

BUILDING CODE SUMMARY

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (EXCEPT FOR 1 AND 2- FAMILY DWELLINGS AND TOWNHOUSES)

NAME OF PROJECT: ATTENDANT BUILDING PARKTON CONVENIENCE CENTER
 ADDRESS: PARKTON ROAD, FAYETTEVILLE, NC ZIP CODE: 28306
 PROPOSED USE: ATTENDANT BUILDING
 OWNER OR AUTHORIZED AGENT: AMANDA BADER PHONE: (910) 321-6920 E-MAIL: abader@co.cumberland.nc.us
 OWNED BY: CITY/COUNTY PRIVATE STATE
 CODE ENFORCEMENT JURISDICTION: CITY, FAYETTEVILLE COUNTY STATE

CONTACT: EDMUND J. GONTRAM III, AIA GONTRAM ARCHITECTURE INC.

DESIGNER:	FIRM	NAME	LICENSE#	TELEPHONE #	E-MAIL
ARCHITECT:	GONTRAM ARCHITECTURE INC.	EDMUND J. GONTRAM III, AIA	7177	(919) 876-5331	eddie@gontramarchitecture.com
CIVIL:	SMITH GARDNER	JESSE C. LI	5489	(919) 628-0077	jesseli@gontraminc.com
ELECTRICAL:	ATLANTEC ENGINEERS NEW I/EG	DAVID J. WHITNEY	17382	(919) 651-1111	David.J.Whitney@megcorp.com
FIRE ALARM:	(NOT APPLICABLE)	(NOT APPLICABLE)			
PLUMBING:	ATLANTEC ENGINEERS NEW I/EG	PATRICK J. MACABE, PE	51195	(919) 571-1111	Patrick.J.Macabe@megcorp.com
MECHANICAL:	ATLANTEC ENGINEERS NEW I/EG	PATRICK J. MACABE, PE	51195	(919) 571-1111	Patrick.J.Macabe@megcorp.com
SPRK-STNDR:	(NOT APPLICABLE)	(NOT APPLICABLE)			
STRUCTURAL:	ROSS LINDEN ENGINEERS	BRIAN H. ROSS, PE	25539	(919) 632-6660	brian@rosslinden.com
RET-WAL>5' H:	(NOT APPLICABLE)	(NOT APPLICABLE)			
OTHER:	(NOT APPLICABLE)	(NOT APPLICABLE)			

2018 NC BUILDING CODE: NEW BUILDING ADDITION RENOVATION 1st TIME INTERIOR COMPLETION
 SHELL/CORE PHASED CONSTRUCTION - SHELL/CORE

2018 NC EXISTING BUILDING CODE: PRESCRIPTIVE REPAIR CHAPTER 14
 ALTERATION-LEVEL HISTORIC PROPERTY CHANGE OF USE

CONSTRUCTED: (date) _____ CURRENT OCCUPANCY(S) (Ch.3) B
 RENOVATED: (date) _____ PROPOSED OCCUPANCY(S) (Ch.3) B

OCCUPANCY CATEGORY (Table 1604.5): Current: II Proposed: II

SCOPE OF WORK:

NEW CONSTRUCTION OF 326 SF ATTENDANT BUILDING FOR LANDFILL CONVENIENCE CENTER

BASIC BUILDING DATA

CONSTRUCTION TYPE: I-A I-B II-A II-B III-A III-B IV V-A V-B

SPRINKLERS: NO PARTIAL YES NFPA 13 NFPA 13R NFPA 13D
 STANDPIPES: NO YES CLASS: I II III WET DRY
 FIRE DISTRICT: NO YES FLOOD HAZARD AREA: NO YES
 SPECIAL INSPECTIONS REQUIRED: NO

GROSS BUILDING AREA TABLE

FLOOR	EXISTING (SQ. FT.)	NEW (SQ. FT.)	SUB-TOTAL
4TH FLOOR			
3RD FLOOR			
2ND FLOOR			
1ST FLOOR	326		
BASEMENT			
TOTAL	326		

PROJECT AREA: 326 SF

ALLOWABLE AREA

PRIMARY OCCUPANCY CLASSIFICATION(S):

ASSEMBLY: A-1 A-2 A-3 A-4 A-5
 BUSINESS
 EDUCATIONAL
 FACTORY: F-1 Moderate F-2 Low
 HIGH-HAZARD: H-1 (Detonate) H-2 (Deflagrate) H-3 (Combust) H-4 (Health) H-5 (HPM)
 INSTITUTIONAL: I-1 Condition I-2 I-3 Condition I-4 I-5
 MERCANTILE
 RESIDENTIAL: R-1 R-2 R-3 R-4
 STORAGE: S-1 Moderate S-2 Low High-Piled
 Parking Garage Open Enclosed Repair Garage
 UTILITY AND MISCELLANEOUS

ACCESSORY OCCUPANCY CLASSIFICATION(S):

INCIDENTAL USES (TABLE 509):

SPECIAL USES (CHAPTER 4 - List code sections):

SPECIAL PROVISIONS (CHAPTER 5 - List code sections):

MIXED OCCUPANCY: NO YES SEPARATION _____ Hr.
 EXCEPTION _____

NON-SEPARATED MIXED OCCUPANCY (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 MIXED OCCUPANCY (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.

$$\frac{\text{ACTUAL AREA OF OCCUPANCY A}}{\text{ALLOWABLE AREA OF OCCUPANCY A}} + \frac{\text{ACTUAL AREA OF OCCUPANCY B}}{\text{ALLOWABLE AREA OF OCCUPANCY B}} \leq 1$$

$$\frac{\text{ACTUAL AREA OF OCCUPANCY A}}{\text{ALLOWABLE AREA OF OCCUPANCY A}} + \frac{\text{ACTUAL AREA OF OCCUPANCY B}}{\text{ALLOWABLE AREA OF OCCUPANCY B}} \leq 1$$

$$\frac{\text{ACTUAL AREA OF OCCUPANCY A}}{\text{ALLOWABLE AREA OF OCCUPANCY A}} + \frac{\text{ACTUAL AREA OF OCCUPANCY B}}{\text{ALLOWABLE AREA OF OCCUPANCY B}} \leq 1$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 AREA	(C) AREA FOR FRONTAGE INCREASE ^{1,2}	(D) ALLOWABLE FLOOR AREA OR UNLIMITED ^{3,4}
1	BUSINESS (B)	326	23,000		23,000

- 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 $I = 100(F/P - 0.25) \times W/30 = \text{_____} (\%)$
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 unobstructed area value in Table 506.2.

ALLOWABLE HEIGHT

BUILDING HEIGHT IN FEET (TABLE 504.3)	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE ¹
BUILDING HEIGHT IN STORIES (TABLE 504.4)	H=40 S=2	12-9' 1	

- ¹ Provide code reference if the "Shown 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.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	RATING PROVIDED (+ REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
STRUCTURAL FRAME-INCLUDING COLUMNS, GIRDERS, AND TRUSSES		0					
BEARING WALLS							
EXTERIOR							
NORTH	> 30 FT	0					
EAST	> 30 FT	0					
WEST	> 30 FT	0					
SOUTH	> 30 FT	0					
INTERIOR							
NONBEARING WALLS AND PARTITIONS							
EXTERIOR WALLS							
NORTH		0					
EAST		0					
WEST		0					
SOUTH		0					
INTERIOR WALLS AND PARTITIONS		0					
FLOOR CONSTRUCTION-INCLUDING SUPPORTING BEAMS AND JOISTS		0					
FLOOR CEILING ASSEMBLY		N/A					
COLUMNS SUPPORTING FLOORS		N/A					
ROOF CONSTRUCTION-INCLUDING SUPPORTING BEAMS AND JOISTS		0					
ROOF CEILING ASSEMBLY		0					
COLUMNS SUPPORTING ROOF		0					
SHAFT ENCLOSURES - EXIT		N/A					
SHAFTS ENCLOSURES- OTHER		N/A					
CORRIDOR SEPARATION		N/A					
OCCUPANCY FIRE BARRIER SEPARATION		N/A					
PARTY FIREWALL SEPARATION		N/A					
SMOKE BARRIER SEPARATION		N/A					
SMOKE PARTITION		N/A					
TENANT DWELLING UNIT/ SLEEPING UNIT SEPARATION		N/A					
INCIDENTAL USE SEPARATION		N/A					

* INDICATE SECTION NUMBER PERMITTING REDUCTION.

PERCENTAGE OF WALL OPENINGS CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
ALL EXT. WALLS ARE > 30 FT	UP, 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 #: G102
 Fire and/or smoke rated wall locations (Chapter 7)
 Assumed and real property line locations
 Exterior wall opening area with respect to distance to assumed property lines (705.8)
 Occupancy Use for each area as it relates to occupant load calculation. (Table 1004.1.2)
 Occupant loads for each area
 Exit sign locations (1013)
 Exit access travel distances (1017)
 Common paths of travel distances (1006.2.1 & 1006.3.2(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.
 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 (1010.1.9.8)
 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)
 Note any code exceptions or table notes that may have been utilized regarding the items above.

ACCESSIBLE DWELLING UNITS (SECTION 1107) (NOT APPLICABLE)

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

ACCESSIBILITY PARKING (SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	96" SPACES	132" SPACES	
		3		1	1
TOTAL		3		1	1

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

USE	WATER CLOSETS			URINALS			LAVATORIES			SHOWERS/TUBS			DRINKING FOUNTAINS	
	MALE	FEMALE	UNSEX	MALE	FEMALE	UNSEX	MALE	FEMALE	UNSEX	REGULAR	ACCESSIBLE	REGULAR	ACCESSIBLE	
EXISTING														
NEW REQUIRED			1*						1			0**	0**	

*NOTE: PER NPCC 403.2 EXCEPTION 2, SEPARATE FACILITIES SHALL NOT BE REQUIRED IN BUSINESS OCCUPANCIES WITH A TOTAL OCCUPANT LOAD, INCLUDING EMPLOYEES AND CUSTOMERS, OF 30 OR FEWER.

**NOTE: PER NPCC 410.2, DRINKING FOUNTAINS SHALL NOT BE REQUIRED FOR AN OCCUPANT LOAD OF 30 OR FEWER.

SPECIAL APPROVALS

SPECIAL APPROVAL: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc. describe below)
 (NOT APPLICABLE)

ENERGY SUMMARY

ENERGY REQUIREMENTS:
 The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design versus the annual energy cost for the proposed design.
 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 ENERGY CODE - PRESCRIPTIVE OTHER
 ASHRAE 90.1 - PERFORMANCE ASHRAE 90.1 - PRESCRIPTIVE
 If "other" specify source here _____

THERMAL ENVELOPE (Prescriptive method only)

ROOF/CEILING ASSEMBLY (each assembly)
 DESCRIPTION OF ASSEMBLY: MEMBRANE ROOF OVER RIGID INSULATION OVER SHEATHING OVER METAL JOISTS FILLED WITH BATT INSULATION
 U-VALUE OF TOTAL ASSEMBLY: U = 0.028
 R-VALUE OF INSULATION: BATT INSULATION = R-25 RIGID INSULATION = R-10 ci
 SKYLIGHTS IN EACH ASSEMBLY:
 U-VALUE OF SKYLIGHT:
 TOTAL SQUARE FOOTAGE OF SKYLIGHTS IN EACH ASSEMBLY:

EXTERIOR WALLS (each assembly)
 DESCRIPTION OF ASSEMBLY: CMU VENEER OR METAL PANEL, AIRSPACE, RIGID INSULATION, SHEATHING, METAL STUDS, BATT INSULATION, GYPSUM WALLBOARD
 U-VALUE OF TOTAL ASSEMBLY: U = 0.033
 R-VALUE OF INSULATION: BATT INSULATION = R-20 RIGID INSULATION = R-7.5 ci
 OPENINGS (windows or doors with glazing)
 U-VALUE OF ASSEMBLY: U-VALUE = 0.45
 SOLAR HEAT GAIN COEFFICIENT: SHGC = .33
 PROTECTION FACTOR: PF = 0.20
 DOOR R-VALUES: U-VALUE = .77

WALLS BELOW GRADE (each assembly)
 DESCRIPTION OF ASSEMBLY: N/A
 U-VALUE OF TOTAL ASSEMBLY:
 R-VALUE OF INSULATION:

FLOORS OVER UNCONDITIONED SPACE (each assembly)
 DESCRIPTION OF ASSEMBLY: N/A
 U-VALUE OF TOTAL ASSEMBLY:
 R-VALUE OF INSULATION:

FLOORS SLAB ON GRADE (each assembly)
 DESCRIPTION OF ASSEMBLY: 4" THICK, 3000 PSI, UNHEATED
 U-VALUE OF TOTAL ASSEMBLY:
 R-VALUE OF INSULATION: R-17.5
 HORIZONTAL/VERTICAL REQUIREMENT: UNHEATED

STRUCTURAL DESIGN

DESIGN LOADS:
 IMPORTANCE FACTORS: SNOW (ls) _____ SEISMIC (I) _____
 LIVE LOADS: ROOF 20 PSF MEZZANINE n/a PSF FLOOR 100 PSF
 GROUND SNOW LOAD: 10 PSF
 WIND LOAD: BASIC WIND SPEED 122 MPH (ASCE-7) EXPOSURE CATEGORY _____

SEISMIC DESIGN CATEGORY A B C D
 Provide the following Seismic Design Parameters:
 Risk Category (Table 1604.5) I II III IV
 Spectral Response Acceleration S_s 0.241 %g S_1 0.103 %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 Moment Frame Inverted Pendulum
 Analysis Procedure: Simplified Equiv. Lateral Force Dynamic
 Architectural, Mechanical, Components anchored? Yes No

LATERAL DESIGN CONTROL Earthquake Wind

SOIL BEARING CAPACITIES
 Field Test (provide copy of test report) 2,000 psf
 Presumptive Bearing Capacity _____ psf
 Pile size, type, and capacity _____

ELECTRICAL SYSTEM AND EQUIPMENT

(SEE ELECTRICAL DRAWINGS FOR ELECTRICAL ENERGY CODE CALCULATIONS.)

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

(SEE MECHANICAL DRAWINGS FOR MECHANICAL ENERGY CODE CALCULATIONS.)

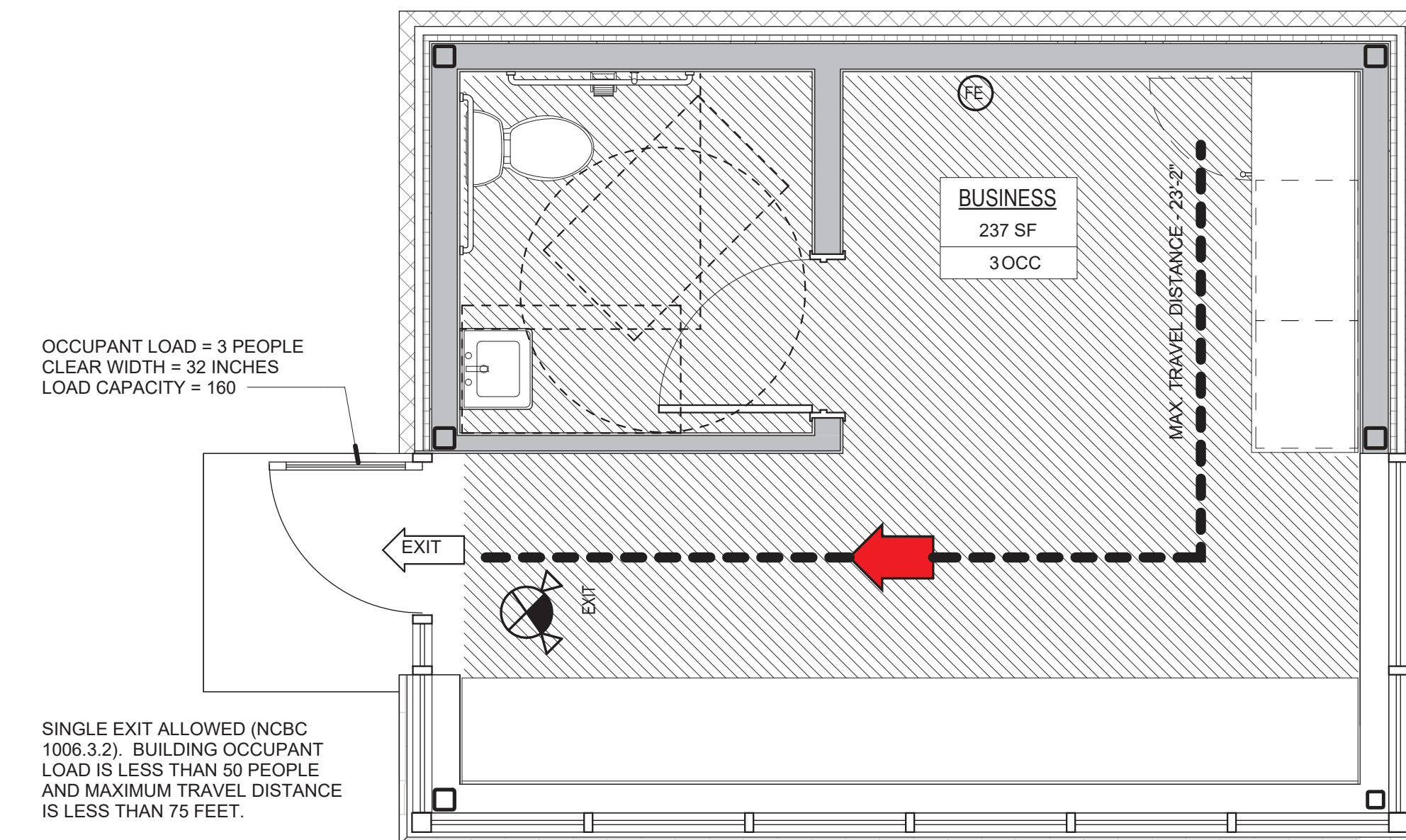
LIFE SAFETY PLAN LEGEND

BUSINESS (B) - 100 GROSS

AREA NAME
 SQUARE FOOTAGE
 OCCUPANCY

PATH OF EGRESS

EXISTING WALL MOUNTED FIRE EXTINGUISHER
 EXIT
 EXIT SIGN WITH EMERGENCY LIGHTS



SINGLE EXIT ALLOWED (NCBC 1006.3.2). BUILDING OCCUPANT LOAD IS LESS THAN 50 PEOPLE AND MAXIMUM TRAVEL DISTANCE IS LESS THAN 75 FEET.

1 LIFE SAFETY PLAN 3/8" = 1'-0"



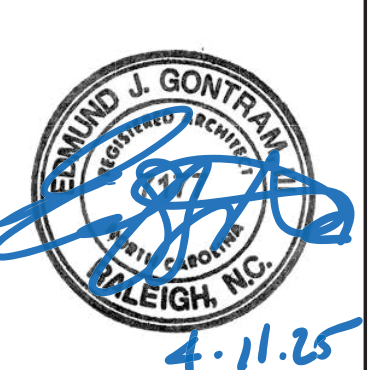
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ATTENDANT BUILDING
 PARKTON SOLID WASTE
 CONVENIENCE CENTER
 PARKTON RD., PARKTON NC, NC 28371

