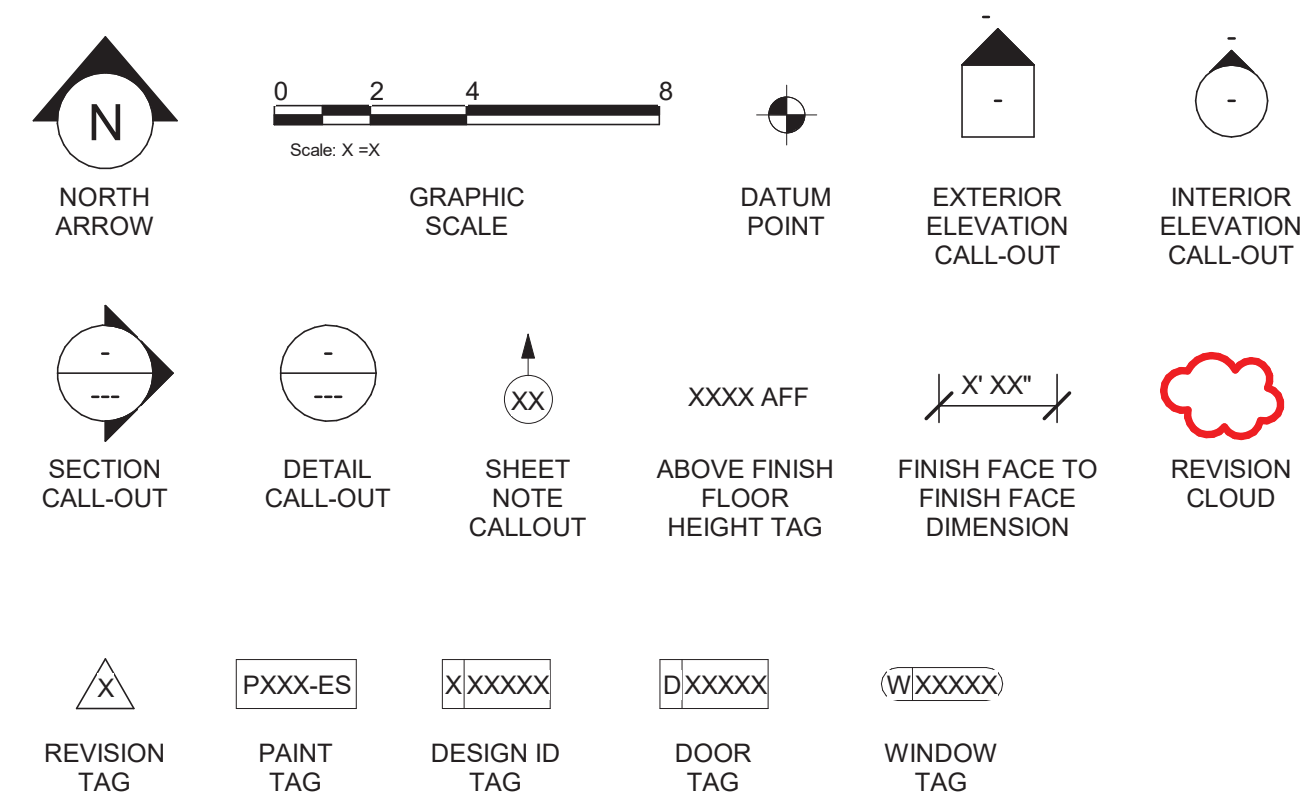


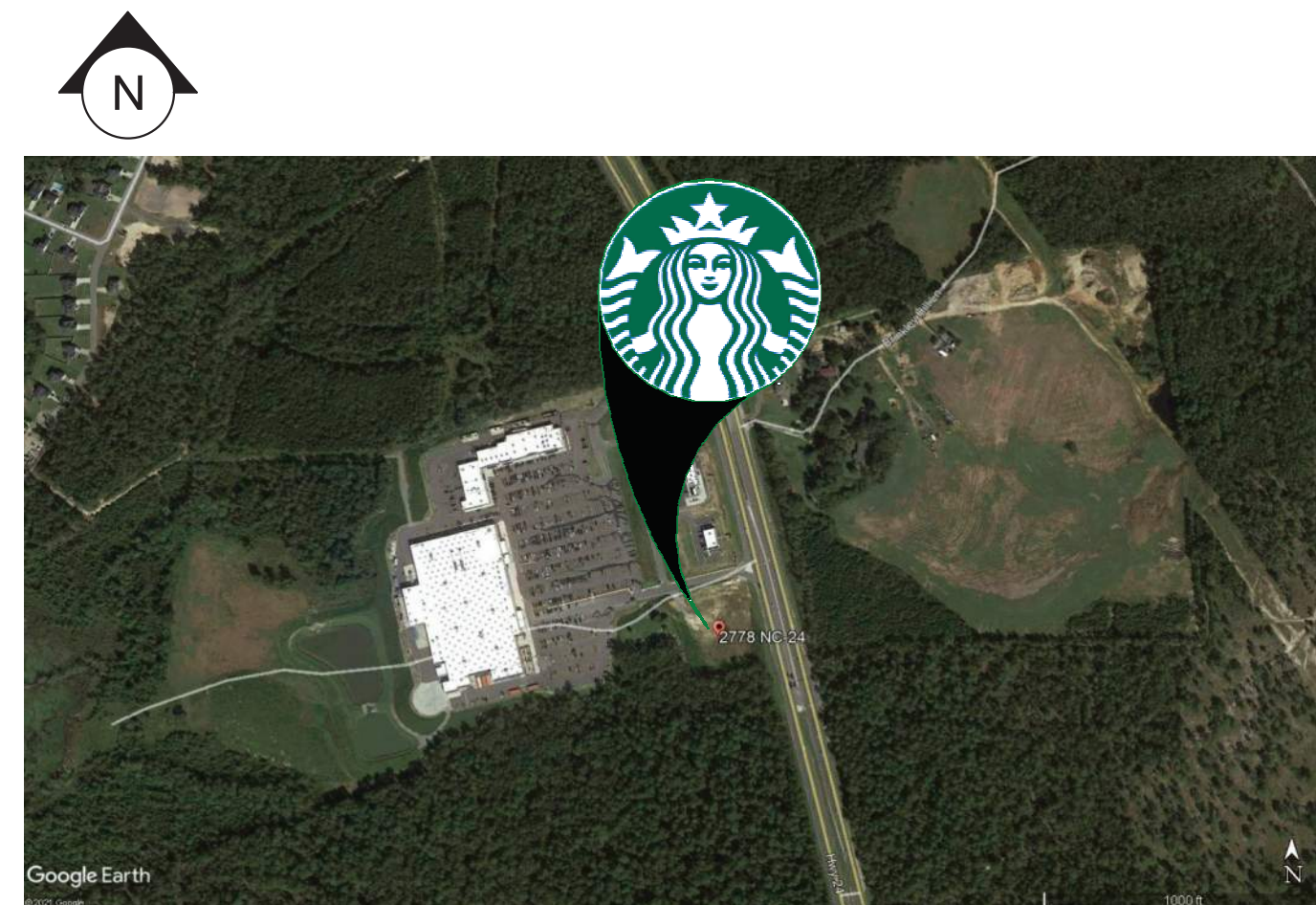
ABBREVIATIONS

- A/C AIR CONDITIONING
- ACT ACOUSTICAL CEILING TILE
- ADJ ADJUSTABLE
- AFF ABOVE FINISHED FLOOR
- AMP AMPERE
- ARCH ARCHITECT
- BOH BACK OF HOUSE
- CAB CABINET
- CL CENTER LINE
- CLG CEILING
- CM STARBUCKS CONSTRUCTION MANAGER
- CTR CENTER
- CX COMMISSIONING
- CXA COMMISSIONING AGENT
- DEG DEGREE
- DET DETAIL
- DIA DIAMETER
- DIM DIMENSION
- DM STARBUCKS DESIGN MANAGER
- DN DOWN
- EA EACH
- EL ELEVATION
- EQ EQUAL
- EXIST EXISTING
- EXT EXTERIOR
- FF&E FURNITURE, FIXTURE, AND EQUIPMENT
- FLR FLOOR
- FOH FRONT OF HOUSE
- FOIC FURNISHED BY OWNER, INSTALLED BY CONTRACTOR
- FOID FURNISHED BY OWNER INSTALLED BY OWNER
- FT FOOT/FEET
- G GROUND
- GC GENERAL CONTRACTOR
- GWB GYPSUM WALLBOARD
- HC HOLLOW CORE
- HDW HARDWARE
- HM HOLLOW METAL
- HORIZ HORIZONTAL
- HR HOUR
- HT HEIGHT
- HVAC HEATING, VENTILATING AND AIR CONDITIONING
- I.D. INSIDE DIAMETER
- LEED LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN
- LL LANDLORD
- LV LOW VOLTAGE
- MAX MAXIMUM
- MEP "MECHANICAL, ELECTRICAL AND PLUMBING"
- MFR MANUFACTURER
- MIN MINIMUM
- NIC NOT IN CONTRACT
- NL NIGHT LIGHT
- NTS NOT TO SCALE
- OC ON CENTER
- O.D. OUTSIDE DIAMETER
- PLC PLACE
- R RADIUS
- REF REFERENCE
- REQ'D REQUIRED
- REV REVISION
- RND ROUND
- SB STARBUCKS
- SC SOLID CORE
- SF SQUARE FEET
- SHT SHEET
- SIM SIMILAR
- SPEC SPECIFICATION
- SQ SQUARE
- TEMP TEMPORARY
- TYP TYPICAL
- UC UNDER COUNTER
- UNO UNLESS NOTED OTHERWISE
- VERT VERTICAL
- VIF VERIFY IN FIELD

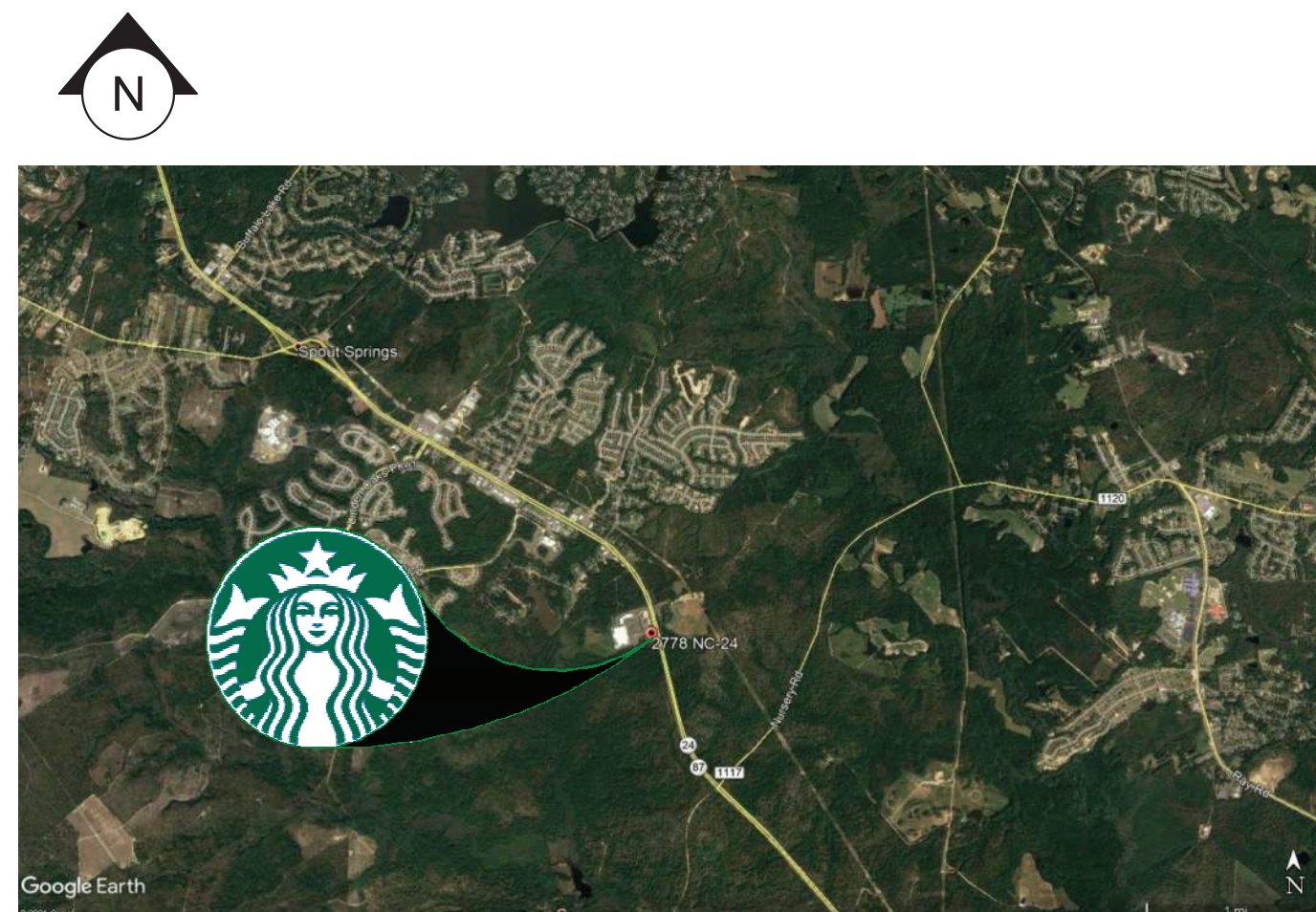
ARCHITECTURAL SYMBOL LEGEND



AERIAL MAP



VICINITY PLAN



PROJECT CONTACTS

- LANDLORD**
PRIMAX PROPERTIES, LLC
MIKE ERICKSON
1100 MOREHEAD STREET
CHARLOTTE, NC 28204
PHONE: (800) 938-5471
- ARCHITECT OF RECORD:**
GPD ENGINEERING AND ARCHITECTURE
PROFESSIONAL CORPORATION 52715
520 SOUTH MAIN STREET, SUITE 2531
AKRON, OH 44311
PHONE: (330)-572-2100
FAX: (330)-572-2101
- CIVIL ENGINEER**
L&C ENGINEERING, INC
MICHAEL TOOTHAKER
3475 CORPORATE WAY, SUITE A
DULUTH, GA 30096
PHONE: (919) 361-5000
- MEP CONSULTANT OF RECORD:**
GPD ENGINEERING AND ARCHITECTURE
PROFESSIONAL CORPORATION C3879
520 SOUTH MAIN STREET, SUITE 2531
AKRON, OH 44311
PHONE: (330)-572-2100
FAX: (330)-572-2101

GENERAL NOTES

1. THE DRAWINGS AND PROJECT MANUAL TOGETHER CONSTITUTE THE CONTRACT DOCUMENTS FOR CONSTRUCTION. ALL GENERAL REQUIREMENTS ARE TO BE MET AND ALL MATERIALS, FINISHES AND SYSTEMS ARE TO BE INSTALLED AND PERFORM PER SPECIFICATIONS UNLESS OTHERWISE NOTED.
2. GENERAL CONTRACTOR SHALL VISIT THE SITE, REVIEW THE BUILDING SHELL DRAWINGS AS SUBMITTED BY THE LANDLORD AND BECOME THOROUGHLY FAMILIAR WITH THE SITE CONDITIONS PRIOR TO CONSTRUCTION.
3. GENERAL CONTRACTOR SHALL INFORM ARCHITECT OF ANY CHANGES, OMISSIONS OR PLAN DISCREPANCIES PRIOR TO CONSTRUCTION.
4. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH LOCAL, COUNTY, STATE AND FEDERAL CODES AND ORDINANCES.
5. GENERAL CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES.
6. GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS, INCLUDING CLEARANCES REQUIRED BY OTHER TRADES AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK. ALL DIMENSIONS ARE TO THE FACE OF THE FINISHED SURFACE UNLESS NOTED OTHERWISE. ALL DIMENSIONS TO BE TAKEN FROM DESIGNATED DATUM POINT. DO NOT SCALE DRAWINGS.
7. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMITS FOR FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL SYSTEMS PRIOR TO INSTALLATION OF SUCH SYSTEMS.
8. GENERAL CONTRACTOR SHALL RETAIN ONE SET OF PERMIT PLANS ON-SITE TO DOCUMENT ALL CHANGES MADE DURING CONSTRUCTION. THE RECORD DRAWINGS SHALL BE ISSUED TO THE OWNER AT PROJECT CLOSE-OUT AS DESCRIBED IN THE GENERAL REQUIREMENTS OF THE PROJECT MANUAL.
9. GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING DELIVERY OF MATERIALS FROM CONTRACTED THIRD PARTY LOGISTICS DISTRIBUTION SERVICES AND VENDOR DIRECT SHIPMENTS. SEE THE PROJECT MANUAL FOR ADDITIONAL INFORMATION.
10. FOR THE PURPOSE OF THE DOCUMENTS, TO "INSTALL", SHALL MEAN TO PROVIDE ALL FASTENERS, MISCELLANEOUS HARDWARE, BLOCKING, ELECTRICAL CONNECTIONS, PLUMBING CONNECTIONS AND OTHER ITEMS REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION, UNLESS OTHERWISE NOTED.
11. ALL ITEM SUBSTITUTIONS MUST BE APPROVED BY OWNER.

INDEX OF SHEETS

LEGEND: X - SHEET ISSUED
R - SHEET ISSUED FOR REFERENCE AND COORDINATION ONLY
SEE TITLEBLOCK FOR REVISION ISSUE DATE(S)

SHEET	SHEET TITLE	BID SET	PERMIT SET	REVISION 1	REVISION 2	REVISION 3	REVISION 4
GENERAL							
G0001	GENERAL INFORMATION	X	X				
G0002a	APPENDIX B	X	X				
G0002b	APPENDIX B	X	X				
G0003	LANDLORD WORK LETTER	X	X				
G0004a	COMCheck	X	X				
G0004b	COMCheck	X	X				
G0004c	COMCheck	X	X				
G0010	SPECIFICATIONS	X	X				
G0011	SPECIFICATIONS	X	X				
G0012	SPECIFICATIONS	X	X				
G0013	SPECIFICATIONS	X	X				
G0014	SPECIFICATIONS	X	X				
STRUCTURAL							
S0001	STRUCTURAL GENERAL NOTES	X	X				
S0002	STRUCTURAL GENERAL NOTES	X	X				
S1001	FOUNDATION PLAN	X	X				
S1002	ROOF FRAMING PLAN	X	X				
S5001	TYPICAL STRUCTURAL DETAILS	X	X				
S5002	FOUNDATION SECTIONS & DETAILS	X	X				
S5003	STRUCTURAL SECTIONS & DETAILS	X	X				
S5004	CANOPY FRAMING SECTIONS AND DETAILS	X	X				
S5005	DUMPSTER ENCLOSURE STRUCTURAL PLANS AND DETAILS	X	X				
S5006	SITE FOUNDATION DETAILS	X	X				
ARCHITECTURAL							
A0002	ARCHITECTURAL SITE DETAILS	X	X				
A0003	ARCHITECTURAL SITE DETAILS	X	X				
A0004	TRASH ENCLOSURE	X	X				
A0005	TRASH ENCLOSURE	X	X				
A0006	PATIO DETAILS	X	X				
A1101	DIMENSIONED FLOOR PLAN	X	X				
A1501	ROOF PLAN	X	X				
A2001	EXTERIOR ELEVATIONS	X	X				
A2002	EXTERIOR ELEVATIONS	X	X				
A3001	BUILDING SECTIONS	X	X				
A3002	WALL SECTIONS	X	X				
A3003	WALL SECTIONS	X	X				
A5001	BUILDING DETAILS	X	X				
A5002	BUILDING DETAILS	X	X				
A5003	BUILDING DETAILS (ROOF)	X	X				
A5004	BUILDING DETAILS (CANOPY)	X	X				
A6001	TYPICAL PENETRATION FLASHING DETAILS	X	X				
A6002	DOOR & STOREFRONT SCHEDULES	X	X				
MECHANICAL							
M1001	MECHANICAL AND PLUMBING PLAN	X	X				
M1002	MECHANICAL & PLUMBING SCHEDULES & DETAILS	X	X				
ELECTRICAL							
E1000	ELECTRICAL NOTES	X	X				
E1001	SITE PLAN - ELECTRICAL	X	X				
E1002	FLOOR/ROOF PLAN - ELECTRICAL	X	X				
E1003	SCHEDULES - ELECTRICAL	X	X				

SCOPE OF WORK

PROPOSED SHELL BUILDING WITH DRIVE THRU.
BUILDING SCOPE OF WORK TO INCLUDE EXTERIOR ENVELOPE CONSTRUCTION (FOOTINGS, WALLS, FENESTRATION, STRUCTURE, ROOF, ETC.), EXTERIOR BUILDING LIGHTING, ROOFTOP MECHANICAL EQUIPMENT, AND UTILITY STUBS. INTERIOR OF SPACE TO BE FINISHED TO GREY SHELL.
SITE SCOPE OF WORK TO INCLUDE INSTALLATION OF DT EQUIPMENT CONDUIT, NEW CONDUIT TO NEW SITE LIGHTING
SIGNAGE TO BE PERMITTED SEPARATELY BY OTHERS - ANY REFERENCES HEREIN ARE FOR COORDINATION PURPOSES ONLY.
CIVIL IMPROVEMENTS TO BE PERMITTED SEPARATELY BY OTHERS - ANY REFERENCES HEREIN ARE FOR COORDINATION PURPOSES ONLY.

PROJECT INFORMATION

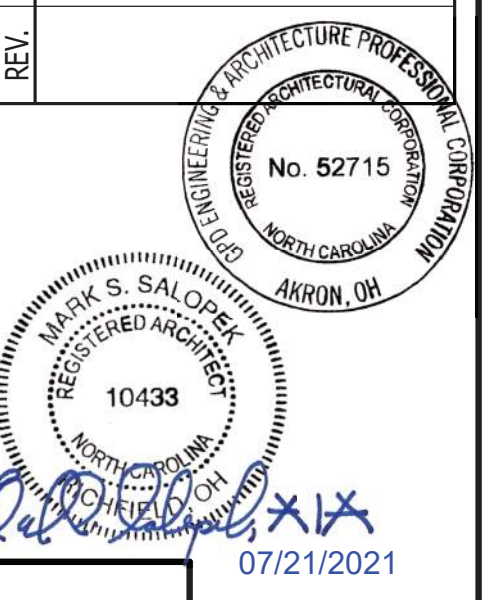
- CODE AUTHORITIES (HARNETT COUNTY, NC):**
- BUILDING CODE: 2018 NORTH CAROLINA STATE BUILDING CODE: BUILDING
 - PLUMBING CODE: 2018 NORTH CAROLINA STATE BUILDING CODE: PLUMBING
 - MECHANICAL CODE: 2018 NORTH CAROLINA STATE BUILDING CODE: MECHANICAL
 - ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE W/ 2017 NORTH CAROLINA AMENDMENTS
 - ENERGY CODE: 2018 NORTH CAROLINA STATE BUILDING CODE: ENERGY CONSERVATION
 - FIRE CODE: 2018 NORTH CAROLINA STATE BUILDING CODE: FIRE PREVENTION CODE
 - ACCESSIBILITY CODE: ICC/ANSI A117.1-2009 STANDARDS FOR ACCESSIBLE DESIGN
- ZONING - COMMERCIAL (HARNETT COUNTY, NC):**
- PARCEL NUMBER: 019594 0107 06
 - GROSS SF: 2,480 SF
 - CONSTRUCTION TYPE: V-B
 - OCCUPANCY TYPE: A-2 (ASSEMBLY)
 - SPRINKLED: N
 - PROPOSED USE: RETAIL SALES AND SERVICES
 - DEFERRED SUBMITTALS: SIGNAGE HEALTH DEPARTMENT



Shell Only



REV.	DATE	DESCRIPTION



GENERAL INFORMATION

SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	--/--
RECORD	--/--

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

G0001

(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	8' ACCESS AISLE	
	9	36	2			2
TOTAL						

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

USE	SPACE	WATERCLOSETS			URINALS	LAVATORIES			SHOWERS / TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		REGULAR	ACCESSIBL
EXIST'G	N/A										
NEW	N/A										
REQ'D	N/A										

SPECIAL APPROVALS

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

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: No Yes N/A FOR SHELL
 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 #: N/A FOR SHELL

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)
 Note any code exceptions or table notes that may have been utilized regarding the items above

Section/Table/Note	Title

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
N/A							

ACCESSIBLE PARKING

2018 NC Administrative Code and Policies Appendix B for Building

2018 NC Administrative Code and Policies Appendix B for Building

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 ⁴ AREA	(C) AREA FOR FRONTAGE INCREASE ^{1,2}	(D) ALLOWABLE AREA PER STORY OR UNLIMITED ³
1	Restaurant	2,480 SQ FT	6,000 SQ FT		6,000 SQ FT

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 $I_i = 100 [F/P - 0.25] \times W/30 = ______ (\%)$

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)	40'-0"	22'-0"	N/A
Building Height in Stories (Table 504.4)	1	1	N/A

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

2018 NC Administrative Code and Policies Appendix B for Building

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
		REQ'D	PROVIDED				
Structural Frame, including columns, girders, trusses	0						
Bearing Walls	0						
Exterior	0						
North	0						
East	0						
West	0						
South	0						
Interior	0						
Nonbearing Walls and Partitions	0						
Exterior walls	0						
North	0						
East	0						
West	0						
South	0						
Interior walls and partitions	0						
Floor Construction Including supporting beams and joists	0						
Floor Ceiling Assembly	0						
Column Supporting Floors	0						
Roof Construction, including supporting beams and joists	0						
Roof Ceiling Assembly	0						
Column Supporting Roof	0						
Shaft Enclosures - Exit	0						
Shaft Enclosures - Other	0						
Corridor Separation	0						
Occupancy/Fire Barrier Separation	0						
Party/Fire Wall Separation	0						
Smoke Barrier Separation	0						
Smoke Partition	0						
Tenant/Dwelling Unit/Sleeping Unit Separation	0						
Incidental Use Separation	0						

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET FROM PERPETRY LINES)	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
N/A			
N/A			
N/A			

2018 NC Administrative Code and Policies Appendix B for Building

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: Spout Springs, NC Shell
 Address: 2778 NC-24, Cameron, NC Zip Code 28236
 Owner/Authorized Agent: Primax Properties, LLC Phone # (980) 938 - 5471 E-Mail emickson@primaxproperties.com
 Owned By: City/County Private State
 Code Enforcement Jurisdiction: City County Harnett State

CONTACT:

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	GPD Engineering & Architecture Professional Corporation 52715	Mark S. Satopka, AIA	10433	(330) 572-2100	msatopka@gpdgroup.com
Civil	GPD Engineering & Architecture Professional Corporation C3879	Steven P. Schaub	49102	(330) 572-2100	sschaub@gpdgroup.com
Electrical	GPD Engineering & Architecture Professional Corporation C2879	Brandon M. Marzley	41099	(330) 572-2100	bmarzley@gpdgroup.com
Fire Alarm	GPD Engineering & Architecture Professional Corporation C2879	Brandon M. Marzley	41099	(330) 572-2100	bmarzley@gpdgroup.com
Plumbing	GPD Engineering & Architecture Professional Corporation C2879	John M. Krasak	38136	(330) 572-2100	jkasak@gpdgroup.com
Mechanical	GPD Engineering & Architecture Professional Corporation C2879				
Sprinkler-Standpipe	GPD Engineering & Architecture Professional Corporation C2879				
Structural	GPD Engineering & Architecture Professional Corporation C2879				
Retaining Walls >5' High					
Other					

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

2018 NC CODE FOR: New Construction Addition Renovation
 1st Time Interior Completion
 Shell/Core
 Phased Construction - Shell/Core
 Renovation

2018 NC EXISTING BUILDING CODE: Prescriptive Repair Chapter 14
 Alteration: Level I Level II Level III
 Historic Property Change of Use

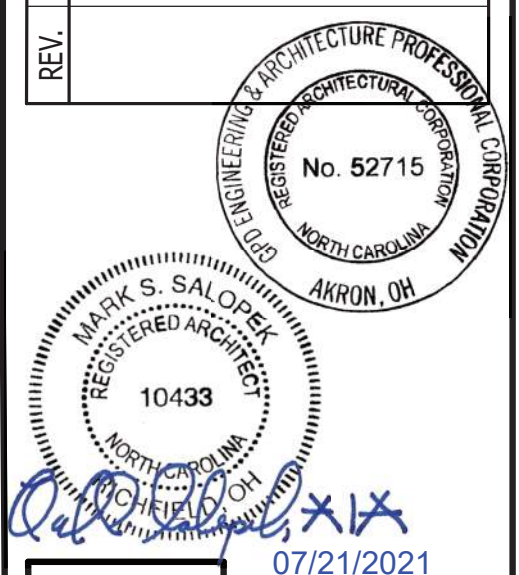
CONSTRUCTED: (date) _____ ORIGINAL OCCUPANCY(S) (Ch. 3): _____
 RENOVATED: (date) _____ CURRENT OCCUPANCY(S) (Ch. 3): _____

RISK CATEGORY (table 1604.5) Current: I II III IV
 Proposed: I II III IV

BASIC BUILDING DATA
 Construction Type: I-A II-A III-A IV V-A
 I-B II-B III-B 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 (Primary) Flood Hazard Area: No Yes
 Special Inspections Required: No Yes

2018 NC Administrative Code and Policies Appendix B for Building

REV.	DATE	DESCRIPTION



SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

APPENDIX B

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	-/-/-
RECORD	-/-/-

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

G0002a

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 N/A FOR SHELL

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 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 NCECC; not required for ASHRAE 90.1)

C406.2 More Efficient Mechanical Equipment
 C406.3 Reduced Lighting Power Density
 C406.4 Enhanced Digital 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

ENERGY SUMMARY

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation 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 vs annual energy cost for the proposed design.

N/A
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 assembly)
Description of assembly: Insulation entirely above deck
U-Value of total assembly: 0.33
R-Value of insulation: R-30
Skylights in each assembly: N/A
U-Value of skylight: N/A
Total square footage of skylights in each assembly: N/A

Exterior Walls (each assembly)
Description of assembly: Wood framed @ 16" o.c.
U-Value of total assembly: 0.053
R-Value of insulation: R-19
Openings (windows or doors with glazing)
U-Value of assembly: 0.30
Solar heat gain coefficient: 0.25
Projection factor: 0.40
Door R-Values:

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
Description of assembly: N/A for Shell
U-Value of total assembly:
R-Value of insulation:
Horizontal/Vertical requirement:
Slab Heated:

2018 NC Administrative Code and Policies

Appendix B for Building

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: 23 F
summer dry bulb: 96 F

Interior design conditions
winter dry bulb: 75.3 F
summer dry bulb: 58.9 F
relative humidity: 58%

Building heating load: 500 MBH

Building cooling load: 234 MBH

Mechanical Spacing Conditioning System

Unitary
description of unit: Packaged Rooftop DX
heating efficiency: 80% AFUE
cooling efficiency: 12.4 EER
size category of unit: 10 ton (TYP OF 2)

Boiler
Size category. If oversized, state reason.: N/A

Chiller
Size category. If oversized, state reason.: N/A

List equipment efficiencies: N/A

2018 NC Administrative Code and Policies

Appendix B for Building

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) 1.0
Seismic (Ie) 1.0

Live Loads: Roof 20 psf
Mezzanine N/A psf
Floor 100 psf

Ground Snow Load: 15 psf

Wind Load: Ultimate Wind Speed 115 mph (ASCE-7)
Exposure Category C

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 0.21 %g S_1 0.094 %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 Equivalent Lateral Force Dynamic

Architectural, Mechanical, Components anchored? Yes No

LATERAL DESIGN CONTROL: Earthquake Wind

SOIL BEARING CAPACITIES:

Field Test (provide copy of test report) N/A psf

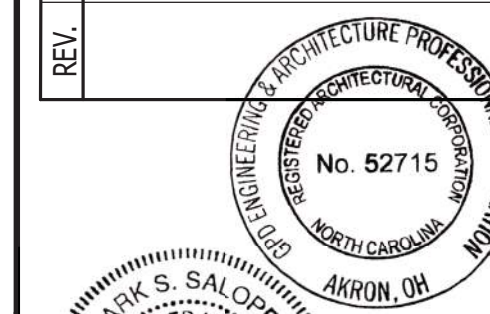
Presumptive Bearing capacity 1500 psf

Pile size, type, and capacity N/A

2018 NC Administrative Code and Policies

Appendix B for Building

REV.	DATE	DESCRIPTION



07/21/2021

SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

APPENDIX B

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	-/-/---
RECORD	-/-/---

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

G0002b

Table with columns: CSI #, Scope Category, Detail. Rows include DT - Site Electric, DT - Traffic Signage, DT - Site Concrete, DT - Drive-Thru Window, DT - Awnings, DT - Site Lighting.

Version April 2020 Page 14 of 16 Tenant Initials/Date: [Signature] / 12/18/2020 Landlord Initials/Date: [Signature] / 12/17/2020

Table with columns: CSI #, Scope Category, Detail. Rows include Site Data Communications, Site Telephone, Trash Enclosure, Irrigation Systems, Site Improvement.

Version April 2020 Page 13 of 16 Tenant Initials/Date: [Signature] / 12/18/2020 Landlord Initials/Date: [Signature] / 12/17/2020

Table with columns: CSI #, Scope Category, Detail. Rows include Gypsum Board, Plumbing Fixtures & Equipment, HVAC, Ductwork, Electrical Panels, Lighting, Site Data Infrastructure.

Version April 2020 Page 12 of 16 Tenant Initials/Date: [Signature] / 12/18/2020 Landlord Initials/Date: [Signature] / 12/17/2020

Table with columns: CSI #, Scope Category, Detail. Rows include Storefront Doors, Fire Alarm, Fire Protection, Site Electrical Distribution, Sidewalks & Patios, Flooring.

Version April 2020 Page 11 of 16 Tenant Initials/Date: [Signature] / 12/18/2020 Landlord Initials/Date: [Signature] / 12/17/2020

Table with columns: CSI #, Scope Category, Detail. Rows include Landlord Work, Selective Demolition, Utility Service, Water Distribution, Sanitary Sewage, Gas Distribution, Roof, Metal Doors & Frames.

Version April 2020 Page 10 of 16 Tenant Initials/Date: [Signature] / 12/18/2020 Landlord Initials/Date: [Signature] / 12/17/2020

LANDLORD WORKLETTER EXHIBIT C-1 CONSTRUCTION REQUIREMENTS AND STANDARDS GREY SHELL ONLY (v.6.16.17). Includes sections 1-3: Landlord Construction, Tenant's Completion of Landlord's Work, Parties Obligations upon Delivery and Possession.



Table with columns: REV, DATE, DESCRIPTION. Includes a circular professional seal for S. S. SALOPKA, REGISTERED ARCHITECT, No. 52715, AARON, OH.

SPOUT SPRINGS 2778 NC-24 CAMERON, NC 28236 LANDLORD WORK LETTER 07/21/2021

Table with columns: PERMIT, BID, CONSTRUCTION, RECORD, PROJECT MANAGER, DESIGNER. Includes dates and signatures for 07/21/2021.

JOB NO. 2020379.19 G0003

Section # & Req.ID	Footings / Foundation Inspection	Complies?	Comments/Assumptions
C303.2.1 [FO6]†	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.2.4.5, C403.2.4.6 [FO9]†	Snow/ice melting system sensors for future connection to controls. Freeze protection systems have automatic controls installed.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: Spout Springs Shell Report date: 03/26/21
 Data filename: O:\2020\2020379\19_Spout Springs, NC\3-COMcheck\COMcheck_Spout Spring, NC.cck Page: 6 of 14

COMcheck Software Version 4.1.5.1 Mechanical Compliance Certificate

Project Information

Energy Code: 2015 IECC
 Project Title: Spout Springs Shell
 Location: Cameron, North Carolina
 Climate Zone: 3a
 Project Type: New Construction

Construction Site: 2778 NC-24, Cameron, NC 28326
 Owner/Agent: Primax Properties, 1100 E. Morehead St, Charlotte, NC 28204, (980) 938-5471
 Designer/Contractor: GPD Engineering and Architecture, 520 South Main St, Suite 2531, Akron, OH 44311, 330-572-2100

Additional Efficiency Package(s)

Reduced interior lighting power. Requirements are implicitly enforced within interior lighting allowance calculations.

Mechanical Systems List

Quantity	System Type & Description
1	HVAC System 1 (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 250 kBtu/h Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et Cooling: 1 each - Single Package DX Unit, Capacity = 117 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 12.40 EER, Required Efficiency: 11.00 EER + 12.6 IEER Fan System: RTU-1 -- Compliance (Motor nameplate HP method) : Passes Fans: FAN 1 Supply, Constant Volume, 4000 CFM, 3.0 motor nameplate hp, 1.0 fan efficiency grade
1	HVAC System 2 (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 250 kBtu/h Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et Cooling: 1 each - Single Package DX Unit, Capacity = 117 kBtu/h, Air-Cooled Condenser, Air Economizer Proposed Efficiency = 12.40 EER, Required Efficiency: 11.00 EER + 12.6 IEER Fan System: RTU-2 -- Compliance (Motor nameplate HP method) : Passes Fans: FAN 2 Supply, Constant Volume, 4000 CFM, 3.0 motor nameplate hp, 1.0 fan efficiency grade

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Brandon M. Marzley, P.E.

Name - Title: Brandon M. Marzley, P.E. Signature: [Signature] Date: 07/21/2021
 SEAL 41099
 NORTH CAROLINA PROFESSIONAL ENGINEER
 BRANDON M. MARZLEY

Project Title: Spout Springs Shell Report date: 03/26/21
 Data filename: O:\2020\2020379\19_Spout Springs, NC\3-COMcheck\COMcheck_Spout Spring, NC.cck Page: 3 of 14

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor _{req}
Window 1: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.35, [Bldg. Use 1 - Retail] (b)	284	---	---	0.300	0.460
Window 1 copy 1: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.35, [Bldg. Use 1 - Retail] (b)	33	---	---	0.300	0.460
Entrance Door: Glass (> 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.35, [Bldg. Use 1 - Retail] (b)	42	---	---	0.300	0.770
WEST Exterior Wall - DT Bump Side 2: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	71	19.0	0.0	0.067	0.064
Exterior Wall - Patio: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	415	19.0	0.0	0.067	0.064
Door 3: Glass (> 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.35, [Bldg. Use 1 - Retail] (b)	21	---	---	0.300	0.770
Window 2: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.35, [Bldg. Use 1 - Retail] (b)	265	---	---	0.300	0.460

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
 (b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
 (c) High albedo roof requirement options: 1) 3-year aged solar reflectance >= 0.55 thermal emittance >= 0.75, 2) 3-year aged solar reflectance index >= 64.0, 3) Initial year aged solar reflectance >= 0.70 thermal emittance >= 0.75, 4) Initial year aged solar reflectance index >= 82.0.

