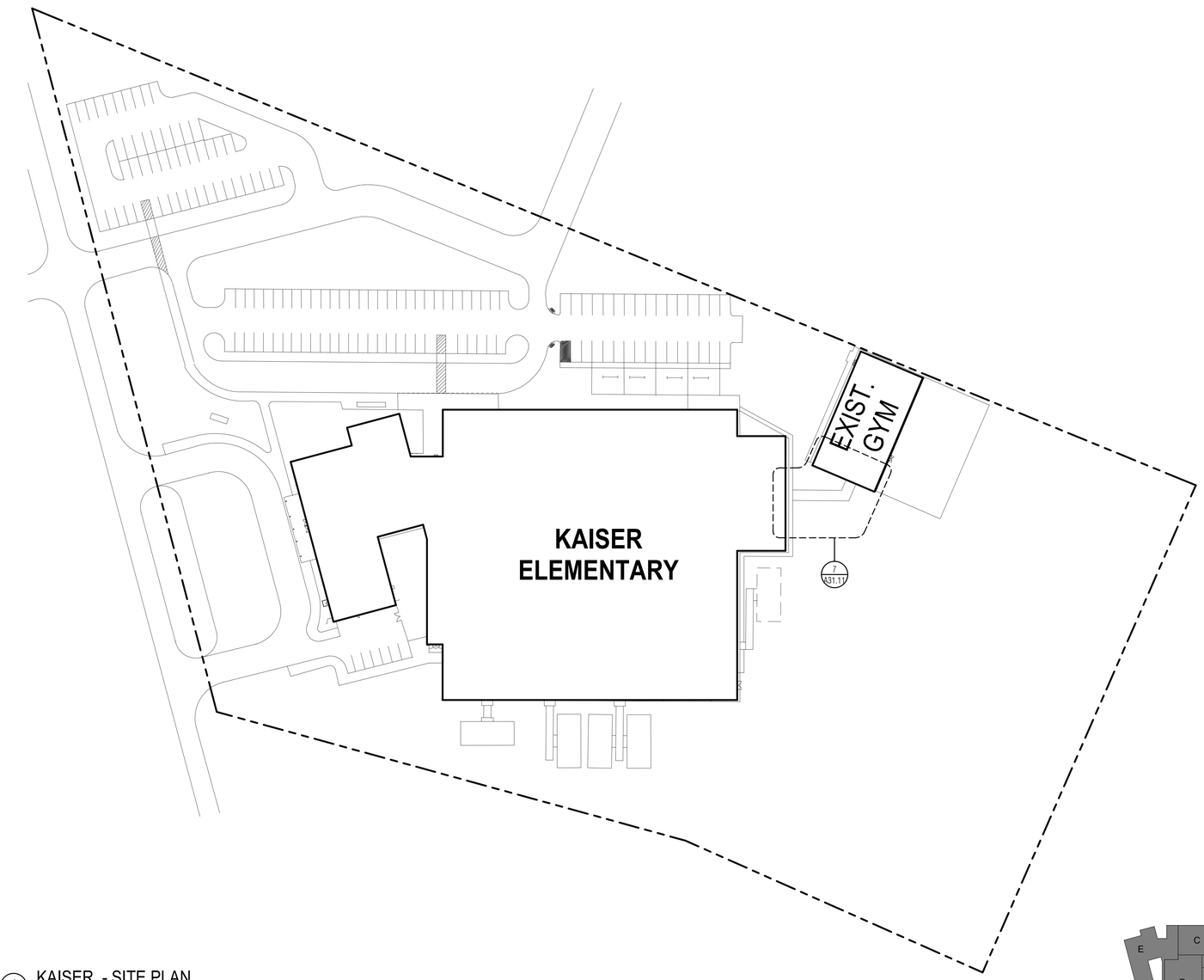


5 GYM SOUTH
SCALE: 1/16" = 1'-0"

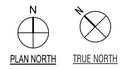
4 GYM NORTH
SCALE: 1/16" = 1'-0"



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



1 KAISER - SITE PLAN
SCALE: 1" = 50'-0"



SITE PLAN NOTES

1. Verify and document existing dimensions and conditions at the site before beginning construction. Notify the Architect of conflicts or variations prior to commencement of construction.
2. To prevent damage to existing trees and shrubs in proximity to the Work, provide and maintain protective barriers around those items in accordance with the specified procedures, or in the absence of those procedures, with recognized landscaping and horticultural practices.

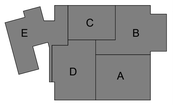
SITE PLAN LEGEND

—x——x——x— CHAIN LINK FENCE, See Plan for Heights

GENERAL KEYNOTE LEGEND

1. REMOVE & REPLACE ALL EXTERIOR CANOPY LIGHTS. REF. ELECTRICAL

Keynote Legend	
Key Value	Keynote Text
A1	INFILL WALL OPENING WITH WALL ASSEMBLY SPECIFIED.
A2	PAINT ENTIRE LENGTH OF CMU WALL INCLUDING COLUMN FURR OUT.
A3	REMOVE AND REPLACE EXISTING BUILDING SEALANT AT CONTROL JOINT.
A14	REINSTALL CEILING GRID AND TILES.
F2	REMOVE & REPLACE DRINKING FOUNTAIN. REF: PLUMBING.
F4	REMOVE EXISTING LOUVERS AND PATCH HOLES IN WALL. PREPARE OPENING TO RECIEVE WALL INFILL.
F5	REMOVE AND REINSTALL CEILING GRID AND TILES FOR INSTALLATION OF THE AHU.



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01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

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Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

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SHEET TITLE
KAISER - SITE PLAN

SHEET NO.
A31.11

KISD 2025 FRP

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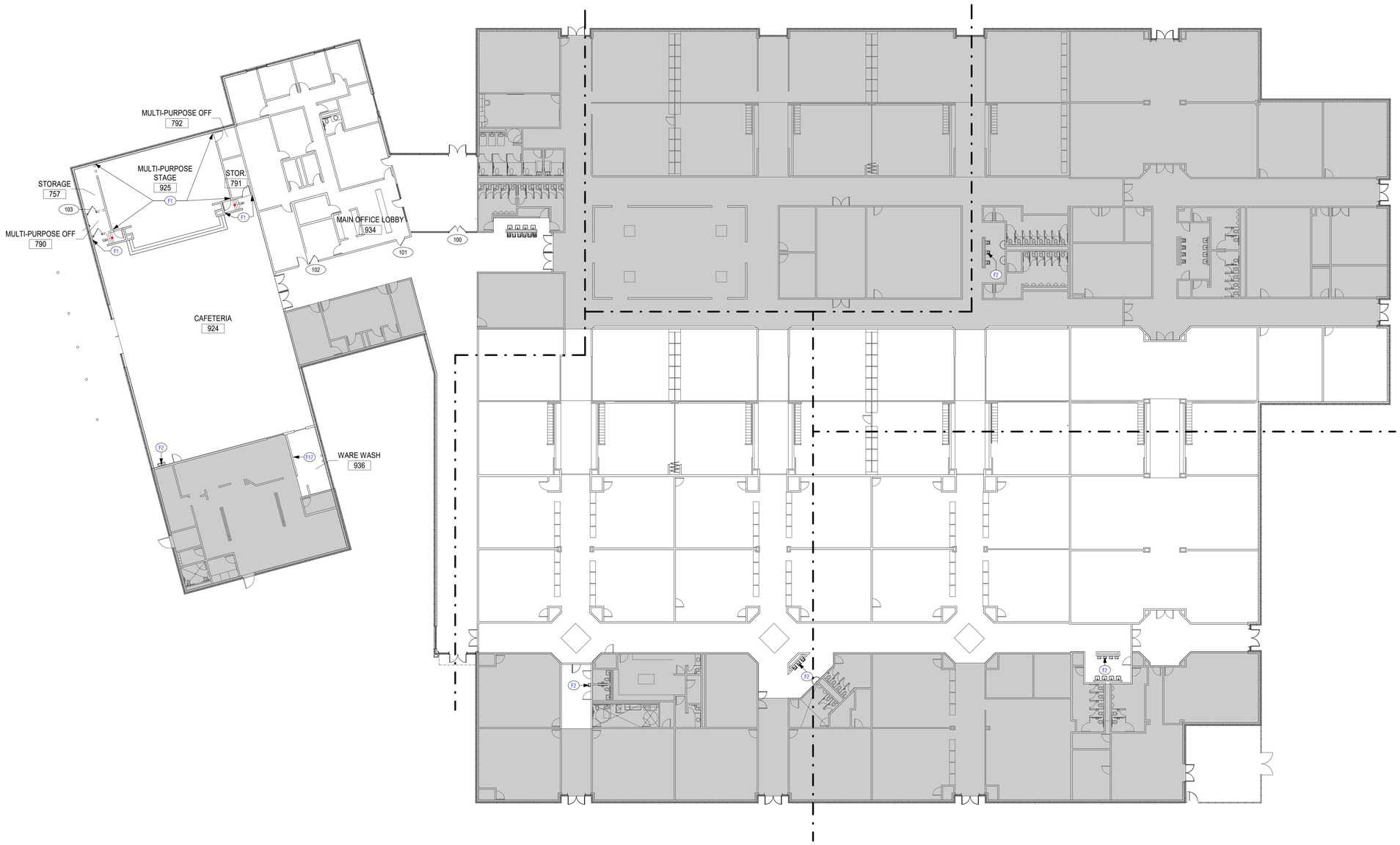
DEMOLITION NOTES

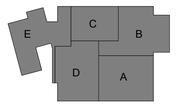
1. Drawings show the general extent of demolition work, however it is impractical to indicate or note every item of demolition. Any items shown dashed are to be removed to make way for new construction, unless noted otherwise.
2. Existing materials containing asbestos to be removed under separate contract prior to construction by Owner's asbestos abatement contractor.
3. Contact the Owner prior to the start of demolition to determine items to be salvaged and returned to Owner.
4. Protect items to remain from damage during demolition.
5. Properly protect and store items to be removed and reinstalled or relocated.
6. Repair or replace at no cost to the Owner any damages to the existing building and site as a result of construction activities.
7. Refer to electrical and mechanical demolition plan for additional information.
8. Patch/repair flooring to match existing at all removed or demolished doors, windows, walls, millwork, lockers and similar items.

Keynote Legend	
Key Value	Keynote Text
F1	PATCH AND REPAIR ALL EXISTING WALL CRACKS. PREP SURFACE TO RECEIVE NEW FINISH AS SCHEDULED.
F2	REMOVE & REPLACE DRINKING FOUNTAIN. REF: PLUMBING.
F17	REPLACE DISH MACHINE EXHAUST FANS. REF: ELECTRICAL



N
PLAN NORTH
TRUE NORTH

1 KAISER - OVERALL DEMO FLOOR PLAN - LEVEL ONE
SCALE: 1/16" = 1'-0"



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Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

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SHEET TITLE
KAISER - OVERALL DEMO PLAN - LEVEL ONE

SHEET NO.
A32.01

KISD 2025 FRP

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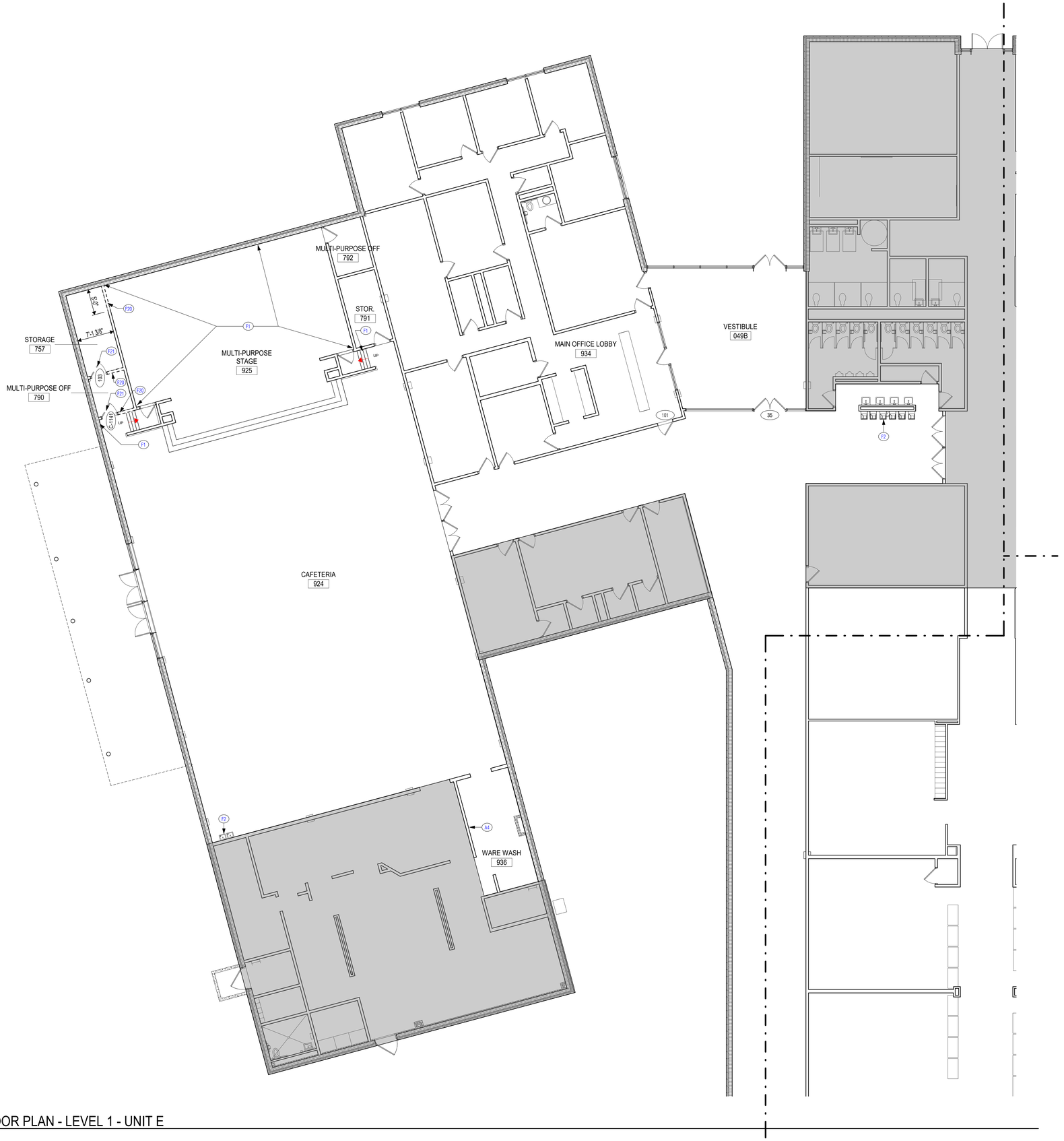


1 KAISER - DEMO FLOOR PLAN - LEVEL 1 - UNIT E
SCALE: 1/8" = 1'-0"

DEMOLITION NOTES

1. Drawings show the general extent of demolition work, however it is impractical to indicate or note every item of demolition. Any items shown dashed are to be removed to make way for new construction, unless noted otherwise.
2. Existing materials containing asbestos to be removed under separate contract prior to construction by Owner's asbestos abatement contractor.
3. Contact the Owner prior to the start of demolition to determine items to be salvaged and returned to Owner.
4. Protect items to remain from damage during demolition.
5. Properly protect and store items to be removed and reinstalled or relocated.
6. Repair or replace at no cost to the Owner any damages to the existing building and site as a result of construction activities.
7. Refer to electrical and mechanical demolition plan for additional information.
8. Patch/repair flooring to match existing at all removed or demolished doors, windows, walls, millwork, lockers and similar items.

DOOR SCHEDULE NOTES

1. At Doors marked 'SMK', provide smoke seals at frame and door bottom to resist the passage of smoke. Provide threshold if required by code or if necessary for proper function of door bottom seal.
2. At Doors marked 'SND', frames to be stuffed with mineral fiber insulation prior to installation and the perimeter of the frame sealed to the surrounding wall with non-hardening acoustical sealant on both sides of the partition. Threshold, where used, shall be sealed to the floor with acoustical sealant.
3. At Doors without a Frame Type designation, the door frame is part of a Glazing System, Sound-Control Door Assembly, Tornado-Resistant Door Assembly, etc.
4. At Doors with a Frame Type designation "AL", the door frame is an interior aluminum frame that is not part of a glazing system
5. At Doors with a Frame Type designation "N/A", there is no door frame required (e.g. all-glass doors, gates, etc.).
6. At Doors with a Frame Type designation "REF. DET", refer to the referenced Head and Jamb detail for frame information.
7. At Doors with a Door Type or Frame Type designation "EX", the door or door frame is existing to remain.
8. Refer to Hardware Schedule for additional information regarding hardware.

DOOR SCHEDULE KEYNOTES

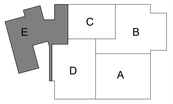
KEY NUMBER	KEYED NOTES
DS7	Access Control / Card Reader

DOOR MATERIAL NOTES

MARK	PANEL MATERIAL
1	Plastic Laminate
4	Painted Hollow Metal

Keynote Legend

Key Value	Keynote Text
A4	INSTALL HANDRAIL.
F1	PATCH AND REPAIR ALL EXISTING WALL CRACKS. PREP SURFACE TO RECEIVE NEW FINISH AS SCHEDULED.
F2	REMOVE & REPLACE DRINKING FOUNTAIN. REF: PLUMBING.
F20	EXISTING WALLS TO BE DEMOLISHED. PREP SLAB FOR INSTALLATION OF NEW FINISHED FLOOR AS SCHEDULED.
F21	REMOVE EXISTING HOLLOW METAL DOOR.



KEY PLAN

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Drawn By:	VLK

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SHEET TITLE
KAISER - DEMO FLOOR PLAN - LEVEL ONE - UNIT E

SHEET NO.
A32.01E

KISD 2025 FRP

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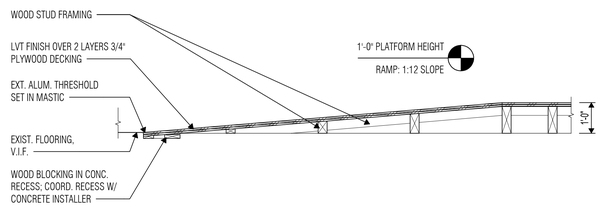
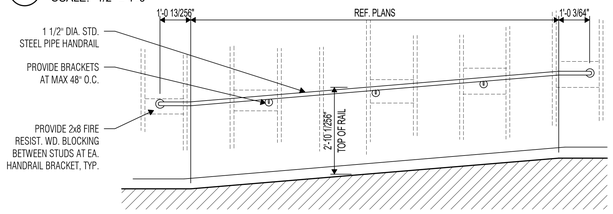
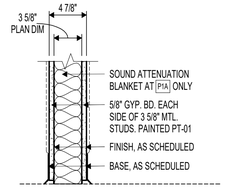


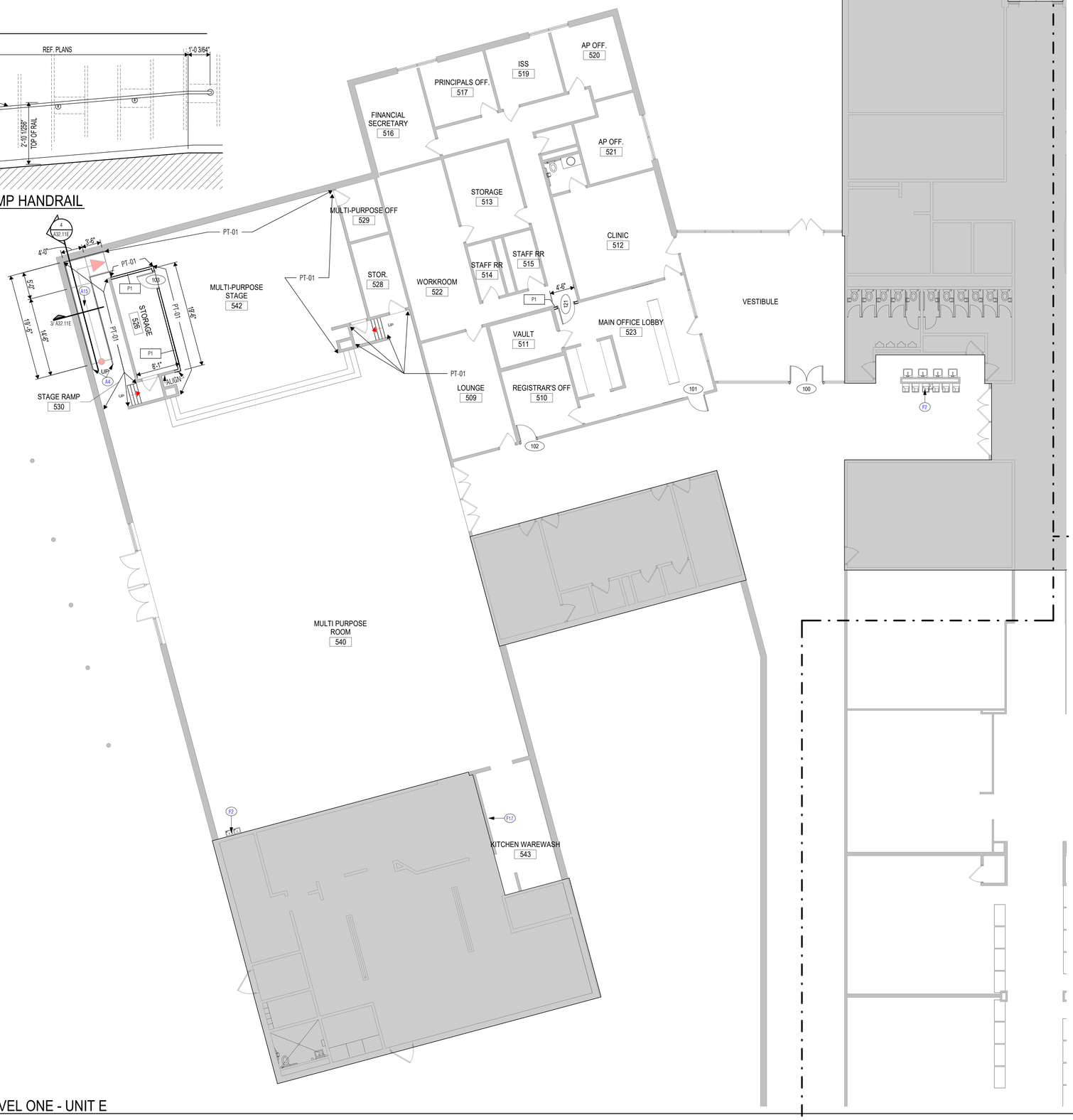
4 STAGE RAMP DETAIL
SCALE: 1/2" = 1'-0"



3 MC101 - ELEVATION OF RAMP HANDRAIL
SCALE: 1/2" = 1'-0"



2 WALL TYPE P6
SCALE: 1 1/2" = 1'-0"



1 KAISER - FLOOR PLAN - LEVEL ONE - UNIT E
SCALE: 1/8" = 1'-0"

FLOOR PLAN NOTES

1. Dimensions on Floor Plans are to face of stud or CMU unless noted otherwise.
2. Coordinate the location of electrical devices with casework, millwork, lockers, etc. Any electrical device that is not properly coordinated shall be relocated at no additional cost.
3. Interior partitions are Type "P1" unless noted otherwise.
4. Refer to Detail 2/A0.31 for Typical Door Maneuvering Clearances. All new doors shall meet the requirements of that detail. If any door is found that does not comply with these requirements, request clarification from the Architect prior to construction.
5. Provide minimum 18 gage (43 mils) cold-formed steel studs as designed by stud engineer for all interior partiti1ons scheduled to receive adhered masonry or stone veneer.
6. At light-gage steel stud partitions that extend above the ceiling, provide diagonal 20 (30 mils) gage stud braces at 4'-0" o.c. to structure above (not to steel deck) as required to provide rigid anchorage and support of partitions.
7. Provide minimum 2 X 6 fire-retardant treated wood blocking in both new and existing stud walls and partitions, at mounting locations for wall-mounted accessories, handrails, casework, markerboards, tackboards, folding partitions, toilet partitions, and all other wall-mounted items. Refer to Sheet A0.31 for typical blocking requirements at various conditions.
8. At Mechanical, Electrical and Boiler Room partitions, seal tightly around all penetrations. Utilize fire safing material at rated partitions.
9. Provide sealant and/or fire safing at all floor penetrations, as applicable.

FLOOR PLAN LEGEND

METAL STUD PARTITION. Extend 4" above highest ceiling plane and brace to structure above as noted in Floor Plan Notes. Refer to Reflected Ceiling Plans for fire, smoke and sound-conditioned partitions that extend to deck above.

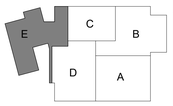
CMU PARTITION. Extend 4" above highest ceiling plane and brace to structure above as detailed. Refer to Reflected Ceiling Plans for fire, smoke and sound-conditioned partitions that extend to deck above.

S1A(6) — LOCKER TYPE; For locker types, refer to sheet A2.23; LOCKER QUANTITY

FURNITURE, FIXTURE OR EQUIPMENT BY OWNER. Coordinate with adjacent electrical devices, casework, etc.

MB	MARKERBOARD. Preceding number is length, in feet.
TB	TACKBOARD. Preceding number is length, in feet.
TS	TACK STRIP. Preceding number is length, in feet.
IM	INTERACTIVE MARKERBOARD
IFP	INTERACTIVE FLAT PANEL
FEC	FIRE EXTINGUISHER WITH CABINET AND BRACKET
FE	FIRE EXTINGUISHER WITH BRACKET
FHC	FIRE HOSE CABINET
HB	HORIZONTAL BLINDS
RS	ROLLING WINDOW SHADES
DS	DOWNSPOUT

Keynote Legend	
Key Value	Keynote Text
A4	INSTALL HANDRAIL.
A15	NEW CONCRETE RAMP AND HANDRAIL. SEE A0.31 FOR TAS HANDRAIL REQUIREMENTS.
F2	REMOVE & REPLACE DRINKING FOUNTAIN. REF: PLUMBING.
F17	REPLACE DISH MACHINE EXHAUST FANS. REF: ELECTRICAL



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01/27/2026

ISSUED: JANUARY 27, 2026

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Project Designer:	MG
Drawn By:	VLK

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SHEET TITLE
KAISER - FLOOR PLAN - LEVEL ONE - UNIT E

SHEET NO.
A32.11E

KISD 2025 FRP

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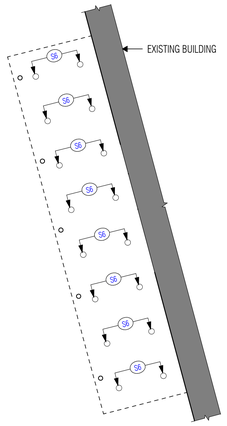
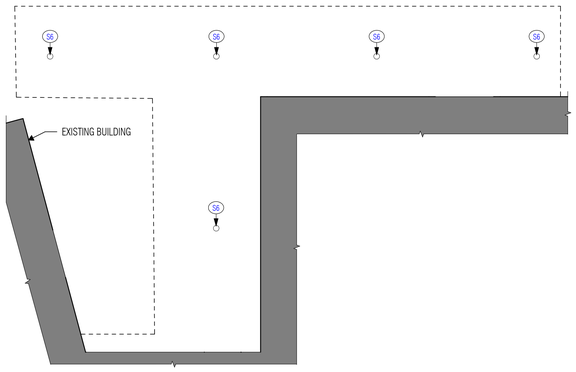
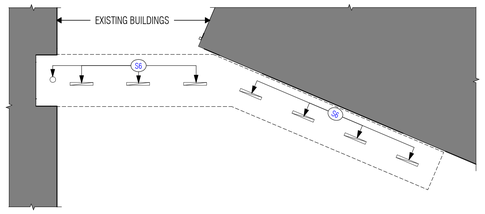


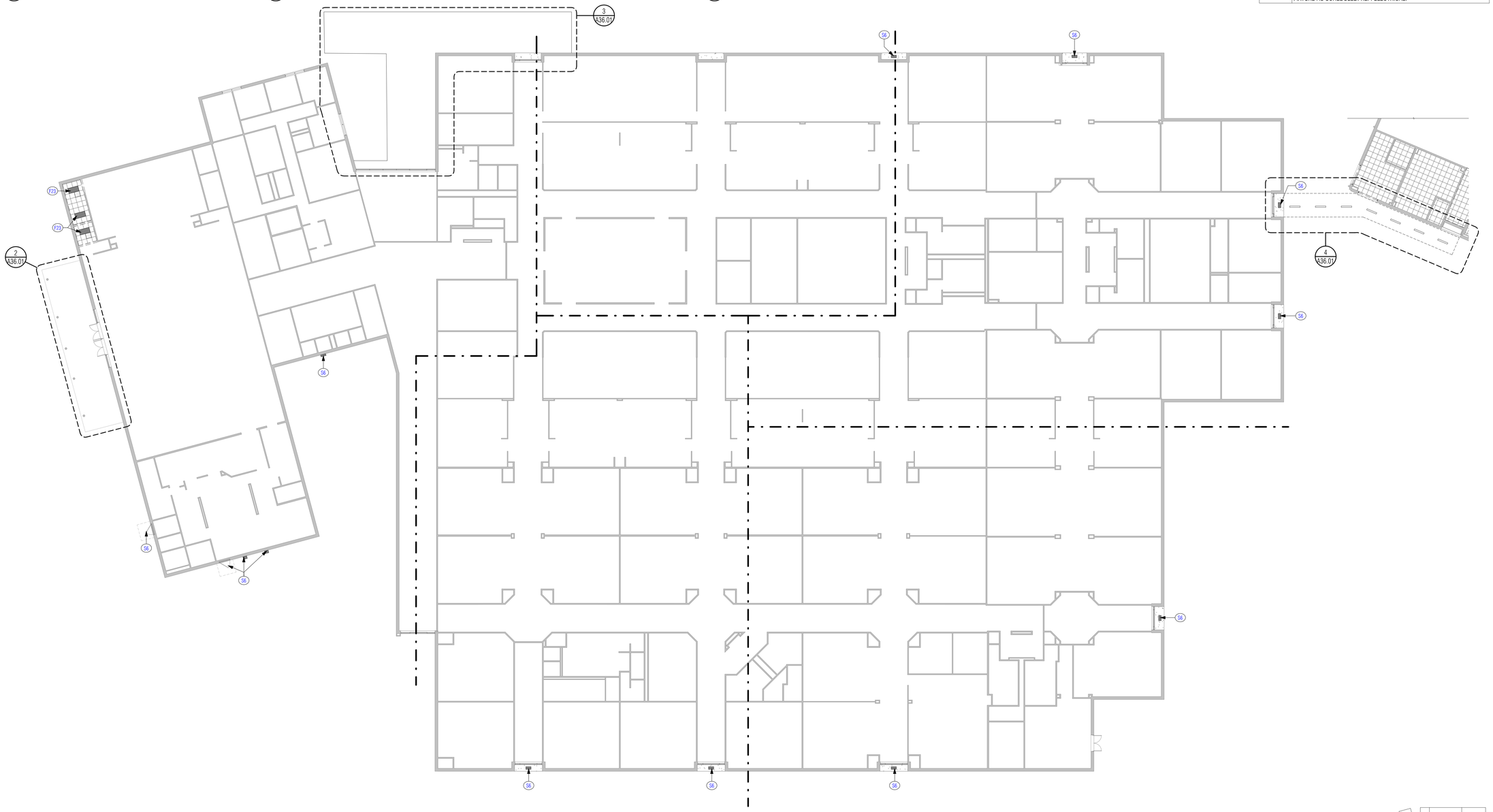
2 KAISER - SOFFIT 1
SCALE: 3/32" = 1'-0"



3 KAISER - SOFFIT 2
SCALE: 3/32" = 1'-0"



4 KAISER - CANOPY 1
SCALE: 3/32" = 1'-0"



1 KAISER - DEMO REFLECTED CEILING PLAN - LEVEL ONE
SCALE: 1/16" = 1'-0"

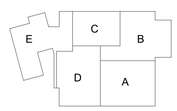
DEMOLITION NOTES

1. Drawings show the general extent of demolition work, however it is impractical to indicate or note every item of demolition. Any items shown dashed are to be removed to make way for new construction, unless noted otherwise.
2. Existing materials containing asbestos to be removed under separate contract prior to construction by Owner's asbestos abatement contractor.
3. Contact the Owner prior to the start of demolition to determine items to be salvaged and returned to Owner.
4. Protect items to remain from damage during demolition.
5. Properly protect and store items to be removed and reinstalled or relocated.
6. Repair or replace at no cost to the Owner any damages to the existing building and site as a result of construction activities.
7. Refer to electrical and mechanical demolition plan for additional information.
8. Patch/repair flooring to match existing at all removed or demolished doors, windows, walls, millwork, lockers and similar items.

GENERAL KEYNOTE LEGEND

1. ALL EXISTING PUBLIC ANNOUNCMENT (PA) HEADS TO BE REMOVED AND PREP SURFACE FOR INSTALL OF NEW SYSTEM.

Keynote Legend	
Key Value	Keynote Text
F23	REMOVE CEILING TILE AND GRID. EXISTING LIGHT FIXTURES TO BE REMOVED AND REINSTALLED. HVAC GRILLES TO REMIAN
S6	REMOVE EXISTING LIGHT FIXTURE AND PREP AREA FOR INSTALLATION OF FIXTURE AS SCHEDULED. REF: ELECTRICAL.



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01/27/2026

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Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

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SHEET TITLE
KAISER - DEMO REFLECTED CEILING PLANS - LEVEL ONE

SHEET NO.
A36.01

KISD 2025 FRP

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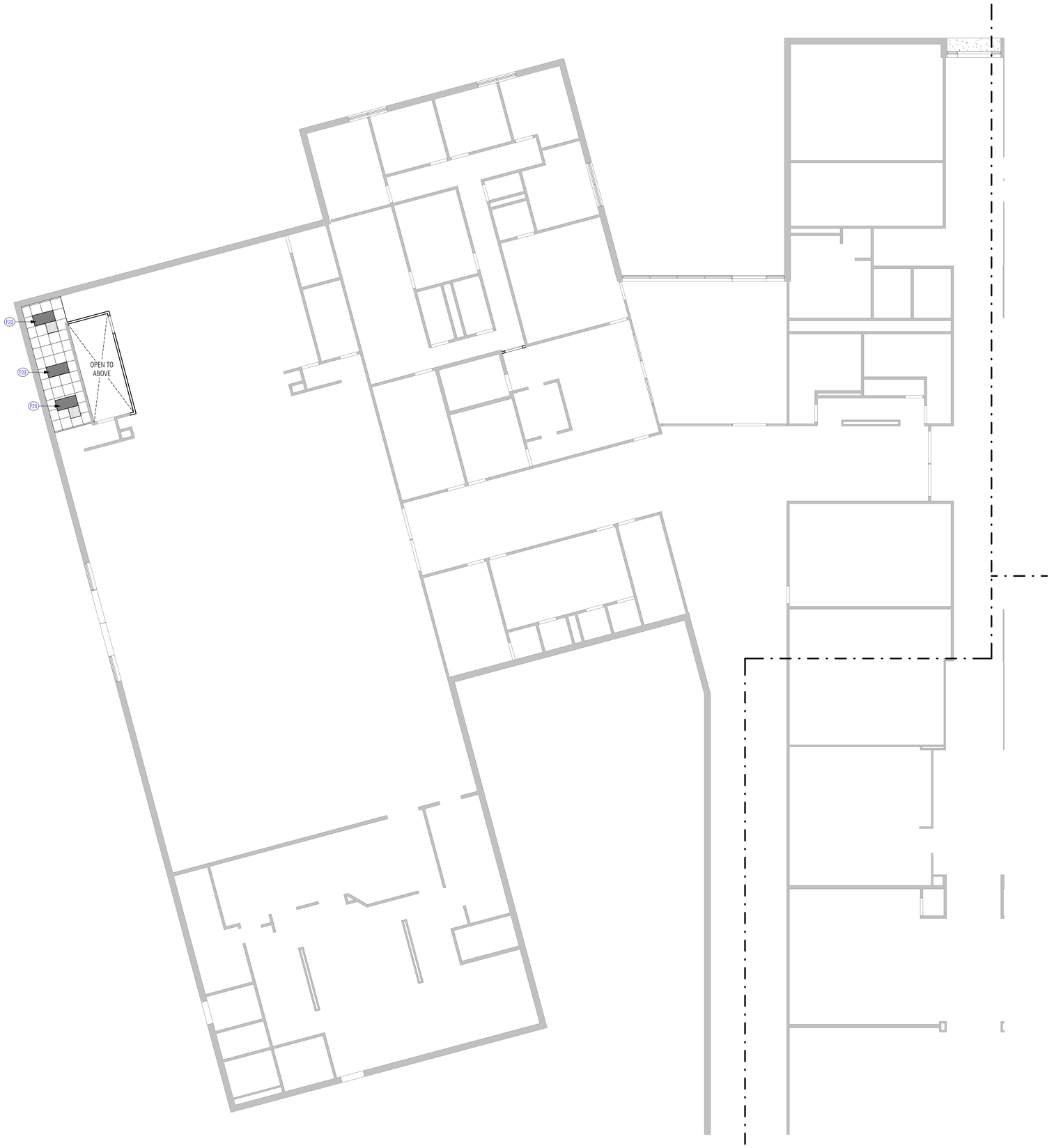


1 KAISER - REFLECTED CEILING PLAN - LEVEL ONE
SCALE: 1/8" = 1'-0"

REFLECTED CEILING PLAN NOTES

1. All ceiling heights shall be [9'-1 1/8"] [8'-11 3/4"] [other] A.F.F. unless noted otherwise.
2. Refer to Detail -/--- for Typical Gypsum Board Ceiling Control Joint Detail.
3. Refer to Detail -/--- for Typical Plaster Ceiling Control Joint Detail.
4. Provide vented reveals at perimeter of all non-insulated exterior plaster soffits. Provide venting strips or perforated panels at perimeter of all non-insulated metal panel soffits (refer to Detail -/---). Venting at non-insulated soffits shall be provided whether specifically indicated on the drawings or not.
5. Provide partition to deck (PTD) at walls surrounding spaces with exposed structure. Refer to Reflected Ceiling Plan Legend for PTD requirements.
6. Provide hold-down clips for all acoustic lay-in ceiling panels at vestibules, at sloped ceilings, at fire-rated ceilings, and within 6 feet of exterior doors without vestibules.
7. At ceiling furring details, the suspended assemblies, bracing, blocking, etc. shown on the details are for schematic representation only. Provide stable, secure and permanent assemblies at these locations in accordance with recommended light-gage steel framing installation practices.
8. At partitions that do not extend to deck above, extend partition 4" minimum above highest adjacent ceiling and brace per Floor Plan Legend and Floor Plan Notes.

REFLECTED CEILING PLAN LEGEND

PYRAMID CEILING DIFFUSER PANELS (SIZE)

H.V.A.C. SUPPLY & RETURN GRILLES
Shown for location purposes only. Refer to Mechanical Drawings.

LIGHT FIXTURES. Refer to Electrical Drawings.

1-HOUR FIRE BARRIER PARTITION

2-HOUR FIRE BARRIER PARTITION

2-HOUR FIRE WALL

3-HOUR FIRE WALL

SMOKE PARTITION

ACOUSTICAL/SOUND PARTITION

NONRATED PARTITION TO DECK

1-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: '1-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'. Brace partitions per Floor Plan General Notes.

2-HOUR FIRE BARRIER PARTITION. Extend partition to deck above and seal with firestopping as required for fire-resistance requirements. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: '2-HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS'. Brace partitions per Floor Plan General Notes.

2-HOUR FIRE WALL. Extend wall to or through deck above and support wall per UL Design requirements, wall sections and details. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: '2-HOUR FIRE WALL - PROTECT ALL OPENINGS'.

3-HOUR FIRE WALL. Extend wall to or through deck above and support wall per UL Design requirements, wall sections and details. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: '3-HOUR FIRE WALL - PROTECT ALL OPENINGS'.

SMOKE PARTITION. Extend partition to deck above and seal with sealant as required to resist the passage of smoke. Paint stenciled label on partitions above ceiling at 15'-0" o.c. as follows: 'SMOKE BARRIER - PROTECT ALL OPENINGS'. Seal all joints and penetrations. Brace partitions per Floor Plan General Notes.

ACOUSTICAL/SOUND PARTITION. Extend partition to deck above and seal with acoustical sealant. Seal all joints and penetrations with acoustical sealant. Brace partitions per Floor Plan General Notes.

NONRATED PARTITION TO DECK. Extend partition to deck above. Brace partitions per Floor Plan General Notes.

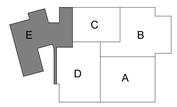
CEILING SCHEDULE

MARK	DESCRIPTION

CEILING FINISH

ACT-01	Acoustic Ceiling Tile (24X24)

Keynote Legend	
Key Value	Keynote Text
F23	REMOVE CEILING TILE AND GRID. EXISTING LIGHT FIXTURES TO BE REMOVED AND REINSTALLED. HVAC GRILLES TO REMIAN



KEY PLAN

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01/27/2026

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KAISER - REFLECTED CEILING PLAN - LEVEL ONE - UNIT E

SHEET NO.
A36.11

KISD 2025 FRP

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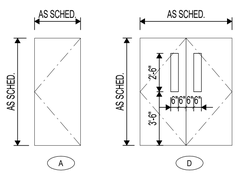
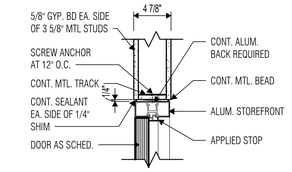
KAISER - DOOR SCHEDULE

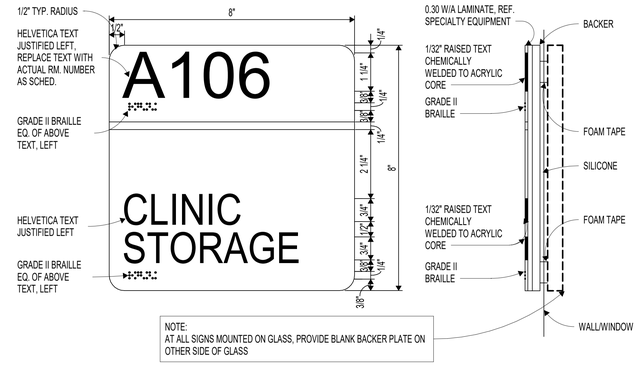
DOOR NO.	DOOR TYPE	DOOR MATERIAL	FRAME TYPE	DOOR OPENING WIDTH	DOOR OPENING HEIGHT	DETAIL - REF. A7.11 U.N.O. HEAD	DETAIL - REF. A7.11 U.N.O. JAMB	DETAIL - REF. A7.11 U.N.O. SILL	FIRE RATING	HARDWARE SET	KEYNOTES	REMARKS
100	D	4	HM	6'-0"	7'-0"	5/A39.11	4/A39.11				DS7	
101	A	1	HM	3'-0"	7'-0"	2/A39.11	3/A39.11				DS7	DOOR RELEASE
102	A	1	-	3'-0"	7'-0"							STOREROOM FUNCTION LOCK
103	A	1	HM	3'-0"	7'-0"	2/A39.11	3/A39.11					DOOR BEING REUSED
121	A	1	AL	3'-0"	7'-0"	8/A39.11	7/A39.11				DS7	CARD READER, DOOR RELEASE AND EXIT DEVICE
122	S	-	-	4'-0"	7'-0"	-	-	-				CHAINLINK



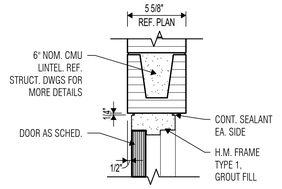
6 DOOR TYPES
SCALE: 1/4" = 1'-0"



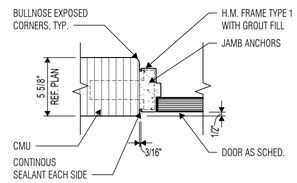
8 HEAD DETAIL ALUM.
SCALE: 1 1/2" = 1'-0"



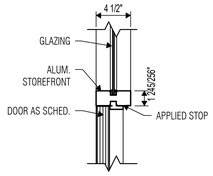
9 SIGN TYPE A
SCALE: 6" = 1'-0"



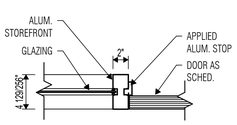
2 HEAD DETAIL H.M.
SCALE: 1 1/2" = 1'-0"



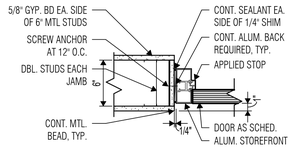
3 JAMB DETAIL H.M.
SCALE: 1 1/2" = 1'-0"



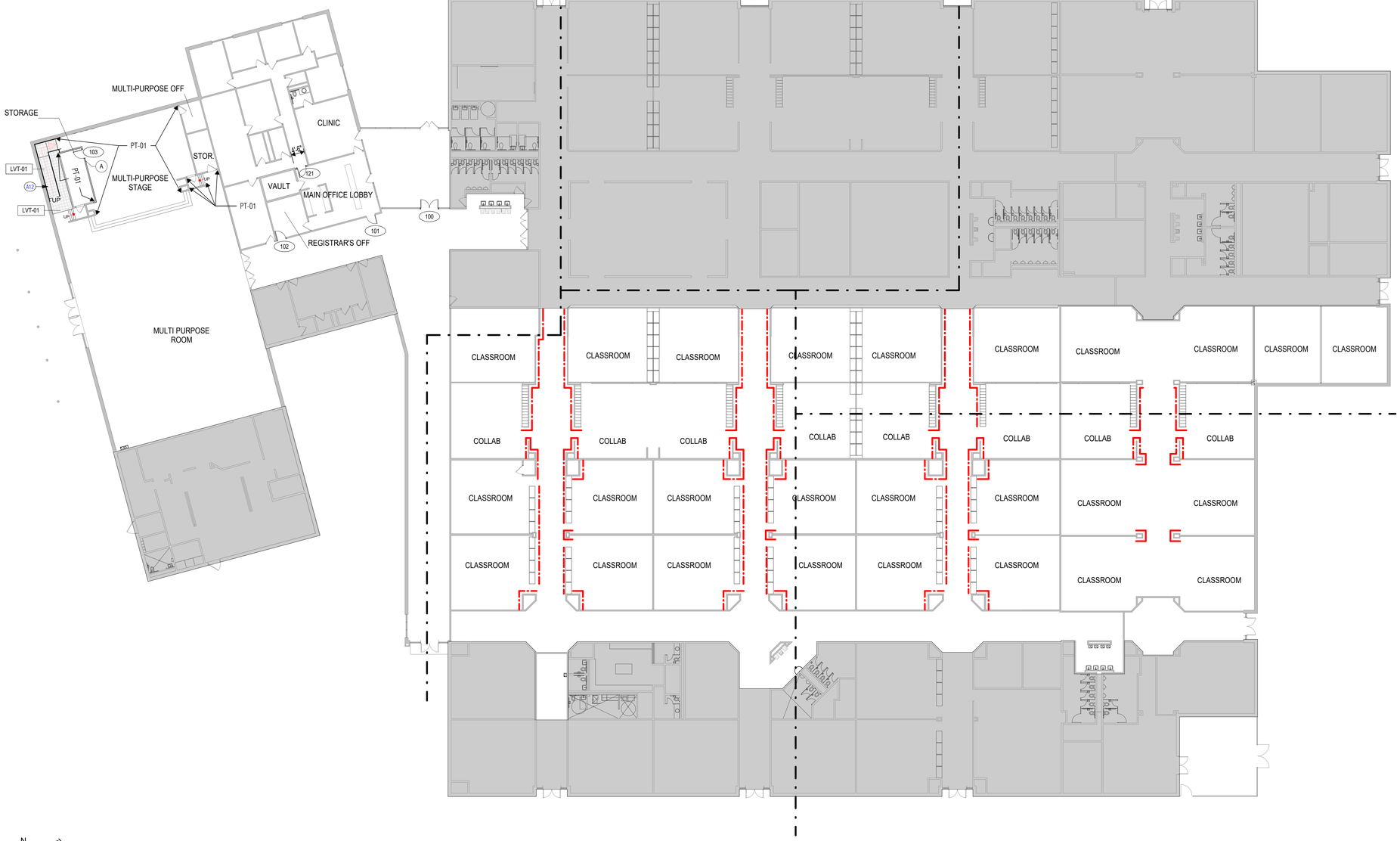
5 STOREFRONT HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



4 STOREFRONT JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



7 JAMB DETAIL ALUM.
SCALE: 1 1/2" = 1'-0"



1 KAISER - OVERALL INTERIOR FINISH PLAN - LEVEL ONE
SCALE: 1/16" = 1'-0"

N
PLAN NORTH
TRUE NORTH

INTERIOR FINISH PLAN SCHEDULE

MARK	DESCRIPTION
FLOOR FINISH	
LVT-01	Luxury Vinyl Tile - Field
RG-01	Athletic Flooring
Keynote Legend	
Key Value	Keynote Text
A12	RAMP TO BE PAINTED.

DOOR SCHEDULE NOTES

1. At Doors marked 'SMK', provide smoke seals at frame and door bottom to resist the passage of smoke. Provide threshold if required by code or if necessary for proper function of door bottom seal.
2. At Doors marked 'SND', frames to be stuffed with mineral fiber insulation prior to installation and the perimeter of the frame sealed to the surrounding wall with non-hardening acoustical sealant on both sides of the partition. Threshold, where used, shall be sealed to the floor with acoustical sealant.
3. At Doors without a Frame Type designation, the door frame is part of a Glazing System, Sound-Control Door Assembly, Tornado-Resistant Door Assembly, etc.
4. At Doors with a Frame Type designation "AL", the door frame is an interior aluminum frame that is not part of a glazing system
5. At Doors with a Frame Type designation "N/A", there is no door frame required (e.g. all-glass doors, gates, etc.).
6. At Doors with a Frame Type designation "REF. DET", refer to the referenced Head and Jamb detail for frame information.
7. At Doors with a Door Type or Frame Type designation "EX", the door or door frame is existing to remain.
8. Refer to Hardware Schedule for additional information regarding hardware.

DOOR SCHEDULE KEYNOTES

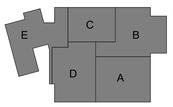
KEY NUMBER	KEYED NOTES
DS7	Access Control / Card Reader

DOOR MATERIAL NOTES

MARK	PANEL MATERIAL
1	Plastic Laminate
4	Painted Hollow Metal

ALTERNATE # 1

WALL TO BE SANDED AND PREPED TO RECIEVE NEW FINISH AS SCHEDULED: PT.00



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REGISTERED ARCHITECT MELISSA E. FLEMING 26313 STATE OF TEXAS

01/27/2026

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Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

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KAISER - INTERIOR OVERALL FINISH PLAN - LEVEL ONE

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FIRE ALARM NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY, FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

LINETYPE LEGEND

———	EXISTING TO REMAIN
– – – –	DISCONNECT AND REMOVE
———	NEW WORK

ELECTRICAL KEYED NOTES

1 UNLESS NOTED OTHERWISE, DISCONNECT AND REMOVE ALL EXISTING INTERIOR LIGHT FIXTURES AND SALVAGE FOR RE-USE. UNLESS INDICATED OTHERWISE EXISTING NORMAL AND EMERGENCY POWER 277V CIRCUITS TO REMAIN IN PLACE FOR RE-USE. REMOVE ALL EXISTING LIGHTING CONTROLS EQUIPMENT AND DEVICES. INCLUDING BUT NOT LIMITED TO SWITCH-LEGS, RELAYS, LIGHTING CABINETS, H-LINK AND WEB LINK, CONTACTORS AND SENSORS.

2 INSTALL EXISTING LIGHT FIXTURES SALVAGED AFTER DEMOLITION AS SHOWN. REPLACE DAMAGED LENSES AND PROVIDE NEW FLUORESCENT LAMPS. CONNECT TO EXISTING CIRCUITS AND CONTROLS IN EXISTING CAFETERIA. PROVIDE EMERGENCY CIRCUIT FOR HATCHED FIXTURES. EXTEND WIRING WITH MATCHING CONDUCTORS/CONDUIT TO EXISTING LOCATION AND/OR NEW FIXTURES. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 3500 W @ 277V. TYPICAL.

3 CONNECT TO EXISTING CIRCUITS AND CONTROLS IN EXISTING CAFETERIA. PROVIDE EMERGENCY CIRCUIT FOR HATCHED FIXTURES. EXTEND WIRING WITH MATCHING CONDUCTORS/CONDUIT TO EXISTING LOCATION AND/OR NEW FIXTURES. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 3500 W @ 277V. TYPICAL.

4 PROVIDE NEW RECEPTACLES AS SHOWN AND CONNECT TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO NEW LOCATION. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 1500 W @ 120 V.

5 PROVIDE LINE VOLTAGE SWITCH AND CONNECT EXISTING CORRIDOR LIGHTING FOR LOCAL CONTROL. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO NEW LOCATION.

6 NEW PA SYSTEM HEAD END. PROVIDE NEW RECEPTACLE AS SHOWN AND CONNECT TO EXISTING CIRCUIT LEFT IN PLACE AFTER DEMOLITION. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO NEW LOCATION. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 1500 W @ 120 V. COORDINATE FINAL PA SYSTEM LOCATION.

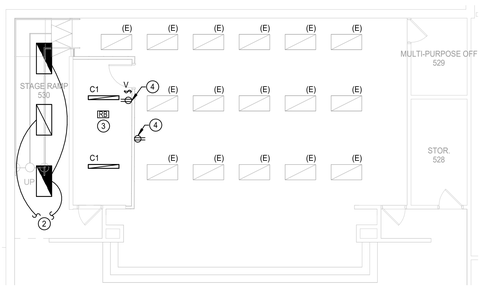
DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

LIGHTING GENERAL NOTES

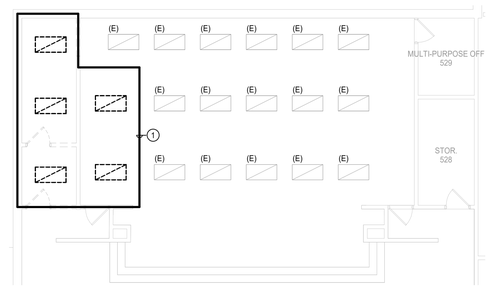
1 UNLESS NOTED OTHERWISE, DISCONNECT AND REMOVE EXISTING EXTERIOR LIGHTING FIXTURES FOR REPLACEMENT. EXISTING CIRCUITS TO REMAIN IN PLACE FOR RE-USE.