ISSUED: 04/11/2025
 FOR CONSTRUCTION

Rev.	Date	Description

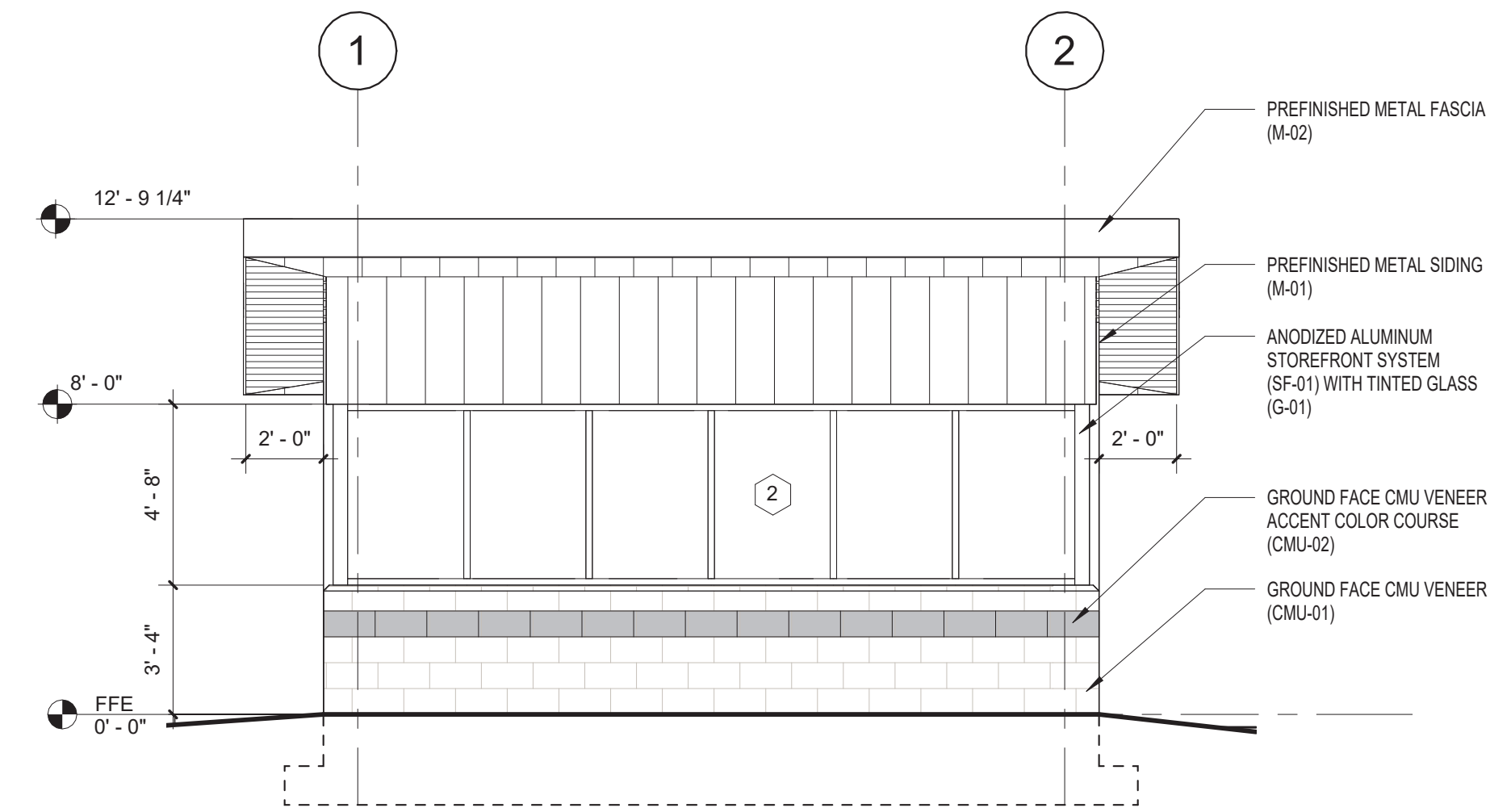


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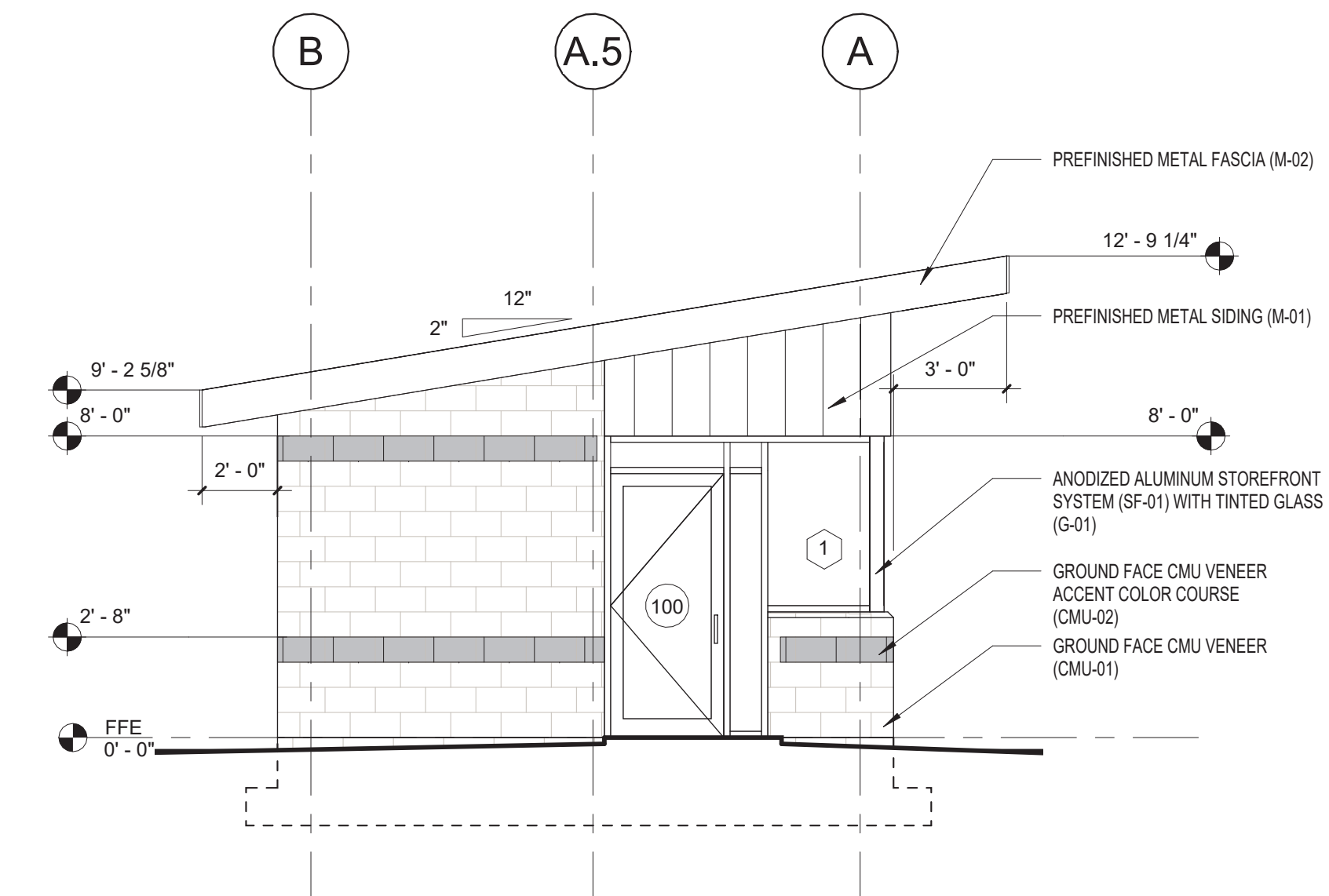
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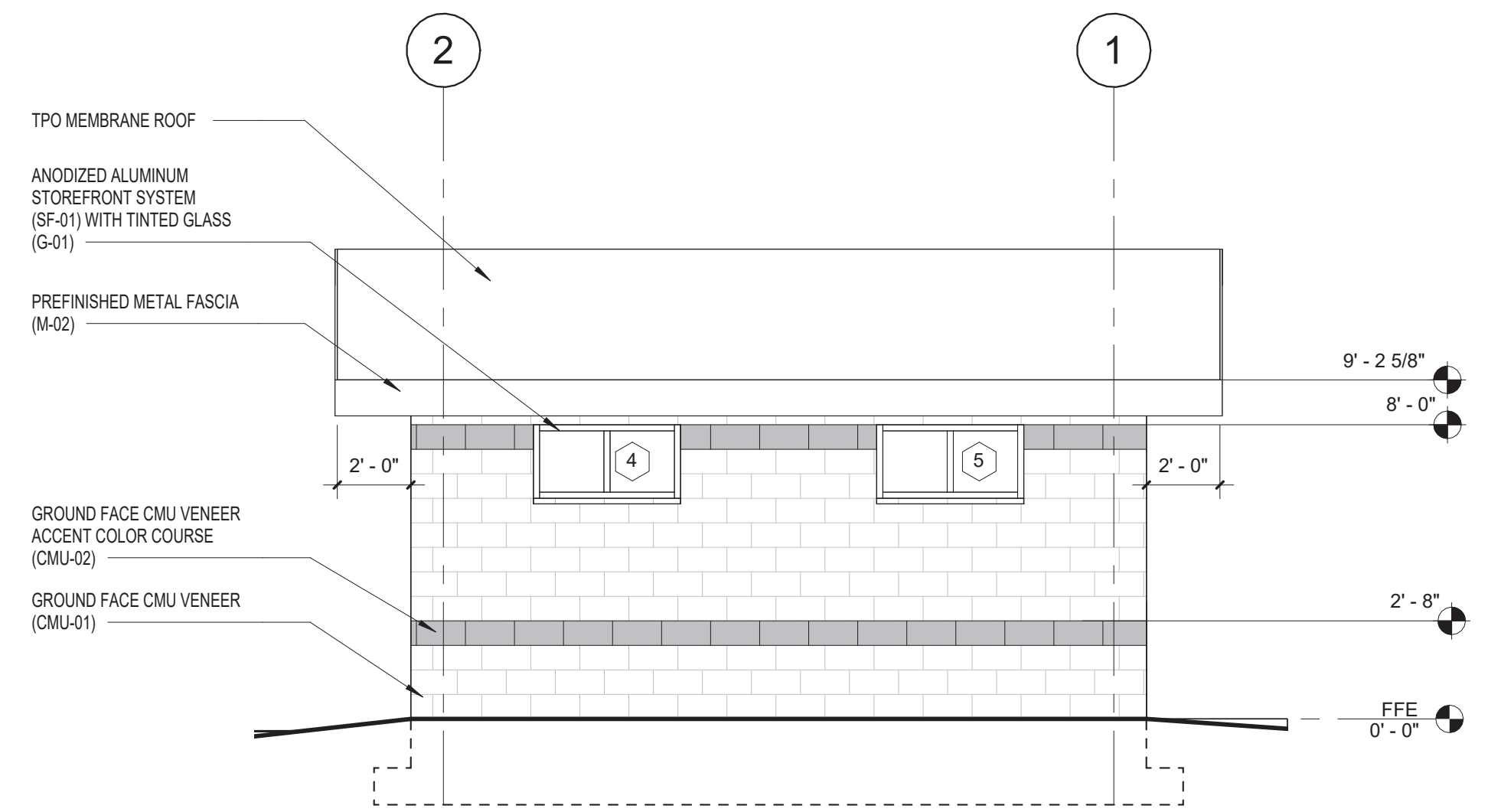
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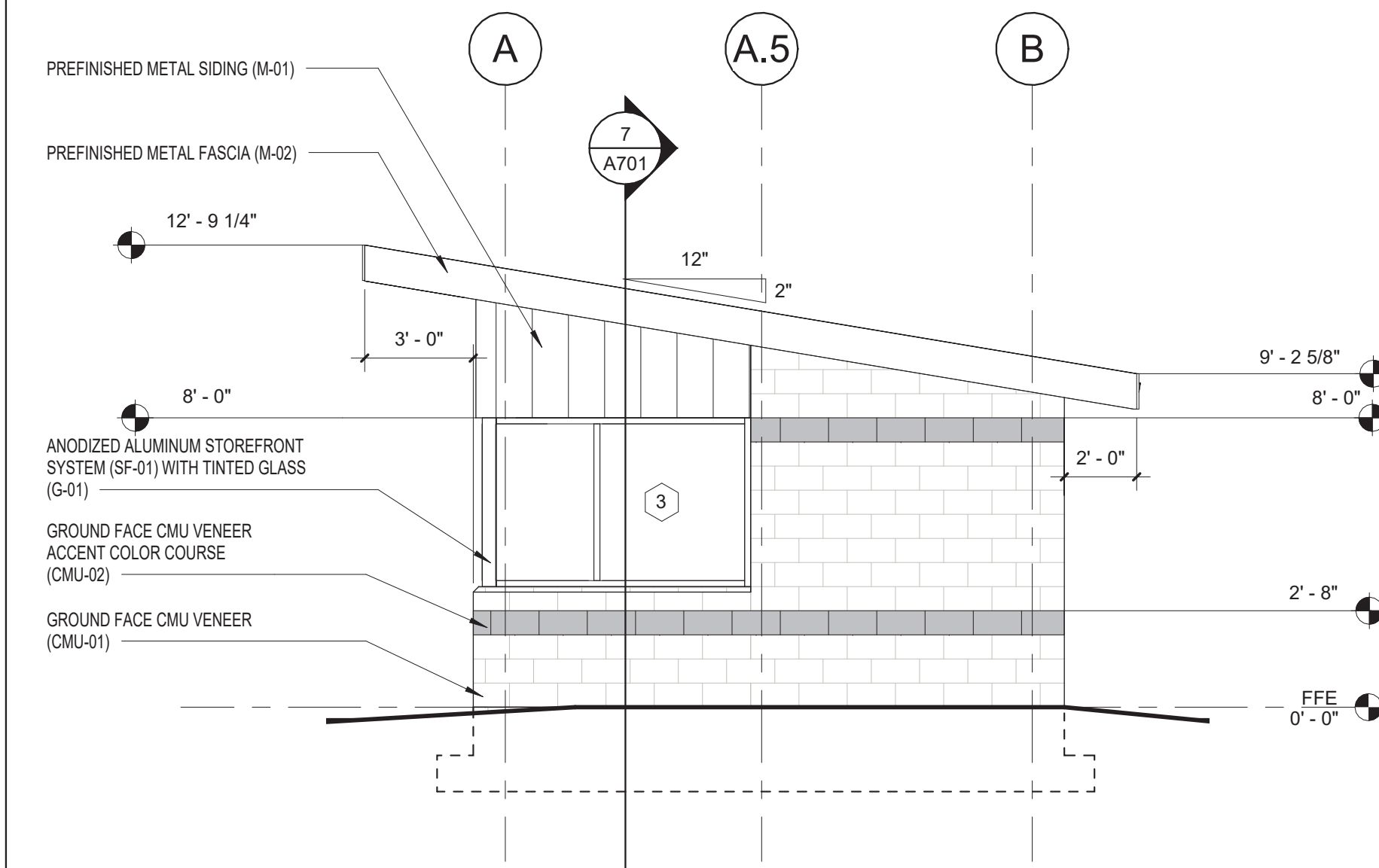
1 ELEVATION - FRONT
1/4" = 1'-0"



2 ELEVATION - LEFT
1/4" = 1'-0"



3 ELEVATION - REAR
1/4" = 1'-0"



4 ELEVATION - RIGHT
1/4" = 1'-0"

EXTERIOR COLOR SCHEDULE:

GROUND FACED CMU VENEER (CMU-01):
MANUFACTURER: ADAMS AN OLDCASTLE COMPANY
PRODUCT: TRENWYTH ARCHITECTURAL HIGH POLISHED MASONRY UNIT
COLOR: 4107-HP

GROUND FACED CMU VENEER ((CMU-02):
MANUFACTURER: ADAMS AN OLDCASTLE COMPANY
PRODUCT: TRENWYTH ARCHITECTURAL HIGH POLISHED MASONRY UNIT
COLOR: 4205-HP

TINTED GLASS (G-01):
MANUFACTURER: VITRO
PRODUCT: SOLARBAN
COLOR: GRAY

PREFINISHED METAL SIDING (M-01):
MANUFACTURER: AEP SPAN
PRODUCT: FLUSH PANEL
COLOR: DARK BRONZE

ALUMINUM STOREFRONT SYSTEM (SF-01):
MANUFACTURER: YKK
PRODUCT: YES 45 TU
COLOR: DARK BRONZE ANODIZED

**ATTENDANT BUILDING
PARKTON SOLID WASTE
CONVENIENCE CENTER**
PARKTON RD., PARKTON NC, NC 28371

ISSUED:
04/11/2025
FOR CONSTRUCTION

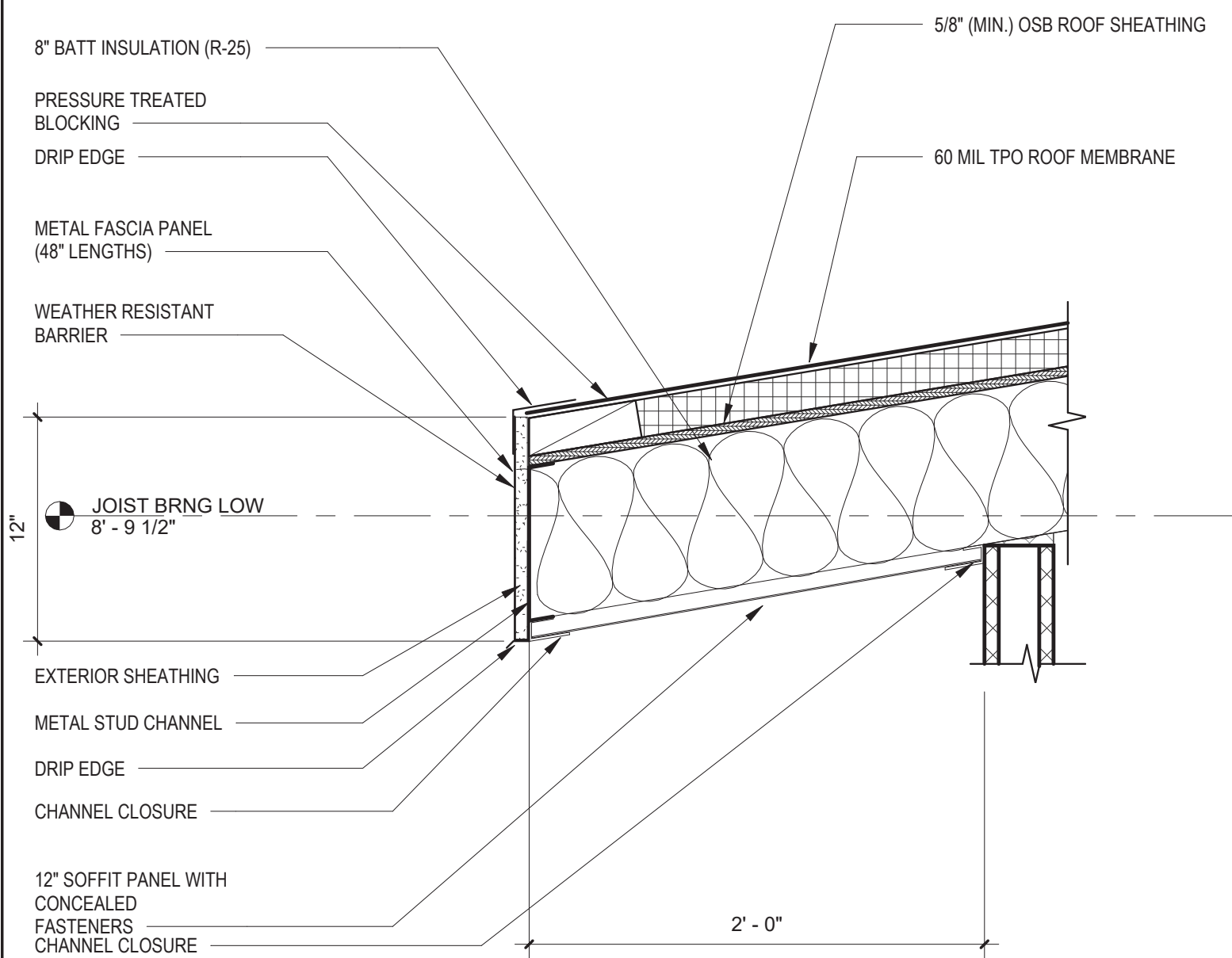
Rev.	Date	Description

DRAWN BY: PJA
APPROVED: E.J.G.

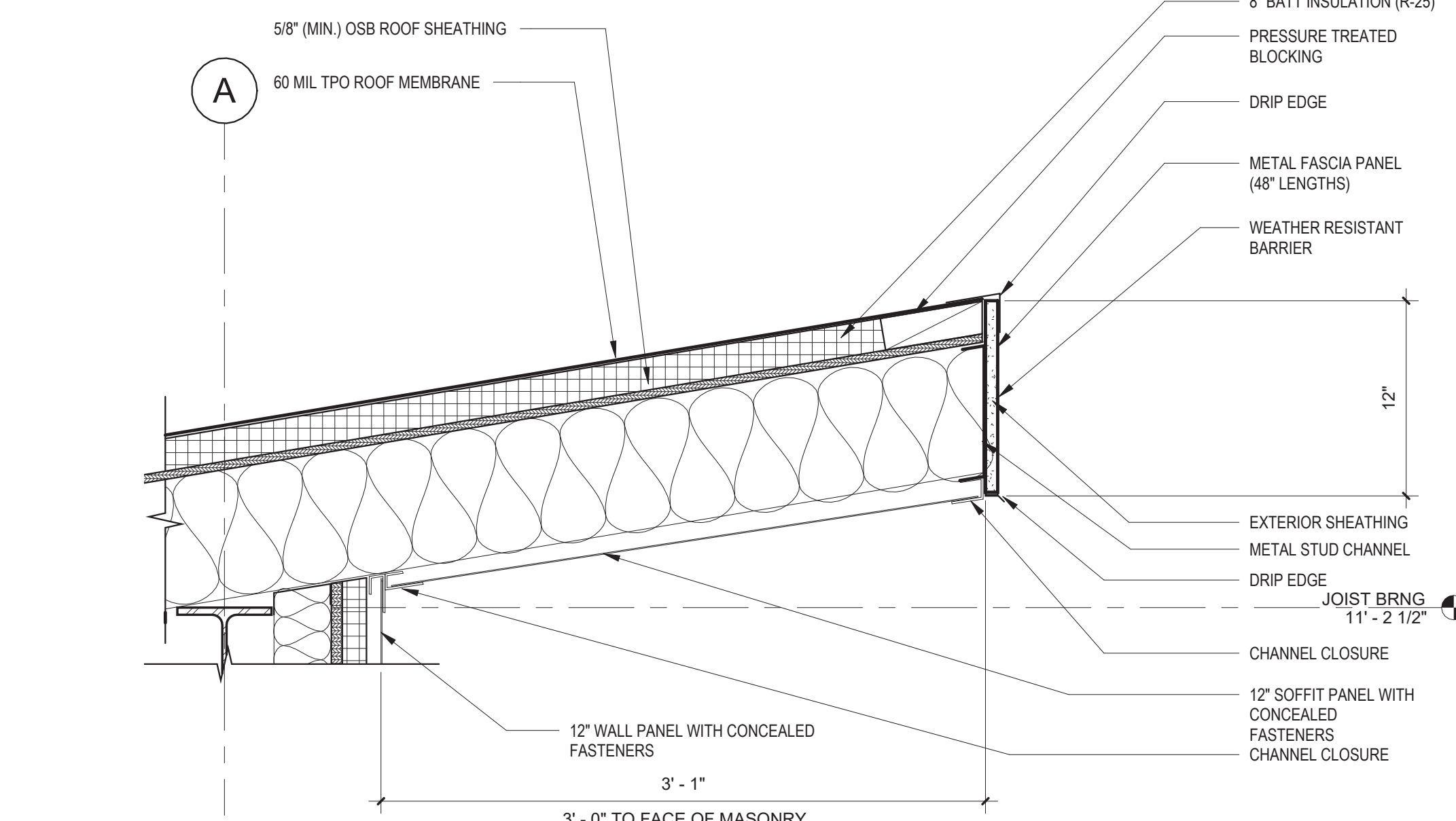
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RECORD:

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EXTERIOR ELEVATIONS

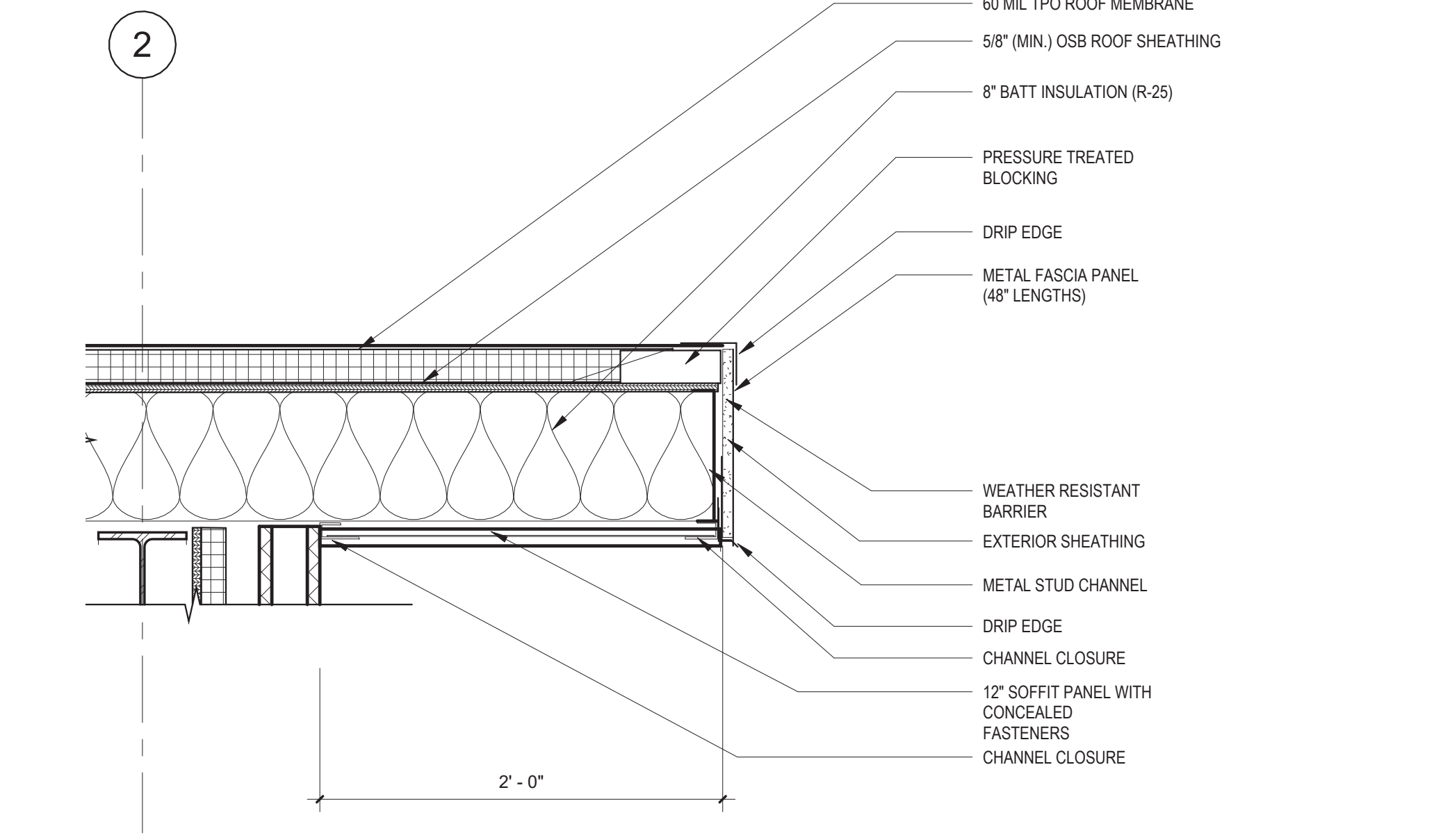
SHEET:
A301



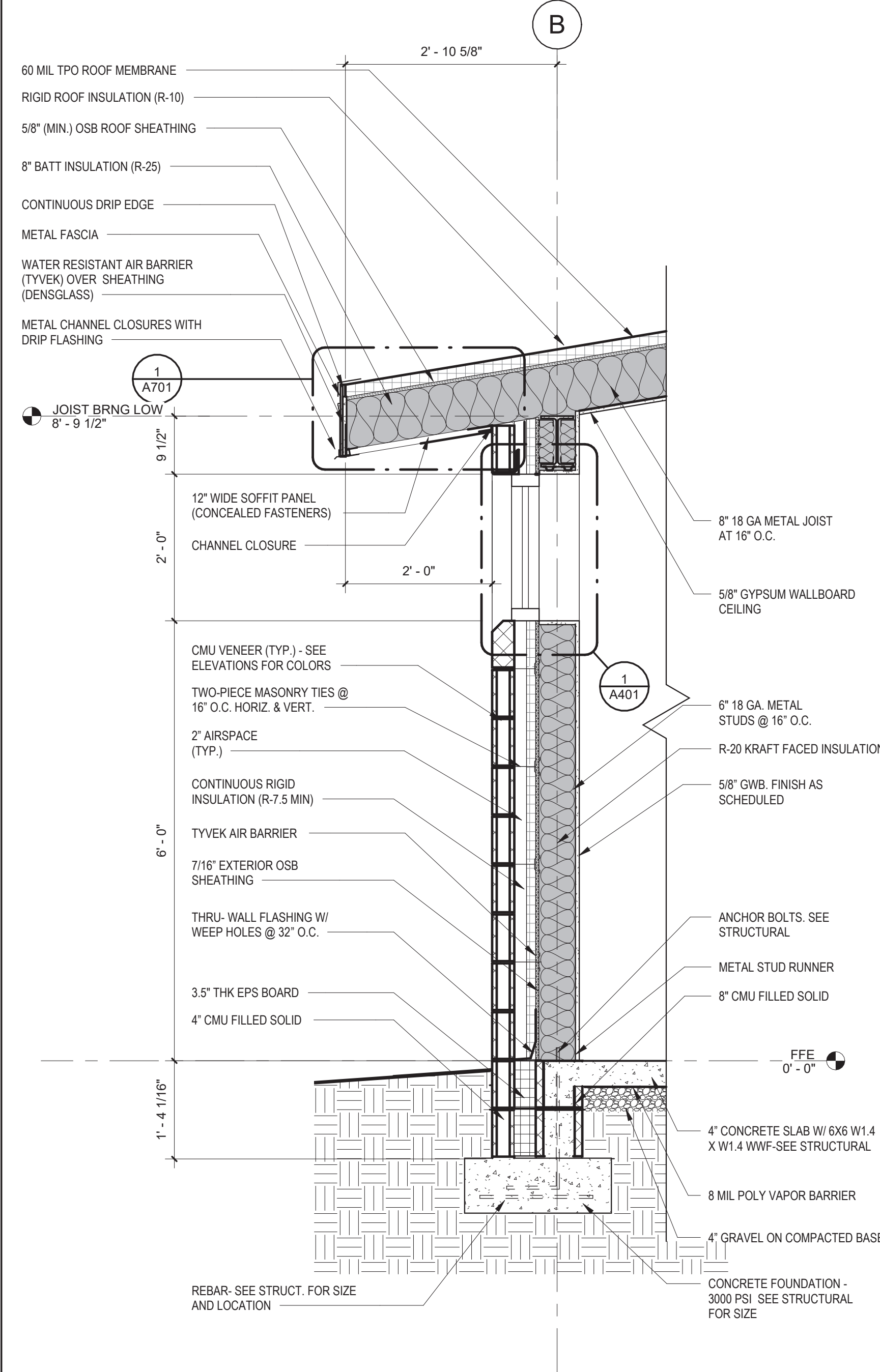
1 ROOF DETAIL-LOW END
 1 1/2" = 1'-0"



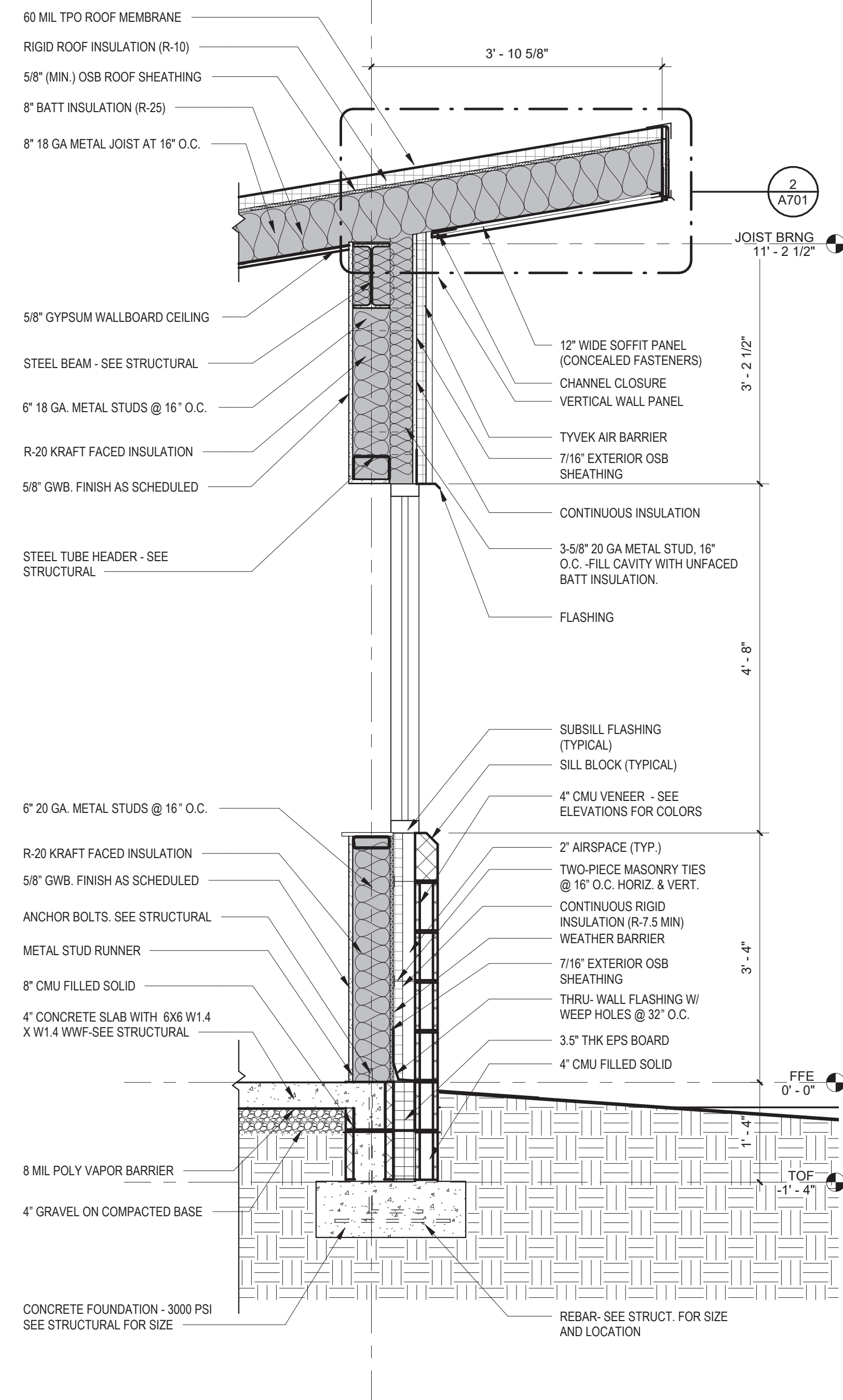
2 ROOF DETAIL-HIGH END
 1 1/2" = 1'-0"



