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B/A PROJ. #: 21132

11/10/2025 100% CD -ISSUE FOR BIDDING/CONSTRUCTION

JAMES HOGG RENOVATIONS (ORG #157)

1144 N Madison Ave., Dallas, TX 75208

GENERAL NOTE:

1. ANY FURNITURE MOVING REQUIRED TO PERFORM THE WORK TO BE DONE BY THE CONTRACTOR. DALLAS ISD WILL NOT PROVIDE MOVING SERVICES.
2. **GC IS RESPONSIBLE FOR ASBESTOS ABATEMENT; REFER TO ASBESTOS SURVEY REPORT IN THE PROJECT MANUAL.**

11-10-2025 100% ISSUE FOR BIDDING/CONSTRUCTION SET

PROJECT TEAM:

ARCHITECT	BRAVE / ARCHITECTURE	4200 MONTROSE BLVD. SUITE 400, HOUSTON, TX 77006 713-524-5858
MEP	CAMPOS ENGIEERING	1331 RIVER BEND ROAD DALLAS, TX 75247 214-696-6291

AB	ANCHOR BOLT	JAN	JANITOR
ACOUS	ACOUSTICAL	JST	JOIST
AD	ACCES DOOR	JT	JOINT
ADA	AMERICAN WITH DISABILITIES ACT		
ADJUST.	ADJUSTABLE	LAM	LAMINATE (D)
ADJ	ADJACENT	LAV	LAVATORY
AFF	ABOVE FINISHED FLOOR	LGTH	LENGTH
AGG	AGGREGATE	LH	LEFT HAND
AHU	AIR HANDLING UNIT	LIN	LINEAR
ALT	ALTERNATE	LOKR	LOCKER(S)
ALUM	ALUMINUM	LL	LIVE LOAD
ANOD	ANODIZED	LT	LIGHT
APPROX	APPROXIMATELY	LWT	LIGHTWEIGHT
AP	ACCESS PANEL		
A-R	ABUSE RESISTANT	MACH	MACHINE
ARCH	ARCHITECT (URAL)	MAINT	MAINTENANCE
A/S	AS SHOWN	MAS	MASONRY
ASPH	ASPHALT	MATL	MATERIAL
ATN	ATTENUATION (ING)	MAX	MAXIMUM
AUTO	AUTOMATIC	MB	MACHINE BOLT
AUX	AUXILIARY	MECH	MECHANICAL
AVE	AVENUE	MEMB	MEMBRANE
AVG	AVERAGE	MEP	MECHANICAL, ELECTRICAL, PLUMBING
A/C	AIR CONDITIONING	MFR	MANUFACTURER
A/V	AUDIO VISUAL	MH	MANHOLE
		MIN	MINIMUM
BD	BOARD	MISC	MISCELLANEOUS
BLDG	BUILDING	ML	METAL LATH
BLKG	BLOCKING	MO	MASONRY OPENING
BLK	BLOCK	MR	MOISTURE RESISTANT
BM	BEAM	MTD	MOUNTED
BOT	BOTTOM	MTG	MOUNTING
BRG	BEARING	MTL	METAL
BRKT	BRACKET	MULL	MULLION
BSMT	BASEMENT		
BTW	BETWEEN	NIC	NOT IN CONTRACT
BUR	BUILT UP ROOFING	NOM	NOMINAL
B&B	BALLED & BURLAPPED	NO. OR #	NUMBER
B-B	BACK TO BACK	NRC	NOISE REDUCTION COEFFICIENT
B.M.	BENCH MARK	NTS	NOT TO SCALE
B/F	BOTH FACES		
		OA	OVERALL
CAB	CABINET	OC	ON CENTER (S)
CB	CHALK BOARD	OD	OUTSIDE DIAMETER
CCTV	CLOSED CIRCUIT TELEVISION	OFCI	OWNER FURNISHED / CONTRACTOR INSTALL
CEM	CEMENT		
CER	CERAMIC	OFF	OFFICE
CFMF	COLD FORMED METAL FRAMING		
CIP	CAST IN PLACE	OFOI	OWNER FURNISHED / OWNER INSTALLED
CI PIPE	CAST IRON PIPE		
CJ	CONTROL JOINT	OH	OVERHEAD
CKBD	CHALKBOARD	OPH	OPPOSITE HAND
CLG	CEILING	OPNG	OPENING
CLR	CLEAR (ANCE)	OPP	OPPOSITE
CLT	CLOSET	ORD	OVERFLOW ROOF DRAIN
CMU	CONCRETE MASONRY UNIT	O/A	OUTSIDE AIR
CNTR	COUNTER		
COL	COLUMN	PART	PARTITION
COMPRES	COMPRESSIBLE	PCF	POUNDS PER CUBIC FOOT
COMP	COMPOSITION	PCP	PORTLAND CEMENT PLASTER
CONC	CONCRETE	PERF	PERFORATED
COND	CONDITION	PLAM	PLASTIC LAMINATE
CONF	CONFERENCE	PLAST	PLASTER
CONST	CONSTRUCTION	PLAS	PLASTIC
CONTR	CONTRACTOR	PLBG	PLUMBING
CONT	CONTINUOUS	PLWD	PLYWOOD
CORRU	CORRUGATED	PNL	PANEL
CORR	CORRIDOR	POL	POLISHED
CSMT	CASEMENT	PRKG	PARKING
CTR	CENTER	PR	PAIR
CTSK	COUNTERSUNK	PSF	POUNDS PER SQUARE FOOT
CT	CERAMIC TILE	PSI	POUNDS PER SQUARE INCH
CU FT	CUBIC FOOT (FEET)	PTD	PAINTED
CU YD	CUBIC YARD	PVC	POLYVINYL CHLORIDE
C	CURB	PVG	PAVING
C-C	CENTER TO CENTER	PVMT	PAVEMENT
C.O.	CASED OPENING	P.L.	PROPERTY LINE
		P/C	PRECAST
DB	DRY MARKER BOARD		
DBL	DOUBLE	QT	QUARRY TILE
DEFL	DEFLECTION		
DF	DRINKING FOUNTAIN	R	RADIUS
DIAG	DIAGONAL	R/AG	RETURN AIR GRILLE
DIA	DIAMETER	R/A	RETURN AIR
DIM	DIMENSION	RCP	REFLECTED CEILING PLAN
DISC	DISCONNECT	RD	ROOF DRAIN
DISP	DISPENSER	REBAR	REINFORCING BAR
DL	DEAD LOAD	RECEPT	RECEPTION
DMPFG	DAMPROOFING	RECEPT	RECEPTACLE
DN	DOWN	RECOM	RECOMMENDATION
DR	DOOR	REC	RECESSED
DS	DOWNSPOUT	REG	REGULATION
DTL	DETAIL	REINF	REINFORCED
DWC	DRYWALL FURRING CHANNEL	REQD	REQUIRED
DWG	DRAWING	RES	RESILIENT
D	DEPTH	RET	RETURN
		REV	REVISION
EA	EACH	RE:	REFER TO
EFOB	EXTERIOR FACE OF BUILDING	RFG	ROOFING
EIFS	EXTERIOR INSULATED FINISH SYSTEM	RH	RIGHT HAND
EJ	EXPANSION JOINT	RI	RISER
ELAS	ELASTIC (ELASTOMERIC)	RM	ROOM
ELEC	ELECTRICAL	ROW	RIGHT OF WAY
ELEV	ELEVATOR	R.T.U.	ROOF TOP UNIT
EL	ELEVATION		
EMER	EMERGENCY	SCHED	SCHEDULE
EP	EXPLOSION PROOF	SC	SOLID CORE
EQUIP	EQUIPMENT	SECT	SECTION
EQ	EQUAL	SF	SQUARE FEET
ESR	ELASTIC SHEET ROOFING	SHLV	SHELVES(ING)
EWC	ELECTRIC WATER COOLER	SHTHG	SHEATHING
EWH	ELECTRIC WATER HEATER	SHT	SHEET
EW	EACH WAY	SHWR	SHOWER(S)
EWSH	EYE WASH	SPEC	SPECIFICATION
EXH	EXHAUST	SQ	SQUARE
EXIST	EXISTING	SS	STAINLESS STEEL
EXPAN	EXPANSION	STAB	STABILIZE (D)
EXP	EXPOSED	STA	STATION
EXT	EXTERIOR	STC	SOUND TRANSMISSION COEFFICIENT
		STD	STANDARD
FA	FIRE ALARM	STL	STEEL
FC	FIRE CODE	STG	STORAGE
FD	FLOOR DRAIN	STR	STRUCTURE (AL)
FEC	FIRE EXTINGUISHER CABINET	SUSP	SUSPENDED
FHC	FIRE HOSE CABINET	SW	SWITCH
FH	FIRE HYDRANT	SYM	SYMMETRICAL
FIN	FINISH (ED)	SYN	SYNTHETIC
FIXT	FIXTURE	S/AD	SUPPLY AIR DIFFUSER
FLRG	FLOORING		
FLR	FLOOR	TA	TOILET ACCESSORY
FLSHG	FLASHING	T.A.S.	TEXAS ACCESSIBILITY STANDARDS
FLUOR	FLUORESCENT	T.B.	TACK BOARD
FL	FLOW LINE	TCOC	TEXTURED COATING ON CONCRETE
FM	FACTORY MUTUAL	T.O.	TOP OF
FR	FIRE RETARDANT	T.O.C.	TOP OF CURB
FRPF	FIREPROOF	TEL	TELEPHONE
FS	FULL SIZE	TEMP	TEMPERED
FTG	FOOTING	THK	THICK (NESS)
FT	FOOT (FEET)	THRES	THRESHOLD
FURN	FURNISH	TB	TACKBOARD
FURR	FURRED (ING)	TLT	TOILET (S)
F.V.	FIELD VERIFY	TRZO	TERRAZZO
FVC	FIRE VALVE CABINET	TR	TREAD
		TTC	TELEPHONE TERMINAL CABINET
GALV	GALVANIZED	TV	TELEVISION
GAL	GALLON	TYP	TYPICAL
GA	GAGE	T	TOP
GC	GENERAL CONTRACTOR		
GD	GRADE, GRADING	UL	UNDERWRITERS LABORATORY
GEN	GENERAL	UNO	UNLESS NOTED OTHERWISE
GI	GALVANIZED IRON	UR	URINAL
GL	GLASS, GLAZING		
GMMU	GLASS MESH MORTAR UNIT	VAC	VACUUM
GMP	GUARANTEED MAXIMUM PRICE	VCT	VINYL COMPOSITION TILE
GR	GROUND	VERT	VERTICAL
GYP	GYPSUM	VEST	VESTIBULE
		VIF	VERIFY IN FIELD
HB	HOSE BIBB	VWC	VINYL WALL COVERING
HC	HOLLOW CORE		
HDCP	HANDICAPPED	WC	WATER CLOSET
HDWD	HARDWOOD	WDW	WINDOW
HDWR	HARDWARE	WD	WOOD
HD	HEAD	WF	WIDE FLANGE
HFS	HALF FULL SIZE	WH	WALL HUNG
HM	HOLLOW METAL	WI	WROUGHT IRON
HORIZ	HORIZONTAL	WP	WATERPROOF (ING)
HP	HORSEPOWER		
HR	HOUR	WR	WATER RESISTANT
HT	HEIGHT	WT	WEIGHT
HVAC	HEATING, VENTILATION, AIR CONDITIONING	WWF	WELDED WIRE FABRIC
HYD	HYDRANT	WP	WORK POINT
		W/I	WITHIN
IBC	INTERNATIONAL BUILDING CODE	W/O	WITHOUT
ICF	INSULATED CONCRETE FORM	WP	WORK POINT
ID	INSIDE DIAMETER	W/	WITH
INCAND	INCANDESCENT	W/I	WITHIN
INCL	INCLUDE		
INFO	INFORMATION	XFMR	TRANSFORMER
INSUL	INSULATION (ING)		
INT	INTERIOR		
IN.	INCH		
IPS	INSIDE PIPE SIZE		

ABBREVIATIONS 17

NORTH SYMBOL

WORKING POINT: START WORK AT THIS LOCATION

+333.77 — EXISTING GRADE ELEVATION

+333.77 — NEW GRADE / SLAB ELEVATION

BOUNDARY OF WORK AREA

RE: XX/A.XXX
RE: XX/A.XXX — DRAWING MATCHLINE

REVISION NUMBER

REVISION CLOUD

6'-0" 4'-0"
10'-0"
10'-0" FV
10'-0" — DIMENSIONS: All dimensions to face of stud unless otherwise noted

FIELD VERIFY: Indicate existing dim.- contractor to field verify.

DOTS: Indicate centerline of object or column lines

EXISTING PARTITION REMAINS

REMOVE PARTITION

NEW PARTITION

EXISTING DOOR REMAINS

REMOVE DOOR

PROVIDE DOOR

COL — EXISTING COLUMN LINE

COL — NEW COLUMN LINE

0'-0" A.F.F.
T.O. CONC. — FLOOR LINE (ELEVATION)

UPPER ROOM
1111.1
000 S.F.
0'-0"A.F.F. — ROOM DESIGNATION

110.1A — DOOR DESIGNATION

110.1A — WINDOW DESIGNATION

KEY NOTE DESIGNATION

A3 — PARTITION TYPE DESIGNATION

S.XXX — SIGNAGE DESIGNATION

CPT. — FINISH MATERIAL DESIGNATION

1 — ACCESSORY/EQUIPMENT DESIGNATION

[CS.01] — CASEWORK DESIGNATION

A.XXX / XX — PICTURE LOCATION DESIGNATION

XX/A.XXX — EXTERIOR ELEVATION DESIGNATION

XX/A.XXX — INTERIOR ELEVATION DESIGNATION

XX/A.XXX — DETAIL AND VERTICAL SECTIONS

XX / A.XXX — BUILDING / WALL SECTION

XX / A.XXX — BUILDING / WALL SECTION

XX/A.XXX — ENLARGED DETAIL

DRAWING SYMBOLS 13

FLOOR DUPLEX OUTLET - GROUNDED
FLOOR TELEPHONE OUTLET
FLOOR DATA OUTLET
FLOOR DATA / ELECTRICAL OUTLET
WP — WALL MOUNTED DUPLEX POWER OUTLET WITH WEATHERPROOF COVER - GROUNDED
WALL MOUNTED DUPLEX POWER OUTLET (GROUNDED)
GFI — WALL MOUNTED DUPLEX POWER OUTLET (GFI)
WALL MOUNTED QUADPLEX POWER OUTLET (GROUNDED)
PLUGMOLD - GROUNDED
WALL MOUNTED TELEPHONE OUTLET (GROUNDED)
WALL MOUNTED DATA / ELECTRICAL OUTLET
D — WALL MOUNTED DATA OUTLET
WALL MOUNTED COAX OUTLET
WALL MOUNTED LIGHT FIXTURE
J — ELECTRICAL J BOX
2X4 FLUORESCENT LIGHT FIXTURE.
2X2 FLUORESCENT LIGHT FIXTURE.
1X4 FLUORESCENT LIGHT FIXTURE.
FLUORESCENT STRIP LIGHT.
RECESSED "CAN" LIGHT FIXTURE. SEE MEP
RECESSED "CAN" ADJUSTABLE LIGHT FIXT-POINT TO DIRECTION OF ARROW.
PENDANT LIGHT FIXTURE.
BUILDING WALL LIGHT FIXTURE. SEE MEP
PENDANT HUNG MH LIGHT FIXTURE. SEE MEP
CEILING SPEAKER - RECESSED
WALL SCONCE LIGHT FIXTURE. SEE MEP
PENDANT LIGHT FIXTURE. DRAW TO SCALE. SEE MEP
FIRE SPRINKLER HEAD. COORDINATE WITH SPRINKLER INSTALLER. ARCHITECT HAS FINAL APPROVAL OF HEAD LOCATIONS.
TRACK LIGHTING. DRAW TO SCALE. SHOW CORRECT NUMBER OF HEADS
WALL MOUNTED "HOLLYWOOD" LIGHTING
GROUND MOUNTED UP LIGHT(S)
S — WALL SWITCH
S_3 — WALL SWITCH (3-WAY)
S_4 — WALL SWITCH (4-WAY)
S_D — WALL SWITCH DIMMER
S.A.C. — RECESS MOUNTED SECURITY ACCESS CARD
S.K.P. — RECESS MOUNTED SECURITY KEY PAD
S.C.P. — RECESS MOUNTED SECURITY CONTROL PANEL
S — WALL MOUNTED SMOKE DETECTOR
WALL MOUNTED EMERGENCY LIGHT BATTERY POWERED
EXIT LIGHT CEILING MOUNTED; NON-DIRECTIONAL
EXIT LIGHT CEILING MOUNTED - DIRECTIONAL, POINT ARROW IN DIRECTION OF EGRESS
EXIT LIGHT WALL MOUNTED; NON-DIRECTIONAL
EXIT LIGHT WALL MOUNTED - DIRECTIONAL, POINT ARROW IN DIRECTION OF EGRESS
T — WALL MOUNTED THERMOSTAT
B — WALL MOUNTED BELL BUTTON
C — WALL MOUNTED BELL CHIME
WALL MOUNTED CLOCK
WALL MOUNTED SUPPLY DIFFUSER. SEE MEP
WALL MOUNTED RETURN DIFFUSER. SEE MEP
HVAC SUPPLY AIR SLOT. SEE MEP
HVAC RETURN AIR SLOT. SEE MEP
HVAC SUPPLY GRILLE. SEE MEP
HVAC RETURN GRILLE. SEE MEP
HVAC RETURN/EXHAUST GRILL. SEE MEP
PENDANT LIGHT ABOVE
CONTINUOUS SHELF OR UNDER COUNTER LIGHT FIXT, DRAW TO SCALE
2'x2' LAY-IN ACOUSTICAL TILE
SUSPENDED CEILING SYSTEM
CEILING FAN
CEILING FAN ABOVE

MECH & ELEC. DRAWING SYMBOLS 9

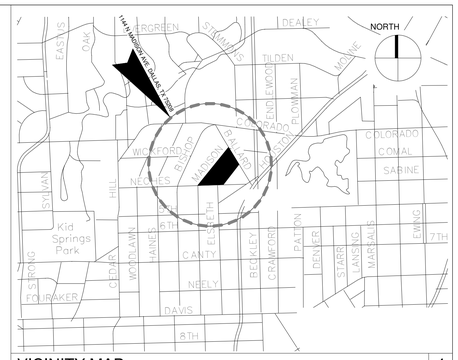
GRASS
COMPACTED EARTH FILL (SECTION)
ROCK FILL (SECTION)
COMMON BRICK (PLAN AND SECTION)
TYPICAL CMU (PLAN AND SECTION)
CAST-IN-PLACE CONCRETE (SECTION)
TYPICAL STONE (SECTION)
MARBLE (PLAN AND SECTION)
TERRAZZO (SECTION)
CERAMIC TILE (SECTION)
STEEL (PLAN AND SECTION)
SOLID SURFACING (SECTION)
CEMENT BOARD (SECTION)
GYPSUM BOARD (SECTION)
PLASTER (PLAN AND SECTION)
METAL SOFFIT PANEL
PLYWOOD (SECTION)
FINISHED WOOD (PLAN, ELEV, AND SECTION)
BATT INSULATION (SECTION)
BATT INSULATION (SECTION)
ACOUSTICAL TILE (SECTION)
WOOD FRAMING - INTERRUPTED (BLOCKING, SHIM, ETC.)
WOOD FRAMING - CONTINUOUS (SECTION)

MATERIAL CONVENTIONS 7

SHEET INDEX

SHEET NUMBER	SHEET NAME	100CD
GENERAL INFORMATION		
G.001	INDEX & GENERAL INFO	Yes
G.030	SURVEY	Yes
G.050	MASTER KEY NOTES	Yes
ARCH DEMOLITION DRAWINGS		
D.040	PHOTOS OF EXISTING CONDITIONS	Yes
D.121	DEMOLITION REFLECTED CEILING PLAN - MAIN LEVEL EXISTING	Yes
D.122	DEMOLITION REFLECTED CEILING PLAN - LOWER LEVEL EXISTING	Yes
D.200	DEMOLITION ROOF PLAN - EXISTING	Yes
SITE DRAWINGS		
A.010	SITE PLAN	Yes
ARCH FLOOR PLANS		
A.101	FLOOR PLAN - MAIN LEVEL EXISTING	Yes
A.121	REFLECTED CEILING PLAN - MAIN LEVEL EXISTING	Yes
A.122	REFLECTED CEILING PLAN - LOWER LEVEL EXISTING	Yes
A.141	SECURITY REFERENCE SHEET	Yes
SCHEDULES		
A.950	INTERIOR SIGNAGE SCHEDULE	Yes
A.951	INTERIOR SIGNAGE SCHEDULE	Yes
MECHANICAL		
M.001	MECHANICAL SYMBOL LEGEND	Yes
M.002	MECHANICAL GENERAL NOTES	Yes
MD.101	MECHANICAL DEMO PLAN - MAIN LEVEL - AREA A	Yes
MD.102	MECHANICAL DEMO PLAN - MAIN LEVEL - AREA B	Yes
MD.103	MECHANICAL DEMO PLAN - MAIN LEVEL - LOWER LEVEL	Yes
MD.201	MECHANICAL DEMO ROOF PLAN - AREA A	Yes
MD.202	MECHANICAL DEMO ROOF PLAN - AREA B	Yes
M.101	MECHANICAL FLOOR PLAN - MAIN LEVEL - AREA A	Yes
M.102	MECHANICAL FLOOR PLAN - MAIN LEVEL - AREA B	Yes
M.103	MECHANICAL FLOOR PLAN - LOWER LEVEL	Yes
M.201	MECHANICAL ROOF PLAN - AREA A	Yes
M.202	MECHANICAL ROOF PLAN - AREA B	Yes
M.401	MECHANICAL DETAILS	Yes
M.402	MECHANICAL DETAILS	Yes
M.501	MECHANICAL SCHEDULES	Yes
M.502	MECHANICAL SCHEDULES	Yes
M.601	MECHANICAL CONTROLS	Yes
M.602	MECHANICAL CONTROLS	Yes
M.603	MECHANICAL CONTROLS	Yes
M.604	MECHANICAL CONTROLS	Yes
ELECTRICAL		
E.001	ELECTRICAL SYMBOL LEGEND	Yes
E.002	ELECTRICAL GENERAL NOTES	Yes
ED.011	ELECTRICAL SITE DEMO PLAN	Yes
ED.101	POWER DEMO PLAN - MAIN LEVEL AREA A	Yes
ED.102	POWER DEMO PLAN - MAIN LEVEL AREA B	Yes
ED.103	POWER DEMO PLAN - LOWER LEVEL	Yes
ED.121	LIGHTING DEMO PLAN - MAIN LEVEL - AREA A	Yes
ED.122	LIGHTING DEMO PLAN - MAIN LEVEL - AREA B	Yes
ED.123	LIGHTING DEMO PLAN - LOWER LEVEL	Yes
ED.201	POWER DEMO PLAN - ROOF - A	Yes
ED.202	POWER DEMO PLAN - ROOF - B	Yes
E.030	ELECTRICAL SITE PLANS	Yes
E.101	POWER FLOOR PLAN - MAIN LEVEL - AREA A	Yes
E.102	POWER FLOOR PLAN - MAIN LEVEL - AREA B	Yes
E.103	POWER FLOOR PLAN - LOWER LEVEL	Yes
E.121	REFELCTED CEILING PLAN - MAIN LEVEL - AREA A	Yes
E.121.1	LIGHTING CONTROLS - MAIN LEVEL - AREA A	Yes
E.122	REFLECTED CEILING PLAN - MAIN LEVEL - AREA B	Yes
E.122.1	LIGHTING CONTROLS - MAIN LEVEL - AREA B	Yes
E.123	REFLECTED CEILING PLAN - LOWER LEVEL	Yes
E.123.1	LIGHTING CONTROLS - LOWER LEVEL	Yes
E.201	ELECTRICAL ROOF PLAN - AREA A	Yes
E.202	ELECTRICAL ROOF PLAN - AREA B	Yes
E.401	ELECTRICAL DETAILS	Yes
E.501	ONE LINE DIAGRAM & FIXTURE SCHEDULE	Yes
E.502	LIGHTING CONTROLS - DIAGRAM	Yes
E.503	LIGHTING CONTROLS - DIAGRAM	Yes
E.504	LIGHTING CONTROLS - DIAGRAM	Yes
E.505	LIGHTING CONTROLS - DIAGRAM	Yes
FIRE ALARM		
FA.001	FIRE ALARM GENERAL NOTES AND SYMBOL LEGENDS	Yes
FA.002	OVERALL PLAN - FIRE ALARM	Yes
FA.003	LOWER LEVEL	Yes
PLUMBING		
P.001	PLUMBING SYMBOL LEGEND	Yes
PD.101	PLUMBING DEMO FLOOR PLAN - MAIN LEVEL - AREA A	Yes
PD.102	PLUMBING DEMO FLOOR PLAN - MAIN LEVEL - AREA B	Yes
PD.103	PLUMBING DEMO FLOOR PLAN -LOWER LEVEL	Yes

SHEET INDEX 5



VICINITY MAP 4

BASE SCOPE OF WORK

New mechanical equipment/ductwork, lighting, water lines, signage and access controls.

GENERAL INFORMATION 1

SHEET INDEX

SHEET NUMBER	SHEET NAME	100CD
P.041	PLUMBING UNDER FLOOR PLAN - AREA A	Yes
P.042	PLUMBING UNDER FLOOR PLAN - AREA B	Yes
P.101	PLUMBING FLOOR PLAN - MAIN LEVEL - AREA A	Yes
P.102	PLUMBING FLOOR PLAN - MAIN LEVEL - AREA B	Yes
P.103	PLUMBING FLOOR PLAN - LOWER LEVEL	Yes
P.401	PLUMBING DETAILS	Yes

PROJECT DESCRIPTION 3

CODE ANALYSIS

James S. Hogg New Tech Center
B/A Project: 21132

1. **PROJECT DESCRIPTION:**

   Project Name: James S. Hogg New Tech Center
   Project Location: 1144 N Madison Ave., Dallas, TX 75208
   B/A Project No.: 21132
   Analysis By: Miti Mehta, AIA
   Date(s): 01/24/2022, 06/06/2022, 08/09/2023, 10/23/2023

2. **GOVERNING AGENCY(s):**

   City of Dallas
   Dallas County
   Dallas County Fire Marshal

3. **GOVERNING CODE(s):**

   Building: 2021 IBC w/ Dallas amendments
   2021 International Existing Building Code w/Dallas Amendments
   Electrical: 2020 NEC w/ Dallas amendments
   2020 NFPA National Electrical Code
   Mechanical: 2021 IMC w/Dallas Amendments
   Plumbing: 2021 IPC w/Dallas Amendments
   Fire: 2021 IFC w/Dallas Amendments
   Commercial Energy: 2021 IECC w/Dallas Amendments
   Gas & Fuel: 2021 IFGC w/Dallas Amendments
   Storm Shelters: 2020 ICC 500
   Accessibility: 2012 Texas Accessibility Standards (TAS/ADAAG) w/ Latest Amendments

4. **ZONING DISTRICT:** PD 468 (Planned Development), SUP 2328; sub district AA-TR-1 RTN

5. **FIRE DISTRICT:** Council District 1

SHEET INDEX 2

JAMES HOGG RENOVATIONS (ORG #157)

1144 N Madison Ave., Dallas, TX 75208

B/A Project No.: 21132

BRAVE/ architecture

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214-696-6291

Ownership of Instruments of Service:
All reports, plans, specifications, computer files, field data, notes & other documents and instruments prepared by BRAVE / ARCHITECTURE, BRAVE / ARCHITECTURE shall remain the property of BRAVE / ARCHITECTURE, BRAVE / ARCHITECTURE shall retain all common law, statutory and other reserved rights, including the copyright thereto.

SEAL:

REGISTERED ARCHITECT — EDWARD L. BRAVE — 16291 — STATE OF TEXAS

11/07/2025

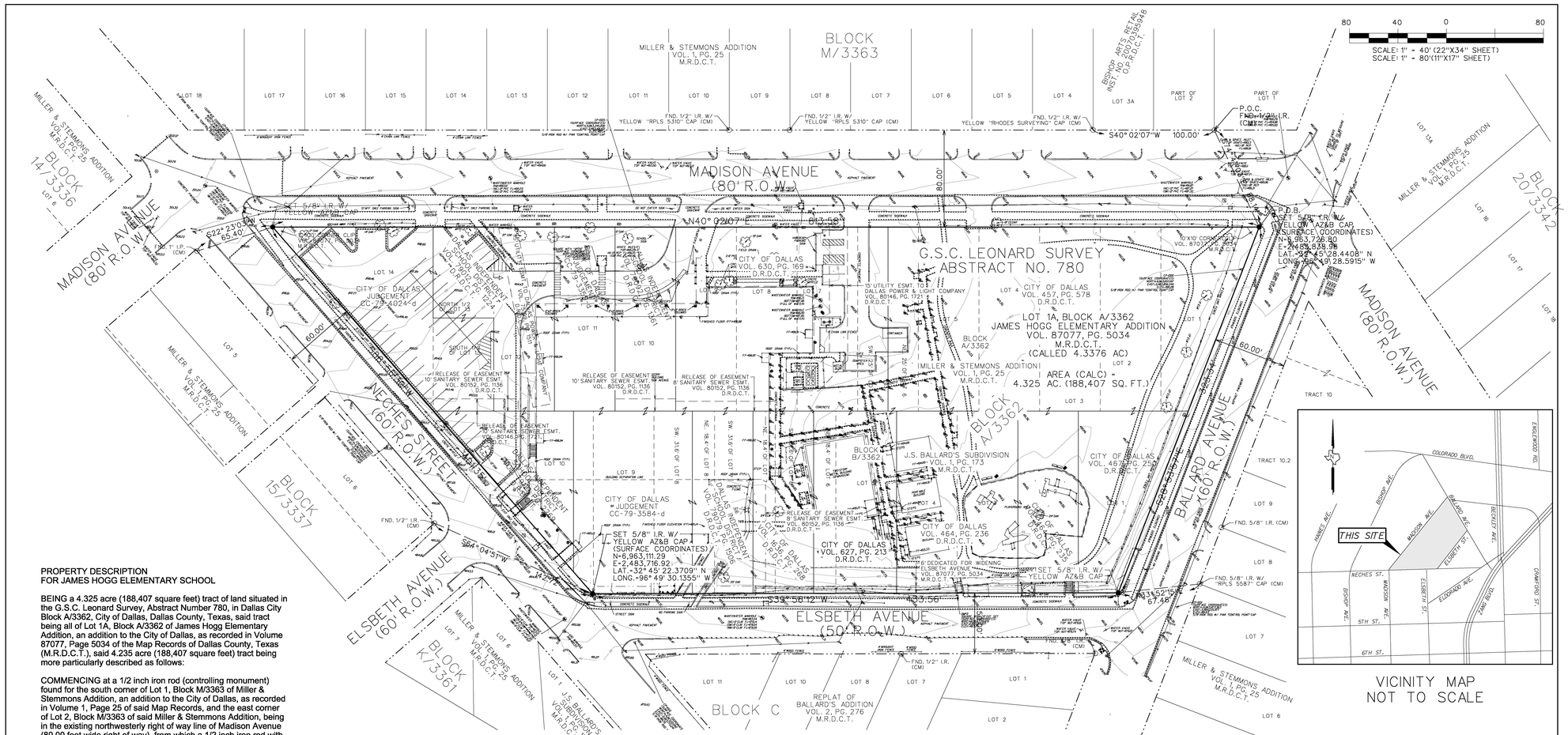
FILE:
DRAWN BY: DK
CHECKED BY: MM

ISSUE:
11/10/2025 100% CD -ISSUE FOR BIDDING/CONSTRUCTION

INDEX & GENERAL INFO

Scale: AS NOTED

G.001



VICINITY MAP
NOT TO SCALE

PROPERTY DESCRIPTION
FOR JAMES HOGG ELEMENTARY SCHOOL

BEING a 4.325 acre (188,407 square feet) tract of land situated in the G.S.C. Leonard Survey, Abstract Number 780, in Dallas City Block A/3362, City of Dallas, Dallas County, Texas, said tract being all of Lot 1A, Block A/3362 of James Hogg Elementary Addition, an addition to the City of Dallas, as recorded in Volume 87077, Page 5034 of the Map Records of Dallas County, Texas (M.R.D.C.T.), said 4.235 acre (188,407 square feet) tract being more particularly described as follows:

COMMENCING at a 1/2 inch iron rod (controlling monument) found for the south corner of Lot 1, Block M/3363 of Miller & Stemmons Addition, an addition to the City of Dallas, as recorded in Volume 1, Page 25 of said Map Records, and the east corner of Lot 2, Block M/3363 of said Miller & Stemmons Addition, being in the existing northwesterly right of way line of Madison Avenue (80.00 foot wide right of way), from which a 1/2 inch iron rod with yellow "Rhodes Surveying"cap (controlling monument) found bears South 40 degrees 02 minutes 07 seconds West, a distance of 100.00 feet for the south corner of Lot 3A and the east corner of Lot 4, all of Block M/3363 of said Miller & Stemmons Addition;

THENCE, South 74 degrees 47 minutes 03 seconds East, over and across said Madison Avenue, a distance of 88.14 feet to a 5/8 inch iron rod with yellow AZ&B cap set for the north corner of Lot 1A, Block A/3362 of said James Hogg Elementary Addition, being in the intersection of the existing southeasterly right of way line of said Madison Avenue and the existing southwesterly right of way line of Ballard Avenue (60.00 foot wide right of way), also being the POINT OF BEGINNING (surface coordinates of North 6,963,726.80 and East 2,483,838.98) of the tract of land herein described;

1. THENCE, South 28 degrees 53 minutes 57 seconds East, along the existing southwesterly right of way line of said Ballard Avenue, a distance of 323.34 feet to a 5/8 inch iron rod with yellow AZ&B cap set for the east corner of said Lot 1A, Block A/3362, being in the intersection of the existing southwesterly right of way line of said Ballard Avenue and the existing northwesterly right of way line of Elsbeth Avenue (50.00 foot wide right of way), from which a 5/8 inch iron rod with "RPLS 5587"cap (controlling monument) found bears North 33 degrees 52 minutes 15 seconds East, a distance of 67.48 feet for the northwest corner of Lot 7 and the southwest corner of Lot 8, all of Block 17/3339 of said Miller & Stemmons Addition;

2. THENCE, South 39 degrees 56 minutes 12 seconds West, along the existing northwesterly right of way line of said Elsbeth Avenue, a distance of 433.56 feet to a 5/8 inch iron rod with yellow AZ&B cap set (surface coordinates of North 6,963,111.29 and East 2,483,716.92) for the southeast corner of said Lot 1A, Block A/3362, being in the intersection of the existing northwesterly right of way line of said Elsbeth Avenue and the existing northerly right of way line of Neches Street (60.00 foot wide right of way), from which a 1/2 inch iron rod (controlling monument) found bears South 64 degrees 04 minutes 51 seconds West, a distance of 142.72 feet for the northeast corner of Lot 6, Block 15/3337 of said Miller & Stemmons Addition and being in the intersection of the existing southerly right of way line of said Neches Street and the existing westerly right of way line of Elsbeth Avenue (60.00 foot wide right of way);

3. THENCE, South 88 degrees 56 minutes 30 seconds West, along the existing northerly right of way line of said Neches Street, a distance of 401.35 feet to a 5/8 inch iron rod with yellow AZ&B cap set for the southwest corner of said Lot 1A, Block A/3362, being in the intersection of the existing northerly right of way line of said Neches Street and the existing southeasterly right of way line of the aforementioned Madison Avenue, from which a 1 inch iron pipe (controlling monument for line) found bears South 22 degrees 23 minutes 03 seconds West, a distance of 65.40 feet;

4. THENCE, North 40 degrees 02 minutes 07 seconds East, along the existing southeasterly right of way line of said Madison Avenue, a distance of 813.58 feet to the POINT OF BEGINNING and containing 4.325 acres (188,407 square feet) of land, more or less.

NOTES:

1. Coordinates, bearings and distances are in U.S. survey feet displayed in surface values based on the Texas Coordinate System of 1983, North Central Zone 4202, North American Datum of 1983 (NAD83) (2011 Adj.), Epoch 2010.00, North Central Zone No. 4202, as determined by GPS observations using the ALLTERRA CENTRAL RTK Network. Geoid 12B Model with a grid to surface adjustment factor of 1.000136506 (Dallas County).

2. All easements are in their approximate location based on deed information.

3. This property is currently zoned "PD"for Planned Development District.

4. This property is determined to be outside the 500-year floodplain zoned X based on the FEMA Flood Map Panel 340 of 725, Map Number 48113CO340J, dated August 23, 2001.

5. This survey was completed without the benefit of a title report.

DWU BENCHMARKS USED:

44-Y-1

A square cut on top of curb on the south side of Colorado Boulevard at walk to house #614 Colorado Boulevard, 250' west of Cedar Hill Avenue. Elevation: 507.30

44-Y-2S

A Standard Water Department Benchmark on top of a storm sewer inlet on the north side of Colorado Boulevard, 95' East of Rainbow Drive. Elevation: 497.83

LEGEND

BOLLARD	FIBER OPTIC SIGN
ROOF DRAIN	BUSH
GUY ANCHOR	UNKNOWN MANHOLE
SPRINKLER VALVE	GREASE TRAP
GAS VALVE	PHONE PEDESTAL
SIGN	TRAFFIC SIGNAL
WATER METER	GAS METER
CLEANOUT	STEEL POLE
SANITARY SEWER MANHOLE	BENCH
LIGHT	EDGE OF GRAVEL LINE
STORM MANHOLE	EDGE OF CONCRETE LINE
TREE	EDGE OF ASPHALT LINE
TRAFFIC CONTROL BOX	BRICK PAVING
POWER POLE	BUILDING OVERHANG LINE
ELECTRIC TRANSFORMER	ELECTRIC BOX/METER

NOTE:
FOR REFERENCE AND COORDINATION ONLY.

05/09/2022
JHogg Property & ROW Boundary_Merged Topo.dgn

JAMES HOGG RENOVATIONS (ORG #157)
1144 N Madison Ave., Dallas, TX 75208
B/A Project No.: 21132

BRAVE/ architecture
4200 Montrose Blvd., Suite 400
Houston, Texas 77006
713.524.5858 v / 713.524.5868 f
studio@bravearchitecture.com

MEP
CAMPOS ENGIEERING
1331 RIVER BEND ROAD
DALLAS, TX 75247
214-696-6291

AZ&B
ARREDONDO, ZEPEDA & BRUNZ, LLC

JAMES S. HOGG ELEMENTARY SCHOOL
DALLAS INDEPENDENT SCHOOL DISTRICT
(DALLAS COUNTY)

APPROXIMATE RIGHT-OF-WAY/PERIMETER BOUNDARY
SURVEYED FROM 04-11-22 TO 05-05-22
SUBMITTED ON 05-11-22
REVISED 08-03-2023
REVISED 09-18-2023

Ownership of Instruments of Service:
All reports, plans, specifications, computer files, field data, notes & other documents and instruments prepared by BRAVE / ARCHITECTURE as instruments of service shall remain the property of BRAVE / ARCHITECTURE. BRAVE / ARCHITECTURE shall retain all common law, statutory and other reserved rights, including the copyright thereto.

SEAL:

DOCUMENT IS HEREBY INCLUDED AS REFERENCE ONLY

FILE:
DRAWN BY: DK
CHECKED BY: MM

ISSUE:
11/10/2025 100% CD -ISSUE FOR BIDDING/CONSTRUCTION

SURVEY

Scale: AS NOTED

G.030

1. REFERENCE THESE NOTES FOR ALL GENERAL NOTES SECTIONS.
2. REFER TO GENERAL INFORMATION SHEETS FOR TYPICAL GRAPHIC, SYMBOLS, ABBREVIATION INDEX, AND "MASTER KEYNOTE" LIST.
3. REFER TO TEXAS ACCESSIBILITY GUIDELINES SHEET(S).
4. REFER TO STANDARD MOUNTING LOCATIONS & TOILET ROOM CONFIGURATIONS SHEET(S) FOR STANDARD DETAILS AND MOUNTING HEIGHTS.
5. ALL HORIZONTAL DIMENSIONS ARE PROVIDED ON PLANS, AND ALL VERTICAL DIMENSIONS ARE PROVIDED ON ELEVATIONS AND/OR SECTIONS UNLESS OTHERWISE NOTED. ALL HORIZONTAL DIMENSIONS ARE TO BE TIED TO A COLUMN LINE. CONTRACTOR WILL IMMEDIATELY REPORT ANY OMISSION OF DIMENSIONS NOT TIED TO A COLUMN LINE TO THE ARCHITECT PRIOR TO START OF CONSTRUCTION.
6. OVERALL PLAN INDICATES EXTERIOR BUILDING DIMENSIONS, ROOM NUMBERS AND NAMES, DOOR DESIGNATIONS, WINDOW DESIGNATIONS, EXTERIOR ELEVATION DESIGNATIONS, ENLARGED PLAN DESIGNATIONS, PARTITION DESIGNATIONS, SIGN DESIGNATIONS, AND BUILDING SECTION DESIGNATIONS. ALL OTHER PLAN INFORMATION IS INDICATED ON REFERENCED ENLARGED PLANS.
7. PLANS INDICATE INTERIOR AND EXTERIOR BUILDING DIMENSIONS, INTERIOR PLAN DETAIL DESIGNATIONS, INTERIOR ELEVATION DESIGNATIONS, PARTITION TYPE DESIGNATIONS, FINISH DESIGNATIONS, AND GENERAL BUILDING MATERIAL. GENERAL CONTRACTOR TO COORDINATE ADDITIONAL REQUIREMENTS OF INTERIOR AND EXTERIOR WALL FINISHES AND COMPONENTS. REFER TO PARTITION TYPES, FINISH SCHEDULE, SIGNAGE SCHEDULE, DOOR AND HARDWARE SCHEDULE, AND WINDOW TYPES FOR ADDITIONAL INFORMATION.
8. ALL DETAILS ARE TYPICAL UNLESS NOTED OTHERWISE; INCORPORATE INTO PROJECT AT NOTED AND/OR APPROPRIATE LOCATIONS WHETHER SPECIFICALLY INDICATED OR NOT.
9. GENERAL CONTRACTOR WILL VERIFY THE FOLLOWING WITH THE RESPECTIVE, RELATED, AND AFFECTED TRADES:
   A. SIZES AND LOCATIONS FOR BACKING/BLOCKING REQUIRED FOR MOUNTING MECHANICAL, ELECTRICAL, PLUMBING AND/OR FIRE SUPPRESSION EQUIPMENT
   B. SIZES AND LOCATIONS OF MECHANICAL, ELECTRICAL, PLUMBING AND/OR FIRE SUPPRESSION PENETRATIONS
   C. CUTTING AND PATCHING FOR WORK REQUIRED BY MECHANICAL, ELECTRICAL, PLUMBING AND/OR FIRE SUPPRESSION
10. FOR SITE AND PAVEMENT ITEMS CIVIL DOCUMENTS TAKE PRECEDENCE OVER ALL ARCHITECTURAL DOCUMENTS UNLESS NOTED OTHERWISE ON CIVIL. GENERAL CONTRACTOR TO COORDINATE ALL SITE ITEMS WITH ALL OTHER DISCIPLINES.
11. THE BUILDING MUST BE TIED TO THE PROPERTY LINE IN TWO DIRECTIONS, AND CONTRACTOR TO NOTIFY ARCHITECT BEFORE START OF WORK IF THERE ARE ANY OMISSIONS TO THIS REQUIREMENT IN THE DRAWING. CONTRACTOR TO START BUILDING CONSTRUCTION @ DESIGNATED "START POINT" UNLESS NOTED OTHERWISE.
12. ALL TYPES OF PERIMETER FENCING TO BE ERECTED ON PROPERTY LINE.
13. REFER TO CIVIL DRAWINGS FOR ADDITIONAL SITE INFORMATION AND DETAILS
14. ELEVATION MARKERS SHOWN ON SLOPED ROOFS REPRESENT THICKNESS OF TAPERED RIGID INSULATION ABOVE THE MINIMUM ROOF BASE RIGID INSULATION.
15. REFERENCE MEP DOCUMENTS FOR ROOF TOP UNIT LOCATIONS AND STRUCTURAL DOCUMENTS FOR SUPPORT AS REQUIRED.
16. WALK/TRAFFIC PADS TO BE PROVIDED AND INSTALLED FROM ROOF ACCESS TO AND AROUND ALL ROOF EQUIPMENT - HVAC, ELECTRICAL, PLUMBING, ETC.
17. FLOOR AND ROOF FRAMING SHOWN IN ARCHITECTURAL DRAWINGS ARE FOR REFERENCE ONLY; RE: STRUCTURAL.
18. REFER TO PARTITION TYPES SHEET(S) FOR STANDARD DETAILS PERTAINING TO THE PARTITION TYPES. ONE OR MORE OF THE DETAILS MAY PERTAIN TO EACH PARTITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND REFERENCE ALL STANDARD PARTITION DETAILS. THE CONTRACTOR IS TO IMMEDIATELY CONTACT THE ARCHITECT IF ANY QUESTIONS ARISE.
19. EXTERIOR DIMENSIONS ARE GIVEN TO EITHER THE EDGE OF SLAB, FACE OF CMU, OR THE EXTERIOR FACE OF STUD WALLS UNLESS NOTED OTHERWISE. DIMENSIONS TO INTERIOR PARTITIONS ARE TO THE FACE OF STUD OR CMU UNLESS NOTED OTHERWISE.
20. PROVIDE CODE COMPLIANT FIRE RETARDANT NON-COMBUSTIBLE BLOCKING, SUPPORTS, BACKING, ETC., FOR SECURE INSTALLATION OF WALL AND CEILING MOUNTED ITEMS.THIS INCLUDES, BUT IS NOT LIMITED TO, MILLWORK, WALL LIGHT FIXTURES, TV BRACKETS, PLUMBING FIXTURES, TOILET ACCESSORIES, HANDRAILS, AND GUARDRAILS. CONTRACTOR TO DETERMINE TYPE OF BLOCKING AND ANCHORING AS REQUIRED TO SUIT INSTALLATION AND WALL CONDITION. BLOCKING IS IN ADDITION TO NOTED PARTITION CONSTRUCTION, AND IS NOT MEANT TO REPLACE THE PARTITION CONSTRUCTION. BLOCKING IS NOT TO INTERFERE OR DEGRADE A PARTITION OR CEILING'S SMOKE AND/OR FIRE RATING.
21. REFER TO DOOR SCHEDULES, WINDOW TYPES, AND DETAILS FOR CONSTRUCTION OF OPENINGS IN THE PARTITIONS
22. PROVIDE LINTELS OR HEADERS AS REQUIRED OR DIRECTED OVER OPENINGS PENETRATED BY MECHANICAL EQUIPMENT, WINDOWS, DOORS, AND/OR OTHER OPENINGS.
23. HINGE SIDE OF ALL DOORS ARE LOCATED 4" FROM ADJACENT WALL UNLESS NOTED OTHERWISE
24. PROVIDE FIRE STOPPING AT ALL PENETRATIONS OF WALLS AND FLOORS AS SPECIFIED IN CONTRACT DOCUMENTS AND SPEC SECTION - FIRESTOPPING
25. FOR ALL SMOKE AND/OR FIRE RATED PARTITIONS THE DESIGNATED UL DESIGN IS TO BE MAINTAINED WITHOUT EXCEPTION. ALL PENETRATIONS AND OPENINGS ARE TO BE SEALED WITH AN APPROVED UL DESIGN OR DESIGNATED DETAIL. THESE DRAWINGS DO NOT LIST ALL THE UL DESIGNS NECESSARY TO MAINTAIN A PARTITIONS SMOKE AND/OR FIRE RATING. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE ALL RATED PARTITIONS FULLY MEET UL REQUIREMENTS.
26. REFER TO PARTITION DESIGN CRITERIA ON PARTITION TYPES SHEET FOR PARTITION DESIGN LIMITATIONS
27. THERE ARE ITEMS SHOWN,SUCH AS OUTLETS, SWITCHES, THERMOSTATS, ETC., ON THE MEPF DRAWINGS THAT ARE NOT DRAWN ON THE ARCHITECTURAL ELEVATIONS. CONTRACTOR TO COORDINATE AND MOUNT ALL MEPF ITEMS PER STANDARD MOUNTING LOCATIONS & TOILET ROOM CONFIGURATION SHEET(S) UNLESS NOTED OTHERWISE. RECEPTACLES MOUNTED ABOVE COUNTERTOPS/BACKSPLASHES ARE TO BE 42" AFF TO CENTERLINE OF COVERPLATE AND ARE TO BE INSTALLED HORIZONTALLY, UNLESS NOTED OTHERWISE. COORDINATE ALL MEP ACCESS PANELS NOT SHOWN ON ARCHITECTURAL CONSTRUCTION DOCUMENTS WITH ARCHITECT PRIOR TO INSTALLATION.
28. HOT WATER LINES AND DRAIN LINES UNDERNEATH ACCESSIBLE SINKS SHALL BE INSULATED
29. IN GYPSUM BOARD CEILINGS LOCATE ALL HVAC ITEMS, EMERGENCY LIGHTING, SPRINKLER HEADS IN CENTER OF SPACE AND EQUAL DISTANT APART FROM EACH OTHER UNLESS NOTED OTHERWISE. IN LAY-IN ACOUSTICAL CEILINGS LOCATE ALL HVAC ITEMS, EMERGENCY LIGHTING, SPRINKLER HEADS, ETC. IN CENTER OF TILE UNLESS NOTED OTHERWISE.
30. COORDINATE ALL MEPF ITEMS IN WALL, FLOOR, AND CEILING NOT SHOWN ON THE ARCHITECTURAL CONSTRUCTION DOCUMENTS WITH ARCHITECT AND MEPF PRIOR TO INSTALLATION. ALL LOCATIONS TO BE SHOWN ON SUBMITTAL DRAWINGS TO ASSIST WITH COORDINATION.
31. IN EXPOSED CEILINGS EVENLY SPACE ALL FIXTURES AT OR BELOW EXPOSED STRUCTURE OR MEP DUCTWORK. COORDINATE LIGHTING WITH FINAL MEPF LAYOUT TO AVOID SHADOWS AND DARK SPOTS.
32. FOR CONCEALED TYPE SPRINKLER HEADS, ARCHITECT WILL COORDINATE W/OWNER FINISH OF SHIELD (STAINLESS STEEL, WHITE, ETC.). TYPICAL HEAD FINISH TO MATCH ADJACENT SURFACE COLOR, IF POSSIBLE.
33. REFER TO FINISH PLANS AND SCHEDULES, INTERIOR AND EXTERIOR ELEVATIONS, SECTIONS AND DETAILS FOR ALL FINISHES
34. PROVIDE FINISHES AS SCHEDULED AND SELECTED BY ARCHITECT
35. PROVIDE NON-SLIP SURFACE FINISH IN WET AREAS
36. FINISHES CONTINUE BEHIND AND BENEATH ALL EQUIPMENT, MILLWORK, AND CASEWORK U.N.O.
37. EXPOSED INTERIOR STRUCTURAL STEEL TO BE EXTERIOR GRADE PAINT FINISH, RE: FINISH SCHEDULE U.N.O,
38. ALL ELECTRONIC CUT VINYL GRAPHICS TO BE INSTALLED ON LEVEL 5 GYPSUM WALL FINISH. USE HIGH-TACK ADHESIVE FOR ALL VINYL GRAPHICS. GC TO VERIFY FINAL WALL GRAPHIC AND FONT WITH ARCHITECT PRIOR TO PURCHASE & INSTALLATION.
39. EXPOSED ENDS OF ALL PROJECTING ELEMENTS SUCH AS SILLS, LEDGES & SIMILAR COMPONENTS FABRICATED IN METAL, STONE & OTHER MATERIALS SHALL BE FINISHED SAME AS FACE
40. CENTER LAY-IN ACOUSTICAL CEILING SYSTEM IN EACH ROOM WITH EQUAL TILE DIMENSIONS ON OPPOSITE WALLS UNLESS NOTED OTHERWISE. NOTIFY ARCHITECT IF ANY TILE ABUTTING THE PARTITION IS LESS THAN 6" IN WIDTH. SECONDARY WALL ANGLES TO SUPPORT SHORT RUNS WILL NOT BE ACCEPTED.
41. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS FOR MILLWORK AND CASEWORK
42. ALL CUSTOM MILLWORK, IF IN SCOPE OF WORK, IS SHOWN IN ELEVATION AND DESIGNED PER DESIGNATED DETAILS. REFER TO INTERIOR ELEVATIONS, MILLWORK DETAILS, AND RELATED SPECIFICATION DIVISIONS FOR ADDITIONAL INFORMATION.
43. ALL MANUFACTURED CASEWORK, IF IN SCOPE OF WORK, IS DESIGNATED ON ENLARGED FLOOR PLANS. REFER TO CASEWORK SCHEDULE AND RELATED SPECIFICATION DIVISIONS FOR DETAILED INFORMATION. CONTRACTOR IS TO FOLLOW THE SCHEDULED MANUFACTURERS SPECIFICATIONS, INSTRUCTIONS, AND RECOMMENDATIONS UNLESS DIRECTED OTHERWISE BY THE CONTRACT MANUAL.

1. THESE DRAWINGS INDICATE THE GENERAL SCOPE OF THE PROJECT IN TERMS OF THE ARCHITECTURAL DESIGN CONCEPT, THE MAJOR DIMENSIONS, AND THE MAJOR ARCHITECTURAL, STRUCTURAL, MECHANICAL & PLUMBING ELEMENTS.
2. AS SCOPE DOCUMENTS THEY DO NOT INDICATE ALL WORK REQUIRED FOR FULL PERFORMANCE AND COMPLETION OF THE JOB. ON THE BASIS OF THE GENERAL WORK INDICATED, ALL CONTRACTORS (AND SUBCONTRACTORS) SHALL FURNISH ALL ITEMS REQUIRED FOR THE PROPER EXECUTION AND TIMELY COMPLETION OF THE WORK.
3. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES. FAILURE OF THE CONTRACTOR TO FOLLOW THIS PROCEDURE SHALL CAUSE THE CONTRACTOR TO ASSUME FULL RESPONSIBILITY FOR ANY SUBSEQUENT MODIFICATION OF THE WORK MANDATED BY ANY REGULATORY AUTHORITY.
4. ALL WORK SHALL COMPLY WITH APPLICABLE STATE AND LOCAL CODES AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT THEIR EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER.
5. ALL WORK SHALL BE PERFORMED IN A FINISHED AND WORKMANLIKE MANNER TO THE ENTIRE SATISFACTION OF THE OWNER & ARCHITECT AND IN ACCORDANCE WITH THE BEST RECOGNIZED TRADE PRACTICES.
6. CONTRACTOR WILL BE HELD TO HAVE STUDIED THE CONTRACT DOCUMENTS, TO HAVE VISITED THE SITE, AND TO HAVE SATISFIED THEMSELVES REGARDING ALL EXISTING CONDITIONS UNDER WHICH THEY WILL BE OBLIGED TO OPERATE. CONTRACTOR SHALL IMMEDIATELY REPORT ANY ERROR, INCONSISTENCY, OR OMISSION TO THE ARCHITECT AS AN RFI FOR REQUIRED CLARIFICATION FROM THE OWNER AND/OR A/E TEAM. WHEN DISCREPANCIES EXIST IN THE CONTRACT DOCUMENTS AND WHEN THE CONTRACTOR DOES NOT REQUEST A CLARIFICATION AS TO WHICH ITEM, STATEMENT, ETC. IS THE CORRECT AND/OR PREFERRED MATERIAL(S), CONSTRUCTION, COMPOSITION, DETAILING, ETC. THEN THE MOST EXPENSIVE SHALL BE INSTALLED AT NO ADDITIONAL COST TO THE PROJECT.
7. CONTRACTOR IS TO PROVIDE AND INSTALL ALL NECESSARY PROTECTIVE DEVICES REQUIRED TO PROTECT ANY EQUIPMENT (CONTRACTOR PROVIDED AND/OR OWNER PROVIDED) INSTALLED PRIOR TO THE COMPLETION OF THE WORK.
8. CONTRACTOR SHALL COORDINATE ALL DELIVERIES AND ACCESSIBILITY TO THE BUILDING FOR ALL ITEMS.
9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK PRIOR TO THE START OF SITE WORK. ALL DAMAGES MADE TO THE EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
10. CONTRACTOR SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FIXTURES, AND SERVICE NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHOWN IN THE CONTRACT DOCUMENTS.
11. ALL MATERIALS AND EQUIPMENT INCORPORATED IN THE WORK SHALL BE NEW AND ALL WORK BE OF GOOD QUALITY, FREE FROM FAULTS, AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS.
12. CONTRACTOR SHALL KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY THEIR OPERATIONS. AT THE COMPLETION OF THE WORK THE CONTRACTOR SHALL PERFORM A FINAL CLEAN-UP, INSIDE AND OUT, CLEAN ALL GLASS SURFACES AND LEAVE THE PROJECT AREA CLEAN.
13. CONTRACTOR SHALL GUARANTEE FOR 1 (ONE) YEAR UNLESS NOTED OTHERWISE IN OWNER-CONTRACTOR AGREEMENT THAT ALL OF THE WORK UNDER THE CONTRACT IS FREE FROM FAULTY MATERIALS, WATER-TIGHT AND LEAK-PROOF IN EVERY PARTICULAR AND FREE FROM IMPROPER WORKMANSHIP.
14. CONTRACTOR SHALL SUPERVISE THE WORK AND COORDINATE ALL PORTIONS THEREOF.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF EXISTING AND NEW WORK. ANY WORK DAMAGE FOR ANY REASON SHALL BE REPLACED AT NO COST TO THE OWNER.
16. CONTRACTOR SHALL NOT SCALE DRAWINGS - LARGER DRAWINGS AND DETAILS SHALL TAKE PRECEDENCE OVER SMALLER DRAWINGS AND DETAILS.
17. ALL EXISTING SITE COMPONENTS TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION. ALL DAMAGED SURFACES AND EQUIPMENT SHALL BE REPAIRED OR REPLACED BY CONTRACTOR AS REQUIRED BY THE OWNER AND/OR OWNER'S REPRESENTATIVE.
18. ALL ITEMS ARE CONSIDERED TO BE "NEW" UNLESS NOTED OTHERWISE.
19. THE DRAWINGS & SPECIFICATIONS ARE COMPLEMENTARY DOCUMENTS. NEITHER TAKE PRECEDENT OVER THE OTHER. CONFLICTS IN SPECIFICATIONS AND DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
20. ALL CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF APPLICABLE LOCAL, STATE, AND FEDERAL CODES OR REGULATIONS.
21. ALL NEW CONSTRUCTION SHALL MEET CURRENT REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT, AND TEXAS ACCESSIBILITY STANDARDS.
22. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES BEFORE PROCEEDING WITH EXCAVATION, TRENCHING OR SIMILAR WORK. THESE DRAWINGS DO NOT CERTIFY THE EXISTENCE OF UTILITIES, EASEMENTS, AND/OR SETBACKS WHICH MAY BE PRESENT BUT UNRECORDED AND/OR UNDETECTED.
23. ALL SUBSTITUTIONS OF MATERIALS AND ASSEMBLIES MUST BE APPROVED BY ARCHITECT IN ACCORDANCE WITH THE SPECIFICATIONS.
24. CONTRACTOR IS REQUIRED TO PROVIDE CONTROL AND EXPANSION JOINTS IN ALL ASSEMBLIES PER CONTRACT DOCUMENTS.
25. CONTRACTOR SHALL PROVIDE ACCESS TO ALL FIRE DAMPER ASSEMBLIES AS NOTED IN CONTRACT DOCUMENTS.
26. ALL PIPING, DUCTWORK AND CONDUIT TO BE CONCEALED UNLESS NOTED OTHERWISE.
27. SITE SURVEY IS PROVIDED BY OTHERS AND IS INCLUDED FOR INFORMATION ONLY. ALL CONDITIONS TO BE FIELD VERIFIED BY CONTRACTOR.
28. CONTRACTOR SHALL MAINTAIN SITE DRAINAGE DURING CONSTRUCTION.
29. CONTRACTOR SHALL MAINTAIN A CLEAN AND SECURE SITE AS REQUIRED BY CONTRACT DOCUMENTS, CONSTRUCTION FACILITIES, AND TEMPORARY CONTROLS.
30. CONTRACTOR SHALL BE RESPONSIBLE FOR ASBESTOS ABATEMENT.

