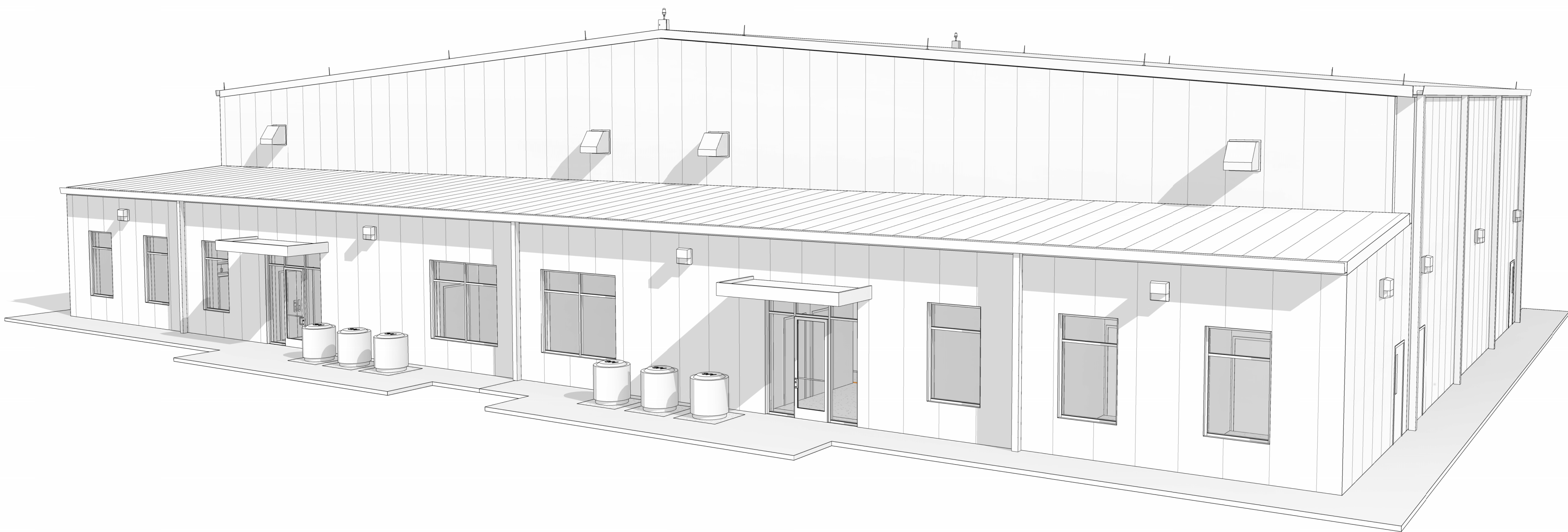




Schedule 1: 2-Unit Box Hangar

Lumberton, NC
28358

100% Construction Documents
January 17, 2025



Schedule 1:
2-Unit Box Hangar

Lumberton, NC 28358



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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE

SCHEDULE 1
COVER SHEET

SHEET NUMBER
G-000

SHEET INDEX
SCHEDULE 1: 2-UNIT BOX HANGAR

GENERAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	G-000	SCHEDULE 1 COVER SHEET
		01/17/2025	G-001	SCHEDULE 1 SHEET INDEX
		01/17/2025	G-002	GENERAL NOTES
		01/17/2025	G-003	PARTITION DETAILS
		01/17/2025	G-004	APPENDIX B
		01/17/2025	LS-101	LIFE SAFETY PLAN

CIVIL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	GA-001	CONSTRUCTION SAFETY PLAN (SCHEDULE 1)
		01/17/2025	GA-101	CONSTRUCTION PHASING PLAN (SCHEDULE 1)
		01/17/2025	VA-101	SURVEY CONTROL PLAN (SCHEDULE 1)
		01/17/2025	CA-101	EXISTING CONDITIONS AND REMOVAL PLAN (SCHEDULE 1)
		01/17/2025	CA-111	SITE LAYOUT PAVING AND MARKING PLAN (SCHEDULE 1)
		01/17/2025	CA-121	GRADING AND DRAINAGE PLAN (SCHEDULE 1)
		01/17/2025	CA-140	SEDIMENTATION & EROSION CONTROL PLAN - 1 (SCHEDULE 1)
		01/17/2025	CA-141	SEDIMENTATION & EROSION CONTROL PLAN - 2 (SCHEDULE 1)
		01/17/2025	CA-161	UTILITY PLAN (SCHEDULE 1)
		01/17/2025	CA-221	DRAINAGE PROFILES (SCHEDULE 1)
		01/17/2025	CA-401	TYPICAL PAVEMENT SECTIONS (SCHEDULE 1)
		01/17/2025	CA-510	PAVING DETAILS (SCHEDULE 1)
		01/17/2025	CA-520	DRAINAGE DETAILS (SCHEDULE 1)
		01/17/2025	CA-540	SEDIMENTATION & EROSION CONTROL DETAILS - 1 (SCHEDULE 1)
		01/17/2025	CA-541	SEDIMENTATION & EROSION CONTROL DETAILS - 2 (SCHEDULE 1)

STRUCTURAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	S-001	GENERAL NOTES
		01/17/2025	S-002	ABBREVIATIONS AND SYMBOL LEGEND
		01/17/2025	S-101	FOUNDATION PLAN
		01/17/2025	S-301	PEMB SECTIONS AND DETAILS
		01/17/2025	S-302	PEMB PIER DETAILS

ARCHITECTURAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	A-101	FIRST FLOOR PLAN
		01/17/2025	A-111	FIRST FLOOR CEILING PLAN
		01/17/2025	A-121	ROOF PLAN
		01/17/2025	A-201	BUILDING ELEVATIONS
		01/17/2025	A-301	BUILDING SECTIONS
		01/17/2025	A-311	WALL SECTIONS
		01/17/2025	A-321	SECTION DETAILS
		01/17/2025	A-401	ENLARGED PLANS
		01/17/2025	A-410	ENLARGED PLANS - ADD ALTERNATES
		01/17/2025	A-411	ENLARGED RESTROOM PLAN AND ELEVATIONS
		01/17/2025	A-412	ENLARGED CEILING PLANS - ADD ALTERNATES
		01/17/2025	A-501	PLAN DETAILS
		01/17/2025	A-601	DOOR SCHEDULE
		01/17/2025	A-602	WINDOW TYPES
		01/17/2025	A-701	FINISH PLAN

PLUMBING

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	P-001	PLUMBING LEGEND, SCHEDULES, AND DETAILS
		01/17/2025	P-101	PLUMBING PLANS
		01/17/2025	P-401	ENLARGED PLUMBING- BASE BID
		01/17/2025	P-402	ENLARGED PLUMBING- ALTERNATE BID

MECHANICAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	M-001	MECHANICAL LEGEND, NOTES AND ENERGY SCHEDULE
		01/17/2025	M-101	MECHANICAL PLAN
		01/17/2025	M-102	MECHANICAL ROOF
		01/17/2025	M-401	ENLARGED MECHANICAL PLANS
		01/17/2025	M-402	ENLARGED MECHANICAL PLANS- ADD ALTERNATE
		01/17/2025	M-601	MECHANICAL SCHEDULES
		01/17/2025	M-701	MECHANICAL CONTROL DIAGRAMS

ELECTRICAL

REV.	CURRENT REVISION DATE	ORIGINAL ISSUANCE DATE	SHEET NO.	SHEET NAME
		01/17/2025	E-001	ELECTRICAL NOTES, LEGENDS AND SCHEDULES
		01/17/2025	E-101	ELECTRICAL BASE BID PLAN
		01/17/2025	E-102	ELECTRICAL POWER PLAN ALTERNATE AL-01
		01/17/2025	E-103	ELECTRICAL ENLARGED POWER PLANS ALTERNATE ALT-02
		01/17/2025	E-111	ELECTRICAL BASE BID LIGHTING PLAN
		01/17/2025	E-112	ELECTRICAL ALTERNATE ALT-01 LIGHTING PLANS
		01/17/2025	E-113	ELECTRICAL ENLARED LIGHTING PLANS
		01/17/2025	E-501	ELECTRICAL DETAILS
		01/17/2025	E-502	ELECTRICAL DETAILS
		01/17/2025	E-601	ELECTRICAL PANEL SCHEDULE BASE BID
		01/17/2025	E-602	ELECTRICAL PANEL SCHEDULES ALTERNATE ALT-01
		01/17/2025	E-701	ELECTRICAL RISER



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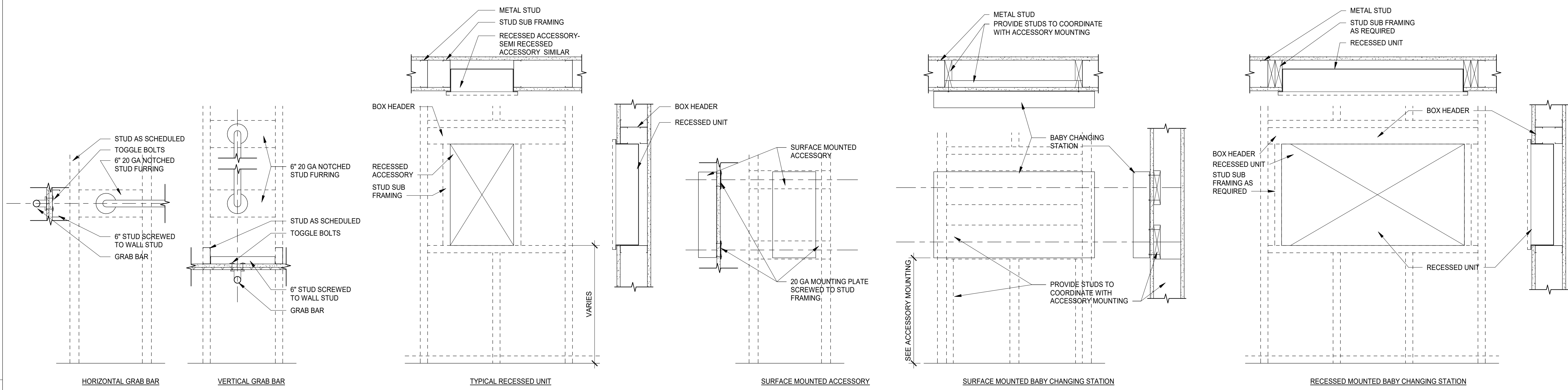
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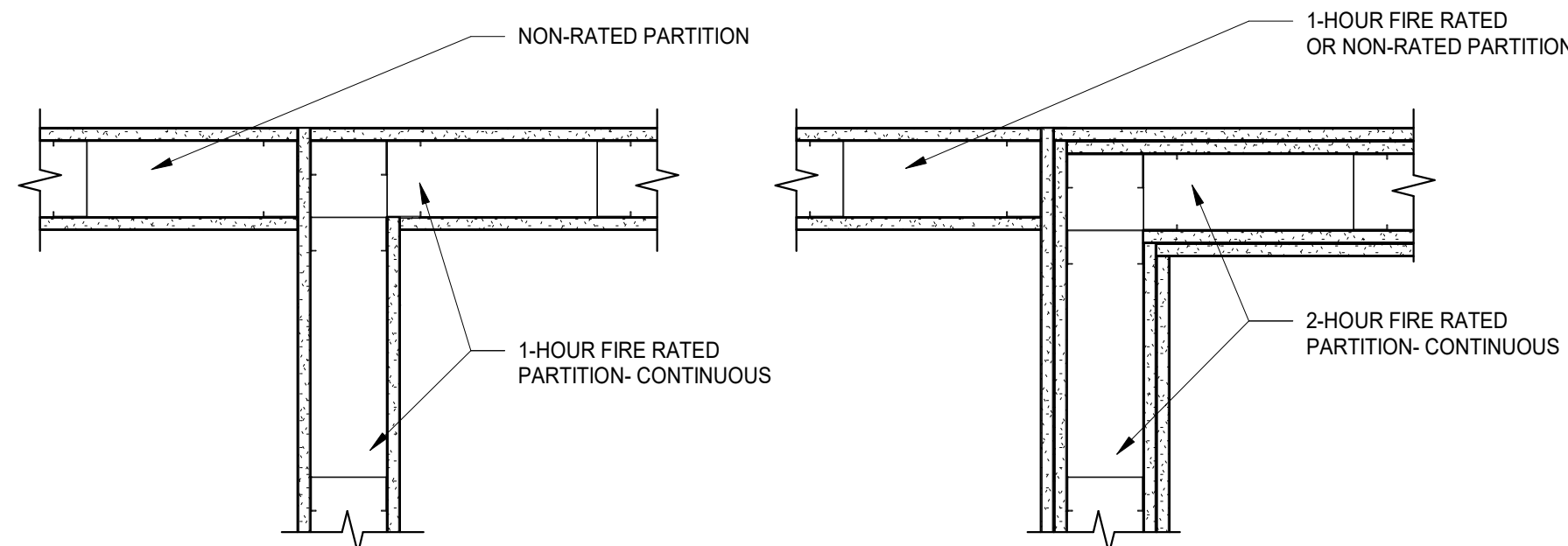
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PROJECT NUMBER 2024
SHEET TITLE

SCHEDULE 1
SHEET INDEX

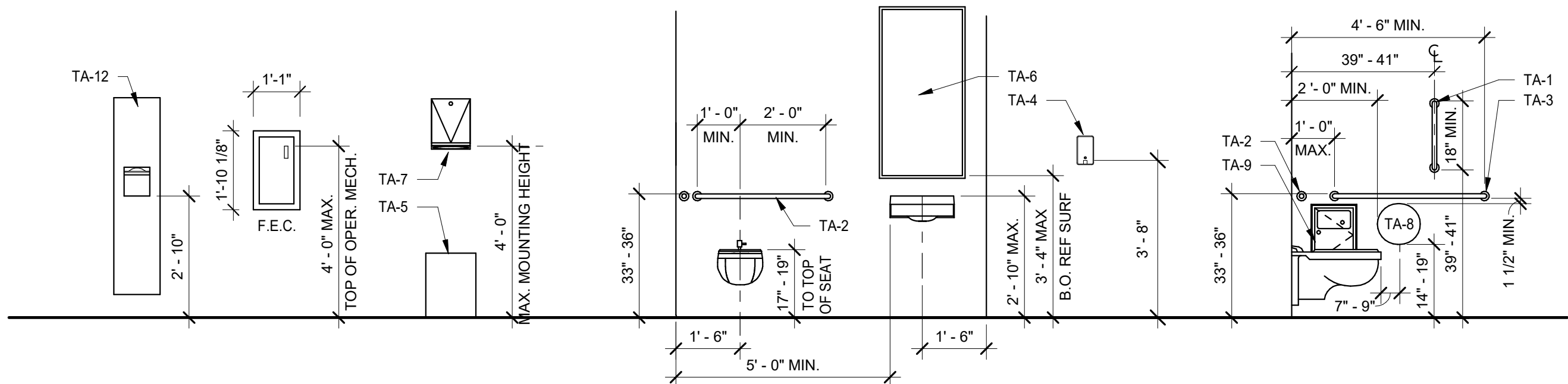
SHEET NUMBER
G-001



16 ACCESSORY MOUNTING DETAILS
1" = 1'-0"



11 RATED INTERSECTION DETAILS
1 1/2" = 1'-0"



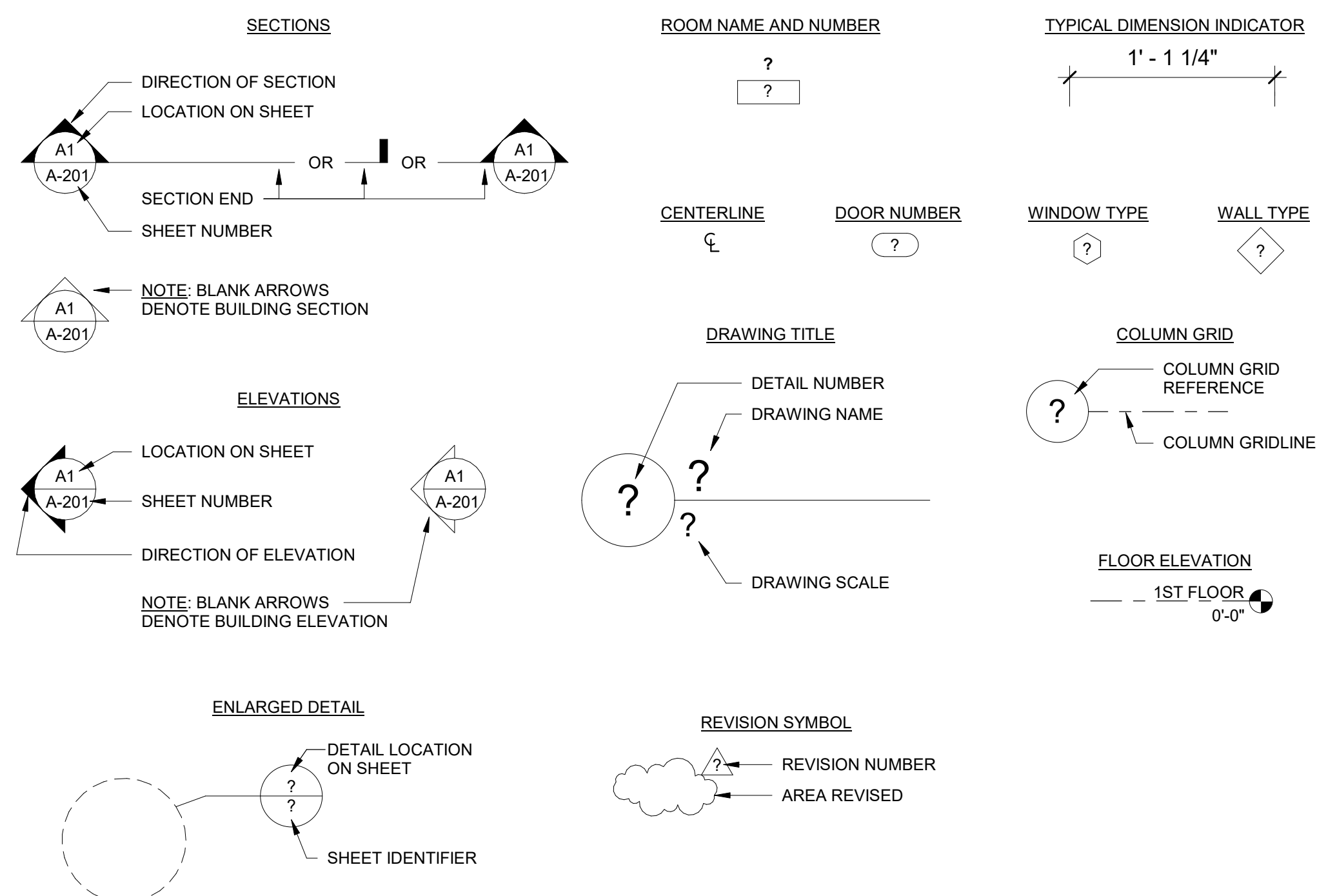
Typical Mounting Heights
N.T.S.

PLAN AND SECTION			ELEVATION		
	EARTH		PLASTER, CEMENT, SAND, GROUT		BRICK
	POROUS FILL (STONE OR GRAVEL)		STEEL, IRON		GLASS
	ROCK		ALUMINUM		CONCRETE / PLASTER / STUCCO
	LIGHTWEIGHT CONCRETE (OR CONCRETE FILL)		WOOD (FINISH)		SHINGLES / SIDING
	STRUCTURAL CONCRETE (CAST IN PLACE, ETC.)		WOOD (ROUGH)		GYPSUM WALL BOARD
	BRICK (COMMON OR FACE)		WOOD BLOCKING		CARPET AND PAD
	CONC. MASONRY UNITS (C.M.U.)		PLYWOOD		

(NOT ALL MATERIALS APPLICABLE)

8 MATERIAL LEGEND
N.T.S.

9 MATERIAL LEGEND
1/8" = 1'-0"



3 GRAPHIC SYMBOLS
N.T.S.

SYMBOLS USED AS ABBREVIATIONS:

\angle	ANGLE	LB./LB.	POUND/POUNDS
C	CENTERLINE	#	PLUS OR MINUS
O	DIAMETER (ROUND)	W/	WITH
#	NUMBER	W/O	WITHOUT

ABBREVIATIONS:			
A/C	AIR CONDITION(ING)	MAINT	MAINTENANCE
ADMIN	ADMINISTRATION	MATL	MATERIAL
AFF	ABOVE FINISHED FLOOR	MAX	MAXIMUM
ALT	ALTERNATE	MECH	MECHANICAL
ALUM	ALUMINUM	MEZZ	MEZZANINE
APPROX	APPROXIMATELY	MFG	MANUFACTURING
ARCH	ARCHITECT(URAL)	MFR	MANUFACTURER
AUTO	AUTOMATIC	MIN	MINIMUM
AUX	AUXILIARY	MISC	MISCELLANEOUS
AV	AUDIO/VISUAL	MO	MASONRY OPENING
BITUM	BITUMINOUS	MR	MOISTURE RESISTANT
BL	BUILDING LINE	MTD	MOUNTED
BLDG	BUILDING	MTG	MOUNTING
BN	BULL NOSE	MTL	METAL
BOS	BOTTOM OF STEEL	N	NORTH
BOT	BOTTOM	NIC	NOT IN CONTRACT
CAB	CABINET	NOM	NOMINAL
CJ	CONTROL JOINT	NON COMB	NON-COMBUSTIBLE
CL	CENTER LINE	NTS	NOT TO SCALE
CLG	CEILING	OC	ON CENTER
CLG HT	CEILING HEIGHT	OD	OUTSIDE DIAMETER
CLO	CLOSET	OPP	OPPOSITE
CLR	CLEARANCE	OPT	OPTION(AL)
CMU	CONCRETE MASONRY UNIT	PCF	POUNDS PER CUBIC FEET
COL	COLUMN	PLAM	PLASTIC LAMINATE
CONC	CONCRETE	PLF	POUNDS PER LINEAR FEET
CONF	CONFERENCE	PLYWD	PLYWOOD
CONT	CONTINUE	PNL	PANEL
CORR	CORROD	PR	PAIR
CU FT	CUBIC FOOT	PREFAB	PREFABRICATED
CU YD	CUBIC YARD	PREFIN	PREFINISH
DEMO	DEMOLISH	PRKG	PARKING
DEPT	DEPARTMENT	PSF	POUNDS PER SQUARE FOOT
DET	DETAIL	PSI	POUNDS PER SQUARE INCH
DF	DRINKING FOUNTAIN	PT	PAINT, POST-TENSIONED, PRE-TREATED
DIA	DIAMETER	PVC	POLYVINYL CHLORIDE (PLASTIC)
DIAG	DIAGONAL	QTR	QUARTER
DIM	DIMENSION	QTY	QUANTITY
DIV	DIVISION	R	RADIUS, RISER
DS	DOWNSPOUT	RCP	REFLECTED CEILING PLAN
E	EAST	RD	ROOF DRAIN
EA	EACH	REF	REFRIGERATOR, REFERENCE
EIFS	EXTERIOR INSULATION & FINISH SYSTEM	REOD	REQUIRED
EJ	EXPANSION JOINT	RL	ROOF LEADER
EL	ELEVATION	RM	ROOM
ELEC	ELECTRICAL	RO	ROUGH OPENING
ELEV	ELEVATOR	ROW	RIGHT OF WAY
ENCL	ENCLOSE(D)	S	SOUTH
EOS	EDGE OF SLAB	SC	SOLID CORE
EQ	EQUAL	SD	STORM DRAIN
EQUIP	EQUIPMENT	SECT	SECTION
EWC	ELECTRIC WATER COOLER	SF	SQUARE FEET
EXIST	EXISTING	SIM	SIMILAR
EXP JT	EXPANSION JOINT	SPEC	SPECIFICATION
EXT	EXTERIOR	SPKR	SPEAKER
EXT	FACE TO FACE	SQ	SQUARE
FD	FLOOR DRAIN	SS	STAINLESS STEEL
FE	FIRE EXTINGUISHER	STD	STANDARD
FEC	FIRE EXTINGUISHER CABINET	STOR	STORAGE
FF EL	FINISH FLOOR ELEVATION	SUSP	SUSPENDED
FHC	FIRE HOSE CABINET	SYS	SYSTEM
FIN FLR	FINISHED FLOOR	SY	SYSTEM
FLR	FLOOR, FILLER	TEL	TELEPHONE
FOC	FACE OF CURB	TEMP	TEMPORARY
FOF	FACE OF FINISH	TFF	TOP OF FINISH FLOOR
FOM	FACE OF MASONRY	THK	THICKNESS
FOS	FACE OF SLAB	THRU	THROUGH
FOW	FACE OF WALL	TO	TOP OF
FT	FOOT, FEET	TOB	TOP OF BEAM
FTG	FOOTING	TOC	TOP OF CONCRETE, CURB
FURN	FURNISH, FURNITURE	TOF	TOP OF FOOTING
GA	GAGE	TOJ	TOP OF JOIST
GALV	GALVANIZED	TOM	TOP OF MASONRY
GC	GENERAL CONTRACTOR	TOP	TOP OF PARAPET
GYP BD	GYPSUM BOARD	TOS	TOP OF SLAB
GYP PLAS	GYPSUM PLASTER	TOW	TOP OF WALL
HC	HANDICAP	TRTD	TREATED
HD	HEAVY DUTY	TV	TELEVISION
HDWD	HARDWOOD	TYP	TYPICAL
HDWR	HARDWARE	UL	UNDERWRITERS LABORATORIES
HM	HOLLOW METAL	UNO	UNLESS NOTED OTHERWISE
HORIZ	HORIZONTAL	VERT	VERTICAL
HT	HEIGHT	VEST	VESTIBULE
HVAC	HEATING, VENTILATION & AIR CONDITIONING	VIF	VERIFY IN FIELD
ID	INSIDE DIAMETER	W	WEST, WIDE
INCL	INCLUDE(D), (ING)	W/	WITH
INFO	INFORMATION	W/O	WITHOUT
INSUL	INSULATION	WW	WALL TO WALL
INT	INTERIOR	WC	WATER CLOSET
JAN CLO	JANITOR CLOSET	WD	WOOD
KIT	KITCHEN	WP	WORKING POINT, WATERPROOFING
KO	KNOCKOUT	WR	WATER REPELLENT
LAB	LABORATORY	WT	WEIGHT
LAM	LAMINATE	WWF	WELDED WIRE FABRIC
LAU	LAUNDRY	YD	YARD
LAV	LAVATORY		
LF	LINEAR FEET		
LVR	LOUVER		

10 STANDARD ABBREVIATIONS
1 1/2" = 1'-0"

16	17	18	19	20
11	12	13	14	15
6	7	8	9	10
1	2	3	4	5

NOTES:
1. WHEN LESS THAN ALL TWENTY (20) DETAIL ZONES ARE UTILIZED OR WHEN ZONES ARE COMBINED, DETAIL NUMBERS WILL NOT BE CONSECUTIVE.
2. THE ZONE IN WHICH THE LOWER LEFT HAND CORNER OF A DETAIL IS LOCATED DETERMINES THE NUMBER OF THE DETAIL.

5 NUMBERING SYSTEM
N.T.S.



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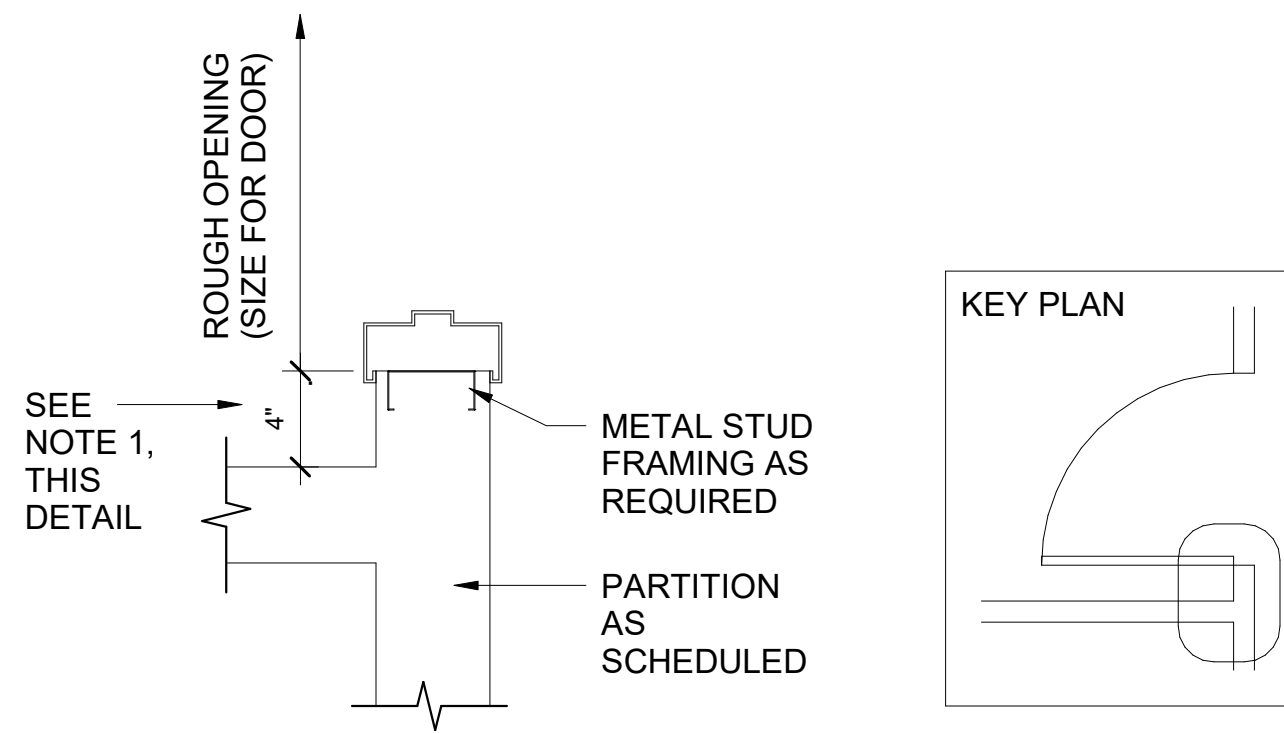
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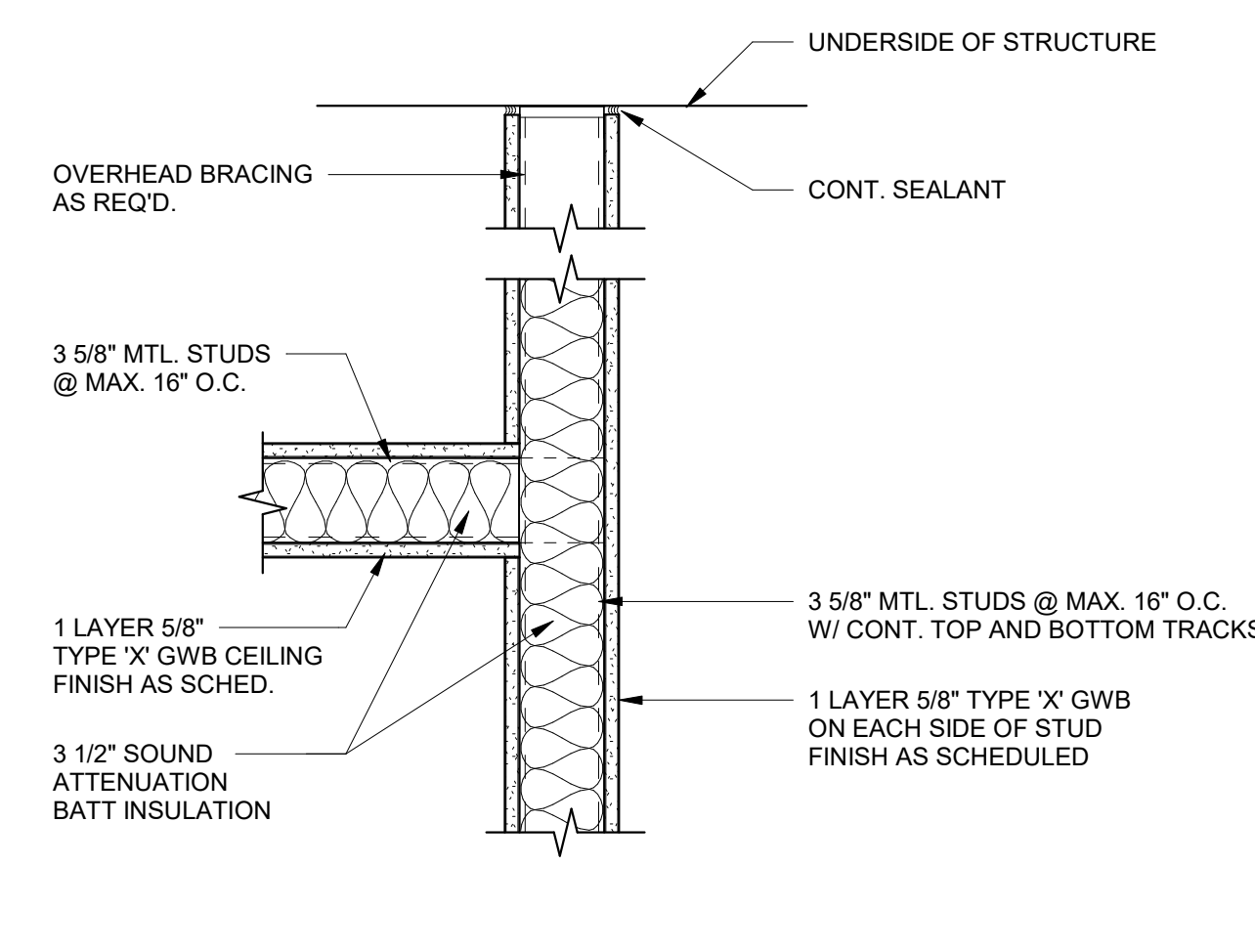
GENERAL NOTES

SHEET NUMBER
G-002

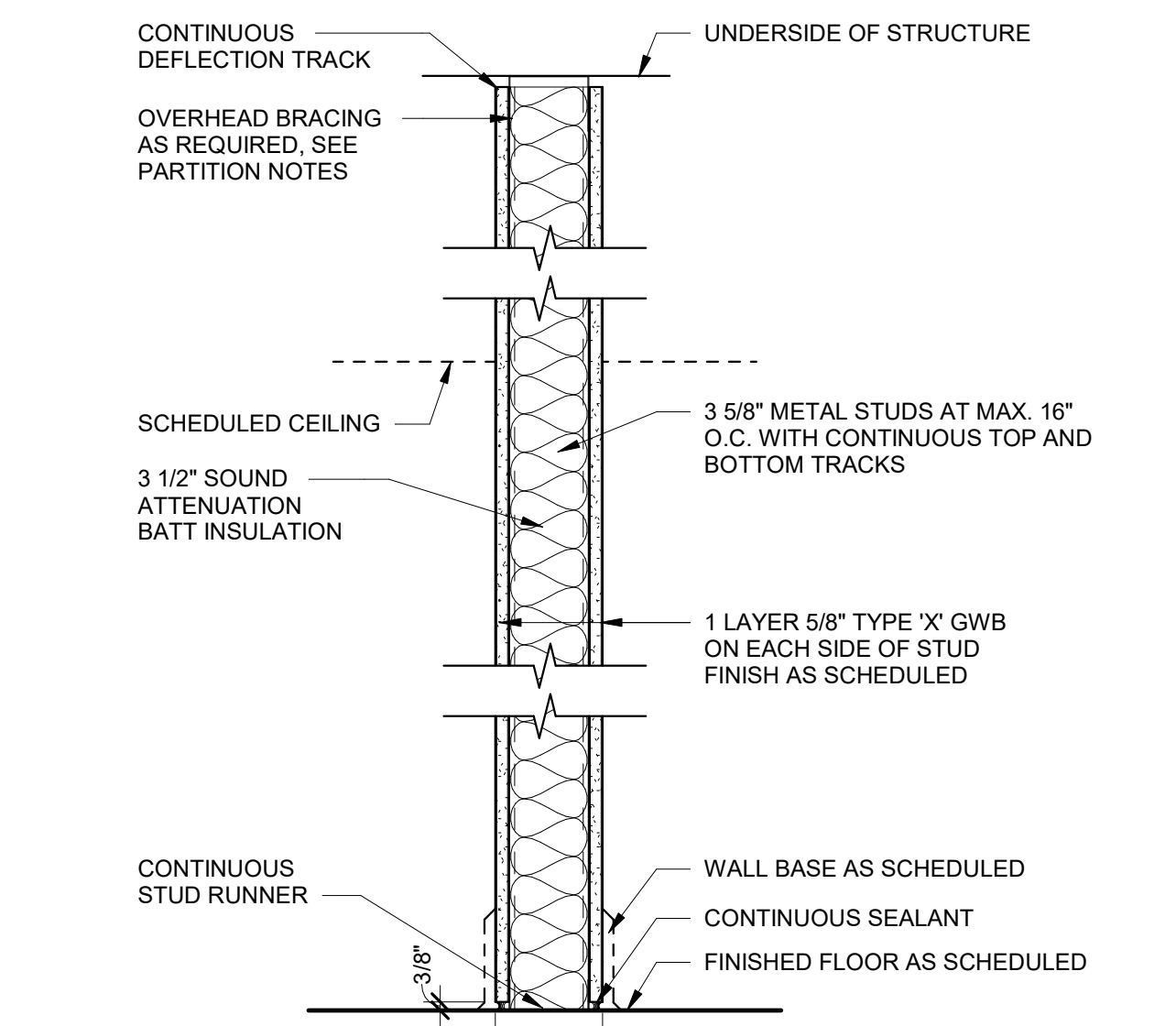
NOTES:
1. GC TO COORDINATE JAMB DEPTH WITH WIDTH OF TRIM.
2. GC TO COORDINATE DOOR LOCATION W/ JAMB DETAIL, TYP.



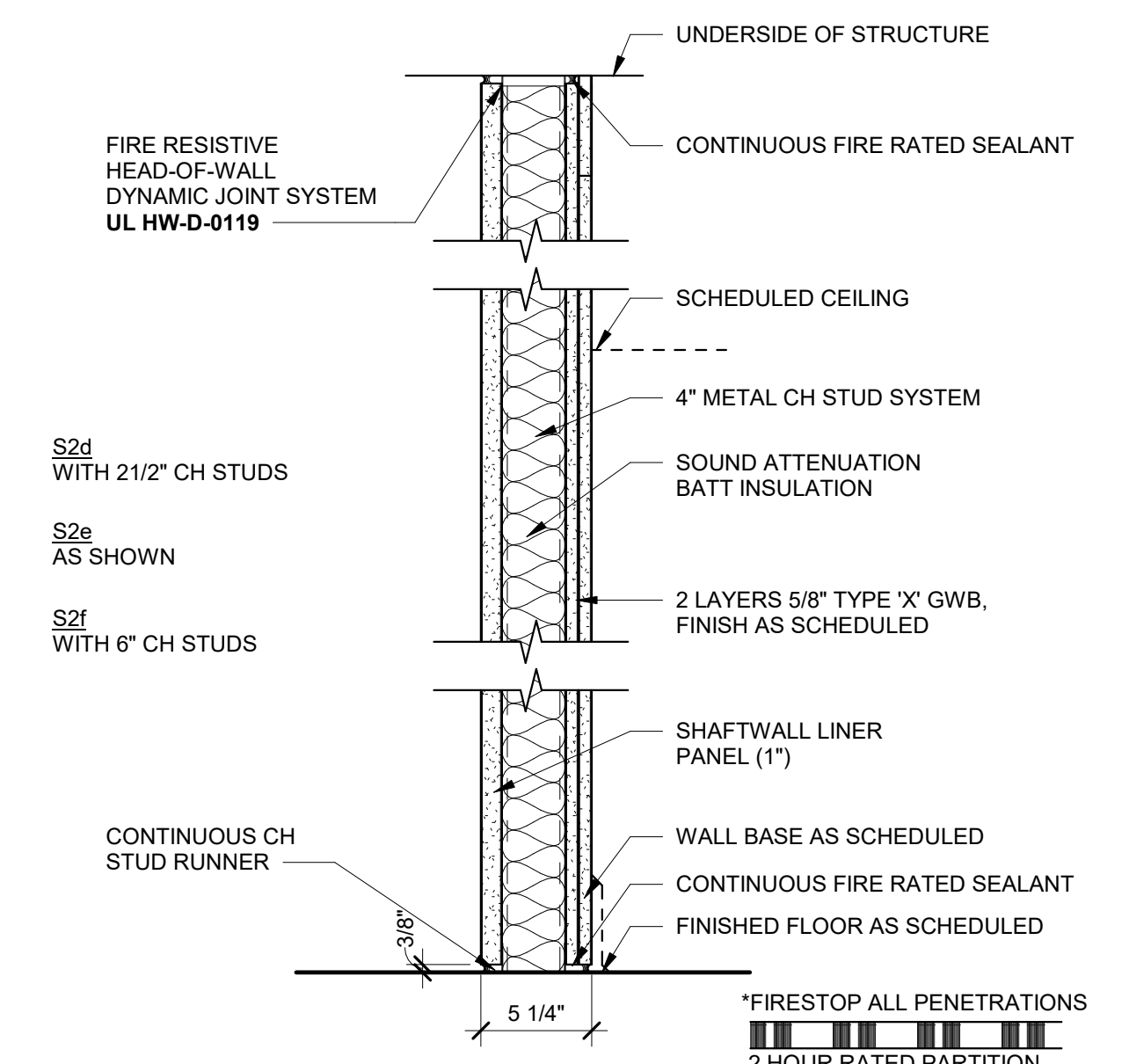
16 TYPICAL DOOR OFFSET DETAIL
1 1/2" = 1'-0"



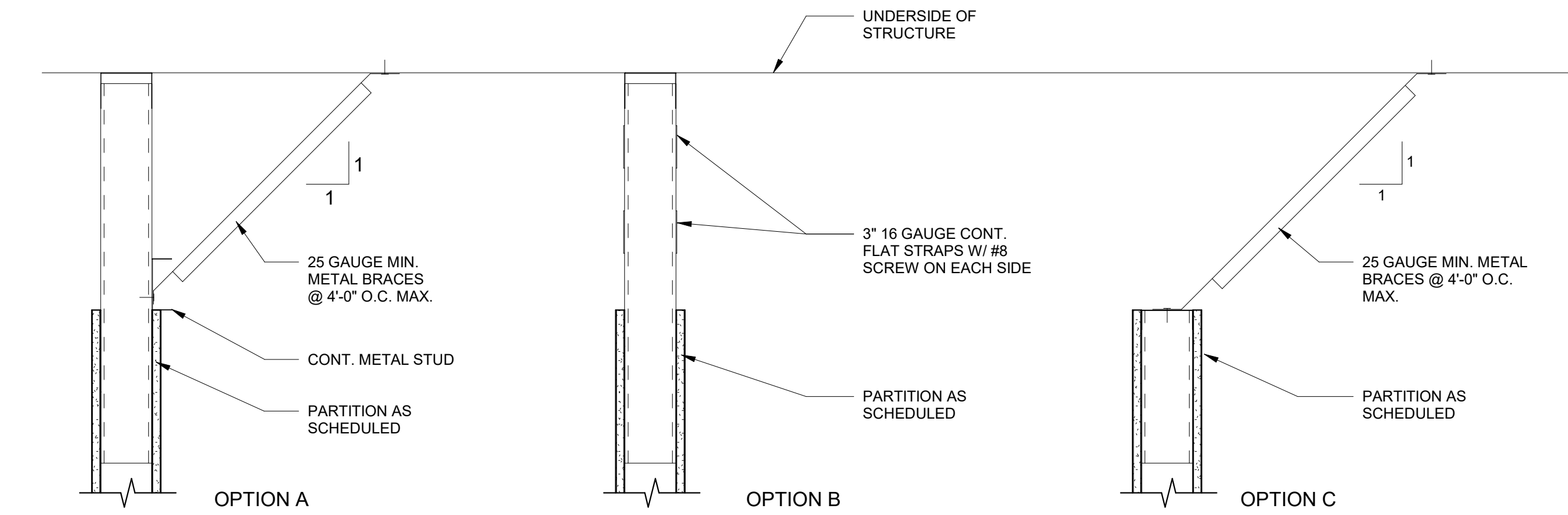
11 TYPICAL GWB CEILING DETAIL
1 1/2" = 1'-0"



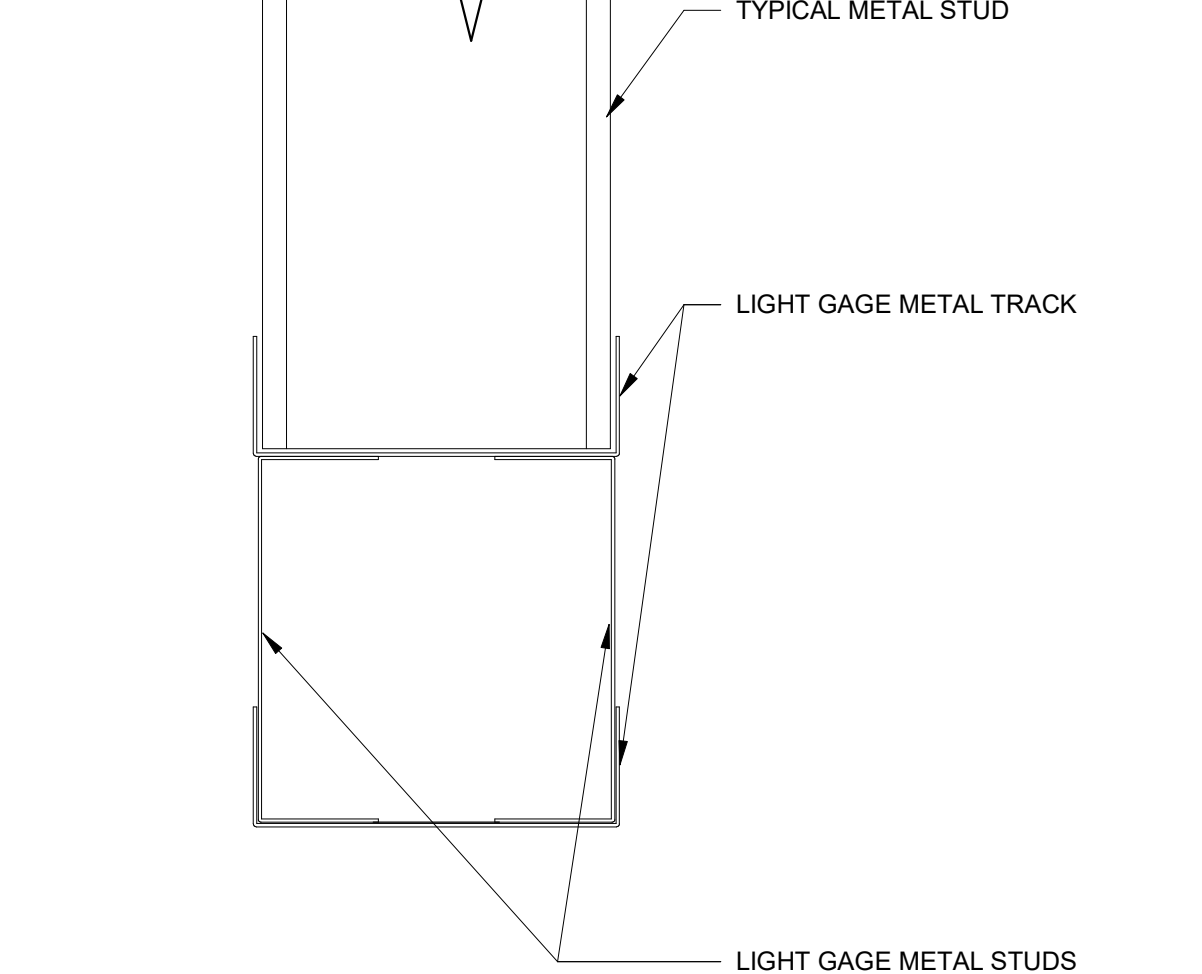
D1a FIRE RATING 0 HR ASSEMBLY NO. N/A STC N/A STC TEST # N/A



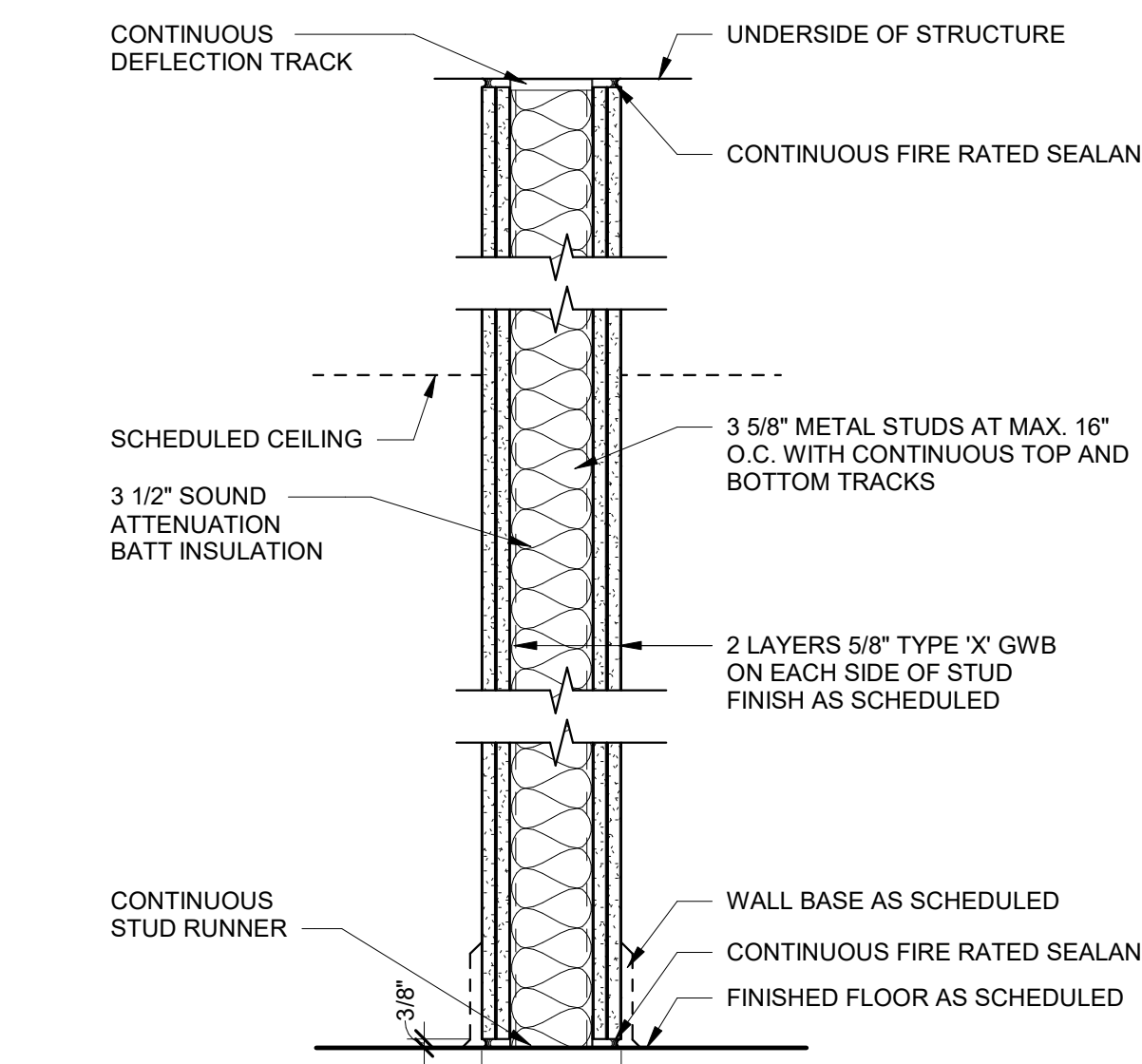
S2e FIRE RATING 2 HR ASSEMBLY NO. U415 STC N/A STC TEST # N/A



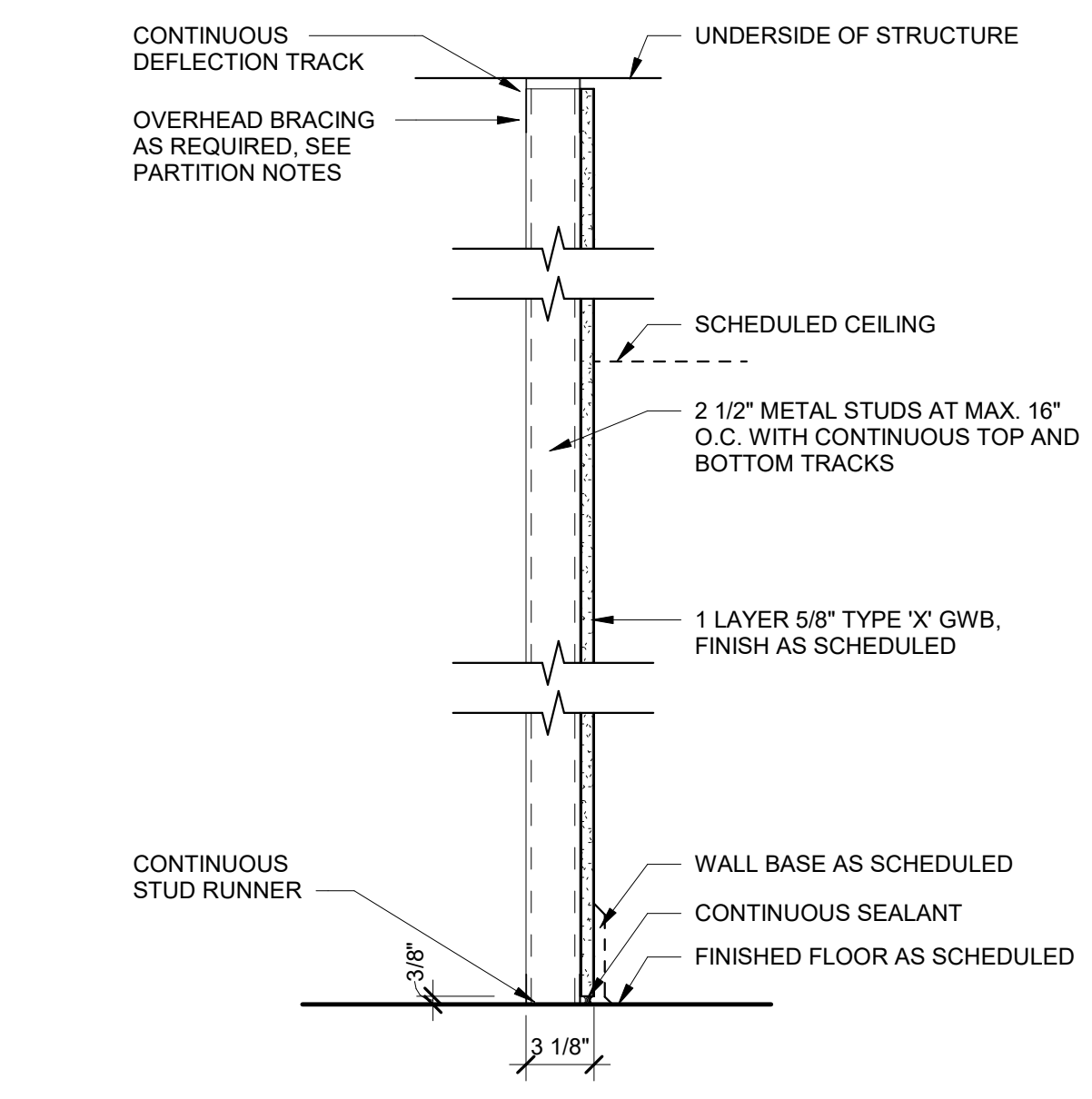
17 ABOVE-CEILING STUD TERMINATION DETAILS
1 1/2" = 1'-0"



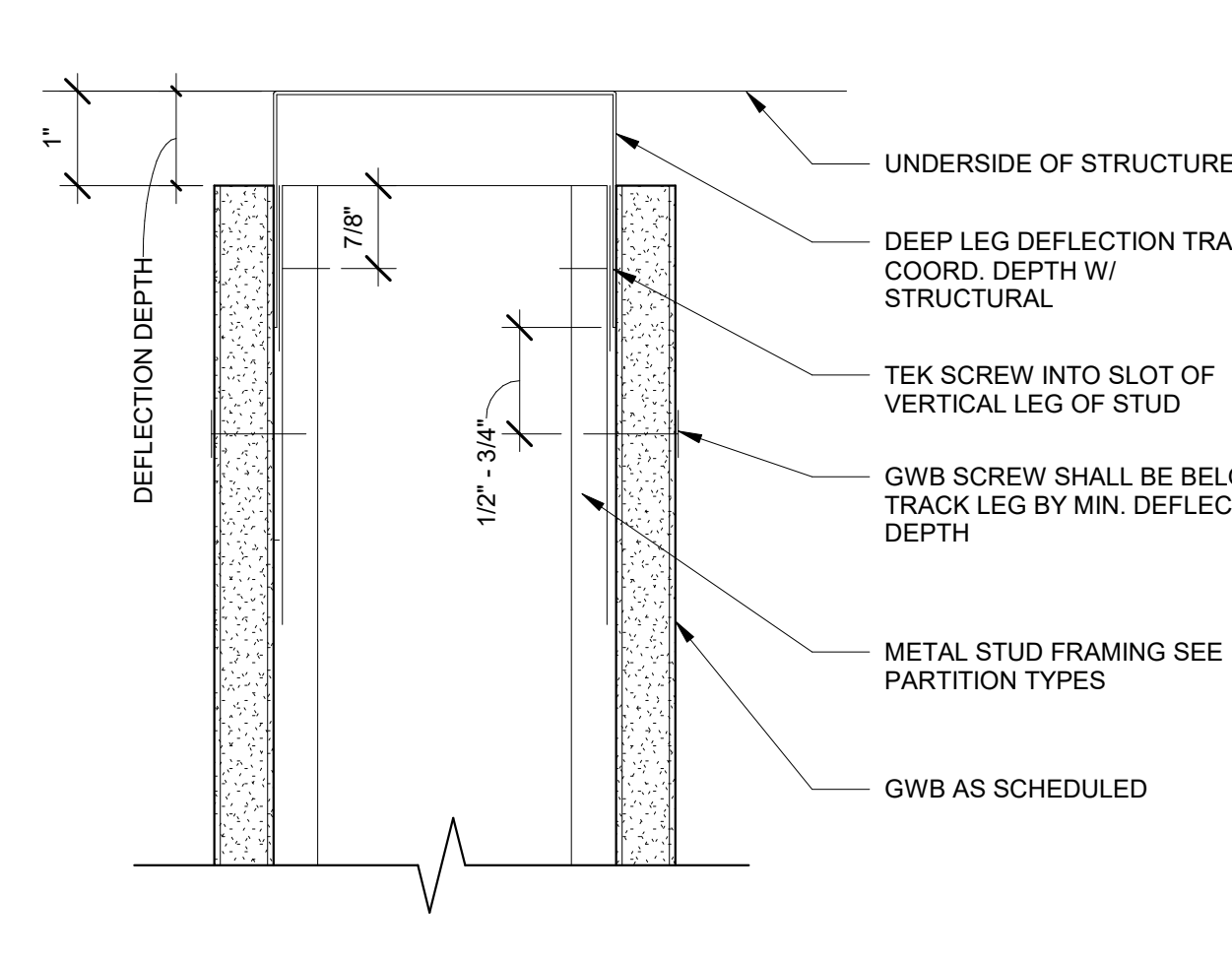
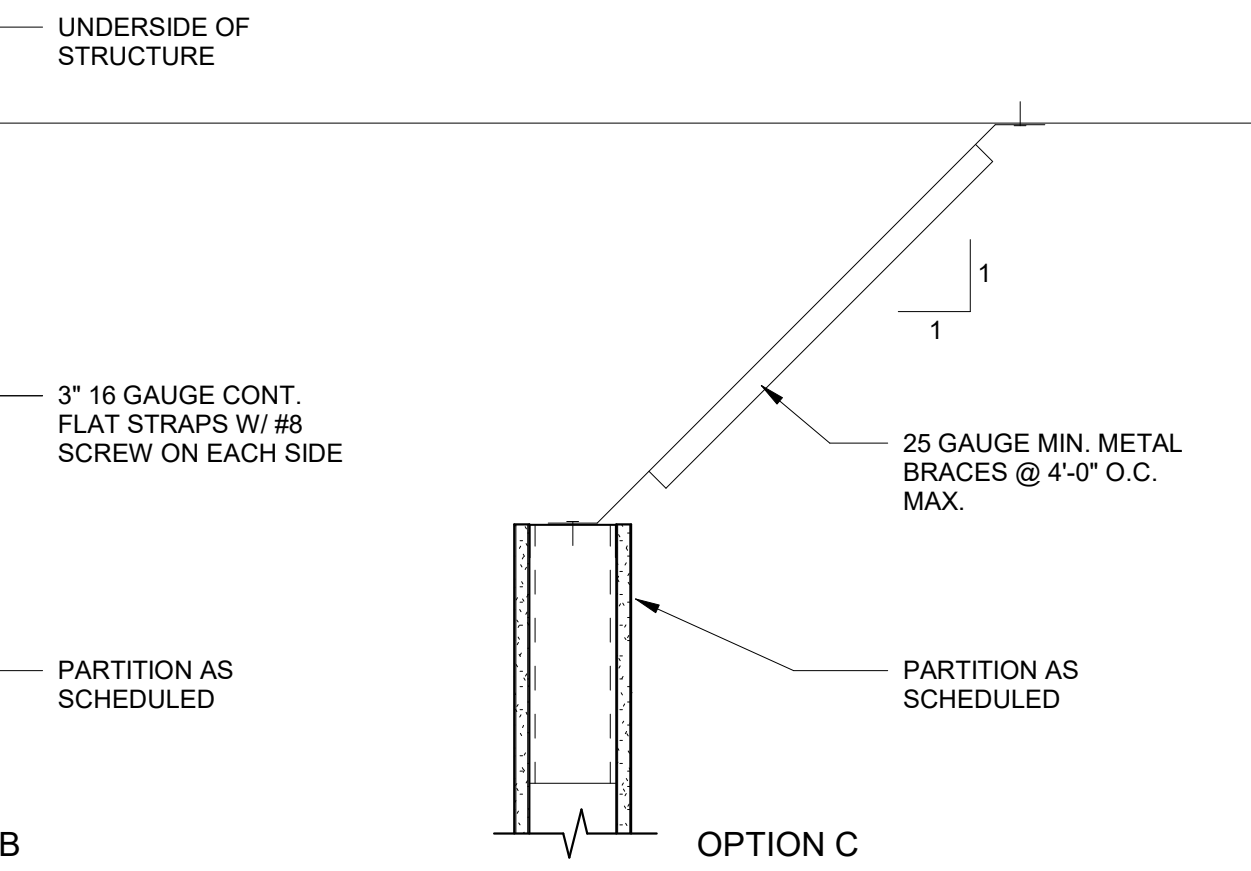
12 TYPICAL STUD HEADER DETAIL
6" = 1'-0"



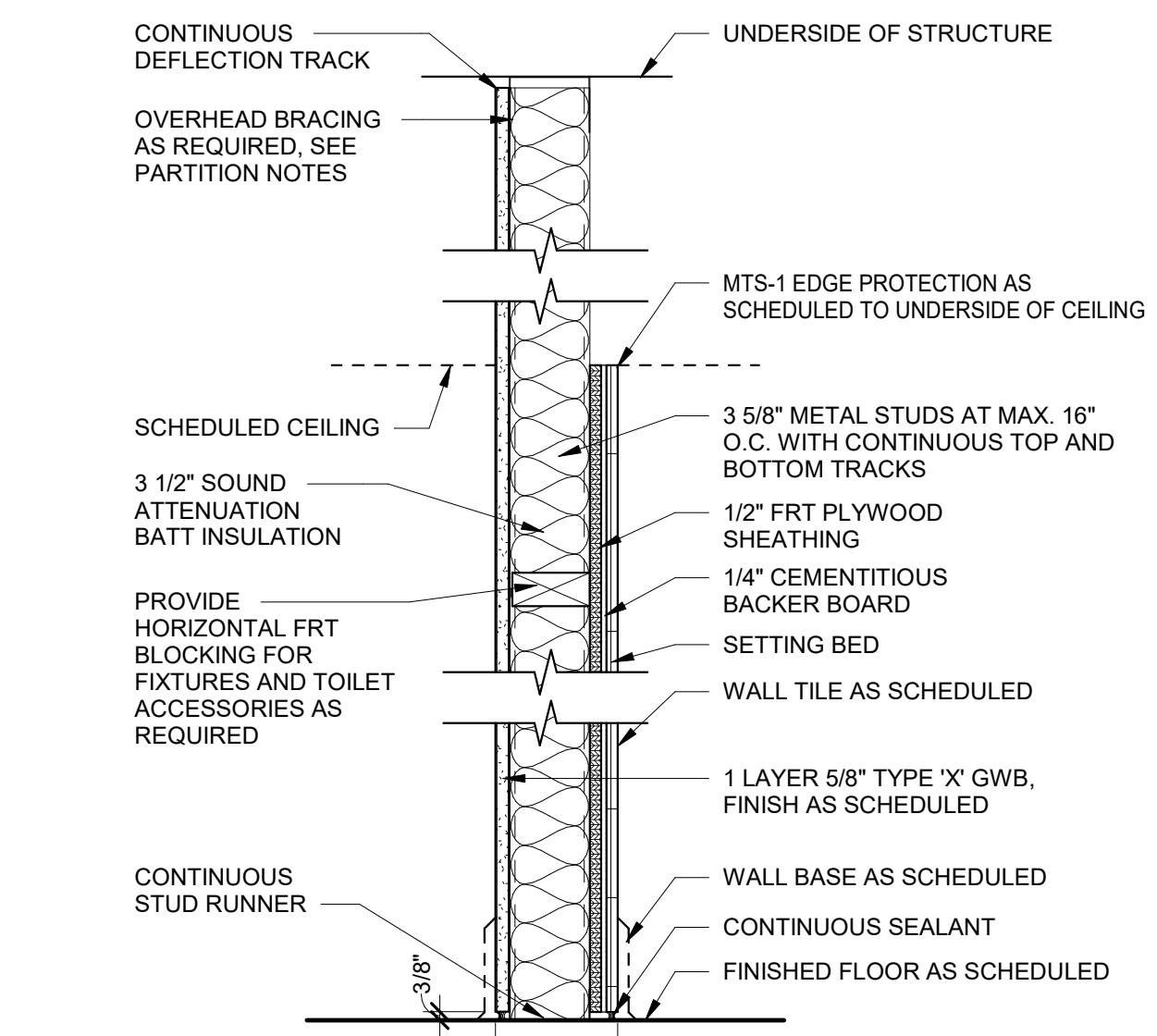
D1e FIRE RATING 2 HR ASSEMBLY NO. U419 STC N/A STC TEST # N/A



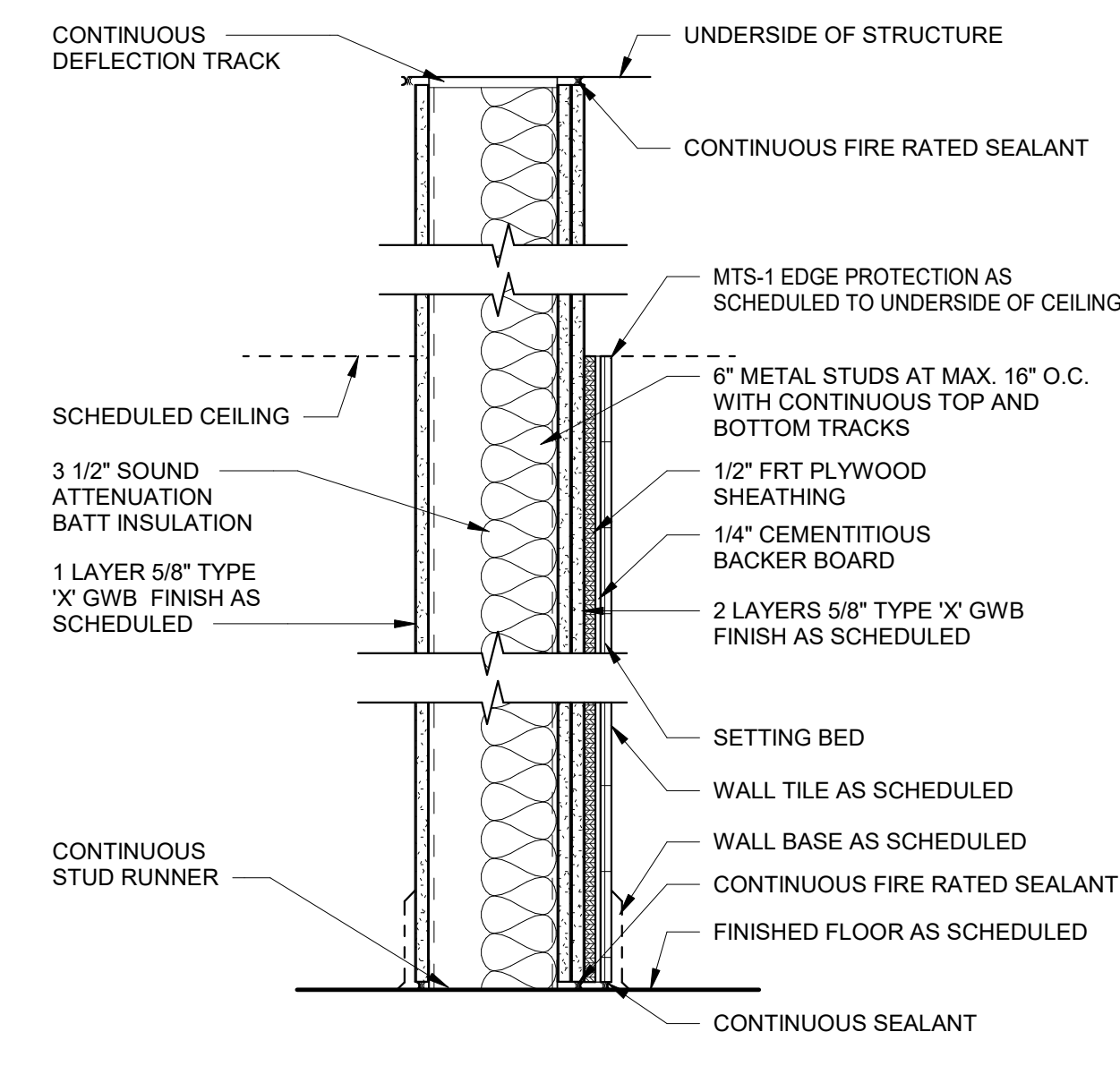
C4a FIRE RATING 0 HR ASSEMBLY NO. N/A STC N/A STC TEST # N/A



13 DEFLECTION TRACK DETAIL
6" = 1'-0"



D3a FIRE RATING 0 HR ASSEMBLY NO. N/A STC N/A STC TEST # N/A



E2e FIRE RATING 0 HR ASSEMBLY NO. N/A STC N/A STC TEST # N/A

PARTITION NOTES

- ALL GYPSUM WALL BOARD TO BE 5/8" TYPE 'X' U.N.O.
- UNLESS NOTED OTHERWISE, DIMENSIONS ARE TO COLUMN CENTER LINE, FACE OF GWB/STUD PARTITIONS, FACE OF MASONRY AND CONCRETE WALLS AND FACE OF EXISTING WALLS.
- HOLD TOP OF PARTITION DOWN 1/2" FROM TOP RUNNER WHERE PARTITION EXTENDS TO STRUCTURE ABOVE.
- ALL CAULK AND SEALANT SHALL BE CONTINUOUS.
- ALL CMU WALLS AND SOUND RATED PARTITIONS SHALL EXTEND FROM FINISHED FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF STRUCTURE OR DECK AND BE ENTIRELY SEALED OFF U.N.O. ALL PENETRATIONS SUCH AS PIPING, CONDUITS, DUCTS, ETC. IN SUCH SEALED OFF WALLS OR PARTITIONS SHALL IN THEMSELVES BE PACKED AND SEALED OFF ALONG THE PERIMETER OF PENETRATION.
- ALL FIRE AND/OR SMOKE PARTITIONS SHALL EXTEND FROM FINISH FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF THE STRUCTURE OR DECK, AND BE ENTIRELY SEALED OFF WITH SAFEGUARDING MATERIAL ONLY. SAFEGUARDING MATERIAL SHALL BE HELD IN PLACE WITH A FIRE STOPPING MATERIAL ON BOTH SIDES, SUCH AS GYPSUM WALL BOARD OR UL LISTED FIRE PROOFING MATERIAL AND ASSEMBLY.
- ALL SOUND RATED (STC) WALLS OR PARTITIONS SHALL HAVE CLOSURE GASKETS AT TOP, BOTTOM, AND SIDES WHERE A SOUND LEAK WOULD OTHERWISE EXIST.
- STRUCTURAL STUDS (20 GA. MINIMUM) SHALL BE USED WHERE ANY NON-SELF-SUPPORTING WALL HUNG FIXTURES, EQUIPMENT, OR CABINETRY OCCUR AND SHALL EXTEND FROM FLOOR TO STRUCTURE ABOVE. SEE TYPICAL SUPPORT DETAILS FOR WALL MOUNTED ITEMS.
- ALL METAL STUD FRAMED PARTITIONS SHALL BE BRACED ABOVE FINISHED CEILINGS. BRACING SHALL BE AS FOLLOWS:
ATTACH A 3 5/8" OR 6" METAL STUD HORIZONTALLY AND CONTINUOUSLY TO PARTITION 8" MAXIMUM ABOVE FINISHED CEILING. PROVIDE 3 5/8" OR 6" METAL STUD KICKERS AT 45 DEGREE ANGLE TO STRUCTURE AT 4'-0" O.C.
- KICKERS SHALL HAVE CLIP ANGLES (14 GA MIN) WITH TWO 1/4" ANCHORS. ALL KICKER LOCATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES PERFORMING WORK ABOVE CEILING.
- DO NOT FASTEN TOP RUNNER TO STUDS; CRIMP RUNNER ON BOTH SIDES OF STUD TO STABILIZE STUD.
- SEE ROOM FINISH SCHEDULE FOR ADDITIONAL REQUIREMENTS FOR FINISH MATERIALS SUCH AS TILE, PANELING, ETC. WHICH ARE NOT SHOWN OR INCLUDED IN THESE PARTITION TYPES.
- WHERE PARTITION TYPES CHANGE IN A STRAIGHT RUN, THE EXPOSED OR MOST IMPORTANT EXPOSED FINISHED FACE, AND NOT NECESSARILY THE CENTERLINE OF STUDS, SHALL ALIGN. REVIEW CASES WHICH ARE UNCLEAR WITH THE ARCHITECT PRIOR TO CONSTRUCTION OF SUCH PARTITIONS.

- WHERE ITEMS ARE RECESSED INTO RATED PARTITIONS, PROVIDE BOXING, INSULATION, ETC. AS REQUIRED TO MAINTAIN THE FIRE RESISTANCE RATING.
- PURSUANT TO NCSCB 803 ALL WOOD PRODUCTS SHALL BE FIRE-RETARDANT TREATED (FRT), INCLUDING BUT NOT LIMITED TO WOOD BLOCKING, CABINETRY AND MILLWORK SUBSTRATES, AND EXPOSED PLYWOOD PANELS
- WHERE SPECIALTY WALL PANEL SYSTEMS ARE TO BE APPLIED TO PARTITIONS, SHIMMING MAY BE REQUIRED TO ENSURE A FLUSH AND PLUMB INSTALLATION.
- ELECTRICAL AND TELECOM ROOMS: IN ADDITION TO GWB AS SCHEDULED, WRAP ENTIRE ROOM IN 3/4" VIRGIN, VOID-FREE, FIRE-RATED PLYWOOD, FROM 0'-0" AFF TO 8'-6" AFF. LAG-BOLTED TO WALLS AT METAL STUD LOCATIONS. PAINT ALL WALL SURFACES AS SCHEDULED.
- ALL CLOSETS ARE TO RECEIVE WOOD SHELVING AND ROD U.N.O.
- PROVIDE FR SOLID WOOD BLOCKING IN WALL AS REQUIRED FOR MOUNTING OF CABINETS, GRAB BARS, TVS, TOILET PARTITIONS AND ACCESSORIES, ETC. SEE PLANS AND ELEVATIONS FOR LOCATIONS OF WALL-MOUNTED BUILT-INS AND EQUIPMENT.
- USE MOISTURE RESISTANT GWB AT ALL WET AREAS.
- SEE STRUCTURAL FOR SHEAR WALL LOCATIONS AND INFORMATION. GC TO COORDINATE SHEATHING SIDE AND EXTENTS WITH ARCHITECTURAL AND STRUCTURAL.
- ALL OUTSIDE CORNERS AT GWB PARTITIONS SHALL RECEIVE CORNERGUARDS, SEE SPECIFICATIONS.

METAL STUD GAUGES	LOCATION	LENGTH	GAUGE
	PARTITION	UP TO 8'-0"	20 GAUGE
	PARTITION	UP TO 10'-0"	18 GAUGE
	PARTITION	UP TO 12'-0"	16 GAUGE
	BULKHEAD	GREATER THAN 12'-0"	SEE STRUCTURAL DRAWINGS.
	BULKHEAD	UP TO 6'-0"	25 GAUGE
	BULKHEAD	UP TO 8'-0"	20 GAUGE
	BULKHEAD	GREATER THAN 8'-0"	SEE SPECIFIC DETAILS AND/OR STRUCT. DRWS.
	SOFFIT	UP TO 4'-0"	25 GAUGE
	SOFFIT	UP TO 8'-0"	25 GAUGE. SEE SPECIFIC DETAILS FOR SUPPORT
	SOFFIT	GREATER THAN 8'-0"	SUSPENDED SYSTEM MUST BE USED
	DOOR / WINDOW HEAD AND JAMB	U.N.O.	16 GA (2 STUDS AT ALL LOCATIONS)

NOTE: U.L. AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.

NOTE: U.L. AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.



Schedule 1: 2-Unit Box Hangar

Lumberton, NC 28358



PO BOX 5510
CHARLOTTE, NC 28299
(704) 331-5747
www.twgarchitects.com
NC Cert. No.: 51140

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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE

PARTITION DETAILS

SHEET NUMBER

G-003

2018 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: LBT Box Hangars with Office
Address: [number, street, city, state, zip]
Owner/Authorized Agent: [name, phone number, email]
Owned By: ☒ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City: [city] ☒ County: Robeson ☐ State

CONTACT: [name, firm, phone number, email]

Discipline	Firm	Name	Lic. #	Phone	E-Mail
[add as required]					

(Others should include firms and individuals such as roos, precast, pre-engineered, interior designers, etc.)

CODE CLASSIFICATION SUMMARY

2018 NC Code For: ☒ New Construction ☐ Addition ☒ Renovation
☐ 1st Time Interior ☐ Shell/Core ☐ Phased Construction
2018 NC Existing Building Code: ☐ Prescriptive ☐ Repair ☐ Chapter 14
Alteration: ☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use
Constructed: [date] Original Occupancy (Ch. 3): [type]
Renovated: [date] Current Occupancy (Ch. 3): [type]
Risk Category (T 1604.5): Current: ☐ I ☐ II ☐ III ☐ IV
Proposed: ☒ I ☐ II ☐ III ☐ IV

BASIC BUILDING DATA

Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV-A ☐ V-A

2018 NC Administrative Code and Policies

Appendix B for Building

(Check all that apply) ☐ I-B ☒ II-B ☐ III-B ☐ IV-B ☐ V-B
Sprinklers: ☐ No ☒ Partial
Standpipes: ☒ No ☐ Yes
Class (Identify below): ☒ Yes (Identify type below): ☐ NFPA 13 ☐ NFPA 13D
☐ I ☐ II ☐ III ☐ IV
Type: (Identify below): ☐ Wet ☐ Dry
Fire District: ☒ No ☐ Yes (Primary)
SI Required: ☒ No ☐ Yes

GROSS BUILDING AREA

Story	Existing SF	New SF	Remo/Alter SF	Sub-Total
[cdt]		11,050		
Total		11,050		11,050

ALLOWABLE AREA

Primary Occupancy Classification: (Select One)
Assembly: ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business: ☒ B (Secondary Occupancy)
Educational: ☐ E
Factory: ☐ F-1 Moderate ☐ F-2 Low
Hazardous: ☐ H-1 Detonate ☐ H-2 ☐ H-3 ☐ H-4 ☐ H-5
☐ Delagrate ☐ Combust ☐ Health ☐ HPM
Institutional: ☐ I-1 Condition: ☐ 1 ☐ 2
☐ I-2 Condition: ☐ 1 ☐ 2
☐ I-3 Condition: ☐ 1 ☐ 2 ☐ 3 ☐ 4
☐ I-4
Mercantile: ☐ M
Residential: ☐ R-1 ☐ R-2 ☐ R-3
Storage: ☐ S-1 Moderate (Hangar) ☐ S-2 Low ☐ High-Piled
☐ Parking Garage: ☐ Open ☐ Closed ☐ Repair Garage
Utility and Miscellaneous:
Accessory Occupancy Classification(s):
Incidental Uses (T 509):

2018 NC Administrative Code and Policies

Appendix B for Building

Special Uses (Chapter 4 - List Code Sections):
Special Provisions (Chapter 5 - List Code Sections):
Mixed Occupancy: ☐ No ☒ Yes - Separation: 1 Hour Exception: [list]
☐ Non-Separated Use (508.3): The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.
☒ Separated Use (508.4) - See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

[copy and paste this and change if required]

Actual Area of Occupancy A (8,466)

Actual Area of Occupancy B (2,584)

Allowable Area of Occupancy A (70,000)

Allowable Area of Occupancy B (23,000)

0.2333: 1.00

Story	Description & Use	(A) Bldg. Area per Story (Actual)	(B) Table 506.2 Area	(C) Area for Frontage Increase ¹³	(D) Allowable Area per Story or Unlimited ¹³
1	SI Hangar	11,040	17,500	Not Used	

1 Frontage area increases from Section 506.3 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = (F)
b. Total Building Perimeter (P)
c. Ratio (F/P) = (F/P)
d. W = Minimum width of public way = (W)
e. Percent of frontage increase 1 = 100 | F/P ÷ 0.25 | x W/30 = (%)
2 Unlimited area applicable under conditions of Section 507.
3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
4 The maximum area of open parking garages must comply with Table 406.5.4
5 Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT	Allowable (Table 503)	Shown on Plans	Code Reference
Building Height in Feet (Table 504.3)	55'-0"	32'-8"	
Building Height in Stories (Table 504.4)	2	1	

2018 NC Administrative Code and Policies

Appendix B for Building

1 Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4.
2 The maximum height of air traffic control towers must comply with Table 412.3.1
3 The maximum height of open parking garages must comply with Table 406.5.4

ACCESSIBLE DWELLING UNITS - (SECTION 1107)

Total Units	Accessible Units Required	Accessible Units Provided	Type A Units Required	Type A Units Provided	Type B Units Required	Type B Units Provided	Total Accessible Units Provided

ACCESSIBLE PARKING - (SECTION 1106)

Lot or Parking Area	Total Number of Parking Spaces		Total Number of Accessible Spaces		Accessible Space Summary				
	Required	Provided	Required	Provided	Regular	Van with 15' Access Aisle	Van with 8' Access Aisle	Van with 5' Access Aisle	
[lot]									
Total									

2018 NC Administrative Code and Policies

Appendix B for Building

FIRE PROTECTION REQUIREMENTS

Building Element	Fire Separation Distance (feet)	Rating		Design # for Rated Assembly	Design # for Rated Penetration	Design # for Rated Joints
		Required	* Provided (w/... reduction)			
Struc. Frame, incl. cols, girders, trusses	0 hr					
Bearing Walls						
Exterior						
North	>30'	0 hr				
East	>30'	0 hr				
West	>30'	0 hr				
South	>30'	0 hr				
Interior	>30'	0 hr				
Nonbearing Walls and Partitions						
Exterior Walls						
North	>30'	0 hr				
East	>30'	0 hr				
West	>30'	0 hr				
South	>30'	0 hr				
Interior walls and partitions	0 hr					
Floor Const., incl. supp. beams & joists	0 hr					
Floor Ceiling Assembly	0 hr					
Column Supporting Floors	0 hr					
Roof Const., incl. supp. beams & joists	0 hr					
Roof Ceiling Assembly	0 hr					
Column Supporting Roof	0 hr					
Shaft Enclosures - Exit	N/A					
Shaft Enclosures - Other	N/A					
Corridor Separation	N/A					
Occupancy/Fire Barrier Separation	1 hr	2 hr		UL V433		
Party/Fire Wall Separation	N/A					
Smoke Barrier Separation	N/A					
Smoke Partition	N/A					
Tenant/Dwelling Unit/ Sleeping Unit Sep.	N/A					
Incidental Use Separation	N/A					

* Indicate section number permitting reduction

2018 NC Administrative Code and Policies

Appendix B for Building

PERCENTAGE OF WALL OPENING CALCULATIONS

Fire Separation Distance (Feet from Property Lines)	Degree of Opening Protection (Table 705.8)	Allowable Area (%)	Actual Shown on Plans (%)
>30'-0"	NS	No Limit	-

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: ☐ No ☒ Yes
Exit Signs: ☐ No ☒ Yes
Fire Alarm: ☐ No ☒ Yes
Smoke Detection Systems: ☐ No ☒ Yes ☐ Partial
Carbon Monoxide Detection: ☒ No ☐ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: _____ LS-101
☒ Fire and/or smoke rated wall locations (Chapter 7)
☐ Assumed and real property line locations (if not on the site plan)
☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
☐ Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)
☐ Occupant loads for each area
☐ Exit access travel distances (1017)
☐ Common path of travel distances (1006.2.1 & 2006.3.2(1))
☐ Dead end lengths (1020.4)
☐ Clear exit widths for each exit door
☐ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
☐ Actual occupant load for each exit door
☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation and supporting construction for a fire barrier fire partition/smoke barrier.
☐ Location of doors with panic hardware (1010.1.10)
☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
☐ Location of doors equipped with hold-open devices
☐ Location of emergency escape windows (1030)
☐ The square footage of each fire area (202)
☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)

2018 NC Administrative Code and Policies

Appendix B for Building

PLUMBING FIXTURE REQUIREMENTS - (TABLE 2902.1)

[adjust per occupancy]
Use: S-1 (Aircraft Storage Hangar) - No requirement for Plumbing Fixtures
Use: B (Business) - 26 Occupants

Water Closets	Urinals	Lavatories	Showers / Tubs	Drinking Fountains	Other

2018 NC Administrative Code and Policies

Appendix B for Building

SPECIAL APPROVALS

	Male	Female	Male	Female	Regular	Accessible
Required	2		2		0	1
Provided	1	1	0	1	1	1

Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below)

2018 NC Administrative Code and Policies

Appendix B for Building

ENERGY SUMMARY

Size category, if oversized, state reason: _____
List equipment efficiencies: _____

Existing building envelope complies with code: ☐ No ☐ Yes (The remainder of this section is not applicable)
Exempt Building: ☐ No ☐ Yes (Provide Code or Statutory reference) _____
Climate Zone: ☐ 3A ☐ 4A ☐ 5A
Method of Compliance: Energy Code ☐ Performance ☐ Prescriptive
ASHRAE 90.1 ☐ Performance ☐ Prescriptive
(If "Other" specify source here) _____

THERMAL ENVELOPE (Prescriptive method only)

Roof/Ceiling Assembly (each fixture type)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Skylights in each assembly: _____
U-Value of skylight: _____
Total square footage of skylights in each assembly: _____

Exterior Walls (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Openings (windows or doors with glazing)
U-Value of assembly: _____
Solar heat gain coefficient: _____
Projection factor: _____
Door R-Values: _____

Walls below grade (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

2018 NC Administrative Code and Policies

Appendix B for Building

Floors over unconditioned space (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

Floors slab on grade
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Horizontal/Vertical requirement: _____
Slab Heated: _____

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors: Snow (Is) _____
Seismic (Is) _____
Live Loads: Roof _____ psf
Mezzanine _____ psf
Floor _____ psf
Ground Snow Load: _____ psf
Wind Load: Ultimate Wind Speed _____ mph (ASCE-7)
Exposure Category _____

SEISMIC DESIGN CATEGORY: ☐ A ☐ B ☐ C ☐ D
Provide the following Seismic Design Parameters:
Occupancy Category (Table 1604.5) ☐ I ☐ II ☐ III ☐ IV
Spectral Response Acceleration S_s _____ %g S₁ _____ %g
Site Classification (ASCE 7) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F
Data source: ☐ Field Test ☐ Presumptive ☐ Historical Data
Basic structural system ☐ Bearing Wall ☐ Dual w/Special Moment Frame
☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel

2018 NC Administrative Code and Policies

Appendix B for Building

Analysis Procedure: ☐ Moment Frame ☐ Inverted Pendulum ☐ Dynamic
☐ Simplified ☐ Equivalent Lateral Force
Architectural, Mechanical, Components anchored? ☐ Yes ☐ No
LATERAL DESIGN CONTROL: Earthquake ☐ Wind ☐
SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) _____ psf
Presumptive Bearing capacity _____ psf
Pile size, type, and capacity _____

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT
Thermal Zone
winter dry bulb: _____
summer dry bulb: _____
Interior design conditions
winter dry bulb: _____
summer dry bulb: _____
relative humidity: _____
Building heating load: _____
Building cooling load: _____
Mechanical Spacing Conditioning System
Unitary
description of unit: _____
heating efficiency: _____
cooling efficiency: _____
size category of unit: _____
Boiler
Size category, if oversized, state reason: _____
Chiller

2018 NC Administrative Code and Policies

Appendix B for Building

Size category, if oversized, state reason: _____
List equipment efficiencies: _____

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT
Method of Compliance: Energy Code ☐ Prescriptive ☐ Performance
ASHRAE 90.1 ☐ Prescriptive ☐ Performance
Lighting schedule (each fixture type)
lamp type required in fixture _____
number of lamps in fixture _____
ballast type used in the fixture _____
number of ballasts in the fixture _____
total wattage per fixture _____
total interior wattage specified vs. allowed (whole building or space by space) _____
total exterior wattage specified vs. allowed _____
Additional Efficiency Package Options
(When using the 2018 NEC/C: not required for ASHRAE 90.1)
☐ C406.2 More Efficient Mechanical Equipment
☐ C406.3 Reduced Lighting Power Density
☐ C406.4 Enhanced Direct Lighting Controls
☐ C406.5 On-Site Renewable Energy
☐ C406.6 Dedicated Outdoor Air System
☐ C406.7 Reduced Energy Use in Service Water Heating

2018 NC Administrative Code and Policies

Appendix B for Building



Section 1: Project Information
Energy Code: 2009 IECC
Project Title: Lumberton - LBT Box Hangar
Project Type: New Construction
Construction Site: _____ Owner/Agent: _____ Designer/Contractor: _____
Building Location (for weather data): Lumberton, North Carolina
Climate Zone: 3A
Vertical Glazing / Wall Area Pct.: 9%
Building Use, Activity Type(s): _____ Floor Area: 11050
1-Transportation : Nonresidential

Section 2: Envelope Assemblies and Requirements Checklist
Envelope ASSES. Design 5% better than code.
Component Name/Description Gross Area or perimeter Cavity Value Cont. R-Value Proposed U-factor Budget U-factor
Orientation: NORTH
Ext. Wall: Metal Building Wall, Single Layer Mineral Fiber (compressed at grt), [Bldg. Use 1 - Transportation] 3000 13.0 6.0 0.067 0.084
Orientation: EAST
Ext. Wall: Metal Building Wall, Single Layer Mineral Fiber (compressed at grt), [Bldg. Use 1 - Transportation] 1905 13.0 6.0 0.067 0.084
Window: Metal Frame, Thermal Break, Perf. Spec., Product ID na, SHGC 0.30, [Bldg. Use 1 - Transportation] (b) 31 --- --- 0.250 0.650
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Transportation] 72 --- --- 0.300 0.700
Orientation: SOUTH
Ext. Wall: Metal Building Wall, Single Layer Mineral Fiber (compressed at grt), [Bldg. Use 1 - Transportation] 3000 13.0 6.0 0.067 0.084
Window: Metal Frame, Thermal Break, Perf. Spec., Product ID na, SHGC 0.30, [Bldg. Use 1 - Transportation] (b) 391 --- --- 0.250 0.650
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Spec., Product ID na, SHGC 0.30, [Bldg. Use 1 - Transportation] (b) 172 --- --- 0.250 0.900
Orientation: WEST
Ext. Wall: Metal Building Wall, Single Layer Mineral Fiber (compressed at grt), [Bldg. Use 1 - Transportation] 1905 13.0 6.0 0.067 0.084
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Transportation] 75 --- --- 0.300 0.700
Orientation: UNSPECIFIED ORIENTATION
Floor: Unheated Slab-On-Grade, [Bldg. Use 1 - Transportation] 400 --- --- --- 0.055
Roof: Metal Building, Standing Seam, [Bldg. Use 1 - Transportation] 11050 19.0 11.0 0.038 0.055

- en Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
eo Penetration product performance must be certified in accordance with NFRC and requires supporting documentation.

Air Leakage, Component Certification, and Vapor Retarder Requirements:
☐ 1. All joints and penetrations are caulked, gasketed or covered with a moisture vapor-permeable wrapping material installed in accordance with the manufacturer's installation instructions.

☐ 2. Windows, doors, and skylights certified as meeting leakage requirements.
☐ 3. Component R-values & U-factors labeled as certified.
☐ 4. No roof insulation is installed on a suspended ceiling with removable ceiling panels.
☐ 5. Other components have supporting documentation for proposed U-factors.
☐ 6. Insulation installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation.
☐ 7. Stair, elevator shaft vents, and other outdoor air intake and exhaust openings in the building envelope are equipped with motorized dampers.
☐ 8. Cargo doors and loading dock doors are weather sealed.
☐ 9. Recessed lighting fixtures installed in the building envelope are Type IC listed as meeting ASTM E283, are sealed with gasket or caulk.
☐ 10. Building entrance doors have a vestibule equipped with self-closing devices.
Exceptions:
☐ Building entrances with revolving doors.
☐ Doors not intended to be used as a building entrance.
☐ Doors that open directly from a space less than 3000 sq. ft. in area.
☐ Doors used primarily to facilitate vehicular movement or materials handling and adjacent personnel doors.
☐ Doors opening directly from a sleeping/dwelling unit.

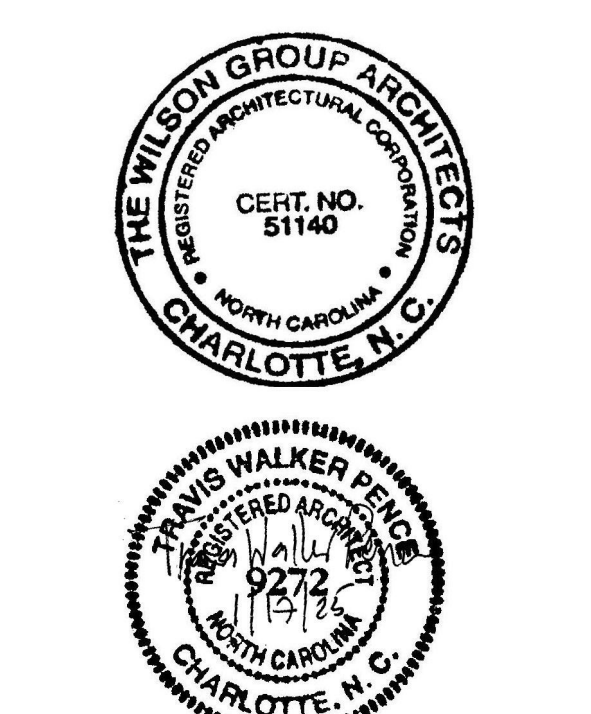
Section 3: Compliance Statement
Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 2009 IECC requirements in COMcheck-view and to comply with the mandatory requirements in the Requirements Checklist.
John H. Barker - Designer John H. Barker 11/07/2024
Name - Title Signature Date

DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE
APPENDIX B
SHEET NUMBER
G-004

Project Title: Lumberton - LBT Box Hangar
Data Filename: _____
Report date: 11/07/24
Page 2 of 2



Schedule 1:
2-Unit Box Hangar
Lumberton, NC 28358



PROJECT MANAGER | CIVIL ENGINEER
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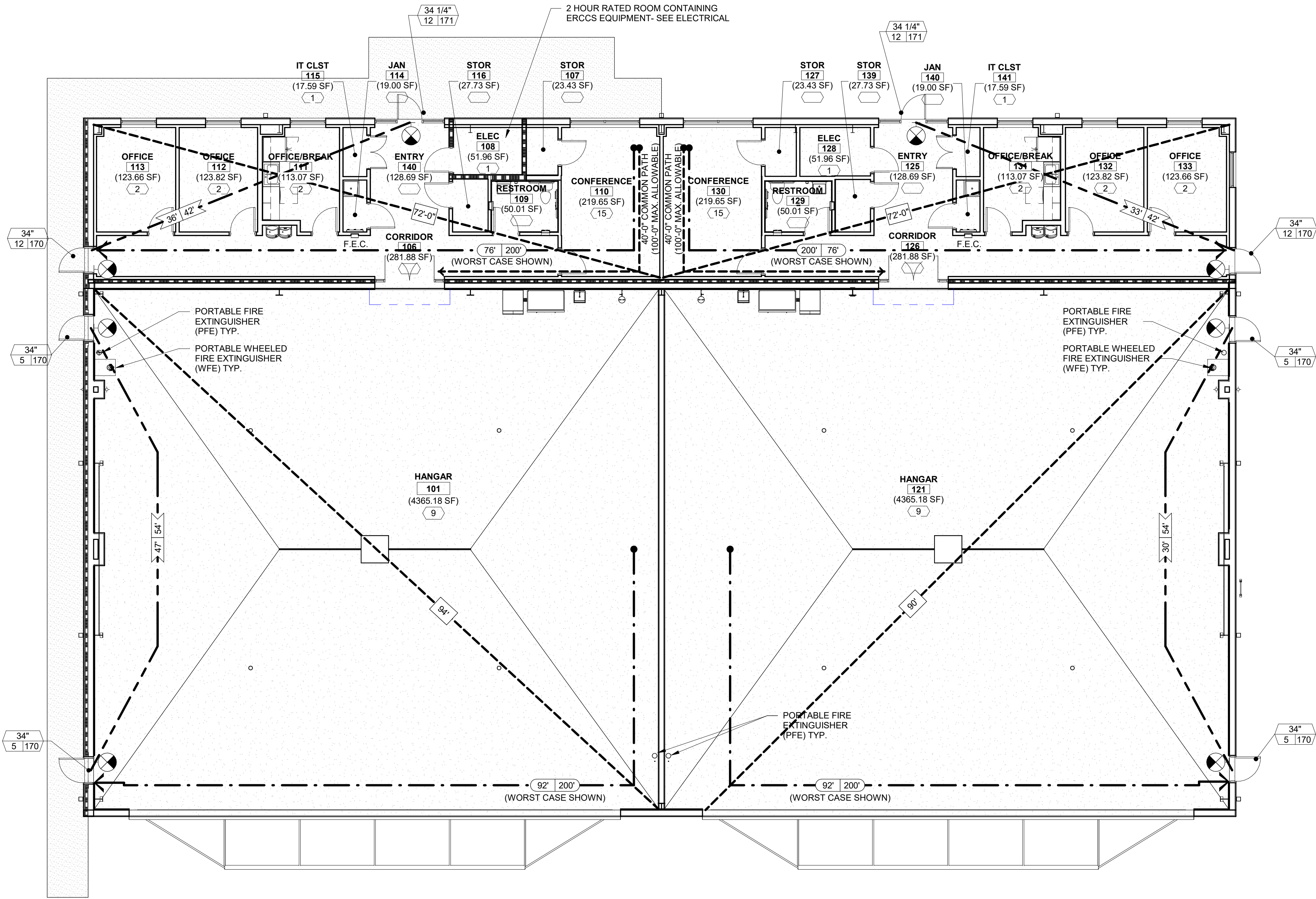
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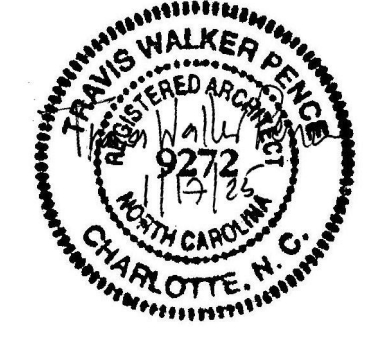
REVISIONS

LIFE SAFETY PLAN CALCULATIONS										
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	
ROOM NUMBER	ROOM NAME	OCCUPANCY TYPE	AREA	AREA PER OCCUPANT	ACTUAL OCCUPANTS (D/E)	STAIR INCHES/OCC	STAIR INCHES REQ (F'G)	OTHER INCHES/OCC	OTHER INCHES REQ (F'J)	
FLOOR LEVEL										
001	UNISEX RESTROOM		57.92 SF							
002	UNISEX RESTROOM		57.92 SF							
101	HANGAR BAY 1	AIRCRAFT AREA (GROSS)	4365.96 SF	500.00 SF	9			0.2	1.75'	
105	ENTRY	INCIDENTAL	130.87 SF	0.00 SF				0.2		
106	CORRIDOR	INCIDENTAL	285.68 SF	0.00 SF				0.2		
107	STOR	N/A	22.36 SF	0.00 SF				0.2		
108	ELEC	ACCESSORY STORAGE AREA- MECH ROOM (GROSS)	48.16 SF	300.00 SF	1			0.2	0.03'	
109	RESTROOM	N/A	50.01 SF	0.00 SF				0.2		
110	CONFERENCE	ASSEMBLY UNCONCENTRATED (TABLES AND CHAIRS)	217.52 SF	15.00 SF	15			0.2	2.90'	
111	OFFICE / BREAK	BUSINESS AREA (GROSS)	110.25 SF	100.00 SF	2			0.2	0.22'	
112	OFFICE	BUSINESS AREA (GROSS)	121.92 SF	100.00 SF	2			0.2	0.24'	
113	OFFICE	BUSINESS AREA (GROSS)	122.15 SF	100.00 SF	2			0.2	0.24'	
114	JAN	N/A	18.34 SF	0.00 SF				0.2		
115	IT	ACCESSORY STORAGE AREA- MECH ROOM (GROSS)	17.31 SF	300.00 SF	1			0.2	0.01'	
116	STOR	N/A	27.68 SF	0.00 SF				0.2		
121	HANGAR BAY 2	AIRCRAFT AREA (GROSS)	4365.96 SF	500.00 SF	9			0.2	1.75'	
125	ENTRY	INCIDENTAL	130.87 SF	0.00 SF				0.2		
126	CORRIDOR	INCIDENTAL	287.04 SF	0.00 SF				0.2		
127	STOR	N/A	22.58 SF	0.00 SF				0.2		
128	ELEC	ACCESSORY STORAGE AREA- MECH ROOM (GROSS)	50.88 SF	300.00 SF	1			0.2	0.03'	
129	RESTROOM	N/A	50.01 SF	0.00 SF				0.2		
130	CONFERENCE	ASSEMBLY UNCONCENTRATED (TABLES AND CHAIRS)	217.52 SF	15.00 SF	15			0.2	2.90'	
131	OFFICE / BREAK	BUSINESS AREA (GROSS)	110.24 SF	100.00 SF	2			0.2	0.22'	
132	OFFICE	BUSINESS AREA (GROSS)	121.92 SF	100.00 SF	2			0.2	0.24'	
133	OFFICE	BUSINESS AREA (GROSS)	122.15 SF	100.00 SF	2			0.2	0.24'	
139	STOR	N/A	27.46 SF	0.00 SF				0.2		
140	JAN	N/A	18.34 SF	0.00 SF				0.2		
141	IT	ACCESSORY STORAGE AREA- MECH ROOM (GROSS)	17.31 SF	300.00 SF	1			0.2	0.01'	
GRAND TOTALS					64		0.00'		10.80'	
					64		0.00'		10.80'	

LIFE SAFETY PLAN LEGEND	
ROOM TAG	ROOM NAME ROOM AREA ACTUAL CLEAR INCHES ACTUAL OCCUPANTS REQUIRED ALLOWABLE EXIT SIGN - COORDINATE LOCATIONS AND REQUIREMENTS W/ ELEC DRAWINGS FEC - FIRE EXTINGUISHER IN FIRE EXTINGUISHER CABINET PFE - WALL-MOUNTED FIRE EXTINGUISHER WFE - WHEELED FIRE EXTINGUISHER
EXIT WIDTH	Room name 101 (99,999 SF) 34" 888 888 MAX OCCUPANTS X' X' X' X' X'
MAXIMUM AREA DIAGONAL	
DISTANCE BETWEEN EXITS	
EXIT ACCESS TRAVEL DISTANCE	
FEC	
PFE	
WFE	
FIRE EXTINGUISHER CALCULATIONS - OFFICE	
ACTUAL AREA SERVED BY FE:	2,584 SF
HAZARD LEVEL:	ORDINARY CLASS ABC
MIN / SF / A:	1,500 SF
EXTINGUISHER TYPE:	PFE (2A-50B-C)
SF / EXTINGUISHER:	3,000 SF
NUMBER OF EXTINGUISHERS:	1 PFE
MAX. SF OF AREA SERVED:	3,000 SF
MAX TRAVEL DISTANCE:	50' LF
ACTUAL MAX. TRAVEL DISTANCE:	44' LF
FIRE EXTINGUISHER CALCULATIONS - OFFICE	
ACTUAL AREA SERVED BY FE:	8,466 SF
HAZARD LEVEL:	ORDINARY CLASS ABC
MIN / SF / A:	1,500 SF
EXTINGUISHER TYPE:	WFE (4A-60B-C)
SF / EXTINGUISHER:	6,000 SF
NUMBER OF EXTINGUISHERS:	2 WFE
MAX. SF OF AREA SERVED:	12,000 SF
MAX TRAVEL DISTANCE:	50' LF
ACTUAL MAX. TRAVEL DISTANCE:	40' LF



Schedule 1:
2-Unit Box Hangar
Lumberton, NC 28358



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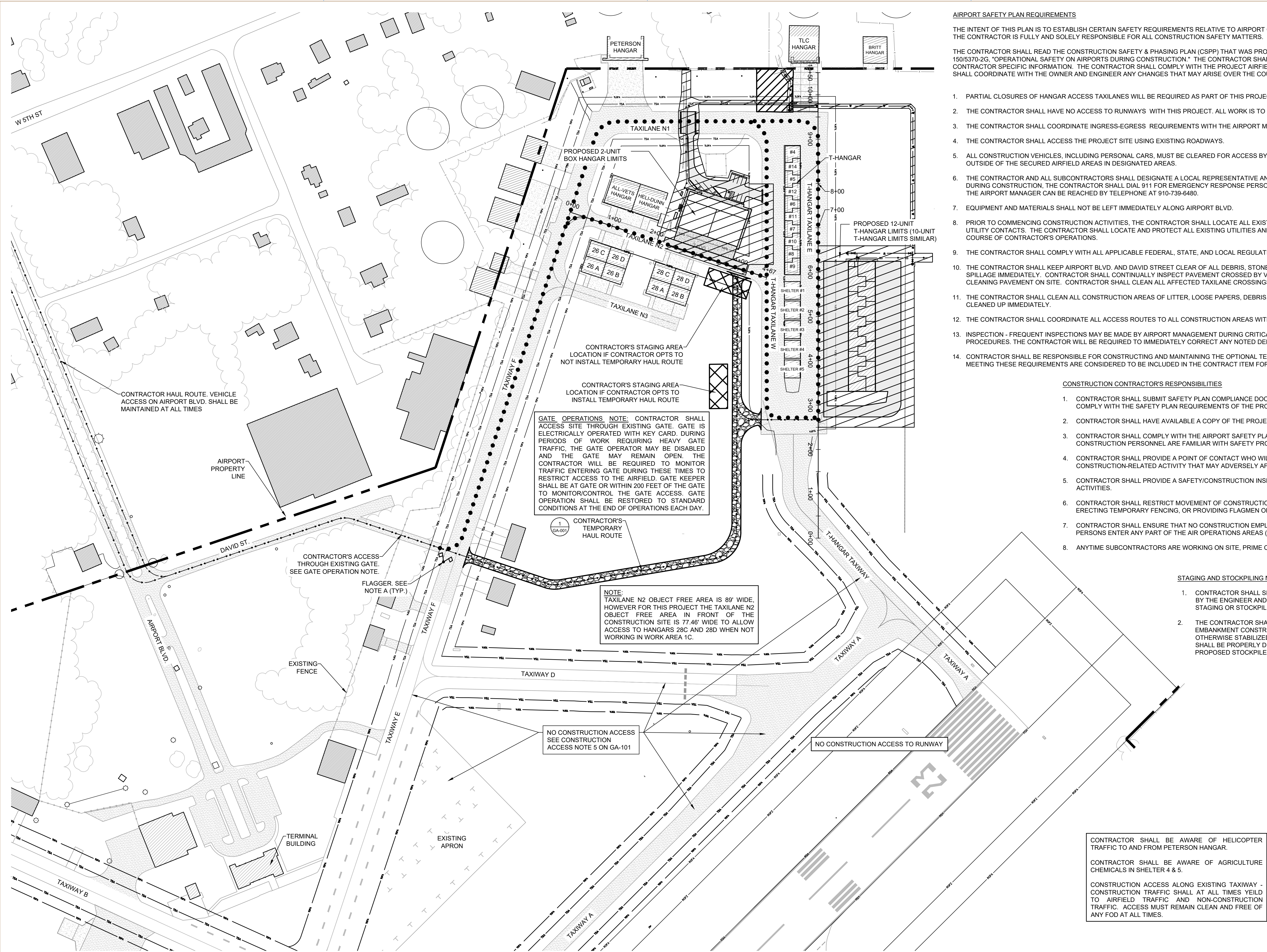
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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE

LIFE SAFETY
PLAN

SHEET NUMBER
LS-101



AIRPORT SAFETY PLAN REQUIREMENTS

THE INTENT OF THIS PLAN IS TO ESTABLISH CERTAIN SAFETY REQUIREMENTS RELATIVE TO AIRPORT OPERATIONS THAT MUST BE ADHERED TO BY THE CONTRACTOR DURING CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR ALL CONSTRUCTION SAFETY MATTERS. IT IS THE INTENT THAT THE AIRPORT WILL REMAIN OPEN DURING THE DURATION OF THIS PROJECT.

THE CONTRACTOR SHALL READ THE CONSTRUCTION SAFETY & PHASING PLAN (CSPP) THAT WAS PROVIDED WITH THE BID DOCUMENTS THAT FOLLOWS THE REQUIREMENTS IN FAA ADVISORY CIRCULAR 150/5370-2G, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION." THE CONTRACTOR SHALL PREPARE AND SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD), TO SUPPLEMENT THE CSPP WITH CONTRACTOR SPECIFIC INFORMATION. THE CONTRACTOR SHALL COMPLY WITH THE PROJECT AIRFIELD SAFETY REQUIREMENTS AS SHOWN ON THE PLANS, PROJECT SPECIFICATIONS, THE CSPP AND SPCD, AND SHALL COORDINATE WITH THE OWNER AND ENGINEER ANY CHANGES THAT MAY ARISE OVER THE COURSE OF THE PROJECT.