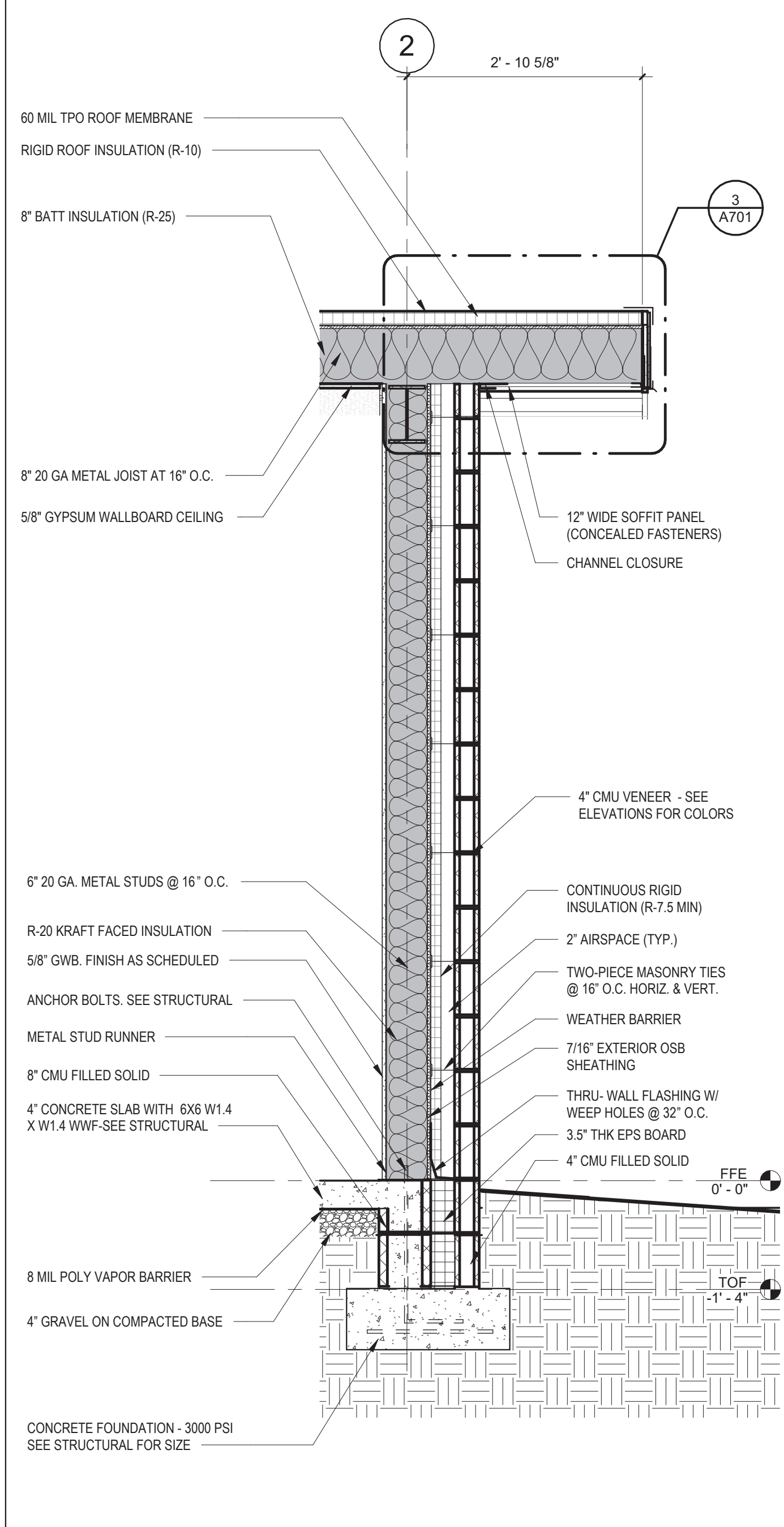
3 ROOF DETAIL - RAKE
 1 1/2" = 1'-0"



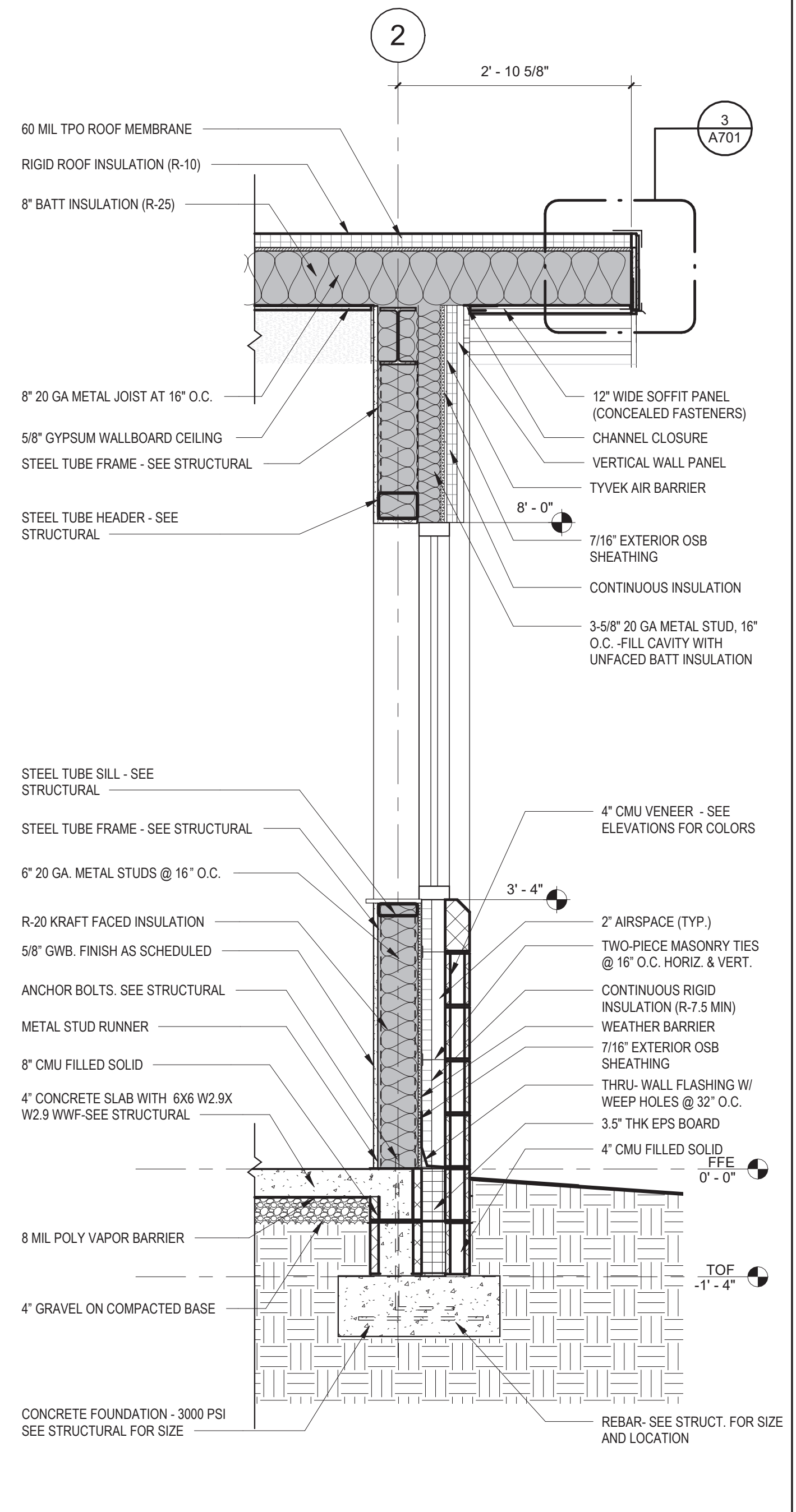
4 WALL SECTION - LOW ROOF EDGE
 3/4" = 1'-0"



5 WALL SECTION - HIGH ROOF EDGE
 3/4" = 1'-0"



6 WALL SECTION - RAKE SIDE
 3/4" = 1'-0"

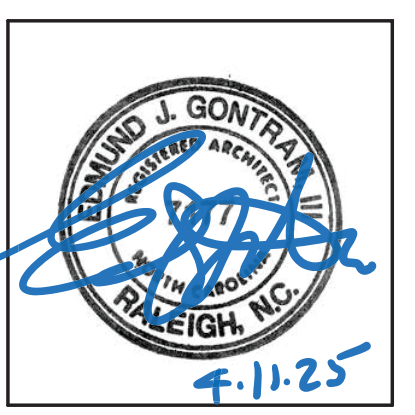


7 WALL SECTION - RAKE (WINDOW)
 3/4" = 1'-0"



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**ATTENDANT BUILDING
 PARKTON SOLID WASTE
 CONVENIENCE CENTER**
 PARKTON RD., PARKTON NC, NC 28371

ISSUED: 04/11/2025
 FOR CONSTRUCTION

Rev.	Date	Description

DRAWN BY: PJA APPROVED: E.J.G.
 PROJECT NO.: 24077 RECORD:
 CONTENTS: WALL SECTIONS

SHEET:
A701

DIVISION 04 - MASONRY
SECTION 042000
UNIT MASONRY

PART 1 GENERAL

1.01 QUALITY ASSURANCE

- A. Comply with provisions of TMS 402/602, except where exceeded by requirements of Contract Documents.

PART 2 PRODUCTS

2.01 CONCRETE MASONRY UNITS

- A. Concrete Block: Comply with referenced standards and as follows:
 - 1. Size: Standard units with nominal face dimensions of 16 by 8 inches (400 by 200 mm) and nominal depths as indicated on drawings for specific locations.
 - 2. Load-Bearing Units: ASTM C90, normal weight.

2.02 MORTAR AND GROUT MATERIALS

- A. Masonry Cement: ASTM C91/C91M, Type N.
- B. Portland Cement: ASTM C150/C150M, Type I; color as required to produce approved color sample.
- C. Hydrated Lime: ASTM C207, Type S.
- D. Mortar Aggregate: ASTM C144.
- E. Grout Aggregate: ASTM C404.
- F. Packaged Dry Material for Mortar for Unit Masonry: Premixed masonry cement and mason's sand, complying with ASTM C1714/C1714M and capable of producing mortar of the specified strength in accordance with ASTM C270 with the addition of water only.
 - 1. Type: Type N.
 - 2. Color: Standard gray, (below grade)

- G. Packaged Dry Material for Mortar for Unit Masonry: Premixed masonry cement and mason's sand, complying with ASTM C1714/C1714M and capable of producing mortar of the specified strength in accordance with ASTM C270 with the addition of water only.
 - 1. Type: Type N.
 - 2. Color: Standard gray, (below grade)

2.03 REINFORCEMENT AND ANCHORAGE

- A. Reinforcing Steel: ASTM A615/A615M, Grade 40 (40,000 psi) (280 MPa), deformed billet bars; galvanized.
- B. Single Wythe Joint Reinforcement: ASTM A951/A951M.
 - 1. Type: Truss or ladder.
 - 2. Material: ASTM A1064/A1064M steel wire, mill galvanized to ASTM A641/A641M Class 3.
 - 3. Size: 0.1483 inch (3.8 mm) side rods with 0.1483 inch (3.8 mm) cross rods; width as required to provide not less than 5/8 inch (16 mm) of mortar coverage on each exposure.
- C. Multiple Wythe Joint Reinforcement: ASTM A951/A951M.
 - 1. Type: Truss.
 - 2. Material: ASTM A1064/A1064M steel wire, mill galvanized to ASTM A641/A641M Class 3.
 - 3. Size: 0.1483 inch (3.8 mm) side rods with 0.1483 inch (3.8 mm) cross rods; width as required to provide not less than 5/8 inch (16 mm) of mortar coverage on each exposure.

2.04 FLASHINGS

- A. Membrane Asphaltic Flashing Materials:
- B. Lap Sealants and Tapes: As recommended by flashing manufacturer; compatible with membrane and adhesives.

2.05 ACCESSORIES

- A. Preformed Control Joints: Rubber material. Provide with corner and tee accessories, fused joints.
- B. Joint Filler: Closed cell polyvinyl chloride; oversized 50 percent to joint width; self expanding; in maximum lengths available.
- C. Cavity Mortar Control: Semi-rigid polyethylene or polyester mesh panels, sized to thickness of wall cavity, and designed to prevent mortar droppings from clogging weeps and cavity vents and allow proper cavity drainage.

2.06 MORTAR AND GROUT MIXING

- A. Mortar for Unit Masonry: ASTM C270, using the Proportion Specification.
 - 1. Masonry below grade and in contact with earth: Type S.
 - 2. Exterior, loadbearing masonry: Type N.
 - 3. Exterior, non-loadbearing masonry: Type N.

PART 3 EXECUTION

3.01 COURSEING

- A. Establish lines, levels, and coursing indicated. Protect from displacement.
- B. Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.
- C. Concrete Masonry Units:
 - 1. Bond: Running.
 - 2. Coursing: One unit and one mortar joint to equal 8 inches (200 mm).
 - 3. Mortar Joints: Concave.

3.02 PLACING AND BONDING

- A. Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.
- B. Lay hollow masonry units with face shell bedding on head and bed joints.
- C. Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.

3.03 WEEPS/CAVITY VENTS

- A. Install weeps in veneer and cavity walls at 32 inches (800 mm) on center horizontally on top of through-wall flashing above shelf angles and lintels and at bottom of walls.

3.04 CAVITY MORTAR CONTROL

- A. Do not permit mortar to drop or accumulate into cavity air space or to plug weep/cavity vents.

3.05 MASONRY FLASHINGS

- A. Whether or not specifically indicated, install masonry flashing to divert water to exterior at all locations where downward flow of water will be interrupted.
- B. Terminate flashing up 8 inches (203 mm) minimum on vertical surface of backing.
- C. Install flashing in accordance with manufacturer's instructions and BIA Technical Notes No. 7.
- D. Extend metal flashings through exterior face of masonry and terminate in an angled drip with hemmed edge. Install joint sealer below drip edge to prevent moisture migration under flashing.

3.06 LINTELS

- A. Install loose steel lintels over openings.

END OF SECTION
DIVISION 07 - THERMAL AND MOISTURE PROTECTION
SECTION 072700
AIR BARRIERS

PART 1 PRODUCTS

1.01 AIR BARRIER MATERIALS (AIR IMPERMEABLE AND WATER VAPOR PERMEABLE)

- A. Air Barrier Sheet, Mechanically Fastened:
 - 1. Air Permeance: 0.004 cfm/sq ft (0.02 L/s sq m), maximum, when tested in accordance with ASTM E2178.
 - 2. Water Vapor Permeance: 10 perms (574 ng/(Pa s sq m)), minimum, when tested in accordance with ASTM E96/E96M using Procedure A - Desiccant Method, at 73.4 degrees F (23 degrees C).
 - 3. Ultraviolet (UV) and Weathering Resistance: Approved by manufacturer for up to 90 days of weather exposure.
 - 4. Surface Burning Characteristics: Flame spread index of 25 or less, and smoke developed index of 50 or less, Class A, when tested in accordance with ASTM E84.

- 5. Seam and Perimeter Tape: Polyethylene self-adhering type, mesh reinforced, 2-1/2 inches (64 mm) wide, compatible with sheet material; unless otherwise indicated.

1.02 ACCESSORIES

- A. Sealants, Tapes, and Accessories for Sealing Air Barrier and Adjacent Substrates: As indicated or in compliance with air barrier manufacturer's installation instructions.
- B. Flexible Flashing: Self-adhesive sheet flashing complying with ASTM D1970/D1970M, except slip resistance requirement waived if not installed on roof.
 - 1. Width: 4 inches (102 mm).
- C. Sill Plate Sealer: Closed-cell foam tape with rubberized adhesive membrane; bridges gap between foundation structure and sill plate or skirt board.
 - 1. Width: 3-1/2 inches (89 mm).

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install materials in accordance with manufacturer's installation instructions.
- B. Air Barriers: Install continuous airtight barrier over surfaces indicated, with sealed seams and with sealed joints to adjacent surfaces.
- C. Apply sealants and adhesives within recommended temperature range in accordance with manufacturer's installation instructions.
- D. Mechanically Fastened Sheets - On Exterior:
 - 1. Install sheets shingle fashion to shed water, with seams generally horizontal.
- E. Openings and Penetrations in Exterior Air Barriers:
 - 1. Install flashing over sills, covering entire sill frame member, extending at least 5 inches (125 mm) onto air barrier and at least 6 inches (150 mm) up jambs; mechanically fasten stretched edges.

END OF SECTION
SECTION 074213
METAL WALL PANELS

PART 1 GENERAL

1.01 WARRANTY

- A. Finish Warranty: Provide 5-year manufacturer warranty against excessive degradation of exterior finish. Include provision for replacement of units with excessive fading, chalking, or flaking. Complete forms in Owner's name and register with warrantor.

PART 2 PRODUCTS

2.01 METAL WALL PANEL SYSTEM

- A. Wall Panel System: Factory fabricated prefinished metal panel system, site assembled.
 - 1. Provide exterior wall panels and soffit panels.
 - 2. Design and size components to support assembly dead loads, and to withstand live loads caused by positive and negative wind pressure acting normal to plane of wall.
 - 3. Maximum Allowable Deflection of Panel: L/180 for length(L) of span.
 - 4. Movement: Accommodate movement within system without damage to components or deterioration of seals, movement between system and perimeter components when subject to seasonal temperature cycling; dynamic loading and release of loads; and deflection of structural support framing.
 - 5. Drainage: Provide positive drainage to exterior for moisture entering or condensation occurring within panel system.
 - 6. Fabrication: Formed true to shape, accurate in size, square, and free from distortion or defects; pieces of longest practical lengths.
 - 7. Corners: Factory-fabricated in one continuous piece with minimum 2-inch (51 mm) returns.
- B. Exterior Wall Panels:
 - 1. Profile: Vertical; style as indicated.
 - 2. Side Seams: Double-interlocked, tight-fitting, sealed with continuous gaskets.
 - 3. Material: Precoated steel sheet, 22 gauge, 0.0299 inch (0.76 mm) minimum thickness.
 - 4. Panel Width: 12 inches (___ mm).
- C. Soffit Panels:
 - 1. Profile: Style as indicated, with venting not provided.
 - 2. Material: Precoated steel sheet, 22 gauge, 0.0299 inch (0.76 mm) minimum thickness.
- D. Internal and External Corners: Same material, thickness, and finish as exterior sheets; profile to suit system; shop cut and factory mitered to required angles.
- E. Expansion Joints: Same material, thickness and finish as exterior sheets; ___ gauge, ___ inch (___ mm) thick; manufacturer's standard brake formed type, of profile to suit system.
- F. Trim: Same material, thickness and finish as exterior sheets; brake formed to required profiles.
- G. Anchors: Galvanized steel.

2.02 MATERIALS

- A. Precoated Steel Sheet: Hot-dipped galvanized steel sheet, ASTM A653/A653M, Structural Steel (SS) or Forming Steel (FS), with G90/Z275 coating; continuous coil-coated on exposed surfaces with specified finish coating and on panel back with specified panel back coating.

2.03 FINISHES

- A. Fluoropolymer Coil Coating System: Polyvinylidene fluoride (PVDF) multi-coat superior performing organic coatings system complying with AAMA 2605, including at least 70 percent PVDF resin, and at least 80 percent of coil coated metal surfaces having minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch (0.023 mm); color and gloss as selected by Architect from manufacturer's standard line.

2.04 ACCESSORIES

- A. Fasteners: Manufacturer's standard type to suit application; with soft neoprene washers, steel, hot dip galvanized. Fastener cap same color as exterior panel.
- B. Field Touch-up Paint: As recommended by panel manufacturer.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install panels on walls and soffits in accordance with manufacturer's instructions.
- B. Fasten panels to structural supports; aligned, level, and plumb.

END OF SECTION
SECTION 075423
THERMOPLASTIC POLYOLEFIN (TPO) MEMBRANE ROOFING - CARLISLE

PART 1 GENERAL

1.01 WARRANTY

- A. Material Warranty: Provide membrane manufacturer's warranty agreeing to replace material that shows manufacturing defects within 10 years after installation.
- B. System Warranty: Provide manufacturer's system warranty agreeing to repair or replace roofing that leaks or is damaged due to wind or other natural causes.
 - 1. Warranty Term: 20 years.
 - 2. For repair and replacement include costs of both material and labor in warranty.
 - 3. Include accidental punctures according to the manufacturer's standard warranty terms.
 - 4. Include hail damage according to the manufacturer's standard warranty terms.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Carlisle SynTec Systems: www.carlisle-syntec.com/#sle.

- B. Substitutions: Allowed.

2.02 ROOFING APPLICATIONS

- A. TPO Membrane Roofing: One ply membrane, asphalt adhered, over insulation.
- B. Roofing Assembly Performance Requirements and Design Criteria:
 - 1. Insulation Thermal Resistance (R-Value): Provide R-Value over entire roof deck in accordance with local building code requirements.

2.03 ROOFING MEMBRANE AND ASSOCIATED MATERIALS

- A. Membrane:
 - 1. Material: Thermoplastic Polyolefin (TPO) complying with ASTM D6878/D6878M.
 - 2. Reinforcing: Internal fabric.
 - 3. Thickness: 60 mil (0.060 inch) (1.5 mm), minimum.
 - 4. Sheet Width: Factory fabricated into largest sheets possible.
 - 5. Color: White.
 - 6. Products:
 - a. Carlisle SynTec Systems; Sure-Weld.
- B. Seaming Materials: As recommended by membrane manufacturer.
- C. Flexible Flashing Material: Same material as membrane.
- D. Base Flashing: Provide waterproof, fully adhered base flashing system at all penetrations, plane transitions, and terminations.

2.04 INSULATION

- A. Polyisocyanurate (ISO) Board Insulation: Complies with ASTM C1289, Type II, Class 1 - Faced with glass-reinforced felt on both surfaces of core foam.
 - 1. Grade and Compressive Strength: Grade 2, 20 psi (Grade 2, 138 kPa), minimum.

2.05 ACCESSORIES

- A. Prefabricated Flashing Accessories:
 - 1. Corners and Seams: Same material as membrane, in manufacturer's standard thicknesses.
 - 2. Penetrations: Same material as membrane, with manufacturer's standard cut-outs, rigid inserts, clamping rings, and flanges.
 - 3. Sealant Pockets: Same material as membrane, with manufacturer's standard accessories, in manufacturer's standard configuration.
 - 4. Pressure Sensitive Cover Strips: 6 inches (152 mm) wide, 45 mil, 0.045 inch (1.1 mm) thick, non-reinforced TPO membrane laminated to 35 mil, 0.035 inch (0.9 mm) thick cured synthetic rubber with pressure sensitive adhesive.
 - 5. Pressure Sensitive Cover Strips: 6 inches (152 mm) wide, 45 mil, 0.045 inch (1.1 mm) thick, non-reinforced TPO membrane laminated to 35 mil, 0.035 inch (0.9 mm) thick cured synthetic rubber with pressure sensitive adhesive.
 - 6. Miscellaneous Flashing: Non-reinforced TPO membrane; 80 mil, 0.080 inch (2.0 mm) thick, in manufacturer's standard lengths and widths.
- B. Insulation Fasteners: Appropriate for purpose intended and approved by roofing manufacturer.
- C. Membrane Adhesive: As recommended by membrane manufacturer.
- D. Surface Conditioner for Adhesives: Compatible with membrane and adhesives.
- E. Sealants: As recommended by membrane manufacturer.
- F. Cleaner: Manufacturer's standard, clear, solvent-based cleaner.
- G. Edgings and Terminations: Manufacturer's standard edge and termination accessories.

PART 3 EXECUTION

3.01 INSTALLATION - GENERAL

- A. Perform work in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.
- B. Do not apply roofing membrane during unsuitable weather.
- C. Do not apply roofing membrane when ambient temperature is outside the temperature range recommended by manufacturer.
- D. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.
- E. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

END OF SECTION
SECTION 076200
SHEET METAL FLASHING AND TRIM

PART 1 GENERAL

1.01 QUALITY ASSURANCE

- A. Perform work in accordance with SMACNA (ASMM) and CDA A4050 requirements and standard details, except as otherwise indicated.

PART 2 PRODUCTS

2.01 SHEET MATERIALS

- A. Pre-Finished Galvanized Steel: ASTM A653/A653M, with G90/Z275 zinc coating; minimum 24-gauge, 0.0239-inch (0.61 mm) thick base metal, shop pre-coated with PVDF coating.
 - 1. Polyvinylidene Fluoride (PVDF) Coating: Superior performing organic powder coating, AAMA 2605, multiple coat, thermally cured fluoropolymer finish system.

2.02 FABRICATION

- A. Form sections true to shape, accurate in size, square, and free from distortion or defects.
- B. Form pieces in longest possible lengths.
- C. Form material with flat lock seams, except where otherwise indicated; at moving joints, use sealed lapped, bayonet-type or interlocking hooked seams.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted.

END OF SECTION
DIVISION 08 - OPENINGS
SECTION 081113
HOLLOW METAL DOORS AND FRAMES

PART 1 GENERAL

1.01 DELIVERY, STORAGE, AND HANDLING

- A. Comply with NAAMM H1MA 840 or ANSI/SDI A250.8 (SDI-100) in accordance with specified requirements.

PART 2 PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. Combined Requirements: If a particular door and frame unit is indicated to comply with more than one type of requirement, comply with the specified requirements for each type; for instance, an exterior door that is also indicated as being sound-rated must comply with the requirements specified for exterior doors and for sound-rated doors; where two requirements conflict, comply with the most stringent.

2.02 HOLLOW METAL FRAMES

- A. Comply with standards and/or custom guidelines as indicated for corresponding door in accordance with applicable door frame requirements.
- B. Frame Finish: Factory primed and field finished.
- C. Interior Door Frames, Non-Fire Rated: Knock-down type.
 - 1. Frame Metal Thickness: 18 gauge, 0.042 inch (1.0 mm), minimum.
 - 2. Frame Finish: Factory primed and field finished.

2.03 FINISHES

- A. Primer: Rust-inhibiting, complying with ANSI/SDI A250.10, door manufacturer's standard.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install doors and frames in accordance with manufacturer's instructions and related requirements of specified door and frame standards or custom guidelines indicated.
- B. Coordinate frame anchor placement with wall construction.

END OF SECTION
SECTION 081416
FLUSH WOOD DOORS

PART 1 GENERAL

1.01 QUALITY ASSURANCE

1.02 WARRANTY

- A. Manufacturer Warranty: Provide manufacturer's warranty on interior doors for the life of the institution. Complete forms in Owner's name and register with manufacturer.
 - 1. Include coverage for delamination of veneer, warping beyond specified installation tolerances, defective materials, and telegraphing core construction.

PART 2 PRODUCTS

2.01 DOORS AND PANELS

- A. Doors: See drawings for locations and additional requirements.
 - 1. Quality Standard: Custom Grade, Heavy Duty performance, in accordance with AWI/AWMACWI (AWS) or AWMACWI (NAAWS), unless noted otherwise.
 - 2. Wood Veneer Faced Doors: 5-ply or 7-ply unless otherwise indicated.
- B. Interior Doors: 1-3/4 inches (44 mm) thick unless otherwise indicated; flush construction.
 - 1. Provide solid core doors at each location.
 - 2. Wood veneer facing for field transparent finish as indicated on drawings.