Envelope PASSES: Design 21% better than code

Envelope 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 systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Mark S. Salopek, AIA

Name - Title: Mark S. Salopek, AIA Signature: [Signature] Date: 07/21/2021
 SEAL 10433
 NORTH CAROLINA PROFESSIONAL ARCHITECT
 MARK S. SALOPEK
 RICHFIELD, OH
 SEAL No. 52715
 NORTH CAROLINA PROFESSIONAL ENGINEER
 MARK S. SALOPEK
 AKRON, OH

Project Title: Spout Springs Shell Report date: 03/26/21
 Data filename: O:\2020\2020379\19_Spout Springs, NC\3-COMcheck\COMcheck_Spout Spring, NC.cck Page: 2 of 14

COMcheck Software Version 4.1.5.1 Inspection Checklist

Energy Code: 2015 IECC

Requirements: 65.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR1]†	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C103.2 [PR2]†	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C402.4.1 [PR10]†	The vertical fenestration area <= 30 percent of the gross above-grade wall area.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.4.1 [PR11]†	The skylight area <= 3 percent of the gross roof area.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.4.2 [PR14]†	In enclosed spaces > 2,500 ft2 directly under a roof with ceiling heights >15 ft, and used as an office, lobby, atrium, concourse, corridor, storage, gymnasium/exercise center, convention center, automotive service, manufacturing, non-refrigerated warehouse, retail store, distribution/sorting area, transportation, or workshop, the following requirements apply: (a) the daylight zone under skylights is >= half the floor area; (b) the skylight area to daylight zone is >= 3 percent with a skylight VT >= 0.40; or a minimum skylight effective aperture >= 1 percent.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C406 [PR9]†	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: Spout Springs Shell Report date: 03/26/21
 Data filename: O:\2020\2020379\19_Spout Springs, NC\3-COMcheck\COMcheck_Spout Spring, NC.cck Page: 4 of 14

COMcheck Software Version 4.1.5.1 Envelope Compliance Certificate

Project Information

Energy Code: 2015 IECC
 Project Title: Spout Springs Shell
 Location: Cameron, North Carolina
 Climate Zone: 3a
 Project Type: New Construction
 Vertical Glazing / Wall Area: 22%

Construction Site: 2778 NC-24, Cameron, NC 28326
 Owner/Agent: Primax Properties, 1100 E. Morehead St, Charlotte, NC 28204, (980) 938-5471
 Designer/Contractor: GPD Engineering and Architecture, 520 South Main St, Suite 2531, Akron, OH 44311, 330-572-2100

Additional Efficiency Package(s)

Reduced interior lighting power. Requirements are implicitly enforced within interior lighting allowance calculations.

Building Area	Floor Area
1-Retail - Nonresidential	2480

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor _{req}
Roof 1: Insulation Entirely Above Deck: High Albedo Roof Required, 3-Year-Aged Solar Reflectance = 0.69, Thermal Emittance = 0.83 (c), [Bldg. Use 1 - Retail]	2335	---	30.0	0.032	0.039
NORTH: Exterior Wall - DT Bump: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	184	19.0	0.0	0.067	0.064
Window 5 DT Window: Metal Frame-Fixed, Perf. Specs.: Product ID READY ACCESS 600 SERIES, SHGC 0.20, PF 0.57, [Bldg. Use 1 - Retail] (b)	20	---	---	0.730	0.460
Window 5: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.57, [Bldg. Use 1 - Retail] (b)	37	---	---	0.300	0.460
Exterior Wall - DT: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1012	19.0	0.0	0.067	0.064
Window 7: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.35, [Bldg. Use 1 - Retail] (b)	35	---	---	0.300	0.460
EAST Exterior Wall - BOH: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	416	19.0	0.0	0.067	0.064
Service Door: Insulated Metal, Swinging, [Bldg. Use 1 - Retail]	28	---	---	0.700	0.610
Exterior Wall - DT Bump Side 1: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	71	19.0	0.0	0.067	0.064
Window 4: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.57, [Bldg. Use 1 - Retail] (b)	9	---	---	0.300	0.460
SOUTH: Exterior Wall 1 - Main Entry: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1244	19.0	0.0	0.067	0.064

Project Title: Spout Springs Shell Report date: 03/26/21
 Data filename: O:\2020\2020379\19_Spout Springs, NC\3-COMcheck\COMcheck_Spout Spring, NC.cck Page: 1 of 14



REV.	DATE	DESCRIPTION

SPOUT SPRINGS
 2778 NC-24
 CAMERON, NC 28326

COMcheck

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	-/-/-
RECORD	-/-/-

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
 2020379.19

G0004a

DESCRIPTION
DATE
REV.

SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

COMcheck

PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	-/-/---
RECORD	-/-/---
PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

G0004b

Section # & Req. ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.2.9.1.3 [ME11] ¹	Ductwork operating >3 in. water column requires air leakage testing.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C403.2.9.1.3 [ME11] ¹	Ductwork operating >3 in. water column requires air leakage testing.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.3 [ME62] ¹	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.3 [ME62] ¹	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.4.4.6 [ME110] ¹	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply. See the Mechanical Systems list for values.
C403.4.4.6 [ME110] ¹	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply. See the Mechanical Systems list for values.
C408.2.2.1 [ME53] ¹	Air outlets and zone terminal devices have means for air balancing.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C403.5.1, C403.5.2 [ME123] ¹	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.5.1 and refrigeration compressor systems that comply with C403.5.2.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.

Additional Comments/Assumptions:

Project Title: Spout Springs Shell
Data filename: O:\2020\2020379\19_Spout Springs, NC\3-COMcheck\COMcheck_Spout Spring, NC.cck
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Section # & Req. ID	Framing / Rough-In Inspection	Complies?	Comments/Assumptions
C303.1.3 [FR12] ¹	Fenestration products rated in accordance with NFRC.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.1.3 [FR13] ¹	Fenestration products are certified as to performance labels or certificates provided.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.4.3 [FR10] ¹	Vertical fenestration SHGC value.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
C402.4.3.4 [FR8] ¹	Vertical fenestration U-Factor.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
C402.4.4 [FR14] ¹	U-factor of opaque doors associated with the building thermal envelope meets requirements.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
C402.5.1.2.1 [FR19] ¹	The building envelope contains a continuous air barrier that is sealed in an approved manner and material permeability <= 0.004 dfm/ft2. Air barrier penetrations are sealed in an approved manner.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.5.2 [FR18] ¹	Factory-built fenestration and doors are labeled as meeting air leakage requirements.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.5.7 [FR17] ¹	Vestibules are installed on all building entrances. Doors have self-closing devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

Project Title: Spout Springs Shell
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Section # & Req. ID	Insulation Inspection	Complies?	Comments/Assumptions
C303.1 [IN3] ¹	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the roof slope is <= 3 in 12.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.1 [IN10] ¹	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.2 [IN7] ¹	Above-grade wall insulation installed per manufacturer's instructions.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.2.1 [IN14] ¹	Exterior insulation is protected from damage with a protective material. Verification for exposed foundation insulation may need to occur during Foundation Inspection.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.2.1 [IN17] ¹	Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C104 [IN6] ¹	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
C402.2.6 [IN18] ¹	Radiant panels and associated components, designed for heat transfer from the panel surfaces to the occupants or indoor space are insulated with a minimum of R-3.5.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.3 [IN5] ¹	High-albedo roofs satisfy one of the following: 3-year-aged solar reflectance >= 0.55 and thermal emittance >= 0.75 or 3-year-aged solar reflectance index >= 64.0.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C104 [IN2] ¹	Installed roof insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. For some ceiling systems, verification may need to occur during Framing Inspection.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Envelope Assemblies table for values.
C402.5.1.1 [IN1] ¹	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

Additional Comments/Assumptions:

Project Title: Spout Springs Shell
Data filename: O:\2020\2020379\19_Spout Springs, NC\3-COMcheck\COMcheck_Spout Spring, NC.cck
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Section # & Req. ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6] ¹	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.5, C404.5.1, C404.5.2 [PL6] ¹	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.6.3 [PL7] ¹	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.6.3 [PL7] ¹	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8] ¹	Water distribution system that pumps water from a heated-water supply pipe back to the heated-water source through a cold-water supply pipe is a demand recirculation water system. Pumps within this system have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C404.7 [PL8] ¹	Water distribution system that pumps water from a heated-water supply pipe back to the heated-water source through a cold-water supply pipe is a demand recirculation water system. Pumps within this system have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.

Additional Comments/Assumptions:

Project Title: Spout Springs Shell
Data filename: O:\2020\2020379\19_Spout Springs, NC\3-COMcheck\COMcheck_Spout Spring, NC.cck
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Section # & Req. ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.3 [FI8] ¹	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C402.5.3 [FI51] ¹	Where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air opening are located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope. Such rooms are sealed and insulated.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.5.6 [FI37] ¹	Weatherseals installed on all loading dock cargo doors.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.5.8 [FI26] ¹	Recessed luminaires in thermal envelope to limit infiltration and be IC rated and labeled. Seal between interior finish and luminaire housing.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.2.2 [FI27] ¹	HVAC systems and equipment capacity does not exceed calculated loads.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.2.4.1 [FI47] ¹	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.2.4.1 [FI47] ¹	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.2.4.1.2 [FI38] ¹	Thermostatic controls have a 5 °F deadband.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.2.4.1.3 [FI20] ¹	Temperature controls have setpoint overlap restrictions.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.2.4.2 [FI39] ¹	Each zone equipped with setback controls using automatic time clock or programmable control system.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.2.4.2.1, C403.2.4.2.2 [FI40] ¹	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

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Section # & Req. ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41] ¹	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C402.5.5, C403.2.4.3 [ME3] ¹	Stair and elevator shaft vents have motorized dampers that automatically close.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.2.1.3 [ME71] ¹	Unenclosed spaces that are heated use only radiant heat.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C403.2.3 [ME55] ¹	HVAC equipment efficiency verified.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Mechanical Systems list for values.
C403.2.4.7 [ME113] ¹	Fault detection and diagnostics installed with air-cooled unitary DX units having economizers.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.2.4.7 [ME113] ¹	Fault detection and diagnostics installed with air-cooled unitary DX units having economizers.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.2.6.1 [ME59] ¹	Demand control ventilation provided for spaces >500 ft2 and >25 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.2.6.2 [ME115] ¹	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C403.2.7 [ME57] ¹	Exhaust air energy recovery on systems meeting Table C403.2.7(1) and C403.2.7(2).	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C403.2.8 [ME116] ¹	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C403.2.9 [ME60] ¹	HVAC ducts and plenums insulated. Where ducts or plenums are installed in or under a slab, verification may need to occur during Foundation Inspection.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C403.2.9 [ME10] ¹	Ducts and plenums sealed based on static pressure and location.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

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REV.	DATE	DESCRIPTION

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C403.2.4.2.3 [F141]¹	Systems include optimum start controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C403.2.4.2.3 [F141]¹	Systems include optimum start controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.2.1 [F128]¹	Commissioning plan developed by registered design professional or approved agency.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.2.3.1 [F131]¹	HVAC equipment has been tested to ensure proper operation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.2.3.2 [F110]¹	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.2.3.3 [F132]¹	Economizers have been tested to ensure proper operation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.2.4 [F129]¹	Preliminary commissioning report completed and certified by registered design professional or approved agency.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.2.5.1 [F17]¹	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.2.5.3 [F143]¹	An air and/or hydronic system balancing report is provided for HVAC systems.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.2.5.4 [F130]¹	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236
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	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	--/--
RECORD	--/--

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

G0004c

GENERAL CONDITIONS

SECTION 014200 - REFERENCES
PART 1 - GENERAL

- 1.1 INDUSTRY STANDARDS
A. APPLICABILITY OF STANDARDS: UNLESS THE CONTRACT DOCUMENTS INCLUDE MORE STRINGENT REQUIREMENTS, APPLICABLE CONSTRUCTION INDUSTRY STANDARDS HAVE THE SAME FORCE AND EFFECT AS IF BOUND OR COPIED DIRECTLY INTO THE CONTRACT DOCUMENTS TO THE EXTENT REFERENCED. SUCH STANDARDS ARE MADE A PART OF THE CONTRACT DOCUMENTS BY REFERENCE.
B. PUBLICATION DATES: COMPLY WITH STANDARDS IN EFFECT AS OF DATE OF THE CONTRACT DOCUMENTS UNLESS OTHERWISE INDICATED.
C. COPIES OF STANDARDS: EACH ENTITY ENGAGED IN CONSTRUCTION ON PROJECT SHOULD BE FAMILIAR WITH INDUSTRY STANDARDS APPLICABLE TO ITS CONSTRUCTION ACTIVITY. COPIES OF APPLICABLE STANDARDS ARE NOT BOUND WITH THE CONTRACT DOCUMENTS.
1. WHERE COPIES OF STANDARDS ARE NEEDED TO PERFORM A REQUIRED CONSTRUCTION ACTIVITY, OBTAIN COPIES DIRECTLY FROM PUBLICATION SOURCE.
1.2 ABBREVIATIONS AND ACRONYMS
A. INDUSTRY ORGANIZATIONS: WHERE ABBREVIATIONS AND ACRONYMS ARE USED IN SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, THEY SHALL MEAN THE RECOGNIZED NAME OF THE ENTITIES IN THE FOLLOWING LIST.
ACI AMERICAN CONCRETE INSTITUTE
AHA AMERICAN HARDBOARD ASSOCIATION
ATC AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
ANSI AMERICAN NATIONAL STANDARDS INSTITUTE
APA - THE ENGINEERED WOOD ASSOCIATION
ASHRAE AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS
ASTM ASTM INTERNATIONAL (AMERICAN SOCIETY FOR TESTING AND MATERIALS INTERNATIONAL)
AWI INTERTEK TESTING SERVICE NA (NOW ETL SEMCO)
AWPA AMERICAN WOOD PROTECTION ASSOCIATION (FORMERLY: AMERICAN WOOD PRESERVERS' ASSOCIATION)
CRI CARPET AND RUG INSTITUTE (THE)
CRRR COOL ROOF RATING COUNCIL
CSA CANADIAN STANDARDS ASSOCIATION
CSA CSA INTERNATIONAL (FORMERLY: IAS - INTERNATIONAL APPROVAL SERVICES)
CSI CONSTRUCTION SPECIFICATIONS INSTITUTE (THE)
ETL SEMCO INTERTEK ETL SEMCO (FORMERLY: ITS - INTERTEK TESTING SERVICE NA)
FM GLOBAL FM GLOBAL (FORMERLY: FMG - FM GLOBAL)
FSC FOREST STEWARDSHIP COUNCIL
HPVA HARDWOOD PLYWOOD & VENEER ASSOCIATION
ISO INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
ITS INTERTEK TESTING SERVICE NA (NOW ETL SEMCO)
MFMA MAPLE FLOORING MANUFACTURERS ASSOCIATION, INC.
MPI MASTER PAINTERS INSTITUTE
NFPA NATIONAL FIRE PROTECTION ASSOCIATION
NOFMA THE WOOD FLOORING MANUFACTURERS ASSOCIATION (FORMERLY: NATIONAL OAK FLOORING MANUFACTURERS ASSOCIATION)
OPL INTERTAK
SDI STEEL DOOR INSTITUTE
SMACNA SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION
UL UNDERWRITERS LABORATORIES INC.
USGBC U.S. GREEN BUILDING COUNCIL
WCLIB WEST COAST LUMBER INSPECTION BUREAU
WCI WOODWORK INSTITUTE (FORMERLY: WIC - WOODWORK INSTITUTE OF CALIFORNIA)
B. CODE AGENCIES: WHERE ABBREVIATIONS AND ACRONYMS ARE USED IN SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, THEY SHALL MEAN THE RECOGNIZED NAME OF THE ENTITIES IN THE FOLLOWING LIST.
DIN DEUTSCHES INSTITUT FUR NORMUNG E.V.
ICC INTERNATIONAL CODE COUNCIL
ICC-ES ICC EVALUATION SERVICE, INC.
C. FEDERAL GOVERNMENT AGENCIES: WHERE ABBREVIATIONS AND ACRONYMS ARE USED IN SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, THEY SHALL MEAN THE RECOGNIZED NAME OF THE ENTITIES IN THE FOLLOWING LIST.
EPA ENVIRONMENTAL PROTECTION AGENCY
D. STANDARDS AND REGULATIONS: WHERE ABBREVIATIONS AND ACRONYMS ARE USED IN SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, THEY SHALL MEAN THE RECOGNIZED NAME OF THE STANDARDS AND REGULATIONS IN THE FOLLOWING LIST.
ADAAG AMERICANS WITH DISABILITIES ACT (ADA) ARCHITECTURAL BARRIERS ACT (ABA) ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES AVAILABLE FROM U.S. ACCESS BOARD
CFR CODE OF FEDERAL REGULATIONS AVAILABLE FROM GOVERNMENT PRINTING OFFICE
E. STATE GOVERNMENT AGENCIES: WHERE ABBREVIATIONS AND ACRONYMS ARE USED IN SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, THEY SHALL MEAN THE RECOGNIZED NAME OF THE ENTITIES IN THE FOLLOWING LIST.
CDHS CALIFORNIA DEPARTMENT OF HEALTH SERVICES
CDPH CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, INDOOR AIR QUALITY SECTION

END OF SECTION 014200

GENERAL CONDITIONS

SECTION 017419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

- 1.1 SUMMARY
A. SALVAGING NON-HAZARDOUS DEMOLITION AND CONSTRUCTION WASTE.
B. RECYCLING NON-HAZARDOUS DEMOLITION AND CONSTRUCTION WASTE.
C. DISPOSING OF NON-HAZARDOUS DEMOLITION AND CONSTRUCTION WASTE.
1.2 DEFINITIONS
A. CONSTRUCTION WASTE: BUILDING AND SITE IMPROVEMENT MATERIALS AND OTHER SOLID WASTE RESULTING FROM CONSTRUCTION, REMODELING, RENOVATION, OR REPAIR OPERATIONS. CONSTRUCTION WASTE INCLUDES PACKAGING.
B. DEMOLITION WASTE: BUILDING AND SITE IMPROVEMENT MATERIALS RESULTING FROM DEMOLITION OR SELECTIVE DEMOLITION OPERATIONS.
C. DISPOSAL: REMOVAL OFF-SITE OF DEMOLITION AND CONSTRUCTION WASTE AND SUBSEQUENT SALE, RECYCLING, REUSE, OR DEPOSIT IN LANDFILL OR INCINERATOR ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
D. RECYCLE: RECOVERY OF DEMOLITION OR CONSTRUCTION WASTE FOR SUBSEQUENT PROCESSING IN PREPARATION FOR REUSE.
E. SALVAGE: RECOVERY OF DEMOLITION OR CONSTRUCTION WASTE AND SUBSEQUENT SALE OR REUSE IN ANOTHER FACILITY.
F. SALVAGE AND REUSE: RECOVERY OF DEMOLITION OR CONSTRUCTION WASTE AND SUBSEQUENT INCORPORATION INTO THE WORK.

END OF SECTION 017419

CONCRETE

SECTION 033500 - CONCRETE FINISHING

- 1.1 SUBMITTALS
A. QUALIFICATION DATA: FOR QUALIFIED APPLICATOR.
B. MATERIAL CERTIFICATES.
1.2 FLOOR AND SLAB TREATMENTS
A. VOC CONTENT: FLOOR TREATMENTS SHALL HAVE A VOC CONTENT OF 200 G/L OR LESS (CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24)).
B. UNPIGMENTED MINERAL DRY-SHAKE FLOOR HARDENER: FACTORY-PACKAGED DRY COMBINATION OF PORTLAND CEMENT, GRADED QUARTZ AGGREGATE, AND PLASTICIZING ADMIXTURE.
C. PIGMENTED MINERAL DRY-SHAKE FLOOR HARDENER: FACTORY-PACKAGED, DRY COMBINATION OF PORTLAND CEMENT, GRADED QUARTZ AGGREGATE, COLOR PIGMENTS, AND PLASTICIZING ADMIXTURE. USE COLOR PIGMENTS THAT ARE FINELY GROUND, NONFADING MINERAL OXIDES INTERGROUND WITH CEMENT.
1.3 LIQUID FLOOR TREATMENTS
A. VOC CONTENT: LIQUID FLOOR TREATMENTS SHALL HAVE A VOC CONTENT OF 200 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).
B. PENETRATING LIQUID FLOOR TREATMENT: CLEAR, CHEMICALLY REACTIVE, WATERBORNE SOLUTION OF INORGANIC SILICATE OR SILICONATE MATERIALS AND PROPRIETARY COMPONENTS, ODORLESS; THAT PENETRATES, HARDENS, AND DENSIFIES CONCRETE SURFACES.
C. PENETRATING LIQUID FLOOR TREATMENTS FOR POLISHED CONCRETE FINISH: CLEAR, WATERBORNE SOLUTION OF INORGANIC SILICATE OR SILICONATE MATERIALS AND PROPRIETARY COMPONENTS, ODORLESS; THAT PENETRATES, HARDENS, AND IS SUITABLE FOR POLISHED CONCRETE SURFACES.
1.4 INSTALLATION
A. DRY-SHAKE FLOOR HARDENER FINISH: AFTER INITIAL FLOATING, APPLY DRY-SHAKE FLOOR HARDENER TO SURFACES.
B. PENETRATING LIQUID FLOOR TREATMENT: PREPARE, APPLY, AND FINISH PENETRATING LIQUID FLOOR TREATMENT ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
C. SEALING COAT: UNIFORMLY APPLY A CONTINUOUS SEALING COAT OF CURING AND SEALING COMPOUND TO HARDENED CONCRETE BY POWER SPRAY OR ROLLER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
D. PROTECT LIQUID FLOOR TREATMENT FROM DAMAGE AND WEAR DURING THE REMAINDER OF CONSTRUCTION PERIOD. USE PROTECTIVE METHODS AND MATERIALS, INCLUDING TEMPORARY COVERING, RECOMMENDED IN WRITING BY LIQUID FLOOR TREATMENTS INSTALLER.

END OF SECTION 033500

MASONRY

SECTION 042200 - CONCRETE MASONRY UNITS

- 1.1 SUMMARY
A. MASONRY CONSTRUCTION:
1. SINGLE-WYTHE MASONRY.
1.2 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
B. SHOP DRAWINGS: FOR THE FOLLOWING:
1. REINFORCING STEEL: DETAIL BENDING AND PLACEMENT OF UNIT MASONRY REINFORCING BARS. COMPLY WITH ACI 315, "DETAILS AND REINFORCED WALLS.
2. FABRICATED FLASHING: DETAIL CORNER UNITS, END-DAM UNITS, AND OTHER SPECIAL APPLICATIONS.
C. SAMPLES FOR VERIFICATION: FOR EACH TYPE AND COLOR OF THE FOLLOWING:
1. EXPOSED CONCRETE MASONRY UNITS.
2. MIX DESIGNS: FOR EACH TYPE OF MORTAR AND GROUT. INCLUDE DESCRIPTION OF TYPE AND PROPORTIONS OF INGREDIENTS.
1. INCLUDE TEST REPORTS, PER ASTM C 780, FOR MORTAR MIXES REQUIRED TO COMPLY WITH PROPERTY SPECIFICATION.
2. INCLUDE TEST REPORTS, PER ASTM C 1019, FOR GROUT MIXES REQUIRED TO COMPLY WITH COMPRESSIVE STRENGTH REQUIREMENT.
1.3 MATERIALS
A. CONCRETE MASONRY UNITS (CMUs):
1. UNITS MADE WITH INTEGRAL WATER REPELLENT FOR EXPOSED UNITS AND WHERE INDICATED.
2. CONCRETE MASONRY UNITS: MEDIUM WEIGHT UNLESS INDICATED OTHERWISE.
B. MASONRY LINTELS: PREFABRICATED OR BUILT-IN-PLACE CMU LINTELS.
C. REINFORCING STEEL: UNCOATED STEEL REINFORCING BARS.
D. REINFORCING BAR POSITIONERS: WIRE UNITS DESIGNED TO FIT INTO MORTAR BED JOINTS SPANNING MASONRY UNIT CELLS AND TO HOLD REINFORCING BARS IN CENTER OF CELLS.
E. MASONRY JOINT REINFORCEMENT:
1. EXTERIOR WALLS: HOT-DIP GALVANIZED, CARBON STEEL.
2. EMBEDDED FLASHING:
1. ALL FLASHING: STAINLESS STEEL
2. SINGLE-WYTHE CMU FLASHING SYSTEM: HIGH-DENSITY POLYETHYLENE CELL FLASHING PANS AND INTERLOCKING CMU WEB COVERS.
G. MASONRY-CELL INSULATION: LOOSE-GRANULAR PERLITE.
H. MORTAR: PORTLAND CEMENT-LIME MORTAR UNLESS OTHERWISE INDICATED.
1.4 INSTALLATION
A. MATCH EXISTING MASONRY COURSING, BONDING, COLOR, AND TEXTURE.
B. BOND PATTERN: RUNNING BOND.
C. CLEAN MASONRY WASTE RECYCLED AS FILL MATERIAL.
1.5 FIELD QUALITY CONTROL
A. TESTING AGENCY: OWNER ENGAGED
B. INSPECTIONS: SPECIAL INSPECTIONS ACCORDING TO LEVEL B IN TMS 402/ACI 530/ASCE 5.

END OF SECTION 042200

METALS

SECTION 055000 - METAL FABRICATIONS

- 1.1 SUMMARY
A. STEEL FRAMING AND SUPPORTS FOR MECHANICAL AND ELECTRICAL EQUIPMENT.
B. STEEL FRAMING AND SUPPORTS FOR APPLICATIONS WHERE FRAMING AND SUPPORTS ARE NOT SPECIFIED IN OTHER SECTIONS.
C. SHELF ANGLES.
D. METAL BOLLARDS.
1.2 SUBMITTALS
A. PRODUCT DATA: FOR THE FOLLOWING:
1. PAINT PRODUCTS.
2. GROUT.
3. ALL PREFABRICATED PRODUCTS.
B. SHOP DRAWINGS: SHOW FABRICATION AND INSTALLATION DETAILS FOR METAL FABRICATIONS.
1. INCLUDE PLANS, ELEVATIONS, SECTIONS, AND DETAILS OF METAL FABRICATIONS AND THEIR CONNECTIONS. SHOW ANCHORAGE AND ACCESSORY ITEMS.
2. PROVIDE TEMPLATES FOR ANCHORS AND BOLTS SPECIFIED FOR INSTALLATION UNDER OTHER SECTIONS.
C. WELDING CERTIFICATES.
1.3 PRODUCTS
A. MATERIALS: STEEL PLATES, SHAPES, AND BARS, STEEL PIPE, SLOTTED CHANNEL FRAMING.
1. LOW-EMITTING PRIMER: METAL PRIMER SHALL HAVE A VOC CONTENT OF 200 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).
B. MISCELLANEOUS FRAMING AND SUPPORTS:
1. STEEL FRAMING AND SUPPORTS FOR MECHANICAL AND ELECTRICAL EQUIPMENT, APPLICATIONS WHERE FRAMING AND SUPPORTS ARE NOT SPECIFIED IN OTHER SECTIONS.
2. GALVANIZE WHERE INDICATED.
3. PRIME WITH ZINC-RICH PRIMER WHERE INDICATED.
a. ZINC-RICH PRIMER SHALL HAVE A VOC CONTENT OF 340 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).
C. LOOSE STEEL LINTELS, GALVANIZED AT EXTERIOR WALLS.
D. SHELF ANGLES: GALVANIZED.
E. STEEL WELD PLATES AND ANGLES NOT SPECIFIED IN OTHER SECTIONS, FOR CASTING INTO CONCRETE.
F. METAL BOLLARDS: SCHEDULE 40 STEEL PIPE.

END OF SECTION 055000

WOODS AND PLASTICS

SECTION 061000 - ROUGH CARPENTRY

- 1.1 MATERIALS
A. WOOD-PRESERVATIVE-TREATED LUMBER:
1. PRESERVATIVE TREATMENT: AWPA U1; USE CATEGORY UC2, BUT USE CATEGORY UC3B FOR EXTERIOR CONSTRUCTION AND USE CATEGORY UC4A FOR ITEMS IN CONTACT WITH THE GROUND.
a. PRESERVATIVE CHEMICALS: CONTAINING NO ARSENIC OR CHROMIUM. DO NOT USE INORGANIC BORON (SBX) FOR SILL PLATES.
2. APPLICATION: ITEMS INDICATED AND AS FOLLOWS:
a. ITEMS IN CONTACT WITH ROOFING OR WATERPROOFING.
b. ITEMS IN CONTACT WITH CONCRETE OR MASONRY.
c. FRAMING LESS THAN 18 INCHES (460 MM) ABOVE GROUND IN CRAWLSPACES.
d. FLOOR PLATES INSTALLED OVER CONCRETE SLABS-ON-GRADE.
B. DIMENSION LUMBER FRAMING:
1. EXPOSED FRAMING: HAND-SELECTED FOR APPEARANCE AND FREEDOM FROM DECAY, HONEYCOMB, KNOT-HOLES, SHAKE, SPLITS, TORN GRAIN AND WAJNE.
a. APPLICATION: EXPOSED EXTERIOR AND INTERIOR FRAMING INDICATED TO RECEIVE A STAINED OR NATURAL FINISH.
b. SPECIES AND GRADE: AS INDICATED FOR LOAD-BEARING CONSTRUCTION.
C. ENGINEERED WOOD PRODUCTS, GENERAL: PRODUCTS LOCATED WITHIN THE BUILDING WEATHERPROOFING SYSTEM SHALL CONTAIN NO ADDED UREA FORMALDEHYDE.
D. SHEAR WALL PANELS, GENERAL: PRODUCTS LOCATED WITHIN THE BUILDING WEATHERPROOFING SYSTEM SHALL CONTAIN NO ADDED UREA FORMALDEHYDE.
E. FASTENERS: HOT-DIP GALVANIZED STEEL WHERE EXPOSED TO WEATHER, IN GROUND CONTACT, IN CONTACT WITH TREATED WOOD, OR IN AREA OF HIGH RELATIVE HUMIDITY.
F. METAL FRAMING ANCHORS:
1. HOT-DIP GALVANIZED STEEL FOR INTERIOR LOCATIONS.
2. HOT-DIP HEAVY-GALVANIZED STEEL FOR TREATED LUMBER AND WHERE INDICATED.
3. STAINLESS STEEL FOR EXTERIOR AND WHERE INDICATED.
G. MISCELLANEOUS MATERIALS:
1. SILL-SEALER GASKETS: [GLASS-FIBER INSULATION] [NEOPRENE FOAM].
2. ADHESIVES SHALL HAVE A VOC CONTENT OF 70 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).

END OF SECTION 061000

WOODS AND PLASTICS

SECTION 061053 - MISCELLANEOUS ROUGH CARPENTRY

- 1.1 MATERIALS
A. WOOD-PRESERVATIVE-TREATED MATERIALS:
1. PRESERVATIVE TREATMENT: AWPA U1; USE CATEGORY UC2.
a. PRESERVATIVE CHEMICALS: CONTAINING NO ARSENIC OR CHROMIUM. DO NOT USE INORGANIC BORON (SBX) FOR SILL PLATES.
2. APPLICATION: ITEMS INDICATED AND THE FOLLOWING:
a. ITEMS IN CONTACT WITH ROOFING OR WATERPROOFING.
b. ITEMS IN CONTACT WITH CONCRETE OR MASONRY.
c. FRAMING LESS THAN 18 INCHES (460 MM) ABOVE GROUND IN CRAWLSPACES.
d. FLOOR PLATES INSTALLED OVER CONCRETE SLABS-ON-GRADE.
B. FIRE-RETARDANT-TREATED MATERIALS:
1. EXTERIOR TYPE FOR EXTERIOR LOCATIONS AND WHERE INDICATED.
2. INTERIOR TYPE A UNLESS OTHERWISE INDICATED.
3. APPLICATION: ITEMS INDICATED AND THE FOLLOWING:
a. FRAMING FOR RAISED PLATFORMS.
b. CONCEALED BLOCKING.
c. ROOF FRAMING AND BLOCKING.
d. ITEMS IN CONTACT WITH ROOFING.
e. PLYWOOD BACKING PANELS.
C. FRAMING:
1. NON-LOAD-BEARING INTERIOR PARTITIONS: CONSTRUCTION OR NO. 2 GRADE.
D. MISCELLANEOUS LUMBER:
1. DIMENSION LUMBER: CONSTRUCTION OR NO. 2 GRADE.
2. UTILITY SHELVING: 19 PERCENT MAXIMUM MOISTURE CONTENT.
3. CONCEALED BOARDS: 19 PERCENT MAXIMUM MOISTURE CONTENT.
E. PLYWOOD BACKING PANELS: EXPOSURE 1, C-D PLUGGED.
F. FASTENERS: HOT-DIP GALVANIZED STEEL WHERE EXPOSED TO WEATHER, IN GROUND CONTACT, IN CONTACT WITH TREATED WOOD, OR IN AREA OF HIGH RELATIVE HUMIDITY.
G. METAL FRAMING ANCHORS:
1. METAL: GALVANIZED STEEL; HOT-DIP HEAVY GALVANIZED STEEL FOR WOOD-PRESERVATIVE-TREATED LUMBER AND WHERE INDICATED.
H. ADHESIVES: ADHESIVES SHALL HAVE A VOC CONTENT OF 70 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).

1.2 INSTALLATION

- A. FURRING TO RECEIVE PLYWOOD OR HARDBOARD PANELING: 1-BY-3-INCH NOMINAL-SIZE (19-BY-83-MM ACTUAL-SIZE) FURRING AT 24 INCHES (610 MM) O.C.
B. FURRING TO RECEIVE GYPSUM BOARD: 1-BY-2-INCH NOMINAL-SIZE (19-BY-38-MM ACTUAL-SIZE) FURRING AT 16 INCHES (406 MM) O.C.

END OF SECTION 061053

WOODS AND PLASTICS

SECTION 061600 - SHEATHING

- 1.1 MATERIALS
A. WOOD PRODUCTS, GENERAL:
1. WOOD PANEL PRODUCTS LOCATED WITHIN THE BUILDING WEATHERPROOFING SYSTEM SHALL CONTAIN NO ADDED UREA FORMALDEHYDE.
B. PRESERVATIVE-TREATED PLYWOOD:
1. PRESERVATIVE TREATMENT: AWPA U1; USE CATEGORY UC2, BUT USE CATEGORY UC3B FOR EXTERIOR CONSTRUCTION AND USE CATEGORY UC4A FOR ITEMS IN CONTACT WITH THE GROUND.
2. PRESERVATIVE CHEMICALS: CONTAINING NO ARSENIC OR CHROMIUM.
3. APPLICATION: TREAT PLYWOOD IN CONTACT WITH MASONRY OR CONCRETE OR USED WITH ROOFING, FLASHING, VAPOR BARRIERS, AND WATERPROOFING.
C. FIRE-RETARDANT-TREATED PLYWOOD:
1. EXTERIOR TYPE FOR EXTERIOR LOCATIONS AND WHERE INDICATED.
2. INTERIOR TYPE A, HIGH TEMPERATURE (HT) FOR ROOF SHEATHING AND WHERE INDICATED.
3. INTERIOR TYPE A, UNLESS OTHERWISE INDICATED.
4. APPLICATION: TREAT THE FOLLOWING:
a. ROOF SHEATHING AT FIRE AND PARTY WALLS.
b. WALL SHEATHING AT FIRE AND PARTY WALLS.
c. ROOF SHEATHING.
d. SUBFLOORING AND UNDERLAYMENT FOR RAISED PLATFORMS.
D. FASTENERS: HOT-DIP GALVANIZED STEEL WHERE EXPOSED TO WEATHER, IN GROUND CONTACT, IN CONTACT WITH TREATED WOOD, OR IN AREA OF HIGH RELATIVE HUMIDITY.
E. MISCELLANEOUS MATERIALS:
1. ADHESIVES SHALL HAVE A VOC CONTENT OF 50 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).
1.2 INSTALLATION
A. WOOD STRUCTURAL PANEL:
1. COMBINATION SUBFLOOR-UNDERLAYMENT:
a. GLUE AND NAIL TO WOOD FRAMING.
b. SCREW TO COLD-FORMED METAL FRAMING.
2. SUBFLOORING:
a. GLUE AND NAIL TO WOOD FRAMING.
b. SCREW TO COLD-FORMED METAL FRAMING.
3. SHEATHING:
a. NAIL TO WOOD FRAMING.
b. SCREW TO COLD-FORMED METAL FRAMING.
4. UNDERLAYMENT:
a. NAIL TO SUBFLOORING.
B. GYPSUM SHEATHING:
1. SCREW TO WOOD FRAMING.
2. SCREW TO COLD-FORMED METAL FRAMING.
C. FIBERBOARD SHEATHING:
1. NAIL TO WOOD FRAMING.
D. PARTICLEBOARD UNDERLAYMENT:
1. GLUE AND NAIL TO SUBFLOORING.
E. HARDBOARD UNDERLAYMENT:
1. NAIL TO SUBFLOORING.

END OF SECTION 061600

THERMAL AND MOISTURE PROTECTION

SECTION 071113 - BITUMINOUS DAMPPROOFING

- 1.1 MATERIALS
A. COLD-APPLIED, EMULSIFIED ASPHALT: VOC OF 250 G/L OR LESS.
1.2 INSTALLATION
A. COLD-APPLIED, EMULSIFIED-ASPHALT DAMPPROOFING:
1. CONCRETE FOUNDATIONS AND PARGED MASONRY FOUNDATION WALLS: TWO BRUSH OR SPRAY COATS, ONE FIBERED BRUSH OR SPRAY COAT, OR ONE TROWEL COAT.
2. UNPARGED MASONRY FOUNDATION WALLS: PRIMER AND TWO BRUSH OR SPRAY COATS, PRIMER AND ONE FIBERED BRUSH OR SPRAY COAT, OR PRIMER AND ONE TROWEL COAT.
3. UNEXPOSED FACES OF CONCRETE RETAINING WALLS: ONE BRUSH OR SPRAY COAT.
4. UNEXPOSED FACES OF MASONRY RETAINING WALLS: PRIMER AND ONE BRUSH OR SPRAY COAT.
5. MASONRY BACKUP FOR BRICK VENEER ASSEMBLIES: PRIMER AND ONE BRUSH OR SPRAY COAT.
6. EXTERIOR FACE OF INNER WYTHE OF CAVITY WALLS: PRIMER AND ONE BRUSH OR SPRAY COAT.
7. INTERIOR FACE OF SINGLE-WYTHE EXTERIOR MASONRY WALLS: PRIMER AND ONE BRUSH OR SPRAY COAT.