Division 0 - Proposal & Contract Requirements

Division 1 - General Requirements

1.1	
1.01	Temporary facilities and controls
1.2	
1.02	Temporary construction
1.3	
1.03	Temporary dustproof partition
1.04	Temporary protective floor cover
1.05	Temporary protective passageway
1.06	Temporary protective wall cover
1.07	Temporary shoring, bracing and support
1.08	Temporary weatherproof closure
1.09	Floor slope to be readjusted that meets TAS requirements; re: August 2022 TAS report
1.10	Entry door Airphone call button to be mounted at 48" A.F.F; re: August 2022 TAS report
1.11	Coordinate with DISD security department for additional hallway directional signage
1.12	Door to have maneuvering clearance; re: August 2022 TAS report
1.13	Replace fire alarm system; re: August 2022 TAS report
1.14	Provide new ADA compliant hand dryer; re: August 2022 TAS report
1.15	Toilet paper dispenser to be mounted per TAS requirements; re: August 2022 TAS report
1.16	Existing drinking fountain to have apron added making it ADA compliant; re: August 2022 TAS report

Division D2 - Site Work Demolition

D2.01	Remove concrete paving as indicated; re: Civil
D2.02	Remove asphalt paving as indicated; re: Civil
D2.03	Remove concrete curb as indicated; re: Civil
D2.04	Remove indicated parking striping; patch and prepare surface for new construction
D2.05	Remove handicap parking symbol
D2.06	Remove striped island; patch and prepare surface for new construction
D2.07	Remove accessible parking sign; patch and prepare surface for new construction
D2.08	Remove concrete walk as indicated; re: Civil
D2.09	Remove asphalt walk as indicated; re: Civil
D2.10	Remove playground equipment as indicated
D2.11	Remove tree; re: Landscape
D2.12	Remove landscaping; re: Landscape
D2.13	Remove accessible concrete ramp and railing ;re: Civil
D2.14	Remove structure as indicated
D2.15	Remove ramp;re: Civil
D2.16	Remove stair; re:Civil
D2.17	Remove plumbing fixture as noted
D2.18	Remove partition as noted
D2.19	Demo wall where indicated
D2.20	Demo roof mounted Exhaust Fan. Curb and Ductwork to remain. Refer to MECH drawings for more information.
D2.21	Remove wall, wall base, and floor finishes
D2.22	Trim existing Gutter; Install new end cap and sealant at end of the existing gutter.
D2.23	Remove existing roof system as necessary to install new cricket; install cover board and 2-ply modified bitumen membrane tied into existing roof system.
D2.24	Remove existing outside louver temporarily to be able to demolition/remove existing AHU and install new AHU. GC to Remove and protect existing louvers for reinstallation after new AHU installation.
D2.25	Remove crosswalk striping; prepare for new construction
D2.26	Remove flooring; patch and prepare surface for new construction
D2.27	Replace damaged floor tiles to match existing
D2.28	Existing planters along construction area to be salvaged, protected, and replaced as good or better conditions.GC to coordinate with owner prior to any construction; re: Civil
D2.29	Remove door and frame; patch and prepare surface for new construction
D2.30	Remove glazing system
D2.31	Remove existing pole
D2.32	Remove ADA signage; prepare for new construction
D2.33	Remove casement opening trim
D2.34	Remove temporary structures
D2.35	Remove canopy, columns and concrete walk; prepare surface for new construction; Re: Civil
D2.36	Remove covered canopy as indicated; remove structure to nearest beam and column
D2.37	Remove existing bike rack
D2.38	Remove railing
D2.39	Remove traffic arrows
D2.40	Remove downspouts
D2.41	Remove metal coping
D2.42	Remove ceiling tiles and grid system
D2.43	Replace damaged ceiling tiles to match existing
D2.44	Remove gypsum board ceiling and support system
D2.45	Remove all light fixtures; prepare for new replacement fixtures; Re: Electrical plans for lighting layout
D2.47	Remove existing signage and foundation; patch and prepare for new construction
D2.50	Remove MEP, Re: MEP
D2.51	Remove floor drain cover, Re: MEP
D2.52	Existing concrete paving to remain; re: Civil
D2.53	Remove ceiling; patch and prepare for new construction
D2.54	Remove planter; prepare for new construction
D2.55	Existing container to be removed, GC to coordinate with owner
D2.56	Remove shelving system.; patch and prepare surface for new construction
D2.57	Remove existing propane tank and all associate piping. Re: MEP
D2.58	Structure to remain; re: Structural
D2.60	Existing concrete curb cut to remain, re: Civil
D2.61	Existing concrete parking to remain, re: Civil
D2.62	Existing asphalt parking to remain, re: Civil
D2.63	Existing concrete curb to remain, re: Civil
D2.64	Play area/equipment to remain
D2.65	Landscape to remain, re: Landscape
D2.66	Existing tree(s) to remain; re: Landscape
D2.67	Existing gate to remain
D2.68	Existing chainlink fence to be removed and space to be prepared to receive new fence
D2.69	ONCOR electric transformer to remain. GC to protect transformer at all times during construction; re: MEP
D2.70	Existing structure to be removed by Owner
D2.71	Existing wall to remain
D2.72	Existing door to remain
D2.73	Existing window to remain, reseal window and glazing
D2.74	Roof scuttle/hatch to remain
D2.75	Stair to remain
D2.76	Existing building
D2.77	Millwork to remain; remove existing plastic laminate and prepare surfaces for new finishes, re: Finish schedule
D2.78	Patch and prepare roof for new construction
D2.79	Roof drain to remain
D2.80	Existing turndown to remain
D2.81	Patch & repair existing ceiling finishes after installation of Mechanical equipment/piping; match existing and/or new adjacent surfaces as noted
D2.82	Light fixtures to remain. Clean existing for like-new appearance. Replace damaged or broken light fixtures to match existing.
D2.83	Plumbing fixture to remain
D2.84	Remove existing portable classroom in its entirety
D2.85	Elevator penthouse to remain
D2.86	Elevator to remain. Elevator to be reprogrammed with new floor height and door opening sequences to match new building layout
D2.87	Demo existing chiller, Re: Mechanical
D2.88	Relocate trash area
D2.89	Remove existing gym in its entirety
D2.90	Prepare for new bike area
D2.91	Remove existing shed
D2.92	Existing concrete sidewalk to remain
D2.93	Demo storefront system, door and frame; patch and prepare for new construction
D2.96	Remove existing fence
D2.97	Remove fencing; coordinate salvage and re-use of existing rod iron fence

Division 2 - Site Work

2.1	
2.01	Working Point; start work at this location
2.2	
2.02	Existing building
2.3	
2.03	New building
2.04	Finish floor elevation, re: Civil
2.05	Area of construction
2.06	Area to remain undeveloped
2.07	Protect trees as-noted within area of work; re: Landscape
2.08	Harris County Flood Control District easement
2.09	New concrete paving; re: Civil for layout of paving expansion joints and control joints
2.10	New asphalt paving; re: Civil
2.11	Crushed concrete paving area; re: Civil
2.12	Permeable pavers; re: Civil
2.13	Parking stripes; 4" wide, white
2.14	Diagonal striping; 4" wide at 2'-0" O.C., white

Division 2 - Site Work

2.15	Fire lane striping; 4" wide, red
2.16	Drive lane striping; 4" wide, yellow
2.17	Accessible parking stall with signage; re: A.040 Site Details Sheet
2.18	Van Accessible parking stall with signage; re: A.040 Site Details Sheet
2.19	LEED parking stall with signage, re: Signage schedule
2.20	Curb cut and new concrete drive; re: Civil
2.21	Curb cut and new asphalt drive; re: Civil
2.22	Concrete curb at landscape; re:Civil and Site Details
2.23	Concrete curb at paving; re:A.040 and Civil
2.24	Concrete curb at crushed concrete parking; re: Civil
2.25	No curb at this location; re: Civil
2.26	Concrete curb radius, Re: Site dimensions and Civil
2.27	Sloped curb
2.28	Mechanical gate, re: Electrical
2.29	Water feature, re: Landscape and MEP
2.30	Detention pond; re: Civil
2.31	Trash container/dumpster area, re: Plans and details
2.32	Concrete walk at landscape, re: Civil and architectural site detail
2.33	Concrete walk at new/existing concrete curb, re: Civil and architectural site detail
2.34	Concrete walk at building edge, re: Civil and architectural site detail
2.35	Concrete walk at existing concrete walk, re: Civil and architectural site detail
2.36	Concrete walk, re: Civil for expansion and control joint notes
2.37	Decomposed granite trail; re: 4/A.040
2.38	Site signage; re: Civil
2.39	Concrete accessible ramp plan; re: Sheet A.040 and Civil
2.40	Crosswalk striping; Re: Sheet A.040
2.41	Flagpole base detail; re: 8/A.040
2.42	Landscaped median; re: Landscape
2.43	8'-0 high treated wood fence
2.44	6'-0 high wrought iron fence & gates to match existing
2.45	Metal screen fence
2.48	Monument sign, re: Structural, Electrical & IT for connection coordination
2.50	Planter; re: Civil
2.51	Concrete Wheel stop
2.52	Concrete speed bump, re: Civil
2.53	Concrete mow strip; re: Landscape
2.54	Bicycle rack, re: Equipment schedule
2.55	Playground equipment/structure, re: Structural and Landscape
2.56	Pool, pool deck, and water park area; re: Landscape, Pool Consultant, and MEP
2.57	Fire hydrant; re: Civil
2.58	Fire line vault; re: Civil
2.59	Domestic water line vault; re: Civil
2.60	Planting and irrigation system; re: Landscape
2.61	Irrigation system with controller, backflow preventer and meter; re: Landscape & IT for control coordination
2.62	Vehicular directional arrow to meet TXDOT requirements; white
2.63	Solid sod this area; re: Landscape
2.64	Hydromulch this area; re: Landscape
2.65	Provide (2) 4" sleeves in 8" of cement stabilized sand; GC shall clearly mark ends of sleeve at finished ground with brass peg
2.66	1/2" expansion joint w/ pourable sealer; re: 12/A.040
2.67	Mechanical yard
2.68	Mechanical yard chainlink fence
2.69	Existing concrete to remain
2.70	Outdoor area with fabric canopy
2.72	Stainless steel bike rack, anchored to concrete; basis of design; re: Specialty Equipment Schedule
2.74	Concrete ramp; Re: Civil , Re: Structural
2.77	Existing concrete curb
2.80	Passenger Loading Zone

Division 3 - Concrete

3.1	
3.01	Concrete slab; re: Structural
3.2	
3.02	Recessed slab area; re: Structural
3.03	Mezzanine slab; re: Structural
3.04	Concrete decking; re: Structural
3.05	Concrete steps; re: Structural
3.06	Concrete fill steps/landing; re: Structural
3.07	Concrete ramp; re: Structural
3.08	Concrete column base; re: Structural
3.09	Concrete wall to match tilt-wall
3.10	Tilt-wall, painted; re: Structural
3.11	Lightweight insulating concrete; sloped to drain; re: Specifications
3.12	Concrete grade beam; re: Structural
3.13	Housekeeping pad, re: Structural and MEP for thickness and detailing
3.14	Vapor barrier; re: Structural
3.15	Sawcut control joint; not to extend/overlap at end points; re: Civil
3.16	Reinforcing steel; re: Structural
3.17	Welded wire mesh; re: Structural
3.19	Nudura 12" ICF One Series Form; Re: Structural
3.20	Nudura 8" ICF Standard Series Form; Re: Structural
3.22	Concrete seating steps; re: Structural, Civil and re: A.041 Site Details Sheet
3.23	Retaining wall; Re: Structural and Civil
3.24	2x key way; re: Structural
3.25	Mechanical Pad; Re: Civil
3.26	2" Mudslab; re: Structural
3.27	Foundation void form; re: Structural

Division 4 - Masonry

4.1	
4.01	4" thick standard CMU, re: Finish schedule
4.2	
4.02	6" thick standard CMU, re: Finish schedule
4.3	
4.03	8" thick standard CMU, re: Finish schedule
4.4	
4.04	12" thick standard CMU, re: Finish schedule
4.05	2-1/2" thick CMU soap, re: Finish schedule
4.06	8" thick CMU sound block
4.07	12" thick CMU sound block
4.08	4" high starter course
4.09	Stone veneer, re: Finish schedule
4.10	Cast stone, re: Finish schedule
4.11	Limestone veneer system; re: Finish schedule
4.12	Glass masonry unit, re: Finish and Glazing schedules
4.13	Face brick, re: Finish schedule
4.14	Soldier course, re: Finish schedule
4.15	Rowlock course, re: Finish schedule
4.16	Clap brick, re: Finish schedule
4.17	Chamfered window sill
4.18	Bond beam; re: Structural
4.19	Bullnose corner
4.20	Tapered coping with drip edge, re: Finish schedule
4.21	Masonry anchor
4.22	New masonry wall to match existing wall
4.23	Horizontal joint reinforcing
4.24	Expansion joint anchors
4.25	Expansion joint filler
4.26	Bond breaker strip
4.27	Mortar net
4.28	Weep holes @ 24" O.C.
4.29	Masonry control joint, install per manufacturers requ

Division 7 - Thermal & Moisture Protection

7.01 Flat roof roofing system, re: Specifications
7.02 Built-up roofing membrane, re: Specifications
7.03 Flexible sheet roofing system, re: Specifications
7.04 Metal roof roofing system, re: Specifications
7.05 Standing seam metal roof on polyisocyanurate insulation board
7.06 Asphalt shingle roofing system, re: Specifications
7.07 Underlayment
7.08 Below grade waterproofing
7.09 Dampproofing
7.10 Batt insulation; depth of insulation to match depth of wall stud, unless noted otherwise
7.11 Rigid board insulation, re: Specifications
7.12 3 1/2" Polyisocyanurate rigid board
7.13 Insulation protective board
7.14 Roof traffic walkway pad(s), GC to coordinate final layout with Owner
7.15 Self Adhered Membrane Air Barrier, re: Specifications
7.16 5/8" Densglass sheathing
7.17 Roof hatch, re: Specifications
7.18 Metal canopy; re: Finish schedule and Structural
7.19 Downspouts; re: Finish Schedule
7.20 Coping at parapet cap; re: Finish Schedule
7.21 Parapet wall covering
7.22 Cap fascia
7.23 Prefinished Metal Fascia
7.24 Metal roof trim
7.25 Downspout connecting to underground sewer line; re: Civil
7.26 Primary overflow; re: Roofing Details
7.27 Secondary overflow located 2" above the membrane and act as emergency drains if the primary scuppers become obstructed
7.28 6" x 4 1/2" Gutter, brackets, and spacers; install per manufacturer's requirements and recommendations
7.29 6" Downspout and support hangers; install per manufacturer's requirements and recommendations
7.30 Integral canopy downspout by canopy provider
7.31 Cast iron downspout boot mounted above grade
7.32 Concrete splash block
7.33 Fry Reglet "Springlok" flashing system
7.34 Collector box; re: Finish Schedule
7.35 Base flashing
7.36 Metal trim flashing
7.37 Roof flashing
7.38 Through-wall flashing
7.39 Membrane flashing
7.40 Roof penetration flashing
7.41 Headwall flashing
7.42 Ridge vent
7.43 Breather vents
7.44 Pitch pocket
7.45 Sealant
7.46 Backer rod and sealant
7.47 Backer rod
7.48 Bond breaker
7.49 Steel mesh, galvanized
7.50 1" cap joint
7.51 1" expansion joint w/ compressible filler
7.52 Roof expansion joint cover
7.53 Expansion joint cover plate
7.54 Draft stop
7.55 Cementitious fireproofing
7.56 Firestopping
7.61 Exterior wall assembly: 14 5/8" concrete, 2 5/8" EPS panel, fluid applied air and water barrier, air gap, 3 5/8" face brick
7.62 Exterior wall assembly: 5/8" gypsum board, 6" metal studs 16" o.c., cavity filled with R-13 batt insulation, 1/2" plywood sheathing, fluid applied air and water barrier, air gap, 3 5/8" face brick
7.63 Exterior wall assembly: 5/8" gypsum board, 2 5/8" EPS panel, 10" concrete, 2 5/8" EPS panel, fluid applied air and water barrier, air gap, 3 5/8" face brick
7.64 Roof assembly: 1.5â€ metal structural steel deck, 4â€ tapered polyisocyanurate rigid insulation R-30 min., 1/2" coverboard, 1.5â€ modified bitumen roof with white granules; Re: Roofing consultant for details and finish â€¦ Division 07
7.65 Stucco; Re: Exterior finish schedule and exterior elevations for color
7.66 Fluid Applied Membrane Air Barrier; re: Specifications
7.67 Nudura 2 5/8" EPS Foam
7.68 Counterflashing with wind clip
7.69 Modified bitumen base flashing base-ply
7.70 Stainless steel through wall flashing; re: Roofing
7.71 24 GA stainless steel expansion joint cap flashing; re: Roofing
7.72 Compressible insulation in elastic membrane; re: Roofing
7.73 24 GA stainless steel cup; secure with stainless steel gasketed fasteners at 12" OC, 6" OC withing 10' of parapet; re: Roofin
7.74 Fry Reglet 1/2" F reveal
7.75 Full bed of exterior grade caulk near interior and exterior edges
7.77 Scheduled louvered vent
7.78 Vapor retarder

Division 8 - Openings

8.01 Scheduled door
8.02 Scheduled door frame
8.03 Overhead coiling door, manual
8.04 Overhead coiling door, elec.
8.05 Overhead sectional door, manual
8.06 Overhead sectional door, elec.
8.07 Sliding door, re: Door schedule
8.08 Moveable partition
8.09 Fire shutter
8.10 Scheduled window, re: Window schedule
8.11 Scheduled window frame, re: Window Schedule
8.12 Scheduled window frame set in full bed of butyl sealant; re: Window Schedule
8.13 Glazing system, re: Glazing schedule
8.14 Vertical sliding service window
8.15 Horizontal sliding service window
8.16 Door louver
8.17 Emergency key box, Knox box 3200, recess mounted, aluminum, re: Standard Mounting Heights A.730
8.18 Access door w/ lock and piano hinge; painted to match wall/ceiling unless noted otherwise
8.19 2'-0" x 2'-0" stainless steel plumbing access panel
8.20 Overhead coiling grille, manual
8.21 Overhead coiling grille, elec.
8.22 Door jamb, re: Door Schedule and General Notes
8.23 Vertical mullion, re: Frame Schedule
8.24 Horizontal mullion, re: Frame Schedule
8.25 Frame anchor
8.26 Floor anchor
8.27 Mounting clip
8.28 Continuous J clip
8.29 Saddle
8.30 Sill pan w/ end dams set in full bed of butyl sealant
8.31 Sill track
8.32 Head track
8.33 Polycarbonate sheet, re: Specifications
8.34 Access control card reader
8.35 Bilco Type K, 4' x 4' Aluminum crawl space floor hatch with ladder
8.37 6'x7' Double doors Type F 90' min., re: Door Schedule
8.38 2'-8" x 5'-0" windows with horizontal window blinds per DISD guidlines; re: Window schedule
8.39 3' x 7' door with sidelite; re: Window schedule
8.40 Double doors with panic bar; re: Door Schedule
8.42 Surface mounted anodized aluminum alloy 6063 housing specified insert and slotted screw holes
8.43 Saddle type threshold with no more than 1/2" in rise with stainless steel fasteners
8.44 1" empty conduit in drywall from door to lay-in ceiling; Re: ELEC

Division 9 - Finishes

9.01 1-5/8" metal studs at 16' O.C. Maximum
9.02 2-1/2" metal studs at 16" O.C. Maximum
9.03 3-5/8" metal studs at 16" O.C. Maximum
9.04 4" metal studs at 16" O.C. Maximum
9.05 6" metal studs at 16" O.C. Maximum
9.06 6" exterior wall metal studs at 16" O.C. Maximum
9.07 Top runner
9.08 Bottom runner
9.09 Metal stud bracing at 48" O.C. maximum, re: Framing Notes
9.10 Double studs at jamb conditions, typical
9.11 1-3/8" x 7/8" metal angle
9.12 2-1/2" x 2-1/2" metal angle
9.13 Cold-rolled channel, 3/4" with 1/2" flanges
9.14 Cold-rolled channel, 1-1/2" with 1?3/2" flanges
9.15 Cold-rolled channel, 2" with 1?3/2" flanges
9.16 Resilient channel
9.17 Metal furring channel
9.18 1" Z-furring channel
9.19 1-1/2" Z-furring channel
9.20 2" Z-furring channel
9.21 3" Z-furring channel
9.22 3/4" cross furring channel
9.23 1-1/2" main runner channel
9.24 1/4" gypsum board
9.25 1/2" gypsum board
9.26 5/8" gypsum board
9.27 5/8" water-resistant Type X gypsum board
9.28 5/8" abuse-resistant gypsum board
9.29 5/8" gypsum board backing board
9.30 1/2" gypsum sheathing
9.31 5/8" cementitious backer board
9.32 Sound attenuation batts; depth of batts to match depth of wall stud, unless noted otherwise
9.33 Acoustical sealant
9.34 Corner bead
9.35 Hogg NTC logo, applied by sports flooring manufacturer
9.36 Hogg NTC logo, painted using school colors
9.37 Hogg NTC logo, custom printed with wall padding manufacturer on end court wall paddings, centered to basketball backstop
9.38 Reveal molding
9.39 Control joint, re: gypsum board installation requirements and recommendations
9.40 Control joint
9.41 Expansion Joint
9.42 Carpet, re: Finish schedule
9.43 Floor tile, re: Finish schedule
9.44 Vinyl tile, re: Finish schedule
9.45 Paver system; re: Finish Schedule
9.46 Epoxy flooring, re: Finish schedule
9.47 Terrazzo, re: Finish schedule
9.48 Slip-resistant liquid floor coating, re: Finish schedule
9.49 Slip resistant sheet vinyl floor covering, re: Finish schedule
9.50 Wood flooring system, re: Finish schedule
9.51 Modular tile sports flooring
9.52 Rubber flooring system, re: Finish schedule
9.53 Resilient base, re: Finish schedule
9.54 Resilient base, re: Finish schedule
9.55 Tile base, re: Finish schedule
9.56 Wood base, re: Finish schedule
9.57 Epoxy base, re: Finish schedule
9.58 Paint, re: Finish schedule
9.59 Wall tile, re: Finish schedule
9.60 Acoustic wall panel(s), re: Finish schedule
9.61 Johnsonite, re: Finish schedule
9.62 Gypsum board ceiling
9.63 Gypsum board furrdown
9.64 Suspended acoustic ceiling tile and grid system, re: Finish schedule
9.65 Perforated metal ceiling assembly system, re: Finish schedule
9.66 Start point for scheduled ceiling grid
9.67 Hanger wire
9.68 Tie wire
9.69 Countertop with matching 4" backsplash unless noted otherwise, re: Finish schedule
9.70 Plaster, re: Finish schedule and Specifications for depth
9.71 Metal lath
9.72 Casing bead
9.73 Drip screed, plain
9.74 Drip screed, vented
9.75 Drip groove
9.78 Uplift bracing, re: Structural
9.79 Mortar bed
9.80 Underlayment
9.81 Vapor barrier
9.82 Vented base
9.83 Sleepers
9.84 Pads
9.85 Johnsonite reducer strip
9.86 Floor transitions
9.87 Game striping paint, re: Finish schedule
9.88 Scheduled partition; Re: Floor plans and wall types
9.89 Metal stud boxed header at opening
9.91 4" Rubber cove
9.92 2-1/2' x 10' Acoustic ceiling baffles by Conwed, re: Reflected Ceiling Plan and Finish schedule
9.93 Ceramic tile base, re: Finish Schedule
9.94 Floor expansion joint 1 x 4" Emshiel SecuritySeal - SSF2
9.95 Floor expansion joint system model 304 Series-Recessed Mount VCT - Floor to wall
9.96 Pulastic Classic 110 synthetic flooring 11mm
9.97 Johnsonite T-Moulding; installed by synthetic floor installers
9.98 Metal track for T-Mouldings; installed by synthetic floor installers
9.99 Johnsonite adaptor strip

Division 10 - Specialties

10.01 Toilet partition(s) , re: Accessory schedule
10.02 Urinal screen, re: Accessory schedule
10.03 Paper towel dispenser, Not In Contract
10.04 Toilet paper dispenser, re: Accessory schedule
10.05 Soap dispenser, re: Accessory schedule
10.06 Grab bar, 42" long, re: Accessory schedule
10.07 Grab bar, 36" long, re: Accessory schedule
10.08 Grab bar at shower, re: Accessory schedule
10.09 Continuous ADA grab bar, re: Accessory schedule
10.10 Framed mirror, 24" x 36", re: Accessory schedule
10.11 Framed mirror, 24" x 60", re: Accessory schedule
10.12 Unframed mirror, re: Accessory schedule
10.13 Sanitary napkin dispenser, re: Accessory schedule
10.14 Sanitary napkin disposal, re: Accessory schedule
10.15 Shower partitions, re: Accessory schedule
10.16 Shower rod, curtain & hooks, re: Accessory schedule
10.17 Wall hooks
10.18 Coat hook, re: Accessory schedule
10.19 Folding shower seat, re: Accessory schedule
10.20 Recessed soap dish, re: Accessory schedule
10.21 Electrical hand dryer, re: Accessory schedule
10.22 Electrical hair dryer, re: Accessory schedule
10.23 Baby changing station, re: Accessory schedule
10.24 Mop rack, re: Accessory schedule
10.25 T.V. ceiling mount, re: Accessory schedule
10.26 T.V. wall mount, re: Accessory schedule
10.27 Mounting angles
10.28 Corner guards(s); flush mount stainless steel
10.29 Fire extinguisher cabinet (FEC), recessed; re: Specifications for finish and labeling
10.30 Wall-hung fire extinguisher (FE)
10.31 Wall anchored metal canopy and required structural support(s), connections, flashing, and components, re: Structural, re: Finish Schedule
10.32 Pre-engineered metal canopy and required structural support(s), connections, flashing, and components, re: Structural, re: Finish Schedule
10.33 Canopy deck
10.34 Canopy fascia
10.35 Canopy frame
10.36 Canopy flashing
10.37 Canopy support
10.38 Wire mesh partition(s)
10.39 Folding panel partition, manual
10.40 Folding panel partition, electric
10.41 Accordion folding partition, manual

Division 10 - Specialties

10.42 Accordion folding partition, electrical
10.43 Operable partition track
10.44 Operable partition head trim
10.45 Metal shelving, re: Equipment schedule
10.46 Prefinished wall louver
10.47 Insect screen
10.48 Mounting angles
10.49 Corner guard(s)
10.50 Flagpole(s)
10.51 Building identification letters, re: Graphics Schedule and Specifications
10.52 Aluminum address post with signage, GC to provide structure; install per manufacturer s requirements and recommendations
10.53 Signage, GC to provide foundation support (site signage) and blocking (interior signage) where required. Signage on glass shall have additional piece on other side concealing back of signage, re: Graphics Schedule
10.54 Occupancy sign; re: Graphics Schedule
10.55 Bldg. plaque(s); re: Graphics Schedule
10.56 Building dedication plaque, O.P.C.I.
10.57 Vinyl graphics, GC to ensure Level 5 finish and smooth finish at each location, re: Graphics Schedule
10.58 Lockers, re: Equipment schedule
10.59 Locker filler panel/trim0
10.60 Existing lockers, new location; GC to provide matching filler panels where needed
10.61 Bench, re: Equipment schedule
10.62 48"x96" Markerboard, white three-coat porcelain enamel process writing surface with 7/16" MDF core and t5 tempered factory 6303 alloy grade aluminum trim, 201-R1 satin anodized finish; GC to provide removable mounting clips, 1" cork map rail and hooks, marker tray and two flag holders; basis of design Claridge Products LCD2048R in 100 white with 74EZ maprail, 76M metal map holders, 76H flag holders
10.63 48"x96" Tackboard, fabric covered 1/4" self healing cork laminated to 1/4" hardboard backing with T5 tempered factory 6303 alloy grade aluminum trim, 201-R1 satin anodized finish; basis of design is Claridge Products 858F in 1690 Grey Mix fabric
10.64 Mailboxes, re: Equipment schedule and Specifications
10.65 Ipe wood pedestal mounted roof decking system
10.66 Nursing bench, Owner provide owner install
10.71 School logo, GC to meet the District's guidelines and requirements
10.74 Room Sign, re: Door schedule and sign schedule
10.75 70" T.V. wall mount, re: Furniture schedule
10.77 Height adjustable nursing bench
10.78 Toilet partition pilaster, secured to both floor and ceiling, re: Accessory Schedule
10.80 4'x16" Markerboard, white three-coat porcelain enamel process writing surface with 7/16" MDF core and t5 tempered factory 6303 alloy grade aluminum trim, 201-R1 satin anodized finish; GC to provide removable mounting clips, 1" cork map rail and hooks, marker tray and two flag holders; basis of design Claridge Products LCD2048R in 100 white with 74EZ maprail, 76M metal map holders, 76H flag holders
10.81 Ghent recessed display case, 48"x96"x16" standard size with non-framed sliding glass front access, 4 adjustable shelves, recessed interior lights, fabric-wrapped tackable panels on all non-glass sides, and aluminum satin anodized frame, re: Specifications
10.82 Coat hanger rod
10.83 48"x48" Tackboard, fabric covered 1/4" self healing cork laminated to 1/4" hardboard backing with T5 tempered factory 6303 alloy grade aluminum trim, 201-R1 satin anodized finish; basis of design is Claridge Products 858F in 1690 Grey Mix fabric
10.84 48"x48" Markerboard, white three-coat porcelain enamel process writing surface with 7/16" MDF core and t5 tempered factory 6303 alloy grade aluminum trim, 201-R1 satin anodized finish; GC to provide removable mounting clips, 1" cork map rail and hooks, marker tray and two flag holders; basis of design Claridge Products LCD2048R in 100 white with 74EZ maprail, 76M metal map holders, 76H flag holders
10.85 Fully recessed defibrillator cabinet (AED), GC to provide, re: Control Room Schedule
10.87 Ceiling grid mounted signage hook, 15 lb capacity
10.89 Nickel-plated steel hanging cables

Division 11 - Equipment

11.01 Front curtain
11.02 Valance
11.03 Border
11.04 Leg
11.05 Rear curtain
11.06 Dish washer
11.07 Refrigerator with Ice Machine
11.08 Under counter refrigerator
11.09 Ice Maker
11.10 Drop-in range
11.11 Range hood
11.12 Cooktop
11.13 Microwave
11.14 Disposal
11.15 Washer
11.16 Dryer
11.17 Wall-hung, electric projection screen
11.18 Ceiling-hung, electric projection screen
11.19 Wall-hung, manual projection screen
11.20 Ceiling-hung, manual projection screen
11.21 Vending machine(s)
11.22 Recessed defibrillator cabinet
11.23 Wall-mounted flat panel television
11.24 Exterior scoreboard, GC to coordinate power and data end points with Owner requirements/needs
11.25 Interior scoreboard, GC to coordinate power and data end points with Owner requirements/needs
11.26 Exterior backstop
11.27 Fixed backstop
11.28 Backstop, forward fold, electrical operation
11.29 Backstop, forward fold, manual
11.30 Volleyball floor insert
11.31 Volleyball Net and Standards
11.32 Roll down divider, electrical
11.33 Wall padding
11.34 Small dumpster (6 yard)
11.35 Large dumpster (40 yard)
11.36 Basketball goal, main court, with safety glass backboards, adjustable height feature, and non-retractable overhead supports. Basis of design: Draper Basketball Backstop - TS-21
11.37 Basketball goal, cross court, with fiberglass backboards, manual operative lifting ratchet, with stationary wall mounted supports. Basis of design: Draper Stationary Wall-Mounted SW
11.39 4-pole equipment hooks/Mop racks, wall mounted and stainless steel
11.40 Wall-mounted, height adjustable shelf
11.41 Projector screen; Owner provide, owner installed; Shown for coordination purposes only

Division 12 - Furnishings

12.01 Base casework
12.02 Wall casework
12.03 Tall casework
12.04 Mobile casework
12.05 Millwork
12.06 Not Used
12.07 Lock
12.08 Horizontal louver blinds, re: Specifications
12.09 Shades, mechanical; GC to provide power and coordinate switch location(s) with Owner
12.10 Shades, manual
12.11 Work station, re: Furniture Schedule
12.12 Office furniture, re: Furniture Schedule

Division 13 - Special Construction

13.01 Metal building system to be permitted separately by contractor; GC to provide structural design, reactions, and anchor bolt engineering for entire system
13.02 Grandstands
13.03 Bleachers, mechanical
13.04 Bleachers, manual

Division 14 - Conveying Systems

14.01 Elevator
14.02 Wheelchair lift
14.03 Overhead cranes
14.04 Crane; Division, by Others; O.P.C.I.
14.05 Jib-Crane; re: Structural

Division 22 - Plumbing

22.01 Wall-mount lavatory; re: Plumbing
22.02 Counter-mount lavatory; re: Plumbing
22.03 Single-compartment undermount sink; re: Plumbing
22.04 Two-compartment sink; re: Plumbing
22.05 Wash fountain; re: Plumbing
22.06 Service sink; re: Plumbing
22.07 Mop sink and controls; re: Plumbing
22.08 Wall-mount water closet; re: Plumbing
22.09 Floor-mount water closet; re: Plumbing
22.10 Urinal; re: Plumbing
22.11 Electric water cooler; re: Plumbing
22.12 Halsey Taylor bi-level electric water cooler and bottle filler, model HTHBWF-OVLSER-I; re: Plumbing
22.13 Prefabricated shower unit; re: Plumbing
22.14 Height adjustable shower head and controls; re: Plumbing
22.15 Floor drain; re: Plumbing
22.16 Floor sink; re: Plumbing
22.17 Roof drain; re: Plumbing
22.18 Overflow drain; re: Plumbing
22.19 Hose bibb; re: Plumbing
22.20 Freeze-proof hose bibb; re: Plumbing
22.21 Wall hydrant; re: Plumbing
22.22 Floor cleanout; re: Plumbing
22.23 Emergency eyewash; re: Plumbing
22.24 Emergency shower/eyewash; re: Plumbing
22.25 Water heater; re: Plumbing
22.26 Instantaneous undercounter water heater; re: Plumbing
22.27 Water softener; re: Plumbing
22.28 Roof vent; re: Plumbing
22.29
22.30 Fire sprinkler head by General Contractor; RE: Plumbing for general notes
22.32 36"x36" clear space prefabricated shower pan and walls; re: Plumbing
22.35 Single-compartment sink; re: Plumbing
22.36 Sump pit
22.37 Elkay LKAPREZL Cane Apron

Division 23 - Mechanical

23.01 Relocated R.T.U. re: Mechanical
23.02 Air Handling Unit; re: Mechanical
23.03 Fan coil unit; re: Mechanical
23.04 Condensing unit; re: Mechanical
23.05 Rooftop unit; re: Mechanical
23.06 Chiller; re: Mechanical
23.07 Boiler; re: Mechanical
23.08 Exhaust fan; re: Mechanical
23.09 Supply fan; re: Mechanical
23.10 Outside air intake; re: Mechanical
23.11 Ductwork; re: Mechanical
23.12 Exposed ductwork to be painted; re: Specifications
23.13 Supply air grille; re: Mechanical
23.14 Return air grille; re: Mechanical
23.15 Exhaust air grille; re: Mechanical
23.16 Slot diffuser; re: Mechanical
23.17 Ruskin XP500 aluminum extreme weather louver, 5" deep with horizontal sightproof blades, tested to FEMA 361 standard design and ICC500 specification for large missile impact; re: Mechanical
23.18 Prefabricated equipment curb; re: Mechanical
23.19 Kitchen vent hood; re: Mechanical
23.20 Kitchen equipment
23.21 Trench Drain
23.22 Scheduled supply duct louvers; re: Mechanical
23.23 Scheduled return duct louvers; re: Mechanical

Division 25 - Electrical

25.01 Approximate location of electrical service connection and meter; re: Civil and Electrical
25.02 Transformer pole; re: Electrical
25.03 Pad-mounted transformer; re: Electrical
25.04 Floor-mounted transformer; re: Electrical
25.05 Suspended transformer; re: Electrical
25.06 Wall-mounted transformer; re: Electrical
25.07 Emergency generator; re: Electrical
25.08 Meter rack; re: Electrical
25.09 Electrical panel(s); re: Electrical
25.10 Scheduled light fixture re: Electrical
25.11 Floor data/power receptacles; re: Electrical
25.12 Coordinate location of floor/wall mounted receptacles with knee space locations; re: Millwork/Casework Elevations
25.13 Receptacles mounted above countertops/backsplashes are to be 42" above-finish-floor to centerline of cover plate and are to be installed horizontally, unless noted otherwise
25.14 Scoreboard receptacle; re: Electrical
25.15 Ceiling mounted data/power receptacles for projector; re: Electrical
25.16 Speaker; re: Electrical
25.17 Audio system cabinet; re: Electrical
25.18 Control switch for elec. projection screen
25.19 Control switch for mechanical door(s)/grille(s)
25.20 Security control panel
25.21 Fire alarm control panel; re: Electrical
25.22 Fire alarm remote annunciator panel; re: Electrical
25.23 Impact protected light fixture; all lights in gymnasium to be protected; re: Electrical
25.24 Suspended LED lighting fixture, Type D8; re: Electrical
25.25 Surface mount exit sign; Provide wire guard and vandal resistant housing; re: Electrical
25.26 Ceiling mount exit sign; Provide vandal resistant housing; re. Electrical
25.27 Main control panel for storm shelter, installed by Access Control Contractor; re. Electrical
25.28 Control panel for water for storm shelter, installed by Access Control Contractor; re. Electrical
25.29 Type W - Exterior wall pack; re: Electrical

NOTES:

1. REFERENCE THIS SHEET IF KEYNOTE IS MISSING FROM ANY FOLLOWING SHEETS. NOT ALL NOTES ARE USED IN THIS PROJECT
2. GC IS RESPONSIBLE FOR ASBESTOS ABATEMENT

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MASTER KEY NOTES

Scale: AS NOTED

G.051

NOT USED 20

NOT USED 19

NOT USED 18

NOT USED 17

NOT USED 16

NOT USED 15

NOT USED 14

NOT USED 13

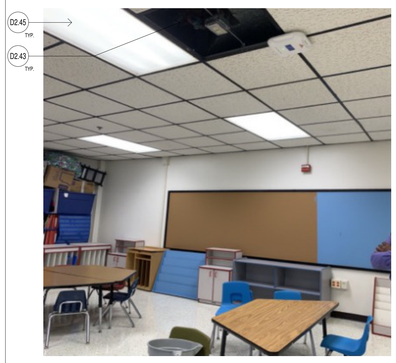
NOT USED 12

NOT USED 11

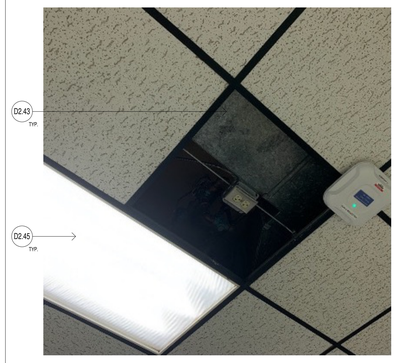
NOT USED 10

NOT USED 9

EXISTING DAMAGED CEILING - TYPICAL 8



EXISTING DAMAGED CEILING - TYPICAL 7



EXISTING DAMAGED CEILING - TYPICAL 6

EXISTING DAMAGED CEILING - TYPICAL 5

KEYNOTES & NOTES 1

D2.43 Replace damaged ceiling tiles to match existing
D2.45 Remove all light fixtures; prepare for new replacement fixtures; Re: Electrical plans for lighting layout

NOTES:

1. PHOTOS SHOWN FOR REFERENCE ONLY. GC TO REFER TO D.121 & D.122
2. ALL EXISTING INTERIOR LIGHT FIXTURES TO BE REPLACED FOR LED, ENERGY STAR
3. COLOR TEMPERATURE TO BE 4000K AT ALL FIXTURES WITH A COLOR RENDERING INDEX OF 80.
4. GC TO REPLACE ANY EXISTING DAMAGED AND/OR BROKEN CEILING TILES; GC TO ASSUME BETWEEN 5 -10 TILES PER ROOM.
5. GC TO REPLACE ANY CEILING TILES DAMAGED DURING CONSTRUCTION
6. ALL EXISTING DOOR GRAPHIC SIGNAGE TO BE REPLACED WITH NEW
7. PROVIDE NEW WAYFINDING SIGNAGE

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PHOTOS OF EXISTING CONDITIONS

Scale: AS NOTED

D.040

DEMOLITION RCP 1/8" = 1'-0" | 6

D2.45 Remove all light fixtures; prepare for new replacement fixtures; Re: Electrical plans for lighting layout

GENERAL NOTE:

FOR LIGHTING FIXTURE REFERENCE ONLY, REF. ELECTRICAL FOR LIGHT FIXTURES AND DETAILS

NOTES:

1. ALL EXISTING INTERIOR LIGHT FIXTURES TO BE REPLACED FOR LED, ENERGY STAR
2. COLOR TEMPERATURE TO BE 4000K AT ALL FIXTURES WITH A COLOR RENDERING INDEX OF 80.
3. GC TO REPLACE ANY EXISTING DAMAGED AND/OR BROKEN CEILING TILES; GC TO ASSUME BETWEEN 5 - 10 TILES PER ROOM.
4. EXISTING CEILING TILES SHOWN FOR REFERENCE ONLY, GC RESPONSIBLE TO COORDINATE ON SITE.

GENERAL NOTES & KEYNOTES 5

EXISTING TO REMAIN

EXISTING GYPSUM BOARD CEILING

EXISTING 2'X2' LAY-IN ACOUSTICAL TILE SUSPENDED CEILING SYSTEM

EXISTING TO BE DEMOLISHED

2X4 RECESSED LIGHT FIXTURE; RE: ELECTRICAL

2X2 RECESSED LIGHT FIXTURE; RE: ELECTRICAL

6" RECESSED LIGHT FIXTURE; RE: ELECTRICAL

LEGEND 1

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DEMOLITION REFLECTED CEILING PLAN - MAIN LEVEL EXISTING

Scale: AS NOTED

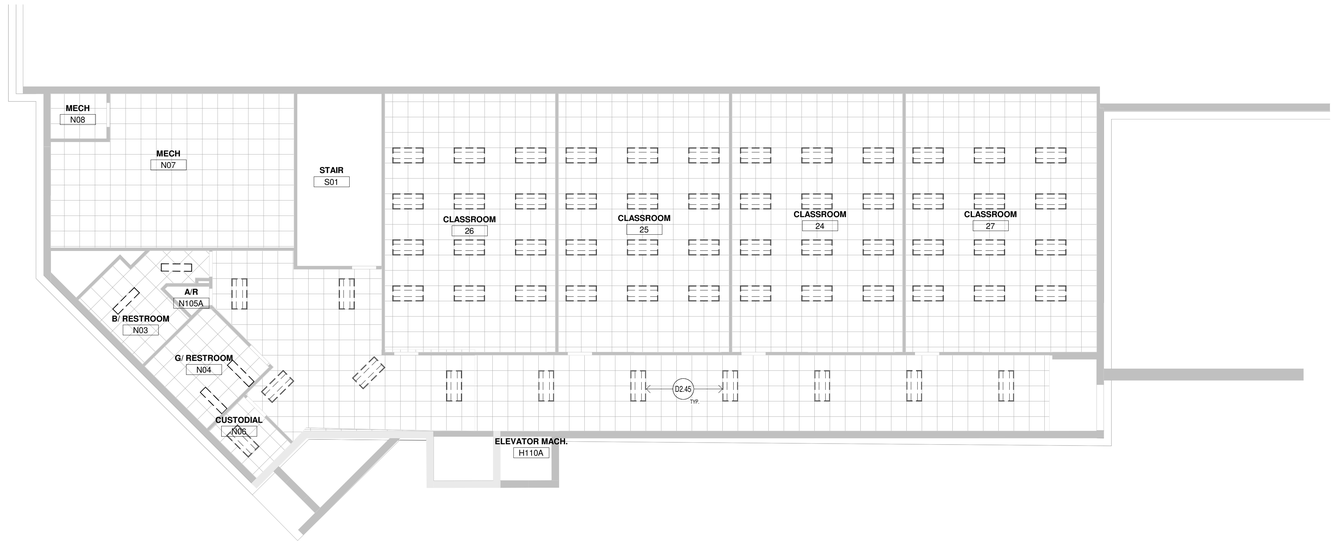
D.121

NOT USED 8

NOT USED 4

NOT USED 7

NOT USED 3



LOWER LEVEL 1/8" = 1'-0" 5

D2.45 Remove all light fixtures; prepare for new replacement fixtures; Re: Electrical plans for lighting layout

GENERAL NOTES:

FOR LIGHTING FIXTURE REFERENCE ONLY, REF. ELECTRICAL FOR LIGHT FIXTURES AND DETAILS

NOTES:

1. ALL EXISTING INTERIOR LIGHT FIXTURES TO BE REPLACED FOR LED, ENERGY STAR
2. COLOR TEMPERATURE TO BE 4000K AT ALL FIXTURES WITH A COLOR RENDERING INDEX OF 80.
3. GC TO REPLACE ANY EXISTING DAMAGED AND/OR BROKEN CEILING TILES; GC TO ASSUME BETWEEN 5 - 10 TILES PER ROOM.
4. EXISTING CEILING TILES SHOWN FOR REFERENCE ONLY, GC RESPONSIBLE TO COORDINATE ON SITE.

GENERAL NOTES & KEYNOTES 2

EXISTING TO REMAIN

EXISTING GYPSUM BOARD CEILING

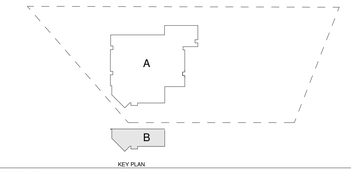
EXISTING 2'X2' LAY-IN ACCOUSTICAL TILE SUSPENDED CEILING SYSTEM

EXISTING TO BE DEMOLISHED

2X4 RECESSED LIGHT FIXTURE; RE: ELECTRICAL

2X2 RECESSED LIGHT FIXTURE; RE: ELECTRICAL

6" RECESSED LIGHT FIXTURE; RE: ELECTRICAL



KEY PLAN

LEGEND 1

JAMES HOGG RENOVATIONS (ORG #157)

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DEMOLITION REFLECTED CEILING PLAN - LOWER LEVEL EXISTING

Scale: AS NOTED

D.122

DEMOLITION ROOF PLAN - EXISTING | 3/32" = 1'-0" | 5

NOT USED | 4

D2.20 Demo roof mounted Exhaust Fan. Curb and Ductwork to remain. Refer to MECH drawings for more information.
D2.24 Remove existing outside louver temporarily to be able to demolition/remove existing AHU and Install new AHU. GC to Remove and protect existing louvers for reinstallation after new AHU installation.

ROOF PLAN DEMOLITION NOTES:

1. EXISTING BUILDING INFORMATION IS APPROXIMATE IN SIZES AND LOCATIONS BASED ON LIMITED AS-BUILTS AND FIELD OBSERVATIONS.
2. GC IS RESPONSIBLE FOR FIELD VERIFICATIONS PRIOR TO COMMENCING WORK. GC TO NOTIFY ARCHITECT/ENGINEER OF RECORD IF DISCREPANCIES ARE FOUND THAT PREVENT THE COMPLETION OF WORK INTENDED IN THESE CONTRACT DOCUMENTS.
3. PREP EXISTING CURBS TO BE REUSED FOR NEW MECH EQUIPMENT; RE: MECH

GENERAL NOTES & KEYNOTES | 2

EXISTING TO REMAIN

EXISTING TO BE DEMOLISHED

LEGEND - DEMOLITION PLAN | 1/8" = 1'-0" | 1

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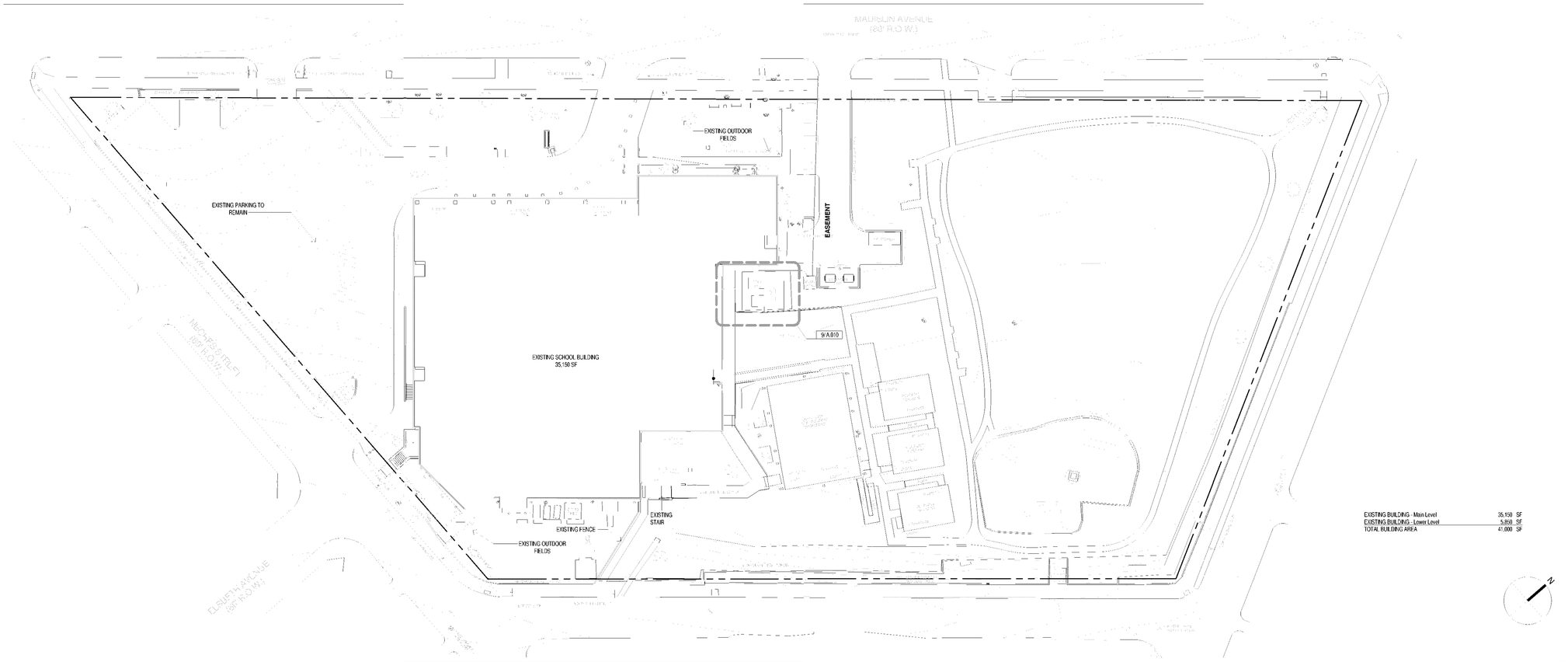
DEMOLITION ROOF PLAN - EXISTING

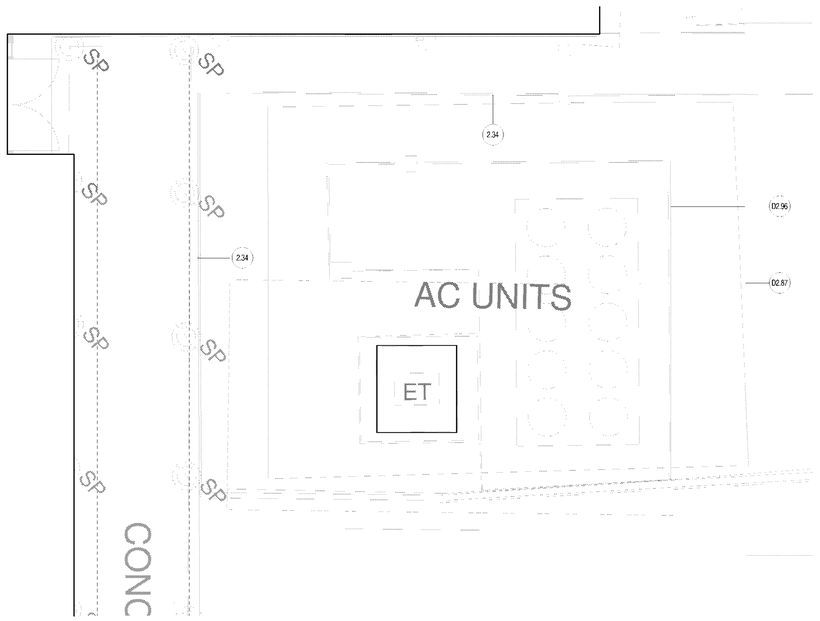
Scale: AS NOTED

D.200



SITE PLAN

1" = 30'-0" | 2



NOT USED | 18

NOT USED

NOT USED | 2

2.34	Concrete walk at building edge, re: Civil and architectural site detail
D2.87	Demo existing chiller, Re: Mechanical
D2.96	Remove existing security fence and access gate; GC to coordinate like-for-like replacement

EXISTING BUILDING FOR RENOVATION; RE: RENOVATION SCOPE

EXISTING CONCRETE PAVING/WALK

EXISTING 6' HIGH FENCE

EXISTING CHAIN LINK FENCE

EXISTING WOOD FENCE

PROPERTY LINE

EASEMENT

SETBACK

EXISTING TREE

NOTES:

1. REFER TO A.650 FOR SIGNAGE INFORMATION

KEY PLAN

NOT USED | 17

ENLARGED PLAN - UTILITY YARD

1/4" = 1'-0" | 9

LEGEND & KEY PLAN | 1

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SITE PLAN

Scale: AS NOTED

A.010

FLOOR PLAN - MAIN LEVEL 1/8" = 1'-0" 9

8.44 1" empty conduit in drywall from door to lay-in ceiling; Re: ELEC

GENERAL NOTE:

ANY FURNITURE MOVE ,THAT IS NEEDED TO COMPLETE THE RENOVATION WORK, TO BE PERFORMED BY THE GC.

GENERAL NOTE:

GC IS RESPONSIBLE FOR ASBESTOS ABATEMENT; REFER TO ASBESTOS SURVEY REPORT IN THE PROJECT MANUAL.

NOTES:

1. REFER TO A.650 FOR SIGNAGE INFORMATION
2. REFER TO SHEET D.040 FOR IMAGES REFERENCING KEYNOTES ABOVE

GENERAL NOTES & KEYNOTES 5

EXISTING TO REMAIN

PROPERTY LINE

EASEMENT

6' HIGH EXISTING CHAIN FENCE LINE

6' HIGH EXISTING ROD IRON FENCE LINE

6' HIGH EXISTING WOOD FENCE LINE

KEY PLAN

LEGEND 1

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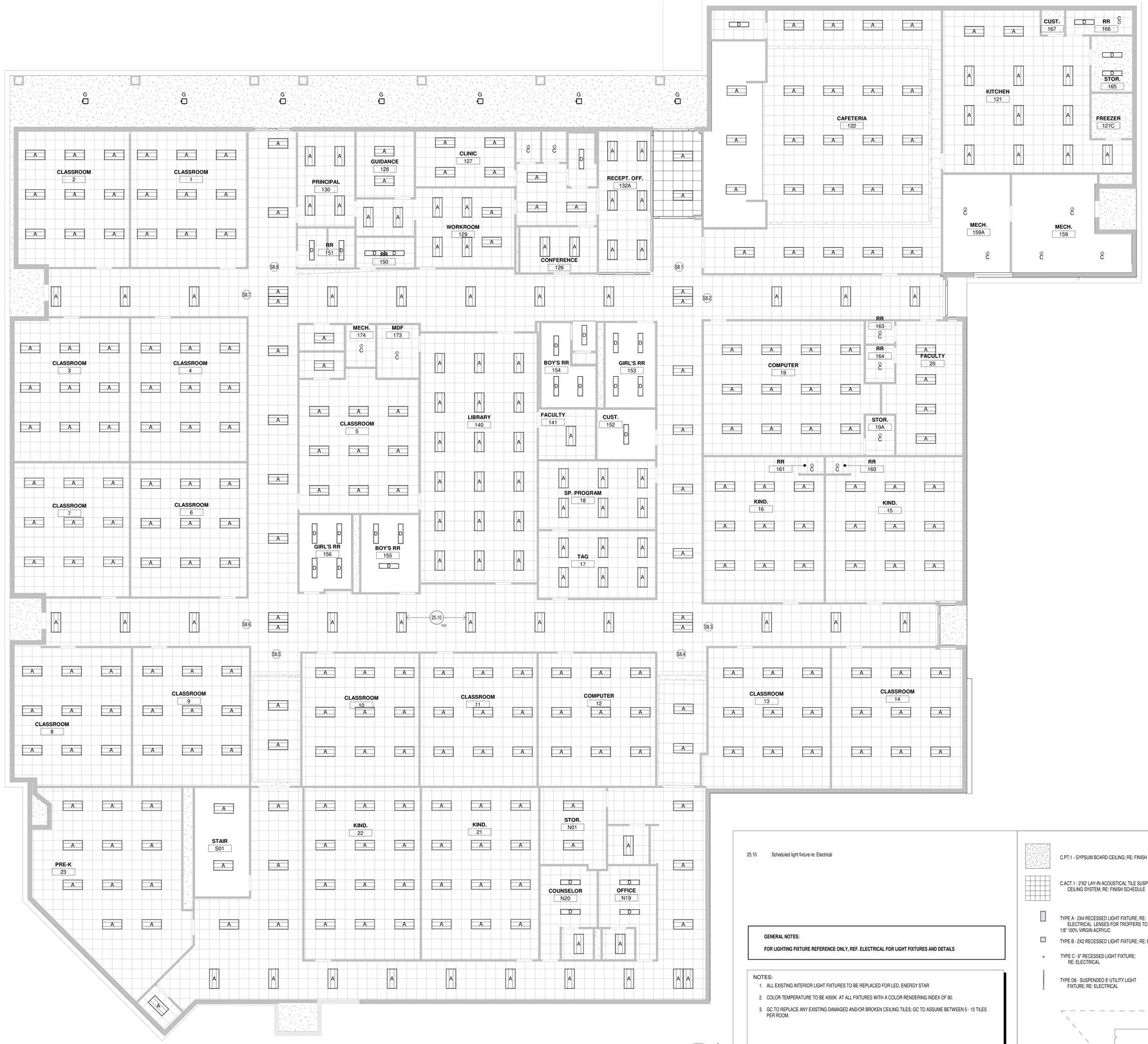
FLOOR PLAN - MAIN LEVEL EXISTING

Scale: AS NOTED

A.101



REFLECTED CEILING PLAN — 1/8" = 1'-0" — 9

25.10 Scheduled light fixture re: Electrical

GENERAL NOTES:

FOR LIGHTING FIXTURE REFERENCE ONLY, REF. ELECTRICAL FOR LIGHT FIXTURES AND DETAILS

NOTES:

1. ALL EXISTING INTERIOR LIGHT FIXTURES TO BE REPLACED FOR LED, ENERGY STAR
2. COLOR TEMPERATURE TO BE 4000K AT ALL FIXTURES WITH A COLOR RENDERING INDEX OF 80.
3. GC TO REPLACE ANY EXISTING DAMAGED AND/OR BROKEN CEILING TILES; GC TO ASSUME BETWEEN 5 - 10 TILES PER ROOM.

GENERAL NOTES & KEYNOTES — 5

- C.PT.1 - GYPSUM BOARD CEILING; RE: FINISH SCHEDULE
- C.ACT.1 - 2'X2' LAY-IN ACOUSTICAL TILE SUSPENDED CEILING SYSTEM; RE: FINISH SCHEDULE
- TYPE A - 2X4 RECESSED LIGHT FIXTURE; RE: ELECTRICAL LENSES FOR TROFFERS TO BE 1/8" 100% VIRGIN ACRYLIC
- TYPE B - 2X2 RECESSED LIGHT FIXTURE; RE: ELECTRICAL
- TYPE C - 6" RECESSED LIGHT FIXTURE; RE: ELECTRICAL
- TYPE D8 - SUSPENDED 8' UTILITY LIGHT FIXTURE; RE: ELECTRICAL
- TYPE EM - EMERGENCY LIGHTING; RE: ELECTRICAL LITHONIA EU2C UL 924 LISTED
- TYPE F - 4' SUSPENDED LINEAR LIGHT FIXTURE; RE ELECTRICAL
- TYPE G - EXTERIOR WALL PACK; RE: ELECTRICAL
- TYPE W - EXTERIOR WALL PACK; RE: ELECTRICAL
- TYPE W1 - EXTERIOR WALL PACK; RE: ELECTRICAL
- TYPE X - EXIT SIGN; RE: ELECTRICAL
- S8 CEILING MOUNTED WAYFINDING SIGN; RE: A.850 & A.851

KEY PLAN

LEGEND — 1

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REFLECTED CEILING PLAN - MAIN LEVEL EXISTING

Scale: AS NOTED

A.121

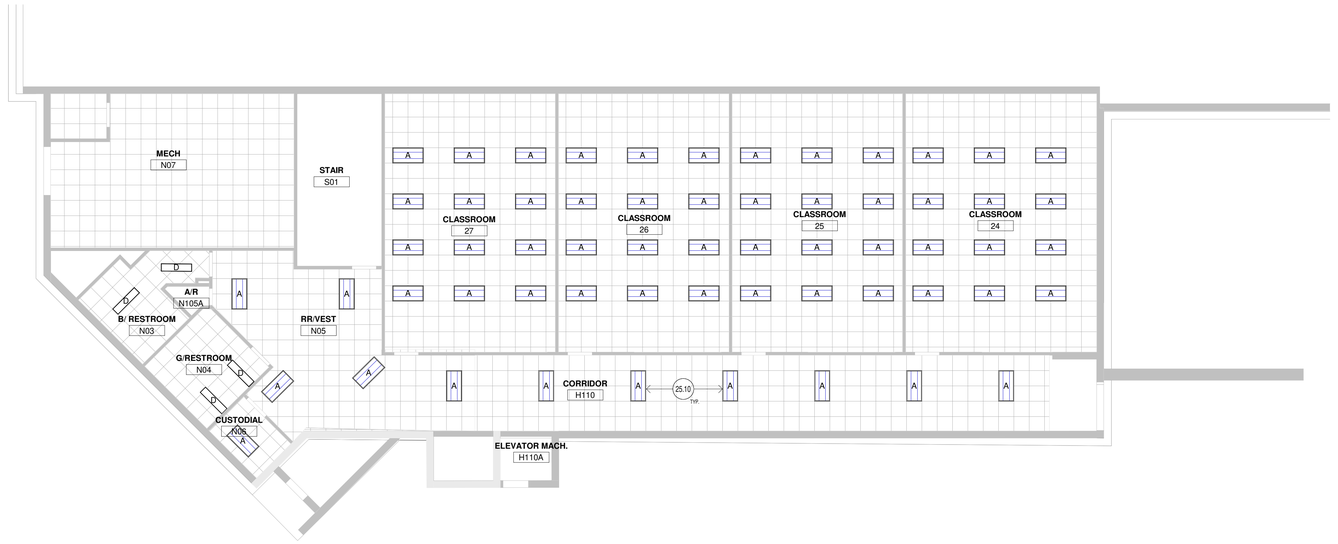
NOT USED 8

NOT USED 4

NOT USED 7

25.10 Scheduled light fixture re: Electrical

NOT USED 3



REFLECTED CEILING PLAN - LOWER LEVEL 1/8" = 1'-0" 5

GENERAL NOTES:

FOR LIGHTING FIXTURE REFERENCE ONLY, REF. ELECTRICAL FOR LIGHT FIXTURES AND DETAILS

NOTES:

1. ALL EXISTING INTERIOR LIGHT FIXTURES TO BE REPLACED FOR LED, ENERGY STAR
2. COLOR TEMPERATURE TO BE 4000K AT ALL FIXTURES WITH A COLOR RENDERING INDEX OF 80.
3. GC TO REPLACE ANY EXISTING DAMAGED AND/OR BROKEN CEILING TILES; GC TO ASSUME BETWEEN 5 - 10 TILES PER ROOM.

C.PT.1 - GYPSUM BOARD CEILING; RE: FINISH SCHEDULE

C.ACT.1 - 2'X2' LAY-IN ACOUSTICAL TILE SUSPENDED CEILING SYSTEM; RE: FINISH SCHEDULE

TYPE A - 2X4 RECESSED LIGHT FIXTURE; RE: ELECTRICAL
LENSES FOR TROFFERS TO BE 1/8" 100% VIRGIN ACRYLIC

TYPE B - 1X4 RECESSED LIGHT FIXTURE; RE: ELECTRICAL

TYPE C - 6" RECESSED LIGHT FIXTURE; RE: ELECTRICAL

TYPE D8 - SUSPENDED 8' UTILITY LIGHT FIXTURE; RE: ELECTRICAL

TYPE EM - EMERGENCY LIGHTING; RE: ELECTRICAL
LITHONIA EU2C
UL 924 LISTED

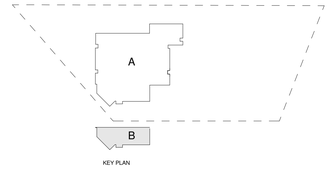
TYPE F - 4' SUSPENDED LINEAR LIGHT FIXTURE; RE:ELECTRICAL

TYPE G - EXTERIOR WALL PACK; RE: ELECTRICAL

TYPE W - EXTERIOR WALL PACK; RE: ELECTRICAL

TYPE W1 - EXTERIOR WALL PACK; RE: ELECTRICAL

TYPE X - EXIT SIGN; RE: ELECTRICAL



KEY PLAN

LEGEND 1/16" = 1'-0" 1

JAMES HOGG RENOVATIONS (ORG #157)

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11/07/2025

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ISSUE:
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REFLECTED CEILING PLAN - LOWER LEVEL EXISTING

Scale: AS NOTED

A.122

LEGEND			
	Description	Quantity	Unit
ACCP	Access Control Panel	1	Count
ACPS	Access Control Power Supply	1	Count
CR	Card Reader - Single Gang	4	Count
DCI	Door Contact - Recessed	8	Count
DRB	Door Release Button - Momentary	1	Count
LOCK	Electronic Lock	4	Count
RMD	Request to Exit Motion Detector	4	Count

DIGI SECURITY SYSTEMS

DRAWN BY: JAH	PARTNER NAME: DISD	PROJECT NAME: James S. Hogg ES - Access Control Additions	DRAWING #: DIGI-1-100
DATE: 11/1/2023	ADDRESS: 1144 N Madison Ave Dallas, TX 75208	PROJECT NUMBER: DIGI-XXXX	

DOOR & HARDWARE SCHEDULE

DOOR NO.	Level	ROOM NAME	HDW GROUP	REMARKS	Location
DOOR 01	MAIN LEVEL	CORRIDOR	SEC-VEST	SEE SPECS FOR HARDWARE SET	CORRIDOR H102
DOOR 02	MAIN LEVEL	CORRIDOR	C-EXT-SGL	SEE SPECS FOR HARDWARE SET	CORRIDOR H101
DOOR 03	MAIN LEVEL	CORRIDOR	C-EXT-PR	SEE SPECS FOR HARDWARE SET	CORRIDOR H101
DOOR 04	MAIN LEVEL	GYM	C-EXT-PR	SEE SPECS FOR HARDWARE SET	GYM

8.44 1" empty conduit in drywall from door to lay-in ceiling; Re: ELEC

NOTES:
1. THE SURVEILLANCE CAMERAS, CARD ACCESS DEVICES AND ASSOCIATED CABLING SCOPE WILL BE DONE BY DISD SECURITY CONTRACTOR. THESE DEVICES ARE SHOWN FOR GC TO PROVIDE BACK-BOX AND 1" CONDUIT (WITH PULL STRING) TO THE NEAREST LAY-IN CEILING
2. GC TO COORDINATE ELECTRIFIED HARDWARE FOR ALL DOORS THAT ARE RECEIVING CARD ACCESS DEVICES
3. GC TO VISIT SITE AND VERIFY EXISTING DOORS CAN ACCEPT SPECIFIED DOOR HARDWARE

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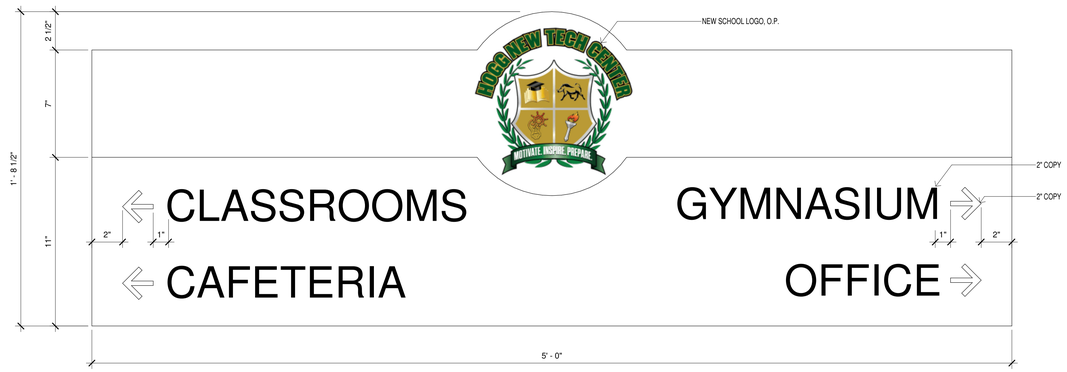
SECURITY REFERENCE SHEET

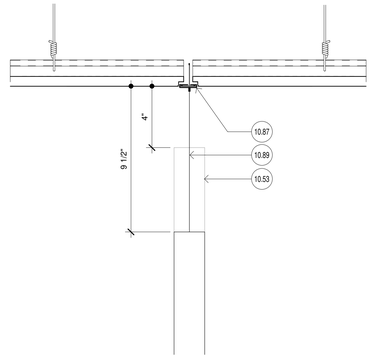
Scale: AS NOTED

A.141



WAYFINDING SIGNAGE TYPICAL - S8

3" = 1'-0" | 12



WAYFINDING SIGNAGE - MOUNTING

3" = 1'-0" | 8

10.53 Signage, GC to provide foundation support (site signage) and blocking (interior signage) where required. Signage on glass shall have additional piece on other side concealing back of signage, re: Graphics Schedule

10.87 Ceiling grid mounted signage hook, 15 lb capacity

10.89 Nickel-plated steel hanging cables

KEYNOTES

4

WAYFINDING SIGN 8.1 FRONT

↑ CLASSROOMS	CLASSROOMS →
← CAFETERIA	GYMNASIUM →

WAYFINDING SIGN 8.2 FRONT

↑ CLASSROOMS	LIBRARY ↑
← GYMNASIUM	OFFICE ↑

WAYFINDING SIGN 8.3 FRONT

↑ CLASSROOMS	CAFETERIA →
← LOWER LEVEL	OFFICE →

WAYFINDING SIGN 8.4 FRONT

↑ OFFICE	GYMNASIUM →
← LIBRARY	CLASSROOMS ←

WAYFINDING SIGN 8.5 FRONT

↑ CLASSROOMS	GYMNASIUM →
→ LIBRARY	CAFETERIA →

WAYFINDING SIGN 8.6 FRONT

↑ LIBRARY	GYMNASIUM ↑
← OFFICE	LOWER LEVEL →

WAYFINDING SIGN 8.7 FRONT

↑ CAFETERIA	LIBRARY ↑
↑ OFFICE	CLASSROOMS →

WAYFINDING SIGN 8.8 FRONT

← OFFICE	CLASSROOMS ↑
← CAFETERIA	LIBRARY ←

WAYFINDING SIGN 8.1 BACK

← CLASSROOMS	CAFETERIA →

WAYFINDING SIGN 8.2 BACK

→ GYMNASIUM	CLASSROOMS →

WAYFINDING SIGN 8.3 BACK

↑ GYMNASIUM	LOWER LEVEL →
← CAFETERIA	

WAYFINDING SIGN 8.4 BACK

↑ LOWER LEVEL	CLASSROOMS →
← GYMNASIUM	LIBRARY →

WAYFINDING SIGN 8.5 BACK

↑ LOWER LEVEL	GYMNASIUM ←

WAYFINDING SIGN 8.6 BACK

↑ CLASSROOMS	CLASSROOMS →
← GYMNASIUM	CAFETERIA →

WAYFINDING SIGN 8.7 BACK

↑ CLASSROOMS	CLASSROOMS ←

WAYFINDING SIGN 8.8 BACK

→ OFFICE	CAFETERIA →
→ LIBRARY	

NOTES:
1. RE: A.121 FOR WAYFINDING SINGAGE (S8) LOCATIONS
2. 'FRONT' REFERENCES SIDE OF SIGN FACING THE EXTERIOR, 'BACK' REFERENCES SIDE OF THE SIGN FACING INTERIOR

WAYFINDING SIGNAGE TEXT - S8

N.T.S. | 11

EXISTING MAIN LEVEL SIGNAGE SCHEDULE

ROOM	NUMBER	SIGN TYPE	COMMENTS
CLASSROOM	1	S1	
CLASSROOM	2	S1	
CLASSROOM	3	S1	
CLASSROOM	4	S1	
CLASSROOM	5	S1	
CLASSROOM	6	S1	
CLASSROOM	7	S1	
CLASSROOM	8	S1	
CLASSROOM	9	S1	
CLASSROOM	10	S1	
CLASSROOM	11	S1	
COMPUTER	12	S1	
CLASSROOM	13	S1	
CLASSROOM	14	S1	
KIND.	15	S1	
KIND.	16	S1	
TAG	17	S1	
SP. PROGRAM	18	S1	
COMPUTER	19	S1, S6	
STOR.	19A	S2	
FACULTY	20	S1	
KIND.	21	S1	
KIND.	22	S1	
PRE-K	23	S1	
KITCHEN	121	S1	
FREEZER	121C	S2	
CAFETERIA	122	S1,S6	
CONFERENCE	126	S1	
CLINIC	127	S1	
GUIDANCE	128	S1	
WORKROOM	129	S1	
PRINCIPAL	130	S1	
RECEPTION	132A	S1	
LIBRARY	140	S1,S6	
FACULTY	141	S1	
RR	150	S5	
RR	151	S5	
CUST.	152	S2	
GIRL'S RR	153	S4	
BOY'S RR	154	S3	
BOY'S RR	155	S3	
GIRL'S RR	156	S4	
MECH.	159	-	
MECH.	159A	S2	
RR	160	S5	
RR	161	S5	
RR	163	S5	
RR	164	S5	
STOR.	165	S2	
RR	166	S5	
CUST.	167	S2	
COOLER	168	S2	
A REST	169	S5	
MECH	170	S2	
VAULT	171	S2	
MECH	172	S2	
MDF	173	S2	
MECH.	174	S2	
STOR.	175	S2	
STOR.	176	S2	
CORRIDOR	H101	S8	
CORRIDOR	H102	S8	
CORRIDOR	H103	S8	
CORRIDOR	H104	S8	
CORRIDOR	H105	S8	
CORRIDOR	H106	S8	
CORRIDOR	H107	S8	
CORRIDOR	H108	S8	

EXISTING MAIN LEVEL SIGNAGE SCHEDULE

ROOM	NUMBER	SIGN TYPE	COMMENTS
CORRIDOR	H109	S8	
CORRIDOR	H111	S8	
CORRIDOR	H112	S8	
STOR.	N01	S2	
STOR.	N02	S2	
CUST.	N09	S2	
OFFICE	N19	S1	
A/R	N19A	S5	
COUNSELOR	N20	S1	
A/R	N20A	S5	
STAIR	S01	S7	

EXISTING LOWER LEVEL SIGNAGE SCHEDULE

ROOM	NUMBER	SIGN TYPE	COMMENTS	Level
CLASSROOM	24	S1		LOWER LEVEL
CLASSROOM	25	S1		LOWER LEVEL
CLASSROOM	26	S1		LOWER LEVEL
CLASSROOM	27	S1		LOWER LEVEL
ELEVATOR MACH.	H110A	-		LOWER LEVEL
B/ RESTROOM	N03	S3		LOWER LEVEL
G/ RESTROOM	N04	S4		LOWER LEVEL
CUSTODIAL	N06	S2		LOWER LEVEL
MECH	N07			LOWER LEVEL
MECH	N08	S2		LOWER LEVEL
A/R	N105A	S2		LOWER LEVEL
STAIR	S01	S7		LOWER LEVEL

NOTES:
1. RE: SHEET A.851 FOR SIGNAGE LOCATIONS

EXISTING MAIN LEVEL & LOWER LEVEL SIGNAGE SCHEDULES

2

SIGNAGE SCHEDULE

SIGN TYPE	GRAPHICS	COLORS	SIGN NAME AND DESCRIPTION
S1	6" wide; 108 (1" COPY, BRAILLE); CLASSROOM (5/8" COPY, GRADE II BRAILLE); 6", 3"	BACKGROUND WITH RAISED ANODIZED ALUMINUM NUMBERS AND LETTERS	ROOM NAME AND NUMBER SIGN : VERIFY WITH CLIENT IF ANY SPECIFIC ROOM REQUIRES THE ROOM NUMBER. IF NECESSARY USE S1 IN LIEU OF S2 AT THOSE LOCATIONS. GC TO COORDINATE LOCATIONS WITH CLIENT PRIOR TO INSTALLATION.
S2	8" wide; MECHANICAL (5/8" COPY, GRADE II BRAILLE); 4", 1"	BACKGROUND WITH RAISED ANODIZED ALUMINUM LETTERS	ROOM IDENTIFICATION SIGN : PROVIDE SIGN AT EACH ROOM AND OFFICE. GC TO COORDINATE LOCATIONS WITH CLIENT PRIOR TO INSTALLATION.
S3	6" wide; BOYS (5/8" COPY, GRADE II BRAILLE); 8" TYP., 6" MIN., 2"	BACKGROUND WITH RAISED ANODIZED ALUMINUM LETTERS	RESTROOM WITH ACCESSIBILITY SIGN: PROVIDE ONE (1) SIGN AT EACH RESTROOM. GC TO COORDINATE LOCATIONS WITH CLIENT PRIOR TO INSTALLATION.
S4	6" wide; GIRLS (5/8" COPY, GRADE II BRAILLE); 8" TYP., 6", 2"	BACKGROUND WITH RAISED ANODIZED ALUMINUM LETTERS	RESTROOM WITH ACCESSIBILITY SIGN: PROVIDE ONE (1) SIGN AT EACH RESTROOM. GC TO COORDINATE LOCATIONS WITH CLIENT PRIOR TO INSTALLATION.

