

**PROJECT TEAM**

**ARCHITECTURE + INTERIORS**  
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**STRUCTURAL ENGINEER**  
BCDM  
1015 N 98th St #300,  
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**MECHANICAL + ELECTRICAL ENGINEER**  
MORRISSEY ENGINEERING  
4940 N 118th St  
Omaha, NE 68164



# OMAHA PUBLIC POWER DISTRICT TRAINING FACILITY PHASE 2

7264 L ROAD  
NEBRASKA CITY, NE 68410

## PERMIT/CONSTRUCTION DRAWINGS

FEBRUARY 3, 2023

BCDM PROJECT NO. 5396-00

OPPD VENDOR LIST	
1.	08 36 13 - SECTIONAL DOORS A. Superior Door, Wade Harvey, (402) 571-2999, www.superiordoormaha.com
2.	13 34 19 - Metal Building Systems A. Kester Construction, Jeff Kester, (402) 359-4700, www.kesterconstructionomaha.com or Behlen approved installer.
3.	27 41 34 - Audio Visual Systems A. AVI-SPL; 10351 Portal Rd. Omaha, NE 68128; (402) 509-3989 B. AVI Systems; 5055 S 111th St, Omaha, NE 68137; (402) 593-6500 C. CCS Presentation Systems; 11041 O St, Omaha, NE 68137; (402) 331-2320 D. CTI Technologies; 14990 Shepard Street, Suite 600, Omaha, NE 68138; (402) 593-6750
4.	27 51 23 - Commercial Multi-Party Communications Systems A. GAI-TRONICS A Hubbell Company, 3030 Kutztown Road, Reading, PA, 19605; www.gai-tronics.com
5.	28 13 00 - Access Control A. Paladin Technologies (formerly VT1 Security); 11011 Q Street Building A Site #101, Omaha, NE 68137; 402-210-2839
6.	28 23 00 - Video Surveillance A. Inteconex; 4531 South 88th Street Suite B, Omaha, NE 68127; 402-779-7984

ALTERNATES	
1.	DEDUCT THE INSTALLATION OF DATA CABLING, JACKS, FACEPLATES AND CABLING TERMINATIONS, TESTING, AND LABELING. WORK TO BE COMPLETED BY OPPD TECH GROUP.  GENERAL / LOW VOLTAGE CONTRACTOR RESPONSIBLE FOR BUILD OUT OF DATA ROOM, OVERHEAD LADDER RUNWAY, RACKS, PATCH PANELS, MANAGERS, FIBER PANELS, FIBER, GROUNDING, ETC. AS PART OF THE BASE BID.

JAMIE WIETFELD, AM THE COORDINATING PROFESSIONAL ON THE OMAHA PUBLIC POWER DISTRICT TRAINING FACILITY PHASE 2 PROJECT.

REVISION SCHEDULE

#	Description	Date

TRAINING FACILITY PHASE 2

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

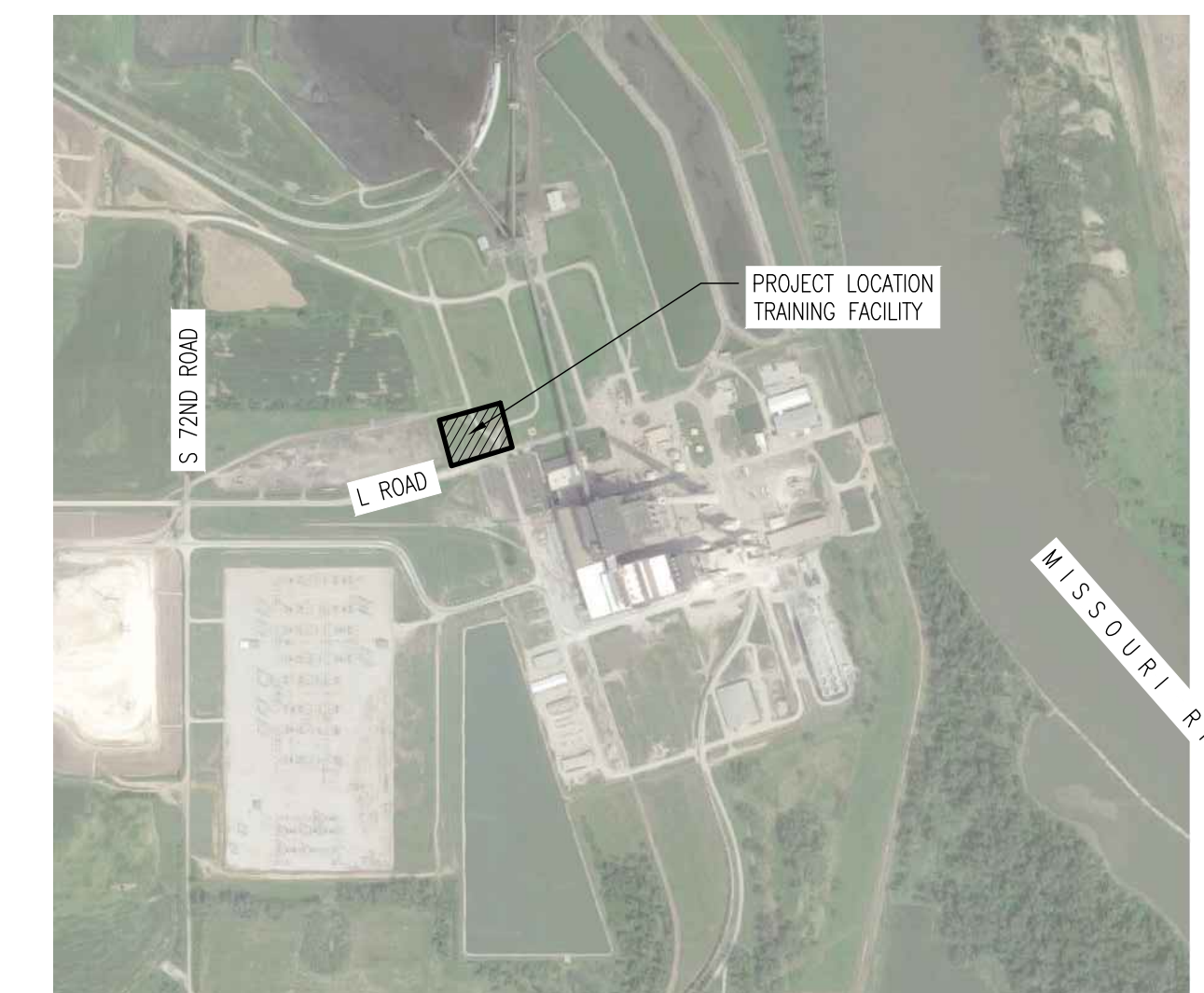
444 SOUTH 16TH STREET  
OMAHA, NE 68102

COVER

**CC-0**

### SHEET INDEX

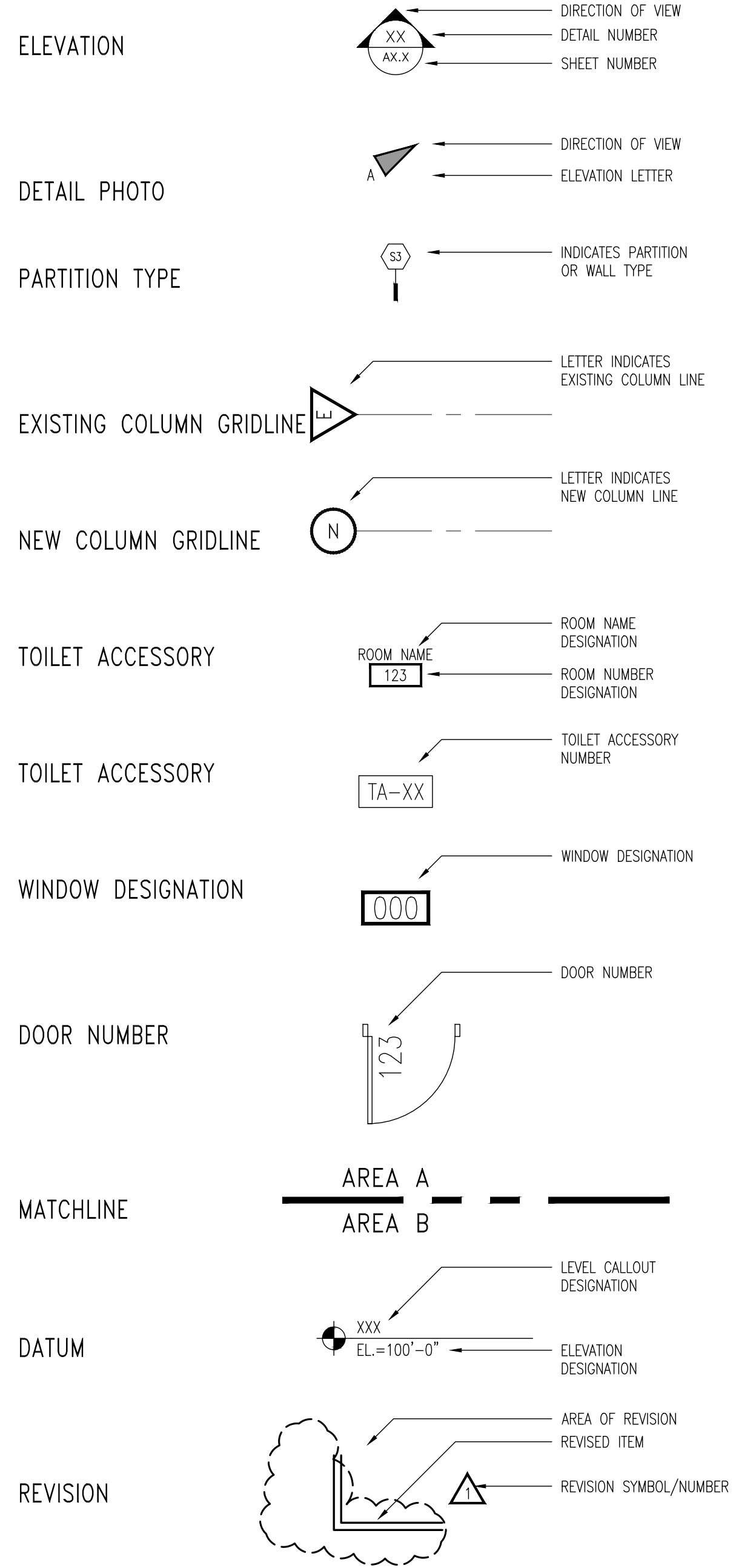
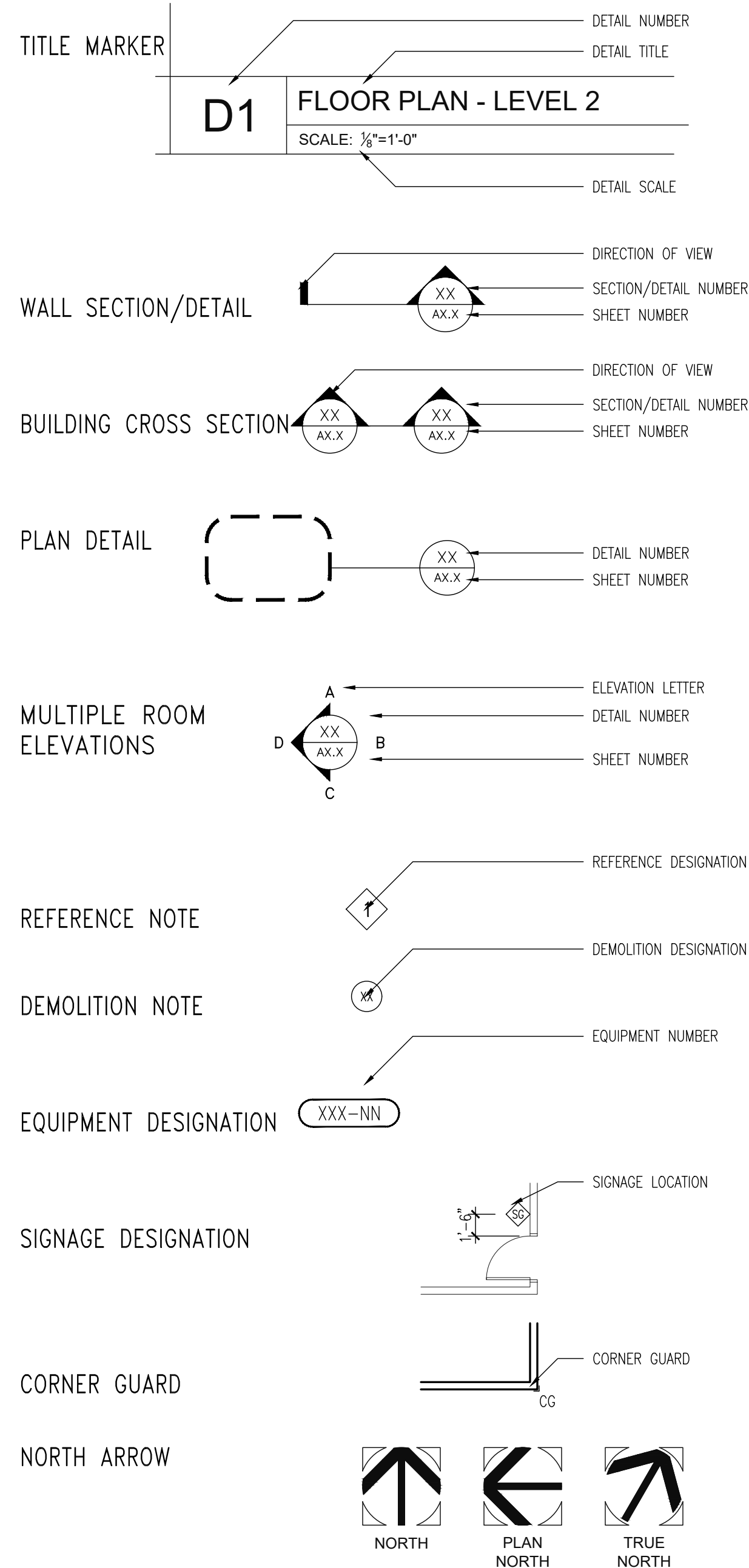
GENERAL		ARCHITECTURAL		STRUCTURAL		MECHANICAL		ELECTRICAL	
SHEET NO.	DESCRIPTION	SHEET NO.	DESCRIPTION	SHEET NO.	DESCRIPTION	SHEET NO.	DESCRIPTION	SHEET NO.	DESCRIPTION
CC-0	COVER	A1-0	FLOOR PLAN - LEVEL 1	S0-0	GENERAL STRUCTURAL NOTES	FP-1	FLOOR PLANS - FIRE PROTECTION	E0-0	ELECTRICAL COVER SHEET
G1-0	DRAWING STANDARDS, ABBREVIATIONS, PARTITION TYPES	A1-1	NOT USED	S1-0	FOUNDATION PLAN AND DETAILS	M2-1	FLOOR PLANS - HVAC	E1-0	SITE UTILITY PLAN - ELECTRICAL
G1-1	CODE SUMMARY / EXITING PLAN,	A1-2	REFLECTED CEILING PLAN - LEVEL 1	S1-2	FRAMING PLAN AND DETAILS	M3-0	FLOOR PLANS - MECHANICAL PIPING	E1-1	FLOOR PLAN - LIGHTING
G2-1	ACCESSIBILITY STANDARDS	A1-3	NOT USED			M3-1	BELOW GRADE PLAN - PLUMBING	E2-1	FLOOR PLANS - POWER
G2-2	ACCESSIBILITY STANDARDS	A1-4	ROOF PLAN			M4-1	FLOOR PLANS - PLUMBING	E3-1	FLOOR PLANS - SPECIAL SYSTEMS
G3-0	CONSTRUCTION PHASING PLAN, PHOTOS	A2-1	EXTERIOR ELEVATIONS			M4-2	MECHANICAL DETAILS	E4-1	ELECTRICAL DETAILS
		A2-2	BUILDING SECTIONS			M5-1	MECHANICAL DETAILS	E4-2	SPECIAL SYSTEMS DETAILS
		A2-3	BUILDING SECTIONS			M5-2	MECHANICAL SCHEDULES	E4-3	SPECIAL SYSTEMS DETAILS
		A3-1	WALL SECTIONS			M5-3	MECHANICAL SCHEDULES	E5-1	ELECTRICAL SCHEDULES
		A4-1	NOT USED					E5-2	ELECTRICAL SCHEDULES
		A4-2	DETAILS					E6-1	AUDIO / VISUAL PLANS
		A5-0	ENLARGED PLANS, INTERIOR ELEVATIONS, DETAILS					E6-2	AUDIO / VISUAL DETAILS
		A5-1	DOOR SCHEDULE, FRAME SCHEDULE, DETAILS						
		A6-0	FURNITURE, FIXTURE, EQUIPMENT PLAN - LEVEL 1						
CIVIL									
C1.0	LEGEND SHEET								
C2.0	EXISTING CONDITIONS								
C3.0	ZONING COMPLIANCE PLAN								
C4.0	GRADING PLAN								
C5.0	UTILITY PLAN								
C6.0	PAVING PLAN								
C7.0	DETAIL SHEET								



LOCATOR MAP

NO SCALE:



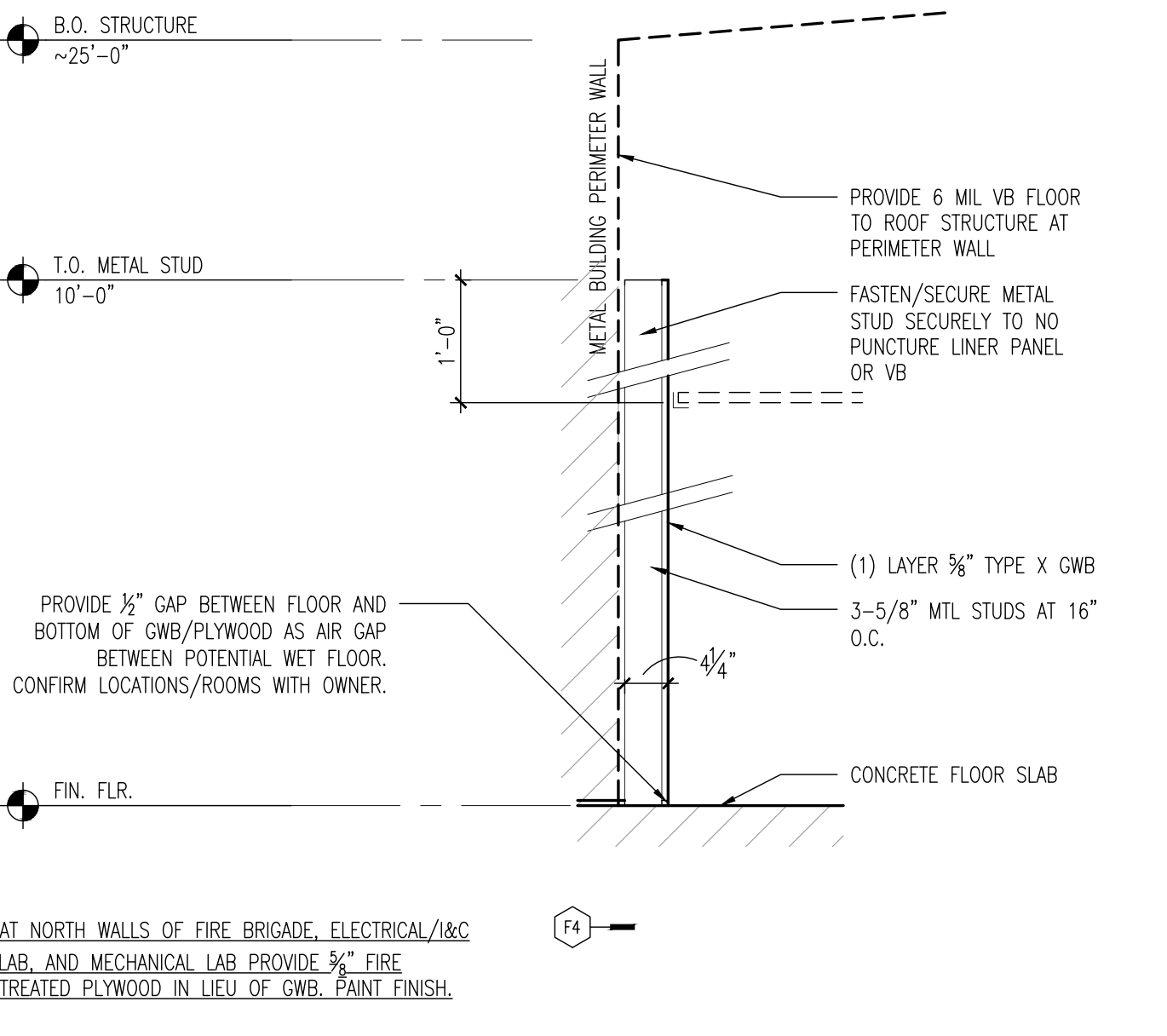
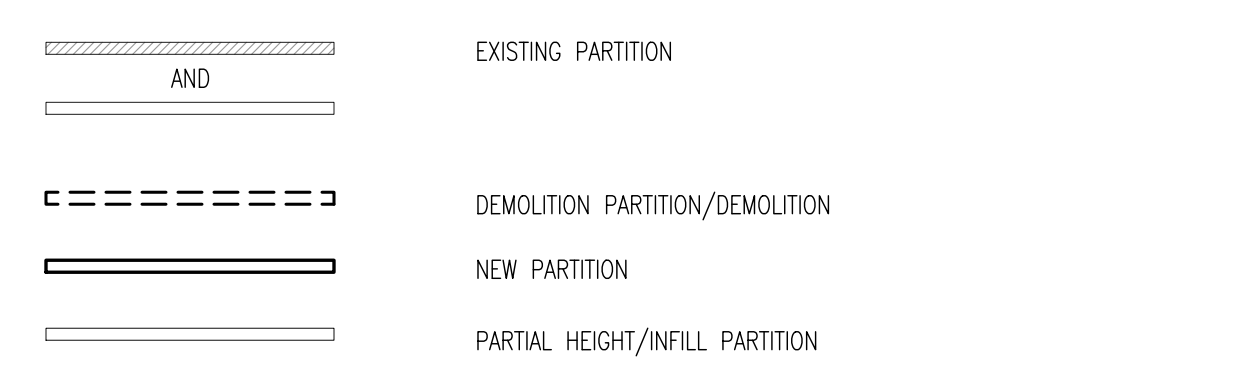


**GENERAL NOTES:**

- A. ALL CONTRACTORS ARE RESPONSIBLE FOR REVIEWING ENTIRE SET OF DOCUMENTS TO DETERMINE THEIR FULL SCOPE OF WORK. CONTRACTOR SHALL NOT BE ALLOWED EXTRA COSTS DUE TO FAILURE TO REVIEW ENTIRE SET OF DOCUMENTS.
- B. CONTRACTOR SHALL TAKE ALL MEASUREMENTS FOR WORK AND BE RESPONSIBLE FOR SAME. CONTRACTOR SHALL ADJUST FOR ACTUAL FIELD CONDITIONS AT NO ADDITIONAL EXPENSE TO OWNER. COORDINATE THE WORK AND SHOP DRAWINGS WITH ALL OTHER TRADES AFFECTED.
- C. FINE FULL-TONE LINES INDICATE EXISTING CONSTRUCTION TO REMAIN. THICK FULL-TONE LINES INDICATE NEW OR RELOCATED CONSTRUCTION.
- D. DIMENSIONS ARE TYPICALLY TO FINISH FACE OF MASONRY, CONCRETE, GYPSUM WALL BOARD, AND METAL FRAMES; OR CENTER LINE OF COLUMN OR BEAMS, UNLESS NOTED OTHERWISE. DOOR DIMENSIONS ARE TO OUTER EDGE OF FRAME.
- E. PROVIDE FIRE TREATED 2x6 OR LARGER WOOD BLOCKING IN WALLS AND FURRING SPACES AS REQUIRED FOR MOUNTING OF ALL WALL SUPPORTED ITEMS.
- F. PROVIDE TREATED BLOCKING AT POINTS WHERE WOOD FRAME ASSEMBLIES ARE IN CONTACT WITH CONCRETE.
- G. ALL SKYWARD FACING JOINTS TO BE SEALED.
- H. EXPOSED PORTIONS OF STEEL LINTELS (OVER DOORS, WINDOWS, ETC.) ARE TO BE PRIMED AND PAINTED, COLOR BY ARCHITECT.
- I. AT INTERIOR PARTITIONS, PROVIDE GWB CONTROL JOINT AT EACH CORNER OF OPENING ON BOTH SIDES OF WALL TO FINISH GWB CEILING OR A MINIMUM OF 6" ABOVE ACOUSTICAL TILE CEILING. CONTROL JOINT NOT REQUIRED IF WITHIN 4" OF A PERPENDICULAR PARTITION ON SAME SIDE.

**ABBREVIATIONS:**

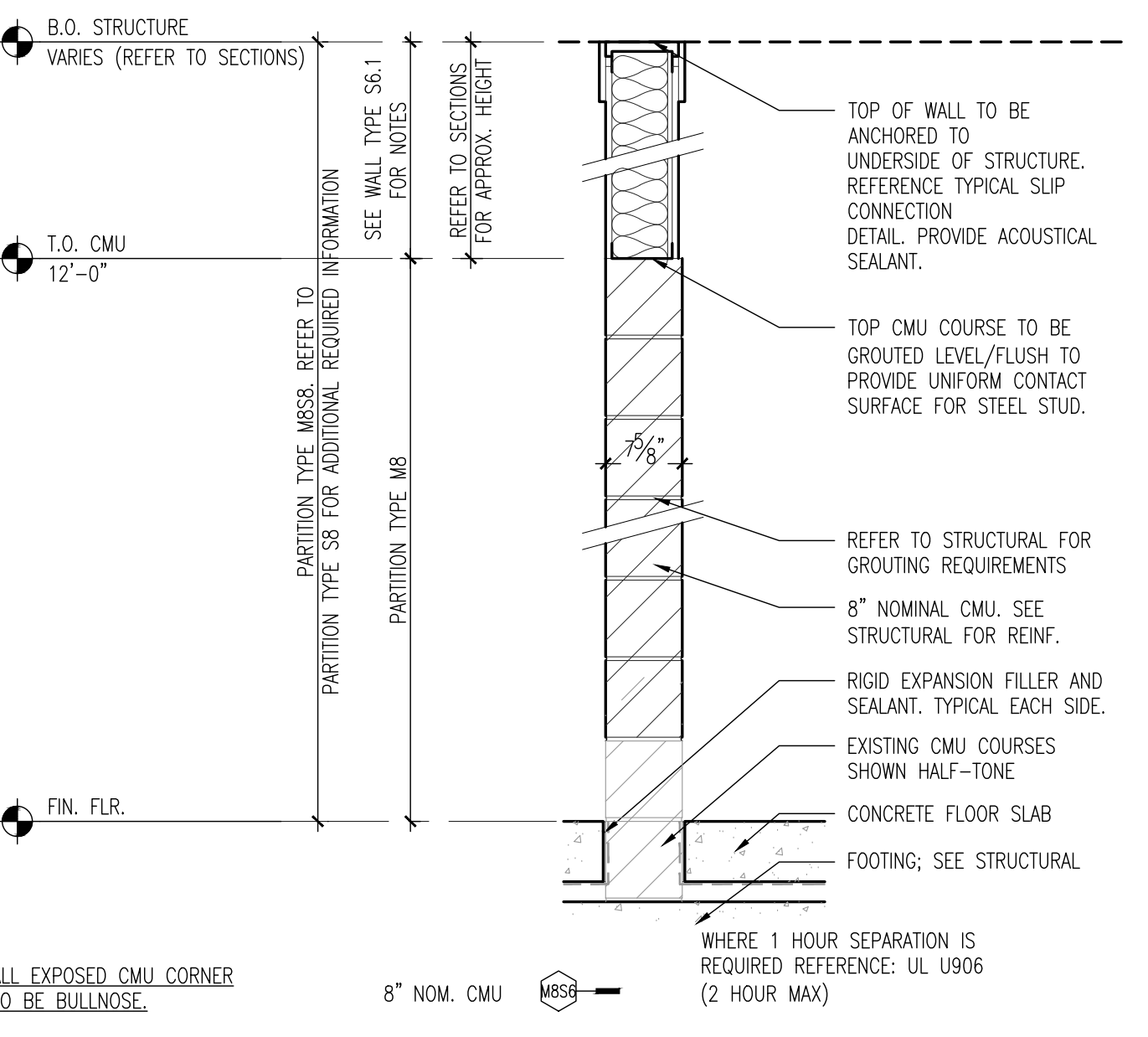
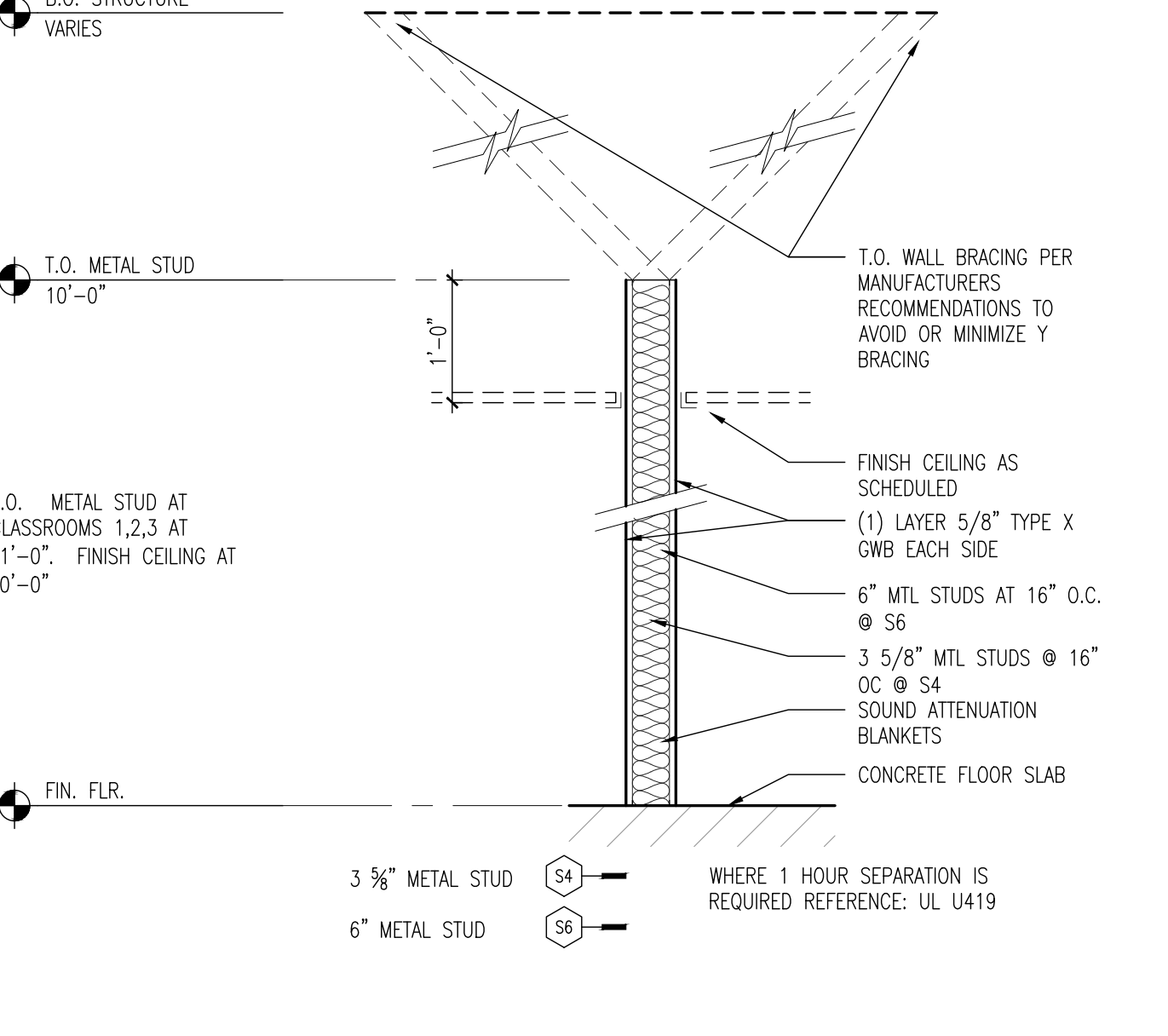
AB	ANCHOR BOLT	NIC	NO IN CONTRACT NUMBER
AF	ABOVE FINISH FLOOR	NO	NO
AHU	AIR HANDLING UNIT	NIS	NOT TO SCALE
AL	ALUMINUM	OD	OUTSIDE DIAMETER
ALT	ALTERNATE	O.C.	ON CENTER OVERHEAD
APPROX	APPROXIMATE	OPNG	OPENING
ARCH	ARCHITECTURAL OR ARCHITECT	OPP	OPPOSITE
ATC	ACOUSTICAL TILE CEILING	PLBG	PLUMBING
BATT	BATT INSULATION	PLYWD	PLYWOOD
BLDG	BUILDING	PNL	PANEL
BLKG	BLOCKING	POPC	PORCELAIN
BM	BEAM	PREFAB	PREFABRICATED
B.O.	BOTTOM OF BEARING	PREFIN	PREFINISHED
BRNG	BEARING	PROJ	PROJECT
CG	CORNER GUARD	PT	POINT
CIP	CAST IN PLACE CONCRETE	PNT	PANT
CJ	CONTROL JOINT	PTN	PARTITION
CLC	CEILING	PVMT	PAVEMENT
CLR	CLEAR	QT	QUARRY TILE
CMU	CONCRETE MASONRY UNIT	R OR RSR	RISER
COL	COLUMN	RAD OR R	RADIUS
CONC	CONCRETE	RB	RESILIENT BASE
CONC	CONCRETE	RENF	REINFORCEMENT
CT	CERAMIC TILE	REQD	REQUIRED
DIA	DIAMETER	R.O.	ROUGH OPENING
DM	DIMENSION	RTU	ROOF TOP UNIT
DN	DOWN	RWC	RESILIENT WALLCOVERING
DS	DOWNSPOUT	SF	SQUARE FOOT (FEET)
DWG	DRAWING	SB	SPLASH BLOCK
EA	EACH	SFTG	SHEDDING
EJ	EXPANSION JOINT	SIM	SIMILAR
EL OR ELEV	ELEVATION = GRADE OR BUILDING	SPEC	SPECIFICATIONS
ELEC	ELECTRIC OR ELECTRICAL	SMNR	STANDING SEAM METAL ROOFING
ELEV	ELEVATOR	SS	STAINLESS STEEL
EQUIP	EQUIPMENT	STD	STANDARD
EW	EACH WAY	STL	STEEL
EW	ELECTRIC WATER COOLER	SUSP	SUSPENDED
FD	FLOOR DRAIN	SVF	SHEET VINYL FLOORING
FE	FIRE EXTINGUISHER	TLT	TOILET
FEC	FIRE EXTINGUISHER CABINET	T OR TRD	TREAD
FIN	FINISH	T.O.	TOP OF
FL OR FLR	FLOOR	TEL	TELEPHONE
FLASH	FLASHING	TYP	TYPICAL
FT	FEET (FOOT)	UNO	UNLESS NOTED OTHERWISE
FTG	FOOTING	V.B.	VAPOR BARRIER
GALV	GALVANIZED	VENT	VENTILATOR(ION)
GL	GLASS OR GLAZING	VERT	VERTICAL
GWB	GYPSUM WALL BOARD	VEST	VESTIBULE
GYP	GYPSUM	VT	VINYL TILE
HC	HANDICAPPED	VTR	VENT THRU ROOF
HR	HEADER	VWC	VINYL WALLCOVERING
HM	HOLLOW METAL	W/O	WITHOUT
INSUL	INSULATION	WD	WOOD
INT	INTERIOR	WDW	WINDOW
JBOX	JUNCTION BOX	WNSCT	WAINSCOT
JT	JOINT	WP	WORK POINT
LAV	LAVATORY		
MTL	MATERIAL		
MAX	MAXIMUM		
MECH	MECHANICAL		
MFG	MANUFACTURING		
MFR	MANUFACTURER		
MIN	MINIMUM		
MISC	MISCELLANEOUS		



**PARTITIONS GENERAL NOTES:**

1. ALL GWB TO BE 5/8" TYPE X UNLESS OTHERWISE NOTED.
2. ALL GYPSUM WALL BOARD WITHIN 24" OF A PLUMBING FIXTURE TO BE 5/8" WATER RESISTANT, FLOOR TO CEILING.
3. PARTITIONS THAT DO NOT EXTEND STRAIGHT UP VERTICALLY TO STRUCTURE ARE TO BE BRACED PER METAL STUD MANUFACTURER'S RECOMMENDATION.
4. GENERAL CONTRACTOR RESPONSIBLE FOR COORDINATING TOP OF PARTITION DEFLECTION TRACK CONNECTION IN ORDER TO ACCOMMODATE EXPECTED DEFLECTION FROM METAL BUILDING WITHOUT CAUSING BUCKLING OR CRUSHING OF METAL STUD.
5. ALL EXPOSED CORNERS OF CMU, INCLUDING AT DOOR OPENINGS, TO BE BULLNOSE.

**PARTITION TYPES**  
NO SCALE



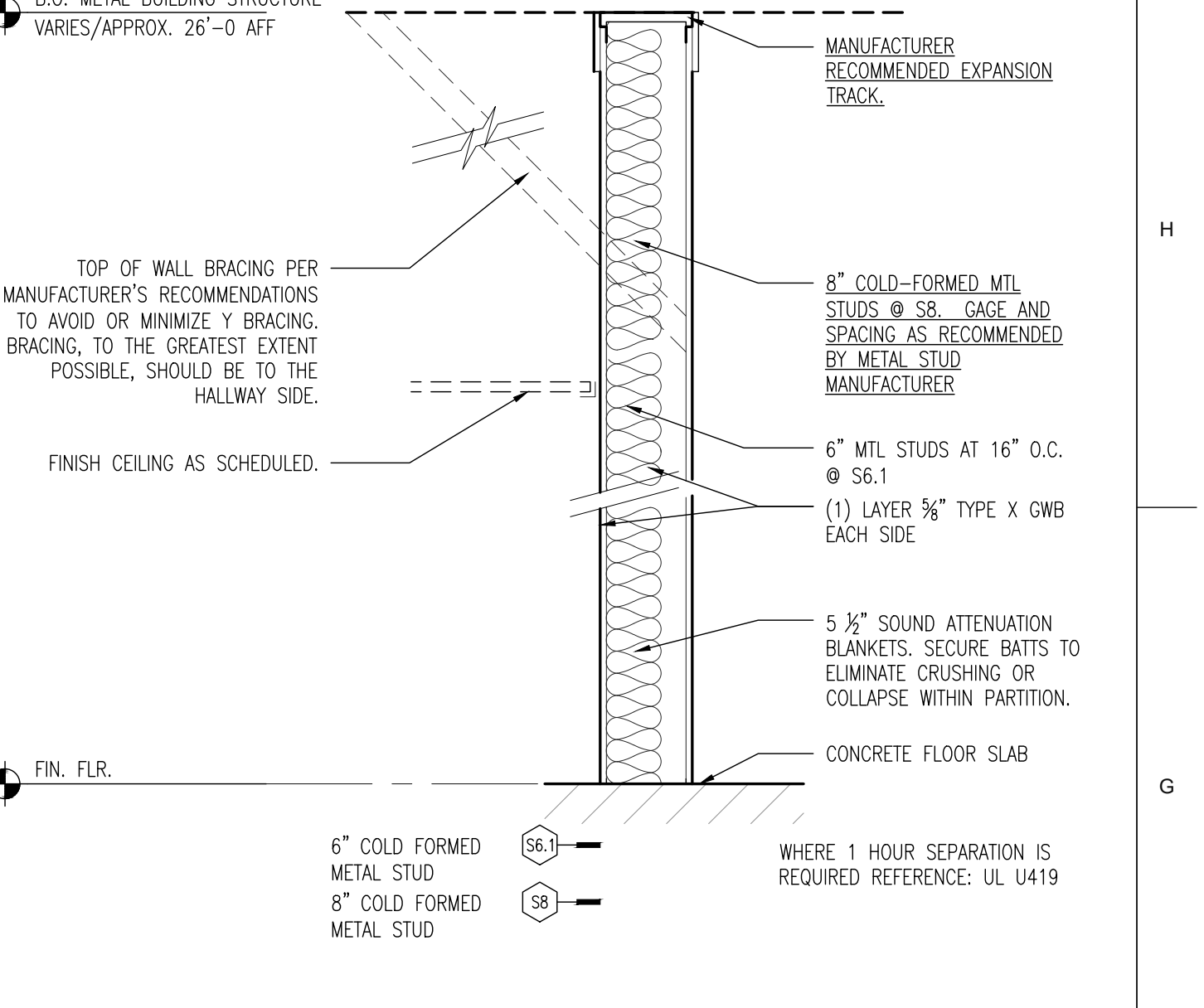
**OPPD NOTICE TO CONTRACTOR AND SUBCONTRACTORS**

SECURITY BACKGROUND SCREENING IS REQUIRED FOR ALL CONTRACTOR PERSONNEL WORKING ON THIS PROJECT. BACKGROUND CHECKS MUST BE COMPLETED PRIOR TO ANY INDIVIDUAL BEING GRANTED UNESCORTED ACCESS. FOLLOW THE OPPD CONTINGENT WORKER PROCESS AND SUBMIT ALL REQUIRED DOCUMENTATION INCLUDING ATTESTATION OF COMPLIANCE, OPPD CONTRACTOR STAFFING REQUISITION FORM AND PHOTO OF CONTINGENT WORKER.

NO FIREARMS OR ANY OTHER WEAPONS ARE ALLOWED ON OPPD PROPERTY, EVEN IF PERMITTED BY LAW.

NO SMOKING OR TOBACCO USE OF ANY TYPE IS ALLOWED ON OPPD PROPERTY.

HARD HATS AND SAFETY GLASSES (OR PRESCRIPTION EYEWEAR WITH ANSI Z87 LENSES AND SIDE SHIELDS) MUST BE WORN AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.



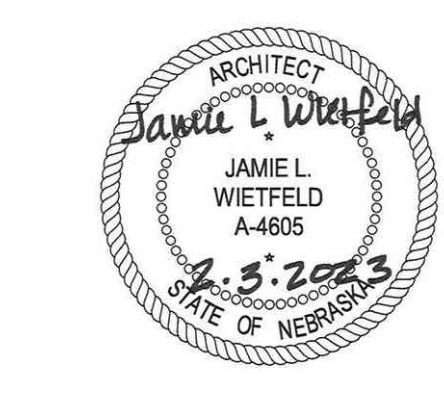
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**REVISION SCHEDULE**

#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC  
POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

DRAWING  
STANDARDS,  
ABBREVIATIONS,  
PARTITION TYPES

**G1-0**



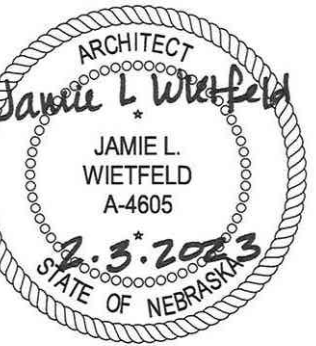
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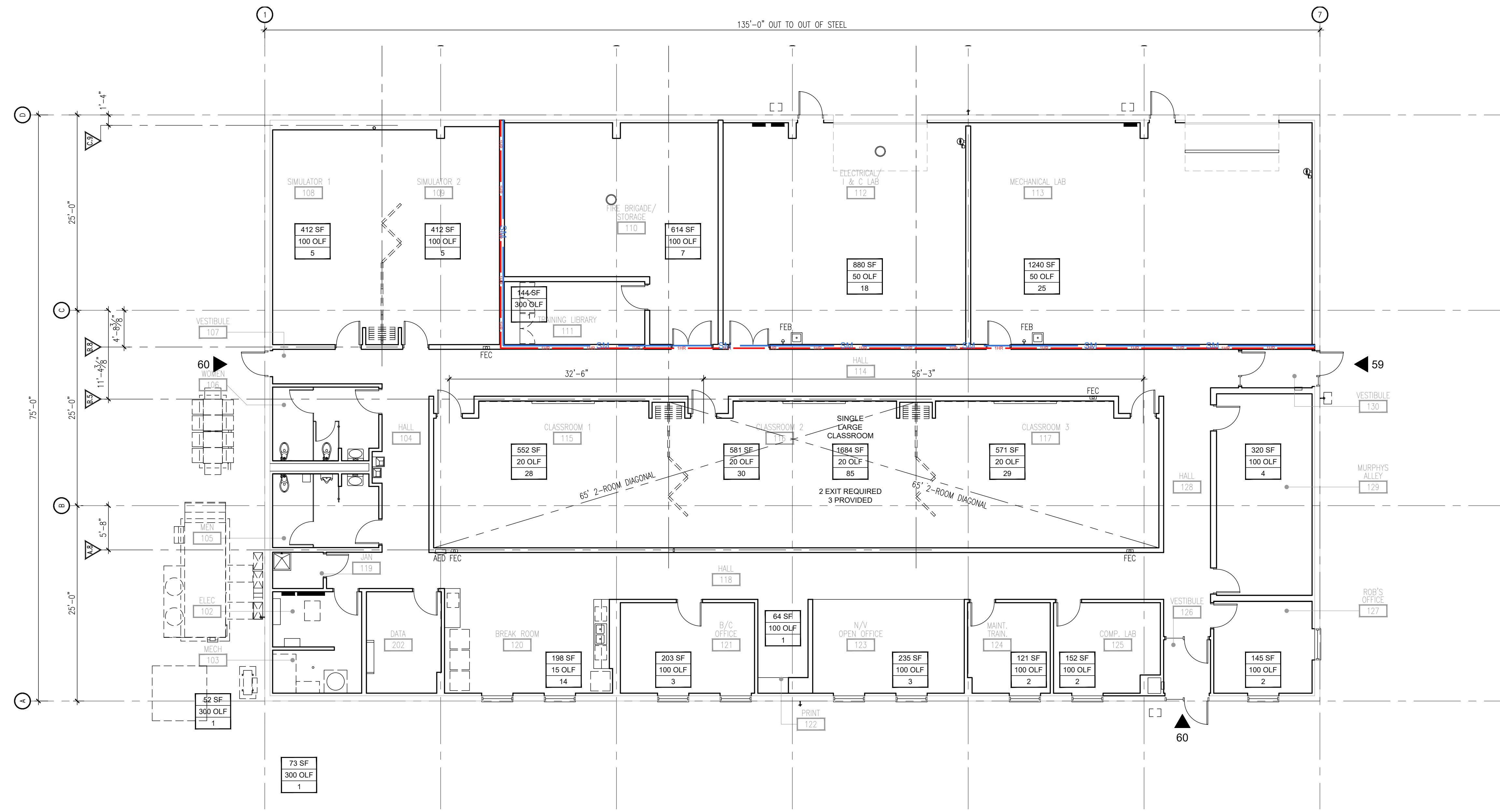
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CODE SUMMARY	
<b>GOVERNING CODE:</b>	
INTERNATIONAL BUILDING CODE	2012 EDITION
INTERNATIONAL MECHANICAL CODE	2012 EDITION
INTERNATIONAL PLUMBING CODE	2012 EDITION
NATIONAL ELECTRIC CODE	MOST RECENT EDITION
INTERNATIONAL ENERGY CONSERVATION CODE	2018 EDITION
INTERNATIONAL FUEL GAS CODE	2012 EDITION
AMERICAN WITH DISABILITIES ACT (ADA)	2010 EDITION
NFPA LIFE SAFETY CODE 101	2012 EDITION
<b>PROJECT DESCRIPTION:</b>	
THIS PROJECT CONSISTS OF THE CONSTRUCTION OF A 10,250 GSF PRE-MANUFACTURED METAL BUILDING TO FACILITATE GENERAL OFFICE, TRAINING, AND LABORATORY FUNCTIONS. INTERIOR CONSTRUCTION CONSISTS OF METAL STUD AND GIB PARTITIONS, GIB PARTITIONS, ACOUSTICAL PANEL CEILING, AND GENERAL/SUPPORTING PLUMBING, MECHANICAL, AND ELECTRICAL WORK.	
<b>LEGAL DESCRIPTION:</b>	
31-8-15 NW1/4 & N1/2 N1/2 SW1/4 & W1/2 W1/2 NE1/4 & NW1/4 NW1/4 OF SE1/4 & ACC FOUR MILE	
<b>ZONING:</b>	
NOT APPLICABLE	
<b>OCCUPANCY CLASSIFICATION/IBC SECTION 508.4:</b>	
B	
<b>OCCUPANCY SEPARATION PER TABLE 508.4</b>	
NO SEPARATIONS REQUIRED	
<b>TYPE OF CONSTRUCTION/IBC TABLE 601</b>	
II-B (0,0,0)	
<b>FIRE SUPPRESSION SYSTEM PROVIDED:</b>	
YES	
<b>MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT PER IBC TABLE 1104.1.2</b>	
OCCUPANCY	FLOOR AREA
ACCESSORY STORAGE	300 GROSS
ASSEMBLY (UNCONCENTRATED)	15 NET
BUSINESS	100 GROSS
CLASSROOM AREA	20 GROSS
SHOPS/VOCATIONAL AREAS	50 GROSS
<b>TOTAL OCCUPANT LOAD</b>	
179	
<b>EGRESS WIDTH PER OCCUPANT SERVED PER IBC SECTION 1005.3.1, EXCEPTION</b>	
0.2 INCHES	
<b>LOCKS AND LATCHES PER IBC SECTION 1008</b>	
PROVIDE EXIT HARDWARE CONSISTENT WITH IBC SECTION 1008 AND IN ACCORDANCE WITH ASSUMED OCCUPANCY/USES.	
<b>COMMON PATH OF EGRESS TRAVEL PER IBC SECTION 1014.3, EXCEPTION 1, (DEFINITION PER NFPA 2000 EDITION, 3.3.3.2)</b>	
100'	
<b>EXIT ACCESS TRAVEL DISTANCE PER IBC TABLE 1016.1</b>	
300'	
PER NFPA 101 38.2.6	300'
<b>CORRIDOR FIRE-RESISTANCE RATING PER IBC TABLE 1016.1</b>	
NONE REQUIRED	
<b>DEAD ENDS PER IBC TABLE 1018.4 EXCEPTION 2</b>	
50'	
PER NFPA 101 38.2.5.2, SPRINKLER EXCEPTION	50'
<b>TRAVEL DISTANCE BETWEEN PORTABLE FIRE EXTINGUISHER PER NFPA 101, 2012</b>	
75'	
<b>PENETRATIONS-FIRE-RATED WALLS AND PARTITIONS PER NFPA 90A, 3-3.1.1 2012 EDITION</b>	
FIRE DAMPERS NOT REQUIRED AS PENETRATIONS ARE THRU 1 HOUR PARTITIONS.	

LEGEND							
EXIT	14 → EXIT/OCCUPANT LOAD AT DOOR						
EGRESS PATH	→ START POINT/REMOTEST POINT						
TRAVEL DISTANCE TO EXIT	75'						
ROOM DATA	<table border="1"> <tr> <td>161 SF</td> <td>← AREA OF ROOM</td> </tr> <tr> <td>300 OLF</td> <td>← OCCUPANT LOAD FACTOR</td> </tr> <tr> <td>1</td> <td>← OCCUPANTS</td> </tr> </table>	161 SF	← AREA OF ROOM	300 OLF	← OCCUPANT LOAD FACTOR	1	← OCCUPANTS
161 SF	← AREA OF ROOM						
300 OLF	← OCCUPANT LOAD FACTOR						
1	← OCCUPANTS						
FIRE EXTINGUISHERS	<table border="1"> <tr> <td>☒</td> <td>← FIRE EXTINGUISHER CABINET</td> </tr> <tr> <td>☒</td> <td>← FIRE EXTINGUISHER BRACKET</td> </tr> <tr> <td>☒</td> <td>← AED (AUTOMATED EXTERNAL DEFIBRILLATOR) REFER TO EQUIPMENT PLAN FOR LOCATION</td> </tr> </table>	☒	← FIRE EXTINGUISHER CABINET	☒	← FIRE EXTINGUISHER BRACKET	☒	← AED (AUTOMATED EXTERNAL DEFIBRILLATOR) REFER TO EQUIPMENT PLAN FOR LOCATION
☒	← FIRE EXTINGUISHER CABINET						
☒	← FIRE EXTINGUISHER BRACKET						
☒	← AED (AUTOMATED EXTERNAL DEFIBRILLATOR) REFER TO EQUIPMENT PLAN FOR LOCATION						
SMOKE SEPARATION	<table border="1"> <tr> <td>— SM — SM —</td> <td>← SMOKE SEPARATION</td> </tr> <tr> <td>— 1HR — 1HR —</td> <td>← 1 HOUR SEPARATION</td> </tr> </table>	— SM — SM —	← SMOKE SEPARATION	— 1HR — 1HR —	← 1 HOUR SEPARATION		
— SM — SM —	← SMOKE SEPARATION						
— 1HR — 1HR —	← 1 HOUR SEPARATION						



**A3** EXITING PLAN - LEVEL 1  
SCALE: 1/8"=1'-0"

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CODE SUMMARY,  
EXITING PLAN

**G1-1**



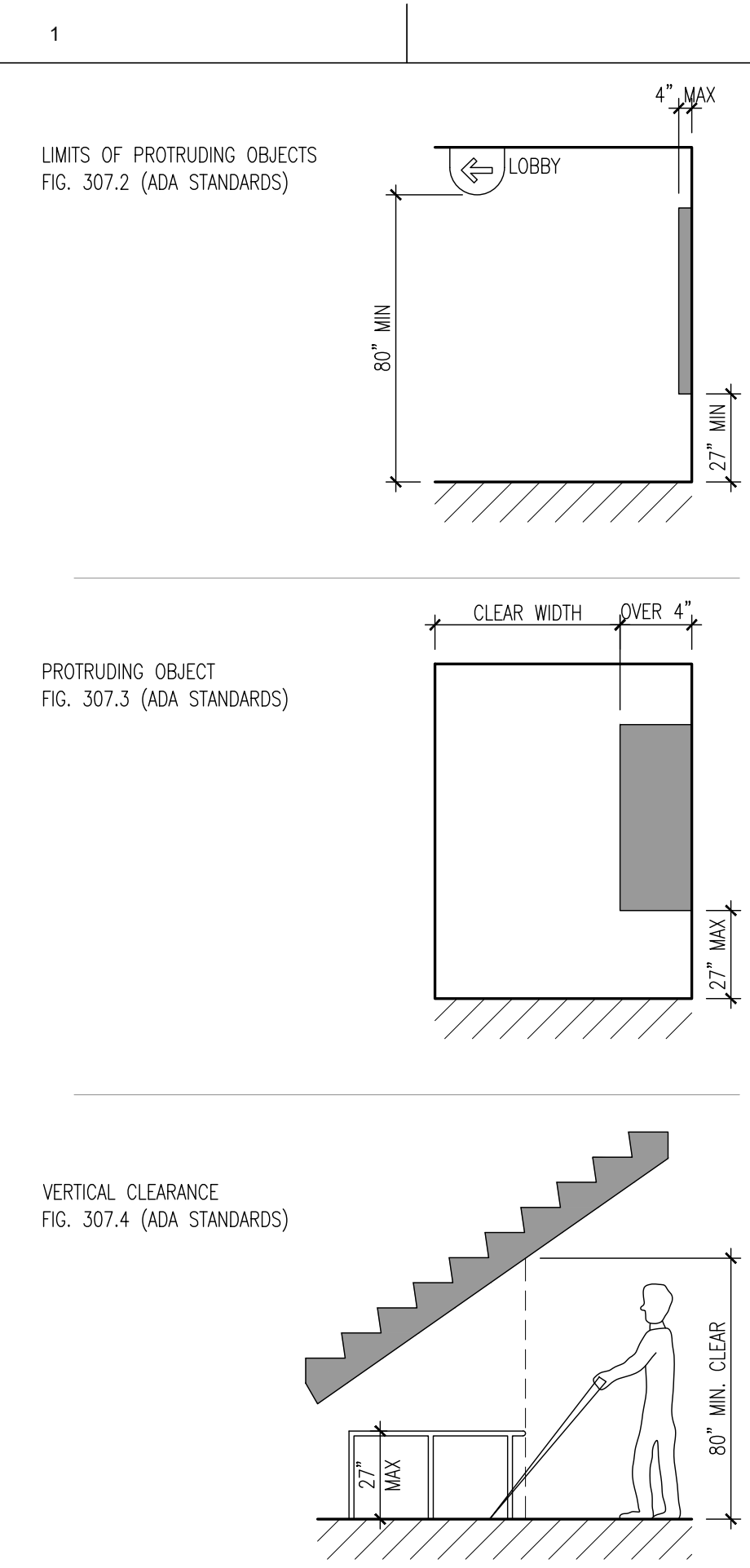
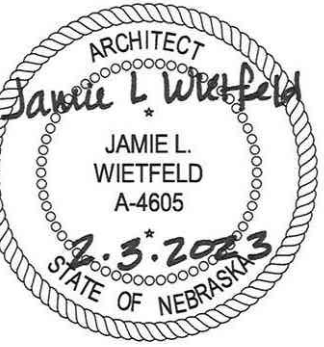
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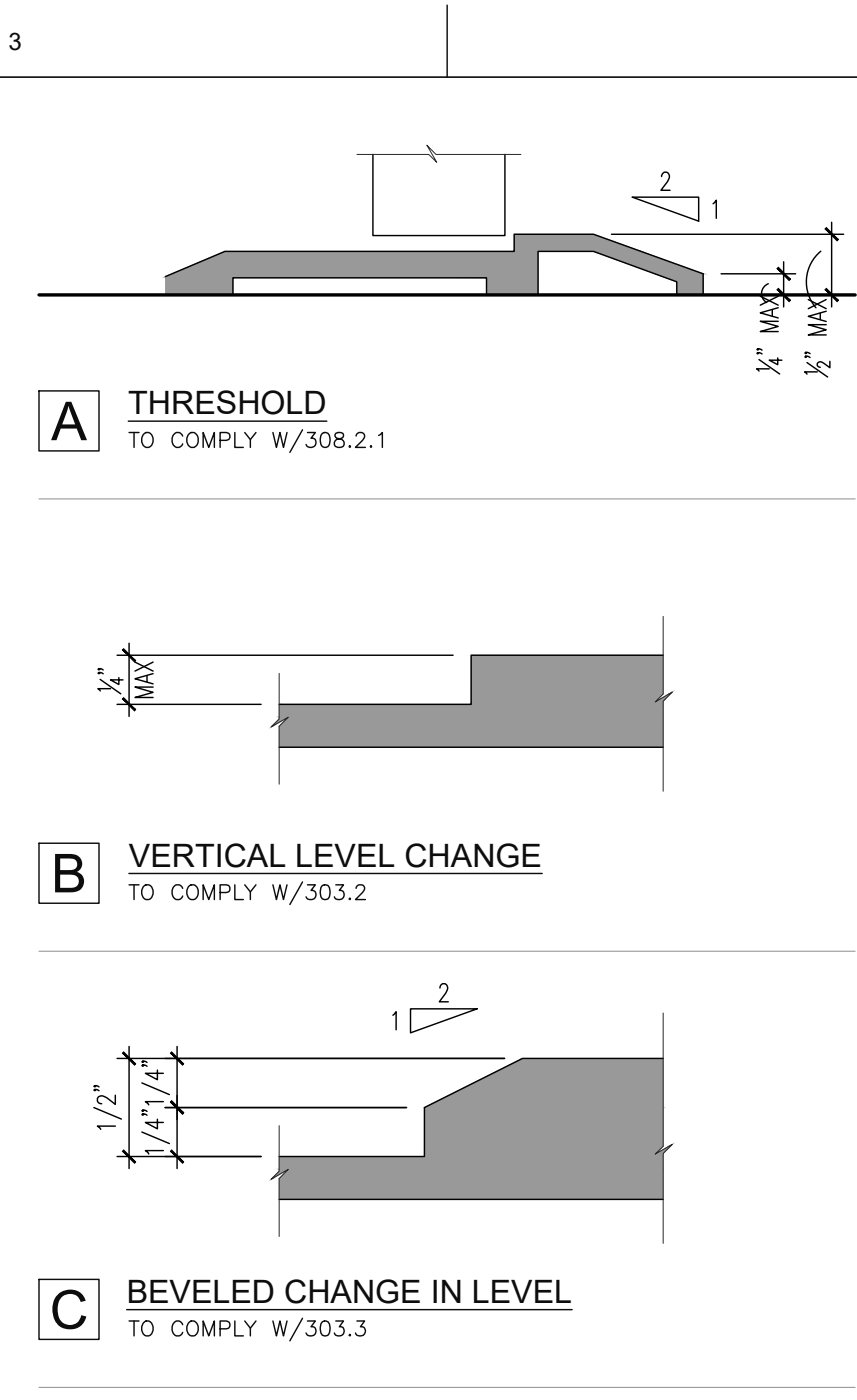
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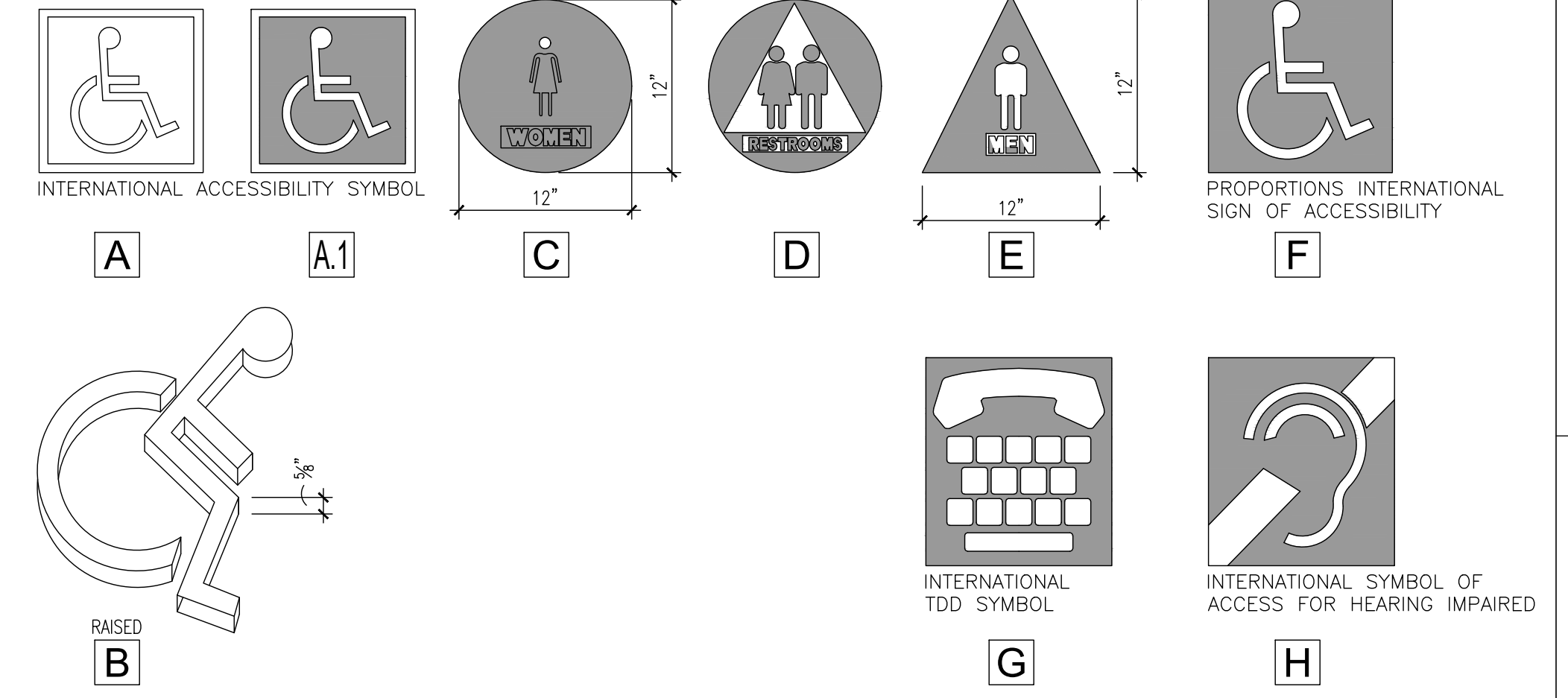


**F1 REACH LIMITS**  
 NO SCALE

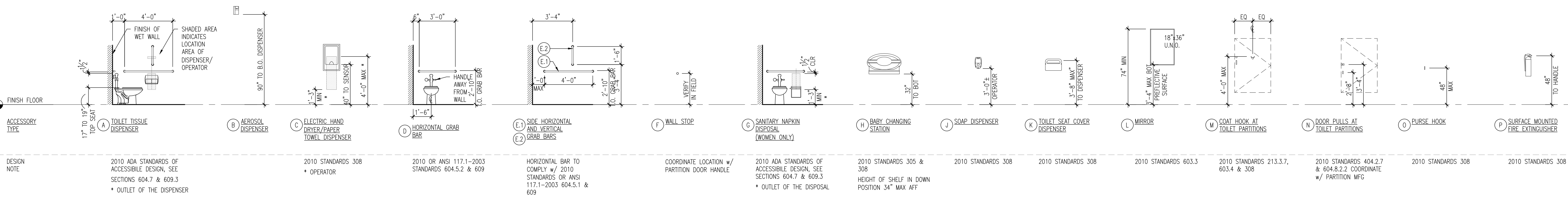


**F3 LEVEL CHANGES**  
 NO SCALE

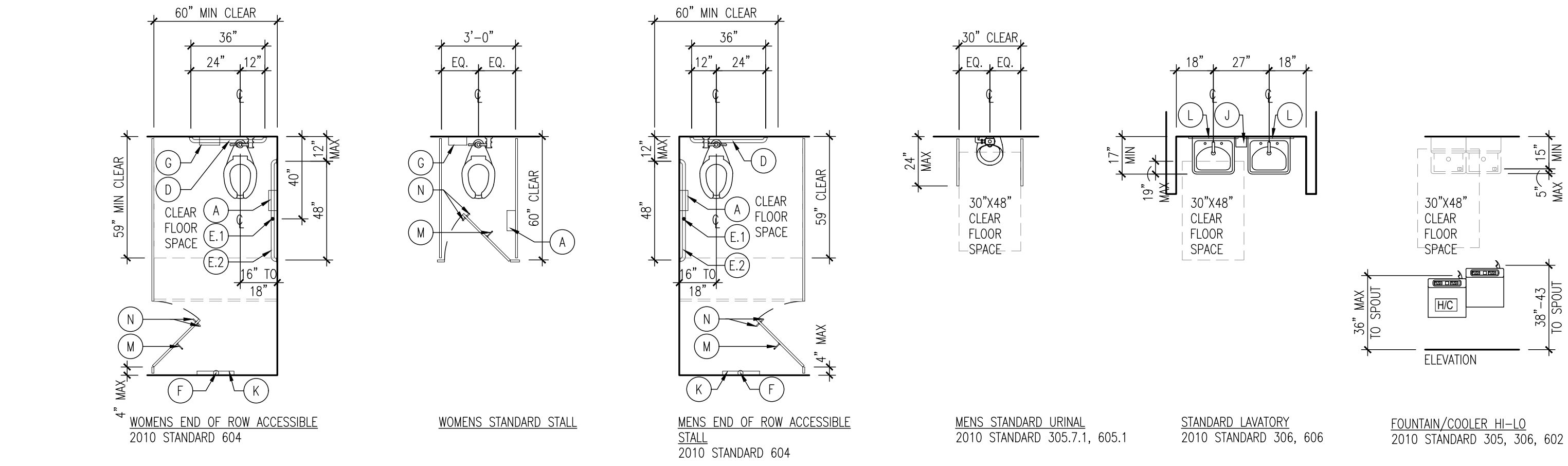
- RAISED LETTERS AND NUMBERS:**  
 TO COMPLY W/703.2
1. WIDTH HEIGHT RATIO BETWEEN 5/8" AND 2".
  2. CONTRAST CHARACTERS AND SYMBOLS WITH BACKGROUND.
  3. UPPERCASE SANS SERIF CHARACTERS RAISED MIN 1/32" ABOVE BACKGROUND.
- SIGNS LOCATIONS:**  
 TO COMPLY W/703.4.2
5. ALL REQUIRED ACCESSIBLE ENTRANCES IDENTIFIED WITH MINIMUM OF ONE STANDARD SIGN. (PER 216.6)
  6. ADDITIONAL DIRECTIONAL SIGNS ALONG ACCESSIBLE PATH OF TRAVEL ARE REQUIRED.
  7. BUILDINGS REMODELED TO PROVIDE ACCESSIBLE SANITARY FACILITIES FOR PUBLIC USE SHALL HAVE INFORMATION POSTED IN THE LOBBY AS PART OF THE BUILDING DIRECTORY.
- INTERNATIONAL SYMBOL OF ACCESSIBILITY:**  
 TO COMPLY W/703.7
- B. STANDARD USED TO IDENTIFY ACCESSIBLE FACILITIES.**
9. WHITE FIGURE ON BLUE BACKGROUND, COLOR #15090 ON FEDERAL STANDARD #595A.
  10. WHEN ENFORCING AGENCY DETERMINES, IF APPROPRIATE, SPECIAL DESIGNS AND COLORS MAY BE APPROVED.
- BRAILLE:**  
 TO COMPLY W/703.3
11. USE CONTRASTED GRADE 2 BRAILLE DOTS TO BE 0.1 INCH ON CENTER IN EACH CELL.
  12. 0.2 INCH SPACE BETWEEN CELLS.
  13. DOTS RAISED MINIMUM 0.025 INCH ABOVE BACKGROUND.



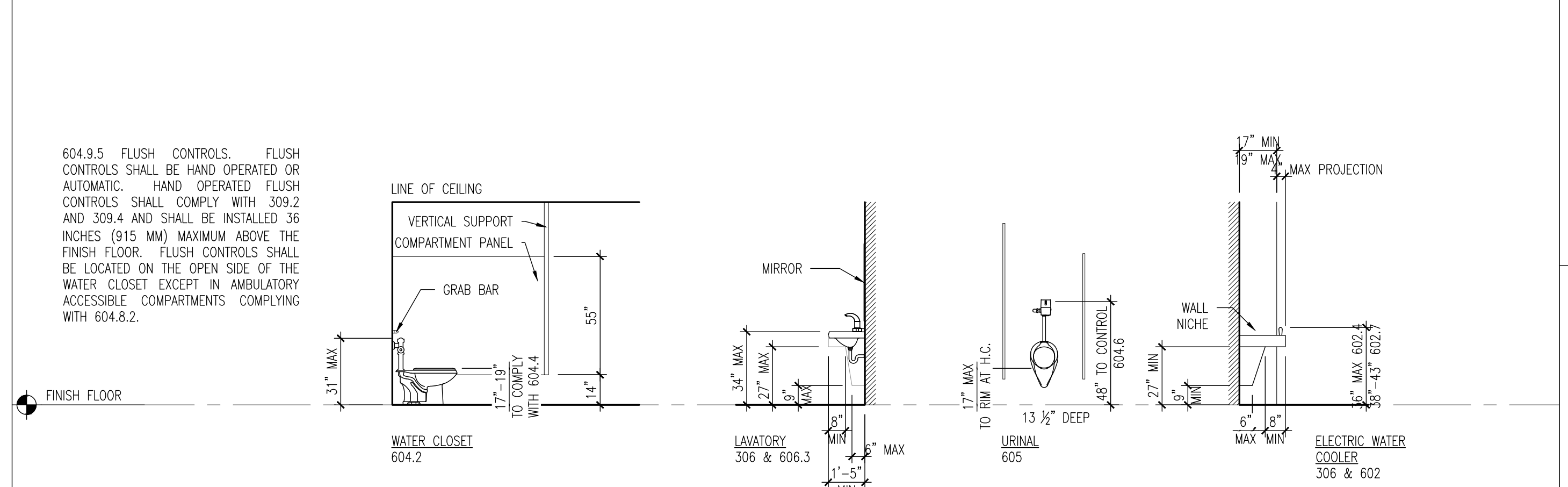
- ACCESSIBILITY REQUIREMENTS:**
1. ALL CONSTRUCTION SHALL BE COMPLETED IN STRICT ACCORDANCE WITH THE DESIGN GUIDELINES ESTABLISHED BY THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN (2010 STANDARDS) / ANSI 117.1 / 2012 NEBRASKA ACCESSIBILITY STANDARDS AND AUTHORITIES HAVING JURISDICTION.
  2. REPORT TO THE OWNER ANY AND ALL DISCREPANCIES BETWEEN, OR WITHIN, THE CONTRACT DOCUMENTS AND THE DESIGN GUIDELINES ESTABLISHED BY THE 2010 STANDARDS PRIOR TO BEGINNING ANY PHASE OF CONSTRUCTION.
  3. UTILIZE EXTREME CARE TO ENSURE THAT ALL TOLERANCES, DIMENSIONS, AND CLEARANCES ARE CONSTRUCTED ACCURATELY AND WITHOUT DEVIATION.



**D1 ACCESSORY MOUNTING DIAGRAMS**  
 SCALE: 1/2"=1'-0"



**B1 STANDARD PLAN LAYOUTS**  
 SCALE: 1/2"=1'-0"



**B5 FIXTURE MOUNTING DIAGRAMS / WATER CLOSET COMPARTMENTS**  
 SCALE: 1/2"=1'-0"

REVISION SCHEDULE

#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD  
 NEBRASKA CITY, NE 68410

OMAHA PUBLIC  
 POWER DISTRICT

444 SOUTH 16TH STREET  
 OMAHA, NE 68102

ACCESSIBILITY STANDARDS



**DOOR ACCESSIBILITY NOTES:**

**404.2.1 CLEAR WIDTH:** DOOR OPENINGS SHALL PROVIDE A CLEAR WIDTH OF 32 INCHES (815 MM) MINIMUM. CLEAR OPENINGS OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES. OPENINGS MORE THAN 24 INCHES (610 MM) DEEP SHALL PROVIDE A CLEAR OPENING OF 36 INCHES (915 MM) MINIMUM. THERE SHALL BE NO PROJECTIONS INTO THE REQUIRED CLEAR OPENING WIDTH LOWER THAN 34 INCHES (865 MM) ABOVE THE FINISH FLOOR OR GROUND. PROJECTIONS INTO THE CLEAR OPENING WIDTH BETWEEN 34 INCHES (865 MM) AND 80 INCHES (2030 MM) ABOVE THE FINISH FLOOR OR GROUND SHALL NOT EXCEED 4 INCHES (100 MM).  
**EXCEPTIONS:**  
 1. IN ALTERATIONS, A PROJECTION OF 5/8 INCH (16 MM) MAXIMUM INTO THE REQUIRED CLEAR WIDTH SHALL BE PERMITTED FOR THE LATCH SIDE STOP.  
 2. DOOR CLOSERS AND DOOR STOPS SHALL BE PERMITTED TO BE 78 INCHES (1980 MM) MINIMUM ABOVE THE FINISH FLOOR OR GROUND.

**404.2.4 MANEUVERING CLEARANCES:** MINIMUM MANEUVERING CLEARANCES AT DOORS AND GATES SHALL COMPLY WITH TABLE 404.2.4.1. MANEUVERING CLEARANCES SHALL EXTEND THE FULL WIDTH OF THE DOORWAY AND THE REQUIRED LATCH SIDE OR HINGE SIDE CLEARANCE.

**404.2.5 THRESHOLDS:** THRESHOLDS, IF PROVIDED AT DOORWAYS, SHALL BE 3/8 INCH (13 MM) HIGH MAXIMUM. BASED THRESHOLDS AND CHANGES IN LEVEL AT DOORWAYS SHALL COMPLY WITH 302 AND 303. **EXCEPTION:** EXISTING OR ALTERED THRESHOLDS X INCH (19 MM) HIGH MAXIMUM THAT HAVE A BEVELED EDGE ON EACH SIDE WITH A SLOPE NOT STEEPER THAN 1:2 SHALL NOT BE REQUIRED TO COMPLY WITH 404.2.5.

**404.2.8.1 DOOR CLOSERS AND GATE CLOSERS:** DOOR CLOSERS AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM.

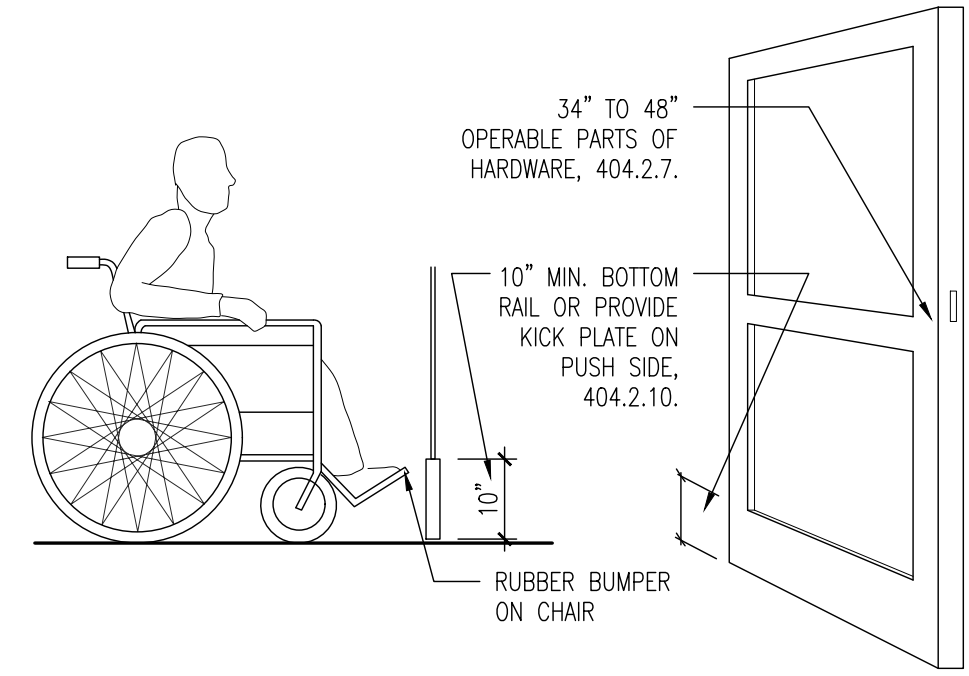
**404.2.9 DOOR AND GATE OPENING FORCE:** FIRE DOORS SHALL HAVE A MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY. THE FORCE FOR PUSHING OR PULLING OPEN A DOOR OR GATE OTHER THAN FIRE DOORS SHALL BE AS FOLLOWS:  
 1. INTERIOR HINGED DOORS AND GATES: 5 POUNDS (22.2 N) MAXIMUM.  
 2. SLIDING OR FOLDING DOORS: 5 POUNDS (22.2 N) MAXIMUM.  
 THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT HOLD THE DOOR OR GATE IN A CLOSED POSITION.

**CONTROL & DEVICE ACCESSIBILITY:**

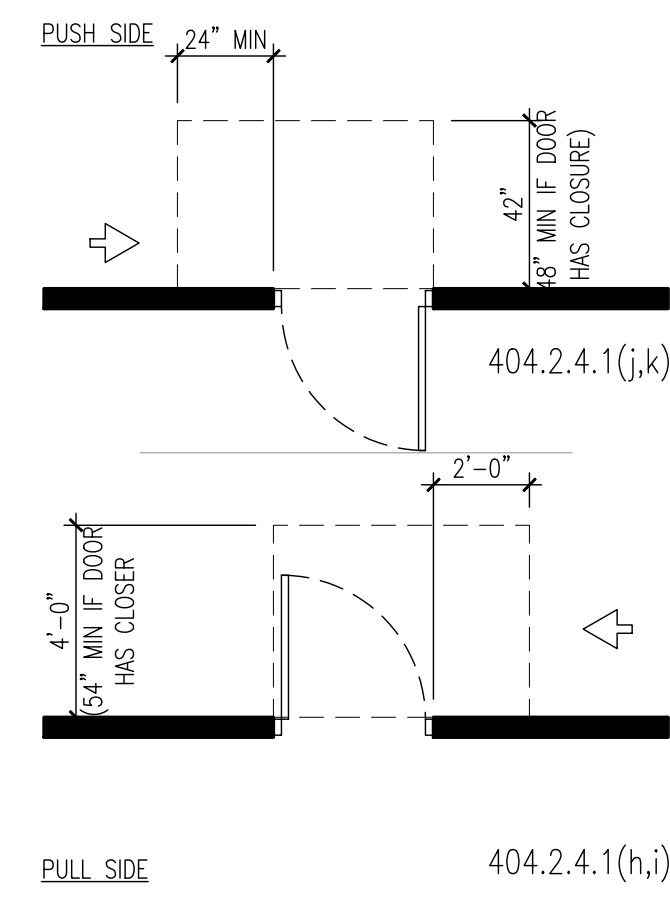
**309.2 CLEAR FLOOR SPACE:** A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 SHALL BE PROVIDED.

**309.3 HEIGHT:** OPERABLE PARTS SHALL BE PLACED WITHIN ONE OR MORE OF THE REACH RANGES SPECIFIED IN 308.

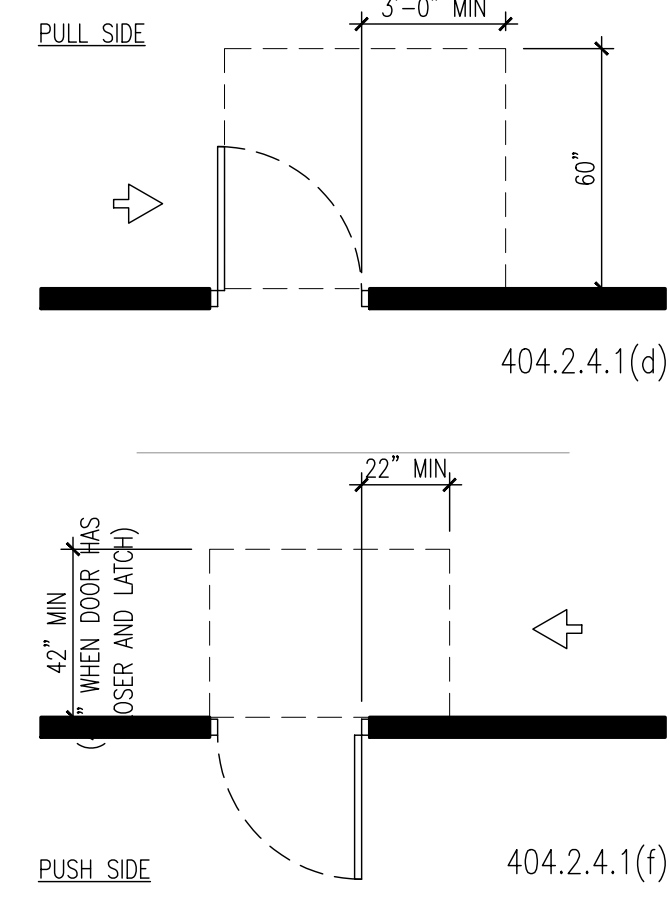
**309.4 OPERABLE PARTS OPERATION:** OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS (22.2 N) MAXIMUM.



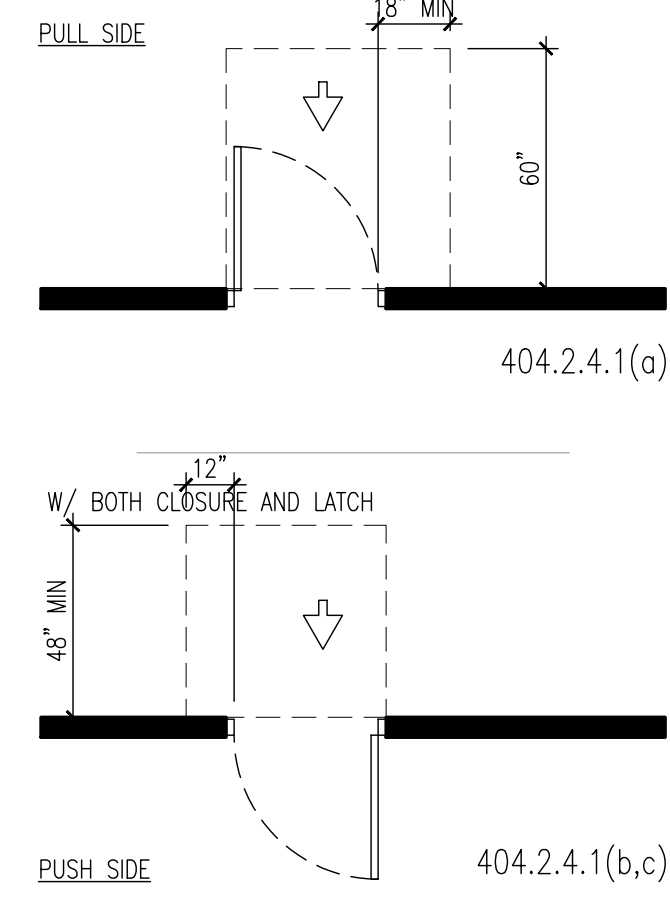
**G2 DETAIL-DOOR ACCESSIBILITY**  
NO SCALE (SEE DOOR ACCESSIBILITY NOTES ON THIS SHEET)



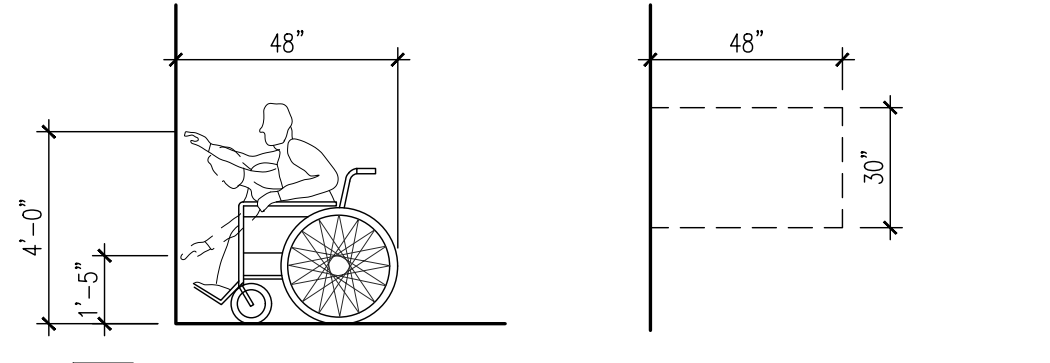
**G3 LATCH SIDE APPROACH**  
NO SCALE



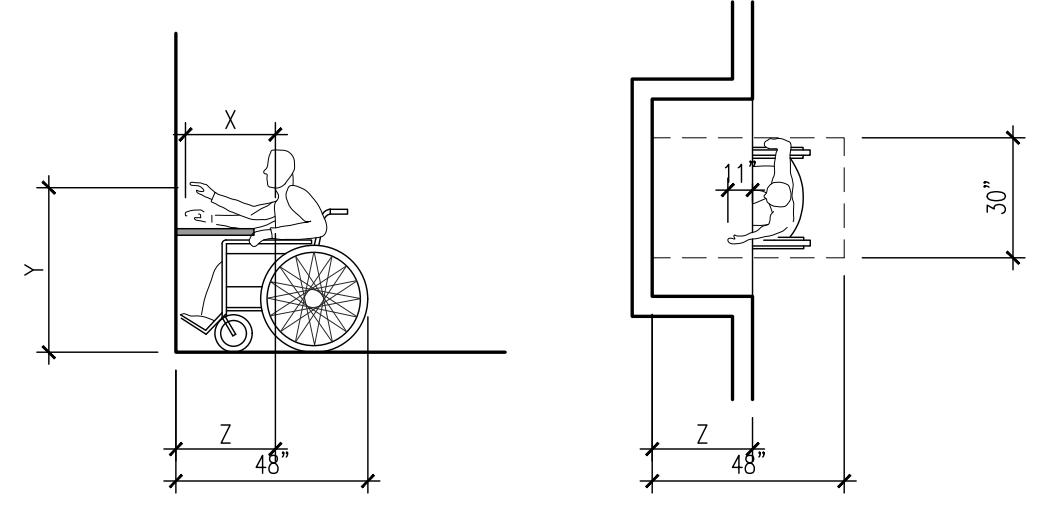
**G5 HINGE SIDE APPROACH**  
NO SCALE



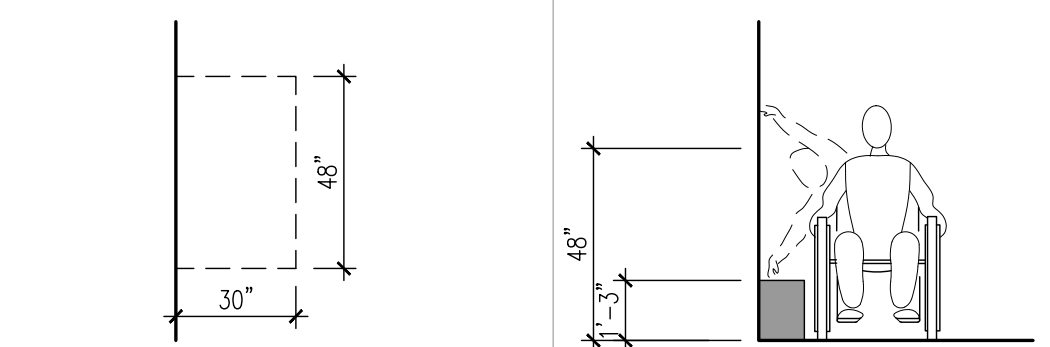
**G6 FRONT APPROACH**  
NO SCALE



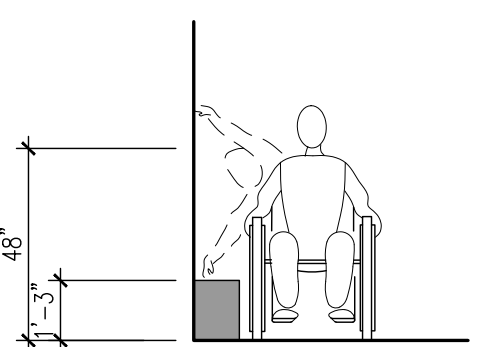
**1 HIGH FORWARD REACH LIMIT**  
TO COMPLY W/308.2.1



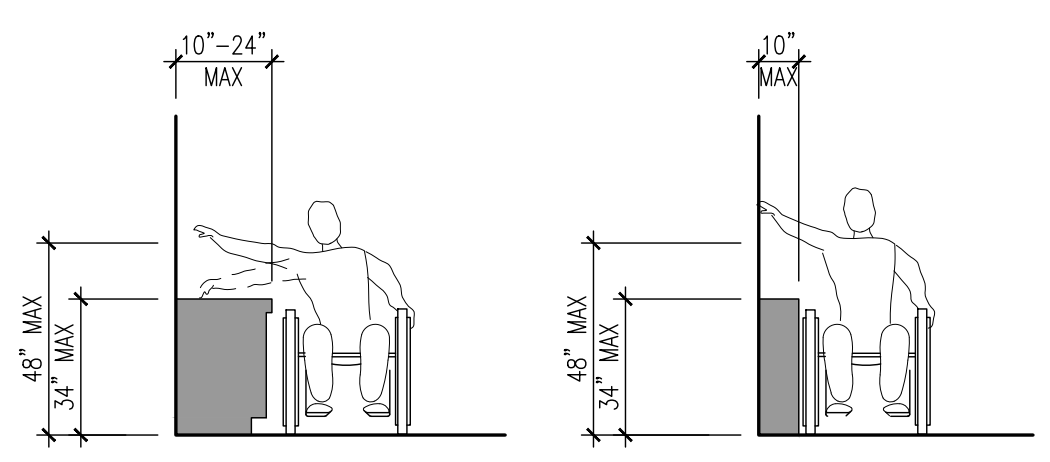
**2 MAXIMUM FORWARD REACH OVER AN OBSTRUCTION**  
TO COMPLY W/308.2.2



**3 CLEAR FLOOR SPACE PARALLEL APPROACH**  
TO COMPLY W/305.5 (B)

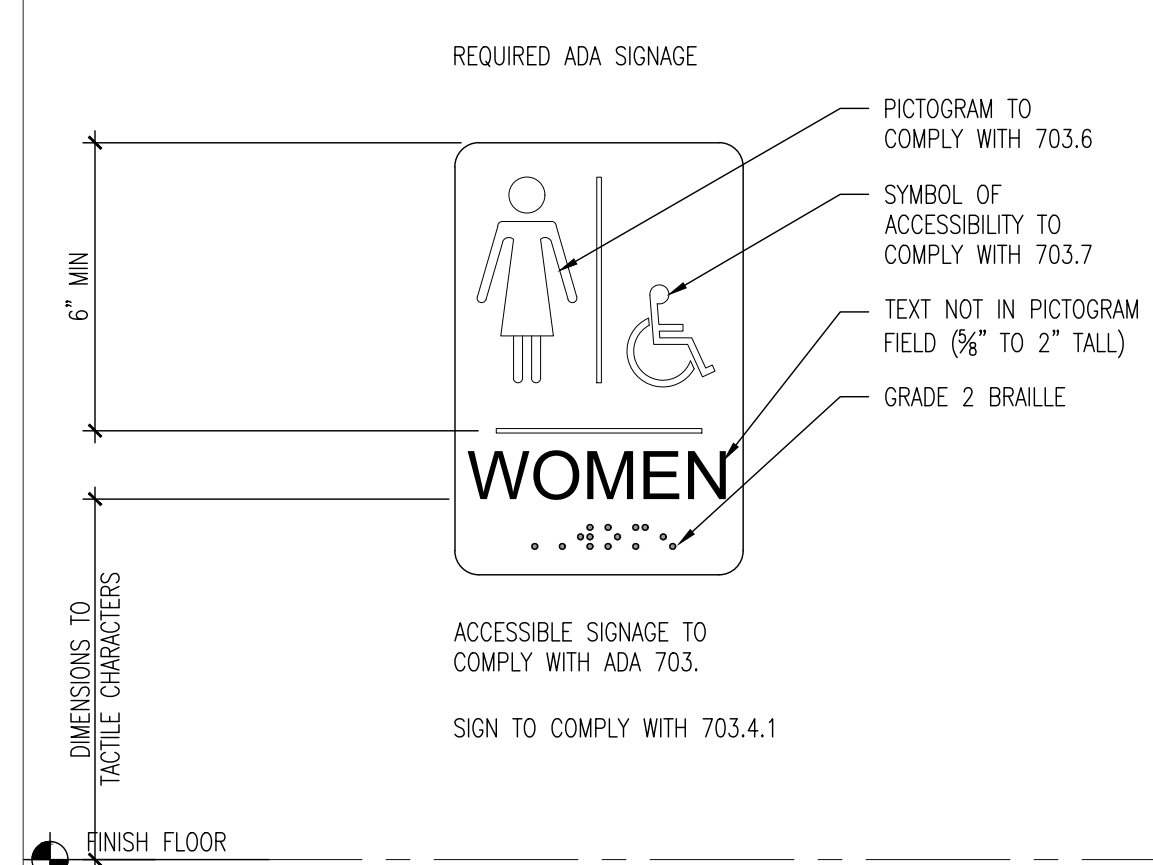


**4 HIGH AND LOW SIDE REACH LIMITS**  
TO COMPLY W/308.3.1

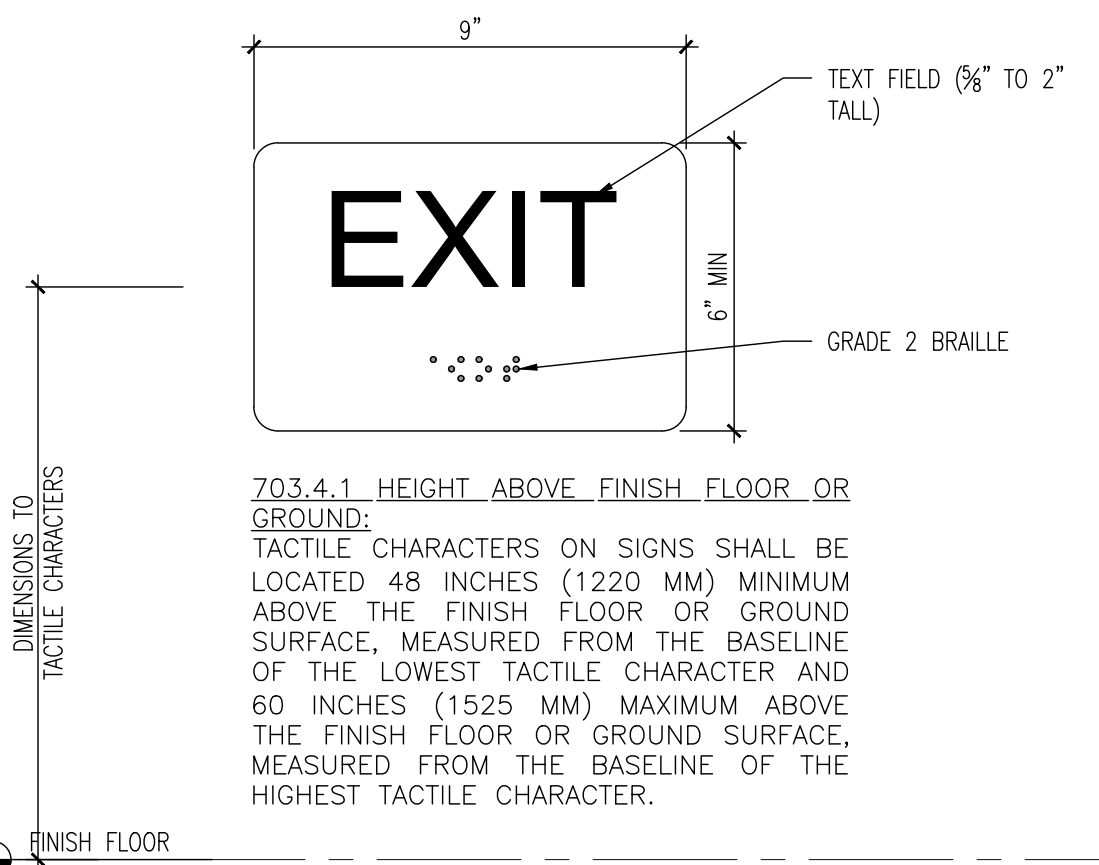


**5 MAXIMUM SIDE REACH OVER AN OBJECT**  
TO COMPLY W/308.3.2

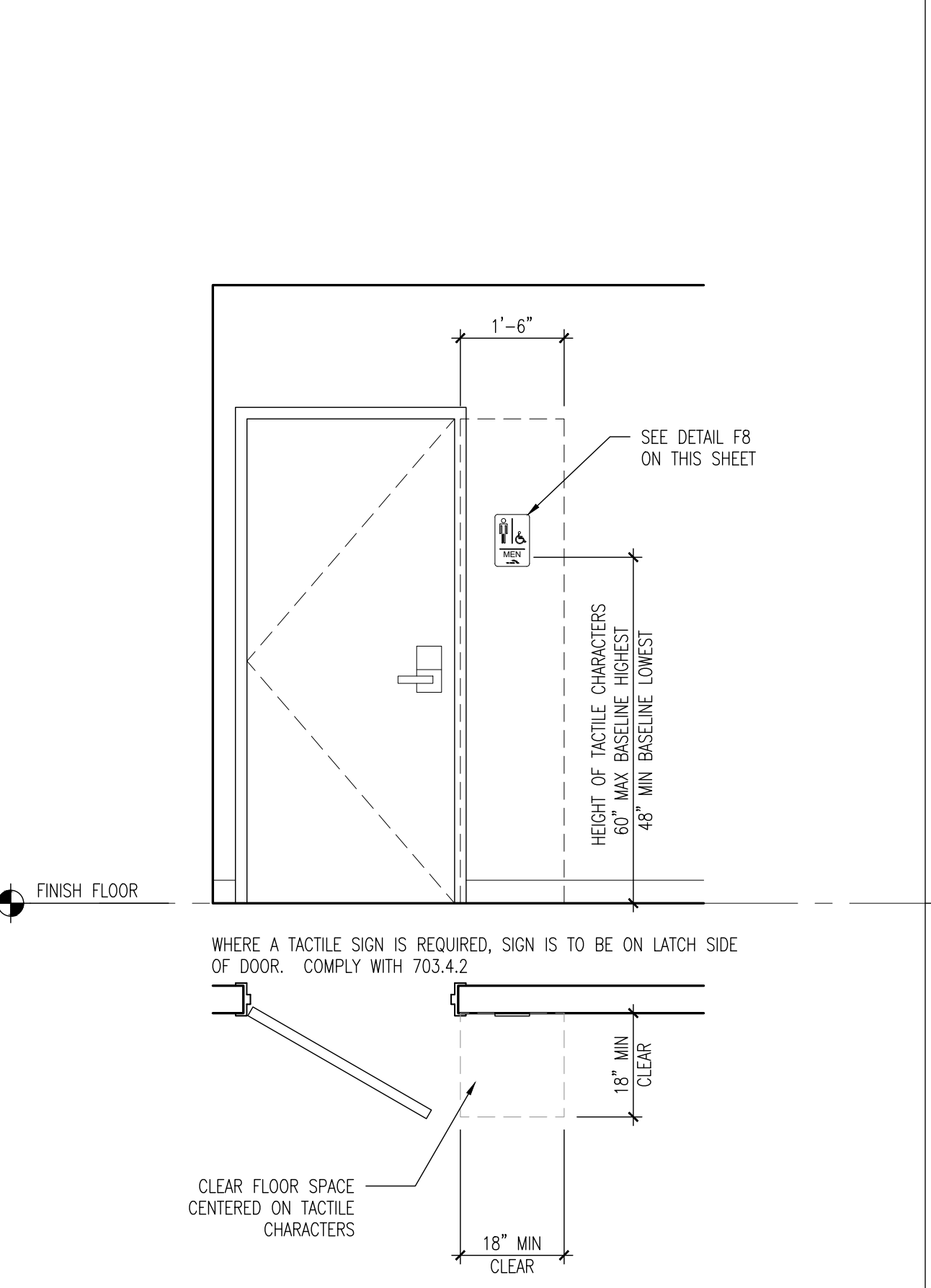
**D7 REACH LIMITS**  
NO SCALE



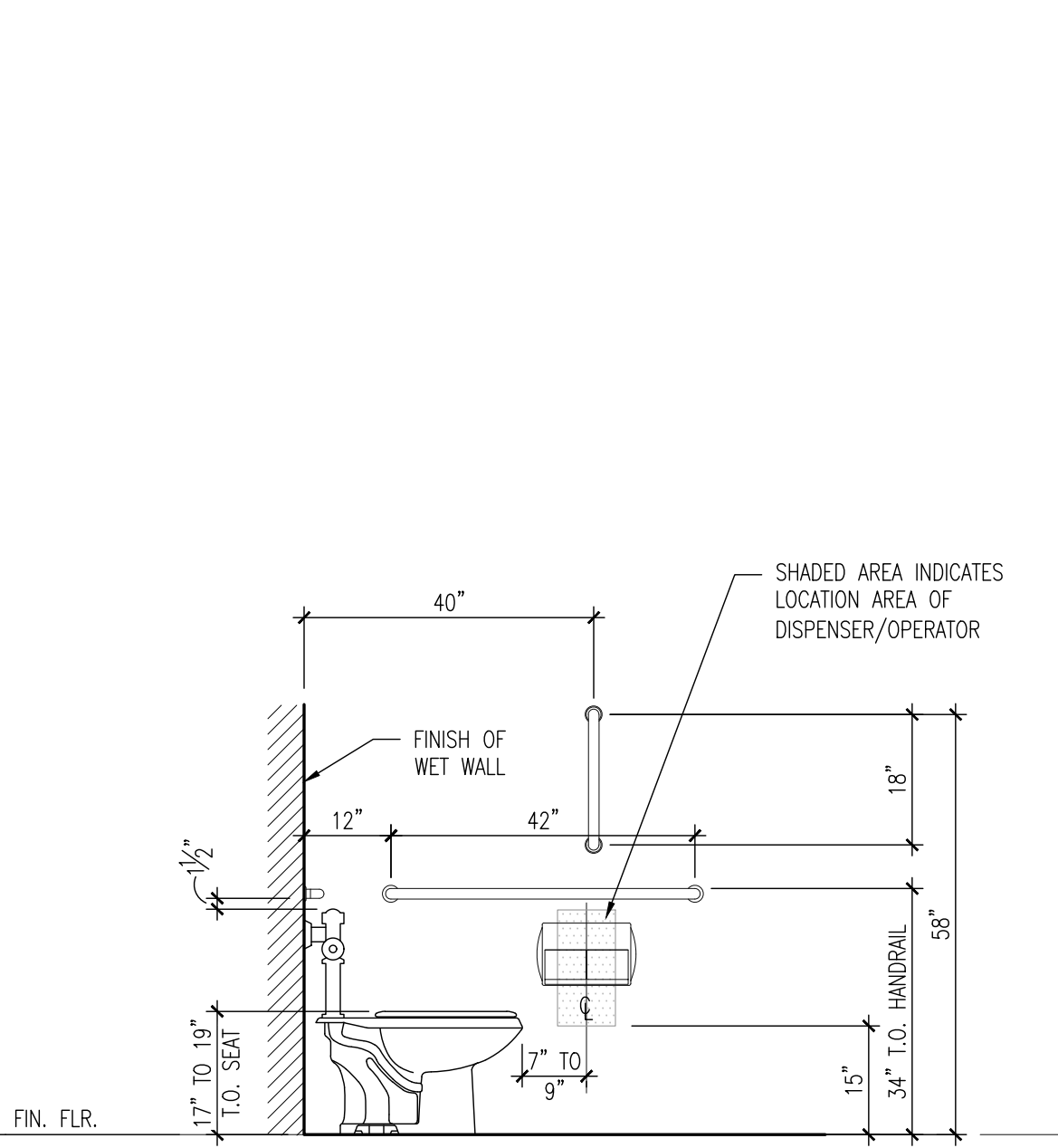
**B3 ACCESSIBLE SIGNAGE DETAIL**  
SCALE: 3/4\"/>



**B4 ACCESSIBLE SIGNAGE DETAIL**  
SCALE: 3/4\"/>



**A6 RESTROOM ACCESSIBLE SIGNAGE**  
SCALE: 1/2\"/>



**A7 ENLARGED ACCESSORY DETAIL**  
SCALE: 1/2\"/>

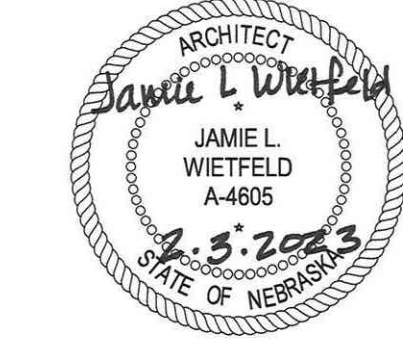
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**CIVIL**  
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 Omaha, NE 68164