END OF SECTION 071113

THERMAL AND MOISTURE PROTECTION

SECTION 071300 - WATERPROOFING

- 1.1 MATERIALS
A. MODIFIED BITUMINOUS SHEET: MINIMUM 60-MIL (1.5-MM) NOMINAL THICKNESS.
B. MODIFIED BITUMINOUS SHEET, FABRIC REINFORCED: MINIMUM 60-MIL (1.5-MM) NOMINAL THICKNESS.
C. EPDM RUBBER SHEET WATERPROOFING: 60 MILS (1.5 MM) THICK, UNREINFORCED.
D. BUTYL RUBBER SHEET WATERPROOFING: 60 MILS (1.5 MM) THICK, UNREINFORCED.
E. AUXILIARY MATERIALS:
1. PRIMER: WATERBORNE.
2. METAL TERMINATION BARS: ALUMINUM.
3. PROTECTION COURSE: AS RECOMMENDED BY MANUFACTURER.
F. MOLDED-SHEET DRAINAGE PANELS: MOLDED-PLASTIC DRAINAGE CORE WITH A WOVEN GEOTEXTILE FACING.
G. HIGH-CAPACITY, MOLDED-SHEET COLLECTOR-PANEL SYSTEM: MOLDED-PLASTIC DRAINAGE CORE WITH A WOVEN GEOTEXTILE FACING; BY SAME MANUFACTURER AS MOLDED-SHEET DRAINAGE PANELS.
H. INSULATION: EXTRUDED-POLYSTYRENE BOARD.
I. INSULATION DRAINAGE PANELS: EXTRUDED-POLYSTYRENE BOARD, WITH GROOVED DRAINAGE CHANNELS; FOR WALL INSTALLATION.
1.2 INSTALLATION
A. MODIFIED BITUMINOUS SHEET: ONE-PLY APPLICATION.
B. RUBBER SHEET: FULLY ADHERED, CEMENT SPLICE SEAMS.

END OF SECTION 071300

THERMAL AND MOISTURE PROTECTION

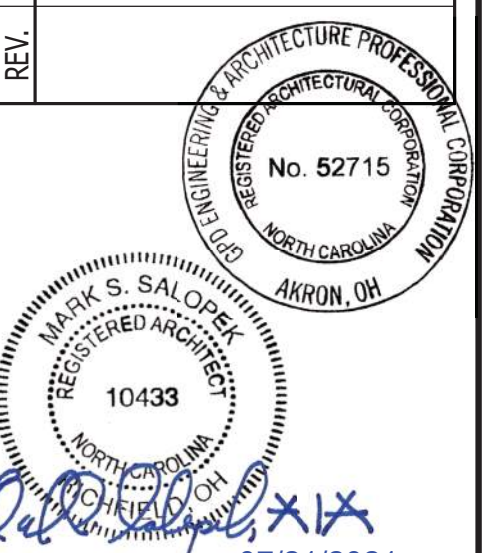
SECTION 072100 - BUILDING INSULATION

- 1.1 SUMMARY
A. APPLICATIONS:
1. PERIMETER INSULATION UNDER SLABS-ON-GRADE.
2. PERIMETER WALL INSULATION (SUPPORTING BACKFILL).
3. CONCEALED BUILDING INSULATION.
4. VAPOR RETARDERS.
5. SOUND ATTENUATION INSULATION.
1.2 PERFORMANCE REQUIREMENTS
A. FLENUM RATING: GLASS-FIBER INSULATION RATED FOR RESISTANCE AGAINST EROSION AND MOLD GROWTH PER UL 181.
1.3 MATERIALS
A. INSULATION:
1. ALL INSULATION MATERIALS LOCATED WITHIN THE WATERPROOF MEMBRANE MUST BE CERTIFIED AS LOW EMITTING. CERTIFICATION MUST BE BASED UPON THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES STANDARD PRACTICE FOR THE TESTING OF VOLATILE ORGANIC EMISSIONS FROM VARIOUS SOURCES USING SMALL-SCALE ENVIRONMENTAL CHAMBERS, INCLUDING 2004 ADDENDA OR A JURISDICTIONALLY RECOGNIZED STANDARD USING EQUIVALENT TESTING METHODOLOGIES AND VOC THRESHOLDS.
B. VAPOR RETARDERS: REINFORCED POLYETHYLENE.

END OF SECTION 072100



Table with 2 columns: REV, DATE. Includes a vertical label 'DESCRIPTION' on the right side.



SPOUT SPRINGS 2778 NC-24 CAMERON, NC 28236 SPECIFICATIONS 07/21/2021

Table with 2 columns: PERMIT, BID, CONSTRUCTION, RECORD, PROJECT MANAGER, DESIGNER. Includes dates and initials.

JOB NO. 2020379.19

G0010

THERMAL AND MOISTURE PROTECTION

SECTION 072500 - WEATHER BARRIERS

- 1.1 MATERIALS
A. BUILDING PAPER: WATER-VAPOR-PERMEABLE, ASPHALT-SATURATED KRAFT BUILDING PAPER WITH FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES OF LESS THAN 25 AND 450, RESPECTIVELY, WHEN TESTED ACCORDING TO ASTM E 84; UV STABILIZED; AND ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
B. BUILDING-WRAP TAPE: PRESSURE-SENSITIVE PLASTIC TAPE RECOMMENDED BY BUILDING-WRAP MANUFACTURER FOR SEALING JOINTS AND PENETRATIONS IN BUILDING WRAP.
C. FLEXIBLE FLASHING: BUTYL RUBBER.

END OF SECTION 072500

THERMAL AND MOISTURE PROTECTION

SECTION 075423 - THERMOPLASTIC POLYOLEFIN (TPO) ROOFING

- 1.1 SUMMARY
A. MECHANICALLY FASTENED MEMBRANE ROOFING SYSTEM WITH 20 YEAR WARRANTY.
B. VAPOR RETARDER.
C. ROOF INSULATION.
- 1.2 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
B. SHOP DRAWINGS: FOR ROOFING SYSTEM. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.
1. BASE FLASHINGS AND MEMBRANE TERMINATIONS.
2. TAPERED INSULATION, INCLUDING SLOPES.
3. INSULATION FASTENING PATTERNS.
C. INSTALLER CERTIFICATES: SIGNED BY ROOFING SYSTEM MANUFACTURER CERTIFYING THAT INSTALLER IS APPROVED, AUTHORIZED, OR LICENSED BY MANUFACTURER TO INSTALL ROOFING SYSTEM.
D. MANUFACTURER CERTIFICATES: SIGNED BY ROOFING MANUFACTURER CERTIFYING THAT ROOFING SYSTEM COMPLIES WITH REQUIREMENTS SPECIFIED IN "PERFORMANCE REQUIREMENTS" ARTICLE.
1. SUBMIT EVIDENCE OF MEETING PERFORMANCE REQUIREMENTS.
E. QUALIFICATION DATA: FOR INSTALLER AND MANUFACTURER.
F. PRODUCT TEST REPORTS: BASED ON EVALUATION OF COMPREHENSIVE TESTS PERFORMED BY MANUFACTURER AND WITNESSED BY A QUALIFIED TESTING AGENCY, FOR COMPONENTS OF ROOFING SYSTEM.
G. WARRANTIES: SPECIAL WARRANTIES SPECIFIED IN THIS SECTION.
- 1.3 PERFORMANCE REQUIREMENTS
A. ROOFING SYSTEM DESIGN: UPLIFT PRESSURES CALCULATED ACCORDING TO ASCE/SEI 7.
B. SOLAR REFLECTANCE INDEX: NOT LESS THAN 78.
- 1.4 EXTERIOR FIRE-TEST EXPOSURE: CLASS C MINIMUM.

- 1.5 MATERIALS
A. THERMOPLASTIC POLYOLEFIN ROOFING MEMBRANE: WHITE, FABRIC-REINFORCED THERMOPLASTIC SHEET, 60 MILS (1.5 MM) THICK.
B. SHEET FLASHING: SAME AS TPO SHEET.
C. ROOF INSULATION: PREFORMED ROOF INSULATION BOARDS MANUFACTURED OR APPROVED BY EPDM ROOFING MANUFACTURER.
1. TAPERED BOARDS: 1/4 INCH PER 12 INCHES(1.49).

- 1.6 INSTALLATION
A. ROOFING MEMBRANE: MECHANICALLY FASTENED.
1. ATTACHMENT METHOD FOR MECHANICALLY FASTENED: IN PLACE.

- 1.7 FIELD QUALITY CONTROL
A. TESTING AGENCY: OWNER ENGAGED.

END OF SECTION 075423

THERMAL AND MOISTURE PROTECTION

SECTION 076200 - SHEET METAL FLASHING AND TRIM

- 1.1 MATERIALS
A. SHEET METALS:
1. COPPER SHEET: MILL FINISH.
2. STAINLESS-STEEL SHEET, TYPE 304: 4 (DIRECTIONAL SATIN) FINISH WITH SMOOTH, FLAT SURFACE.
3. METALLIC-COATED STEEL SHEET: PROVIDE ZINC-COATED (GALVANIZED) STEEL SHEET ACCORDING TO ASTM A 653/A 653M, G90 (Z275) COATING DESIGNATION; PREPAINTING BY COIL-COATING PROCESS TO COMPLY WITH ASTM A 755/A 755M.
a. SURFACE: MANUFACTURER'S STANDARD CLEAR ACRYLIC COATING ON BOTH SIDES.
b. COIL-COATED FINISH: TWO-COAT FLUOROPOLYMER.
B. UNDERLAYMENT: FELTS.
- 1.2 PRODUCTS
A. FORMED LOW-SLOPE ROOF FABRICATIONS: INCLUDING COPINGS, ROOF EXPANSION-JOINT COVERS, COUNTERFLASHING, FLASHING RECEIVERS, ROOF-PENETRATION FLASHING AND ROOF-DRAIN FLASHING.
B. FORMED WALL FABRICATIONS: INCLUDING THROUGH-WALL FLASHING, OPENING FLASHINGS IN FRAME CONSTRUCTION, AND WALL EXPANSION-JOINT COVER.
C. MISCELLANEOUS FORMED FABRICATIONS: INCLUDING EQUIPMENT SUPPORT FLASHING.

END OF SECTION 076200

THERMAL AND MOISTURE PROTECTION

SECTION 077200 - ROOF ACCESSORIES

- 1.1 PRODUCTS
A. ROOF CURBS: INSULATED.
1. HEIGHT: MINIMUM 12 INCHES (300 MM) ABOVE ROOFING SURFACE UNLESS OTHERWISE INDICATED.
2. NAILER: FACTORY-INSTALLED WOOD NAILER ALONG TOP FLANGE OF CURB, CONTINUOUS AROUND CURB PERIMETER.
B. EQUIPMENT SUPPORTS: RAIL TYPE.
1. HEIGHT: MINIMUM 12 INCHES (300 MM) ABOVE ROOFING SURFACE UNLESS OTHERWISE INDICATED.
C. DUCT SUPPORTS: EXTRUDED ALUMINUM, URETHANE INSULATED.
D. PIPE PORTALS: FLASHING TYPE, FORMED ALUMINUM WITH EPDM CAPS.
E. PREFORMED FLASHING SLEEVES: EXHAUST VENT FLASHING AND VENT STACK FLASHING FABRICATED FROM ALUMINUM SHEET.

END OF SECTION 077200

THERMAL AND MOISTURE PROTECTION

SECTION 079200 - JOINT SEALANTS

- 1.1 MATERIALS
A. VOC CONTENT OF INTERIOR SEALANTS: PROVIDE INTERIOR SEALANTS AND SEALANT PRIMERS THAT COMPLY WITH THE FOLLOWING LIMITS FOR VOC CONTENT WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24):
1. SEALANTS: 250 G/L.
2. SEALANT PRIMERS FOR NONPOROUS SUBSTRATES: 250 G/L.
3. SEALANT PRIMERS FOR POROUS SUBSTRATES: 775 G/L.
B. SUITABILITY FOR CONTACT WITH FOOD: WHERE SEALANTS ARE INDICATED FOR JOINTS THAT WILL COME IN REPEATED CONTACT WITH FOOD, PROVIDE PRODUCTS THAT COMPLY WITH 21 CFR 177.2600.
C. ELASTOMERIC JOINT SEALANTS: LIQUID APPLIED, CHEMICALLY CURING; ASTM C 920.
1. MULTICOMPONENT NONSAG NEUTRAL-CURING SILICONE SEALANT ES-1.
2. SINGLE-COMPONENT MILDEW-RESISTANT NEUTRAL-CURING SILICONE SEALANT ES-2.
3. SINGLE-COMPONENT MILDEW-RESISTANT ACID-CURING SILICONE SEALANT ES-3.
4. SINGLE-COMPONENT MILDEW-RESISTANT ACID-CURING RTV SILICONE SEALANT ES-4.
5. MULTICOMPONENT NONSAG POLYUREA SEALANT ES-5.
6. MULTICOMPONENT NONSAG POLYUREA FILLER ES-6.
D. LATEX SEALANT LS-1: COMPLY WITH ASTM C 834, TYPE P, GRADE NF.
E. JOINT-SEALANT BACKING:

- 1.2 JOINT-SEALANT SCHEDULE
A. JOINT-SEALANT APPLICATION JS-1: EXTERIOR HORIZONTAL NONTRAFFIC AND TRAFFIC ISOLATION AND CONTRACTION JOINTS IN CAST-IN-PLACE CONCRETE SLABS.
1. JOINT SEALANT: ES-5.
B. JOINT-SEALANT APPLICATION JS-2: EXTERIOR PERIMETER JOINTS BETWEEN WALL AND FRAMES OF DOORS AND WINDOWS.
1. JOINT SEALANT: ES-1.
C. JOINT-SEALANT APPLICATION JS-3: EXTERIOR CONTROL AND EXPANSION JOINTS IN HORIZONTAL TRAFFIC SURFACES OF BRICK PAVERS, CERAMIC TILE, STONE PAVING UNITS, CONCRETE TILE.
1. JOINT SEALANT: MULTICOMPONENT POURABLE POLYSULFIDE SEALANT.
2. JOINT-SEALANT COLOR: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
D. JOINT-SEALANT APPLICATION JS-4: INTERIOR PERIMETER JOINTS OF EXTERIOR OPENINGS.
1. JOINT SEALANT: ES-3.
E. JOINT-SEALANT APPLICATION JS-5: INTERIOR CERAMIC TILE EXPANSION, CONTROL, CONTRACTION, AND ISOLATION JOINTS IN HORIZONTAL TRAFFIC SURFACES.
1. JOINT SEALANT: ES-3.
2. JOINT-SEALANT COLOR: AS NOTED.
F. JOINT-SEALANT APPLICATION JS-6: INTERIOR JOINTS BETWEEN PLUMBING FIXTURES AND ADJOINING WALLS, FLOORS, AND COUNTERS.
1. JOINT SEALANT: ES-3.
2. JOINT-SEALANT COLOR: TRANSLUCENT.
G. JOINT-SEALANT APPLICATION JS-7: VERTICAL JOINTS ON EXPOSED SURFACES OF INTERIOR PARTITIONS.
1. JOINT SEALANT: ES-3.
H. JOINT-SEALANT APPLICATION JS-8: PERIMETER JOINTS BETWEEN INTERIOR WALL SURFACES AND FRAMES OF INTERIOR DOORS, WINDOWS.
1. JOINT SEALANT: ES-3.
I. JOINT-SEALANT APPLICATION JS-9: HVAC JOINTS.
1. JOINT SEALANT: ES-2.
2. JOINT-SEALANT COLOR: ALUMINUM.
J. JOINT-SEALANT APPLICATION JS-10: NON-POROUS MATERIAL TO NON-POROUS MATERIAL.
1. JOINT SEALANT: ES-4.
2. JOINT-SEALANT COLOR: CLEAR.

END OF SECTION 079200

DOORS AND WINDOWS

SECTION 081130 - HOLLOW METAL DOORS AND FRAMES

- 1.1 SUMMARY
A. STANDARD HOLLOW METAL DOORS AND FRAMES.
- 1.2 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED. INCLUDE CONSTRUCTION DETAILS, MATERIAL DESCRIPTIONS, CORE DESCRIPTIONS, FIRE-RESISTANCE RATING, TEMPERATURE-RISE RATINGS, AND FINISHES.
B. SHOP DRAWINGS: INCLUDE THE FOLLOWING:
1. ELEVATIONS OF EACH DOOR DESIGN.
2. DETAILS OF DOORS, INCLUDING VERTICAL AND HORIZONTAL EDGE DETAILS AND METAL THICKNESSES.
3. FRAME DETAILS FOR EACH FRAME TYPE, INCLUDING DIMENSIONED PROFILES AND METAL THICKNESSES.
4. LOCATIONS OF REINFORCEMENT AND PREPARATIONS FOR HARDWARE.
5. DETAILS OF EACH DIFFERENT WALL OPENING CONDITION.
6. DETAILS OF ANCHORAGES, JOINTS, FIELD SPLICES, AND CONNECTIONS.
7. DETAILS OF ACCESSORIES.
8. DETAILS OF MOLDINGS, REMOVABLE STOPS, AND GLAZING.
9. DETAILS OF CONDUIT AND PREPARATIONS FOR POWER, SIGNAL, AND CONTROL SYSTEMS.

- 1.3 INTERIOR FRAMES
A. STANDARD-DUTY FRAMES: SDI A250.8, LEVEL 1. AT LOCATIONS INDICATED IN THE DOOR AND FRAME SCHEDULE.
1. PHYSICAL PERFORMANCE: LEVEL C ACCORDING TO SDI A250.4.
2. FRAMES:
a. MATERIALS: UNCOATED, COLD-ROLLED STEEL SHEET, MINIMUM THICKNESS OF 0.042 INCH (1.0 MM).
b. CONSTRUCTION: KNOCKED DOWN.

- 1.4 EXTERIOR HOLLOW-METAL DOORS AND FRAMES
A. HEAVY-DUTY DOORS AND FRAMES: SDI A250.8, LEVEL 2. AT LOCATIONS INDICATED IN THE DOOR AND FRAME SCHEDULE.
1. PHYSICAL PERFORMANCE: LEVEL B ACCORDING TO SDI A250.4, UL 752 LEVEL 2 BULLET RESISTANT.
2. DOORS:
a. TYPE: AS INDICATED IN THE DOOR AND FRAME SCHEDULE.
b. THICKNESS: 1-3/4 INCHES (44.5 MM).
c. FACE: METALLIC-COATED STEEL SHEET, WITH MINIMUM A40 (ZF120) COATING.
d. EDGE CONSTRUCTION: MODEL 1, FULL FLUSH.
e. CORE: MANUFACTURER'S STANDARD KRAFT-PAPER HONEYCOMB, POLYSTYRENE, POLYURETHANE, POLYISOCYANURATE, MINERAL-BOARD, OR VERTICAL STEEL-STIFFENER CORE AT MANUFACTURER'S DISCRETION.
3. FRAMES:
a. MATERIALS: METALLIC-COATED STEEL SHEET, MINIMUM THICKNESS OF 0.053 INCH (1.3 MM), WITH MINIMUM A40 (ZF120) COATING.
B. FINISHES: FACTORY PRIMING FOR FIELD PAINTING.

- 1.5 INSTALLATION
A. METAL-STUD PARTITIONS AND CONCRETE WALLS: FRAMES FILLED WITH INSULATION.
B. MASONRY WALLS: FRAMES FILLED WITH GROUT.

END OF SECTION 081130

DOORS AND WINDOWS

SECTION 084113 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

- 1.1 PERFORMANCE REQUIREMENTS
A. DELEGATED DESIGN: CONTRACTOR TO DESIGN ALUMINUM-FRAMED SYSTEMS.
B. DEFLECTION OF FRAMING MEMBERS:
1. DEFLECTION NORMAL TO WALL PLANE: LIMITED TO L/175.
2. DEFLECTION PARALLEL TO GLAZING PLANE: LIMITED TO L/360 OR 1/8 INCH (3.2 MM), WHICHEVER IS SMALLER.
C. AIR INFILTRATION:
1. FIXED FRAMING AND GLASS AREA: MAXIMUM AIR LEAKAGE OF 0.06 CFM/SQ. FT. (0.30 L/S PER SQ. M) AT A STATIC-AIR-PRESSURE DIFFERENTIAL OF 1.57 LBF/SQ. FT. (75 PA).
2. ENTRANCE DOORS:
A. PAIR OF DOORS: MAXIMUM AIR LEAKAGE OF 1.0 CFM/SQ. FT. (5.08 L/S PER SQ. M) AT A STATIC-AIR-PRESSURE DIFFERENTIAL OF 1.57 LBF/SQ. FT. (75 PA).
B. SINGLE DOORS: MAXIMUM AIR LEAKAGE OF 0.5 CFM/SQ. FT. (2.54 L/S PER SQ. M) AT A STATIC-AIR-PRESSURE DIFFERENTIAL OF 1.57 LBF/SQ. FT. (75 PA).
- 1.2 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
B. SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, FULL-SIZE DETAILS, AND ATTACHMENTS TO OTHER WORK.
1. SHOW CONNECTION TO AND CONTINUITY WITH ADJACENT THERMAL, WEATHER, AIR, AND VAPOR BARRIERS.
C. SAMPLES: FOR EACH EXPOSED FINISH REQUIRED.
D. ENERGY PERFORMANCE CERTIFICATES.

- 1.3 MATERIALS
A. ALUMINUM: ALLOY AND TEMPER RECOMMENDED BY MANUFACTURER.
B. STEEL REINFORCEMENT.

- 1.4 SYSTEM COMPONENTS
A. FRAMING MEMBERS:
1. CONSTRUCTION: THERMALLY BROKEN.
2. GLAZING SYSTEM: GASKETS ON FOUR SIDES.
3. GLAZING PLANE: FRONT.
B. GLAZING: SECTION 088000 "GLAZING."
C. ENTRANCE DOORS:
1. DOOR CONSTRUCTION: 1-3/4-INCH (44.5-MM) OVERALL THICKNESS.
2. DOOR DESIGN: AS INDICATED.
D. ENTRANCE DOOR HARDWARE: AS SCHEDULED.

END OF SECTION 084113

DOORS AND WINDOWS

SECTION 087100 - DOOR HARDWARE

- 1.1 SUMMARY
A. COMMERCIAL DOOR HARDWARE FOR SWINGING DOORS.
B. OTHER DOORS TO THE EXTENT INDICATED.
C. CYLINDERS FOR DOORS SPECIFIED IN OTHER SECTIONS.
- 1.2 SUBMITTALS
A. PRODUCT DATA: INCLUDE CONSTRUCTION AND INSTALLATION DETAILS, MATERIAL DESCRIPTIONS, DIMENSIONS OF INDIVIDUAL COMPONENTS AND PROFILES, AND FINISHES.
- 1.3 WARRANTY
A. WARRANTY PERIOD: ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION, EXCEPT AS FOLLOWS:
1. MANUAL CLOSERS: 25 YEARS FROM DATE OF INVOICE.
2. CYLINDRICAL LOCKSETS: TWO YEARS FROM DATE OF INVOICE.
3. EXIT DEVICES: FIVE YEARS FROM DATE OF INVOICE.

- 1.4 MAINTENANCE SERVICE
A. FULL-MAINTENANCE SERVICE: SIX MONTHS.

- 1.5 PRODUCTS
A. CYLINDERS AND KEYING:
1. CONSTRUCTION KEYING: CONSTRUCTION CORES.
2. KEYING SYSTEM:
a. GRAND MASTER KEY.
b. LOCKS MASTER KEYED OR GRAND MASTER KEYED TO EXISTING SYSTEM.
c. ALL CYLINDERS KEYED ALIKE.
d. KEYS: NICKEL SILVER.
1) STAMPING: PERMANENTLY INSCRIBE EACH KEY WITH A LOCKNET KEY CONTROL NUMBER, STATE CODE, AND INCLUDE THE FOLLOWING NOTATION:
a) NOTATION: "DO NOT DUPLICATE."
2) QUANTITY: IN ADDITION TO ONE EXTRA KEY BLANK FOR EACH LOCK, PROVIDE THE FOLLOWING:
a) CYLINDER CHANGE KEYS: TWO.
b) CONSTRUCTION KEYS: FOUR.
c) MASTER KEYS: FOUR.
d) GRAND MASTER KEYS: TWO.

- 1.6 FIELD QUALITY CONTROL
A. INDEPENDENT ARCHITECTURAL HARDWARE CONSULTANT: OWNER ENGAGED TO PERFORM INSPECTIONS.
B. OCCUPANCY ADJUSTMENT: THREE MONTHS.

END OF SECTION 087100

DOORS AND WINDOWS

SECTION 088000 - GLAZING

- 1.1 SUMMARY
A. GLASS FOR WINDOWS, DOORS AND STOREFRONT FRAMING.
- 1.2 SUBMITTALS
A. PRODUCT DATA: FOR EACH PRODUCT.
B. PRODUCT CERTIFICATES: FOR GLASS.
- 1.3 MATERIALS
A. SILICONE GLAZING SEALANTS: NEUTRAL OR BASIC CURING, CLASS 50, VOC LESS THAN 250 G/L.
B. GLAZING TAPES: BACK-BEDDING-MASTICTYPE.
C. GLAZING GASKETS: DENSE COMPRESSION.
- 1.4 MONOLITHIC GLASS SCHEDULE
A. GLASS TYPE [GL-<1>]: LOW-E-COATED, CLEAR INSULATING GLASS.
1. OUTDOOR LITE: ANNEALED FLOAT GLASS.
2. INDOOR LITE: ANNEALED FLOAT GLASS.
B. GLASS TYPE [GL-<2>]: LOW-E-COATED, CLEAR INSULATING GLASS.
1. OUTDOOR LITE: FULLY TEMPERED FLOAT GLASS.
2. INDOOR LITE: FULLY TEMPERED FLOAT GLASS.

END OF SECTION 088000

FINISHES

SECTION 092216 - NON-STRUCTURAL STEEL FRAMING

- 1.1 SUMMARY
A. NON-LOAD-BEARING STEEL FRAMING MEMBERS FOR INTERIOR FRAMING SYSTEMS.
- 1.2 MATERIALS
A. STEEL FRAMING FOR FRAMED ASSEMBLIES:
B. FRAMING MEMBERS, GENERAL: COMPLY WITH ASTM C 754 FOR CONDITIONS INDICATED.
1. STEEL SHEET COMPONENTS: COMPLY WITH ASTM C 645 REQUIREMENTS FOR METAL, UNLESS OTHERWISE INDICATED.
2. PROTECTIVE COATING: COATING WITH EQUIVALENT CORROSION RESISTANCE OF ASTM A 653/A 653M, G40 (Z120), HOT-DIP GALVANIZED, UNLESS OTHERWISE INDICATED.
- 1.3 STEEL FRAMING FOR FRAMED ASSEMBLIES
A. SALVAGED MATERIAL: USE SALVAGED FRAMING MATERIALS WHENEVER AVAILABLE.
B. STEEL STUDS AND RUNNERS: ASTM C 645.
1. MINIMUM BASE-METAL THICKNESS: 0.033 INCH (0.84 MM) UNLESS OTHERWISE INDICATED ON DRAWINGS.
2. DEPTH: AS INDICATED ON DRAWINGS.
C. DIMPLED STEEL STUDS AND RUNNERS:
1. MINIMUM BASE-METAL THICKNESS: 0.025 INCH (0.64 MM).
2. DEPTH: AS INDICATED ON DRAWINGS.
D. SLIP-TYPE HEAD JOINTS: WHERE INDICATED, PROVIDE ONE OF THE FOLLOWING:
1. SINGLE LONG-LEG RUNNER SYSTEM: ASTM C 645 TOP RUNNER WITH 2-INCH- (50.8-MM-) DEEP FLANGES IN THICKNESS NOT LESS THAN INDICATED FOR STUDS, INSTALLED WITH STUDS FRICTION FIT INTO TOP RUNNER AND WITH CONTINUOUS BRIDGING LOCATED WITHIN 12 INCHES (305 MM) OF THE TOP OF STUDS TO PROVIDE LATERAL BRACING.
2. DOUBLE-RUNNER SYSTEM: ASTM C 645 TOP RUNNERS, INSIDE RUNNER WITH 2-INCH- (50.8-MM-) DEEP FLANGES IN THICKNESS NOT LESS THAN INDICATED FOR STUDS AND FASTENED TO STUDS, AND OUTER RUNNER SIZED TO FRICTION FIT INSIDE RUNNER.
3. DEFLECTION TRACK: STEEL SHEET TOP RUNNER MANUFACTURED TO PREVENT CRACKING OF FINISHES APPLIED TO INTERIOR PARTITION FRAMING RESULTING FROM DEFLECTION OF STRUCTURE ABOVE; IN THICKNESS NOT LESS THAN INDICATED FOR STUDS AND IN WIDTH TO ACCOMMODATE DEPTH OF STUDS.
E. COLD-ROLLED CHANNEL BRIDGING: 0.0538-INCH (1.37-MM) BARE-STEEL THICKNESS, WITH MINIMUM 1/2-INCH- (12.7-MM-) WIDE FLANGES.
1. DEPTH: 1-1/2 INCHES (38.1 MM).
2. CLIP ANGLE: NOT LESS THAN 1-1/2 BY 1-1/2 INCHES (38.1 BY 38.1 MM), 0.068-INCH- (1.73-MM-) THICK, GALVANIZED STEEL.
F. HAT-SHAPED RIGID FURRING CHANNELS: ASTM C 645.
1. MINIMUM BASE-METAL THICKNESS: AS INDICATED ON DRAWINGS.
2. DEPTH: AS INDICATED ON DRAWINGS.
G. COLD-ROLLED FURRING CHANNELS: 0.0538-INCH (1.37-MM) BARE-STEEL THICKNESS, WITH MINIMUM 1/2-INCH- (12.7-MM-) WIDE FLANGES.
1. DEPTH: AS INDICATED ON DRAWINGS.
2. FURRING BRACKETS: ADJUSTABLE, CORRUGATED-EDGE TYPE OF STEEL SHEET WITH MINIMUM BARE-STEEL THICKNESS OF 0.0312 INCH (0.79 MM).
3. TIE WIRE: ASTM A 641/A 641M, CLASS 1 ZINC COATING, SOFT TEMPER, 0.0625-INCH- (1.59-MM-) DIAMETER WIRE, OR DOUBLE STRAND OF 0.0475-INCH- (1.21-MM-) DIAMETER WIRE.
H. Z-SHAPED FURRING: WITH SLOTTING OR NON-SLOTTED WEB, FACE FLANGE OF 1-1/4 INCHES (31.8 MM), WALL ATTACHMENT FLANGE OF 7/8 INCH (22.2 MM), MINIMUM BARE-METAL THICKNESS OF 0.0179 INCH (0.45 MM), AND DEPTH REQUIRED TO FIT INSULATION THICKNESS INDICATED.

END OF SECTION 092216

FINISHES

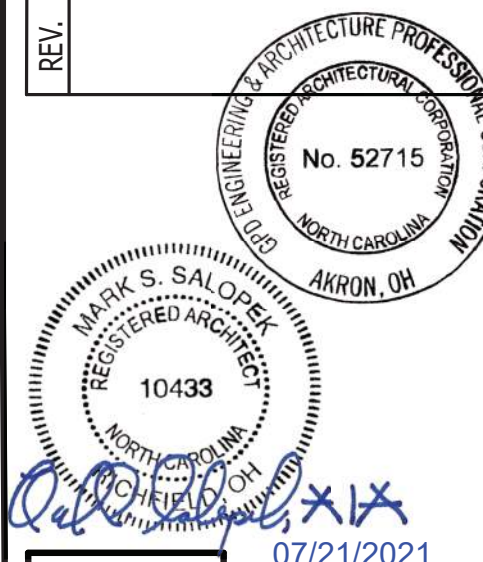
SECTION 092400 - PORTLAND CEMENT PLASTERING

- 1.1 SUBMITTALS
A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
B. SAMPLES FOR VERIFICATION: FOR EACH TYPE OF FACTORY-PREPARED FINISH COAT INDICATED; 12 BY 12 INCHES (305 BY 305 MM), AND PREPARED ON RIGID BACKING.
- 1.2 MATERIALS
A. METAL LATH:
1. EXPANDED-METAL LATH: SELF-FURRING DIAMOND-MESH WITH HOT-DIP GALVANIZED-ZINC COATING.
2. WELDED-WIRE LATH: SELF-FURRING.
3. PAPER BACKING: PROVIDE AT EXTERIOR LOCATIONS.
B. ACCESSORIES:
1. FOUNDATION WEEP SCREED: HOT-DIP GALVANIZED STEEL SHEET.
2. CORNERITE: FABRICATED FROM METAL LATH WITH HOT-DIP GALVANIZED-ZINC COATING.
3. EXTERNAL-OUTSIDE-CORNER REINFORCEMENT: FABRICATED FROM METAL LATH WITH HOT-DIP GALVANIZED-ZINC COATING.
4. CASING BEADS: FABRICATED FROM ZINC OR ZINC-COATED (GALVANIZED) STEEL, SQUARE-EDGED STYLE; WITH EXPANDED FLANGES.
5. CONTROL JOINTS: FABRICATED FROM ZINC OR ZINC-COATED (GALVANIZED) STEEL; ONE-PIECE-TYPE, FOLDED PAIR OF UNPERFORATED SCREEDS IN M-SHAPED CONFIGURATION; WITH PERFORATED FLANGES AND REMOVABLE PROTECTIVE TAPE ON PLASTER FACE OF CONTROL JOINT.
6. EXPANSION JOINTS: FABRICATED FROM ZINC OR ZINC-COATED (GALVANIZED) STEEL; FOLDED PAIR OF UNPERFORATED SCREEDS IN M-SHAPED CONFIGURATION; WITH EXPANDED FLANGES.
7. TWO-PIECE EXPANSION JOINTS: FABRICATED FROM ZINC OR ZINC-COATED (GALVANIZED) STEEL, FORMED TO PRODUCE SLIP-JOINT AND SQUARE-EDGED REVEAL THAT IS ADJUSTABLE FROM 1/4 TO 5/8 INCH (6 TO 16 MM) WIDE; WITH PERFORATED FLANGES.
C. FIBER FOR BASE COAT: ALKALINE-RESISTANT GLASS OR POLYPROPYLENE FIBERS, 1/2 INCH (13 MM) LONG, FREE OF CONTAMINANTS, MANUFACTURED FOR USE IN CEMENT PLASTER.
D. WIRE: ASTM A 641/A 641M, CLASS 1 ZINC COATING, SOFT TEMPER, NOT LESS THAN 0.0475-INCH (1.21-MM) DIAMETER UNLESS OTHERWISE INDICATED.
E. PLASTER MATERIALS: PORTLAND CEMENT WITH SAND AGGREGATE.
F. COLORANTS FOR JOB-MIXED FINISH COATS: COLORFAST MINERAL PIGMENTS THAT PRODUCE FINISH PLASTER COLOR.
G. PLASTER MIXES: ASTM C 926.

- 1.3 INSTALLATION:
A. PLASTER FINISH COATS: APPLY TO PROVIDE SMOOTH TEXTURED FINISH.

END OF SECTION 092400

REV.	DATE	DESCRIPTION



07/21/2021

SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

SPECIFICATIONS

PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
	-/-/-
RECORD	DATE
	-/-/-

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

G0011

FINISHES

SECTION 092900 - GYPSUM BOARD

- 1.1 SUMMARY
 - A. INTERIOR GYPSUM BOARD.
 - B. TILE BACKING PANELS.
- 1.2 SUBMITTALS
 - A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
 - B. SAMPLES: FOR THE FOLLOWING PRODUCTS:
 1. TEXTURED FINISHES: MANUFACTURER'S STANDARD SIZE FOR EACH TEXTURED FINISH INDICATED AND ON SAME BACKING INDICATED FOR WORK.
- 1.3 MATERIALS
 - A. INTERIOR GYPSUM BOARD:
 1. GENERAL: COMPLYING WITH ASTM C 36/C 36M OR ASTM C 1396/C 1396M, AS APPLICABLE TO TYPE OF GYPSUM BOARD INDICATED AND WHICHEVER IS MORE STRINGENT.
 - a. MUST BE CERTIFIED AS LOW EMITTING. CERTIFICATION MUST BE BASED UPON THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES STANDARD PRACTICE FOR THE TESTING OF VOLATILE ORGANIC EMISSIONS FROM VARIOUS SOURCES USING SMALL-SCALE ENVIRONMENTAL CHAMBERS, INCLUDING 2004 ADDENDA OR A JURISDICTIONALLY RECOGNIZED STANDARD USING EQUIVALENT TESTING METHODOLOGIES AND VOC THRESHOLDS.
 2. TYPE X:
 - a. THICKNESS: 5/8 INCH (15.9 MM).
 - b. LONG EDGES: TAPERED.
 3. MOISTURE- AND MOLD-RESISTANT TYPE: WITH MOISTURE- AND MOLD-RESISTANT CORE AND SURFACES.
 - a. CORE: 5/8 INCH (15.9 MM), TYPE X.
 - b. LONG EDGES: TAPERED.
 - c. MOLD RESISTANCE: ASTM D 3273, SCORE OF 10 AS RATED ACCORDING TO ASTM D 3274.
 - B. TILE-BACKING PANELS:
 1. GLASS-MAT, WATER-RESISTANT BACKING BOARD: ASTM C 1178/C 1178M, WITH MANUFACTURER'S STANDARD EDGES.
 - a. MUST BE CERTIFIED AS LOW EMITTING. CERTIFICATION MUST BE BASED UPON THE CALIFORNIA DEPARTMENT OF HEALTH SERVICES STANDARD PRACTICE FOR THE TESTING OF VOLATILE ORGANIC EMISSIONS FROM VARIOUS SOURCES USING SMALL-SCALE ENVIRONMENTAL CHAMBERS, INCLUDING 2004 ADDENDA OR A JURISDICTIONALLY RECOGNIZED STANDARD USING EQUIVALENT TESTING METHODOLOGIES AND VOC THRESHOLDS.
 - b. CORE: 5/8 INCH (15.9 MM), TYPE X.
 - c. MOLD RESISTANCE: ASTM D 3273, SCORE OF 10 AS RATED ACCORDING TO ASTM D 3274.
 2. CEMENTITIOUS BACKER UNITS: ANSI A118.9 AND ASTM C 1288 OR 1325, WITH MANUFACTURER'S STANDARD EDGES.
 - a. THICKNESS: 1/4 INCH (6.4 MM).
 - b. MOLD RESISTANCE: ASTM D 3273, SCORE OF 10 AS RATED ACCORDING TO ASTM D 3274.
 - C. TRIM ACCESSORIES:
 - a. INTERIOR: CORNERBEAD.