1. PARTIAL CLOSURES OF HANGAR ACCESS TAXILANES WILL BE REQUIRED AS PART OF THIS PROJECT.
2. THE CONTRACTOR SHALL HAVE NO ACCESS TO RUNWAYS WITH THIS PROJECT. ALL WORK IS TO BE ACCOMPLISHED OUTSIDE THE RUNWAY OBJECT FREE AREA (ROFA).
3. THE CONTRACTOR SHALL COORDINATE INGRESS-EGRESS REQUIREMENTS WITH THE AIRPORT MANAGEMENT AND RESIDENT PROJECT REPRESENTATIVE.
4. THE CONTRACTOR SHALL ACCESS THE PROJECT SITE USING EXISTING ROADWAYS.
5. ALL CONSTRUCTION VEHICLES, INCLUDING PERSONAL CARS, MUST BE CLEARED FOR ACCESS BY THE AIRPORT MANAGEMENT AND RESIDENT PROJECT REPRESENTATIVE. PERSONAL CARS SHALL BE PARKED OUTSIDE OF THE SECURED AIRFIELD AREAS IN DESIGNATED AREAS.
6. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL DESIGNATE A LOCAL REPRESENTATIVE AND ALTERNATE TO CONTACT ON A 24 HOUR BASIS IN CASE OF EMERGENCY. IN THE EVENT OF AN EMERGENCY DURING CONSTRUCTION, THE CONTRACTOR SHALL DIAL 911 FOR EMERGENCY RESPONSE PERSONNEL. THE CONTRACTOR SHALL ALSO NOTIFY THE AIRPORT MANAGER ONLY AFTER 911 HAS BEEN CALLED. THE AIRPORT MANAGER CAN BE REACHED BY TELEPHONE AT 910-739-6480.
7. EQUIPMENT AND MATERIALS SHALL NOT BE LEFT IMMEDIATELY ALONG AIRPORT BLVD.
8. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES WITHIN PROJECT WORK AREAS. THIS EFFORT SHALL INCLUDE COORDINATING WITH LOCAL UTILITY CONTACTS. THE CONTRACTOR SHALL LOCATE AND PROTECT ALL EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR THE IMMEDIATE RESOLUTION OF ANY UTILITY FACILITIES DAMAGED IN THE COURSE OF CONTRACTOR'S OPERATIONS.
9. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS IN REGARD TO CONSTRUCTION NOISE AND EROSION CONTROL DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL KEEP AIRPORT BLVD. AND DAVID STREET CLEAR OF ALL DEBRIS, STONES, ETC., DURING CONSTRUCTION. ALL PAVEMENTS SHALL BE CLEANED OF CONSTRUCTION DEBRIS AND SPILLAGE IMMEDIATELY. CONTRACTOR SHALL CONTINUALLY INSPECT PAVEMENT CROSSING BY VEHICLES DURING CONSTRUCTION OPERATIONS. CONTRACTOR SHALL MAINTAIN SUITABLE EQUIPMENT FOR CLEANING PAVEMENT ON SITE. CONTRACTOR SHALL CLEAN ALL AFFECTED TAXILANE CROSSINGS AND TRAVEL AREAS AS NEEDED OR AS DIRECTED TO KEEP THE PAVEMENT CLEAN OF DEBRIS.
11. THE CONTRACTOR SHALL CLEAN ALL CONSTRUCTION AREAS OF LITTER, LOOSE PAPERS, DEBRIS, ETC. ON A DAILY BASIS, OR AS DIRECTED BY THE ENGINEER. ALL SPILLAGE ON PAVED AREAS SHALL BE CLEANED UP IMMEDIATELY.
12. THE CONTRACTOR SHALL COORDINATE ALL ACCESS ROUTES TO ALL CONSTRUCTION AREAS WITH RESIDENT PROJECT REPRESENTATIVE AND AIRPORT MANAGEMENT PRIOR TO BEGINNING WORK.
13. INSPECTION - FREQUENT INSPECTIONS MAY BE MADE BY AIRPORT MANAGEMENT DURING CRITICAL PHASES OF THE WORK TO ENSURE THAT THE CONTRACTOR IS FOLLOWING RECOMMENDED SAFETY PLAN PROCEDURES. THE CONTRACTOR WILL BE REQUIRED TO IMMEDIATELY CORRECT ANY NOTED DEFICIENCIES.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING AND MAINTAINING THE OPTIONAL TEMPORARY HAUL ROUTE, AND REMOVAL AND RESTORATION TO EXISTING SITE CONDITIONS. PAYMENT FOR MEETING THESE REQUIREMENTS ARE CONSIDERED TO BE INCLUDED IN THE CONTRACT ITEM FOR "TEMPORARY CONSTRUCTION ITEMS" AND NO ADDITIONAL PAYMENT WILL BE MADE.

CONSTRUCTION CONTRACTOR'S RESPONSIBILITIES

1. CONTRACTOR SHALL SUBMIT SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) TO THE AIRPORT OPERATOR ON HOW CONTRACTOR SHALL COMPLY WITH THE SAFETY PLAN REQUIREMENTS OF THE PROJECT.
2. CONTRACTOR SHALL HAVE AVAILABLE A COPY OF THE PROJECT AIRPORT SAFETY PLAN ON SITE AT ALL TIMES.
3. CONTRACTOR SHALL COMPLY WITH THE AIRPORT SAFETY PLAN ASSOCIATED WITH THE CONSTRUCTION PROJECT AND ENSURE THAT CONSTRUCTION PERSONNEL ARE FAMILIAR WITH SAFETY PROCEDURES AND REGULATIONS ON THE AIRPORT.
4. CONTRACTOR SHALL PROVIDE A POINT OF CONTACT WHO WILL COORDINATE AN IMMEDIATE RESPONSE TO CORRECT ANY CONSTRUCTION-RELATED ACTIVITY THAT MAY ADVERSELY AFFECT THE OPERATIONAL SAFETY OF THE AIRPORT.
5. CONTRACTOR SHALL PROVIDE A SAFETY/CONSTRUCTION INSPECTOR FAMILIAR WITH AIRPORT SAFETY TO MONITOR CONSTRUCTION ACTIVITIES.
6. CONTRACTOR SHALL RESTRICT MOVEMENT OF CONSTRUCTION VEHICLES TO CONSTRUCTION AREAS BY FLAGGING AND BARRICADING, ERECTING TEMPORARY FENCING, OR PROVIDING FLAGMEN OR ESCORTS AS APPROPRIATE.
7. CONTRACTOR SHALL ENSURE THAT NO CONSTRUCTION EMPLOYEES, EMPLOYEES OF SUBCONTRACTORS OR SUPPLIERS, OR OTHER PERSONS ENTER ANY PART OF THE AIR OPERATIONS AREAS (AOA) UNLESS AUTHORIZED.
8. ANYTIME SUBCONTRACTORS ARE WORKING ON SITE, PRIME CONTRACTOR SHALL HAVE SUPERVISORY PERSONNEL ONSITE.

STAGING AND STOCKPILING NOTES

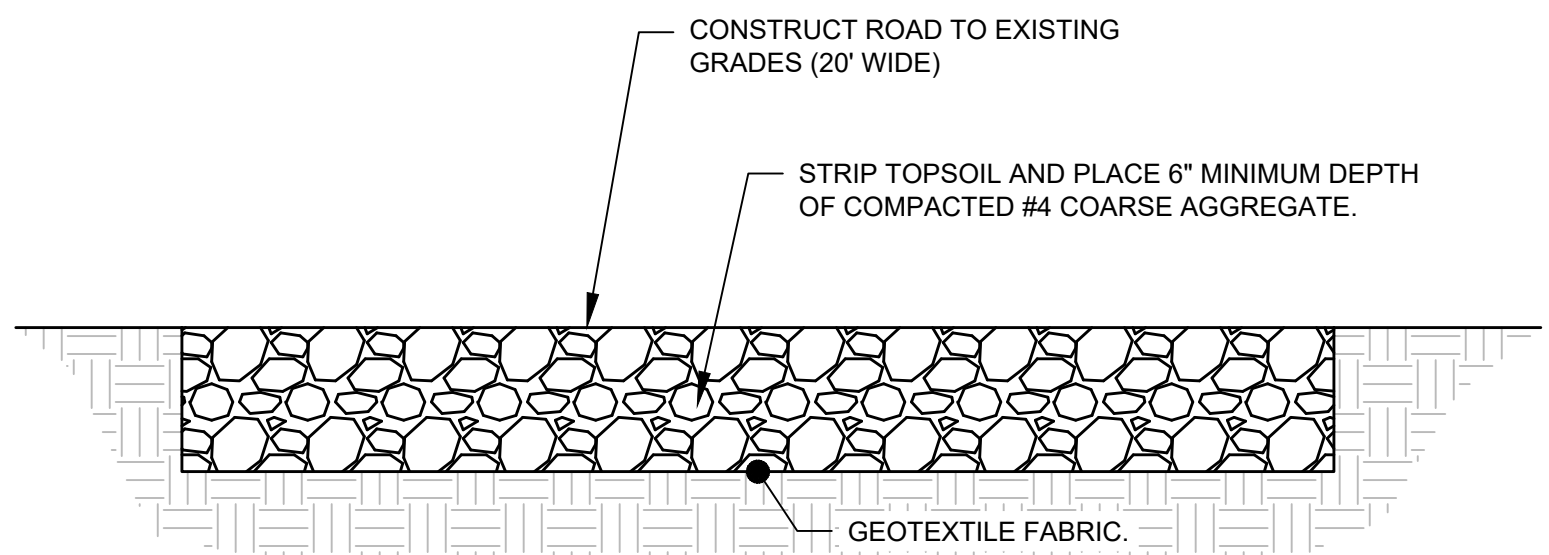
1. CONTRACTOR SHALL SET UP STAGING AREAS IN LOCATIONS SHOWN ON THIS SHEET OR AS AUTHORIZED BY THE ENGINEER AND AIRPORT MANAGEMENT. NO ADDITIONAL CLEARING WILL BE ALLOWED FOR STAGING OR STOCKPILING EXCEPT AS SPECIFICALLY AUTHORIZED.
2. THE CONTRACTOR SHALL STOCKPILE TOPSOIL SEPARATELY FROM SUBSOIL MATERIALS SUITABLE FOR EMBANKMENT CONSTRUCTION. TOPSOIL SHALL BE RE-SPREAD ON DISTURBED AREAS NOT PAVED OR OTHERWISE STABILIZED. ALL SURPLUS TOPSOIL AND SUBSOIL MATERIALS EXCAVATED ON THE PROJECT SHALL BE PROPERLY DISPOSED OF OFFSITE. AIRPORT MANAGEMENT SHALL APPROVE LOCATION OF PROPOSED STOCKPILES.

NOTE A:
CONTRACTOR WILL BE REQUIRED TO UTILIZE FLAGMEN AT TAXILANE CROSSING DURING CONSTRUCTION. FLAGMEN SHALL HAVE ALL CONSTRUCTION TRAFFIC STOP PRIOR TO ENTERING OR CROSSING TAXIWAY/TAXILANE OBJECT FREE AREAS, AS SHOWN ON THE PLANS. CONTRACTOR SHALL VISUALLY MONITOR AIR TRAFFIC PRIOR TO VEHICLES ENTERING OR CROSSING ACTIVE TAXIWAYS/TAXILANES. DURING HEAVY HAULING OPERATIONS A FLAGGER WILL BE REQUIRED.

ACTIVE AIR OPERATIONS AREA
ALL AIRFIELD AREAS SHALL BE CONSIDERED ACTIVE UNLESS SPECIFICALLY CLOSED AND BARRICADED IN ACCORDANCE WITH THE SAFETY & PHASING PLAN. ALL CROSSINGS OF ACTIVE AIR AREAS SHALL BE COMPLETED UNDER RADIO CONTROL WITH AIRPORT MANAGEMENT. IN ALL CASES, AIRCRAFT SHALL HAVE THE RIGHT OF WAY. ALL CONSTRUCTION TRAFFIC SHALL STOP CLEAR OF ACTIVE AIR AREAS AND ALLOW AIRCRAFT TO PASS UNIMPEDED. THE CONTRACTOR SHALL USE EXTREME CAUTION IN ACTIVE AIR AREAS. ANY SPILLAGE/DEBRIS ON PAVEMENTS SHALL BE CLEANED UP IMMEDIATELY AFTER EACH CROSSING.

CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PROTECT ANY EXISTING PAVEMENT THAT CONSTRUCTION EQUIPMENT CROSSES OR TRAVELS ON. CONTRACTOR SHALL REPAIR ANY DAMAGE FROM HIS OPERATIONS IN ACCORDANCE WITH SPECIFICATIONS

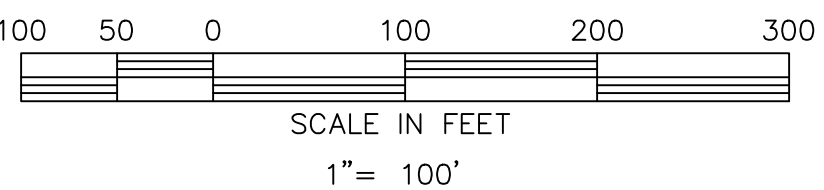
CONTRACTOR SHALL BE AWARE OF HELICOPTER TRAFFIC TO AND FROM PETERSON HANGAR.
CONTRACTOR SHALL BE AWARE OF AGRICULTURE CHEMICALS IN SHELTER 4 & 5.
CONSTRUCTION ACCESS ALONG EXISTING TAXIWAY - CONSTRUCTION TRAFFIC SHALL AT ALL TIMES YIELD TO AIRFIELD TRAFFIC AND NON-CONSTRUCTION TRAFFIC. ACCESS MUST REMAIN CLEAN AND FREE OF ANY FOD AT ALL TIMES.



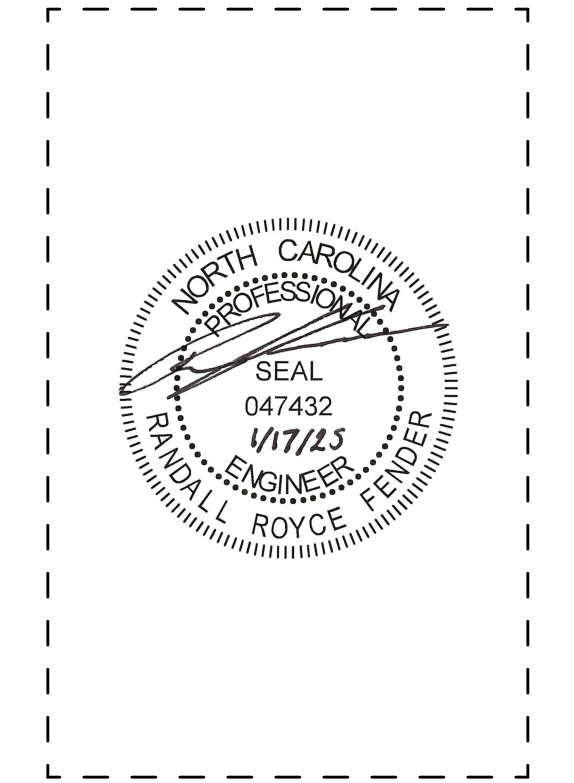
1 PROPOSED TEMPORARY HAUL ROUTE TYPICAL SECTION (CONTRACTOR OPTION)
GA-001 SCALE: NOT TO SCALE

CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING HAUL ROUTE THROUGHOUT CONSTRUCTION AND SHALL REMOVE HAUL ROUTE AND RESTORE TO ORIGINAL CONDITIONS UPON COMPLETION OF CONSTRUCTION. EXCAVATED MATERIAL SHALL BE PILED TO THE SIDE OF THE ROAD TO BE USED TO RESTORE THE AREA AT THE END OF CONSTRUCTION. CONTRACTOR SHALL MAINTAIN THESE PILES THROUGHOUT CONSTRUCTION AS REQUIRED OR DIRECTED BY THE ENGINEER/RPR. MATERIAL REMOVED AT END OF CONSTRUCTION SHALL BE DISPOSED OF OFF AIRPORT PROPERTY. TOPSOIL EXCAVATED FOR ORIGINAL ROAD CONSTRUCTION SHALL BE USED TO RESTORE AREA TO PRE-CONSTRUCTION CONDITIONS. HAUL ROUTE AREA SHALL BE SEEDS AND STABILIZED USING EXCELSIOR MATTING FOLLOWING REMOVAL. ALL COSTS ASSOCIATED WITH THIS ITEM SHALL BE INCLUDED IN LUMP SUM PRICE FOR "TEMPORARY CONSTRUCTION ITEMS".

LEGEND	
---	CONTRACTOR'S ACCESS ROUTE WITH TEMPORARY HAUL ROUTE OPTION
.....	CONTRACTOR'S ACCESS ROUTE WITHOUT TEMPORARY HAUL ROUTE OPTION
▨	WORK AREA LIMITS
⊗	CONTRACTOR'S STAGING AREA
---	AIRPORT PROPERTY LINE
---	TOW A / TLOFA
---	TAXIWAY/TAXILANE OBJECT FREE AREA



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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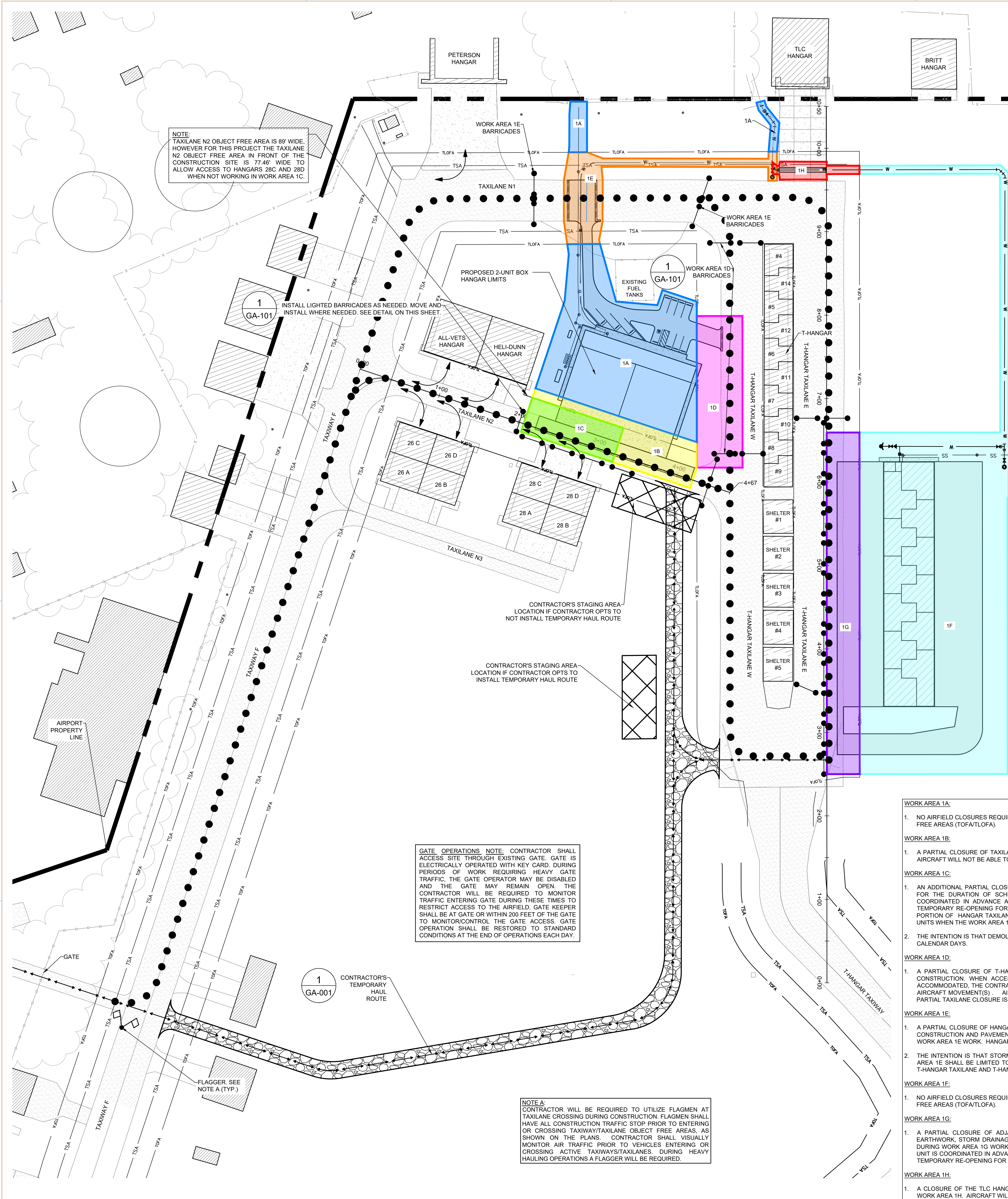
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REVISIONS

DATE JANUARY 2025
PROJECT NUMBER 3105-2401
SHEET TITLE

CONSTRUCTION SAFETY PLAN (ALL SCHEDULES)

SHEET NUMBER
GA-001



STEADY BURNING RED SOLAR LIGHT SECURELY MOUNTED TO BARRICADE (TYP.) SPACED NOT MORE THAN 10' MEETING LUMINANCE REQUIRED BY STATE HIGHWAY DEPARTMENT

4" MAX

1 LOW-PROFILE LIGHTED BARRICADE
GA-101 SCALE: NOT TO SCALE

NOTES:

- THE AIRPORT WILL NOT PROVIDE AVIATION BARRICADES. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AVIATION BARRICADES IN SUFFICIENT QUANTITIES TO COMPLETE THE WORK FOR THIS CONTRACT.
- LOW PROFILE LIGHTED BARRICADES PROVIDED SHALL BE WATER FILLED TYPE BARRICADES MEETING THE REQUIREMENTS OF FAA ADVISORY CIRCULAR 150/5370-2G. SHALL COME WITH ORANGE AND WHITE HIGH INTENSITY REFLECTIVE SHEETING AND SHALL INCLUDE LIGHTING MOUNTS FOR SOLAR POWERED OR BATTERY POWERED LIGHTS. LOW PROFILE BARRICADES SHALL BE PROVIDED WITH STEADY BURNING OR FLASHING RED LIGHTS. THE CONTRACTOR SHALL PROVIDE WATER NECESSARY TO FILL THE BARRICADES AND ENSURE ADEQUATE WATER HAS BEEN PROVIDED TO ANCHOR THE BARRICADES IN PLACE TO PREVENT OVERTURNING FROM PROP WASH AND JET BLAST.
- CONTRACTOR SHALL CHECK LIGHTS DAILY TO VERIFY THAT THEY ARE IN WORKING CONDITION AND SHALL REPLACE LIGHTS AS REQUIRED. AVIATION TYPE BARRICADES SHALL DEFINE CONSTRUCTION AREAS AND SHALL BE MAINTAINED, ANCHORED, AND RELOCATED BY THE CONTRACTOR AS NEEDED. BARRICADES SHALL BE INSTALLED WITH MAXIMUM 4' SPACE BETWEEN BARRICADE.
- CONTRACTOR SHALL INSTALL BARRICADES AT LOCATIONS SHOWN ON INDIVIDUAL PLAN SHEETS. BARRICADES SHALL BE MOVED AND RELOCATED AS REQUIRED. EXTEND BARRICADES ACROSS THE FULL WIDTH OF THE PAVEMENT.
- COST TO PROVIDE AND MAINTAIN BARRICADES SHALL BE INCLUDED IN LUMP SUM PRICE FOR "MOBILIZATION"

TAXILANE CLOSURES AND HANGAR ACCESS NOTES:

- SECTIONS OF THE HANGAR TAXILANE NETWORK WILL BE CLOSED FOR VARIOUS PERIODS OF TIME TO ACCOMMODATE CONSTRUCTION OPERATIONS AND CONSTRUCTION ACCESS, AS SHOWN ON THIS PLAN. CLOSED TAXILANE AREAS SHALL BE DELINEATED USING LIGHTED LOW PROFILE AVIATION BARRICADES SUPPLIED, MAINTAINED, POSITIONED AND RE-POSITIONED BY THE CONTRACTOR. A MINIMUM OF FORTY (40) BARRICADES SHALL BE PROVIDED FOR SCHEDULE 1 AND AN ADDITIONAL FORTY (40) BARRICADES SHALL BE PROVIDED IF SCHEDULE 2A OR 2B IS AWARDED.
- A SECTION OF TAXILANE IN FRONT OF THE NEW 2-UNIT BOX HANGAR WILL BE CLOSED THROUGHOUT SCHEDULE 1 CONSTRUCTION. OTHER SEGMENTS WILL BE CLOSED FOR SHORTER DURATIONS WHEN SCHEDULE 1 AND/OR SCHEDULE 2A/2B CONSTRUCTION OR ACCESS REQUIRES WORK, PERSONNEL, VEHICLE TRAFFIC, MATERIALS AND/OR EQUIPMENT WITHIN THE ASSOCIATED OBJECT FREE AREA.
- THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH AIRPORT MANAGEMENT TO AFFORD AIRCRAFT ACCESS TO AND FROM HANGAR UNITS AFFECTED BY TAXILANE CLOSURES. EFFECTIVE COMMUNICATION BETWEEN THE CONTRACTOR AND AIRPORT MANAGEMENT IS REQUIRED. GENERALLY, IF ACCESS IS NEEDED TO AND/OR FROM AN AFFECTED HANGAR UNIT, AIRPORT MANAGEMENT WILL GIVE ADVANCE NOTICE OF 24-HOURS OR MORE. WHEN FEASIBLE, THE CONTRACTOR SHALL PREPARE THE NECESSARY HANGAR TAXILANE AREAS FOR TEMPORARY RE-OPENING TO ACCOMMODATE THE PRE-SCHEDULED AIRCRAFT MOVEMENT(S). TO TEMPORARILY RE-OPEN, THE AFFECTED TAXILANE SEGMENT SHALL BE PAVED, SWEEPED, CLEANED OF DEBRIS, FOD AND SPILLAGE, AND THE OBJECT FREE AREA SHALL BE CLEAR OF ALL PERSONNEL, VEHICLE, EQUIPMENT, MATERIALS, OPEN EXCAVATIONS AND OTHER HAZARDS. THE CONTRACTOR SHALL NOTIFY AIRPORT MANAGEMENT WHEN THE TAXILANE IS READY SO THAT AN INSPECTION CAN BE MADE IN ADVANCE OF THE AIRCRAFT MOVEMENT. IF CONDITIONS SO WARRANT, THE AIRPORT MAY PROVIDE ONE OR MORE WING WALKER(S) TO ASSIST THE TENANT FOR THE AIRCRAFT MOVEMENT. DURING AIRCRAFT MOVEMENT, THE CONTRACTOR MUST CEASE ADJACENT OPERATIONS WHICH COULD VIOLATE THE OBJECT FREE AREA SUCH AS MATERIAL HANDLING WITH CRANES, EXCAVATORS AND LIFTS WHICH COULD SWING OR TRAVEL INTO THE OBJECT FREE AREA.
- HANGAR UNIT NUMBERS, TENANT NAMES AND TAXILANE DESIGNATION NOMENCLATURE ARE INCLUDED ON THIS PLAN TOP HELP FACILITATE CLEAR COMMUNICATION AS TO AREAS WHICH ARE CLOSED, AREAS WHICH ARE TEMPORARILY RE-OPENED AND THE INTENDED AIRCRAFT OPERATING PATH.
- WHEN CRITICAL CONSTRUCTION OPERATIONS SUCH AS STEEL ERECTION, TRENCH WORK OR TAXILANE PAVING, ARE PLANNED WHICH WILL MAKE IT DIFFICULT OR IMPOSSIBLE TO ACCOMMODATE PRE-SCHEDULED AIRCRAFT MOVEMENTS, THE CONTRACTOR SHALL SO ADVISE AIRPORT MANAGEMENT, SO THAT AFFECTED TENANTS CAN BE NOTIFIED AND AIRCRAFT MOVED TO THE TERMINAL APRON OR OTHER LOCATION IN ADVANCE OF THE CRITICAL CONSTRUCTION OPERATION.

CONSTRUCTION ACCESS NOTES:

- THE CONTRACTOR SHALL ACCESS THE WORK SITE USING THE EXISTING AIRPORT GATE AS SHOWN ON THE PROJECT SAFETY AND PHASING PLAN SHEETS INCLUDED IN THE SCHEDULE 1 PLAN SET. THIS IS AN ELECTRICALLY OPERATED GATE WITH CARD READER ACCESS CONTROL. THE AIRPORT WILL FURNISH UP TO FOUR (4) ACCESS CARDS FOR THE CONTRACTOR'S USE. THESE CARDS SHALL BE HELD ONLY BY THE CONTRACTOR'S SUPERVISORY PERSONNEL AND DESIGNATED GATE KEEPER/ESCORT PERSONNEL. THE GATE SHALL REMAIN CLOSED AND SECURED EXCEPT WHEN MONITORED BY THE CONTRACTOR'S GATE KEEPER, WHO MUST REMAIN WITHIN 200 FEET OF THE GATE WHILE IT IS OPEN SO THE GATE KEEPER CAN MONITOR TRAFFIC AND PREVENT ENTRY TO UNAUTHORIZED VEHICLES AND PERSONNEL. THE GATE KEEPER SHALL BE PROVIDED WITH A CELL PHONE PRE-LOADED WITH THE CONTACT NUMBERS FOR CONTRACTOR ON-SITE SUPERVISORY AND HOME OFFICE PERSONNEL AND AIRPORT MANAGEMENT, AND SHALL BE INSTRUCTED TO CONTACT SUCH INDIVIDUALS IN THE EVENT OF UNAUTHORIZED GATE ACCESS, GATE MALFUNCTION OR ANY SORT OF EMERGENCY SITUATION.
- DURING PERIODS OF HIGHER VOLUME CONSTRUCTION TRAFFIC SUCH AS SHIFT CHANGES, CONSTRUCTION MATERIAL HAULING OPERATIONS AND CONCRETE PLACEMENTS, THE ELECTRIC GATE OPERATOR MAY BE DISABLED WITH THE GATE LEFT OPEN BUT MONITORED BY THE GATE KEEPER UNDER THE 200-FOOT LIMITATION NOTED ABOVE. OTHERWISE, THE GATE OPERATOR SHALL BE SET FOR NORMAL OPERATION.
- THE CONTRACTOR SHALL PROVIDE AN ESCORT INDIVIDUAL WITH AN APPROPRIATE VEHICLE TO ESCORT DELIVERY VEHICLES AND OTHERS NOT FAMILIAR WITH SITE TRAFFIC PATTERNS BETWEEN THE GATE AND THE VARIOUS WORK AREAS AND STAGING AREAS. THIS INDIVIDUAL MAY BE THE SAME AS THE GATE KEEPER, PROVIDED THAT THE GATE IS CLOSED AND SECURED WHILE THE INDIVIDUAL IS AWAY FROM THE GATE FOR ESCORT PURPOSES.
- THE CONTRACTOR IS NOT AUTHORIZED TO CONDUCT CONSTRUCTION ACCESS AND HAULING OPERATIONS ON OR ACROSS THE TERMINAL APRON, TAXIWAYS A, B, D, OR E AND/OR ANY RUNWAY WITHOUT THE EXPLICIT PRIOR APPROVAL OF AND REAL TIME COORDINATION WITH AIRPORT MANAGEMENT ON A CASE BY CASE BASIS.
- THE CONTRACTOR IS AUTHORIZED TO USE THE EXISTING AIRPORT HANGAR TAXILANES (INCLUDING TAXIWAY F) FOR RUBBER TIED VEHICLE TRAFFIC FOR ACCESS TO AND BETWEEN THE ACCESS GATE, WORK AREAS AND STAGING AREAS. ALL CONSTRUCTION TRAFFIC MUST YIELD THE RIGHT OF WAY (TAXILANE PAVEMENT AND ADJACENT OBJECT FREE AREAS) AT ALL TIMES TO MOVING AIRCRAFT. THIS INCLUDES FIXED WING AIRPLANES TAXIING BETWEEN HANGARS, THE TERMINAL APRON AND/OR THE TAXIWAY/RUNWAY ENVIRONMENT AND HELICOPTERS HOVER-TAXIING ALONG THE TAXILANE NETWORK. CONSTRUCTION TRAFFIC MUST YIELD TO OR READILY ACCOMMODATE NON-CONSTRUCTION VEHICULAR TRAFFIC, INCLUDING HANGAR TENANT VEHICLES, AIRPORT VEHICLES AND SERVICE VEHICLES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING PORTIONS OF THE TAXILANE NETWORK USED FOR CONSTRUCTION TRAFFIC CLEAR OF ANY AND ALL DEBRIS, SPILLAGE, FOD, SOIL, MATERIALS, ETC. WHICH COULD BE DAMAGING TO AIRCRAFT. THE CONTRACTOR SHALL IMMEDIATELY CLEAN UP ANY SUCH MATERIALS AND SHALL MAINTAIN SWEEPING EQUIPMENT ON-SITE FOR THAT PURPOSE AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TIMELY REPAIR OF ANY PAVEMENT AND/OR SHOULDER AREA DAMAGE ALONG THE TAXILANES RESULTING FROM CONSTRUCTION ACCESS ALONG OR ACROSS THE TAXILANES. REPAIRS SHALL RESTORE THE AFFECTED AREAS TO EXISTING CONDITION OR BETTER TO THE SATISFACTION OF THE OWNER AND THE ENGINEER. NOTE THAT THE EXISTING TAXILANE PAVEMENTS ARE OLDER AND EXHIBIT VARIOUS FORMS AND LEVELS OF DISTRESS. THE CONTRACTOR SHALL PHOTO DOCUMENT PRE-CONSTRUCTION CONDITIONS AND AREAS OF PAVEMENT DISTRESS OR DAMAGE ALONG THE TAXILANES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSIDERING THE POTENTIAL EFFECTS OF HEAVIER VEHICLES ON THE PAVEMENT IN CONDUCTING CONSTRUCTION ACCESS AND HAULING OPERATIONS.
- THE CONTRACTOR MAY CONSTRUCT A HAUL ROAD, GENERALLY FOLLOWING THE ALIGNMENT AND GEOMETRY SHOWN ON THE PLANS, TO REDUCE THE POTENTIAL IMPACTS OF HAULING OPERATIONS AND CONSTRUCTION TRAFFIC ON THE TAXILANE NETWORK. THE CROSS SECTIONAL DETAIL ON THE PLANS IS CONSIDERED A MINIMUM SECTION. NO REPRESENTATION IS MADE AS TO THE ADEQUACY OF THAT SECTION FOR THE WEIGHTS, TYPES AND NUMBERS OF TRUCKS ANTICIPATED. THE CONTRACTOR IS ADVISED THAT MARGINAL SOIL CONDITIONS ARE LIKELY ALONG THE ALIGNMENT. IF THE CONTRACTOR ELECTS TO CONSTRUCT THE HAUL ROAD, HE SHALL BE FULLY RESPONSIBLE FOR DETERMINING THE ROADWAY CROSS SECTION AND FOR ALL WORK NECESSARY TO LAY OUT, CONSTRUCT, MAINTAIN, AND REMOVE THE HAUL ROUTE AND TO RESTORE THE ALIGNMENT FOLLOWING CONSTRUCTION TO THE SATISFACTION OF THE OWNER AND THE ENGINEER. FOLLOWING ROADWAY REMOVAL, THE AREA SHALL BE SMOOTHLY GRADED TO DRAIN, COVERED WITH TOPSOIL AND TURF ESTABLISHED BY SEEDING AND MULCHING, BUT WITH 20 FEET OF SOD ADJACENT TO TAXILANE PAVEMENTS.
- ALL COSTS FOR CONSTRUCTION ACCESS, INCLUDING BUT NOT LIMITED TO PRE-CONSTRUCTION PHOTOS, GATE KEEPING, ESCORTING, PAVEMENT SWEEPING, PAVEMENT REPAIRS, HAUL ROAD CONSTRUCTION AND MAINTENANCE AND SITE RESTORATION SHALL BE INCLUDED IN THE LUMP SUM PAY ITEM FOR "TEMPORARY CONSTRUCTION ITEMS".

WORK AREA 1A:

- NO AIRFIELD CLOSURES REQUIRED FOR WORK AREA 1A AS THE WORK IS LOCATED OUTSIDE ALL TAXIWAY/TAXILANE OBJECT FREE AREAS (TOFA/TLOFA).

WORK AREA 1B:

- A PARTIAL CLOSURE OF TAXILANE N2 (WORK AREA 1B) IS PROVIDED FOR THE DURATION OF SCHEDULE 1 CONSTRUCTION. AIRCRAFT WILL NOT BE ABLE TO UTILIZE THE CLOSED PORTION OF HANGAR TAXILANE N2.

WORK AREA 1C:

- AN ADDITIONAL PARTIAL CLOSURE OF HANGAR TAXILANE N2 (WORK AREA 1C) IS PROVIDED FOR INTERMITTENT CLOSURE FOR THE DURATION OF SCHEDULE 1 CONSTRUCTION. WHEN ACCESS TO/FROM HANGAR UNITS 26 C OR 28 D IS COORDINATED IN ADVANCE AND CAN BE ACCOMMODATED, THE CONTRACTOR SHALL PREPARE WORK AREA 1C FOR TEMPORARY RE-OPENING FOR THE SCHEDULED AIRCRAFT MOVEMENT(S). AIRCRAFT WILL NOT BE ABLE TO UTILIZE THIS PORTION OF HANGAR TAXILANE N2 DURING WORK AREA 1C CLOSURES. NO ACCESS IS AVAILABLE TO THE TWO HANGAR UNITS WHEN THE WORK AREA 1C PARTIAL TAXILANE CLOSURE IS IN EFFECT.
- THE INTENTION IS THAT DEMOLITION AND RECONSTRUCTION OF PAVEMENT WITHIN WORK AREA 1C SHALL BE LIMITED TO 14 CALENDAR DAYS.

WORK AREA 1D:

- A PARTIAL CLOSURE OF T-HANGAR TAXILANE W (WORK AREA 1D) IS PROVIDED FOR THE DURATION OF SCHEDULE 1 CONSTRUCTION. WHEN ACCESS TO/FROM T-HANGAR UNITS 6, 7 OR 8 IS COORDINATED IN ADVANCE AND CAN BE ACCOMMODATED, THE CONTRACTOR SHALL PREPARE WORK AREA 1D FOR TEMPORARY RE-OPENING FOR THE SCHEDULED AIRCRAFT MOVEMENT(S). AIRCRAFT WILL NOT BE ABLE TO UTILIZE THE ADJACENT TAXILANE WHEN THE WORK AREA 1D PARTIAL TAXILANE CLOSURE IS IN EFFECT.

WORK AREA 1E:

- A PARTIAL CLOSURE OF HANGAR TAXILANE N1 (WORK AREA 1E) IS PROVIDED FOR STORM DRAIN, WATER AND SEWER LINE CONSTRUCTION AND PAVEMENT RESTORATION. AIRCRAFT WILL NOT BE ABLE TO UTILIZE THE CLOSED TAXILANE DURING WORK AREA 1E WORK. HANGAR ACCESS NEEDS SHALL BE DISCUSSED AND COORDINATED WITH THE CLOSURE SCHEDULE.
- THE INTENTION IS THAT STORM DRAIN, WATER AND SEWER CONSTRUCTION AND PAVEMENT RESTORATION WITHIN WORK AREA 1E SHALL BE LIMITED TO 21 CALENDAR DAYS. AIRCRAFT IN T-HANGARS AND SHELTERS WILL HAVE TO USE THE T-HANGAR TAXILANE AND T-HANGAR TAXIWAY.

WORK AREA 1F:

- NO AIRFIELD CLOSURES REQUIRED FOR WORK AREA 1F AS THE WORK IS LOCATED OUTSIDE ALL TAXIWAY/TAXILANE OBJECT FREE AREAS (TOFA/TLOFA).

WORK AREA 1G:

- A PARTIAL CLOSURE OF ADJACENT T-HANGAR TAXILANE E IS REQUIRED FOR WORK IN WORK AREA 1G, INCLUDING EARTHWORK, STORM DRAINAGE AND PAVING WORK. AIRCRAFT WILL NOT BE ABLE TO UTILIZE THE ADJACENT TAXILANE DURING WORK AREA 1G WORK. WHEN ACCESS TO/FROM T-HANGAR UNITS 9 OR 10 OR EAST SIDE ACCESS TO A SHELTER UNIT IS COORDINATED IN ADVANCE AND CAN BE ACCOMMODATED, THE CONTRACTOR SHALL PREPARE WORK AREA 1G FOR TEMPORARY RE-OPENING FOR THE SCHEDULED AIRCRAFT MOVEMENT(S).

WORK AREA 1H:

- A CLOSURE OF THE TLC HANGAR APRON IS REQUIRED FOR WATER MAIN AND PAVEMENT RESTORATION AND CURING IN WORK AREA 1H. AIRCRAFT WILL NOT BE ABLE TO UTILIZE THE HANGAR APRON DURING WORK AREA 1H WORK.

GATE OPERATIONS NOTE: CONTRACTOR SHALL ACCESS SITE THROUGH EXISTING GATE. GATE IS ELECTRICALLY OPERATED WITH KEY CARD. DURING PERIODS OF WORK REQUIRING HEAVY GATE TRAFFIC, THE GATE OPERATOR MAY BE DISABLED AND THE GATE MAY REMAIN OPEN. THE CONTRACTOR WILL BE REQUIRED TO MONITOR TRAFFIC ENTERING GATE DURING THESE TIMES TO RESTRICT ACCESS TO THE AIRFIELD. GATE KEEPER SHALL BE AT GATE OR WITHIN 200 FEET OF THE GATE TO MONITOR/CONTROL. THE GATE ACCESS, GATE OPERATION SHALL BE RESTORED TO STANDARD CONDITIONS AT THE END OF OPERATIONS EACH DAY.

NOTE A: CONTRACTOR WILL BE REQUIRED TO UTILIZE FLAGMEN AT TAXILANE CROSSING DURING CONSTRUCTION. FLAGMEN SHALL HAVE ALL CONSTRUCTION TRAFFIC STOP PRIOR TO ENTERING OR CROSSING TAXIWAY/TAXILANE OBJECT FREE AREAS, AS SHOWN ON THE PLANS. CONTRACTOR SHALL VISUALLY MONITOR AIR TRAFFIC PRIOR TO VEHICLES ENTERING OR CROSSING ACTIVE TAXIWAYS/TAXILANES. DURING HEAVY HAULING OPERATIONS A FLAGGER WILL BE REQUIRED.

LEGEND

- CONTRACTOR'S ACCESS ROUTE WITH TEMPORARY HAUL ROUTE OPTION
- CONTRACTOR'S ACCESS ROUTE WITHOUT TEMPORARY HAUL ROUTE OPTION
- CONTRACTOR'S STAGING AREA
- AIRPORT PROPERTY LINE
- TOFA/TLOFA TAXIWAY/TAXILANE OBJECT FREE AREA
- WORK AREA 1A LIMITS
- WORK AREA 1B LIMITS
- WORK AREA 1C LIMITS
- WORK AREA 1D LIMITS
- WORK AREA 1E LIMITS
- WORK AREA 1F LIMITS
- WORK AREA 1G LIMITS
- WORK AREA 1H LIMITS

SCALE IN FEET

1" = 50'

City of
LUMBERTON
North Carolina

Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358

SEAL
047432
1/17/25
NORTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER
ROYCE L. WILSON

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REVISIONS

DATE JANUARY 2025
PROJECT NUMBER 3105-2401
SHEET TITLE

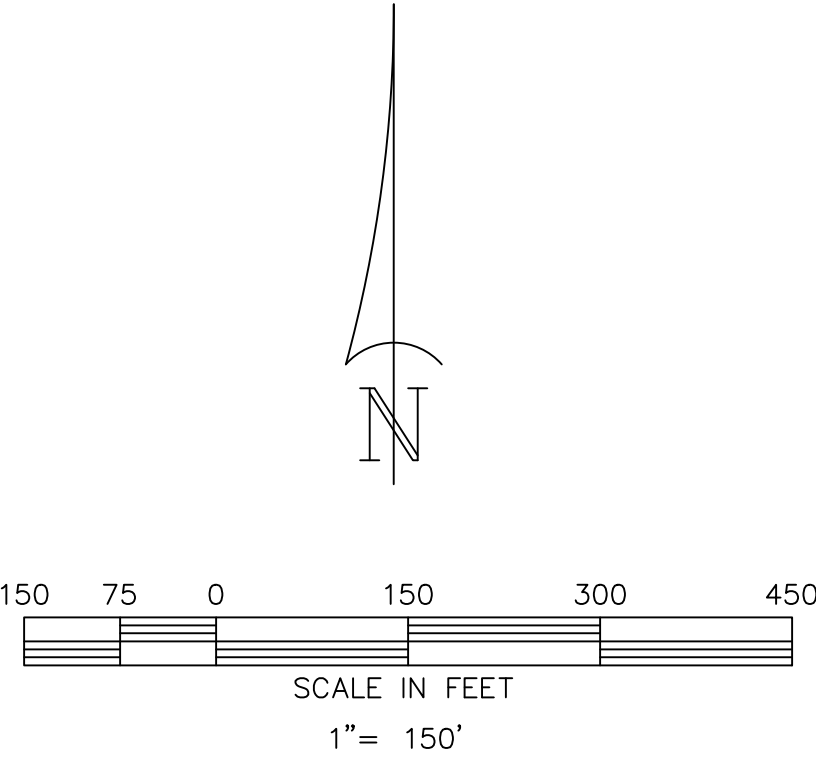
CONSTRUCTION PHASING PLAN (ALL SCHEDULES)

SHEET NUMBER

GA-101



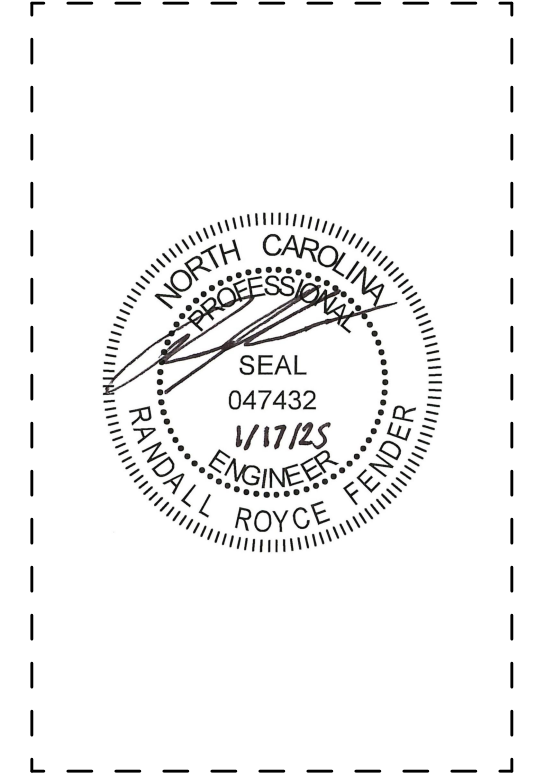
- NOTES:
1. SURVEY WAS PERFORMED BY COASTALGEOMATICS LAND SURVEYING, DATED AUGUST 2024.
 2. HORIZONTAL DATUM: NAD83 (2011), VERTICAL DATUM: NAVD88.
 3. CONTRACTOR SHALL BE REQUIRED TO CONFIRM CONTROL POINT DATA PRIOR TO USE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER.
 4. COORDINATES SHOWN ARE GROUND COORDINATES. TO CONVERT GROUND TO GRID - MULTIPLY BY 0.99993499.
 5. CONTRACTOR SHALL PROTECT ALL CONTROL POINTS DURING CONSTRUCTION TO PREVENT DAMAGE. CONTRACTOR SHALL BE REQUIRED TO REINSTALL ANY CONTROL POINTS DAMAGED BY CONSTRUCTION ACTIVITIES THAT WILL BE REQUIRED FOR PROJECT COMPLETION.



SURVEY CONTROL POINTS NC GRID (NAD88/2011)			
NORTHING	EASTING	ELEVATION	DESCRIPTION
313,829.48'	1,981,637.81'	121.62'	NCGS MONUMENT "LUMBERPORT"
311,718.38'	1,980,318.55'	121.89'	NCGS MONUMENT "LUMBERPORT AZIMUTH"



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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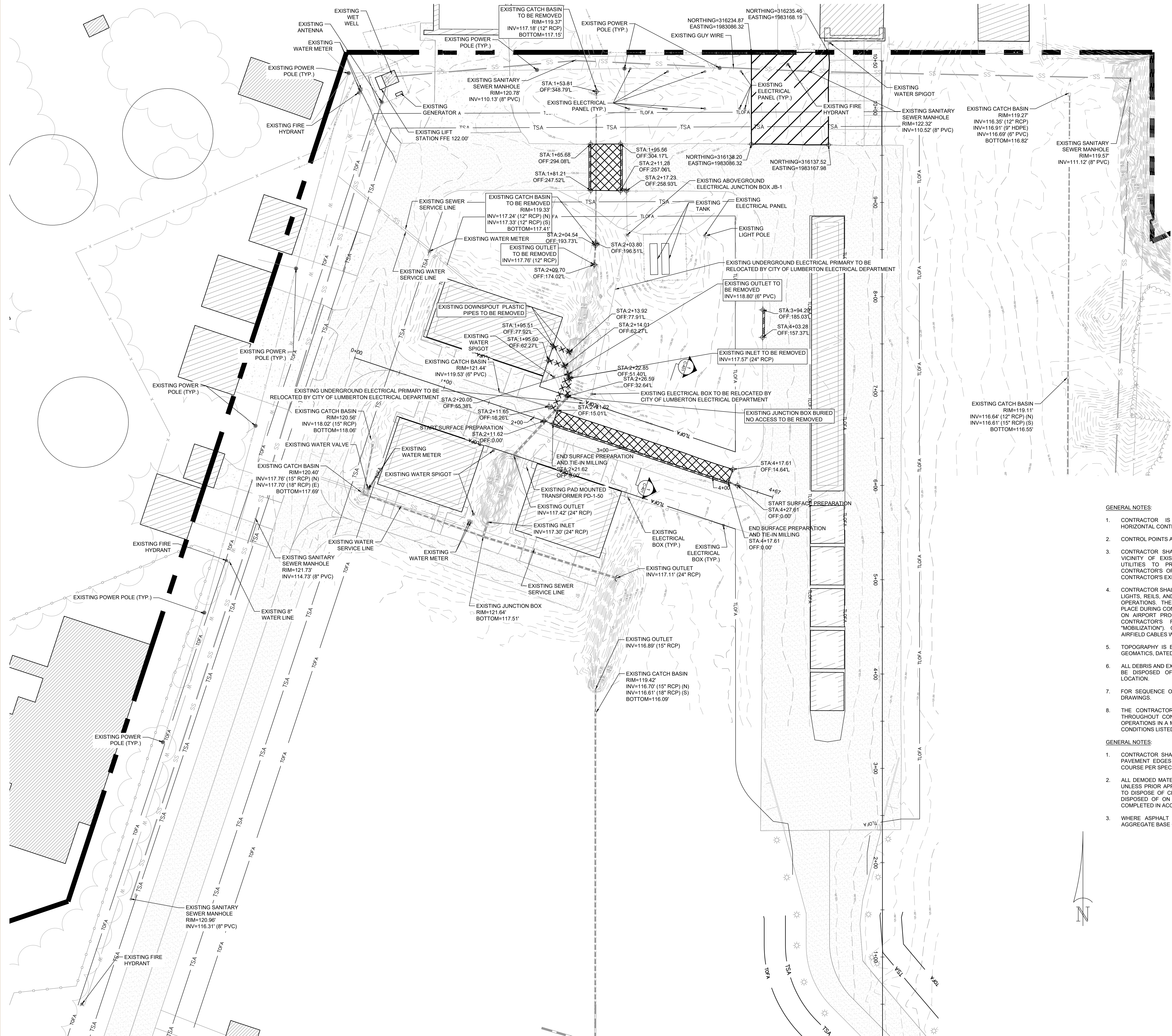
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REVISIONS

DATE: JANUARY 2025
PROJECT NUMBER: 3105-2401
SHEET TITLE:

SURVEY
CONTROL PLAN
(SCHEDULE 1)

SHEET NUMBER
VA-101



LEGEND

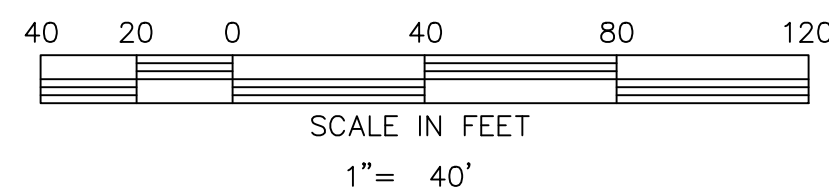
- ASPHALTIC PAVEMENT TO BE REMOVED (FULL-DEPTH)
- ASPHALTIC PAVEMENT TIE-IN MILLING, 1.5" DEPTH
- EXISTING AIRPORT BUILDINGS
- EXISTING CONCRETE PAVEMENT
- EXISTING BITUMINOUS PAVEMENT
- EXISTING CONTOURS
- EXISTING FENCE
- EXISTING STORM SEWER TO BE REMOVED
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING WATER LINE
- EXISTING OVERHEAD ELECTRICAL LINE
- EXISTING UNDERGROUND ELECTRICAL LINE
- EXISTING TAXIWAY LIGHTS
- TSA TAXIWAY SAFETY AREA
- TOFA/TLOFA TAXIWAY/TAXILANE OBJECT FREE AREA
- SUE INVESTIGATION LIMITS

GENERAL NOTES:

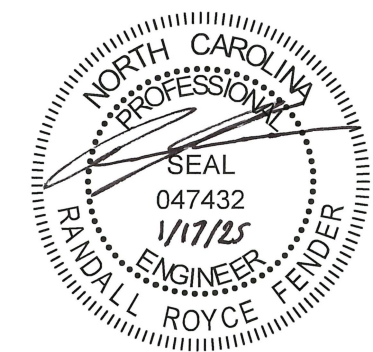
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING VERTICAL AND HORIZONTAL CONTROL FOR THE DURATION OF THE PROJECT.
- CONTROL POINTS AND BENCHMARKS ARE SHOWN ON SHEET VA-101.
- CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF EXISTING UNDERGROUND CABLES, TAXIWAY LIGHTS AND UTILITIES TO PREVENT DAMAGE. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL HAVE EXISTING ELECTRICAL LINES SERVICING RUNWAY LIGHTS, REELS, AND ALL OTHER UTILITIES LOCATED PRIOR TO EXCAVATION OPERATIONS. THESE ELECTRICAL SERVICE LINES SHALL BE PROTECTED IN PLACE DURING CONSTRUCTION. THE SERVICE TO LOCATE AND MARK LINES ON AIRPORT PROPERTY WITHIN CONSTRUCTION LIMITS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS INCLUDED IN THE ITEM "MOBILIZATION". CONTRACTOR WILL BE RESPONSIBLE FOR MARKING ALL AIRFIELD CABLES WITHIN THE PROJECT LIMITS.
- TOPOGRAPHY IS BASED ON GROUND SURVEY PERFORMED BY COASTAL GEOMATICS, DATED AUGUST 2024.
- ALL DEBRIS AND EXCESS SOIL, AGGREGATE, ASPHALT, ETC. REMOVED SHALL BE DISPOSED OFF AIRPORT PROPERTY IN A PROPERLY PERMITTED LOCATION.
- FOR SEQUENCE OF CONSTRUCTION AND PHASING, SEE GA-100 SERIES DRAWINGS.
- THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL PERMITS ON-SITE THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL PERFORM ALL OPERATIONS IN A MANNER CONSISTENT WITH THE PERMITS, INCLUDING ALL CONDITIONS LISTED THEREIN.

GENERAL NOTES:

- CONTRACTOR SHALL CUT BACK GRASS AND VEGETATION 10 FEET FROM PAVEMENT EDGES TO ALLOW PLACEMENT OF NEW ASPHALTIC SURFACE COURSE PER SPECIFICATION SECTION P-101.
- ALL DEMOED MATERIALS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY UNLESS PRIOR APPROVAL IS GIVEN BY AIRPORT MANAGER AND ENGINEER TO DISPOSE OF CERTAIN MATERIALS ON AIRPORT PROPERTY. MATERIALS DISPOSED OF ON AIRPORT PROPERTY SHALL BE PLACED IN LIFTS AND COMPLETED IN ACCORDANCE WITH SPECIFICATION P-152.
- WHERE ASPHALT IS CALLED OUT TO BE REMOVED, THE UNDERLYING AGGREGATE BASE COURSE SHOULD BE LEFT IN PLACE.



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
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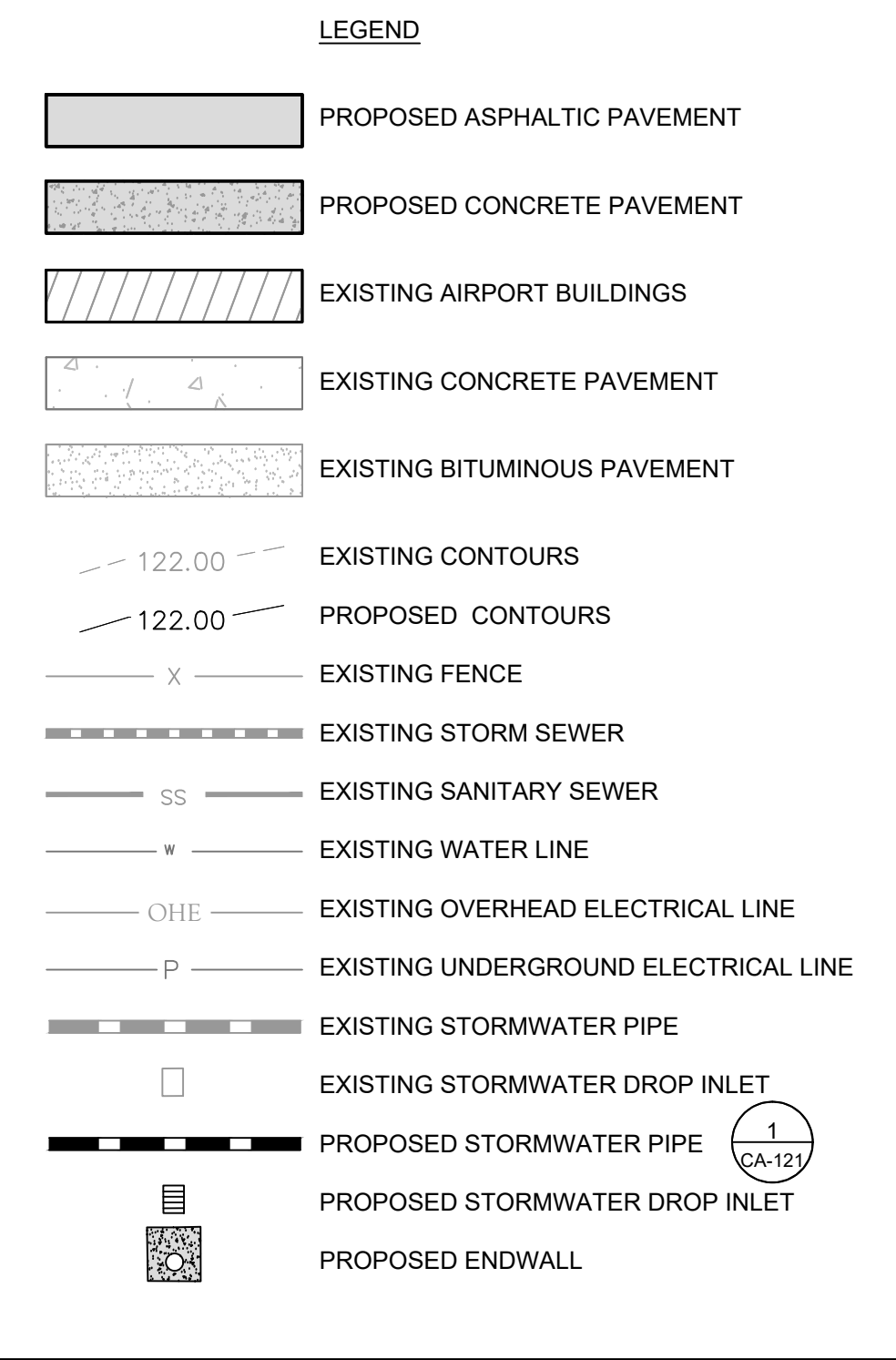
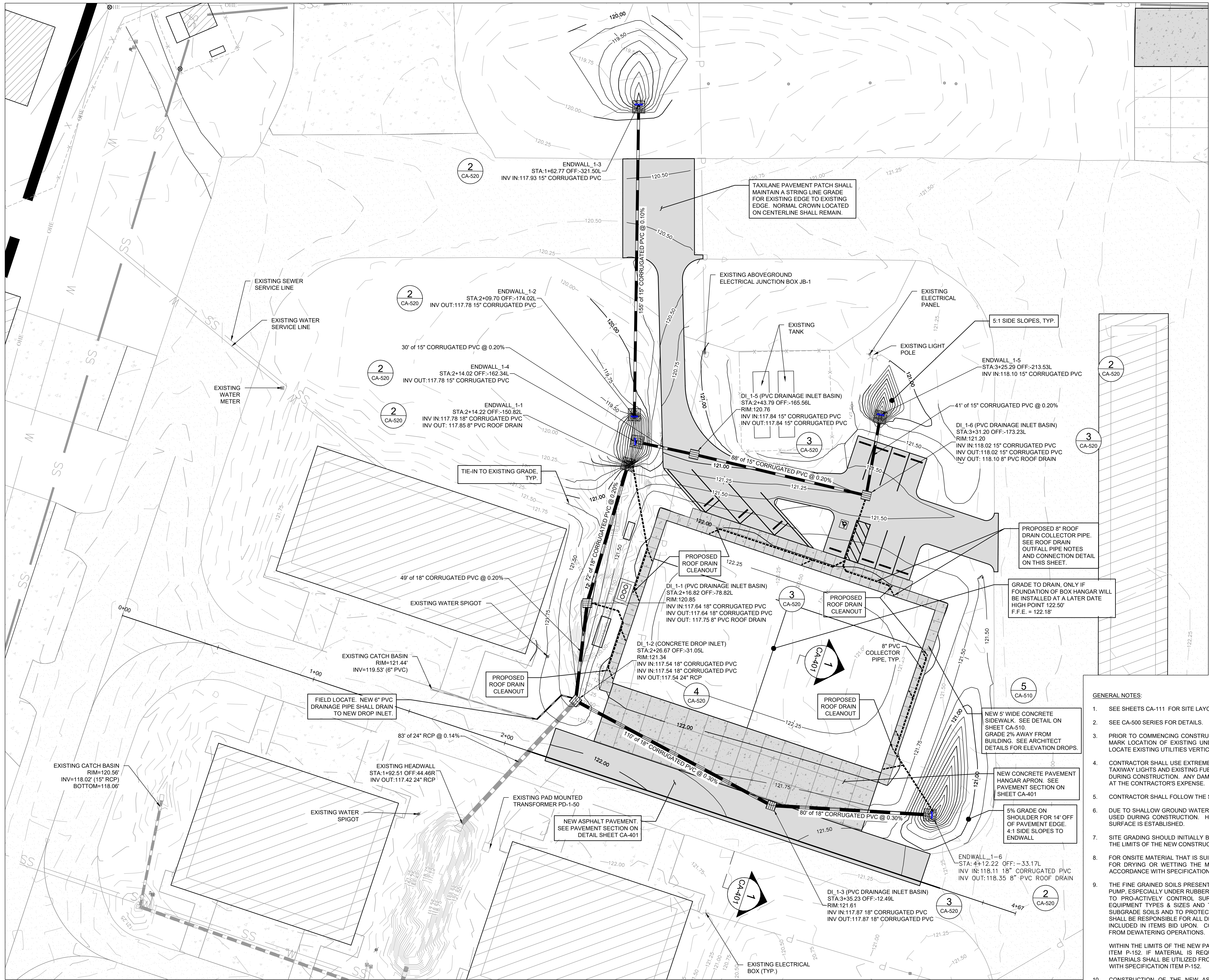
REVISIONS

DATE: JANUARY 2025
PROJECT NUMBER: 3105-2401
SHEET TITLE:

**EXISTING
CONDITIONS AND
REMOVAL PLAN
(SCHEDULE 1)**

SHEET NUMBER

CA-101



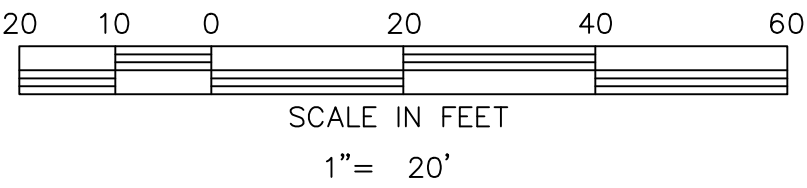
ROOF DRAIN CONNECTION DETAIL
NOT TO SCALE

**** ROOF DRAIN OUTFALL PIPE NOTES**

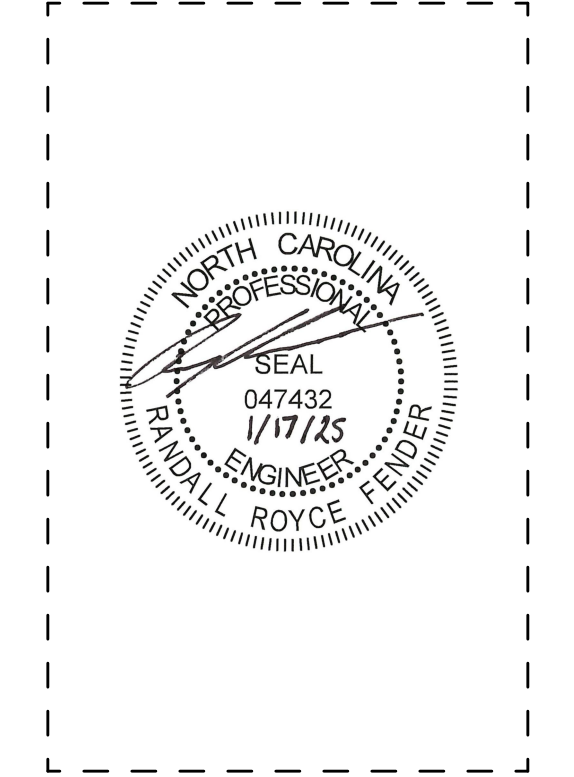
1. ROOF DRAINAGE FROM DOWNSPOUTS SHALL DRAIN INTO THE UNDERGROUND ROOF DRAIN COLLECTION SYSTEM DEPICTED ON THIS DRAWING. FINAL ALIGNMENT OF ROOF DRAIN LEADERS AND INVERTS TO BE COORDINATED IN THE FIELD TO AVOID OTHER UTILITIES IN THE AREA.
2. ROOF DRAIN UNDERGROUND COLLECTOR PIPES SHALL BE 8" PVC (SCH 40) AND SHALL BE INSTALLED TO MAINTAIN A MINIMUM 1% SLOPE ON THE COLLECTOR PIPE. ROOF DRAIN COLLECTOR PIPES SHALL CONNECT TO THE PROPOSED DRAINAGE INLET AS SHOWN.
3. UNDERGROUND ROOF DRAIN COLLECTION SYSTEM PIPE SHALL BE TURNED VERTICALLY AT EACH DOWNSPOUT LOCATION AND A DOWNSPOUT ADAPTER SHALL BE INSTALLED ABOVE THE SURFACE OF THE GROUND TO INTERCEPT EACH DOWNSPOUT WHERE IT ENTERS THE UNDERGROUND COLLECTION SYSTEM. A CLEANOUT SHALL BE INSTALLED AT THE END OF THE SYSTEM. THE COST FOR THE DOWNSPOUT ADAPTERS AND CLEANOUT SHALL BE INCLUDED IN THE PER LINEAR FOOT PRICE FOR "8" ROOF DRAIN OUTFALL PIPE".

GENERAL NOTES:

1. SEE SHEETS CA-111 FOR SITE LAYOUT PLAN.
2. SEE CA-500 SERIES FOR DETAILS.
3. PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL CONTACT THE LOCAL UTILITY LOCATING COMPANIES TO MARK LOCATION OF EXISTING UNDERGROUND UTILITIES. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE EXISTING UTILITIES VERTICALLY AND HORIZONTALLY.
4. CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF EXISTING UNDERGROUND CABLES AND TAXIWAY LIGHTS AND EXISTING FUEL FARM TO PREVENT DAMAGE. CONTRACTOR SHALL PROTECT ALL UTILITIES IN PLACE DURING CONSTRUCTION. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
5. CONTRACTOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION DESCRIBED ON SHEET CA-140.
6. DUE TO SHALLOW GROUND WATER AND LOOSE OR SOFT SOILS, IT IS RECOMMENDED THAT WIDE TRACKED VEHICLES BE USED DURING CONSTRUCTION. HEAVY RUBBER-TIRE VEHICLES SHOULD BE KEPT OFF OF THE SITE UNTIL A STABLE SURFACE IS ESTABLISHED.
7. SITE GRADING SHOULD INITIALLY BEGIN WITH THE REMOVAL OF ANY TOPSOIL AND SURFACE VEGETATION FROM WITHIN THE LIMITS OF THE NEW CONSTRUCTION. THE ANTICIPATED DEPTH OF TOPSOIL AND VEGETATION IS 3 INCHES.
8. FOR ONSITE MATERIAL THAT IS SUITABLE FOR USE IN PROJECT EMBANKMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR DRYING OR WETTING THE MATERIAL TO WITHIN 2% OF OPTIMUM MOISTURE AND COMPACT THE MATERIAL IN ACCORDANCE WITH SPECIFICATION SECTION P-152.
9. THE FINE GRAINED SOILS PRESENT IN THE PROJECT AREA ARE SENSITIVE TO EXCESSIVE MOISTURE, AND MAY RUT AND PUMP, ESPECIALLY UNDER RUBBER TIRE TRAFFIC LOADING WHEN WET. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRO-ACTIVELY CONTROL SURFACE RUNOFF AND GROUND WATER, TO EXERCISE DISCRETION IN SELECTING EQUIPMENT TYPES & SIZES AND TO SEQUENCE HIS OPERATIONS SO AS TO MINIMIZE DETERIORATION OF EXPOSED SUBGRADE SOILS AND TO PROTECT THE SUBGRADE UNTIL THE OVERLYING MATERIALS CAN BE PLACED. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING OPERATIONS DURING CONSTRUCTION. COST FOR DEWATERING SHALL BE INCLUDED IN ITEMS BID UPON. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING ALL SEDIMENT PRODUCED FROM DEWATERING OPERATIONS.
10. CONSTRUCTION OF THE NEW ASPHALTIC PAVEMENT SHALL INCLUDE PLACEMENT OF THE ASPHALTIC PAVEMENT SURFACE COURSE IN TWO LIFTS. EACH LIFT OF PAVEMENT SHALL BE CONSTRUCTED AND COMPACTED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATION. AFTER THE FIRST LIFT HAS BEEN PLACED AND HAD ADEQUATE TIME TO COOL, TACK COAT SHALL BE APPLIED TO THE PAVEMENT SURFACE. PRIOR TO PAVING THE NEXT LIFT.
11. UPON COMPLETION OF THE PAVING OPERATIONS, STOCKPILED TOPSOIL SHALL BE PLACED ON DISTURBED AREAS PRIOR TO SODDING OR SEEDING AND MULCHING. ALL EXCESS STOCKPILED TOPSOIL AND EXCAVATED SOIL PREVIOUSLY STOCKPILED SHALL BE DISPOSED OF OFF AIRPORT PROPERTY. THERE SHALL BE NO SEPARATE MEASUREMENT AND PAYMENT FOR STOCKPILING THE TOPSOIL AND PLACING THE TOPSOIL IN ITS FINAL LOCATION OR HAULING OFFSITE AND DISPOSAL OF EXCESS MATERIAL.
12. INSTALL SOD FOR ALL DISTURBED AREAS AROUND NEW HANGAR AND HANGAR INFIELD.



Schedule 1:
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REVISIONS

DATE JANUARY 2025
PROJECT NUMBER 3105-2401
SHEET TITLE

GRADING & DRAINAGE PLAN (SCHEDULE 1)

SHEET NUMBER
CA-121



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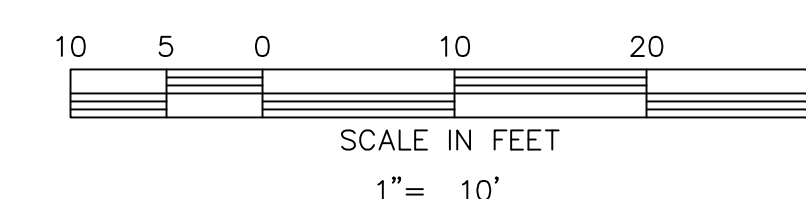
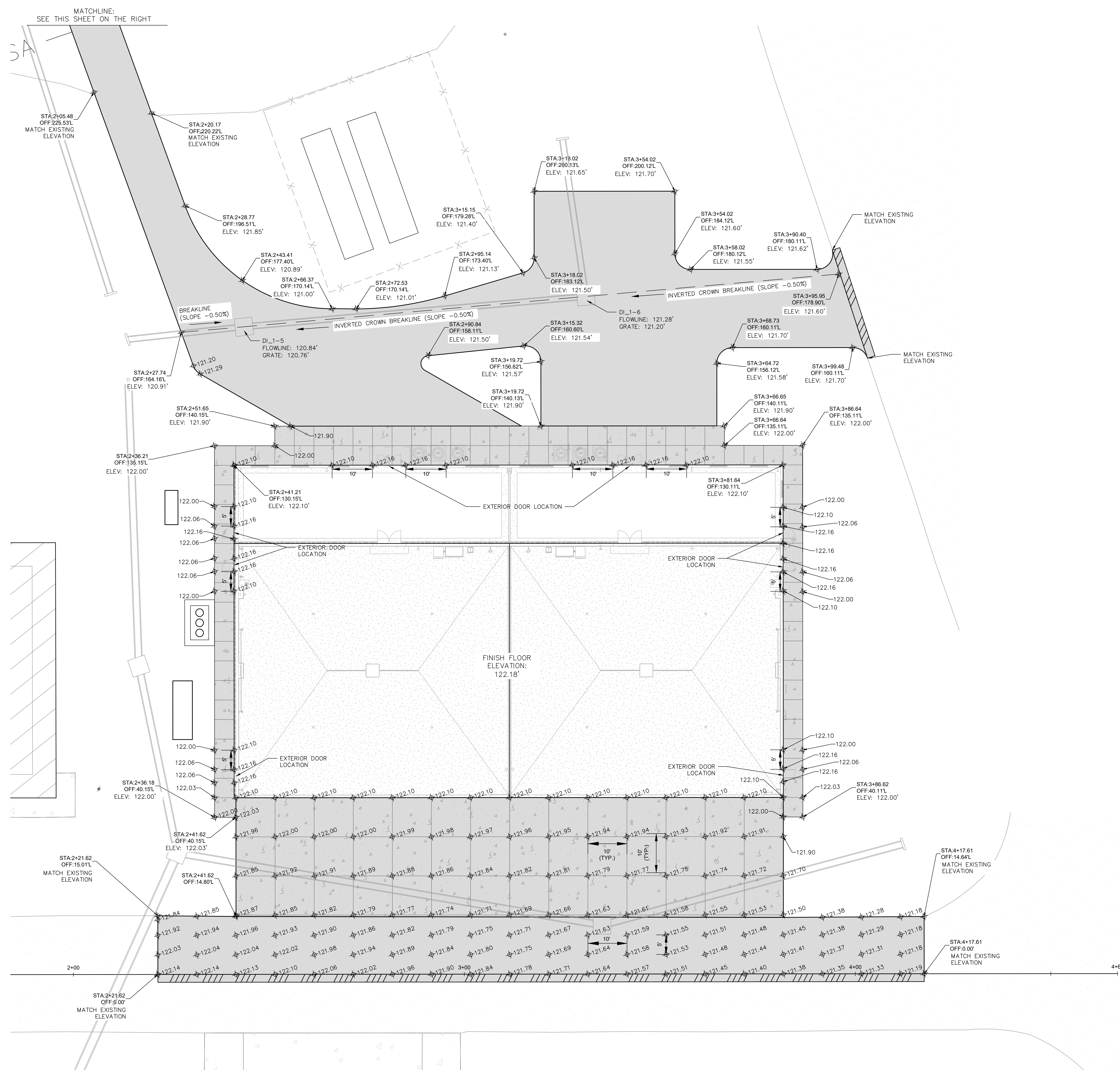
REVISIONS

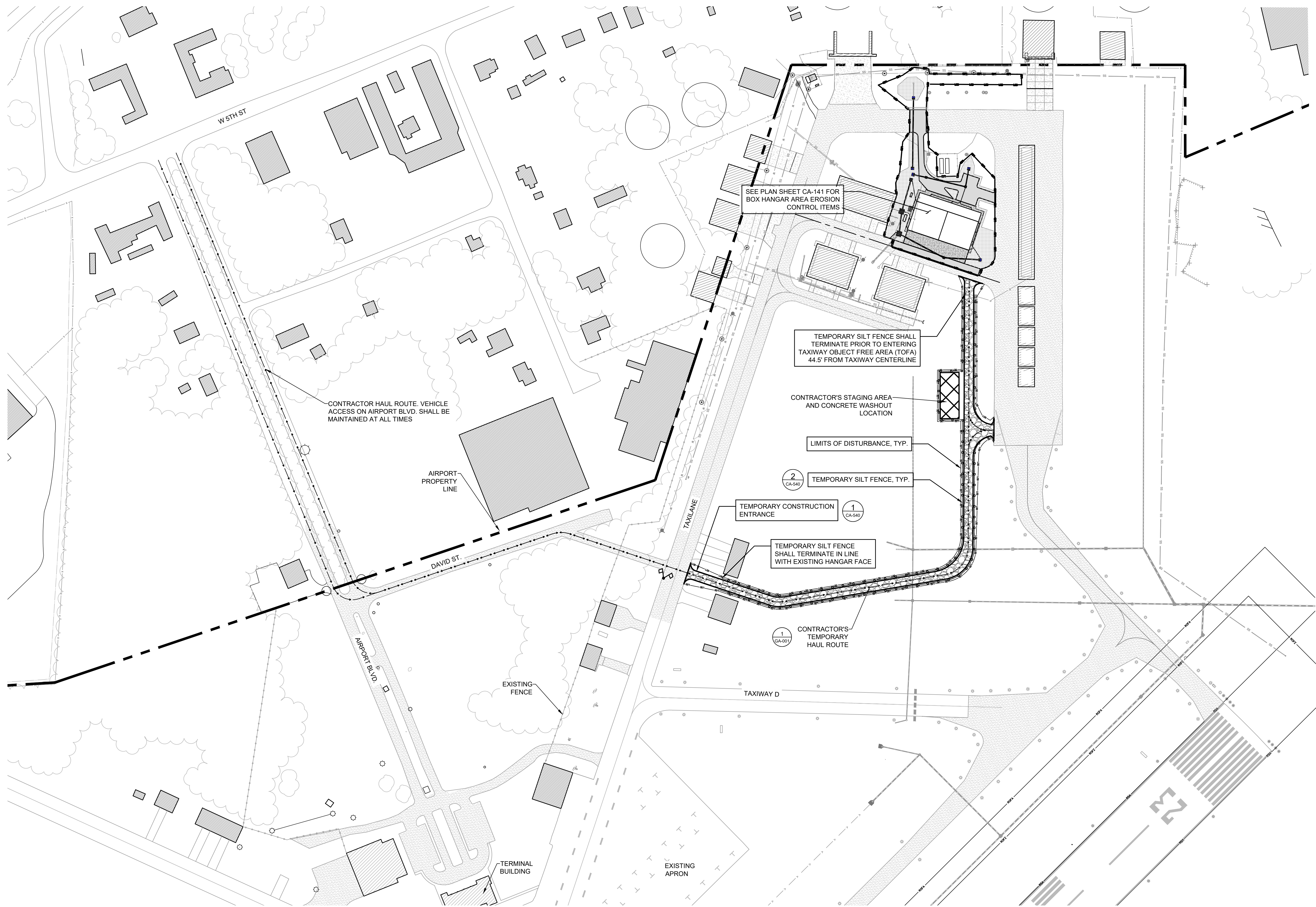
DATE	JANUARY 2025
PROJECT NUMBER	3105-2401
SHEET TITLE	

PAVEMENT
ELEVATION PLAN
(SCHEDULE 1)

SHEET NUMBER

CA-131





EROSION AND SEDIMENT CONTROL NOTES:

- ALL TEMPORARY OR PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES NECESSARY FOR RETAINING SEDIMENTS ON THE CONSTRUCTION SITE SHALL BE INSTALLED AT THE LOCATIONS AS SPECIFIED ON THE PLANS PRIOR TO ANY LAND CLEARING OR GRUBBING ACTIVITIES. A RAIN GAUGE PROVIDED BY CONTRACTOR MUST BE LOCATED ON SITE AT ALL TIMES.
- SUFFICIENT MATERIALS REQUIRED FOR STABILIZATION AND/OR REPAIR OF EROSION CONTROL MEASURES AND STORMWATER ROUTING AND TREATMENT SHALL BE ON SITE AT ALL TIMES.
- CRITICAL EROSION AREAS SHALL BE GIVEN SPECIAL ATTENTION PRIOR TO AND DURING CONSTRUCTION OF THE PROJECT AND UNTIL SUCH TIME AS STABILIZATION OF THE PROJECT HAS BEEN ESTABLISHED.
- CONTRACTOR SHALL MAKE PERIODIC SITE INSPECTIONS OF THE EROSION AND SEDIMENT CONTROL MEASURES TO DETERMINE THEIR CONDITION AND PERFORMANCE. IF SEDIMENT HAS DEPOSITED IN A STREAM OR WETLAND, CONTRACTOR SHALL NOTIFY OWNER AND THE DIVISION OF WATER QUALITY OFFICE WITHIN 24 HOURS AND WRITTEN NOTICE MUST BE PROVIDED WITHIN 5 DAYS. SHOULD ANY ADJUSTMENTS OR REPAIRS NEED TO BE MADE, THE CONTRACTOR SHALL RESPOND IMMEDIATELY IN MAKING NECESSARY REPAIR, ADJUSTMENT AND/OR REPLACEMENT. ANY SEDIMENT WHICH HAS BEEN TRANSPORTED BEYOND THE PROJECT LIMITS SHALL BE REMOVED AND/OR STABILIZED AS DIRECTED BY THE ENGINEER.
- TOPSOIL AND AGGREGATE STOCKPILES SHALL BE PLACED AT THE LOCATION AS DIRECTED BY THE ENGINEER. DEDICATED DEMOLITION AND OTHER WASTE AREAS AND EARTHEN MATERIAL STOCKPILES MUST BE LOCATED AT LEAST 50' FROM STORM DRAINS OR STREAMS UNLESS NO ALTERNATIVE IS FEASIBLE. SILT FENCE SHALL BE ERECTED AT THE TOE OF THE STOCKPILES. SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
- WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICLES TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
- CONTRACTOR SHALL MAINTAIN AND REPAIR EXISTING AGGREGATE BASE ON ACCESS ROADS, PARKING AREAS AND/OR OTHER VEHICLE TRANSPORTATION ROUTES AS REQUIRED OR AS DIRECTED BY THE ENGINEER.
- EROSION AND SEDIMENT CONTROL MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE. THE MEASURES ARE TO BE KEPT CLEAR OF DEBRIS AND SEDIMENTS SHALL BE CLEANED OUT PERIODICALLY DURING AND AFTER CONSTRUCTION ACTIVITIES. ALL OTHER STORM WATER MANAGEMENT FACILITIES SHALL BE INSTALLED AND MADE OPERATIONAL AS SHOWN OR REQUIRED BY CONSTRUCTION ACTIVITIES.
- A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DISTURBED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ENOUGH TO SURVIVE AND WILL INHIBIT EROSION. PERMANENT VEGETATIVE COVER SHALL CONSIST OF LIMING, FERTILIZING, SEEDING, AND MULCHING TO ASSURE A FIRM STAND OF GRASS. TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED ONLY WHEN STABILIZATION HAS BEEN ESTABLISHED.

- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE SCHEDULED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER EACH RAINFALL PRODUCING RUNOFF DURING THE PROJECT. NECESSARY REPAIR, ADJUSTMENT AND/OR REPLACEMENT SHALL BE PERFORMED IMMEDIATELY. RAINY SEASONS OR WET PERIODS WILL BE OF PARTICULAR CONCERN AND THE PROJECT SHALL BE INSPECTED DAILY BY THE CONTRACTOR.
- AIRBORNE SEDIMENTS (DUST) SHALL BE CONTROLLED IN ACCORDANCE WITH REQUIREMENTS OF THE SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- A PERMANENT GROUND COVER MUST BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER), FOLLOWING COMPLETION OF EACH PHASE OF CONSTRUCTION.
- ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY AND PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED BY THE CONTRACTOR EVERY SEVEN (7) DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ONE-HALF (1/2) INCH DURING THE PROJECT AND FINAL STABILIZATION OF PROJECT. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED, AS NECESSARY.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED BY THE CONTRACTOR DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE NORTH CAROLINA SEDIMENTATION CONTROL LAW AND THE RELATED REGULATIONS, INCLUDING IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN AND THE REQUIREMENTS OF THE NPDES GENERAL PERMIT.
- THE CONTRACTOR SHALL MAINTAIN ON SITE AT ALL TIMES A COPY OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, DATED MAY, 2013.

NOTES:

- EXCLOSOR MATTING SHALL BE INSTALLED ON ALL DISTURBED OR NEW SLOPES 5:1 OR GREATER. SEE DETAIL ON SHEET CB-541.
- SEE SEDIMENTATION AND EROSION CONTROL NOTES AND DETAILS ON SHEETS CB-540 THROUGH CB-543.
- FEDERAL REGULATIONS WILL NOT ALLOW MEASURES SUCH AS SILT FENCE TO BE PLACED WITHIN EXISTING TAXILANE OBJECT FREE AREAS THAT ARE OPEN FOR USE.
- THERE MAY BE INSTANCES WHERE SHRUB AND TREE GROWTH NEXT TO THE FENCE MAKES IT IMPRACTICAL TO PLACE SILT FENCE WITHIN THE FENCE. IN THIS CASE, SILT FENCE SHALL BE INSTALLED ON THE OTHER SIDE OF THE FENCE WHILE ENSURING THE SILT FENCE IS STILL INSTALLED ON AIRPORT PROPERTY. IN TRANSITIONS FROM EITHER SIDE OF THE FENCE TO THE OTHER, SUFFICIENT OVERLAP SHOULD BE ADDED TO ENSURE SEDIMENT IS CONTAINED ON SITE.

STABILIZATION TIMEFRAMES		
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES.

LEGEND	
	AIRPORT PROPERTY LINE
	TAXIWAY/TAXILANE OBJECT FREE AREA (T/OFA/TLOFA)
	EXISTING STORM SEWER
	EXISTING BUILDING
	EXISTING VEGETATION
	EXISTING FENCE
	PROPOSED PAVEMENT
	EXISTING MAJOR CONTOUR (2.5')
	EXISTING MINOR CONTOUR (0.5')
	PROPOSED MAJOR CONTOUR, 2.5'
	PROPOSED MINOR CONTOUR, 0.5'
	TEMPORARY SILT FENCE
	TEMPORARY DROP INLET PROTECTION
	LIMITS OF DISTURBANCE
	PROPOSED STORM SEWER
	TEMPORARY DIVERSION DITCH
	TEMPORARY SILT FENCE STONE OUTLET
	CONTRACTOR'S ACCESS ROUTE
	CONTRACTOR'S STAGING AREA

PERMANENT SEED MIXES SHALL BE APPLIED AS FOLLOWS:

SEED	APPLICATION RATE (LBS/ACRE)	SEEDING DATES
COMMON BERMUDAGRASS (HULLED)	50	MAR. 1 - JUL. 31
COMMON BERMUDAGRASS (UNHULLED)	70	AUG. 1 - FEB. 28

TEMPORARY SEED MIXES SHALL BE APPLIED AS FOLLOWS:

SEED	APPLICATION RATE (LBS/ACRE)	SEEDING DATES
RYE (GRAIN)	120	JAN. 1 - MAR. 31
KOBE LESPEDEZA	50	APR. 1 - AUG. 15
HULLED BERMUDA GRASS	50	APR. 1 - AUG. 15
RYE (GRAIN)	120	AUG. 16 - DEC. 31

FERTILIZER:

FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 LBS/ACRE OF A 10-10-10 COMMERCIAL FERTILIZER. FERTILIZER SHALL BE APPLIED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION T-901 SEEDING OF THE PROJECT SPECIFICATIONS.

LIME:

LIME SHALL BE APPLIED AT THE RATE OF 3,000 LBS/ACRE. LIME SHALL BE APPLIED IN ACCORDANCE WITH SECTION T-901 SEEDING OF THE PROJECT SPECIFICATIONS.

MULCH:

MULCH SHALL CONSIST OF MANUFACTURED MULCH. MULCH SHALL BE EVENLY APPLIED AT THE RATE OF 2 TO 3 TONS PER ACRE TO PROVIDE A LOOSE DEPTH OF 1 2"-3". MANUFACTURED MULCH SHALL BE APPLIED AT THE RATE AS RECOMMENDED BY THE MANUFACTURER. MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION T-908 - MULCHING OF THE SPECIFICATIONS.

MAINTENANCE OF SEEDED AREAS:

THE CONTRACTOR SHALL BE REQUIRED TO ESTABLISH A GOOD STAND OF GRASS OF UNIFORM COLOR AND DENSITY TO THE SATISFACTION OF THE ENGINEER AND OWNER. THE CONTRACTOR SHALL WATER THE SEEDED AREAS AS REQUIRED FOR SEED GERMINATION AND AS REQUIRED TO MAINTAIN AREAS OF ESTABLISHED GRASS. THE CONTRACTOR SHALL MOW GRASS AREAS AND CONTROL THE PRESENCE OF INVASIVE SPECIES AS REQUIRED. CONTRACTOR WILL BE REQUIRED TO RESEED AND MULCH ALL AREAS WHERE SEEDING EMERGENCE IS POOR. ALL AREAS OF EROSION SHALL BE REPAIRED AND RESEEDED AS SOON AS POSSIBLE. CONTRACTOR SHALL PROTECT SEEDED AREAS FROM TRAFFIC AS MUCH AS POSSIBLE.

GENERAL SEQUENCE OF CONSTRUCTION:

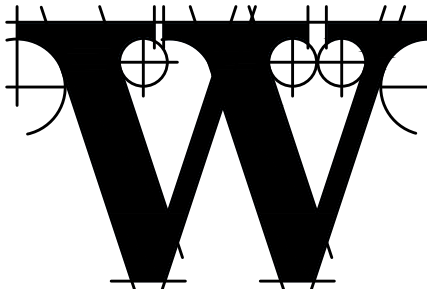
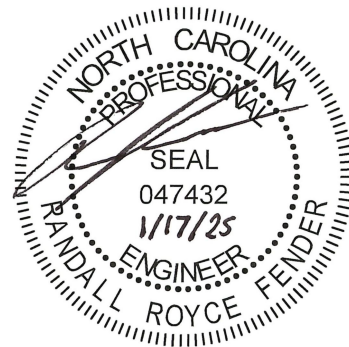
THE FOLLOWING GENERAL SEQUENCE OF CONSTRUCTION HAS BEEN DEVELOPED TO OUTLINE THE REQUIREMENTS FOR EROSION AND SEDIMENTATION CONTROL. IN ACCORDANCE WITH THE CONTRACT PROVISIONS, THE CONTRACTOR SHALL DEVELOP AND SUBMIT A DETAILED PROJECT CONSTRUCTION SCHEDULE.

SEQUENCE OF CONSTRUCTION - SEDIMENT AND EROSION CONTROL

- PERFORM PROJECT LAYOUT (SURVEY), MARK UTILITIES AND FLAG CLEARING LIMITS FOR REVIEW BY ENGINEER.
- AIRPORT WILL HOLD PRECONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION.
- INSTALL TEMPORARY CONSTRUCTION ENTRANCE.
- CLOSE CONSTRUCTION AREA FOR AIRPORT TRAFFIC WITH APPROPRIATE BARRICADES AND TAXIWAY CLOSURE CROSSES.
- INSTALL TEMPORARY SILT FENCE AND OTHER TEMPORARY EROSION CONTROL MEASURES.
- SET UP STAGING AND STOCKPILE AREAS.
- STRIP APPROXIMATELY 4 INCHES TO REMOVE TOPSOIL AND GRASS ROOTMAT.
- INSTALL NEW PIPE AND DRAINAGE STRUCTURES.
- BEGIN PLACING FILL TO BRING SITE TO PROPOSED GRADES.
- INSTALL TEMPORARY DROP INLET PROTECTION.
- COMPLETE WATER AND SANITARY SEWER UTILITIES INSTALLATION AND GRADING.
- COMPLETE FINAL GRADING.
- COMMENCE PLACEMENT OF STONE BASE COURSE, COMPACT, AND GRADE TO SPECIFIED ELEVATIONS AND GRADE.
- CONSTRUCT ASPHALTIC PAVEMENT AND CONCRETE PAVEMENT.
- COMPLETE SHOULDER GRADING OPERATIONS AS NECESSARY.
- BEGIN SODDING, SEEDING, AND MULCHING OPERATIONS FOR DISTURBED AREAS.
- REMOVE MISCELLANEOUS EQUIPMENT, STOCKPILES, DEBRIS, ETC., FROM PROJECT AND STAGING AREA TO DISPOSE OF OFF AIRPORT PROPERTY, AS REQUIRED.
- COMPLETE RESTORATION OF ALL DISTURBED AREAS AND COMPLETE SODDING, SEEDING AND MULCHING ON ALL AREAS THROUGHOUT THE PROJECT. FOLLOWING STABILIZATION OF THE SITE, INCLUDING ESTABLISHMENT OF A GOOD STAND OF GRASS IN ALL AREAS, THE CONTRACTOR SHALL REQUEST FINAL INSPECTION BY NCDC. REMOVE REMAINING TEMPORARY EROSION CONTROL MEASURES AS THE PROJECT IS COMPLETED OR GRASSSED AREAS ARE REESTABLISHED AS DIRECTED BY THE ENGINEER.
- ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER RAINFALL EVENTS. NEEDED REPAIRS WILL BE MADE IMMEDIATELY. SEE MAINTENANCE REQUIREMENTS FOR EACH EROSION AND SEDIMENT CONTROL PRACTICE.



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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- ARCHITECTS -

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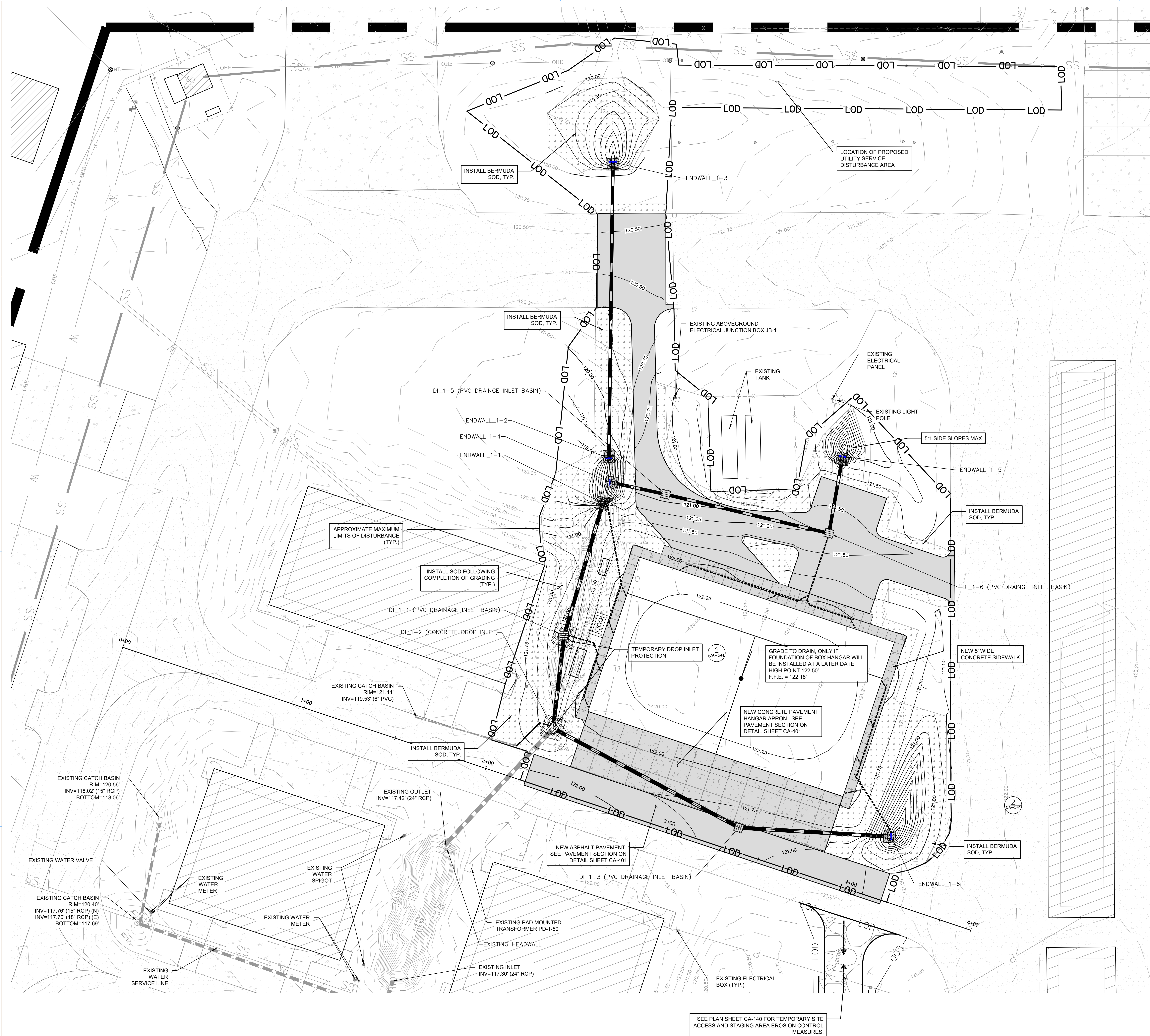
REVISIONS

DATE JANUARY 2025
PROJECT NUMBER 3105-2401
SHEET TITLE

SEDIMENTATION
& EROSION
CONTROL PLAN - 1
(SCHEDULE 1)

SHEET NUMBER

CA-140

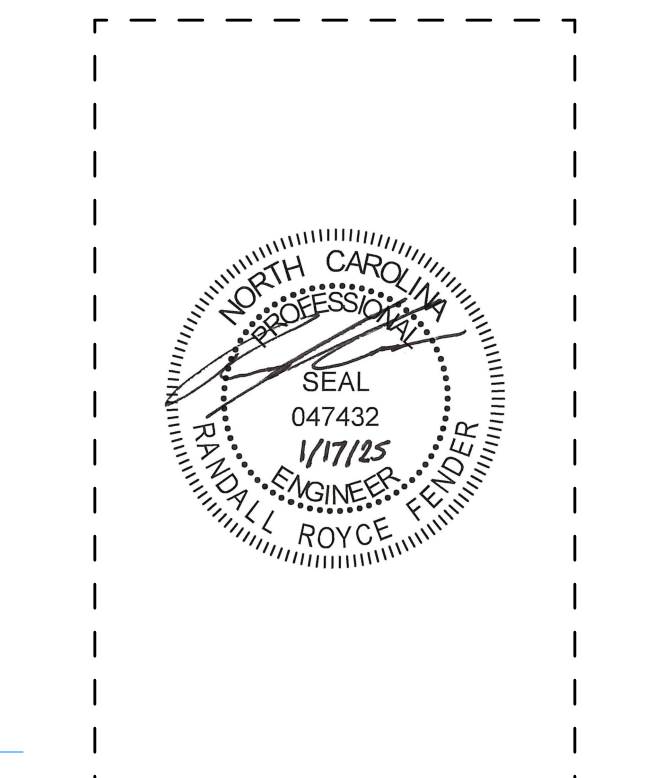


LEGEND	
	AIRPORT PROPERTY LINE
	TAXIWAY/TAXILANE OBJECT FREE AREA (TOFA/TLOFA)
	EXISTING STORM SEWER
	EXISTING BUILDING
	EXISTING VEGETATION
	EXISTING FENCE
	PROPOSED ASPHALT PAVEMENT
	PROPOSED CONCRETE PAVEMENT
	EXISTING SANITARY SEWER
	EXISTING WATER LINE
	EXISTING OVERHEAD ELECTRICAL LINE
	EXISTING UNDERGROUND ELECTRICAL LINE
	EXISTING MAJOR CONTOUR (2.5')
	EXISTING MINOR CONTOUR (0.5')
	PROPOSED MAJOR CONTOUR, 2.5'
	PROPOSED MINOR CONTOUR, 0.5'
	TEMPORARY SILT FENCE
	TEMPORARY DROP INLET PROTECTION
	LIMITS OF DISTURBANCE
	PROPOSED STORM SEWER
	TEMPORARY DIVERSION DITCH
	CONTRACTOR'S ACCESS ROUTE
	CONTRACTOR'S STAGING AREA
	BERMUDA SOD

- NOTES:
- SEE SEDIMENTATION AND EROSION CONTROL NOTES AND DETAILS ON SHEETS CA-540 AND CA-541.
 - FEDERAL REGULATIONS WILL NOT ALLOW MEASURES SUCH AS SILT FENCE TO BE PLACED WITHIN EXISTING TAXILANE OBJECT FREE AREAS THAT ARE OPEN FOR USE.