SIGNAGE SCHEDULE

SIGN TYPE	GRAPHICS	COLORS	SIGN NAME AND DESCRIPTION
S5	6" wide; RESTROOM (5/8" COPY, GRADE II BRAILLE); 8", 6", 2"	BACKGROUND WITH RAISED ANODIZED ALUMINUM LETTERS	RESTROOM WITH ACCESSIBILITY SIGN: PROVIDE ONE (1) SIGN AT EACH RESTROOM. GC TO COORDINATE LOCATIONS WITH CLIENT PRIOR TO INSTALLATION.
S6	8" wide; MAXIMUM ROOM OCCUPANCY NOT TO EXCEED 000 PERSONS (5/8" COPY, GRADE II BRAILLE); 8", 1"	BACKGROUND WITH RAISED ANODIZED ALUMINUM NUMBERS AND LETTERS	OCCUPANT LOAD SIGN: PROVIDE ONE AT EACH ASSEMBLY SPACE GREATER THAN 49 PEOPLE. RE : CODE REVIEW SHEETS AND PLANS GC TO COORDINATE LOCATIONS WITH CLIENT PRIOR TO INSTALLATION.
S7	STAIR A (1" COPY, BRAILLE); NO ROOF ACCESS (5/8" COPY, BRAILLE); LEVEL 1 TO BASEMENT (5/8" COPY, BRAILLE); 1' - 3"	BACKGROUND WITH RAISED ANODIZED ALUMINUM LETTERS	STAIR SIGN: PROVIDE ONE AT EACH STAIR. GC TO COORDINATE LOCATIONS WITH CLIENT PRIOR TO INSTALLATION.

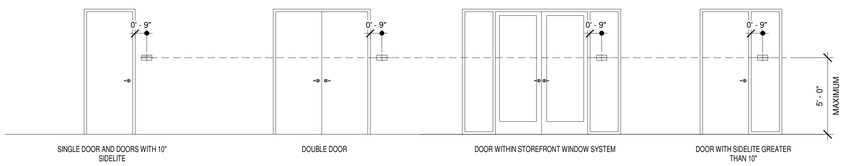
SIGNAGE NOTES

1. ALL COPY TO BE ARIAL.
2. ALL COPY TO BE RAISED 1/32" MINIMUM.
3. NO TACTILE CHARACTERS MAY BE LOCATED BELOW 48" AFF
4. SIZE OF COPY MAY BE ADJUSTED; HOWEVER, LETTERS MAY NOT BE LESS THAN 5/8" HIGH OR NUMBERS LESS THAN 1" HIGH.
5. SIGN FACE AND BACK SHALL BE MELAMINE PLASTIC LAMINATE WITH MATTE STIPPLE FINISH, AS SELECTED BY ARCHITECT. SIDES TO SIGN SHALL BE PAINTED TO MATCH SIGN FACE.
6. AT LOCATIONS WHERE SIGNAGE IS TO BE INSTALLED ON GLAZING INSTALL MATCHING ACRYLIC AND LAMINATE BLANK ON BACK SIDE OF GLASS.
7. PROVIDE 1/4" DEMARCATION LINE WHERE INDICATED.
8. SIGNAGE SHALL COMPLY WITH CURRENT ADA REQUIREMENTS. DESIGN BASE MODEL AND COLOR TO BE DETERMINED BY CLIENT.
9. CEILING MOUNTED SIGNAGE TO NOT SIT BELOW 84" A.F.F.

NOTES:
1. RE: EXISTING ROOM SCHEDULE, DOOR SCHEDULE, PLANS AND INTERIOR ELEVATIONS FOR LOCATIONS
3. GC TO COORDINATE ROOM NAMES AND NUMBERS WITH OWNER PRIOR TO ORDERING BUILDING SIGNAGE. GC TO COORDINATE SUBMITTAL WITH ARCHITECT.
4. GC TO PROVIDE MAXIMUM OCCUPANCY SIGNS AT ALL ASSEMBLY SPACES WITH OCCUPANT LOAD GREATER THAN 49 PEOPLE. RE: G.010
5. AT ROOMS WITH MULTIPLE ENTRANCES, PROVIDE SIGNAGE AT EACH ENTRANCE, INCLUDING DIVISIBLE ROOMS

INTERIOR SIGNAGE TYPES S1 - S7

3" = 1'-0" | 9



TYPICAL SIGN LOCATION AT DOOR

1/4" = 1'-0" | 1

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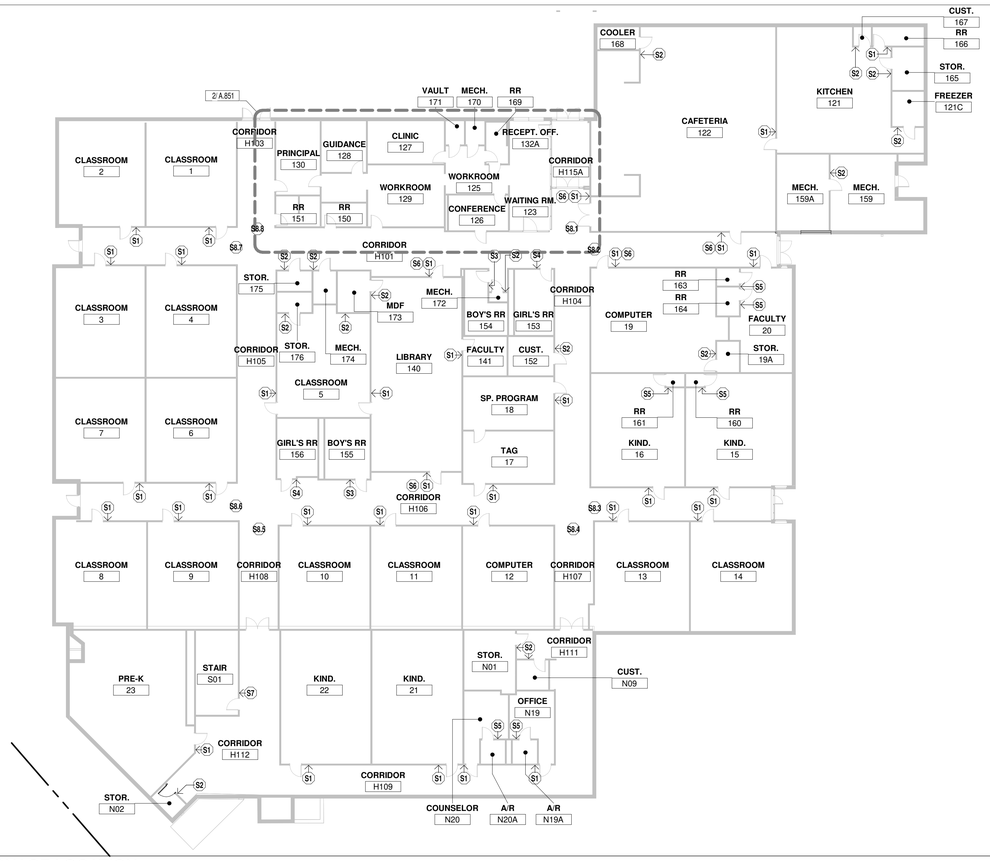
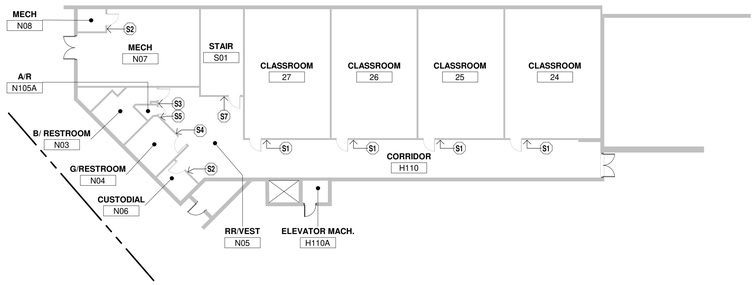
INTERIOR SIGNAGE SCHEDULE

Scale: AS NOTED

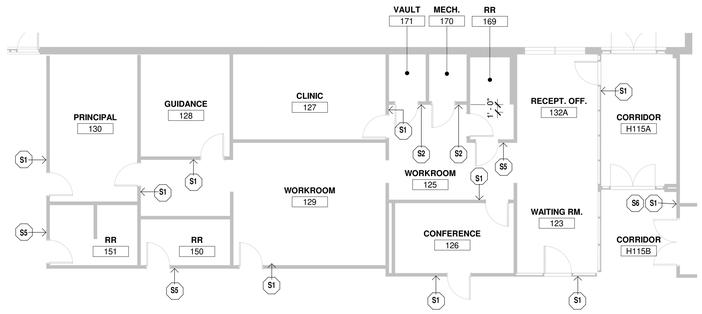
A.850



OVERALL FLOOR PLAN - SIGNAGE LOCATION — 1/16" = 1'-0" | 7



OVERALL FLOOR PLAN - LOWER LEVEL - SIGNAGE LOCATION — 1/16" = 1'-0" | 9



ENLARGED PLAN - SIGNAGE LOCATION — 1/8" = 1'-0" | 2

WALL MOUNTED SIGNS

- (S1) ROOM SIGN - CLASSROOM
- (S2) ROOM SIGN - SUPPORT
- (S3) RESTROOM SIGN - BOYS
- (S4) RESTROOM SIGN - GIRLS
- (S5) RESTROOM SIGN - UNISEX/ACCESSIBLE
- (S6) MAXIMUM OCCUPANCY SIGN
- (S7) STAIR SIGN

CEILING MOUNTED SIGNS

- (S8) WAYFINDING SIGN

NOTES:

1. RE: A.121 FOR WAYFINDING SINGAGE (S8) LOCATIONS

LEGEND - WAYFINDING — 1/8" = 1'-0" | 5

NOT USED | 1

TEXAS ACCESSIBILITY GUIDELINES REFERENCE | 3

CHAPTER 7: COMMUNICATION ELEMENTS AND FEATURES

702 Fire Alarm Systems

702.1 General. Fire alarm systems shall have permanently installed audible and visible alarms complying with NFPA 72 (1999 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1), except that the maximum allowable sound level of audible notification appliances complying with section 4-3.2.1 of NFPA 72 (1999 edition) shall have a sound level no more than 110 dB at the minimum hearing distance from the audible appliance. In addition, alarms in guest rooms required to provide communication features shall comply with sections 4-3 and 4-4 of NFPA 72 (1999 edition) or sections 7.4 and 7.5 of NFPA 72 (2002 edition).

703 Signs

703.1 General. Signs shall comply with 703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided.

703.2 Raised Characters. Raised characters shall comply with 703.2 and shall be duplicated in braille complying with 703.3. Raised characters shall be installed in accordance with 703.4.

703.2.1 Depth. Raised characters shall be 1/32 inch (0.8 mm) minimum above their background.

703.2.2 Case. Characters shall be uppercase.

703.2.3 Style. Characters shall be sans serif. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

703.2.4 Character Proportions. Characters shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I". 703.2.5 Character Height. Character height measured vertically from the baseline of the character shall be 5/8 inch (16 mm) minimum and 2 inches (51 mm) maximum based on the height of the uppercase letter "I".

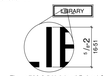


Figure 703.2.5 Height of Raised Characters

703.2.6 Stroke Thickness. Stroke thickness of the uppercase letter "I" shall be 15 percent maximum of the height of the character.

703.2.7 Character Spacing. Character spacing shall be measured between the two closest points of adjacent raised characters within a message, excluding word spaces. Where characters have rectangular cross sections, spacing between individual raised characters shall be 1/8 inch (3.2 mm) minimum and 4 times the raised character stroke width maximum. Where characters have other cross sections, spacing between individual raised characters shall be 1/16 inch (1.6 mm) minimum and 4 times the raised character stroke width maximum at the base of the cross sections, and 1/8 inch (3.2 mm) minimum and 4 times the raised character stroke width maximum at the top of the cross sections. Characters shall be separated from raised borders and decorative elements 3/8 inch (9.5 mm) minimum.

703.2.8 Line Spacing. Spacing between the baselines of separate lines of raised characters within a message shall be 135 percent minimum and 170 percent maximum of the raised character height.

703.3 Braille. Braille shall be contracted (Grade 2) and shall comply with 703.3 and 703.4.

703.3.1 Dimensions and Capitalization. Braille dots shall have a domed or rounded shape and shall comply with Table 703.3.1. The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.

Figure 703.3.1 Braille Measurement

703.3.2 Position. Braille shall be positioned below the corresponding text. If text is multi-lined, braille shall be placed below the entire text. Braille shall be separated 3/8 inch (9.5 mm) minimum from any other tactile characters and 3/8 inch (9.5 mm) minimum from raised borders and decorative elements.

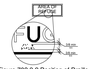


Figure 703.3.2 Position of Braille

703.4 Installation Height and Location. Signs with tactile characters shall comply with 703.4.

703.4.1 Height Above Finish Floor or Ground. Tactile characters on signs shall be located 48 inches (1220 mm) minimum above the finish floor or ground surface, measured from the baseline of the lowest tactile character and 60 inches (1525 mm) maximum above the finish floor or ground surface, measured from the baseline of the highest tactile character.

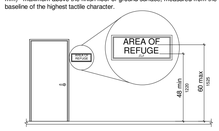


Figure 703.4.1 Height of Tactile Characters Above Finish Floor or Ground

703.4.2 Location. Where a tactile sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a tactile sign is provided at double doors with two active leafs, the sign shall be located to the right of the right hand door. Where there is no wall space at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall. Signs containing tactile characters shall be located so that a clear floor space of 18 inches (455 mm) minimum by 18 inches (455 mm) minimum, centered on the tactile characters, is provided beyond the arc of any door swing between the closed position and 45 degree open position.

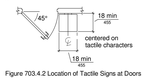


Figure 703.4.2 Location of Tactile Signs at Doors

703.5 Visual Characters. Visual characters shall comply with 703.5.

703.5.1 Finish and Contrast. Characters and their background shall have a non-glare finish. Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.

703.5.2 Case. Characters shall be uppercase or lowercase or a combination of both.

703.5.3 Style. Characters shall be conventional in form. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

703.5.4 Character Proportions. Characters shall be selected from fonts where the width of the uppercase letter "O" is 55 percent minimum and 110 percent maximum of the height of the uppercase letter "I".

703.5.5 Character Height. Minimum character height shall comply with Table 703.5.5. Viewing distance shall be measured as the horizontal distance between the character and an obstruction preventing further approach towards the sign. Character height shall be based on the uppercase letter "I".

703.5.6 Height From Finish Floor or Ground. Visual characters shall be 40 inches (1015 mm) minimum above the finish floor or ground.

703.5.7 Stroke Thickness. Stroke thickness of the uppercase letter "I" shall be 10 percent minimum and 30 percent maximum of the height of the character.

703.5.8 Character Spacing. Character spacing shall be measured between the two closest points of adjacent characters, excluding word spaces. Spacing between individual characters shall be 10 percent minimum and 35 percent maximum of character height.

703.5.9 Line Spacing. Spacing between the baselines of separate lines of characters within a message shall be 135 percent minimum and 170 percent maximum of the character height.

703.6 Pictograms. Pictograms shall comply with 703.6.

703.6.1 Pictogram Field. Pictograms shall have a field height of 6 inches (150 mm) minimum. Characters and braille shall not be located in the pictogram field.

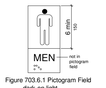


Figure 703.6.1 Pictogram Field
dark-on-light.

703.6.2 Finish and Contrast. Pictograms and their field shall have a non-glare finish. Pictograms shall contrast with their field with either a light pictogram on a dark field or a dark pictogram on a light field.

703.6.3 Text Descriptors. Pictograms shall have text descriptors located directly below the pictogram field. Text descriptors shall comply with 703.2, 703.3 and 703.4.

703.7 Symbols of Accessibility. Symbols of accessibility shall comply with 703.7.

703.7.1 Finish and Contrast. Symbols of accessibility and their background shall have a non-glare finish. Symbols of accessibility shall contrast with their background with either a light symbol on a dark background or a dark symbol on a light background.

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11/10/2025 100% CD -ISSUE FOR BIDDING/CONSTRUCTION

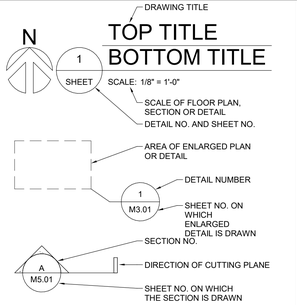
INTERIOR SIGNAGE SCHEDULE

Scale: AS NOTED

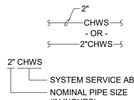
A.851

MECHANICAL SYMBOL LEGEND

GRAPHIC SYMBOLS



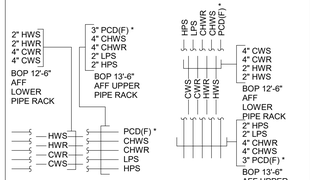
PIPING DESIGNATION



MULTI-LINE KEY

HORIZONTAL RUN ON PLAN
READ TOP TO BOTTOM

VERTICAL RUN ON PLAN
READ LEFT TO RIGHT



* - (F) INDICATES FUTURE PIPING ON RACK

MISCELLANEOUS SYMBOLS

XXX-1	EQUIPMENT DESIGNATION
	SINGLE LINE PIPE/DUCTWORK BREAK
	DOUBLE LINE PIPE/ROUND DUCTWORK BREAK
	RECTANGULAR DUCT/STANDARD BREAK
1	KEYED NOTE
1	REVISION DELTA
	POINT OF DISCONNECTION
	POINT OF CONNECTION (NEW TO EXISTING)
	NEW ITEMS (PIPING/DUCTWORK/EQUIPMENT)
	EXISTING ITEMS TO REMAIN
	EXISTING ITEMS TO BE DEMOLISHED
	LIMIT OF EXISTING ITEMS TO BE REMOVED
	NEW CONNECTION TO EXISTING ITEM
(N)	NEW ITEM (NOTATION SHOWN AS NECESSARY FOR CLARIFICATION)
(E)	EXISTING ITEM TO REMAIN (NOTATION SHOWN AS NECESSARY FOR CLARIFICATION)
(F)	FUTURE ITEM (NOTATION SHOWN AS NECESSARY FOR CLARIFICATION)
(R)	EXISTING ITEM TO BE RELOCATED (NOTATION SHOWN AS NECESSARY FOR CLARIFICATION)
(D)	EXISTING ITEM TO BE DEMOLISHED (NOTATION SHOWN AS NECESSARY FOR CLARIFICATION)

PIPE & FITTING SYMBOLS

DOUBLE LINE	SINGLE LINE	DESCRIPTION
		PIPE
		DIRECTION OF FLOW / SLOPE
		PIPING WITH INSULATION (WHEN SHOWN FOR CLARITY)
		WELDED JOINT
		SCREWED JOINT
		FLANGED JOINT
		UNION
		GROOVED END JOINT
		GENERIC FLEXIBLE COUPLING (REFER TO SPECIFICATIONS)
		GROOVED END ADAPTER FLANGE
		FLANGED COUPLING ADAPTER
		STUB END OR FLANGE ADAPTER W/ FLANGE RING
		BLIND FLANGE
		ELBOW, 45 DEGREE (LONG RADIUS UON)
		ELBOW, 90 DEGREE (LONG RADIUS UON)
		ELBOW, 90 DEGREE - CHANGE IN DIRECTION TOWARD VIEWER
		ELBOW, 90 DEGREE - CHANGE IN DIRECTION AWAY FROM VIEWER
		TEE FITTING
		TEE FITTING, BRANCH TOWARD VIEWER
		TEE FITTING, BRANCH AWAY FROM VIEWER
		LATERAL
		REDUCER - CONCENTRIC
		REDUCER - ECCENTRIC
		CAP
		ANCHOR
CO	CO	CLEANOUT
		THERMOWELL WITH THERMOMETER
		PRESSURE GAUGE WITH GAUGE COCK
		STRAINER - "Y" TYPE WITH BLOW DOWN
	S	AIR SEPARATOR
M	M	WATER METER
		VENTURI FLOW METER
		FLOW ORIFICE PLATE
F&T	F&T	STEAM TRAP. TYPE AS NOTED IB = INVERTED BUCKET F&T = FLOAT & THERMOSTATIC TH = THERMODYNAMIC BP = BALANCED PRESSURE
		PUMP, ARROW INDICATES FLOW

NOTE:
WELDED FITTINGS ARE SHOWN FOR DOUBLE LINE PIPING. FITTINGS WITH OTHER END CONDITIONS ARE SIMILAR.

VALVE SYMBOLS

DOUBLE LINE	SINGLE LINE	DESCRIPTION
		GATE VALVE
		BUTTERFLY VALVE
		BALL VALVE
		DIAPHRAGM VALVE
		GLOBE VALVE
		PLUG VALVE
		CHECK VALVE
		PRESSURE REDUCING VALVE
		BALANCING VALVE
		PRESSURE RELIEF VALVE
		AUTOMATIC AIR VENT
		MANUAL AIR VENT

CONTROL VALVES

DOUBLE LINE	SINGLE LINE	DESCRIPTION
		TWO-WAY, TWO POSITION CONTROL VALVE
S	S	TWO-WAY, TWO POSITION CONTROL VALVE W/ SOLENOID
M	M	TWO-WAY, MODULATING CONTROL VALVE
		THREE-WAY, TWO POSITION CONTROL VALVE
M	M	THREE-WAY, MODULATING CONTROL VALVE

CONTROL SYMBOLS

WALL MOUNTED DEVICES

T	TEMPERATURE SENSOR/THERMOSTAT
H	HUMIDITY SENSOR/HUMIDISTAT
M	MOTION SENSOR
R	OVERRIDE SWITCH
CO2	CARBON DIOXIDE SENSOR
CO	CARBON MONOXIDE SENSOR
VFD	VARIABLE FREQUENCY DRIVE

EQUIPMENT SYMBOLS

	ROOFTOP EXHAUST FAN (ROOF PLAN VIEW)
	ROOFTOP EXHAUST FAN (ROOF PLAN VIEW)
	INLINE EXHAUST FAN (EF), AIR HANDLING UNIT (AHU), CONDENSING UNIT (CU)
	WALL LOUVER WITH POSITIVE OR NEGATIVE AIRFLOW
UC	DOOR UNDERCUT (SPECIFY CFM IF REQUIRED)
LD	DOOR LOUVER (SPECIFY CFM IF REQUIRED)

DUCTWORK SYMBOLS

DOUBLE LINE	SINGLE LINE	DESCRIPTION
AxB	AxB	RECTANGULAR OR SQUARE DUCT. DIMENSIONS ARE IN INCHES, MIN. INSIDE CLEAR, A = WIDTH, B= HEIGHT
A"Ø	A"Ø	ROUND DUCT DIMENSIONS ARE IN INCHES, MIN. INSIDE CLEAR, A = DIAMETER
AxBØ	AxBØ	FLAT OVAL DUCT DIMENSIONS ARE IN INCHES, MIN. INSIDE CLEAR, A = WIDTH, B= HEIGHT
R D	R D	DUCTWORK RISE (R) OR DROP (D) RELATIVE TO DIRECTION OF AIRFLOW
		DIRECTION OF AIR FLOW
		SUPPLY AIR OR POSITIVE PRESSURE DUCTWORK, SECTION TOWARDS/AWAY VIEWER
		SUPPLY AIR OR POSITIVE PRESSURE DUCTWORK, AIRFLOW AWAY FROM VIEWER
		RETURN AIR OR NEGATIVE PRESSURE DUCTWORK, AIRFLOW TOWARDS VIEWER
		RETURN AIR OR NEGATIVE PRESSURE DUCTWORK, AIRFLOW AWAY FROM VIEWER
		EXHAUST AIR DUCTWORK, AIRFLOW TOWARDS VIEWER
		EXHAUST AIR DUCTWORK, AIRFLOW AWAY FROM VIEWER
		RIGID ROUND DUCTWORK, AIRFLOW TOWARDS VIEWER
		RIGID ROUND DUCTWORK, AIRFLOW AWAY FROM VIEWER
		TRANSITION - ECCENTRIC REDUCER
		TRANSITION - CONCENTRIC REDUCER
		TRANSITION - SQUARE TO ROUND
		90° ELBOW WITH TURNING VANES (REQUIRED ON SUPPLY DUCTWORK)
		90° ELBOW WITHOUT TURNING VANES (RETURN OR EXHAUST DUCTWORK ONLY)
		45° ELBOW WITH TURNING VANES (REQUIRED ON SUPPLY DUCTWORK)
		45° ELBOW WITHOUT TURNING VANES (RETURN OR EXHAUST DUCTWORK ONLY)
W R		RADIUS 90° ELBOW (R = 1.5W)
W R		RADIUS 45° ELBOW (R = 1.5W)
A"Ø	A"Ø	SPIN-IN FITTING WITH FLEXIBLE DUCTWORK, DIMENSIONS ARE IN INCHES, MIN. INSIDE CLEAR, A = DIAMETER
		BRANCH TAKE-OFF WITH MVD
		CONICAL TAKE-OFF WITH MVD
		MANUAL VOLUME DAMPER
FD	FD	FIRE DAMPER
FSD	FSD	FIRE/SMOKE DAMPER
SD	SD	SMOKE DAMPER
BDD	BDD	BACKDRAFT DAMPER
M	M	MOTORIZED DAMPER
B	B	BAROMETRIC DAMPER
S	S	SMOKE DETECTOR

DUCTWORK SYMBOLS

DOUBLE LINE	SINGLE LINE	DESCRIPTION
SP	SP	STATIC PRESSURE SENSOR
T	T	TEMPERATURE SENSOR
H	H	HUMIDITY SENSOR
CO2	CO2	CARBON DIOXIDE SENSOR
DP	DP	DIFFERENTIAL PRESSURE SENSOR
DPS	DPS	DIFFERENTIAL PRESSURE SAFETY SHUT-DOWN RELAY
AF	AF	AIRFLOW PROOF SWITCH
		ACCESS PANEL/CLEANOUT

AIR DISTRIBUTION

REFER TO SCHEDULE FOR ADDITIONAL INFORMATION

	SUPPLY AIR DIFFUSER
	RETURN AIR OR TRANSFER AIR GRILLE
	EXHAUST AIR GRILLE
	ROUND SUPPLY AIR DIFFUSER
	LINEAR SLOT DIFFUSER
CRD	CEILING RADIATION DAMPER
	SIDEWALL REGISTER
	DUCT MOUNTED GRILLE
S1 8"Ø 250 TYP OF 2	AIR DISTRIBUTION CALLOUT

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04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT
	COMMENTS #00
11/07/2025	100% CD/PERMIT

MECHANICAL SYMBOL LEGEND

Scale: AS NOTED

M.001

ABBREVIATIONS

A (0.5)	COMPRESSED AIR (WORKING PRESS.)	FCU	FAN COIL UNIT	PG	PRESSURE GAUGE
AAV	AUTOMATIC AIR VENT	FD	FLOOR DRAIN	PH	PHASE
ABV	ABOVE	°F	FAHRENHEIT [DEGREES]	PHC	PREHEAT COIL
AC	ALTERNATING CURRENT	FLA	FULL LOAD AMPS	PRV	PRESSURE REDUCING VALVE
A/C	AIR CONDITIONING	FLG	FLANGE	PPM	PARTS PER MILLION
ACU	AIR CONDITIONING UNIT	FMS	FACILITY MANAGEMENT SYSTEM	PLBG	PLUMBING
AD	ACCESS DOOR, AREA DRAIN	FOB	FLAT ON BOTTOM	PRESS	PRESSURE
AFF	ABOVE FINISHED FLOOR	FOT	FLAT ON TOP	PS	PRESSURE SWITCH
AHU	AIR HANDLING UNIT	FPB	FAN POWERED BOX	PSF	POUNDS PER SQUARE FOOT
AI	ANALOG INPUT	FPI	FINS PER INCH	PSI	POUNDS PER SQUARE INCH
ALT	ALTITUDE	FPM	FEET PER MINUTE	PSIG	POUNDS PER SQUARE INCH GAUGE
AMB	AMBIENT	FPS	FEET PER SECOND	PTAC	PACKAGED TERMINAL A/C
AMP	AMPERE	FRP	FIBERGLASS REINFORCED PLASTIC		
AO	ANALOG OUTPUT	FT	FOOT, FEET	Q	TOTAL, TOTAL HEAT
AP	ACCESS PANEL	FT LB	FOOT-POUND	QT	QUART
APD	AIR PRESSURE DROP			QTY	QUANTITY
APPROX	APPROXIMATE	GA	GAUGE, GAGE		
AS	AIR SEPARATOR	GAL	GALLON	R	RELIEF, THERMAL RESISTANCE
ASC	ABOVE SUSPENDED CEILING	GALV	GALVANIZED	RA	RETURN AIR
AHJ	AUTHORITY HAVING JURISDICTION	GEN	GENERATOR	RAC	ROOM AIR CONDITIONER
AVG	AVERAGE	GPD	GALLONS PER DAY	RECT	RECTANGULAR
AWG	AMERICAN WIRE GAUGE	GPH	GALLONS PER HOUR	REFR	REFRIGERATION
		GPM	GALLONS PER MINUTE	RET	RETURN
B&S	BELL & SPIGOT	GSW	GROUND SOURCE WATER (GEOTHERMAL	RED	REDUCER
B/B	BACK TO BACK	GTV	GATE VALVE	REV	REVOLUTIONS
BAL	BALANCE			REF	REFERENCE
BBR	BASE BOARD RADIATOR	HC	HEATING COIL	RH	RELATIVE HUMIDITY
BFC	BELOW FINISHED CEILING	HD	HEAD	RHC	REHEAT COIL
BFG	BELOW FINISHED GRADE	HG	HEAT GAIN	RHG	REFRIGERANT HOT GAS
BFV	BUTTERFLY VALVE	HGT	HEIGHT	RHV	REHEAT VALVE
BFBP	BOILER FEED BOOSTER PUMP	HP	HEAT PUMP, HORSEPOWER	RL	REFRIGERANT LIQUID
BFW	BOILER FEED WATER	HPC	HIGH PRESSURE CONDENSATE	RPM	REVOLUTIONS PER MINUTE
BLDG	BUILDING	HPS	HIGH PRESSURE STEAM (>100 PSI)	RPS	REVOLUTIONS PER SECOND
BHP	BRAKE HORSEPOWER	HR	HOUR	RS	REFRIGERANT SUCTION
BLR	BOILER	HS	HUMIDITY SENSOR	RTU	ROOF TOP UNIT
BLW	BELOW	HSTAT	HUMIDISTAT	RV	RELIEF VALVE
BO	BLOWOFF	HVAC	HEATING, VENTILATION AND A/C		
BOD	BOTTOM OF DUCT	HW	HEATING WATER	S	SECOND
BOP	BOTTOM OF PIPE	HWB	HEATING WATER BOILER	SA	SUPPLY AIR
BOS	BOTTOM OF STEEL	HWC	HEATING WATER COIL	SAT	SATURATION
BTU	BRITISH THERMAL UNIT	HWCP	HEATING WATER CIRCULATING PUMP	SC	SHADING COEFFICIENT
BTUH	BRITISH THERMAL UNIT PER HOUR	HWP	HEATING WATER PUMP	SEER	SEASONAL EER
BV	BALL VALVE	HWR	HEATING WATER RETURN	SF	SQUARE FEET
BYP	BYPASS	HWS	HEATING WATER SUPPLY	SG	SPECIFIC GRAVITY, STEAM GAUGE
		HWT	HEATING WATER TANK	SH	SENSIBLE HEAT
°C	CELSIUS [DEGREES]	HZ	HERTZ (FREQUENCY)	SHG	SENSIBLE HEAT GAIN
C/C	COOLING COIL			SHGC	SOLAR HEAT GAIN COEFFICIENT
CAP	CAPACITY	I/O	INPUT/OUTPUT	SHR	SENSIBLE HEAT RATIO
CD	CONDENSATE DRAIN	ID	INSIDE DIAMETER	SOLV	SOLENOID VALVE
CF	CHEMICAL FEED	IE	INVERT ELEVATION	SOV	SHUT OFF VALVE
CFM	CUBIC FEET PER MINUTE	IN WC	INCHES WATER COLUMN	SP	STATIC PRESSURE, SUMP PUMP
CFS	CUBIC FEET PER SECOND	INV	INVERT	SPEC	SPECIFICATION
CH	CHILLER	IP	IRON PIPE	SPLY	SUPPLY
CHW	CHILLED WATER	IPS	IRON PIPE SIZE, INCHES PER SECOND	SPS	STATIC PRESSURE SENSOR
CHWP	CHILLED WATER PUMP	IPT	IRON PIPE THREADED	SQ	SQUARE
CHWPP	CHILLED WATER PRIMARY PUMP	IR	INFRARED	SSP	STAINLESS STEEL PIPE
CHWR	CHILLED WATER RETURN	IW	INDIRECT WASTE	SST	STAINLESS STEEL
CHWS	CHILLED WATER SUPPLY			STD	STANDARD
CHWSP	CHILLED WATER SECONDARY PUMP	K	KELVIN, THERMAL CONDUCTIVITY	STM	STEAM
CI	CAST IRON	KIP	THOUSAND POUNDS	STR	STRAINER
CIP	CAST IRON PIPE	KIP FT	THOUSAND FOOT-POUNDS	STWP	STEAM WORKING PRESSURE
CKT	CIRCUIT	KW	KILOWATT	SUCT	SUCTION
CKV	CHECK VALVE	KWh	KILOWATT HOUR	SUP	SUPPLY
CL	CENTER LINE (℄)			SV	SAFETY VALVE
CONN	CONNECTION	LAT	LEAVING AIR TEMPERATURE		
CPD	CONDENSATE PUMP DISCHARGE	LB	POUNDS	T	TEMPERATURE SENSOR
CRAC	COMPUTER ROOM A/C UNIT	LDBT	LEAVING DRY BULB TEMPERATURE	T&P	TEMPERATURE AND PRESSURE
CRP	CONDENSATE RETURN PUMP	LF	LINEAR FEET	TCV	TEMPERATURE CONTROL VALVE
CT	COOLING TOWER	LG	LENGTH	TD	TEMPERATURE DIFFERENCE
CU	CONDENSING UNIT	LH	LATENT HEAT	TEMP	TEMPERATURE
CU FT	CUBIC FEET	LHG	LATENT HEAT GAIN	TOP	TOP OF PIPE
CU IN	CUBIC INCH	LP	LOW PRESSURE	TRANS	TRANSFER
CUH	CABINET UNIT HEATER	LPC	LOW PRESSURE CONDENSATE	TSTAT	THERMOSTAT
Cv	COEFFICIENT - VALVE FLOW	LPS	LOW PRESSURE STEAM (<15 PSI)		
CW	COLD WATER (POTABLE)	LRA	LOCKED ROTOR AMPS	U	HEAT TRANSFER COEFFICIENT
CWP	CONDENSER WATER PUMP	LT	LEAVING TEMPERATURE	U/G	UNDERGROUND
CWR	CONDENSER WATER RETURN	LTHW	LOW TEMPERATURE HOT WATER	UH	UNIT HEATER
CWS	CONDENSER WATER SUPPLY	LWBT	LEAVING WET BULB TEMPERATURE	UON	UNLESS OTHERWISE NOTED
		LWT	LEAVING WATER TEMPERATURE		
D	DRAIN			V	VOLTS
DB	DRY BULB	mA	MILLIAMPERES	VAC	VOLTS ALTERNATING CURRENT
DBT	DRY BULB TEMPERATURE	MAX	MAXIMUM	VAR	VARIABLE
dB	DECIBEL	MCA	MINIMUM CIRCUIT AMPACITY	VAV	VARIABLE AIR VOLUME
DC	DIRECT CURRENT	MCC	MOTOR CONTROL CENTER	VDC	VOLTS DIRECT CURRENT
DDC	DIRECT DIGITAL CONTROL	MIN	MINIMUM	VEL	VELOCITY
DEG	DEGREES [CELSIUS OR FAHRENHEIT]	MOCP	MAXIMUM OVERCURRENT PROTECTION	VENT	VENT, VENTILATION
DENS	DENSITY	MOV	MOTOR OPERATED VALVE	VERT	VERTICAL
DEWPT	DEW POINT TEMPERATURE	MP	MEDIUM PRESSURE	VFD	VARIABLE FREQUENCY DRIVE
DIA	DIAMETER	MPC	MEDIUM PRESSURE CONDENSATE	VP	VELOCITY PRESSURE
DIP	DUCTILE IRON PIPE	MPS	MEDIUM PRESSURE STEAM (16-99 PSI)	VRF	VARIABLE REFRIGERANT FLOW
DOV	DRAIN OFF VALVE	MPT	MALE PIPE THREAD	VSD	VARIABLE SPEED DRIVE
DPS	DIFFERENTIAL PRESSURE SENSOR	MU	MAKE-UP WATER		
DPT	DIFFERENTIAL PRESSURE TRANSMITTER	MVD	MANUAL VOLUME DAMPER	W	WATT
DS	DISCONNECT SWITCH			WB	WET BULB
DWV	DRAIN, WASTE & VENT	NA	NOT APPLICABLE	WBT	WET BULB TEMPERATURE
		NC	NOISE CRITERIA, NORMALLY CLOSED	WC	WATER COLUMN
EA	EXHAUST AIR	NIC	NOT IN CONTRACT	WG	WATER GAGE
E/P	ELECTRIC PNEUMATIC	NO	NORMALLY OPEN, NUMBER	WH	WATER HEATER
EAT	ENTERING AIR TEMPERATURE	NPS	NOMINAL PIPE SIZE	WL	WATER LINE
ECON	ECONOMIZER	NR	NOISE REDUCTION	WLD	WELDED
ECU	EVAPORATIVE COOLING UNIT	NRC	NOISE REDUCTION COEFFICIENT	WM	WATER METER
EDBT	ENTERING DRY BULB TEMPERATURE	NTS	NOT TO SCALE	WNF	WELD NECK FLANGE
EDH	ELECTRIC DUCT HEATER			WP	WATER PUMP
EER	ENERGY EFFICIENCY RATIO	OA	OUTSIDE AIR	WPD	WATER PRESSURE DROP
EF	EXHUAST FAN	OAF	OUTSIDE AIR FAN	WPR	WORKING PRESSURE DROP
EFF	EFFICIENCY	OAI	OUTSIDE AIR INTAKE	WSHP	WATER SOURCE HEAT PUMP
EL	ELEVATION	OBD	OPPOSED BLADE DAMPER	WSP	WORKING STEAM PRESSURE
ENT	ENTERING	OD	OUTSIDE DIAMETER	WT	WEIGHT
EOV	ELECTRONICALLY OPERATED VALVE	OZ	OUNCE		
ESP	EXTERNAL STATIC PRESSURE			YD	YARD, YARD DRAIN
ET	EXPANSION TANK	P	PUMP	YR	YEAR
EUH	ELECTRIC UNIT HEATER	P/E	PNEUMATIC ELECTRIC		
EVAP	EVAPORATOR	%	PERCENT	Z	ZONE
EWBT	ENTERING WET BULB TEMPERATURE	PC	PUMPED CONDENSATE		
EWT	ENTERING WATER TEMPERATURE	PCC	PRECOOL COIL		
EXCH	EXCHANGER	PD	PRESSURE DROP		
EXH	EXHAUST	POS	POSITIVE		
EXP	EXPANSION	PR	PUMPED RETURN		

MECHANICAL GENERAL NOTES

1. ISOLATION VALVES SHALL BE PROVIDED IN ALL BRANCH PIPING AND AT EQUIPMENT CONNECTIONS. ALL ISOLATION VALVES ARE TO BE 1/4 TURN FULL PORT BALL VALVES.
2. PIPING CONNECTIONS TO ALL EQUIPMENT SHALL BE FABRICATED WITH THE ISOLATION VALVES, FLANGES AND/OR UNIONS POSITIONED TO ALLOW REMOVAL AND SERVICE OF THE COMPONENT PARTS.
3. INSTALL MANUAL AIR VENTS AT THE HIGH POINTS OF THE PIPING SYSTEMS.
4. ROUTE PIPING IN AN ORDERLY MANNER AND MAINTAIN PROPER GRADES. INSTALL TO CONSERVE HEADROOM AND TO CREATE MINIMUM INTERFERENCE WITH USE OF SPACE. ROUTE ALL PIPING PARALLEL TO BUILDING LINES UON. GROUP PIPING AT COMMON BOP ELEVATIONS WHENEVER PRACTICAL. PIPES LOCATED IN CONCEALED SPACES SHALL BE ROUTED CLOSE TO BUILDING STRUCTURE UON.
5. INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION WITHOUT STRESSING PIPE OR EQUIPMENT CONNECTED.
6. INSTALL VALVES WITH STEMS UPRIGHT OR HORIZONTAL, NOT INVERTED.
7. INSTALL VALVES AND EQUIPMENT IN ACCESSIBLE LOCATIONS. INSTALL ACCESS DOORS IN PARTITIONS OR CEILINGS WHERE VALVES AND EQUIPMENT WOULD OTHERWISE BE INACCESSIBLE.
8. WHEN SOCKET WELD OR SOLDER END VALVES ARE INSTALLED, SPECIAL CARE SHALL BE TAKEN TO AVOID OVERHEATING AND DAMAGING THE VALVE BODY, TRIM OR PACKING. DAMAGED VALVES SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
9. IDENTIFY EACH PIPE WITH LABELING AS REQUIRED BY SPECIFICATIONS.
10. SLEEVE ALL PIPING THAT PENETRATES FIRE RATED WALLS, FLOORS AND PARTITIONS. PENETRATIONS SHALL BE SEALED WITH A U.L. LISTED ASSEMBLY TO PROVIDE A RATING EQUAL TO OR GREATER THAN THAT OF THE PENETRATED WALL, FLOOR OR PARTITION.
11. SLEEVE ALL PIPING THAT PENETRATES EXTERIOR BUILDING WALLS AND GRADE BEAMS. SEAL PENETRATIONS WATERTIGHT.
12. COORDINATE WITH OTHER TRADES BEFORE FABRICATION OR INSTALLATION OF ANY SYSTEMS.
13. EXISTING DUCTWORK, PIPING AND EQUIPMENT SHOWN ON THESE DRAWINGS INDICATES THE GENERAL LOCATION AND ROUTING. THE ACTUAL LOCATION SHALL BE DETERMINED BY THE CONTRACTOR WHO SHALL COORDINATE ALL WORK WITH ALL TRADES NECESSARY TO INSTALL NEW DUCTWORK, PIPING OR EQUIPMENT AS SHOWN ON THE DRAWING.
14. THESE DRAWINGS DO NOT NECESSARILY SHOW ALL OFFSETS OR ELEVATION DIFFERENCES WHICH MAY BE NECESSARY FOR THE COMPLETE INSTALLATION. THESE SHALL BE PROVIDED AS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM AT NO ADDITIONAL COST TO THE CONTRACT.
15. ALL NEW DUCTWORK SHALL BE EXTERNALLY INSULATED AS SPECIFIED.
16. WHERE REMOVAL OF EXISTING DUCTWORK OR PORTIONS OF ANY AIR SYSTEM IS NECESSARY, THE DUCT SHALL BE PATCHED AND SEALED AIRTIGHT USING PATCH OF SAME MATERIAL AND EQUAL OR GREATER THICKNESS AS EXISTING. PATCHES SHALL BE ATTACHED WITH SHEET METAL SCREWS OR OTHER MEANS OF POSITIVE ATTACHMENT (WELDING, BONDING, ETC.) AS SPECIFIED FOR THE PARTICULAR DUCT SYSTEM. NEW INSULATION SHALL BE EQUAL TO OR BETTER THAN EXISTING AND SHALL BE PATCHED AND SEALED TO MATCH EXISTING INSULATION AND MAINTAIN VAPOR BARRIER.
17. COORDINATE ALL REMODEL WORK WITH NEW CONSTRUCTION AND OTHER TRADES.
18. THE CONTRACTOR SHALL ADJUST AND BALANCE ALL MECHANICAL SYSTEMS TO DESIGN SETTINGS AS SHOWN AND SHALL REBALANCE TO RESTORE SETTINGS OF SYSTEMS TEMPORARILY ALTERED FOR THE PURPOSES OF COMPLETING THE WORK OF THIS PROJECT.
19. NOTIFY AND COORDINATE WITH THE OWNER AT LEAST SEVEN DAYS PRIOR TO SHUTDOWN OF ANY BUILDING SERVICES OR EQUIPMENT. SHUTDOWN TIME SHALL BE KEPT TO A MINIMUM.
20. ANY ITEMS DAMAGED DURING DEMOLITION SHALL BE REPLACED WITH NEW MATERIALS TO MATCH EXISTING.
21. CONTRACTOR SHALL PROVIDE TEMPORARY DUCTWORK, ELECTRICAL SERVICE, PIPING OR OTHER BUILDING SERVICES AS REQUIRED TO KEEP OTHER AREAS IN OPERATION DURING REMODELING. NOTIFY OWNER PRIOR TO SHUT-DOWN FOR ANY TEMPORARY SERVICE REQUIREMENTS. ALL TEMPORARY WORK SHALL BE COMPLETELY REMOVED ONLY AFTER NEW SERVICES ARE COMPLETELY INSTALLED AND FUNCTIONAL.
22. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATIONS OF CEILING-MOUNTED HVAC DEVICES AND EQUIPMENT.
23. DUCT ROUTING CHANGES MADE BY THE CONTRACTOR FOR THE PURPOSE OF ACCOMMODATING FIELD CONDITIONS SHALL INCLUDE FIRE DAMPERS AND COMBINATION FIRE/SMOKE DAMPERS IN RATED PARTITIONS AS SHOWN IN ORIGINAL ROUTING ARRANGEMENTS.
24. FURNISH AND INSTALL ACCESS DOORS (AD) IN THE DUCTWORK IMMEDIATELY ADJACENT TO EACH FIRE DAMPER AND EACH FIRE/SMOKE DAMPER. PARTITIONS SHALL BE PROVIDED WITH ACCESS DOORS TO PROVIDE SERVICE AND ACCESS TO DAMPER ACCESS DOORS.
25. PROVIDE FIRE AND COMBINATION FIRE/SMOKE DAMPERS WHERE REQUIRED BY CODE. FIRE, SMOKE, AND COMBINATION FIRE/SMOKE DAMPERS SHALL BE UL LISTED, SHALL BEAR THE UL LABEL AND SHALL COMPLY WITH NFPA BULLETIN NO. 90A. FULLY-OPEN DAMPERS SHALL NOT HAVE ANY PROJECTIONS INTO THE AIRSTREAM.
26. ABANDONED DUCT SHALL BE REMOVED WHERE INDICATED ON THE DRAWINGS. DUCT REMAINING IN PLACE SHALL BE CAPPED, SEALED AIR TIGHT AT POINT(S) OF DEMOLITION, AND INSULATED TO MATCH EXISTING..
27. NEW HOLES THROUGH EXISTING FLOORS SHALL BE CORE DRILLED. ALL CORES SHALL BE X-RAYED PRIOR TO CORING.
28. ALL DUCT SIZES SHOWN HEREIN REPRESENT INSIDE CLEAR DIMENSIONS. EXTERNAL SHEET METAL DIMENSIONS OF DUCTWORK THAT IS SPECIFIED TO BE INTERNALLY LINED SHALL BE ADJUSTED BY THE CONTRACTOR TO ALLOW FOR THICKNESS OF LINING.
29. THE OWNER SHALL HAVE THE OPTION TO DESIGNATE ANY MATERIALS REMOVED OR DEMOLISHED DURING THIS WORK AS "RECYCLABLE" AND SHALL HAVE FINAL DISPOSITION OVER THE DISPOSAL OF THESE MATERIALS. ALL MATERIALS REMOVED/DEMOLISHED BY THE CONTRACTOR FOR THIS JOB AND NOT RETAINED BY THE OWNER FOR RECYCLING OR OTHER PURPOSES SHALL BE DISPOSED OFF-SITE BY THE CONTRACTOR.
30. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL OF ANY EQUIPMENT DESIGNATED FOR REMOVAL. THE OWNER SHALL PROVIDE A LIST OF ITEMS THEY REQUIRE TO BE SALVAGED PRIOR TO THE START OF DEMOLITION. THE CONTRACTOR SHALL REMOVE THESE ITEMS USING REASONABLE CARE TO MINIMIZE DAMAGE.
31. ANY AND ALL WATER CONNECTIONS MADE FOR THE PURPOSE OF CLEANING TOOLS OR THE WORK AREA OR FOR ANY OTHER CONSTRUCTION-RELATED PURPOSES SHALL BE MADE ONLY TO DOMESTIC WATER HOSE BIBBS OR TO CONTRACTOR-SUPPLIED WATER SOURCES. APPROVED BACKFLOW PREVENTION DEVICES SHALL BE USED AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION. CONNECTIONS SHALL NOT BE MADE TO FIRE WATER, CHILLED WATER, CONDENSER WATER, HEATING HOT WATER, DOMESTIC HOT WATER OR ANY OTHER TREATED WATER SOURCE UNLESS REQUIRED AS PART OF WORK ON THESE SYSTEMS.
32. EXCEPT WHERE REQUIRED AT EQUIPMENT NOZZLES, FLANGES SHALL BE RAISED FACE WELD-NECK.
33. INSTALL DIELECTRIC FITTINGS AT ALL FERROUS PIPE CONNECTIONS TO NON-FERROUS METALLIC PIPE OR EQUIPMENT.
34. BULLHEAD TEES SHALL NOT BE USED TO JOIN CONVERGING (RETURN) FLOWS, REGARDLESS OF ARRANGEMENT SHOWN ON PLANS.
35. PROVIDE ESCUTCHEON PLATES WHERE PIPES EXPOSED TO VIEW PENETRATE FINISHED WALLS, FLOORS AND CEILINGS. SPLIT-RING ESCUTCHEON PLATES SHALL NOT BE USED UON.
36. PROVIDE CAPPED DRAIN VALVES AT LOW POINTS OF PIPING SYSTEMS AND AT EQUIPMENT CONNECTIONS. PROVIDE HOSE BIBB CONNECTIONS WITH CAPS AT DRAIN VALVES WHICH DO NOT DISCHARGE DIRECTLY OVER OR ARE NOT PIPED DIRECTLY TO AN APPROPRIATE DRAIN.
37. PIPING, DUCTWORK OR EQUIPMENT CONNECTIONS OPENED BY DEMOLITION OR RENOVATION SHALL BE TEMPORARILY SEALED TO KEEP OUT FOREIGN MATTER UNTIL SUCH TIME AS RECONNECTIONS ARE MADE.

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06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

MECHANICAL GENERAL NOTES

Scale: AS NOTED

M.002

SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
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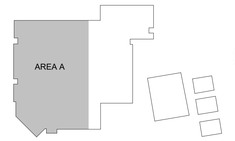
D	CONTRACTOR TO REMOVE AND RE-INSTALL THE CEILING TILE/GRID AS NECESSARY TO PERFORM THE WORK.

KEYNOTES	
1	EXISTING VAV BOX TO BE DEMOLISHED. DISCONNECT FROM EXISTING MEDIUM PRESSURE SUPPLY AND LOW PRESSURE SUPPLY DUCTWORK TO REMAIN. PROVIDE TEMPORARY CAP ON SUPPLY DUCTWORK ENDS AND PROTECT FOR RECONNECTION TO NEW EQUIPMENT. DEMOLISH ASSOCIATED CONTROLS. DEMOLISH ALL EXISTING PNEUMATIC CONTROL SYSTEMS.
2	DISCONNECT DUCTWORK AND CONDENSATE PIPE. PROVIDE TEMPORARY CAP AND PREPARE FOR CONNECTION TO NEW FAN COIL UNIT.



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MECHANICAL PLAN DEMO - MAIN LEVEL - AREA A PACKAGE 1 — 1/8" = 1'-0" | 1

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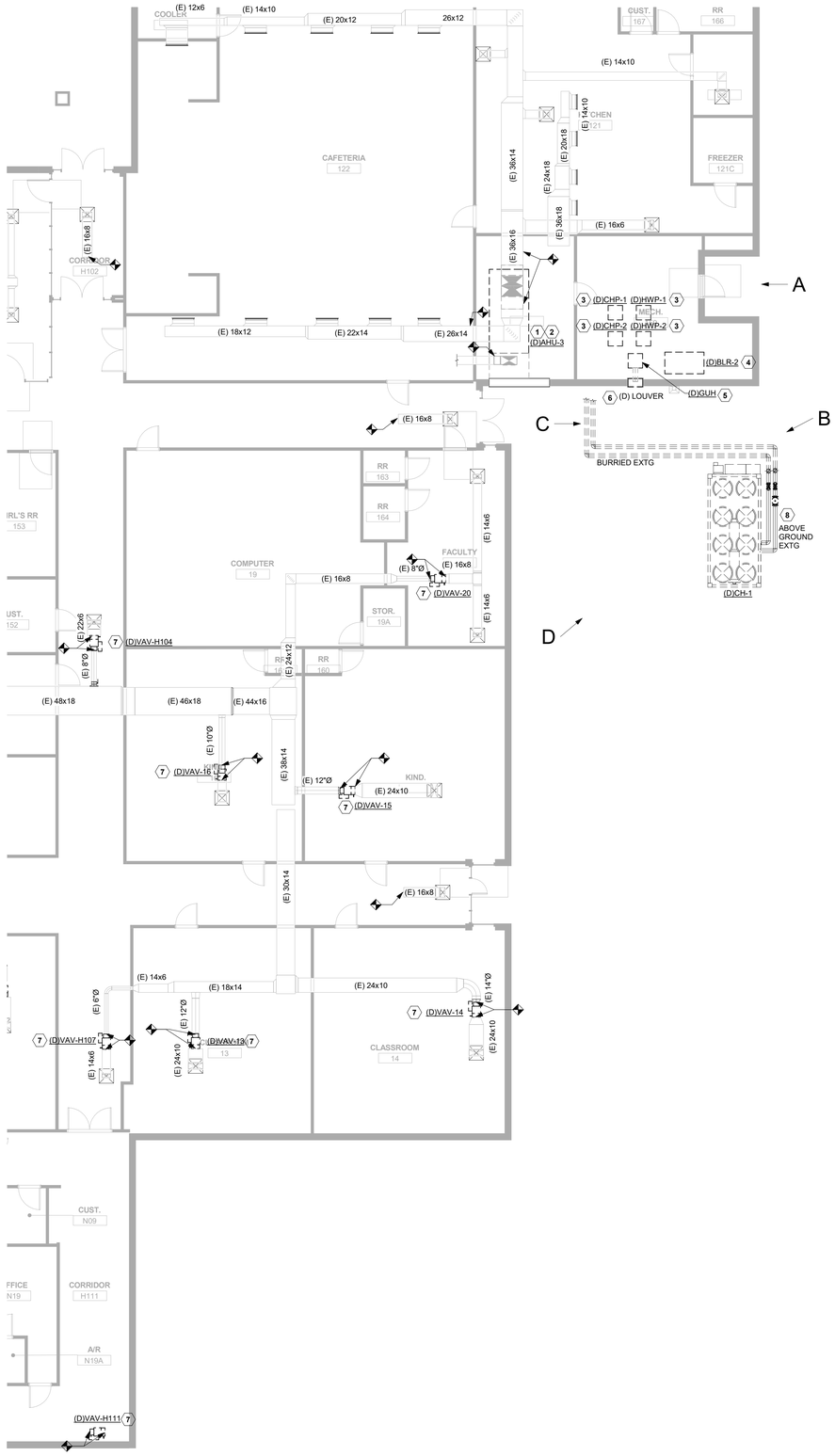
MECHANICAL DEMO PLAN - MAIN LEVEL - AREA A

Scale: AS NOTED

MD.101



A.

B.

C.

D.

SHEET NOTES

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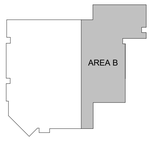
D	CONTRACTOR TO REMOVE AND RE-INSTALL THE CEILING TILE/GRID AS NECESSARY TO PERFORM THE WORK.

KEYNOTES

1	EXISTING CHILLED AND HEATING HOT WATER SUPPLY/RETURN BRANCH LINES SERVING AHU BACK TO MAIN IN MECHANICAL ROOM. PROVIDE NEW ISOLATION VALVES AND TEMPORARY CAP. PREPARE PIPING FOR NEW CONNECTION TO NEW AHU.
2	DEMOLISH EXISTING SUPPLY AND RETURN DUCTWORK SERVING AHU BACK TO PENETRATIONS AT KITCHEN/CAFFETERIA WALLS. PROVIDE TEMPORARY CAP ON ENDS OF DUCTWORK AND PREPARE FOR NEW CONNECTION TO NEW AHU.
3	DEMOLISH EXISTING CHILLED/HOT WATER PUMP, CONTROLS AND STARTER. DEMOLISH CHILLED/HOT WATER PIPING BACK AS NEEDED TO ALLOW DEMOLITION OF PUMP. PROVIDE NEW ISOLATION VALVES ON PIPING. PROVIDE TEMPORARY CAP ON PIPE END AND PREPARE PIPING FOR NEW CONNECTION TO NEW PUMP. EXISTING CONCRETE HOUSEKEEPING PAD TO REMAIN.
4	DEMOLISH EXISTING BOILER AND ASSOCIATE COMBUSTION AIR INTAKE, FLUE VENT, CONTROLS, STARTER, ETC. DEMOLISH HOT WATER PIPING BACK AS NEEDED TO ALLOW DEMOLITION OF BOILER. PROVIDE NEW ISOLATION VALVES ON SUPPLY AND RETURN PIPING. PROVIDE TEMPORARY CAP IN PIPING AND PREPARE FOR NEW CONNECTION TO NEW BOILER. EXISTING CONCRETE HOUSEKEEPING PAD TO REMAIN.
5	DEMOLISH EXISTING GAS HEATER IN IT'S ENTIRETY, INCLUDING COMBUSTION AIR INTAKE, FLUE VENT, GAS PIPING, CONTROLS, ETC.
6	DEMOLISH EXISTING LOUVER IN WALL. PATCH AND REPAIR WALL TO MATCH SURROUNDING CONDITIONS. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR MORE INFORMATION.
7	EXISTING VAV BOX TO BE DEMOLISHED. DISCONNECT FROM EXISTING MEDIUM PRESSURE SUPPLY AND LOW PRESSURE SUPPLY DUCTWORK TO REMAIN. PROVIDE TEMPORARY CAP ON SUPPLY DUCTWORK ENDS AND PROTECT FOR RECONNECTION TO NEW EQUIPMENT. DEMOLISH ASSOCIATED CONTROLS. DEMOLISH ALL EXISTING PNEUMATIC CONTROL SYSTEMS.
8	DEMOLISH EXISTING PACKAGED AIR COOLED CHILLER AND ASSOCIATE CONTROLS. PROVIDE TEMPORARY CAP ON PIPING AND PREPARE FOR CONNECTION TO NEW CHILLER. REMOVE EXISTING ISOLATION VALVES AND CONTROL VALVE. COORDINATE WITH TRADES TO OPEN CHAIN LINK FENCE AROUND CHILLER

NOTE: GC TO PROVIDE THE OWNER 2 WEEKS TO SALVAGE REMOVED HVAC EQUIPMENT. IF OWNER CHOOSES TO NOT PICK THEM UP, GC TO HAUL OFF THESE EQUIPMENT AT NO COST TO THE OWNER.



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	COMMENTS #00
11/07/2025	100% CD/PERMIT

MECHANICAL DEMO PLAN - MAIN LEVEL - AREA B

Scale: AS NOTED

MD.102

MECHANICAL PLAN DEMO - MAIN LEVEL - AREA B PACKAGE 1 | 1/8" = 1'-0" | 1

A.

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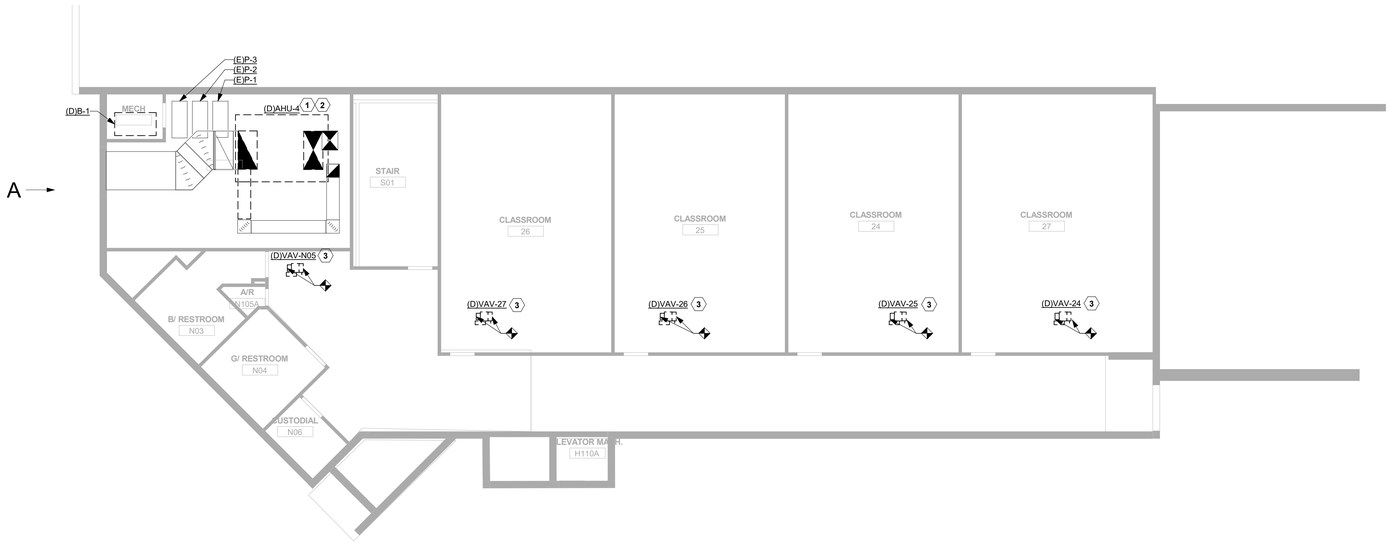
D	CONTRACTOR TO REMOVE AND RE-INSTALL THE CEILING TILE/GRID AS NECESSARY TO PERFORM THE WORK.

KEYNOTES	
1	DEMOLISH EXISTING AHU AND ASSOCIATED CONTROLS. DEMOLISH EXISTING SUPPLY, RETURN, AND OUTSIDE AIR DUCTWORK SERVING AHU BACK AS NEEDED TO ALLOW DEMOLITION OF AHU. PROVIDE TEMPORARY CAP ON ENDS OF DUCTWORK AND PREPARE FOR NEW CONNECTION TO NEW AHU.
2	EXISTING CHILLED AND HEATING HOT WATER SUPPLY/RETURN BRANCH LINES SERVING AHU BACK TO MAIN IN MECHANICAL ROOM. PROVIDE NEW ISOLATION VALVES AND TEMPORARY CAP. PREPARE PIPING FOR NEW CONNECTION TO NEW AHU.
3	EXISTING VAV BOX TO BE DEMOLISHED. DISCONNECT FROM EXISTING MEDIUM PRESSURE SUPPLY AND LOW PRESSURE SUPPLY DUCTWORK TO REMAIN. PROVIDE TEMPORARY CAP ON SUPPLY DUCTWORK ENDS AND PROTECT FOR RECONNECTION TO NEW EQUIPMENT. DEMOLISH ASSOCIATED CONTROLS. DEMOLISH ALL EXISTING PNEUMATIC CONTROL SYSTEMS.



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MECHANICAL PLAN DEMO - LOWER LEVEL PACKAGE 1 | 1/8" = 1'-0" | 2

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214-752-9098

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DALLAS, TX 75230
214-739-9105

STRUCTURAL
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214-696-6291

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817-946-7825

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PRICE CONSULTANTS
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11/7/2025

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03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
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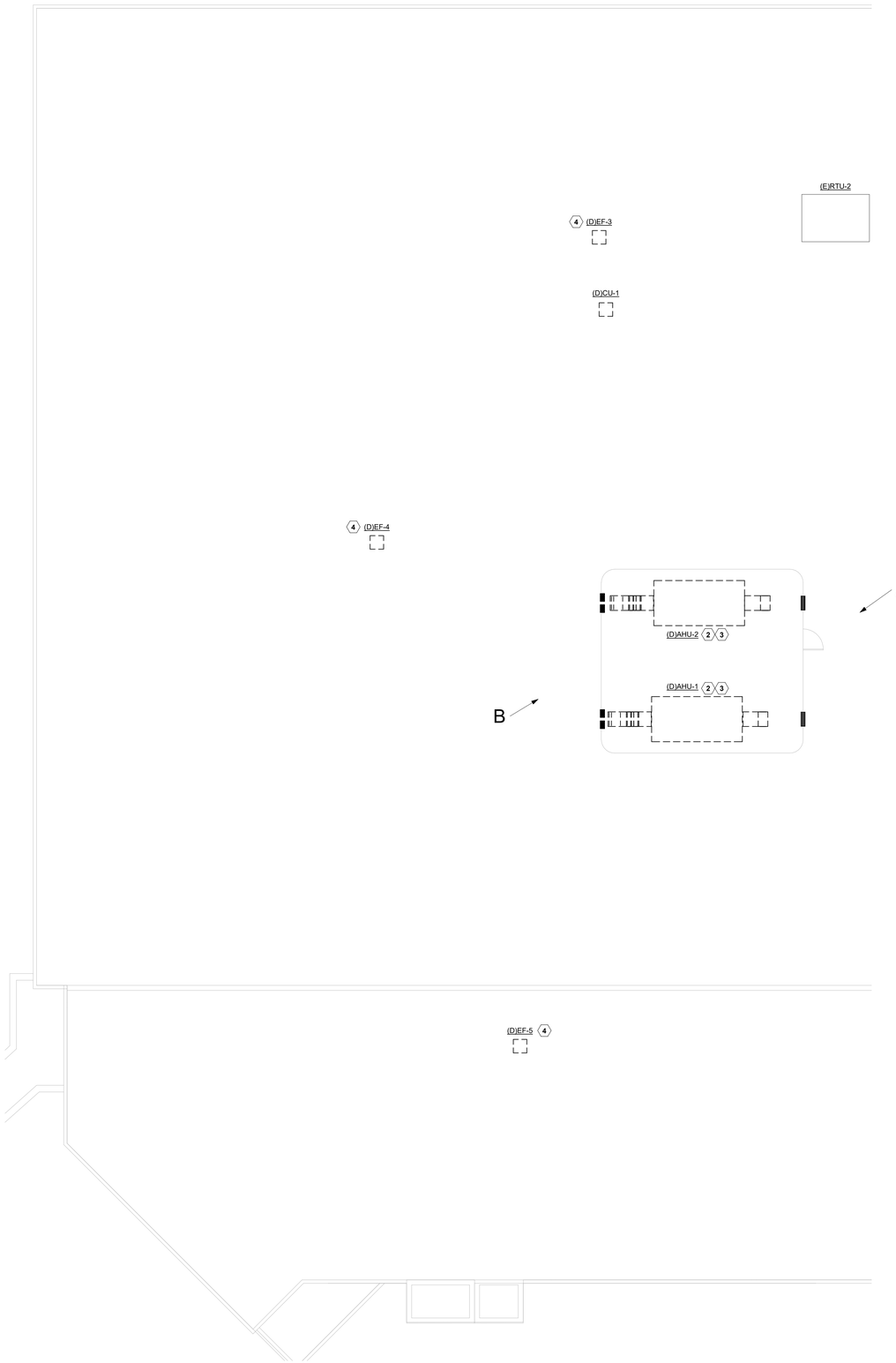
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

MECHANICAL DEMO PLAN - LOWER LEVEL

Scale: AS NOTED

MD.103



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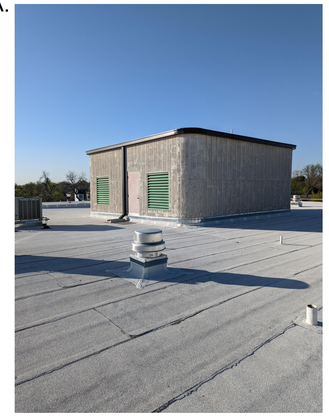
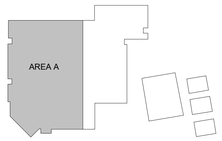


B.

SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
C	EXISTING HVAC SYSTEMS, DUCTWORK, PIPING, ETC. ARE APPROXIMATE SIZES AND LOCATIONS BASED ON LIMITED AS-BUILTS AND FIELD OBSERVATIONS. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXACT SIZES AND LOCATIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER OF RECORD IF DISCREPANCIES ARE FOUND THAT PREVENT THE COMPLETION OF WORK INTENDED IN THESE CONTRACT DOCUMENTS.
D	CONTRACTOR TO REMOVE AND RE-INSTALL THE CEILING TILE/GRID AS NECESSARY TO PERFORM THE WORK.

KEYNOTES	
1	NOT USED
2	EXISTING CHILLED AND HEATING HOT WATER SUPPLY/RETURN BRANCH LINES SERVING AHU BACK TO MAIN IN MECHANICAL ROOM. PROVIDE NEW ISOLATION VALVES AND TEMPORARY CAP. PREPARE PIPING FOR NEW CONNECTION TO NEW AHU.
3	DEMOLISH EXISTING SUPPLY AND RETURN DUCTWORK SERVING AHU BACK TO PENETRATIONS AT ROOF/FLOOR. PROVIDE TEMPORARY CAP ON ENDS OF DUCTWORK AND PREPARE FOR NEW CONNECTION TO NEW AHU.
4	DEMOLISH ROOF MOUNTED EXHAUST FAN. DUCTWORK AND CURB SHALL REMAIN.



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Project Number: D21-2552.00

MECHANICAL DEMO ROOF PLAN - AREA A PACKAGE 1 — 1/8" = 1'-0" | 1

JAMES S HOGG NEW TECH CENTER (ORG #157)

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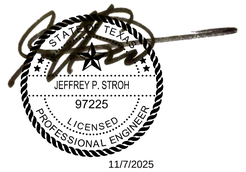

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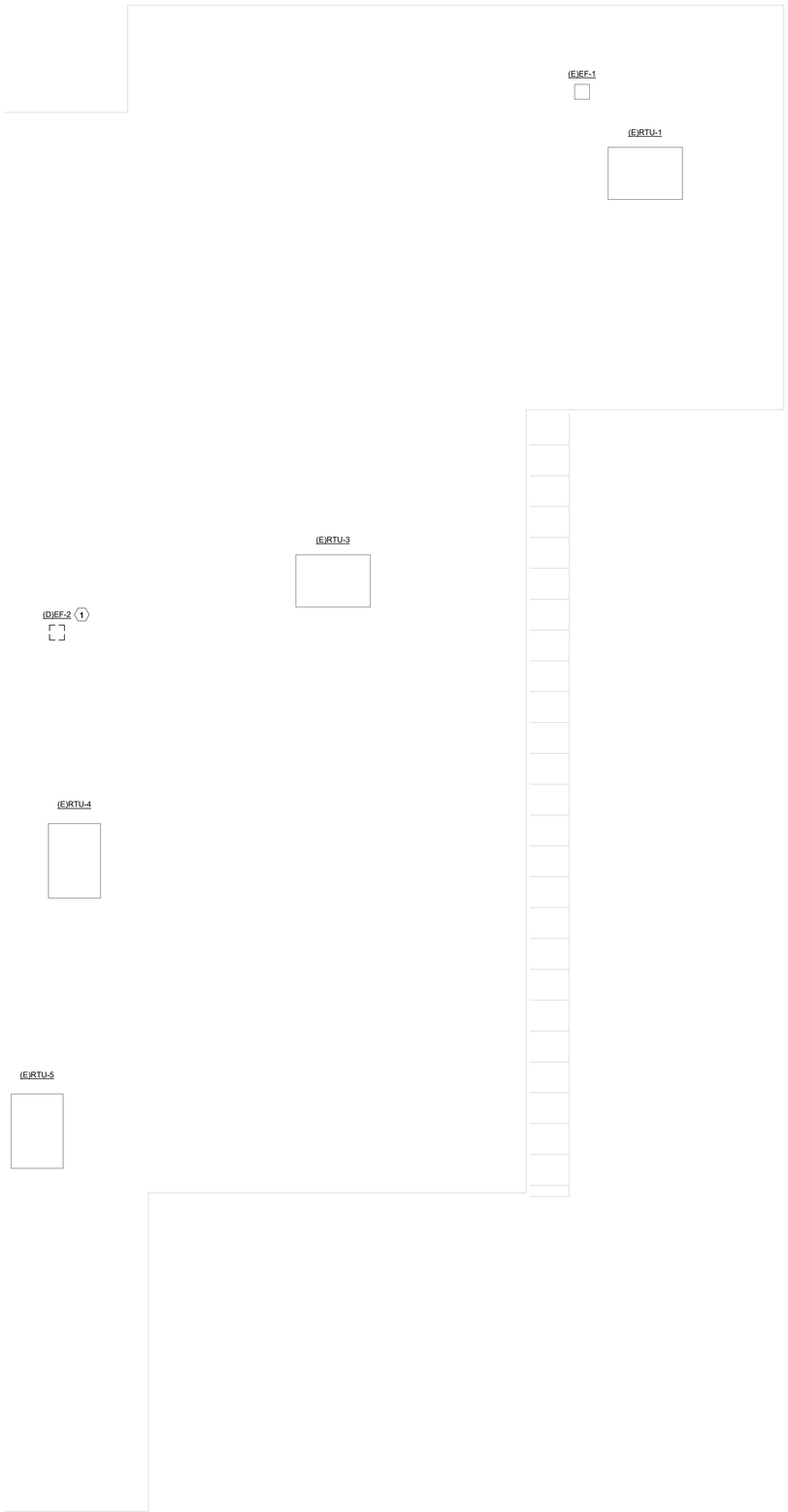
MECHANICAL DEMO ROOF PLAN - AREA A

Scale: AS NOTED

MD.201



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D	CONTRACTOR TO REMOVE AND RE-INSTALL THE CEILING TILE/GRID AS NECESSARY TO PERFORM THE WORK.

KEYNOTES	
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MECHANICAL DEMO ROOF PLAN - AREA B PACKAGE 1 | 1/8" = 1'-0" | 1

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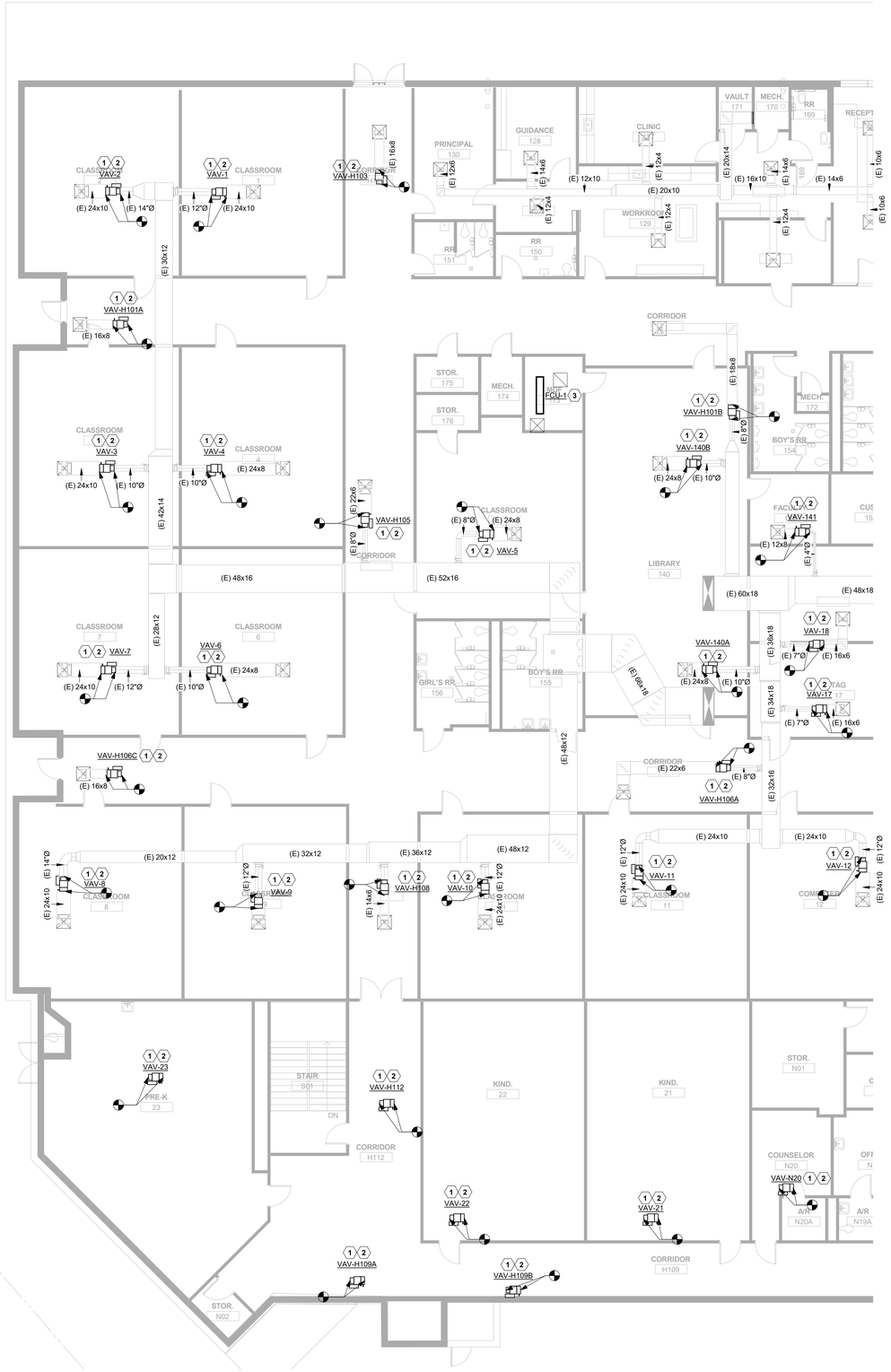
MECHANICAL DEMO ROOF PLAN - AREA B

Scale: AS NOTED

MD.202



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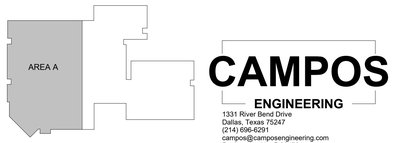
KEYNOTES	
1	NEW DDC SINGLE DUCT VAV BOX WITH HOT WATER REHEAT. CONNECT INLET OF VAV BOX TO EXISTING MEDIUM PRESSURE BRANCH DUCTWORK (SIZE AS SHOWN ON SCHEDULE). CONNECT OUTLET OF VAV BOX TO EXISTING LOW PRESSURE DUCTWORK.
2	PROVIDE NEW 3/4" HOT WATER SUPPLY AND RETURN PIPING FOR NEW VAV BOX. CONNECT HWS/HWR INTO NEAREST MAIN LINE. ESTIMATE 25'-0" OF DISTANCE FROM THE MAIN TO THE BOX FOR PIPE QUANTITY. PROVIDE NEW 2-WAY CONTROL VALVE AND VALVE PIPING PACKAGE (REFER TO DETAIL SHEET FOR MORE INFORMATION).
3	RECONNECT TO EXISTING DUCTWORK. ROUTE TO EXISTING CONDENSATE TO NEAREST DRAIN SUCH AS MECH 174.



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MECHANICAL PLAN - MAIN LEVEL - AREA A PACKAGE 1 | 1/8" = 1'-0" | 1

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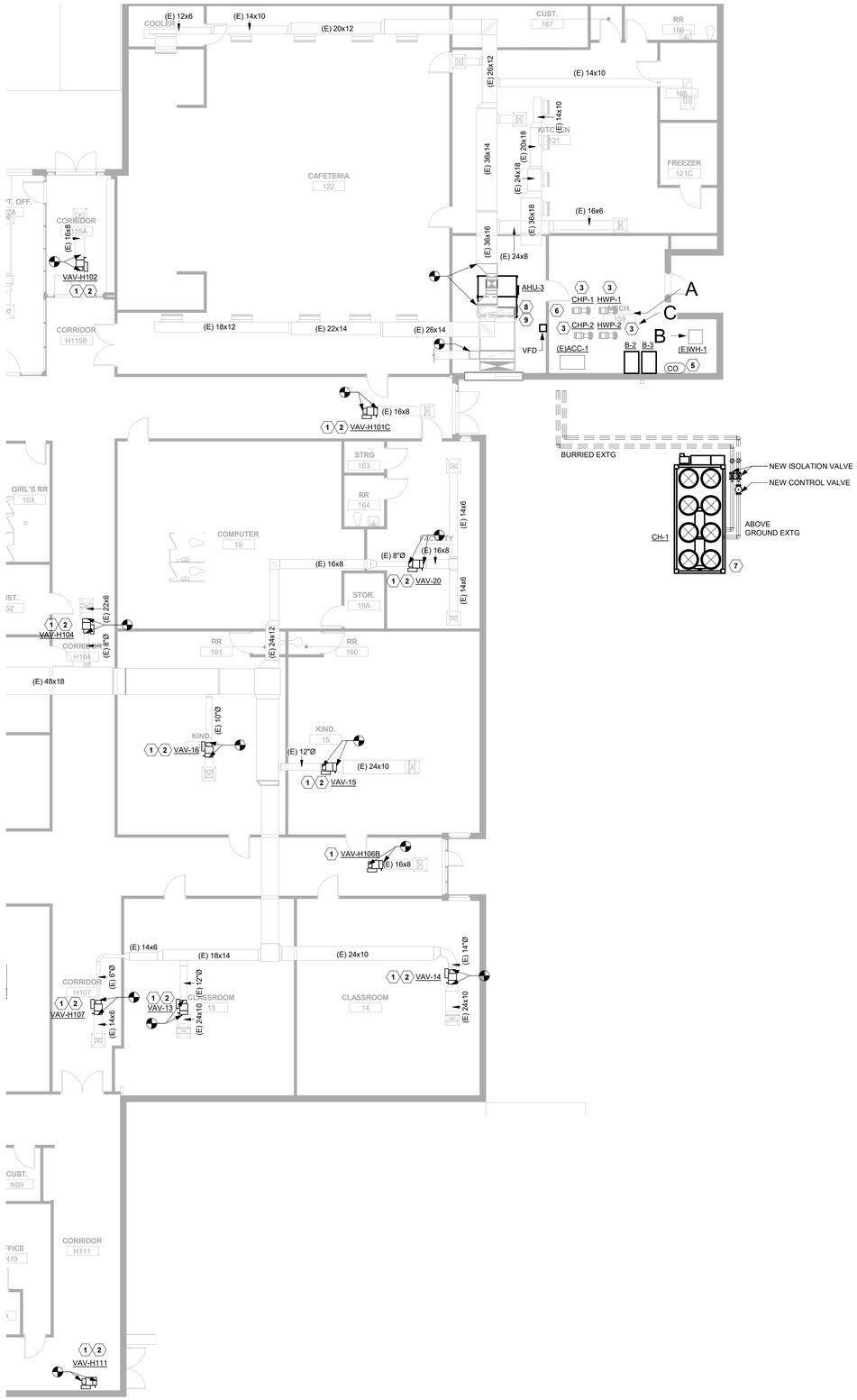
MECHANICAL FLOOR PLAN - MAIN LEVEL - AREA A

Scale: AS NOTED

M.101



A.

B.

C.

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D	CONTRACTOR TO REMOVE AND RE-INSTALL THE CEILING TILE/GRID AS NECESSARY TO PERFORM THE WORK.

KEYNOTES	
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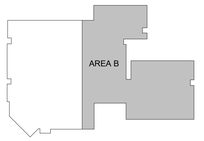
2	PROVIDE NEW 3/4" HOT WATER SUPPLY AND RETURN PIPING FOR NEW VAV BOX. CONNECT HWS/HWR INTO NEAREST MAIN LINE. ESTIMATE 25'-0" OF DISTANCE FROM THE MAIN TO THE BOX FOR PIPE QUANTITY. PROVIDE NEW 2-WAY CONTROL VALVE AND VALVE PIPING PACKAGE (REFER TO DETAIL SHEET FOR MORE INFORMATION).
3	PROVIDE ANY PIPING NECESSARY FOR NEW CONNECTION. EXISTING CONCRETE PADS TO BE REUSED.
4	REMOVE LOUVER FOR DEMOLITION AND REINSTALLATION OF AHU. PROTECT LOUVER AND KEEP CLEAN FOR RE-USE AND RE-INSTALLATION.
5	PROVIDE NATURAL GAS AND CARBON MONOXIDE DETECTION SYSTEM. INTERLOCK WITH BOILER(S) TO SHUT DOWN BOILERS WHEN CO LEVEL RISES ABOVE 50 PPM.
6	REPLACE EXISTING DISTECH JACE 7 PANEL WITH NEW JACE 8 NIAGRA 4 AND UPDATE AS REQUIRED REPLACE ALL LON CONTROLS WITH BACKNET IP.
7	INSTALL NEW PACKAGED AIR COOLED CHILLER ON EXISTING CONCRETE HOUSEKEEPING PAD. CONNECT TO EXISTING CHILLED WATER SUPPLY AND RETURN PIPING. PROVIDE NEW ISOLATION VALVES AND CONTROL VALVE. UTILIZE EXISTING CONTROL WIRING TO CONNECT NEW CHILLER TO NEW JACE. COORDINATE WITH TRADES TO REPAIR FENCING AROUND CHILLER ONCE WORK IS COMPLETE.
8	INSTALL NEW AHU ON TO EXISTING CONCRETE PAD. PROVIDE DUCTWORK TO CONNECT INTO EXISTING. PROVIDE NEW HWS/R ISOLATION VALVES AND 3-WAY CONTROL VALVE. PROVIDE NEW CHS/R ISOLATION VALVES AND 2-WAY CONTROL VALVE. ROUTE CONDESATE TO FLOOR DRAIN.
9	AHU SHALL BE KNOCKDOWN OR MODULAR ASSEMBLED INSIDE MECHANICAL ROOM.



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MECHANICAL PLAN - MAIN LEVEL - AREA B PACKAGE 1 | 1/8" = 1'-0" | 1

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MECHANICAL FLOOR PLAN - MAIN LEVEL - AREA B

Scale: AS NOTED

M.102

A.

B.

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3	INSTALL NEW AHU ON TO EXISTING CONCRETE PAD. PROVIDE DUCTWORK TO CONNECT INTO EXISTING. PROVIDE NEW HWS/R ISOLATION VALVES AND 3-WAY CONTROL VALVE. PROVIDE NEW CHS/R ISOLATION VALVES AND 2-WAY CONTROL VALVE. ROUTE CONDESATE TO FLOOR DRAIN.
4	PROVIDE NEW 4" FLUE AND COMBUSTION AIR TO NEW CONCENTRIC CAP.
5	PROVIDE NATURAL GAS AND CARBON MONOXIDE DETECTION SYSTEM. INTERLOCK WITH BOILER(S) TO SHUT DOWN BOILERS WHEN CO LEVEL RISES ABOVE 50 PPM.
6	AHU SHALL BE KNOCKDOWN OR MODULAR ASSEMBLED INSIDE MECHANICAL ROOM.

MECHANICAL PLAN - LOWER LEVEL PACKAGE 1 | 1/8" = 1'-0" | 1

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STRUCTURAL
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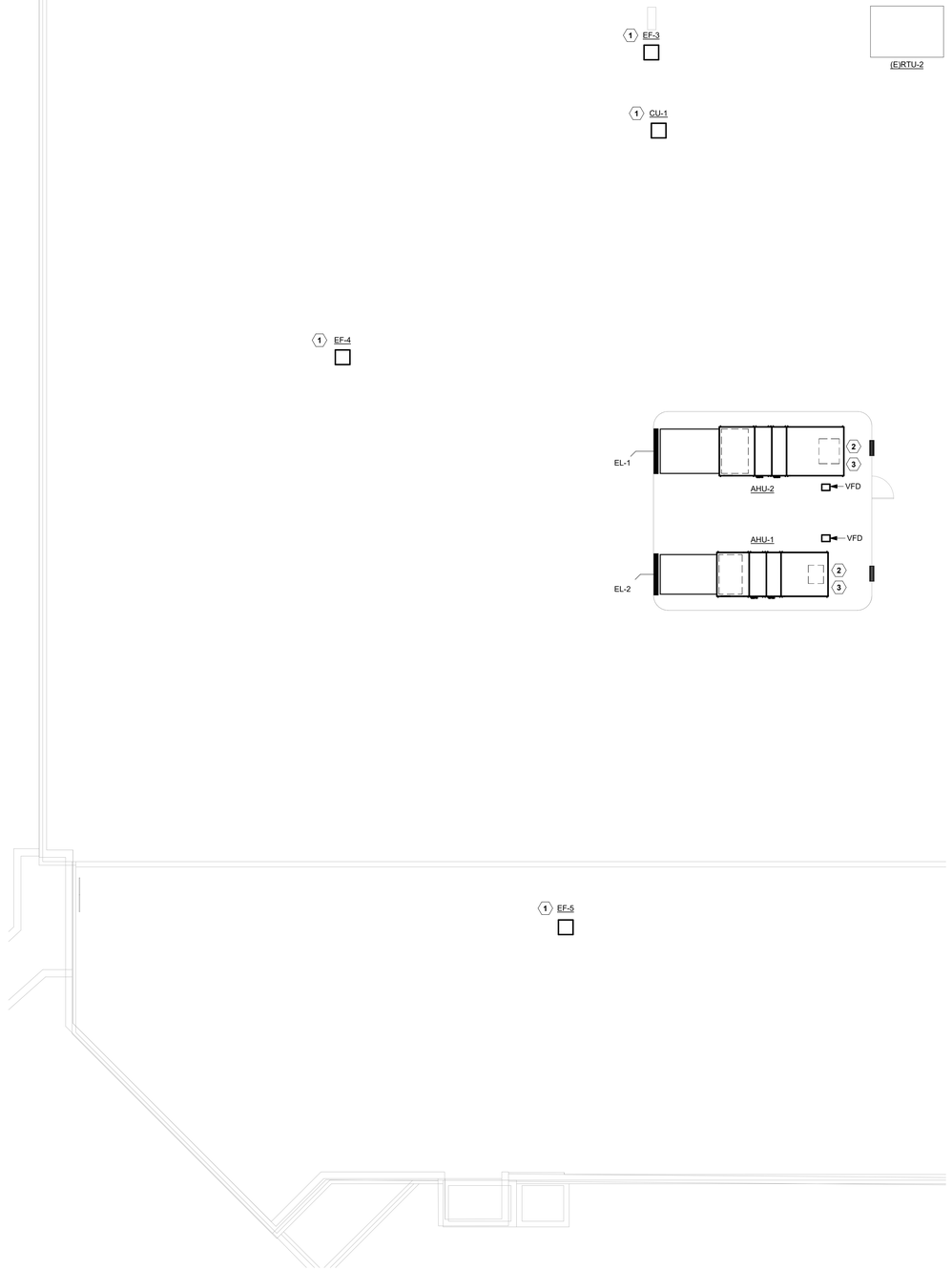
MECHANICAL FLOOR PLAN - LOWER LEVEL

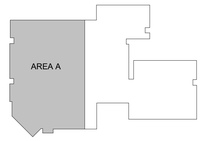
Scale: AS NOTED

M.103



SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
C	EXISTING HVAC SYSTEMS, DUCTWORK, PIPING, ETC. ARE APPROXIMATE SIZES AND LOCATIONS BASED ON LIMITED AS-BUILTS AND FIELD OBSERVATIONS. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXACT SIZES AND LOCATIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER OF RECORD IF DISCREPANCIES ARE FOUND THAT PREVENT THE COMPLETION OF WORK INTENDED IN THESE CONTRACT DOCUMENTS.
D	CONTRACTOR TO REMOVE AND RE-INSTALL THE CEILING TILE/GRID AS NECESSARY TO PERFORM THE WORK.

KEYNOTES	
1	REUSE EXISTING CURBS AND ADD CURB ADAPTERS AS NEEDED.
2	AHU SHALL BE KNOCKDOWN OR MODULAR ASSEMBLED INSIDE MECHANICAL ROOM.
3	INSTALL NEW AHU ON TO EXISTING CONCRETE PAD. PROVIDE DUCTWORK TO CONNECT INTO EXISTING. PROVIDE NEW HWS/R ISOLATION VALVES AND 3-WAY CONTROL VALVE. PROVIDE NEW CHS/R ISOLATION VALVES AND 2-WAY CONTROL VALVE. ROUTE CONDESATE TO FLOOR DRAIN.



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MECHANICAL ROOF PLAN - AREA A PACKAGE 1 | 1/8" = 1'-0" | 1

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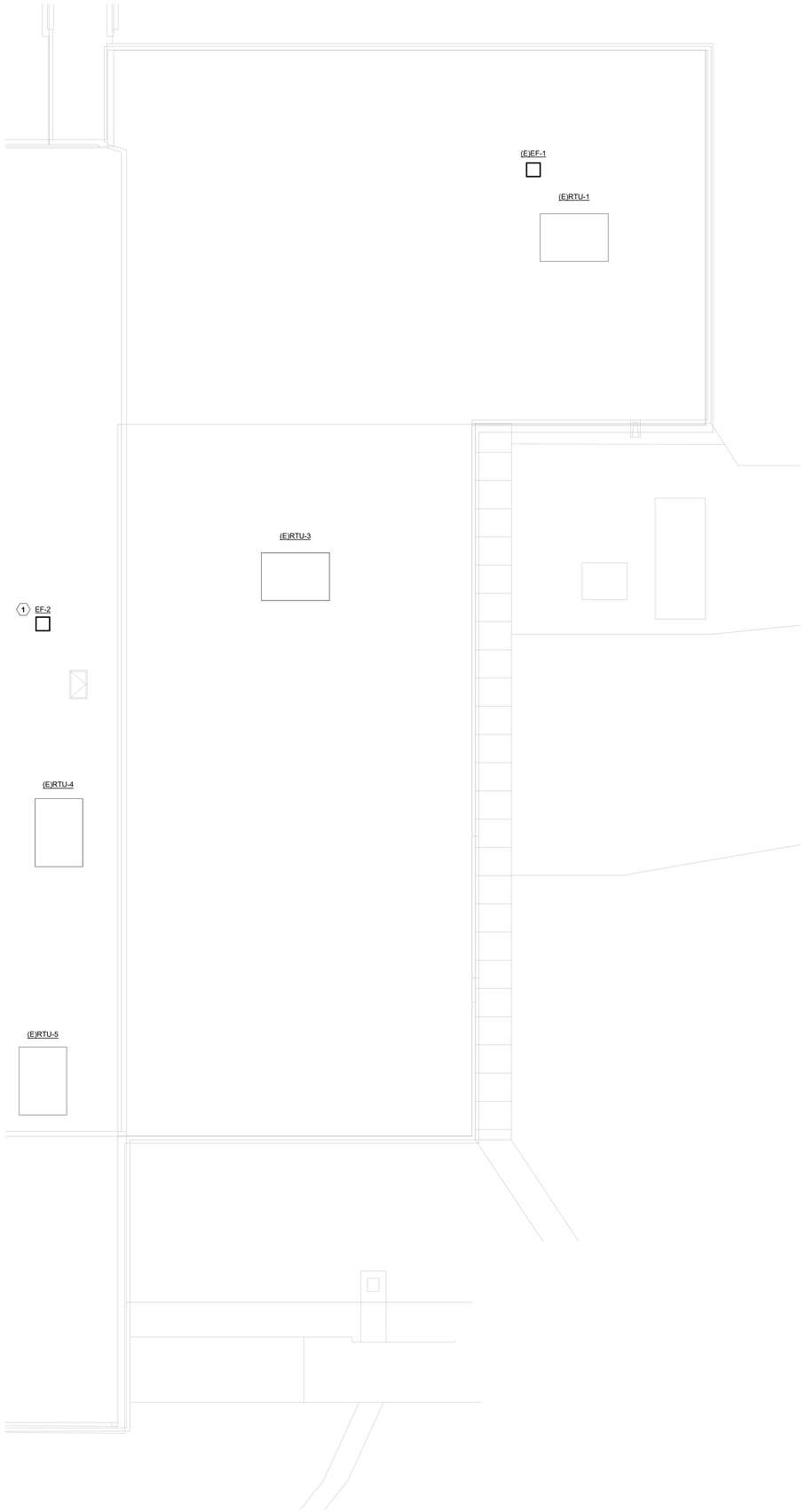
MECHANICAL ROOF PLAN - AREA A

Scale: AS NOTED

M.201



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D	CONTRACTOR TO REMOVE AND RE-INSTALL THE CEILING TILE/GRID AS NECESSARY TO PERFORM THE WORK.

KEYNOTES	
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MECHANICAL ROOF PLAN - AREA B PACKAGE 1 | 1/8" = 1'-0" | 1

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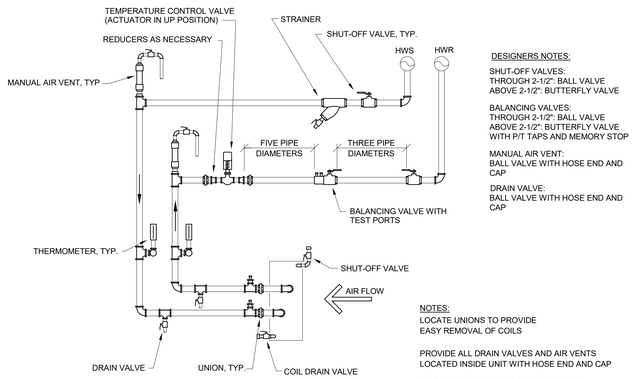
MECHANICAL ROOF PLAN - AREA B

Scale: AS NOTED

M.202



DESIGNERS NOTES:

SHUT-OFF VALVES:
THROUGH 2-1/2": BALL VALVE
ABOVE 2-1/2": BUTTERFLY VALVE

BALANCING VALVES:
THROUGH 2-1/2": BALL VALVE
ABOVE 2-1/2": BUTTERFLY VALVE
WITH P/T TAPS AND MEMORY STOP

MANUAL AIR VENT:
BALL VALVE WITH HOSE END AND CAP

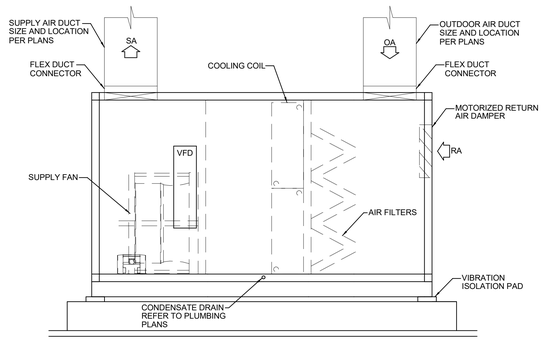
DRAIN VALVE:
BALL VALVE WITH HOSE END AND CAP

NOTES:
LOCATE UNIONS TO PROVIDE
EASY REMOVAL OF COILS

PROVIDE ALL DRAIN VALVES AND AIR VENTS
LOCATED INSIDE UNIT WITH HOSE END AND CAP

PIPE ALL DRAIN VALVES AND AIR VENTS
LOCATED OUTSIDE UNIT TO FLOOR DRAIN

HEATING OR COOLING COIL PIPING WITH TWO-WAY VALVE — NTS — 1



NOTES:
1. SUPPLY FAN SHALL BE FACTORY MOUNTED WITH MANUFACTURER'S STANDARD RESTRAINED VIBRATION ISOLATION MOUNTING DEVICES HAVING A MINIMUM STATIC DEFLECTION OF 2-INCHES.
2. UNIT SHALL BE MOUNTED ON EXISTING CONCRETE EQUIPMENT BASE.

TYPICAL INDOOR HYDRONIC AHU DETAIL — NTS — 2

DESIGNERS NOTES:

SHUT-OFF VALVES:
THROUGH 2-1/2": BALL VALVE
ABOVE 2-1/2": BUTTERFLY VALVE

BALANCING VALVES:
THROUGH 2-1/2": BALL VALVE
ABOVE 2-1/2": BUTTERFLY VALVE
WITH P/T TAPS AND MEMORY STOP

MANUAL AIR VENT:
BALL VALVE WITH HOSE END AND CAP

DRAIN VALVE:
BALL VALVE WITH HOSE END AND CAP

NOTES:
LOCATE UNIONS TO PROVIDE
EASY REMOVAL OF COILS

PROVIDE ALL DRAIN VALVES AND AIR VENTS
LOCATED INSIDE UNIT WITH HOSE END AND CAP

PIPE ALL DRAIN VALVES AND AIR VENTS
LOCATED OUTSIDE UNIT TO FLOOR DRAIN

HEATING OR COOLING COIL PIPING WITH THREE-WAY VALVE — NTS — 3

TYPICAL EXHAUST FAN DETAIL — NTS — 4

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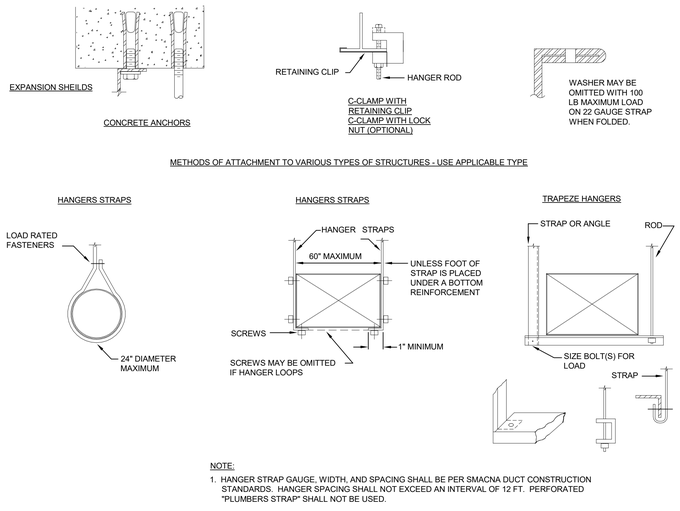
MECHANICAL DETAILS

Scale: AS NOTED

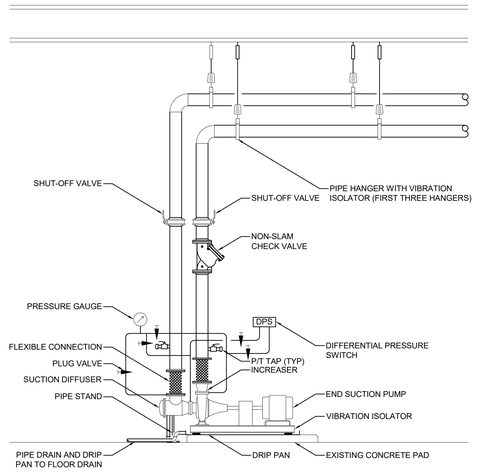
M.401



NOTE:

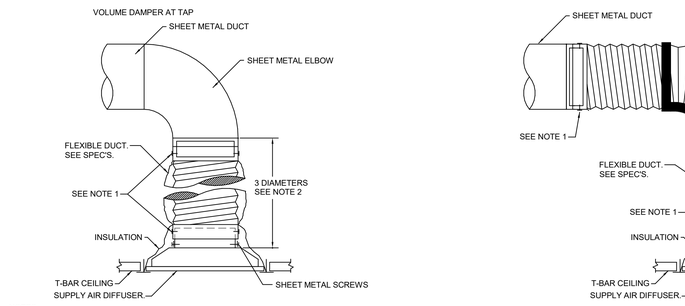
1. HANGER STRAP GAUGE, WIDTH, AND SPACING SHALL BE PER SMACNA DUCT CONSTRUCTION STANDARDS. HANGER SPACING SHALL NOT EXCEED AN INTERVAL OF 12 FT. PERFORATED "PLUMBERS STRAP" SHALL NOT BE USED.
2. SIZE ALL THREAD ROD AND TRAPEZE UNISTRUT CHANNEL FOR LOADS.
3. CONCRETE ANCHORS SHALL BE RATED FOR USE IN CRACKED CONCRETE PER IBC.

TYPICAL DUCT HANGER DETAIL — NTS | 1

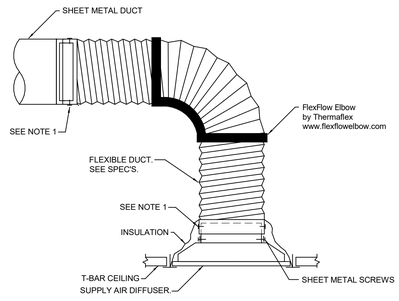


NOTES:
1. SHUT-OFF VALVES:
VALVES SIZES THROUGH 2": PROVIDE BALL VALVES, VALVES 2 1/2" AND ABOVE: PROVIDE BUTTERFLY VALVES

TYPICAL END SUCTION PUMP DETAIL — NTS | 2



NOTES:
1. USE PLENUM COLLARS TO ATTACH FLEXIBLE DUCT . USE SHEET METAL SCREWS AND (2) WRAPS OF TAPE TO SECURE. PLENUM COLLARS. ALTERNATE METHOD: BANDING DEVICE OR PANDUIT STRAP, IN LIEU OF SHEET METAL SCREWS. ALL TAPES AND SEALING MATERIALS SHALL COMPLY WITH UL181A FOR RIGID DUCT AND UL181B FOR FLEXIBLE DUCT.
2. SECURE SHEET METAL DROP TO DIFFUSER NECK WITH A MIN. OF (3) SHEET METAL SCREWS AND (2) FULL WRAPS OF TAPE PER UL REQUIREMENTS LISTED IN NOTE 1.
3. ALL FLEX DUCT SHALL BE INSTALLED WITHOUT KINKS, SAGGING, OR SHORT-RADIUS BENDS.



NOTES:
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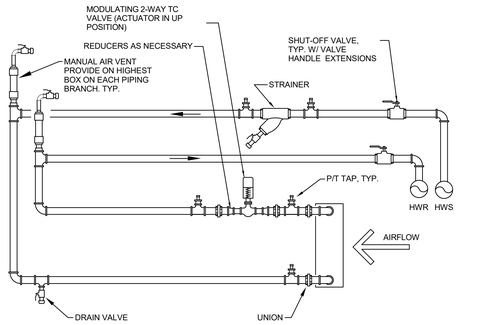
2. IF A MINIMUM OF 2 DIAMETERS OF STRAIGHT RUN IS NOT AVAILABLE ABOVE THE REGISTER USE HARD DUCT SHORT RADIUS CONNECTION.
3. ALL FLEX DUCT SHALL BE INSTALLED WITHOUT KINKS, SAGGING, OR SHORT-RADIUS BENDS.

TYPICAL FLEXDUCT CONNECTIONS DETAIL — NTS | 3



NOTES:
1. IN PLACE OF DETAIL ABOVE FACTORY ASSEMBLED COIL PIPING PACKAGE MAY BE PROVIDE BY GRISWOLD CONTROLS, HAYS FLUID CONTROLS, OR FLUID DYNAMICS CORP. COIL PACKAGE SHALL CONSIST AT A MINIMUM OF THE COMPONENTS SHOWN IN THE DETAIL AND SHALL MEET ALL REQUIREMENTS OUTLINED IN THE SPECIFICATIONS.
2. PROVIDE ALL DRAIN VALVES WITH HOSE ADAPTER AND CAP
3. PROVIDE ALL AIR VENTS WITH THREADED PLUG

TYPICAL VAV BOX HEATING COIL DETAIL — NTS | 4

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MECHANICAL DETAILS

Scale: AS NOTED

M.402

HYDRONIC AIR HANDLING UNIT SCHEDULE

MARK AHU-	LOCATION	SUPPLY FAN								HOT WATER PRE-HEATING PERFORMANCE DATA							NET COOLING PERFORMANCE DATA										POWER CONN.				MANUFACTURER MAKE AND MODEL	REMARKS
		SUPPLY CFM		O/A CFM		EXT. S.P.	QTY	HP	DRIVE	EAT	LAT	CAPACITY	WATER				CAPACITY (MBH)			O.D. D.B.	E.A.T.		L.A.T.	WATER				V	PH	MCA	MOCP		
		DES	MIN	DES	MIN							MBH	E.W.T.	L.W.T.	GPM	MAX P.D.	TOTAL	SENS.	LAT.		D.B.	W.B.	D.B.	E.W.T.	L.W.T.	GPM	MAX P.D.						
1	PENTHOUSE	14535	4365	3600	940	2	1	20	DIRECT	27.1	55	131	130	100	9	10	633	405	228	105	81	66	55	42	58	79	10	208	3	30	50	CARRIER 39M	1-12
2	PENTHOUSE	18635	5595	3425	1295	2	1	15	DIRECT	38.2	55	102	130	100	7	10	591	393	198	105	80	65	55	42	58	74	10	208	3	22.1	35	CARRIER 39M	1-12
3	1ST FLOOR MECH ROOM	5000	1500	1740	460	2	1	7.5	DIRECT	9.7	55	73	130	100	5	10	145	88	57	105	84	68	55	42	58	18	10	208	3	10.8	15	CARRIER 39M	1-12
4	LOWER LEVEL MECH ROOM	13855	4160	3600	1160	2	1	15	DIRECT	25.0	55	135	130	100	9	10	624	405	219	105	81	67	55	45	55	125	10	208	3	22.1	35	CARRIER 39M	1-12

1. EXTERNAL STATIC PRESSURE ("WG") INCLUDES DUCTWORK, BALANCING DAMPERS AND AIR DEVICES ONLY.
2. UNITS SHALL PERFORM TO LISTED CAPACITIES. UNIT PERFORMANCE MUST SATISFY BOTH SENSIBLE AND LATENT CAPACITY REQUIREMENTS.
3. DESIGN BASIS IS CARRIER. CONTRACTOR IS RESPONSIBLE FOR VARIATIONS IN FIT AND ELECTRICAL SERVICE.
4. PROVIDE WITH TERMINAL STRIP FOR CONTROL SYSTEM INTERFACE - COORDINATE WITH CONTROLS CONTRACTOR.
5. PROVIDE WITH 2" MERV 13 FILTERS.
6. PROVIDE SUPPLY FAN WITH VARIABLE FREQUENCY DRIVE AND SHAFT GROUNDING
7. PROVIDE WITH 0-100% MODULATING OUTSIDE AIR AND RETURN AIR DAMPER
8. PROVIDE WITH RETURN AIR SMOKE DETECTOR INTERLOCKED TO SUPPLY FAN
9. PROVIDE WITH INTEGRAL DISCONNECT
10. PROVIDE WITH STAINLESS STEEL OR CORROSION RESISTANT CONDENSATE DRAIN PAN
11. UNIT SHALL BE KNOCKDOWN OR MODULARE ABLE TO PASS THROUGH MECHROOM DOORS AND ASSEMBLED WITHIN THE MECH ROOM HOUSING THE UNIT.
12. CONTRACTOR SHALL NOT ORDER THE NEW UNIT UNTIL THEY ENSURE THE EXISITNG CIRCUITS MADE AVAILABLE BY THE REMOVED UNIT ARE ADIQUATE TO SUPPORT THE NEW UNIT ELECTRICAL LOAD.

DX DUCTLESS SPLIT SYSTEM AIR CONDITIONER SCHEDULE

MARK FCU-CU-	SERVICE	AIR HANDLER						MANUFACTURER MAKE AND MODEL	AIR COOLED CONDENSING UNIT							MANUFACTURER MAKE AND MODEL	COOLING PERFORMANCE DATA							REMARKS
		ARRANGEMENT	CFM	POWER CONNECTION					COMPRESSORS		REF. TYPE	FANS		POWER CONNECTION					CAPACITY (MBH)		O.D. D.B. F.	ENTERING		MIN. SEER	
				V.	Ph.	MCA	MOCP		NO.	R.L.AMPS EACH		NO.	FLA	V.	Ph.	MCA	MOCP		TOTAL	SENS		D.B. F.	W.B. F.		
1	MDF 173	HORIZONTAL	1,200	208	1	31.2	35	CARRIER FV4C	1	3.9	R410A	1	0.6	208	1	19.5	30	CARRIER 25 HCE	31.0	23.9	105	75	63	14	1-4

1. OR APPROVED EQUAL.
2. SIZE, ROUTE, INSULATE AND PROVIDE APPURTENANCES FOR DX PIPING SYSTEMS, PER MANUFACTURER RECOMMENDATIONS
3. COORDINATE OUTDOOR UNIT MOUNTING REQUIREMENTS AND ROOF PENETRATIONS. USE EXISTING PIPE ROUTE AND CONDENSING UNIT MOUNTING METHOD.
4. UNIT MINIMUM SEER 2 IS 13.4.

AIR COOLED CHILLER SCHEDULE

MARK CH-	NOMINAL TONS	O.D. AMBIENT	TYPE	EWT DEG F	LWT DEG F	FLOW (GPM) DESIGN	WPD FT WG	FOULING FACTOR	FL EER	IPLV EER	REF. TYPE	UNIT ELECTRICAL					WEIGHT (LBS)	MANUFACTURER AND MODEL NO.	REMARKS
												VOLTS	PH.	HZ	MCA	MOCP			
1	100	105	SCROLL	58	42	150	8	0.0001	8.5	17.8	R-410A	208	3	60	467	500	5,200	CARRIER 30RC	1-9

1. ALL PIPING EXISTING. PROVIDE NEW ISOLATION VALVES AND CONTROL VALVE.
2. PROVIDE LOW SOUND PACKAGE FOR COMPRESSORS AND CONDENSER FAN.
3. PROVIDE UNIT MOUNTED NON-FUSED DISCONNECT SWITCH
4. PROVIDE SUCTION ACCUMULATOR, WATER FLOW SWITCH AND PUMP DIFFERENTIAL SENSOR
5. PROVIDE PACKAGED UNIT FOR OUTDOOR APPLICATION
6. PROVIDE HIGH EFFICIENCY, VARIABLE SPEED SCROLL
7. PROVIDE 115V NEMA 3R SERVICE OUTLET
8. PROVIDE WATER PRESSURE GAUGE SET
9. PROVIDE COMPRESSOR SOUND ATTENUATING PACKAGE

CONDENSING BOILER SCHEDULE

MARK B-	GAS TYPE	TURN DOWN	INPUT BUTH	OUTPUT BUTH	FLOW (GPM)	EWT	LWT	FLUE SIZE	UNIT ELECTRICAL					WEIGHT (LBS)	MANUFACTURER AND MODEL NO.	REMARKS
									VOLTS	PH.	HZ	MCA	MOCP			
1	NATURAL	10:1	600	627	38	100	130	4	120	1	60	4	15	471	LAARS XTR	1-12
2	NATURAL	10:1	500	483	32	100	130	4	120	1	60	4	15	401	LAARS XTR	1-12
3	NATURAL	10:1	500	483	32	100	130	4	120	1	60	4	15	401	LAARS XTR	1-12

1. PROVIDE 75 PSI ASME PRESSURE RELIEF VALVE.
2. INTERLOCK BOILER CONTROL WITH NEW CARBON MONOXIDE SENSOR.
3. PROVIDE FLAME SAFEGUARD SWITCH.
4. PROVIDE BOILER SEQUENCER WITH AUTO LEAD/LAG, BOILER PUMP CONTROL, AND OUTSIDE AIR RESET.
5. THE BOILER INSPECTION IS TO BE COORDINATED BY THE CONTRACTOR.
6. PROVIDE DIFFERENTIAL PRESSURE SWITCH.
7. PROVIDE MANUFACTURER'S BACNET BOILER CONTROLS.
8. PROVIDE MANUFACTURER'S CONCENTRIC VENT KIT.
9. PROVIDE MANUFACTURER'S CONDENSATE NEUTRALIZATION KIT.
10. PROVIDE ALARM ON ANY FAILURE.
11. PROVIDE REALTIME O2 FEEDBACK.
12. PROVIDE NEW FLUE THAT IS A COMBINATION OF PLV & CPVC COMPLYING WITH ANSI/ASTM D1785 F441, POLYPROPYLENE PIPE THAT COMPLIES WITH ULC S636, OR STAINLESS STEEL COMPLYING WITH UL1738.

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SEAL:

11/7/2025

FILE:
DRAWN BY: MC
CHECKED BY: JS

ISSUE:

03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

MECHANICAL SCHEDULES

Scale: AS NOTED

M.501

NOTE: CONTRACTOR IS TO INSTALL NEW AC FILTERS ON ALL NEWLY INSTALLED AC EQUIPMENT, BOTH AT ONE WEEK PRIOR TO THE SUBSTANTIAL COMPLETION AND ONE WEEK PRIOR TO THE SIX MONTHS WARRANTY WALK.

NOTE: IT IS OUR UNDERSTANDING THAT THE FACILITY HAS A LONWORKS BMS NETWORK. THE CONTRACTOR WILL PROVIDE ALL NECESSARY INTERFACES TO CONNECT NEW BACNET EQUIPMENT TO EXISTING LONWORKS NETWORK.

PUMP SCHEDULE

MARK -	LOCATION	SERVES	TYPE	GPM	TOTAL HEAD FT. W.G.	PUMP EFF.	MOTOR DATA HP	RPM	V	PH	MANUFACTURER MAKE AND MODEL	REMARKS
CHP-1	MECH 159	CHILLED WATER LOOP	BASE MOUNTED END SUCTION	75	60	61.15	3	1800	208	3	GRUNDFOS NBSE 015	1-6
CHP-2	MECH 159	CHILLED WATER LOOP	BASE MOUNTED END SUCTION	75	60	61.15	3	1800	208	3	GRUNDFOS NBSE 016	1-6
HWP-1	MECH 159	HEATED WATER LOOP	BASE MOUNTED END SUCTION	38	40	49.03	0.75	3600	208	3	GRUNDFOS LC 12501	1-6
HWP-2	MECH 159	HEATED WATER LOOP	BASE MOUNTED END SUCTION	38	40	49.03	0.75	3600	208	3	GRUNDFOS LC 12501	1-6

1. PUMP SUBMITTED MUST MEET STATED PUMP EFFECIENCY AT CONDITIONS SPECIFIED
2. PUMP MOTOR SHALL BE INVERTER DUTY RATED WITH SHAFT GROUNDING
3. PROVIDE WITH TEFC MOTOR
4. PROVIDE WITH ANSI CLASS 125 FLANGES
5. NOT USED.
6. PROVIDE WITH END SUCTION DIFFUSER

FAN SCHEDULE

MARK	LOCATION	SERVES	CFM	EXT. SP IN. W.G.	MOTOR DATA HP/(WATTS)	V	PH	DRIVE	MAX. SONES	CONTROL	MANUFACTURER AND MODEL NUMBER	WEIGHT (LBS.)	REMARKS
EF-2	ROOF	REST 153 & REST 154	805	0.25	1/4	115	1	DIRECT	9.5	CONTINUOUS	COOK ACED-EC	55	1,2,4,5,7,8
EF-3	ROOF	A REST 150	390	0.25	1/6	115	1	DIRECT	5.4	CONTINUOUS	COOK ACED-EC	55	1,2,4,5,7,8
EF-4	ROOF	REST 155 & 156	530	0.25	1/6	115	1	DIRECT	6.9	CONTINUOUS	COOK ACED-EC	55	1,2,4,5,7,8
EF-5	ROOF	REST N03 & NO4	400	0.25	1/4	115	1	DIRECT	5.2	CONTINUOUS	COOK ACED-EC	55	1,2,4,5,7,8

1. OR APPROVED EQUAL
2. PROVIDE A MOTORIZED BACKDRAFT DAMPER
3. SUSPEND FROM STRUCTURE ABOVE, USE FAN MANUFACTURER'S HANGING VIBRATION ISOLATOR KIT
4. PROVIDE FAN WITH INTEGRAL DISCONNECT
5. PROVIDE INSULATED FACTORY ROOF CURB TO MATCH ROOF TYPE AND SLOPE
6. PROVIDE A WHITE, ALUMINUM GRILLE
7. PROVIDE WITH ALUMINUM BIRD SCREEN
8. PROVIDE WITH FACTORY PRE-WIRED, FAN SPEED CONTROLLER
9. PROVIDE WITH INLET GUARD
10. CONNECT FAN TO EMERGENCY POWER FOR STORM SHELTER OPERATION
11. PROVIDE WITH MERV-13 FILTER BOX AND TWO SETS OF FILTERS
12. PROVIDE SOFT START IN FAN.

SINGLE DUCT VAV BOX WITH HYDRONIC HEATING SCHEDULE

MARK VAV-	SERVES	INLET SIZE	AIR VALVE DESIGN CFM	MAX CFM	MIN CFM	HOT WATER HEATING EAT D.B.	LAT D.B.	CAP MBH	WATER EWT	LWT	GPM	MAX P.D.	POWER CONN. V	PH	MANUFACTURER MAKE AND MODEL	REMARKS
1	CLASSROOM 1	12	1,140	1975	350	55	95	15.1	130	100	1.0	10	120	1	ENVIRO-TEC SDR	1-10
2	CLASSROOM 2	12	1,340	1975	410	55	95	17.7	130	100	1.2	10	120	1	ENVIRO-TEC SDR	1-10
3	CLASSROOM 3	12	1,290	1975	390	55	95	16.8	130	100	1.1	10	120	1	ENVIRO-TEC SDR	1-10
4	CLASSROOM 4	10	1,065	1355	320	55	95	13.8	130	100	0.9	10	120	1	ENVIRO-TEC SDR	1-10
5	CLASSROOM 5	10	1,000	1355	300	55	95	13.0	130	100	0.9	10	120	1	ENVIRO-TEC SDR	1-10
6	CLASSROOM 6	10	1,065	1355	320	55	95	13.8	130	100	0.9	10	120	1	ENVIRO-TEC SDR	1-10
7	CLASSROOM 7	10	1,065	1355	320	55	95	13.8	130	100	0.9	10	120	1	ENVIRO-TEC SDR	1-10
8	CLASSROOM 8	12	1,515	1975	460	55	95	19.9	130	100	1.3	10	120	1	ENVIRO-TEC SDR	1-10
9	CLASSROOM 9	12	1,240	1975	380	55	95	16.4	130	100	1.1	10	120	1	ENVIRO-TEC SDR	1-10
10	CLASSROOM 10	12	1,315	1975	400	55	95	17.3	130	100	1.2	10	120	1	ENVIRO-TEC SDR	1-10
H103	CORRIDOR H103	10	800	1355	240	55	95	10.4	130	100	0.7	10	120	1	ENVIRO-TEC SDR	1-10
H104	CORRIDOR H104	8	600	840	180	55	95	7.8	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
H106	CORRIDOR H106	8	500	840	150	55	95	6.5	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
H132	CORRIDOR H132	8	600	840	180	55	95	7.8	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
11	CLASSROOM 11	12	1,190	1975	360	55	95	15.6	130	100	1.0	10	120	1	ENVIRO-TEC SDR	1-10
13	CLASSROOM 13	12	1,315	1975	400	55	95	17.3	130	100	1.2	10	120	1	ENVIRO-TEC SDR	1-10
14	CLASSROOM 14	12	1,365	1975	410	55	95	17.7	130	100	1.2	10	120	1	ENVIRO-TEC SDR	1-10
H101	CORRIDOR H101	8	600	840	180	55	95	7.8	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
H105	CORRIDOR H105	8	600	840	180	55	95	7.8	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
H111	CORRIDOR H111	8	500	840	150	55	95	6.5	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
H113	CORRIDOR H113	8	600	840	180	55	95	7.8	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
H114	CORRIDOR H114	8	500	840	150	55	95	6.5	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
H115	CORRIDOR H115	8	600	840	180	55	95	7.8	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
20	FACILITIES 20	8	620	840	190	55	95	8.2	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
15	KINDER ROOM 15	12	1,215	1975	370	55	95	16.0	130	100	1.1	10	120	1	ENVIRO-TEC SDR	1-10
16	KINDER ROOM 16	10	1,065	1355	320	55	95	13.8	130	100	0.9	10	120	1	ENVIRO-TEC SDR	1-10
140A	LIBRARY 140	10	940	1355	290	55	95	12.5	130	100	0.8	10	120	1	ENVIRO-TEC SDR	1-10
140B	LIBRARY 140	10	940	1355	290	55	95	12.5	130	100	0.8	10	120	1	ENVIRO-TEC SDR	1-10
141	LIBRARY OFFICE 141	4	125	250	43	55	95	1.9	130	100	0.1	10	120	1	ENVIRO-TEC SDR	1-10
121	MUSIC CLASSROOM 121	12	1,500	1975	450	55	95	19.4	130	100	1.3	10	120	1	ENVIRO-TEC SDR	1-10
123	SPED CLASSROOM 123	12	1,500	1975	450	55	95	19.4	130	100	1.3	10	120	1	ENVIRO-TEC SDR	1-10
122	TAG CLASSROOM 122	12	1,500	1975	450	55	95	19.4	130	100	1.3	10	120	1	ENVIRO-TEC SDR	1-10
24	CLASSROOM 24	12	1,400	1975	420	55	95	18.1	130	100	1.2	10	120	1	ENVIRO-TEC SDR	1-10
25	CLASSROOM 25	12	1,400	1975	420	55	95	18.1	130	100	1.2	10	120	1	ENVIRO-TEC SDR	1-10
26	CLASSROOM 26	12	1,400	1975	420	55	95	18.1	130	100	1.2	10	120	1	ENVIRO-TEC SDR	1-10
27	CLASSROOM 27	12	1,400	1975	420	55	95	18.1	130	100	1.2	10	120	1	ENVIRO-TEC SDR	1-10
H108A	CORRIDOR H108	8	605	840	190	55	95	8.2	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
H108B	CORRIDOR H108	8	605	840	190	55	95	8.2	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
H110	CORRIDOR H110	8	605	840	190	55	95	8.2	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
N20	COUNSELORS N20	8	500	840	150	55	95	6.5	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
ELEV	ELEVATOR	8	605	840	190	55	95	8.2	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10
21	KINDER ROOM 21	12	1,440	1975	440	55	95	19.0	130	100	1.3	10	120	1	ENVIRO-TEC SDR	1-10
22	KINDER ROOM 22	12	1,440	1975	440	55	95	19.0	130	100	1.3	10	120	1	ENVIRO-TEC SDR	1-10
23	PRE-K ROOM 23	14	2,115	2750	640	55	95	27.6	130	100	1.8	10	120	1	ENVIRO-TEC SDR	1-10
N05	RR/VEST N05	6	340	435	110	55	95	4.8	130	100	0.5	10	120	1	ENVIRO-TEC SDR	1-10

1. PROVIDE WITH CONTROL TRANSFORMER.
2. PROVIDE 1" MATT-FACED INSULATION ON ALL INTERIOR SURFACES
3. PROVIDE LEFT OR RIGHT HAND CONFIGURATIONS AS NECESSARY FOR ACCESSIBILITY
4. PROVIDE RECOMMENDED MAINTENANCE CLEARANCES. PROVIDE ACCESS PANELS IN WALLS/CEILINGS AS REQUIRED
5. PROVIDE CONTROLS PER SEQUENCE OF OPERATION AND SPECIFICATIONS
6. HEATING COIL IS MOUNTED AT THE BOX DISCHARGE
7. PROVIDE WITH MODULATING HOT WATER CONTROL VALVE
8. BOX SELECTION SHALL BE BASED ON 80 PERCENT OF MANUFACTURER'S LISTED MAXIMUM ALLOWABLE CFM
9. CFM MIN/MAX VALUES REFER TO THE RANGE OF CAPABILITY FOR THIS AIR VALVE SIZE. IT IS NOT A MINIMUM/MAXIMUM SETTING
10. ALL ABOVE CEILING EQUIPMENT IS TO HAVE LAMINATED CEILING TAGS BELOW CEILING.

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97225
LICENSED
PROFESSIONAL ENGINEER

11/7/2025

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DRAWN BY: MC
CHECKED BY: JS

ISSUE:

03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT
	COMMENTS #00
11/07/2025	100% CD/PERMIT

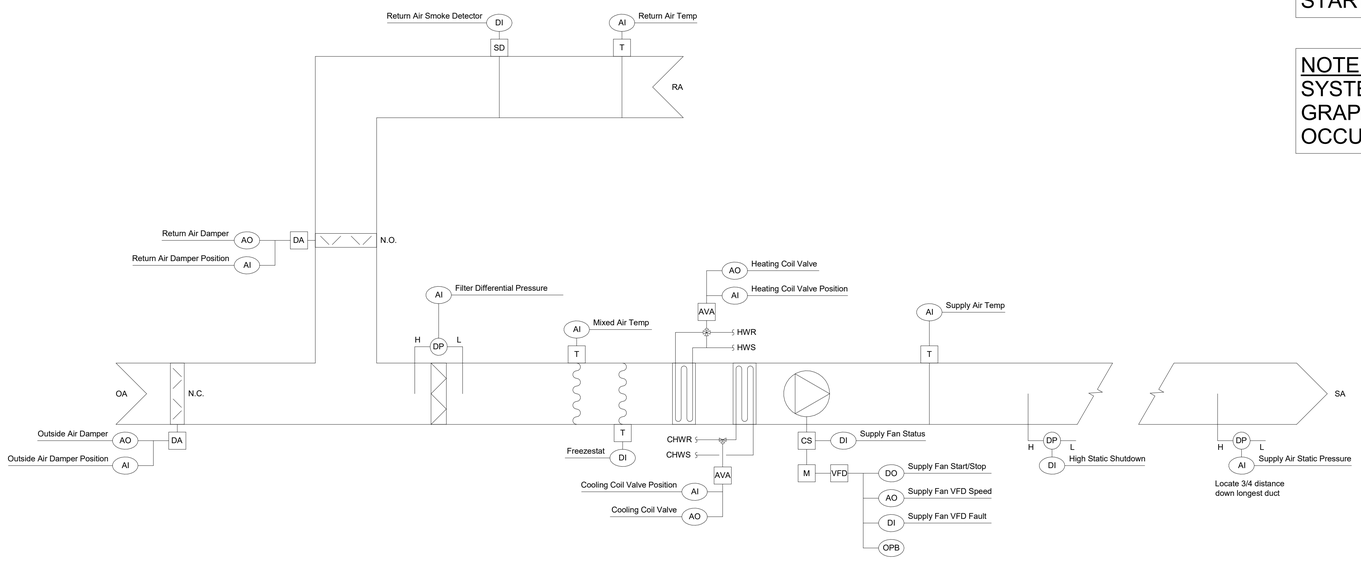
MECHANICAL SCHEDULES

Scale: AS NOTED

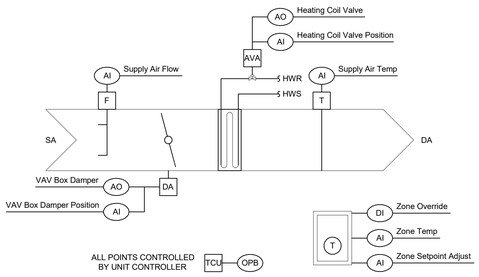
M.502

NOTE: CONTROLS VENDOR TO SCREENSHOT EXISTING CONTROLS SYSTEM GRAPHICS FOR ENTIRE FACILITY PRIOR TO WORK. IF ANY EQUIPMENT FOUND NOT WORKING, INFORM AECOM PM PRIOR TO START OF ANY WORK.

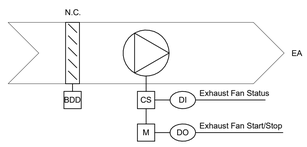
NOTE: BAS CONTRACTOR TO SUBMIT THE GRAPHICS TO THE SYSTEM AS A REQUIRED SUBMITTAL. UPLOAD THE PRE-APPROVED GRAPHICS TO THE BAS NO LATER THAN 30 DAYS BEFORE STAFF OCCUPANCY.



VARIABLE AIR VOLUME AIR HANDLING UNIT | 1



SINGLE DUCT VAV BOX W/ HOT WATER REHEAT | 2



EXHAUST FAN | 3

MDF / IDF ROOMS SEQUENCE OF OPERATIONS

A. GENERAL:

1. Units to have standalone thermostat. Units to operate continuously.
2. The FMCS shall monitor space temperature for all MDF/IDF rooms. The FMCS shall generate an alarm should the space temperature exceed or drop below its assigned alarm limits (adj.).

B. CONTROL POINTS:

Description	Type
Space Temperature (Each Room)	AI

MDF/IDF ROOM | NTS | 5

SYMBOL LIST

SYMBOL	DESCRIPTION
	OPPOSED BLADE DAMPER
	DIRECT EXPANSION COOLING COIL
	FAN OR PUMP MOTOR
DP	DIFFERENTIAL PRESSURE SENSOR
SD	SMOKE DETECTOR
T	DUCT MOUNTED TEMPERATURE SENSOR
T	WALL MOUNTED TEMPERATURE SENSOR
VFD	VARIABLE FREQUENCY DRIVE
DI	DDC DIGITAL INPUT POINT
DO	DDC DIGITAL OUTPUT POINT
AI	DDC ANALOG INPUT POINT
AO	DDC ANALOG OUTPUT POINT
M	MOTOR
DA	DAMPER ACTUATOR
BRD	BAROMETRIC RELIEF DAMPER
FR	FREEZE STAT
CO2	DUCT MOUNTED CO2 SENSOR
ES	ENTHALPY SENSOR, ECONOMIZER
CS	CURRENT SENSOR

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Registration No. F-001731
Project Number: D21-2552.00

JAMES S HOGG NEW TECH CENTER (ORG #157)

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B/A Project No.: 21132

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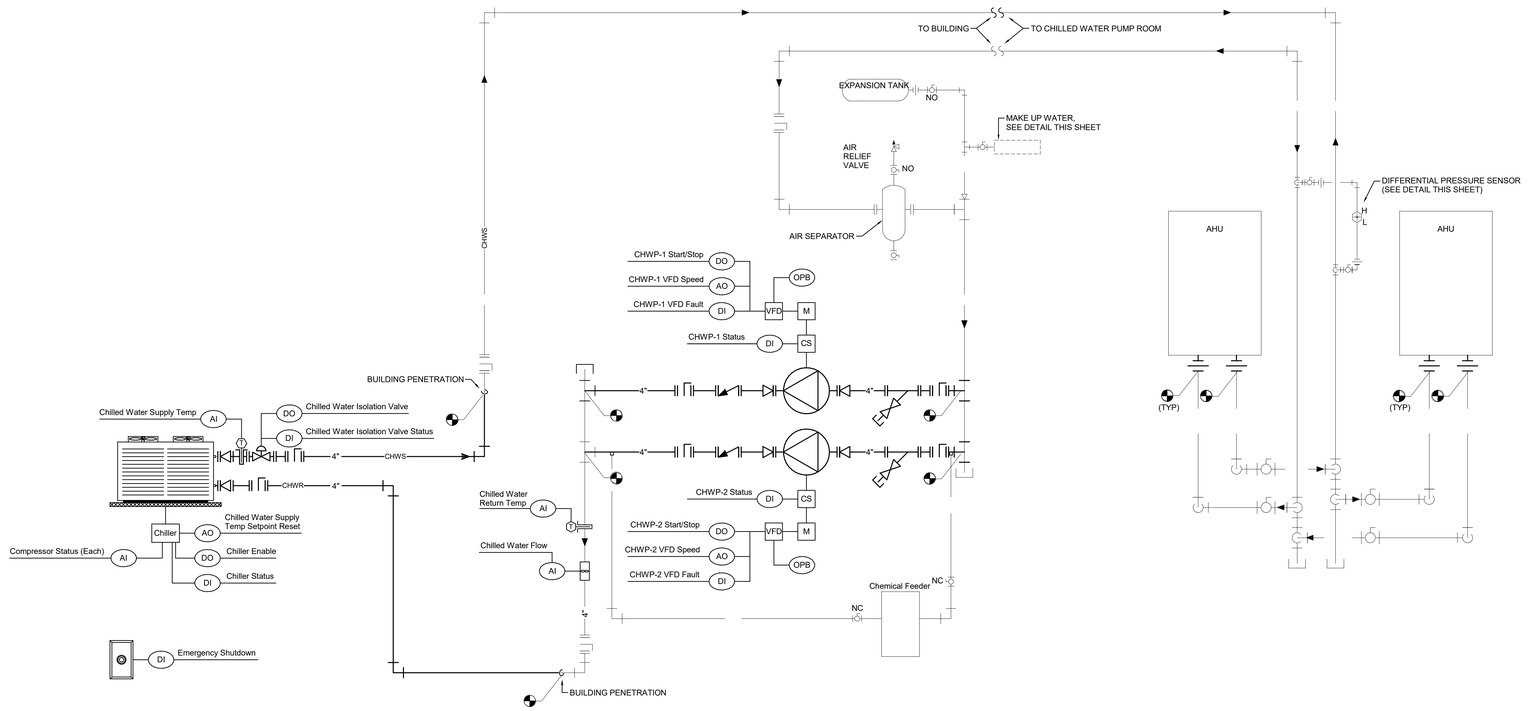
MECHANICAL CONTROLS

Scale: AS NOTED

M.601

NOTE: CONTROLS VENDOR TO SCREENSHOT EXISTING CONTROLS SYSTEM GRAPHICS FOR ENTIRE FACILITY PRIOR TO WORK. IF ANY EQUIPMENT FOUND NOT WORKING, INFORM AECOM PM PRIOR TO START OF ANY WORK.