2 CONNECT NEW LIGHT FIXTURES TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO EXISTING LOCATION AND/OR NEW FIXTURES.



N

3 **ELECTRICAL PLAN - LEVEL 1 - KAISER - STAGE**
Scale: 1/8" = 1'-0"



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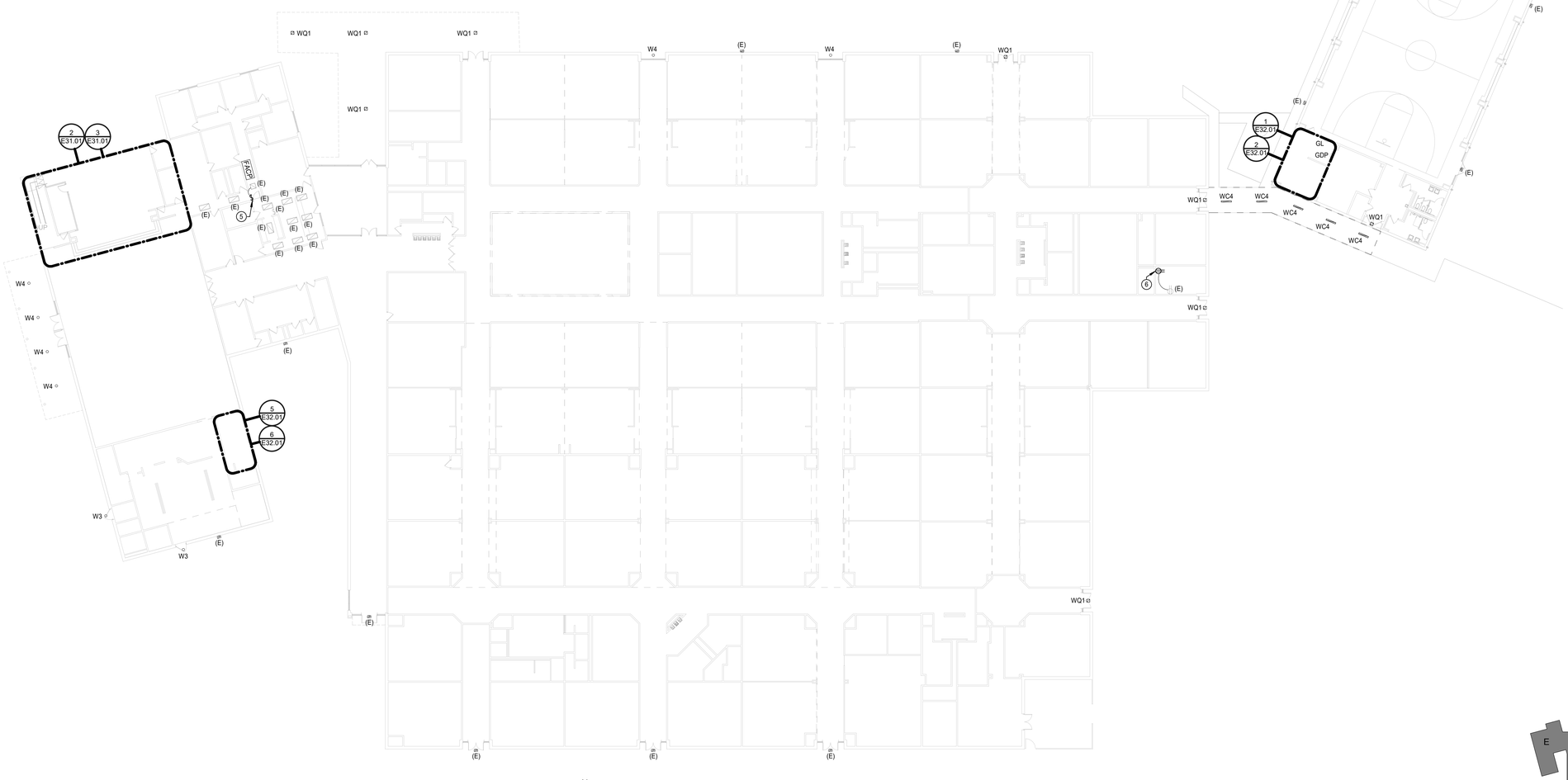
2 **ELECTRICAL DEMOLITION PLAN - KAISER - STAGE**
Scale: 1/8" = 1'-0"



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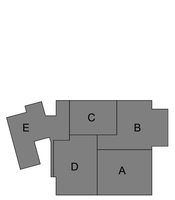
1 **ELECTRICAL COMPOSITE PLAN - LEVEL 1 - KAISER ES**
Scale: 1" = 20'-0"



KEY PLAN

01-27-2026

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REVISIONS

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Checked By:	PS
Drawn By:	LT

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SHEET TITLE
ELECTRICAL COMPOSITE PLAN - LEVEL 1 - KAISER ES

SHEET NO.
E31.01

KISD 2025 FRP

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PANELBOARD CIRCUIT DIRECTORY:

CONTRACTOR SHALL RECORD AND/OR PRESERVE THE EXISTING CIRCUIT DIRECTORY, IF ANY, FOR THE SOLE PURPOSE UPON COMPLETION OF NEW WORK OF PRODUCING A NEW CIRCUIT DIRECTORY.

CONTRACTOR SHALL PROVIDE AS PART OF THE CONSTRUCTION DOCUMENTS A NEW, NEATLY TYPED DIRECTORY. CONTRACTOR SHALL LEGIBLY IDENTIFY AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE. LOADS SERVED AND LOCATION AND/OR THE PANELBOARD SCHEDULE ON THE DRAWINGS. THE WORD "EXISTING" SHALL NOT BE USED ON PANELBOARD DIRECTORIES. SPARE BREAKERS ARE TO BE LISTED AS "SPARE". SPACES WITH NO BREAKERS ARE TO BE LEFT BLANK. REFER TO NEC-2023: 408.4(A) FOR DETAILS.

CONTRACTOR SHALL PERMANENTLY LABEL AS PART OF THE CONSTRUCTION DOCUMENTS ALL SWITCHBOARDS, SWITCHGEAR AND PANELBOARDS TO INDICATE EACH POWER SOURCE. REFER TO NEC-2023: 408.4(B) FOR DETAILS.

CONTRACTOR TO FIELD VERIFY INTERRUPTING FAULT CURRENT CAPACITY OF EXISTING PANELS AND/OR SWITCHBOARDS AND TO PROVIDE NEW BREAKERS/FUSES TO MATCH EXISTING.

Branch Panel: GDP — Campus: Kaiser ES — EXISTING PANEL

Location: Room 1583
Supply From:
Mounting: Surface

Volts: 277/480 Wye
Phases: 3
Wires: 4

A.I.C. Rating: Existing
Enclosure: Type 1
Mains: 400A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				10.0 / 10.0						2	
--	3	GH	--	100	3	10.0 / 10.0		3	70	--	XFMR GT	4	--
	5						10.0 / 10.0					6	
	7				14.3 / 0.0			1	--	--	Space	8	--
1	9	CU-PE-1	#4	80	3	14.3 / 0.0		1	--	--	Space	10	--
	11						14.3 / 0.0	1	--	--	Space	12	--
	13				14.3 / 3.1							14	
1	15	EDH-PE-1	#4	70	3	14.3 / 3.1		3	20	#12	AHU-PE-1	16	1
	17						14.3 / 3.1					18	
	19				0.0 / 1.3							20	
--	21	Spare	--	70	3	0.0 / 1.3		3	20	#12	EDH-PE-2	22	1
	23						0.0 / 1.3					24	
	25				0.0 / 0.0							26	
--	27	Spare	--	30	3	0.0 / 0.0		3	100	--	Spare	28	--
	29						0.0 / 0.0					30	
			Total Load:		53.1 kVA	53.1 kVA	53.1 kVA						
			Total Amps:		192 A	192 A	192 A						

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	99.2 kVA	100.00%	99.2 kVA		
Miscellaneous	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	159.2 kVA
Existing	60.0 kVA	125.00%	75.0 kVA	**Total Est. Demand:**	174.2 kVA
				Total Conn. Current:	191 A
				Total Est. Demand...	209 A

Notes:
1. New circuit and breaker.

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

LINETYPE LEGEND

———	EXISTING TO REMAIN
– – – –	DISCONNECT AND REMOVE
———	NEW WORK

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

ELECTRICAL KEYED NOTES

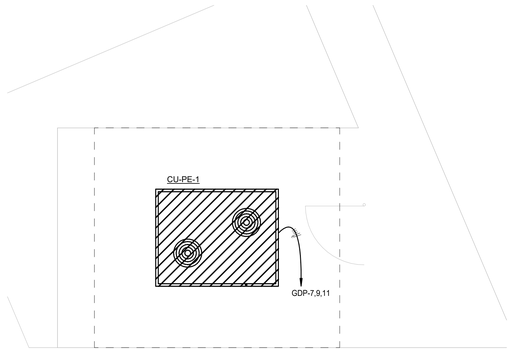
1 DISCONNECT EXISTING MECHANICAL EQUIPMENT AND REMOVE ASSOCIATED DISCONNECT/CONTROLLER FOR MECHANICAL EQUIPMENT REPLACEMENT AND NEW DISCONNECT/CONTROLLER. REMOVE EXISTING CIRCUIT BACK TO SOURCE OR NEXT DEVICE TO REMAIN.

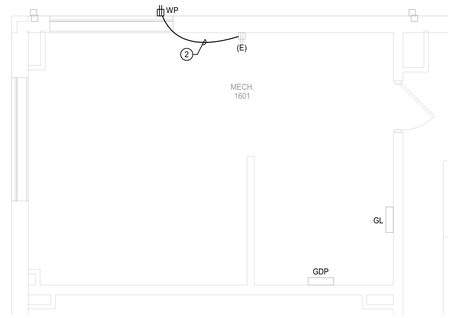
2 PROVIDE NEW RECEPTACLES AS SHOWN AND CONNECT TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO NEW LOCATION. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 1500 W @ 120 V.

3 LEAK DETECTION. COORDINATE FINAL LOCATION WITH DIVISION 23. PROVIDE NEW BRANCH BREAKER IN EXISTING PANEL 'GL', 20A/1P. 2#12, 1#12G. 3/4"C.

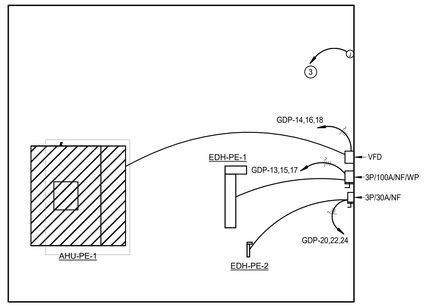
4 DISCONNECT EXISTING MECHANICAL EQUIPMENT AND REMOVE ASSOCIATED DISCONNECT/CONTROLLER FOR REPLACEMENT. EXISTING CIRCUIT TO REMAIN IN PLACE FOR RE-USE.

5 CONNECT REPLACEMENT MECHANICAL EQUIPMENT TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE.





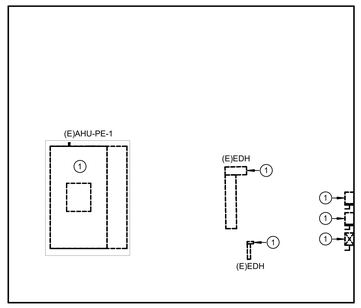
N 2 **ELECTRICAL FLOOR PLAN - MECH GYM - KAISER ES**
Scale: 1/4" = 1'-0"



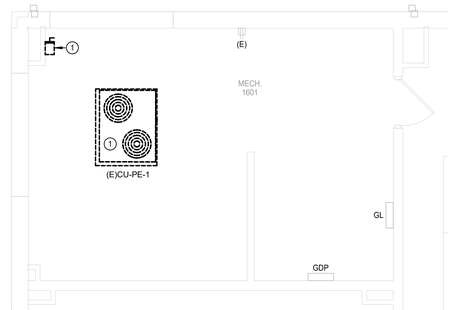
N 4 **ELECTRICAL FLOOR PLAN - MEZZ GYM - KAISER ES**
Scale: 1/4" = 1'-0"

N 6 **ELECTRICAL PLAN - LEVEL 1 - KAISER - KITCHEN**
Scale: 1/8" = 1'-0"

N 5 **ELECTRICAL DEMOLITION PLAN - KAISER - KITCHEN**
Scale: 1/8" = 1'-0"



N 3 **ELECTRICAL DEMOLITION FLOOR PLAN - MEZZ GYM - KAISER ES**
Scale: 1/4" = 1'-0"



N 1 **ELECTRICAL DEMOLITION FLOOR PLAN - MECH GYM - KAISER ES**
Scale: 1/4" = 1'-0"

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LICENSED PROFESSIONAL ENGINEER
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	LT
Checked By:	PS
Drawn By:	LT

PROJECT NO.
25-0225.00

SHEET TITLE
ELECTRICAL FLOOR PLANS & PANELBOARD SCHEDULES - KAISER ES

SHEET NO.
E32.01

KISD 2025 FRP

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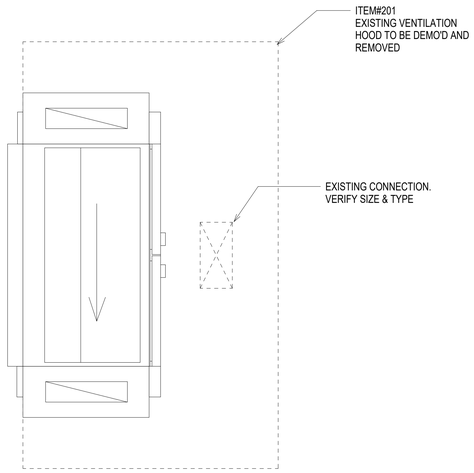
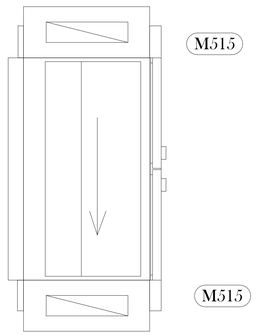


1 FS-1 EXISTING CONDITIONS

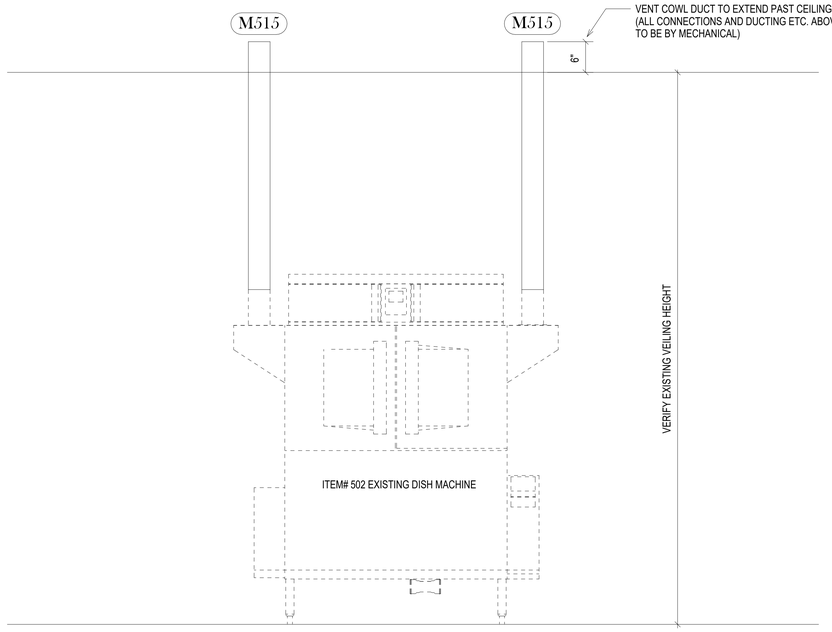
SCALE: N.T.S.



2 FS-1 NEW MECHANICAL

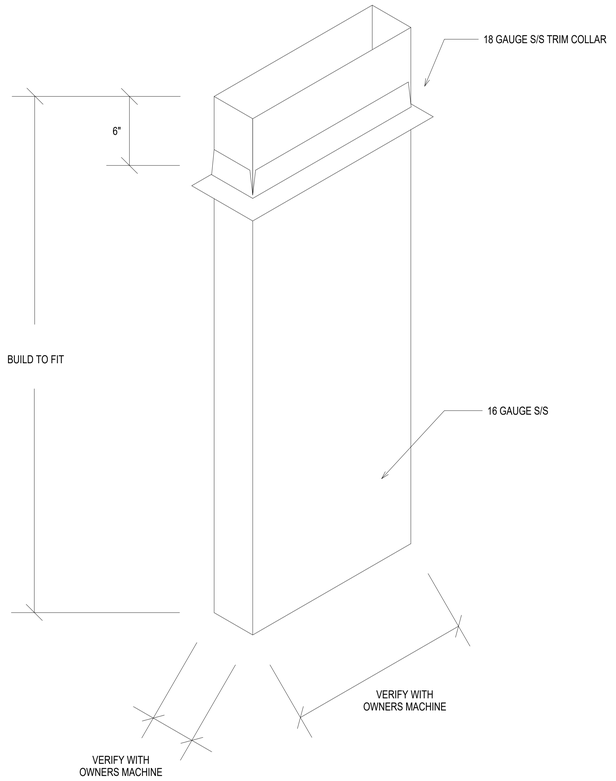
SCALE: N.T.S.

FOOD SERVICE MECHANICAL SCHEDULE						
SFD NO.	SFD QTY	SFD TYPE	SFD SIDE	SFD SIZE	SFD LOCATION	SFD CFM
M515	1	EXHAUST	LOAD SIDE	4" X 16"	CLG	200
M515	1	EXHAUST	UNLOAD SIDE	4" X 16"	CLG	400



3 FS-1 ELEVATION

SCALE: N.T.S.



4 VENT DUCT DETAIL

SCALE: N.T.S.

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REGISTERED ARCHITECT
MELINDA E. FLEMING
STATE OF TEXAS

01/27/2026

ISSUED: 01-27-2026

REVISIONS

Revision No.	Revision Date

Project Director:
Project Architect:
Project Designer:
Drawn By: R.H.

PROJECT NO.
25-0225.00

SHEET TITLE
FOOD SERVICE

SHEET NO.
FS-1

KISD 2025 FRP

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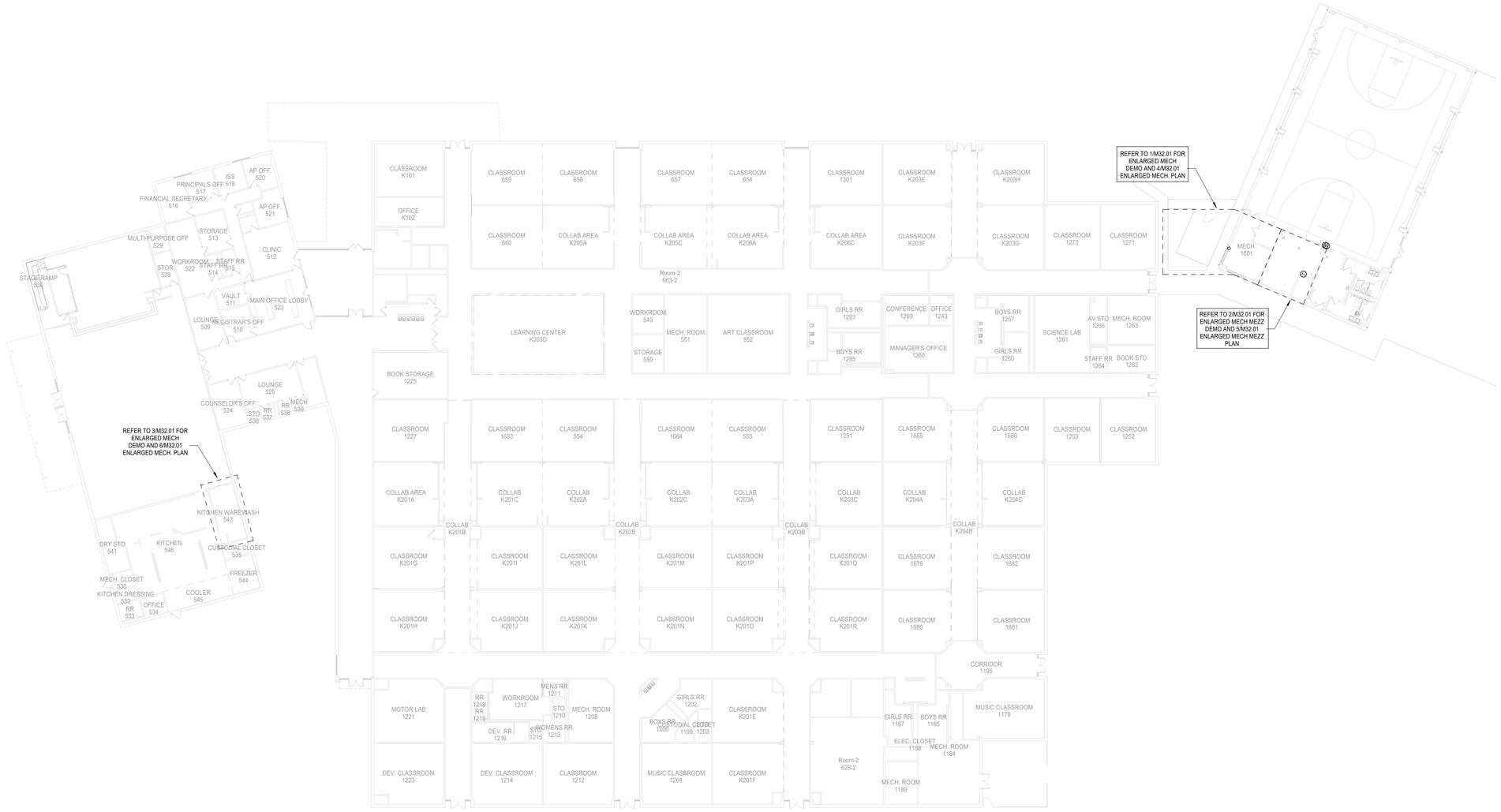
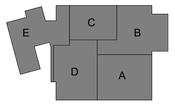


1 **MECHANICAL COMPOSITE PLAN - KAISER**
Scale: 1" = 20'-0"



KEY PLAN

BRADLEY R. KALMANS
68233
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PROFESSIONAL ENGINEER
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	IP
Checked By:	VP
Drawn By:	IP

PROJECT NO.
25-0225.00

SHEET TITLE
MECHANICAL COMPOSITE PLAN - KAISER

SHEET NO.
M31.00

KISD 2025 FRP

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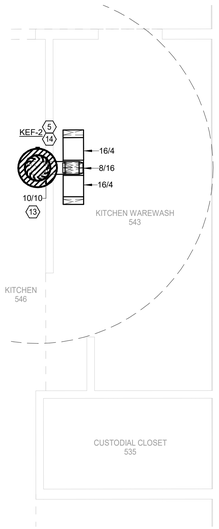
GENERAL NOTES:

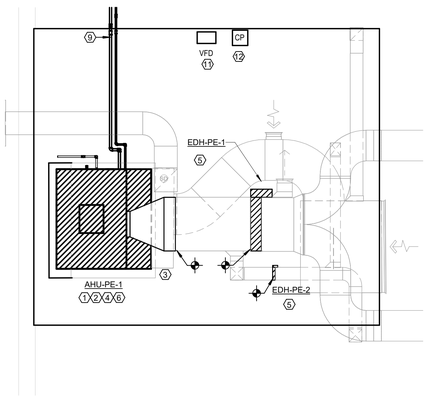
1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

KEYED NOTES:

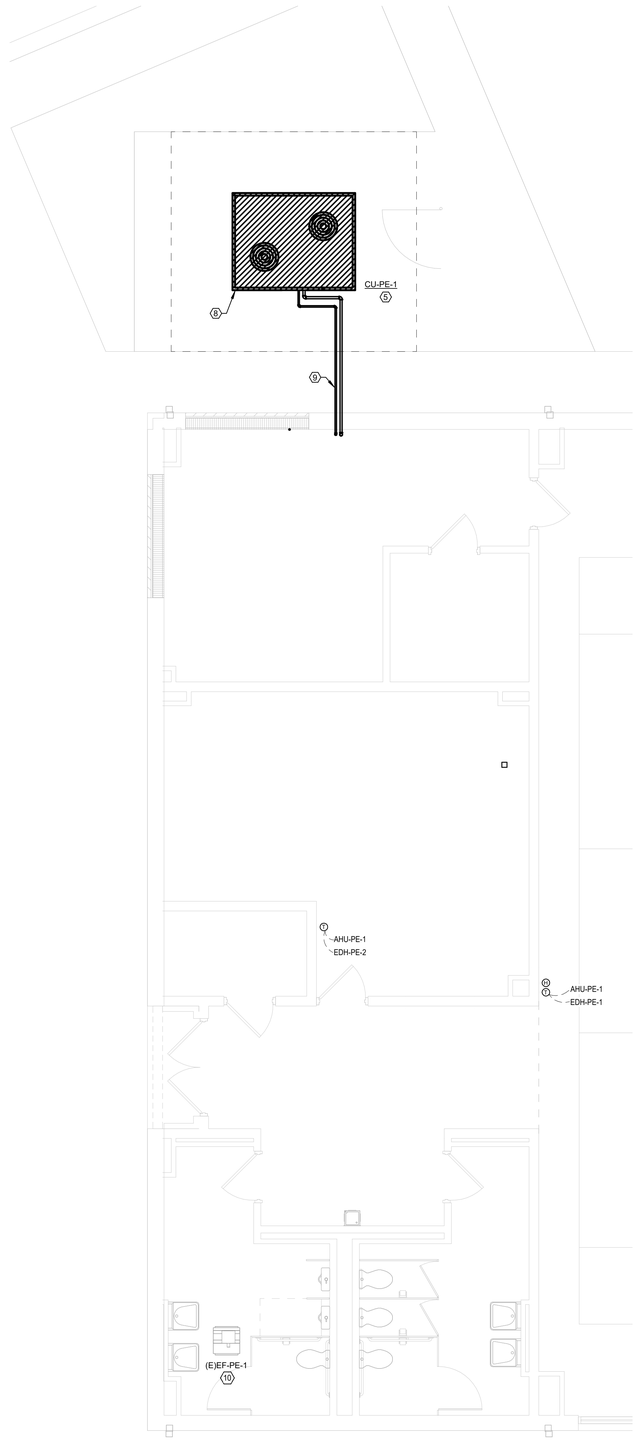
1. VERIFY SERVICE CLEARANCE FOR FAN SHAFT AND COIL REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2. VERIFY SERVICE CLEARANCE FOR AIR FILTER REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
3. SHEET METAL PLENUM, FULL SIZE OF UNIT RETURN AIR OPENING, LENGTH AS REQUIRED FOR ALL DUCT CONNECTIONS SHOWN.
4. ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO EXISTING FLOOR DRAIN LOCATED IN THIS ROOM.
5. VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
6. NEW AIR HANDLING SHALL BE INSTALLED ON EXISTING CONCRETE PAD. EXTEND AS REQUIRED FOR NEW UNIT.
7. EXISTING EQUIPMENT TO REMAIN AND BE REUSED.
8. PROVIDE 4" THICK CONCRETE HOUSEKEEPING PAD.
9. ROUTE REFRIGERANT LINES UP TO AHU-PE-1 ON MECHANICAL MEZZANINE. SIZE LINE PER MANUFACTURER'S RECOMMENDATIONS
10. INTERLOCK EXISTING EXHAUST FAN WITH NEW AIR HANDLING UNIT.
11. CONNECT NEW VFD TO EXISTING FIRE ALARM WIRING, RECOMMISION FIRE ALARM SYSTEM TO ENSURE AHU SHUTS DOWN WHEN SIGNALED BY THE FIRE ALARM SYSTEM.
12. ADD NEW NETWORK CARD TO EXISTING BMCS PANEL.
13. EXHAUST DUCTWORK (DIMENSION AS SHOWN) UP TO EXHAUST FAN ON ROOF. TRANSITION TO FAN INLET AS REQUIRED.
14. NEW EXHAUST FAN SHALL BE INSTALLED ON EXISTING ROOF CURB. PROVIDE ROOF CURB ADAPTOR AS REQUIRED FOR NEW FAN.



MECHANICAL ENLARGED PLAN - LEVEL 1 - KAISER KITCHEN
6 Scale: 1/4" = 1'-0"



MECHANICAL ENLARGED PLAN - LEVEL 2 - KAISER GYM
5 Scale: 1/4" = 1'-0"



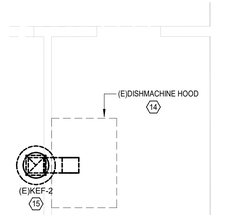
MECHANICAL ENLARGED PLAN - LEVEL 1 - KAISER GYM
4 Scale: 1/4" = 1'-0"

GENERAL NOTES:

1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITHED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

SYMBOL LEGEND

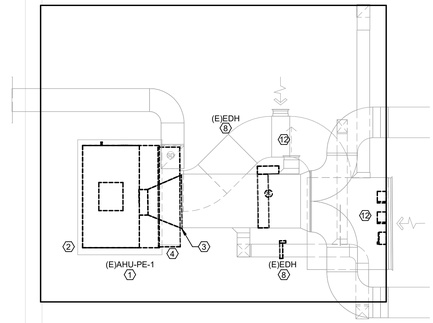
SYMBOL	DESCRIPTION
RENOVATIONS	
⊕	POINT OF CONNECTION FROM NEW TO EXISTING
▭	ITEM TO REMAIN
▭ (dashed)	ITEM TO BE REMOVED



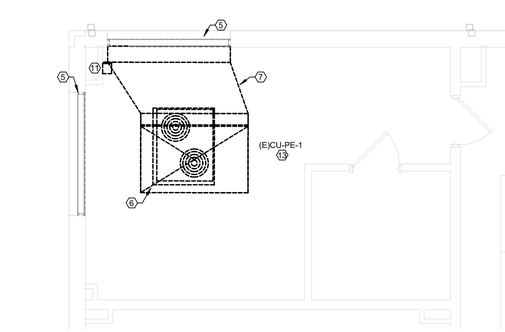
MECHANICAL DEMOLITION ENLARGED PLAN - LEVEL 1 - KAISER KITCHEN
3 Scale: 1/4" = 1'-0"

DEMOLITION KEYED NOTES:

1. REMOVE EXISTING AIR HANDLING UNIT AND ASSOCIATED CONDENSATE PIPING. EXISTING DUCTWORK SHALL REMAIN AND REUSED.
2. EXISTING CONCRETE PAD SHALL REMAIN AND BE REUSED.
3. REMOVE EXISTING SUPPLY DUCTWORK UP TO THIS POINT.
4. REMOVE EXISTING RETURN PLENUM.
5. REMOVE EXISTING WALL LOUVER. EXISTING OPENING SHALL BE SEALED TO MATCH EXISTING WALL FINISH.
6. REMOVE EXISTING CONCRETE PAD.
7. REMOVE EXISTING CONDENSER UNIT PLENUM AIR AND ASSOCIATED DUCTWORK.
8. REMOVE EXISTING ELECTRIC DUCT HEATER. EXISTING DUCTWORK SHALL REMAIN AND REUSED.
9. REMOVE EXISTING RETURN DUCTWORK UP TO THIS POINT.
10. REMOVE EXISTING OUTSIDE AIR DUCTWORK UP TO THIS POINT.
11. REMOVE EXISTING ELECTRICAL STARTER.
12. EXISTING RETURN DUCTWORK TO REMAIN AND BE REUSED.
13. REMOVE EXISTING CONDENSER UNIT AND ASSOCIATED REFRIGERANT LINES.
14. REMOVE EXISTING DISHMACHINE HOOD AND ASSOCIATED DUCTWORK UP TO EXISTING KEF-2 ON ROOF.
15. REMOVE EXISTING KEF-2 ON ROOF, ASSOCIATED ROOF CURB TO REMAIN AND BE REUSED.



MECHANICAL DEMOLITION ENLARGED PLAN - LEVEL 2 - KAISER GYM
2 Scale: 1/4" = 1'-0"



MECHANICAL DEMOLITION ENLARGED PLAN - LEVEL 1 - KAISER GYM
1 Scale: 1/4" = 1'-0"

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KLEIN, TX

BRADLEY KALMAN 86558 LICENSED PROFESSIONAL ENGINEER
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	IP
Checked By:	VP
Drawn By:	IP

PROJECT NO.
25-0225.00

SHEET TITLE
MECHANICAL ENLARGED PLAN - KAISER

SHEET NO.
M32.01

KISD 2025 FRP

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FAN

MARK	LOCATION	CFM	MAXIMUM RPM	EXT. STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHARAC.	LOCALLY SWITCHED BY	INTERLOCKED WITH	FAN TYPE	MANUFACTURER	MODEL NUMBER	REMARKS
KEF-2	KITCHEN 546	600	1,000	0.35	0.25	120/1/60	-	DISHMACHINE	UPBLAST	COOK	VCR	(1,2,3)

GENERAL NOTES:

1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:

1. PROVIDE WITH DISCONNECT.
2. REFER MANUFACTURER FOR INSTALLATION GUIDE.
3. ROOF MOUNTED BELT DRIVEN UPBLAST KITCHEN EXHAUST FAN.

DX-AIR HANDLING UNIT

MARK	FAN					COOLING					REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHARAC.	AIR TEMPERATURE (°F) ENTERING DRY BULB	AIR TEMPERATURE (°F) ENTERING WET BULB	MIN. TOTAL CAPACITY (BTUH)	MIN. SENSIBLE CAPACITY (BTUH)	MINIMUM EER/ SEER	NUMBER OF STAGES	
AHU-PE-1	8,300	1,200	0.75	10	460/3/60	78.2	65.2	336,150	234,860	10.0/-	2	(1,2,3,4,5,6,7)

GENERAL NOTES:

1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:

1. FACE VELOCITY ACROSS COOLING COIL SHALL NOT EXCEED 500 FPM.
2. CONSTANT VOLUME UNIT WITH VARIABLE FREQUENCY DRIVE.
3. PROVIDE VERTICAL FRONT DISCHARGE UNIT.
4. PROVIDE ANGLE FILTER SECTION.
5. HEATING BY ELECTRIC DUCT HEATERS.
6. UNIT HEIGHT MUST NOT EXCEED 100"
7. PROVIDE WITH FACTORY A2L REFRIGERANT LEAK DETECTION SYSTEM CERTIFIED TO UL 60335-2-40 AS SPECIFIED.

AIR COOLED CONDENSING UNIT

MARK	MIN. TOTAL CAPACITY (BTUH)	OUTDOOR AIR TEMP (°F)	MINIMUM EER/ SEER	NUMBER OF STAGES	CURRENT CHARAC.	RELATED UNIT MARK	REMARKS
CU-PE-1	336,150	95	10.0/-	2	460/3/60	AHU-PE-1	(1,2,3,4)

GENERAL NOTES:

1. MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 24 INCHES ON NON-SERVICE SIDES AND 36 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE FOR CONDENSER AIR FLOW AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:

1. DISCONNECT SWITCH PROVIDED AND INSTALLED BY ELECTRICIAN.
2. PROVIDE WITH LOW AMBIENT KIT.
3. REFRIGERANT LINES TO BE SIZED PER MANUFACTURER'S REQUIREMENTS.
4. PROVIDE WITH FACTORY A2L REFRIGERANT LEAK DETECTION SYSTEM CERTIFIED TO UL 60335-2-40 AS SPECIFIED.

ELECTRIC DUCT HEATER

MARK	CFM	ENTERING AIR TEMP.(°F)	MINIMUM CAPACITY (BTUH)	KW	PRESSURE DROP (IN. W.G.)	NUMBER OF STAGES	CURRENT V	CURRENT P	CURRENT F	REMARKS
EDH-PE-1	7,575	67	147,258	43	0.25	SCR	480	3	60	(1)
EDH-PE-2	725	67	14,094	4	0.25	SCR	480	3	60	(1)

REMARKS:

1. PROVIDE WITH FLANGE FOR MOUNTING IN DUCTWORK.

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MECHANICAL SCHEDULES - KAISER

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PLUMBING KEYED NOTES

1 EXISTING SINGLE ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO BE REMOVED AND REPLACED WITH A NEW ONE. VERIFY WITH THE DISTRICT WHICH UNIT IS TO BE REPLACED. MAINTAIN EXISTING UTILITIES/ROUGH-IN TO SERVE NEW FIXTURE(S). FIELD VERIFY THE EXACT LOCATION, SIZE, AND CONDITION OF EXISTING PIPING. REPAIR EXISTING PIPING IF NEEDED AND PREPARE FOR NEW CONNECTION.

2 EXISTING BI-LEVEL ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO BE REMOVED AND REPLACED WITH A NEW ONE. MAINTAIN EXISTING UTILITIES/ROUGH-IN TO SERVE NEW FIXTURE(S). FIELD VERIFY THE EXACT LOCATION, SIZE, AND CONDITION OF EXISTING PIPING. REPAIR EXISTING PIPING IF NEEDED AND PREPARE FOR NEW CONNECTION.

3 EXISTING SINGLE ELECTRIC DRINKING FOUNTAIN WITH BOTTLE FILLING STATION TO REMAIN.

4 EXISTING SINGLE ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO REMAIN.

5 EXISTING RETROFITTED ELECTRIC DRINKING FOUNTAIN WITH BOTTLE FILLING STATION TO REMAIN.

PLUMBING GENERAL NOTES

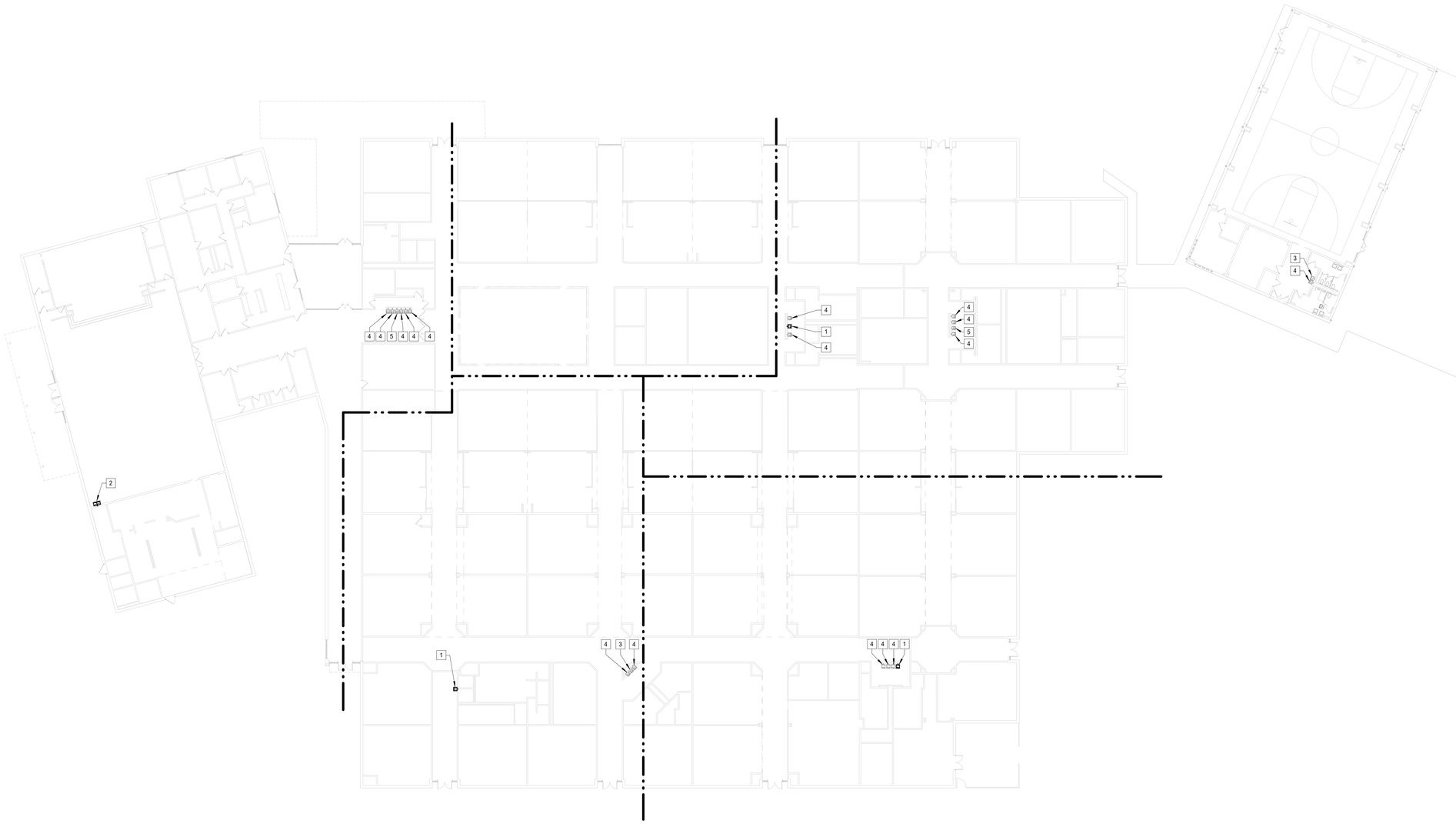
1. CONTRACT DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. CONTRACTOR TO VERIFY AT SITE EXACT LOCATIONS, AND SIZES OF EXISTING PIPING. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK.

2. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK.

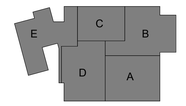
3. PLUMBING FIXTURES/EQUIPMENT SHOWN ON PLAN THAT ARE NOT IDENTIFIED AND DO NOT HAVE A FIXTURE DESIGNATION ARE EXISTING AND ARE TO REMAIN.

4. ANY OTHER ITEMS NOT REFERENCED WHICH ARE LOCATED IN THE DEMOLISHED SPACE (VENT, WASTE, WATER HEATER, PLUMBING FIXTURE, ETC.) THAT ARE IDENTIFIED OR DISCOVERED DURING DEMOLITION WHICH WILL NOT BE USED FOR THIS PROJECT, SHALL BE DEMOLISHED BACK TO THE MAIN SOURCE OR RISER, AND DEVICES SHALL BE RETAINED TO THE OWNER STORAGE AS DIRECTED BY THE ARCHITECT/OWNER.

5. OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL PLUMBING FIXTURES/ EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT NOT LIMITED TO PUMPS, HEATERS, AND STAINLESS STEEL SINKS. CONTRACTOR TO NOTIFY DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.



1 **PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 1 - KAISER**
Scale: 1" = 20'-0"



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01-27-2026

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PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 1 - KAISER

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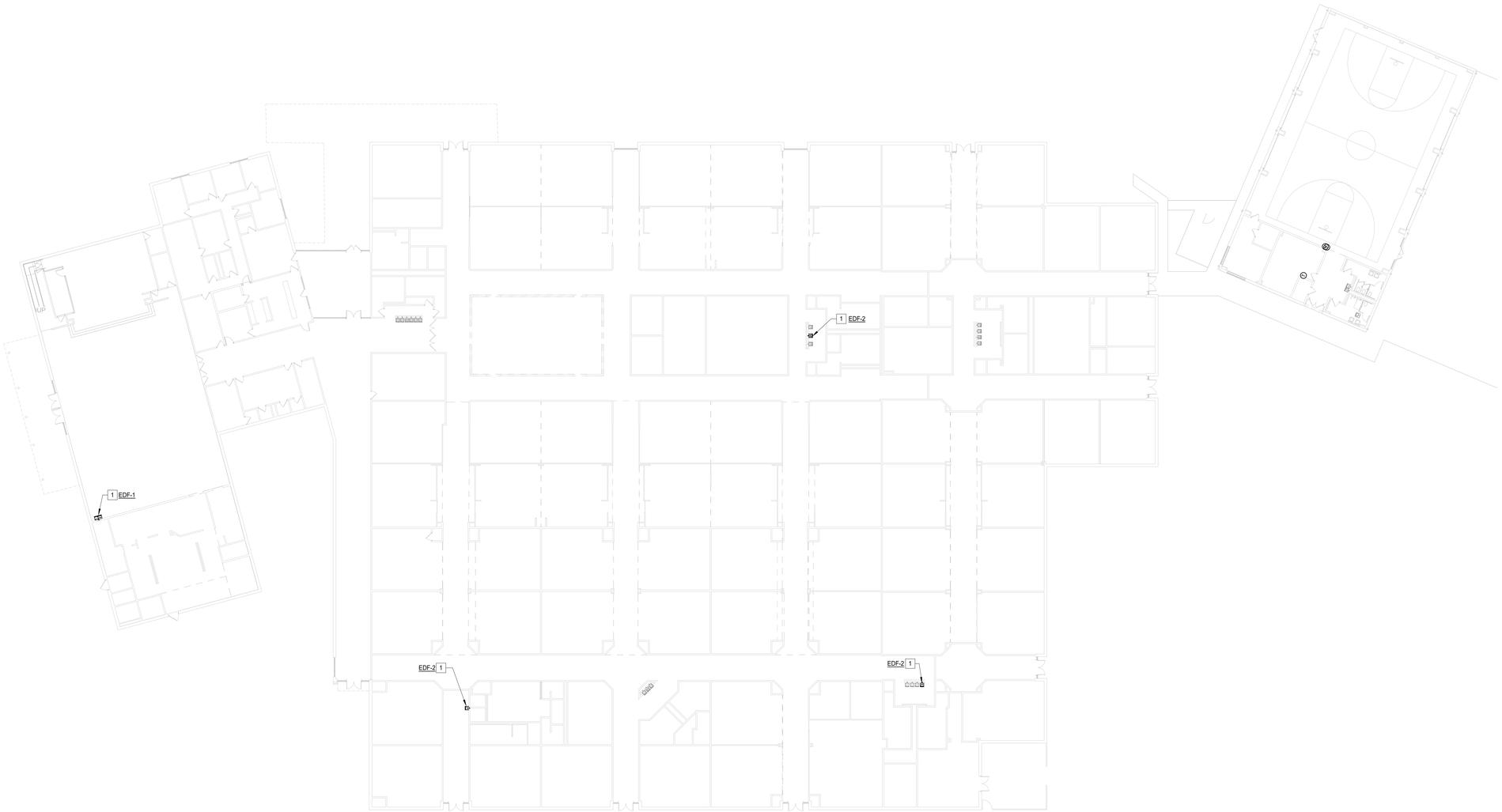
PLUMBING GENERAL NOTES

1. CONTRACT DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. CONTRACTOR TO VERIFY AT SITE EXACT LOCATIONS, AND SIZES OF EXISTING PIPING. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
2. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK.
3. PLUMBING FIXTURES/EQUIPMENT SHOWN ON PLAN THAT ARE NOT IDENTIFIED AND DO NOT HAVE A FIXTURE DESIGNATION ARE EXISTING AND ARE TO REMAIN.
4. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.
5. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.
6. REFER TO PLUMBING DETAILS AND SCHEDULES SHEET(S).

PLUMBING KEYED NOTES

1 PROVIDE AND INSTALL NEW PLUMBING FIXTURE(S) AS INDICATED. CONNECT TO EXISTING UTILITIES, CW, SANITARY AND VENT.



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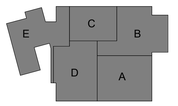
1 **PLUMBING COMPOSITE PLAN - LEVEL 1 - KAISER**
Scale: 1" = 20'-0"



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PLUMBING GENERAL NOTES

1. WITHIN THE EXISTING BUILDING, EXISTING WATER, WASTE AND VENT SERVICES ARE TO BE MODIFIED AS REQUIRED AND REUSED FOR THE INSTALLATION OF NEW AND/OR RELOCATED PLUMBING FIXTURES. REFER TO PLUMBING FLOOR PLANS FOR POINTS OF CONNECTION.
2. WITHIN THE EXISTING BUILDING, SAWCUT AND REMOVE EXISTING FLOOR SLAB AS REQUIRED TO PROVIDE NEW AND/OR RELOCATED PLUMBING FIXTURES, CLEANOUTS, AND UNDERSLAB WASTE AND VENT PIPING. PATCH AND REFINISH FLOOR TO MATCH EXISTING.
3. IN AREAS WHERE THE FLOOR SLAB IS REMOVED, CONTRACTOR SHALL ALSO REMOVE UNDERSLAB WASTE AND VENT PIPING WHICH SERVES FIXTURES DESIGNATED FOR REMOVAL. PRIOR TO ANY REMOVAL, FIELD VERIFY THAT LINES TO BE REMOVED DO NOT SERVE ANY EXISTING FIXTURES TO REMAIN OR NEW FIXTURES TO BE INSTALLED.
4. IN AREAS WHERE THE FLOOR SLAB IS NOT REMOVED, CONTRACTOR SHALL ABANDON IN PLACE ANY UNDERSLAB WASTE AND VENT PIPING NO LONGER NEEDED, UNLESS THE PIPING MUST BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION. IF NEW WORK DOES NOT NECESSITATE THEIR REMOVAL, CUT AND PLUG SUCH LINES BELOW SLAB, AND PATCH FLOOR TO MATCH EXISTING.
5. FIELD VERIFY EXACT LOCATION, SIZE, DEPTH, DIRECTION OF FLOW, CAPACITY, PIPE MATERIAL AND CONDITION OF EXISTING WASTE PIPING PRIOR TO BEGINNING CONSTRUCTION. ENSURE THAT PROPER CONNECTIONS TO AND EXTENSION OF SUCH UTILITIES CAN BE MADE.
6. WASTE LINES TO BE RE-USED OR RECONNECTED TO SHALL BE THOROUGHLY RODDED OUT AND FLUSHED TO ENSURE THEY ARE FREE FROM BLOCKAGES.
7. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.
8. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT. SHOULD A CONFLICT OCCUR THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.
9. CONTRACTOR TO COORDINATE ALL REMODEL WORK WITH THE WORK OF OTHER TRADES TO AVOID CONFLICTS AND TO MINIMIZE INTERRUPTION OF SERVICES.
10. COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST ARCHITECTURAL DRAWINGS AND SPECIFICATIONS PRIOR TO ANY ROUGH-INS.
11. DO NOT ROUGH-IN FROM THESE DRAWINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS.
12. CONTRACTOR TO FIELD VERIFY AS NECESSARY THE EXACT ROUTING AND SIZES OF ALL PIPING.
13. ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE, INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
14. THE PROPER INSTALLATION OF NEW FIXTURES AND THE PROPER CONTINUED OPERATION OF EXISTING FIXTURES TO REMAIN SHALL DETERMINE THE EXTENT AND NATURE OF PLUMBING REMODEL WORK.
15. EACH VENT SHALL TERMINATE VERTICALLY NOT LESS THAN 6" ABOVE ROOF, MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN VENT TERMINALS THROUGH ROOF AND ALL FRESH AIR INTAKES, AND A MINIMUM 5'-0" FROM ANY EXTERIOR WALL.
16. PRIOR TO BEGINNING CONSTRUCTION, COORDINATE BUILDING BACKFLOW PREVENTION REQUIREMENTS WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PROVIDE AS DIRECTED.

SHOCK ARRESTOR SCHEDULE

P.D.I. SYMBOLS:	FIXTURE UNITS:	THREADED CONNECTION	CERTIFICATION
A	1 - 11	1/2"	ASSE 1010
B	12 - 32	3/4"	ASSE 1010
C	33 - 60	1"	ASSE 1010
D	61 - 113	1"	ASSE 1010
E	114 - 154	1"	ASSE 1010
F	155 - 330	1"	ASSE 1010

PLUMBING FIXTURE SCHEDULE

TYPE: EDF-1 (T.A.S. COMPLIANT) - INTERIOR WITH BOTTLE FILLER
DESCRIPTION: WALL HUNG, BARRIER FREE, SELF-CONTAINED, VANDAL RESISTANT BOTTLE FILLING STATION AND BI-LEVEL ADA COOLER, NON-FILTERED REFRIGERATED STAINLESS. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50F DRINKING WATER, BASED ON 80F INLET WATER AND 90F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE GREEN COUNTER, LAMINAR FLOW, REAL DRAIN, VANDAL RESISTANT. FURNISHED WITH VANDAL RESISTANT BUBBLER. ELECTRONIC BOTTLE FILLER BUTTON WITH MECHANICAL FRONT BUBBLER BUTTON ACTIVATION. PROVIDE CANE TOUCH APRON IN ALL STAINLESS STEEL ON ALL UNITS MOUNTED WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH.
HALSEY TAYLOR #HTHB-HVR8BL-NF WITH APRON #98324C.
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE #8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE #403-BL-8FS.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: EDF-2 (T.A.S. COMPLIANT) - INTERIOR WITH BOTTLE FILLER
DESCRIPTION: WALL HUNG, BARRIER FREE, SELF-CONTAINED,VANDAL RESISTANT BOTTLE FILLING STATION AND SINGLE ADA COOLER, NON-FILTERED REFRIGERATED STAINLESS. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50F DRINKING WATER, BASED ON 80F INLET WATER AND 90F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE GREEN COUNTER, LAMINAR FLOW, REAL DRAIN, VANDAL RESISTANT. FURNISHED WITH VANDAL RESISTANT BUBBLER. ELECTRONIC BOTTLE FILLER BUTTON WITH MECHANICAL FRONT BUBBLER BUTTON ACTIVATION. PROVIDE CANE TOUCH APRON IN ALL STAINLESS STEEL ON ALL UNITS MOUNTED WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH.
HALSEY TAYLOR #HTHB-HVR8-NF WITH APRON #98324C.
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE #8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE #403-BFS.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

GENERAL NOTES

ALL LAVATORIES AND SINKS SHALL BE SUPPLIED WITH HOT AND COLD WATER (UNLESS NOTED TO BE COLD WATER ONLY) TO FAUCETS AS INDICATED ON PLANS AND FIXTURE SCHEDULE. PROVIDE CHROME PLATED BRASS SUPPLY STOPS WITH LOOSE KEYS AND WALL ESCUTCHEONS. PROVIDE CHROME PLATED FLEXIBLE RISERS OF SIZE REQUIRED TO PROPERLY CONNECT FIXTURES. PROVIDE 17 GAUGE CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON (UNLESS NOTED TO BE AN ACID WASTE FIXTURE). REFER TO FIXTURE SCHEDULE FOR MINIMUM SIZES OF PLUMBING FIXTURE ROUGH-INS.