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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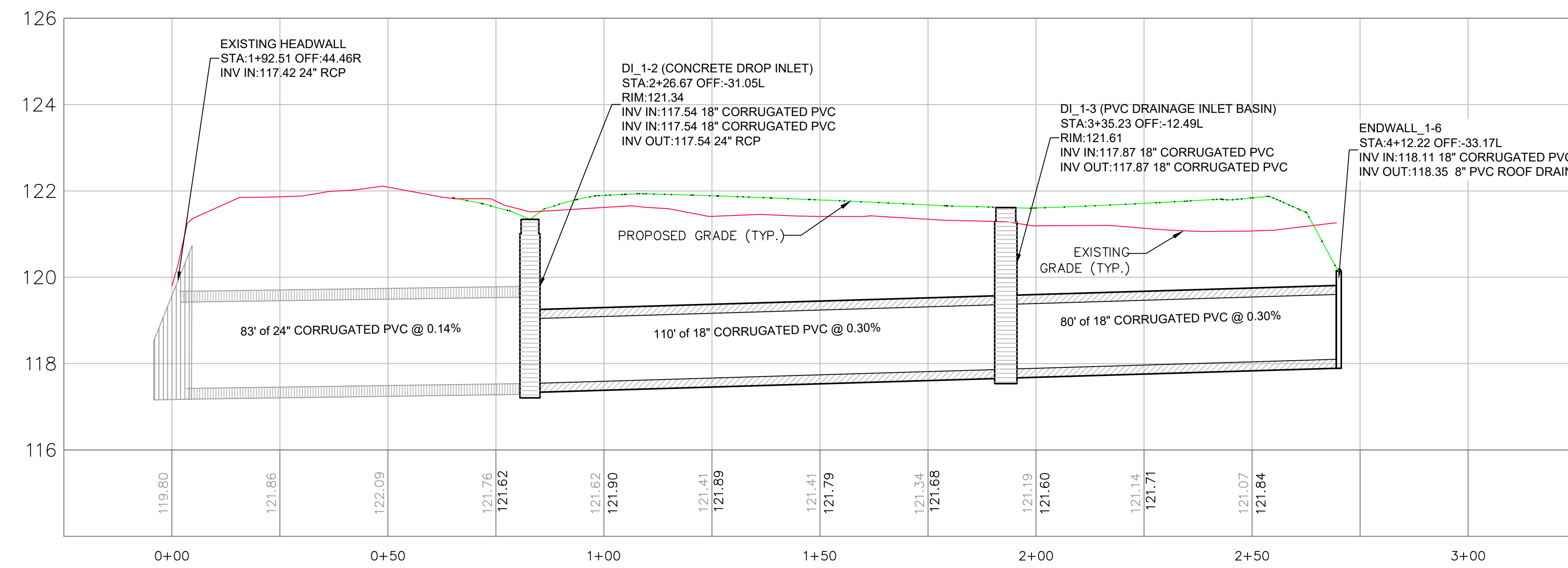
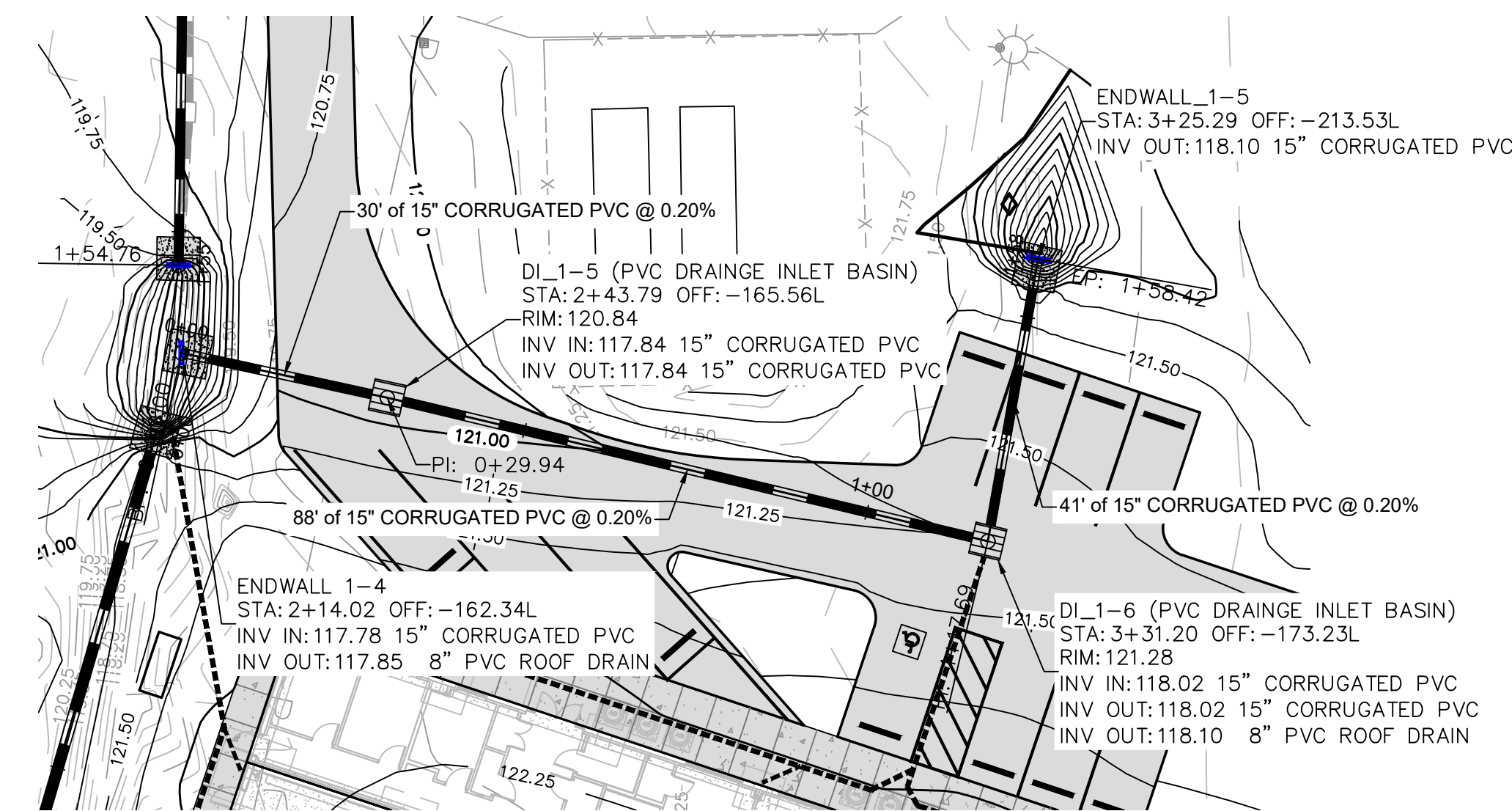
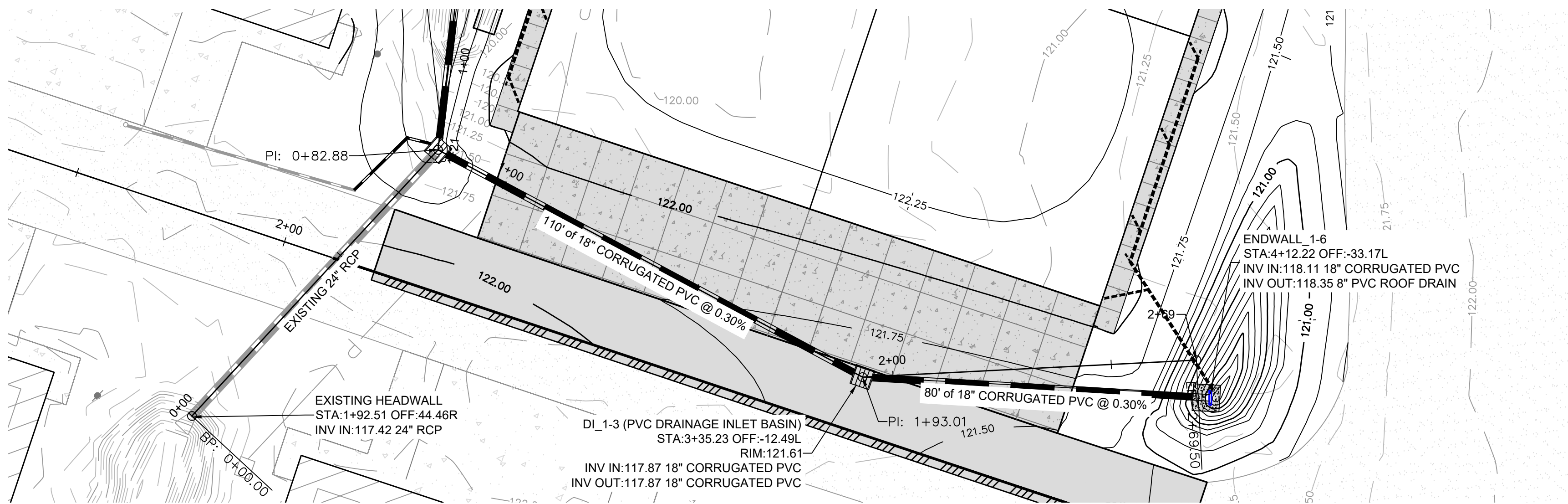
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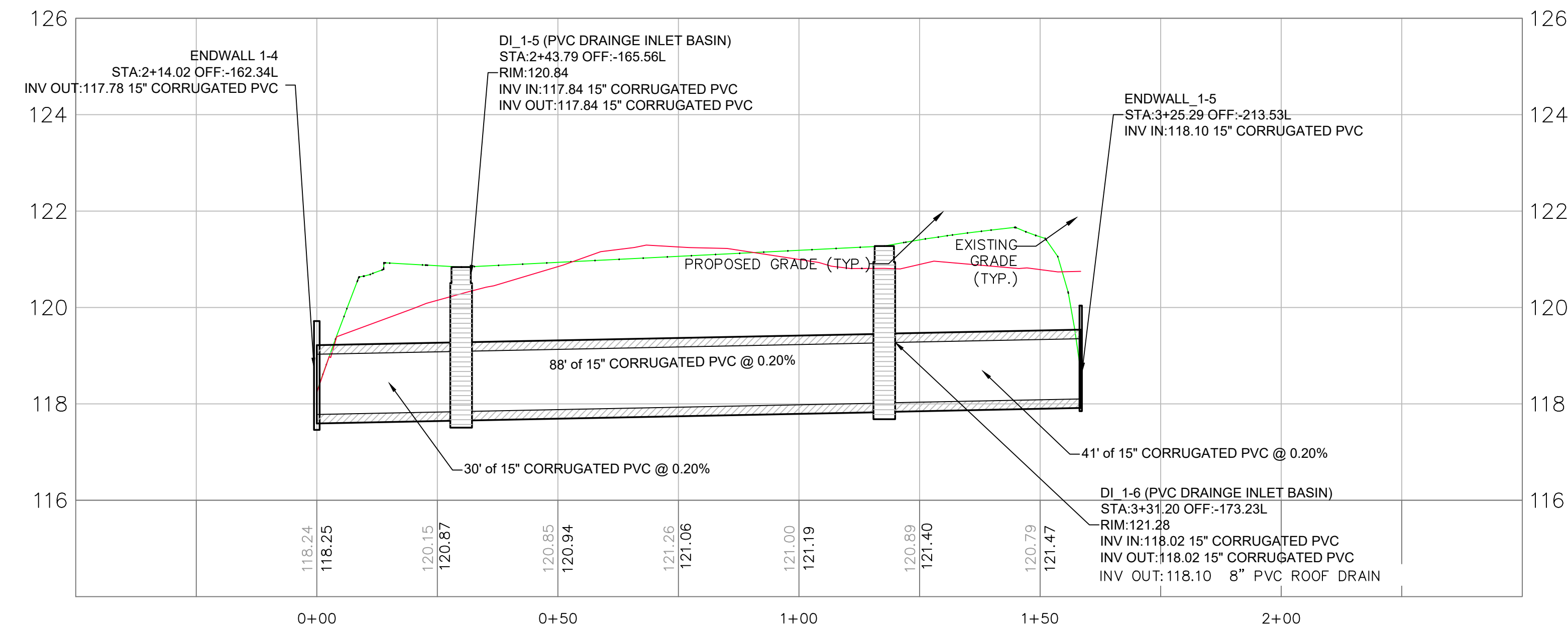
DATE: JANUARY 2025
PROJECT NUMBER: 3105-2401
SHEET TITLE:

SEDIMENTATION & EROSION CONTROL PLAN - 2 (SCHEDULE 1)

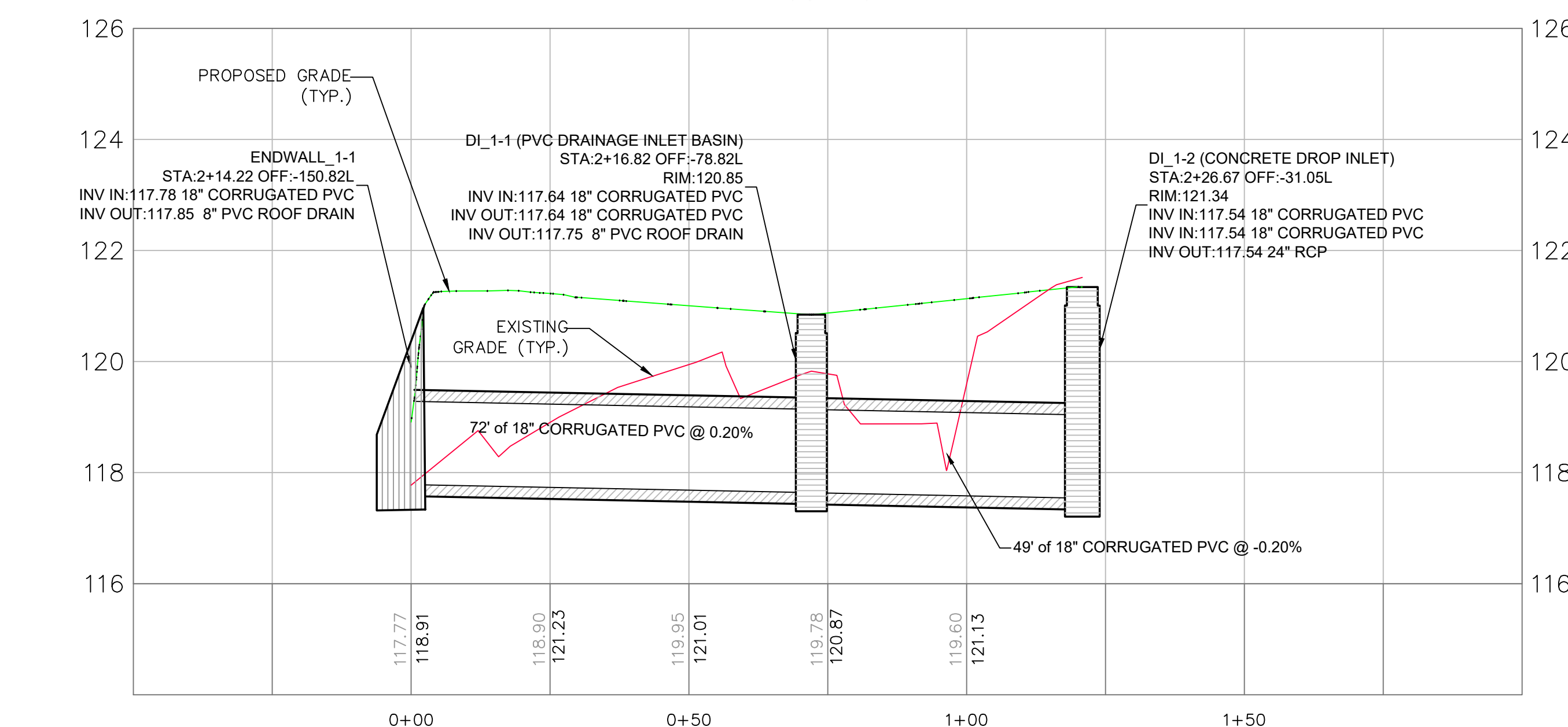
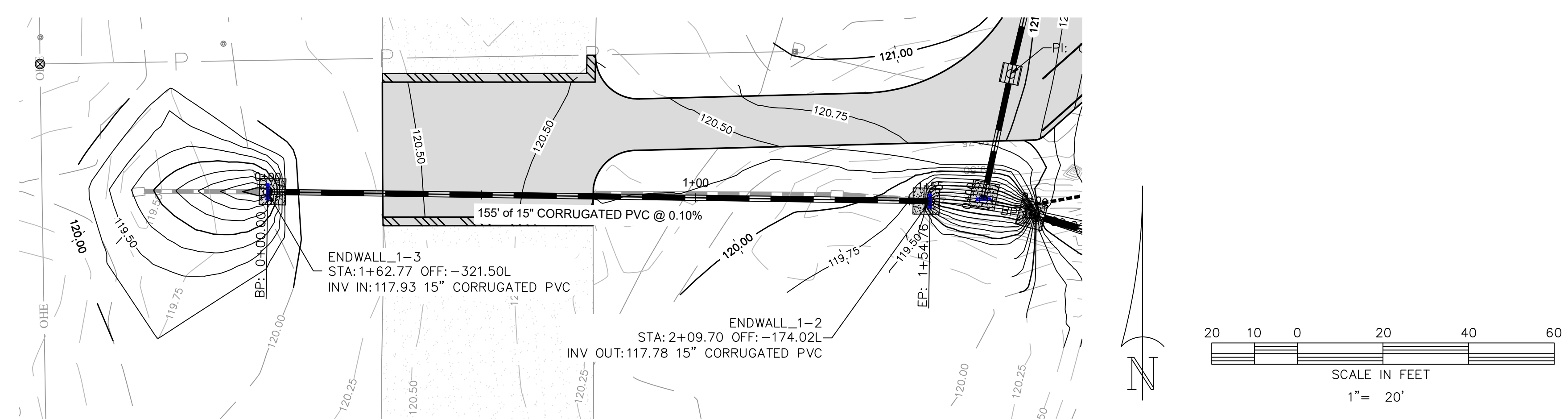
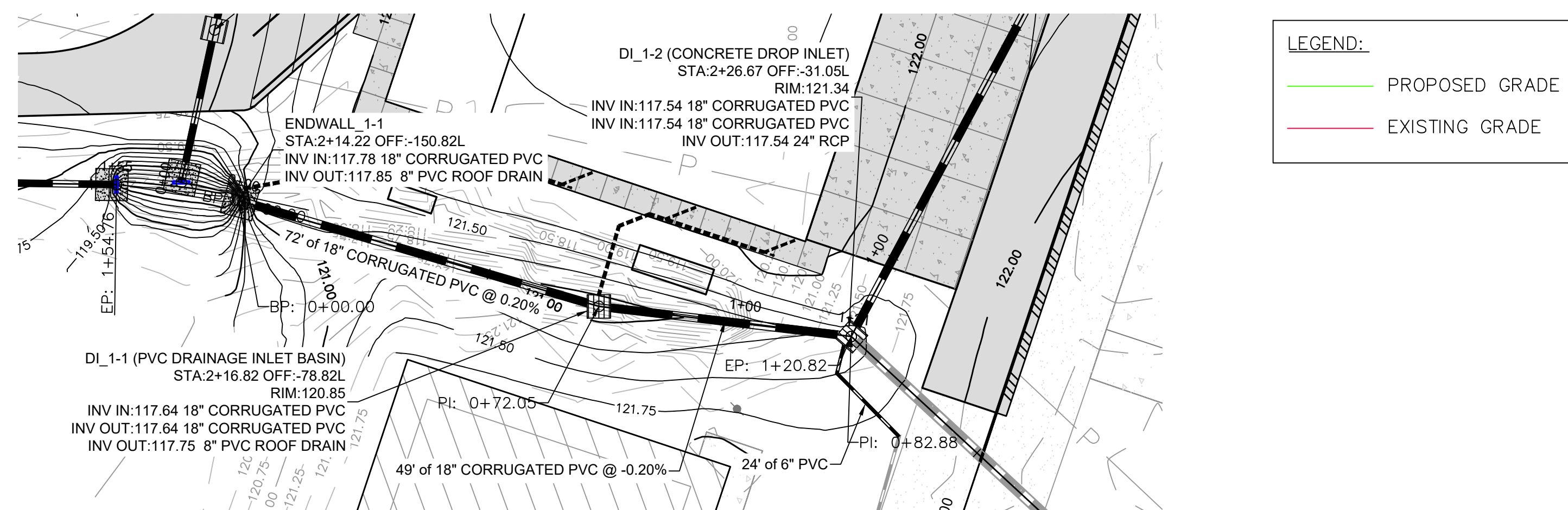
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CA-141



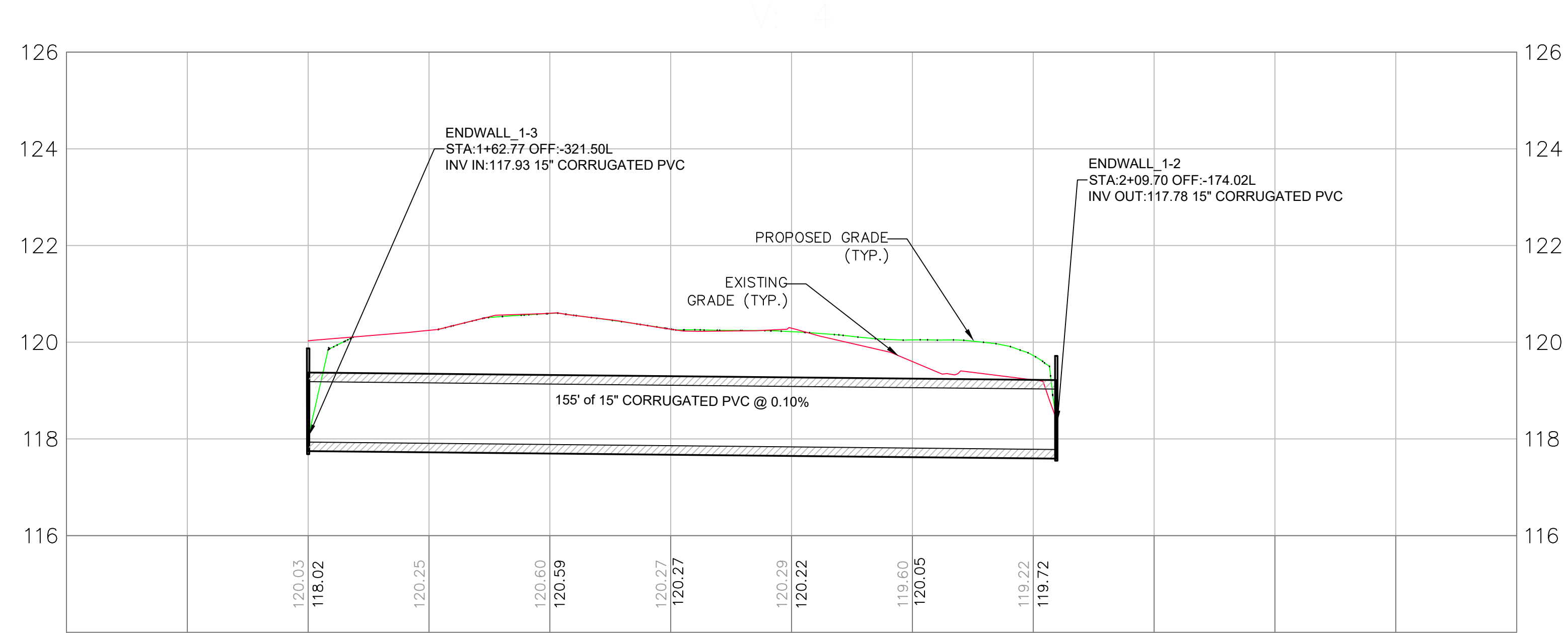
SCHEDULE 1 PROPOSED STORMWATER (STRUCTURE ENDWALL 1-6 TO DI 1-2)
H: 1"=20'
V: 1"=2'



SCHEDULE 1 PROPOSED STORMWATER (STRUCTURE ENDWALL 1-5 TO ENDWALL 1-4)
H: 1"=20'
V: 1"=2'



SCHEDULE 1 PROPOSED STORMWATER (STRUCTURE FES 1-1 TO DI 1-2)
H: 1"=20'
V: 1"=2'

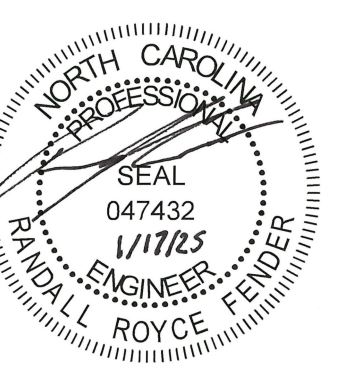


SCHEDULE 1 PROPOSED STORMWATER (STRUCTURE ENDWALL 1-3 TO ENDWALL 1-2)
H: 1"=20'
V: 1"=2'



Schedule 1: 2-Unit Box Hangar

Lumberton Regional Airport
Lumberton, NC 28358



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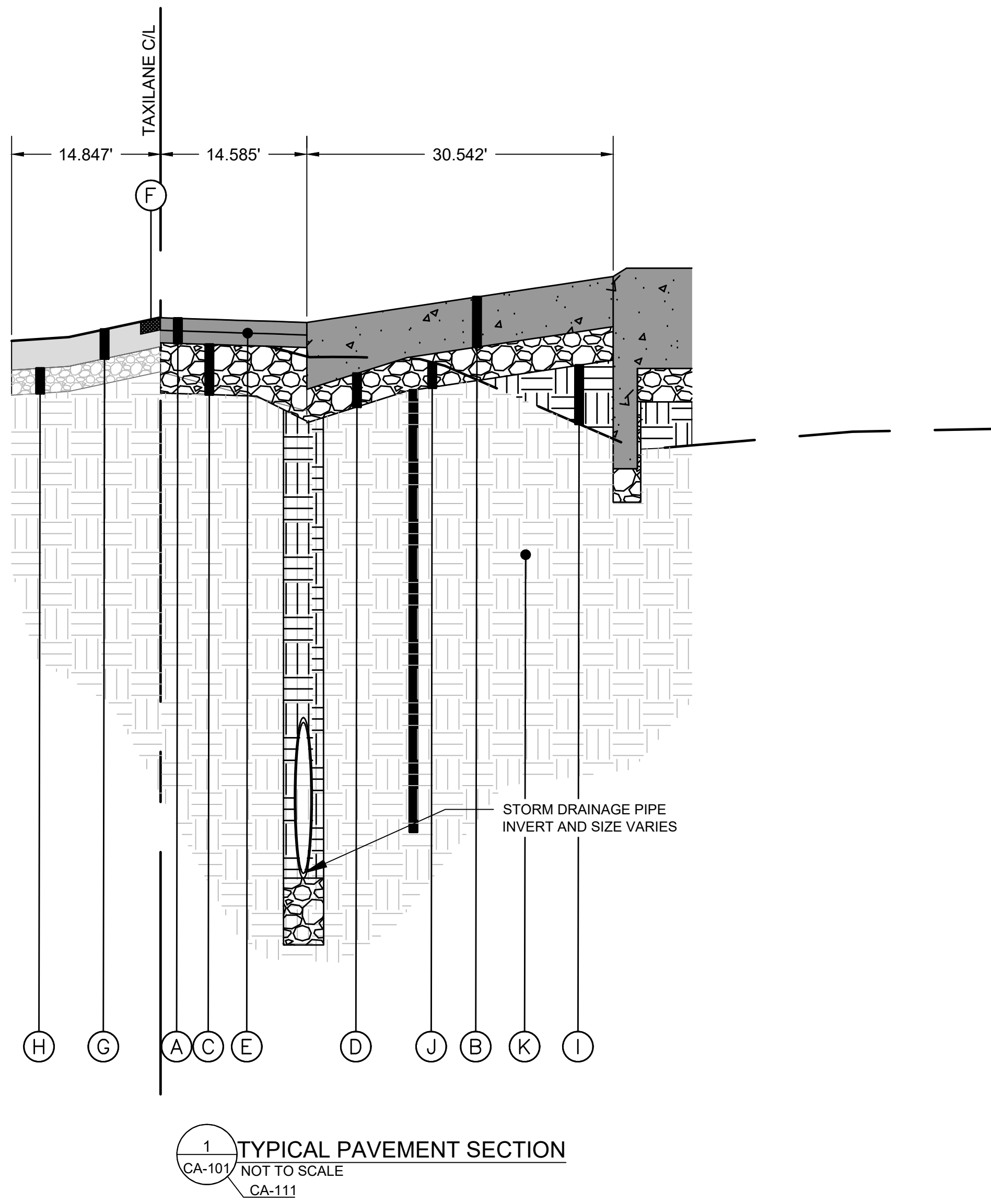
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REVISIONS

DATE: JANUARY 2025
PROJECT NUMBER: 3105-2401
SHEET TITLE:

DRAINAGE PROFILES (SCHEDULE 1)

SHEET NUMBER
CA-221



LEGEND:

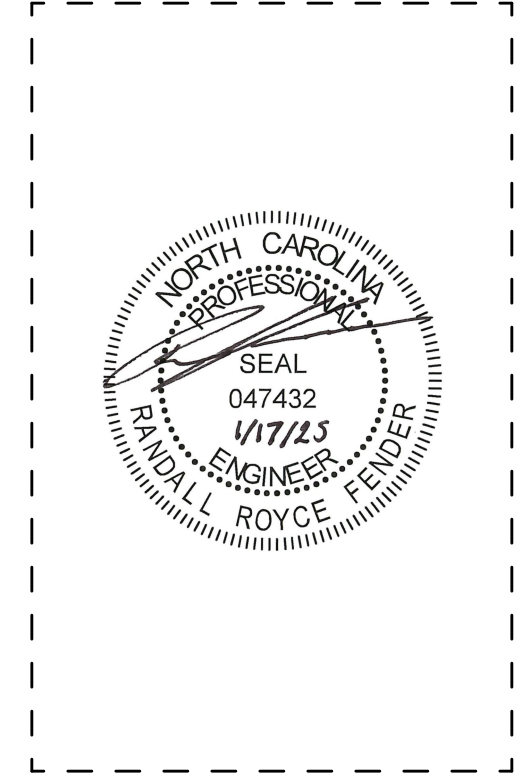
- (A) PROPOSED HOT MIX ASPHALT SURFACE COURSE, 3-INCH DEPTH (2 - 1.5" LIFTS, S9.5B)
- (B) PROPOSED NCDOT CONCRETE CLASS "PAVEMENT" PAVEMENT, 6-INCH DEPTH
- (C) PROPOSED AGGREGATE BASE COURSE, 6-INCH DEPTH (P-209)
- (D) PROPOSED AGGREGATE BASE COURSE, 4-INCH DEPTH (P-209)
- (E) PROPOSED ASPHALTIC TACK COAT (P-603)
- (F) PROPOSED ASPHALTIC PAVEMENT MILLING AND OVERLAY, 1.5-INCH DEPTH
- (G) EXISTING ASPHALTIC SURFACE COURSE, 3.5-INCH DEPTH
- (H) EXISTING AGGREGATE BASE COURSE, 3-INCH DEPTH
- (I) FILL/UNCLASSIFIED EXCAVATION (P-152)
- (J) CUT/UNCLASSIFIED EXCAVATION (P-152)
- (K) EXISTING SUBGRADE

NOTES:

- SEE SHEET CA-111 FOR SCHEDULE 1 PAVING LIMITS.
- SEE THE CA-120 SERIES DRAWINGS FOR SCHEDULE 1 SITE GRADING.



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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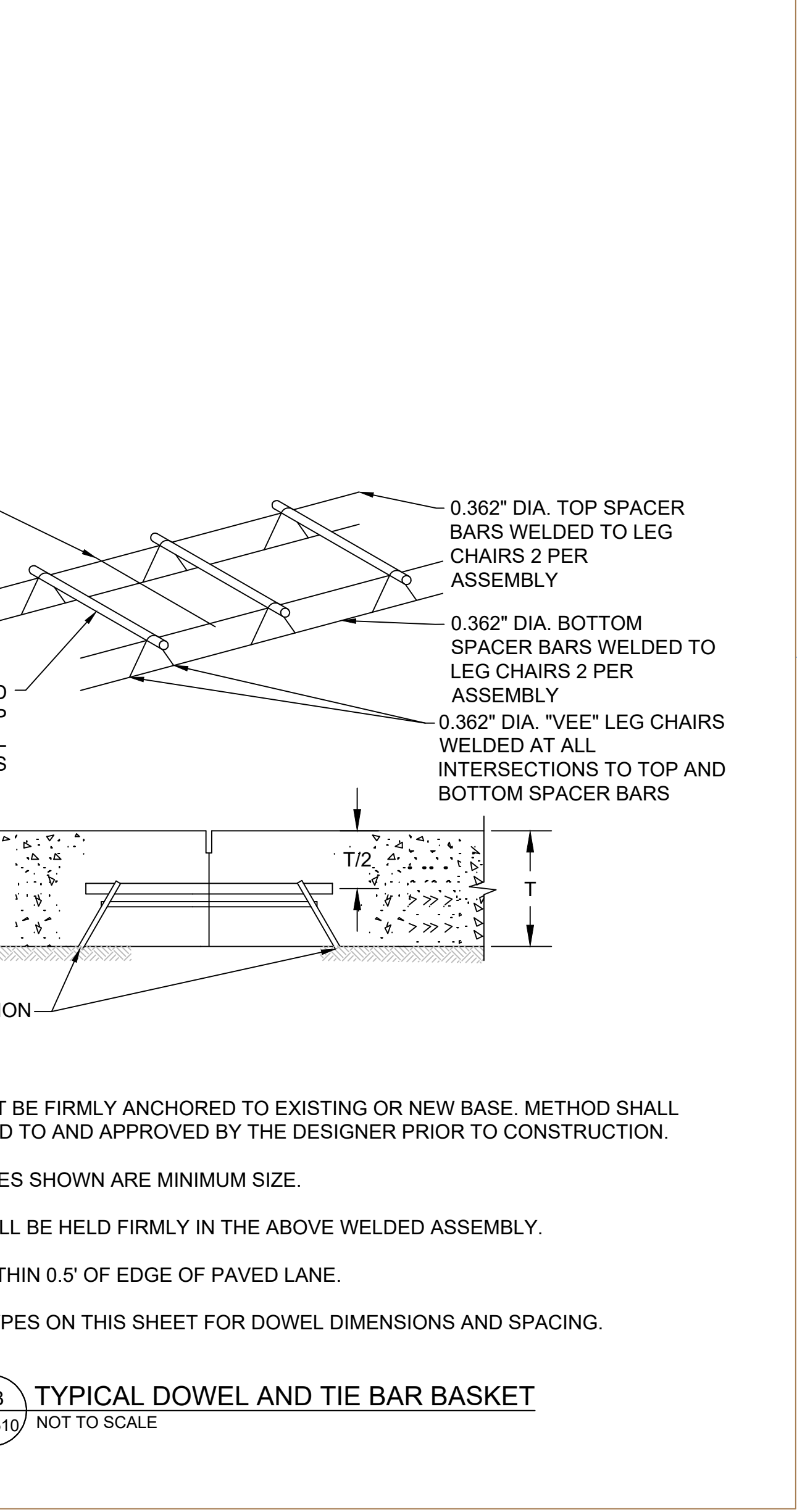
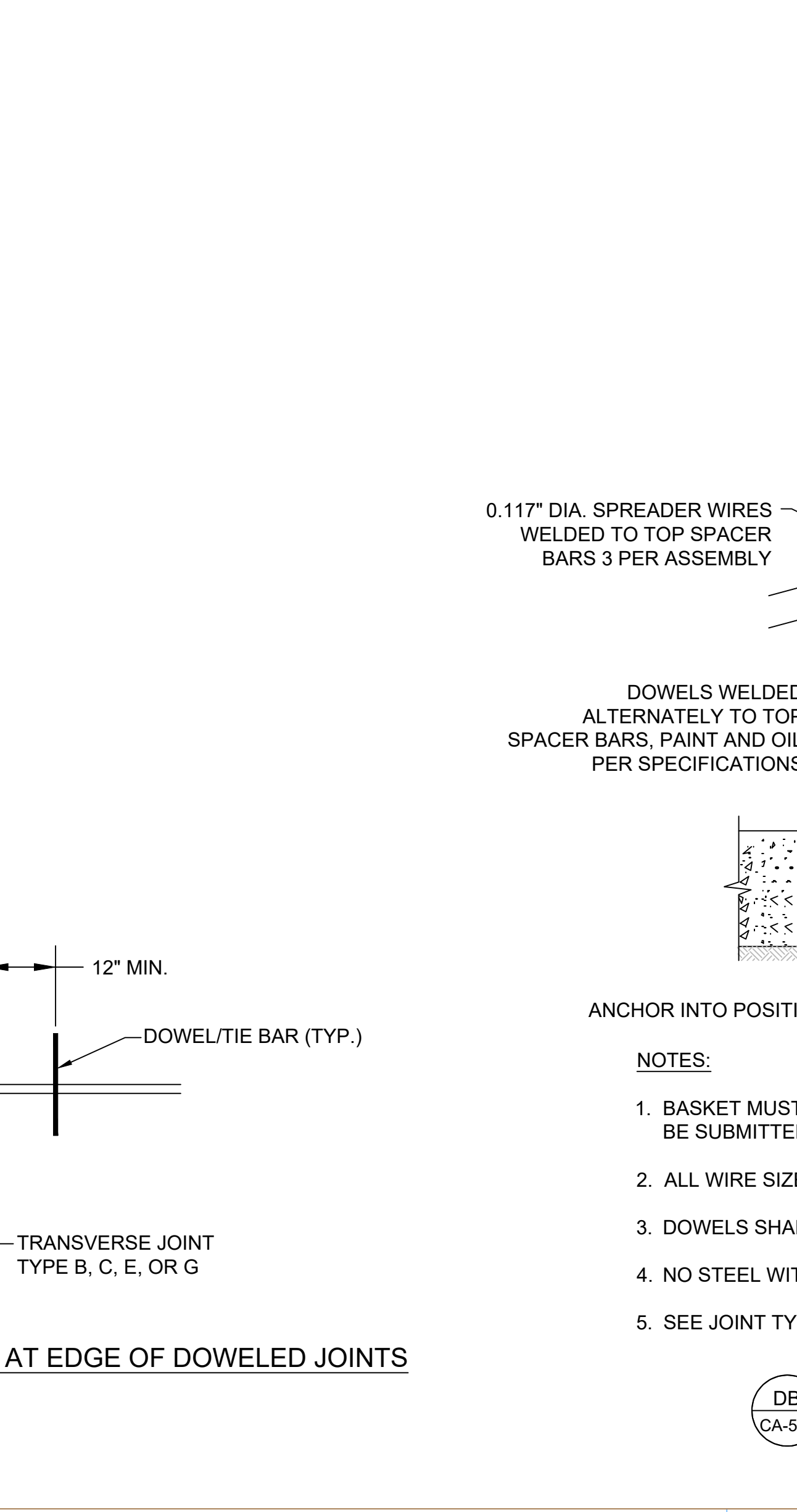
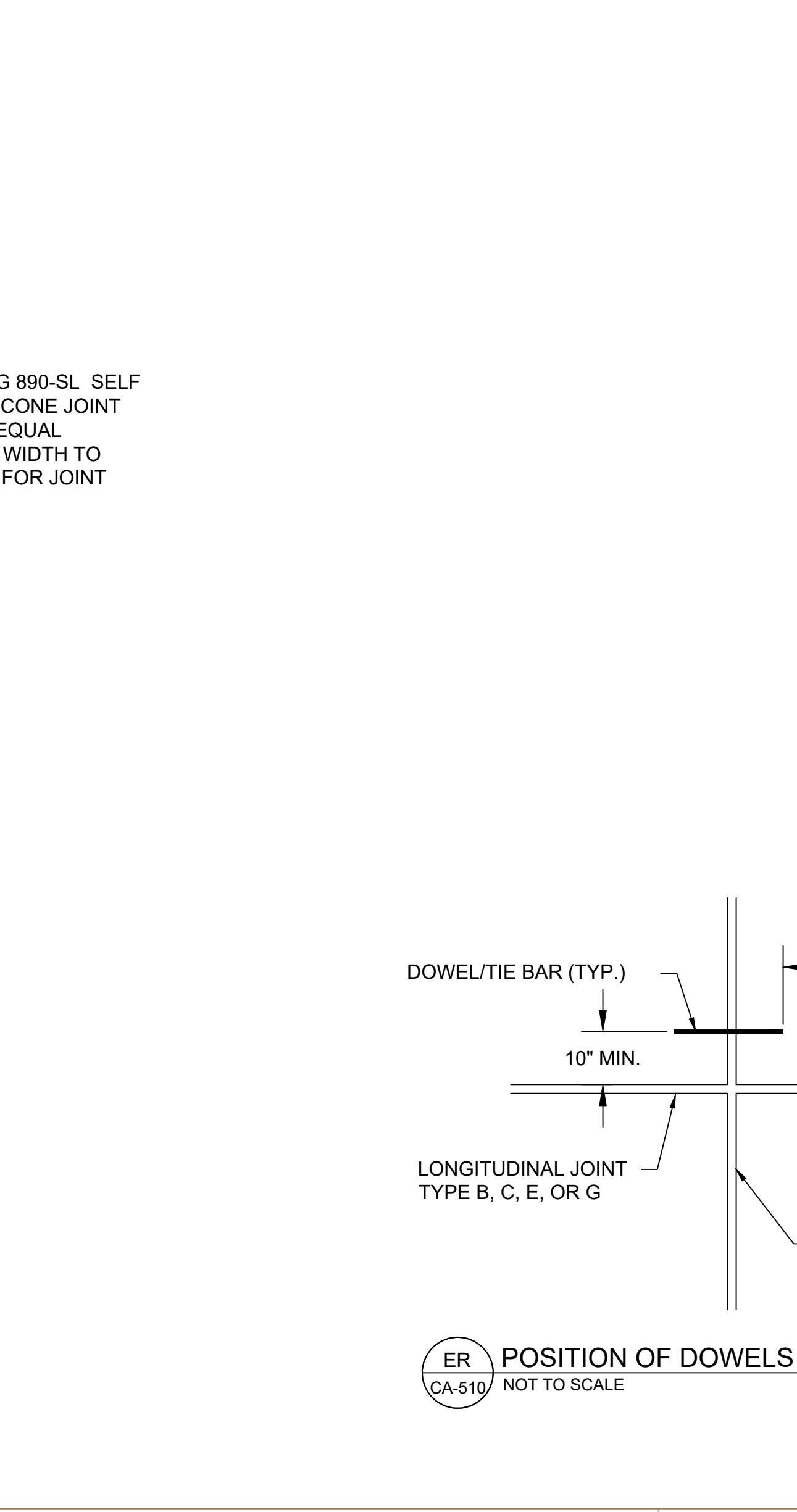
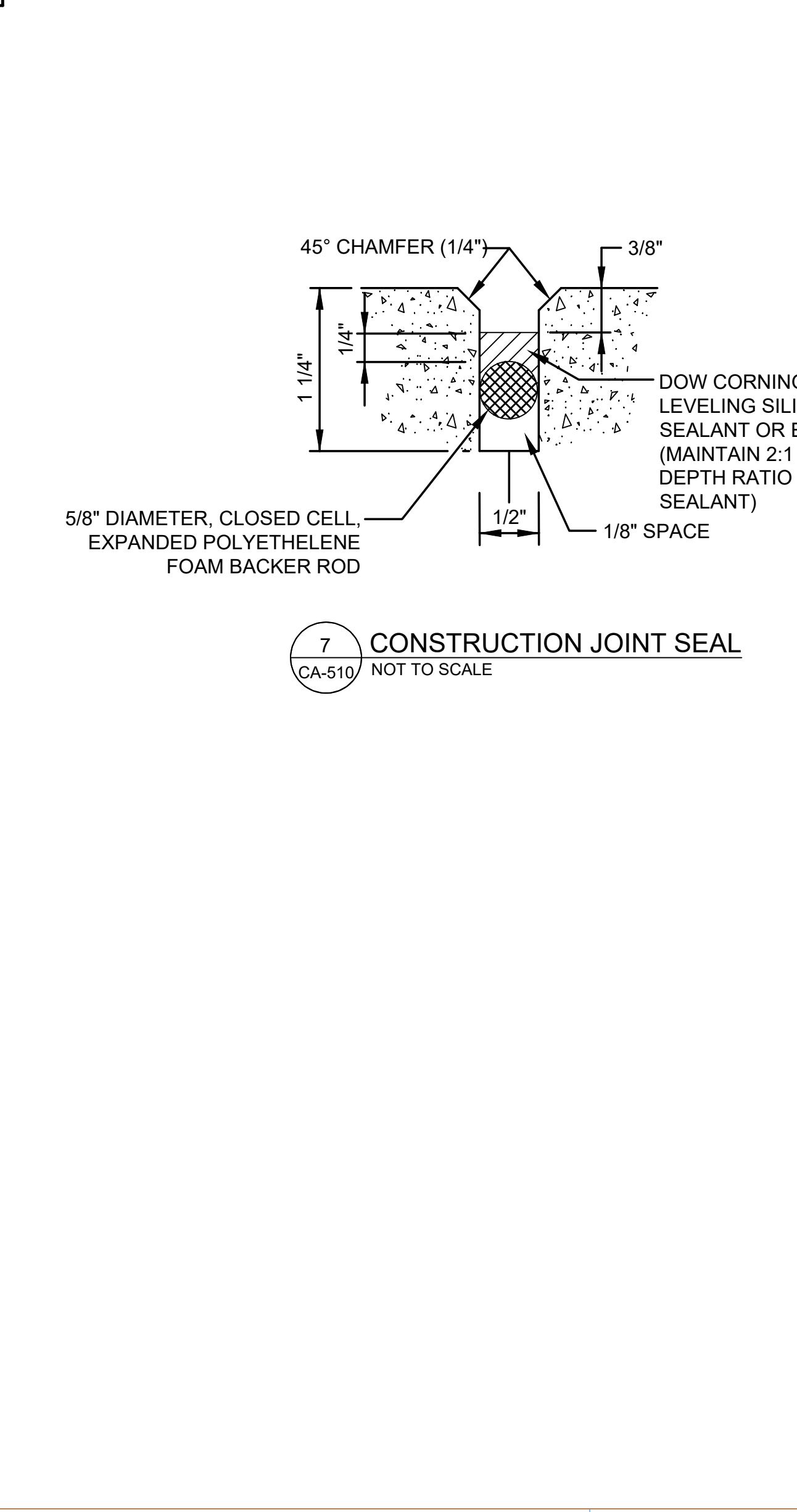
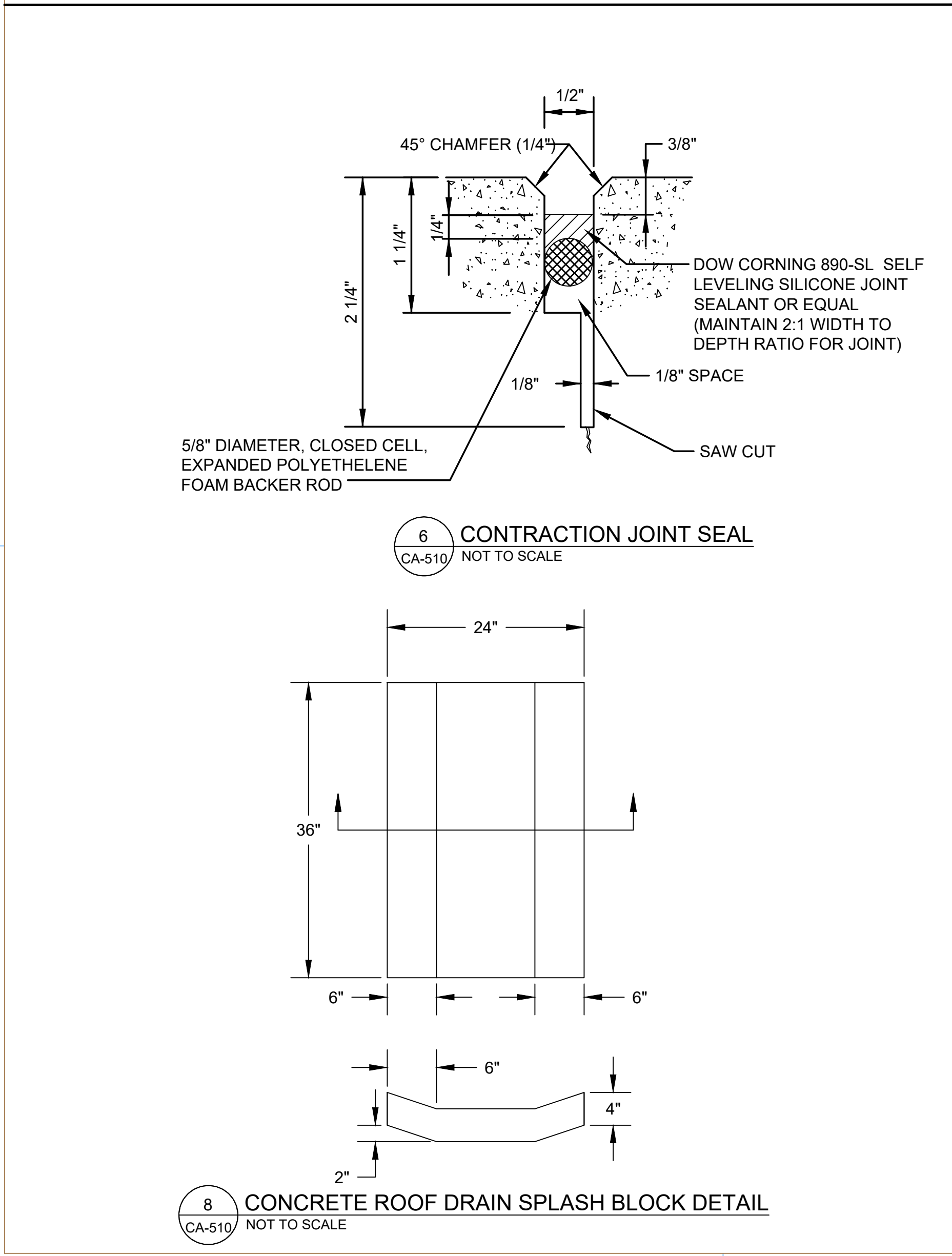
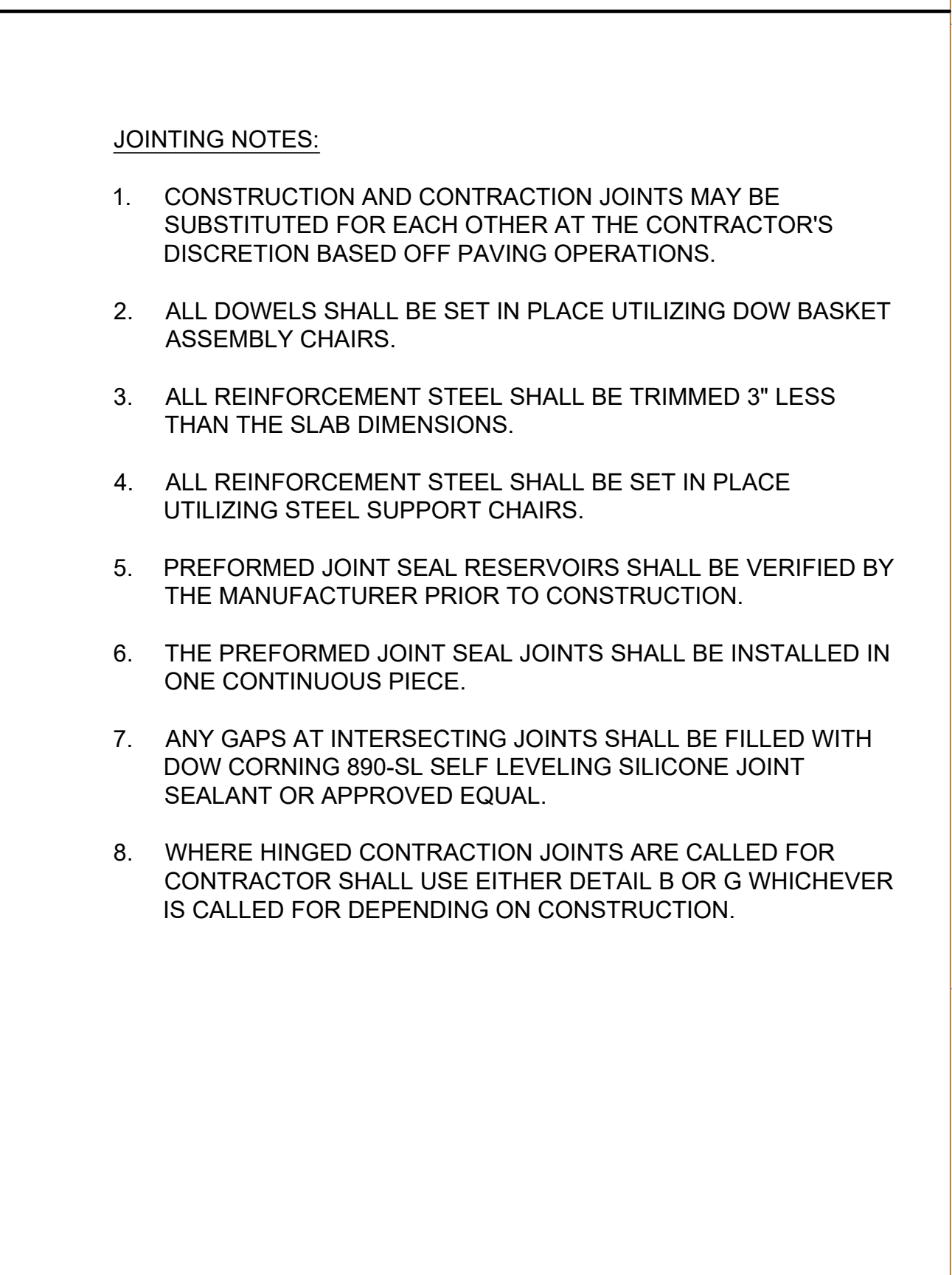
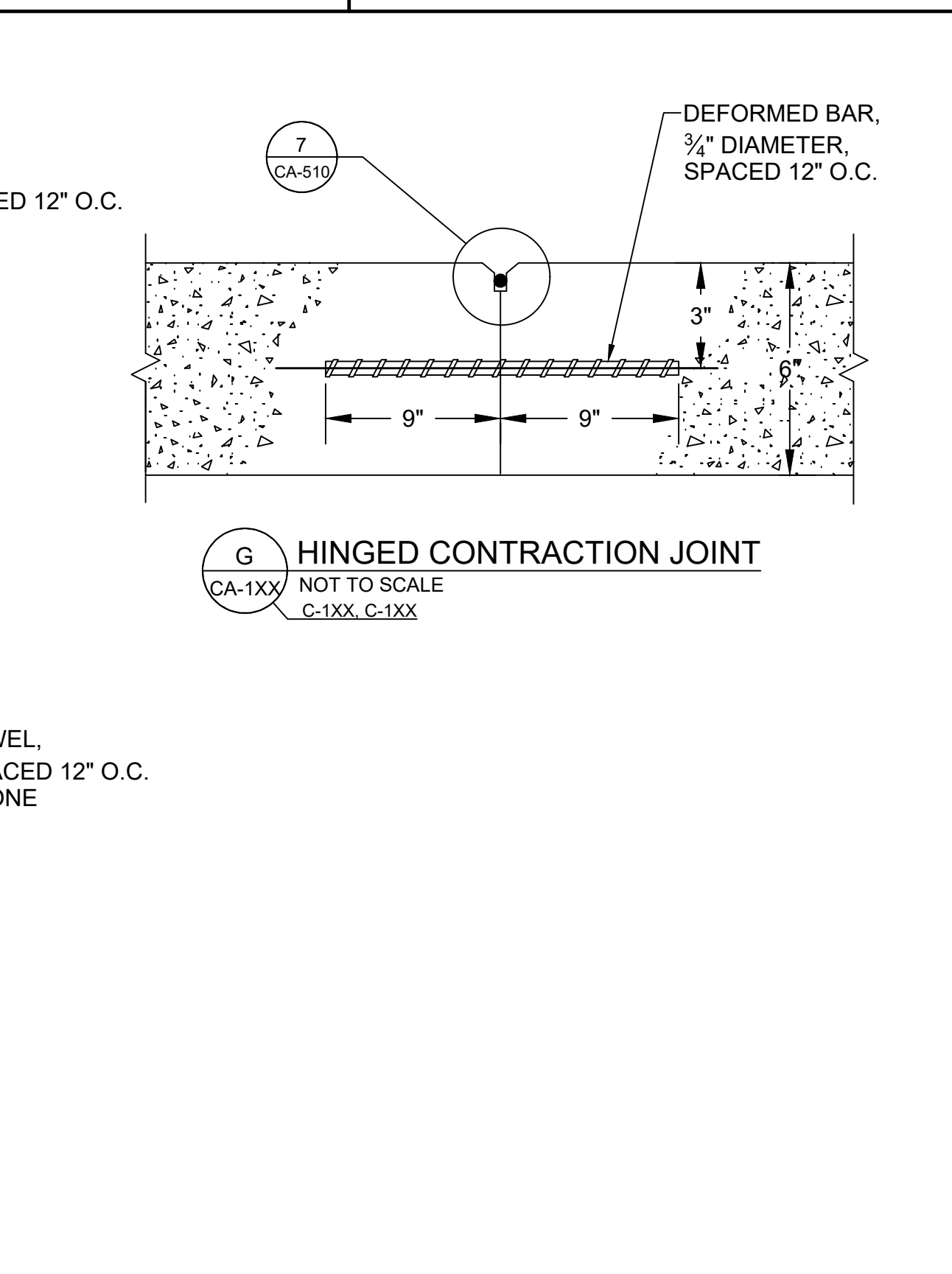
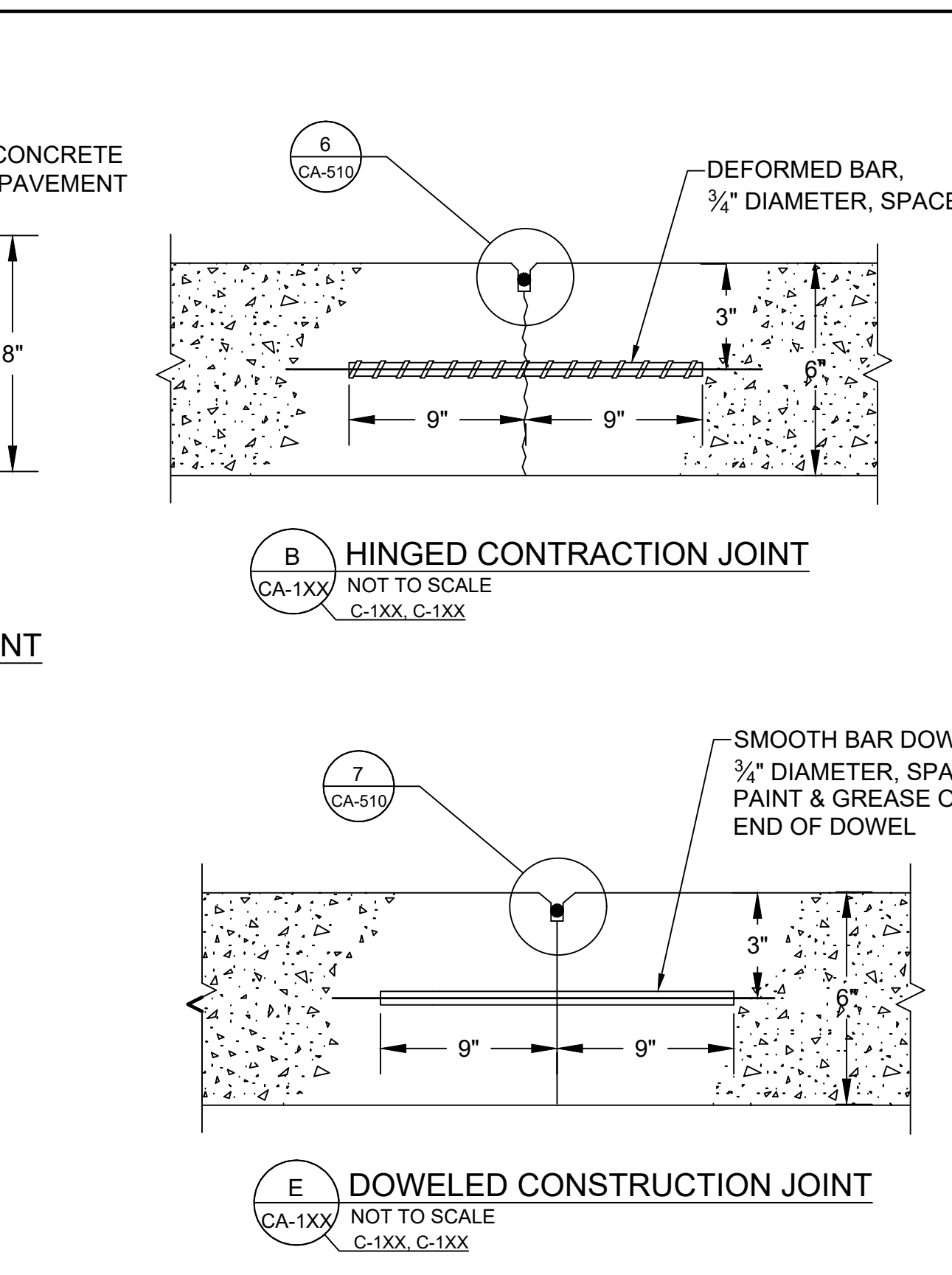
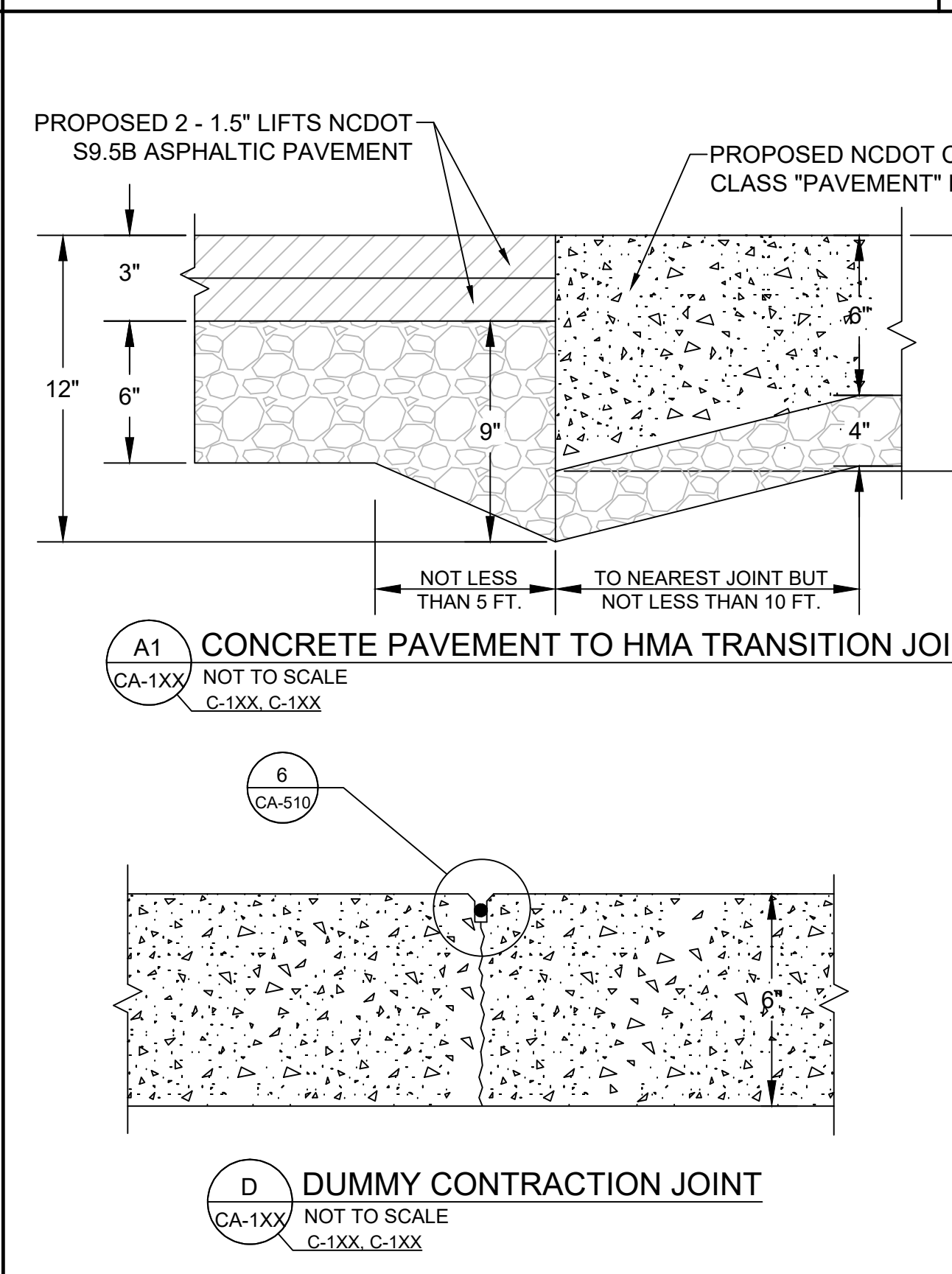
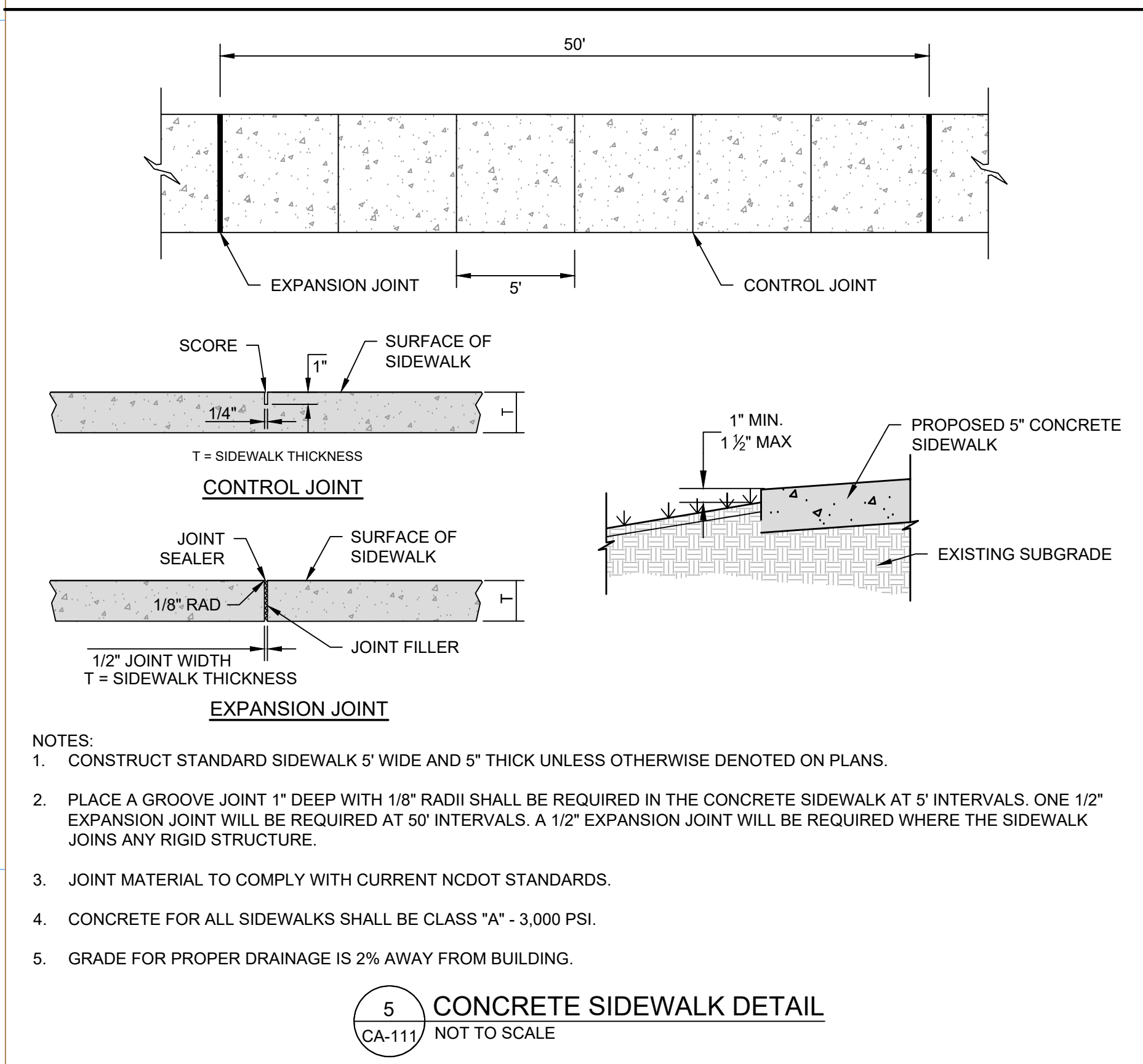
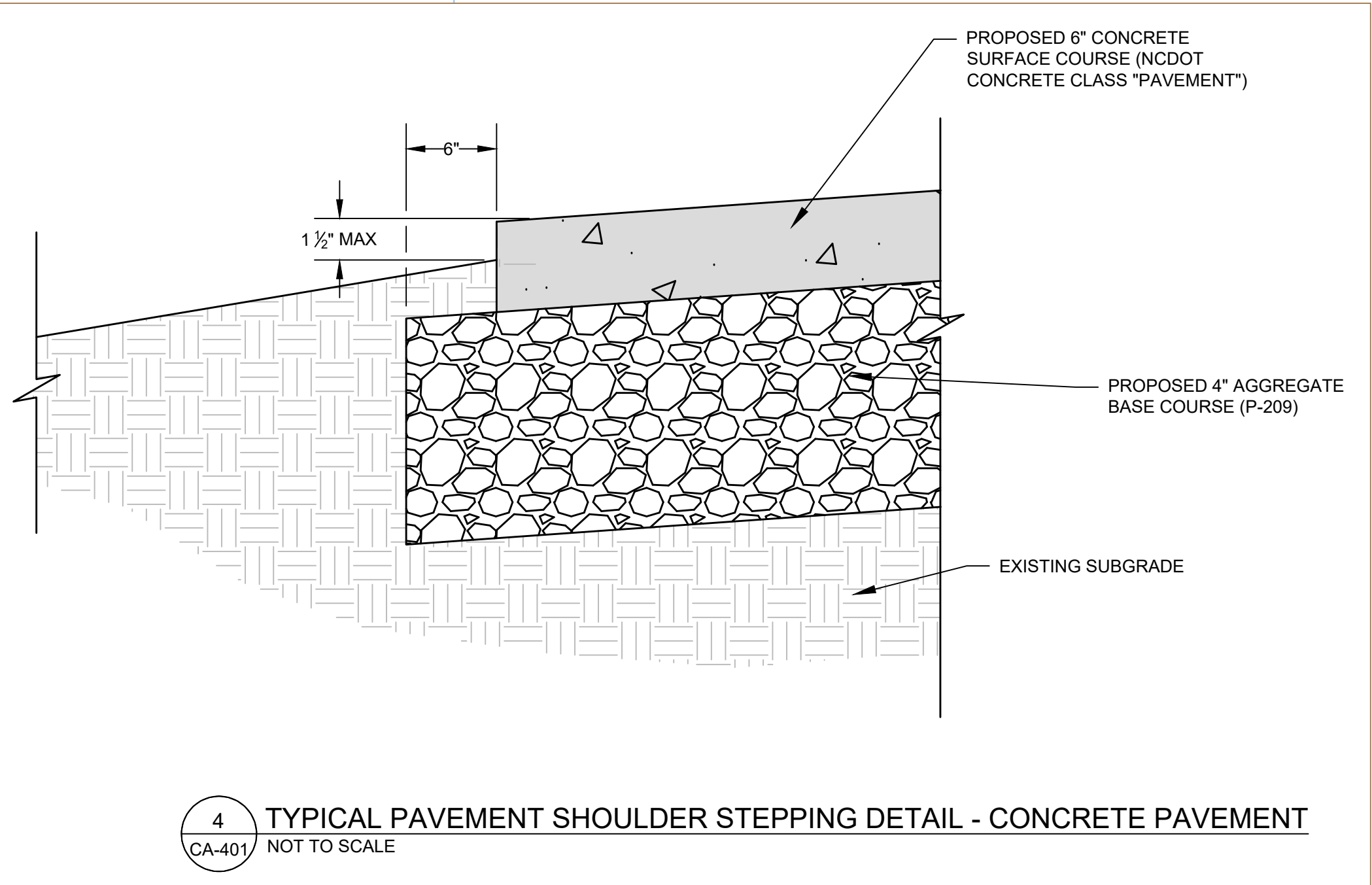
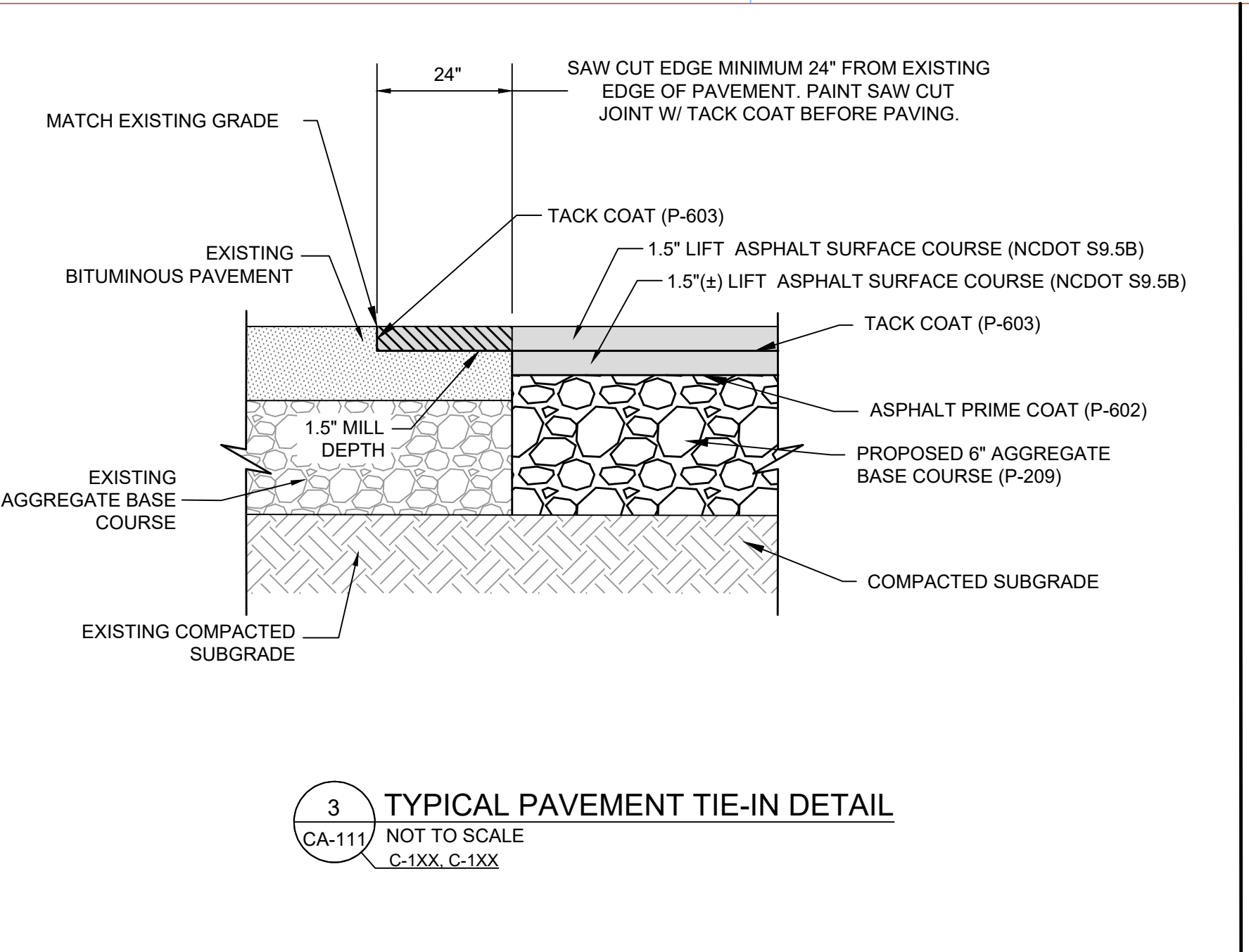
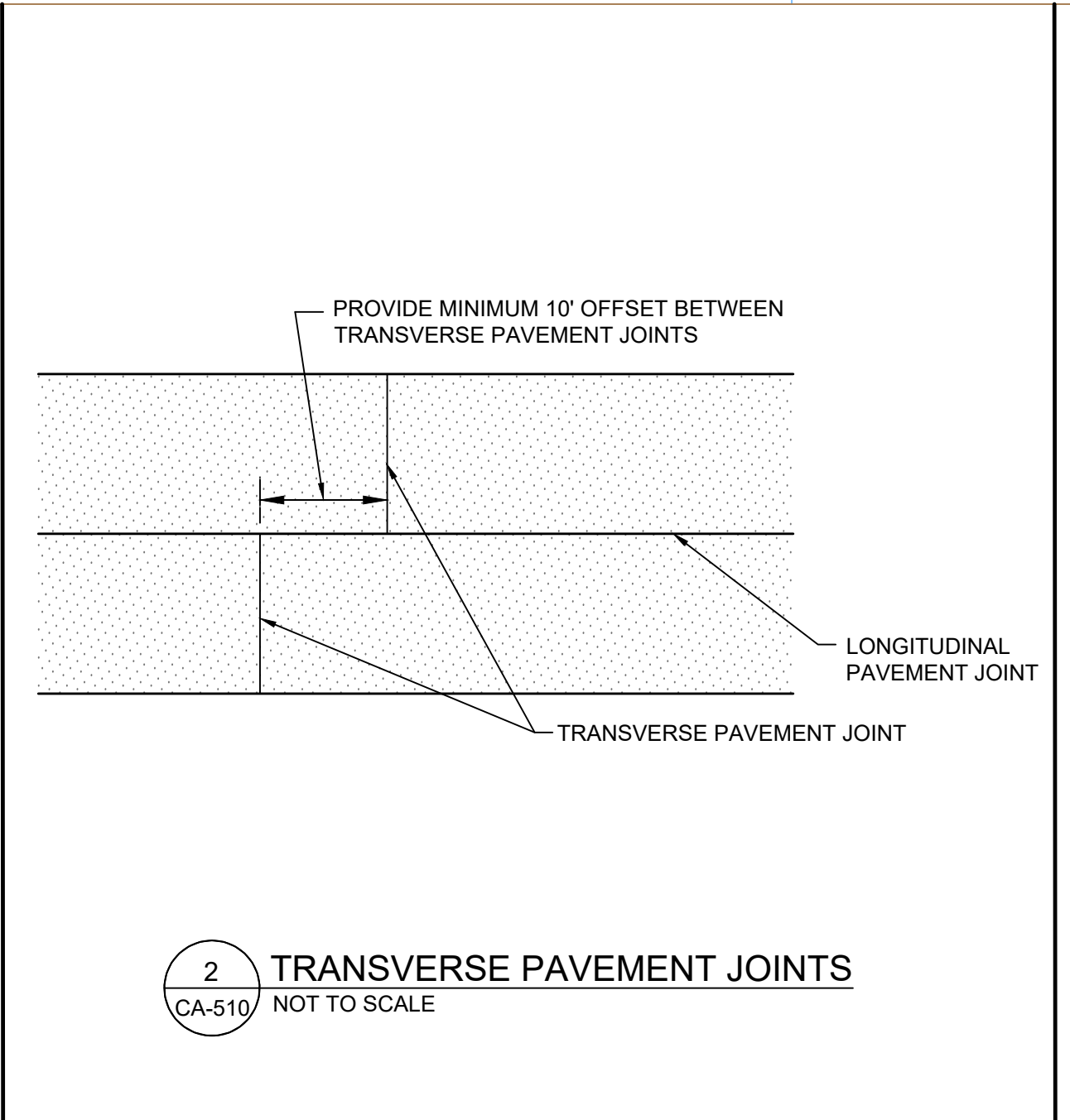
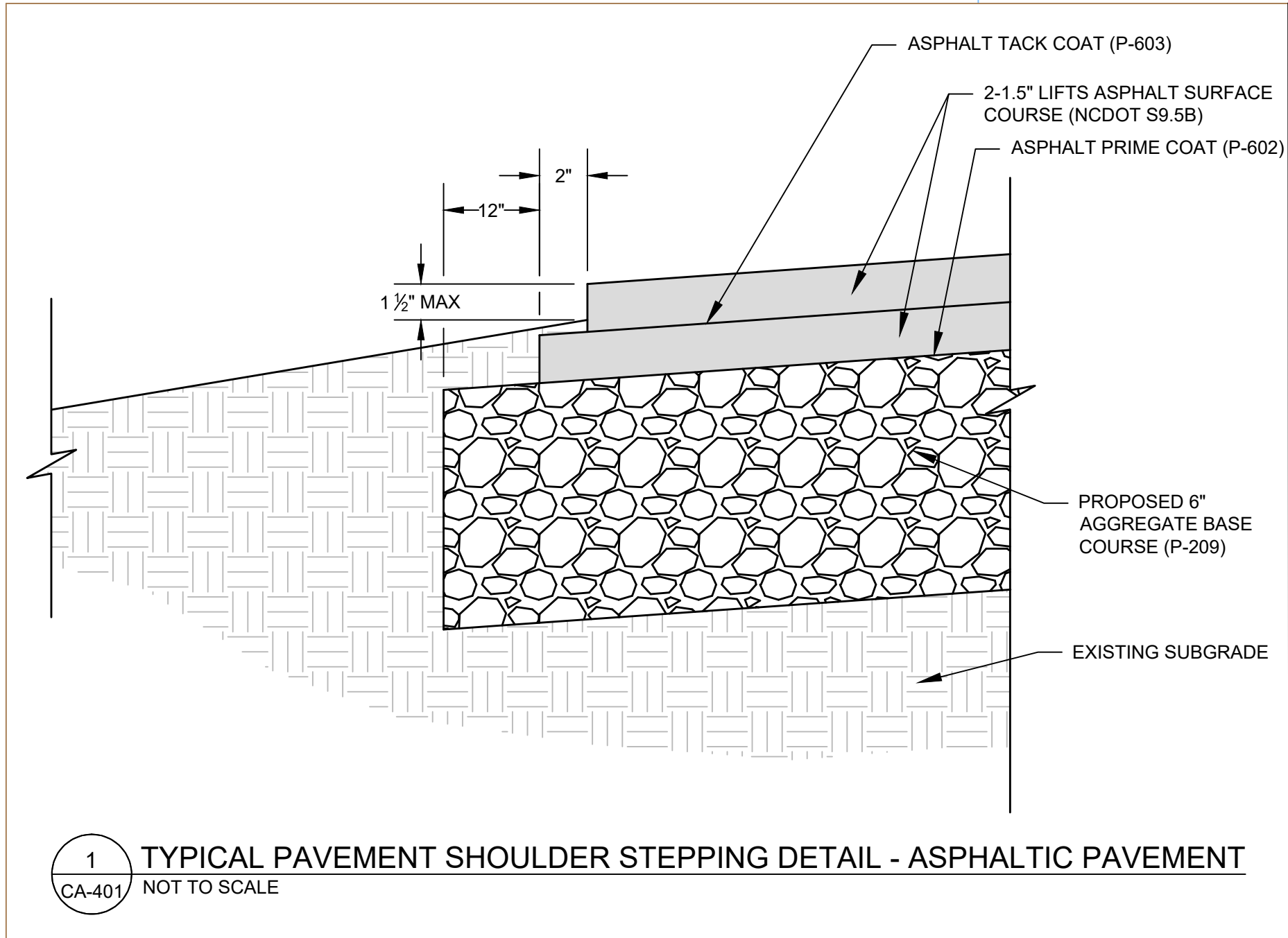
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REVISIONS

DATE JANUARY 2025
PROJECT NUMBER 3105-2401
SHEET TITLE

TYPICAL
PAVEMENT
SECTIONS
(SCHEDULE 1)

SHEET NUMBER
CA-401



City of Lumberton North Carolina

Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358

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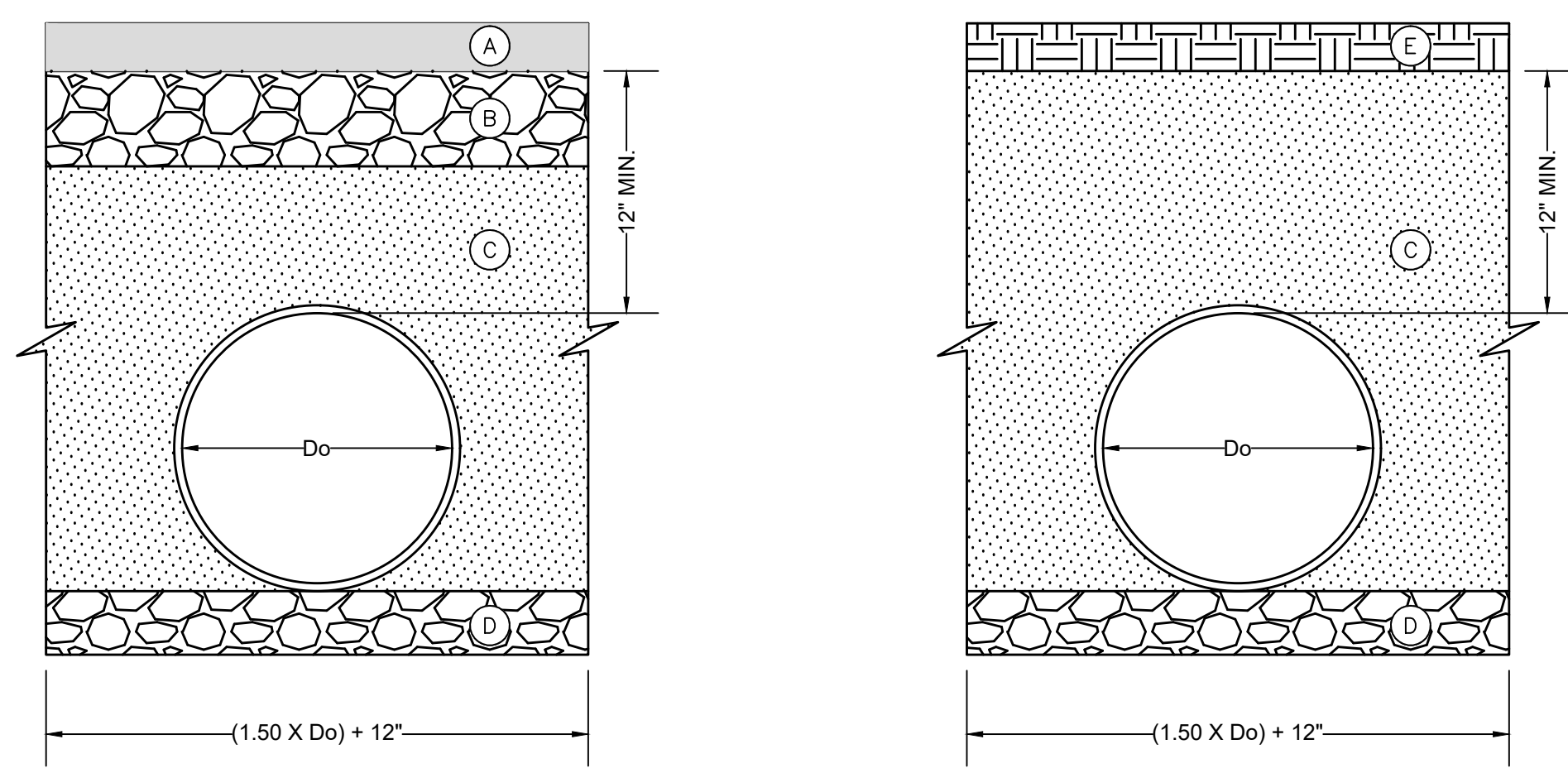
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REVISIONS

DATE: JANUARY 2025
PROJECT NUMBER: 3105-2401
SHEET TITLE: PAVING DETAILS (SCHEDULE 1)

SHEET NUMBER: **CA-510**



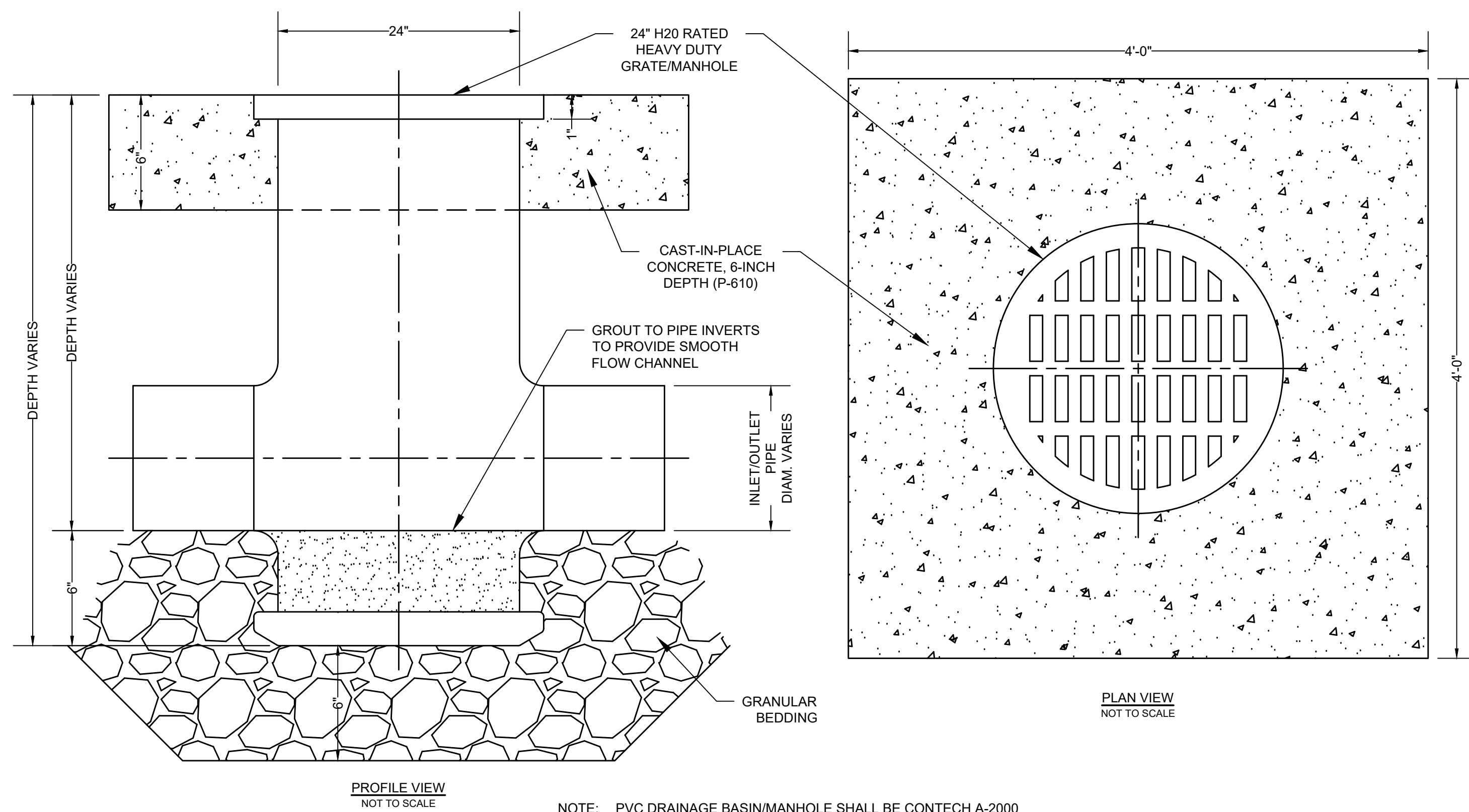
TRENCH MATERIALS:

- (A) PROPOSED PAVEMENT. SEE SHEET CA-401 FOR PAVEMENT SECTION AND SHEET CA-510 FOR PAVEMENT DETAILS.
- (B) PROPOSED AGGREGATE BASE COURSE. SEE SHEET CA-401 FOR PAVEMENT SECTION AND SHEET CA-510 FOR PAVEMENT DETAILS.
- (C) SELECT GRANULAR FILL MATERIAL TO BE ASTM D2321 CLASS I OR APPROVED EQUAL. COMPACTED TO DENSITIES SPECIFIED IN SPECIFICATION ITEM P-152. MAX. PARTICLE SIZE IS 1.5" +/-.
- (D) RELATIVELY LOOSE GRANULAR BEDDING, ROUGHLY SHAPED TO FIT BOTTOM OF PIPE, 4" TO 6" IN DEPTH. (ASTM D2321 CLASS I OR OTHER SUITABLE GRANULAR MATERIAL.)
- (E) 4" TOPSOIL. SOD OR SEED/MULCH.

NOTES:

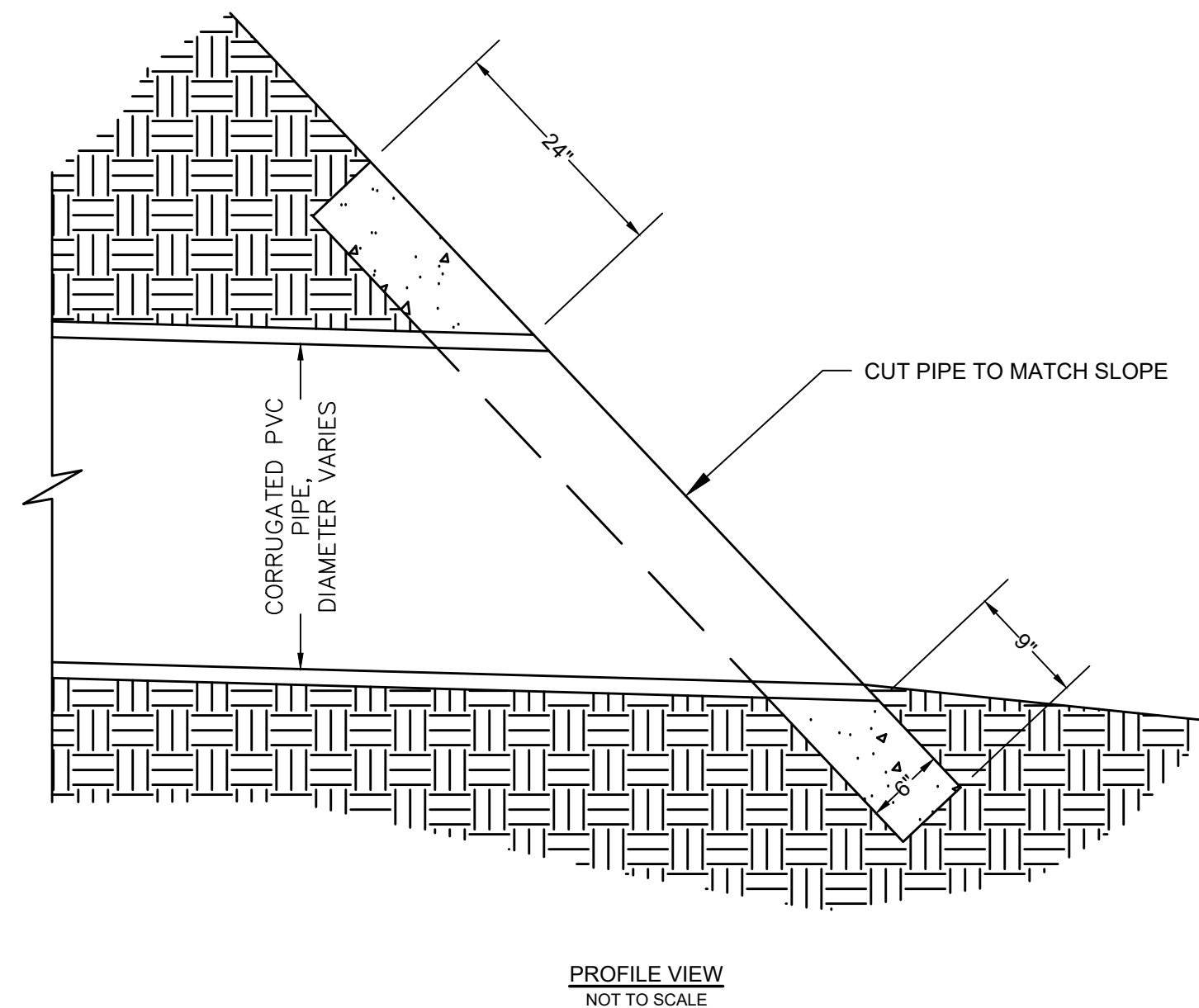
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MANIPULATE WET SOILS FOR DRYING OR TO ADD WATER AS NECESSARY TO ACHIEVE THE SPECIFIED DENSITY.
- ALL MATERIALS SHALL BE COMPACTED IN 8" MAXIMUM LOOSE LIFTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION SUPPORT AND DEWATERING.
- PIPE JOINTS SHALL HAVE ELASTOMERIC GASKETS MEETING ASTM F477.
- SELECT GRANULAR FILL MATERIAL SHALL BE WRAPPED WITH GEOTEXTILE TO PREVENT SOIL MIGRATION.
- ALL EXCAVATION, BEDDING & BACKFILL (WHETHER FROM THE EXCAVATION OR FROM OFF-SITE SOURCES), DEWATERING, EXCAVATION SUPPORT, PIPE MATERIALS, FABRIC FOR WRAPPING JOINTS, INCIDENTALS AND LABOR SHALL BE INCLUDED IN THE UNIT PRICE PER LINEAR FOOT OF PIPE.

1 TYPICAL PIPE TRENCH DETAIL - CORRUGATED PVC
CA-121 NOT TO SCALE

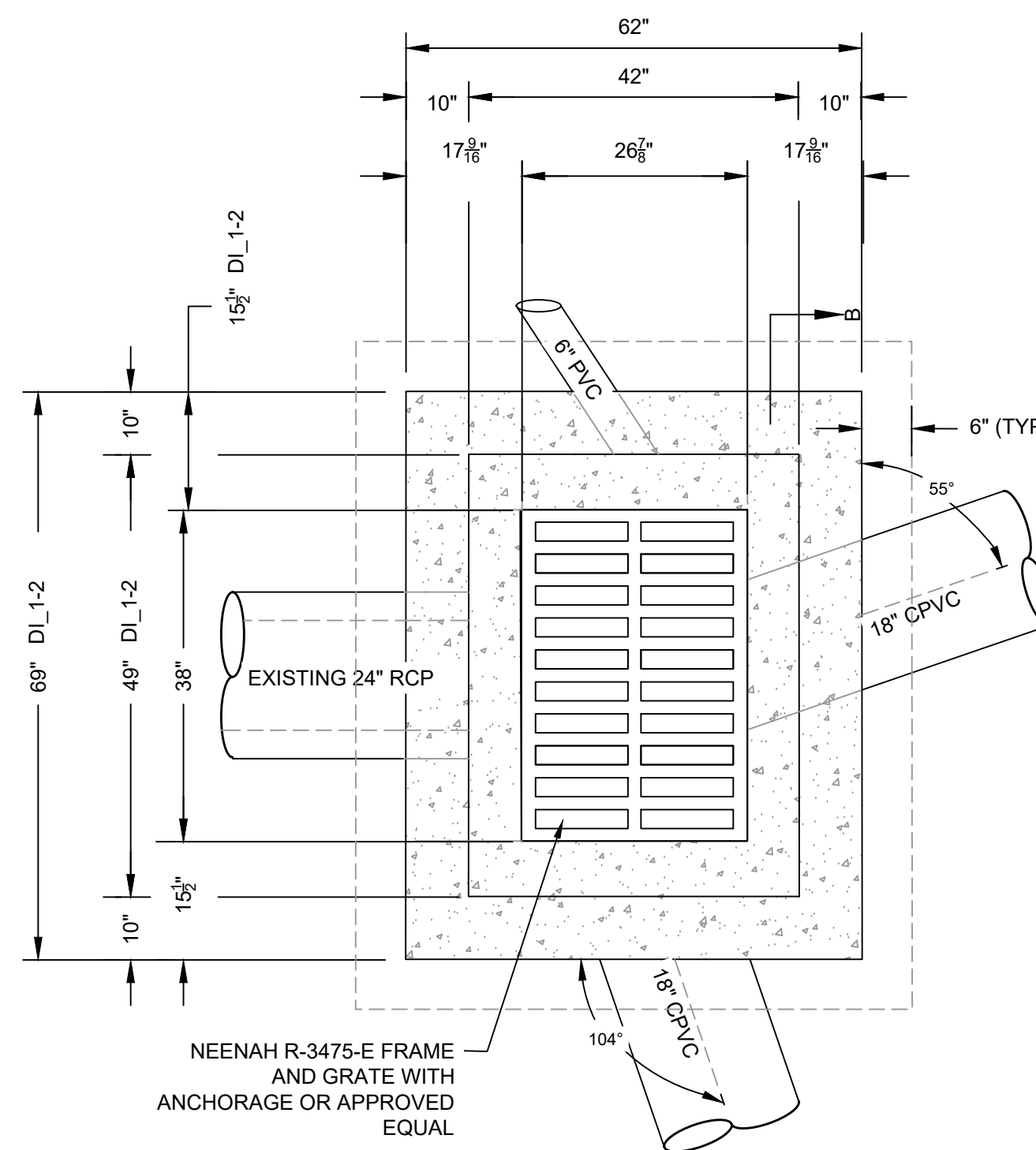
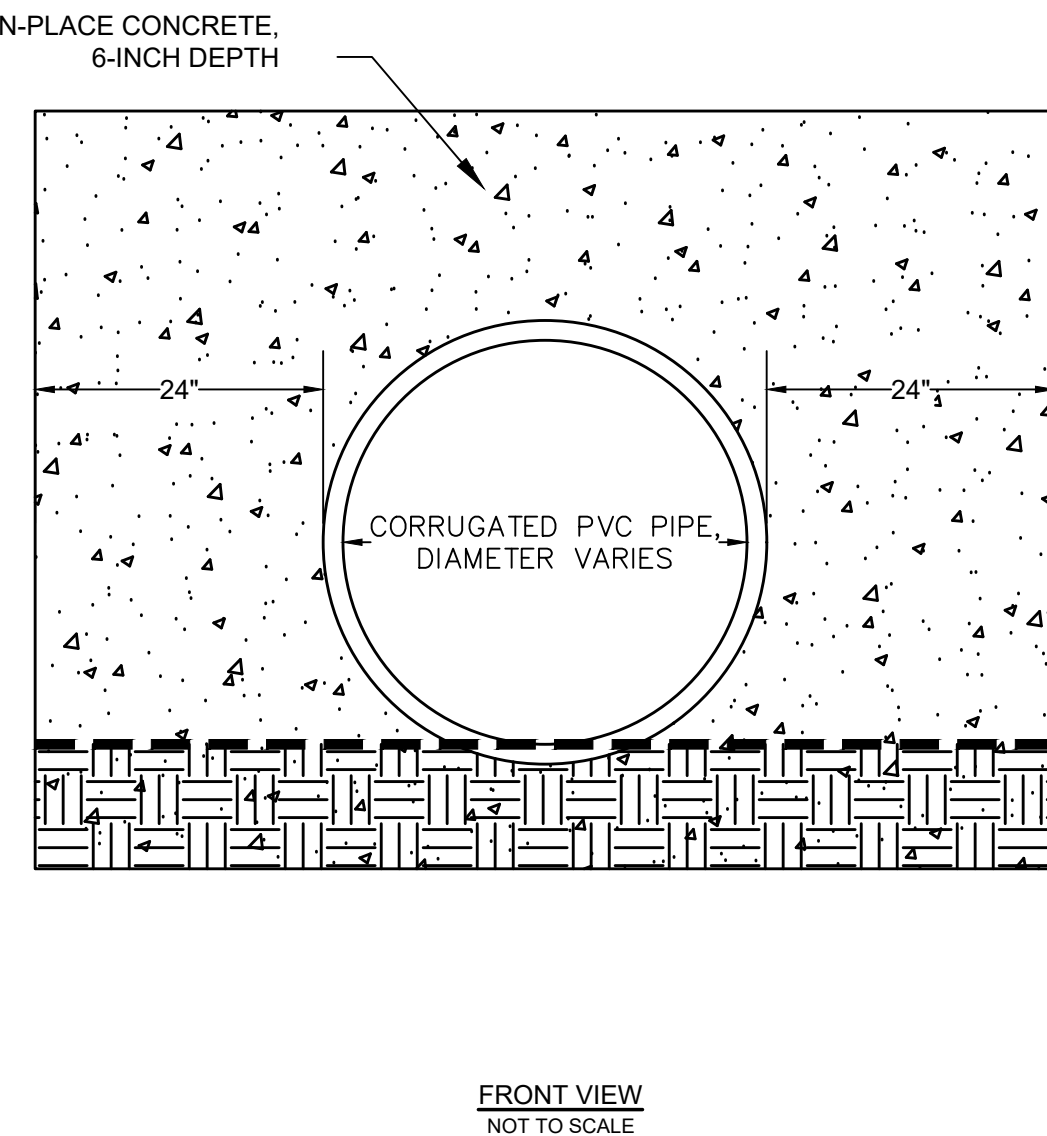


NOTE: PVC DRAINAGE BASIN/MANHOLE SHALL BE CONTECH A-2000 OR APPROVED EQUAL.

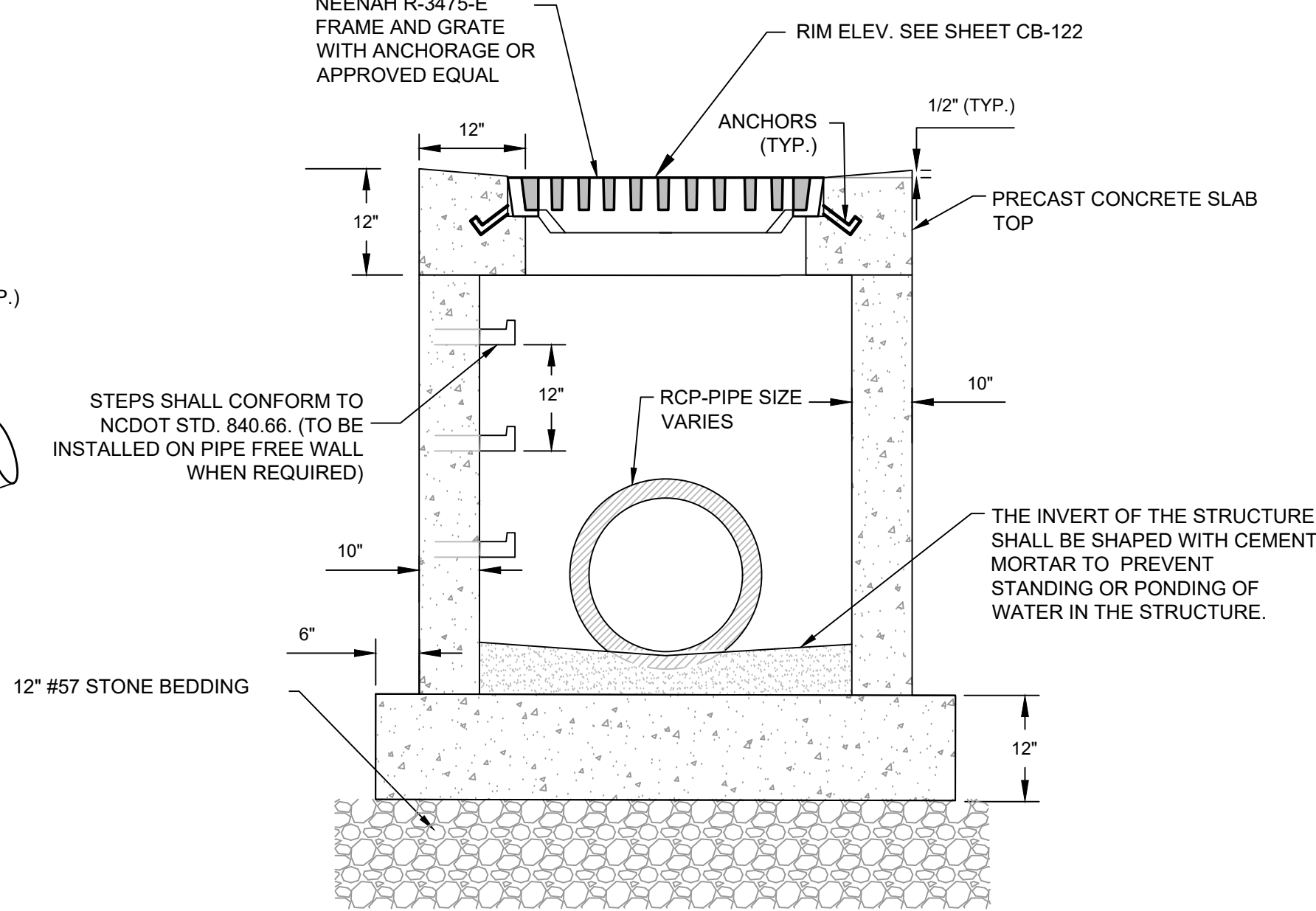
3 PVC DRAINAGE INLET BASIN/MANHOLE DETAIL
CA-121 NOT TO SCALE



2 CONCRETE REINFORCED PIPE INLET/OUTLET
CA-121 SCALE: NTS
CA-141



PLAN VIEW - STRUCTURE DI 1-2



SECTION B-B
NOTE: BACKFILL ALL DRAINAGE STRUCTURES EXCAVATIONS WITH SAND FILL (COST INCLUDED IN UNIT PRICE PER EACH STRUCTURE).

4 PRECAST CONCRETE DROP INLETS
CA-121 NOT TO SCALE

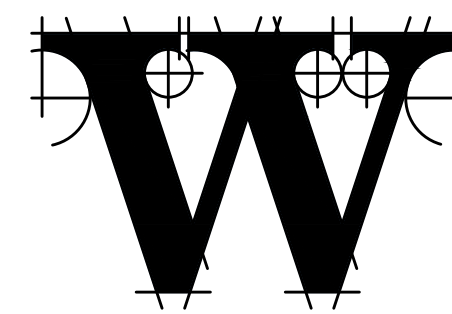
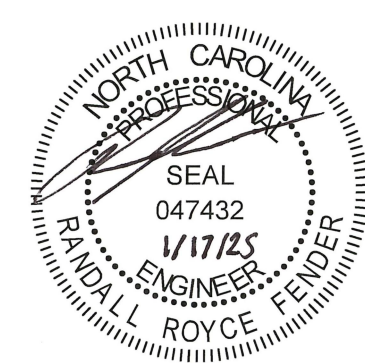
GENERAL NOTES FOR PRECAST CONCRETE DROP INLET

- THE DETAIL SHOWN FOR 'PRECAST CONCRETE DROP INLET' IS TO SHOW NOMINAL SIZE AND DIMENSIONS OF PROPOSED STRUCTURES ONLY AND MAY VARY BASED ON DESIGN. FOR ALL PRECAST CONCRETE STRUCTURES, THE CONTRACTOR WILL BE REQUIRED TO SUBMIT DESIGN CALCULATIONS, DETAILED SHOP DRAWINGS, AND DESIGN PREPARED AND SEALED BY A NORTH CAROLINA PROFESSIONAL ENGINEER. PRECAST CONCRETE STRUCTURES SHALL BE DESIGNED TO CARRY ALL APPLICABLE LOADINGS, INCLUDING VERTICAL AND LATERAL EARTH PRESSURES, DEAD LOADS, LIFTING LOADS AND AIRCRAFT LIVE LOADS. AIRCRAFT LIVE LOADS SHALL BE TREATED IN ACCORDANCE WITH FAA ADVISORY CIRCULAR 150/5320-2D, CHAPTER 7, USING A 25,000 POUND DUAL GEAR AIRCRAFT LOAD FOR DIRECT LOADING AND LOADING ON BURIED STRUCTURES.
- ALL MATERIALS, DESIGN, MANUFACTURE, TESTING, AND PRODUCT PERFORMANCE FOR THE PRECAST CONCRETE COMPONENTS AND ACCESSORIES SHALL BE IN ACCORDANCE WITH ASTM C913.
- BASE SECTIONS SHALL HAVE A BOTTOM POURED MONOLITHICALLY WITH THE WALLS OR AN APPROVED WATER-STOP CAST INTO THE BOTTOM FOR THE JOINT TO THE WALLS.
- JOINTS SHALL BE TONGUE AND GROOVE. JOINT SEALANT SHALL BE BUTYL RUBBER AND SHALL MEET THE REQUIREMENTS OF AASHTO M 198, TYPE B. SIZE AND AMOUNT OF SEALANT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- CONCRETE SHALL BE 4000 PSI COMPRESSIVE STRENGTH MEETING THE REQUIREMENTS OF SECTION P-610 OF THE PROJECT SPECIFICATIONS.
- REINFORCING STEEL SHALL BE ASTM A-706, LOW-ALLOY STEEL DEFORMED AND PLAIN BARS FOR CONCRETE REINFORCEMENT, GRADE 60. WIRE AND WIRE MESH SHALL CONFORM TO AASHTO M 55 AND M 221.
- FLOW LINE OF BASE TO BE GROUTED TO OUTLET PIPE FLOW LINE TO MAINTAIN A CONTINUOUS FLOW. GROUT SHALL BE TYPE M MORTAR MATERIAL.
- IF STRUCTURE DEPTH EXCEEDS 4'-6", STEPS ARE TO BE PLACED ON WALL. SEE NCDOT STANDARD DRAWING FOR STEP. STEPS SHALL BE ALIGNED IN ALL SECTIONS TO FORM A CONTINUOUS LADDER. STEPS SHALL BE ALIGNED WITH OPENING IN TOP OR FLAT SLAB ADAPTER SO AS TO PROVIDE REASONABLE ACCESS. STEP SPACING SHALL NOT EXCEED 1'-0".
- LIFT HOLES AND/OR DEVICES MAY BE PLACED AS NECESSARY. ALL LIFT HOLES SHALL BE GROUTED CLOSED PRIOR TO COMPLETION OF THE INSTALLATION. ALL LIFTING METHODS MUST MEET OSHA REGULATIONS.
- AFTER PIPE IS SET INTO THE DRAINAGE STRUCTURE, THE REMAINING OPENING AROUND THE PIPE MUST BE SEALED WITH BRICK AND MORTAR OR CONCRETE FOR THE FULL WALL THICKNESS OF THE STRUCTURE.
- THE CONTRACT UNIT PRICE PRECAST DROP INLETS SHALL INCLUDE THE COST OF FURNISHING ALL MATERIALS AND WORK INCIDENTAL TO THE CONSTRUCTION OF THE STRUCTURE COMPLETE IN PLACE AS SHOWN.