NOTE: BAS CONTRACTOR TO SUBMIT THE GRAPHICS TO THE SYSTEM AS A REQUIRED SUBMITTAL. UPLOAD THE PRE-APPROVED GRAPHICS TO THE BAS NO LATER THAN 30 DAYS BEFORE STAFF OCCUPANCY.



AIR COOLED CHILLER SYSTEM | 1

SYMBOL LIST

SYMBOL	DESCRIPTION
	OPPOSED BLADE DAMPER
	DIRECT EXPANSION COOLING COIL
	FAN OR PUMP MOTOR
DP	DIFFERENTIAL PRESSURE SENSOR
SD	SMOKE DETECTOR
T	DUCT MOUNTED TEMPERATURE SENSOR
T	WALL MOUNTED TEMPERATURE SENSOR
VFD	VARIABLE FREQUENCY DRIVE
DI	DDC DIGITAL INPUT POINT
DO	DDC DIGITAL OUTPUT POINT
AI	DDC ANALOG INPUT POINT
AO	DDC ANALOG OUTPUT POINT
M	MOTOR
DA	DAMPER ACTUATOR
BRD	BAROMETRIC RELIEF DAMPER
FR	FREEZE STAT
CO2	DUCT MOUNTED CO2 SENSOR
ES	ENTHALPY SENSOR, ECONOMIZER
CS	CURRENT SENSOR

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MECHANICAL CONTROLS

Scale: AS NOTED

M.602

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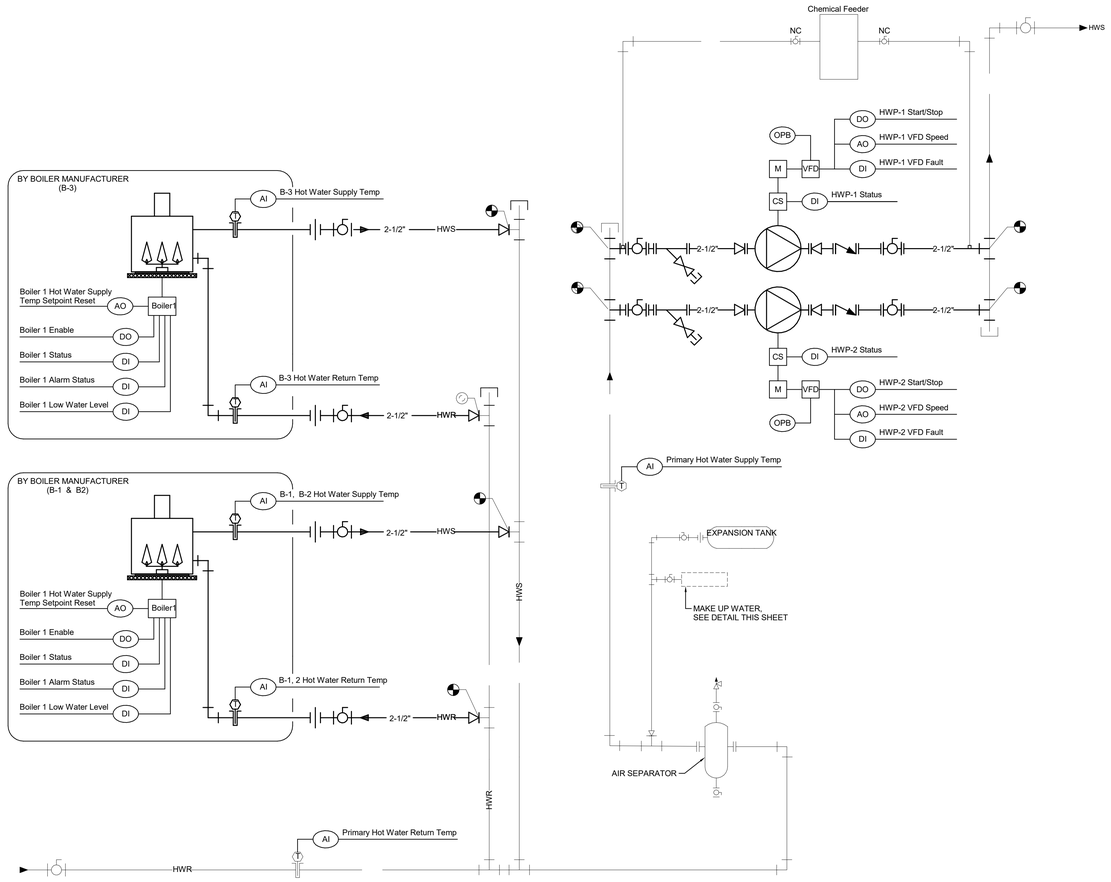

HOT WATER BOILER SYSTEM | 1

SYMBOL LIST

SYMBOL	DESCRIPTION
	OPPOSED BLADE DAMPER
	DIRECT EXPANSION COOLING COIL
	FAN OR PUMP MOTOR
DP	DIFFERENTIAL PRESSURE SENSOR
SD	SMOKE DETECTOR
T	DUCT MOUNTED TEMPERATURE SENSOR
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MECHANICAL CONTROLS

Scale: AS NOTED

M.603

AMBIENT CONDITIONS

A. GENERAL:

1. The FMCS shall shall monitor the ambient outside conditions at the building. Sensors shall be located outside the building northernb exposure.

B. CONTROL POINTS:

Description	Type
Outside Temperature	AI
Outside Humidity	AI
Outside CO2	AI

VARIABLE FREQUENCY DRIVES

A. GENERAL:

1. The FMCS shall interface and monitor points from the VFDs.
2. VFD interfaces shall be achieved via communication link.
3. VFD data to be shown on associated unitary graphic.
4. Provide dashboard with daily, weekly, monthly, and yearly usage totals for KWH and

B. CONTROL POINTS:

Description	Type
Start/Stop (Each VFD)	DI
Alarm (Each VFD)	DI
Percent Output (Each VFD)	AI
Frequency Output (Each VFD)	AI
Amperage (Each VFD)	AI
KWH (Each VFD)	AI
Runtime (Each VFD)	AI

MDF / IDF ROOMS

A. GENERAL:

1. Units to have standalone thermostat. Units to operate continuously.
2. The FMCS shall monitor space temperature for all MDF/IDF rooms. The FMCS shall generate an alarm should the space temperature exceed or drop below its assigned alarm limits (adj.).

B. CONTROL POINTS:

Description	Type
Space Temperature (Each Room)	AI

VARIABLE PRIMARY CHILLED WATER SYSTEM

A. GENERAL:

1. There are two chillers with motorized isolation valves. The pumping system will be variable primary type with two pumps. The pump(s) will have a minimum flow condition equal to the minimum flow allowed by the chiller manufacturer. There will also be a bypass line with an automated control valve to allow the minimum flow of chillers. Minimum flow to be specified by the chiller manufacturer.

B. CENTRAL PLANT SYSTEM ENABLING/DISABLING

1. The occupied/unoccupied mode of operation shall be defined by the EMCS optimum start/stop schedule.
2. The EMCS shall enable the chilled water system based on an ambient temperature above 50° F (adj.) and requests for cooling. The number of requests shall be adjustable. This system enable will assign the lead/lag chillers and lead/lag pumps. Equipment will operate on a lead-lag and equal run time basis.
3. The lead chillers slow stroking, motorized isolation valve (120 seconds) shall open.
4. After a time delay allowing the motorized isolation valve to fully open, the lead chilled water pump shall start. If lead pump fails to start and flow not proven, system shall be able to auto rotate and start lag pump.
5. Once a chilled water pump has started and water flow has been proven, the lead chiller shall be enabled. If lead chiller fails to start, system shall be able to auto rotate and start lag chiller. The motorized isolation valve shall be opened/closed with the enabling/disabling of its corresponding chiller.
6. Upon each start of the chilled water system, it will activate a lag chiller enable delay of 1 hour (adj.) in order for the system loop and the lead chiller to stabilize.

C. CHILLED WATER TEMPERATURE CONTROL:

1. The chilled water setpoint will be controlled by EMCS by sending a setpoint signal 42°F (adj.) to each chiller control panel (UCP).
2. There shall be a linear chilled water supply temperature reset algorithm in between:
   a. 42°F (adj.) chilled water supply when outside air temperature is at or above 70°F (adj.)
   b. 46°F (adj.) chilled water supply when outside air temperature is at or below 50°F (adj.)

D. CHILLER DEMAND LIMIT:

1. Chiller demand limiting will be used at least 120 seconds (adj.) prior to the sequencing and staging up of lag chillers.
2. The chiller demand limit signal of 40% (adj.) will be sent by EMCS to chillers.
3. Once the staging up of lag chiller has occurred, the chiller limit signal shall stay active for an additional 300 seconds (adj.) to allow system to stabilize. After time delay is over, the chiller demand limiting signal shall be disabled

E. CHILLED WATER PUMPING SYSTEM:

1. Variable Primary Chilled Pumping System:
   a. One variable primary pump will be started when system is enabled. If lead pump fails to start and flow not proven, system shall be able to auto rotate and start lag pump.
   b. The speed of the pumps shall not drop below minimum output to maintain minimum flow through enabled chillers.
   c. Anytime a there is a call for two chillers to run simultaneously, there shall be a call for two pumps to run simultaneously.
   d. The pump VFD will be controlled by differential pressure transducer (s) across the supply and return piping at locations as shown on the drawings or as directed by the engineer. If the pressure is below setpoint, the pump speed will be increased. If the differential pressure is above setpoint, the pump speed will be decreased.
   e. The lag pump will activate whenever the speed of the first pump is at or above 90% (adj.) for 15 minutes (adj.). The lag pump shall turn on and operate in unison with the lead pump to maintain building load. Once both pumps are operating at 40% (adj.), for 15 minutes (adj.) the lag pump shall turn off and the lead pump shall remain on to maintain building load.
   f. The differential pressure setpoint for the pumping system shall be reset based on maximum chilled water valve position. If the maximum valve position is above 90% (adj.), then the differential set point will be set to maximum pressure as determined by the temperature control system contractor. If the maximum valve position is below 50% (adj.), then the differential pressure setpoint will be set to minimum pressure as determined by the temperature control system contractor. If the maximum valve position is between 90%-50% (adj.), then the differential pressure setpoint will modulate linearly between the minimum and maximum pressure setpoints.

F. CHILLED WATER BYPASS:

1. Minimum Flow:
   a. The chilled water bypass valve shall be initially closed and open as necessary to provide minimum flow to enabled chillers.
   b. Bypass valve shall monitor chiller flow meter to ensure minimum flow is being met by modulating bypass control valve open as necessary.
   c. As a failsafe backup to the flow meter, bypass valve shall also monitor the chilled water pressure drop across each chiller evaporator when a chiller is enabled. As the sensed differential pressure falls below the pressure drop associated with the chiller recommended flow rate, as provided by the chiller manufacturer, modulate the bypass control valve to maintain minimum flow. Initial default chiller evaporator pressure drop of 3 psi (adj.).

G. SAFETIES:

1. Freeze Protection:
   a. When the outside air (OA) temperature drops below 36°F (adj.), a primary pump will be started and all associated isolation valves opened. All building chilled water valves will be open to 20%.
   b. When the OA temperature rises 2°F above freeze protection setpoint for one hour, the reverse shall occur.

H. CONTROL POINTS:

Description	Type
Outside Air Temperature	AI
Building Common Chilled Water Supply Temperature	AI
Building Common Chilled Water Return Temperature	AI
Chiller Supply Water Temperature (Each Chiller)	AI
Chiller Return Water Temperature (Each Chiller)	AI
Chilled Water Bypass Temperature	AI
Chiller Evaporator Differential Pressure (Each Chiller)	AI
Building Flow	AI
Chiller Flow	AI
Makeup Water Flow	AI
Building Chilled Water Differential Pressure (Each Sensor)	AI
Chiller Amps/Status (Each Chiller)	AI
Chiller Alarm (Each Chiller)	AI
Pump Amps/Status (Each Pump)	AI
Motorized Valve Feedback Position (Each Valve)	AI
Chiller Start/Stop Command (Each Chiller)	DO
Pump Start/Stop Command (Each Pump)	DO
Pump VFD Speed (Each Pump)	AO
Chiller Supply Setpoint (Each Chiller)	AO
Chiller Capacity Limit (Each Chiller)	AO
Chiller Isolation Valve (Each Chiller)	AO
Chilled Water Bypass Valve	AO

CONDENSING VARIABLE PRIMARY HEATING WATER SYSTEM (OEM BOILER SEQUENCE)

A. GENERAL:

1. There are two boilers with circulating primary pumps and two building hot water pumps.

B. HEATING SYSTEM ENABLING/DISABLING:

1. The occupied/unoccupied mode of operation shall be defined by the EMCS optimum start/stop schedule.
2. The EMCS shall enable the hot water system based on an ambient temperature below 60° F (adj.) and requests for heating. The number of requests shall be adjustable. This system enable will enable the boiler sequencer that is provided by boiler manufacturer. Building pumps will operate on a lead-lag and equal run time basis.

C. HOT WATER PUMPING:

1. Building Pumping System:
   a. One variable building pump will be started when system is enabled. If lead pump fails to start and flow not proven, system shall be able to auto rotate and start lag pump.
   b. The pump VFD will be controlled by differential pressure transducer (s) across the supply and return piping at locations as shown on the drawings or as directed by the engineer. If the pressure is below setpoint, the pump speed will be increased. If the differential pressure is above setpoint, the pump speed will be decreased.
   c. The lag pump will activate whenever the speed of the first pump is at or above 90% (adj.) for 15 minutes (adj.). The lag pump shall turn on and operate in unison with the lead pump to maintain building load. Once both pumps are operating at 40% (adj.), for 15 minutes (adj.) the lag pump shall turn off and the lead pump shall remain on to maintain building load.
   d. The differential pressure setpoint for the pumping system shall be reset based on maximum hot water valve position. If the maximum valve position is above 90% (adj.), then the differential set point will be set to maximum pressure as determined by as determined by TAB contractor. If the maximum valve position is below 50% (adj.), then the differential pressure setpoint will be set to minimum pressure as determined by TAB contractor. If the maximum valve position is between 90%-50% (adj.), then the differential pressure setpoint will modulate linearly between the minimum and maximum pressure setpoints.

D. BOILER CONTROL:

1. Sequencing:
   a. The EMCS will enable the manufacturer provided boiler sequencer. The sequencer will modulate boilers.
2. Primary Circulating Pumps:
   a. Primary circulating pumps shall be hardwired interlocked with boiler.
   b. Primary circulating pumps shall run continuously anytime there is a call for its associated boiler.

E. HOT WATER TEMPERATURE CONTROL:

1. The hot water setpoint will be sent by EMCS to sequencer and sequencer will modulate boilers to meet setpoint.
2. There shall be a linear hot water supply temperature reset algorithm in between:
   a. 100°F (adj.) hot water supply when outside air temperature is at or above 60°F (adj.)
   b. 130°F (adj.) hot water supply when outside air temperature is at or below 45°F (adj.)

F. SAFETIES:

1. Freeze Protection:
   a. When the outside air (OA) temperature drops below 36°F (adj.), a building pump will be started. All building hot water valves will be open to 20%.
   b. When the OA temperature rises 2°F above freeze protection setpoint for one hour, the reverse shall occur.
2. CO Monitoring:
   a. A carbon monoxide sensor shall be installed in boiler room.
   b. Carbon monoxide sensor shall be hardwired interlocked with boiler(s) and shutdown boiler(s) when carbon monoxide rises above 50 ppm.
   c. Carbon monoxide alarm shall disable any supply fans in boiler room and enable all exhaust fans in boiler room.

G. CONTROL POINTS:

Description	Type
Outside Air Temperature	AI
Building Common Hot Water Supply Temperature	AI
Building Common Hot Water Return Temperature	AI
Boiler Supply Water Temperature (Each Boiler)	AI
Boiler Return Water Temperature (Each Boiler)	AI
Building Flow	AI
Makeup Water Flow	AI
Building Hot Water Differential Pressure (Each Sensor)	AI
Boiler Amps/Status (Each Boiler)	AI
Boiler Alarm (Each Boiler)	AI
Circulation Pump Amps/Status (Each Pump)	AI
Building Pump Amps/Status (Each Pump)	AI
CO Monitoring Alarm	DI
Boiler Sequencer System Enable	DO
Boiler Sequencer Hot Water Setpoint	AO
Building Pump Start/Stop Command (Each Pump)	DO
Building Pump VFD Speed (Each Pump)	AO

VARIABLE AIR VOLUME AIR HANDLING UNIT (CHILLED WATER/ HOT WATER PREHEAT)

A. GENERAL:

1. The unit shall have supply fan, hot water coil, chilled water coil and outside air damper. The control system contractor shall provide a dedicated stand-alone DDC controller for each unit.

B. UNIT ENABLING/DISABLING:

1. The occupied/unoccupied mode of operation shall be defined by the EMCS optimum start/stop schedule.
2. During unoccupied times, a minimum number of associated VAV boxes, 40% (adj.), shall request the AHU before AHU is allowed to operate.

C. FAN CONTROL:

1. The unit shall operate when the associated VAV boxes it serves are in occupied mode and operational.
2. The supply fan VFD will be controlled by static pressure transducer 2/3rds of the way down the longest supply duct run. If the static pressure is below setpoint, the supply fan speed will be increased. If the static pressure is above setpoint, the supply fan speed will be decreased.
3. A static pressure reset algorithm shall be used with minimum and maximum limits of .5" to 1.2" (adj.). VAV boxes shall be polled for damper position. Static pressure shall be slowly decreased until 25% (adj.) of the VAV box damper positions are at least 90% open.

D. TEMPERATURE CONTROL:

1. Warm-up or Cool-down:
   a. The EMCS shall determine the required warm-up or cool-down period based on the optimized start algorithm.
   b. Upon enabling the unit, the unit shall heat or cool as required to satisfy the occupied heating or cooling setpoints of 60% (adj.) of the VAV boxes (initially 70°F heating, 74°F cooling) as sensed by a space temperature sensor.
   c. During warm-up, the supply air discharge temperature shall be 90°F (adj.). During cool-down, the supply air temperature shall be 55°F (adj.).
   d. Once the occupied setpoint temperature threshold has been reached, the EMCS shall switch the unit to the occupied mode.
2. Occupied Mode:
   a. Preheat Coil:
      (1) The preheat valve will modulate to maintain precool discharge air temperature of 50°F (adj.). Preheat coil shall be disabled when ambient outside air temperature is above 55°F (adj.).
   b. Cooling Coil:
      (1) The chilled water valve will modulate to initially maintain unit discharge supply air temperature of 55°F (adj.). There shall be a linear supply air temperature reset algorithm in between:
         i. 55°F (adj.) supply air temperature supply when outside air temperature is at or above 80°F (adj.)
         ii. 60°F(adj.) supply air temperature supply when outside air temperature is at or below 50°F (adj.)

E. OUTSIDE AIR DAMPER CONTROL:

1. Warm-up or Cool-down:
   a. The outside air damper shall be closed.
2. Occupied Mode:
   a. EMCS shall monitor the CO2 level at return air duct/plenum:
      (1) When CO2 levels are below 1100 ppm (adj.), the outside air damper shall be at the minimum position (adj.) as set by TAB. Reference scheduled CFM.
      (2) When CO2 levels are above 1200 ppm (adj.), the outside air damper shall be at the maximum position (adj.) as set by TAB. Reference scheduled CFM.
3. Unoccupied mode:
   a. The outside air damper shall be closed.

F. DRY BULB ECONOMIZER MODE: (Utilize when economizer exemption cannot be taken)

1. In occupied or unoccupied mode, outside air temperature is 60°F (adj.) or below and there is a call for cooling, the unit shall be in economizer mode. Outside air damper is to open 100% and to provide free cooling. If cold deck setpoint is not meet within 10 min (adj.), mechanical cooling will be enabled.

G. SAFETIES:

1. Freeze Protection:
   a. When the outside air (OA) temperature drops below 36°F (adj.), chilled water and hot water valves will be open to 20% if not already open.
   b. When the OA temperature rises 2°F above freeze protection setpoint for one hour, the reverse shall occur.
2. Freeze Stat:
   a. A temperature low limit switch shall be provided to disable the unit and close all dampers when it senses that the air temperature is below 36°F (adj.)
3. Static Pressure Switch
   a. A high static pressure switch shall be provided to disable the unit and close all dampers when pressure switch is activated.

H. CONTROL POINTS:

Description	Type
Fan Amps/Status	AI
Filter Alarm	DI
Mixed Air Temperature	AI
Return Air Temperature	AI
Return Air Humidity	AI
Return Air CO2	AI
Preheat Supply Temperature (PreCool)	AI
Unit Discharge Air Temperature	AI
Static Pressure Sensor	AI
Freeze Status Alarm	DI
High Static Alarm	DI
Fan Start/Stop Command	DO
Fan VFD Speed	AO
Chilled Water Valve	AO
Hot Water Valve	AO
Outside Air Damper	AO

VAV TERMINAL UNIT WITH HOT WATER REHEAT

A. GENERAL:

1. The variable air volume (VAV) terminal unit with hot water reheat shall serve intended spaces. The control system contractor shall provide a dedicated stand-alone DDC controller for each unit.

B. UNIT ENABLING/DISABLING:

1. The occupied/unoccupied mode of operation shall be defined by the EMCS schedule.
2. During unoccupied times, as required to maintain the unoccupied heating and cooling setpoints 55°F (adj.) heating and 85°F (adj.) cooling as sensed by the space temperature sensor.

C. TEMPERATURE CONTROL:

1. Warm-up or Cool-down:
   a. The EMCS shall determine the required warm-up or cool-down period based on the optimized start algorithm.
   b. Upon enabling the unit, the unit shall heat and cool as required to maintain the occupied heating and cooling setpoints (initially 70°F heating, 74°F cooling) as sensed by a space temperature sensor.
   c. During warm-up, the VAV box shall modulate to max heating CFM and the hot water valve shall be closed. Once the occupied setpoint temperature threshold has been reached, the EMCS shall switch the VAV box to the occupied mode.
   d. During cool-down, the VAV box shall modulate to max cooling CFM and the hot water valve shall be closed. Once the occupied setpoint temperature threshold has been reached, the EMCS shall switch the VAV box to the occupied mode.
2. Occupied Mode:
   a. The unit shall heat and cool as required to maintain the occupied heating and cooling setpoints (initially 70°F heating, 74°F cooling) as sensed by a space temperature sensor.
   b. On a rise in space temperature, the unit will modulate to provide max cooling CFM. As space temperature decreases, the box will modulate down to its minimum cooling CFM. As the space temperature continues to fall to below the spaces heating set point, the VAV terminal shall modulate its heating minimum heating CFM. At this point, the hot water valve will modulate to maintain heating leaving air temperature setpoint of 90°F (adj.). The VAV box shall modulate CFM to maintain space temperature setpoint.
   c. The unit shall not enter heating mode unless outside air temperature is below 60° F (adj.).
3. Unoccupied Mode:
   a. The VAV box shall modulate CFM and hot water valve as needed to maintain unoccupied space temperature setpoints.

D. CONTROL POINTS:

Description	Type
Space Temperature	AI
Discharge Air Temperature	AI
Discharge Air CFM Flow	AI
Damper Position	AO
Hot Water Valve	AO

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SEAL:

11/7/2025

FILE:
DRAWN BY: MC
CHECKED BY: JS

ISSUE:

03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

MECHANICAL CONTROLS

Scale: AS NOTED

M.604

ELECTRICAL ABBREVIATIONS

(ALL ABBREVIATIONS MAY NOT APPEAR ON DRAWINGS)

A	AMPERE(S)
AC	ALTERNATING CURRENT
ACCU	AIR-COOLED CONDENSING UNIT
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFI	ARC FAULT INTERRUPTOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY(ROOT MEAN SQUARE ALTERNATE)
ALT	ALTERNATE
APPROX	APPROXIMATE OR APPROXIMATELY
ARCH	ARCHITECT
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
AWG	AMERICAN WIRE GAGE
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
BLDG	BUILDING
BOD	BOTTOM OF DUCT
BOT	BOTTOM OF TRAY
C	CONDUIT OR TUBING
CAT NO.	CATALOG NUMBER
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCTV	CLOSED-CIRCUIT TELEVISION
CKT	CIRCUIT
CLG	CEILING
CND	CONDUCTOR
COMM	COMMUNICATIONS
CONT	CONTINUATION
CT(S)	CURRENT TRANSFORMER(S)
DC	DIRECT CURRENT
DISC	DISCONNECT
DIV	DIVISION
DPDT	DOUBLE-POLE, DOUBLE THROW
DPST	DOUBLE POLE, SINGLE THROW
DWG(S)	DRAWING(S)
EC	ELECTRICAL CONTRACTOR
EGC	EQUIPMENT GROUNDING CONDUCTOR
EHH	ELECTRICAL HANDHOLE
ELEC	ELECTRIC/ELECTRICAL
ELEV	ELEVATION
EMG	EMERGENCY
EMH	ELECTRICAL MANHOLE
EMT	ELECTRICAL METALLIC TUBING
EQPT	EQUIPMENT
ES	ENERGY SAVING
EWC	ELECTRICAL WATER COOLER
EWH	ELECTRICAL WATER HEATER
EX	EXISTING
EXH	EXHAUST
F	FUSE(S)
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OWNER
FL	FLOOR
FLA	FULL LOAD AMPERE(S)
FLEX	FLEXIBLE
FS	FUSIBLE SAFETY SWITCH/FUSIBLE SWITCH
FUT	FUTURE
FVNR	FULL VOLTAGE, NON-REVERSING
FVR	FULL VOLTAGE, REVERSING
G	GROUND
GFI/GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GS	GALVANIZED STEEL
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HORIZ	HORIZONTAL
HP	HORSEPOWER
HPF	HIGH POWER FACTOR
HPS	HIGH PRESSURE SODIUM
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
HZ	HERTZ
IES	ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA
IECC	INTERNATIONAL ENERGY CONSERVATION CODE
IG	ISOLATED GROUND
IMC	INTERMEDIATE METALLIC CONDUIT
INST	INSTRUMENT/INSTRUMENTATION
JBOX	JUNCTION BOX
KA	KILOAMPERE(S)
KW	KILOWATTS(S)
KWH	KILOWATT-HOUR(S)
KV	KILOVOLT(S)
KVA	KILOVOLT-AMPERE(S)
KVAR	KILOVOLT-AMPERE(S) REACTIVE
LED	LIGHT EMITTING DIODE
LPF	LOW POWER FACTOR
LPS	LOW PRESSURE SODIUM
LTG	LIGHTING
m	METER(S)
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MECH	MECHANICAL
MEZZ	MEZZANINE
MH	METAL HALIDE
MIC	MICROPHONE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
mm	MILLIMETER(S)
MMS	MANUAL MOTOR STARTER
MTD	MOUNTED
MTR	MOTOR
MTS	MANUAL TRANSFER SWITCH
MV	MEDIUM VOLTAGE
MVA	MEGAVOLT-AMPERE(S)
MVAR	MEGAVOLT-AMPERE(S) REACTIVE
MW	MEGAWATT(S)
NC	NORMALLY CLOSED
NL	NIGHT LIGHT (UNSWITCHED CIRCUIT)
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NFS	NON-FUSIBLE SAFETY SWITCH
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OH	OVERHEAD
P	POLE(S)
PA	PUBLIC ADDRESS SYSTEM
PF	POWER FACTOR
PL	PILOT LIGHT
PNL	PANELBOARD
PVC	POLYVINYL CHLORIDE
RC	REMOTE CONTROL
RCP	REFLECTED CEILING PLAN
REC	RECEPTACLES(S)
RGS	RIGID GALVANIZED STEEL
RVSS	REDUCED VOLTAGE, SOLID STATE
SF	SQUARE FOOT OR FEET
SPDT	SINGLE-POLE, DOUBLE-THROW
SPST	SINGLE-POLE, SINGLE-THROW
SS	START-STOP
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SPD	SURGE PROTECTIVE DEVICE
ST	SHUNT TRIP
TA	TRIP AMPERE(S)
TAS	TEXAS ACCESSIBILITY STANDARDS
TEL	TELEPHONE
TEMP	TEMPORARY
TV	TELEVISION
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES, INC.
UPS	UNINTERRUPTIBLE POWER SUPPLY
UNO	UNLESS NOTED OTHERWISE
V	VOLTAGE OR VOLT(S)
VA	VOLT-AMPERE(S)
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
W	WATT(S)
WP	WEATHERPROOF
W/	WITH
W/O	WITHOUT
XFMR	TRANSFORMER
XP	EXPLOSION-PROOF
△	DELTA
#	NUMBER
Ø	PHASE(S)

ELECTRICAL CONVENTIONS

LB-3 — PANELBOARD, SWITCHBOARD OR MOTOR CONTROL CENTER DESIGNATION

BRANCH CIRCUIT HOMERUN TO PANELBOARD. EGC TO BE RUN WITH ALL CIRCUITS SIZED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC)

- CONDUIT CONCEALED
- CONDUIT UNDERGROUND
- CONDUIT EXPOSED
- CONDUIT CAPPED OFF
- CONDUIT CONTINUED
- CONDUIT RUN UP
- CONDUIT RUN DOWN
- GROUND WIRE CONCEALED
- GROUND SYSTEM

LIGHTING SYMBOL LEGEND

(ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS)

GENERAL

	NO HATCH INDICATES NORMAL POWER LIGHT FIXTURE
	HALF SOLID INDICATES EGRESS LIGHT WITH EMERGENCY BATTERY
	DOWNLIGHT FIXTURE
	2X2 LIGHT FIXTURE
	2X4 LIGHT FIXTURE
	4 FEET STRIP LIGHT FIXTURE
	WALL MOUNTED LIGHT FIXTURE
	EMERGENCY LIGHT FIXTURE
	CLG MTD EXIT LIGHT - SHADING INDICATEDS NUMBER OF FACES. ARROWS INDICATE ORIENTATION
	WALL MTD EXIT LIGHT - SHADING INDICATEDS NUMBER OF FACES. ARROWS INDICATE ORIENTATION
	POLE MOUNTED SITE LIGHTING FIXTURE
	BOLLARD LIGHT FIXTURE

LIGHTING CONTROL LEGEND

(ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS)

GENERAL

^{a} - SUPERSCRIPT DENOTES FIXTURE BEING CONTROLLED
- K - KEY OPERATED SWITCH
- T- TIMER SWITCH
- 3 - THREE WAY SWITCH
- WP - WEATHERPROOF SWITCH

PC	PHOTOCELL (MATCH CONTACTOR COIL VOLTAGE AS REQUIRED)
$	TOGGLE SWITCH - SPST
TC	DIGITAL PROGRAMMABLE TIME CLOCK
$OS	WALL MOUNTED OCCUPANCY SENSOR / SWITCH
$VS	WALL MOUNTED VACANCY SENSOR / SWITCH
$VSD	WALL MOUNTED VACANCY SENSOR / DIMMER SWITCH
$LV	WALL MOUNTED LOW VOLTAGE PUSH BUTTON / KEY PAD
$LVD	WALL MOUNTED LOW VOLTAGE DIMMER SWITCH
VS	CEILING MOUNTED VACANCY SENSOR
OS	CEILING MOUNTED OCCUPANCY SENSOR
DS	CEILING MOUNTED DAY LIGHT SENSOR

ELECTRICAL SYMBOL LEGEND

(ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS)

$M	MOTOR RATED SWITCH WITHOUT OVERLOAD PROTECTION
J	JUNCTION BOX
PB	PULLBOX
	TELEPOWER/COMMUNICATIONS POLE
	CEILING MOUNTED DUPLEX RECEPTACLE, NEMA 5-20R
CT	DUPLEX RECEPTACLE, NEMA 5-20R, MOUNTED 6" ABOVE COUNTERTOP
CT	GFCI DUPLEX RECEPTACLE, NEMA 5-20R, MOUNTED 6" ABOVE COUNTERTOP
WP	GFCI DUPLEX RECEPTACLE, NEMA 5-20R IN WEATHER PROOF ENCLOSURE
	HALF CONTROLLED DUPLEX RECEPTACLE NEMA 5-20R
	QUADRUPLEX RECEPTACLE, NEMA 5-20R
	HALF CONTROLLED QUADRUPLEX RECEPTACLE, NEMA 5-20R
E	EMERGENCY POWER DUPLEX RECEPTACLE, NEMA 5-20R, RED COLOR FINISH
E	CEILING MTD EMERGENCY POWER DUPLEX RECEPTACLE, PROVIDE RED OUTLET AND COVERPLATE

ELECTRICAL SYMBOL LEGEND

(ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS)

TR	TAMPER RESISTANT DUPLEX RECEPTACLE, NEMA 5-20R,
IG	ISOLATED GROUND DUPLEX RECEPTACLE, NEMA 5-20R, ORANGE COLOR FINISH
	DUPLEX RECEPTACLE, NEMA 5-20R, PROTECTED BY GFCI BREAKER
	SPECIAL PURPOSE RECEPTACLE - WALL MOUNTED
	FLOOR BOX OR POKE THROUGH DEVICE
	DUPLEX RECEPTACLE, NEMA 5-20R, MOUNT AT SPECIAL HEIGHT, REFER TO THE ARCHITECTURAL ELEVATION
	GFCI DUPLEX RECEPTACLE, NEMA 5-20R, MOUNT AT SPECIAL HEIGHT, REFER TO THE ARCHITECTURAL ELEVATION
	QUAD. RECEPTACLE, NEMA 5-20R, MOUNT AT SPECIAL HEIGHT, REFER TO THE ARCHITECTURAL ELEVATION
E	EMERGENCY POWER DUPLEX RECEPTACLE, MOUNT AT SPECIAL HEIGHT, REFER TO THE ARCHITECTURAL ELEVATION
IG	ISOLATED GROUND DUPLEX RECEPTACLE, MOUNT AT SPECIAL HEIGHT, REFER TO THE ARCHITECTURAL ELEVATION
	DUPLEX RECEPTACLE PROTECTED BY GFCI BREAKER, MOUNT AT SPECIAL HEIGHT, REFER TO THE ARCHITECTURAL ELEVATION
W	TELECOMMUNICATIONS WALL MTD OUTLET WITH MINIMUM 1"C. TO ABOVE CEILING, 48" AFF TO CENTER
	TELECOMMUNICATIONS/DATA WALL OUTLET WITH MINIMUM 1" C. TO ABOVE CEILING 18" TO CENTER UNO
	CEILING MTD VOICE/DATA DEVICE
	TELECOMMUNICATIONS TERMINAL BOARD
TV	TELEVISION DEVICE JUNCTION BOX WITH 1" C. TO ABOVE ACCESSIBLE CEILING
	MOTOR
30/3/1	NON-FUSED DISCONNECT SWITCH (AMPS/POLES/NEMA RATING)
30/3/25/3R	FUSED DISCONNECT SWITCH (AMPS/POLES/FUSE RATING/NEMA RATING)
30/3/25/5R/00	COMBINATION DISCONNECT SWITCH/MOTOR STARTER (AMPS/POLES/FUSE RATING/NEMA RATING/STARTER SIZE)
VFD	VARIABLE FREQUENCY DRIVE
	ELECTRICAL PANEL (SURFACE OR FLUSH MOUNTED AS NOTED ON PANEL SCHEDULE AND DRAWINGS)
	MISC. CONTROL PANEL (SURFACE OR FLUSH MOUNTED AS NOTED ON DRAWINGS)
T	TRANSFORMER
	PUSH BUTTON MTD AT 48" TO CENTER UNO
	GROUND BAR
	WIREMOLD, NEMA 5-20R RECEPTACLE 24" O.C. UNO
	CEILING MOUNTED CAMERA
	CEILING MOUNTED SPEAKER
J	JUNCTION BOX (ELEC. ONE-LINE)
M	METER (ELEC. ONE-LINE)
SPD	SURGE PROTECTION DEVICE (ONE-LINE)
	TRANSFORMER (ELEC. ONE-LINE)
	GROUND OR GROUND ROD AS NOTED ON PLAN / DRAWING
EPO	EMERGENCY POWER OFF PUSHBUTTON WITH COVER
CR	CARD READER AT 48" AFF TO TOP OF DEVICE, UNO
DR	DOOR RELEASE SWITCH AT 48" AFF TO TOP OF DEVICE, UNO

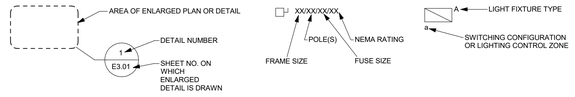
NOTES:

1) STANDARD MOUNTING HEIGHT FOR ALL POWER, DATA/VOICE OUTLETS SHALL BE 18" AF.F. TO TOP OF DEVICE, U.N.O.

2) RECEPTACLE WITH SUBSCRIPT 'IG' SHALL BE ISOLATED GROUND RECEPTACLES.

3) STANDARD MOUNTING HEIGHT FOR ALL LIGHT SWITCH, WALL SENSOR, TIMER AND PUSH BUTTON WILL BE 48" A.F.F TO TOP OF DEVICE, U.N.O.

GRAPHIC SYMBOLS



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11/07/2025

FILE:
DRAWN BY: AG
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ISSUE:	Project Status
03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT
	COMMENTS #00
11/07/2025	100% CD/PERMIT

ELECTRICAL SYMBOL LEGEND

Scale: AS NOTED

E.001

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Registration No. F-001731
Project Number: D21-2552.00

GENERAL POWER NOTES

A. REFER TO ARCHITECTURAL PLANS, ELEVATIONS AND DETAILS FOR EXACT LOCATION OF ALL WIRING DEVICES.

B. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND ALL LOCAL, STATE CODES.

C. ALL FLOOR CUTTINGS SHALL BE COORDINATED WITH STRUCTURAL DRAWINGS FOR RESTRICTIONS. COORDINATE WITH STRUCTURE ENGINEER AND GENERAL CONTRACTOR.

D. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN CODE REQUIRED MINIMUM CLEARANCES AROUND ELECTRICAL EQUIPMENT FOR WORKING SPACE, DEDICATED SPACE, ACCESSIBILITY FOR MAINTENANCE AND OPERATION.

E. MECHANICAL EQUIPMENT WILL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. THE LOCATION SHOWN ON ELECTRICAL DRAWINGS ARE APPROXIMATE. REFER TO MECHANICAL DRAWINGS AND COORDINATE WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION OF EACH PIECE OF EQUIPMENT AND DETERMINE EXACT ROUGH-IN AND CONNECTION REQUIREMENTS.

F. ELECTRICAL CONTRACTOR SHALL MAKE ALL ELECTRICAL POWER CONNECTIONS TO HVAC, PLUMBING, KITCHEN AND OTHER EQUIPMENT AS REQUIRED.

G. ALL RECEPTACLES SHALL BE LABELED WITH ELECTRICAL PANEL NAME AND THE CIRCUIT FEEDING THEM.

H. PROVIDE A TYPED DIRECTORY IN ALL PANELBOARDS CLEARLY DESCRIBING THE LOCATION OF AND TYPE OF LOAD BEING SERVED FOR ALL CIRCUITS. PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR ALL PANELBOARDS AND DISCONNECT SWITCHES.

I. MINIMUM 20A BRANCH CIRCUIT SHALL BE 2#12, #12G, 3/4"C AND 2#10, #10G, 3/4"C FOR 30A BRANCH CIRCUIT. ALL CONDUCTORS SHALL BE COPPER, 75 DEGREE C, TYPE THHN/THWN EXCEPT WHERE OTHERWISE REQUIRED BY SPECIFICATION OR CODES.

J. ALL 120V CIRCUITS LONGER THAN 70 FEET SHALL BE #10 AWG AND 277V CIRCUITS LONGER THAN 150 FEET SHALL BE #10 AWG UNLESS NOTED OTHERWISE.

K. ALL RECEPTACLES LOCATED WITH 6 FEET OF EDGE OF SINK SHALL BE GFCI TYPE. EACH GFCI RECEPTACLE SHALL BE INSTALLED SO THAT IT WILL NOT TRIP OTHER RECEPTACLES FED FROM SAME CIRCUIT. FEED-THOUGH GFCI OUTLET IS NOT ALLOWED.

L. WHERE THE RECEPTACLES ARE SHOWN BACK-TO-BACK ON A COMMON FIRE RATED WALL, OFFSET THE TWO BOXES AT LEAST 24 INCHES HORIZONTAL DISTANCE PER CODE.

M. ALL EXTERIOR AND ROOF MOUNTED RECEPTACLES SHALL BE GFCI TYPE AND EQUIPPED WITH LISTED "EXTRA DUTY" WEATHERPROOF IN-USE COVER PER NEC.

N. ALL ELECTRICAL EQUIPMENT SHALL BE RAINTIGHT (NEMA 3R) WHERE EXPOSED TO THE WEATHER. ALL FLEX CONDUITS CONNECTED TO SUCH EQUIPMENT SHALL BE LIQUIDTIGHT.

O. PROVIDE A PULLWIRE FOR ALL EMPTY CONDUITS.

P. PROVIDE FIRE RETARDANT U.L. APPROVED SEALANT ON ALL PENETRATIONS, WALLS, AND STRUCTURAL SLABS. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO VERIFY PRIOR TO SUBMITTING BID, THE LOCATIONS OF ALL SUCH FIRE RATED PARTITIONS, WALLS AND STRUCTURAL SLABS.

Q. WHERE CORE DRILLING OF FLOORS/WALLS IS REQUIRED, THE CONTRACTOR SHALL SEAL OPENINGS WATERTIGHT AFTER UTILITIES HAVE BEEN INSTALLED. LOCATION OF CORED HOLES SHALL COORDINATE WITH LOCATION OF EQUIPMENT IN A MANNER THAT IS CLEAN AND FUNCTIONAL.

R. ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT, BACKBOX ROUGH-IN AND RELATED ELECTRICAL WORK FOR ALL PHONE/DATA, CARD READER, ELECTRIC DOOR STRIKE, PUSH-PLATES, HOLD OPEN DEVICES, DEVICES, ETC. REFER TO THE ARCHITECTURAL DRAWINGS, LOW VOLTAGE, SECURITY AND NURSE CALL VENDOR'S DRAWINGS FOR EXACT DEVICE LOCATION. ALL LOW VOLTAGE WIRING SHALL BE BY LOW VOLTAGE CONTRACTOR.

S. IT SHALL NOT BE THE INTENT OF THESE PLANS AND/OR SPECIFICATIONS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR SHALL BE EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PROVIDE ALL LABOR, MATERIALS AND SUPERVISION NECESSARY TO ACCOMPLISH THE WORK.

T. ELECTRICAL CONTRACTOR SHALL COORDINATE THEIR WORK WITH ALL OTHER CONTRACTORS AND TRADES BEFORE INSTALLATION OF THEIR WORK IN CHASES, CEILING SPACES AND OTHER AREAS WHERE CONFLICT MAY OCCUR.

U. ARC-FLASH HAZARD WARNING LABELS SHALL BE PROVIDED AND APPLIED TO SWITCHBOARD, PANELBOARDS, MOTOR CONTROL CENTER, DISCONNECT SWITCHES AND EQUIPMENT CONTROLLERS PER NEC ARTICLE 110.16. THE LABEL SHALL BE PERMANENTLY AFFIXED TO THE EQUIPMENT AND SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. ALSO, FOR SERVICE EQUIPMENT RATED 1,200 AMPS OR MORE NOT SERVING DWELLING UNIT, THE LABEL SHALL CONTAIN THE FOLLOWING INFORMATION:

- NOMINAL SYSTEM VOLTAGE.
- AVAILABLE FAULT CURRENT AT THE SERVICE OVERCURRENT PROTECTIVE DEVICES.
- THE CLEARING TIME OF SERVICE OVERCURRENT PROTECTIVE DEVICES BASED ON THE AVAILABLE FAULT CURRENT AT THE SERVICE EQUIPMENT.
- THE DATE THE LABEL WAS APPLIED.

V. CODE COMPLIANT FIRE ALARM SYSTEM EXTENSION SHALL BE PROVIDED BY FIRE ALARM CONTRACTOR. ALL FIRE ALARM WORK SHALL BE BY A STATE LICENSED FIRE ALARM CONTRACTOR WHO SHALL DESIGN AND INSTALL THE SYSTEM. REQUIRED FIRE ALARM DEVICES ARE NOT INDICATED ON THESE PLANS. SHOP DRAWINGS OF SYSTEM SHALL BE SUBMITTED TO AHJ FOR APPROVAL PRIOR TO INSTALLATION. REFER TO THE SPECIFICATION FOR ADDITIONAL REQUIREMENTS.

W. ALL CIRCUITS SHALL BE PROVIDED WITH INDEPENDENT GROUND AND NEUTRAL WIRES. NO MULTIWIRE (SHARED NEUTRAL) BRANCH CIRCUITS SHALL BE PERMITTED.

GENERAL LIGHTING NOTES

A. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND ELEVATION FOR EXACT LOCATION OF ALL LIGHT FIXTURES. COORDINATE LIGHT FIXTURES WITH GRILLES, DIFFUSERS, CEILING MOUNTED FIRE ALARM DEVICES, SECURITY DEVICES, SPRINKLER HEADS AND ACCESS PANELS, ETC. TO AVOID CONFLICTS. PROVIDE FIXTURE MOUNTING BRACKETS, ACCESSORIES, PLASTER FRAMES, ETC. SUITABLE FOR CEILING TYPES INDICATED ON THE ARCHITECTURAL REFLECTED CEILING PLANS.

B. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES BETWEEN LIGHTING PLANS AND REFLECTED CEILING PLANS RELATING TO QUANTITY, TYPE AND LOCATION OF LIGHT FIXTURES.

C. GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY IF CONFLICTS OCCUR BETWEEN LIGHTING PLAN AND ANY OTHER TRADES. DO NOT PROCEED WITH THE INSTALLATION IN THAT AREA UNTIL THE CONFLICT HAS BEEN RESOLVED TO THE SATISFACTION OF THE ARCHITECT AND ENGINEER.

D. IN AREAS INDICATED TO HAVE OCCUPANCY SENSOR FOR LIGHTING CONTROL, IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH LIGHTING CONTROL MANUFACTURER AND REPRESENTATIVE AND PROVIDE ALL REQUIRED POWER PACKS, SENSORS, AND CONTROLLER QUANTITY. LOCATE AND AIM THE SENSOR OR PHOTOCELL FOR A COMPLETE AND PROPER AREA COVERAGE IN ACCORDANCE WITH DEVICE MANUFACTURER'S RECOMMENDATIONS. WHERE CEILING MOUNTED SENSORS AE SHOWN WITH WALL SWITCHES FOR CONTROL OF THE SAME AREA, CONNECT SENSOR/POWER PACK DOWNSTREAM OF WALL SWITCH. PROVIDE SHOP DRAWINGS WITH DEVICE LAYOUT AND SYSTEM FOR ENGINEER TO REVIEW. PRIOR TO FINAL SITE INSPECTION, LIGHTING CONTROL VENDOR SHALL PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SYSTEM HAS BEEN TESTED TO ENSURE PROPER CALIBRATION, ADJUSTMENT, PROGRAMMING AND OPERATION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENT AND MANUFACTURER'S INSTRUCTION PER IECC 2021 - SECTION 408.3 REQUIREMENT.

E. FOR ALL LIGHT FIXTURES WITH EMERGENCY BATTERY PACK, THE BATTERY SHALL BE RATED FOR A FULL 90 MINUTE BACKUP WITH INTEGRAL TEST BUTTON.

F. ALL EXIT SIGNS, EMERGENCY UNITS, BATTERY / INVERTER POWERED LIGHTS AND LIFE-SAFETY BRANCH LIGHT FIXTURES LOCATED IN PUBLIC CORRIDOR, STAIRWELL, OR EGRESS PATH SHALL NOT BE SWITCHED.

G. CONNECT EXIT SIGNS AND EMERGENCY BATTERY UNITS TO NEAREST LIGHTING BRANCH CIRCUIT AHEAD OF LIGHT SWITCH, DIMMING MODULES AND/OR TIME CLOCK, PHOTO-CELL. EXTEND ADDITIONAL "HOT" CONDUCTOR TO KEEP THE DEVICES UN-SWITCHED.

H. MINIMUM 20A BRANCH CIRCUIT SHALL BE 2#12, #12G, 3/4"C AND 2#10, #10G, 3/4"C FOR 30A BRANCH CIRCUIT. ALL CONDUCTORS SHALL BE COPPER, 75 DEGREE C, TYPE THHN/THWN EXCEPT WHERE OTHERWISE REQUIRED BY SPECIFICATION OR CODES.

I. ALL 120V CIRCUITS LONGER THAN 70 FEET SHALL BE #10 AWG AND 277V CIRCUITS LONGER THAN 150 FEET SHALL BE #10 AWG UNLESS NOTED OTHERWISE.

GENERAL DEMOLITION NOTES

A. REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR EXTENT OF DEMOLITION WORK.

B. DEMOLITION DRAWINGS ARE BASED ON EXISTING PLANS AND FIELD INVESTIGATION PRIOR TO DEMOLITION. CONTACTOR SHALL VISIT THE SITE BEFORE BIDDING IN ORDER TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND AVOID CONFLICTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS AND THE JOB SITE CONDITION AND TAKE THOSE DISCREPANCIES INTO ACCOUNT WHEN BIDDING OR SUBMIT BIDDING PROPOSAL.

C. ELECTRICAL CONTRACTOR SHALL COORDINATE SERVICE INTERRUPTION WITH THE OWNER, ARCHIECT, UTILITY COMPANY AND SHALL NOT INTERRUPT POWER WITHOUT THE OWNER/ARCHITECT'S PERMISSION.

D. LOCATE ALL EXISTING UTILITIES PRIOR TO STARTING THE WORK. PROTECT EXISTING UTILITIES FROM DAMAGE.

E. DEVICES, LIGHTS SHOWN IN A SOLID LINE OR MARKED 'E' ARE EXISTING TO REMAIN AND SHALL REMAIN CONNECTED TO THEIR ORIGINAL CIRCUITS UNLESS NOTED OTHERWISE. NOT ALL EXISTING DEVICES AND LIGHTS ARE NECESSARY SHOWN ON THE DEMOLITION PLANS, CONTRACTOR TO FIELD VERIFY.

F. DEVICES, LIGHTS SHOWN IN A DASHED LINETYPE OR MARKED 'R' ARE EXISTING TO BE REMOVED OR RELOCATED. WHERE ITEMS ARE REMOVED, REMOVE ALL ASSOCIATED WIRING, CONDUITS, BOXES, FASTENERS, ETC. BACK TO J-BOXES ABOVE CEILING OR BACK TO PANELBOARDS UNLESS NOTED OTHERWISE.

G. REMOVE ALL EXISTING POWER, VOICE/DATA AND SPECIAL SYSTEM OUTLETS IN DEMOLITION WALLS AND RENOVATED AREA WITH ASSOCIATED WIRING AND CONDUITS BACK TO NEAREST CEILING JUNCTION BOXES OR PANELBOARDS.

H. RELOCATE EXISTING LIGHT FIXTURES, LIGHT SWITCHES IF AFFECTED BY INSTALLATION OF NEW WALL AND RECONNECT TO EXISTING LIGHTING CIRCUIT.

I. REMOVE ALL FLOOR MOUNTED RECEPTACLES LOCATED IN THE DEMOLITION AREA, GROUT OF HOLES.

J. REMOVE ALL CONDUIT, BOXES LEFT EXPOSED BY REMOVAL OF WALLS AND CEILINGS IN REMODELED AREAS.

K. WHERE REMOVED ITEM RESULTS IN DISCONTINUATION OF POWER TO DOWNSTREAM DEVICES, THE CONTRACTOR SHALL PROVIDE ALL NECESSARY REWIRING SO THAT THE EXISTING SYSTEM REMAINS IN GOOD OPERATION. RELOCATE EXISTING ELECTRICAL POWER OR LIGHTING EQUIPMENT OR SYSTEMS AS REQUIRED THAT INTERFERE WITH THEW NEW WORK AND TO ACCOMMODATE THE WORK OF OTHER TRADES. ELECTRICAL DEVICES, LIGHTS, EQUIPMENTS AND SYSTEMS LOCATED IN AREAS OUTSIDE THE AREA OF WORK SHALL REMAIN IN SERVICE UNLESS OTHERWISE NOTED.

L. ELECTRICAL CONTRACTOR SHALL IDENTIFY ALL CIRCUITS FREED BY DEMOLITION FOR RE-USE IN RENOVATED AREAS IF APPLICABLE.

M. NEW CIRCUIT BREAKERS INSTALLED IN EXISTING PANELBOARDS SHALL BE OF THE SAME MANUFACTURER AND MATCH THE SHORT CIRCUIT RATING (AIC) AS THE PANELBOARD.

N. ELECTRICAL CONTRACTOR SHALL UPDATE AS-BUILT DRAWINGS WITH THE EXACT CIRCUIT NUMBERS USED AND PROVIDE TYPEWRITTEN DIRECTORY CARD INSIDE PANELBOARD REFLECTING THE CORRECTION INSTALLATION. ALL UNUSED EXISTING SPARE CIRCUITS SHALL BE IDENTIFIED. ALL SPARE BREAKERS SHALL BE TURN TO THE "OFF" POSITION AND LABEL 'SPARE'.

O. COORDINATE WITH OWNER FOR DISPOSITION OF ALL REMOVED ELECTRICAL ITEMS. EXERCISE CARE IN REMOVAL OF DEMOLITION ITEMS, REPAIR AT NO ADDITIONAL COST TO THE OWNER. ANY DAMAGE CAUSED TO EXISTING CONSTRUCTION AND/OR EQUIPMENT TO REMAIN.

P. EXISTING PANELBOARDS ARE TO REMAIN ENERGIZED UNTIL ALL CIRCUITS HAVE BEEN REMOVED. THE WORK TO RELOCATE CIRCUITS FROM EXISTING PANELBOARDS TO THE NEW PANELBOARDS SHALL BE COORDINATED WITH THE OWNER, ARCHITECT AND BUILDING ENGINEER AND BE PERFORMED AT TIMES THAT DO NOT DISRUPT ONGOING WORK AND AFFECTED AREAS.

Q. ALL EXISTING LIGHT FIXTURES TO BE REUSED OR REFURBISHED LIGHTS SHALL BE CLEANED, RE-LAMPED AND CHECKED FOR PROPER OPERATION. CONTRACTOR SHALL REPLACE ANY DEFECTIVE PARTS AS REQUIRED.

R. WHERE NEW LIGHT FIXTURES ARE INDICATED TO REPLACE OLD FIXTURES AT THE SAME LOCATION, EXISTING WIRING MAY BE REUSED. VERIFY LOAD WILL NOT EXCEED BREAKER RATING.

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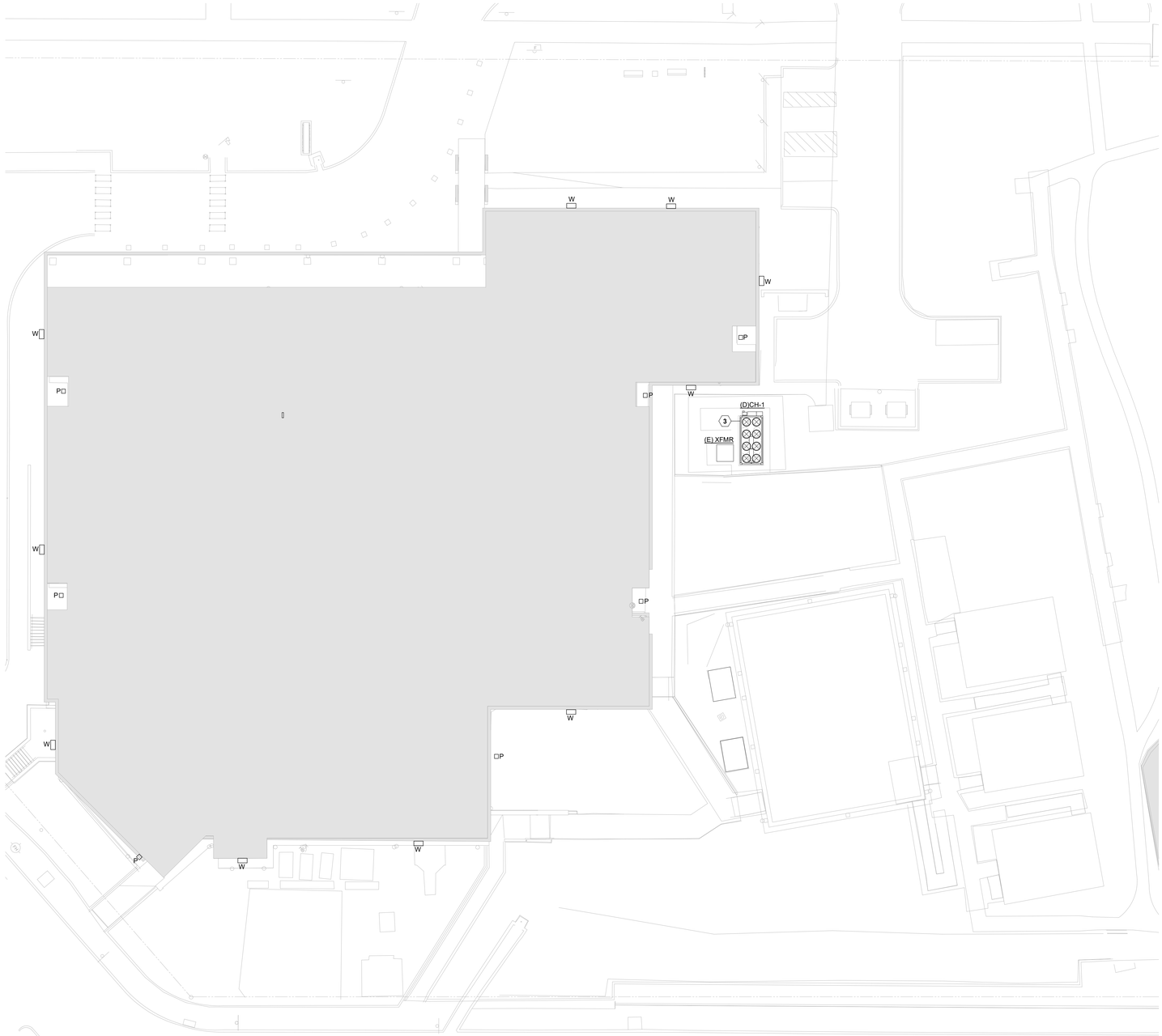
ELECTRICAL GENERAL NOTES

Scale: AS NOTED

E.002

POWER DEMOLITION SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

KEYNOTES	
1	EXISTING WALL PACK TO BE REPLACED WITH NEW LED LIGHT FIXTURE TYPE 'W'. SEE LIGHTING SCHEDULE ON SHEET E.501 FOR MORE INFORMATION.
2	REPLACE EXISTING SQUARE DOWNLIGHT WITH NEW LED LIGHT FIXTURE TYPE 'P'. SEE LIGHTING SCHEDULE ON SHEET E.501 FOR MORE INFORMATION.
3	DISCONNECT AND REMOVE EXISTING CHILLER, DISCONNECT SWITCH, WIRING AND CONDUIT BACK TO SOURCE ELECTRICAL PANEL. CONTRACTOR TO TURN OFF BREAKER AND LABEL AS 'SPARE'.



ELECTRICAL SITE DEMO PLAN 1/16" = 1'-0" 1

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ELECTRICAL SITE DEMO PLAN

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POWER DEMOLITION SHEET NOTES	
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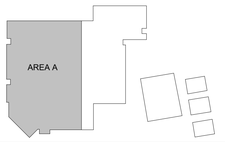
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

KEYNOTES	
1	DISCONNECT EXISTING FCU-1 AND DISCONNECT SWITCH, CAPTURE EXISTING CIRCUIT TO REMAIN FOR FUTURE USE.
2	DISCONNECT AND REMOVE EXISTING VAV BOX, EXISTING 120V POWER CIRCUIT AT VAV BOX TO REMAIN FOR FUTURE USE.



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POWER DEMO PLAN - MAIN LEVEL - AREA A

Scale: AS NOTED

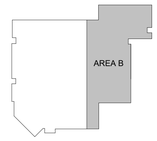
ED.101

POWER DEMOLITION SHEET NOTES

A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

KEYNOTES

1	DISCONNECT AND REMOVE EXISTING AHU. EXISTING CIRCUIT TO REMAIN FOR FUTURE USE.
2	DISCONNECT AND REMOVE EXISTING CHILLED/HOT WATER PUMP. EXISTING CIRCUIT TO REMAIN FOR FUTURE USE.
3	DISCONNECT AND REMOVE EXISTING BOILER. EXISTING CIRCUIT TO REMAIN FOR FUTURE USE.
4	DISCONNECT AND REMOVE EXISTING VAV BOX. EXISTING 120V POWER CIRCUIT AT VAV BOX TO REMAIN FOR FUTURE USE.
5	DISCONNECT AND REPLACE EXISTING 1600A SWITCH BOARD WITH NEW OUTDOOR SWITCHBOARD. SEE DETAIL 01 ON SHEET E.501 FOR MORE INFORMATION.



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ELECTRICAL PLAN DEMO - MAIN LEVEL - AREA B Package 1 | 1/8" = 1'-0" | 1

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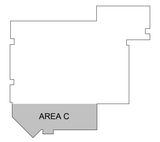
POWER DEMO PLAN - MAIN LEVEL - AREA B

Scale: AS NOTED

ED.102

POWER DEMOLITION SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

KEYNOTES	
1	DISCONNECT AND REMOVE EXISTING VAV BOX, EXISTING 120V POWER CIRCUIT AT VAV BOX TO REMAIN FOR FUTURE USE.
2	DISCONNECT EXISTING FCU-1 AND DISCONNECT SWITCH, CAPTURE EXISTING CIRCUIT TO REMAIN FOR FUTURE USE.
3	DISCONNECT AND REMOVE EXISTING BOILER, EXISTING CIRCUIT TO REMAIN FOR FUTURE USE.
4	EXISTING TO REMAIN PUMPS SHOWN FOR REFERENCE PURPOSE ONLY. CONTRACTOR TO PROTECT DURING DEMO PHASE IN THE AREA.