INSULATION KITS AT ALL LAVATORIES AND SINKS REQUIRED TO BE T.A.S. ACCESSIBLE (MCGUIRE OR TRUEBRO). ALL SUCH FIXTURES AND FINAL INSTALLATIONS SHALL COMPLY WITH THE STATE ACCESSIBILITY STANDARDS REQUIREMENTS.

INSERT TRAP GUARDS AFTER FINAL RODDING OF DRAINS. INSTALL TRAP GUARD WITH CLEAR SILICONE CAULK FOR GAS-TIGHT SEAL. FOR DRAIN RODDING AFTER INSTALLATION. INSERT SEWER TAPE THROUGH LIGHTLY GREASED 1-1/2" PVC PIPE TO PROTECT TRAP GUARD.

PLUMBING PIPING LEGEND

SYMBOLS	DESCRIPTION
SAN	SANITARY OR WASTE PIPING ABOVE GRADE (SAN)
SAN	SANITARY OR WASTE PIPING BELOW GRADE (SAN)
GW	GREASE WASTE PIPING (GW)
GW	GREASE WASTE PIPING BELOW GRADE (GW)
SD	STORM DRAIN PIPING (SD)
SD	STORM DRAIN PIPING BELOW GRADE (GW)
SSD	SUB-SOIL DRAIN OR FOOTING DRAIN (SSD)
AW	ACID WASTE PIPING (AW)
AW	ACID WASTE PIPING BELOW GRADE (AW)
PD	PUMPED DISCHARGE (PD)
CD	CONDENSTATE DRAIN PIPING (CD)
D	CONDENSTATE - INDIRECT DRAIN PIPING (D)
	VENT PIPING (V)
CW	COLD WATER PIPING (CW)
HW	HOT WATER PIPING (HW)
HWR	HOT WATER RETURN PIPING (HWR)
SCW	SOFT COLD WATER PIPING (SCW)
CDW	CHILLED DRINKING WATER PIPING (CDW)
TP	TRAP PRIMER LINE (TP)
F	FIRE PROTECTION PIPING (F)
AS	AUTOMATIC SPRINKLER PIPING (AS)
GAS	NATURAL GAS PIPING (G)
GV	GAS VENT PIPING (GV)
AIR	COMPRESSED AIR PIPING (A)
	FLOW DIRECTIONAL ARROW
	SHUT-OFF VALVE
	BALANCING VALVE (BV)
	SOLENOID VALVE (SV)
	BALL VALVE (BV)
	BUTTERFLY VALVE
	LUBRICATED PACKED PLUG STOP STOP COCK (PC)
	HORIZONTAL SWING CHECK
	UNION
	HORIZONTAL SWING CHECK
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	REDUCED PRESSURE BACKFLOW PREVENTER (RPBFP)
	PIPING DOWN
	RISE OR DROP PIPING
	PIPING UP -OR- PIPING UP & DOWN
	CAP ON END OF PIPE
	CLEANOUT (WALL OR CEILING) (CO)
	FLOOR CLEANOUT (FCO)
	EXTERIOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO)
	TWO-WAY CLEANOUT (PROVIDE 18"x24"x4" CONCRETE PAD OUTSIDE)
	FIRE DEPARTMENT VALVE AT RISER
	FIRE HYDRANT
	FIRE DEPARTMENT CONNECTION
	PRESSURE REDUCING VALVE (PRV)
	BRANCH CONNECTION OUT OF TOP
	BRANCH CONNECTION OUT OF BOTTOM
	BRANCH CONNECTION OUT OF SIDE
	WYE & 1/8TH BEND BRANCH CONNECTION
	WYE BRANCH CONNECTION
	HOSE BIBB
	PRESSURE GAUGE WITH COCK
	THERMOMETER
	GAS PRESSURE REGULATOR
	TEST COCK
	GAS METER
	WALL HYDRANT
	VALVE IN RISE
	ASME TEMPERATURE & PRESSURE RELIEF VALVE
	VACUUM RELIEF VALVE
	ANGLE VALVE
	OS&Y VALVE
	ROOF DRAIN
1	REFER TO KEYED NOTE
FS	FLOW SWITCH
	FLOOR SINK (FS)
	FLOOR DRAIN (FD)
	FLOOR DRAIN WITH P-TRAP (FD)
	FLOOR DRAIN WITH P-TRAP AT 45° ANGLE (FD)
	HUB DRAIN (HD)
	ACCESS PANEL FOR TRAP PRIMER OR SHOCK ABSORBER
AP	ACCESS PANEL LOCATION SYMBOL
A	SHOCK ABSORBER
	AIR CHAMBER
(E)	EXISTING
(N)	NEW
N.C.	NORMALLY CLOSED
VTR	VENT THRU ROOF
B.F.F.	BELOW FINISHED FLOOR
A.F.F.	ABOVE FINISHED FLOOR
	NEW CONNECTION
IE=100.00'	INVERT ELEVATION
1	DELTA CHANGE SYMBOL
P 1	RISER FLAG

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Registration: F-4111
Project No: 2500-02120-00

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01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	AA
Checked By:	EH
Drawn By:	AA

PROJECT NO.
25-0225.00

SHEET TITLE
PLUMBING SCHEDULES AND DETAILS - KAISER

SHEET NO.
P35.01

KISD 2025 FRP

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ALTERNATES

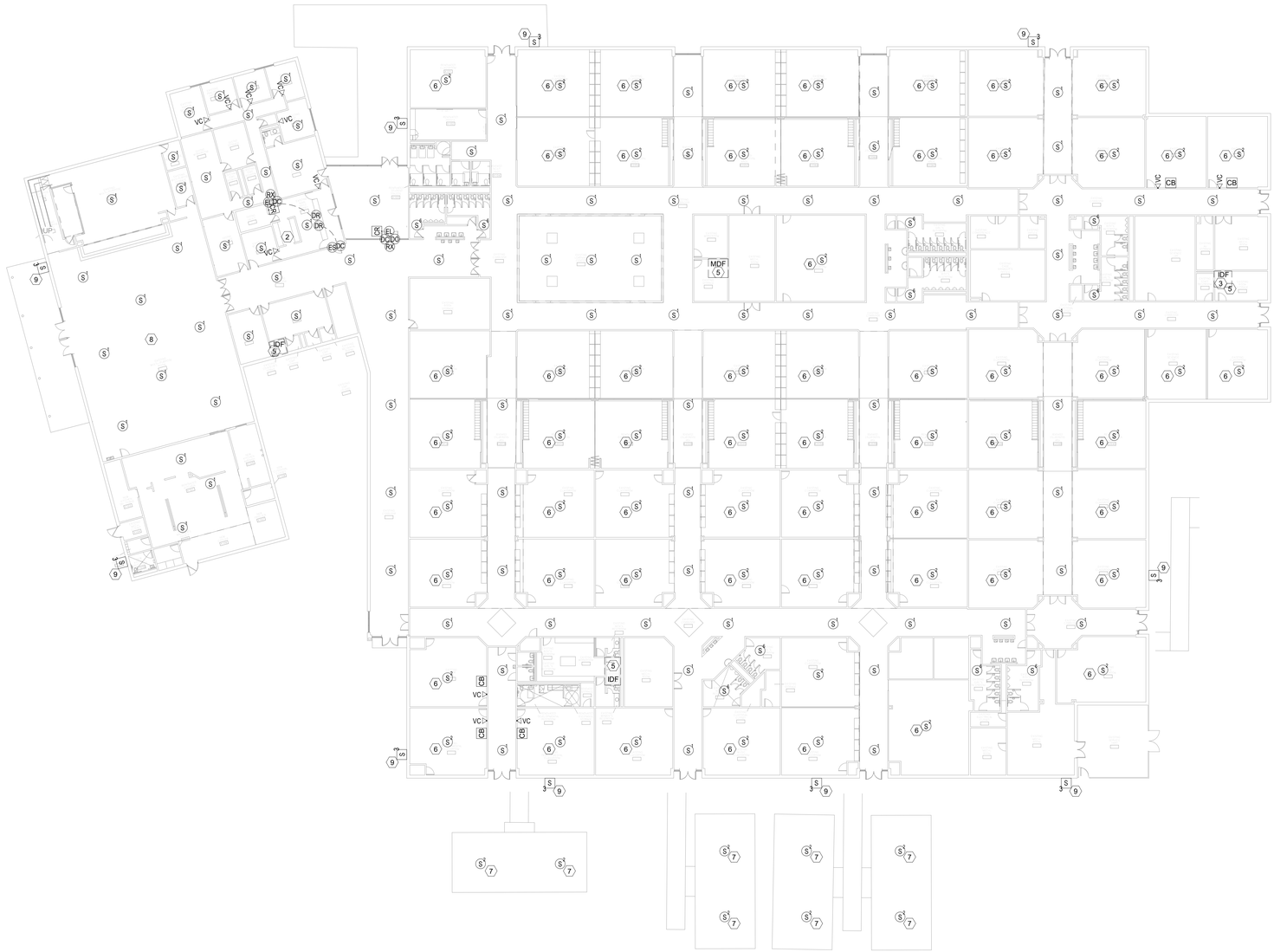
1. CAMPUS PA SYSTEM HEAD END TO BE REPLACED AT ALL CAMPUSES. PROVIDE PRICING PER CAMPUS AS AN ALTERNATE TO REPLACE ALL SPEAKERS AND CABLING FOR THE FOLLOWING CAMPUSES: EILAND, KLENK, MCDOUGLE, AND NITSCH. PRICING SHOULD INCLUDE ALL GATEWAYS, AMPLIFIERS, POWER SUPPLIES, AND UPS REQUIRED TO CREATE A DISTRIBUTED ANALOG COMMON ZONE THROUGHOUT BUILDING CORIDORS AND COMMON AREAS. PER SHEET KEYNOTES SPEAKERS IN CLASSROOMS SHALL BE IP.
2. REPLACEMENT OF ENTIRE CAMPUS PA SYSTEM, INCLUDING SPEAKERS AND CABLING FOR KAISER ES SHALL BE INCLUDED IN BASE BID ALL COMMON ZONE SPEAKERS SHOULD BE DISTRIBUTD UTILIZING GATEWAYS, AMPLIFIERS, POWER SUPPLIES, AND UPS AS NEEDED. ALL CLASSROOMS SHALL UTILIZE IP SPEAKERS CONNECTED TO CATEGORY CABLING AS PER KEYNOTES ON PLANS.

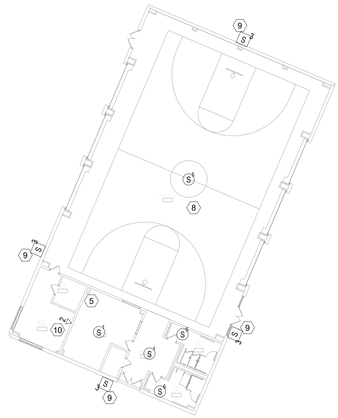
TECHNOLOGY - GENERAL NOTES

1. EXISTING PA SYSTEM HEAD END, SPEAKERS, AND WIRING TO BE DEMOLISHED IN ENTIRETY.
2. SPEAKERS IN CLASSROOMS TO HAVE TALK-BACK FUNCTIONALITY AND SHALL BE IP- SPEAKERS. ONLY SPED CLASROOMS SHALL HAVE VOLUME CONTROLS AND CALL BUTTONS.
3. SPEAKERS IN NON-CLASSROOM ENVIRONMENTS SHALL BE ANALOG SPEAKERS, WITH ONLY OFFICES AND CONFERENCE ROOMS RECEIVING VOLUME CONTROLS.

TECHNOLOGY KEYNOTES

1. UTILIZE EXISTING CAT6 CABLE FOR NEW PA SYSTEM HEAD END.
2. DEMOLISH EXISTING PA SYSTEM HEAD END AT THIS LOCATION, INCLUDING 66-BLOCKS AND PLAYWOOD BACKBOARD. PATCH AND PAINT HOLES, AS NEEDED TO PROVIDE A FINISHED LOOK FOR THE WALL.
3. LOCATION OF NEW PA SYSTEM HEAD END.
4. RELOCATE EXISTING CAT6 DATA OUTLET FROM EXSITNG PA HEAD END TO THIS LOCATION.
5. PROVIDE AND INSTALL VALCOM IP GATEWAY, AS NEEDED, FOR CONNECTION OF ANALOG SPEAKERS TO PA SYSTEM. FOR EACH GATEWAY, ALSO PROVIDE AMPLIFIER, POWER SUPPLY AND BATTERY BACK-UP/UPS. PROVIDE NEW CAT6 CONNECTION TO OWNER NETWORK.
6. UTILIZE EXISTING BLUE CAT6 CABLE/DATA OUTLET (ABOVE CEILING) FOR NEW IP SPEAKER.
7. UTILIZE EXISTING CAT6 CABLE/DATA OUTLET (ABOVE CEILING) FOR NEW IP SPEAKER.
8. PROVIDE AND INSTALL PA OVERRIDE FOR LOCAL SOUND SYSTEM.
9. ESTIMATED SPEAKER LOCATION. PROVIDE AND INSTALL TO MATCH EXISTING QUANTITIES ON THE BUILDING.
10. PROVIDE AND INSTALL DUAL DATA OUTLET IN GYM MECHANICAL MEZZANINE, CONNECTED TO EXISTING SWITCH IN GYM OFFICE. COORDINATE EXACT LOCATION REQUIRED FOR DATA OUTLET WITH BAS CONTRACTOR.





1 Kaiser ES LEVEL ONE
SCALE: 1" = 20'-0"

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BICSI ID # 256657
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RCDD

ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director: Proj. Director
Project Architect: VLK
Project Designer: Designer
Drawn By: Author

PROJECT NO.
25-0225.00

SHEET TITLE
TECHNOLOGY - KAISER LEVEL ONE

SHEET NO.
T102.1

KISD 2025 FRP

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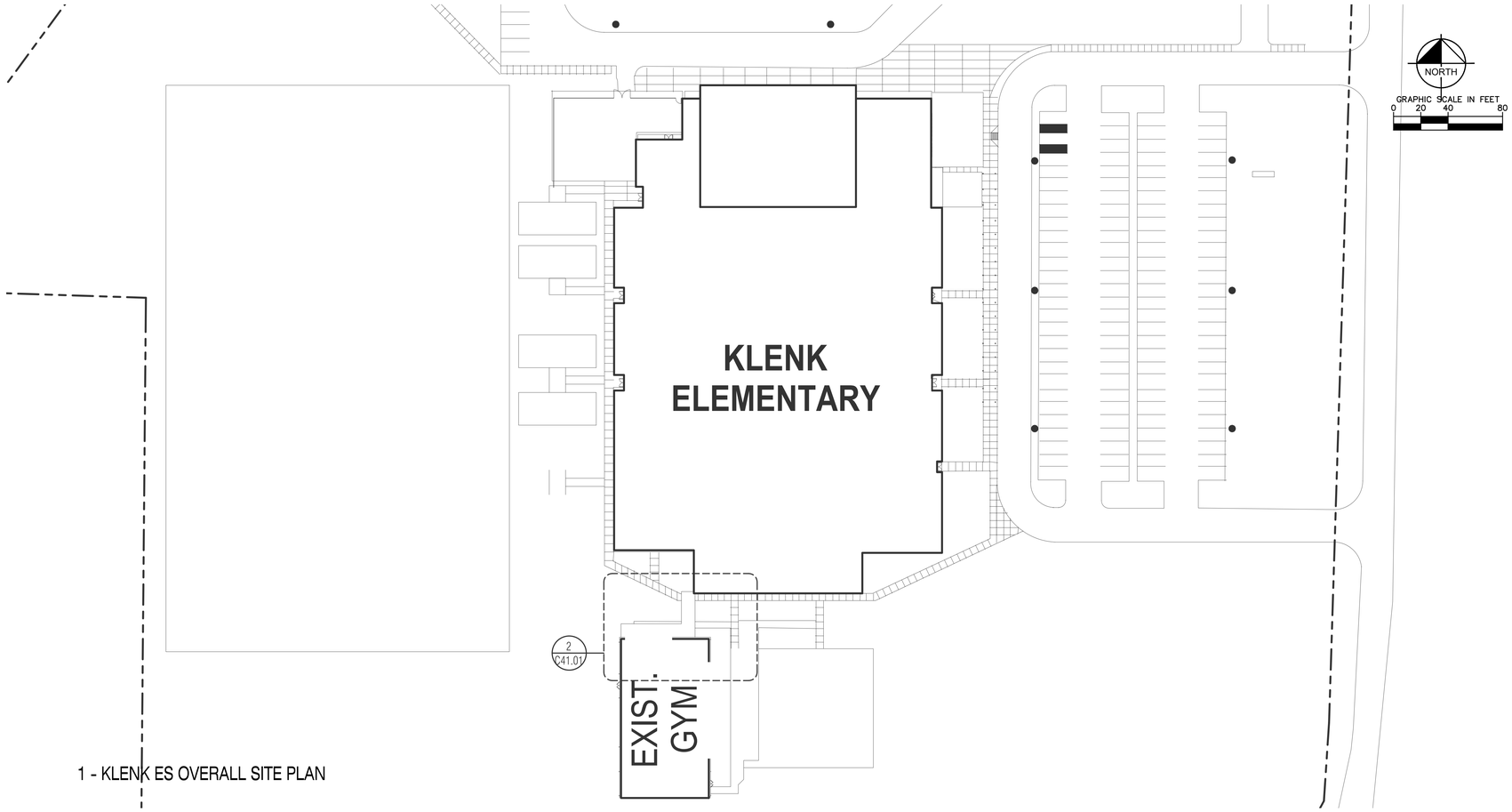
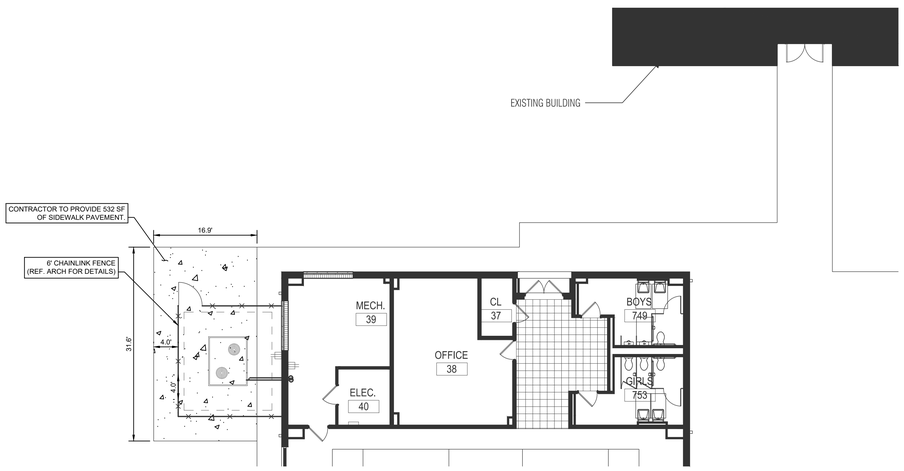


1 - KLENK ES OVERALL SITE PLAN



2 - KLENK ES ENLARGED CIVIL PLAN

LEGEND	
	PROPERTY LINE
	PROP. CANOPY (REF ARCH FOR DETAILS)
	CURB RAMP NOT IN PUBLIC ROW
PAVING MATERIAL LEGEND	
	PROP. SIDEWALK

KEYED NOTES	
1	PROP. SAWCUT/MATCH EXISTING PAVEMENT LINE
2	ACCESSIBLE RAMP
3	4" SOLID WHITE STRIPING, 2'-0" O.C. @ 45°
4	PROP. 10" HDPE STORM CONNECTION TO CANOPY DOWNSPOUT. STORM TO BE ROUTED TO NEAREST INLET.
5	PROP. 10" 45° BEND
6	PROP. 10" WYE

GENERAL NOTES

1. DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

2. ALL RADII 2' UNLESS OTHERWISE NOTED.

3. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING POLES AND FIXTURES AND ELECTRICAL PLAN PRIOR TO PLACING PAVEMENT.

4. REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.

5. SIDEWALKS TO HAVE A 5% MAXIMUM RUNNING SLOPE AND A 2% MAXIMUM CROSS SLOPE IN ACCORDANCE WITH ADA REQUIREMENTS.

6. FIELD VERIFY ADA GRADES PRIOR TO PLACING PAVEMENT. CONTRACTOR SHALL CONSTRUCT ALL ACCESSIBLE ROUTES IN ACCORDANCE WITH ADA STANDARDS AND TAS.

7. REF. IRRIGATION PLANS PRIOR TO PLACING PAVEMENT.

8. CONTRACTOR SHALL BUDGET FOR ACCESSIBLE STALL STRIPING, FIRE LANE STRIPING, DIRECTIONAL ARROWS, ETC.

9. SITE LIGHTING IS BY OTHERS. REF. SITE LIGHTING PLANS FOR LOCATIONS AND DETAILS PRIOR TO PLACING PAVEMENT.

10. REF. BUILDING PLANS FOR ALL EXTERIOR STAIR DETAILS.

11. CONTRACTOR TO ADJUST EXISTING SANITARY SEWER MANHOLES, STORM SEWER MANHOLES, ELECTRICAL MANHOLES, FIRE HYDRANTS, VALVE BOXES, WATER METERS, ETC. TO MATCH PROPOSED FINISHED GRADES IF NECESSARY.

Know what's **below.** **Call** before you dig.

CAUTION!!

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

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ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	KLM
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Project Designer:	RDH
Drawn By:	RDH

PROJECT NO.
25-0225.00

SHEET TITLE
KLENK
DIMENSION
CONTROL PLAN

SHEET NO.
C41.01

KISD 2025 FRP

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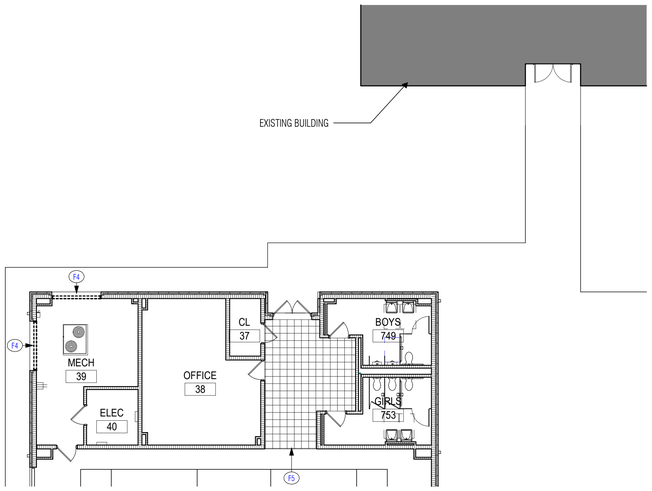
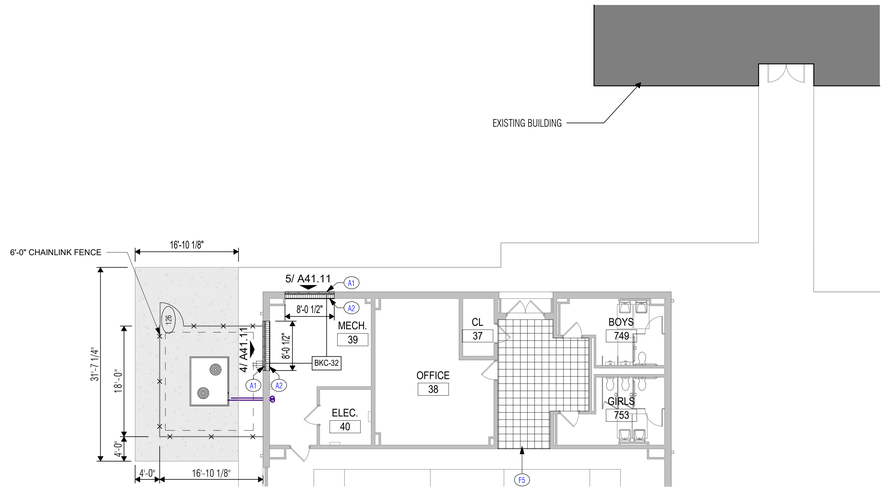
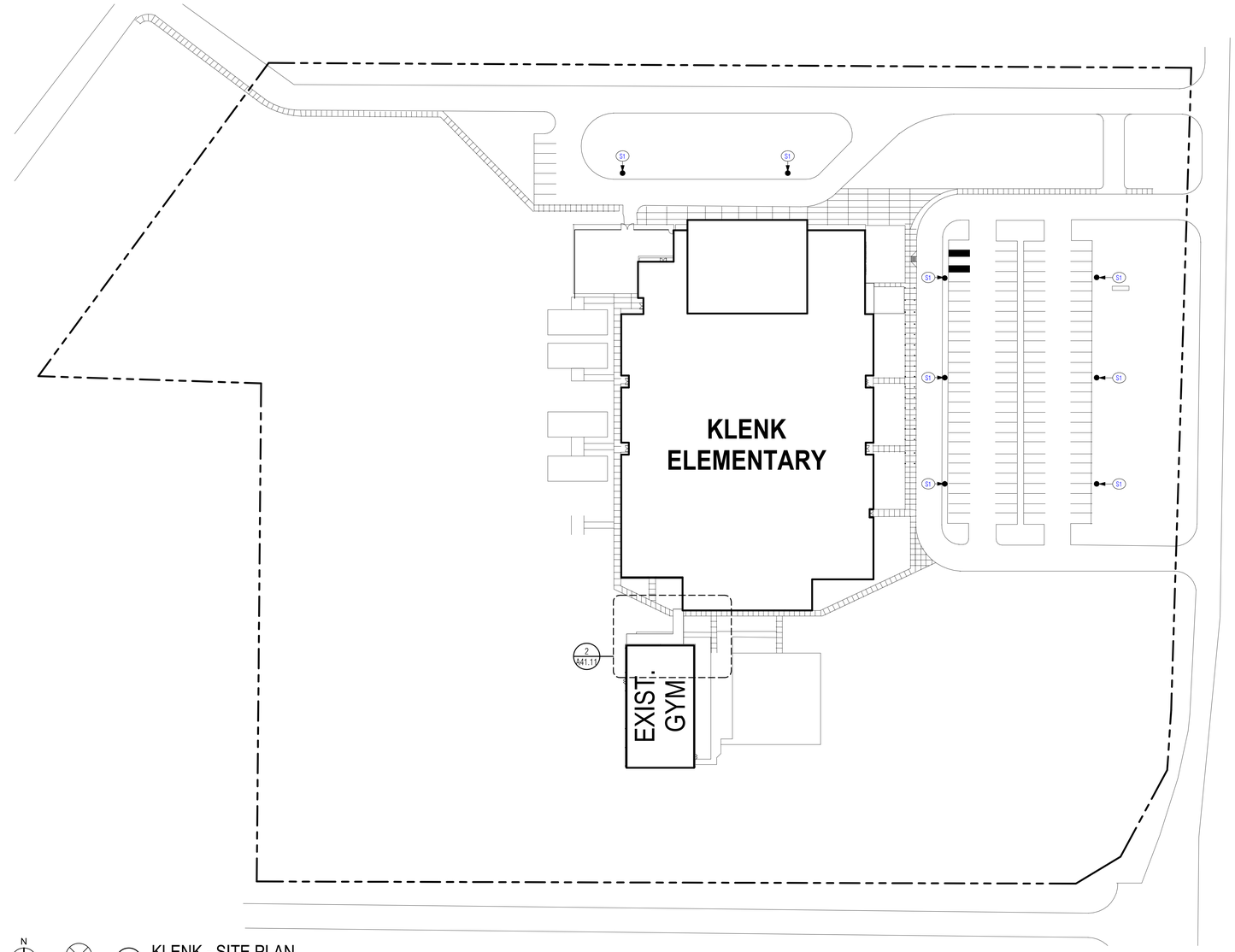


2 GYMNASIUM ENLARGED DEMO PLAN
SCALE: 1" = 10'-0"

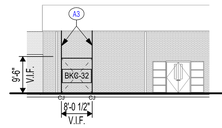


3 GYMNASIUM ENLARGED PLAN
SCALE: 1" = 10'-0"

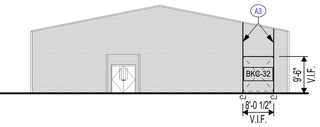


N
PLAN NORTH
TRUE NORTH

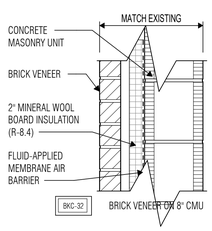
1 KLENK - SITE PLAN
SCALE: 1" = 50'-0"

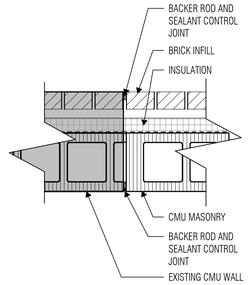


4 GYM SOUTHEAST ELEVATION
SCALE: 1/16" = 1'-0"



5 GYM NORTHEAST ELEVATION
SCALE: 1/16" = 1'-0"





6 WALL ASSEMBLY
SCALE: 1 1/2" = 1'-0"

A
B
C D
KEY PLAN

SITE PLAN NOTES

1. Verify and document existing dimensions and conditions at the site before beginning construction. Notify the Architect of conflicts or variations prior to commencement of construction.
2. To prevent damage to existing trees and shrubs in proximity to the Work, provide and maintain protective barriers around those items in accordance with the specified procedures, or in the absence of those procedures, with recognized landscaping and horticultural practices.

SITE PLAN LEGEND

—X——X——X— CHAIN LINK FENCE, See Plan for Heights

REMOVE AND REPLACE EXISTING BUILDING FOUNDATION SEALANT JOINTS.

Keynote Legend	
Key Value	Keynote Text
A1	INFILL WALL OPENING WITH WALL ASSEMBLY SPECIFIED.
A2	PAINT ENTIRE LENGTH OF CMU WALL INCLUDING COLUMN FURR OUT.
A3	REMOVE AND REPLACE EXISTING BUILDING SEALANT AT CONTROL JOINT.
F4	REMOVE EXISTING LOUVERS AND PATCH HOLES IN WALL. PREPARE OPENING TO RECIEVE WALL INFILL.
F5	REMOVE AND REINSTALL CEILING GRID AND TILES FOR INSTALLATION OF THE AHU.
S1	REMOVE & REPLACE ALL EXTERIOR LIGHT POLE HEADS ONLY. REF: ELECTRICAL.

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01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
KLENK - SITE PLAN

SHEET NO.
A41.11

KISD 2025 FRP

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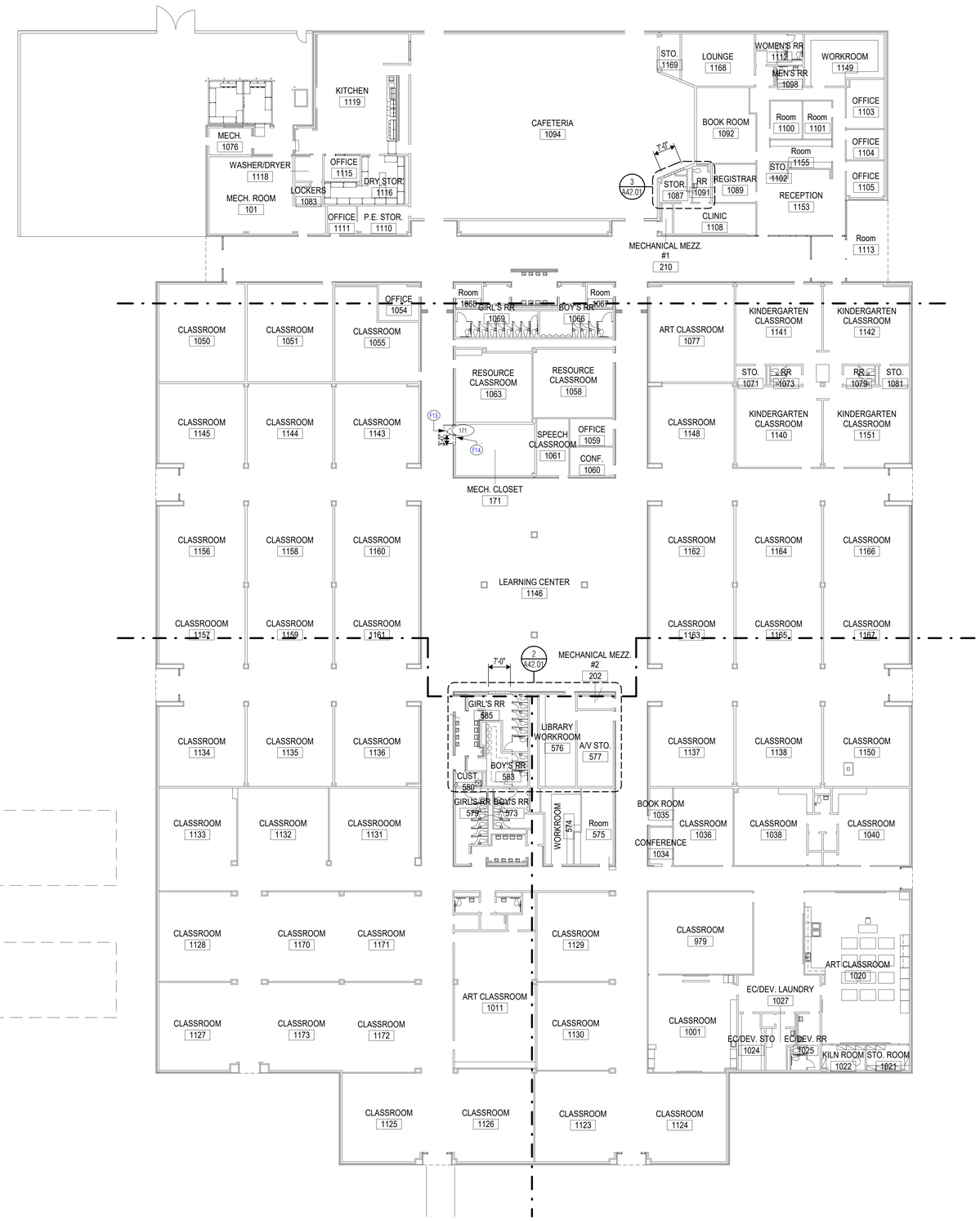
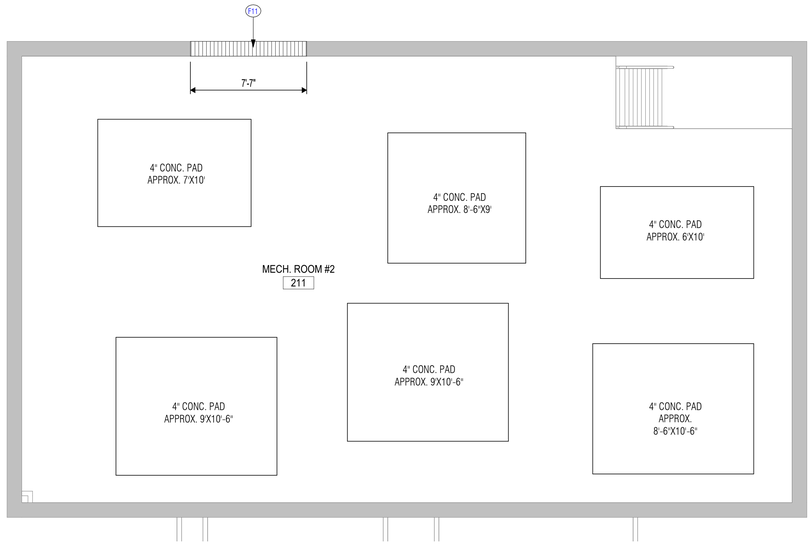
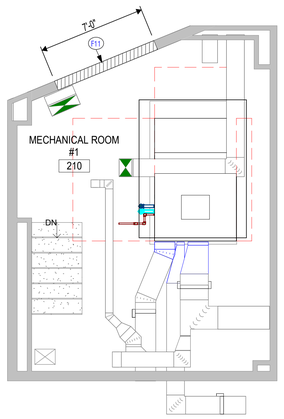
Keynote Legend	
Key Value	Keynote Text
F11	7'X7' UP TO DECK OF EXISTING MEZZANINE CMU PARTITION WILL NEED TO BE REMOVED AND REINSTALLED FOR INSTALL OF AHU. WALL IN ITS ENTIRETY TO BE PAINTED FOLLOWING GYP. BOARD PATCH.
F13	REMOVE H.M. DOOR FRAME FROM EXISTING CMU WALL; REMOVE H.M. DOOR; REF: DOOR SCHEDULE.
F14	REMOVE 3' X 7' CMU PARTITION; PREP FOR DOOR FRAME INSTALLATION AS SCHEDULED.



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



2 DEMO FLOOR PLAN - LEVEL 2 - MEZZANINE MECH. RM #2
SCALE: 1/4" = 1'-0"



3 DEMO FLOOR PLAN - LEVEL 2 - MECH. RM #1
SCALE: 1/4" = 1'-0"

PLAN NORTH

TRUE NORTH

KEY PLAN
A
B
C D

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
KLENK - OVERALL DEMO PLAN - LEVEL ONE

SHEET NO.
A42.01

KISD 2025 FRP

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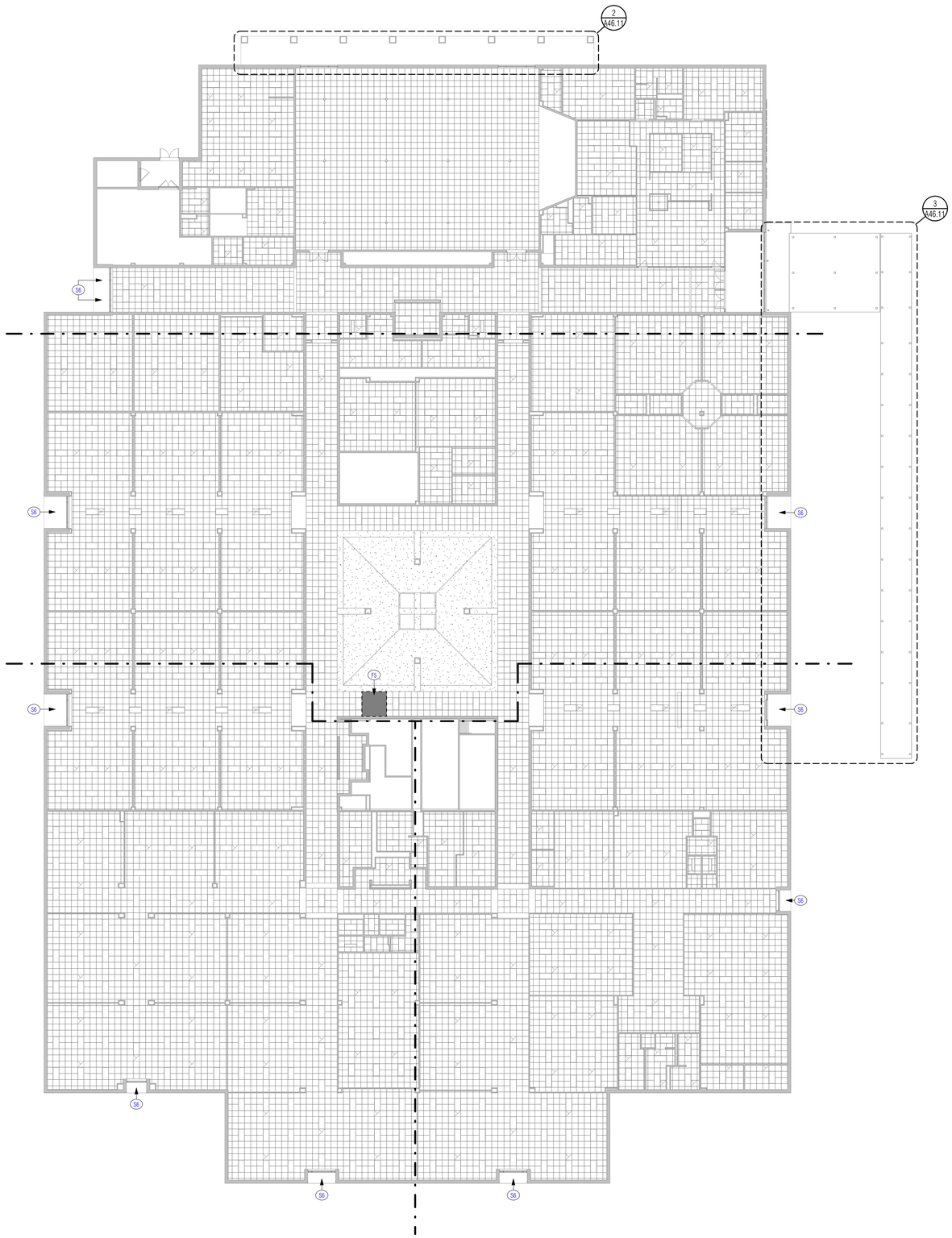
DEMOLITION NOTES

1. Drawings show the general extent of demolition work, however it is impractical to indicate or note every item of demolition. Any items shown dashed are to be removed to make way for new construction, unless noted otherwise.
2. Existing materials containing asbestos to be removed under separate contract prior to construction by Owner's asbestos abatement contractor.
3. Contact the Owner prior to the start of demolition to determine items to be salvaged and returned to Owner.
4. Protect items to remain from damage during demolition.
5. Properly protect and store items to be removed and reinstalled or relocated.
6. Repair or replace at no cost to the Owner any damages to the existing building and site as a result of construction activities.
7. Refer to electrical and mechanical demolition plan for additional information.
8. Patch/repair flooring to match existing at all removed or demolished doors, windows, walls, millwork, lockers and similar items.

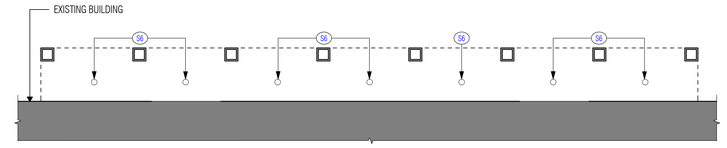
GENERAL KEYNOTE LEGEND

1. ALL EXISTING PUBLIC ANNOUNCMENT (PA) HEADS TO BE REMOVED AND PREP SURFACE FOR INSTALL OF NEW SYSTEM.

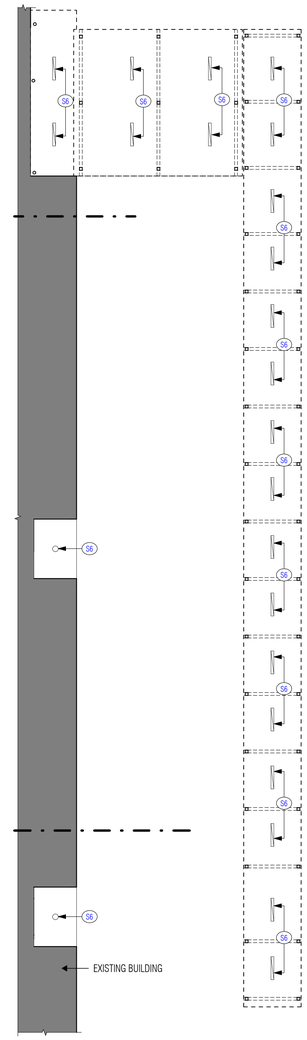
Keynote Legend	
Key Value	Keynote Text
F5	REMOVE AND REINSTALL CEILING GRID AND TILES FOR INSTALLATION OF THE AHU.
S6	REMOVE EXISTING LIGHT FIXTURE AND PREP AREA FOR INSTALLATION OF FIXTURE AS SCHEDULED. REF: ELECTRICAL.



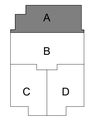
1 KLENK - DEMO REFLECTED CEILING PLAN - LEVEL ONE
SCALE: 1/16" = 1'-0"



2 KLENK - SOFFIT 1
SCALE: 3/32" = 1'-0"



3 KLENK - CANOPY 1
SCALE: 3/32" = 1'-0"



KEY PLAN

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01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
KLENK - REFLECTED CEILING PLAN - LEVEL ONE

SHEET NO.
A46.11

KISD 2025 FRP

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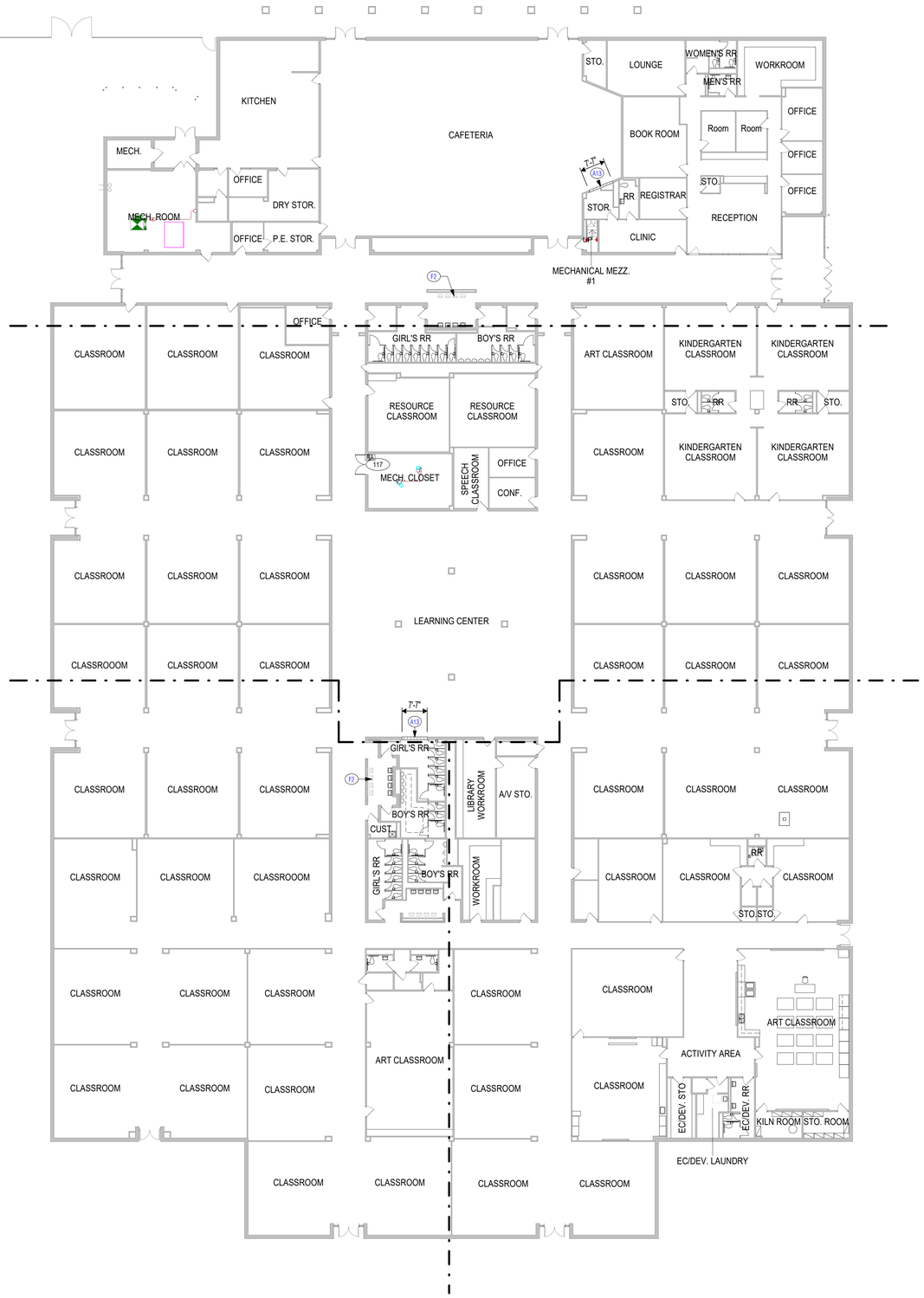
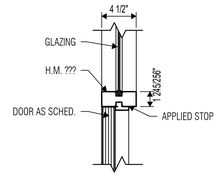
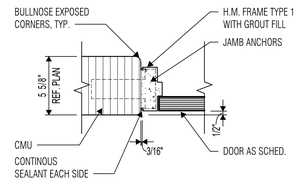
KLENK - DOOR SCHEDULE

DOOR NO.	DOOR TYPE	DOOR MATERIAL	FRAME TYPE	DOOR OPENING WIDTH	DOOR OPENING HEIGHT	DETAIL - REF. A7.11 U.N.O. HEAD	JAMB	SILL	FIRE RATING	HARDWARE SET	KEYNOTES	REMARKS
117	B	1	HM	6'-0"	7'-0"	5/A49.11	3/A49.11					
126	S	-		4'-0"	7'-0"							CHAINLINK

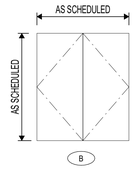




5 HEAD DETAIL H.M.
SCALE: 1 1/2" = 1'-0"



3 JAMB DETAIL H.M.
SCALE: 1 1/2" = 1'-0"



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

Keynote Legend	
Key Value	Keynote Text
A13	PATCH TAPE AND FLOAT GYP. BOARD PARTITION THAT WAS REMOVED FOR INSTALLATION OF AHU. APPROXIMATELY 7'X7'.
F2	REMOVE & REPLACE DRINKING FOUNTAIN. REF: PLUMBING.

DOOR SCHEDULE NOTES

1. At Doors marked 'SMK', provide smoke seals at frame and door bottom to resist the passage of smoke. Provide threshold if required by code or if necessary for proper function of door bottom seal.
2. At Doors marked 'SND', frames to be stuffed with mineral fiber insulation prior to installation and the perimeter of the frame sealed to the surrounding wall with non-hardening acoustical sealant on both sides of the partition. Threshold, where used, shall be sealed to the floor with acoustical sealant.
3. At Doors without a Frame Type designation, the door frame is part of a Glazing System, Sound-Control Door Assembly, Tornado-Resistant Door Assembly, etc.
4. At Doors with a Frame Type designation "AL", the door frame is an interior aluminum frame that is not part of a glazing system
5. At Doors with a Frame Type designation "N/A", there is no door frame required (e.g. all-glass doors, gates, etc.).
6. At Doors with a Frame Type designation "REF. DET", refer to the referenced Head and Jamb detail for frame information.
7. At Doors with a Door Type or Frame Type designation "EX", the door or door frame is existing to remain.
8. Refer to Hardware Schedule for additional information regarding hardware.

DOOR SCHEDULE KEYNOTES

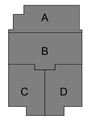
KEY NUMBER	KEYED NOTES
DS7	Access Control / Card Reader

DOOR MATERIAL NOTES

MARK	PANEL MATERIAL
1	Plastic Laminate
4	Painted Hollow Metal

N
PLAN NORTH
TRUE NORTH

1 KLENK - OVERALL INTERIOR FINISH PLAN - LEVEL ONE
SCALE: 1/16" = 1'-0"



KEY PLAN

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
KLENK - INTERIOR OVERALL FINISH PLAN - LEVEL ONE

SHEET NO.
A49.11

KISD 2025 FRP

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VLK

LINETYPE LEGEND

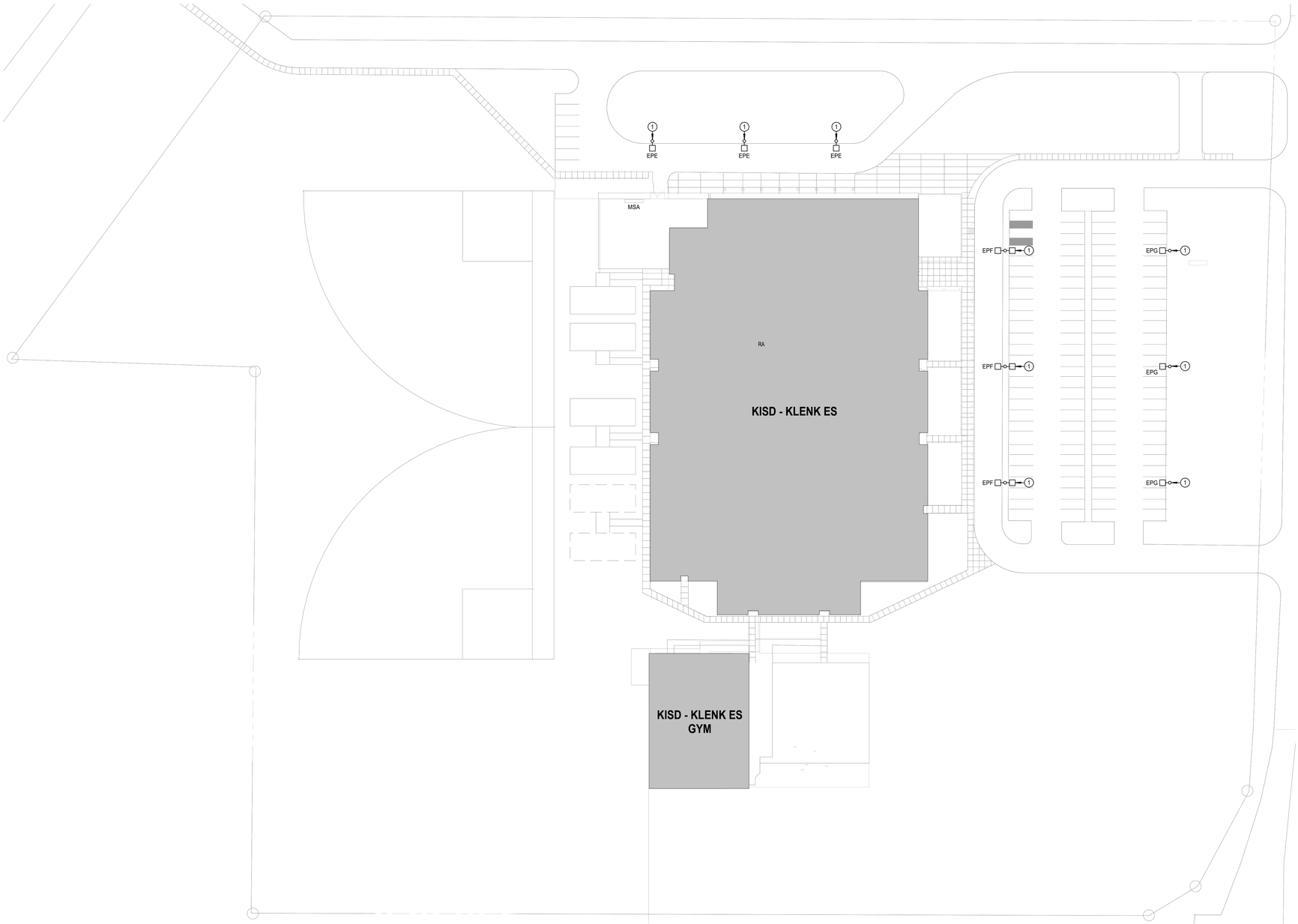
———	EXISTING TO REMAIN
— — —	DISCONNECT AND REMOVE
———	NEW WORK

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

ELECTRICAL KEYED NOTES

1 REMOVE EXISTING SITE LIGHTING FIXTURE AND REPLACE WITH NEW AS SCHEDULED. RE-USE EXISTING POLE AND CONCRETE BASE. PROVIDE ALL MOUNTING ACCESSORIES TO ACCOMMODATE REPLACEMENT FIXTURE ON EXISTING POLE. EXTEND CONDUCTORS WITH MATCHING SIZE TO REPLACEMENT FIXTURE.