Schedule 1: 2-Unit Box Hangar

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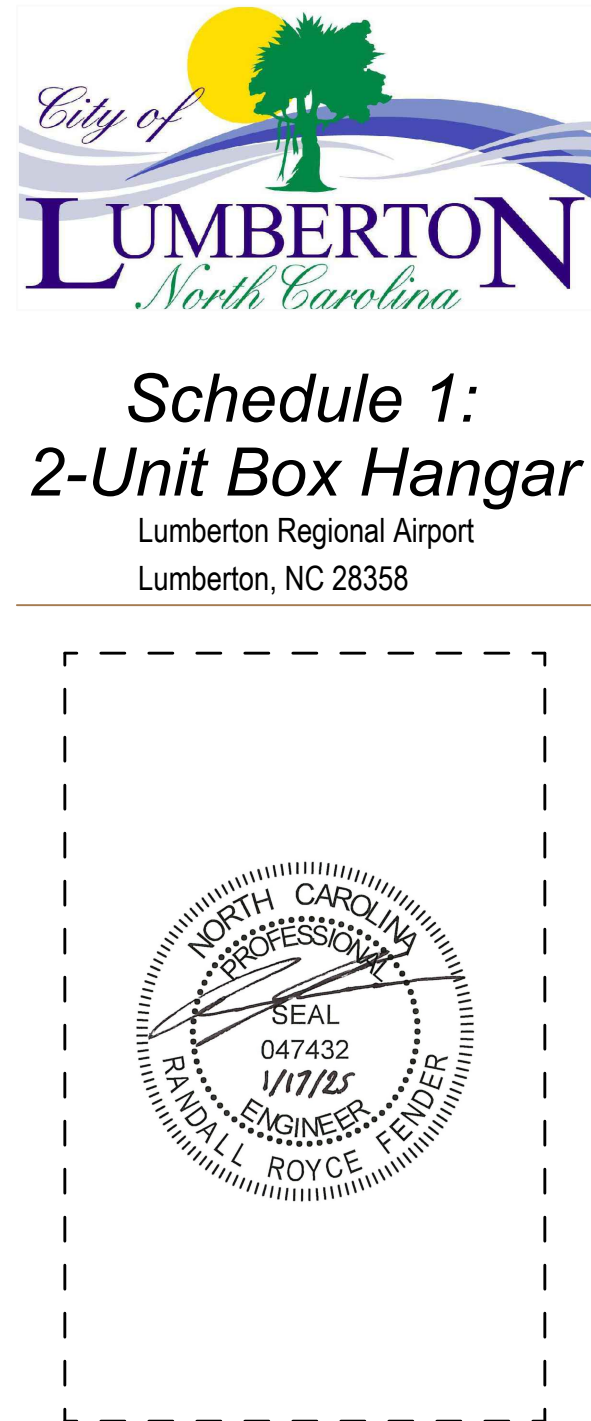
REVISIONS

DATE JANUARY 2025
PROJECT NUMBER 3105-2401
SHEET TITLE

DRAINAGE DETAILS (SCHEDULE 1)

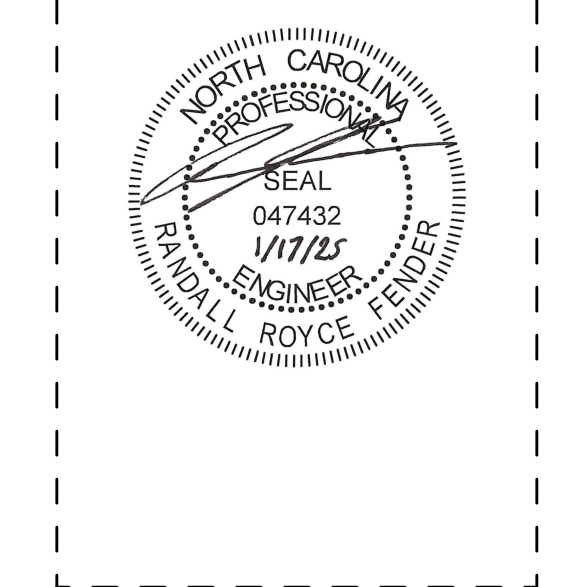
SHEET NUMBER

CA-520



Schedule 1: 2-Unit Box Hangar

Lumberton Regional Airport
Lumberton, NC 28358



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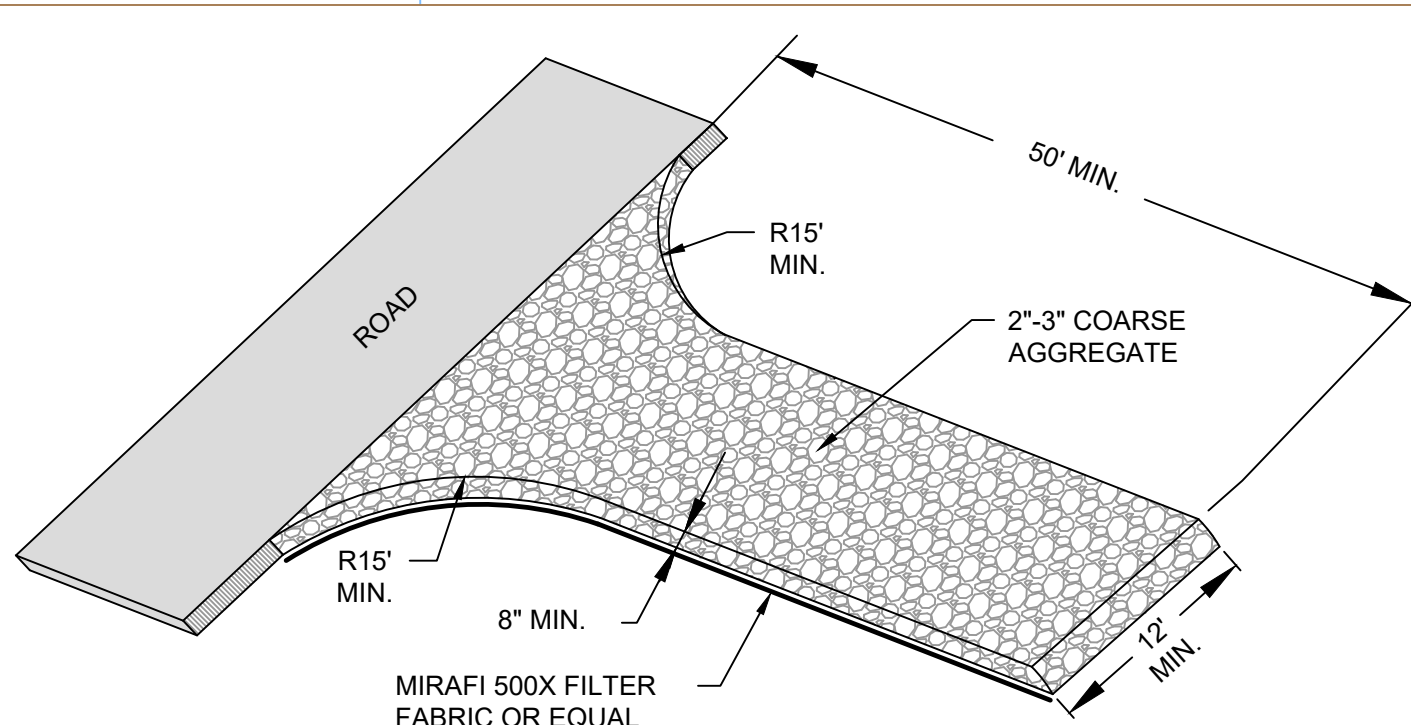
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REVISIONS

DATE: JANUARY 2025
PROJECT NUMBER: 3105-2401
SHEET TITLE

SEDIMENTATION & EROSION CONTROL DETAILS - 1 (SCHEDULE 1) SHEET NUMBER

CA-540



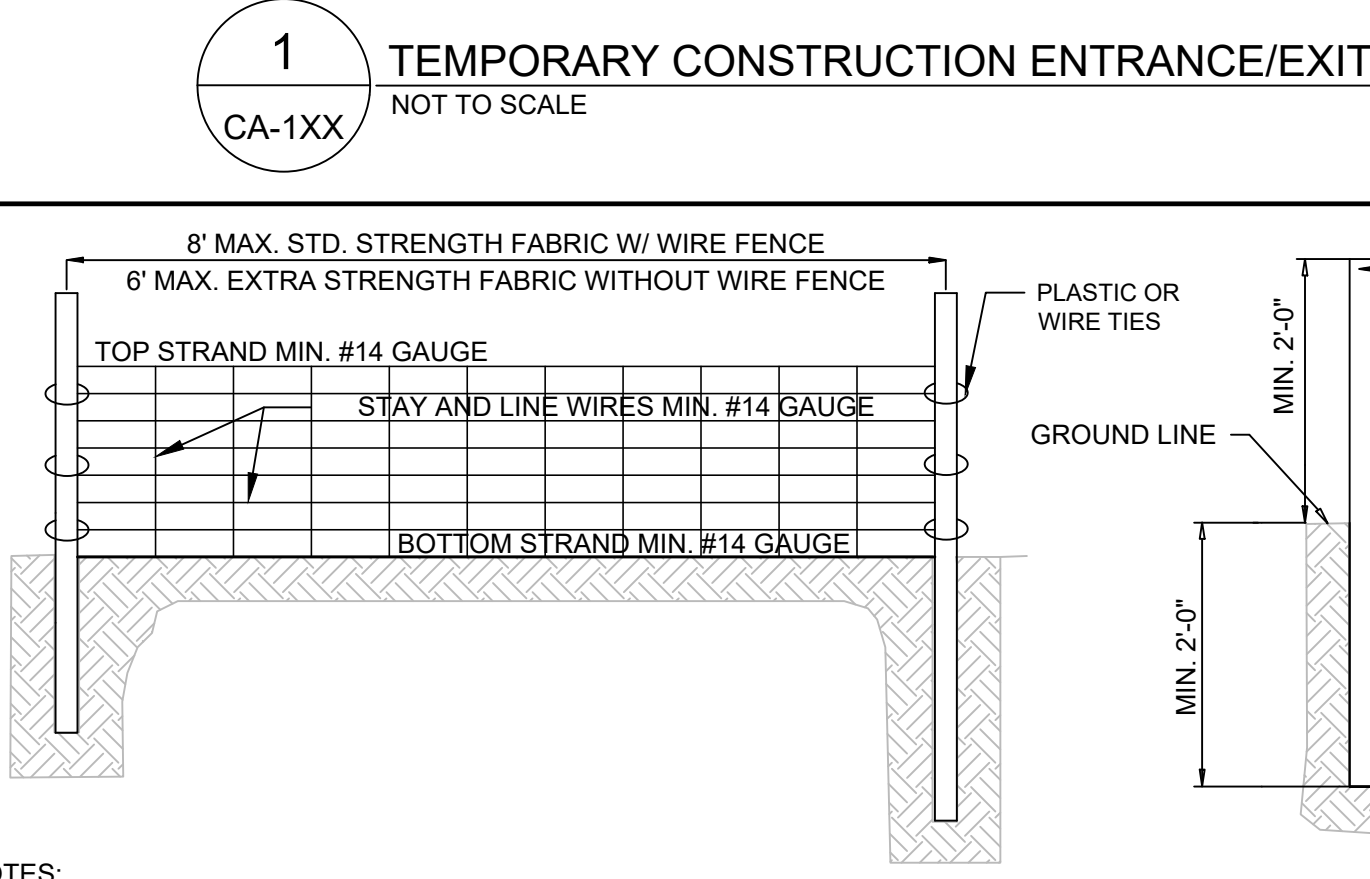
NOTE: CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION ENTRANCE TO MAINTAIN EXISTING DRAINAGE FLOWS.

CONSTRUCTION SPECIFICATIONS:

- CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AND PROPERLY GRADE IT.
- CONTRACTOR SHALL INSTALL TEMPORARY CONSTRUCTION ENTRANCE TO MAINTAIN EXISTING DRAINAGE FLOWS.
- PROVIDE DRAINAGE TO CARRY WATER TO SUITABLE OUTLET.

MAINTENANCE REQUIREMENTS:

MAINTAIN MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.



SILT FENCE NOTES:

- WIRE FENCE (IF USED) SHALL BE MINIMUM 14 GAUGE WITH A MAXIMUM MESH OPENING OF 6-INCHES.
- SYNTHETIC FIBER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFIN OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461 AND ALSO SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS ACCORDING TO ASTM D 4355.
- SEE THE NC EROSION CONTROL MANUAL FOR SPECIFICATIONS INSTALLING SEDIMENT FENCE USING THE SLICING METHOD MACHINERY.

SILT FENCE MAINTENANCE REQUIREMENTS:

- INSPECT SILT FENCE AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
- REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING OR DAMAGING THE FENCE DURING CLEANOUT.
- REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.



PERMANENT SEED MIXES SHALL BE APPLIED AS FOLLOWS:

SEED	APPLICATION RATE (LBS/ACRE)	SEEDING DATES
COMMON BERMU DAGRASS (HULLED)	50	APRIL 1 - AUGUST 31
COMMON BERMU DAGRASS (UNHULLED)	70	SEPTEMBER 1 - MARCH 31

NOTE: MILLET IS NOT ALLOWED.

TEMPORARY SEED MIXES SHALL BE APPLIED AS FOLLOWS:

SEED	APPLICATION RATE (LBS/ACRE)	SEEDING DATES
RYE (GRAIN)	120	DECEMBER 1 - MARCH 31
KOBE LESPEDEZA	50	
HULLED BERMU DA GRASS	50	APRIL 1 - AUGUST 31
RYE (GRAIN)	120	SEPTEMBER 1 - NOVEMBER 1

FERTILIZER:

FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 LBS/ACRE OF A 10-10-10 COMMERCIAL FERTILIZER.

LIME:

LIME SHALL BE APPLIED AT THE RATE OF 3,000 LBS/ACRE. LIME SHALL BE APPLIED IN ACCORDANCE WITH SECTION T-901 SEEDING OF THE PROJECT SPECIFICATIONS.

MULCH:

MULCH SHALL CONSIST OF MANUFACTURED MULCH. MULCH SHALL BE EVENLY APPLIED AT THE RATE OF 2 TO 3 TONS PER ACRE TO PROVIDE A LOOSE DEPTH OF 1 1/2-3". MANUFACTURED MULCH SHALL BE APPLIED AT THE RATE AS RECOMMENDED BY THE MANUFACTURER. MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION T-908 - MULCHING OF THE SPECIFICATIONS.

CONTRACTOR MAINTENANCE OF SEEDED AREAS:

THE CONTRACTOR SHALL BE REQUIRED TO ESTABLISH A GOOD STAND OF GRASS OF UNIFORM COLOR AND DENSITY TO THE SATISFACTION OF THE ENGINEER AND OWNER. THE CONTRACTOR SHALL WATER THE SEEDED AREAS AS REQUIRED FOR SEED GERMINATION AND AS REQUIRED TO MAINTAIN AREAS OF ESTABLISHED GRASS. THE CONTRACTOR SHALL MOW GRASS AREAS AND CONTROL THE PRESENCE OF INVASIVE SPECIES AS REQUIRED. CONTRACTOR WILL BE REQUIRED TO RESEED AND MULCH ALL AREAS WHERE SEEDING EMERGENCE IS POOR. ALL AREAS OF EROSION SHALL BE REPAIRED AND RESEEDED AS SOON AS POSSIBLE. CONTRACTOR SHALL PROTECT SEEDED AREAS FROM TRAFFIC AS MUCH AS POSSIBLE.

TEMPORARY AND PERMANENT SEEDING OPERATIONS

SITE AREA DESCRIPTION	STABILIZATION TIMEFRAMES	
	STABILIZATION	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES.



SOD PLACEMENT DETAIL

NOT TO SCALE

EROSION AND SEDIMENT CONTROL NOTES:

- ALL TEMPORARY OR PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES NECESSARY FOR RETAINING SEDIMENTS ON THE CONSTRUCTION SITE SHALL BE INSTALLED AT THE LOCATIONS AS SPECIFIED ON THE PLANS PRIOR TO ANY LAND CLEARING OR GRUBBING ACTIVITIES. A RAIN GAUGE PROVIDED BY CONTRACTOR MUST BE LOCATED ON SITE AT ALL TIMES.
- NO WASTE, SPOIL, SOLIDS, OR FILL OF ANY KIND SHALL OCCUR IN WETLANDS, WATERS OUTSIDE THE LIMITS PERMITTED BY THE ADJACENT PERMITS, OR RIPARIAN AREAS BEYOND THE FOOTPRINT OF THE IMPACTS DEPICTED FOR THIS PROJECT. ALL CONSTRUCTION ACTIVITIES, INCLUDING THE DESIGN, INSTALLATION, OPERATION, AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL, BEST MANAGEMENT PRACTICES SHALL BE PERFORMED SO THAT NO VIOLATIONS OF STATE WATER QUALITY STANDARDS, STATUTES, OR RULES OCCUR.
- SEDIMENT AND EROSION CONTROL MEASURES SHALL NOT BE PLACED IN WETLANDS OR WATERS. EXCEPTIONS TO THIS CONDITION REQUIRE APPLICATION SUBMITTAL TO AND WRITTEN APPROVAL BY THE DIVISION. IF PLACEMENT OF SEDIMENT AND EROSION CONTROL DEVICES IN WETLANDS AND WATERS IS UNAVOIDABLE, THEN DESIGN AND PLACEMENT OF TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE CONDUCTED IN A MANNER THAT MAY RESULT IN DIS-EQUILIBRIUM OF WETLANDS, STREAM BEDS, OR BANKS, ADJACENT TO OR UPSTREAM AND DOWNSTREAM OF THE ABOVE STRUCTURES. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE REMOVED AND THE NATURAL GRADE RESTORED WITHIN TWO MONTHS OF THE DATE THAT DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES (DEMUR) OR LOCALLY DELEGATED PROGRAM HAS RELEASED THE SPECIFIC AREA WITHIN THE PROJECT.
- SUFFICIENT MATERIALS REQUIRED FOR STABILIZATION AND/OR REPAIR OF EROSION CONTROL MEASURES AND STORMWATER ROUTING AND TREATMENT SHALL BE ON SITE AT ALL TIMES.
- CRITICAL EROSION AREAS SHALL BE GIVEN SPECIAL ATTENTION PRIOR TO AND DURING CONSTRUCTION OF THE PROJECT AND UNTIL SUCH TIME AS STABILIZATION OF THE PROJECT HAS BEEN ESTABLISHED.
- CONTRACTOR SHALL MAKE PERIODIC SITE INSPECTIONS OF THE EROSION AND SEDIMENT CONTROL MEASURES TO DETERMINE THEIR CONDITION AND PERFORMANCE. IF SEDIMENT HAS DEPOSITED IN A STREAM OR WETLAND, CONTRACTOR SHALL NOTIFY OWNER AND THE DIVISION OF WATER QUALITY OFFICE WITHIN 24 HOURS AND WRITTEN NOTICE MUST BE PROVIDED WITHIN 5 DAYS. SHOULD ANY ADJUSTMENTS OR REPAIRS NEED TO BE MADE, THE CONTRACTOR SHALL RESPOND IMMEDIATELY IN MAKING NECESSARY REPAIR, ADJUSTMENT AND/OR REPLACEMENT. ANY SEDIMENT WHICH HAS BEEN TRANSPORTED BEYOND THE PROJECT LIMITS SHALL BE REMOVED AND/OR STABILIZED AS DIRECTED BY THE ENGINEER.
- TOPSOIL AND AGGREGATE STOCKPILES SHALL BE PLACED AT THE LOCATION AS DIRECTED BY THE ENGINEER. DEDICATED DEMOLITION AND OTHER WASTE AREAS AND EARTHEN MATERIAL STOCKPILES MUST BE LOCATED AT LEAST 50' FROM STORM DRAINS OR STREAMS UNLESS NO ALTERNATIVE IS FEASIBLE. SILT FENCE SHALL BE ERECTED AT THE TOE OF THE STOCKPILES. SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
- WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICLES TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
- CONTRACTOR SHALL MAINTAIN AND REPAIR EXISTING AGGREGATE BASE ON ACCESS ROADS, PARKING AREAS AND/OR OTHER VEHICLE TRANSPORTATION ROUTES AS REQUIRED OR AS DIRECTED BY THE ENGINEER.
- EROSION AND SEDIMENT CONTROL MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPLAND LAND DISTURBANCE TAKES PLACE. THE MEASURES ARE TO BE KEPT CLEAR OF DEBRIS AND SEDIMENTS SHALL BE CLEANED OUT PERIODICALLY DURING AND AFTER CONSTRUCTION ACTIVITIES. ALL OTHER STORM WATER MANAGEMENT FACILITIES SHALL BE INSTALLED AND MADE OPERATIONAL AS SHOWN OR REQUIRED BY CONSTRUCTION ACTIVITIES.
- A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DISTURBED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION. PERMANENT VEGETATIVE COVER SHALL CONSIST OF LIVING, FERTILIZING, SEEDING, AND MULCHING TO ASSURE A FIRM STAND OF GRASS. TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED ONLY WHEN STABILIZATION HAS BEEN ESTABLISHED.
- CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE SCHEDULED BY THE CONTRACTOR ON A WEEKLY BASIS AND AFTER EACH RAINFALL PRODUING RUNOFF DURING THE PROJECT. NECESSARY REPAIR, ADJUSTMENT AND/OR REPLACEMENT SHALL BE PERFORMED IMMEDIATELY. RAINY SEASONS OR WET PERIODS WILL BE OF PARTICULAR CONCERN AND THE PROJECT SHALL BE INSPECTED DAILY BY THE CONTRACTOR.
- AIRBORNE SEDIMENTS (DUST) SHALL BE CONTROLLED IN ACCORDANCE WITH REQUIREMENTS OF THE SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- A PERMANENT GROUND COVER MUST BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER), FOLLOWING COMPLETION OF EACH PHASE OF CONSTRUCTION.
- ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY AND PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED BY THE CONTRACTOR EVERY SEVEN (7) DAYS OR AFTER EACH RAINFALL OCCURRENCE THAT EXCEEDS ONE-HALF (1/2) INCH DURING THE PROJECT AND FINAL STABILIZATION OF PROJECT. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED, AS NECESSARY.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED BY THE CONTRACTOR DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE NORTH CAROLINA SEDIMENTATION CONTROL LAW AND THE RELATED REGULATIONS, INCLUDING IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN AND THE REQUIREMENTS OF THE NPDES GENERAL PERMIT.
- THE CONTRACTOR SHALL MAINTAIN ON SITE AT ALL TIMES A COPY OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, DATED MAY, 2013.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING		
SECTION A: SELF-INSPECTION		
Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.		
Inspection	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual day rainfall information is available, record the cumulative rain measurement for those unattended days later. This will determine if a site inspection is needed. Days on which no rainfall occurred are to be recorded as "zero". The permittee may use another rain-measuring device approved by the Division.
(2) EASC Measures	At least once per 7 calendar days and within 24 hours of a rain event 3.0 inch or 24 hours	1. Identification of the measures inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Indication of whether the measures were operating properly. 5. Description of maintenance needs for the measures. 6. Description, extent, and date of corrective action taken.
(3) Stormwater discharge outfalls (DQCs)	At least once per 7 calendar days and within 24 hours of a rain event 3.0 inch or 24 hours	1. Identification of the discharge outfalls inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Indication of whether the outfalls were operating properly. 5. Description of maintenance needs for the outfalls. 6. Description, extent, and date of corrective action taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event 3.0 inch or 24 hours	1. Identification of the perimeter inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Indication of whether the perimeter was operating properly. 5. Description of maintenance needs for the perimeter. 6. Description, extent, and date of corrective action taken.
(5) Stormwater discharge outfalls (DQCs)	At least once per 7 calendar days and within 24 hours of a rain event 3.0 inch or 24 hours	1. Identification of the discharge outfalls inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Indication of whether the outfalls were operating properly. 5. Description of maintenance needs for the outfalls. 6. Description, extent, and date of corrective action taken.
(6) Ground stabilization measures	At least once per 7 calendar days and within 24 hours of a rain event 3.0 inch or 24 hours	1. Identification of the measures inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Indication of whether the measures were operating properly. 5. Description of maintenance needs for the measures. 6. Description, extent, and date of corrective action taken.

NOTE: The rain inspection resets the requirement of a calendar day inspection requirement.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING		
SECTION B: RECORDKEEPING		
1. EASC Plan Documentation The approved EASC plan as well as any approved deviations shall be kept on the site. The approved EASC plan must be kept up-to-date throughout the coverage under this permit. The following items pertain to the EASC plan and shall be kept on site and available for inspection at all times during normal business hours.		
Item to Document	Documentation Requirements	
(a) Each EASC measure has been installed and does not significantly detract from the locations, dimensions and relative elevations shown on the approved EASC plan.	Initial and date each EASC measure on a copy of the approved EASC plan or complete, date and sign an inspection report that lists each EASC measure shown on the approved EASC plan. This documentation is required upon the initial installation of the EASC measures or if the EASC measures are modified after initial installation.	
(b) A phase of grading has been completed.	Initial and date a copy of the approved EASC plan or complete, date and sign an inspection report to indicate completion of the construction phase.	
(c) Ground cover is located and installed in accordance with the approved EASC plan.	Initial and date a copy of the approved EASC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.	
(d) The maintenance and repair requirements for all EASC measures have been performed.	Complete, date and sign an inspection report.	
(e) Corrective actions have been taken to EASC measures.	Initial and date a copy of the approved EASC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.	

2. Additional Documentation to be Kept on Site

In addition to the EASC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical.

(a) This General Permit is well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if those provide equal access and utility as the hard-copy records.

(c) Documentation to be Retained for Three Years
All data used to complete the e-NOR and all inspection records shall be maintained for a period of three years after project completion and made available upon request. (40 CFR 122.41)

PART II, SECTION 6, ITEM (4)

DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- The EASC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the EASC plan authority has approved these items.
- The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part II, Section C, Item (2)(c) and (d) of this permit.
- Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems.
- Vegetated, upland areas of the site or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in item (d) above.
- Velocity dispersion devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices to reduce the velocity of the discharge.
- Removal of sediment from the dewatering treatment devices described in item (d) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit. The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Site Area Description	Required Ground Stabilization Timeframes	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (H2O) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HOW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HOW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below.

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulch and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulch and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Strips or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store Flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if container overflows.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of the site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide stacking or anchoring of portable toilets during periods of high winds or in high traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

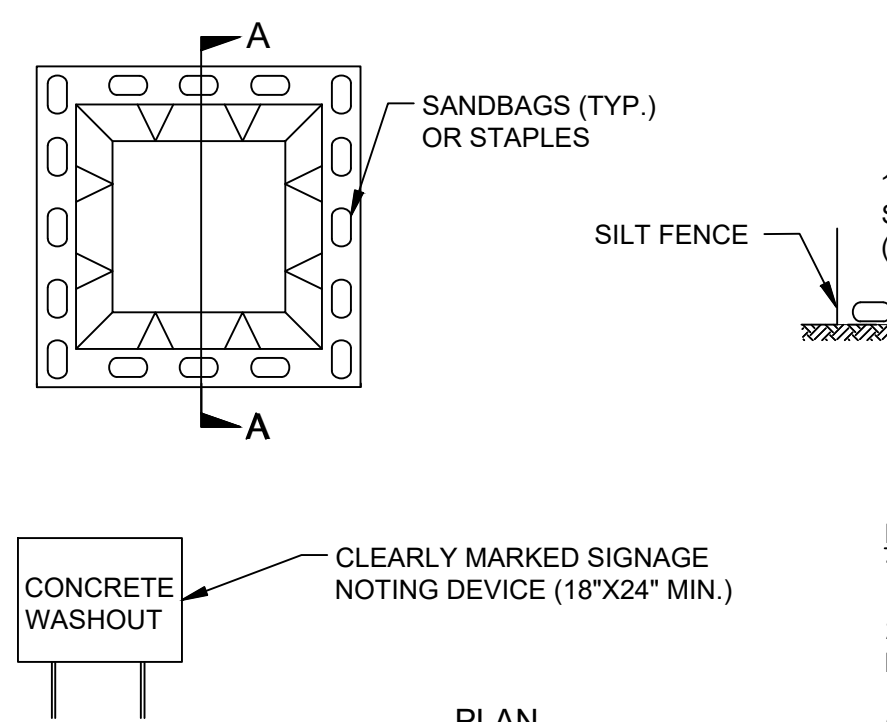
EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19



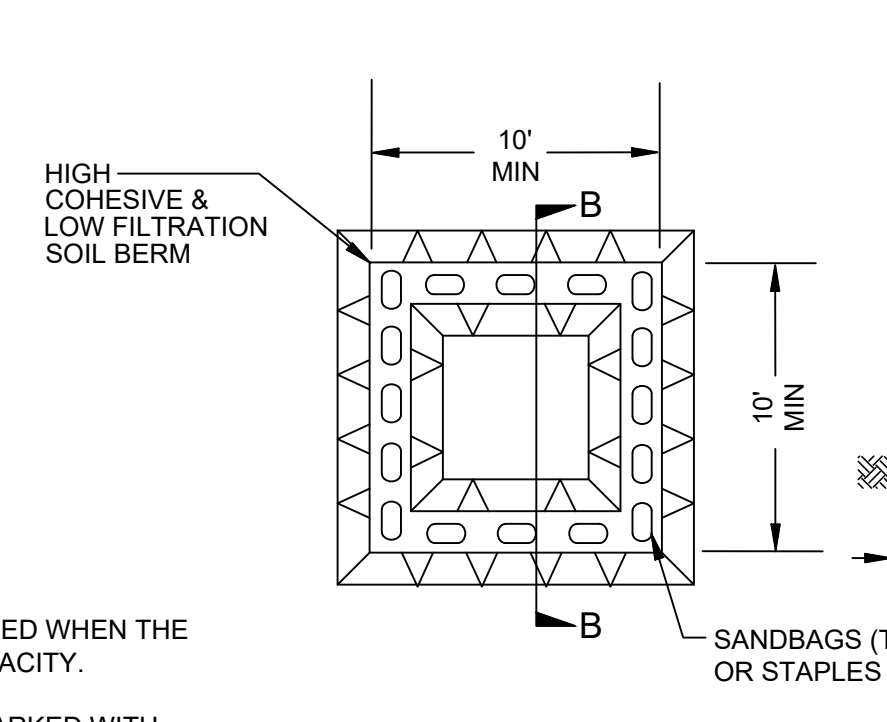
SECTION A-A

- ACTUAL LOCATION DETERMINED IN FIELD
- THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.
- CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

PLAN

BELOW GRADE WASHOUT STRUCTURE

NOT TO SCALE

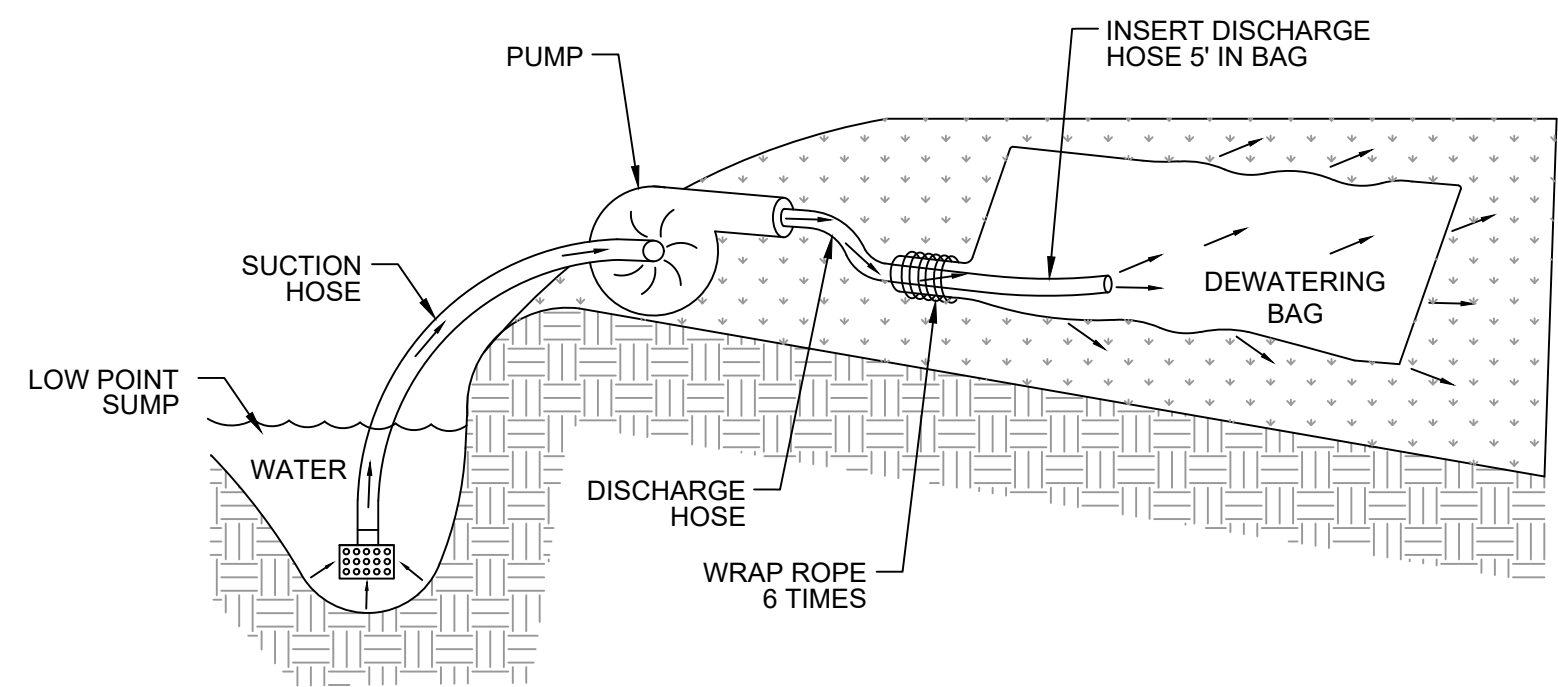


SECTION B-B

- ACTUAL LOCATION DETERMINED IN FIELD
- THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
- CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

PLAN

ABOVE GRADE WASHOUT STRUCTURE



NOTE:

1. A SEDCATCH DEWATERING BAG OR APPROVED EQUAL SHOULD BE USED ANYTIME WATER IS PUMPED FROM EXCAVATED AREAS ON SITE.

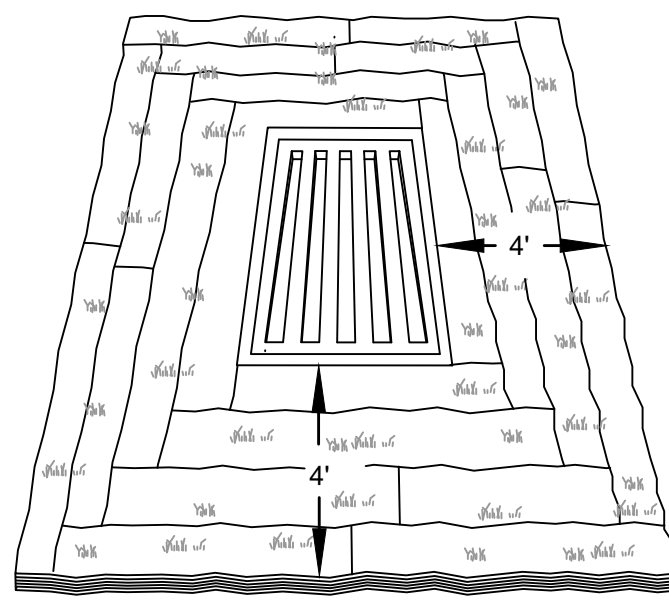
INSTALLATION AND USE:

2. PLACE DEWATERING BAG ON THE GROUND OR ON A TRAILER OVER A LEVEL STABILIZED AREA.
3. INSERT DISCHARGE PIPE A MINIMUM OF 5 FEET INSIDE DEWATERING BAG AND SECURE WITH A ROPE WRAPPED 6 TIMES AROUND THE SNOOT OVER A 6 INCH WIDTH OF THE BAG.
4. REPLACE DEWATERING BAG WHEN HALF FULL OF SEDIMENT OR WHEN THE SEDIMENT HAS REDUCED THE FLOW RATE OF THE PUMP DISCHARGE TO AN IMPRACTICAL AMOUNT.

MAINTENANCE AND DISPOSAL:

1. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENT AWAY FROM WATERWAYS OR ENVIRONMENTALLY SENSITIVE AREAS. SLIT OPEN SEDIMENT BAG AND REMOVE ACCUMULATED SEDIMENT AND DISPERSE IN GRADED AREAS AND STABILIZE. DISPOSE OF BAG AT AN APPROPRIATE RECYCLING OR SOLID WASTE FACILITY.

1 DEWATERING BAG DETAIL
CA-541 NOT TO SCALE



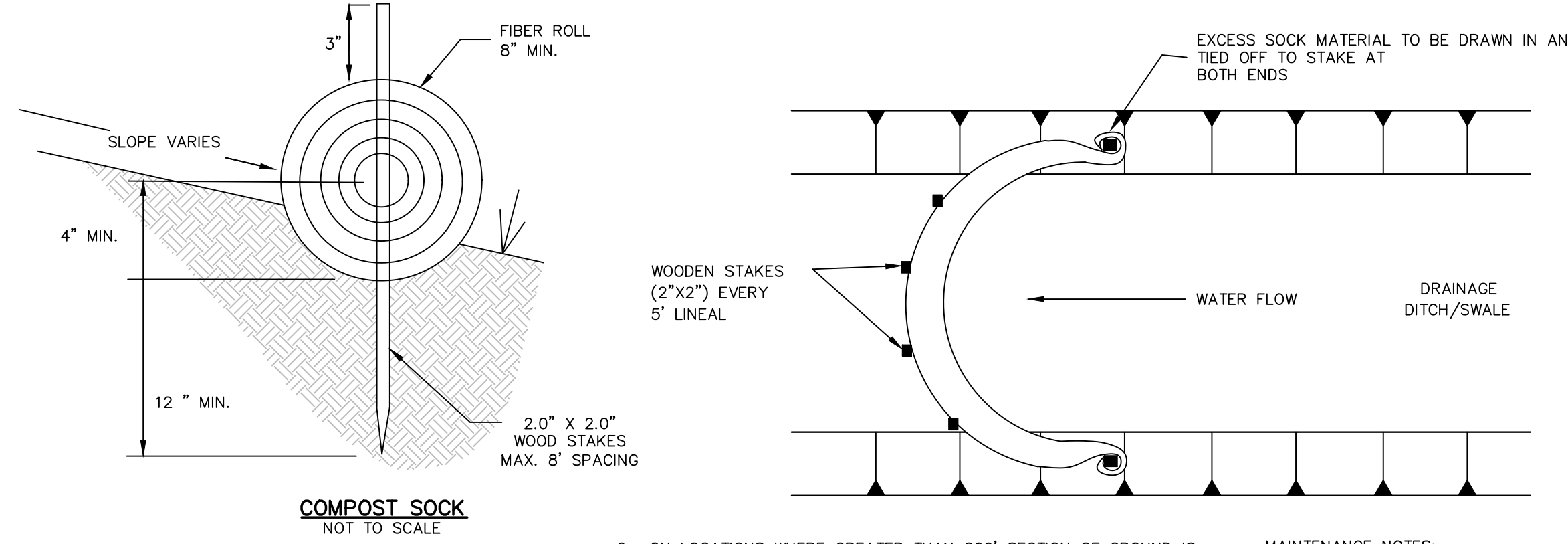
CONSTRUCTION NOTES:

1. BRING THE AREA TO BE SODDED TO FINAL GRADE ELEVATION WITH TOP SOIL. ADD FERTILIZER AND LIME, AND INSTALL SOD. SOD SHALL BE BERMUDA.
2. LAY ALL SOD STRIPS PERPENDICULAR TO THE DIRECTION OF FLOWS.
3. KEEP THE WIDTH OF THE SOD AT LEAST 4 FT IN THE DIRECTION OF FLOWS.
4. STAGGER SOD STRIPS SO THAT ADJACENT STRIP ENDS ARE NOT ALIGNED.

MAINTENANCE:

1. DURING THE FIRST 4 WEEKS, WATER SOD AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF 2 INCHES.
2. MAINTAIN GRASS HEIGHT AT LEAST 2 INCHES WITH NO MORE THAN ONE-THIRD THE SHOOT HEIGHT (GRASS LEAF) REMOVED IN ANY MOWING.
3. APPLY FERTILIZER AS NECESSARY TO MAINTAIN THE DESIRED GROWTH AND SOD DENSITY. ADD LIME AS NEEDED TO MAINTAIN THE PROPER pH.

2 TEMPORARY SOD INLET PROTECTION DETAIL
CA-141 NOT TO SCALE



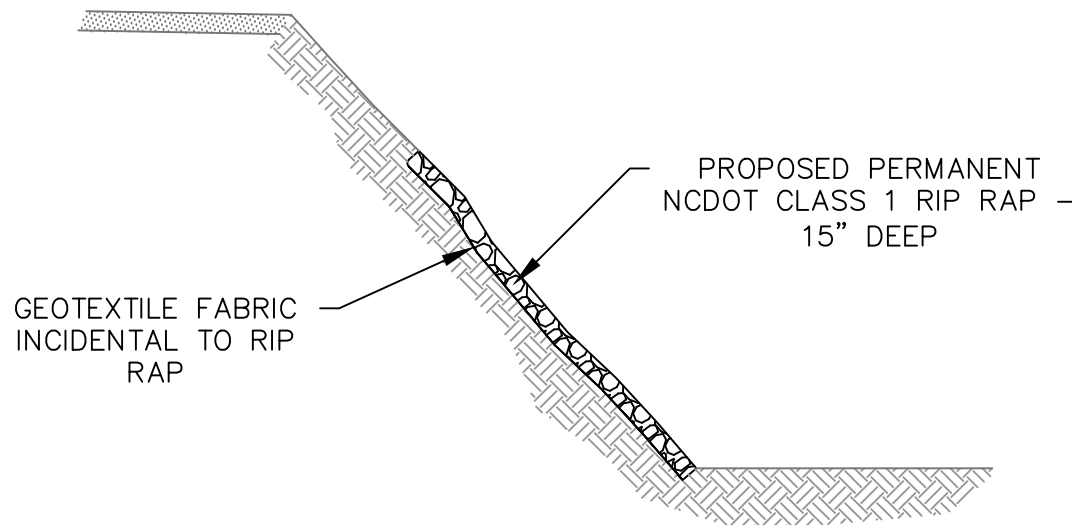
COMPOST SOCK NOTES:

1. COMPOST USED IN SOCK SHALL BE CERTIFIED BY THE US COMPOSTING COUNCILS SEAL OF TESTING PROGRAM (USCC-STA). COMPOST USED SHALL BE CONSIDERED MATURE AS DEFINED BY USCC-STA BIOLOGICAL ASSAYS SEEDLING EMERGENCE AND RELATIVE GROWTH TEST.
2. COMPOST SOCKS SHALL BE INSTALLED AT APPROXIMATE LOCATIONS SHOWN ON SHEET ECL.7
3. PRIOR TO INSTALLATION, CLEAR ALL OBSTRUCTIONS INCLUDING ROCKS, CLOUDS AND OTHER DEBRIS GREATER THAN ONE INCH THAT MAY INTERFERE WITH PROPER FUNCTION OF THE COMPOST SOCK.
4. THE ENDS OF THE COMPOST SOCKS SHALL BE TURNED SLIGHTLY UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND THE END OF THE SOCKS.
5. FILL SOCK NETTING UNIFORMLY WITH COMPOST TO THE DESIRED LENGTH SUCH THAT THE COMPOST SOCKS DO NOT DEFORM.
6. ON LOCATIONS WHERE GREATER THAN 200' SECTION OF GROUND IS TO BE TREATED, THE SOCK LENGTH SHOULD BE SLEEVED. AFTER ONE SECTION (200 FT) IS FILLED AND TIED OFF (KNOTTED OR ZIP TIED), THE SECOND SECTION SHALL BE PULLED OVER THE FIRST 1-2 FEET AND SLEEVED CREATING AN OVERLAP. ONCE OVERLAPPED, THE SECOND SECTION IS FILLED STARTING AT THE SLEEVED AREA TO CREATE A SEAMLESS APPEARANCE.
7. OAK OR OTHER DURABLE HARDWOOD STAKES 2" X 2" IN CROSS SECTION SHOULD BE DRIVEN VERTICALLY PLUMB THROUGH THE CENTER OF THE COMPOST SOCK. STAKES SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 4 FEET, OR A MAXIMUM INTERVAL OF 8 FEET IF THE SOCK IS PLACED IN A 4 INCH TRENCH. THE STAKES SHOULD BE DRIVEN TO A MINIMUM DEPTH OF 12 INCHES, WITH A MINIMUM OF 3 INCHES PROTRUDING ABOVE THE COMPOST SOCK.
8. IN THE EVENT STAKING IS NOT POSSIBLE (I.E., WHEN SOCKS ARE USED ON PAVEMENT) HEAVY CONCRETE BLOCKS SHALL BE USED BEHIND THE SOCK TO HOLD IT IN PLACE DURING RUNOFF EVENTS.
9. COMPOST SOCKS ARE NOT TO BE USED IN PERENNIAL OR INTERMITTENT STREAMS.

MAINTENANCE NOTES:

INSPECT COMPOST SOCKS WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT (1/2 INCH OR GREATER). REMOVE ACCUMULATED SEDIMENT AND ANY DEBRIS. THE COMPOST SOCK MUST BE REPLACED IF CLOGGED OR TORN. IF PONDING BECOMES EXCESSIVE, THE SOCK MAY NEED TO BE REPLACED WITH A LARGER DIAMETER OR A DIFFERENT MEASURE. THE SOCK NEEDS TO BE REINSTALLED IF UNDERMINED OR DISLOADED. THE COMPOST SOCK SHALL BE INSPECTED UNTIL LAND DISTURBANCE IS COMPLETE AND THE AREA ABOVE THE MEASURE HAS BEEN PERMANENTLY STABILIZED.

3 TEMPORARY SOD INLET PROTECTION DETAIL
CA-141 NOT TO SCALE
CA-1XX



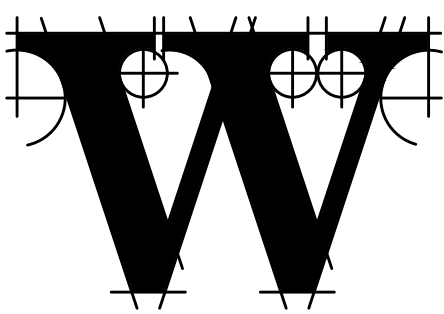
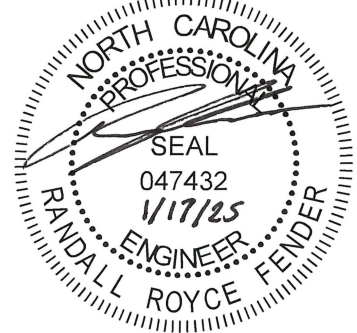
NOTE 'A':

CONTRACTOR TO INSTALL RIP RAP WITH UNDERLYING FILTER FABRIC ON SIDE SLOPE UP TO STORM WATER PIPE. ITEM TO BE PAID FOR UNDER "RIP RAP FOR SLOPE STABILIZATION" PER TON.

4 RIP RAP FOR SLOPE STABILIZATION
CA-141 SCALE: NTS



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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WATER & SEWER ENGINEER

WITHERSRAVENEL

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REVISIONS

DATE JANUARY 2025
PROJECT NUMBER 3105-2401
SHEET TITLE

SEDIMENTATION
& EROSION
CONTROL
DETAILS - 2
(SCHEDULE 1)
SHEET NUMBER

CA-541



Schedule 1:
2-Unit Box Hangar

Lumberton, NC 28358



01/17/2025



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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE

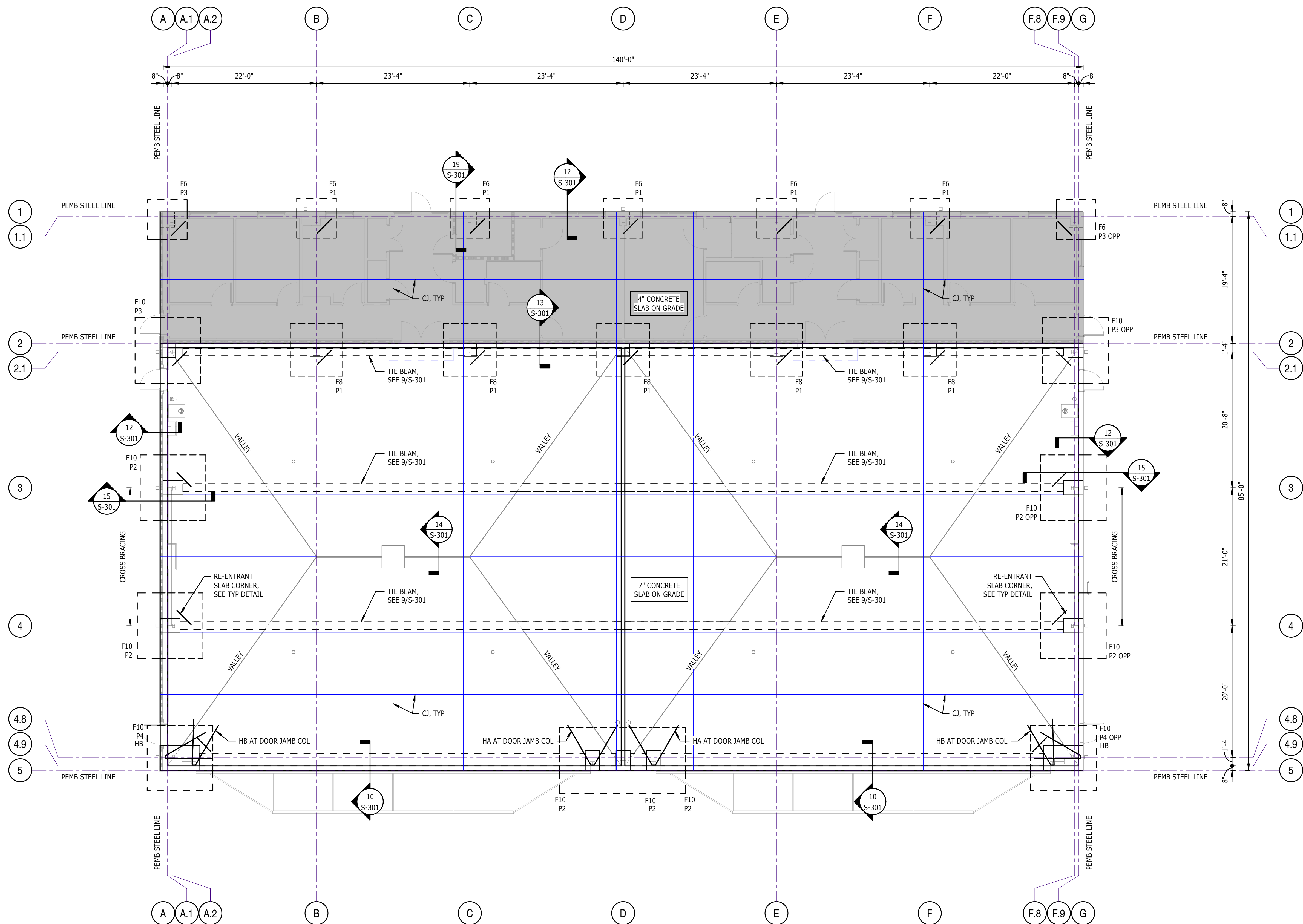
ABBREVIATIONS
AND SYMBOL
LEGEND

SHEET NUMBER

S-002

ABBREVIATIONS			
@	AT	GT	GIRDER TRUSS
&	AND	HD	HEADED
Ø	DIAMETER	HI	HIGH
AB	ANCHOR BOLTS	HORIZ	HORIZONTAL
ACI	AMERICAN CONCRETE INSTITUTE	HSS	HOLLOW STRUCTURAL SECTION
ADDL	ADDITIONAL	INT	INTERIOR
ADH	ADHESIVE	JT	JOINT
AFF	ABOVE FINISHED FLOOR	K	KIP(S)
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	KB	KNEE BRACE
AISI	AMERICAN IRON AND STEEL INSTITUTE	KSI	KIPS PER SQUARE INCH
ALT	ALTERNATE	LB	LONG BAR
ARCH	ARCHITECTS / ARCHITECTURAL	LBS	POUNDS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	LH	LONG LEG HORIZONTAL
AWS	AMERICAN WELDING SOCIETY	LLV	LONG LEG VERTICAL
B/ or BOT	BOTTOM	LO	LOW
BCX	BOTTOM CHORD EXTENSION	LOC	LOCATION
BFB	BOTTOM FLANGE BRACE	LSH	LONG SIDE HORIZONTAL
BFF	BELOW FINISHED FLOOR	LSV	LONG SIDE VERTICAL
BLDG	BUILDING	LWC	LIGHT WEIGHT CONCRETE
BM	BEAM	MAX	MAXIMUM
BOS	BOTTOM OF STEEL	MC	MOMENT CONNECTION
BRG	BEARING	MCJ	MASONRY CONTROL JOINT
BTWN	BETWEEN	MECH	MECHANICAL
CANT	CANTILEVER	MFR	MANUFACTURER
CJ	CONTROL JOINT	MID	MIDDLE
CL	CENTERLINE	MIN	MINIMUM
CLR	CLEAR	MISC	MISCELLANEOUS
CHU	CONCRETE MASONRY UNIT	MOW	MIDDLE OF WALL
COL	COLUMN	MP	MASONRY PILASTER
CONC	CONCRETE	No or #	NUMBER
CONN	CONNECTION	NS	NEAR SIDE
CONST JT	CONSTRUCTION JOINT	NTS	NOT TO SCALE
CONT	CONTINUOUS	NWC	NORMAL WEIGHT CONCRETE
CONTR	CONTRACTOR	OC	ON CENTER
COORD	COORDINATE	OPNG	OPENING
CTRD	CENTERED	OPP	OPPOSITE HAND
U	NAILS (PENNY)	PAF	POWDER ACTUATED FASTENER
DBA	DEFORMED BAR ANCHOR	PED	PEDESTAL
DEFL	DEFLECTION	PL	PLATE
DEPR	DEPRESSION / DEPRESSED	PSF	POUNDS PER SQUARE FOOT
DET	DETAIL	PSI	POUNDS PER SQUARE INCH
DIAG	DIAGONAL	PT	PRESSURE TREATED
DIM	DIMENSION	P-T	POST-TENSIONED
DIST	DISTANCE	REF	REFERENCE
DWG(S)	DRAWING(S)	REINF	REINFORCING
DWL(S)	DOWEL(S)	REQD	REQUIRED
EA	EACH	SB	SHORT BAR
EE	EACH END	SCHD	SCHEDULE
EF	EACH FACE	SIM	SIMILAR
EJ	EXPANSION JOINT	SOG	SLAB ON GRADE
EL	ELEVATION	SPEC(S)	SPECIFICATION(S)
ELEV	ELEVATOR	SQ	SQUARE
EMBED	EMBEDDED / EMBEDMENT	STD	STANDARD
ENGR	ENGINEER	STIFF	STIFFENER
EOD	EDGE OF DECK	STIRR	STIRRUPS
EOS	EDGE OF SLAB	STL	STEEL
EQ	EQUAL	STR	STRUCTURAL
EQUIP	EQUIPMENT	T/	TOP
EW	EACH WAY	TCX	TOP CHORD EXTENSION
EXIST	EXISTING	TOC	TOP OF CONCRETE
EXP	EXPANSION	TOF	TOP OF FOOTING
EXT	EXTERIOR	TOS	TOP OF STEEL
FDN	FOUNDATION	TOW	TOP OF WALL
FIE	FINISHED FLOOR ELEVATION	TYP	TYPICAL
FOM	FACE OF MASONRY	UNO	UNLESS NOTED OTHERWISE
FOW	FACE OF WALL	VERT	VERTICAL
FS	FAR SIDE	VIF	VERIFY IN FIELD
FTG	FOOTING	W/	WITH
GA	GAUGE	WWF	WELDED WIRE FABRIC
GALV	GALVANIZED	WP	WORK POINT

SYMBOL LEGEND	
SYMBOL	MEANING
	SPOT ELEVATION. ELEVATION RELATIVE TO REFERENCE ELEVATION.
<No>	TOP OF FOOTING, GRADE BEAM, PILE CAP, OR DRILLED PIER. ELEVATION RELATIVE TO REFERENCE ELEVATION.
<No> - <No>	STEP IN TOP OF FOOTING ELEVATION, SEE "TYPICAL STEP IN WALL FOOTING" DETAIL. ELEVATION RELATIVE TO REFERENCE ELEVATION.
	DEPRESSED OR RAISED SLAB ELEVATION, SEE "TYPICAL STEP IN SLAB ON GRADE" DETAIL. ELEVATION RELATIVE TO REFERENCE ELEVATION.
[No]	TOP OF WALL OR PEDESTAL. ELEVATION RELATIVE TO REFERENCE ELEVATION.
(No) [+No]	TOP OF STEEL/JOIST BEARING ELEVATION TOP OF STEEL ABOVE STEEL/JOIST BEARING ELEVATION.
	SLOPED STEPPED SLAB.
F#	SPREAD FOOTING TYPE, SEE SCHEDULE.
P#	CONCRETE PEDESTAL TYPE, SEE SCHEDULE.
PC#	PILE CAP TYPE, SEE SCHEDULE.
GB# WxD	CONCRETE GRADE BEAM TYPE, SEE SCHEDULE. "W" INDICATES BEAM WIDTH AND "D" INDICATES BEAM DEPTH (IN INCHES).



1 FOUNDATION PLAN

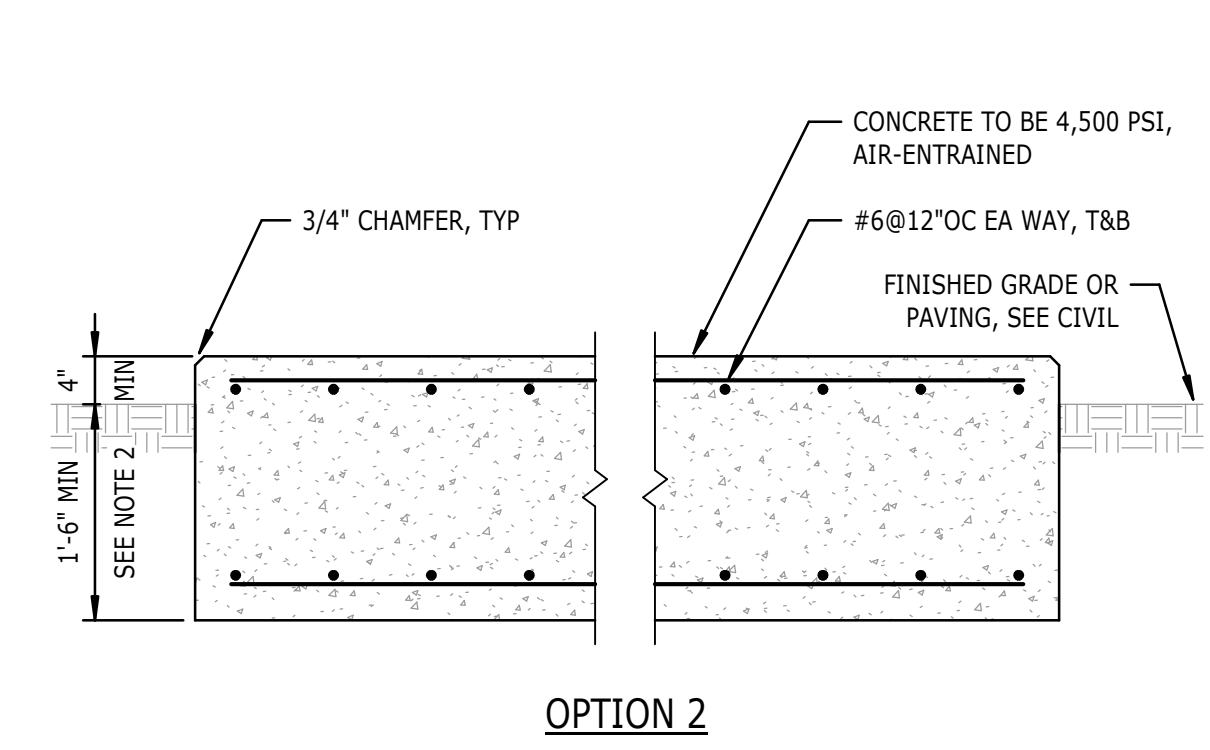
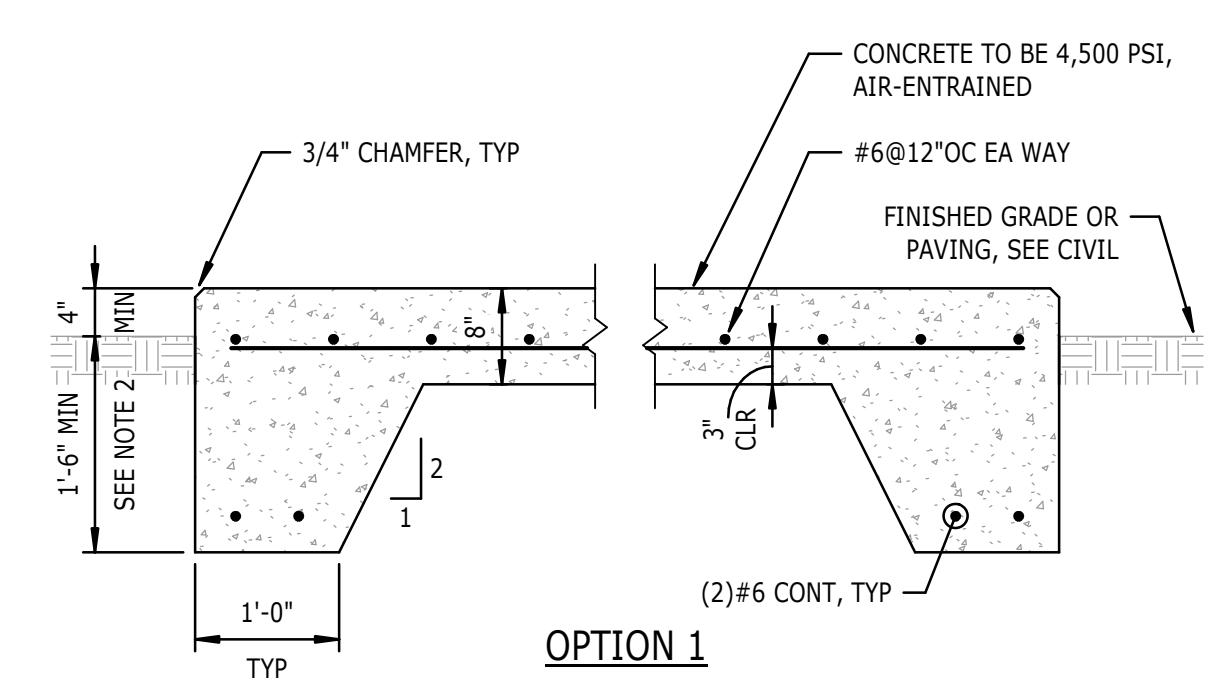
1
S-101

1/8" = 1'-0"

FOUNDATION PLAN NOTES:

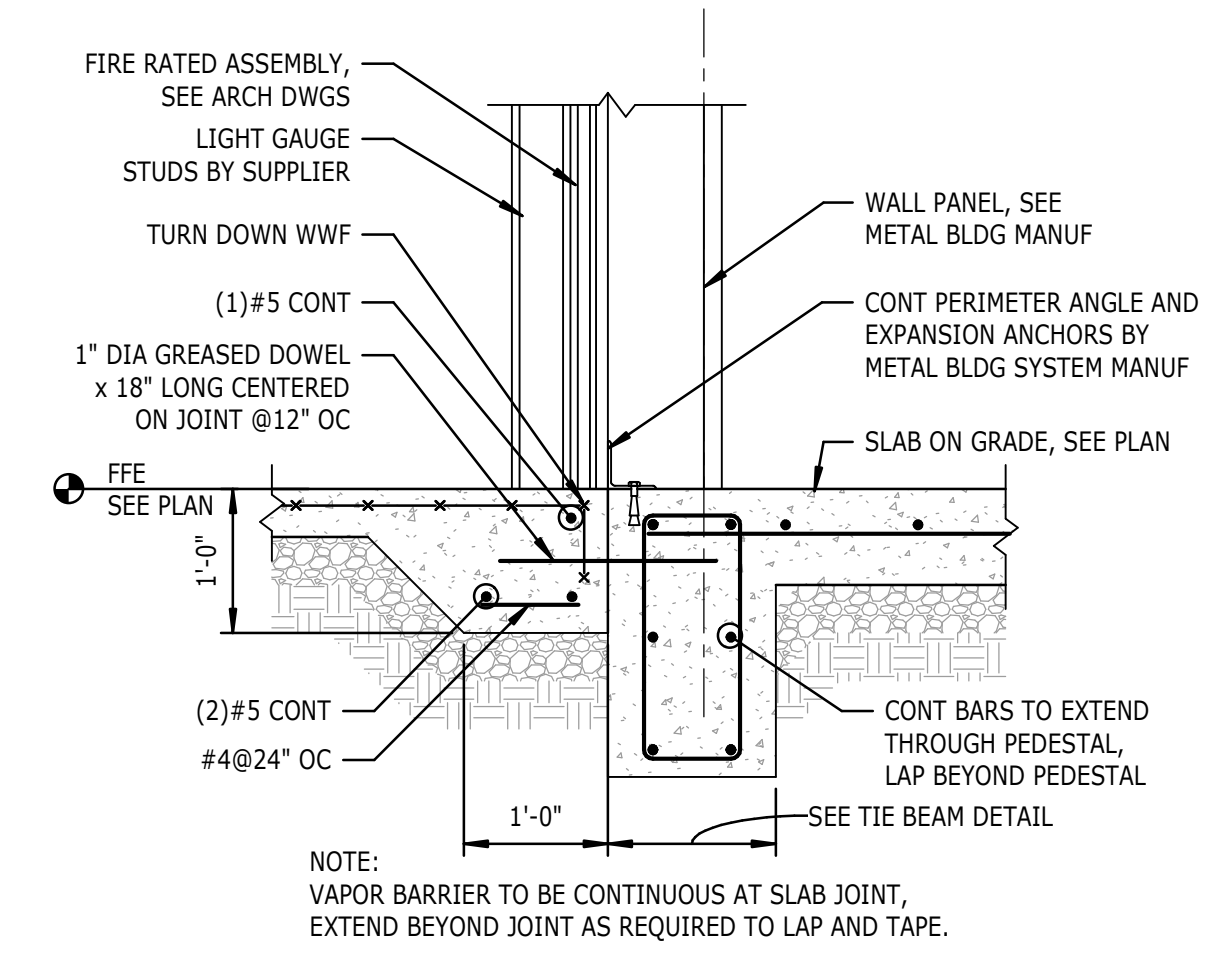
1. SEE S-0 SERIES FOR GENERAL NOTES, ABBREVIATIONS, AND SYMBOL LEGEND.
2. REFERENCE FINISHED FLOOR ELEVATION 0'-0". SEE CIVIL DRAWINGS FOR ACTUAL ELEVATION.
3. TOP OF FOOTING ELEVATION 2'-0" BELOW FINISHED FLOOR ELEVATION, UNO.
4. TOP OF PEDESTAL ELEVATION AT 0'-0", UNO.
5. FOR TYPICAL SLAB CONSTRUCTION DETAILS, SEE TYPICAL DETAILS.
6. SEE ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR 4" DIA PVC CONDUIT STUB UPS CAST IN SLAB.
7. FOOTING SIZES ARE BASED ON PRELIMINARY REACTIONS. FINAL FOOTING SIZES WILL BE PROVIDED BASED ON THE SUBMITTED PEMB SHOP DRAWINGS. CONTRACTOR TO PROVIDE A UNIT PRICE AT BID FOR A BLENDED COST PER CUBIC YARD OF CONCRETE FOOTING ADDED OR REDUCED. BLENDED RATE TO INCLUDE ALL COST ASSOCIATED WITH THE CHANGE IN FOOTING SIZE INCLUDING CONCRETE, REINFORCING, AND EXCAVATION. REFER TO UNIT PRICE SCHEDULE 1 - No. 1.
8. REINFORCING SHOP DRAWINGS TO BE COMPLETED AFTER REVISED FOOTING SIZES ARE PROVIDED BASED ON FINALIZED PEMB SHOP DRAWINGS.
9. SLOPE EXTERIOR SLABS, SIDEWALKS, AND PAVING AS INDICATED ON THE ARCHITECTURAL OR CIVIL DRAWINGS.
10. LATERAL BRACING AND CONNECTIONS BY PEMB SUPPLIER, TYP. COORDINATE BRACING GEOMETRY WITH ARCHITECTURAL DRAWINGS TO AVOID EXPOSED MEMBERS.

SPREAD FOOTING SCHEDULE					
MARK	SIZE			REINFORCEMENT (EACH WAY)	
	WIDTH	LENGTH	DEPTH	TOP	BOTTOM
F6	6'-0"	6'-0"	1'-0"	NA	(7)#5
F8	8'-0"	8'-0"	1'-5"	NA	(9)#7
F10	10'-0"	10'-0"	2'-6"	(11)#7	(11)#7

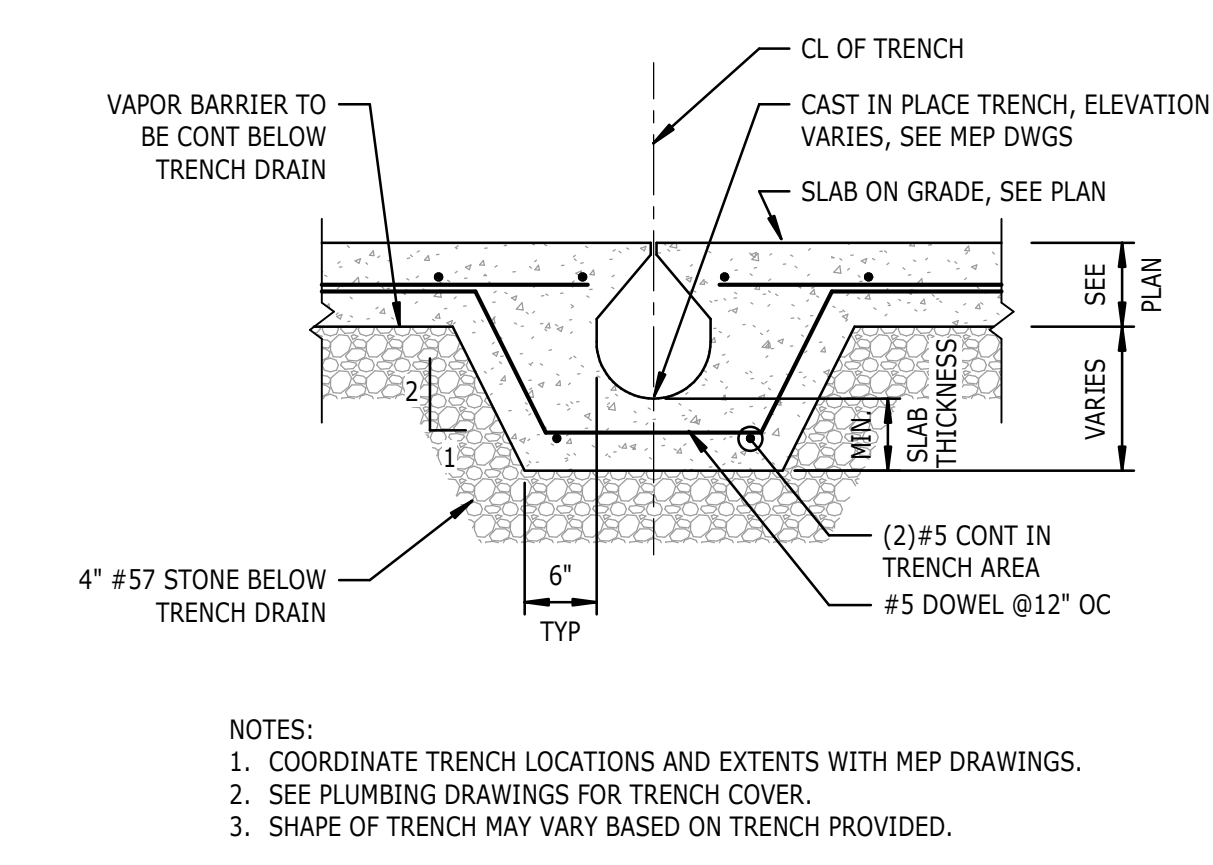


NOTES:
1. THE EXACT SIZE, SHAPE, AND LOCATION OF EQUIPMENT PADS SHALL BE DETERMINED BY THE CONTRACTOR AFTER APPROVAL OF EQUIPMENT SHOP DRAWINGS. ANCHOR BOLTS WHERE REQUIRED SHALL BE SIZED AND LOCATED ACCORDING TO MANUFACTURER'S REQUIREMENTS.
2. INCREASE DEPTH AS REQUIRED BY THE GEOTECHNICAL REPORT FOR AREA-SPECIFIC FREEZE-THAW DEPTHS.

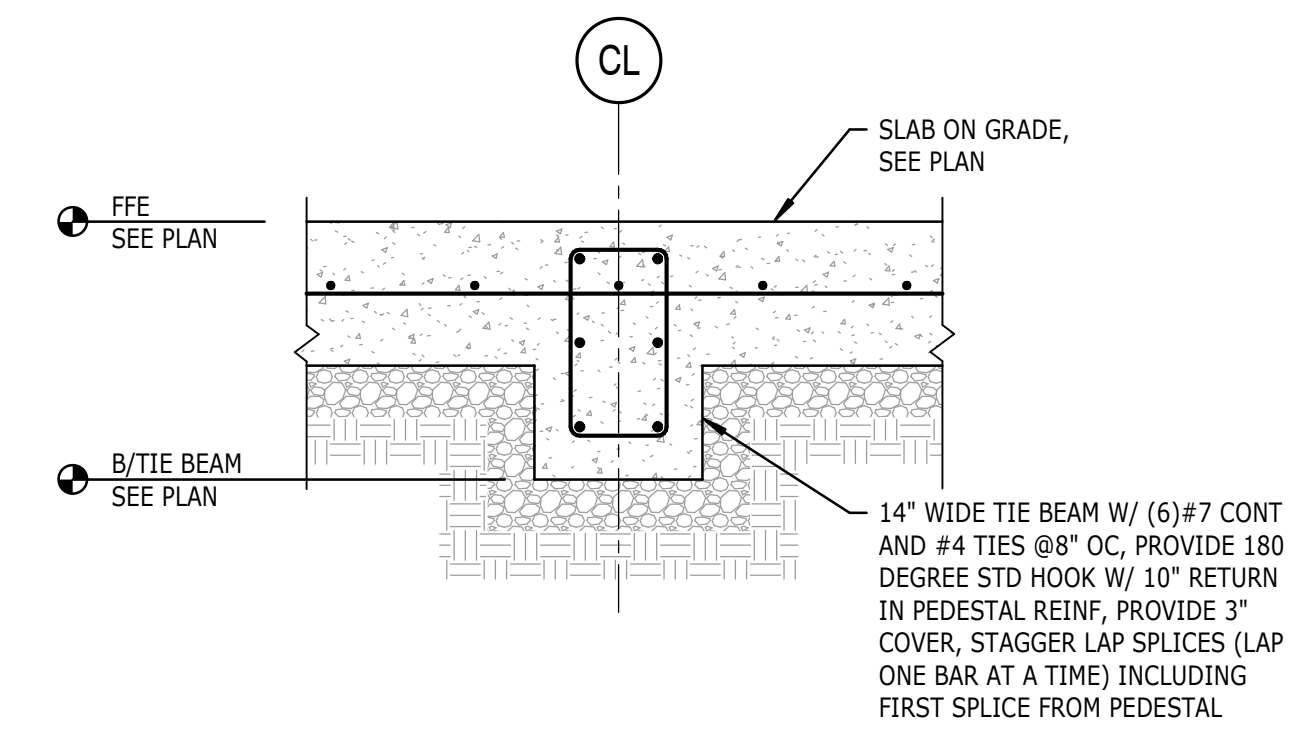
17 TYPICAL EXTERIOR EQUIPMENT PAD
S-301 3/4" = 1'-0"



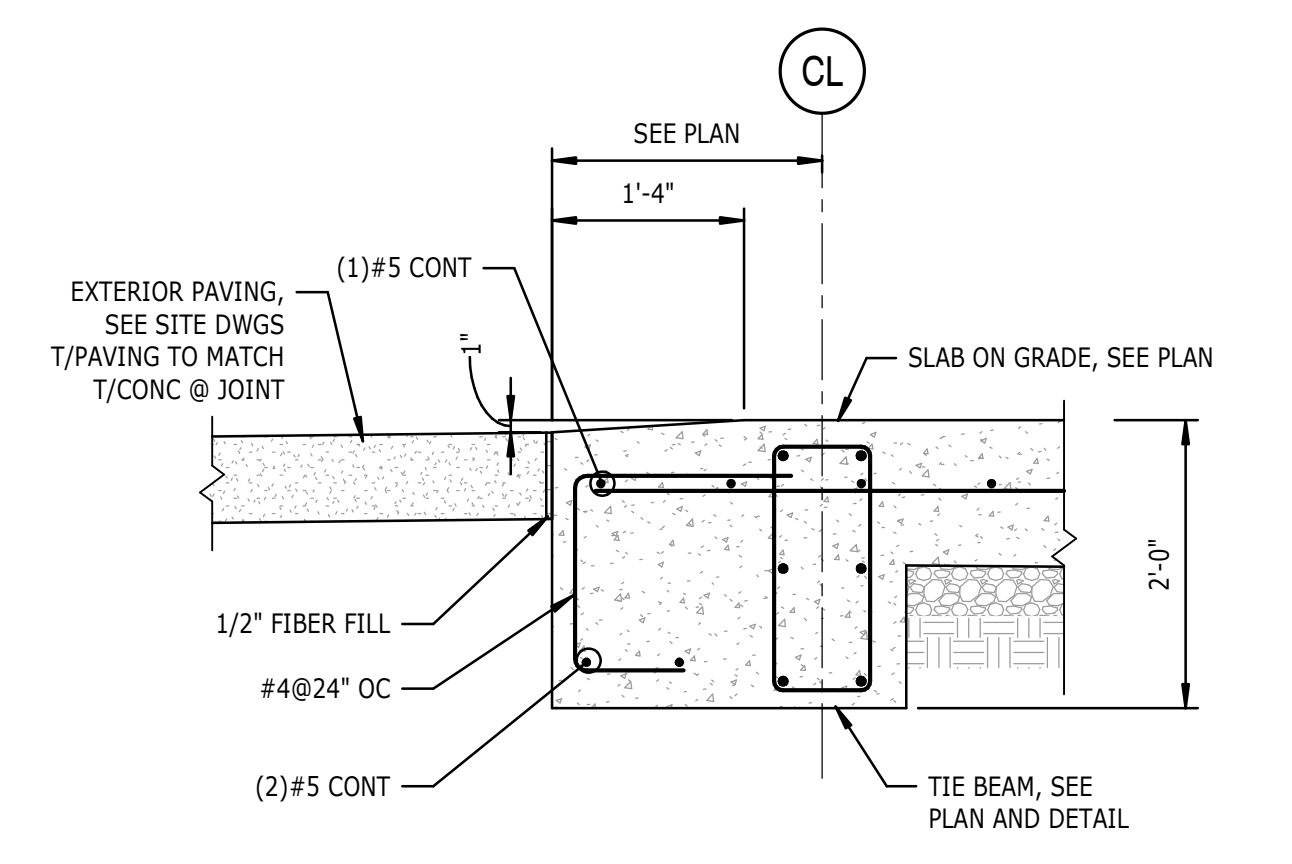
13 AT SLAB ON GRADE TRANSITION
S-301 3/4" = 1'-0"



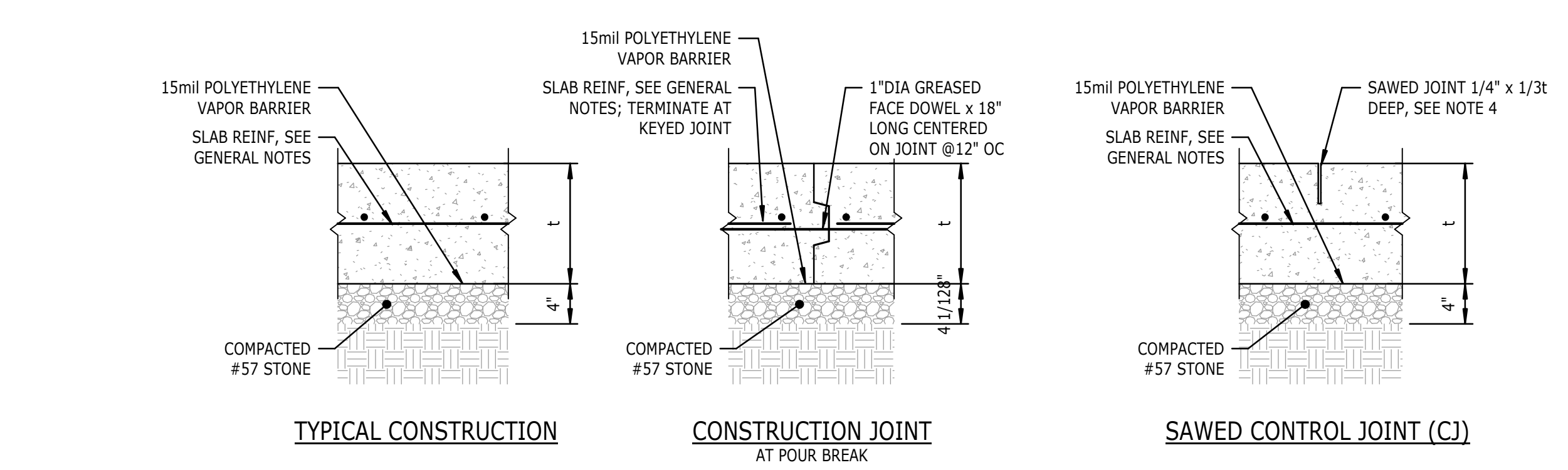
14 SECTION AT TRENCH DRAIN
S-301 3/4" = 1'-0"



9 SECTION
S-301 TYPICAL TENSION TIE BEAM NTS



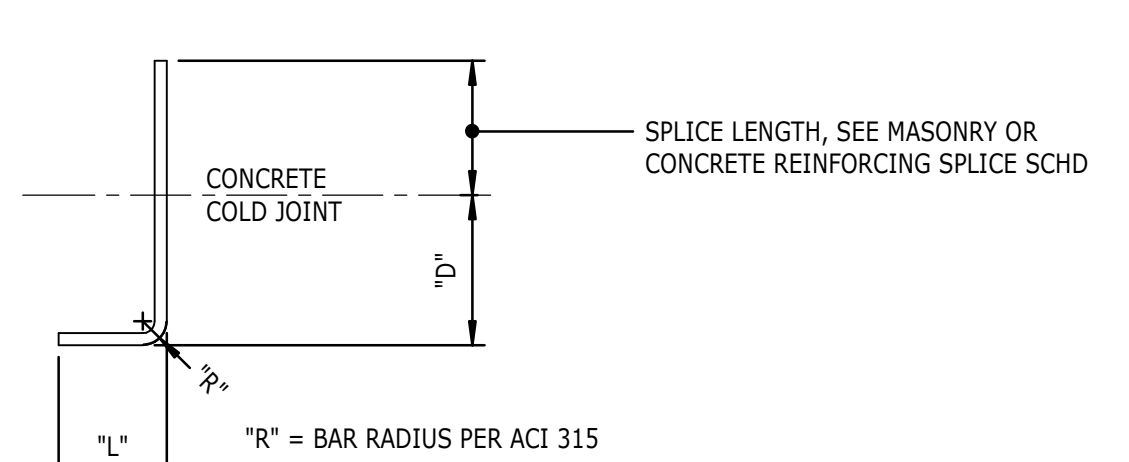
10 SECTION
S-301 SECTION AT HANGAR DOOR NTS



NOTES:
1. 't' DENOTES SLAB THICKNESS; SEE PLANS.
2. LOCATION OF SLAB ON GRADE CONSTRUCTION JOINTS SHALL BE DETERMINED BY THE CONTRACTOR. JOINT LOCATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
3. SEE PLANS FOR LOCATION OF CONTROL JOINTS LABELED (CJ).
4. SAW CUT CONTROL JOINTS WITHIN 8 HOURS OF SLAB POUR.

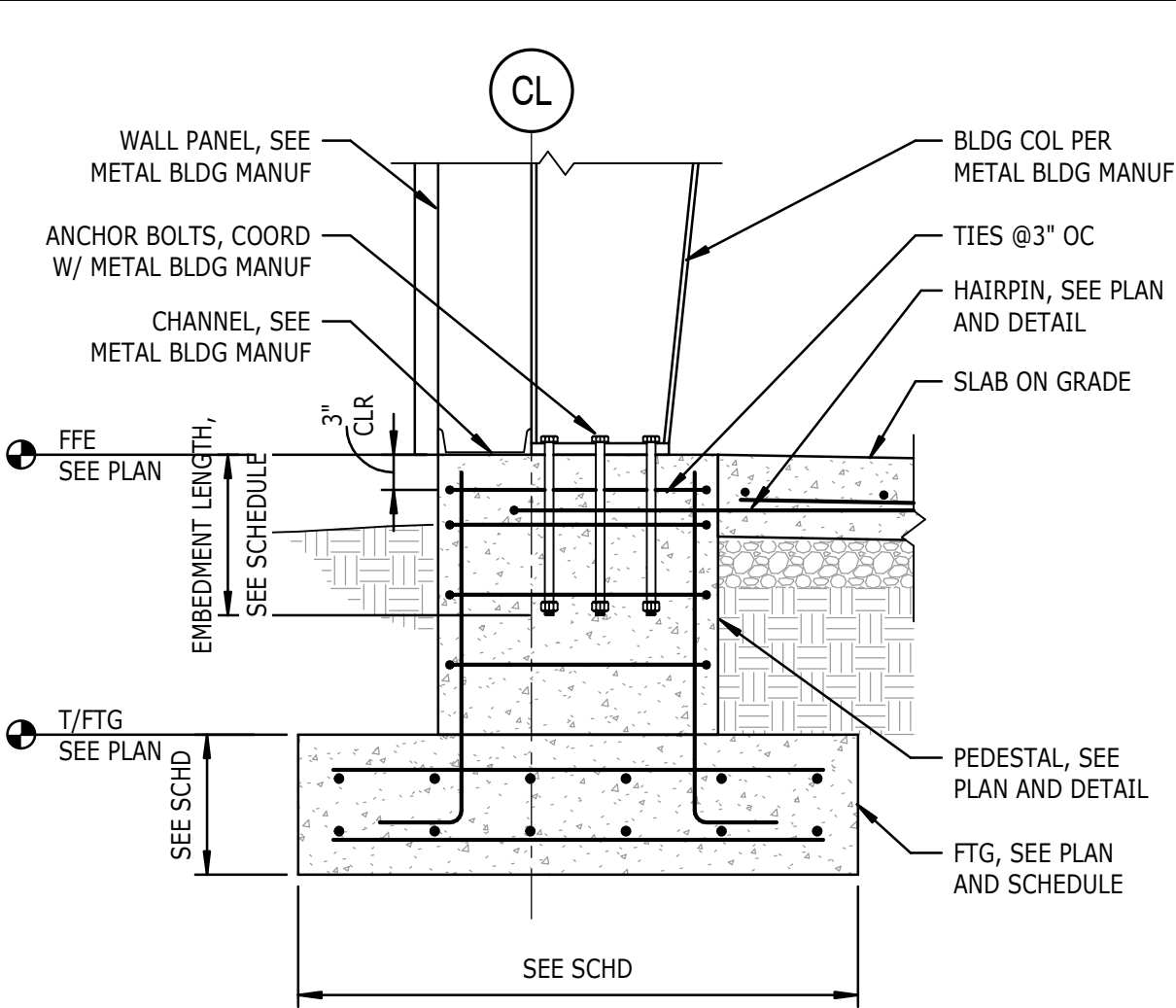
1 TYPICAL SLAB ON GRADE
S-301 NTS

CONCRETE REINFORCING DOWEL EMBEDMENT				
BAR SIZE	LEG DIM, "L"	EMBEDMENT, "D"		
		f'c = 3,000 PSI	f'c = 4,000 PSI	f'c = 5,000 PSI
#3	6"	6"	6"	6"
#4	8"	8"	7"	6"
#5	10"	10"	9"	8"
#6	12"	12"	10"	9"
#7	14"	14"	12"	11"
#8	16"	16"	14"	12"
#9	19"	18"	15"	14"
#10	22"	20"	17"	15"
#11	24"	22"	19"	17"



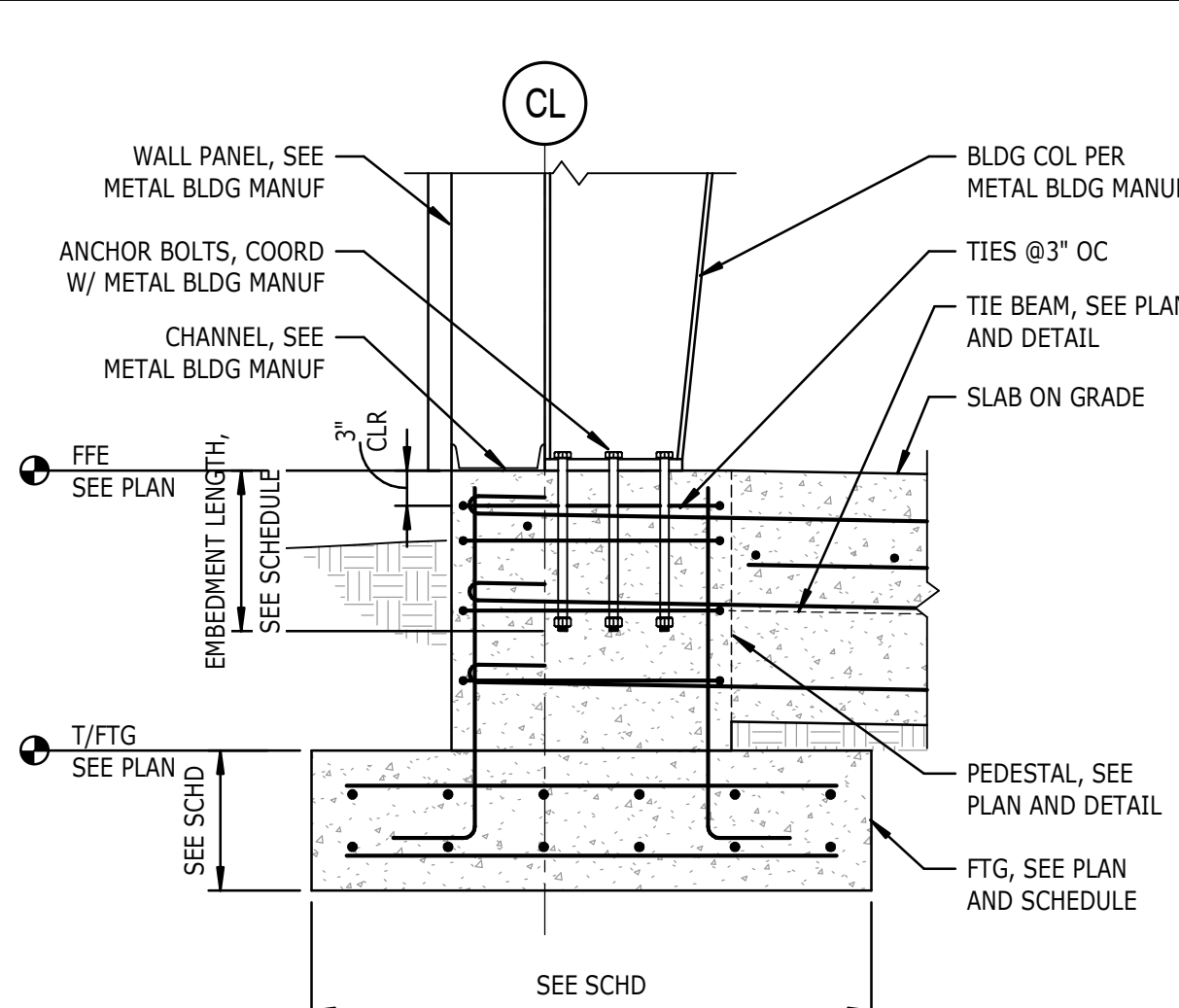
NOTES:
1. FOR CONCRETE STRENGTHS NOT PROVIDED, USE THE EMBEDMENT LENGTH FOR THE LOWER CONCRETE STRENGTH AS SHOWN IN THE TABLE.
2. DOWEL LENGTHS BASED ON NORMAL WEIGHT CONCRETE. FOR LIGHT WEIGHT, INCREASE DOWEL LENGTH "D" BY 30%.
3. SIDE COVER ON BARS MUST BE GREATER THAN 2 1/2". END COVER ON 90° HOOKED BARS MUST BE GREATER THAN 2".
4. FOR EPOXY-COATED BARS, INCREASE THE DOWEL LENGTH "D" BY 20%.

2 DOWEL EMBEDMENT LENGTH SCHEDULE
S-301 3/4" = 1'-0"



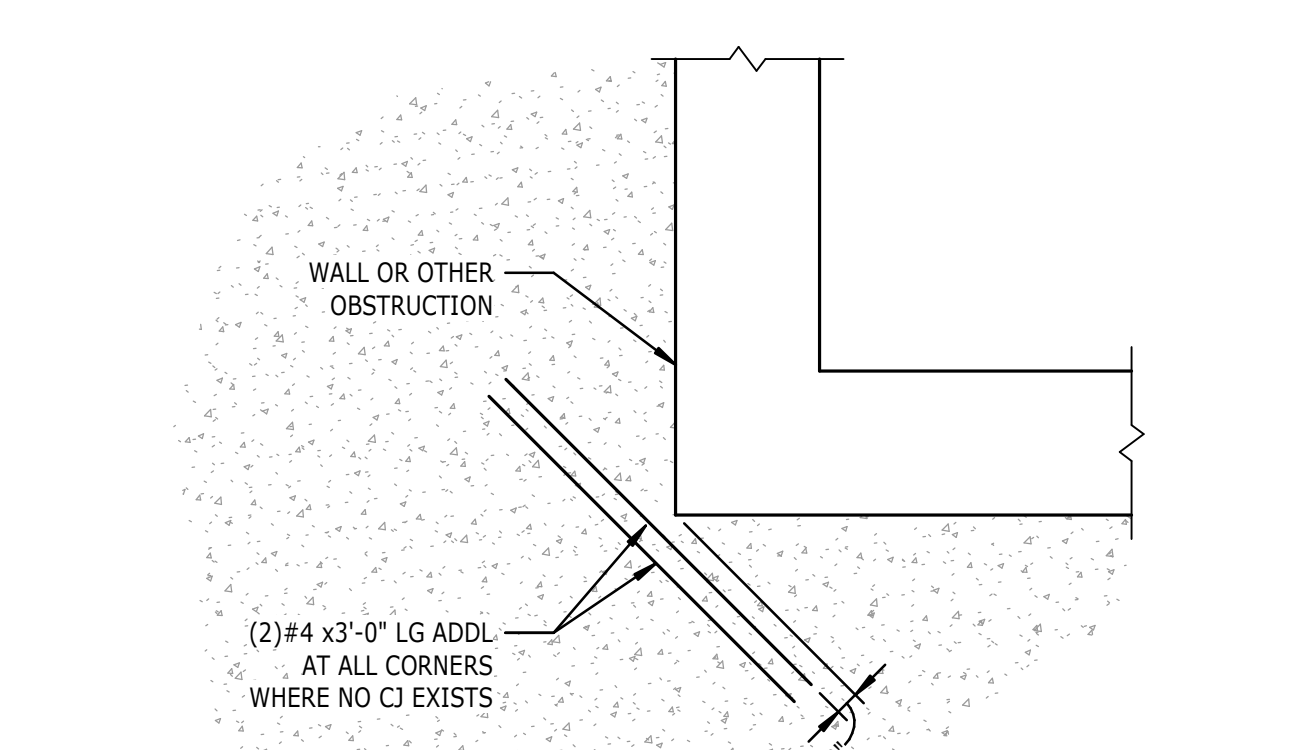
NOTES:
1. PROVIDE STANDARD ACI 90 DEGREE HOOK AT BOTTOM END OF ALL VERTICAL BARS IN PEDESTAL.
2. PROVIDE DOUBLE NUTS OR TACK WELD NUT AT ALL ANCHOR BOLTS.

19 SECTION
S-301 TYPICAL COLUMN FTG AT STEEL COLUMN WITH PEDESTAL NTS



NOTES:
1. PROVIDE STANDARD ACI 90 DEGREE HOOK AT BOTTOM END OF ALL VERTICAL BARS IN PEDESTAL.
2. PROVIDE DOUBLE NUTS OR TACK WELD NUT AT ALL ANCHOR BOLTS.

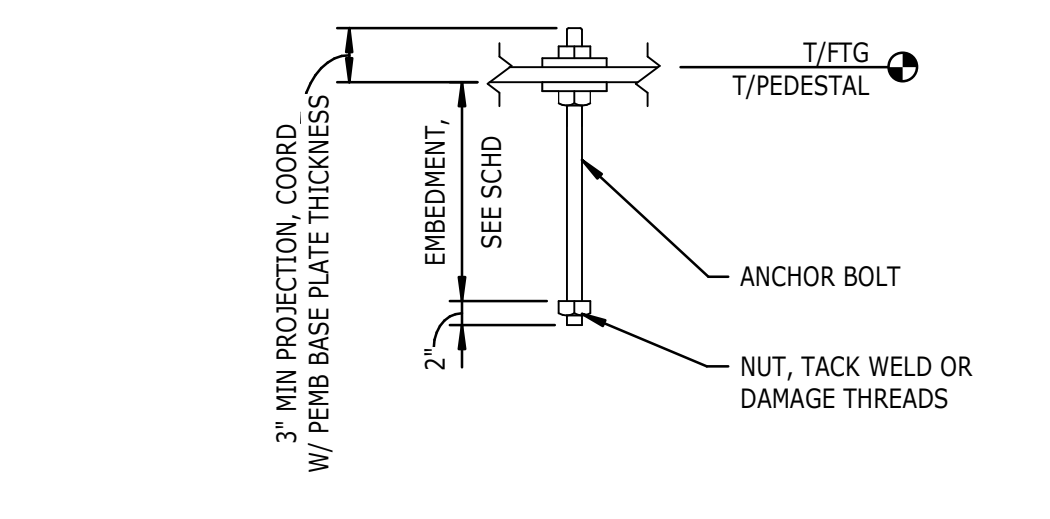
15 SECTION
S-301 TYPICAL COLUMN FTG AT STEEL COLUMN WITH PEDESTAL AND TIE BEAM NTS



11 TYPICAL SLAB AT CORNERS
S-301 3/4" = 1'-0"

ANCHOR BOLT EMBEDMENT SCHEDULE	
ANCHOR BOLT DIAMETER	FTG/PEDESTAL EMBEDMENT DEPTH (MIN)
5/8" DIA	18"
3/4" DIA	18"
1" DIA	20"
1 1/4" DIA	22"

NOTE:
1. ANCHOR BOLT DIA, GRADE, LOCATION, AND PROJECTION BY BLDG MANUF.

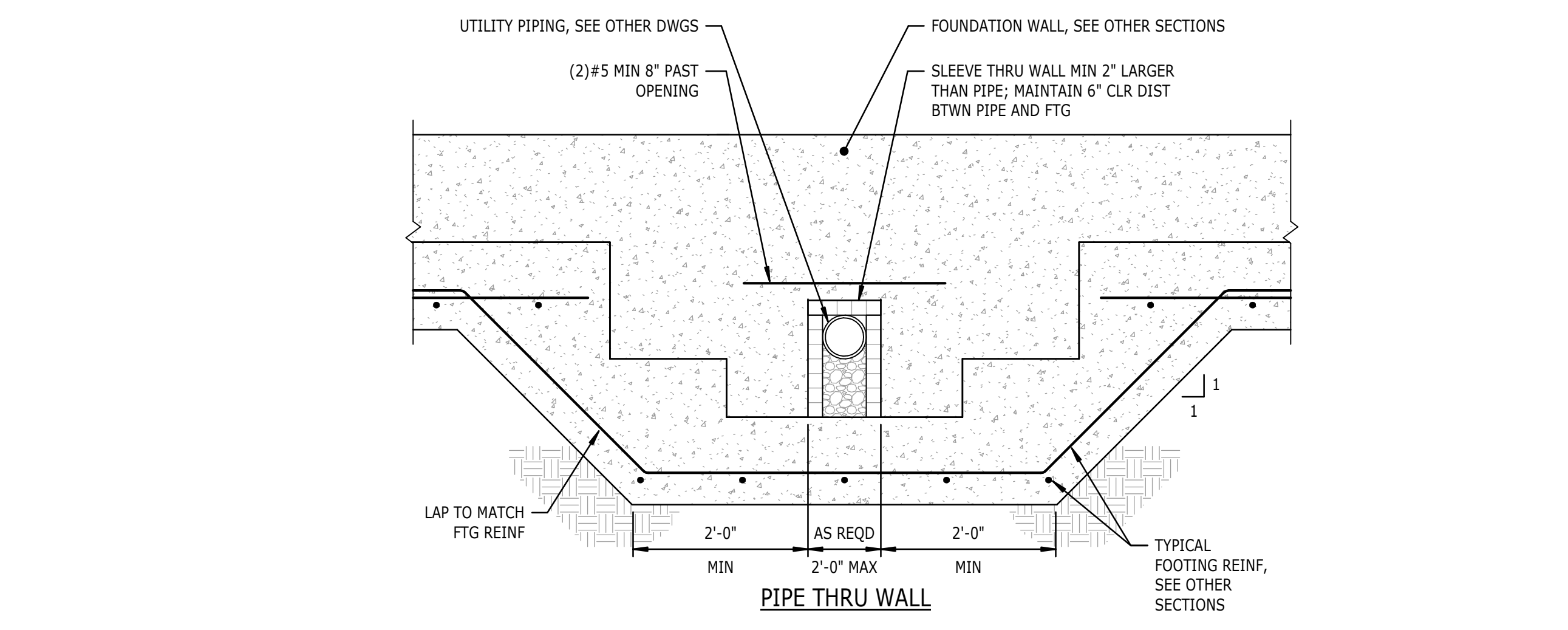


7 STEEL COLUMN BASE PLATE SCHEDULE
S-301 NTS

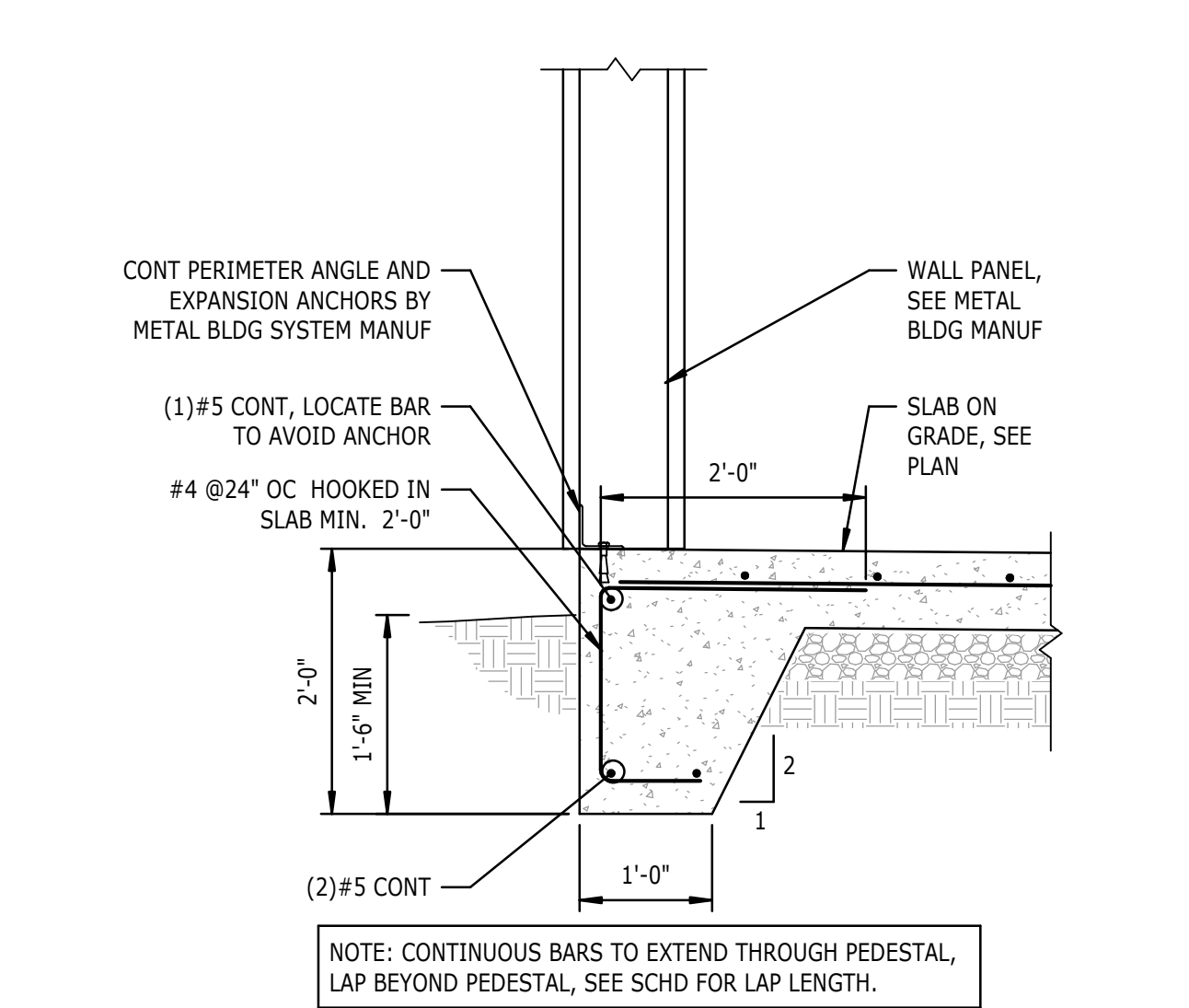
CONCRETE REINFORCING SPLICES			
BAR SIZE	f'c = 3,000 PSI	f'c = 4,000 PSI	f'c = 5,000 PSI
#3	1'-10"	1'-7"	1'-5"
#4	2'-4"	2'-1"	1'-10"
#5	3'-0"	2'-7"	2'-4"
#6	3'-7"	3'-1"	2'-9"
#7	5'-2"	4'-6"	4'-1"
#8	5'-11"	5'-2"	4'-8"
#9	6'-6"	5'-10"	5'-3"
#10	7'-6"	6'-6"	5'-10"
#11	8'-4"	7'-3"	6'-6"

NOTES:
1. FOR CLASS B LAP SPlice, SPLICE LENGTH = 1.3 x DEVELOPMENT LENGTH.
2. APPLIES TO BOTTOM BARS ONLY (LESS THAN 12" OF FRESH CONCRETE BELOW BAR).
3. APPLIES WHERE THE CLEAR COVER IS GREATER THAN THE BAR DIAMETER.
4. WHEN MORE THAN 12" OF FRESH CONCRETE BELOW SPLICE, THEN INCREASE SPLICE TO 1.3 x SPLICE LENGTH.

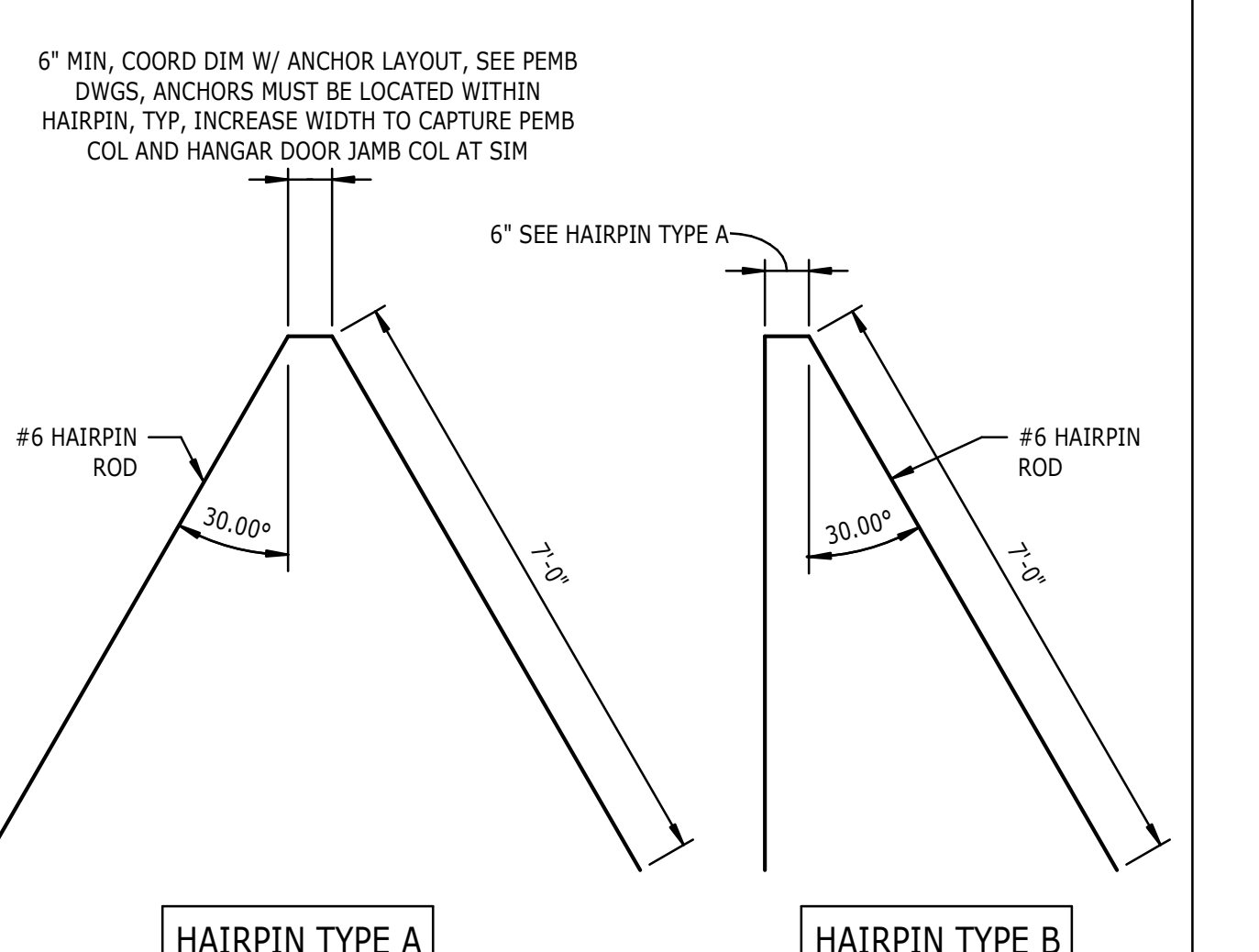
3 CONCRETE REINFORCING SPLICE SCHEDULE
S-301 3/4" = 1'-0"



16 TYPICAL UTILITY BELOW FOOTING
S-301 3/4" = 1'-0"



12 SECTION
S-301 SECTION AT EXTERIOR WALL NTS



8 HAIRPIN DETAILS
S-301 NTS

City of
LUMBERTON
North Carolina

Schedule 1:
2-Unit Box Hangar

Lumberton, NC 28358

Professional Engineer
P. A. A. A. A.
041315
01/17/2025

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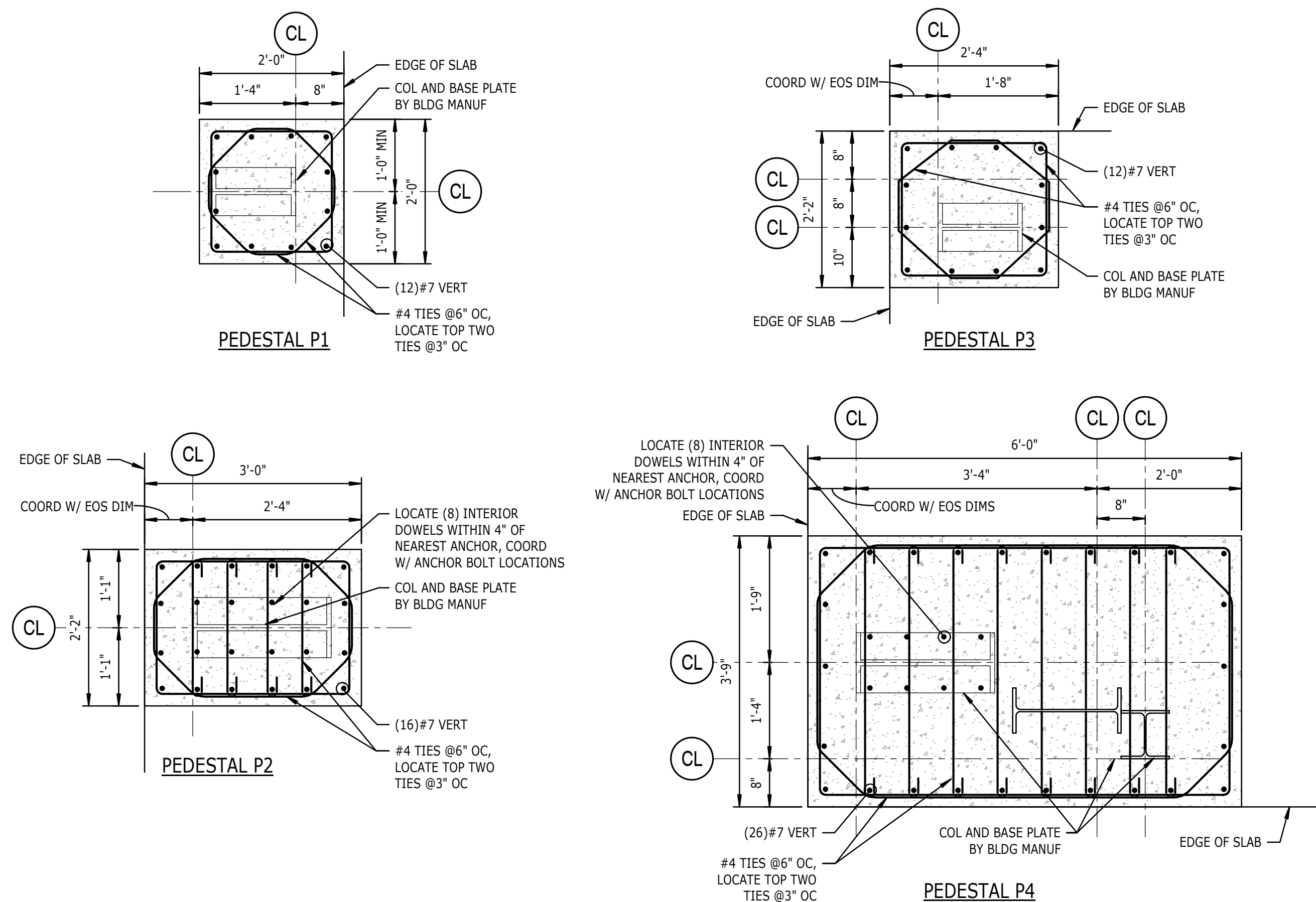
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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE

PEMB SECTIONS AND DETAILS

SHEET NUMBER
S-301



NOTES:
1. COORDINATE PEDESTAL EXTENTS WITH METAL BUILDING SYSTEM MANUFACTURER. ADD ONE VERTICAL BAR EACH FACE FOR EACH 6" OR PARTIAL PEDESTAL EXTENSION.
2. 8" CONCRETE WALLS AT BUILDING CORNERS NOT SHOWN ON PEDESTAL FOR CLARITY, SEE S-101.