END OF SECTION 092900

FINISHES

SECTION 099113 - EXTERIOR PAINTING

- 1.1 SUMMARY
 - A. SURFACE PREPARATION AND THE APPLICATION OF PAINT SYSTEMS ON EXTERIOR SUBSTRATES.
- 1.2 SUBMITTALS
 - A. SAMPLES FOR VERIFICATION:
 1. FOR EACH NON-STANDARD LATEX TOPCOAT COLOR AND GLOSS INDICATED.
 2. FOR EACH TYPE OF NON-STANDARD PAINT SYSTEM AND IN EACH COLOR AND GLOSS OF TOPCOAT INDICATED.
- 1.3 EXTERIOR PAINTING SCHEDULE
 - A. CONCRETE SUBSTRATES, NONTRAFFIC SURFACES:
 1. LATEX SYSTEM:
 - a. PRIME COAT: LATEX, EXTERIOR, MATCHING TOPCOAT.
 - b. TOPCOAT: LATEX, EXTERIOR (GLOSS LEVEL AS INDICATED IN PAINT SCHEDULE).
 - B. CLAY-MASONRY SUBSTRATES:
 1. LATEX SYSTEM:
 - a. PRIME COAT: LATEX, EXTERIOR, MATCHING TOPCOAT.
 - b. TOPCOAT: LATEX, EXTERIOR (GLOSS LEVEL AS INDICATED IN PAINT SCHEDULE).
 - C. CMU SUBSTRATES:
 1. LATEX SYSTEM:
 - a. PRIME COAT: BLOCK FILLER, LATEX, INTERIOR/EXTERIOR.
 - b. TOPCOAT: LATEX, EXTERIOR (GLOSS LEVEL AS INDICATED IN PAINT SCHEDULE).
 - D. STEEL SUBSTRATES:
 1. WATER-BASED LIGHT INDUSTRIAL COATING SYSTEM:
 - a. PRIME COAT: PRIMER, ALKYL, ANTI-CORROSIVE FOR METAL.
 - b. TOPCOAT: LIGHT INDUSTRIAL COATING, EXTERIOR, WATER BASED (GLOSS LEVEL AS INDICATED IN PAINT SCHEDULE).
 - E. GALVANIZED-METAL SUBSTRATES:
 1. LATEX SYSTEM:
 - a. PRIME COAT: PRIMER, GALVANIZED, WATER BASED.
 - b. TOPCOAT: LATEX, EXTERIOR (GLOSS LEVEL AS INDICATED IN PAINT SCHEDULE).
 - F. ALUMINUM SUBSTRATES:
 1. LATEX SYSTEM:
 - a. PRIME COAT: PRIMER, QUICK DRY, FOR ALUMINUM.
 - b. TOPCOAT: LATEX, EXTERIOR (GLOSS LEVEL AS INDICATED IN PAINT SCHEDULE).
 - G. WOOD, NONTRAFFIC SURFACES:
 1. LATEX SYSTEM:
 - a. PRIME COAT: PRIMER, LATEX FOR EXTERIOR WOOD.
 - b. TOPCOAT: LATEX, EXTERIOR (GLOSS LEVEL AS INDICATED IN PAINT SCHEDULE).
 - H. WOOD, TRAFFIC SURFACES:
 1. LATEX SYSTEM:
 - a. PRIME COAT: PRIMER, LATEX FOR EXTERIOR WOOD.
 - b. TOPCOAT: INTERIOR/EXTERIOR LATEX FLOOR AND PORCH (LOW GLOSS).
 - 1) WITH ADDITIVE TO INCREASE SKID RESISTANCE OF PAINTED SURFACE.
 - I. PORTLAND CEMENT PLASTER SUBSTRATES:
 1. LATEX SYSTEM:
 - a. PRIME COAT: LATEX, EXTERIOR, MATCHING TOPCOAT.
 - b. TOPCOAT: LATEX, EXTERIOR (GLOSS LEVEL AS INDICATED IN PAINT SCHEDULE).

END OF SECTION 099113

PLUMBING

SECTION 220516 - EXPANSION FITTINGS AND LOOPS FOR PLUMBING PIPING

- 1.1 REQUIREMENTS
 - A. PROVIDE FOR EXPANSION OF PLUMBING PIPING IN ACCORDANCE WITH INDUSTRY STANDARDS AND GOOD INSTALLATION PRACTICES.

END OF SECTION 220516

PLUMBING

SECTION 220517 - SLEEVES AND SLEEVE SEALS FOR PLUMBING PIPING

- 1.1 SLEEVE-SEAL SYSTEMS
 - A. FIELD-ASSEMBLED, MODULAR SEALING-ELEMENT UNIT FOR FILLING ANNULAR SPACE BETWEEN PIPING AND SLEEVE.
 1. SEALING ELEMENTS: EPDM RUBBER.
 2. PRESSURE PLATES: CARBON STEEL.
 3. CONNECTING BOLTS AND NUTS: CARBON STEEL WITH CORROSION-RESISTANT COATING.
- 1.2 SLEEVE-SEAL FITTINGS
 - A. MANUFACTURED PLASTIC, SLEEVE-TYPE, PLASTIC OR RUBBER WATERSTOP ASSEMBLY MADE FOR IMBEDDING IN CONCRETE SLAB OR WALL.
- 1.3 GROUT
 - A. NONSHRINK, FACTORY PACKAGED.
- 1.4 SLEEVE AND SLEEVE-SEAL SCHEDULE
 - A. EXTERIOR CONCRETE WALLS ABOVE GRADE:
 1. PIPING SMALLER THAN NPS 6 (DN 150): CAST-IRON WALL SLEEVES.
 - B. EXTERIOR CONCRETE WALLS BELOW GRADE:
 1. PIPING SMALLER THAN NPS 6 (DN 150): CAST-IRON WALL SLEEVES WITH SLEEVE-SEAL SYSTEM.
 - C. CONCRETE SLABS-ON-GRADE:
 1. PIPING SMALLER THAN NPS 6 (DN 150): CAST-IRON WALL SLEEVES WITH SLEEVE-SEAL SYSTEM.
 - D. INTERIOR PARTITIONS:
 1. PIPING SMALLER THAN NPS 6 (DN 150): GALVANIZED-STEEL-PIPE SLEEVES.

END OF SECTION 220517

PLUMBING

SECTION SECTION 220519 - METERS AND GAGES FOR PLUMBING PIPING

- 1.1 PRODUCTS
 - A. LIQUID-IN-GLASS THERMOMETERS:
 1. COMPACT-STYLE, LIQUID-IN-GLASS THERMOMETERS:
 - a. CASE: CAST ALUMINUM, 6-INCH (152-MM) SIZE.
 - b. CASE FORM: BACK ANGLE.
 - c. TUBE: GLASS WITH MAGNIFYING LENS AND BLUE ORGANIC LIQUID.
 - d. TUBE BACKGROUND: NONREFLECTIVE ALUMINUM WITH ETCHED SCALE IN DEG F (DEG C).
 - B. THERMOWELLS:
 1. MATERIAL FOR USE WITH COPPER TUBING: CNR.
 2. MATERIAL FOR USE WITH STEEL PIPING: CSA.
 3. TYPE: STEPPED SHANK UNLESS STRAIGHT OR TAPERED SHANK IS INDICATED.
 4. HEAT-TRANSFER MEDIUM: MIXTURE OF GRAPHITE AND GLYCERIN.
 - C. PRESSURE GAGES:
 1. DIRECT-MOUNTED, METAL-CASE, DIAL-TYPE PRESSURE GAGES:
 - a. CASE: OPEN-FRONT, PRESSURE RELIEF TYPE (S); CAST ALUMINUM OR DRAWN STEEL; 4-1/2-INCH (114-MM) DIAMETER.
 - b. PRESSURE-ELEMENT ASSEMBLY: BOURDON TUBE UNLESS OTHERWISE INDICATED.
 - c. PRESSURE CONNECTION: BRASS, WITH NPS 1/4 (DN 8), ASME B1.20.1 PIPE THREADS AND BOTTOM-OUTLET TYPE UNLESS BACK-OUTLET TYPE IS INDICATED.
 - d. DIAL: NONREFLECTIVE ALUMINUM WITH ETCHED SCALE IN PSI (KPA).
 - e. WINDOW: GLASS.
 - f. RING: METAL.
 - g. ACCURACY: GRADE A, PLUS OR MINUS 1 PERCENT OF MIDDLE HALF OF SCALE RANGE.
 - D. GAGE ATTACHMENTS:
 1. SNUBBERS: BRASS, WITH NPS 1/4 (DN 8), AND PISTON-TYPE SURGE-DAMPENING DEVICE. INCLUDE EXTENSION FOR USE ON INSULATED PIPING.
 2. VALVES: BRASS BALL, WITH NPS 1/4 (DN 8), PIPE THREADS.

END OF SECTION 220519

PLUMBING

SECTION 220523 - GENERAL DUTY VALVES FOR PLUMBING PIPING

- 1.1 DOMESTIC HOT- AND COLD-WATER VALVES
 - A. PIPE NPS 2 (DN 50) AND SMALLER:
 1. TWO-PIECE, BRASS BALL VALVES WITH FULL PORT, BRASS TRIM, AND LEAD FREE.
 2. THREE-PIECE, BRASS BALL VALVES WITH FULL PORT, BRASS TRIM, AND LEAD FREE.
 3. BRONZE SWING CHECK VALVES, CLASS 125, BRONZE DISC WITH THREADED END CONNECTIONS, AND LEAD FREE.
 4. BRONZE GATE VALVES, CLASS 125, NRS WITH THREADED ENDS, AND LEAD FREE.

END OF SECTION 220523

PLUMBING

SECTION 220529 - HANGERS AND SUPPORTS FOR PLUMBING PIPING

- 1.1 COMPONENTS
 - A. METAL PIPE HANGERS AND SUPPORTS: FACTORY FABRICATED WITH GALVANIZED COATING, NON-METALLIC COATED FOR HANGERS IN DIRECT CONTACT WITH COPPER TUBING.
 - B. THERMAL-HANGER SHIELD INSERTS: ASTM C 552, TYPE II CELLULAR GLASS.
 - C. FASTENER SYSTEMS: POWDER-ACTUATED FASTENERS.
 - D. PIPE POSITIONING SYSTEMS: IAPMO PS 42, POSITIONING SYSTEM OF METAL BRACKETS, CLIPS, AND STRAPS.
 - E. SUPPORTS FOR PEX PIPING SHALL BE MANUFACTURER APPROVED.

END OF SECTION 220529

PLUMBING

SECTION 220553 - IDENTIFICATION FOR PLUMBING PIPING AND EQUIPMENT

- 1.1 PRODUCTS
 - A. EQUIPMENT LABELS: METAL.
 - B. WARNING SIGNS AND LABELS: 1/16 INCH (1.6 MM) THICK AND NOT LESS THAN 2-1/2 BY 3/4 INCH (64 BY 19 MM) SIZE WITH FASTENERS. LETTER SIZE NOT LESS THAN 1/4 INCH (6.4 MM) FOR NAME OF UNITS IF VIEWING DISTANCE IS LESS THAN 24 INCHES (600 MM), 1/2 INCH (13 MM) FOR VIEWING DISTANCES UP TO 72 INCHES (1830 MM), AND PROPORTIONATELY LARGER LETTERING FOR GREATER VIEWING DISTANCES. INCLUDE SECONDARY LETTERING TWO-THIRDS TO THREE-QUARTERS THE SIZE OF PRINCIPAL LETTERING.
 - C. PIPE LABELS: PRETENSIONED, LETTER SIZE NOT LESS THAN 1/2 INCH (13 MM) FOR VIEWING DISTANCES UP TO 72 INCHES (1830 MM) AND PROPORTIONATELY LARGER LETTERING FOR GREATER VIEWING DISTANCES.
 - D. STENCILS: ALUMINUM, LETTER SIZE NOT LESS THAN 1/2 INCH (13 MM) FOR VIEWING DISTANCES UP TO 72 INCHES (1830 MM) AND PROPORTIONATELY LARGER LETTERING FOR GREATER VIEWING DISTANCES.
 - E. VALVE TAGS: BRASS, 0.032-INCH (0.8-MM) MINIMUM THICKNESS.
 - F. WARNING TAGS: 3 BY 5-1/4 INCHES (75 BY 133 MM) MINIMUM; BRASS GROMMET AND WIRE FASTENERS.

END OF SECTION 220553

PLUMBING

SECTION 220719 - PLUMBING PIPING INSULATION

- 1.1 QUALITY ASSURANCE
 - A. SURFACE-BURNING CHARACTERISTICS: FLAME-SPREAD INDEX OF 25, AND SMOKE-DEVELOPED INDEX OF 50 FOR INSULATION INSTALLED INDOORS; ACCORDING TO ASTM E 84.
- 1.2 PIPING INSULATION SCHEDULE, GENERAL
 - A. ITEMS NOT INSULATED: UNLESS OTHERWISE INDICATED, DO NOT INSTALL INSULATION ON THE FOLLOWING:
 1. DRAINAGE PIPING LOCATED IN CRAWL SPACES.
 2. BELOW-GRADE DRAINAGE PIPING.
 3. CHROME-PLATED PIPES AND FITTINGS UNLESS THERE IS A POTENTIAL FOR PERSONNEL INJURY.
- 1.3 INDOOR PIPING INSULATION SCHEDULE
 - A. DOMESTIC COLD WATER: FLEXIBLE ELASTOMERIC, MINERAL-FIBER, PREFORMED PIPE INSULATION, TYPE I OR PHENOLIC.
 - B. DOMESTIC HOT AND RECIRCULATED HOT WATER: FLEXIBLE ELASTOMERIC, MINERAL-FIBER, PREFORMED PIPE INSULATION, TYPE I OR PHENOLIC.
 - C. STORMWATER AND OVERFLOW: 1/2" MINIMUM, CELLULAR GLASS, FLEXIBLE ELASTOMERIC, MINERAL-FIBER, PREFORMED PIPE INSULATION, TYPE I, PHENOLIC OR POLYOLEFIN.
 - D. ROOF DRAIN AND OVERFLOW DRAIN BODIES: 1/2" MINIMUM, CELLULAR GLASS, FLEXIBLE ELASTOMERIC, MINERAL-FIBER, PREFORMED PIPE INSULATION, TYPE I, PHENOLIC OR POLYOLEFIN.
 - E. HOT SERVICE DRAINS: CELLULAR GLASS OR MINERAL-FIBER, PREFORMED PIPE, TYPE I OR II.
 - F. ICE BIN DRAIN: INSULATE DRAIN LINES WITH 1/2" (13MM) THICK SELF-SEALING, SECTIONAL, CLOSED CELL FOAM.
 - G. DOMESTIC COLD AND HOT WATER IN CASEWORK AND BAR AREAS: FLEXIBLE ELASTOMERIC, MINERAL-FIBER, PREFORMED PIPE INSULATION, TYPE I OR PHENOLIC.

- 1.4 OUTDOOR, ABOVEGROUND PIPING INSULATION SCHEDULE
 - A. DOMESTIC WATER PIPING: FLEXIBLE ELASTOMERIC, MINERAL-FIBER, PREFORMED PIPE INSULATION, TYPE I OR PHENOLIC.

- 1.5 INDOOR, FIELD-APPLIED JACKET SCHEDULE
 - A. PIPING, CONCEALED: ALUMINUM.
 - B. PIPING, EXPOSED: ALUMINUM.

END OF SECTION 220719

PLUMBING

SECTION 221116 - DOMESTIC WATER PIPING

- 1.1 INFORMATIONAL SUBMITTALS
 - A. SYSTEM PURGING AND DISINFECTING ACTIVITIES REPORT.
 - B. FIELD QUALITY-CONTROL REPORTS.
- 1.2 FIELD CONDITIONS
 - A. INTERRUPTION OF EXISTING WATER SERVICE: DO NOT INTERRUPT WATER SERVICE TO FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY WATER SERVICE ACCORDING TO REQUIREMENTS INDICATED:
 1. NOTIFY CONSTRUCTION MANAGER NO FEWER THAN TWO DAYS IN ADVANCE OF PROPOSED INTERRUPTION OF WATER SERVICE.
 2. DO NOT INTERRUPT WATER SERVICE WITHOUT CONSTRUCTION MANAGER'S WRITTEN PERMISSION.
- 1.3 PIPING MATERIALS
 - A. POTABLE-WATER PIPING AND COMPONENTS SHALL COMPLY WITH NSF 14 AND NSF 61 ANNEX G. PLASTIC PIPING COMPONENTS SHALL BE MARKED WITH "NSF-PW".
- 1.4 UNDER-BUILDING-SLAB, DOMESTIC WATER, BUILDING SERVICE PIPING
 - A. PIPE NPS 3 (DN 80) AND SMALLER:
 1. SOFT COPPER TUBE; WROUGHT-COPPER; AND BRAZED JOINTS.
 2. OTHER APPROVED PIPING WHEN SOIL IS CORROSIIVE.
- 1.5 UNDER-BUILDING-SLAB, DOMESTIC WATER PIPING
 - A. PIPE NPS 2 (DN 50) AND SMALLER:
 1. HARD COPPER TUBE; WROUGHT-COPPER; AND BRAZED JOINTS.
 2. OTHER APPROVED PIPING WHEN SOIL IS CORROSIIVE.
- 1.6 ABOVE GROUND DOMESTIC WATER PIPING
 - A. PIPE NPS 2 (DN 50) AND SMALLER:
 1. HARD COPPER TUBE; WROUGHT-COPPER; SOLDER-JOINT FITTINGS; AND SOLDERED JOINTS WITH NON-LEAD, NON-ANTIMONY SOLDER.

END OF SECTION 221116

PLUMBING

SECTION 221119 - DOMESTIC WATER PIPING SPECIALTIES

- 1.1 QUALITY ASSURANCE
 - A. QUALITY STANDARDS: NSF 14 AND NSF 61.
- 1.2 PRODUCTS
 - A. BACKFLOW PREVENTERS:
 1. REDUCED-PRESSURE-PRINCIPLE BACKFLOW PREVENTERS:
 - a. BODY: BRONZE FOR NPS 2 (DN 50) AND SMALLER.
 - b. END CONNECTIONS: THREADED FOR NPS 2 (DN 50) AND SMALLER.
 - c. CONFIGURATION: HORIZONTAL, STRAIGHT THROUGH.
 2. DOUBLE-CHECK BACKFLOW-PREVENTION ASSEMBLIES:
 - a. BODY: BRONZE FOR NPS 2 (DN 50) AND SMALLER.
 - b. END CONNECTIONS: THREADED FOR NPS 2 (DN 50) AND SMALLER.
 - c. CONFIGURATION: HORIZONTAL, STRAIGHT THROUGH.
 3. HOSE-CONNECTION BACKFLOW PREVENTERS.
 - B. WATER PRESSURE-REDUCING VALVES:
 1. WATER REGULATORS:
 - a. BODY: BRONZE FOR NPS 2 (DN 50) AND SMALLER.
 - b. VALVES FOR BOOSTER HEATER WATER SUPPLY: INCLUDE INTEGRAL BYPASS.
 - c. END CONNECTIONS: THREADED FOR NPS 2 (DN 50) AND SMALLER.
 - C. STRAINERS FOR DOMESTIC WATER PIPING:
 1. BODY: BRONZE FOR NPS 2 (DN 50) AND SMALLER; CAST IRON WITH INTERIOR LINING AND EPOXY COATING FOR NPS 2-1/2 (DN 65) AND LARGER.
 2. CONNECTIONS: THREADED FOR NPS 2 (DN 50) AND SMALLER; FLANGED FOR NPS 2-1/2 (DN 65) AND LARGER.
 3. SCREEN: STAINLESS STEEL WITH ROUND PERFORATIONS UNLESS OTHERWISE INDICATED.
 4. DRAIN: PIPE PLUG.
 - D. WALL HYDRANTS:
 1. NONFREEZE WALL HYDRANTS:
 - a. OUTLET: CONCEALED.
 - b. FINISH: CHROME PLATED.
 2. NONFREEZE, HOT- AND COLD-WATER WALL HYDRANTS:
 - a. OUTLET: CONCEALED.
 - b. FINISH: CHROME PLATED.
 3. MODERATE-CLIMATE WALL HYDRANTS:
 - a. OUTLET: CONCEALED.
 - b. FINISH: CHROME PLATED.
 4. VACUUM BREAKER WALL HYDRANTS: LOOSE KEY.
 - E. POST HYDRANTS:
 1. NONFREEZE, DRAINING-TYPE POST HYDRANTS.
 2. NONFREEZE, NONDRAINING-TYPE POST HYDRANTS.
 3. FREEZE-RESISTANT SANITARY YARD HYDRANTS: ZINC-PLATED STEEL CANISTER.
 - F. DRAIN VALVES: BALL-VALVE TYPE.

END OF SECTION 221119

PLUMBING

SECTION 221316 - SANITARY WASTE AND VENT PIPING

- 1.1 PROJECT CONDITIONS
 - A. INTERRUPTION OF EXISTING SANITARY WASTE SERVICE: DO NOT INTERRUPT SERVICE TO FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY SERVICE ACCORDING TO REQUIREMENTS INDICATED:
 1. NOTIFY CONSTRUCTION MANAGER NO FEWER THAN TWO DAYS IN ADVANCE OF PROPOSED INTERRUPTION OF SANITARY WASTE SERVICE.
 2. DO NOT PROCEED WITH INTERRUPTION OF SANITARY WASTE SERVICE WITHOUT CONSTRUCTION MANAGER'S WRITTEN PERMISSION.
- 1.2 MATERIALS
 - A. HUB-AND-SPIGOT, SERVICE-CLASS, SCHEDULE 40 PVC SOIL PIPE AND FITTINGS BELOW GRADE WHERE REQUIRED BY LOCAL CODE.
 - B. HUBLESS, SCHEDULE 40 PVC SOIL PIPE AND CISIP, HUBLESS PIPING COUPLINGS.
 - C. SOLID-WALL SCHEDULE 40 ABS PIPE WITH ABS SOCKET FITTINGS MAY BE USED ABOVE AND BELOW GRADE IF ALLOWED BY LOCAL CODE.
 - D. UNSHIELDED, NONPRESSUREPRESSURE TRANSITION COUPLINGS.
 - E. FLANGE DIELECTRIC FITTINGS.
 - F. PE-FILM ENCASUREMENT FOR UNDERGROUND METAL PIPING.
 - G. SCHEDULE 40 PVC PIPE WITH PVC SOCKET FITTING MAY BE USED BELOW GRADE IF ALLOWED BY LOCAL AUTHORITY.

- 1.3 ADHESIVES
 - A. ADHESIVES SHALL NOT EXCEED A VOC CONTENT OF 510G/L FOR PVC AND 325 G/L FOR ABS.

END OF SECTION 221316

PLUMBING

SECTION 221319 - SANITARY WASTE PIPING SPECIALTIES

- 1.1 QUALITY ASSURANCE
 - A. QUALITY STANDARD FOR PLASTIC PIPING: NSF 14.
- 1.3 PRODUCTS
 - A. CLEANOUTS:
 1. EXPOSED: COUNTERSUNK, BRASS CLOSURE PLUG.
 2. CERAMIC TILE AND CARPETED FLOORS: SQUARE, ADJUSTABLE WITH NICKEL BRONZE TOP.
 3. RESILIENT (VINYL) FLOOR: SQUARE, ADJUSTABLE, NICKEL BRONZE TOP WITH COMPATIBLE FLANGE.
 - B. THROUGH-PENETRATION FIRESTOP ASSEMBLIES: LISTED AND LABELED ASSEMBLY OF SLEEVE AND STACK FITTING WITH FIRESTOPPING PLUG.
 - C. MISCELLANEOUS SANITARY DRAINAGE PIPING SPECIALTIES:
 1. COUNTERFLASHING-TYPE, SCHEDULE 40 PVC STACK FLASHING FITTINGS.
 2. SCHEDULE 40 PVC BODY VENT CAPS.
 3. FROST-RESISTANT VENT TERMINALS.
 4. EXPANSION JOINTS.

END OF SECTION 221319

HEATING, VENTILATING AND AIR CONDITIONING

SECTION 230548 - VIBRATION AND SEISMIC CONTROLS FOR HVAC

- 1.1 COMPONENTS
 - A. VIBRATION ISOLATORS:
 1. OPEN-SPRING ISOLATORS: FREESTANDING, LATERALLY STABLE.
 2. PIPE-RISER RESILIENT SUPPORT: ALL-DIRECTIONAL, ACOUSTICAL PIPE ANCHOR.
 3. RESILIENT PIPE GUIDES.
 4. RESTRAINED-AIR-SPRING ISOLATORS: FREESTANDING, SINGLE OR MULTIPLE, COMPRESSED-AIR BELLOWS WITH VERTICAL-LIMIT STOP RESTRAINT.
 5. ELASTOMERIC HANGERS.
 6. SPRING HANGERS: COMBINATION COIL-SPRING AND ELASTOMERIC-INSERT HANGERS WITH SPRING AND INSERT IN COMPRESSION AND WITH VERTICAL-LIMIT STOP.
 - B. VIBRATION ISOLATION EQUIPMENT BASES:
 1. STEEL BASE: FACTORY-FABRICATED, WELDED, STRUCTURAL-STEEL BASES AND RAILS.
 2. INERTIA BASE: FACTORY-FABRICATED, WELDED, STRUCTURAL-STEEL BASES AND RAILS READY FOR FIELD-APPLIED, CAST-IN-PLACE CONCRETE.

- 1.2 FIELD QUALITY CONTROL
 - A. TESTING: BY CONTRACTOR.

END OF SECTION 230548

HEATING, VENTILATING AND AIR CONDITIONING

SECTION 230713 - DUCT INSULATION

- 1.1 QUALITY ASSURANCE
 - A. SURFACE-BURNING CHARACTERISTICS: FLAME-SPREAD INDEX OF 25, AND SMOKE-DEVELOPED INDEX OF 50 FOR INSULATION INSTALLED INDOORS; OR 75, AND SMOKE-DEVELOPED INDEX OF 150 FOR INSULATION INSTALLED OUTDOORS; ACCORDING TO ASTM E 84.
 - B. ADHESIVES: VOC CONTENT OF 60 G/L OR LESS FOR INDOOR APPLICATIONS.
 - C. MINIMUM INSULATION VALUE OF R-6.
- 1.2 DUCT INSULATION SCHEDULE, GENERAL
 - A. PLENUMS AND DUCTS REQUIRING INSULATION:
 1. INDOOR, CONCEALED SUPPLY AND OUTDOOR AIR.
 2. INDOOR, EXPOSED SUPPLY (WHERE POSSIBILITY OF CONDENSATION).
 3. INDOOR, CONCEALED RETURN LOCATED IN UNCONDITIONED SPACE.
 4. INDOOR, EXPOSED RETURN LOCATED IN UNCONDITIONED SPACE.
 - B. ITEMS NOT INSULATED:
 1. METAL DUCTS WITH DUCT LINER OF SUFFICIENT THICKNESS TO COMPLY WITH ENERGY CODE AND ASHRAE/IESNA 90.1.
 2. FACTORY-INSULATED FLEXIBLE DUCTS.
 3. FACTORY-INSULATED PLENUMS AND CASINGS.
 4. FLEXIBLE CONNECTORS.
 5. VIBRATION-CONTROL DEVICES.
 6. FACTORY-INSULATED ACCESS PANELS AND DOORS.
- 1.3 INDOOR DUCT AND PLENUM INSULATION SCHEDULE
 - A. CONCEALED, RECTANGULAR, SUPPLY-AIR DUCT INSULATION: MINERAL-FIBER BLANKET.
 - B. CONCEALED, RECTANGULAR, RETURN-AIR DUCT INSULATION: MINERAL-FIBER BLANKET.
 - C. CONCEALED, SUPPLY-AIR PLENUM INSULATION: MINERAL-FIBER BLANKET.
 - D. CONCEALED, RETURN-AIR PLENUM INSULATION: MINERAL-FIBER BLANKET.
 - E. EXPOSED, RECTANGULAR, SUPPLY-AIR DUCT INSULATION: MINERAL-FIBER BOARD.
 - F. EXPOSED, RECTANGULAR, RETURN-AIR DUCT INSULATION: MINERAL-FIBER BOARD.

END OF SECTION 230713

HEATING, VENTILATING AND AIR CONDITIONING

SECTION 231123 - FACILITY NATURAL-GAS PIPING

- 1.1 SUMMARY
A. NATURAL-GAS PIPING WITHIN THE BUILDING AND DISTRIBUTION ON THE PROJECT SITE.
- 1.2 PERFORMANCE REQUIREMENTS
A. MINIMUM OPERATING-PRESSURE RATINGS:
1. PIPING AND VALVES: 100 PSIG (690 KPA) MINIMUM UNLESS OTHERWISE INDICATED
2. SERVICE REGULATORS: 65 PSIG (450 KPA) MINIMUM UNLESS OTHERWISE INDICATED.
3. MINIMUM OPERATING PRESSURE OF SERVICE METER: 5 PSIG (34.5 KPA).
B. NATURAL-GAS SYSTEM PRESSURES WITHIN BUILDINGS: 0.5 PSIG (3.45 KPA) OR LESS.
- 1.3 MATERIALS
A. PIPING SPECIALTIES:
1. APPLIANCE FLEXIBLE CONNECTORS LISTED WITH CAPACITY MEETING OR EXCEEDING APPLIANCE RATING.
2. QUICK-DISCONNECT DEVICES.
3. Y-PATTERN STRAINERS.
4. WEATHERPROOF VENT CAP.
B. MANUAL GAS SHUTOFF VALVES:
1. TWO-PIECE, FULL-PORT BRONZE BALL VALVES WITH BRONZE TRIM.
2. BRONZE PLUG VALVES.
3. CAST-IRON, NONLUBRICATED PLUG VALVES.
4. PE BALL VALVES.
5. VALVE BOXES.
C. PRESSURE REGULATORS:
1. LINE PRESSURE REGULATORS.
2. APPLIANCE PRESSURE REGULATORS.
D. DIELECTRIC FITTINGS: DIELECTRIC UNIONS.
E. DETECTABLE WARNING TAPE FOR UNDERGROUND PIPING.
- 1.4 OUTDOOR PIPING SCHEDULE
A. UNDERGROUND PIPING: STEEL PIPE WITH WELDED JOINTS.
B. ABOVEGROUND PIPING: STEEL PIPE WITH THREADED JOINTS.
C. BRANCH PIPING IN CAST-IN-PLACE CONCRETE: ANNEALED-TEMPER COPPER TUBE WITH BRAZED JOINTS.
D. CONTAINMENT CONDUIT: STEEL PIPE WITH WELDED JOINTS.
- 1.5 INDOOR PIPING SCHEDULE FOR PRESSURES LESS THAN 0.5 PSIG (3.45 KPA)
A. ABOVEGROUND BRANCH PIPING NPS 1 (DN 25) AND SMALLER: STEEL PIPE WITH THREADED JOINTS.
B. ABOVEGROUND DISTRIBUTION PIPING: STEEL PIPE WITH THREADED JOINTS.
C. UNDERGROUND PIPING: STEEL PIPE WITH WELDED JOINTS.
D. CONTAINMENT CONDUIT AND VENT PIPING: STEEL PIPE WITH WELDED JOINTS.

END OF SECTION 231123

HEATING, VENTILATING AND AIR CONDITIONING

SECTION 233113 - METAL DUCTS

- 1.1 MATERIALS
A. SINGLE-WALL RECTANGULAR DUCTS AND FITTINGS: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" BASED ON INDICATED STATIC-PRESSURE CLASS UNLESS OTHERWISE INDICATED.
B. SHEET METAL MATERIALS:
1. GALVANIZED SHEET STEEL.
C. DUCT LINER:
1. FIBROUS GLASS, TYPE I, FLEXIBLE.
a. WATER-BASED LINER ADHESIVE: VOC CONTENT OF 80 G/L OR LESS FOR INTERIOR APPLICATIONS.
E. SEALANT MATERIALS:
1. WATER-BASED JOINT AND SEAM SEALANT: VOC CONTENT OF 250 G/L OR LESS FOR INTERIOR APPLICATIONS.
2. FLANGED JOINT SEALANT: VOC CONTENT OF 250 G/L OR LESS FOR INTERIOR APPLICATIONS.
3. FLANGE GASKETS.
1.2 SEISMIC-RESTRAINT DEVICES
A. HANGER ROD STIFFENER: STEEL TUBE OR STEEL SLOTTED-SUPPORT-SYSTEM SLEEVE WITH INTERNALLY BOLTED CONNECTIONS TO HANGER ROD.
1.3 DUCT SCHEDULE
A. ALL DUCTS SHALL BE GALVANIZED STEEL.
1.5 HANGERS AND SUPPORT
A. HANGER RODS: ELECTROGALVANIZED, ALL-THREAD RODS OR GALVANIZED RODS WITH THREADS PAINTED WITH ZINC-CHROMATE PRIMER AFTER INSTALLATION.
B. STRAP AND ROD SIZES: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," TABLE 5-1 (TABLE 5-1M), "RECTANGULAR DUCT HANGERS MINIMUM SIZE," AND TABLE 5-2, "MINIMUM HANGER SIZES FOR ROUND DUCT."
C. DUCT ATTACHMENTS: SHEET METAL SCREWS, BLIND RIVETS, OR SELF-TAPPING METAL SCREWS; COMPATIBLE WITH DUCT MATERIALS.

END OF SECTION 233113

HEATING, VENTILATING AND AIR CONDITIONING

SECTION 233423 - HVAC POWER VENTILATORS

- 1.1 QUALITY ASSURANCE
A. AMCA-CERTIFIED RATINGS SEAL.
- 1.2 CENTRIFUGAL ROOF VENTILATORS
A. DIRECT-DRIVE OR BELT-DRIVEN CENTRIFUGAL TYPE, WITH SPUN-ALUMINUM HOUSING.
1. VARIABLE-SPEED CONTROLLER.
2. DISCONNECT SWITCH INSIDE FAN HOUSING.
3. BIRD SCREENS.
4. BACKDRAFT DAMPERS.
5. MOTORIZED DAMPERS.

END OF SECTION 233423

HEATING, VENTILATING AND AIR CONDITIONING

SECTION 237413 - PACKAGED, OUTDOOR, CENTRAL-STATION AIR-HANDLING UNITS

- 1.1 MANUFACTURED UNITS
A. CASING:
1. GALVANIZED STEEL PAINTED WITH BAKED ENAMEL.
2. GALVANIZED-STEEL LINER.
3. INSULATED WITH FIBERGLASS.
4. GALVANIZED-STEEL DRAIN PAN WITH DRAIN CONNECTION ON BOTH SIDES.
B. SUPPLY-AIR FAN: BELT-DRIVEN, FORWARD CURVED, CENTRIFUGAL.
C. CONDENSER-COIL FAN: DIRECT-DRIVEN PROPELLER.
D. SUPPLY-AIR REFRIGERANT COIL:
1. ALUMINUM-PLATE FINS AND SEAMLESS COPPER TUBE.
E. OUTDOOR-AIR REFRIGERANT COIL:
1. ALUMINUM-PLATE FINS AND SEAMLESS COPPER TUBE.
F. REFRIGERANT CIRCUIT COMPONENTS:
1. NUMBER OF REFRIGERANT CIRCUITS: NUMBER AS SCHEDULED.
2. COMPRESSOR: HERMETIC SCROLL.
3. REFRIGERANT: R-407C OR R-410A.
4. LOW-AMBIENT KIT.
G. FILTERS: DISPOSABLE, MINIMUM 90 PERCENT ARRESTANCE, AND MINIMUM MERV 6.
H. GAS FURNACE:
1. HEAT EXCHANGER AND DRAIN PAN: ALUMINIZED STEEL.
2. FUEL: NATURAL.
3. IGNITION: ELECTRONIC.
4. GRAVITY VENT.
5. TWO-STAGE MODULATING GAS CONTROL VALVE.
I. OUTDOOR- AND RETURN-AIR MIXING DAMPERS: 0 TO 100 PERCENT ECONOMIZER WITH MOTORIZED DAMPERS AND HOOD.
J. ELECTRICAL POWER CONNECTION: SINGLE WITH UNIT-MOUNTED DISCONNECT.
K. BASIC UNIT CONTROLS:
1. CONTROL BOARD TO BE COMPATIBLE WITH CONTROL SYSTEM (EMS, STANDARD AND DCV CONTROLS).
2. WALL-MOUNTED HUMIDISTAT OR SENSOR WITH EXPOSED SET POINT AND EXPOSED INDICATION.
3. REMOTE WALL-MOUNTED ANNUNCIATOR PANEL.
L. ELECTRONIC CONTROLLERS:
1. SAFETY CONTROLS.
2. SCHEDULED CONTROLS.
3. UNOCCUPIED PERIOD CONTROLS.
4. SUPPLY FAN CONTROLS.
5. REFRIGERANT CIRCUIT CONTROLS.
6. GAS FURNACE CONTROLS.
7. FIXED MINIMUM OUTDOOR-AIR CONTROLS.
8. ECONOMIZER ENTHALPHY-BASED CONTROLS.
9. CARBON DIOXIDE SENSOR INPUT CONTROLS FOR DEMAND CONTROLLED VENTILATION.
M. ACCESSORIES:
1. GAS BURNER COMPARTMENT HEATER.
2. DUPLEX ELECTRICAL OUTLET.
3. LOW-AMBIENT KIT.
4. FILTER DIFFERENTIAL PRESSURE SWITCH.
5. HAIL GUARDS.
6. CONCENTRIC DIFFUSER.
N. ROOF CURB:
1. VIBRATION ISOLATORS.
2. WIND RESTRAINTS.
3. SEISMIC RESTRAINTS.