**REVISION SCHEDULE**

#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

**ACCESSIBILITY STANDARDS**

**G2-2**



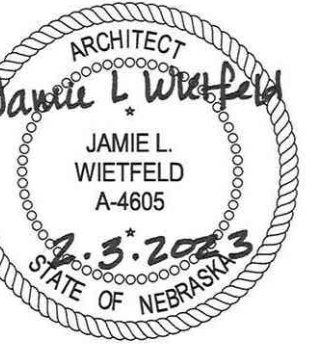
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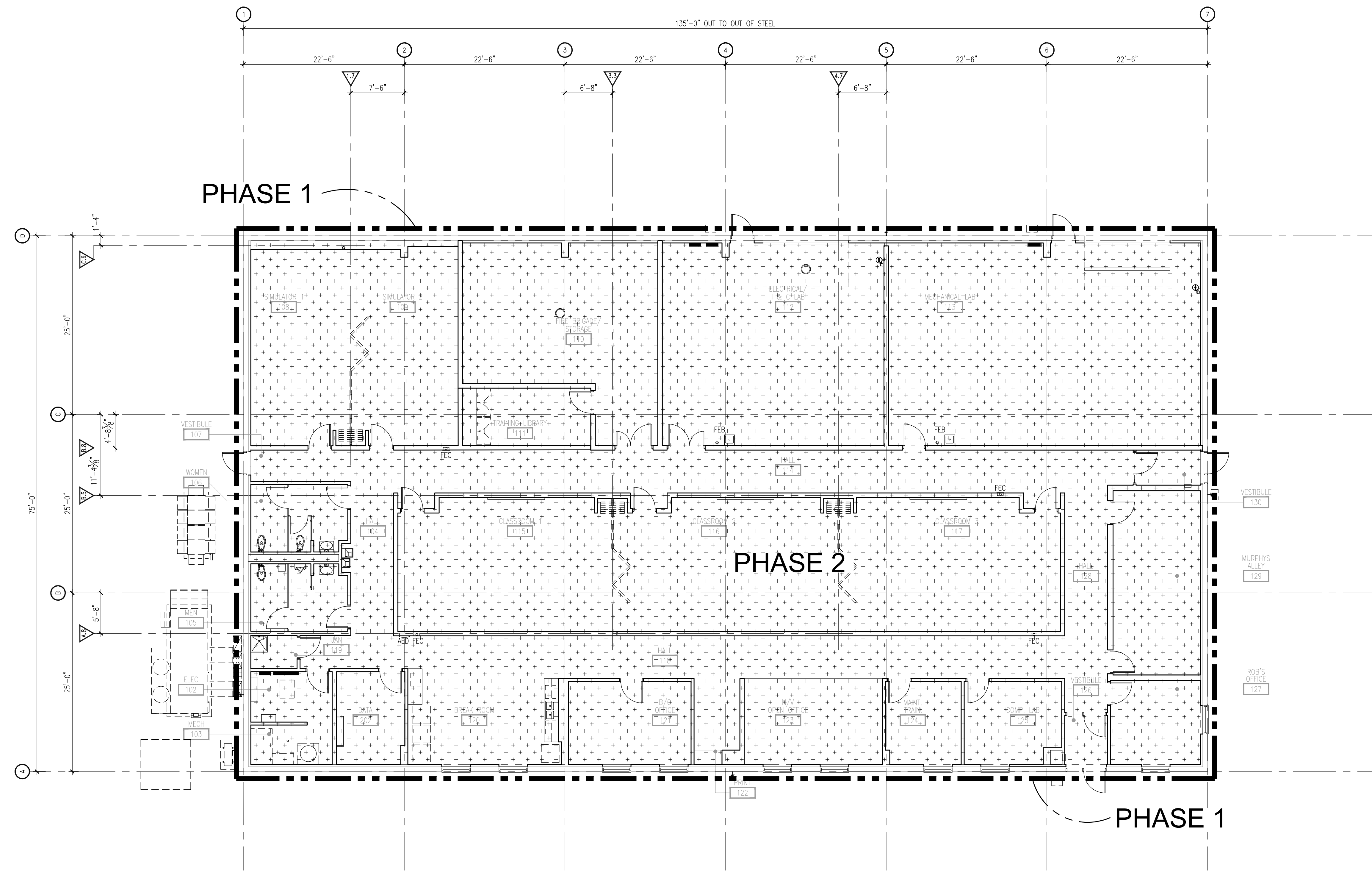


**F3** PHOTOS OF EXISTING CONDITIONS  
NO SCALE

**PHASES**

**PHASE 1**  
 - EXISTING - NO NEW WORK

**PHASE 2**  
 - UNDER SLAB MEP ROUGH-INS  
 - POUR ENTIRE PERIMETER SLAB  
 - POWER BORE TO THE POWER POLE  
 - FIBER PULL TO THE PULL BOX  
 - INSTALL LIFT STATION  
 - CONSTRUCT CLASSROOMS  
 - CONSTRUCT OFFICES  
 - SITE PAVING  
 - CONSTRUCT SIMULATORS  
 - CONSTRUCT LABS  
 - CONSTRUCT FIRE BRIGADE STORAGE ROOM



**A3** CONSTRUCTION PHASING PLAN  
SCALE: 1/8"=1'-0"

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CONSTRUCTION  
PHASING PLAN,  
PHOTOS

**G3-0**



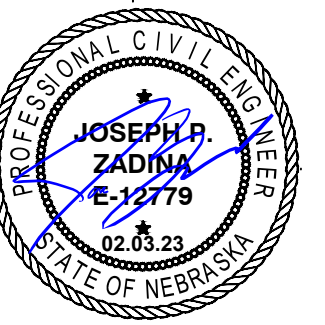
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OMAHA PUBLIC  
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444 SOUTH 16TH STREET  
 OMAHA, NE 68102

LEGEND SHEET

C1.0

1	2	3	4	5	6	7	8
<b>LINETYPES</b>		<b>DRAINAGE</b>		<b>BLOCKS</b>		<b>PROPOSED</b>	
<b>EXISTING</b>		<b>PROPOSED</b>		<b>EXISTING</b>		<b>PROPOSED</b>	
AIR	AIR	100 YEAR	100 YR	SANITARY CLEAN OUT	GAS CURB STOP	TREE DECIDUOUS	CONTOUR
CABLE	CABLE	500 YEAR	500 YR	SANITARY MANHOLE	GAS MANHOLE	TREE CONIFEROUS	FUTURE CONTOUR
CONDUIT	CONDUIT	1000 YEAR	1000 YR	SEWER WARNING SIGN	GAS METER	BUSH	EXISTING CONTOUR
CONSTRUCTION FENCE	CONSTRUCTION FENCE	10 YEAR EGL	10YR EGL	SEPTIC TANK	GAS VALVE	BOULDER	WETLANDS AREA NOT TO BE DISTURBED
DRAIN TILES	DRAIN TILES	2 YEAR EGL	2YR EGL	AREA INLET ROUND	GAS WARNING SIGN	ARROW LEFT	FILL AREA
ELECTRIC	FENCE	5 YEAR EGL	5YR EGL	AREA INLET SQUARE	TELEPHONE MANHOLE	ARROW RIGHT	STABILIZED ACCESS ROAD
FENCE	FENCE BARBED WIRE	100 YEAR EGL	100YR EGL	GRATE INLET	TELEPHONE PEDESTAL	ARROW STRAIGHT	VEGETATED BUFFER STRIP
FENCE BARBED WIRE	FENCE STEEL	10 YEAR HGL	10YR HGL	GRATE INLET W/ HOOD	TELEPHONE PULLBOX	STRIPING "ONLY"	RIDGE
FENCE STEEL	FENCE WIRE	2 YEAR HGL	2YR HGL	STORM MANHOLE	TELEPHONE WARNING SIGN	BICYCLE STRIPING	FLOW PATH
FENCE WIRE	FENCE WOOD	5 YEAR HGL	5YR HGL	4' CURB INLET	UNIDENTIFIED MANHOLE	HANDICAP SYMBOL	SPOT ELEVATION
FENCE WOOD	FIBER OPTICS	FLOOD WAY	FLDWY	CURB INLET LEFT	UNIDENTIFIED UTILITY PEDESTAL	TRAFFIC SIGNAL	DRAINAGE AREA NAME
FIBER OPTICS	FLOW ARROW	PROPERTY LINE		CURB INLET RIGHT	UNIDENTIFIED VALVE	TRAFFIC SIGNAL PEDESTAL	DRAINAGE AREA RUNOFF COEFFICIENT
FLOOD PLAN	FORCE MAIN	EXISTING LOT LINE		DOWN SPOUT/ROOF DRAIN	UNIDENTIFIED PULLBOX	TRAFFIC SIGNAL PULL BOX	DRAINAGE BASIN DELINEATION
FLOW ARROW	GAS	SECTION LINE		FLARED END SECTION	WATER CURB STOP	PARKING METER	DRAINAGE SUB BASIN DELINEATION
FORCE MAIN	GRAVEL AND DIRT EDGE	EASEMENT		CONTINUE SYMBOL	WATER MANHOLE	STOP SIGN	TIME OF CONCENTRATION DRAINAGE PATH
GAS	IRRIGATION	GENERAL ABBREVIATIONS		CABLE MANHOLE	WATER METER	YIELD SIGN	WATTLE
GRAVEL AND DIRT EDGE	NON POTABLE WATER	ADA	AMERICANS WITH DISABILITIES ACT	CABLE PEDESTAL	WATER VALVE	RR CROSSING ARM	VEHICLE TRACKING PAD
IRRIGATION	OIL	BC	BACK OF CURB	CABLE PULLBOX	WATER WARNING SIGN	BENCHMARK	TEMPORARY SEEDING
NON POTABLE WATER	OIL AND GAS	BOSW	BACK OF WALK	LIGHT POLE	AUTO SPRINKLER BUILDING	TEMPORARY BENCHMARK	STRAW HAY BALE
OIL	OVERHEAD POWER	BP	BOTTOM OF PIPE	YARD LIGHT	POST INDICATOR VALVE	ROW MARKER	SLOPE PROTECTION
OIL AND GAS	OVERHEAD TELEPHONE	BW	BOTTOM OF WALL	GROUND LIGHT	YARD HYDRANT	CONTROL POINT	PERMANENT SEEDING
OVERHEAD POWER	OVERHEAD UTILITY	C	COMPUTED DIMENSION	BLDG MOUNTED LIGHT	IRRIGATION CONTROL VALVE	MONUMENT FOUND	INLET PROTECTION
OVERHEAD TELEPHONE	POWER	CATV	CABLE TELEVISION	STREET LIGHT	IRRIGATION SPRINKLER HEAD	MONUMENT SET	STORM SEWER
OVERHEAD UTILITY	RAW WATER	CL	CENTERLINE	POWER POLE	WELL	WITNESS CORNER	SANITARY SEWER
POWER	ROOF DRAIN	CMP	CORRUGATED METAL PIPE	H STRUCTURE	MONITORING WELL	COMPUTED CORNER	SANITARY SEWER SERVICE
RAW WATER	SANITARY SEWER	CP	CONTROL POINT	H STRUCTURE W/ TRANSFORMER	TABLE	SECTION CORNER TIE	SANITARY SERVICE RISER
ROOF DRAIN	STORM SEWER	CY	CUBIC YARD	ELECTRIC MANHOLE	MAILBOX	SECTION CORNER	DROP MANHOLE
SANITARY SEWER	TELEPHONE	DIA	DIAMETER	ELECTRIC METER	MISCELLANEOUS POINT		SLOTTED UNDER DRAIN
STORM SEWER	UNDER DRAIN	DIP	DUCTILE IRON PIPE	ELECTRIC PEDESTAL	VENT		WATER
TELEPHONE	UNIDENTIFIED UTILITY	E	EAST	ELECTRIC PULLBOX	TOWER		AIR TAP
UNDER DRAIN	UTILITY	ELEV.	ELEVATION	ELECTRIC TRANSFORMER	PROPANE TANK		FIRE HYDRANT
UNIDENTIFIED UTILITY	LIMITS OF CONSTRUCTION	EOG	EDGE OF GRAVEL	ELECTRIC VAULT	FLAGPOLE		TEE
UTILITY	LIMITS OF DISTURBED AREA	FL	FINISHED GRADE	ELECTRIC WARNING SIGN	AIR CONDITIONING UNIT		BEND
WATER	EROSION CONTROL	FG	FINISHED GRADE	GUY	DRINKING FOUNTAIN		REDUCER
RAILROAD TRACKS	EARTH BERM	FH	FIRE HYDRANT	FIBER OPTIC MANHOLE	BENCH		VALVE GATE
FLOW LINE	EARTH DIVERSION	FL	FLOWLINE	FIBER OPTIC PULL BOX	BOLLARD		MANHOLE
BUILDING OVERHANG	EROSION CONTROL LOG	FL	FLOWLINE	FIBER OPTIC VAULT	BORE HOLE		FLARED END SECTION
AIR	FENCE	G	GAS	FIBER OPTIC PEDESTAL	COLUMN ROUND		CURB INLET
CABLE	FILL DIVERSION	GB	GRADE BREAK	FIBER OPTIC WARNING SIGN	COLUMN SQUARE		AREA INLET
ELECTRIC	FLOW ARROW	HP/LP	HIGH POINT/LOW POINT	FUEL TANK	VACUUM		GRATE INLET
FIBER OPTIC	INTERCEPTOR DIKE	HORIZ	HORIZONTAL	FUEL CAP			BIORETENTION GARDEN
GAS	INTERCEPTOR SWALE	IE	INVERT ELEVATION				
SANITARY SEWER	LEVEL SPREADER	LF	LINEAR FEET				
STORM SEWER	LEVEL TERRACE	M	MEASURED DIMENSION				
TELEPHONE	SEDIMENT CONTROL LOG	MH	MANHOLE				
UNDERGROUND POWER	SILT FENCE	ME	MATCH EXISTING				
UTILITY	STRAW WATTLE	N	NORTH				
WATER	TEMPORARY DITCH	N.T.S.	NOT TO SCALE				
		OT	OPEN TOP PIPE				
		P	PLAT DIMENSION				
		PC	POINT OF CURVATURE				
		PI	POINT OF INTERSECTION				
		PL	PROPERTY LINE				
		PT	PINCHED TOP PIPE				
		PVC	POLYVINYL CHLORIDE				
		P.V.C.	POINT OF VERTICAL CURVE				
		PVI	POINT OF VERTICAL INTERSECTION				
		PVT	POINT OF VERTICAL TANGENCY				
		X 1020.12	SPOT ELEVATION RECORD DIMENSION				
		R	REBAR				
		RCP	REINFORCED CONCRETE PIPE				
		ROW	RIGHT OF WAY				
		S	SOUTH				
		SF	SQUARE FEET				
		SS	SANITARY SEWER				
		ST	STORM				
		STA	STATION				
		STD	STANDARD				
		SW	SIDEWALK				
		T	TELEPHONE				
		TC	TOP OF CURB				
		TOF	TOP OF FOUNDATION				
		TOG	TOP OF GRADE				
		TOI	TOP OF ISLAND				
		TP	TOP OF PAVEMENT				
		TS	TOP OF SLAB				
		TW	TOP OF WALL				
		TYP.	TYPICAL				
		VERT.	VERTICAL				
		W	WEST				
		WQCV	WATER QUALITY CAPTURE VOLUME				
		YPC	YELLOW PLASTIC CAP				



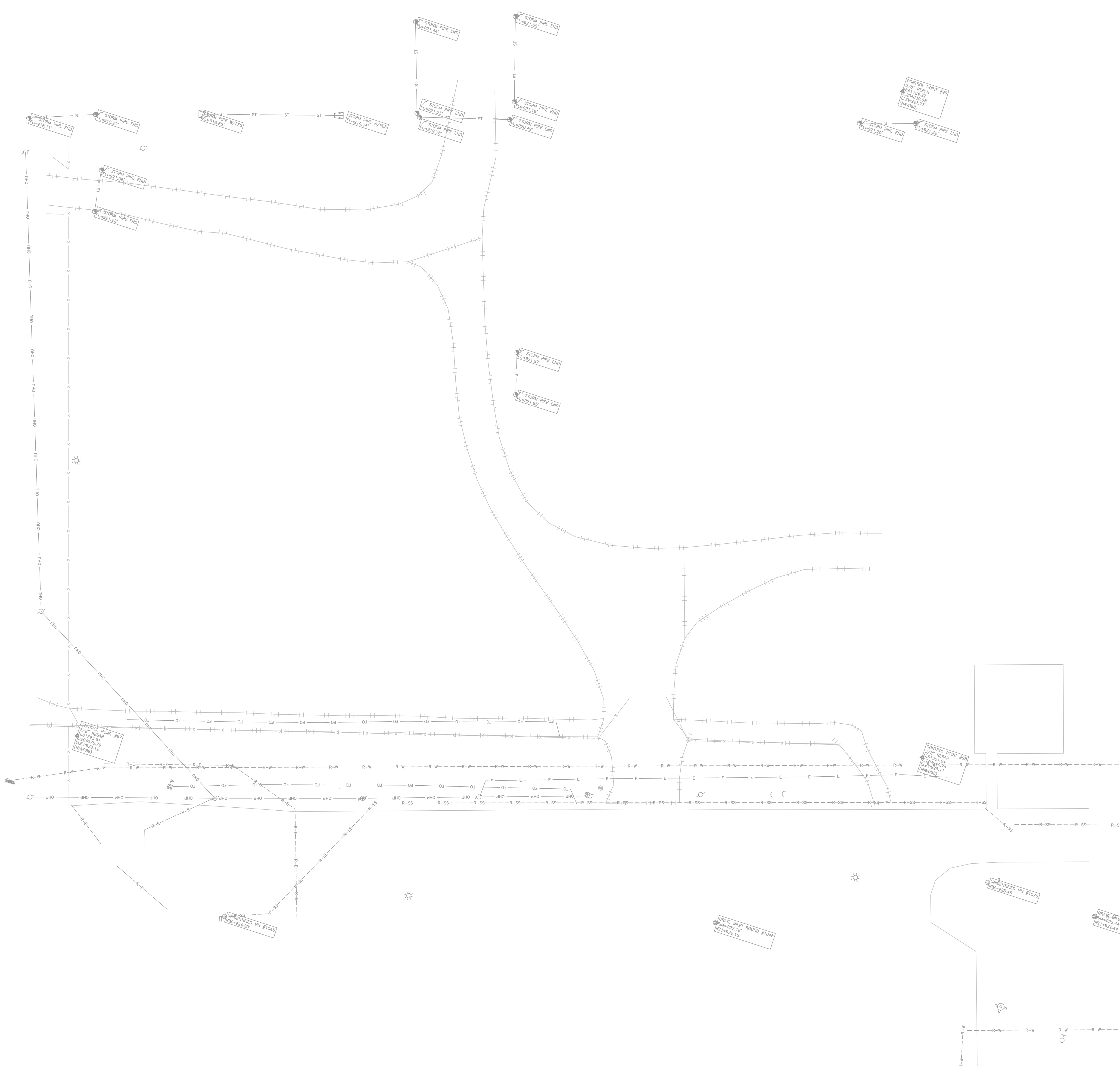
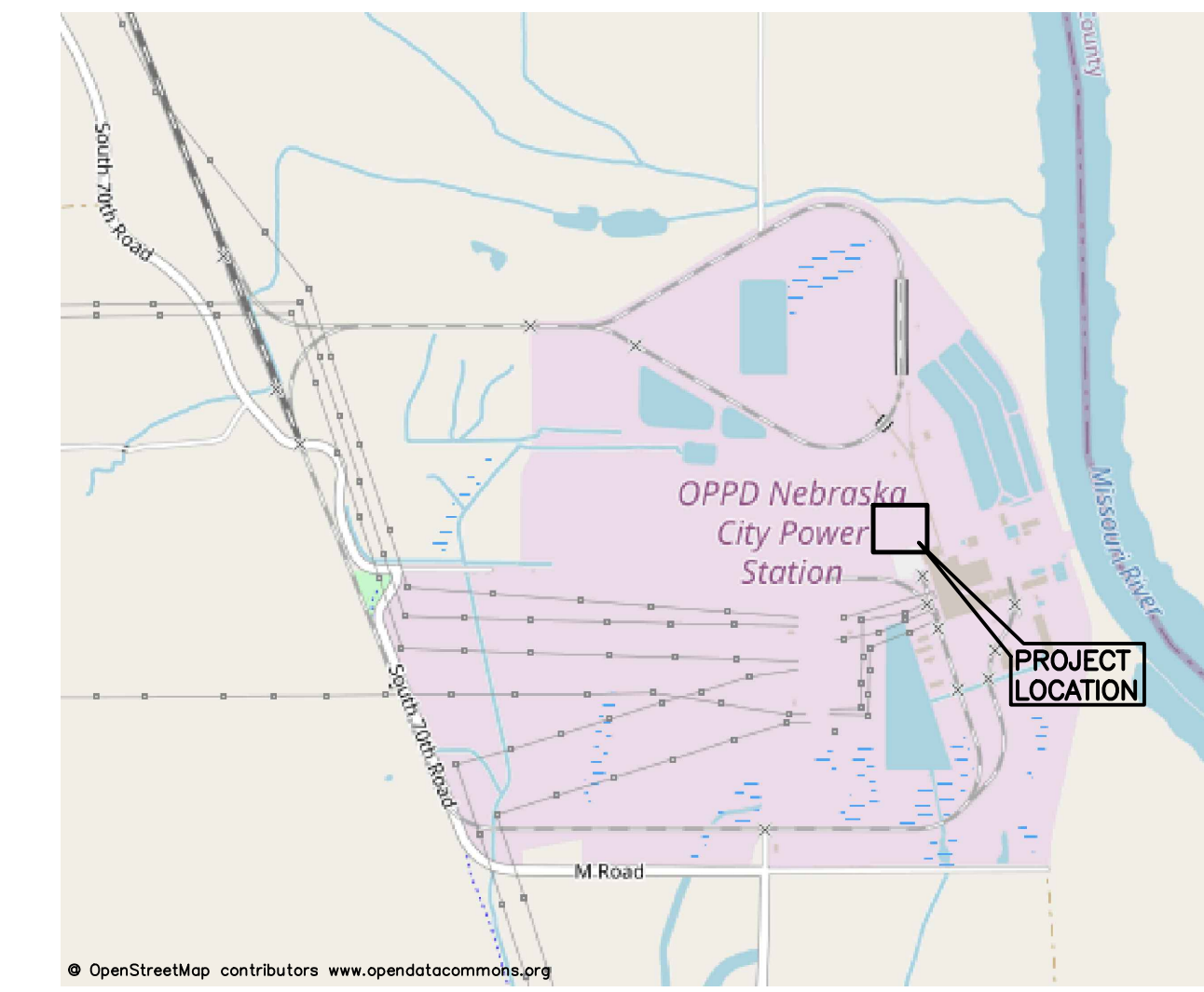
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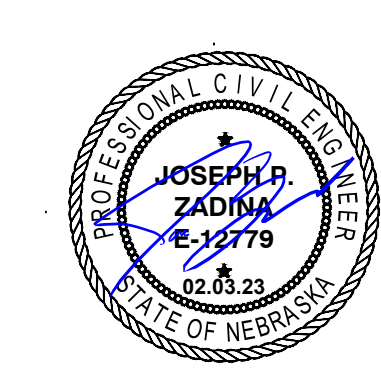
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**LEGEND**

— OHU —	OVERHEAD UTILITY
— FO —	FIBER OPTICS
— E —	ELECTRIC
— ST —	STORM SEWER
— OHP —	OVERHEAD POWER
—+—+—	GRAVEL AND DIRT EDGE
— X — X —	FENCE
— R-SS —	RECORD SANITARY SEWER
— R-W —	RECORD WATER LINE
— R-E —	RECORD ELECTRICAL DUCT
■	BENCHMARK
▲	CONTROL POINT
⊙	ELECTRIC MANHOLE
⊙	ELECTRIC VAULT
⊙	FLARED END SECTION
⊙	FIBER OPTIC PULLBOX
⊙	FIBER OPTIC WARNING SIGN
⊙	FIRE HYDRANT
⊙	GRATE INLET ROUND
⊙	GUY
⊙	STREET LIGHT
⊙	POST INDICATOR VALVE
⊙	POWER POLE
⊙	SIGN
⊙	STOP SIGN
⊙	STORM MANHOLE
⊙	STORM PIPE END
⊙	TELEPHONE PEDESTAL
⊙	UNIDENTIFIED MANHOLE
⊙	UNIDENTIFIED PEDESTAL
⊙	WATER MANHOLE
⊙	WATER VALVE
⊙	YARD HYDRANT



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PHASE 2

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OMAHA, NE 68102

EXISTING  
CONDITIONS

**C2.0**

FOR INFORMATIONAL PURPOSES ONLY







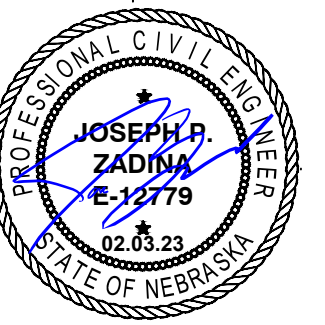
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OMAHA PUBLIC  
POWER DISTRICT

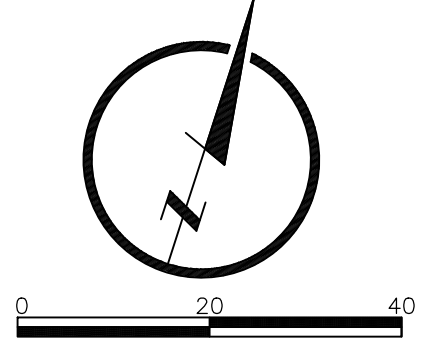
444 SOUTH 16TH STREET  
OMAHA, NE 68102

GRADING PLAN

**C4.0**

**NOTE:**  
SEE THIS SHEET FOR EROSION CONTROL MEASURES TO BE INSTALLED. THESE ARE PROPOSED LOCATIONS. IF THE CONTRACTOR WISHES TO USE ALTERNATE LOCATIONS IT MUST BE APPROVED BY THE ENGINEER.

THIS WORK SHALL BE PERFORMED UNDER THE AUTHORIZATION OF THE ASSOCIATED PERMIT NEP 160000. WEEKLY AND RAINFALL EVENT INSPECTIONS WILL BE CONDUCTED UNDER THE AUTHORITY OF THE EXISTING PERMIT HOLDER.



**ELEVATION NOTES**

- PROPOSED CONTOURS ARE FINISHED GRADE/TOP OF PAVEMENT ELEVATIONS. NOT SUBGRADE ELEVATIONS.

**GRADING AND EROSION CONTROL NOTES**

- IN CONSTRUCTION OF CONTROLLED FILLS, ALL SOILS SHALL BE COMPACTED AS INDICATED ON THE COMPACTION REQUIREMENTS TABLE (THIS SHEET). MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D 698 (STANDARD PROCTOR).
- ALL OPERATORS/CONTRACTORS MUST COMPLY WITH ALL NOISE AND DUST CONTROL ORDINANCES OF APPLICABLE GOVERNMENT AGENCIES.
- ALL OPERATORS/CONTRACTORS MUST LOCATE ALL EXISTING UTILITY PRIOR TO THE START OF WORK (ONE CALL 811).
- ALL OPERATORS/CONTRACTORS SHALL BE RESPONSIBLE TO COMPLY WITH OSHA REGULATIONS.
- FOR DUST CONTROL, THE CONTRACTORS/OPERATORS MUST USE ANY OF THE FOLLOWING MEASURES OR A COMBINATION IF NECESSARY: ESTABLISHING TEMPORARY SEEDING, PERMANENT SEEDING, AND/OR MULCH IN AREAS SUBJECT TO LITTLE OR NO CONSTRUCTION TRAFFIC; IRRIGATING STRIPPED AREAS AND/OR HAUL ROADS; REDUCING VEHICULAR SPEED ON HAUL ROADS. FURTHERMORE, THE DUST CONTROL (9.5.17) BMP PRESENTED WITHIN THE OMAHA REGIONAL STORMWATER DESIGN MANUAL MUST BE ADHERED TO AT ALL TIMES. THE AFOREMENTIONED PUBLICATIONS CAN BE FOUND AT [HTTP://WWW.PCWPEROSIONCONTROL.ORG](http://www.PCWPEROSIONCONTROL.ORG).
- THE CONTRACTORS/OPERATORS MUST ENSURE SEDIMENT THAT HAS BEEN ACCIDENTALLY TRANSPORTED ONTO PUBLIC STREETS IS REMOVED AS NEEDED, AT THE END OF EACH WORKING DAY, AND PRIOR TO ALL RAIN EVENTS. SEDIMENT SHALL BE SHOVELLED AND/OR SWEEPED FROM THE STREET AND DISPOSED OF IN A MANNER THAT PREVENTS STORMWATER CONTAMINATION. FURTHERMORE, THE STREET CLEANING / SWEEPING (9.6.4) BMP PRESENTED WITHIN THE OMAHA REGIONAL STORMWATER DESIGN MANUAL MUST BE ADHERED TO AT ALL TIMES. THE AFOREMENTIONED PUBLICATIONS CAN BE FOUND AT [HTTP://WWW.PCWPEROSIONCONTROL.ORG](http://www.PCWPEROSIONCONTROL.ORG).

**NOTE:** CONTRACTOR TO CONFIRM THAT SITE GRADING WAS COMPLETED AS PART OF THE PHASE 1 DESIGN PLANS AND CONSTRUCTION. ANY NEW GRADING SHALL ONLY BE COMPLETED AS NECESSARY TO ALLOW FOR CONSTRUCTION OF THE NEW PHASE 2 PAVING AREAS. CONTRACTOR SHALL COORDINATE WITH ARCHITECT AND ENGINEER IF EXISTING CONDITIONS VARY.

**NOTE:** CONTRACTOR SHALL RESEED ANY AREAS DISTURBED DURING CONSTRUCTION. THIS WOULD INCLUDE AREAS USED FOR MATERIAL STORAGE, TRAILER LOCATION, UTILITY TRENCHING, PAVING CONSTRUCTION ETC.

**GRADING KEYNOTES:**

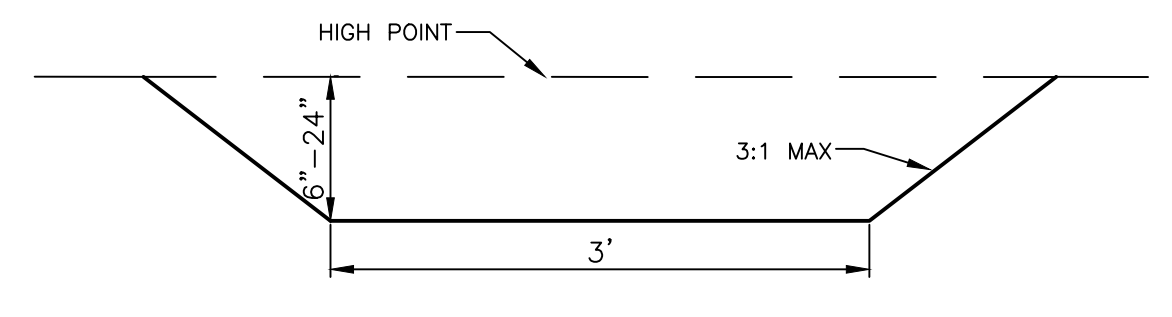
- CONTRACTOR SHALL INSTALL AND MAINTAIN A SWPPP NOTIFICATION SIGN PER STANDARD SPECIFICATION 9.6.7, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL.
- CONTRACTOR SHALL INSTALL AND MAINTAIN A STABILIZED VEHICLE AND EQUIPMENT PARKING AREA.
- PROPOSED LOCATION OF JOB TRAILER LOCATION; ALTERNATE LOCATION MUST BE APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL INSTALL AND MAINTAIN A SANITARY WASTE RECEPTACLE PER STANDARD SPECIFICATION 9.6.2, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL.
- CONTRACTOR SHALL INSTALL AND MAINTAIN A SOLID WASTE RECEPTACLE PER STANDARD SPECIFICATION 9.6.3, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL.
- CONTRACTOR SHALL INSTALL AND MAINTAIN A DESIGNATED VEHICLE AND EQUIPMENT FUELING AREA PER STANDARD SPECIFICATION 9.6.6, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL.
- CONTRACTOR SHALL INSTALL AND MAINTAIN A DESIGNATED MATERIAL DELIVERY AND STORAGE AREA PER STANDARD SPECIFICATION 9.6.4, OMAHA REGIONAL STORMWATER DRAINAGE MANUAL.
- CONTRACTOR SHALL MAINTAIN A CONCRETE WASHOUT.
- THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITH CITY OF OMAHA LAWN SEED MIXTURE, FERTILIZER AND MULCH.
- CONTRACTOR SHALL INSTALL ROLLED EROSION CONTROL PRODUCT (NORTH AMERICAN GREEN S75 OR APPROVED EQUIVALENT).

- AS REQUIRED THE CONTRACTOR SHALL IMPLEMENT STREET CLEANING/SWEEPING PRACTICES. SEPARATE PAYMENT SHALL NOT BE MADE FOR STREET CLEANING/SWEEPING.
- CONTRACTOR SHALL FIELD VERIFY EXISTING UTILITIES PRIOR TO GRADING ANY SIDEWALK.
- CONTRACTOR SHALL INSTALL AND MAINTAIN A DRAINAGE SWALE. SEE DETAIL, THIS SHEET.

SF1-SF4 CONTRACTOR SHALL INSTALL AND MAINTAIN SILT FENCE. — SF —

SW1-SW7 CONTRACTOR SHALL INSTALL AND MAINTAIN STRAW WADDLE WITHIN DRAINAGE SWALE. — SW —

**NOTE:** CONTRACTOR SHALL SEED DISTURBED AREA WITH TEMPORARY SEASONAL WINTER MIX BETWEEN PHASES.



DRAINAGE SWALE DETAIL  
NO SCALE

**COMPACTION REQUIREMENTS TABLE**

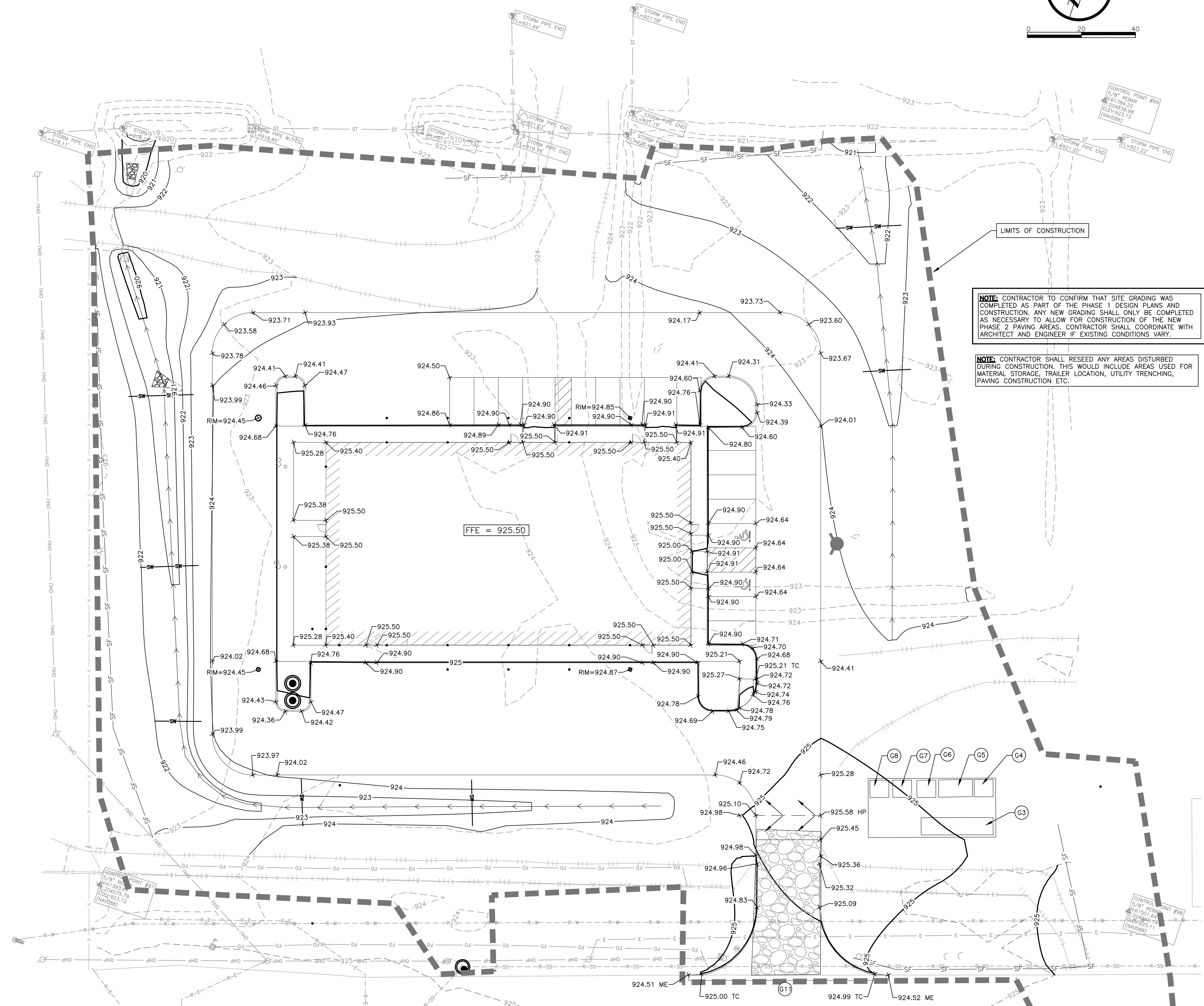
SEE GEOTECHNICAL ENGINEERING REPORT:	OPFD TRAINING BUILDING		
PREPARED BY:	THEILE GEOTECH INC. (402) 556-2171		
ENGINEER:	RAEMANNA C. D. THEILE		
PROJECT NO:	20600.00		
DATE:	NOVEMBER 2, 2020		
MAX. DEPTH OF LIFT FOR FILL (MEASURED LOOSE)	8"		
AREA	TEST	COMPACTION	MOISTURE
UTILITY TRENCH BACKFILL (DEPTH < 5')	STANDARD PROCTOR	95%	-3/+4
UTILITY TRENCH BACKFILL (DEPTH > 5')	STANDARD PROCTOR	95%	-3/+4
PCC PAVEMENT SUBGRADE (UPPER 12")	MODIFIED PROCTOR	90%	-3/+4
ACC PAVEMENT SUBGRADE (UPPER 12")	MODIFIED PROCTOR	92%	-3/+4
PAVEMENT SUBGRADE (DEPTH > 12")	STANDARD PROCTOR	95%	-3/+4
MANHOLE + STRUCTURE BACKFILL (FULL DEPTH)	STANDARD PROCTOR	95%	-3/+4
SIDEWALK SUBGRADE (UPPER 6")	STANDARD PROCTOR	95%	-3/+4
ALL OTHER FILL	STANDARD PROCTOR	95%	-3/+4

**NOTES:**

- STANDARD PROCTOR SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D 698.
- MODIFIED PROCTOR SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D 1557.

**EROSION CONTROL SUMMARY TABLE**

TOTAL AREA OF SITE	2.02 AC.
DISTURBED AREA	2.02 AC.
EROSION CONTROL MEASURES:	SILT FENCE, STRAW WADDLES, ROCK ACCESS ROAD, INLET PROTECTION, AND SEEDING



1 2 3 4 5 6 7 8

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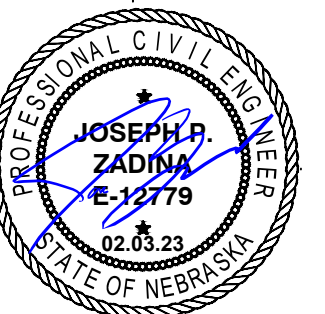
PROJECT TEAM

**ARCHITECTURE + INTERIORS**  
 BCDM ARCHITECTS  
 1015 N 98th St #300,  
 Omaha, NE 68114

**CIVIL**  
 LAMP EYENROSEN  
 14710 W. Dodge Road, Suite 100  
 Omaha, NE 68154

**STRUCTURAL ENGINEER**  
 BCDM  
 1015 N 98th St #300,  
 Omaha, NE 68114

**MECHANICAL + ELECTRICAL ENGINEER**  
 MORRISSEY ENGINEERING  
 4940 N 118th St  
 Omaha, NE 68164



**SANITARY SEWER NOTES**

- MANHOLES SHALL BE LOCATED IN ACCORDANCE WITH THE COORDINATES SHOWN. THE LENGTH OF PIPE BETWEEN MANHOLES MAY VARY ACCORDINGLY.
- THE CONTRACTOR IS REFERRED TO THE FOLLOWING CITY OF OMAHA STANDARD PLATES:  
 701-01 SEWER BEDDING  
 702-01 CONCRETED COLLAR  
 702-02 SEWER TAP  
 703-04 SANITARY SEWER CLEAN-OUT
- MANHOLES SHALL INCLUDE A 4" AND AN 8" ADJUSTING RING AT THE TOP OF THE RISER SECTION. RISER SECTIONS BELOW THE ADJUSTING RINGS SHALL BE AS NECESSARY TO COMPLETE THE MANHOLE.
- THE CONTRACTOR SHALL PERFORM AIR OR WATER LEAKAGE TESTS IN ACCORDANCE WITH CITY OF OMAHA SPECIFICATIONS.
- TRENCH BACKFILL SHALL BE COMPACTED AS SHOWN IN THE COMPACTION REQUIREMENTS TABLE. (SEE SHEET C4.0), OR AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.
- CONCRETE FOR MANHOLES AND PIPE SHALL BE L&M USING TYPE II PORTLAND CEMENT. THE CEMENT FOR MANHOLE GROUT SHALL BE THE SAME AS THAT FOR MANHOLE CONCRETE AND SHALL MEET THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
- ALL PIPES SHALL BE BEDDED IN ACCORDANCE WITH THE CITY OF OMAHA STANDARD PLATE 701-01.
- ALL SANITARY SEWER SERVICE CONNECTIONS MUST BE MADE BY A LICENSED PLUMBER.
- THE CONTRACTOR INSTALLING SEWER SHALL HOLD A VALID SEWER LAYER'S LICENSE AND SHALL OBTAIN ALL REQUIRED PERMITS. PERMITTING FEES SHALL BE PAID BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

**STORM SEWER NOTES**

- INLETS AND MANHOLES SHALL BE LOCATED IN ACCORDANCE WITH THE COORDINATES SHOWN. THE LENGTHS OF PIPES MAY VARY ACCORDINGLY.
- THE CONTRACTOR IS REFERRED TO THE FOLLOWING CITY OF OMAHA STANDARD PLATES:  
 701-01 STORM BEDDING  
 702-02 SEWER TAP  
 700-03 PIPE PLUG
- TRENCH BACKFILL SHALL BE COMPACTED AS SHOWN IN THE COMPACTION REQUIREMENTS TABLE. (SEE SHEET C4.0) OR AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.
- RCP PIPE SHALL BE BEDDED IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS. ALL OTHER PIPE SHALL BE BEDDED IN ACCORDANCE WITH CITY OF OMAHA STANDARD PLATE 701-01.
- STORM SEWER MATERIALS: THE FOLLOWING MATERIALS ARE GENERALLY APPROVED FOR STORM SEWER CONSTRUCTION:
  - REINFORCED CONCRETE PIPE (RCP). RCP SHALL BE CLASS III WALL B OR C AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM C76-03 AND SHALL BE INSTALLED AS REQUIRED BY ASTM C1479-01. ALL REINFORCED CONCRETE PIPE JOINTS SHALL BE INSTALLED USING RUBBER GASKETS IN ACCORDANCE WITH ASTM C443, STANDARD SPECIFICATIONS FOR JOINTS FOR CONCRETE PIPE AND MANHOLES, USING RUBBER GASKETS.
  - DUCTILE IRON PIPE (DIP). DIP SHALL CONFORM TO THE REQUIREMENTS OF ASTM A746-09 AND SHALL BE INSTALLED AS REQUIRED BY ASTM C800-08.
  - POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE. PVC PIPE SHALL BE TYPE 1, GRADE 1 AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM D2665-02/4E0 AND SHALL BE INSTALLED AS REQUIRED BY ASTM D2321-00.
  - HIGH DENSITY POLYETHYLENE (HDPE) PIPE. HDPE PIPE SHALL HAVE A CORRUGATED EXTERIOR AND A SMOOTH INTERIOR AND SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-294 TYPE S AND SHALL BE INSTALLED AS REQUIRED BY ASTM D2321-00 AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. HDPE PIPE SHALL BE MANUFACTURED FROM HDPE VIRGIN COMPOUNDS AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-3350 FOR THE CELL CLASSIFICATION 336420C. COUPLING BANDS SHALL MEET THE SOIL TIGHTNESS REQUIREMENTS OF AASHTO SECTION 26.4.2.4.

- CONCRETE FOR STORM SEWER STRUCTURES SHALL BE L&M USING TYPE II PORTLAND CEMENT. THE CEMENT FOR MANHOLE GROUT SHALL BE THE SAME AS THAT FOR MANHOLE CONCRETE AND SHALL MEET THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
- ALL STORM SEWER CONSTRUCTED IN THE PUBLIC RIGHT OF WAY SHALL BE REINFORCED CONCRETE PIPE (RCP).
- THE CONTRACTOR INSTALLING SEWER SHALL HOLD A VALID SEWER LAYER'S LICENSE AND SHALL OBTAIN ALL REQUIRED PERMITS. PERMITTING FEES SHALL BE PAID BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

**WATER MAIN NOTES**

- THE CONTRACTOR SHALL CONSTRUCT WATER SERVICE FROM EXISTING MAINS TO THE BUILDING. CONTRACTOR SHALL VERIFY BUILDING CONNECTION LOCATIONS IN ARCHITECTURAL PLANS.
- THE CONTRACTOR SHALL PROVIDE VALVE BOX AND WATER METER.
- CALL M.U.D. BUILDER AND CONTRACTOR SERVICES (402) 554-7987 FOR FURTHER DETAILS.
- ALL WATER LINES SHALL HAVE 5" MINIMUM COVER.
- CONSTRUCT WATER SERVICE PER M.U.D. SPECIFICATIONS.
- ALL WATER LINES SHALL MEET THE REQUIREMENTS OF THE OMAHA MUNICIPAL CODE SECTION 49-1518. WATER SERVICE.
- ALL WATER SERVICE MUST BE INSTALLED BY A LICENSED PLUMBER.
- CONTRACTOR WILL COORDINATE WITH OWNER PRIOR TO HIS BID TO DETERMINE WHO PAYS TAPPING FEES, COST OF WATER METER, COST OF ASSOCIATED PERMITS, AND CAPITAL FACILITIES CHARGE.
- ALL WATER SERVICE LINES AND CONNECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE METROPOLITAN UTILITIES DISTRICT (M.U.D.) WATER RULES AND REGULATIONS.

**POWER NOTES**

- THE CONTRACTOR SHALL CONSTRUCT CONCRETE TRANSFORMER PAD AND PRIMARY CONDUIT PER THE OMAHA PUBLIC POWER DISTRICT GENERAL WIRING AND METERING SPECIFICATIONS.

**TELEPHONE SERVICE NOTES**

- COORDINATE WITH OWNER AND WINDSTREAM TO PROVIDE COMMUNICATION LINES AS REQUIRED.

**UTILITY CONTACTS**

UTILITY	CONTACT	PHONE
SANITARY SEWER:	OPPD SYSTEM ENGINEERING SHAWN PECK	531-226-8118
POWER:	OPPD LARRY CARMINE	531-226-4032 (OFFICE)
TELEPHONE:	WINDSTREAM	844-621-5090
FIBER:	OPPD NETWORK ENGINEERING OUYNH NGUYEN	531-226-5464 (FIBER TO RACK)
	RYAN SWEENEY	531-226-3121 (DOWNSTREAM OF RACK)
WATER:	(UP TO METER)	NEBRASKA CITY UTILITIES 402-873-3353
	OPPD SYSTEM ENGINEERING SHAWN PECK	531-226-8118 (DOWNSTREAM OF THE METER)
FIRE PROTECTION:	OPPD SYSTEM ENGINEERING KRIS AHRENS	531-226-8113

REVISION SCHEDULE

#	Description	Date

EPND  
 TRAINING  
 FACILITY  
 PHASE 2

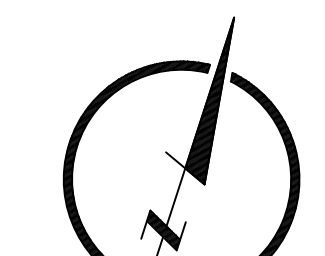
7264 L ROAD  
 NEBRASKA CITY, NE 68410

OMAHA PUBLIC  
 POWER DISTRICT

444 SOUTH 16TH STREET  
 OMAHA, NE 68102

UTILITY PLAN

C5.0



**NOTE:** UTILITIES PREVIOUSLY CONSTRUCTED UNDER A SEPARATE CONTRACT ARE OUTLINED AS SHOWN:

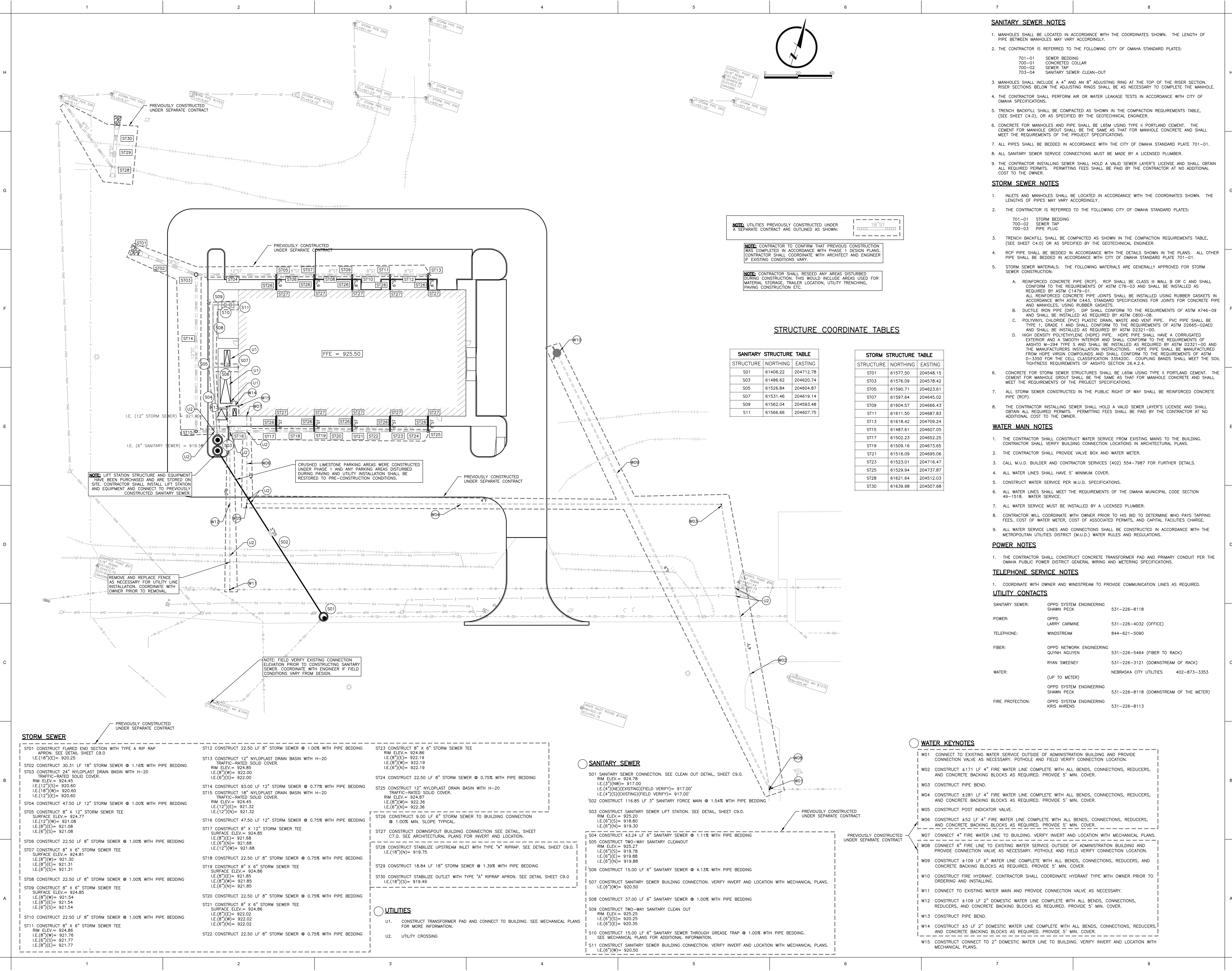
**NOTE:** CONTRACTOR TO CONFIRM THAT PREVIOUS CONSTRUCTION WAS COMPLETED IN ACCORDANCE WITH PHASE 1 DESIGN PLANS. CONTRACTOR SHALL COORDINATE WITH ARCHITECT AND ENGINEER IF EXISTING CONDITIONS VARY.

**NOTE:** CONTRACTOR SHALL RESEED ANY AREAS DISTURBED DURING CONSTRUCTION. THIS WOULD INCLUDE AREAS USED FOR MATERIAL STORAGE, TRAILER LOCATION, UTILITY TRENCHING, PAVING CONSTRUCTION ETC.

**STRUCTURE COORDINATE TABLES**

STRUCTURE	NORTHING	EASTING
S01	61406.22	204712.78
S03	61486.62	204620.74
S05	61526.84	204604.87
S07	61531.46	204619.14
S09	61562.04	204593.48
S11	61566.66	204607.75

STRUCTURE	NORTHING	EASTING
ST01	61577.50	204548.15
ST03	61576.09	204578.42
ST05	61590.71	204623.61
ST07	61597.64	204645.02
ST09	61604.57	204666.43
ST11	61611.50	204687.83
ST13	61618.42	204709.24
ST15	61487.61	204607.05
ST17	61502.23	204652.25
ST19	61509.16	204673.65
ST21	61516.09	204695.06
ST23	61523.01	204716.47
ST25	61529.94	204737.87
ST28	61621.64	204512.03
ST30	61639.98	204507.68



**STORM SEWER**

- ST01 CONSTRUCT FLARED END SECTION WITH TYPE A RIP RAP APRON. SEE DETAIL SHEET C9.0. I.E.(18°)(E) = 920.25
- ST02 CONSTRUCT 30.31 LF 18" STORM SEWER @ 1.16% WITH PIPE BEDDING
- ST03 CONSTRUCT 24" NYLOPLAST DRAIN BASIN WITH H=20 TRAFFIC-RATED SOLID COVER. RIM ELEV. = 924.45 I.E.(12°)(E) = 920.60 I.E.(12°)(W) = 920.60 I.E.(12°)(S) = 920.60
- ST04 CONSTRUCT 47.50 LF 12" STORM SEWER @ 1.00% WITH PIPE BEDDING
- ST05 CONSTRUCT 8" X 12" STORM SEWER TEE SURFACE ELEV. = 924.77 I.E.(12°)(W) = 921.08 I.E.(8°)(E) = 921.08 I.E.(8°)(S) = 921.08
- ST06 CONSTRUCT 22.50 LF 8" STORM SEWER @ 1.00% WITH PIPE BEDDING
- ST07 CONSTRUCT 8" X 6" STORM SEWER TEE SURFACE ELEV. = 924.81 I.E.(8°)(W) = 921.30 I.E.(8°)(E) = 921.31 I.E.(8°)(S) = 921.31
- ST08 CONSTRUCT 22.50 LF 8" STORM SEWER @ 1.00% WITH PIPE BEDDING
- ST09 CONSTRUCT 8" X 6" STORM SEWER TEE SURFACE ELEV. = 924.85 I.E.(8°)(W) = 921.54 I.E.(8°)(E) = 921.54 I.E.(8°)(S) = 921.54
- ST10 CONSTRUCT 22.50 LF 8" STORM SEWER @ 1.00% WITH PIPE BEDDING
- ST11 CONSTRUCT 8" X 6" STORM SEWER TEE RIM ELEV. = 924.86 I.E.(8°)(W) = 921.76 I.E.(8°)(E) = 921.77 I.E.(8°)(S) = 921.77
- ST12 CONSTRUCT 22.50 LF 8" STORM SEWER @ 1.00% WITH PIPE BEDDING
- ST13 CONSTRUCT 12" NYLOPLAST DRAIN BASIN WITH H=20 TRAFFIC-RATED SOLID COVER. RIM ELEV. = 924.85 I.E.(8°)(W) = 922.00 I.E.(8°)(S) = 922.00
- ST14 CONSTRUCT 93.00 LF 12" STORM SEWER @ 0.77% WITH PIPE BEDDING
- ST15 CONSTRUCT 18" NYLOPLAST DRAIN BASIN WITH H=20 TRAFFIC-RATED SOLID COVER. RIM ELEV. = 924.45 I.E.(12°)(E) = 921.32 I.E.(12°)(N) = 921.32
- ST16 CONSTRUCT 47.50 LF 12" STORM SEWER @ 0.75% WITH PIPE BEDDING
- ST17 CONSTRUCT 8" X 12" STORM SEWER TEE SURFACE ELEV. = 924.85 I.E.(8°)(E) = 921.68 I.E.(8°)(N) = 921.68 I.E.(12°)(W) = 921.68
- ST18 CONSTRUCT 22.50 LF 8" STORM SEWER @ 0.75% WITH PIPE BEDDING
- ST19 CONSTRUCT 8" X 6" STORM SEWER TEE SURFACE ELEV. = 924.86 I.E.(8°)(W) = 921.85 I.E.(8°)(N) = 921.85 I.E.(6°)(S) = 921.85
- ST20 CONSTRUCT 22.50 LF 8" STORM SEWER @ 0.75% WITH PIPE BEDDING
- ST21 CONSTRUCT 8" X 6" STORM SEWER TEE SURFACE ELEV. = 924.86 I.E.(8°)(E) = 922.02 I.E.(8°)(S) = 922.02 I.E.(6°)(N) = 922.02
- ST22 CONSTRUCT 22.50 LF 8" STORM SEWER @ 0.75% WITH PIPE BEDDING

- ST23 CONSTRUCT 8" X 6" STORM SEWER TEE RIM ELEV. = 924.86 I.E.(8°)(E) = 922.19 I.E.(6°)(W) = 922.19 I.E.(6°)(N) = 922.19
- ST24 CONSTRUCT 22.50 LF 8" STORM SEWER @ 0.75% WITH PIPE BEDDING
- ST25 CONSTRUCT 12" NYLOPLAST DRAIN BASIN WITH H=20 TRAFFIC-RATED SOLID COVER. RIM ELEV. = 924.87 I.E.(8°)(W) = 922.36 I.E.(6°)(N) = 922.36
- ST26 CONSTRUCT 9.00 LF 6" STORM SEWER TO BUILDING CONNECTION @ 1.00% MIN. SLOPE TYPICAL
- ST27 CONSTRUCT DOWNSPOUT BUILDING CONNECTION SEE DETAIL SHEET C7.0. SEE ARCHITECTURAL PLANS FOR INVERT AND LOCATION
- ST28 CONSTRUCT STABILIZE UPSTREAM INLET WITH TYPE "A" RIPRAP. SEE DETAIL SHEET C9.0. I.E.(18°)(N) = 919.75
- ST29 CONSTRUCT 18.84 LF 18" STORM SEWER @ 1.39% WITH PIPE BEDDING
- ST30 CONSTRUCT STABILIZE OUTLET WITH TYPE "A" RIPRAP APRON. SEE DETAIL SHEET C9.0 I.E.(18°)(S) = 919.49

**SANITARY SEWER**

- S01 SANITARY SEWER CONNECTION. SEE CLEAN OUT DETAIL SHEET C9.0. RIM ELEV. = 924.78 I.E.(6°)(W) = 917.00 I.E.(4°)(NE)(EXISTING)(FIELD VERIFY) = 917.00' I.E.(4°)(S)(EXISTING)(FIELD VERIFY) = 917.00'
- S02 CONSTRUCT 116.85 LF 3" SANITARY FORCE MAIN @ 1.54% WITH PIPE BEDDING
- S03 CONSTRUCT SANITARY SEWER LIFT STATION. SEE DETAIL SHEET C9.0. RIM ELEV. = 925.20 I.E.(6°)(S) = 919.80 I.E.(6°)(N) = 919.30
- S04 CONSTRUCT 43.24 LF 6" SANITARY SEWER @ 1.11% WITH PIPE BEDDING RIM ELEV. = 925.27 I.E.(6°)(S) = 919.75 I.E.(6°)(E) = 919.88 I.E.(6°)(N) = 919.88
- S05 CONSTRUCT TWO-WAY SANITARY CLEANOUT RIM ELEV. = 925.27 I.E.(6°)(S) = 919.75 I.E.(6°)(E) = 919.88 I.E.(6°)(N) = 919.88
- S06 CONSTRUCT 15.00 LF 6" SANITARY SEWER @ 4.13% WITH PIPE BEDDING
- S07 CONSTRUCT SANITARY SEWER BUILDING CONNECTION. VERIFY INVERT AND LOCATION WITH MECHANICAL PLANS.
- S08 CONSTRUCT 37.00 LF 6" SANITARY SEWER @ 1.00% WITH PIPE BEDDING
- S09 CONSTRUCT TWO-WAY SANITARY CLEAN OUT RIM ELEV. = 925.24 I.E.(6°)(S) = 920.25 I.E.(6°)(E) = 920.25 I.E.(6°)(N) = 920.35
- S10 CONSTRUCT 15.00 LF 6" SANITARY SEWER THROUGH GREASE TRAP @ 1.00% WITH PIPE BEDDING. SEE MECHANICAL PLANS FOR ADDITIONAL INFORMATION.
- S11 CONSTRUCT SANITARY SEWER BUILDING CONNECTION. VERIFY INVERT AND LOCATION WITH MECHANICAL PLANS. I.E.(6°)(W) = 920.50

**UTILITIES**

- U1. CONSTRUCT TRANSFORMER PAD AND CONNECT TO BUILDING. SEE MECHANICAL PLANS FOR MORE INFORMATION.
- U2. UTILITY CROSSING

**WATER KEYNOTES**

- W01 CONNECT TO EXISTING WATER SERVICE OUTSIDE OF ADMINISTRATIVE BUILDING AND PROVIDE CONNECTION VALVE AS NECESSARY. POT HOLE AND FIELD VERIFY CONNECTION LOCATION.
- W02 CONSTRUCT ±171 LF 4" FIRE WATER LINE COMPLETE WITH ALL BENDS, CONNECTIONS, REDUCERS, AND CONCRETE BACKING BLOCKS AS REQUIRED. PROVIDE 5' MIN. COVER.
- W03 CONSTRUCT PIPE BEND.
- W04 CONSTRUCT ±281 LF 4" FIRE WATER LINE COMPLETE WITH ALL BENDS, CONNECTIONS, REDUCERS, AND CONCRETE BACKING BLOCKS AS REQUIRED. PROVIDE 5' MIN. COVER.
- W05 CONSTRUCT POST INDICATOR VALVE.
- W06 CONSTRUCT ±52 LF 4" FIRE WATER LINE COMPLETE WITH ALL BENDS, CONNECTIONS, REDUCERS, AND CONCRETE BACKING BLOCKS AS REQUIRED. PROVIDE 5' MIN. COVER.
- W07 CONNECT 4" FIRE WATER LINE TO BUILDING. VERIFY INVERT AND LOCATION WITH MECHANICAL PLANS.
- W08 CONNECT 6" FIRE LINE TO EXISTING WATER SERVICE OUTSIDE OF ADMINISTRATIVE BUILDING AND PROVIDE CONNECTION VALVE AS NECESSARY. POT HOLE AND FIELD VERIFY CONNECTION LOCATION.
- W09 CONSTRUCT ±109 LF 6" WATER LINE COMPLETE WITH ALL BENDS, CONNECTIONS, REDUCERS, AND CONCRETE BACKING BLOCKS AS REQUIRED. PROVIDE 5' MIN. COVER.
- W10 CONSTRUCT FIRE HYDRANT. CONTRACTOR SHALL COORDINATE HYDRANT TYPE WITH OWNER PRIOR TO ORDERING AND INSTALLING.
- W11 CONNECT TO EXISTING WATER MAIN AND PROVIDE CONNECTION VALVE AS NECESSARY.
- W12 CONSTRUCT ±109 LF 2" DOMESTIC WATER LINE COMPLETE WITH ALL BENDS, CONNECTIONS, REDUCERS, AND CONCRETE BACKING BLOCKS AS REQUIRED. PROVIDE 5' MIN. COVER.
- W13 CONSTRUCT PIPE BEND.
- W14 CONSTRUCT ±5 LF 2" DOMESTIC WATER LINE COMPLETE WITH ALL BENDS, CONNECTIONS, REDUCERS, AND CONCRETE BACKING BLOCKS AS REQUIRED. PROVIDE 5' MIN. COVER.
- W15 CONSTRUCT CONNECT TO 2" DOMESTIC WATER LINE TO BUILDING. VERIFY INVERT AND LOCATION WITH MECHANICAL PLANS.







**PROJECT TEAM**

**ARCHITECTURE + INTERIORS**  
BCDM ARCHITECTS  
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**CIVIL**

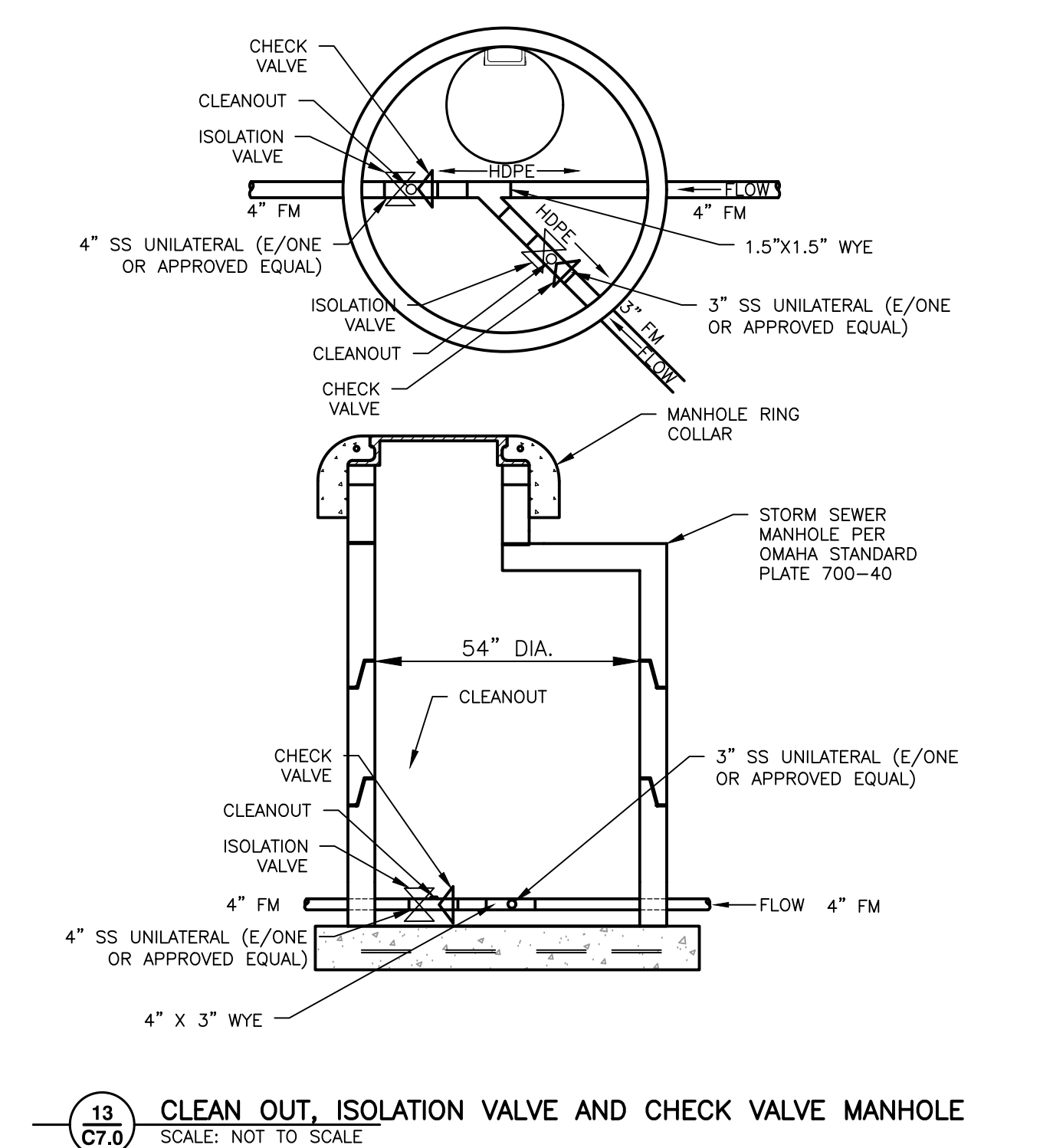
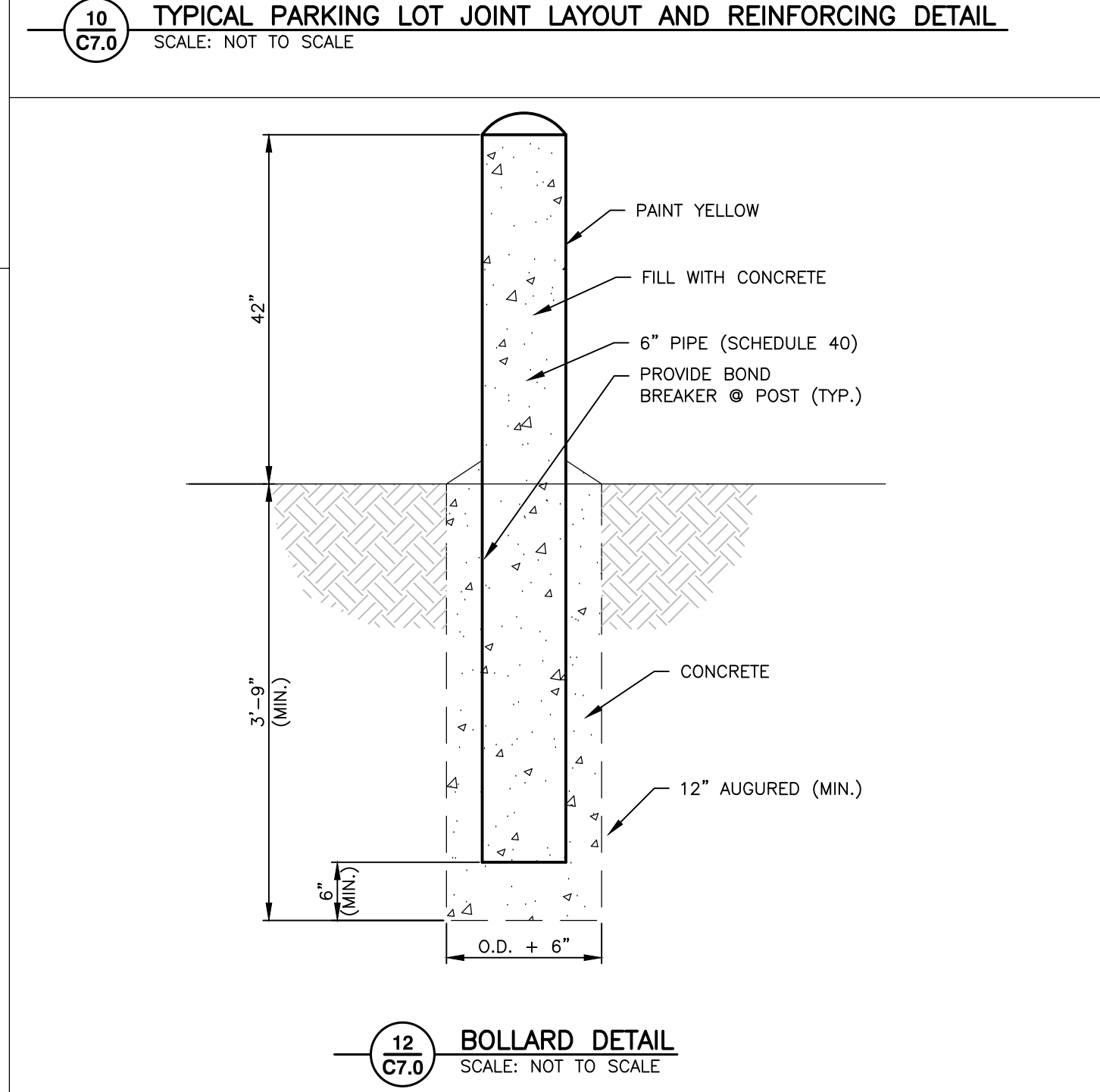
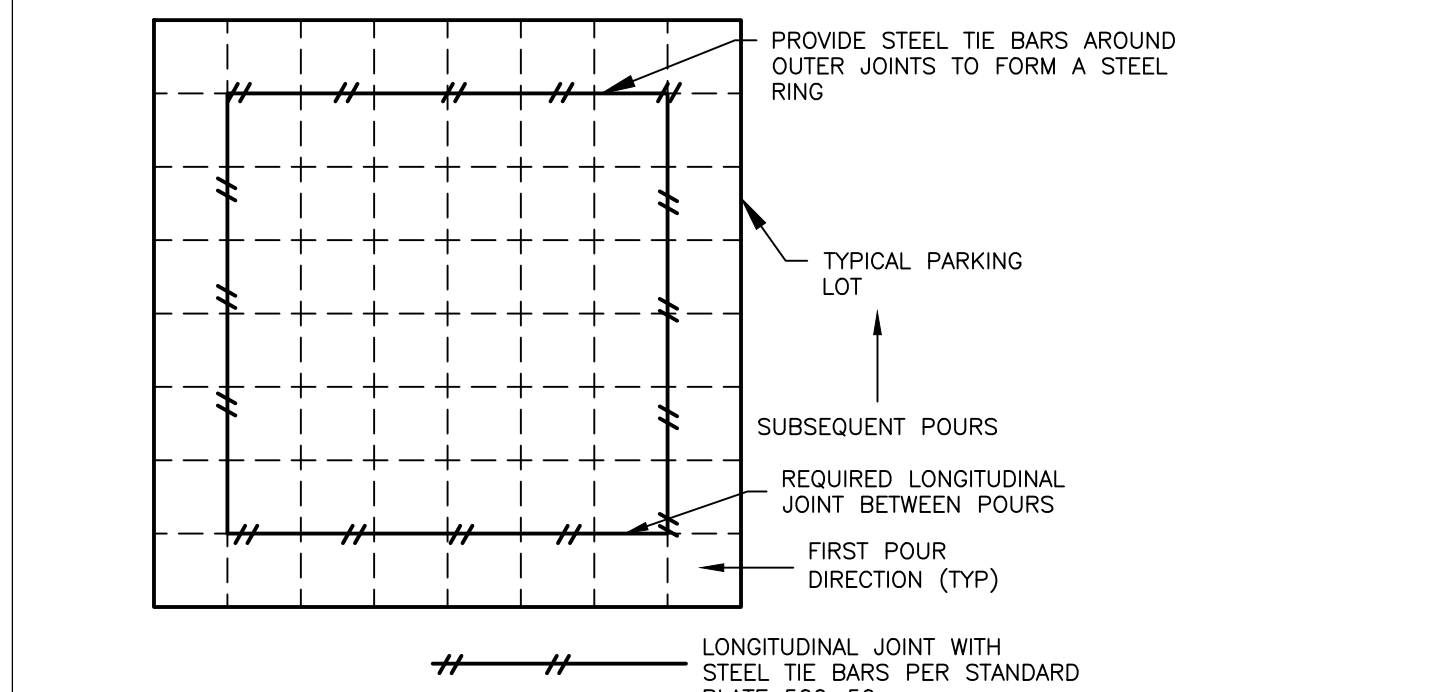
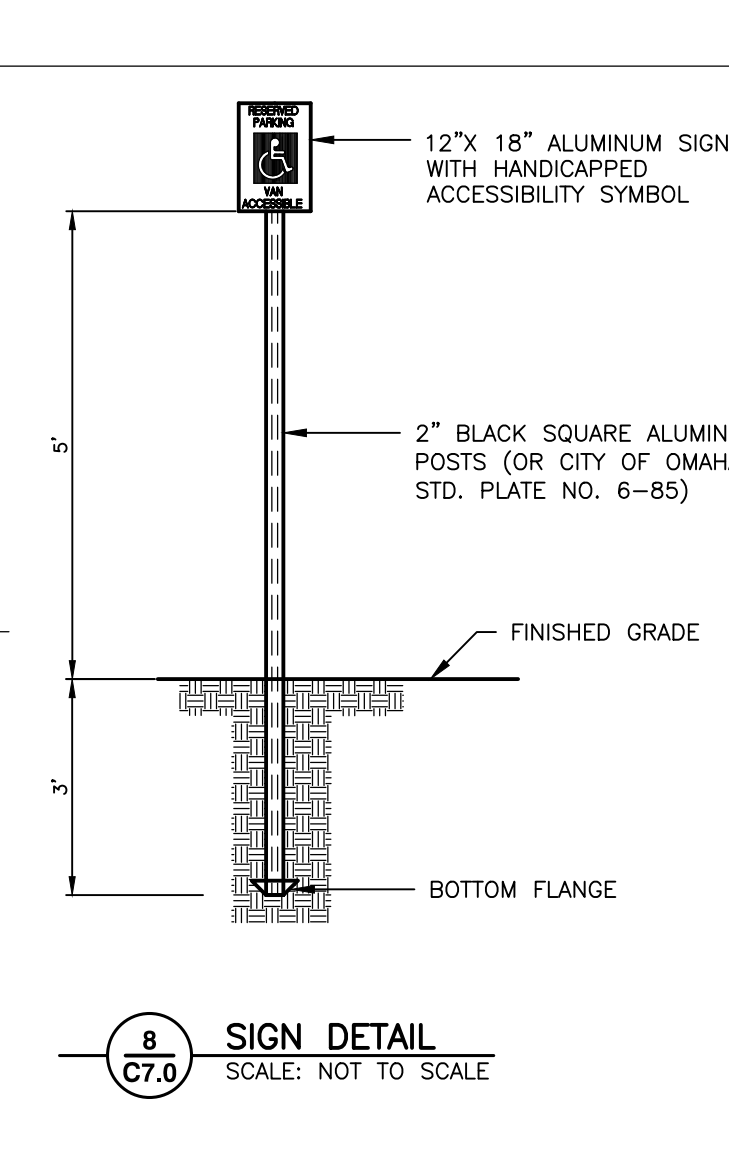
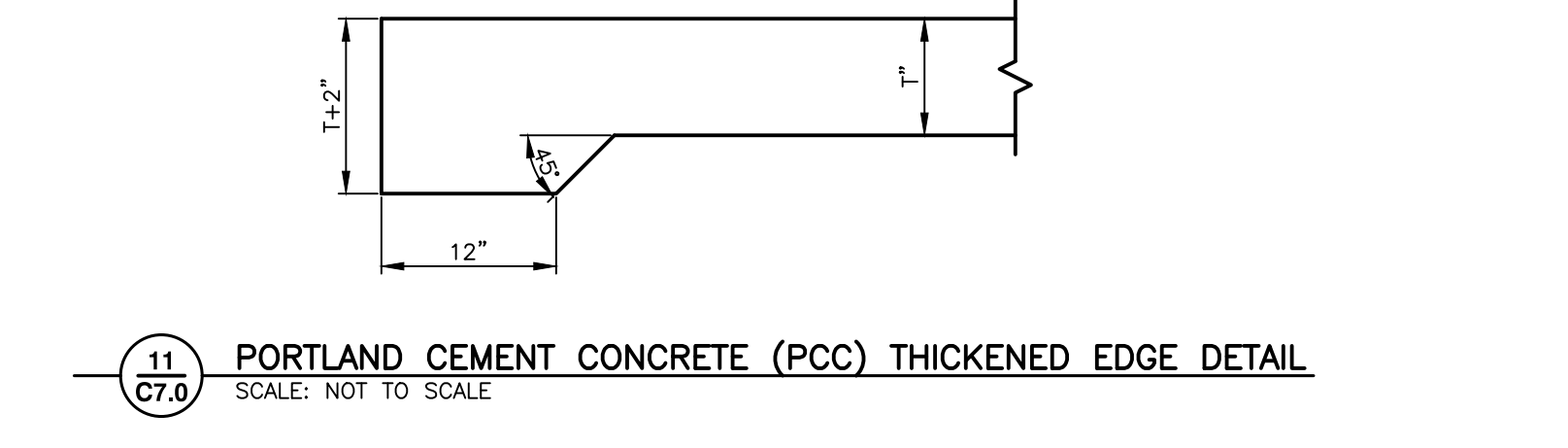
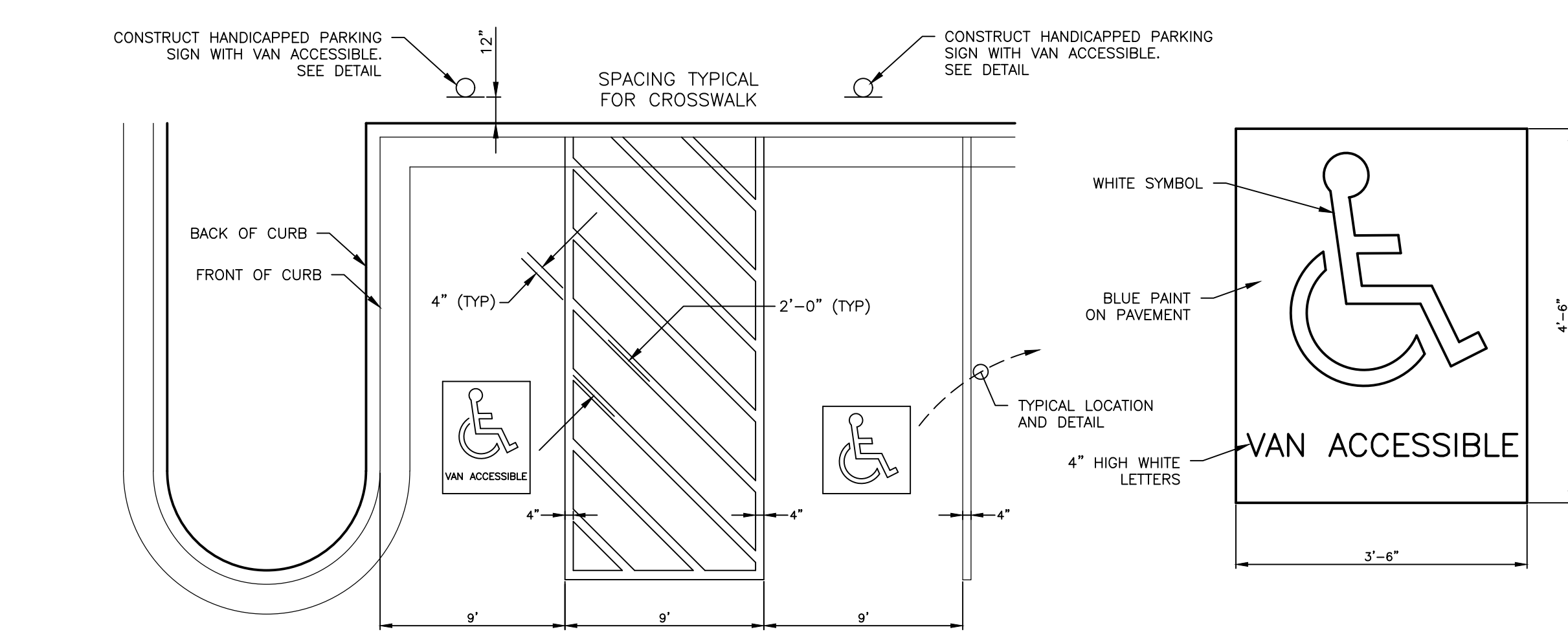
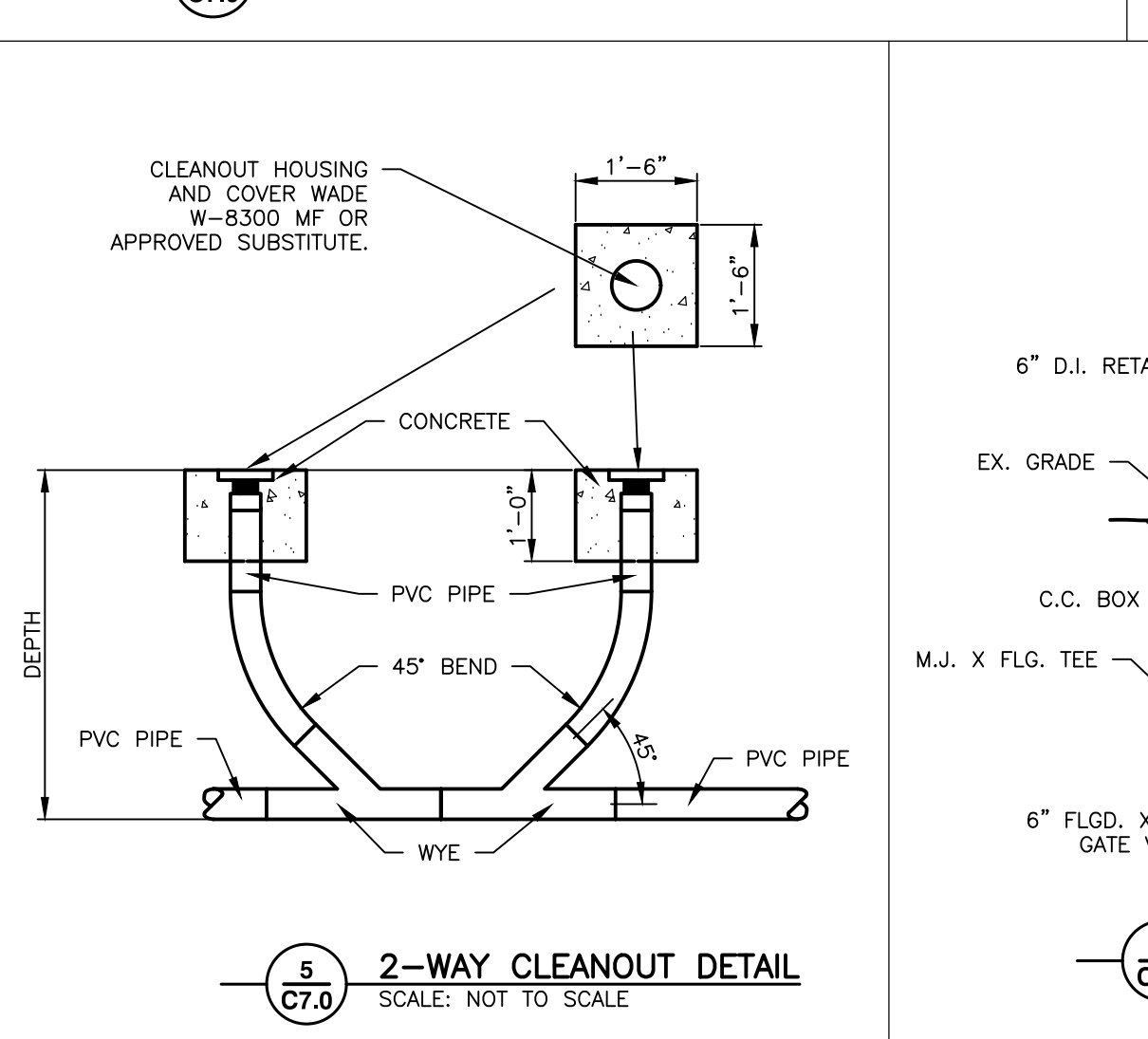
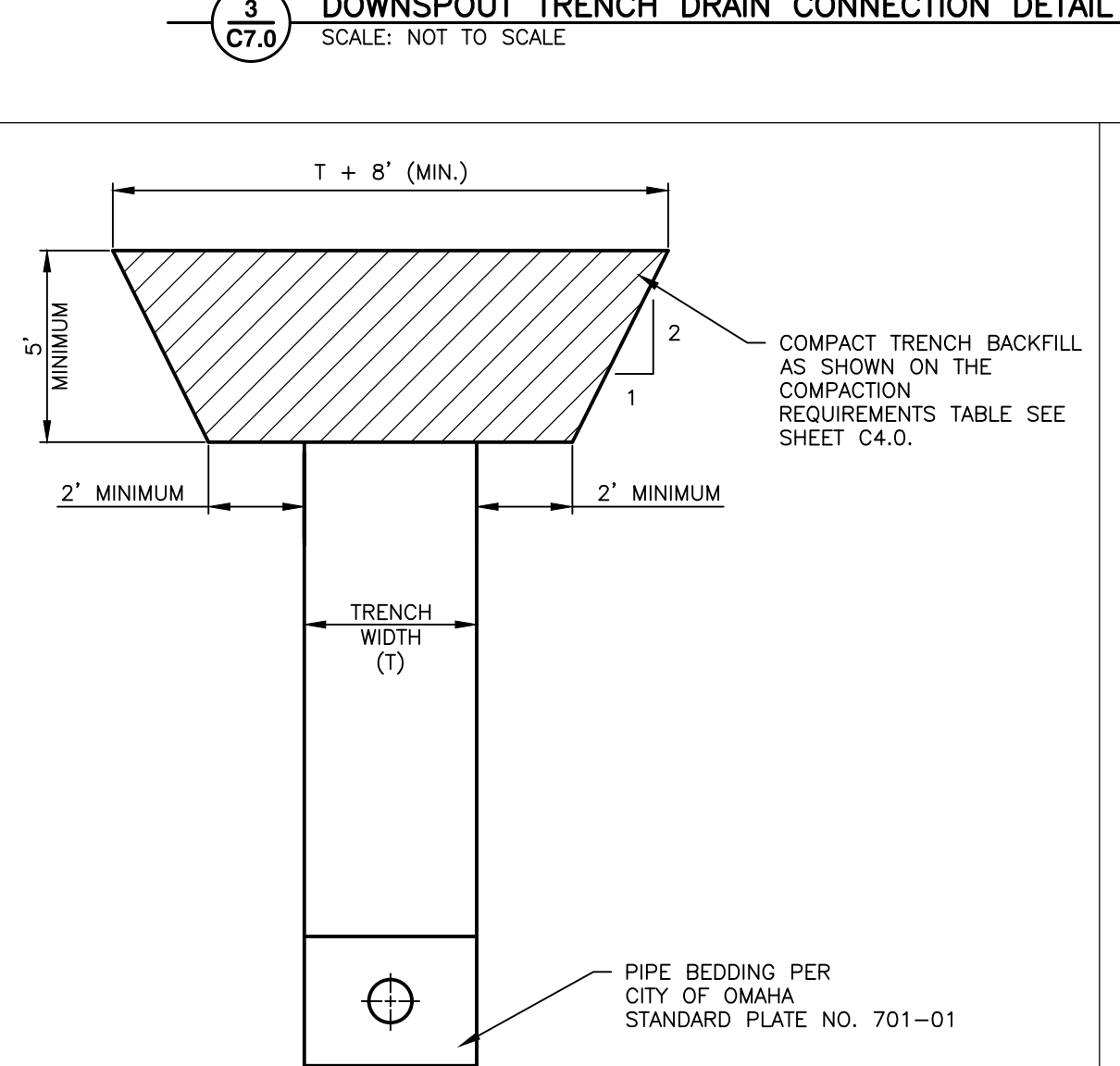
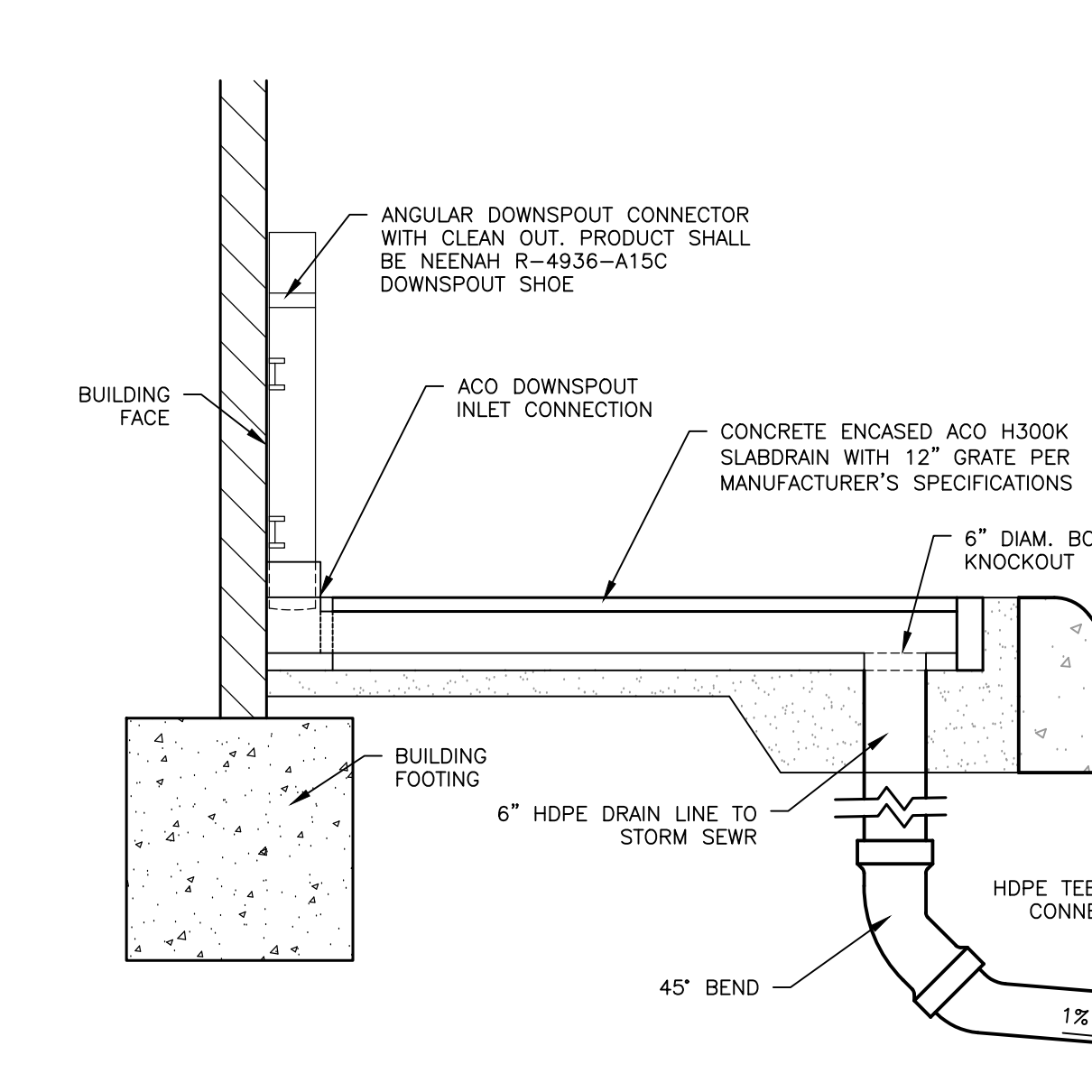
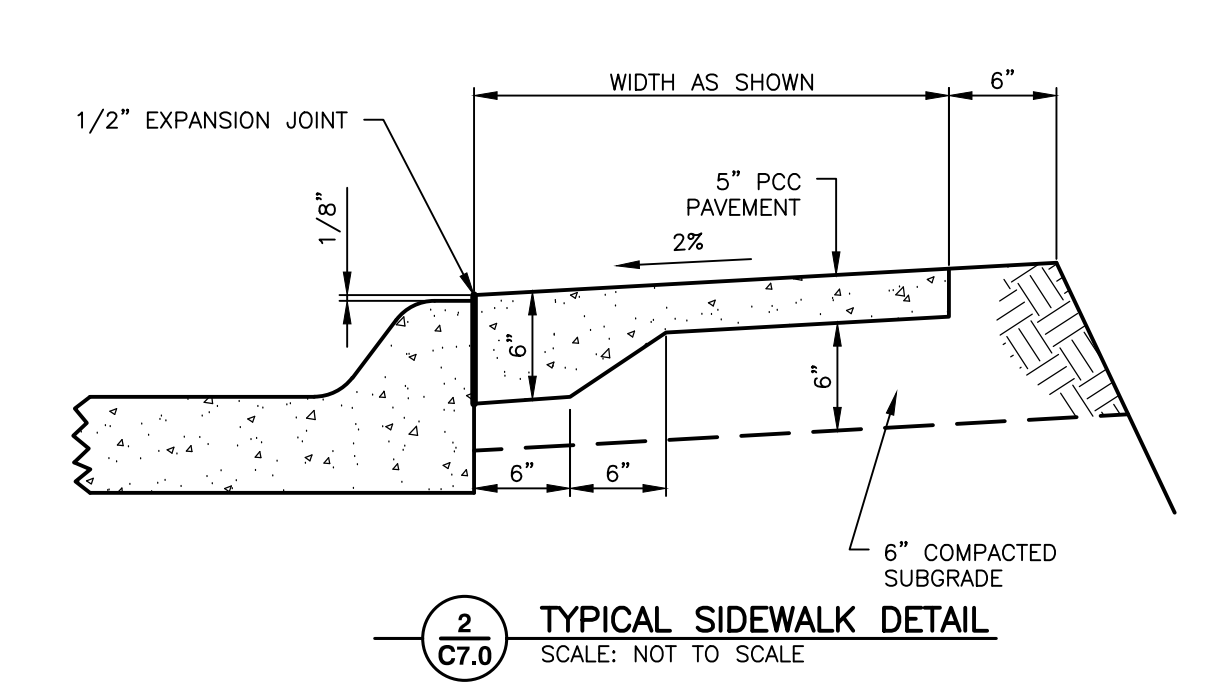
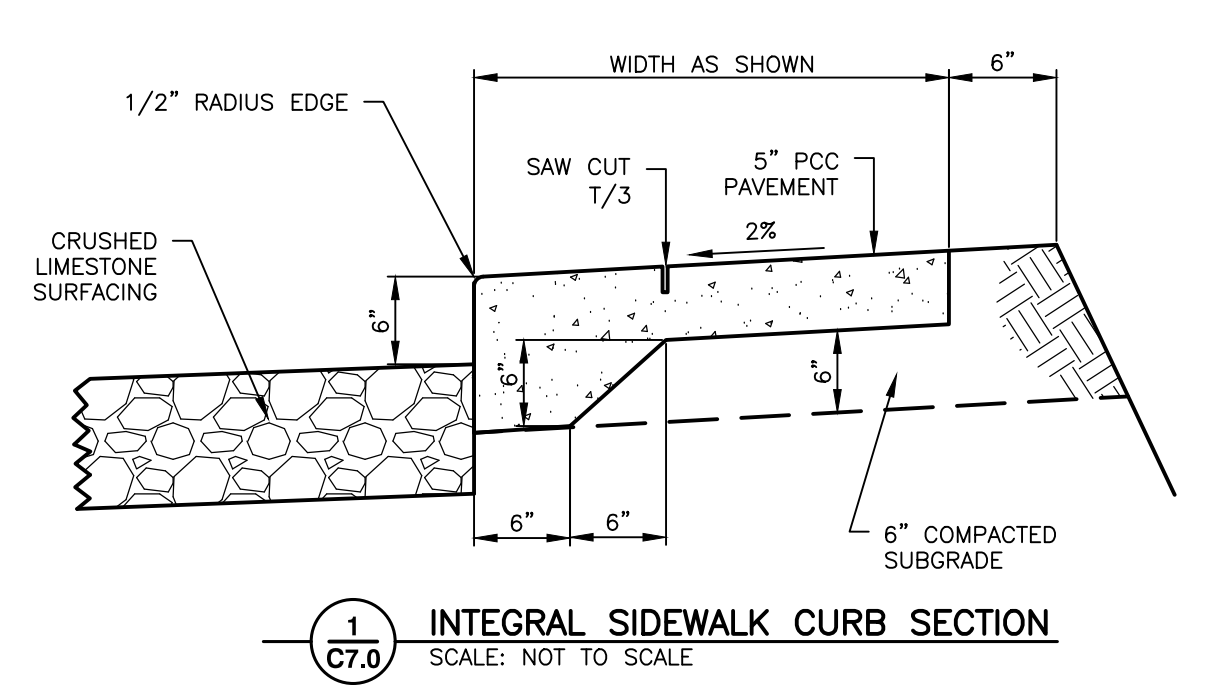
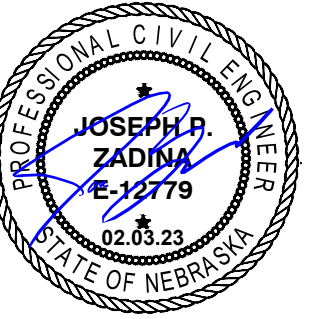
LAMP RYNEARSON  
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Omaha, NE 68154

**STRUCTURAL ENGINEER**

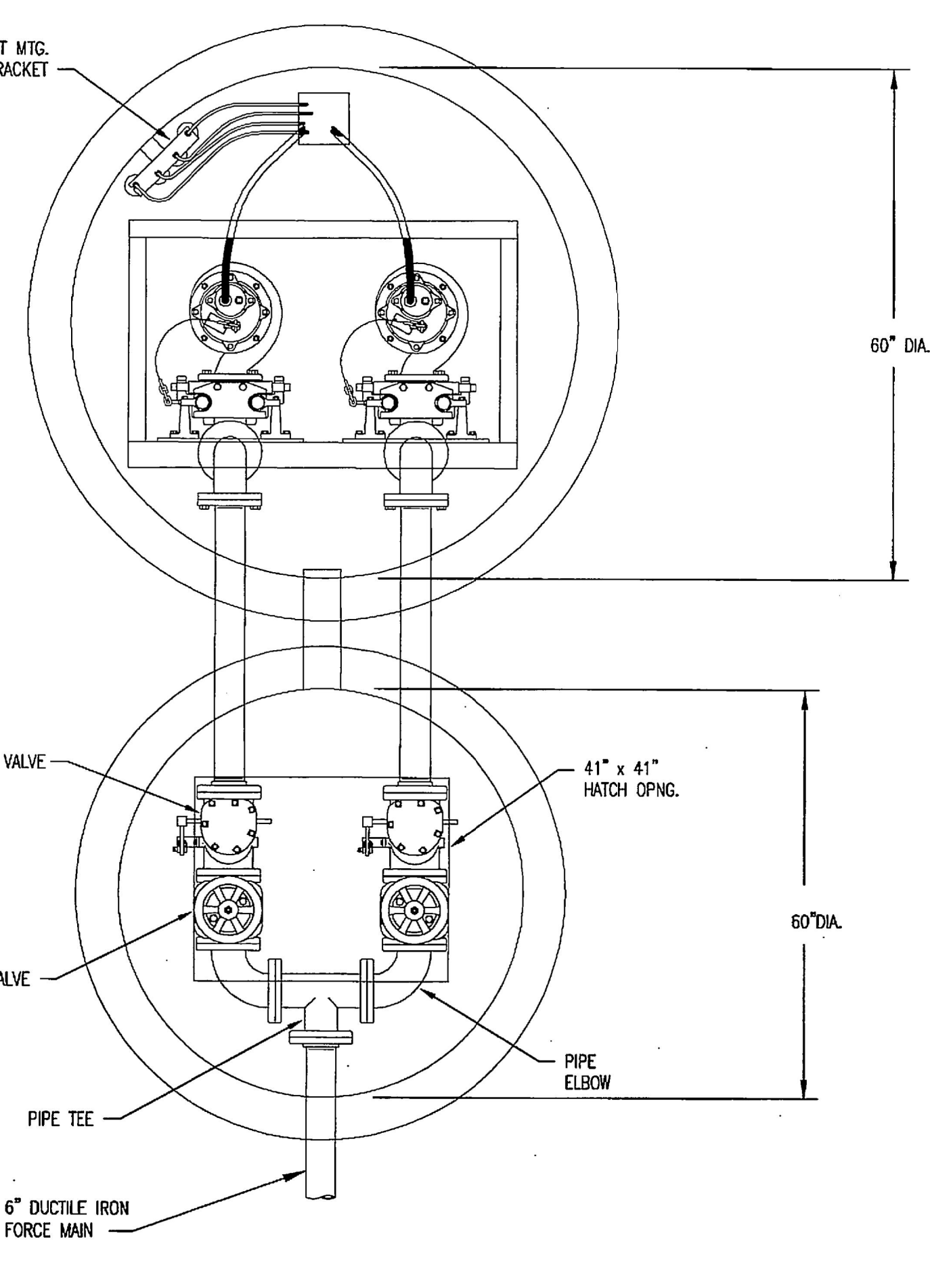
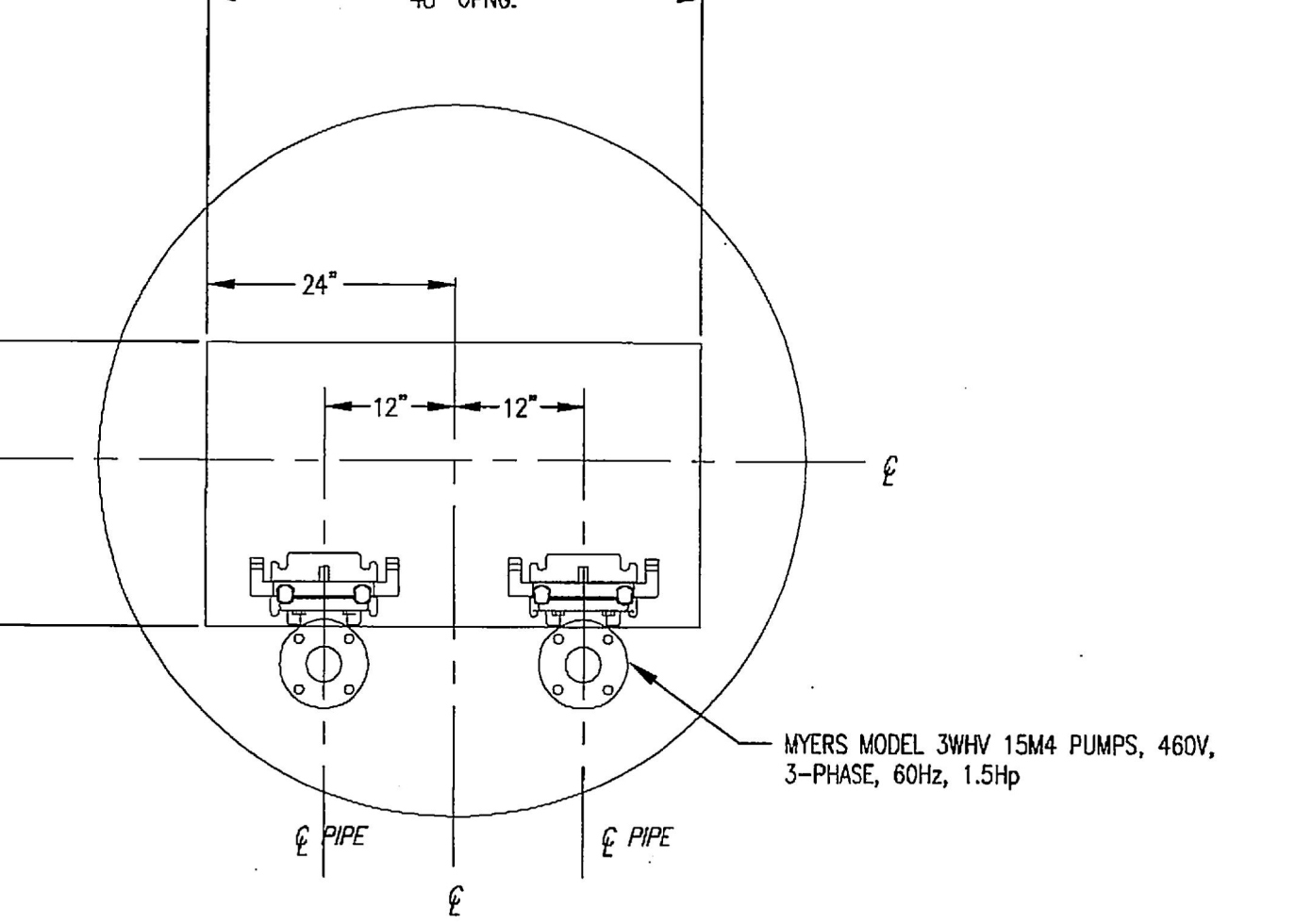
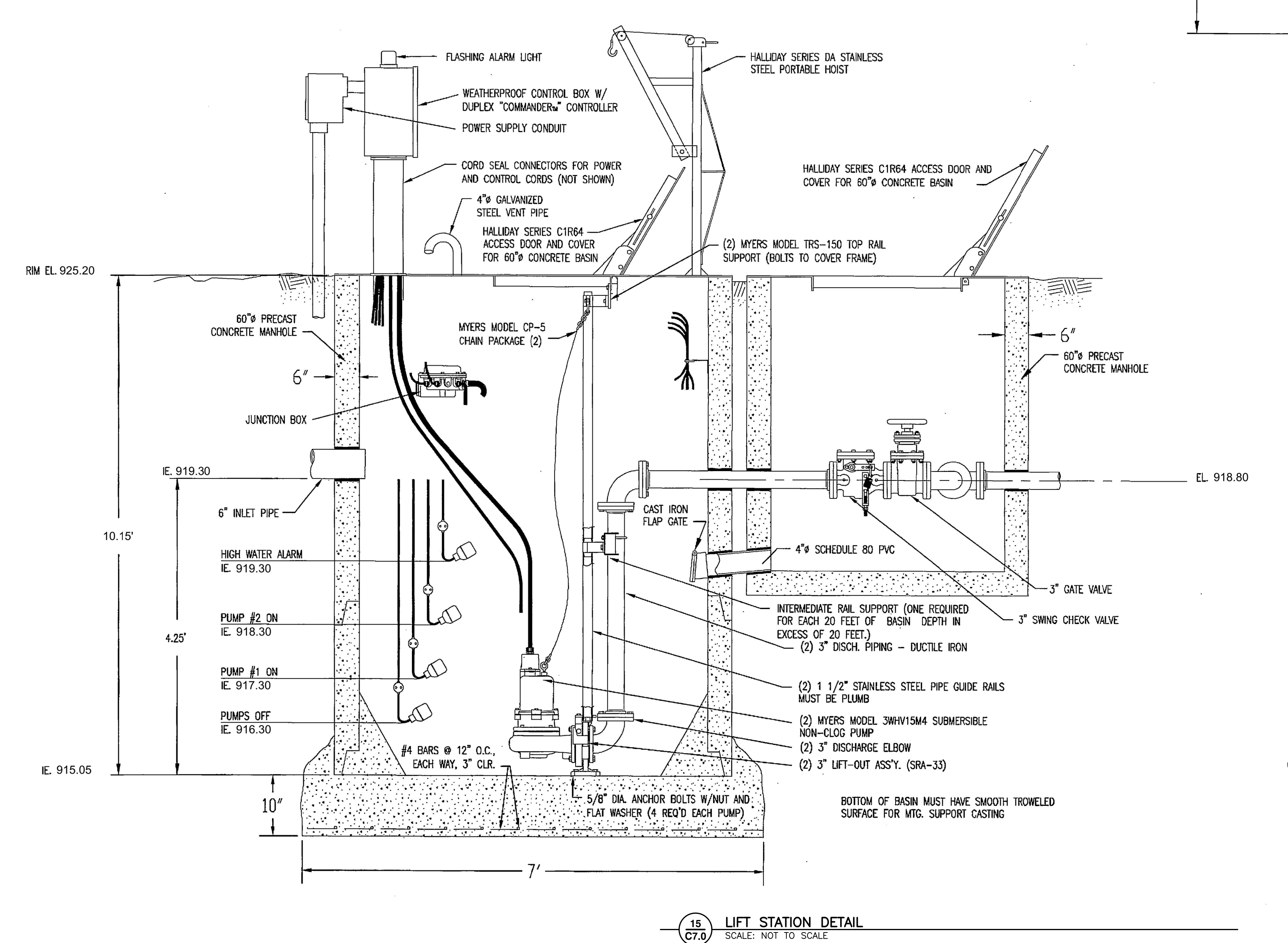
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**MECHANICAL + ELECTRICAL ENGINEER**

MORRISSEY ENGINEERING  
4940 N 118th St  
Omaha, NE 68164



TYPICAL INSTALLATION  
DUPLIX 3" SUBMERSIBLE NON-CLOG  
PUMP SERIES: 3WHV  
LIFT OUT MODELS: SRA-33



REVISION SCHEDULE

Description	Date

EPND  
TRAINING  
FACILITY  
PHASE 2

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC  
POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

DETAIL SHEET

**C7.0**



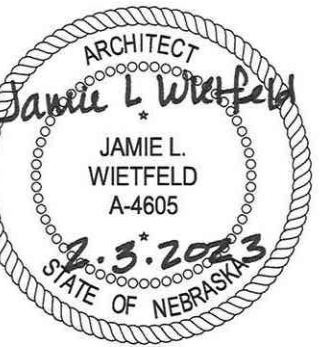
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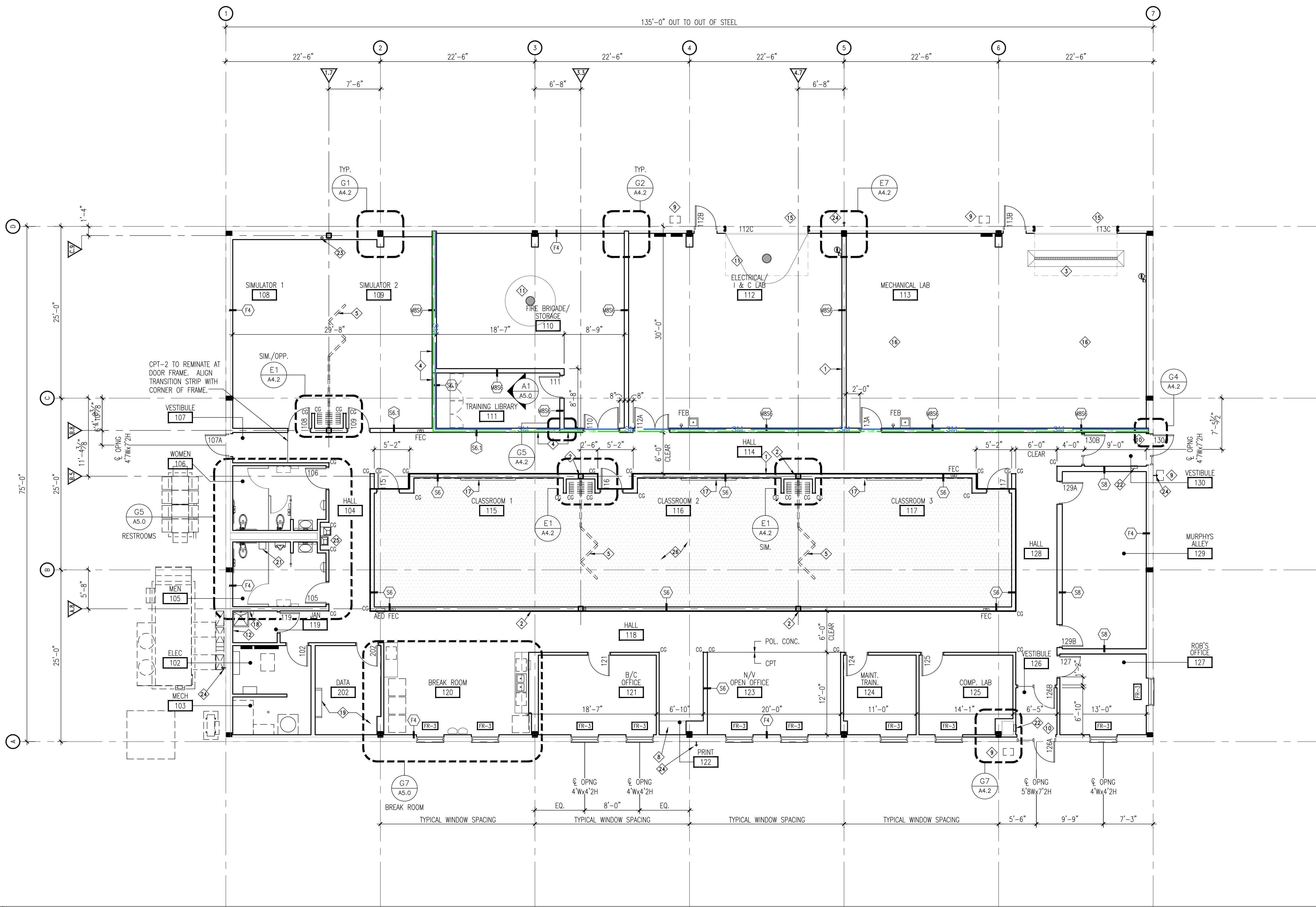
**GENERAL PLAN NOTES**

A. THESE NOTES APPLY TO ALL PLAN AND REFLECTED CEILING PLAN SHEETS.  
B. ALL CONSTRUCTION SHALL COMPLY TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT, AND APPLICABLE EDITION OF THE INTERNATIONAL BUILDING CODE.  
C. CONTRACTOR SHALL PROTECT ALL CONSTRUCTION TO REMAIN FROM DAMAGE.  
D. ALL GWB TO BE 3/4" TYPE X UNLESS NOTED OTHERWISE. REFER TO PARTITION TYPES FOR LOCATIONS OF WATER RESISTANT GWB.  
E. REFER TO GENERAL SHEET FOR PARTITION TYPES.  
F. ALL PARTITIONS THAT INTERACT WITH ROOF STRUCTURE TO ALLOW FOR EXPANSION/FLEX PER STUD MANUFACTURER'S RECOMMENDATIONS. OCCUPANCY SEPARATION DETAIL PER GYPSUM WALL BOARD MANUFACTURER'S RECOMMENDATIONS.  
G. ALL PERIMETER PARTITIONS TO BE F4 UNLESS NOTED OTHERWISE.  
H. EXCLUDING PERIMETER PARTITIONS, ALL PARTITIONS TO BE S4 UNLESS NOTED OTHERWISE.