2.02 DOOR AND PANEL CORES

- A. Non-Rated Solid Core and 20 Minute Rated Doors: Type particleboard core (PC), plies and faces as indicated.

2.03 DOOR FACINGS

- A. Veneer Facing for Transparent Finish: White birch, veneer grade in accordance with quality standard indicated, plain sliced (flat cut), with book match between leaves of veneer, running match of spliced veneer leaves assembled on door or panel face.
 - 1. Vertical Edges: Any option allowed by quality standard for grade.

2.04 DOOR CONSTRUCTION

- A. Fabricate doors in accordance with door quality standard specified.
- B. Factory machine doors for hardware other than surface-mounted hardware, in accordance with hardware requirements and dimensions.
- C. Factory fit doors for frame opening dimensions identified on shop drawings, with edge clearances in accordance with specified quality standard.
 - 1. Exception: Doors to be field finished.

2.05 FINISHES - WOOD VENEER DOORS

- A. Finish work in accordance with AWI/AWMACWI (AWS) or AWMACWI (NAAWS), Section 5 - Finishing for grade specified and as follows:
 - 1. Transparent:
 - a. System - 12, Polyurethane, Water-based.
 - b. Stain: As selected by Architect.
 - c. Sheen: Satin.
 - 2. Seal door top edge with color sealer to match door facing.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install doors in accordance with manufacturer's instructions and specified quality standard.
- B. Coordinate installation of doors with installation of frames and hardware.

END OF SECTION
SECTION 084313
ALUMINUM-FRAMED STOREFRONTS

PART 1 GENERAL

PART 2 PRODUCTS

2.01 ALUMINUM-FRAMED STOREFRONT

- A. Aluminum-Framed Storefront: Factory fabricated, factory finished aluminum framing members with infill, and related flashings, anchorage and attachment devices.
 - 1. Glazing Position: Centered (front to back).
 - 2. Finish: Superior performing organic coatings.
 - a. Factory finish all surfaces that will be exposed in completed assemblies.
 - b. Touch-up surfaces cut during fabrication so that no natural aluminum is visible in completed assemblies, including joint edges.
 - 3. Finish Color: As indicated on drawings.
 - 4. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors and hardware; fasteners and attachments concealed from view; reinforced as required for imposed loads.
 - 5. Construction: Eliminate noises caused by wind and thermal movement, prevent vibration harmonics, and prevent "stack effect" in internal spaces.
 - 6. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
- B. Performance Requirements
 - 1. Wind Loads: Design and size components to withstand the specified load requirements without damage or permanent set, when tested in accordance with ASTM E330/E330M, using loads 1.5 times the design wind loads and 10 second duration of maximum load.
 - a. Member Deflection: Limit member deflection to flexure limit of glass in any direction, with full recovery of glazing materials.
 - 2. Air Leakage: 0.06 cfm/sq ft (0.3 L/sec sq m) maximum leakage of storefront wall area when tested in accordance with ASTM E283/E283M at 1.57 psf (75 Pa) pressure difference.
 - 3. Air Leakage: 0.06 cfm/sq ft (0.3 L/sec sq m) maximum leakage of storefront wall area when tested in accordance with ASTM E283/E283M at 1.57 psf (75 Pa) pressure difference.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Secure flashings in place using concealed fasteners, and use exposed fasteners only where permitted.

END OF SECTION
DIVISION 08 - OPENINGS
SECTION 081113
HOLLOW METAL DOORS AND FRAMES

2.02 COMPONENTS

- A. Aluminum Framing Members: Tubular aluminum sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep drainage system.
 - 1. Glazing Stops: Flush.
- B. Swing Doors: Glazed aluminum.
 - 1. Thickness: 1-3/4 inches (43 mm).
 - 2. Top Rail: 4 inches (100 mm) wide.
 - 3. Vertical Sill: 4-1/2 inches (115 mm) wide.
 - 4. Bottom Rail: 10 inches (254 mm) wide.
 - 5. Glazing Stops: Square.
 - 6. Finish: Same as storefront.

2.03 MATERIALS

- A. Extruded Aluminum: ASTM B221 (ASTM B221M).
- B. Fasteners: Stainless steel.

2.04 FINISHES

- A. Class 1 Natural Anodized Finish: AAMA 611 AA-M12C22A41 Clear anodic coating not less than 0.7 mils (0.018 mm) thick.

2.05 HARDWARE

- A. For each door, include weatherstripping, sill sweep strip, and threshold.
- B. Weatherstripping: Wool pile, continuous and replaceable; provide on all doors.
- C. Sill Sweep Strips: Resilient seal type, retracting, of neoprene; provide on all doors.
- D. Threshold: Extruded aluminum, one piece per door opening, ribbed surface; provide on all doors.
- E. Hinges: Butt type, swing clear; top and bottom.
- F. Push/Pull Set: Standard configuration push/pull handles.
- G. Door Closers: Exposed overhead.
- H. Locks: Dead latch with turn handle inside ; keyed cylinder outside.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install wall system in accordance with manufacturer's instructions.
- B. Attach to structure to permit sufficient adjustment to accommodate construction tolerances and other irregularities.
- C. Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.

END OF SECTION
SECTION 087100
DOOR HARDWARE

PART 1 GENERAL

1.01 ADMINISTRATIVE REQUIREMENTS

- A. Furnish templates for door and frame preparation to manufacturers and fabricators of products requiring internal reinforcement for door hardware.
- B. Keying Requirements Meeting:
 - 1. Attendance Required.
 - 2. Agenda.
 - 3. Incorporate "Keying Requirements Meeting" decisions into keying submittal upon review of door hardware keying system including, but not limited to, the following:

1.02 WARRANTY

- A. Manufacturer's Warranty: Provide warranty against defects in material and workmanship for period indicated. Complete forms in Owner's name and register with manufacturer.
 - 1. Closers: Five years, minimum.
 - 2. Locksets and Cylinders: Three years, minimum.
 - 3. Other Hardware: Two years, minimum.

PART 2 PRODUCTS

2.01 DESIGN AND PERFORMANCE CRITERIA

- A. Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.
- B. Provide door hardware products that comply with the following requirements:
 - 1. Applicable provisions of federal, state, and local codes.
 - 2. Hardware Preparation for Wood Doors with Wood or Steel Frames: BHMA A156.1/15V.
 - 3. Fasteners:
 - 1. Provide fasteners of proper type, size, quantity, and finish that comply with commercially recognized standards for proposed applications.

2.02 HINGES

STRUCTURAL NOTES

I. GENERAL

1. DESIGN CODES

- NORTH CAROLINA BUILDING CODE, 2018 EDITION (AMENDED 2015 INTERNATIONAL BUILDING CODE)
 - ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-14)
 - AISC MANUAL OF STEEL CONSTRUCTION - ALLOWABLE STRESS DESIGN NINTH EDITION
 - ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
2. DESIGN LOADS
- RISK CATEGORY II
- LIVE LOADS: FIRST FLOOR: 100 PSF
ROOF: 20 PSF
- ULTIMATE DESIGN WIND SPEED: 122 MPH
- GROUND SNOW LOAD 10 PSF
- SEISMIC DESIGN CATEGORY C
SITE CLASS D
Ss = 0.241
S1 = 0.103

3. ALL ELEVATIONS ARE REFERENCED FROM FINISHED FLOOR ELEVATION OF 0'-0". SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

4. DETAILED SHOP DRAWINGS SHALL BE PROVIDED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. STRUCTURAL STEEL SHOP DRAWINGS SHALL REQUIRE APPROVAL PRIOR TO FABRICATION.

5. ENGINEER'S SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY AND DOES NOT CERTIFY ARCHITECTURAL LAYOUT OR DIMENSIONAL ACCURACY.

6. ROSS LINDEN ENGINEERS PC ASSUMES NO LIABILITY FOR CHANGES OR MODIFICATIONS MADE TO THESE DRAWINGS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THESE DRAWINGS.

II. CONCRETE

1. UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL HAVE THE FOLLOWING STRENGTH AND SLUMP REQUIREMENTS:
3,500 PSI 28-DAY COMPRESSIVE STRENGTH, MAX. 5" SLUMP.

2. ALL CONCRETE SHALL BE MOIST CURED PER ACI 301 OR CURED WITH AN APPROVED CURING COMPOUND. CONTRACTOR SHALL VERIFY THAT THE CURING COMPOUND IS COMPATIBLE WITH FLOOR COVERING ADHESIVES, COATINGS, OR TOPPING TO BE USED. CONCRETE SHALL BE CURED FOR A MINIMUM OF 7 DAYS.

3. UNLESS OTHERWISE NOTED, ALL REINFORCING STEEL SHALL BE NEW BILLET STEEL, CONFORMING TO ASTM A-615, GRADE 60, DEFORMED.

4. UNLESS OTHERWISE NOTED, ALL DETAILING, FABRICATION, AND PLACING OF REINFORCING STEEL SHALL CONFORM TO THE MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES. (ACI 315)

5. ALL BAR SPLICES SHALL BE CLASS "B" TENSION SPLICES PER ACI 318-14, UNLESS OTHERWISE SHOWN.

6. ANCHOR BOLTS TO BE ASTM A36 OR A307.

7. CONTRACTOR SHALL REFER TO DRAWINGS OF OTHER TRADES AND VENDOR DRAWINGS FOR EMBEDDED ITEMS AND RECESSES NOT SHOWN ON THE STRUCTURAL DRAWINGS.

8. A GEOTECHNICAL REPORT BY GEOTECHNOLOGIES DATED 1 APRIL 2025 HAS BEEN USED AS THE BASIS OF THIS DESIGN. ALL SPREAD FOOTINGS ARE DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 2,000 PSF. A GEOTECHNICAL REPRESENTATIVE SHALL INSPECT ALL FOOTING EXCAVATIONS TO CONFIRM ALLOWABLE BEARING PRESSURES.

9. PROVIDE TWO (2) #5 x 4'-0" LONG DIAGONAL BARS IN TOP FACE OF ALL SLABS (1" CLEAR) AT ALL RE-ENTRANT CORNERS.

10. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, PROTECTING, AND RELOCATING AS REQUIRED ALL SERVICE AND UTILITY LINES IN VICINITY OF THE WORK SITE.

11. CONTRACTOR SHALL VERIFY ALL SIZES AND LOCATIONS OF ALL MECHANICAL AND ELECTRICAL OPENINGS AND EQUIPMENT PADS WITH THE MECHANICAL AND ELECTRICAL DETAILS AND SHOP DRAWINGS BY OTHERS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL OPENINGS AND SLEEVES FOR PROPER DISTRIBUTION FOR ALL UTILITIES THROUGHOUT THE BUILDING.

12. ALL DOWELS WHICH ARE TO BE DRILLED AND GROUTED INTO EXISTING CONCRETE SHALL BE DONE WITH AN EPOXY GROUT. DRILL HOLE WITH DIAMETER 1/8" LARGER THAN DOWEL OR AS RECOMMENDED BY GROUT SUPPLIER. USE HIT-RE 500 V3 BY HILTI OR APPROVED EQUAL.

III. MASONRY

- 1. MASONRY CONSTRUCTION SHALL COMPLY WITH ACI 530.1-13/ASCE 6-13: "SPECIFICATION FOR MASONRY STRUCTURES."
- 2. ASSUMED MASONRY PROPERTIES: UNIT COMPRESSIVE STRENGTH 1900 PSI, TYPE S MORTAR, PARTIAL GROUT, RUNNING BOND.

IV. STRUCTURAL STEEL

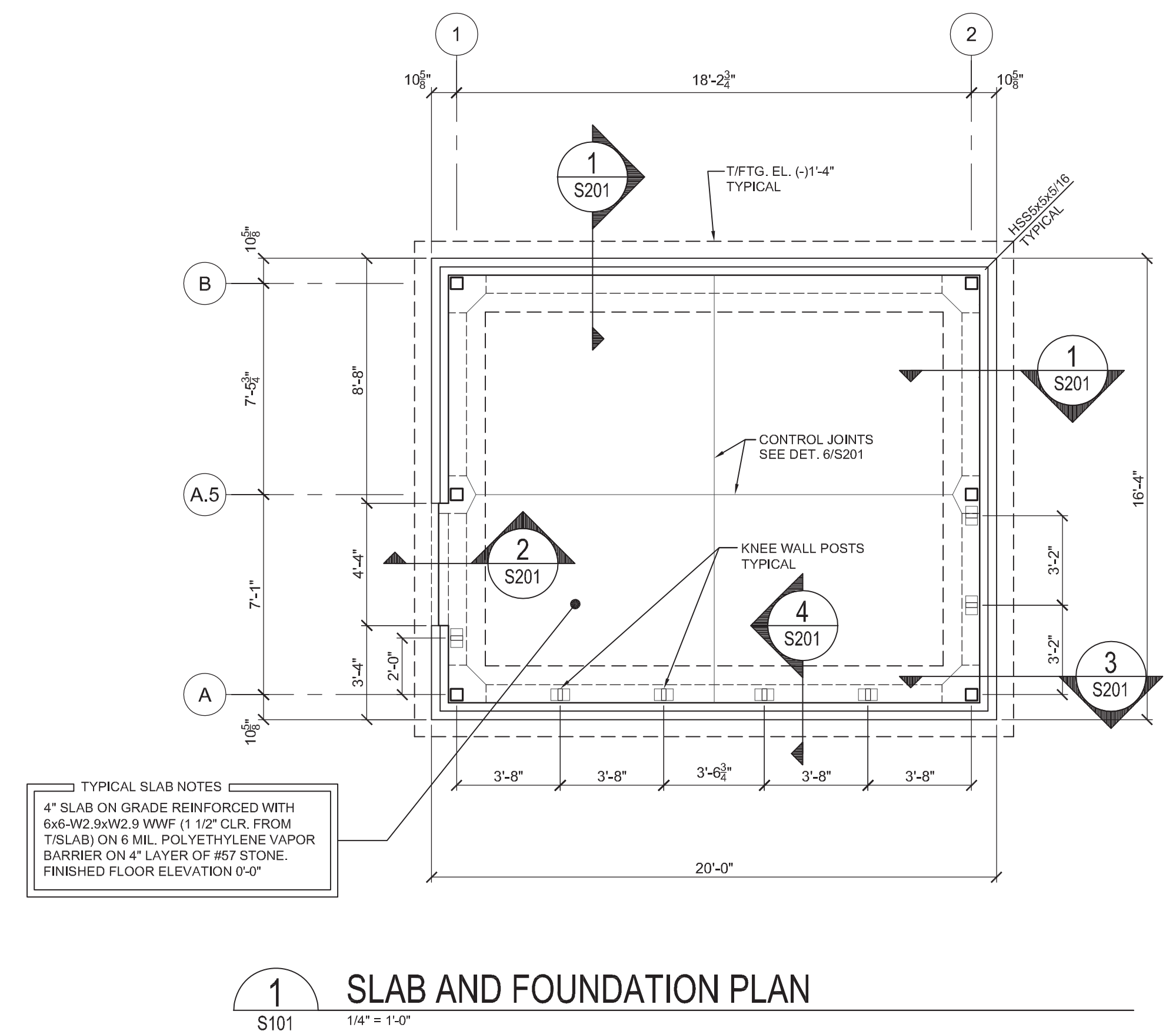
- 1. SEE FRAMING PLANS FOR BOTTOM OF BASE PLATE ELEVATIONS.
- 2. ALL STRUCTURAL STEEL WIDE FLANGE BEAMS AND COLUMNS, UNLESS NOTED, SHALL CONFORM TO THE REQUIREMENTS OF ASTM A992 OR ASTM A572, GRADE 50. ANGLES AND CHANNELS SHALL CONFORM TO ASTM A36. TUBES SHALL CONFORM TO ASTM A500, GRADE B.
- 3. ALL DETAILING, FABRICATION, AND ERECTION OF STRUCTURAL STEEL, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE REQUIREMENTS OF THE AISC SPECIFICATIONS FOR BUILDINGS, LATEST EDITION.
- 4. UNLESS OTHERWISE NOTED, ALL SHOP CONNECTIONS SHALL BE MADE BY WELDING OR HIGH STRENGTH BOLTING. (3/4" DIAMETER BOLTS, MINIMUM)
- 5. WELDS SHALL BE MADE WITH E-70XX ELECTRODES BY CERTIFIED WELDERS.
- 6. UNLESS OTHERWISE NOTED, ALL FIELD CONNECTIONS SHALL BE MADE WITH 3/4" DIAMETER HIGH STRENGTH BOLTS (ASTM A-325). CONNECTIONS SHALL BE DESIGNED AS BEARING TYPE WITH THREADS IN SHEAR PLANE. BOLTS SHALL BE TIGHTENED TO THE SNUG TIGHT CONDITION PER "AISC" UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- 7. UNLESS OTHERWISE SHOWN, ALL BEAM CONNECTIONS SHALL BE STANDARD FRAMED OR SEATED CONNECTIONS AS SHOWN IN PART 10 OF THE AISC MANUAL OF STEEL CONSTRUCTION. UNLESS REACTIONS ARE INDICATED ON THE DRAWINGS, CONNECTIONS SHALL DEVELOP AT LEAST ONE-HALF OF THE TOTAL UNIFORM LOAD CAPACITY TABULATED IN THE TABLES OF THE MANUAL FOR THE GIVEN SHAPE AND SPAN OF THE BEAM IN QUESTION. IN NO CASE, HOWEVER, SHALL THE LENGTH OF THE FRAMED CONNECTIONS BE LESS THAN ONE-HALF OF THE "T" DISTANCE OF THE BEAM WEB.
- 8. GUSSET PLATES SHALL BE 3/8" THICK MINIMUM.
- 9. ALL COLUMN ANCHOR BOLT HOLES TO BE OVERSIZED IN ACCORDANCE WITH RECOMMENDATIONS OF "AISC" MANUAL FOR "DETAILING FOR STEEL CONSTRUCTION."
- 10. UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL BRACING CONNECTIONS SHALL BE DESIGNED AND DETAILED SO THAT ALL FORCE COMPONENTS CAN BE DELIVERED DIRECTLY TO THE CENTERLINE OF INTERSECTING MEMBERS. ALTERNATELY, CONNECTIONS SHALL BE DESIGNED TO ACCOUNT FOR RESULTING ECCENTRICITIES.
- 11. CONTRACTOR TO PROVIDE ADEQUATE BRACING FOR STRUCTURE SO THAT IT WILL BE STABLE DURING ALL STAGES OF CONSTRUCTION. THE STRUCTURE AND FOUNDATIONS ARE DESIGNED FOR A COMPLETED CONDITION ONLY AND THEREFORE REQUIRES ADDITIONAL SUPPORT TO MAINTAIN STABILITY BEFORE COMPLETION.

V. LIGHT GAUGE STEEL FRAMING

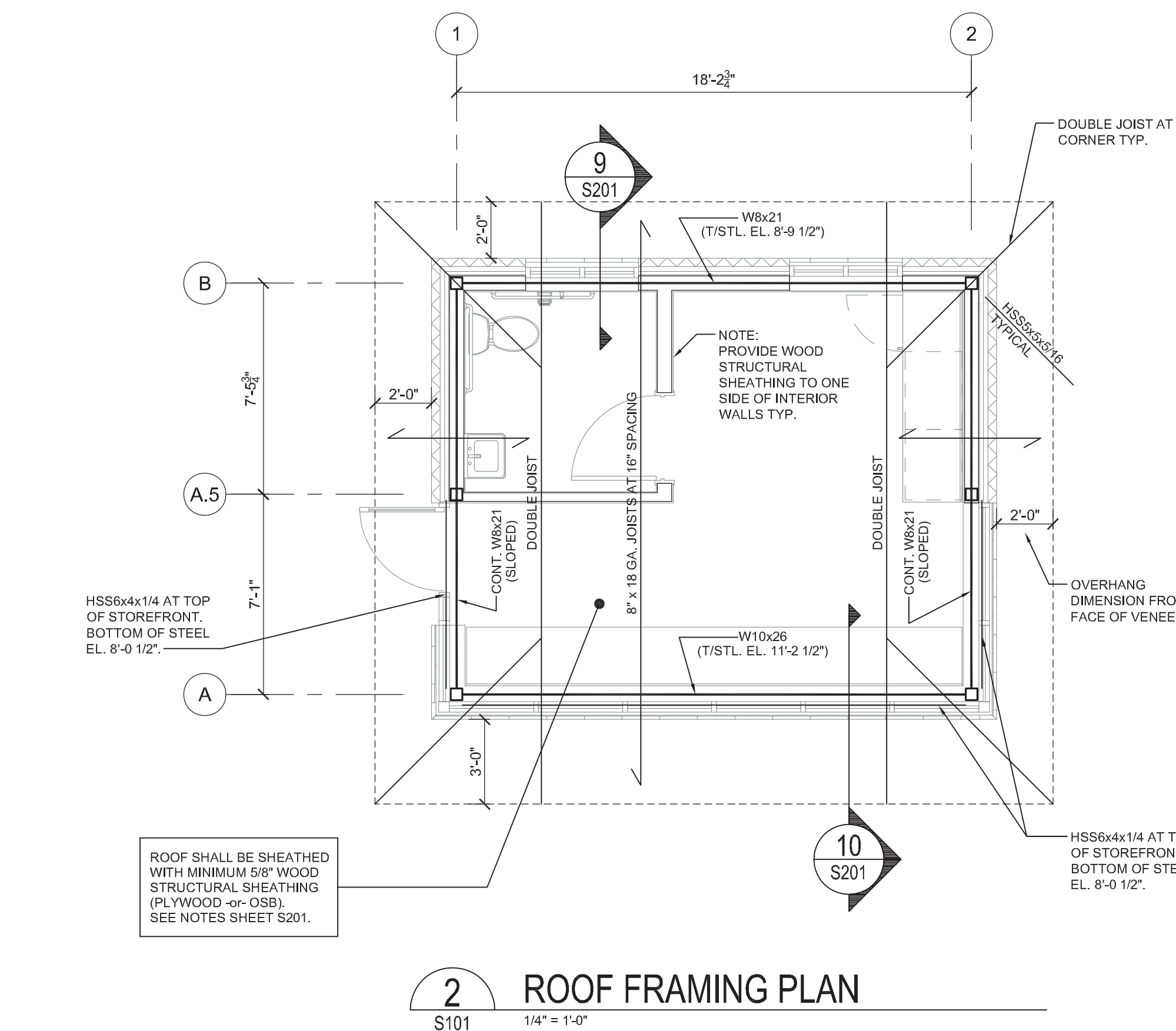
- 1. INSTALLATION OF LIGHT GAUGE STEEL FRAMING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 2. WALL STUDS SHALL HAVE THE FOLLOWING PROPERTIES:
16" MAX. SPACING
STUD DEPTH = 6"
FLANGE WIDTH = 1 5/8"
18 GAUGE STEEL
- 3. PROVIDE MIN. 18 GA. BOTTOM TRACK AND ANCHOR TO SLAB WITH POWDER ACTUATED FASTENERS AT 16" O.C.
- 4. SEE ARCH. DWGS. FOR WALL FINISH MATERIALS. PROVIDE GYPSUM BOARD ON ALL INTERIOR WALLS (MINIMUM 1/2"). FASTEN ALL PANELS WITH 1 1/4" SCREWS AT 7" o.c. AT TOP AND BOTTOM PLATES AND ALL STUDS FOR INTERIOR SIDE OF EXTERIOR WALLS, AND 12" o.c. AT TOP AND BOTTOM PLATES AND ALL STUDS FOR ALL OTHER WALLS. GYPSUM SHALL BE APPLIED PERPENDICULAR TO FRAMING.
- 5. ALL EXTERIOR WALLS SHALL BE SHEATHED WITH MINIMUM 7/16" WOOD STRUCTURAL SHEATHING (PLYWOOD -or- OSB) WITH BLOCKING AT ALL JOINTS. FASTEN ALL PANELS WITH SCREWS AT 3" o.c. AT ALL EDGES AND AT 6" o.c. AT INTERMEDIATE FRAMING.
- 6. SEE TYPICAL WALL SECTION FOR ADDITIONAL INFORMATION.

VI. WOOD

- 1. ALL EXTERIOR WALLS SHALL BE SHEATHED WITH MINIMUM 7/16" SHEATHING WITH BLOCKING AT ALL JOINTS. FASTEN ALL PANELS WITH SCREWS AT 4" o.c. AT ALL EDGES AND AT 8" o.c. AT INTERMEDIATE FRAMING. ORIENT PANEL EDGE PARALLEL WITH FRAMING.
- 2. PROVIDE MINIMUM 1/2" GYPSUM BOARD ON BOTH SIDES OF FULL-HEIGHT INTERIOR WALLS WITH INTERMEDIATE SUPPORT AT ALL JOINTS. FASTEN ALL PANELS WITH 1 1/4" SCREWS AT 7" o.c. AT TOP AND BOTTOM PLATES AND ALL STUDS. GYPSUM SHALL BE APPLIED PERPENDICULAR TO FRAMING.
- 3. ROOF FRAMING SHALL BE SHEATHED WITH MINIMUM 5/8" WOOD STRUCTURAL SHEATHING (PLYWOOD -or- OSB). PROVIDE PLYWOOD EDGE CLIPS BETWEEN PANELS.