N

1 **ELECTRICAL SITE PLAN - KLENK ES**
Scale: 1" = 40'-0"

KEY PLAN
A
B
C D

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REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	LT
Checked By:	PS
Drawn By:	LT

PROJECT NO.
25-0225.00

SHEET TITLE
ELECTRICAL SITE PLAN - KLENK ES

SHEET NO.
E41.00

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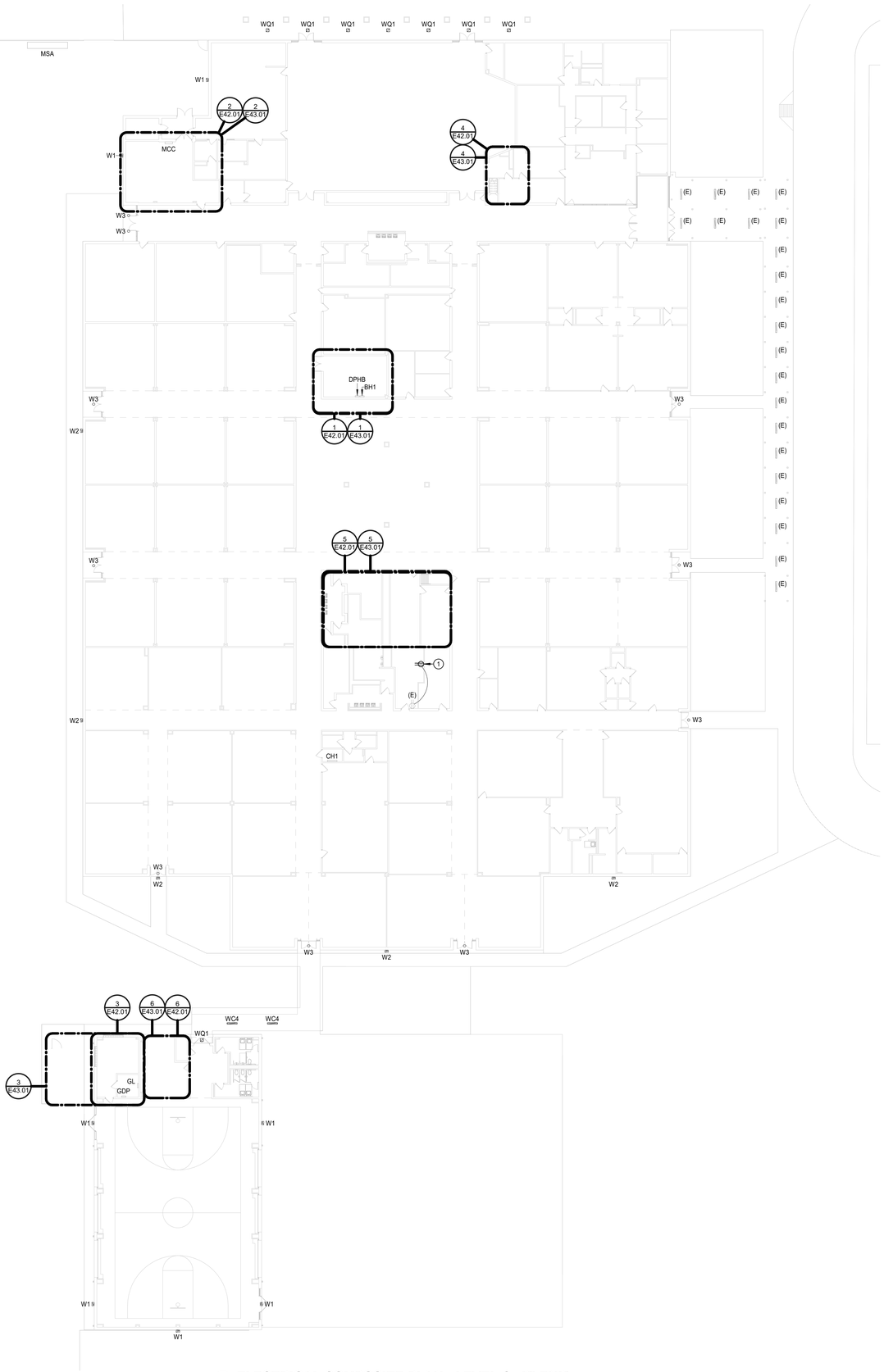


1 **ELECTRICAL COMPOSITE PLAN - LEVEL 1 - KLENK**
Scale: 1" = 20'-0"

LINETYPE LEGEND

	EXISTING TO REMAIN
	DISCONNECT AND REMOVE
	NEW WORK

FIRE ALARM NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY, FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

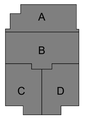
LIGHTING GENERAL NOTES

1 UNLESS NOTED OTHERWISE, DISCONNECT AND REMOVE EXISTING EXTERIOR LIGHTING FIXTURES FOR REPLACEMENT. EXISTING CIRCUITS TO REMAIN IN PLACE FOR RE-USE.

2 CONNECT NEW LIGHT FIXTURES TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO EXISTING LOCATION AND/OR NEW FIXTURES.

ELECTRICAL KEYED NOTES

1 NEW PA SYSTEM HEAD END. PROVIDE NEW RECEPTACLE AS SHOWN AND CONNECT TO EXISTING CIRCUIT LEFT IN PLACE AFTER DEMOLITION. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO NEW LOCATION. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 1500 W @ 120 V. COORDINATE FINAL PA SYSTEM LOCATION.



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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	LT
Checked By:	PS
Drawn By:	LT

PROJECT NO.

25-0225.00

SHEET TITLE

ELECTRICAL COMPOSITE PLAN - LEVEL 1 - KLENK ES

SHEET NO.

E41.01

KISD 2025 FRP

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LINETYPE LEGEND

———	EXISTING TO REMAIN
– – – –	DISCONNECT AND REMOVE
———	NEW WORK

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

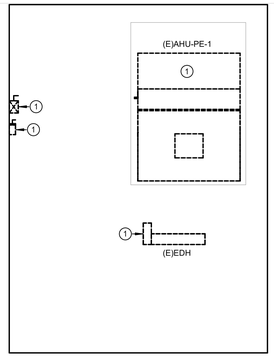
REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

ELECTRICAL KEYED NOTES

1 DISCONNECT EXISTING MECHANICAL EQUIPMENT AND REMOVE ASSOCIATED DISCONNECT/CONTROLLER FOR MECHANICAL EQUIPMENT REPLACEMENT AND NEW DISCONNECT/CONTROLLER. REMOVE EXISTING CIRCUIT BACK TO SOURCE OR NEXT DEVICE TO REMAIN.

2 TEMPORARILY REMOVE EXISTING PANELS AND TRANSFORMERS AND RETAIN IN PLACE ALL EXISTING BRANCH CIRCUITS AND FEEDER FOR WORK THAT REQUIRE WALL REMOVAL AND/OR REPLACEMENT, INCLUDING BUT NOT LIMITED TO MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION, RELOCATE EXISTING PANELS AND TRANSFORMERS TO PREVIOUS LOCATION ON REPLACEMENT WALL. RETAIN IN PLACE ALL EXISTING BRANCH CIRCUITS AND FEEDER FROM SOURCE FOR ALL EXISTING PANELS LABELED TO BE TEMPORARILY REMOVED. EXTEND/RE-ROUTE EXISTING BRANCH CIRCUITS AND FEEDER LEFT IN PLACE AFTER DEMOLITION FROM EXISTING PANELS TO BE RELOCATED.

3 UNLESS NOTED OTHERWISE, DISCONNECT AND REMOVE EXISTING LINE VOLTAGE SWITCH. EXISTING NORMAL AND EMERGENCY POWER 277V CIRCUITS TO REMAIN IN PLACE FOR RE-USE.



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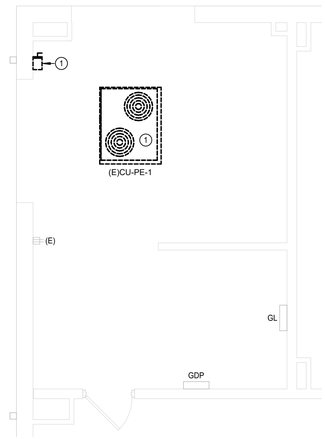
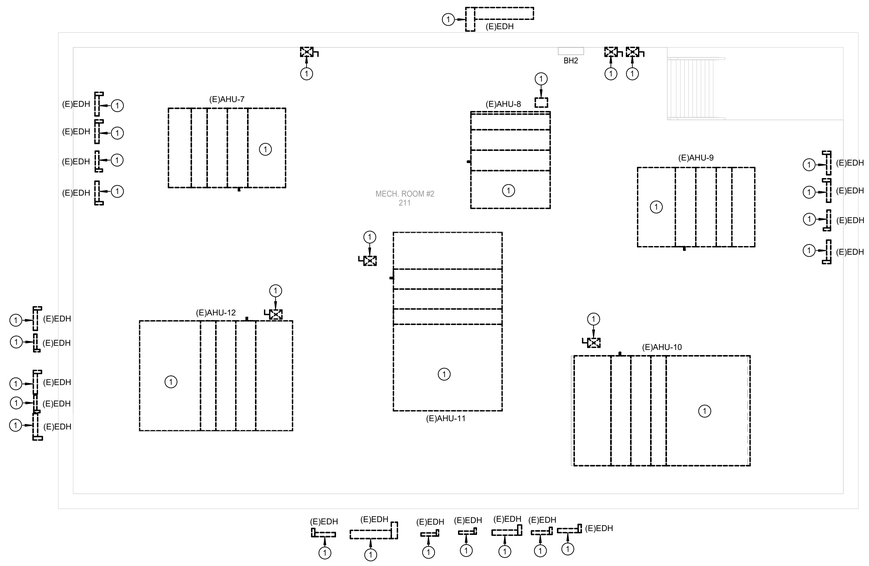
6 ELECTRICAL DEMOLITION FLOOR PLAN - MEZZ GYM - KLENK ES
Scale: 1/4" = 1'-0"





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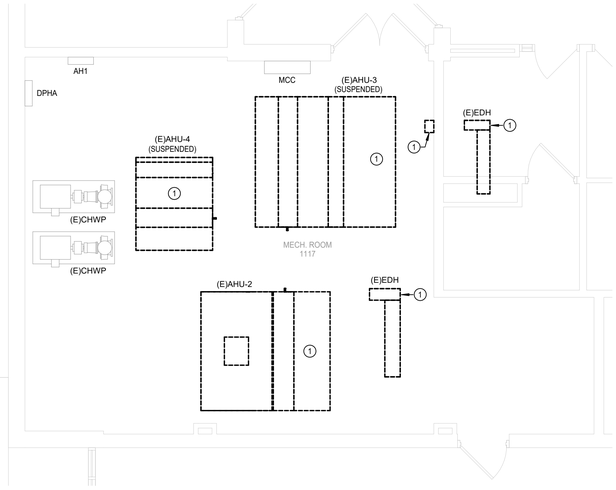
5 ELECTRICAL DEMOLITION FLOOR PLAN - MECH MEZZ 2 - KLENK ES
Scale: 1/4" = 1'-0"



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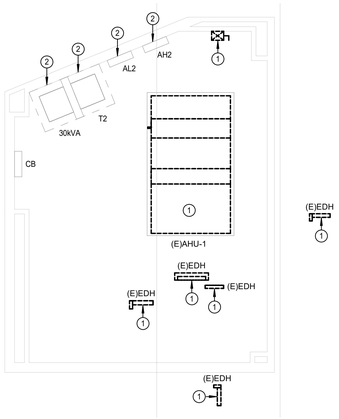
3 ELECTRICAL DEMOLITION FLOOR PLAN - MECH GYM - KLENK ES
Scale: 1/4" = 1'-0"



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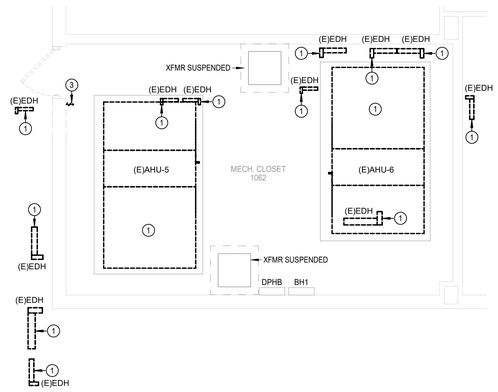
4 ELECTRICAL DEMOLITION FLOOR PLAN - MECH MEZZ 1 - KLENK ES
Scale: 1/4" = 1'-0"



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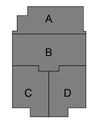
1 ELECTRICAL DEMOLITION FLOOR PLAN - MECH 1 - KLENK ES
Scale: 1/4" = 1'-0"

KEY PLAN



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01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	LT
Checked By:	PS
Drawn By:	LT

PROJECT NO.
25-0225.00

SHEET TITLE
ELECTRICAL DEMOLITION FLOOR PLANS - KLENK ES

SHEET NO.
E42.01

KISD 2025 FRP

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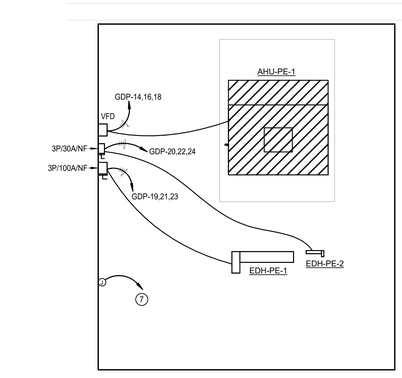
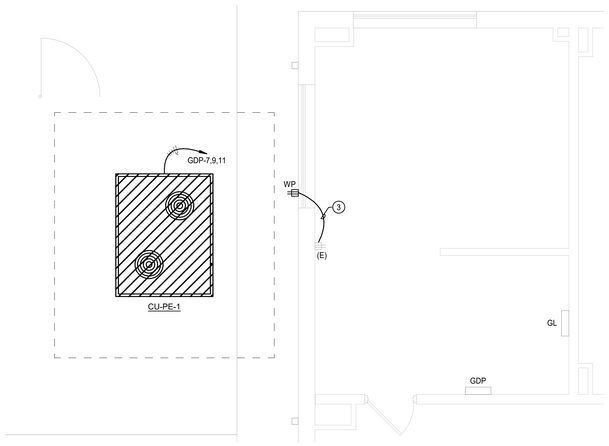


N

6 ELECTRICAL FLOOR PLAN - MEZZ GYM - KLENK ES

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



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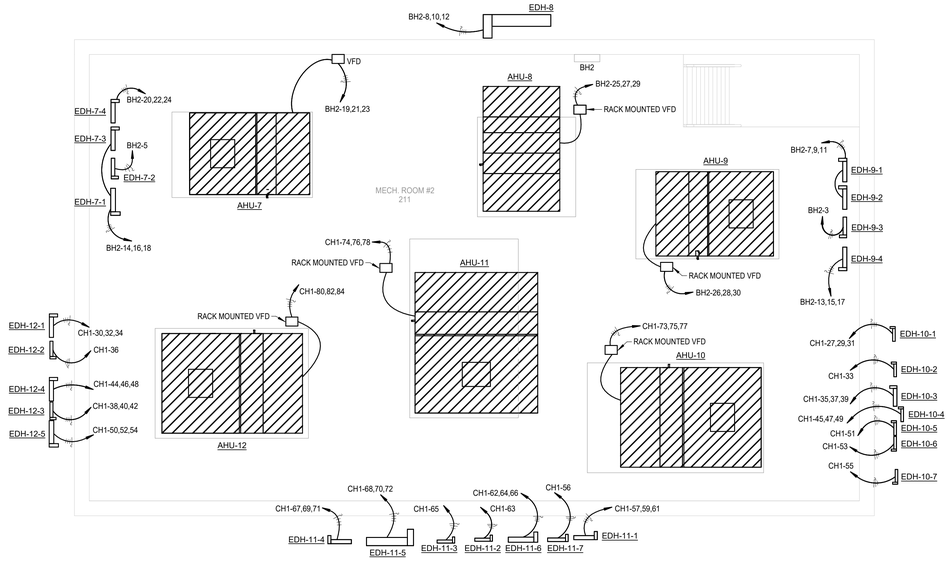
3 ELECTRICAL FLOOR PLAN - MECH GYM - KLENK ES

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



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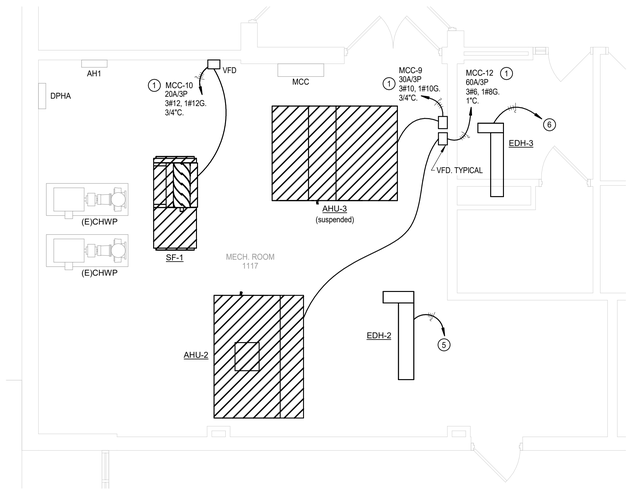
5 ELECTRICAL FLOOR PLAN - MECH MEZZ 2 - KLENK ES

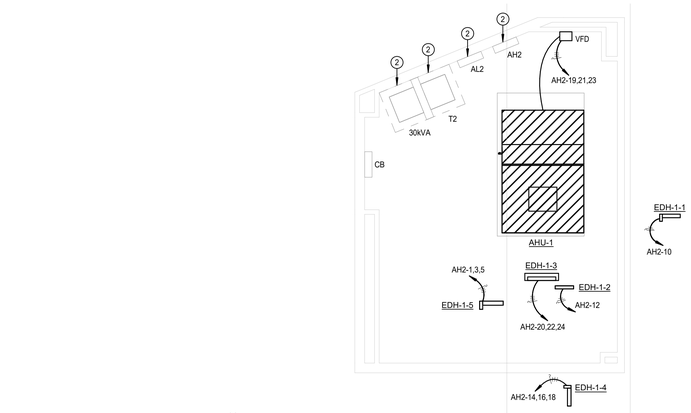
Scale: 1/4" = 1'-0"



N

2 ELECTRICAL FLOOR PLAN - MECH 2 - KLENK ES

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



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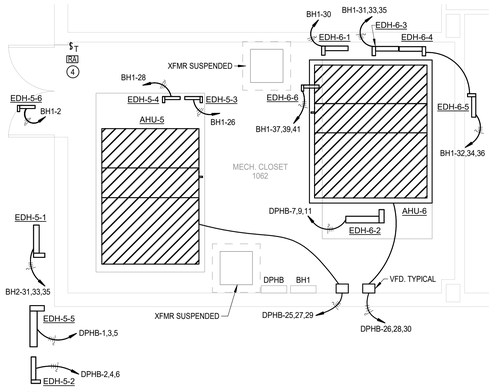
4 ELECTRICAL FLOOR PLAN - MECH MEZZ 1 - KLENK ES

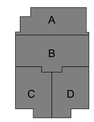
Scale: 1/4" = 1'-0"



N

1 ELECTRICAL FLOOR PLAN - MECH 1 - KLENK ES

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



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Project No: 2500-02120-00

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LINETYPE LEGEND

———	EXISTING TO REMAIN
- - - -	DISCONNECT AND REMOVE
———	NEW WORK

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

ELECTRICAL KEYED NOTES

1 REMOVE EXISTING OVERLOAD RELAYS AND CONTROL WIRING. CAP ALL OPENINGS AFTER REMOVAL OF CONTROLS AND INDICATORS. RE-LABEL AS FEEDER DISCONNECT ONLY. PROVIDE BRANCH BREAKER AS SHOWN AND FILLER PLATES.

2 TEMPORARILY REMOVE EXISTING PANELS AND TRANSFORMERS AND RETAIN IN PLACE ALL EXISTING BRANCH CIRCUITS AND FEEDER FOR WORK THAT REQUIRE WALL REMOVAL AND/OR REPLACEMENT, INCLUDING BUT NOT LIMITED TO MECHANICAL, TECHNOLOGY, FIRE ALARM, FIRE SPRINKLERS AND PLUMBING SCOPE OF WORK. AFTER COMPLETION, RELOCATE EXISTING PANELS AND TRANSFORMERS TO PREVIOUS LOCATION ON REPLACEMENT WALL. RETAIN IN PLACE ALL EXISTING BRANCH CIRCUITS AND FEEDER FROM SOURCE FOR ALL EXISTING PANELS LABELED TO BE TEMPORARILY REMOVED. EXTEND/RE-ROUTE EXISTING BRANCH CIRCUITS AND FEEDER LEFT IN PLACE AFTER DEMOLITION FROM EXISTING PANELS TO BE RELOCATED.

3 PROVIDE NEW RECEPTACLES AS SHOWN AND CONNECT TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION, EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO NEW LOCATION. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 1500 W @ 120 V.

4 PROVIDE SWITCH AND CONNECT EXISTING LIGHTING FOR LOCAL CONTROL. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO NEW LOCATION.

5 CONNECT MECHANICAL UNIT TO EXISTING PANEL SOURCE 'DPHA'. PROVIDE NEW 110A/3P BREAKER/FUSES IN EXISTING SPACE AND PROVIDE NEW 3#2, 1#6G. 1-1/2"C.

6 CONNECT MECHANICAL UNIT TO EXISTING PANEL SOURCE 'AH1'. PROVIDE NEW 60A/3P BREAKER/FUSES IN EXISTING SPACE AND PROVIDE NEW 3#6, 1#10G. 1"C.

7 LEAK DETECTION, COORDINATE FINAL LOCATION WITH DIVISION 23. PROVIDE NEW BRANCH BREAKER IN EXISTING PANEL 'GL', 20A/1P, 2#12, 1#12G. 3/4"C.

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01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	LT
Checked By:	PS
Drawn By:	LT

PROJECT NO.

25-0225.00

SHEET TITLE

ELECTRICAL FLOOR PLANS - KLENK ES

SHEET NO.

E43.01

KISD 2025 FRP

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Branch Panel: GDP — Campus: Klenk ES — EXISTING PANEL

Location: ELEC. 40 | **Supply From:** | **Mounting:** Surface
Volts: 277/480 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: Existing | **Enclosure:** Type 1 | **Mains:** 400A MCB

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				10.0 / 10.0						2	
--	3	PANEL GH	--	100	3	10.0 / 10.0		3	70	-- XFMR 'GT'	4	--
	5						10.0 / 10.0				6	
	7				14.3 / 0.0						8	
1	9	CU-PE-1	#4	80	3	14.3 / 0.0		3	100	-- Spare	10	--
	11						14.3 / 0.0				12	
	13				0.0 / 2.3						14	
--	15	Spare	--	100	3	0.0 / 2.3		3	20	#12 AHU-PE-1	16	1
	17						0.0 / 2.3				18	
	19				15.0 / 1.3						20	
1	21	EDH-PE-1	#4	70	3	15.0 / 1.3		3	20	#12 EDH-PE-2	22	1
	23						15.0 / 1.3				24	
	25				0.0 / 0.0			1	--	-- Space	26	--
--	27	Spare	--	30	3	0.0 / 0.0		1	--	-- Space	28	--
	29						0.0 / 0.0	1	--	-- Space	30	--
			Total Load:		52.9 kVA	52.9 kVA	52.9 kVA					
			Total Amps:		191 A	191 A	191 A					

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	98.7 kVA	100.00%	98.7 kVA		
Miscellaneous	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	158.7 kVA
Existing	60.0 kVA	125.00%	75.0 kVA	**Total Est. Demand:**	173.7 kVA
				Total Conn. Current:	191 A
				Total Est. Demand...	209 A

Notes:
1. New circuit and breaker.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: DPHB — Campus: Klenk ES — EXISTING PANEL

Location: MECH. CLOSET 1062 | **Supply From:** | **Mounting:** Surface
Volts: 277/480 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: 50,000 | **Enclosure:** Type 1 | **Mains:** 600A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				5.3 / 5.0						2	
1	3	EDH-5-5	#10	30	3	5.3 / 5.0		3	30	#10 EDH-5-2	4	1
	5						5.3 / 5.0				6	
	7				5.3 / 6.0						8	
1	9	EDH-6-2	#10	30	3	5.3 / 6.0		3	50	-- Existing XFMR 'CA'	10	--
	11						5.3 / 6.0				12	
	13				15.0 / 46.0						14	
--	15	Existing	--	125	3	15.0 / 50.0		3	150	-- Existing PANEL BH2	16	
	17						15.0 / 50.0				18	
--	19	Space	--	--	1	0.0 / 29.3					20	
--	21	Space	--	--	1		0.0 / 28.3	3	200	-- Existing PANEL BH1	22	
--	23	Space	--	--	1		0.0 / 26.3				24	
	25				3.1 / 3.1						26	
1	27	AHU-5	#10	30	3	3.1 / 3.1		3	30	#10 AHU-6	28	1
	29						3.1 / 3.1				30	
			Total Load:		118.2 kVA	121.2 kVA	119.2 kVA					
			Total Amps:		427 A	438 A	431 A					

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	244.7 kVA	100.00%	244.7 kVA		
Existing	114.0 kVA	125.00%	142.5 kVA	**Total Conn. Load:**	358.7 kVA
				Total Est. Demand:	387.2 kVA
				Total Conn. Current:	431 A
				Total Est. Demand...	466 A

Notes:
1. New circuit and breaker.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: CH1 — Campus: Klenk ES — EXISTING PANEL

Location: Room 1013 | **Supply From:** | **Mounting:** Surface
Volts: 277/480 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: Existing | **Enclosure:** Type 1 | **Mains:** 400A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
--	1	Existing lighting	--	20	1	1.0 / 1.0		1	20	-- Existing lighting	2	--
--	3	Existing lighting	--	20	1		1.0 / 1.0	1	20	-- Existing lighting	4	--
--	5	Existing lighting	--	20	1			1	20	-- Existing lighting	6	--
--	7	Existing lighting	--	20	1	1.0 / 1.0		1	20	-- Existing lighting	8	--
--	9	Existing lighting	--	20	1		1.0 / 1.0	1	20	-- Existing lighting	10	--
--	11	Existing lighting	--	20	1			1	20	-- Existing lighting	12	--
--	13	Existing lighting	--	20	1	1.0 / 1.0		1	20	-- Existing lighting	14	--
	15						5.0 / 1.0	1	20	-- Existing lighting	16	--
--	17	Existing water heater	--	30	3							
	19						5.0 / 1.0	1	20	-- Existing lighting	18	--
	21				5.0 / 0.0			1	--	-- Space	20	--
--	23	Existing water heater	--	20	3		3.0 / 0.0					
	25					3.0 / 0.0		1	--	-- Space	22	--
	27						3.3 / 0.0	1	--	-- Space	24	--
1	29	EDH-10-1	#12	20	3						26	--
	31					3.3 / 3.7					28	--
1	33	EDH-10-2	#10	30	1	3.3 / 3.7		3	20	#12 EDH-12-1	30	
	35					6.0 / 3.7					32	1
1	37	EDH-10-3	#12	20	3		3.3 / 5.0	1	30	#10 EDH-12-2	34	
	39					3.3 / 3.3					36	1
--	41	Space	--	--	1			3	20	#12 EDH-12-3	38	
--	43	Space	--	--	1	0.0 / 3.3					40	1
	45					0.0 / 3.7					42	
1	47	EDH-10-4	#12	20	3			3	20	#12 EDH-12-4	44	
	49					3.0 / 3.7					46	1
1	51	EDH-10-5	#10	30	1		3.0 / 4.3				48	
1	53	EDH-10-6	#10	30	1	4.0 / 4.3		3	20	#12 EDH-12-5	50	
1	55	EDH-10-7	#10	30	1		4.0 / 4.3				52	1
	57					5.0 / 6.0		1	30	#10 EDH-11-7	54	1
1	59	EDH-11-1	#12	20	3	3.0 / 0.0		1	--	-- Space	56	1
	61						3.0 / 0.0	1	--	-- Space	58	--
1	63	EDH-11-2	#10	30	1	3.0 / 3.0					60	--
1	65	EDH-11-3	#10	30	1		5.0 / 3.0	3	20	#12 EDH-11-6	62	
	67					3.0 / 5.0					64	1
1	69	EDH-11-4	#12	20	3			3	30	#10 AHU-11-5	66	1
	71					3.0 / 5.0					68	
	73						3.0 / 5.0				70	1
1	75	AHU-10	#10	30	3	2.7 / 4.2					72	
	77						2.7 / 4.2	3	40	#8 AHU-11	74	
--	81	Existing XFMR T4	--	70	3	10.0 / 2.7					76	1
	83						10.0 / 2.7	3	30	#10 AHU-12	78	
			Total Load:		83.4 kVA	86.4 kVA	85.4 kVA				82	1
			Total Amps:		301 A	313 A	309 A				84	

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	185.2 kVA	100.00%	185.2 kVA		
Existing	70.0 kVA	125.00%	87.5 kVA	**Total Conn. Load:**	255.2 kVA
				Total Est. Demand:	272.7 kVA
				Total Conn. Current:	307 A
				Total Est. Demand...	328 A

Notes:
1. New circuit and breaker.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: BH2 — Campus: Klenk ES — EXISTING PANEL

Location: MECH. ROOM #2 211 | **Supply From:** DPHB | **Mounting:** Surface
Volts: 277/480 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: Existing | **Enclosure:** Type 1 | **Mains:** 225A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
--	1	Existing lighting	--	20	1	1.0 / 1.0		1	20	-- Existing lighting	2	--
1	3	EDH-9-3	#10	30	1		5.0 / 1.0	1	20	-- Existing lighting	4	--
1	5	EDH-7-2	#10	30	1			1	20	-- Existing lighting	6	--
	7					5.3 / 11.7					8	
1	9	EDH-9-1 / EDH-9-2	#10	30	3		5.3 / 11.7	3	60	#6 EDH-8	10	1
	11										12	
	13					3.0 / 5.7					14	
1	15	EDH-9-4	#12	20	3		3.0 / 5.7	3	30	#10 EDH-7-1 / EDH-7-3	16	1
	17										18	
	19					2.2 / 3.0					20	
1	21	AHU-7	#12	20	3		2.2 / 3.0	3	20	#12 EDH-7-4	22	1
	23						2.2 / 3.0				24	
	25					2.7 / 2.0					26	
1	27	AHU-8	#10	30	3		2.7 / 2.0	3	20	#12 AHU-9	28	1
	29						2.7 / 2.0				30	
	31					4.3 / 4.0					32	
1	33	EDH-5-1	#12	20	3		4.3 / 4.0	3	30	-- Existing water heater	34	--
	35						4.3 / 4.0				36	
--	37	Space	--	--	1	0.0 / 0.0		1	--	-- Space	38	--
--	39	Space	--	--	1		0.0 / 0.0	1	--	-- Space	40	--
--	41	Space	--	--	1		0.0 / 0.0	1	--	-- Space	42	--
			Total Load:		46.0 kVA	50.0 kVA	50.0 kVA					
			Total Amps:		166 A	183 A	183 A					

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	130.0 kVA	100.00%	130.0 kVA		
Existing	16.0 kVA	125.00%	20.0 kVA	**Total Conn. Load:**	146.0 kVA
				Total Est. Demand:	150.0 kVA
				Total Conn. Current:	176 A
				Total Est. Demand...	180 A

Notes:
1. New circuit and breaker.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: BH1 — Campus: Klenk ES — EXISTING PANEL

Location: MECH. CLOSET 1062 | **Supply From:** DPHB | **Mounting:** Surface
Volts: 277/480 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: Existing | **Enclosure:** Type 1 | **Mains:** 225A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				3.0 / 3.0			1	20	#12 EDH-5-6	2	1
--	3	Existing XFMR '3TR'	--	30	3	3.0 / 1.0		1	20	-- Existing lighting	4	--
	5						3.0 / 1.0	1	20	-- Existing lighting	6	--
--	7	Existing lighting	--	20	1	1.0 / 1.0		1	20	-- Existing lighting	8	--
--	9	Existing lighting	--	20	1		1.0 / 1.0	1	20	-- Existing lighting	10	--
--	11	Existing lighting	--	20	1			1	20	-- Existing lighting	12	--
--	13	Existing lighting	--	20	1	1.0 / 1.0		1	20	-- Existing lighting	14	--
--	15	Existing lighting	--	20	1		1.0 / 1.0	1	20	-- Existing lighting	16	--
--	17	Existing lighting	--	20	1			1	20	-- Existing lighting	18	--
--	19	Existing lighting	--	20	1	1.0 / 1.0		1	20	-- Existing lighting	20	--
--	21	Existing lighting	--	20	1		1.0 / 1.0	1	20	-- Existing lighting	22	--
--	23	Existing lighting	--	20	1			1	20	-- Existing lighting	24	--
--	25	Existing lighting	--	20	1	1.0 / 4.0		1	20	#12 EDH-5-3	26	1
--	27	Existing lighting	--	20	1		1.0 / 5.0	1	30	#10 EDH-5-4	28	1
--	29	Existing lighting	--	20	1			1	20	#10 EDH-6-1	30	1
	31					3.0 / 5.3					32	
1	33	EDH-6-3	#12	20	3		3.0 / 5.3	3	30	#10 EDH-6-4 / EDH-6-5	34	1
	35						3.0 / 5.3				36	
	37					3.0 / 1.0		1	20	-- Existing lighting	38	--
1	39	EDH-6-6	#12	20	3	3.0 / 1.0		1	20	-- Existing lighting	40	--
	41						3.0 / 1.0	1	20	-- Existing lighting	42	--
			Total Load:		29.3 kVA	28.3 kVA	26.3 kVA					
			Total Amps:		107 A	103 A	95 A					

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	49.0 kVA	100.00%	49.0 kVA		
Existing	35.0 kVA	125.00%	43.8 kVA	**Total Conn. Load:**	84.0 kVA
				Total Est. Demand:	92.8 kVA
				Total Conn. Current:	101 A
				Total Est. Demand...	112 A

Notes:
1. New circuit and breaker.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: AH2 — Campus: Klenk ES — EXISTING PANEL

Location: MECHANICAL ROOM #1... | **Supply From:** | **Mounting:** Surface
Volts: 277/480 Wye | **Phases:** 3 | **Wires:** 4
A.I.C. Rating: Existing | **Enclosure:** Type 1 | **Mains:** 225A MLO

Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				2.0 / 0.0			1	20	-- Spare	2	--
1	3	EDH-1-5	#12	20	3	2.0 / 0.0		1	20	-- Spare	4	--
	5						2.0 / 0.0	1	20	-- Spare	6	--
--	7	Existing lighting	--	20	1	1.0 / 1.0		1	20	-- Existing	8	--
--	9	Existing lighting	--	20	1		1.0 / 4.0	1	20	#12 EDH-1-1	10	1
--	11	Existing lighting	--	20	1			1	20	#12 EDH-1-2	12	1
--	13	Existing lighting	--	20	1	1.0 / 2.3					14	
--	15	Existing lighting	--	20	1		1.0 / 2.3	3	20	#12 EDH-1-4	16	1
--	17	Existing	--	20	1						18	
	19					2.4 / 3.7					20	
1	21	AHU-1	#12	20	3		2.4 / 3.7	3	20	#12 EDH-1-3	22	1
	23						2.4 / 3.7				24	
	25					6.0 / 6.0					26	
--	27	Existing XFMR 'CB'	--	50	3		6.0 / 6.0	3	50	-- Existing XFMR 'T2'	28	--
	29					6.0 / 6.0					30	
--	31	Existing FCU	--	20	1	1.0 / 0.0		1	--	-- Space	32	--
--	33	Space	--	--	1		0.0 / 0.0	1	--	-- Space	34	--
--	35	Space	--	--	1			1	--	-- Space	36	--
--	37	Space	--	--	1	0.0 / 0.0		1	--	-- Space	38	--
--	39	Space	--	--	1		0.0 / 0.0	1	--	-- Space	40	--
--	41	Space	--	--	1			1	--	-- Space	42	--
			Total Load:		26.4 kVA	28.4 kVA	26.4 kVA					
			Total Amps:		95 A	102 A	95 A					

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	37.1 kVA	100.00%	37.1 kVA		
Existing	44.0 kVA	125.00%	55.0 kVA	**Total Conn. Load:**	81.1 kVA
				Total Est. Demand:	92.1 kVA
				Total Conn. Current:	98 A
				Total Est. Demand...	111 A

Notes:
1. New circuit and breaker.

Abbrevations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

PANELBOARD CIRCUIT DIRECTORY:

CONTRACTOR SHALL RECORD AND/OR PRESERVE THE EXISTING CIRCUIT DIRECTORY, IF ANY, FOR THE SOLE PURPOSE UPON COMPLETION OF NEW WORK OF PRODUCING A NEW CIRCUIT DIRECTORY.

CONTRACTOR SHALL PROVIDE AS PART OF THE CONSTRUCTION DOCUMENTS A NEW, NEATLY TYPED DIRECTORY. CONTRACTOR SHALL LEGIBLY IDENTIFY AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE, LOADS SERVED AND LOCATION AND/OR THE PANELBOARD SCHEDULE ON THE DRAWINGS. THE WORD 'EXISTING' SHALL NOT BE USED ON PANELBOARD DIRECTORIES. SPARE BREAKERS ARE TO BE LISTED AS "SPARE". SPACES WITH NO BREAKERS ARE TO BE LEFT BLANK. REFER TO NEC-2023: 408.4(A) FOR DETAILS.

CONTRACTOR SHALL PERMANENTLY LABEL AS PART OF THE CONSTRUCTION DOCUMENTS ALL SWITCHBOARDS, SWITCHGEAR AND PANELBOARDS TO INDICATE EACH POWER SOURCE. REFER TO NEC-2023: 408.4(B) FOR DETAILS.

CONTRACTOR TO FIELD VERIFY INTERRUPTING FAULT CURRENT CAPACITY OF EXISTING PANELS AND/OR SWITCHBOARDS AND TO PROVIDE NEW BREAKERS/FUSES TO MATCH EXISTING.

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KLEIN, TX

BRADLEY KALMANS
REGISTERED
ENGINEER
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director: MR
Designed By: LT
Checked By: PS
Drawn By: LT

PROJECT NO.
25-0225.00

SHEET TITLE
ELECTRICAL PANELBOARD SCHEDULES - KLENK ES

SHEET NO.
E44.01

KISD 2025 FRP

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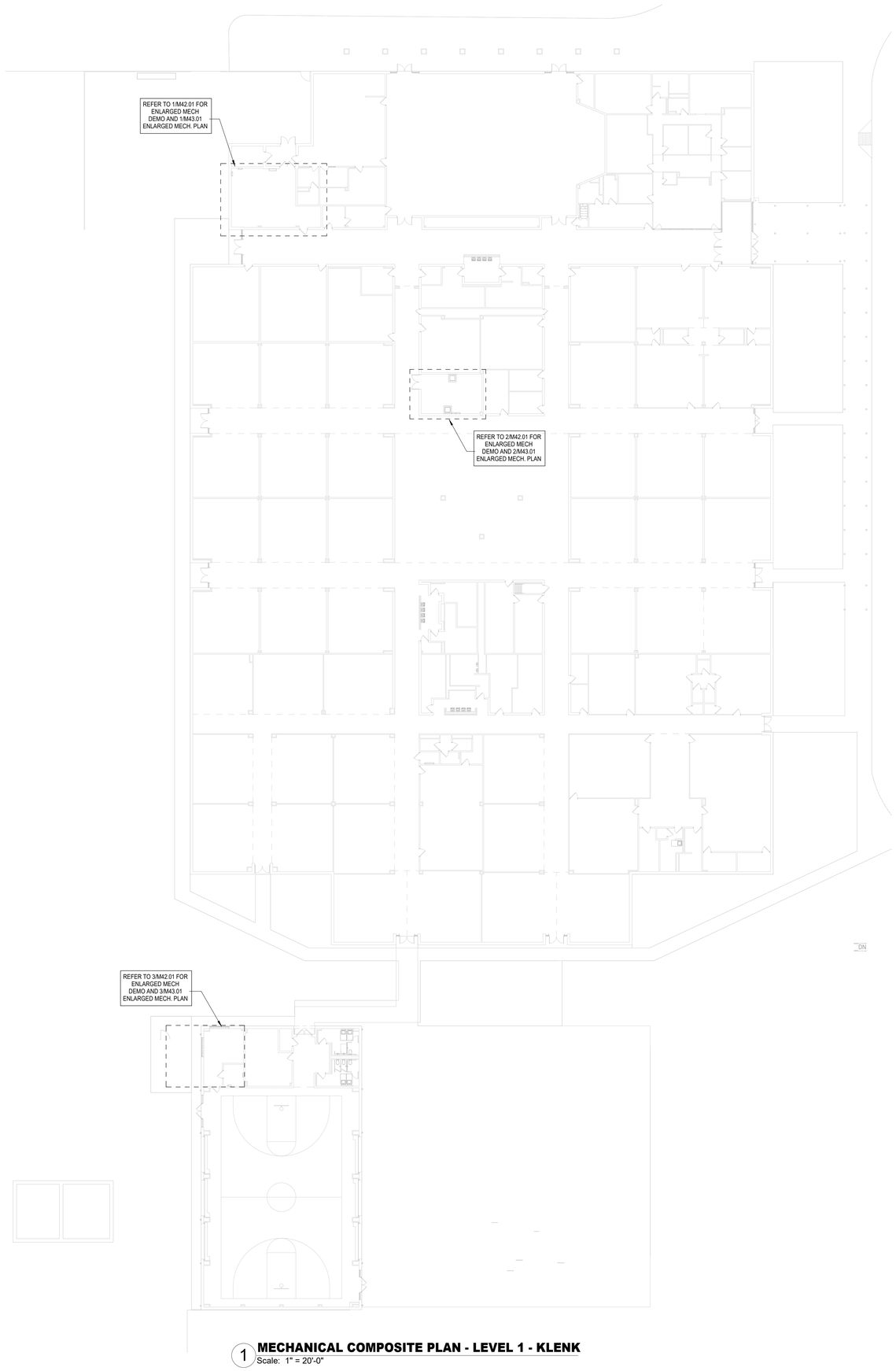
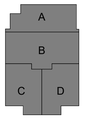


1 **MECHANICAL COMPOSITE PLAN - LEVEL 1 - KLENK**
Scale: 1" = 20'-0"



KEY PLAN

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	IP
Checked By:	VP
Drawn By:	IP

PROJECT NO.

25-0225.00

SHEET TITLE

MECHANICAL COMPOSITE PLAN - LEVEL 1 - KLENK

SHEET NO.

M41.00

KISD 2025 FRP

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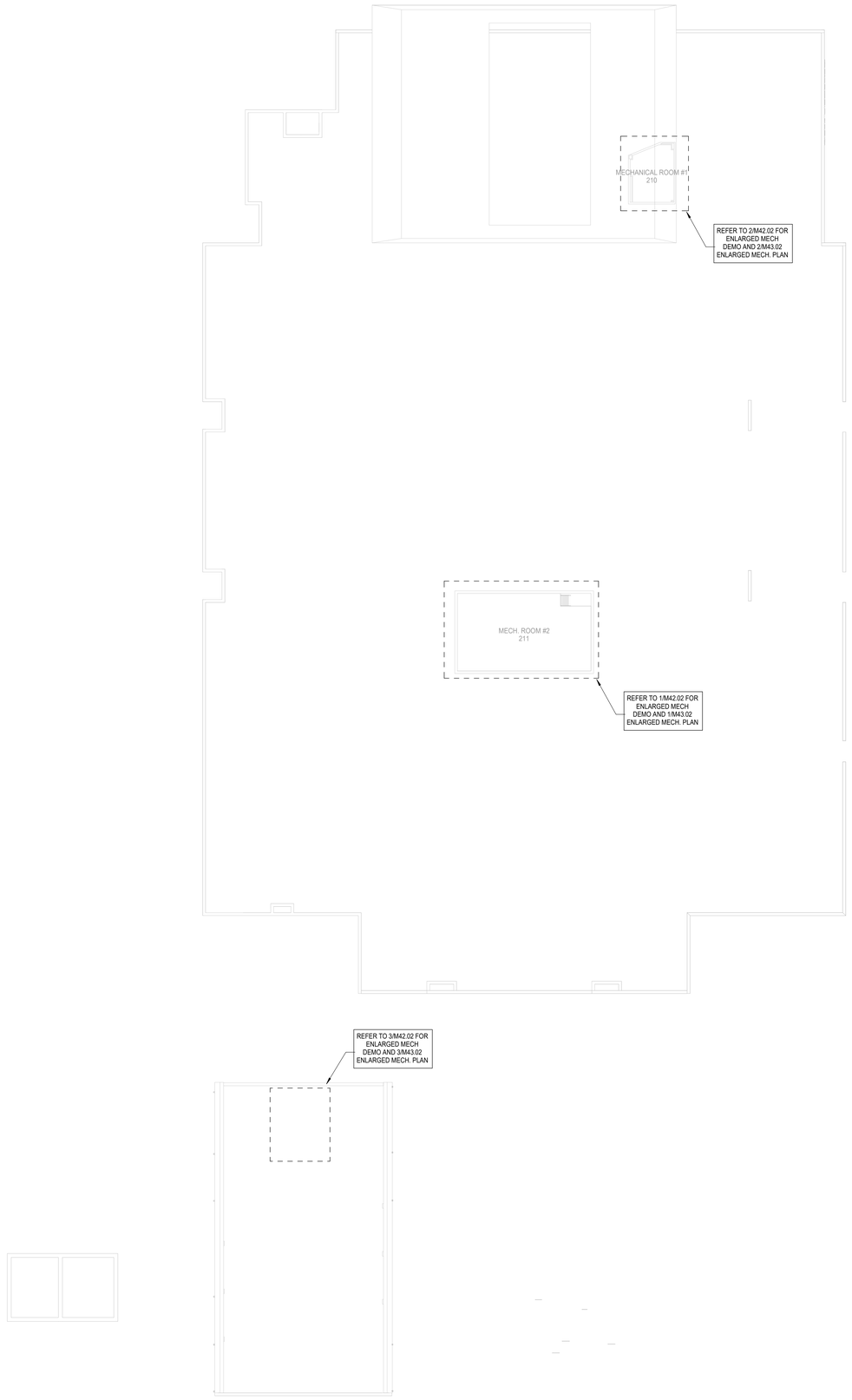

1 **MECHANICAL COMPOSITE PLAN - LEVEL 2 - KLENK**
Scale: 1" = 20'-0"

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	IP
Checked By:	VP
Drawn By:	IP

PROJECT NO.
25-0225.00

SHEET TITLE
MECHANICAL COMPOSITE PLAN - LEVEL 2 - KLENK

SHEET NO.
M41.01

KEY PLAN
A
B
C D

KISD 2025 FRP

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10930 W. Sam Houston Pkwy North, Suite 900
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Registration: F-4111
Project No: 2550-02120-00

VLK

GENERAL NOTES:

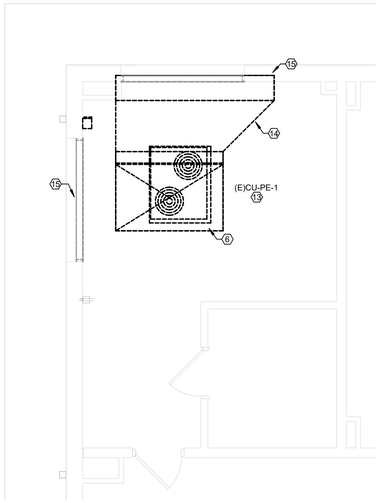
1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITHED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

SYMBOL LEGEND

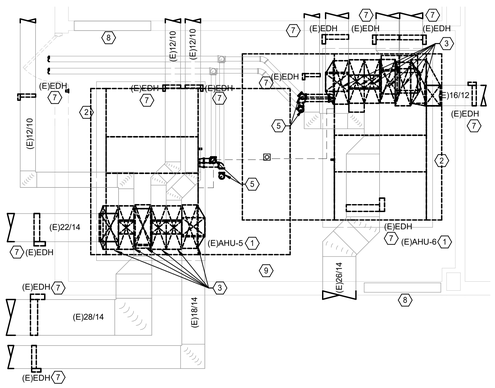
SYMBOL	DESCRIPTION
RENOVATIONS	
⌖	POINT OF CONNECTION FROM NEW TO EXISTING
▭	ITEM TO REMAIN
⬚	ITEM TO BE REMOVED

DEMOLITION KEYED NOTES:

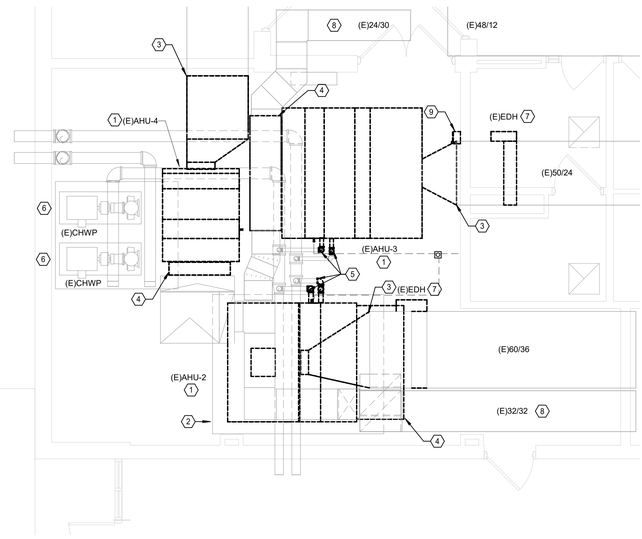
1. REMOVE EXISTING AIR HANDLING UNIT AND ASSOCIATED CONDENSATE PIPING. EXISTING DUCTWORK SHALL REMAIN AND REUSED.
2. EXISTING CONCRETE PAD SHALL REMAIN AND BE REUSED.
3. REMOVE EXISTING SUPPLY DUCTWORK UP TO THIS POINT.
4. REMOVE EXISTING RETURN PLENUM.
5. REMOVE EXISTING CHWS&R PIPING BACK TO THIS POINT.
6. EXISTING EQUIPMENT TO REMAIN AND BE REUSED.
7. REMOVE EXISTING ELECTRIC DUCT HEATER. EXISTING DUCTWORK SHALL REMAIN AND REUSED.
8. EXISTING RETURN DUCTWORK TO REMAIN AND BE REUSED.
9. REMOVE EXISTING VFD.
13. REMOVE EXISTING CONDENSER UNIT AND ASSOCIATED REFRIGERANT LINES.
14. REMOVE EXISTING CONDENSER UNIT PLENUM AIR AND ASSOCIATED DUCTWORK.
15. REMOVE EXISTING WALL LOUVER. EXISTING OPENING SHALL BE SEALED TO MATCH EXISTING WALL FINISH.
9. REMOVE EXISTING RETURN DUCTWORK UP TO THIS POINT.
10. REMOVE EXISTING OUTSIDE AIR DUCTWORK UP TO THIS POINT.