1 TYPICAL PEDESTAL PLANS
S-302 3/4" = 1'-0"

GENERAL NOTES - FLOOR PLAN

- SEE ENLARGED PLANS FOR PARTITION TAGS NOT IDENTIFIED ON THIS SHEET.
- SEE SHEET G-003 FOR PARTITION TYPES AND ASSOCIATED PARTITION ITEMS.
- EDGE OF SLAB AT BUILDING PERIMETER TO ALIGN WITH OUTSIDE FACE OF STUD/ CMU U.N.O.
- SEE STRUCTURAL DRAWINGS FOR ALL E.O.S. DETAILS AND CONDITIONS.
- PROVIDE FR BLOCKING AS REQUIRED AT LOCATIONS WITH WALL-MOUNTED EQUIPMENT. (TVs, MONITORS, CASEWORK, ETC.)

PARTITION NOTES

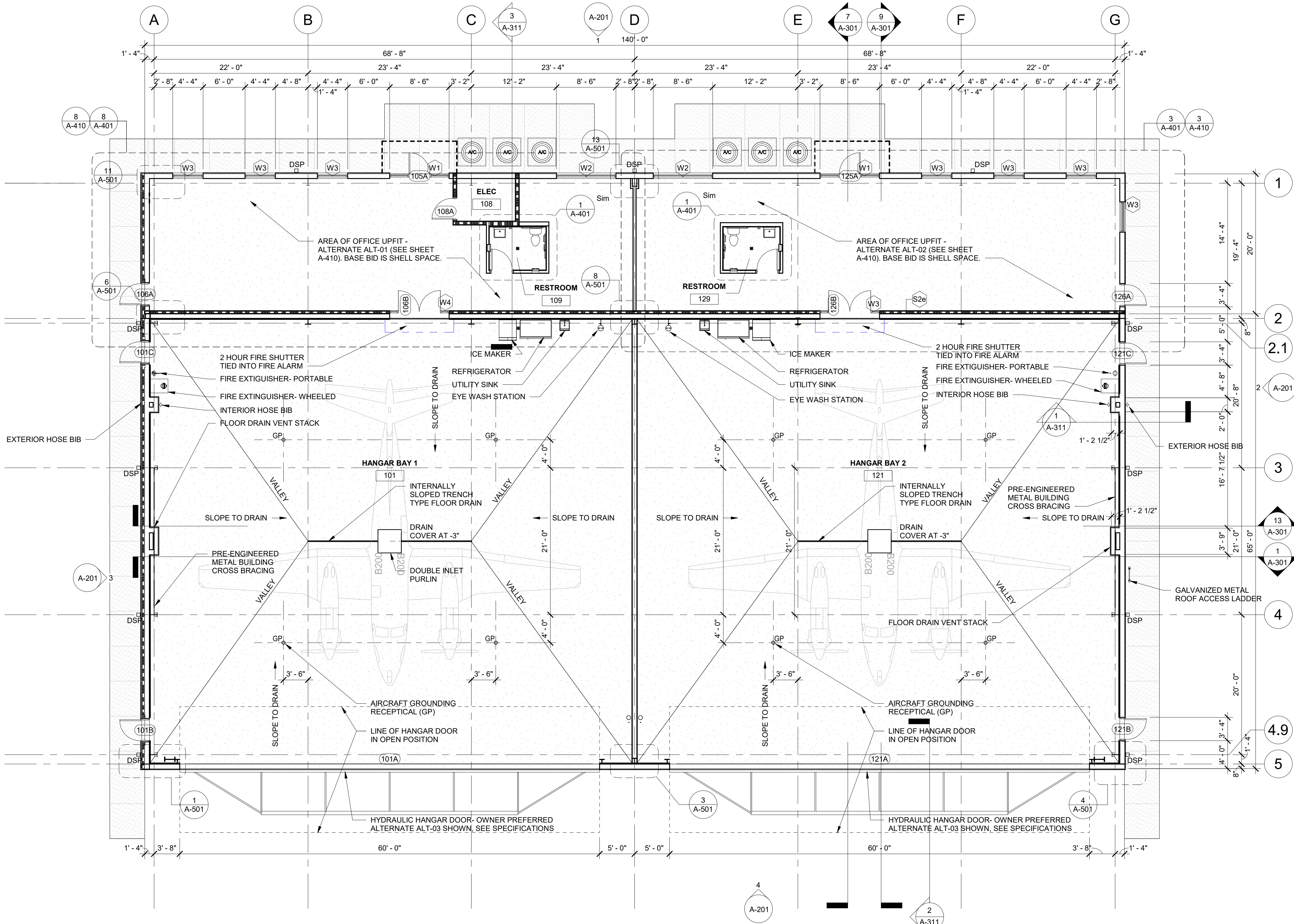
- ALL GYPSUM WALL BOARD TO BE 5/8" TYPE 'X' U.N.O.
- UNLESS NOTED OTHERWISE, DIMENSIONS ARE TO COLUMN CENTER LINE, FACE OF GWB/STUD PARTITIONS, FACE OF MASONRY AND CONCRETE WALLS AND FACE OF EXISTING WALLS.
- HOLD TOP OF PARTITION DOWN 1/2" FROM TOP RUNNER WHERE PARTITION EXTENDS TO STRUCTURE ABOVE.
- ALL CAULK AND SEALANT SHALL BE CONTINUOUS.
- ALL CMU WALLS AND SOUND RATED PARTITIONS SHALL EXTEND FROM FINISHED FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF STRUCTURE OR DECK, AND BE ENTIRELY SEALED OFF U.N.O. ALL PENETRATIONS SUCH AS PIPING, CONDUITS, DUCTS, ETC. IN SUCH SEALED OFF WALLS OR PARTITIONS SHALL IN THEMSELVES BE PACKED AND SEALED OFF ALONG THE PERIMETER OF PENETRATION.
- ALL FIRE AND/OR SMOKE PARTITIONS SHALL EXTEND FROM FINISH FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF THE STRUCTURE OR DECK, AND BE ENTIRELY SEALED OFF WITH SAFEGING MATERIAL ONLY. SAFEGING MATERIAL SHALL BE HELD IN PLACE WITH A FIRE STOPPING MATERIAL, ON BOTH SIDES, SUCH AS GYPSUM WALL BOARD OR UL LISTED FIRE PROOFING MATERIAL AND ASSEMBLY.
- ALL SOUND RATED (STC) WALLS OR PARTITIONS SHALL HAVE CLOSURE GASKETS AT TOP, BOTTOM, AND SIDES WHERE A SOUND LEAK WOULD OTHERWISE EXIST.
- STRUCTURAL STUDS (20 GA. MINIMUM) SHALL BE USED WHERE ANY NON-SELF-SUPPORTING WALL HUNG FIXTURES, EQUIPMENT, OR CABINETRY OCCUR AND SHALL EXTEND FROM FLOOR TO STRUCTURE ABOVE. SEE TYPICAL SUPPORT DETAILS FOR WALL MOUNTED ITEMS.
- ALL METAL STUD FRAMED PARTITIONS SHALL BE BRACED ABOVE FINISHED CEILINGS. BRACING SHALL BE AS FOLLOWS:
ATTACH A 3/8" OR 6" METAL STUD HORIZONTALLY AND CONTINUOUSLY TO PARTITION 8" MAXIMUM ABOVE FINISHED CEILING. PROVIDE 3/8" OR 6" METAL STUD KICKERS AT 45 DEGREE ANGLE TO STRUCTURE AT 4'-0" O.C.
- KICKERS SHALL HAVE CLIP ANGLES (14 GA MIN.) WITH TWO 1/4" ANCHORS. ALL KICKER LOCATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES PERFORMING WORK ABOVE CEILING.
- DO NOT FASTEN TOP RUNNER TO STUDS. CRIMP RUNNER ON BOTH SIDES OF STUD TO STABILIZE STUD.
- SEE ROOM FINISH SCHEDULE FOR ADDITIONAL REQUIREMENTS FOR FINISH MATERIALS SUCH AS TILE, PANELING, ETC. WHICH ARE NOT SHOWN OR INCLUDED IN THESE PARTITION TYPES.
- WHERE PARTITION TYPES CHANGE IN A STRAIGHT RUN, THE EXPOSED OR MOST IMPORTANT EXPOSED FINISHED FACE, AND NOT NECESSARILY THE CEILING OF STUDS, SHALL ALIGN. REVIEW CASES WHICH ARE UNCLEAR WITH THE ARCHITECT PRIOR TO CONSTRUCTION OF SUCH PARTITIONS.

- WHERE ITEMS ARE RECESSED INTO RATED PARTITIONS, PROVIDE BOXING, INSULATION, ETC. AS REQUIRED TO MAINTAIN THE FIRE RESISTANCE RATING.
- PURSUANT TO NCSCBC 603 ALL WOOD PRODUCTS SHALL BE FIRE-RETARDANT TREATED (FRT), INCLUDING BUT NOT LIMITED TO WOOD BLOCKING, CABINETRY AND MILLWORK SUBSTRATES, AND EXPOSED PLYWOOD PANELS.
- WHERE SPECIALTY WALL PANEL SYSTEMS ARE TO BE APPLIED TO PARTITIONS, SHIMMING MAY BE REQUIRED TO ENSURE A FLUSH AND PLUMB INSTALLATION.
- ELECTRICAL AND TELECOM ROOMS: IN ADDITION TO GWB AS SCHEDULED, WRAP ENTIRE ROOM IN 3/4" VIRGIN, VOID-FREE, FIRE-RATED PLYWOOD, FROM 0'-6" AFF TO 8'-6" AFF, LAG-BOLTED TO WALLS AT METAL STUD LOCATIONS. PAINT ALL WALL SURFACES AS SCHEDULED.
- ALL CLOSETS ARE TO RECEIVE WOOD SHELVING AND ROD U.N.O.
- PROVIDE FR SOLID WOOD BLOCKING IN WALL AS REQUIRED FOR MOUNTING OF CABINETS, GRAB BARS, TV'S, TOILET PARTITIONS AND ACCESSORIES, ETC. SEE PLANS AND ELEVATIONS FOR LOCATIONS OF WALL-MOUNTED BUILT-INS AND EQUIPMENT.
- USE MOISTURE RESISTANT GWB AT ALL WET AREAS.
- SEE STRUCTURAL FOR SHEAR WALL LOCATIONS AND INFORMATION. GC TO COORDINATE SHEATHING SIDE AND EXTENTS WITH ARCHITECTURAL AND STRUCTURAL.
- ALL OUTSIDE CORNERS AT GWB PARTITIONS SHALL RECIEVE CORNERGUARDS, SEE SPECIFICATIONS.

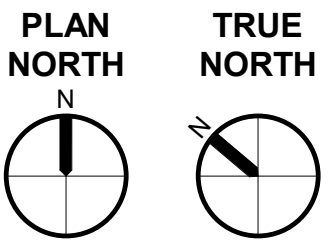
METAL STUD GAUGES	LOCATION	LENGTH	GAUGE
	PARTITION	UP TO 8'-0"	20 GAUGE
	PARTITION	UP TO 10'-0"	18 GAUGE
	PARTITION	UP TO 12'-0"	16 GAUGE
	PARTITION	GREATER THAN 12'-0"	SEE STRUCTURAL DRAWINGS.
	BULKHEAD	UP TO 6'-0"	25 GAUGE
	BULKHEAD	UP TO 8'-0"	20 GAUGE
	BULKHEAD	GREATER THAN 8'-0"	SEE SPECIFIC DETAILS AND/OR STRUCT. DRWGS.
	SOFFIT	UP TO 4'-0"	25 GAUGE
	SOFFIT	UP TO 8'-0"	20 GAUGE
	SOFFIT	GREATER THAN 8'-0"	SEE SPECIFIC DETAILS FOR SUPPORT SUSPENDED SYSTEM MUST BE USED
	DOOR / WINDOW HEAD AND JAMB	U.N.O.	16 GA (2 STUDS AT ALL LOCATIONS)

NOTE: U.L. AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.

NOTE: U.L. AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.



1 FLOOR PLAN
1/8" = 1'-0"



Schedule 1:
2-Unit Box Hangar

Lumberton, NC 28358



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(704) 331-5747
www.twgarchitects.com
NC Cert. No.: 51140

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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE

FIRST FLOOR
PLAN

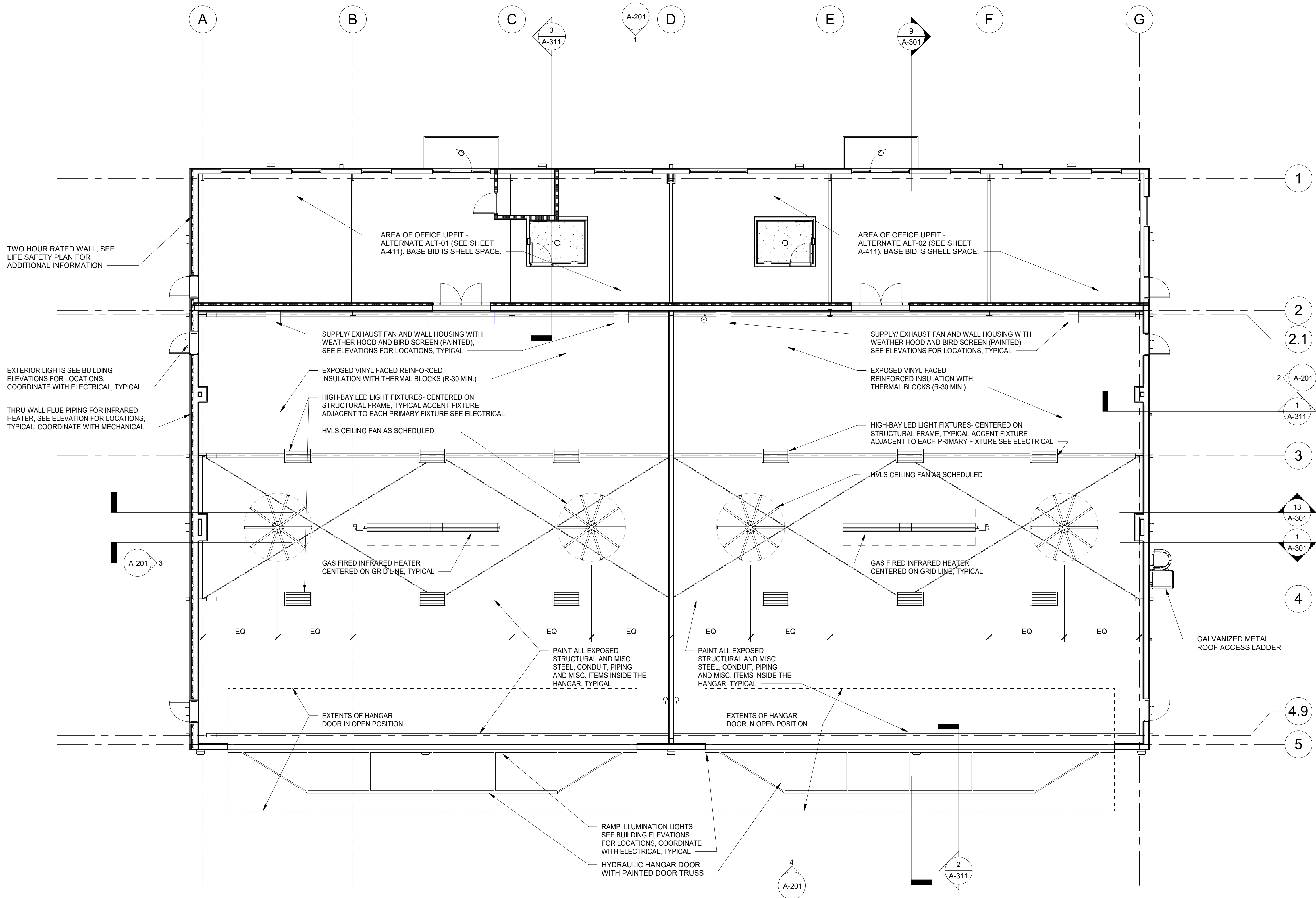
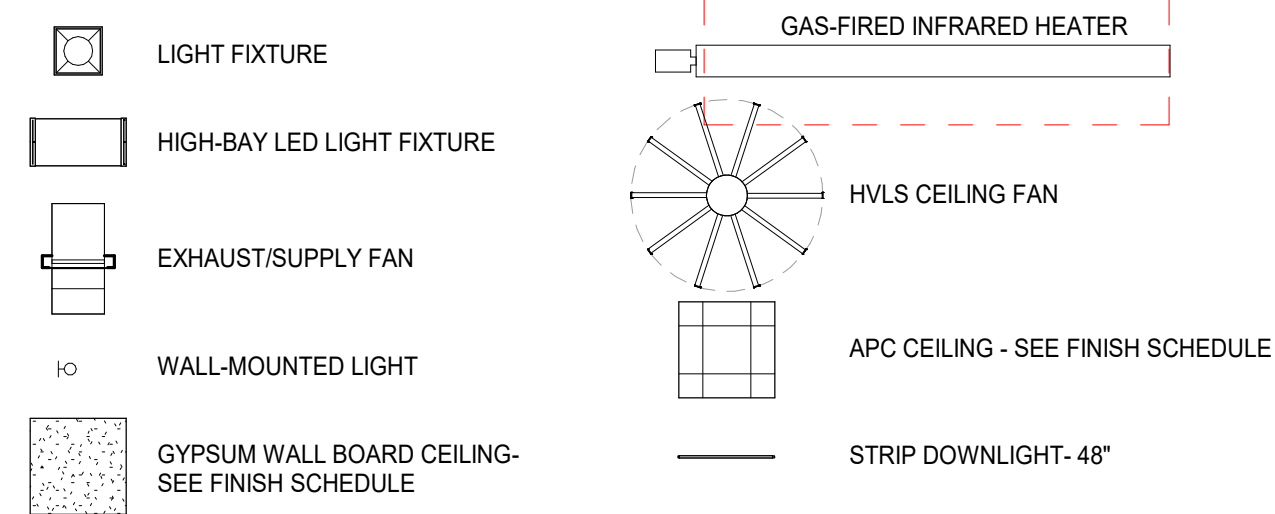
SHEET NUMBER

A-101

GENERAL NOTES - CEILING

- 1. SEE MECHANICAL DRAWINGS FOR DIFFUSER LOCATIONS AND OTHER MECHANICAL CEILING DEVICES.
- 2. SEE ELECTRICAL DRAWINGS FOR LIGHTING LOCATIONS AND OTHER ELECTRICAL CEILING DEVICES.
- 3. ALL CEILING HEIGHTS ARE AT 10'-0" A.F.F. UNLESS NOTED OTHERWISE.
- 4. ALL CEILING DEVICES, INCLUDING DOWNLIGHTS, SPRINKLER HEADS, HVAC GRILLES SMALLER THAN 2x2 FEET, ARE TO BE CENTERED IN CEILING TILE UNLESS NOTED OTHERWISE. CONTRACTOR TO REVIEW ALL CONFLICTS WITH ARCHITECT PRIOR TO INSTALLATION.
- 5. CENTER EXIT SIGNS OVER DOORS UNLESS NOTED OTHERWISE.
- 6. ARCHITECT AND ENGINEER OF RECORD TO REVIEW SPRINKLER HEAD LAYOUT LOCATIONS AND SPACING ON FIRE PROTECTION SHOP DRAWINGS FOR COORDINATION WITH DESIGN AND WALL AND CEILING SYSTEMS.
- 7. CONTRACTOR SHALL COORDINATE WITH ALL TRADES INVOLVED, INCLUDING PREPARATION OF COORDINATION DRAWINGS, TO ENSURE CLEARANCES FOR FIXTURES, DUCTWORK, CEILINGS, ETC. AS NECESSARY TO MAINTAIN THE INDICATED FINISHED CEILING / FIXTURE MOUNTING HEIGHT.
- 8. DIMENSIONS ARE TO CENTER LINE OF FIXTURES U.N.O.
- 9. PERIMETER CEILING GRID ANGLE, WHERE IT OCCURS, SHALL BE TIGHT TO FINISHED FACE OF PARTITION SURFACES, FREE FROM CURVES, GAPS, BREAKS, AND OTHER IRREGULARITIES..
- 10. SUSPENDED CEILING PANEL SIZE: NO SMALLER THAN 4" INCHES. NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS PRIOR TO INSTALLATION.
- 11. CENTER CEILING SYSTEMS IN ROOMS BOTH DIRECTIONS UNLESS OTHERWISE NOTED.

CEILING PLAN LEGEND

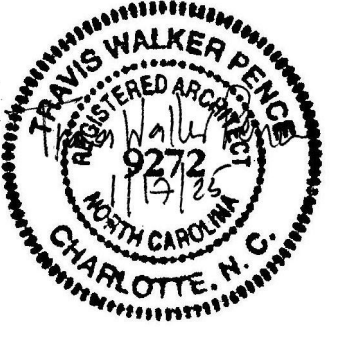


1 REFLECTED CEILING PLAN
1/8" = 1'-0"



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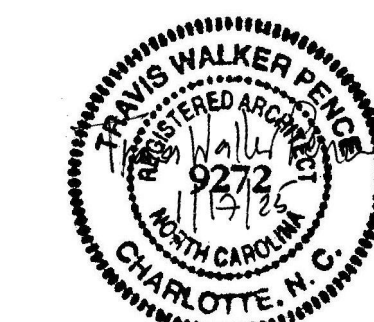
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PROJECT NUMBER 2024
SHEET TITLE

FIRST FLOOR
CEILING PLAN

SHEET NUMBER
A-111



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PROJECT NUMBER	2024
SHEET TITLE	

ROOF PLAN

SHEET NUMBER

A-121

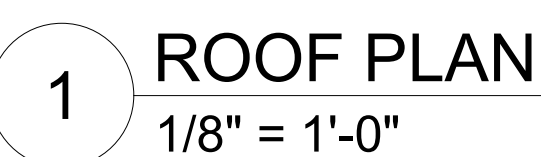


1. ROOF INSULATION SHALL MEET THE REQUIREMENTS OF SECTION 1508.1 OF THE NCSCB (2012).
2. ROOFTOP EQUIPMENT IS SHOWN FOR INTENT ONLY. SEE MECHANICAL DRAWINGS FOR SIZE, TYPE AND LOCATIONS.
3. CONTRACTOR TO PROVIDE SOUND VIBRATION ISOLATION BASE FOR ALL ROOFTOP EQUIPMENT.
4. SEE DETAIL 19/A-121 FOR LIGHTNING ARREST MOUNTING DETAILS
5. ALL ROOF PENETRATIONS TO MATCH COLOR OF ROOF PANELS

(X)		GUTTER SIZE		DOWNSPOUT SIZE	
DRAINAGE AREA		REQUIRED	PROVIDED	REQUIRED	PROVIDED
1A (1C)	1,003 SQ. F.T.	6.5"Wx5.0"D (20")	8"Wx8"D (20")	3.75"x4.75"	6"Wx6"
1B	788 SQ. F.T.	6.5"Wx5.0"D (20")	8"Wx8"D (20")	3.75"x4.75"	6"Wx6"
2A (2D)	827 SQ. F.T.	6.5"Wx5.0"D (20")	8"Wx8"D (20")	3.75"x4.75"	6"Wx6"
2B (2C)	1,460 SQ. F.T.	6.5"Wx5.0"D (20")	8"Wx8"D (20")	3.75"x4.75"	6"Wx6"
3A (3D)	827 SQ. F.T.	6.5"Wx5.0"D (20")	8"Wx8"D (20")	3.75"x4.75"	6"Wx6"
3B (3C)	1,460 SQ. F.T.	6.5"Wx5.0"D (20")	8"Wx8"D (20")	3.75"x4.75"	6"Wx6"

1.	PRIMARY ROOF DRAIN 4" PER P1106.1
2.	SEE PLUMBING DRAWING FOR MORE INFORMATION

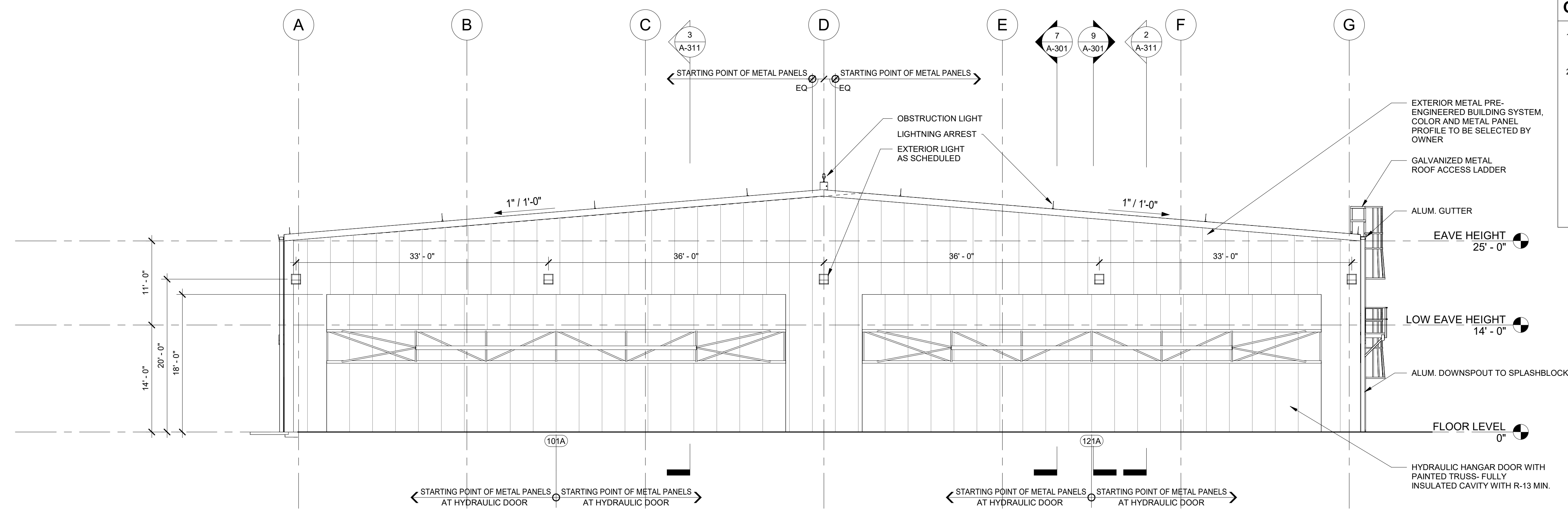
DSP- ALUM DOWNSPOUT



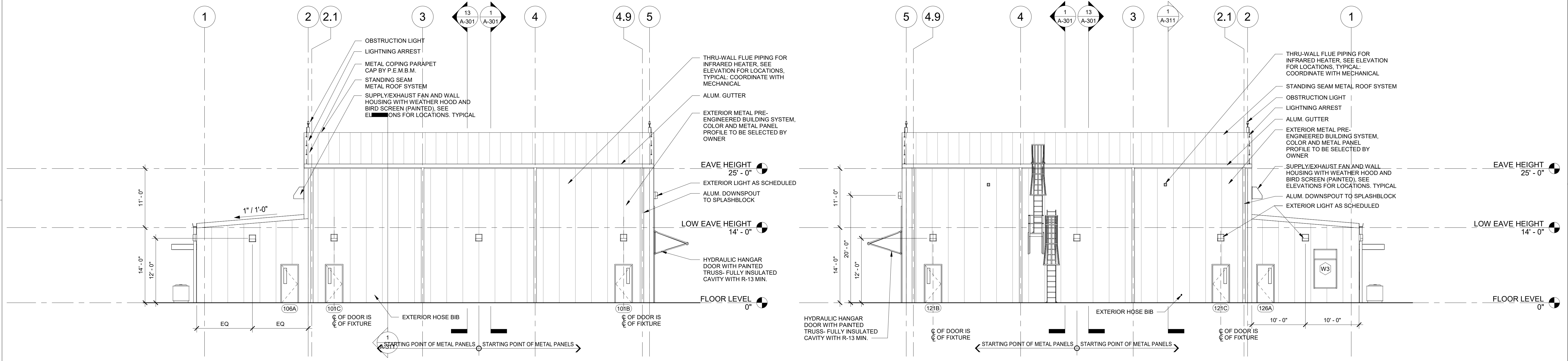
— EXTERIOR LIGHT
AS SCHEDULED

— HYDRAULIC HANGAR DOOR
WITH PAINTED DOOR TRUSS

*, CONTRACTOR TO
LOCATIONS/ LAYOUT
PRIOR TO INSTALLATION

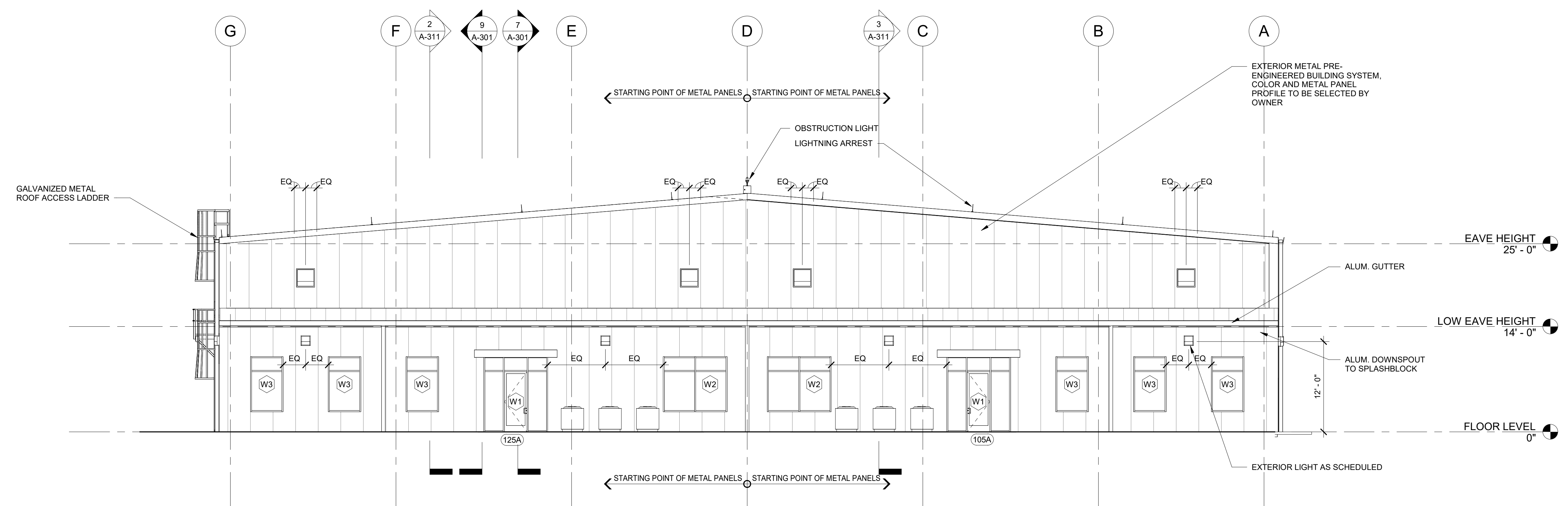


4 BUILDING ELEVATION- HANGAR DOOR
1/8" = 1'-0"



3 BUILDING ELEVATION- SIDE
1/8" = 1'-0"

2 BUILDING ELEVATION- SIDE
1/8" = 1'-0"



1 BUILDING ELEVATION- OFFICE FRONT
1/8" = 1'-0"

GENERAL NOTES - ELEVATIONS

1. ALL EXTERIOR DEVICES ARE SHOWN WITH THE INTENT OF CENTERING ON METAL WALL PANEL RIBS. CONTRACTOR TO COORDINATE/ CONFIRM ALL EXTERIOR OPENING, DEVICES, PENETRATIONS, ETC. LOCATIONS WITH DESIGN TEAM PRIOR TO INSTALLATION.
2. METAL WALL PANEL RIB LOCATIONS ARE INTENTIONAL. SEE ELEVATIONS FOR SPRING POINT(S) OF PANEL RHYTHM.



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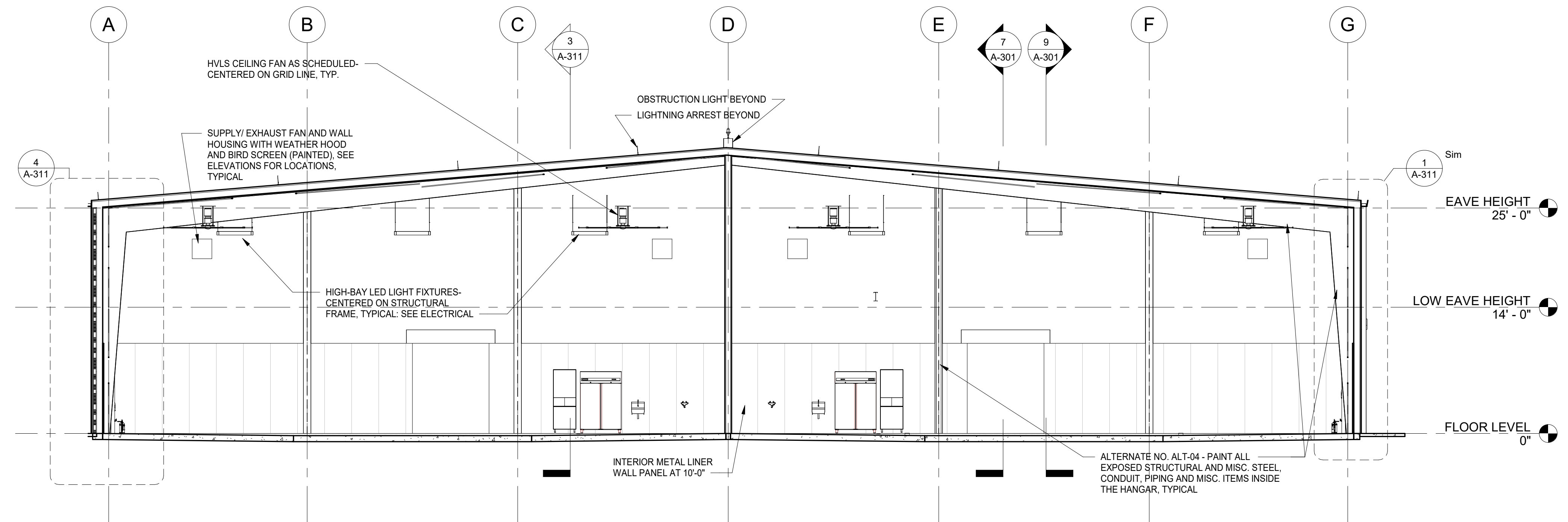
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SHEET TITLE

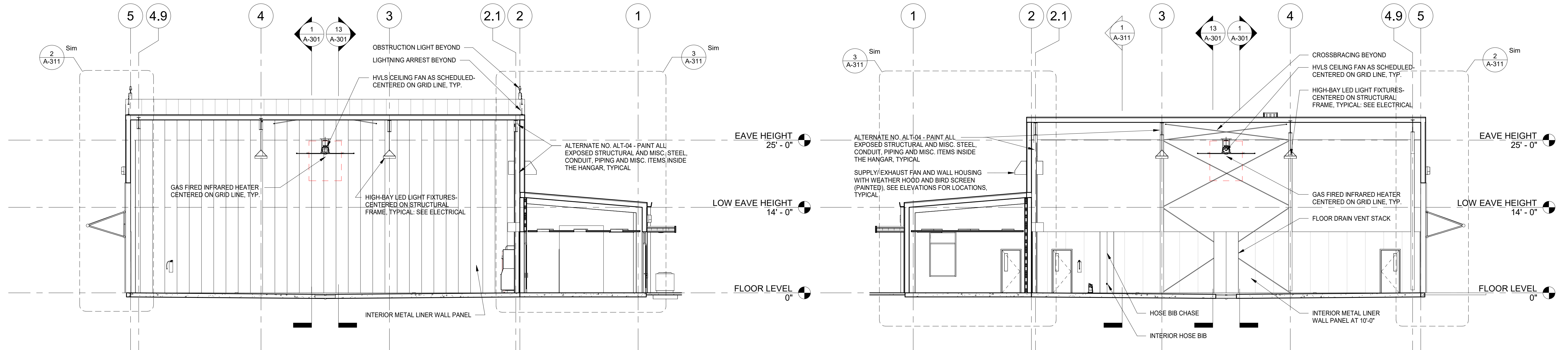
BUILDING
ELEVATIONS

SHEET NUMBER

A-201

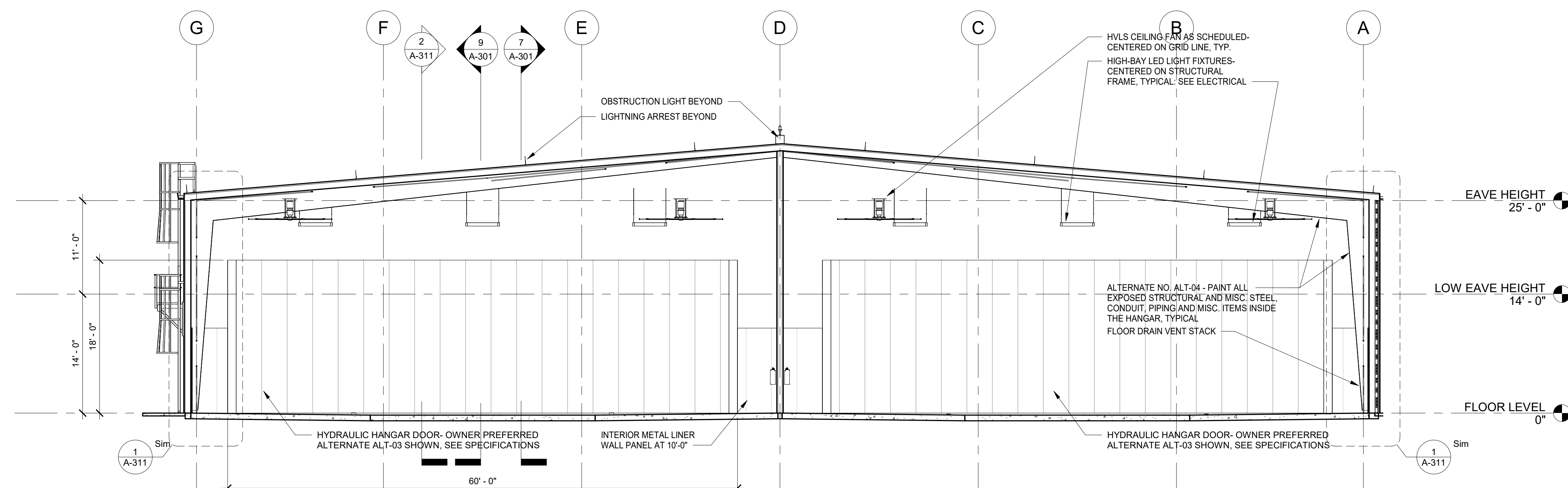


13 LONGITUDINAL SECTION 2
1/8" = 1'-0"

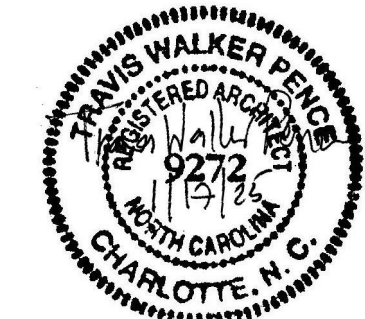


7 TRANSVERSE SECTION 2
1/8" = 1'-0"

9 TRANSVERSE SECTION 1
1/8" = 1'-0"



1 LONGITUDINAL SECTION 1
1/8" = 1'-0"



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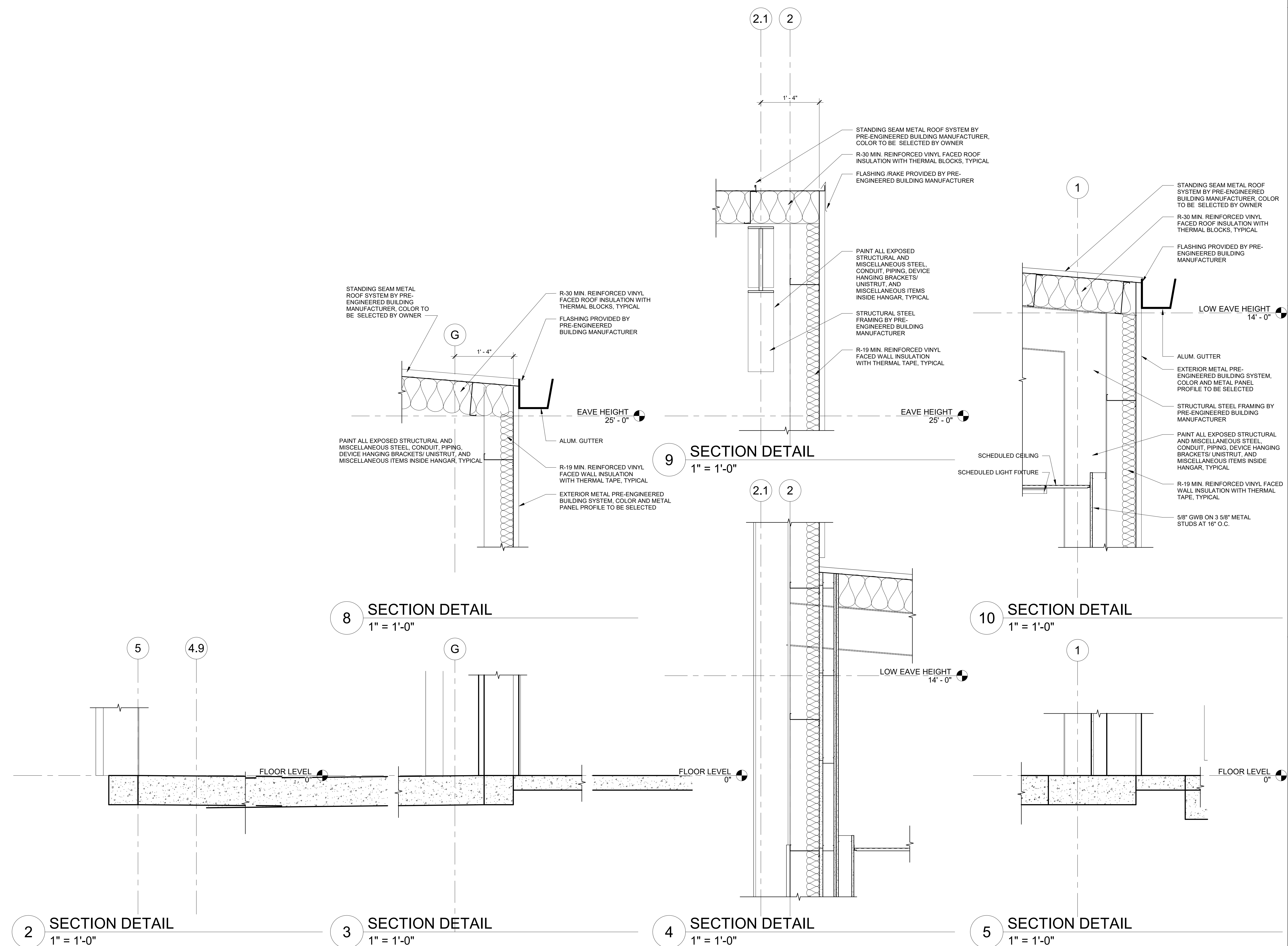
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DATE 01/17/2025
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SHEET TITLE

**SECTION
DETAILS**

SHEET NUMBER
A-321



- WHERE ITEMS ARE RECESSED INTO RATED PARTITIONS, PROVIDE BOXING, INSULATION, ETC. AS REQUIRED TO MAINTAIN THE FIRE RESISTANCE RATING.
15. PURSUANT TO NCSBC 603, ALL WOOD PRODUCTS SHALL BE FIRE-RETARDANT TREATED (FRT), INCLUDING BUT NOT LIMITED TO JOIST, RAFTER, PLANK, MINISTRY AND MILLWORK SUBSTRATES, AND EXPOSED PLYWOOD PANELS
16. WHERE SPECIALLY WALL PANEL SYSTEMS ARE TO BE APPLIED TO PARTITIONS, SHIMMING MAY BE REQUIRED TO ENSURE A FLUSH AND PLUMB INSTALLATION.
17. ELECTRICAL AND TELECOM ROUTING, IN ADDITION TO GWB AS SCHEDULED, WRAP ENTIRE ROOM IN 3/4" VIRGIN, VOID-FREE, FIRE-RATED PLYWOOD, 1/8" AFF TO 8" AFF, LAG-SOLIC TO WALLS AT METAL STUD LOCATIONS. PAINT ALL WALL SURFACES AS SCHEDULED.
18. ALL CLOSETS ARE TO RECEIVE WOOD SHELVING AND R 40" U.
19. PROVIDE FR SOLID WOOD BLOCKING IN WALL AS REQUIRED FOR MOUNTING OF CABINETS, GRAB BARS, TVS, COILET PARTITIONS AND ACCESSORIES, ETC. SEE PLANS AND ELEVATIONS FOR LOCATIONS OF WALL-MOUNTED BUILT-INS AND EQUIPMENT.
20. USE MOISTURE RESISTANT GWB AT ALL WET AREAS.
21. SEE STRUCTURAL FOR SHEAR WALL LOCATIONS AND INFORMATION. GC TO COORDINATE SHEATHING SIDE AND EXTENTS WITH ARCHITECTURAL AND STRUCTURAL.
22. ALL OUTSIDE CORNERS AT GWB PARTITIONS SHALL RECEIVE CORNGUARDS, SEE SPECIFICATIONS.
- | METAL STUD GAUGES | LOCATION | LENGTH | GAUGE |
|-------------------|---------------|---------------------|--|
| | PARTITION | TO 10'-0" | 10 GAUGE |
| | PARTITION | TO 10'-10" | 18 GAUGE |
| | PARTITION | TO 10'-12" | 16 GAUGE |
| | PARTITION | GREATER THAN 12'-0" | SEE STRUCT. DRAWINGS |
| | BULKHEAD | TO 6'-0" | 25 GAUGE |
| | BULKHEAD | TO 10'-0" | 20 GAUGE |
| | BULKHEAD | GREATER THAN 8'-0" | SEE SPECIFIC DETAILS AND/OR STRUCT. DRWS. |
| | SOFFIT | TO 6'-0" | 25 GAUGE |
| | SOFFIT | TO 10'-0" | 25 GAUGE, SEE SPECIFIC DETAILS FOR SUPPORT |
| | SOFFIT | GREATER THAN 8'-0" | SUSPENDED SYSTEM MUST BE USED |
| | DOOR / WINDOW | | |
| | HEAD AND JAMB | U. O. M. | 16 GA (2 STUDS AT ALL LOCATIONS) |
- NOTE: U-L AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.

-401

PARTITION NOTES

1. ALL GYPSUM WALL BOARD TO BE 5/8" TYPE 'X' U.N.O.
2. UNLESS NOTED OTHERWISE, DIMENSIONS ARE TO COLUMN CENTER LINE, FACE OF GWB/STUD PARTITIONS, FACE OF MASONRY AND CONCRETE WALLS AND FACE OF EXISTING WALLS.
3. HOLD TOP OF PARTITION DOWN 1/2" FROM TOP RUNNER WHERE PARTITION EXTENDS TO STRUCTURE ABOVE.
4. ALL CAULK AND SEALANT SHALL BE CONTINUOUS.
5. ALL CMU WALLS AND SOUND RATED PARTITIONS SHALL EXTEND FROM FINISHED FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF STRUCTURE OR DECK AND BE ENTIRELY SEALED OFF U.N.O. ALL PENETRATIONS SUCH AS PIPING, CONDUITS, DUCTS, ETC. IN SUCH SEALED OFF WALLS OR PARTITIONS SHALL IN THEMSELVES BE PACKED AND SEALED OFF ALONG THE PERIMETER OF PENETRATION.
6. ALL FIRE AND/OR SMOKE PARTITIONS SHALL EXTEND FROM FINISH FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF THE STRUCTURE OR DECK, AND BE ENTIRELY SEALED OFF WITH SAFING MATERIAL ONLY. SAFING MATERIAL SHALL BE HELD IN PLACE WITH A FIRE STOPPING MATERIAL ON BOTH SIDES, SUCH AS GYPSUM WALL BOARD OR UL LISTED FIRE PROOFING MATERIAL AND ASSEMBLY.
7. ALL SOUND RATED (STC) WALLS OR PARTITIONS SHALL HAVE CLOSURE GASKETS AT TOP, BOTTOM, AND SIDES WHERE A SOUND LEAK WOULD OTHERWISE EXIST.
8. STRUCTURAL STUDS (20 GA. MINIMUM) SHALL BE USED WHERE ANY NON-SELF-SUPPORTING WALL HUNG FIXTURES, EQUIPMENT, OR CABINETRY OCCUR AND SHALL EXTEND FROM FLOOR TO STRUCTURE ABOVE. SEE TYPICAL SUPPORT DETAILS FOR WALL MOUNTED ITEMS.
9. ALL METAL STUD FRAMED PARTITIONS SHALL BE BRACED ABOVE FINISHED CEILINGS. BRACING SHALL BE AS FOLLOWS:
ATTACH A 3 5/8" OR 6" METAL STUD HORIZONTALLY AND CONTINUOUSLY TO PARTITION 6" MAXIMUM ABOVE FINISHED CEILING. PROVIDE 3 5/8" OR 6" METAL STUD KICKERS AT 45 DEGREE ANGLE TO STRUCTURE AT 4'-0" O.C.
10. KICKERS SHALL HAVE CLIP ANGLES (14 GA MIN.) WITH TWO 1/4" ANCHORS. ALL KICKER LOCATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES PERFORMING WORK ABOVE CEILING.
11. DO NOT FASTEN TOP RUNNER TO STUDS; CRIMP RUNNER ON BOTH SIDES OF STUD TO STABILIZE STUD.
12. SEE ROOM FINISH SCHEDULE FOR ADDITIONAL REQUIREMENTS FOR FINISH MATERIALS SUCH AS TILE, PANELING, ETC. WHICH ARE NOT SHOWN OR INCLUDED IN THESE PARTITION TYPES.
13. WHERE PARTITION TYPES CHANGE IN A STRAIGHT RUN, THE EXPOSED OR MOST IMPORTANT EXPOSED FINISH FACE, AND NOT NECESSARILY THE CENTERLINE OF STUDS, SHALL ALIGN. REVIEW CASES WHICH ARE UNCLEAR WITH THE ARCHITECT PRIOR TO CONSTRUCTION OF SUCH PARTITIONS.
14. WHERE ITEMS ARE RECESSED INTO RATED PARTITIONS, PROVIDE BOXING, INSULATION, ETC. AS REQUIRED TO MAINTAIN THE FIRE RESISTANCE RATING.
15. PURSUANT TO NC8BC 603 ALL WOOD PRODUCTS SHALL BE FIRE-RETARDANT TREATED (FRT), INCLUDING BUT NOT LIMITED TO WOOD BLOCKING, CABINETRY AND MILLWORK SUBSTRATES, AND EXPOSED PLYWOOD PANELS.
16. WHERE SPECIALTY WALL PANEL SYSTEMS ARE TO BE APPLIED TO PARTITIONS, SHIMMING MAY BE REQUIRED TO ENSURE A FLUSH AND PLUMB INSTALLATION.
17. ELECTRICAL AND TELECOM ROOMS: IN ADDITION TO GWB AS SCHEDULED, WRAP ENTIRE ROOM IN 3/4" VIRGIN, VOID-FREE, FIRE-RATED PLYWOOD, FROM 0'-6" AFF TO 8'-6" AFF. LAG-BOLTED TO WALLS AT METAL STUD LOCATIONS. PAINT ALL WALL SURFACES AS SCHEDULED.
18. ALL CLOSETS ARE TO RECEIVE WOOD SHELVING AND ROD U.N.O.
19. PROVIDE FR SOLID WOOD BLOCKING IN WALL AS REQUIRED FOR MOUNTING OF CABINETS, GRAB BARS, TV'S, TOILET PARTITIONS AND ACCESSORIES, ETC. SEE PLANS AND ELEVATIONS FOR LOCATIONS OF WALL-MOUNTED BUILT-INS AND EQUIPMENT.
20. USE MOISTURE RESISTANT GWB AT ALL WET AREAS.
21. SEE STRUCTURAL FOR SHEAR WALL LOCATIONS AND INFORMATION. GC TO COORDINATE SHEATHING SIDE AND EXTENTS WITH ARCHITECTURAL AND STRUCTURAL.
22. ALL OUTSIDE CORNERS AT GWB PARTITIONS SHALL RECEIVE CORNERGUARDS, SEE SPECIFICATIONS.

METAL STUD GAUGES	LOCATION	LENGTH	GAUGE
PARTITION	PARTITION	UP TO 8'-0"	20 GAUGE
PARTITION	PARTITION	UP TO 10'-0"	18 GAUGE
PARTITION	PARTITION	UP TO 12'-0"	16 GAUGE
BULKHEAD	PARTITION	GREATER THAN 12'-0"	SEE STRUCTURAL DRAWINGS.
BULKHEAD	PARTITION	UP TO 6'-0"	25 GAUGE
BULKHEAD	PARTITION	UP TO 8'-0"	20 GAUGE
BULKHEAD	PARTITION	GREATER THAN 8'-0"	SEE SPECIFIC DETAILS AND/OR STRUCT. DRWGS.
SOFFIT	PARTITION	UP TO 4'-0"	25 GAUGE
SOFFIT	PARTITION	UP TO 8'-0"	25 GAUGE
SOFFIT	PARTITION	GREATER THAN 8'-0"	SEE SPECIFIC DETAILS FOR SUPPORT SUSPENDED SYSTEM MUST BE USED
DOOR / WINDOW	HEAD AND JAMB	U.N.O.	16 GA (2 STUDS AT ALL LOCATIONS)

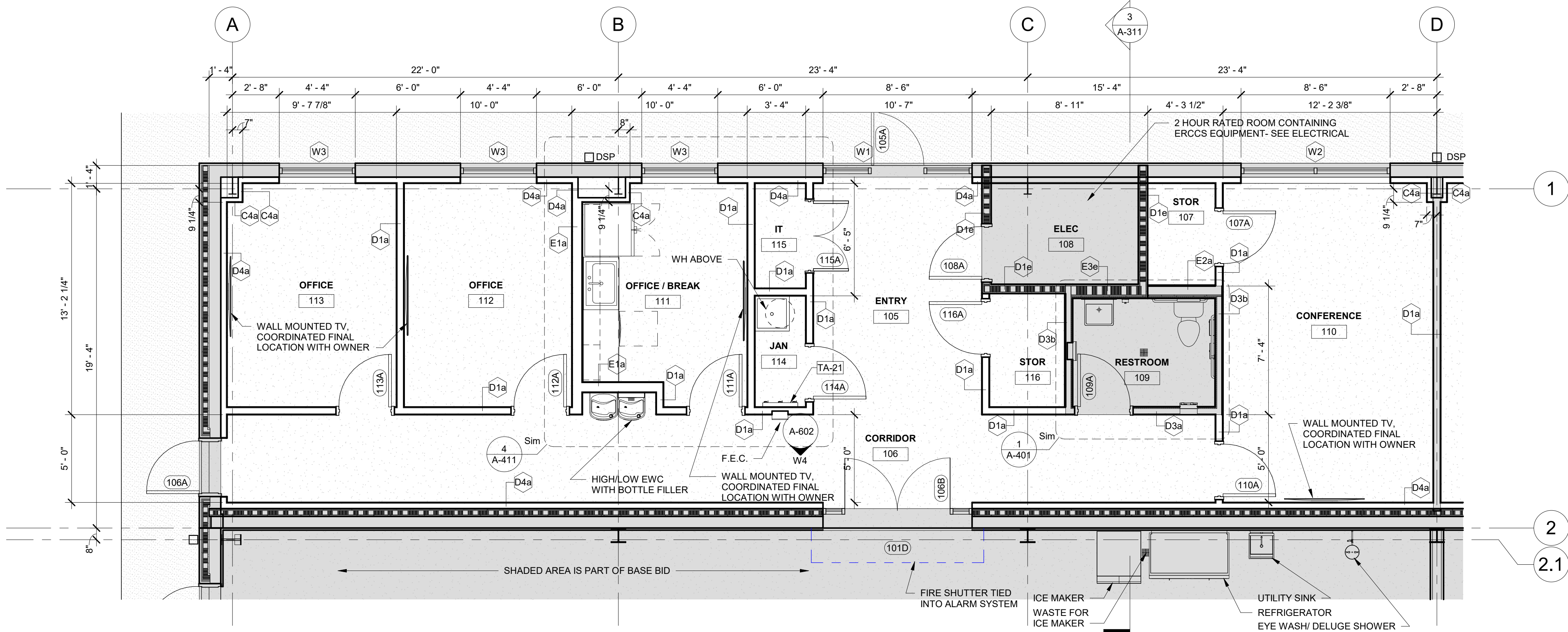
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GENERAL NOTES - FLOOR PLAN

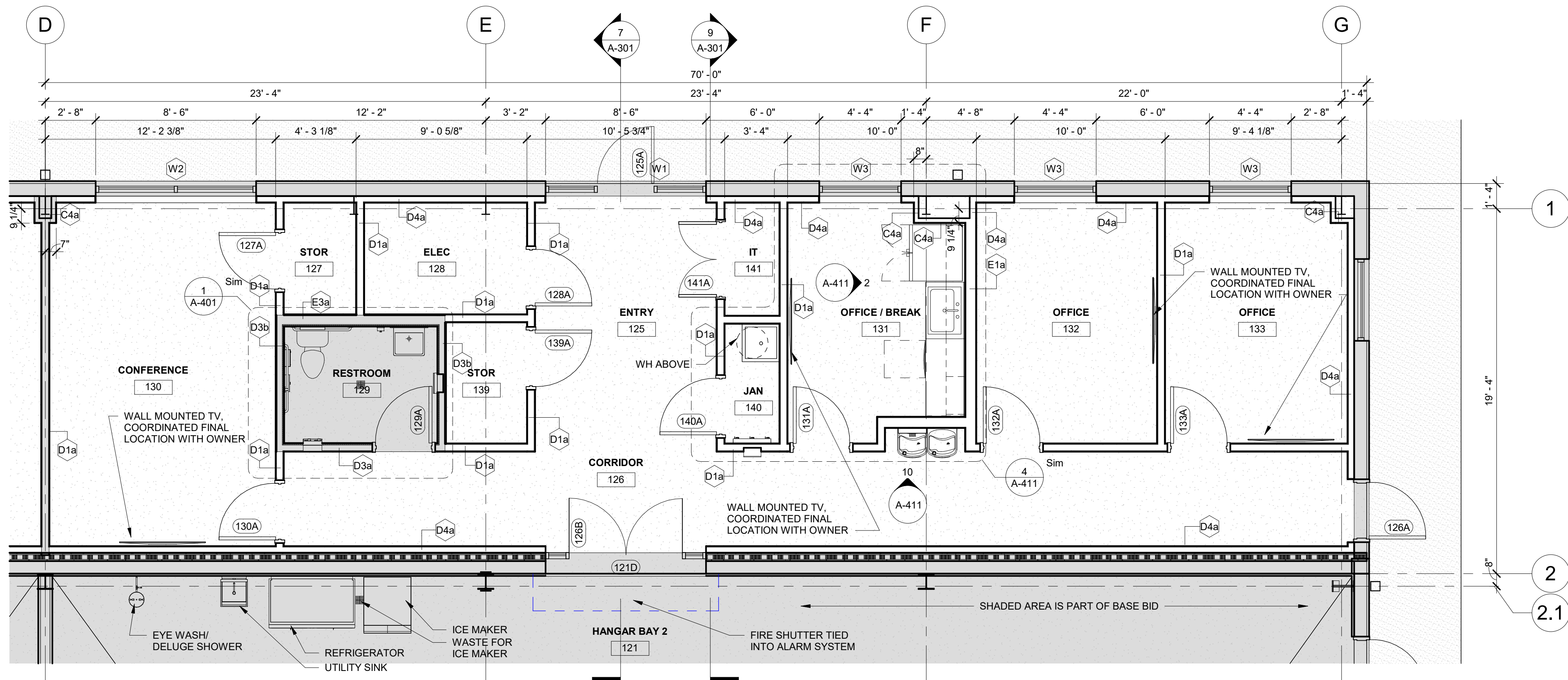
1. SEE ENLARGED PLANS FOR PARTITION TAGS NOT IDENTIFIED ON THIS SHEET.
2. SEE SHEET G-003 FOR PARTITION TYPES AND ASSOCIATED PARTITION ITEMS.
3. EDGE OF SLAB AT BUILDING PERIMETER TO ALIGN WITH OUTSIDE FACE OF STUD/ CMU U.N.O.
4. SEE STRUCTURAL DRAWINGS FOR ALL E.O.S. DETAILS AND CONDITIONS.
5. PROVIDE FR BLOCKING AS REQUIRED AT LOCATIONS WITH WALL-MOUNTED EQUIPMENT. (TV'S, MONITORS, CASEWORK, ETC.)

FLOOR PLAN LEGEND

- NON RATED WALL- SEE PARTITION TYPES
- 1 HOUR RATED WALL- SEE PARTITION TYPES
- 2 HOUR RATED WALL- SEE PARTITION TYPES



8 ENLARGED OFFICE PLAN - ALT-01
1/4" = 1'-0"



3 ENLARGED OFFICE PLAN - ALT-02
1/4" = 1'-0"



Schedule 1:
2-Unit Box Hangar

Lumberton, NC 28358



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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE

ENLARGED
PLANS - ADD
ALTERNATES

SHEET NUMBER

A-410

PARTITION NOTES

1. ALL GYPSUM WALL BOARD TO BE 5/8" TYPE 'X' U.N.O.

2. UNLESS NOTED OTHERWISE, DIMENSIONS ARE TO COLUMN CENTER LINE, FACE OF GWB/STUD PARTITIONS, FACE OF MASONRY AND CONCRETE WALLS AND FACE OF EXISTING WALLS.

3. HOLD TOP OF PARTITION DOWN 1/2" FROM TOP RUNNER WHERE PARTITION EXTENDS TO STRUCTURE ABOVE.

4. ALL CAULK AND SEALANT SHALL BE CONTINUOUS.

5. ALL CMU WALLS AND SOUND RATED PARTITIONS SHALL EXTEND FROM FINISHED FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF STRUCTURE OR DECK AND BE ENTIRELY SEALED OFF U.N.O. ALL PENETRATIONS SUCH AS PIPING, CONDUITS, DUCTS, ETC. IN SUCH SEALED OFF WALLS OR PARTITIONS SHALL IN THEMSELVES BE PACKED AND SEALED OFF ALONG THE PERIMETER OF PENETRATION.

6. ALL FIRE AND/OR SMOKE PARTITIONS SHALL EXTEND FROM FINISH FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF THE STRUCTURE OR DECK, AND BE ENTIRELY SEALED OFF WITH SAFEGING MATERIAL ONLY. SAFEGING MATERIAL SHALL BE HELD IN PLACE WITH A FIRE STOPPING MATERIAL ON BOTH SIDES, SUCH AS GYPSUM WALL BOARD OR UL LISTED FIRE PROOFING MATERIAL AND ASSEMBLY.

7. ALL SOUND RATED (STC) WALLS OR PARTITIONS SHALL HAVE CLOSURE GASKETS AT TOP, BOTTOM, AND SIDES WHERE A SOUND LEAK WOULD OTHERWISE EXIST.

8. STRUCTURAL STUDS (20 GA. MINIMUM) SHALL BE USED WHERE ANY NON-SELF-SUPPORTING WALL HUNG FIXTURES, EQUIPMENT, OR CABINETRY OCCUR AND SHALL EXTEND FROM FLOOR TO STRUCTURE ABOVE. SEE TYPICAL SUPPORT DETAILS FOR WALL MOUNTED ITEMS.

9. ALL METAL STUD FRAMED PARTITIONS SHALL BE BRACED ABOVE FINISHED CEILINGS. BRACING SHALL BE AS FOLLOWS:
ATTACH A 3/8" OR 6" METAL STUD HORIZONTALLY AND CONTINUOUSLY TO PARTITION 6" MAXIMUM ABOVE FINISHED CEILING. PROVIDE 3/8" OR 6" METAL STUD KICKERS AT 45 DEGREE ANGLE TO STRUCTURE AT 4'-0" O.C.

10. KICKERS SHALL HAVE CLIP ANGLES (14 GA MIN.) WITH TWO 1/4" ANCHORS. ALL KICKER LOCATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES PERFORMING WORK ABOVE CEILING.

11. DO NOT FASTEN TOP RUNNER TO STUDS; CRIMP RUNNER ON BOTH SIDES OF STUD TO STABILIZE STUD.

12. SEE ROOM FINISH SCHEDULE FOR ADDITIONAL REQUIREMENTS FOR FINISH MATERIALS SUCH AS TILE, PANELING, ETC. WHICH ARE NOT SHOWN OR INCLUDED IN THESE PARTITION TYPES.

13. WHERE PARTITION TYPES CHANGE IN A STRAIGHT RUN, THE EXPOSED OR MOST IMPORTANT EXPOSED FINISHED FACE, AND NOT NECESSARILY THE CENTERLINE OF STUDS, SHALL ALIGN. REVIEW CASES WHICH ARE UNCLEAR WITH THE ARCHITECT PRIOR TO CONSTRUCTION OF SUCH PARTITIONS.
14. WHERE ITEMS ARE RECESSED INTO RATED PARTITIONS, PROVIDE BOXING, INSULATION, ETC. AS REQUIRED TO MAINTAIN THE FIRE RESISTANCE RATING.

15. PURSUANT TO NCSBC 603 ALL WOOD PRODUCTS SHALL BE FIRE-RETARDANT TREATED (FRT), INCLUDING BUT NOT LIMITED TO WOOD BLOCKING, CABINETRY AND MILLWORK SUBSTRATES, AND EXPOSED PLYWOOD PANELS.

16. WHERE SPECIALTY WALL PANEL SYSTEMS ARE TO BE APPLIED TO PARTITIONS, SHIMMING MAY BE REQUIRED TO ENSURE A FLUSH AND PLUMB INSTALLATION.

17. ELECTRICAL AND TELECOM ROOMS: IN ADDITION TO GWB AS SCHEDULED, WRAP ENTIRE ROOM IN 3/4" VIRGIN, VOID-FREE, FIRE-RATED PLYWOOD, FROM 0'-6" AFF TO 8'-6" AFF. LAG-BOLTED TO WALLS AT METAL STUD LOCATIONS. PAINT ALL WALL SURFACES AS SCHEDULED.

18. ALL CLOSETS ARE TO RECEIVE WOOD SHELVING AND ROD U.N.O.

19. PROVIDE FR SOLID WOOD BLOCKING IN WALL AS REQUIRED FOR MOUNTING OF CABINETS, GRAB BARS, TV'S, TOILET PARTITIONS AND ACCESSORIES, ETC. SEE PLANS AND ELEVATIONS FOR LOCATIONS OF WALL-MOUNTED BUILT-INS AND EQUIPMENT.

20. USE MOISTURE RESISTANT GWB AT ALL WET AREAS.

21. SEE STRUCTURAL FOR SHEAR WALL LOCATIONS AND INFORMATION. GC TO COORDINATE SHEATHING SIDE AND EXTENTS WITH ARCHITECTURAL AND STRUCTURAL.

22. ALL OUTSIDE CORNERS AT GWB PARTITIONS SHALL RECIEVE CORNERGUARDS, SEE SPECIFICATIONS.
- METAL STUD GAUGES

LOCATION	LENGTH	GAUGE
PARTITION UP TO 8'-0"	20 GAUGE	
PARTITION UP TO 10'-0"	18 GAUGE	
PARTITION UP TO 12'-0"	16 GAUGE	
PARTITION GREATER THAN 12'-0"	SEE STRUCTURAL DRAWINGS.	
BULKHEAD UP TO 6'-0"	25 GAUGE	
BULKHEAD UP TO 8'-0"	20 GAUGE	
BULKHEAD GREATER THAN 8'-0"	SEE SPECIFIC DETAILS AND/OR STRUCT. DRWGS.	
SOFFIT UP TO 4'-0"	25 GAUGE	
SOFFIT UP TO 8'-0"	25 GAUGE. SEE SPECIFIC DETAILS FOR SUPPORT SUSPENDED SYSTEM MUST BE USED	
DOOR/WINDOW HEAD AND JAMB U.N.O.	16 GA (2 STUDS AT ALL LOCATIONS)	

NOTE: U.L. AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.

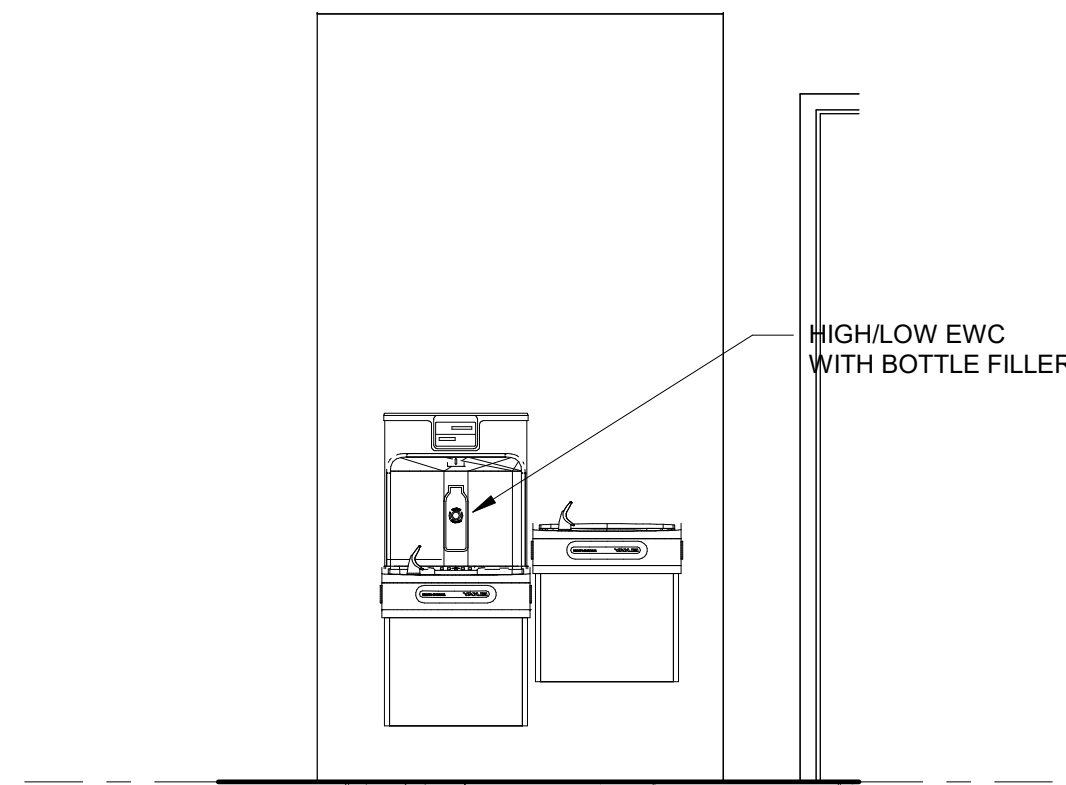
GENERAL NOTES - FLOOR PLAN

1. SEE ENLARGED PLANS FOR PARTITION TAGS NOT IDENTIFIED ON THIS SHEET.
2. SEE SHEET G-003 FOR PARTITION TYPES AND ASSOCIATED PARTITION ITEMS.
3. EDGE OF SLAB AT BUILDING PERIMETER TO ALIGN WITH OUTSIDE FACE OF STUD/ CMU U.N.O.
4. SEE STRUCTURAL DRAWINGS FOR ALL E.O.S. DETAILS AND CONDITIONS.
5. PROVIDE FR BLOCKING AS REQUIRED AT LOCATIONS WITH WALL-MOUNTED EQUIPMENT. (TV's, MONITORS, CASEWORK, ETC.)

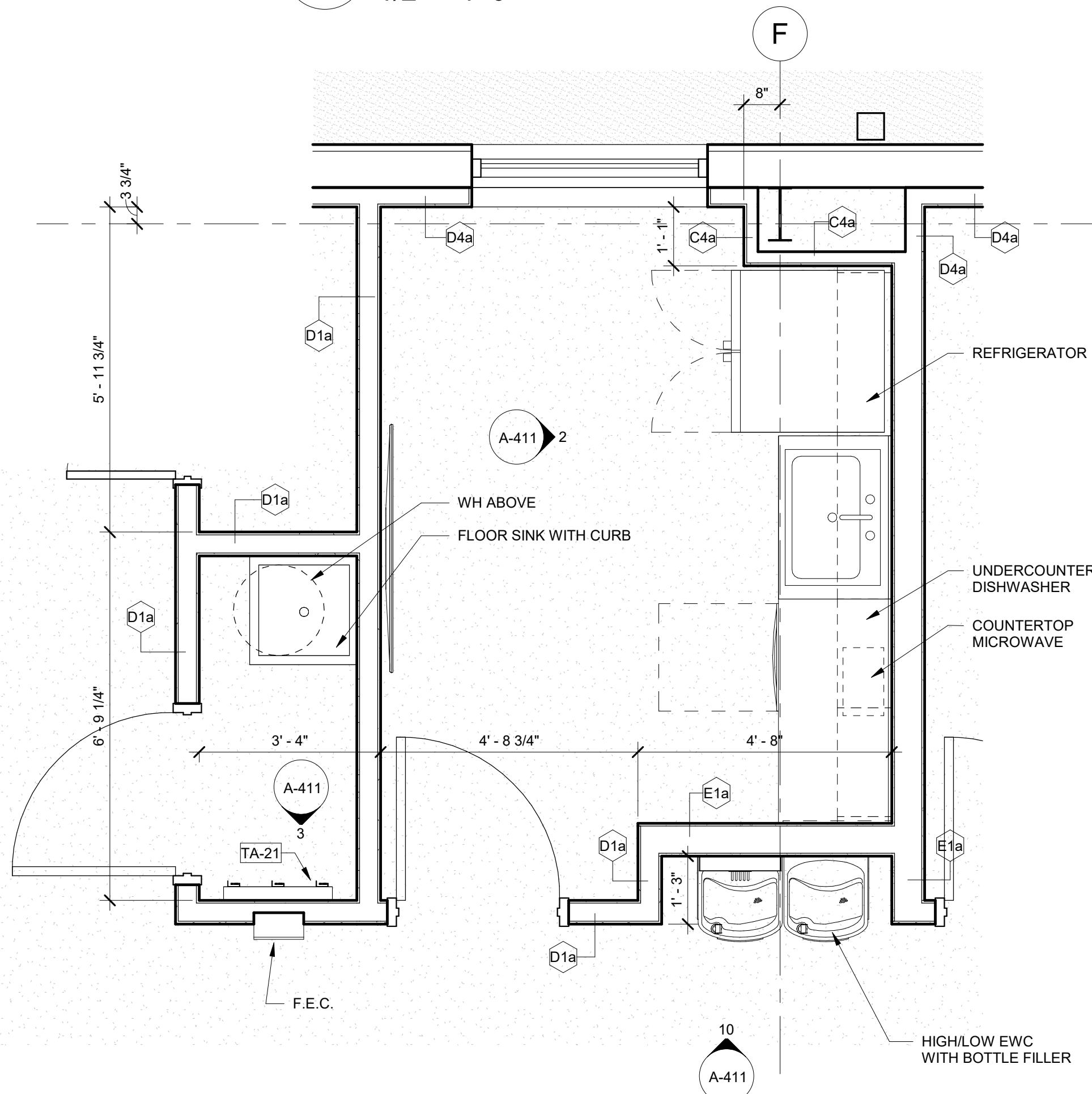
TOILET ACCESSORY LEGEND AND NOTES

SYMBOL	DESCRIPTION	MODEL
TA-1	18" GRAB BAR	BOBRICK B-5806.99X18
TA-2	36" GRAB BAR	BOBRICK B-5806.99X36
TA-3	42" GRAB BAR	BOBRICK B-5806.99X42
TA-4	SURFACE-MOUNTED HAND SOAP DISPENSER	BOBRICK B-2111
TA-5	WASTE RECEPTACLE	BOBRICK B-279
TA-6	24" X 48" SIDE EDGE LIGHTED MIRROR- SEE ELECTRICAL	MATRIX MIRRORS- L4 (2700K)
TA-7	PAPER TOWEL DISPENSER	BOBRICK B-262
TA-8	SURFACE-MOUNTED TOILET TISSUE DISPENSER	BOBRICK B-2890
TA-9	SURFACE-MOUNTED SANITARY NAPKIN DISPOSAL	BOBRICK B-254
TA-10	SURFACE-MOUNTED CLOTHES HOOK	
TA-11	INSULATED TAIL PIECE AND HOT WATER PIPE (CLASS C RATING)	BOBRICK B-5806.99X18
TA-12	SEMI RECESSED PAPER TOWEL DISPENSER/ DISPOSAL	BOBRICK B-38032
TA-13	SANITARY NAPKIN DISPENSER	BOBRICK B-3706
TA-14	SHOWER CURTAIN AND ROD	BOBRICK B-204
TA-15	PREFABRICATED ADA SHOWER WITH GRAB BARS, FOLDING SEAT AND ACCESSIBLE CONTROLS	COMFORT DESIGN SSS 3637BF-3P RRF
TA-16	COUNTER TOP MOUNTED CIRCULAR WASTE CHUTE	BOBRICK B-532
TA-17	DOUBLE ROBE HOOK	BOBRICK B-672
TA-18	TOILET SEAT COVER DISPENSER	BOBRICK B-221
TA-19	SHOWER GRAB BAR	BOBRICK B-5837.99
TA-20	ADA SHOWER SEAT- FOLDING	BOBRICK B-5181
TA-21	MOP/ BROOM HOLDER (24")	BOBRICK B-223x24

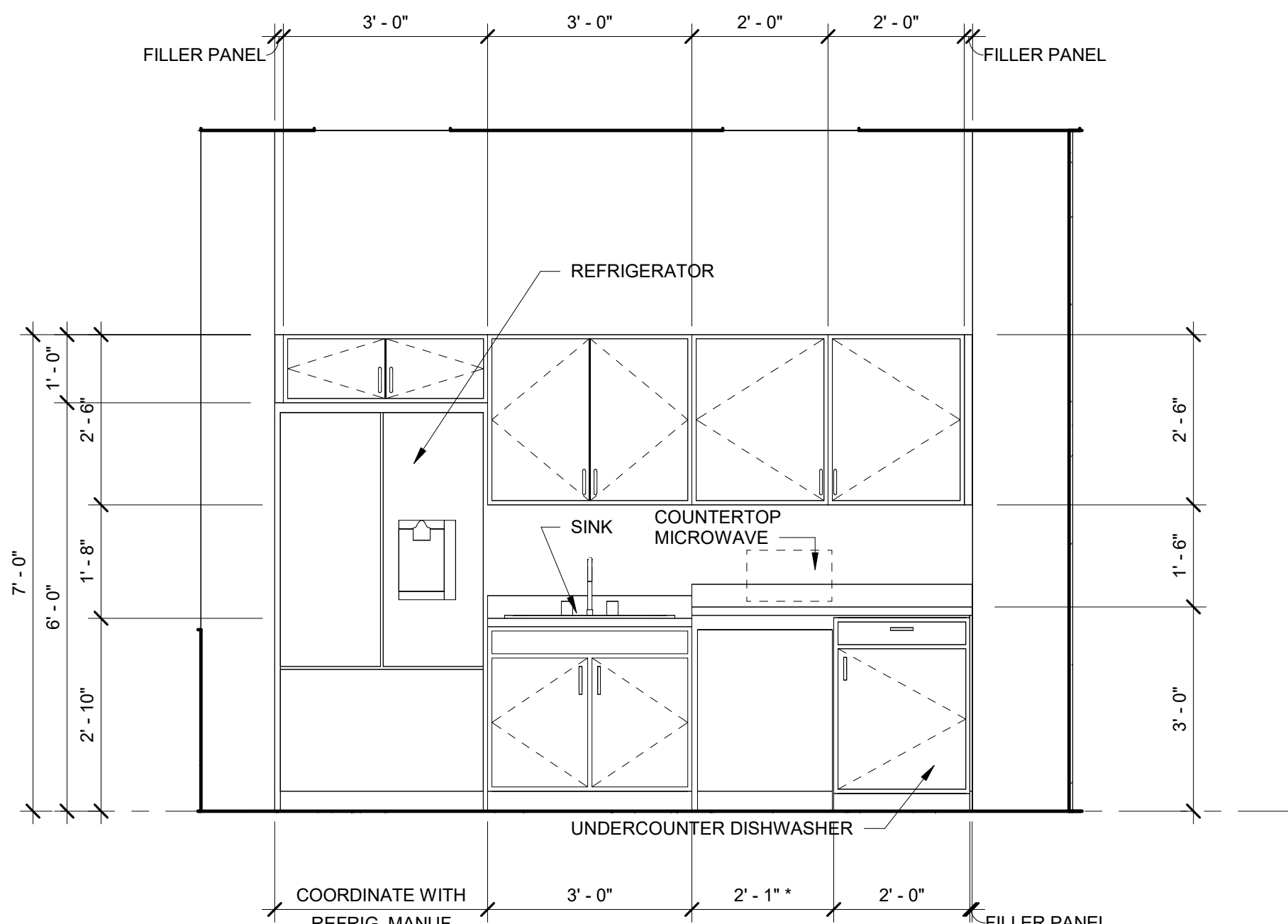
1. ALL MODELS ARE BASIS OF DESIGN.
2. ALL WALLS/ PARTITIONS WITHIN 2'-0" FROM SINKS, URINALS AND WATER CLOSETS SHALL MEET THE REQUIREMENTS OF NCSBC SECTION 1210.2



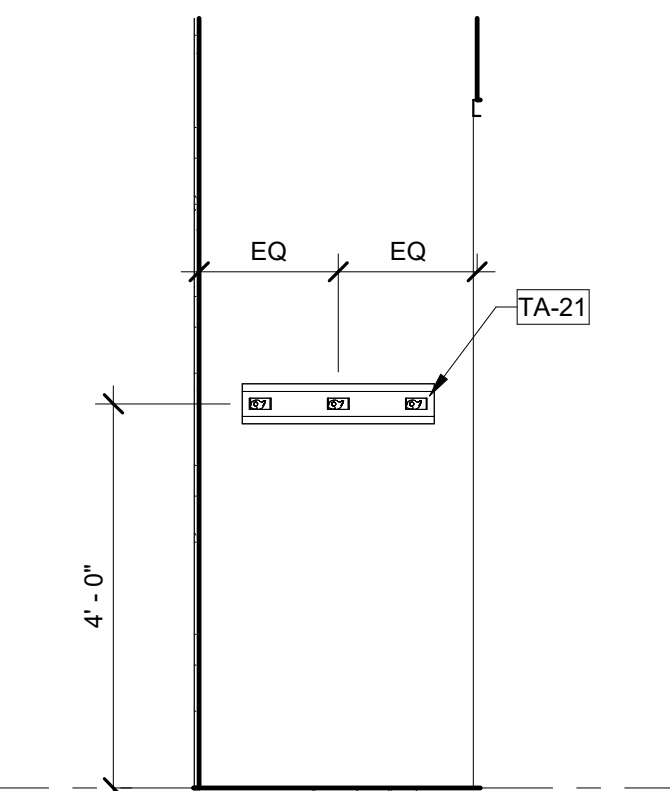
10 EWC ELEVATION
1/2" = 1'-0"



4 ENLARGED JANITOR CLOSET
1/2" = 1'-0"



2 BREAKROOM ELEVATION
1/2" = 1'-0"

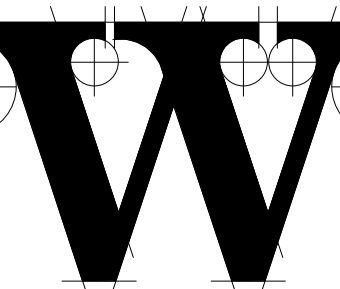


3 JANITOR ELEVATION
1/2" = 1'-0"



Schedule 1:
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Lumberton, NC 28358



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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE

ENLARGED
RESTROOM PLAN
AND ELEVATIONS

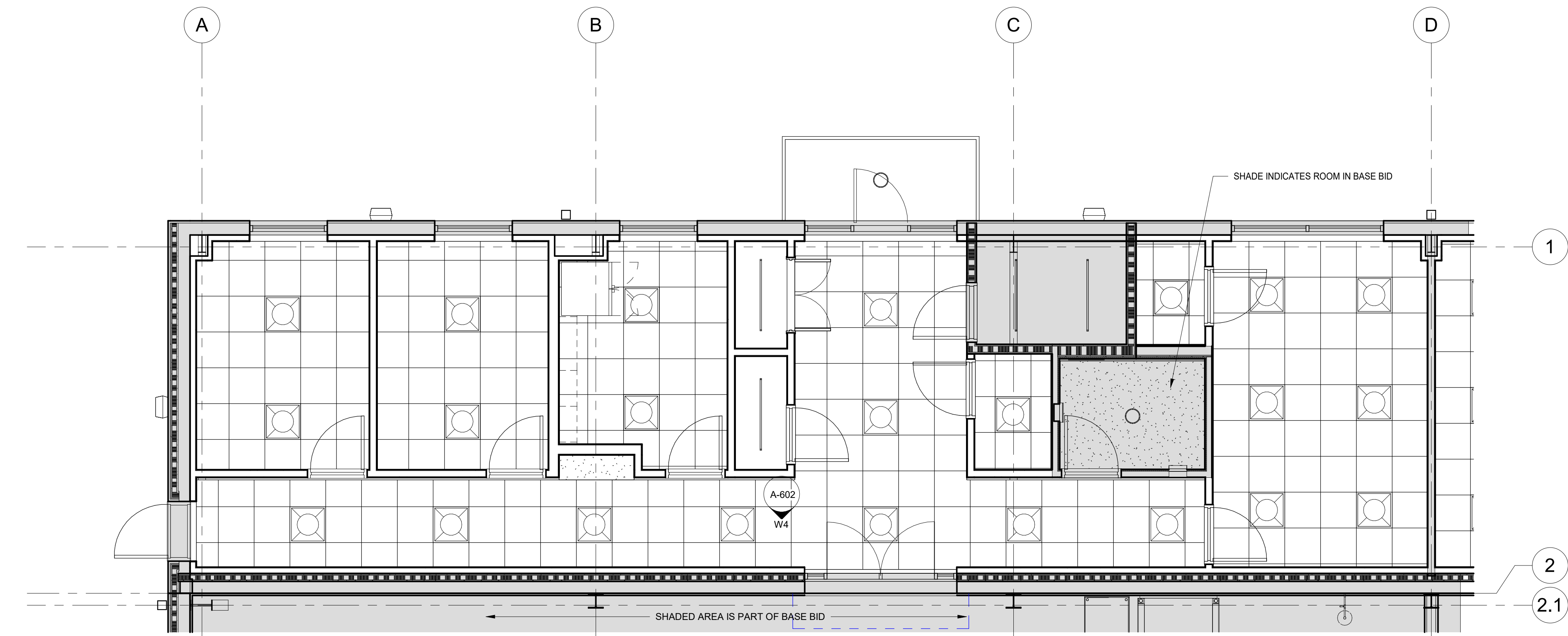
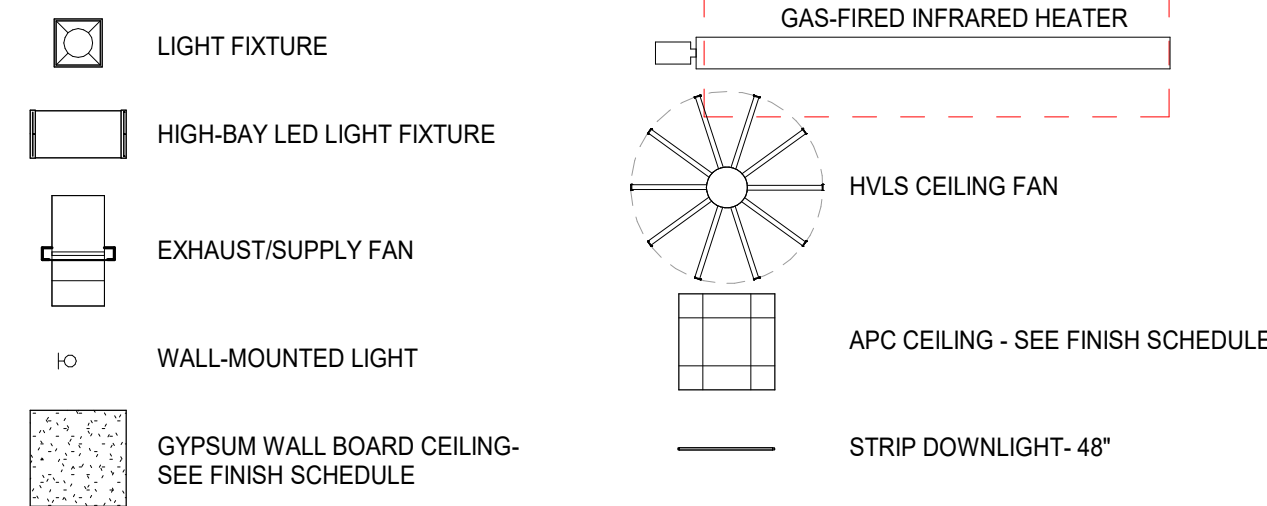
SHEET NUMBER

A-411

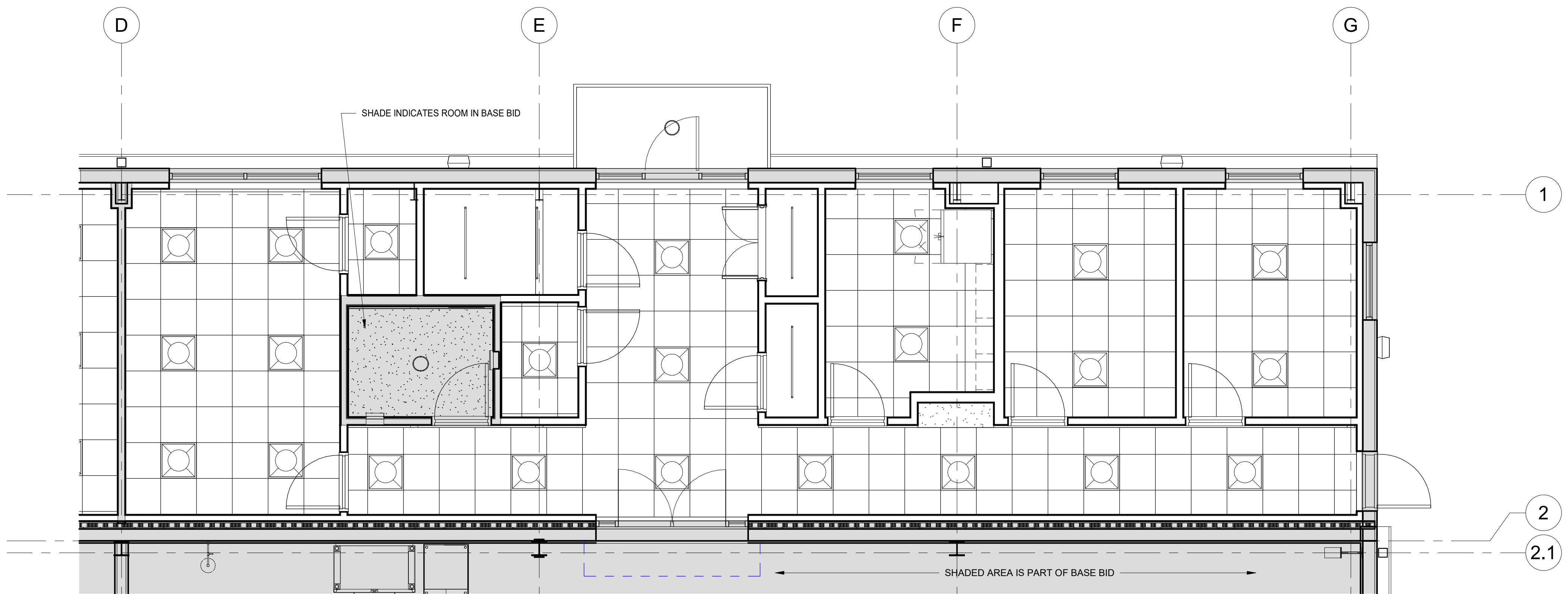
GENERAL NOTES - CEILING

1. SEE MECHANICAL DRAWINGS FOR DIFFUSER LOCATIONS AND OTHER MECHANICAL CEILING DEVICES.
2. SEE ELECTRICAL DRAWINGS FOR LIGHTING LOCATIONS AND OTHER ELECTRICAL CEILING DEVICES.
3. ALL CEILING HEIGHTS ARE AT 10'-0" A.F.F. UNLESS NOTED OTHERWISE.
4. ALL CEILING DEVICES, INCLUDING DOWNLIGHTS, SPRINKLER HEADS, HVAC GRILLES SMALLER THAN 2x2 FEET, ARE TO BE CENTERED IN CEILING TILE UNLESS NOTED OTHERWISE. CONTRACTOR TO REVIEW ALL CONFLICTS WITH ARCHITECT PRIOR TO INSTALLATION.
5. CENTER EXIT SIGNS OVER DOORS UNLESS NOTED OTHERWISE.
6. ARCHITECT AND ENGINEER OF RECORD TO REVIEW SPRINKLER HEAD LAYOUT LOCATIONS AND SPACING ON FIRE PROTECTION SHOP DRAWINGS FOR COORDINATION WITH DESIGN AND WALL AND CEILING SYSTEMS.
7. CONTRACTOR SHALL COORDINATE WITH ALL TRADES INVOLVED, INCLUDING PREPARATION OF COORDINATION DRAWINGS, TO ENSURE CLEARANCES FOR FIXTURES, DUCTWORK, CEILINGS, ETC. AS NECESSARY TO MAINTAIN THE INDICATED FINISHED CEILING / FIXTURE MOUNTING HEIGHT.
8. DIMENSIONS ARE TO CENTER LINE OF FIXTURES U.N.O.
9. PERIMETER CEILING GRID ANGLE, WHERE IT OCCURS, SHALL BE TIGHT TO FINISHED FACE OF PARTITION SURFACES, FREE FROM CURVES, GAPS, BREAKS, AND OTHER IRREGULARITIES.
10. SUSPENDED CEILING PANEL SIZE, NO SMALLER THAN 4" INCHES. NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS PRIOR TO INSTALLATION.
11. CENTER CEILING SYSTEMS IN ROOMS BOTH DIRECTIONS UNLESS OTHERWISE NOTED.

CEILING PLAN LEGEND



8 ENLARGED CEILING PLAN - ALT-01
1/4" = 1'-0"



3 ENLARGED CEILING PLAN - ALT-02
1/4" = 1'-0"



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DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE

ENLARGED
CEILING PLANS -
ADD
ALTERNATES

SHEET NUMBER

A-412



PARTITION NOTES

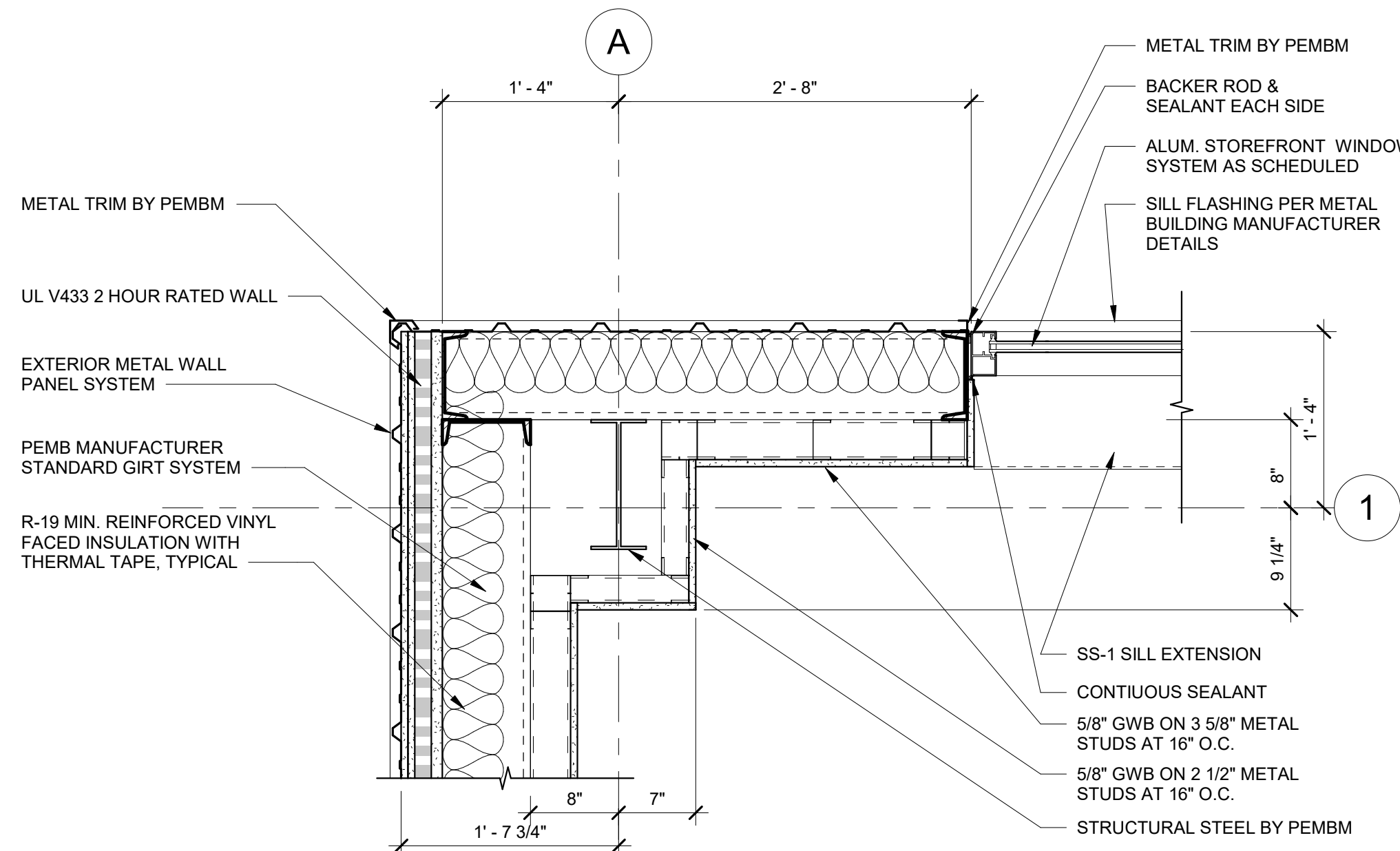
1. ALL GYPSUM WALL BOARD TO BE 5/8" TYPE 'X' U.N.O.
2. UNLESS NOTED OTHERWISE, DIMENSIONS ARE TO COLUMN CENTER LINE, FACE OF GWB/STUD PARTITIONS, FACE OF MASONRY AND CONCRETE WALLS AND FACE OF EXISTING WALLS.
3. HOLD TOP OF PARTITION DOWN 1/2" FROM TOP RUNNER WHERE PARTITION EXTENDS TO STRUCTURE ABOVE.
4. ALL CAULK AND SEALANT SHALL BE CONTINUOUS.
5. ALL CMU WALLS AND SOUND RATED PARTITIONS SHALL EXTEND FROM FINISHED FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF STRUCTURE OR DECK AND BE ENTIRELY SEALED OFF U.N.O. ALL PENETRATIONS SUCH AS PIPING, CONDUITS, DUCTS, ETC. IN SUCH SEALED OFF WALLS OR PARTITIONS SHALL IN THEMSELVES BE PACKED AND SEALED OFF ALONG THE PERIMETER OF PENETRATION.
6. ALL FIRE AND/OR SMOKE PARTITIONS SHALL EXTEND FROM FINISH FLOOR TO WHERE THEY MAY BE SEALED, SUCH AS THE UNDERSIDE OF THE STRUCTURE OR DECK, AND BE ENTIRELY SEALED OFF WITH SAFING MATERIAL ONLY. SAFING MATERIAL SHALL BE HELD IN PLACE WITH A FIRE STOPPING MATERIAL, ON BOTH SIDES, SUCH AS GYPSUM WALL BOARD OR UL LISTED FIRE PROOFING MATERIAL AND ASSEMBLY.
7. ALL SOUND RATED (STC) WALLS OR PARTITIONS SHALL HAVE CLOSURE GASKETS AT TOP, BOTTOM, AND SIDES WHERE A SOUND LEAK WOULD OTHERWISE EXIST.
8. STRUCTURAL STUDS (20 GA. MINIMUM) SHALL BE USED WHERE ANY NON-SELF-SUPPORTING WALL HUNG FIXTURES, EQUIPMENT, OR CABINETS OCCUR AND SHALL EXTEND FROM FLOOR TO STRUCTURE ABOVE. SEE TYPICAL SUPPORT DETAILS FOR WALL MOUNTED ITEMS.
9. ALL METAL STUD FRAMED PARTITIONS SHALL BE BRACED ABOVE FINISHED CEILINGS. BRACING SHALL BE AS FOLLOWS:
ATTACH A 3/8" OR 6" METAL STUD HORIZONTALLY AND CONTINUOUSLY TO PARTITION 8" MAXIMUM ABOVE FINISHED CEILING. PROVIDE 3/8" OR 6" METAL STUD KICKERS AT 45 DEGREE ANGLE TO STRUCTURE AT 4'-0" O.C.
KICKERS SHALL HAVE CLIP ANGLES (14 GA MIN.) WITH TWO 1/4" ANCHORS. ALL KICKER LOCATIONS SHALL BE COORDINATED WITH ALL OTHER TRADES PERFORMING WORK ABOVE CEILING.
10. DO NOT FASTEN TOP RUNNER TO STUDS; CRIMP RUNNER ON BOTH SIDES OF STUD TO STABILIZE STUD.
11. SEE ROOM FINISH SCHEDULE FOR ADDITIONAL REQUIREMENTS FOR FINISH MATERIALS SUCH AS TILE, PANELING, ETC. WHICH ARE NOT SHOWN OR INCLUDED IN THESE PARTITION TYPES.
12. WHERE PARTITION TYPES CHANGE IN A STRAIGHT RUN, THE EXPOSED OR MOST IMPORTANT EXPOSED FINISHED FACE, AND NOT NECESSARILY THE CENTERLINE OF STUDS, SHALL ALIGN. REVIEW CASES WHICH ARE UNCLEAR WITH THE ARCHITECT PRIOR TO CONSTRUCTION OF SUCH PARTITIONS.

14. WHERE ITEMS ARE RECESSED INTO RATED PARTITIONS, PROVIDE BOXING, INSULATION, ETC. AS REQUIRED TO MAINTAIN THE FIRE RESISTANCE RATING.
15. PURSUANT TO NCSCBC 603 ALL WOOD PRODUCTS SHALL BE FIRE-RETARDANT TREATED (FRT), INCLUDING BUT NOT LIMITED TO WOOD BLOCKING, CABINETS AND MILLWORK SUBSTRATES, AND EXPOSED PLYWOOD PANELS.
16. WHERE SPECIALTY WALL PANEL SYSTEMS ARE TO BE APPLIED TO PARTITIONS, SHIMMING MAY BE REQUIRED TO ENSURE A FLUSH AND PLUMB INSTALLATION.
17. ELECTRICAL AND TELECOM ROOMS: IN ADDITION TO GWB AS SCHEDULED, WRAP ENTIRE ROOM IN 3/4" VIRGIN, VOID-FREE, FIRE-RATED PLYWOOD, FROM 0'-6" AFF TO 8'-6" AFF, LAG-BOLTED TO WALLS AT METAL STUD LOCATIONS. PAINT ALL WALL SURFACES AS SCHEDULED.
18. ALL CLOSETS ARE TO RECEIVE WOOD SHELVING AND ROD U.N.O.
19. PROVIDE FR SOLID WOOD BLOCKING IN WALL AS REQUIRED FOR MOUNTING OF CABINETS, GRAB BARS, TV'S, TOILET PARTITIONS AND ACCESSORIES, ETC. SEE PLANS AND ELEVATIONS FOR LOCATIONS OF WALL-MOUNTED BUILT-INS AND EQUIPMENT.
20. USE MOISTURE RESISTANT GWB AT ALL WET AREAS.
21. SEE STRUCTURAL FOR SHEAR WALL LOCATIONS AND INFORMATION. GC TO COORDINATE SHEATHING SIDE AND EXTENTS WITH ARCHITECTURAL AND STRUCTURAL.
22. ALL OUTSIDE CORNERS AT GWB PARTITIONS SHALL RECEIVE CORNERGUARDS, SEE SPECIFICATIONS.

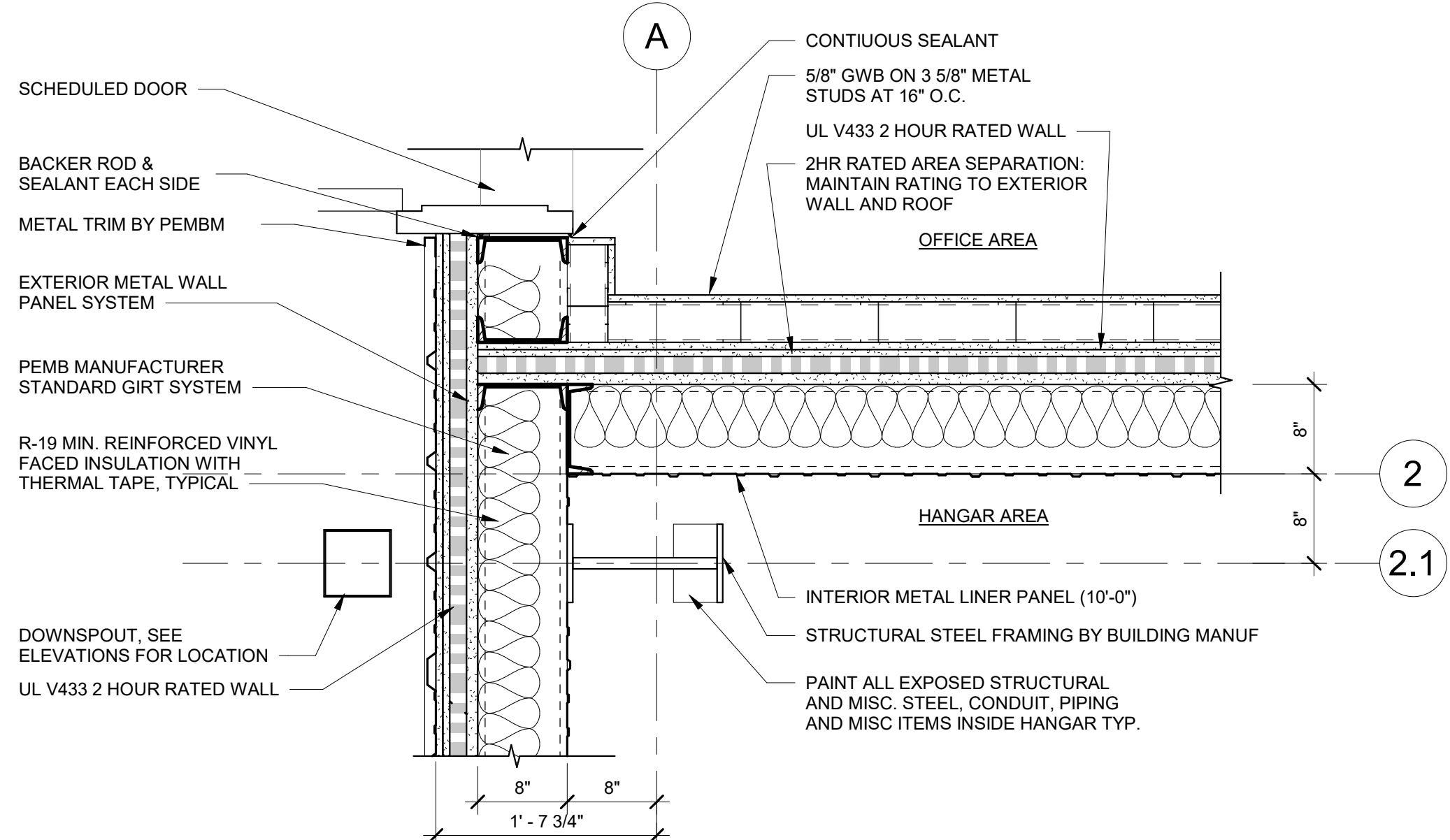
METAL STUD GAUGES	LOCATION	LENGTH	GAUGE
	PARTITION	UP TO 8'-0"	20 GAUGE
	PARTITION	UP TO 10'-0"	18 GAUGE
	PARTITION	UP TO 12'-0"	16 GAUGE
	PARTITION	GREATER THAN 12'-0"	SEE STRUCTURAL DRAWINGS.
	BULKHEAD	UP TO 6'-0"	25 GAUGE
	BULKHEAD	UP TO 8'-0"	20 GAUGE
	BULKHEAD	GREATER THAN 8'-0"	SEE SPECIFIC DETAILS AND/OR STRUCT. DRWG.
	SOFFIT	UP TO 4'-0"	25 GAUGE
	SOFFIT	UP TO 8'-0"	25 GAUGE. SEE SPECIFIC DETAILS FOR SUPPORT
	SOFFIT	GREATER THAN 8'-0"	SUSPENDED SYSTEM MUST BE USED
	DOOR / WINDOW	U.N.O.	16 GA (2 STUDS AT ALL LOCATIONS)
	HEAD AND JAMB	U.N.O.	

NOTE: U.L. AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.