**REFERENCED PLAN NOTES (◊)**

THESE NOTES APPLY TO ALL PLAN AND REFLECTED CEILING PLAN SHEETS:

- CENTER WALL/PARTITION ON GRID LINE.
- WALL PARTITION IS NOT CENTERED ON GRID LINE. HALLOWAY SIDE GWB TO BE UNINTERRUPTED BY COLUMN. COLUMN FINISH PROJECTIONS TO OCCUR ON CLASSROOM SIDE.
- PROVIDE 1"-0" WIDE BORDER TO BE SLOPED AT 1% AROUND TRENCH DRAIN. OTHERWISE CONCRETE SLAB IS LEVEL.
- ALIGN FINISH.
- OPERABLE PARTITION. REFER TO PROJECT MANUAL.
- NOT USED.
- NOT USED.
- TWO-DOOR BASE CABINET WITH ADJUSTABLE SHELF AND SOLID SURFACE TOP.
- BOOT SCRAPER. REFER TO PROJECT MANUAL. OWNER TO PROVIDE CONFIRMATION OF BOOT SCRAPER LENGTH.
- VESTIBULE TO HAVE WALL TO WALL WALK-OFF CARPET.
- PROVIDE MIN. 3/8", 1" SLOPED OFFSET FROM E OF DRAIN. AT OH DOOR, EXTEND SLOPE TO JAMES AS SHOWN. OTHERWISE CONCRETE SLAB IS LEVEL.
- PROVIDE RESILIENT WALL COVERING SYSTEM (ACROVYN OR SIMILAR) AROUND MOP SINK TO EXTENTS SHOWN. FLOOR TO 48" AFF.
- NOT USED.
- NOT USED.
- GENERAL CONTRACTOR AND OVERHEAD DOOR SUPPLIER TO COORDINATE REQUIREMENTS FOR SUPPLY, AND INSTALL SUPPLEMENTAL AND MISCELLANEOUS STEEL FOR THE MOUNTING OF DOOR TRACK AND MOTOR.
- BRIDGE CRANE BEAM STRUCTURE, AND EQUIPMENT ABOVE. REFER TO STRUCTURAL AND PROJECT MANUAL FOR ADDITIONAL INFORMATION.
- INSTALL MARKERBOARD ON EACH SIDE OF AV DISPLAY. PROVIDE FIRE-TREATED PLYWOOD BACKING MATERIAL AT AV LOCATIONS.
- MOP HOLDER AND SHELF. REFER TO PROJECT MANUAL.
- DATA ROOM TO HAVE 6 MIL VAPOR BARRIER ON ALL WALLS AND CEILING. METAL FRAMING AND SUSPENDED GWB LID TO FINISH AT 12'-0" ABOVE FINISH FLOOR. THE ACUSTICAL PANEL CEILING SYSTEM TO FINISH AT 10'-0" ABOVE FINISH FLOOR. COORDINATE THE SUPPORTS OF SUSPENDED GWB CEILING WITH MECHANICAL, ELECTRICAL, DATA CABLING, CONDUITS, AND DUCTS.
- NOT USED.
- PLUMBING ACCESS PANEL E 55" AFF. OCCURS ON MENS SIDE ONLY. CONFIRM LOCATION WITH PLUMBING. REFER TO PLUMBING AND PROJECT MANUAL.
- RECESSED ELECTRIC HEATER. REFER TO ELECTRICAL.
- 4" VENT. REFER TO MECHANICAL. COORDINATE PLACEMENT TO EXTERIOR TO MINIMIZE DEPTH OF WALL FURRING.
- WALL HYDRANT. REFER TO MECHANICAL.
- REFER TO ENLARGED RESTROOM PLAN FOR ADDITIONAL INFORMATION REGARDING PLACEMENT OF PARTITION AND DRINKING FOUNTAIN.
- ADDING TO THE BASE PARTITIONS, ON THE CEILING, PROVIDE METAL STUD FRAMING, 3/4" TYPE X GWB, AND 6 MIL VAPOR BARRIER OVER THE CLASSROOMS TO THE EXTENTS SHOWN HATCHED. VAPOR BARRIER IS TO EXTEND DOWN THE FULL HEIGHT OF THE PERIMETER PARTITIONS. VAPOR BARRIER IS TO HAVE TAPED JOINTS AND FREE OF ANY PUNCTURES. THE GWB LID IS TO BE FIRE TAPED. SEE PROJECT MANUAL SECTION 05400 COLD FORMED METAL FRAMING FOR REQUIREMENTS OF FRAMING. REFER TO ELECTRICAL AND MECHANICAL FOR ADDITIONAL INFORMATION. ENCLOSURE TO BE CONTINUOUS, INCLUDING BULKHEADS OVER PARTITION STRUCTURE AND STRUCTURAL MEMBERS. SEAL ALL PENETRATION THRU WALLS AND CEILING. REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION FOR THESE AFFECTED DOORS.



**D3 FLOOR PLAN - LEVEL 1**  
SCALE: 1/8"=1'-0"

SPECIFICATION	APPLICATION	NOTES/REMARKS	MARK
ARMSTRONG, OPTIMA SQUARE REGULAR 9/16", 24"x24"			ACROV
CS ACROVYN VA-200N-1.5" LEGS; 265 FOG, 48" HIGH INSTALLED ABOVE VINYL BASE			
MOHAWK, OPTIC RESET, FIELD OF VIEW DARK/GT449, 979 SILHOUETTE DARK, 12"x36"	SIMULATOR ROOMS, CLASSROOMS, OFFICES, & OFFICE AREAS		CPT-1
MAPEI, 93, WARM GRAY	PORCELAIN TILE WET WALL, RESTROOMS		
ARMSTRONG, SUPRAFINE EXPOSED TEE SYSTEM 9/16"			
SHERWIN-WILLIAMS, EIDER WHITE, 7014	TO BE USED ON ALL WALLS, EXCEPT WHEN SPECIFIED OTHERWISE	EGGSHELL FOR ALL APPLICATIONS EXCEPT RESTROOMS & LABS	PNT-1
SHERWIN-WILLIAMS, EIDER WHITE, 7014	RESTROOM & LAB WALLS. FIRE BRIGADE		PNT-1
SHERWIN-WILLIAMS, LOCH BLUE, 6502	TBD - TYPICAL OF CONFERENCE ROOMS & OFFICES	EGGSHELL	PNT-2
SHERWIN-WILLIAMS, ELLIE GRAY, 7650	TBD - TYPICAL OF CONFERENCE ROOMS & CLASSROOMS	EGGSHELL	PNT-3
SHERWIN-WILLIAMS, REYNARD, 6348	WOMEN'S RESTROOM	WALL OPPOSITE OF WET WALL	PNT-4
SHERWIN-WILLIAMS, SERAPE, 6656	MEN'S RESTROOM	WALL OPPOSITE OF WET WALL	PNT-5
SHERWIN-WILLIAMS, SNOWBOUND, 7004	WHERE/F APPLICABLE	FLAT	PNT-6
SHERWIN-WILLIAMS, IRON ORE, 7069	ALL DOOR FRAMES		
FORMICA, TERRIL, MATTE	ALL CABINETS		
DALTILE, SANTINO, BIANCO, SN06, 12x24	WOMEN'S RESTROOM WET WALL	BEHIND FIXTURES & SINK, 2/3 OFFSET	T-1
DALTILE, SANTINO, GRIGIO, SN08, 12x24	MEN'S RESTROOM WET WALL	BEHIND FIXTURES & SINK, 2/3 OFFSET	T-2
JOHNSONITE, BURNT UMBER, 83, COVE, ROLLED, 4" HEIGHT	ALL WALLS WHERE APPLICABLE		RB-1
2" ALUMINUM BLINDS	ALL EXTERIOR WINDOWS		
CAMBRIA, LUXURY SERIES, BRITTANICA	KITCHENETTE COUNTER		
CAMBRIA, SNOWDOWN WHITE	RESTROOM SINK COUNTER		
SCRANTON, HINY HIDERS, GREY	BOTH RESTROOMS		
SCHLUTER, BRUSHED STAINLESS	CARPET TO CONCRETE & TILE WET WALL TO CONCRETE FLOOR	STYLE TO BE DETERMINED BY APPLICATION	
MOHAWK, FIRST STEP II, OBSIDIAN 989	ALL VESTIBULES	QUARTER TURN	CPT-2
CORIAN, SILVER BIRCH	ALL WINDOW SILLS	IF APPLICABLE	

ROOM FINISH SCHEDULE																	
ROOM NO	ROOM NAME	SUBFLOOR MAT'L	FLOOR FINISH	BASE MAT'L	HEIGHT	CEILING		NORTH WALL		SOUTH WALL		EAST WALL		WEST WALL		NOTES	ROOM NO
						MATERIAL	FINISH	MAT'L	FINISH	MAT'L	FINISH	MAT'L	FINISH	MAT'L	FINISH		
102	ELECTRICAL	CONC.	SEALED CONC.	RB-1	12'-0"	GWB	PNT-6	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		102
103	MECHANICAL	CONC.	SEALED CONC.	RB-1	12'-0"	GWB	PNT-6	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		103
104	HALL	CONC.	POLISHED CONC.	RB-1	9'-0"	ATC	ATC-1	GWB	PNT-1	GWB/ALUM	PNT-1	GWB	PNT-1	GWB	PNT-1		104
105	MEN	CONC.	POLISHED CONC.	RB-1/T-2	9'-0"	ATC	ATC-1	GWB	T-2	GWB	PNT-5	GWB	PNT-1	GWB	PNT-1		105
106	WOMEN	CONC.	POLISHED CONC.	RB-1/T-1	9'-0"	ATC	ATC-1	GWB	PNT-4	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		106
107	VESTIBULE	CONC.	CPT-2/WALK-OFF	RB-1	9'-0"	ATC	ATC-1	GWB	PNT-1	GWB	PNT-1	GWB/ALUM	PNT-1	GWB/ALUM	PNT-1		107
108	SIMULATOR 1	CONC.	CPT-1	RB-1	10'-0"	ATC/GWB	ATC-1/PNT-6	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		108
109	SIMULATOR 2	CONC.	CPT-1	RB-1	10'-0"	ATC/GWB	ATC-1/PNT-6	GWB	PNT-1	GWB	PNT-1	GWB	PNT-2	GWB	PNT-1		109
110	FIRE BRIGADE/STORAGE	CONC.	SEALED CONC.	RB-1	-26"-0/VARIES	EXP. STR	ATC-1	PLYWOOD	PNT-1	CMU/GWB	PNT-1	CMU/GWB	PNT-1	CMU/GWB	PNT-1	3,4,6	110
111	TRAINING LIBRARY	CONC.	SEALED CONC.	RB-1	9'-0"	ATC	ATC-1	CMU	PNT-1	CMU	PNT-1	CMU	PNT-1	CMU	PNT-1		111
112	ELECTRICAL/AC LAB	CONC.	SEALED CONC.	RB-1	+26"-0/VARIES	EXP. STR	PNT-1	PLYWOOD	PNT-1	CMU/GWB	PNT-1	CMU/GWB	PNT-1	CMU/GWB	PNT-1	3,4,6	112
113	MECHANICAL LAB	CONC.	SEALED CONC.	RB-1	+26"-0/VARIES	EXP. STR	PNT-1	PLYWOOD	PNT-1	CMU/GWB	PNT-1	PLYWOOD	PNT-1	CMU/GWB	PNT-1	3,4,6	113
114	HALL	CONC.	POLISHED CONC.	RB-1	9'-0"	ATC/GWB	ATC-1/PNT-6	CMU/GWB	PNT-1	GWB	PNT-1	GWB/ALUM	PNT-1	GWB/ALUM	PNT-1		114
115	CLASSROOM 1	CONC.	CPT-1	RB-1	10'-0"	ATC/GWB	ATC-1/PNT-6	GWB	PNT-3	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	5,8	115
116	CLASSROOM 2	CONC.	CPT-1	RB-1	10'-0"	ATC/GWB	ATC-1/PNT-6	GWB	PNT-3	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	5,8	116
117	CLASSROOM 3	CONC.	CPT-1	RB-1	10'-0"	ATC/GWB	ATC-1/PNT-6	GWB	PNT-3	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	5,8	117
118	HALL	CONC.	POLISHED CONC.	RB-1	9'-0"	ATC	ATC-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		118
119	JANITOR	CONC.	SEALED CONC.	RB-1	9'-0"	ATC	ATC-1	GWB	PNT-1/ACROV	GWB	PNT-1/ACROV	GWB	PNT-1/ACROV	GWB	PNT-1/ACROV	2,3	119
120	BREAK ROOM	CONC.	POLISHED CONC.	RB-1	9'-0"	ATC	ATC-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		120
121	B/C OFFICE	CONC.	CPT-1	RB-1	9'-0"	ATC	ATC-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		121
122	PRINT	CONC.	POLISHED CONC.	RB-1	9'-0"	ATC	ATC-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		122
123	N/V OPEN OFFICE	CONC.	CPT-1	RB-1	9'-0"	ATC	ATC-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		123
124	MAINT. TRAINING	CONC.	CPT-1	RB-1	9'-0"	ATC	ATC-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		124
125	COMPUTER LAB	CONC.	CPT-1	RB-1	9'-0"	ATC	ATC-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		125
126	VESTIBULE	CONC.	CPT-2/WALK-OFF	RB-1	8'-0"	GWB	PNT-6	GWB	PNT-1	GWB/ALUM	PNT-1	GWB	PNT-1	GWB	PNT-1		126
127	ROB'S OFFICE	CONC.	CPT-1	RB-1	9'-0"	ATC	ATC-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		127
128	HALL	CONC.	POLISHED CONC.	RB-1	9'-0"	ATC	ATC-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		128
129	MURPHY'S ALLEY	CONC.	POLISHED CONC.	RB-1	+26"-0/VARIES	EXP. STR	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1		129
130	VESTIBULE	CONC.	CPT-2/WALK-OFF	RB-1	8'-0"	GWB	PNT-6	GWB	PNT-1	GWB	PNT-1	GWB/ALUM	PNT-1	GWB/ALUM	PNT-1	4	130
202	DATA (MOVED TO LEVEL 1)	CONC.	SEALED CONC.	RB-1	12'-0"	GWB	PNT-6	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	GWB	PNT-1	NOTE 7	202

**GENERAL NOTES:**

- AT RESILIENT WALL COVERING LOCATIONS (ACROVYN OR SIMILAR), USE MANUFACTURER'S COMPATIBLE CORNER GUARD.
- TYPICAL GYPSUM WALL BOARD CEILINGS AND BULKHEADS SHALL BE PNT-6 UNLESS NOTED OTHERWISE.
- UNLESS NOTED OTHERWISE, TILE FINISH IS FLOOR TO CEILING.

**SCHEDULE NOTES:**

- INSTALL WALL TO WALL WALK-OFF CARPET TILE.
- PROVIDE RESILIENT WALL COVERING SYSTEM (ACROVYN OR SIMILAR) AROUND MOP SINK TO EXTENTS SHOWN. FLOOR TO 48" AFF.
- PROVIDE EPOXY PAINT AT PAINTED WALLS THIS ROOM.
- PAINT EXPOSED STRUCTURE INCLUDING DECKING, JOISTS, BEAMS, DUCT WORK, PIPING, AND LINER SYSTEM.
- FINISH BULKHEAD (FOR OPERABLE PARTITION) TO BE 1'-0" BELOW FINISH/SCHEDULED ATC CEILING.
- NORTH WALLS TO RECEIVE 3/4" FIRE TREATED PLYWOOD FLOOR TO 12'-0" AFF (IN LIEU OF GWB). REFER TO PARTITION TYPES.
- DATA ROOM TO HAVE 6 MIL VAPOR BARRIER ON ALL WALLS AND CEILING. METAL FRAMING AND SUSPENDED GWB LID TO FINISH AT 12'-0" ABOVE FINISH FLOOR. COORDINATE THE SUPPORTS OF SUSPENDED GWB CEILING WITH MECHANICAL, ELECTRICAL, DATA CABLING, CONDUITS, AND DUCTS.
- CLASSROOMS 1, 2, & 3: REFER TO REFERENCED PLAN NOTE 26 FOR FURTHER INFORMATION.

IN ADDITION TO DATA AND ELECTRICAL ROOM, WHERE BACKING IS NECESSARY OR REQUIRED, FIRE TREATED BACKING IS TO BE USED. PAINT FINISH AS SCHEDULED. TYPICAL.

REVISION SCHEDULE

#	Description	Date

TRAINING FACILITY PHASE 2

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

FLOOR PLAN - LEVEL 1

A1-0



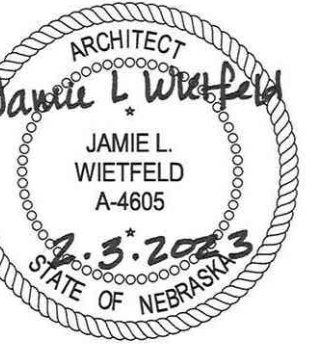
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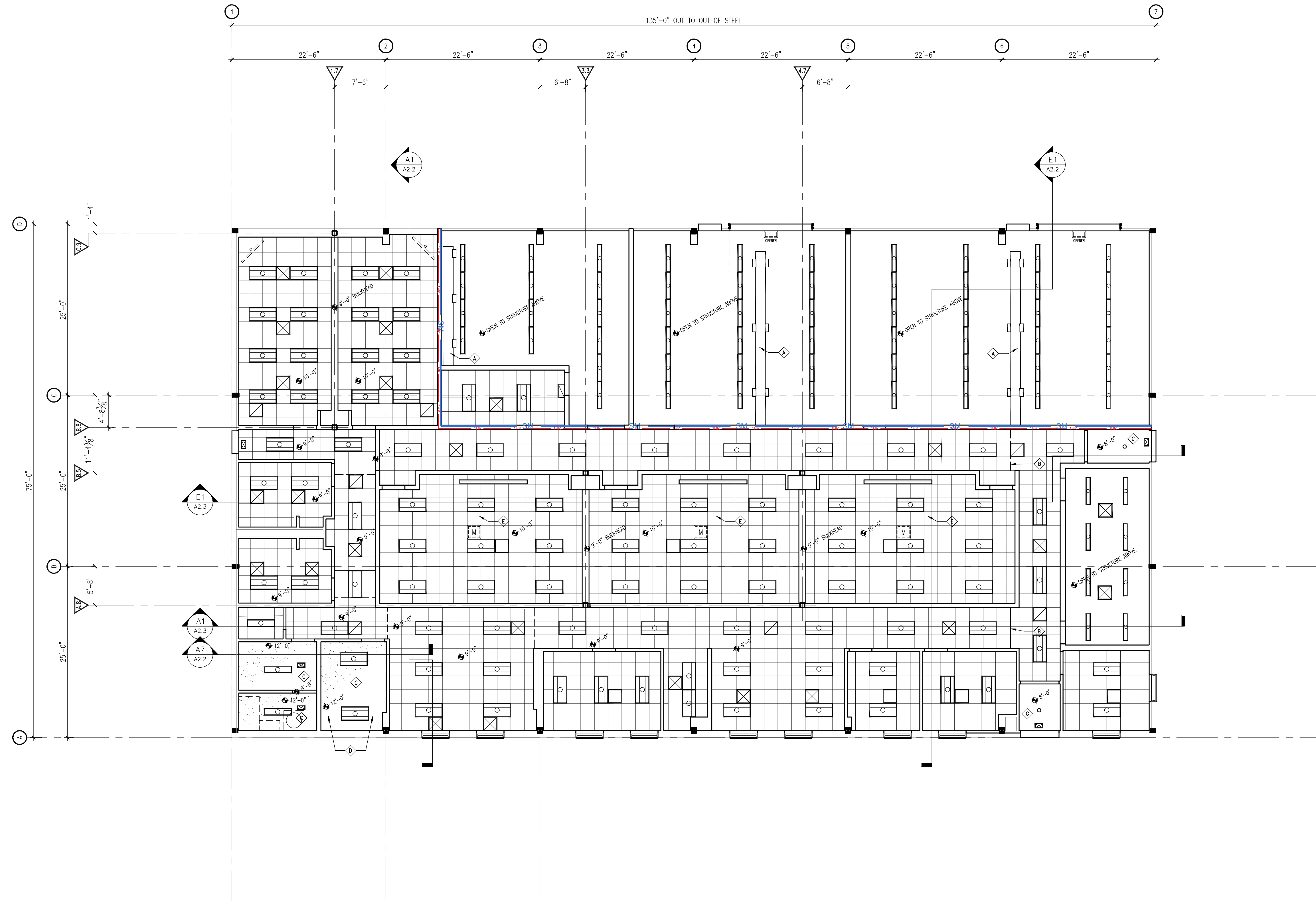
REFLECTED CEILING PLAN LEGEND		
	NATURAL WOOD LAP SIDING	EXISTING LIGHT FIXTURES
	STAIN FINISH OR PRE-FINISHED	EXISTING MECHANICAL DIFFUSERS
	EXPOSED ROOF/FLOOR JOISTS OR RAFTER	MECHANICAL DIFFUSERS
	PAINT FINISH	LIGHT FIXTURES
	ROUGH-FINISHED TIMBER STAIN FINISH	HEAT LAMP
	WOOD TRIM FINISH	CEILING ACCESS PANEL
	HARDI PANEL SOFFIT BOARD WITH 2x2 BATTENS AT 16" O.C. PAINT FINISH	

**CEILING PLAN NOTES**

- ALL FINISH CEILINGS TO BE 9'-0" ABOVE FINISH FLOOR UNLESS NOTED OTHERWISE. REFER TO ROOM FINISH SCHEDULE.
- ALL GYPSUM WALL BOARD BULKHEAD TO BE FINISHED 2" BELOW FINISH SUSPENDED CEILING SYSTEM UNLESS NOTED OTHERWISE.
- NOT ALL LIGHT FIXTURES AND ELECTRICAL DEVICES ARE REPRESENTED ON REFLECTED CEILING PLAN. SEE ELECTRICAL DRAWINGS.
- NOT ALL MECHANICAL FIXTURES AND DEVICES ARE REPRESENTED ON REFLECTED CEILING PLAN. SEE MECHANICAL DRAWINGS.

**REFERENCED CEILING PLAN NOTES (R)**

- MECHANICAL DUCT. SEE MECHANICAL.
- LOCATION OF CUT/PRESSED CEILING PAD (TO ADJUST SPACING)
- GWB CEILING (PAINT FINISH)
- DATA ROOM; REFER TO NOTE 7 ON ROOM FINISH SCHEDULE FOR ADDITIONAL INFORMATION REGARDING WALLS AND CEILING CONSTRUCTION.
- CLASSROOMS 1, 2, & 3; REFER TO NOTE 26 ON THE REFERENCED PLAN NOTES FOR ADDITIONAL INFORMATION REGARDING WALLS AND CEILING CONSTRUCTION.



**D3 REFLECTED CEILING - LEVEL 1**  
SCALE: 1/8"=1'-0"

REVISION SCHEDULE

#	Description	Date

TRAINING FACILITY  
PHASE 2

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC  
POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

REFLECTED  
CEILING PLAN -  
LEVEL 1

**A1-2**



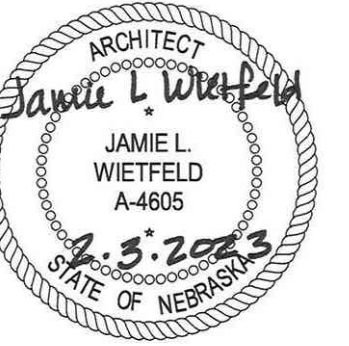
**PROJECT TEAM**

**ARCHITECTURE + INTERIORS**  
BCDM ARCHITECTS  
1015 N 98th St #300,  
Omaha, NE 68114

**CIVIL**  
LAMP RYNEARSON  
14710 W. Dodge Road, Suite 100  
Omaha, NE 68154

**STRUCTURAL ENGINEER**  
BCDM  
1015 N 98th St #300,  
Omaha, NE 68114

**MECHANICAL + ELECTRICAL ENGINEER**  
MORRISSEY ENGINEERING  
4940 N 118th St  
Omaha, NE 681614

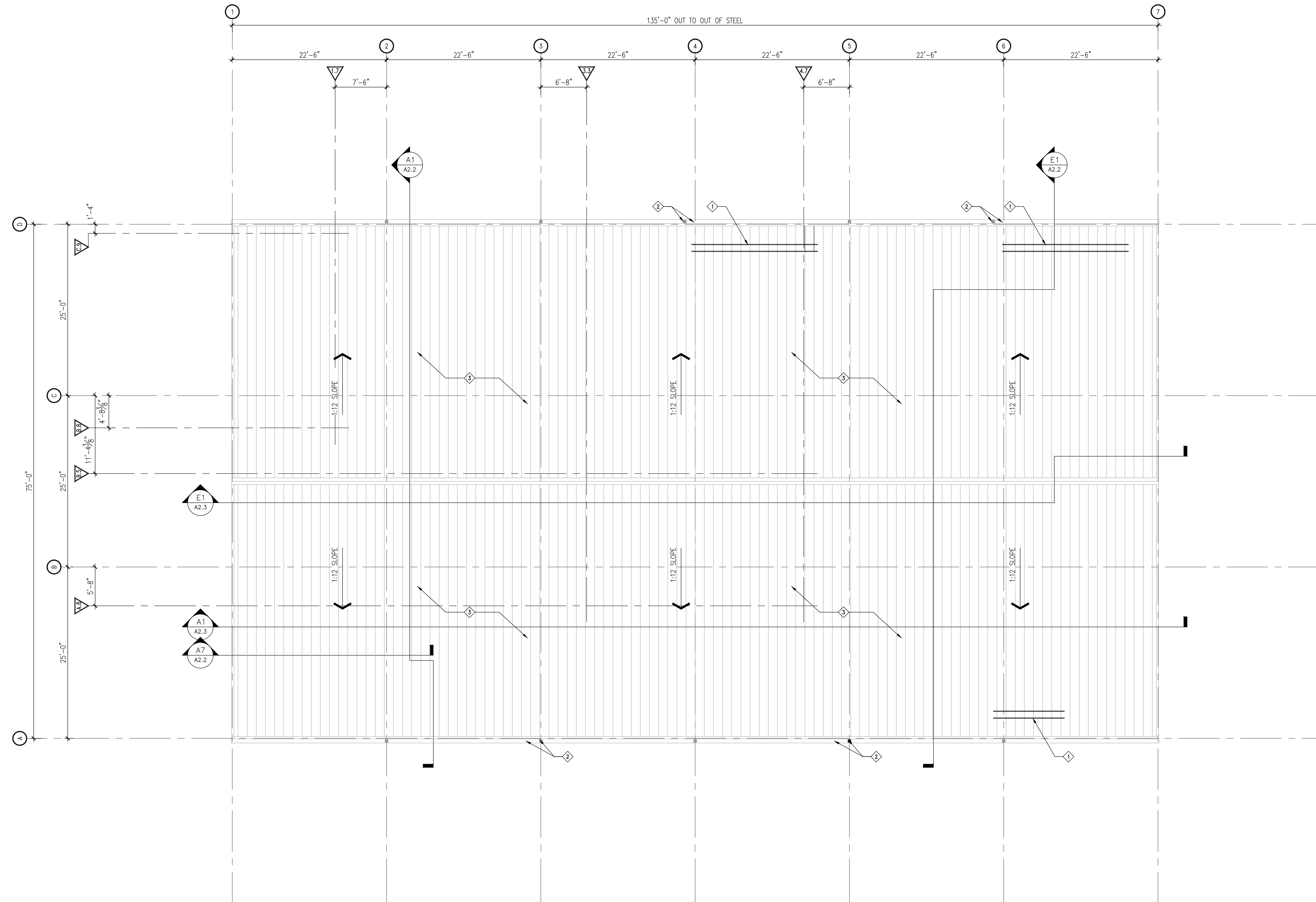


**GENERAL ROOF PLAN NOTES**

- A. EXISTING ROOF PLAN SHOWN FOR REFERENCE ONLY.
- B. CONFIGURATION OF ROOF MATERIAL SHOWN IN PLAN AND DETAIL ARE SUBJECT TO THE ROOF MANUFACTURER'S REQUIREMENTS FOR WARRANTY COVERAGE. NO CHANGES TO BE MADE WITHOUT PRIOR AUTHORIZATION.

**REFERENCED ROOF PLAN NOTES (◇)**

- 1. PRE-MANUFACTURED METAL SNOW FENCE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. SNOW FENCE IS TO EXTEND PAST WIDTH OF OPENING BY A MINIMUM OF 1'-0" IN BOTH DIRECTIONS, INCLUDING OVERHEAD DOORS.
- 2. EXISTING PRE-MANUFACTURED METAL GUTTER AND DOWNSPOUT. REFER TO ELEVATIONS FOR LOCATIONS. ADJUST ACCORDINGLY TO AVOID OPENING AND MAINTAIN DOOR CLEARANCES. COORDINATE WITH CIVIL.
- 3. EXISTING STANDING SEAM METAL ROOF SYSTEM BY METAL BUILDING MANUFACTURER.



**D3** ROOF PLAN  
SCALE: 1/8"=1'-0"

REVISION SCHEDULE

#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC  
POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

ROOF PLAN

**A1-4**



**PROJECT TEAM**

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Omaha, NE 68114

**CIVIL**

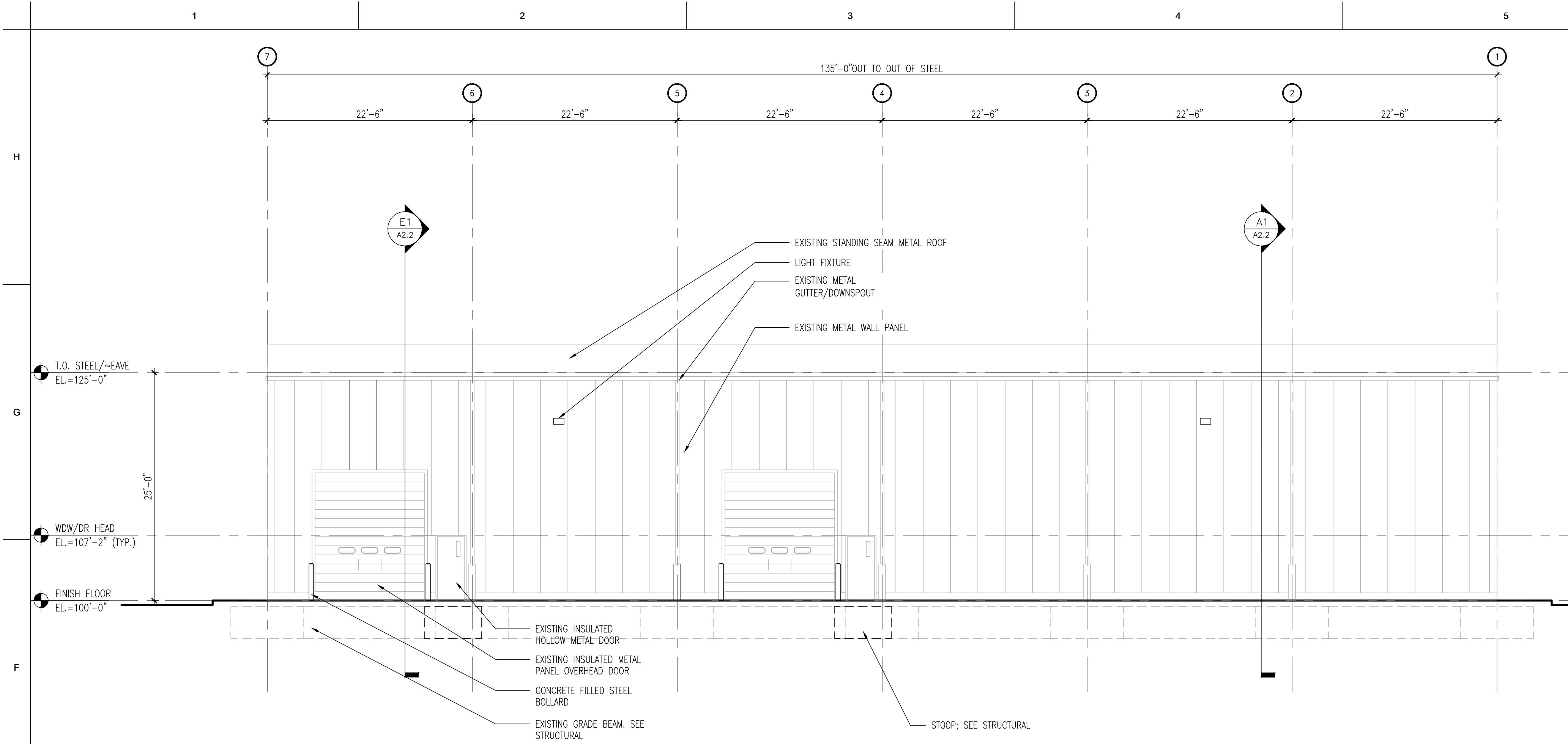
LAMP RYNEARSON  
14710 W. Dodge Road, Suite 100  
Omaha, NE 68154

**STRUCTURAL ENGINEER**

BCDM  
1015 N 98th St #300,  
Omaha, NE 68114

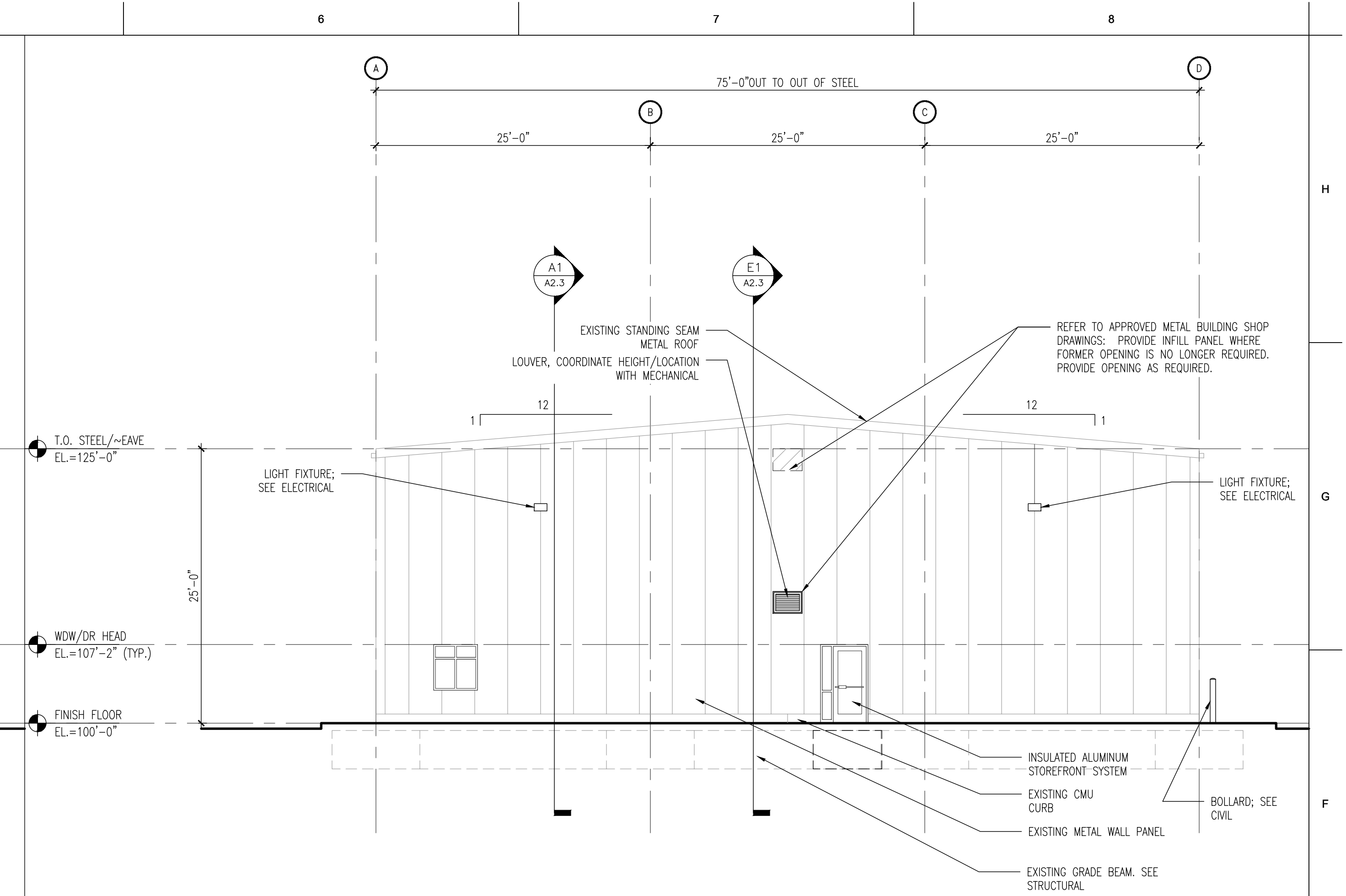
**MECHANICAL + ELECTRICAL ENGINEER**

MORRISSEY ENGINEERING  
4940 N 118th St  
Omaha, NE 68164



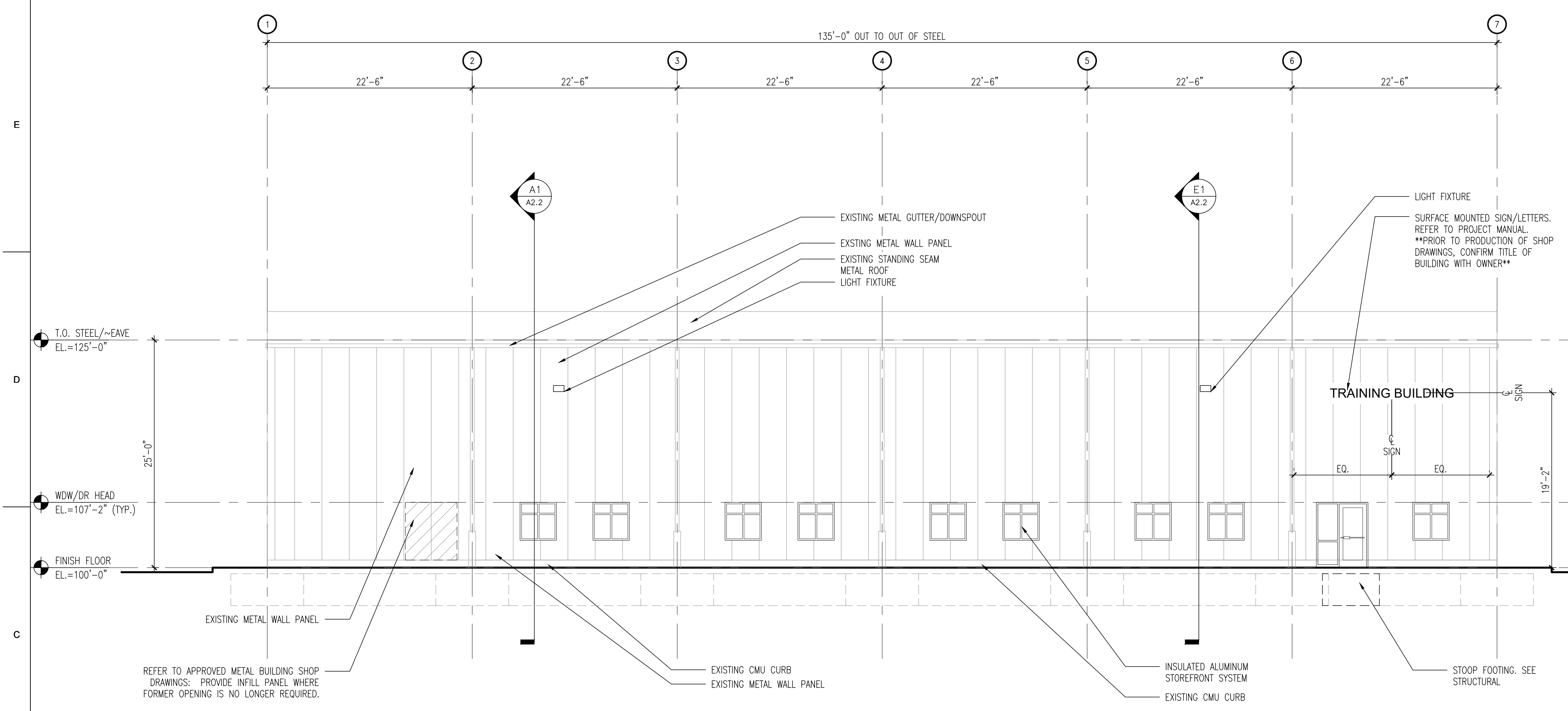
**F1 NORTH ELEVATION**

SCALE: 3/8"=1'-0"



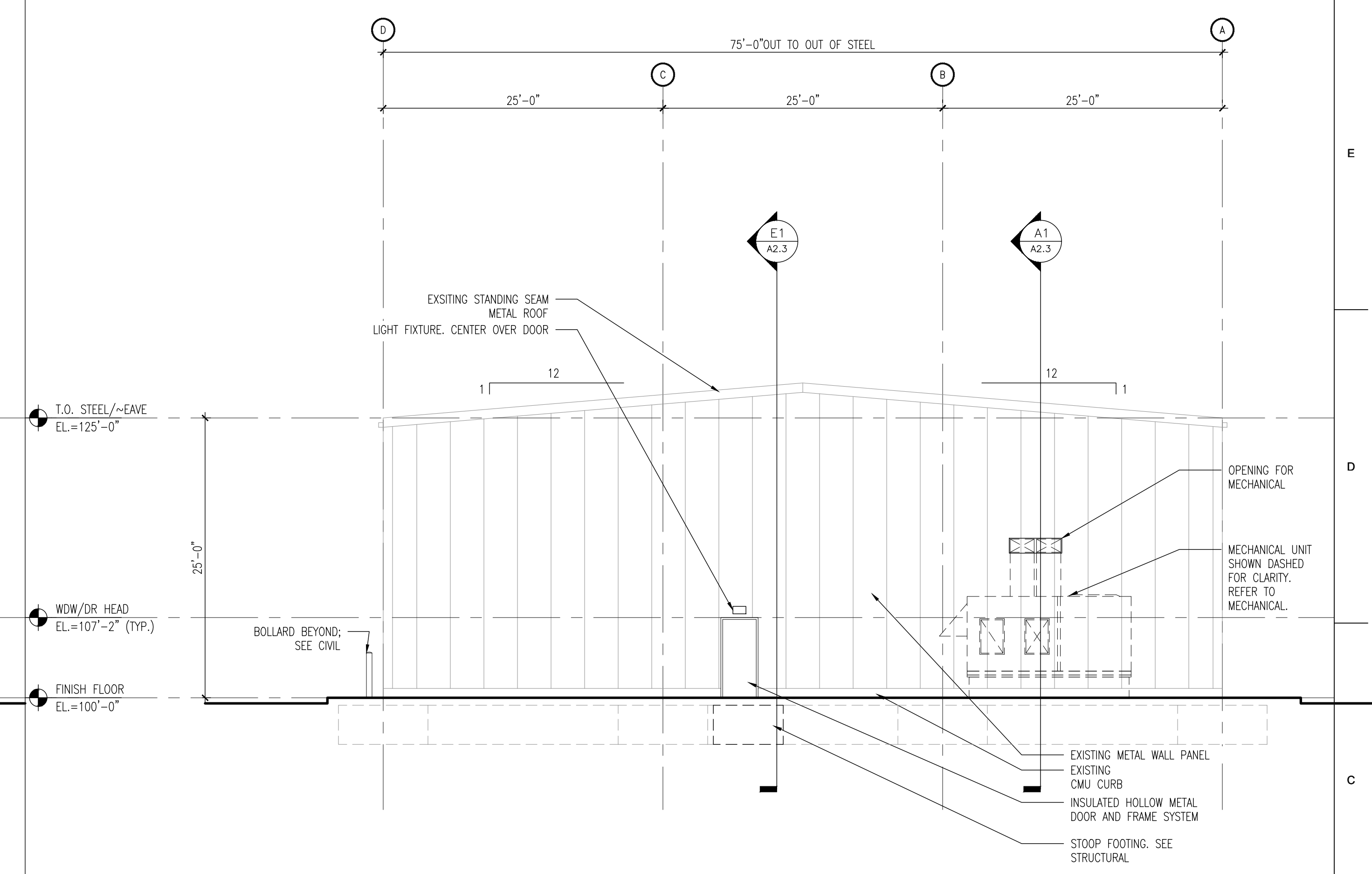
**F5 EAST ELEVATION**

SCALE: 3/8"=1'-0"



**C1 SOUTH ELEVATION**

SCALE: 3/8"=1'-0"



**C5 WEST ELEVATION**

SCALE: 3/8"=1'-0"

**WINDOW AND DOOR NOTE**

A. WINDOW AND DOOR OPENINGS HAVE ALREADY BEEN CUT INTO THE EXISTING METAL BUILDING.  
B. THE CONTRACTOR SHALL REMOVE ALL WOOD BLOCKING, OSB, AND SEALANT AS REQUIRED TO PREP THE OPENINGS FOR THE INSTALLATION OF DOORS AND WINDOWS.  
C. FIELD VERIFY THE EXISTING SIZES AND CONDITIONS OF THE DOOR AND WINDOW OPENINGS.  
D. REMOVE AND REPLACE EXISTING METAL BUILDING FLASHINGS AS NECESSARY FOR THE INSTALLATION OF THE DOORS AND WINDOWS.

REVISION SCHEDULE

#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC  
POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

EXTERIOR  
ELEVATIONS

**A2-1**



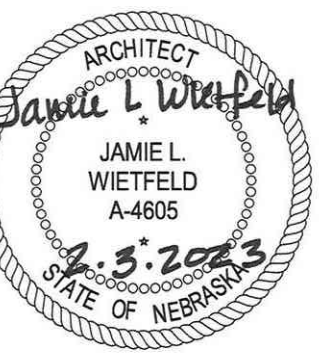
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**CIVIL**  
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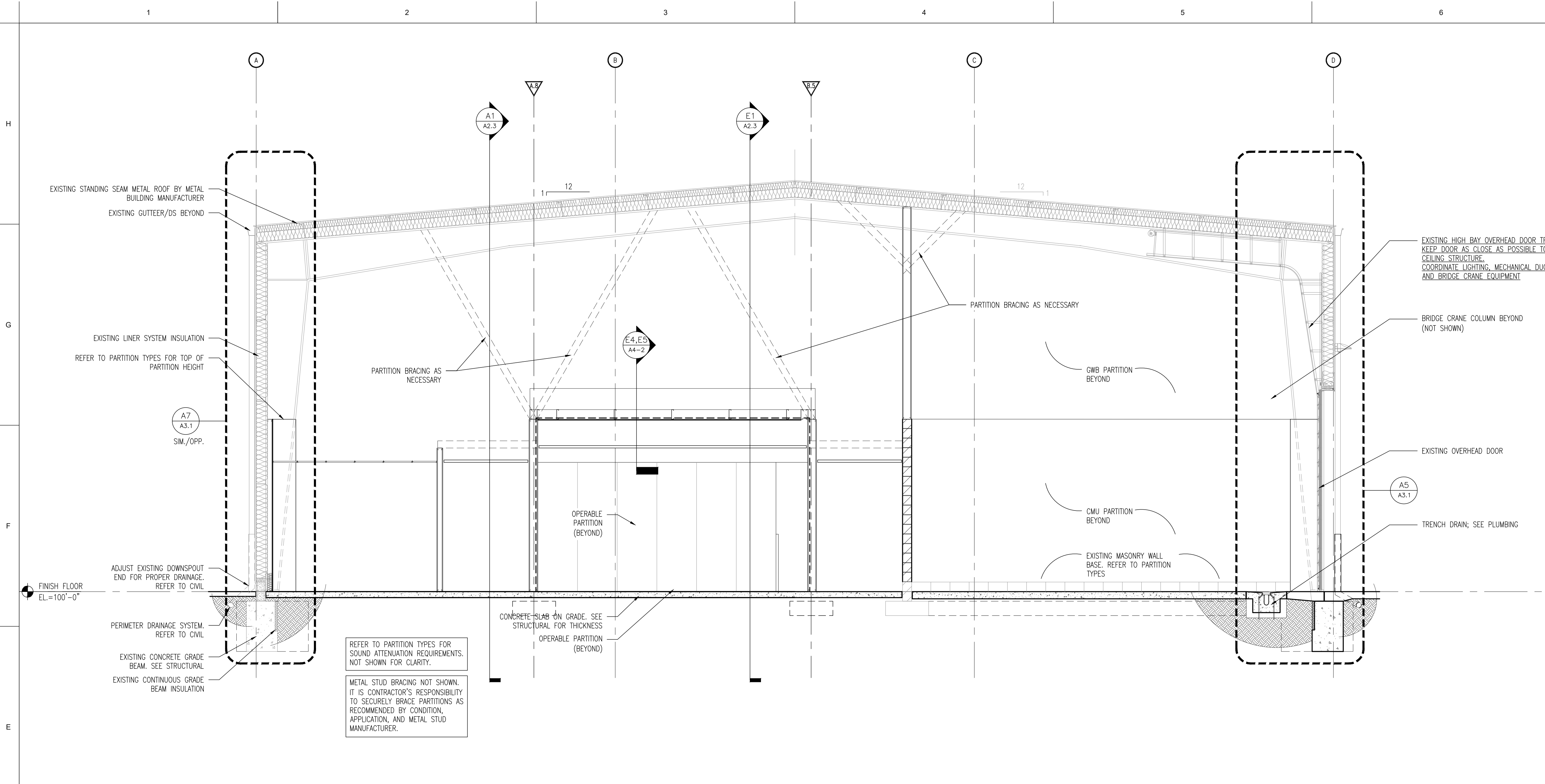
**STRUCTURAL ENGINEER**  
BCDM  
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Omaha, NE 68114

**MECHANICAL + ELECTRICAL ENGINEER**  
MORRISSEY ENGINEERING  
4940 N 118th St  
Omaha, NE 68164

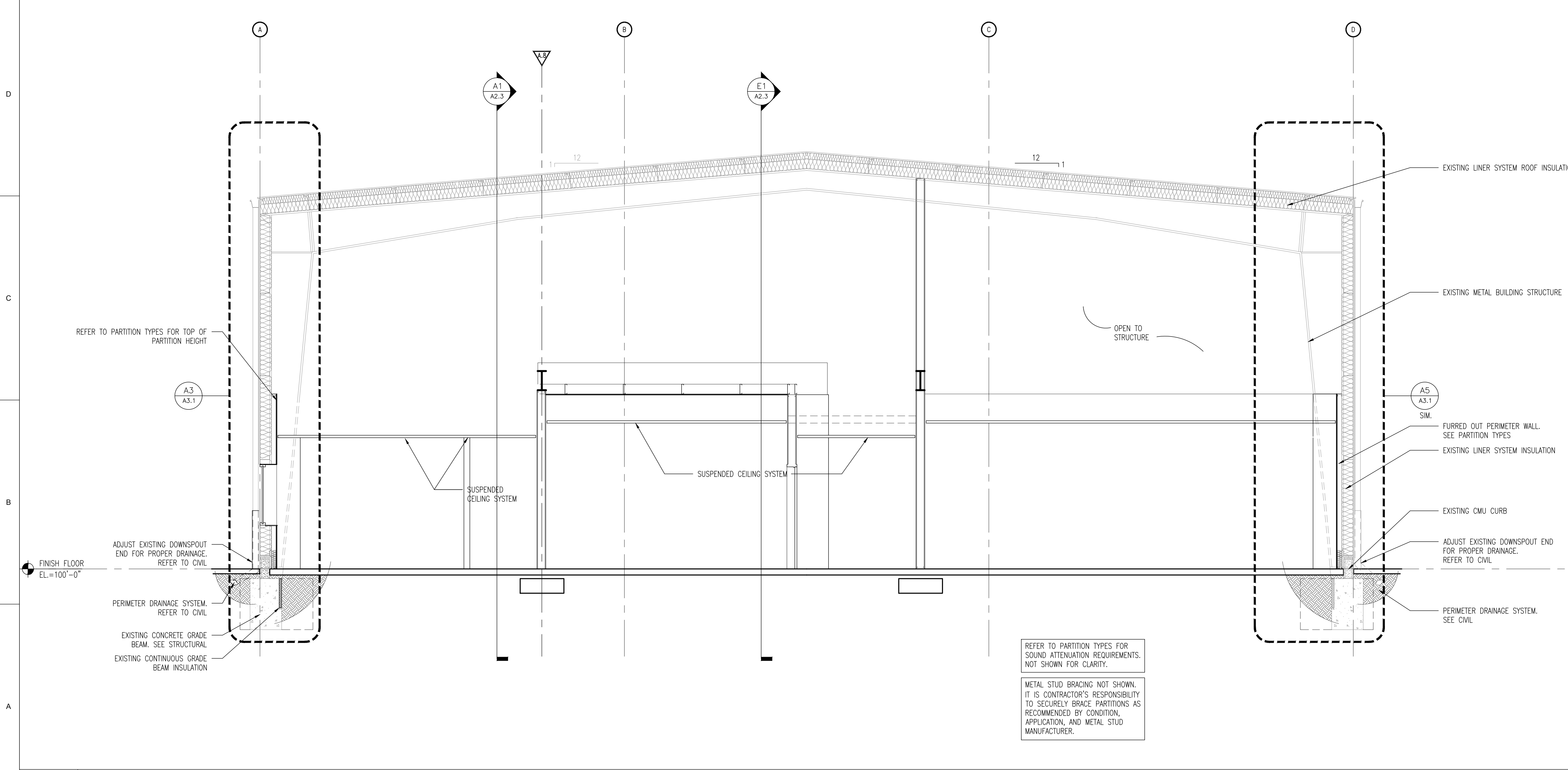


**GENERAL SECTION NOTES**

- THESE NOTES APPLY TO ALL PLAN AND BUILDING AND WALL SECTION SHEETS.
- FOR CLARITY, WALL BRACING IS NOT SHOWN. GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING NECESSARY ABOVE CEILING BRACING FOR PARTITIONS. REFER TO PARTITION TYPES.
- FOR CLARITY, SOUND ATTENUATION BLANKETS ARE NOT SHOWN IN THE PARTITIONS. GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING SOUND ATTENUATION BLANKETS AS SHOWN IN PARTITION TYPES. REFER TO PARTITION TYPES.
- ALL GWB TO BE 5/8" TYPE X UNLESS NOTED OTHERWISE. REFER TO PARTITION TYPES FOR LOCATIONS OF WATER RESISTANT GWB.
- REFER TO GENERAL SHEET FOR PARTITION TYPES.
- ALL PARTITIONS THAT INTERACT WITH ROOF STRUCTURE TO ALLOW FOR EXPANSION/FLEX PER STUD MANUFACTURER'S RECOMMENDATIONS. OCCUPANCY SEPARATION DETAIL PER GYPSUM WALL BOARD MANUFACTURER'S RECOMMENDATIONS.
- ALL PERIMETER PARTITIONS TO BE F4 UNLESS NOTED OTHERWISE.
- EXCLUDING PERIMETER PARTITIONS, ALL PARTITIONS TO BE S4 UNLESS NOTED OTHERWISE. REFER TO FLOOR PLAN FOR PARTITION TYPE IDENTIFICATION(S).
- UNLESS NOTED OTHERWISE, GYPSUM WALL BOARD BULKHEADS TO BE 2" LOWER THAN THE SCHEDULED FINISH CEILING HEIGHT. TYPICAL.



**E1 BUILDING SECTION**  
SCALE: 1/2"=1'-0"



**A1 BUILDING SECTION**  
SCALE: 1/2"=1'-0"

REVISION SCHEDULE

#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC  
POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

BUILDING  
SECTIONS

**A2-2**



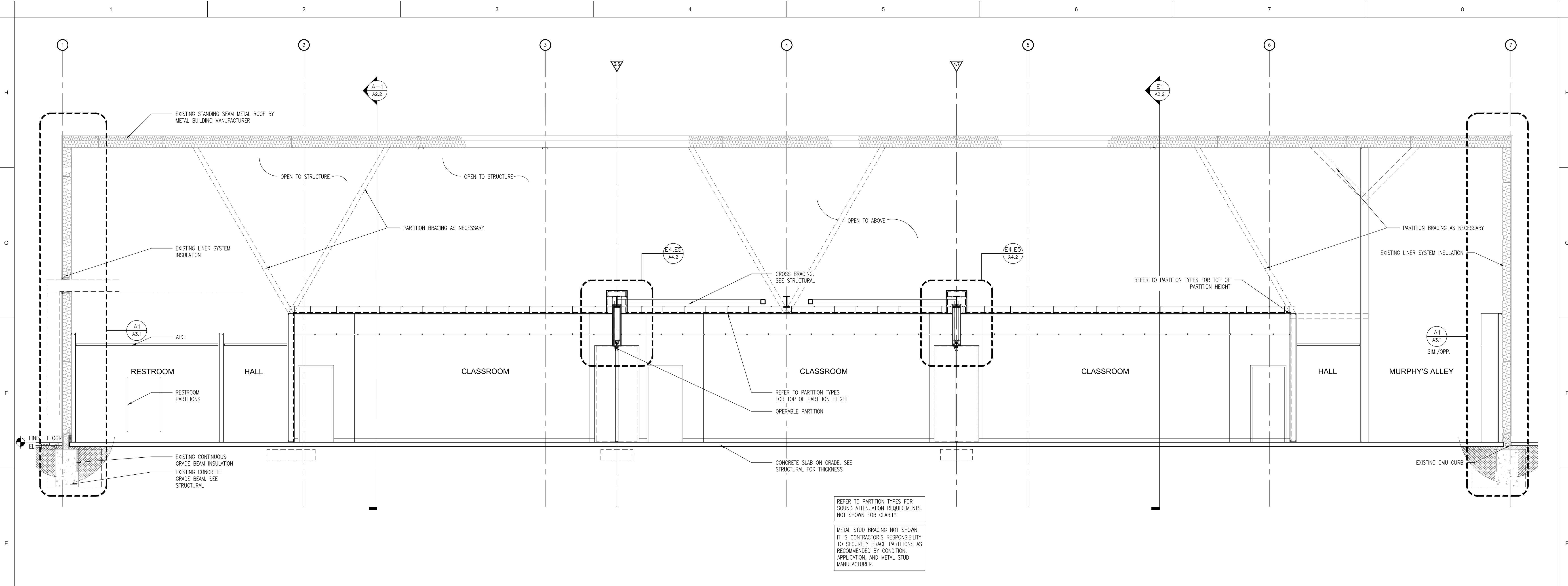
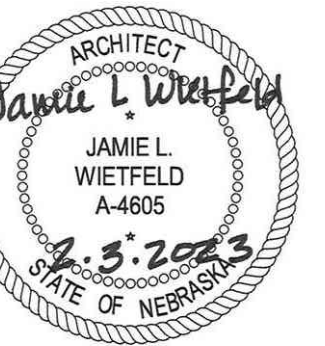
**PROJECT TEAM**

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Omaha, NE 68114

**MECHANICAL + ELECTRICAL ENGINEER**  
MORRISSEY ENGINEERING  
4940 N 118th St  
Omaha, NE 68164

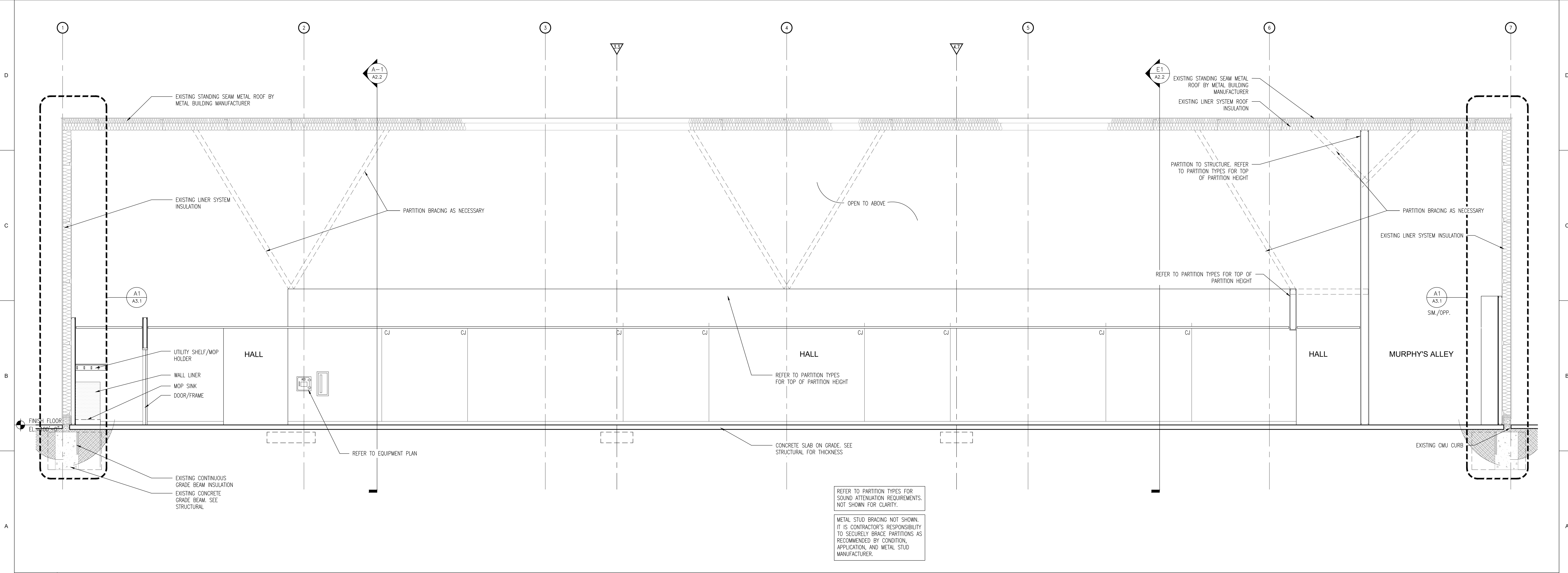


REFER TO PARTITION TYPES FOR SOUND ATTENUATION REQUIREMENTS. NOT SHOWN FOR CLARITY.

METAL STUD BRACING NOT SHOWN. IT IS CONTRACTOR'S RESPONSIBILITY TO SECURELY BRACE PARTITIONS AS RECOMMENDED BY CONDITION, APPLICATION, AND METAL STUD MANUFACTURER.

**E1 BUILDING SECTION**

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



REFER TO PARTITION TYPES FOR SOUND ATTENUATION REQUIREMENTS. NOT SHOWN FOR CLARITY.

METAL STUD BRACING NOT SHOWN. IT IS CONTRACTOR'S RESPONSIBILITY TO SECURELY BRACE PARTITIONS AS RECOMMENDED BY CONDITION, APPLICATION, AND METAL STUD MANUFACTURER.

**A1 BUILDING SECTION**

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

REVISION SCHEDULE

#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC  
POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

**BUILDING SECTIONS**

**A2-3**



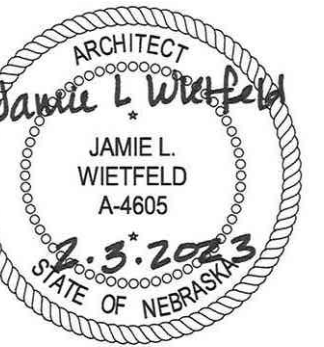
PROJECT TEAM

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MECHANICAL + ELECTRICAL ENGINEER  
MORRISSEY ENGINEERING  
4940 N 118th St  
Omaha, NE 68164



REVISION SCHEDULE

#	Description	Date

TRAINING FACILITY PHASE 2

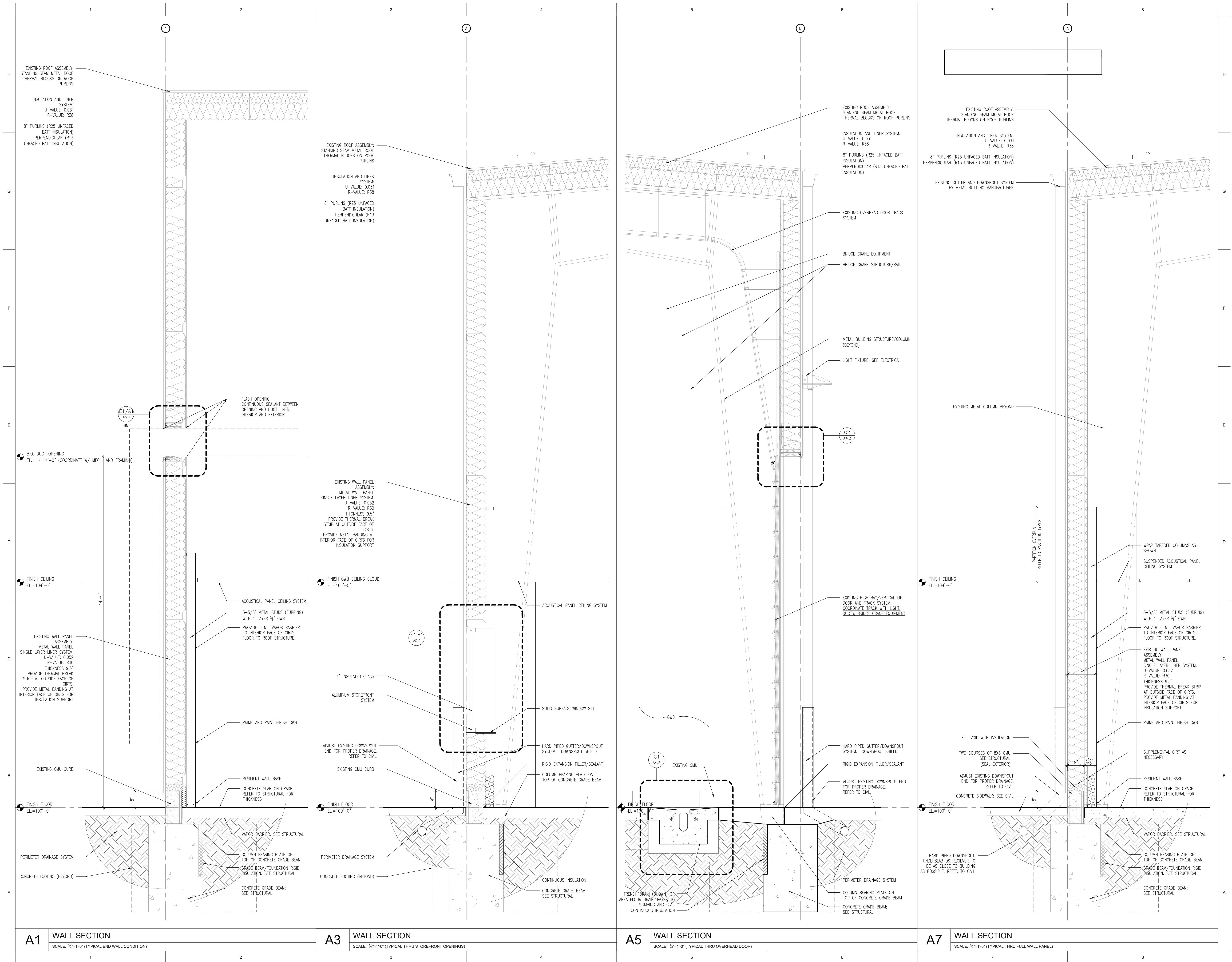
7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

WALL SECTIONS

A3-1





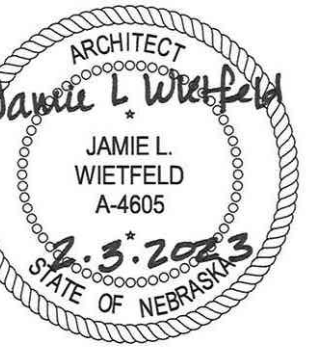
PROJECT TEAM

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Omaha, NE 68164



REVISION SCHEDULE

#	Description	Date

TRAINING FACILITY PHASE 2

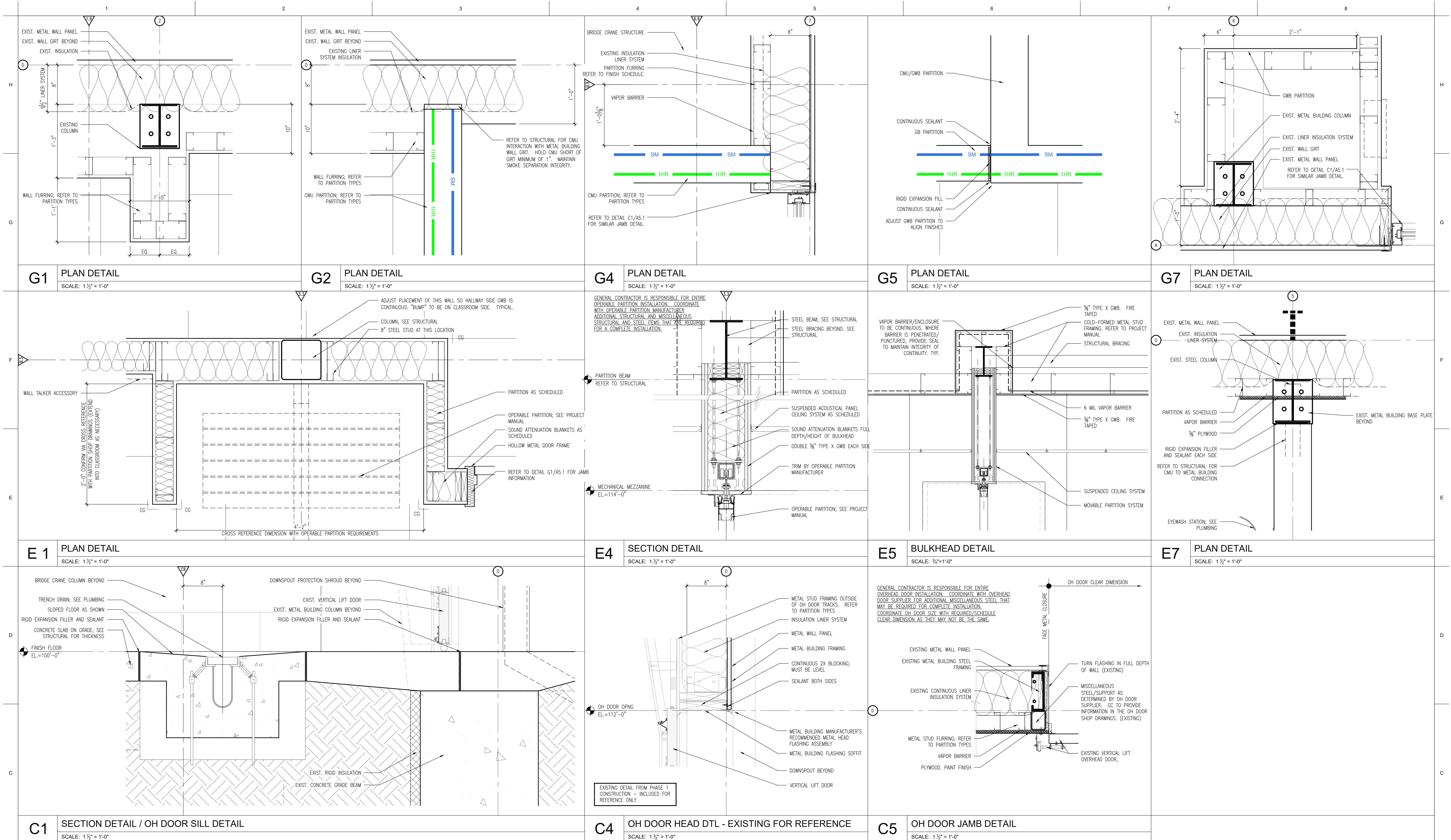
7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

DETAILS

A4-2



A

B

C

D

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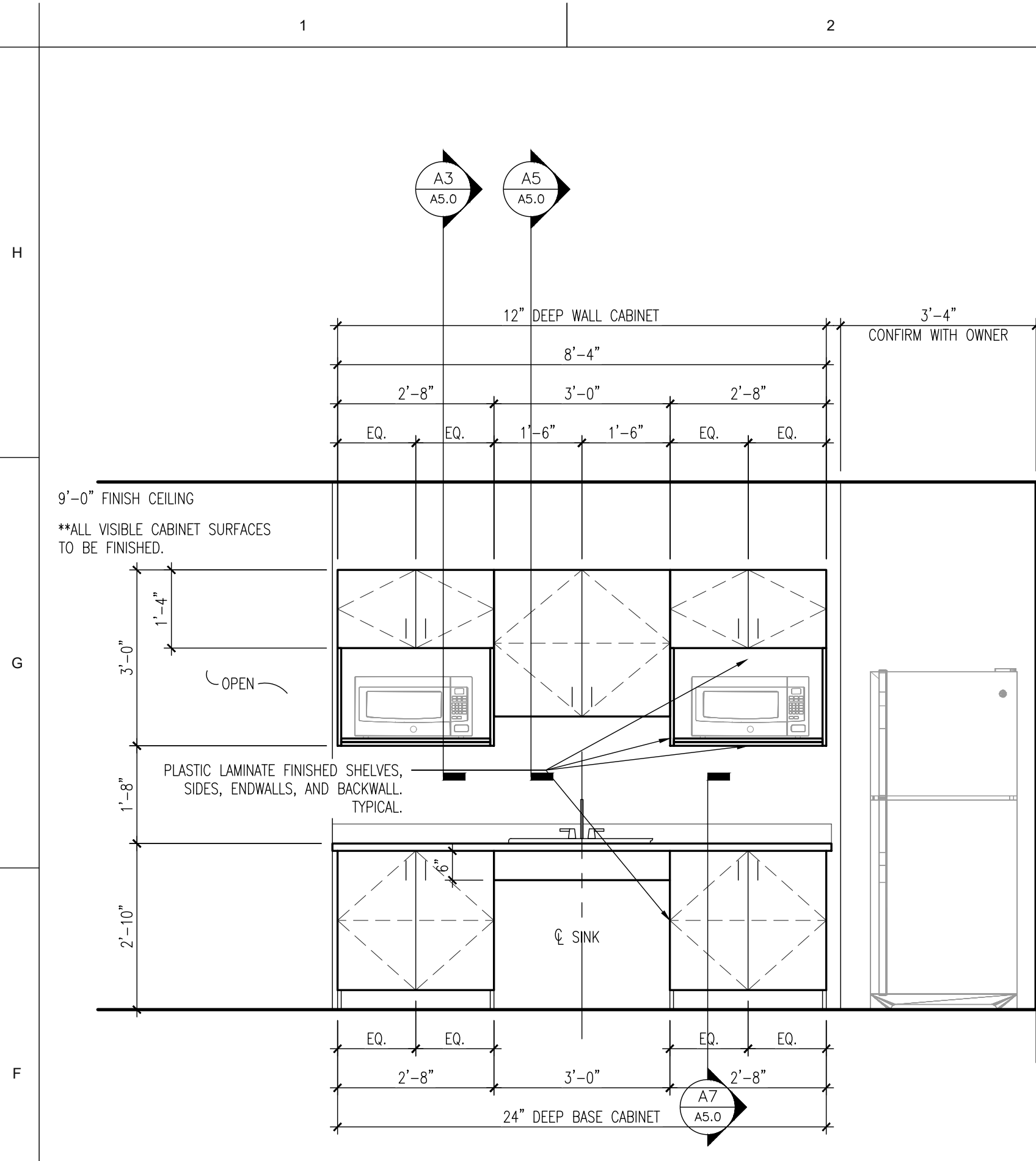
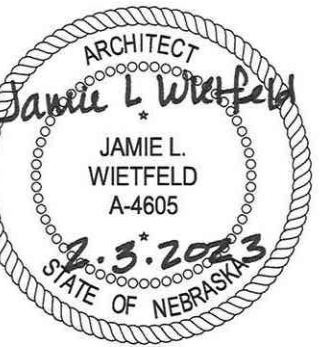
PROJECT TEAM

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Omaha, NE 68114

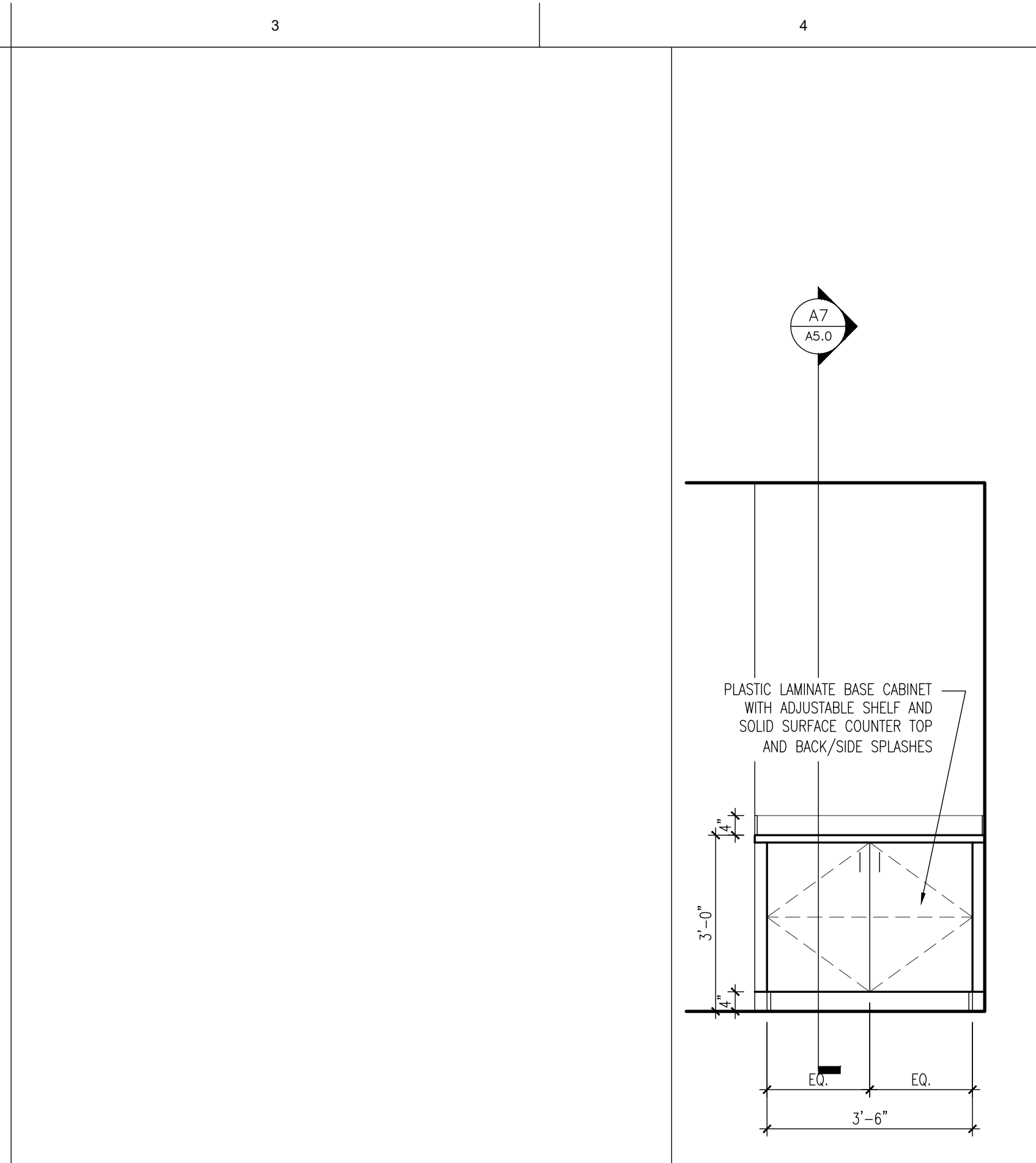
CIVIL  
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BCDM  
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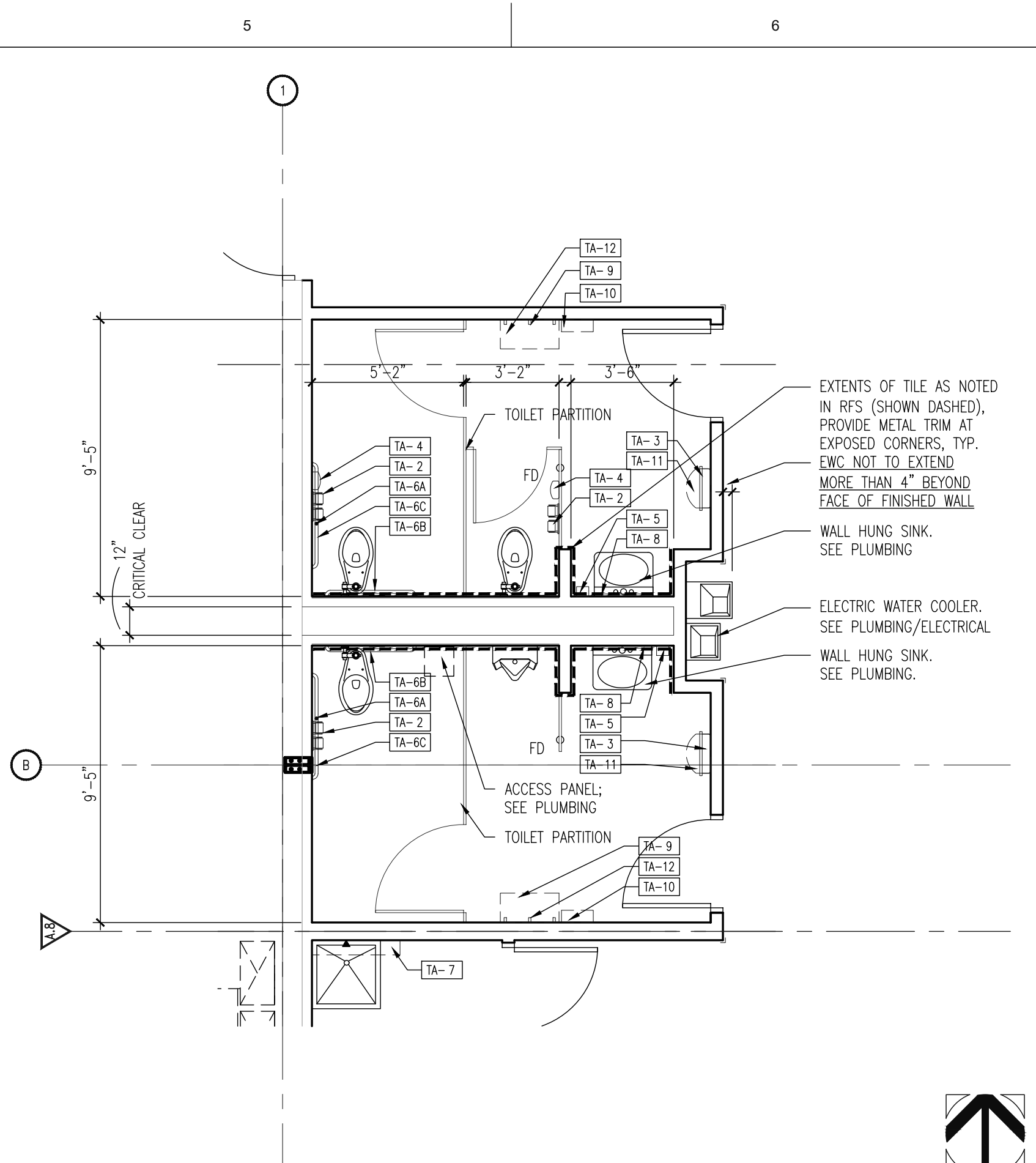
MECHANICAL + ELECTRICAL ENGINEER  
MORRISSEY ENGINEERING  
4940 N 118th St  
Omaha, NE 68164



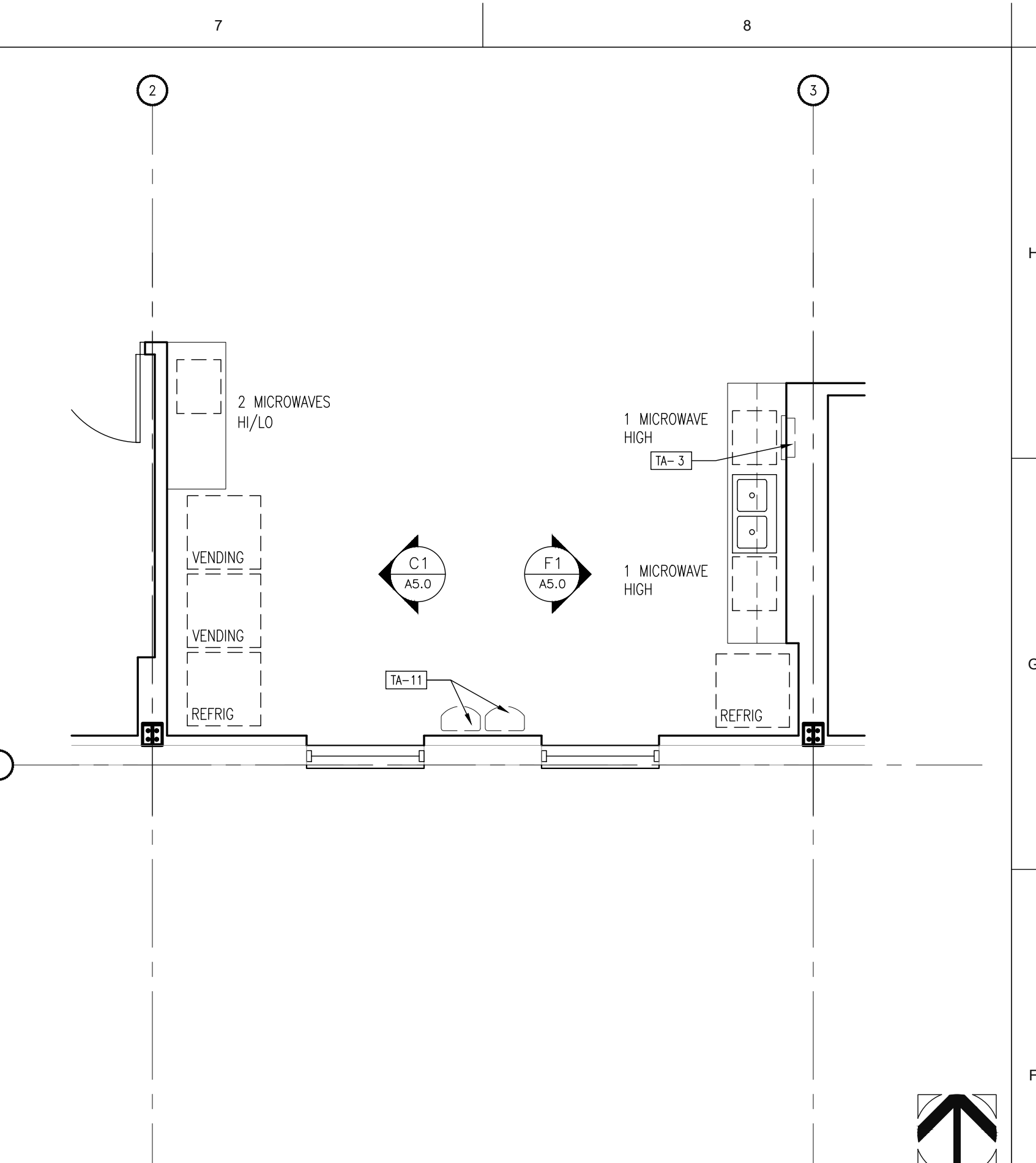
**F1** MILLWORK ELEVATION  
SCALE: 1/2"=1'-0" (BREAK ROOM SINK)



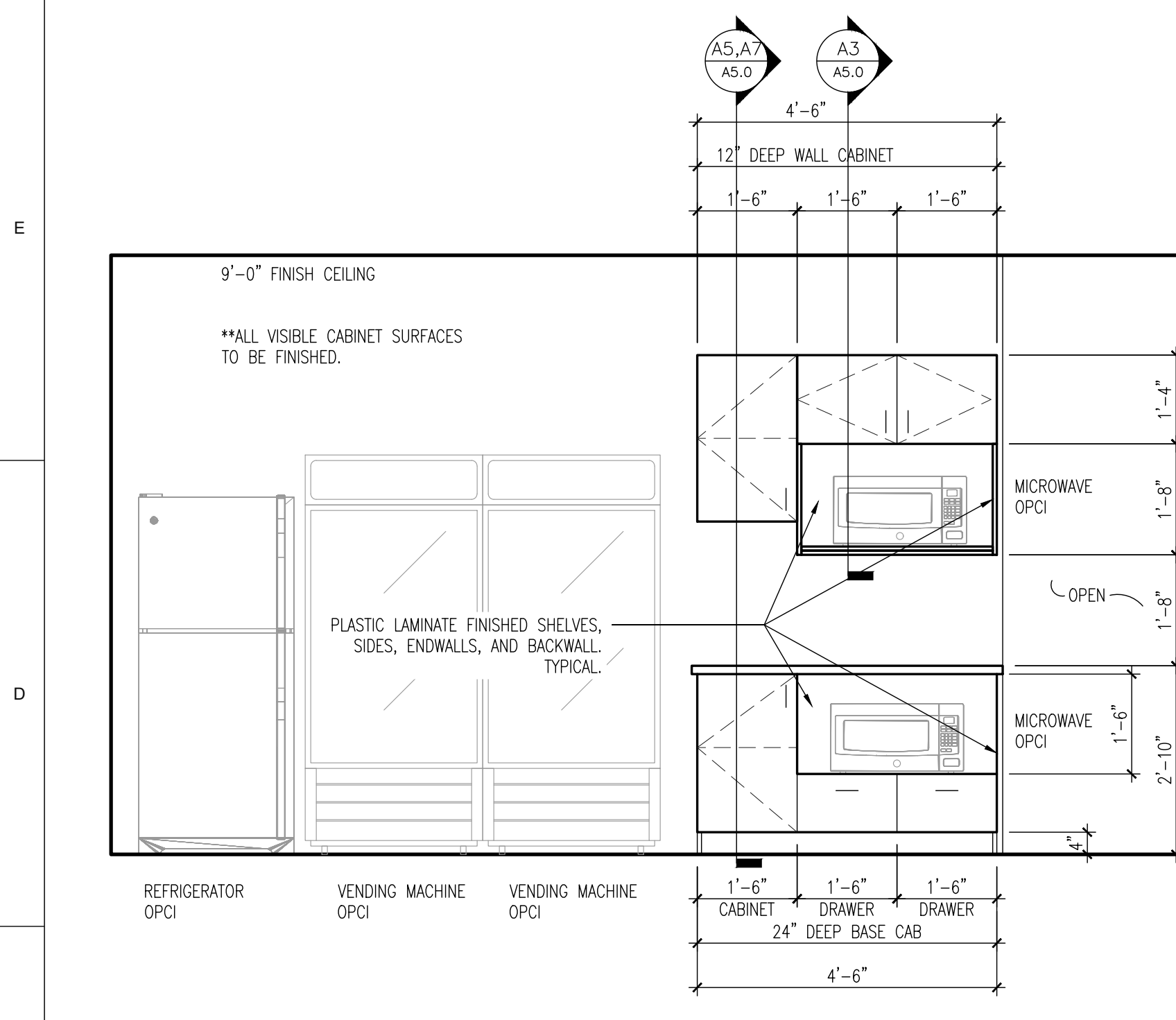
**F4** MILLWORK ELEV.  
SCALE: 1/2"=1'-0"



**F5** ENLARGED FLOOR PLAN - RESTROOMS  
SCALE: 1/2"=1'-0"



**F7** ENLARGED FLOOR PLAN - BREAK ROOM  
SCALE: 1/2"=1'-0"



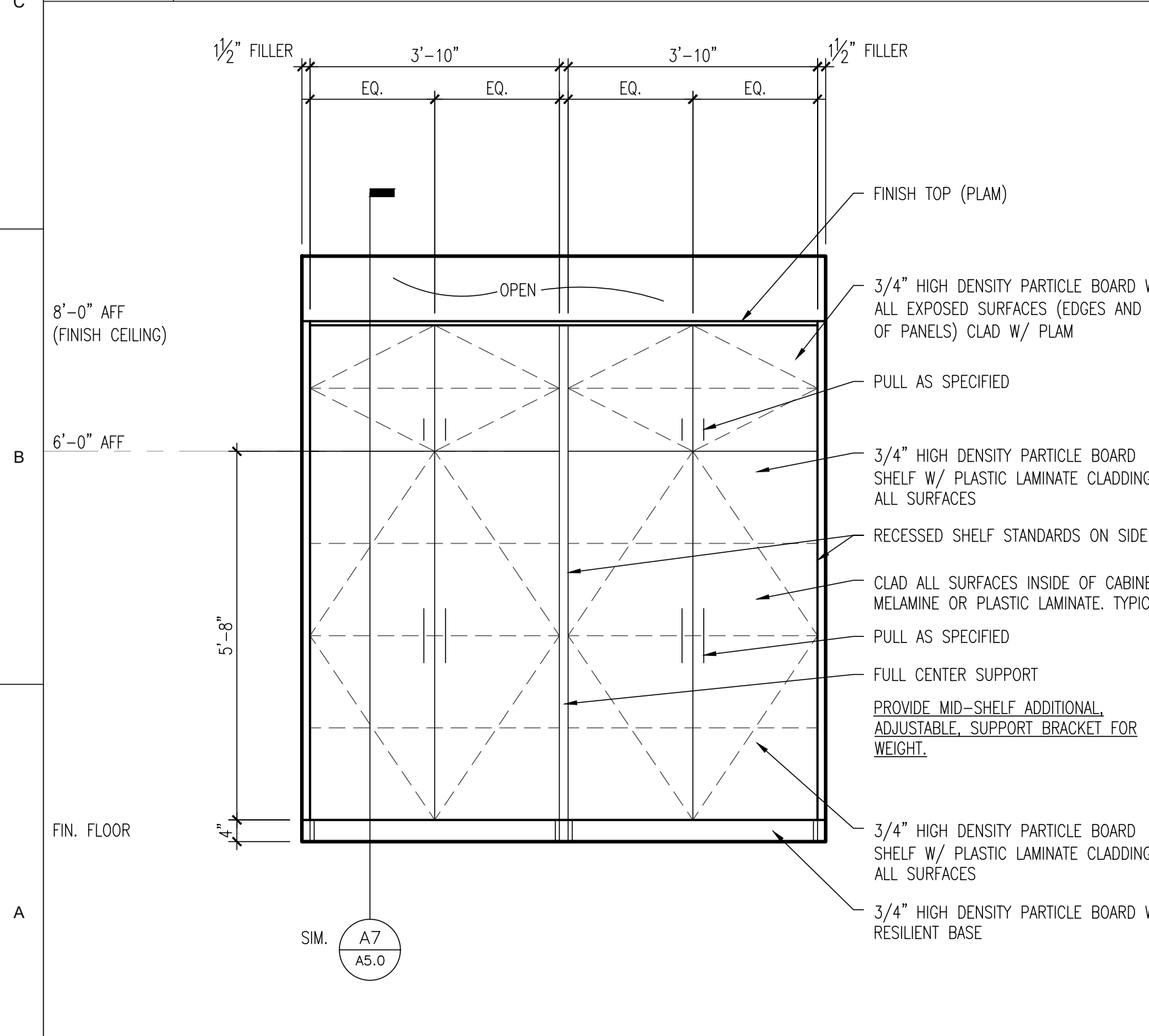
**C1** MILLWORK ELEVATION  
SCALE: 1/2"=1'-0" (BREAK ROOM VENDING WALL)