3 **MECHANICAL DEMOLITION ENLARGED PLAN - KLENK - GYM MECH**
Scale: 1/4" = 1'-0"



2 **MECHANICAL DEMOLITION ENLARGED PLAN - KLENK - MECH 171**
Scale: 1/4" = 1'-0"



1 **MECHANICAL DEMOLITION ENLARGED PLAN - KLENK - MECH 101**
Scale: 1/4" = 1'-0"

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

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SHEET TITLE
MECHANICAL DEMOLITION ENLARGED PLAN - LEVEL 1 - KLENK

SHEET NO.
M42.01

KISD 2025 FRP

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GENERAL NOTES:

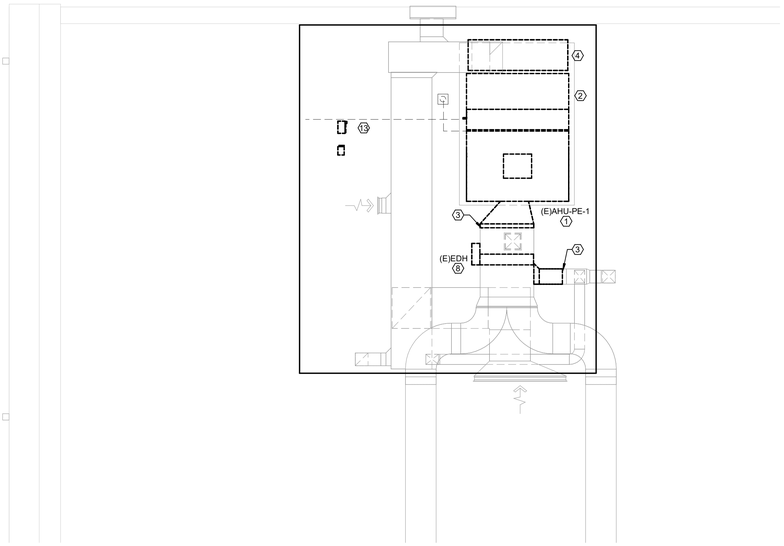
1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITHED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

SYMBOL LEGEND

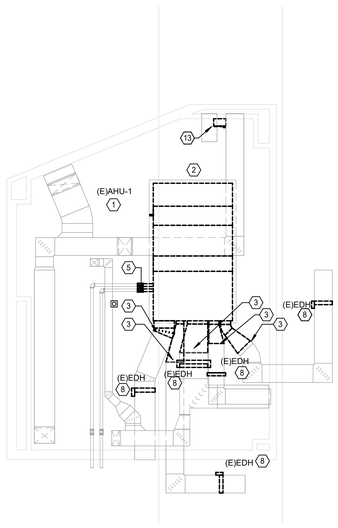
SYMBOL	DESCRIPTION
RENOVATIONS	
	POINT OF CONNECTION FROM NEW TO EXISTING
	ITEM TO REMAIN
	ITEM TO BE REMOVED

DEMOLITION KEYED NOTES:

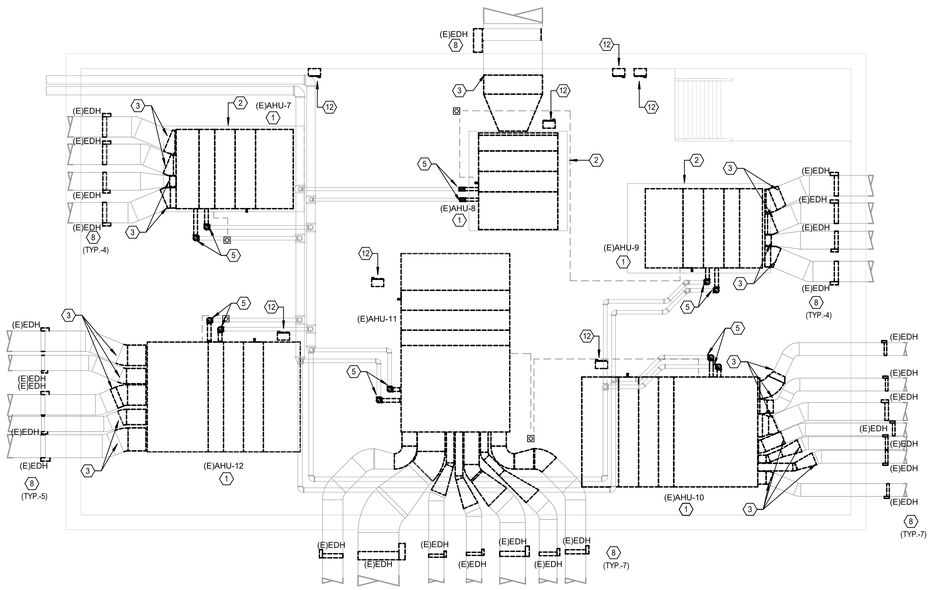
1. REMOVE EXISTING AIR HANDLING UNIT AND ASSOCIATED CONDENSATE PIPING. EXISTING DUCTWORK SHALL REMAIN AND REUSED.
2. EXISTING CONCRETE PAD SHALL REMAIN AND BE REUSED.
3. REMOVE EXISTING SUPPLY DUCTWORK UP TO THIS POINT.
4. REMOVE EXISTING RETURN PLENUM.
5. REMOVE EXISTING CHWS&R PIPING BACK TO THIS POINT.
6. REMOVE EXISTING CONDENSATE PIPING BACK TO THIS POINT.
7. EXISTING EQUIPMENT TO REMAIN AND BE REUSED.
8. REMOVE EXISTING ELECTRIC DUCT HEATER. EXISTING DUCTWORK SHALL REMAIN AND REUSED.
9. REMOVE EXISTING RETURN DUCTWORK UP TO THIS POINT.
10. EXISTING RETURN DUCTWORK TO REMAIN AND BE REUSED.
11. REMOVE EXISTING OUTSIDE AIR DUCTWORK UP TO THIS POINT.
12. REMOVE EXISTING VFD.
13. REMOVE EXISTING REFRIGERANT LINES.



3 **MECHANICAL DEMOLITION ENLARGED PLAN - KLENK - GYM MECH MEZZ.**
Scale: 1/4" = 1'-0"



2 **MECHANICAL DEMOLITION ENLARGED PLAN - KLENK - MECH MEZZ. 210**
Scale: 1/4" = 1'-0"



1 **MECHANICAL DEMOLITION ENLARGED PLAN - KLENK - MECH 202**
Scale: 1/4" = 1'-0"

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ISSUED: JANUARY 27, 2026

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SHEET TITLE
MECHANICAL DEMOLITION ENLARGED PLAN - LEVEL 2 - KLENK

SHEET NO.
M42.02

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GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

KEYED NOTES:

1. VERIFY SERVICE CLEARANCE FOR FAN SHAFT AND COIL REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2. VERIFY SERVICE CLEARANCE FOR AIR FILTER REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
3. SHEET METAL PLENUM. FULL SIZE OF UNIT RETURN AIR OPENING, LENGTH AS REQUIRED FOR ALL DUCT CONNECTIONS SHOWN.
4. ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO EXISTING FLOOR DRAIN LOCATED IN THIS ROOM.
5. VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
6. NEW AIR HANDLING SHALL BE INSTALLED ON EXISTING CONCRETE PAD. EXTEND AS REQUIRED FOR NEW UNIT.
7. EXISTING EQUIPMENT TO REMAIN AND BE REUSED.
8. PROVIDE 4" THICK CONCRETE HOUSEKEEPING PAD.
9. ROUTE REFRIGERANT LINES UP TP AHU-PE-1 ON MECHANICAL MEZZANINE. SIZE LINE PER MANUFACTURER'S RECOMMENDATIONS
10. INTERLOCK EXISTING EXHAUST FAN WITH NEW AIR HANDLING UNIT.

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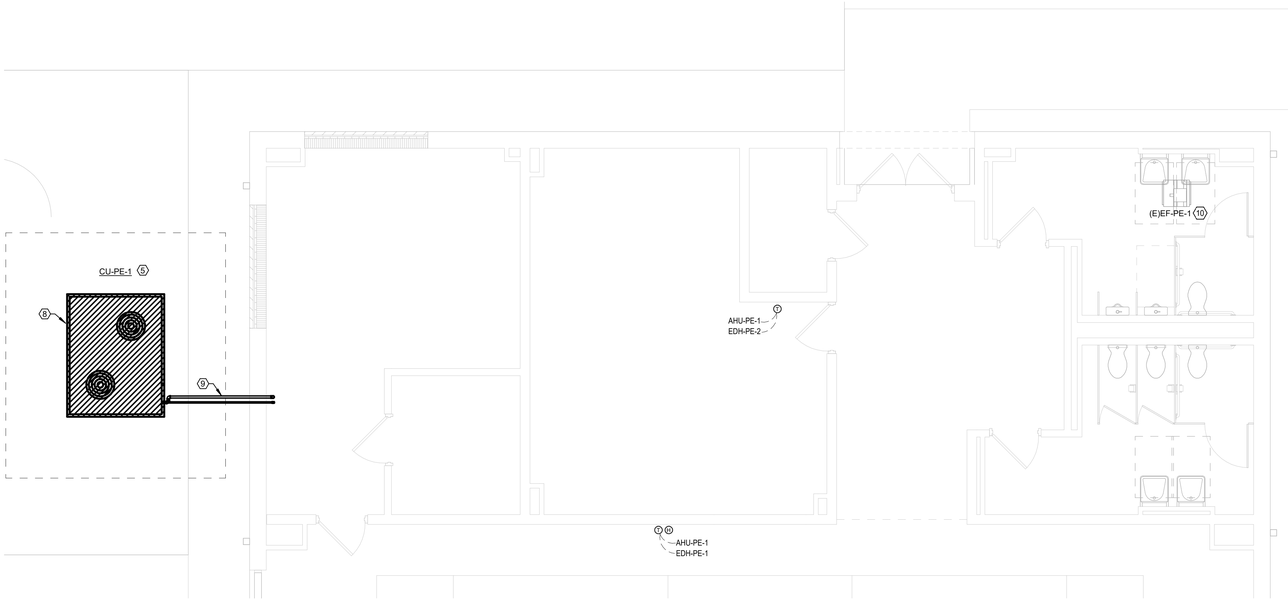
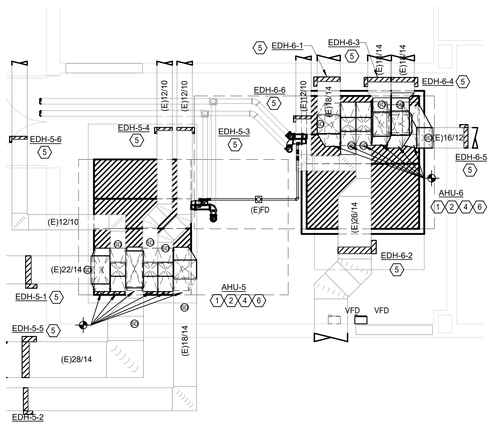
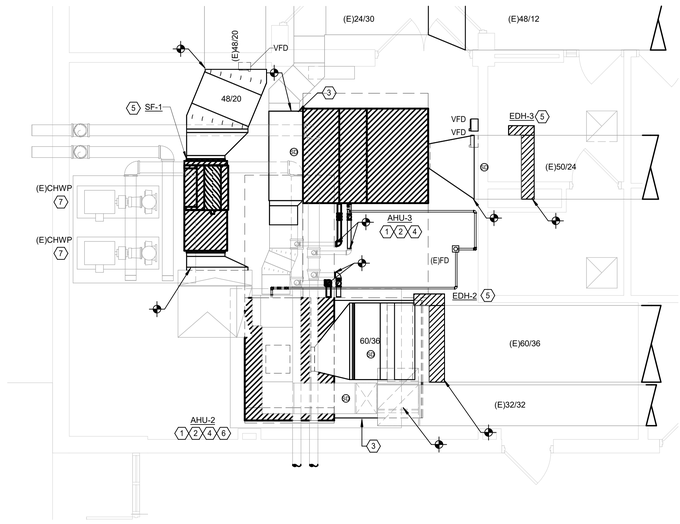


3 MECHANICAL ENLARGED PLAN - KLENK - GYM MECH
Scale: 1/4" = 1'-0"



2 MECHANICAL ENLARGED PLAN - KLENK - MECH 171
Scale: 1/4" = 1'-0"



1 MECHANICAL ENLARGED PLAN - KLENK - MECH 101
Scale: 1/4" = 1'-0"

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01-27-2026

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SHEET TITLE
MECHANICAL ENLARGED PLAN - LEVEL 1 - KLENK

SHEET NO.
M43.01

KISD 2025 FRP

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GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM EOISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

KEYED NOTES:

1. VERIFY SERVICE CLEARANCE FOR FAN SHAFT AND COIL REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2. VERIFY SERVICE CLEARANCE FOR AIR FILTER REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
3. SHEET METAL PLENUM, FULL SIZE OF UNIT RETURN AIR OPENING, LENGTH AS REQUIRED FOR ALL DUCT CONNECTIONS SHOWN.
4. ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO EXISTING FLOOR DRAIN LOCATED IN THIS ROOM.
5. VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
6. NEW AIR HANDLING SHALL BE INSTALLED ON EXISTING CONCRETE PAD. EXTEND AS REQUIRED FOR NEW UNIT.
7. EXISTING EQUIPMENT TO REMAIN AND BE REUSED
8. ROUTE REFRIGERANT LINES TO ASSOCIATED AIR COOLED CONDENSING UNIT ON ROOF. SIZE PER MANUFACTURERS RECOMMENDATIONS.
9. CONNECT NEW VFD TO EXISTING FIRE ALARM WIRING, RECOMMISON FIRE ALARM SYSTEM TO ENSURE AHU SHUTS DOWN WHEN SIGNALED BY THE FIRE ALARM SYSTEM.
10. ADD NEW NETWORK CARD TO EXISTING BMCS PANEL.

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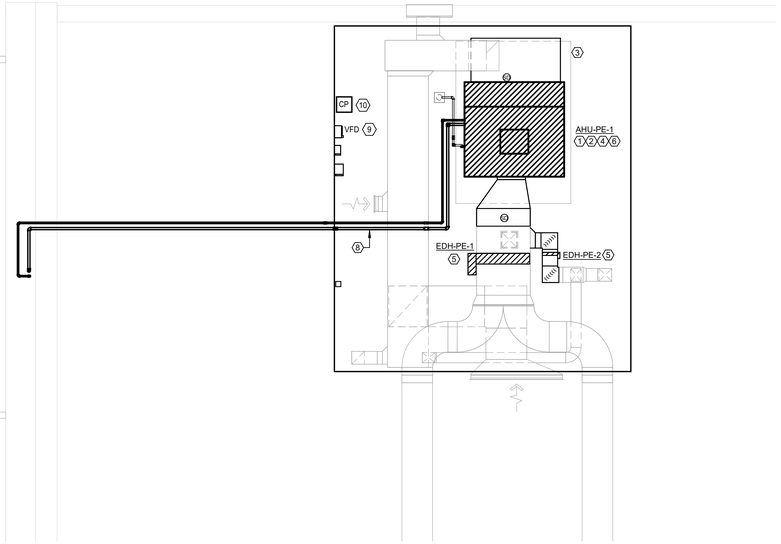
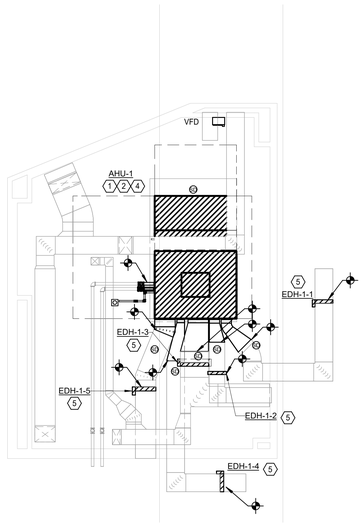
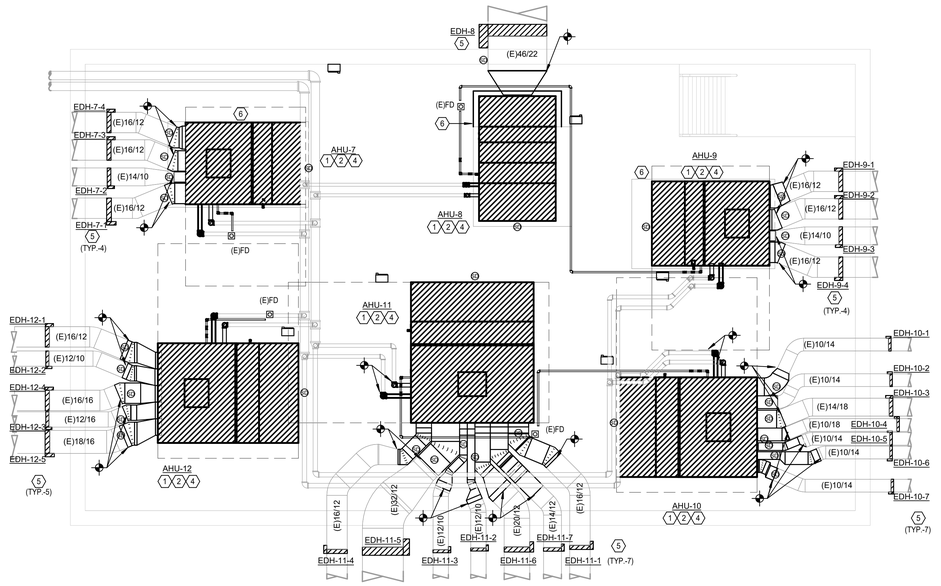


4 MECHANICAL ENLARGED PLAN - LEVEL 2 - KLENK - KLENK MECH 415 SF
Scale: 1/4" = 1'-0"



2 MECHANICAL ENLARGED PLAN - LEVEL 2 - KLENK - KLENK MECH ROOM
Scale: 1/4" = 1'-0"



1 MECHANICAL ENLARGED PLAN - LEVEL 2 - KLENK - KLENK MEZZANINE ROOM
Scale: 1/4" = 1'-0"

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MECHANICAL ENLARGED PLAN - LEVEL 2 - KLENK

SHEET NO.
M43.02

KISD 2025 FRP

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AHU ZONES

ZONE NUMBER	LOCATION	SUPPLY CFM
Z-1-1	EXISTING ROOM	680
Z-1-2	EXISTING ROOM	300
Z-1-3	EXISTING ROOM	2,050
Z-1-4	EXISTING ROOM	1,020
Z-1-5	EXISTING ROOM	1,220
AHU-1		5,270
Z-5-1	EXISTING ROOM	2,500
Z-5-2	EXISTING ROOM	1,610
Z-5-3	EXISTING ROOM	530
Z-5-4	EXISTING ROOM	630
Z-5-5	EXISTING ROOM	2,620
Z-5-6	EXISTING ROOM	570
AHU-5		8,460
Z-6-1	EXISTING ROOM	530
Z-6-2	EXISTING ROOM	2,620
Z-6-3	EXISTING ROOM	1,300
Z-6-4	EXISTING ROOM	1,150
Z-6-5	EXISTING ROOM	1,160
Z-6-6	EXISTING ROOM	1,520
AHU-6		8,280
Z-7-1	EXISTING ROOM	1,150
Z-7-2	EXISTING ROOM	640
Z-7-3	EXISTING ROOM	1,105
Z-7-4	EXISTING ROOM	1,520
AHU-7		4,415
Z-9-1	EXISTING ROOM	1,520
Z-9-2	EXISTING ROOM	1,160
Z-9-3	EXISTING ROOM	640
Z-9-4	EXISTING ROOM	1,150
AHU-9		4,470
Z-10-1	EXISTING ROOM	1,400
Z-10-2	EXISTING ROOM	860
Z-10-3	EXISTING ROOM	1,700
Z-10-4	EXISTING ROOM	1,100
Z-10-5	EXISTING ROOM	700
Z-10-6	EXISTING ROOM	700
Z-10-7	EXISTING ROOM	800
AHU-10		7,260
Z-11-1	EXISTING ROOM	1,355
Z-11-2	EXISTING ROOM	625
Z-11-3	EXISTING ROOM	625
Z-11-4	EXISTING ROOM	1,355
Z-11-5	EXISTING ROOM	2,750
Z-11-6	EXISTING ROOM	1,650
Z-11-7	EXISTING ROOM	950
AHU-11		9,310
Z-12-1	EXISTING ROOM	1,325
Z-12-2	EXISTING ROOM	620
Z-12-3	EXISTING ROOM	1,250
Z-12-4	EXISTING ROOM	1,655
Z-12-5	EXISTING ROOM	2,050
AHU-12		6,900

MULTI-ZONE AIR HANDLING UNIT

MARK	FAN							COOLING							REMARKS
								AIR TEMPERATURE (°F)				WATER			
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C)	HORSE POWER	CURRENT CHARAC. V	PH	F	ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	LEAVING WET BULB	ENTERING TEMP (°F)	LEAVING TEMP (°F)	GPM	PRESSURE DROP (FT.)	PIPE SIZE TO COIL (IN.)	
AHU-1	5,270	750	0.95	7.5	480	3	60	77.9	65.0	53.0	52.5	45	55	39.4	15.0	2-1/2"	(1,2,4,5,6,7)
AHU-5	8,460	860	0.75	10.0	480	3	60	77.2	64.4	55.0	54.0	45	55	65.1	15.0	3"	(1,2,3,5,6,8)
AHU-6	8,280	850	0.75	10.0	480	3	60	77.2	64.4	55.0	54.0	45	55	60.8	15.0	2-1/2"	(1,2,3,5,6,8)
AHU-7	4,415	560	0.70	7.5	480	3	60	77.8	64.9	55.0	54.5	45	55	36.2	15.0	2"	(1,2,4,5,6,9)
AHU-9	4,470	545	0.70	7.5	480	3	60	77.7	64.8	55.0	54.5	45	55	35.9	15.0	2"	(1,2,4,5,6,9)
AHU-10	7,260	1,050	0.75	10.0	480	3	60	78.1	65.1	52.5	52.0	45	55	67.7	15.0	3"	(1,2,4,5,6,9)
AHU-11	9,310	1,050	0.75	15.0	480	3	60	77.5	64.6	52.5	52.0	45	55	89.4	15.0	3"	(1,2,4,5,6,9)
AHU-12	6,900	1,350	0.75	10.0	480	3	60	79.4	66.1	52.5	52.0	45	55	68.2	15.0	3"	(1,2,4,5,6,9)

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

UNIT SHALL FIT WITHIN EXISTING AVAILABLE SPACE. MANUFACTURER SHALL FIELD VERIFY PRIOR TO ORDERING. PROVIDE SHIPPING SPLITS AS REQUIRED.

REMARKS:
1. VELOCITY NOT TO EXCEED 500 FPM ON COOLING COIL.
2. HORIZONTAL BLOW THRU MULTIZONE UNIT WITH DIRECT DRIVE FAN AND VARIABLE FREQUENCY DRIVE.
3. TOP DISCHARGE.
4. FRONT DISCHARGE.
5. LOW VELOCITY FLAT FILTER SECTION WITH TOP INLET.
6. HEATING BY ELECTRIC DUCT HEATERS.
7. UNIT HEIGHT MUST NOT EXCEED 66".
8. UNIT HEIGHT MUST NOT EXCEED 76".
9. UNIT HEIGHT MUST NOT EXCEED 60".

AIR HANDLING UNIT

MARK	FAN							COOLING								REMARKS
								AIR TEMPERATURE (°F)				WATER				
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C)	HORSE POWER	CURRENT CHARAC. V	PH	F	ENTERING DRY BULB	ENTERING WET BULB	LEAVING DRY BULB	LEAVING WET BULB	ENTERING TEMP (°F)	LEAVING TEMP (°F)	GPM	PRESSURE DROP (FT.)	PIPE SIZE TO COIL	
AHU-2	12,245	2,400	0.75	20.0	480	3	60	79.4	68.1	55.0	54.0	45.0	57.0	100.7	15.0	3"	(1,3,4,7,8,9,10)
AHU-3	6,660	450	0.60	10.0	480	3	60	78.0	67.0	55.0	54.5	45.0	57.0	35.5	15.0	2"	(1,2,4,6,8,9,10)
AHU-8	5,450	1,200	0.60	10.0	480	3	60	79.9	66.6	55.0	54.5	45.0	57.0	49.0	15.0	2-1/2"	(1,2,4,6,8,9,10,11)

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.
3. UNIT SHALL FIT WITHIN EXISTING AVAILABLE SPACE. MANUFACTURER SHALL FIELD VERIFY PRIOR TO ORDERING. PROVIDE SHIPPING SPLITS AS REQUIRED.

REMARKS:
1. VELOCITY NOT TO EXCEED 500 FPM ON COOLING COIL.
2. HORIZONTAL DRAW THROUGH UNIT WITH VARIABLE FREQUENCY DRIVE..
3. VERTICAL DRAW THROUGH UNIT WITH VARIABLE FREQUENCY DRIVE..
4. DIRECT DRIVE FAN.
5. TOP DISCHARGE.
6. FRONT DISCHARGE.
7. REAR DISCHARGE.
8. CONSTANT VOLUME UNIT.
9. FLAT FILTER SECTION
10. HEATING BY ELECTRIC DUCT HEATERS.
11. UNIT HEIGHT MUST NOT EXCEED 60".

ELECTRIC DUCT HEATER

MARK	CFM	ENTERING AIR TEMP (°F)	MINIMUM CAPACITY (BTUH)	KW	PRESSURE DROP (IN. W.G.)	NUMBER OF STAGES	CURRENT V	P	F	REMARKS
EDH-1-1	625	60	14,175	4	0.25	SCR	277	1	60	(1)
EDH-1-2	260	60	5,616	2	0.25	SCR	277	1	60	(1)
EDH-1-3	1,775	60	36,423	11	0.25	SCR	480	3	60	(1)
EDH-1-4	885	60	23,895	7	0.25	SCR	480	3	60	(1)
EDH-1-5	1,020	60	22,032	6	0.25	SCR	480	3	60	(1)
EDH-2	12,245	60	242,010	71	0.25	SCR	480	3	60	(1)
EDH-3	6,660	60	119,760	35	0.25	SCR	480	3	60	(1)
EDH-5-1	2,500	60	43,200	13	0.25	SCR	480	3	60	(1)
EDH-5-2	1,610	60	41,036	12	0.25	SCR	480	3	60	(1)
EDH-5-3	530	60	12,135	4	0.25	SCR	277	1	60	(1)
EDH-5-4	630	60	15,649	5	0.25	SCR	277	1	60	(1)
EDH-5-5	2,620	60	52,914	16	0.25	SCR	480	3	60	(1)
EDH-5-6	570	60	10,465	3	0.25	SCR	277	1	60	(1)
EDH-6-1	530	60	11,448	3	0.25	SCR	277	1	60	(1)
EDH-6-2	2,620	60	54,611	16	0.25	SCR	480	3	60	(1)
EDH-6-3	1,300	60	29,484	9	0.25	SCR	480	3	60	(1)
EDH-6-4	1,150	60	31,050	9	0.25	SCR	480	3	60	(1)
EDH-6-5	1,160	60	22,237	7	0.25	SCR	480	3	60	(1)
EDH-6-6	1,520	60	31,190	9	0.25	SCR	480	3	60	(1)
EDH-7-1	1,150	60	25,709	8	0.25	SCR	480	3	60	(1)
EDH-7-2	640	60	15,621	5	0.25	SCR	277	1	60	(1)
EDH-7-3	1,105	60	29,238	9	0.25	SCR	480	3	60	(1)
EDH-7-4	1,520	60	31,190	9	0.25	SCR	480	3	60	(1)
EDH-8	5,450	60	120,663	35	0.25	SCR	480	3	60	(1)
EDH-9-1	1,520	60	30,714	9	0.25	SCR	480	3	60	(1)
EDH-9-2	1,160	60	22,300	7	0.25	SCR	480	3	60	(1)
EDH-9-3	640	60	15,621	5	0.25	SCR	277	1	60	(1)
EDH-9-4	1,150	60	29,435	9	0.25	SCR	480	3	60	(1)
EDH-10-1	1,230	63	32,479	10	0.25	SCR	480	3	60	(1)
EDH-10-2	720	63	18,896	6	0.25	SCR	277	1	60	(1)
EDH-10-3	1,580	63	32,422	10	0.25	SCR	480	3	60	(1)
EDH-10-4	1,025	63	29,114	9	0.25	SCR	480	3	60	(1)
EDH-10-5	700	63	13,835	4	0.25	SCR	277	1	60	(1)
EDH-10-6	700	63	13,835	4	0.25	SCR	277	1	60	(1)
EDH-10-7	800	63	17,107	5	0.25	SCR	277	1	60	(1)
EDH-11-1	1,200	64	30,715	9	0.25	SCR	480	3	60	(1)
EDH-11-2	600	64	15,358	5	0.25	SCR	277	1	60	(1)
EDH-11-3	600	64	15,358	5	0.25	SCR	277	1	60	(1)
EDH-11-4	1,200	64	30,715	9	0.25	SCR	480	3	60	(1)
EDH-11-5	2,590	64	49,510	15	0.25	SCR	480	3	60	(1)
EDH-11-6	1,560	64	30,832	9	0.25	SCR	480	3	60	(1)
EDH-11-7	910	64	18,870	6	0.25	SCR	277	1	60	(1)
EDH-12-1	1,220	60	36,234	11	0.25	SCR	480	3	60	(1)
EDH-12-2	570	60	17,237	5	0.25	SCR	277	1	60	(1)
EDH-12-3	1,170	60	34,244	10	0.25	SCR	480	3	60	(1)
EDH-12-4	1,550	60	36,828	11	0.25	SCR	480	3	60	(1)
EDH-12-5	1,910	60	44,556	13	0.25	SCR	480	3	60	(1)
EDH-PE-1	7,575	67	147,258	43	0.25	SCR	480	3	60	(1)
EDH-PE-2	725	67	14,094	4	0.25	SCR	480	3	60	(1)

REMARKS
1. PROVIDE WITH FLANGE FOR MOUNTING IN DUCTWORK.

DX-AIR HANDLING UNIT

MARK	FAN					COOLING					REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHARAC.	AIR TEMPERATURE (°F) ENTERING DRY BULB	ENTERING WET BULB	MIN. TOTAL CAPACITY (BTUH)	MIN. SENSIBLE CAPACITY (BTUH)	MINIMUM EER/ SEER	NUMBER OF STAGES	
AHU-PE-1	8,300	1,200	0.75	10	460/3/60	78.2	65.2	336,150	234,860	10.0/-	2	(1,2,3,4,5,6,7)

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. FACE VELOCITY ACROSS COOLING COIL SHALL NOT EXCEED 500 FPM.
2. CONSTANT VOLUME UNIT WITH VARIABLE FREQUENCY DRIVE.
3. PROVIDE VERTICAL FRONT DISCHARGE UNIT.
4. PROVIDE ANGLE FILTER SECTION.
5. HEATING BY ELECTRIC DUCT HEATERS.
6. UNIT HEIGHT MUST NOT EXCEED 100"
7. PROVIDE WITH FACTORY A2L REFRIGERANT LEAK DETECTION SYSTEM CERTIFIED TO UL 60335-2-40 AS SPECIFIED.

AIR COOLED CONDENSING UNIT

MARK	MIN. TOTAL CAPACITY (BTUH)	OUTDOOR AIR TEMP (°F)	MINIMUM EER/ SEER	NUMBER OF STAGES	CURRENT CHARAC.	RELATED UNIT MARK	REMARKS
CU-PE-1	336,150	95	10.0/-	2	460/3/60	AHU-PE-1	(1,2,3,4)

GENERAL NOTES:
1. MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 24 INCHES ON NON-SERVICE SIDES AND 36 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE. FOR CONDENSER AIR FLOW AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. DISCONNECT SWITCH PROVIDED AND INSTALLED BY ELECTRICIAN.
2. PROVIDE WITH LOW AMBIENT KIT.
3. REFRIGERANT LINES TO BE SIZED PER MANUFACTURER'S REQUIREMENTS.
4. PROVIDE WITH FACTORY A2L REFRIGERANT LEAK DETECTION SYSTEM CERTIFIED TO UL 60335-2-40 AS SPECIFIED.

FAN

MARK	LOCATION	CFM	MAXIMUM RPM	EXT. STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHARAC.	LOCALLY SWITCHED BY	INTERLOCKED WITH	FAN TYPE	MANUFACTURER	MODEL NUMBER	REMARKS
SF-1	MECH. ROOM 1117	5,280	1,200	0.75	3	460/3/60	-	(E)F-3	INLINE	COOK	SQN	(1,2,3,4)

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:
1. INLINE DIRECT DRIVE SUPPLY FAN WITH 1" ALUMINUM WASHABLE FILTER.
2. REFER MANUFACTURER FOR INSTALLATION GUIDE.
3. PROVIDE WITH VARIABLE FREQUENCY DRIVE.
4. SUSPEND UNIT WITH FOUR THREADED HANGER RODS ATTACHED TO TWO UNISTRUT RUNNERS SECURED TO STRUCTURE. PROVIDE SPRING ISOLATION. REFER TO MANUFACTURER FOR MORE DETAILS.

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01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

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Checked By: VP
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MECHANICAL SCHEDULES - KLENK

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KISD 2025 FRP

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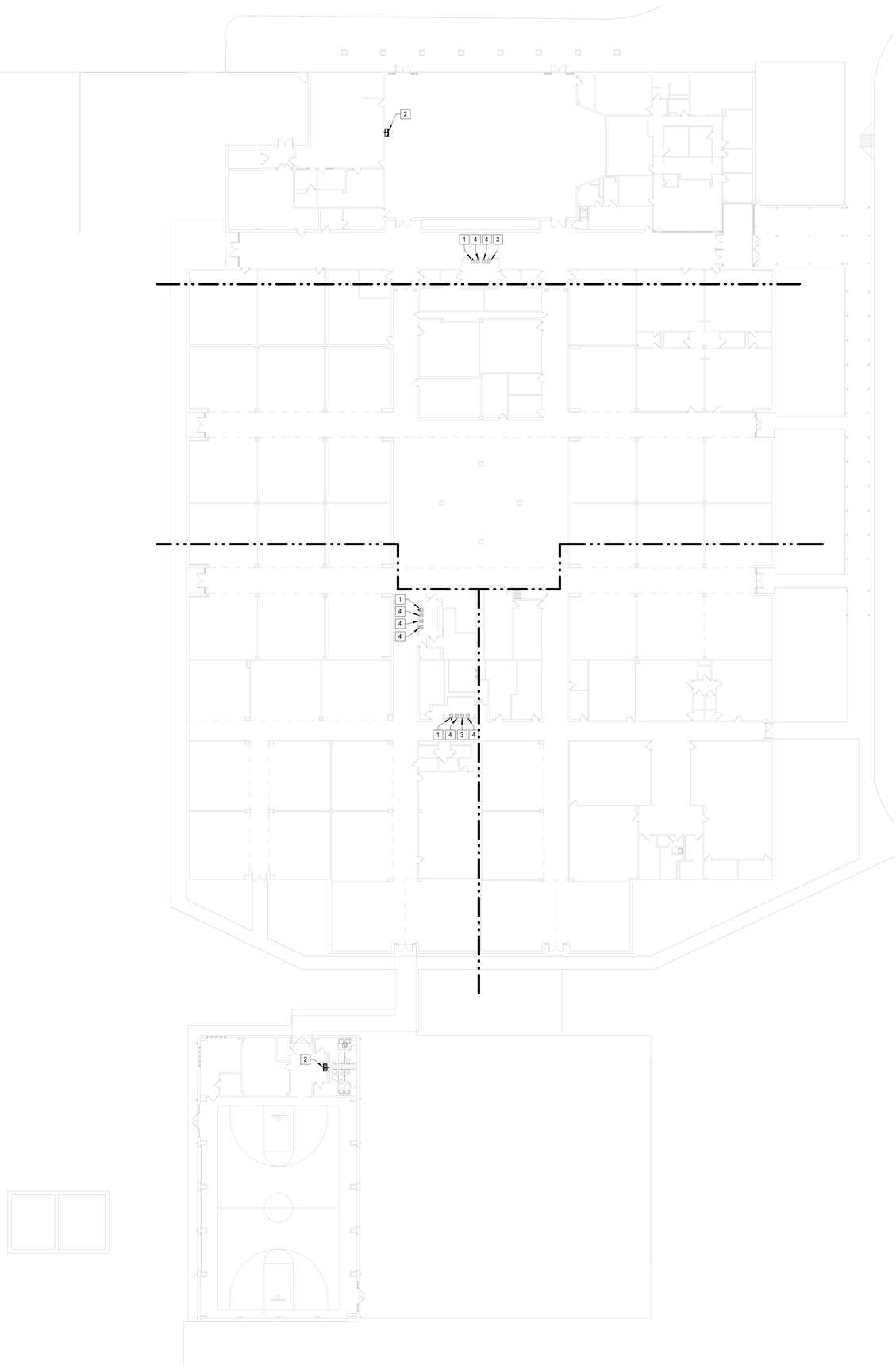


1 **PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 1 - KLENK**
Scale: 1" = 20'-0"

PLUMBING GENERAL NOTES

1. CONTRACT DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. CONTRACTOR TO VERIFY AT SITE EXACT LOCATIONS, AND SIZES OF EXISTING PIPING. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
2. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK.
3. PLUMBING FIXTURES/EQUIPMENT SHOWN ON PLAN THAT ARE NOT IDENTIFIED AND DO NOT HAVE A FIXTURE DESIGNATION ARE EXISTING AND ARE TO REMAIN.
4. ANY OTHER ITEMS NOT REFERENCED WHICH ARE LOCATED IN THE DEMOLISHED SPACE (VENT, WASTE, WATER HEATER, PLUMBING FIXTURE, ETC.) THAT ARE IDENTIFIED OR DISCOVERED DURING DEMOLITION WHICH WILL NOT BE USED FOR THIS PROJECT, SHALL BE DEMOLISHED BACK TO THE MAIN SOURCE OR RISER. AND DEVICES SHALL BE RETAINED TO THE OWNER STORAGE AS DIRECTED BY THE ARCHITECT/OWNER.
5. OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL PLUMBING FIXTURES/ EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT NOT LIMITED TO PUMPS, HEATERS, AND STAINLESS STEEL SINKS. CONTRACTOR TO NOTIFY DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.

PLUMBING KEYED NOTES

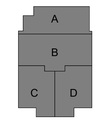
1 EXISTING SINGLE ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO BE REMOVED AND REPLACED WITH A NEW ONE. VERIFY WITH THE DISTRICT WHICH UNIT IS TO BE REPLACED. MAINTAIN EXISTING UTILITIES/ROUGH-IN TO SERVE NEW FIXTURE(S). FIELD VERIFY THE EXACT LOCATION, SIZE, AND CONDITION OF EXISTING PIPING. REPAIR EXISTING PIPING IF NEEDED AND PREPARE FOR NEW CONNECTION.

2 EXISTING BI-LEVEL ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO BE REMOVED AND REPLACED WITH A NEW ONE. MAINTAIN EXISTING UTILITIES/ROUGH-IN TO SERVE NEW FIXTURE(S). FIELD VERIFY THE EXACT LOCATION, SIZE, AND CONDITION OF EXISTING PIPING. REPAIR EXISTING PIPING IF NEEDED AND PREPARE FOR NEW CONNECTION.

3 EXISTING RETROFITTED ELECTRIC DRINKING FOUNTAIN WITH BOTTLE FILLING STATION TO REMAIN.

4 EXISTING SINGLE ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO REMAIN.

KEY PLAN



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01-27-2026

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REVISIONS

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SHEET TITLE
PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 1 - KLENK

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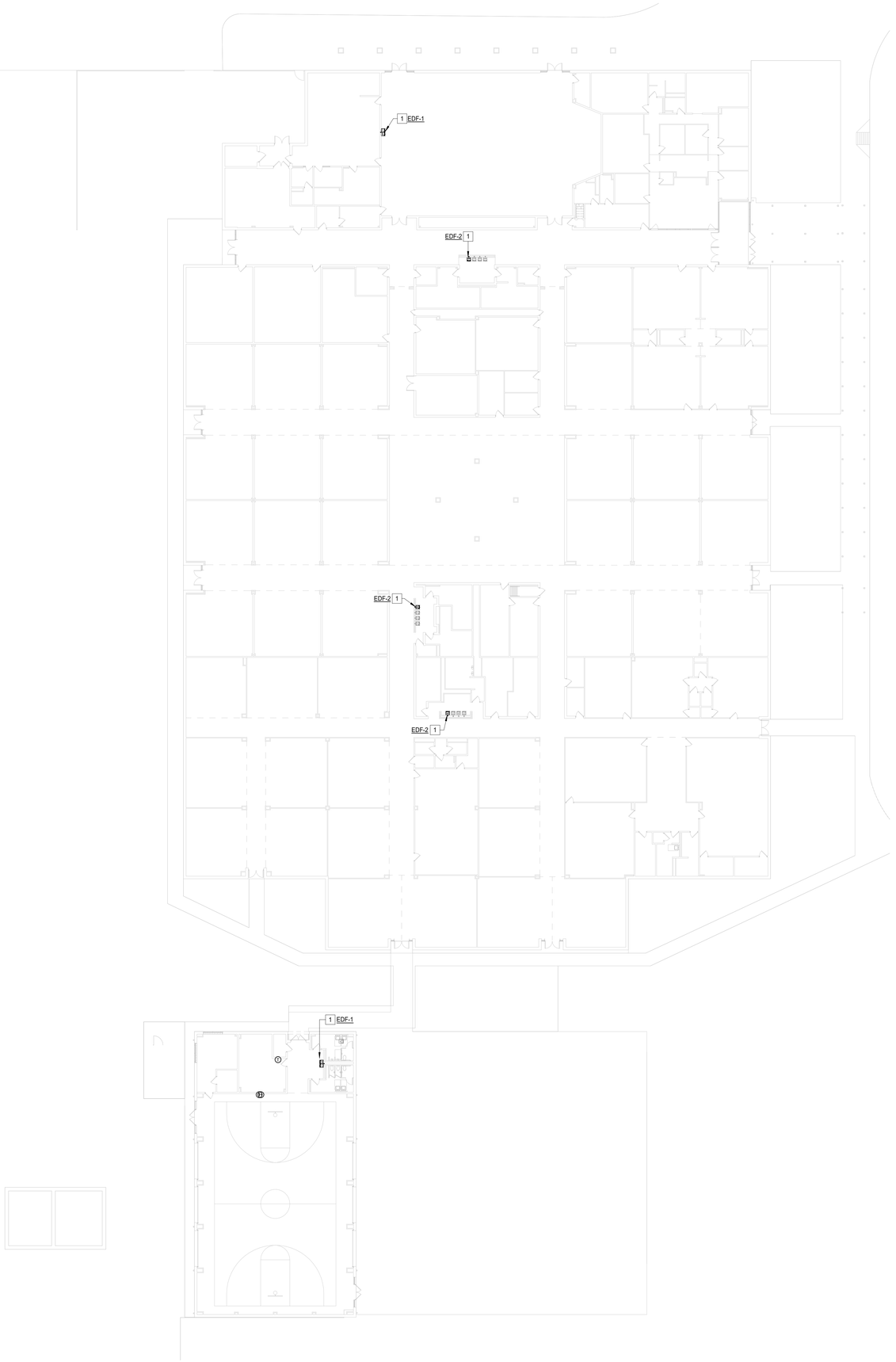

1 **PLUMBING COMPOSITE PLAN - LEVEL 1 - KLENK**
Scale: 1" = 20'-0"

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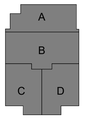
PLUMBING GENERAL NOTES

1. CONTRACT DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. CONTRACTOR TO VERIFY AT SITE EXACT LOCATIONS, AND SIZES OF EXISTING PIPING. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
2. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK.
3. PLUMBING FIXTURES/EQUIPMENT SHOWN ON PLAN THAT ARE NOT IDENTIFIED AND DO NOT HAVE A FIXTURE DESIGNATION ARE EXISTING AND ARE TO REMAIN.
4. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.
5. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.
6. REFER TO PLUMBING DETAILS AND SCHEDULES SHEET(S).

PLUMBING KEYED NOTES

1 PROVIDE AND INSTALL NEW PLUMBING FIXTURE(S) AS INDICATED. CONNECT TO EXISTING UTILITIES, CW, SANITARY AND VENT.



KEY PLAN

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PLUMBING COMPOSITE PLAN - LEVEL 1 - KLENK

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PLUMBING GENERAL NOTES

1. WITHIN THE EXISTING BUILDING, EXISTING WATER, WASTE AND VENT SERVICES ARE TO BE MODIFIED AS REQUIRED AND REUSED FOR THE INSTALLATION OF NEW AND/OR RELOCATED PLUMBING FIXTURES. REFER TO PLUMBING FLOOR PLANS FOR POINTS OF CONNECTION.
2. WITHIN THE EXISTING BUILDING, SAWCUT AND REMOVE EXISTING FLOOR SLAB AS REQUIRED TO PROVIDE NEW AND/OR RELOCATED PLUMBING FIXTURES, CLEANOUTS, AND UNDERSLAB WASTE AND VENT PIPING. PATCH AND REFINISH FLOOR TO MATCH EXISTING.
3. IN AREAS WHERE THE FLOOR SLAB IS REMOVED, CONTRACTOR SHALL ALSO REMOVE UNDERSLAB WASTE AND VENT PIPING WHICH SERVES FIXTURES DESIGNATED FOR REMOVAL. PRIOR TO ANY REMOVAL, FIELD VERIFY THAT LINES TO BE REMOVED DO NOT SERVE ANY EXISTING FIXTURES TO REMAIN OR NEW FIXTURES TO BE INSTALLED.
4. IN AREAS WHERE THE FLOOR SLAB IS NOT REMOVED, CONTRACTOR SHALL ABANDON IN PLACE ANY UNDERSLAB WASTE AND VENT PIPING NO LONGER NEEDED, UNLESS THE PIPING MUST BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION. IF NEW WORK DOES NOT NECESSITATE THEIR REMOVAL, CUT AND PLUG SUCH LINES BELOW SLAB, AND PATCH FLOOR TO MATCH EXISTING.
5. FIELD VERIFY EXACT LOCATION, SIZE, DEPTH, DIRECTION OF FLOW, CAPACITY, PIPE MATERIAL AND CONDITION OF EXISTING WASTE PIPING PRIOR TO BEGINNING CONSTRUCTION. ENSURE THAT PROPER CONNECTIONS TO AND EXTENSION OF SUCH UTILITIES CAN BE MADE.
6. WASTE LINES TO BE RE-USED OR RECONNECTED TO SHALL BE THOROUGHLY RODDED OUT AND FLUSHED TO ENSURE THEY ARE FREE FROM BLOCKAGES.
7. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.
8. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT. SHOULD A CONFLICT OCCUR THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.
9. CONTRACTOR TO COORDINATE ALL REMODEL WORK WITH THE WORK OF OTHER TRADES TO AVOID CONFLICTS AND TO MINIMIZE INTERRUPTION OF SERVICES.
10. COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST ARCHITECTURAL DRAWINGS AND SPECIFICATIONS PRIOR TO ANY ROUGH-INS.
11. DO NOT ROUGH-IN FROM THESE DRAWINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS.
12. CONTRACTOR TO FIELD VERIFY AS NECESSARY THE EXACT ROUTING AND SIZES OF ALL PIPING.
13. ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE, INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
14. THE PROPER INSTALLATION OF NEW FIXTURES AND THE PROPER CONTINUED OPERATION OF EXISTING FIXTURES TO REMAIN SHALL DETERMINE THE EXTENT AND NATURE OF PLUMBING REMODEL WORK.
15. EACH VENT SHALL TERMINATE VERTICALLY NOT LESS THAN 6" ABOVE ROOF, MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN VENT TERMINALS THROUGH ROOF AND ALL FRESH AIR INTAKES, AND A MINIMUM 5'-0" FROM ANY EXTERIOR WALL.
16. PRIOR TO BEGINNING CONSTRUCTION, COORDINATE BUILDING BACKFLOW PREVENTION REQUIREMENTS WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PROVIDE AS DIRECTED.

SHOCK ARRESTOR SCHEDULE

P.D.I. SYMBOLS:	FIXTURE UNITS:	THREADED CONNECTION	CERTIFICATION
A	1 - 11	1/2"	ASSE 1010
B	12 - 32	3/4"	ASSE 1010
C	33 - 60	1"	ASSE 1010
D	61 - 113	1"	ASSE 1010
E	114 - 154	1"	ASSE 1010
F	155 - 330	1"	ASSE 1010

PLUMBING FIXTURE SCHEDULE

TYPE: EDF-1 (T.A.S. COMPLIANT) - INTERIOR WITH BOTTLE FILLER
DESCRIPTION: WALL HUNG, BARRIER FREE, SELF-CONTAINED, VANDAL RESISTANT BOTTLE FILLING STATION AND BI-LEVEL ADA COOLER, NON-FILTERED REFRIGERATED STAINLESS. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50F DRINKING WATER, BASED ON 80F INLET WATER AND 90F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE GREEN COUNTER, LAMINAR FLOW, REAL DRAIN, VANDAL RESISTANT. FURNISHED WITH VANDAL RESISTANT BUBBLER. ELECTRONIC BOTTLE FILLER BUTTON WITH MECHANICAL FRONT BUBBLER BUTTON ACTIVATION. PROVIDE CANE TOUCH APRON IN ALL STAINLESS STEEL ON ALL UNITS MOUNTED WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH.
HALSEY TAYLOR #HTHB-HVR8BLNF WITH APRON #98324C.
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE #8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE #403-BL-BFS.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: EDF-2 (T.A.S. COMPLIANT) - INTERIOR WITH BOTTLE FILLER
DESCRIPTION: WALL HUNG, BARRIER FREE, SELF-CONTAINED,VANDAL RESISTANT BOTTLE FILLING STATION AND SINGLE ADA COOLER, NON-FILTERED REFRIGERATED STAINLESS. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50F DRINKING WATER, BASED ON 80F INLET WATER AND 90F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE GREEN COUNTER, LAMINAR FLOW, REAL DRAIN, VANDAL RESISTANT. FURNISHED WITH VANDAL RESISTANT BUBBLER. ELECTRONIC BOTTLE FILLER BUTTON WITH MECHANICAL FRONT BUBBLER BUTTON ACTIVATION. PROVIDE CANE TOUCH APRON IN ALL STAINLESS STEEL ON ALL UNITS MOUNTED WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH.
HALSEY TAYLOR #HTHB-HVR8-NF WITH APRON #98324C.
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE #8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE #403-BFS.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

GENERAL NOTES

ALL LAVATORIES AND SINKS SHALL BE SUPPLIED WITH HOT AND COLD WATER (UNLESS NOTED TO BE COLD WATER ONLY) TO FAUCETS AS INDICATED ON PLANS AND FIXTURE SCHEDULE. PROVIDE CHROME PLATED BRASS SUPPLY STOPS WITH LOOSE KEYS AND WALL ESCUTCHEONS. PROVIDE CHROME PLATED FLEXIBLE RISERS OF SIZE REQUIRED TO PROPERLY CONNECT FIXTURES. PROVIDE 17 GAUGE CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON (UNLESS NOTED TO BE AN ACID WASTE FIXTURE). REFER TO FIXTURE SCHEDULE FOR MINIMUM SIZES OF PLUMBING FIXTURE ROUGH-INS.

INSULATION KITS AT ALL LAVATORIES AND SINKS REQUIRED TO BE T.A.S. ACCESSIBLE (MCGUIRE OR TRUEBRO). ALL SUCH FIXTURES AND FINAL INSTALLATIONS SHALL COMPLY WITH THE STATE ACCESSIBILITY STANDARDS REQUIREMENTS.

INSERT TRAP GUARDS AFTER FINAL RODDING OF DRAINS. INSTALL TRAP GUARD WITH CLEAR SILICONE CAULK FOR GAS-TIGHT SEAL. FOR DRAIN RODDING AFTER INSTALLATION. INSERT SEWER TAPE THROUGH LIGHTLY GREASED 1-1/2" PVC PIPE TO PROTECT TRAP GUARD.

PLUMBING PIPING LEGEND

SYMBOLS	DESCRIPTION
SAN	SANITARY OR WASTE PIPING ABOVE GRADE (SAN)
SAN	SANITARY OR WASTE PIPING BELOW GRADE (SAN)
GW	GREASE WASTE PIPING (GW)
GW	GREASE WASTE PIPING BELOW GRADE (GW)
SD	STORM DRAIN PIPING (SD)
SD	STORM DRAIN PIPING BELOW GRADE (GW)
SSD	SUB-SOIL DRAIN OR FOOTING DRAIN (SSD)
AW	ACID WASTE PIPING (AW)
AW	ACID WASTE PIPING BELOW GRADE (AW)
PD	PUMPED DISCHARGE (PD)
CD	CONDENSTATE DRAIN PIPING (CD)
D	CONDENSTATE - INDIRECT DRAIN PIPING (D)
	VENT PIPING (V)
CW	COLD WATER PIPING (CW)
HW	HOT WATER PIPING (HW)
HWR	HOT WATER RETURN PIPING (HWR)
SCW	SOFT COLD WATER PIPING (SCW)
CDW	CHILLED DRINKING WATER PIPING (CDW)
TP	TRAP PRIMER LINE (TP)
F	FIRE PROTECTION PIPING (F)
AS	AUTOMATIC SPRINKLER PIPING (AS)
GAS	NATURAL GAS PIPING (G)
GV	GAS VENT PIPING (GV)
AIR	COMPRESSED AIR PIPING (A)
	FLOW DIRECTIONAL ARROW
	SHUT-OFF VALVE
	BALANCING VALVE (BV)
SV	SOLENOID VALVE (SV)
	BALL VALVE (BV)
	BUTTERFLY VALVE
	LUBRICATED PACKED PLUG STOP STOP COCK (PC)
	HORIZONTAL SWING CHECK
	UNION
	HORIZONTAL SWING CHECK
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	REDUCED PRESSURE BACKFLOW PREVENTER (RPBFP)
	PIPING DOWN
	RISE OR DROP PIPING
	PIPING UP -OR- PIPING UP & DOWN
	CAP ON END OF PIPE
	CLEANOUT (WALL OR CEILING) (CO)
	FLOOR CLEANOUT (FCO)
	EXTERIOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO)
	TWO-WAY CLEANOUT (PROVIDE 18"x24"x4" CONCRETE PAD OUTSIDE)
	FIRE DEPARTMENT VALVE AT RISER
	FIRE HYDRANT
	FIRE DEPARTMENT CONNECTION
	PRESSURE REDUCING VALVE (PRV)
	BRANCH CONNECTION OUT OF TOP
	BRANCH CONNECTION OUT OF BOTTOM
	BRANCH CONNECTION OUT OF SIDE
	WYE & 1/8TH BEND BRANCH CONNECTION
	WYE BRANCH CONNECTION
	HOSE BIBB
	PRESSURE GAUGE WITH COCK
	THERMOMETER
	GAS PRESSURE REGULATOR
	TEST COCK
	GAS METER
	WALL HYDRANT
	VALVE IN RISE
	ASME TEMPERATURE & PRESSURE RELIEF VALVE
	VACUUM RELIEF VALVE
	ANGLE VALVE
	OS&Y VALVE
	ROOF DRAIN
1	REFER TO KEYED NOTE
FS	FLOW SWITCH
	FLOOR SINK (FS)
	FLOOR DRAIN (FD)
	FLOOR DRAIN WITH P-TRAP (FD)
	FLOOR DRAIN WITH P-TRAP AT 45° ANGLE (FD)
	HUB DRAIN (HD)
	ACCESS PANEL FOR TRAP PRIMER OR SHOCK ABSORBER
AP	ACCESS PANEL LOCATION SYMBOL
A	SHOCK ABSORBER
	AIR CHAMBER
(E)	EXISTING
(N)	NEW
N.C.	NORMALLY CLOSED
VTR	VENT THRU ROOF
B.F.F.	BELOW FINISHED FLOOR
A.F.F.	ABOVE FINISHED FLOOR
	NEW CONNECTION
IE=100.00'	INVERT ELEVATION
1	DELTA CHANGE SYMBOL
P 1	RISER FLAG

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	AA
Checked By:	EH
Drawn By:	AA

PROJECT NO.
25-0225.00

SHEET TITLE
PLUMBING SCHEDULES AND DETAILS - KLENK

SHEET NO.
P45.01

KISD 2025 FRP

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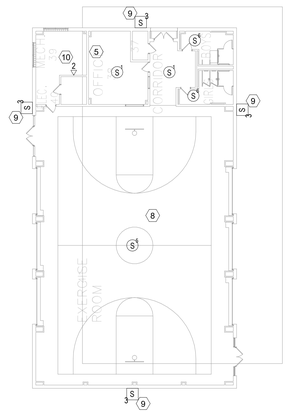

1 Klenk ES LEVEL ONE
SCALE: 1" = 20'-0"

TECHNOLOGY - GENERAL NOTES

1. EXISTING PA SYSTEM HEAD END, SPEAKERS, AND WIRING TO BE DEMOLISHED IN ENTIRETY.
2. SPEAKERS IN CLASSROOMS TO HAVE TALK-BACK FUNCTIONALITY AND SHALL BE IP- SPEAKERS. ONLY SPED CLASROOMS SHALL HAVE VOLUME CONTROLS AND CALL BUTTONS.
3. SPEAKERS IN NON-CLASSROOM ENVIRONMENTS SHALL BE ANALOG SPEAKERS, WITH ONLY OFFICES AND CONFERENCE ROOMS RECEIVING VOLUME CONTROLS.