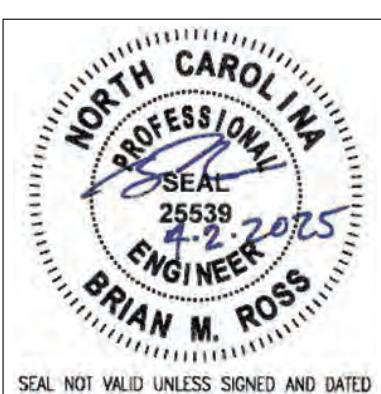
1 SLAB AND FOUNDATION PLAN
S101 1/4" = 1'-0"



2 ROOF FRAMING PLAN
S101 1/4" = 1'-0"



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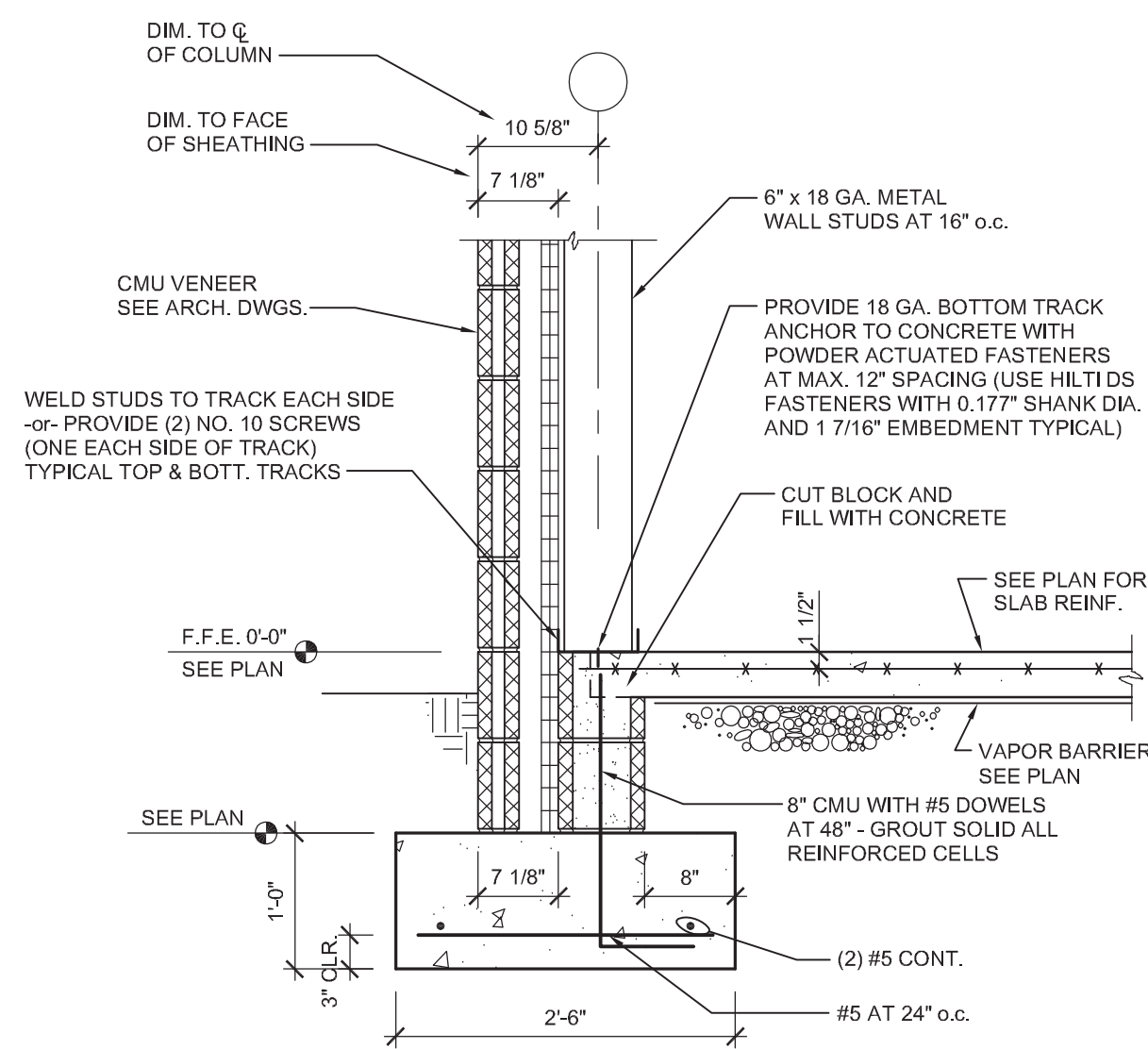
ATTENDANT BUILDING
PARKTON SOLID WASTE
CONVENIENCE CENTER
PARKTON RD. | PARKTON NC, NC 28371

PLOT DATE:
4/2/2025
ISSUED:
4/2/2025
FOR CONSTRUCTION

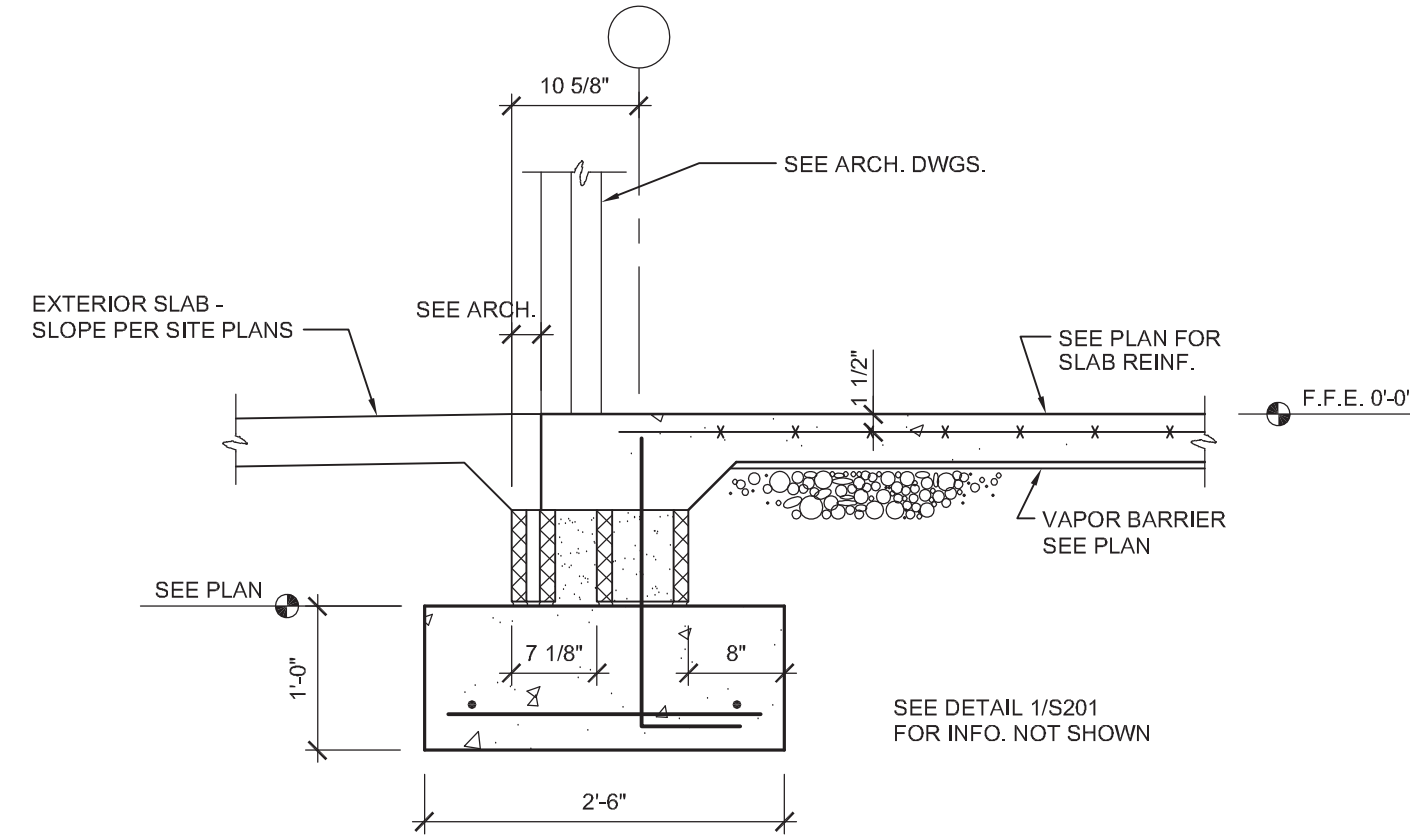
DRAWN BY:
BR
APPROVED:
SS/EG
PROJECT NO.:
C250306
RECORD:

CONTENTS:
FOUNDATION AND
FRAMING PLANS

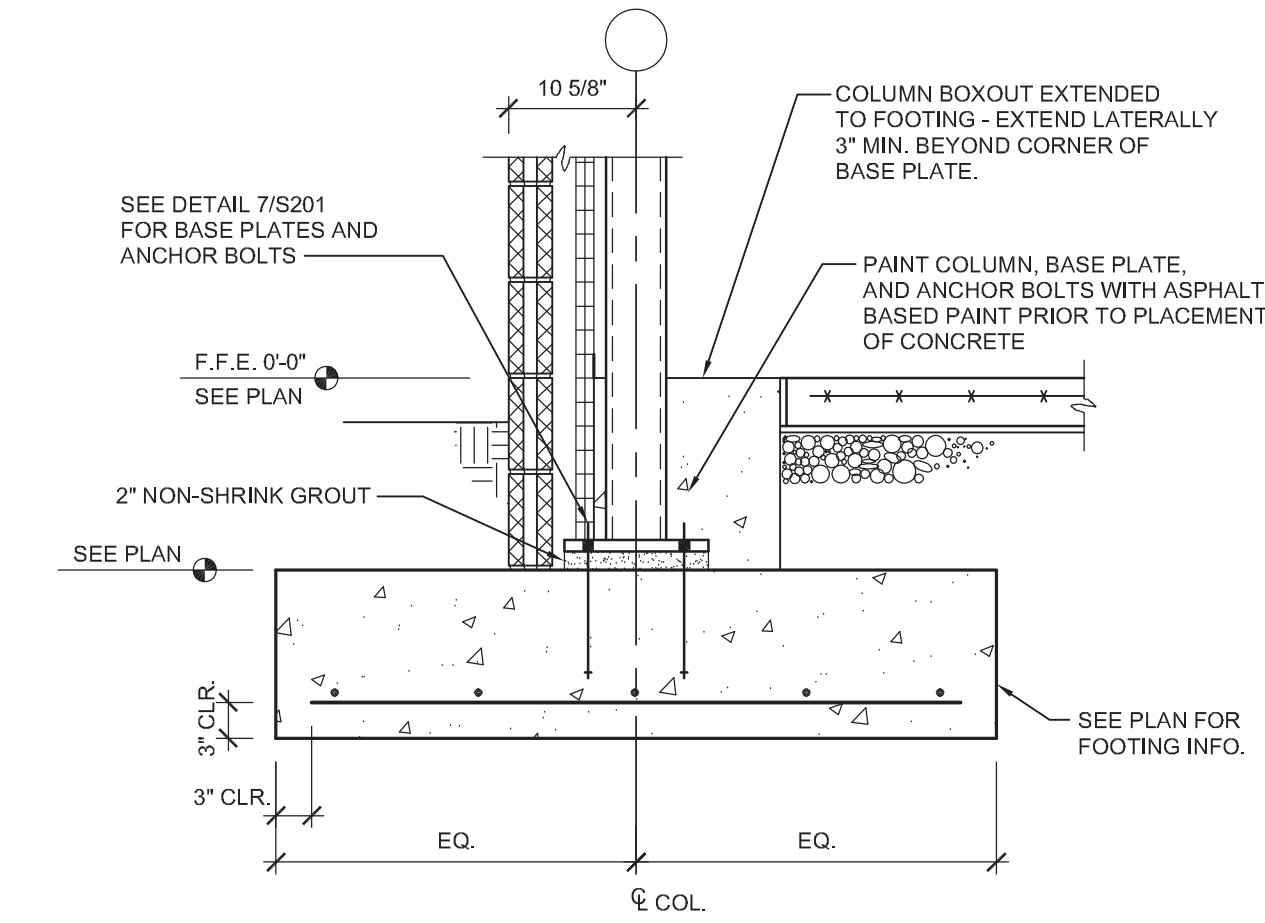
SHEET:
S101



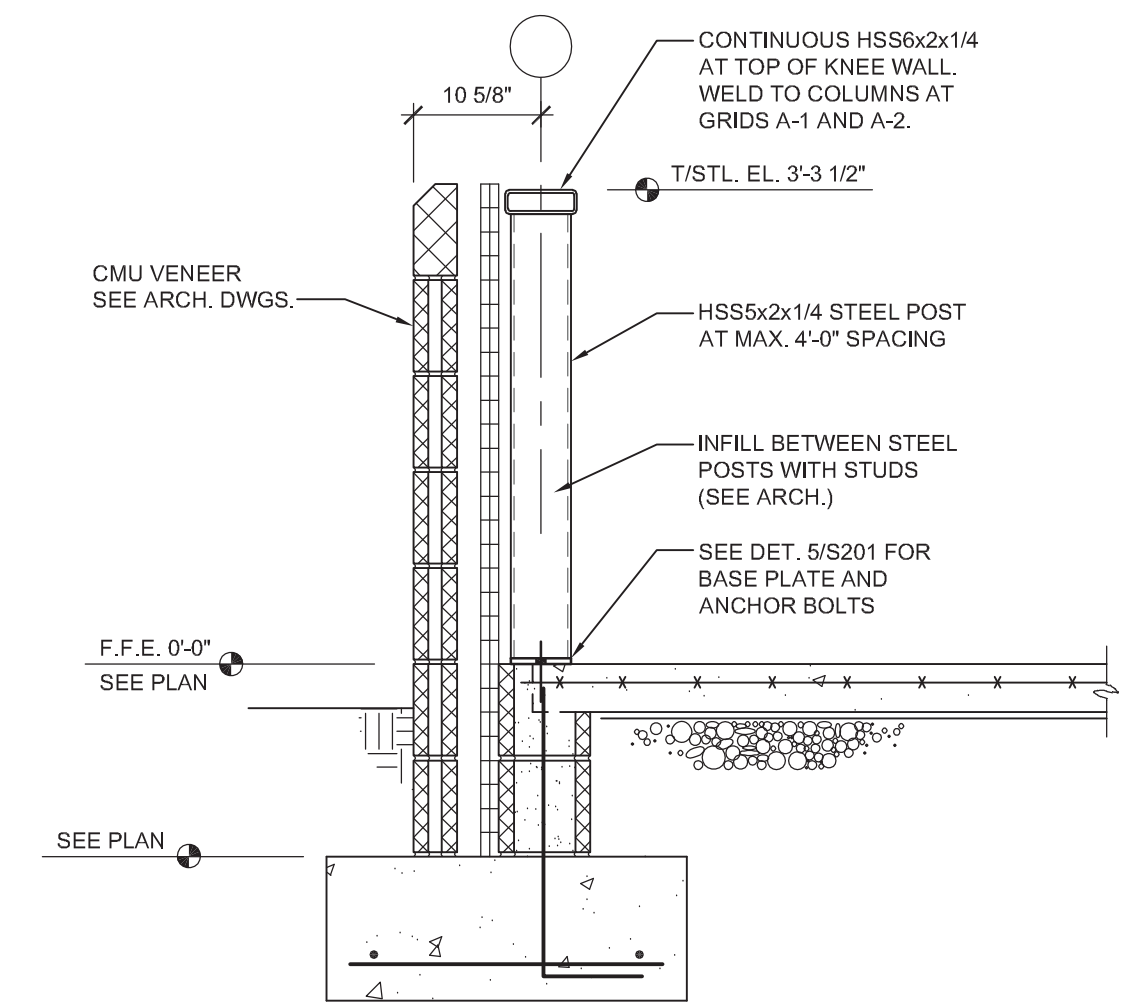
1 DETAIL - PERIMETER FOOTING
S201 3/4" = 1'-0"



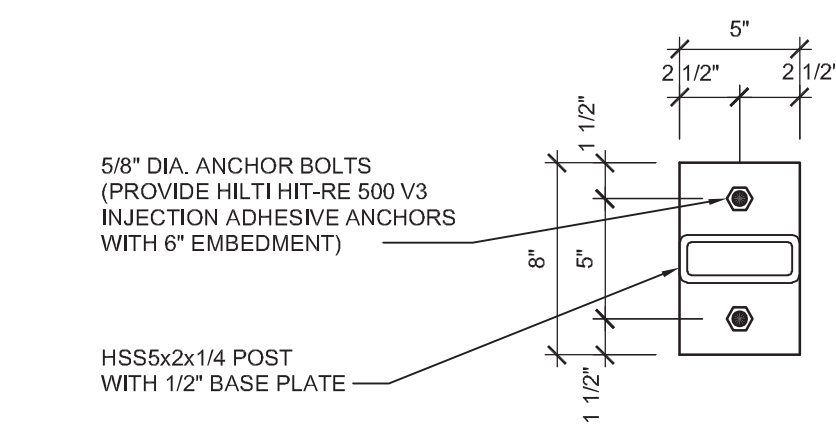
2 DETAIL - SLAB EDGE AT DOORS
S201 3/4" = 1'-0"



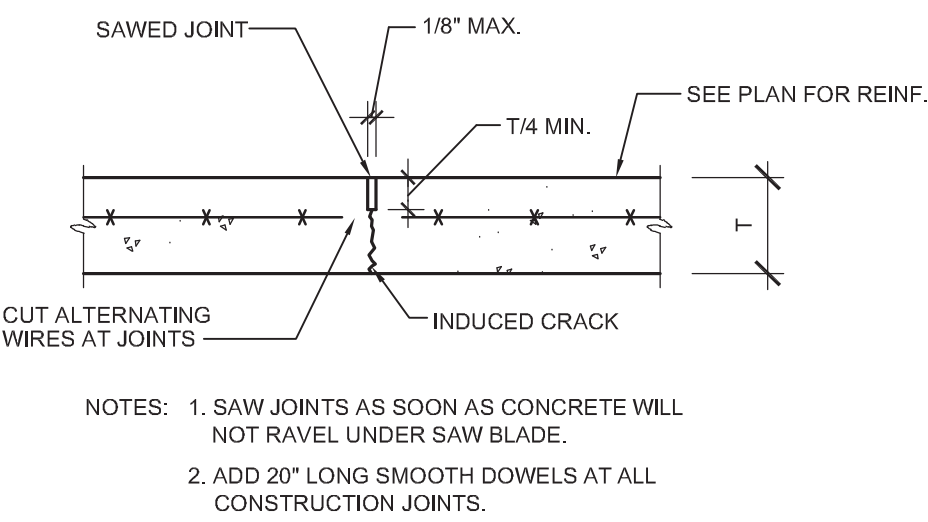
3 DETAIL - COLUMN FOOTING
S201 3/4" = 1'-0"



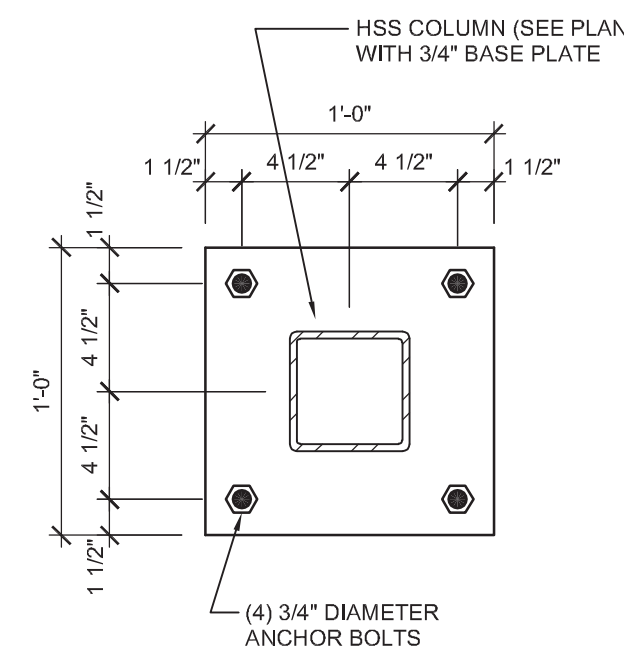
4 DETAIL - KNEE WALL
S201 3/4" = 1'-0"



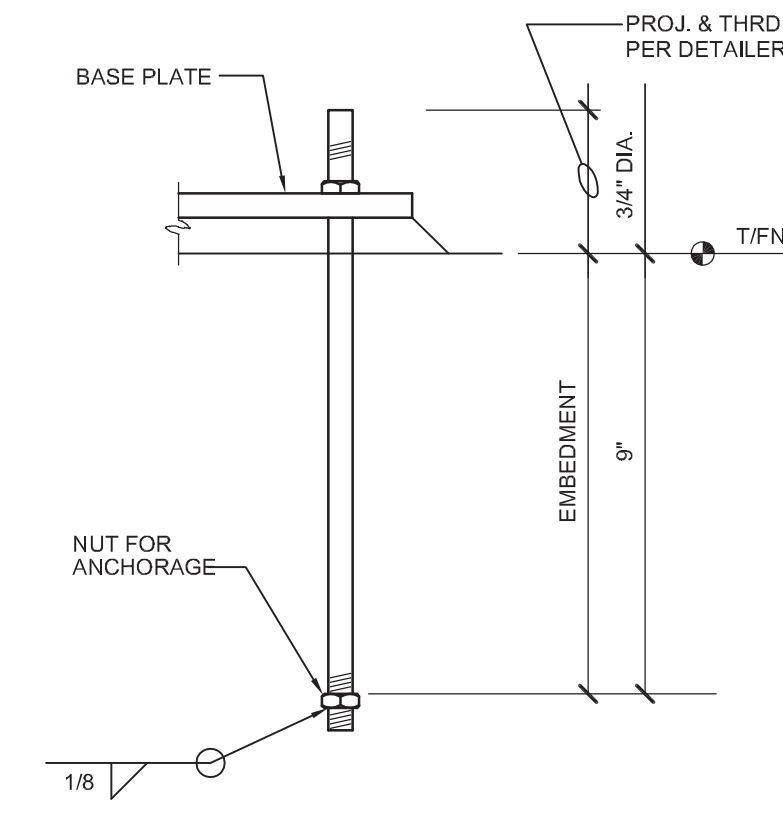
5 POST BASE PLATE
S201 1 1/2" = 1'-0"



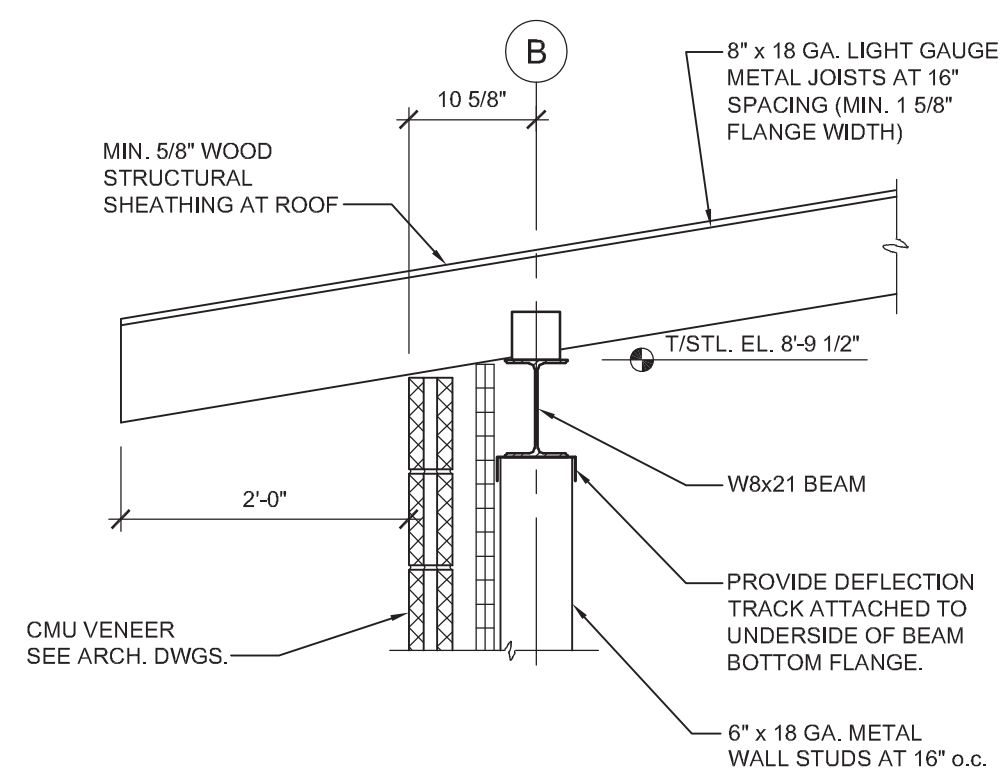
6 DETAIL - TYP. SLAB CONTROL JOINT
S201 1" = 1'-0"



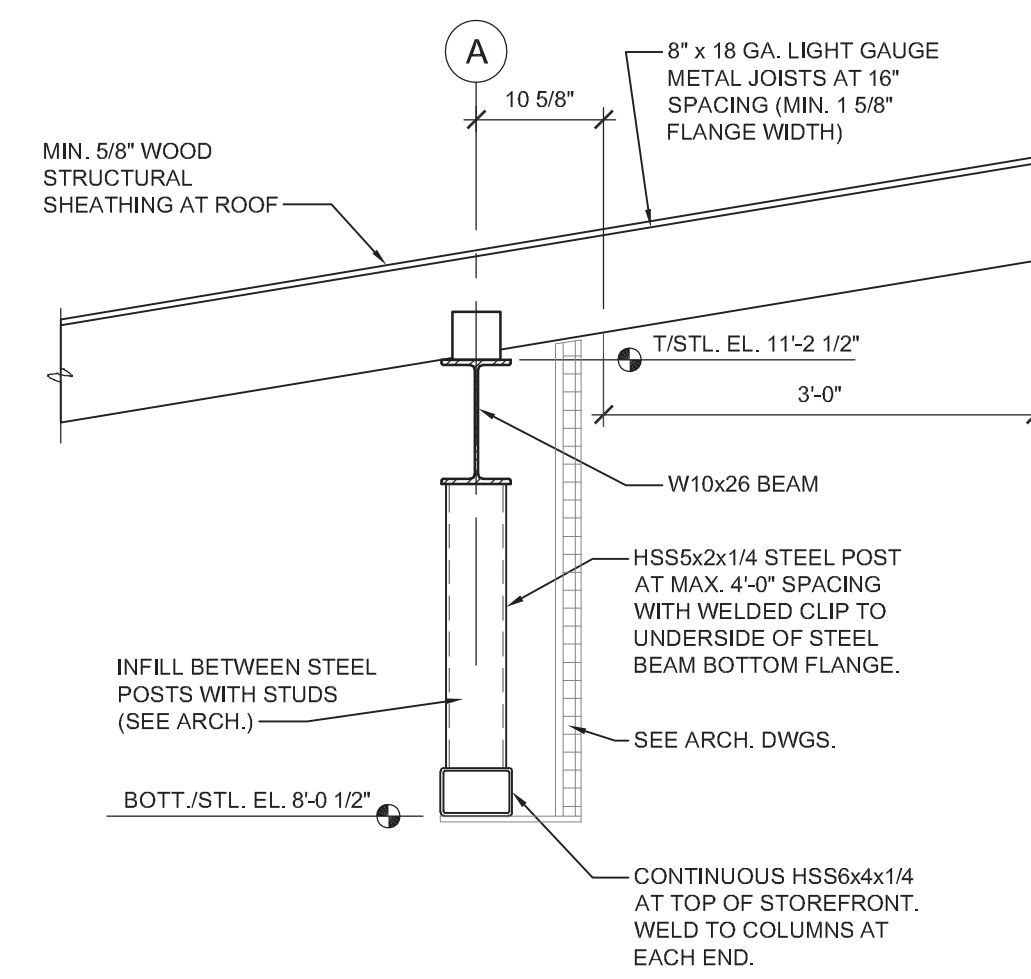
7 BASE PLATE DETAIL
S201 1 1/2" = 1'-0"