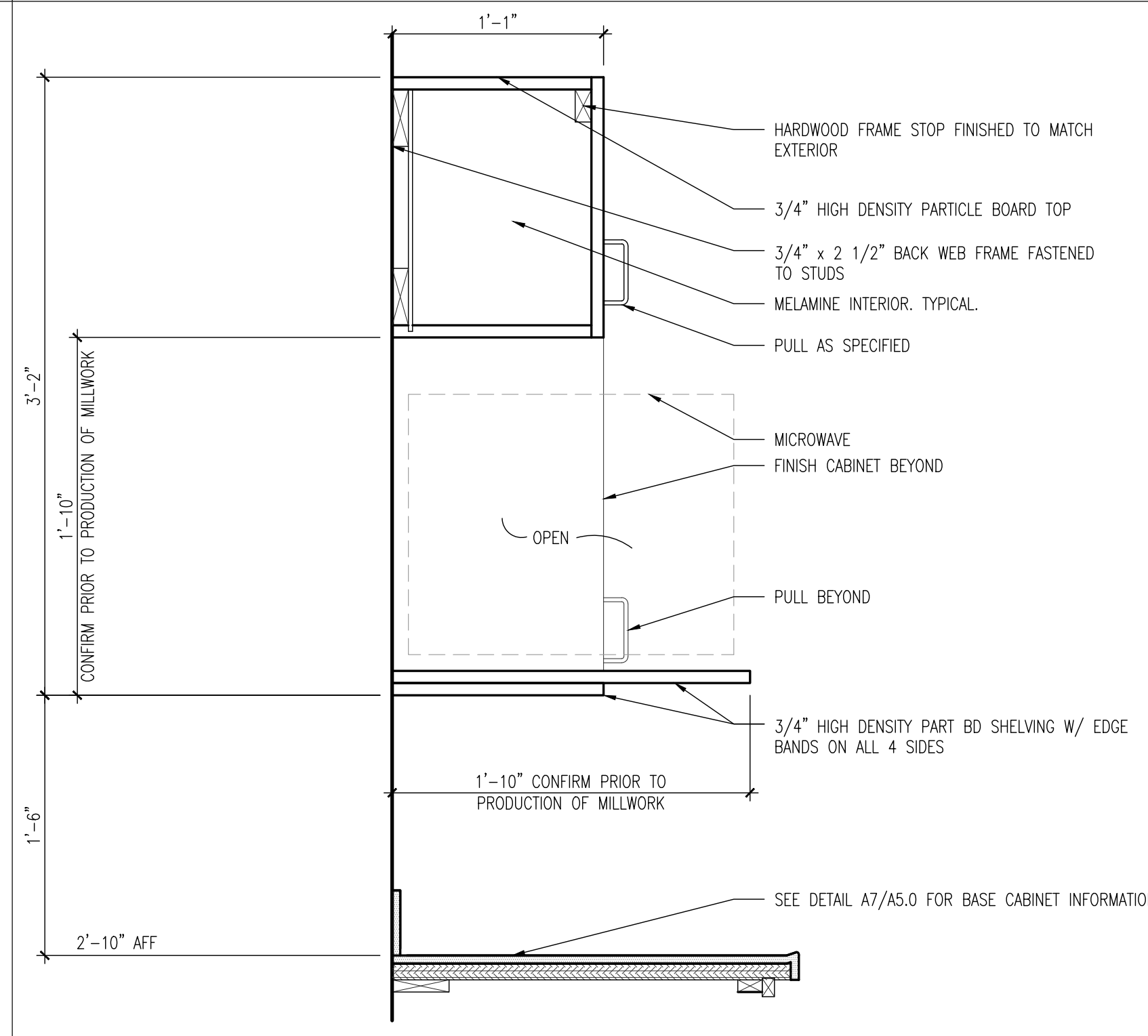
**C5** NOT USED  
SCALE: 1 1/2"=1'-0"

TOILET ACCESSORIES ARE BASIS OF DESIGN: BOBRICK OR BRADLEY

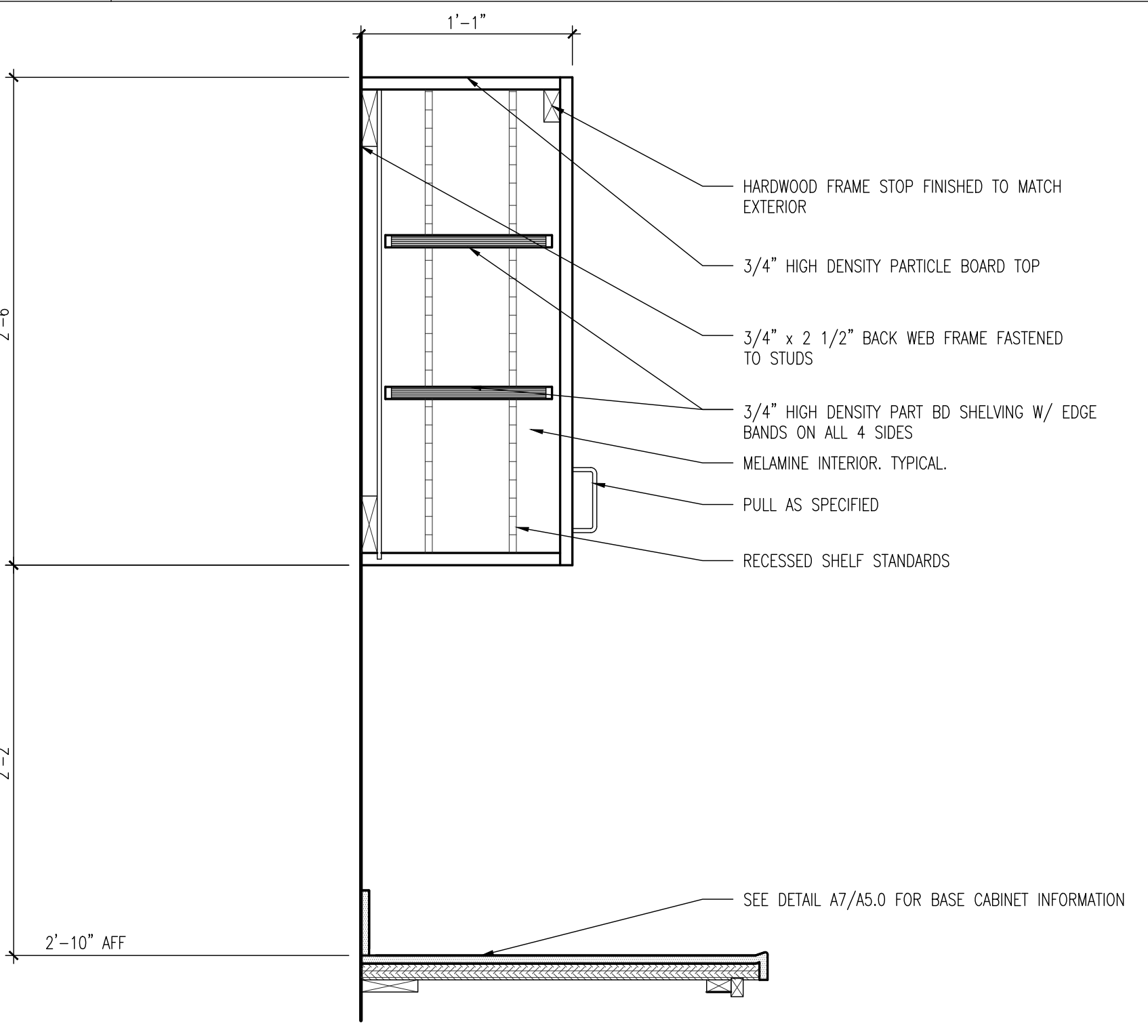
NUMBER	DESCRIPTION	MODEL NO.
TA-1	NOT USED	B-
TA-2	PAPER HOLDER	BRAD-5241
TA-3	BATTERY OPERATED SURFACE MOUNT PAPER TOWEL DISPENSER	GP-59489
TA-4	SURFACE MOUNT NAPKIN DISPOSAL	B-254
TA-5	SOAP DISPENSER (CONFIRM MOUNTING LOCATION W/ OWNER)	GOJO-2740-12
TA-6A	GRAB BAR - 18"	B-6806
TA-6B	GRAB BAR - 36"	B-6806
TA-6C	GRAB BAR - 42"	B-6806
TA-7	MOP HOLDER WITH SHELF - 36"	BRAD-9953
TA-8	MIRROR	B-290
TA-9	SHELF - 24" X 4" STAINLESS STEEL	BRAD-7512
TA-10	SHARPS CONTAINER (CONFIRM WALL LOCATION IN FIELD)	OPCI
TA-11	WASTE RECEPTACLE	OPCI
TA-12	ROBE HOOK	BRAD-9119



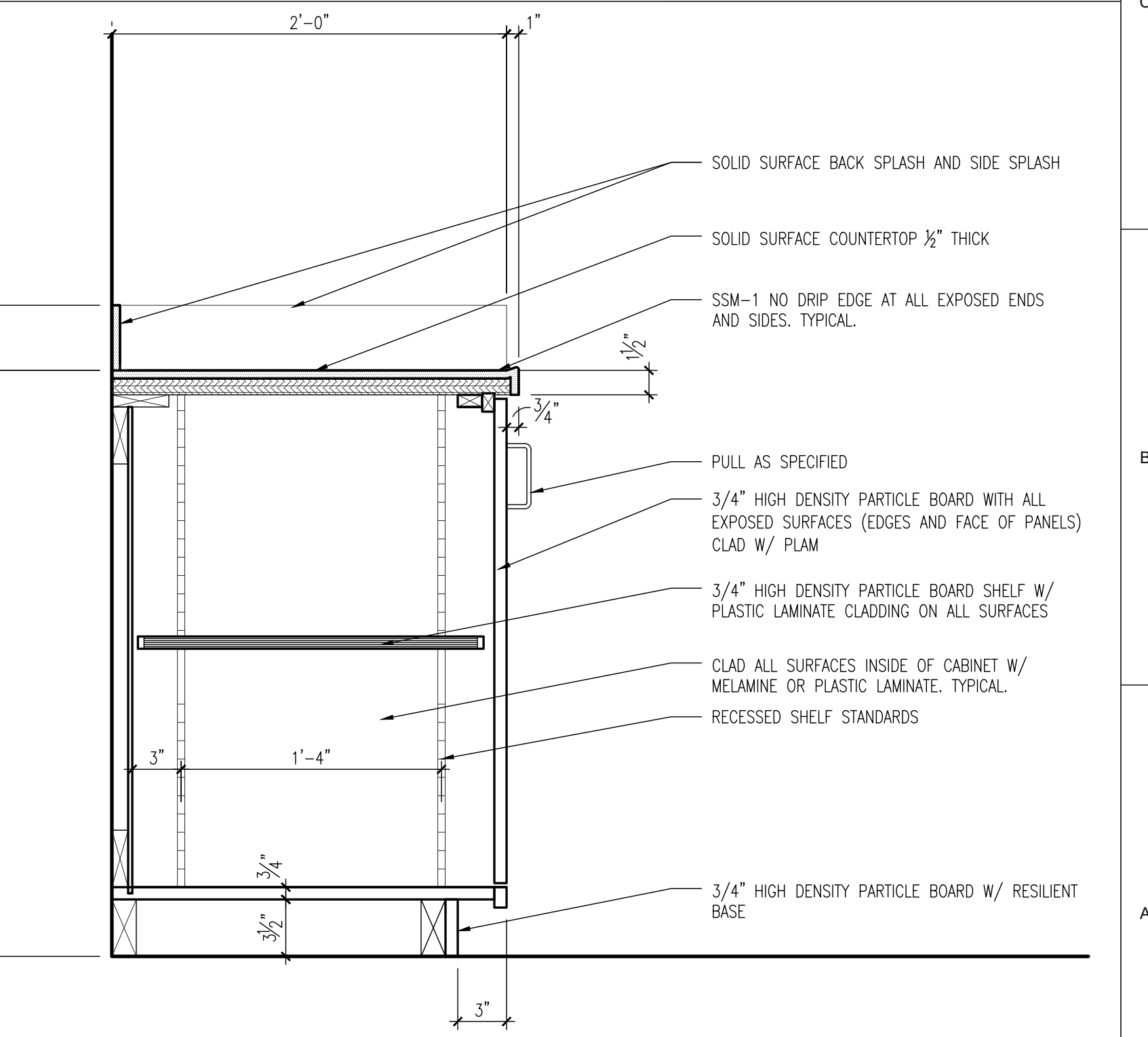
**C3** MILLWORK ELEV.  
SCALE: 1/2"=1'-0" (TRAINING LIBRARY)



**A3** RESTROOM VANITY SECTION AT GWB  
SCALE: 1 1/2"=1'-0"



**A5** MILLWORK SECTION - WALL CABINET  
SCALE: 1 1/2"=1'-0" (AT BREAK ROOM)



**A7** MILLWORK SECTION - BASE CABINET  
SCALE: 1 1/2"=1'-0" (AT PRINT ROOM)

REVISION SCHEDULE

#	Description	Date

TRAINING FACILITY PHASE 2

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

ENLARGED PLANS,  
INTERIOR ELEVATIONS,  
DETAILS

**A5-0**



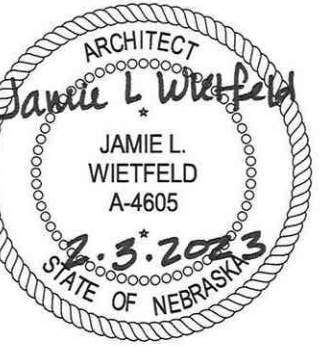
PROJECT TEAM

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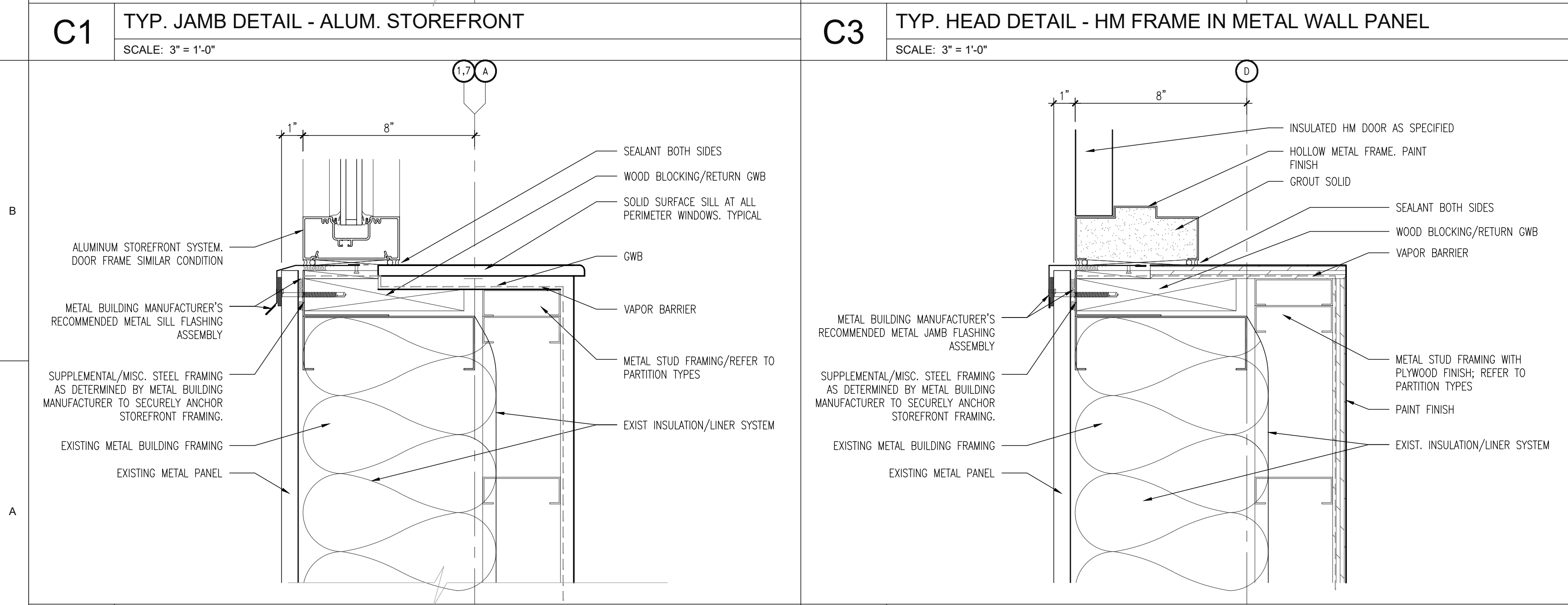
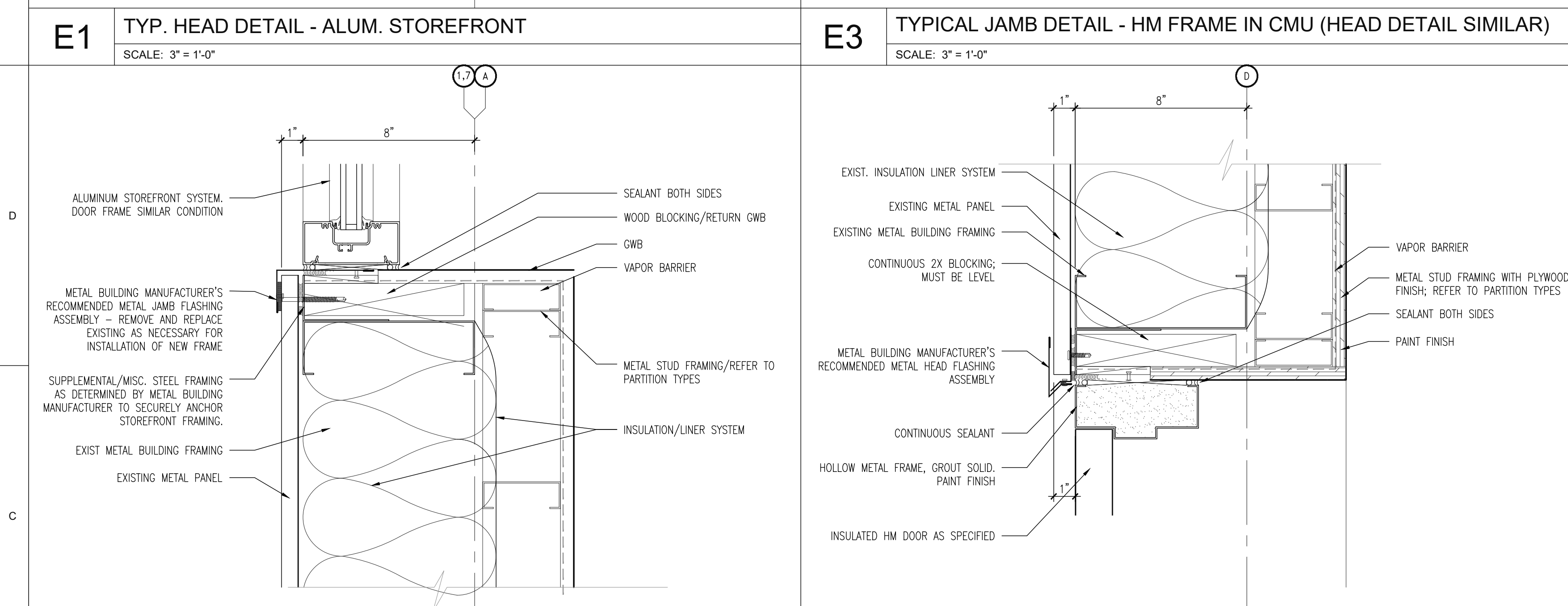
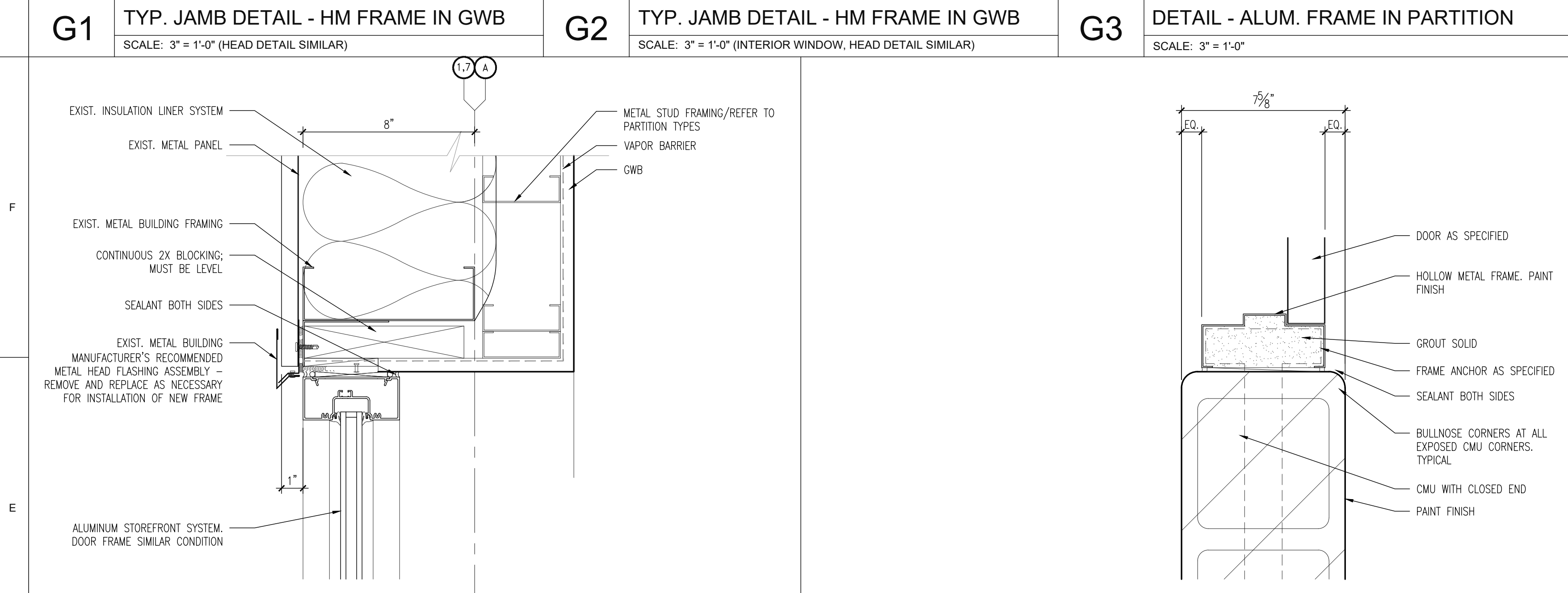
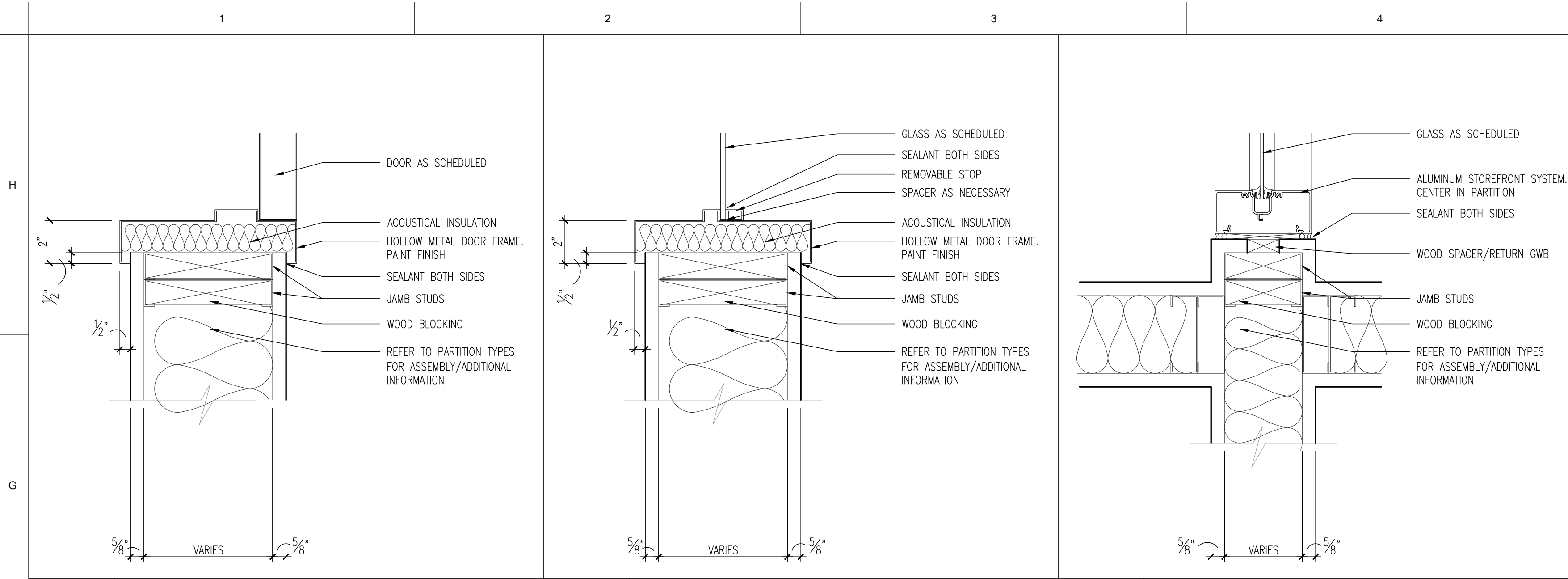
MECHANICAL + ELECTRICAL ENGINEER  
MORRISSEY ENGINEERING  
4940 N 118th St  
Omaha, NE 68164



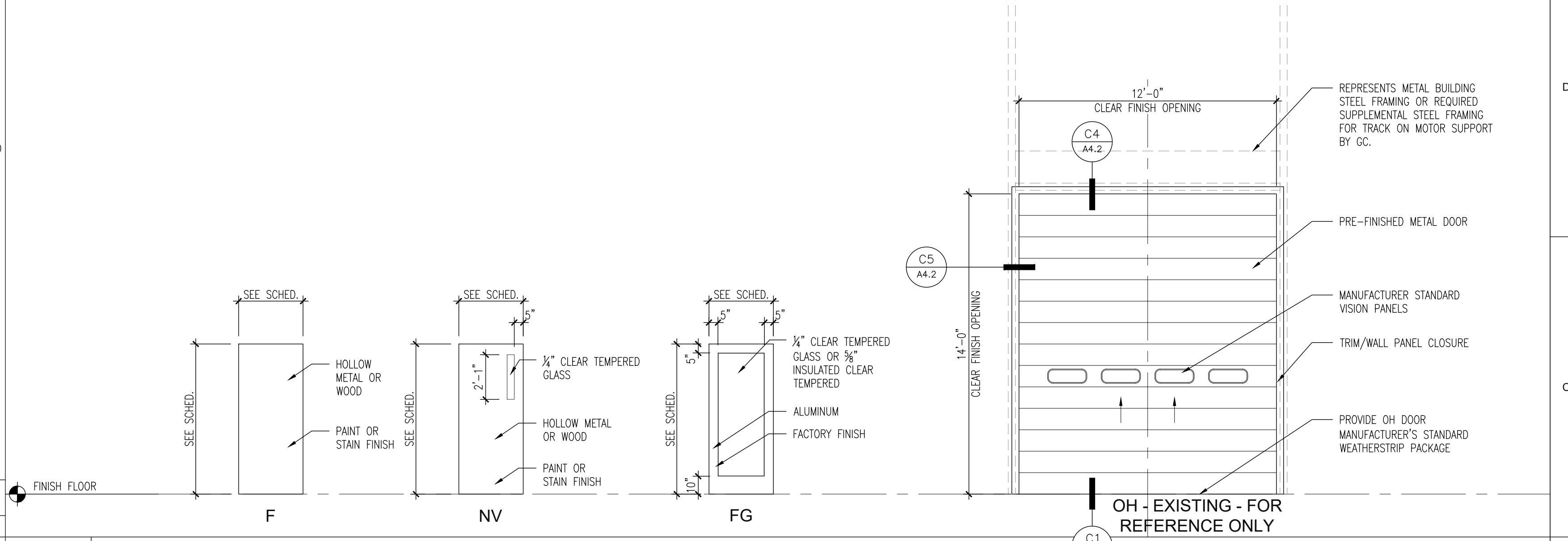
DOOR / FRAME SCHEDULE

DOOR NO.	ROOM	DOOR SIZE			DOOR			FRAME			RATING	NOTES	INSTALLATION PHASE
		WIDTH	HEIGHT	THICK	TYPE	MATL	FINISH	TYPE	MATL	FINISH			
102	ELECTRICAL	3'-0"	7'-0"	1.75"	F	WOOD	STAIN	FR-1	HM	PAINT			PHASE 2
105	MEN	3'-0"	7'-0"	1.75"	F	WOOD	STAIN	FR-1	HM	PAINT			PHASE 2
106	WOMEN	3'-0"	7'-0"	1.75"	F	WOOD	STAIN	FR-1	HM	PAINT			PHASE 2
107A	VESTIBULE	3'-0"	7'-0"	1.75"	F	HM	PAINT	FR-1	HM	PAINT	2,3,4		PHASE 2
108	SIMULATOR 1	3'-0"	7'-0"	1.75"	F	WOOD	STAIN	FR-1	HM	PAINT			PHASE 2
109	SIMULATOR 2	3'-0"	7'-0"	1.75"	F	WOOD	STAIN	FR-1	HM	PAINT			PHASE 2
110	FIRE BRIGADE/STORAGE	PR 3'-0"/2'-0"	7'-0"	1.75"	F	HM	PAINT	FR-1	HM	PAINT	60 MIN		PHASE 2
111	TRAINING LIBRARY	3'-0"	7'-0"	1.75"	F	HM	PAINT	FR-1	HM	PAINT			PHASE 2
112A	ELECTRICAL/A&C LAB	PR 3'-0"/2'-0"	7'-0"	1.75"	F	HM	PAINT	FR-1	HM	PAINT	60 MIN	1	PHASE 2
112B	ELECTRICAL/A&C LAB	3'-0"	7'-0"	1.75"	NV	HM	PAINT	FR-1	HM	PAINT	2,3,4,5		PHASE 1-EXISTING
112C	ELECTRICAL/A&C LAB	OH 12'-0"	14'-0"	2"	OH	ALUM	FACTORY FINISH	FR-1	STEEL	PAINT			PHASE 1-EXISTING
113A	MECHANICAL LAB	3'-0"	7'-0"	1.75"	F	HM	PAINT	FR-1	HM	PAINT	60 MIN	1	PHASE 2
113B	MECHANICAL LAB	3'-0"	7'-0"	1.75"	NV	HM	PAINT	FR-1	HM	PAINT	2,3,4,5		PHASE 1-EXISTING
113C	MECHANICAL LAB	OH 12'-0"	14'-0"	2"	OH	ALUM	FACTORY FINISH	FR-1	STEEL	PAINT			PHASE 1-EXISTING
115	CLASSROOM 1	3'-0"	7'-0"	1.75"	NV	WOOD	STAIN	FR-1	HM	PAINT		NOTE 12	PHASE 2
116	CLASSROOM 2	3'-0"	7'-0"	1.75"	NV	WOOD	STAIN	FR-1	HM	PAINT		NOTE 12	PHASE 2
117	CLASSROOM 3	3'-0"	7'-0"	1.75"	NV	WOOD	STAIN	FR-1	HM	PAINT		NOTE 12	PHASE 2
119	JANITOR	2'-10"	7'-0"	1.75"	F	WOOD	STAIN	FR-1	HM	PAINT		13	PHASE 2
121	OFFICE	3'-0"	7'-0"	1.75"	F	WOOD	STAIN	FR-1	HM	PAINT			PHASE 2
124	MAINT./TRAIN.	3'-0"	7'-0"	1.75"	F	WOOD	STAIN	FR-1	HM	PAINT			PHASE 2
125	COMPUTER LAB	3'-0"	7'-0"	1.75"	F	WOOD	STAIN	FR-1	HM	PAINT			PHASE 2
126A	VESTIBULE	3'-0"	7'-0"	1.75"	FG	ALUM	FACTORY FINISH	FR-2M	ALUM	FACTORY FINISH	9		PHASE 2
126B	VESTIBULE	3'-0"	7'-0"	1.75"	FG	ALUM	FACTORY FINISH	FR-2M	ALUM	FACTORY FINISH	10		PHASE 2
127	OFFICE	3'-0"	7'-0"	1.75"	F	WOOD	STAIN	FR-1	HM	PAINT			PHASE 2
128A	MURPHY'S ALLEY	3'-0"	7'-0"	1.75"	F	HM	PAINT	FR-1	HM	PAINT			PHASE 2
128B	MURPHY'S ALLEY	3'-0"	7'-0"	1.75"	F	HM	PAINT	FR-1	HM	PAINT			PHASE 2
130A	VESTIBULE	3'-0"	7'-0"	1.75"	FG	ALUM	FACTORY FINISH	FR-2M	ALUM	FACTORY FINISH	9		PHASE 2
130B	VESTIBULE	3'-0"	7'-0"	1.75"	FG	ALUM	FACTORY FINISH	FR-2M	ALUM	FACTORY FINISH	10		PHASE 2
202	DATA	3'-0"	7'-0"	1.75"	F	WOOD	STAIN	FR-1	HM	PAINT			PHASE 2

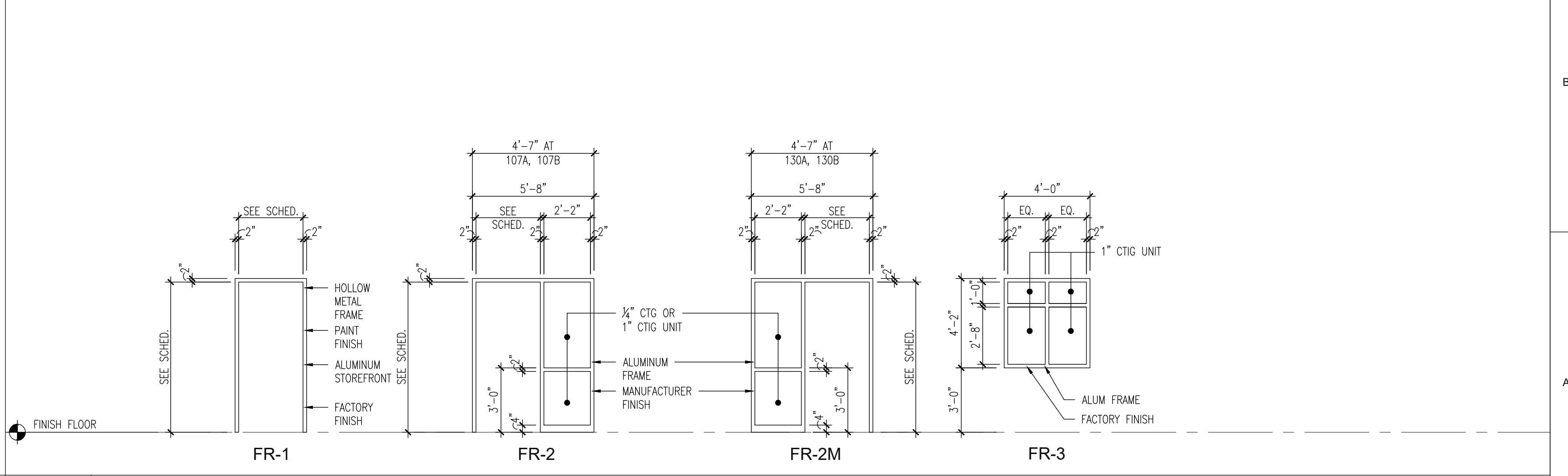
- GENERAL DOOR NOTES:**
- REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION.
  - ALL HARDWARE, INCLUDING HARDWARE FOR STOREFRONT DOORS, TO BE PROVIDED BY DOOR SUPPLIER. COORDINATE KEYING WITH OWNER.
  - PROVIDE DOOR SILENCERS AT ALL DOORS.
  - SCHEDULED DOOR DIMENSIONS ARE CLEAR DIMENSIONS. DOOR SUPPLIER TO CONFIRM ACTUAL DOOR REQUIRED SIZE FOR THIS INSTALLATION(S).
  - NOT USED.
  - GENERAL CONTRACTOR IS REQUIRED TO COORDINATE, PROVIDE, AND INSTALL REQUIRED MISCELLANEOUS STEEL, BLOCKING, FASTENERS, OR SIMILAR DEVICES FOR THE COMPLETE INSTALLATION OF OVERHEAD DOOR, TRACK, AND MOTOR.
- DOOR/FRAME SCHEDULE NOTES:**
- PROVIDE 4" HEAD.
  - PROVIDE INSULATED DOOR.
  - PROVIDE CLOSER.
  - PROVIDE WEATHERSTRIP PACKAGE.
  - PAINT.
  - EXISTING INSULATED OVERHEAD PANEL DOOR.
  - ALL HARDWARE BY DOOR SUPPLIER.
  - DOOR LIFT OPERATOR AND MOTOR BY DOOR SUPPLIER.
  - PROVIDE 1" INSULATED/TEMPERED GLAZING UNIT.
  - PROVIDE 1/4" CLEAR/TEMPERED GLAZING UNIT.
  - THIS DOOR IS LOCATED ON LEVEL 1.
  - PROVIDE DOOR SEALS AND SWEEPS FOR AMMONIA SHELTER IN PLACE.
  - LOCATE DOOR/FRAME AS FAR NORTH AS POSSIBLE.



**D5 DOOR SCHEDULE**  
NO SCALE: (ALL HOLLOW METAL FRAME SIGHTLINE WIDTHS ARE 2" UNLESS NOTED OTHERWISE)



**B5 DOOR TYPES**  
NO SCALE:



**A5 FRAME TYPES**  
NO SCALE: (ALL FRAME SIGHTLINE WIDTHS ARE 2" UNLESS NOTED OTHERWISE)

REVISION SCHEDULE

Description	Date

TRAINING FACILITY PHASE 2

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

DOOR SCHEDULE, FRAME SCHEDULE, DETAILS

A5-1



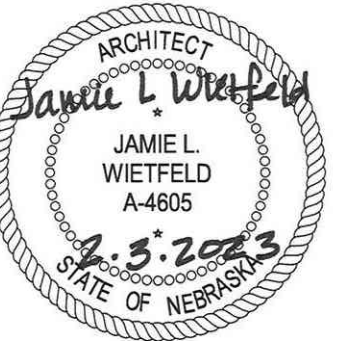
PROJECT TEAM

**ARCHITECTURE + INTERIORS**  
BCDM ARCHITECTS  
1015 N 98th St #300,  
Omaha, NE 68114

**CIVIL**  
LAMP RYNEARSON  
14710 W. Dodge Road, Suite 100  
Omaha, NE 68154

**STRUCTURAL ENGINEER**  
BCDM  
1015 N 98th St #300,  
Omaha, NE 68114

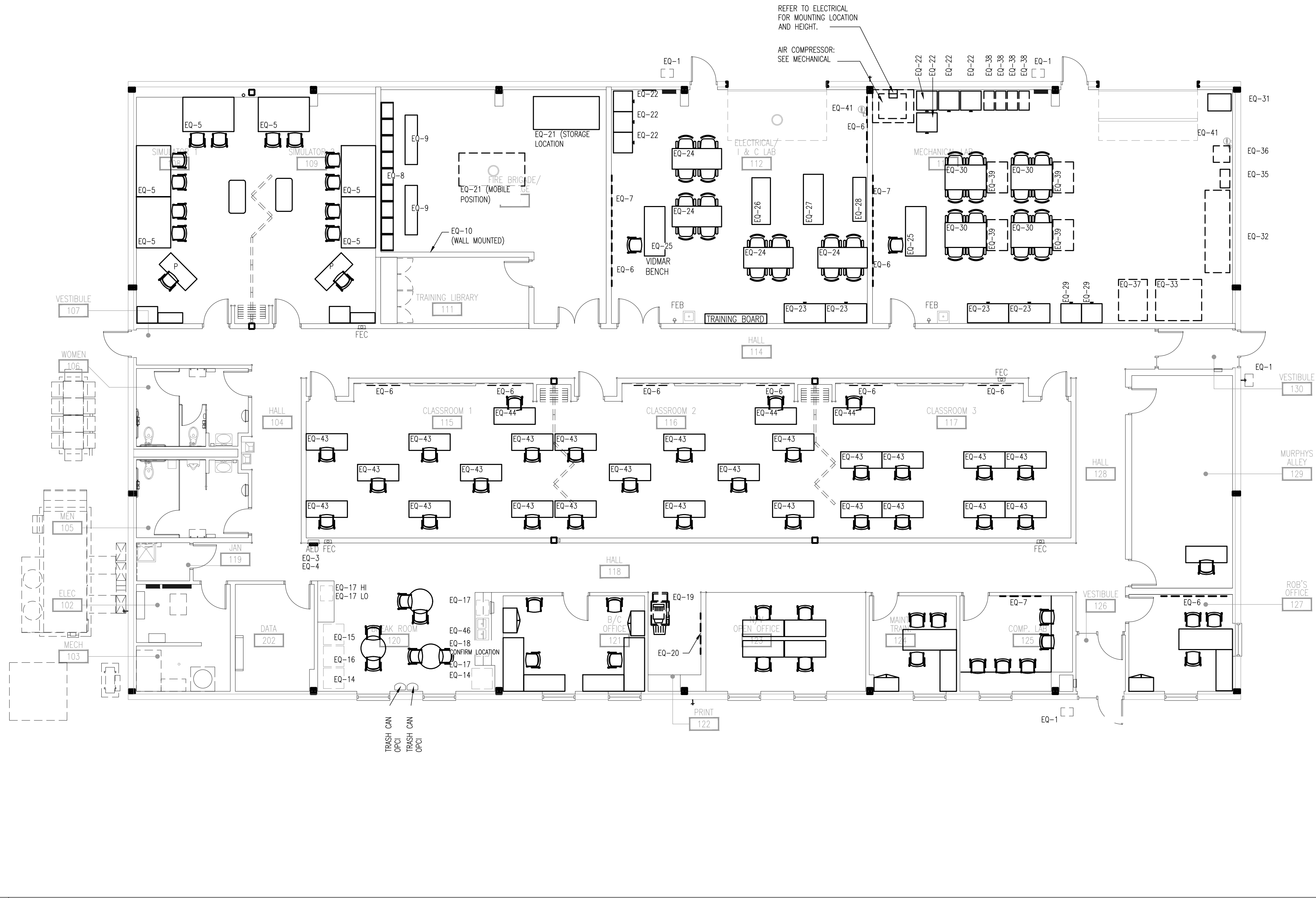
**MECHANICAL + ELECTRICAL ENGINEER**  
MORRISSEY ENGINEERING  
4940 N 118th St  
Omaha, NE 68164



Room No.	Equipment or Item	Notes
EQ-1	MOUNTED BOOT SCRAPER	NORTHERN TOOL + EQUIPMENT; MODEL # BB2: www.NorthernTool.com ----- CONTRACTOR PROVIDED, CONTRACTOR INSTALLED
EQ-2	NOT USED	NOT USED
EQ-3	AED CABINET	SEE SPEC SECTION 10 43 00
EQ-4	FIRST AID KIT	OWNER PROVIDED, OWNER INSTALLED
EQ-5	CONSOLES	OWNER PROVIDED, OWNER INSTALLED
EQ-6	WHITEBOARD	SEE SPEC SECTION 10 11 00
EQ-7	WALL MOUNT FOR DISPLAY	SEE ELECTRICAL
EQ-8	BUNKER GEAR LOCKERS	SEE SPEC SECTION 10 51 43
EQ-9	BENCHES	SEE SPEC SECTION 10 21 13-19
EQ-10	BREATHING APPARATUS MOUNTS QUANTITY: 6 (SIX) REQUIRED	GRAINGER, INC.; SUGATSUNE WALL HOOK WITH A WORKING LOAD OF 26 LBS, ITEM #4DRV7: www.grainger.com. OR APPROVED EQUAL ----CONTRACTORE PROVIDED, CONTRACTOR INSTALLED
EQ-11	NOT USED	
EQ-12	WHITEBOARD WALL COVERING	SEE SPEC SECTION 09 72 00
EQ-13	PROJECTION SCREEN	SEE ELECTRICAL
EQ-13A	PROJECTOR WITH CEILING MOUNTS	SEE ELECTRICAL
EQ-14	REFRIGERATOR	OWNER PROVIDED, OWNER INSTALLED
EQ-15	VENDING - SNACK	OWNER PROVIDE, OWNER INSTALLED
EQ-16	VENDING - BEVERAGE	OWNER PROVIDE, OWNER INSTALLED
EQ-17	MICROWAVE	OWNER PROVIDE, OWNER INSTALLED
EQ-18	COFFEE MAKER	OWNER PROVIDE, OWNER INSTALLED
EQ-19	PRINTER	OWNER PROVIDED, OWNER INSTALLED
EQ-20	TACK BOARD	SEE SPEC SECTION 10 11 00
EQ-21	FLOW TRAINER	OWNER PROVIDED, OWNER INSTALLED
EQ-22	VIDMAR 9 DRAWER	OWNER PROVIDED, OWNER INSTALLED
EQ-23	VIDMAR 4 DRAWER	OWNER PROVIDED, OWNER INSTALLED
EQ-24	VIDMAR BENCH W/OUT STORAGE	OWNER PROVIDED, OWNER INSTALLED
EQ-25	VIDMAR BENCH W/ STORAGE	OWNER PROVIDED, OWNER INSTALLED
EQ-26	RESISTANCE TESTER PART 1	OWNER PROVIDED, OWNER INSTALLED
EQ-27	RESISTANCE TESTER PART 2	OWNER PROVIDED, OWNER INSTALLED
EQ-28	LAB VOLT	OWNER PROVIDED, OWNER INSTALLED
EQ-29	VIDMAR LOCKER	OWNER PROVIDED, OWNER INSTALLED
EQ-30	WELDING BENCH	OWNER PROVIDED, OWNER INSTALLED
EQ-31	HOZTY PRESSURE WASHER	OWNER PROVIDED, OWNER INSTALLED
EQ-32	LE BLOND LATHE	OWNER PROVIDED, OWNER INSTALLED
EQ-33	ACRA CNC MILL	OWNER PROVIDED, OWNER INSTALLED
EQ-34	NOT USED	NOT USED
EQ-35	WILTON DRILL PRESS	OWNER PROVIDED, OWNER INSTALLED
EQ-36	BENCH GRINDER	OWNER PROVIDED, OWNER INSTALLED
EQ-37	PEERLESS VERTICAL SAW	OWNER PROVIDED, OWNER INSTALLED
EQ-38	WELDERS	OWNER PROVIDED, OWNER INSTALLED
EQ-39	WELDER EXHAUST CART	OWNER PROVIDED, OWNER INSTALLED
EQ-40	CNC EXHAUST	SEE MECHANICAL
EQ-41	EYE WASH STATION	SEE MECHANICAL
EQ-42	NOT USED	NOT USED
EQ-43	STUDENT WORK STATIONS AND CHAIRS	OWNER PROVIDED, OWNER INSTALLED
EQ-44	INSTRUCTOR DESK AND CHAIR	OWNER PROVIDED, OWNER INSTALLED
EQ-45	NOT USED	NOT USED
EQ-46	GARBAGE DISPOSAL	SEE MECHANICAL
EQ-47	NOT USED	NOT USED

REFER TO ELECTRICAL DRAWINGS AND 1/EO-0 AND 3/EA-3 FOR CO-TRONIC DEVICE INFORMATION AND LOCATIONS.

IN ADDITION TO DATA AND ELECTRICAL ROOM, WHERE BACKING IS NECESSARY OR REQUIRED, FIRE TREATED BACKING IS TO BE USED. PAINT FINISH AS SCHEDULED. TYPICAL.



D4 FURNITURE, FIXTURE, EQUIPMENT PLAN - LEVEL 1  
SCALE: 1/8"=1'-0"

REVISION SCHEDULE

#	Description	Date

TRAINING FACILITY PHASE 2

7264 L ROAD  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

FURNITURE, FIXTURE, EQUIPMENT PLAN - LEVEL 1

A6-0



**PROJECT TEAM**

**ARCHITECTURE + INTERIORS**

BCDM ARCHITECTS  
1015 N 98th St #300,  
Omaha, NE 68114

**CIVIL ENGINEER**

COMPANY NAME  
14710 W Dodge Road, Suite 100,  
Omaha, NE 68154

**STRUCTURAL ENGINEER**

BCDM  
1015 N 98th St #300,  
Omaha, NE 68114

**MECHANICAL + ELECTRICAL**

**ENGINEER**

MORRISSEY ENGINEERING  
4540 N 118th St,  
Omaha, NE 68164



REVISION SCHEDULE		
#	Description	Date

**TRAINING  
FACILITY  
PHASE 2**

7264 L ROAD  
NEBRASKA CITY, NE  
68410

**OMAHA PUBLIC  
POWER DISTRICT**

**GENERAL  
STRUCTURAL NOTES**

**SO-0**

**MASONRY**

- CONCRETE MASONRY UNITS SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C90. MASONRY UNIT COMPRESSIVE STRESS = 2000 PSI. MASONRY ASSEMBLAGE COMPRESSIVE STRESS Fm = 1500 PSI.
- MORTAR SHALL CONFORM TO ASTM C270 TYPE S OR M, Fc = 2000 PSI.
- GROUTING FOR REINFORCED MASONRY CELLS TO BE LOW LIFT WITH MAXIMUM GROUT HEIGHT = 4'-8" UNLESS SPECIFICALLY APPROVED.
- ALL MASONRY WALLS SHALL BE REINFORCED HORIZONTALLY WITH HOT DIPPED GALVANIZED STEEL 9 GAGE LADDER TYPE JOINT REINFORCING AT 16" O.C. REINFORCE WALLS VERTICALLY AS SHOWN ON DRAWINGS WITH LAP SPLICES = 40 BAR DIAMETERS.
- PROVIDE (1) - #5 VERTICAL BAR AT ALL CORNERS AND ENDS OF WALLS. PROVIDE (1) - #5 BAR ON EACH SIDE OF ALL OPENINGS. EXTEND BARS 2'-0" BEYOND OPENING.
- PROVIDE CONTINUOUS BOND BEAM AT ALL BEARING LOCATIONS AND TOP OF WALL. PROVIDE 100% SOLID BEARING, MINIMUM 3 COURSES UNDER BEAMS, 1 COURSE UNDER JOISTS, UNLESS DETAILED OTHERWISE.
- HOLLOW MASONRY UNITS TO BE LAID WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. WEBS SHALL ALSO BE BEDDED IN ALL UNITS. TOOL ALL JOINTS.
- PROVIDE TEMPORARY SHORING NECESSARY FOR LATERAL SUPPORT OF ALL MASONRY WALLS.
- PROVIDE LINTELS OVER ALL OPENINGS IN MASONRY WALLS. REFER TO ALL DRAWINGS FOR SIZES AND LOCATIONS OF OPENINGS.
- THE FABRICATOR SHALL SUPPLY LOOSE ANGLE LINTELS OVER ALL MASONRY OPENINGS AND RECESSES. LINTELS NOT SHOWN OR DETAILED ON DRAWINGS SHALL CONSIST OF A 3/8" BENT PLATE WITH 6" VERTICAL LEG AND HORIZONTAL LEG 1/2" LESS THAN EXTERIOR VENEER SURFACE TO SUBSTRATE WITH 8" END BEARING.
- POST-INSTALLED MECHANICAL ANCHORS: HILTI KWIK BOLT TZ, ICC-ES ESR-3785 (CARBON STEEL AND ANSI TYPE 304 STAINLESS STEEL).
- POST-INSTALLED ADHESIVE ANCHORS: HILTI HAS THREADED RODS, INTERNALLY THREADED INSERTS, OR REBAR WITH HILTI HIT-HY 70 INJECTION ADHESIVE ANCHORING SYSTEM FOR ANCHORAGE TO UNGROUTED CMU, ICC-ES ESR-2682.
- POST-INSTALLED ADHESIVE ANCHORS: HILTI HAS THREADED RODS, INTERNALLY THREADED INSERTS, OR REBAR WITH HILTI HIT-HY 200 INJECTION ADHESIVE ANCHORING SYSTEM FOR ANCHORAGE TO GROUTED CMU, ICC-ES ESR-3963.

**STRUCTURAL STEEL**

- ALL MATERIAL AND WORK SHALL CONFORM TO THE 'AISC' MANUAL OF STEEL CONSTRUCTION LATEST EDITION, AND 'AISC' CODE OF STANDARD PRACTICE, LATEST EDITION.
- WIDE FLANGE AND WT SECTIONS: ASTM A992, GRADE 50, U.N.O. ALL OTHER SHAPES AND PLATES: ASTM A36
- SQUARE AND RECTANGULAR TUBING: ASTM A500 GRADE B, Fy=46 KSI. STRUCTURAL ROUND PIPE: ASTM A500 OR A53, GRADE B.
- BOLTS FOR STRUCTURAL STEEL CONNECTIONS: 3/4" DIAMETER, ASTM A325, REGULAR HIGH STRENGTH BOLTS WITH HARDENED WASHERS. ALL HIGH STRENGTH BOLTS SHALL BE TORQUED PER ASTM A325, UNLESS DETAILED OTHERWISE.
- ANCHOR RODS: ASTM F1554 STEEL OR AS SPECIFIED, WITH EMBEDDED NUT AND WASHER, LEVELING & TOP NUT WITH PLATE WASHERS.
- WELDING TO BE PERFORMED BY WELDERS THAT ARE AWS CERTIFIED IN TYPE OF WELD CALLED FOR USING LOW HYDROGEN E70 ELECTRODES.
- CONNECTIONS TO BE DESIGNED IN ACCORDANCE WITH 'AISC' STANDARDS. CONNECTION DESIGN SHALL BE BY STEEL FABRICATOR UNLESS SPECIFICALLY DETAILED OTHERWISE. CONNECTIONS SHALL SUPPORT A MINIMUM OF ONE-HALF THE TOTAL UNIFORM LOAD CAPACITY CALCULATED FROM THE TABLES FOR ALLOWABLE UNIFORM LOADS FOR BEAMS IN THE AISC 'MANUAL OF STEEL CONSTRUCTION', LATEST EDITION.
- ALL OPEN ENDS OF TUBE SECTIONS SHALL BE SUPPLIED WITH A 1/4" SEAL WELDED END PLATE.
- SUBMIT DETAILED FABRICATION AND ERECTION DRAWINGS FOR ALL WORK. SHOP DRAWINGS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE IN WHICH THE PROJECT IS LOCATED.
- INTERIOR STRUCTURAL STEEL THAT IS NOT EXPOSED TO VIEW WILL REQUIRE NO PRIMER OR PAINT. EXPOSED STRUCTURAL STEEL TO BE PAINTED PER PAINT SYSTEM SHOWN IN SPECIFICATIONS, SURFACES SHALL BE CLEANED IN ACCORDANCE WITH SSPC RATING PER PAINT MANUFACTURER'S RECOMMENDATIONS.
- ALL EXTERIOR EXPOSED STRUCTURAL STEEL AND LINTELS TO BE GALVANIZED.

**METAL BUILDING**

- THE BUILDING SHALL BE DESIGNED FOR THE FOLLOWING MINIMUM DEFLECTION REQUIREMENTS:
  - A. RRAME RAFTERS L/240
  - B. FRAME SIDESWAY H/120
  - C. PURLINS L/240
  - D. GIRTS L/120
  - E. ENDWALL POSTS L/180
  - F. ROOF PANEL L/150
  - G. WALL PANEL L/120

**SPECIAL INSPECTIONS**

- CONTRACTOR TO COORDINATE SPECIAL INSPECTIONS IN ACCORDANCE WITH IRC 2012 SECTION 1705. AS NOTED BELOW, SPECIAL INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT INSPECTION FIRM UNDER THE SUPERVISION OF A LICENSED ENGINEER AND APPROVED BY THE BUILDING OFFICIAL AND ARCHITECT & ENGINEER OF RECORD.
- SPECIAL INSPECTOR SHALL OBSERVE WORK FOR CONFORMANCE w/ DESIGN DRAWINGS & SPECIFICATIONS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. UNCORRECTED DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT & ENGINEER OF RECORD.
- MONTHLY INSPECTION REPORTS SHALL BE PROVIDED TO BUILDING OFFICIAL AND ARCHITECT & ENGINEER OF RECORD.
- SPECIAL INSPECTION REQUIREMENTS INCLUDE THE FOLLOWING:
  - STRUCTURAL STEEL PER SECTION 1705.2 AND AISC 360
  - STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL PER TABLE 1705.2.2.
  - WELDING OF STRUCTURAL STEEL PER SECTION 1705.2, AISC 360, AND AWS D1.1. WELDING OF COLD FORMED STEEL FLOOR AND ROOF DECK PER TABLE 1705.2.2 AND AWS D1.3.
  - CONCRETE CONSTRUCTION PER SECTION 1705.3 AND TABLE 1705.3. EXCEPTIONS 1 AND 2 NOT ALLOWED.
  - STRUCTURAL MASONRY PER SECTION 1705.4, TMS 402/ACI 530/ASCE 5, AND TMS 602/ACI 530.1/ASCE 6.
  - SOIL EXCAVATIONS AND FILLING PER SECTION 1705.6 AND GEOTECHNICAL REPORT.
  - POST INSTALLED EXPANSION AND ADHESIVE ANCHOR INSTALLATION IN ACCORDANCE WITH ICBO REPORTS NOTED THIS SHEET.

**DESIGN CRITERIA**

- BUILDING CODE: INTERNATIONAL BUILDING CODE 2012 + ANY APPLICABLE LOCAL AMENDMENTS.
- DEAD LOAD: WEIGHT OF ALL STRUCTURAL AND NON-STRUCTURAL PERMANENT COMPONENTS OF THE BUILDING.
- ROOF LIVE LOADS: MIN. LOAD USED IN DESIGN IS GREATER OF 20 PSF OR APPLICABLE SNOW DRIFT.
- ROOF SNOW LOAD FACTORS:
  - GROUND SNOW LOAD (Pg) 30 PSF
  - FLAT ROOF SNOW LOAD (Pf) 20 PSF
  - SNOW EXPOSURE FACTOR (Ce) 1.0
  - SNOW LOAD IMPORTANCE FACTOR (Is) 1.0
  - THERMAL FACTOR (Ct) 1.0
- WIND LOAD FACTORS:
  - BASIC WIND SPEED 115 MPH
  - RISK CATEGORY II
  - EXPOSURE CATEGORY C
- SEISMIC LOAD FACTORS:
  - SITE CLASS D
  - SPECTRAL RESPONSE COEFFICIENT SDS 0.084
  - SPECTRAL RESPONSE COEFFICIENT SD1 0.079
  - SEISMIC IMPORTANCE FACTOR Ie 1.0
  - RISK CATEGORY II
  - SEISMIC DESIGN CATEGORY A
- NO PROVISIONS FOR FUTURE EXPANSION

**COORDINATION AND VERIFICATION**

- ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR AND SHALL CONFORM TO THOSE SHOWN ON OTHER DRAWINGS. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES FOUND.
- IF MATERIALS, QUANTITIES, STRENGTHS OR SIZES INDICATED BY THE DRAWINGS OR SPECIFICATIONS ARE NOT IN AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR GREATER QUANTITY, STRENGTH OR SIZE INDICATED, SPECIFIED OR NOTED SHALL BE PROVIDED.
- MECHANICAL FRAMING LOADS, OPENINGS, AND STRUCTURE, ARE SHOWN FOR BIDDING PURPOSES ONLY. CONTRACTOR SHALL OBTAIN APPROVAL OF MECHANICAL AND OTHER TRADES BEFORE PROCEEDING WITH SUCH PORTION OF THE WORK.

**FOUNDATIONS**

- ALL FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE NET BEARING PRESSURE = 2000 PSF
- PROVIDE SHEETING, SHORING, AND BRACING AS REQUIRED TO PROTECT ADJACENT BUILDINGS, STREET, AND UTILITIES.
- AT PERIMETER FOOTINGS AND FOOTINGS BENEATH UNHEATED AREAS, FROST DEPTH TO BE MINIMUM 42 INCHES BELOW FINISH GRADE.
- SUBSOIL INVESTIGATION REPORT AND BORING LOGS ARE INCLUDED IN THE PROJECT SPECIFICATIONS. THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THIS REPORT AND FOLLOW ALL RECOMMENDATIONS.
- NOTIFY ENGINEER AND GEOTECHNICAL ENGINEER OF UNUSUAL SOIL CONDITIONS BEFORE PROCEEDING WITH WORK. THIS INCLUDES SOIL CONDITIONS IN VARIANCE WITH TEST BORINGS.

**CAST-IN-PLACE CONCRETE**

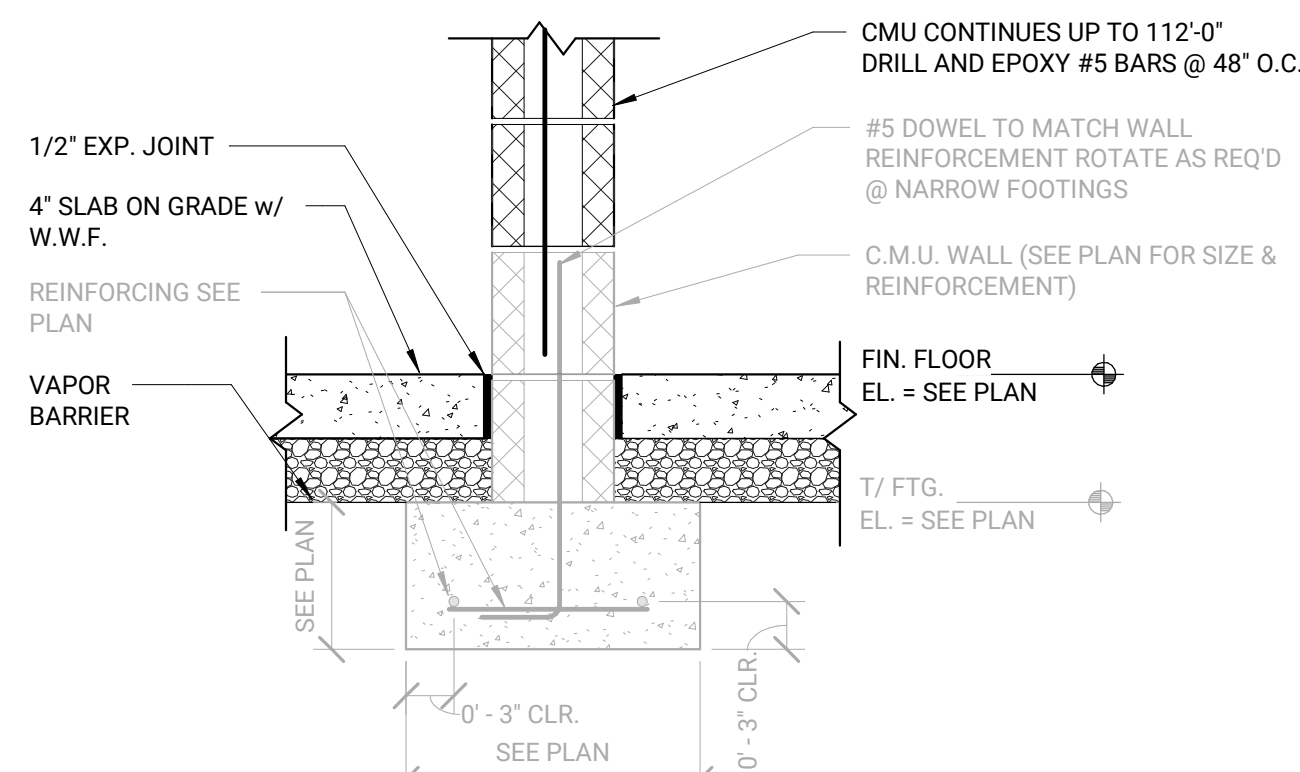
- CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301 'SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS'
- SUBMIT SHOP DRAWINGS FOR ALL REINFORCING STEEL AND EMBEDDED ITEMS.
- COLD WEATHER CONCRETING SHALL CONFORM TO ACI - 306, HOT WEATHER CONCRETING SHALL CONFORM TO ACI - 305
- DO NOT PLACE PIPES, DUCTS, OR OTHER ITEMS IN STRUCTURAL CONCRETE WITHOUT APPROVAL OF THE ARCHITECT OR ENGINEER.
- ALL REINFORCEMENT, ANCHOR BOLTS, & EMBEDDED ITEMS SHALL BE PLACED AND INSPECTED PRIOR TO CONCRETE PLACEMENT. DO NOT "FLOAT" ITEMS INTO FOOTINGS
- REINFORCEMENT: DEFORMED BARS CONFORMING TO ASTM A615 GRADE 60.
- WELDED WIRE FABRIC TO BE FLAT SHEETS AND CONFORM TO ASTM A 185.
- CEMENT: NORMAL PORTLAND CEMENT, ASTM C150, TYPE 1.
- AGGREGATE: DURABLE, WELL-GRADED MINERALS CONFORMING TO ASTM C33.
- WATER SHALL BE CLEAN, POTABLE, AND FREE FROM DELETERIOUS MATERIALS. ADDITION OF WATER AT JOBSITE WILL NOT BE ALLOWED UNLESS SPECIFICALLY APPROVED
- CONCRETE MIX: Fc = 4,000 PSI, SLUMP 2" TO 4", SEE SPECIFICATION FOR ANY ALTERNATE MIXES
- ADMIXTURES SHALL CONFORM TO ASTM C494. USE AIR ENTRAINING ADMIXTURES CONFORMING TO ASTM C260 TO MAINTAIN AIR CONTENT RANGE 5%-7% FOR EXTERIOR CONCRETE.
- GROUT SHALL BE NON-SHRINK, NON-METALLIC. CONCRETE CONTRACTOR TO PROVIDE AND INSTALL IN ACCORDANCE TO MANUFACTURER'S DIRECTIONS.
- THOROUGHLY COMPACT AND VIBRATE CONCRETE INTO CORNERS AND AROUND REINFORCING AND EMBEDDED ITEMS. USE INTERNAL VIBRATION WHERE SIZE OF SECTION PERMITS.
- CONCRETE COVER: UNLESS NOTED OTHERWISE, DETAIL REINFORCING TO PROVIDE MINIMUM CONCRETE COVER AS FOLLOWS:
  - CONCRETE CAST AGAINST, AND PERMANENTLY EXPOSED TO, EARTH. 3"
  - CONCRETE EXPOSED TO EARTH OR WEATHER 2"
  - CONCRETE NOT EXPOSED TO EARTH OR WEATHER, BEAM AND COLUMN BARS 1 1/2"
  - CONCRETE NOT EXPOSED TO EARTH OR WEATHER, SLAB AND WALLS 1"
- PROVIDE CORNER BARS AT WALL AND FOOTING CORNERS TO MATCH HORIZONTAL REINFORCING.
- SAWCUT CONTROL JOINTS IN CONCRETE SLABS ON GRADE SHALL BE 1/8" WIDE AND 1/4 OF SLAB THICKNESS IN DEPTH. CUTTING OPERATIONS SHALL BE FROM 4 TO 12 HOURS AFTER PLACING CONCRETE. WHEN THE AIR TEMPERATURE IS LESS THAN 50 DEGREES, SAW CUT 12 HOURS AFTER PLACING CONCRETE. JOINTS TO BE ON COLUMN LINES AND MAXIMUM SPACING OF JOINTS SHALL BE 14'-0" UNLESS SHOWN OTHERWISE ON DRAWINGS.
- POST-INSTALLED MECHANICAL ANCHORS: HILTI KWIK BOLT TZ, ICC-ES ESR-1917 (CARBON STEEL AND ANSI TYPE 304 STAINLESS STEEL).
- POST-INSTALLED ADHESIVE ANCHORS: HILTI HAS THREADED RODS, INTERNALLY THREADED INSERTS, OR REBAR WITH HILTI RE 500 SD INJECTION ADHESIVE ANCHORING SYSTEM FOR ANCHORAGE TO CONCRETE, ICC-ES ESR-2322.
- MINIMUM LAP SPLICE AND DEVELOPMENT LENGTH IN INCHES SHOWN IN TABLE BELOW APPLY TO Fc=4000 PSI AND Fy = 60,000 PSI. TOP BARS DEFINED AS HORIZONTAL REINFORCEMENT SUCH THAT 12" OF CONCRETE IS CAST BELOW THE SPLICE OR DEVELOPMENT LENGTH. LAP TOP BARS AT MID-SPAN. LAP BOTTOM BARS AT SUPPORTS.

BAR SIZE	SPLICE LENGTH		DEVELOPMENT LENGTH	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	24	19	19	15
#4	32	25	25	19
#5	40	31	31	24
#6	48	37	37	29
#7	70	54	54	42
#8	80	62	62	48
#9	91	70	70	54
#10	102	79	79	61
#11	113	87	87	67

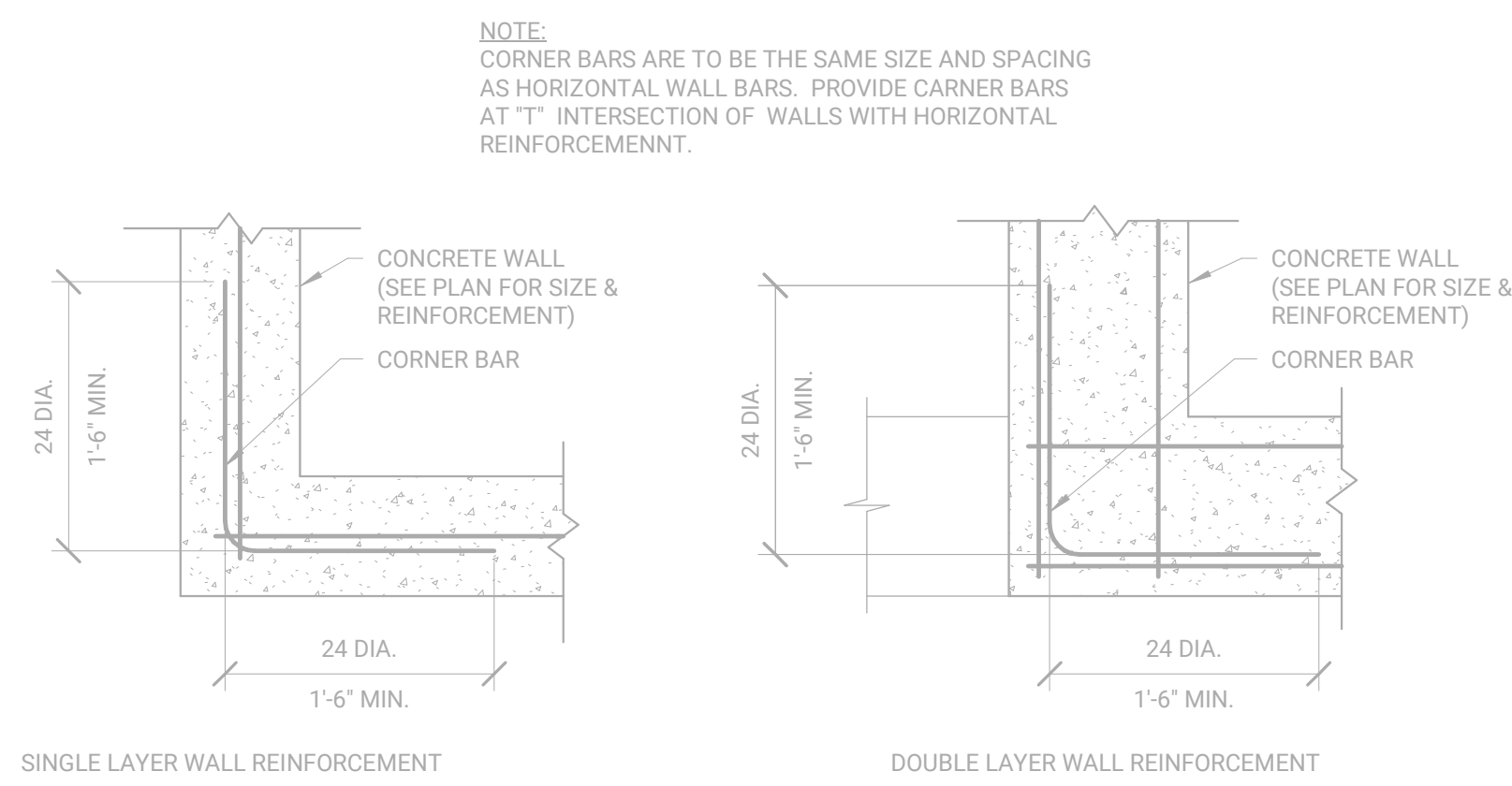


**NOTES**

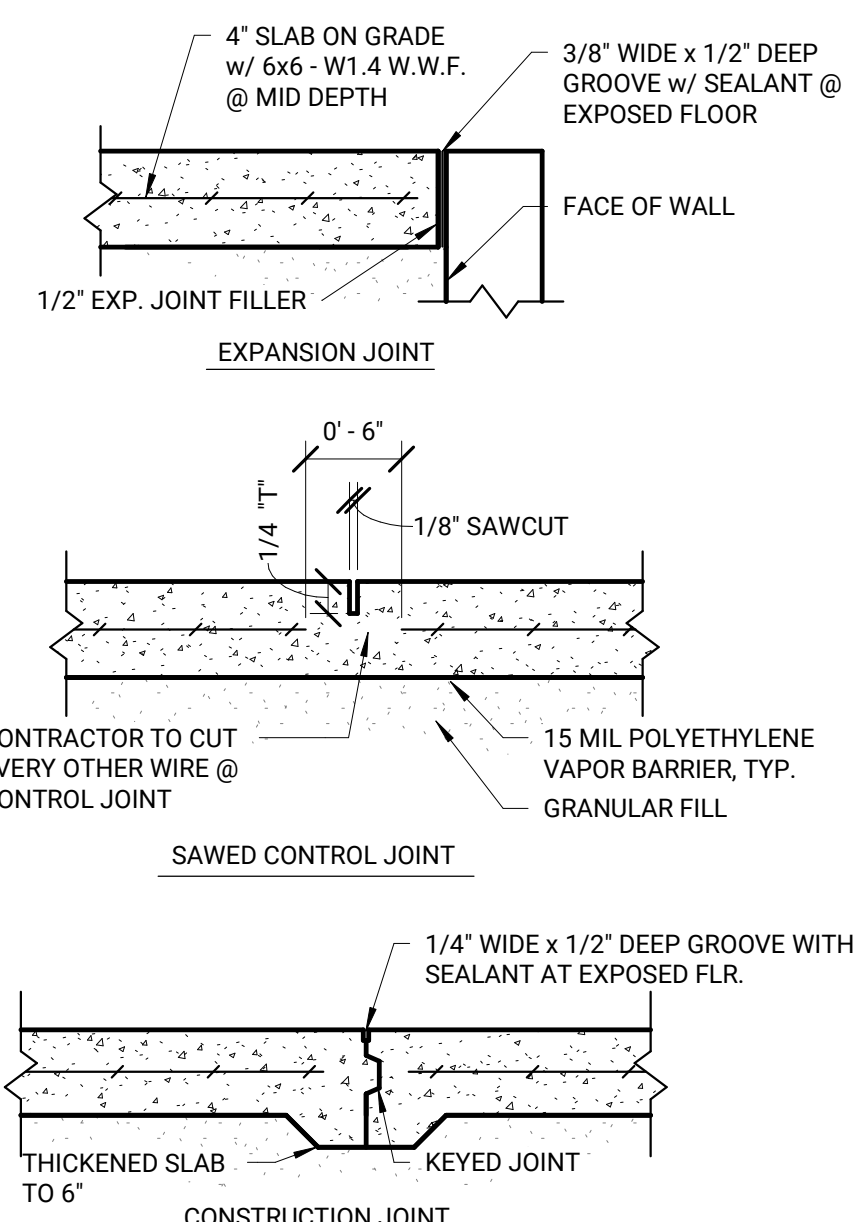
- SEE DWG. S0-0 FOR ADDITIONAL INFORMATION.
- E.W. - DENOTES: EACH WAY
- U.N.O. - DENOTES: UNLESS NOTED OTHERWISE
- O.C. - DENOTES: ON CENTER
- A.B. - DENOTES: ANCHOR BOLT
- T&B - DENOTES: TOP AND BOTTOM
- W.W.F. - DENOTES: 6x6 W2.9xW2.9 WELDED WIRE FABRIC
- TOP OF FOOTINGS ELEVATION + 99'-4" UNLESS NOTED THUSLY.
- T/FTG  
EL = #1'-4"
- (A) - DENOTES: FOOTING TYPE, SEE SCHEDULE 1/S2-1
- VAPOR BARRIER TO BE 15 MIL. CLASS A BY STEGO OR APPROVED EQUAL
- RE-STEEL EPOXY DEPTHS TO BE 9" TYPICAL



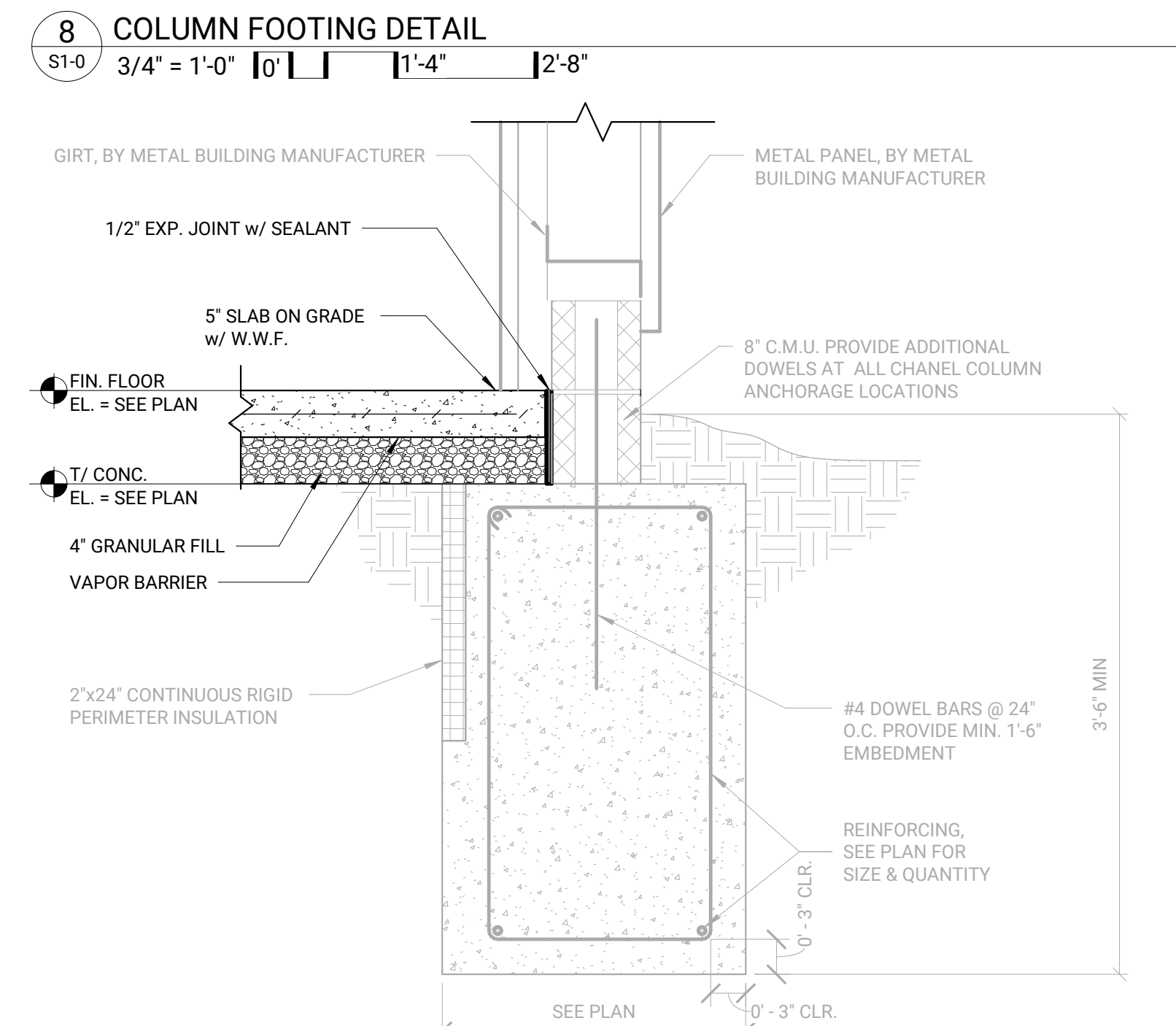
**7 CONTINUOUS WALL FOOTING DETAIL**  
S1-0 1" = 1'-0" 0' 1' 2'



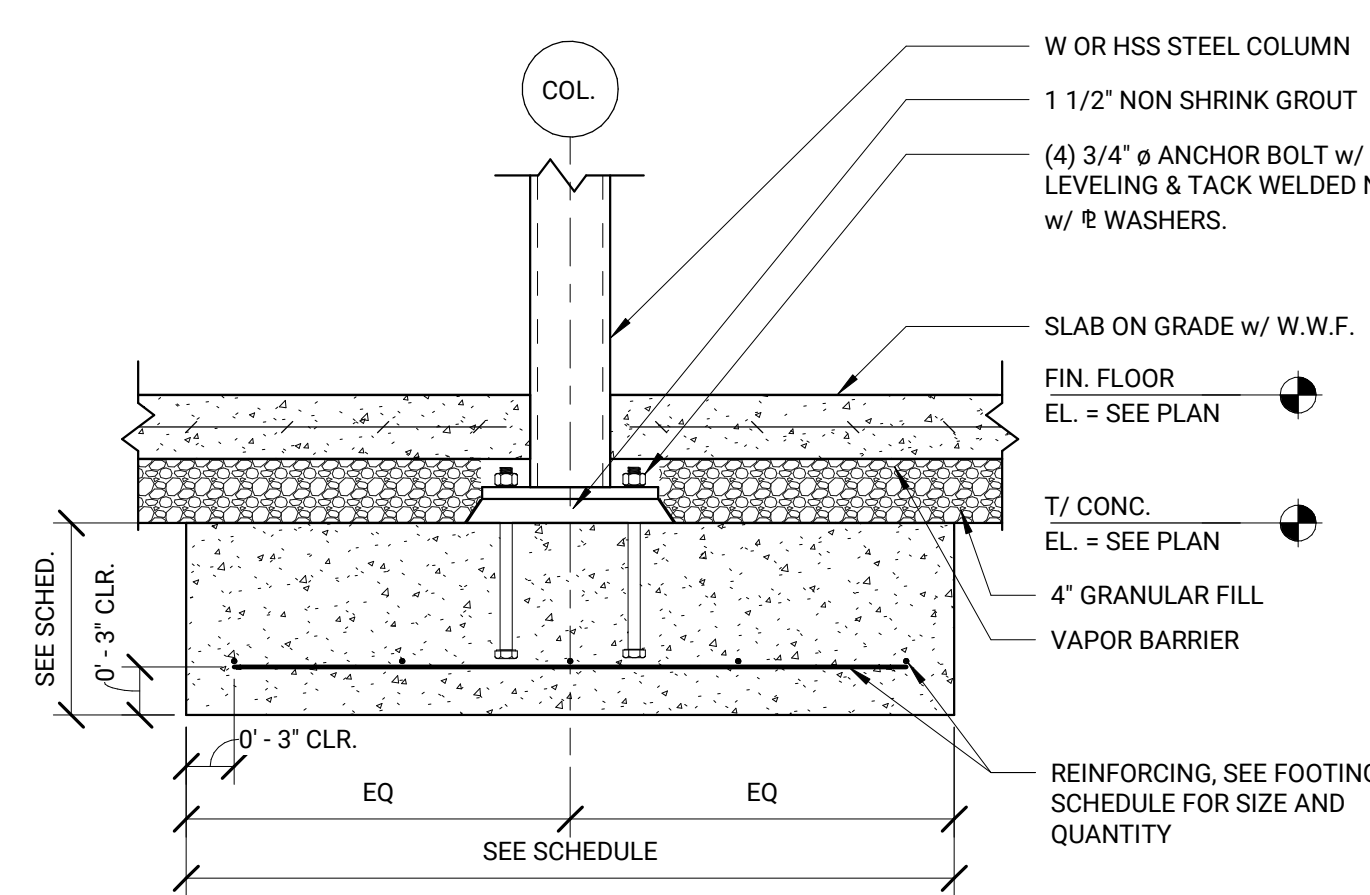
**6 TYPICAL GRADE BEAM & WALL CORNER REINFORCEMENT DETAIL**  
S1-0 1" = 1'-0" 0' 1' 2'



**5 SLAB ON GRADE DETAIL**  
S1-0 1" = 1'-0" 0' 1' 2'

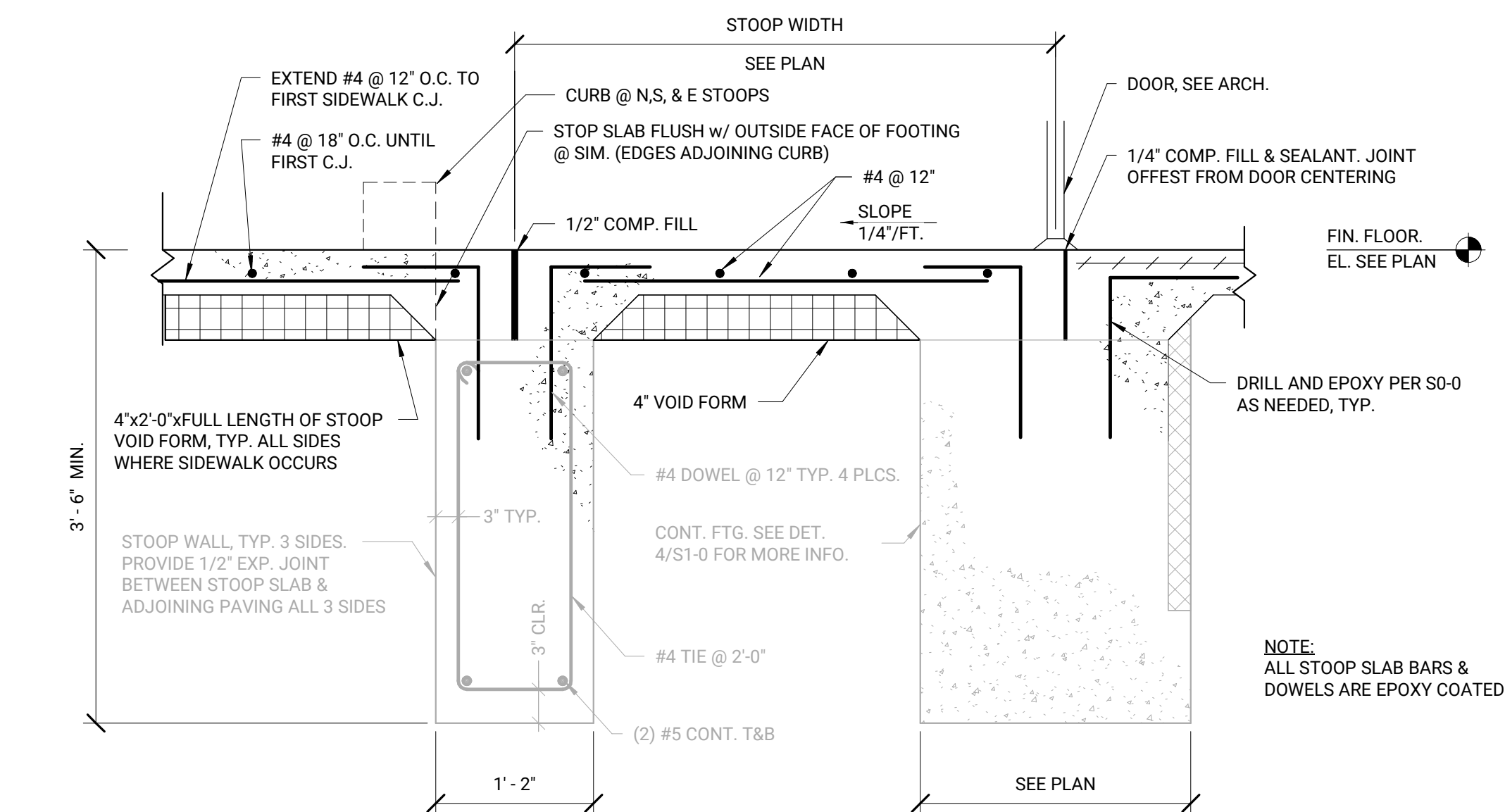


**4 CONCRETE FOUNDATION DETAIL**  
S1-0 1" = 1'-0" 0' 1' 2'

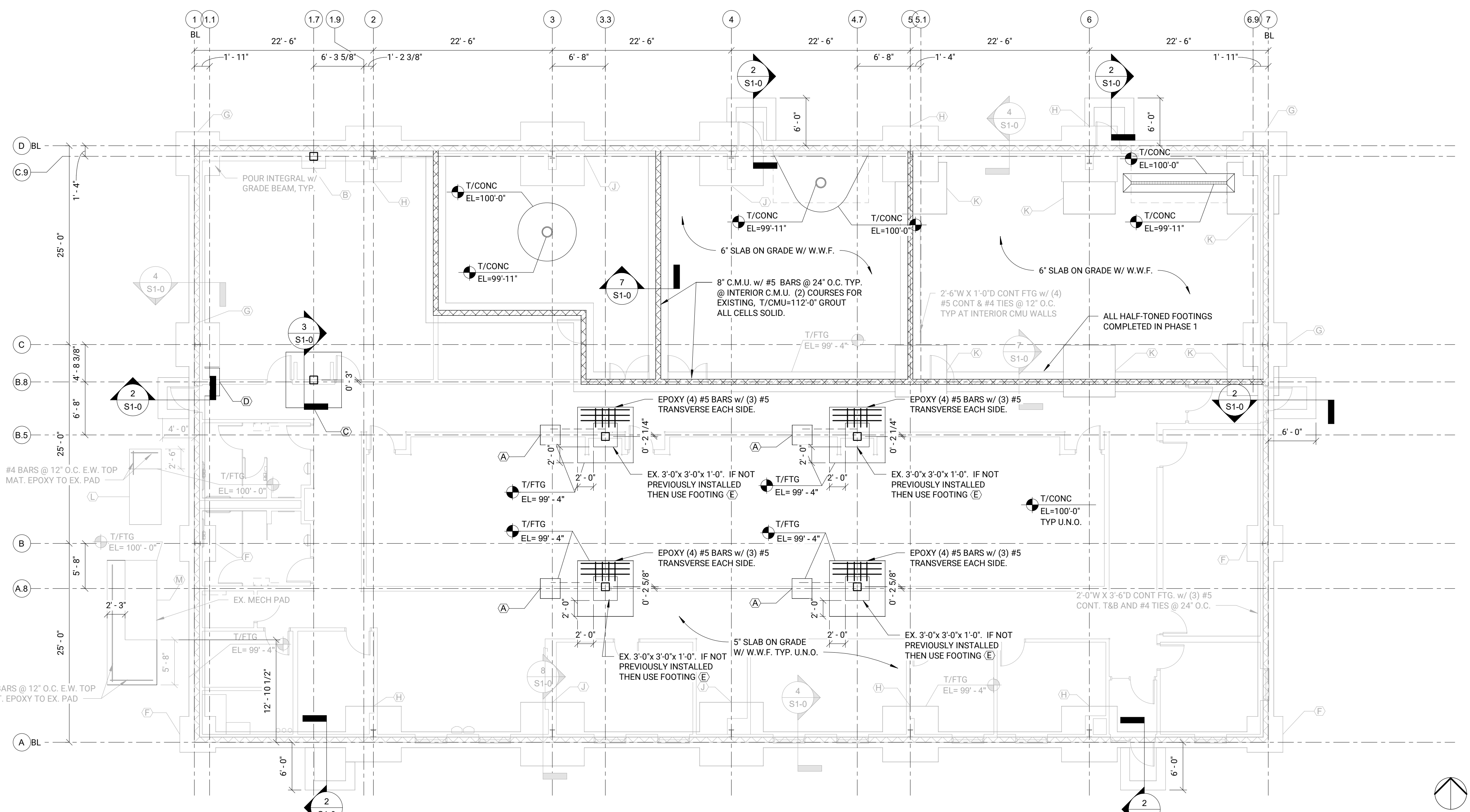


**3 CONCRETE FOOTING DETAIL**  
S1-0 1" = 1'-0" 0' 1' 2'

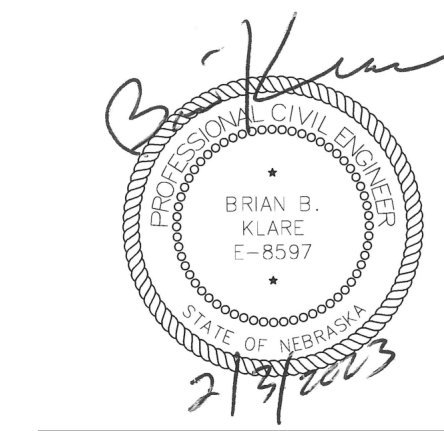
Structural Foundation Schedule				
Type Mark	Width	Length	Depth	Reinforcing
A	2'-6"	2'-6"	1'-0"	(3) #5 E.W.
B	3'-0"	3'-0"	3'-6"	(4) #5 E.W. T&B
C	7'-0"	7'-0"	1'-0"	(8) #5 E.W.
D	3'-6"	3'-6"	3'-6"	(5) #5 E.W. T&B
F	4'-6"	4'-6"	3'-6"	(6) #5 E.W. T&B
G	5'-6"	5'-6"	3'-6"	(7) #5 E.W. T&B
H	7'-0"	7'-0"	3'-6"	(8) #5 E.W. T&B
J	8'-0"	8'-0"	3'-6"	(9) #5 E.W. T&B
K	6'-6"	6'-6"	1'-6"	(7) #5 E.W. T&B
L	4'-0"	7'-0"	4'-0"	#4 @12" E.W. TOP MAT
M	4'-0"	10'-0"	4'-0"	#4 @12" E.W. TOP MAT



**2 STOOP DETAIL**  
S1-0 1" = 1'-0" 0' 1' 2'



**1 FOUNDATION PLAN**  
S1-0 1/8" = 1'-0" 0' 8' 16'



REVISIONS		
#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD  
NEBRASKA CITY, NE  
68410

**OMAHA PUBLIC POWER DISTRICT**

444 SOUTH 16TH STREET  
OMAHA, NE 68102

**FOUNDATION PLAN**



**PROJECT TEAM**

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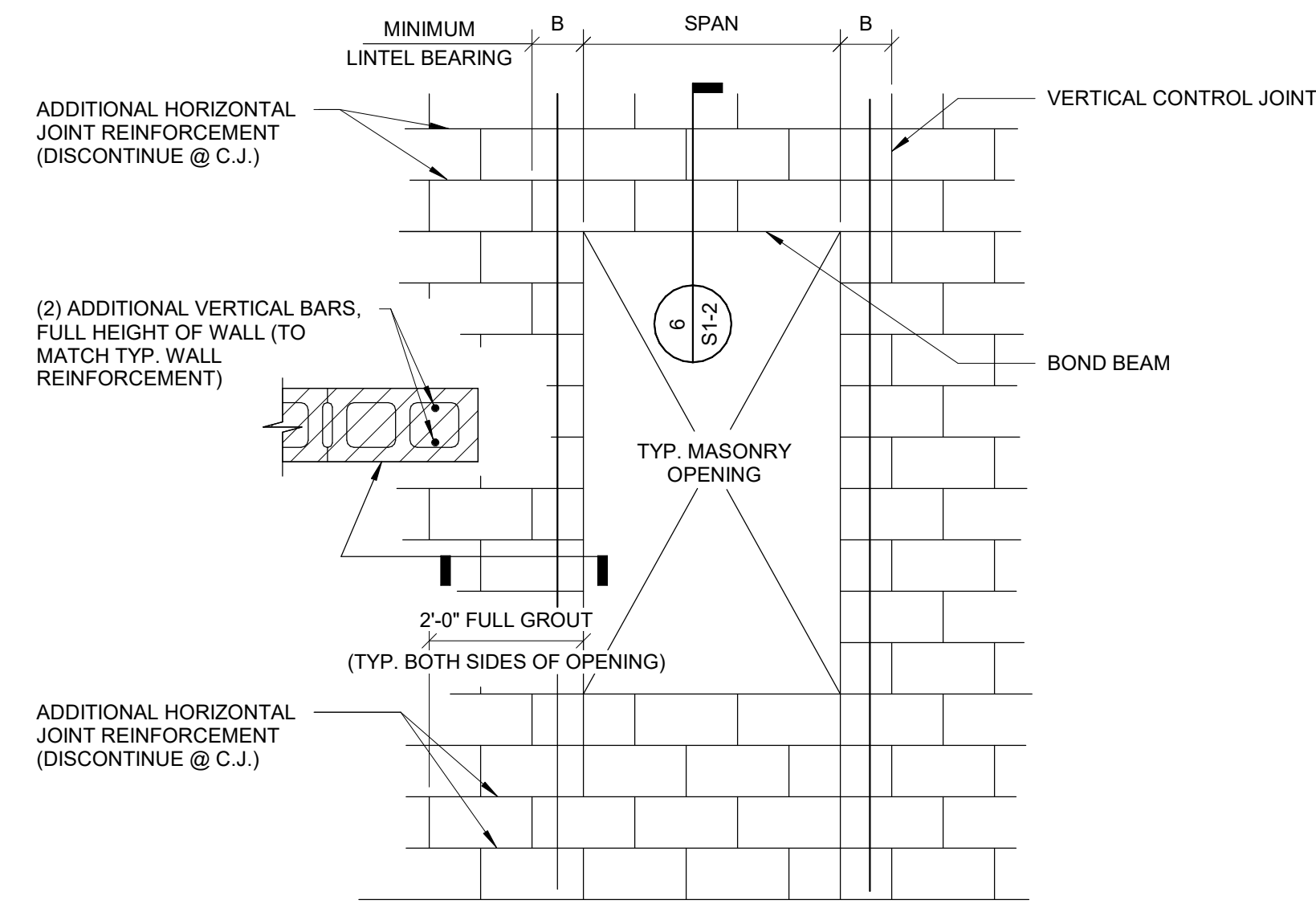


**NOTES**

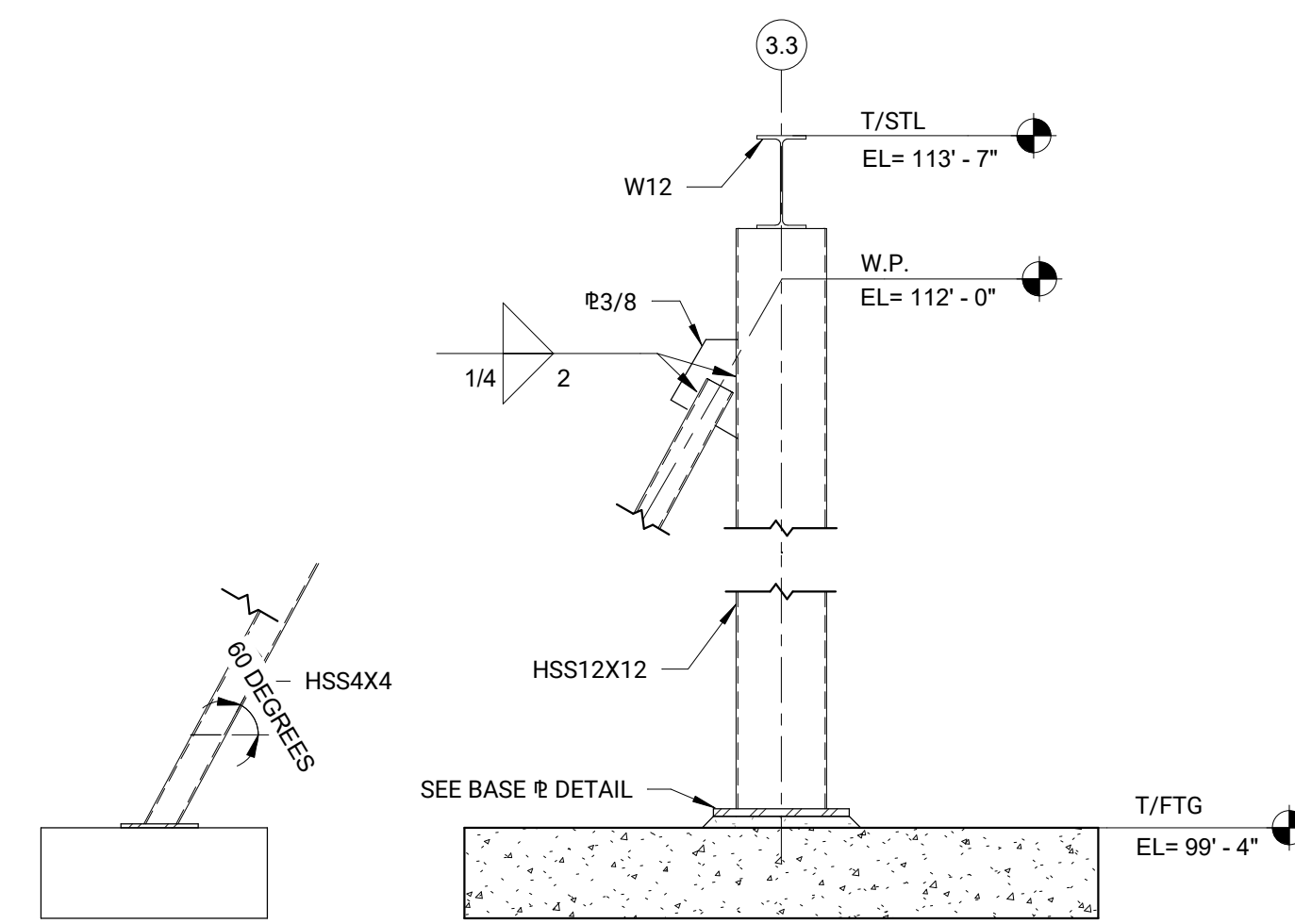
- SEE DWG. S0-0 FOR ADDITIONAL INFORMATION.
- U.N.O. - DENOTES: UNLESS NOTED OTHERWISE
- W.P. - DENOTES: WORKING POINT
- O.C. - DENOTES: ON CENTER
- DENOTES: MOMENT CONNECTION
- - DENOTES: BEAM FRAMING INTO COLUMN
- ⊖ - DENOTES: BEAM OVER COLUMN
- W 8x13 113'-7" - DENOTES: T/STL ELEVATION. IF ONLY (1) IS SHOWN, T/STL ELEVATION SAME AT BOTH ENDS
- T/STL ELEVATION = 113'-7" U.N.O.
- MECHANICAL UNITS HANGING FROM METAL BUILDING STRUCTURE TO BE DISTRIBUTED AMONG 2 PURLINS MINIMUM. NO MORE THAN ONE UNIT MAY ATTACH TO ANY INDIVIDUAL PURLIN.
- HANGING CONNECTIONS TO PURLINS PER METAL BUILDING SYSTEMS MANUAL APPENDIX A6, FIGURE A6.1(a) AND FIGURE A6.1(e). USE L2 1/2x2 1/2x1/4 CLIP ANGLES AND L3X3x1/4 CROSS MEMBER w/ 1/2" BOLTS IN A6.1(e)

FRAMING PLAN	112' - 0"							FRAMING PLAN	112' - 0"
	HSS12x12x3/8	HSS12x12x3/8	HSS12x12x3/8	HSS12x12x3/8	HSS12x12x3/8	HSS12x12x3/8	HSS12x12x3/8		
FOUNDATION PLAN								FOUNDATION PLAN	100' - 0"
Column Locations	A.8-3.3	A.8-4.7	B.5-3.3	B.5-4.7	B.8-1.7	C.9-1.7			

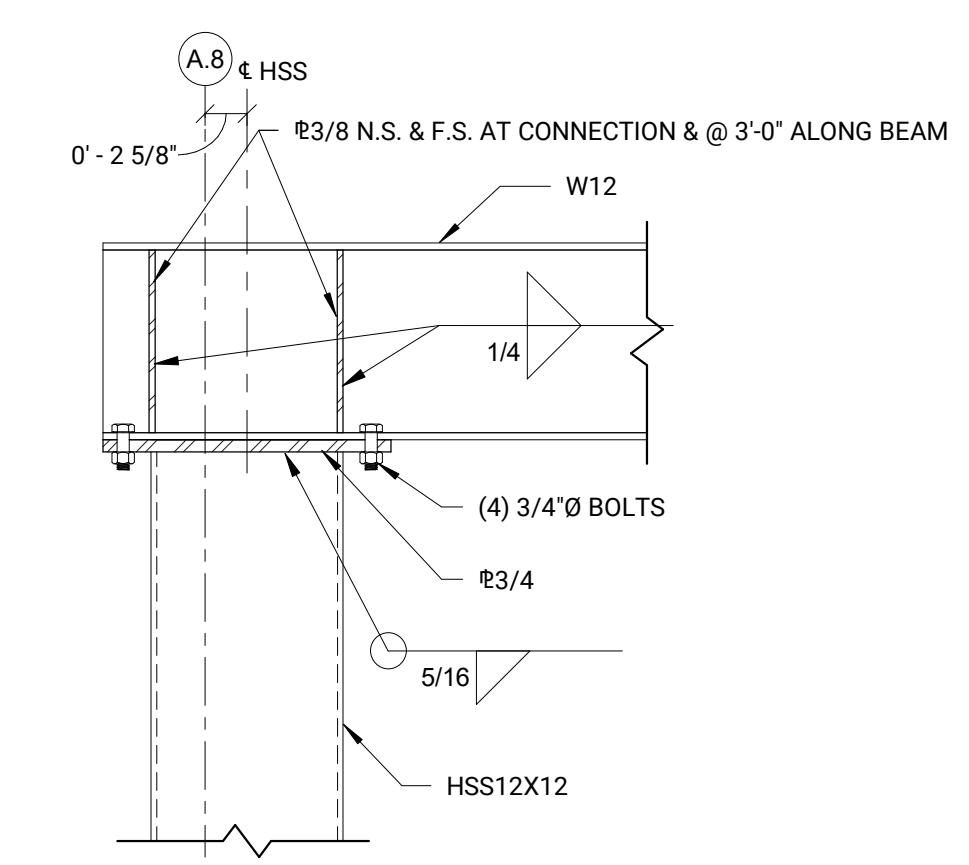
**GRAPHICAL COLUMN SCHEDULE**  
1/8" = 1'-0"



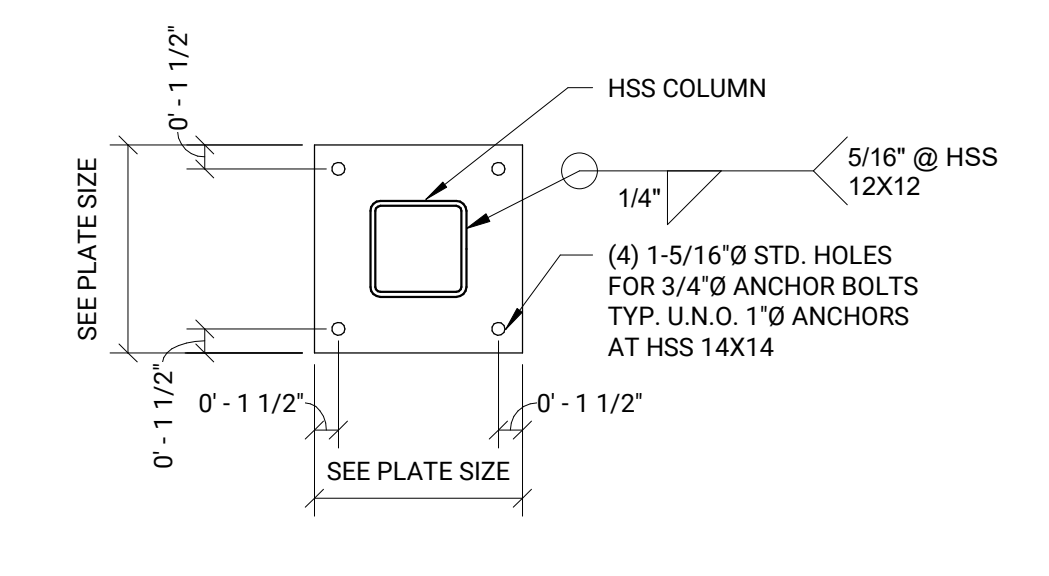
**5 C.M.U WALL OPENING W/ LINTEL & CONTROL JOINT DETAIL**  
1 1/2" = 1'-0" | 0" | 8" | 1'-4"



**4 BRACE DETAIL**  
1/2" = 1'-0" | 0" | 2" | 14"



**3 MOMENT FRAME DETAIL**  
1" = 1'-0" | 0" | 1" | 2"

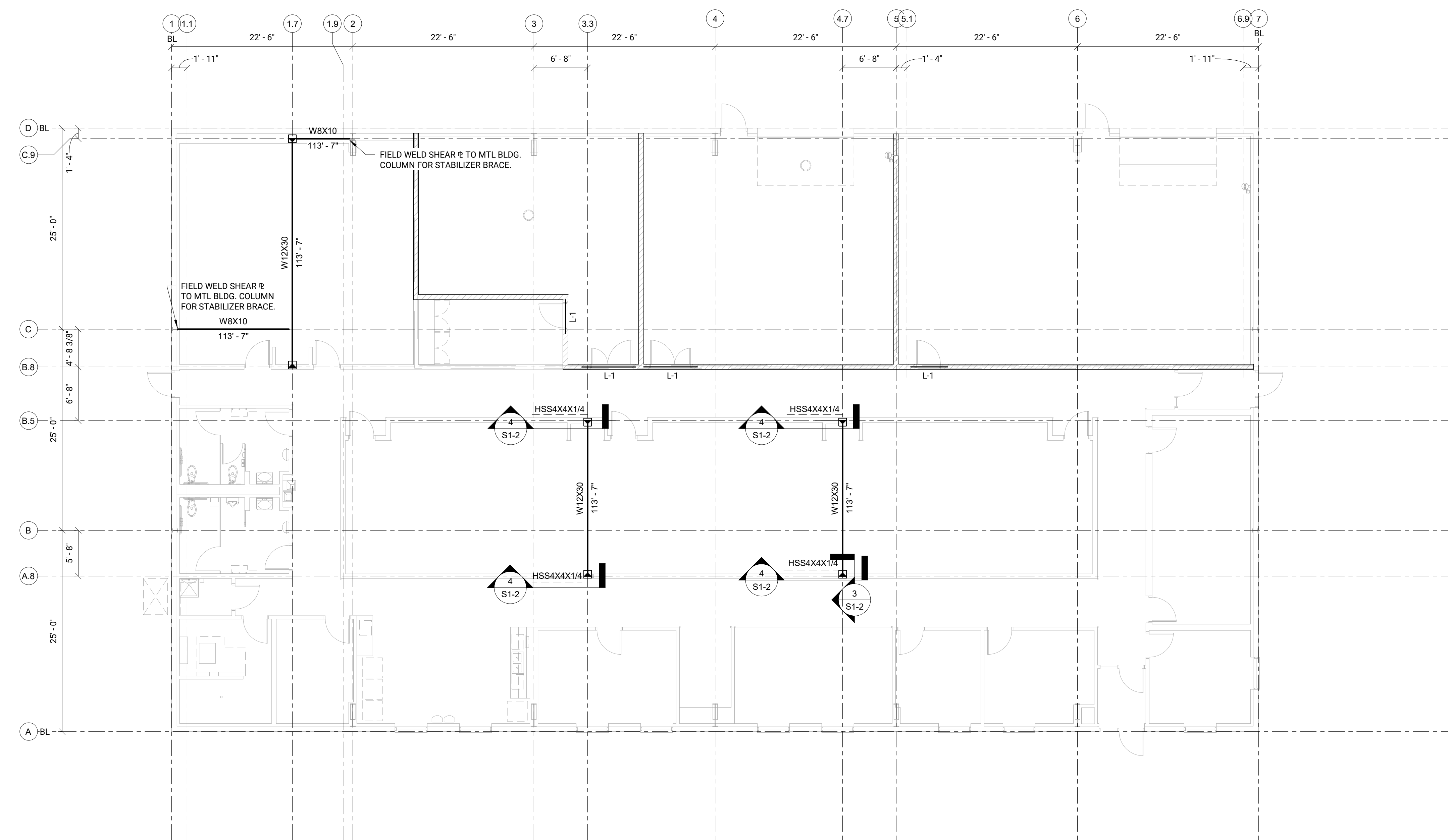


**2 BASE PLATE DETAIL**  
1" = 1'-0" | 0" | 1" | 2"

TYPE 1

LINTEL SCHEDULE			
LINTEL #	TYPE	BOND BEAM REINF. DEPTH	STRUCTURAL STEEL
L-1	1	(2) #5 8"	
L-2			

**6 LINTEL SCHEDULE & DETAIL**  
1" = 1'-0" | 0" | 1" | 2"



**1 FRAMING PLAN**  
1/8" = 1'-0" | 0" | 8" | 16"

REVISION SCHEDULE		
#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD  
NEBRASKA CITY, NE  
68410

**OMAHA PUBLIC POWER DISTRICT**

444 SOUTH 16TH STREET  
OMAHA, NE 68102

**FRAMING PLAN**

**S1-2**



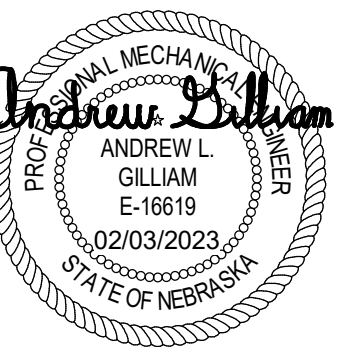
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FIRE SPRINKLER GENERAL NOTES

- DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
- COORDINATE ALL WALL AND FLOOR PENETRATIONS WITH GENERAL CONTRACTOR. SEAL PENETRATIONS OF EXTERIOR ENVELOPE WATER TIGHT. FIRE CAULK AROUND ALL PENETRATIONS THROUGH FIRE RATED WALLS WITH AN APPROVED FIRE STOPPING MATERIAL.
- COORDINATE FIRE SPRINKLER PIPE ROUTING AND FIRE SPRINKLER HEAD LOCATIONS WITH DIFFUSERS, REGISTERS, AND GRILLES, FIRE ALARM DETECTORS, LIGHTS AND CEILING PLANS.
- INSTALL ALL VALVES IN ACCESSIBLE LOCATIONS.
- CONTRACTOR SHALL COORDINATE ALL PIPE ROUTING WITH ALL OTHER TRADES. CONTRACTOR SHALL PROVIDE ALL ADDITIONAL OFFSETS AS REQUIRED TO COMPLETE INSTALLATION AND AVOID CONFLICTS.
- MAINTAIN MANUFACTURER'S REQUIRED CLEARANCE AROUND ALL MECHANICAL EQUIPMENT TO ALLOW PROPER OPERATION AND FOR EASY MAINTENANCE.
- ROUTE ALL PIPING IN BAR JOISTS, ABOVE CEILINGS, IN CHASES AND IN WALLS AS REQUIRED TO CONCEAL PIPING.
- COORDINATE LOCATION OF ALL SPRINKLER HEADS AND PIPING WITH ALL OTHER TRADES. IF CONFLICTS DO OCCUR SUCH THAT LIGHTS, DUCTWORK, OR CEILING SYSTEMS CANNOT BE INSTALLED DUE TO SPRINKLER PIPING INTERFERENCE, THE PIPING SHALL BE RELOCATED AT NO ADDITIONAL EXPENSE TO THE PROJECT.
- LOCATE ALL FIRE SPRINKLER HEADS CENTERED IN CEILING TILES. QUARTER POINTS IN 2'x4' WILL BE ACCEPTABLE.