TECHNOLOGY KEYNOTES

1. UTILIZE EXISTING CAT6 CABLE FOR NEW PA SYSTEM HEAD END.
2. DEMOLISH EXISTING PA SYSTEM HEAD END AT THIS LOCATION, INCLUDING 66-BLOCKS AND PLAYWOOD BACKBOARD. PATCH AND PAINT HOLES, AS NEEDED TO PROVIDE A FINISHED LOOK FOR THE WALL.
3. LOCATION OF NEW PA SYSTEM HEAD END.
4. RELOCATE EXISTING CAT6 DATA OUTLET FROM EXSITNG PA HEAD END TO THIS LOCATION.
5. PROVIDE AND INSTALL VALCOM IP GATEWAY, AS NEEDED, FOR CONNECTION OF ANALOG SPEAKERS TO PA SYSTEM. FOR EACH GATEWAY, ALSO PROVIDE AMPLIFIER, POWER SUPPLY AND BATTERY BACK-UP/UPS. PROVIDE NEW CAT6 CONNECTION TO OWNER NETWORK.
6. UTILIZE EXISTING BLUE CAT6 CABLE/DATA OUTLET (ABOVE CEILING) FOR NEW IP SPEAKER.
7. UTILIZE EXISTING CAT6 CABLE/DATA OUTLET (ABOVE CEILING) FOR NEW IP SPEAKER.
8. PROVIDE AND INSTALL PA OVERRIDE FOR LOCAL SOUND SYSTEM.
9. ESTIMATED SPEAKER LOCATION. PROVIDE AND INSTALL TO MATCH EXISTING QUANTITIES ON THE BUILDING.
10. PROVIDE AND INSTALL DUAL DATA OUTLET IN GYM MECHANICAL MEZZANINE, CONNECTED TO EXISTING SWITCH IN GYM OFFICE. COORDINATE EXACT LOCATION REQUIRED FOR DATA OUTLET WITH BAS CONTRACTOR.

ALTERNATES

1. CAMPUS PA SYSTEM HEAD END TO BE REPLACED AT ALL CAMPUSES. PROVIDE PRICING PER CAMPUS AS AN ALTERNATE TO REPLACE ALL SPEAKERS AND CABLING FOR THE FOLLOWING CAMPUSES: EILAND, KLENK, MCDOUGLE, AND NITSCH. PRICING SHOULD INCLUDE ALL GATEWAYS, AMPLIFIERS, POWER SUPPLIES, AND UPS REQUIRED TO CREATE A DISTRIBUTED ANALOG COMMON ZONE THROUGHOUT BUILDING CORIDORS AND COMMON AREAS. PER SHEET KEYNOTES SPEAKERS IN CLASSROOMS SHALL BE IP.
2. REPLACEMENT OF ENTIRE CAMPUS PA SYSTEM, INCLUDING SPEAKERS AND CABLING FOR KAISER ES SHALL BE INCLUDED IN BASE BID ALL COMMON ZONE SPEAKERS SHOULD BE DISTRIBUTD UTILIZING GATEWAYS, AMPLIFIERS, POWER SUPPLIES, AND UPS AS NEEDED. ALL CLASSROOMS SHALL UTILIZE IP SPEAKERS CONNECTED TO CATEGORY CABLING AS PER KEYNOTES ON PLANS.

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BICSI REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Brian C Porter
BICSI ID # 256657
EXPIRES 12-31-27

ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	Proj. Director
Project Architect:	VLK
Project Designer:	Designer
Drawn By:	Author

PROJECT NO.
25-0225.00

SHEET TITLE
TECHNOLOGY - KLENK LEVEL ONE

SHEET NO.
T103.1

KISD 2025 FRP

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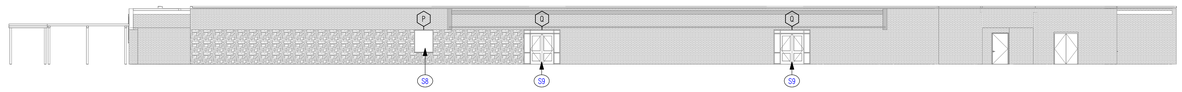
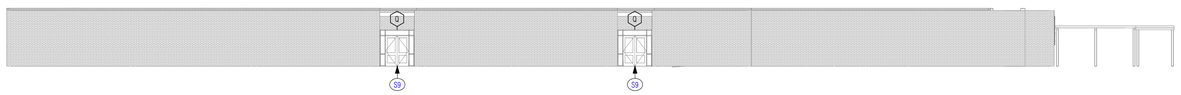


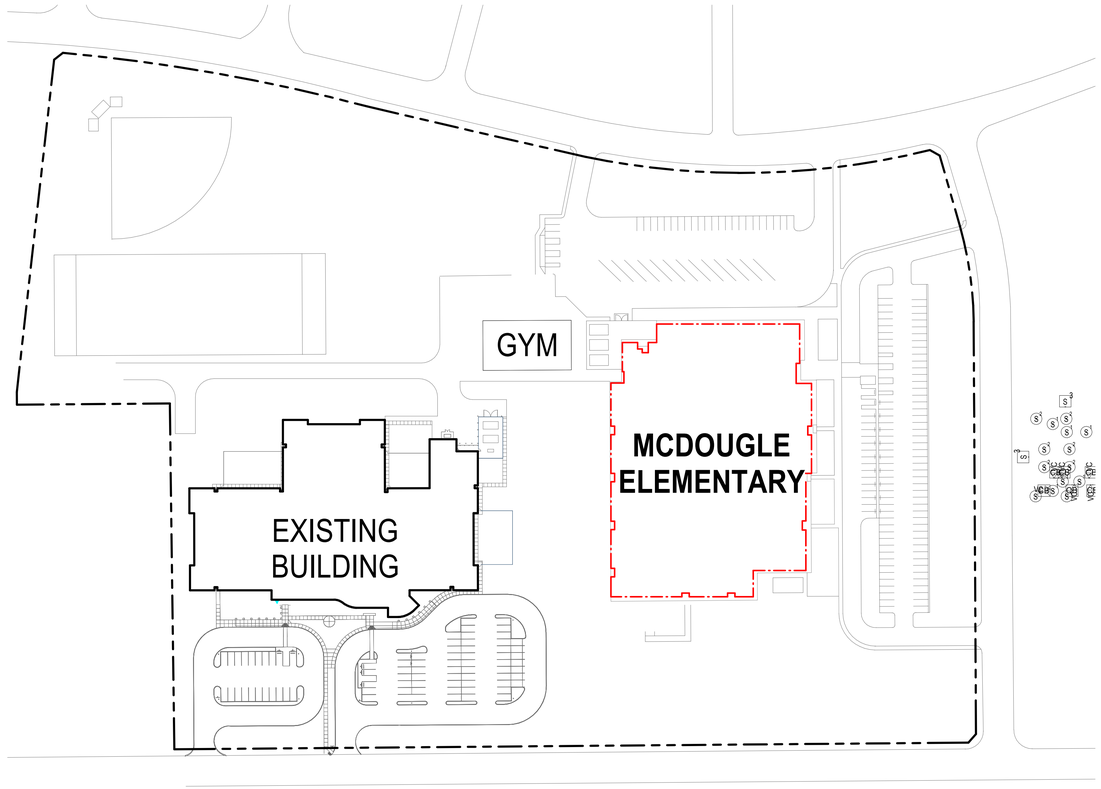
6 MCDOUGLE - NORTH ELEVATION
SCALE: 1/16" = 1'-0"



5 MCDOUGLE - SOUTH ELEVATION
SCALE: 1/16" = 1'-0"

4 MCDOUGLE - EAST ELEVATION
SCALE: 1/16" = 1'-0"

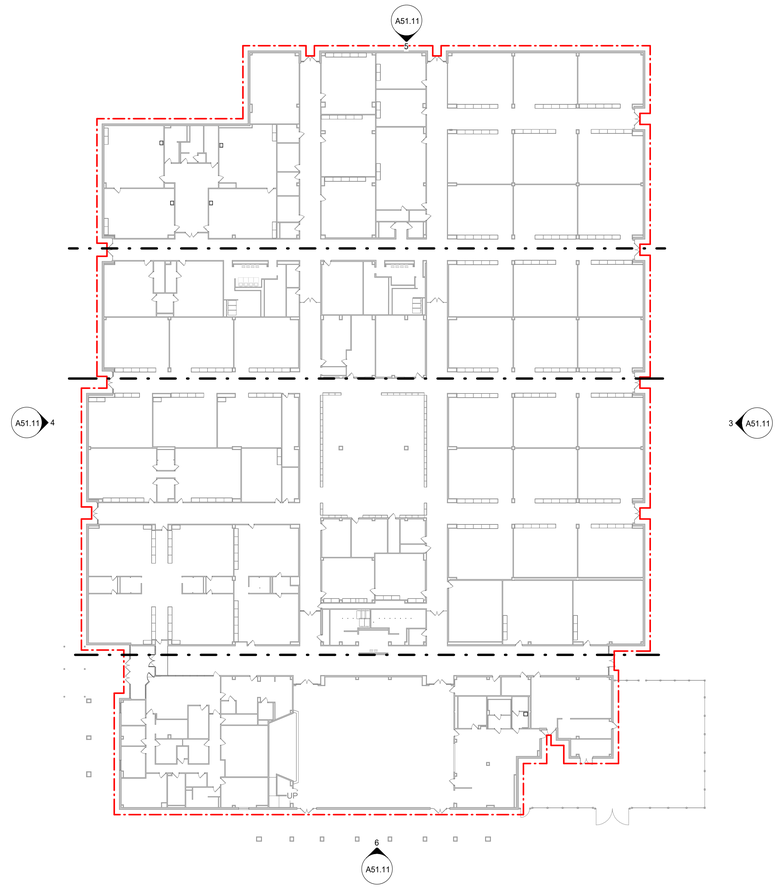
3 MCDOUGLE - WEST ELEVATION
SCALE: 1/16" = 1'-0"



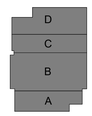
N
PLAN NORTH

N
TRUE NORTH

1 MCDOUGLE - SITE PLAN
SCALE: 1" = 80'-0"



2 MCDOUGLE - OVERALL PLAN
SCALE: 1" = 30'-0"



KEY PLAN

SITE PLAN NOTES

1. Verify and document existing dimensions and conditions at the site before beginning construction. Notify the Architect of conflicts or variations prior to commencement of construction.
2. To prevent damage to existing trees and shrubs in proximity to the Work, provide and maintain protective barriers around those items in accordance with the specified procedures, or in the absence of those procedures, with recognized landscaping and horticultural practices.

SITE PLAN LEGEND

—X——X——X— CHAIN LINK FENCE, See Plan for Heights

REMOVE AND REPLACE EXISTING BUILDING FOUNDATION SEALANT JOINTS.

Keynote Legend	
Key Value	Keynote Text
S8	REPLACE WETGLAZE SEALANTS ALONG ALL GLAZING AT STOREFRONT WINDOW.
S9	REPLACE WETGLAZE SEALANTS ALONG ALL GLAZING AT STOREFRONT DOOR SYSTEM. REPLACE DOOR GASKET AND SWEEPS.

EXTERIOR ELEVATION NOTES

1. Dimensions on Floor Plans are to face of stud or CMU unless noted otherwise.
2. Remove and Replace all Caulk and Sealant at Building Facade Joints. G.C. to Confirm Locations and Quantities.

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

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SHEET TITLE
MCDOUGLE - SITE PLAN

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A51.11

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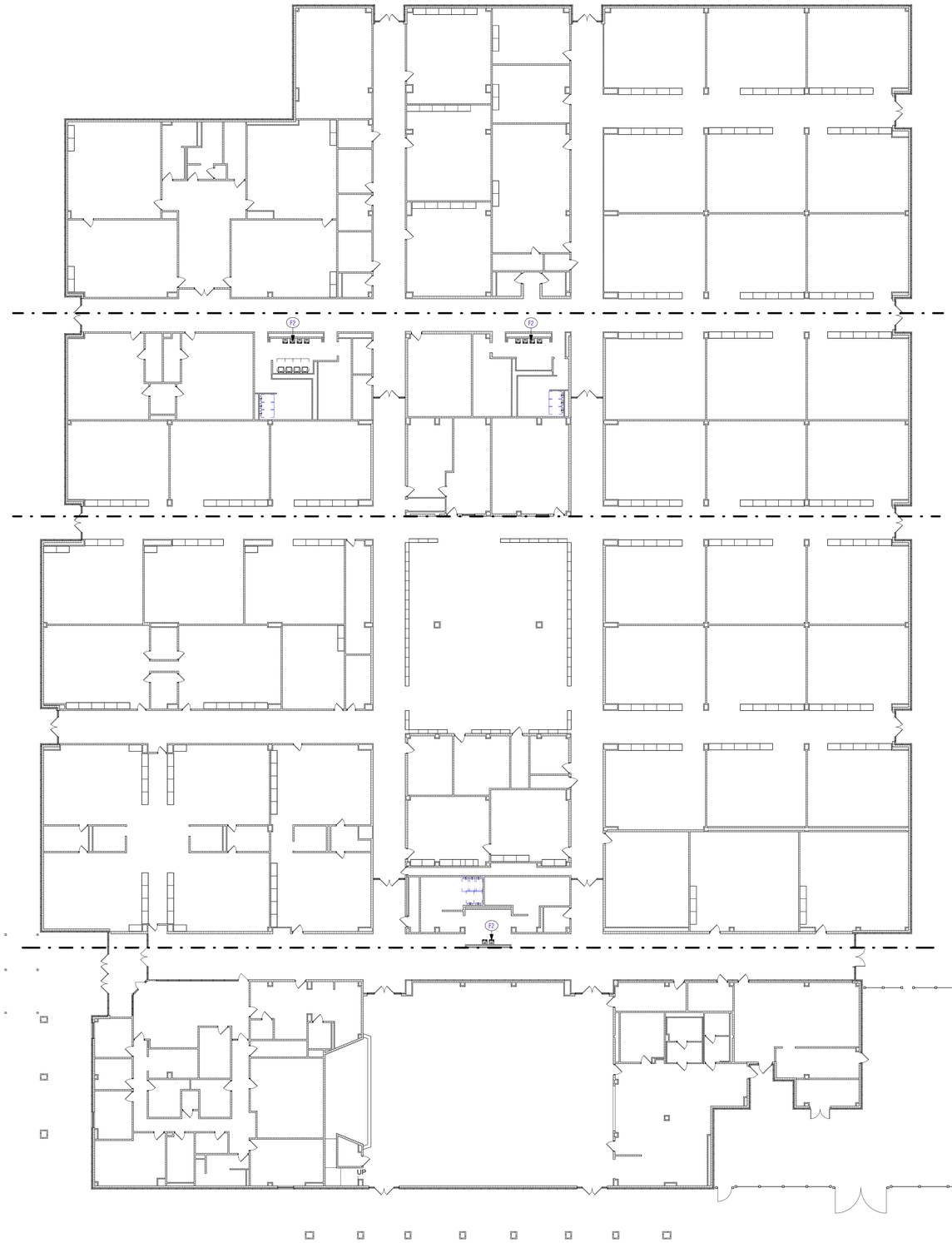

DEMOLITION NOTES

1. Drawings show the general extent of demolition work, however it is impractical to indicate or note every item of demolition. Any items shown dashed are to be removed to make way for new construction, unless noted otherwise.
2. Existing materials containing asbestos to be removed under separate contract prior to construction by Owner's asbestos abatement contractor.
3. Contact the Owner prior to the start of demolition to determine items to be salvaged and returned to Owner.
4. Protect items to remain from damage during demolition.
5. Properly protect and store items to be removed and reinstalled or relocated.
6. Repair or replace at no cost to the Owner any damages to the existing building and site as a result of construction activities.
7. Refer to electrical and mechanical demolition plan for additional information.
8. Patch/repair flooring to match existing at all removed or demolished doors, windows, walls, millwork, lockers and similar items.

GENERAL KEYNOTE LEGEND

1. ALL EXISTING PUBLIC ANNOUNCMENT (PA) HEADS TO BE REMOVED AND PREP SURFACE FOR INSTALL OF NEW SYSTEM.

Keynote Legend	
Key Value	Keynote Text
F2	REMOVE & REPLACE DRINKING FOUNTAIN. REF: PLUMBING.

N
PLAN NORTH

N
TRUE NORTH

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

KEY PLAN
D
C
B
A

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

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SHEET TITLE
MCDOUGLE - OVERALL PLAN - LEVEL ONE

SHEET NO.
A52.01

KISD 2025 FRP

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LINETYPE LEGEND

	EXISTING TO REMAIN
	DISCONNECT AND REMOVE
	NEW WORK

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

FIRE ALARM NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

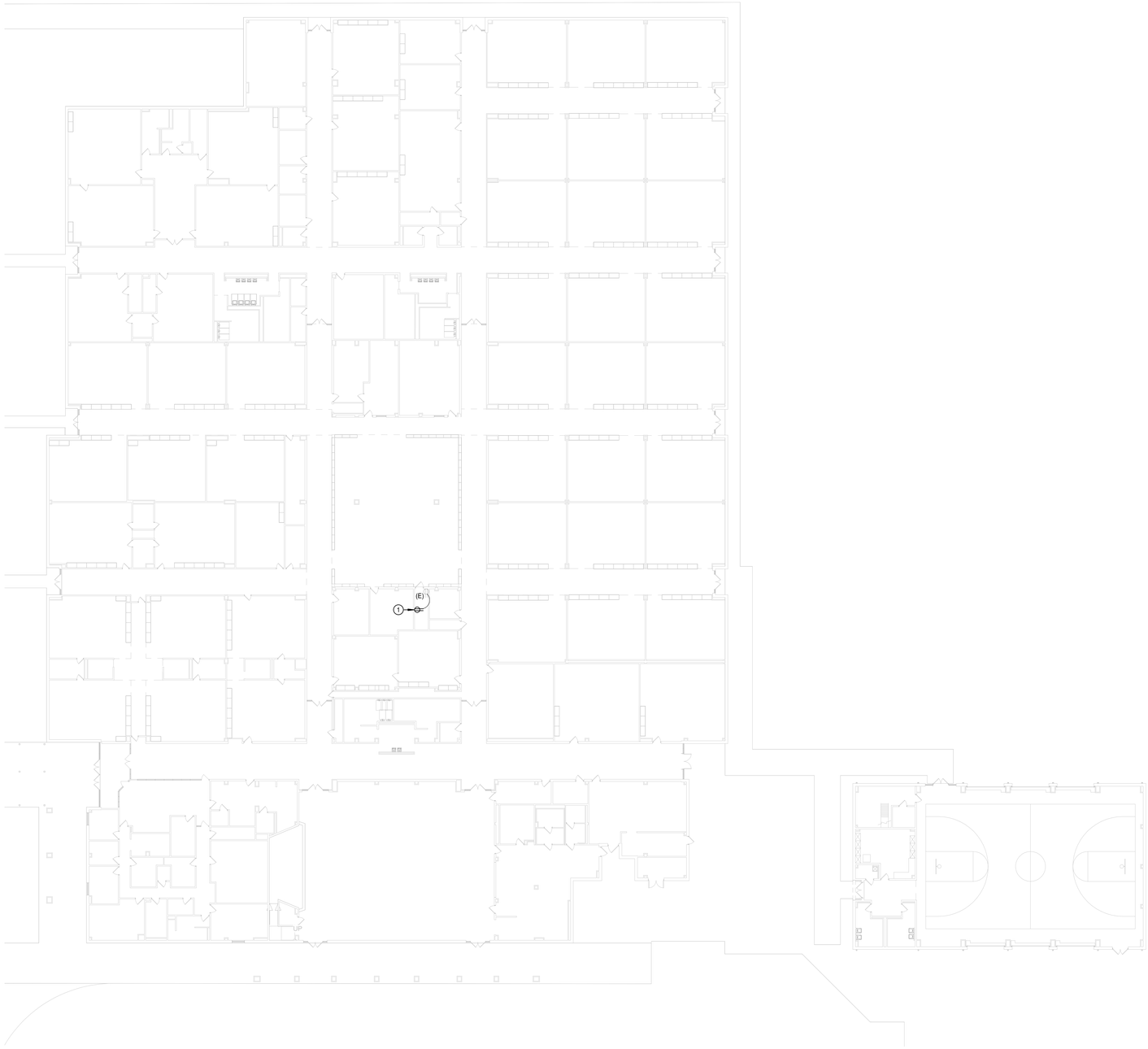
B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY, FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

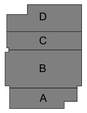
ELECTRICAL KEYED NOTES

1 NEW PA SYSTEM HEAD END. PROVIDE NEW RECEPTACLE AS SHOWN AND CONNECT TO EXISTING CIRCUIT LEFT IN PLACE AFTER DEMOLITION, EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO NEW LOCATION. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 1500 W @ 120 V. COORDINATE FINAL PA SYSTEM LOCATION.



N

1 **ELECTRICAL COMPOSITE PLAN - LEVEL 1 - MCDOUGLE**
Scale: 1" = 20'-0"



KEY PLAN

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Revision No.	Revision Date

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Designed By:	LT
Checked By:	PS
Drawn By:	LT

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SHEET TITLE
ELECTRICAL COMPOSITE PLAN - LEVEL 1 - MCDOUGLE ES

SHEET NO.
E51.01

KISD 2025 FRP

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PLUMBING GENERAL NOTES

1. CONTRACT DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. CONTRACTOR TO VERIFY AT SITE EXACT LOCATIONS, AND SIZES OF EXISTING PIPING. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
2. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK.
3. PLUMBING FIXTURES/EQUIPMENT SHOWN ON PLAN THAT ARE NOT IDENTIFIED AND DO NOT HAVE A FIXTURE DESIGNATION ARE EXISTING AND ARE TO REMAIN.
4. ANY OTHER ITEMS NOT REFERENCED WHICH ARE LOCATED IN THE DEMOLISHED SPACE (VENT, WASTE, WATER HEATER, PLUMBING FIXTURE, ETC.) THAT ARE IDENTIFIED OR DISCOVERED DURING DEMOLITION WHICH WILL NOT BE USED FOR THIS PROJECT, SHALL BE DEMOLISHED BACK TO THE MAIN SOURCE OR RISER, AND DEVICES SHALL BE RETAINED TO THE OWNER STORAGE AS DIRECTED BY THE ARCHITECT/OWNER.
5. OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL PLUMBING FIXTURES/ EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT NOT LIMITED TO PUMPS, HEATERS, AND STAINLESS STEEL SINKS. CONTRACTOR TO NOTIFY DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.

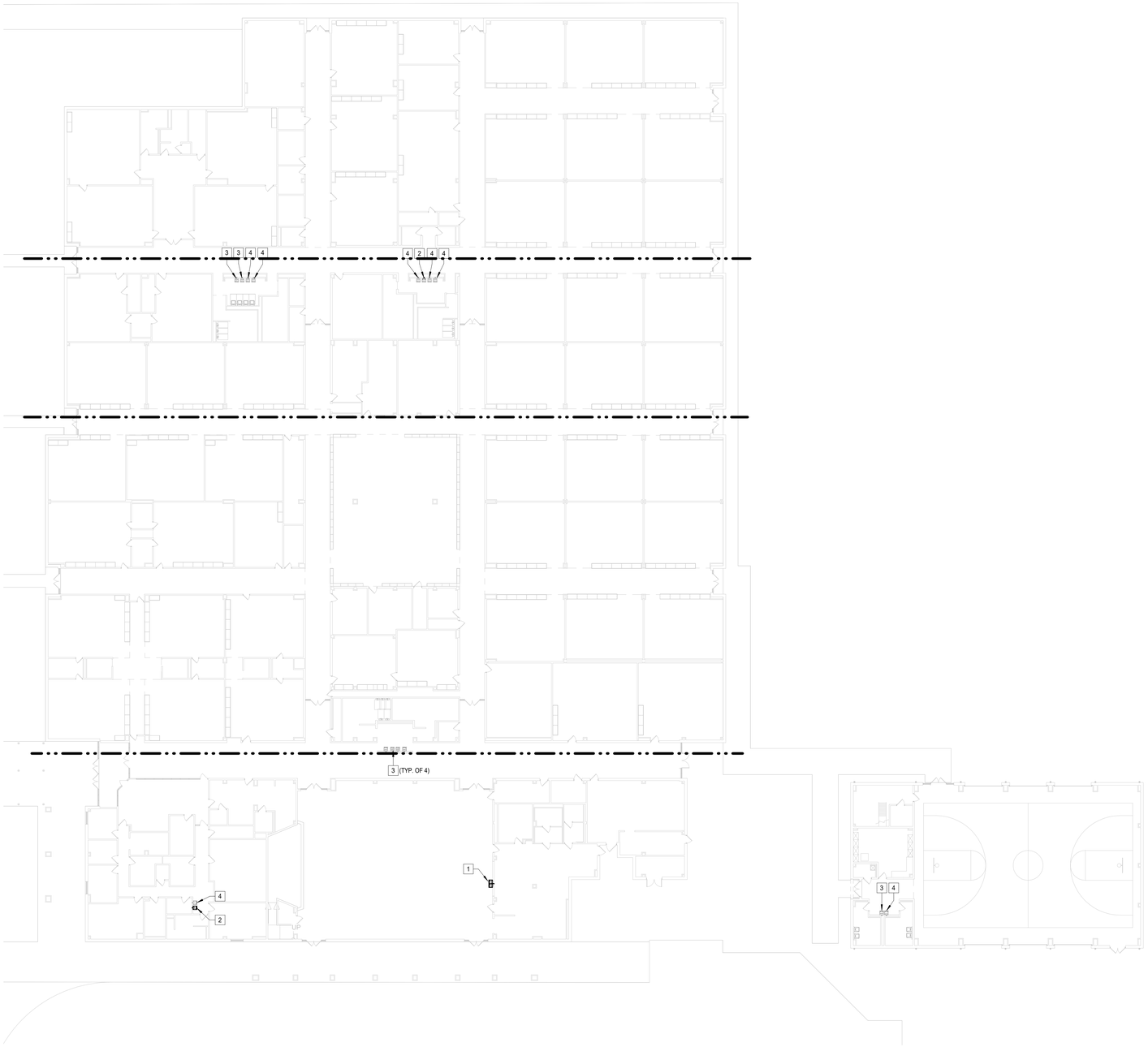
PLUMBING KEYED NOTES

1 EXISTING BI-LEVEL ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO BE REMOVED AND REPLACED WITH A NEW ONE. MAINTAIN EXISTING UTILITIES/ROUGH-IN TO SERVE NEW FIXTURE(S). FIELD VERIFY THE EXACT LOCATION, SIZE, AND CONDITION OF EXISTING PIPING. REPAIR EXISTING PIPING IF NEEDED AND PREPARE FOR NEW CONNECTION.

2 EXISTING SINGLE ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO BE REMOVED AND REPLACED WITH A NEW ONE. VERIFY WITH THE DISTRICT WHICH UNIT IS TO BE REPLACED. MAINTAIN EXISTING UTILITIES/ROUGH-IN TO SERVE NEW FIXTURE(S). FIELD VERIFY THE EXACT LOCATION, SIZE, AND CONDITION OF EXISTING PIPING. REPAIR EXISTING PIPING IF NEEDED AND PREPARE FOR NEW CONNECTION.

3 EXISTING SINGLE ELECTRIC DRINKING FOUNTAIN WITH BOTTLE FILLING STATION TO REMAIN.

4 EXISTING SINGLE ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO REMAIN.



1 **PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 1 - MCDOUGLE**
Scale: 1" = 20'-0"

KEY PLAN
D
C
B
A

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KLEIN ISD
KLEIN, TX

BRADLEY M. KALMANS
01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

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PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 1 - MCDOUGLE

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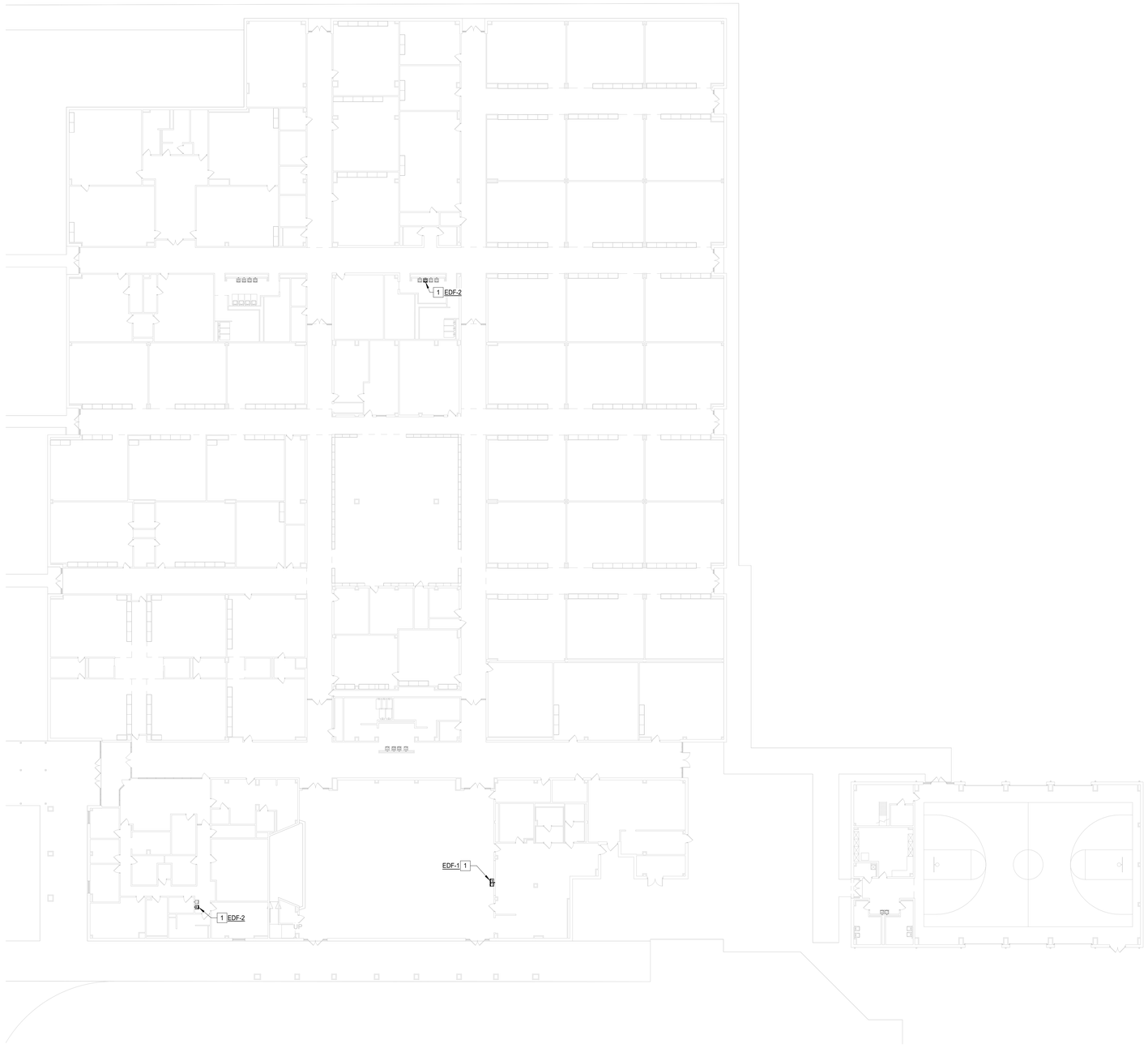
PLUMBING GENERAL NOTES

1. CONTRACT DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. CONTRACTOR TO VERIFY AT SITE EXACT LOCATIONS, AND SIZES OF EXISTING PIPING. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
2. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK.
3. PLUMBING FIXTURES/EQUIPMENT SHOWN ON PLAN THAT ARE NOT IDENTIFIED AND DO NOT HAVE A FIXTURE DESIGNATION ARE EXISTING AND ARE TO REMAIN.
4. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.
5. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.
6. REFER TO PLUMBING DETAILS AND SCHEDULES SHEET(S).

PLUMBING KEYED NOTES

1 PROVIDE AND INSTALL NEW PLUMBING FIXTURE(S) AS INDICATED. CONNECT TO EXISTING UTILITIES, CW, SANITARY AND VENT.



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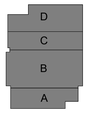
1 **PLUMBING COMPOSITE PLAN - LEVEL 1 - MCDOUGLE**
Scale: 1" = 20'-0"



KEY PLAN

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PLUMBING COMPOSITE PLAN - LEVEL 1 - MCDOUGLE

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PLUMBING GENERAL NOTES

1. WITHIN THE EXISTING BUILDING, EXISTING WATER, WASTE AND VENT SERVICES ARE TO BE MODIFIED AS REQUIRED AND REUSED FOR THE INSTALLATION OF NEW AND/OR RELOCATED PLUMBING FIXTURES. REFER TO PLUMBING FLOOR PLANS FOR POINTS OF CONNECTION.
2. WITHIN THE EXISTING BUILDING, SAWCUT AND REMOVE EXISTING FLOOR SLAB AS REQUIRED TO PROVIDE NEW AND/OR RELOCATED PLUMBING FIXTURES, CLEANOUTS, AND UNDERSLAB WASTE AND VENT PIPING. PATCH AND REFINISH FLOOR TO MATCH EXISTING.
3. IN AREAS WHERE THE FLOOR SLAB IS REMOVED, CONTRACTOR SHALL ALSO REMOVE UNDERSLAB WASTE AND VENT PIPING WHICH SERVES FIXTURES DESIGNATED FOR REMOVAL. PRIOR TO ANY REMOVAL, FIELD VERIFY THAT LINES TO BE REMOVED DO NOT SERVE ANY EXISTING FIXTURES TO REMAIN OR NEW FIXTURES TO BE INSTALLED.
4. IN AREAS WHERE THE FLOOR SLAB IS NOT REMOVED, CONTRACTOR SHALL ABANDON IN PLACE ANY UNDERSLAB WASTE AND VENT PIPING NO LONGER NEEDED, UNLESS THE PIPING MUST BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION. IF NEW WORK DOES NOT NECESSITATE THEIR REMOVAL, CUT AND PLUG SUCH LINES BELOW SLAB, AND PATCH FLOOR TO MATCH EXISTING.
5. FIELD VERIFY EXACT LOCATION, SIZE, DEPTH, DIRECTION OF FLOW, CAPACITY, PIPE MATERIAL AND CONDITION OF EXISTING WASTE PIPING PRIOR TO BEGINNING CONSTRUCTION. ENSURE THAT PROPER CONNECTIONS TO AND EXTENSION OF SUCH UTILITIES CAN BE MADE.
6. WASTE LINES TO BE RE-USED OR RECONNECTED TO SHALL BE THOROUGHLY RODDED OUT AND FLUSHED TO ENSURE THEY ARE FREE FROM BLOCKAGES.
7. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.
8. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT. SHOULD A CONFLICT OCCUR THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.
9. CONTRACTOR TO COORDINATE ALL REMODEL WORK WITH THE WORK OF OTHER TRADES TO AVOID CONFLICTS AND TO MINIMIZE INTERRUPTION OF SERVICES.
10. COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST ARCHITECTURAL DRAWINGS AND SPECIFICATIONS PRIOR TO ANY ROUGH-INS.
11. DO NOT ROUGH-IN FROM THESE DRAWINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS.
12. CONTRACTOR TO FIELD VERIFY AS NECESSARY THE EXACT ROUTING AND SIZES OF ALL PIPING.
13. ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE, INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
14. THE PROPER INSTALLATION OF NEW FIXTURES AND THE PROPER CONTINUED OPERATION OF EXISTING FIXTURES TO REMAIN SHALL DETERMINE THE EXTENT AND NATURE OF PLUMBING REMODEL WORK.
15. EACH VENT SHALL TERMINATE VERTICALLY NOT LESS THAN 6" ABOVE ROOF, MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN VENT TERMINALS THROUGH ROOF AND ALL FRESH AIR INTAKES, AND A MINIMUM 5'-0" FROM ANY EXTERIOR WALL.
16. PRIOR TO BEGINNING CONSTRUCTION, COORDINATE BUILDING BACKFLOW PREVENTION REQUIREMENTS WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PROVIDE AS DIRECTED.

SHOCK ARRESTOR SCHEDULE

P.D.I. SYMBOLS:	FIXTURE UNITS:	THREADED CONNECTION	CERTIFICATION
A	1 - 11	1/2"	ASSE 1010
B	12 - 32	3/4"	ASSE 1010
C	33 - 60	1"	ASSE 1010
D	61 - 113	1"	ASSE 1010
E	114 - 154	1"	ASSE 1010
F	155 - 330	1"	ASSE 1010

PLUMBING FIXTURE SCHEDULE

TYPE: EDF-1 (T.A.S. COMPLIANT) - INTERIOR WITH BOTTLE FILLER
DESCRIPTION: WALL HUNG, BARRIER FREE, SELF-CONTAINED, VANDAL RESISTANT BOTTLE FILLING STATION AND BI-LEVEL ADA COOLER, NON-FILTERED REFRIGERATED STAINLESS. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50F DRINKING WATER, BASED ON 80F INLET WATER AND 90F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE GREEN COUNTER, LAMINAR FLOW, REAL DRAIN, VANDAL RESISTANT. FURNISHED WITH VANDAL RESISTANT BUBBLER. ELECTRONIC BOTTLE FILLER BUTTON WITH MECHANICAL FRONT BUBBLER BUTTON ACTIVATION. PROVIDE CANE TOUCH APRON IN ALL STAINLESS STEEL ON ALL UNITS MOUNTED WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH.
HALSEY TAYLOR #HTHB-HVR98L-NF WITH APRON #98324C.
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE #8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE #403-BL-BFS.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: EDF-2 (T.A.S. COMPLIANT) - INTERIOR WITH BOTTLE FILLER
DESCRIPTION: WALL HUNG, BARRIER FREE, SELF-CONTAINED,VANDAL RESISTANT BOTTLE FILLING STATION AND SINGLE ADA COOLER, NON-FILTERED REFRIGERATED STAINLESS. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50F DRINKING WATER, BASED ON 80F INLET WATER AND 90F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE GREEN COUNTER, LAMINAR FLOW, REAL DRAIN, VANDAL RESISTANT. FURNISHED WITH VANDAL RESISTANT BUBBLER. ELECTRONIC BOTTLE FILLER BUTTON WITH MECHANICAL FRONT BUBBLER BUTTON ACTIVATION. PROVIDE CANE TOUCH APRON IN ALL STAINLESS STEEL ON ALL UNITS MOUNTED WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH.
HALSEY TAYLOR #HTHB-HVR9-NF WITH APRON #98324C.
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE #8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE #403-BFS.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

GENERAL NOTES

ALL LAVATORIES AND SINKS SHALL BE SUPPLIED WITH HOT AND COLD WATER (UNLESS NOTED TO BE COLD WATER ONLY) TO FAUCETS AS INDICATED ON PLANS AND FIXTURE SCHEDULE. PROVIDE CHROME PLATED BRASS SUPPLY STOPS WITH LOOSE KEYS AND WALL ESCUTCHEONS. PROVIDE CHROME PLATED FLEXIBLE RISERS OF SIZE REQUIRED TO PROPERLY CONNECT FIXTURES. PROVIDE 17 GAUGE CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON (UNLESS NOTED TO BE AN ACID WASTE FIXTURE). REFER TO FIXTURE SCHEDULE FOR MINIMUM SIZES OF PLUMBING FIXTURE ROUGH-INS.

INSULATION KITS AT ALL LAVATORIES AND SINKS REQUIRED TO BE T.A.S. ACCESSIBLE (MCGUIRE OR TRUEBRO). ALL SUCH FIXTURES AND FINAL INSTALLATIONS SHALL COMPLY WITH THE STATE ACCESSIBILITY STANDARDS REQUIREMENTS.

INSERT TRAP GUARDS AFTER FINAL RODDING OF DRAINS. INSTALL TRAP GUARD WITH CLEAR SILICONE CAULK FOR GAS-TIGHT SEAL. FOR DRAIN RODDING AFTER INSTALLATION. INSERT SEWER TAPE THROUGH LIGHTLY GREASED 1-1/2" PVC PIPE TO PROTECT TRAP GUARD.

PLUMBING PIPING LEGEND

SYMBOLS	DESCRIPTION
SAN	SANITARY OR WASTE PIPING ABOVE GRADE (SAN)
SAN	SANITARY OR WASTE PIPING BELOW GRADE (SAN)
GW	GREASE WASTE PIPING (GW)
GW	GREASE WASTE PIPING BELOW GRADE (GW)
SD	STORM DRAIN PIPING (SD)
SD	STORM DRAIN PIPING BELOW GRADE (GW)
SSD	SUB-SOIL DRAIN OR FOOTING DRAIN (SSD)
AW	ACID WASTE PIPING (AW)
AW	ACID WASTE PIPING BELOW GRADE (AW)
PD	PUMPED DISCHARGE (PD)
CD	CONDENSTATE DRAIN PIPING (CD)
D	CONDENSTATE - INDIRECT DRAIN PIPING (D)
	VENT PIPING (V)
CW	COLD WATER PIPING (CW)
HW	HOT WATER PIPING (HW)
HWR	HOT WATER RETURN PIPING (HWR)
SCW	SOFT COLD WATER PIPING (SCW)
CDW	CHILLED DRINKING WATER PIPING (CDW)
TP	TRAP PRIMER LINE (TP)
F	FIRE PROTECTION PIPING (F)
AS	AUTOMATIC SPRINKLER PIPING (AS)
GAS	NATURAL GAS PIPING (G)
GV	GAS VENT PIPING (GV)
AIR	COMPRESSED AIR PIPING (A)
	FLOW DIRECTIONAL ARROW
	SHUT-OFF VALVE
	BALANCING VALVE (BV)
	SOLENOID VALVE (SV)
	BALL VALVE (BV)
	BUTTERFLY VALVE
	LUBRICATED PACKED PLUG STOP STOP COCK (PC)
	HORIZONTAL SWING CHECK
	UNION
	HORIZONTAL SWING CHECK
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	REDUCED PRESSURE BACKFLOW PREVENTER (RPBFP)
	PIPING DOWN
	RISE OR DROP PIPING
	PIPING UP -OR- PIPING UP & DOWN
	CAP ON END OF PIPE
	CLEANOUT (WALL OR CEILING) (CO)
	FLOOR CLEANOUT (FCO)
	EXTERIOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO)
	TWO-WAY CLEANOUT (PROVIDE 18"x24"x4" CONCRETE PAD OUTSIDE)
	FIRE DEPARTMENT VALVE AT RISER
	FIRE HYDRANT
	FIRE DEPARTMENT CONNECTION
	PRESSURE REDUCING VALVE (PRV)
	BRANCH CONNECTION OUT OF TOP
	BRANCH CONNECTION OUT OF BOTTOM
	BRANCH CONNECTION OUT OF SIDE
	WYE & 1/8TH BEND BRANCH CONNECTION
	WYE BRANCH CONNECTION
	HOSE BIBB
	PRESSURE GAUGE WITH COCK
	THERMOMETER
	GAS PRESSURE REGULATOR
	TEST COCK
	GAS METER
	WALL HYDRANT
	VALVE IN RISE
	ASME TEMPERATURE & PRESSURE RELIEF VALVE
	VACUUM RELIEF VALVE
	ANGLE VALVE
	OS&Y VALVE
	ROOF DRAIN
1	REFER TO KEYED NOTE
FS	FLOW SWITCH
	FLOOR SINK (FS)
	FLOOR DRAIN (FD)
	FLOOR DRAIN WITH P-TRAP (FD)
	FLOOR DRAIN WITH P-TRAP AT 45° ANGLE (FD)
	HUB DRAIN (HD)
	ACCESS PANEL FOR TRAP PRIMER OR SHOCK ABSORBER
AP	ACCESS PANEL LOCATION SYMBOL
A	SHOCK ABSORBER
	AIR CHAMBER
(E)	EXISTING
(N)	NEW
N.C.	NORMALLY CLOSED
VTR	VENT THRU ROOF
B.F.F.	BELOW FINISHED FLOOR
A.F.F.	ABOVE FINISHED FLOOR
	NEW CONNECTION
IE=100.00"	INVERT ELEVATION
1	DELTA CHANGE SYMBOL
P / 1	RISER FLAG

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01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

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Project Director:	MR
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SHEET TITLE
PLUMBING SCHEDULES AND DETAILS - MCDOUGLE

SHEET NO.
P55.01

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TECHNOLOGY - GENERAL NOTES

1. EXISTING PA SYSTEM HEAD END, SPEAKERS, AND WIRING TO BE DEMOLISHED IN ENTIRETY.
2. SPEAKERS IN CLASSROOMS TO HAVE TALK-BACK FUNCTIONALITY AND SHALL BE IP- SPEAKERS. ONLY SPED CLASROOMS SHALL HAVE VOLUME CONTROLS AND CALL BUTTONS.
3. SPEAKERS IN NON-CLASSROOM ENVIRONMENTS SHALL BE ANALOG SPEAKERS, WITH ONLY OFFICES AND CONFERENCE ROOMS RECEIVING VOLUME CONTROLS.

TECHNOLOGY KEYNOTES

1. UTILIZE EXISTING CAT6 CABLE FOR NEW PA SYSTEM HEAD END.
2. DEMOLISH EXISTING PA SYSTEM HEAD END AT THIS LOCATION, INCLUDING 66-BLOCKS AND PLAYWOOD BACKBOARD. PATCH AND PAINT HOLES, AS NEEDED TO PROVIDE A FINISHED LOOK FOR THE WALL.
3. LOCATION OF NEW PA SYSTEM HEAD END.
4. RELOCATE EXISTING CAT6 DATA OUTLET FROM EXSITNG PA HEAD END TO THIS LOCATION.
5. PROVIDE AND INSTALL VALCOM IP GATEWAY, AS NEEDED. FOR CONNECTION OF ANALOG SPEAKERS TO PA SYSTEM. FOR EACH GATEWAY, ALSO PROVIDE AMPLIFIER, POWER SUPPLY AND BATTERY BACK-UP/UPS. PROVIDE NEW CAT6 CONNECTION TO OWNER NETWORK.
6. UTILIZE EXISTING BLUE CAT6 CABLE/DATA OUTLET (ABOVE CEILING) FOR NEW IP SPEAKER.
7. UTILIZE EXISTING CAT6 CABLE/DATA OUTLET (ABOVE CEILING) FOR NEW IP SPEAKER.
8. PROVIDE AND INSTALL PA OVERRIDE FOR LOCAL SOUND SYSTEM.
9. ESTIMATED SPEAKER LOCATION. PROVIDE AND INSTALL TO MATCH EXISTING QUANTITIES ON THE BUILDING.
10. PROVIDE AND INSTALL DUAL DATA OUTLET IN GYM MECHANICAL MEZZANINE, CONNECTED TO EXISTING SWITCH IN GYM OFFICE. COORDINATE EXACT LOCATION REQUIRED FOR DATA OUTLET WITH BAS CONTRACTOR.

ALTERNATES

1. CAMPUS PA SYSTEM HEAD END TO BE REPLACED AT ALL CAMPUSES. PROVIDE PRICING PER CAMPUS AS AN ALTERNATE TO REPLACE ALL SPEAKERS AND CABLING FOR THE FOLLOWING CAMPUSES: EILAND, KLENK, MCDOUGLE, AND NITSCH. PRICING SHOULD INCLUDE ALL GATEWAYS, AMPLIFIERS, POWER SUPPLIES, AND UPS REQUIRED TO CREATE A DISTRIBUTED ANALOG COMMON ZONE THROUGHOUT BUILDING CORIDORS AND COMMON AREAS. PER SHEET KEYNOTES SPEAKERS IN CLASSROOMS SHALL BE IP.
2. REPLACEMENT OF ENTIRE CAMPUS PA SYSTEM, INCLUDING SPEAKERS AND CABLING FOR KAISER ES SHALL BE INCLUDED IN BASE BID ALL COMMON ZONE SPEAKERS SHOULD BE DISTRIBUTD UTILIZING GATEWAYS, AMPLIFIERS, POWER SUPPLIES, AND UPS AS NEEDED. ALL CLASSROOMS SHALL UTILIZE IP SPEAKERS CONNECTED TO CATEGORY CABLING AS PER KEYNOTES ON PLANS.

1 McDougle ES LEVEL ONE
SCALE: 1" = 20'-0"

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Project Designer:	Designer
Drawn By:	Author

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SHEET TITLE
TECHNOLOGY - MCDOUGLE LEVEL ONE

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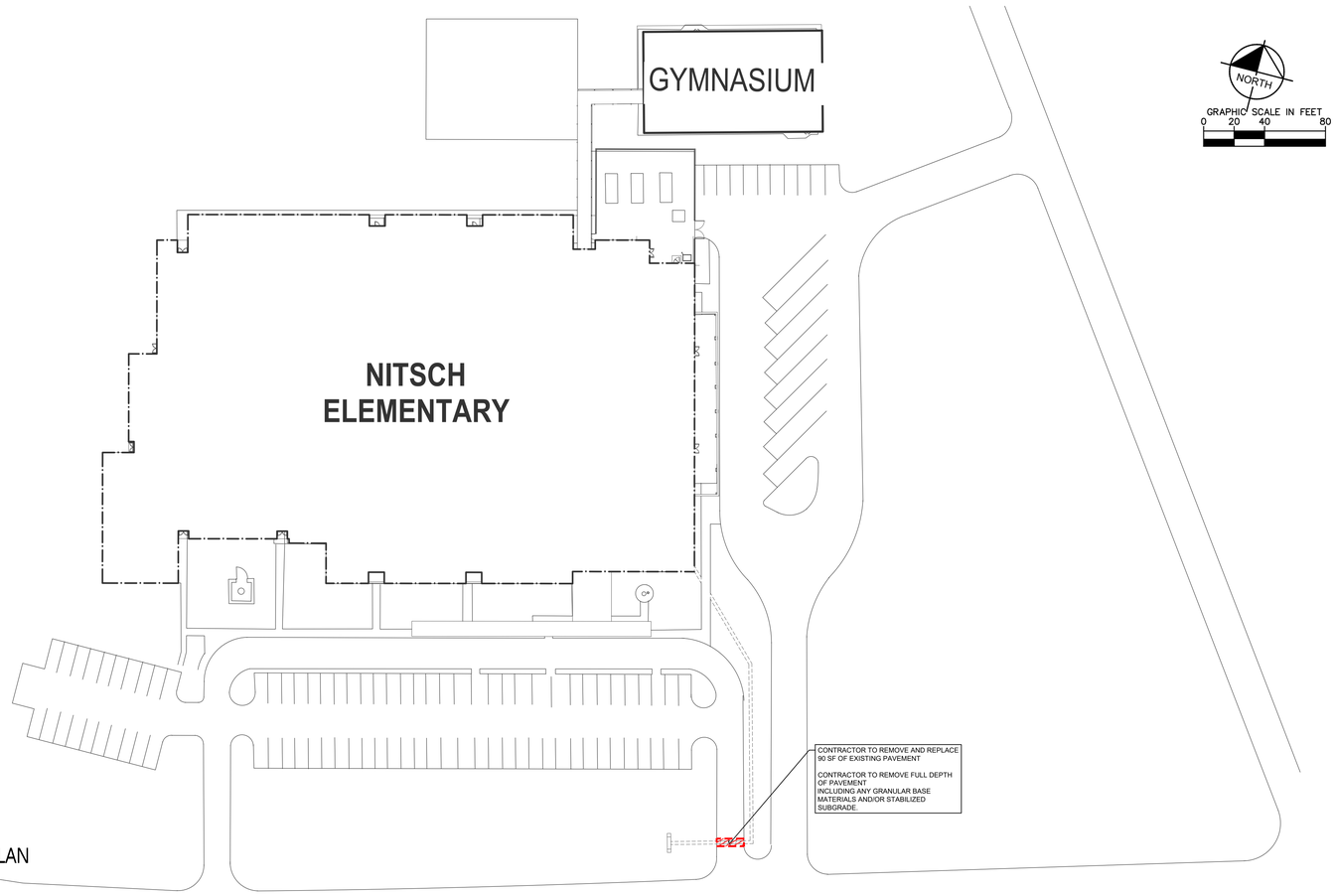
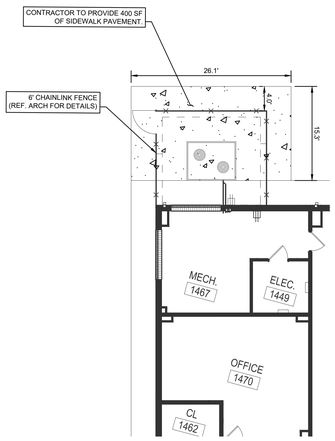


1 - NITSCH ES - OVERALL SITE PLAN



2 - NITSCH ES ENLARGED CIVIL PLAN

GRAPHIC SCALE IN FEET
0 5 10 20

LEGEND	
	PROPERTY LINE
	PROP. CANOPY (REF ARCH FOR DETAILS)
	CURB RAMP NOT IN PUBLIC ROW
PAVING MATERIAL LEGEND	
	PROP. SIDEWALK

KEYED NOTES	
1	PROP. SAWCUT/MATCH EXISTING PAVEMENT LINE
2	ACCESSIBLE RAMP
3	4" SOLID WHITE STRIPING, 2'-0" O.C. @ 45°
4	PROP. 10" HDPE STORM CONNECTION TO CANOPY DOWNSPOUT. STORM TO BE ROUTED TO NEAREST INLET.
5	PROP. 10" 45° BEND
6	PROP. 10" WYE

GENERAL NOTES

1. DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

2. ALL RADII 2' UNLESS OTHERWISE NOTED.

3. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING POLES AND FIXTURES AND ELECTRICAL PLAN PRIOR TO PLACING PAVEMENT.

4. REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS.

5. SIDEWALKS TO HAVE A 5% MAXIMUM RUNNING SLOPE AND A 2% MAXIMUM CROSS SLOPE IN ACCORDANCE WITH ADA REQUIREMENTS.

6. FIELD VERIFY ADA GRADES PRIOR TO PLACING PAVEMENT. CONTRACTOR SHALL CONSTRUCT ALL ACCESSIBLE ROUTES IN ACCORDANCE WITH ADA STANDARDS AND TAS.

7. REF. IRRIGATION PLANS PRIOR TO PLACING PAVEMENT.

8. CONTRACTOR SHALL BUDGET FOR ACCESSIBLE STALL STRIPING, FIRE LANE STRIPING, DIRECTIONAL ARROWS, ETC.

9. SITE LIGHTING IS BY OTHERS. REF. SITE LIGHTING PLANS FOR LOCATIONS AND DETAILS PRIOR TO PLACING PAVEMENT.

10. REF. BUILDING PLANS FOR ALL EXTERIOR STAIR DETAILS.

11. CONTRACTOR TO ADJUST EXISTING SANITARY SEWER MANHOLES, STORM SEWER MANHOLES, ELECTRICAL MANHOLES, FIRE HYDRANTS, VALVE BOXES, WATER METERS, ETC. TO MATCH PROPOSED FINISHED GRADES IF NECESSARY.

Know what's **below.**
Call before you dig.

CAUTION!!

EXISTING UNDERGROUND UTILITIES IN THE AREA CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REPAIRS TO EXISTING UTILITIES DUE TO DAMAGE INCURRED DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES ON THE PLANS.

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ISSUED: January 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	KLM
Project Engineer:	RDH
Project Designer:	RDH
Drawn By:	RDH

PROJECT NO.
25-0225.00

SHEET TITLE
NITSCH
DIMENSION
CONTROL PLAN

SHEET NO.
C61.01

KISD 2025 FRP

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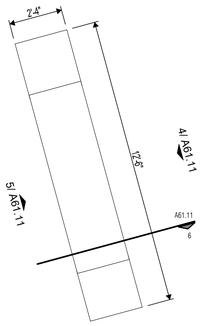
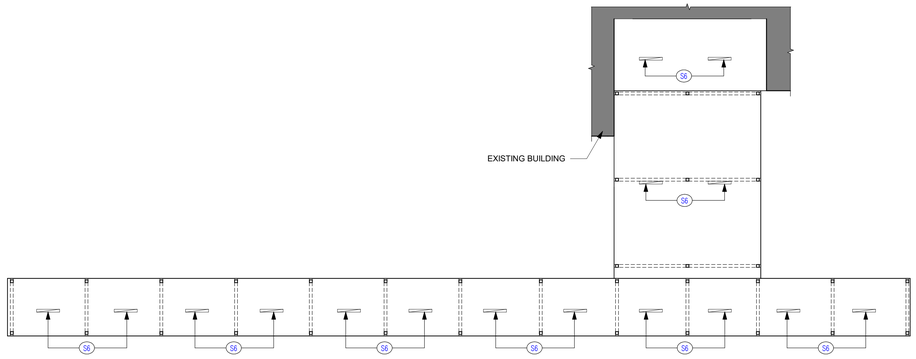
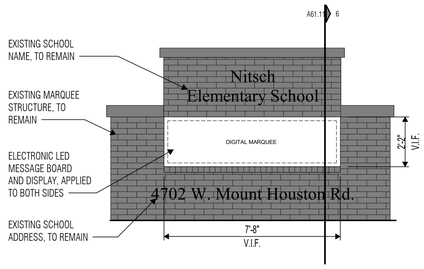


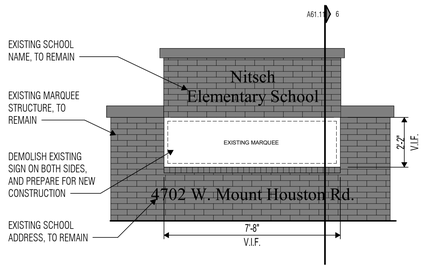
2 NITSCH - MARQUEE PLAN
SCALE: 3/8" = 1'-0"



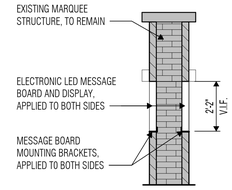
3 NITSCH - CANOPY 1
SCALE: 3/32" = 1'-0"



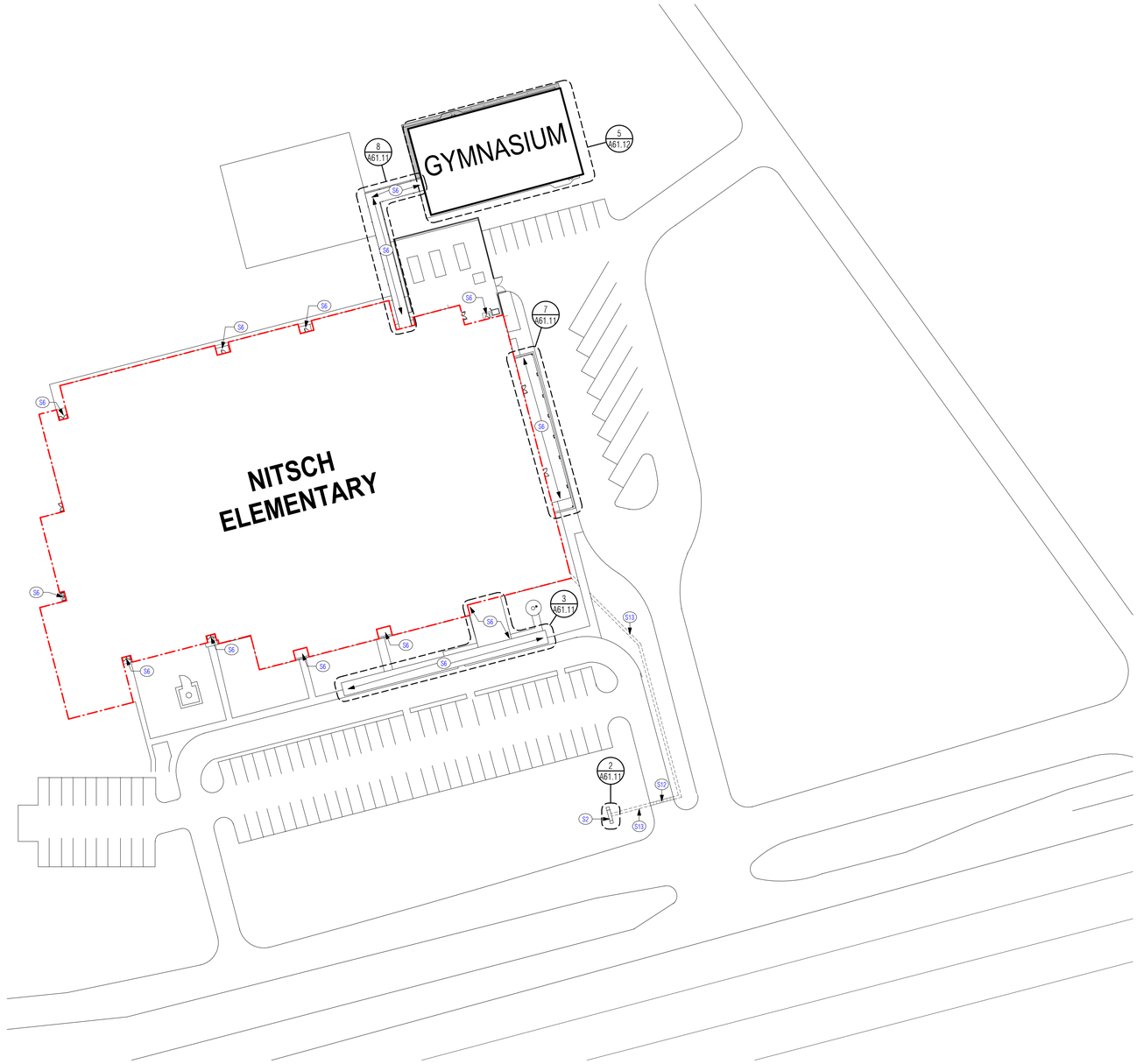
4 NITSCH - MARQUEE ELEVATION
SCALE: 3/8" = 1'-0"

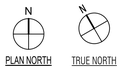


5 NITSCH - MARQUEE ELEVATION - DEMO
SCALE: 3/8" = 1'-0"

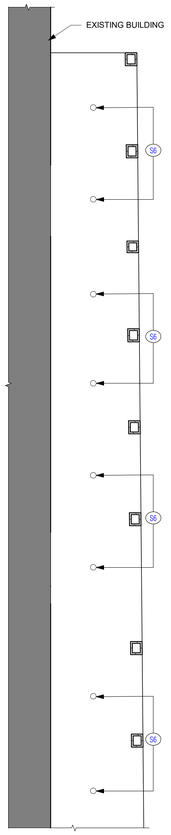


6 NITSCH - MARQUEE SECTION
SCALE: 3/8" = 1'-0"

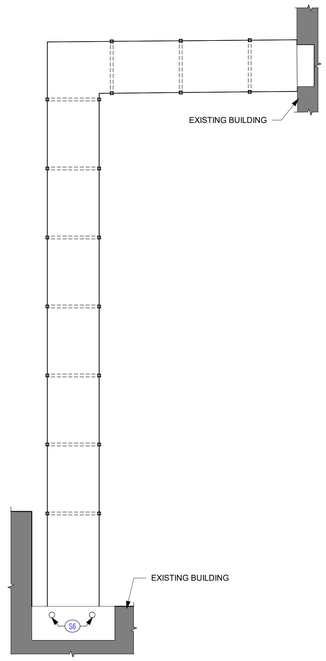




1 NITSCH - SITE PLAN
SCALE: 1" = 40'-0"



7 NITSCH - SOFFIT 1
SCALE: 3/32" = 1'-0"



8 NITSCH - CANOPY 2
SCALE: 3/32" = 1'-0"

SITE PLAN NOTES

1. Verify and document existing dimensions and conditions at the site before beginning construction. Notify the Architect of conflicts or variations prior to commencement of construction.
2. To prevent damage to existing trees and shrubs in proximity to the Work, provide and maintain protective barriers around those items in accordance with the specified procedures, or in the absence of those procedures, with recognized landscaping and horticultural practices.

SITE PLAN LEGEND

—x——x——x— CHAIN LINK FENCE, See Plan for Heights

REMOVE AND REPLACE EXISTING BUILDING FOUNDATION SEALANT JOINTS.

Keynote Legend	
Key Value	Keynote Text
S2	EXISTING BRICK MARQUEE TO BE RETROFITTED FOR NEW DIGITAL SIGNAGE AS SCHEDULED.
S6	REMOVE EXISTING LIGHT FIXTURE AND PREP AREA FOR INSTALLATION OF FIXTURE AS SCHEDULED. REF: ELECTRICAL.
S12	EXISTING CONCRETE TO BE SAW CUT FOR ELECTRICAL TRENCH. REF: CIVIL
S13	TRENCH ELECTRICAL IN EXISTING SOD.

KEY PLAN

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01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
NITSCH - SITE PLAN

SHEET NO.
A61.11

KISD 2025 FRP

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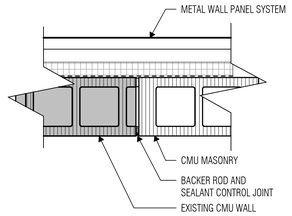
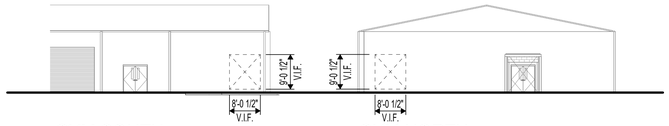
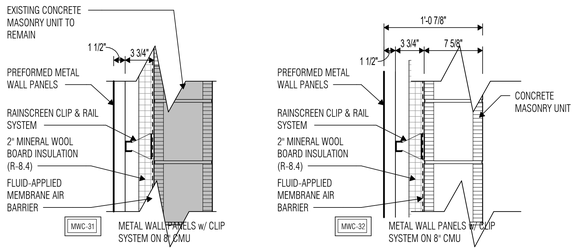


1 CMU CJ - PLAN DETAIL
SCALE: 1 1/2" = 1'-0"

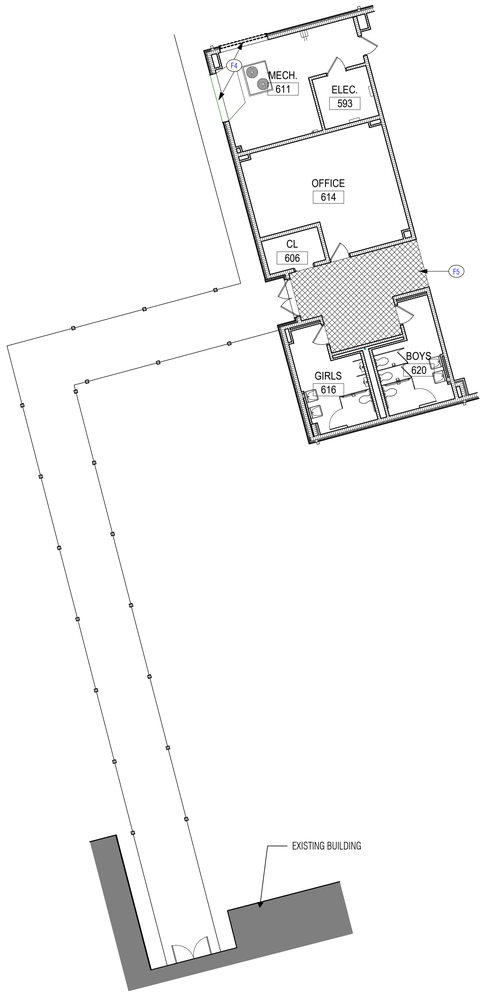


2 GYM SOUTH
SCALE: 1/16" = 1'-0"

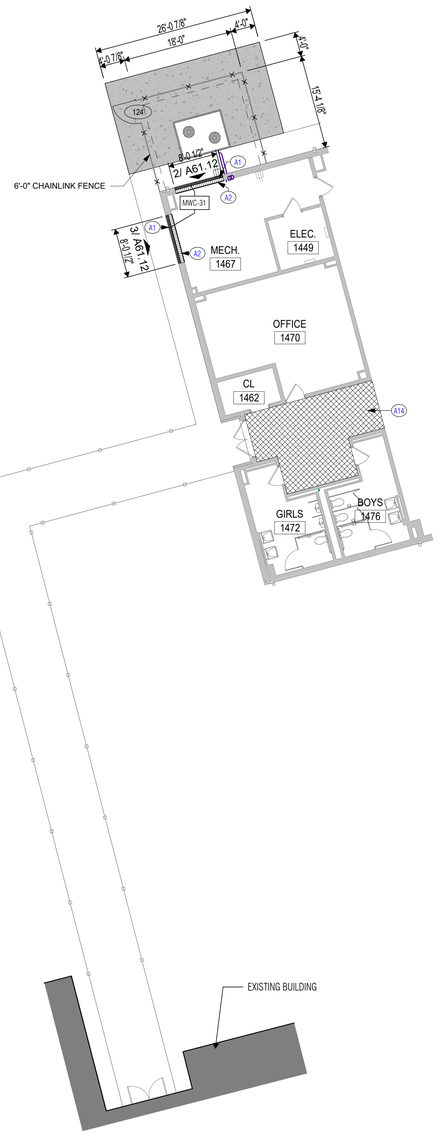
3 GYM NORTH
SCALE: 1/16" = 1'-0"



4 WALL ASSEMBLY
SCALE: 1 1/2" = 1'-0"



5 NITSCH - GYM DEMO PLAN
SCALE: 1" = 10'-0"

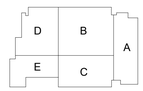


6 NITSCH - GYM PLAN
SCALE: 1" = 10'-0"

DEMOLITION NOTES

1. Drawings show the general extent of demolition work, however it is impractical to indicate or note every item of demolition. Any items shown dashed are to be removed to make way for new construction, unless noted otherwise.
2. Existing materials containing asbestos to be removed under separate contract prior to construction by Owner's asbestos abatement contractor.
3. Contact the Owner prior to the start of demolition to determine items to be salvaged and returned to Owner.
4. Protect items to remain from damage during demolition.
5. Properly protect and store items to be removed and reinstalled or relocated.
6. Repair or replace at no cost to the Owner any damages to the existing building and site as a result of construction activities.
7. Refer to electrical and mechanical demolition plan for additional information.
8. Patch/repair flooring to match existing at all removed or demolished doors, windows, walls, millwork, lockers and similar items.

Keynote Legend	
Key Value	Keynote Text
A1	INFILL WALL OPENING WITH WALL ASSEMBLY SPECIFIED.
A2	PAINT ENTIRE LENGTH OF CMU WALL INCLUDING COLUMN FURR OUT.
A14	REINSTALL CEILING GRID AND TILES.
F4	REMOVE EXISTING LOUVERS AND PATCH HOLES IN WALL. PREPARE OPENING TO RECIEVE WALL INFILL.
F5	REMOVE AND REINSTALL CEILING GRID AND TILES FOR INSTALLATION OF THE AHU.



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01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
NITSCH - GYM PLAN

SHEET NO.
A61.12

KISD 2025 FRP

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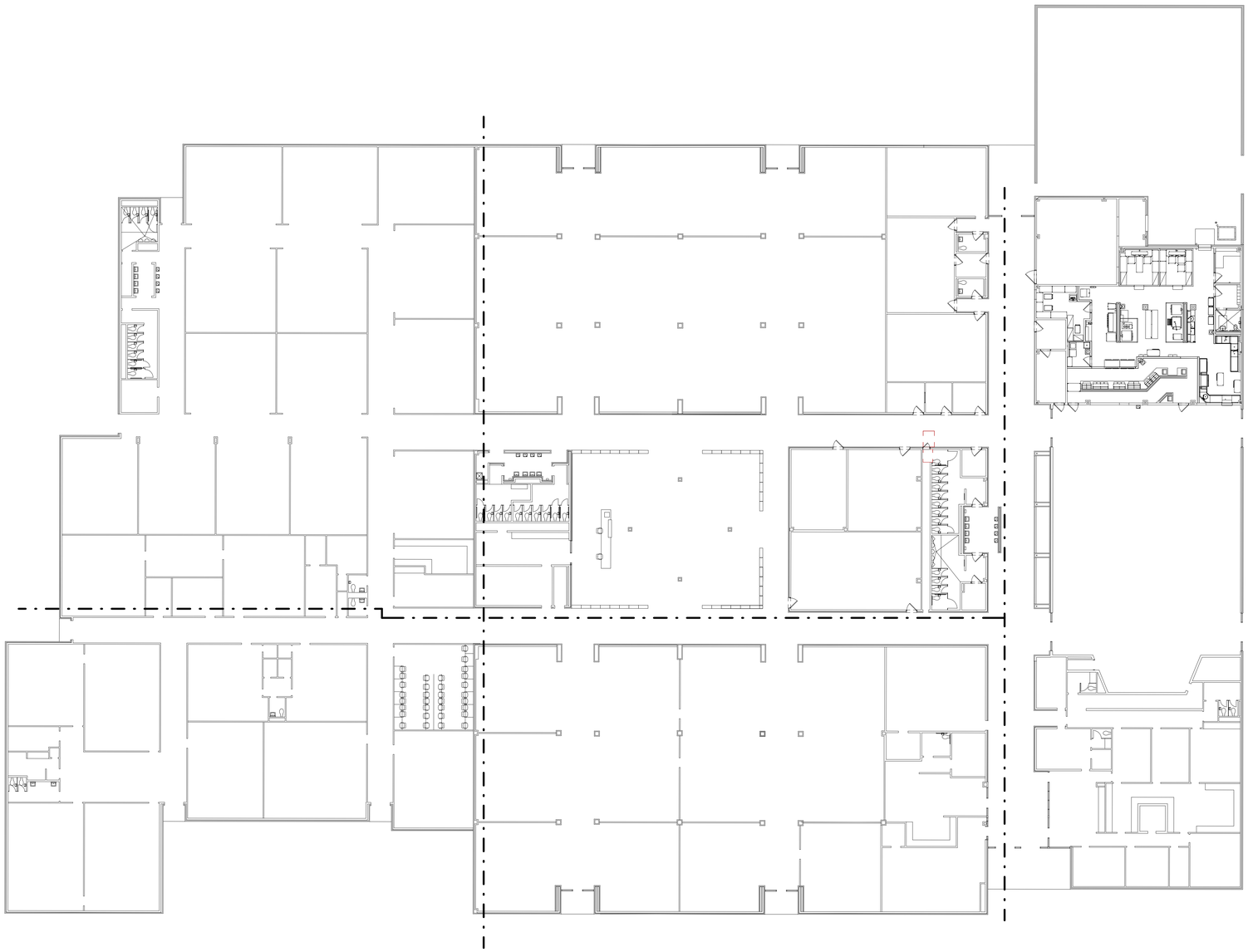


DEMOLITION NOTES

1. Drawings show the general extent of demolition work, however it is impractical to indicate or note every item of demolition. Any items shown dashed are to be removed to make way for new construction, unless noted otherwise.
2. Existing materials containing asbestos to be removed under separate contract prior to construction by Owner's asbestos abatement contractor.
3. Contact the Owner prior to the start of demolition to determine items to be salvaged and returned to Owner.
4. Protect items to remain from damage during demolition.
5. Properly protect and store items to be removed and reinstalled or relocated.
6. Repair or replace at no cost to the Owner any damages to the existing building and site as a result of construction activities.
7. Refer to electrical and mechanical demolition plan for additional information.
8. Patch/repair flooring to match existing at all removed or demolished doors, windows, walls, millwork, lockers and similar items.

GENERAL KEYNOTE LEGEND

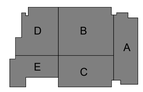
1. ALL EXISTING PUBLIC ANNOUNCMENT (PA) HEADS TO BE REMOVED AND PREP SURFACE FOR INSTALL OF NEW SYSTEM.

Keynote Legend	
Key Value	Keynote Text

N — PLAN NORTH

TRUE NORTH

1 NITSCH - OVERALL DEMO FLOOR PLAN - LEVEL ONE
SCALE: 1/16" = 1'-0"



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REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.

25-0225.00

SHEET TITLE

NITSCH - OVERALL DEMO PLAN - LEVEL ONE

SHEET NO.

A62.01

KISD 2025 FRP

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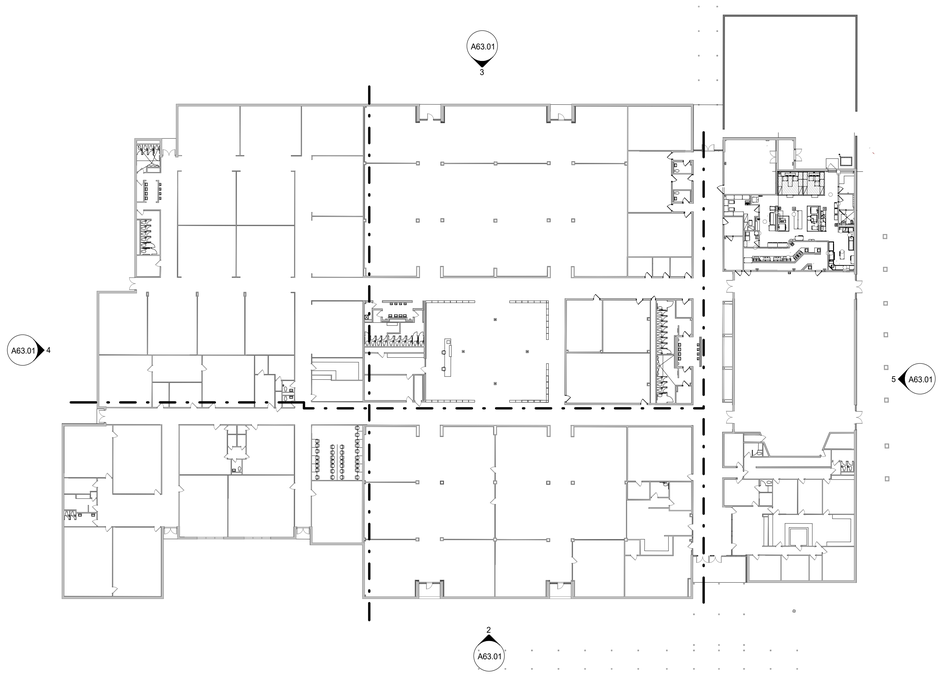
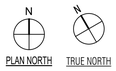
EXTERIOR ELEVATION NOTES

1. Dimensions on Floor Plans are to face of stud or CMU unless noted otherwise.
2. Remove and Replace all Caulk and Sealant at Building Facade Joints. G.C. to Confirm Locations and Quantities.

Keynote Legend	
Key Value	Keynote Text
S8	REPLACE WETGLAZE SEALANTS ALONG ALL GLAZING AT STOREFRONT WINDOW.
S9	REPLACE WETGLAZE SEALANTS ALONG ALL GLAZING AT STOREFRONT DOOR SYSTEM. REPLACE DOOR GASKET AND SWEEPS.

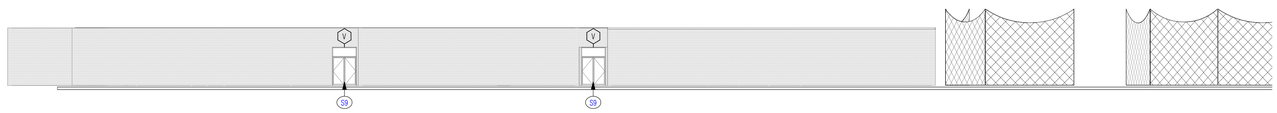




1 NITSCH - OVERALL PLAN
SCALE: 1" = 30'-0"

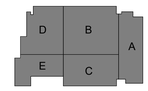
2 NITSCH - SOUTH ELEVATION
SCALE: 1/16" = 1'-0"

3 NITSCH - NORTH ELEVATION
SCALE: 1/16" = 1'-0"



4 NITSCH - WEST ELEVATION
SCALE: 1/16" = 1'-0"

5 NITSCH - EAST ELEVATION
SCALE: 1/16" = 1'-0"



KEY PLAN

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01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
NITSCH - EXTERIOR ELEVATIONS

SHEET NO.
A63.01

KISD 2025 FRP

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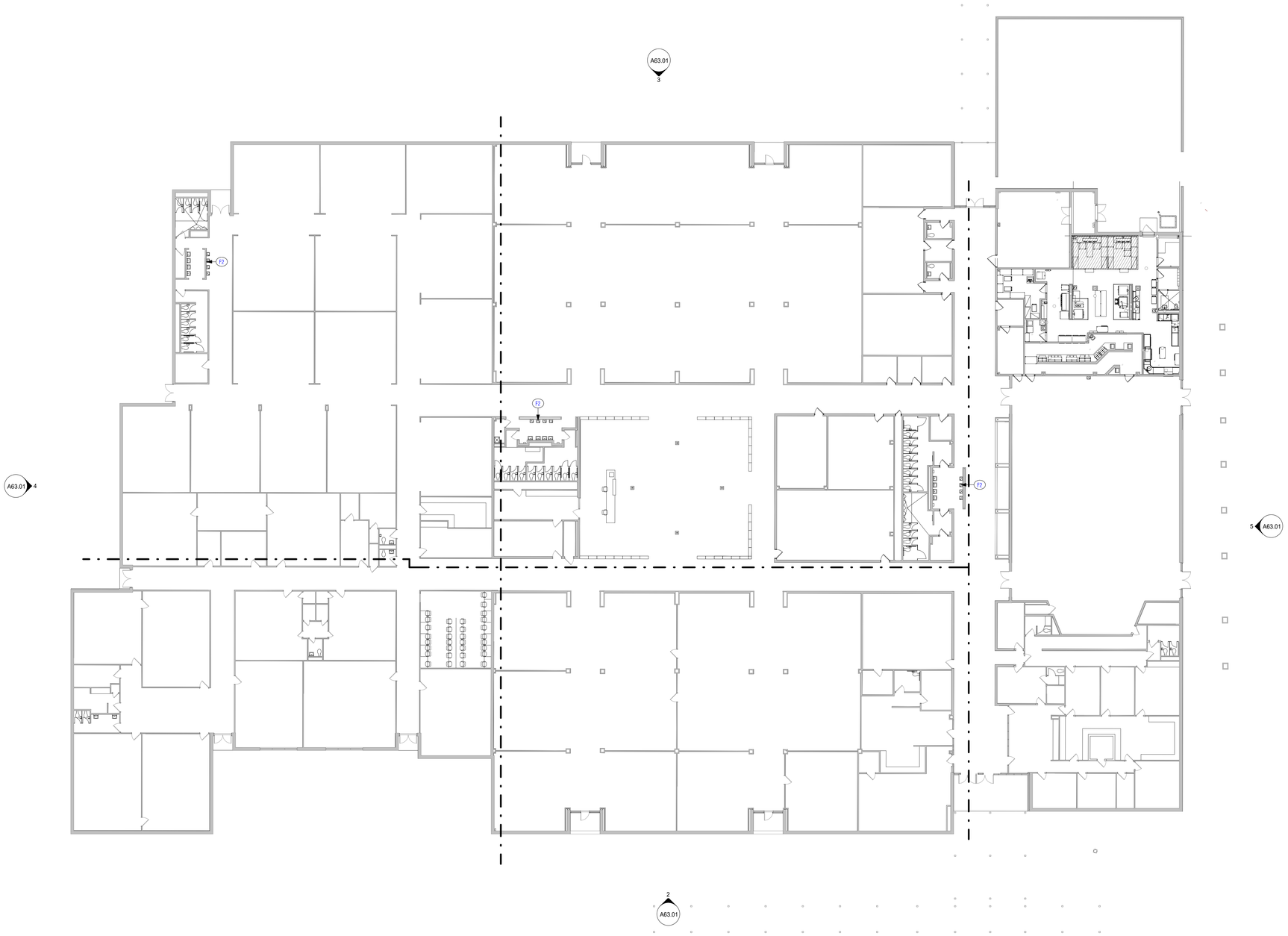
INTERIOR FINISH PLAN SCHEDULE

MARK	DESCRIPTION
FLOOR FINISH	
LVT-01	Luxury Vinyl Tile - Field
RGY-01	Athletic Flooring

Keynote Legend

Keynote Value	Keynote Text
F2	REMOVE & REPLACE DRINKING FOUNTAIN. REF: PLUMBING.



N
PLAN NORTH
TRUE NORTH

1 NITSCH - INTERIOR OVERALL FINISH PLAN - LEVEL ONE
SCALE: 1/16" = 1'-0"

KEY PLAN

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01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
NITSCH - INTERIOR OVERALL FINISH PLAN - LEVEL ONE

SHEET NO.
A69.11

KISD 2025 FRP

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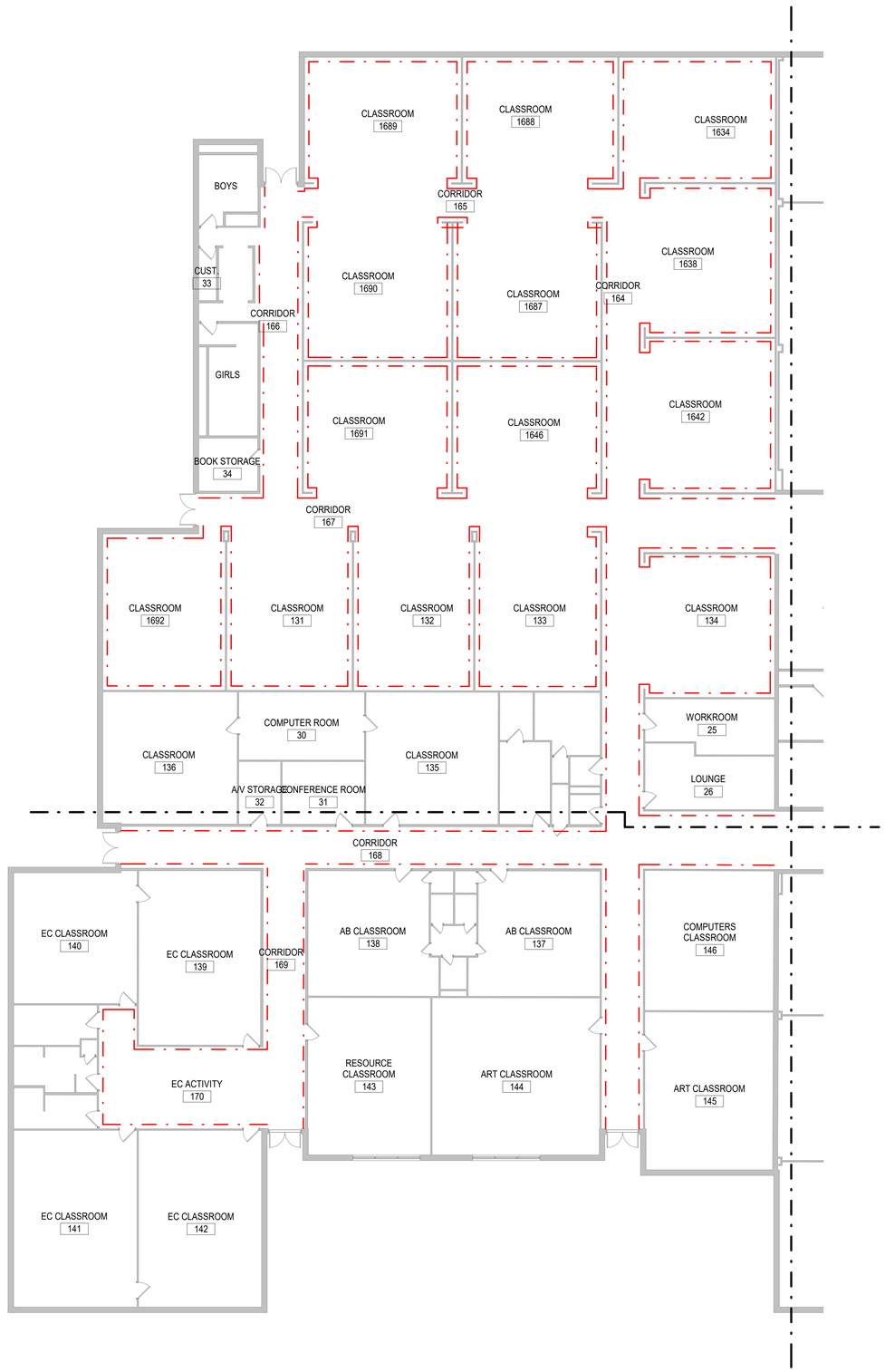

1 NITSCH - INTERIOR OVERALL FINISH PLAN - LEVEL ONE - UNIT D & E (ALTERNATE)
SCALE: 3/32" = 1'-0"

INTERIOR FINISH PLAN SCHEDULE

MARK	DESCRIPTION

FLOOR FINISH

LVT-01	Luxury Vinyl Tile - Field
~~RG-01~~	~~Athletic Flooring~~

ALTERNATE # 2

WALL TO BE SANDED AND PREPED TO RECIEVE NEW FINISH AS SCHEDULED: PT.00

KEY PLAN

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01/27/2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MEF
Project Architect:	MG
Project Designer:	MG
Drawn By:	VLK

PROJECT NO.
25-0225.00

SHEET TITLE
NITSCH - INTERIOR FINISH PLAN - LEVEL ONE - UNIT D & E (ALTERNATE)

SHEET NO.
A69.12

KISD 2025 FRP

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Registration: F-4111
Project No: 2550-02120-00

VLK

LINETYPE LEGEND

	EXISTING TO REMAIN
	DISCONNECT AND REMOVE
	NEW WORK

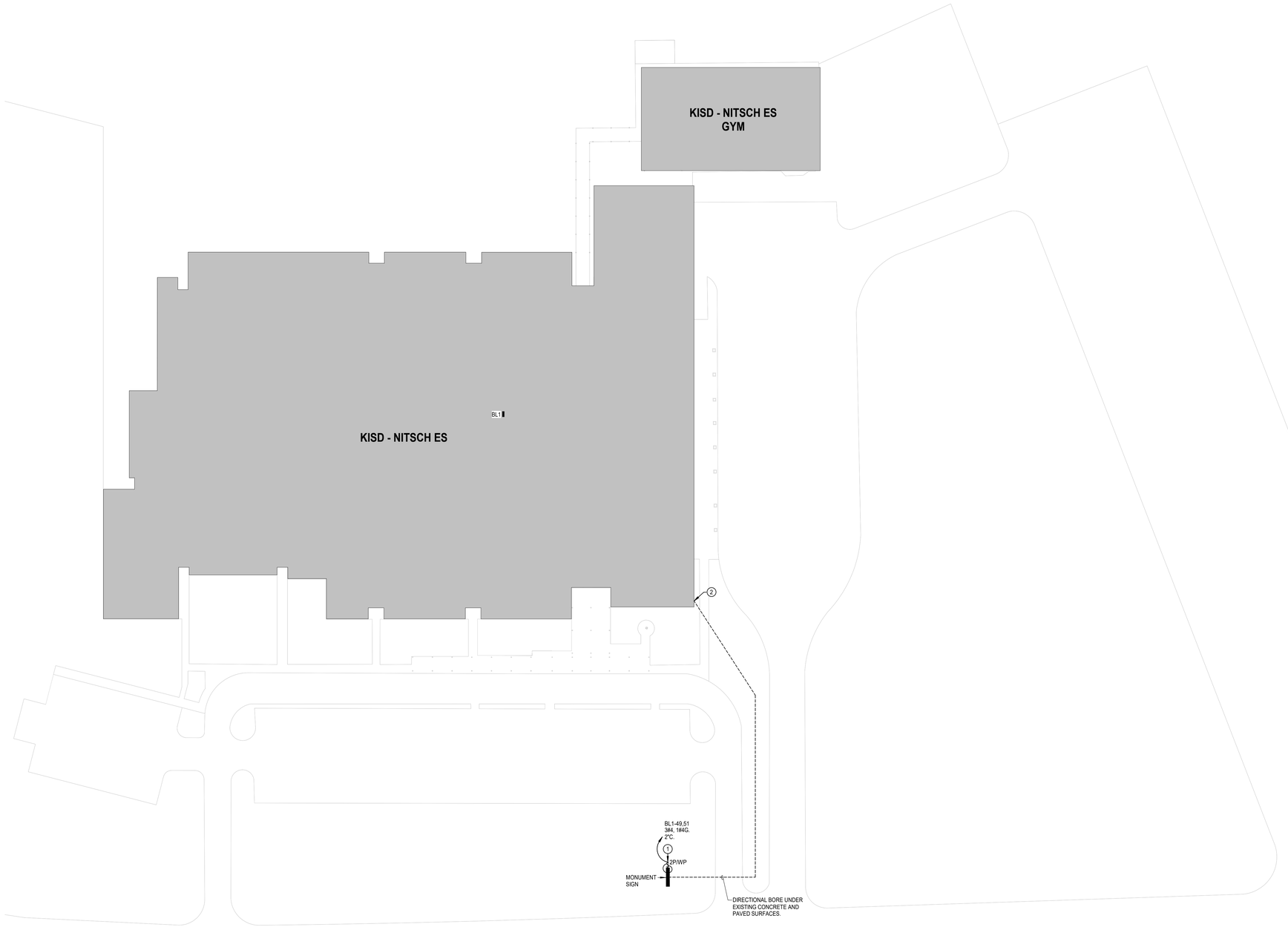
DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

ELECTRICAL KEYED NOTES

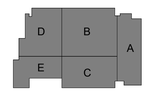
1 PROVIDE NEW SURFACE MOUNTED SWITCH, CONDUCTORS AND CONDUIT AS INDICATED. MAKE FINAL CONNECTIONS TO (2)DIGITAL LED SIGNS. DIRECTIONAL BORE UNDER EXISTING CONCRETE AND PAVED SURFACES.

2 STUB UP CONDUIT AND PENETRATE BUILDING. COORDINATE FINAL LOCATION OF BUILDING PENETRATION WITH ARCHITECT/OWNER.



N

1 **ELECTRICAL SITE PLAN - NITSCH ES**
Scale: 1" = 30'-0"



KEY PLAN

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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	LT
Checked By:	PS
Drawn By:	LT

PROJECT NO.
25-0225.00

SHEET TITLE
ELECTRICAL SITE PLAN - NITSCH ES

SHEET NO.
E61.00

KISD 2025 FRP

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Registration: F-4111
Project No: 2550-02120-00

VLK

LINETYPE LEGEND

———	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
———	NEW WORK

FIRE ALARM NOTES

A. FIRE ALARM SYSTEM IS PERFORMANCE BASED PER SPECIFICATIONS. CONTRACTOR TO REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. A LICENSED FIRE ALARM PLANNING SUPERINTENDENT CERTIFIED TO A MINIMUM LEVEL 3, IN THE SUBFIELD OF FIRE ALARM SYSTEMS THROUGH THE NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES (NICET), SHALL PROVIDE PLANS AND CALCULATIONS FOR A MANUAL AND AUTOMATIC FIRE DETECTION AND ALARM SYSTEM TO COMPLY WITH THE BUILDING SPACE LAYOUT, BUILDING OCCUPANCY, CURRENT NFPA 72, LOCAL AND STATE CODE REQUIREMENTS, AND THE FIRE ALARM AND DETECTION SYSTEM SPECIFICATIONS.

C. FIRE ALARM DEVICES ARE SHOWN FOR REFERENCE ONLY. FIRE ALARM CONTRACTOR IS RESPOSIBLE FOR VERIFYING EXISTING LOCATIONS AND PROVIDING A COMPLETE AND FUNCTIONING, CODE COMPLIANT SYSTEM.

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

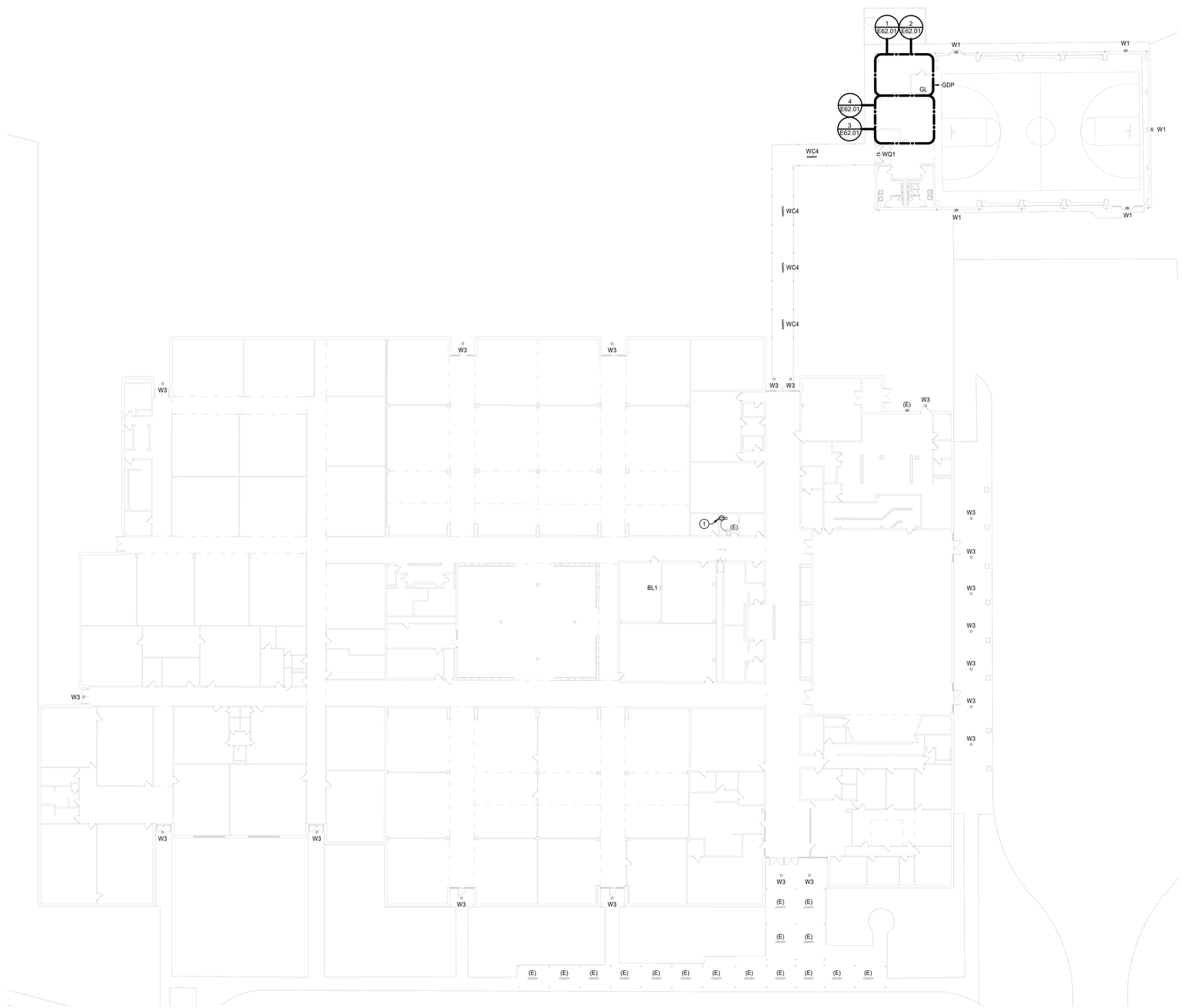
LIGHTING GENERAL NOTES

1 UNLESS NOTED OTHERWISE, DISCONNECT AND REMOVE EXISTING EXTERIOR LIGHTING FIXTURES FOR REPLACEMENT. EXISTING CIRCUITS TO REMAIN IN PLACE FOR RE-USE.

2 CONNECT NEW LIGHT FIXTURES TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO EXISTING LOCATION AND/OR NEW FIXTURES.

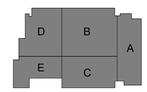
ELECTRICAL KEYED NOTES

1 NEW PA SYSTEM HEAD END. PROVIDE NEW RECEPTACLE AS SHOWN AND CONNECT TO EXISTING CIRCUIT LEFT IN PLACE AFTER DEMOLITION. EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO NEW LOCATION. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 1500 W @ 120 V. COORDINATE FINAL PA SYSTEM LOCATION.



N

1 **ELECTRICAL COMPOSITE PLAN - LEVEL 1 - NITSCH**
Scale: 1" = 20'-0"



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01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

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Project Director:	MR
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Checked By:	PS
Drawn By:	LT

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SHEET TITLE
ELECTRICAL COMPOSITE PLAN - LEVEL 1 - NITSCH ES

SHEET NO.
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LINETYPE LEGEND

———————	EXISTING TO REMAIN
— — — —	DISCONNECT AND REMOVE
———————	NEW WORK

DEMOLITION / EXISTING DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS ON FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.

REMOVE EXISTING AND PROVIDE NEW DUCT DETECTORS FOR AIR HANDLING UNITS BEING REPLACED BY DIVISION 23.

ELECTRICAL KEYED NOTES

1 DISCONNECT EXISTING MECHANICAL EQUIPMENT AND REMOVE ASSOCIATED DISCONNECT/CONTROLLER FOR MECHANICAL EQUIPMENT REPLACEMENT AND NEW DISCONNECT/CONTROLLER. REMOVE EXISTING CIRCUIT BACK TO SOURCE OR NEXT DEVICE TO REMAIN.

2 PROVIDE NEW RECEPTACLES AS SHOWN AND CONNECT TO EXISTING CIRCUITS LEFT IN PLACE AFTER DEMOLITION, EXTEND CONDUCTORS/CONDUIT WITH MATCHING SIZE TO NEW LOCATION. FIELD VERIFY CONNECTED LOAD NOT TO EXCEED 1500 W @ 120 V.

3 LEAK DETECTION. COORDINATE FINAL LOCATION WITH DIVISION 23. PROVIDE NEW BRANCH BREAKER IN EXISTING PANEL 'GL', 20A/1P, 2#12, 1#12G. 3/4"C.

PANELBOARD CIRCUIT DIRECTORY:

CONTRACTOR SHALL RECORD AND/OR PRESERVE THE EXISTING CIRCUIT DIRECTORY, IF ANY, FOR THE SOLE PURPOSE UPON COMPLETION OF NEW WORK OF PRODUCING A NEW CIRCUIT DIRECTORY.

CONTRACTOR SHALL PROVIDE AS PART OF THE CONSTRUCTION DOCUMENTS A NEW, NEATLY TYPED DIRECTORY. CONTRACTOR SHALL LEGIBLY IDENTIFY AS TO ITS CLEAR, EVIDENT, AND SPECIFIC PURPOSE OR USE, LOADS SERVED AND LOCATION AND/OR THE PANELBOARD SCHEDULE ON THE DRAWINGS. THE WORD "EXISTING" SHALL NOT BE USED ON PANELBOARD DIRECTORIES. SPARE BREAKERS ARE TO BE LISTED AS "SPARE". SPACES WITH NO BREAKERS ARE TO BE LEFT BLANK. REFER TO NEC-2023: 408.4(A) FOR DETAILS.

CONTRACTOR SHALL PERMANENTLY LABEL AS PART OF THE CONSTRUCTION DOCUMENTS ALL SWITCHBOARDS, SWITCHGEAR AND PANELBOARDS TO INDICATE EACH POWER SOURCE. REFER TO NEC-2023: 408.4(B) FOR DETAILS.

CONTRACTOR TO FIELD VERIFY INTERRUPTING FAULT CURRENT CAPACITY OF EXISTING PANELS AND/OR SWITCHBOARDS AND TO PROVIDE NEW BREAKERS/FUSES TO MATCH EXISTING.

Branch Panel: GDP — Campus: Nitsch ES — EXISTING PANEL

Location: ELEC. 1449 **Volts:** 277/480 Wye **A.I.C. Rating:** Existing
Supply From: **Phases:** 3 **Enclosure:** Type 1
Mounting: Surface **Wires:** 4 **Mains:** 400A MCB
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
	1				10.0 / 10.0						2	
--	3	PANEL GH	--	100	3	10.0 / 10.0		3	70	-- XFMR GT	4	--
	5						10.0 / 10.0				6	
	7				14.3 / 0.0						8	
1	9	CU-PE-1	#4	80	3	14.3 / 0.0		3	100	-- Spare	10	--
	11						14.3 / 0.0				12	
	13				0.0 / 2.7						14	
--	15	Spare	--	100	3	0.0 / 2.7		3	30	#10 AHU-PE-1	16	1
	17						0.0 / 2.7				18	
	19				14.3 / 1.3						20	
1	21	EDH-PE-1	#4	70	3	14.3 / 1.3		3	20	#12 EDH-PE-2	22	1
	23						14.3 / 1.3				24	
	25				0.0 / 0.0			1	--	-- Space	26	--
--	27	Spare	--	30	3	0.0 / 0.0		1	--	-- Space	28	--
	29						0.0 / 0.0	1	--	-- Space	30	--
			Total Load:		52.7 kVA	52.7 kVA	52.7 kVA					
			Total Amps:		190 A	190 A	190 A					

Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
HVAC	98.0 kVA	100.00%	98.0 kVA		
Miscellaneous	0.0 kVA	0.00%	0.0 kVA	**Total Conn. Load:**	158.0 kVA
Existing	60.0 kVA	125.00%	75.0 kVA	**Total Est. Demand:**	173.0 kVA
				Total Conn. Current:	190 A
				Total Est. Demand...	208 A

Notes:
1. New circuit and breaker.

Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE

Branch Panel: BL1 — Campus: Nitsch ES — EXISTING PANEL

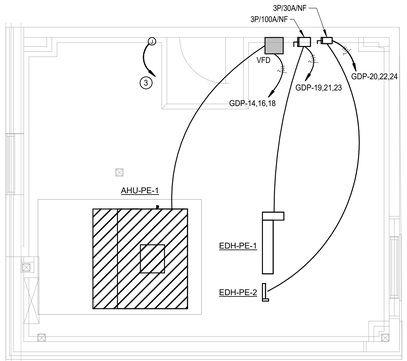
Location: Room 926 **Volts:** 120/208 Wye **A.I.C. Rating:** Existing
Supply From: **Phases:** 3 **Enclosure:** Type 1
Mounting: Surface **Wires:** 4 **Mains:** 100A MCB
Phase in kVA

Note	CKT	Circuit Description	Wire	Breaker	A	B	C	Breaker	Wire	Circuit Description	CKT	Note
--	1	Existing lighting contactor	--	20	1	0.1 / 0.2		1	20	-- Existing F/A booster	2	--
--	3	Existing lighting contactor	--	20	1		0.1 / 0.2	1	20	-- Existing F/A booster	4	--
--	5	Existing lighting contactor	--	20	1		0.1 / 0.4	1	20	-- Existing receptacles	6	--
--	7	Existing receptacles	--	20	1	0.4 / 0.4		1	30	-- Existing receptacles	8	--
--	9	Existing receptacles	--	20	1		0.4 / 0.4	1	20	-- Existing receptacles	10	--
--	11	Existing receptacles	--	20	1		0.4 / 0.4	1	20	-- Existing receptacles	12	--
--	13	Existing EF-6	--	20	1	0.7 / 0.4		1	20	-- Existing receptacles	14	--
--	15	Existing EDF	--	20	1		0.4 / 0.4	1	20	-- Existing receptacles	16	--
--	17	Existing EDF	--	20	1		0.4 / 0.4	1	20	-- Existing receptacles	18	--
--	19	Existing receptacles	--	20	1	0.4 / 0.4		1	20	-- Existing receptacles	20	--
--	21	Existing receptacles	--	20	1		0.4 / 0.4	1	20	-- Existing receptacles	22	--
--	23	Existing receptacles	--	20	1		0.4 / 0.4	1	20	-- Existing receptacles	24	--
--	25	Existing receptacles	--	20	1	0.4 / 0.4		1	20	-- Existing receptacles	26	--
--	27	Existing receptacles	--	20	1		0.4 / 0.4	1	20	-- Existing receptacles	28	--
--	29	Existing receptacles	--	20	1		0.4 / 0.4	1	20	-- Existing EDF	30	--
--	31	Existing hand dryer	--	30	1	0.5 / 0.4		1	20	-- Existing EDF	32	--
--	33	Existing hand dryer	--	30	1		0.5 / 0.2	1	20	-- Existing	34	--
--	35	Existing	--	30	1		0.2 / 0.4	1	20	-- Existing receptacles	36	--
	37					2.0 / 0.7		1	20	-- Existing EF-9	38	--
--	39	Existing Panel 'BL2'	--	60	3		2.0 / 0.2	1	20	-- Existing	40	--
	41						2.0 / 0.4	1	20	-- Existing EF-7/8	42	--
	43					0.0 / 0.7		1	20	-- Existing EF-6	44	--
--	45	Existing SPD	--	20	3		0.0 / 0.4	1	20	-- Existing receptacles	46	--
	47						0.0 / 0.4	1	20	-- Existing receptacles	48	--
1	49	Marquee sign	#4	20	2	0.0 / 0.0		1	--	-- Space	50	--
	51						0.0 / 0.0	1	--	-- Space	52	--
--	53	Space	--	--	1			1	--	-- Space	54	--
--	55	Space	--	--	1	0.0 / 0.0		1	--	-- Space	56	--
--	57	Space	--	--	1		0.0 / 0.0	1	--	-- Space	58	--
--	59	Space	--	--	1			0.0 / 0.0	1	-- -- Space	60	--
			Total Load:		8.1 kVA	6.8 kVA	7.1 kVA					
			Total Amps:		68 A	57 A	60 A					

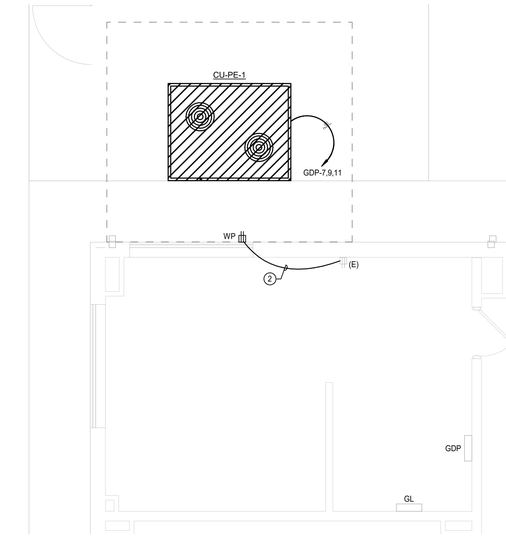
Load Classification Abbreviation	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Miscellaneous	0.0 kVA	0.00%	0.0 kVA		
Existing	22.0 kVA	125.00%	27.5 kVA	**Total Conn. Load:**	22.0 kVA
				Total Est. Demand:	27.5 kVA
				Total Conn. Current:	61 A
				Total Est. Demand...	76 A

Notes:
- Splice conductors to a smaller size or provide wire reducing adapters to accommodate large wire size shown on schedule.
1. New circuit and breaker.

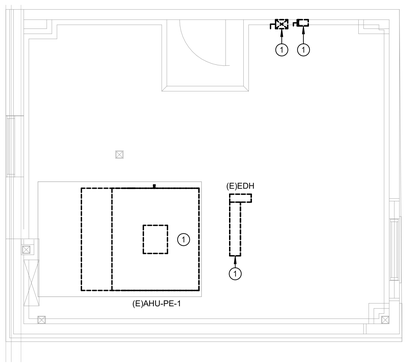
Abbreviations:
G - PROVIDE GFCI CIRCUIT BREAKER
LF - PROVIDE PERMANENT LOCK-OFF DEVICE
LO - PROVIDE PERMANENT LOCK-ON DEVICE
M - PROVIDE METERING DEVICE



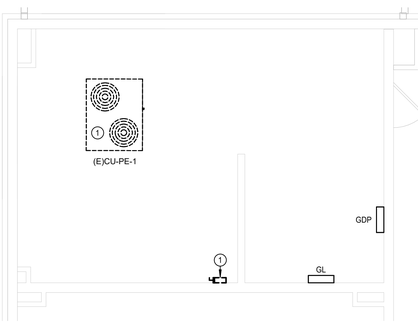
N 4 **ELECTRICAL FLOOR PLAN - MEZZ GYM - NITSCH ES**
Scale: 1/4" = 1'-0"



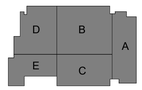
N 2 **ELECTRICAL FLOOR PLAN - MECH GYM - NITSCH ES**
Scale: 1/4" = 1'-0"



N 3 **ELECTRICAL DEMOLITION FLOOR PLAN - MEZZ. GYM - NITSCH ES**
Scale: 1/4" = 1'-0"



N 1 **ELECTRICAL DEMOLITION FLOOR PLAN - MECH GYM - NITSCH ES**
Scale: 1/4" = 1'-0"



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01-27-2026

ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director: MR
Designed By: LT
Checked By: PS
Drawn By: LT

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25-0225.00

SHEET TITLE
ELECTRICAL FLOOR PLANS & PANELBOARD SCHEDULES - NITSCH ES

SHEET NO.
E62.01

KISD 2025 FRP

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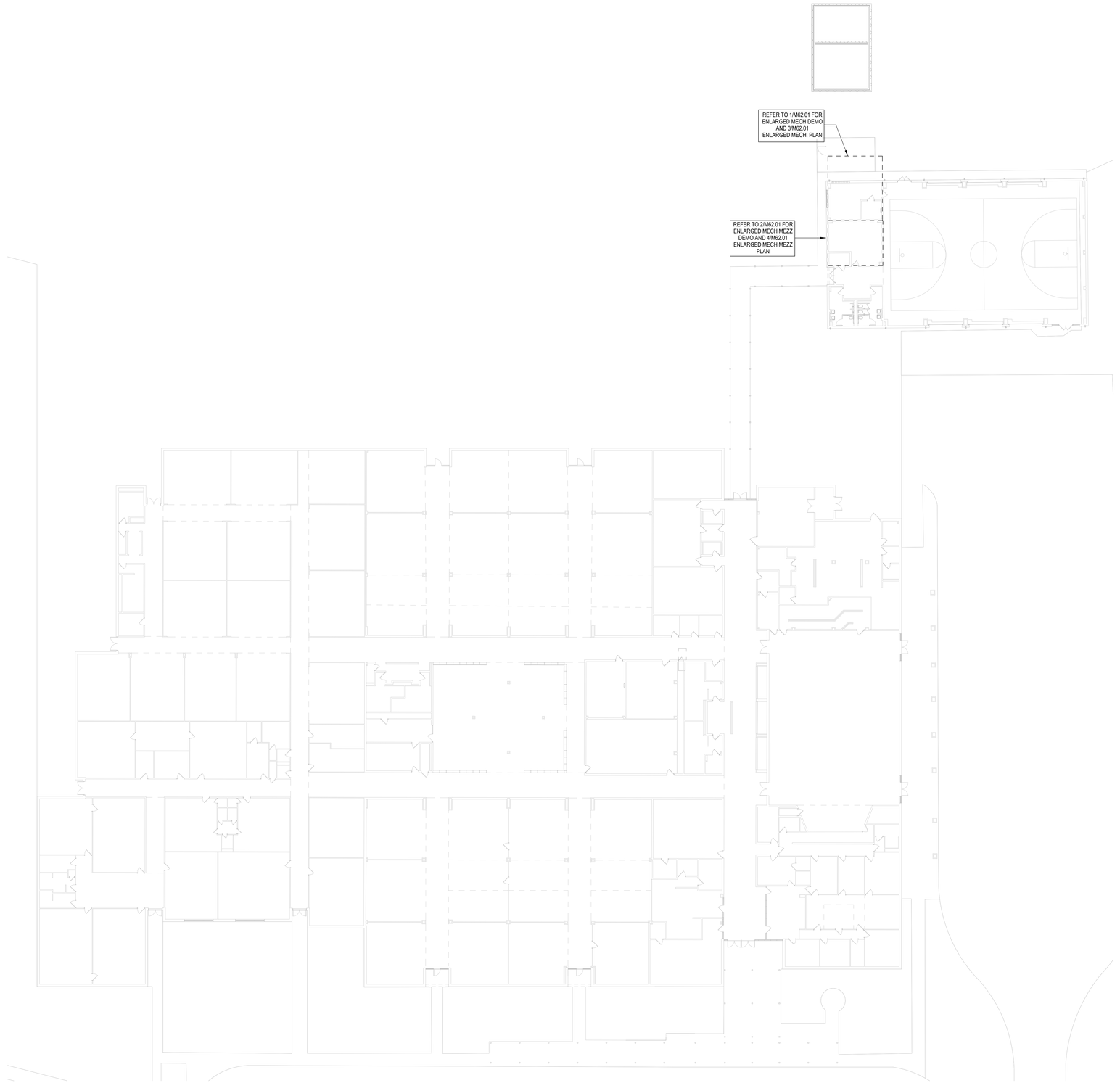
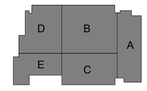


1 **MECHANICAL COMPOSITE PLAN - LEVEL 1 - NITSCH**
Scale: 1" = 20'-0"



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ISSUED: JANUARY 27, 2026

REVISIONS

Revision No.	Revision Date

Project Director:	MR
Designed By:	IP
Checked By:	VP
Drawn By:	IP

PROJECT NO.
25-0225.00

SHEET TITLE
MECHANICAL COMPOSITE PLAN - NITSCH

SHEET NO.
M61.00

KISD 2025 FRP

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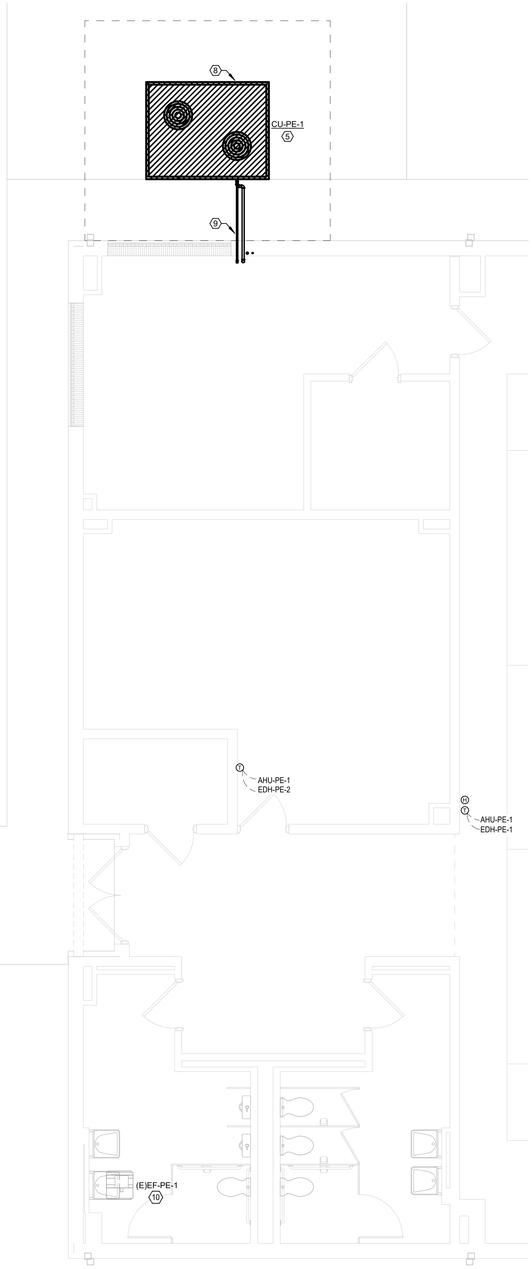
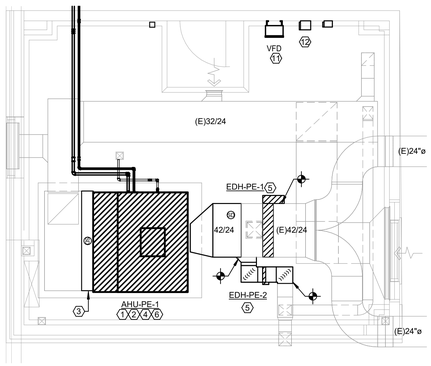
GENERAL NOTES:

1. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
2. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

KEYED NOTES:

1. VERIFY SERVICE CLEARANCE FOR FAN SHAFT AND COIL REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
2. VERIFY SERVICE CLEARANCE FOR AIR FILTER REMOVAL WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
3. SHEET METAL PLENUM, FULL SIZE OF UNIT RETURN AIR OPENING, LENGTH AS REQUIRED FOR ALL DUCT CONNECTIONS SHOWN.
4. ROUTE FULL SIZE CONDENSATE DRAIN PIPE TO EXISTING FLOOR DRAIN LOCATED IN THIS ROOM.
5. VERIFY SERVICE CLEARANCE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ALL TRADES NOT TO OBSTRUCT.
6. NEW AIR HANDLING SHALL BE INSTALLED ON EXISTING CONCRETE PAD. EXTEND AS REQUIRED FOR NEW UNIT.
7. EXISTING EQUIPMENT TO REMAIN AND BE REUSED.
8. PROVIDE 4" THICK CONCRETE HOUSEKEEPING PAD.
9. ROUTE REFRIGERANT LINES UP TP AHU-PE-1 ON MECHANICAL MEZZANINE. SIZE LINE PER MANUFACTURER'S RECOMMENDATIONS
10. INTERLOCK EXISTING EXHAUST FAN WITH NEW AIR HANDLING UNIT.
11. CONNECT NEW VFD TO EXISTING FIRE ALARM WIRING, RECOMMISION FIRE ALARM SYSTEM TO ENSURE AHU SHUTS DOWN WHEN SIGNALED BY THE FIRE ALARM SYSTEM,
12. ADD NEW NETWORK CARD TO EXISTING BMCS PANEL.





MECHANICAL ENLARGED PLAN - LEVEL 2 - NITSCH - NITSCH MECH 415 SF
4 Scale: 1/4" = 1'-0"

MECHANICAL ENLARGED PLAN - LEVEL 1 - NITSCH GYM
3 Scale: 1/4" = 1'-0"

GENERAL NOTES:

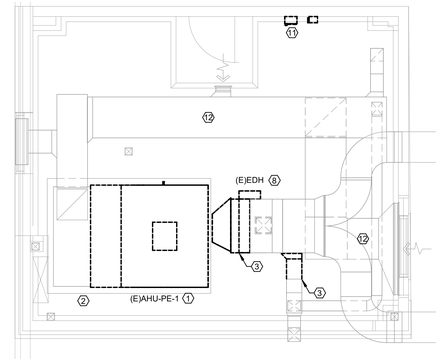
1. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT BEING REMOVED ROM THIS PROJECT. THIS INCLUDES BUT IS NOT LIMITHED TO CHILLERS, AIR HANDLING UNITS, FANS, CONDENSING UNITS, BMCS CONTROL PANELS, TEMPERATURE SENSORS, AND CONTROL VALVES.
2. THESE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC, AND DO NOT NECESSARILY REFLECT ACTUAL DIMENSIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FEILD-VERIFY ALL DIMINSIONS AND COORDINATE PLACEMENT OF ALL EQUIPMENT ADN ROUTING OF ALL PIPING AND/OR DUCT SYSTEMS.
3. ALL MECHANICAL SYSTEMS SHOWN ON THIS PLAN ARE FROM ECISTING DRAWINGS AND PRELIMINARY FEILD WORK. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL LOCATIONS AND SIZES OF MECHANICAL SYSTEMS PRIOR TO THE START OF WORK.

SYMBOL LEGEND

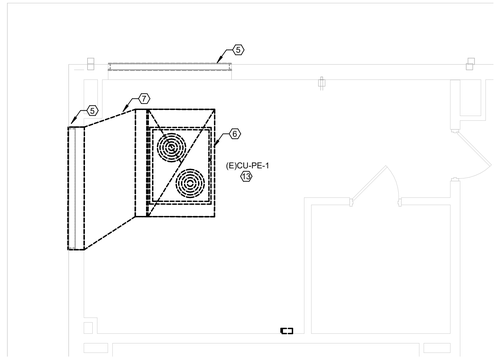
SYMBOL	DESCRIPTION
RENOVATIONS	
⊕	POINT OF CONNECTION FROM NEW TO EXISTING
▭	ITEM TO REMAIN
▭ (dashed)	ITEM TO BE REMOVED

DEMOLITION KEYED NOTES:

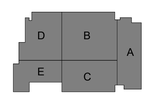
1. REMOVE EXISTING AIR HANDLING UNIT AND ASSOCIATED CONDENSATE PIPING. EXISTING DUCTWORK SHALL REMAIN AND REUSED.
2. EXISTING CONCRETE PAD SHALL REMAIN AND BE REUSED.
3. REMOVE EXISTING SUPPLY DUCTWORK UP TO THIS POINT.
4. REMOVE EXISTING RETURN PLENUM.
5. REMOVE EXISTING WALL LOUVER. EXISTING OPENING SHALL BE SEALED TO MATCH EXISTING WALL FINISH.
6. REMOVE EXISTING CONCRETE PAD.
7. REMOVE EXISTING CONDENSER UNIT PLENUM AIR AND ASSOCIATED DUCTWORK.
8. REMOVE EXISTING ELECTRIC DUCT HEATER. EXISTING DUCTWORK SHALL REMAIN AND REUSED.
9. REMOVE EXISTING RETURN DUCTWORK UP TO THIS POINT.
10. REMOVE EXISTING OUTSIDE AIR DUCTWORK UP TO THIS POINT.
11. REMOVE EXISTING ELECTRICAL STARTER.
12. EXISTING RETURN DUCTWORK TO REMAIN AND BE REUSED.
13. REMOVE EXISTING CONDENSER UNIT AND ASSOCIATED REFRIGERANT LINES.



MECHANICAL DEMOLITION ENLARGED PLAN - LEVEL 2 - NITSCH - NITSCH MECH 415 SF
2 Scale: 1/4" = 1'-0"



MECHANICAL DEMOLITION ENLARGED PLAN - LEVEL 1 - NITSCH GYM
1 Scale: 1/4" = 1'-0"



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MECHANICAL ENLARGED PLAN - NITSCH

SHEET NO.
M62.01

KLEIN ISD
KLEIN, TX

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DX-AIR HANDLING UNIT

MARK	FAN					COOLING						REMARKS
	SUPPLY AIR CFM	OUTSIDE AIR CFM	EXT. STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHARAC.	AIR TEMPERATURE (°F) ENTERING DRY BULB	ENTERING WET BULB	MIN. TOTAL CAPACITY (BTUH)	MIN. SENSIBLE CAPACITY (BTUH)	MINIMUM EER/ SEER	NUMBER OF STAGES	
AHU-PE-1	8,300	1,200	0.75	10	460/3/60	78.2	65.2	336,150	234,860	10.0/-	2	(1,2,3,4,5,6,7)

GENERAL NOTES:

1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 12 INCHES ON NON-SERVICE SIDES AND 30 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:

1. FACE VELOCITY ACROSS COOLING COIL SHALL NOT EXCEED 500 FPM.
2. CONSTANT VOLUME UNIT WITH VARIABLE FREQUENCY DRIVE.
3. PROVIDE VERTICAL FRONT DISCHARGE UNIT.
4. PROVIDE ANGLE FILTER SECTION.
5. HEATING BY ELECTRIC DUCT HEATERS.
6. UNIT HEIGHT MUST NOT EXCEED 100"
7. PROVIDE WITH FACTORY A2L REFRIGERANT LEAK DETECTION SYSTEM CERTIFIED TO UL 60335-2-40 AS SPECIFIED.

AIR COOLED CONDENSING UNIT

MARK	MIN. TOTAL CAPACITY (BTUH)	OUTDOOR AIR TEMP (°F)	MINIMUM EER/ SEER	NUMBER OF STAGES	CURRENT CHARAC.	RELATED UNIT MARK	REMARKS
CU-PE-1	336,150	95	10.0/-	2	460/3/60	AHU-PE-1	(1,2,3,4)

GENERAL NOTES:

1. MINIMUM RECOMMENDED CLEARANCE AROUND UNIT IS 24 INCHES ON NON-SERVICE SIDES AND 36 INCHES ON SERVICE SIDES. MAINTAIN MINIMUM CLEARANCE FOR CONDENSER AIR FLOW AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

REMARKS:

1. DISCONNECT SWITCH PROVIDED AND INSTALLED BY ELECTRICIAN.
2. PROVIDE WITH LOW AMBIENT KIT.
3. REFRIGERANT LINES TO BE SIZED PER MANUFACTURER'S REQUIREMENTS.
4. PROVIDE WITH FACTORY A2L REFRIGERANT LEAK DETECTION SYSTEM CERTIFIED TO UL 60335-2-40 AS SPECIFIED.

ELECTRIC DUCT HEATER

MARK	CFM	ENTERING AIR TEMP (°F)	MINIMUM CAPACITY (BTUH)	KW	PRESSURE DROP (IN. W.G.)	NUMBER OF STAGES	CURRENT			REMARKS
							V	P	F	
EDH-PE-1	7,575	67	147,258	43	0.25	SCR	480	3	60	(1)
EDH-PE-2	725	67	14,094	4	0.25	SCR	480	3	60	(1)

REMARKS:

1. PROVIDE WITH FLANGE FOR MOUNTING IN DUCTWORK.

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MECHANICAL SCHEDULES - NITSCH

SHEET NO.

M63.00

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PLUMBING GENERAL NOTES

1. CONTRACT DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION, AND WHEN AVAILABLE, EXISTING RECORD DOCUMENTS. CONTRACTOR TO VERIFY AT SITE EXACT LOCATIONS, AND SIZES OF EXISTING PIPING. REPORT DISCREPANCIES TO ARCHITECT BEFORE DISTURBING EXISTING INSTALLATION, AND IMMEDIATELY AFTER SUCH DISCREPANCIES ARE DISCOVERED. CONTRACTOR TO VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS BETWEEN EXISTING CONDITIONS AND DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
2. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK.
3. PLUMBING FIXTURES/EQUIPMENT SHOWN ON PLAN THAT ARE NOT IDENTIFIED AND DO NOT HAVE A FIXTURE DESIGNATION ARE EXISTING AND ARE TO REMAIN.
4. ANY OTHER ITEMS NOT REFERENCED WHICH ARE LOCATED IN THE DEMOLISHED SPACE (VENT, WASTE, WATER HEATER, PLUMBING FIXTURE, ETC.) THAT ARE IDENTIFIED OR DISCOVERED DURING DEMOLITION WHICH WILL NOT BE USED FOR THIS PROJECT, SHALL BE DEMOLISHED BACK TO THE MAIN SOURCE OR RISER, AND DEVICES SHALL BE RETAINED TO THE OWNER STORAGE AS DIRECTED BY THE ARCHITECT/OWNER.
5. OWNER OR ITS REPRESENTATIVE SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL PLUMBING FIXTURES/ EQUIPMENT BEING REMOVED FROM THIS PROJECT. THIS INCLUDES BUT NOT LIMITED TO PUMPS, HEATERS, AND STAINLESS STEEL SINKS. CONTRACTOR TO NOTIFY DISTRICT PRIOR TO DEMOLITION WORK TO DISCUSS ALL RETURNED ITEMS TO DISTRICT.

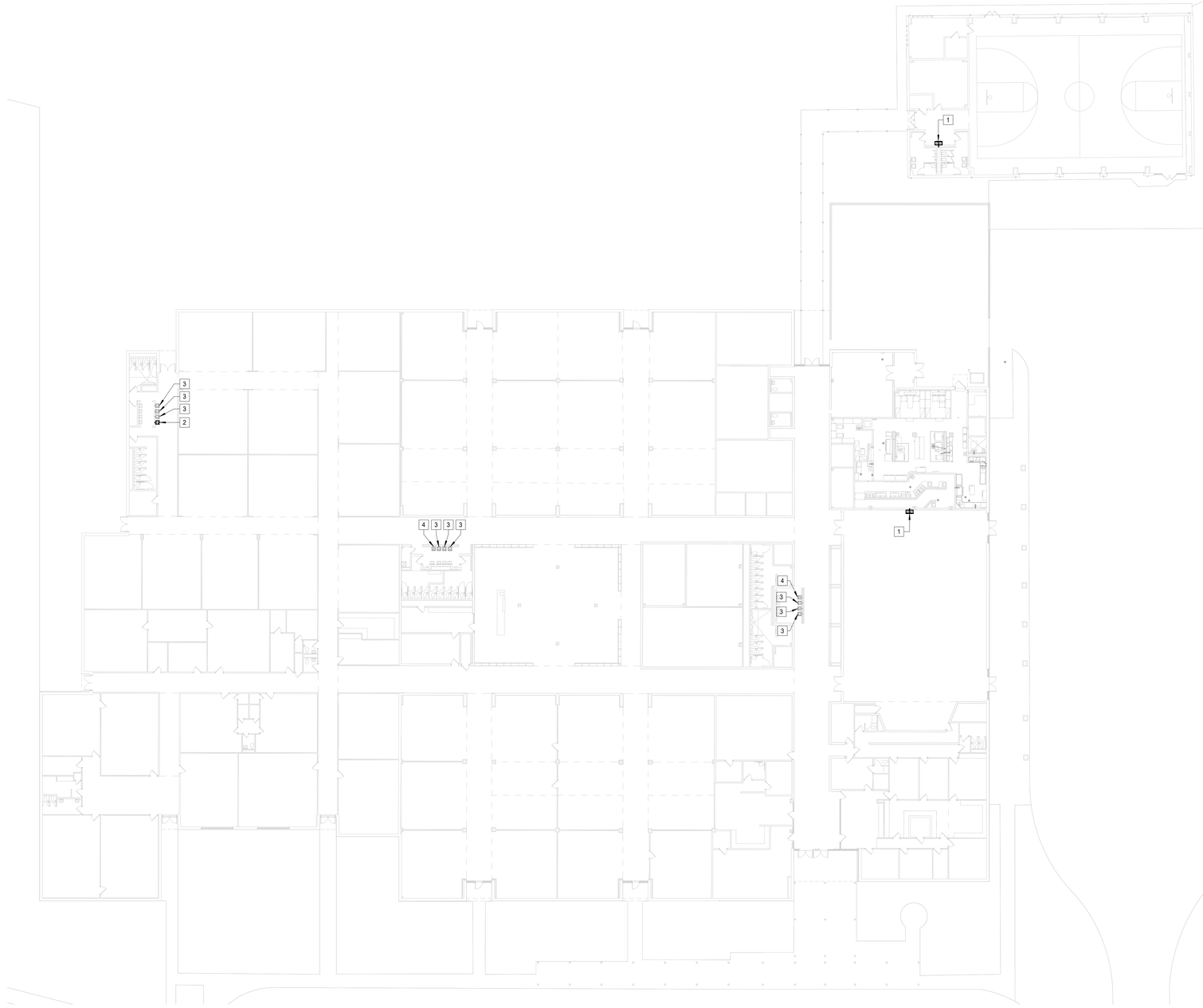
PLUMBING KEYED NOTES

1 EXISTING BI-LEVEL ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO BE REMOVED AND REPLACED WITH A NEW ONE. MAINTAIN EXISTING UTILITIES/ROUGH-IN TO SERVE NEW FIXTURE(S). FIELD VERIFY THE EXACT LOCATION, SIZE, AND CONDITION OF EXISTING PIPING. REPAIR EXISTING PIPING IF NEEDED AND PREPARE FOR NEW CONNECTION.

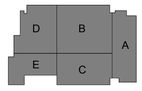
2 EXISTING SINGLE ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO BE REMOVED AND REPLACED WITH A NEW ONE. VERIFY WITH THE DISTRICT WHICH UNIT IS TO BE REPLACED. MAINTAIN EXISTING UTILITIES/ROUGH-IN TO SERVE NEW FIXTURE(S). FIELD VERIFY THE EXACT LOCATION, SIZE, AND CONDITION OF EXISTING PIPING. REPAIR EXISTING PIPING IF NEEDED AND PREPARE FOR NEW CONNECTION.

3 EXISTING SINGLE ELECTRIC DRINKING FOUNTAIN WITH NON-BOTTLE FILLING STATION TO REMAIN.

4 EXISTING RETROFITTED ELECTRIC DRINKING FOUNTAIN WITH BOTTLE FILLING STATION TO REMAIN.



1 **PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 1 - NITSCH**
Scale: 1" = 20'-0"



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PLUMBING DEMOLITION COMPOSITE PLAN - LEVEL 1 - NITSCH

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PLUMBING GENERAL NOTES

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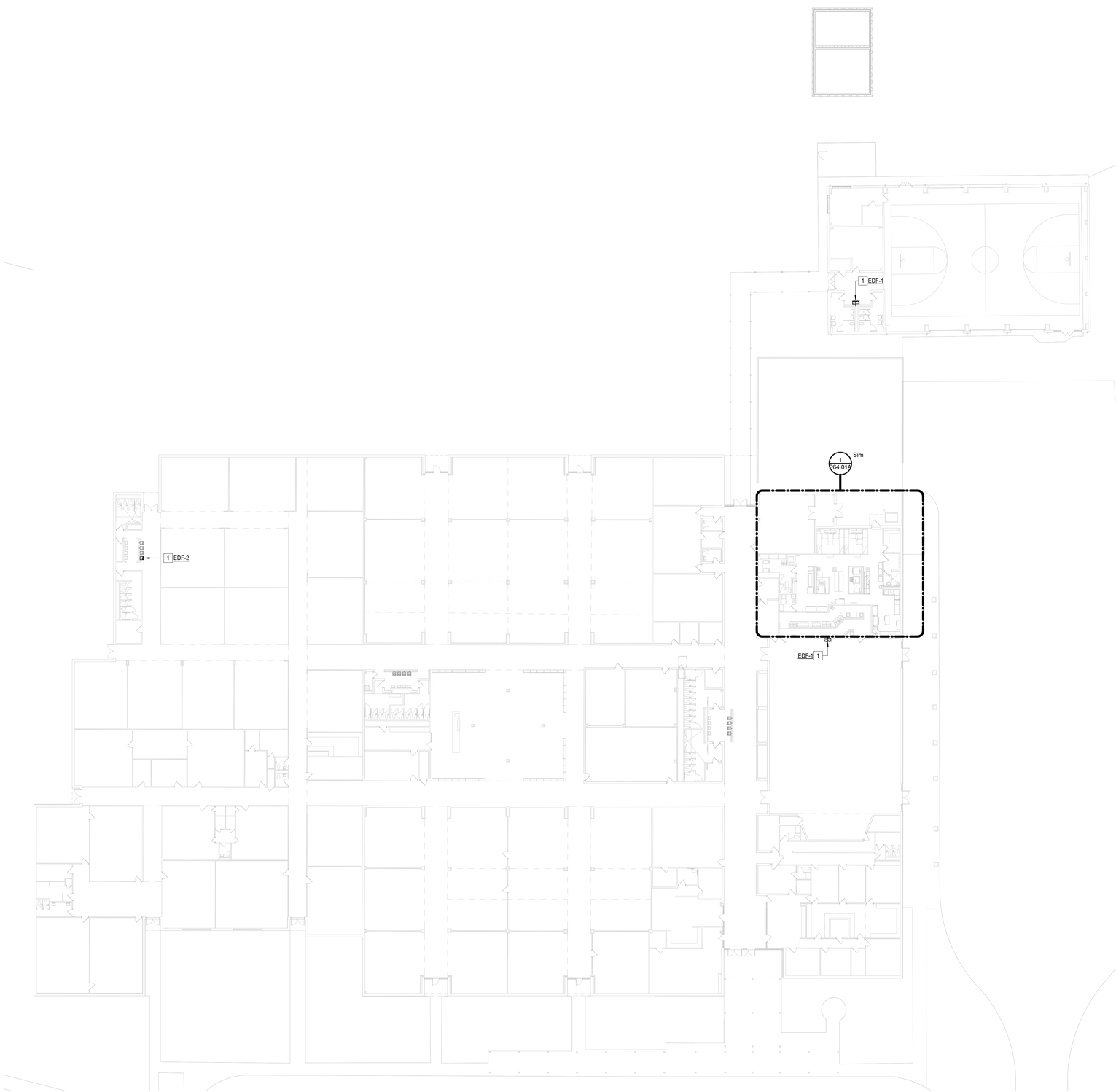
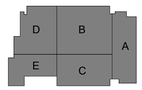
2. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTAL OF BID TO DETERMINE CONDITIONS AFFECTING THE WORK. ANY ITEMS WHICH ARE NOT COVERED IN THE BID DOCUMENTS OR ANY PROPOSED SUBSTITUTIONS SHALL BE LISTED SEPARATELY AND QUALIFIED IN THE CONTRACTORS BID. SUBMITTAL OF BID SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS AND ANY MODIFICATIONS WHICH ARE REQUIRED TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. FAILURE TO VISIT THE SITE DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY IN PERFORMANCE OF WORK.
3. PLUMBING FIXTURES/EQUIPMENT SHOWN ON PLAN THAT ARE NOT IDENTIFIED AND DO NOT HAVE A FIXTURE DESIGNATION ARE EXISTING AND ARE TO REMAIN.
4. REFER TO ARCHITECTS DRAWING FOR EXACT LOCATION OF FLOOR DRAINS.
5. DO NOT SCALE THE PLUMBING DRAWINGS, REFER TO THE DIMENSIONED ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONAL DATA.
6. REFER TO PLUMBING DETAILS AND SCHEDULES SHEET(S).

PLUMBING KEYED NOTES

1 PROVIDE AND INSTALL NEW PLUMBING FIXTURE(S) AS INDICATED. CONNECT TO EXISTING UTILITIES, CW, SANITARY AND VENT.



1 **PLUMBING COMPOSITE PLAN - LEVEL 1 - NITSCH**
Scale: 1" = 20'-0"



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PLUMBING COMPOSITE PLAN - LEVEL 1 - NISTCH

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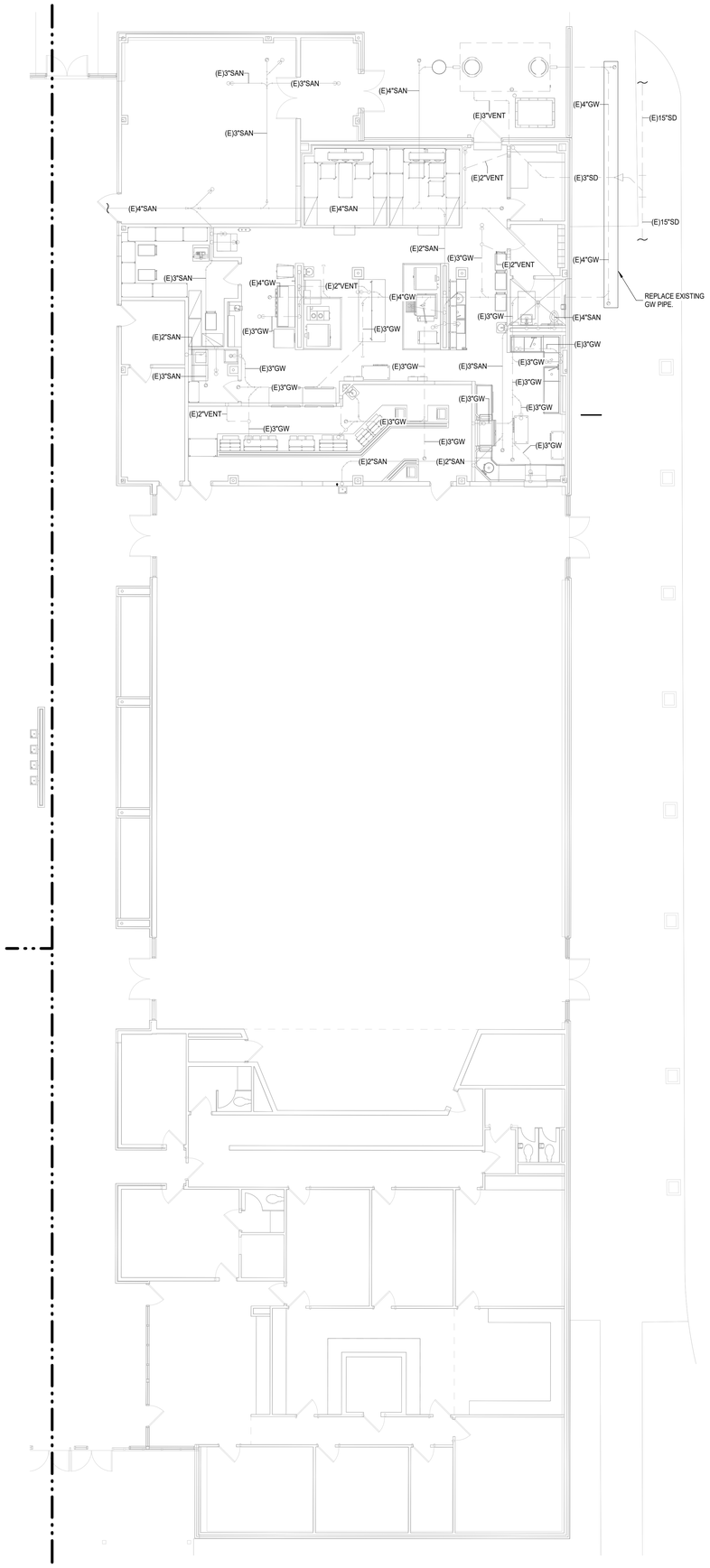
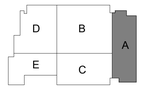


1 **PLUMBING UNDERFLOOR PLAN - NITSCH UNIT A**
Scale: 1/8" = 1'-0"



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Designed By:	Designer
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Drawn By:	Author

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PLUMBING UNDERFLOOR PLAN - AREA A - NISTCH

SHEET NO.
P64.01A

KISD 2025 FRP

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PLUMBING GENERAL NOTES

1. WITHIN THE EXISTING BUILDING, EXISTING WATER, WASTE AND VENT SERVICES ARE TO BE MODIFIED AS REQUIRED AND REUSED FOR THE INSTALLATION OF NEW AND/OR RELOCATED PLUMBING FIXTURES. REFER TO PLUMBING FLOOR PLANS FOR POINTS OF CONNECTION.
2. WITHIN THE EXISTING BUILDING, SAWCUT AND REMOVE EXISTING FLOOR SLAB AS REQUIRED TO PROVIDE NEW AND/OR RELOCATED PLUMBING FIXTURES, CLEANOUTS, AND UNDERSLAB WASTE AND VENT PIPING. PATCH AND REFINISH FLOOR TO MATCH EXISTING.
3. IN AREAS WHERE THE FLOOR SLAB IS REMOVED, CONTRACTOR SHALL ALSO REMOVE UNDERSLAB WASTE AND VENT PIPING WHICH SERVES FIXTURES DESIGNATED FOR REMOVAL PRIOR TO ANY REMOVAL, FIELD VERIFY THAT LINES TO BE REMOVED DO NOT SERVE ANY EXISTING FIXTURES TO REMAIN OR NEW FIXTURES TO BE INSTALLED.
4. IN AREAS WHERE THE FLOOR SLAB IS NOT REMOVED, CONTRACTOR SHALL ABANDON IN PLACE ANY UNDERSLAB WASTE AND VENT PIPING NO LONGER NEEDED, UNLESS THE PIPING MUST BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION. IF NEW WORK DOES NOT NECESSITATE THEIR REMOVAL, CUT AND PLUG SUCH LINES BELOW SLAB, AND PATCH FLOOR TO MATCH EXISTING.
5. FIELD VERIFY EXACT LOCATION, SIZE, DEPTH, DIRECTION OF FLOW, CAPACITY, PIPE MATERIAL AND CONDITION OF EXISTING WASTE PIPING PRIOR TO BEGINNING CONSTRUCTION. ENSURE THAT PROPER CONNECTIONS TO AND EXTENSION OF SUCH UTILITIES CAN BE MADE.
6. WASTE LINES TO BE RE-USED OR RECONNECTED TO SHALL BE THOROUGHLY RODDED OUT AND FLUSHED TO ENSURE THEY ARE FREE FROM BLOCKAGES.
7. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.
8. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT. SHOULD A CONFLICT OCCUR THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.
9. CONTRACTOR TO COORDINATE ALL REMODEL WORK WITH THE WORK OF OTHER TRADES TO AVOID CONFLICTS AND TO MINIMIZE INTERRUPTION OF SERVICES.
10. COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST ARCHITECTURAL DRAWINGS AND SPECIFICATIONS PRIOR TO ANY ROUGH-INS.
11. DO NOT ROUGH-IN FROM THESE DRAWINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS.
12. CONTRACTOR TO FIELD VERIFY AS NECESSARY THE EXACT ROUTING AND SIZES OF ALL PIPING.
13. ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE, INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
14. THE PROPER INSTALLATION OF NEW FIXTURES AND THE PROPER CONTINUED OPERATION OF EXISTING FIXTURES TO REMAIN SHALL DETERMINE THE EXTENT AND NATURE OF PLUMBING REMODEL WORK.
15. EACH VENT SHALL TERMINATE VERTICALLY NOT LESS THAN 6" ABOVE ROOF. MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN VENT TERMINALS THROUGH ROOF AND ALL FRESH AIR INTAKES, AND A MINIMUM 5'-0" FROM ANY EXTERIOR WALL.
16. PRIOR TO BEGINNING CONSTRUCTION, COORDINATE BUILDING BACKFLOW PREVENTION REQUIREMENTS WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PROVIDE AS DIRECTED.

SHOCK ARRESTOR SCHEDULE

P.D.I. SYMBOLS:	FIXTURE UNITS:	THREADED CONNECTION	CERTIFICATION
A	1 - 11	1/2"	ASSE 1010
B	12 - 32	3/4"	ASSE 1010
C	33 - 60	1"	ASSE 1010
D	61 - 113	1"	ASSE 1010
E	114 - 154	1"	ASSE 1010
F	155 - 330	1"	ASSE 1010

PLUMBING FIXTURE SCHEDULE

TYPE: EDF-1 (T.A.S. COMPLIANT) - INTERIOR WITH BOTTLE FILLER
DESCRIPTION: WALL HUNG, BARRIER FREE, SELF-CONTAINED, VANDAL RESISTANT BOTTLE FILLING STATION AND BI-LEVEL ADA COOLER, NON-FILTERED REFRIGERATED STAINLESS. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 90F DRINKING WATER, BASED ON 80F INLET WATER AND 90F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE GREEN COUNTER, LAMINAR FLOW, REAL DRAIN, VANDAL RESISTANT. FURNISHED WITH VANDAL RESISTANT BUBBLER. ELECTRONIC BOTTLE FILLER BUTTON WITH MECHANICAL FRONT BUBBLER BUTTON ACTIVATION. PROVIDE CANE TOUCH APRON IN ALL STAINLESS STEEL ON ALL UNITS MOUNTED WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH.
HALSEY TAYLOR #HTHB-HVRBBL-NF WITH APRON #98324C.
P-TRAP: 1-1/4" CHROME PLATED CAST BRASS TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON. MCGUIRE #8872.
SUPPLIES: 1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVE WITH ESCUTCHEON AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE #2165LK.
CARRIER: RECTANGULAR STEEL TUBING UPRIGHTS WITH WELDED 3" X 4-1/2" BASE ANCHORED TO CONCRETE SLAB WITH (4) 1/2" BOLTS. ADJUSTABLE SLEEVE FOR CONNECTION TO HANGER PLATE PROVIDED BY FIXTURE MANUFACTURER. WADE #403-BL-BFS.
ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE: EDF-2 (T.A.S. COMPLIANT) - INTERIOR WITH BOTTLE FILLER
DESCRIPTION: WALL HUNG, BARRIER FREE, SELF-CONTAINED,VANDAL RESISTANT BOTTLE FILLING STATION AND SINGLE ADA COOLER, NON-FILTERED REFRIGERATED STAINLESS. CHILLING CAPACITY OF 8.0 GPH (GALLONS PER HOUR) OF 50F DRINKING WATER, BASED ON 80F INLET WATER AND 90F AMBIENT, PER ASHRAE 18 TESTING. FEATURES SHALL INCLUDE GREEN COUNTER, LAMINAR FLOW, REAL DRAIN, VANDAL RESISTANT. FURNISHED WITH VANDAL RESISTANT BUBBLER. ELECTRONIC BOTTLE FILLER BUTTON WITH MECHANICAL FRONT BUBBLER BUTTON ACTIVATION. PROVIDE CANE TOUCH APRON IN ALL STAINLESS STEEL ON ALL UNITS MOUNTED WITH A CLEAR KNEE SPACE GREATER THAN 27" HIGH.
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ROUGH-IN: 2" WASTE, 2" VENT, 1/2" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

GENERAL NOTES

ALL LAVATORIES AND SINKS SHALL BE SUPPLIED WITH HOT AND COLD WATER (UNLESS NOTED TO BE COLD WATER ONLY) TO FAUCETS AS INDICATED ON PLANS AND FIXTURE SCHEDULE. PROVIDE CHROME PLATED BRASS SUPPLY STOPS WITH LOOSE KEYS AND WALL ESCUTCHEONS. PROVIDE CHROME PLATED FLEXIBLE RISERS OF SIZE REQUIRED TO PROPERLY CONNECT FIXTURES. PROVIDE 17 GAUGE CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON (UNLESS NOTED TO BE AN ACID WASTE FIXTURE). REFER TO FIXTURE SCHEDULE FOR MINIMUM SIZES OF PLUMBING FIXTURE ROUGH-INS.

INSULATION KITS AT ALL LAVATORIES AND SINKS REQUIRED TO BE T.A.S. ACCESSIBLE (MCGUIRE OR TRUEBRO). ALL SUCH FIXTURES AND FINAL INSTALLATIONS SHALL COMPLY WITH THE STATE ACCESSIBILITY STANDARDS REQUIREMENTS.

INSERT TRAP GUARDS AFTER FINAL RODDING OF DRAINS. INSTALL TRAP GUARD WITH CLEAR SILICONE CAULK FOR GAS-TIGHT SEAL. FOR DRAIN RODDING AFTER INSTALLATION. INSERT SEWER TAPE THROUGH LIGHTLY GREASED 1-1/2" PVC PIPE TO PROTECT TRAP GUARD.

PLUMBING PIPING LEGEND

SYMBOLS	DESCRIPTION
SAN	SANITARY OR WASTE PIPING ABOVE GRADE (SAN)
SAN	SANITARY OR WASTE PIPING BELOW GRADE (SAN)
GW	GREASE WASTE PIPING (GW)
GW	GREASE WASTE PIPING BELOW GRADE (GW)
SD	STORM DRAIN PIPING (SD)
SD	STORM DRAIN PIPING BELOW GRADE (GW)
SSD	SUB-SOIL DRAIN OR FOOTING DRAIN (SSD)
AW	ACID WASTE PIPING (AW)
AW	ACID WASTE PIPING BELOW GRADE (AW)
PD	PUMPED DISCHARGE (PD)
CD	CONDENSTATE DRAIN PIPING (CD)
D	CONDENSTATE - INDIRECT DRAIN PIPING (D)
	VENT PIPING (V)
CW	COLD WATER PIPING (CW)
HW	HOT WATER PIPING (HW)
HWR	HOT WATER RETURN PIPING (HWR)
SCW	SOFT COLD WATER PIPING (SCW)
CDW	CHILLED DRINKING WATER PIPING (CDW)
TP	TRAP PRIMER LINE (TP)
F	FIRE PROTECTION PIPING (F)
AS	AUTOMATIC SPRINKLER PIPING (AS)
GAS	NATURAL GAS PIPING (G)
GV	GAS VENT PIPING (GV)
AIR	COMPRESSED AIR PIPING (A)
	FLOW DIRECTIONAL ARROW
	SHUT-OFF VALVE
	BALANCING VALVE (BV)
	SOLENOID VALVE (SV)
	BALL VALVE (BV)
	BUTTERFLY VALVE
	LUBRICATED PACKED PLUG STOP STOP COCK (PC)
	HORIZONTAL SWING CHECK
	UNION
	HORIZONTAL SWING CHECK
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	REDUCED PRESSURE BACKFLOW PREVENTER (RPBFP)
	PIPING DOWN
	RISE OR DROP PIPING
	PIPING UP -OR- PIPING UP & DOWN
	CAP ON END OF PIPE
	CLEANOUT (WALL OR CEILING) (CO)
	FLOOR CLEANOUT (FCO)
	EXTERIOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO)
	TWO-WAY CLEANOUT (PROVIDE 18"x24"x4" CONCRETE PAD OUTSIDE)
	FIRE DEPARTMENT VALVE AT RISER
	FIRE HYDRANT
	FIRE DEPARTMENT CONNECTION
	PRESSURE REDUCING VALVE (PRV)
	BRANCH CONNECTION OUT OF TOP
	BRANCH CONNECTION OUT OF BOTTOM
	BRANCH CONNECTION OUT OF SIDE
	WYE & 1/8TH BEND BRANCH CONNECTION
	WYE BRANCH CONNECTION
	HOSE BIBB
	PRESSURE GAUGE WITH COCK
	THERMOMETER
	GAS PRESSURE REGULATOR
	TEST COCK
	GAS METER
	WALL HYDRANT
	VALVE IN RISE
	ASME TEMPERATURE & PRESSURE RELIEF VALVE
	VACUUM RELIEF VALVE
	ANGLE VALVE
	OS&Y VALVE
	ROOF DRAIN
1	REFER TO KEYED NOTE
FS	FLOW SWITCH
	FLOOR SINK (FS)
	FLOOR DRAIN (FD)
	FLOOR DRAIN WITH P-TRAP (FD)
	FLOOR DRAIN WITH P-TRAP AT 45° ANGLE (FD)
	HUB DRAIN (HD)
	ACCESS PANEL FOR TRAP PRIMER OR SHOCK ABSORBER
AP	ACCESS PANEL LOCATION SYMBOL
A	SHOCK ABSORBER
	AIR CHAMBER
(E)	EXISTING
(N)	NEW
N.C.	NORMALLY CLOSED
VTR	VENT THRU ROOF
B.F.F.	BELOW FINISHED FLOOR
A.F.F.	ABOVE FINISHED FLOOR
	NEW CONNECTION
IE=100.00'	INVERT ELEVATION
1	DELTA CHANGE SYMBOL
P 1	RISER FLAG

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1 Nitsch ES LEVEL ONE
SCALE: 1" = 20'-0"

TECHNOLOGY - GENERAL NOTES

1. EXISTING PA SYSTEM HEAD END, SPEAKERS, AND WIRING TO BE DEMOLISHED IN ENTIRETY.
2. SPEAKERS IN CLASSROOMS TO HAVE TALK-BACK FUNCTIONALITY AND SHALL BE IP- SPEAKERS. ONLY SPED CLASROOMS SHALL HAVE VOLUME CONTROLS AND CALL BUTTONS.
3. SPEAKERS IN NON-CLASSROOM ENVIRONMENTS SHALL BE ANALOG SPEAKERS, WITH ONLY OFFICES AND CONFERENCE ROOMS RECEIVING VOLUME CONTROLS.

TECHNOLOGY KEYNOTES

1. UTILIZE EXISTING CAT6 CABLE FOR NEW PA SYSTEM HEAD END.
2. DEMOLISH EXISTING PA SYSTEM HEAD END AT THIS LOCATION, INCLUDING 66-BLOCKS AND PLAYWOOD BACKBOARD. PATCH AND PAINT HOLES, AS NEEDED TO PROVIDE A FINISHED LOOK FOR THE WALL.
3. LOCATION OF NEW PA SYSTEM HEAD END.
4. RELOCATE EXISTING CAT6 DATA OUTLET FROM EXSITNG PA HEAD END TO THIS LOCATION.
5. PROVIDE AND INSTALL VALCOM IP GATEWAY, AS NEEDED, FOR CONNECTION OF ANALOG SPEAKERS TO PA SYSTEM. FOR EACH GATEWAY, ALSO PROVIDE AMPLIFIER, POWER SUPPLY AND BATTERY BACK-UP/UPS. PROVIDE NEW CAT6 CONNECTION TO OWNER NETWORK.
6. UTILIZE EXISTING BLUE CAT6 CABLE/DATA OUTLET (ABOVE CEILING) FOR NEW IP SPEAKER.
7. UTILIZE EXISTING CAT6 CABLE/DATA OUTLET (ABOVE CEILING) FOR NEW IP SPEAKER.
8. PROVIDE AND INSTALL PA OVERRIDE FOR LOCAL SOUND SYSTEM.
9. ESTIMATED SPEAKER LOCATION. PROVIDE AND INSTALL TO MATCH EXISTING QUANTITIES ON THE BUILDING.
10. PROVIDE AND INSTALL DUAL DATA OUTLET IN GYM MECHANICAL MEZZANINE, CONNECTED TO EXISTING SWITCH IN GYM OFFICE. COORDINATE EXACT LOCATION REQUIRED FOR DATA OUTLET WITH BAS CONTRACTOR.

ALTERNATES

1. CAMPUS PA SYSTEM HEAD END TO BE REPLACED AT ALL CAMPUSES. PROVIDE PRICING PER CAMPUS AS AN ALTERNATE TO REPLACE ALL SPEAKERS AND CABLING FOR THE FOLLOWING CAMPUSES: EILAND, KLENK, MCDOUGLE, AND NITSCH. PRICING SHOULD INCLUDE ALL GATEWAYS, AMPLIFIERS, POWER SUPPLIES, AND UPS REQUIRED TO CREATE A DISTRIBUTED ANALOG COMMON ZONE THROUGHOUT BUILDING CORIDORS AND COMMON AREAS. PER SHEET KEYNOTES SPEAKERS IN CLASSROOMS SHALL BE IP.
2. REPLACEMENT OF ENTIRE CAMPUS PA SYSTEM, INCLUDING SPEAKERS AND CABLING FOR KAISER ES SHALL BE INCLUDED IN BASE BID ALL COMMON ZONE SPEAKERS SHOULD BE DISTRIBUTD UTILIZING GATEWAYS, AMPLIFIERS, POWER SUPPLIES, AND UPS AS NEEDED. ALL CLASSROOMS SHALL UTILIZE IP SPEAKERS CONNECTED TO CATEGORY CABLING AS PER KEYNOTES ON PLANS.

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