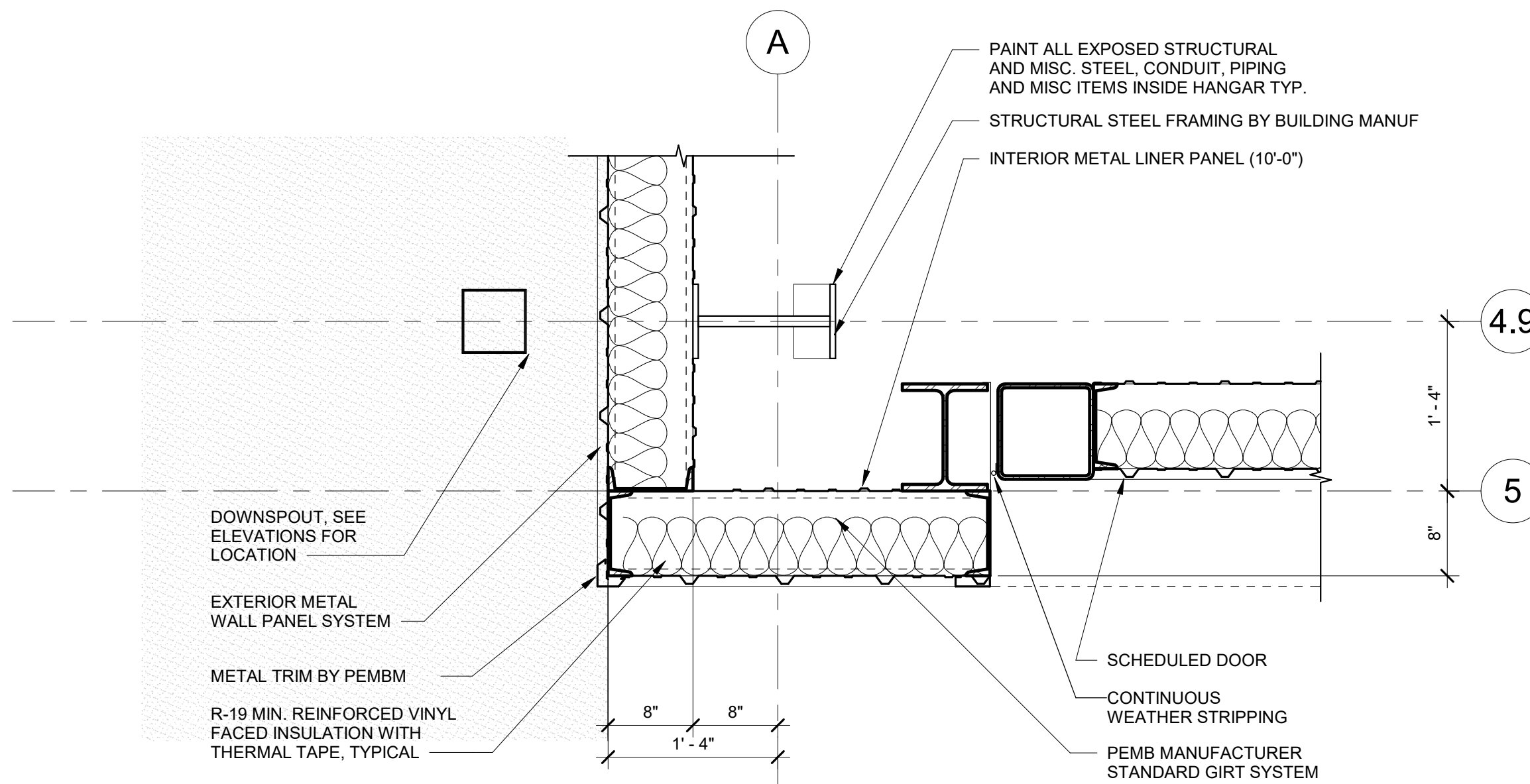
NOTE: U.L. AND STRUCTURAL REQUIREMENTS TAKE PRECEDENCE OVER THE ABOVE SPECIFICATIONS.



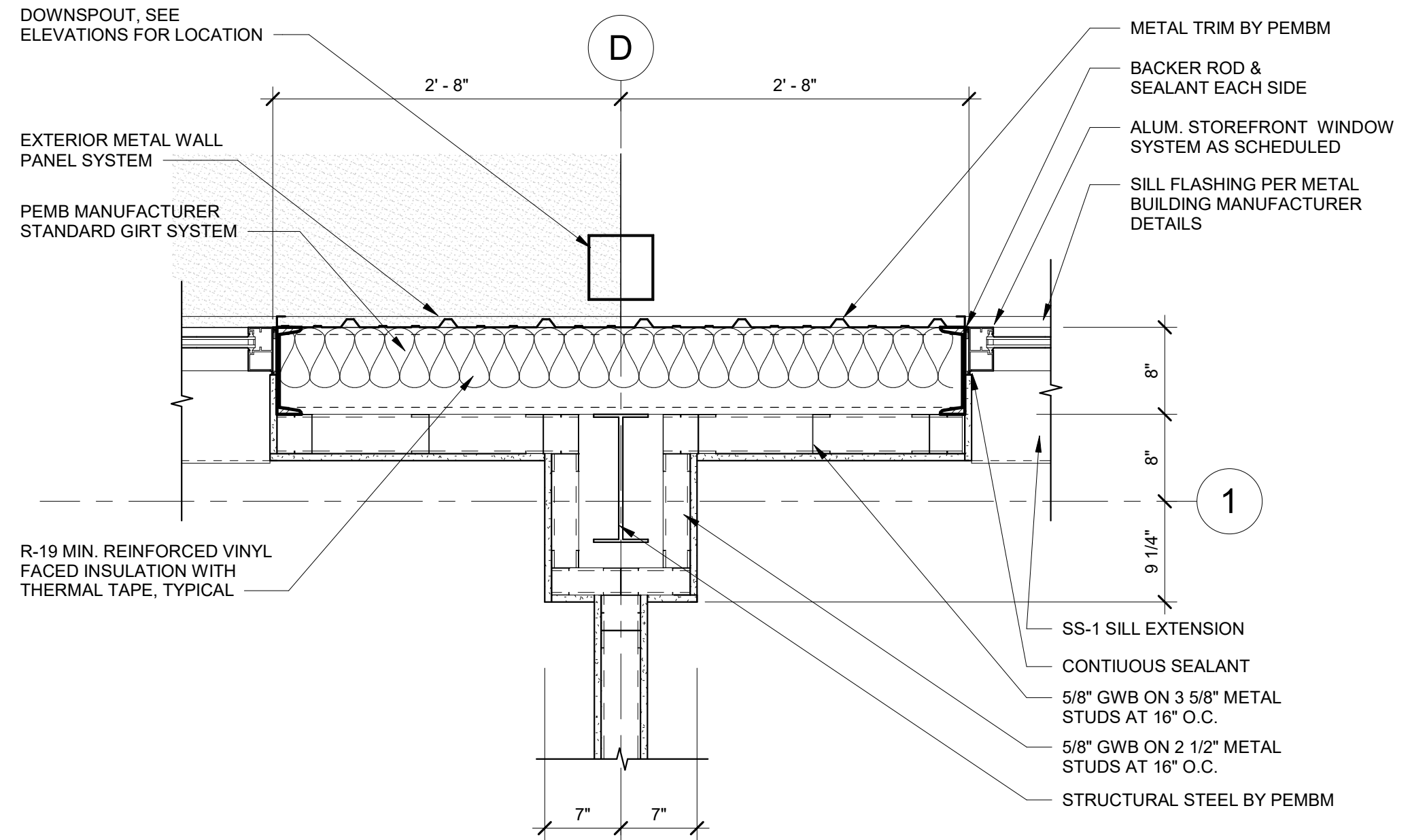
11 PLAN DETAIL
1" = 1'-0"



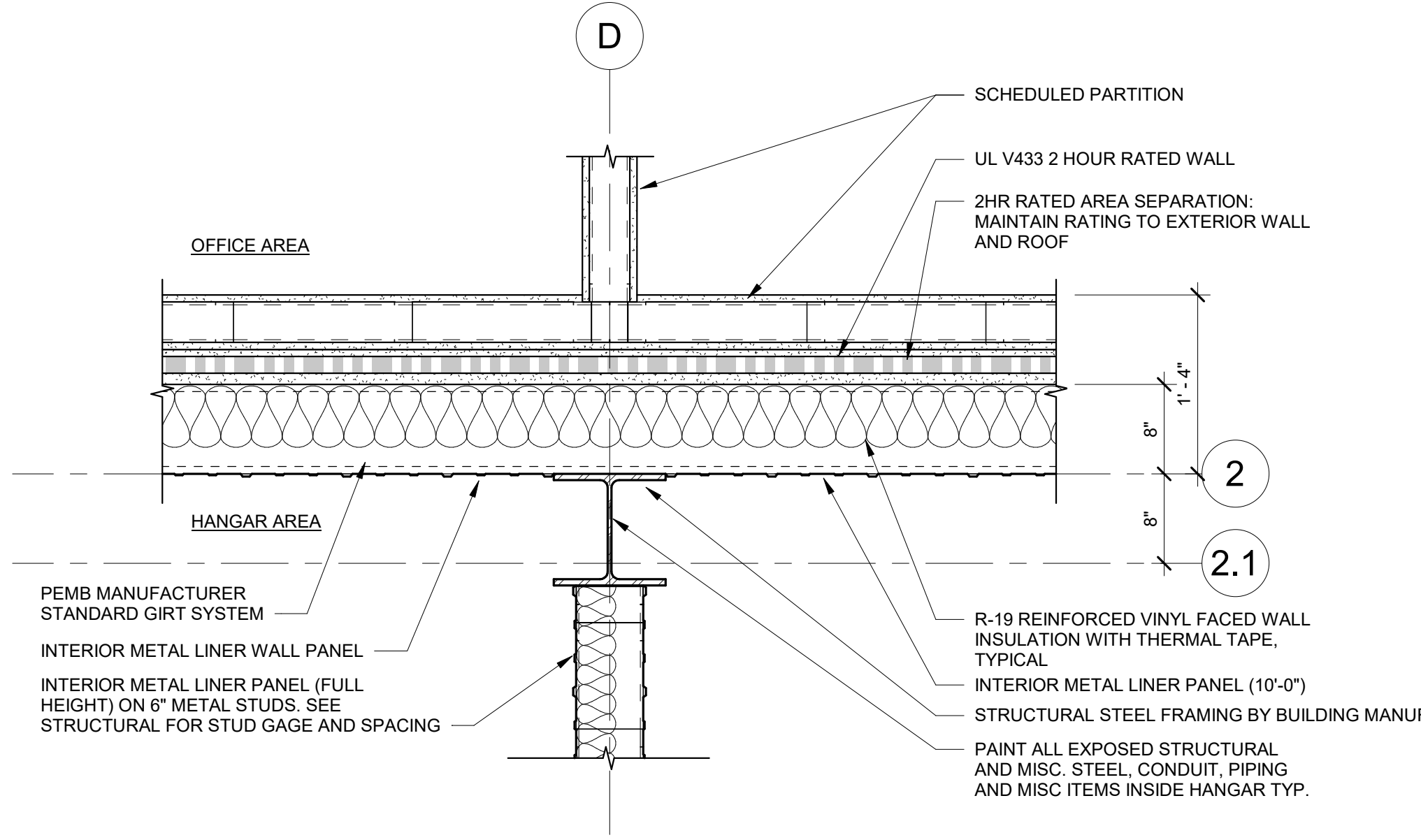
6 PLAN DETAIL
1" = 1'-0"



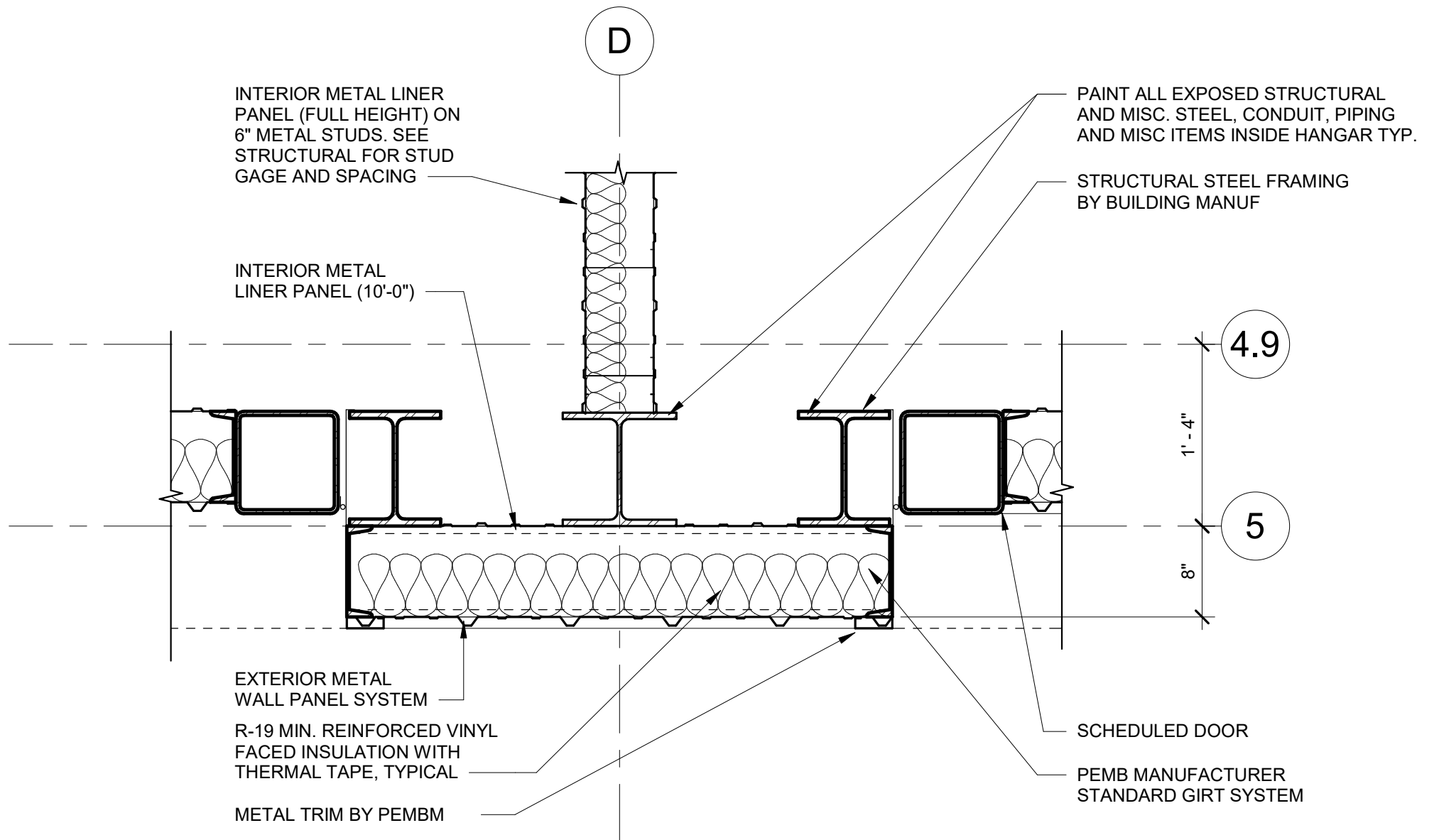
1 PLAN DETAIL
1" = 1'-0"



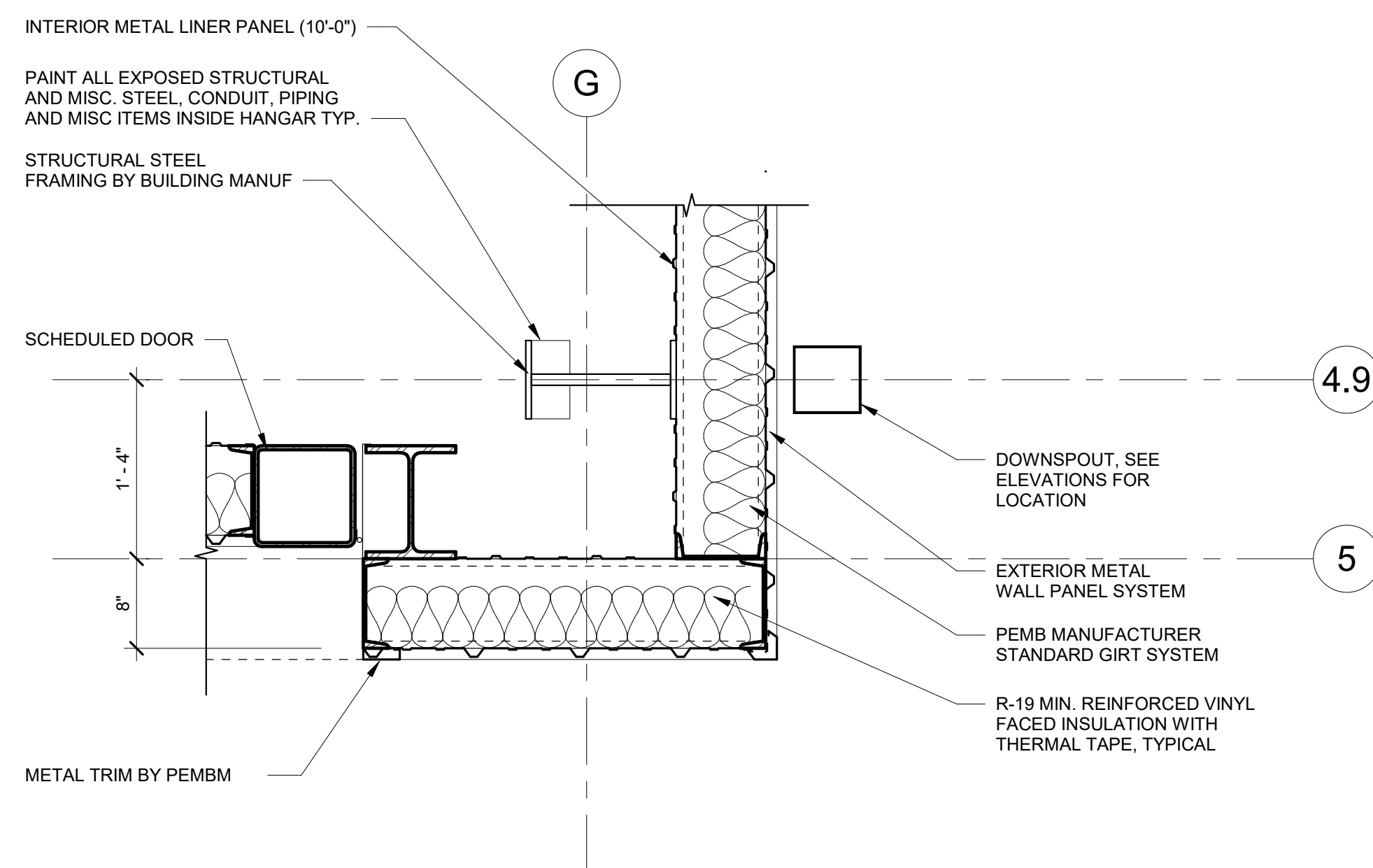
13 PLAN DETAIL
1" = 1'-0"



8 PLAN DETAIL
1" = 1'-0"

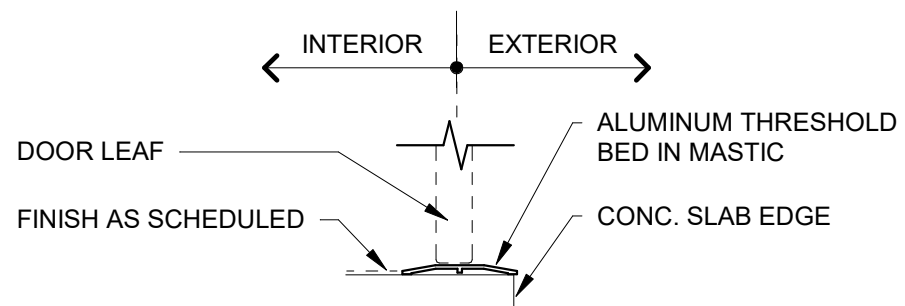


3 PLAN DETAIL
1" = 1'-0"

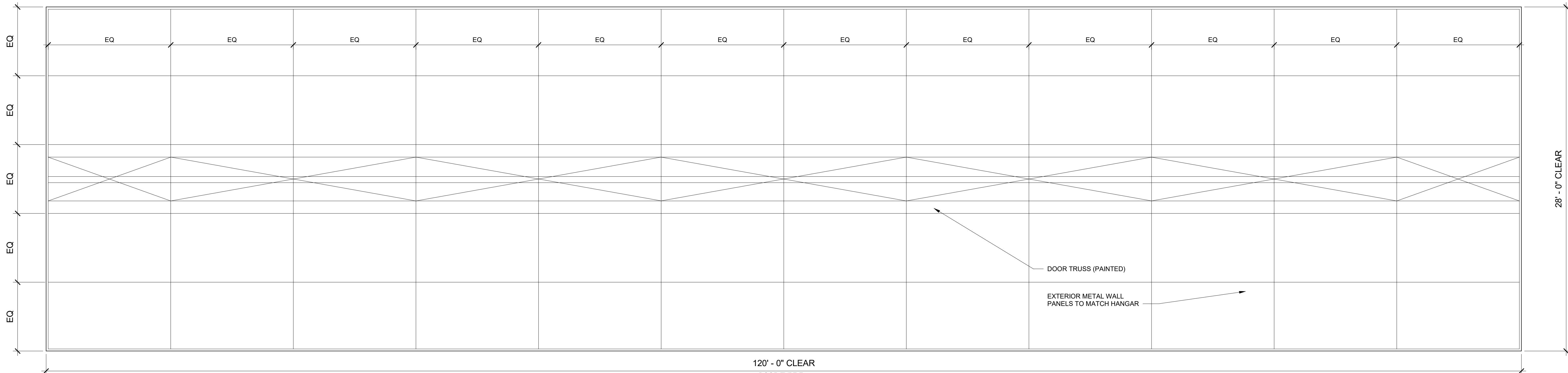
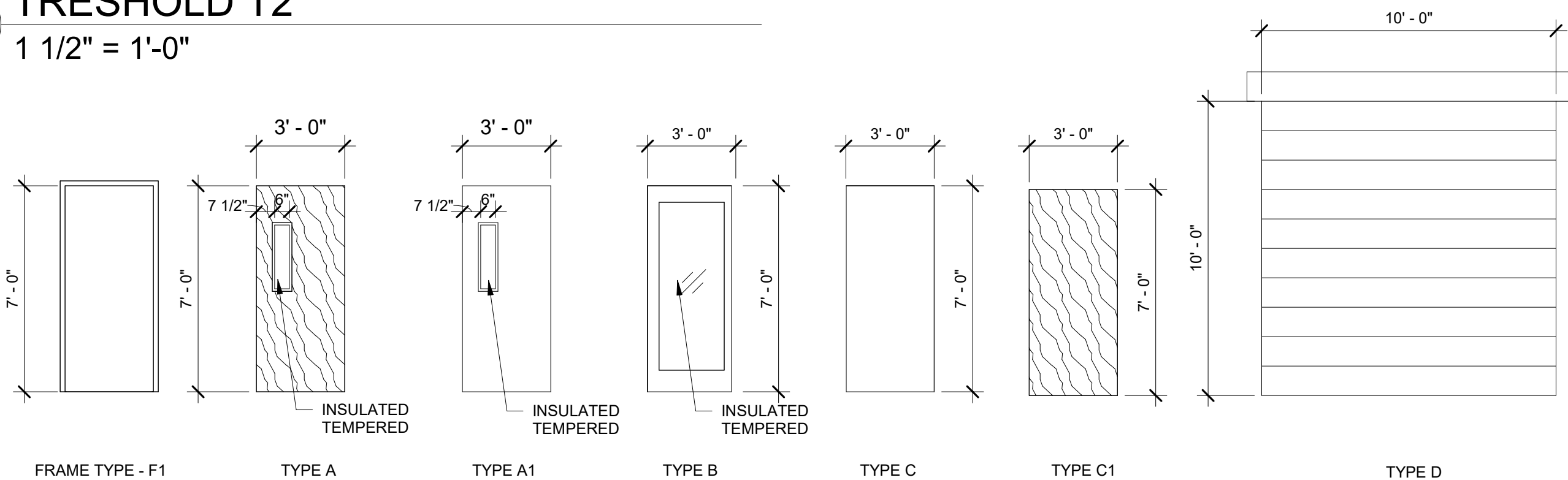


4 PLAN DETAIL
1" = 1'-0"

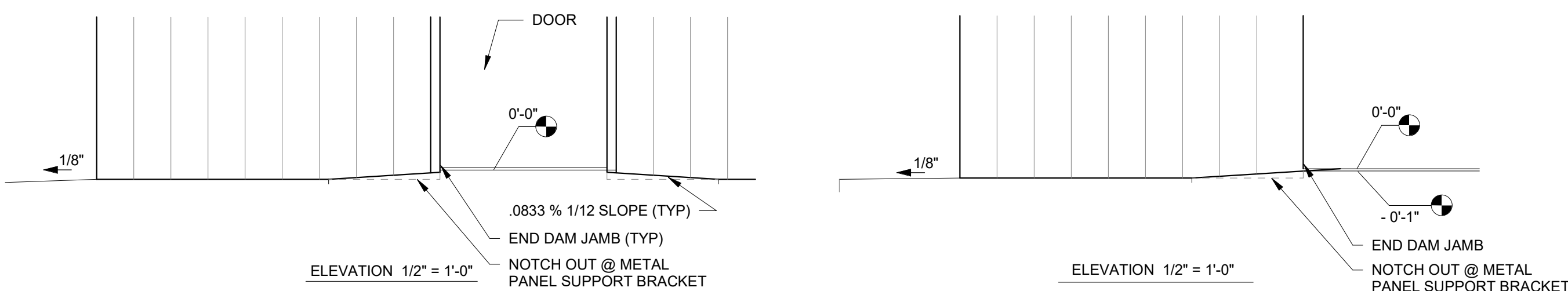
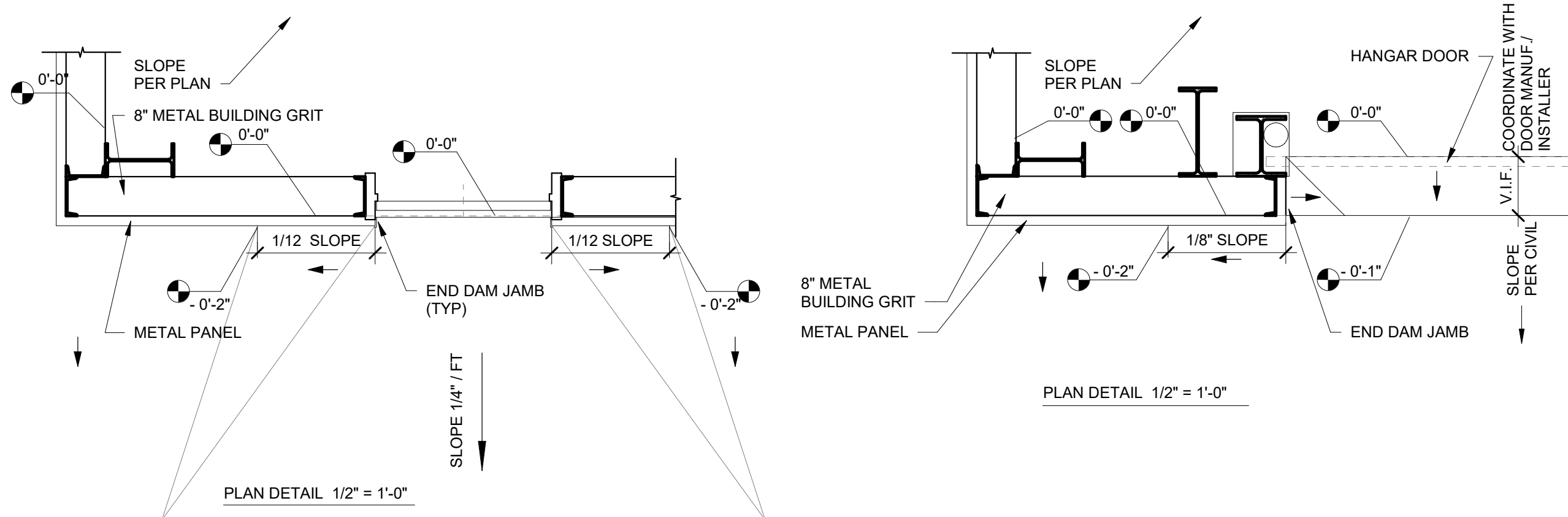
17 THRESHOLD T1
3" = 1'-0"



16 TRESHOLD T2
1 1/2" = 1'-0"



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



1 DOOR SLAB DETAIL
1/2" = 1'-0"

2 HANGAR DOOR SLAB DETAIL
1/2" = 1'-0"

3 HEAD/JAMB H4/J4
1 1/2" = 1'-0"

4 HEAD/JAMB H2/J2
1 1/2" = 1'-0"

5 JAMB J1
1 1/2" = 1'-0"

8 HEAD/JAMB H5/J5
1 1/2" = 1'-0"

7 SILL S5
1 1/2" = 1'-0"

9 HEAD/JAMB H3/J3
1 1/2" = 1'-0"

10 HEADER H1
1 1/2" = 1'-0"

GLAZING LEGEND AND NOTES

G1	INSULATED LOW E GLAZING - CLEAR
G2	INSULATED LOW E FULLY TEMPERED GLAZING - CLEAR
G3	GLAZING - CLEAR
G4	TEMPERED GLAZING - CLEAR
G5	SPANDREL GLASS

NOTES:

- ALL DIMENSIONS ARE NOMINAL OF ROUGH OPENING AND ARE THE OVERALL SIZE. VERIFY IN FIELD PRIOR TO FABRICATION.
- SEE WINDOW ELEVATIONS FOR GLAZING TYPE(S).
- SEE WINDOW ELEVATIONS FOR DIMENSIONS/LOCATIONS OF MULLIONS.
- ALL EXTERIOR WINDOWS ARE TO RECEIVE WINDOW ROLLER SHADES AS SPECIFIED UNLESS NOTED OTHERWISE.
- ALL GLAZING IN RESTROOM LOCATIONS SHALL BE FULLY TEMPERED (G2).
- SEE PLANS FOR FROSTED GLASS LOCATIONS (I.E. RESTROOMS).

DOOR SECURITY NOTES:

- ALL EXTERIOR DOOR FRAMES ARE TO BE MINIMUM 16 GA.
- ALL EXTERIOR HM DOORS ARE TO BE STEEL- 16 GA. MINIMUM.
- EXTERIOR LOCKSETS ARE TO BE GRADE 1 COMMERCIAL LOCKSETS WITH 3/4" LATCH THROW.
- EXTERIOR DOORS TO BE EQUIPPED WITH A LATCH PROTECTOR.

DOOR SCHEDULE

DOOR NUMBER	ROOM NAME	ROOM NUMBER	DOOR					DOOR FINISH	FRAME TYPE	FRAME		HEAD	DETAILS		FIRE RATING	HARDWARE SET	COMMENTS	
			DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MATERIAL			FRAME MATERIAL	FRAME FINISH		JAMB	THRESHOLD				
101A				60' - 0"	18' - 0"	1 3/4"										N/A		DOOR DIMENSIONS ARE CLEAR DIMENSIONS
101B	HANGAR BAY 1	101		3' - 0"	7' - 0"	2"	HM	PAINT	F1	HM	PAINT	H3	J3			2 HR		
101C	HANGAR BAY 1	101		3' - 0"	7' - 0"	2"	HM	PAINT	F1	HM	PAINT	H3	J3			2 HR		
101D	HANGAR BAY 1	101		8' - 6"	10' - 0"	1 3/4"	*	FACTORY	-	*	*					2 HR		*FIRE SHUTTER TIED INTO ALARM SYSTEM
105A	ENTRY	105		3' - 0"	8' - 0"	2"	ALUM.	*	STOREFRONT	ALUM.	*	SEE MANUF.	SEE MANUF.	9a/A-602		2 HR		*FACTORY FINISH
106A	CORRIDOR	106		3' - 0"	7' - 0"	2"	HM	PAINT	F1	HM	PAINT	H2	J2			2 HR		
106B	CORRIDOR	106		6' - 0"	8' - 0"	2"	ALUM.	*	STOREFRONT	ALUM.	*	SEE MANUF.	SEE MANUF.	9a/A-602		2 HR		*FACTORY FINISH
108A	ELEC	108		3' - 0"	7' - 0"	1 3/4"	HM	PAINT	F1	HM	PAINT	H1	J1			2 HR		
109A	RESTROOM	109		3' - 0"	7' - 0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1			0 HR		
121A				60' - 0"	18' - 0"	1 3/4"												DOOR DIMENSIONS ARE CLEAR DIMENSIONS
121B	HANGAR BAY 2	121		3' - 0"	7' - 0"	1 3/4"	HM	PAINT	F1	HM	PAINT	H3	J3			0 HR		
121C	HANGAR BAY 2	121		3' - 0"	7' - 0"	1 3/4"	HM	PAINT	F1	HM	PAINT	H3	J3			0 HR		
121D	CORRIDOR	126		8' - 6"	10' - 0"	1 3/4"	*	FACTORY	-	*	*					2 HR		
125A	ENTRY	125		3' - 0"	8' - 0"	2"	ALUM.	*	STOREFRONT	ALUM.	*	SEE MANUF.	SEE MANUF.	9a/A-602		0 HR		*FACTORY FINISH
126A	CORRIDOR	126		3' - 0"	7' - 0"	1 3/4"	HM	PAINT	F1	HM	PAINT	H1	J1			0 HR		
126B	CORRIDOR	126		6' - 0"	8' - 0"	2"	ALUM.	*	STOREFRONT	ALUM.	*	SEE MANUF.	SEE MANUF.	9a/A-602		0 HR		*FACTORY FINISH
129A	RESTROOM	129		3' - 0"	7' - 0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1			0 HR		

DOOR SCHEDULE - ALT-01

DOOR NUMBER		ROOM NAME	ROOM NUMBER	DOOR					DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME		DETAILS			FIRE RATING	HARDWARE SET		COMMENTS
				DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MATERIAL				FRAME MATERIAL	FRAME FINISH	HEAD	JAMB	THRESHOLD				
107A	STOR	107	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1			0 HR				
110A	CONFERENCE	110	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1			0 HR				
111A	OFFICE / BREAK	111	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1			0 HR				
112A	OFFICE	112	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1			0 HR				
113A	OFFICE	113	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1			0 HR				
114A	ENTRY	105	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1			0 HR				
115A	ENTRY	105	C1	4'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1			0 HR				
116A	STOR	116	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1			0 HR				

DOOR SCHEDULE - ALT-02

DOOR NUMBER	ROOM NAME	ROOM NUMBER	DOOR						DOOR FINISH	FRAME TYPE	FRAME		DETAILS			FIRE RATING	HARDWARE SET	COMMENTS
			DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MATERIAL	FRAME MATERIAL			FRAME FINISH	HEAD	JAMB	THRESHOLD				
127A	STOR	127	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1		0 HR			
128A	ELEC	128	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1		0 HR			
130A	CONFERENCE	130	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1		0 HR			
131A	OFFICE / BREAK	131	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1		0 HR			
132A	OFFICE	132	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1		0 HR			
133A	OFFICE	133	A	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1		0 HR			
139A	STOR	139	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1		0 HR			
140A	JAN	140	C1	3'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1		0 HR			
141A	IT	141	C1	4'-0"	7'-0"	1 3/4"	WD	STAIN	F1	HM	PAINT	H1	J1		0 HR			



Schedule 1:
2-Unit Box Hangar

Lumberton, NC 28358



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NC Cert. No.: 51140

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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE

DOOR SCHEDULE

SHEET NUMBER

A-601

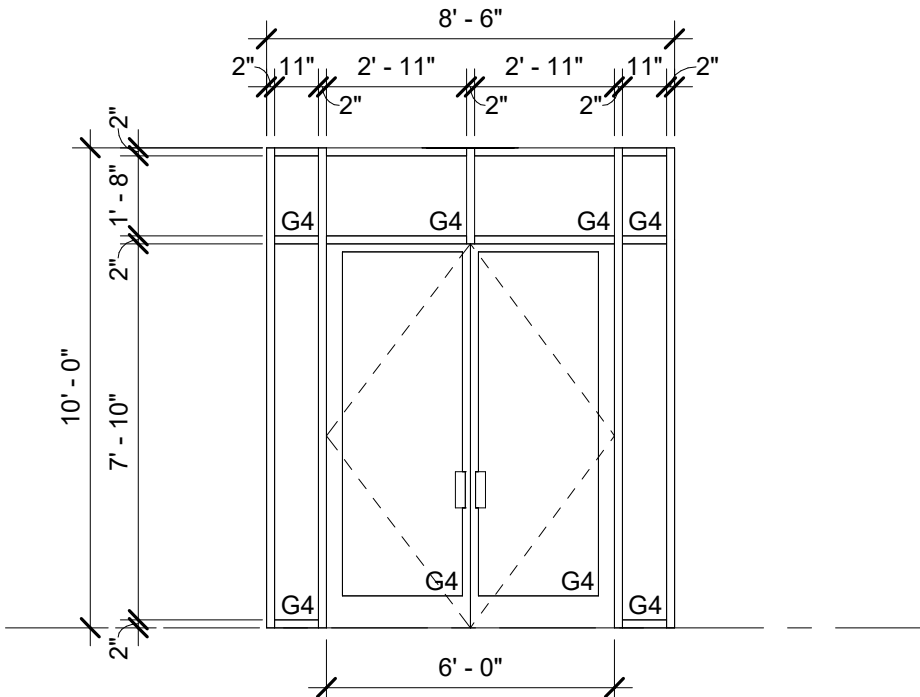
GLAZING LEGEND AND NOTES

G1	INSULATED LOW E GLAZING - CLEAR
G2	INSULATED LOW E FULLY TEMPERED GLAZING - CLEAR
G3	GLAZING - CLEAR
G4	TEMPERED GLAZING - CLEAR
G5	SPANDREL GLASS

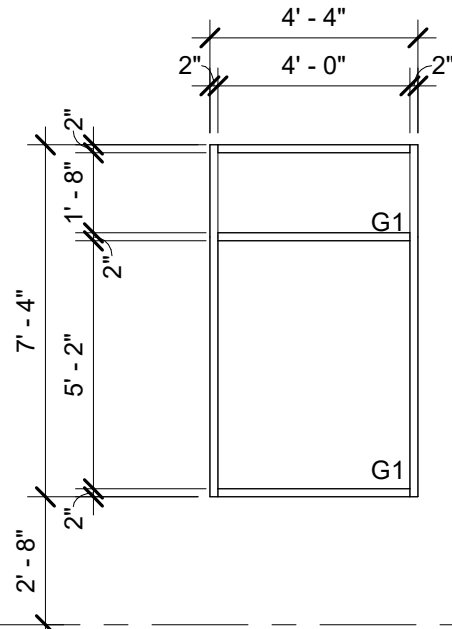
- NOTES:
1. ALL DIMENSIONS ARE NOMINAL OF ROUGH OPENING AND ARE THE OVERALL SIZE. VERIFY IN FIELD PRIOR TO FABRICATION.
 2. SEE WINDOW ELEVATIONS FOR GLAZING TYPE(S).
 3. SEE WINDOW ELEVATIONS FOR DIMENSIONS/ LOCATIONS OF MULLIONS.
 4. ALL EXTERIOR WINDOWS ARE TO RECEIVE WINDOW ROLLER SHADES AS SPECIFIED UNLESS NOTED OTHERWISE.
 5. ALL GLAZING IN RESTROOM LOCATIONS SHALL BE FULLY TEMPERED (G2).
 6. SEE PLANS FOR FROSTED GLASS LOCATIONS (I.E. RESTROOMS).

WINDOW SCHEDULE

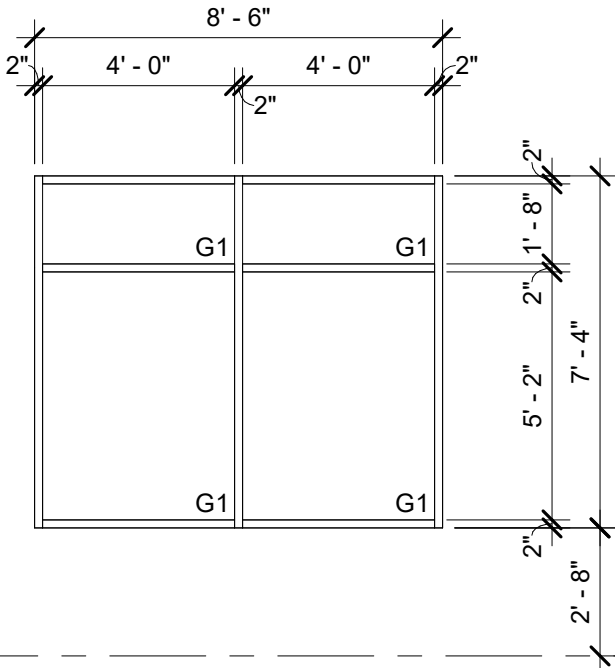
TYPE MARK	WIDTH	HEIGHT	HEAD HEIGHT	HEAD DETAILS	JAMB DETAILS	SILL DETAILS	COMMENTS
TYPE A	6'-0"	8'-0"	10'-0"	10b/A6.02	10a/A6.02	10a/A6.02	



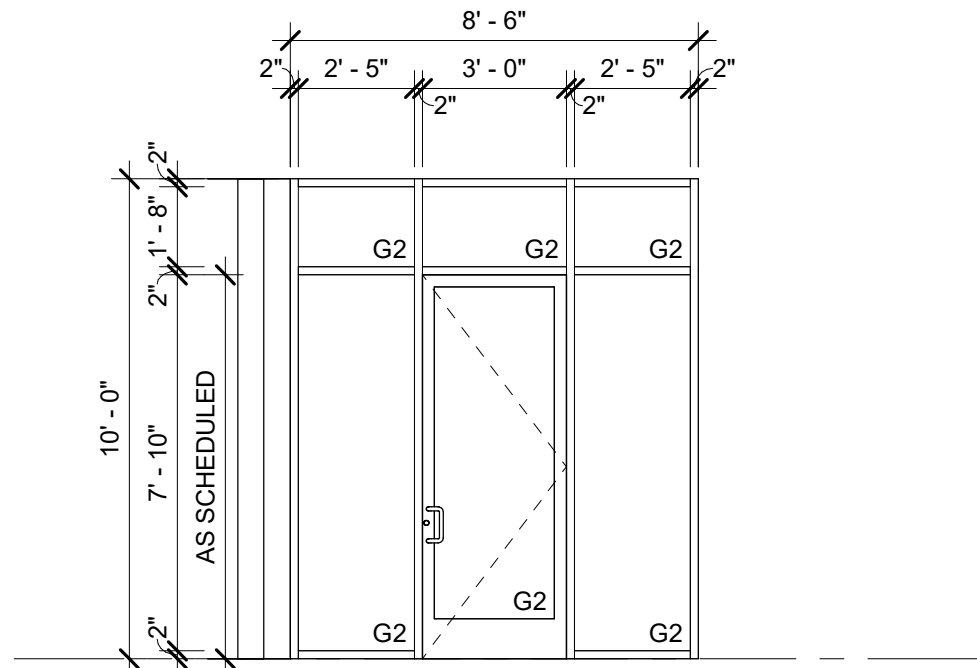
W4 WINDOW TYPE W4
1/4" = 1'-0"



W3 WINDOW TYPE W3
1/4" = 1'-0"



W2 WINDOW TYPE W2
1/4" = 1'-0"



W1 WINDOW TYPE W1
1/4" = 1'-0"



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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE

WINDOW TYPES

SHEET NUMBER

A-602

FINISH LEGEND

FLOORING (CPT = CARPET) (PT = PORCELAIN TILE) (LVT = LUXURY VINYL TILE) (SDT = STATIC DISSIPATIVE TILE)	
CPT-1	SHAW CONTRACT GROUP; STYLE: 57451 IN COMMON TILE; COLOR: 50518 MERGE; ASHLAR PATTERN.
CPT-2	SHAW CONTRACT GROUP; STYLE: 57442 COLLECTIVE V TILE; COLOR: 38580 GRAY; ASHLAR PATTERN.
CPT-3	SHAW CONTRACT GROUP; STYLE: 57414 SWIFT TILE; COLOR: 14500 TROT; MONOLITHIC PATTERN; ENTRYWAY CARPET.
PT-1	DALTILE; 6" X 48" PORCELAIN FLOOR TILE; EMERSON WOOD; BUTTER PECAN PLANK; SEE FINISH PLANS FOR PATTERN; GROUT COLOR TO BE SELECTED BY ARCHITECT.
PT-2	DALTILE; 12"X24" PORCELAIN FLOOR TILE; SOCIETY; CIVIC SAND; SEE FINISH PLANS FOR PATTERN; GROUT COLOR TO BE SELECTED BY ARCHITECT.
SDT-1	ARMSTRONG; 51956 FOSSIL GRAY ELECTROSTATIC DISSIPATIVE 12"X12 TILE.
BASE (RB = RUBBER BASE) (PB = PORCELAIN TILE BASE)	
RB-1	FLEXCO; 4" COVED VINYL WALL BASE; COLOR: 093 GRAPHITE.
PB-1	DALTILE; 12"X24" PORCELAIN TILE BASE; SOCIETY; MONUMENT WHITE S045; ALIGN W/ WALL TILE JOINTS U.N.O.; GROUT COLOR TO BE SELECTED BY ARCHITECT.
WB-1	1X8 NOMINAL (3/4" X 5 1/2") MDF TRIM W/ 3/4" OAK WOOD QUARTER ROUND SHOE TRIM; FINISH AS SCHEDULED OR INDICATED ON DRAWINGS.
WALL SURFACE (FRP = FIBERGLASS REINFORCEMENT PANEL) (WT = PORCELAIN WALL TILE) (GWB-2 = GYPSUM WALL BOARD AT UNFINISHED AREAS) (WPS = WALL PANEL SYSTEM)	
WT-1	DALTILE; 12"X24" PORCELAIN WALL TILE; SOCIETY; MONUMENT WHITE S045; SEE ELEVATIONS FOR PATTERN; GROUT COLOR TO BE SELECTED BY ARCHITECT.
WT-2	AMERICAN OLEAN; 2"X8" GLOSSY PORCELAIN WALL ACCENT TILE; CONRAD BRICK; MARINE CB86; SEE ELEVATIONS FOR PATTERN; GROUT COLOR TO BE SELECTED BY ARCHITECT.
FRP-1	FRP TRIM ACCESSORIES TO MATCH PANEL COLOR.
GWB-2	5/8" TYPE 'X' GYPSUM WALL BOARD PARTITIONS (INCLUDING EXTERIOR); ONLY TAPE AND FLOAT GWB. SURFACE TO REMAIN UNFINISHED.
WPS-1	WALL PANEL SYSTEM 1: 1/2" GRADE 'A' SANDED PLYWOOD W/ BEECH VENEER ON EXPOSED SIDE. FINISH W/ STAIN ST-1 AS SCHEDULED. MOUNTED ON 1/4" ALUM. Z-CLIPS.
SOLID SURFACE (QS = QUARTZ SURFACE) (P.LAM = PLASTIC LAMINATE)	
QS-1	HANSTONE QUARTZ; SPECCHIO WHITE CT402.
P.LAM-1	WILSONART; 8229K-79 FRISTON ASH; RIDGEWOOD TEXTURE FINISH W/ AEON STRATCH RESISTANCE. VERTICAL GRAIN ORIENTATION U.N.O.
PAINT (P = PAINT)	
P-1	PPG 0965-3 SILVER BAND; EGGSHELL FINISH. FOR USE AT ALL INTERIOR WALLS U.N.O.
P-2	PPG 0963-5 SUPERHERO GRAY; SATIN FINISH. FOR USE AT WAINSCOT TRIM.
P-3	PPG 0965-1 SHADED WHISPER; SEMI-GLOSS FINISH. FOR USE AT ALL DOOR AND WINDOW CASINGS AND INTERIOR DOOR JAMBS U.N.O.
P-4	PPG 1002-1 SILVER FEATHER; FLAT FINISH. FOR USE AT ALL GWB CEILINGS AND SOFFITS U.N.O.
P-5	PPG 0965-1 SHADED WHISPER; FLAT FINISH. FOR USE AT ALL EXTERIOR FIBER CEMENT TRIM, BEADBOARD CEILINGS, FIBERGLASS COLUMNS U.N.O.
P-6	PPG 1076-5 LOCOMOTION. FOR USE AT EXTERIOR BRACKETS.
P-7	PPG. COLOR TO MATCH ALUMINUM STOREFRONT FINISH FINISH. FOR USE AT EXTERIOR HM DOORS AND FRAMES U.N.O.
P-8	PPG 0965-7 STARLESS SKY; FLAT FINISH. FOR USE AT REVEAL JOINTS WHERE INDICATED U.N.O.
ST-1	ALL INTERIOR FLUSH WOOD DOORS; MASONITE ASPIRO SERIES; STAIN COLOR: HONEY.
MISCELLANEOUS (MTS = METAL TRANSITION STRIP; EP = EDGE PROTECTION)	
MTS-1	SCHLUTER SYSTEMS; 1" PROFILE TRANSITION FLOOR TRIM. COORDINATE TRIM HEIGHT/DEPTH AS REQUIRED WITH FLOOR FINISH THICKNESSES.
EP-1	SCHLUTER SYSTEMS; ROUNDED EDGE. FOR USE AT TRANSITION FROM PB-1 TILE BASE TO GWB WALL AND WHERE INDICATED ON DRAWINGS.
EP-2	SCHLUTER SYSTEMS; ROUNDED OUTSIDE CORNER. FOR USE AT ALL OUTSIDE CORNERS AT WALL TILE U.N.O.
CEILINGS (GWB) = GYPSUM WALL BOARD) (APC = ACOUSTICAL PANEL CEILING) (BBD = BEADBOARD CEILING)	
APC-1	USG; MARS CLIMAPLUS; WHITE; 24"X24" LAY-IN ACOUSTICAL PANEL SYSTEM W/ WHITE DX SQUARE EDGE SUSPENSION GRID.
APC-2	USG; TRUE WOOD LINEAR PLANKS; 6" X 8". ACOUSTICAL W/ 3/4" REVEALS BETWEEN PANELS; BEECH WOOD VENEER FINISH FROM MANUFACTURER'S FULL RANGE. SEE RCP'S FOR PLANK ORIENTATION AND COORDINATION WITH MEP DEVICES AND ACCESSORIES.
GWB-1	5/8" TYPE 'X' GYPSUM WALL BOARD CEILINGS AND SOFFITS; FINISH AS SCHED.
GWB-2	5/8" TYPE 'X' GYPSUM WALL BOARD CEILING- ONLY TAPE AND FLOAT GWB. SURFACE TO REMAIN UNFINISHED.
BBD-1	FIBER CEMENT PANEL; BEADED SOFFIT PANEL; SEE DRAWINGS FOR ORIENTATION AND FINISH.

FINISH SYMBOL LEGEND

	FLOOR TILE		CARPET TILE - CPT-1
	FLOOR TILE- STATIC GUARD		CARPET TILE - CPT-2
	SEALED CONCRETE		CARPET TILE - CPT-3
			UNFINISHED- FUTURE

GENERAL NOTES - FINISH PLAN

- GC TO PROVIDE COMPLIANCE DATA THAT INTERIOR WALL AND CEILING FINISHES COMPLY WITH CLASSIFICATION B; FLAME SPREAD 28-75 AND SMOKE DEVELOPED 0-450 FOR VERTICAL EXITS, EXIT PASSAGEWAYS, EXIT ACCESS CORRIDORS AND OTHER EXITWAYS.
- GC TO PROVIDE COMPLIANCE DATA THAT INTERIOR WALL AND CEILING FINISHES COMPLY WITH CLASSIFICATION C; FLAME SPREAD 75-200 AND SMOKE DEVELOPED 0-450 FOR ROOMS AND ENCLOSED SPACES.
- GC TO PROVIDE COMPLIANCE DATA FOR INTERIOR FLOOR FINISHES THAT SHOWS COMPLIANCE WITH NC 804.
- FLOOR FINISHES MUST MEET SLIP RESISTANCE REQUIREMENT OF 0.60 WET, AND BE A MINIMUM OF CLASS II PER NFPA 253.
- TRANSITION OF DIFFERING FLOORING MATERIALS BETWEEN ROOMS TO OCCUR AT THE CENTER OF THE DOOR LEAF.
- SEALANTS AND CAULKING ARE TO MATCH THE DOMINANT SURFACE IN WHICH THEY OCCUR U.N.O., SAMPLE OF SEALANTS ARE TO BE SUBMITTED TO ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.
- GC TO VERIFY ALL FINISHED WITH OWNER AND ARCHITECT PRIOR TO PROCUREMENT.
- IN AREAS WITH ANY PORTION OF EXPOSED STRUCTURAL ABOVE, THE WALL FINISHES SHALL EXTEND TO UNDERSIDE OF STRUCTURE.
- ALL UNIDENTIFIED COLORS AND FINISHES SHALL BE SELECTED AND APPROVED BY ARCHITECT THROUGH THE SUBMITTAL PROCESS.
- RECESSED WIREWAYS, ACCESS PANELS, GRILLES, ELECTRICAL PANELS, AND ALL OTHER SUCH ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DEVICES SHALL BE FINISHED TO MATCH ADJACENT WALL OR CEILING SURFACE, U.N.O.

SCHEDULE 1 ROOM FINISH SCHEDULE

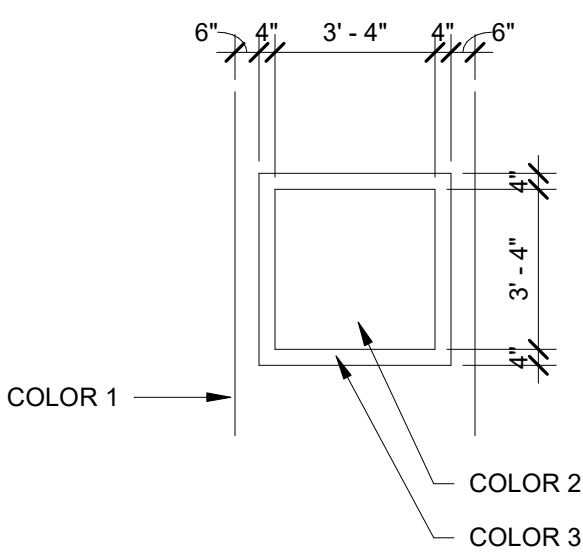
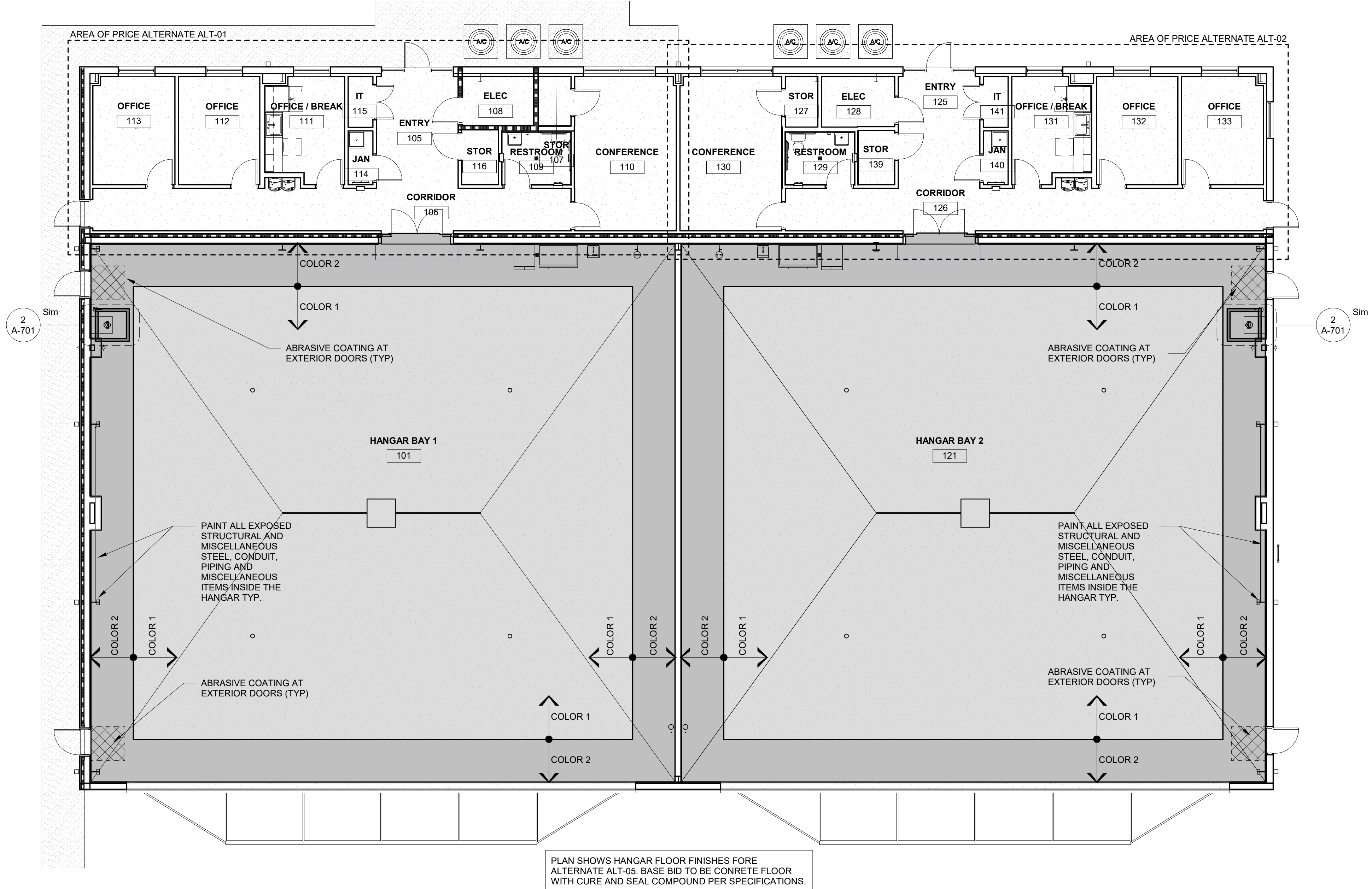
NUMBER	NAME	BASE	FLOORING	WALL FINISH			CEILING	REMARKS
				NORTH WALL	EAST WALL	WEST WALL		
101	HANGAR BAY 1							
108	ELEC							
109	RESTROOM							
121	HANGAR BAY 2							
129	RESTROOM							

SCHEDULE 1 ROOM FINISH SCHEDULE - ALT-01

NUMBER	NAME	BASE	FLOORING	WALL FINISH			CEILING	REMARKS
				NORTH WALL	EAST WALL	SOUTH WALL		
105	ENTRY							
106	CORRIDOR							
107	STOR							
110	CONFERENCE							
111	OFFICE / BREAK							
112	OFFICE							
113	OFFICE							
114	JAN							
115	IT							
116	STOR							

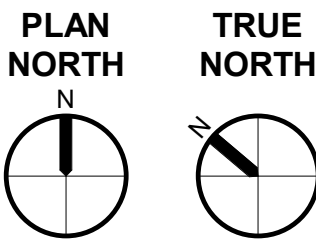
SCHEDULE 1 ROOM FINISH SCHEDULE - ALT-02

NUMBER	NAME	BASE	FLOORING	WALL FINISH			CEILING	REMARKS
				NORTH WALL	EAST WALL	SOUTH WALL		
125	ENTRY							
126	CORRIDOR							
127	STOR							
128	ELEC							
130	CONFERENCE							
131	OFFICE / BREAK							
132	OFFICE							
133	OFFICE							
139	STOR							
140	JAN							
141	IT							



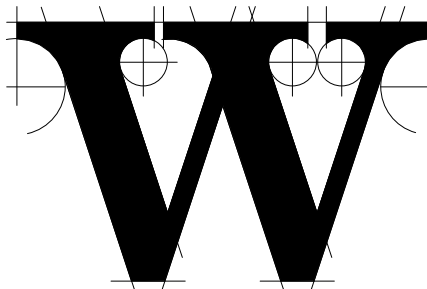
2 W.F.E. FLOOR MARKING DETAIL
1/4" = 1'-0"

1 FINISH PLAN - ALTERNATE ALT-05
1/8" = 1'-0"



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2-Unit Box Hangar

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PHONE: 910-454-4210
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WATER & SEWER ENGINEER

WITHERSRAVENEL

219 STATION ROAD, SUITE 101
WILMINGTON, NC 28405
PHONE: 910-256-9277 LICENSE NO. F-1479

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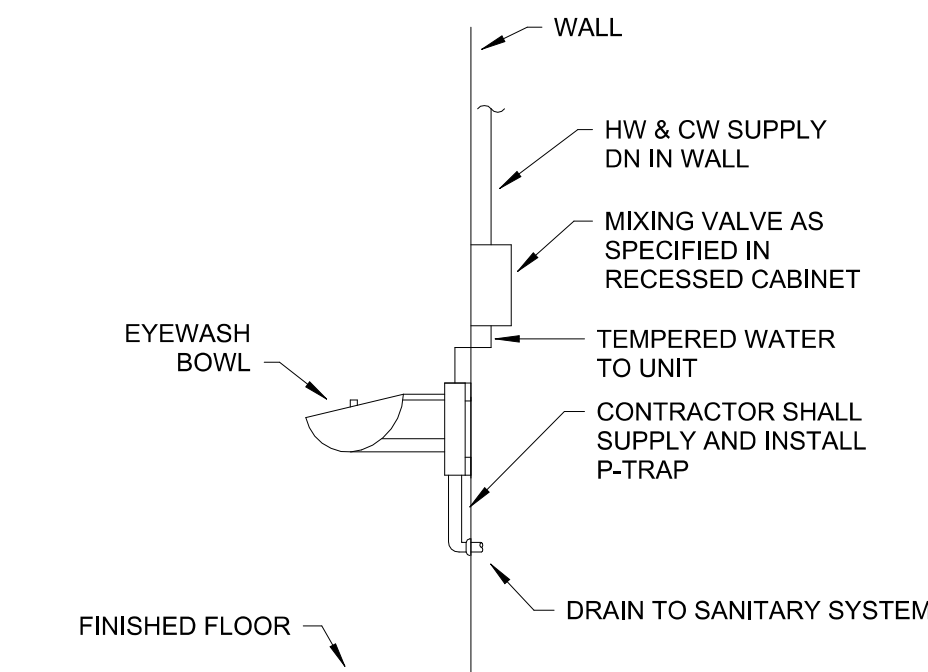
REVISIONS

DATE 01/17/2025
PROJECT NUMBER 2024
SHEET TITLE

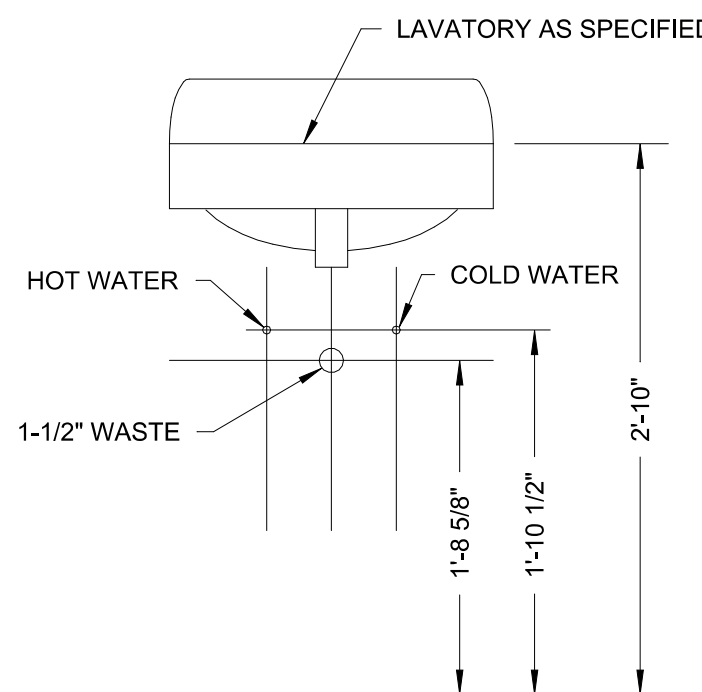
FINISH PLAN

SHEET NUMBER

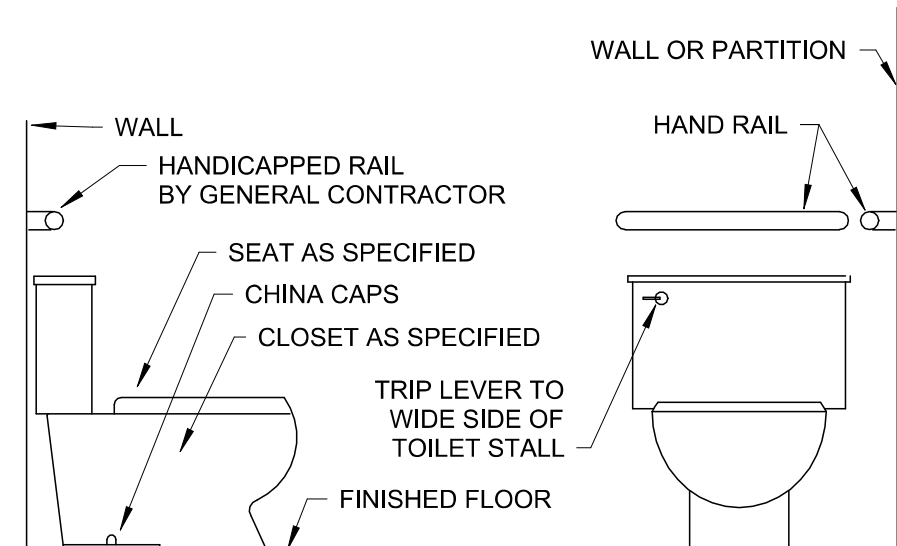
A-701



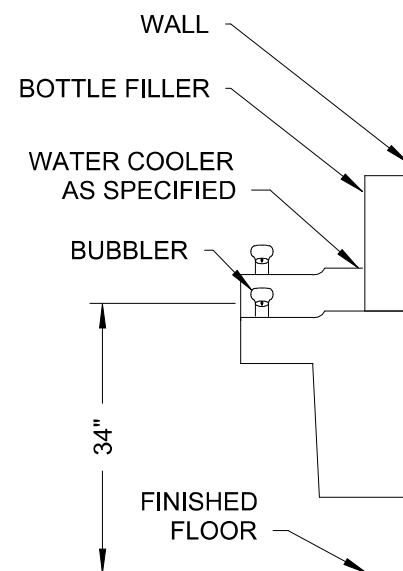
A EEW-1
P-001
EMERGENCY EYEWASH (EEW-1) DETAIL
SCALE: NONE



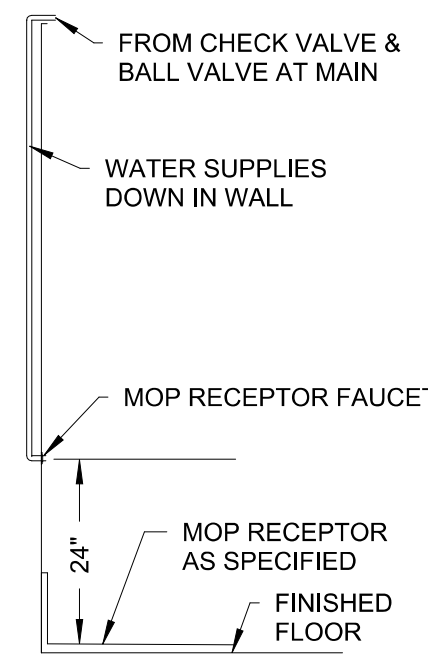
C L-1
P-001
ADULT ADA LAVATORY (L-1) DETAIL
SCALE: NONE



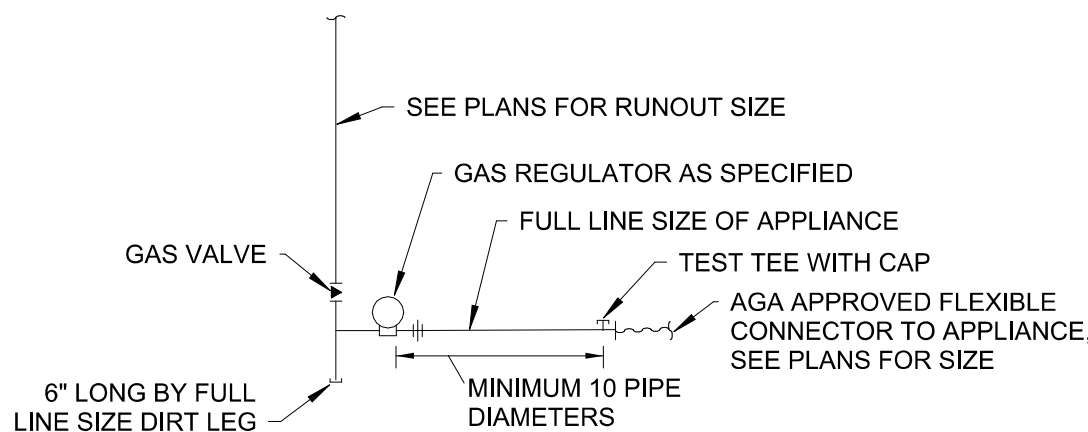
B WC-1
P-001
ADULT ADA WATER CLOSET (WC-1) DETAIL
SCALE: NONE



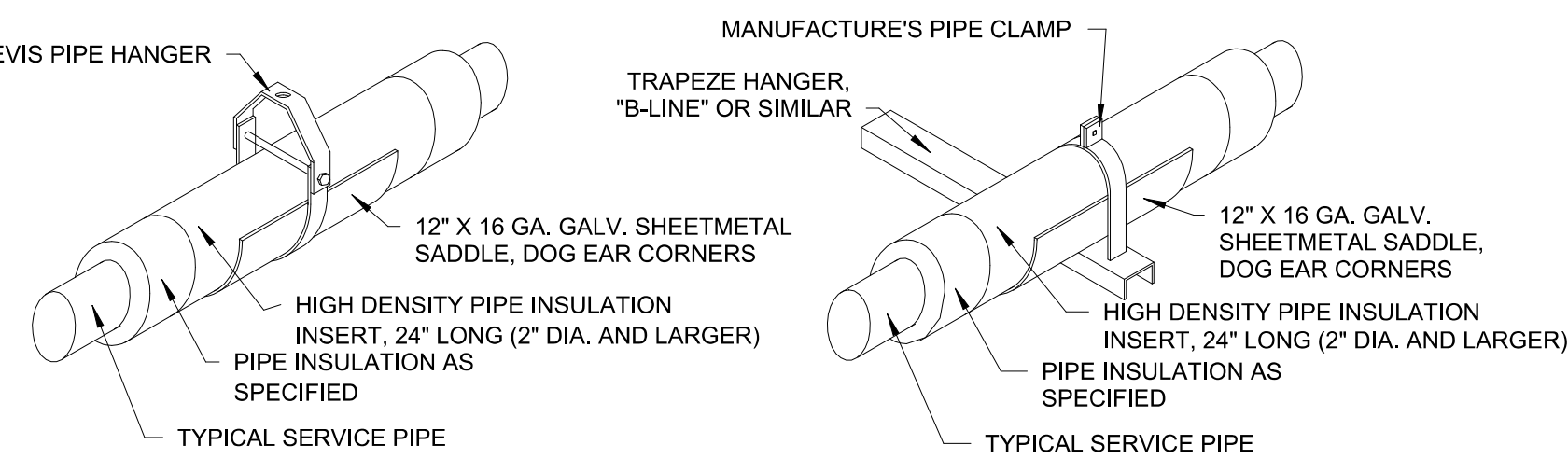
D EWC-1
P-001
ADULT DUAL HEIGHT EWC (EWC-1) DETAIL
SCALE: NONE



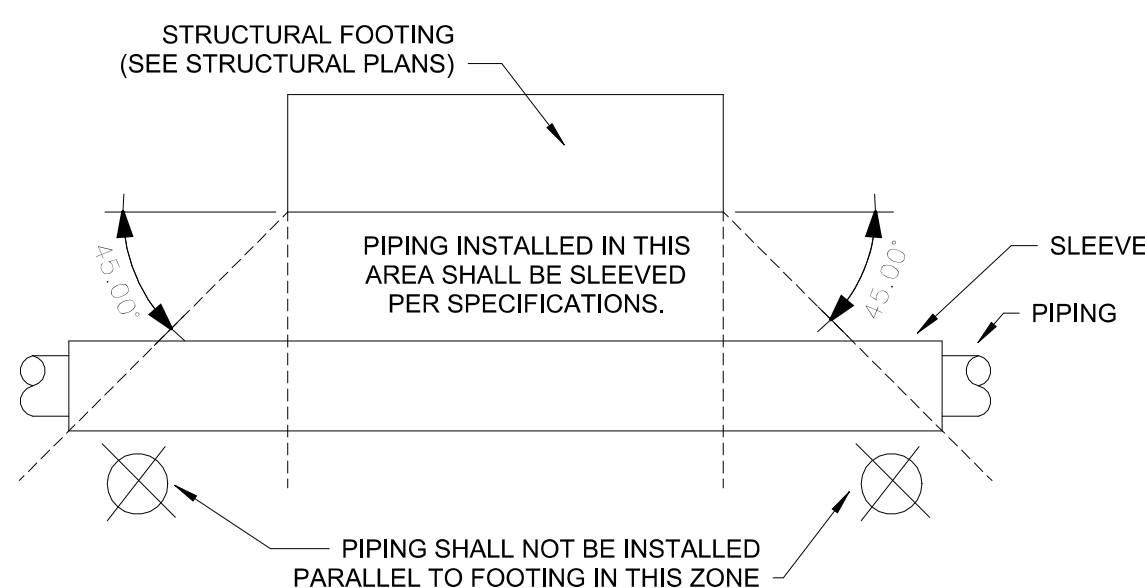
E MR-1
P-001
MOP RECEPTOR (MR-1) DETAIL
SCALE: NONE



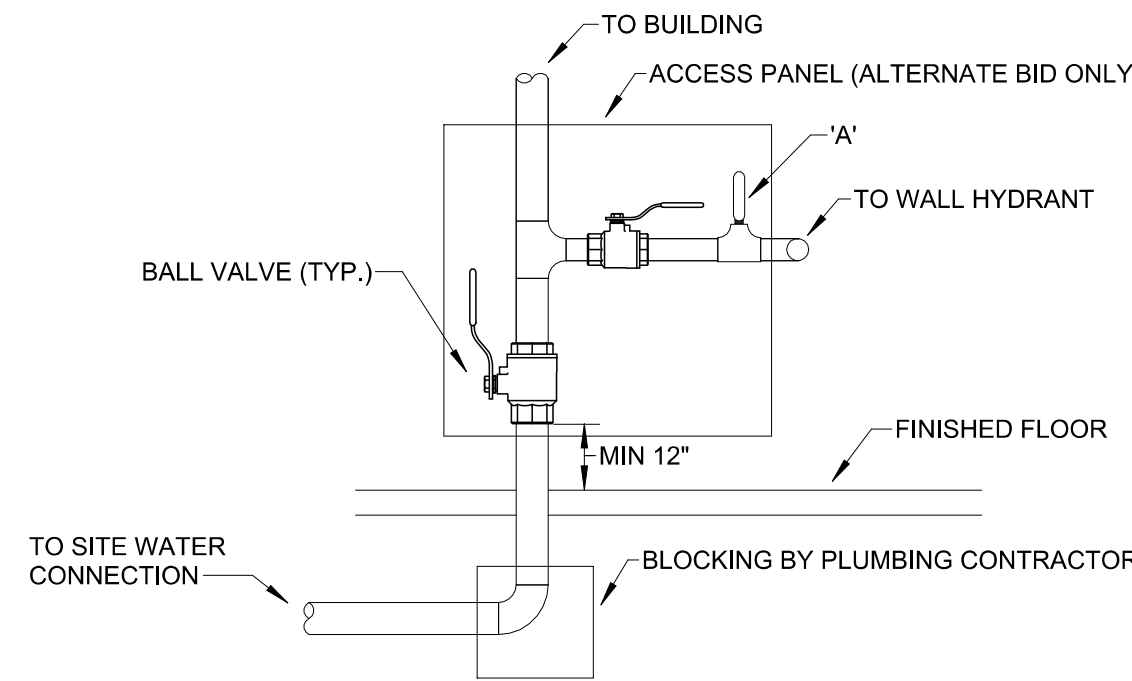
F P-001
TYPICAL GAS PIPING CONNECTION
SCALE: NO SCALE



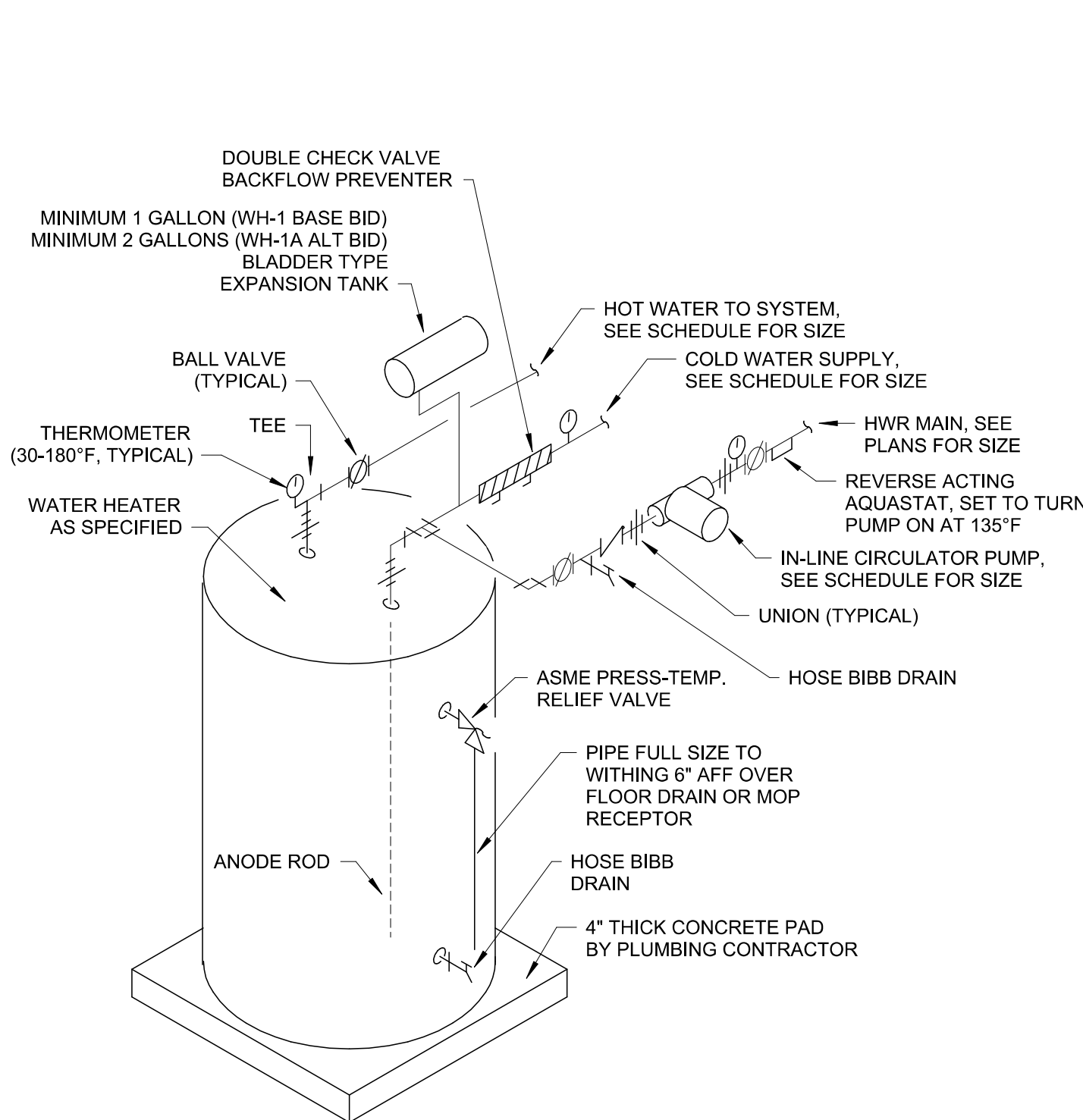
G P-001
PIPE HANGER DETAILS
SCALE: NONE



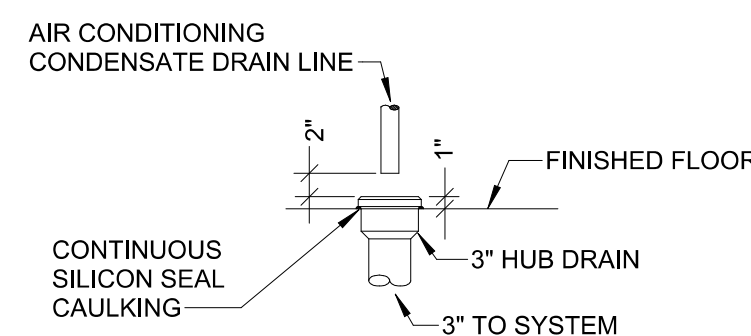
H P-001
PIPING UNDER FOOTINGS
SCALE: NO SCALE



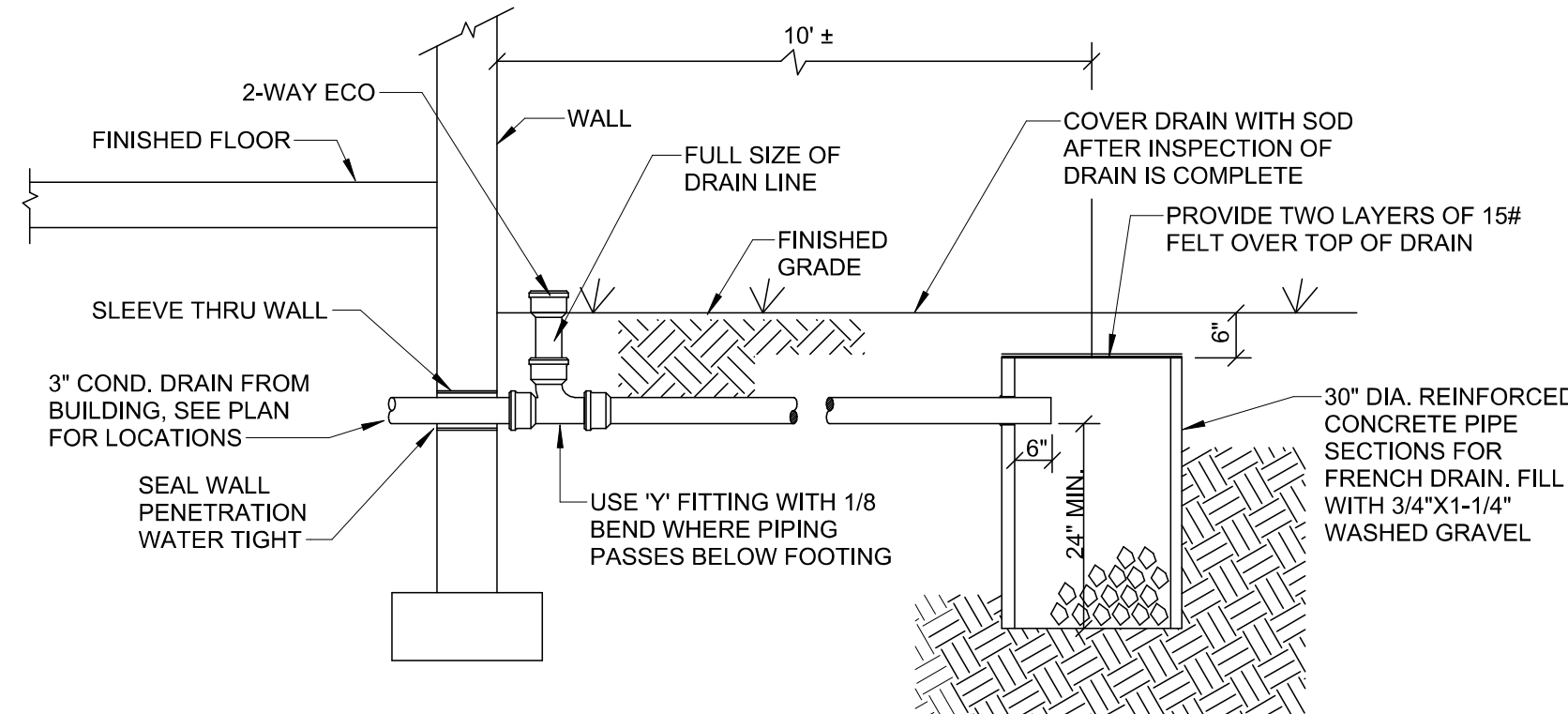
J P-001
DOMESTIC WATER ENTRANCE DETAIL
SCALE: NONE



L P-001
WATER HEATER (WH-1 & WH-1A) PIPING DETAIL
SCALE: NONE



K HD-1
P-001
HUB DRAIN (HD-1) DETAIL
SCALE: NONE



M P-001
CONDENSATE FRENCH DRAIN DETAIL
SCALE: NONE

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	ROUGH-IN SIZES			REMARKS
		WASTE	C.W.	H.W.	
WC-1	WATER CLOSET	4"	1/2"	-	ADULT ADA/DETAIL B/P-001
L-1	LAVATORY	1-1/2"	1/2"	1/2"	ADULT ADA/DETAIL C/P-001
HB-1	WALL HYDRANT	-	3/4"	-	MOUNT 24" AFG
HB-2	HOSE BIBB	-	1/2"	-	MOUNT 12" AFF
FD-1	FLOOR DRAIN	2"	-	-	
FD-2	FLOOR DRAIN	4"	-	-	
FS-1	FLOOR SINK	3"	-	-	1/2 GRATE
TD-1	TRENCH DRAIN	4"	-	-	
SK-1	UTILITY SINK	1-1/2"	1/2"	1/2"	
SK-2*	BREAKROOM SINK	1-1/2"	1/2"	1/2"	UNDERMOUNT
CB-1	ICE MAKER CONNECTION BOX	-	1/2"	-	
EWC-1*	ELECTRIC WATER COOLER	1-1/2"	1/2"	-	DUAL HEIGHT, ADULT/DETAIL D/P-001
MR-1*	MOP RECEPTOR	3"	1/2"	1/2"	36"x36"/DETAIL E/P-001
HD-1	HUB DRAIN	3***	-	-	DETAIL K/P-001
EEW-1	EMERGENCY EYEWASH	1-1/4"	1/2"	1/2"	WALL MOUNTED/ DETAIL A/P-001

* INDICATES FIXTURE IS PART OF ALTERNATE BID PACKAGE
** INDICATES FIXTURE SHALL BE DISCHARGE TO FRENCH DRAIN, SEE DETAIL M/P-001

NOTE: MIXING VALVES SHALL BE PROVIDED AT ALL LAVATORIES AND SINKS. SEE SPECIFICATIONS.

WATER HEATER SCHEDULE

SYMBOL	DESCRIPTION	ROUGH-IN SIZES		TEMP. SETTING	STORAGE CAPACITY	RECOVERY	FUEL	LOAD	ELEC.	DETAIL
		C.W.	H.W.							
WH-1	TANK TYPE ELECTRIC WATER HEATER	3/4"	3/4"	140°F	10 GAL.	8 GPH	ELECTRIC	2kW	120V, 1Ø	L/P-001
WH-1A*	TANK TYPE ELECTRIC WATER HEATER	3/4"	3/4"	140°F	30 GAL.	27 GPH	ELECTRIC	6kW	240V, 1Ø	L/P-001

* INDICATES WATER HEATER IS PART OF ALTERNATE BID PACKAGE

CIRCULATOR PUMP SCHEDULE

SYMBOL	GPM	THD	ELECTRICAL		LOCATION	SERVICE	CONTROL
			HP	VOLTAGE			
CP-1*	1	6	1/4Ø	115 V., 1Ø	HANGAR BAY	HOT WATER RETURN	AQUASTAT/TIME CLOCK

* INDICATES PUMP IS PART OF ALTERNATE BID PACKAGE

PROPANE GAS REGULATOR SCHEDULE

SYMBOL	LOCATION	SERVING	CAPACITY			REMARKS
			CFH	INLET PRESSURE	OUTLET PRESSURE	
REG 1	HANGAR BAY 1	IRH-1	100	2 PSIG	11" W.C.	LIMITED VENTING
REG 2	HANGAR BAY 2	IRH-2	100	2 PSIG	11" W.C.	LIMITED VENTING

LEGEND

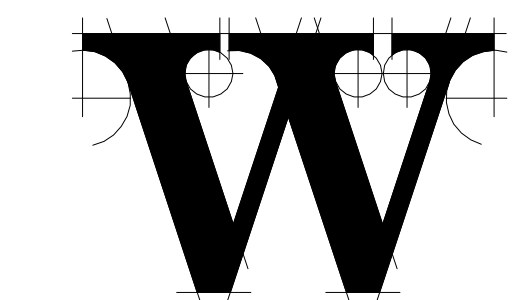
W	WASTE PIPING
V	VENT PIPING
C	CONDENSATE PIPING
WO	WASTE OIL PIPING
CW	COLD WATER PIPING
HW	HOT WATER PIPING
HWR	HOT WATER RETURN PIPING
G	PROPANE GAS PIPING
1/2"	BALL/BUTTERFLY VALVE
1/2"	CHECK VALVE
1/2"	VALVE IN RISE
1/2"	PIPE ELBOW TURNED DOWN
1/2"	PIPE ELBOW TURNED UP
1/2"	PIPE TEE TURNED DOWN
1/2"	PIPE TEE TURNED UP
1/2"	UNION
1/2"	STRAINER
1/2"	DOUBLE CHECK VALVE BACKFLOW PREVENTER
1/2"	REDUCED PRESSURE BACKFLOW PREVENTER
1/2"	SHOCK ARRESTER, 'A' INDICATES PLUMBING DRAINAGE INSTITUTE STANDARD SIZE
1/2"	ASME PRESSURE TEMPERATURE RELIEF VALVE
VTR	VENT THRU ROOF
CO	CLEANOUT
ECO	EXTERIOR CLEANOUT
WCO	WALL CLEANOUT
HDFCO	HEAVY DUTY FLOOR CLEANOUT
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
INV.	INVERT ELEVATION
CONT.	CONTINUATION
CONTR.	CONTRACTOR
MECH.	MECHANICAL
EQ	EQUIPMENT

NUMBER INDICATES PLAN OR SECTION
LETTER INDICATES ELEVATION OR DETAIL
SHEET NUMBER WHERE PLAN, SECTION, ELEVATION OR DETAIL IS DRAWN



Schedule 1: 2-Unit Box Hangar

Lumberton Regional Airport
Lumberton, NC 28358



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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 3105-2401
SHEET TITLE

PLUMBING LEGEND, SCHEDULES, AND DETAILS

SHEET NUMBER

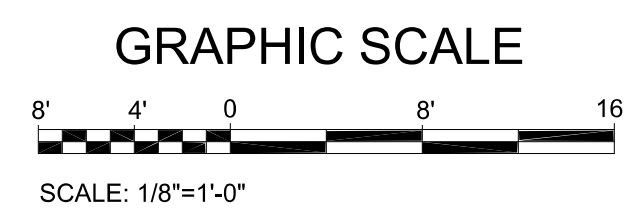
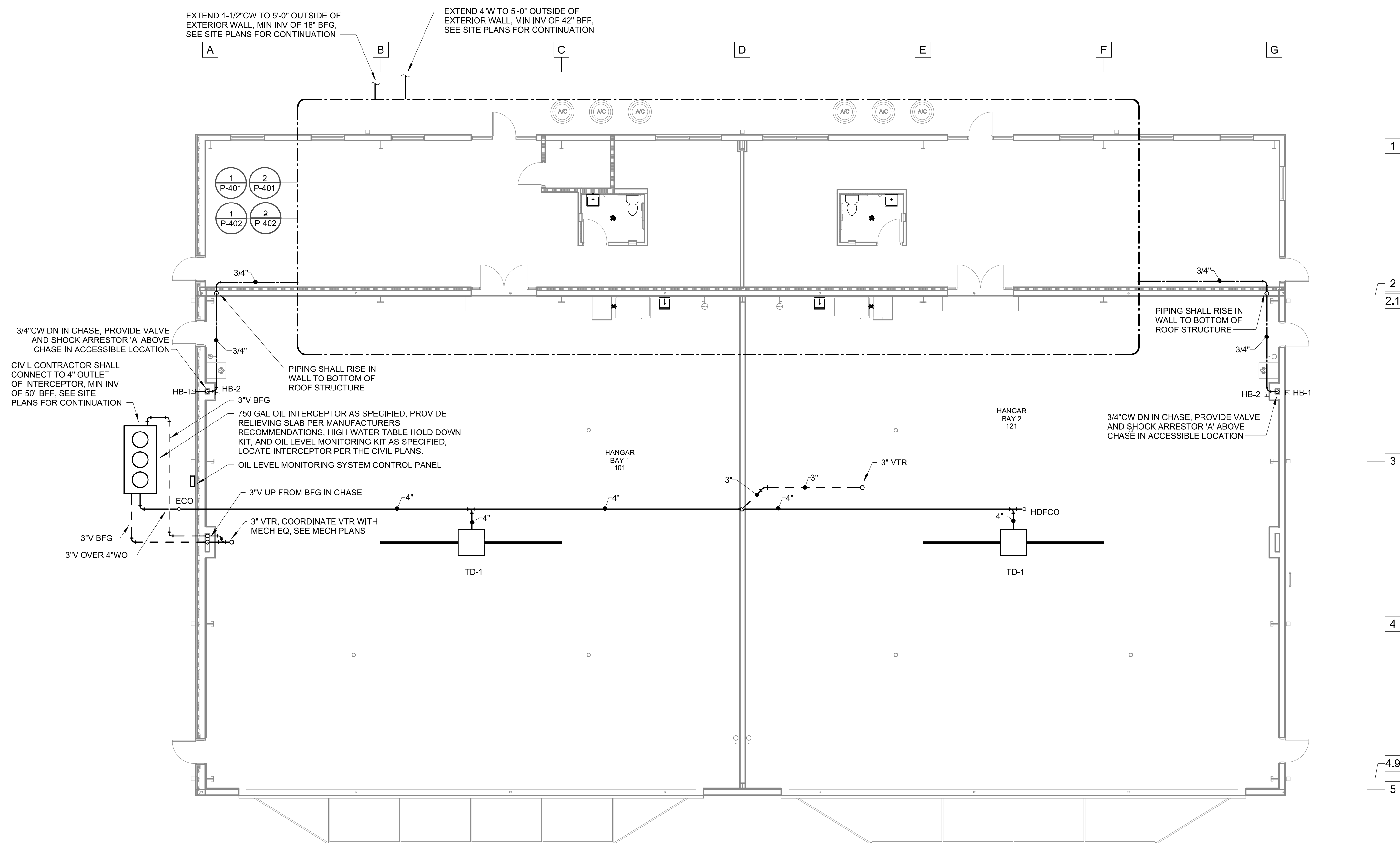
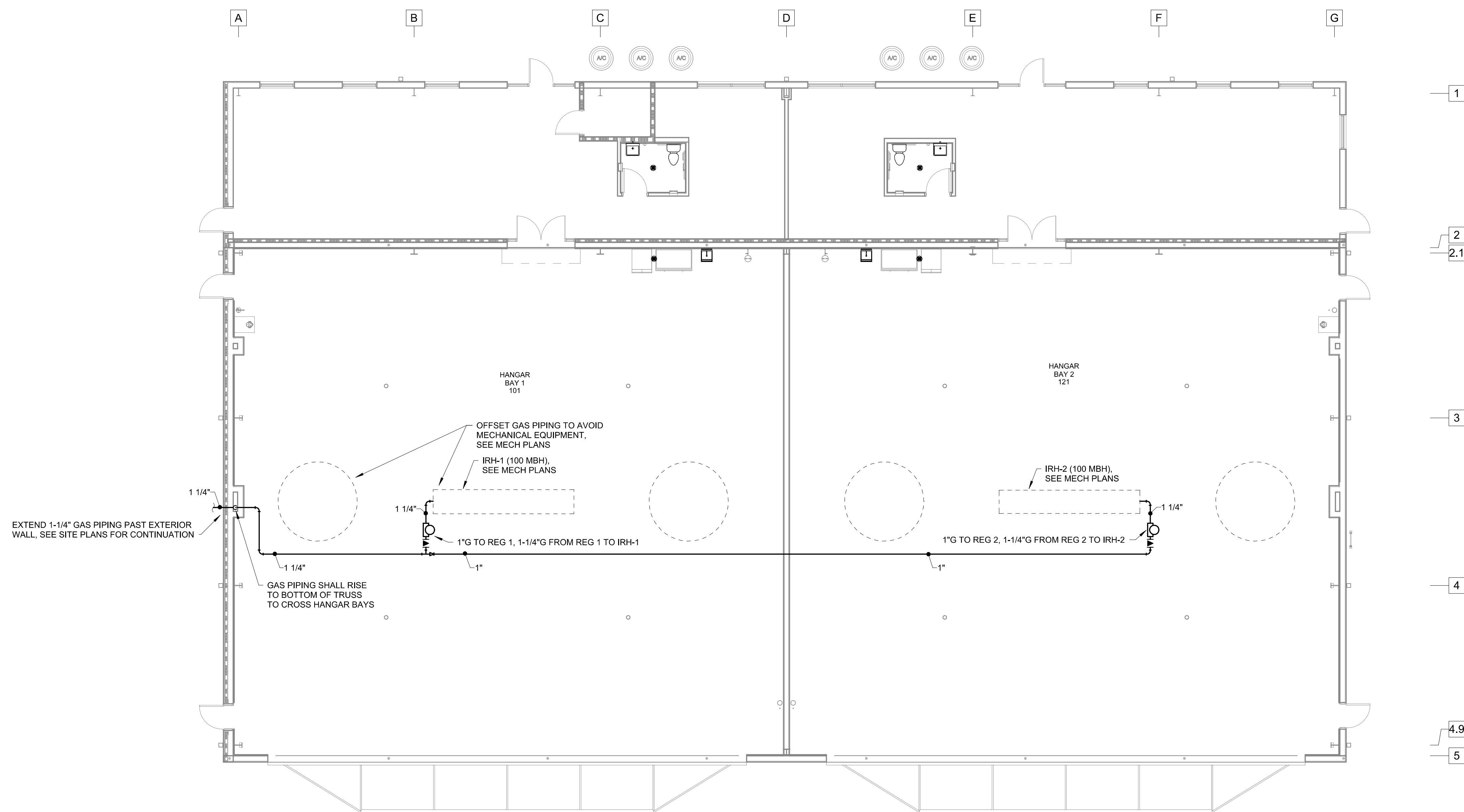
P-001

TOTAL CONNECTED LOAD BASE BID

WASTE FIXTURE UNITS =	18	F.U.
WASTE OIL FIXTURE UNITS =	4	F.U.
TOTAL WASTE FIXTURE UNITS =	22	F.U.
COLD WATER DEMAND =	27.7	GPM
HOT WATER DEMAND =	10.7	GPM
PROPANE GAS DEMAND =	200	CFH

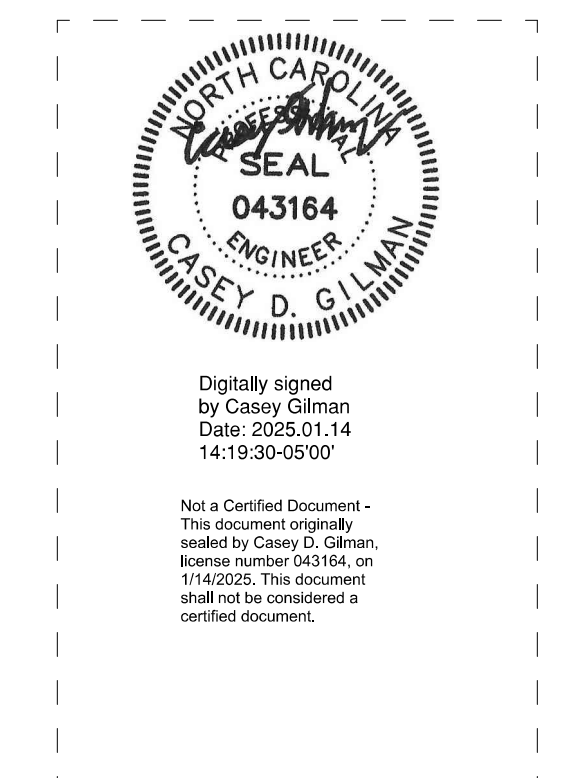
TOTAL CONNECTED LOAD ALTERNATE BID

WASTE FIXTURE UNITS =	27	F.U.
WASTE OIL FIXTURE UNITS =	4	F.U.
TOTAL WASTE FIXTURE UNITS =	31	F.U.
COLD WATER DEMAND =	35	GPM
HOT WATER DEMAND =	18.4	GPM
PROPANE GAS DEMAND =	200	CFH



PARTITION LEGEND	
	NON RATED WALL
	1 HOUR RATED PARTITION
	2 HOUR RATED PARTITION

NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.



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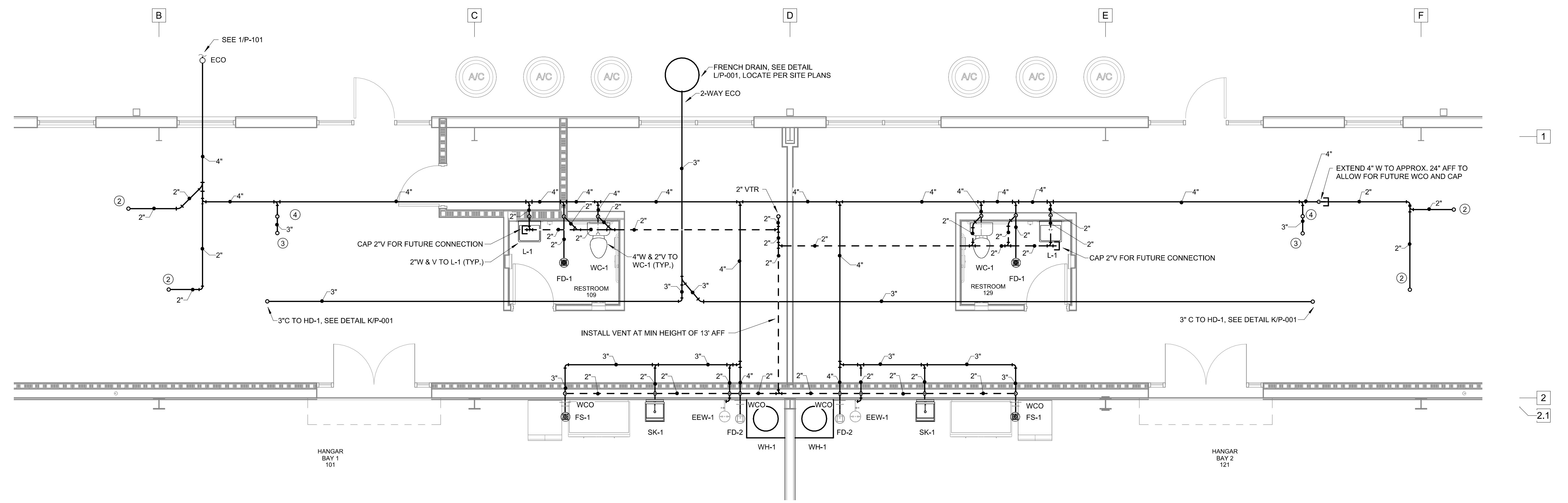
REVISIONS

DATE 01/17/2025
PROJECT NUMBER 3105-2401
SHEET TITLE

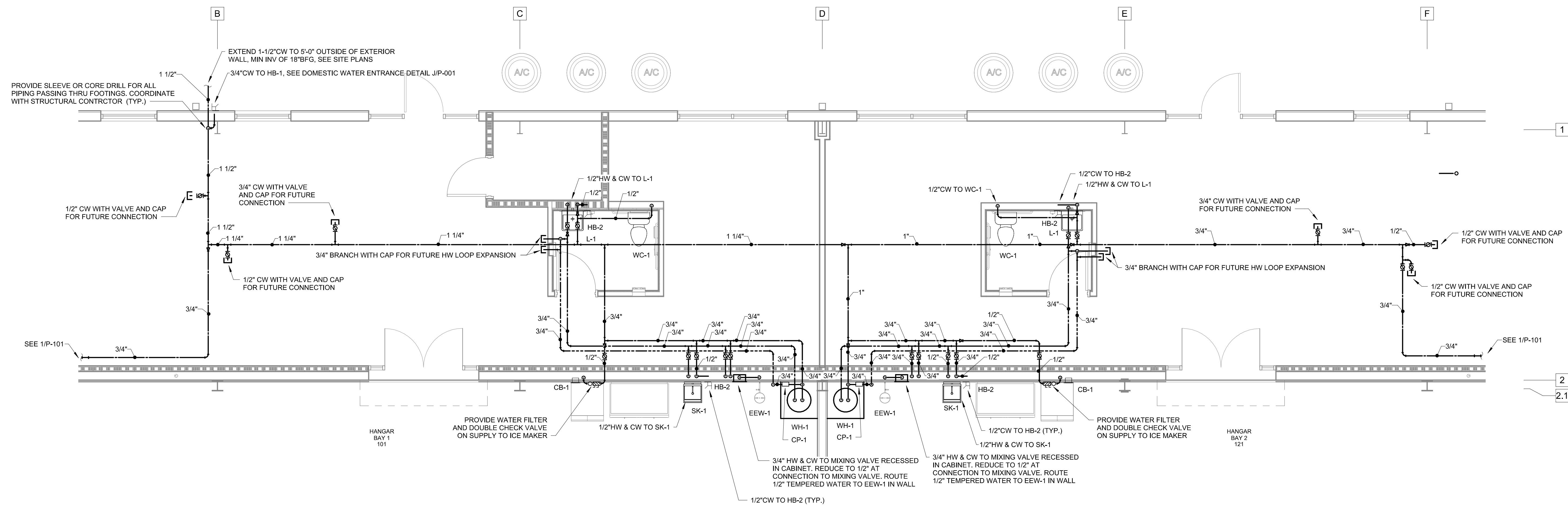
**ENLARGED
PLUMBING - BASE
BID**

SHEET NUMBER
P-401

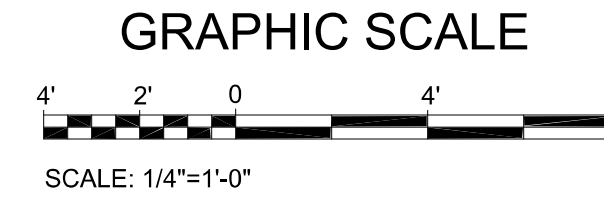
- KEYED NOTES:** (THIS SHEET ONLY)
- ① CAP 4" W AFF FOR FUTURE WATER CLOSET CONNECTION.
 - ② CAP 2" W AFF FOR FUTURE CONNECTION.
 - ③ CAP 3" W AFF FOR FUTURE MOP RECEPTOR CONNECTION.
 - ④ CAP 2" V AFF FOR FUTURE VENT CONNECTION.



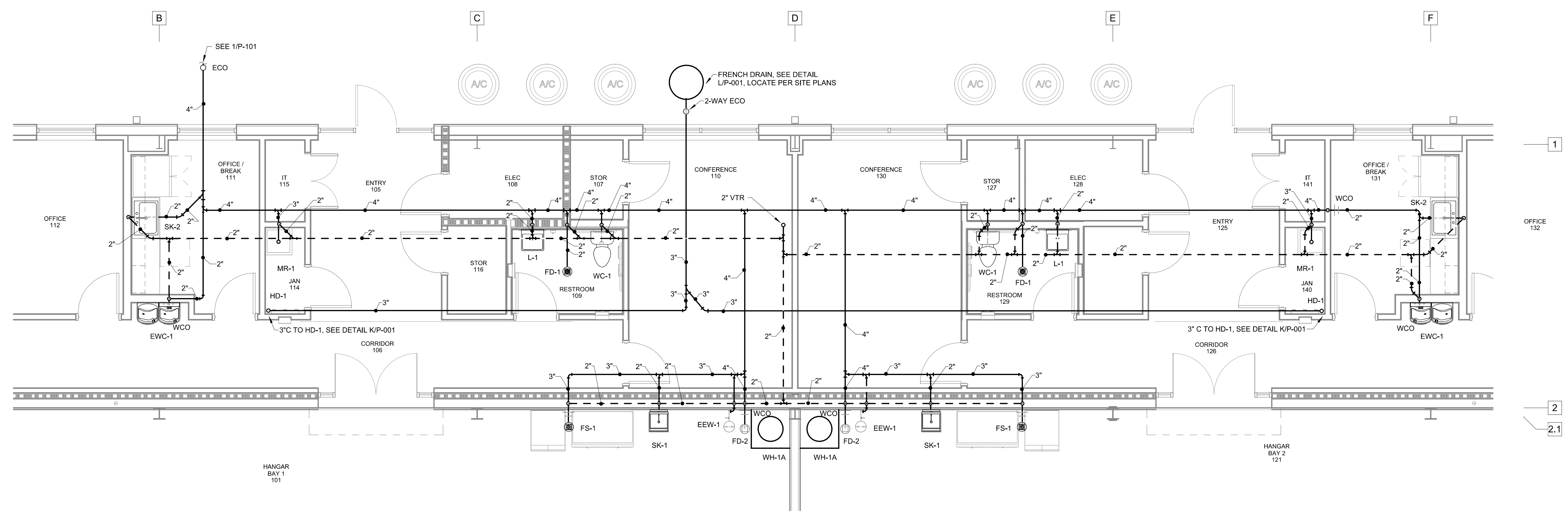
1 ENLARGED WASTE AND VENT - BASE BID
SCALE: 1/4" = 1'-0"



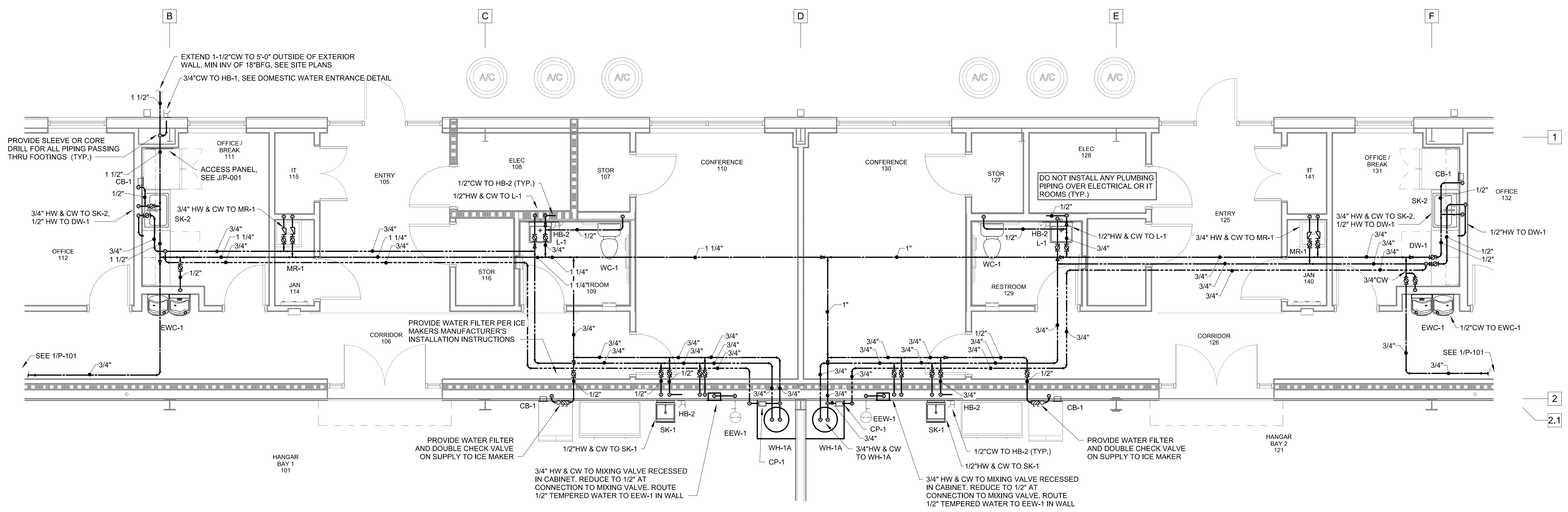
2 ENLARGED DOMESTIC WATER - BASE BID
SCALE: 1/4" = 1'-0"



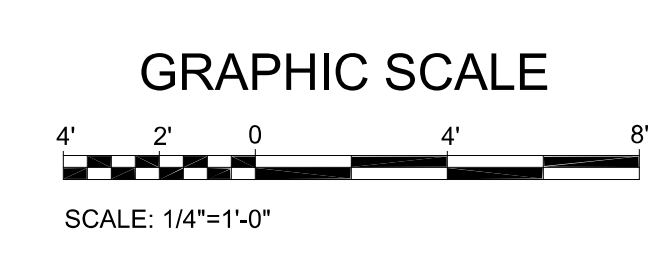
PARTITION LEGEND	
	NON RATED WALL
	1 HOUR RATED PARTITION
	2 HOUR RATED PARTITION
NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.	