FIRE SPRINKLER HEAD DESIGNATION SCHEDULE

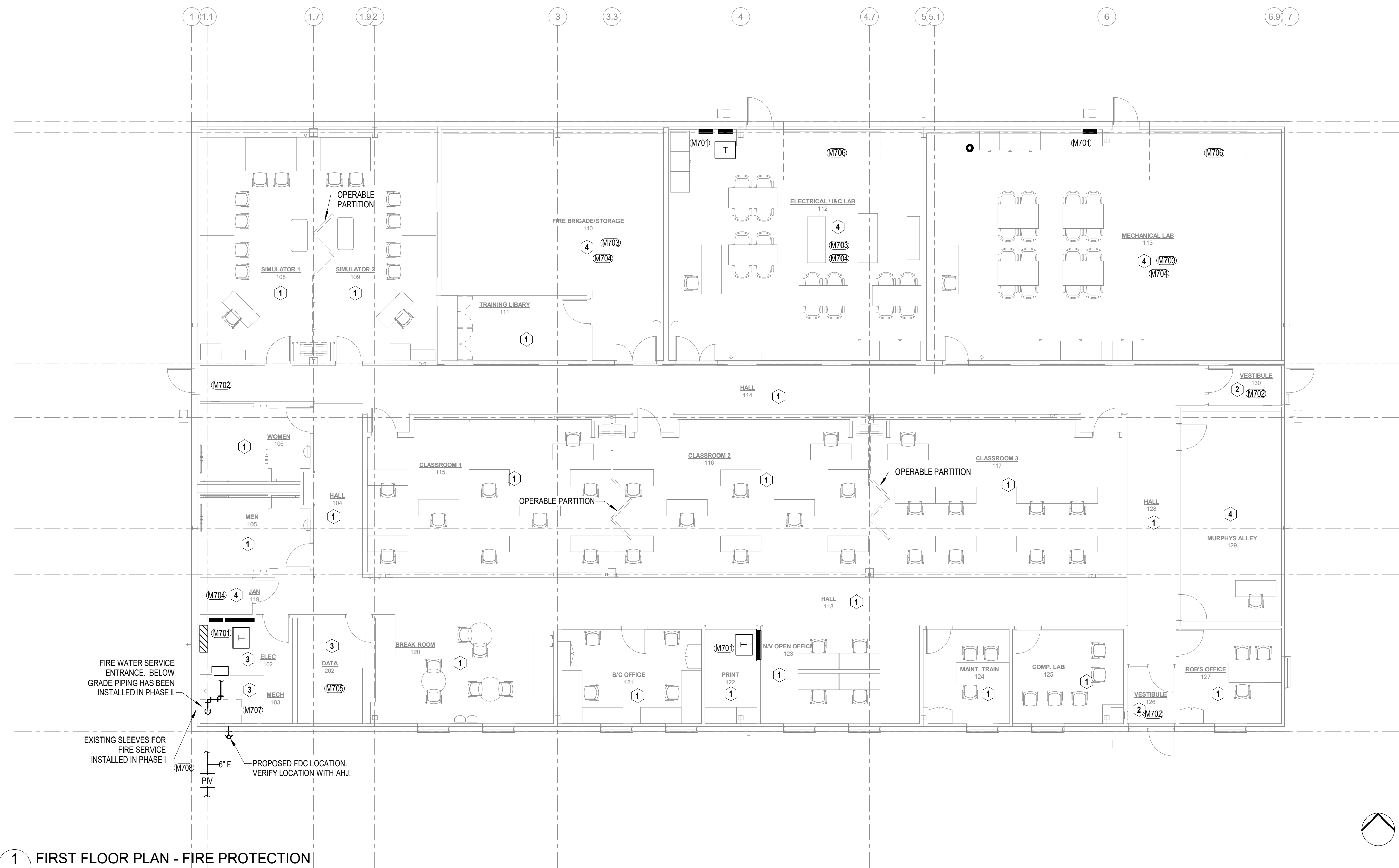
PLAN TAG	CEILING TYPE	HEAD TYPE	HEAD COLOR
1	LAY-IN ACCOUSTICAL TILE	FLAT PLATE CONCEALED	WHITE
2	GYP. BOARD	FLAT PLATE CONCEALED	WHITE
3	EXPOSED STRUCTURE	UPRIGHT	BRASS
4	EXPOSED STRUCTURE	UPRIGHT	BRASS (WITH CAGES)

REMARKS:

- THIS PLAN IS FOR COORDINATION PURPOSES ONLY. REFER TO ARCHITECTURAL CEILING PLANS FOR SPECIFIC CEILING TYPES AND POTENTIAL OBSTRUCTIONS. PROVIDE ALL HEADS AS REQUIRED FOR DESIGN INTENT AND AN NFPA 13 COMPLIANT SYSTEM. SEE ADDITIONAL FIRE PROTECTION NOTES FOR ADDITIONAL INFORMATION.

KEYNOTES

- M701 DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS / EQUIPMENT. MAINTAIN ALL CODE REQUIRED CLEARANCES.
- M702 PROVIDE DRY-TYPE FIRE SPRINKLER(S) HEADS. DO NOT LOCATE WATER-FILLED PIPING IN AREAS PRONE TO FREEZING.
- M703 PAINT PIPING EXPOSED TO VIEW IN OCCUPIED SPACES TO MATCH STRUCTURE / CEILING. COLOR SELECTED BY ARCHITECT.
- M704 PROVIDE HEAD CAGES ON FIRE SPRINKLER HEADS PROTECTING THIS ROOM.
- M705 DO NOT ROUTE PIPING IN DATA ROOM THAT DOES NOT DIRECTLY SERVE DATA ROOM. DO NOT ROUTE WATER FILLED PIPING OVER DATA ROOM.
- M706 PROVIDE PROTECTION ABOVE AND BELOW OVERHEAD DOOR AS REQUIRED BY NFPA. PROVIDE HEAD CAGES FOR HEAD LOCATED BELOW DOOR.
- M707 PROVIDE FIRE SERVICE ENTRANCE WITH DOUBLE CHECK BACKFLOW PREVENTER, ISOLATION VALVES, FLOW SWITCH, ETC. AS REQUIRED BY NFPA 13, STATE FIRE MARSHALL, AND LOCAL CODES.
- M708 FIRE SPRINKLER POST INDICATOR VALVE PER NFPA 13 AND AUTHORITY HAVING JURISDICTION REQUIREMENTS. LOCATE A MINIMUM OF 40'-0" FROM BUILDING (SEE CIVIL).



1 FIRST FLOOR PLAN - FIRE PROTECTION  
FP-1-1 1/8" = 1'-0" 0' 16"

#	Description	Date

TRAINING FACILITY PHASE 2

7264 L ROAD,  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

FLOOR PLAN - FIRE PROTECTION

FP1-1

BCDM NO. 5396-00  
02/03/2023

MEI PROJECT NO. 20297



4940 North 118th Street  
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do not scale drawings. verify all dimensions and clearances from architectural, structural, shop and other appropriate drawings or at site. lay out and coordinate all work prior to installation to provide clearances required for operation, maintenance, and codes and verify non-interference with other work. do not fabricate prior to verification of clearance for all trades.



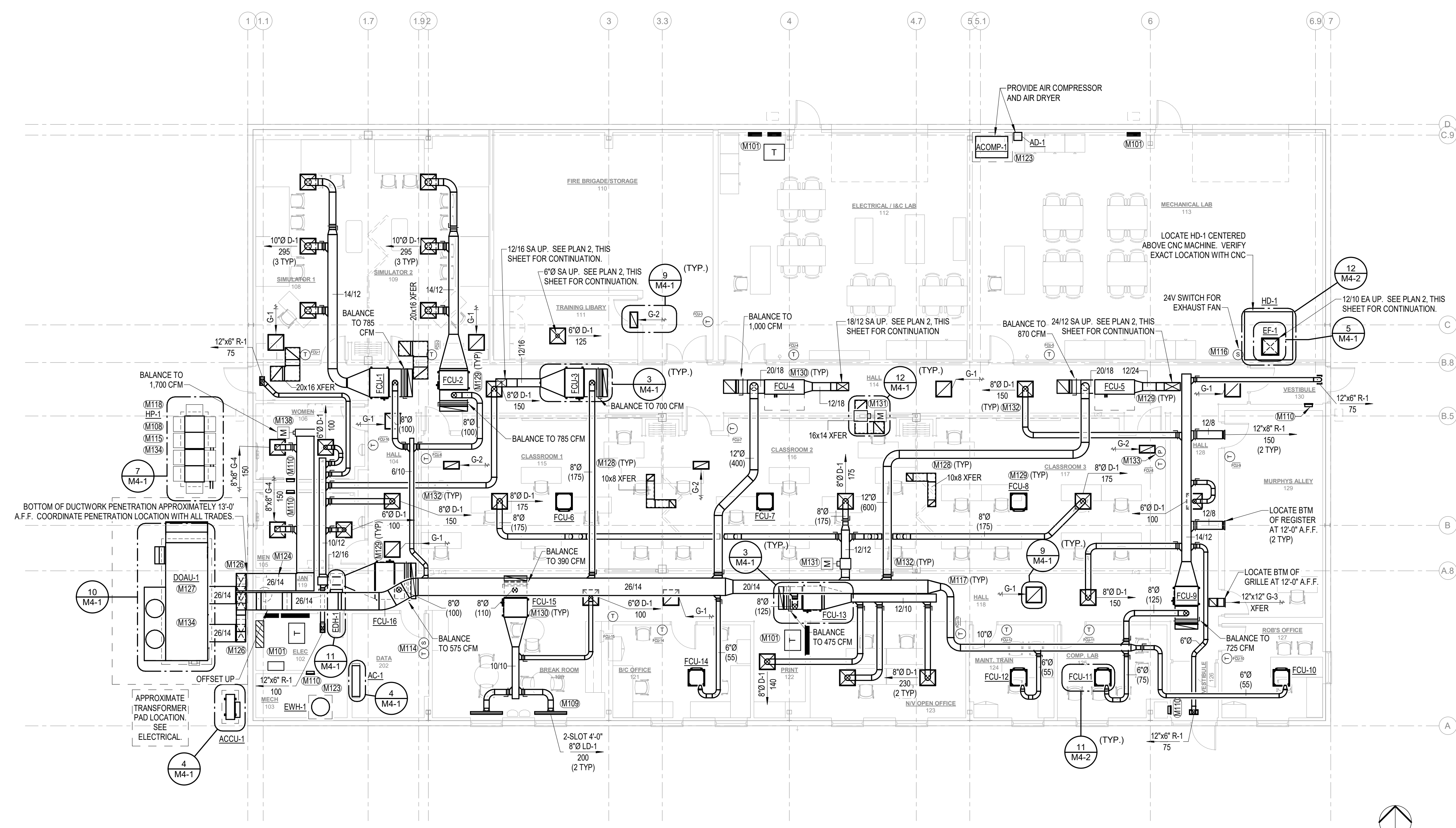
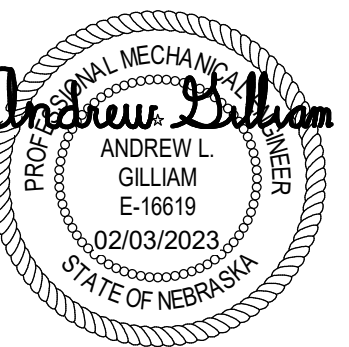
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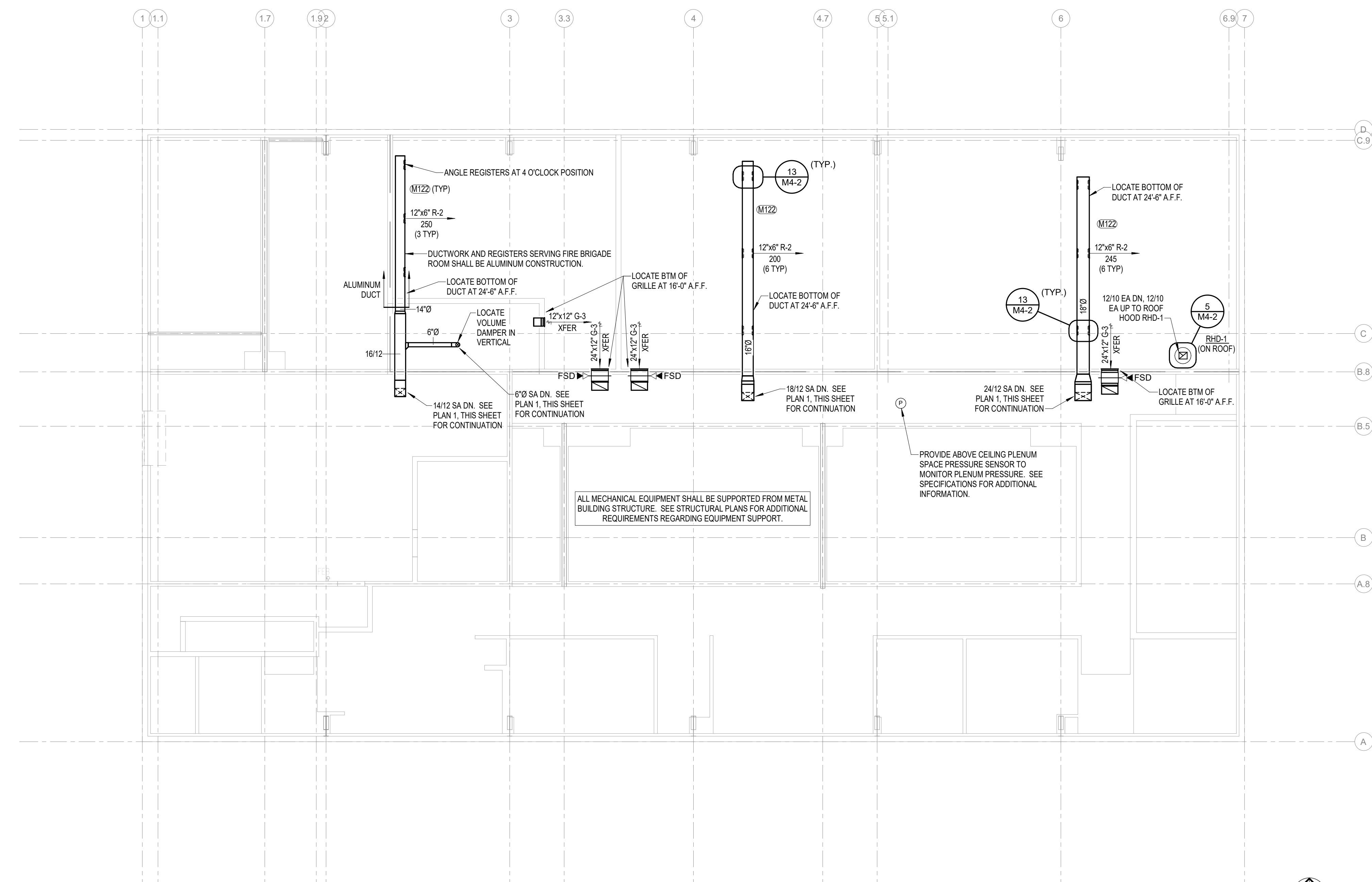
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MORRISSEY ENGINEERING  
4940 North 118th Street  
Omaha, NE 68164



**1 FIRST FLOOR PLAN - HVAC**  
M1-1 1/8" = 1'-0" 0' 11" 8' 16"



**2 UPPER VOLUME PLAN - HVAC**  
M1-1 1/8" = 1'-0" 0' 11" 8' 16"

**HVAC GENERAL NOTES**

- DO NOT ROUTE DUCTWORK ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
- FIRE CAULK ALL DUCTWORK PENETRATIONS THROUGH FIRE RATED WALLS AND ASSEMBLIES. ALL PENETRATIONS OF FIRE RESISTANT CONSTRUCTION SHALL BE SEALED WITH A LISTED FIRESTOPPING ASSEMBLY BY THE CONTRACTOR RESPONSIBLE FOR THE PENETRATION. CAULK AROUND ALL DUCTWORK PENETRATIONS THROUGH FULL HEIGHT SOUND WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTION.
- COORDINATE DUCT ROUTING WITH ALL OTHER TRADES. OFFSET AND EXTEND DUCTWORK AS REQUIRED TO AVOID CONFLICTS.
- CENTER DIFFUSERS, REGISTERS, AND GRILLES IN CEILING TILES WHERE 24x24 OR 24x12 CEILING DEVICES ARE NOT USED.
- ROUND RUN-OUTS TO DIFFUSERS SHALL BE THE SAME SIZE AS THE NECK UNLESS OTHERWISE NOTED. SEE DIFFUSER CONNECTION DETAIL 2 ON SHEET M4-1.
- PROVIDE RETURN AIR BOOT AT EACH G-1 AND G-2 RETURN AIR GRILLES. SEE DETAIL 9 SHEET M4-1.
- LOCATE FIRE DAMPERS, VOLUME DAMPERS, ETC. IN ACCESSIBLE LOCATIONS. PROVIDE CEILING ACCESS PANELS AS REQUIRED IN GYP. BOARD CEILINGS TO SERVE DAMPERS. LOCATE DAMPERS ABOVE ACCESSIBLE LAY-IN TILE CEILINGS WHERE POSSIBLE. COORDINATE ALL LOCATIONS WITH REFLECTED CEILING PLANS. GENERAL CONTRACTOR AND ARCHITECT. MAINTAIN ACCESSIBILITY TO ALL DAMPERS.
- CONTRACTOR TO PROVIDE ALL LOW VOLTAGE AND LINE VOLTAGE CONTROL WIRING REQUIRED FOR COMPLETE OPERATION OF ALL MECHANICAL EQUIPMENT.
- PROVIDE VOLUME DAMPER IN EACH SUPPLY AIR BRANCH OFF OF MAIN DUCTWORK AS INDICATED ON PLAN.
- SEE DUCT FITTING DETAILS 1, SHEET M4-1.
- THERMOSTAT AND SENSOR ROUGH-INS BY ELECTRICAL CONTRACTOR.

**KEYNOTES**

- DO NOT ROUTE DUCTWORK ABOVE ELECTRICAL PANELS. MAINTAIN ALL NEC REQUIRED CLEARANCES.
- PROVIDE 18" TALL SUPPORT STAND (MITSUBISHI SUPERSTAND OR EQUAL) TO SUPPORT HEAT PUMP. BOLT STANDS DOWN TO CONCRETE BELOW. COORDINATE EXACT LOCATION WITH ALL TRADES. SEE DETAIL 7, SHEET M4-1.
- CENTER LINEAR DIFFUSER WITH BUILDING FEATURES.
- ELECTRIC HEATER BY ELECTRICAL CONTRACTOR. UNIT CONTROLLED BY INTEGRAL THERMOSTAT. SEE ELECTRICAL DRAWINGS.
- PROVIDE MANUFACTURERS HARD WIRED THERMOSTAT AND SPACE TEMPERATURE SENSOR CONNECTED TO BAS.
- MAINTAIN MANUFACTURERS RECOMMENDED AIRFLOW AND MAINTENANCE CLEARANCES AROUND VRF HEAT PUMP UNIT.
- LOW VOLTAGE WALL SWITCH PROVIDED BY TEMPERATURE CONTROL CONTRACTOR TO ACTIVATE EF-1 AND OPEN MOTORIZED DAMPERS.
- PROVIDE QUICK-DETACHABLE MAGNETIC FILTER SCREENS TO COVER ALL HEAT PUMP CONDENSER OPENINGS. CONFIRM SIZES AND QUANTITIES WITH ACTUAL EQUIPMENT PROVIDED. INTENT IS FOR SCREENS TO BE PLACED ON OPENINGS DURING DIRTY SITE OPERATION FOR REDUCED CONDENSER CLEANING.
- PROVIDE PAINT GRIP FINISH ON DUCTWORK EXPOSED TO VIEW.
- PROVIDE EQUIPMENT PAD TO EXTEND 4" BEYOND FOOTPRINT OF EQUIPMENT. VERIFY EXACT SIZE AND LOCATION.
- PROPOSED TEMPERATURE CONTROL PANEL LOCATION. COORDINATE WITH ELECTRICAL CONTRACTOR.
- EXTERIOR DUCTWORK SHALL INCLUDE 1-1/2" DUCT LINER AND 1-1/2" MINERAL FIBER BOARD COVERED WITH AN ALUMINUM GUARD (OR EQUAL). WEATHERPROOF MEMBRANE. WATERPROOF MEMBRANE SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AROUND ENTRY OF DUCTWORK AND SHED WATER. ANY PONDING OR STANDING WATER WILL BE UNACCEPTABLE.
- GRADE MOUNTED DEDICATED OUTDOOR AIR UNIT LOCATED ON EXTERIOR EQUIPMENT PAD. SEE STRUCTURAL. MAINTAIN MANUFACTURERS RECOMMENDED CLEARANCES.
- ROUTE DUCTWORK OVER TOP OF CLASSROOM LID. MINIMIZE PENETRATIONS THROUGH CLASSROOM FLOOR.
- FANCOIL UNIT SHALL BE SUPPORTED BY UNITS TRUT WITH ALL-THREAD RODS. PROVIDE ANTI-SWAY ANGLE IRON KICKER BRACING TO PREVENT EQUIPMENT MOVEMENT. SEE STRUCTURAL PLANS FOR ADDITIONAL SUPPORT INFORMATION.
- MAINTAIN MANUFACTURERS RECOMMENDED CLEARANCES AROUND FANCOIL UNIT.
- PROVIDE 24V SMOKE DAMPER AT AMMONIA DETECTION SHELTER PENETRATION. DAMPER SHALL BE POWER OPEN, FAIL CLOSED.
- FIRE CAULK AROUND ALL DUCTWORK AND PIPING PENETRATIONS OF AMMONIA DETECTION SHELTER. ANY PENETRATION THRU SHELL OF SHELTER SHALL BE SEALED AIRTIGHT. CONTRACTOR SHALL VERIFY ALL LOCATIONS. PIPING PENETRATION LOCATIONS NOT INDICATED.
- PROVIDE 24V PUSH BUTTON EMERGENCY ACTIVATION SHELTER-IN PLACE SYSTEM WITHIN LOCABLE METAL ENCLOSURE WITH BREAKABLE GLASS FRONT PANE. ROUGH-IN BY ELECTRICAL CONTRACTOR. BUTTON SHALL HAVE ENGRAVED PLAQUE MOUNTED ABOVE BUTTON STATING PUSH FOR OUTDOOR AMMONIA SPILL ONLY. SEE SPECIFICATIONS FOR CONTROL REQUIREMENTS.
- PROVIDE QUICK-DETACHABLE MAGNETIC FILTER SCREENS TO COVER ALL DEDICATED OUTDOOR AIR UNIT AND VRF HEAT PUMP CONDENSER COILS. CONFIRM SIZES AND QUANTITIES WITH ACTUAL EQUIPMENT PROVIDED. INTENT IS FOR SCREENS TO BE PLACED ON OPENINGS DURING DIRTY SITE OPERATION FOR REDUCED CONDENSER CLEANING AND EASILY REMOVED FOR NORMAL OPERATION.
- BALANCE MOTORIZED DAMPER TO 1,700 CFM IN NORMAL OPERATION. DAMPER SHALL MODULATE TO MAINTAIN BUILDING PLENUM PRESSURE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

**TRAINING FACILITY PHASE 2**

7264 L ROAD,  
NEBRASKA CITY, NE 68410

**OMAHA PUBLIC POWER DISTRICT**

444 SOUTH 16TH STREET  
OMAHA, NE 68102

**FLOOR PLANS - HVAC**

MEI PROJECT NO. 20297

**morrissey engineering inc.**  
mechanical | electrical | lighting | technology | commissioning

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**M1-1**



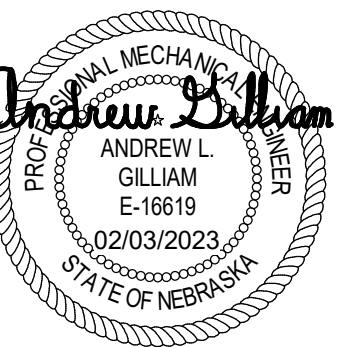
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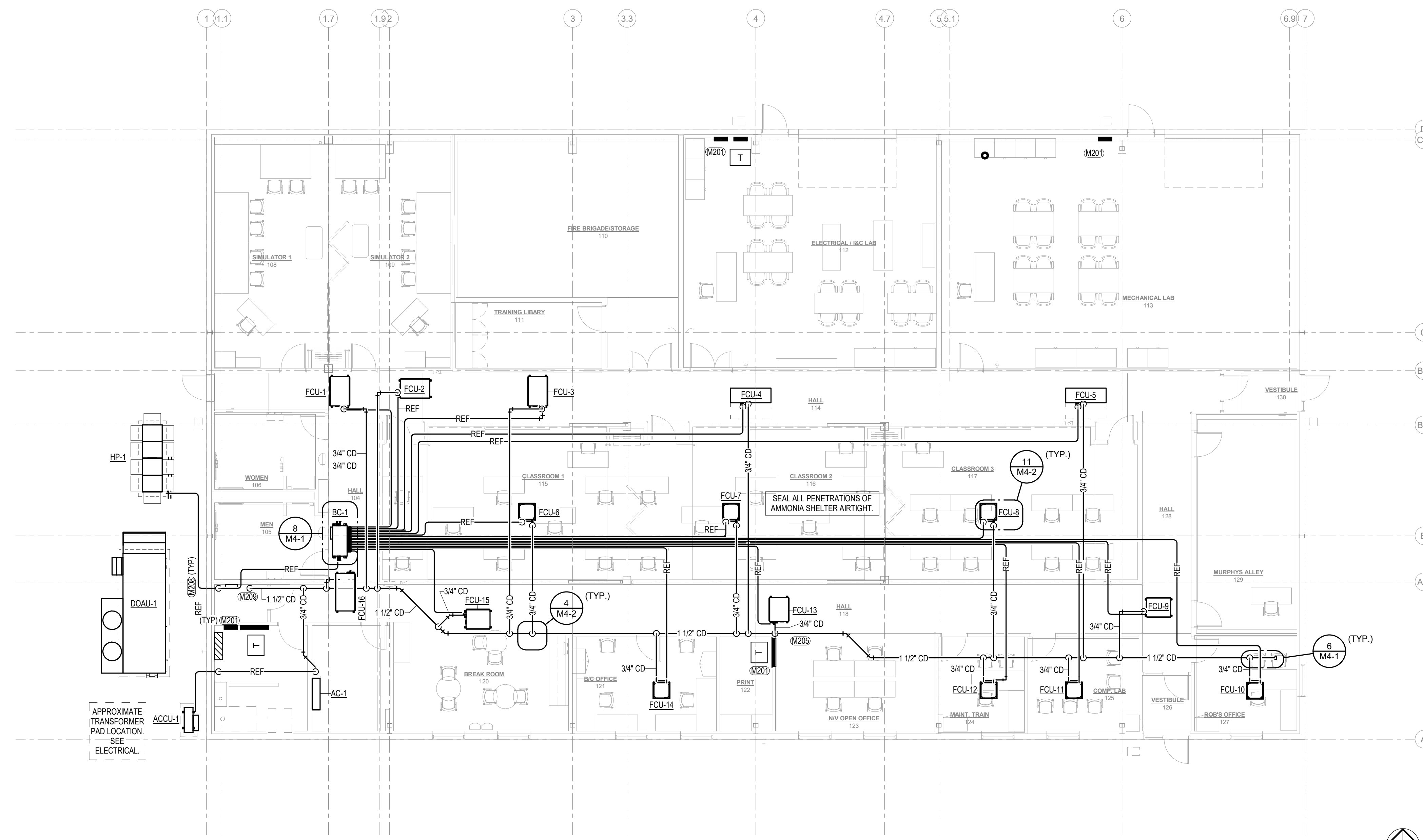


**MECHANICAL PIPING GENERAL NOTES**

- DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
- COORDINATE PIPE ROUTING WITH ALL OTHER TRADES. PROVIDE ALL ADDITIONAL OFFSETS AND TRANSITIONS AS REQUIRED TO COMPLETE INSTALLATION.
- INSTALL ALL ISOLATION VALVES AND BALANCING VALVES IN ACCESSIBLE LOCATIONS.
- ALL PIPING SHOWN FOR CLARITY. ROUTE CONDENSATE AND REFRIGERANT PIPING CONCEALED IN CHASES, IN WALLS OR ABOVE CEILINGS AS REQUIRED.
- PROVIDE REFRIGERANT PIPING FOR VRF SYSTEM AS REQUIRED PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT PIPE ROUTING WITH ALL OTHER TRADES. PROVIDE REFRIGERANT PIPING AND ALL REFRIGERANT SPECIALTIES REQUIRED PER MANUFACTURER'S RECOMMENDATIONS FOR COMPLETE OPERATION SYSTEM.
- SEAL ALL REFRIGERANT PIPING HOLES IN MEZZANINES AND SPACES. MAINTAIN FIRE RATINGS. ALL PENETRATIONS OF FIRE RESISTANT CONSTRUCTION SHALL BE SEALED WITH A LISTED FIRESTOPPING ASSEMBLY BY THE CONTRACTOR RESPONSIBLE FOR THE PENETRATION.
- SEE PIPING INSULATION DETAIL 6, SHEET M4-2.

**KEYNOTES**

- M201 DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL NEC REQUIRED CLEARANCES.
- M205 CONDENSATE MAIN PIPING INTENDED TO BE PUMPED UP TO GRAVITY CONDENSATE MAIN. MAINTAIN 1/8" PER FOOT REQUIRED SLOPE ON GRAVITY PIPING.
- M208 SUPPORT REFRIGERANT PIPING OFF OF THE GROUND UTILIZING PRE-MANUFACTURED PIPE SUPPORTS (PIPE PIER ELITE OR APPROVED EQUAL) SPACED AT 5'-0" MAXIMUM AND AT EACH TURN IN DIRECTION.
- M209 DISCHARGE CONDENSATE TO MOP SINK. MAINTAIN CODE REQUIRED AIR GAP ABOVE FLOOD PLANE OF FIXTURE. SLOPE GRAVITY CONDENSATE A MINIMUM OF 1/8" PER FOOT. SLOPE TOWARDS DISCHARGE END. ROUTE APPROXIMATELY 30" ABOVE CEILING.



**1 FIRST FLOOR PLAN - MECHANICAL PIPING**  
1/8" = 1'-0" | 0' 1" | 8' | 16'

#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD,  
NEBRASKA CITY, NE 68410

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POWER DISTRICT

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**FLOOR PLAN - MECHANICAL PIPING**

MEI PROJECT NO. 20297

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**M2-1**



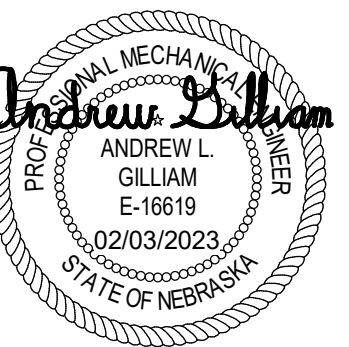
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MECHANICAL + ELECTRICAL  
ENGINEER  
MORRISSEY ENGINEERING  
4940 North 118th Street  
Omaha, NE 68164



#	Description	Date

TRAINING  
FACILITY  
PHASE 2

7264 L ROAD,  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC  
POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

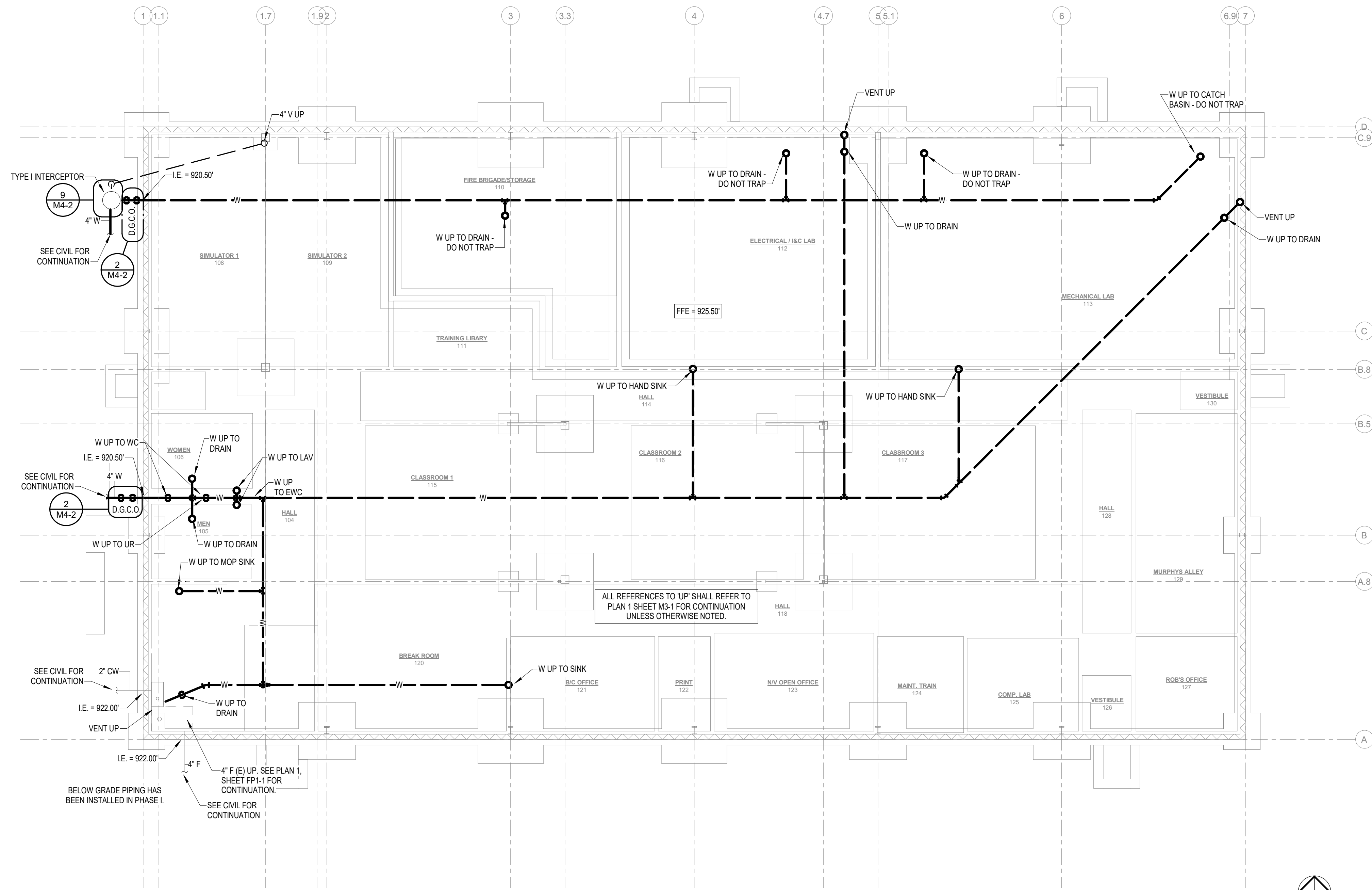
BELOW GRADE PLAN  
- PLUMBING

M3-0

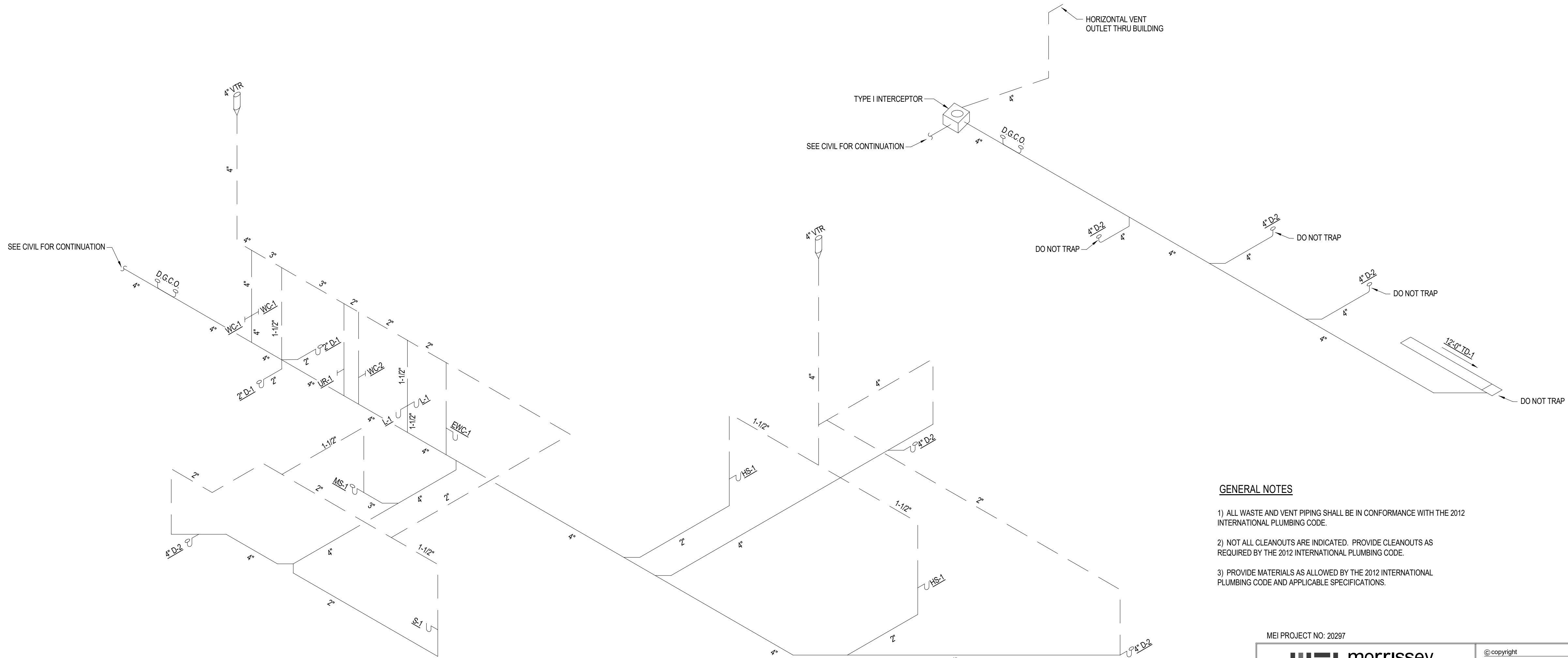
BCDM NO. 5396-00  
02/03/2023

UNDERGROUND PLUMBING GENERAL NOTES

- HOLES CUT IN FLOORS TO PERMIT THE INSTALLATION OF PIPING SHALL BE CAREFULLY MADE AND RESTRICTED TO THE SMALLEST PRACTICAL SIZE.
- PIPE ROUTING IS SHOWN FOR CLARITY AND GENERAL ROUTING INFORMATION. CONTRACTOR SHALL COORDINATE EXACT ROUTING WITH ALL TRADES. OFFSET AND TRANSITION PIPING AS REQUIRED TO AVOID CONFLICTS.
- REFER TO WASTE AND VENT RISER DIAGRAM FOR COMPLETE WASTE AND VENT SIZES ON THIS SHEET.
- COORDINATE ALL BELOW GRADE PIPING WITH STRUCTURAL FOOTINGS. PROVIDE SLEEVES AS REQUIRED.



1 BELOW GRADE PLAN - PLUMBING  
M3-0 1/8" = 1'-0" 0' 16'



GENERAL NOTES

- ALL WASTE AND VENT PIPING SHALL BE IN CONFORMANCE WITH THE 2012 INTERNATIONAL PLUMBING CODE.
- NOT ALL CLEANOUTS ARE INDICATED. PROVIDE CLEANOUTS AS REQUIRED BY THE 2012 INTERNATIONAL PLUMBING CODE.
- PROVIDE MATERIALS AS ALLOWED BY THE 2012 INTERNATIONAL PLUMBING CODE AND APPLICABLE SPECIFICATIONS.

MEI PROJECT NO. 20297

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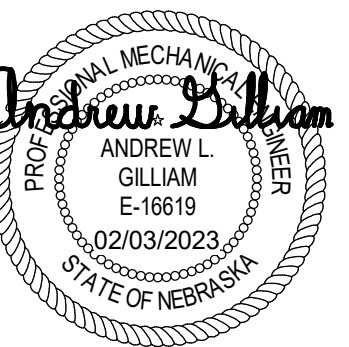
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2 WASTE AND VENT RISER DIAGRAM  
M3-0 NTS 0' 16'



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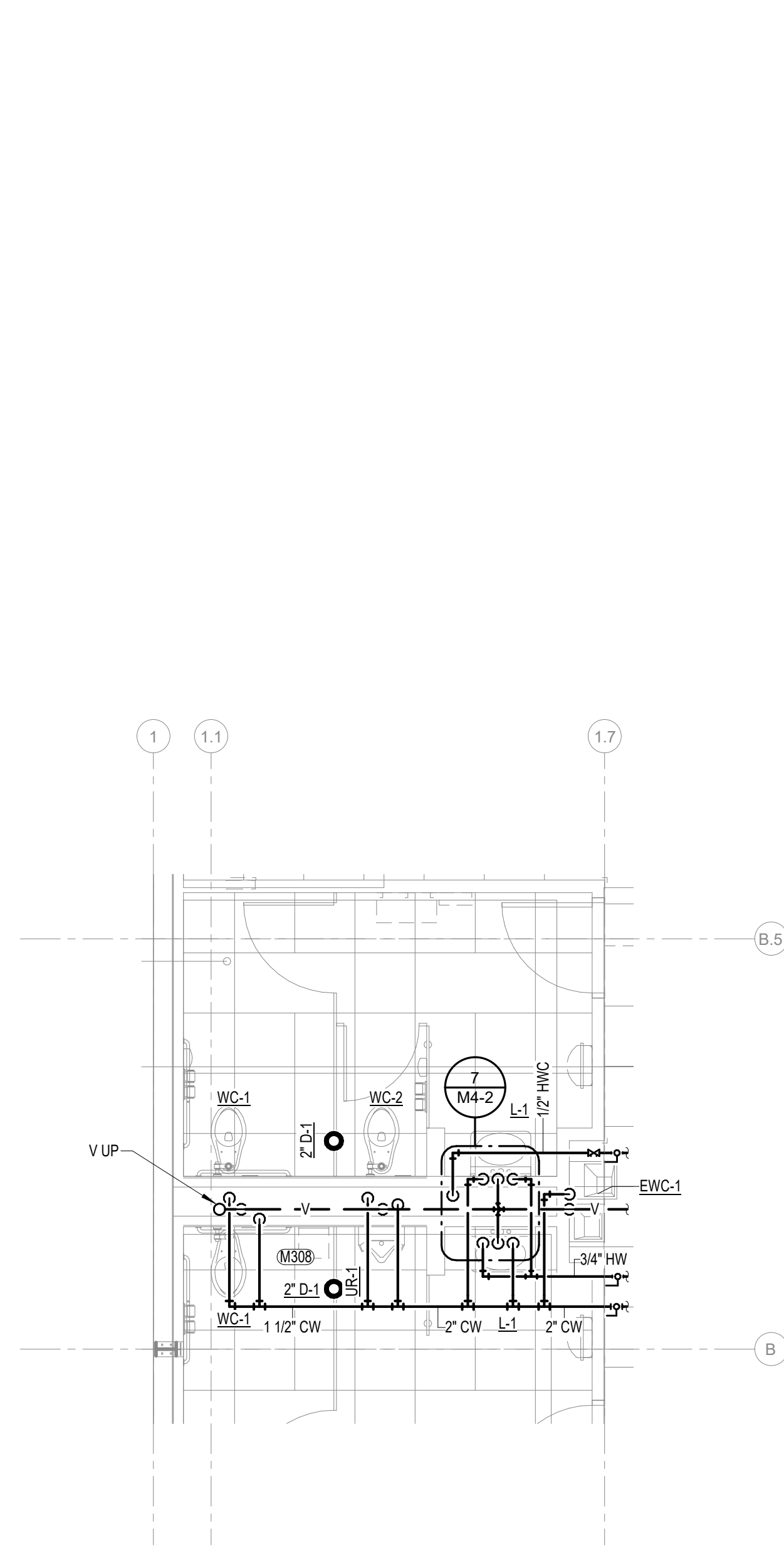


PLUMBING GENERAL NOTES

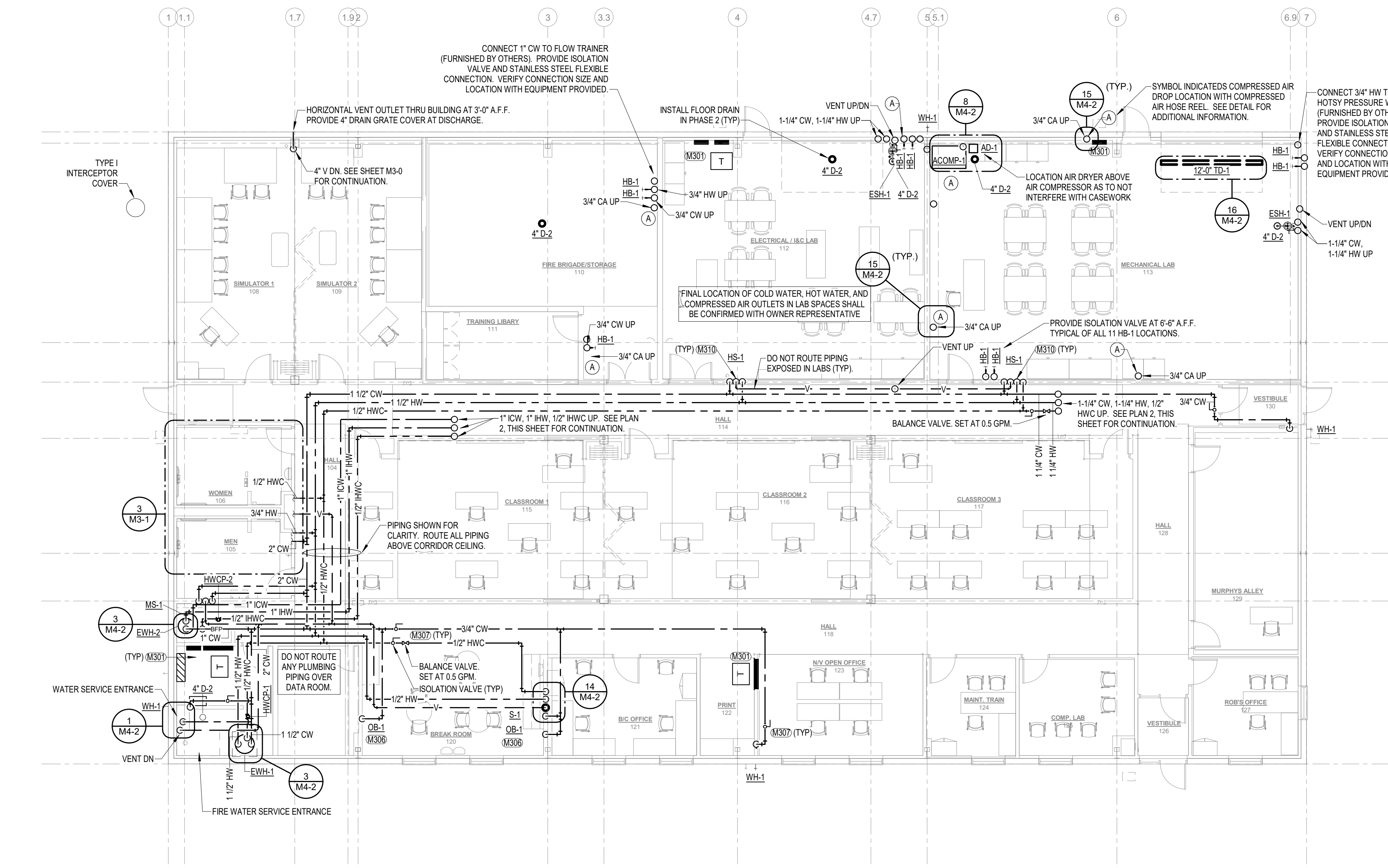
- DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL CODE REQUIRED CLEARANCES.
- COORDINATE PIPE ROUTING WITH ALL OTHER TRADES. PROVIDE ALL ADDITIONAL OFFSETS AND TRANSITIONS AS REQUIRED TO COMPLETE INSTALLATION.
- PLANS ARE SCHEMATIC IN NATURE. COORDINATE EXACT ROUTING AND EQUIPMENT LOCATIONS WITH ALL OTHER TRADES. PROVIDE ALL ADDITIONAL OFFSETS AS REQUIRED TO COMPLETE INSTALLATION.
- INSTALL ALL ISOLATION VALVES AND BALANCING VALVES IN ACCESSIBLE LOCATIONS.
- ALL PIPING SHOWN FOR CLARITY. ROUTE WASTE, VENT, AND WATER PIPING CONCEALED IN CHASES, IN WALLS, OR ABOVE CEILINGS AS REQUIRED.
- DO NOT ROUTE WATER PIPING IN EXTERIOR WALLS.
- NOT ALL CLEANOUTS ARE SHOWN. PROVIDE CLEANOUTS PER UNIFORM PLUMBING CODE. EXTEND CLEANOUTS TO WALLS WHERE APPLICABLE. COORDINATE CLEANOUT LOCATIONS WITH GENERAL CONTRACTOR.
- SEE WASTE AND VENT RISER DIAGRAM ON SHEET M3-3 FOR WASTE AND VENT PIPE SIZES.
- SEE PLUMBING FIXTURE SCHEDULE SHEET M6-3 FOR PLUMBING FIXTURE CONNECTION REQUIREMENTS.
- ALL PENETRATIONS OF FIRE RESISTANT CONSTRUCTION SHALL BE SEALED WITH A LISTED FIRESTOPPING ASSEMBLY BY THE CONTRACTOR RESPONSIBLE FOR THE PENETRATION.

KEYNOTES

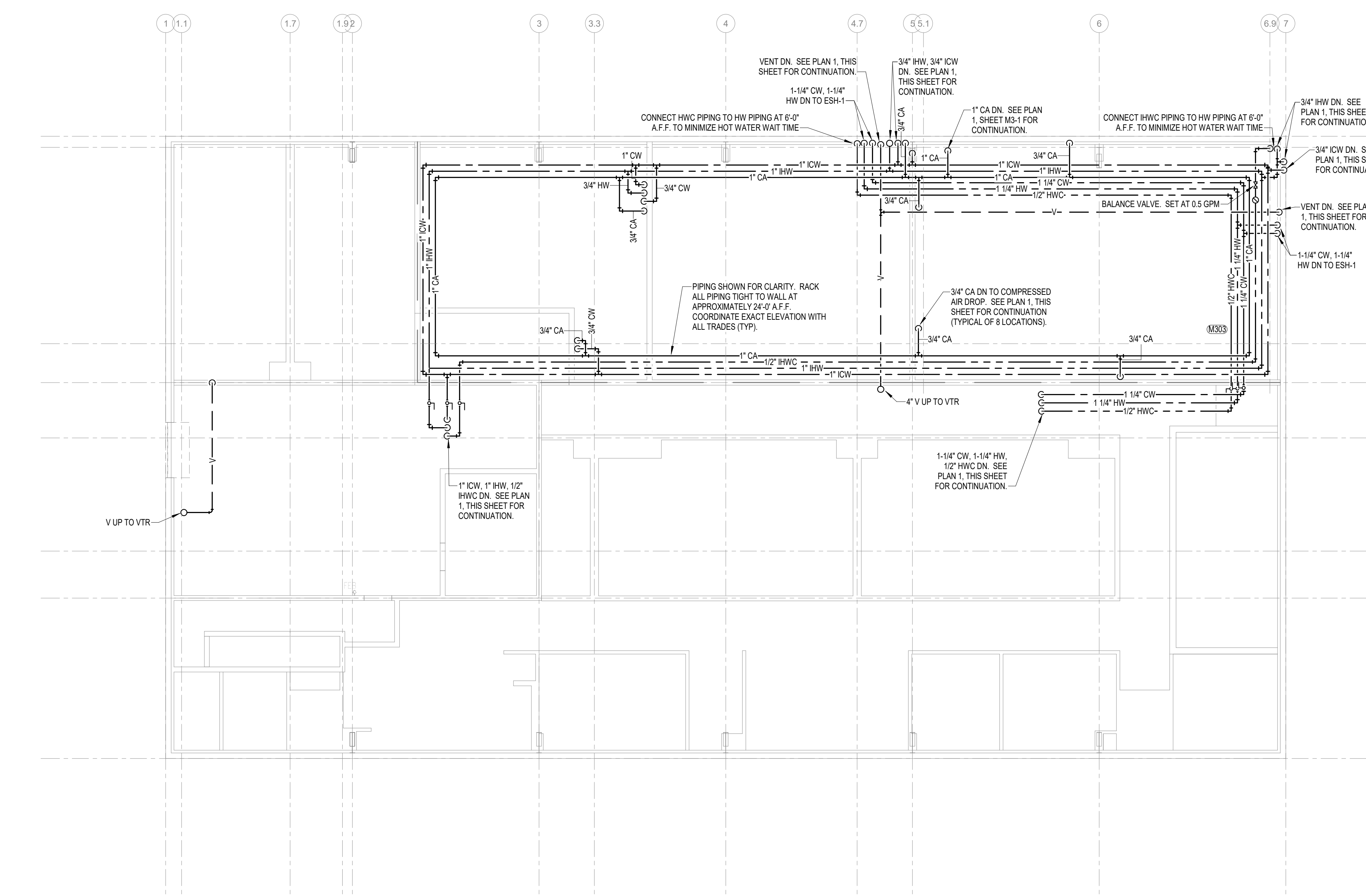
- M301 DO NOT ROUTE PIPING ABOVE ELECTRICAL PANELS. MAINTAIN ALL NEC REQUIRED CLEARANCES.
- M303 RACK COMPRESSED AIR, INDUSTRIAL COLD WATER, INDUSTRIAL HOT WATER, AND INDUSTRIAL HOT WATER CIRCULATION AGAINST WALL AT APPROXIMATELY 24" A.F.F. VERIFY EXACT ROUTING WITH ALL TRADES.
- M306 PROVIDE ICE MAKER OUTLET BOX FOR REFRIGERATOR. COORDINATE EXACT BOX LOCATION WITH EQUIPMENT. ROUTE 1/4" CW WITH ISOLATION VALVE TO ICE MAKER OUTLET BOX.
- M307 LOCATE ALL PIPE ACCESSORIES REQUIRING ACCESS AT A MAXIMUM OF 3'-0" ABOVE CEILING.
- M308 PROVIDE WATER HAMMER ARRESTOR IN PLUMBING CHASE WITH ACCESS FROM MENS SIDE OF RESTROOM. COORDINATE EXACT LOCATION OF ACCESS PANEL WITH ALL TRADES.
- M310 LOCATE PIPING WITHIN CONCRETE BLOCK WALL. COORDINATE LOCATION WITH ALL TRADES. NOT ALL LOCATIONS ARE IDENTIFIED.



3 ENLARGED RESTROOMS - PLUMBING PLAN  
 M3-1 1/4" = 1'-0" 0' 1' 4' 8'



1 FIRST FLOOR PLAN - PLUMBING  
 M3-1 1/8" = 1'-0" 0' 1' 8' 16'



2 UPPER VOLUME PLAN - PLUMBING  
 M3-1 1/8" = 1'-0" 0' 1' 8' 16'

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FLOOR PLANS - PLUMBING

MEI PROJECT NO. 202297

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M3-1



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#	Description	Date
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TRAINING FACILITY PHASE 2

7264 L ROAD,  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

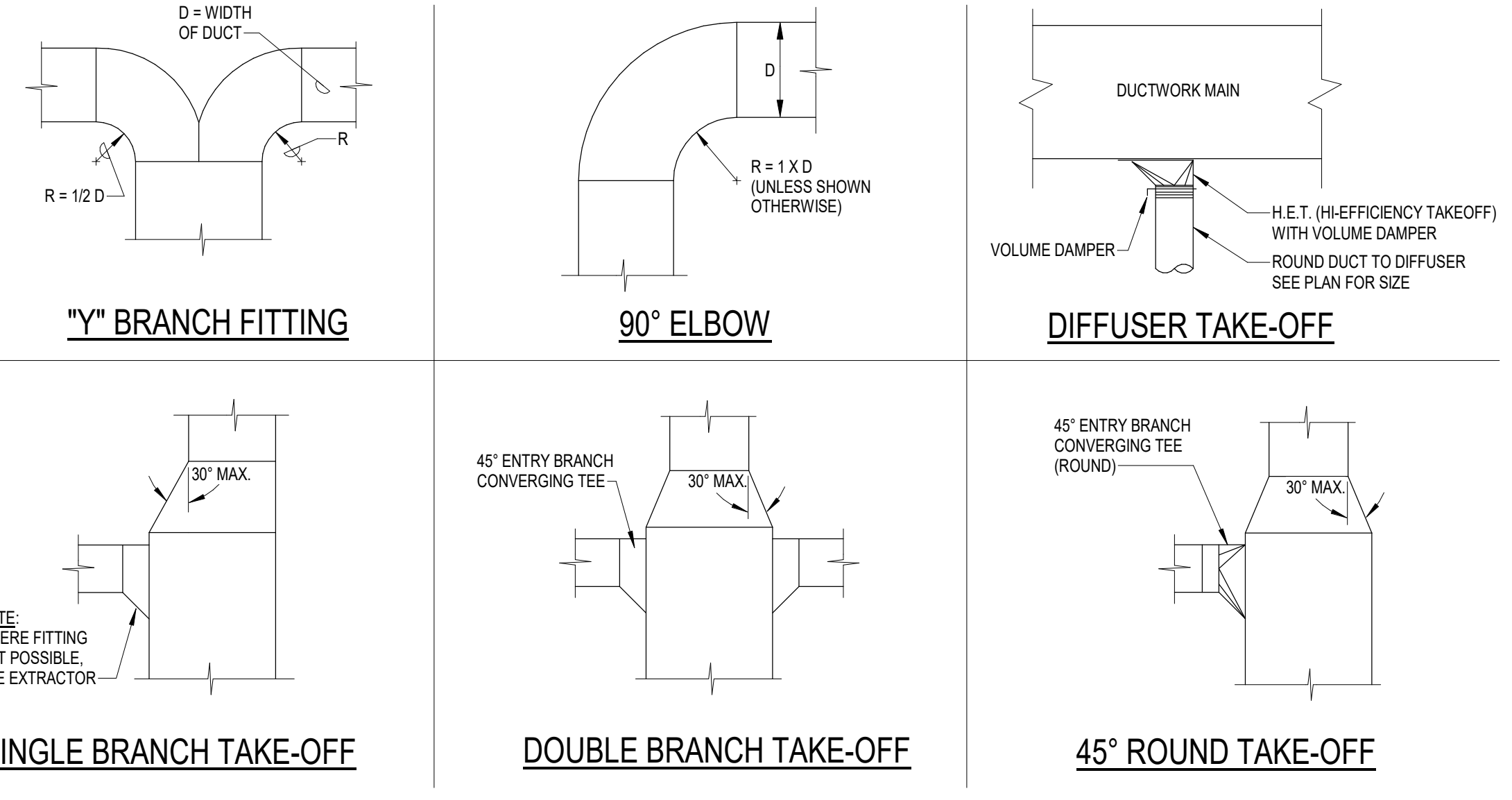
444 SOUTH 16TH STREET  
OMAHA, NE 68102

MECHANICAL DETAILS

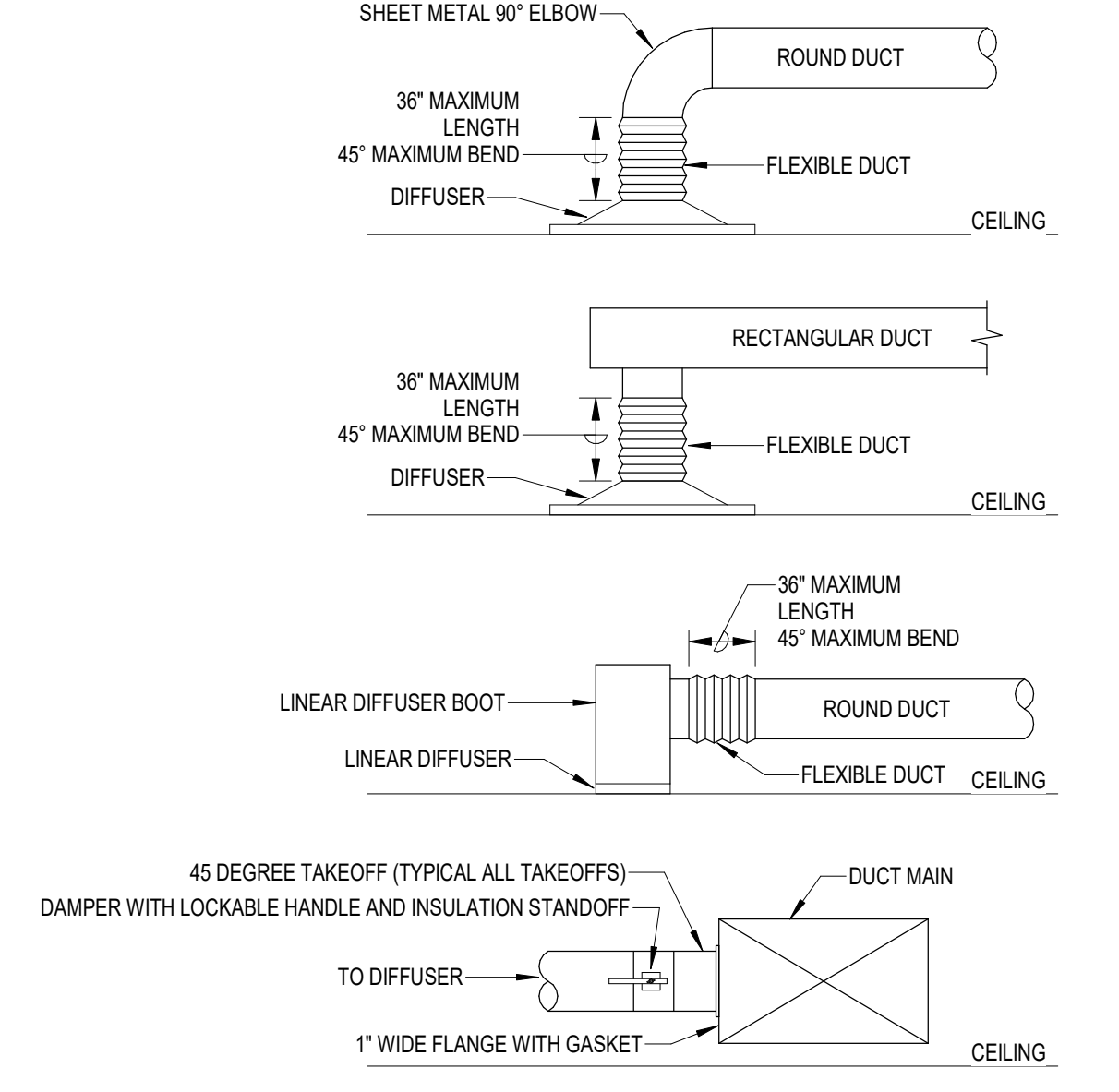
M4-1

BCDM NO. 5396-00  
02/03/2023

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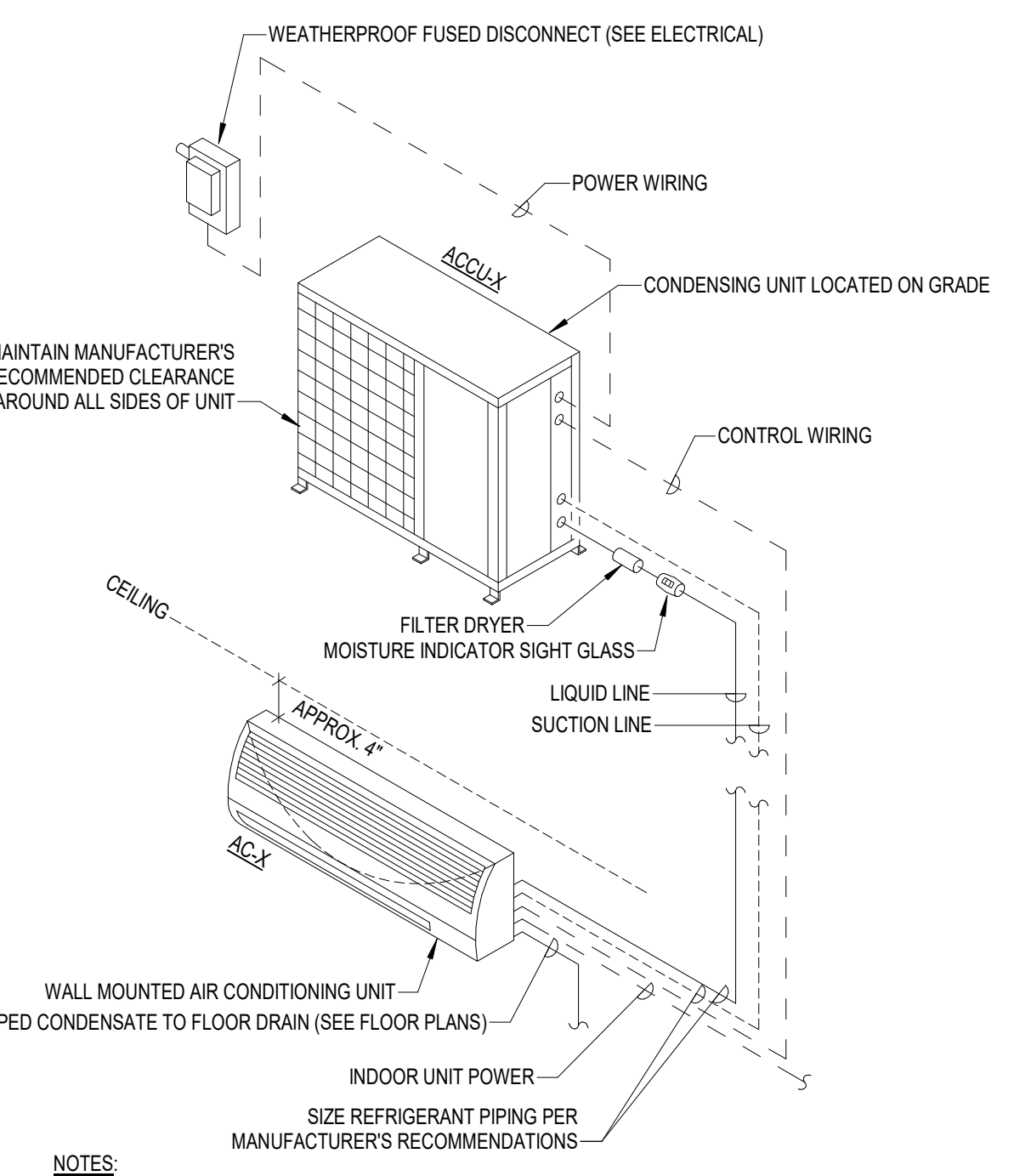
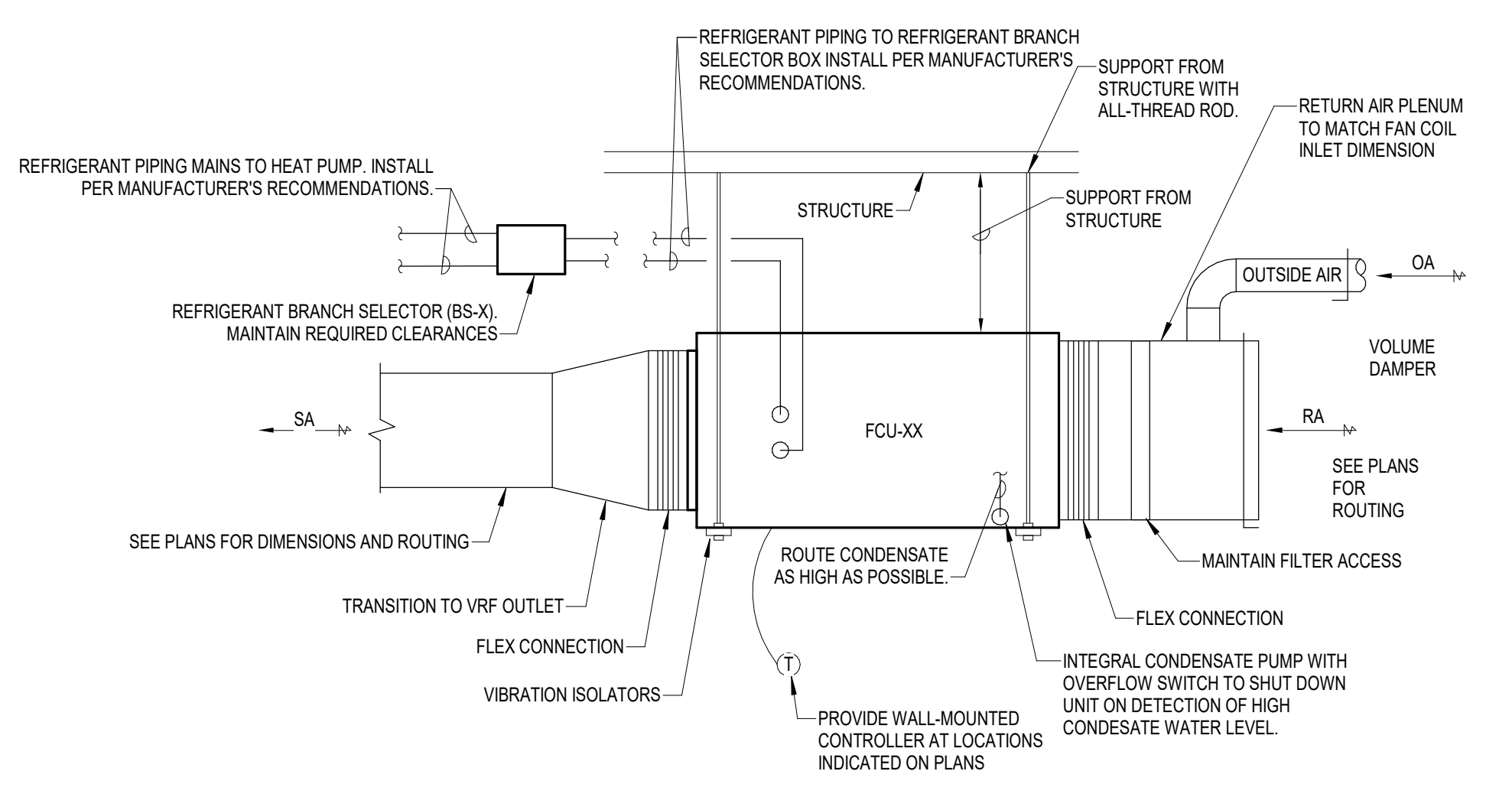
1 DUCT FITTING DETAILS  
M4-1 NTS



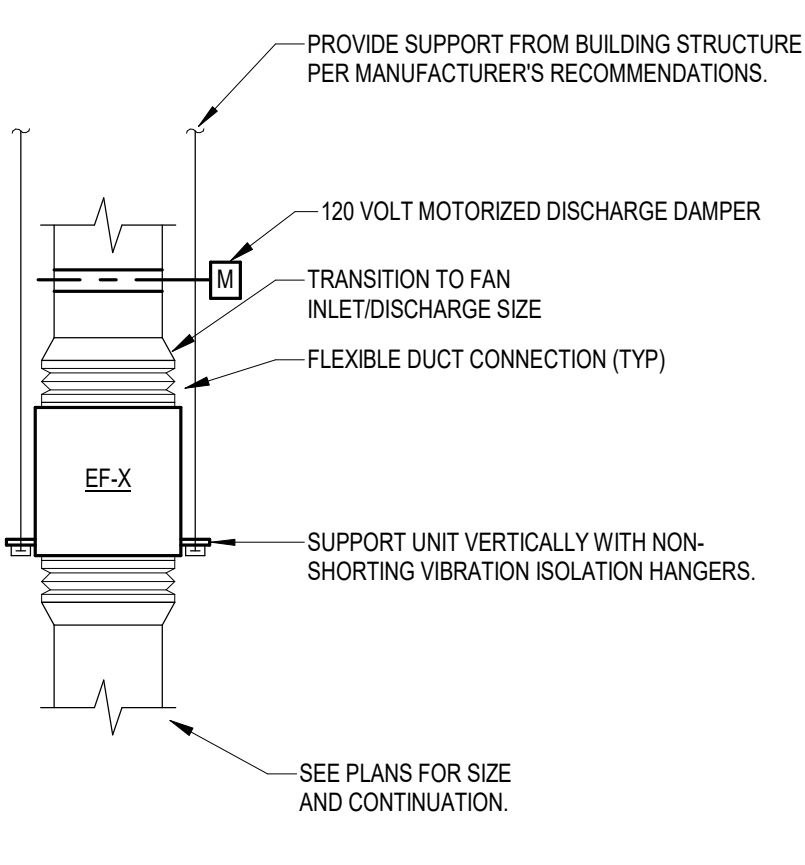
2 DUCT CONNECTION DETAILS  
M4-1 NTS

NOTES:  
1) USE OF FLEX DUCT FOR 90 DEGREE TURNS INTO DIFFUSERS WILL NOT BE ACCEPTABLE.  
2) ALL DIFFUSER RUNOUTS SHALL UTILIZE 45 DEGREE TAKEOFFS AS INDICATED. STRAIGHT TAPS WILL NOT BE ACCEPTABLE.

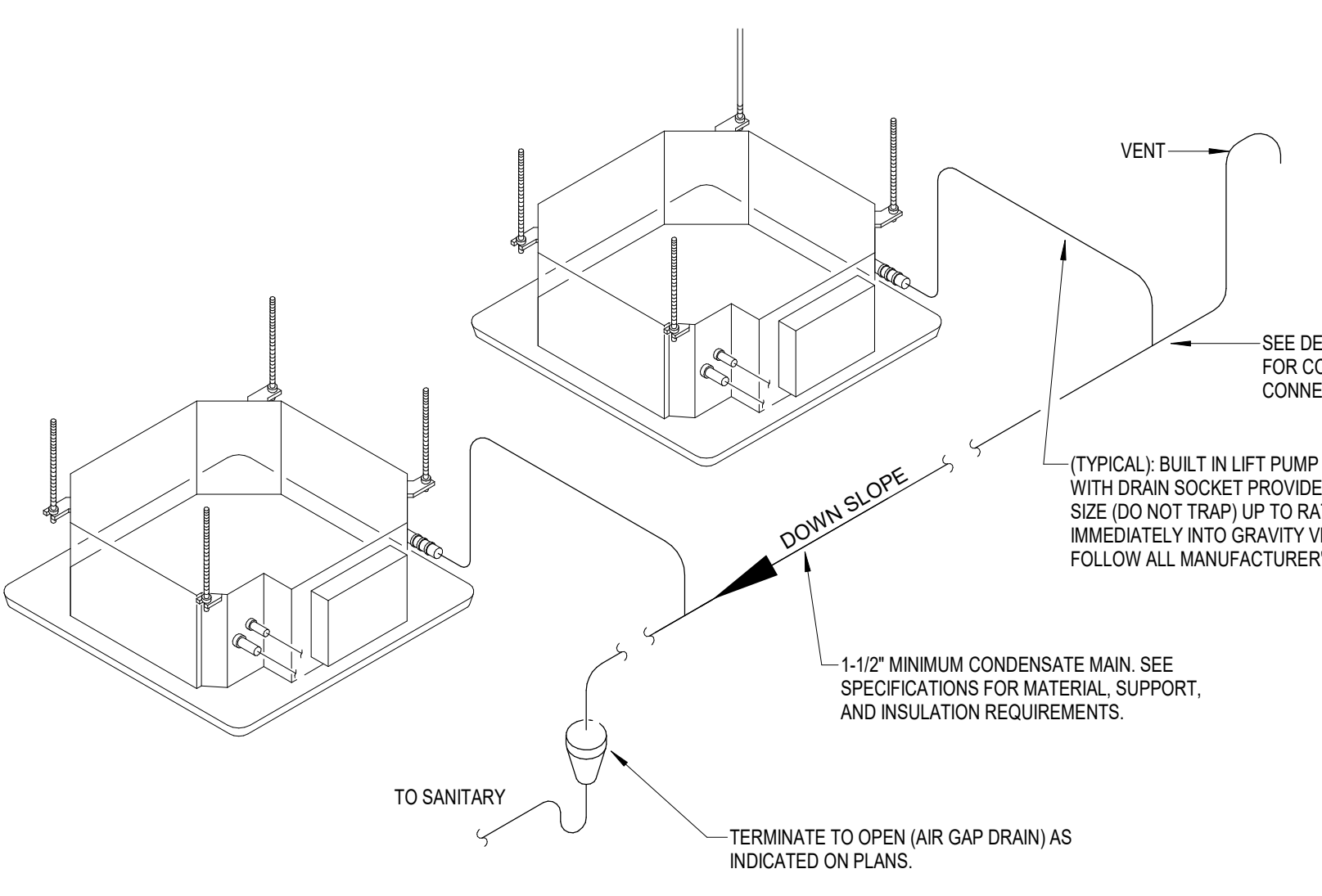
3 DUCTED HORIZONTAL VRF FANCOIL DETAIL  
M4-1 NTS



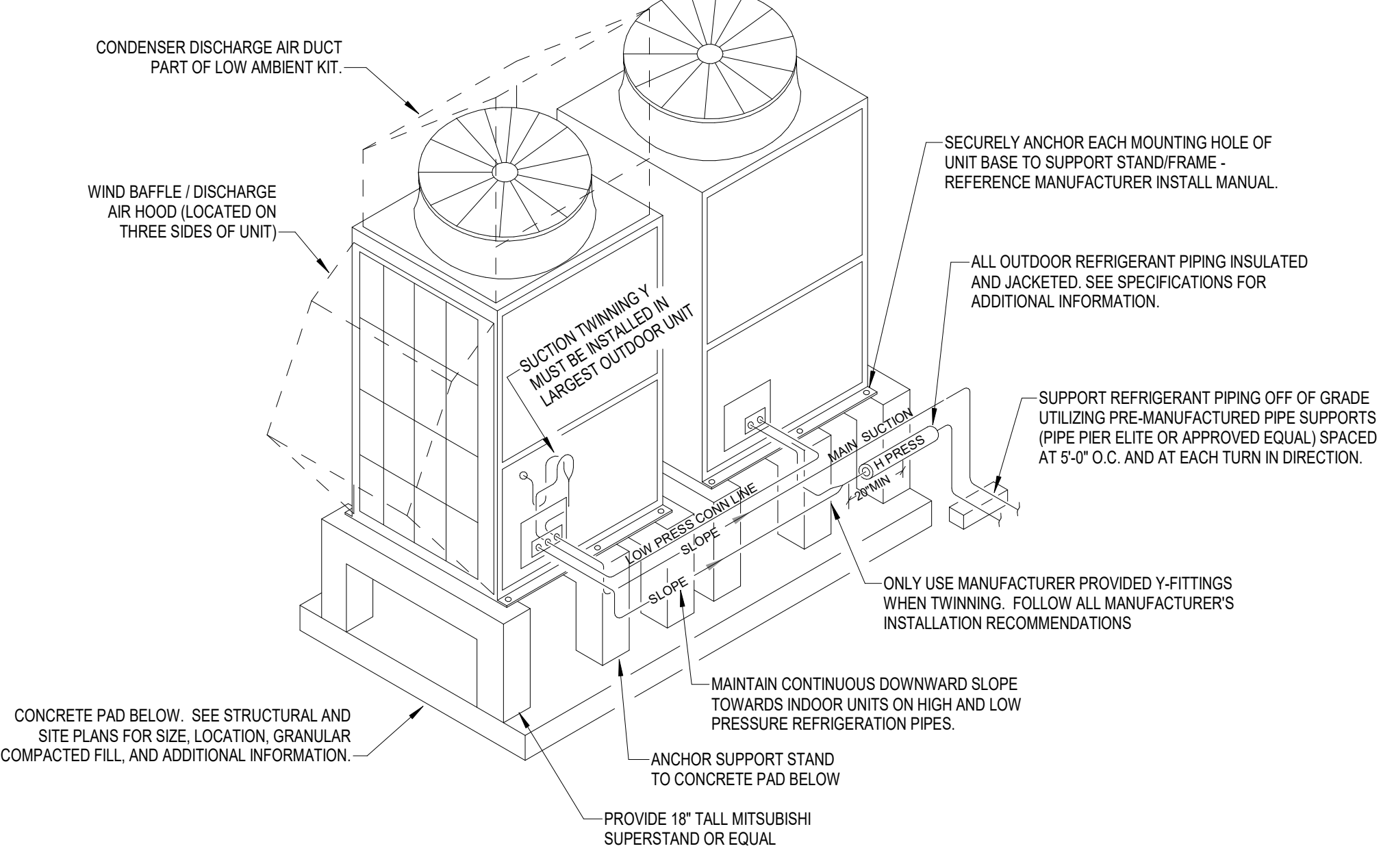
4 DUCTLESS SPLIT HEAT PUMP UNIT DETAIL  
M4-1 NTS



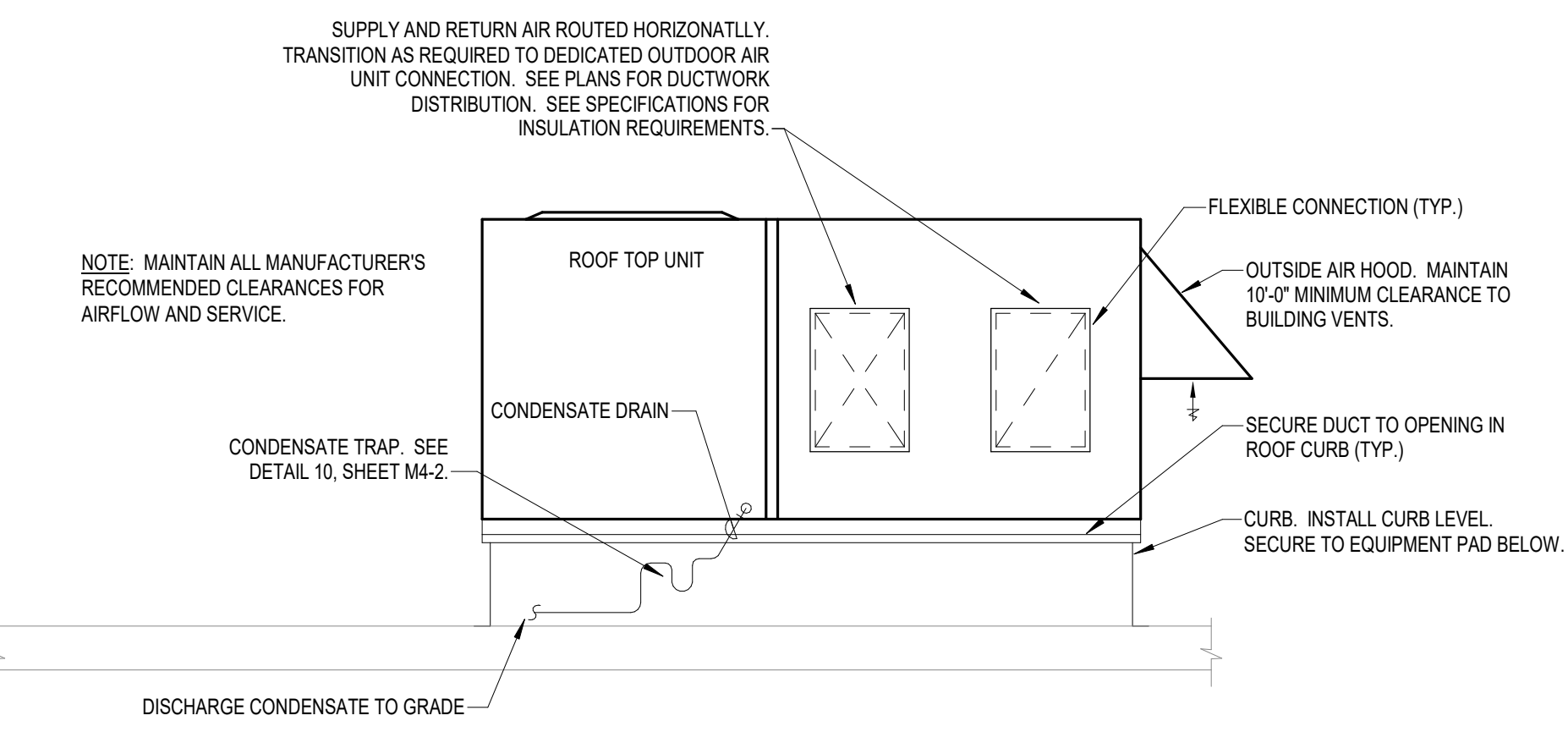
5 EXHAUST FAN MOUNTING DETAIL  
M4-1 NTS



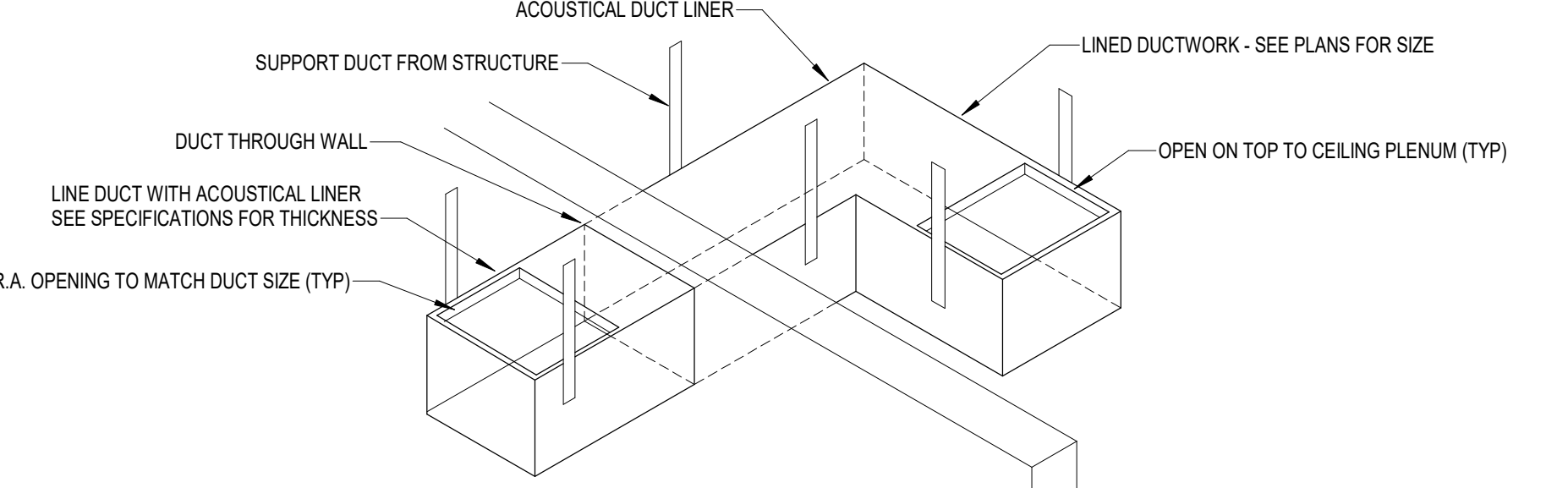
6 CONDENSATE GROUPED PIPING DETAIL  
M4-1 NTS



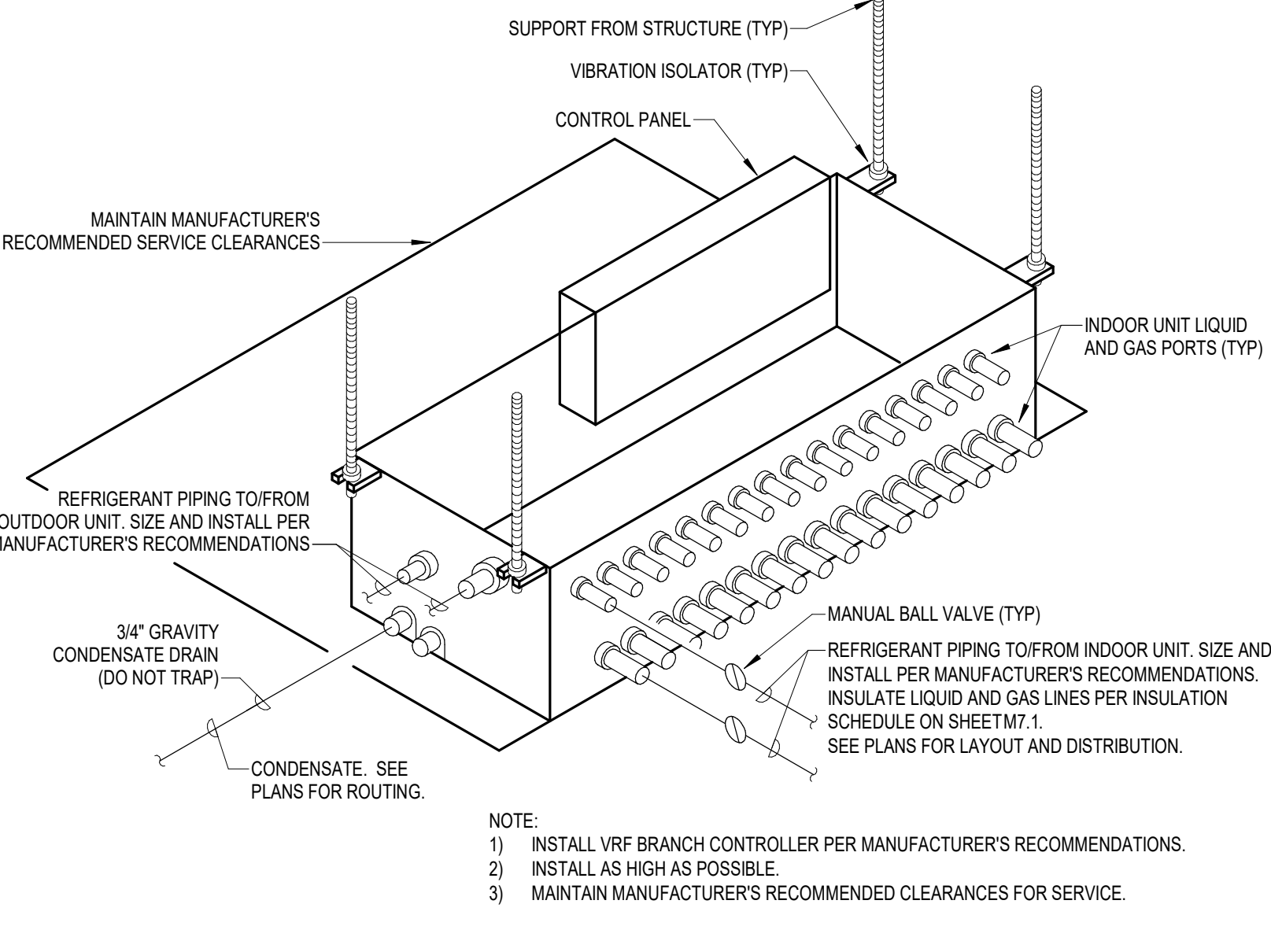
7 VRF OUTDOOR HEAT PUMP SUPPORT DETAIL  
M4-1 NTS



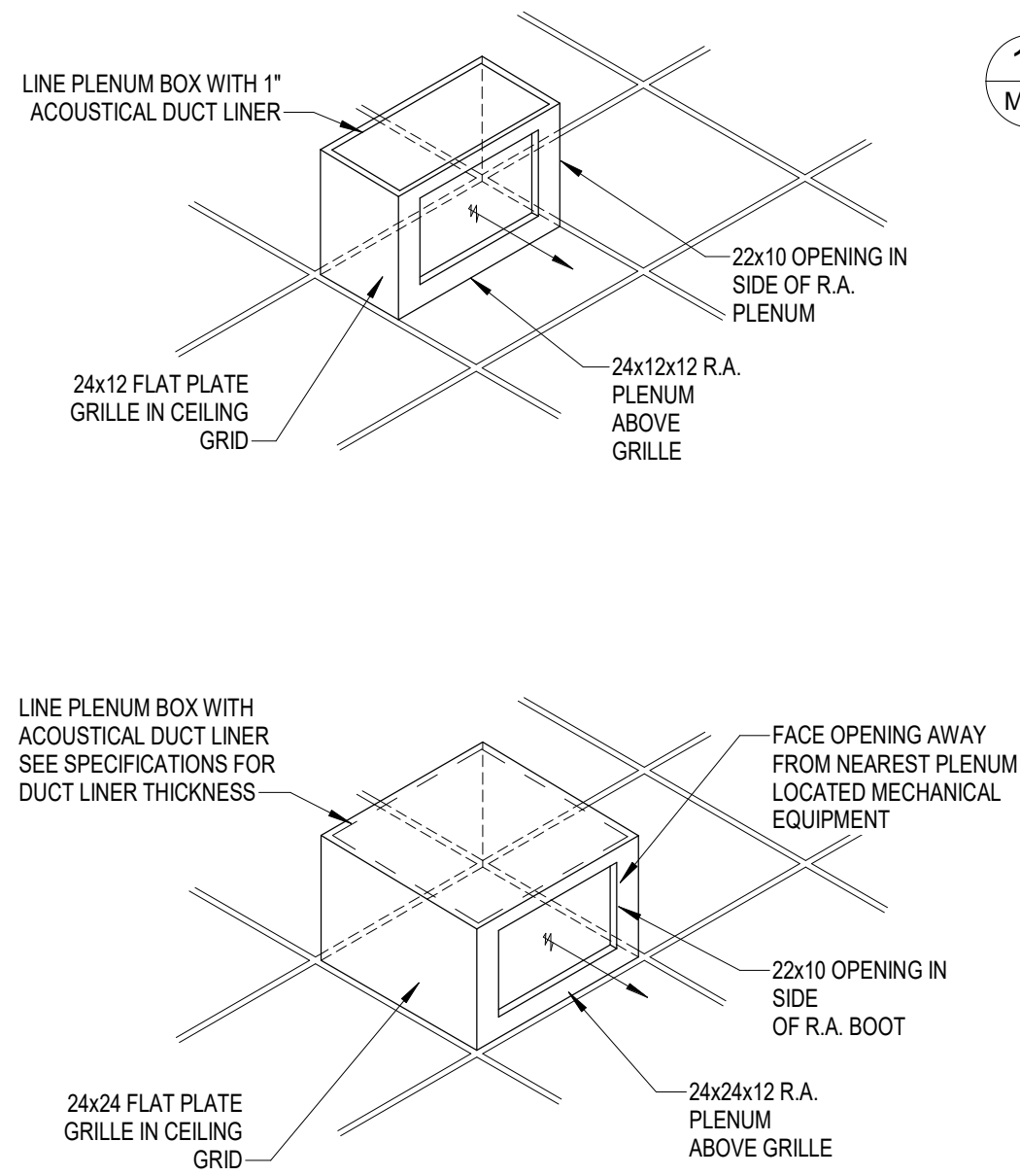
10 DEDICATED OUTDOOR AIR UNIT MOUNTING DETAIL  
M4-1 NTS