END OF SECTION 237413

ELECTRICAL

SECTION 260519 - LOW-VOLTAGE (600V OR LESS) ELECTRICAL POWER CONDUCTORS AND CABLES

- 1.1 MATERIALS
A. CONDUCTORS AND CABLES:
1. CONDUCTORS: COPPER.
2. CONDUCTOR INSULATION: TYPE THHN/THWN-2, TYPE XHHW-2, TYPE USE AND TYPE SO.
3. MULTICONDUCTOR CABLE: METAL-CLAD CABLE, TYPE MC WITH GROUND WIRE. (IF ALLOWED BY LOCAL JURISDICTION).
1.2 CONDUCTOR MATERIAL APPLICATIONS
A. FEEDERS: COPPER, SOLID FOR NO. 10 AWG AND SMALLER; STRANDED FOR NO. 8 AWG AND LARGER.
B. BRANCH CIRCUITS: COPPER, SOLID FOR NO. 12 AWG AND SMALLER; STRANDED FOR NO. 10 AWG AND LARGER, EXCEPT VFC CABLE, WHICH SHALL BE EXTRA FLEXIBLE STRANDED.
1.3 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS
A. SERVICE ENTRANCE: TYPE THHN/THWN-2, SINGLE CONDUCTORS IN RACEWAY.
B. EXPOSED FEEDERS: TYPE THHN/THWN-2, SINGLE CONDUCTORS IN RACEWAY.
C. FEEDERS CONCEALED IN CEILINGS, WALLS, PARTITIONS, AND CRAWLSPACES: TYPE THHN/THWN-2, SINGLE CONDUCTORS IN RACEWAY.
D. FEEDERS CONCEALED IN CONCRETE, BELOW SLABS-ON-GRADE, AND UNDERGROUND: TYPE THHN/THWN-2, SINGLE CONDUCTORS IN RACEWAY.
E. EXPOSED BRANCH CIRCUITS, INCLUDING IN CRAWLSPACES: TYPE THHN/THWN-2, SINGLE CONDUCTORS IN RACEWAY.
F. BRANCH CIRCUITS CONCEALED IN CEILINGS, WALLS, AND PARTITIONS: TYPE THHN/THWN-2, SINGLE CONDUCTORS IN RACEWAY.
G. BRANCH CIRCUITS CONCEALED IN CONCRETE, BELOW SLABS-ON-GRADE, AND UNDERGROUND: TYPE THHN/THWN-2, SINGLE CONDUCTORS IN RACEWAY.
H. CORD DROPS AND PORTABLE APPLIANCE CONNECTIONS: TYPE SO, HARD SERVICE CORD WITH STAINLESS-STEEL, WIRE-MESH, STRAIN RELIEF DEVICE AT TERMINATIONS TO SUIT APPLICATION.

- 1.4 FIELD QUALITY CONTROL
A. TESTING: BY CONTRACTOR.

END OF SECTION 260519

ELECTRICAL

SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

- 1.1 QUALITY ASSURANCE
A. QUALITY STANDARD FOR GROUNDING AND BONDING MATERIALS AND EQUIPMENT: UL 467.
- 1.2 PRODUCTS
A. INSULATED CONDUCTORS: COPPER WIRE OR CABLE.
B. BARE COPPER CONDUCTORS:
1. SOLID CONDUCTORS.
2. STRANDED CONDUCTORS.
3. TINNED CONDUCTORS.
4. STRANDED BONDING CONDUCTORS.
5. COPPER TAPE BRAIDED BONDING JUMPERS.
6. TINNED-COPPER BRAIDED BONDING JUMPERS.
C. CONNECTORS: BOLTED AND EXOTHERMIC-WELDED TYPE.
D. GROUNDING ELECTRODES:
1. GROUND RODS: COPPER-CLAD STEEL, SECTIONAL TYPE WITH GROUND WELL AND COVER.
1.3 FIELD QUALITY CONTROL
A. GROUND RESISTANCE TESTING: BY CONTRACTOR-ENGAGED AGENCY.

END OF SECTION 260526

ELECTRICAL

SECTION 260529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

- 1.1 PERFORMANCE REQUIREMENTS
A. DESIGN SUPPORTS FOR MULTIPLE RACEWAYS CAPABLE OF SUPPORTING COMBINED WEIGHT OF SUPPORTED SYSTEMS AND ITS CONTENTS.
B. DESIGN EQUIPMENT SUPPORTS CAPABLE OF SUPPORTING COMBINED OPERATING WEIGHT OF SUPPORTED EQUIPMENT AND CONNECTED SYSTEMS AND COMPONENTS.
- 1.2 PRODUCTS
A. SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS:
1. STEEL SLOTTED SUPPORT SYSTEMS WITH PAINTED COATINGS.
2. NONMETALLIC SLOTTED SUPPORT SYSTEMS.
3. RACEWAY AND CABLE SUPPORTS.
4. STEEL AND MALLEABLE-IRON CONDUIT AND CABLE HANGERS, CLAMPS, AND ASSOCIATED ACCESSORIES.
5. SUPPORT FOR NON-ARMORED CONDUCTORS AND CABLES IN VERTICAL CONDUIT RISERS.
6. STRUCTURAL STEEL FOR FABRICATED SUPPORTS AND RESTRAINTS.
7. MOUNTING, ANCHORING, AND ATTACHMENT COMPONENTS:
a. POWDER-ACTUATED FASTENERS.
b. MECHANICAL-EXPANSION ANCHORS.
c. CONCRETE INSERTS.
d. CLAMPS FOR ATTACHMENT TO STEEL STRUCTURAL ELEMENTS.
e. ALL-STEEL SPRINGHEAD TOGGLE BOLTS.
f. THREADED HANGER RODS.
B. FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES: WELDED OR BOLTED STEEL SHAPES.

END OF SECTION 260529

ELECTRICAL

SECTION 260533 - RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

- 1.1 MATERIALS
A. METAL CONDUITS, TUBING, AND FITTINGS:
1. GRC.
2. EMT.
3. FMC. ZINC-COATED STEEL.
4. LFMC.
5. FITTINGS:
a. EMT: STEEL, SETSCREW OR COMPRESSION TYPE.
b. EXPANSION FITTINGS.
B. NONMETALLIC CONDUITS, TUBING, AND FITTINGS:
1. RNC.
2. FITTINGS: MATCH CONDUIT.
3. SOLVENT CEMENTS AND ADHESIVE PRIMERS SHALL HAVE A VOC CONTENT OF 510 AND 550 G/L OR LESS, RESPECTIVELY.
C. METAL WIREWAYS AND AUXILIARY GUTTERS: SHEET METAL WITH SCREW COVERS.
D. SURFACE METAL RACEWAYS: METAL, GALVANIZED STEEL, WITH SNAP-ON COVERS.
E. BOXES, ENCLOSURES, AND CABINETS:
1. METAL OUTLET AND DEVICE BOXES: ALUMINUM.
2. METAL FLOOR BOXES: CAST METAL OR SHEET METAL, FULLY ADJUSTABLE.
3. LUMINAIRE OUTLET BOXES: NONADJUSTABLE, DESIGNED FOR ATTACHMENT OF LUMINAIRE WEIGHING 50 LB (23 KG).
4. SMALL SHEET METAL PULL AND JUNCTION BOXES.
5. CAST-METAL ACCESS, PULL, AND JUNCTION BOXES.
6. BOX EXTENSIONS.
7. HINGED-COVER ENCLOSURES: METAL.
8. CABINETS: GALVANIZED STEEL.

1.2 RACEWAY APPLICATION

- A. OUTDOORS:
1. EXPOSED: GRC.
2. CONCEALED, ABOVEGROUND: RNC, TYPE EPC-40-PVC.
3. UNDERGROUND: RNC, TYPE EPC-40-PVC, DIRECT BURIED.
4. CONNECTION TO VIBRATING EQUIPMENT: LFMC.
5. BOXES AND ENCLOSURES, ABOVEGROUND: TYPE 3R OR TYPE 4.
B. INDOORS:
1. EXPOSED, NOT SUBJECT TO PHYSICAL DAMAGE: EMT.
2. EXPOSED, NOT SUBJECT TO SEVERE PHYSICAL DAMAGE: EMT.
3. CONCEALED: EMT.
4. CONNECTION TO VIBRATING EQUIPMENT: FMC, EXCEPT LFMC IN DAMP OR WET LOCATIONS.
5. DAMP OR WET LOCATIONS: GRC.
6. BOXES AND ENCLOSURES: TYPE 1, EXCEPT TYPE 4 NONMETALLIC IN DAMP OR WET LOCATIONS.
C. MINIMUM RACEWAY SIZE: 3/4-INCH (21-MM) TRADE SIZE.
D. RACEWAY FITTINGS: COMPATIBLE WITH RACEWAYS AND SUITABLE FOR USE AND LOCATION.
1. RIGID AND INTERMEDIATE STEEL CONDUIT: THREADED RIGID STEEL CONDUIT FITTINGS.
2. PVC EXTERNALLY COATED, RIGID STEEL CONDUITS: FITTINGS LISTED FOR USE WITH THIS TYPE OF CONDUIT.
3. EMT: SETSCREW, STEEL FITTINGS.
4. FLEXIBLE CONDUIT: FITTINGS LISTED FOR USE WITH FLEXIBLE CONDUIT.

END OF SECTION 260533

ELECTRICAL

SECTION 260536 - CABLE TRAYS FOR ELECTRICAL SYSTEMS

- 1.1 CABLE TRAY TYPES
A. LADDER.
B. SINGLE RAIL.
C. TROUGH.
- 1.2 MATERIALS
A. CABLE TRAYS, FITTINGS, AND ACCESSORIES: STEEL.
1. FACTORY-STANDARD PRIMER: WITH CHROMIUM-ZINC-PLATED HARDWARE.
2. MILL GALVANIZED BEFORE FABRICATION; WITH GALVANIZED HARDWARE.
3. ELECTROGALVANIZED BEFORE FABRICATION; WITH GALVANIZED HARDWARE.
4. HOT-DIP GALVANIZED AFTER FABRICATION; WITH CHROMIUM-ZINC-PLATED HARDWARE.
5. POWDER-COAT ENAMEL PAINT; WITH CHROMIUM-ZINC-PLATED HARDWARE.
6. BLACK OXIDE FINISH FOR SUPPORT ACCESSORIES AND MISCELLANEOUS HARDWARE.
B. CABLE TRAYS, FITTINGS, AND ACCESSORIES: ALUMINUM; WITH STAINLESS-STEEL HARDWARE.
C. CABLE TRAY ACCESSORIES:
1. COVERS: LOUVEREDTYPE.
2. BARRIER STRIPS.
3. CABLE TRAY SUPPORTS AND CONNECTORS.
D. WARNING SIGNS: 1-1/2-INCH- (40-MM-) HIGH, BLACK LETTERS ON YELLOW BACKGROUND WITH LEGEND "WARNING! NOT TO BE USED AS WALKWAY, LADDER, OR SUPPORT FOR LADDERS OR PERSONNEL".

- 1.3 SOURCE QUALITY CONTROL
A. TESTED ACCORDING TO NEMA VE 1.

END OF SECTION 260536

ELECTRICAL

SECTION 260544 - SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING

- 1.1 MATERIALS
A. SLEEVES:
1. SCHEDULE 40 STEEL PIPE.
2. CAST-IRON PIPE.
3. GALVANIZED-STEEL SHEET FOR CONDUITS PENETRATING NON-FIRE-RATED GYPSUM-BOARD ASSEMBLIES.
4. MOLDED-PE OR -PP PIPE.
5. GALVANIZED-STEEL SHEET FOR RECTANGULAR OPENINGS.
B. SLEEVE-SEALS:
1. EPDM RUBBER SEALING ELEMENTS.
2. CARBON-STEEL PRESSURE PLATES.
3. CARBON-STEEL, WITH CORROSION-RESISTANT COATING CONNECTING BOLTS AND NUTS.
C. HYDRAULIC-CEMENT GROUT.
D. SILICONE SEALANTS:
1. SINGLE-COMPONENT, SILICONE-BASED, NEUTRAL-CURING ELASTOMERIC SEALANT.
2. MULTICOMPONENT, SILICONE-BASED LIQUID ELASTOMERIC NONSHRINKING FOAM.
3. VOC CONTENT OF 250 G/L OR LESS.

END OF SECTION 260544

ELECTRICAL

260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

- 1.1 QUALITY ASSURANCE
A. COMPLY WITH ANSI A13.1 AND IEEE C2.
- 1.2 PRODUCTS
A. POWER AND CONTROL RACEWAY IDENTIFICATION: VINYL LABELS.
B. POWER AND CONTROL CABLE IDENTIFICATION: VINYL LABELS.
C. CONDUCTOR IDENTIFICATION: COLOR-CODING CONDUCTOR TAPE.
D. FLOOR MARKING TAPE: 2-INCH- (50-MM-) WIDE PRESSURE-SENSITIVE VINYL TAPE.
E. WARNING LABELS AND SIGNS: SELF-ADHESIVE WARNING LABELS.
G. INSTRUCTION SIGNS: ENGRAVED, LAMINATED ACRYLIC OR MELAMINE PLASTIC.
H. EQUIPMENT IDENTIFICATION LABELS: ENGRAVED, LAMINATED ACRYLIC OR MELAMINE PLASTIC.

END OF SECTION 260553

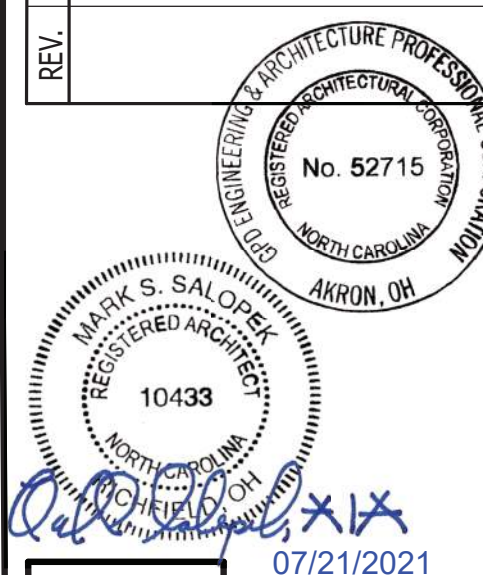
ELECTRICAL

SECTION 260923 - LIGHTING CONTROL DEVICES

- 1.1 PRODUCTS
A. TIME SWITCHES: PROGRAMMABLE UNITS, WITH SINGLE CHANNEL; ASTRONOMIC TIME, SEVEN-DAY PROGRAMMABLE WITH MINIMUM 8 ON/OFF SET POINTS PER 24 HOUR SCHEDULE.
B. OUTDOOR PHOTOELECTRIC SWITCHES: SOLID STATE, WITH DRY CONTACTS, 15-SECOND TIME DELAY, AND METAL-OXIDE VARISTOR SURGE PROTECTION.
C. DAYLIGHT-HARVESTING SWITCHING CONTROLS: CEILING MOUNTED WITH ADJUSTABLE TIME DELAY AND SET-POINTS.
D. INDOOR OCCUPANCY SENSORS: DUAL-TECHNOLOGY TYPE, WITH SEPARATE, EXTERNALLY MOUNTED RELAY UNIT.
E. SWITCHBOX-MOUNTED OCCUPANCY SENSORS.
F. LIGHTING CONTACTORS: ELECTRICALLY OPERATED AND ELECTRICALLY HELD, WITH NONFUSED DISCONNECT IN NEMA 250 ENCLOSURE. PROVIDE WITH CONTROL AND PILOT DEVICES AS INDICATED IN PLANS.
G. EMERGENCY SHUNT RELAY: NORMALLY CLOSED, ELECTRICALLY HELD, ARRANGED FOR WIRING IN PARALLEL WITH MANUAL OR AUTOMATIC SWITCHING CONTACTS.
H. CONTROL CABLES:
1. POWER CABLES: NOT SMALLER THAN NO. 12 AWG.
2. CLASSES 2 AND 3 CONTROL CABLES: STRANDED-COPPER CONDUCTORS, NOT SMALLER THAN NO. 18 AWG.
3. CLASS 1 CONTROL CABLES: STRANDED-COPPER CONDUCTORS, NOT SMALLER THAN NO. 14 AWG.

END OF SECTION 260923

REV.	DATE	DESCRIPTION



SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

SPECIFICATIONS

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	-/-/---
RECORD	-/-/---

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

G0013

ELECTRICAL

SECTION 262416 - PANELBOARDS

- 1.1 QUALITY ASSURANCE
A. MANUFACTURER QUALIFICATIONS: ISO 9001 OR 9002 CERTIFIED.
- 1.2 PRODUCTS
A. GENERAL REQUIREMENTS FOR PANELBOARDS:
1. CONSTRUCTED TO WITHSTAND SEISMIC FORCES.
2. ENCLOSURES: FLUSH MOUNTED.
a. FRONT: HINGED COVER WITH KEY LOCK.
b. OPTIONAL ENCLOSURE FEATURES: SKIRT FOR SURFACE-MOUNTED PANELBOARDS.
c. DIRECTORY CARD.
3. INCOMING MAINS: CONVERTIBLE BETWEEN TOP AND BOTTOM.
4. PHASE, NEUTRAL, AND GROUND BUSES: TIN-PLATED ALUMINUM.
5. CONDUCTOR CONNECTORS:
a. MATERIAL: TIN-PLATED ALUMINUM.
b. MAIN AND NEUTRAL LUGS: MECHANICAL TYPE.
c. FEED-THROUGH LUGS: MECHANICAL TYPE.
6. PERCENTAGE OF FUTURE SPACE CAPACITY: FIVE PERCENT.
7. SERVICE EQUIPMENT LABEL FOR PANELBOARDS INCORPORATING ONE OR MORE MAIN SERVICE DISCONNECTING AND OVERCURRENT PROTECTIVE DEVICES.
B. PANELBOARD OR LOAD CENTER SHORT-CIRCUIT CURRENT RATING: FULLY RATED TO INTERRUPT SYMMETRICAL SHORT-CIRCUIT CURRENT AVAILABLE AT TERMINALS. LISTED SERIES RATED SYSTEM MAY BE USED IF APPROVED BY EOR TO LIMIT FAULT TO BELOW 22k AIC FOR GFI BREAKERS.
1. MAINS: LUGS ONLY.
2. BRANCH OVERCURRENT PROTECTIVE DEVICES FOR CIRCUIT-BREAKER FRAME SIZES LARGER THAN 125 A: BOLT-ON CIRCUIT BREAKERS.
C. LIGHTING AND APPLIANCE BRANCH-CIRCUIT PANELBOARDS:
1. MAINS: LUGS ONLY.
2. BRANCH OVERCURRENT PROTECTIVE DEVICES: PLUG-IN CIRCUIT-BREAKER TYPE.
3. DOORS: CONCEALED HINGE.
D. LOAD CENTERS:
1. MAINS: LUGS ONLY.
2. BRANCH CIRCUIT BREAKERS: PLUG-IN.
3. DOORS: CONCEALED HINGE.
4. CONDUCTOR CONNECTORS: MECHANICAL TYPE.
E. DISCONNECTING AND OVERCURRENT PROTECTIVE DEVICES:
1. CIRCUIT BREAKERS: THERMAL-MAGNETIC TYPES.
2. GFI CIRCUIT BREAKERS: RATED FOR PERSONNEL.
3. AFCI CIRCUIT BREAKERS: AS REQUIRED BY CODE.
4. OPTIONS AND TYPES AS NEEDED.
F. IDENTIFICATION:
1. PANELBOARD LABELS: MANUFACTURER'S NAME AND TRADEMARK, VOLTAGE, AMPERAGE, NUMBER OF PHASES, ARC FLASH HAZARD, AND NUMBER OF POLES SHALL BE LOCATED ON THE INTERIOR OF THE PANELBOARD DOOR.
2. BREAKER LABELS: FACEPLATE SHALL LIST CURRENT RATING, UL AND IEC CERTIFICATION STANDARDS, AND AIC RATING.
3. CIRCUIT DIRECTORY: DIRECTORY CARD INSIDE PANELBOARD DOOR, MOUNTED IN TRANSPARENT CARD HOLDER.
G. ACCESSORIES:
1. ACCESSORY SET INCLUDING TOOLS.
2. PORTABLE TEST SET: FOR TESTING FUNCTIONS OF SOLID-STATE TRIP DEVICES WITHOUT REMOVING FROM PANELBOARD.
- 1.3 FIELD QUALITY CONTROL
A. TESTING: BY CONTRACTOR.

END OF SECTION 262416

ELECTRICAL

SECTION 262713 - ELECTRICITY METERING

- 1.1 EQUIPMENT FOR ELECTRICITY METERING BY UTILITY COMPANY
A. UTILITY-COMPANY-COMPLIANT CURRENT-TRANSFORMER CABINETS: COMPLY WITH REQUIREMENTS OF ELECTRICAL-POWER UTILITY COMPANY.
B. METER SOCKETS: COMPLY WITH REQUIREMENTS OF ELECTRICAL-POWER UTILITY COMPANY.

END OF SECTION 262713

ELECTRICAL

SECTION 262726 - WIRING DEVICES

- 1.1 PRODUCTS
A. RECEPTACLES: DUPLEX, 125 V, 20 A.
1. STRAIGHT BLADE: CONVENIENCE AND ISOLATED GROUND.
2. GFCI: FEED THROUGH.
3. TWIST-LOCKING TYPE WITH ISOLATED-GROUND TERMINAL.
B. PENDANT CORD-CONNECTOR DEVICES WITH EXTERNAL CABLE GRIP.
C. CORD AND PLUG SETS: MATCH VOLTAGE AND CURRENT RATINGS AND NUMBER OF CONDUCTORS TO REQUIREMENTS OF EQUIPMENT BEING CONNECTED.
D. TOGGLE SWITCHES: 120/277 V, 20 A.
1. PILOT-LIGHT SWITCHES.
2. KEY-OPERATED SWITCHES.
E. WALL-BOX DIMMERS:
1. MODULAR, FULL-WAVE, SOLID-STATE UNITS WITH SLIDER CONTROL.
a. INCANDESCENT: SOFT TAP OR OTHER QUIET SWITCH; EMIRFI FILTER TO ELIMINATE INTERFERENCE.
b. FLUORESCENT: TRIM POTENTIOMETER FOR LOW-END DIMMING.
c. LED: COMPATIBLE WITH LED DRIVER OR LAMP.
F. WALL PLATES:
1. MATERIAL FOR BAR: THERMOPLASTIC WITH COLOR PER STARBUCKS.
3. MATERIAL FOR CUSTOMER AREAS: THERMOPLASTIC WITH COLOR OPTION PER STARBUCKS.
G. FINISHES:
1. CONNECTED TO NORMAL POWER SYSTEM: CONFIRM COLOR WITH STARBUCKS REPRESENTATIVE.
2. CONNECTED TO EMERGENCY POWER SYSTEM: RED.
3. ISOLATED-GROUND RECEPTACLES: AS SPECIFIED ABOVE, WITH ORANGE TRIANGLE ON FACE.

END OF SECTION 262726

ELECTRICAL

SECTION 262816 - ENCLOSED SWITCHES AND CIRCUIT BREAKERS

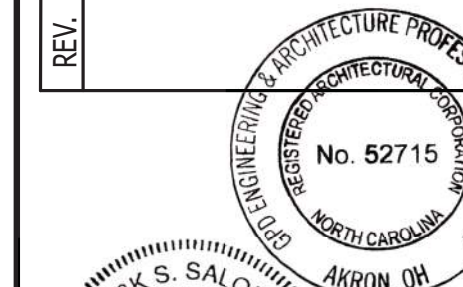
- 1.1 PRODUCTS
A. FUSIBLE SWITCHES:
1. GENERAL DUTY, SINGLE THROW, [240-V] [600V] AC, 800 A AND SMALLER: UL 98 AND NEMA KS 1, TYPE GD.
a. EQUIPMENT GROUND KIT.
b. NEUTRAL KIT.
c. ISOLATED GROUND KIT.
d. CLASS R FUSE KIT.
e. AUXILIARY CONTACT KIT.
f. HOOKSTICK HANDLE.
g. LUGS: MECHANICAL.
h. SERVICE-RATED SWITCHES.
i. ACCESSORY CONTROL POWER.
B. NONFUSIBLE SWITCHES:
1. GENERAL DUTY, SINGLE THROW, [240-V] [600V] AC, 600 A AND SMALLER: UL 98 AND NEMA KS 1, TYPE GD.
2. ACCESSORIES:
a. EQUIPMENT GROUND KIT.
b. NEUTRAL KIT.
c. ISOLATED GROUND KIT.
d. AUXILIARY CONTACT KIT.
e. HOOKSTICK HANDLE.
f. LUGS: MECHANICAL.
g. ACCESSORY CONTROL POWER.
C. MOLDED-CASE CIRCUIT BREAKERS:
1. THERMAL-MAGNETIC TYPE.
2. ADJUSTABLE INSTANTANEOUS-TRIP TYPE.
3. ELECTRONIC-TRIP TYPE.
4. CURRENT-LIMITING TYPE.
5. INTEGRALLY FUSED TYPE.
6. GFCI TYPE.
7. GFEP TYPE.
8. FEATURES AND ACCESSORIES:
a. LUGS: MECHANICAL.
b. TYPE SWD FOR SWITCHING FLUORESCENT LIGHTING LOADS.
c. TYPE HID FOR FEEDING FLUORESCENT AND HIGH-INTENSITY DISCHARGE LIGHTING CIRCUITS.
d. GROUND-FAULT PROTECTION: INTEGRALLY MOUNTED, SELF-POWERED TYPE.
e. SHUNT TRIP.
f. UNDERVOLTAGE TRIP: 35 TO 75 PERCENT OF RATED VOLTAGE WITHOUT INTENTIONAL TIME DELAY.
g. AUXILIARY CONTACTS: TWO SPDT SWITCHES.
h. ALARM SWITCH: ONE NO CONTACT.
i. KEY INTERLOCK KIT.
j. ZONE-SELECTIVE INTERLOCKING: INTEGRAL WITH ELECTRONIC TRIP.
k. ELECTRICAL OPERATOR.
l. ACCESSORY CONTROL POWER.
D. MOLDED-CASE SWITCHES:
1. MCCB WITH FIXED, HIGH-SET INSTANTANEOUS TRIP ONLY, AND SHORT-CIRCUIT WITHSTAND RATING EQUAL TO EQUIVALENT BREAKER FRAME SIZE INTERRUPTING RATING.
2. FEATURES AND ACCESSORIES:
a. LUGS: MECHANICAL.
b. GROUND-FAULT PROTECTION: REMOTE-MOUNTED AND POWERED TYPE.
c. SHUNT TRIP.
d. UNDERVOLTAGE TRIP: 35 TO 75 PERCENT OF RATED VOLTAGE WITHOUT INTENTIONAL TIME DELAY.
e. AUXILIARY CONTACTS: TWO SPDT SWITCHES.
f. ALARM SWITCH: ONE NO CONTACT.
g. KEY INTERLOCK KIT.
h. ZONE-SELECTIVE INTERLOCKING: INTEGRAL WITH REMOTE GROUND-FAULT TRIP UNIT.
i. ELECTRICAL OPERATOR.
j. ACCESSORY CONTROL POWER.
E. ENCLOSURES:
1. INDOOR, DRY AND CLEAN LOCATIONS: NEMA 250, TYPE 1.
2. OUTDOOR LOCATIONS: NEMA 250, TYPE 3R.

- 1.2 FIELD QUALITY CONTROL
A. TESTING: BY CONTRACTOR.

- 1.3 ADJUSTING
A. SET FIELD-ADJUSTABLE CIRCUIT-BREAKER TRIP RANGES.

END OF SECTION 262816

REV.	DATE	DESCRIPTION



SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

SPECIFICATIONS

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	--/--
RECORD	--/--

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

G0014

STRUCTURAL GENERAL NOTES

GENERAL REQUIREMENTS AND DESIGN CRITERIA

BUILDING CODE AND REFERENCE STANDARDS: THE 2018 NORTH CAROLINA STATE (BASED ON 2015 INTERNATIONAL BUILDING CODE) GOVERNS THE DESIGN AND CONSTRUCTION OF THIS PROJECT. REFERENCE TO A SPECIFIC SECTION IN THE CODE DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE ENTIRE MATERIALS REFERENCE STANDARDS NOTED BELOW.

DEFINITIONS: THE FOLLOWING DEFINITIONS APPLY TO THESE GENERAL NOTES:
 - "STRUCTURAL ENGINEER OF RECORD" (SER) - THE STRUCTURAL ENGINEER
 - "SPECIALTY STRUCTURAL ENGINEER" (SSE) - A LICENSED PROFESSIONAL ENGINEER, NOT THE SER WHO PERFORMS SPECIALTY STRUCTURAL ENGINEERING SERVICES NECESSARY TO COMPLETE THE STRUCTURE WHO HAS EXPERIENCE AND TRAINING IN THE SPECIFIC SPECIALTY. THE GENERAL CONTRACTOR, SUBCONTRACTOR, OR SUPPLIER WHO IS RESPONSIBLE FOR THE DESIGN, FABRICATION AND INSTALLATION OF SPECIALTY-ENGINEERED ELEMENTS SHALL RETAIN THE SSE. SUBMITTALS SHALL BE STAMPED AND SIGNED BY THE SSE. DOCUMENTS STAMPED AND SIGNED BY THE SSE SHALL BE COMPLETED BY OR UNDER THE DIRECT SUPERVISION OF THE SSE WITH A PE LICENSE ISSUED BY THE STATE IN WHICH THE PROJECT IS TO BE CONSTRUCTED.

ARCHITECTURAL DRAWINGS: REFER TO THE ARCHITECTURAL DRAWINGS FOR INFORMATION INCLUDING, BUT NOT LIMITED TO: DIMENSIONS, ELEVATIONS, SLOPES, DOOR AND WINDOW OPENINGS, NON-BEARING WALLS, CURTAIN WALLS, STAIRS, CURBS, DRAINS, DEPRESSIONS, RAILINGS, WATERPROOFING, FINISHES, AND OTHER NONSTRUCTURAL ITEMS.

STRUCTURAL RESPONSIBILITIES: THE SER IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE PRIMARY STRUCTURE IN ITS COMPLETED STATE.

CONTRACTOR RESPONSIBILITIES: THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND ALL JOB RELATED SAFETY STANDARDS SUCH AS OSHA. THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING, BRACING, AND OTHER ELEMENTS REQUIRED TO MAINTAIN STABILITY UNTIL THE STRUCTURE IS COMPLETED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE WORK REQUIRE IN THE CONSTRUCTION DOCUMENTS AND THE REQUIREMENTS FOR EXECUTING IT PROPERLY.

THE CONTRACTOR SHALL SUBMIT PLANS SHOWING THE LOCATION, WEIGHT, SIZE, AND ANCHORAGE OF ALL HANGERS SUPPORTING ALL MECHANICAL, ELECTRICAL, PLUMBING, OR SPRINKLER LOADS IN EXCESS OF 50 POUNDS. ALL ROOF-MOUNTED EQUIPMENT SHALL BE INCLUDED ON THESE PLANS AND SHALL SHOW THE WEIGHTS, SIZE, MOUNTING ATTACHMENT DETAILS, AND LOCATIONS. SUBMIT PLANS TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION.

DISCREPANCIES: IN CASE OF DISCREPANCIES BETWEEN THESE GENERAL NOTES, THE CONTRACT DRAWINGS AND SPECIFICATIONS, AND/OR REFERENCE STANDARDS, THE ENGINEER SHALL DETERMINE WHICH SHALL GOVERN. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

SITE VERIFICATION: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE PRIOR TO FABRICATION AND/OR CONSTRUCTION. CONFLICTS BETWEEN THE DRAWINGS AND ACTUAL SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK. ALL UNDERGROUND UTILITIES SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO EXCAVATION OR DRILLING.

CONSTRUCTION LOADS: LOADS ON THE STRUCTURE DURING CONSTRUCTION SHALL NOT EXCEED THE DESIGN LOADS OR THE CAPACITY OF THE PARTIALLY COMPLETED STRUCTURE.

WIND DESIGN: (ASCE 7-10)	WIND SPEED (ULTIMATE): V = 115 MPH	WIND SPEED (ASD) V = 89 MPH
	RISK CATEGORY II	WIND IMPORTANCE FACTOR: Iw = 1.0
	EXPOSURE CATEGORY: C	INTERNAL PRESSURE COEFFICIENT: C _{pi} = 0.18 (FULLY ENCLOSED)

EFFECTIVE WIND AREA (SQ. FT.)	ROOF			WALL	
	CORNER ZONE (PSF) ③	END ZONE (PSF) ②	INTERIOR ZONE 1 (PSF) ①	END ZONE (PSF) ⑤	INTERIOR ZONE (PSF) ④
≤ 10	+16.0/-72.8	+16.0/-48.4	+16.0/-28.8	+19.8/-34.7	+19.8/-28.1
20	+16.0/-68.2	+16.0/-46.5	+16.0/-28.5	+18.9/-34.4	+18.9/-27.9
50	+16.0/-54.3	+16.0/-40.8	+16.0/-27.7	+17.8/-33.7	+17.8/-27.6
100	+16.0/-31.3	+16.0/-31.3	+16.0/-26.4	+16.9/-32.3	+16.9/-26.9

END ZONE WIDTH = 6'-0" FOR ROOF, 3'-0" FOR WALL

SEISMIC DESIGN: (ASCE 7-10)	RISK CATEGORY II	SEISMIC IMPORTANCE FACTOR I _e = 1.0
	SITE CLASS D	
	S_s 0.21	
	S₁ 0.094	
	S_{D5} 0.22	
	S_{D1} 0.15	
	SEISMIC DESIGN CATEGORY C	

BASIC LATERAL FORCE RESISTING SYSTEM:

SDC C: COMBINATION OF WOOD STRUCTURAL PANEL SHEAR WALLS AND STEEL SYSTEMS NOT SPECIFICALLY DESIGNED FOR SEISMIC RESISTANCE

RESPONSE MODIFICATION FACTOR R:	3
SEISMIC RESPONSE COEFFICIENT	C _s = 0.073
SEISMIC BASE SHEAR	V = 10 K

DEFLECTIONS:	TOTAL LOAD DEFLECTION LIMIT	L/240
	LIVE LOAD DEFLECTION LIMIT	L/360

SNOW LOAD:	GROUND SNOW LOAD:	15 PSF
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LIVE LOADS:	ROOF:	20 PSF
	DINING ROOMS:	100 PSF

DESIGN-BY-OTHERS (DEFERRED SUBMITTALS) LOADS: ALL PRE-ENGINEERED, PRE-FABRICATED, PRE-MANUFACTURED, OR OTHER PRODUCTS DESIGNED BY OTHERS SHALL BE DESIGNED FOR THE TRIBUTARY DEAD AND LIVE LOADS PLUS WIND, EARTHQUAKE, SNOW, SNOW DRIFT, AND COMPONENT AND CLADDING LOADS WHEN APPLICABLE. DESIGN SHALL CONFORM TO THE PROJECT DRAWINGS AND SPECIFICATIONS, REFERENCE STANDARDS, AND GOVERNING CODE.

SUBMITTALS & INSPECTIONS

SUBMITTALS: SUBMITTALS OF SHOP DRAWINGS, MILL TESTS, AND PRODUCT DATA FOR ITEMS DESIGNED BY THE SSE SHALL BE MADE TO THE ENGINEER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REVIEW AND PLACE A SHOP DRAWING STAMP ON THE SUBMITTAL BEFORE FORWARDING TO THE ENGINEER. SUBMITTALS SHALL BE MADE IN TIME TO PROVIDE A MINIMUM OF ONE WEEK FOR REVIEW BY THE ENGINEER. SUBMITTALS REQUIRED FOR THIS PROJECT ARE SPECIFIED IN THE SPECIFIC SECTIONS BELOW.

SUBMITTALS & INSPECTIONS (CONT'D.)

INSPECTIONS: ALL CONSTRUCTION IS SUBJECT TO INSPECTION BY THE BUILDING OFFICIAL IN ACCORDANCE WITH IBC SECTION 110. THE CONTRACTOR SHALL COORDINATE ALL REQUIRED INSPECTIONS WITH THE BUILDING OFFICIAL. SUBMIT COPIES OF ALL INSPECTION REPORTS TO THE ENGINEER FOR REVIEW.

SPECIAL INSPECTIONS: IN ADDITION TO THE INSPECTIONS REQUIRED BY IBC SECTION 110, SPECIAL INSPECTORS SHALL, IN ACCORDANCE WITH IBC SECTION 1704, PERFORM THE FOLLOWING:

CONCRETE:

- PERIODIC INSPECTION OF REINFORCING STEEL
- PERIODIC VERIFICATION OF THE USE OF THE REQUIRED DESIGN MIX
- CONTINUOUS INSPECTION DURING THE SAMPLING OF FRESH CONCRETE AND DURING SLUMP, AIR CONTENT AND TEMPERATURE DETERMINATIONS
- PERIODIC INSPECTION OF FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED
- CONTINUOUS INSPECTION DURING THE PLACING OF REINFORCED CONCRETE
- CONTINUOUS INSPECTION DURING THE GROUTING OPERATION OF BOLTS OR REBAR DOWELS.

STEEL:

- PERIODIC INSPECTION OF STEEL, BOLTS, NUTS AND WASHERS IDENTIFICATION MARKS CONFORM TO ASTM STANDARD AND WELD FILLER MATERIAL CONFORMS TO AWS.
- PERIODIC VERIFICATION OF CERTIFICATE OF COMPLIANCE
- PERIODIC INSPECTION OF HIGH STRENGTH BOLT CONNECTION.
- PERIODIC INSPECTION OF FILLET WELDS < 5/16 INCH AND FLOOR AND ROOF DECK WELDS
- CONTINUOUS INSPECTION OF FILLET WELDS > 5/16 INCH, COMPLETE AND PARTIAL PENETRATION WELDS, MULTIPASS FILLET WELDS.

SOILS AND FOUNDATIONS:

- PERIODIC VERIFICATION OF MATERIALS BELOW SHALLOW FOUNDATIONS AS ADEQUATE TO ACHIEVE DESIGN BEARING CAPACITY
- PERIODIC VERIFICATION OF PROPER EXCAVATION DEPTH AND THAT EXCAVATIONS HAVE REACHED PROPER MATERIAL
- PERIODIC CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS
- CONTINUOUS VERIFICATION OF USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.
- PERIODIC VERIFICATION OF PROPER SUBGRADE PREPARATION.

WOOD:

- DIAPHRAGMS & SHEAR WALLS: CONTINUOUS INSPECTION DURING FIELD GLUING OPERATIONS, PERIODIC INSPECTION OF ANCHOR BOLTS, HOLDDOWNS, DRAG STRUT CONNECTIONS, NAILING SIZE AND SPACING.
- PERIODIC VERIFICATION OF MOISTURE CONTENT OF WOOD STUDS, PLATES, BEAMS, AND JOISTS
- PERIODIC INSPECTION OF 2X AND 3X BOTTOM PLATES AND PLATE WASHERS.

SOILS AND FOUNDATIONS:

REFERENCE STANDARDS: CONFORM TO IBC CHAPTER 18 "SOILS AND FOUNDATIONS"

GEOTECHNICAL REPORT: THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT PREPARED BY ECS SOUTHEAST, LLP, DATED FEBRUARY 5, 2021, PROJECT NUMBER 33.5460, FOR ALL REQUIREMENTS RELATED TO EXCAVATION, PREPARATION OF THE SUBGRADE, COMPACTION PROCEDURES, AND FOR ANY OTHER GEOTECHNICAL REQUIREMENTS. WHERE CONFLICTING REQUIREMENTS BETWEEN THE DRAWINGS AND GEOTECHNICAL REPORT ARE PRESENT, THE MOST STRINGENT REQUIREMENT SHALL BE BID UNLESS OTHERWISE ADDRESSED BY THE ENGINEER OF RECORD IN A FORMAL REQUEST FOR INFORMATION.