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ELECTRICAL PLAN DEMO - LOWER LEVEL Package 1 | 1/8" = 1'-0" | 1

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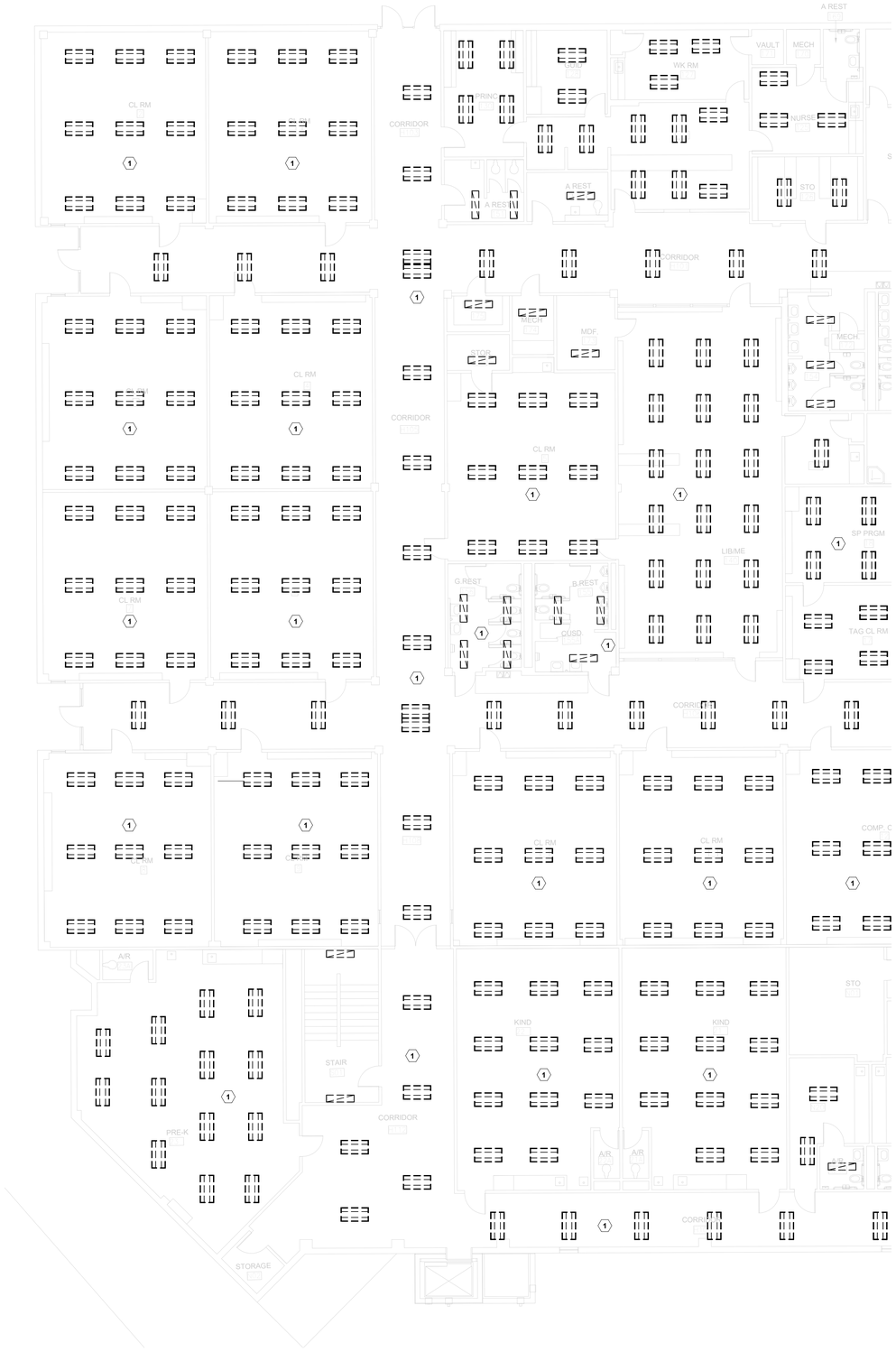
POWER DEMO PLAN - LOWER LEVEL

Scale: AS NOTED

ED.103

LIGHTING DEMOLITION SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

KEYNOTES	
1	DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES, EXIT LIGHTS AND LIGHTING CONTROLS, EXISTING CIRCUIT TO REMAIN TO POWER NEW LED LIGHTS.(TYPICAL)



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LIGHTING DEMO PLAN - MAIN LEVEL - AREA A PACKAGE 1 — 1/8" = 1'-0" | 1

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11/07/2025

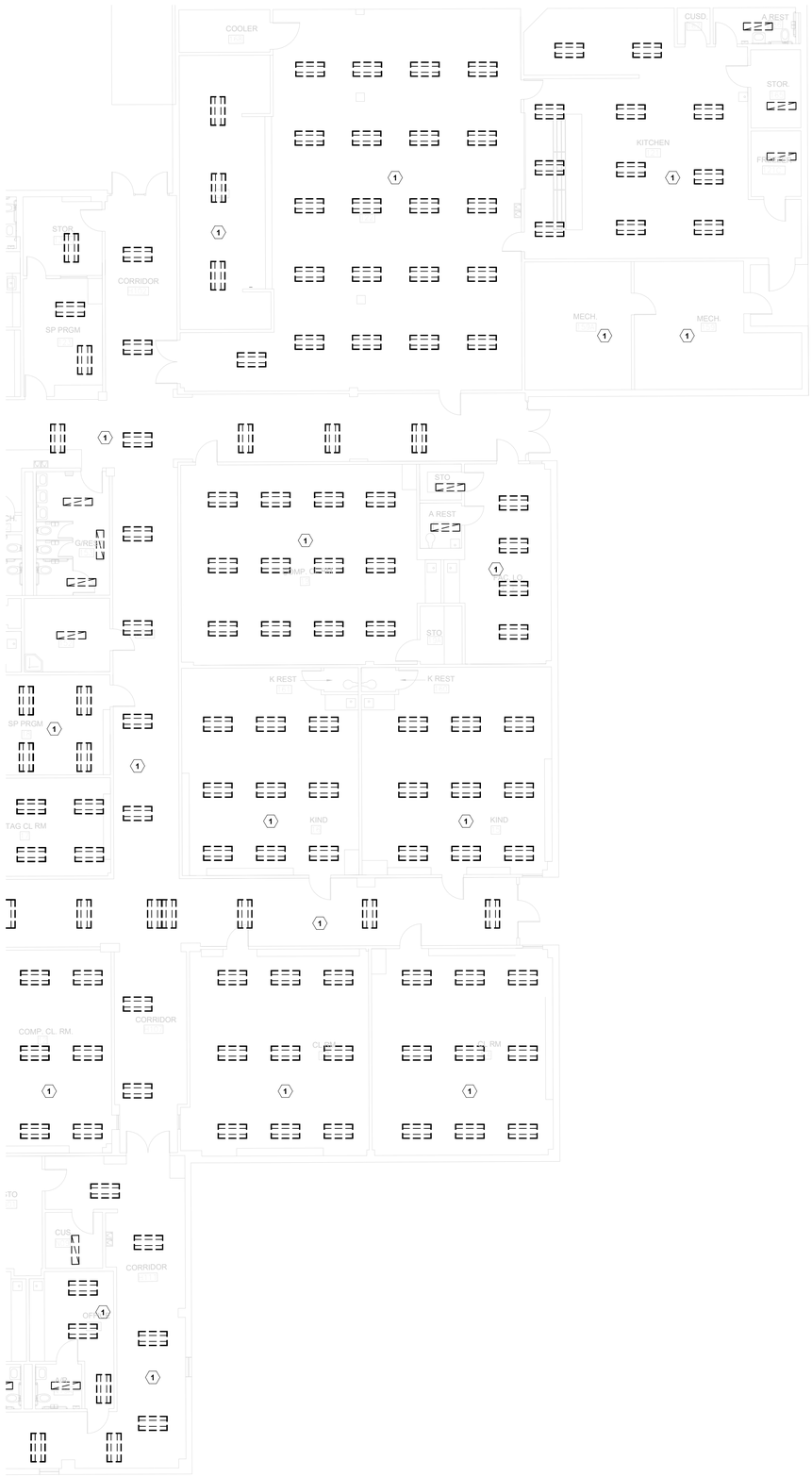
FILE:
DRAWN BY: AG
CHECKED BY: AN

ISSUE:	Project Status
03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

LIGHTING DEMO PLAN - MAIN LEVEL - AREA A

Scale: AS NOTED

ED.121



LIGHTING DEMOLITION SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

KEYNOTES	
1	DISCONNECT AND REMOVE EXISTING LIGHT FIXTURES, EXIT LIGHTS AND LIGHTING CONTROLS, EXISTING CIRCUIT TO REMAIN TO POWER NEW LED LIGHTS.(TYPICAL)

LIGHTING DEMO PLAN - MAIN LEVEL - AREA B PACKAGE 1 — 1/8" = 1'-0" | 1

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09/01/2023	ADD SERVICE 50%CD
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LIGHTING DEMO PLAN - MAIN LEVEL - AREA B

Scale: AS NOTED

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ED.122

LIGHTING DEMOLITION SHEET NOTES	
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KEYNOTES	
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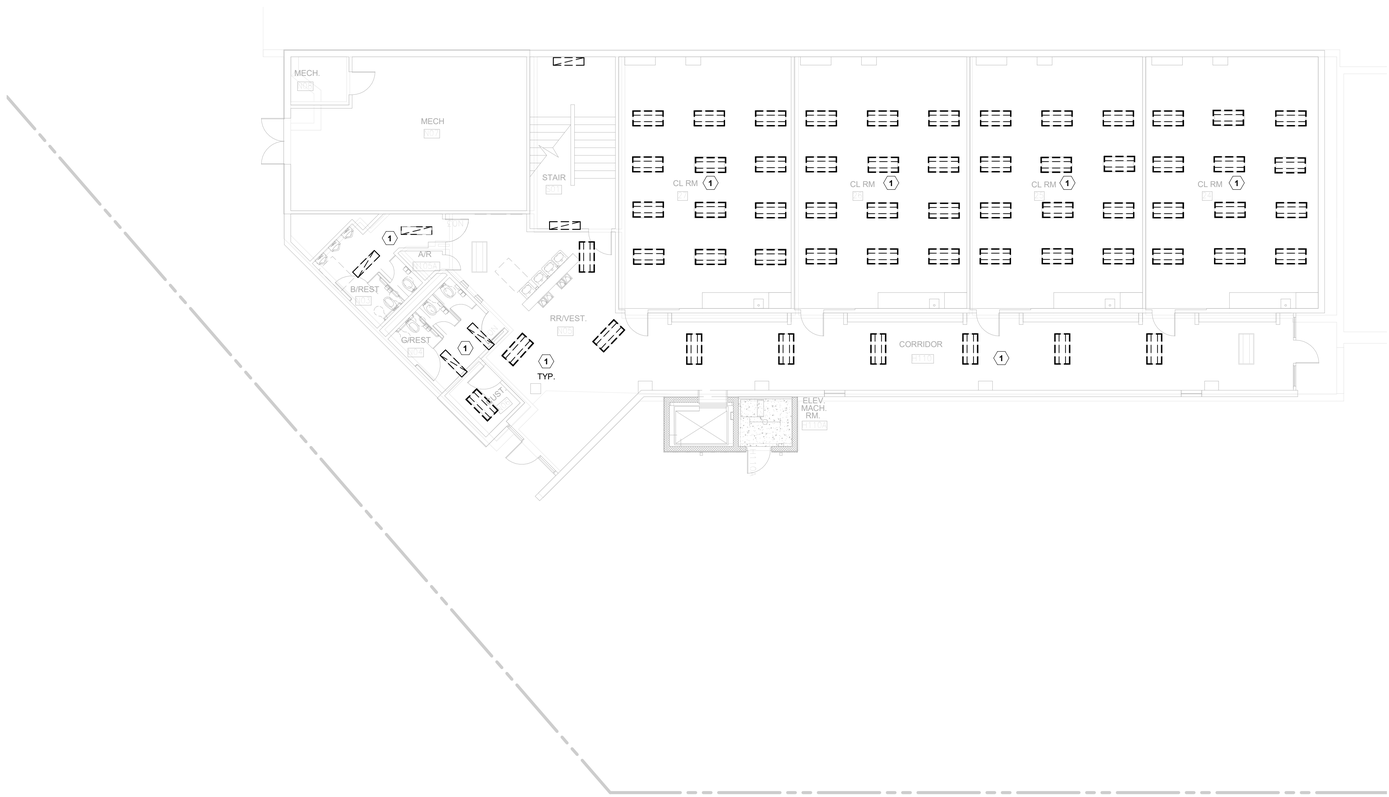

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LIGHTING DEMO PLAN - LOWER LEVEL PACKAGE 1 | 1/8" = 1'-0" | 1

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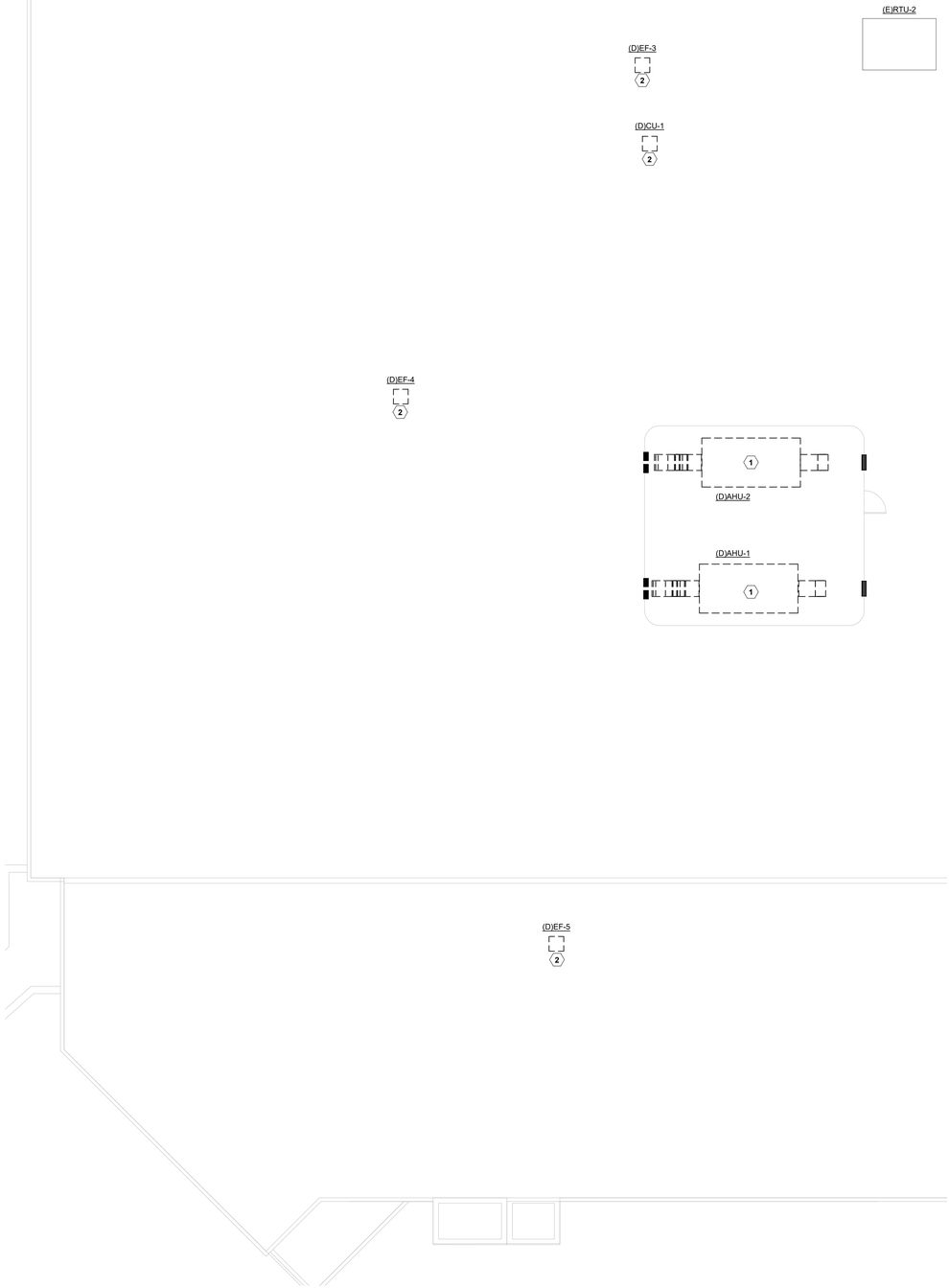
LIGHTING DEMO PLAN - LOWER LEVEL

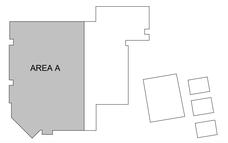
Scale: AS NOTED

ED.123

LIGHTING DEMOLITION SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

KEYNOTES	
1	DISCONNECT AND REMOVE EXISTING AHU. EXISTING CIRCUIT TO REMAIN FOR FUTURE USE.
2	DISCONNECT AND REMOVE EXISTING EXHAUST FAN. EXISTING CIRCUIT TO REMAIN FOR FUTURE USE.





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ELECTRICAL DEMO PLAN - ROOF - AREA A Package 1 | 1/8" = 1'-0" | 1

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ISSUE:	Project Status
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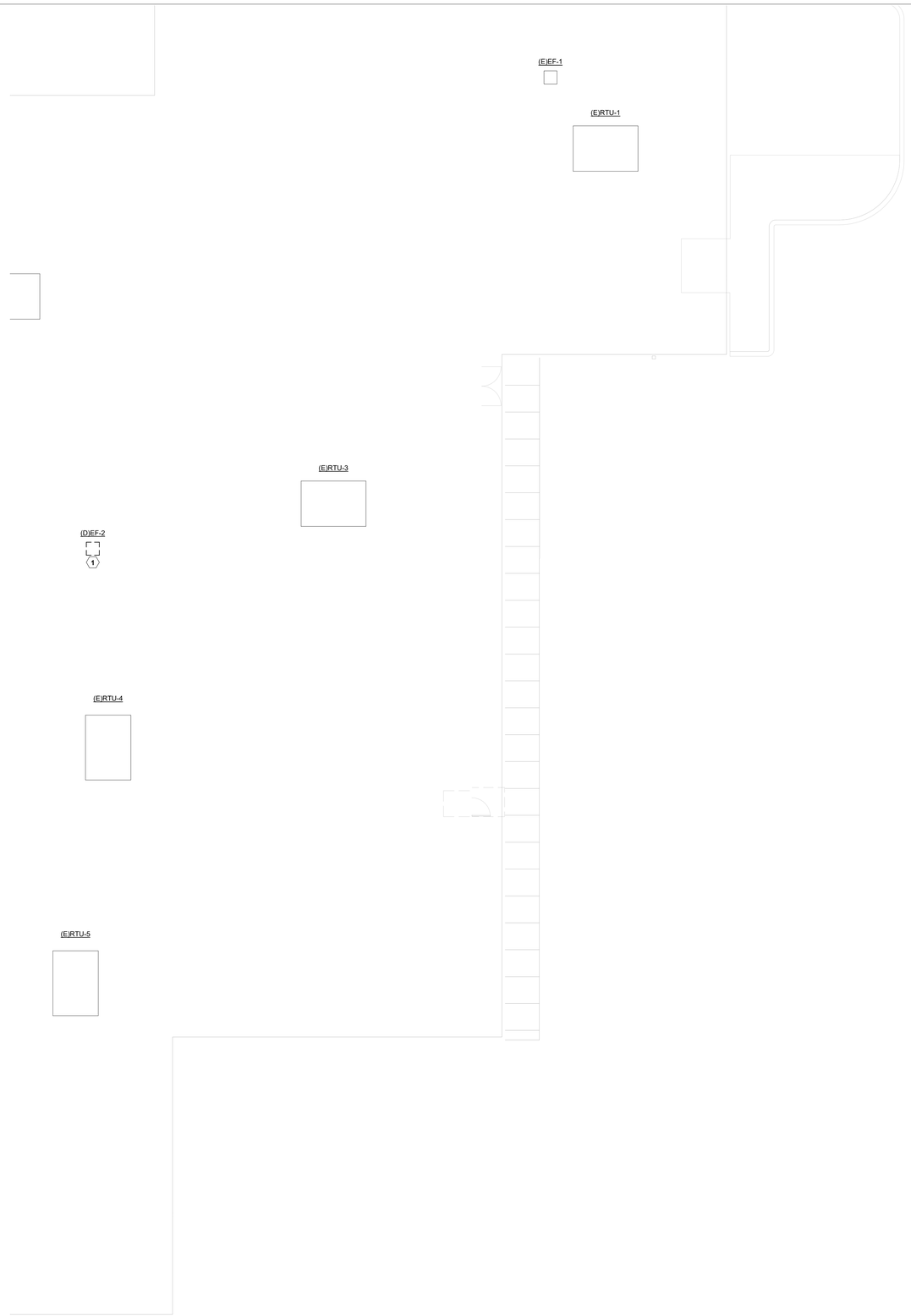
POWER DEMO PLAN - ROOF- A

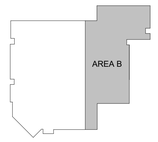
Scale: AS NOTED

ED.201



LIGHTING DEMOLITION SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

KEYNOTES	
1	DISCONNECT AND REMOVE EXISTING EXHAUST FAN. EXISTING CIRCUIT TO REMAIN FOR FUTURE USE.



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ELECTRICAL DEMO PLAN - ROOF - AREA B Package 1 | 1/8" = 1'-0" | 1

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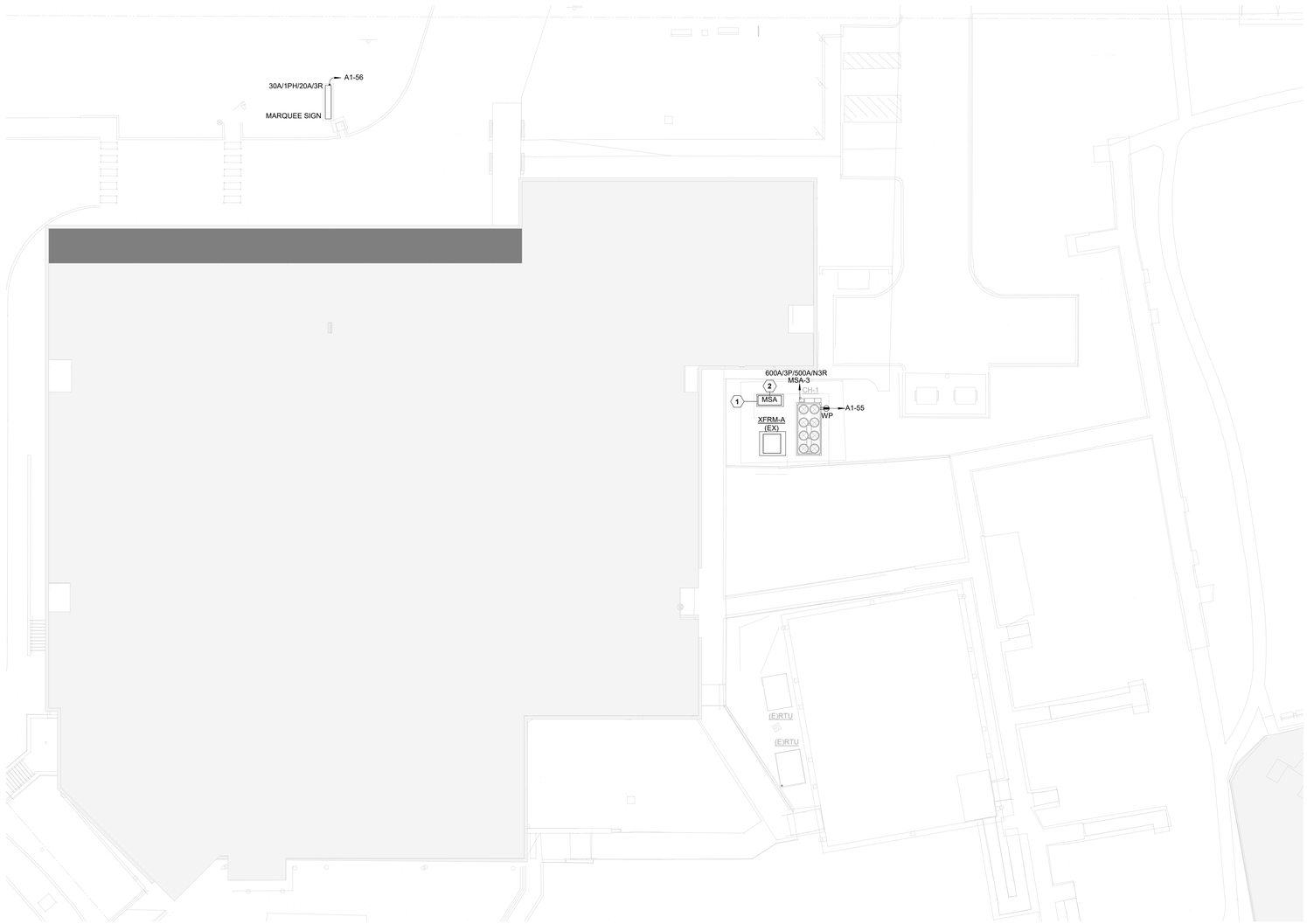
POWER DEMO PLAN - ROOF - B

Scale: AS NOTED

ED.202

SITE SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
C	IF THE BUILDING HAS LIGHTING PROTECTION SYSTEM, THE LIGHTING PROTECTION CONTRACTOR TO BOND ALL NEW ROOFTOP, SITE HVAC EQUIPMENT, METAL OBJECTS (LOCATED OUTSIDE LIGHTING ZONE OF PROTECTION) TO NEAREST, EXISTING BUILDING LIGHTING PROTECTION SYSTEM.

KEYNOTES	
1	ELECTRICAL UNDERGROUND SECONDARY CONDUITS: ENCASED IN RED CONCRETE. RED PIGMENT TO BE INTEGRALLY MIXED INTO 3000 PSI CONCRETE. MINIMUN COVER OF 2 FEET.
2	CONTRACTOR TO PROVIDE MIN. 6" THICK CONCRETE PAD FOR NEW MAIN SWITCHBOARD. EXTEND THE PAD NO MORE THAN 6 INCHES BEYOND EQUIPMENT FOOT PRINT.



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ELECTRICAL SITE PLAN Package 1 | 1/16" = 1'-0" | 1

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ELECTRICAL SITE PLAN

Scale: AS NOTED

E.030

POWER SHEET NOTES

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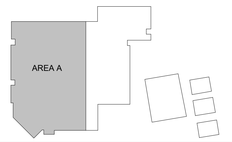
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
C	IF THE BUILDING HAS LIGHTING PROTECTION SYSTEM, THE LIGHTING PROTECTION CONTRACTOR TO BOND ALL NEW ROOFTOP, SITE HVAC EQUIPMENT, METAL OBJECTS (LOCATED OUTSIDE LIGHTING ZONE OF PROTECTION) TO NEAREST, EXISTING BUILDING LIGHTING PROTECTION SYSTEM.
D	RECONNECT NEW UNIT TO EXISTING CIRCUIT PREVIOUSLY FEEDING THE EXISTING UNIT THAT WAS MADE SAFE DURING REMOVAL OF THE OLD UNIT. CONTRACTOR TO REVIEW CONDITION OF EXISTING WIRING AND CONDUIT THAT IS TO BE REUSED. CONTRACTOR TO VERIFY EXISTING CONDUIT AND WIRE SIZE ARE COMPATIBLE WITH NEW UNIT REQUIREMENTS. CONTRACTOR TO REPORT ANY ISSUES WITH THE CONDUIT AND WIRING TO ARCHITECT AND ENGINEER PRIOR TO INSTALLATION OF NEW EQUIPMENT. CONNECT NEW DISCONNECT SWITCH AT THE EXISTING WIRING LOCATION TO PREVENT ADDING SPLICES TO THE EXISTING WIRING. EXTEND NEW WIRING FROM THE DISCONNECT SWITCH TO THE NEW HVAC EQUIPMENT CONTROLS.

KEYNOTES

1	CONNECT NEW FCU-1 TO EXISTING CIRCUIT SERVING REMOVED FCU. PROVIDE REQUIRED FUSED DISCONNECT SWITCH.
2	CONNECT NEW VAV BOX TO EXISTING CIRCUIT SERVING REMOVED VAV BOXES. PROVIDE NEW TOGGLE SWITCH, WIRING & CONDUIT AS NEEDED.
3	PROVIDE NEW AES COMMUNICATOR. CONTRACTOR TO VERIFY WITH DISD FOR EXACT MODEL NUMBER AND SPECIAL REQUIRES.
4	EXISTING TO REMAIN ELECTRICAL PANEL SHOWN FOR REFERENCE PURPOSE ONLY.



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ELECTRICAL PLAN - MAIN LEVEL - AREA A Package 1 | 1/8" = 1'-0" | 1

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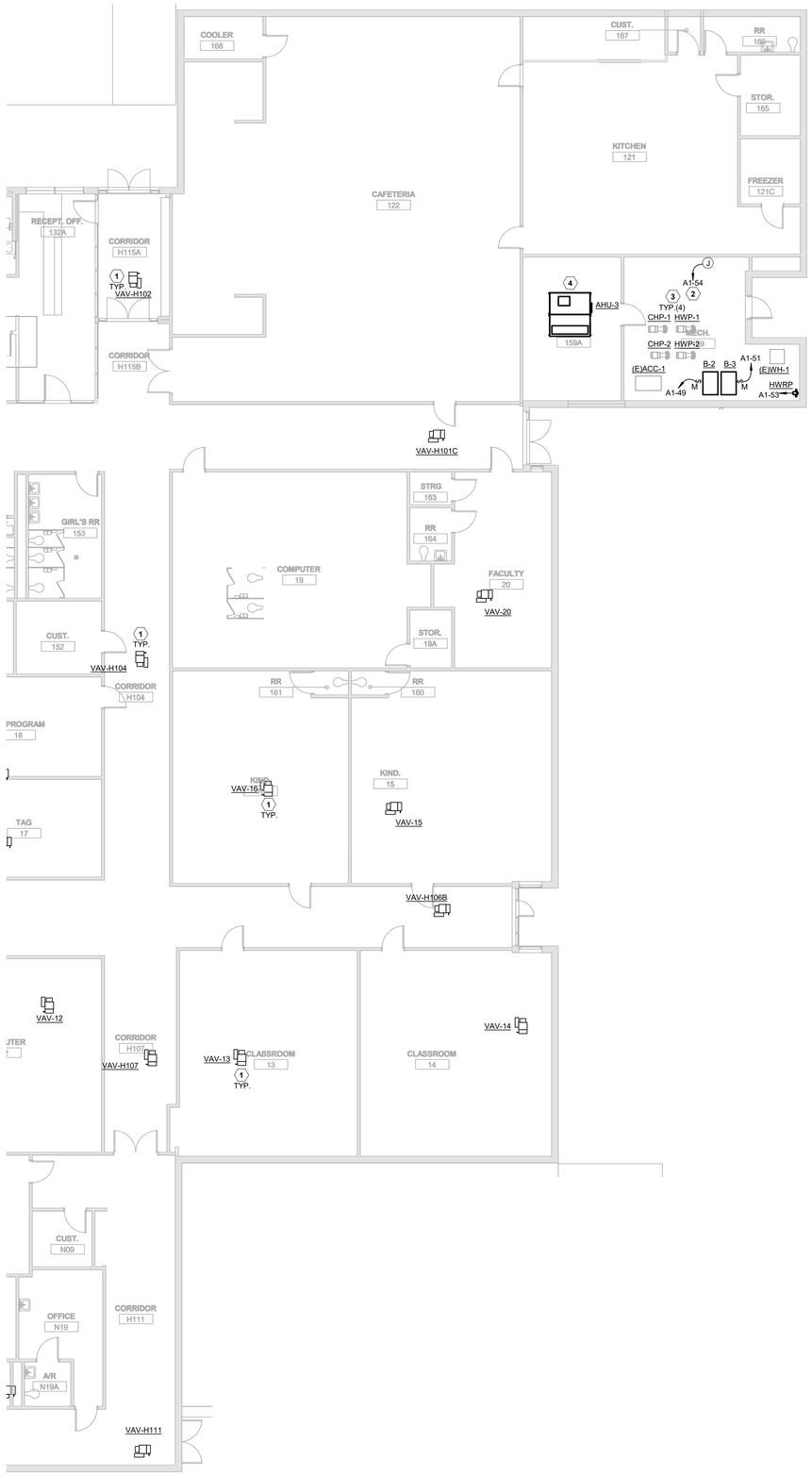
POWER FLOOR PLAN - MAIN LEVEL - AREA A

Scale: AS NOTED

E.101



POWER SHEET NOTES

A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
C	IF THE BUILDING HAS LIGHTING PROTECTION SYSTEM, THE LIGHTING PROTECTION CONTRACTOR TO BOND ALL NEW ROOFTOP, SITE HVAC EQUIPMENT, METAL OBJECTS (LOCATED OUTSIDE LIGHTING ZONE OF PROTECTION) TO NEAREST, EXISTING BUILDING LIGHTING PROTECTION SYSTEM.
D	RECONNECT NEW UNIT TO EXISTING CIRCUIT PREVIOUSLY FEEDING THE EXISTING UNIT THAT WAS MADE SAFE DURING REMOVAL OF THE OLD UNIT. CONTRACTOR TO REVIEW CONDITION OF EXISTING WIRING AND CONDUIT THAT IS TO BE REUSED. CONTRACTOR TO VERIFY EXISTING CONDUIT AND WIRE SIZE ARE COMPATIBLE WITH NEW UNIT REQUIREMENTS. CONTRACTOR TO REPORT ANY ISSUES WITH THE CONDUIT AND WIRING TO ARCHITECT AND ENGINEER PRIOR TO INSTALLATION OF NEW EQUIPMENT. CONNECT NEW DISCONNECT SWITCH AT THE EXISTING WIRING LOCATION TO PREVENT ADDING SPLICES TO THE EXISTING WIRING. EXTEND NEW WIRING FROM THE DISCONNECT SWITCH TO THE NEW HVAC EQUIPMENT CONTROLS.

KEYNOTES

1	CONNECT NEW VAV BOX TO EXISTING CIRCUIT SERVING REMOVED VAV BOXES. PROVIDE NEW TOGGLE SWITCH, WIRING & CONDUIT AS NEEDED.
2	CONTRACTOR TO PROVIDE POWER TO NEW LIGHTING RELAY PANEL. CONTRACTOR TO VERIFY WITH OWNER AND LIGHTING VENDOR FOR FINAL LOCATION AND REQUIREMENTS PRIOR TO FINAL INSTALLATION.
3	CONNECT NEW PUMPS TO EXISTING CIRCUIT SERVING REMOVED PUMPS. PROVIDE REQUIRED FUSED DISCONNECT SWITCH, WIRING AND CONDUIT AS NEEDED, WIRE SIZE TO MATCH BREAKER SIZE OR LARGER.
4	CONNECT NEW AHU TO EXISTING CIRCUIT SERVING REMOVED AHU. PROVIDE REQUIRED FUSED DISCONNECT SWITCH, WIRING AND CONDUIT AS NEEDED, WIRE SIZE TO MATCH BREAKER SIZE OR LARGER. NEW VFDS WILL BE PROVIDED FOR EACH AHU BY MECHANICAL CONTRACTOR, VERIFY WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION AND CONNECTION.

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ELECTRICAL PLAN - MAIN LEVEL - AREA B Package 1 | 1/8" = 1'-0" | 1

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94936
LICENSED
ARCHITECT
11/07/2025

FILE:
DRAWN BY: AG
CHECKED BY: AN

ISSUE:	Project Status
03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

POWER FLOOR PLAN - MAIN LEVEL - AREA B

Scale: AS NOTED

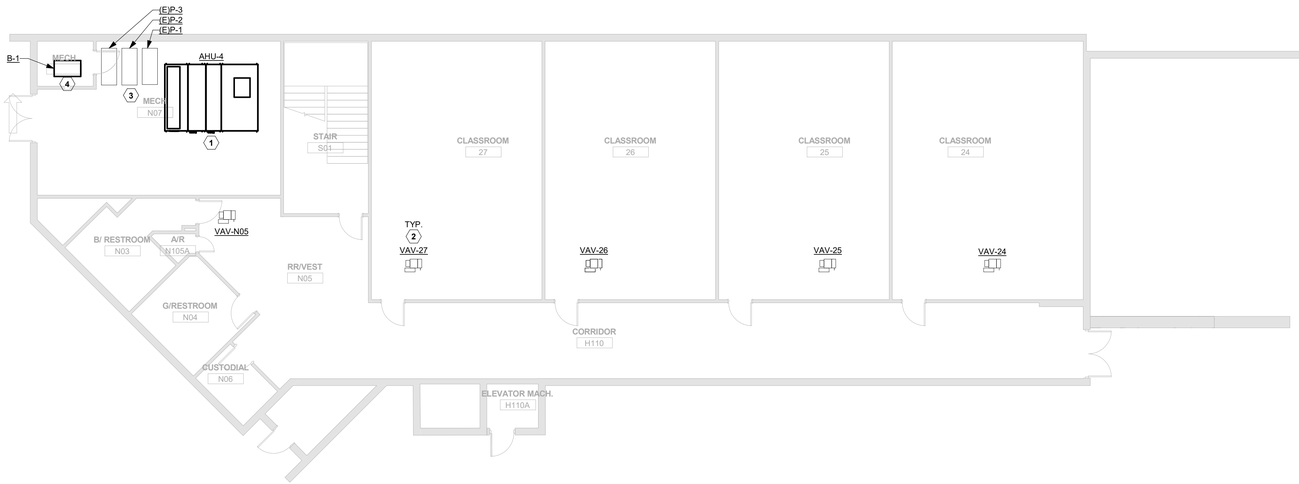
E.102

POWER SHEET NOTES

A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
C	IF THE BUILDING HAS LIGHTING PROTECTION SYSTEM, THE LIGHTING PROTECTION CONTRACTOR TO BOND ALL NEW ROOFTOP, SITE HVAC EQUIPMENT, METAL OBJECTS (LOCATED OUTSIDE LIGHTING ZONE OF PROTECTION) TO NEAREST, EXISTING BUILDING LIGHTING PROTECTION SYSTEM.
D	RECONNECT NEW UNIT TO EXISTING CIRCUIT PREVIOUSLY FEEDING THE EXISTING UNIT THAT WAS MADE SAFE DURING REMOVAL OF THE OLD UNIT. CONTRACTOR TO REVIEW CONDITION OF EXISTING WIRING AND CONDUIT THAT IS TO BE REUSED. CONTRACTOR TO VERIFY EXISTING CONDUIT AND WIRE SIZE ARE COMPATIBLE WITH NEW UNIT REQUIREMENTS. CONTRACTOR TO REPORT ANY ISSUES WITH THE CONDUIT AND WIRING TO ARCHITECT AND ENGINEER PRIOR TO INSTALLATION OF NEW EQUIPMENT. CONNECT NEW DISCONNECT SWITCH AT THE EXISTING WIRING LOCATION TO PREVENT ADDING SPLICES TO THE EXISTING WIRING. EXTEND NEW WIRING FROM THE DISCONNECT SWITCH TO THE NEW HVAC EQUIPMENT CONTROLS.

KEYNOTES

1	CONNECT NEW AHU TO EXISTING CIRCUIT SERVING REMOVED AHU. PROVIDE REQUIRED FUSED DISCONNECT SWITCH, WIRING AND CONDUIT AS NEEDED, WIRE SIZE TO MATCH BREAKER SIZE OR LARGER. NEW VFDS WILL BE PROVIDED FOR EACH AHU BY MECHANICAL CONTRACTOR, VERIFY WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION AND CONNECTION.
2	CONNECT NEW VAV BOX TO EXISTING CIRCUIT SERVING REMOVED VAV BOXES. PROVIDE NEW TOGGLE SWITCH, WIRING & CONDUIT AS NEEDED.
3	EXISTING PUMPS TO REMAIN. PUMPS SHOWN FOR REFERENCE PURPOSE ONLY.
4	CONNECT NEW BOILER TO EXISTING CIRCUIT SERVING REMOVED BOILER. PROVIDE REQUIRED FUSED DISCONNECT SWITCH, WIRING AND CONDUIT AS NEEDED, WIRE SIZE TO MATCH BREAKER SIZE OR LARGER. VERIFY WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION AND CONNECTION.



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ELECTRICAL PLAN - LOWER LEVEL - Package 1 | 1/8" = 1'-0" | 1

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PROFESSIONAL ENGINEER
11/07/2025

FILE:
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CHECKED BY: AN

ISSUE:	Project Status
03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

POWER FLOOR PLAN - LOWER LEVEL

Scale: AS NOTED

E.103

LIGHTING SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
C	CONNECT ALL EXIT SIGNS AND BATTERY LIGHTS TO LOCAL AND NEAREST CIRCUIT. ALL EXIT SIGNS AND BATTERY LIGHTS SHALL NOT BE SWITCHED

KEYNOTES	
1	CONNECT NEW LIGHTS TO THE EXISTING LIGHTING CIRCUIT SERVING THE AREA.

AREA A

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REFLECTED CEILING PLAN - MAIN LEVEL - AREA A PACKAGE 1 | 1/8" = 1'-0" | 1

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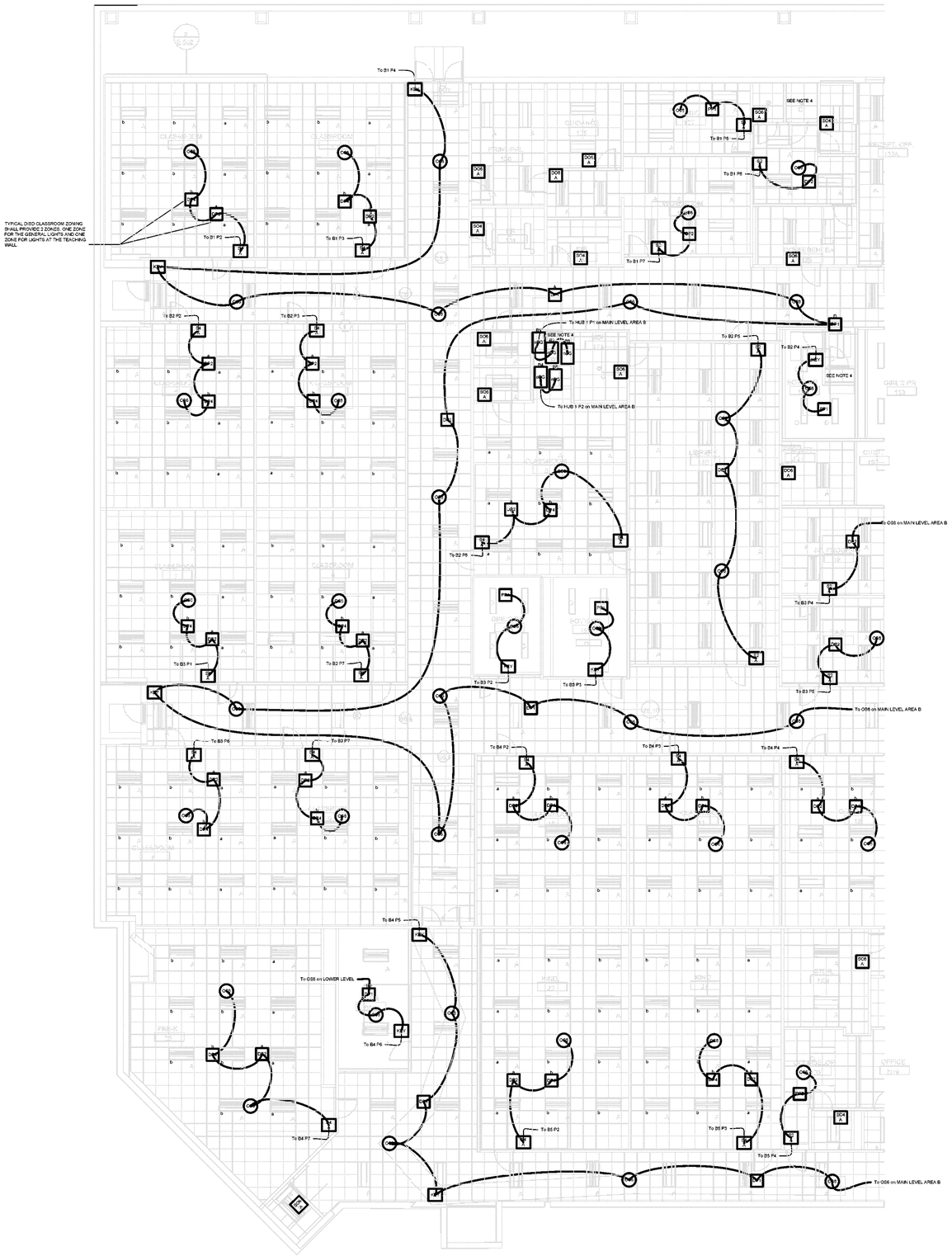
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

REFLECTED CEILING PLAN - MAIN LEVEL - AREA A

Scale: AS NOTED

E.121



HORTON CONTROLS GROUP

PRODUCT LEGEND
MAIN LEVEL AREA A

4	DO6 A	DO6 A WSXA MWO PDT D SA XX Wall Switch Sensor, Multi-way Option, Passive Dual Technology, Dimming, Vacancy (default) or Auto-On
7	DP1	DP1 NPP16 D EFP Power/Relay Pack, Occupancy Controlled Dimming, External Fault Protection
21	DP2	DP2 NPP16 D EFP SA Power/Relay Pack, Occupancy Controlled Dimming, External Fault Protection, Vacancy (default) or Auto-On
15	DP4	DP4 NPP16 D EFP SA2 Power/Relay Pack, Occupancy Controlled Dimming, External Fault Protection, Manual On; Ch. 2
9	KEY	KEY NPODA KEY WH Low Voltage Wallpod, Digital keyswitch
5	nBG	nBG NBRG 8 KIT Bridge, Kit
42	OS6	OS6 NCM PDT 10 RJB Low Voltage Ceiling Mount Sensor, Passive Dual Technology, Large Motion / Extended Range 360° Lens, Rear RJ-45 Ports
4	PP1	PP1 NPP16 EFP Power/Relay Pack, External Fault Protection
1	S1 A	S1 A NPODMA XX nLight Wired Aesthetic Wallpod
7	S2 A	S2 A NPODMA DX XX nLight Wired Aesthetic Wallpod, Raise/Lower Dimming Without Wires
16	S4 A	S4 A NPODMA 2P DX XX nLight Wired Aesthetic Wallpod, 2-Pole, Raise/Lower Dimming Without Wires
4	SO4 A	SO4 A WSXA PDT XX Wall Switch Sensor, Passive Dual Technology
7	SO6 A	SO6 A WSXA PDT SA XX Wall Switch Sensor, Passive Dual Technology, Vacancy (default) or Auto-On

WIRE LEGEND
MAIN LEVEL AREA A

——	CAT5e nLight Pre-terminated CAT5e cable for nLight communication network

HOG DESIGN NOTES:

1. DESIGN BASED ON 2021 IECC.

2. DESIGN BASED ON 120/277 LIGHTING SYSTEM.

3. EMERGENCY LIGHTING ASSUMED TO BE PROVIDED VIA WALL PACKS WITH INTEGRAL BATTERY TO BE ENTIRELY INDEPENDENT FROM LIGHTING SYSTEM. STORM SHELTER AREA ASSUMED TO BE ON A UPS SYSTEM, NO EMERGENCY UL924 DEVICES PROVIDED. IF THIS DOES NOT APPLY THEN EMERGENCY UL924 DEVICES WILL BE REQUIRED.

4. CONTROLS NOT PROVIDED FOR THIS SPACE FOR OCCUPANT SAFETY OR NOT REQUIRED BY CODE. LIGHTS SHALL BE TURNED ON/OFF VIA TOGGLE SWITCH BY OTHERS.

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LIGHTING CONTROLS - MAIN LEVEL - AREA A

12" = 1'-0" | 1

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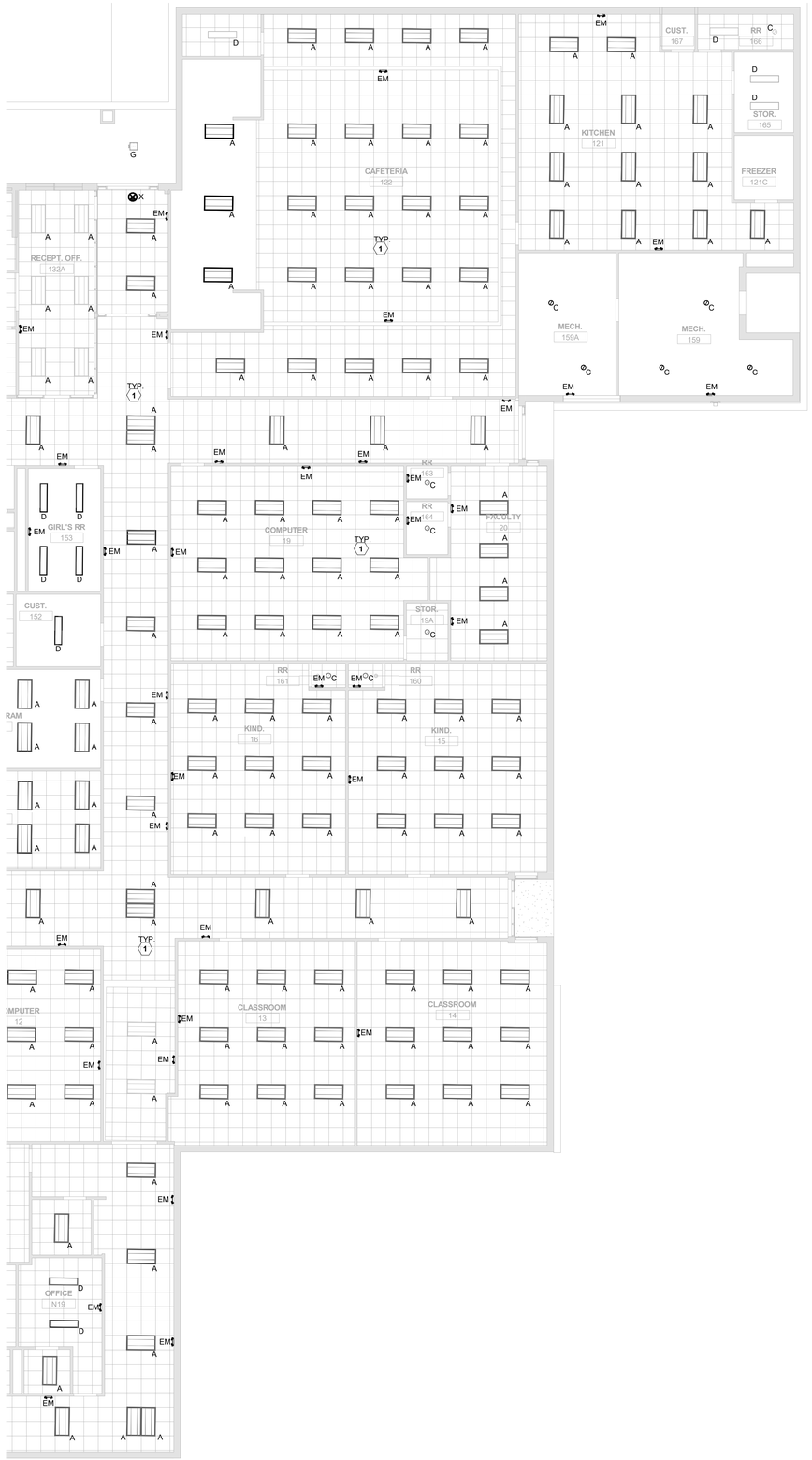
ISSUE:	Project Status
03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

LIGHTING CONTROLS - MAIN LEVEL - AREA A

Scale: AS NOTED

E.121.1



LIGHTING SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
C	CONNECT ALL EXIT SIGNS AND BATTERY LIGHTS TO LOCAL AND NEAREST CIRCUIT. ALL EXIT SIGNS AND BATTERY LIGHTS SHALL NOT BE SWITCHED

KEYNOTES	
1	CONNECT NEW LIGHTS TO THE EXISTING LIGHTING CIRCUIT SERVING THE AREA.

AREA B

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REFLECTED CEILING PLAN - MAIN LEVEL - AREA B PACKAGE 1 | 1/8" = 1'-0" | 1

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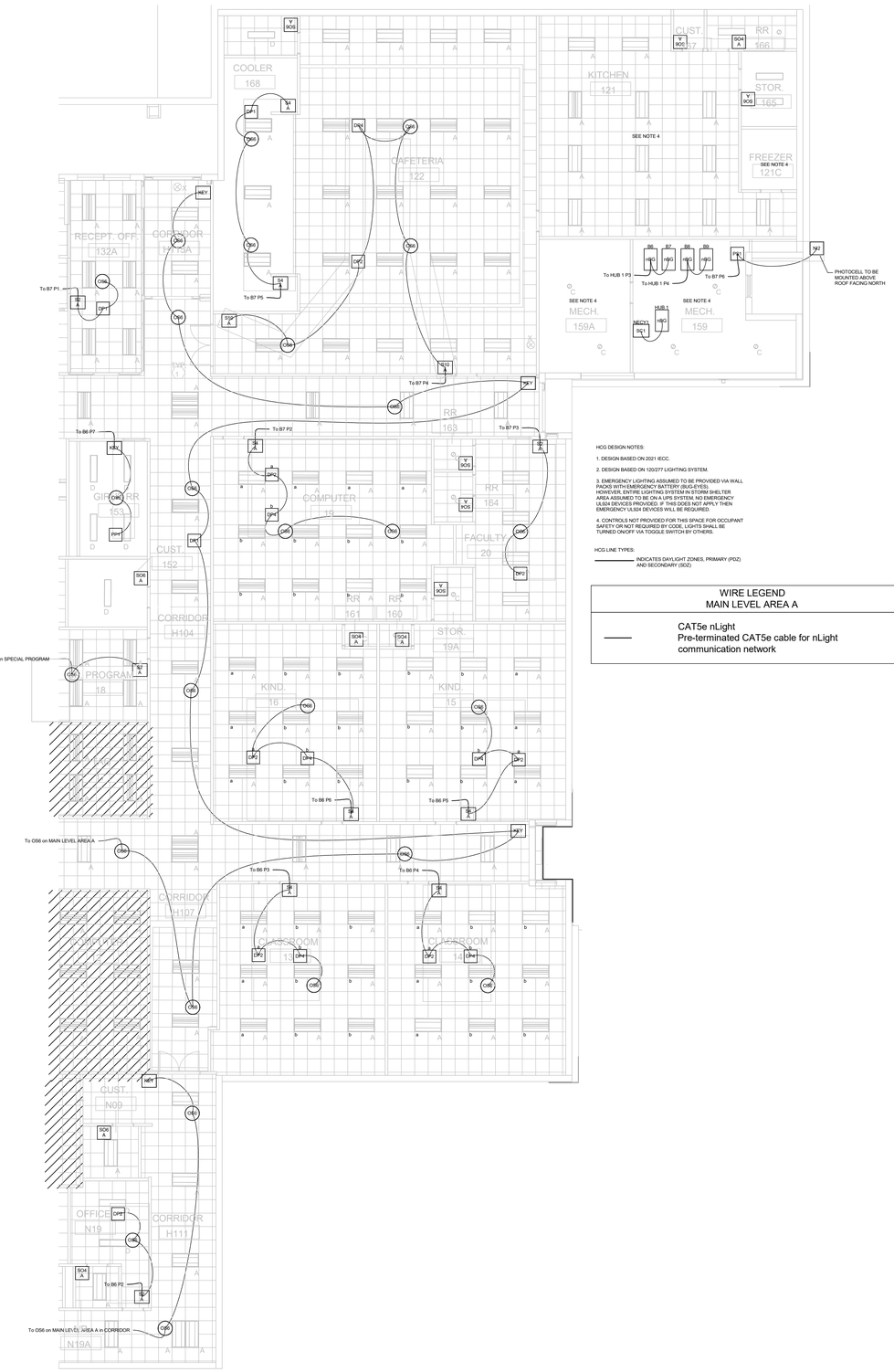
REFLECTED CEILING PLAN - MAIN LEVEL - AREA B

Scale: AS NOTED

E.122



HCG DESIGN NOTES:

1. DESIGN BASED ON 2021 IECC.
2. DESIGN BASED ON 120/277 LIGHTING SYSTEM.
3. EMERGENCY LIGHTING ASSUMED TO BE PROVIDED VIA WALL PACKS WITH EMERGENCY BATTERY (BUG-EYES). HOWEVER, ENTIRE LIGHTING SYSTEM IN STORM SHELTER AREA ASSUMED TO BE ON A UPS SYSTEM. NO EMERGENCY UL924 DEVICES PROVIDED. IF THIS DOES NOT APPLY THEN EMERGENCY UL924 DEVICES WILL BE REQUIRED.
4. CONTROLS NOT PROVIDED FOR THIS SPACE FOR OCCUPANT SAFETY OR NOT REQUIRED BY CODE. LIGHTS SHALL BE TURNED ON/OFF VIA TOGGLE SWITCH BY OTHERS.

HCG LINE TYPES:

——— INDICATES DAYLIGHT ZONES, PRIMARY (PDZ) AND SECONDARY (SDZ)

WIRE LEGEND MAIN LEVEL AREA A	
———	CAT5e nLight Pre-terminated CAT5e cable for nLight communication network

HORTON CONTROLS GROUP

PRODUCT LEGEND
MAIN LEVEL AREA B

1	DO6A	DO6 A WSXA MWO PDT D SA XX Wall Switch Sensor, Multi-way Option, Passive Dual Technology, Dimming, Vacancy (default) or Auto-On
3	DP1	DP1 NPP16 D EFP Power/Relay Pack, Occupancy Controlled Dimming, External Fault Protection
8	DP2	DP2 NPP16 D EFP SA Power/Relay Pack, Occupancy Controlled Dimming, External Fault Protection, Vacancy (default) or Auto-On
6	DP4	DP4 NPP16 D EFP SA2 Power/Relay Pack, Occupancy Controlled Dimming, External Fault Protection, Manual On; Ch. 2
5	KEY	KEY NPODA KEY WH Low Voltage Wallpod, Digital keyswitch
5	nBG	nBG NBRG 8 KIT Bridge, Kit
1	NI2	NI2 NIO PC KIT nLight Device, On/off photocell, Kit
26	OS6	OS6 NCM PDT 10 RJB Low Voltage Ceiling Mount Sensor, Passive Dual Technology, Large Motion / Extended Range 360° Lens, Rear RJ-45 Ports
1	PP1	PP1 NPP16 EFP Power/Relay Pack, External Fault Protection
1	PS1	PS1 NPS 80 Power Supply, 80 mA
2	S10	S10 A NPODMA 4S DX XX nLight Wired Aesthetic Wallpod, 4 scene control, Raise/Lower Dimming Without Wires
7	S2A	S2 A NPODMA DX XX nLight Wired Aesthetic Wallpod, Raise/Lower Dimming Without Wires
7	S4A	S4 A NPODMA 2P DX XX nLight Wired Aesthetic Wallpod, 2-Pole, Raise/Lower Dimming Without Wires
1	SC1	SC1 NECY MVOLT BAC ENC NW GFXK nLight Eclypse, 120-277 VAC, BACnet, Enclosure for nLight ECLYPSE, No Wi-Fi, nGWY2 GFX and PS 150 Power Supply
6	SO4	SO4 A WSXA PDT XX Wall Switch Sensor, Passive Dual Technology
7	SO6	SO6 A WSXA PDT SA XX Wall Switch Sensor, Passive Dual Technology, Vacancy (default) or Auto-On

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AREA B

James S Hogg Elementary School

1144 N Madison Ave., Dallas, TX 75208

B/A Project No.: 21132

BRAVE/ architecture
4200 Montrose Blvd., Suite 400
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JQ INFRASTRUCTURE
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817-5467200

LANDSCAPE
STUDIO OUTSIDE
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DALLAS TX 75226
214-954-7160

STRUCTURAL
JQ
15810 PARK TEN PLACE, SUITE 225
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832-941-5233

MEP
CAMPOS ENGINEERING
1331 REIVER BEND ROAD
DALLAS TX 75247
214-696-6291

TECHNOLOGY DESIGN
DATACOM DESIGN GROUP
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ROOFING CONSULTANT
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SEAL:

ANH V. NGUYEN 94936 LICENSED ARCHITECT
11/07/2025

FILE:	
DRAWN BY:	AG
CHECKED BY:	AN

ISSUE:	Project Status
03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

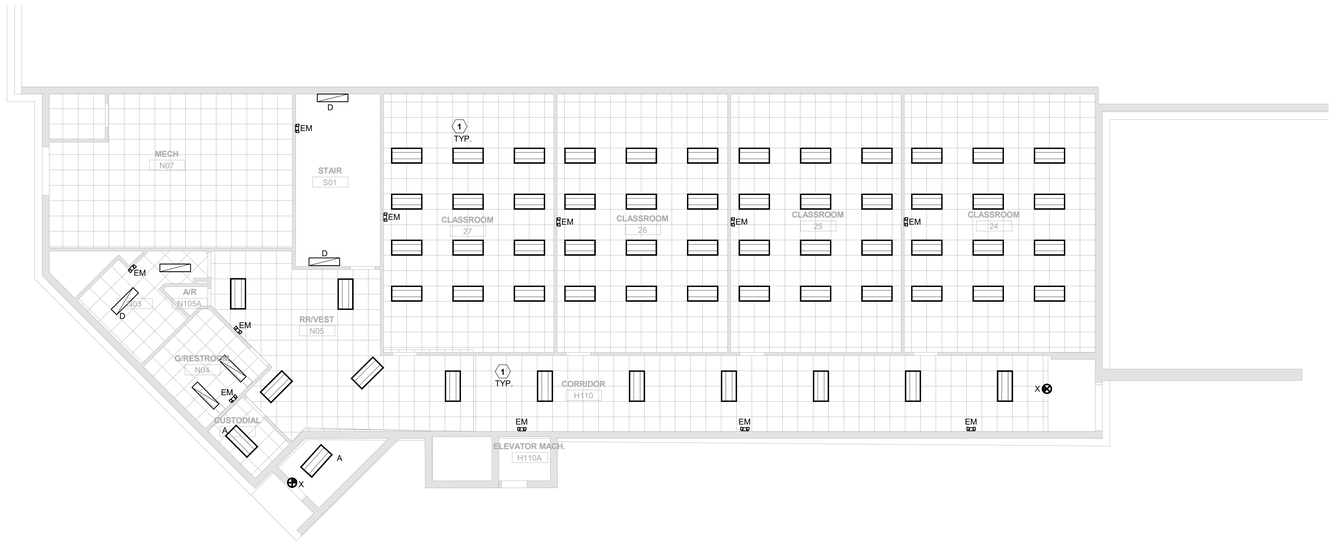
LIGHTING CONTROLS - MAIN LEVEL - AREA B

Scale: AS NOTED

E.122.1

LIGHTING SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
C	CONNECT ALL EXIT SIGNS AND BATTERY LIGHTS TO LOCAL AND NEAREST CIRCUIT. ALL EXIT SIGNS AND BATTERY LIGHTS SHALL NOT BE SWITCHED

KEYNOTES	
1	CONNECT NEW LIGHTS TO THE EXISTING LIGHTING CIRCUIT SERVING THE AREA.



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campos@camposengineering.com
Registration No. F-001731
Project Number: D21-2552.00

REFLECTED CEILING PLAN - LOWER LEVEL PACKAGE 1 — 1/8" = 1'-0" | 1

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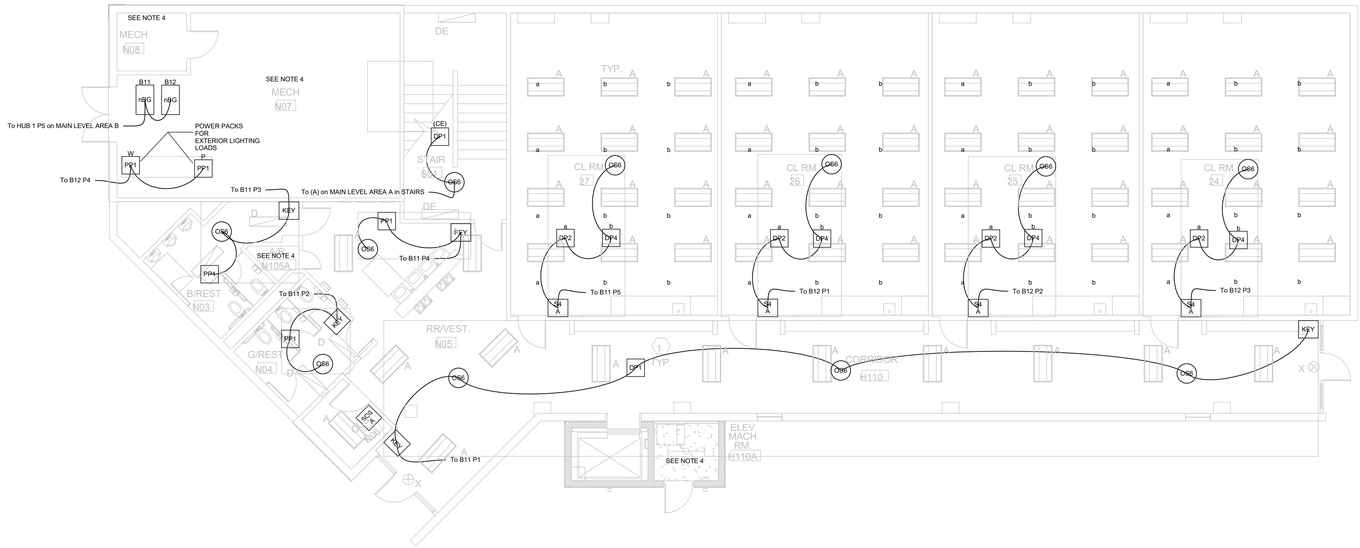
REFLECTED CEILING PLAN - LOWER LEVEL

Scale: AS NOTED

E.123



PRODUCT LEGEND
LOWER LEVEL

2	DP1	DP1 NPP16 D EFP Power/Relay Pack, Occupancy Controlled Dimming, External Fault Protection
4	DP2	DP2 NPP16 D EFP SA Power/Relay Pack, Occupancy Controlled Dimming, External Fault Protection, Vacancy (default) or Auto-On
4	DP4	DP4 NPP16 D EFP SA2 Power/Relay Pack, Occupancy Controlled Dimming, External Fault Protection, Manual On; Ch. 2
5	KEY	KEY NPODA KEY WH Low Voltage Wallpod, Digital keyswitch
2	nBG	nBG NBRG 8 KIT Bridge, Kit
11	OS6	OS6 NCM PDT 10 RJB Low Voltage Ceiling Mount Sensor, Passive Dual Technology, Large Motion / Extended Range 360° Lens, Rear RJ-45 Ports
5	PP1	PP1 NPP16 EFP Power/Relay Pack, External Fault Protection
4	S4 A	S4 A NPODMA 2P DX XX nLight Wired Aesthetic Wallpod, 2-Pole, Raise/Lower Dimming Without Wires
1	SO6 A	SO6 A WSXA PDT SA XX Wall Switch Sensor, Passive Dual Technology, Vacancy (default) or Auto-On

WIRE LEGEND LOWER LEVEL	
———	CAT5e nLight Pre-terminated CAT5e cable for nLight communication network

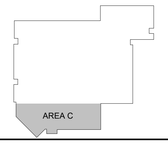
HCG DESIGN NOTES:

1. DESIGN BASED ON 2021 IECC.

2. DESIGN BASED ON 120/277 LIGHTING SYSTEM.

3. EMERGENCY LIGHTING ASSUMED TO BE PROVIDED VIA WALL PACKS WITH EMERGENCY BATTERY (BUG-EYES). HOWEVER, ENTIRE LIGHTING SYSTEM IN STORM SHELTER AREA ASSUMED TO BE ON A UPS SYSTEM, NO EMERGENCY UL924 DEVICES PROVIDED. IF THIS DOES NOT APPLY, THEN EMERGENCY UL924 DEVICES WILL BE REQUIRED.

4. CONTROLS NOT PROVIDED FOR THIS SPACE FOR OCCUPANT SAFETY OR NOT REQUIRED BY CODE. LIGHTS SHALL BE TURNED ON/OFF VIA TOGGLE SWITCH BY OTHERS.



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LIGHTING CONTROLS - LOWER LEVEL 1" = 80'-0" 1

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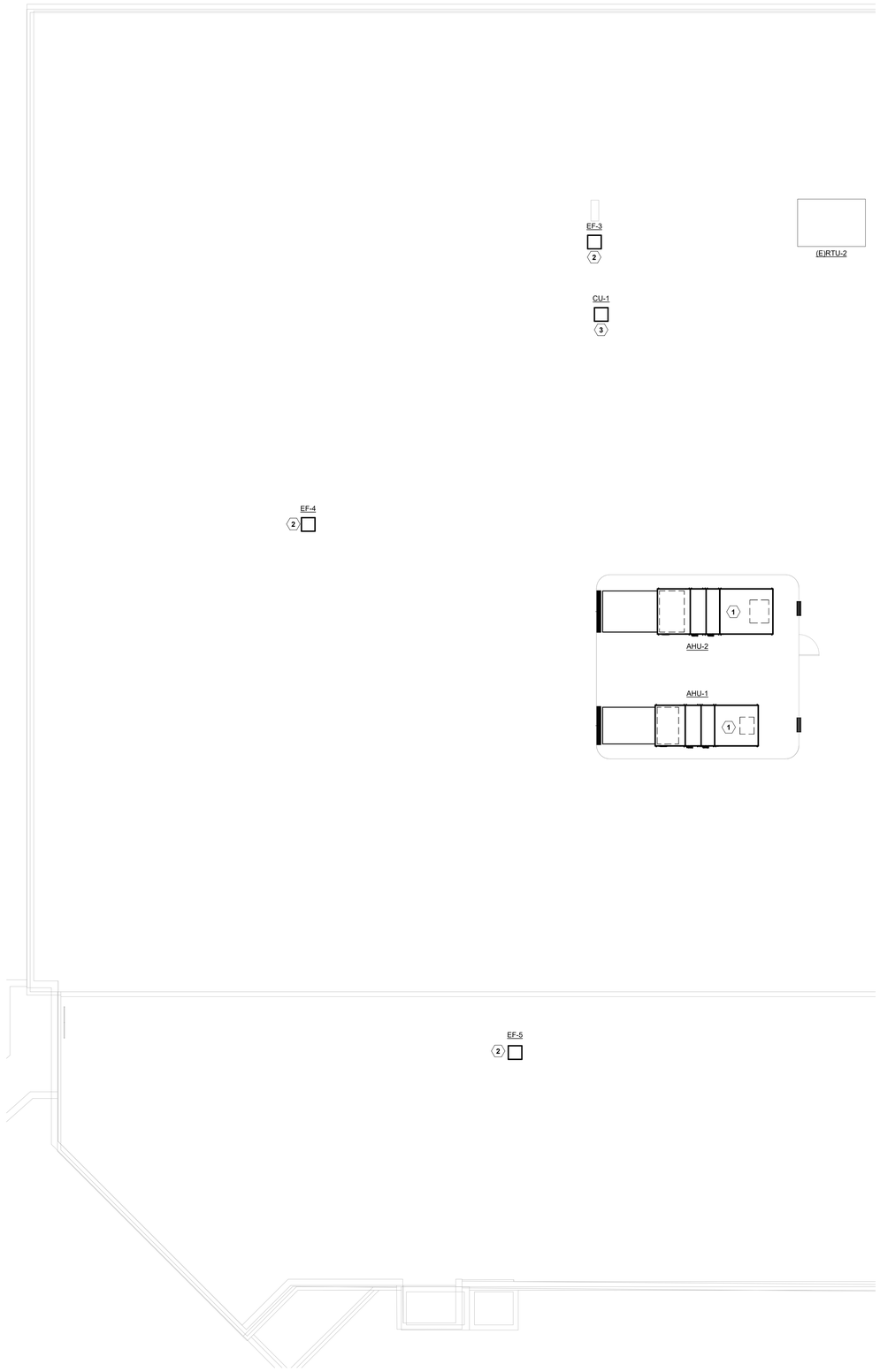
LIGHTING CONTROLS - LOWER LEVEL

Scale: AS NOTED

E.123.1



POWER SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
C	IF THE BUILDING HAS LIGHTING PROTECTION SYSTEM, THE LIGHTING PROTECTION CONTRACTOR TO BOND ALL NEW ROOFTOP, SITE HVAC EQUIPMENT, METAL OBJECTS (LOCATED OUTSIDE LIGHTING ZONE OF PROTECTION) TO NEAREST, EXISTING BUILDING LIGHTING PROTECTION SYSTEM.
D	RECONNECT NEW UNIT TO EXISTING CIRCUIT PREVIOUSLY FEEDING THE EXISTING UNIT THAT WAS MADE SAFE DURING REMOVAL OF THE OLD UNIT. CONTRACTOR TO REVIEW CONDITION OF EXISTING WIRING AND CONDUIT THAT IS TO BE REUSED. CONTRACTOR TO VERIFY EXISTING CONDUIT AND WIRE SIZE ARE COMPATIBLE WITH NEW UNIT REQUIREMENTS. CONTRACTOR TO REPORT ANY ISSUES WITH THE CONDUIT AND WIRING TO ARCHITECT AND ENGINEER PRIOR TO INSTALLATION OF NEW EQUIPMENT. CONNECT NEW DISCONNECT SWITCH AT THE EXISTING WIRING LOCATION TO PREVENT ADDING SPLICES TO THE EXISTING WIRING. EXTEND NEW WIRING FROM THE DISCONNECT SWITCH TO THE NEW HVAC EQUIPMENT CONTROLS.

KEYNOTES	
1	CONNECT NEW AHU TO EXISTING CIRCUIT SERVING REMOVED AHU. PROVIDE REQUIRED FUSED DISCONNECT SWITCH, WIRING AND CONDUIT AS NEEDED, WIRE SIZE TO MATCH BREAKER SIZE OR LARGER. NEW VFDS WILL BE PROVIDED FOR EACH AHU BY MECHANICAL CONTRACTOR, VERIFY WITH MECHANICAL CONTRACTOR FOR EXACT LOCATION AND CONNECTION.
2	CONNECT NEW EXHAUST FANS TO EXISTING CIRCUIT SERVING REMOVED EXHAUST FANS. PROVIDE REQUIRED FUSED DISCONNECT SWITCH, WIRING AND CONDUIT AS NEEDED.
3	CONTRACTOR TO CONNECT NEW CU-1 TO EXISTING CIRCUIT THAT WAS MADE SAFE AND PROTECTED DURING DEMOLITION PHASE. CONTRACTOR TO EXTEND CONDUIT AND WIRING AS REQUIERED.