8 TYP. ANCHOR BOLT DETAIL
S201 NO SCALE



9 FRAMING SECTION
S201 3/4" = 1'-0"



10 FRAMING SECTION
S201 3/4" = 1'-0"



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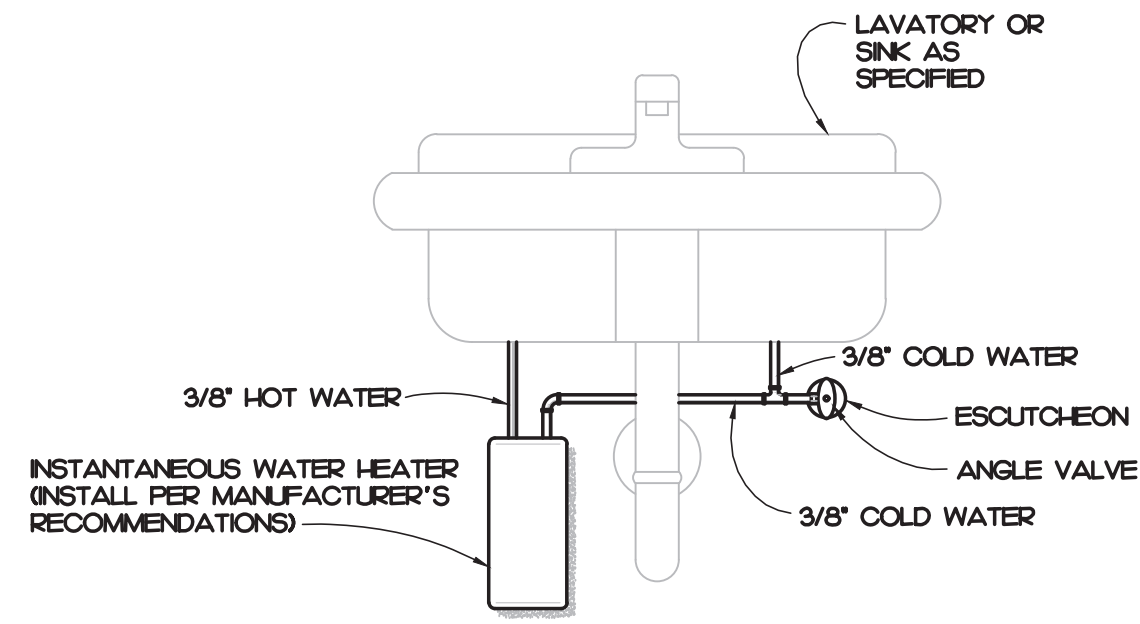
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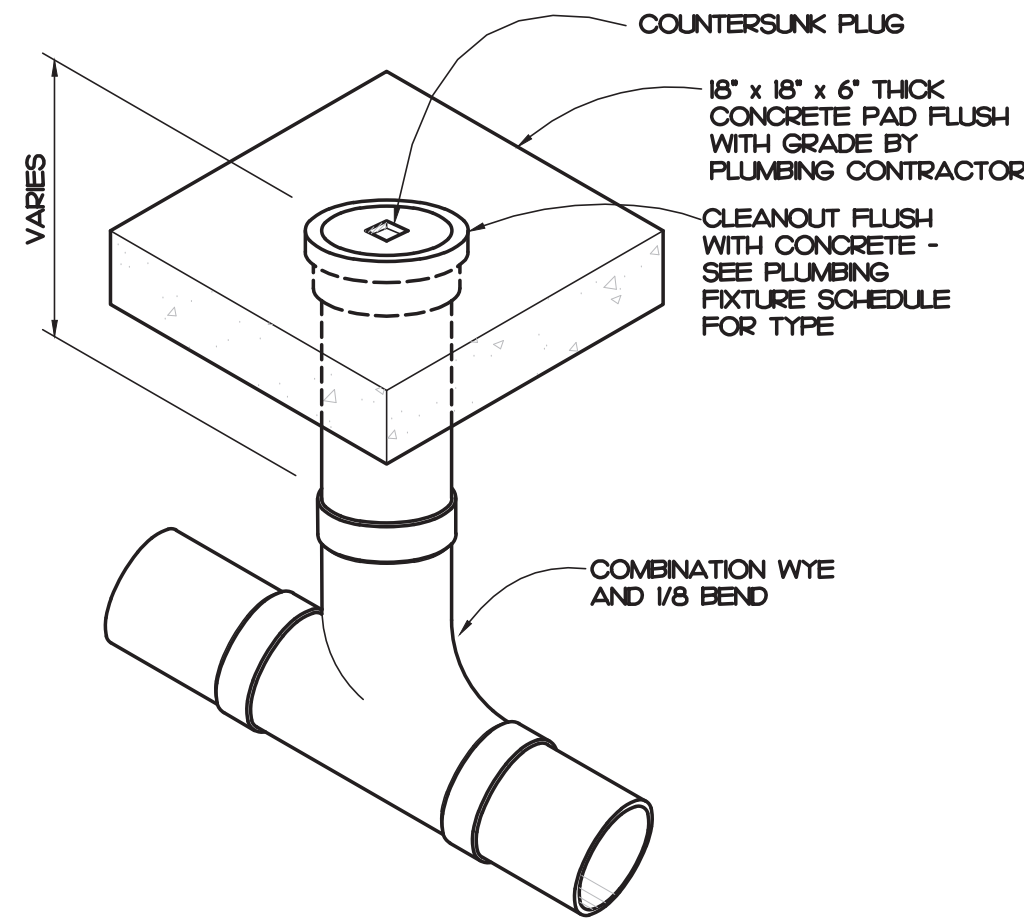
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APPROVED:
SS/EG
PROJECT NO.:
C250306
RECORD:

CONTENTS:
SECTIONS AND
DETAILS

SHEET:
S201



5 WATER HEATER DETAIL
NOT TO SCALE



6 CLEANOUT DETAIL
NOT TO SCALE

PLUMBING FIXTURE SCHEDULE

SYMBOL / IMAGE	DESCRIPTION	3 - EQUALS						PPING CONNECTIONS		
		MANUFACTURER	MODEL NUMBER	MANUFACTURER	MODEL NUMBER	MANUFACTURER	MODEL NUMBER	COLD WATER	HOT WATER	SANITARY SEWER
COH	EXTERIOR CLEANOUT	ZURN	Z-4449-EP	WATTS	CO-380-34B	JR SMITH	4283	-	-	SEE PLUMBING DRAWINGS
	CLEANOUT FERRULE WITH CAST IRON BODY, WITH GAS AND WATERTIGHT BRONZE PLUG, MOUNT IN CONCRETE.									
LH	LAVATORY	KOHLER	K-2861-O	AMERICAN STANDARD	0355.02	ZURN	Z5834			
	FALUCET	DELTA	523LF-HGM-HDF	CHICAGO FALUCETS	2200-4	MOEN	6470			
	TRAP	McGUIRE	8902	DEARBORN BRASS	7024	KOHLER	K-8999			2"
	SUPPLY	McGUIRE	85LK	BRASS CRAFT	R992AC	KOHLER	K-7605-P-CP	1/2"	1/2"	
	WALL HUNG LAVATORY SHALL BE MADE OF CAST IRON WITH A WHITE FINISH, HAVE 4" CENTERS, AN OVERFLOW, SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. DECK MOUNTED FALUCET SHALL BE CHROME FINISH, SINGLE LEVER, 4" CENTERS, WITH 3/8" COPPER SUPPLY TUBE INLETS, AND PROVIDED WITH AN AERATOR. RIGID SUPPLY KIT SHALL INCLUDE CHROME PLATED BRASS STOPS WITH THREADED CONNECTIONS, FULL TURN BRASS STEM, REDUCER, AND FLANGE. INLET SHALL BE 3/8" IPS, OUTLET SHALL BE 3/8" IPS. P-TRAP SHALL BE CHROME PLATED CAST BRASS BODY WITH CLEANOUT, CAST BRASS ELBOW AND CAST BRASS SLIP NUT, AND FLANGE. PROVIDE WITH OFFSET DRAIN, TRILEBRO LAV SHIELD, AND WATER TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070 OR CSA B253.									
WC-1	WATER CLOSET	KOHLER	K-3979	TOTO	CST744SL	AMERICAN STANDARD	25AA004.020			4"
	SEAT	BEMIS	K655SC	KOHLER	K-4670-C-O	CHURCH				
	SUPPLY	BRASSCRAFT	CS40DLC	KOHLER	K-7638	McGUIRE	185	1/2"	-	
	1/6 GPF TOILET SHALL BE MADE OF VITREOUS CHINA WITH A WHITE FINISH AND A 12" ROUGH-IN. TOILET SHALL INCLUDE POLISHED CHROME TRIP LEVER. SEAT SHALL BE EXTRA HEAVY WEIGHT SOLID PLASTIC WITH OPEN FRONT LESS COVER FOR ELONGATED BOWL. SUPPLY KIT SHALL INCLUDE CHROME PLATED BRASS STOPS, FULL TURN BRASS STEM AND FLANGE. INLET SHALL BE 3/8" IPS, OUTLET SHALL BE 3/8" IPS. THE FLUSHING LEVER MECHANISM SHALL BE ON THE WIDE SIDE OF THE STALL.									
WH	WATER HEATER	EMAX	SP2412					3/8"	3/8"	
	ELECTRIC INSTANTANEOUS WATER HEATER SHALL HAVE AN ELECTRIC INPUT OF 24 KW AT 120 VOLT, SINGLE PHASE. WIRING BY LICENSED ELECTRICAL CONTRACTOR.									

PLUMBING SCHEDULE NOTES AND LEGEND:

- THE PLUMBING CONTRACTOR MAY SUBSTITUTE FIXTURES WITH OWNERS' APPROVAL.
- SUBMIT CUT SHEETS FOR ALL PROPOSED FIXTURES TO ARCHITECT PRIOR TO BIDDING.
- PROVIDE VACUUM BREAKER ON ALL EQUIPMENT REQUIRING PLUMBING.
- REFER TO MANUFACTURERS WEB SITE FOR CUT SHEETS AND DATA ON THE FIXTURES AND APPURTENANCES USED IN THIS SCHEDULE.

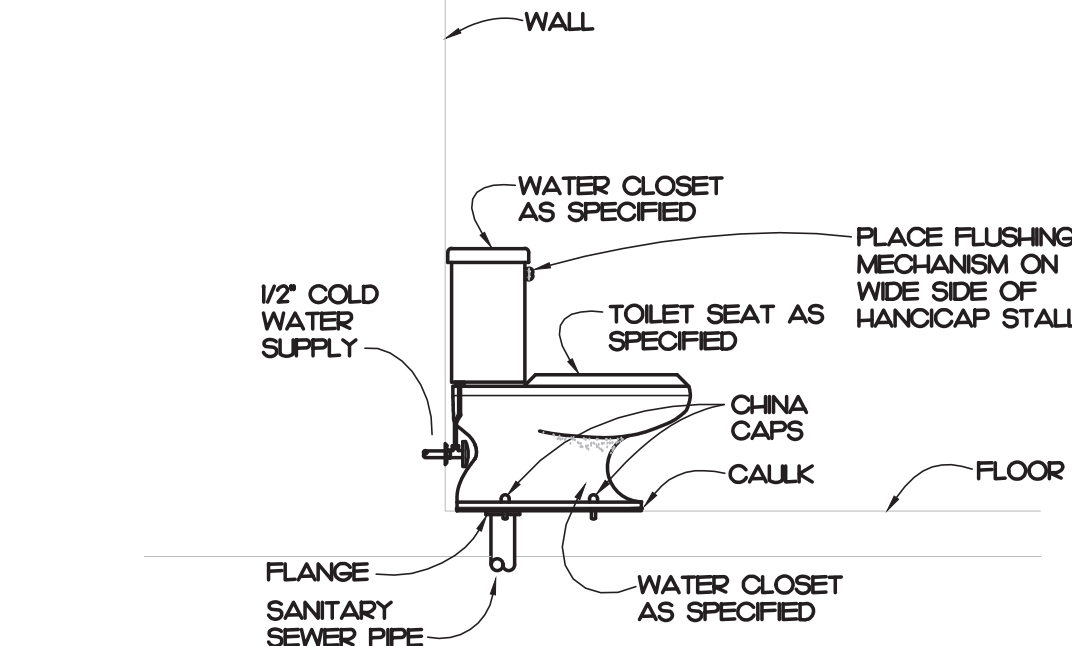
ADA COMPLIANT
 ELECTRICAL POWER
 GAS FIRED

PLUMBING GENERAL NOTES

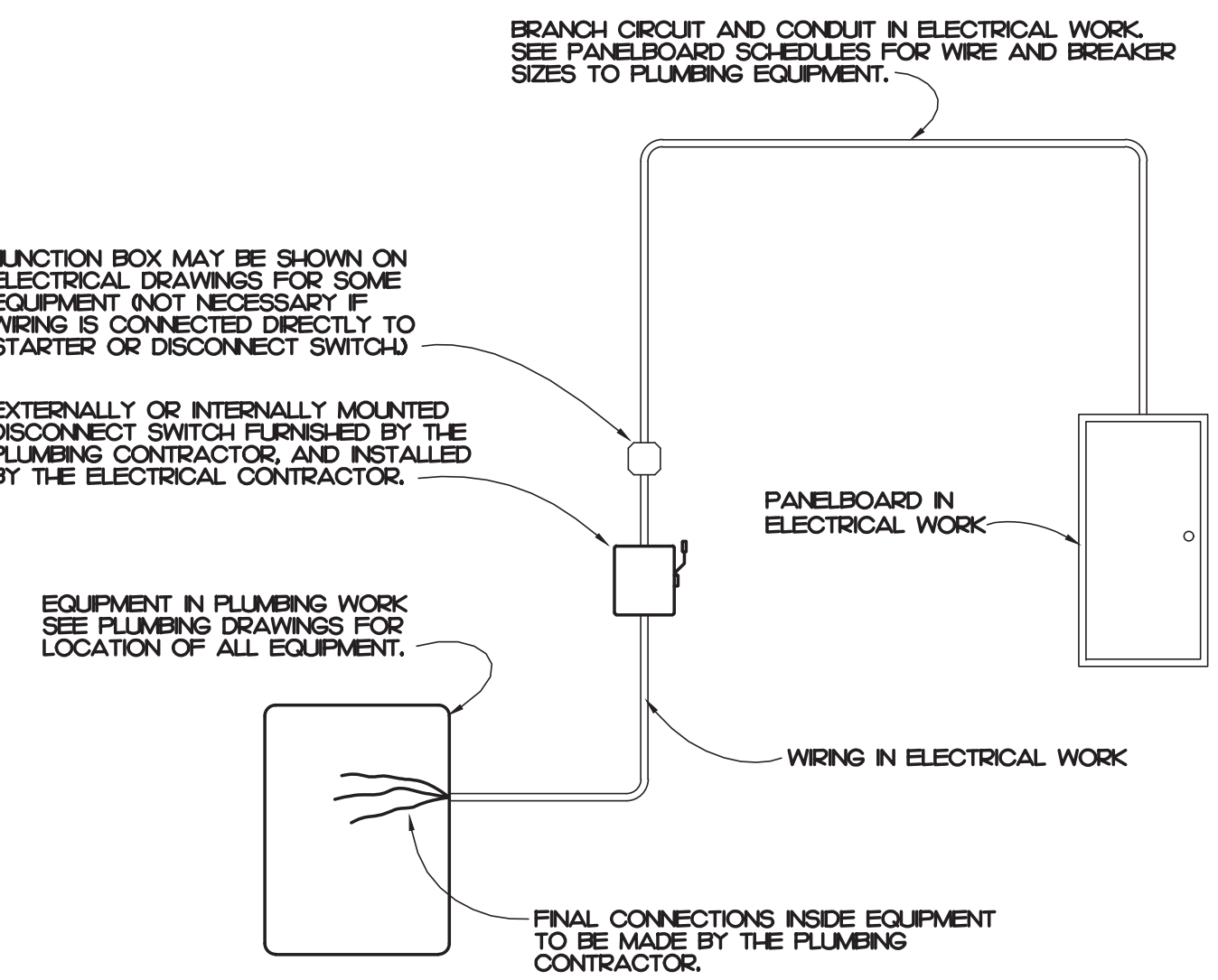
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE CODE, ALL LOCAL AND OTHER APPLICABLE CODES.
- ANY PERMITS AND INSPECTION FEES SHALL BE SECURED AND PAID FOR BY THE PLUMBING CONTRACTOR.
- ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMAN. THE PLUMBING CONTRACTOR SHALL COORDINATE ALL OF HIS WORK WITH ALL OTHER CONTRACTORS.
- THE PLUMBING PLANS AND SPECIFICATIONS SHALL BE THOROUGHLY REVIEWED PRIOR TO PURCHASING MATERIALS AND INSTALLATION. ALL DISCREPANCIES OR INTERFERENCES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION.
- THESE PLANS ARE DIAGRAMMATIC AND MAY NOT SHOW MINOR DETAILS AND LOCATIONS. FOR DIMENSIONS, REFER TO THE ARCHITECTURAL PLANS.
- THE PLUMBING CONTRACTOR SHALL PROVIDE ALL OPENINGS REQUIRED FOR THE PLUMBING WORK. THE PATCHING SHALL BE BY THE PLUMBING CONTRACTOR AND FINISHING BY GENERAL CONTRACTOR.
- ALL PIPE, FITTINGS, FIXTURES, AND SOLDER TO BE LEAD FREE.
- WATER PIPING BELOW GRADE SHALL BE TYPE "K" COPPER (NO JOINTS BELOW GRADE) AND ABOVE GRADE TYPE "L" COPPER, SUPPORTED AS REQUIRED AND SHALL BE HYDROSTATICALLY TESTED FOR ONE HOUR AT 50 PSI. TEST TO COMPLY WITH ALL EPA STANDARDS. THE ENTIRE WATER DISTRIBUTION SYSTEM SHALL BE DISINFECTED PRIOR TO PLACING IN SERVICE.
- WATER PIPING LOCATED ABOVE CEILINGS AND IN EXTERIOR WALLS SHALL BE ROUTED ON HEATED SIDE OF CEILING INSULATION (UNDERSIDE) AND WALL INSULATION (INSIDE).
- ALL COLD AND HOT WATER PIPING SHALL BE INSULATED. INSULATE WASTE PIPING AS DESIGNATED ON PLUMBING DRAWINGS. INSULATION SHALL BE FIBERGLASS. EXPOSED PIPING TO BE WRAPPED WITH ALUMINUM JACKET.
- DO NOT SUPPORT PIPING FROM BAR JOIST BRIDGING AND/OR ROOF DECK.
- IF THE WATER PRESSURE EXCEEDS 80 PSI A PRESSURE REDUCING VALVE SHALL BE INSTALLED WHERE THE WATER ENTERS THE BUILDING.
- PLUMBING CONTRACTOR SHALL PROVIDE A DIELECTRIC UNION WHEN CONNECTING DISSIMILAR MATERIAL.
- WATER HEATERS SHALL HAVE AN EFFICIENCY MEETING REQUIREMENTS OF THE NORTH CAROLINA BUILDING CODE.
- THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL AND CONTROL CONNECTIONS TO THE EQUIPMENT FURNISHED UNDER HIS CONTRACT.
- SANITARY SEWER AND VENT PIPING SHALL BE SCHEDULE 40 PVC, CELLULAR CORE (FOAM CORE) IS NOT ALLOWED. SANITARY SEWER AND VENT PIPING SHALL BE GAS AND AIR TIGHT.
- THE PLUMBING CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION OF ANY WORK.
- THE PLUMBING CONTRACTOR SHALL REVIEW ALL UTILITY SITE PLANS FOR WORK BY OTHERS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK WITH WORK BY OTHERS AND AVOID ALL CONFLICTS.
- LOCATIONS OF UTILITIES (WASTE AND WATER PIPING, ETC.) PROVIDED BY OTHERS, THAT ARE TO BE CONNECTED TO ARE ASSUMED. IT SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO VERIFY THESE LOCATIONS AND MAKE FINAL CONNECTIONS AS REQUIRED.
- ALL VENT PIPING THROUGH THE ROOF SHALL BE A MINIMUM OF 5'-0" FROM ALL MAKE-UP AIR INLETS OR A MINIMUM OF 2'-0" ABOVE THE TOP OF ALL MAKE-UP AIR INLETS. VENTS THROUGH ROOF ARE TO BE ON REAR OF BUILDING.
- SEE ARCHITECTURAL DRAWINGS FOR PLUMBING MINIMUM FACILITY CALCULATIONS.
- THE PLUMBING CONTRACTOR SHALL VERIFY BUILDING FLOOR ELEVATION IS ABOVE MAN-HOLE RIM ELEVATION OR PROVIDE A BACKWATER VALVE AS REQUIRED.
- THE PLUMBING CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A SET OF AS-BUILT DRAWINGS UPON COMPLETION OF PROJECT.

PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION
	COLD WATER PIPING
	COLD WATER PIPING BELOW FINISHED FLOOR
	WATER PIPING TURNED DOWN
	WATER PIPING TURNED UP
	PIPING SIDE CONNECTION
	SANITARY SEWER / WASTE PIPING
	SANITARY SEWER / WASTE PIPING DIRECTION OF FLOW
	VENT PIPING
	VENT PIPE UP
	PLUMBING FIXTURE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR
	FLOOR CLEANOUT
	VENT THRU ROOF



4 WATER CLOSET DETAIL
NOT TO SCALE

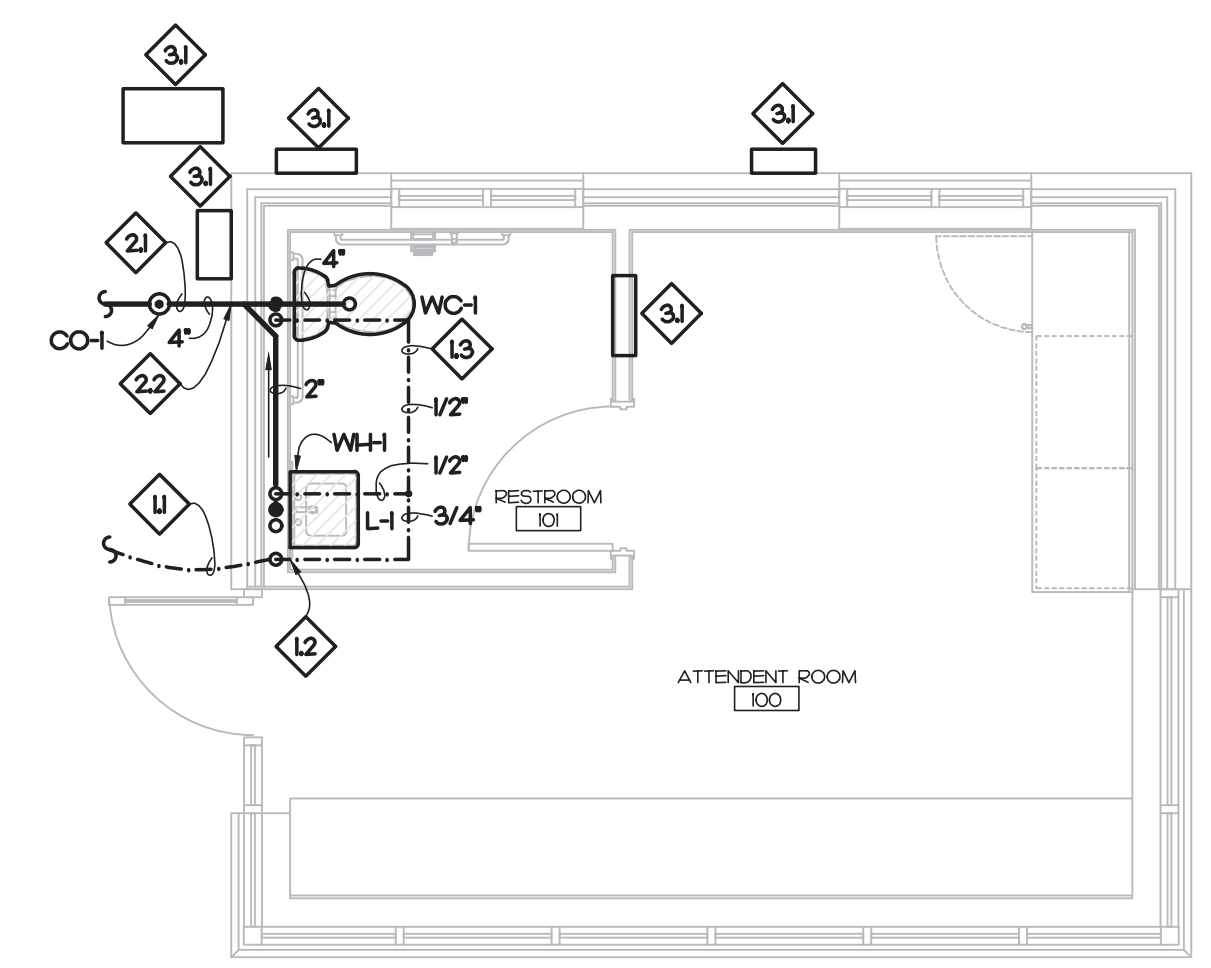


3 TYPICAL WIRING DETAIL
NOT TO SCALE

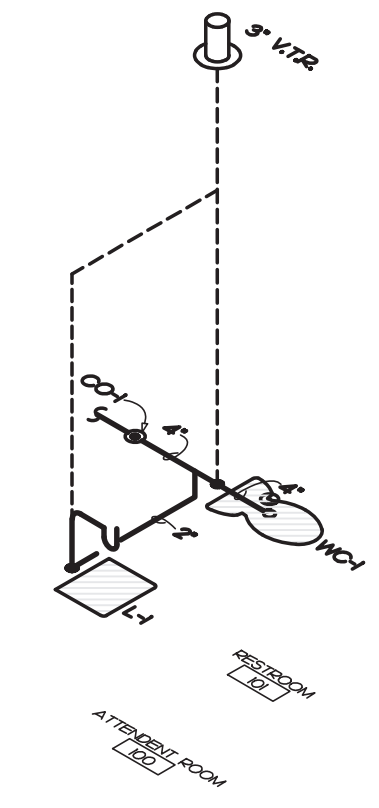
PLUMBING KEY NOTES

- 1/4" COLD WATER PIPE TO BE LOCATED BELOW FINISHED GRADE. PLUMBING CONTRACTOR'S WORK BEGINS 5'-0" OUTSIDE BUILDING. SEE SITE PLAN FOR CONTINUATION. SEE SITE PLAN FOR BACKFLOW.
- MAIN SHUT OFF VALVE IN WALL. PROVIDE WITH ACCESS PANEL.
- WATER PIPING ABOVE FINISHED CEILING. COORDINATE LOCATION WITH MECHANICAL AND ELECTRICAL CONTRACTOR'S.
- 4" SANITARY SEWER PIPE TO BE LOCATED BELOW FINISHED GRADE. PLUMBING CONTRACTOR'S WORK EXTENDS 5'-0" OUTSIDE BUILDING. SEE SITE PLAN FOR CONTINUATION.
- INVERT ELEVATION IS TO BE 175' BELOW FINISHED FLOOR.
- ELECTRICAL EQUIPMENT BY ELECTRICAL CONTRACTOR.

ALL VENT PIPING IS TO BE 2' UNLESS NOTED OTHERWISE.



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



2 WASTE RISER PLAN
NOT TO SCALE

IMEG 3221 BLUE RIDGE ROAD, STE 113
RALEIGH, NC 27612
P: 919.571.1111
www.imegcorp.com

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North Carolina Design Registration #F-1507

0 1 2 3
REF. SCALE IN INCHES PROJECT # 25044



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IMEG CONSULTANTS CORP.
No. F-1507
SEAL 051195
NORTH CAROLINA PROFESSIONAL ENGINEER
PARKTON, NC

ATTENDANT BUILDING
PARKTON SOLID WASTE
CONVENIENCE CENTER
PARKTON RD. | PARKTON NC, NC 28371

PLOT DATE: 04/10/2025	
ISSUED: 04/10/2025 FOR CONSTRUCTION	
REVISION:	
DRAWN BY: JAD	APPROVED: PJM
PROJECT NO.: 24077	RECORD:
CONTENTS: PLUMBING PLAN	
SHEET: P101	

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT METHOD OF COMPLIANCE
 PRESCRIPTIVE ENERGY COST BUDGET
 THERMAL ZONE 3A
 EXTERIOR DESIGN CONDITIONS
 winter dry bulb: 16°F
 summer dry bulb: 93°F
 relative humidity: 46%
 INTERIOR DESIGN CONDITIONS
 winter dry bulb: 70°F
 summer dry bulb: 74°F
 relative humidity: 50%
 BUILDING HEATING LOAD: BLOCK LOAD = 10.2 MBH
 BUILDING COOLING LOAD: BLOCK LOAD = 14.0 MBH (12 TONS)
 MECHANICAL SPACING CONDITIONING SYSTEM
 Unitary:
 description of unit:
 heating efficiency:
 cooling efficiency:
 heat output of unit:
 cooling output of unit:
 Boiler: NA
 total boiler capacity, if oversized state reason.
 Chiller: NA
 total chiller capacity, if oversized state reason.