GEOTECHNICAL INSPECTION: A GEOTECHNICAL ENGINEER ENGAGED BY THE OWNER SHALL INSPECT ALL PREPARED SOIL BEARING SURFACES PRIOR TO PLACEMENT OF CONCRETE AND REINFORCING STEEL AND PROVIDE A LETTER TO THE OWNER STATING THAT SOILS ARE ADEQUATE TO SUPPORT THE "ALLOWABLE FOUNDATION PRESSURE" SHOWN BELOW. ASSUMED VALUES SHALL BE FIELD VERIFIED BY THE BUILDING OFFICIAL OR THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE.

DESIGN SOIL VALUES:
 ASSUMED ALLOWABLE BEARING PRESSURE: 2500 PSF

SLABS ON GRADE AND FOUNDATIONS: ALL FOUNDATIONS SHALL BEAR ON FIRM, UNDISTURBED SOIL OR COMPACTED FILL FREE FROM ORGANIC MATTER. IF POOR SOILS ARE ENCOUNTERED AT FOUNDATION DEPTHS SPECIFIED, NOTIFY OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH CONSTRUCTION. SLABS ON GRADE SHALL BE PLACED ON 4" COMPACTED CRUSHED STONE UNLESS OTHERWISE RECOMMENDED IN A GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.

FOUNDATION STEM WALLS: UNLESS OTHERWISE NOTED ON THE DRAWINGS, THE MAXIMUM UNBALANCED SOIL CONDITION FOR ALL FOUNDATION STEM WALLS (DIFFERENCE IN ELEVATION BETWEEN INTERIOR AND EXTERIOR SOIL GRADES) SHALL BE 1'-6" MAINTAIN A MINIMUM 8" SEPARATION BETWEEN FINISH GRADE AND UNTREATED WOOD FRAMING.

BACKFILLING: BACKFILL BEHIND RETAINING AND FOUNDATION WALLS SHALL BE OF FREE-DRAINING MATERIAL PLACED IN MAXIMUM LOOSE LIFTS OF NO GREATER THAN 8 INCHES. BACKFILL SHALL BE COMPACTED USING HAND-OPERATED EQUIPMENT ONLY. THE CONTRACTOR SHALL REFRAIN FROM OPERATING HEAVY EQUIPMENT BEHIND RETAINING AND FOUNDATION WALLS WITHIN A DISTANCE EQUAL TO OR GREATER THAN THE HEIGHT OF THE WALL, UNLESS APPROVED OTHERWISE BY THE ENGINEER.

FOOTING DEPTH: BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 1'-6" MINIMUM BELOW TOP OF FINISH GRADE AND BOTTOM OF ALL INTERIOR FOOTINGS SHALL BE 1'-0" MINIMUM BELOW TOP OF FINISH GRADE UNLESS NOTED OTHERWISE ON THE DRAWINGS.

CAST-IN-PLACE CONCRETE:

REFERENCE STANDARDS: CONFORM TO:
 1) ACI 318-14 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY"
 2) IBC CHAPTER 19 CONCRETE

FIELD REFERENCE: THE CONTRACTOR SHALL KEEP A COPY OF ACI FIELD REFERENCE MANUAL, SP-15 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301)" WITH SELECTED ACI AND ASTM REFERENCES

CONCRETE MIXTURES: CONFORM TO ACI 318 CHAPTER 5 "CONCRETE QUALITY, MIXING, AND PLACING."

MATERIALS: CONFORM TO ACI 318 CHAPTER 3 "MATERIALS" FOR REQUIREMENTS FOR CEMENTITIOUS MATERIALS, AGGREGATES, MIXING WATER, AND ADMIXTURES.

SUBMITTALS: PROVIDE ALL SUBMITTALS REQUIRED BY ACI 301 SECTION 4.1.2. SUBMIT MIX DESIGNS FOR EACH MIX IN THE TABLE BELOW:

MEMBER TYPE/LOCATION	STRENGTH (PSI)	TEST AGE (DAYS)	MAXIMUM AGGREGATE	MAXIMUM W/C RATIO	AIR CONTENT
FOUNDATIONS	4000	28	1"	0.45	4.5%
INTERIOR SLABS-ON-GRADE	4000	28	1"	0.45	
EXTERIOR SLABS-ON-GRADE	4000	28	1"	0.45	4.5%

CAST-IN-PLACE CONCRETE (CONT'D.):

MIX DESIGN NOTES:

- 1) W/C RATIO: WATER-CEMENTITIOUS MATERIAL RATIOS SHALL BE BASED ON THE TOTAL WEIGHT OF CEMENTITIOUS MATERIALS. RATIOS NOT SHOWN IN THE TABLE ABOVE ARE CONTROLLED BY STRENGTH REQUIREMENTS.
- 2) CEMENTITIOUS CONTENT: THE USE OF FLY ASH, OTHER POZZOLANS, SILICA FUME, OR SLAG SHALL CONFORM TO ACI 301 SECTION 4.2.2.8.B. MAXIMUM AMOUNT OF FLY ASH SHALL BE 20% OF TOTAL CEMENTITIOUS CONTENT UNLESS REVIEWED AND APPROVED OTHERWISE BY SER.
- 3) AIR CONTENT: CONFORM TO ACI 301 SECTION 4.2.2.4. HORIZONTAL EXTERIOR SURFACES IN CONTACT WITH THE SOIL REQUIRE ENTRAINED AIR. USE "MODERATE EXPOSURE." VERTICAL EXTERIOR SURFACES REQUIRE "MODERATE EXPOSURE." TOLERANCE IS ± 1/2%. AIR CONTENT SHALL BE MEASURED AT POINT OF PLACEMENT.
- 4) SLUMP: CONFORM TO ACI 301 SECTION 4.2.2.4. SLUMP SHALL BE DETERMINED AT POINT OF PLACEMENT.
- 5) SHRINKAGE LIMIT: CONCRETE USED IN ELEVATED SLABS AND BEAMS SHALL HAVE A SHRINKAGE LIMIT OF 0.045% AT 28 DAYS MEASURED IN ACCORDANCE WITH ASTM C157
- 6) NON-CHLORIDE ACCELERATOR: NON-CHLORIDE ACCELERATING ADMIXTURE MAY BE USED IN CONCRETE SLABS PLACED AT AMBIENT TEMPERATURES BELOW 50°F AT THE CONTRACTOR'S OPTION.

FORMWORK: CONFORM TO ACI 301 SECTION 2 "FORMWORK AND FORM ACCESSORIES." REMOVAL OF FORMS SHALL CONFORM TO SECTION 2.3.2 EXCEPT STRENGTH INDICATED IN SECTION 2.3.2.5 SHALL BE 0.75 F_c.

MEASURING, MIXING, AND DELIVERY: CONFORM TO ACI 301 SECTION 4.3.

HANDLING, PLACING, CONSTRUCTING, AND CURING: CONFORM TO ACI 301 SECTION 5.

CONSTRUCTION JOINTS: CONFORM TO ACI 301 SECTION 2.2.2.5, 5.1.2.3A, 5.2.2.1, AND 5.3.2.6. CONSTRUCTION JOINTS SHALL BE LOCATED AND DETAILED AS ON THE CONSTRUCTION DRAWINGS. USE OF AN ACCEPTABLE ADHESIVE, SURFACE RETARDER, PORTLAND CEMENT GROUT, OR ROUGHENING THE SURFACE IS NOT REQUIRED UNLESS SPECIFICALLY NOTED ON THE DRAWINGS. WHERE SHEAR BOND IS REQUIRED, ROUGHEN SURFACE TO 1/4" AMPLITUDE.

EMBEDDED ITEMS: POSITION AND SECURE IN PLACE EXPANSION JOINT MATERIAL, ANCHORS AND OTHER STRUCTURAL AND NON-STRUCTURAL EMBEDDED ITEMS BEFORE PLACING CONCRETE. CONTRACTOR SHALL REFER TO MECHANICAL, ELECTRICAL, PLUMBING & ARCHITECTURAL DRAWINGS & COORDINATE ALL OTHER EMBEDDED ITEMS.

GROUT: USE 5000 PSI NON SHRINK GROUT

SHRINKAGE: CONVENTIONAL CONCRETE SLABS WILL CONTINUE TO SHRINK AFTER INITIAL PLACEMENT OF CONCRETE. CONTRACTOR AND SUBCONTRACTOR SHALL COORDINATE JOINTING AND INTERIOR MATERIAL FINISHES TO PROVIDE ADEQUATE TOLERANCE FOR EXPECTED SHRINKAGE.

TESTING AND ACCEPTANCE:
 TESTING: OBTAIN SAMPLES AND CONDUCT TESTS IN ACCORDANCE WITH ACI 301 SECTION 1.6.4.2. ADDITIONAL SAMPLES MAY BE REQUIRED TO OBTAIN CONCRETE STRENGTHS AT ALTERNATE INTERVALS THAN SHOWN BELOW.

CURE 5 CYLINDERS FOR 28-DAY TEST AGE, TEST 1 CYLINDER AT 7 DAYS, TEST 3 CYLINDERS AT 28 DAYS, AND HOLD 1 CYLINDER IN RESERVE FOR USE AS THE ENGINEER DIRECTS. AFTER 56 DAYS, UNLESS NOTIFIED BY THE ENGINEER TO THE CONTRARY, THE RESERVE CYLINDER MAY BE DISCARDED WITHOUT BEING TESTED FOR SPECIMENS MEETING 28-DAY STRENGTH REQUIREMENTS.

ACCEPTANCE: STRENGTH IS SATISFACTORY WHEN:
 THE AVERAGES OF ALL SET OF 3 CONSECUTIVE TESTS EQUAL OR EXCEED THE SPECIFIED STRENGTH. NO INDIVIDUAL TEST FALLS BELOW THE SPECIFIED STRENGTH BY MORE THAN 500 PSI. A "TEST" FOR ACCEPTANCE IS THE AVERAGE STRENGTH OF THE TWO CYLINDERS TESTED AT THE SPECIFIED TEST AGE.

CONCRETE REINFORCING

- REFERENCE STANDARDS:** CONFORM TO:
 1) ACI 301 "STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE", SECTION 3 "REINFORCEMENT AND REINFORCEMENT SUPPORTS."
 2) ACI SP-66 "ACI DETAILING MANUAL" INCLUDING ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT."
 3) CRSI MSP-2 "MANUAL OF STANDARD PRACTICE."
 4) IBC CHAPTER 19, CONCRETE.
 5) ACI 318 AND ACI 318R.

SUBMITTALS: CONFORM TO ACI 301 SECTION 3.1.1 "SUBMITTALS, DATA AND DRAWINGS." SUBMIT PLACING DRAWINGS SHOWING FABRICATION DIMENSIONS AND LOCATIONS FOR PLACEMENT OF REINFORCEMENT AND REINFORCEMENT SUPPORTS.

MATERIALS:	
REINFORCING BARS	ASTM A615, GRADE 60, DEFORMED BARS
SMOOTH WELDED WIRE FABRIC	ASTM A 1064 FLAT SHEETS ONLY
BAR SUPPORTS	CRSI MSP-2, CHAPTER 3 "BAR SUPPORTS"
TIE WIRE	16.5 GAGE OR HEAVIER, BLACK ANNEALED.

FABRICATION: CONFORM TO ACI 301, SECTION 3.2.2 "FABRICATION", AND ACI SP-66 "ACI DETAILING MANUAL."

WELDING: BARS SHALL NOT BE WELDED.

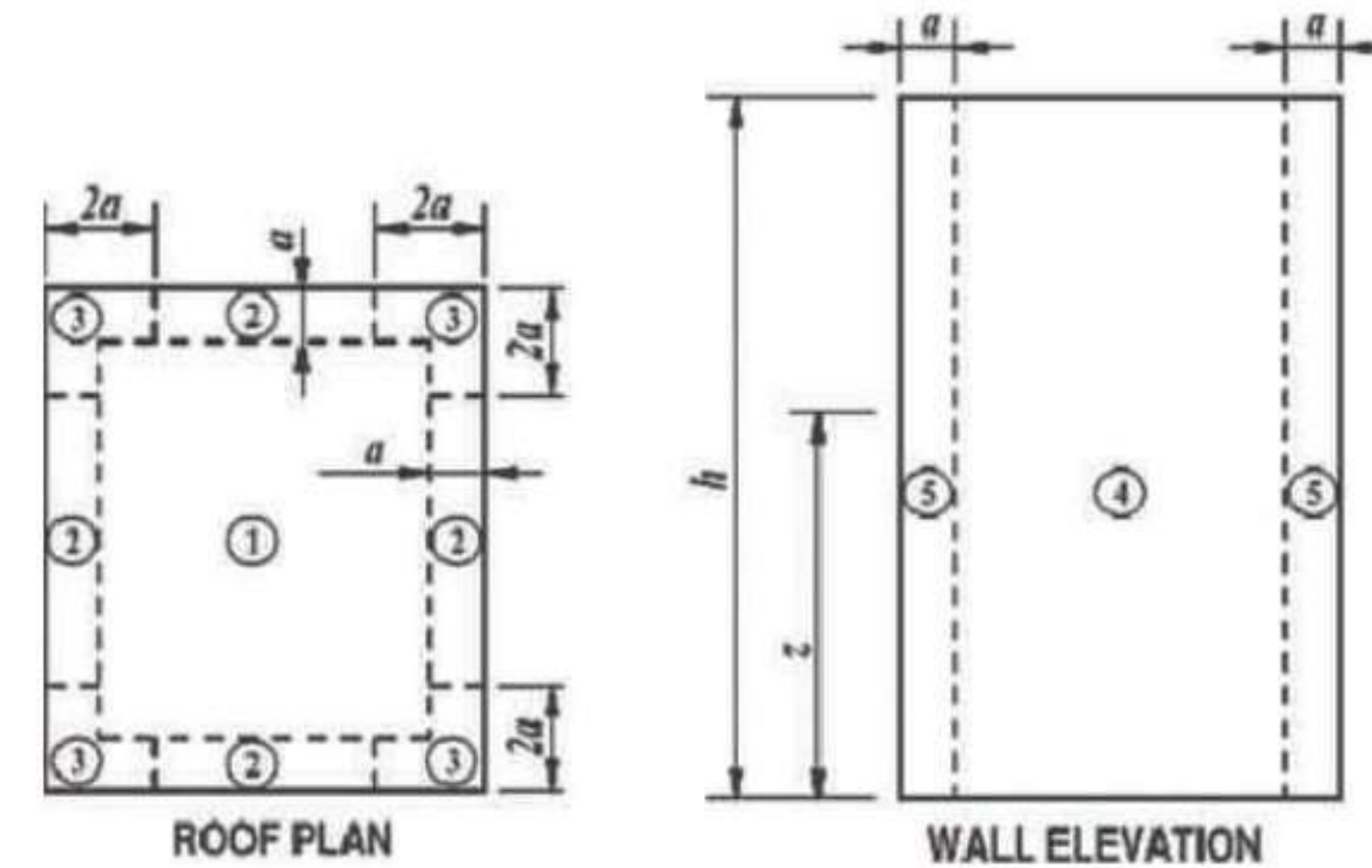
PLACING: CONFORM TO ACI 301, SECTION 3.3.2 "PLACEMENT." PLACEMENT TOLERANCES SHALL CONFORM TO SECTION 3.3.2.1 "TOLERANCES."

CONCRETE COVER: CONFORM TO THE FOLLOWING COVER REQUIREMENTS FROM ACI 301, TABLE 3.3.2.3:
 CONCRETE CAST AGAINST EARTH 3"
 CONCRETE EXPOSED TO EARTH OR WEATHER (#5 & SMALLER) 1 1/2"
 CONCRETE EXPOSED TO EARTH OR WEATHER (#6 & LARGER) 2"

SPLICES: CONFORM TO ACI 301, SECTION 3.3.2.7. REFER TO "LAP SPLICE SCHEDULE" OR PLANS FOR TYPICAL SPLICES. THE SPLICES ON INDIVIDUAL SHEETS CONTROL OVER THE SCHEDULE. USE CLASS B SPLICES UNLESS OTHERWISE NOTED. MECHANICAL CONNECTIONS MAY BE USED WHEN APPROVED BY THE ENGINEER.

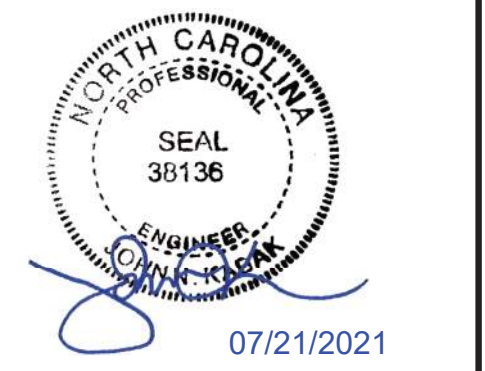
FIELD BENDING: CONFORM TO ACI 301 SECTION 3.3.2.8. "FIELD BENDING OR STRAIGHTENING." BAR SIZES #3 THROUGH #5 MAY BE FIELD BENT COLD THE FIRST TIME. OTHER BARS REQUIRE PREHEATING. DO NOT TWIST BARS.

CORNER BARS: PROVIDE MATCHING-SIZED "L" CORNER BARS FOR ALL HORIZONTAL WALL AND FOOTING BARS WITH THE APPROPRIATE SPLICE LENGTH, UNO.



WIND LOAD DIAGRAM

REV.	DATE	DESCRIPTION



SPOUT SPRINGS
 2778 NC-24
 CAMERON, NC 28236

STRUCTURAL GENERAL NOTES

PERMIT	DATE
BID	07/21/2021
CONSTRUCTION	-/-/-
RECORD	-/-/-
PROJECT MANAGER	DESIGNER
AK	GM

JOB NO.
2020379.19

S0001



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2

3

4

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STRUCTURAL STEEL:

DESIGN STANDARDS: STRUCTURAL STEEL FOR THIS PROJECT IS DESIGNED IN ACCORDANCE WITH AISC STEEL CONSTRUCTION MANUAL, FIFTEENTH EDITION.

REFERENCE STANDARDS: CONFORM TO:

- 1) AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS & BRIDGES"
- 2) RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS"
- 3) AWS D1.10 "STRUCTURAL WELDING CODE - STEEL"
- 5) AISC 341 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS"

SUBMITTALS:

- 1) SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH AISC SPECIFICATION SECTION M1 "SHOP DRAWINGS"
- 2) SUBMIT WELDER'S CERTIFICATES VERIFYING QUALIFICATION WITHIN PAST 12 MONTHS.

MATERIALS:

STRUCTURAL WF SHAPES	ASTM A992, FY = 50 KSI
OTHER STRUCTURAL SHAPES	ASTM A36, FY = 36 KSI
BAR & PLATES	ASTM A36, FY = 36 KSI
HSS STRUCTURAL TUBING	ASTM A500, GRADE B, FY = 46 KSI
BOLTS	ASTM A325 OR ASTM F1852, TYPE 1, PLAIN
NUTS	ASTM A563 OR ASTM A194, GRADE 2H
WASHERS (FLAT OR BEVELLED)	ASTM F436
ANCHOR RODS (HEADED, THREADED)	ASTM 1554, GRADE 36 (WELDABLE)
THREADED RODS	ASTM A36, FY = 36 KSI
WELDING ELECTRODES	E70XX

WELDING: CONFORM TO AWS D1.10. WELDERS SHALL BE CERTIFIED IN ACCORDANCE WITH AWS REQUIREMENTS. USE E70 ELECTRODES OF TYPE REQUIRED FOR MATERIALS TO BE WELDED.

HIGH-STRENGTH BOLTING: HIGH-STRENGTH BOLTS SHALL BE INSTALLED PER JOINT TYPE ST - "SNUG TIGHT" PER RCSC SPECIFICATION SECTION 4. ASTM A325 BOLTS SHALL CONFORM TO THE RCSC SPECIFICATION SECTION 2 DESIGNED WITH ASTM A325-N BOLTS - "THREADS INCLUDED IN THE SHEAR PLANE."

ANCHOR BOLTS: ANCHOR BOLTS MAY BE EITHER HEADED BOLTS OR THREADED ROD WITH NUT AT EMBEDDED END. PREVENT NUT ROTATION AT EMBEDDED END BY TACK WELDING, DEFORMING BOLT THREADS, OR DOUBLE-NUTTING

FABRICATION/ERECTION: CONFORM TO AISC SPECIFICATION SECTION M2 "FABRICATION", AISC CODE SECTION 6 "FABRICATION AND DELIVERY" AND AISC CODE SECTION 8 "QUALITY CONTROL." THE FABRICATOR AND ERECTOR SHALL MAINTAIN A QUALITY CONTROL PROGRAM TO THE EXTENT DEEMED NECESSARY SO THAT ALL OF THE WORK IS PERFORMED IN ACCORDANCE WITH THIS CODE, THE AISC SPECIFICATION, AND THE CONTRACT DOCUMENTS.

SHOP PAINTING: CONFORM TO AISC 360. DO NOT PAINT STEEL TO BE EMBEDDED IN CONCRETE, FIREPROOFED, OR CONCEALED BY THE INTERIOR BUILDING FINISH. DO NOT PAINT SURFACES TO BE FIELD WELDED OR WHERE SLIP-CRITICAL BOLTS ARE SPECIFIED. ALL OTHER INTERIOR STEEL SHALL BE PAINTED WITH ONE COAT OF GREY SHOP PRIMER. ALL EXPOSED EXTERIOR STEEL SHALL BE PAINTED WITH AN EXTERIOR MULTI-COAT SYSTEM AS PER THE ARCHITECT OR PROJECT SPECIFICATIONS. FIELD TOUCH-UP PAINTING SHALL BE WITH PRIMER FOR EXPOSED INTERIOR SURFACES AND AS PER THE ARCHITECT OR BUILDING SPECIFICATIONS FOR EXPOSED EXTERIOR SURFACES.

GALVANIZING: ALL EXPOSED STEEL OUTSIDE THE BUILDING ENVELOPE SHALL BE HOT-DIPPED GALVANIZED. APPLY FIELD TOUCH-UPS PER SPECIFICATIONS.

ERECTION: CONFORM TO AISC SPECIFICATION SECTION M4 "ERECTION" AND AISC CODE SECTION 7 "ERECTION." STEEL WORK SHALL BE CARRIED UP TRUE AND PLUMB WITHIN THE LIMITS DEFINED IN AISC CODE SECTION 7.11.

EXPOSED STRUCTURAL STEEL:

CANOPY STEEL TUBE FRAMING IS ARCHITECTURALLY EXPOSED, AND THEREFORE REQUIRES SPECIAL CARE BE TAKEN DURING FABRICATION, HANDLING AND ERECTION. THE FOLLOWING REQUIREMENTS FROM SECTION 10 OF THE AISC CODE OF STANDARD PRACTICE FOR ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL APPLY. ADDITIONAL REQUIREMENTS OF SECTION 10 DO NOT APPLY. SUCH FRAMING SHALL BE CONSIDERED CATEGORY 2 ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS)

FABRICATION SHALL BE DONE IN ACCORDANCE WITH THE DETAILS SHOWN ON THE STRUCTURAL DRAWINGS. ALL COPES, MITERS, AND BUTT CUTS IN SURFACES SHALL BE MADE WITH UNIFORM GAPS AS SHOWN ON THE DRAWINGS, OR IN REASONABLE CONTACT IF SHOWN WITHOUT A GAP. WELDS SHALL BE REASONABLY SMOOTH AND UNIFORM. FINISHING AND GRINDING IS NOT REQUIRED EXCEPT WHERE NECESSARY FOR FIT OR CLEARANCE, OR WHEN SPECIFICALLY NOTED ON THE CONTRACT DRAWINGS.

THE FABRICATOR SHALL USE SPECIAL CARE TO AVOID BENDING, TWISTING OR OTHERWISE DISTORTING OF INDIVIDUAL MEMBERS OR ASSEMBLIES.

ERECTION SHALL BE PERFORMED SO AS TO PROVIDE A CLOSE FIT AND NEAT APPEARANCE OF THE STRUCTURE.

UNLOADING, HANDLING, AND ERECTION SHALL BE EXECUTED WITH CARE TO MINIMIZE DAMAGE TO ANY SHOP PAINT. IF TEMPORARY BRACES OR ERECTION CLIPS ARE USED, UPON REMOVAL, STEEL SURFACES SHALL BE GROUND SMOOTH AND HOLES FILLED WITH WELD METAL OR BODY SOLDER AND SMOOTHED BY GRINDING OR FILING. TOUCH UP ABRASIONS OF THE SHOP COAT SHALL BE PERFORMED BY THE PAINTING CONTRACTOR.

MASONRY

ALL CONCRETE MASONRY SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" (TMS 402) AND "SPECIFICATION FOR MASONRY STRUCTURES" (TMS 602) AND LOCAL BUILDING CODE REQUIREMENTS.

CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, TYPE I OR II.

ASTM C270, TYPE "S" MORTAR WITH A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI SHALL BE USED FOR ALL MASONRY WALLS.

GROUT TO FILL CORES SHALL BE ASTM C476, COARSE GROUT (3/8" MAXIMUM AGGREGATE) WITH A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI IN 28 DAYS.

REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60.

LAY MASONRY UNITS WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. BED WEBS IN MORTAR IN STARTING COURSE OF FOOTINGS AND IN ALL COURSES OF COLUMNS AND PILASTERS, AND WHERE ADJACENT TO CELLS OR CAVITIES TO BE REINFORCED OR FILLED WITH CONCRETE OR GROUT.

MASONRY SHALL BE LAID IN RUNNING BOND, UNLESS NOTED OTHERWISE.

VERTICAL REINFORCING LAP SPLICES SHALL BE 48 BAR DIAMETERS.

MAXIMUM GROUT POUR SHALL BE 5 FEET. CONSOLIDATE BY MECHANICAL VIBRATION.

MORTAR PROTRUSIONS, EXTENDING INTO CELLS OR CAVITIES TO BE REINFORCED AND FILLED, SHALL BE REMOVED.

ALL CORNERS ARE TO BE TIED BY MASONRY BOND.

FASTENERS

ADHESIVE ANCHORS

REINFORCING BAR DOWELS, REINFORCING BARS, THREADED RODS, BOLTS ETC. WHICH ARE INDICATED TO BE ADHESIVE DOWELLED INTO CONCRETE OR SOLID MASONRY SHALL BE ACCOMPLISHED USING HIT HY-200 SAFESET ADHESIVE BY HILTI FASTENING SYSTEMS OF TULSA, OK. (ICC REPORT NO. ESR 3013), OR EQUAL.

DRILL, BRUSH, AND CLEAN ALL HOLES, AND INSTALL ALL ANCHORS IN COMPLETE ACCORDANCE WITH MANUFACTURERS PUBLISHED RECOMMENDATIONS, AS WELL AS ALL APPLICABLE BUILDING CODES OR ENGINEERING REPORTS. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90, TYPE I OR II.

POWDER ACTUATED FASTENERS (PAF)

POWDER ACTUATED FASTENERS SHALL BE .157" DIA. HILTI X-U. WHEN USED FOR FASTENING TO STEEL, FASTENER POINTS SHALL COMPLETELY PENETRATE THE STEEL. FASTENERS TO CONCRETE SHALL BE EMBEDDED 1" MINIMUM INTO CONCRETE.

WOOD FRAMING

REFERENCE STANDARDS: CONFORM TO:

- 1) IBC CHAPTER 23 "WOOD"
- 2) NDS AND NDS SUPPLEMENT - "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION"
- 3) BCSI 2008 "BUILDING COMPONENT SAFETY INFORMATION"

DEFERRED SUBMITTALS: SUBMIT PRODUCT DATA AND PROOF OF ICC APPROVAL FOR FRAMING MEMBERS AND FASTENERS THAT HAVE BEEN DESIGNED BY OTHERS. SUBMIT CALCULATIONS PREPARED BY THE SSE REGISTERED IN THE STATE IN WHICH THE PROJECT IS CONSTRUCTED. FOR ALL MEMBERS AND CONNECTIONS DESIGNED BY OTHERS ALONG WITH SHOP DRAWINGS, ALL NECESSARY BRIDGING, BLOCKING, BLOCKING PANELS AND WEB STIFFENERS SHALL BE DETAILED AND FURNISHED BY THE SUPPLIER. TEMPORARY AND PERMANENT BRIDGING SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S SPECIFICATIONS. DEFLECTION LIMITS SHALL BE AS NOTED UNDER DESIGN LOADS SECTION.

IDENTIFICATION: ALL SAWN LUMBER AND PRE-MANUFACTURED WOOD PRODUCTS SHALL BE IDENTIFIED BY THE GRADE MARK OR A CERTIFICATE OF INSPECTION ISSUED BY THE CERTIFYING AGENCY.

MATERIALS:

-SAWN LUMBER: CONFORM TO GRADING RULES OF WWPA, WCLIB, OR NLGA. FINGER JOINTED STUDS ACCEPTABLE AT INTERIOR WALLS ONLY.

MEMBER USE	SIZE	SPECIES	GRADE
STUDS & POSTS	2X4, 2X6	D-F-L	NO. 2
JOISTS	2X6, 2X8	D-F-L	NO. 2
JOISTS & BEAMS	2X10, 2X12	D-F-L	NO. 2

-WOOD STRUCTURAL SHEATHING (PLYWOOD): WOOD APA-RATED STRUCTURAL SHEATHING INCLUDES:

ALL VENEER PLYWOOD, ORIENTED STRAND BOARD, WAFERBOARD, PARTICLEBOARD, T1-11 SIDING, AND COMPOSITES OF VENEER AND WOOD BASED MATERIAL. CONFORM TO PRODUCT STANDARD PS-1 AND PS-2 OF THE U.S. DEPT. OF COMMERCE AND THE AMERICAN PLYWOOD ASSOCIATION (APA).

LOCATION	MINIMUM APA RATING	THICKNESS	SPAN RATING	PLYWOOD GRADE	EXPOSURE
ROOF		23/32"	48/24	C-D	1
WALLS		15/32"	32/16	C-D	1

-JOIST HANGERS AND CONNECTORS: SHALL BE "STRONG TIE" BY SIMPSON COMPANY OR USP EQUIVALENT AS SPECIFIED IN THEIR LATEST CATALOGS. ALTERNATE CONNECTORS BY OTHER MANUFACTURERS MAY BE SUBSTITUTED PROVIDED THEY HAVE CURRENT ICC APPROVAL FOR EQUIVALENT OR GREATER LOAD CAPACITIES AND ARE REVIEWED AND APPROVED BY THE SER PRIOR TO ORDERING. CONNECTORS SHALL BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE 1/2 OF THE NAILS OR BOLTS IN EACH MEMBER. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE FULL LENGTH COMMON NAIL STRAPS TO WOOD. FRAMING AS LATE AS POSSIBLE IN THE FRAMING PROCESS TO ALLOW THE WOOD TO SHRINK AND THE BUILDING TO SETTLE.

-NAILS AND STAPLES: CONFORM TO IBC SEC 2303.6 "NAILS AND STAPLES." UNLESS NOTED ON PLANS, NAIL PER IBC TABLE 2304.10.1 UNLESS NOTED OTHERWISE ALL NAILS SHALL BE COMMON. NAIL SIZES SPECIFIED ON THE DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETER
8D	2 1/2"	0.131"
10D	3"	0.148"
12D (16D SINKER)	3 1/4"	0.148"
16D	3 1/2"	0.162"

-LAG BOLTS/BOLTS: CONFORM TO ASTM A307

-WOOD HOLD-DOWNS: HOLD-DOWNS SPECIFIED ARE AS MANUFACTURED BY SIMPSON STRONG-TIE CO. ADDITIONAL FRAMING MEMBERS SHALL BE PROVIDED PER THE SYSTEM REQUIREMENTS. ACCEPTABLE EQUIVALENT PRODUCT SUBSTITUTIONS ARE AVAILABLE FROM OTHER MANUFACTURERS WITH SER APPROVAL.

-ENGINEERED WOOD PRODUCTS: THE FOLLOWING MATERIALS ARE BASED ON ENGINEERED LUMBER MANUFACTURED BY TRUS-JOIST/WEYERHAUSER AND WERE USED FOR THE DESIGN AS SHOWN ON THE PLANS. ALTERNATE PRODUCTS BY OTHER MANUFACTURERS MAY BE SUBSTITUTED PROVIDED THEY HAVE CURRENT ICC APPROVAL FOR EQUIVALENT OR GREATER LOAD AND STIFFNESS PROPERTIES AND ARE REVIEWED AND APPROVED BY THE SER.

A) LAMINATED VENEER LUMBER (LVL): CONFORM TO NES REPORT NO. NER-481, ICC ES REPORT NO. ER-4975 OR CCMC REPORT NO. 08075-R

B) LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM STRUCTURAL PROPERTIES:

Fb = 2600 PSI
Fv = 285 PSI
E = 1900 KSI
Emin = 988 KSI

C) I-JOISTS SHALL HAVE MATERIAL AND SECTION PROPERTIES GREATER THAN OR EQUAL TO TRUS-JOIST/WEYERHAUSER TJI 360. I-JOIST FRAMING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH INSTRUCTIONS, CONSTRUCTION DETAILS AND PLACEMENT DRAWINGS, WHICH SHALL BE PROVIDED BY THE MANUFACTURER.

NAILING REQUIREMENTS: PROVIDE MINIMUM NAILING IN ACCORDANCE WITH IBC TABLE 2304.10.1 "FASTENING SCHEDULE" EXCEPT AS NOTED ON THE DRAWINGS. NAILING FOR ROOF/FLOOR DIAPHRAGMS/SHEAR WALLS SHALL BE PER DRAWINGS. NAILS SHALL BE DRIVEN FLUSH AND SHALL NOT FRACTURE THE SURFACE OF SHEATHING.

STANDARD LIGHT-FRAME CONSTRUCTION: UNLESS NOTED ON THE PLANS, CONSTRUCTION SHALL CONFORM TO IBC SECTION 2308 "CONVENTIONAL LIGHT-FRAME CONSTRUCTION" AND IBC SECTION 2304 "GENERAL CONSTRUCTION REQUIREMENTS."

1) WALL FRAMING: UNLESS OTHERWISE NOTED, ALL EXTERIOR WALLS SHALL BE 2x6 AT 16" O.C. PROVIDE (2) BUNDLED STUDS (MIN.) AT WALL ENDS AND EACH SIDE OF EACH OPENING. UNO. PROVIDE 15/32" (MIN.) WOOD STRUCTURAL PANEL A.P.A. RATED SHEATHING ON EXTERIOR SURFACES. FASTEN EXTERIOR SHEATHING TO STUDS WITH 8D NAILS AT 6" O.C. EDGE, 12" O.C. FIELD, UNO AS GREATER ON THE DRAWINGS. REFER TO SHEAR WALL SCHEDULE FOR SPECIFIC SHEATHING, STUD AND NAILING REQUIREMENTS AT SHEAR WALLS.

2) SILL PLATE ANCHORAGE: PROVIDE 1/2" DIAMETER BY 6" EMBEDMENT ANCHOR BOLTS AT 48" MAXIMUM ON CENTER. PROVIDE A MINIMUM OF TWO BOLTS PER SILL PLATE SEGMENT WITH ONE BOLT LOCATED AT LEAST 4 INCHES, BUT NOT MORE THAN 12 INCHES, FROM EACH END OF EACH SEGMENT.

3) ROOF FRAMING: ROOF SHEATHING SHALL BE 23/32" MIN. WOOD STRUCTURAL PANEL A.P.A. RATED SHEATHING, FASTENED TO SUPPORTING MEMBERS WITH 10D NAILS AT 6" O.C. AT EDGES AND 12" O.C. IN THE FIELD. PROVIDE ROOF SHEATHING EDGE CLIPS CENTERED BETWEEN FRAMING AT UNBLOCKED SHEATHING EDGES. SHEATHING SHALL BE LAID WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBERS.

MOISTURE CONTENT: WOOD MATERIAL USED FOR THIS PROJECT SHALL HAVE MAXIMUM MOISTURE CONTENT OF 19% EXCEPT FOR THE PRESSURE-TREATED WOOD SILL PLATE

PRESERVATIVE TREATMENT: WOOD MATERIALS ARE REQUIRED TO BE "TREATED WOOD" UNDER CERTAIN CONDITIONS IN ACCORDANCE WITH IBC SECTION 2304.11 "PROTECTION AGAINST DECAY AND TERMITES." CONFORM TO THE APPROPRIATE STANDARDS OF THE AMERICAN WOOD-PRESERVATIVES ASSOCIATION (AWPA) FOR SAWN LUMBER, GLUED LAMINATED TIMBER, ROUND POLES, WOOD PILES, AND MARINE PILES. FOLLOW AMERICAN LUMBER STANDARDS COMMITTEE (ALSC) QUALITY ASSURANCE PROCEDURES. PRODUCTS SHALL BEAR THE APPROPRIATE MARK.

METAL CONNECTORS/PT WOOD: GPD RECOMMENDS THAT ALL METAL HARDWARE AND FASTENERS IN CONTACT WITH PRESSURE TREATED LUMBER BE STAINLESS STEEL TYPE 316L. AT THE OWNER'S RISK AND DISCRETION, HOT-DIPPED GALVANIZED METAL HARDWARE AND FASTENERS MAY BE INVESTIGATED FOR USE IN LIEU OF STAINLESS STEEL PROVIDED THAT THE FINISH HAS A MINIMUM ZINC CONTENT OF 1.85 OZ/SF AND ITS USE IS COORDINATED BY THE CONTRACTOR AND WOOD SUPPLIER FOR THE EXPECTED ENVIRONMENT AND MOISTURE EXPOSURE FOR APPROPRIATE USE BASED ON THE METHOD OF PRESERVATIVE TREATMENT OF THE WOOD.