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Project Number: D21-2552.00

ELECTRICAL PLAN - ROOF - AREA A Package 1 | 1/8" = 1'-0" | 1

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ANH V. NGUYEN
94936
LICENSED
ARCHITECT
11/07/2025

FILE:
DRAWN BY: AG
CHECKED BY: AN

ISSUE:	Project Status
03/02/2022	SCHEMATIC DESIGN
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06/21/2022	50% CD
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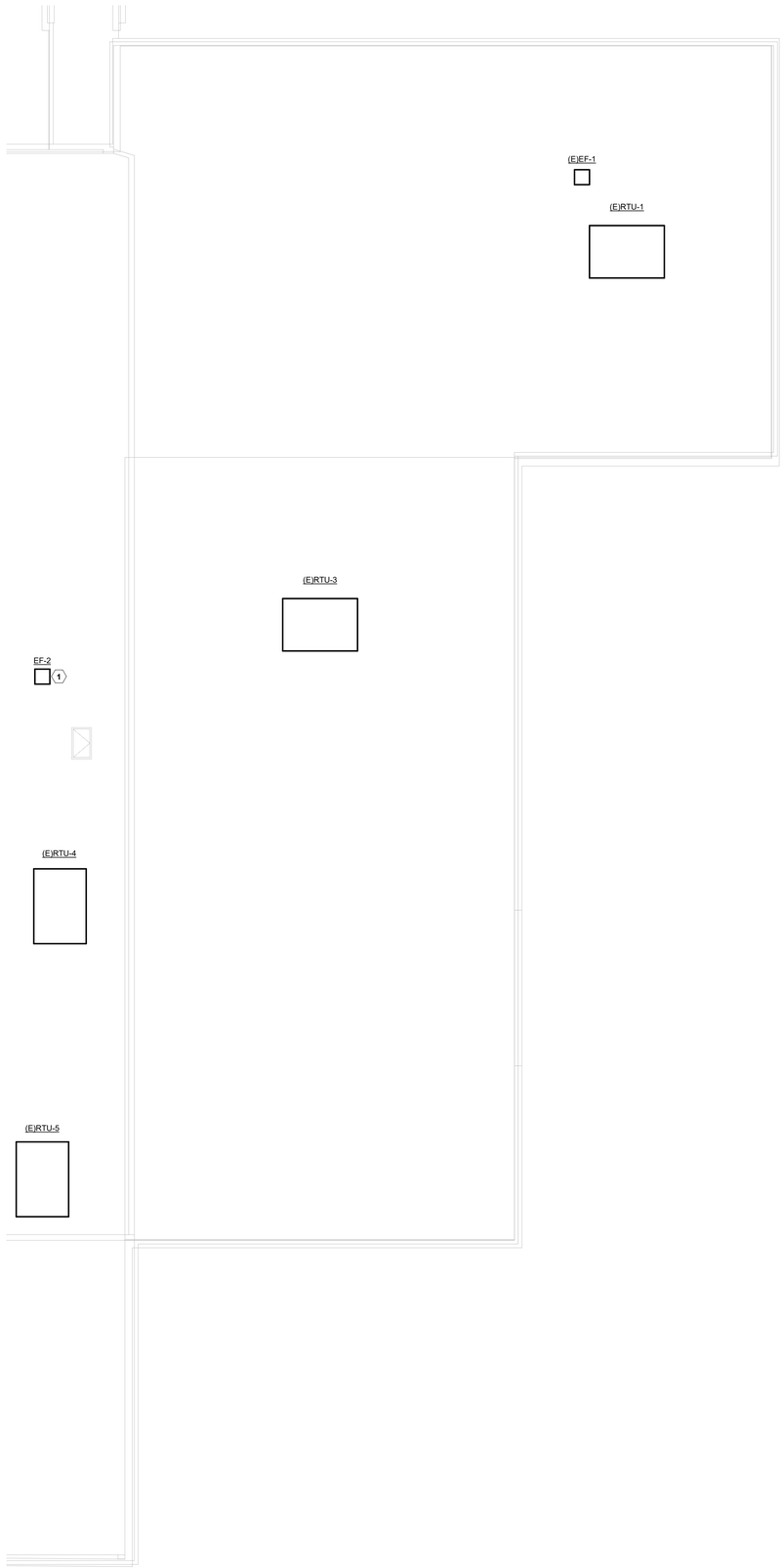
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

ELECTRICAL ROOF PLAN - AREA A

Scale: AS NOTED

E.201



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KEYNOTES

1	CONNECT NEW EXHAUST FANS TO EXISTING CIRCUIT SERVING REMOVED EXHAUST FANS. PROVIDE REQUIRED FUSED DISCONNECT SWITCH, WIRING AND CONDUIT AS NEEDED.

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ELECTRICAL PLAN - ROOF - AREA B Package 1 | 1/8" = 1'-0" | 1

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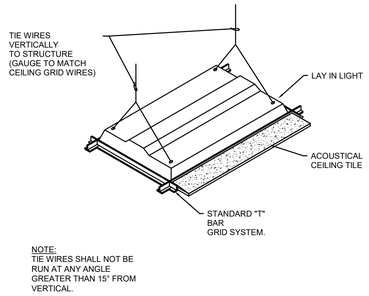
ELECTRICAL ROOF PLAN - AREA B

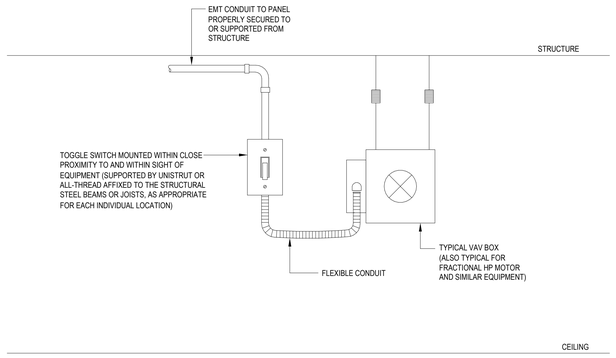
Scale: AS NOTED

E.202

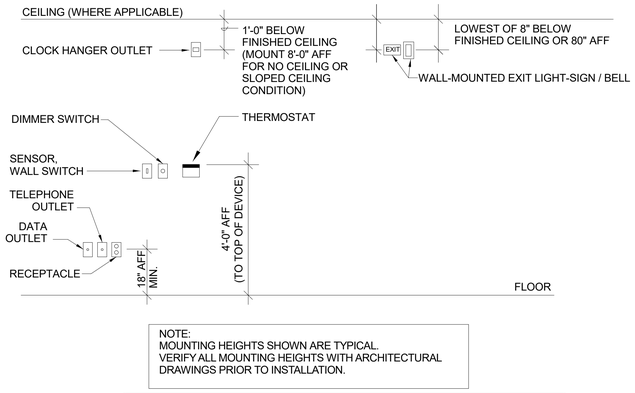


NOTE:
TIE WIRES SHALL NOT BE RUN AT ANY ANGLE GREATER THAN 15° FROM VERTICAL.

LIGHT FIXTURE INSTALLATION - TYPICAL | 1

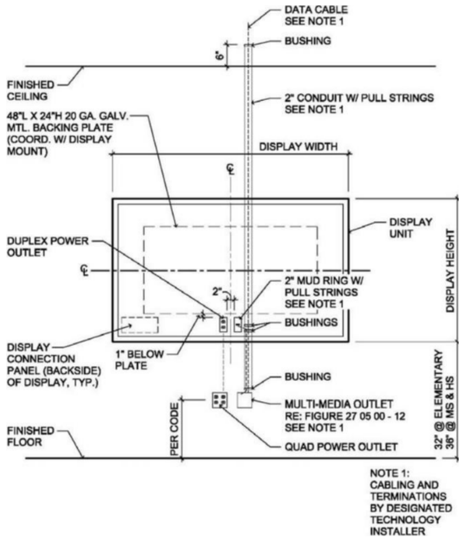


TYPICAL VAV BOX DISCONNECT | 2

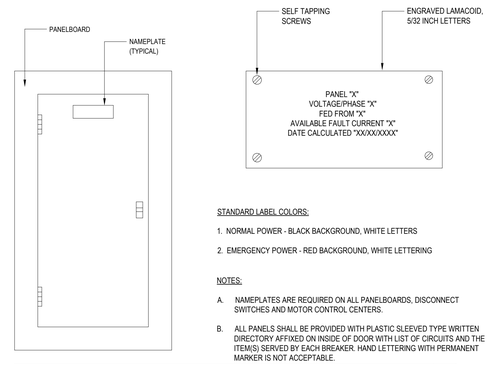


NOTE:
MOUNTING HEIGHTS SHOWN ARE TYPICAL.
VERIFY ALL MOUNTING HEIGHTS WITH ARCHITECTURAL DRAWINGS PRIOR TO INSTALLATION.

WIRING DEVICE MOUNTING DETAIL | 3



TEACHING WALL | 4



STANDARD LABEL COLORS:

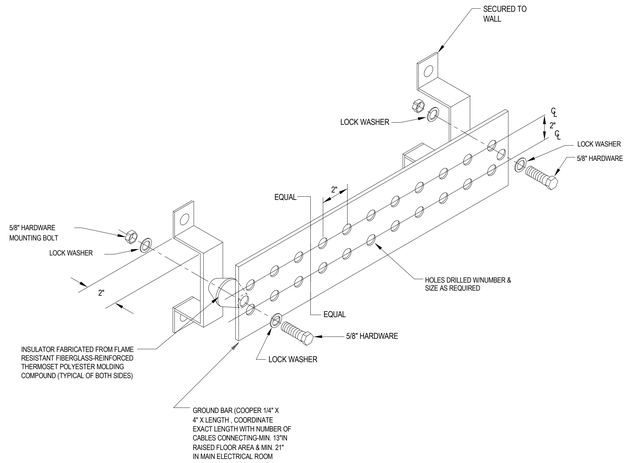
1. NORMAL POWER - BLACK BACKGROUND, WHITE LETTERS
2. EMERGENCY POWER - RED BACKGROUND, WHITE LETTERING

NOTES:

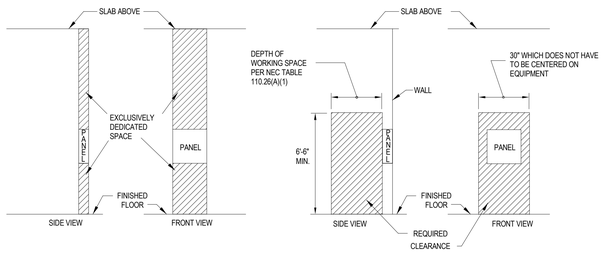
A. NAMEPLATES ARE REQUIRED ON ALL PANELBOARDS, DISCONNECT SWITCHES AND MOTOR CONTROL CENTERS.

B. ALL PANELS SHALL BE PROVIDED WITH PLASTIC SLEEVED TYPE WRITTEN DIRECTORY AFFIXED ON INSIDE OF DOOR WITH LIST OF CIRCUITS AND THE ITEM(S) SERVED BY EACH BREAKER. HAND LETTERING WITH PERMANENT MARKER IS NOT ACCEPTABLE.

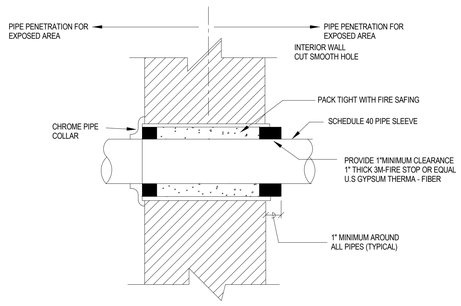
PANELBOARD NAMEPLATE DETAIL | 5



GROUND BAR DETAIL | 6



TYPICAL PANELBOARD REQUIRED CLEARANCE | 7



CONDUIT FIRE PENETRATION | 8

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SEAL:

ANH V. NGUYEN 94936 LICENSED ARCHITECT
11/07/2025

FILE:
DRAWN BY: AG
CHECKED BY: AN

ISSUE:	Project Status
03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

ELECTRICAL DETAILS

Scale: AS NOTED

E.401

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	VOLTAGE	MOUNTING	MANUFACTURER/CATALOG #	INPUT WATTAGE
A	2'X4' RECESSED	UNV.	RECESSED	LITHONIA STAK 2X4 4000LM 35K C0L MIN10 ZT MVOLT	33.2
C	6" DOWNLIGHT	UNV.	RECESSED	LITHONIA LDN6 35/20 L06 AR LD MVOLT GZ10	22.5
D	1'X4' RECESSED	UNV.	RECESSED	LITHONIA STAK 1X4 3000LM HM 35K C0L MIN10 ZT MVOLT	24.3
EM	EMERGENCY BUG EYE	UNV.	WALL MOUNTED	LITHONIA EU2C (COLOR) MVOLT SD	3
G	EXTERIOR LIGHT	120V	RECESSED	KIRLIN LRC-10KLD-2000L-120-SKL-WFL-40K	60
X	EXIT SIGN	UNV.	CEILING	LITHONIA LQM S (BLANK) 3 R MVOLT	2

NOTES:

1. THE ARCHITECT SHALL REVIEW AND DETERMINE FINISH AND LAMP COLOR OF ALL LIGHT FIXTURES.
2. SUBSTITUTIONS: ALL SUBSTITUTED LIGHTS MUST MEET OR EXCEED SPECIFIED LIGHT SPECIFICATION.
3. **PROVIDE (5) YEAR MANUFACTURER'S WARRANTY FOR ALL LED LIGHTS AND BATTERY PACKS. WARRANTIES TO COVER THE COST OF MATERIALS AND LABOR FOR REPAIR AND INSTALLATION.**
4. **ALL NEW LED LIGHTS SHALL BE EITHER ENERGY STAR OR DESIGNlIGHTS Consortium DLC APPROVED AND 4000K CRI (COLOR RENDING INDEX) OF 80 OR HIGHER.**

SWITCHBOARD: MSA

LOCATION: EXTERIOR WALL
SUPPLY FROM:
MOUNTING: FLOOR
ENCLOSURE: NEMA 3R

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 65 K.A.I.C
MAIN TYPE: 1600A MCB
MAINS RATING: 1600 A

CKT	CIRCUIT DESCRIPTION	CIRCUIT BREAKER	Load	WIRING AND CONDUIT SIZE
1	EXISTING SPD (240KA PER PHASE)	100/3	23,400 VA	SEE ONE - LINE DIAGRAM
2	EXISTING PANEL'DP'	600/3	140,400 VA	SEE ONE - LINE DIAGRAM
3	NEW CHILLER	500/3	134,496 VA	SEE ONE - LINE DIAGRAM
4	EXISTING RTU-2	60/3	14,040 VA	SEE ONE - LINE DIAGRAM
5	EXISTING RTU-5	60/3	14,040 VA	SEE ONE - LINE DIAGRAM
6	EXISTING TRANSFORMER 'TA'	200/3	0 VA	SEE ONE - LINE DIAGRAM
7	EXISTING PANEL 'DP (2)'	800/3	0 VA	SEE ONE - LINE DIAGRAM
8	SPARE	225/3	0 VA	
9	SPARE	100/3	0 VA	
10	SPACE		--	
11	SPACE		--	
12	SPACE		--	
13	SPACE		--	
14	SPACE		--	
15	SPACE		--	
16	SPACE		--	
		TOTAL LOAD:	326,376 VA	
		TOTAL AMPS:	906 A	

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND LOAD	PANEL TOTALS	
HVAC	162576 VA	162576 VA		
MISCELLANEOUS	163800 VA	163800 VA	**TOTAL CONNECTED LOAD:**	326,376 VA
			TOTAL DEMAND LOAD:	326,376 VA
			TOTAL CONNECTED AMPS.:	906 A
			TOTAL DEMAND AMPS:	906 A

EXISTING TRANSFORMER

NOTES:

(EX) PANEL 'A1 SEC II'

SERVICE: 208Y/120V, 3PH. 4W + G
MAIN BUS: 100A MCB
AIC RATING: 10KA FULLY RATED

LOCATION: MECH 174
FED FROM: A1 SEC-1
FEED THROUGH LUGS: NO

ENCLOSURE: NEMA-1
MOUNTING: SURFACE

POLE	LOAD DESCRIPTION	TOTAL VA	REMARK TAG	WIRE SIZE	CB	PH	CB	WIRE SIZE	REMARK TAG	TOTAL VA	LOAD DESCRIPTION	POLE
43	EXISTING LOAD	1,440			20/1	A	20/1			1,440	EXISTING LOAD	44
45	SPARE				20/1	B	20/1			1,440	EXISTING LOAD	46
47	SPARE				20/1	C	20/1				SPARE	48
49	**B-2**	**480**			**20/1**	A	20/2			1,248	EXISTING COPIER	50
51	**B-1**	**480**			**20/1**	B	--			1,248	--	52
53	**HWRP**	**864**			**20/1**	C	**20/1**			**500**	**RELAY PANEL**	54
55	**WP CHILLER UNIT REC.**	**180**			**20/1**	A	**20/1**			**500**	**MARQUEE SIGN**	56
57	SPACE ONLY				20/1	B	20/1				SPACE ONLY	58
59	SPACE ONLY				20/1	C	20/1				SPACE ONLY	60
61	SPACE ONLY				20/1	A	20/1				SPACE ONLY	62
63	SPACE ONLY				20/1	B	20/1				SPACE ONLY	64
65	SPACE ONLY				20/1	C	20/1				SPACE ONLY	66
67	SPACE ONLY				20/1	A	20/1				SPACE ONLY	68
69	SPACE ONLY				20/1	B	20/1				SPACE ONLY	70
71	SPACE ONLY				20/1	C	20/1				SPACE ONLY	72
73	SPACE ONLY				20/1	A	20/1				SPACE ONLY	74
75	SPACE ONLY				20/1	B	20/1				SPACE ONLY	76
77	SPACE ONLY				20/1	C	20/1				SPACE ONLY	78
79	SPACE ONLY				20/1	A	20/1				SPACE ONLY	80
81	SPACE ONLY				20/1	B	20/1				SPACE ONLY	82
83	SPACE ONLY				20/1	C	20/1				SPACE ONLY	84

	KVA	AMPS
TOTAL CONNECTED	9.8	27.3
TOTAL DEMAND	9.8	27.3

PHASE TOTALS (CONNECTED LOAD)	KVA	AMPS
PHASE-A	5.3	44.1
PHASE-B	3.2	26.4
PHASE-C	1.4	11.4

LOAD TYPE	CONNECTED	DEMAND
LIGHTING		
RECEPTACLE	180 VA	180 VA
ELEVATOR		
CONTINUOUS		
KITCHEN		
MOTOR		
HVAC		
HEATING	960 VA	960 VA
MISCELLANEOUS	8,680 VA	8,680 VA
LARGEST MOTOR		

NOTES

1) MINIMUM 20A CIRCUIT WILL BE 2#12, #12G, 3/4"C AND 2#10, #10G, 3/4"C FOR 30A CIRCUIT.
2) BOLD TEXT INDICATES NEW CIRCUIT AND BREAKER.

REMARK TAG

A: PROVIDE GFCI BREAKER	D: PROVIDE SHUNT-TRIP CIRCUIT BREAKER
B: PROVIDE LOCK OFF BREAKER	
C: PROVIDE LOCK ON CIRCUIT BREAKER	

WIRE SIZE

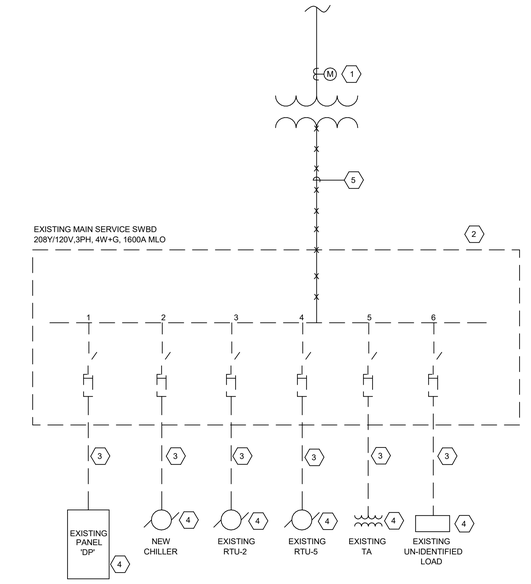
BRANCH CIRCUIT SCHEDULE

BREAKER RATING	WIRE + CONDUIT SIZE
15A/1P, 15A/2P	2#12, #12G, 3/4"C
20A/1P, 20A/2P	2#12, #12G, 3/4"C
25A/1P, 25A/2P	2#10, #10G, 3/4"C
30A/1P, 30A/2P	2#10, #10G, 3/4"C
35A/1P, 35A/2P	2#8, #10G, 3/4"C
40A/1P, 40A/2P	2#8, #10G, 3/4"C
45A/1P, 45A/2P	2#6, #10G, 1"C
50A/1P, 50A/2P	2#6, #10G, 1"C
60A/1P, 60A/2P	2#4, #10G, 1"C
70A/1P, 70A/2P	2#4, #8G, 1"C
80A/1P, 80A/2P	2#3, #8G, 1-1/4"C
15A/3P	3#12, #12G, 3/4"C
20A/3P	3#12, #12G, 3/4"C
25A/3P	3#10, #10G, 3/4"C
30A/3P	3#10, #10G, 3/4"C
35A/3P	3#8, #10G, 3/4"C
40A/3P	3#8, #10G, 3/4"C
45A/3P	3#6, #10G, 1"C
50A/3P	3#6, #10G, 1"C
60A/3P	3#4, #10G, 1"C
70A/3P	3#4, #8G, 1"C
80A/3P	3#3, #8G, 1-1/4"C
90A/3P	3#2, #8G, 1-1/4"C
100A/3P	3#1, #8G, 1-1/2"C
110A/3P	3#1, #6G, 1-1/2"C
125A/3P	3#1, #6G, 1-1/2"C

NOTES:

1. ALL CONDUCTORS ARE COPPER, 75 DEGREE C RATED, UNLESS NOTED OTHERWISE.
2. CONDUCTOR SIZES INDICATED ARE MINIMUM ALLOWED, INCREASE SIZE AS REQUIRED TO ACCOUNT FOR VOLTAGE DROP.
3. FOR ALL CIRCUITS, PROVIDE ADDITIONAL NEUTRAL OR ISOLATED GROUND WIRE IF REQUIRED BY EQUIPMENT OR ELECTRICAL OUTLET SPECIFICATION.

2 BRANCH CIRCUIT SCHEDULE
SCALE: NONE



1 ELECTRICAL ONE LINE DIAGRAM - DEMOLITION
SCALE: NONE

KEY NOTES - DEMOLITION

1. EXISTING ONCOR PAD MOUNTED TRANSFORMER AND METER TO BE RE-UED, TO SERVE NEW SWITCHBOARD.
2. EXISTING SWITCHBOARD TO BE REPLACED WITH NEW SWITCHBOARD LOCATED OUTDOOR. COORDINATE WITH OWNER/ARCHITECT FOR FOR ALL REQUIRED POWER OUTAGE, TEMPORARY POWER AND SEQUENCE OF WORK TWO WEEKS IN ADVANCE PRIOR TO START ANY DEMOLITION OR NEW WORK. ELECTRICAL CONTRACTOR TO FIELD VERIFY ALL EXISTING AND ACTIVE LOAD EQUIPMENT POWERED FROM THIS SWITCHBOARD, PROVIDE ALL REQUIRED BREAKERS AND WIRING CONDUITS, DISCONNECTS , ETC.
3. EXISTING FEEDER TO BE REPLACED WITH NEW FEEDER MATCHING NEW BREAKER RATING. ELECTRICAL CONTRACTOR TO FIELD VERIFY EXISTING FUSE OR BREAKER SIZE, PROVIDE NEW WIRE SIZE PER CODE.
4. EXISTING EQUIPMENT TO BE RE-FED FROM NEW SWITCHBOARD.
5. ABANDON EXISTING UNDERGROUND FEEDER TO REMOVED SWITCHBOARD.

KEY NOTES - NEW

1. PROVIDE SWITCHBOARD WITH ADVANCE INTEGRAL DIGITAL METER, SQUARED PM5500 SERIES OR EQUALS.
2. PROVIDE SHORT CIRCUIT CALCULATION, SHORT CIRCUIT AND ARC FLASH LABELS PER NEC 110.6 & 110.24.
3. NEW BREAKER SHALL BE LSI TYPE AND HAS FEATURE TO MEET NEC 240.87 FOR ARC FLASH ENERGY REDUCTION REQUIREMENT.
4. CONTRACTOR TO FIELD VERIFY EXISTING FUSE RATING AND PROVIDE NEW BREAKERS, FEEDERS TO MATCH EXISTING FUSE BREAKER RATING AND CODE COMPLIANCE.
5. BOND NEW SERVICE SWITCHBOARD TO AVAILABLE BUILDING GROUNDING SYSTEM (WATER METAL PIPE, BUILDING STEEL, UFER, NEW GROUND RODS) AS REQUIRED BY NEC ARTICLE 250.
6. PROVIDE REQUIREMENTS THAT MAJOR EQUIPMENT (ELECTRICAL PANELS,SWITCH GEAR, UPS,GENERATORS) IS TO BE TESTED BY THE INSTALLER TO VERIFY THAT IT FUNCTIONS ACCORDING TO ITS DESIGN OBJECTIVES AND SPECIFICATIONS. DALLAS ISD-M&O REPRESENTATIVE OF THE SPECIFIC TRADE OR DISCIPLINE TO BE PRESENT DURING TESTING TO VERIFY FUNCTION.

ELECTRICAL FEEDER SCHEDULE	
TAG	CONDUCTOR CONFIGURATION
500	(2) SETS OF (3#250KCM, #2 G, 2-1/2"C)
100N	4#1, #8 G, 1-1/2"C

NOTE: ALL CONDUCTORS SHALL BE COPPER, 75 DEGREE C.

2 ELECTRICAL ONE LINE DIAGRAM - NEW WORK
SCALE: NONE

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PROFESSIONAL ENGINEER
11/07/2025

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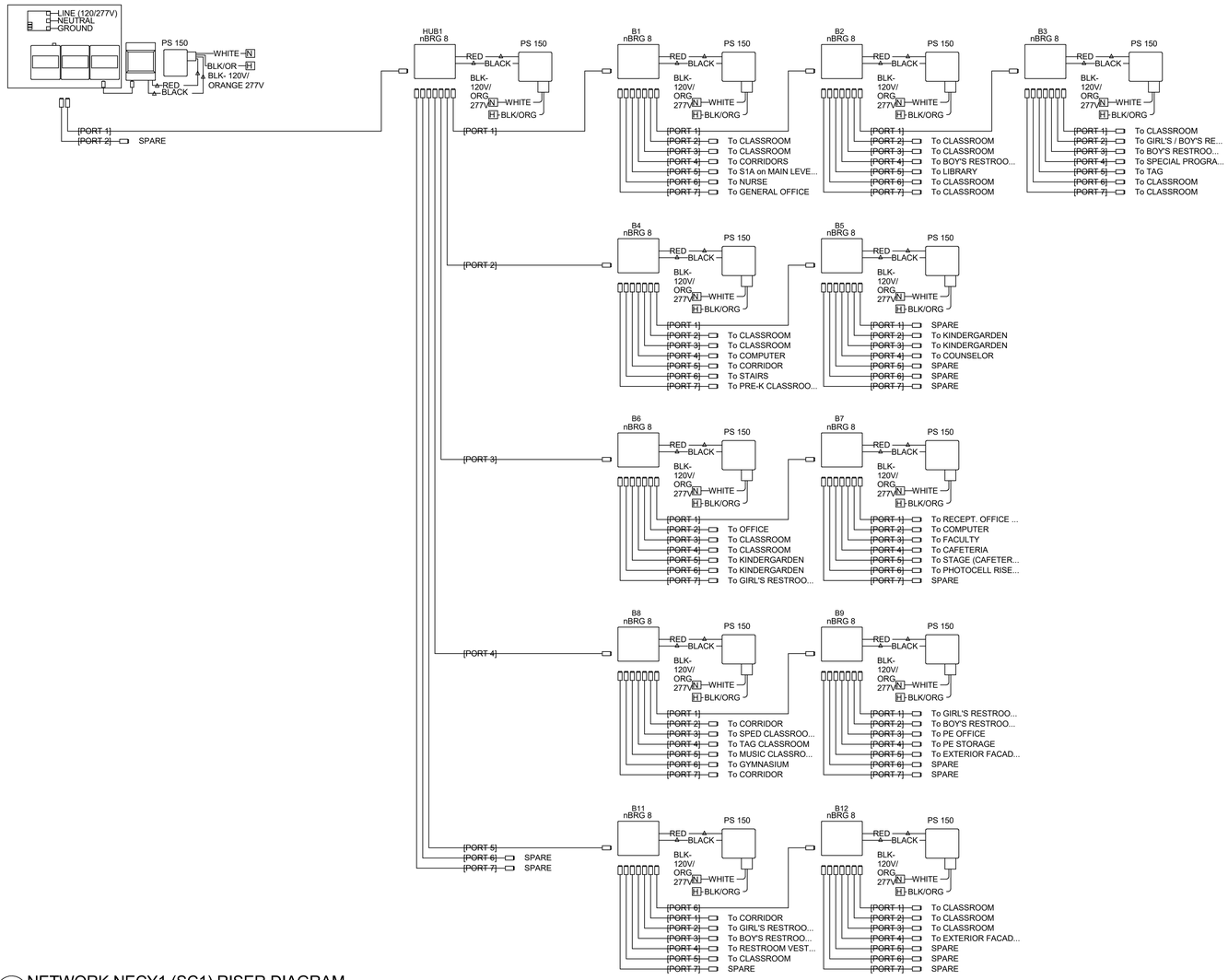
	COMMENTS #00
11/07/2025	100% CD/PERMIT

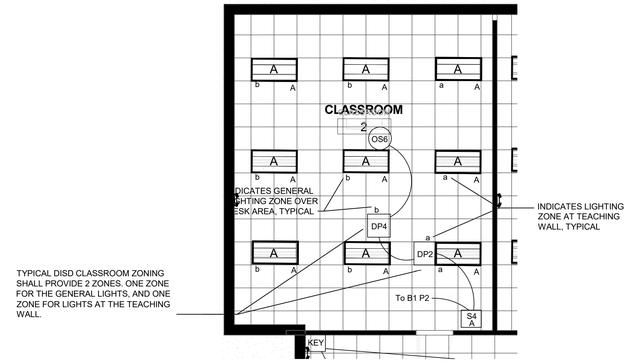
ONE LINE DIAGRAM &
FIXTURE SCHEDULE

Scale: AS NOTED

E.501



1 NETWORK NECY1 (SC1) RISER DIAGRAM
NO SCALE



2 TYPICAL CLASSROOM DETAIL
1/4" = 1'

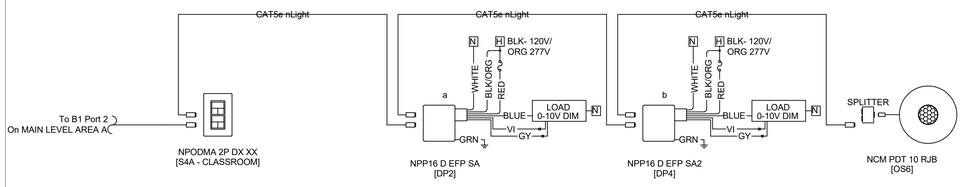
NOTE: DRAWINGS PROVIDED DO NOT INDICATE LOCATION OF TEACHING WALL. LIGHTING ZONE LOCATIONS SHALL BE DETERMINED BY LATEST ARCHITECTURAL DRAWINGS PER EACH CLASSROOM.

SOO	OCCUPANCY SENSOR: VACANCY MODE (MANUAL ON)	OCCUPANCY SENSOR: OCCUPANCY MODE (AUTO ON)	OCCUPANCY SENSOR: SENSOR TIME OUT PERIOD (MINUTES)	OCCUPANCY SENSOR: DUAL TECHNOLOGY	TIME CLOCK: SCHEDULE ON TIME	TIME CLOCK: SCHEDULE OFF TIME	TIME CLOCK: SCHEDULE OVERRIDE SWITCH	WALL SWITCH: MANUAL (ON/OFF)	WALL SWITCH: MANUAL DIMMING	WALL SWITCH: KEY SWITCH	WALL SWITCH: SCENE CONTROL	WALL SWITCH: GRAPHIC TOUCHSCREEN	DAYLIGHT SENSOR: SWITCHING (ON/OFF)	DAYLIGHT SENSOR: DIMMING	DAYLIGHT SENSOR: TARGET LIGHTING LEVELS (FC)	OTHER: EXTERIOR LOCATION	OTHER: PLUG LOAD CONTROL	OTHER: NETWORKED	NOTES
BREAKROOM	X		20	X				X										X	
CAFETERIA		X	20	X	TBD	TBD	X				X							X	1
CLASSROOMS	X		20	X					X								X	X	
COORIDORS		X	20	X	TBD	TBD	X			X								X	1
EXTERIOR FACADE & CANOPIES					DUSK	DAWN										X			2
GIRLS/BOYS RESTROOMS		X	20	X						X								X	
LARGE OFFICE	X		20	X					X									X	
LIBRARY/MEDIA CENTER	X		20	X					X						X	50		X	
NURSE	X		20	X					X									X	
OFFICE	X		20	X					X								X		
PLATFORM		X	20	X				X										X	
PRIVATE RESTROOM		X	20	X				X											
SMALL CONFERENCE ROOM	X		20	X					X									X	
STAFF RESTROOM		X	20	X				X										X	
STORAGE / CUSTODIAL CLOSET	X		20	X				X											
TEACHER WORKROOM	X		20	X				X										X	

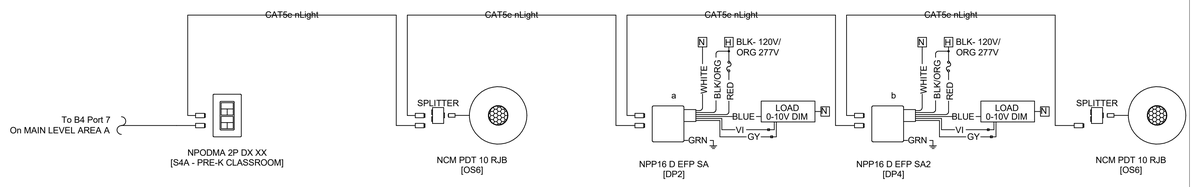
NOTES:
1 TIME SCHEDULE TO BE COORDINATED WITH OWNERSHIP DURING COMMISIONING.

2 LIGHTS SHALL BE CONTROLLED BY PHOTOCELL FOR ON/OFF OPERATION AND TIME CLOCK SHALL DIM THE LIGHTS BY 50% BETWEEN THE HOURS OF MIDNIGHT AND 6:00 AM IN THE MORNING.

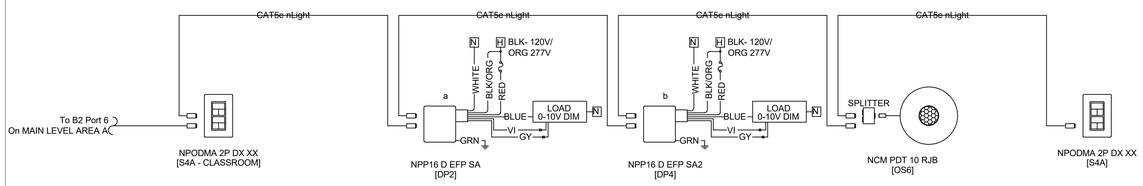
3 SEQUENCE OF OPERATION
NO SCALE



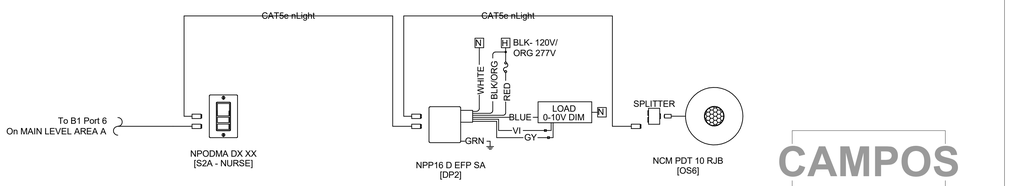
4 TYPICAL CLASSROOM / COMPUTER ROOM / KINDERGARDEN DETAIL
NO SCALE



5 PRE-K CLASSROOM DETAIL
NO SCALE



6 CLASSROOM w/ 2 KEYPAD STATIONS ROOM DETAIL
NO SCALE



7 GENERAL OFFICE / NURSE / COUNSELOR / OFFICE / FACULTY ROOM / TAG ROOM DETAIL
NO SCALE

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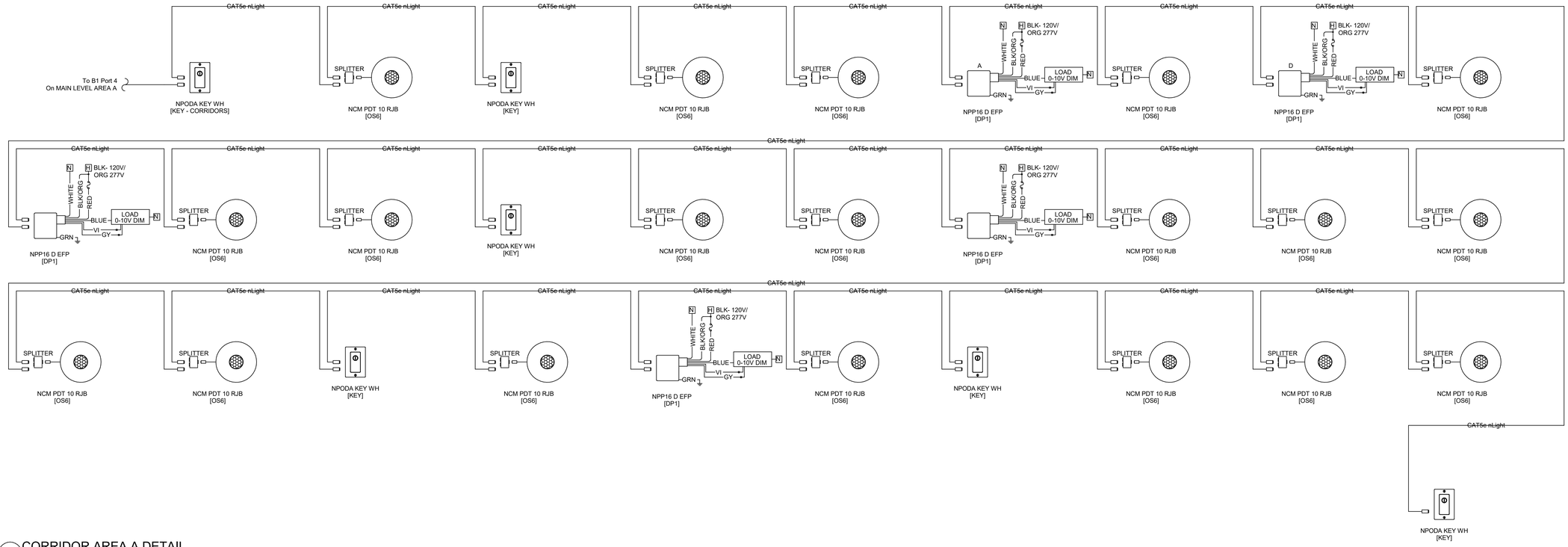
11/07/2025	100% CD/PERMIT

LIGHTING CONTROLS - DIAGRAM

Scale: AS NOTED

E.502



8 CORRIDOR AREA A DETAIL
NO SCALE

9 CORRIDOR AREA A & AREA B DETAIL
NO SCALE

10 CORRIDOR AREA B DETAIL
NO SCALE

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LIGHTING CONTROLS - DIAGRAM

Scale: AS NOTED

E.503

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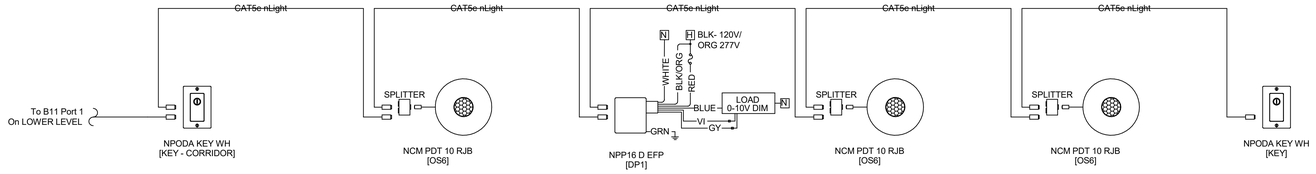

11 CORRIDOR (LOWER LEVEL) DETAIL
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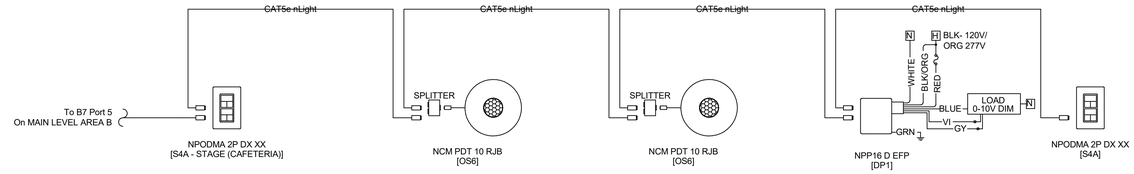

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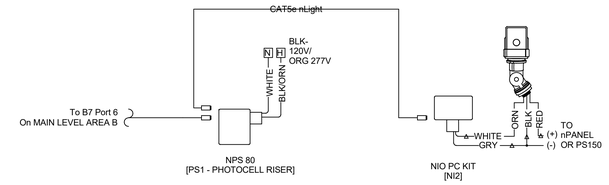

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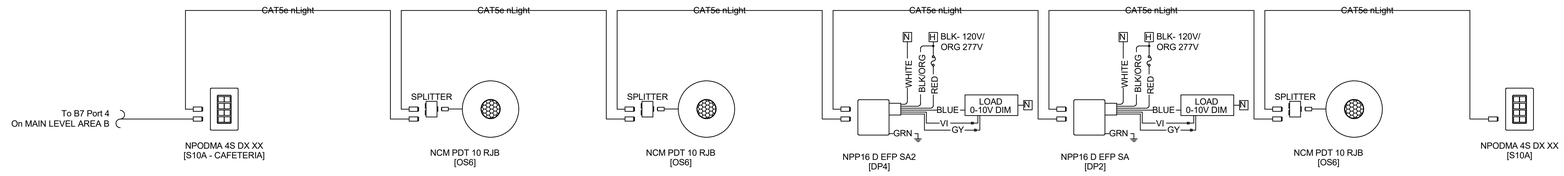

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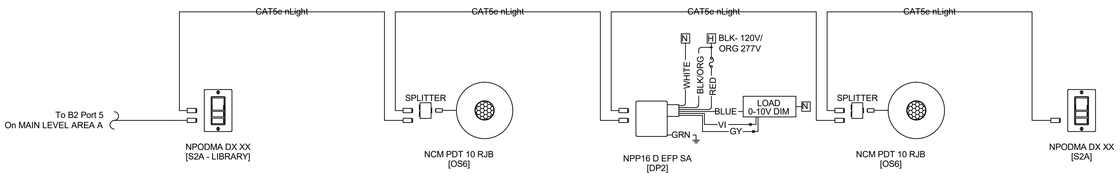

15 LIBRARY ROOM DETAIL
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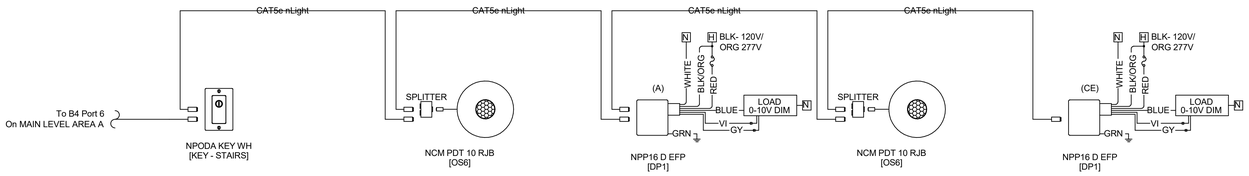

16 TYPICAL GIRL'S / BOY'S RESTROOM DETAIL
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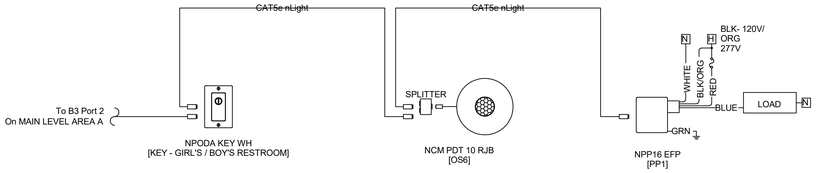

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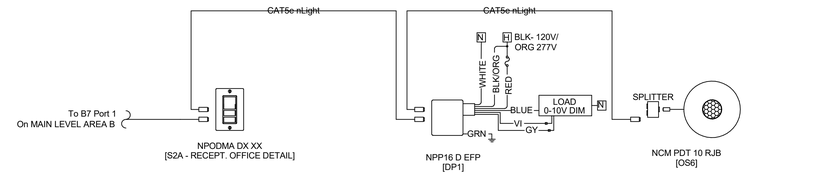

18 RECEPT. OFFICE DETAIL
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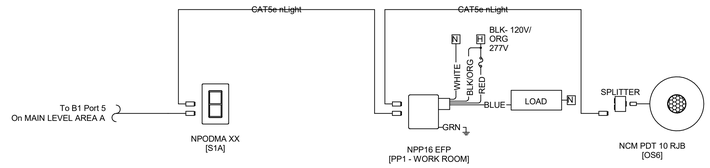
LIGHTING CONTROLS - DIAGRAM

Scale: AS NOTED

E.504



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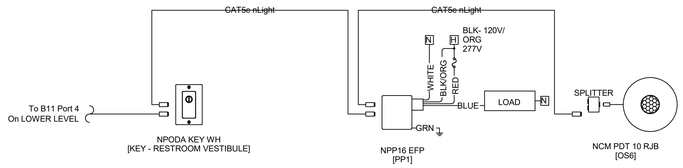

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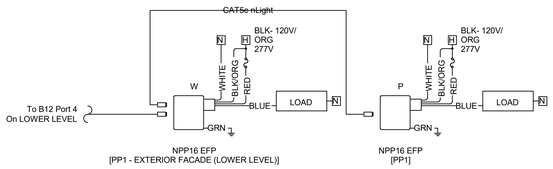

23 EXTERIOR FACADE (LOWER LEVEL) DETAIL
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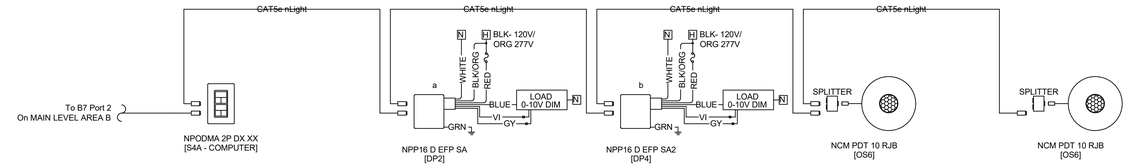
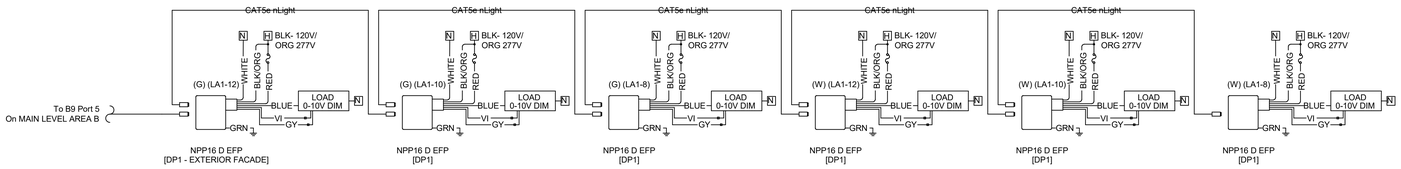


20 COMPUTER ROOM w/ 2 SENSORS
NO SCALE



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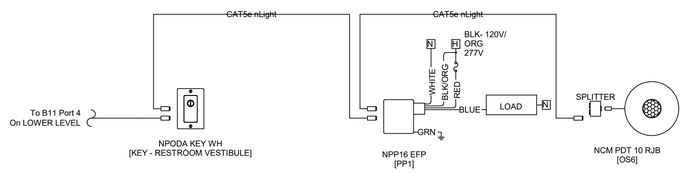

24 RESTROOM VESTIBULE DETAIL
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LIGHTING CONTROLS - DIAGRAM

Scale: AS NOTED

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DISD DESIGN GUIDELINES

ADDRESSABLE FIRE ALARM SYSTEMS

1. ARCHITECT TO CONFIRM SYSTEM MONITORING PROGRAM REQUIREMENTS WITH DALLAS ISD-IT-CSS, CENTRAL DISPATCH, AND M&O.
   - 1.1 FIRE ALARM SYSTEMS ARE MONITORED BY AN AES-MULTINET RECEIVER AT DALLAS ISD'S CENTRAL MONITORING SYSTEM. FIRE ALARM SYSTEMS ARE TO REPORT TO CENTRAL MONITORING SYSTEM VIA AN AES 7788F/7744F SERIES FIRE SUBSCRIBER AND AES 7794 AES-INTELLIPRO FIRE OR DALLAS ISD APPROVED EQUAL. IF CENTRAL MONITORING SYSTEM IS NOT AVAILABLE, SIGNAL IS TO BE SENT TO SOUTHWEST DISPATCH OR AS DIRECTED BY DALLAS ISD DESIGNATED REPRESENTATIVE. PROVIDE TWELVE MONTHS OF MONITORING SERVICE REQUIRED AS PART OF THE INSTALL.
   - 1.2 NOTIFIER NFS2-3030 ARE THE PREFERRED SYSTEMS. PROPOSED ALTERNATE SYSTEMS TO BE PRE-APPROVED BY DALLAS ISD DESIGNATED REPRESENTATIVE, AND DALLAS ISD-M&O.
   - 1.3 EXISTING SYSTEMS: ARCHITECT TO CONFIRM STATUS WITH DALLAS ISD-IT-CSS, CENTRAL DISPATCH, AND M&O.
   - 1.4 WHEN EXPANDING AN EXISTING SYSTEM, ARCHITECT TO CONFIRM STATUS, CAPACITY, AND REQUIREMENTS WITH DALLAS ISD-M&O AND ALSO FIELD VERIFY.
2. SYSTEM TO COMPLY WITH ALL APPLICABLE CODES. ANY CONFLICTS BETWEEN REQUIREMENTS LISTED IN THESE TECHNICAL DESIGN GUIDELINES AND APPLICABLE CODES TO BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE DALLAS ISD DESIGNATED REPRESENTATIVE, WHO WILL ALSO REVIEW WITH DALLAS ISD-M&O.
   - 2.1 GENERAL REQUIREMENTS:
     - 2.1.1 FIRE ALARM SYSTEMS ARE TO BE ADDRESSABLE.
     - 2.1.2 FIRE ALARM PANELS ARE TO HAVE INTERNAL DIALERS.
     - 2.1.3 DOOR HOLDERS ARE TO BE ELECTROMAGNETIC AND CONNECTED TO THE BUILDING FIRE ALARM SYSTEM. ELECTROMECHANICAL DEVICES ARE NOT ACCEPTABLE. MAGNETIC DOOR HOLDERS ARE TO BE POWERED BY 24-VOLT DC ONLY.
     - 2.1.4 FIRE ALARM SYSTEM IS TO HAVE SURGE PROTECTION AT EACH LOCATION THE SIGNALING LINE CIRCUIT LEAVES THE MAIN BUILDING OR RETURNS TO THE BUILDING FROM PORTABLES.
     - 2.1.5 FIRE ALARM SYSTEM TO HAVE INTEGRAL MASS NOTIFICATION.
     - 2.1.6 CEILING-MOUNTED AUDIO/VISUAL DEVICES ARE PREFERRED.
     - 2.1.7 PULL STATION PROTECTORS WITH INTEGRAL HORN ARE REQUIRED FOR ALL MANUAL PULL STATIONS IN GYMNASIUM.
     - 2.1.8 HVAC DUCT DETECTORS TO BE POWERED BY THE FIRE ALARM SYSTEM. DUCT DETECTORS ON FIRE ALARM CONTROL PANEL (FACP) ARE NOT TO BE POWERED BY HVAC.
     - 2.1.9 ALL BUILDINGS ON A CAMPUS TO BE CONNECTED TO THE MAIN FIRE ALARM CONTROL PANEL (FACP).
     - 2.1.10 COPY OF THE FIRE ALARM CONTROL PANEL PROGRAM TO BE PROVIDED AND PLACED IN THE DOCUMENT CABINETS LOCATED AT THE FIRE ALARM CONTROL PANEL (FACP).
     - 2.1.11 ALL EXISTING PANELS, DEVICES, AND WIRING TO BE REMOVED UPON INSTALLATION OF NEW SYSTEMS.
     - 2.1.12 ALL REMOTE POWER SUPPLY AND AMP CABINET LOCATIONS ARE TO BE PROVIDED AND PLACED IN LOCKED DOCUMENT CABINETS LOCATED AT THE FIRE ALARM CONTROL PANEL (FACP).
     - 2.1.13 FIRE ALARM CONTROL PANELS (FACP) TO BE LOCATED IN THE MAIN ADMINISTRATIVE OFFICE.
     - 2.1.14 ALL FIRE ALARM AC BREAKERS TO HAVE LOCK-ON DEVICES INSTALLED PER NEC 70 ELECTRICAL CODE.
     - 2.1.15 FIRE ALARM TO BE ZONED SEPARATELY FOR AUDITORIUMS AND BLACK BOX THEATRES FOR USE OF HAZE, FOG OR OTHER ATMOSPHERICS IN PERFORMANCE. COORDINATE WITH THEATRE CONSULTANT AND DALLAS ISD FINE ARTS.
3. ARCHITECT IS TO INCLUDE THE FOLLOWING REQUIREMENTS AT A MINIMUM IN THE CONTRACT DOCUMENTS:
   - 3.1 CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH DALLAS ISD-IT-CSS AND IT-INFRASTRUCTURE TO PROVIDE ANY DEDICATED PHONE LINES THAT ARE REQUIRED. TYPICALLY ONLY REQUIRED IN REMOTE LOCATIONS THAT CANNOT USE THE AES SYSTEM.
   - 3.2 LICENSED FIRE ALARM INSTALLER TO COORDINATE ANY PROPOSED SYSTEM EXPANSION WITH DALLAS ISD-M&O PRIOR TO SUBMITTAL AND INSTALLATION.
   - 3.3 LICENSED FIRE ALARM CONTRACTOR TO PROVIDE SYSTEM SUBMITTAL WITH ALL ZONE INFORMATION. CONTRACTOR TO COORDINATE SYSTEM MONITORING PROGRAM REQUIREMENTS WITH DALLAS ISD-IT-CSS AND CENTRAL DISPATCH.
   - 3.4 INSTALL LOCKING DOCUMENT BOX AT THE FIRE ALARM CONTROL PANEL (FACP). PLACE COMPLETED AS-BUILT DRAWINGS, UPON COMPLETION, IN LOCKED DOCUMENT BOX.
   - 3.5 INSTALLATION IDENTIFYING STICKER TO BE PLACED INSIDE THE FIRE ALARM CONTROL PANEL (FACP).
   - 3.6 SALVAGED ITEMS: ALL EXISTING FIRE ALARM CONTROL PANELS AND REMOTE POWER SUPPLIES TO BE REMOVED WITH CARE AND RETURNED TO DALLAS ISD DESIGNATED REPRESENTATIVE, WHO WILL PROVIDE TO DALLAS ISD-M&O.
   - 3.7 ATTIC STOCK OF LIKE MANUFACTURE TO BE PROVIDED TO DALLAS ISD DESIGNATED REPRESENTATIVE, WHO WILL PROVIDE TO DALLAS ISD-M&O UPON COMPLETION OF INSTALLATION IN THE FOLLOWING QUANTITIES. 10% OF FIELD DEVICES, ONE SLC (SIGNALING LINE CIRCUIT) LOOP CARD, ONE CPU (CENTRAL PROCESSING UNIT), ONE ACM-24AT CONTROL MODULE, IF USED, AND ONE REMOTE POWER SUPPLY.

GENERAL NOTES FOR FIRE ALARM

1. PROVIDE INTERLOCKS TO THE BUILDING FIRE ALARM SYSTEM TO PROVIDE AUTOMATIC SIGNALING TO AN APPROVED LOCATION WITH ADEQUATE DIALING AND COMMUNICATION SYSTEM TO ALERT THE LOCAL FIRE DEPARTMENT. A LEASED TELEPHONE LINE WILL BE PROVIDED BY THE OWNER.
2. ALL JUNCTION BOXES AND COVER PLATES TO EMERGENCY SYSTEM SHALL BE PAINTED RED FOR QUICK RECOGNITION.
3. CONTRACTOR SHALL COMPLY WITH ALL NATIONAL, STATE AND LOCAL CODES. CONTRACTOR SHALL PROVIDE A COMPLETE FIRE ALARM SYSTEM THAT IS COMPLIANT WITH ALL CODES.
4. VERIFY LOCATION OF THE FIRE ALARM CONTROL AND ANNUNCIATOR (WHERE REQUIRED) PANELS WITH THE LOCAL AUTHORITY HAVING JURISDICTION PRIOR TO ROUGH-IN.
5. ALL BUILDINGS SHALL HAVE APPROVED RADIO COVERAGE FOR EMERGENCY RESPONDERS WITHIN THE BUILDING BASED UPON THE EXISTING COVERAGE LEVELS OF THE PUBLIC SAFETY COMMUNICATION SYSTEM OF THE JURISDICTION AT THE EXTERIOR OF THE BUILDING.
6. ALL WIRE/CABLE FOR INITIATING AND INDICATING CIRCUITS SHALL COMPLY WITH NFPA 70, ARTICLE 760. ALL WIRE SHALL BE RUN IN CONDUIT, WHERE WIRE IS SUBJECT TO DAMAGE, WHICH SHALL BE RUN IN NEAT AND ORDERLY MANNER AS HIGH AS POSSIBLE.
7. CONNECTION FOR FIRE ALARM CONTROL PANEL(S) TO 120 VOLT POWER SUPPLY SHALL BE ON A DEDICATED BRANCH CIRCUIT. THE CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING, BE LOCKABLE, BE ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL AND BE IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL". THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE FIRE ALARM CONTROL UNIT.
8. SEAL PENETRATIONS OF RATED WALLS TO MAINTAIN THE INTEGRITY OF THE WALL ASSEMBLY.
9. PENETRATIONS OF EXTERIOR WALLS AND ROOF DECK SHALL BE WEATHER PROOFED.
10. PROVIDE UNISTRUT SUPPORT RACK AT ALL LOCATIONS OF MORE THAN A SINGLE CONDUIT. CONDUITS SHALL BE MOUNTED TO THE TOP OF SUPPORT RACK USING SPLIT UNISTRUT CLAMPS AND JUNCTION BOXES SHALL BE ORIENTED FOR ACCESS FROM BELOW.
11. WHERE EXPOSED CONDUIT MUST BE USED, CONDUITS SHALL BE GROUPED AND MOUNTED ON CHANNEL BOLTED SECURELY TO BUILDING STRUCTURE.
12. FIRE ALARM CONTRACTOR SHALL COORDINATE CONDUIT AND CONDUCTOR SIZES WITH SYSTEMS VENDOR AND SHALL PROVIDE MATERIAL AS REQUIRED.
13. ALL WIRE RUN EXPOSED IN AIR PLENUM SHALL UTILIZE PLENUM RATED CABLE.
14. ALL STROBE CANDELA RATINGS SHALL COMPLY WITH TEXAS ACCESSIBILITY STANDARDS.

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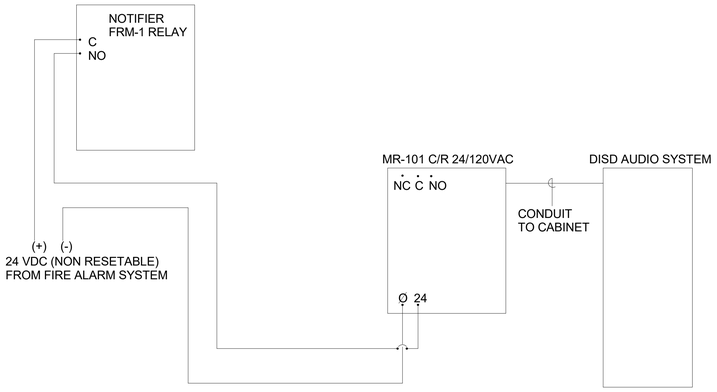
FIRE ALARM GENERAL NOTES AND SYMBOL LEGEND

Scale: AS NOTED

FA.001



2 AUDIO SHUNT DIAGRAM

SCALE: NO SCALE

DISCLAIMER NOTE

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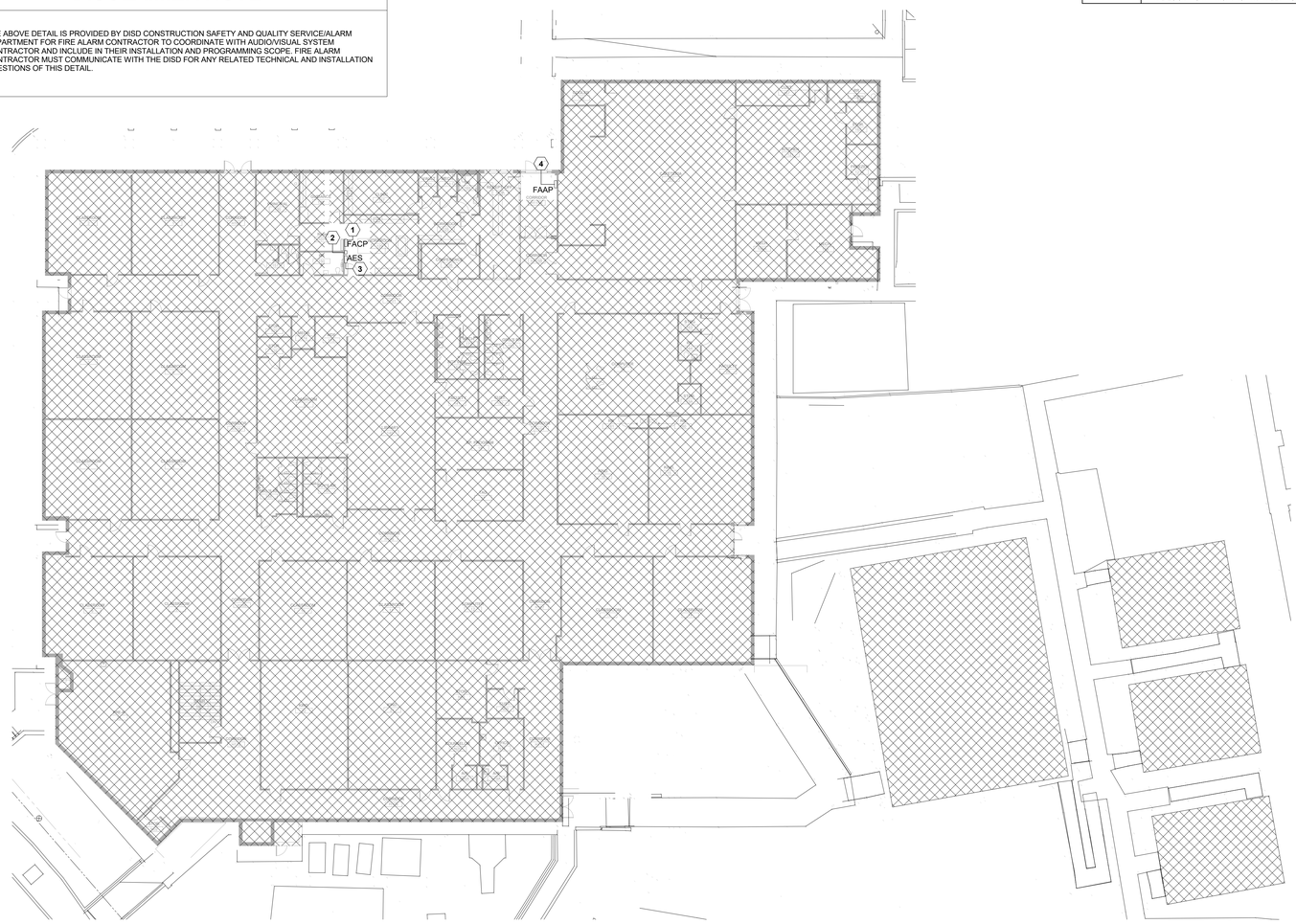

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2. REQUIREMENTS OF FIRE ALARM SYSTEMS MEETS CRITERIA AS PER SECTION TDG OF DISD.

FIRE ALARM LEGEND

NFPA 72 FIRE ALARM SYSTEM

FIRE ALARM LEGEND

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL PANEL
FAAP	FIRE ALARM ANNUNCIATOR PANEL
AES	FIRE ALARM WIRELESS RADIO COMMUNICATOR
FAD	FIRE ALARM DOCUMENTS (FAD) CABINET

KEYNOTES

1	NEW FIRE ALARM CONTROL PANEL TO BE INSTALLED IN MAIN ADMINISTRATION OFFICE. ELECTRICAL CONTRACTOR TO POWER THE PANEL FROM SAME CIRCUIT
2	NEW FIRE ALARM DOCUMENTS (FAD) CABINET. INSTALL NEXT TO THE FACP. CABINET MUST BE BY HONEYWELL FARENHYT SERIES (# SFK-FAD).
3	PROPOSED LOCATION OF NEW AES TRANSMITTER DEVICE. COORDINATE WITH DISD. CONNECT TO THE SAME CIRCUIT AS THE FACP.
4	NEW FIRE ALARM ANNUNCIATOR PANEL TO BE INSTALLED IN THE SECURED VESTIBULE. COORDINATE WITH DISD FOR FINAL LOCATION PRIOR TO INSTALLATION

FIRE ALARM NOTE

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Registration No. F-001731
Project Number: D21-2552.00

OVERALL PLAN - FIRE ALARM | 1/16" = 1'-0" | 1

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ANH V. NGUYEN
94936
LICENSED
ARCHITECT
11/07/2025

FILE:
DRAWN BY: SC
CHECKED BY: JS

ISSUE:

03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

OVERALL PLAN - FIRE ALARM

Scale: AS NOTED

FA.002

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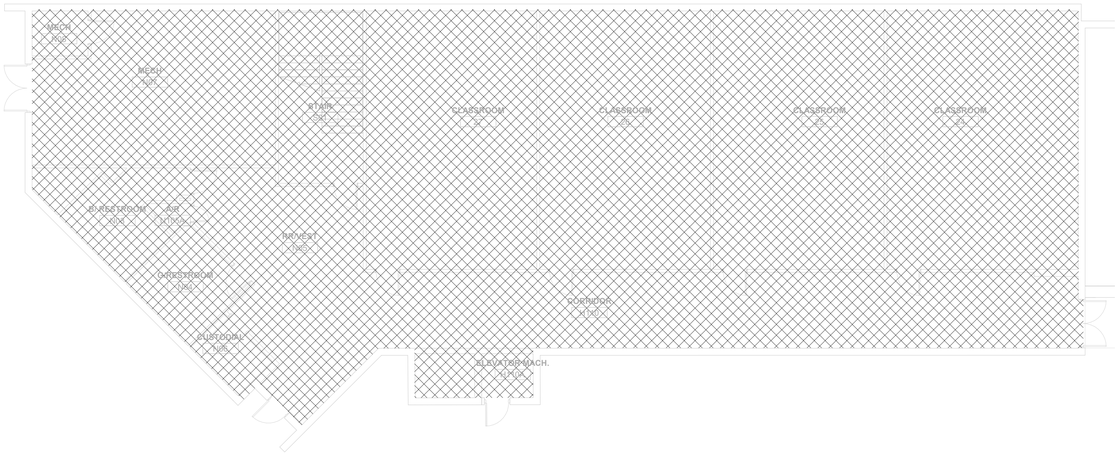

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LOWER LEVEL - FIRE ALARM | 1/8" = 1'-0" | 1

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SEAL:

FILE:
DRAWN BY: Author
CHECKED BY: Checker

ISSUE:

03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

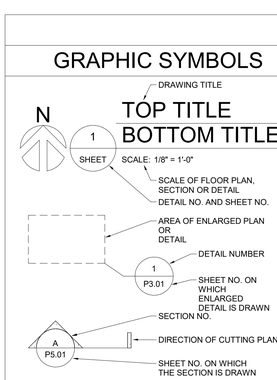
LOWER LEVEL

Scale: AS NOTED

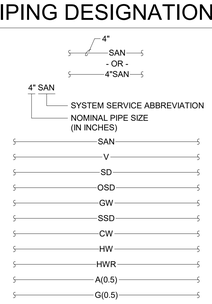
FA.003

PLUMBING SYMBOL LEGEND

GRAPHIC SYMBOLS



PIPING DESIGNATIONS



MISCELLANEOUS SYMBOLS

XXX-1	EQUIPMENT DESIGNATION
	SINGLE LINE PIPE BREAK
	DOUBLE LINE PIPE BREAK
	STANDARD BREAK
1	KEYED NOTE
1	REVISION DELTA
	POINT OF DISCONNECTION
	POINT OF CONNECTION (NEW TO EXISTING)
	NEW ITEMS (PIPING/EQUIPMENT)
	EXISTING ITEMS TO REMAIN
	EXISTING ITEMS TO BE DEMOLISHED
	LIMIT OF EXISTING ITEMS TO BE REMOVED
	NEW CONNECTION TO EXISTING ITEM
(N)	NEW ITEM (NOTATION SHOWN AS NECESSARY FOR CLARIFICATION)
(E)	EXISTING ITEM TO REMAIN (NOTATION SHOWN AS NECESSARY FOR CLARIFICATION)
(F)	FUTURE ITEM (NOTATION SHOWN AS NECESSARY FOR CLARIFICATION)
(R)	EXISTING ITEM TO BE RELOCATED (NOTATION SHOWN AS NECESSARY FOR CLARIFICATION)
(D)	EXISTING ITEM TO BE DEMOLISHED (NOTATION SHOWN AS NECESSARY FOR CLARIFICATION)

PIPE & FITTING SYMBOLS

DOUBLE LINE	SINGLE LINE	DESCRIPTION
		PIPE
		DIRECTION OF FLOW / SLOPE
		PIPING WITH INSULATION (WHEN SHOWN FOR CLARITY)
		WELDED JOINT
		SCREWED JOINT
		FLANGED JOINT
		UNION
		GROOVED END JOINT
		GENERIC FLEXIBLE COUPLING (REFER TO SPECIFICATIONS)
		GROOVED END ADAPTER FLANGE
		FLANGED COUPLING ADAPTER
		STUB END OR FLANGE ADAPTER W/ FLANGE RING
		BLIND FLANGE
		ELBOW, 45 DEGREE (LONG RADIUS UON)
		ELBOW, 90 DEGREE (LONG RADIUS UON)
		ELBOW, 90 DEGREE - CHANGE IN DIRECTION TOWARD VIEWER
		ELBOW, 90 DEGREE - CHANGE IN DIRECTION AWAY FROM VIEWER
		TEE FITTING
		TEE FITTING, BRANCH TOWARD VIEWER
		TEE FITTING, BRANCH AWAY FROM VIEWER
		LATERAL
		REDUCER - CONCENTRIC
		REDUCER - ECCENTRIC
		CAP
		ANCHOR
CO	CO	CLEANOUT PLUG / WALL CLEANOUT
		VENTURI FLOW METER
		FLOW ORIFICE PLATE
		STRAINER - "Y" TYPE WITH BLOW DOWN
		THERMOWELL WITH THERMOMETER
		PRESSURE GAUGE WITH GAUGE COCK

NOTE:
WELDED FITTINGS ARE SHOWN FOR DOUBLE LINE PIPING.
FITTINGS WITH OTHER END CONDITIONS ARE SIMILAR.