LIST EQUIPMENT EFFICIENCIES: SEE SCHEDULES ON THIS SHEET

EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS)
 motor horsepower:
 number of phases:
 minimum efficiency:
 motor type:
 # of poles:
 SEE SCHEDULES ON THIS SHEET

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 State Energy Code.
 SIGNED: *Patrick McCabe*
 NAME: Patrick J. McCabe, PE
 TITLE: Professional Engineer

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	SHEET METAL DUCT
	EXHAUST FAN
	THERMOSTAT - MOUNTED 48" ABOVE FINISHED FLOOR

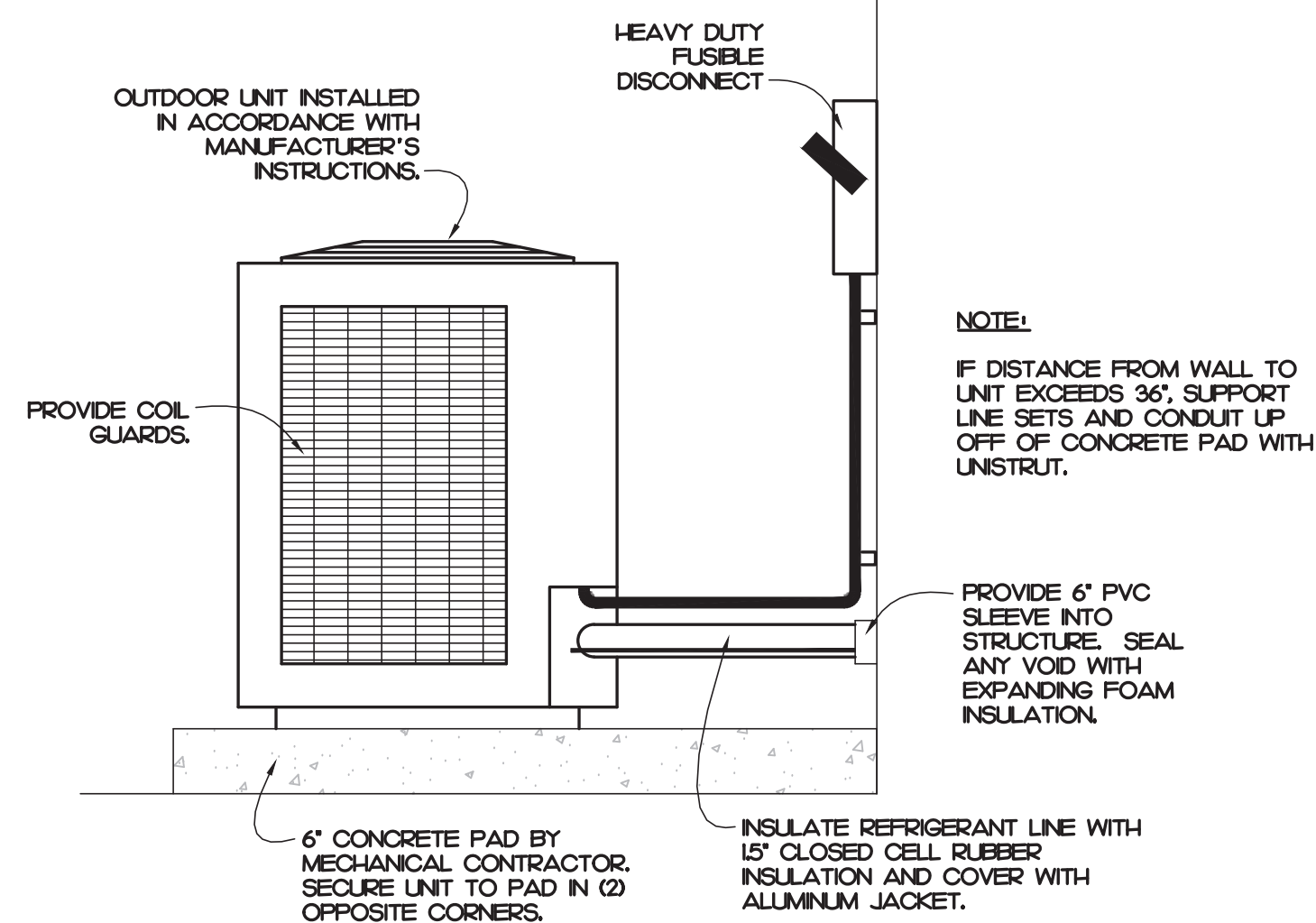
NATURAL VENTILATION SUMMARY

REQUIRED:
 TOTAL REQUIRED = 220 SQFT = 0.04 - 9 SQFT
 PROVIDED:
 TOTAL PROVIDED = 21 SQFT (NEW DOOR)
 NOTE: NATURAL VENTILATION FROM NEW DOOR IS IN EXCESS OF THE REQUIRED 4% OF SQFT PER NCMC 4022

SPLIT SYSTEM HEAT PUMP SCHEDULE

INSIDE UNIT				OUTSIDE UNIT						
MARK	BASIS OF DESIGN	FAN CFM	WATTS	MARK	BASIS OF DESIGN	COOLING / HEATING CAPACITY	ELECTRICAL POWER (MCA/MCOOP)	EFFICIENCY COOLING	EFFICIENCY HEATING	NOTES
FC-1	MTSLEISH PKA-ALBNL	450	30	HP-1	MTSLEISH PLZ-ARBNL	18.0/23.6 MBH	230/1 16 25	195 SEER2	8.9 HSPF2	I-5

NOTES:
 1. PROVIDE FUSIBLE DISCONNECT ON OUTDOOR UNIT.
 2. PROVIDE MOTOR RATED SWITCH FOR INDOOR UNIT.
 3. ROUTE CONDENSATE TO EXTERIOR SPLASH BLOCK.
 4. PROVIDE WITH WIRED THERMOSTAT.
 5. PROVIDE WITH LOW AMBIENT CONTROLS DOWN TO 0°F.

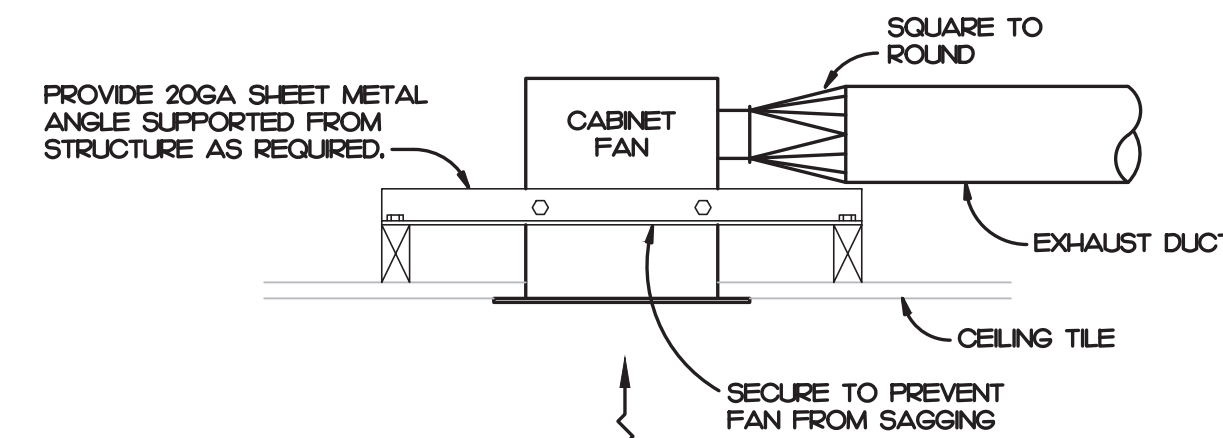


2 OUTDOOR UNIT DETAIL
 NOT TO SCALE

EXHAUST FAN SCHEDULE

MARK	BASIS OF DESIGN	SERVICE	TYPE	CFM	RPM	HP/AMPS	S.P.	POWER	NOTES
EF-1	COOK GC-140	TOILET	CABINET FAN	105	1500	67 Watts	0.25'	120/1	I-3

NOTES:
 1. PROVIDE WITH DISCONNECT SWITCH.
 2. PROVIDE WITH BACKDRAFT DAMPER.
 3. CONTROL VIA WALL SWITCH BY E.C.



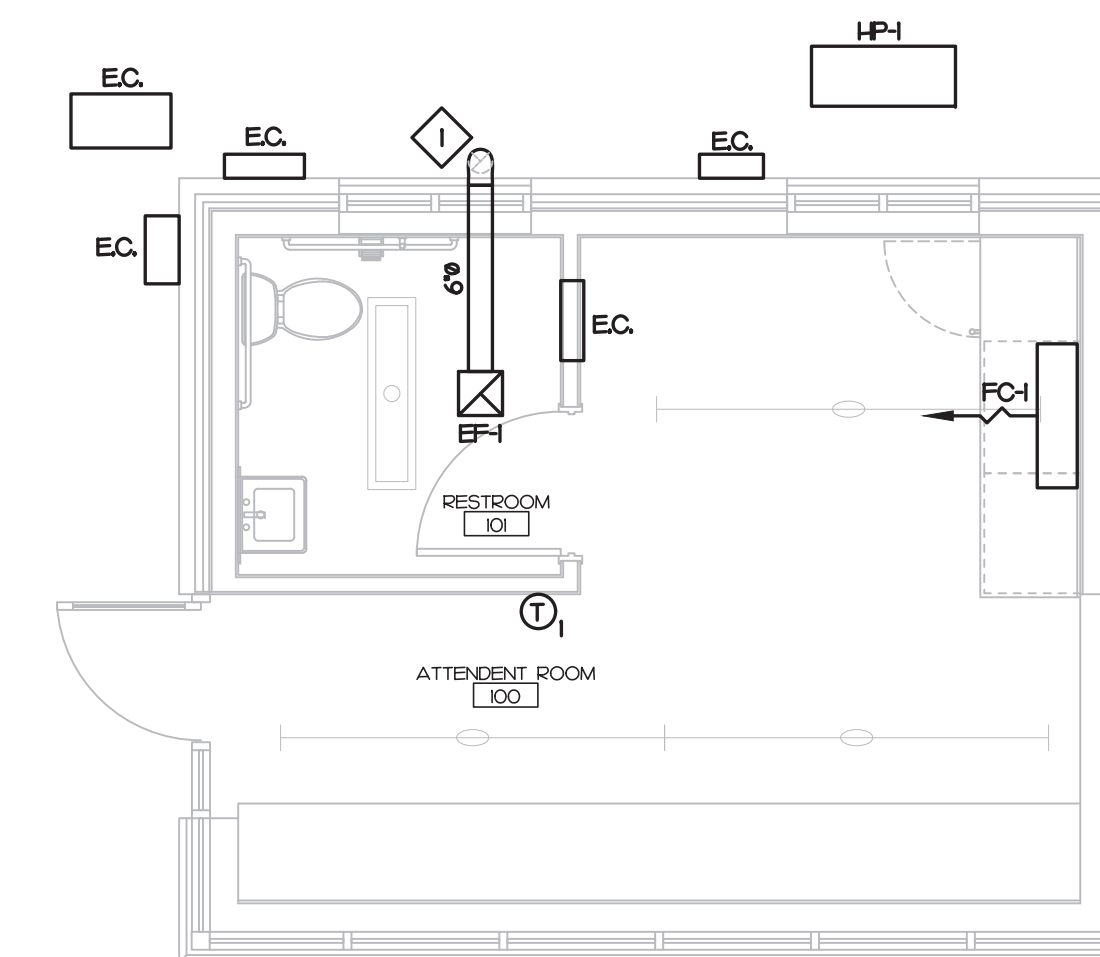
3 CABINET FAN DETAIL
 NOT TO SCALE

GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE CODE, ALL LOCAL AND OTHER APPLICABLE CODES.
- ANY PERMITS AND INSPECTION FEES SHALL BE SECURED AND PAID FOR BY THE MECHANICAL CONTRACTOR (M.C.).
- ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMAN. THE M.C. SHALL COORDINATE ALL OF HIS WORK WITH ALL OTHER CONTRACTORS.
- THE MECHANICAL PLANS AND SPECIFICATIONS SHALL BE THOROUGHLY REVIEWED PRIOR TO PURCHASING MATERIALS AND INSTALLATION. ALL DISCREPANCIES OR INTERFERENCES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION.
- THESE PLANS ARE DIAGRAMMATIC AND MAY NOT SHOW MINOR DETAILS AND LOCATIONS. FOR DIMENSIONS, REFER TO THE ARCHITECTURAL PLANS.
- THE M.C. SHALL BE RESPONSIBLE FOR ALL ELECTRICAL STARTERS, INTERLOCKS, CONTROL WIRING. THE ELECTRICAL CONTRACTOR SHALL PROVIDE POWER WIRING, CONDUIT FROM THE DISCONNECT TO M.C. EQUIPMENT. THE M.C. SHALL BE RESPONSIBLE FOR ALL FINAL CONNECTION TO HIS EQUIPMENT.
- ALL THERMOSTATS, WIRING AND CONDUIT ARE TO BE FURNISHED BY THE M.C. MOUNT THERMOSTATS 4'-0" ABOVE THE FLOOR, UNLESS OTHERWISE NOTED.
- THE M.C. SHALL INSURE THAT ALL MECHANICAL EQUIPMENT INSTALLED UNDER HIS CONTRACT SHALL OPERATE FREE OF OBJECTIONABLE NOISE AND VIBRATION.
- THE M.C. SHALL KEEP THE PREMISES CLEAR OF DEBRIS FROM HIS WORK DURING CONSTRUCTION AND LEAVE THE AREA AND BUILDING CLEAN AT THE COMPLETION OF HIS WORK. HE SHALL ALSO LEAVE CLEAN ALL EXPOSED EQUIPMENT IN HIS CONTRACT.
- ALL DUCTWORK SIZES SHOWN ARE ACTUAL SHEET METAL DIMENSIONS. EXTERNALLY WRAP ALL DUCT WITH 3" FOIL-BACKED INSULATION FOR A MINIMUM OF R-8.
- MECHANICAL CONTRACTOR SHALL WORK WITH TEST AND BALANCE CONTRACTOR TO REMEDY ANY DIFFERENCES TO INCLUDE FAN DRIVE CHANGES, INSTALLATION OF DAMPERS OR OTHER MINOR DUCT MODIFICATIONS TO PROVIDE AIRFLOW TO WITHIN +/- 10% OF THE DESIGN VALUES LISTED ON THESE PLANS.
- THE AIR HANDLING UNIT SHALL OPERATE AT ALL TIMES DURING OCCUPIED HOURS.
- THE MECHANICAL CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A SET OF AS-BUILT DRAWINGS UPON COMPLETION OF JOB.
- THE MECHANICAL CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A BALANCE REPORT BY A CERTIFIED TEST AND BALANCE COMPANY.
- PROVIDE PERMIT LABEL ENGRAVED PLASTIC LAMINATE MECHANICALLY FASTENED TO OUTDOOR UNITS.
- LABEL CEILING GRID WHERE EQUIPMENT IS LOCATED ABOVE LAY-IN CEILING. WITH EQUIPMENT IDENTIFIER. ALSO LABEL ALL TEMPERATURE SENSORS AND THERMOSTATS WITH EQUIPMENT IDENTIFIER.

MECHANICAL KEY NOTES

- ROUTE 6" EXHAUST DUCT TO EXTERIOR. TERMINATE IN SOFFIT VENT.



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



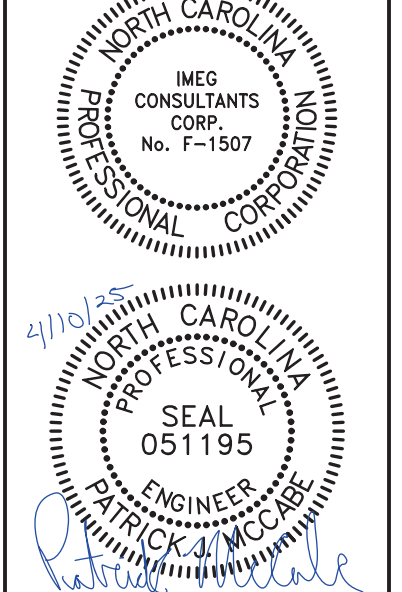
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 CONVENIENCE CENTER
 PARKTON RD. | PARKTON NC, NC 28371

PLOT DATE:
 04/10/2025
 ISSUED:
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 FOR CONSTRUCTION
 REVISION:

DRAWN BY:
 NGB
 PROJECT NO.:
 24077

APPROVED:
 PJM
 RECORD:

CONTENTS:
 MECHANICAL PLAN

SHEET:
 M101

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SYMBOL LEGEND

SYMBOL	DESCRIPTION	REMARKS
[Symbol]	1 X 4 SURFACE FIXTURE - LETTER DESIGNATES TYPE	SEE FIXTURE SCHED.
[Symbol]	LINEAR STRIP FIXTURE - LETTER DESIGNATES TYPE	SEE FIXTURE SCHED.
[Symbol]	WALL SCONCE LIGHT FIXTURE - LETTER DESIGNATES TYPE	SEE FIXTURE SCHED.
[Symbol]	EXTERIOR WALL LIGHT FIXTURE - LETTER DESIGNATES TYPE	SEE FIXTURE SCHED.
[Symbol]	EMERGENCY WITH EXIT LIGHT - CONNECT UNSWITCHED	SEE FIXTURE SCHED.
[Symbol]	BATTERY BACKUP EMERGENCY LIGHT - CONNECT UNSWITCHED	SEE FIXTURE SCHED.
[Symbol]	PHOTOCELL, 105-305VAC, 50/60HZ, 1800VA BALLAST LOAD, 1000W TUNGSTEN LOAD, 8A LED LOAD (LP TO 2220W #277V)	TORX ZSS04
[Symbol]	POLE MOUNT FIXTURE WITH 1 LUMINAIRE - LETTER DESIGNATES TYPE	SEE FIXTURE SCHED.
[Symbol]	SINGLE POLE TOGGLE SWITCH, MOUNT 4" AFF, UNLESS NOTED OTHERWISE.	HUBBELL I231** WITH NPJ1 COVER PLATE
[Symbol]	WALL MOUNTED OCCUPANCY SENSOR SWITCH, DUAL TECHNOLOGIES, MOUNT 4" AFF, UNLESS NOTED OTHERWISE. 800W/120VAC OR 1200W/277VAC	SENSORWORX SWX-I2** NPJ26 COVER PLATE
[Symbol]	SPECIFICATION GRADE DUPLEX TAMPER RESISTANT RECEPTACLE, MOUNT 6" AFF, UNLESS OTHERWISE NOTED.	HUBBELL HBL5362** TR WITH NPJ3 COVER PLATE
[Symbol]	SPECIFICATION GRADE TAMPER RESISTANT GFCI RECEPTACLE, MOUNT 6" AFF, UNLESS OTHERWISE NOTED.	HUBBELL GFT1RST20** WITH NPJ26 COVER PLATE
[Symbol]	SPECIFICATION GRADE DUPLEX TAMPER RESISTANT RECEPTACLE, MOUNT 6" AFF, UNLESS OTHERWISE NOTED. FED FROM GFCI CIRCUIT BREAKER.	HUBBELL GFTWRST20** WITH WP26M COVER PLATE
[Symbol]	CEILING PANEL CABINET FAN, FURNISHED AND INSTALLED BY MC, WIRED BY EC.	SEE MECH. PLAN
[Symbol]	JUNCTION BOX SIZED PER NEC.	
[Symbol]	DISCONNECT SWITCH SEE PLANS FOR SIZE AND TYPE	SQUARE D HEAVY DUTY
[Symbol]	DISCONNECT PROVIDED BY MC, FINAL CONNECTIONS BY EC.	SEE MECHANICAL PLAN
[Symbol]	DISCONNECT SWITCH WITH MOTOR STARTER, SEE PLANS FOR SIZE AND TYPE	SQUARE D HEAVY DUTY
[Symbol]	NEW CONCEALED WIRING	PER NEC.
[Symbol]	UNSWITCHED LIGHTING CONDUCTOR	PER NEC.
[Symbol]	HOME RUN TO PANEL BOARD, NUMBERS OF ARROW INDICATE CIRCUITS	PER NEC.
[Symbol]	120/240V 1Ø, 3W PANEL BOARD - SEE PANEL SCHEDULES	SQUARE D NQ/H-LINE
[Symbol]	277/480V 3Ø, 4W PANEL BOARD - SEE PANEL SCHEDULES	SQUARE D NF/H-LINE
[Symbol]	UTILITY METER BASE	SEE POWER RISER
A.F.C.	ABOVE FINISHED CEILING	
A.F.F.	ABOVE FINISHED FLOOR - NOTE ALL MOUNTING DIMENSIONS GIVEN ARE TO THE BOTTOM OF THE OUTLET BOX	

GENERAL NOTES

- THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR FLOOR PLAN DIMENSIONS. DO NOT SCALE THESE DRAWINGS.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE ANY AND ALL WORK WITH OTHER TRADES INVOLVED IN THE PROJECT, PRIOR TO THE INSTALLATION OF HIS EQUIPMENT SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND TO ALLOW FOR OPTIMUM MAINTENANCE AND WORKING SPACE.
- USE OF THE CONDUIT SYSTEM FOR EQUIPMENT GROUNDING SHALL NOT BE ACCEPTABLE. A SEPARATE GREEN GROUND WIRE SHALL BE RUN WITH THE CIRCUIT CONDUCTORS IN EACH CONDUIT.
- ALL BREAKER SIZES, SHOWN FOR MECHANICAL EQUIPMENT, SHALL BE VERIFIED BEFORE THE PURCHASE OR INSTALLATION OF SAID EQUIPMENT, WITH THE EQUIPMENT SUPPLIER AND THE MECHANICAL CONTRACTOR.
- ALL WORK AND MATERIAL SHALL BE PROVIDED IN ACCORDANCE WITH THE STATE, LOCAL AND NATIONAL CODES, ORDINANCES AND 2020 NATIONAL ELECTRICAL CODE (NFPA 70).
- EACH CONTRACTOR SHALL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED BY HIM AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE REQUEST OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS AND JUNCTION BOXES SHALL BE REVIEWED AND COORDINATED WITH THE ARCHITECT, PRIOR TO INSTALLATION FOR USE WITH THE ACTUAL EQUIPMENT, CASEWORK, AND MILLWORK TO BE FINISHED.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY DISCONNECTS, SWITCHES, AND RECEPTACLES UNDER THE ELECTRICAL BID AND SHALL INCLUDE ALL NECESSARY CIRCUITS TO AND FINAL CONNECTIONS TO THE EQUIPMENT PROVIDED BY ALL SUPPLIERS. SEE DETAILS FOR CONNECTION TO EQUIPMENT PROVIDED BY MECHANICAL AND PLUMBING CONTRACTORS.
- PENETRATION:
 - WHERE ELECTRICAL EQUIPMENT PENETRATES RATED WALLS AND CEILINGS, EXTERIOR WALLS, THEY SHALL BE PROPERLY SEALED PER APPROVED UL METHODS.
 - WHERE ELECTRICAL EQUIPMENT PENETRATES EXTERIOR WALLS, THEY SHALL BE PROPERLY SEALED WITH METHODS APPROVED BY THE ENGINEER. SUBMIT DETAIL OF PROPOSED SEALING METHODS.
- ALL PERMITS AND INSPECTION FEES SHALL BE SECURED AND PAID BY THE ELECTRICAL CONTRACTOR.
- ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE COMPLETE UPDATED TYPEDWRITTEN PANEL SCHEDULES FOR ALL PANELBOARDS.
- AS BUILT DRAWINGS SHALL BE GIVEN TO THE OWNER AT THE COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHALL VERIFY THE CEILING TYPES WITH THE GENERAL CONTRACTOR PRIOR TO THE PURCHASE OF ANY LIGHT FIXTURES SO THAT THE PROPER TRIM WILL BE PROVIDED FOR ALL FIXTURES. ANY DIFFERENCES WILL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
- ALL WIRE SIZES INDICATED ON THE PANEL SCHEDULES ARE BASED ON 75 DEGREE COPPER TH-IN-TWIN WIRE. ALL WIRE TERMINALS AND EQUIPMENT SHALL BE LISTED AND APPROVED FOR 75°C. ONLY THINW-2 WIRE SHALL BE INSTALLED IN WET AND EXTERIOR LOCATION.
- MINIMUM CONDUIT SIZE SHALL BE 1/2" AND MINIMUM WIRE SIZE SHALL BE #12 AWG.
- ARMORED CABLE (TYPE AC) AND METAL-CLAD CABLE (TYPE MC) ARE ACCEPTABLE WIRING METHODS SUBJECT TO THE FOLLOWING RESTRICTIONS:
 - SEE NEC 320 AND 330 FOR RESTRICTION.
 - PENETRATIONS OF RATED WALLS SHALL BE IN ACCORDANCE WITH APPROVED UL PENETRATION METHODS.
 - CABLE SHALL NOT BE USED FOR HOME RUN TO PANEL BOARD.
 - CABLE SHALL ONLY BE INSTALLED IN CONCEALED SPACE AND FURRED AREAS. MAX. LENGTH OF EACH SECTION IN ACCESSIBLE CONCEALED CEILING SPACES SHALL NOT EXCEED 10 FT.
 - WHERE REQUIRED BY NEC 577.3, CABLE SHALL BE LISTED FOR THE USE.
- THE MAXIMUM NUMBER OF HOMERUNS IN A CONDUIT SHALL NOT EXCEED THREE (3). FEEDING CIRCUITS WITH SHARED NEUTRAL SHALL BE SWITCHED TOGETHER.
- ALL DISCONNECTS SHALL HAVE SEPARATE NEUTRAL AND GROUND BARS.
- ALL PANELS SHALL BE ONE PHASE, THREE WIRE UNLESS OTHERWISE NOTED.
- BOXES AND CONDUITS SHALL NOT BE INSTALLED RECESSED IN A 3-HOUR OR HIGHER RATED WALL WHEN OUTLETS ARE INDICATED ON THESE WALLS, FIELD COORDINATE CONDUIT AND BOX INSTALLATION.
- ELECTRICAL IDENTIFICATION
 - FURNISH AND INSTALL ENGRAVED LAMINATED PHENOLIC NAMEPLATES FOR ALL SAFETY SWITCHES, PANEL BOARDS, TRANSFORMERS, SWITCHBOARDS, MOTOR CONTROL CENTERS AND OTHER ELECTRICAL EQUIPMENT SUPPLIED FOR THE PROJECT FOR IDENTIFICATION.
 - FURNISH AND INSTALL SELF-ADHESIVE PLASTIC TAPE FOR ALL RECEPTACLE AND WALL SWITCH COVER PLATES INDICATING CIRCUIT NUMBERS.
- THE ELECTRICAL CONTRACTOR SHALL FIELD COORDINATE THE INSTALLATION OF THE NEW UNDERGROUND ELECTRICAL SERVICE WITH THE LOCAL UTILITY. THE OWNER SHALL PAY ALL CHARGES FOR THE INSTALLATION OF THE NEW UNDERGROUND UTILITY SERVICE.