1 ENLARGED WASTE & VENT - ALTERNATE BID
SCALE: 1/4" = 1'-0"



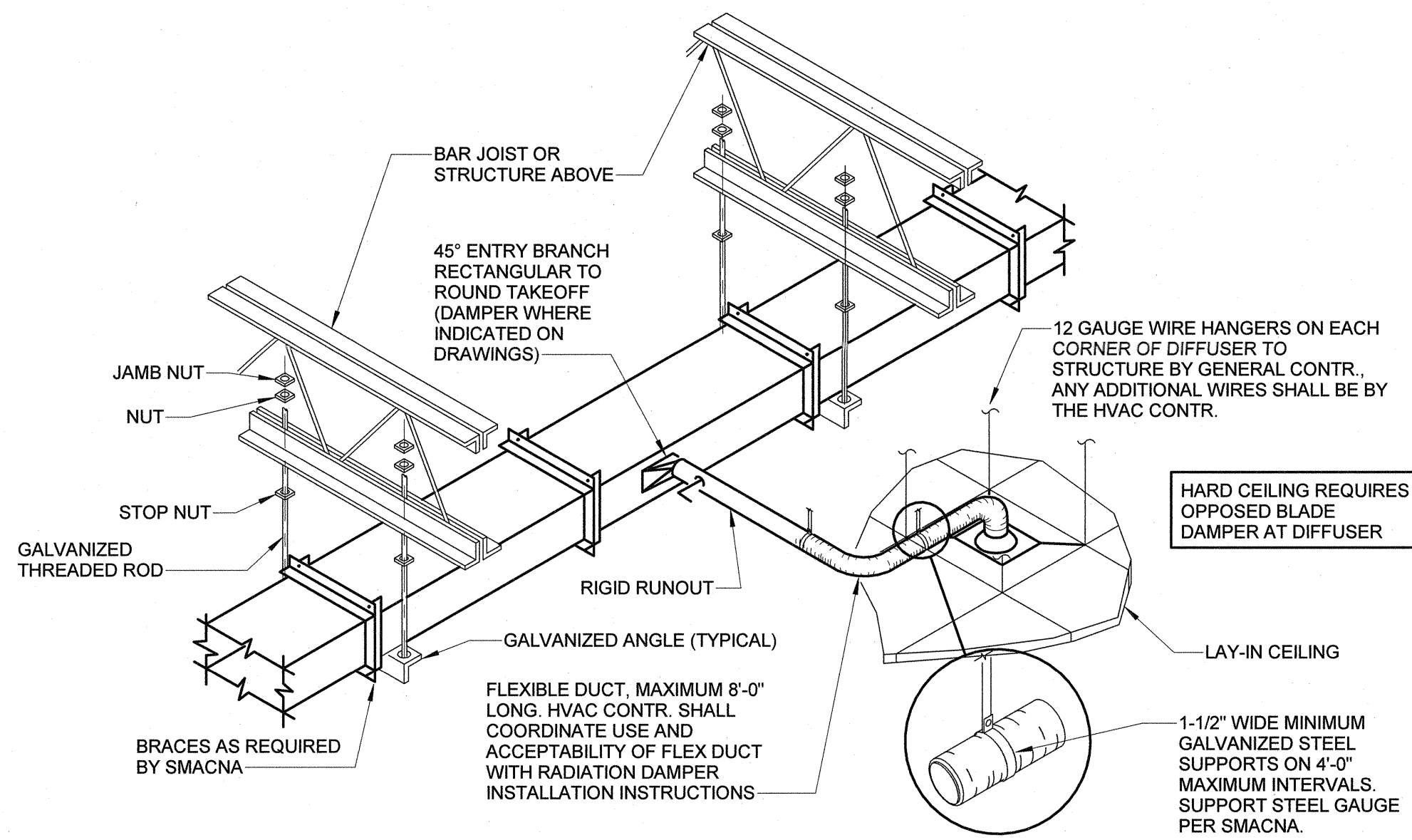
2 ENLARGED DOMESTIC WATER - ALTERNATE BID
SCALE: 1/4" = 1'-0"



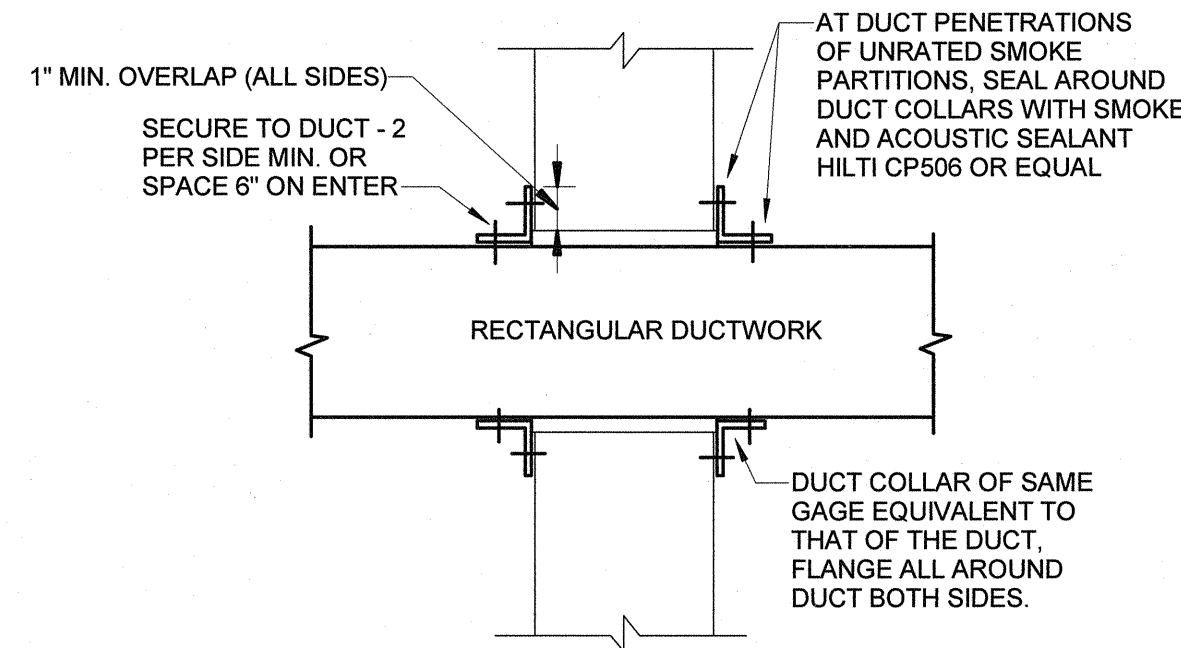
PARTITION LEGEND

	NON RATED WALL
	1 HOUR RATED PARTITION
	2 HOUR RATED PARTITION

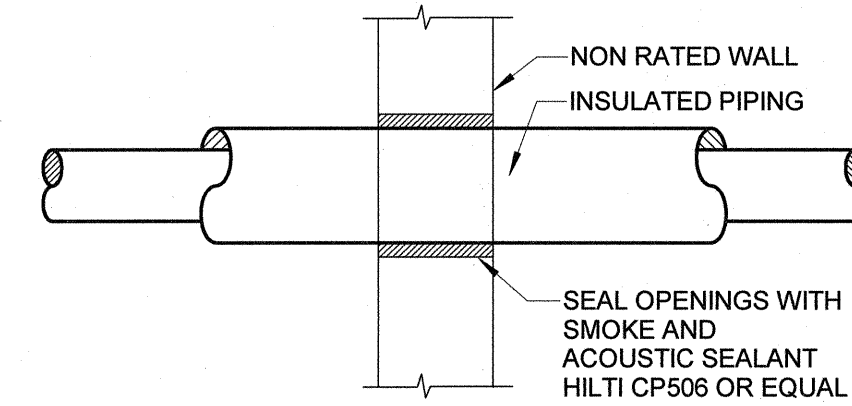
NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.



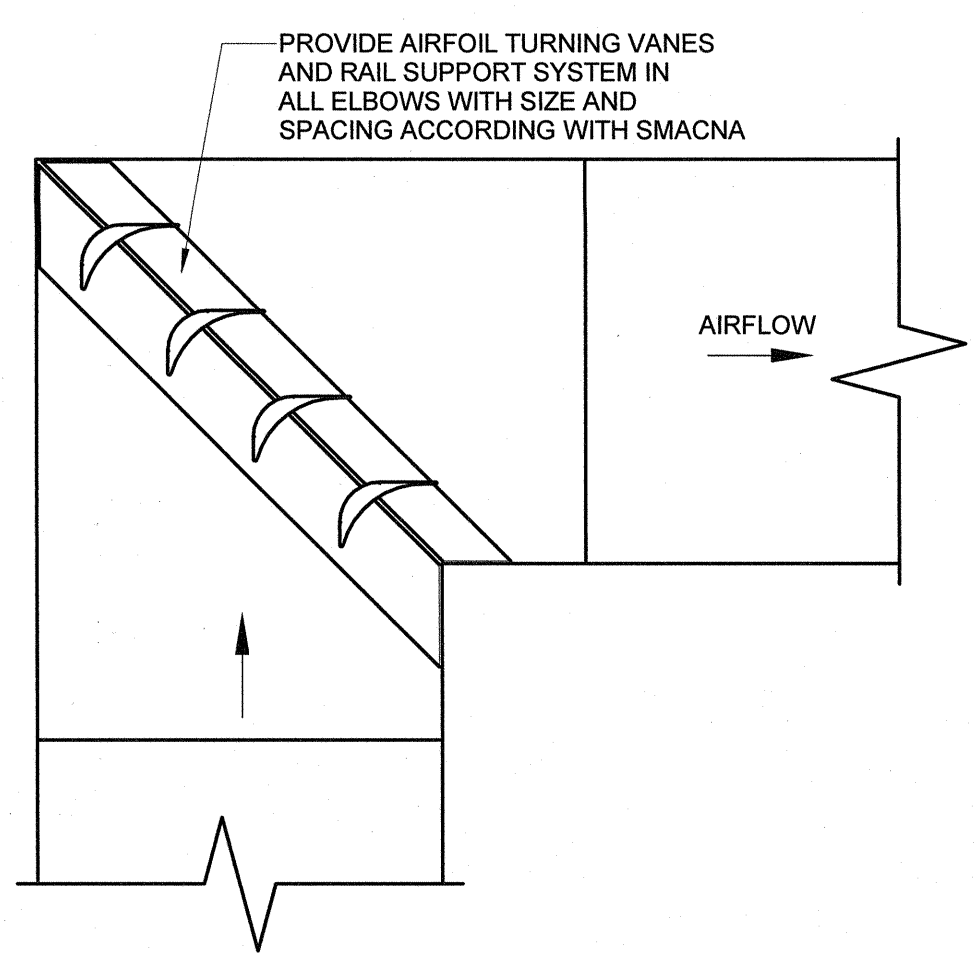
A TYPICAL SUPPLY DUCT DETAIL
SCALE: NONE



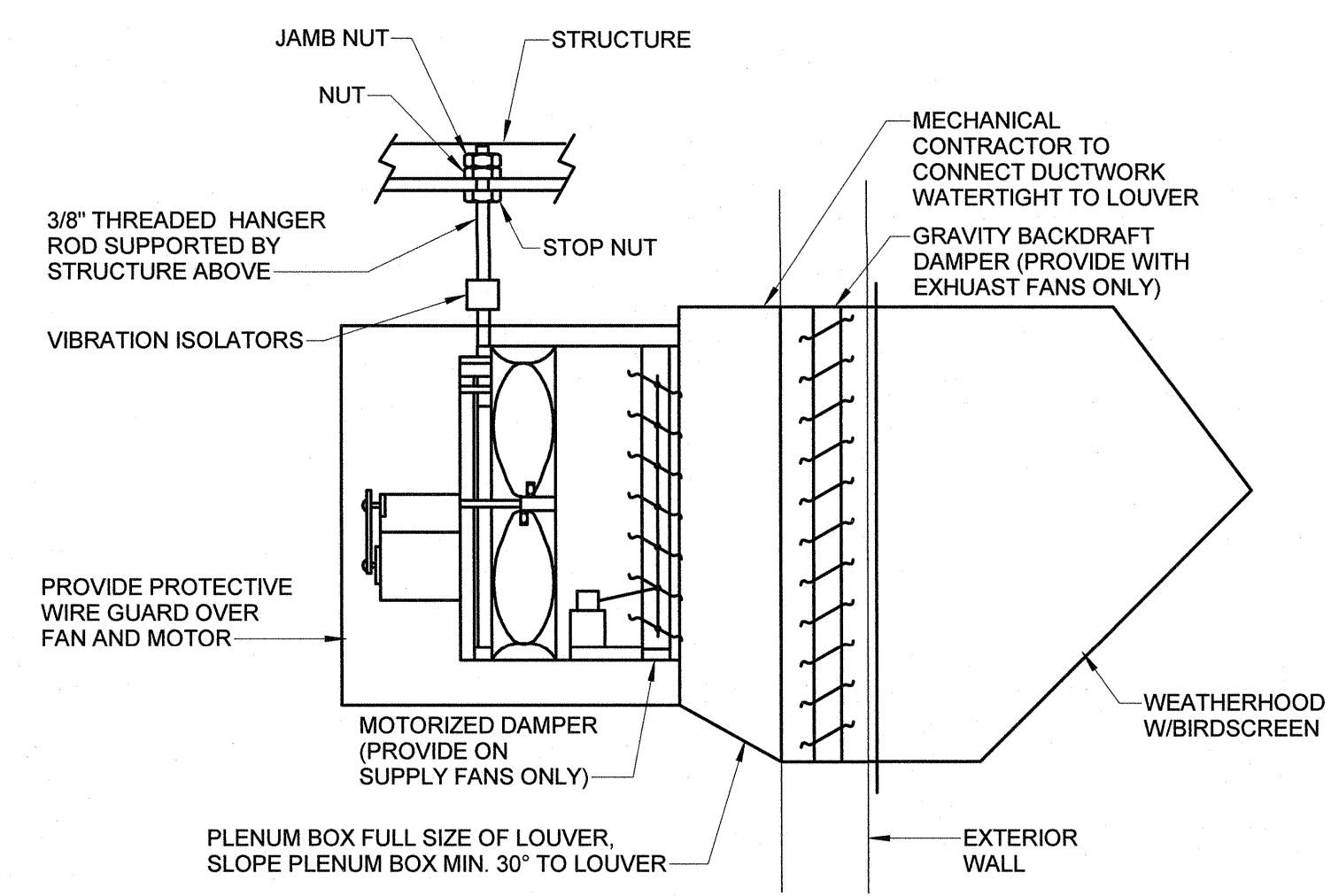
B DUCT PENETRATION DETAIL
SCALE: NONE



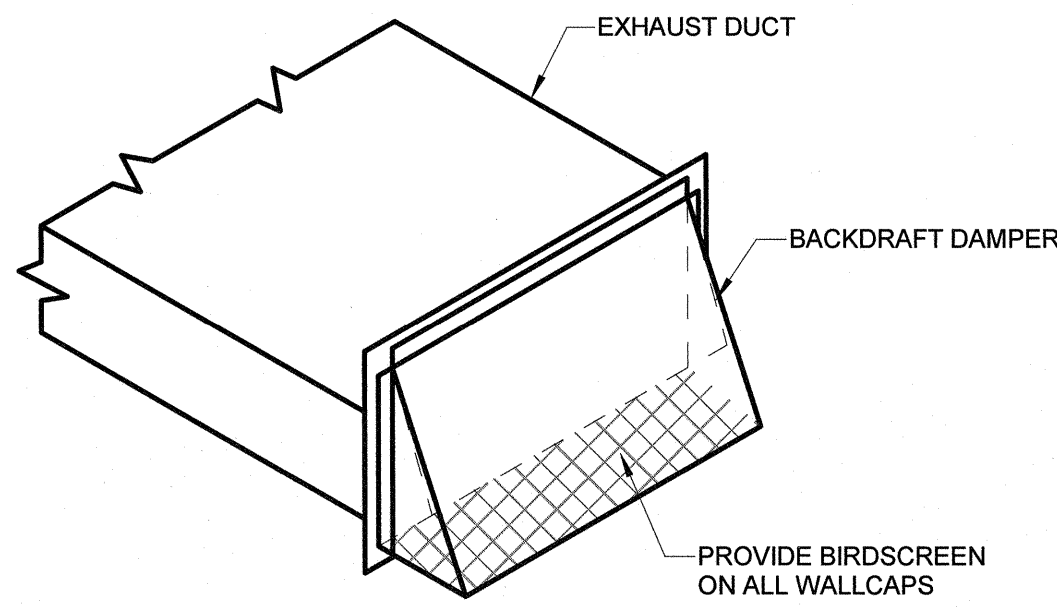
C PIPE PENETRATION DETAIL
SCALE: NONE



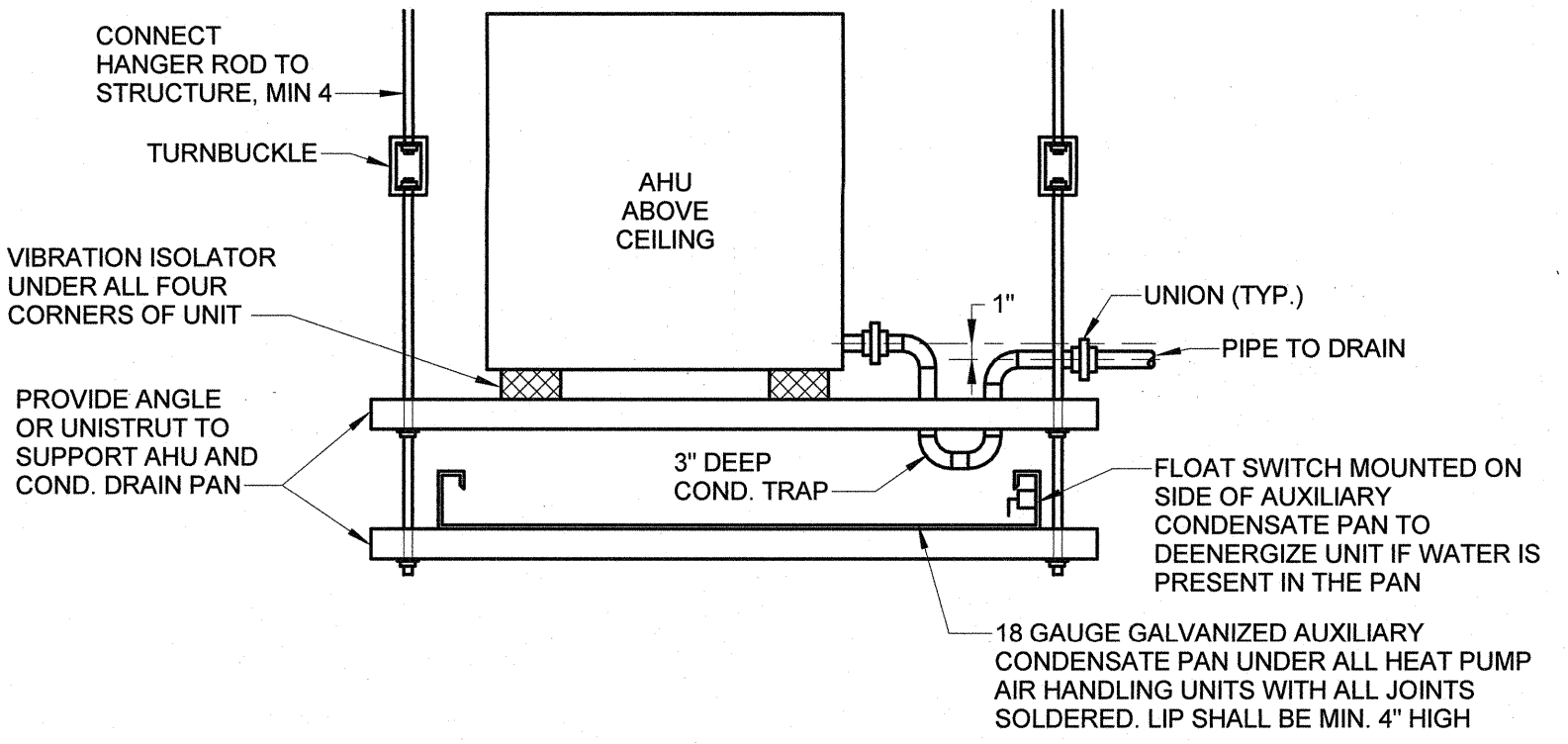
D TYPICAL DUCT ELBOW WITH TURNING VANES
SCALE: NONE



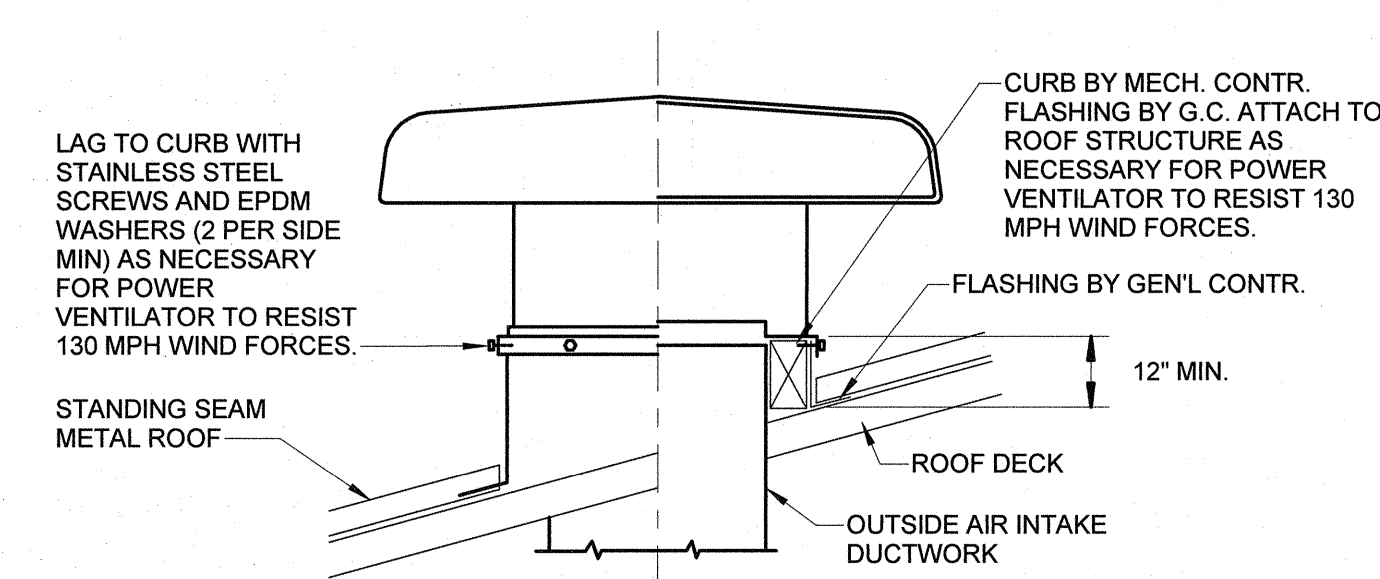
E SIDEWALL SUPPLY AND EXHAUST FAN DETAIL
SCALE: NONE



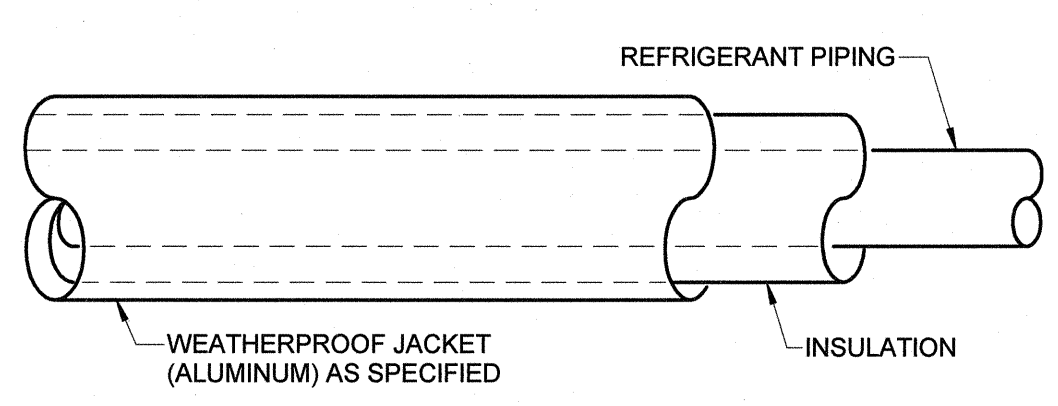
F WALL CAP DETAIL
SCALE: NONE



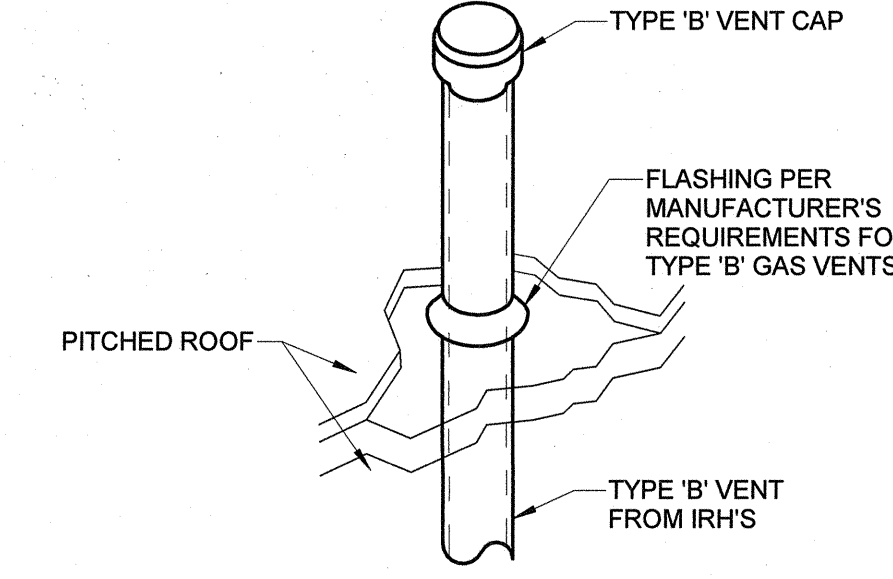
G AIR HANDLING UNIT SUPPORT AND CONDENSATE PIPING DETAIL
SCALE: NONE



H GRAVITY VENTILATOR
SCALE: NONE



J EXTERIOR REFRIGERANT PIPING DETAIL
SCALE: NONE



K VENT OUTLET
SCALE: NONE

GENERAL NOTES:

- HVAC CONTRACTOR SHALL FIELD VERIFY ALL RELEVANT DIMENSIONS, CLEARANCES, LOCATIONS AND ELEVATIONS PRIOR TO ORDERING, FABRICATION, AND INSTALLATION OF HIS WORK. DISCREPANCIES OR INTERFERENCE'S SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER AS SOON AS POSSIBLE.
- THE DRAWINGS DIAGRAMMATICALLY INDICATE THE GENERAL LOCATION OF DUCTS, PIPING AND EQUIPMENT AND DO NOT SHOW ALL SUPPORTS, OFFSETS, FITTINGS, BOLTS, CONNECTIONS, ETC. REQUIRED FOR A COMPLETE SYSTEM. WHILE THE DRAWINGS ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE, IF IT IS FOUND NECESSARY TO CHANGE THE LOCATION OF ANY WORK TO ACCOMMODATE THE CONDITIONS AT THE BUILDING, SUCH CHANGES SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER, AND AS DIRECTED BY THE ENGINEER.
- CONTRACTOR SHALL PROTECT EQUIPMENT AND SYSTEMS DURING CONSTRUCTION FROM MOISTURE, CONSTRUCTION DEBRIS, DUST AND OTHER FOREIGN MATERIALS BOTH BEFORE AND AFTER INSTALLATION. SELF-ADHESIVE 3-MIL POLYETHYLENE FILM SHALL BE INSTALLED OVER EQUIPMENT, CEILING EXHAUST FANS, DUCTLESS SPLIT SYSTEMS, AHUS, VRF AHUS, OPENINGS IN VAV BOXES, ETC AND ALL OPEN ENDS OF DUCTWORK.
- PIPING, DUCTWORK, ETC., SHALL NOT BE SUPPORTED FROM BAR JOIST BRIDGING OR ROOF DECK. EQUIPMENT SUPPORTED BY BAR JOISTS SHALL HAVE SUPPORTS ATTACHED AS CLOSE AS POSSIBLE TO BAR JOIST PANEL POINTS. HVAC CONTRACTOR SHALL SUPPLY ANY AND ALL STRUCTURAL MEMBERS NECESSARY TO SUPPORT WORK BETWEEN BAR JOISTS, BEAMS, ETC. REFER TO STRUCTURAL DRAWINGS FOR DETAILS AND MAXIMUM SPACING REQUIREMENTS REGARDING HANGER ATTACHMENTS AND SUPPORTS TO STRUCTURE.
- ALL PIPING PENETRATIONS THROUGH RATED FLOORS AND WALLS SHALL BE FIRE STOPPED USING PIPE PENETRATIONS DETAILS AS SPECIFIED. ALL PIPING PENETRATIONS THROUGH NON RATED WALLS SHALL BE PROTECTED USING DETAILS SHOWN ON SHEET M-001. ALL DUCT PENETRATIONS THRU NON RATED WALLS SHALL BE PROTECTED USING DETAILS SHOWN ON SHEET M-001.
- IN AREAS WITH GYPBOARD CEILINGS, HVAC CONTRACTOR SHALL INSTALL EQUIPMENT, DUCTWORK AND PIPES PRIOR TO GYPBOARD INSTALLATION.
- ALL SUPPLY AND RETURN CONNECTIONS TO AHU SHALL BE MADE WITH A FLEXIBLE DUCT CONNECTION.
- ALL DUCT JOINTS SHALL BE SEALED AS SPECIFIED.
- ALL DUCTWORK DIMENSIONS ON THE DRAWINGS ARE FREE INSIDE DIMENSIONS.
- COORDINATE MECHANICAL DUCTWORK AND PIPING LOCATIONS TO AVOID ALL ELECTRICAL PANELS WITH THE ELECTRICAL CONTRACTOR.
- AIR CONDITIONING CONDENSATE LINES ARE MINIMAL SIZE. DO NOT INSTALL SMALLER THAN ACTUAL COIL CONNECTION SIZE.
- ALL THERMOSTATS AND SWITCHES FOR MECHANICAL SYSTEMS SHALL BE MOUNTED 44\"/>

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT METHOD OF COMPLIANCE

- ☐ COMPLIANCE PER CHAPTER 4 NORTH CAROLINA ENERGY CONSERVATION CODE - SECTIONS C403.2 (MANDATORY), C403.3 ECONOMIZERS (PRESCRIPTIVE) AND C406 ADDITIONAL EFFICIENCY PACKAGE OPTIONS.
 - ☐ C406.2 MORE EFFICIENT HVAC PERFORMANCE
 - ☐ C406.3 REDUCED LIGHTING POWER DENSITY
 - ☐ C406.4 ENHANCED LIGHTING CONTROLS
 - ☐ C406.5 ON-SITE RENEWABLE ENERGY
 - ☐ C406.6 DOAS PROVISION FOR CERTAIN HVAC
 - ☐ C406.7 HIGH ENERGY SERVICE WATER HEATING
- ☒ COMPLIANCE PER CHAPTER 4 NORTH CAROLINA ENERGY CONSERVATION CODE - SECTIONS C403.2 (MANDATORY), C403.3 ECONOMIZERS (PRESCRIPTIVE), C403.4 HYDRONIC AND MULTIPLE ZONE (PRESCRIPTIVE) AND C406 ADDITIONAL EFFICIENCY PACKAGE OPTIONS.
 - ☐ C406.2 MORE EFFICIENT HVAC PERFORMANCE
 - ☒ C406.3 REDUCED LIGHTING POWER DENSITY
 - ☐ C406.4 ENHANCED LIGHTING CONTROLS
 - ☐ C406.5 ON-SITE RENEWABLE ENERGY
 - ☐ C406.6 DOAS PROVISION FOR CERTAIN HVAC
 - ☐ C406.7 HIGH ENERGY SERVICE WATER HEATING
- ☐ COMPLIANCE PER CHAPTER 4 NORTH CAROLINA ENERGY CONSERVATION CODE - SECTIONS C402.5, C403.2, C404, C405.2, C405.3, C405.5, C405.6 AND C407 TOTAL BUILDING PERFORMANCE. THE BUILDING ENERGY COST SHALL BE EQUAL TO OR LESS THAN 85 PERCENT OF THE STANDARD REFERENCE DESIGN BUILDING.
- ☐ COMPLIANCE PER ANSI/ASHRAE/IESNA 90.1-2013.
- ☐ COMPLIANCE PER NORTH CAROLINA SPECIFIC COMCHECK OR ASHRAE 90.1-2013 COMCHECK.

CLIMATE ZONE 3A

EXTERIOR DESIGN CONDITIONS
winter dry bulb: 20.9°F
summer dry bulb: 93.4°F DB/74.7°F WB

INTERIOR DESIGN CONDITIONS
winter dry bulb: 70°F
summer dry bulb: 75°F
relative humidity: 55%

BUILDING HEATING LOAD: 89.3 MBH - EXCLUDING HANGAR

BUILDING COOLING LOAD: 7.8 TONS - EXCLUDING HANGAR

MECHANICAL SPACING CONDITIONING SYSTEM

Unitary:
description of unit: SEE SCHEDULES ON SHEET M-601
heating efficiency:
cooling efficiency:
heat output of unit:
cooling output of unit:

Boiler: N/A
total boiler output: If oversized, state reason.

Chiller: N/A
total chiller capacity: If oversized, state reason.

LIST EQUIPMENT EFFICIENCIES: SEE SCHEDULES ON SHEET M-601

EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS)

motor horsepower:
number of phases:
minimum efficiency:
motor type:
of poles: SEE SCHEDULES ON SHEET M-601

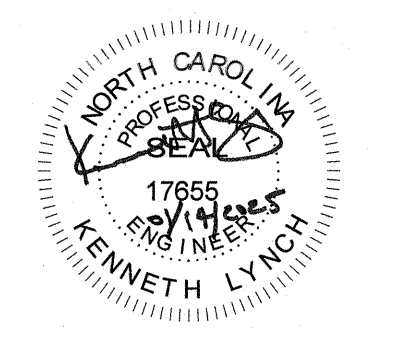
DESIGNER STATEMENT

To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of the North Carolina Energy Conservation Code.

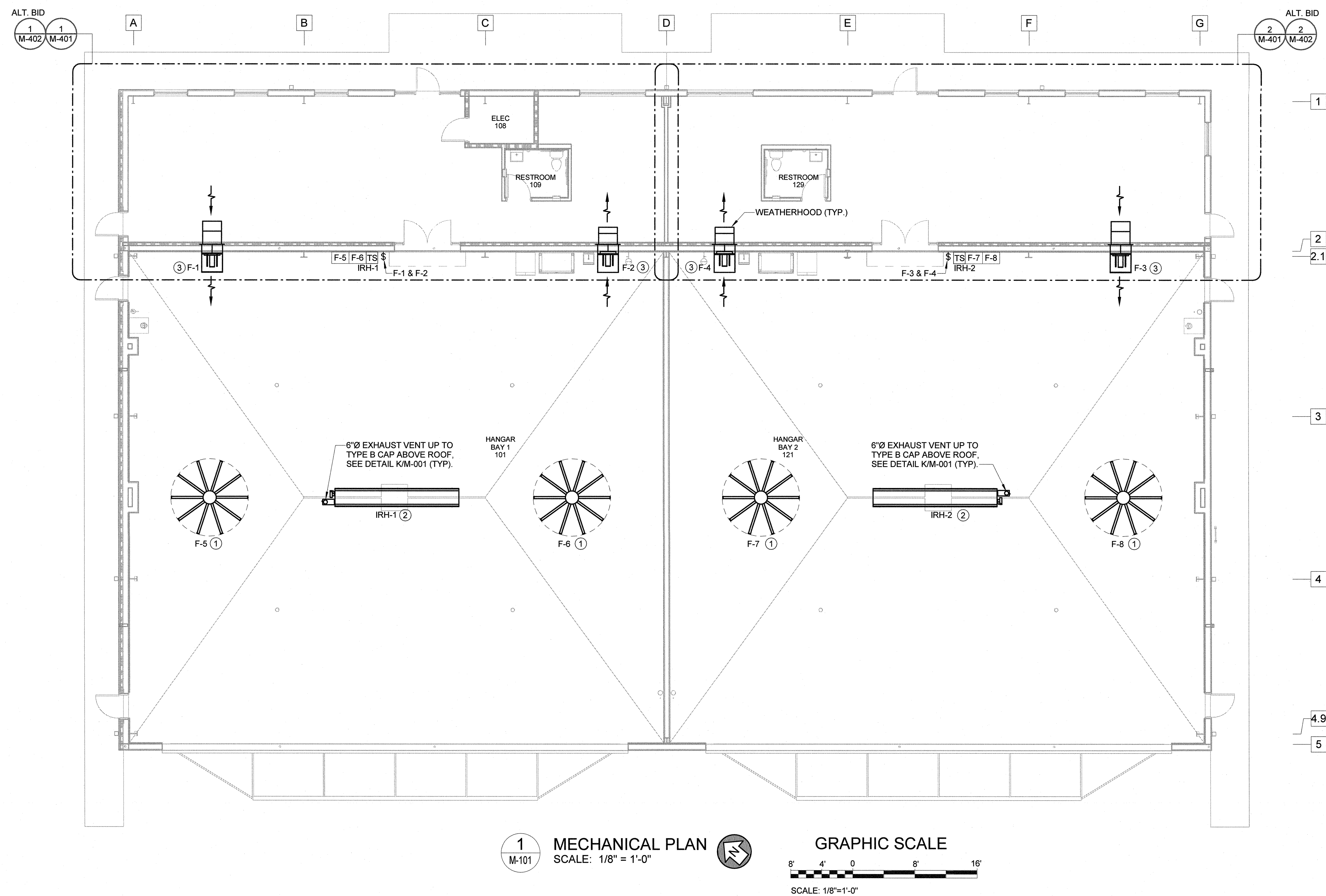
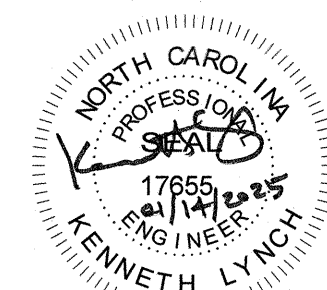
SIGNED: Kenneth Lynch, P.E.
NAME: Professional Engineer
TITLE:

LEGEND

R	REFRIGERANT PIPING
C	AIR CONDITIONING CONDENSATE PIPING
PC	PUMPED CONDENSATE PIPING
	FLEXIBLE DUCTWORK
=====	RECTANGULAR DUCTWORK
=====	SUPPLY AIR DUCTWORK TURNED DOWN
=====	SUPPLY AIR DUCTWORK TURNED UP
=====	RETURN AIR/EXHAUST AIR TURNED DOWN
=====	RETURN AIR/EXHAUST AIR TURNED UP
=====	DUCT WITH RUNOUT (SPIN-IN TAKE OFF WITH DAMPER)
=====	CEILING RETURN AIR/ EXHAUST AIR REGISTER
=====	CEILING SUPPLY AIR DIFFUSER
=====	REGISTER, GRILLE OR DIFFUSER SYMBOL
=====	HEATING AND COOLING THERMOSTAT WITH # INDICATING UNIT
=====	COOLING THERMOSTAT
=====	HEAVY DUTY DISCONNECT SWITCH
=====	KEYED NOTE SYMBOL
SA	SUPPLY AIR
RA	RETURN AIR
OA	OUTSIDE AIR
E.X.A.	EXHAUST AIR
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
MD	MANUAL DAMPER
MOD	MOTOR OPERATED DAMPER
AFF	ABOVE FINISHED FLOOR
FIN. FL.	FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
CONC.	CONCRETE
CONT.	CONTINUATION
CONTR.	CONTRACTOR
CO	CARBON MONOXIDE SENSOR
HT	HUMIDITY SENSOR
AD	ACCESS DOOR (MIN 16"x16")



REVISIONS

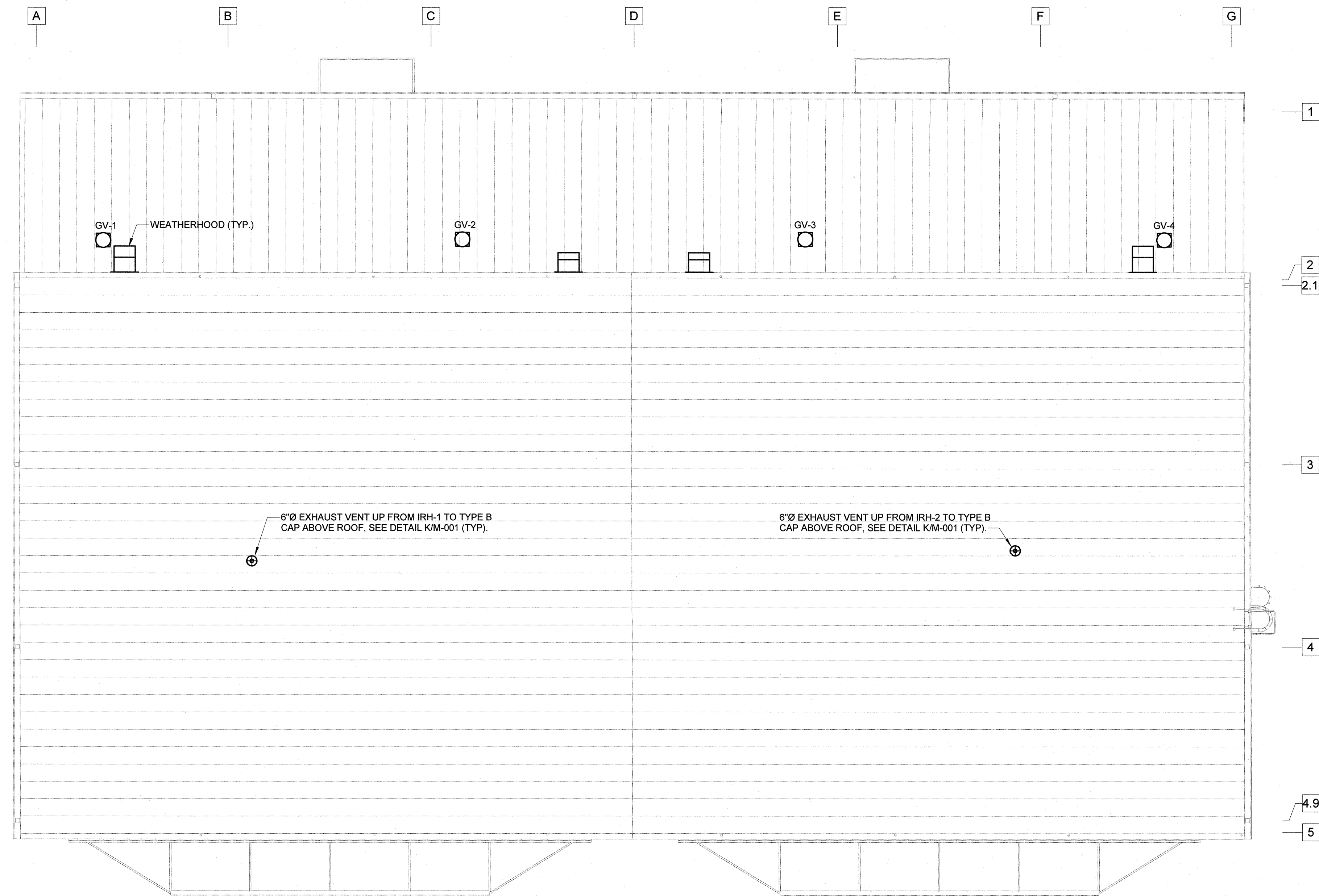
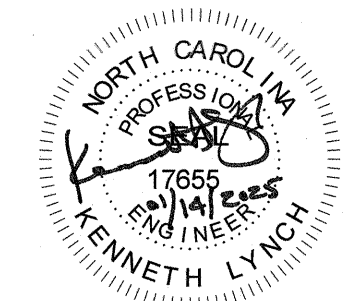


- KEYED NOTES:** (THIS SHEET ONLY)
- 1 BOTTOM OF HVLS VENTILATOR SHALL BE 22'-6" AFF. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - 2 MOUNT RADIANT HEATERS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS, INCLUDING MINIMUM DISTANCE FROM COMBUSTIBLES.
 - 3 PROVIDE PROTECTIVE WIRE GUARD OVER FAN DAMPER AND ACUTATOR. SEE DETAIL EIM-001. FANS LOCATED ABOVE LOW ROOF OFFICE AREA.

PARTITION LEGEND

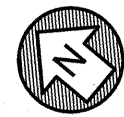
---	NON RATED WALL
---	1 HOUR RATED PARTITION
---	2 HOUR RATED PARTITION

NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.

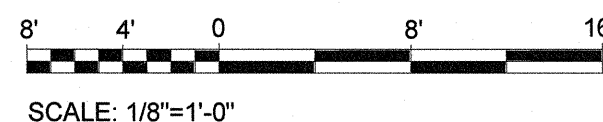


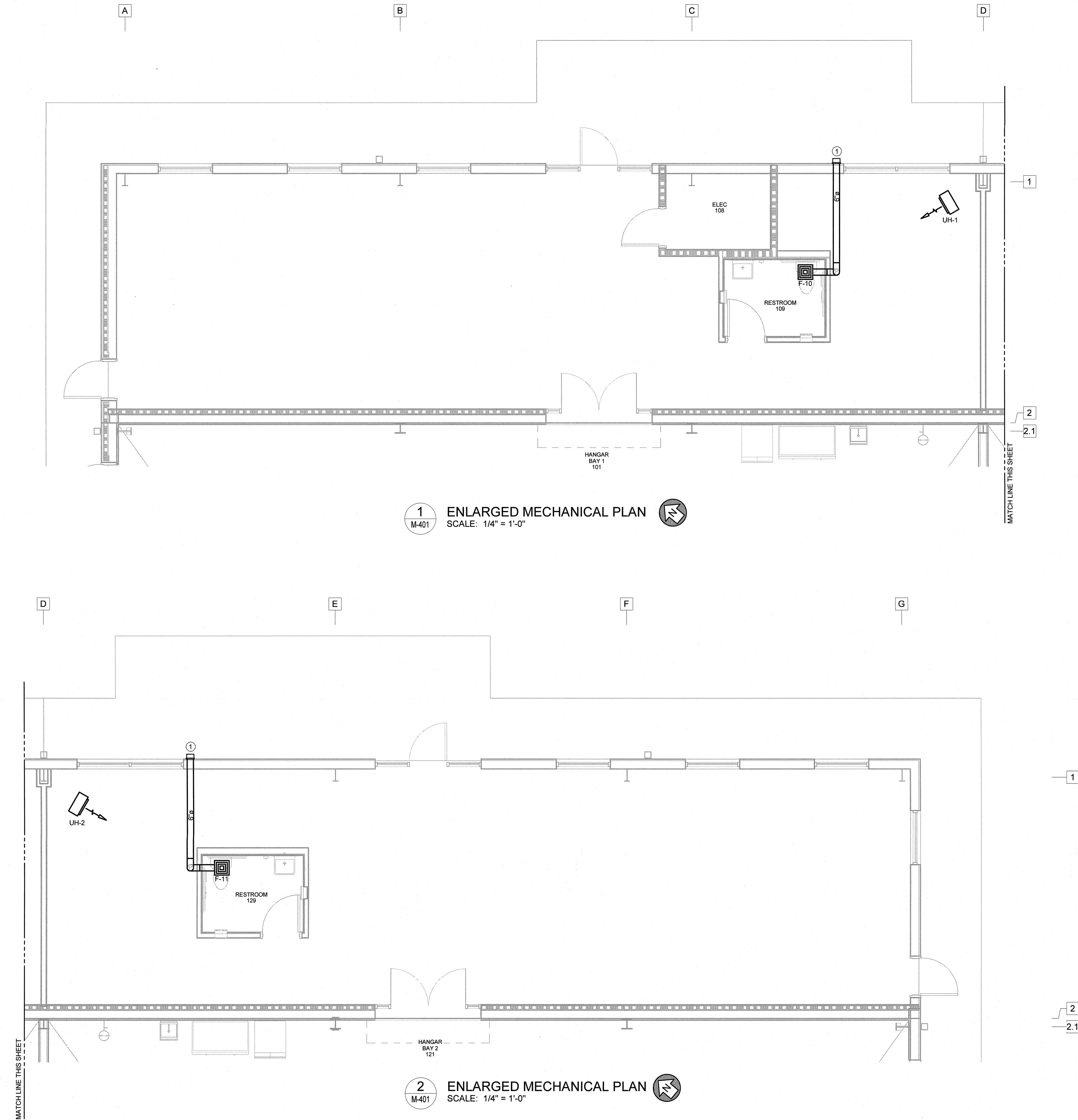
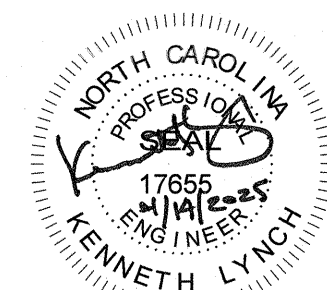
1
M-102

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



GRAPHIC SCALE



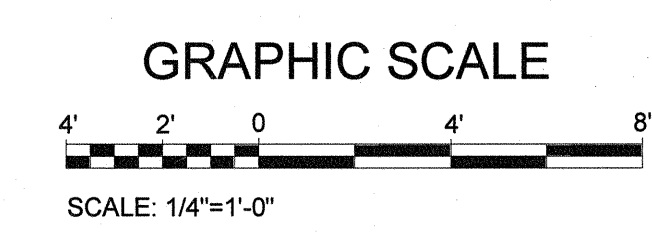


1
M-401
ENLARGED MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

2
M-401
ENLARGED MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

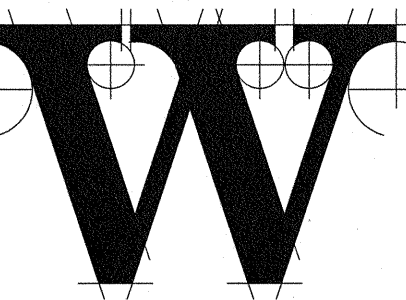
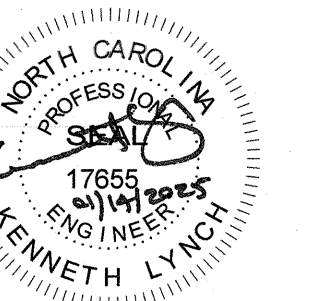
KEYED NOTES: (THIS SHEET ONLY)

- ① WALL CAP WITH BACKDRAFT DAMPER AND BIRD SCREEN. SEE DETAIL F/M-001.



PARTITION LEGEND

- NON RATED WALL
= 1 HOUR RATED PARTITION
= 2 HOUR RATED PARTITION
NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.



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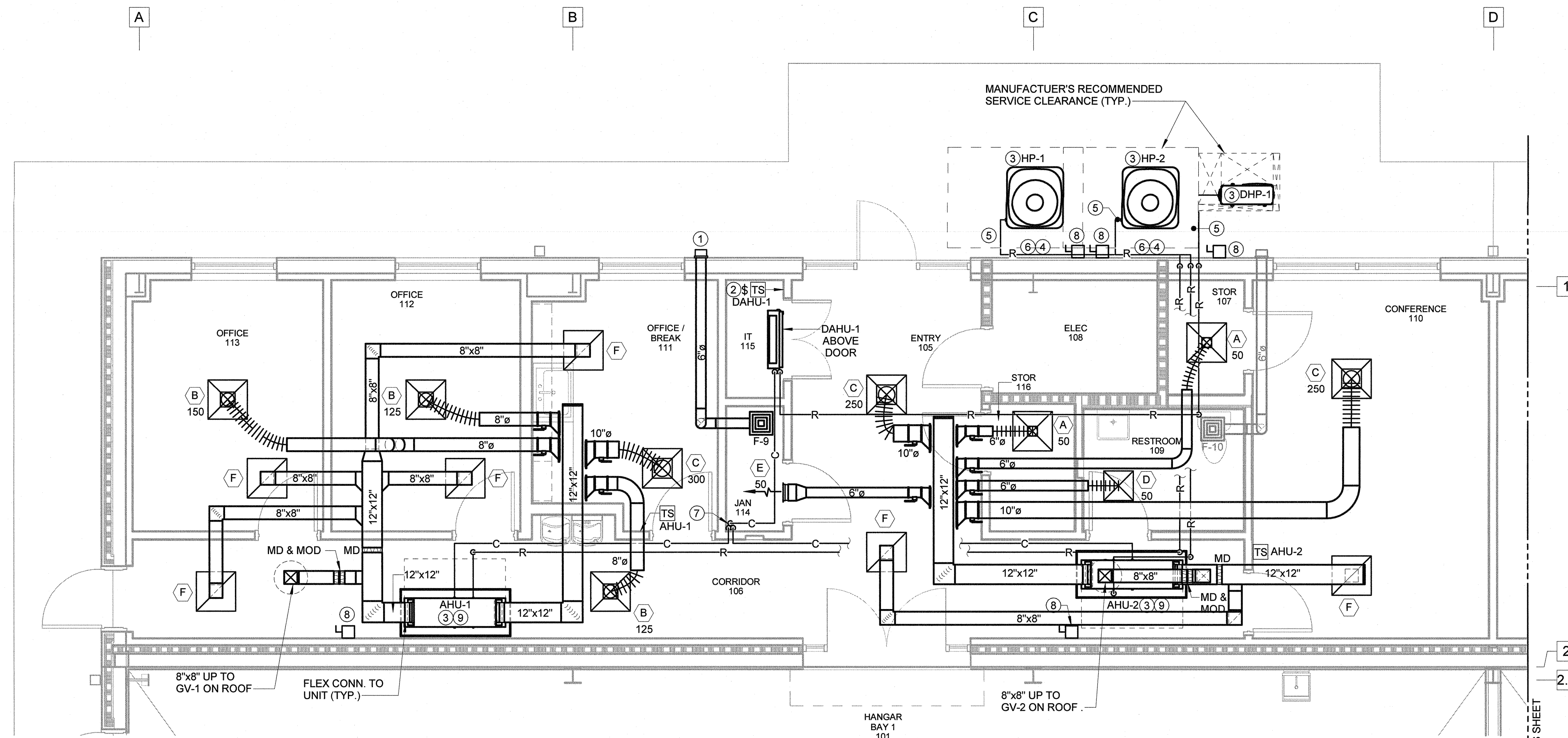
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DATE 01/17/2025
PROJECT NUMBER 3105-2401
SHEET TITLE

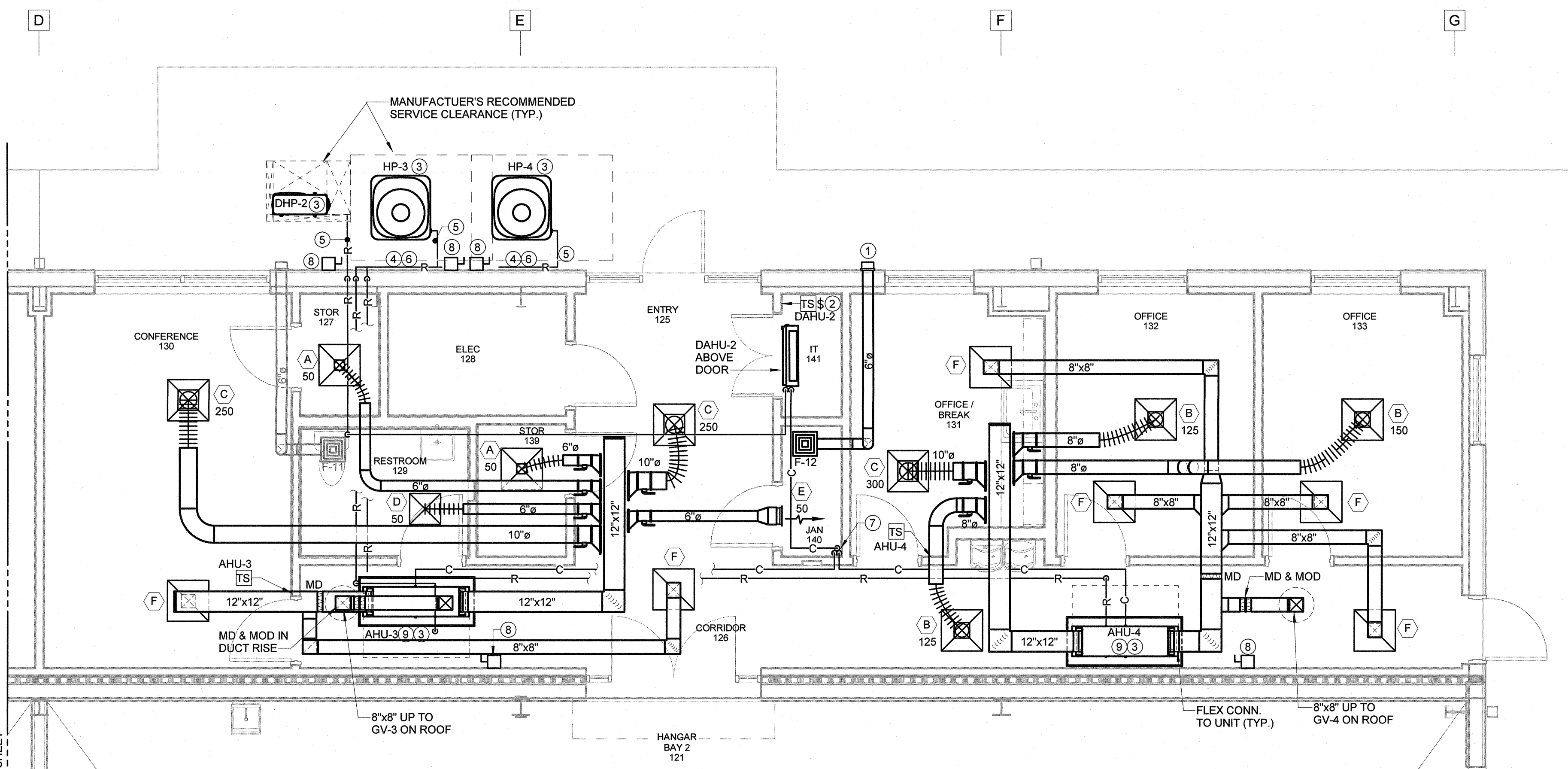
**ENLARGED
MECHANICAL
PLANS - ADD
ALTERNATE**

SHEET NUMBER

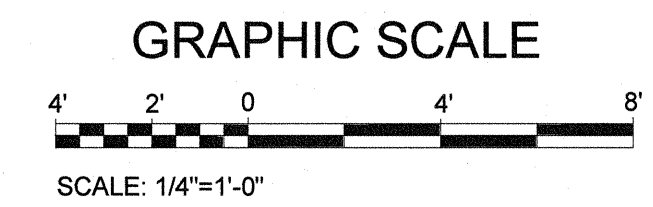
M-402



1 MECHANICAL OFFICE PLAN - ALT-01
SCALE: 1/4" = 1'-0"



2 MECHANICAL OFFICE PLAN - ALT-02
SCALE: 1/4" = 1'-0"



PARTITION LEGEND	
	NON RATED WALL
	1 HOUR RATED PARTITION
	2 HOUR RATED PARTITION
NOTE: SEE SHEET G003 FOR CONSTRUCTION OF PARTITION TYPES.	

SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE																
AIR HANDLING UNIT SECTION								OUTDOOR HEAT PUMP SECTION							REMARKS	
SYMBOL	AIR QUANTITY		EXT SP "H2O (1)	ELECTRICAL				SYMBOL	ELECTRICAL			COOLING CAPACITY BTUH (2)	HEATING CAPACITY BTUH (3)	SEER2		
	TOTAL CFM	OUTSIDE CFM		MCA	MOCF	STRIP HEAT (KW)	FAN HP		VOLTAGE & PHASE	MCA	MOCF					VOLTAGE & PHASE
AHU-1	700	115	0.50"	44	45	7.68	1/3	230V-1Ø	HP-1	15	25	230V-1Ø	22,500	14,000	14.60	ALTERNATE BID-01
AHU-2	700	115	0.50"	44	45	7.68	1/3	230V-1Ø	HP-2	15	25	230V-1Ø	22,500	14,000	14.60	ALTERNATE BID-01
AHU-3	700	115	0.50"	44	45	7.68	1/3	230V-1Ø	HP-3	15	25	230V-1Ø	22,500	14,000	14.60	ALTERNATE BID-02
AHU-4	700	115	0.50"	44	45	7.68	1/3	230V-1Ø	HP-4	15	25	230V-1Ø	22,500	14,000	14.60	ALTERNATE BID-02

(1) EXT. S.P. INCLUDES SUPPLY & RETURN AIR DUCTWORK. FILTERS IN UNIT ARE NOT INCLUDED IN THIS FIGURE.

(2) CAPACITY WHEN MATCHED WITH INDOOR HEAT PUMP SECTION AT AHRI CONDITIONS.

(3) CAPACITY AT 17° F OUTSIDE AIR TEMPERATURE.

POWER VENTILATOR SCHEDULE										
SYMBOL	CFM	ESP	RPM	TIP SPEED	ELECTRICAL		TYPE	DRIVE	CONTROL	REMARKS
					HP	VOLTAGE				
F-1	4500	0.50"	1270	8000	1	230V-1Ø	SIDEWALL PROPELLER SUPPLY	BELT	(3)	HANGAR BAY 1 101
F-2	4500	0.50"	1270	8000	1	230V-1Ø	SIDEWALL PROPELLER EXHAUST	BELT	(3)	HANGAR BAY 1 101
F-3	4500	0.50"	1270	8000	1	230V-1Ø	SIDEWALL PROPELLER SUPPLY	BELT	(3)	HANGAR BAY 2 121
F-4	4500	0.50"	1270	8000	1	230V-1Ø	SIDEWALL PROPELLER EXHAUST	BELT	(3)	HANGAR BAY 2 121
F-5	-	-	-	-	1	240V-1Ø	10'-0" HVLS AIR MOVEMENT (5)	DIRECT	(4)	HANGAR BAY 1 101
F-6	-	-	-	-	1	240V-1Ø	10'-0" HVLS AIR MOVEMENT (5)	DIRECT	(4)	HANGAR BAY 1 101
F-7	-	-	-	-	1	240V-1Ø	10'-0" HVLS AIR MOVEMENT (5)	DIRECT	(4)	HANGAR BAY 2 121
F-8	-	-	-	-	1	240V-1Ø	10'-0" HVLS AIR MOVEMENT (5)	DIRECT	(4)	HANGAR BAY 2 121
F-9	75	0.50"	770	1360	29 (1)	115V-1Ø	CEILING EXHAUST	DIRECT	(2)	JAN 114 - ALTERNATE BID-01
F-10	75	0.50"	770	1360	29 (1)	115V-1Ø	CEILING EXHAUST	DIRECT	(2)	RESTROOM 109
F-11	75	0.50"	770	1360	29 (1)	115V-1Ø	CEILING EXHAUST	DIRECT	(2)	RESTROOM 129
F-12	75	0.50"	770	1360	29 (1)	115V-1Ø	CEILING EXHAUST	DIRECT	(2)	JAN 140 - ALTERNATE BID-02

(1) WATTS

(2) VIA LIGHTING CONTROL SYSTEM'S OCCUPANCY SENSOR.

(3) SWITCH ON WALL. NOTE THAT SUPPLY AND EXHAUST FANS IN SAME HANGAR ALWAYS OPERATE AT THE SAME TIME.

(4) VARIABLE SPEED/ON/OFF/FORWARD/REVERSE TOUCHSCREEN FACTORY CONTROLLER.

(5) BASIS OF DESIGN IS HUNTER ECO 10.

RADIANT HEATER SCHEDULE										
SYMBOL	BTU/HR INPUT	GAS INLET (1)		TYPE	ELECTRICAL		MOUNTING ANGLE ABOVE HORIZONTAL	MOUNTING HEIGHT	SYSTEM LENGTH	REMARKS
		SIZE	PRESSURE		AMPS	VOLTAGE & PHASE				
IRH-1	100,000	1/2"	11" WC	INFRA-RED TUBE	2.6	120V-1Ø	0°	22'-0" AFF	17'-6"	HANGAR BAY 1 101 (2)
IRH-2	100,000	1/2"	11" WC	INFRA-RED TUBE	2.6	120V-1Ø	0°	22'-0" AFF	17'-6"	HANGAR BAY 2 121 (2)

(1) LP GAS.

(2) BASIS OF DESIGN SPACE-RAY LTU100-30-L5

DUCTLESS SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE													
SYMBOL	AIR QUANTITY		EXT SP "H2O (1)	ELECTRICAL		SYMBOL	ELECTRICAL			COOLING CAPACITY BTUH (2)	HEATING CAPACITY BTUH (3)	SEER2	REMARKS
	TOTAL CFM	OUTSIDE CFM		FAN FLA	VOLTAGE & PHASE		MCA	RECOMMENDED BREAKER SIZE	VOLTAGE & PHASE				
DAHU-1	350	-	-	1.0	230V-1Ø	DHP-1	11	15	230V-1Ø	5,600-18,000	13,600	20.2	IT 115 - ALTERNATE BID-01
DAHU-2	350	-	-	1.0	230V-1Ø	DHP-2	11	15	230V-1Ø	5,600-18,000	13,600	20.2	IT 141 - ALTERNATE BID-02

(1) EXT. S.P. INCLUDES SUPPLY & RETURN AIR DUCTWORK. FILTERS IN UNIT ARE NOT INCLUDED IN THIS FIGURE.

(2) MINIMUM AND MAXIMUM CAPACITY WHEN MATCHED WITH INDOOR HEAT PUMP SECTION AT AHRI CONDITIONS.

(3) CAPACITY AT 17° F OUTSIDE AIR TEMPERATURE.

ELECTRIC UNIT HEATER SCHEDULE							
SYMBOL	CFM	BTU	ELECTRICAL		MOUNTING HEIGHT	DISCHARGE	REMARKS
			KW	VOLTAGE			
UH-1	700	25.6	7.5	240V-1Ø	8'-0" AFF	HORIZONTAL	AREA OF FUTURE OFFICE UPFIT (1)
UH-2	700	25.6	7.5	240V-1Ø	8'-0" AFF	HORIZONTAL	AREA OF FUTURE OFFICE UPFIT (1)

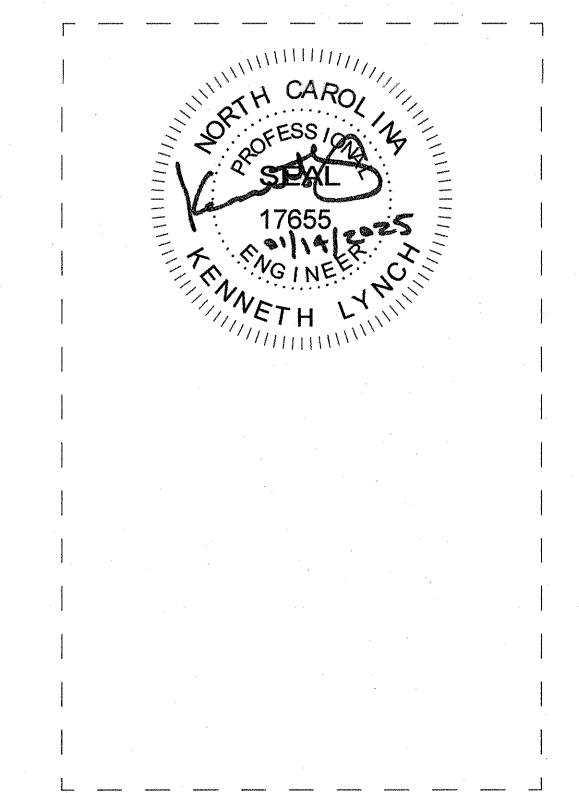
(1) WITH BUILT-IN THERMOSTAT.

GRAVITY VENTILATOR SCHEDULE					
SYMBOL	CFM	MIN. THROAT SIZE	MAXIMUM AIR PRESS DROP "H2O	TYPE	SERVING
GV-1	115	11"x11"	0.10	OUTSIDE AIR INTAKE	AHU-1 - ALTERNATE BID-01
GV-2	115	11"x11"	0.10	OUTSIDE AIR INTAKE	AHU-2 - ALTERNATE BID-01
GV-3	115	11"x11"	0.10	OUTSIDE AIR INTAKE	AHU-3 - ALTERNATE BID-02
GV-4	115	11"x11"	0.10	OUTSIDE AIR INTAKE	AHU-4 - ALTERNATE BID-02

REGISTER, GRILLE & DIFFUSER SCHEDULE - ALTERNATE BID -01 & 02					
SYMBOL	C.F.M.	NECK SIZE	TYPE	RUNOUT SIZE	REMARKS
(A)	50-100	6"X6"	2'X2' LAY-IN CEILING SA DIFFUSER	6"Ø	
(B)	125-225	9"X9"	2'X2' LAY-IN CEILING SA DIFFUSER	8"Ø	
(C)	250-400	12"X12"	2'X2' LAY-IN CEILING SA DIFFUSER	10"Ø	
(D)	50-100	6"X6"	CEILING SA DIFFUSER	6"Ø	
(E)	25-150	10"X6"	SIDEWALL SA REGISTER	6"Ø - 8"Ø	
(F)	250-1000	22"X22"	2'X2' LAY-IN RA GRILLE	-	



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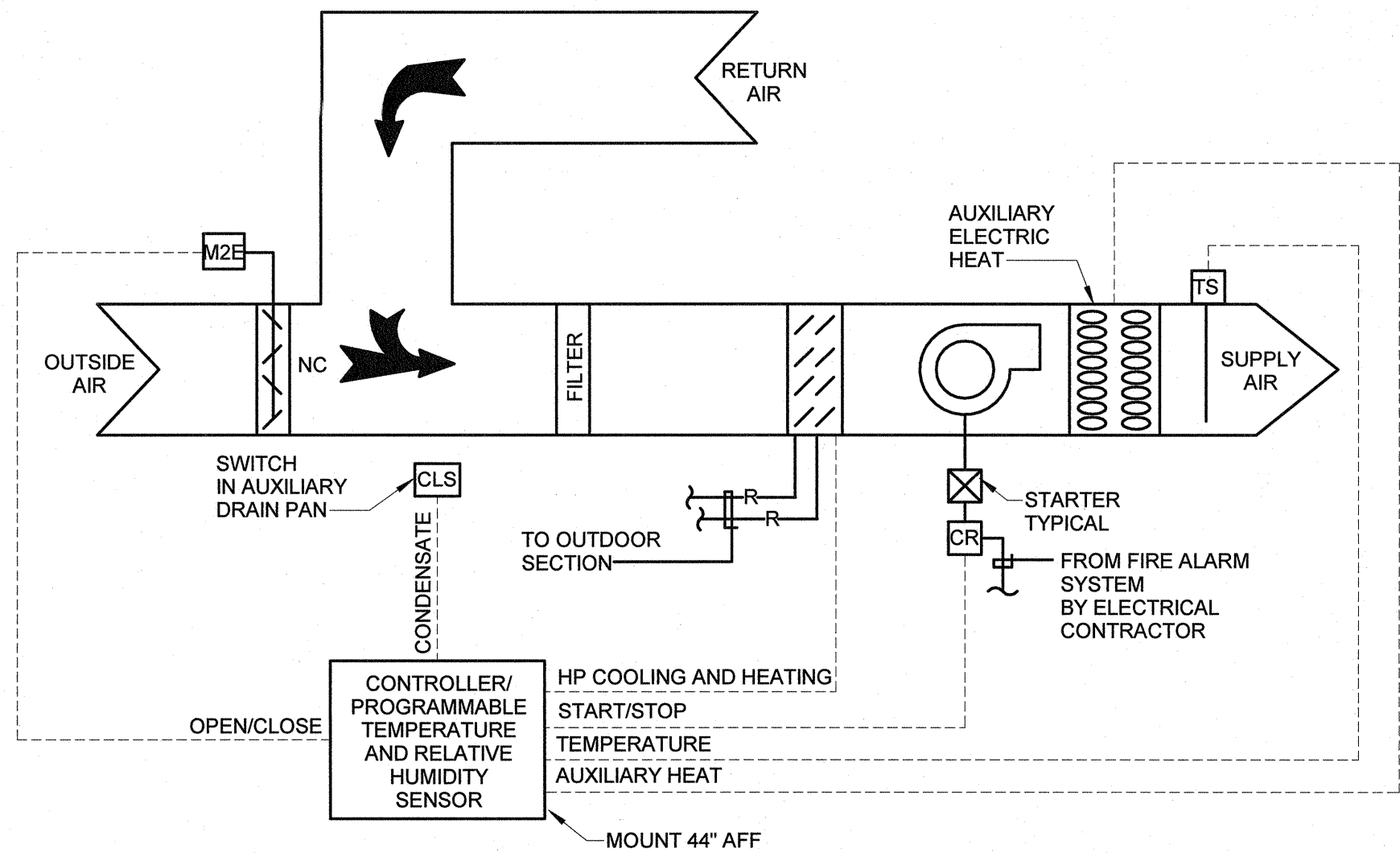
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 SHEET TITLE

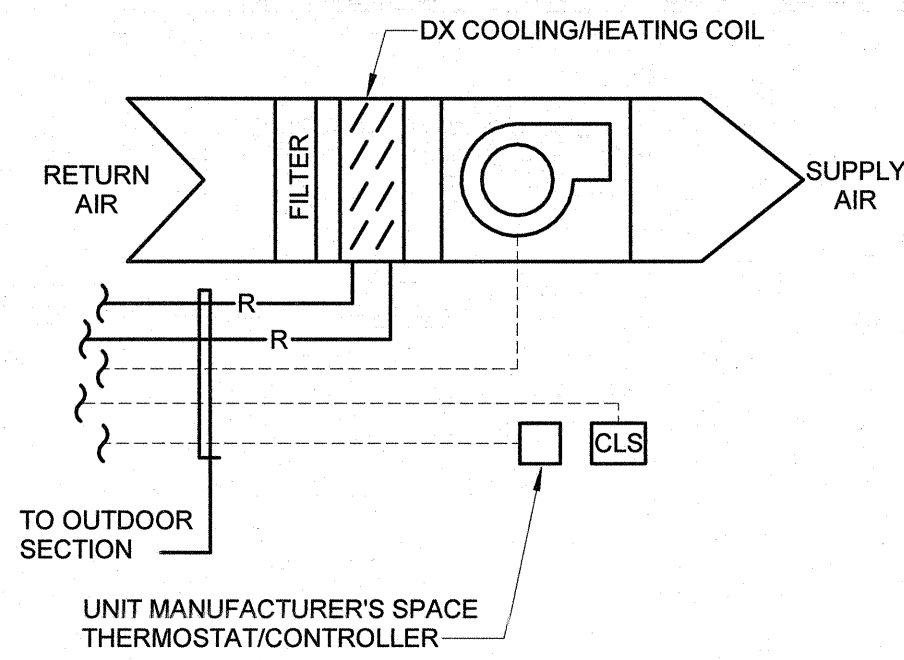
MECHANICAL SCHEDULES

SHEET NUMBER
M-601



SPLIT SYSTEM HEAT PUMP SEQUENCE OF OPERATION

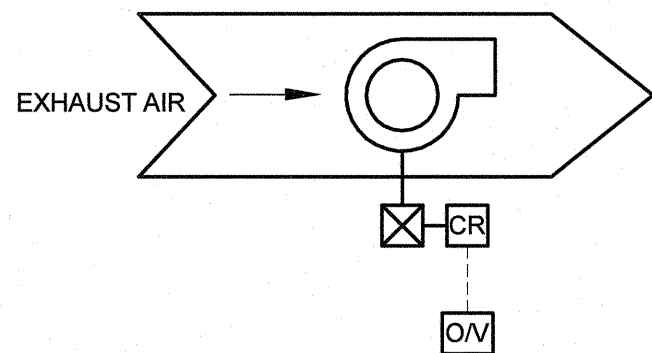
- A. OCCUPIED:
- INDOOR FAN SHALL OPERATE CONTINUOUSLY.
 - OUTSIDE AIR DAMPERS SHALL BE OPEN.
 - CONTROLLER/THERMOSTAT SHALL MONITOR SPACE TEMPERATURE AND CONTROL THE HEAT PUMP COMPRESSORS FOR COOLING (IN STAGES WHEN AVAILABLE) AND HEAT PUMP COMPRESSORS AND AUXILIARY ELECTRIC HEAT IN STAGES FOR HEATING TO MAINTAIN SPACE TEMPERATURE SETPOINT.
- B. UNOCCUPIED: INDOOR FAN AND HEAT PUMP COMPRESSORS AND AUXILIARY ELECTRIC HEAT SHALL OPERATE IN STAGES, CYCLING ON AND OFF AS NECESSARY TO MAINTAIN SPACE TEMPERATURE AT UNOCCUPIED HEATING AND COOLING SETPOINTS. OUTSIDE AIR DAMPERS SHALL REMAIN CLOSED.
- C. DE-HUMIDIFICATION: IF SPACE RELATIVE HUMIDITY RISES ABOVE A LIMIT OF 65% RH (ADJ.), HEAT PUMP COMPRESSORS SHALL OPERATE FOR COOLING (IN STAGES WHEN AVAILABLE). AUXILIARY ELECTRIC HEATING SHALL OPERATE AS NECESSARY TO MAINTAIN SPACE COOLING TEMPERATURE SETPOINT. WHEN SPACE RELATIVE HUMIDITY DROPS TO 50% RH (ADJ.), HEAT PUMP SYSTEM SHALL RETURN TO NORMAL MODE OF OPERATION.
- D. SAFETIES:
- THE ELECTRICAL CONTRACTOR WILL PROVIDE A FIRE ALARM SYSTEM RELAY ADJACENT TO EACH FAN CONTROL THROUGH WHICH THE CONTRACTOR SHALL HARDWIRE POWER TO THE UNIT WHETHER OR NOT UNIT'S CONTROLS ARE IN AUTO OR MANUAL MODES. ANY SIGNAL FROM THE FIRE ALARM SYSTEM WILL MAKE RELAY BREAK OPERATING POWER FOR THE UNIT.
 - UPON HIGH LEVELS OF CONDENSATE IN PAN, COOLING SHALL BE DEENERGIZED.
- E. SYSTEMS USING A2L REFRIGERANTS:
- SYSTEMS USING A2L WITH REFRIGERANT CHARGE > 4.0 LBS SHALL HAVE INTEGRAL FACTORY INSTALLED REFRIGERANT LEAK DETECTION SYSTEM MOUNTED IN THE AIR HANDLING UNIT SECTION DOWNSTREAM OF THE EVAPORATOR COIL WITH INTERNAL CONTROLS TO AUTOMATICALLY UPON REFRIGERANT DETECTED, UNIT COMMANDS COMPRESSORS AND ELECTRIC HEAT (IF PRESENT) OFF, AND COMMANDS AIR HANDLING UNITS FAN TO MAXIMUM AIRFLOW FOR AIR CIRCULATION. ONCE REFRIGERANT HAS NOT BEEN DETECTED FOR A MINIMUM OF 5 MINUTES, UNIT SHALL RETURN TO NORMAL OPERATION.
 - FOR SYSTEMS USING A2L REFRIGERANT, IF RELEASABLE REFRIGERANT CHARGE IN THE SYSTEM EXCEEDS THE LEVELS ALLOWED IN ANSI/ASHRAE STANDARD 15 - 2022 OR NEWER FOR THE EFFECTIVE DISPERSAL VOLUME, PROVIDE SAFETY ISOLATION VALVES IN BOTH REFRIGERANT LINES AS RELEASE MITIGATION CONTROLS. VALVES SHALL AUTOMATICALLY CLOSE UPON SIGNAL FROM THE UNIT INTEGRAL REFRIGERANT LEAK DETECTOR. VALVE LOCATIONS SHALL BE AS SUCH FOR RELEASABLE REFRIGERANT CHARGE TO BE LESS THAN THE LEVELS ALLOWED IN ANSI/ASHRAE STANDARD 15 - 2022 OR NEWER FOR THE EFFECTIVE DISPERSAL VOLUME.



DUCTLESS SPLIT SYSTEM HEAT PUMP

SEQUENCE OF OPERATION

MANUFACTURER FURNISHED WALL MOUNTED HARD WIRED THERMOSTAT SHALL CONTROL UNIT.
UNIT SHALL BE DEENERGIZED ON HIGH CONDENSATE LEVELS

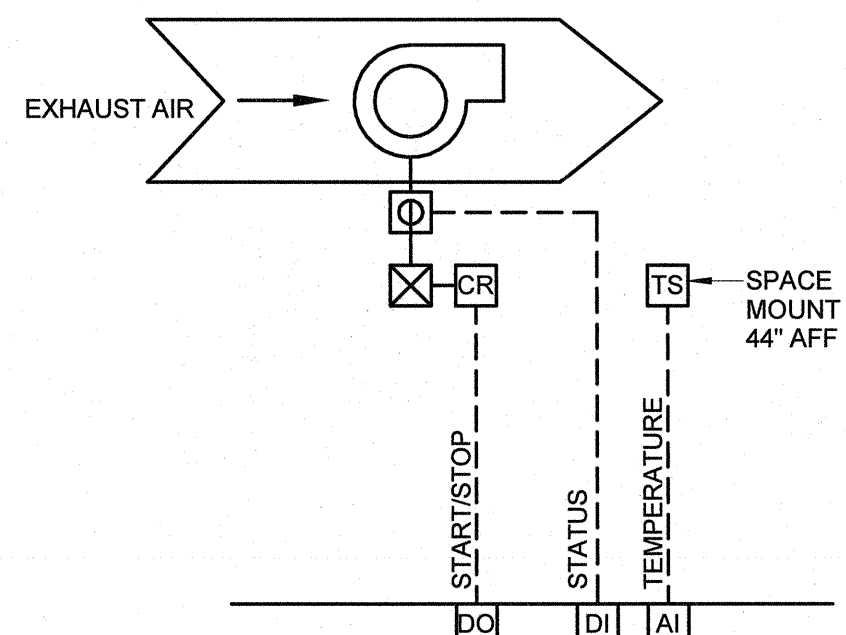


CEILING EXHAUST FANS

SEQUENCE OF OPERATION

DESCRIPTION: CONSTANT AIR VOLUME EXHAUST FAN, AS SCHEDULED.

FAN START/STOP CONTROL: START/STOP UNIT FAN BASED ON INTERLOCK WITH SPACES OCCUPANCY/VACANCY SENSORS.



SIDEWALL & HVLS FANS

SEQUENCE OF OPERATION

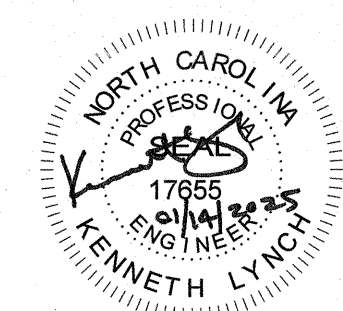
- A. POWER VENTILATORS SHALL BE CONTROLLED BY LOCAL THERMOSTATS.
- B. SEE POWER VENTILATOR SCHEDULE FOR DEFINITION OF POWER VENTILATOR CONTROL.

CONTROL SYMBOL LEGEND

TH	TEMPERATURE/RELATIVE HUMIDITY SENSOR
HT	HUMIDITY SENSOR
CR	CONTROL RELAY
MZE	MOTOR OPERATED 2-POSITION ELECTRIC
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
FAR	FIRE ALARM RELAY
CLS	CONDENSATE LEVEL SENSOR
OV	OCCUPANCY/VACANCY SENSOR
SA	SUPPLY AIR
RA	RETURN AIR
OA	OUTSIDE AIR
Q	CURRENT SENSOR
X	STARTER



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DATE 01/17/2025
PROJECT NUMBER 3105-2401
SHEET TITLE

MECHANICAL CONTROL DIAGRAMS

SHEET NUMBER

M-701

ELECTRICAL NOTES

1. ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
2. PERMITS FOR ELECTRICAL WORK SHALL BE OBTAINED BY AND PAID BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL PAY FOR ANY ADDITIONAL FEES FOR INSPECTIONS, TESTS, AND OTHER SERVICES AS REQUIRED FOR THE COMPLETION OF THE WORK.
3. THE ELECTRICAL CONTRACTOR AND ANY OF HIS SUBCONTRACTORS SHALL VISIT THE PROJECT SITE TO WITNESS EXISTING CONDITIONS AND BECOME FAMILIAR WITH THE SCOPE OF THE WORK REQUIRED PRIOR TO SUBMITTING PROPOSALS. WORK REQUIRED BY EXISTING JOB CONDITIONS NOT INDICATED ON DRAWINGS SHALL BE INCLUDED IN THE PROPOSALS.
4. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO RESULT IN THE PRODUCTION OF A COMPLETE AND FUNCTIONAL ELECTRICAL SYSTEM. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND OTHER SERVICES AS NECESSARY TO COMPLETE THE WORK.
5. DISCREPANCIES IN THE DRAWINGS AND SPECIFICATIONS THAT WILL AFFECT THE WORK SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT, ENGINEER, AND/OR OWNER PRIOR TO SUBMITTING PROPOSALS.
6. UNLESS NOTED OTHERWISE, ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND INCLUDE A 3RD PARTY LABEL (I.E.: UL, CSA, ETL, ETC.) LISTING APPROVAL FOR ITS INSTALLED APPLICATION.
7. REVIEW PLANS OF OTHER TRADES FOR COORDINATION OF WORK AND FOR RELATED AND ADJOINING WORK.
8. REVIEW COMPLETE PLAN SET FOR CONSTRUCTION TYPE, FINISHES, HEADROOM, ROOF FINISHES, CEILINGS, ETC. REVIEW COMPLETE PLAN SET FOR PROJECT PHASING AND STAGING. REVIEW COMPLETE PLAN SET FOR WORK COVERED BY ALTERNATE BID ITEMS.
9. COORDINATE DEVICE AND EQUIPMENT MOUNTING HEIGHTS WITH OTHER DISCIPLINE DRAWINGS, CASEWORK DETAILS & SUBMITTALS, EQUIPMENT DETAILS & SUBMITTALS, ETC.
10. PENETRATIONS OF FIRE-RATED WALLS, FLOORS, CEILINGS, AND PARTITIONS SHALL BE FIRE STOPPED IN ACCORDANCE WITH REQUIREMENTS OF THE STATE BUILDING CODE. COORDINATE WORK TO INSURE THAT FIRE STOPPING IS COMPLETED.
11. PENETRATIONS OF EXTERIOR BUILDING WALLS, FLOORS, OR ROOFS SHALL BE SEALED WATERTIGHT. INTERIORS OF RACEWAY PENETRATIONS THROUGH EXTERIOR WALLS SHALL BE SEALED WITH NON-HARDENING ELECTRICAL PUTTY.
12. CUTTING AND PATCHING TO INSTALL DEVICES AND EQUIPMENT SHALL BE PERFORMED WITH FINISHES RESTORED TO THEIR ORIGINAL CONDITION. SUCH WORK SHALL BE COMPLETED TO A DEGREE THAT IS ACCEPTABLE TO THE ARCHITECT, ENGINEER, AND/OR OWNER.
13. COORDINATE PRECISE LOCATION OF HVAC EQUIPMENT WITH THE MECHANICAL CONTRACTOR.
14. FOR HVAC EQUIPMENT, VERIFY CIRCUIT BREAKER RATINGS, FUSE RATINGS, AND WIRE SIZES. IF RATINGS DIFFER FROM THOSE INDICATED ON THE DRAWINGS, NOTIFY THE ARCHITECT, ENGINEER, AND OWNER FOR DIRECTION. PROVIDE OVERCURRENT PROTECTION IN ACCORDANCE WITH EQUIPMENT MANUFACTURER NAMEPLATE DATA. IF THE EQUIPMENT LISTING LABEL REQUIRES FUSED PROTECTION, ENSURE THAT FUSES IN A FUSED DISCONNECT SWITCH AT THE EQUIPMENT ARE SIZED AS INDICATED ON THE EQUIPMENT LABEL.
15. VERIFY PROPER SIZING OF OVERLOAD DEVICES IN STARTERS BASED ON EQUIPMENT NAMEPLATE DATA.
16. IF HORSEPOWER OR LOAD RATINGS OF EQUIPMENT DIFFER FROM THOSE INDICATED ON THE DRAWINGS, NOTIFY THE ARCHITECT, ENGINEER, AND OWNER FOR DIRECTION.
17. PROVIDE NATIONAL ELECTRICAL CODE REQUIRED CLEARANCES FOR ALL ELECTRICAL EQUIPMENT. COORDINATE RESOLUTION OF CONFLICTS WITH OTHER TRADES.
18. RECEPTACLE, SWITCH, DATA/TELEPHONE OUTLETS SHALL BE FLUSH MOUNTED IN FINISHED SPACES UNLESS OTHERWISE NOTED.
19. PRIOR TO ORDERING LIGHT FIXTURES, CONTRACTOR SHALL VERIFY TYPE OF CEILING OR WALL BY REVIEW OF ARCHITECTURAL FINISH SCHEDULES AND PROVIDE SUITABLE TRIM AND APPURTENANCES TO MOUNT FIXTURES IN TYPE OF CEILING OR WALL INDICATED.
20. RECESSED LIGHT FIXTURES INSTALLED IN CEILINGS WITH INSULATION (AS INDICATED IN ARCHITECTURAL PLANS, OR FOUND AS EXISTING CONDITIONS) SHALL BE U.L. RATED FOR DIRECT CONTACT WITH INSULATION.
21. EXIT AND EMERGENCY LIGHTS SHALL BE CONNECTED TO THE NEAREST UNSWITCHED CIRCUIT THAT SERVES LIGHT FIXTURES WITHIN THE SAME SPACE.
22. NO MOUNTING HARDWARE SHALL BE ATTACHED TO ROOF DECKS. ATTACHMENTS SHALL BE MADE TO THE ROOF SUPPORTING STRUCTURE.
23. PANEL BUS MATERIAL: COPPER.
24. SHARED NEUTRAL CONDUCTORS SHALL NOT BE USED UNLESS SPECIFICALLY INDICATED SO ON HOMERUN CIRCUITRY DESIGNATIONS.
25. PANEL BREAKER CONFIGURATIONS SHALL BE INSTALLED AS INDICATED ON THE PANEL SCHEDULES OR AS NOTED. BREAKER POSITION REVISIONS WILL NOT BE ACCEPTED UNLESS APPROVED IN WRITING BY THE ENGINEER.
26. LOAD CIRCUITS SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS. CIRCUITRY REVISIONS WILL NOT BE ACCEPTED UNLESS APPROVED IN WRITING BY THE ENGINEER.

ABBREVIATIONS

ADA
AFF
AFG
AHU
LTS
AIC
ARA
BKR
C
C/B
CLG
OCT
EC
COMP
CU
DAHJ
DHP
DIA
DWG
EC
EMT
ENCL
EXSTG
G
GEC
GFCI
GFI
HP
HP
IMC
K
LED
LTS
MC
MCB
MFR
MLO
N/A
NEC
NEMA
NTS
P
PH
PNL
REC
RECP
REQD
RIG
RGS
S.S.
SYS
TYP
UL
UNO
UDON
V
VA
W
W
W/
WP
XFMR

AMERICAN DISABILITIES ACT
ABOVE FINISHED FLOOR
ABOVE FINISHED GRADE
AIR HANDLER UNIT
AMPS INTERRUPTING CAPABILITY
AREA OF RESCUE ASSISTANCE
BREAKER
CONDUIT
CIRCUIT BREAKER
CEILING
CIRCUIT
COMPRESSOR
COPPER
DUCTLESS AIR HANDLING UNIT
DUCTLESS HEAT PUMP
DIAMETER
DRAWING
ELECTRICAL CONTRACTOR
ELECTRICAL METALLIC TUBING
ENCLOSED
EXISTING
EQUIPMENT GROUND
GROUNDING ELECTRODE CONDUCTOR
GROUND FAULT CIRCUIT INTERRUPTER
GROUND FAULT INTERRUPTER
HEAT PUMP
HORSEPOWER
INTERMEDIATE METAL CONDUIT
KILO (THOUSAND)
LIGHT EMITTING DIODE
LIGHTING
LIGHTS
MECHANICAL CONTRACTOR
MAIN CIRCUIT BREAKER
MANUFACTURER
MAIN LUG ONLY
NOT APPLICABLE
NATIONAL ELECTRICAL CODE
NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
NOT TO SCALE
PHASE OR POLE
PHASE
PANEL
RECEPTACLE
RECEPTACLE
REQUIRED
RIGID GALVANIZED CONDUIT
RIGID GALVANIZED STEEL
STAINLESS STEEL
SYSTEM
SOLID NEUTRAL
TYPICAL
UNDERWRITERS LABORATORY
UNLESS NOTED OTHERWISE
UNLESS OTHERWISE NOTED
VOLTS
VOLTS-AMPS
WATTS
WIRE
W/
WITH
WEATHERPROOF
TRANSFORMER

LUMINAIRE SCHEDULE

CALLOUT	SYMBOL	DESCRIPTION	LAMP	BALLAST	VOLTS	MOUNTING	MANUFACTURER / MODEL	NOTES	CALLOUT
B2M		2x2, ARCHITECTURAL LENSED, INDIRECT	(1) 40W LED	LED DIMMABLE DRIVER	120V 1P 2W	RECESSED	COLUMBIA #LUCAT SERIES DAYBRITE #FCX SERIES METALUX #22CZ SERIES	4400 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. SMOOTH, ROUND LENSE.	B2M
EG		EMERGENCY EGRESS, BATTERY	(2) 7W MR 16 LED	BATTERY	120V 1P 2W	WALL; MTD 8'-0" AFF	EMERGLITE #COMPACT PREMIER SERIES BEGHELLI #E000 LUNA LED SERIES LIGHTALARMS #COMPACT GRANDE SERIES	CONNECT TO NEAREST UNSWITCHED LIGHT CIRCUIT IN SAME SPACE. THESE FIXTURES ARE NOT TAGGED WITH "EG" ON THE DRAWINGS; ONLY THE SYMBOL IS USED. DESIGN CRITERIA: 70 FT SPACING, UTILIZING 6 FT WIDE PATH, 80/50/20 REFLECTANCES, MAINTAINING 1 FC AVG AND 0.2 FC MINIMUM.	EG
H		HIGH BAY	(1) 147W LED	LED DIMMABLE DRIVER	120V 1P 2W	PENDANT; MTD 20'-0" AFF	COLUMBIA #CLH-LSCS SERIES DAY-BRITE #FBX SERIES METALUX #0HB SERIES	19,000 NOMINAL LUMENS. 4000K COLOR TEMPERATURE, 80 CRI. WIRE GUARD. POLYCARBONATE LENS.	H
IM		4' INDUSTRIAL	(1) 44W LED	LED DRIVER	120V 1P 2W	PENDANT/SURFACE	COLUMBIA #LCL SERIES DAYBRITE #FSS SERIES METALUX #SNLED SERIES	5300 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. WIRE GUARD. FROSTED LENS.	IM
IV1		INVERTER, EGRESS LIGHTING	N/A	BATTERY	120V 1P 2W	SURFACE	EMERGI-LITE #EMIU SERIES BODINE #ELI-S SERIES LIGHTALARMS #LMUI SERIES	INVERTER FOR BATTERY BACKUP OF EGRESS LIGHTING; 100W FOR 90 MINUTES (MINIMUM). INCLUDE SELF-DIAGNOSTIC OPTION. LOCATE ON WALL OR ABOVE CEILING WHERE APPLICABLE - PROVIDE "LIGHTING INVERTER" LABEL ON CEILING GRID BELOW INSTALLED LOCATION. STANDARD LIGHTING CONTROL OVERRIDE FOR 0-10V DIMMING SYSTEM.	IV1
P4W		PARKING LOT LIGHT	(1) 122W LED	LED DRIVER	120V 1P 2W	POLE	BEACON #VIPER SERIES LUMARK #Z6RDL SERIES GARDCO #ECF SERIES	TYPE 4 WIDE DISTRIBUTION; 4000K; 18000 LUMENS; FINISH SELECTION BY ARCHITECT. 25' ROUND TAPERED ALUMINIUM POLE SUITABLE FOR 110 MPH WIND TO MEET NC BUILDING CODE.	P4W
R6		6" RECESSED CAN	(1) 25W LED	LED DIMMABLE DRIVER	120V 1P 2W	RECESSED	PRESCOLITE #LFR6RD SERIES LIGHTOLIER #Z6RDL SERIES PORTFOLIO #D6A SERIES	2500 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. SELF-FLANGED LENSED REFLECTOR TRIM; LOW IRIDESCENT CLEAR FINISH.	R6
R6XE		6" RECESSED CAN, EXTERIOR, EGRESS	(1) 18W LED	LED DRIVER	120V 1P 2W	RECESSED	PHILIPS LIGHTOLIER #L6R SERIES WILLIAMS #RDR SERIES ATLANTIC #LED6C SERIES	DAMP LOCATION. 2000 NOMINAL LUMENS. 4000K COLOR TEMP; SELF-FLANGED OPEN REFLECTOR TRIM, LOW IRIDESCENT CLEAR FINISH. IC RATED, AIRTIGHT CONSTRUCTION. GASKET BETWEEN FIXTURE & SOFFIT; SEE SPECIFICATIONS FOR ENERGY CODE REQUIREMENTS.	R6XE
W1		HALF CYLINDER WALL PACK	(1) 30W LED	LED DRIVER	120V 1P 2W	WALL; MTD 12' AFG	HUBBELL #RD12 SERIES GARDCO #104L SERIES MCGRAW-EDISON #ISC SERIES	3100 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. TYPE IV DISTRIBUTION. FINISH SELECTION BY ARCHITECT.	W1
W2		LED FLOOD LIGHT	(1) 206W LED	LED DRIVER	120V 1P 2W	WALL; MTD 23' AFG	VIPER #MICRO STRIKE LUMARK #PREVAIL SERIES GARDCO #ECF-S SERIES	29000 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. TYPE IV DISTRIBUTION. FINISH SELECTION BY ARCHITECT.	W2
WB		HALF CYLINDER WALL PACK, EGRESS	(1) 20W LED (1) 20W LED	LED DRIVER LED DRIVER	120V 1P 2W	WALL	HUBBELL #RD12 SERIES GARDCO #104L SERIES MCGRAW-EDISON #ISC SERIES	5300 NOMINAL LUMENS. 4000K COLOR TEMPERATURE. TYPE IV DISTRIBUTION. DUAL LED DRIVERS AND DUAL LED ARRAYS FOR EGRESS REQUIREMENTS. DOWNLIGHT ONLY. FINISH SELECTION BY ARCHITECT.	WB
X		EXIT SIGN, BATTERY BACKUP	(2) 1W LED	BATTERY	120V 1P 2W	UNIVERSAL	EMERGLITE #PREMIER SERIES BEGHELLI #FAC0 PYX SERIES LIGHTALARMS #GRANDE SERIES	CONNECT TO NEAREST UNSWITCHED LIGHT CIRCUIT IN SAME SPACE. THESE FIXTURES ARE NOT TAGGED WITH "X" ON THE DRAWINGS; ONLY THE SYMBOL IS USED.	X

SWITCH LEGEND

SYMBOL	DESCRIPTION	NOTES
\$ ₀	DIMMER SWITCH	RATED FOR VOLTAGE WHERE APPLIED, 1200W; MTD 42" AFF UNO
\$ ₄	4-WAY SWITCH	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO; WHERE SHOWN PAIRED, PROVIDE DUAL LEVEL SWITCHING; SEE DUAL LEVEL SWITCHING NOTES AT THE STANDARD SWITCH SYMBOL IN THIS LEGEND.
\$ ₀₁	OCCUPANCY SENSOR WALL SWITCH, SINGLE CKT, DUAL TECHNOLOGY	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO
⊗	OCCUPANCY SENSOR, LOW VOLTAGE, DUAL TECHNOLOGY; CEILING MTD	INCORPORATE POWER PACK FOR CIRCUITRY SWITCHING, SEE WIRING DIAGRAMS
⊙	PHOTOCELL, EXTERIOR	MOUNT ON NORTH FACE OF BLDG, FACING NORTH
\$	TOGGLE SWITCH, SINGLE POLE	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO; WHERE INDICATED, WHERE USED AS AN EQUIPMENT DISCONNECT, PROVIDE LOCKABLE TYPE COVER.
\$ ₃	3-WAY SWITCH	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO

FIRE ALARM LEGEND

SYMBOL	DESCRIPTION	MOUNTING
	FIRE ALARM CONTROL PANEL	WALL
	MONITOR MODULE FOR MONITORING A DRY CONTACT CLOSURE DEVICE	
	PULL STATION	WALL
	SMOKE DETECTOR	CEILING

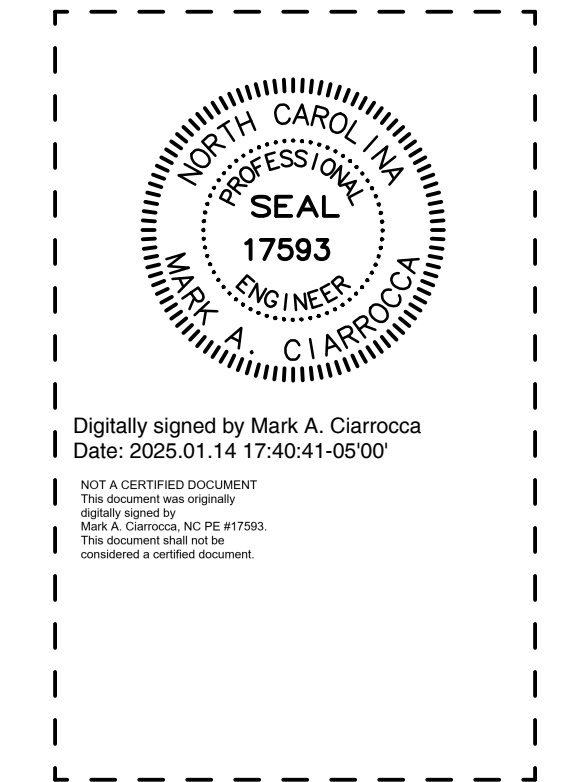
RECEPTACLE LEGEND

SYMBOL	NEMA	VOLTS	DESCRIPTION
	5-20R	120V 1P 2W	DUPLEX, MTD 18" AFF UNO
	5-20R	120V 1P 2W	POWER FOR GENERATOR BLOCK HEATER
	5-20R	120V 1P 2W	DUPLEX GFCI, MTD 6" ABOVE COUNTER OR 6" ABOVE BACKSPLASH IF APPLICABLE. CONTRACTOR TO COORDINATE WITH ARCHITECTURAL BACKSPLASH DETAILS.
	5-20R	120V 1P 2W	DISHWASHER OUTLET, DUPLEX, MTD 12" AFF UNO. SUPPLY FROM GFCI TYPE C/B.
	5-20R	120V 1P 2W	DUPLEX GFCI, MTD 18" AFG UNO; LISTED WEATHER-RESISTANT TYPE; PROVIDE CAST ALUMINUM WEATHERPROOF IN-USE COVER WITH CAST ALUMINUM FD WEATHERPROOF BOX
	5-20R	120V 1P 2W	DUPLEX GFCI, MTD 18" AFF UNO
	5-20R	120V 1P 2W	POWER FOR ICE MACHINE; MTD 24" AFF UNO
	5-20R	120V 1P 2W	DUPLEX FOR REFRIGERATOR; MOUNT 48" AFF UNO. SUPPLY FROM GFCI TYPE C/B.
		120V 1P 2W	POWER FOR EMERGENCY RESPONDER COMMUNICATION COVERAGE SYSTEM
		120V 1P 2W	POWER FOR FIRE ALARM CONTROL PANEL
	5-20R	120V 1P 2W	QUAD, MTD 18" AFF UNO
	5-20R	120V 1P 2W	POWER FOR GENERATOR BATTERY CHARGER, BATTERY HEATER, & WINDING HEATER
	5-20R	120V 1P 2W	QUAD, MTD IN FLUSH FLOOR BOX; SEE AUX SYS PLANS FOR SHARED BOX; PROVIDE DIVIDER FOR POWER SEPARATION FROM VOICE/DATA
		120V 1P 2W	EXHAUST FAN; SEE MECHANICAL SCHEDULE. PROVIDE POWER PACK FOR SWITCHING WITH LIGHTING CEILING OCCUPANCY SENSOR.

MISC. ELECTRICAL SYMBOL LEGEND	
	ENCLOSED CIRCUIT BREAKER, NEMA 3R OUTSIDE, AMPERAGE AS INDICATED OR BASED ON SUPPLY CIRCUIT RATING.
	PANELBOARD, SEE PANEL SCHEDULE
	GROUND ROD, 3/4" X 10' COPPER CLAD, WHERE TWO RODS ARE INDICATED, SPACE A MINIMUM OF 22' APART.
	PUSH BUTTON SWITCH CONTROLLER FOR HANGAR DOOR. MOUNT 42" AFF.
	EQUIPMENT CONNECTION
	HOMERUN DESIGNATION, #12 CONDUCTORS UNLESS NOTED OTHERWISE.
	EQUIPMENT GROUND CONDUCTOR PHASE CONDUCTOR NEUTRAL CONDUCTOR
	LETTER INDICATES ELEVATION OR DETAIL; NUMBER INDICATES PLAN OR SECTION SHEET NUMBER WHERE PLAN, SECTION, ELEVATION OR DETAIL IS DRAWN
	2 HOUR RATED PARTITION



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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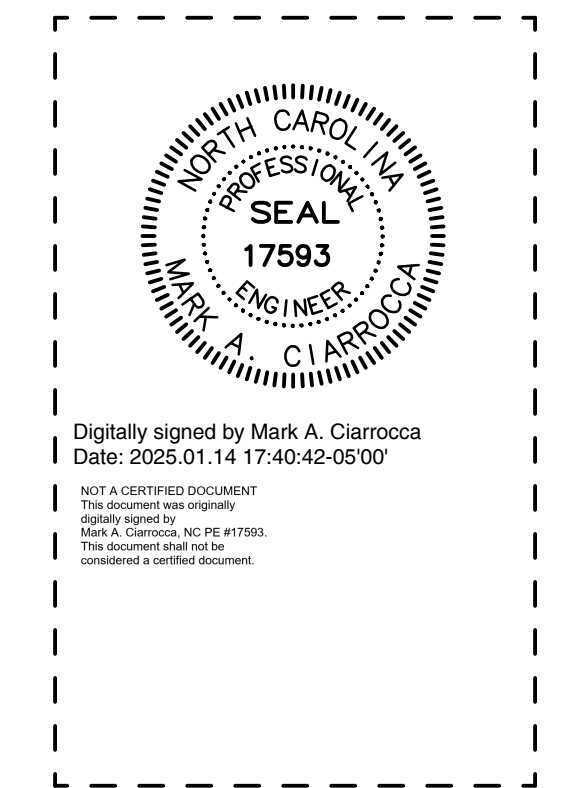
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PROJECT NUMBER 3105-2401
SHEET TITLE

ELECTRICAL
NOTES, AND
LEGENDS

SHEET NUMBER
E-001



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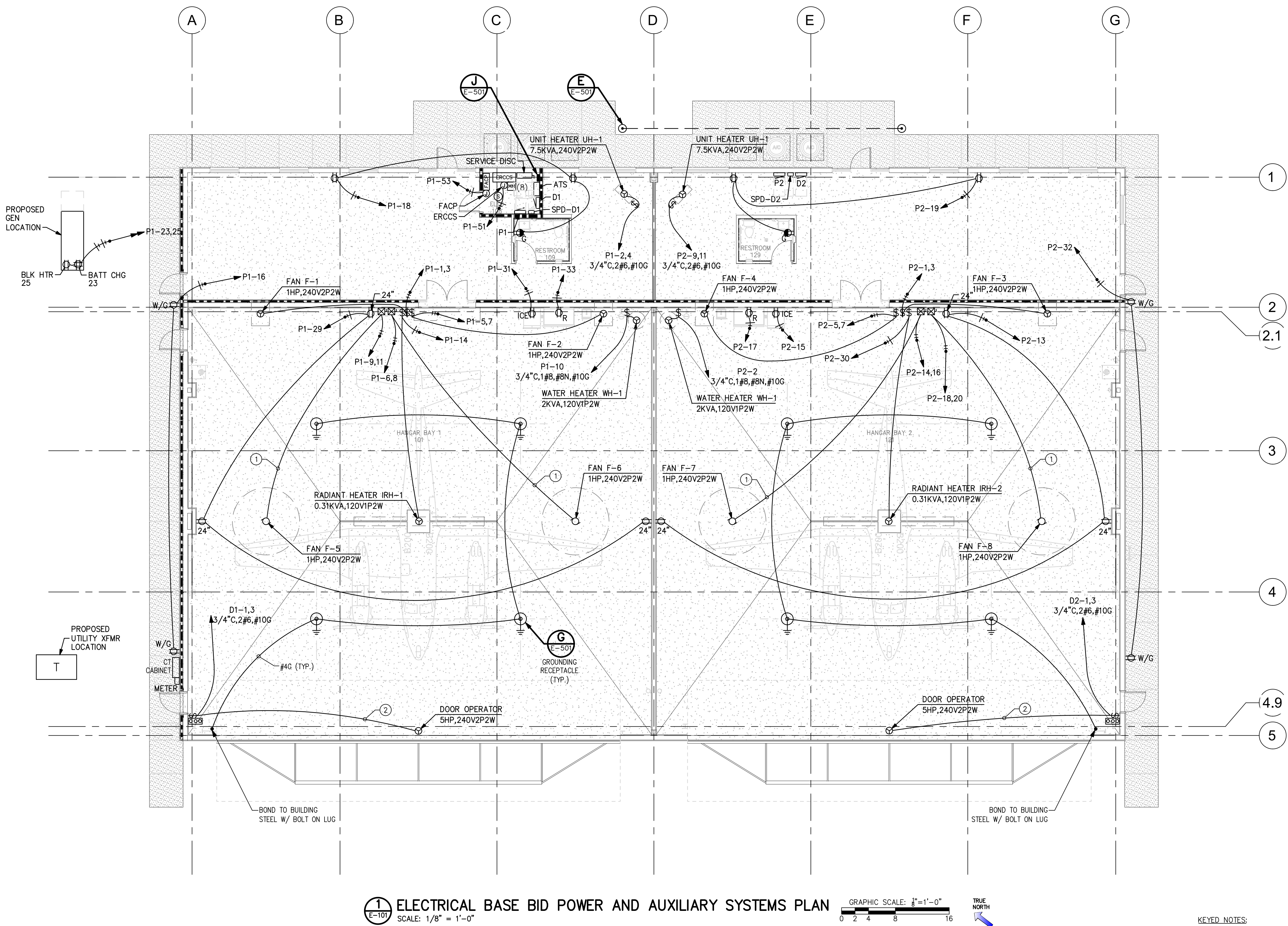
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ELECTRICAL
BASE BID
PLAN

SHEET NUMBER
E-101



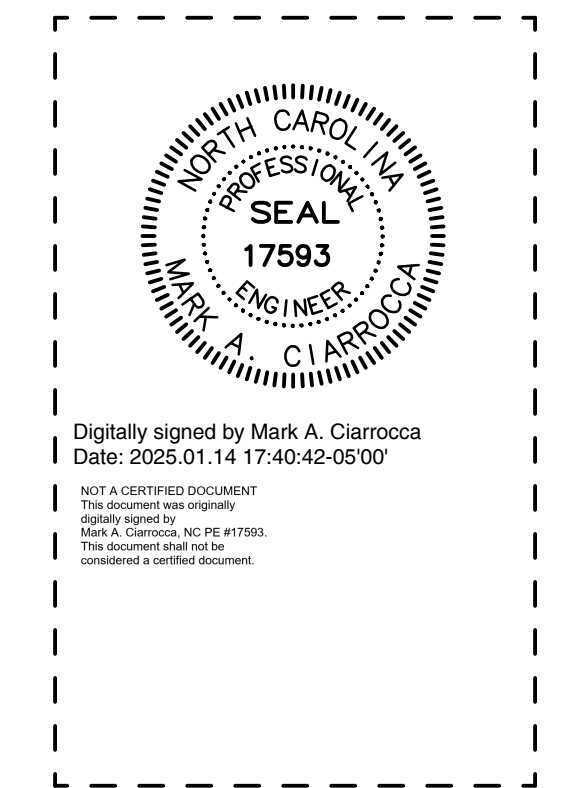
1 ELECTRICAL BASE BID POWER AND AUXILIARY SYSTEMS PLAN
SCALE: 1/8" = 1'-0"
GRAPHIC SCALE: 1/4" = 1'-0"
TRUE NORTH

KEYED NOTES:

- COORDINATE FAN CIRCUITRY REQUIREMENTS WITH FAN VENDOR/INSTALLER.
- COORDINATE CONTROL COMPONENTS AND CIRCUITRY REQUIREMENTS WITH DOOR VENDOR/INSTALLER.