PIPE & FITTING SYMBOLS

DOUBLE LINE	SINGLE LINE	DESCRIPTION
		AQUASTAT
		AUTOMATIC AIR VENT
		MANUAL AIR VENT
		WATER METER
		PUMP, ARROW INDICATES FLOW

NOTE:
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VALVE SYMBOLS

DOUBLE LINE	SINGLE LINE	DESCRIPTION
		GATE VALVE
		SHUT-OFF VALVE IN VALVE BOX
		BUTTERFLY VALVE
		BALL VALVE
		DIAPHRAGM VALVE
		GLOBE VALVE
		PLUG VALVE
		GAS COCK
		CHECK VALVE
		BACKFLOW PREVENTER
		BACKWATER VALVE
		PRESSURE REDUCING VALVE
		BALANCING VALVE
		ANGLE VALVE
		TEMPERATURE AND PRESSURE RELIEF VALVE
S	S	SOLENOID VALVE
M	M	MOTOR OPERATED VALVE
PCV	PCV	GAS PRESSURE REGULATOR

NOTE:
WELDED FITTINGS ARE SHOWN FOR DOUBLE LINE PIPING.
FITTINGS WITH OTHER END CONDITIONS ARE SIMILAR.

EQUIPMENT SYMBOLS

FD	FLOOR/HUB DRAIN	OC	P-TRAP
FS	FLOOR SINK		HOSE BIBB / FROST-PROOF HOSE BIBB
	ROOF DRAIN / OVER-FLOW ROOF DRAIN	■	TRAP PRIMER
	FLOOR CLEANOUT		WATER HAMMER ARRESTOR
	CLEANOUT TO GRADE		

THIS IS A STANDARD LEGEND SHEET. SOME INFORMATION ON THIS SHEET MAY NOT NECESSARILY APPLY TO THIS PROJECT.

ABBREVIATIONS

A (0.5)	COMPRESSED AIR (WORKING PRESS.)	FCU	FAN COIL UNIT	PG	PRESSURE GAUGE
AAV	AUTOMATIC AIR VENT	FD	FLOOR DRAIN	PH	PHASE
ABV	ABOVE	°F	FAHRENHEIT [DEGREES]	PHC	PREHEAT COIL
AC	ALTERNATING CURRENT	FLA	FULL LOAD AMPS	PRV	PRESSURE REDUCING VALVE
A/C	AIR CONDITIONING	FLG	FLANGE	PPM	PARTS PER MILLION
ACU	AIR CONDITIONING UNIT	FMS	FACILITY MANAGEMENT SYSTEM	PLBG	PLUMBING
AD	ACCESS DOOR, AREA DRAIN	FOB	FLAT ON BOTTOM	PRESS	PRESSURE
AFF	ABOVE FINISHED FLOOR	FOT	FLAT ON TOP	PS	PRESSURE SWITCH
AHU	AIR HANDLING UNIT	FPI	FINS PER INCH	PSF	POUNDS PER SQUARE FOOT
AI	ANALOG INPUT	FPM	FEET PER MINUTE	PSI	POUNDS PER SQUARE INCH
ALT	ALTITUDE	FPS	FEET PER SECOND	PSIG	POUNDS PER SQUARE INCH GAUGE
AMB	AMBIENT	FRP	FIBERGLASS REINFORCED PLASTIC	PTAC	PACKAGED TERMINAL A/C
AMP	AMPERE	FT	FOOT, FEET		
AO	ANALOG OUTPUT	FT LB	FOOT-POUND	Q	TOTAL, TOTAL HEAT
AP	ACCESS PANEL			QT	QUART
APD	AIR PRESSURE DROP	G (0.5)	GAS (WORKING PRESSURE)	QTY	QUANTITY
APPROX	APPROXIMATE	GA	GAUGE, GAGE		
AS	AIR SEPARATOR	GAL	GALLON	R	RELIEF, THERMAL RESISTANCE
ASC	ABOVE SUSPENDED CEILING	GALV	GALVANIZED	RA	RETURN AIR
AHJ	AUTHORITY HAVING JURISDICTION	GEN	GENERATOR	RAC	ROOM AIR CONDITIONER
AVG	AVERAGE	GLV	GLOBE VALVE	RECT	RECTANGULAR
AWG	AMERICAN WIRE GAUGE	GPD	GALLONS PER DAY	REFR	REFRIGERATION
		GPH	GALLONS PER HOUR	RET	RETURN
B&S	BELL & SPIGOT	GPM	GALLONS PER MINUTE	RED	REDUCER
B/B	BACK TO BACK	GTV	GATE VALVE	REV	REVOLUTIONS
BAL	BALANCE	GW	GREASE WASTE	REF	REFERENCE
BBR	BASE BOARD RADIATOR			RH	RELATIVE HUMIDITY
BFC	BELOW FINISHED CEILING	HC	HEATING COIL	RHC	REHEAT COIL
BFG	BELOW FINISHED GRADE	HD	HEAD/HUB DRAIN	RHG	REFRIGERANT HOT GAS
BFV	BUTTERFLY VALVE	HG	HEAT GAIN	RHV	REHEAT VALVE
BFBP	BOILER FEED BOOSTER PUMP	HGT	HEIGHT	RL	REFRIGERANT LIQUID
BFW	BOILER FEED WATER	HP	HEAT PUMP, HORSEPOWER	RPM	REVOLUTIONS PER MINUTE
BLDG	BUILDING	HPC	HIGH PRESSURE CONDENSATE	RPS	REVOLUTIONS PER SECOND
BHP	BRAKE HORSEPOWER	HPS	HIGH PRESSURE STEAM (>100 PSI)	RS	REFRIGERANT SUCTION
BLR	BOILER	HR	HOUR	RTU	ROOF TOP UNIT
BLW	BELOW	HSTAT	HUMIDISTAT	RV	RELIEF VALVE
BO	BLOWOFF	HVAC	HEATING, VENTILATION AND A/C		
BOD	BOTTOM OF DUCT	HW	HOT WATER	S	SECOND
BOP	BOTTOM OF PIPE	HWB	HOT WATER BOILER	SA	SUPPLY AIR
BOS	BOTTOM OF STEEL	HWC	HOT WATER COIL	SAN	SANITARY
BTU	BRITISH THERMAL UNIT	HWCP	HOT WATER CIRCULATING PUMP	SC	SHADING COEFFICIENT
BTUH	BRITISH THERMAL UNIT PER HOUR	HWP	HOT WATER PUMP	SD	STORM DRAIN
BV	BALL VALVE	HWR	HOT WATER RETURN	SEER	SEASONAL EER
BYP	BYPASS	HWS	HOT WATER SUPPLY	SF	SQUARE FEET
		HWT	HOT WATER TANK	SG	SPECIFIC GRAVITY, STEAM GAUGE
°C	CELSIUS [DEGREES]	HZ	HERTZ (FREQUENCY)	SH	SENSIBLE HEAT
C/C	COOLING COIL			SHG	SENSIBLE HEAT GAIN
CAP	CAPACITY	I/O	INPUT/OUTPUT	SHGC	SOLAR HEAT GAIN COEFFICIENT
CD	CONDENSATE DRAIN	ID	INSIDE DIAMETER	SHR	SENSIBLE HEAT RATIO
CF	CHEMICAL FEED	IE	INVERT ELEVATION	SOLV	SOLENOID VALVE
CFM	CUBIC FEET PER MINUTE	IN WC	INCHES WATER COLUMN	SOV	SHUT OFF VALVE
CFS	CUBIC FEET PER SECOND	INV	INVERT	SP	STATIC PRESSURE, SUMP PUMP
CH	CHILLER	IP	IRON PIPE	SPEC	SPECIFICATION
CHW	CHILLED WATER	IPS	IRON PIPE SIZE, INCHES PER SECOND	SPS	STATIC PRESSURE SENSOR
CHWP	CHILLED WATER PUMP	IPT	IRON PIPE THREADED	SQ	SQUARE
CHWPP	CHILLED WATER PRIMARY PUMP	IR	INFRARED	SSD	SUB-SOIL DRAIN
CHWR	CHILLED WATER RETURN	IW	INDIRECT WASTE	SSP	STAINLESS STEEL PIPE
CHWS	CHILLED WATER SUPPLY			SST	STAINLESS STEEL
CHWSP	CHILLED WATER SECONDARY PUMP	K	KELVIN, THERMAL CONDUCTIVITY	STD	STANDARD
	CAST IRON	KIP	THOUSAND POUNDS	STM	STEAM
CIP	CAST IRON PIPE	KIP FT	THOUSAND FOOT-POUNDS	STR	STRAINER
CKT	CIRCUIT	KW	KILOWATT	STWP	STEAM WORKING PRESSURE
CKV	CHECK VALVE	KWh	KILOWATT HOUR	SUCT	SUCTION
CL	CENTER LINE (℄)			SUP	SUPPLY
CONN	CONNECTION	LAT	LEAVING AIR TEMPERATURE	SV	SAFETY VALVE
CPD	CONDENSATE PUMP DISCHARGE	LB	POUNDS		
CRAC	COMPUTER ROOM A/C UNIT	LDBT	LEAVING DRY BULB TEMPERATURE	T	TEMPERATURE SENSOR
CRP	CONDENSATE RETURN PUMP	LF	LINEAR FEET	T&P	TEMPERATURE AND PRESSURE
CT	COOLING TOWER	LG	LENGTH	TCV	TEMPERATURE CONTROL VALVE
CU	CONDENSING UNIT	LH	LATENT HEAT	TD	TEMPERATURE DIFFERENCE
CU FT	CUBIC FEET	LHG	LATENT HEAT GAIN	TEMP	TEMPERATURE
CU IN	CUBIC INCH	LP	LOW PRESSURE	TOP	TOP OF PIPE
CUH	CABINET UNIT HEATER	LPC	LOW PRESSURE CONDENSATE	TRANS	TRANSFER
Cv	COEFFICIENT - VALVE FLOW	LPS	LOW PRESSURE STEAM (<15 PSI)	TSTAT	THERMOSTAT
CW	COLD WATER (POTABLE)	LRA	LOCKED ROTOR AMPS		
CWR	COLD WATER RETURN (POTABLE)	LT	LEAVING TEMPERATURE	U	HEAT TRANSFER COEFFICIENT
		LTHW	LOW TEMPERATURE HOT WATER	U/G	UNDERGROUND
D	DRAIN	LWBT	LEAVING WET BULB TEMPERATURE	UH	UNIT HEATER
DB	DRY BULB	LWT	LEAVING WATER TEMPERATURE	UON	UNLESS OTHERWISE NOTED
DBT	DRY BULB TEMPERATURE				
dB	DECIBEL	mA	MILLIAMPERES	V	VENT/VOLTS
DC	DIRECT CURRENT	MAX	MAXIMUM	VAC	VOLTS ALTERNATING CURRENT
DCW	DOMESTIC COLD WATER	MCA	MINIMUM CIRCUIT AMPACITY	VAR	VARIABLE
DDC	DIRECT DIGITAL CONTROL	MCC	MOTOR CONTROL CENTER	VAV	VARIABLE AIR VOLUME
DEG	DEGREES [CELSIUS OR FAHRENHEIT]	MIN	MINIMUM	VDC	VOLTS DIRECT CURRENT
DENS	DENSITY	MOCP	MAXIMUM OVERCURRENT PROTECTION	VEL	VELOCITY
DEWPT	DEW POINT TEMPERATURE	MOV	MOTOR OPERATED VALVE	VENT	VENT, VENTILATION
DIA	DIAMETER	MP	MEDIUM PRESSURE	VERT	VERTICAL
DIP	DUCTILE IRON PIPE	MPC	MEDIUM PRESSURE CONDENSATE	VFD	VARIABLE FREQUENCY DRIVE
DOV	DRAIN OFF VALVE	MPS	MEDIUM PRESSURE STEAM (16-99 PSI)	VP	VELOCITY PRESSURE
DPS	DIFFERENTIAL PRESSURE SENSOR	MPT	MALE PIPE THREAD	VRF	VARIABLE REFRIGERANT FLOW
DPT	DIFFERENTIAL PRESSURE TRANSMITTER	MU	MAKE-UP WATER	VSD	VARIABLE SPEED DRIVE
DS	DISCONNECT SWITCH	MVD	MANUAL VOLUME DAMPER		
DWV	DRAIN, WASTE & VENT			W	WATT
		NA	NOT APPLICABLE	WB	WET BULB
EA	EXHAUST AIR	NC	NOISE CRITERIA, NORMALLY CLOSED	WBT	WET BULB TEMPERATURE
E/P	ELECTRIC PNEUMATIC	NIC	NOT IN CONTRACT	WC	WATER COLUMN
EAT	ENTERING AIR TEMPERATURE	NO	NORMALLY OPEN, NUMBER	WG	WATER GAGE
ECON	ECONOMIZER	NPS	NOMINAL PIPE SIZE	WH	WATER HEATER
ECU	EVAPORATIVE COOLING UNIT	NR	NOISE REDUCTION	WL	WATER LINE
EDBT	ENTERING DRY BULB TEMPERATURE	NRC	NOISE REDUCTION COEFFICIENT	WLD	WELDED
EDH	ELECTRIC DUCT HEATER	NTS	NOT TO SCALE	WM	WATER METER
EER	ENERGY EFFICIENCY RATIO			WNF	WELD NECK FLANGE
EF	EXHUAST FAN	OA	OUTSIDE AIR	WP	WATER PUMP
EFF	EFFICIENCY	OAF	OUTSIDE AIR FAN	WPD	WATER PRESSURE DROP
EL	ELEVATION	OAI	OUTSIDE AIR INTAKE	WPR	WORKING PRESSURE DROP
ENT	ENTERING	OD	OUTSIDE DIAMETER	WSHP	WATER SOURCE HEAT PUMP
EOV	ELECTRONICALLY OPERATED VALVE	OSD	OVERFLOW STORM DRAIN	WSP	WORKING STEAM PRESSURE
ESP	EXTERNAL STATIC PRESSURE	OZ	OUNCE	WT	WEIGHT
ET	EXPANSION TANK				
EUH	ELECTRIC UNIT HEATER	P	PUMP	YD	YARD, YARD DRAIN
EVAP	EVAPORATOR	P/E	PNEUMATIC ELECTRIC	YR	YEAR
EWBT	ENTERING WET BULB TEMPERATURE	%	PERCENT		
EWT	ENTERING WATER TEMPERATURE	PC	PUMPED CONDENSATE	Z	ZONE
EXCH	EXCHANGER	PCC	PRECOOL COIL		
EXH	EXHAUST	PD	PRESSURE DROP		
EXP	EXPANSION	POS	POSITIVE		
		PR	PUMPED RETURN		

PLUMBING GENERAL NOTES

1. THE PLUMBING CONTRACTOR SHALL VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND SITE AFFECTED BY THIS WORK BEFORE SUBMITTING PROPOSALS, SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT PRICING AND EXECUTION OF THE WORK. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WILL NOT BE RECOGNIZED. UTILITIES AND SERVICES INDICATED ARE TAKEN FROM VARIOUS SURVEYS, AS-BUILT DRAWINGS AND FIELD INVESTIGATIONS. IT IS TO BE UNDERSTOOD THAT UNFORSEEN CONDITIONS PROBABLY EXIST AND NEW WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON THE DRAWINGS. COOPERATION WITH OTHER TRADES AND EXISTING CONDITIONS IN ROUTING, AS DIRECTED BY THE OWNER AND ARCHITECT/ENGINEER, MAY BE NECESSARY AND IT IS INTEDED THAT SUCH DEVIATIONS SHALL BE CONSIDERED AS PART OF THIS CONTRACT. IT IS ALSO UNDERSTOOD THAT THE PLANS ARE NOT COMPLETELY TO SCALE. THIS CONTRACTOR IS TO FIELD VERIFY DIMENSIONS OF ALL SITE UTILITIES, ETC., PRIOR TO BID, AND INCLUDE ANY DEVIATIONS IN THE PROPOSAL.
2. PROVIDE ISOLATION VALVES IN ALL BRANCH PIPING AND AT EQUIPMENT CONNECTIONS.
3. PROVIDE ALL PLUMBING FIXTURES WITH ACCESSIBLE STOPS.
4. PROVIDE ISOLATION VALVES IN THE HOT AND COLD WATER PIPING TO EACH GROUP OF PLUMBING FIXTURES.
5. PIPING CONNECTIONS TO ALL EQUIPMENT SHALL BE FABRICATED WITH THE ISOLATION VALVES, FLANGES AND/OR UNIONS POSITIONED TO ALLOW REMOVAL AND SERVICE OF THE COMPONENT PARTS.
6. ROUTE PIPING IN AN ORDERLY MANNER AND MAINTAIN PROPER GRADES. INSTALL TO CONSERVE HEADROOM AND TO CREATE MINIMUM INTERFERENCE WITH USE OF SPACE. ROUTE ALL PIPING PARALLEL TO BUILDING LINES UON. GROUP PIPING AT COMMON BOP ELEVATIONS WHENEVER PRACTICAL. PIPES LOCATED IN CONCEALED SPACES SHALL BE ROUTED CLOSE TO BUILDING STRUCTURE UON.
7. INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION WITHOUT STRESSING PIPE OR EQUIPMENT CONNECTED.
8. INSTALL VALVES WITH STEMS UPRIGHT OR HORIZONTAL, NOT INVERTED.
9. INSTALL VALVES AND EQUIPMENT IN ACCESSIBLE LOCATIONS. INSTALL ACCESS DOORS IN PARTITIONS OR CEILINGS WHERE VALVES AND EQUIPMENT WOULD OTHERWISE BE INACCESSIBLE.
10. WHEN SOCKET WELD OR SOLDER END VALVES ARE INSTALLED, SPECIAL CARE SHALL BE TAKEN TO AVOID OVERHEATING AND DAMAGING THE VALVE BODY, TRIM OR PACKING. DAMAGED VALVES SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
11. IDENTIFY EACH PIPE WITH LABELING AS REQUIRED BY SPECIFICATIONS.
12. SLEEVE ALL PIPING THAT PENETRATES FIRE RATED WALLS, FLOORS AND PARTITIONS. PENETRATIONS SHALL BE SEALED WITH A U.L. LISTED ASSEMBLY TO PROVIDE A RATING EQUAL TO OR GREATER THAN THAT OF THE PENETRATED WALL, FLOOR OR PARTITION.
13. SLEEVE ALL PIPING THAT PENETRATES EXTERIOR BUILDING WALLS AND GRADE BEAMS. SEAL PENETRATIONS WATERTIGHT.
14. COORDINATE WITH OTHER TRADES BEFORE FABRICATION OR INSTALLATION OF ANY SYSTEMS.
15. EXISTING PIPING AND EQUIPMENT SHOWN ON THESE DRAWINGS INDICATES THE GENERAL LOCATION AND ROUTING. THE ACTUAL LOCATION SHALL BE DETERMINED BY THE CONTRACTOR WHO SHALL COORDINATE ALL WORK WITH ALL TRADES NECESSARY TO INSTALL NEW PIPING OR EQUIPMENT AS SHOWN ON THE DRAWING.
16. THESE DRAWINGS DO NOT NECESSARILY SHOW ALL OFFSETS OR ELEVATION DIFFERENCES WHICH MAY BE NECESSARY FOR THE COMPLETE INSTALLATION. THESE SHALL BE PROVIDED AS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM AT NO ADDITIONAL COST TO THE CONTRACT.
17. COORDINATE ALL REMODEL WORK WITH NEW CONSTRUCTION AND OTHER TRADES.
18. NOTIFY AND COORDINATE WITH THE OWNER AT LEAST SEVEN DAYS PRIOR TO SHUTDOWN OF ANY BUILDING SERVICES OR EQUIPMENT. SHUTDOWN TIME SHALL BE KEPT TO A MINIMUM.
19. ANY ITEMS DAMAGED DURING DEMOLITION SHALL BE REPLACED WITH NEW MATERIALS TO MATCH EXISTING.
20. CONTRACTOR SHALL PROVIDE TEMPORARY ELECTRICAL SERVICE, PIPING OR OTHER BUILDING SERVICES AS REQUIRED TO KEEP OTHER AREAS IN OPERATION DURING REMODELING. NOTIFY OWNER PRIOR TO SHUT-DOWN FOR ANY TEMPORARY SERVICE REQUIREMENTS. ALL TEMPORARY WORK SHALL BE COMPLETELY REMOVED ONLY AFTER NEW SERVICES ARE COMPLETELY INSTALLED AND FUNCTIONAL.
21. ABANDONED PIPING SHALL BE REMOVED WHERE INDICATED ON THE DRAWINGS. PIPING REMAINING IN PLACE SHALL BE CAPPED, SEALED AIR TIGHT AT POINT(S) OF DEMOLITION, AND INSULATED TO MATCH EXISTING.
22. NEW HOLES THROUGH EXISTING FLOORS SHALL BE CORE DRILLED. ALL CORES SHALL BE X-RAYED PRIOR TO CORING.
23. THE OWNER SHALL HAVE THE OPTION TO DESIGNATE ANY MATERIALS REMOVED OR DEMOLISHED DURING THIS WORK AS "RECYCLABLE" AND SHALL HAVE FINAL DISPOSITION OVER THE DISPOSAL OF THESE MATERIALS. ALL MATERIALS REMOVED/DEMOLISHED BY THE CONTRACTOR FOR THIS JOB AND NOT RETAINED BY THE OWNER FOR RECYCLING OR OTHER PURPOSES SHALL BE DISPOSED OFF-SITE BY THE CONTRACTOR.
24. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL OF ANY EQUIPMENT DESIGNATED FOR REMOVAL. THE OWNER SHALL PROVIDE A LIST OF ITEMS THEY REQUIRE TO BE SALVAGED PRIOR TO THE START OF DEMOLITION. THE CONTRACTOR SHALL REMOVE THESE ITEMS USING REASONABLE CARE TO MINIMIZE DAMAGE.
25. ANY AND ALL WATER CONNECTIONS MADE FOR THE PURPOSE OF CLEANING TOOLS OR THE WORK AREA OR FOR ANY OTHER CONSTRUCTION-RELATED PURPOSES SHALL BE MADE ONLY TO DOMESTIC WATER HOSE BIBBS OR TO CONTRACTOR-SUPPLIED WATER SOURCES. APPROVED BACKFLOW PREVENTION DEVICES SHALL BE USED AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION. CONNECTIONS SHALL NOT BE MADE TO FIRE WATER, CHILLED WATER, CONDENSER WATER, HEATING HOT WATER, DOMESTIC HOT WATER OR ANY OTHER TREATED WATER SOURCE UNLESS REQUIRED AS PART OF WORK ON THESE SYSTEMS.
26. EXCEPT WHERE REQUIRED AT EQUIPMENT NOZZLES, FLANGES SHALL BE RAISED FACE WELD-NECK.
27. INSTALL DIELECTRIC FITTINGS AT ALL FERROUS PIPE CONNECTIONS TO NON-FERROUS METALLIC PIPE OR EQUIPMENT.
28. PROVIDE CHROME PLATED, OR ARCHITECT APPROVED COLOR, ESCUTCHEON PLATES WHERE PIPES EXPOSED TO VIEW PENETRATE FINISHED WALLS, FLOORS AND CEILINGS. SPLIT-RING ESCUTCHEON PLATES SHALL NOT BE USED UON.
29. PROVIDE CAPPED DRAIN VALVES AT LOW POINTS OF PIPING SYSTEMS AND AT EQUIPMENT CONNECTIONS. PROVIDE HOSE BIBB CONNECTIONS WITH CAPS AT DRAIN VALVES WHICH DO NOT DISCHARGE DIRECTLY OVER OR ARE NOT PIPED DIRECTLY TO AN APPROPRIATE DRAIN.
30. PIPING OR EQUIPMENT CONNECTIONS OPENED BY DEMOLITION OR RENOVATION SHALL BE TEMPORARILY SEALED TO KEEP OUT FOREIGN MATTER UNTIL SUCH TIME AS RECONNECTIONS ARE MADE.
31. ALL PIPING SHALL BE SLOPED PER THE PLUMBING CODE AND THE AUTHORITY HAVING JURISDICTION.
32. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF EXISTING SANITARY PIPING TO WHICH NEW SEWER DRAINS ARE TO BE CONNECTED BEFORE INSTALLATION OF NEW SEWER LINE.
33. PROVIDE CLEANOUTS IN ACCORDANCE WITH THE PLUMBING CODE, NO MORE THAN 100 FT. APART, AT CHANGES IN DIRECTION GREATER THAN 45 DEGREES, AND AT THE BASE OF STORM, SOIL AND WASTE STACKS.
34. REFER TO ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE EXACT LOCATIONS, MOUNTING HEIGHTS AND DIMENSIONS.
35. ALL ADA COMPLIANT FIXTURES SHALL BE MOUNTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA).
36. INSTALL WATER HAMMER SHOCK ARRESTORS AT EACH BATTERY OF FIXTURES AND AS INDICATED ON RISER DIAGRAMS/ISOMETRICS. ARRESTORS SHALL BE FACTORY-FABRICATED. INSTALL ARRESTORS AND SIZE PER PLUMBING AND DRAINAGE INSTITUTE STANDARD P.D.I. WH-201. PROVIDE ACCESS PANELS FOR SERVICE AND MAINTENANCE.
37. DRAIN, WASTE, AND VENT PIPING LOCATED IN FIRE RATED WALL ASSEMBLIES AND RETURN AIR PLENUMS SHALL BE SERVICE WEIGHT CAST IRON WITH NO HUB FITTINGS.
38. UPON COMPLETION OF THE DOMESTIC WATER PIPING INSTALLATION, THE ENTIRE BUILDING'S HOT WATER RECIRCULATION SYSTEM SHALL BE CALIBRATED AND BALANCED TO PROVIDE SATISFACTORY OPERATION UNDER MINIMUM AND MAXIMUM EXPECTED FLOW CONDITIONS.

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03/02/2022	SCHEMATIC DESIGN
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06/21/2022	50% CD
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09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
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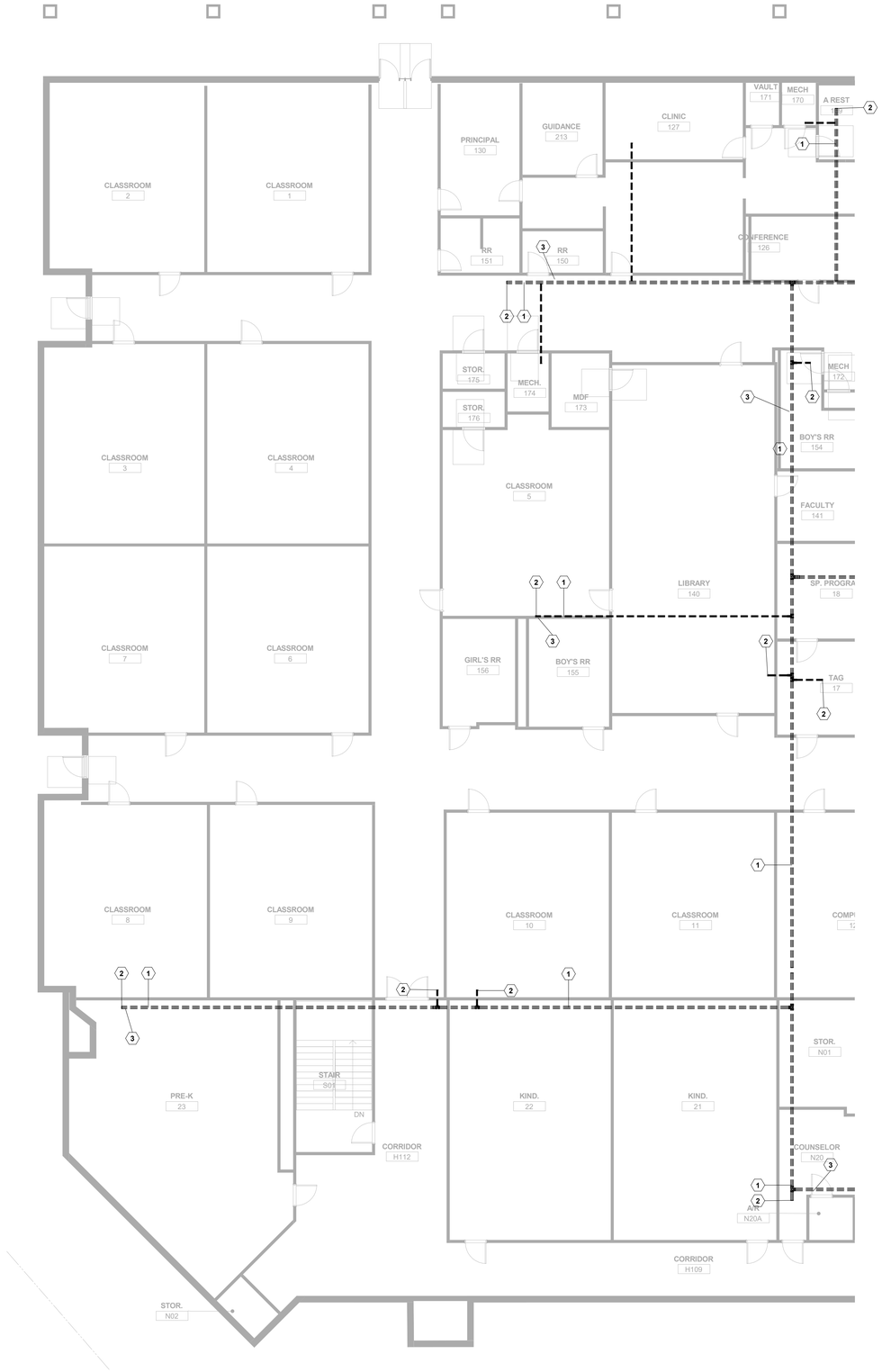
11/07/2025	100% CD/PERMIT

PLUMBING SYMBOL LEGEND

Scale: AS NOTED

P.001



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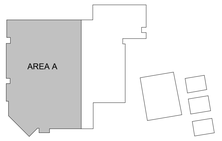
3	DEMOLISH DOMESTIC HOT AND COLD WATER IN IT'S ENTIRETY. TO ALL FIXTURES UP TO CHASES AND OR WET WALLS TO BE REPLACED WITH LIKE AND KIND.



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PLUMBING DEMO UNDER FLOOR PLAN - MAIN LEVEL - AREA A — 1/8" = 1'-0" | 1

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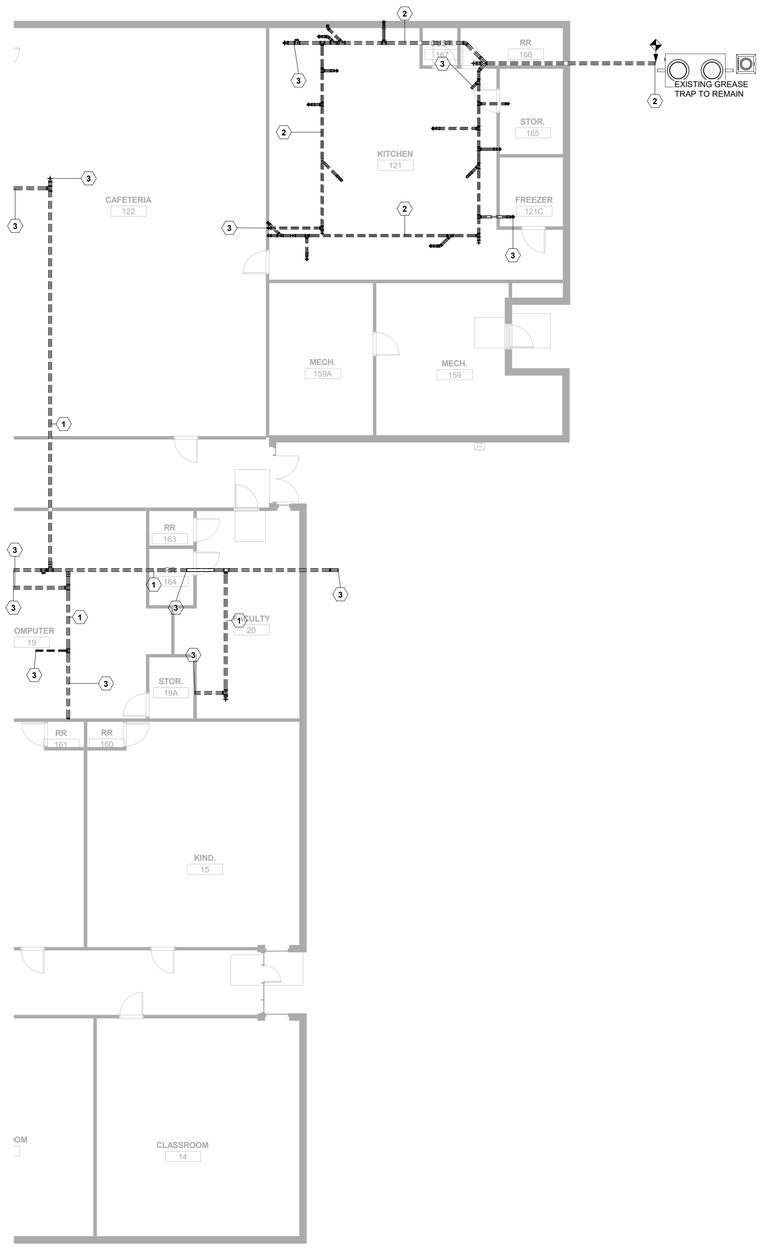
PLUMBING DEMO FLOOR PLAN - MAIN LEVEL - AREA A

Scale: AS NOTED

PD.101



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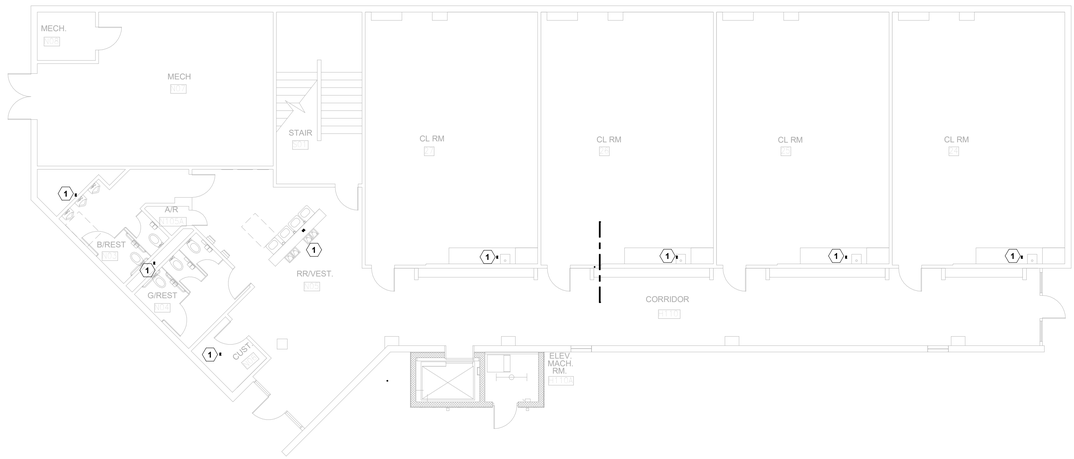
PLUMBING DEMO FLOOR PLAN - MAIN LEVEL - AREA B

Scale: AS NOTED

PD.102

PLUMBING SHEET NOTES	
A	REFER TO SYMBOL LEGEND AND GENERAL NOTES FOR ADDITIONAL INFORMATION.
B	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
C	EXISTING PLUMBING SYSTEMS, PIPING, ETC. SHOWN ARE APPROXIMATE SIZES AND LOCATIONS BASED ON LIMITED AS-BUILTS AND FIELD OBSERVATIONS. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXACT SIZES AND LOCTIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER OF RECORD IF DISCREPANCIES ARE FOUND THAT PREVENT THE COMPLETION OF WORK INTENDED IN THESE CONTRACT DOCUMENTS

KEYNOTES	
1	DEMOLISH DOMESTIC HOT AND COLD WATER IN IT'S ENTIRETY. TO ALL FIXTURES UP TO CHASES AND OR WET WALLS TO BE REPLACED WITH LIKE AND KIND.



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SEAL:

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FILE:
DRAWN BY: JW
CHECKED BY: JS

ISSUE:	Project Status
03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

PLUMBING DEMO FLOOR PLAN - LOWER LEVEL

Scale: AS NOTED

PD.103

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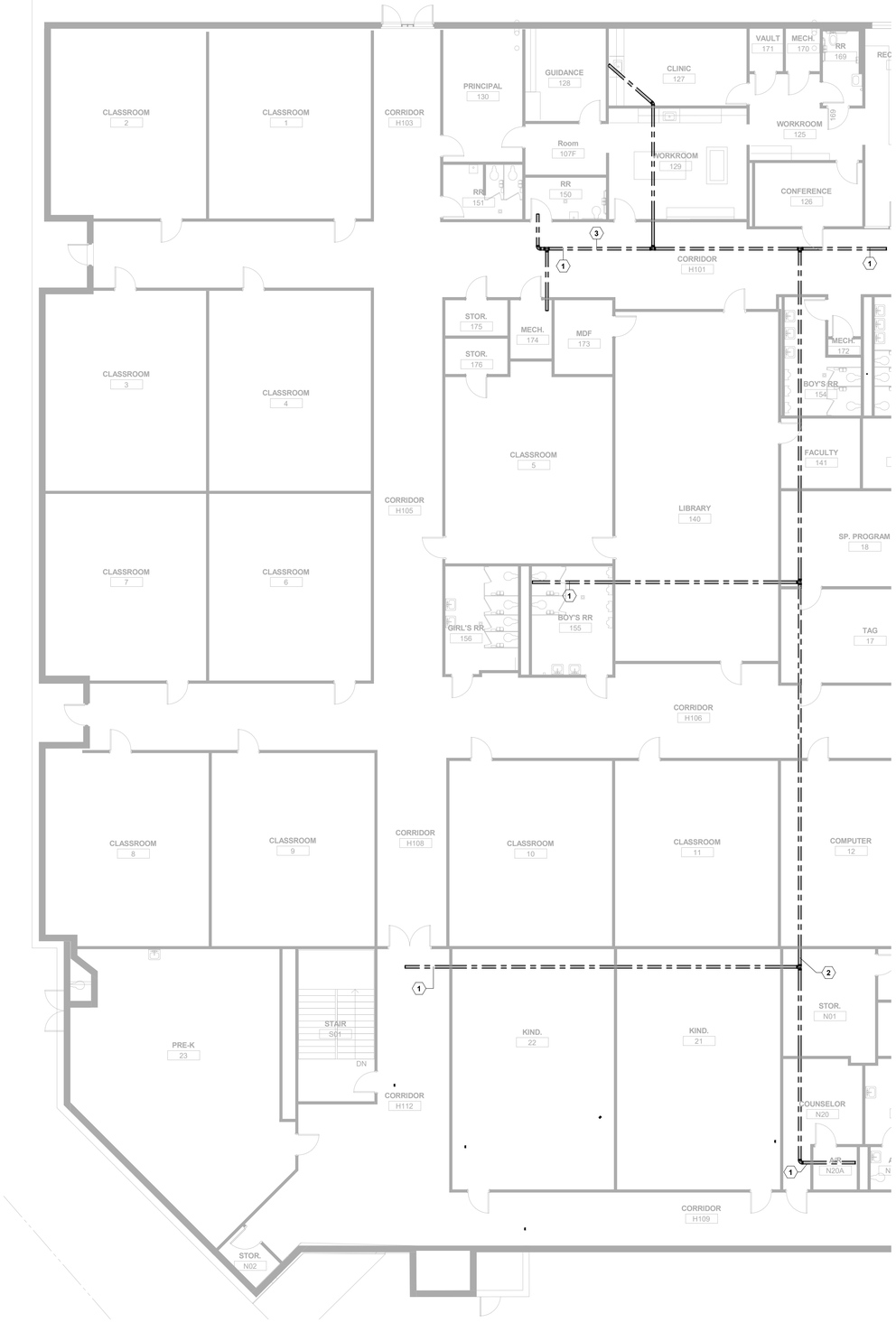

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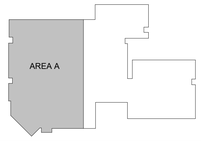
KEYNOTES	
1	ALL SANITARY SEWER PIPING MAINS LOCATED IN CRAWL SPACE ARE TO BE REPLACED WITH NEW PVC PIPING. CONNECT INTO EXISTING SANITARY RISERS AT EXISTING AT WET WALLS. CONNECT NEW SEWER TO EXISITNG CIVIL SANITARY. NEW PLUMBING TO EXTEND 5'-0" OUTSIDE THE BUILDING. PROVIDE NEW DOUBLE CLEANOUT AT CONNECTION TO CIVIL.
2	INSTALL NEW SHUT-OFF VALVE ON BRANCH PIPING TO ISOLATE TOILET FIXTURES - VERIFY EXACT CONDITIONS AND LOCATIONS.
3	CONTRACTOR SHALL PLAN WORK SO THAT THE SANITARY SEWER SHALL STAY OPERATIONAL UNTIL NEW PIPING IS INSTALLED AND READY FOR SWITCH OVER.



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PLUMBING UNDER FLOOR PLAN - MAIN LEVEL - AREA A — 1/8" = 1'-0" | 1

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11/06/2023	95%CD
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02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

PLUMBING UNDER FLOOR PLAN - AREA A

Scale: AS NOTED

P.041

PLUMBING SHEET NOTES

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KEYNOTES

1	NEW GREASE WASTE PIPING TO EXISTING GREASE INTERCEPTOR.
2	ALL SANITARY SEWER PIPING MAINS LOCATED IN CRAWL SPACE ARE TO BE REPLACED WITH NEW PVC PIPING. CONNECT INTO EXISTING SANITARY RISERS AT EXISTING AT WET WALLS. CONNECT NEW SEWER TO EXISITNG CIVIL SANITARY. NEW PLUMBING TO EXTEND 5'-0" OUTSIDE THE BUILDING. PROVIDE NEW DOUBLE CLEANOUT AT CONNECTION TO CIVIL.
3	REPLACE ALL EXISTING GREASE WASTE PIPING AND FLOOR DRAINS IN FOOD SERVICE AREA AND CONNECT TO NEW GREASE WASTE PIPING TO EXISTING GREASE INTERCEPTOR.
4	INSTALL NEW SHUT-OFF VALVE ON BRANCH PIPING TO ISOLATE TOILET FIXTURES - VERIFY EXACT CONDITIONS AND LOCATIONS.
5	CONTRACTOR SHALL PLAN WORK SO THAT THE SANITARY SEWER SHALL STAY OPERATIONAL UNTIL NEW PIPING IS INSTALLED AND READY FOR SWITCH OVER.

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PLUMBING UNDER FLOOR PLAN - MAIN LEVEL - AREA B | 1/8" = 1'-0" | 1

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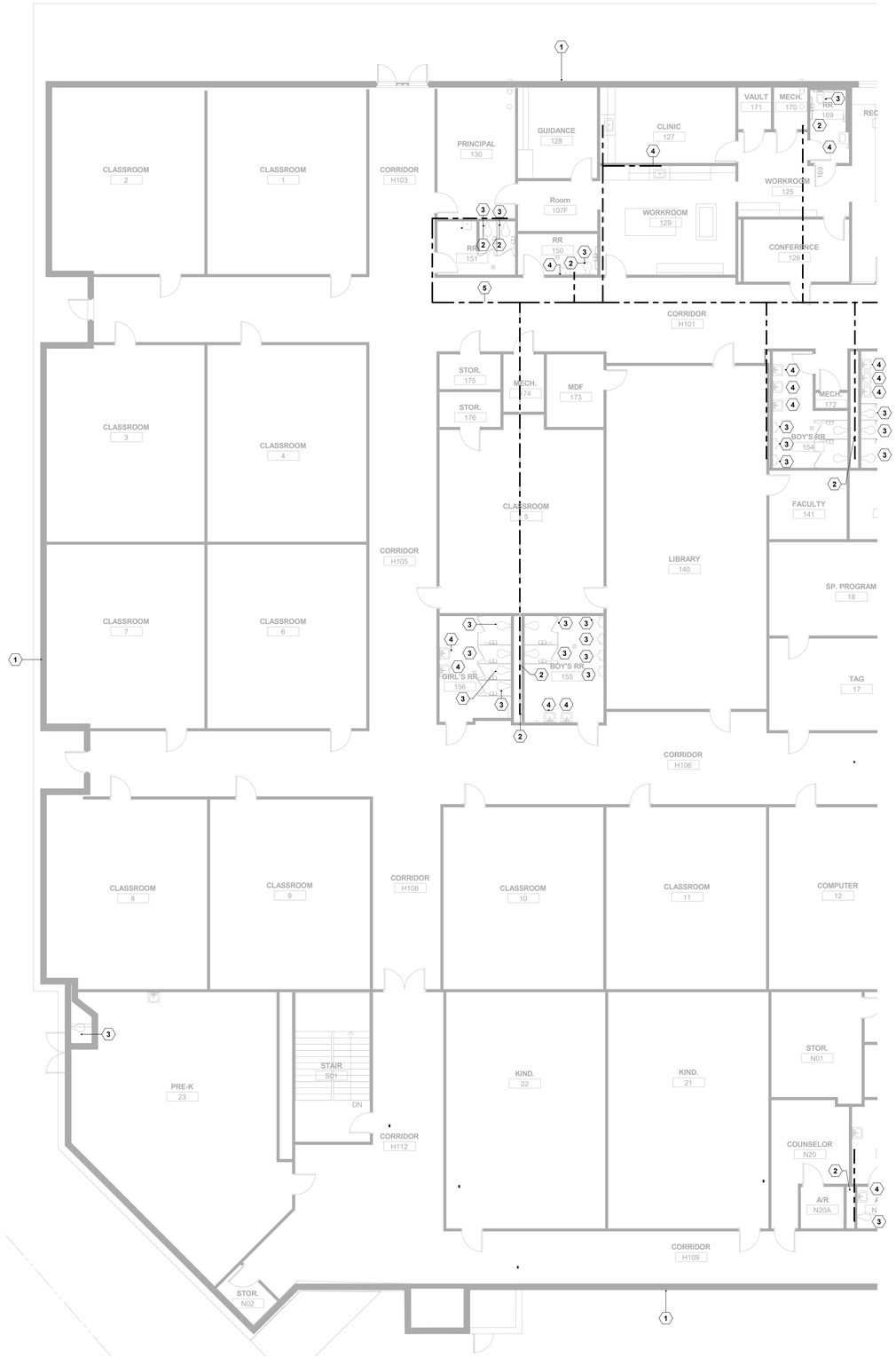
11/07/2025	100% CD/PERMIT

PLUMBING UNDER FLOOR PLAN - AREA B

Scale: AS NOTED

P.042



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KEYNOTES	
1	REPLACE EXISTING HOSE BIBB WITH NEW NFWH THIS AREA. VERIFY EXACT LOCATION.
2	INSTALL NEW SHUT-OFF VALVE ON BRANCH PIPING TO ISOLATE TOILET FIXTURES - VERIFY EXACT CONDITIONS AND LOCATIONS.
3	PROVIDE NEW COLD WATER PIPING, IN CEILING SPACE, FROM EXISTING BACKFLOW PREVENTER TO CHASE/WET WALL. CONNECT TO RISER WITHIN THE WET WALL TO SERVE EXISTING FIXTURE. NEW PIPE SHALL MATCH EXISTING PIPE SIZE, CONTRACTOR TO FIELD VERIFY.
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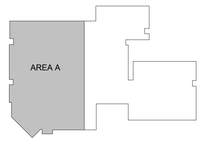

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Project Number: D21-2552.00

PLUMBING FLOOR PLAN - MAIN LEVEL - AREA A | 1/8" = 1'-0" | 1

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STATE OF TEXAS
JEFFREY P. STROH
97225
LICENSED PROFESSIONAL ENGINEER
11/7/2025

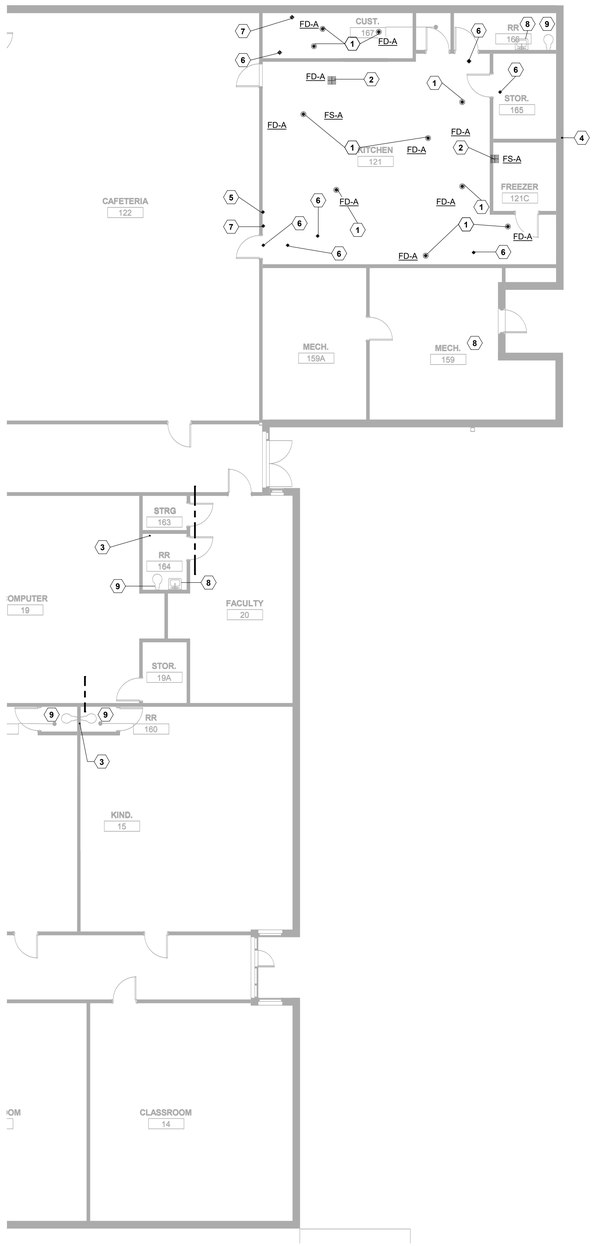
FILE:
DRAWN BY: JW
CHECKED BY: JS

ISSUE:	Project Status
03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT
	COMMENTS #0
11/07/2025	100% CD/PERMIT

PLUMBING FLOOR PLAN - MAIN LEVEL - AREA A

Scale: AS NOTED

P.101



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KEYNOTES

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2	CONTRACTOR SHALL PLAN WORK SO THAT THE DOMESTIC WATER SHALL STAY OPERATIONAL UNTIL NEW PIPING IS INSTALLED AND READY FOR SWITCH OVER.
3	INSTALL NEW SHUT-OFF VALVE ON BRANCH PIPING TO ISOLATE TOILET FIXTURES - VERIFY EXACT CONDITIONS AND LOCATIONS.
4	REPLACE EXISTING HOSE BIBB WITH NEW NFWH THIS AREA. VERIFY EXACT LOCATION.
5	CONNECT TO EXISTING VENT UP THROUGH ROOF VTR VERIFY EXACT LOCATION.
6	FLOOR CLEANOUT.
7	EXISTING VTR TO REMAIN.
8	PROVIDE NEW HOT AND COLD WATER PIPING,IN CEILING SPACE, FROM EXISTING BACKFLOW PREVENTER SOURCE TO CHASE/WET WALL. CONNECT TO RISER WITHIN THE WET WALL TO SERVE EXISTING FIXTURE. NEW PIPE SHALL MATCH EXISTING PIPE SIZE. CONTRACTOR TO FIELD VERIFY.
9	PROVIDE NEW COLD WATER PIPING, IN CEILING SPACE, FROM EXISTING BACKFLOW PREVENTER TO CHASE/WET WALL. CONNECT TO RISER WITHIN THE WET WALL TO SERVE EXISTING FIXTURE. NEW PIPE SHALL MATCH EXISTING PIPE SIZE. CONTRACTOR TO FIELD VERIFY.

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PLUMBING FLOOR PLAN - MAIN LEVEL - AREA B 1/8" = 1'-0" 1

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PLUMBING FLOOR PLAN - MAIN LEVEL - AREA B

Scale: AS NOTED

P.102

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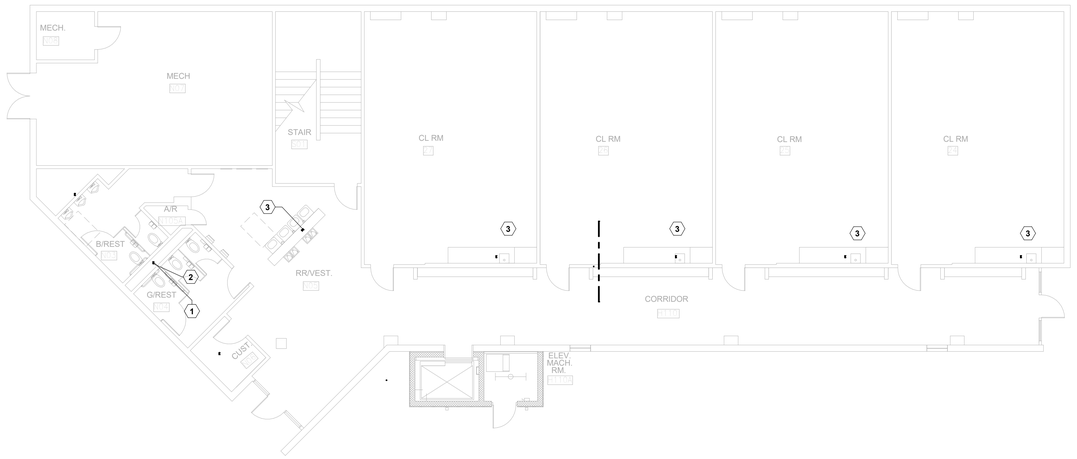
3	PROVIDE NEW DOMESTIC HOT AND COLD WATER PIPING, IN CEILING SPACE, TO EXISTING CHASE(S) / WET WALL(S) FOR CONNECTION TO EXISTING FIXTURES THIS AREA. VERFIY ALL CONDITIONS.



PLUMBING FLOOR PLAN -- LOWER LEVEL 1/8" = 1'-0" | 1

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LICENSED
PROFESSIONAL ENGINEER
11/7/2025

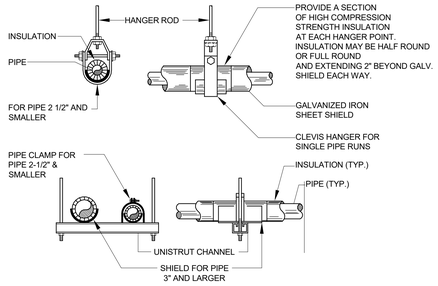
FILE:
DRAWN BY: JW
CHECKED BY: JS

ISSUE:	Project Status
03/02/2022	SCHEMATIC DESIGN
04/04/2022	DESIGN DEVELOPMENT
06/21/2022	50% CD
07/06/2023	ADD SERVICE DD
09/01/2023	ADD SERVICE 50%CD
11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT COMMENTS #00
11/07/2025	100% CD/PERMIT

PLUMBING FLOOR PLAN - LOWER LEVEL

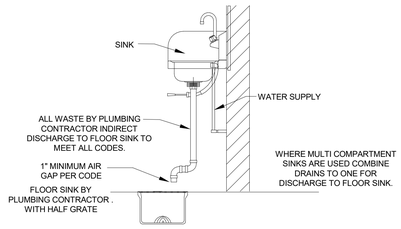
Scale: AS NOTED

P.103



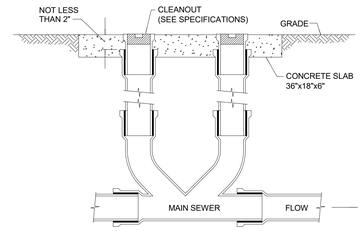
8 WATER PIPING HANGERS & SUPPORT DETAIL

SCALE: NONE



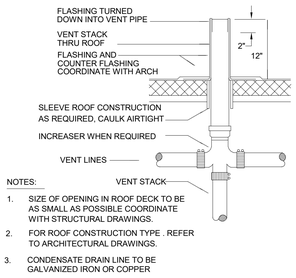
7 INDIRECT WASTE DETAIL

SCALE: NONE



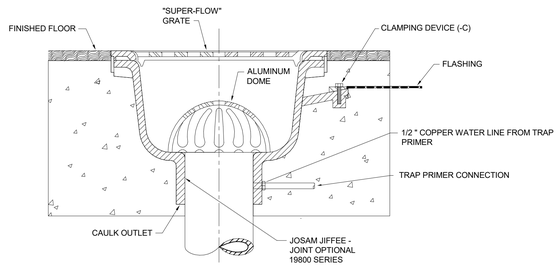
1 DOUBLE EXTERIOR CLEANOUT

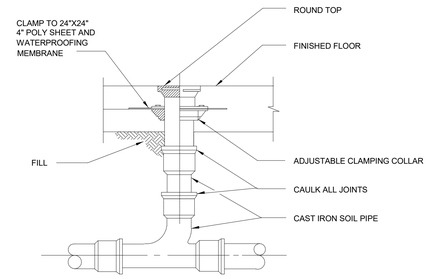
SCALE: NONE



9 VENT STACK DETAIL

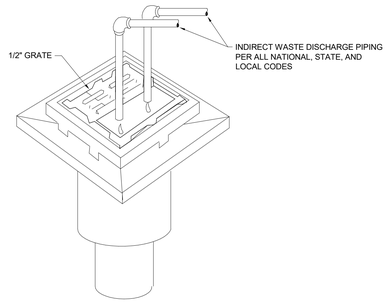
SCALE: NONE





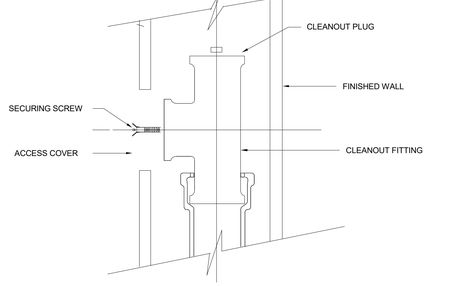
2 FLOOR CLEANOUT DETAIL

SCALE: NONE



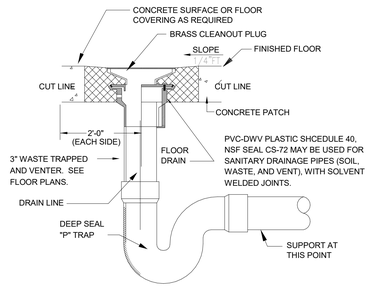
6 FLOOR SINK DETAIL

SCALE: NONE



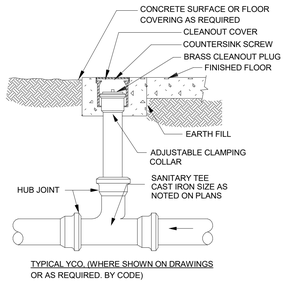
3 WALL CLEANOUT DETAIL

SCALE: NONE



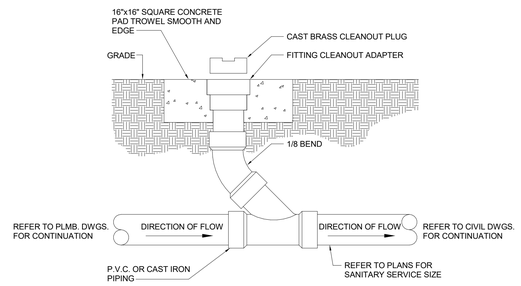
10 FLOOR DRAIN DETAIL

SCALE: NONE



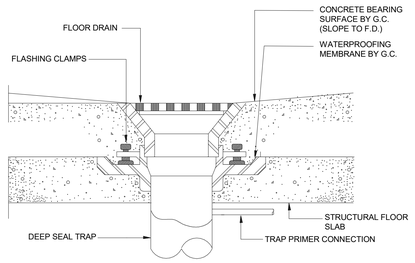
12 EXTERIOR CLEANOUT

SCALE: NONE



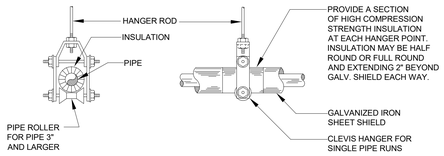
11 CLEANOUT TO GRADE

SCALE: NONE



5 FLOOR DRAIN INSTALLATION

SCALE: NONE



4 WATER PIPING HANGERS & SUPPORT DETAIL

SCALE: NONE

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11/06/2023	95%CD
01/12/2024	ISSUE FOR PERMIT/100%CD
02/02/2024	ISSUE FOR PERMIT
	COMMENTS #00
11/07/2025	100% CD/PERMIT

PLUMBING DETAILS

Scale: AS NOTED

P.401

PLUMBING FIXTURES SCHEDULE

ITEM	NAME	MODEL - MANUFACTURER - DESCRIPTION	CONNECTION SCHEDULE			
			DCW	DHW	WASTE	VENT
FD-A	FLOOR DRAIN	* WADE 1103-AX6, ADJUSTABLE, ROUND STRAINER * TRAP PRIMER-JOSAM 88250				
FS-A	FLOOR SINK - ARC	* ZURN SANI-FLOR MODEL Z-1751, STAINLESS STEEL, 12"X12" RECEPTOR, 8" SUMP DEPTH, ANTI-SPLASH DOME STRAINER GRATE * TRAP PRIMER-JOSAM 88250	1/2"	----	3"	2"
MV-A	MIXING VALVE	WATTS LFUSG-B SAFETY MIX VALVE WITH INTEGRAL STRAINER AND SERVICE STOP	1/2"	1/2"	----	----
WHA	WATER HAMMER ARRESTOR	SIOUX CHEIF 650 SERIES, ELECTRONIC, LEAD-FREE COPPER HOUSING, POLYPROPYLENE PISTON, EPDM O-RING SEAL, BRASS NPT THREADED CONNECTION, 150 PSI, 33°F-180°F, 1/2" MALE I.P.S. INLET (SIZE 'A'), 3/4" MALE I.P.S. INLET (SIZE 'B'), 3/4" MALE I.P.S. INLET (SIZES 'C,D,E,F'). WATER HAMMER ARRESTORS SHALL BE INSTALLED AND CERTIFIED TO THE FOLLOWING SPECIFICATIONS: PDI-WH201, ANSI A112.26.1, ASSE 1010. TYPE "A"=11 F.U. MAX., TYPE "B"=32 F.U. MAX., TYPE "C"=60 F.U. MAX., TYPE "D"=113 F.U. MAX., TYPE "E"=154 F.U. MAX., TYPE "F"=330 F.U. MAX. PROVIDE ACCESS PANELS FOR SERVICE AND MAINTENANCE.	----	----	----	----
TPV-1	TRAP PRIMER VALVE	SIOUX CHEIF 695-01, ELECTRONIC, LEAD FREE BRASS CONSTRUCTION, PRIMING VALVE AUTOMATICALLY OPERATES 115V ELECTRIC TIMER , CONNECT SUPPLY PIPING, PROVIDE SHUT-OFF VALVE UPSTREAM, AND DISRIBUTION CONNECTION FOR MULTIBLE DRAINS. VALVE MUST BE CENTERED ACCESS PANEL.	1/2"	----	----	----
FCO	FLOOR CLEANOUT	WATTS CO-200-R, ADJUSTABLE CLEANOUT, EPOXY COATED CAST IRON BODY, ANCHOR FLANGE, GAS AND WATERTIGHT ABS TAPERED THREAD PLUG, AND ROUND SCORIATED SECURED POLISHED NICKEL BRONZE TOP. PROVIDE CARPET MARKER. PROVIDE RECESSED TOP (-T) FOR TILE AS REQUIRED. 4" MINIMUM OR FULL SIZE OF HORIZONTAL PIPE.	----	----	2,3 & 4"	----
GCO	GRADE CLEANOUT	WATTS CO-200-R, ADJUSTABLE CLEANOUT, EPOXY COATED CAST IRON BODY, ANCHOR FLANGE, GAS AND WATERTIGHT ABS TAPERED THREAD PLUG, AND ROUND SCORIATED SECURED POLISHED BRONZE TOP. WHEN INSTALLED ON GRADE, PROVIDE A 18"X18" CONCRETE BASE. 4" MINIMUM OR FULL SIZE OF HORIZONTAL PIPE.	----	----	2,3 & 4"	----
DCO	DOUBLE GRADE CLEANOUT	SAME AS ABOVE ONE IN DIRECTION OF FLOW ONE OPPOSED.	----	----	4"	----
WCO	WALL CLEANOUT	WATTS CO-446-RD, CLEANOUT TEE, EPOXY COATED CAST IRON BODY, GAS AND WATERTIGHT ABS TAPERED THREAD PLUG, AND ROUND, SMOOTH STAINLESS STEEL WALL ACCESS COVER WITH SECURING SCREW. FULL SIZE OF PIPE.	----	----	2,3 & 4"	----
NFWH	CONCEALED FREEZELESS WALL HYDRANT	WATTS HY-725-14-K-88-CIA, ASSE 1019-2004 AND ASSE 1011 APPROVED, 125 PSI MAX. WORKING PRESSURE, ANTI-SIPHON VACUUM BREAKER, BRONZE HEAD, SEAT CASTING, AND INTERNAL WORKING PARTS, BRONZE WALL CASING 3/4" INLET AND 3/4" MALE HOSE THREAD, LOOSE TEE KEY, STANDARD CHROME FINISH, NICKEL BRONZE BOX WITH HINGED COVER, CYLINDER LOCK AND "WATER" STAMPED ON COVER.	3/4"	----	----	----
NFYH	FREEZELESS YARD HYDRANT	WOODFORD Y34, EXPOSED, LEAD-FREE, NON-FREEZE YARD HYDRANT. HYDRANT FEATURES A DURA-COATED CAST IRON HEAD AND LIFT HANDLE WITH LOCK OPTION, GALVANIZED STEEL CASING, BRONZE AND STAINLESS STEEL INTERIOR COMPONENTS, 3/4" INLET CONNECTION AND 3/4" MALE HOSE CONNECTION. FLANGE AND CLAMP COLLAR. PROVIDE WITH 3/4" ADAPTER VACUUM BREAKER.	3/4"	----	----	----

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PLUMBING SCHEDULES

Scale: AS NOTED

P.501