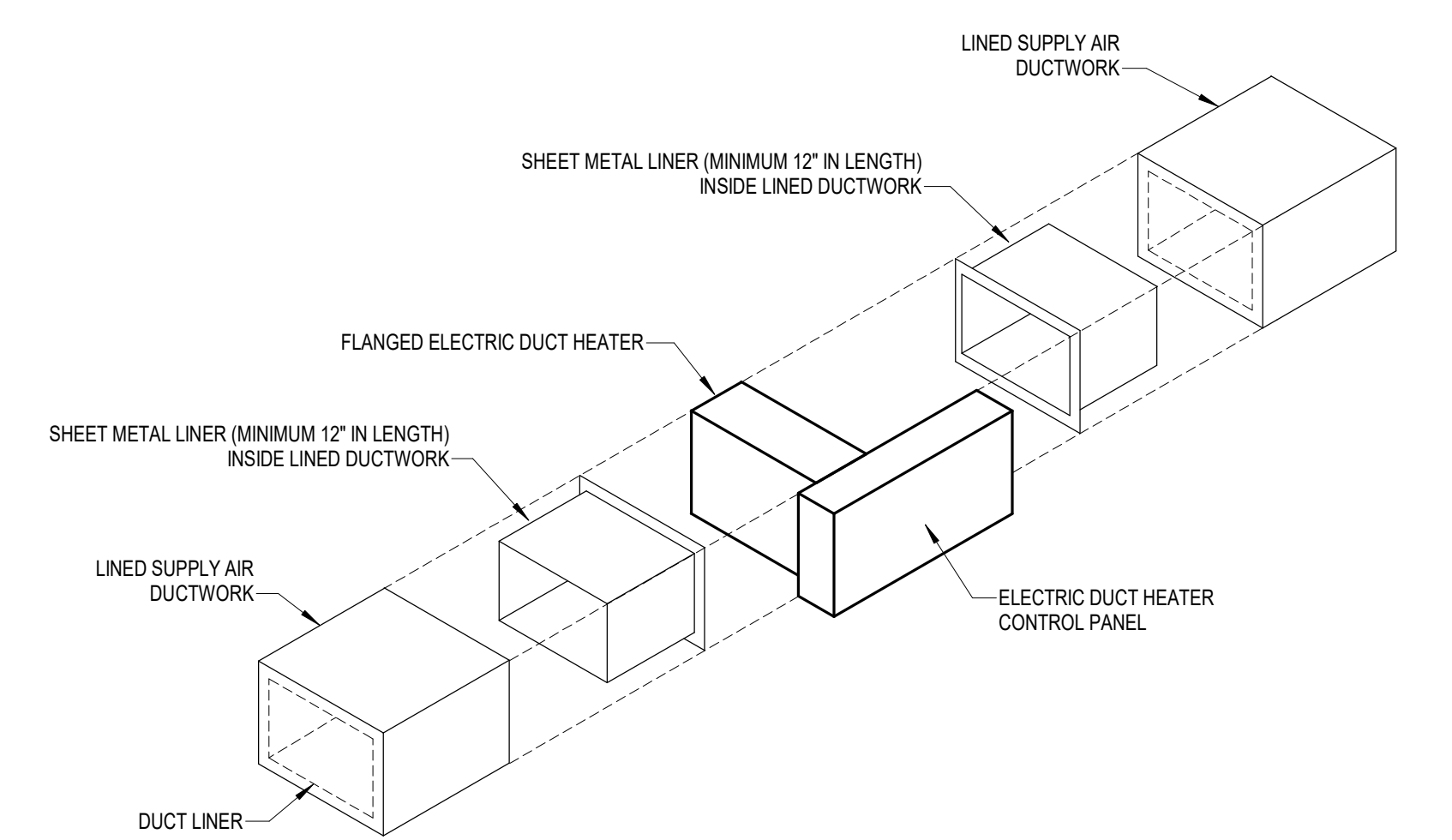
12 TRANSFER DUCT DETAIL  
M4-1 NTS



8 VRF BRANCH SELECTOR DETAIL  
M4-1 NTS



9 RETURN AIR BOOT DETAILS  
M4-1 NTS



11 ELECTRIC DUCT HEATER DETAIL  
M4-1 NTS

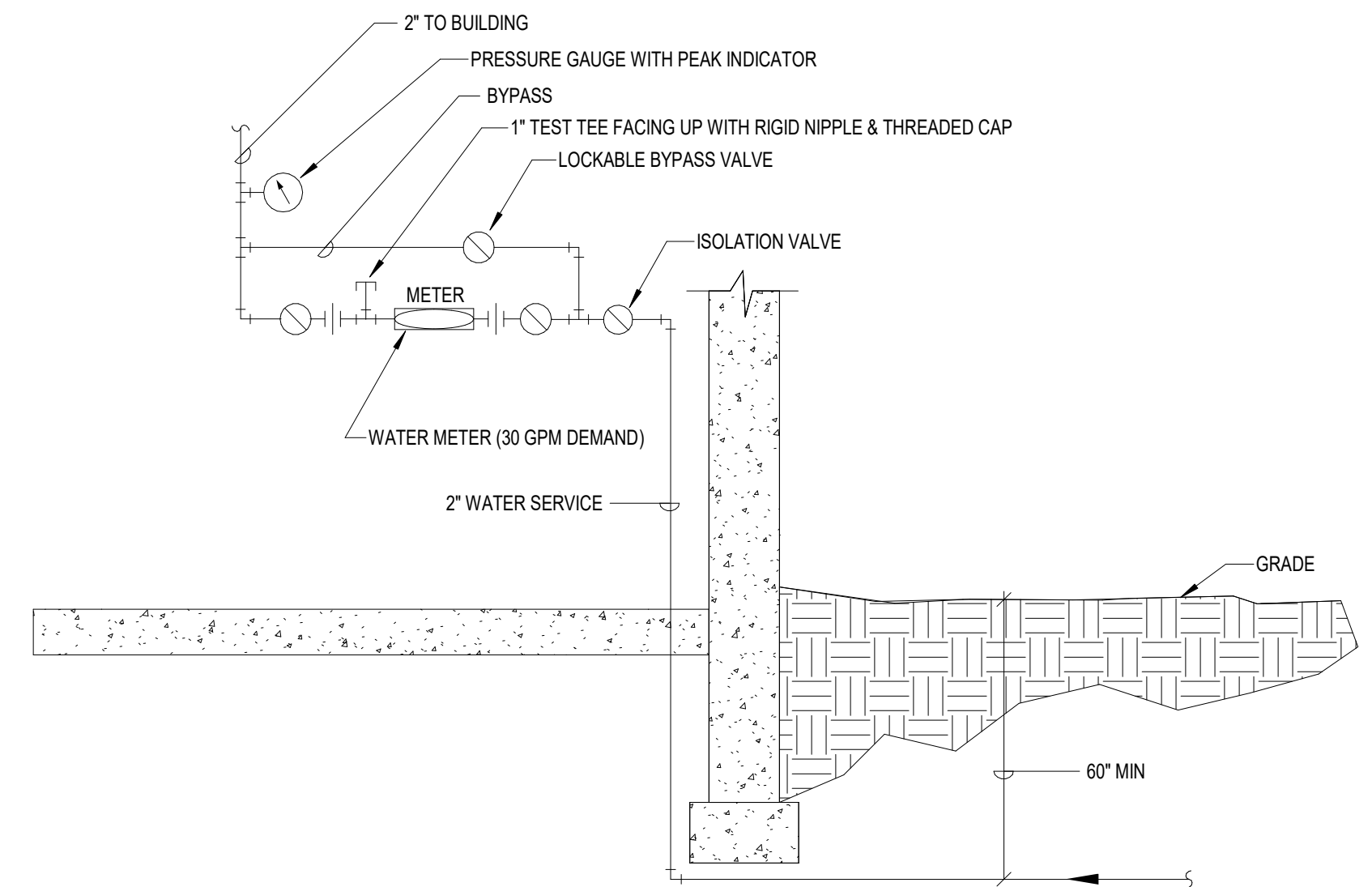
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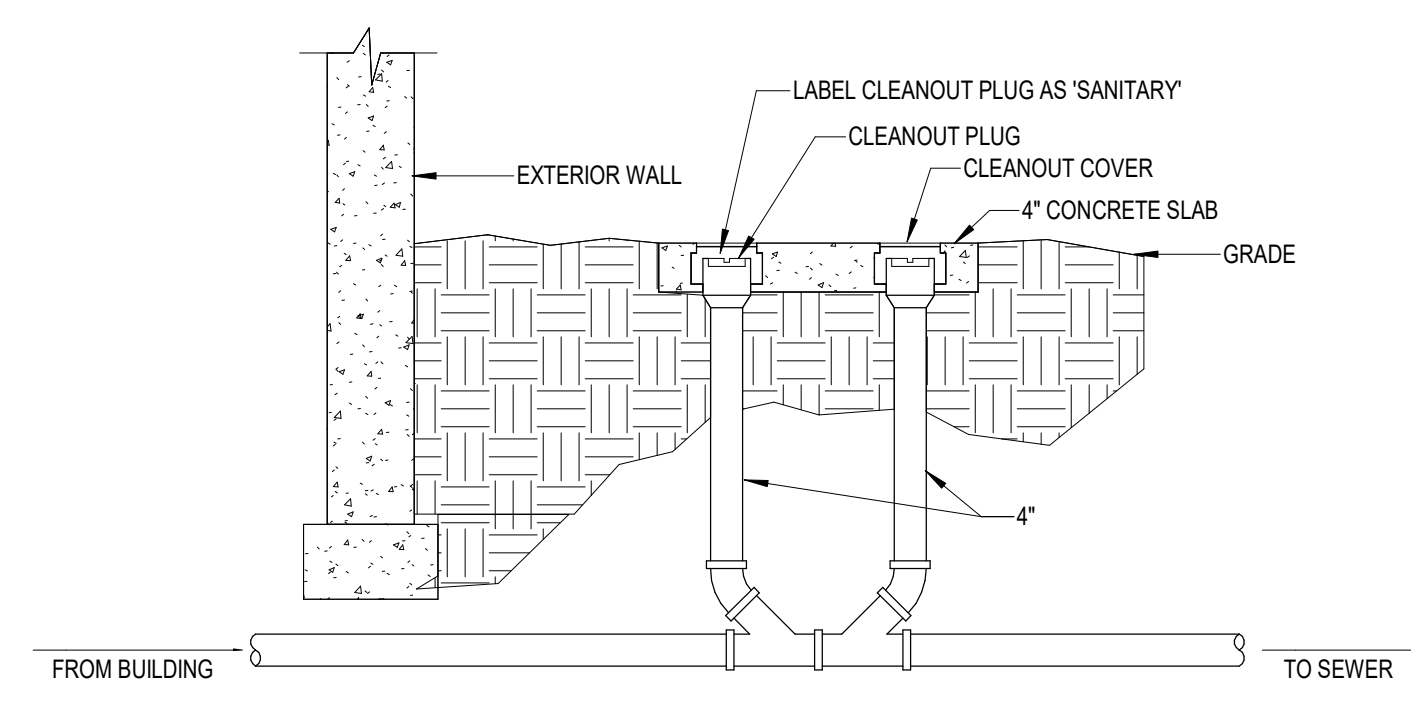
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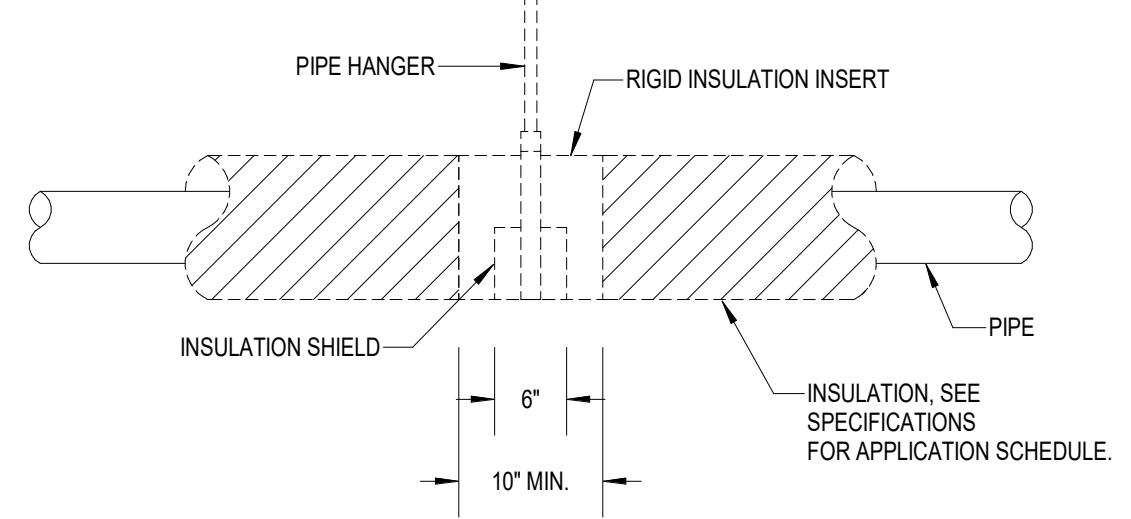
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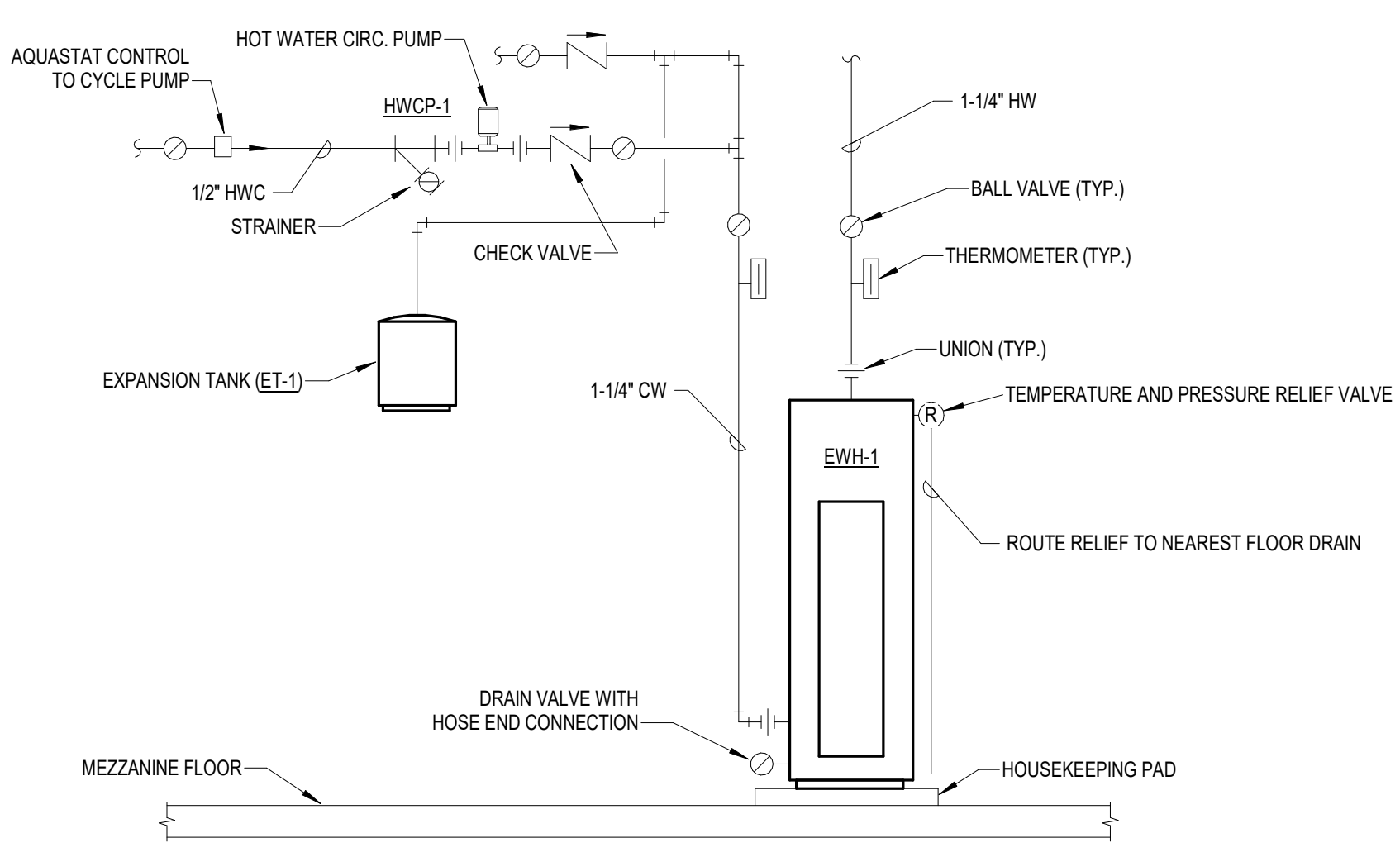
1 WATER SERVICE ENTRANCE DETAIL  
M4-2 NTS



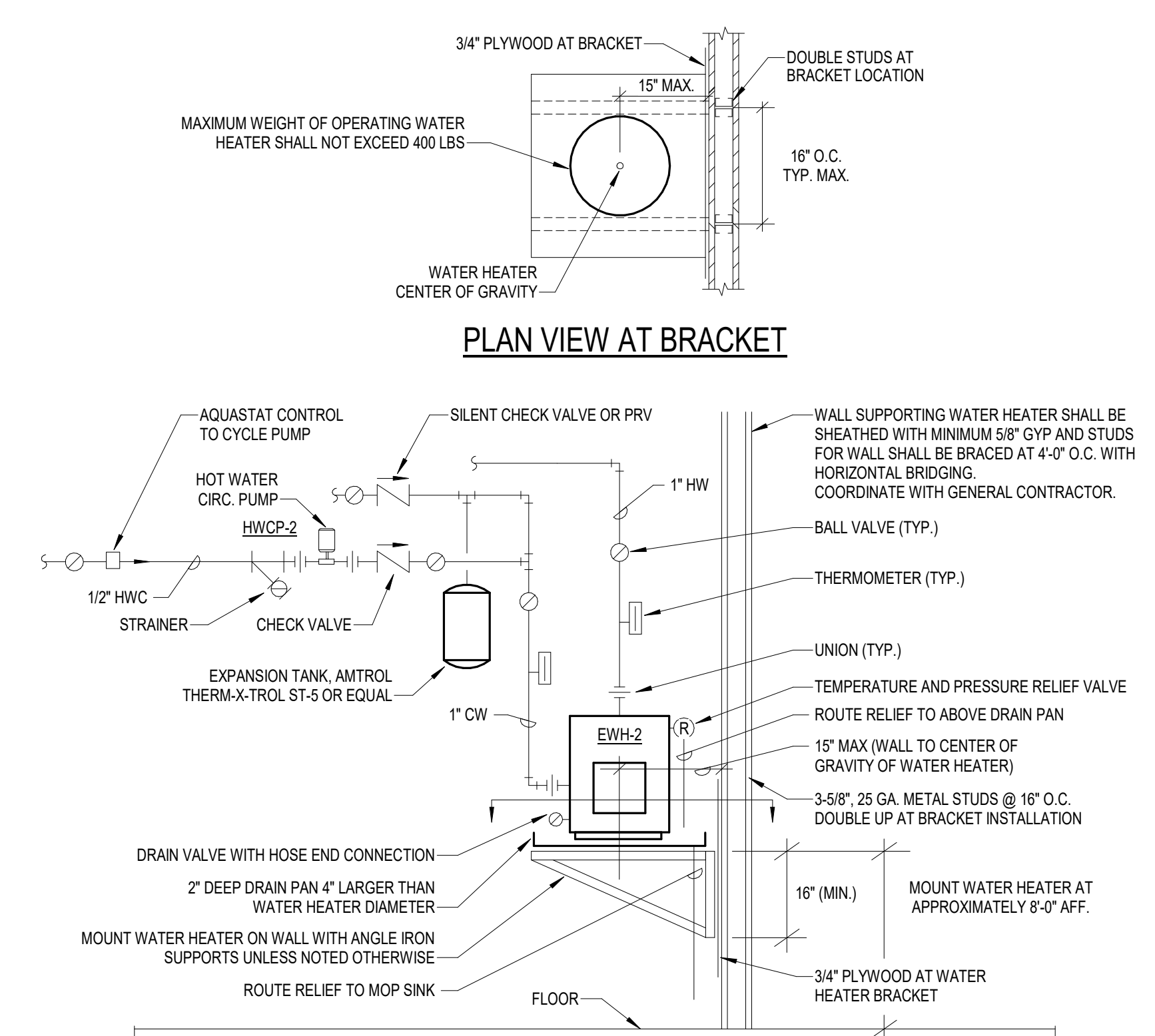
2 DOUBLE GRADE CLEANOUT DETAIL  
M4-2 NTS



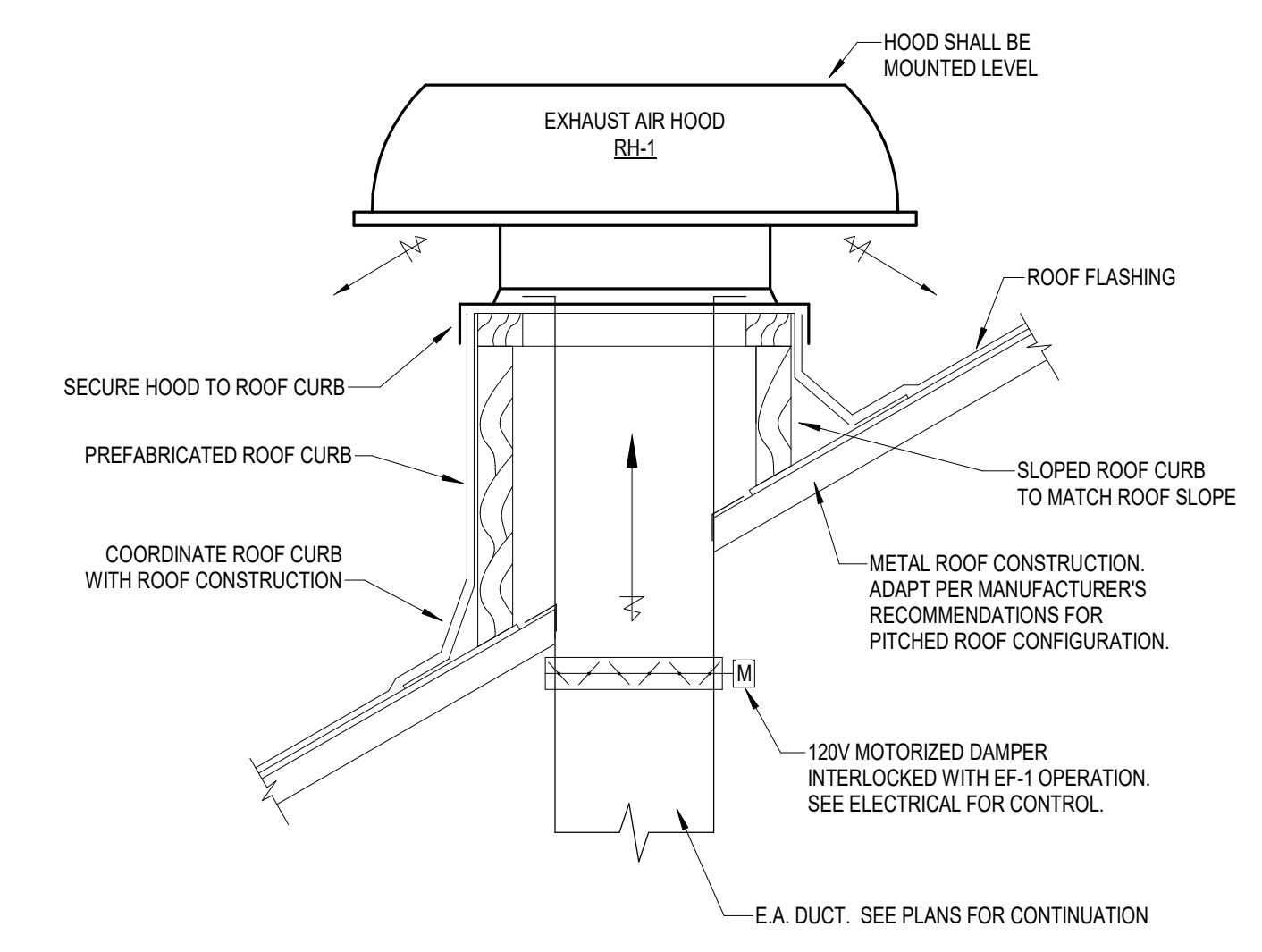
6 PIPING INSULATION INSTALLATION DETAIL  
M4-2 NTS



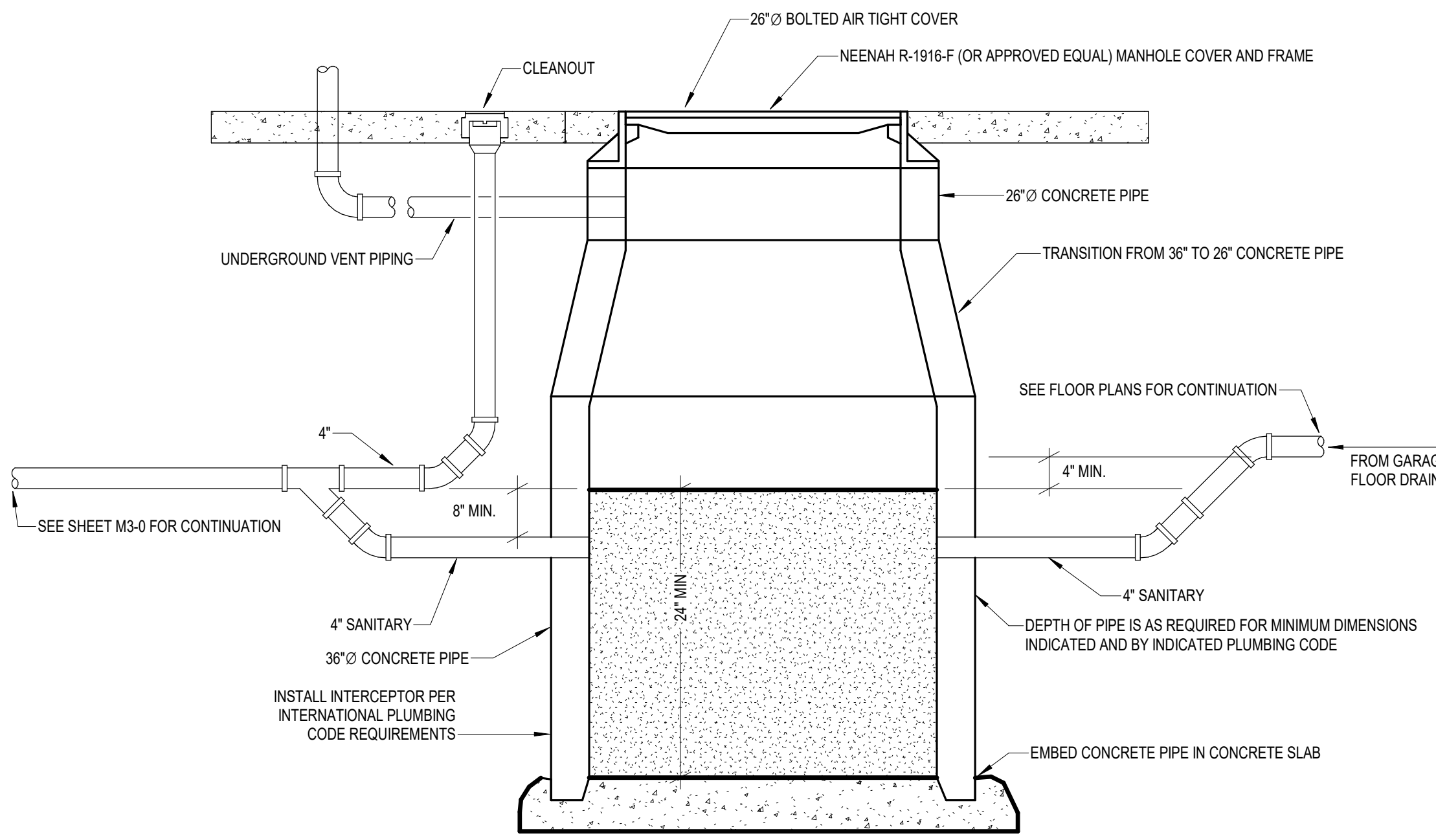
3 ELECTRIC WATER HEATER DETAIL  
M4-2 NTS



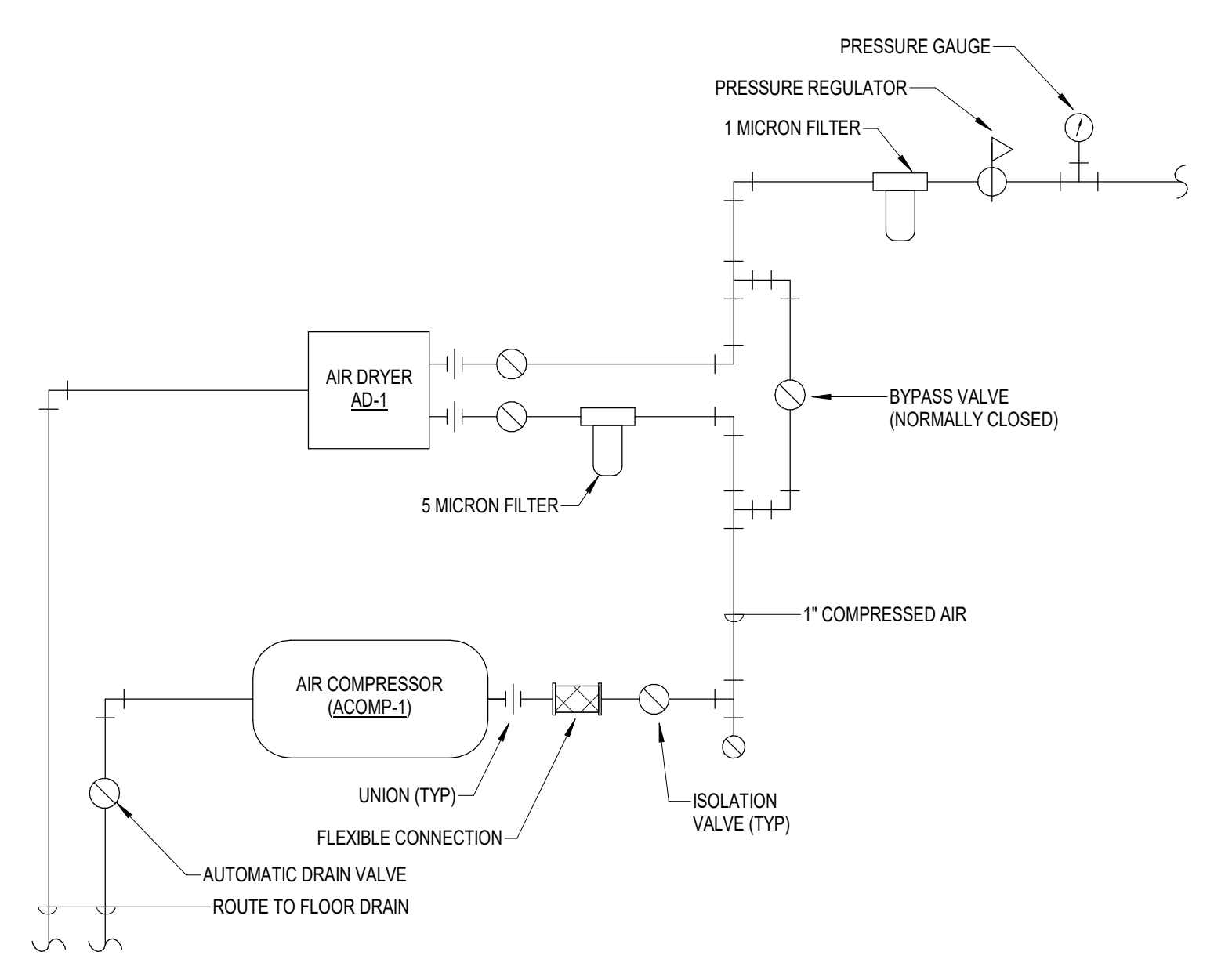
PLAN VIEW AT BRACKET



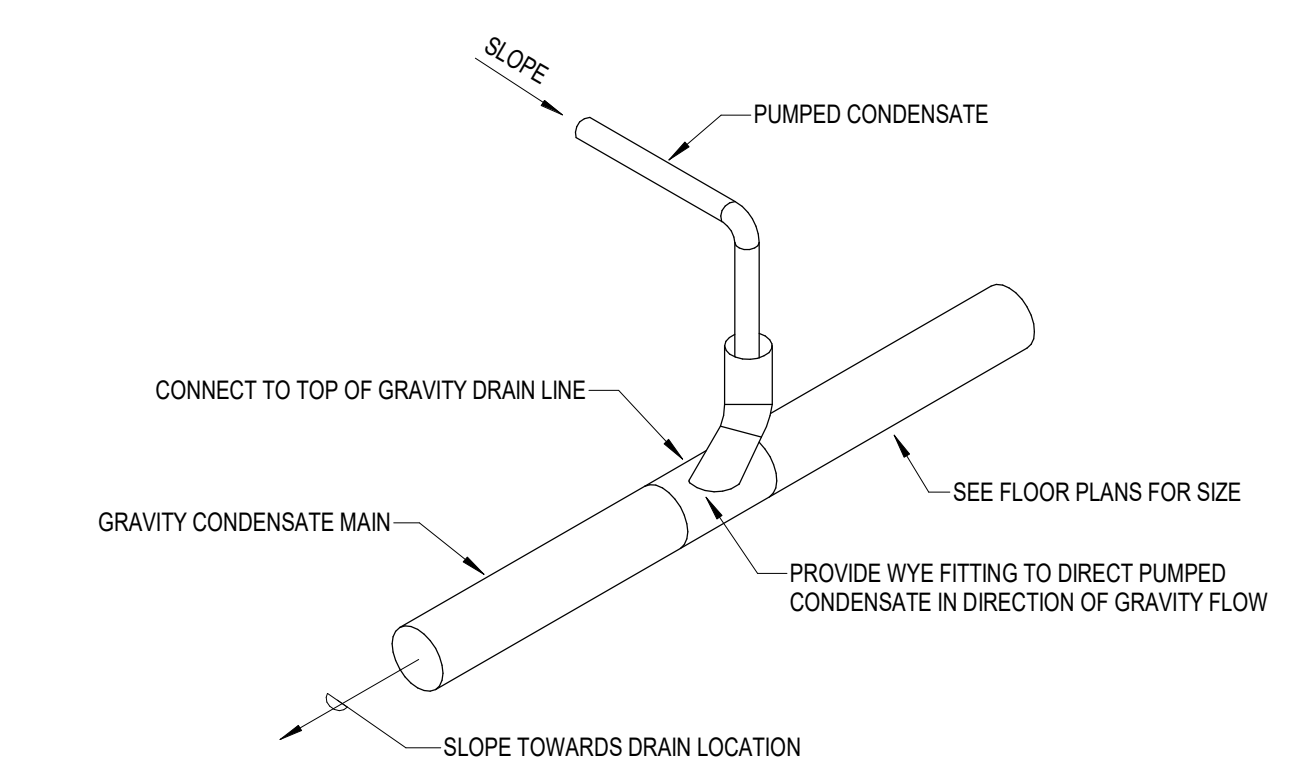
5 ROOF HOOD DETAIL  
M4-2 NTS



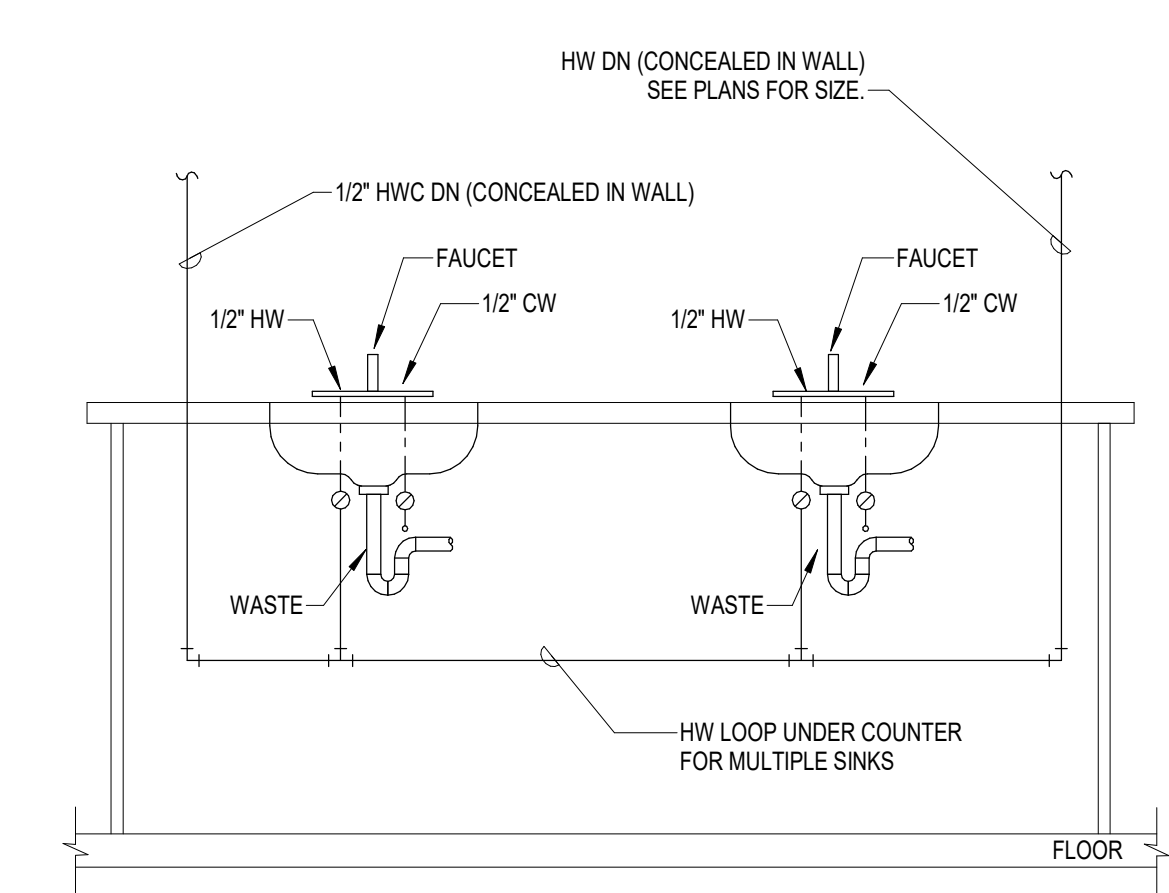
9 TYPE I OIL INTERCEPTOR DETAIL  
M4-2 NTS



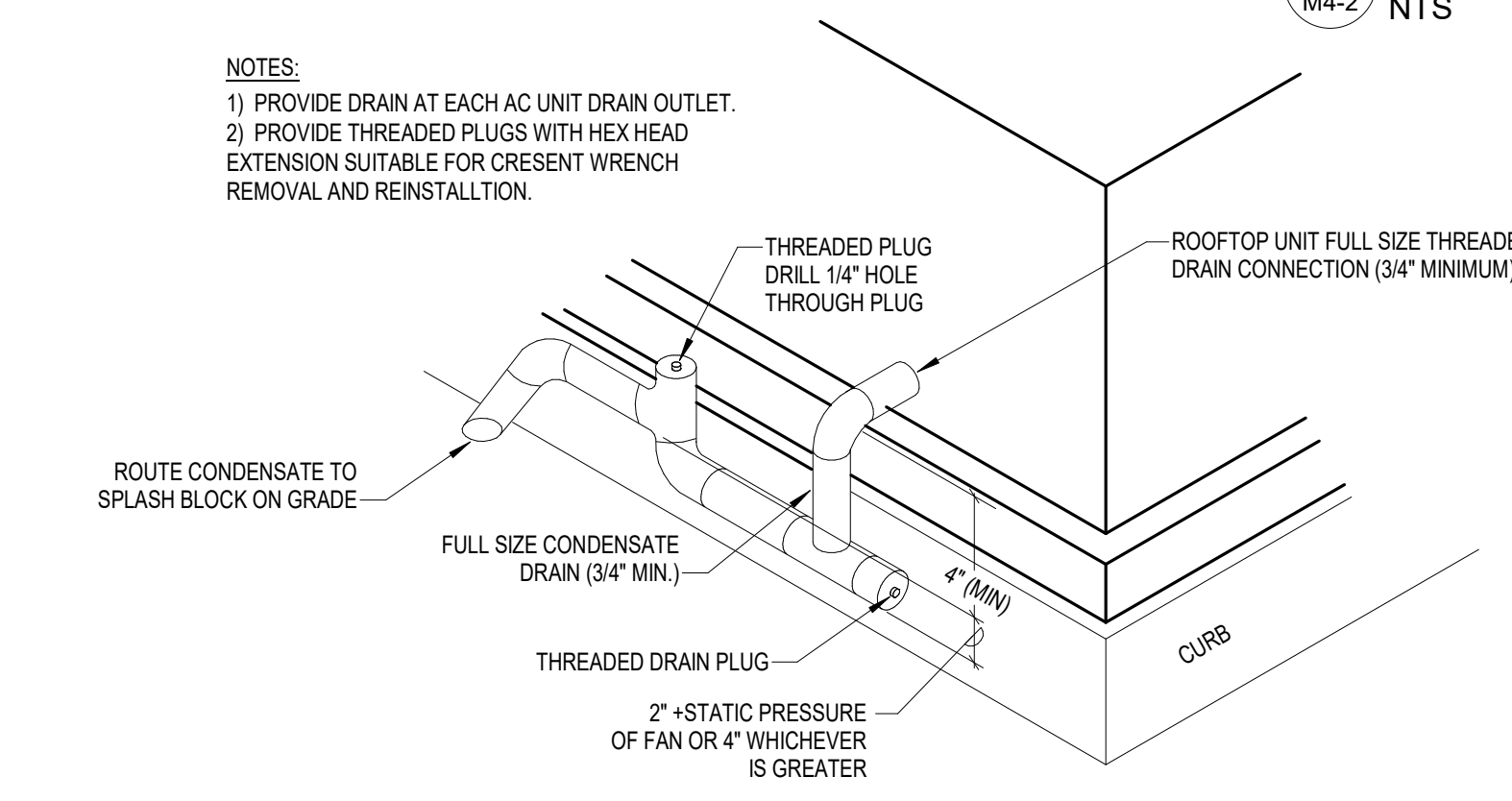
8 AIR COMPRESSOR INSTALLATION DETAIL  
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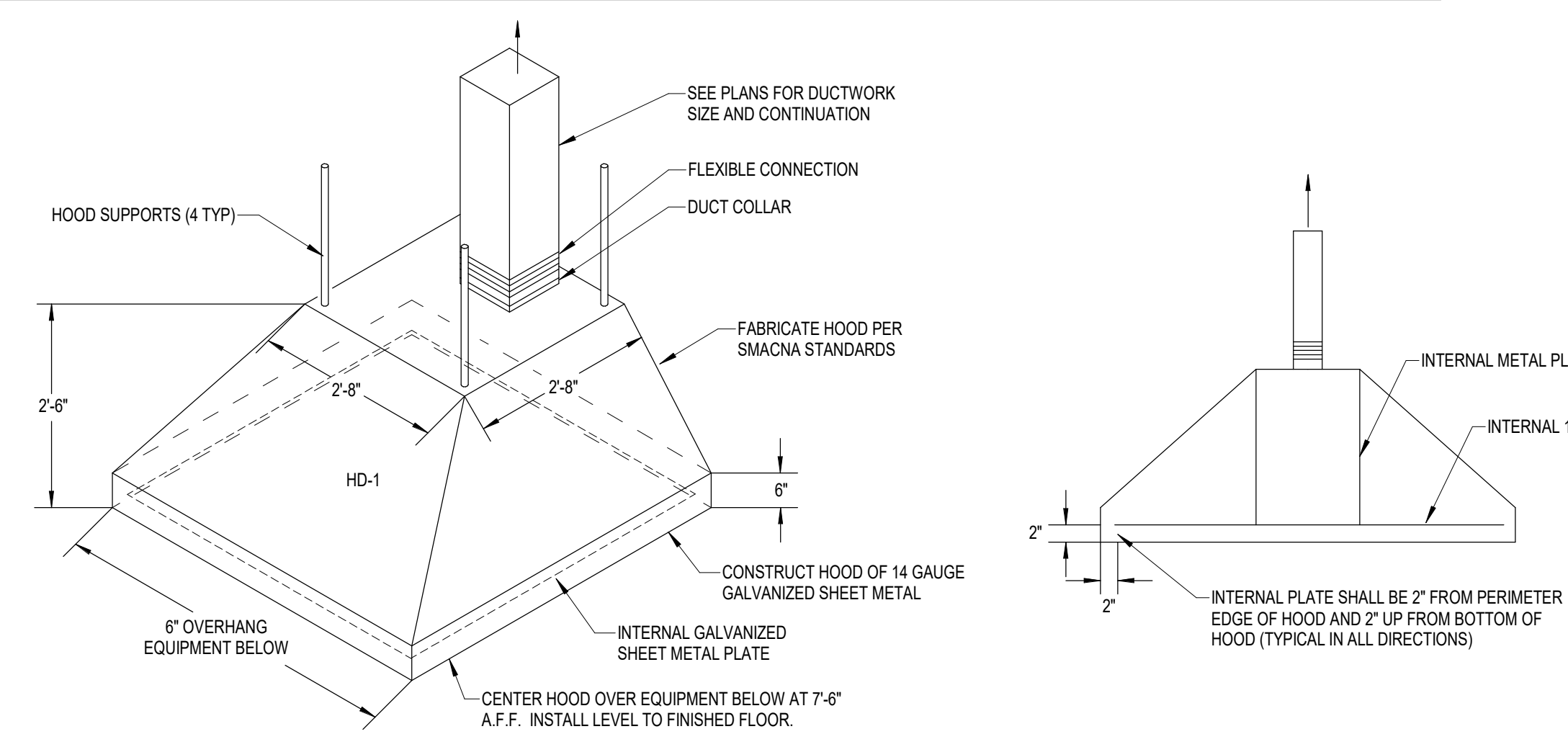
4 GRAVITY CONDENSATE CONNECTION DETAIL  
M4-2 NTS



7 HOT WATER CIRCULATION CONNECTION DETAIL  
M4-2 NTS



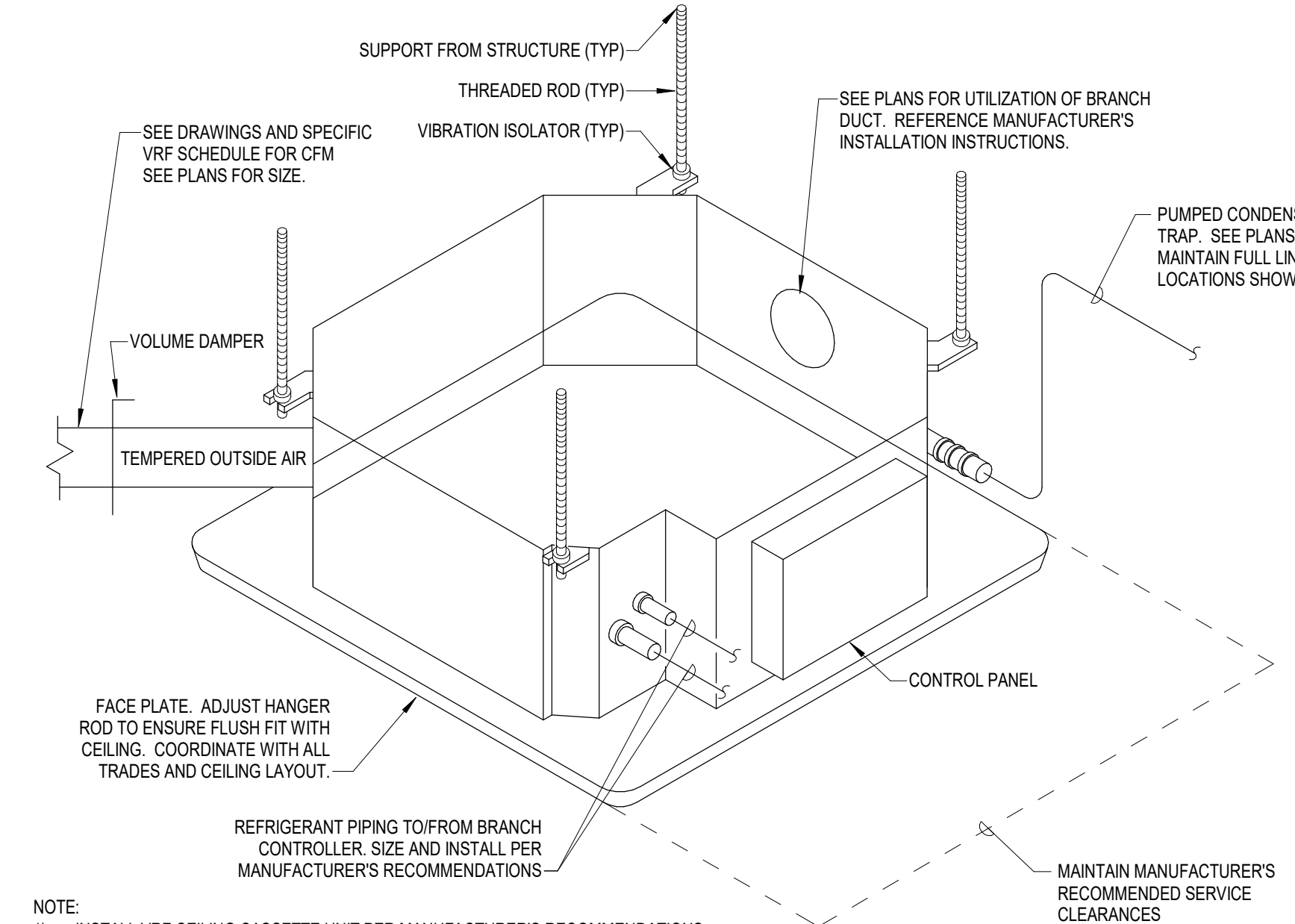
10 CONDENSATE DRAIN DETAIL  
M4-2 NTS



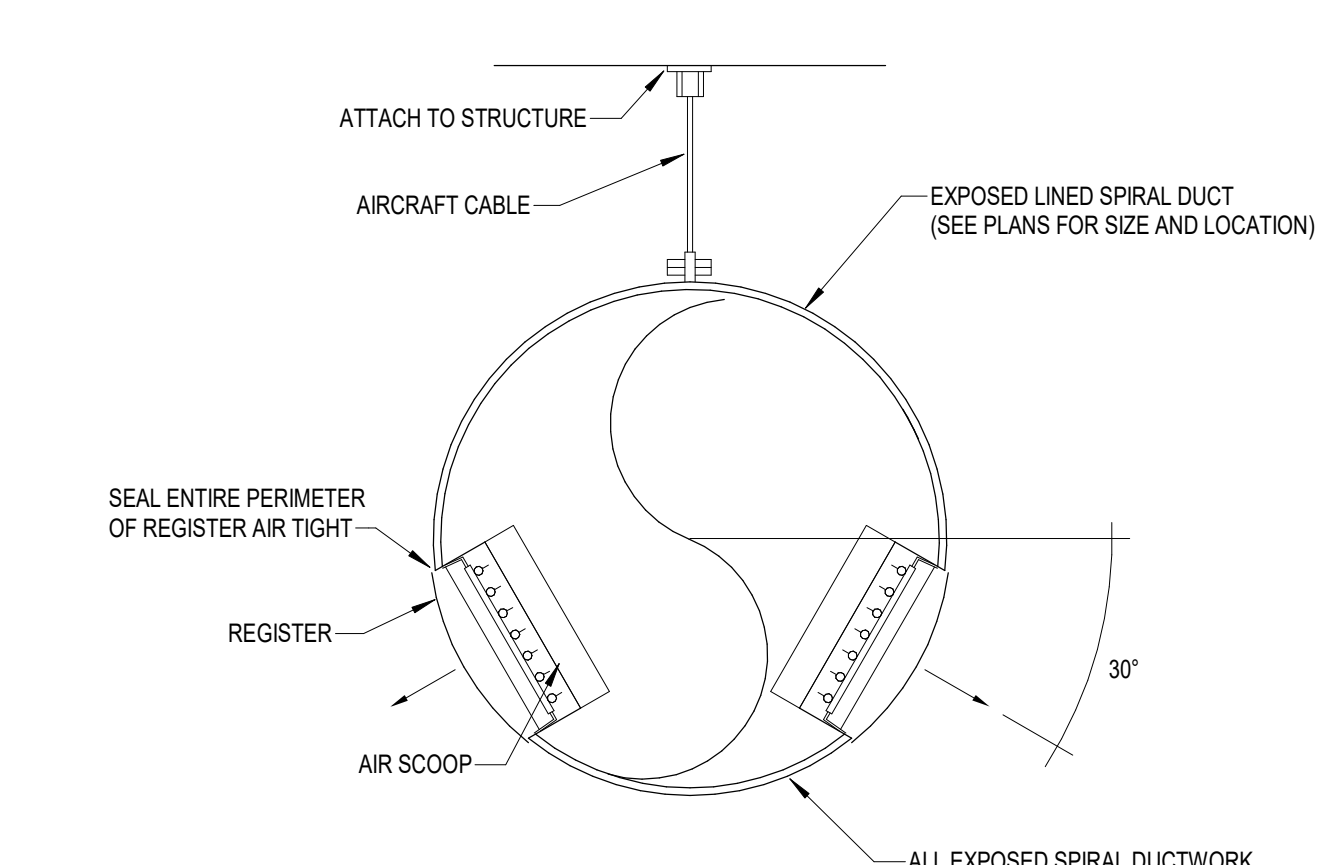
ISOMETRIC VIEW

ELEVATION VIEW

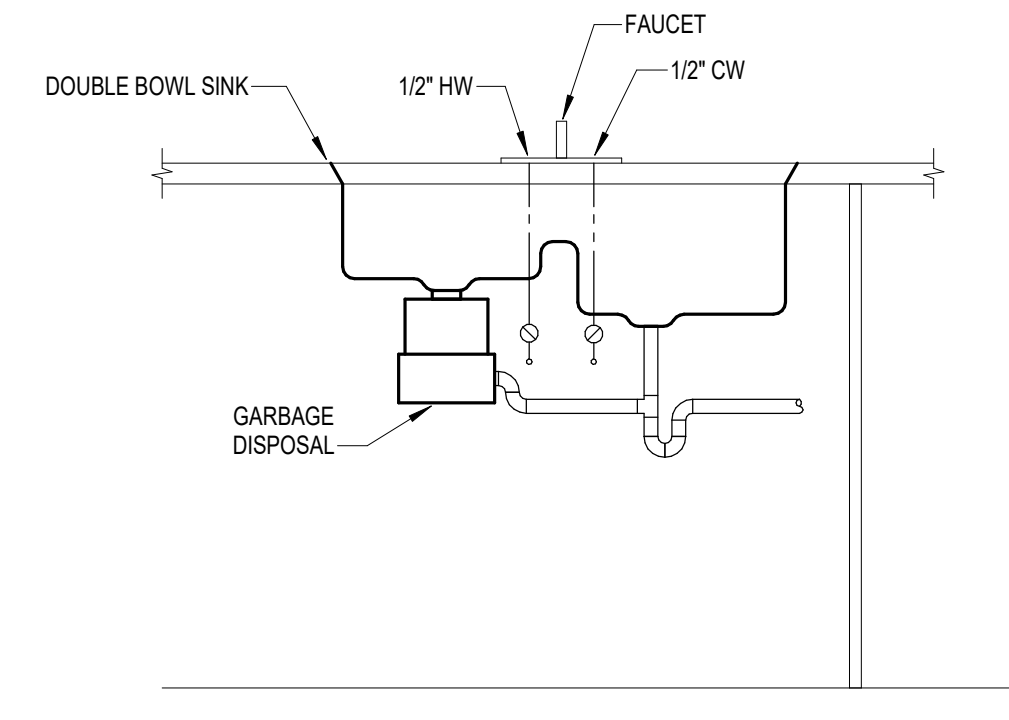
12 EXHAUST HOOD DETAIL  
M4-2 NTS



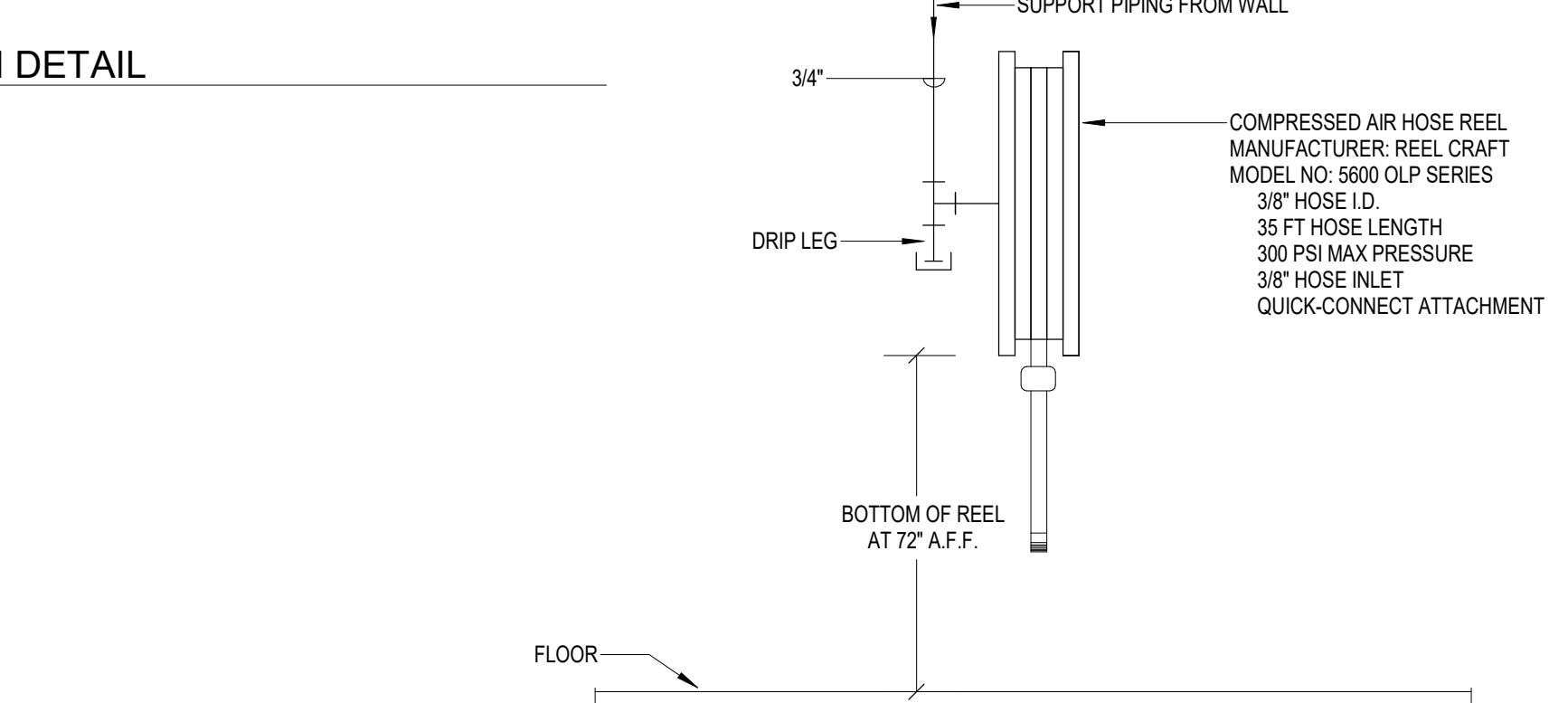
11 VRF INDOOR FANCOIL (CASSETTE) DETAIL  
M4-2 NTS



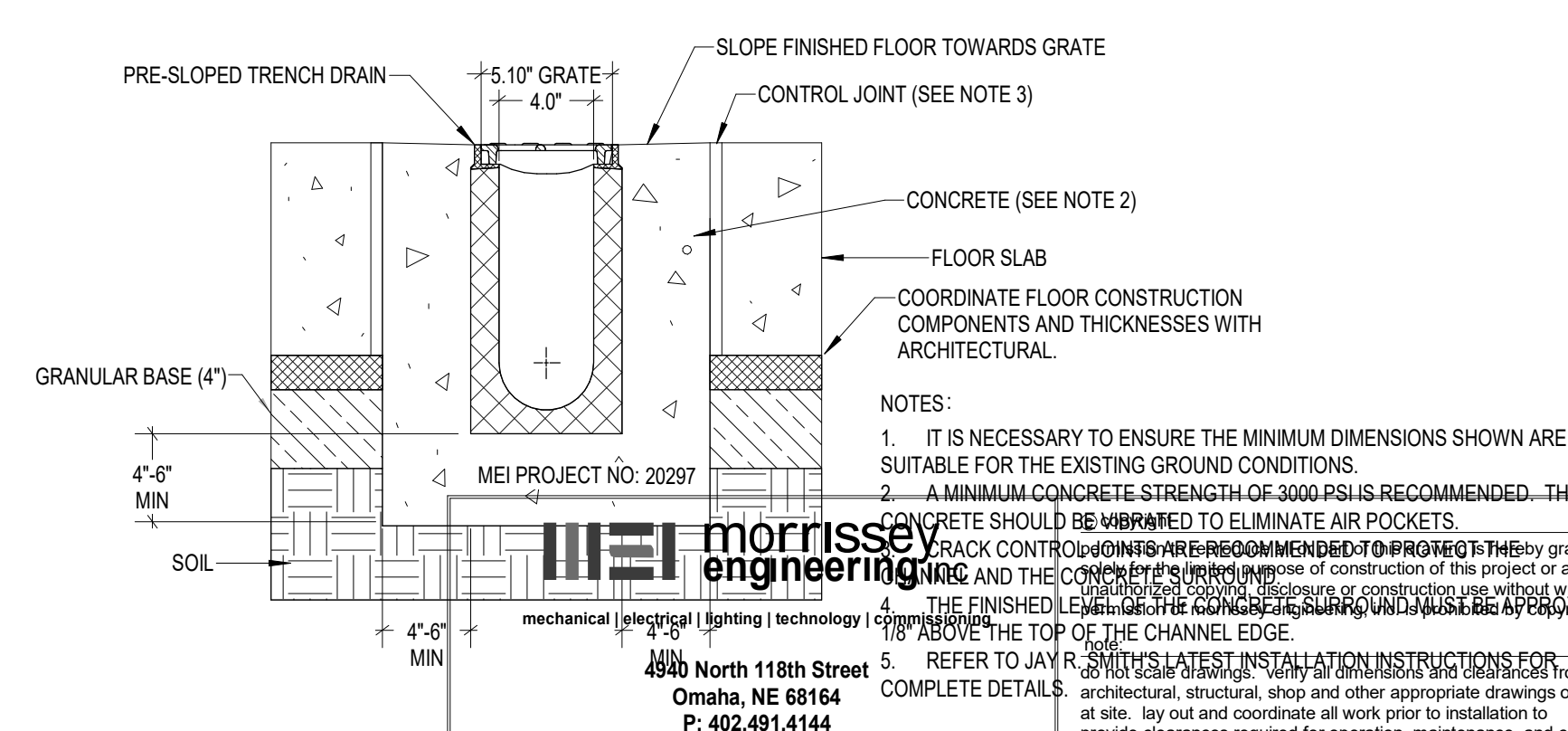
13 REGISTER MOUNTING DETAIL  
M4-2 NTS



14 GARBAGE DISPOSAL CONNECTION DETAIL  
M4-2 NTS



15 COMPRESSED AIR DROP WITH HOSE REEL DETAIL  
M4-2 NTS



16 TRENCH DRAIN DETAIL  
M4-2 NTS





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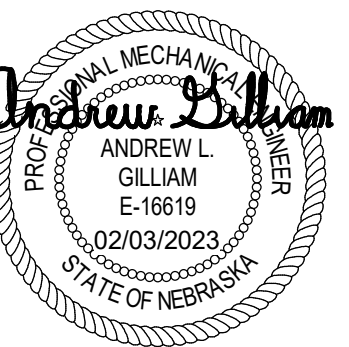
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DEDICATED OUTSIDE AIR UNIT SCHEDULE

GENERAL	PLAN TAG	DOAU-1		
	MANUFACTURER	TRANE		
	MODEL NUMBER	OADG010 F3		
	SERVES	(1)		
	SIZE (LxWxH) (IN)	176" x 65" x 66" (2)		
	CONFIGURATION	HORIZONTAL (3)		
	REMARKS	(4) (5) (6) (7) (8) (9)		
SUPPLY FAN	TOTAL AIRFLOW (CFM)	2400		
	EXTERNAL STATIC PRESSURE (IN. W.C.)	1.5" (10)		
	DESIGN FAN RPM	1,822		
	MAXIMUM FAN BHP	1.37		
	REMARKS	(11)		
SUPPLY FAN MOTOR	RPM	1,750		
	HP	2		
	VOLTS	460		
	PHASE	3		
	TOTAL AIRFLOW (CFM)	2,000		
	EXTERNAL STATIC PRESSURE (IN. W.C.)	0.75" (10)		
	MAXIMUM FAN RPM	1,470		
	MAXIMUM FAN BHP	0.75		
	REMARKS	(11)		
EXHAUST FAN	RPM	1,750		
	HP	1.5		
	VOLTS	460		
	PHASE	3		
ENERGY RECOVERY WHEEL COOLING AIR	ENTERING AIR TEMP (DBWB) (°F)	95°F / 79.0°F		
	LEAVING AIR TEMP (DBWB) (°F)	81.8°F / 70.4°F		
	EXHAUST AIR TEMP (DBWB) (°F)	75.0°F / 63.0°F		
	SENSIBLE/TOTAL CAPACITY (MBH)	82.2 / 32.6		
ENERGY RECOVERY WHEEL HEATING AIR	ENTERING AIR TEMP (DB) (°F)	45.0°F		
	LEAVING AIR TEMP (DB) (°F)	62.8°F		
	RETURN AIR TEMP (DBWB) (°F)	70°F		
	SENSIBLE/TOTAL CAPACITY (MBH)	65.5 / 32.0		
DX COOLING	ENTERING AIR TEMP (DBWB) (°F)	81.8°F / 70.4°F		
	LEAVING AIR TEMP (DBWB) (°F)	54.2°F / 54.0°F		
	CAPACITY - TOTAL / SENSIBLE (MBH)	126.4 / 73.4		
	AMBIENT AIR TEMPERATURE	105°F		
HOT GAS REHEAT	ENTERING AIR TEMP (DB) (°F)	55.0°F		
	LEAVING AIR TEMP (DBWB) (°F)	70.0°F / 60.1°F		
	REHEAT CAPACITY (MBH)	96.5		
	ENTERING AIR TEMP (DB) (°F)	-10°F		
	LEAVING AIR TEMP (DB) (°F)	42.6°F		
	CAPACITY (kW)	40		
	REMARKS	(15)		
	VOLTS	460		
	PHASE	3		
	MAXIMUM FUSE SIZE (AMPS)	80		
	MINIMUM CIRCUIT AMPACITY (AMPS)	71.3		
	REMARKS	(12)		
	ROOF CURB	(8)		
	FILTERS	(13)		
	ECONOMIZER	(16)		
	THERMOSTAT	-		
	CONTROLS	(14)		
	REMARKS	(17)		

- BUILDING OCCUPANT VENTILATION AND EXHAUST
- STANDARD UNIT DIMENSIONS. ADDITIONAL SPACE REQUIRED FOR ECONOMIZER HOOD AND ROOF CURB
- OUTSIDE AIR ENERGY RECOVERY VENTILATION UNIT WITH EXHAUST FAN, SUPPLY FAN, ENERGY RECOVERY WHEEL, DAMPERS, POST ENERGY RECOVERY WHEEL DX COOLING, ELECTRIC PREHEATING AND MODULATING HOT GAS REHEAT. UNIT TO HAVE MODULATING WHEEL SPEED FROST CONTROL. PROVIDE UNIT WITH DOUBLE WALL HOUSING WITH MINIMUM R-12 INSULATION. COORDINATE DOAU UNIT CONFIGURATION WITH PLAN LAYOUT OF UNIT. VERIFY AVAILABLE CLEARANCE SPACE AND PROVIDE UNITS WITH ACCESS AS REQUIRED
- STANDARD UNIT WEIGHT + 6,000 LBS. OTHER UNIT ACCESSORIES ARE ADDITIONAL WEIGHT.
- PROVIDE MANUFACTURER'S UNIT CONTROLLER WITH THE FOLLOWING: DIRTY SUPPLY AND EXHAUST FILTER INDICATORS, UNIT ON / OFF INDICATOR, ROTATION SENSOR INDICATOR, AND FROST CONTROL INDICATOR. CONTROL POINTS SHALL BE INTERFACED THROUGH THE B.A.S SYSTEM. SEE SPECIFICATIONS FOR DETAILED LIST OF POINTS TO BE MONITORED AND CONTROLLED THROUGH SYSTEM. COORDINATE INTERFACE WITH TEMPERATURE CONTROL CONTRACTOR AND BUILDING AUTOMATION SYSTEM.
- MODULATING ENTHALPHY WHEEL SPEED DEFROST CONTROL SHALL BE CONTROLLED BY THE MANUFACTURER'S STANDARD CONTROLS.
- SET COOLING COIL DISCHARGE AIR TEMPERATURE TO 55°F. HOT GAS REHEAT TO PROVIDE INCREASED DISCHARGE TEMPERATURE (IN COOLING MODE) TO ROOM NEUTRAL CONDITIONS OF 70°F (ADA). IN HEATING MODE, ELECTRIC HEATING COIL SHALL HEAT AIR TO 45°F PRIOR TO ENERGY RECOVERY WHEEL.
- PROVIDE 12" CURB SUITABLE FOR MOUNTING ON EQUIPMENT PAD LOCATED ON GRADE.
- PROVIDE COIL HALI GUARDS, WINGED TOOL-LESS ACCESS PANELS, ASHRAE STD 62.1 COMPLIANT STAINLESS STEEL DRAIN PAN, SMOKE DETECTORS PROVIDED BY ELECTRICAL.
- VERIFY TOTAL STATIC PRESSURE WITH MANUFACTURER'S COMPONENTS. EXTERNAL STATIC PRESSURE DOES NOT INCLUDE FILTER, COOLING COIL, AND OTHER DOAU ACCESSORIES. OVERALL ROOFTOP UNIT STATIC PRESSURE RATING SHALL ACCOMMODATE PRESSURE DROP VALUES OF A WET COIL, MODULE FILTER, INTERNAL UNIT PRESSURE DROP AND EXTERNAL STATIC PRESSURE INDICATED.
- PROVIDE F.C. FANS WITH EC MOTORS, MOTORIZED EXHAUST AND OUTDOOR AIR INTAKE DAMPERS. PROVIDE WITH 2" MERV 13 FILTER ON INCOMING OUTDOOR AIR.
- SINGLE POINT POWER CONNECTION. PROVIDE INTEGRAL DOOR INTERLOCKING ELECTRIC DISCONNECT SWITCH, MOTOR STARTERS, CONTROL CIRCUIT FUSING, AND CONTROL TRANSFORMERS FOR 24 VAC CIRCUIT AS STANDARD COMPONENTS IN THE CONTROL CENTER.
- 2" DISPOSABLE - MERV 13.
- DOC - SEE TEMPERATURE CONTROL SPECIFICATIONS.
- SCR CONTROL, CAPABLE OF FULL MODULATION FROM 0-100% HEATING CAPACITY.
- 0-100% ECONOMIZER WITH COMPARATIVE ENTHALPHY CONTROL.
- PROVIDE BYPASS DAMPER AT ENERGY RECOVERY WHEEL.
- PROVIDE CUSTOM 1" FILTER RACK ON ALL CONDENSER OPENINGS TO PREVENT DIRT INFILTRATION. VERIFY EXACT SIZE AND QUANTITY WITH UNIT PROVIDED.

TRAINING FACILITY PHASE 2

7264 L ROAD,  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

MECHANICAL SCHEDULES

M5-1



**MULTI-POSITION FANCOIL**



**CEILING-RECESSED VRF CASSETTES**

23" x 23" (0.75-1.5)



**SLIM-DUCTED**

VRF INDOOR UNIT SCHEDULE

GENERAL	MODEL TAG (1)	FCU-1	FCU-2	FCU-3	FCU-4	FCU-5	FCU-6	FCU-7	FCU-8	FCU-9	FCU-10	FCU-11	FCU-12	FCU-13	FCU-14	FCU-15	FCU-16
	MANUFACTURER	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)	TRANE (6)
	MODEL NUMBER	TPEFY-P30	TPEFY-P24	TPEFY-P30	TPVYF-P48	TPVYF-P34	TRFLY-P18	TRFLY-P18	TRFLY-P18	TPEFY-P24	TRFLY-P12	TRFLY-P18	TRFLY-P08	TPEFY-P18	TRFLY-P12	TPEFY-P18	TPEFY-P30
	MAX WEIGHT (LBS.)	100	100	100	175	175	100	100	100	100	50	100	50	100	50	100	100
	CONFIGURATION	(7)	(7)	(7)	(8)	(8)	(9)	(9)	(9)	(9)	(9)	(9)	(9)	(7)	(7)	(7)	(7)
	MAXIMUM SIZE (WxDxH) (IN)	48" x 29" x 10"	48" x 29" x 10"	48" x 29" x 10"	22" x 25" x 60"	22" x 25" x 60"	23" x 23" x 60" (12)	23" x 23" x 60" (12)	23" x 23" x 60" (12)	48" x 29" x 10"	23" x 23" x 9" (12)	34" x 34" x 12" (12)	23" x 23" x 9" (12)	40" x 29" x 10"	23" x 23" x 9" (12)	40" x 29" x 10"	48" x 29" x 10"
	REMARKS	(5) (13) (14)	(5) (13) (14)	(5) (13) (14)	(5)	(5)	(2) (5) (10)	(2) (5) (10)	(2) (5) (10)	(5) (13) (14)	(2) (5) (10)	(2) (5) (10)	(5) (13) (14)	(2) (5) (10)	(2) (5) (10)	(5) (13) (14)	(5) (13) (14)
FAN	AIRFLOW RANGE (CFM)	618 - 742 - 883	618 - 742 - 883	618 - 742 - 883	980 - 1,190 - 1,400	1,040 - 1,262 - 1,485	636 - 671 - 742 - 812	636 - 671 - 742 - 812	636 - 671 - 742 - 812	618 - 742 - 883	245 - 280 - 335	636 - 671 - 742 - 812	230 - 280 - 315	424 - 512 - 600	245 - 280 - 335	424 - 512 - 600	618 - 742 - 883
	EXTERNAL STATIC PRESSURE (IN. W.C.)	0.60"	0.60"	0.60"	0.80"	0.80"	(3)	(3)	(3)	0.60"	(3)	(3)	(3)	0.60"	(3)	0.60"	0.60"
	FAN MOTOR OUTPUT (W)	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES	VARIES
	MIN. CIRCUIT AMPS (MCA)	2.8	2.8	2.8	39.5 / 33.9	39.5 / 33.9	0.54	0.54	0.54	2.8	0.29	0.54	0.28	1.6	0.29	1.6	2.8
ELECTRICAL	MAX OVERCURRENT PROTECTION (A)	15	15	15	40 / 35	40 / 35	15	15	15	15	15	15	15	15	15	15	15
	VOLTS	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208
	PHASE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	REMARKS	(4)	(4)	(4)	(1) (4)	(1) (4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)

- PROVIDE INTEGRAL 15 KW (11.3 kW @ 208V 1PH) SUPPLEMENTAL HEATING COIL WITH 2 STAGES OF HEATING AND INTEGRAL CIRCUIT BREAKERS. COORDINATE ELECTRICAL CONNECTION WITH ELECTRICAL CONTRACTOR. FAN COIL UNIT AND ELECTRIC HEAT REQUIRE SEPARATE CONNECTIONS.
- PROVIDE WITH INTEGRAL FACTORY CONDENSATE PUMP.
- FREE DISCHARGE.
- DISCONNECT BY ELECTRICAL CONTRACTOR.
- PROVIDE WITH MANUFACTURER'S TOUCH SCREEN WALL MOUNTED THERMOSTAT WITH LCD DISPLAY AND OCCUPANT OVERRIDE. REFER TO CONTROL SPECIFICATIONS.
- SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCT BY ONE OF THE FOLLOWING MANUFACTURERS: TRANE, MITSUBISHI, DAIKIN, SAMSUNG
- SLIM (DUCTED) CEILING CONCEALED TYPE VRF UNIT.
- MULTI-POSITION VRF UNIT LOCATED IN THE HORIZONTAL POSITION. SEE FLOOR PLANS FOR CONFIGURATION.
- 2" x 2" CEILING-RECESSED, CASSETTE TYPE, MODULAR INDOOR VRF UNIT.
- PROVIDE MANUFACTURER'S WASHABLE LONG-LIFE FILTER WITH MILDEW-PROOF RESIN.
- PROVIDE MANUFACTURER'S OUTDOOR AIR CONNECTION KIT. BALANCE OUTSIDE AIR TO AIRFLOW SHOWN ON FLOOR PLANS.
- DIMENSIONS GIVEN ARE FOR UNIT HOUSING. GRILLE DIMENSIONS ARE 2" x 2" x 1" TO FIT WITH STANDARD CEILING GRID.
- PROVIDE STANDARD SIZE FIELD INSTALLED FILTER IN ACCESSIBLE LOCATION. COORDINATE WITH UNIT CLEARANCE AREAS. FILTERS SHALL BE MERV 13. PROVIDE ADDITIONAL FILTERS FOR CONSTRUCTION PHASE.
- PROVIDE WITH INTEGRAL FACTORY CONDENSATE PUMP. INTEGRAL PUMP SHALL BE CAPABLE OF 25" OF CONDENSATE LIFT.

MISCELLANEOUS EQUIPMENT SCHEDULE (1)(3)

ACOMP-1		DESCRIPTION: SINGLE POINT CONNECTION SINGLE STAGE RECIPROCAL DRIVEN COMPRESSOR WITH VERTICAL 120 GALLON TANK. ELECTRICAL (2): 10 HP @ 460 VOLT, 3 PHASE (STAR-DELTA STARTER) DIMENSIONS: 42" (L) x 34" (W) x 84" (H) WEIGHT: 800 LBS OTHER FEATURES/ACCESSORIES: SOLID CAST IRON PUMP, DISC AND SPRING VALVES, ENCLOSED BELT GUARD, MAGNETIC MOTOR STARTER, STAINLESS STEEL FLEX AIR LINES, INLET SILENCER WITH INTEGRATE AIR FILTER, AUTOMATIC TANK DRAIN, LOW OIL MONITOR, HAND/OFF/AUTO OPERATING SWITCH, RUBBER MOUNTING PADS, AND HOUR METER. LOCATE AIR COMPRESSOR ON EQUIPMENT PAD. SEE PLANS FOR ADDITIONAL INFORMATION.
AD-1		DESCRIPTION: REFRIGERATED TYPE DRYER (R410A) ELECTRICAL: 120V 1 PH

- PICTURES OF EQUIPMENT MAY NOT INDICATE ACTUAL EQUIPMENT SPECIFIED. PICTURES ARE GRAPHICAL IN NATURE. SEE DESCRIPTION FOR ACTUAL EQUIPMENT MODEL.
- DISCONNECT PROVIDED BY ELECTRICAL CONTRACTOR.
- SEE DETAIL 8, SHEET M4-2 FOR ADDITIONAL INFORMATION.

BRANCH CIRCUIT CONTROLLER

PLAN TAG	BC-1		
MANUFACTURER	TRANE		
MODEL NUMBER	TOMB-M10119KA11		
SERVES	VRF SYSTEM		
NUMBER OF PORTS	16		
SIZE (L x W x H) (IN.)	10" x 45" x 22"		
VOLTS / PHASE	208 / 1		
MCA	1.57 / 1.82		
MOPD (AMPS)	15		
REMARKS	(1) (2) (3)		

- ELECTRICAL DISCONNECT BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL DRAWINGS.
- PROVIDE REFRIGERATION BALL VALVES ON SUPPLY AND RETURN OF EACH BRANCH CIRCUIT.
- PROVIDE MINIMUM 2 SPARE CIRCUITS ON BRANCH CONTROLLER FOR FUTURE SPARE CAPACITY.

HYPER-HEATING INVERTER VRF HEAT PUMP

PLAN TAG	HP-1		
MANUFACTURER	TRANE		
MODEL NUMBER	1UR-638H46A		
SERVES	VRF SYSTEM		
CONFIGURATION	H2 V-SERIES		
MAXIMUM SIZE (WxD) (IN)	2 @ 72" x 69" x 30"		
MAXIMUM WEIGHT (LBS.)	1,800		
REMARKS	(3) (4) (6) (7) (8) (10)		

VRF AIR-TO-AIR HEAT PUMP SCHEDULE

GENERAL	PLAN TAG	HP-1		
	MANUFACTURER	TRANE		
	MODEL NUMBER	1UR-638H46A		
	SERVES	VRF SYSTEM		
	CONFIGURATION	H2 V-SERIES		
	MAXIMUM SIZE (WxD) (IN)	2 @ 72" x 69" x 30"		
	MAXIMUM WEIGHT (LBS.)	1,800		
	REMARKS	(3) (4) (6) (7) (8) (10)		
ELECTRICAL	VOLTS	480		
	PHASE	3		
	MAXIMUM UNIT KW	-		
	MAXIMUM COP (AMPS)	2 @ 50		
	MINIMUM CIRCUIT AMPACITY (AMPS)	2 @ 30.0		
	REMARKS	(8)		
	AMBIENT AIR TEMPERATURE (F)	95		
	MINIMUM NET SEER (ARI)	10.2		
COOLING (1)	NOMINAL CAPACITY (TONS)	32.0		
	TOTAL COOLING (MBH)	384		
	SENSIBLE COOLING (MBH)	-		
	AMBIENT AIR TEMPERATURE (F)	-8.1		
HEATING (2)	MINIMUM NET COP (ARI)	3.3		
	MINIMUM HEATING CAPACITY (MBH)	384		
	TYPE	R410A		
REFRIGERANT	MIN. NUMBER OF CIRCUITS	-		
	REMARKS	-		
	TYPE	(9)		
COMPRESSORS	QUANTITY	4		
	HP	-		
	REMARKS	-		
	TYPE	PROP.		
CONDENSER FANS	QUANTITY	4		
	HP	-		
	REMARKS	-		

- COOLING CAPACITY AT 100% COMBINATION, 95°F DB OUTDOOR AIR TEMPERATURE AND 67°F INDOOR WB TEMPERATURE.
- HEATING CAPACITY  
100% HEATING CAPACITY AT 0°F OUTDOOR AMBIENT,  
85% HEATING CAPACITY AT -13°F OUTDOOR AMBIENT,  
SIMULTANEOUS HEATING AND COOLING DOWN TO -4°F OUTDOOR AMBIENT.
- PROVIDE WITH 10 YEAR COMPRESSOR WARRANTY.
- HEAT RECOVERY TYPE AIR-TO-AIR HEAT PUMP SERVING MULTIPLE INDOOR VARIABLE REFRIGERANT VOLUME UNITS WITH MANUFACTURER'S CONTROLS.
- MANUFACTURER'S STANDARD INVERTER-DRIVEN SCROLL COMPRESSOR AND CONTROLS.
- PROVIDE WITH LOW AMBIENT KIT FOR OPERATION DOWN TO -10°F AMBIENT, SNOW / HAIL GUARDS AND BASE PAN HEATER.
- PROVIDE MANUFACTURER'S TWINNING KIT.
- UNIT INCLUDES (2) INDEPENDENT UNITS WITH (2) ELECTRICAL CONNECTIONS. ELECTRICAL DISCONNECTS BY ELECTRICAL CONTRACTOR. SEE ELECTRICAL DRAWINGS.
- PROVIDE CUSTOM 1" MERV 4 FILTER RACK ON ALL EXTERIOR VRF HEAT PUMP OPENINGS TO PREVENT DIRT INFILTRATION. VERIFY EXACT SIZE AND QUANTITY WITH HEAT PUMP PROVIDED.
- PROVIDE 18" TALL SUPPORT STAND (MITSUBISHI SUPERSTAND OR EQUAL) TO RAISE UNIT OFF GRADE.

SPLIT SYSTEM AIR CONDITIONER SCHEDULE

GENERAL	PLAN TAG (INDOOR UNIT)	AC-1
	PLAN TAG (OUTDOOR UNIT)	ACCU-1
	MANUFACTURER	MITSUBISHI
	MODEL NUMBER	PKA-A30KA7
	SERVES	TELECOM ROOM
	CONFIGURATION	(1)
	MAXIMUM SIZE (LxWxH) (IN)	47" x 12" x 15"
	ACCESSORIES	-
	REMARKS	(4) (6) (9)
AIRFLOW	AIRFLOW (CFM)	635 - 505 - 775
	MOTOR HP	56 WATTS
	VOLTS	208
	PHASE	1
ELECTRICAL	MOCF (OUTDOOR UNIT)	25
	MCA (INDOOR / OUTDOOR)	1 / 19
	REMARKS	(2) (8)
HEATING	HEAT PUMP (MBH)	21



PROJECT TEAM

ARCHITECTURE + INTERIORS

BCDM ARCHITECTS  
1015 N 98th St #300,  
Omaha, NE 68114

CIVIL ENGINEER

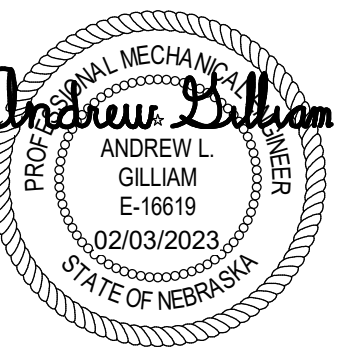
LAMP RYNEARSON  
14710 W. Dodge Road, Suite 100  
Omaha, NE 68114

STRUCTURAL ENGINEER

BCDM  
1015 N 98th St #300,  
Omaha, NE 68114

MECHANICAL + ELECTRICAL ENGINEER

MORRISSEY ENGINEERING  
4940 North 118th Street  
Omaha, NE 68164



HOOD SCHEDULE	
PLAN TAG	HD-1 (2)
SERVES	CNC
CONFIGURATION	(1)
MAX WEIGHT (LBS)	1,000
AIRFLOW (CFM)	500
STATIC PRESSURE DROP (IN. W.C.)	0.10"
HOOD SIZE (LxWxH)	6'-6"X6'-6"X2'-6"
ACCESSORIES	-
REMARKS	(1) CUSTOM MANUFACTURED OR FIELD CONSTRUCTED HOOD. HOOD SHALL BE CONSTRUCTED OF 14 GAUGE GALVANIZED SHEET METAL. CONSTRUCT, SEAL, AND INSTALL PER SMACNA STANDARDS. (2) SEE DETAIL 12, SHEET M4-2.

FAN SCHEDULE	
GENERAL	PLAN TAG EF-1
	MANUFACTURER GREENHECK
	MODEL NUMBER SQ-98-VG
SERVES	HD-1
TYPE	CENT. IN-LINE
MAXIMUM WEIGHT (LBS)	100
ROOF OPENING SIZE (IN)	-
ACCESSORIES	(3)
FAN	AIRFLOW (CFM) 500
	TOTAL ESP (IN. W.C.) 0.75"
	LEVEL -
	WHEEL TYPE B.I.
	MINIMUM WHEEL DIA. 9.9"
	MAXIMUM SONES 11.4
	MAXIMUM FAN RPM 1,574
	MAXIMUM FAN BHP 0.18 (2)
MOTOR	RPM 1,725
	HP 0.25
	VOLTS 115
	PHASE 1
	TYPE ECM
	CONTROL DEVICE (1)
	REMARKS -
REMARKS	(1) FAN SHALL BE CONTROLLED BY WALL SWITCH AND MONITORED BY BUILDING AUTOMATION SYSTEM. (2) FAN BHP SHALL NOT EXCEED 85% OF MOTOR HP. (3) PROVIDE FAN WITH REMOTE 120V MOTORIZED DAMPER LOCATED AT ROOF LEVEL AND INTERLOCKED WITH FAN OPERATION. INSULATED HOUSING, WIRING PIGTAIL, VERTICAL HANGING MOUNT, DISCONNECT, SPEED CONTROLLER, AND UL LISTING.

RELIEF HOOD SCHEDULE	
PLAN TAG	RHD-1
MANUFACTURER	GREENHECK
MODEL NUMBER	GRSR-16
SERVES	EF-1
CONFIGURATION	(1) (3)
MAX WEIGHT (LBS)	100
AIRFLOW (CFM)	500
MAXIMUM STATIC PRESSURE DROP (IN. W.C.)	0.05"
ROOF OPENING SIZE	-
NECK SIZE (LxW) (IN.)	18"0
HOOD SIZE (LxW) (IN.)	29"0
THROAT AREA (SQ. FT)	1.0
ACCESSORIES	(2)
REMARKS	(1) SPUN ALUMINUM EXHAUST HOOD. (2) PROVIDE WITH ALUMINUM BIRDSCREEN, 12" ROOF CURB, CURB SEAL AND 1" THICK HOOD INSULATION. (3) COORDINATE EXACT INSTALLATION LOCATION WITH METAL BUILDING ROOF. MAINTAIN WATER SHED ON ROOF.

PIPING INSULATION SCHEDULE (1) (2) (3)					
SERVICE	PIPING SIZES	INSULATION TYPE	INSULATION THICKNESS (IN)	VAPOR RETARDER REQUIRED	REMARKS
CONDENSATE DRAIN (COPPER)	ALL	MINERAL FIBER	1/2"	YES	-
REFRIGERANT SUCTION (RS)	1-1/4" AND SMALLER	FLEXIBLE ELASTOMERIC	3/4"	YES	-
REFRIGERANT SUCTION (RS)	1-1/2" AND LARGER	FLEXIBLE ELASTOMERIC	1"	YES	-
REFRIGERANT LIQUID (RL)	ALL	FLEXIBLE ELASTOMERIC	3/4"	YES	-
REFRIGERANT HOT GAS DISCHARGE (RD)	ALL	FLEXIBLE ELASTOMERIC	3/4"	YES	-
DOMESTIC COLD WATER (CW)	ALL	MINERAL FIBER	1/2"	YES	-
DOMESTIC HOT WATER (HW)	ALL	MINERAL FIBER	1"	NO	-
DOMESTIC HOT WATER RECIRC (HWC)	ALL	MINERAL FIBER	1"	NO	-
PLUMBING VENTS, 2 FEET BELOW ROOF	ALL	MINERAL FIBER	1/2"	YES	-
REMARKS	1. ALL INSULATION SHALL MEET 2018 IECC REQUIREMENTS. 2. SEE PIPING INSULATION DETAIL 6 ON SHEET M4-2. 3. SEE PIPING INSULATION SPECIFICATION SECTIONS 220720 AND 230720.				

DUCTWORK INSULATION SCHEDULE (1) (3)						
SERVICE	DUCTWORK APPLICATION	INSULATION TYPE	INSULATION THICKNESS (IN)	MINIMUM INSTALLED R-VALUE	VAPOR RETARDER REQUIRED	REMARKS
SUPPLY AIR	RECTANGULAR, ALL	DUCT LINER	1-1/2	6	YES	-
SUPPLY AIR	ROUND, EXPOSED	DUCT LINER	1-1/2	6	YES	(2)
RETURN AIR	RECTANGULAR, ALL	DUCT LINER	1-1/2	6	YES	-
OUTSIDE AIR	RECTANGULAR, ALL	MINERAL FIBER BLANKET	2-3/16	6	YES	-
OUTSIDE AIR	ROUND, ALL	MINERAL FIBER BLANKET	2-3/16"	6	YES	-
EXHAUST AIR	FROM EXTERIOR, BACK 36" INTO BUILDING	MINERAL FIBER BLANKET	2-3/16"	6	YES	-
OUTSIDE AIR	RECTANGULAR, OUTDOORS	MINERAL FIBER BOARD	2-3/16"	8	YES	(4)
RELIEF AIR	RECTANGULAR, OUTDOORS	MINERAL FIBER BOARD	2-3/16"	8	YES	(4)
REMARKS	1. ALL INSULATION SHALL MEET 2018 IECC REQUIREMENTS. 2. PROVIDE OWENS CORNING QUIETR SPIRAL DUCT LINER OR EQUAL. 3. SEE DUCT INSULATION SPECIFICATION SECTION 230700 FOR ADDITIONAL INFORMATION. 4. FOR ALL OUTDOOR DUCTWORK PROVIDE 2-3/16" DUCT LINER, 1-1/2" MINERAL FIBER BOARD, AND ALUMNAGUARD WATERPROOF MEMBRANE.					

DIFFUSER REGISTER GRILLE SCHEDULE										
PLAN TAG	D-1	LD-1	R-1	R-2	G-1	G-2	G-3	G-4		
MANUFACTURER	TITUS	TITUS	TITUS	TITUS	TITUS	TITUS	TITUS	TITUS		
MODEL NUMBER	OMNI	FL-10	300RL	S300FL	PAR	PAR	23RL	PAR		
FUNCTION	SUPPLY	SUPPLY	SUPPLY	SUPPLY	RETURN	RETURN	RETURN	EXHAUST		
DESCRIPTION	FLAT PLATE	(5)	REGISTER	REGISTER	PERF GRILLE	PERF GRILLE	GRILLE	PERF. GRILLE		
DEFLECTION	360°	ADJUSTABLE	DOUBLE	DOUBLE	-	-	45°	-		
MAX. STATIC PRESSURE (" W.G.)	0.10"	0.10"	0.10"	0.10"	0.08"	0.08"	0.08"	0.08"		
CONSTRUCTION MATERIAL	STEEL	ALUMINUM	STEEL	ALUMINUM	STEEL	STEEL	ALUMINUM	STEEL		
FINISH	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE		
NECK SIZE (IN)	SEE PLANS	SEE PLANS	SEE PLANS	SEE PLANS	22" x 22"	22" x 10"	SEE PLANS	SEE PLANS		
FACE SIZE (IN)	24" x 24"	SEE PLANS	NECK + 1-3/4"	NECK + 1-3/4"	24" x 24"	24" x 12"	NECK + 1-3/4"	24" x 24"		
ACCESSORIES	(4)	-	O.B.D.	EXTRACTOR	(3)	(3)	-	-		
REMARKS	(1) (2)	(1) (2)	(1) (2)	(1) (2)	(1) (2)	(1) (2)	(1) (2)	(1) (2)		
REMARKS	(1) VERIFY CEILING CONSTRUCTION PRIOR TO FURNISHING MATERIAL. (2) NOISE CRITERIA (NC) SHALL BE LESS THAN 25 ON DIFFUSERS, REGISTERS AND GRILLES LOCATED IN OCCUPIED SPACES. (3) PROVIDE RETURN AIR BOOT. SEE DETAIL 9, SHEET M4-1. (4) PROVIDE BACKPAN INSULATION BLANKET. (5) FLOWBAR ARCHITECTURAL CEILING DIFFUSER, 1" SLOTS, HIGH THROW PATTERN CONTROLLER (SET TO DISTRIBUTE AIR HORIZONTALLY IN BOTH DIRECTIONS), INSULATED PLENUM, AND BORDER TYPE COMPATIBLE WITH CEILING.									

PUMP SCHEDULE			
PLAN TAG	HWCP-1	HWCP-2	
GENERAL	MANUFACTURER BELL & GOSSETT	BELL & GOSSETT	
	MODEL NUMBER NBF-25	NBF-25	
SERVES	HW CIRC	IND. HW CIRC	
TYPE	IN-LINE	IN-LINE	
ACCESSORIES	(1) (3)	(1) (3)	
FLOW (GPM)	2	0.5	
TOTAL HEAD (FEET)	12 (4)	12 (4)	
SHUT-OFF HEAD (FEET)	30 (4)	30 (4)	
NPSH AVAILABLE (FEET)	-	-	
MIN EFFICIENCY	-	-	
FLUID	WATER	WATER	
SUCTION SIZE (IN)	1/2"	1/2"	
DISCHARGE SIZE (IN)	1/2"	1/2"	
CUT / MAX. IMPELLER DIA. (IN)	-	-	
RPM	3,300	3,300	
BHP / HP	270 WATTS	270 WATTS	
VOLTS	115	115	
PHASE	1	1	
TYPE	O.D.P.	O.D.P.	
CONTROL DEVICE	(2)	(2)	
REMARKS	-	-	
REMARKS	1. LEAD FREE /ALL BRONZE CONSTRUCTION FOR POTABLE WATER APPLICATIONS. 2. PUMP CONTROLLED BY AQUASTAT AND CONNECTED TO BUILDING AUTOMATION SYSTEM. 3. SEE WATER HEATER DETAIL 3, SHEET M4-2 FOR PIPING SPECIALTIES. 4. PUMP SHALL BE SPEED WITH THERMALLY PROTECTED MOTOR COVERING A WIDE RANGE OF HYDRAULIC CAPABILITIES. MINIMUM PERFORMANCE ON SPEED 1: 2 GPM AT 11' H2O. MAXIMUM PERFORMANCE ON SPEED 3: 2 GPM AT 18' H2O. SET PUMP SPEED AS REQUIRED FOR APPLICATION.		

PIPING SPECIALTIES SCHEDULE		
PLAN TAG	ET-1	
GENERAL	MANUFACTURER	STATE
	MODEL NUMBER	ETC-15 (1)
SERVES	DOMESTIC HW	
CONFIGURATION	VERTICAL	
MAX WEIGHT (LBS) - DRY WEIGHT	30	
SIZE (DIA x L) or (W x H) (IN.)	18"0 x 25"	
TANK CAPACITY (GALLONS)	15	
ACCEPTANCE CAPACITY	5.6	
FLOW RATE (GPM)	-	
REMARKS	1. DIAPHRAGM EXPANSION TANK.	

WATER HEATER SCHEDULE			
PLAN TAG	EW-H1	EW-H2	
GENERAL	MANUFACTURER A.O. SMITH	A.O. SMITH	
	MODEL NUMBER DSE-100-45	DEL 30	
SERVES	SEE PLANS	IHW	
RECOVERY (GPH@ 100°F RISE)	263	18	
TYPE	(1)	(1)	
TANK	STORAGE CAPACITY (GAL)	100	30
	DIMENSIONS (LxWxH) (IN.)	59"x28"x0	31"x27"x0
	REMARKS	(2) (3)	(2) (3)
	VOLTAGE/PHASE	480V/3PH	480V/3PH
	CAPACITY (KW)	45	4.5
ELECTRIC	NUMBER OF STAGES	3	1
	KW PER STAGE	15	4.5
	REMARKS	-	-
REMARKS	1. GLASS LINED, TANK TYPE ELECTRIC. 2. ASME PRESSURE/TEMPERATURE RELIEF VALVE. 3. PROVIDE WITH 3 YEAR WARRANTY.		

ELECTRIC HEATING COIL SCHEDULE		
PLAN TAG	EDH-1	
GENERAL	MANUFACTURER INDEECO	
	MODEL NUMBER XUB	
SERVES	SEE PLANS	
APPROXIMATE SIZE (LxW) (IN)	26x14 (3)	
TYPE	OPEN COIL	
MAX. FINS PER INCH	-	
REMARKS	(1) (2)	
AIR	AIRFLOW (CFM)	2,400
	FACE VELOCITY (FPM)	(4)
	MAX. AIR PRESSURE DROP (IN. WG)	0.02
	ENTERING AIR TEMP (°F)	45.0
	LEAVING AIR TEMP (°F)	99.7
	TOTAL CAPACITY (MBH)	153.5
ELECTRIC	VOLTAGE/PHASE	480V/3Ø
	CAPACITY (KW)	45.0
	NUMBER OF STAGES	SCR
	W PER STAGE	-
	REMARKS	(2)
REMARKS	(1) FLANGED ELECTRIC HEATING COIL. PROVIDE AIR FLOW SWITCH, PILOT SWITCH, SCR CONTROL, CLASS 1 CONTROL WIRING, BUILT-IN FUSES FOR EACH HEATER STAGE, DISCONNECT, THERMAL CUT-OUT, DUCT MOUNTED CONTROL PANEL, AND TERMINAL STRIP CONNECTION FOR DDC CONTROLS. (2) ELECTRIC HEAT CONTROLS SHALL INTERFACE WITH BUILDING MANAGEMENT SYSTEM. SEE SPECIFICATIONS FOR REQUIRED CONTROL FEATURES. COORDINATE INTERFACE WITH TEMPERATURE CONTROL CONTRACTOR. (3) SEE PLANS FOR DUCT SIZES. MAINTAIN MANUFACTURERS RECOMMENDED MINIMUM SPACING INSIDE DUCT TO MINIMIZE AIR BYPASS. (4) MAINTAIN MINIMUM REQUIRED AIRFLOW VELOCITY ACCORDING TO MANUFACTURERS RECOMMENDATION.	

TRAINING FACILITY PHASE 2

7264 L ROAD,  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

MECHANICAL SCHEDULES

M5-2

BCDM NO. 5396-00  
02/03/2023

MEI PROJECT NO. 20297















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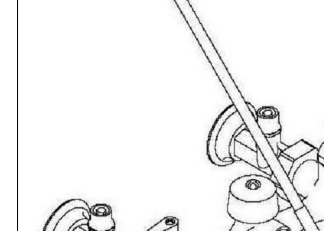




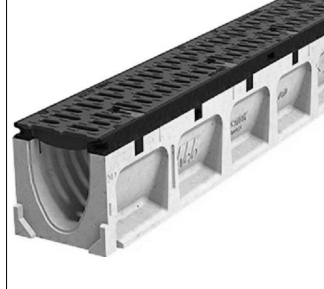


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NOTE: do not scale drawings. verify all dimensions and clearances from architectural, structural, shop and other appropriate drawings or as site. lay out and coordinate all work prior to installation to provide clearances required for operation, maintenance, and codes and verify non-interference with other work. do not fabricate prior to verification of clearance for all trades.

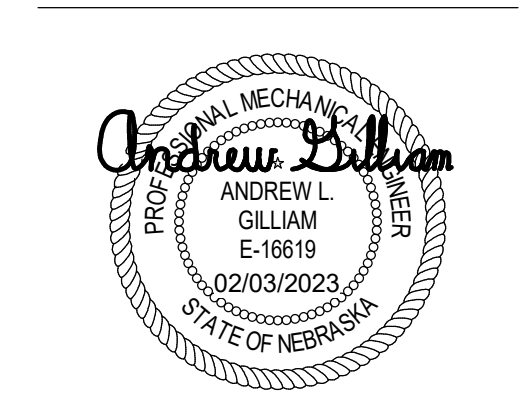


PLUMBING FIXTURE SCHEDULE (1) (2)											
REMARKS: 1. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS INCLUDING STOPS, FITTINGS AND ALL OTHER SPECIALTIES. 2. PICTURES OF FIXTURES MAY NOT INDICATE ACTUAL FIXTURE SPECIFIED. PICTURES ARE GRAPHICAL IN NATURE. SEE DESCRIPTION FOR ACTUAL FIXTURE AND MODEL.											
TAG	FIXTURE (2)		FAUCET-VALVE ACCESSORY (2)		DESCRIPTION	CONNECTIONS				REMARKS	
	MODEL	IMAGE	MODEL	IMAGE		CW	HW	V	W		
WC-1	KOHLER: K-4325 "KINGSTON"		SLOAN: OPTIMA PLUS SF5M REGAL 111-1.28		DESCRIPTION: ELONGATED, SIPHON JET BOWL, WALL MOUNTED, BACK OUTLET WATER CLOSURE WITH FLUSHMETER. ADA COMPLIANT: YES COLOR: WHITE FLUSHMETER: TOP SPRUI, 1.28 GALLONS PER FLUSH. FLUSHMETER FINISH: POLISHED CHROME. FLUSHMETER OPERATION: BATTERY WITH TRUE MANUAL OVERRIDE. SEAT: WHITE, ELONGATED, OPEN FRONT WITHOUT COVER, SEAT WITH CHECK HINGE. RIM HEIGHT: 14"-15"	1 1/4"	2"	4"		FIXTURE SHALL BE MPP TESTED FOR A MINIMUM OF 1,000 GRAMS PER FLUSH.	
WC-2	KOHLER: K-4325 "KINGSTON"		SLOAN: OPTIMA PLUS SF5M REGAL 111-1.28		DESCRIPTION: ELONGATED, SIPHON JET BOWL, WALL MOUNTED, BACK OUTLET WATER CLOSURE WITH FLUSHMETER. ADA COMPLIANT: NOT REQUIRED COLOR: WHITE FLUSHMETER: TOP SPRUI, 1.28 GALLONS PER FLUSH. FLUSHMETER FINISH: POLISHED CHROME. FLUSHMETER OPERATION: BATTERY WITH TRUE MANUAL OVERRIDE. SEAT: WHITE, ELONGATED, OPEN FRONT WITHOUT COVER, SEAT WITH CHECK HINGE. RIM HEIGHT: 17.5"-18"	1 1/4"	2"	4"		FIXTURE SHALL BE MPP TESTED FOR A MINIMUM OF 1,000 GRAMS PER FLUSH.	
UR-1	KOHLER: 491-ET "BARDON"		SLOAN: OPTIMA PLUS SF5M GEM2 186-0.125 XL HEU		DESCRIPTION: WASH-DOWN, WALL HUNG, WALL OUTLET WITH URINAL FLUSHMETER. ADA COMPLIANT: YES COLOR: WHITE FLUSHMETER: TOP SPRUI, 0.5 GALLONS PER FLUSH. FLUSHMETER FINISH: POLISHED CHROME. FLUSHMETER OPERATION: BATTERY POWERED, SENSOR ACTUATION, AUTOMATIC FLUSH SYSTEM WITH TRUE MECHANICAL OVERRIDE. RIM HEIGHT: 17"	3/4"	1 1/2"	2"			
L-1	KOHLER: K-2065 "KINGSTON"		SLOAN: OPTIMA EAF-250		DESCRIPTION: WALL MOUNT LAVATORY WITH BATTERY POWERED SENSOR FAUCET. ADA COMPLIANT: YES COLOR: WHITE FIXTURE DIMENSIONS: 21-1/4" X 18-1/8" CONSTRUCTION: FAUCET INLET SPACING TO MATCH LAVATORY OPENINGS. FAUCET VALVE OPERATION: BATTERY POWERED, SENSOR OPERATED FAUCET ACCESSORIES: RELOW DECK THERMOSTATIC MIXING VALVE. FAUCET SPOUT: INTEGRAL WITH BODY, VANDAL RESISTANT AERATOR, 1/2-GPM FLOW. DRAIN: GRID STRAINER ADA INSULATION KIT: PROVIDE SUPPLY AND DRAIN SOFT MOLDED INSULATION KITS FROM FIXTURE TO WALL. COVERINGS TO BE CUSHIONED JACKET PLASTIC COVERING WITH SELF-STICKING FASTENING SYSTEM.	1/2"	1/2"	1 1/4"	1 1/4"		
S-1	ELKAY: ELUH4321655		KOHLER: K-586-CP "SIMPLICE"		DESCRIPTION: UNDER-MOUNT DOUBLE BOWL, 18 GAUGE STAINLESS STEEL SINK WITH GOOSENECK FAUCET. ADA COMPLIANT: YES FIXTURE BOWL DIMENSIONS: DOUBLE BOWL, 32"x18"x5-1/2" FIXTURE CONSTRUCTION: FAUCET INLET SPACING TO MATCH SINK OPENINGS. FIXTURE DRAIN: 1-1/2" GRID STRAINER WITH 3-1/2" REMOVABLE STAINLESS STEEL CRUMB CUP. FOOD WASTE DISPOSER: IN-SINK ERATOR, BADGER 5XP, 3/4 HP, 115 VAC, INCLUDE MOTOR WITH OVERLOAD PROTECTION AND RESET BUTTON, WALL SWITCH, CORROSION RESISTANT CHAMBER WITH LAM RESISTANT STAINLESS STEEL GRINDER, SPLASH GUARD, AND COMBINATION COVER/STOPPER. FAUCET HANDLE: SINGLE HANDLE LEVER. FAUCET SPOUT: 8-1/2" SWING SPOUT WITH 1.75 GPM FLOW AERATOR. FAUCET FINISH: POLISHED CHROME.	1/2"	1/2"	1 1/2"	1 1/2"		
HS-1	ADVANCE TABCO: 7-PS-88		NONE		DESCRIPTION: HEAVY GAUGE TYPE 304 STAINLESS STEEL WALL MOUNTED HAND SINK WITH SPLASH MOUNTED GOOSE NECK FAUCET. ADA COMPLIANT: YES. FIXTURE DIMENSIONS: 10" X 14" X 5" FIXTURE CONSTRUCTION: STAINLESS STEEL FAUCET: SPLASH MOUNTED GOOSE NECK FAUCET. FAUCET VALVE OPERATION: DUAL LEVEL MANUAL FAUCET. DRAIN: 1-1/2" GRID STRAINER WITH 3-1/2" REMOVABLE STAINLESS STEEL CRUMB CUP.	1/2"	1/2"	1 1/2"	1 1/2"		
EW-C1	ELKAY: LZ3TL6WSSP		--		DESCRIPTION: BARRIER FREE WALL MOUNTED BI-LEVEL FILTERED WATER COOLER WITH BOTTLE FILLER. ADA COMPLIANT: YES NUMBER OF BUBBLERS: TWO + BOTTLE FILLER (SEE BELOW) BOTTLE FILLER: SENSOR ACTIVATED, 1.1 GPM LAMINAR FLOW WITH 20 SECOND SHUT OFF, LED LIGHT AND BOTTLES SAVED DIGITAL DISPLAY COUNTER. FIXTURE CABINET MATERIAL: STAINLESS STEEL. THERMOSTAT: ADJUSTABLE SET AT 50°F. ELECTRICAL: 100V, 3 WIRE CORD AND PLUG ACTIVATION: PUSH BAR ACTUATION MECHANISM. UNIT SHALL INCLUDE 3000-GALLON CAPACITY FILTER, CERTIFIED TO NSF/ANSI 42 & 53, WITH VISUAL FILTER MONITOR TO INDICATE WHEN REPLACEMENT IS NECESSARY AND SHALL AUTOMATICALLY DETECT A NEW FILTER/RESET VISUAL FILTER MONITOR ACCORDINGLY. UNIT SHALL TURN OFF REFRIGERATION SYSTEM AS NEEDED, IN ADDITION TO SELF-DIAGNOSING SYSTEM ISSUES AND DISPLAY RELATED MESSAGES.	1/2"		1 1/4"	1 1/4"		FIXTURE UNIT CAPACITY: 8 GPH.