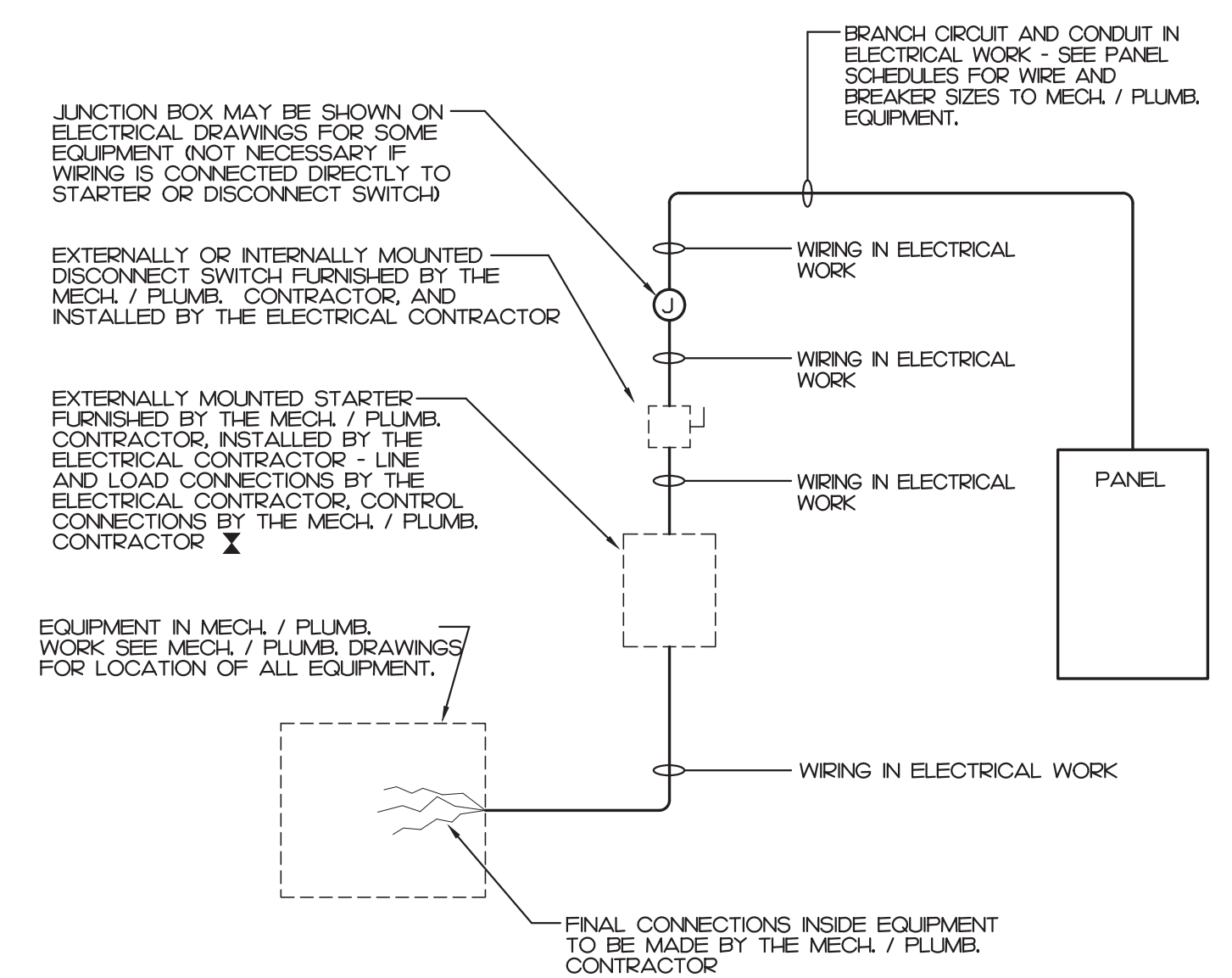
2018 NORTH CAROLINA ENERGY CODE

LAMP TYPE REQUIRED	LIGHTING SCHEDULE			
	FLUORESCENT T8/T5	LED	CFL	INCAN
NUMBER OF LAMPS	N/A	SEE SCHEDULE	N/A	N/A
BALLAST TYPE USED	N/A	FIXTURE	N/A	N/A
NUMBER OF BALLASTS	N/A	SCHEDULE	N/A	N/A
TOTAL WATTAGE PER FIXTURE	N/A		N/A	N/A

INTERIOR WATTAGE	SPECIFIED	ALLOWED BY CODE
OFFICE		268
TOTAL	230	241 **
EXTERIOR WATTAGE	ZONE 3	
ALLOWANCE	32	750

- NOTES:**
- ** PER SECTION C406.3, THE WHOLE AREA ALLOWED BY CODE IS REQUIRED TO BE 10% LOWER THAN THOSE CALCULATED PER SECTION C406.4.2.
 - VALUE CALCULATE PER SECTION C406.4.2: 268 WATTS
 - VALUE PER SECTION C406.3: 241 WATTS
 - ALL EXTERIOR LIGHTS:
 - CONTROLLED BY PHOTOCELL THAT WILL NOT INTENDED TO BE ON FOR 24 HOUR OPERATION.
- DESIGNER STATEMENT: TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLES WITH THE ELECTRICAL SYSTEM AND EQUIPMENT REQUIREMENTS OF THE NORTH CAROLINA STATE BUILDING CODE, 2018 - ENERGY.

SIGNED: [Signature]
 NAME: DAVID J. WHITNEY, P.E.
 TITLE: ENGINEER



- NOTES:**
- A COMBINATION STARTER MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER.
 - E.C. SHALL FURNISH ALL REQUIRED FUSES.

WIRING TO MECHANICAL AND PLUMBING EQUIPMENT

NOT TO SCALE

LIGHT FIXTURE SCHEDULE

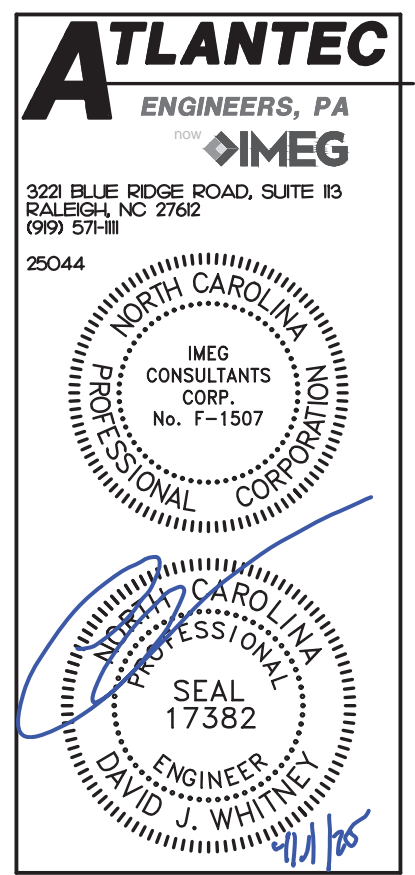
TYPE	DESCRIPTION	CATALOG	ELECTRICAL DATA	NOTES
A	8' STRIP LIGHT 6000 LUMEN	LITHONIA CSS-L96-AL04-MVOLT-35K-80CRI	6000 LUMEN LED, 3500K 0-10V ELECTRONIC DIMMING DRIVER 46 WATTS - 51 VA, 120-277V	
B	1x4 LED FLAT PANEL FIXTURE SURFACE MOUNTED 2500 LUMEN	LITHONIA CPX-1X4-AL07-80CRI-S1W17**MVOLT	2500 LUMEN LED, 3500K 0-10V ELECTRONIC DIMMING DRIVER 20 WATTS - 22 VA, 120-277V	
C	EXTERIOR WALL PACK 3000 LUMEN	LITHONIA WIDGEZLED-P3-30K-80CRI**MVOLT-SRM	3000 LUMEN LED, 3000K ELECTRONIC DRIVER 18 WATTS, 20 VA, 120-277V	
EGX	EMERGENCY WITH EXIT LIGHT 1 SIDE RED LETTER	LITHONIA LHQM-LED-R-SD	4 WATTS - 4 VA, 120/277V	
BH	EXTERIOR EMERGENCY LIGHT LISTED FOR WET LOCATION	LITHONIA AFF-OEL**FCT	11 WATTS - 12 VA, 120/277V	
EG	EMERGENCY LIGHT	LITHONIA ELM2L-SDRT	2 WATTS - 2 VA, 120/277V	

- NOTES:**
- SEE ARCHITECTURAL PLAN FOR MOUNTING LOCATION AND HEIGHT. FIELD COORDINATE MOUNTING HEIGHT WITH ARCHITECT. IF NOT SHOWN ON ARCHITECTURAL PLAN.
 - E.C. SHALL SUBMIT CATALOG TO ARCHITECT FOR APPROVAL PRIOR PURCHASE ANY. FINISH COLOR/TRIM SUBJECT TO BE CHANGED PER ARCHITECT.
 - FIELD VERIFY FLUORESCENT LAMP COLOR WITH ARCHITECT PRIOR PURCHASE ANY.



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**ATTENDANT BUILDING
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 CONVENIENCE CENTER
 PARKTON RD. | PARKTON NC, NC 28371**

PLOT DATE: 04/10/2025	
ISSUED: 04/10/2025 FOR CONSTRUCTION	
REVISION:	
DRAWN BY: SWM	APPROVED: DJW
PROJECT NO.: 24077	RECORD:
CONTENTS: ELECTRICAL NOTES, LEGEND, DETAILS	

SHEET:
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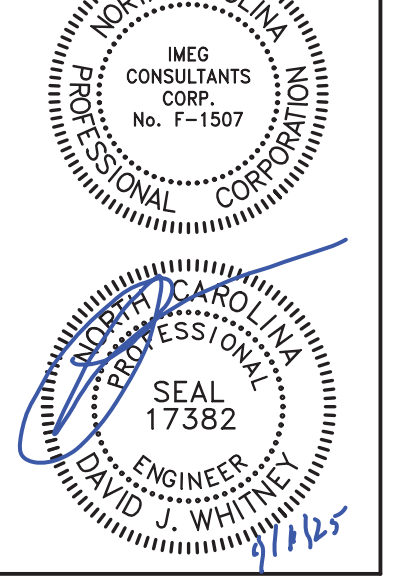
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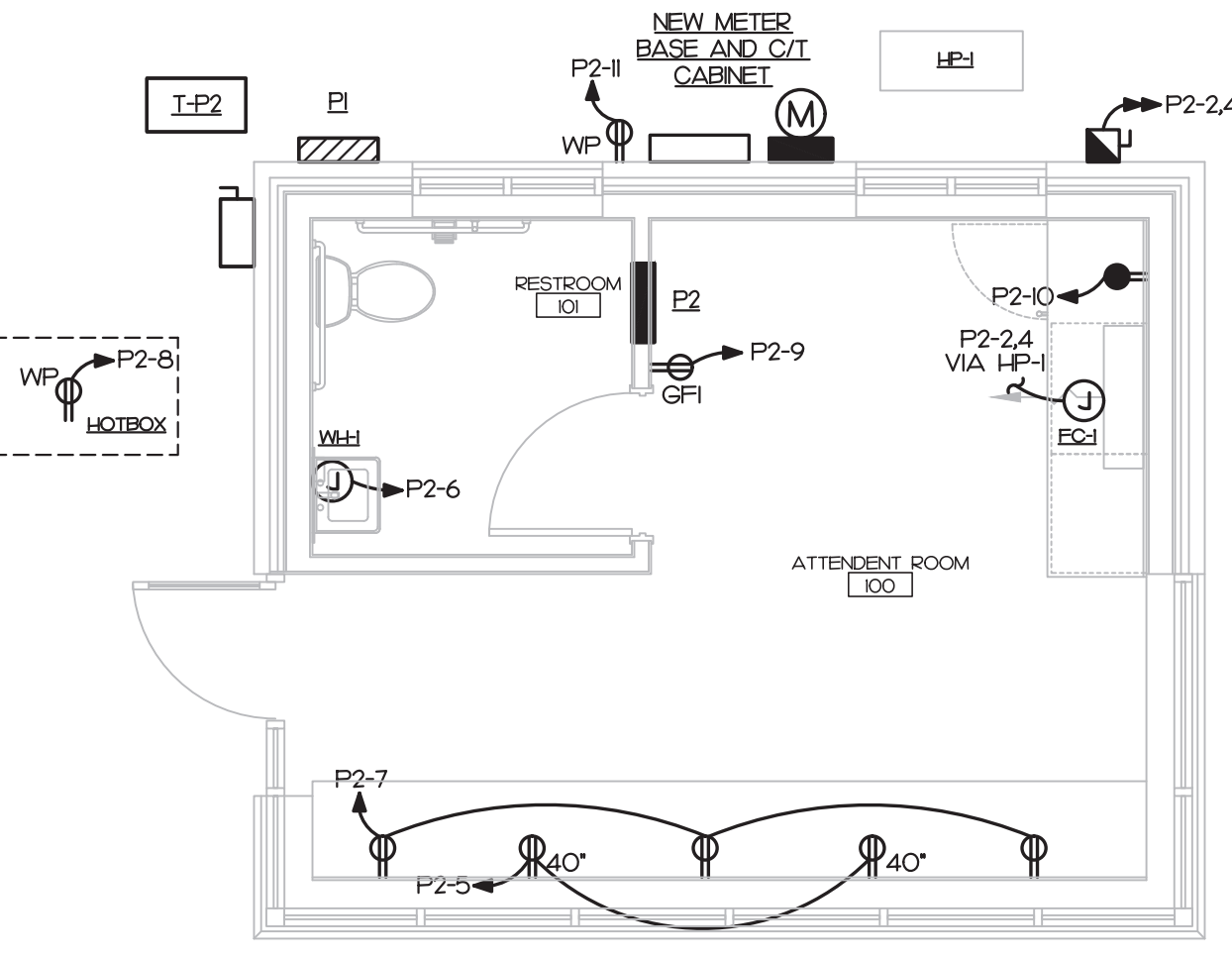
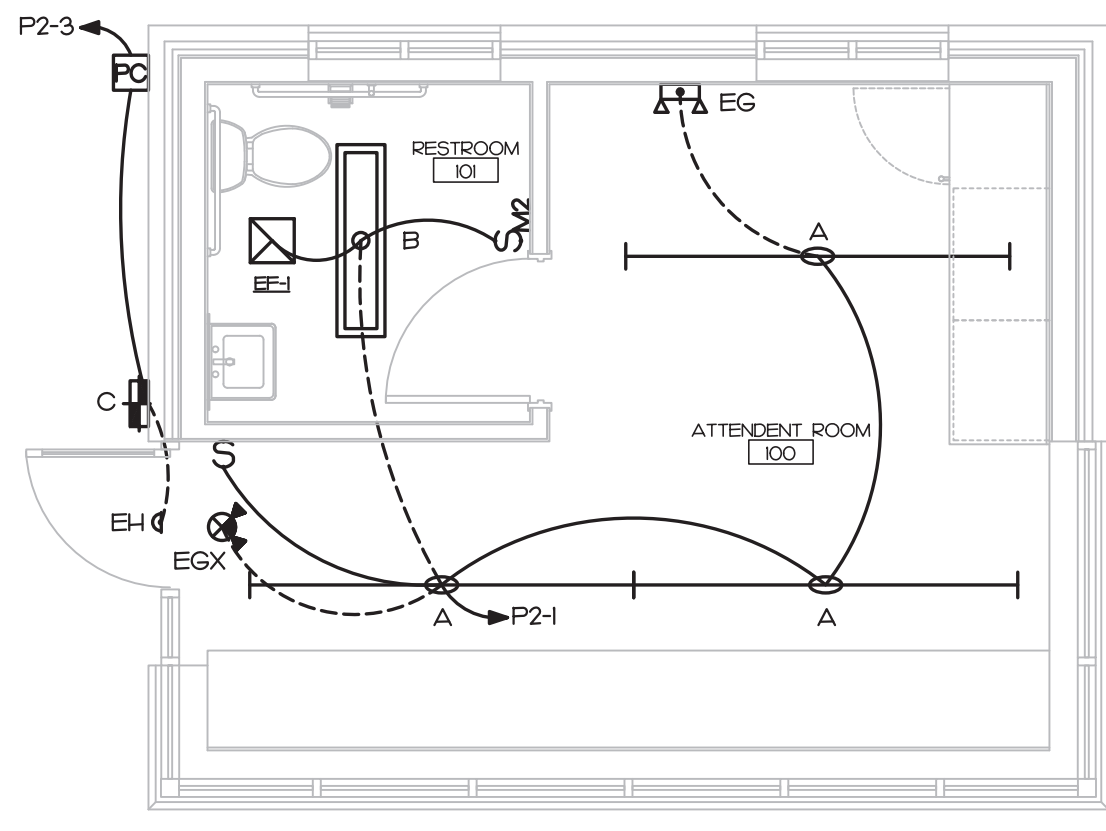
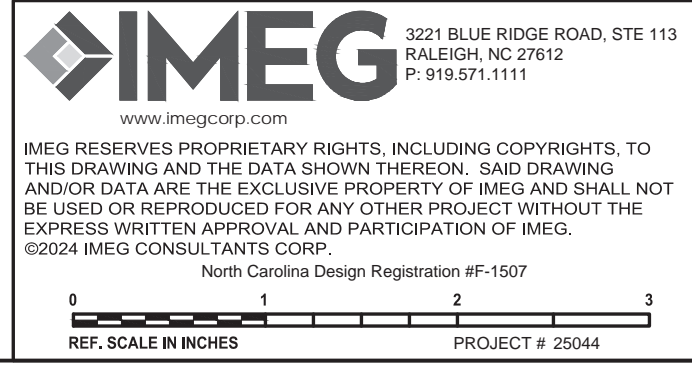
REVISION:

DRAWN BY: SWM APPROVED: DJW

PROJECT NO.: 24077 RECORD:

CONTENTS: ELECTRICAL PLANS, POWER RISER, PANEL SCHEDULES

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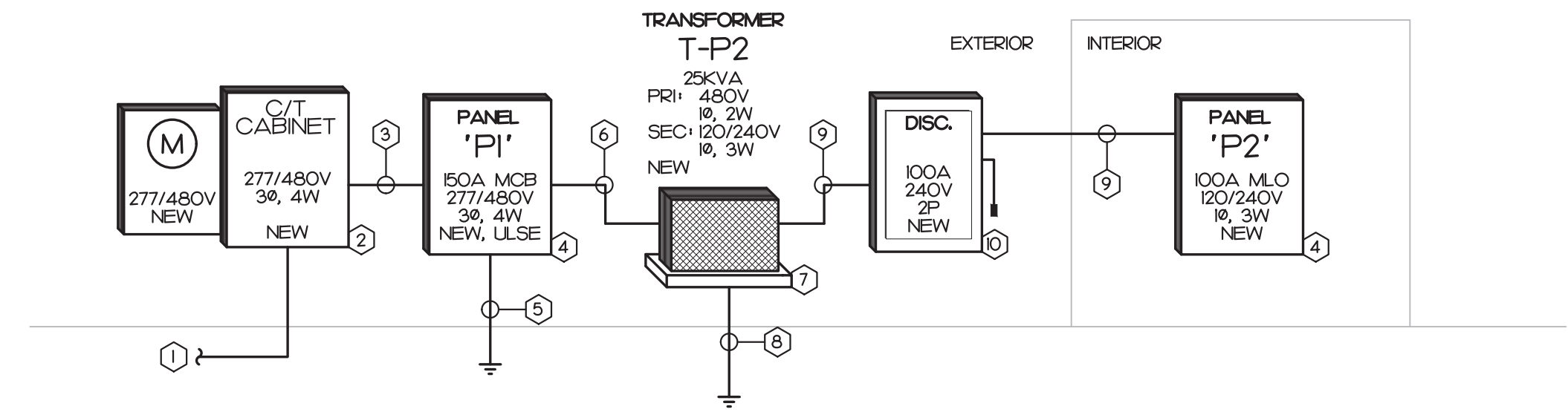


1 LIGHTING PLAN SCALE: 1/4" = 1'-0"

2 POWER PLAN SCALE: 1/4" = 1'-0"

- KEY NOTES: 1. NEW 277/480V, 3Ø, 4W UNDERGROUND SERVICE CONDUCTORS... 2. NEW C/T CABINET AND METER BASE... 3. NEW SERVICE ENTRANCE CONDUCTORS... 4. NEW PANELBOARD... 5. NEW GROUNDING ELECTRODE CONDUCTORS... 6. NEW FEEDER... 7. NEW 25KVA, 480V PRIMARY, 120/240V SECONDARY NEMA 3R TRANSFORMER... 8. NEW SUPPLY SIDE BONDING JUMPER... 9. NEW FEEDER... 10. PROVIDE A 100A, 240 VOLT, 2-POLE, NEMA 3R FUSED DISCONNECT...

NOTES: 1. E.C. SHALL FIELD VERIFY AVAILABLE MAXIMUM FAULT CURRENT WITH UTILITY AND PROVIDE LABEL INDICATING THE CURRENT ON DISCONNECT PER NEC 110.24(A)



3 POWER RISER NOT TO SCALE

PANEL P1 277/480V, 3 PHASE, 4 WIRE. Table with columns: OKT, DESCRIPTION, KVA, C, G, W, CB, OKT, KVA, DESCRIPTION, OKT. Includes summary table for connected loads and demand.

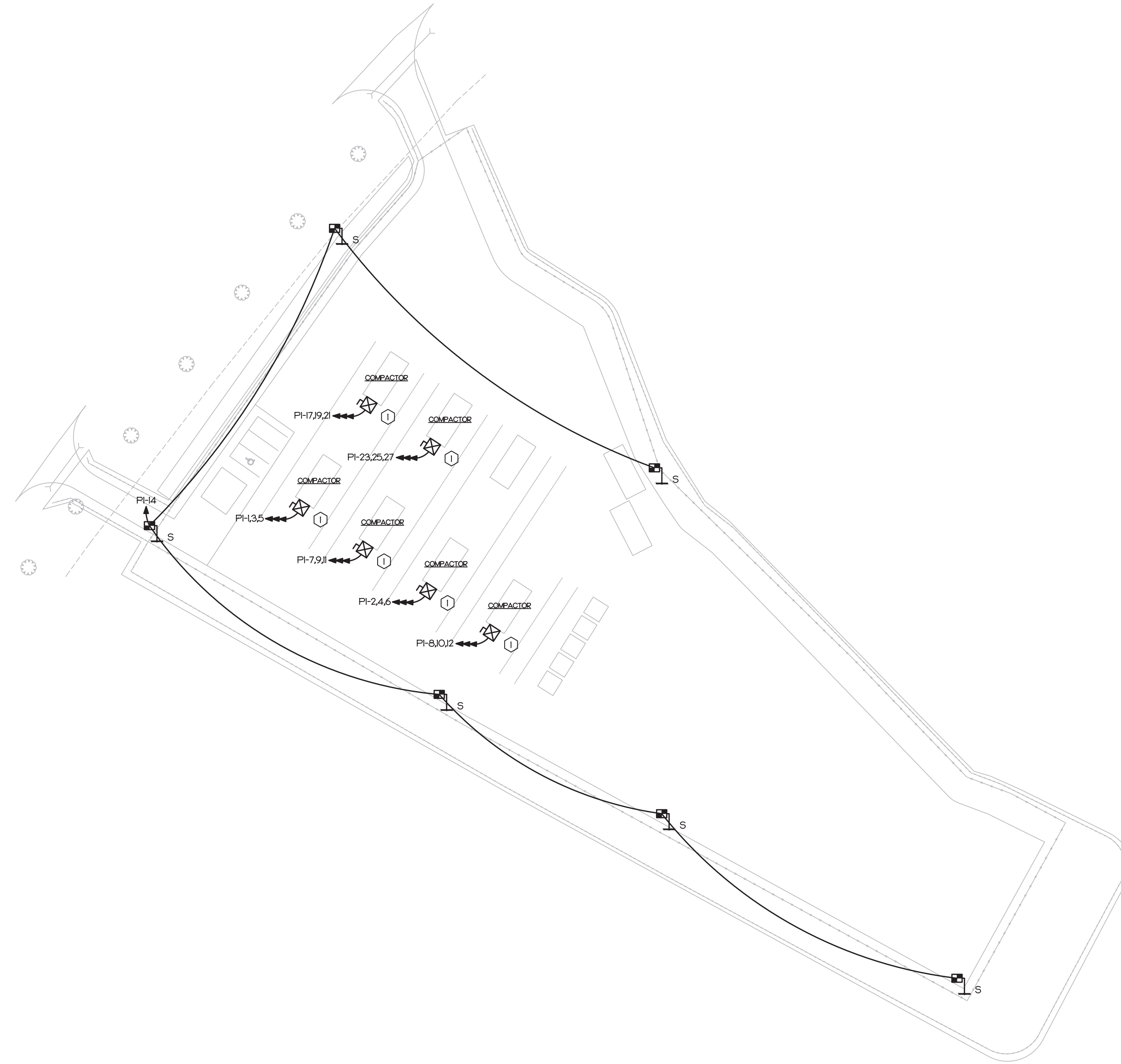
PANEL P2 120/240V, 1 PHASE, 3 WIRE. Table with columns: OKT, DESCRIPTION, KVA, C, G, W, CB, OKT, KVA, DESCRIPTION, OKT. Includes summary table for connected loads and demand.

4 PANEL SCHEDULES NOT TO SCALE

25044

KEY NOTES

① E.G. TO PROVIDE DISCONNECT AND MOTOR STARTER WITH HAND OFF AND AUTO SWITCH



SITE LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	CATALOG	ELECTRICAL DATA	NOTES
S	1 LED POLE LIGHT TYPE 4, 4000K, 35000 LUMENS W/ BACK LIGHT SHIELD 25 FT. ABOVE GRADE ROUND DIRECT BURIAL FIBERGLASS POLE TO MATCH ADJUSTABLE ARM MOUNT TO MATCH	CREE® NTA-A-NM-T4-35L-40K-L1 DIRECT BURIAL FIBERGLASS POLE: OSZF9RTDB BACK LIGHT SHIELD: NTA-BLSF-35L	35000 LUMEN LED, 4000K ELECTRONIC DRIVER 230 WATTS - 256 VA, 120-277V	ALL TYPE 'S' FIXTURES TO BE MOUNTED AT 25' POLE TO HAVE AT LEAST 7' EMBEDMENT WITH 25' ABOVE GRADE

1 SITE POWER PLAN
SCALE: 1" = 20'-0"



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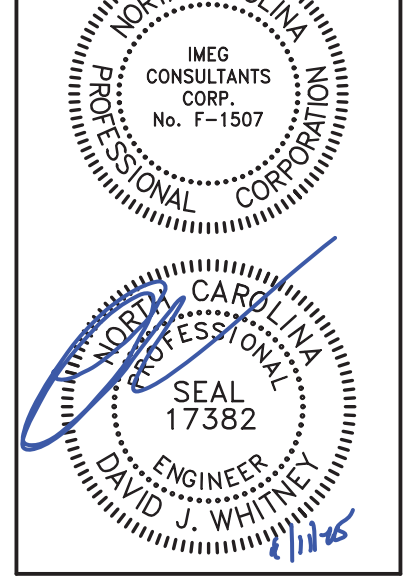
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APPROVED:
DJW

PROJECT NO.:
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RECORD:
SITE PLAN

SHEET:
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