REV.	DATE	DESCRIPTION



07/21/2021

SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

STRUCTURAL GENERAL NOTES

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	-/-/-
RECORD	-/-/-

PROJECT MANAGER	DESIGNER
AK	GM

JOB NO.
2020379.19

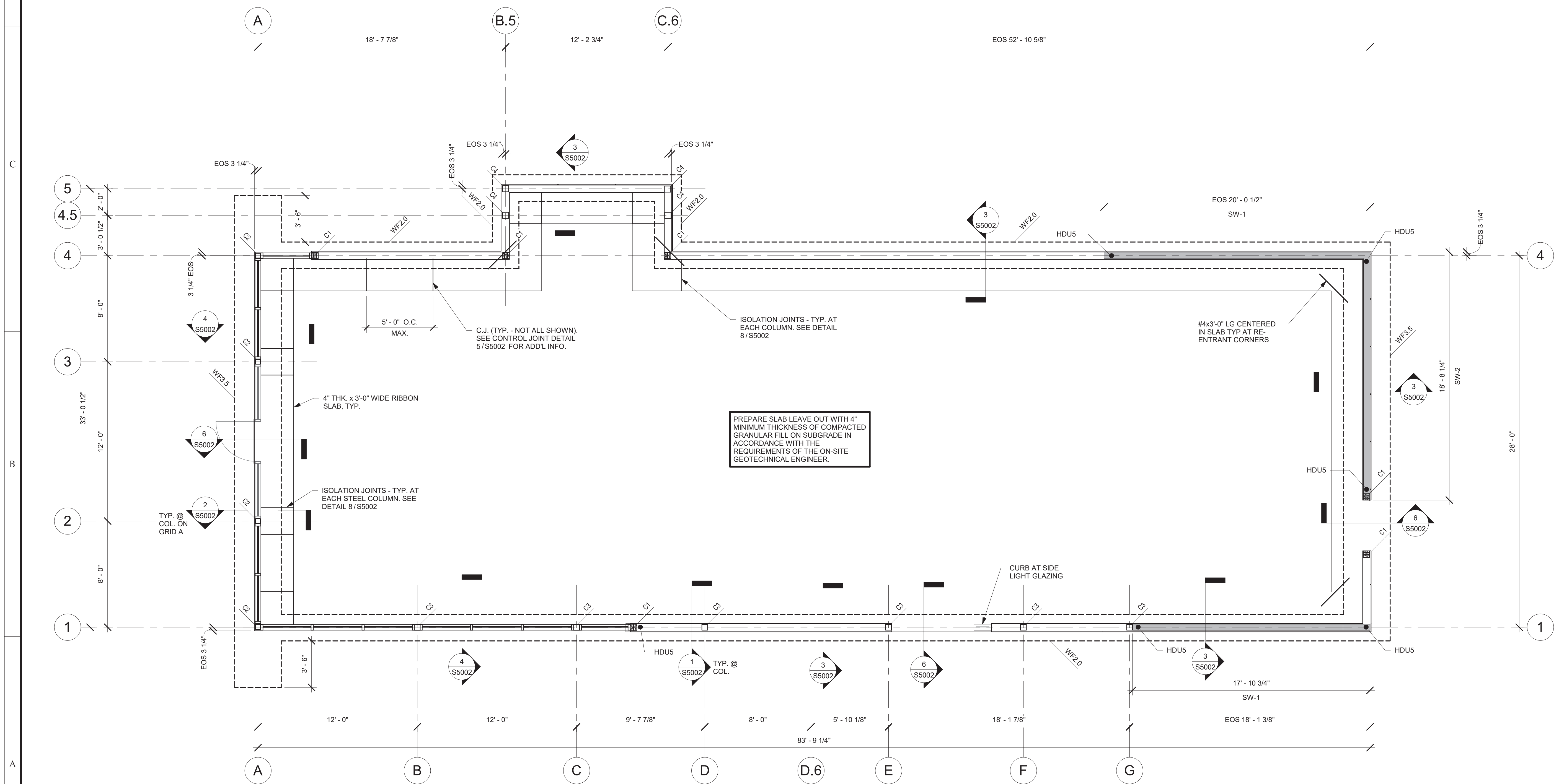
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COLUMN SCHEDULE			
MARK	COLUMN SECTION	BASE PLATE BxNxD DETAIL	ANCHOR RODS OR FASTENERS
C1	(2) 2x6 JACK STUDS PLUS (2) 2x6 KING STUDS	SIMPSON A35 5/S5001	(1) 5/8"Ø x 6" EMBED. ANCHOR ROD.
C2	HSS5x5x3/8	16x16"x1 1/4" 6/S5001	(6) 7/8"Ø F1554 GR36 WITH 12" EMBEDMENT
C3	5 1/4x5 1/4 PSL WOOD	SIMPSON RPBZ 8/S5001	(2) 1/4"Ø x 1 3/4" LG. SIMPSON TITEN SCREWS
C4	6x6 #2 SOUTHERN PINE	SIMPSON A35 5/S5001	(1) 5/8"Ø x 6" EMBED. ANCHOR ROD

FOOTING SCHEDULE		
MARK	DIMENSIONS (WIDTHxLENGTHxTHICKNESS)	REINFORCING
WF2.0	2'-0"xCONTx1'-4"	(3) #5 BOT (CONT.)
WF3.5	3'-6"xCONTx1'-4"	(4) #5 TOP & BOTTOM AND #5 @ 24" O.C. TRANSVERSE TOP & BOT.

GENERAL NOTES

- FOR STRUCTURAL GENERAL NOTES AND DESIGN CRITERIA, REFER TO SHEET S0001.
- DIMENSIONS: VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. ALL DIMENSIONS SHOWN ARE TO OUTSIDE FACE OF STUD, OR CENTERLINE OF STEEL COLUMN. CONTINUOUS FOOTINGS ARE CENTERED UNDER PERIMETER WALL STUDS.
- TOP OF SLAB ELEVATION 0'-0".
- REFER TO SHEET S0001 FOR SUBGRADE PREPARATION AND FILL REQUIREMENTS AT SLABS AND FOOTINGS.
- WF INDICATES WALL FOOTING. SEE SCHEDULE ON THIS SHEET.
- ALL WOOD IN CONTACT WITH WEATHER-EXPOSED CONCRETE OR WITHIN 8" OF FINISHED GRADE SHALL BE PRESSURE-TREATED.
- SW-X INDICATES SHEAR WALL. FOR SHEAR WALL ELEVATION, DETAILS, AND SCHEDULE, SEE SHEET S5001.
- HDU-X INDICATES HOLDOWN PER SCHEDULE ON SHEET S5001.



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

REV.	DATE	DESCRIPTION



SPOUT SPRINGS
 2778 NC-24
 CAMERON, NC 28236

FOUNDATION PLAN

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	-/-/-
RECORD	-/-/-

PROJECT MANAGER	DESIGNER
AK	GM

JOB NO.
2020379.19

S1001

LEGEND

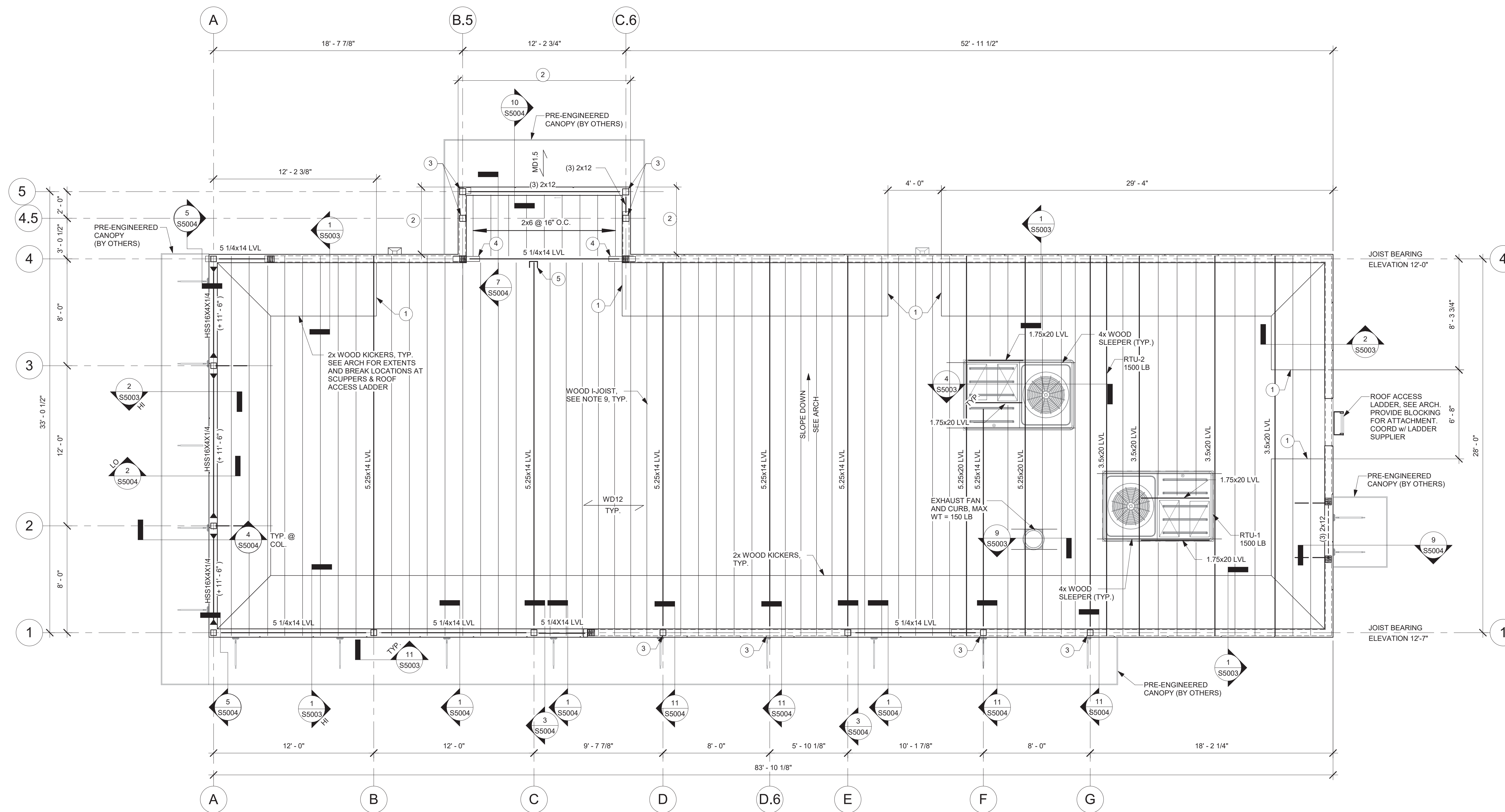
WD12 WOOD STRUCTURAL PANEL DECKING PER GENERAL NOTES, FASTEN TO SUPPORTS WITH 8D NAILS AT 6" O.C. EDGE, 12" O.C. FIELD.

GENERAL NOTES

- FOR STRUCTURAL GENERAL NOTES & DESIGN CRITERIA, REFERENCE SHEET S0001.
- DIMENSIONS: VERIFY ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. DIMENSIONS SHOWN ARE TO OUTSIDE FACE OF STUD, CENTERLINE OF JOIST OR CENTERLINE OF GRID/STEEL.
- FOR ALL DUCTS, CHASES, AND PIPES, REFERENCE MECHANICAL, PLUMBING, ELECTRICAL, AND SPRINKLER DRAWINGS.
- INDICATES HSS TO HSS MOMENT CONNECTION. SEE 7/S5003.
- INDICATES SPAN DIRECTION OF STEEL OR W.S.P. DECKING.
- PROVIDE WOOD STRUCTURAL PANEL FILLERS BETWEEN PLYS OF HEADERS TO MATCH WIDTH OF WALL STUDS.
- THE ROOF OVER THE BUILDING INTERIOR IS WOOD STRUCTURAL PANEL DIAPHRAM DESIGNED TO TRANSFER LATERAL FORCES TO THE WOOD STRUCTURAL PANEL SHEAR WALLS. DOUBLE TOP PLATES OF THE WOOD FRAMED WALLS AND ABOVE THE WALL OPENINGS BEHAVE AS A DIAPHRAM CHORDS AND COLLECTOR ELEMENTS. MAINTAIN CONTINUOUS DOUBLE TOP PLATE AND SPLICE PER 7/S5001.
- SEE FOUNDATION PLAN FOR SHEAR WALL LOCATIONS.
- ROOF JOISTS ARE 20" DEEP I-JOISTS SPACED AT 16" O.C. BETWEEN COLUMN LINES, TRUS-JOIST/WEYERHAEUSER TJI 360 OR APPROVED ALTERNATE.
- (X-X) INDICATES TOP OF STEEL ELEVATION REFERENCED FROM FINISH FLOOR ELEVATION OF (0'-0").
- TOP OF LVL ROOF MEMBERS SHALL MATCH TOP OF ADJACENT I-JOISTS.

KEYED NOTES

- PROVIDE END WALL FRAMED WITH 2x4 STUDS @ 16" O.C. WITH 15/32" WOOD STRUCTURAL PANEL SHEATHING.
- DENOTES DOUBLE 2x TOP PLATE AT TOP OF PARAPET TO BE CONTINUOUS WITHOUT BREAKS FOR EXTENTS SHOWN. FASTEN DOUBLE PLATE TOGETHER USING (2) 10d NAILS @ 16" O.C. LAP TOP PLATES AT CORNERS USING A SIMPSON 1212HL STRAP TIE.
- STRUCTURAL ATTACHMENTS OF PRE-ENGINEERED CANOPIES SHALL BE MADE TO POSTS INDICATED.
- SIMPSON ST2215 WITH (10) 16D NAILS TO TOP PLATE AND (10) 16D NAILS TO BEAM.
- SIMPSON HUQ612-SDS



1 ROOF FRAMING PLAN
 Scale: 1/4" = 1'-0"

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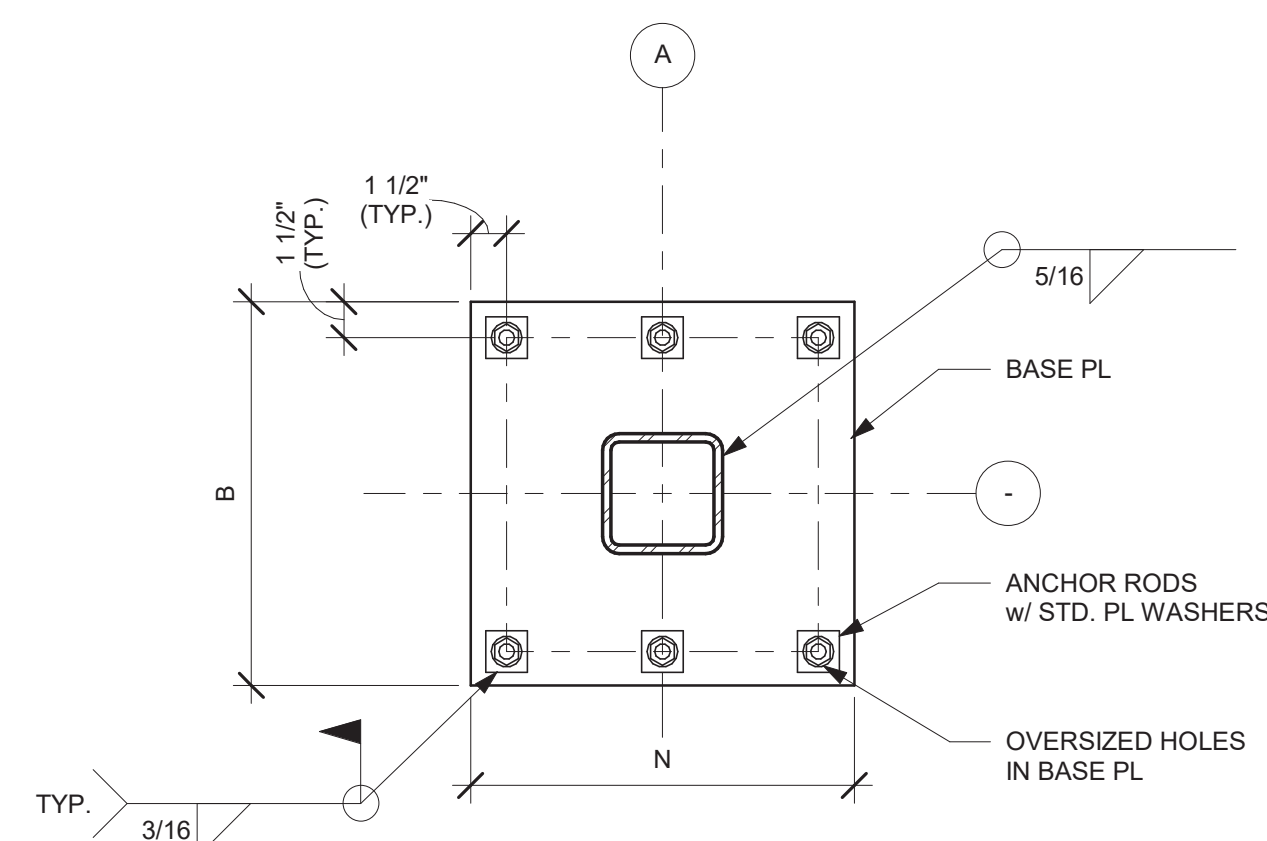
ROOF FRAMING PLAN

PERMIT	DATE
	07/21/2021
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	07/21/2021
CONSTRUCTION	
RECORD	

PROJECT MANAGER	DESIGNER
AK	GM

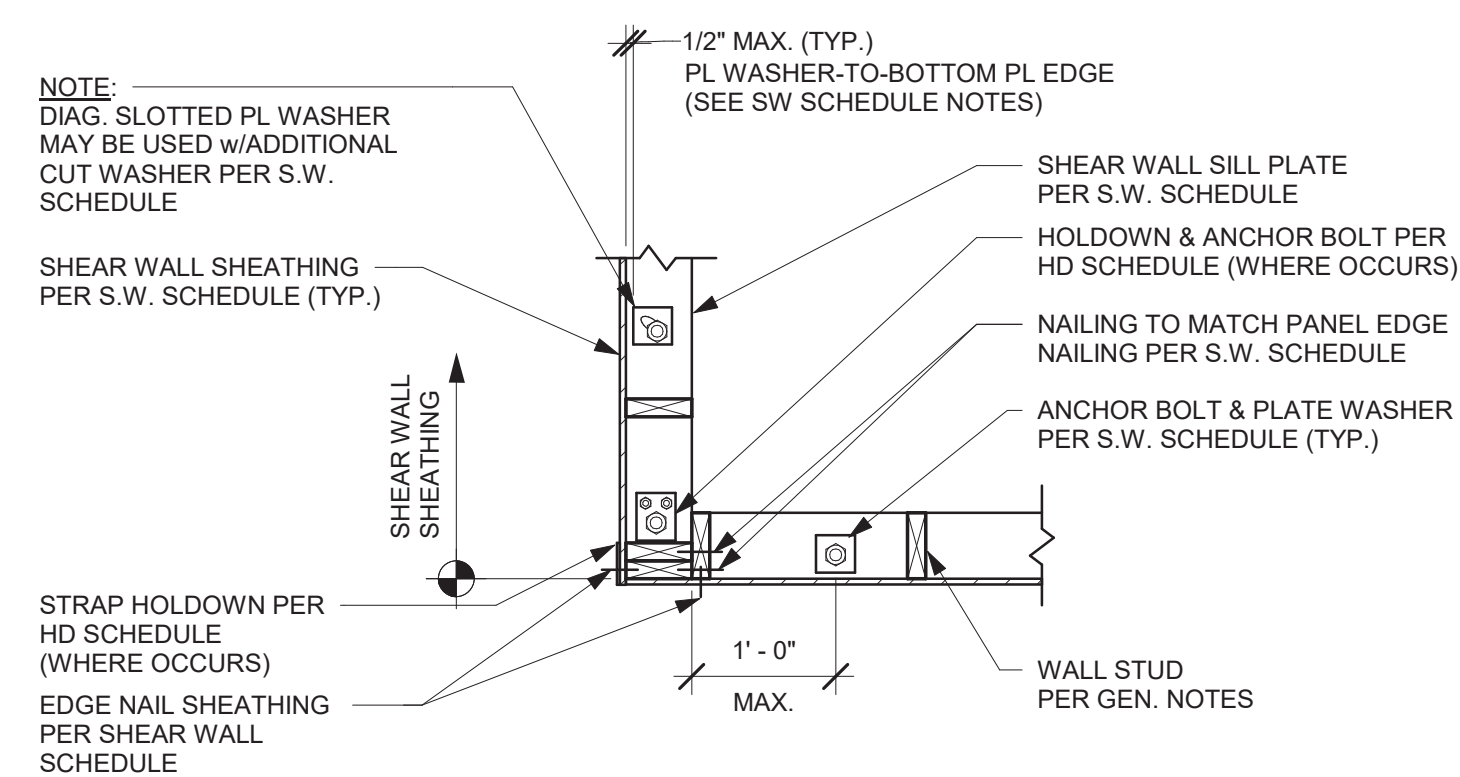
JOB NO.
2020379.19

S1002

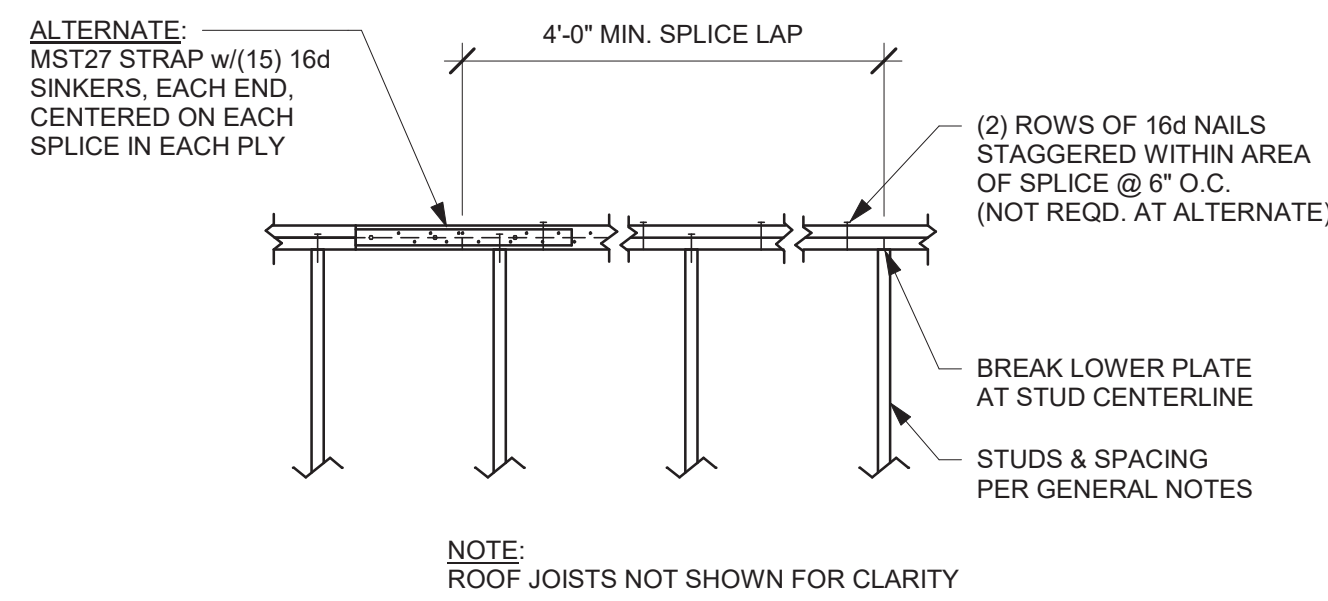


NOTE: SEE COLUMN SCHEDULE FOR ADDITIONAL INFORMATION AND PLAN FOR ORIENTATION.

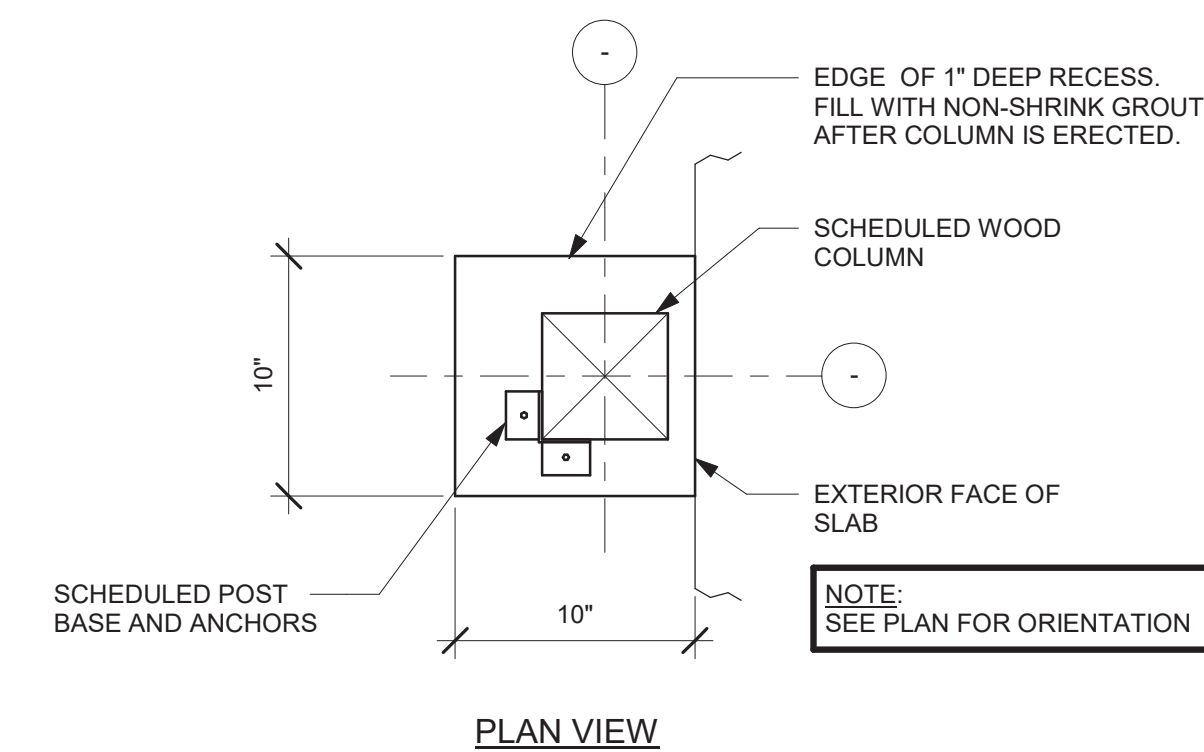
6 TYPICAL MOMENT BASE PLATE DETAIL
Scale: 1 1/2" = 1'-0"



1 TYP. SHEAR WALL ELEVATION
Scale: 1/2" = 1'-0"



7 TYPICAL SPLICE PLATE DETAIL
Scale: 1/2" = 1'-0"

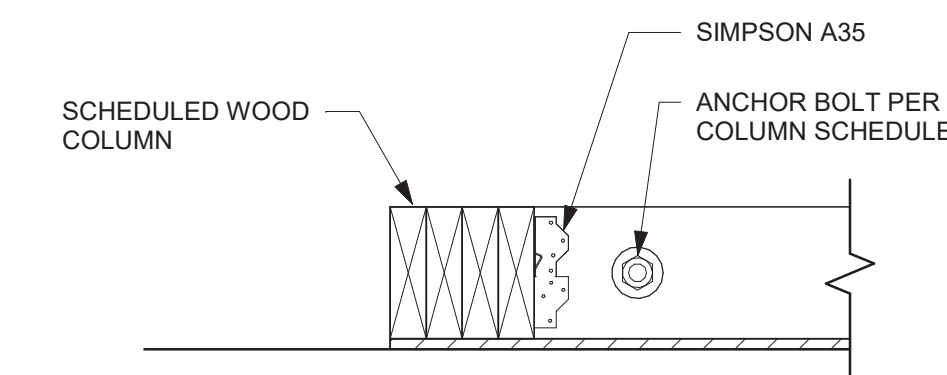


8 TYPICAL WOOD COLUMN BASE DETAIL
Scale: 1 1/2" = 1'-0"

SHEAR WALL HOLDOWN SCHEDULE				
MODEL #	ANCHORAGE TYPE/ MIN EMBEDMENT	FASTENERS	END STUD REQUIRED	CAPACITY (LBS.)
HDU5	5/8" DIA. x 6" EMB.* ANCHOR BOLT	(10) 1/4"x2 1/2" SDS WOOD SCREWS	(2) 2x STUDS	5,600

* EMBEDMENT SPECIFIED IS INTO FOOTING

- NOTES:
- HOLDOWNS SPECIFIED ARE AS MANUFACTURED BY SIMPSON STRONG-TIE CO. INC. ACCEPTABLE EQUIVALENT PRODUCT SUBSTITUTIONS ARE AVAILABLE FROM OTHER MANUFACTURERS W/ SER. APPROVAL.
 - LOCATE ALL HOLDOWNS AT ENDS OF ALL SHEAR WALLS & FASTEN TO BUNDLED END STUDS.
 - BUNDLED END STUDS SHOULD BE STITCH-NAILED TOGETHER USING MINIMUM (2) 16d @ 10" O.C. U.N.O.
 - LOCATE "HDU#F" HOLDOWNS AT CONCRETE FOUNDATION LEVEL.
 - ALL HOLDOWN ANCHOR BOLTS SHALL BE 4" MIN. FROM CONCRETE WALL ENDS.
 - SEE GENERAL NOTES FOR ADDITIONAL ANCHOR BOLT REQUIREMENTS.



4 TYP. WOOD FRAMED HOLDOWN SCHEDULE
Scale: 3/4" = 1'-0"

5 TYP. WOOD COLUMN SHEAR CONNECTION
Scale: 1 1/2" = 1'-0"

WOOD-FRAMED SHEAR WALL SCHEDULE					
SW TYPE	SW SHEATHING APA RATED	NAIL SIZE & SPACING AT PANEL EDGES	EDGE MEMBER REQUIREMENTS	SILL PLATE REQUIREMENTS	
				ANCHOR BOLT TO SLAB	SILL PLATE AT SLAB
SW-1	15/32" WSP SHEATHING	8d @ 6" O.C.	(2)-2x	1/2"x6" EMBED. @ 32" O.C.	P.T. 2x
SW-2	15/32" WSP SHEATHING	8d @ 4" O.C.	(2)-2x	1/2"x6" EMBED. @ 32" O.C.	P.T. 2x

NOTE:
SEE GENERAL NOTES FOR TYPICAL NON-SHEAR WALL CONSTRUCTION AND SILL PLATE ANCHORAGE UNLESS NOTED OTHERWISE.

- NOTES:
- INSTALL PANELS HORIZONTALLY
 - BLOCKING IS REQ'D. AT ALL PANEL EDGES.
 - PROVIDE SHEAR WALL SHEATHING & NAILING FOR ENTIRE LENGTH OF THE WALLS INDICATED ON THE PLANS. ENDS OF FULL HEIGHT WALLS ARE DESIGNATED BY WINDOWS OR DOORWAYS OR AS DESIGNATED ON PLANS. HOLDOWN REQUIREMENTS PER PLANS.
 - SHEATHING EDGE NAILING IS REQUIRED AT ALL HOLDOWN POSTS. EDGE NAILING MAY ALSO BE REQUIRED TO EACH STUD USED IN BUILT-UP HOLDOWN POSTS. ADDITIONAL INFORMATION PER HOLDOWN SCHEDULE & DETAILS.
 - INTERMEDIATE FRAMING TO BE 2x MINIMUM MEMBERS. ATTACH SHEATHING TO INTERMEDIATE FRAMING WITH 10d NAILS AT 12" o.c.
 - WHERE SPECIFIED, FRAMING CLIPS SHALL BE SIMPSON "A35" OR "LTP5" OR APPROVED EQUIVALENT.

2 TYP. WOOD-FRAMED SHEAR WALL SCHEDULE
Scale: 3/4" = 1'-0"

- ANCHOR BOLTS SHALL BE PROVIDED WITH HOT-DIPPED GALVANIZED STEEL PLATE WASHERS 3x3x1/4 MIN. THE HOLE IN THE PLATE WASHER MAY BE DIAGONALLY SLOTTED 13/16"x1 3/4" PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER & NUT. PLATE WASHER TO EXTEND TO WITHIN 1/2" OF THE EDGE OF THE SILL PLATE ON THE SIDE(S) w/ SHEATHING.
- PRESSURE TREATED MATERIAL CAN CAUSE EXCESSIVE CORROSION IN CONTACT WITH FASTENERS. ADDITIONAL INFORMATION PER STRUCTURAL NOTES.
- WHERE WOOD SHEATHING IS APPLIED OVER GYPSUM SHEATHING, CONTACT THE ENGINEER OF RECORD FOR ALTERNATE NAILING REQUIREMENTS.
- AT ADJOINING PANEL EDGES, (2) 2x STUDS NAILED TOGETHER MAY BE USED IN PLACE OF SINGLE 3x STUD. DOUBLE 2x STUDS SHALL BE CONNECTED TOGETHER BY NAILING STUDS TOGETHER WITH 3" LONG NAILS OF THE SAME SPACING & DIAMETER AS THE PLATE NAILING.
- WHERE ABUTTING PANELS OR SILL PLATES REQUIRE 3x MINIMUM, NAIL STUDS TO 3x BOTTOM SILL PLATES W/ EITHER (2) 10d END NAILS OR (4) 8d TOENAILS.
- CONTACT THE STRUCTURAL ENGINEER OF RECORD FOR ADHESIVE OR EXPANSION BOLT ALTERNATIVE TO CAST-IN-PLACE ANCHOR BOLTS. SPECIAL INSPECTION MAY BE REQUIRED.