PLUMBING FIXTURE SCHEDULE (1) (2)											
REMARKS: 1. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS INCLUDING STOPS, FITTINGS AND ALL OTHER SPECIALTIES. 2. PICTURES OF FIXTURES MAY NOT INDICATE ACTUAL FIXTURE SPECIFIED. PICTURES ARE GRAPHICAL IN NATURE. SEE DESCRIPTION FOR ACTUAL FIXTURE AND MODEL.											
TAG	FIXTURE (2)		FAUCET-VALVE ACCESSORY (2)		DESCRIPTION	CONNECTIONS				REMARKS	
	MODEL	IMAGE	MODEL	IMAGE		CW	HW	V	W		
MS-1	WILLIAMS: SB-900 "SERVICEPORT"		KOHLER: K-6007 "KINLOCK"		DESCRIPTION: FLOOR MOUNTED MOP SINK WITH WALL MOUNTED FAUCET. ADA COMPLIANT: NOT REQUIRED FIXTURE DIMENSIONS: 24" X 24" X 12" HIGH FIXTURE CONSTRUCTION: TERRAZZO, RIM GUARD, STAINLESS STEEL FAUCET: ROUGH CHROME, WIDESPREAD BASIN BRASS WITH SUPPLIES 8" ON CENTER. FAUCET MOUNTING: WALL CENTERED ON FIXTURE. FAUCET HANDLE: DUAL LEVER. FAUCET SPOUT: INTEGRAL VACUUM BREAKER, PAIL HOOK, AND HOSE THREAD OUTLET. WALL BRACE: ASSEMBLY WITH WALL BRACKET AND SUPPORT TO FAUCET SPOUT. HOSE HOLDER: E.L. MUSTEE & SONS 65.700, HEAVY DUTY 3/8" DIA. 31" RUBBER HOSE AND SPRING LOADED MOLDED RUBBER HOSE HOLDER ON STAINLESS STEEL WALL PLATE. MOP HANGER: E.L. MUSTEE & SONS 65.800, THREE SPRING-LOADED RUBBER MOP HOLDERS ATTACHED TO STAINLESS STEEL WALL PLATE. WALL GUARD: E.L. MUSTEE & SONS 67.2424, 12" HIGH, 20 GAUGE, #304 STAINLESS STEEL WALL GUARD.	3/4"	3/4"	1 1/2"	3"		
ES-H1	GAURDVAN: G100CP				DESCRIPTION: SAFETY STATION WITH EYE WASH, PLASTIC BOWL. SHOWER HEAD: 10" DIAMETER PLASTIC. SHOWER VALVE: 1" IPS STAINLESS STEEL STAY-OPEN BALL VALVE, STAINLESS STEEL ACTUATING ARM AND 20" STAINLESS STEEL PULL ROD. SPRAY HEAD ASSEMBLY: TWO 60-PLUS SPRAY HEADS, EACH HEAD WITH A FILP TOP DUCT COVER, INTERNAL FLOW CONTROL AND FILTER TO REMOVE WATER IMPURITIES. EYE WASH BOWL: 11-1/2" PLASTIC. EYE WASH VALVE: 1/2" STAINLESS STEEL STAY-OPEN BALL VALVE. PIPE AND FITTINGS: SCHEDULE 40 BRUSHED STAINLESS STEEL, FURNISH WITH POLYETHYLENE COVERS FOR VERTICAL PIPING FOR HIGH VISIBILITY AND CORROSION RESISTANCE. SUPPLY: 1-1/4" NPT FEMAL TOP OR SIDE INLET. SIGN: FURNISH WITH ANSI-COMPLIANT IDENTIFICATION SIGN. ADDITIONAL OPTIONS: F020: REGULATES SHOWER FLOW RATE TO 20 GPM. PROVIDE POINT-OF-USE THERMOSTATIC MIXING VALVE TO PROVIDE TEMPERED WATER TO EMERGENCY EYEWASH. THERMOSTATIC MIXING VALVE: DESIGNED TO PROVIDE 80°F TEPID, POTABLE WATER AT EMERGENCY EYEWASH. TO MAINTAIN TEMPERATURE AT PLUS OR MINUS 5°F THROUGHOUT REQUIRED 15-MINUTE TEST PERIOD. AND IN CASE OF UNIT FAILURE TO CONTINUE COLD-WATER FLOW, WITH UNION CONNECTIONS, CONTROLS, METAL PIPING, AND CORROSION-RESISTANT ENCLOSURE, SUPPLY CONNECTIONS: FOR HOT AND COLD WATER.	1 1/4"	1 1/4"				TEPID WATER
OB-1	DATEY: I2K		--		DESCRIPTION: RECESSED WALL OUTLET BOX WITH ISOLATION VALVE.	1/4"					
2" D-1	J.R. SMITH: 2005		--		DESCRIPTION: FLOOR DRAIN WITH CAST IRON BODY, FLASHING COLLAR, 6" ROUND ADJUSTABLE NICKEL BRONZE GRATE.					SEE PLANS FOR WASTE AND VENT SIZE REQUIREMENTS.	
4" D-2	J.R. SMITH: 2110		--		FLOOR DRAIN WITH CAST IRON BODY, FLASHING COLLAR, 8.5" ROUND MEDIUM DUTY GRATE.					SEE PLANS FOR WASTE AND VENT SIZE REQUIREMENTS.	
TD-1	J.R. SMITH: #9865 (6" WIDE)		--		DESCRIPTION: NON-METALLIC TRENCH DRAIN, POLYESTER RESIN AND QUARTZ AGGREGATE. PRECAST, INTERLOCKING DESIGN, INTEGRAL METAL RAIL, WITH BOTTOM RADIUS AND 0.5 PERCENT SLOPE. CHANNEL, SLOPE DRAIN SYSTEM OR EQUAL. 1. PRECAST MATERIAL, LOAD PRESSURE OF 14,300 PSI, BENDING PRESSURE OF 2,300 PSI, FROST-PROOF, SALT-PROOF, INERT TO ACID, ALKALI AND ALKALI CONDITIONS, AND LESS THAN 1.0 PERCENT WATER ABSORPTION RATE. 2. CHANNEL SECTIONS, INTERLOCKING-JOINT, PRECAST, MODULAR UNITS WITH END COPS. PROVIDE OUTLETS IN NUMBERS, SIZES, AND LOCATIONS INDICATED. INCLUDE EXTENSION SECTIONS NECESSARY FOR REQUIRED DEPTH. 3. GRATES: CLASS C, GALVANIZED STEEL, SLOTTED. 4. LOCKING MECHANISM: MANUFACTURER'S STANDARD DEVICE FOR SECURING GRATES TO CHANNEL SECTIONS. 5. CATCH BASINS: 21-8 1/4" INCH POLYMER-CONCRETE BODY WITH SLOTTED GRATE. GRATE RATING TO MATCH DRAIN.					4"	
WH-1	WOODFORD: 67C		--		DESCRIPTION: WALL HYDRANT WITH THE FOLLOWING FEATURES: NON-FREEZE, AUTOMATIC DRAINING, ANTI-BACKFLOW TYPE, KEY OPERATION, 3/4" NPS THREADED OR SOLDER JOINT INLET, AND GARDEN HOSE THREADS ON OUTLET. INCLUDE OPERATING KEY FOR EACH HYDRANT. TYPE: SURFACE MOUNT FINISH: CHROME PLATED OPERATION: KEY, 3/8" OPERATING ROD	3/4"					
HB-1	WOODFORD: 26C		--		HOSE BIBB WITH BRONZE BODY, RENEWABLE COMPOSITION DISC, 3/4" NPS THREADED OR SOLDER JOINT INLET. PROVIDE GARDEN HOSE THREADS ON OUTLET AND INTEGRAL, NON-REMOVABLE, DRAINABLE, HOSE CONNECTION WITH ANTI-SIPHON VACUUM BREAKER. FINISH: CHROME OPERATION: WHEEL-HANDLE	3/4"	0"	0"	0"		



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#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD,  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

**PLUMBING FIXTURE SCHEDULE**

**M5-3**

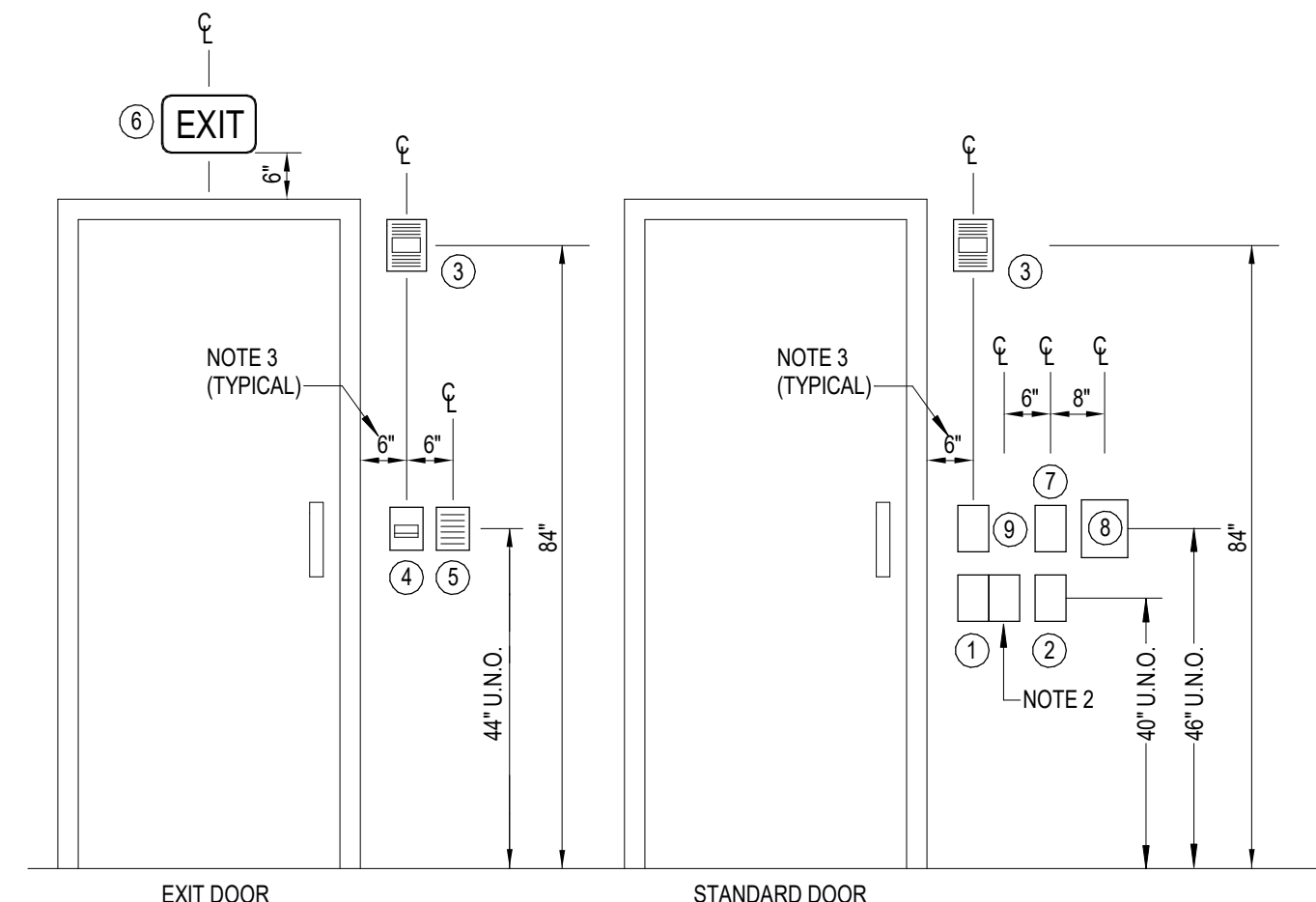
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02/03/2023

MEI PROJECT NO. 20297

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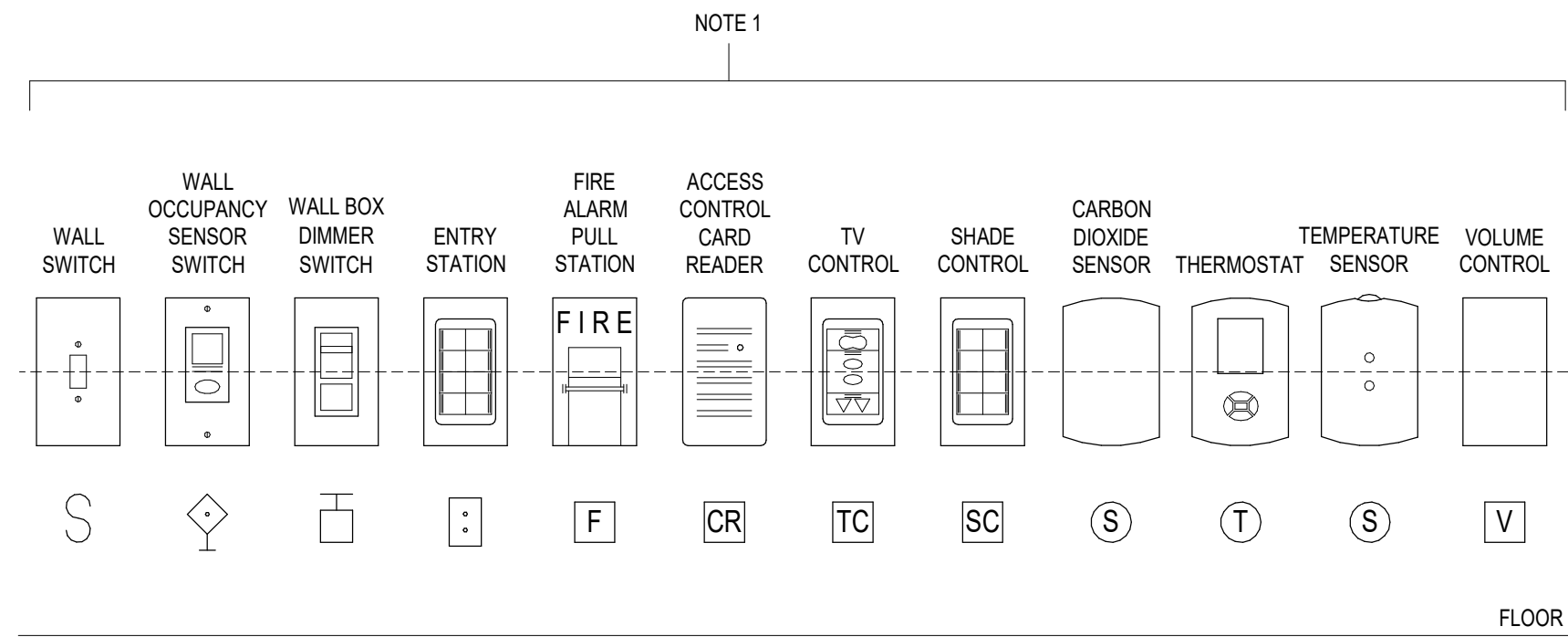




**DEVICES:**

- 1 WALL SWITCH, WALL OCCUPANCY SENSOR SWITCH, WALL BOX DIMMER SWITCH, OR ENTRY STATION
- 2 THERMOSTAT, TEMPERATURE SENSOR, OR CARBON DIOXIDE SENSOR ROUGH-IN
- 3 FIRE ALARM AUDIOVISUAL INDICATING DEVICE
- 4 FIRE ALARM PULL STATION
- 5 ACCESS CONTROL CARD READER
- 6 EXIT SIGN
- 7 GA-TRONICS VOLUME CONTROL
- 8 GA-TRONICS RECESSED PHONE
- 9 OWNER PROVIDED WALL PHONE

**1 DEVICE ALIGNMENT DETAIL**  
E0-0 NOT TO SCALE



**NOTES:**

1. ALIGN DEVICES VERTICALLY AND HORIZONTALLY WHEREVER POSSIBLE. NOT ALL DEVICES OR CONFIGURATIONS ARE DEPICTED ON THIS DETAIL. FOR ANY CONFIGURATIONS WITH FOUR OR MORE DEVICES, COORDINATE ARRANGEMENT WITH THE ENGINEER PRIOR TO ROUGH-IN. SEE FLOOR PLANS FOR INDIVIDUAL DOOR REQUIREMENTS.
2. WHERE MULTIPLE SWITCHES OR WALL BOX DIMMERS ARE GANGED TOGETHER, ALIGN FIRST GANG WITH DEVICES ABOVE AND ADD DEVICES TO THE RIGHT AS REQUIRED.
3. DIMENSIONS ARE TO BE MEASURED FROM OUTSIDE EDGE OF DOOR FRAME OR TRIM. WHERE SIDE LIGHT WINDOWS ARE PROVIDED, DIMENSIONS SHOULD BE MEASURED FROM OUTSIDE EDGE OF SIDE LIGHT WINDOW FRAME OR TRIM.
4. ALL DEVICES SHALL BE LOCATED TO MAINTAIN ALL A.D.A. MOUNTING HEIGHT REQUIREMENTS AND SUCH THAT CENTER OF ADJACENT DEVICES ARE AT SAME ELEVATION. (TYPICALLY 44" A.F.F. TO CENTER OF DEVICE). NOTIFY ENGINEER OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.

**GENERAL FIRE ALARM NOTES**

1. PROVIDE FIRE ALARM WIRING TO POST-INDICATOR SWITCH. USE RGS CONDUIT WHERE EXPOSED ABOVE GRADE. PROVIDE FIRE ALARM WIRING TO EACH FIRE SPRINKLER SYSTEM FLOW AND TAMPER SWITCH. COORDINATE QUANTITIES AND LOCATIONS WITH FIRE SPRINKLER CONTRACTOR AND MECHANICAL DRAWINGS.
2. ALL FIRE ALARM WIRING SHALL BE RAN FREE-AIR ABOVE NON-ACCESSIBLE CEILING AND IN CONDUIT IN AREAS WITH EXPOSED STRUCTURE (NO CEILING). IN EXPOSED STRUCTURE AREAS, ROUTE CONDUIT TIGHT TO STRUCTURE. CONDUIT SHALL BE ROUTED PARALLEL OR PERPENDICULAR TO STRUCTURE IN A NEAT AND WORKMANLIKE MANNER.
3. ENSURE ALL PENETRATIONS THROUGH FIRE AND SMOKE WALLS ARE PROPERLY SEALED. SEE ARCHITECTURAL CODE REVIEW PLAN FOR FIRE AND SMOKE WALL LOCATIONS.
4. PROVIDE ADDRESSABLE CONTROL MODULES AS REQUIRED FOR CONTROL OF ELECTRIC LOCKS/STRIKES ON EGRESS DOORS. DOORS SHALL BE UNLOCKED IN AN ALARM CONDITION. REFER TO ARCHITECTURAL DOOR HARDWARE SCHEDULE.
5. PROVIDE ELECTRICAL CONNECTIONS TO SMOKE AND FIRE/SMOKE DAMPERS INCLUDING POWER AND FIRE ALARM. PROVIDE A DUCT MOUNTED SMOKE DETECTOR WITH 5'-0" OF SMOKE DAMPER PER IBC 907.3.2. PROVIDE 120V CONNECTION FROM LOCKABLE CIRCUIT BREAKER IN NEAREST 120V PANEL WITH A MAXIMUM OF 6 PER 20A 1P CIRCUIT. VERIFY EXACT QUANTITY AND LOCATION OF DAMPERS WITH MECHANICAL DRAWINGS. SEE DETAIL FOR ADDITIONAL REQUIREMENTS.

**GENERAL SPECIAL SYSTEMS NOTES**

1. SPECIAL SYSTEMS ROUGH-INS PROVIDED BY ELECTRICAL CONTRACTOR.
2. PROVIDE J-HOOK CABLE SUPPORTS FOR ALL CABLE NOT SUPPORTED BY CABLE TRAY. MAXIMUM SPACING SHALL BE 6'-0".
3. PROVIDE UL LISTED FIRESTOP AND SMOKESTOP ASSEMBLIES FOR ALL RATED PENETRATIONS.
4. PROVIDE STAINLESS STEEL WALL PLATE WITH MOUNTING STUDS FOR ALL SINGLE CABLE TELEPHONE OUTLETS MOUNTED AT 48". ENSURE TERMINATION MATCHES CATEGORY CABLE RATING.
5. PROVIDE 10' SERVICE LOOP FOR ALL COMMUNICATIONS CABLES AT COMMUNICATION TERMINATION ROOM. 3' SERVICE LOOP AT STATION END.
6. ALL TELECOMMUNICATIONS CABLING SHALL BE TERMINATED TO THE COMMUNICATIONS TERMINATION ROOM DESIGNATED FOR THAT SPECIFIC AREA OF THE FACILITY, UNLESS OTHERWISE INDICATED.
7. PROVIDE FACTORY CABLE DROP-OUTS FOR ANY CABLING ENTERING OR EXITING CABLE TRAY OR LADDER RUNWAY.
8. PROVIDE ALL SUGGESTED FACTORY MOUNTING BRACKETS FOR LADDER RUNWAY. PROVIDE END CLOSING KIT FOR ALL LADDER RUNWAY THAT DOES NOT TERMINATE TO A WALL.
9. PROVIDE TWO-HOLE, DOUBLE CRIMP, GROUNDING LUGS WITH VIEWING HOLES, SIZED TO MATCH CONDUCTORS.
10. PROVIDE STAINLESS STEEL MOUNTING HARDWARE FOR ALL GROUND CONNECTIONS.
11. MECHANICALLY LABEL ALL GROUND BARS AND CONNECTIONS TO GROUND BARS.
12. MECHANICALLY LABEL TERMINATION BLOCKS AND CABLES.
13. PROVIDE (2) 1-1/2" C. SLEEVES ABOVE ACCESSIBLE CEILING FROM EACH ROOM THROUGH WALL TO ABOVE NEAREST ACCESSIBLE CORRIDOR CEILING OR OVERHEAD PATHWAY. PROVIDE INSULATED BUSHINGS ON EACH END. SEAL BOTH ENDS OF CONDUIT WITH REMOVABLE PENUM RATED ACOUSTICAL SEALANT.

**GENERAL LIGHTING NOTES**

1. UTILITY LOCATIONS INDICATED ON DRAWINGS ARE APPROXIMATE AND THE MOST ACCURATE INFORMATION AVAILABLE AT THE TIME OF DESIGN. PRIOR TO EQUIPMENT AND CONDUIT INSTALLATION, THE CONTRACTOR SHALL COORDINATE EXACT INSTALLATION DETAILS AND MODIFY WORK PLAN ACCORDINGLY TO MEET UTILITY REQUIREMENTS. CORRESPOND WITH UTILITY COMPANY PRIOR TO ANY SITE DEVELOPMENT THAT MAY IMPACT THE INSTALLATION SUCH AS IRRIGATION INSTALLATION, CONCRETE OR ASPHALT INSTALLATION, LANDSCAPING, ETC.
2. MINIMUM SIZE FOR ALL UNDERGROUND CONDUITS SHALL BE 1" UNLESS OTHERWISE NOTED. MINIMUM WIRE SIZE SHALL BE #10 UNLESS OTHERWISE NOTED.
3. ROUTE CONDUITS UNDER HARD SURFACES AS MUCH AS POSSIBLE TO AVOID CONFLICTS WITH LANDSCAPING AND LAWN IRRIGATION.
4. PROVIDE A GREEN INSULATED GROUND WIRE IN ALL RECEPTACLE, LIGHTING, AND EQUIPMENT BRANCH CIRCUITS.
5. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT.

**GENERAL POWER NOTES**

1. MINIMUM BRANCH CIRCUIT CONDUIT SHALL BE 1/2" MINIMUM DATA/COMMUNICATIONS CONDUIT SHALL BE 1". SEE DRAWINGS FOR AREAS WHERE LARGER CONDUITS ARE REQUIRED.
2. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT.
3. PROVIDE A GREEN INSULATED GROUND WIRE IN ALL RECEPTACLE AND EQUIPMENT BRANCH CIRCUITS.
4. SEE DEVICE ALIGNMENT DETAIL FOR INSTALLATION LOCATION OF DEVICES ADJACENT TO DOORS AND MOUNTING HEIGHT REQUIREMENTS.
5. INSTALL CONVENIENCE RECEPTACLES AT EQUIPMENT REQUIRING SERVICING PER 2020 NEC 210.63.
6. IN EXPOSED STRUCTURE AREAS (NO CEILING), ROUTE CONDUIT TIGHT TO STRUCTURE. CONDUIT SHALL BE ROUTED PARALLEL OR PERPENDICULAR TO STRUCTURE IN A NEAT AND WORKMANLIKE MANNER. PAINT EXPOSED CONDUIT AND BOXES TO MATCH STRUCTURE IN FINISHED AREAS WITHOUT A CEILING. EXPOSED WIRING OF ANY TYPE WILL NOT BE ALLOWED IN FINISHED AREAS.
7. ALL CABLING AND RACEWAY INSTALLED IN EXPOSED OR CONCEALED LOCATIONS NEAR METAL CORRUGATED ROOF DECKING SHALL BE INSTALLED AND SUPPORTED SO THE NEAREST OUTER SURFACE OF THE CABLE OR RACEWAY IS NOT LESS THAN 6 INCHES FROM THE NEAREST SURFACE OF THE ROOF DECKING.
8. CONTRACTOR SHALL COORDINATE LOCATION OF LUMINAIRES, SPEAKERS, FIRE ALARM, ETC. WITH FIRE RATED WALLS AND CEILING AND PROVIDE ENCLOSURES AS REQUIRED TO MAINTAIN THE FIRE INTEGRITY RATING. COORDINATE EXACT LOCATIONS OF FIRE RATED WALLS AND CEILING WITH ARCHITECTURAL DRAWINGS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
9. REFER TO ACCESS CONTROL DETAIL FOR DOOR HARDWARE ROUGH-IN REQUIREMENTS. COORDINATE WITH ARCHITECTURAL DOOR HARDWARE SCHEDULE AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.
10. COORDINATE ALL FLOOR BOX LOCATIONS WITH ARCHITECT AND FURNITURE EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.
11. COORDINATE MOUNTING HEIGHT AND EXACT LOCATION OF DEVICES FOR ALL TVs WITH ARCHITECT PRIOR TO ROUGH-IN.
12. ELECTRICAL CONTRACTOR SHALL PROVIDE ROUGH-IN FOR ALL THERMOSTATS AND/OR SENSORS. ROUGH-IN TO INCLUDE 4" SQUARE BOX WITH SINGLE MID RING AND 1/2" CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING. LOCATE BOX AT 44" AFF ALIGNED VERTICALLY AND HORIZONTALLY WITH ADJACENT ELECTRICAL DEVICES. REFER TO MECHANICAL DRAWINGS FOR THERMOSTAT AND/OR SENSOR LOCATIONS.
13. SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL REQUIREMENTS AND INFORMATION ON MECHANICAL EQUIPMENT.

ELECTRICAL SYMBOLS			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
<b>LIGHTING</b>			
[Symbol]	LUMINAIRE	[Symbol]	SINGLE POLE SWITCH
[Symbol]	LUMINAIRE CONNECTED TO EMERGENCY CIRCUIT OR BATTERY	[Symbol]	2-WAY SWITCH
[Symbol]	STIMP LUMINAIRE	[Symbol]	4-WAY SWITCH
[Symbol]	WALL MOUNTED LUMINAIRE	[Symbol]	WALL BOX DIMMER SWITCH
[Symbol]	WALL MOUNTED LUMINAIRE	[Symbol]	CEILING MOUNTED MOTOR SENSORSWITCH
[Symbol]	WALL MOUNTED LUMINAIRE	[Symbol]	WALL MOUNTED MOTOR SENSORSWITCH
[Symbol]	TRACK LUMINAIRE	[Symbol]	WALL MOUNTED MOTOR SENSORSWITCH WITH 5-WY DIMMING
[Symbol]	EMERGENCY BATTERY PACK	[Symbol]	LOW VOLTAGE LIGHTING CONTROL SWITCH
[Symbol]	CEILING MOUNTED EXIT LIGHT WITH DIRECTIONAL ARROW	[Symbol]	WALL MOUNTED PHOTOCELL
[Symbol]	WALL OR MOUNTED EXIT LIGHT WITH DIRECTIONAL ARROW	[Symbol]	CEILING MOUNTED PHOTOCELL
[Symbol]	POLE MOUNTED LUMINAIRE	[Symbol]	POLE MOUNTED PHOTOCELL
[Symbol]	ISLAND LUMINAIRE	[Symbol]	ISLAND LUMINAIRE
<b>FIRE ALARM</b>			
[Symbol]	FIRE ALARM SMOKE DETECTOR	[Symbol]	FIRE ALARM HORN & STROBE COMBINATION
[Symbol]	FIRE ALARM HEAT DETECTOR	[Symbol]	FIRE ALARM HORN & STROBE COMBINATION
[Symbol]	DUCT MOUNTED SMOKE DETECTOR	[Symbol]	CEILING FIRE ALARM STROBE
[Symbol]	FIRE ALARM MANUAL CALL STATION	[Symbol]	CEILING FIRE ALARM HORN & STROBE COMBINATION
[Symbol]	FIRE SPRINKLER VALVE TAMPER SWITCH	[Symbol]	CEILING FIRE ALARM SPEAKER & STROBE COMBINATION
[Symbol]	FIRE SPRINKLER LOW SWITCH	[Symbol]	WALL FIRE ALARM SPEAKER & STROBE COMBINATION
[Symbol]	FIRE ALARM CONTROL PANEL	[Symbol]	CEILING FIRE ALARM SPEAKER
[Symbol]	FIRE ALARM ANNUNCIATOR PANEL	[Symbol]	WALL FIRE ALARM SPEAKER
[Symbol]	FIRE ALARM MAGNETIC DOOR-HOLDER	[Symbol]	WALL FIRE ALARM SPEAKER
<b>POWER</b>			
[Symbol]	FLOOR BOX - COMBINATION POWER & DATA	[Symbol]	FLOOR BOX - COMBINATION POWER & DATA
[Symbol]	1/2" DENOTES GRID TYPE	[Symbol]	POLE-TYPE - COMBINATION POWER & DATA
[Symbol]	1" DENOTES ISOLATED CIRCUIT TYPE	[Symbol]	FLOOR MOUNTED DUPLEX RECEPTACLE
[Symbol]	1/4" DENOTES HOSPITAL GRADE TYPE	[Symbol]	MOTOR TP - BRACKET HORSEPOWER RATING
[Symbol]	1/8" DENOTES TAMPER RESISTANT TYPE	[Symbol]	DISCONNECT SWITCH
[Symbol]	1/2" DENOTES UNIVERSAL SERIAL BUS (USB) TYPE	[Symbol]	THERMAL ELEMENT SWITCH
[Symbol]	DOUBLE SWITCHING DEVICES AND DEVICES	[Symbol]	SWITCH A FLUSH
[Symbol]	SMALL SWITCHING DEVICES (SPDT, WIRE-ON)	[Symbol]	SWITCH A FLUSH
[Symbol]	HORIZONTAL MOUNTED DUPLEX RECEPTACLE	[Symbol]	MAGNETIC MOTOR SWITCHER
[Symbol]	CEILING MOUNTED DUPLEX RECEPTACLE	[Symbol]	COMBINATION MAGNETIC SWITCHER/DISCONNECT
[Symbol]	DOUBLE DUPLEX RECEPTACLE	[Symbol]	MOTOR CONTROL PULSBUTTON STATION
[Symbol]	TRIPLE RECEPTACLE	[Symbol]	RELAY
[Symbol]	CONVERTER RECEPTACLE (NEMA 40A) (120/200V 3Ø)	[Symbol]	MULTI-OUTLET ASSEMBLY - LENGTHS AS NOTATED
[Symbol]	WIRELESS RECEPTACLE (NEMA 40A) (120/200V 3Ø)	[Symbol]	RELAY
[Symbol]	WIRELESS RECEPTACLE (NEMA 15-30) (120V 1Ø) (P15 WIRE)	[Symbol]	RELAY
[Symbol]	WIRELESS RECEPTACLE (NEMA 15-30) (120V 1Ø) (P15 WIRE)	[Symbol]	RELAY
[Symbol]	SPECIAL PURPOSE RECEPTACLE (NEMA CONFORMS AS NOTED)	[Symbol]	RELAY
<b>COMMUNICATION</b>			
[Symbol]	WALL PHONE OUTLET (TP) INDICATES (GA-TRONICS TYPE PHONE)	[Symbol]	GA-TRONICS CEILING SPEAKER
[Symbol]	WALL COMMUNICATIONS DATA OUTLET	[Symbol]	GA-TRONICS HALL SPEAKER
[Symbol]	CEILING COMMUNICATIONS DATA OUTLET	[Symbol]	SOUND REINFORCEMENT WALL SPEAKER
[Symbol]	CEILING WIRELESS ACCESS POINT OUTLET	[Symbol]	SOUND REINFORCEMENT CEILING SPEAKER
[Symbol]	TELEPHONE WIRELESS OUTLET	[Symbol]	WALL MICROPHONE OUTLET
[Symbol]	WALL CLOSET	[Symbol]	CEILING MICROPHONE OUTLET
[Symbol]	GA-TRONICS VOLUME CONTROL	[Symbol]	WALL MICROPHONE OUTLET
<b>SECURITY</b>			
[Symbol]	CEILING MOUNTED SECURITY MOTION DETECTOR	[Symbol]	VIDEO SURVEILLANCE CAMERA (W INDICATES TYPE)
[Symbol]	WALL MOUNTED SECURITY MOTION DETECTOR	[Symbol]	SECURITY CARD READER
[Symbol]	WALL MOUNTED SECURITY MOTION DETECTOR	[Symbol]	ELECTRIC STRIKE
[Symbol]	DOOR POSITION SWITCH	[Symbol]	ELECTRONIC LOCK REACTION
[Symbol]	MAGNETIC LOCK	[Symbol]	INTRUSION KEYING
[Symbol]	INTRUSION STATION	[Symbol]	HANDSET ALARM
<b>GENERAL</b>			
[Symbol]	LIGHTING PANEL	[Symbol]	WALL MOUNTED JUNCTION BOX
[Symbol]	DISTRIBUTION PANEL, SWITCHBOARD OR MOTOR CONTROL CENTER	[Symbol]	JUNCTION BOX
[Symbol]	CABINET, ENCLOSURE OR CONTROL PANEL, TYPE INDICATED ON PLANS	[Symbol]	CONDUIT (SEAL)
[Symbol]	BRANCH CIRCUIT (SPIND)	[Symbol]	CONDUIT DOWN
[Symbol]	BRANCH CIRCUIT CONCEALED IN CEILING OR WALL	[Symbol]	CIRCUIT UP
[Symbol]	BRANCH CIRCUIT CONCEALED IN FLOOR	[Symbol]	CONDUIT THROUGH
[Symbol]	BRANCH CIRCUIT (2-3 WIRE)	[Symbol]	CONDUIT THROUGH
[Symbol]	TERMINAL TO PANEL, QUANTITY OF ARROWS INDICATES QUANTITY OF CIRCUITS	[Symbol]	BELL
[Symbol]	SPECIAL PURPOSE POWER AS INDICATED	[Symbol]	PUSH-BUTTON
[Symbol]	BRANCH CIRCUIT CONTROLLED DEVICE - VIA RELAY	[Symbol]	BELL
[Symbol]	SUBSCRIPT "TP" APPLIED TO ANY SYMBOL, INDICATES THERMOPROOF	[Symbol]	BELL
[Symbol]	NEW TYPE "R" OR EQUIVALENT	[Symbol]	BELL
[Symbol]	SUBSCRIPT "WP" APPLIED TO ANY SYMBOL, INDICATES WEATHERPROOF	[Symbol]	BELL
[Symbol]	NEW TYPE "R" OR EQUIVALENT	[Symbol]	BELL
[Symbol]	SUBSCRIPT "R" ADDED TO ANY SYMBOL, INDICATES RELOCATED	[Symbol]	BELL
[Symbol]	SUBSCRIPT "RT" ADDED TO ANY FLOOR OUTLET INDICATES	[Symbol]	BELL
[Symbol]	WHERE "TP" IS USED ON PANEL RECEPTACLE A TYPICAL NOTE OR CONDITION	[Symbol]	BELL
[Symbol]	SUBSCRIPT "TL" ADDED TO ANY SYMBOL, INDICATES TAMP LOCATOR	[Symbol]	BELL
[Symbol]	SUBSCRIPT "EP" ADDED TO ANY SYMBOL, INDICATES EXPLOSION PROOF	[Symbol]	BELL
[Symbol]	CLASS, GROUP & DIVISION AS NOTED	[Symbol]	BELL
[Symbol]	SUBSCRIPT "X" ADDED TO ANY SYMBOL, INDICATES XRAY OPERATED	[Symbol]	BELL
[Symbol]	SUBSCRIPT "Y" ADDED TO ANY SYMBOL, INDICATES YRAY OPERATED	[Symbol]	BELL
[Symbol]	SUBSCRIPT "Z" ADDED TO ANY SYMBOL, INDICATES ZRAY OPERATED	[Symbol]	BELL

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#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD,  
NEBRASKA CITY, NE 68410

**OMAHA PUBLIC POWER DISTRICT**

444 SOUTH 16TH STREET  
OMAHA, NE 68102

**ELECTRICAL COVER SHEET**

**E0-0**

BCDM NO. 5396-00  
02/03/2023

MEI PROJECT NO. 20297



mechanical | electrical | lighting | technology | commissioning  
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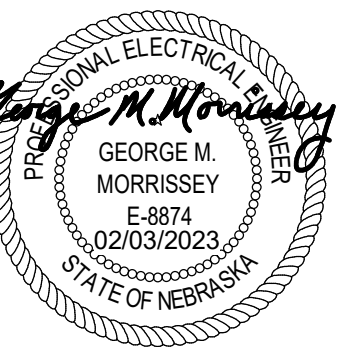
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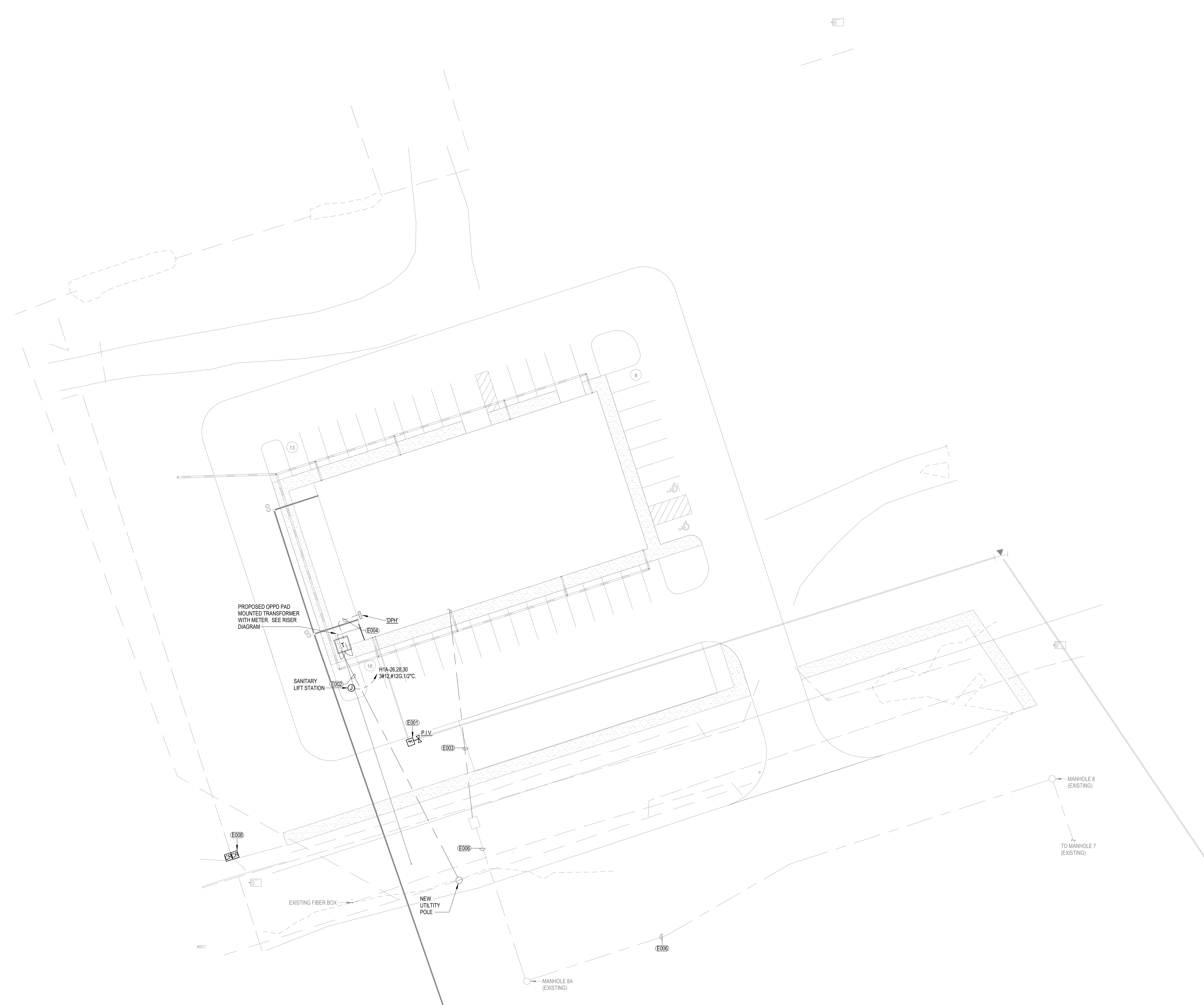


**GENERAL SITE NOTES**

1. UTILITY LOCATIONS INDICATED ON DRAWINGS ARE APPROXIMATE AND THE MOST ACCURATE INFORMATION AVAILABLE AT THE TIME OF DESIGN. PRIOR TO EQUIPMENT AND CONDUIT INSTALLATION, THE CONTRACTOR SHALL COORDINATE EXACT INSTALLATION DETAILS AND MODIFY WORK PLAN ACCORDINGLY TO MEET UTILITY REQUIREMENTS. CORRESPOND WITH UTILITY COMPANY PRIOR TO ANY SITE DEVELOPMENT THAT MAY IMPACT THE INSTALLATION, SUCH AS IRRIGATION INSTALLATION, CONCRETE OR ASPHALT INSTALLATION, LANDSCAPING, ETC.
2. MINIMUM SIZE FOR ALL UNDERGROUND CONDUITS SHALL BE 1" UNLESS OTHERWISE NOTED. MINIMUM WIRE SIZE SHALL BE #10 UNLESS OTHERWISE NOTED.
3. ROUTE CONDUITS UNDER HARD SURFACES AS MUCH AS POSSIBLE TO AVOID CONFLICTS WITH LANDSCAPING AND LAWN IRRIGATION.
4. PROVIDE A GREEN INSULATED GROUND WIRE IN ALL RECEPTACLE, LIGHTING, AND EQUIPMENT BRANCH CIRCUITS.
5. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT.

**KEYNOTES**

- E001 PROVIDE 1" CONDUIT FROM FIRE ALARM PANEL WITH FIRE ALARM WIRING TO TAMPER SWITCH ON POST INDICATOR VALVE. USE RSS CONDUIT ABOVE GRADE.
- E002 UNDERGROUND CONDUIT FOR TRANSFORMER PRIMARY FEEDERS. COORDINATE LOCATION WITH OPPD. SEE ELECTRICAL RISER DIAGRAM.
- E003 PROVIDE 3/4" UNDERGROUND CONDUITS FOR TELECOMMUNICATIONS FROM TELECOMMUNICATION ROOM TO NEW IN-GRADE PULLBOX. PROVIDE (1) CONDUIT WITH MAXCELL 4" 3-CELL DETECTABLE INNERDUCT. SEE TELECOMMUNICATIONS RISER DIAGRAM.
- E004 UNDERGROUND CONDUIT TRANSFORMER SECONDARY FEEDERS. COORDINATE LOCATION WITH OPPD. SEE ELECTRICAL RISER DIAGRAM.
- E006 EXISTING UNDERGROUND DUCTBANK BASED ON LATEST INFORMATION AVAILABLE AT TIME OF DESIGN. COORDINATE EXACT LOCATION WITH EXISTING SITE CONDITIONS.
- E008 EXISTING GATE CARD READER LOCATION. PROVIDE NEW CABLES TO EXISTING LOCATION THROUGH EXISTING UNDERGROUND CONDUIT AND HATCHES. PROVIDE TWO NEW CARD READERS (1) IN, (1) OUT. PROGRAM CARD READER INTO NEW ACCESS CONTROL SYSTEM HEADEND INSIDE BUILDING. MOUNT CARD READER TO EXISTING FENCE. NEW CONDUITS SHALL BE RGS TO PROTECT CASLING INSTALLATION.



#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD,  
NEBRASKA CITY, NE 68410

**OMAHA PUBLIC POWER DISTRICT**

444 SOUTH 16TH STREET  
OMAHA, NE 68102

**SITE UTILITY PLAN - ELECTRICAL**

**E1-0**

BCDM NO. 5396-00  
02/03/2023

MEI PROJECT NO. 20297



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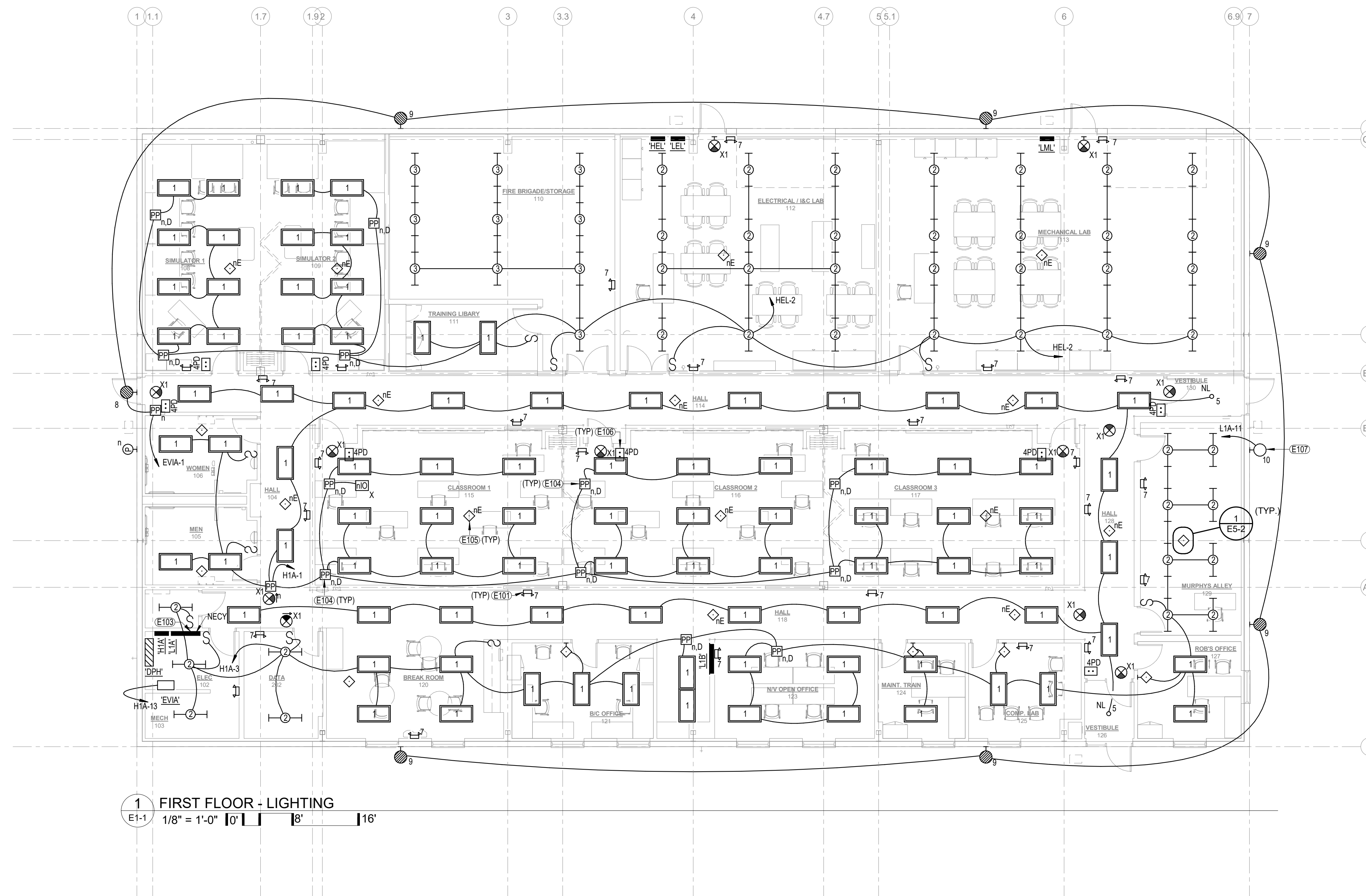
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**KEYNOTES**

- E101 CONNECT BATTERY LEADS AHEAD OF LOCAL SWITCHING. CONNECT TO LIGHTING CIRCUIT SERVING SPACE.
- E103 PROVIDE LIGHTING CONTROL SYSTEM (LIGHT ECLIPSE CONTROL PANEL). CONTROL PANEL SHALL CONTAIN FLUSH MOUNTED NEMA 1 ENCLOSURE, BACNET, TOUCHSCREEN INTERFACE, ENVISION SOFTWARE. SEE SPECIFICATIONS AND LIGHTING CONTROL DEVICE SCHEDULE FOR ADDITIONAL INFORMATION.
- E104 LIGHTING CONTROL NETWORK POWER PACK - SEE LIGHTING CONTROL DEVICE SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. LOCATE ABOVE NEAREST ACCESSIBLE CEILING. PROVIDE ALL LOW VOLTAGE AND LINE VOLTAGE CONNECTIONS INDICATED ON PLAN.
- E105 PROVIDE LIGHTING CONTROL NETWORK LOW VOLTAGE CEILING MOUNTED OCCUPANCY SENSOR - SEE LIGHTING CONTROL DEVICE SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- E106 PROVIDE LIGHTING CONTROL NETWORK ENTRY STATION - SEE LIGHTING CONTROL DEVICE SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- E107 DUAL HELIOPORT OBSTRUCTION LIGHT MOUNTED TO RIDGE OF ROOF. PROVIDE 12' LENGTH OF 3/4" RGS CONDUIT MAST AND APPLETON FS #F0CT DEEP CAST WEATHERPROOF BOX FOR FIXTURE MOUNTING. SEAL ALL ROOF PENETRATIONS WEATHERTIGHT. PROVIDE FLIGHT LIGHT BR100 (FA-5) STYLE PHOTOCELL MOUNTED TO THREADED HUB ON CAST BOX BELOW FIXTURE ASSEMBLY. AT PANEL INDICATED, PROVIDE FLIGHT LIGHT BR1001 300PM FLASHER AND BR101US LAMP ALARM WITH INTERNAL BUZZER FOR REMOTE DETECTION OF FAILED LAMP(S). CONNECT OBSTRUCTION LIGHTING AND ACCESSORY CONTROLS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.



**1 FIRST FLOOR - LIGHTING**  
E1-1 1/8" = 1'-0" 0' 8' 16'

#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD,  
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OMAHA PUBLIC  
POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

**FLOOR PLAN - LIGHTING**

**E1-1**

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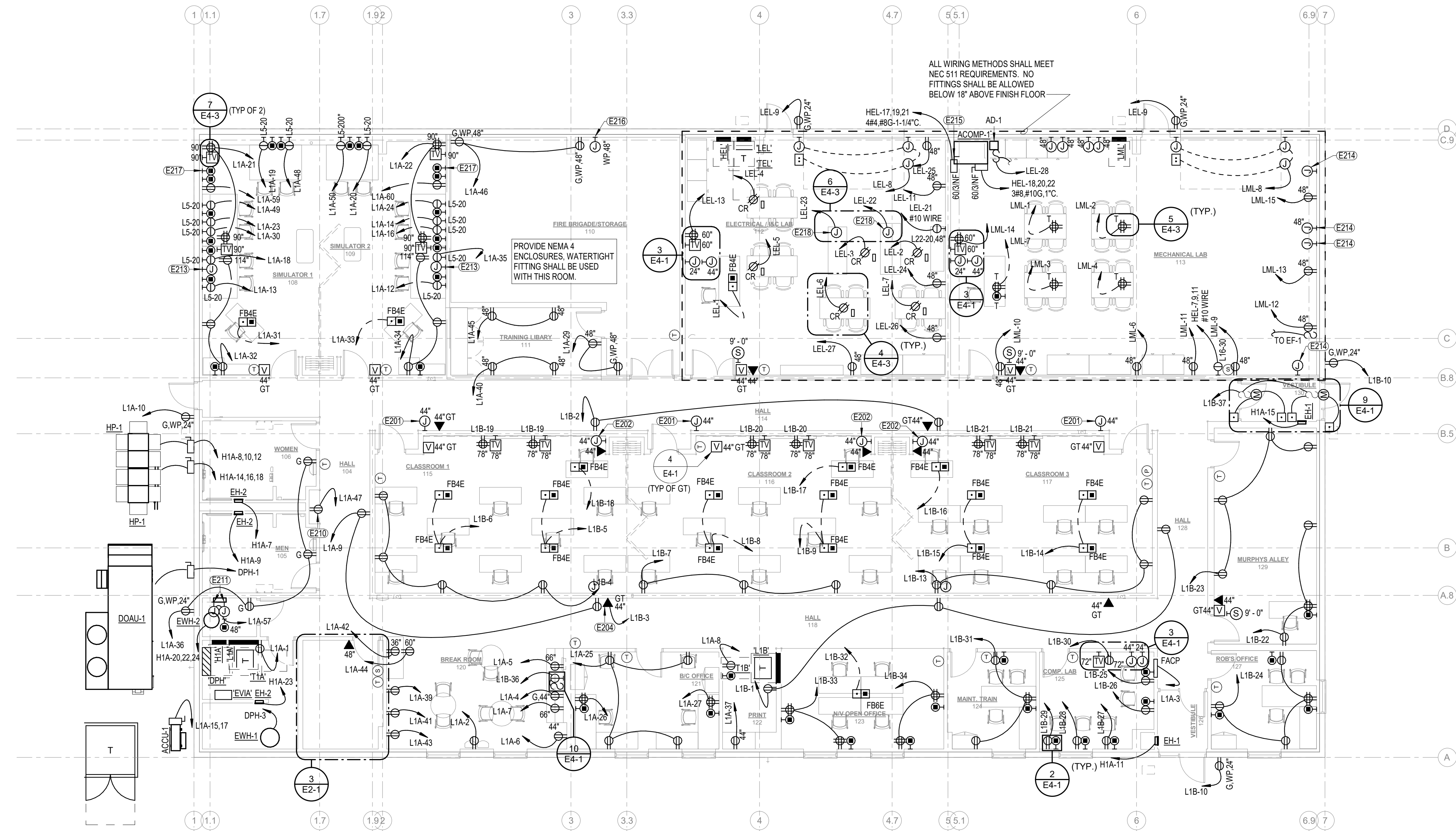
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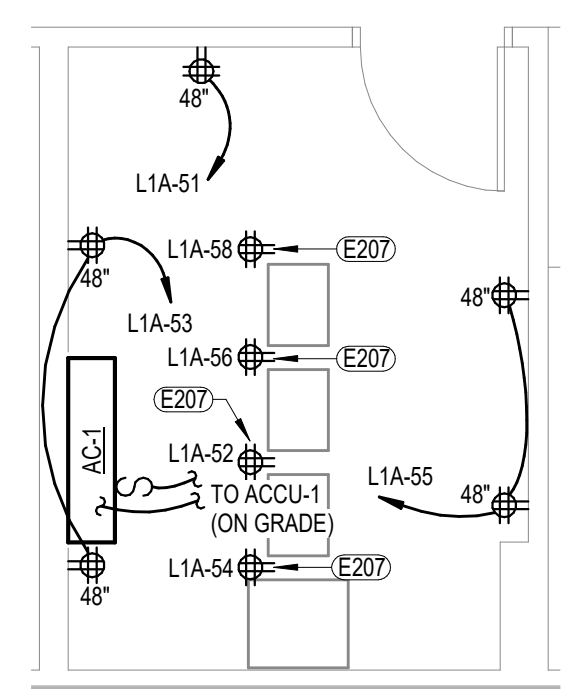


**GENERAL NOTE:**  
 1. ELECTRICAL CONTRACTOR SHALL INVENTORY ALL OWNER FURNISHED EQUIPMENT SCHEDULED FOR USE IN LAB AREAS. FIELD VERIFY ALL ELECTRICAL DETAILS ON EQUIPMENT WITH OWNER PRIOR TO ROUGH-IN, INCLUDING BUT NOT LIMITED TO: OVER CURRENT PROTECTION, CONDUCTOR SIZE, CONDUIT SIZE, LOCAL DISCONNECTING MEANS, HARD-WIRED OR CORD AND PLUG CONNECTIONS, REQUIRED RECEPTACLE CONFIGURATIONS AND FINAL EQUIPMENT LOCATIONS. MAKE ALL ADJUSTMENTS REQUIRED FOR FINAL CONNECTIONS TO EQUIPMENT.

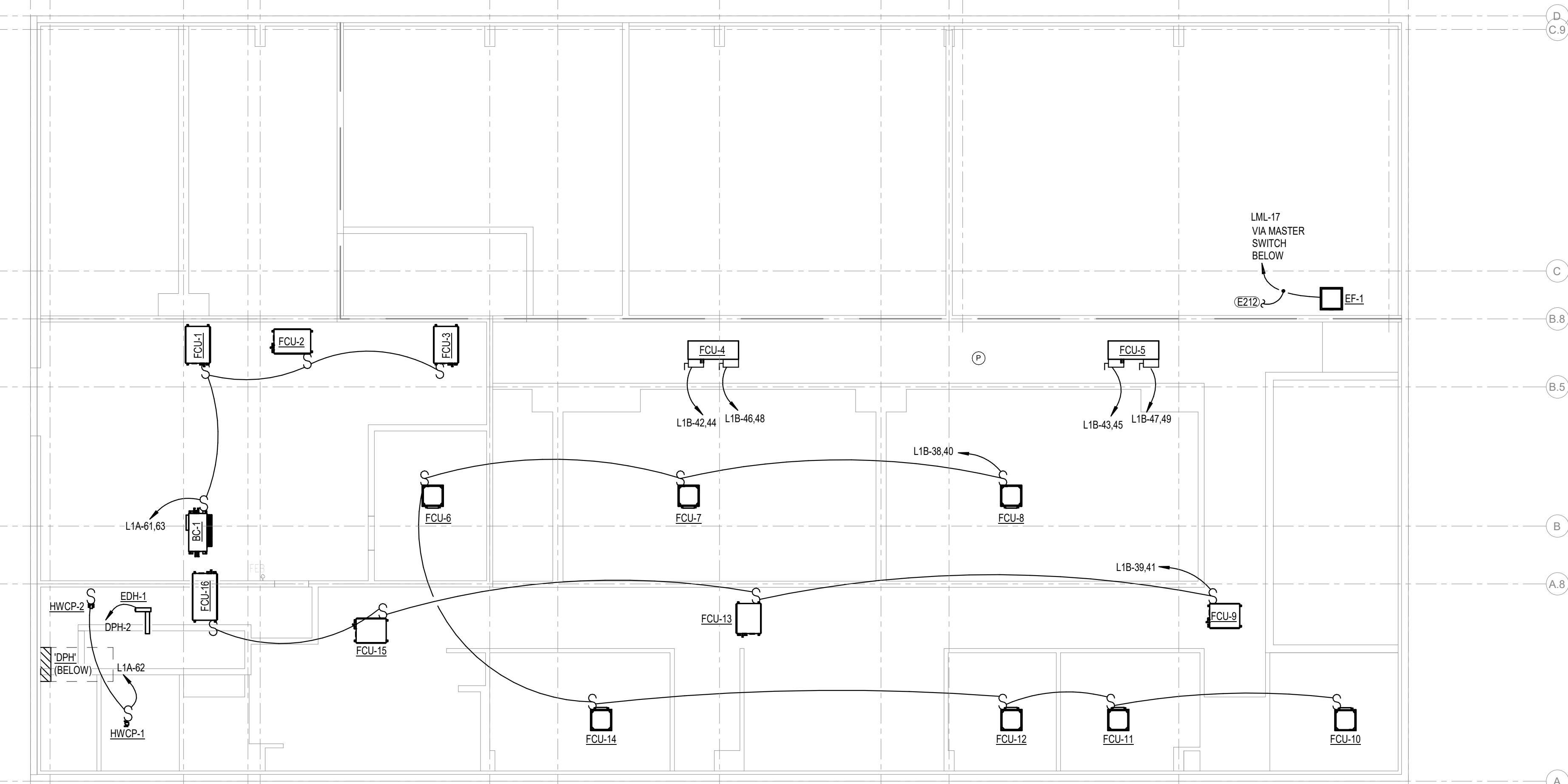
- KEYNOTES:**
- E201 PROVIDE 2-GANG JUNCTION BOX WITH 2-GANG RING WITH 1/4" C. TO ABOVE ACCESSIBLE CEILING. PROVIDE INSULATED BUSHING ON CONDUIT END. PROVIDE BLANK COVER PLATE FOR FUTURE INSTALLATION OF ROOM SCHEDULER.
  - E202 PROVIDE 2-GANG JUNCTION BOX WITH 2-GANG RING WITH 1/4" C. TO ABOVE ACCESSIBLE CEILING. PROVIDE INSULATED BUSHING ON CONDUIT END.
  - E204 PROVIDE ELECTRICAL CONNECTION TO FIRST GA-TRONICS HANDSET IN NEW BUILDING. COORDINATE REQUIREMENTS WITH SYSTEM INSTALLER AND MANUFACTURER'S RECOMMENDATIONS.
  - E207 INSTALL RECEPTACLE ON OVERHEAD BASKET TRAY. COORDINATE RECEPTACLE LOCATION WITH VERTICAL CABLE MANAGERS.
  - E210 LOCATE RECEPTACLE FOR WATER COOLER UNIT SO THAT CORD AND PLUG ARE CONCEALED INSIDE OR BEHIND UNIT. PROVIDE 201 GFCT TYPE CIRCUIT BREAKER.
  - E211 PROVIDE ELECTRICAL CONNECTION TO TEMPERATURE AND VRF CONTROL PANELS. COORDINATE FINAL LOCATIONS WITH MECHANICAL CONTRACTOR.
  - E212 PROVIDE ELECTRICAL CONNECTION TO VOLTAGE MATCHED MOTORIZED DAMPER. COORDINATE LOCATION WITH MECHANICAL CONTRACTOR.
  - E213 PROVIDE 2-GANG DEEP JUNCTION BOX WITH 1-GANG RING WITH GROMMETTED OPENING AND 1-1/4" C. TO ABOVE ACCESSIBLE CEILING. PROVIDE INSULATED BUSHING ON CONDUIT END.
  - E214 PROVIDE ROUGH-IN FOR OWNER PROVIDED EQUIPMENT. PROVIDE 1-1/2" CONDUIT BACK TO PANEL "HEL".
  - E215 PROVIDE CONDUIT MAST AND WEATHERHEAD FOR CONNECTION TO 4 BUSS OVERHEAD CRANE. VERIFY REQUIREMENTS WITH MANUFACTURER.
  - E216 PROVIDE ROUGH-IN FOR OWNER PROVIDED EQUIPMENT. PROVIDE 1-1/2" CONDUIT BACK TO PANEL "H1A".
  - E217 PROVIDE 2-GANG DEEP JUNCTION BOX WITH 2-GANG RING WITH 1-1/4" C. TO ABOVE ACCESSIBLE CEILING. PROVIDE INSULATED BUSHING ON CONDUIT END.
  - E218 PROVIDE RECEPTACLE AT DECK AND CORD DROP TO OWNER EQUIPMENT. VERIFY REQUIREMENTS WITH OWNER.



**1 FIRST FLOOR - POWER**  
 1/8" = 1'-0" | 0' | 8' | 16'



**3 ENLARGED DATA ROOM 202 - POWER**  
 1/4" = 1'-0" | 0' | 8' | 16'



**2 ATTIC PLAN - POWER**  
 1/8" = 1'-0" | 0' | 8' | 16'

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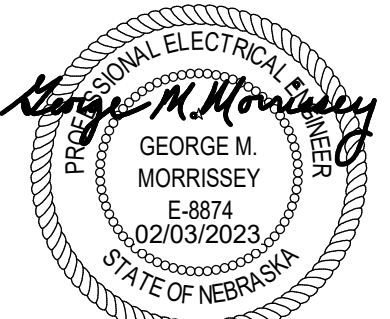
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#	Description	Date
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**TRAINING FACILITY PHASE 2**

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**OMAHA PUBLIC POWER DISTRICT**

444 SOUTH 16TH STREET  
 OMAHA, NE 68102

**FLOOR PLANS - POWER**

**E2-1**

BCDM NO. 5396-00  
 02/03/2023



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Omaha, NE 68114

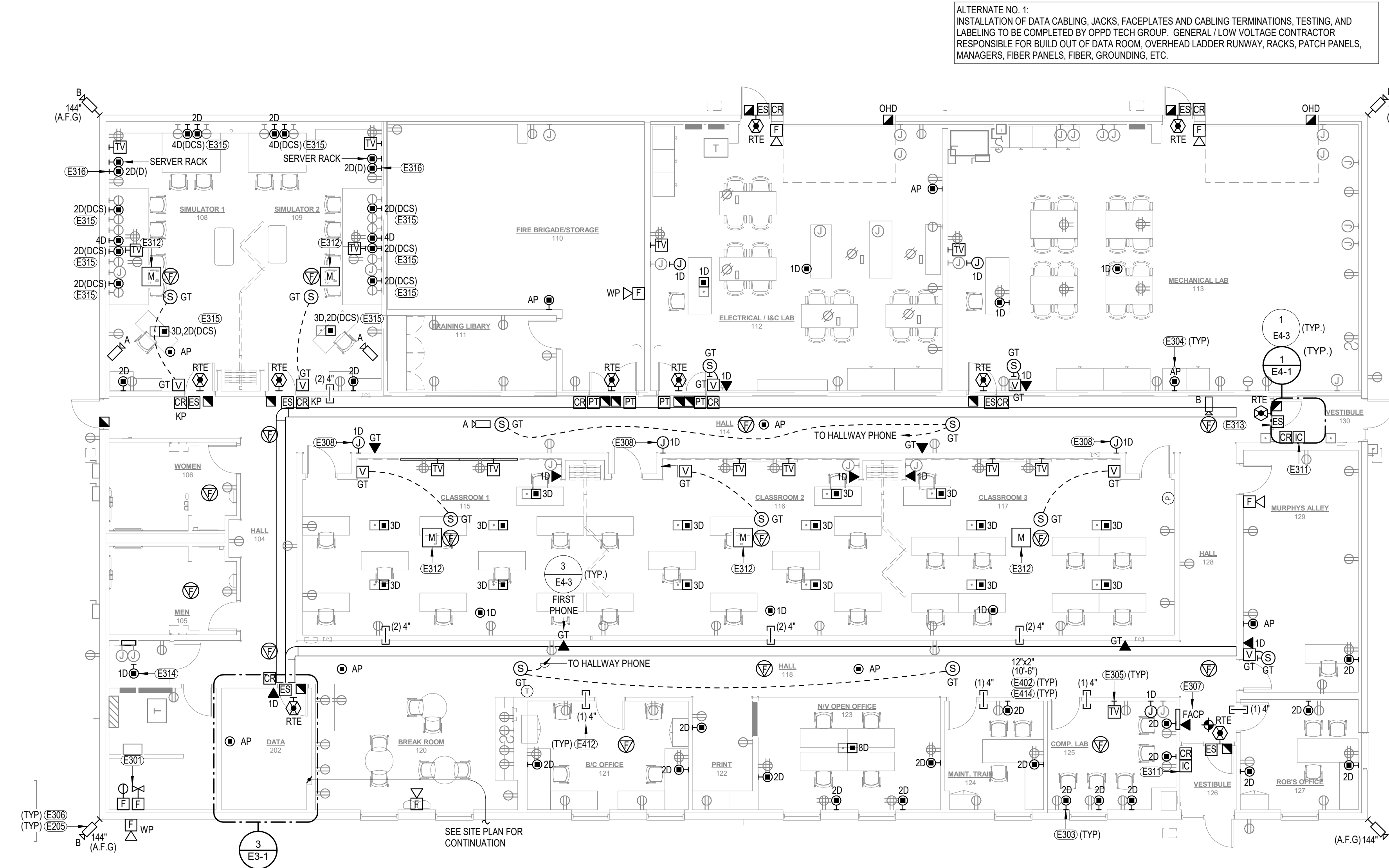
**MECHANICAL + ELECTRICAL ENGINEER**

MORRISSEY ENGINEERING  
4940 North 118th Street  
Omaha, NE 68164



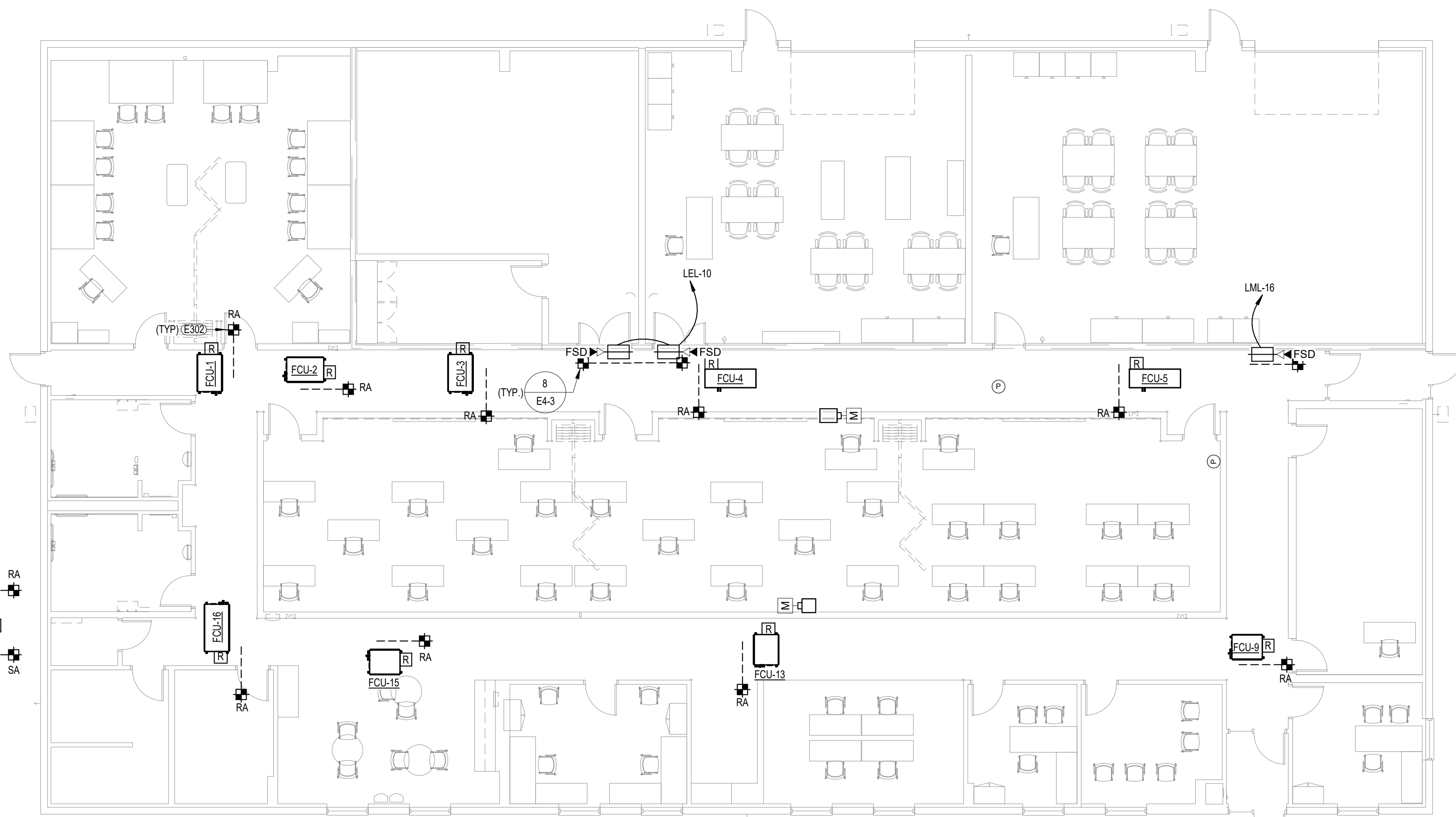
**KEYNOTES**

- E205 PROVIDE SINGLE GANG JUNCTION BOX WITH 1-GANG RING AND 3/4" TO ABOVE NEAREST ACCESSIBLE CEILING OR OVERHEAD PATHWAY. PROVIDE INSULATED BUSHING ON CONDUIT END.
- E301 FIRE ALARM CONTRACTOR TO PROVIDE MONITORING OF FLOW AND TAMPER SWITCHES AT FIRE ALARM RISER. VERIFY LOCATION AND QUANTITY OF SWITCHES REQUIRED WITH FIRE SPRINKLER CONTRACTOR PRIOR TO ROUGH-IN.
- E302 DUCT SMOKE DETECTOR(S) AND RELAY. PROVIDE DUCT MOUNTED SMOKE DETECTOR. FAN SHUTDOWN RELAY. REMOTE INDICATOR, CONTROLS CONNECTIONS FOR SHUT-DOWN, AND CONNECTION TO FIRE ALARM CONTROL PANEL. RETURN AIR (RA), SUPPLY AIR (SA). SHUT-DOWN OF UNIT SHALL BE FROM DUCT DETECTOR ALARM. LOCATE REMOTE INDICATOR IN NEAREST MECHANICAL/CUSTODIAL ROOM.
- E303 PROVIDE CATEGORY DATA CABLE(S) TO EACH OUTLET, QUANTITY OF CABLES INDICATED ON DRAWINGS.
- E304 PROVIDE (1) CATEGORY DATA CABLE TO EACH WIRELESS ACCESS POINT. PROVIDE 3/4" SERVICE LOOP. TERMINATE WITH PLENUM RATED SURFACE BOX MOUNTED ABOVE ACCESSIBLE CEILING OR COILED NEATLY AS HIGH AS POSSIBLE IN EXPOSED STRUCTURE. SECURED WITH VELCRO STRAPS. PROVIDE 3 PATCH CORD FOR CONNECTION TO OWNER-FURNISHED WIRELESS ACCESS POINT.
- E305 PROVIDE (1) CATEGORY DATA CABLE FOR EACH TELEVISION LOCATION.
- E306 PROVIDE (1) CATEGORY DATA CABLE FOR CONNECTION TO POE SECURITY CAMERA. PROVIDE 2" SERVICE LOOP. TERMINATE WITH PLENUM RATED SURFACE BOX MOUNTED ABOVE ACCESSIBLE CEILING OR COILED NEATLY AS HIGH AS POSSIBLE IN EXPOSED STRUCTURE. SECURED WITH VELCRO STRAPS. PROVIDE 3 PATCH CORD FOR CONNECTION TO SECURITY CAMERA (CAMERA BY DIVISION 28 CONTRACTOR).
- E307 PROVIDE (2) CATEGORY DATA CABLES FOR CONNECTION TO FACP. TERMINATE WITH MODULAR JACK IN FACP. EXTEND CABLES TO ABOVE. SERVICE PROVIDER BEHIND. COIL CABLES AND LEAVE UNTERMINATED.
- E308 PROVIDE (1) CATEGORY DATA CABLE FOR CONNECTION TO FUTURE ROOM SCHEDULER. TERMINATE WITH MODULAR JACK IN BACKBOX. PROVIDE 1" PATCH CORD FOR CONNECTION TO FUTURE EQUIPMENT.
- E309 PROVIDE (1) CATEGORY DATA CABLE TO ACCESS CONTROL PANEL. TERMINATE WITH SURFACE BOX MOUNTED IN CONTROL PANEL. PROVIDE 1" PATCH CORD FOR CONNECTION TO CONTROL PANEL.
- E310 PROVIDE CONNECTION BETWEEN FIRE ALARM RELAY AND ACCESS CONTROL PANEL.
- E311 INTERCOM STATION LOCATION, AVIGLON # 4. PROVIDE (1) CATEGORY DATA CABLE TO STATION. TERMINATE WITH MODULAR JACK IN BACKBOX. PROVIDE 1" PATCH CORD FOR CONNECTION TO STATION. STATION SHALL BE PROGRAMMED TO RING OPPD SECURITY CENTRAL STATION, S3-226-3700. INTERCOM PROVIDED AND INSTALLED BY DIVISION 28/30 CONTRACTOR.
- E312 PROVIDE (1) CATEGORY DATA CABLE FOR CONNECTION TO AV EQUIPMENT. TERMINATE WITH PLENUM RATED SURFACE BOX MOUNTED ABOVE ACCESSIBLE CEILING. PROVIDE 3 PATCH CORD FOR CONNECTION TO AV EQUIPMENT (EQUIPMENT BY DIVISION 27/34 CONTRACTORS).
- E313 PROVIDE ACCESS CONTROL MODULE INTERFACE TO ACCOMMODATE ADA DOOR OPERATOR.
- E314 PROVIDE (1) CATEGORY DATA CABLE FOR CONNECTION TO TEMPERATURE CONTROL PANEL. TERMINATE TO MODULAR JACK MOUNTED INSIDE CONTROL PANEL. PROVIDE 1" PATCH CORD FOR CONNECTION TO PANEL. COORDINATE FINAL LOCATION WITH MECHANICAL CONTRACTOR.
- E315 PROVIDE CATEGORY 5 DATA CABLES POINT TO POINT FROM WORKSTATION LOCATION TO OUTLET LABELED "SERVER RACK". PROVIDE MODULAR JACKS ON EACH END. DATA CABLE AND JACKS SHALL BE RED IN COLOR. SEE SPECIFICATIONS.
- E316 PROVIDE CATEGORY 6 DATA CABLES FROM OUTLET LOCATION TO DATA RACK "DCS". PROVIDE RED MODULAR JACKS ON EACH END.
- E401 PROVIDE COMMUNICATIONS BACKBOARD, 3/4" AC GRADE A SIDE OUT, ALL SIDES PAINTED WITH 2 COATS OF WHITE FIRE RATED PAINT, (TYP)
- E402 PROVIDE 12" HORIZONTAL BASKET TRAY, B.LINE# FT212, (TYP)
- E403 PROVIDE WALL ANGLE SUPPORT KIT FOR EACH INSTANCE BASKET TRAY. TERMINATES AT WALL. B.LINE# FT49TK, (TYP)
- E405 PROVIDE BASKET TRAY CORNER RADIUS, B.LINE# FT49RS, (TYP)
- E406 PROVIDE 12" TRIANGULAR SUPPORT BRACKET THROUGHOUT ENTIRE ROOM FOR MOUNTING RUNWAY TO WALL. B.LINE# FTB2CS, (TYP)
- E407 PROVIDE LADDER RUNWAY TRAPEZOID SUPPORT BRACKET EVERY 6' B.LINE# FTB12CT. PROVIDE INDIVIDUAL SUPPORTS FOR EACH END OF BRACKET, (TYP)
- E408 COMMUNICATIONS SERVICE ENTRANCE CONDUITS BY ELECTRICAL CONTRACTOR. STUB CONDUITS BY ABOVE FLOOR. PROVIDE INSULATED BUSHINGS ON CONDUIT ENDS.
- E409 BOND BASKET TRAY TO COMMUNICATIONS GROUND BAR WITH #6 AWG THHN, (TYP)
- E410 BOND EACH SECTION OF BASKET TRAY NOT BONDED WITH A FACTORY WELD. REMOVE POWDER COAT UNDER BONDING CONNECTION, (TYP)
- E411 PROVIDE ST1 E2 PATH (OR EQUAL BY HLTI), MECHANICAL FIRESTOP DEVICE FOR WALL PENETRATIONS. PROVIDE QUANTITY AND SIZE INDICATED ADJACENT TO KEYNOTE, (TYP)
- E412 PROVIDE ST1 E2 PATH SMOKE AND ACOUSTIC SLEEVE (OR EQUAL BY HLTI), FOR WALL PENETRATIONS. PROVIDE QUANTITY AND SIZE INDICATED ADJACENT TO KEYNOTE, (TYP)
- E414 PROVIDE CONTINUOUS OVERHEAD BASKET TRAY DIVIDER FOR SEPARATION OF STRUCTURED CABLING AND SECURITY CABLING IN PATHWAY.

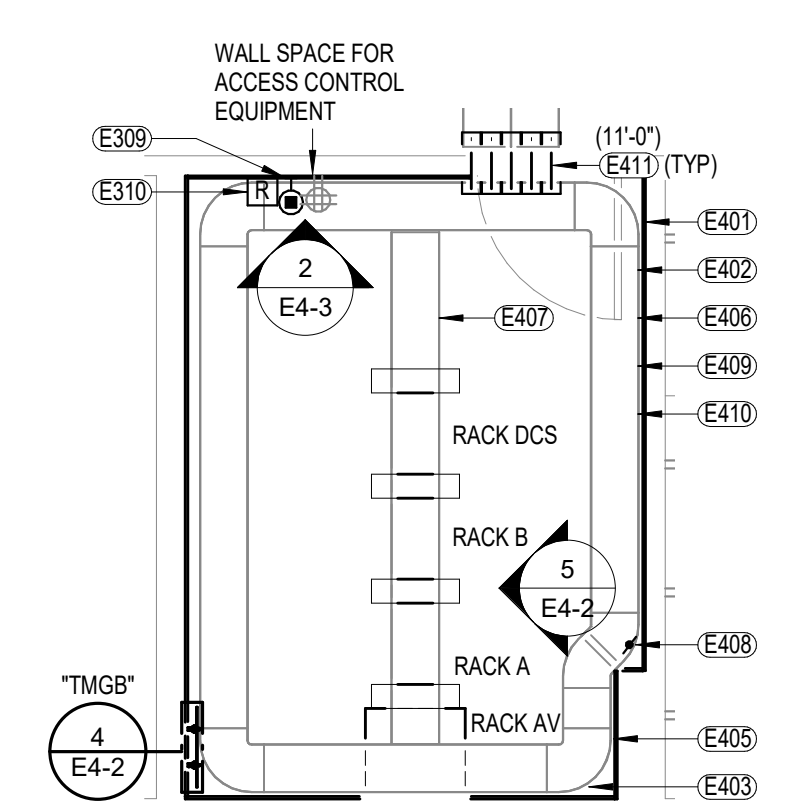


ALTERNATE NO. 1:  
INSTALLATION OF DATA CABLING, JACKS, FACEPLATES AND CABLING TERMINATIONS, TESTING, AND LABELING TO BE COMPLETED BY OPPD TECH GROUP. GENERAL/LOW VOLTAGE CONTRACTOR RESPONSIBLE FOR BUILD OUT OF DATA ROOM, OVERHEAD LADDER RUNWAY, RACKS, PATCH PANELS, MANAGERS, FIBER PANELS, FIBER, GROUNDING, ETC.

**1 FIRST FLOOR - SPECIAL SYSTEMS**  
E3-1 1/8" = 1'-0" 0' 16'



**2 ATTIC PLAN - SPECIAL SYSTEMS**  
E3-1 1/8" = 1'-0" 0' 16'



**3 ENLARGED DATA ROOM 202 - SYSTEMS**  
E3-1 1/4" = 1'-0" 0' 16'

MEI PROJECT NO. 20297

**morrissey engineering inc.**  
mechanical | electrical | lighting | technology | commissioning

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note: do not scale drawings. verify all dimensions and clearances from architectural, structural, shop and other appropriate drawings or as site. lay out and coordinate all work prior to installation to provide clearances required for operation, maintenance, and codes and safety non-interference with other work. do not fabricate prior to verification of clearance for all trades.

**TRAINING FACILITY PHASE 2**

7264 L ROAD,  
NEBRASKA CITY, NE 68410

**OMAHA PUBLIC POWER DISTRICT**

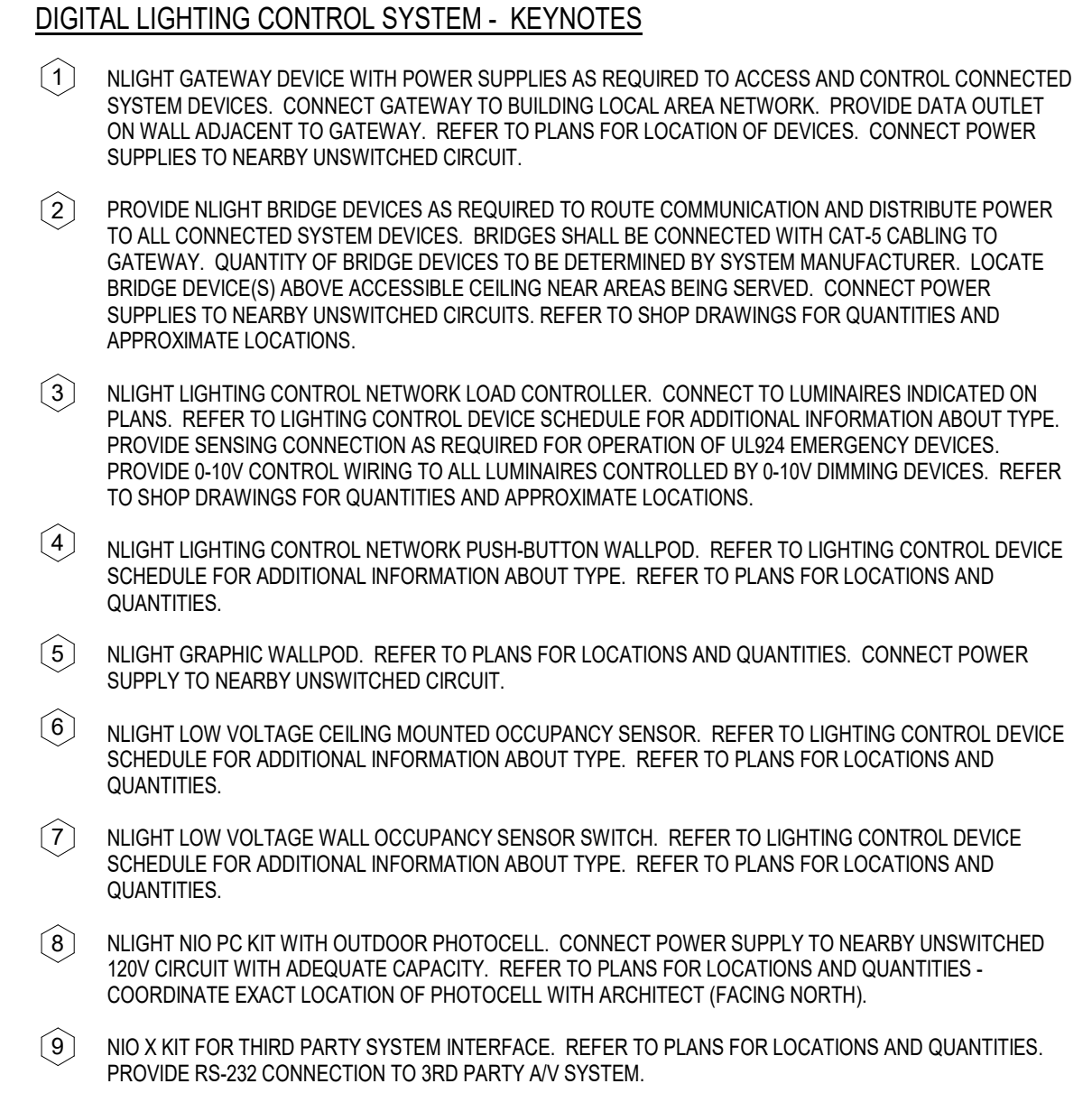
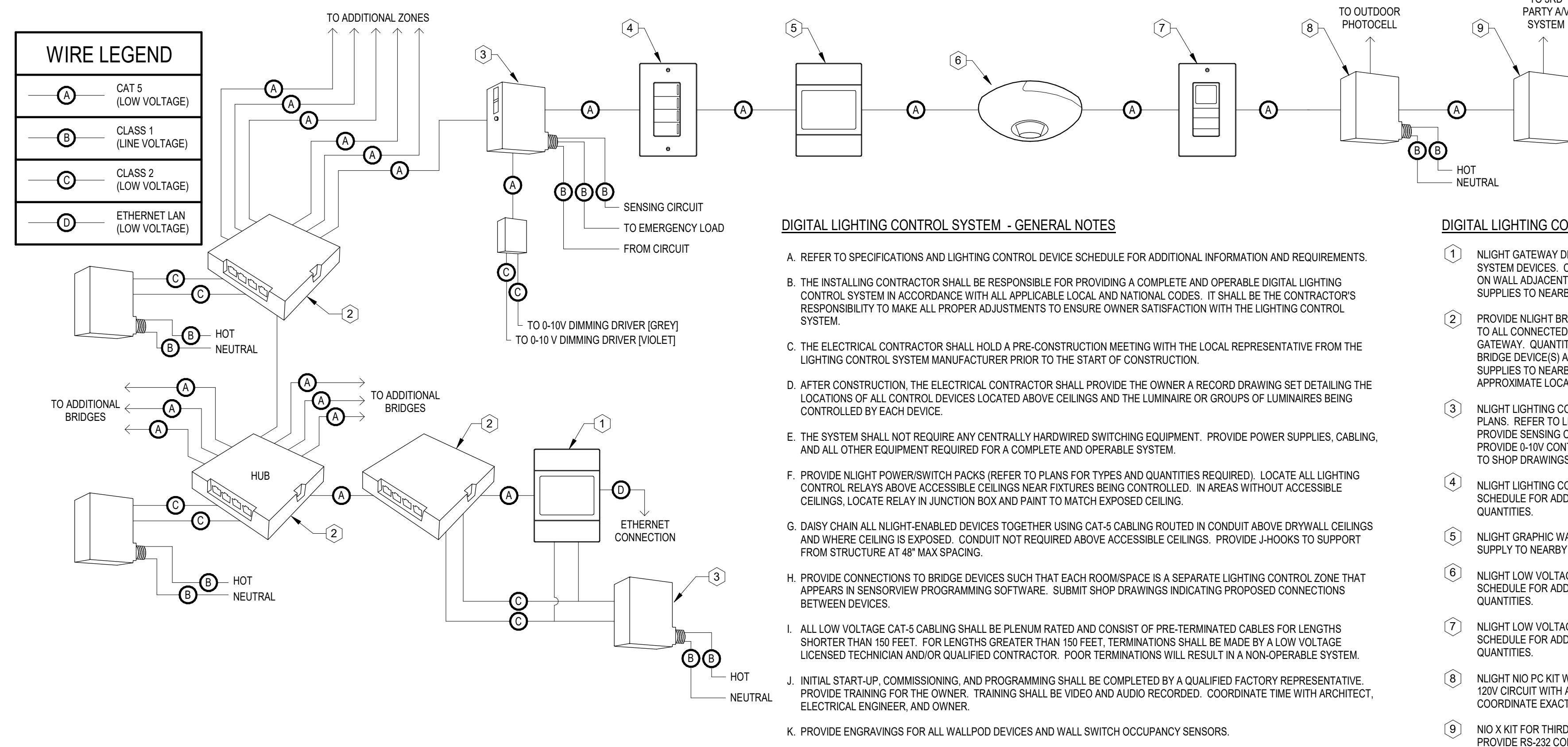
444 SOUTH 16TH STREET  
OMAHA, NE 68102

**FLOOR PLANS - SPECIAL SYSTEMS**

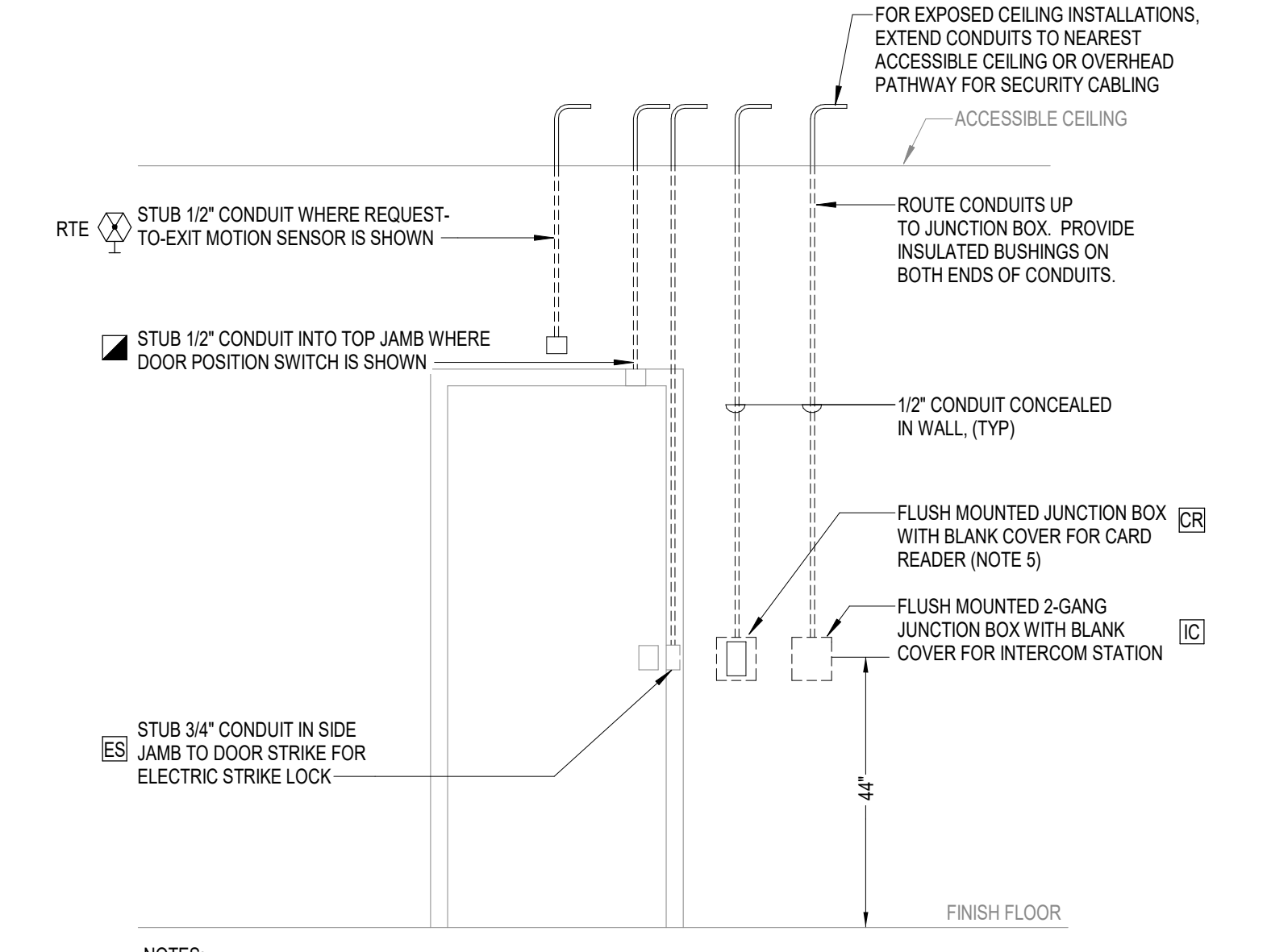
**E3-1**

BCDM NO. 5396-00  
02/03/2023



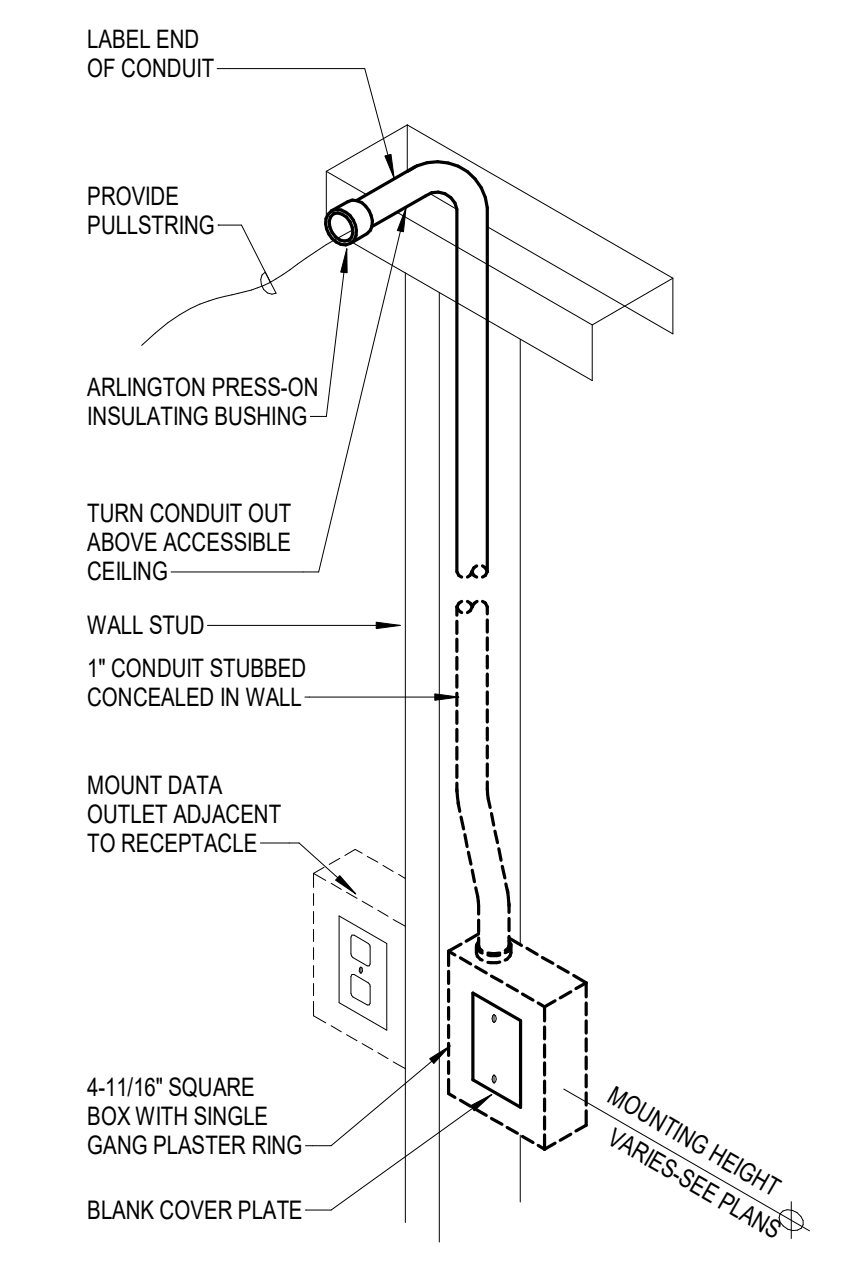


6 TYPICAL LIGHTING CONTROL DIAGRAM  
E4-1 NOT TO SCALE

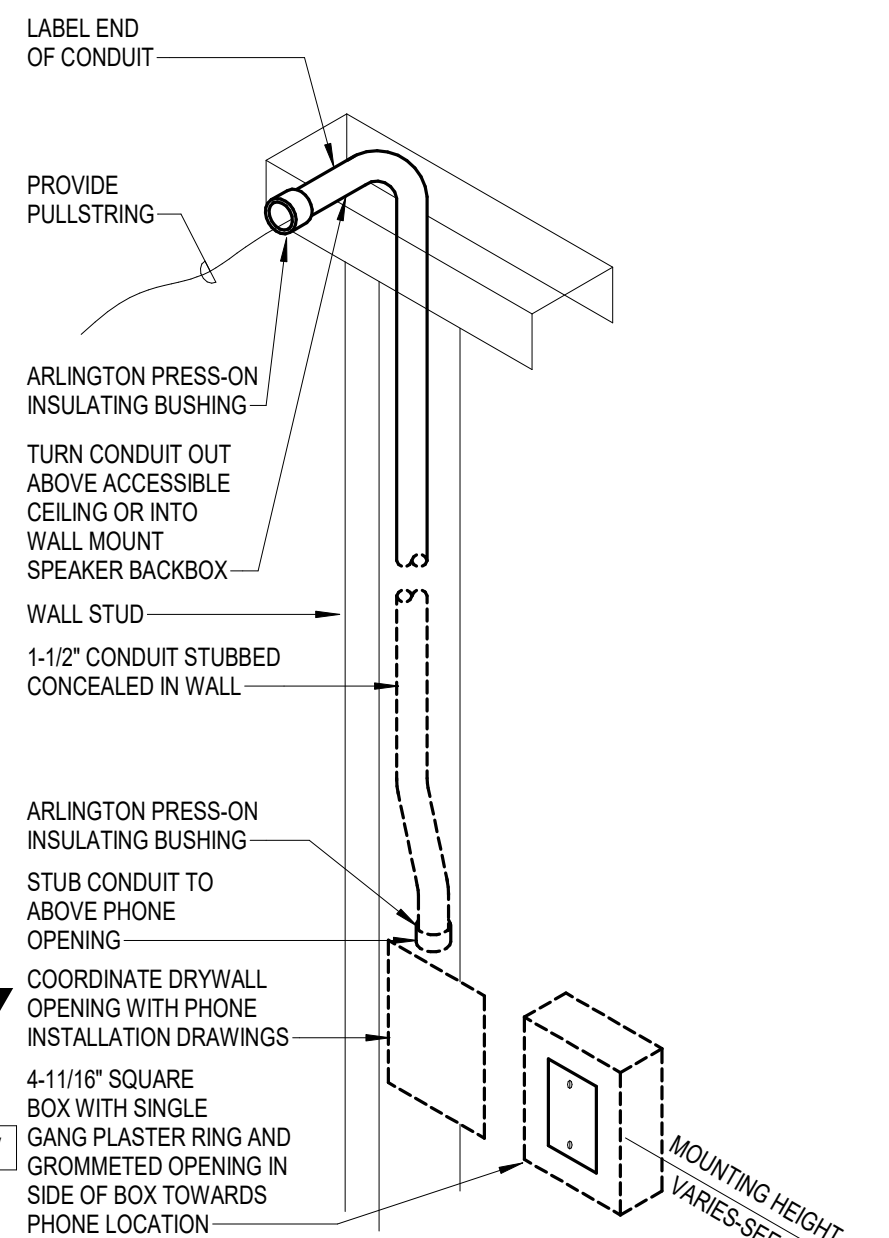


- NOTES:
- ROUGH-IN REQUIREMENTS AND LOCATIONS SIMILAR FOR DOUBLE DOORS.
  - NOT ALL DEVICES ROUGH-IN AT ALL DOORS. SEE PLANS FOR SPECIFIC DOOR ROUGH-IN REQUIREMENTS.
  - COORDINATE ACCESS CONTROL ROUGH-IN REQUIREMENTS WITH ARCHITECTURAL DOOR SCHEDULES AND SECURITY CONTRACTOR.
  - 1" DENOTES MULLION MOUNTED DEVICE. PROVIDE CONDUIT PATHWAY DOWN TO DOOR FRAME MULLION IN LIEU OF WALL.
  - MAINTAIN A MINIMUM OF 12" PHYSICAL SEPARATION WHERE CARD READERS ARE SHOWN ON BACK-TO-BACK WALLS.