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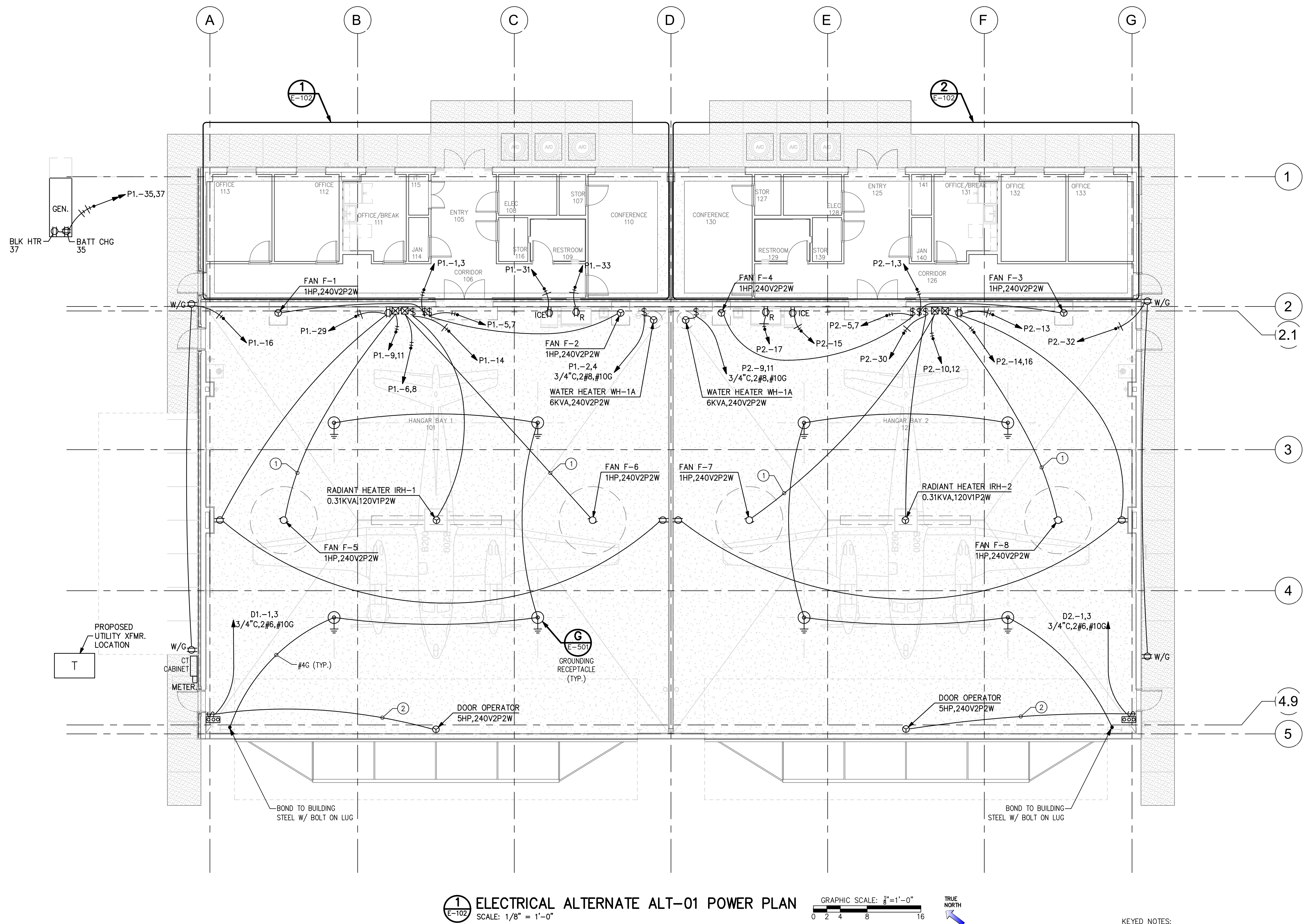
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SHEET TITLE

ELECTRICAL
POWER PLAN
ALTERNATE AL-01

SHEET NUMBER
E-102

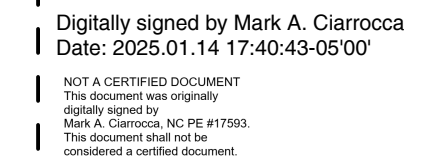


ELECTRICAL ALTERNATE ALT-01 POWER PLAN
SCALE: 1/8" = 1'-0"

GRAPHIC SCALE: 1/8" = 1'-0"
0 2 4 8 16
TRUE NORTH

KEYED NOTES:

- COORDINATE FAN CIRCUITRY REQUIREMENTS WITH FAN VENDOR/INSTALLER.
- COORDINATE CONTROL COMPONENTS AND CIRCUITRY REQUIREMENTS WITH DOOR VENDOR/INSTALLER.



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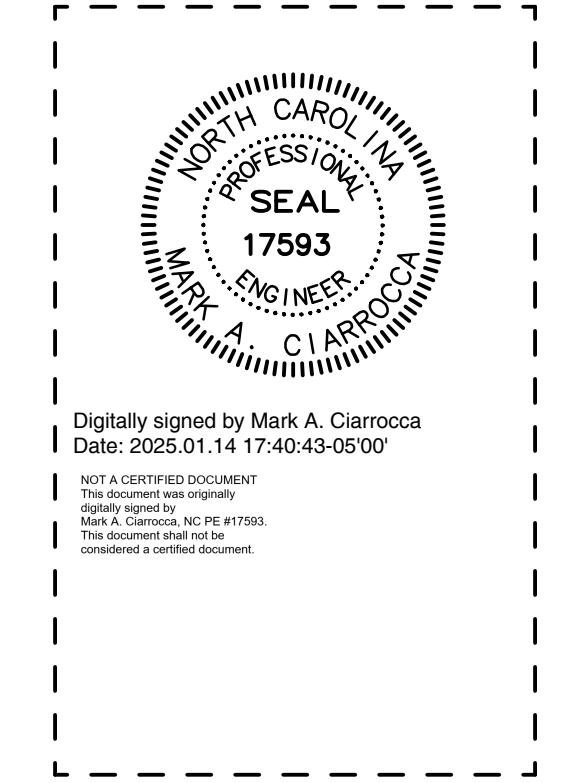
ELECTRICAL
ENLARGED
POWER PLANS
ALTERNATE ALT-0

SHEET NUMBER
E-103





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PHONE: 910-256-9277 LICENSE NO. F-1479

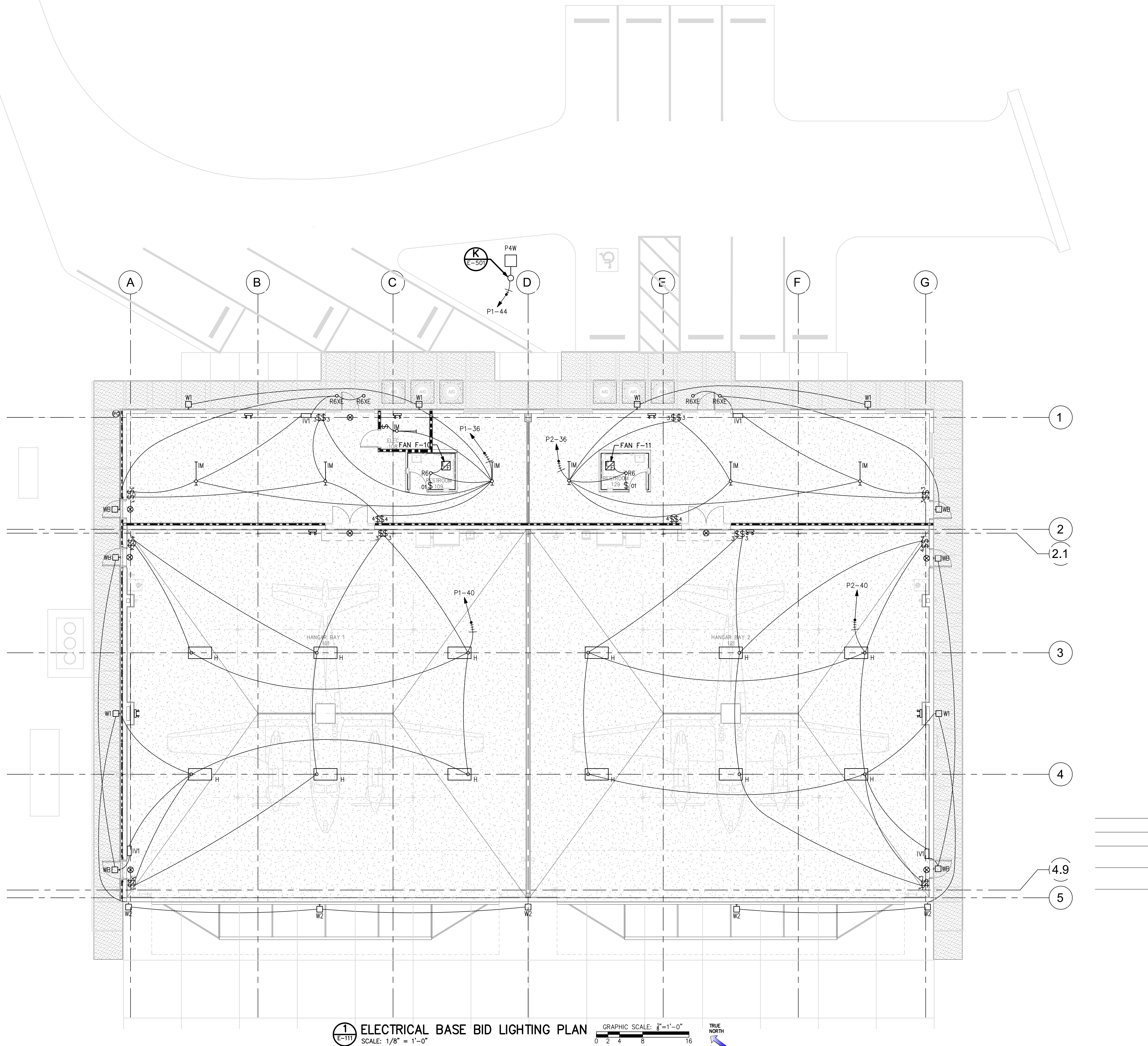
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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 3105-2401
SHEET TITLE

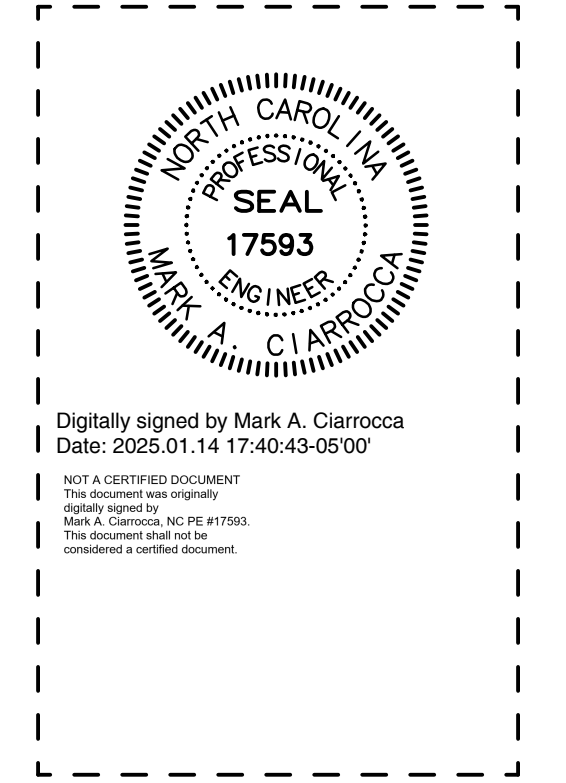
ELECTRICAL
BASE BID
LIGHTING
PLAN

SHEET NUMBER
E-111





Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



THE WILSON GROUP
- ARCHITECTS -
PO BOX 5510
CHARLOTTE, NC 28299
(704) 331-0747
www.twgarchitects.com
NC Cert. No.: 51140

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EMAIL: TBILM@TBILM.COM

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WITHER RAVENEL
219 STATION ROAD, SUITE 101
WILMINGTON, NC 28405
PHONE: 910-256-9277 LICENSE NO. F-1479

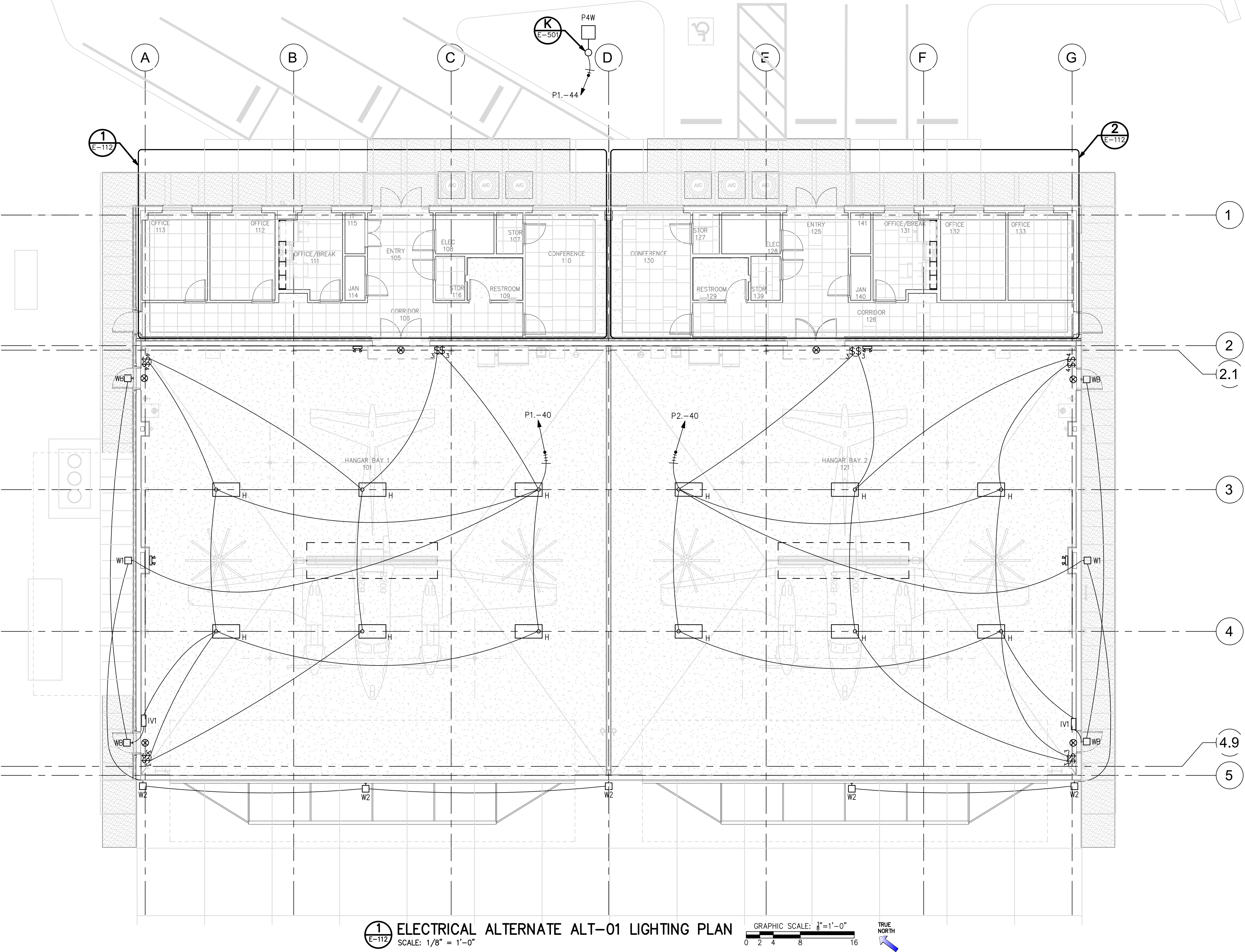
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DATE 01/17/2025
PROJECT NUMBER 3105-2401
SHEET TITLE

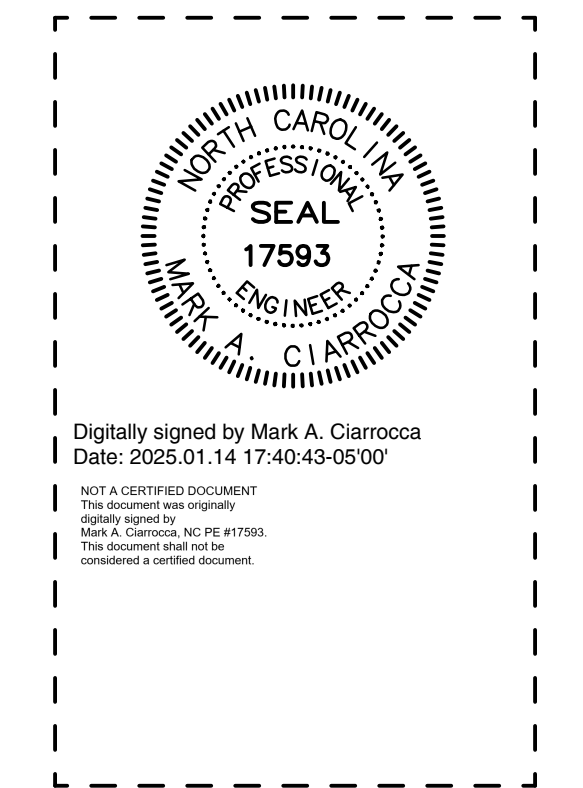
ELECTRICAL
ALTERNATE ALT-01
LIGHTING PLANS

SHEET NUMBER
E-112





Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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WITHER RAVENEL
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PHONE: 910-256-9277 LICENSE NO. F-1479

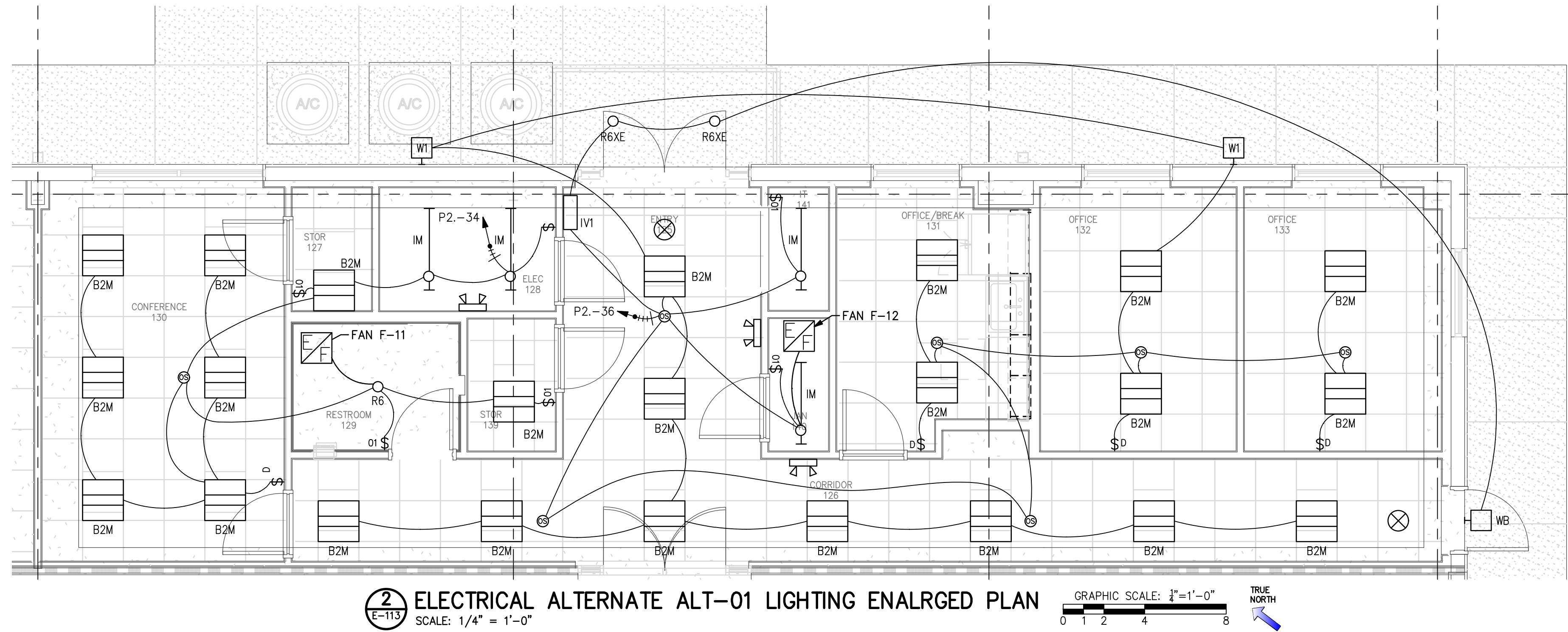
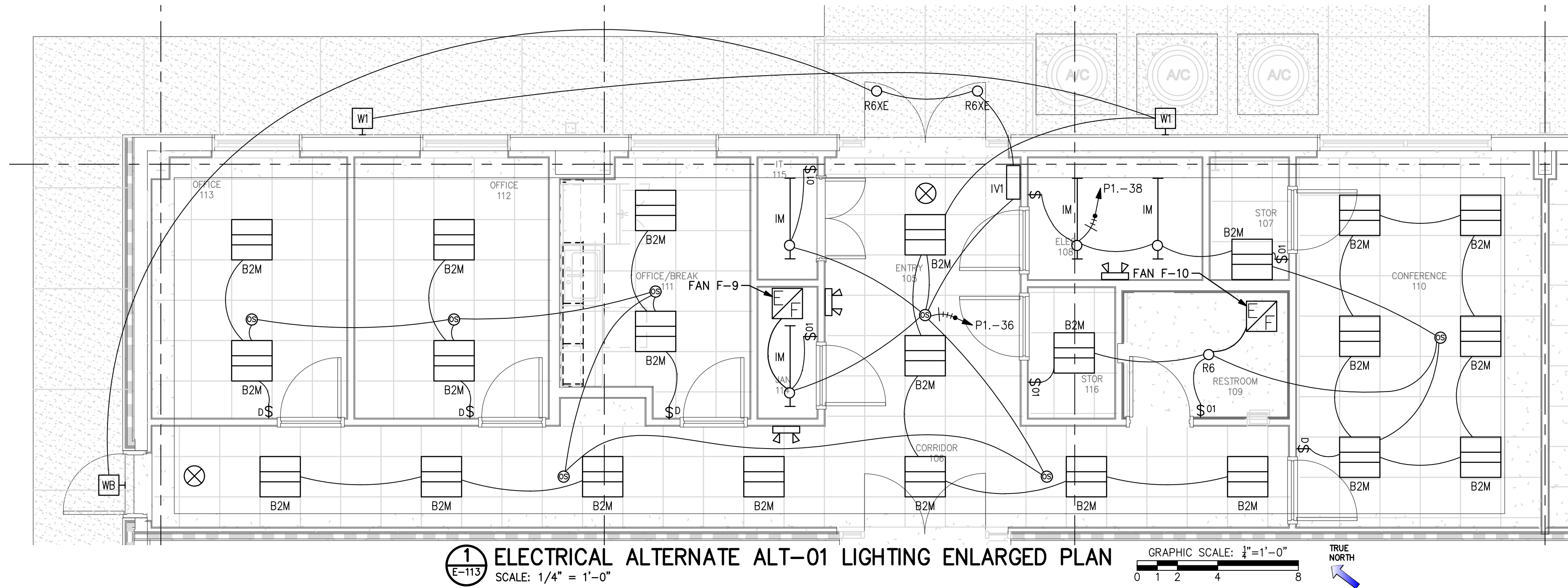
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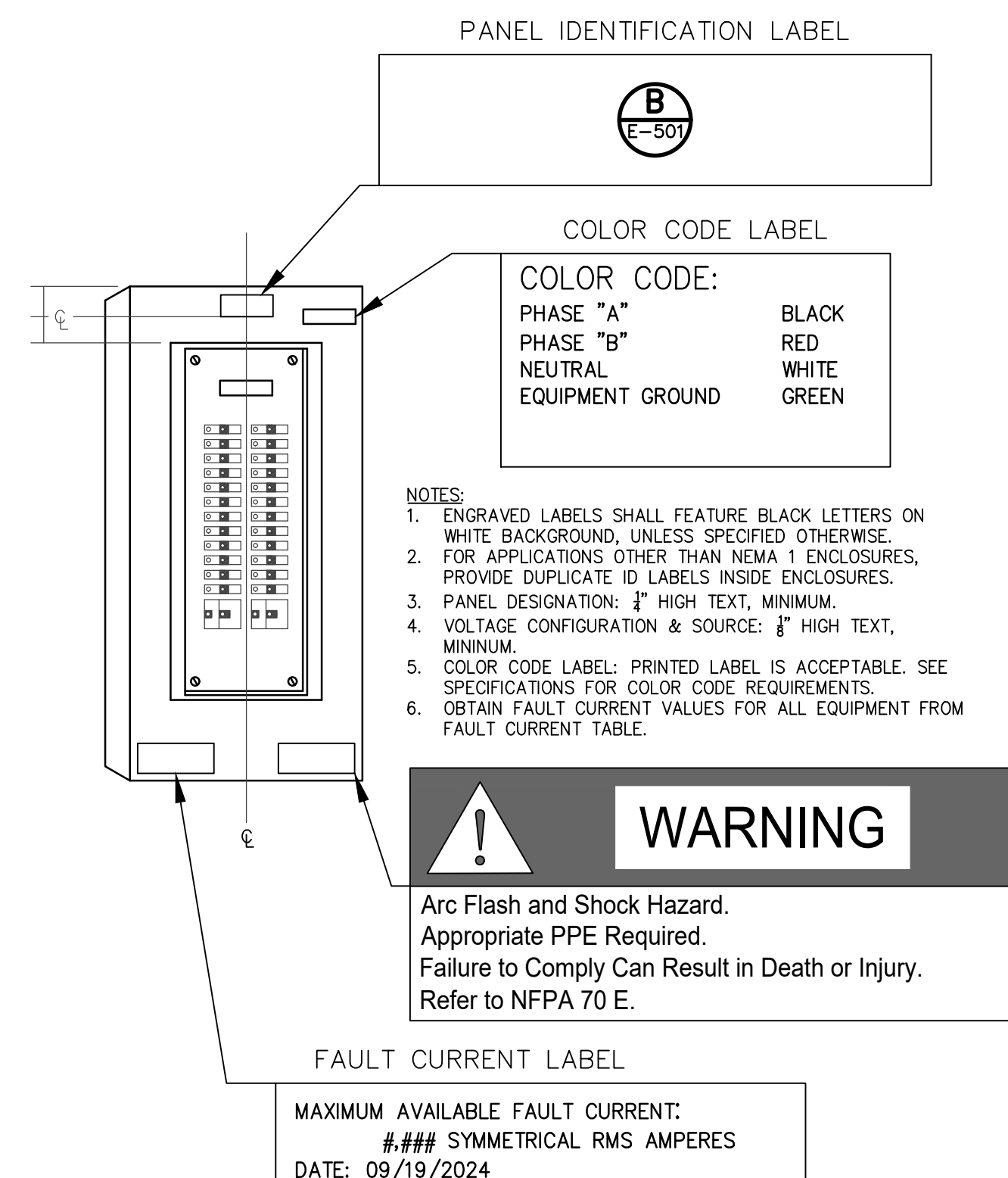
REVISIONS

DATE 01/17/2025
PROJECT NUMBER 3105-2401
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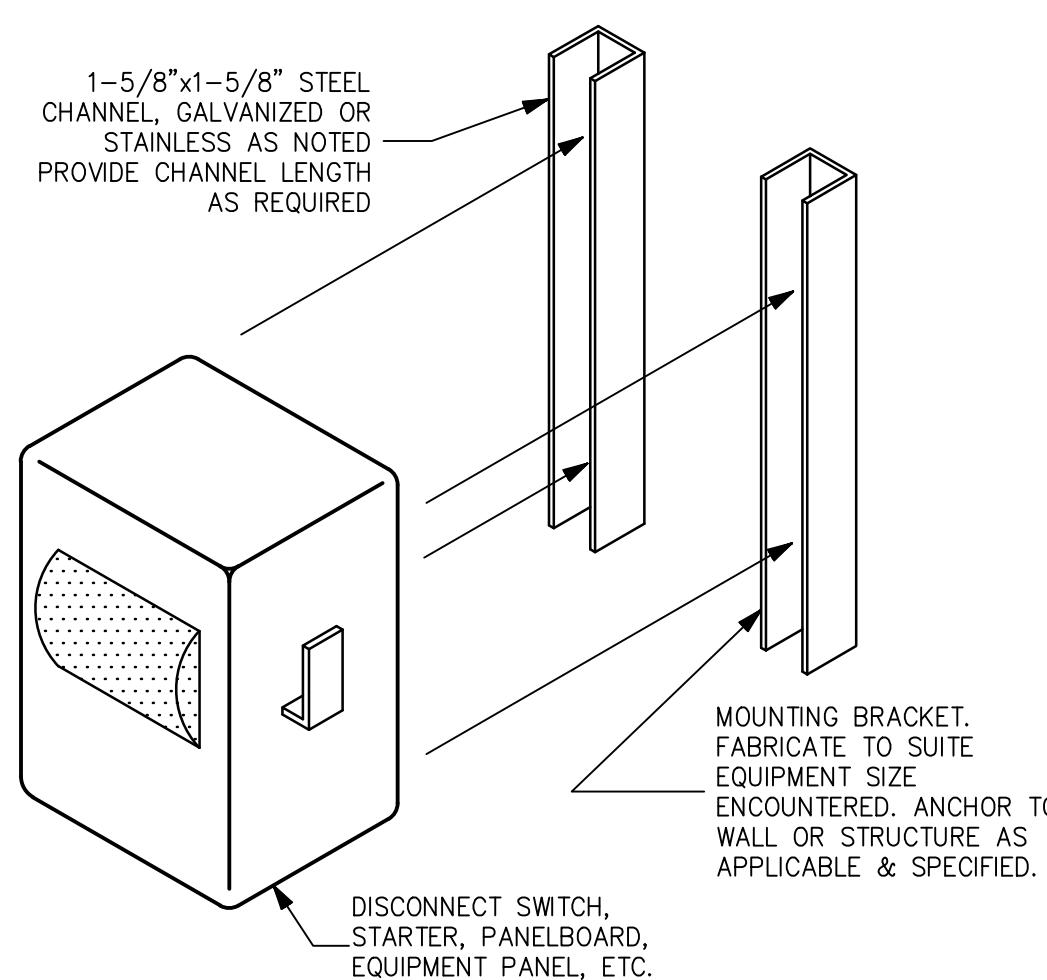
ELECTRICAL
ENLARGED
LIGHTING
PLANS

SHEET NUMBER
E-113

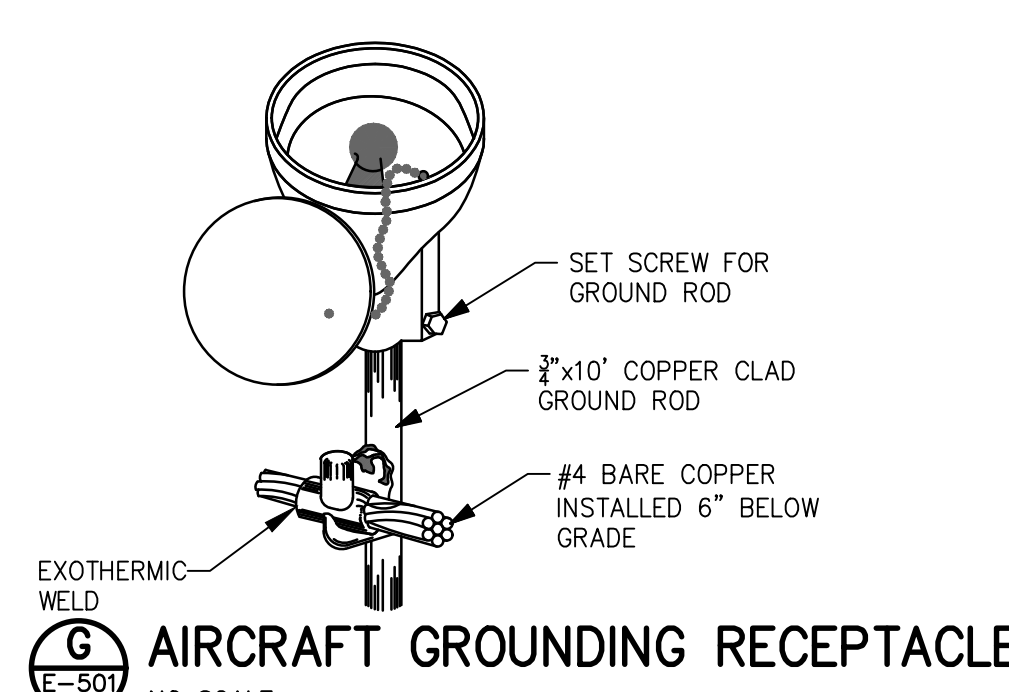




A
E-501
TYPICAL PANELBOARD IDENTIFICATION
NO SCALE



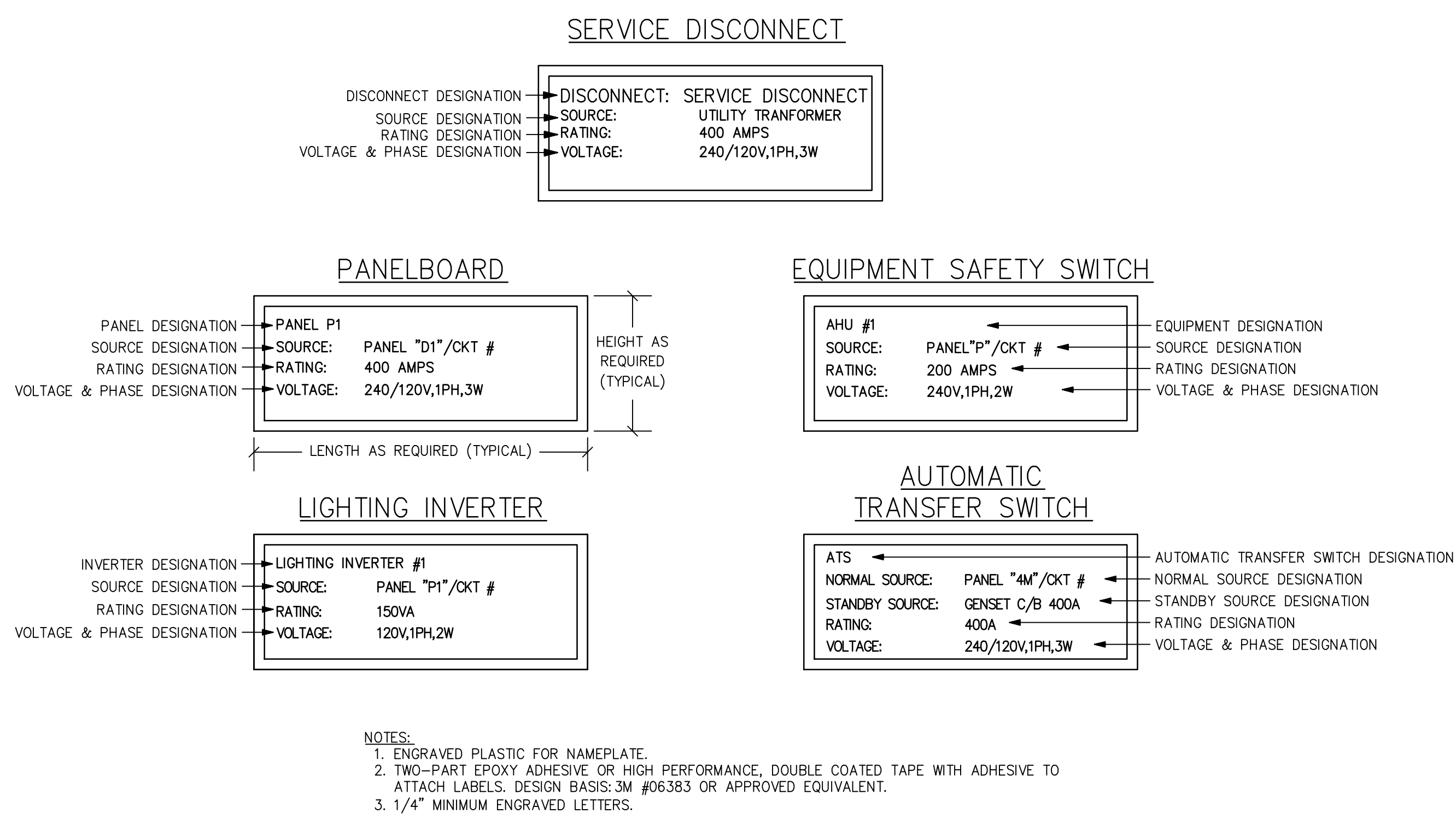
D
E-501
EQUIPMENT MOUNTING DETAIL
NO SCALE



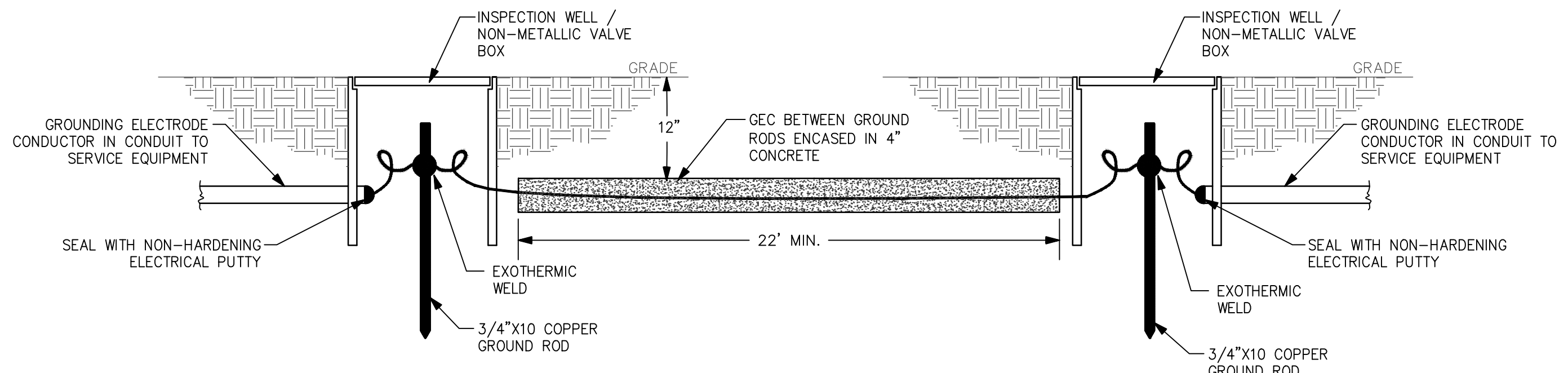
G
E-501
AIRCRAFT GROUNDING RECEPTACLE
NO SCALE

FAULT CURRENT SCHEDULE

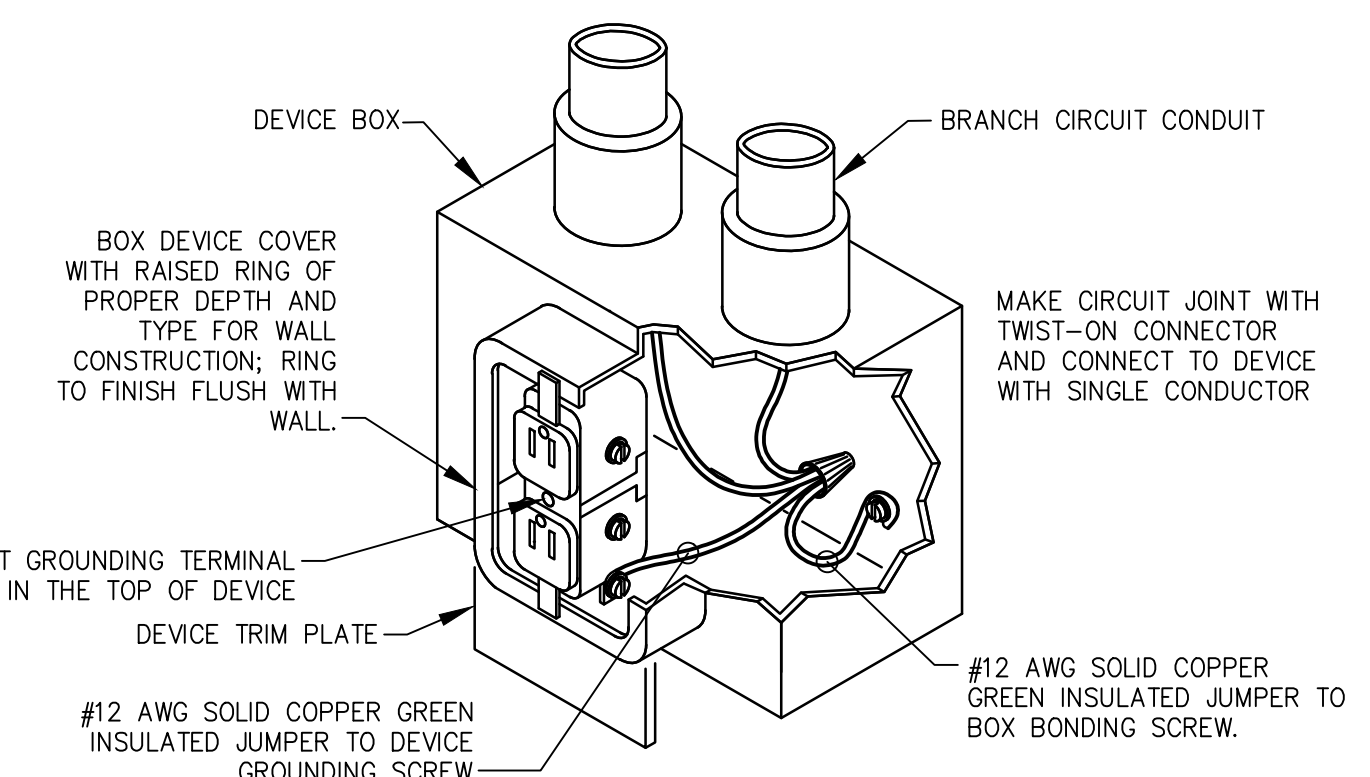
DEVICE	L-L FAULT
SERVICE DISC	11,752
ATS	14,773
D1	14,243
D2	11,021
P2	10,442
SPD-M2	5,501
P1	13,205
SPD-M1	5,976



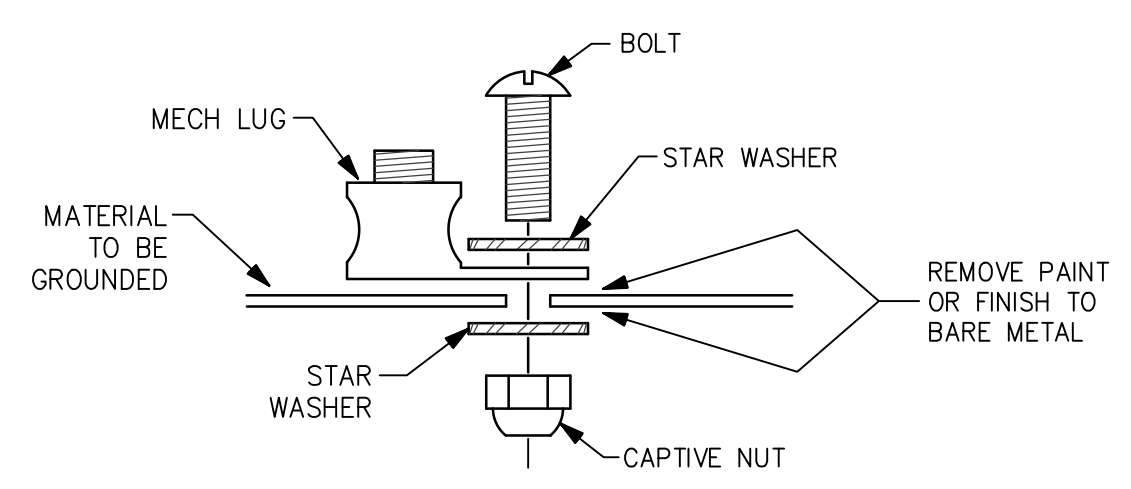
B
E-501
TYPICAL NAMEPLATE DETAILS
NO SCALE



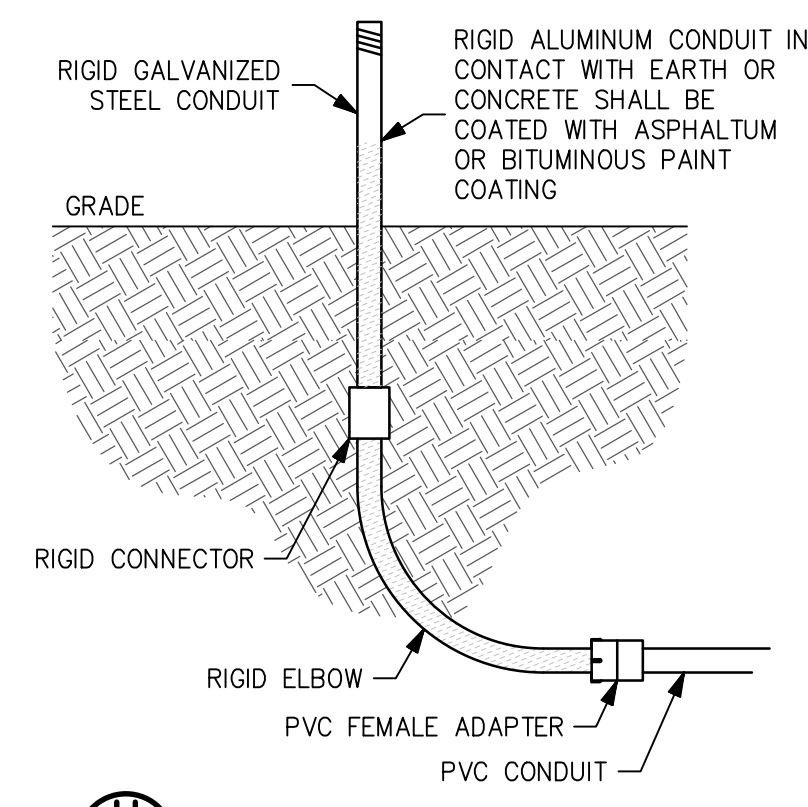
E
E-501
GROUND RODS & INSPECTION WELLS
NO SCALE



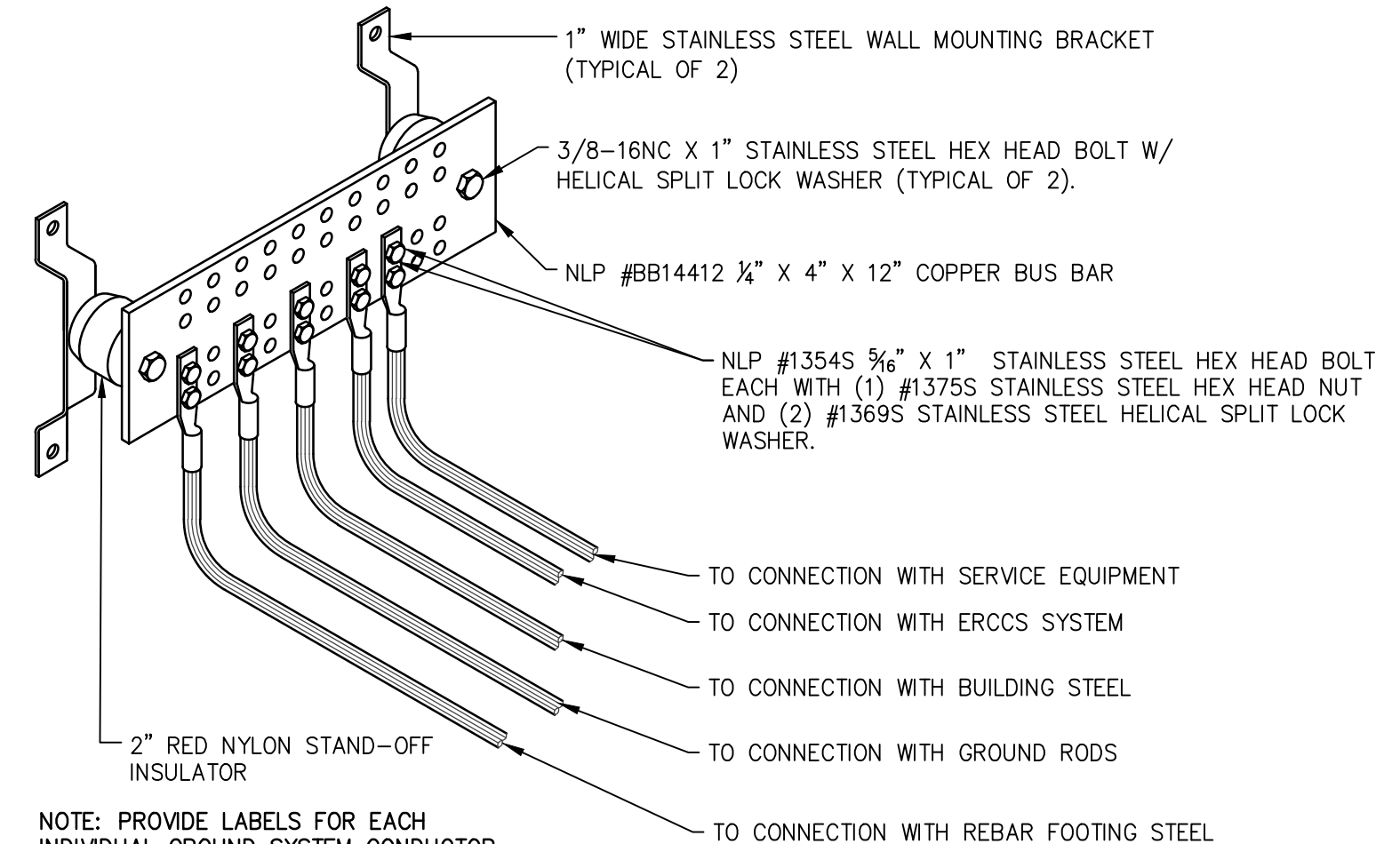
C
E-501
OUTLET GROUNDING DETAIL
NO SCALE



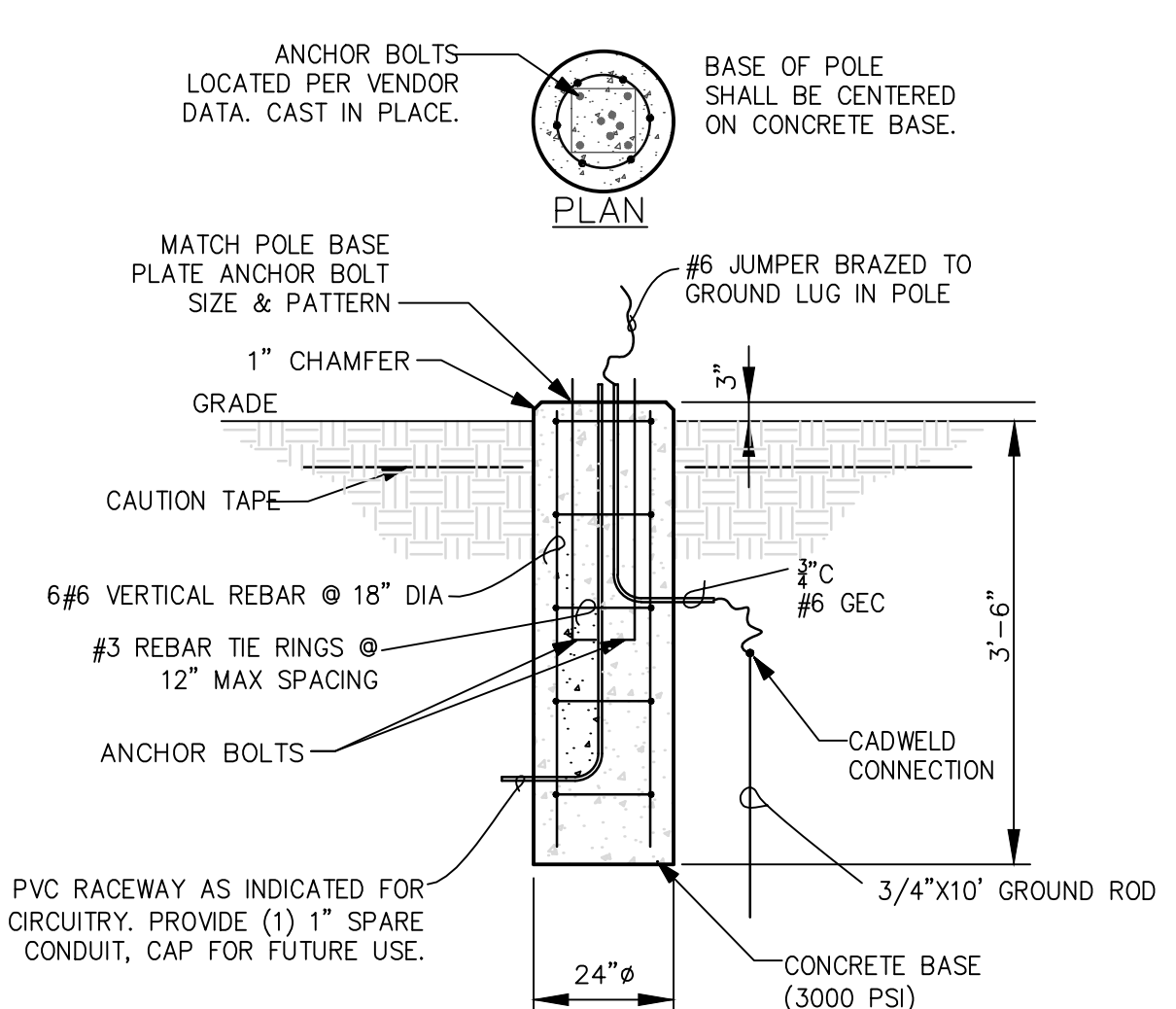
F
E-501
GROUNDING LUG DETAIL
NO SCALE



H
E-501
CONDUIT STUB-UP
NO SCALE



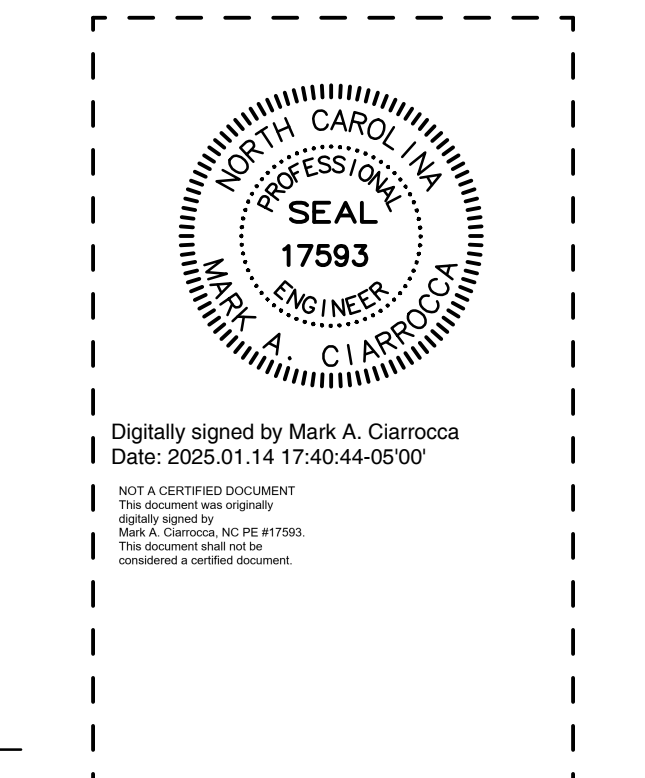
J
E-501
MAIN GROUND BAR
NO SCALE



K
E-501
POLE BASE DETAIL, AREA LIGHT
NO SCALE



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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PHONE: 910-256-9277 LICENSE NO. F-1479

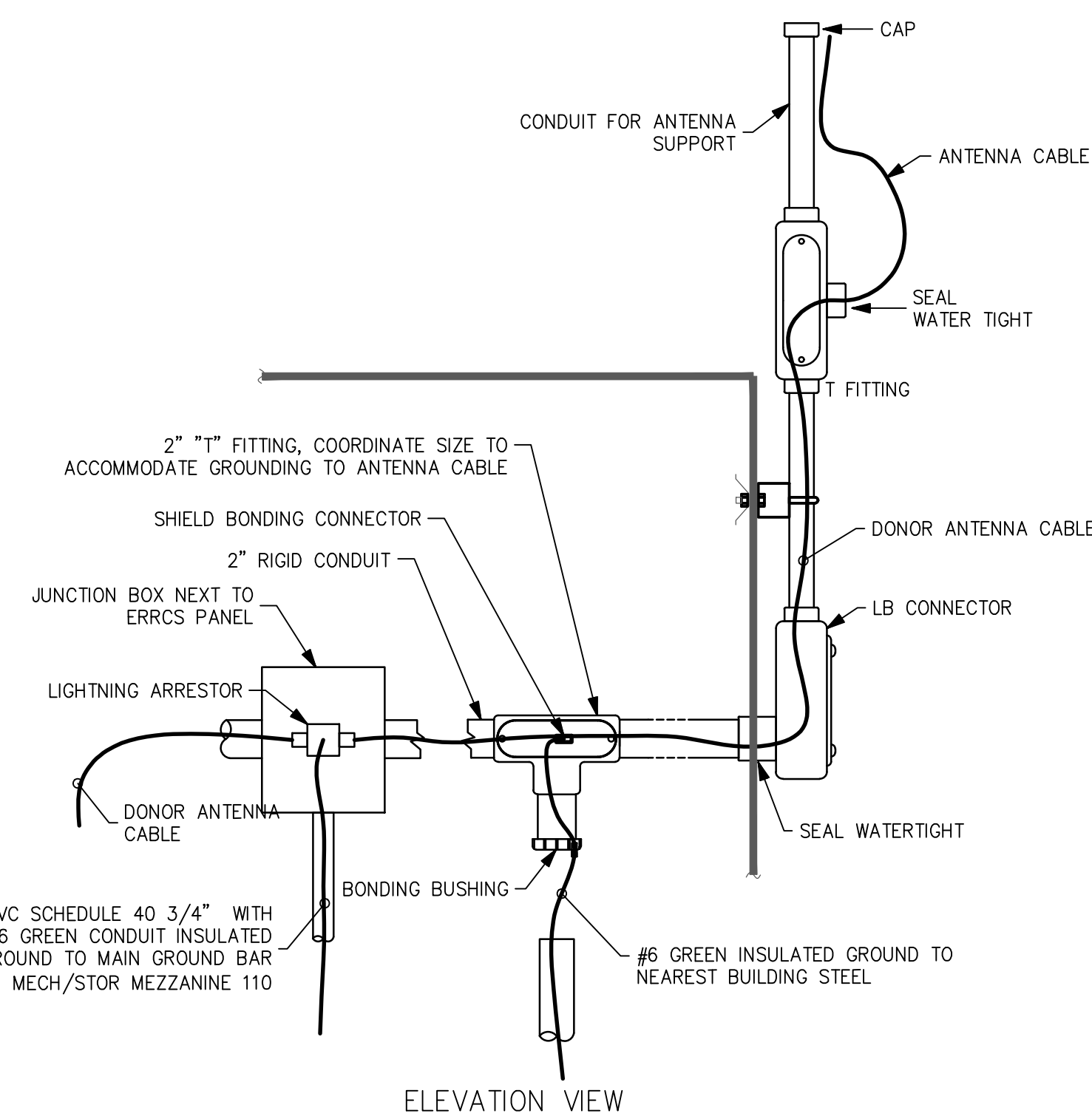
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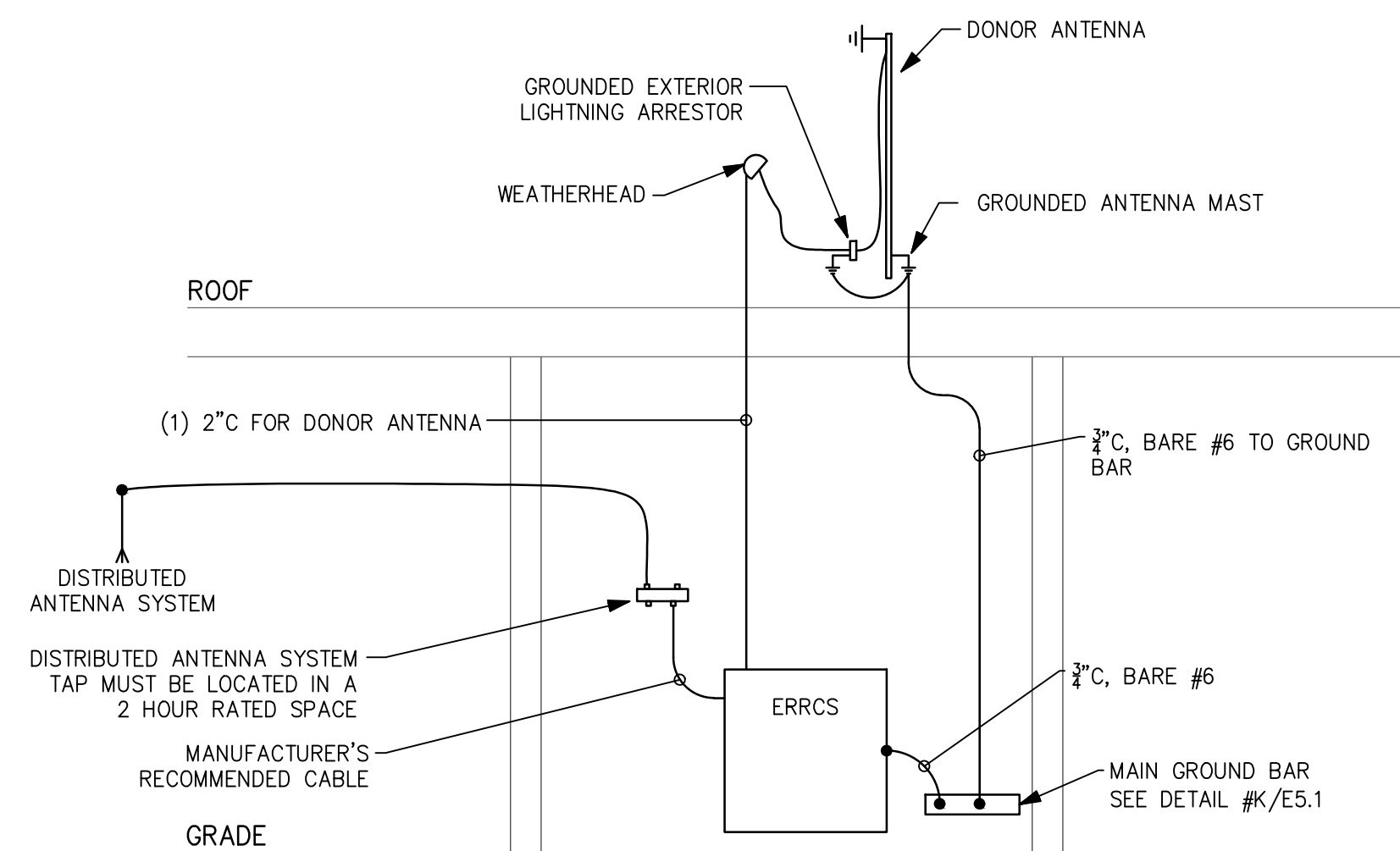
REVISIONS

DATE: 01/17/2025
PROJECT NUMBER: 3105-2401
SHEET TITLE:

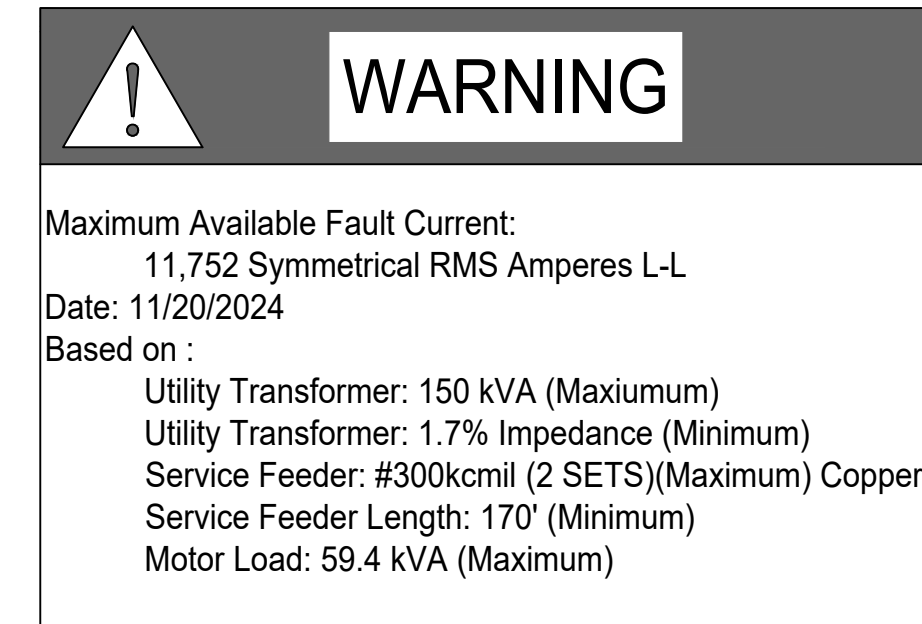
ELECTRICAL DETAILS



A ERCCS ANTENNA MAST MOUNTING DETAIL
NO SCALE

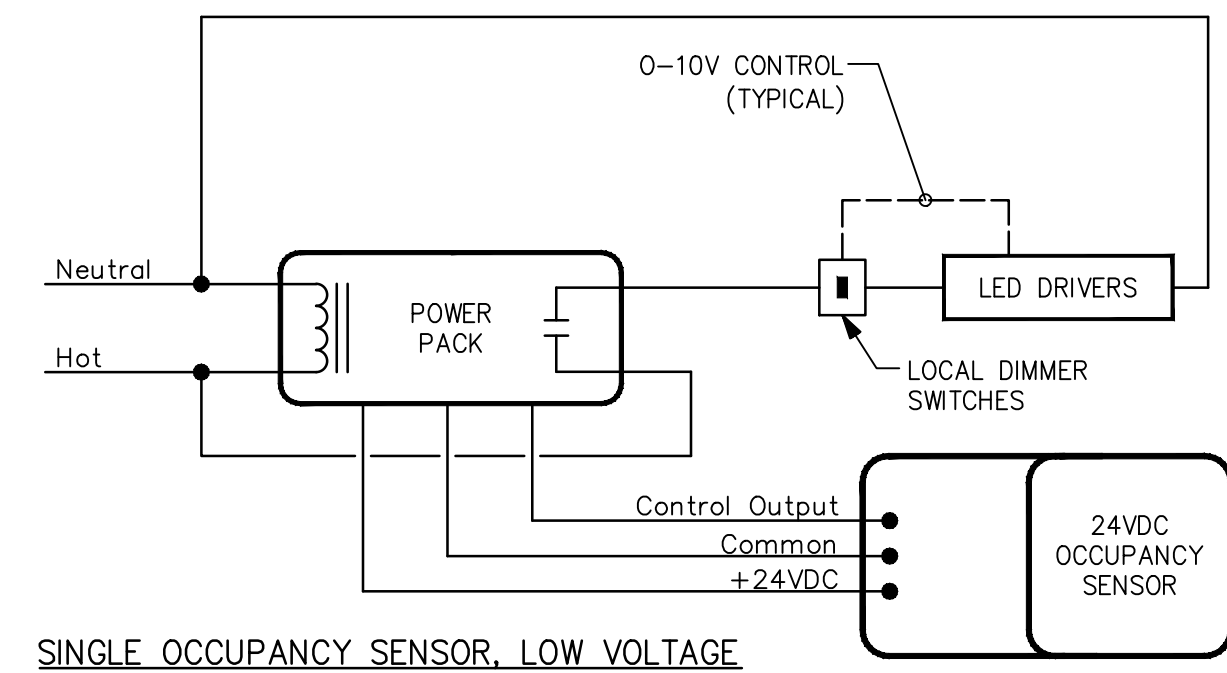


B ERCCS COMMUNICATIONS RISER
NO SCALE

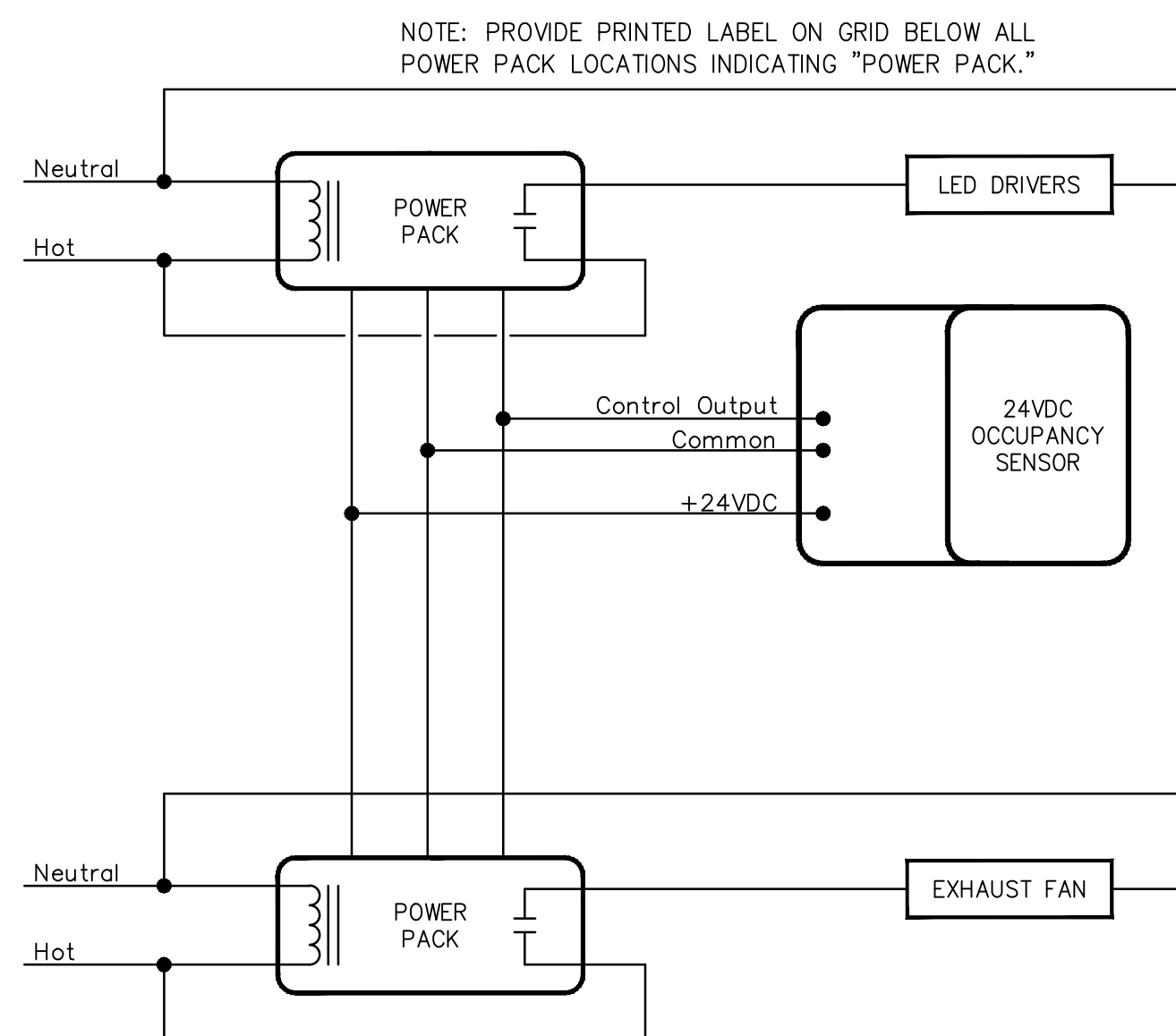


NOTE:
THE CONTRACTOR SHALL OBTAIN INSTALLED SERVICE TRANSFORMER DATA AND AVAILABLE FAULT CURRENT DATA FROM THE UTILITY COMPANY. FORWARD INFORMATION TO THE ENGINEER FOR ASSESSMENT OF REVISIONS TO THE LABEL DATA.

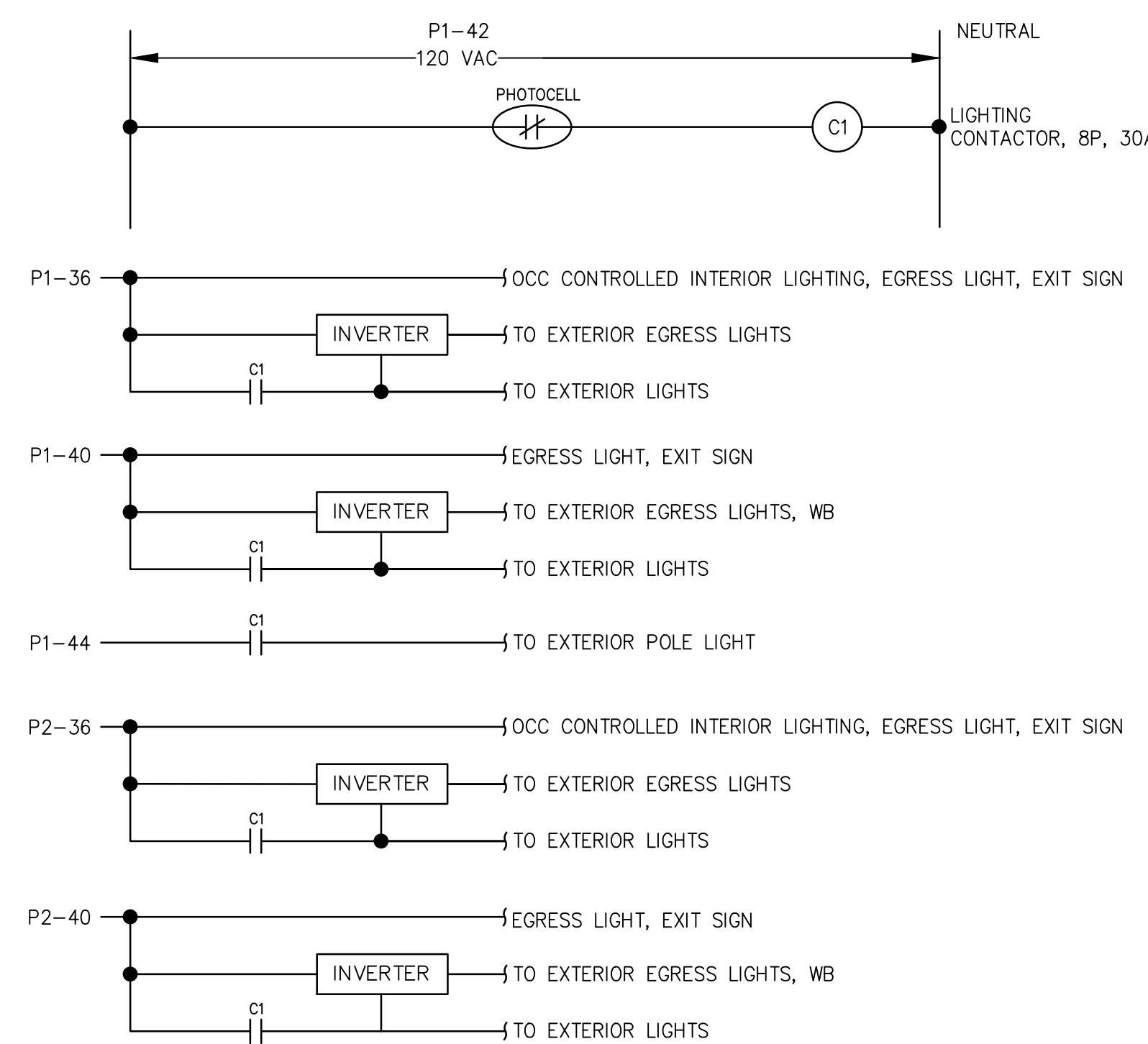
C FAULT CURRENT LABEL FOR SERVICE EQUIPMENT
NO SCALE



E OCCUPANCY SENSOR WIRING FOR DIMMING LEVEL LIGHTING CONTROL
NO SCALE

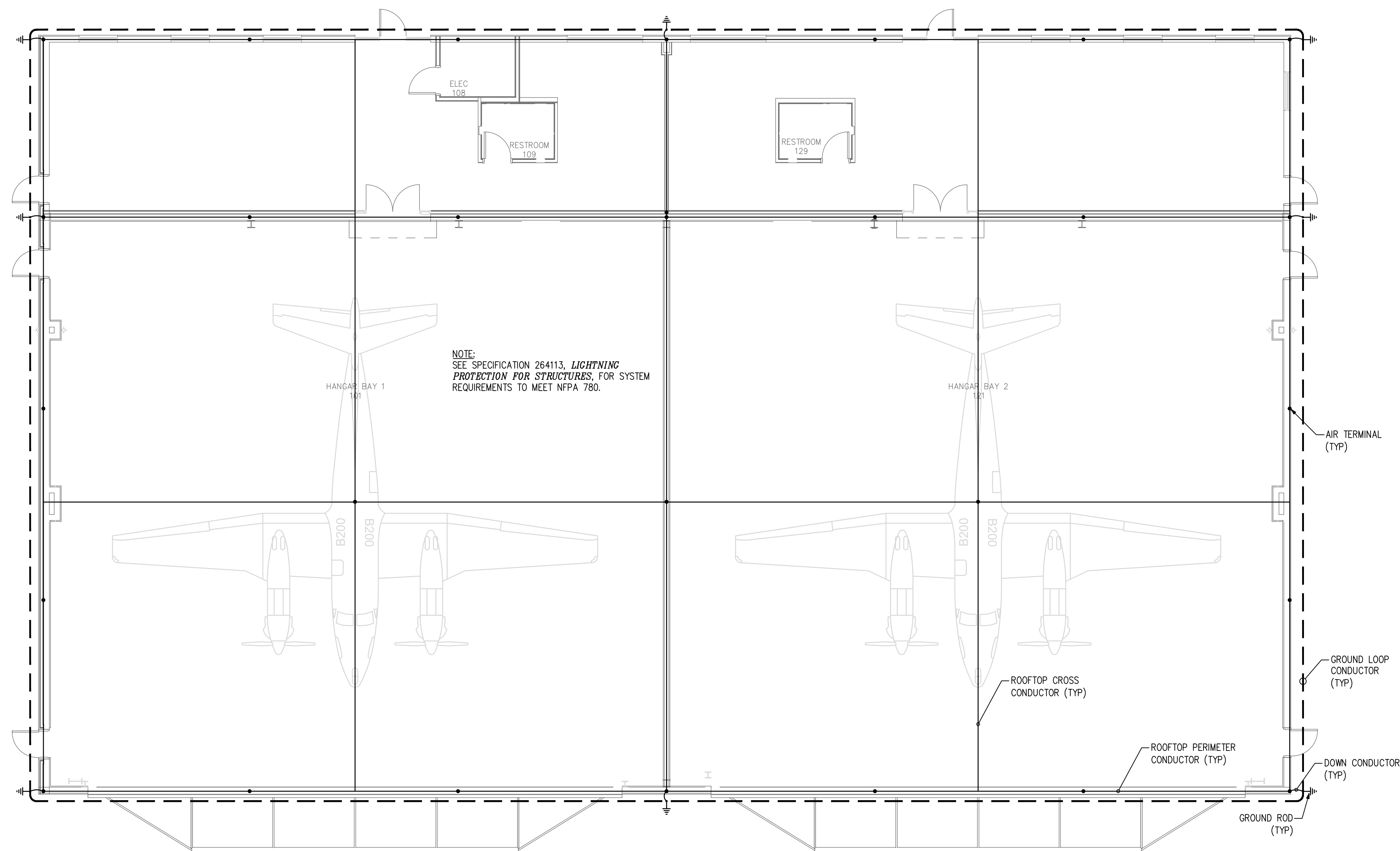


F OCCUPANCY SENSOR WIRING FOR LIGHTING AND EXHAUST FAN CONTROL
NO SCALE

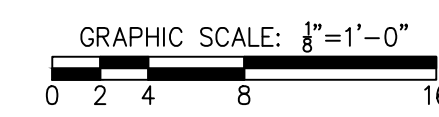


AUTO MODE CONTROL SCHEME
1. INTERIOR LIGHTS THAT ARE NOT UNDER OCCUPANCY SENSOR CONTROL, IN ELEC 108 OR ELEC 128 SHALL TURN ON/OFF VIA ONE TOGGLE SWITCH OVERRIDE ON EACH HANGAR SIDE.
2. EXTERIOR LIGHTS TURN ON/OFF VIA PHOTOCELL.
3. EXTERIOR EGRESS LIGHTS SHALL REMAIN ENERGIZED DURING POWER OUTAGES THROUGH THE INVERTERS AFTER DARK. THE SWITCHED INPUT TO THE INVERTER FROM THE PHOTOCELL RELAY PREVENTS OPERATION OF THE INVERTER DURING DAYLIGHT.

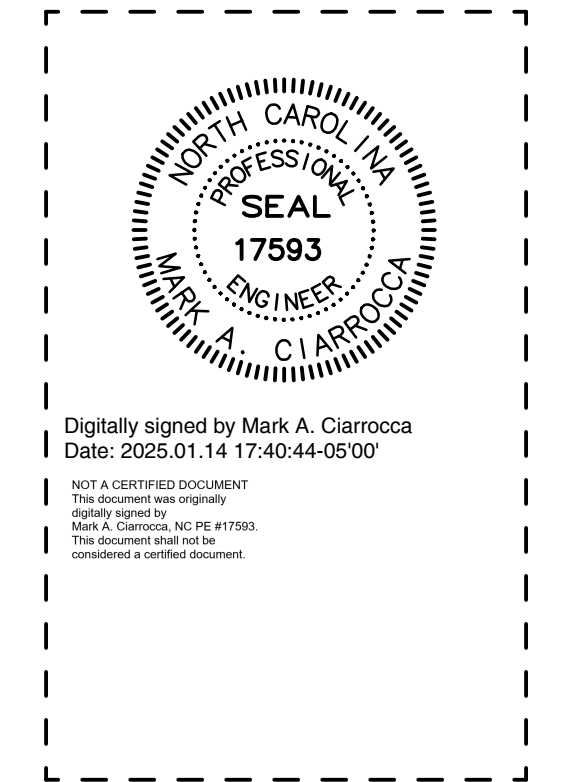
G LIGHTING CONTROL SCHEMATIC
NO SCALE



H LIGHTNING PROTECTION SYSTEM LAYOUT
SCALE: 1/8" = 1'-0"



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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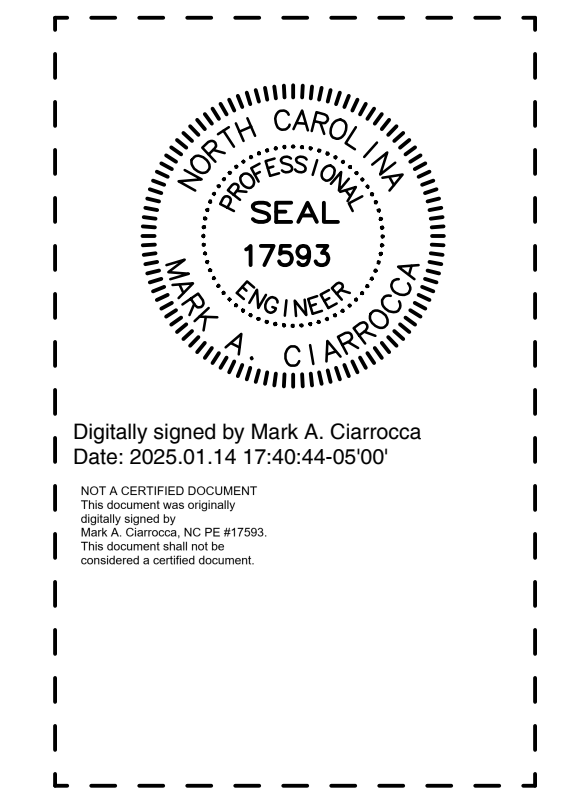
DATE: 01/17/2025
PROJECT NUMBER: 3105-2401
SHEET TITLE:

ELECTRICAL DETAILS

SHEET NUMBER
E-502



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 3105-2401
SHEET TITLE

ELECTRICAL
PANEL
SCHEDULES
BASE BID

SHEET NUMBER
E-601

D1

ROOM: ELEC 108			VOLTS: 240/120V 2P 3W			AIC: 18,000			
MOUNTING: SURFACE			BUS AMPS: 600			MAIN BKR: MLO			
FED FROM: ATS			NEUTRAL: 100%			LUGS: STANDARD			
NOTE:									
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA	
			A	B				A	B
1	60/2	DOOR OPERATOR	3.36		2	70/2	SPD-D1	0	
3				3.36	4				0
5	-/2	SPACE	0	0	6	400/2	PANEL D2	14.9	
7					8				14.7
9	-/2	SPACE	0	0	10	400/2	PANEL P1	14.2	
11					12				13.6
13	-/2	SPACE	0	0	14	-/2	SPACE	0	
15				0	16				0
17	-/2	SPACE	0	0	18	-/2	SPACE	0	
19				0	20				0
21	-/2	SPACE	0	0	22	-/2	SPACE	0	
23				0	24				0
25	-/2	SPACE	0	0	26	-/2	SPACE	0	
27				0	28				0
29	-/1	SPACE	0	0	30	-/1	SPACE	0	
TOTAL CONNECTED KVA BY PHASE								32.4	31.7
TOTAL CONNECTED AMPS BY PHASE								270	264
			CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING			3.99	4.99	(125%)	RECEPTACLES	2.88	2.88	(50%>10)
LARGEST MOTOR			6.72	1.68	(25%)	NONCONTINUOUS	8.5	8.5	(100%)
MOTORS			33.7	33.7	(100%)	HEATING	15	15	(100%)
TOTAL LOAD							66.8		
BALANCED LOAD							278 A		

P1

ROOM: ELEC 108		VOLTS: 240/120V 2P 3W		AIC: 14,000					
MOUNTING: SURFACE		BUS AMPS: 400		MAIN BKR: MLO					
FED FROM: D1		NEUTRAL: 100%		LUGS: STANDARD					
NOTE:									
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA	
			A	B				A	B
1	15/2	FAN F-1	0.96		2	50/2	UNIT HEATER UH-1	3.75	
3				0.96	4				3.75
5	15/2	FAN F-2	0.96		6	15/2	FAN F-6	0.96	
7				0.96	8				0.96
9	15/2	FAN F-5	0.96		10	40/1	WATER HEATER WH-1	2	
11				0.96	12	20/1	SPARE		0
13	20/1	SPARE	0		14	15/1	RADIANT HEATER IRH-1	0.312	
15	20/1	SPARE		0	16	20/1	REC-EXT GFCI		0.36
17	20/1	SPARE	0		18	20/1	REC	0.54	
19	20/1	SPARE	0	0	20	20/1	SPARE		0
21	20/1	SPARE		0	22	20/1	SPARE	0	
23	20/1	REC-BATTERY CHARGER		1	24	20/1	SPARE		0
25	20/1	REC-BLOCK HEATER	1.5		26	20/1	SPARE	0	
27	20/1	SPARE		0	28	20/1	SPARE		0
29	20/1	REC	0.54		30	20/1	SPARE	0	
31	20/1	ICE MACHINE		1	32	20/1	SPARE		0
33	20/1	(*) REC-REFRIGERATOR	1		34	20/1	SPARE	0	
35	20/1	SPARE		0	36	20/1	EGRESS, EXH FAN, EXIT, INVERTER, LTG, LTG-WALLPACK		0.439
37	20/1	SPARE	0		38	20/1	SPARE	0	
39	20/1	SPARE		0	40	20/1	EGRESS, EXIT, INVERTER, LTG, LTG-WALLPACK		1.68
41	20/1	SPARE	0		42	20/1	LTG CONTROL	0.1	
43	20/1	SPARE		0	44	20/1	LTG-SITE		0.124
45	20/1	SPARE	0	0	46	20/1	SPARE	0	
47	20/1	SPARE		0	48	20/1	SPARE		0
49	20/1	SPARE	0	0	50	20/1	SPARE	0	
51	20/1	(#) EMERGENCY RESPONDER RADIO		1	52	20/1	SPARE		0
53	20/1	(#) FIRE ALARM PANEL	1		54	20/1	SPARE	0	
TOTAL CONNECTED KVA BY PHASE								14.2	13.6
TOTAL CONNECTED AMPS BY PHASE								118	113
			CONN KVA	CALC KVA				CONN KVA	CALC KVA
LIGHTING			2.19	2.74	(125%)	RECEPTACLES	1.44	1.44	(50%>10)
LARGEST MOTOR			2	0.5	(25%)	NONCONTINUOUS	6.5	6.5	(100%)
MOTORS			10.1	10.1	(100%)	HEATING	7.5	7.5	(100%)
TOTAL LOAD							28.8		
BALANCED LOAD							120 A		

(*) INDICATES GFCI C/B
(#) INDICATES BREAKER WITH BREAKER LOCK

D2

ROOM: SHELL SPACE		VOLTS: 240/120V 2P 3W		AIC: 14,000					
MOUNTING: SURFACE		BUS AMPS: 400		MAIN BKR: MLO					
FED FROM: D1		NEUTRAL: 100%		LUGS: STANDARD					
NOTE:									
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA	
			A	B				A	B
1	60/2	DOOR OPERATOR	3.36		2	70/2	SPD-D2	0	
3				3.36	4				0
5	-/2	SPACE	0	0	6	400/2	PANEL P2	11.5	
7					8				11.4
9	-/2	SPACE	0	0	10	-/2	SPACE	0	
11					12				0
13	-/2	SPACE	0	0	14	-/2	SPACE	0	
15				0	16				0
17	-/2	SPACE	0	0	18	-/2	SPACE	0	
19				0	20				0
21	-/2	SPACE	0	0	22	-/2	SPACE	0	
23				0	24				0
25	-/2	SPACE	0	0	26	-/2	SPACE	0	
27				0	28				0
29	-/1	SPACE	0	0	30	-/1	SPACE	0	
					TOTAL CONNECTED KVA BY PHASE			14.9	14.7
					TOTAL CONNECTED AMPS BY PHASE			124	123
			CONN KVA	CALC KVA			CONN KVA	CALC KVA	
LIGHTING			1.8	2.25	(125%)	RECEPTACLES	1.44	1.44	(50%>10)
LARGEST MOTOR			6.72	1.68	(25%)	NONCONTINUOUS	2	2	(100%)
MOTORS			16.9	16.9	(100%)	HEATING	7.5	7.5	(100%)
TOTAL LOAD							31.7		
BALANCED LOAD							132 A		

P2

ROOM: SHELL SPACE

MOUNTING: SURFACE

FED FROM: D2

NOTE:

VOLTS: 240/120V 2P 3W

BUS AMPS: 400

NEUTRAL: 100%

AIC: 10,000

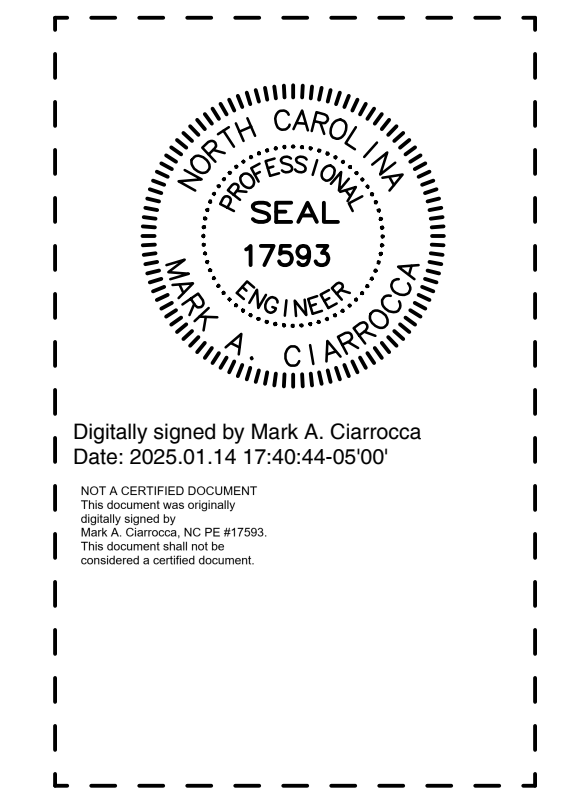
MAIN BKR: MLO

LUGS: STANDARD

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA			
			A	B				A	B		
1	15/2	FAN F-3	0.96		2	40/1	WATER HEATER WH-1	2			
3				0.96	4	20/1	SPARE		0		
5	15/2	FAN F-4	0.96		6	20/2	SPARE	0	0		
7				0.96	8				0		
9	50/2	UNIT HEATER UH-1	3.75		10	20/2	SPARE	0			
11				3.75	12				0		
13	20/1	REC	0.54		14	15/2	FAN F-7	0.96			
15	20/1	ICE MACHINE		1	16				0.96		
17	20/1	(*) REC-REFRIGERATOR	1		18	15/2	FAN F-8	0.96			
19	20/1	REC		0.54	20				0.96		
21	20/1	SPARE	0	0	22	20/2	SPARE	0			
23	20/1	SPARE		0	24				0		
25	20/1	SPARE	0	0	26	20/2	SPARE	0			
27	20/1	SPARE		0	28				0		
29	20/1	SPARE	0	0	30	15/1	RADIANT HEATER IRH-2	0.312			
31	20/1	SPARE		0	32	20/1	REC-EXT GFCI		0.36		
33	20/1	SPARE	0	0	34	20/1	SPARE	0			
35	20/1	SPARE		0	36	20/1	EGRESS, EXH FAN, INVERTER, LTG, LTG-WALLPACK		0.477		
37	20/1	SPARE	0		38	20/1	SPARE	0			
39	20/1	SPARE		0	40	20/1	EGRESS, EXIT, INVERTER, LTG, LTG-WALLPACK		1.47		
41	20/1	SPARE	0	0	42	20/1	SPARE	0			
43	20/1	SPARE		0	44	20/1	SPARE		0		
45	20/1	SPARE	0	0	46	20/1	SPARE	0			
47	20/1	SPARE		0	48	20/1	SPARE		0		
49	20/1	SPARE	0	0	50	20/1	SPARE	0			
51	20/1	SPARE		0	52	20/1	SPARE		0		
53	20/1	SPARE	0	0	54	20/1	SPARE	0			
					TOTAL CONNECTED KVA BY PHASE					11.5	11.4
					TOTAL CONNECTED AMPS BY PHASE					95.8	94.9
			CONN KVA	CALC KVA				CONN KVA	CALC KVA		
LIGHTING	1.8	2.5	(125%)		RECEPTACLES	1.44	1.44	(50%>10)			
LARGEST MOTOR	2	0.5	(25%)		NONCONTINUOUS	2	2	(100%)			
MOTORS	10.1	10.1	(100%)		HEATING	7.5	7.5	(100%)			
					TOTAL LOAD			23.8			
					BALANCED LOAD			99.3 A			



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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REVISIONS

DATE 01/17/2025
PROJECT NUMBER 3105-2401
SHEET TITLE

ELECTRICAL
PANEL
SCHEDULES
ALTERNATE
ALT-01

SHEET NUMBER
E-602

D1. (ALTERNATE ALT-01)

ROOM: ELEC 108
MOUNTING: SURFACE
FED FROM: ATS.
NOTE:

VOLTS: 240/120V 2P 3W
BUS AMPS: 600
NEUTRAL: 100%

AIC: 22,000
MAIN BKR: MLO
LUGS: STANDARD

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA	
			A	B				A	B
1	60/2	DOOR OPERATOR	3.36		2	30/2	SPD-D1.	0	
3				3.36	4				0
5	-/2	SPACE	0		6	400/2	PANEL D2.	30.3	
7				0	8				32.5
9	-/2	SPACE	0		10	400/2	PANEL P1.	30.1	
11				0	12				30.6
13	-/2	SPACE	0		14	-/2	SPACE	0	
15				0	16				0
17	-/2	SPACE	0		18	-/2	SPACE	0	
19				0	20				0
21	-/2	SPACE	0		22	-/2	SPACE	0	
23				0	24				0
25	-/2	SPACE	0		26	-/2	SPACE	0	
27				0	28				0
29	-/1	SPACE	0		30	-/1	SPACE	0	
TOTAL CONNECTED KVA BY PHASE								63.8	66.4
TOTAL CONNECTED AMPS BY PHASE								532	554
			CONN KVA	CALC KVA				CONN KVA	CALC KVA
LIGHTING			6.07	7.59	(125%)	RECEPTACLES	15.3	12.7	(50%>10)
LARGEST MOTOR			6.72	1.68	(25%)	NONCONTINUOUS	12.5	12.5	(100%)
MOTORS			42	42	(100%)	HEATING	54.3	54.3	(100%)
						COOLING	23.6	0	(0%)
TOTAL LOAD								131	
BALANCED LOAD								545 A	

P1. (ALTERNATE ALT-01)

ROOM: ELEC 108
MOUNTING: SURFACE
FED FROM: D1.
NOTE:

VOLTS: 240/120V 2P 3W
BUS AMPS: 400
NEUTRAL: 100%

AIC: 22,000
MAIN BKR: MLO
LUGS: STANDARD

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA			
			A	B				A	B		
1	15/2	FAN F-1	0.96		2	35/2	WATER HEATER WH-1A	3	3		
3				0.96	4						
5	15/2	FAN F-2	0.96		6	15/2	FAN F-6	0.96			
7				0.96	8				0.96		
9	15/2	FAN F-5	0.96		10	15/2	DAHU-1, DHP-1	1.44			
11				0.96	12				1.44		
13	45/2	AHU-1	4.27		14	15/1	RADIANT HEATER IRH-1	0.312			
15				4.27	16	20/1	REC-EXT GFCI		0.36		
17	45/2	AHU-2	4.27		18	20/1	REC	0.9			
19				4.27	20	20/1	REC		0.9		
21	25/2	HP-1	1.8		22	20/1	REC	0.9			
23				1.8	24	20/1	(*) REC-DISHWASHER		1		
25	25/2	HP-2	1.8		26	20/1	(*) REC-REFRIGERATOR	1			
27				1.8	28	20/1	REC		0.72		
29	20/1	REC	0.54		30	20/1	REC		0.54		
31	20/1	ICE MACHINE		1	32	20/1	REC, REC-EXT GFCI, REC-GFCI		0.72		
33	20/1	(*) REC-REFRIGERATOR		1	34	20/1	REC		0.54		
35	20/1	REC-BATTERY CHARGER		1	36	20/1	EGRESS, EXH FAN, EXIT, INVERTER, LTG, LTG-WALLPACK		1.08		
37	20/1	REC-BLOCK HEATER		1.5	38	20/1	EGRESS, EXH FAN, LTG		0.634		
39	20/1	REC		0.72	40	20/1	EGRESS, EXIT, INVERTER, LTG, LTG-WALLPACK		1.68		
41	20/1	REC, REC-FLOOR		0.72	42	20/1	LTG CONTROL		0.1		
43	20/1	SPARE		0	44	20/1	SPARE		0		
45	20/1	SPARE		0	46	20/1	SPARE		0		
47	20/1	SPARE		0	48	20/1	SPARE		0		
49	20/1	SPARE		0	50	20/1	SPARE		0		
51	20/1	(#) EMERGENCY RESPONDER RADIO		1	52	20/1	SPARE		0		
53	20/1	(#) FIRE ALARM PANEL		1	54	20/1	SPARE		0		
					TOTAL CONNECTED KVA BY PHASE					30.1	30.6
					TOTAL CONNECTED AMPS BY PHASE					251	255

(*) INDICATES GFCI C/B
(#) INDICATES BREAKER WITH BREAKER LOCK

D2. (ALTERNATE ALT-01)

ROOM: ELEC 128

MOUNTING: SURFACE

FED FROM: D1.

NOTE:

VOLTS: 240/120V 2P 3W

BUS AMPS: 400

NEUTRAL: 100%

AIC: 22,000

MAIN BKR: MLO

LUGS: STANDARD

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA	
			A	B				A	B
1	60/2	DOOR OPERATOR	3.36		2	30/2	SPD-D2.	0	
3				3.36	4				0
5	-/2	SPACE	0		6	400/2	PANEL P2.	27	
7				0	8				29.1
9	-/2	SPACE	0		10	-/2	SPACE	0	
11				0	12				0
13	-/2	SPACE	0		14	-/2	SPACE	0	
15				0	16				0
17	-/2	SPACE	0		18	-/2	SPACE	0	
19				0	20				0
21	-/2	SPACE	0		22	-/2	SPACE	0	
23				0	24				0
25	-/2	SPACE	0		26	-/2	SPACE	0	
27				0	28				0
29	-/1	SPACE	0		30	-/1	SPACE	0	
TOTAL CONNECTED KVA BY PHASE								30.3	32.5
TOTAL CONNECTED AMPS BY PHASE								253	271
			CONN KVA	CALC KVA				CONN KVA	CALC KVA
LIGHTING			2.88	3.6	(125%)	RECEPTACLES	7.74	7.74	(50%>10)
LARGEST MOTOR			6.72	1.68	(25%)	NONCONTINUOUS	4	4	(100%)
MOTORS			21	21	(100%)	HEATING	27.2	27.2	(100%)
						COOLING	11.8	0	(0%)
TOTAL LOAD								65.2	
BALANCED LOAD								272 A	

P2.

(ALTERNATE ALT-01)

ROOM: ELEC 128

MOUNTING: SURFACE

FED FROM: D2.

NOTE:

VOLTS: 240/120V 2P 3W

BUS AMPS: 400

NEUTRAL: 100%

AIC: 18,000

MAIN BKR: MLO

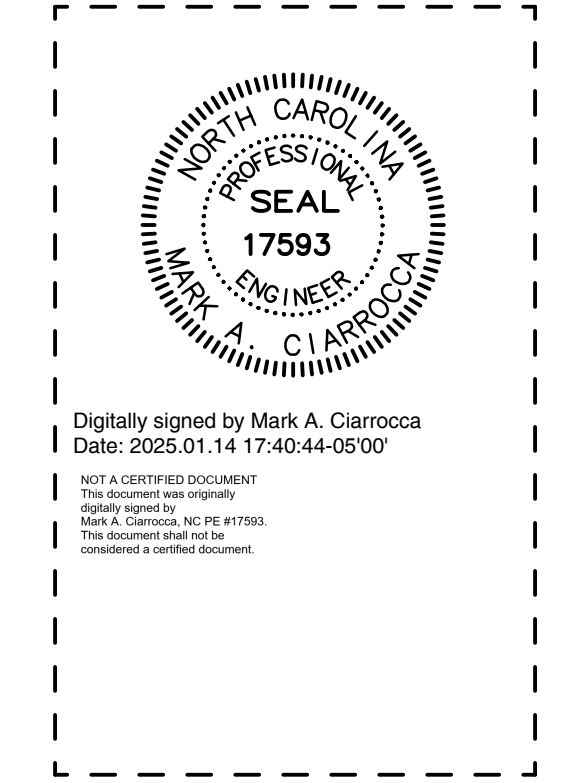
LUGS: STANDARD

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA		CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA	
			A	B				A	B
1	15/2	FAN F-3	0.96		2	45/2	AHU-4	4.27	
3				0.96	4				4.27
5	15/2	FAN F-4	0.96		6	45/2	AHU-3	4.27	
7				0.96	8				4.27
9	35/2	WATER HEATER WH-1A	3		10	15/2	FAN F-7	0.96	
11				3	12				0.96
13	20/1	REC	0.54		14	15/2	FAN F-8	0.96	
15	20/1	(*) ICE MACHINE		1	16				0.96
17	20/1	(*) REC-REFRIGERATOR	1		18	25/2	HP-3	1.8	
19	20/1	REC	0	0.9	20				1.8
21	20/1	REC	0.9		22	25/2	HP-4	1.8	
23	20/1	(*) REC-REFRIGERATOR		1	24				1.8
25	20/1	(*) REC-DISHWASHER	1		26	15/2	DAHU-2, DHP-2	1.44	
27	20/1	REC		0.9	28				1.44
29	20/1	REC	0.72		30	15/1	RADIANT HEATER IRH-2	0.312	
31	20/1	REC		0.54	32	20/1	REC-EXT GFCI		0.36
33	20/1	REC, REC-EXT GFCI, REC-GFCI	0.72		34	20/1	EGRESS, EXH FAN, LTG	0.634	
35	20/1	REC		0.54	36	20/1	EGRESS, EXH FAN, EXIT, INVERTER, LTG, LTG-WALLPACK		1.08
37	20/1	REC	0.72		38	20/1	SPARE	0	
39	20/1	REC, REC-FLOOR		0.9	40	20/1	EGRESS, EXIT, INVERTER, LTG, LTG-WALLPACK		1.47
41	20/1	SPARE	0		42	20/1	SPARE	0	
43	20/1	SPARE		0	44	20/1	SPARE		0
45	20/1	SPARE	0		46	20/1	SPARE	0	
47	20/1	SPARE		0	48	20/1	SPARE		0
49	20/1	SPARE	0		50	20/1	SPARE	0	
51	20/1	SPARE		0	52	20/1	SPARE		0
53	20/1	SPARE	0		54	20/1	SPARE	0	
TOTAL CONNECTED KVA BY PHASE								27	29.1
TOTAL CONNECTED AMPS BY PHASE								225	243

	CONN KVA	CALC KVA		CONN KVA	CALC KVA	
LIGHTING	2.88	3.6	(125%)	RECEPTACLES	7.74	7.74
LARGEST MOTOR	6	1.5	(25%)	NONCONTINUOUS	4	4
MOTORS	14.3	14.3	(100%)	HEATING	27.2	27.2
				COOLING	11.8	0
				TOTAL LOAD		58.3
				BALANCED LOAD		243 A



Schedule 1:
2-Unit Box Hangar
Lumberton Regional Airport
Lumberton, NC 28358



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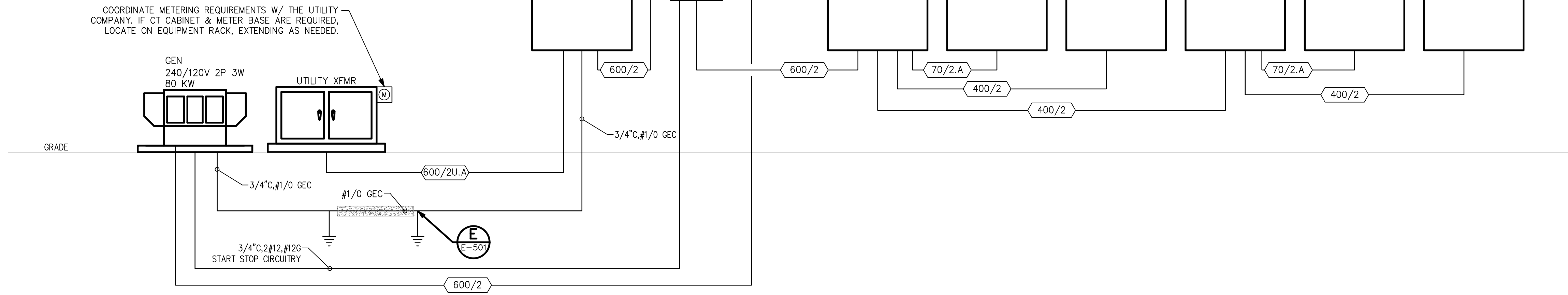
DATE 01/17/2025
PROJECT NUMBER 3105-2401
SHEET TITLE

ELECTRICAL
RISERS

SHEET NUMBER
E-701

FEEDER SCHEDULE			
ID	FEEDER AMPS	CONDUIT AND FEEDER	FEEDING THESE DEVICES
70/2A	70	1"C,2#4, #4N, #4G	SPD-D1, SPD-D2
400/2	400	3"C,2#500kcmil, #500kcmil N, #3G	D2, P1, P2
600/2	600	(2)2-1/2"C,2#300kcmil, #300kcmil N, #1G	ATS, ATS, D1
600/2U.A	600	(2)2-1/2"C,2#300kcmil, #300kcmil N	SERVICE DISC

SIZING METHOD: COPPER, 60°C #12 THROUGH #1, 75°C #1/0 AND ABOVE



A ELECTRICAL POWER RISER
NO SCALE

FIRE ALARM OPERATION MATRIX				ALARM	TROUBLE	SUPERVISORY	CONTROL
				A	B	C	D
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