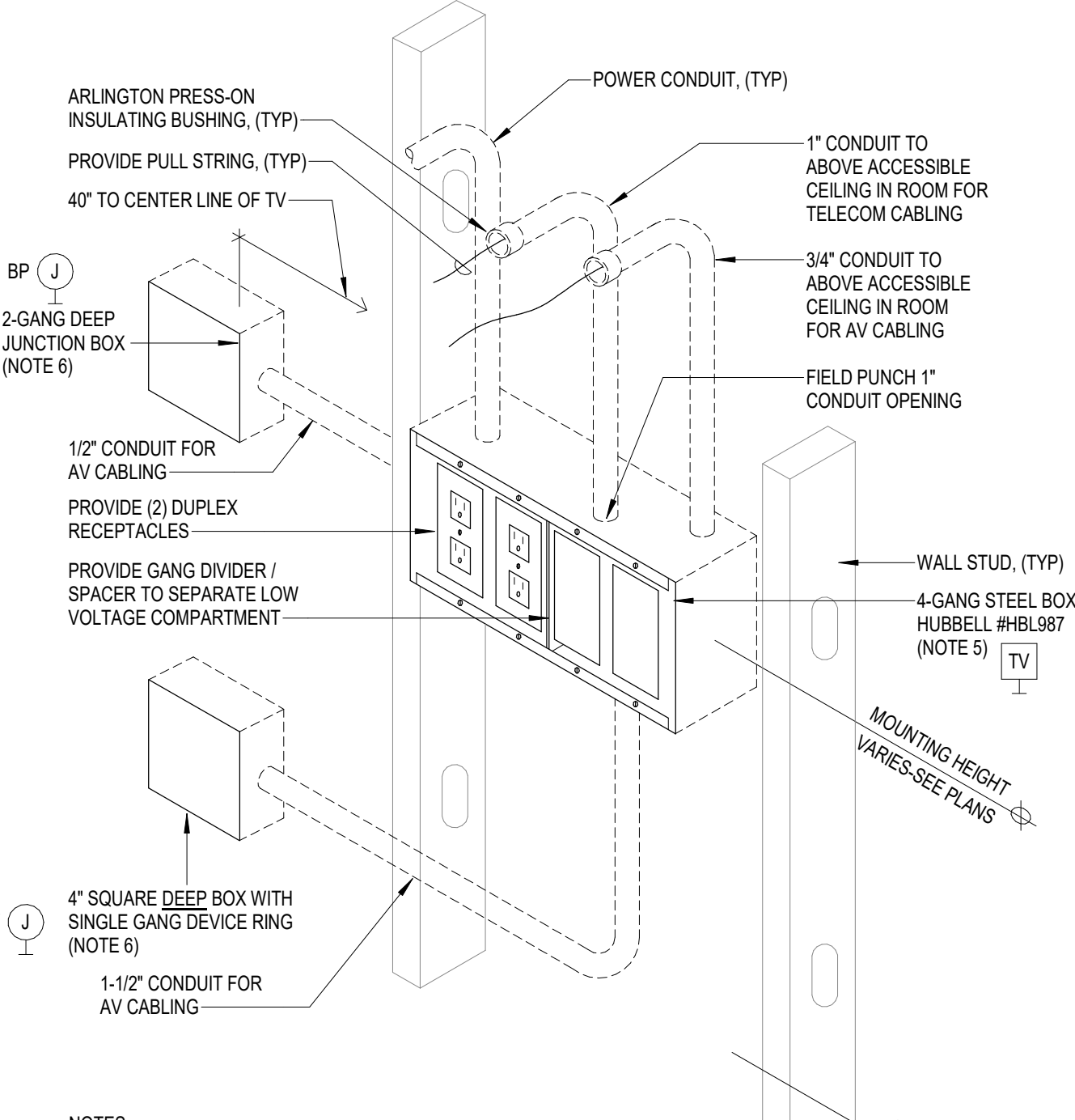
1 ACCESS CONTROL ROUGH-IN DETAIL  
E4-1 NOT TO SCALE



2 DATA/COMM ROUGH-IN DETAIL  
E4-1 NOT TO SCALE

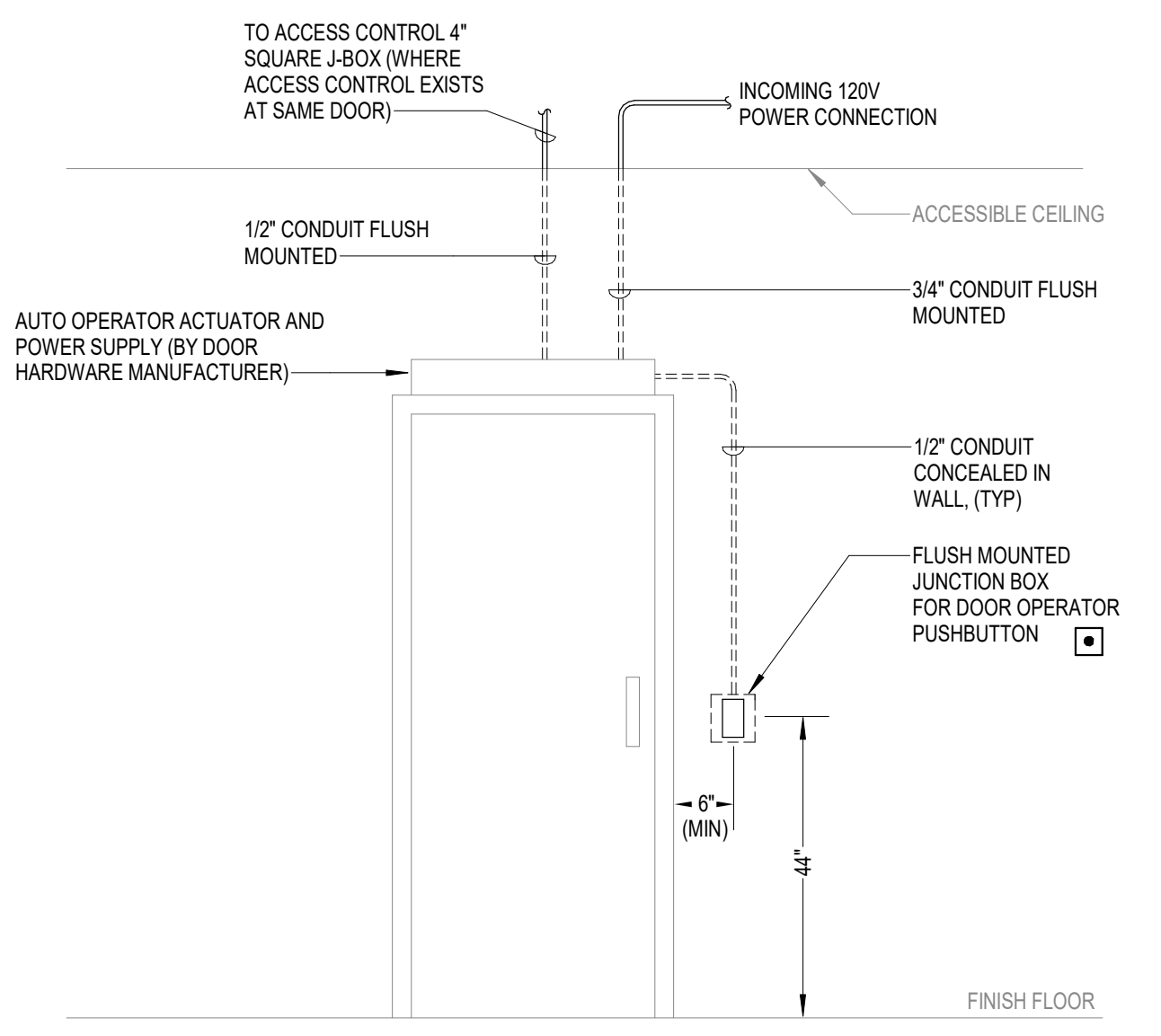


4 PHONE ROUGH-IN DETAIL  
E4-1 NOT TO SCALE



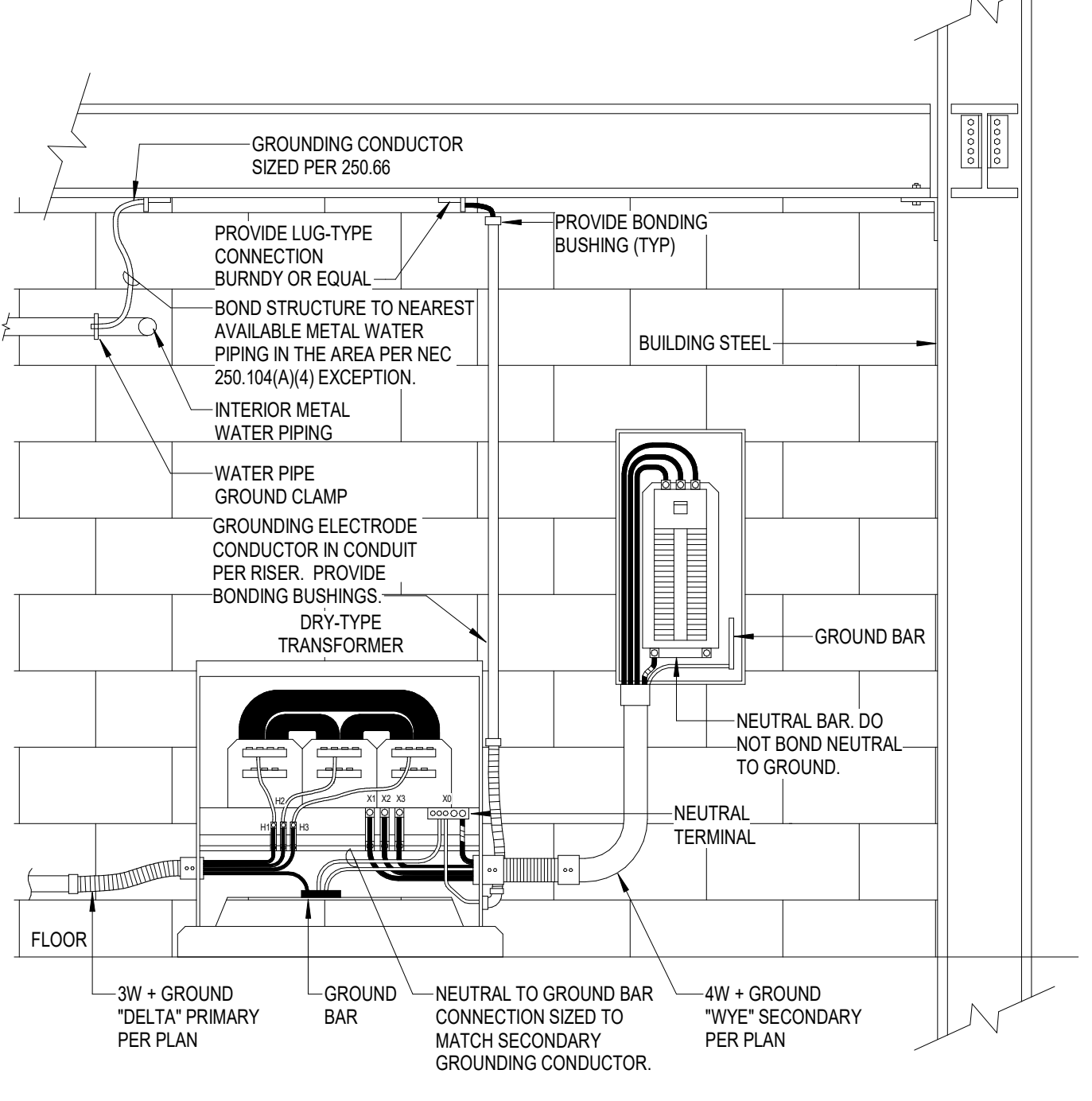
- NOTES:
- PROVIDE ARLINGTON PRESS-ON INSULATED BUSHING AT CONDUIT END.
  - PROVIDE PULL STRING AT ALL EMPTY CONDUITS.
  - SEE FLOORPLAN FOR MOUNTING HEIGHT OF DEVICES.
  - ALL WIRING DEVICES SHALL BE DECORA STYLE. PROVIDE DECORA PLATES FOR ALL OPENINGS.
  - LOCATE BOX CONCEALED BEHIND PROPOSED TV LOCATION.
  - PROVIDE FIRE-RATED PUTTY BEHIND BOX FOR SOUND ATTENUATION.

3 TELEVISION ROUGH IN DETAIL  
E4-1 NOT TO SCALE

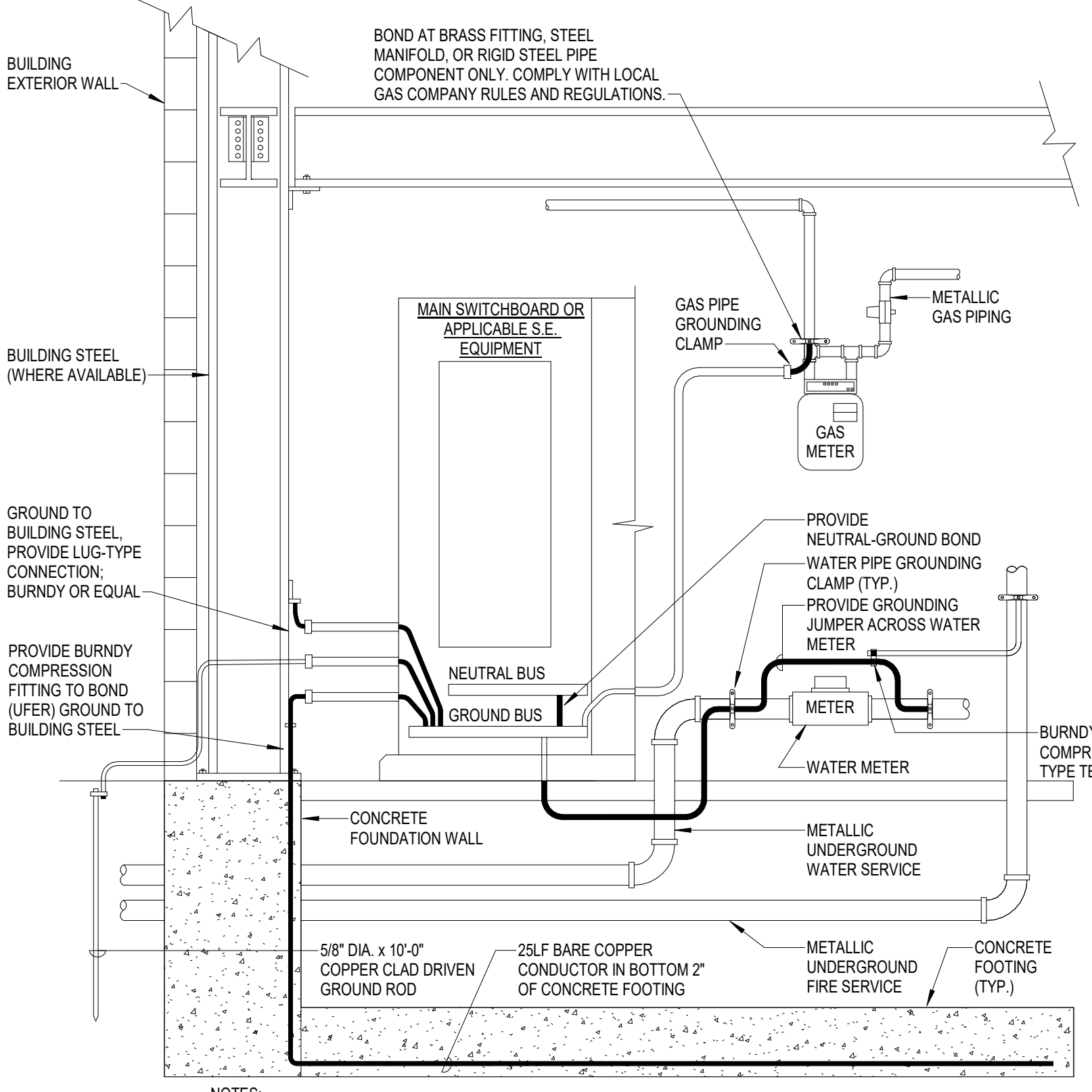


- NOTES:
- NOT ALL DEVICES REQUIRED AT ALL DOORS. SEE PLANS FOR QUANTITIES AND LOCATIONS OF DEVICES.
  - ROUGH-IN REQUIREMENTS AND LOCATIONS SIMILAR FOR DOUBLE DOORS.
  - COORDINATE ACCESS CONTROL ROUGH-IN REQUIREMENTS WITH ARCHITECTURAL DOOR SCHEDULES AND SECURITY CONTRACTOR.
  - 1" DENOTES MULLION MOUNTED DEVICE. PROVIDE CONDUIT PATHWAY DOWN TO DOOR FRAME MULLION IN LIEU OF WALL.

9 AUTO OPERATOR DOOR ROUGH-IN DETAIL  
E4-1 NOT TO SCALE

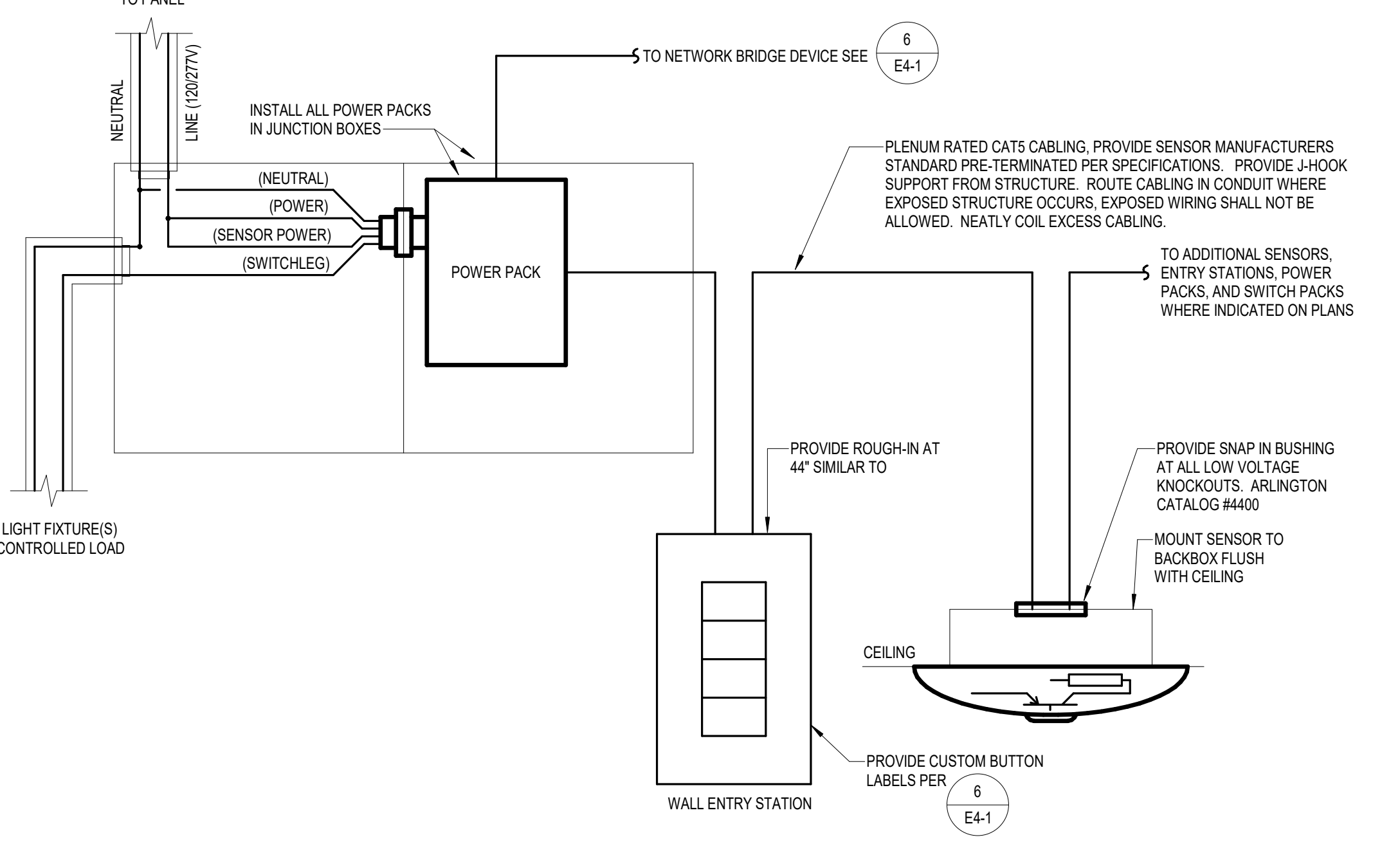


7 DRY-TYPE TRANSFORMER GROUNDING DETAIL (STEEL)  
E4-1 NOT TO SCALE

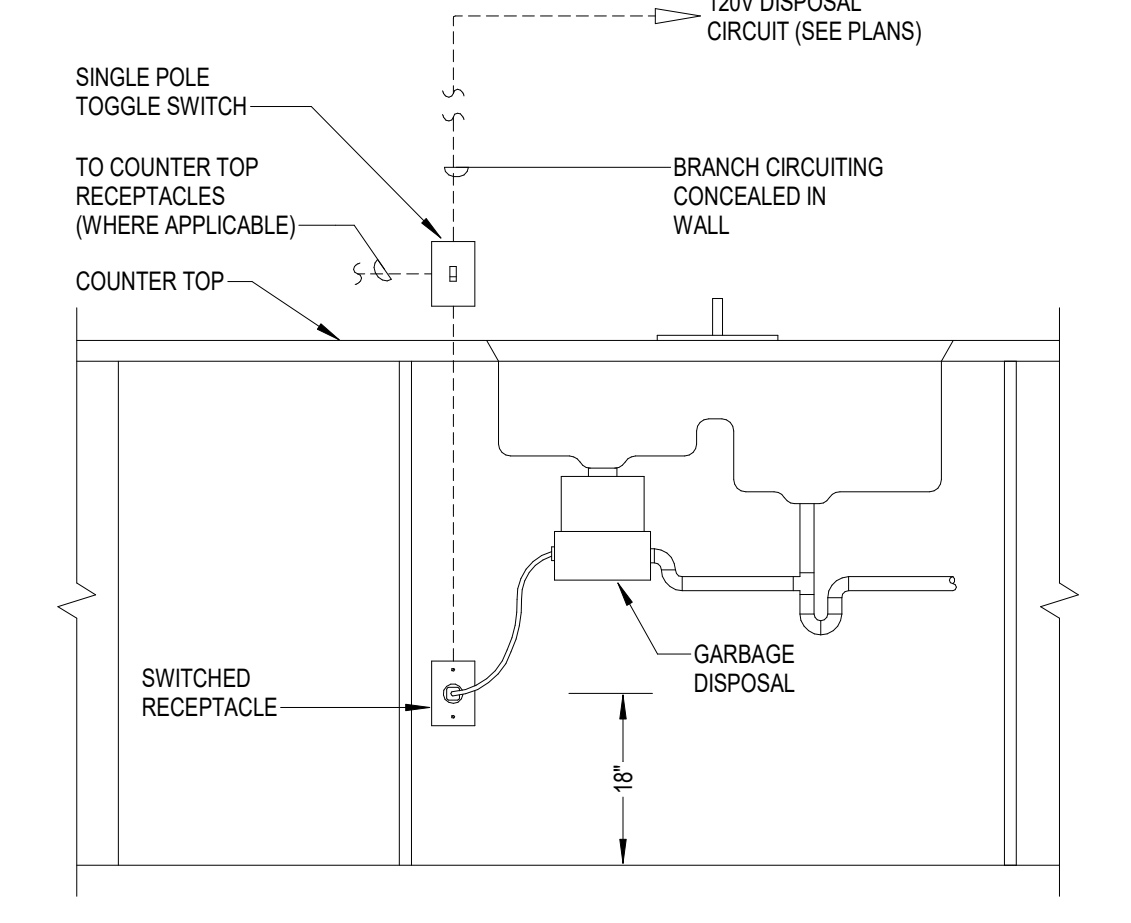


- NOTES:
- PHYSICAL LAYOUT SHOULD BE DETERMINED FROM FLOOR PLAN DRAWINGS AND FIELD DIMENSIONS.
  - ALL GROUNDING CONDUCTORS SIZED IN ACCORDANCE WITH NEC TABLE 250.66.
  - ALL CLAMPS AND FITTINGS SHALL BE UL LISTED FOR THE APPLICATION.

5 MAIN SERVICE GROUNDING DETAIL  
E4-1 NOT TO SCALE



8 TYPICAL LIGHTING CONTROL (NETWORK TYPE) ROOM CONNECTION DETAIL  
E4-1 NOT TO SCALE



10 DISPOSAL CONNECTION DETAIL  
E4-1 NOT TO SCALE

**BCDM architects**

**PROJECT TEAM**

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**TRAINING FACILITY PHASE 2**

7264 L ROAD,  
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OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

**ELECTRICAL DETAILS**

**E4-1**

BCDM NO. 5396-00  
02/03/2023







**PROJECT TEAM**

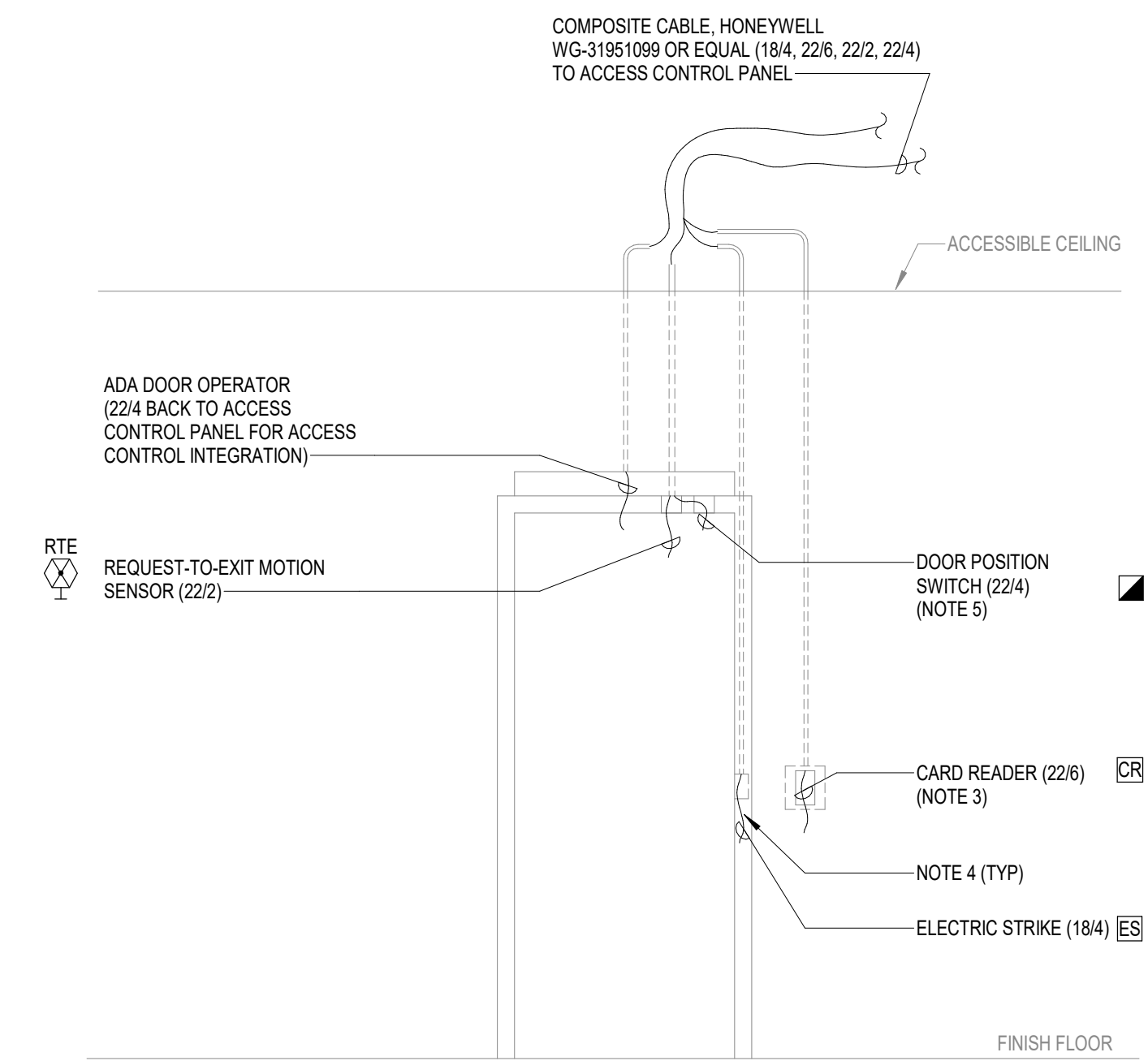
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**MECHANICAL + ELECTRICAL ENGINEER**

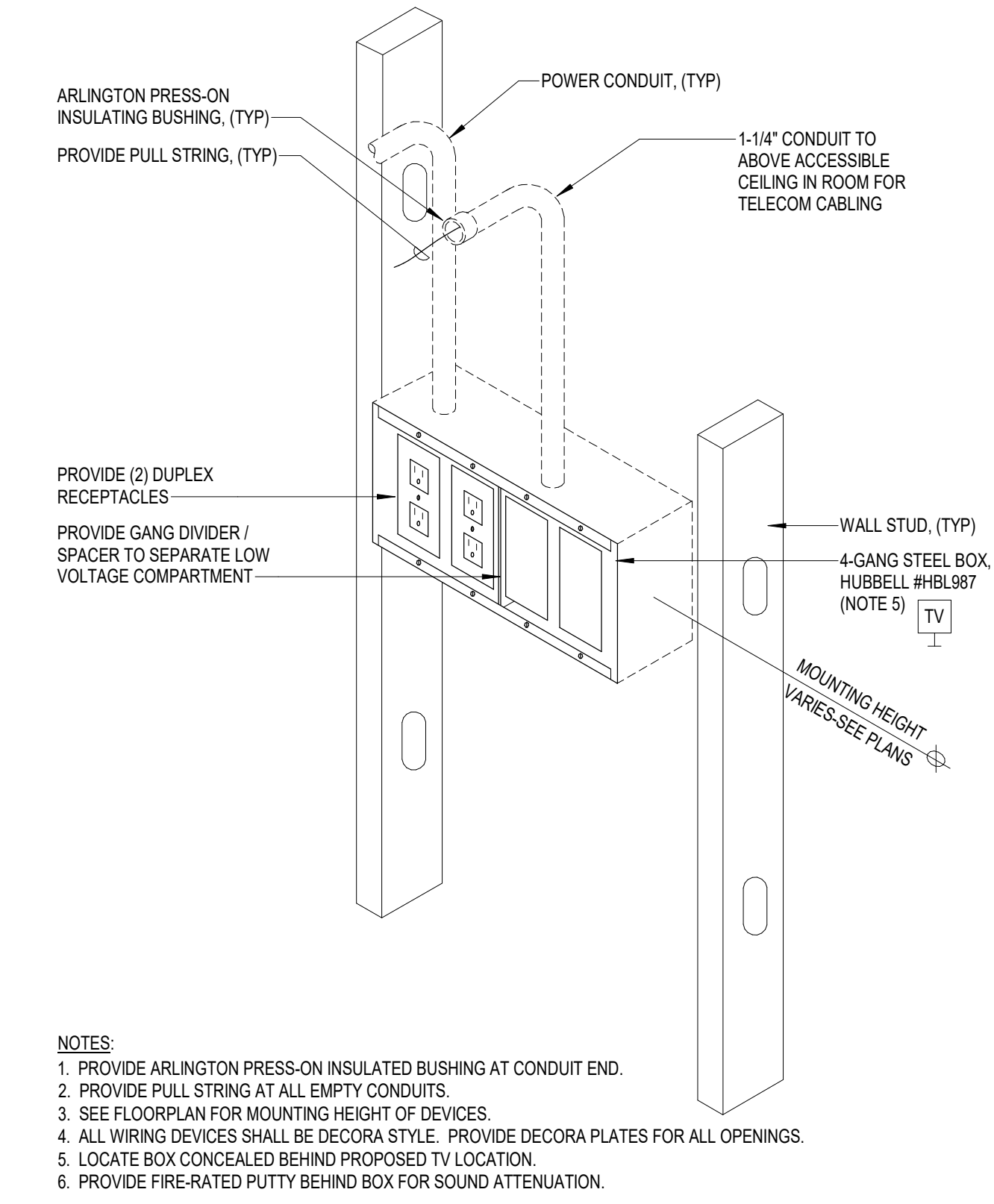
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Omaha, NE 68164



**NOTES:**

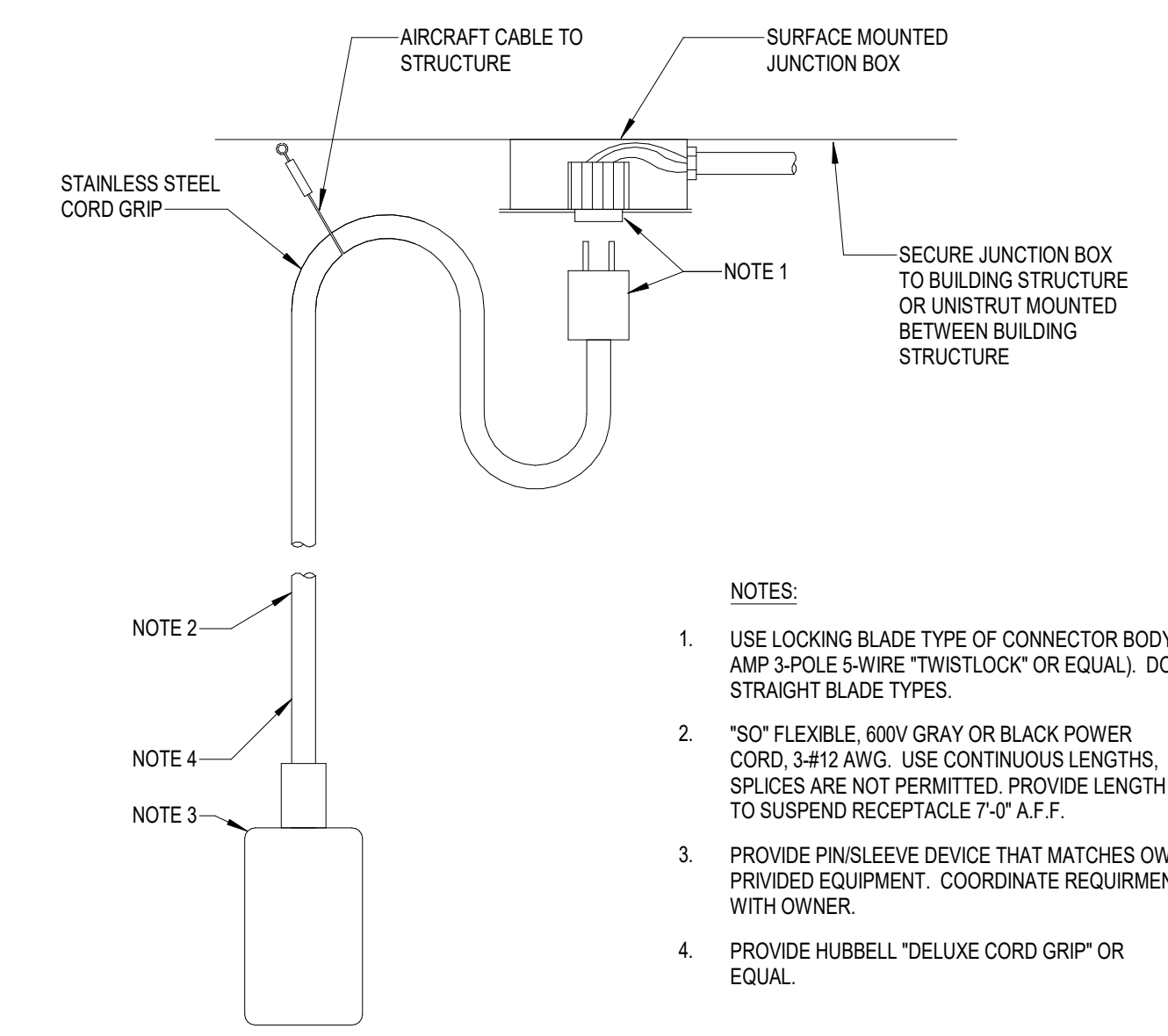
1. NOT ALL DEVICES REQUIRED AT ALL DOORS. SEE PLANS FOR QUANTITIES AND LOCATIONS OF DEVICES.
2. ALL CABLING SHALL BE FURNISHED AND INSTALLED BY 281100 SECURITY CABLING CONTRACTOR. ALL DEVICES AND DEVICE TERMINATIONS WILL BE PROVIDED BY OWNER'S SECURITY VENDOR. TEST CABLING FOR CONTINUITY AND MECHANICALLY LABEL EACH CABLE.
3. FOR READ IN / READ OUT DOORS, PROVIDE ADDITIONAL 226 CABLE FOR SECOND READER.
4. PULL WIRING THROUGH ENDPOINT DEVICE OPENINGS. PROVIDE SUFFICIENT SLACK LOOP SO THAT CABLING WILL REACH THE FLOOR BELOW THE DEVICE.
5. FOR DOUBLE DOORS, PROVIDE ADDITIONAL 222 CABLE FROM 4" SQUARE J-BOX TO SECOND DOOR POSITION SWITCH AND PROVIDE ADDITIONAL 184 CABLE FROM 4" SQUARE J-BOX TO SECOND POWER TRANSFER HINGE.

**1 ACCESS CONTROL CABLING DETAIL**  
E4-3 NOT TO SCALE



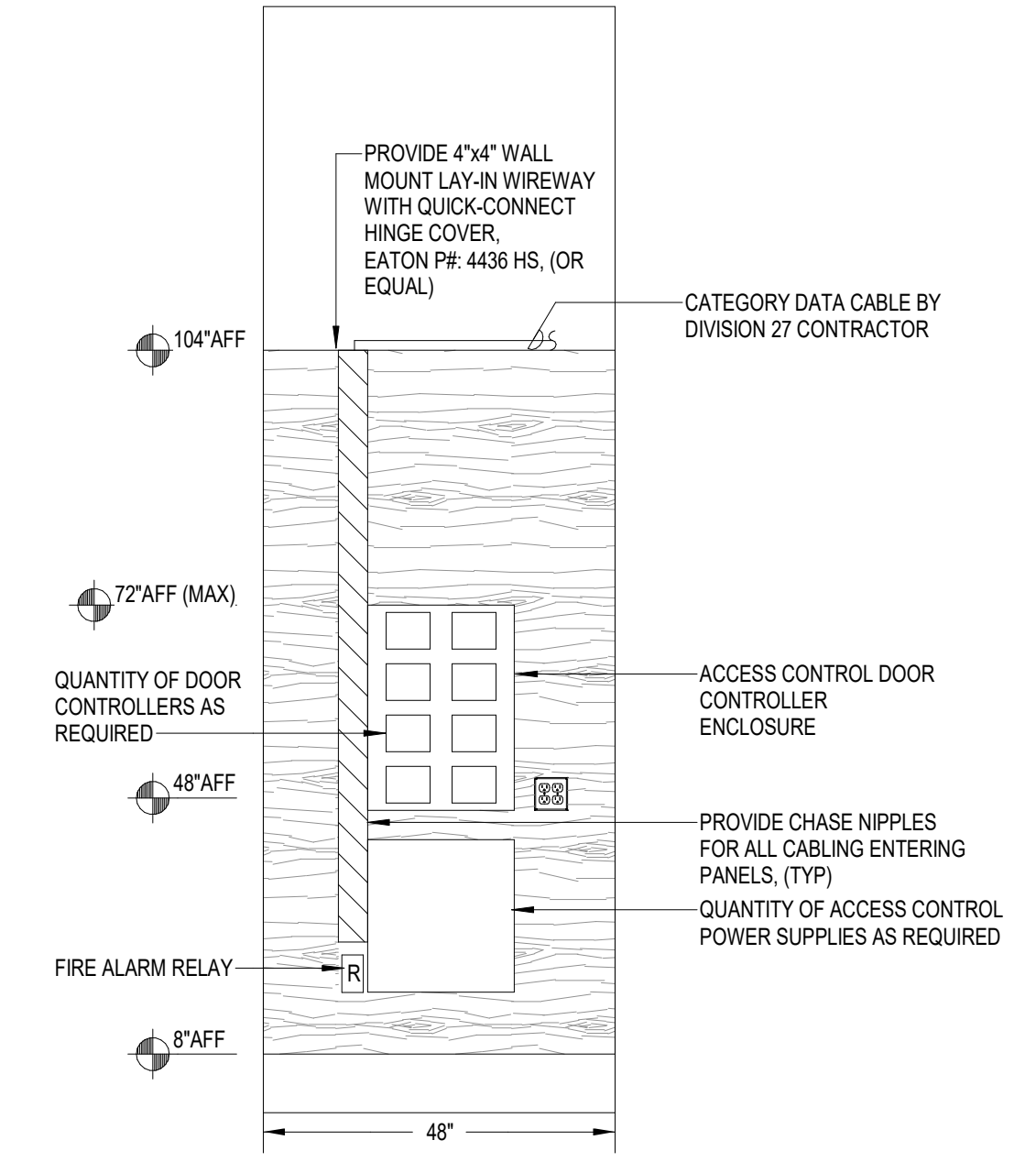
- NOTES:**
1. PROVIDE ARLINGTON PRESS-ON INSULATED BUSHING AT CONDUIT END.
  2. PROVIDE PULL STRING AT ALL EMPTY CONDUITS.
  3. SEE FLOORPLAN FOR MOUNTING HEIGHT OF DEVICES.
  4. ALL WIRING DEVICES SHALL BE DECORA STYLE. PROVIDE DECORA PLATES FOR ALL OPENINGS.
  5. LOCATE BOX CONCEALED BEHIND PROPOSED TV LOCATION.
  6. PROVIDE FIRE-RATED PUTTY BEHIND BOX FOR SOUND ATTENUATION.

**7 TELEVISION ROUGH IN DETAIL**  
E4-3 NOT TO SCALE

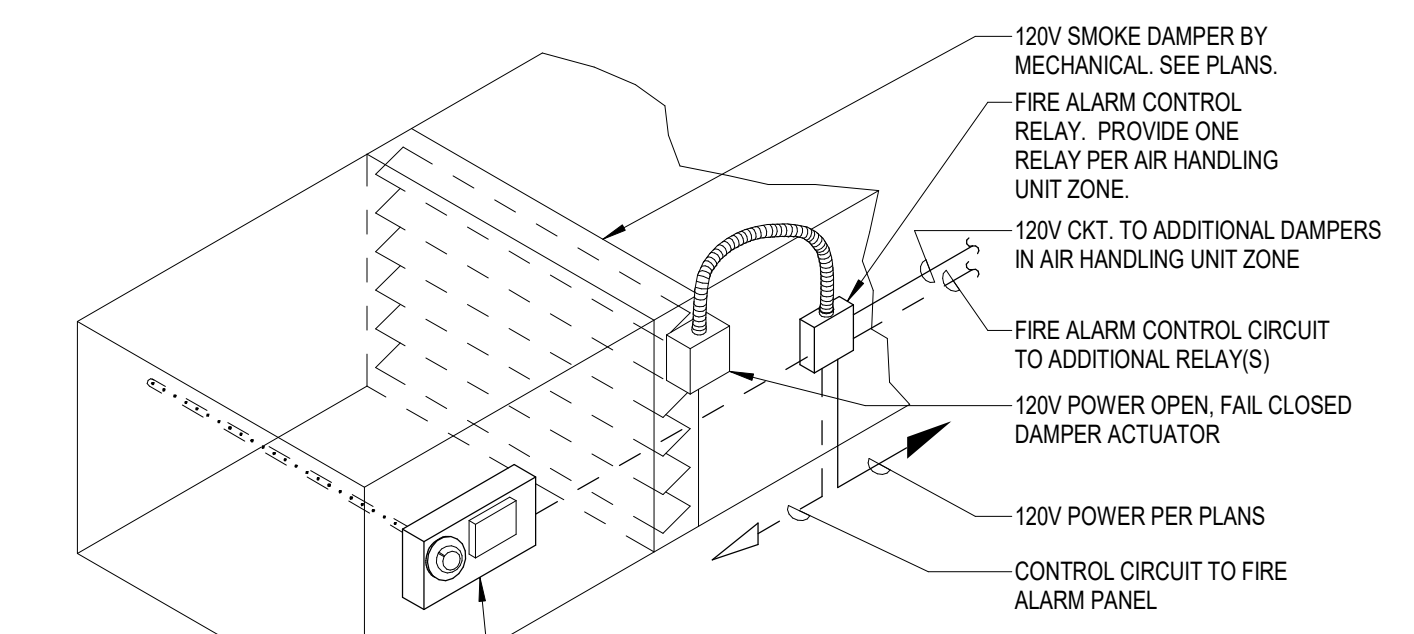


- NOTES:**
1. USE LOCKING BLADE TYPE OF CONNECTOR BODY (HUBBELL 20 AMP 3-POLE 5-WIRE "TWISTLOCK" OR EQUAL). DO NOT USE STRAIGHT BLADE TYPES.
  2. \*50" FLEXIBLE, 600V GRAY OR BLACK POWER CORD, 3-#12 AWG. USE CONTINUOUS LENGTHS. SPLICES ARE NOT PERMITTED. PROVIDE LENGTH TO SUSPEND RECEPTACLE 7'-0" A.F.F.
  3. PROVIDE PINSLEEVE DEVICE THAT MATCHES OWNER PROVIDED EQUIPMENT. COORDINATE REQUIREMENTS WITH OWNER.
  4. PROVIDE HUBBELL "DELUXE CORD GRIP" OR EQUAL.

**6 PENDANT RECEPTACLE MOUNT DETAIL**  
E4-3 NOT TO SCALE

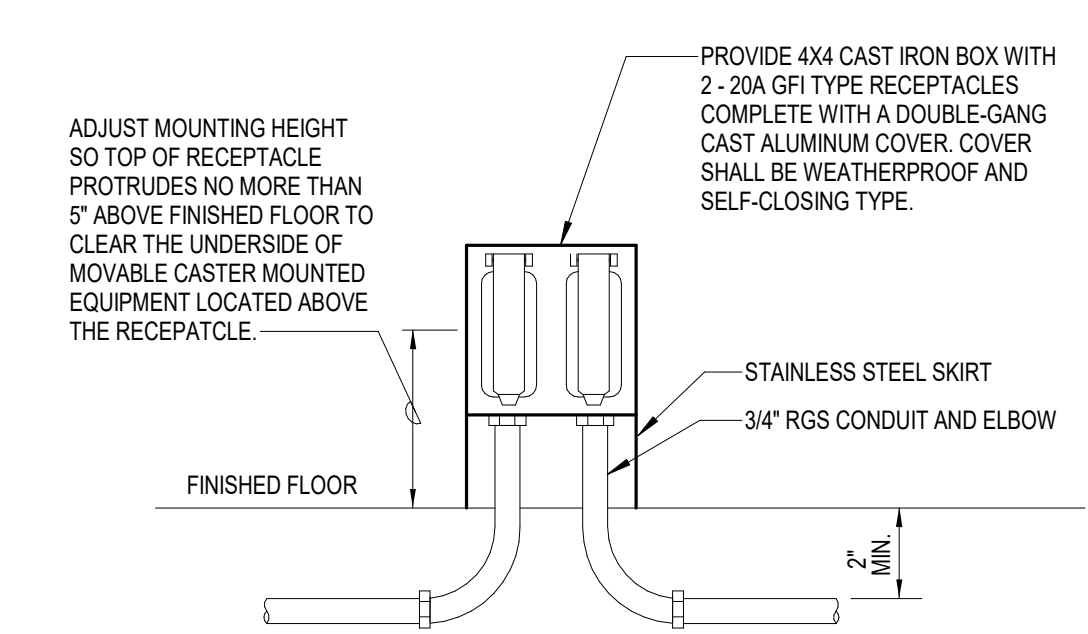


**2 ACCESS CONTROL WALL ELEVATION**  
E4-3 NOT TO SCALE

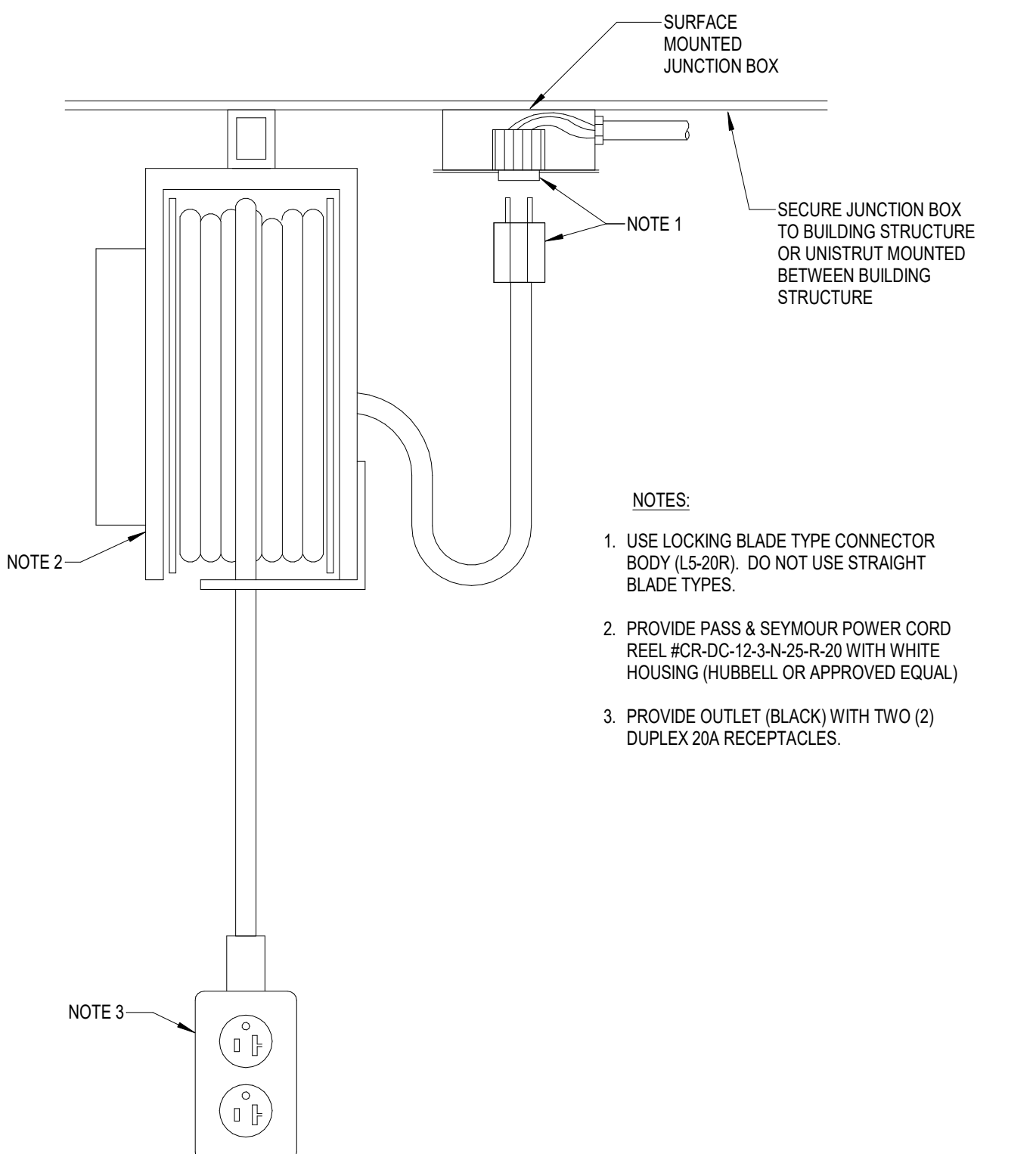


- NOTES:**
1. ANY FIRE ALARM SHALL CLOSE SMOKE DAMPERS AND SHUT DOWN ASSOCIATED MECHANICAL EQUIPMENT.
  2. DETAIL APPLIES TO BOTH SMOKE AND FIRE/SMOKE DAMPERS.
  3. PROVIDE BREAKER LOCK AT PANEL FOR 120V CIRCUIT.
  4. VERIFY AIR HANDLING UNIT ZONES WITH MECHANICAL.
  5. CONNECT TO SPARE 20 AMP, 1 POLE, 120V FUSE IN NEAREST ELECTRICAL PANEL.
  6. QUANTITY OF UNITS CONNECTED PER CIRCUIT SHALL BE SUCH THAT VOLTAGE DROP DOES NOT EXCEED 2% TO ANY UNIT. VERIFY INPUT LOAD WITH MANUFACTURERS DATA.

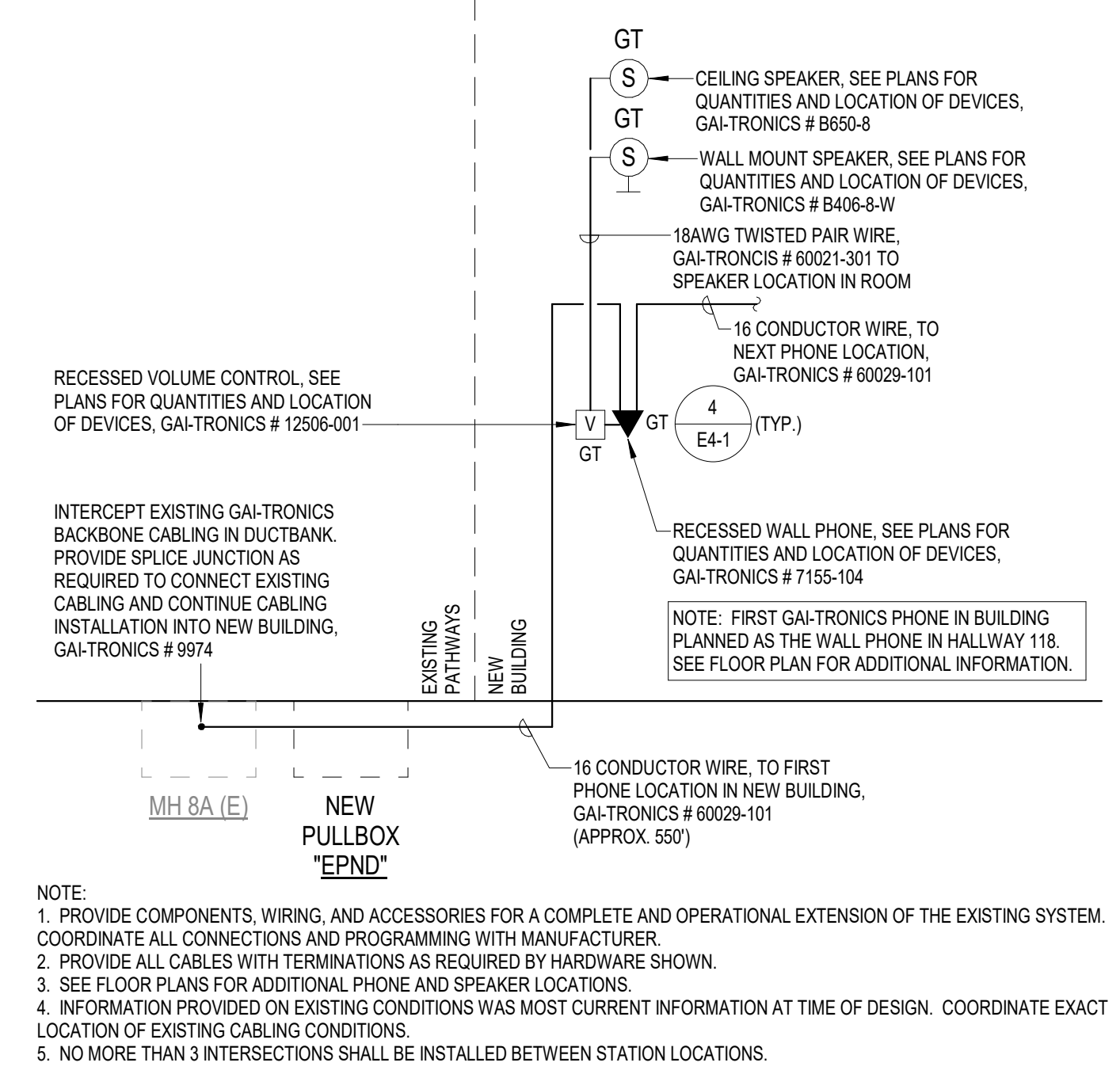
**8 FIRE/SMOKE DAMPER CONNECTION DETAIL**  
E4-3 NOT TO SCALE



**5 FLOOR RECEPTACLE - DUPLEX**  
E4-3 NOT TO SCALE



**4 CORD REEL**  
E4-3 1/8" = 1'-0"



**3 GAI-TRONICS RISER DIAGRAM**  
E4-3 NOT TO SCALE

- NOTE:**
1. PROVIDE COMPONENTS, WIRING, AND ACCESSORIES FOR A COMPLETE AND OPERATIONAL EXTENSION OF THE EXISTING SYSTEM. COORDINATE ALL CONNECTIONS AND PROGRAMMING WITH MANUFACTURER.
  2. PROVIDE ALL CABLES WITH TERMINATIONS AS REQUIRED BY HARDWARE SHOWN.
  3. SEE FLOOR PLANS FOR ADDITIONAL PHONE AND SPEAKER LOCATIONS.
  4. INFORMATION PROVIDED ON EXISTING CONDITIONS WAS MOST CURRENT INFORMATION AT TIME OF DESIGN. COORDINATE EXACT LOCATION OF EXISTING CABLING CONDITIONS.
  5. NO MORE THAN 3 INTERSECTIONS SHALL BE INSTALLED BETWEEN STATION LOCATIONS.

MEI PROJECT NO. 20297

**morrissy engineering inc**  
mechanical | electrical | lighting | technology | commissioning

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#	Description	Date

**TRAINING FACILITY PHASE 2**

7264 L ROAD,  
NEBRASKA CITY, NE 68410

**OMAHA PUBLIC POWER DISTRICT**

444 SOUTH 16TH STREET  
OMAHA, NE 68102

**SPECIAL SYSTEMS DETAILS**

**E4-3**



PROJECT TEAM

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MECHANICAL + ELECTRICAL  
ENGINEER  
MORRISSEY ENGINEERING  
4540 North 118th Street  
Omaha, NE 68164



MECHANICAL EQUIPMENT CONNECTION SCHEDULE						
MARK	VOLTAGE	PHASE	DISCONNECT	BREAKER	WIRE AND CONDUIT	REMARKS
AC-1	208 V	1	2-POLE TOGGLE		2#12,#10G,1/2" C	NOTE 2 (ACCU-1)
ACCU-1	208 V	1	302NFR1	252	2#10,#10G,3/4" C	
ACOMP-1	480 V	3	603NFR	353	3#8,#10G,1" C	
AD-1	120 V	1	TOGGLE SWITCH	201	2#12,#12G,1/2" C	
BC-1	208 V	1	TOGGLE SWITCH	152	2#12,#12G,1/2" C	
DDAU-1	480 V	3	1003NFR1	803	4#4,#6G,1-1/4" C	
EDH-1	480 V	3	LOCKING BREAKER	703	4#4,#6G,1-1/4" C	
EF-1	120 V	1	NOTE 3	201	2#12,#12G,1/2" C	
EH-1	277 V	1	NOTE 3	201	2#12,#12G,1/2" C	NOTE 1
EH-2	277 V	1	NOTE 3			
EWN-1	480 V	3	LOCKING BREAKER	803	3#4,#6G,1-1/4" C	
EWN-2	480 V	3				
FCU	208 V	1	2-POLE TOGGLE	152	2#12,#12G,1/2" C	NOTE 1
FCU-1	208 V	1	2-POLE TOGGLE	152	2#12,#12G,1/2" C	
FCU-2	208 V	1	2-POLE TOGGLE	152	2#12,#12G,1/2" C	
FCU-3	208 V	1	2-POLE TOGGLE	152	2#12,#12G,1/2" C	
FCU-4	208 V	1	602NFR		2#8,#10G,3/4" C	NOTE 4
FCU-5	208 V	1	602NFR		2#8,#10G,3/4" C	NOTE 4
FCU-9	208 V	1	2-POLE TOGGLE	152	2#12,#12G,1/2" C	
FCU-13	208 V	1	2-POLE TOGGLE	152	2#12,#12G,1/2" C	
FCU-15	208 V	1	2-POLE TOGGLE	152	2#12,#12G,1/2" C	
FCU-16	208 V	1	2-POLE TOGGLE	152	2#12,#12G,1/2" C	
HD-1	120 V	1	TOGGLE SWITCH		2#12,#12G,1/2" C	NOTE 2 (EF-1)
HP-1	480 V	3	603NFR1	503	3#8,#10G,1" C	NOTE 1
HWCP-1	120 V	1	TOGGLE SWITCH	201	2#12,#12G,1/2" C	
HWCP-2	120 V	1	TOGGLE SWITCH			

GENERAL REQUIREMENTS:

A. VERIFY VOLTAGE AND PHASE WITH MECHANICAL CONTRACTOR AND APPROVED MECHANICAL SHOP DRAWINGS PRIOR TO INSTALLATION.

SCHEDULE NOTES:

- MULTIPLE UNITS SCHEDULED IN PROJECT, SEE FLOOR PLANS FOR PANEL AND CIRCUIT INFORMATION.
- MECHANICAL EQUIPMENT DERIVES POWER FROM AUXILIARY MECHANICAL EQUIPMENT. EQUIPMENT LISTED IN (i) IN COMMENTS.
- EQUIPMENT PROVIDED WITH INTEGRAL DISCONNECTING MEANS.
- FCU-4 & FCU-5** FAN COIL PROVIDED WITH FACTORY DISCONNECTS / CIRCUIT BREAKERS. PROVIDE DUAL ELECTRICAL CONNECTIONS TO MECHANICAL UNITS. SEE PANEL SCHEDULES FOR REQUIRED CIRCUIT BREAKER SIZES.

ELECTRIC HEAT SCHEDULE							
MARK	MANUFACTURER	CATALOG NUMBER	WATTS	VOLTAGE	PHASE	LENGTH	REMARKS
EH-1	KING ELECTRIC	LPWA2730,TP,CB2L,LPWAIC,LPWAG-G	3000 VA	277 V	1		
EH-2	KING ELECTRIC	LPWA2726,TP,CB2L,LPWAIC,LPWAG-G	2000 VA	277 V	1		

NOTES:

- PROVIDE WITH INTEGRAL SERVICE DISCONNECT AND THERMOSTAT. INSTALL PER MANUFACTURERS INSTRUCTIONS.

LIGHTING CONTROL DEVICE SCHEDULE				
SYMBOL	TAG	MANUFACTURER	CATALOG NUMBER	DESCRIPTION
⏏	4PD	ACUITY CONTROLS NLIGHT	nPODM 4P DX	LIGHTING CONTROL NETWORK ENTRY STATION WITH FOUR SETS OF ON AND OFF PUSH BUTTONS AND RAISE/LOWER DIMMING CONTROL
⏏	NECY	ACUITY CONTROLS NLIGHT	NECY MVOLT BAC ENC GFXX	NLIGHT SYSTEM CONTROLLER
⏏	nE	ACUITY CONTROLS NLIGHT	nCM PFD 10	EXTENDED RANGE LOW VOLTAGE CEILING SENSOR CONNECTED TO LIGHTING CONTROL NETWORK
⏏	n	ACUITY CONTROLS NLIGHT	nIO PC KIT	OUTDOOR PHOTOCELL KIT CONNECTED TO LIGHTING CONTROL NETWORK
⏏	X	ACUITY CONTROLS NLIGHT	nIO X KIT	LIGHTING CONTROL NETWORK RS-232 THIRD PARTY INTERFACE KIT
⏏	n	ACUITY CONTROLS NLIGHT	nPP16	LIGHTING CONTROL NETWORK 16A POWER PACK
⏏	nD	ACUITY CONTROLS NLIGHT	nPP16 D	LIGHTING CONTROL NETWORK 16A POWER PACK WITH 0-10V DIMMING
⏏	n	ACUITY CONTROLS NLIGHT	nSP16	LIGHTING CONTROL NETWORK 16A SECONDARY SWITCH PACK

LUMINAIRE SCHEDULE												
MARK	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	LIGHT SOURCE			ELECTRICAL		FINISH	MOUNTING	ACCEPTABLE MANUFACTURERS	REMARKS
				SPEC.	CCT	TYPE	LOAD	VOLTS				
1	2x4 TROFFER	FOCAL POINT	FEQ2 24 AC 500L 955 1 C UNV L01 G WH	5,000 LM	3500K	LED	51 W	277 V	WHITE	FLUSHCEILING	NOTE 1	NOTE 6
2	4' LED STRIPLIGHT	LITHONIA	ZL1F L48 5MR 6000LM MDD MVOLT 35K 90CRI WH ZACH SQ	8,000 LM	3500K	LED	56 W	277 V	WHITE	SURFACE/CEILING	NOTE 1	NOTE 5
3	4' LED STRIPLIGHT	LITHONIA	VAP 8000LM FST WID MVOLT G210 35K 90CRI WLFEND2 CMB	8,000 LM	3500K	LED	67 W	277 V	WHITE	SURFACE/CEILING	NOTE 1	NOTE 5
5	4' ROUND LED DOWNLIGHT	LITHONIA	LDW 3520 LW AR LD MVOLT G210	2,900 LM	3500K	LED	22 W	277 V	WHITE	FLUSHCEILING	NOTE 2	
7	LED BATTERY LIGHT	LITHONIA	ELM2L	FURN. W/ LUMINAIRE	FURN. W/ LUMINAIRE		2 W	277 V	WHITE	SURFACE/WALL	NOTE 1	
8	LED WALLPACK	LITHONIA	WST 92 40K VF MVOLT DDBXD	3,000 LM	4000K	LED	25 W	277 V	DARK BRONZE	SURFACE/WALL 8'-0" A.F.F.	NOTE 1	
9	LED WALLPACK	LITHONIA	DSXW2 LED 30C 1000 40K T4M 277 DDBXD	10,365 LM	4000K	LED	109 W	277 V	DARK BRONZE	SURFACE/WALL 20'-0" A.F.F.	NOTE 1	
10	FAA OBSTRUCTION LIGHT	FLIGHT LIGHT (OR EQUAL)	FL-810-R-AC1-348-F-P-1-B	LED			100 W	120 V		SURFACE		MOUNT AS HIGH AS POSSIBLE
X1	SINGLE FACE EXIT SIGN	LITHONIA	LDM 5 W 3 R 120/277	FURN. W/ LUMINAIRE	FURN. W/ LUMINAIRE	LED	2 W	277 V	WHITE	NOTE 3		NOTE 3

GENERAL REQUIREMENTS:

- CONTRACTOR SHALL VERIFY CATALOG NUMBERS AND INSTALLATION REQUIREMENTS PRIOR TO ORDERING. NOTIFY ENGINEER OF ANY CONFLICTS WITH PROPOSED INSTALLATION.
- LIGHT SOURCE TYPES: LED = LIGHT EMITTING DIODE.
- UNLESS NOTED OTHERWISE, REFER TO PLANS FOR SUSPENSION LENGTHS REQUIRED FOR ALL SUSPENDED LUMINAIRES.

LUMINAIRE SCHEDULE NOTES:

- LUMINAIRE SHALL BE CONSIDERED EQUAL AS MANUFACTURED BY: ACUITY BRANDS, HUBBELL, COOPER, OR PHILIPS LIGHTING.
- LUMINAIRE SHALL BE CONSIDERED EQUAL AS MANUFACTURED BY: GOTHAM, PATHWAY, PRESCOLITE, OR COOPER PORTFOLIO.
- REFER TO PLANS FOR MOUNTING REQUIREMENTS SUCH AS WALL MOUNT, END MOUNT, CEILING MOUNT AND PROVIDE LUMINAIRES ACCORDINGLY. PROVIDE DIRECTIONAL CHEVRON ARROWS AS INDICATED ON PLANS.
- REFER TO PLANS FOR RUN LENGTHS AND CONFIGURATIONS REQUIRED. LUMINAIRE SHALL BE CONTINUOUS FOR ENTIRE LENGTHS OF WALLS. PRIOR TO ORDERING CONTRACTOR SHALL VERIFY WALL DIMENSIONS.
- VERIFY MOUNTING HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.
- PROVIDE ALTERNATE BID #3 USING LITHONIA 4 EPANEL 2X4 5400LM 80CRI 35K MIN10 ZT MVOLT. REFER TO ARCHITECTURAL DOCUMENTS FOR ALTERNATE BID REQUIREMENTS.

FLOORBOX SCHEDULE											
MARK	DESCRIPTION	MANUFACTURER	MODEL	COVER			RECEPTACLE	LOW VOLTAGE CONDUIT	ACCEPTABLE MANUFACTURERS	REMARKS	
				STYLE	TOP	FLANGE					FINISH
FBHE	4-GANG MULTI-SERVICE ON GRADE RECESSED FLOORBOX	WIREMOLD	RFBAE-OG	8	C	T	NOTE 4	(2) 1/2"	(2) 1"	NOTE 2,3	
FBIE	6-GANG MULTI-SERVICE ON GRADE RECESSED FLOORBOX	WIREMOLD	RFBAE-OG	6	C	T	NOTE 4	(6) 1/2"	(2) 1-1/4"	NOTE 2,3	

GENERAL REQUIREMENTS:

- CONTRACTOR SHALL VERIFY CATALOG NUMBERS AND INSTALLATION REQUIREMENTS PRIOR TO ORDERING. NOTIFY ENGINEER OF ANY CONFLICTS WITH PROPOSED INSTALLATION.
- INSTALL PER MANUFACTURERS INSTRUCTIONS.
- CONFIRM FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.
- VERIFY FINISH AND FLOORING TYPE PRIOR TO ORDERING.
- PREP/OUR SLEEVES MAY BE USED IN PLACE OF CORE DRILLING/SAW CUTTING IF LOCATIONS ARE DETERMINED PRIOR TO POURING THE FLOOR.

FLOORBOX SCHEDULE NOTES:

- FLOORBOX SHALL BE CONSIDERED EQUAL AS MANUFACTURED BY: WIREMOLD, HUBBELL.
- PROVIDE WITH INTERNAL RJ DEVICE BRACKETS AND ALL OTHER MOUNTING HARDWARE AS REQUIRED.
- PROVIDE CONDUIT FROM CONNECTOR ROUTED UNDER/FLOOR, UP CONCEALED IN WALL, AND STUBBED TO ABOVE ACCESSIBLE CEILING SPACE. TERMINATE WITH INSULATING BUSHING.
- COORDINATE COLOR OF FLOOR BOX COVER WITH ARCHITECT AND OWNERS INTERIOR DESIGNER PRIOR TO ORDERING.

DRY-TYPE TRANSFORMER SCHEDULE							
MARK	TRANSFORMER TYPE	KVA	VOLTAGE		MOUNTING	GROUNDING ELECTRODE	REMARKS
			PRIMARY	SECONDARY			
T1A	GENERAL PURPOSE	75 KVA	480 V	208Y/120V	WALL	#2-3/4" C	
T1B	GENERAL PURPOSE	75 KVA	480 V	208Y/120V	WALL	#2-3/4" C	
T1L	GENERAL PURPOSE	75 KVA	480 V	208Y/120V	WALL	#2-3/4" C	

INVERTER SCHEDULE				
Inverter: EVIA		Voltage: 277		
Location:		Panel: H1A		
OB#	DESCRIPTION	LOAD	VOLTAGE	NOTES
1	LTG - BUILDING LIGHTS	679 W	277 V	
		679 W		

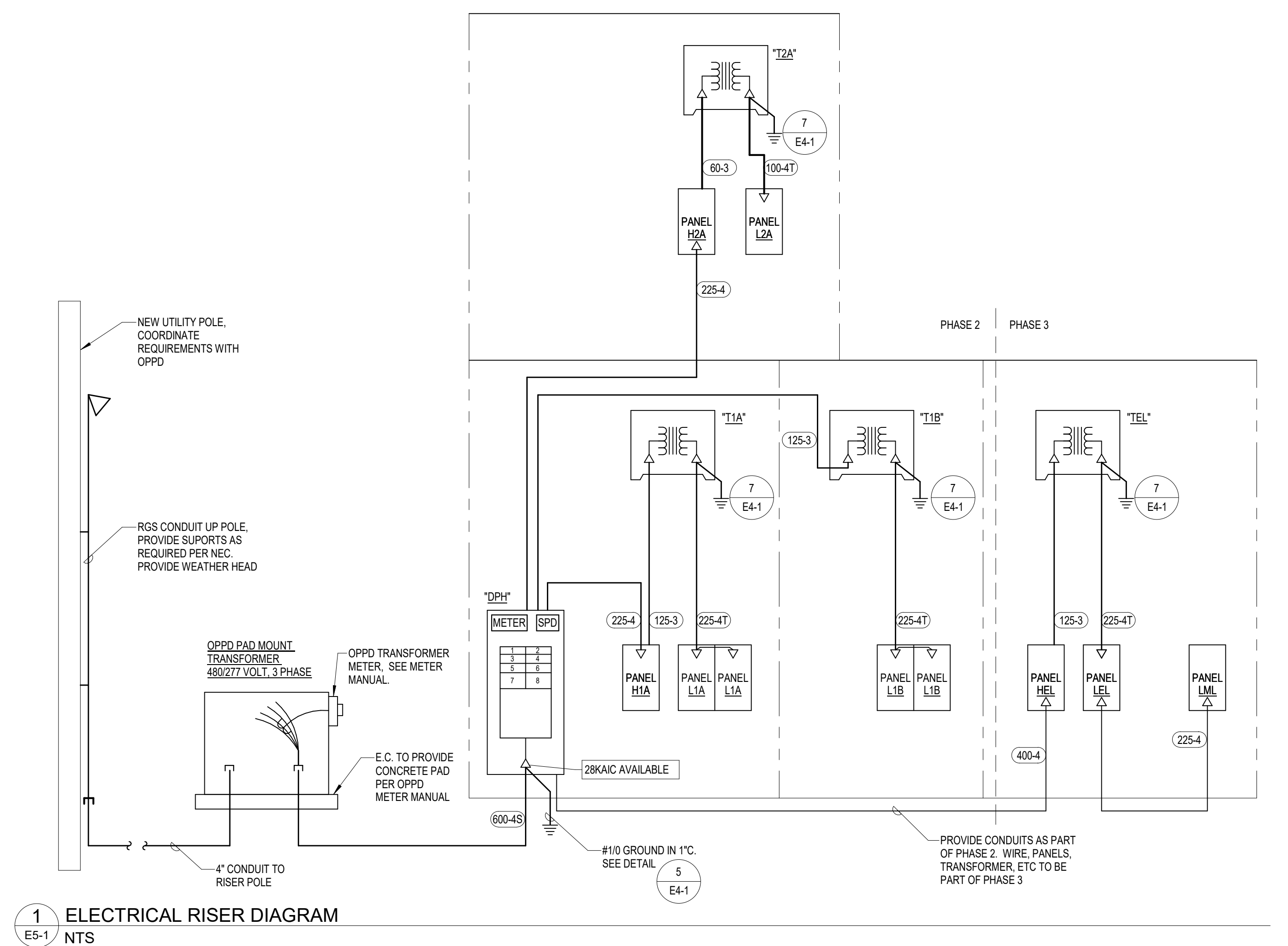
Notes:  
PROVIDE FAST-TRANSFER, PURE SINE WAVE EMERGENCY LIGHTING INVERTER WITH QUANTITY OF OUTPUT BREAKERS INDICATED BY EVENTUITE, DIAL LITE, OR ISOLITE. PROVIDE WITH ADEQUATE CAPACITY TO ACCOMMODATE LED LOADS INDICATED IN SCHEDULE FOR 90 MINUTE OPERATION. MANUFACTURER TO DETERMINE CAPACITY BASED ON ACTUAL PRODUCT DATA SUBMITTED DURING SHOP DRAWINGS AND OVERLOAD CAPACITY OF INVERTER. PROVIDE WITH SELF-TEST / SELF-DIAGNOSTICS OPTION AND MINIMUM 2 YEAR WARRANTY. FOR INVERTERS WITH MULTIPLE OUTPUT BREAKERS, PROVIDE INVERTER WITH SURGE SUPPRESSION.

COPPER FEEDER SCHEDULE	
FEEDER	WIRE AND CONDUIT
60-3	3-#6 #10 G-1" C
100-4T	4-#1, #6 G-1-1/2" C
125-3	3-#1, #6 G-1-1/2" C
225-4	4-#4#0, #4 G-2-1/2" C
225-4T	4-#4#0, #2 G-2-1/2" C
400-4	4-#600 KCMIL, #3 G-4" C
600-4S	4-#600 KCMIL IN EACH OF (2) 3" C

NOTE:  
AT CONTRACTOR'S OPTION, COMPACT ELECTRICAL GRADE ALUMINUM CONDUCTORS MAY BE USED FOR FEEDERS 100 AMPS AND LARGER. IF ALUMINUM IS USED, CONTRACTOR TO SIZE ALUMINUM EQUAL TO FEEDER SCHEDULE (COPPER) AS INDICATED ON CONTRACT DOCUMENTS AND SHALL BE SUBMITTED TO ENGINEER FOR REVIEW.

ESTIMATED MAX. DEMAND			
LOAD	CONN. (VA)	D.F.	EMD (VA)
LIGHTING	8,907	1.0	8,907
RECEPTACLES	53,100	0.59	31,550
HVAC	74,004	0.8	59,203
ELECTRIC HEAT	121,000	0.8	96,800
(MISCELLANEOUS)	249,051	0.71	176,850
TOTAL	506,062		373,310

REQUIRED SERVICE: 600 AMPS AT  
480/277 VOLTS, 3 PHASE, 4 WIRE



1 ELECTRICAL RISER DIAGRAM  
E5-1 NTS

MEI PROJECT NO. 20297

**morrissey engineering inc**  
mechanical | electrical | lighting | technology | commissioning

4940 North 118th Street  
Omaha, NE 68164  
P: 402-491-4144  
www.morrisseyengineering.com

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Notes:  
do not scale drawings. verify all dimensions and clearances from architectural, structural, shop and other appropriate drawings or as site. lay out and coordinate all work prior to installation to provide clearances required for operation, maintenance, and codes and verify non-interference with other work. do not fabricate prior to verification of clearance for all trades.

TRAINING FACILITY PHASE 2

7264 L ROAD,  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

ELECTRICAL SCHEDULES

E5-1



DISTRIBUTION PANEL SCHEDULE						
Panel: DPH		Rating: 600 A		A.I.C. Rating: 35000		
Remarks: MAIN CKT. BKR. W/GND. BAR		Volts: 480/277		Phase: 3		
Options: OWNER METERING, SPD		Wires: 4		S.E. Rated: YES		
CKT	NAMEPLATE DESIGNATION	ACTIVE	SPARE	FUSE	SPACE	REMARKS
1	DOAU-1	80 A	3			
2	EDH-1	70 A	3			LOCKABLE
3	EWH-1	80 A	3			LOCKABLE
4	TRANSFORMER T1B'	125 A	3			LOCKABLE
5	SPACE	125 A	3			
6	PANEL 'H1A'	225 A	3			
7	SPARE	225 A	3			
8	SPACE	225 A	3			
9	PANEL 'HEL'	400 A	3			
10	SPACE	400 A	3			

**Notes:**  
1. THE CURRENT LIMITING PLUG IN THE CIRCUIT BREAKER OR THE BREAKER ITSELF MUST BE THE NEXT LOGICAL SIZE ABOVE THE SERVICE CONDUCTOR SIZE.  
2. A PERMANENT 'RED' ENGRAVED PHENOLIC PLATE MUST BE INSTALLED ON OR ABOVE THE MAIN CIRCUIT BREAKER WITH THE FOLLOWING INFORMATION:  
a. SERVICE SIZE - PER NEC.  
b. ALL PROGRAMMED BREAKER SETTINGS.  
c. "CAUTION - ANY CHANGES TO THESE SETTINGS COULD BE A POTENTIAL RISK TO LIFE AND PROPERTY"  
3. PROVIDE AN ARC ENERGY REDUCING MAINTENANCE SWITCH FOR EACH CIRCUIT BREAKER FRAME SIZE 1200 AMPS AND LARGER.

LIGHTING PANEL SCHEDULE												
Panel: H1A				Voltage: 480/277								
Rating: 225 A				Phase: 3								
Mounting: SURFACE				Wires: 4								
Type: MLO W/GND BAR				A.I.C. Rating: 25000								
Circuit Description	OPT	R	P	CKT	A	B	C	CKT	P	R	OPT	Circuit Description
LTG - WEST HALF OF BUILDING				20	1	1	...	2				
LTG - EAST HALF OF BUILDING				20	1	3	...	3	125			T1A
EXITS SIGNS	L			20	1	5	...	6				
ELEC HEAT - WOMENS RR				20	1	7	...	8				
ELEC HEAT - MENS RR				20	1	9	...	10	30			HP-1-1
ELEC HEAT - SE VESTIBULE				20	1	11	...	12				
EVIA	L			20	1	13	...	14				
ELEC HEAT - NE VESTIBULE				20	1	15	...	16	30			HP-1-2
FUTURE FLOW TRAINER	--			60	3	19	...	20				
ELEC HEAT - WATER SERVICE				20	1	21	...	22	3	15		EWH-2
SPARE	--			20	1	23	...	24				
SPARE	--			20	1	25	...	26				
SPARE	--			20	1	27	...	28	3	15		SANITARY LIFT STATION
SPARE	--			20	1	29	...	30				
SPARE	--			20	1	31	...	32	1	--		SPACE
SPARE	--			20	1	33	...	34	1	--		SPACE
SPARE	--			20	1	35	...	36	1	--		SPACE
SPARE	--			20	1	37	...	38	1	--		SPACE
SPARE	--			20	1	39	...	40	1	--		SPACE
SPARE	--			20	1	41	...	42	1	--		SPACE

**Options:**  
G - GFCl type circuit breaker. S - Shunt trip type circuit breaker.  
L - Locking handle type circuit breaker. R - Reconnect to existing circuit breaker.

LIGHTING PANEL SCHEDULE												
Panel: HEL				Voltage: 480/277								
Rating: 400 A				Phase: 3								
Mounting: SURFACE				Wires: 4								
Type: MLO W/GND BAR				A.I.C. Rating: SERIES RATED WITH UPSTREAM OVERCURRENT PROTECTIVE DEVICE								
Circuit Description	OPT	R	P	CKT	A	B	C	CKT	P	R	OPT	Circuit Description
TRANSFORMER 'TEL'	L			125	3	1	...	2	1	20		LTG - ELEC/MECH LAB
												SPARE
												SPARE
												SPARE
												SPARE
VERTICAL SAW				30	3	9	...	10	1	20		SPARE
SPACE	--			1	11	...	12	1	20			SPARE
SPACE	--			1	13	...	14	1	20			SPARE
SPACE	--			1	15	...	16	1	20			SPARE
CRANE POWER				60	3	19	...	20	3	35		AIR COMPRESSOR
												SPARE
												SPARE
												SPARE
FUTURE WELDER	--			25	3	25	...	26	3	75		FUTURE HOTSYS
												SPARE
												SPARE
												SPARE
FUTURE WELDER	--			25	3	31	...	32	3	25		FUTURE WELDER
												SPARE
												SPARE
												SPARE
FUTURE LATHE	--			30	3	37	...	38	3	15		CNC MILL
												SPARE
												SPARE
												SPARE
FUTURE DRILL PRESS	--			20	3	43	...	44	1	--		SPACE
												SPACE
												SPACE
												SPACE
												SPACE
												SPACE

**Options:**  
G - GFCl type circuit breaker. S - Shunt trip type circuit breaker.  
L - Locking handle type circuit breaker. R - Reconnect to existing circuit breaker.

LIGHTING PANEL SCHEDULE												
Panel: L1A				Voltage: 120/208								
Rating: 225 A				Phase: 3								
Mounting: SURFACE				Wires: 4								
Type: MCB W/SUB FEED LUGS AND GND BAR				A.I.C. Rating: 10000								
Circuit Description	OPT	R	P	CKT	A	B	C	CKT	P	R	OPT	Circuit Description
REC - MECH / ELEC				20	1	1	...	2	1	20		REC - BREAK ROOM
FIRE ALARM PANEL	L			20	1	3	...	4	1	20		REC - BREAK ROOM COUNTER
REC - BREAKROOM	G			20	1	5	...	6	1	20	G	REC - BREAKROOM FRIG
REC - BREAKROOM	G			20	1	7	...	8	1	20		REC - COPY
REC - HALL				20	1	9	...	10	1	20		REC - EXTERIOR
LTG - FAA	L			20	1	11	...	12	1	20		REC - SIM ROOM
REC - SIM ROOM				20	1	13	...	14	1	20		REC - SIM ROOM
AC UNIT - DATA 202				25	2	15	...	16	1	20		REC - SIM ROOM
REC - SIM ROOM				20	1	19	...	20	1	20		REC - SIM ROOM
REC - SIM ROOM				20	1	21	...	22	1	20		REC - SIM ROOM
REC - SIM ROOM				20	1	23	...	24	1	20		REC - SIM ROOM
REC - B/C OFFICE				20	1	25	...	26	1	20		REC - B/C OFFICE
REC - B/C OFFICE				20	1	27	...	28	1	20		SPARE
REC - FIRE BRIGADE				20	1	29	...	30	1	20		REC - SIM ROOM
REC - SIM ROOM				20	1	31	...	32	1	20		REC - SIM ROOM
REC - SIM ROOM				20	1	33	...	34	1	20		REC - SIM ROOM
REC - SIM ROOM				20	1	35	...	36	1	20		REC - BREAK ROOM DISPOSAL
REC - COPY ROOM				20	1	37	...	38	1	20	L	LIGHTING CONTROL
REC - BREAK ROOM VENDING	G			20	1	39	...	40	1	20		REC - TRAINING LIBRARY
REC - BREAK ROOM VENDING	G			20	1	41	...	42	1	20	G	REC - BREAK ROOM MW
REC - BREAK ROOM VENDING	G			20	1	43	...	44	1	20	G	REC - BREAK ROOM MW
REC - TRAINING LIBRARY				20	1	45	...	46	1	20		REC - FIRE BRIGADE
REC - HALLWAY EWC	G			20	1	47	...	48	1	20		REC - SIM ROOM
REC - SIM ROOM				20	1	49	...	50	1	20		REC - SIM ROOM
REC - DATA 202 SOUTH WALL				20	1	51	...	52	1	20		REC - AV RACK
REC - DATA 202 EAST WALL				20	1	53	...	54	1	20		REC - IT RACK A
REC - DATA 202 WEST WALL				20	1	55	...	56	1	20		REC - IT RACK B (ALT #1)
BUILDING CONTROL PANEL				20	1	57	...	58	1	20		REC - DCS RACK (ALT #2)
REC - SIMULATOR 1				20	1	59	...	60	1	20		REC - SIMULATOR 2
FCU (NORTH CORRIDOR)				15	2	63	...	64	1	--		HVOP-1 / HVOP-2
SPACE	--			1	65	...	66	1	--			SPACE
SPACE	--			1	67	...	68	1	--			SPACE
SPACE	--			1	69	...	70	1	--			SPACE
SPACE	--			1	71	...	72	1	--			SPACE
SPACE	--			1	73	...	74	1	--			SPACE
SPACE	--			1	75	...	76	1	--			SPACE
SPACE	--			1	77	...	78	1	--			SPACE
SPACE	--			1	79	...	80	1	--			SPACE
SPACE	--			1	81	...	82	1	--			SPACE
SPACE	--			1	83	...	84	1	--			SPACE

**Options:**  
G - GFCl type circuit breaker. S - Shunt trip type circuit breaker.  
L - Locking handle type circuit breaker. R - Reconnect to existing circuit breaker.

LIGHTING PANEL SCHEDULE												
Panel: L1B				Voltage: 120/208								
Rating: 225 A				Phase: 3								
Mounting: FLUSH				Wires: 4								
Type: MCB W/SUB FEED LUGS AND GND BAR				A.I.C. Rating: SERIES RATED WITH UPSTREAM OVERCURRENT PROTECTIVE DEVICE								
Circuit Description	OPT	R	P	CKT	A	B	C	CKT	P	R	OPT	Circuit Description
REC - HALL				20	1	3	...	4	1	20		REC - CLASS ROOM 1
GAITRONICS SYSTEM	--			20	1	3	...	4	1	20		REC - CLASS ROOM 1
FB - CLASS ROOM 1				20	1	5	...	6	1	20		FB - CLASS ROOM 1
REC - CLASS ROOM 2				20	1	7	...	8	1	20		REC - CLASS ROOM 2
REC - CLASS ROOM 2				20	1	9	...	10	1	20		REC - EXTERIOR
SPARE	--			20	1	11	...	12	1	20		SPARE
REC - CLASS ROOM 2				20	1	13	...	14	1	20		REC - CLASS ROOM 3
REC - CLASS ROOM 3				20	1	15	...	16	1	20		REC - CLASS ROOM 3
REC - CLASS ROOM 2				20	1	17	...	18	1	20		REC - CLASS ROOM 1
CLASS ROOM 1 MOTOR...				20	1	21	...	22	1	20		CLASS ROOM 2 MOTOR SCREE
CLASS ROOM 3 MOTOR...				20	1	23	...	24	1	20		REC - MURPHY ALLEY
REC - MURPHY ALLEY				20	1	25	...	26	1	20		REC - ROB'S OFFICE
REC - COMP LAB				20	1	25	...	26	1	20		REC - COMP LAB
REC - COMP LAB				20	1	27	...	28	1	20		REC - COMP LAB
REC - COMP LAB				20	1	29	...	30	1	20		REC - COMP LAB</



**PROJECT TEAM**

**ARCHITECTURE + INTERIORS**

BCDM ARCHITECTS  
1015 N 98th St #300,  
Omaha, NE 68114

**CIVIL ENGINEER**

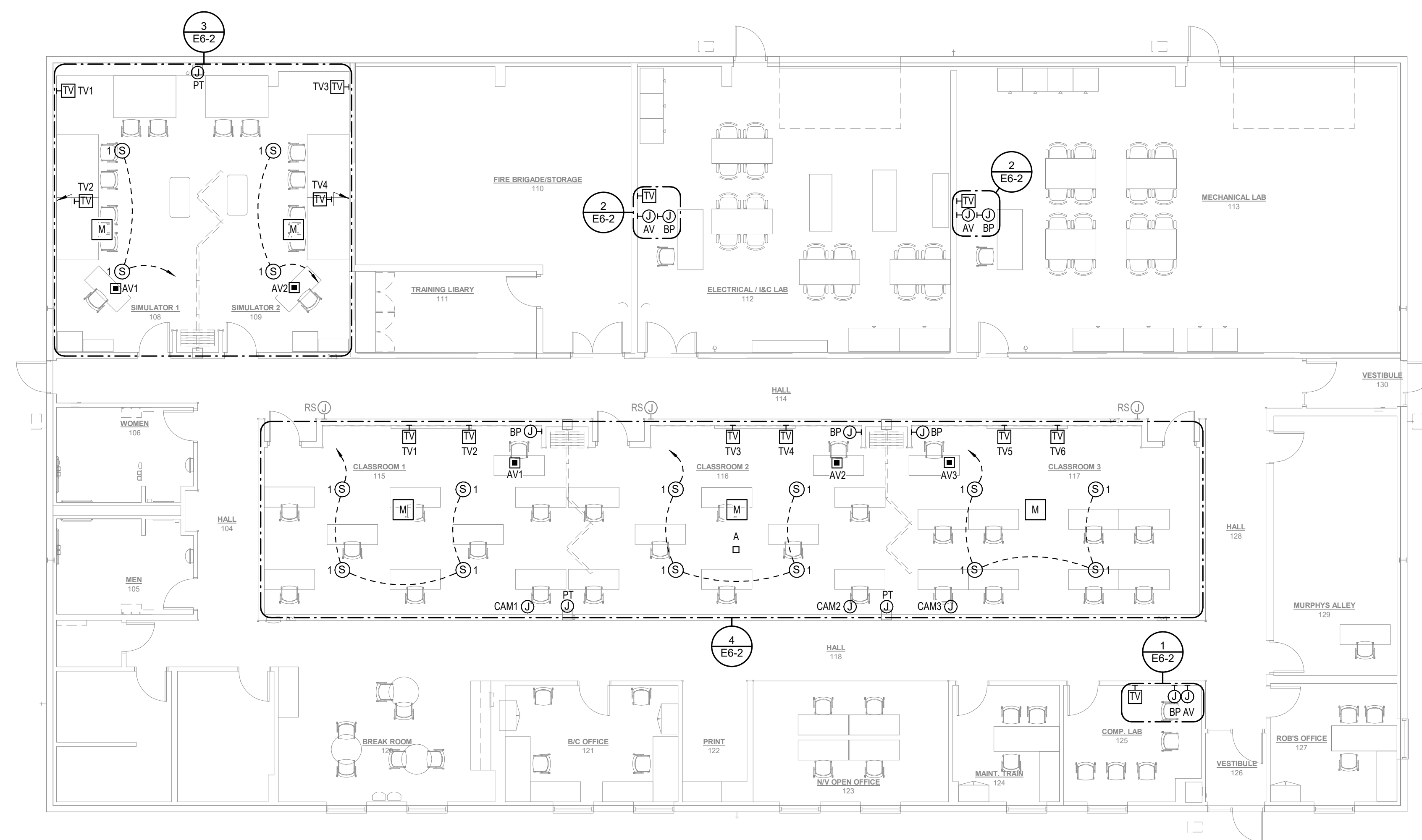
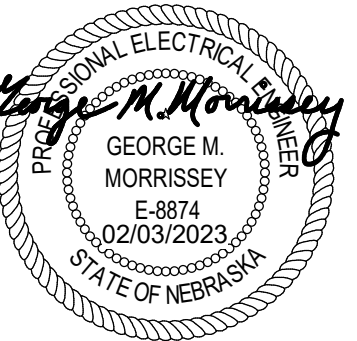
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Omaha, NE 68114

**MECHANICAL + ELECTRICAL ENGINEER**

MORRISSEY ENGINEERING  
4940 North 118th Street  
Omaha, NE 68164



**1** FIRST FLOOR - AUDIO / VISUAL  
E6-1 1/8" = 1'-0" 10' 16'

#	Description	Date
---	-------------	------

**TRAINING FACILITY PHASE 2**

7264 L ROAD,  
NEBRASKA CITY, NE 68410

OMAHA PUBLIC  
POWER DISTRICT

444 SOUTH 16TH STREET  
OMAHA, NE 68102

**AUDIO / VISUAL PLANS**

MEI PROJECT NO. 20297



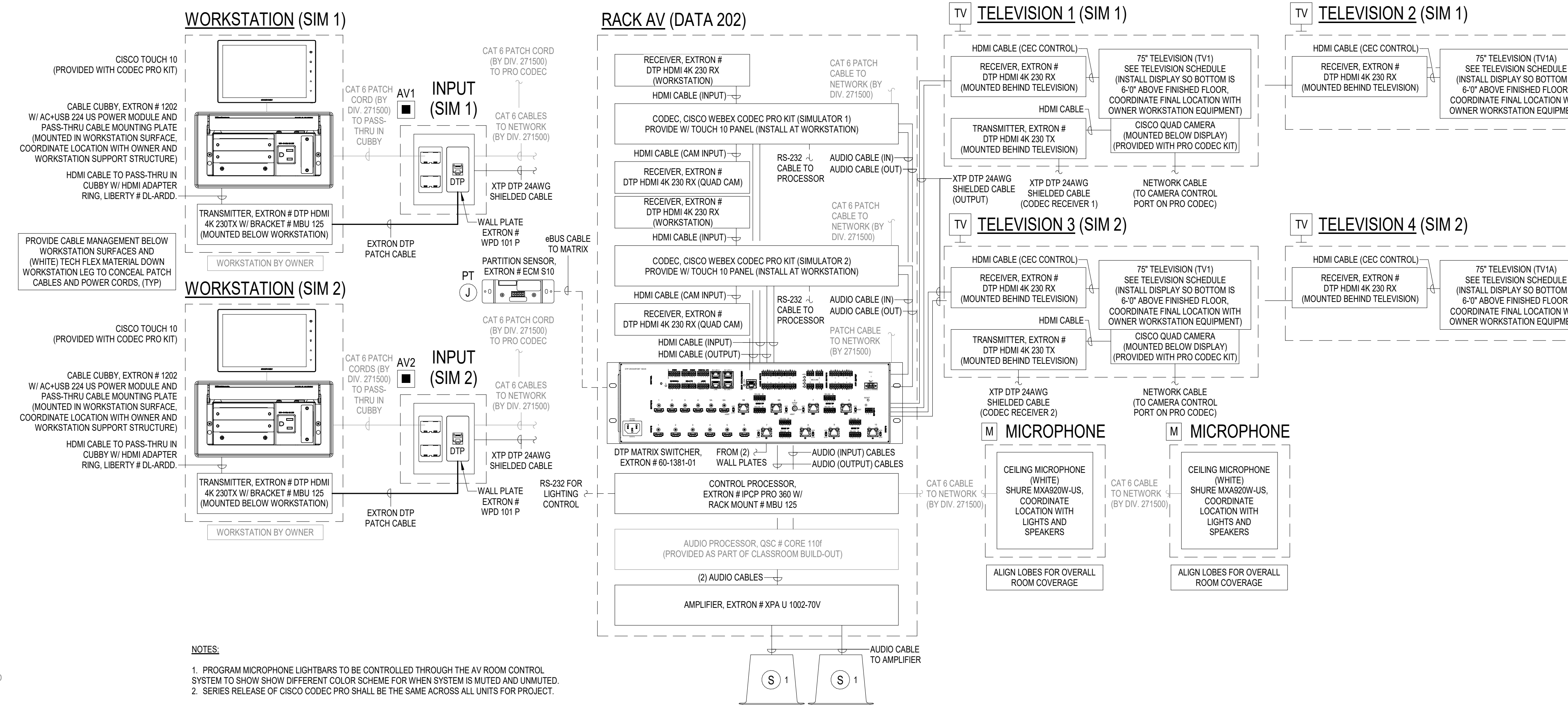
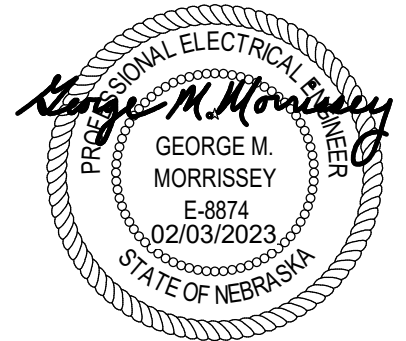
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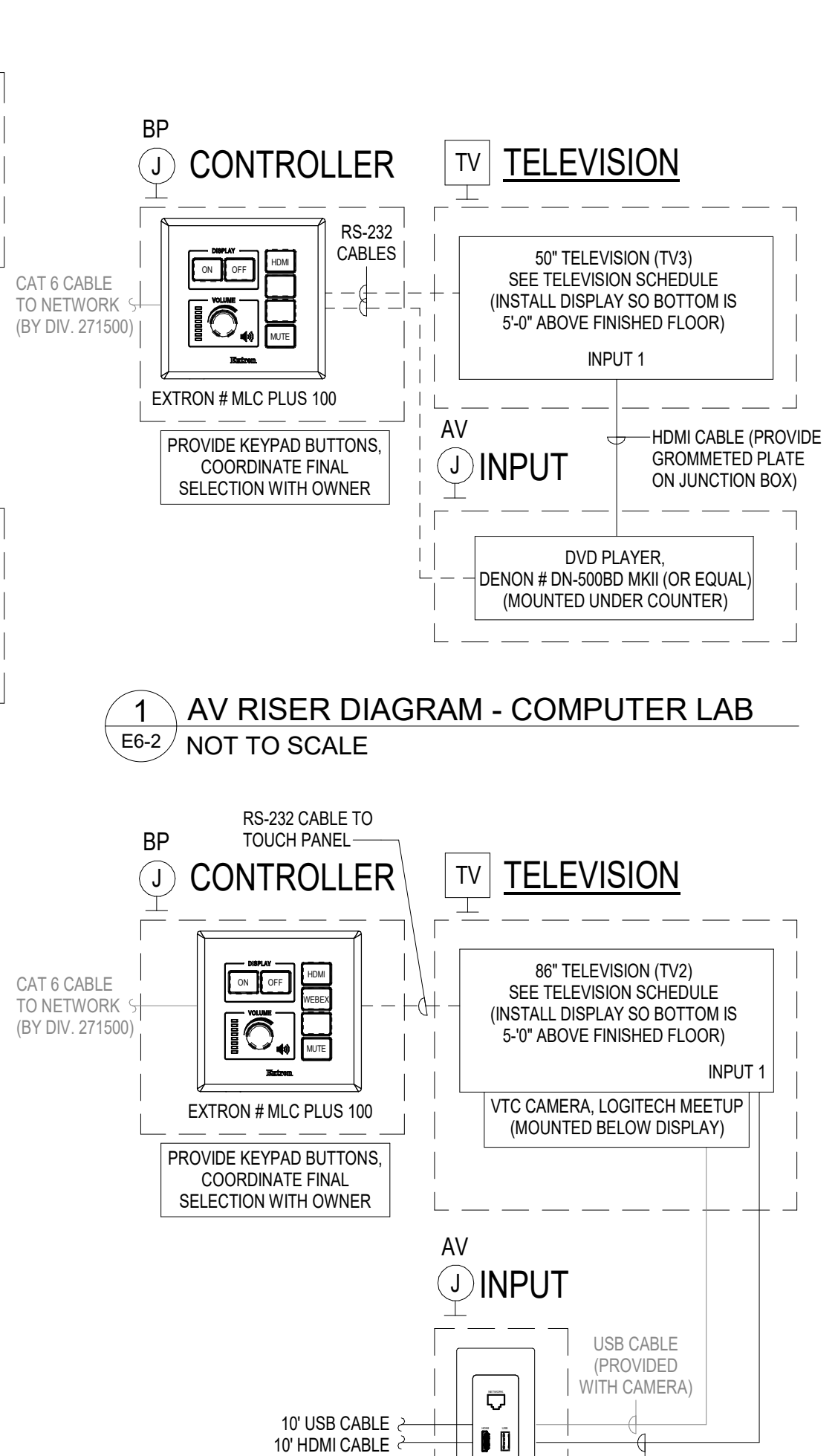
**E6-1**

BCDM NO. 5396-00  
02/03/2023

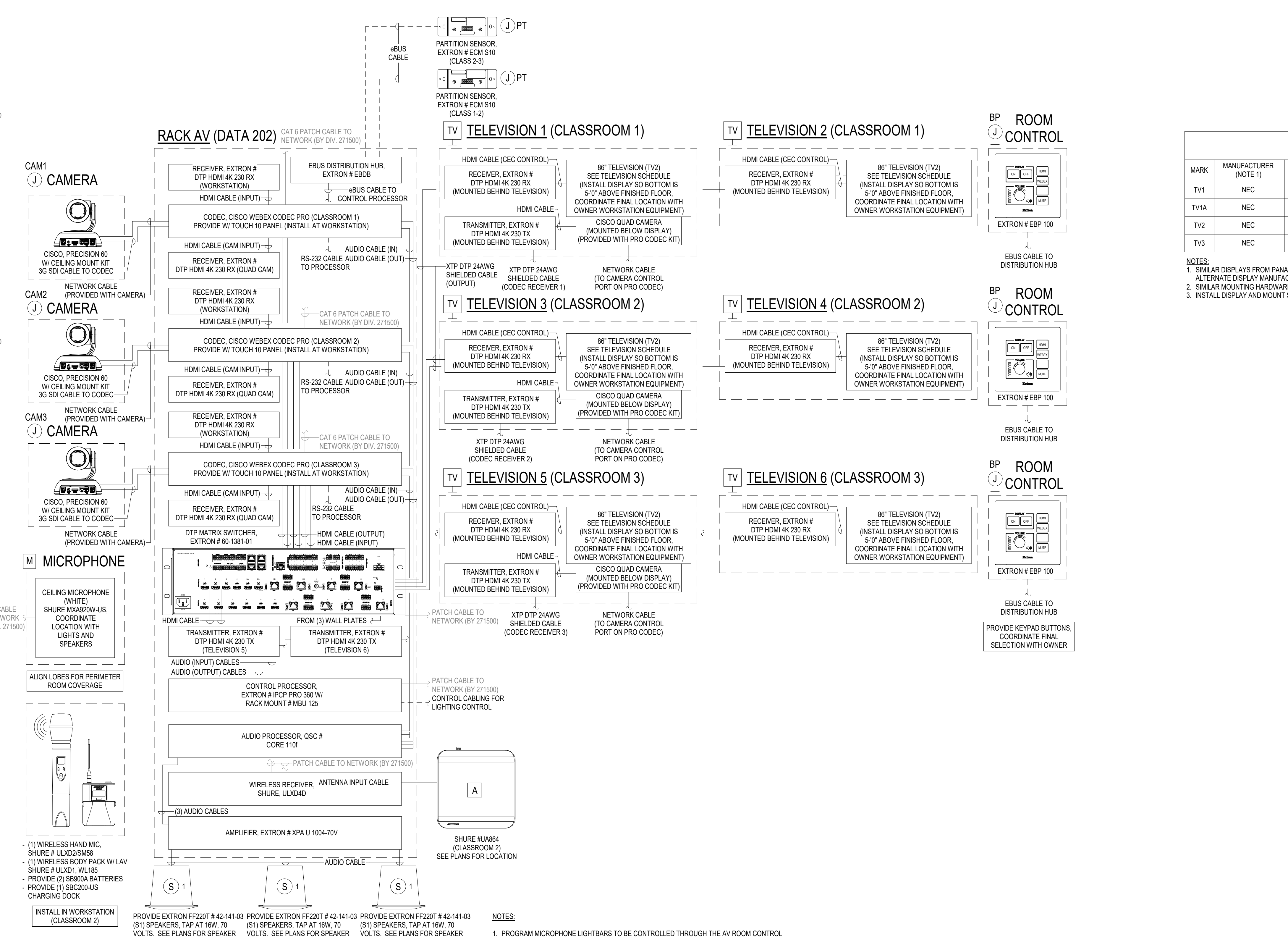




3 AV RISER DIAGRAM - SIMULATORS  
NOT TO SCALE



2 AV RISER DIAGRAM - LABS  
NOT TO SCALE



4 AV RISER DIAGRAM - DIVIDABLE CLASSROOMS  
NOT TO SCALE

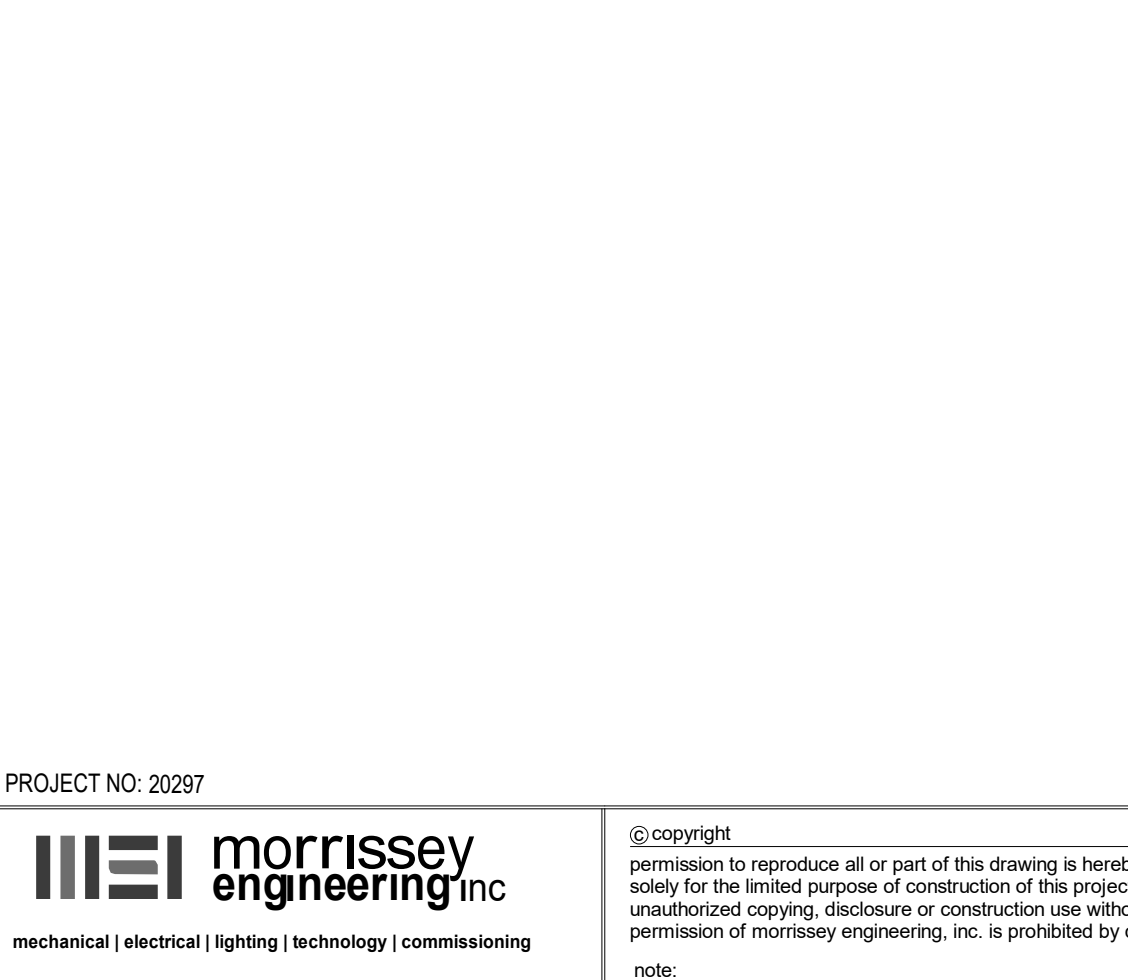
**GENERAL AUDIO VISUAL NOTES**

- DASHED LINES REPRESENT CONTROL WIRING. CONTROL WIRING IS RS-232 UNLESS OTHERWISE INDICATED. ALL OTHER WIRING IS TO MATCH CONNECTOR TYPE REQUIREMENTS.
- UNLESS OTHERWISE INDICATED, ALL AUDIO CABLEING SHALL BE BELDEN OR WEST PENN.
- PROVIDE ALL CABLES WITH TERMINATIONS AS REQUIRED BY HARDWARE SHOWN.
- SEE SPECIFICATIONS FOR ADDITIONAL PROGRAMMING, WARRANTY, AND AUDIOVISUAL SUPPLEMENTAL INFORMATION.

DISPLAY SCHEDULE					
MARK	MANUFACTURER (NOTE 1)	CATALOG NUMBER	DESCRIPTION	MOUNTING HARDWARE (NOTE 2)	REMARKS
TV1	NEC	C7500 SERIES	75" 4K UHD TV	CHIEF # TSS25T	NOTE 3
TV1A	NEC	C7500 SERIES	75" 4K UHD TV	CHIEF # LTM1U	
TV2	NEC	C8600 SERIES	86" 4K UHD TV	CHIEF # LTM1U	
TV3	NEC	ME501 SERIES	50" 4K UHD TV	CHIEF # LTTU	

**NOTES:**

- SIMILAR DISPLAYS FROM PANASONIC, SAMSUNG, AND SHARP WILL BE CONSIDERED AS EQUALS. VERIFY COMPATIBILITY OF WALL MOUNT WITH ALTERNATE DISPLAY MANUFACTURER.
- SIMILAR MOUNTING HARDWARE FROM PEERLESS WILL BE CONSIDERED AS EQUAL.
- INSTALL DISPLAY AND MOUNT SO TOP OF DISPLAY IS 2" BELOW CEILING.



MEI PROJECT NO. 202297

**MEI morrissey engineering inc**  
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