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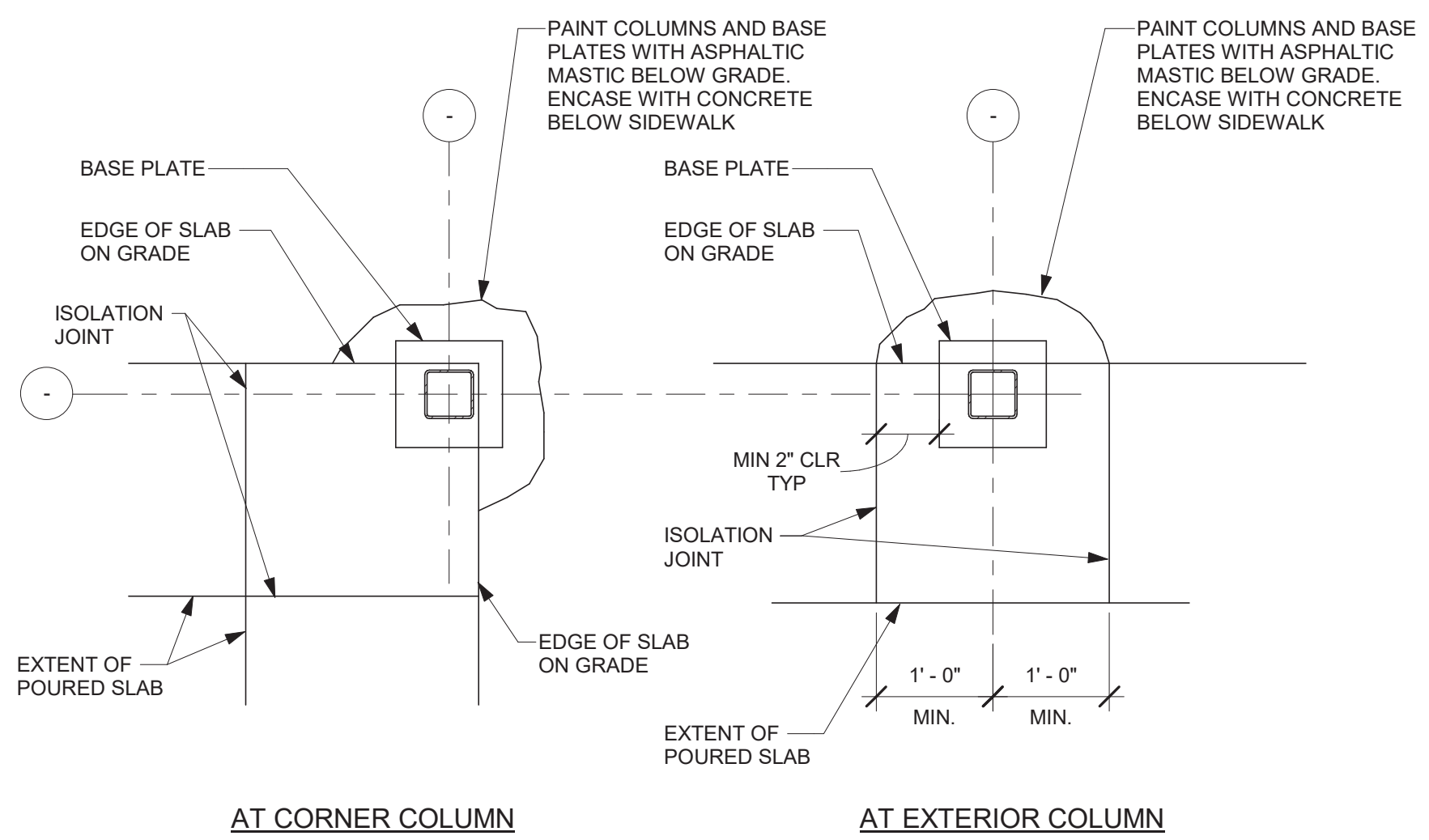
SPOUT SPRINGS
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TYPICAL STRUCTURAL DETAILS

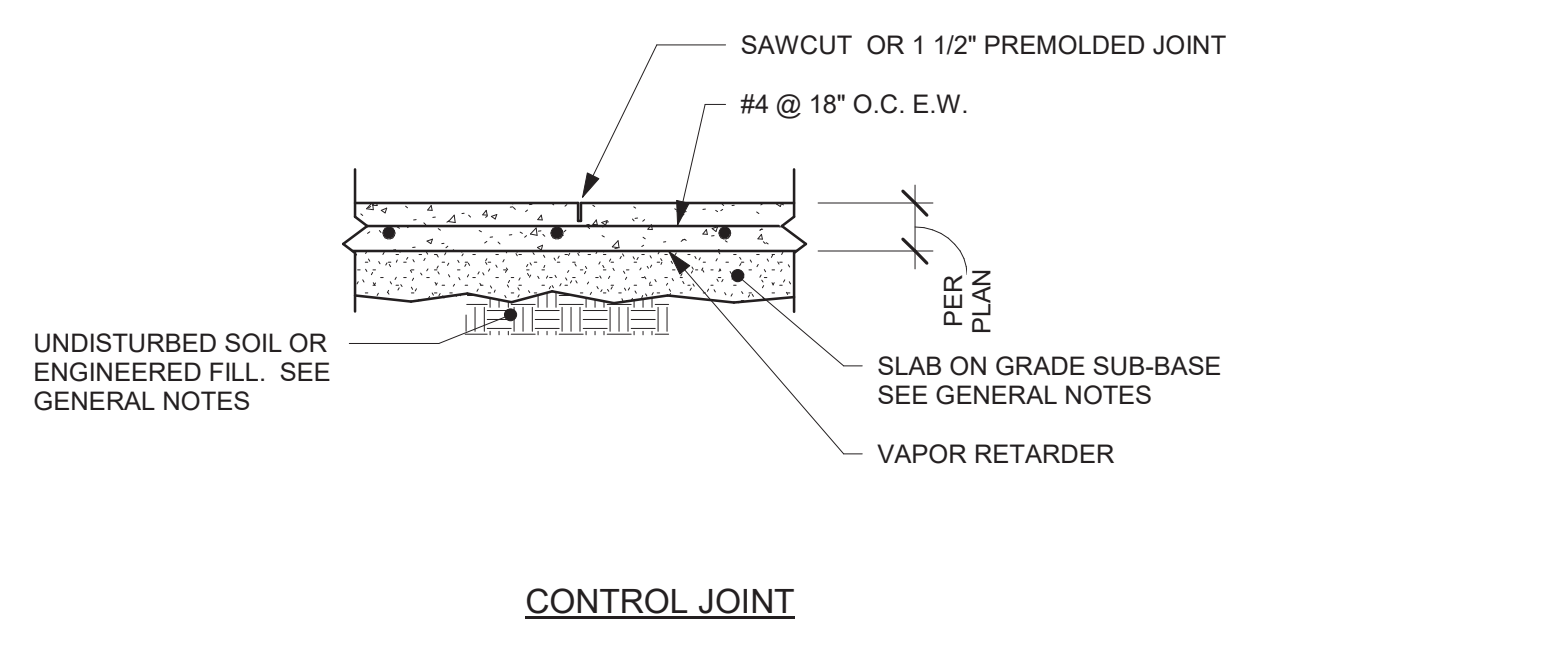
PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
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RECORD	DATE
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PROJECT MANAGER	DESIGNER
AK	GM

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S5001

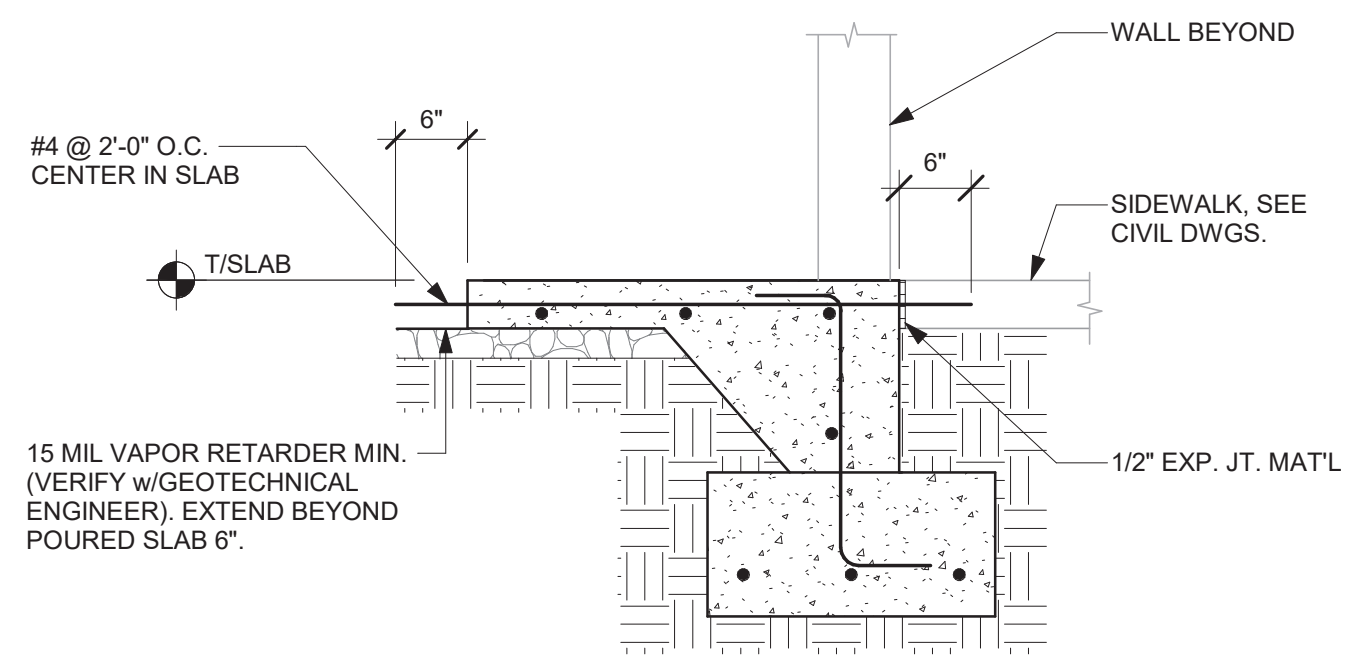


8 TYP. SLAB ISOLATION JOINT DETAILS
Scale: 3/4" = 1'-0"



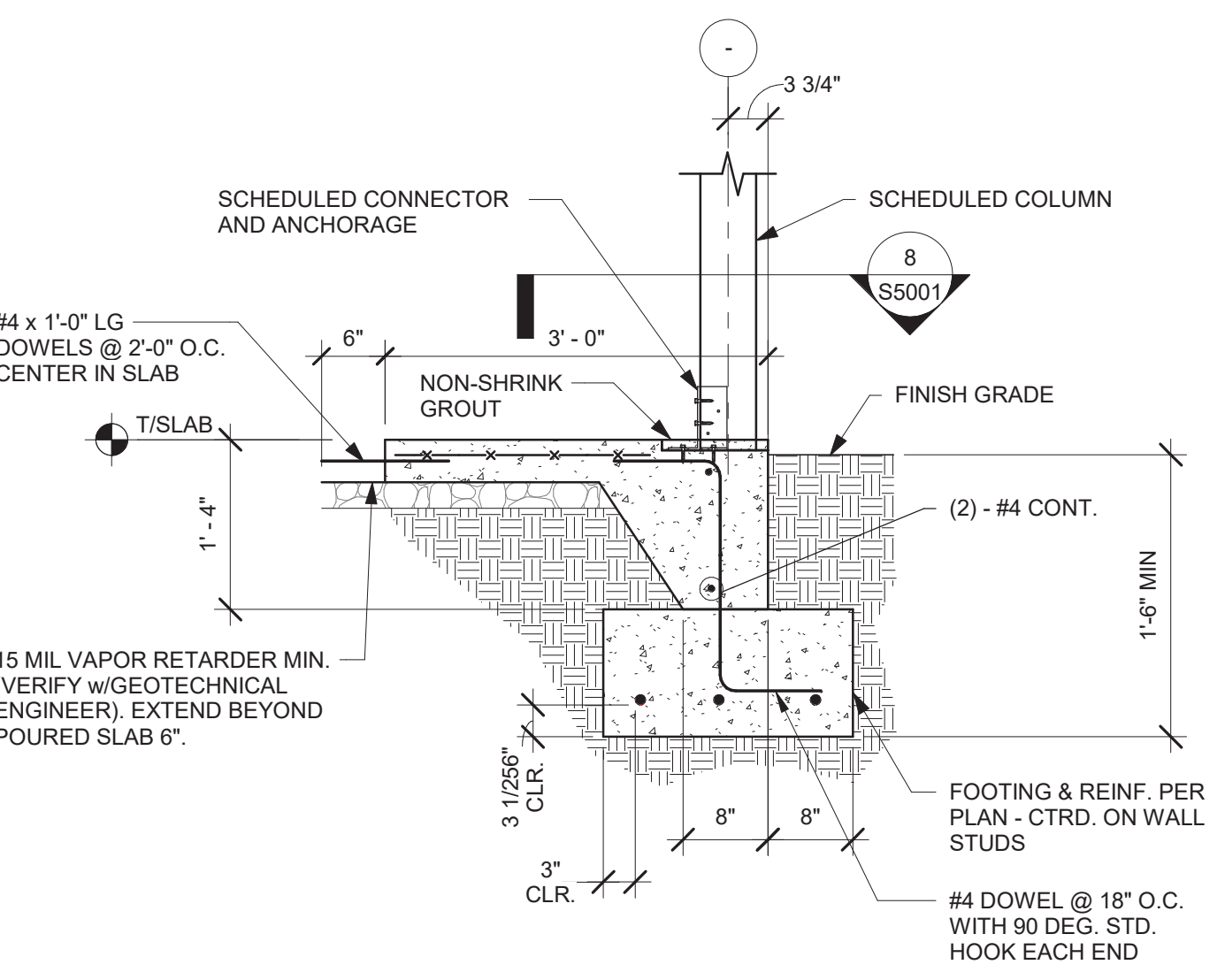
NOTES:
1. FOR CONSTRUCTION OR CONTROL JOINT LOCATIONS, REFERENCE FOUNDATION/SLAB PLAN.
2. USE "SOFTCUT SAW" AS SOON AS POSSIBLE WITHOUT CAUSING RAVELING OF CONCRETE EDGES. SAWCUT ALONG SHORT DIRECTION OF POUR FIRST.

5 TYPICAL SLAB ON GRADE JOINT DETAIL
Scale: 3/4" = 1'-0"



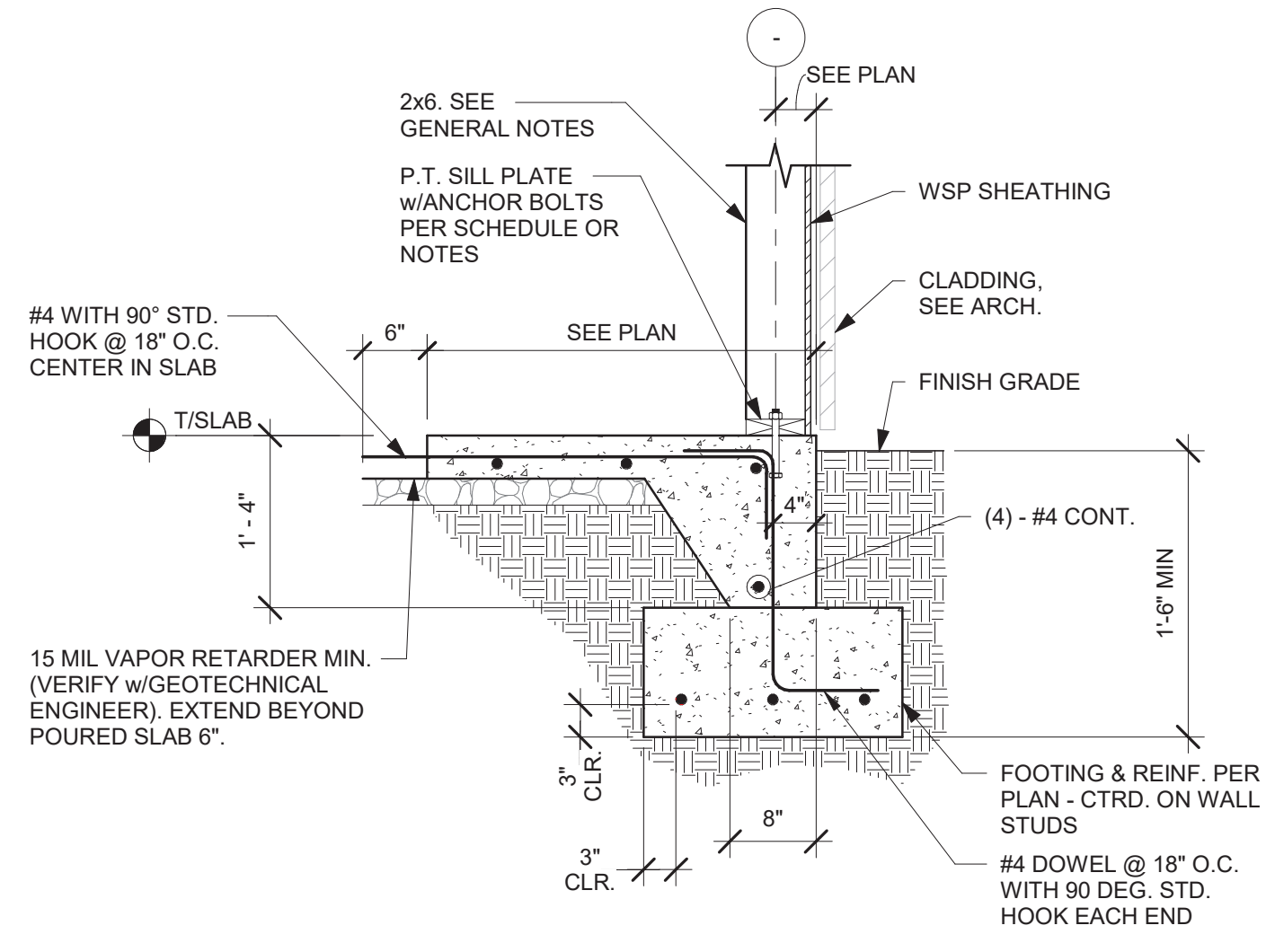
NOTE:
SEE DETAIL 3/S5002 FOR ADDITIONAL INFORMATION

6 FOOTING AT ENTRY
Scale: 3/4" = 1'-0"



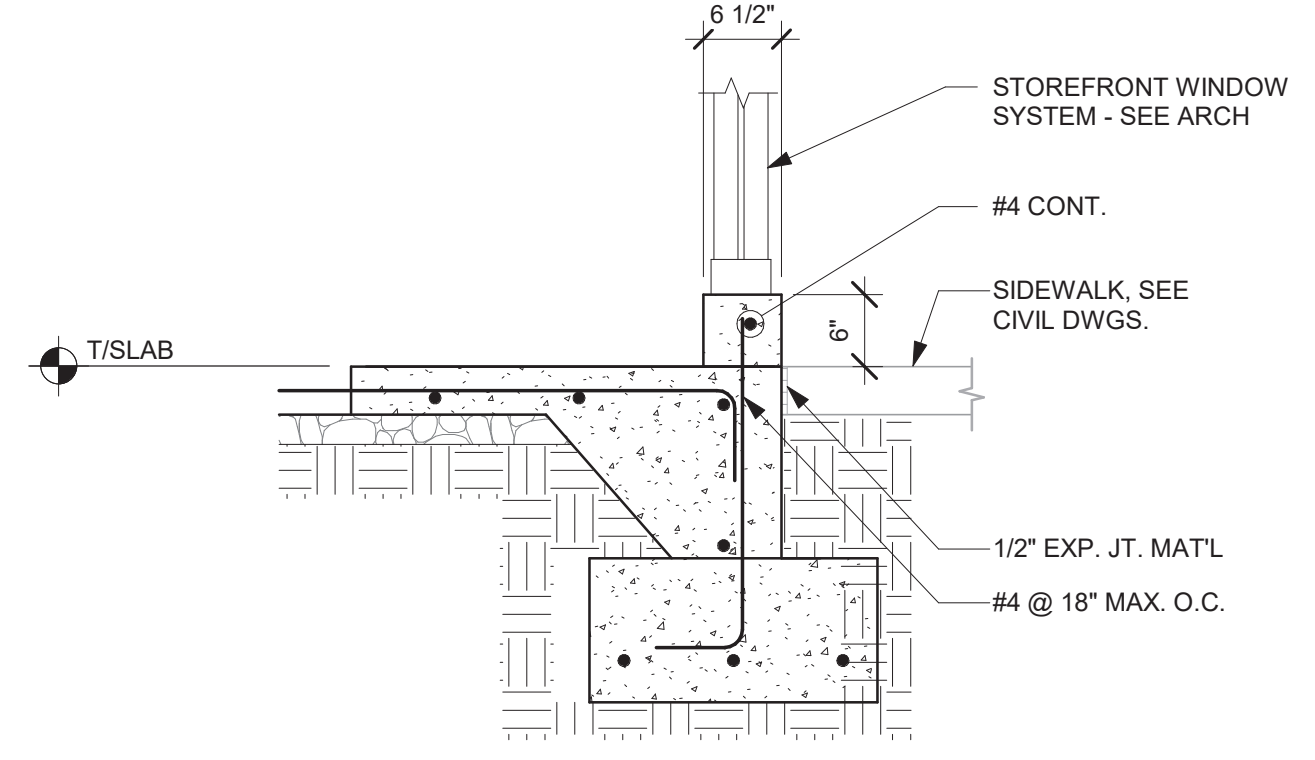
NOTE:
SEE DETAIL 1/S5002 FOR ADDITIONAL INFORMATION

2 SECTION AT MOMENT FRAME COLUMN
Scale: 3/4" = 1'-0"



NOTE: NOT ALL FOOTING REINFORCING IS DEPICTED IN DETAIL. SEE PLAN.

3 EXTERIOR WALL FOOTING
Scale: 3/4" = 1'-0"



NOTE:
SEE DETAIL 3/S5002 FOR ADDITIONAL INFORMATION

4 FOOTING AT STOREFRONT WINDOW
Scale: 3/4" = 1'-0"

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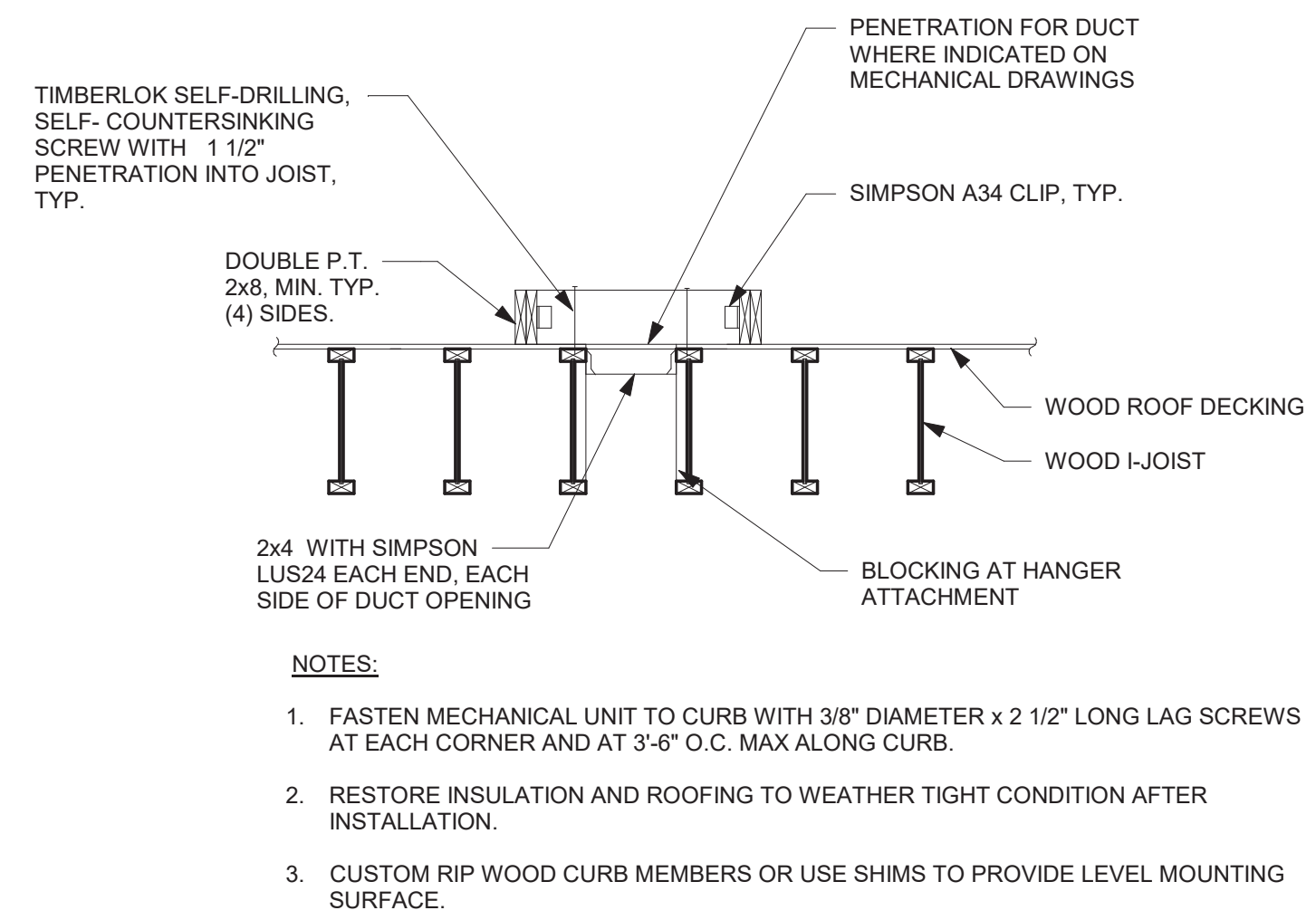
FOUNDATION SECTIONS & DETAILS

PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
RECORD	DATE

PROJECT MANAGER	DESIGNER
AK	GM

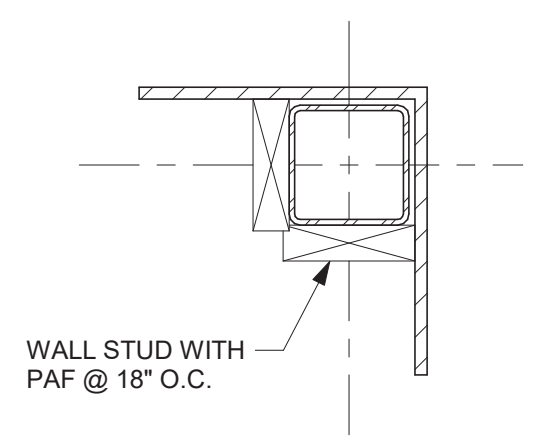
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2020379.19

S5002

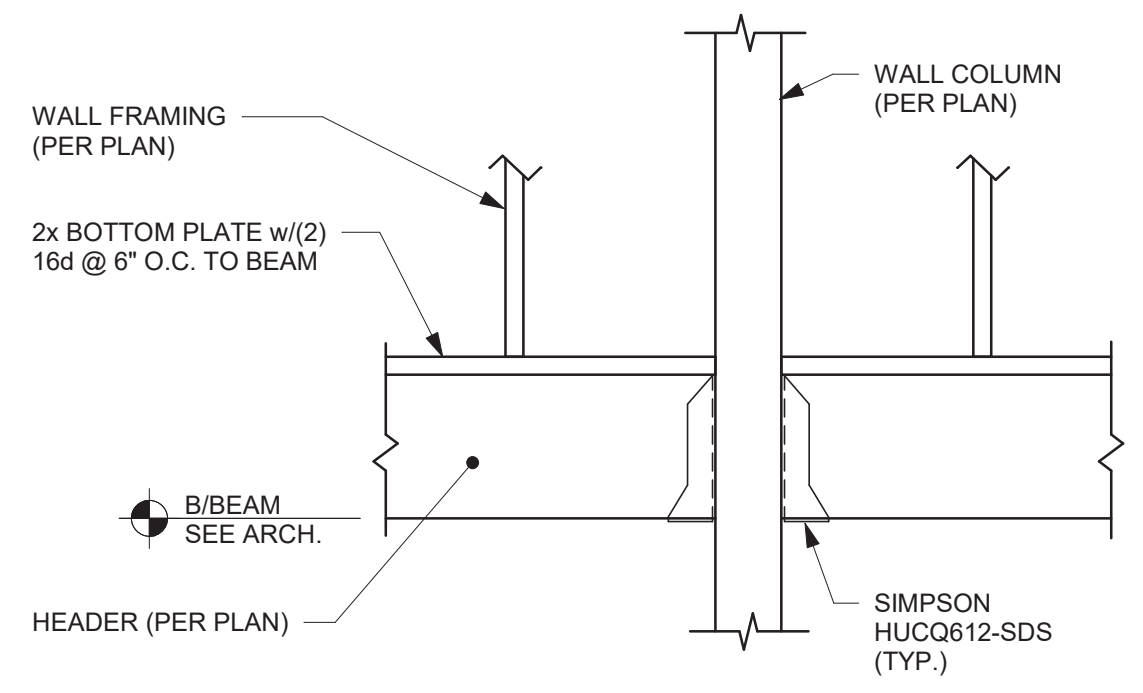


- NOTES:**
1. FASTEN MECHANICAL UNIT TO CURB WITH 3/8" DIAMETER x 2 1/2" LONG LAG SCREWS AT EACH CORNER AND AT 3'-6" O.C. MAX ALONG CURB.
 2. RESTORE INSULATION AND ROOFING TO WEATHER TIGHT CONDITION AFTER INSTALLATION.
 3. CUSTOM RIP WOOD CURB MEMBERS OR USE SHIMS TO PROVIDE LEVEL MOUNTING SURFACE.

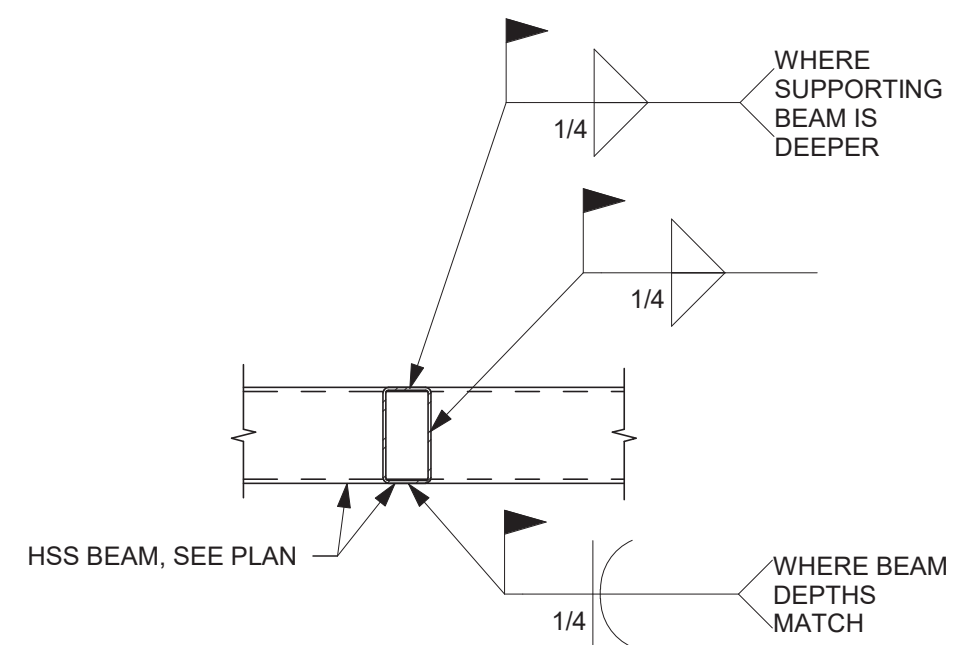
9 SECTION AT TYP. ROOF OPENING
Scale: 1/2" = 1'-0"



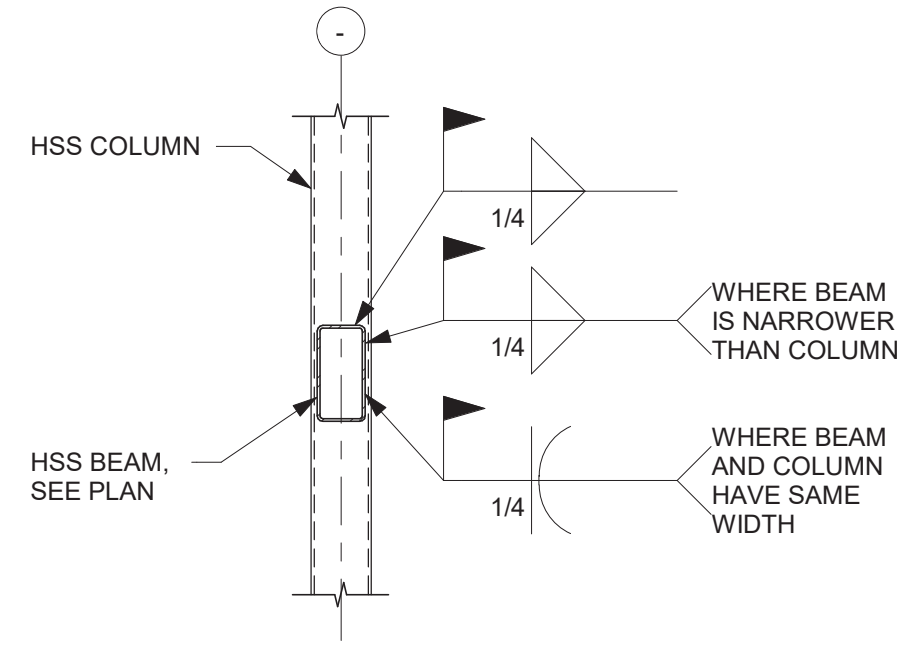
10 PLAN AT CORNER COLUMN
Scale: 1 1/2" = 1'-0"



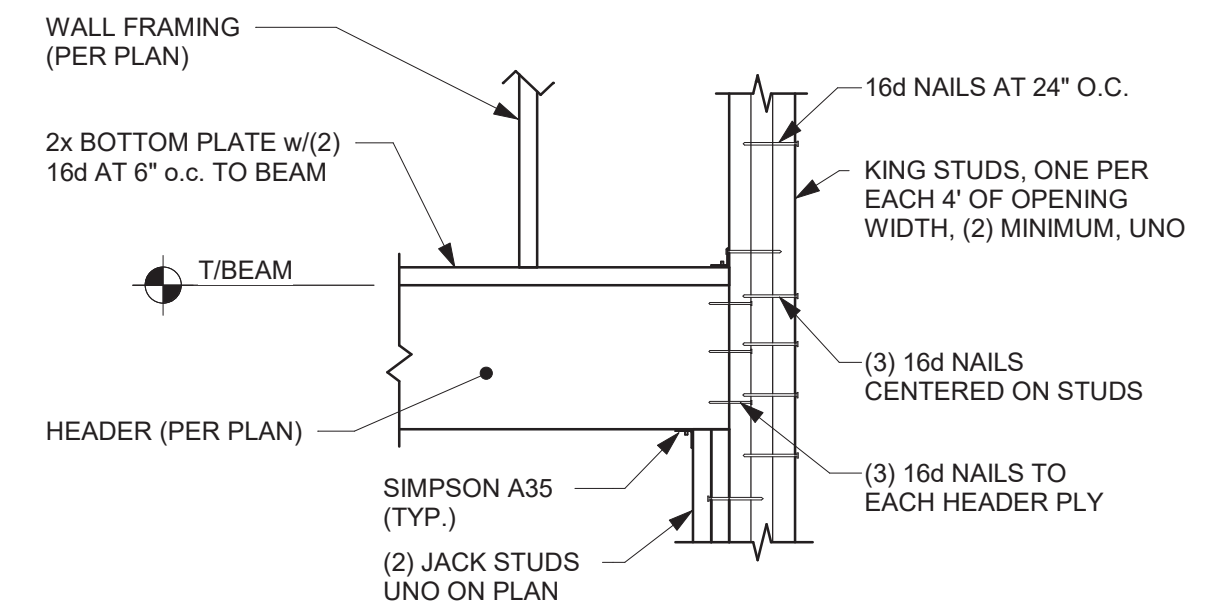
11 TYP. WOOD HEADER CONNECTION ABOVE STOREFRONT
Scale: 3/4" = 1'-0"



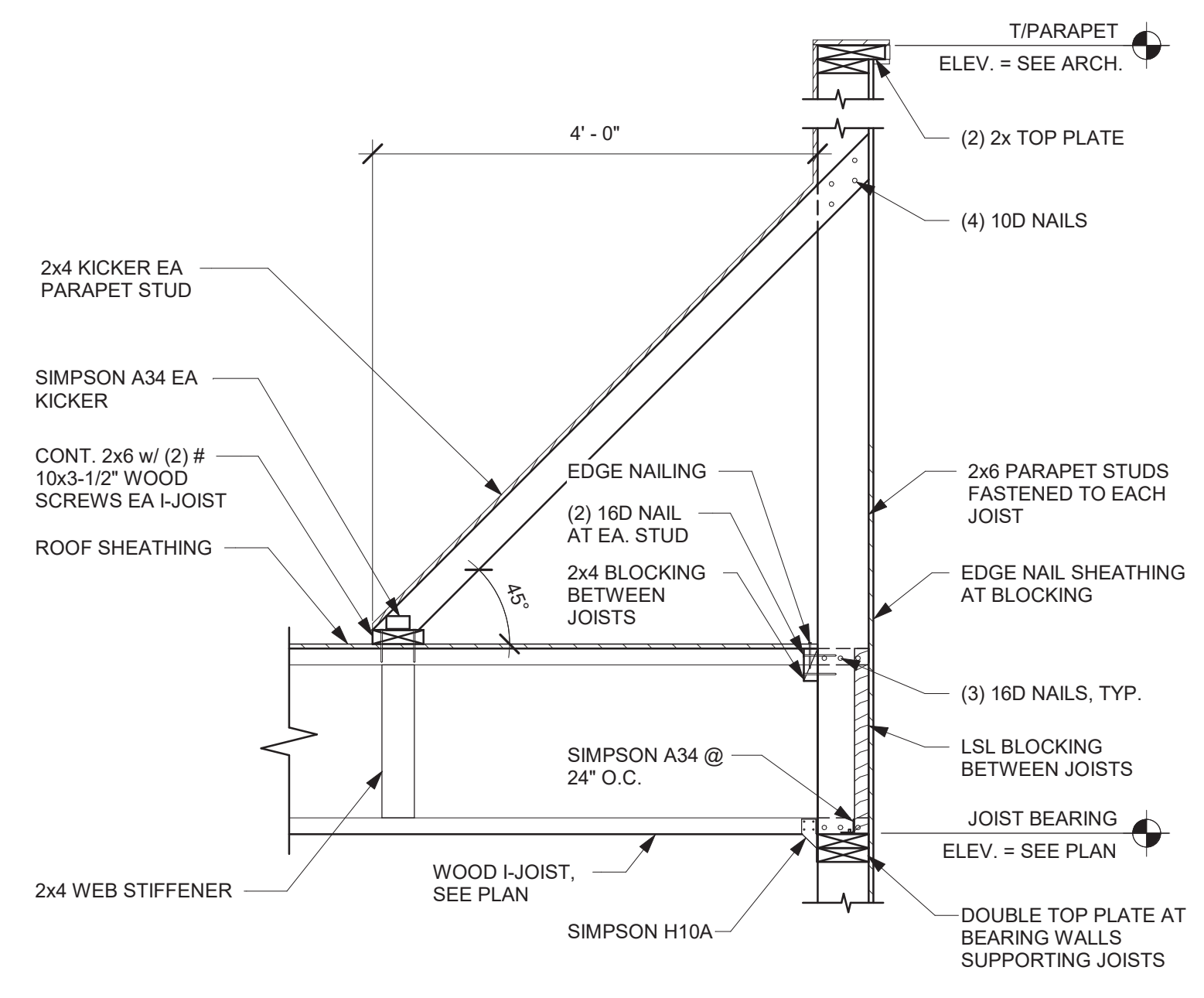
5 TYPICAL HSS CONNECTION TO BEAM
Scale: 3/4" = 1'-0"



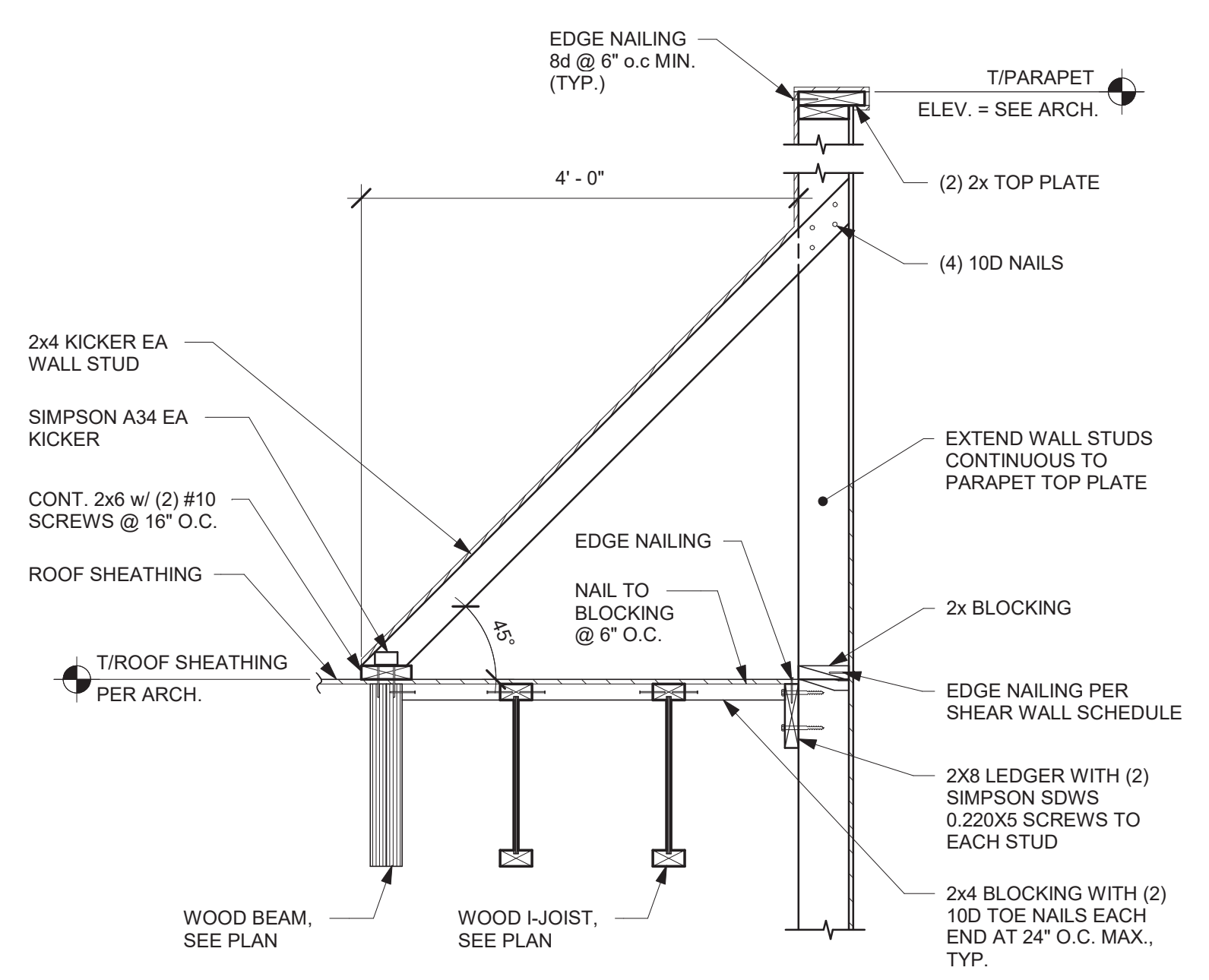
7 TYPICAL HSS CONN. TO COLUMN
Scale: 3/4" = 1'-0"



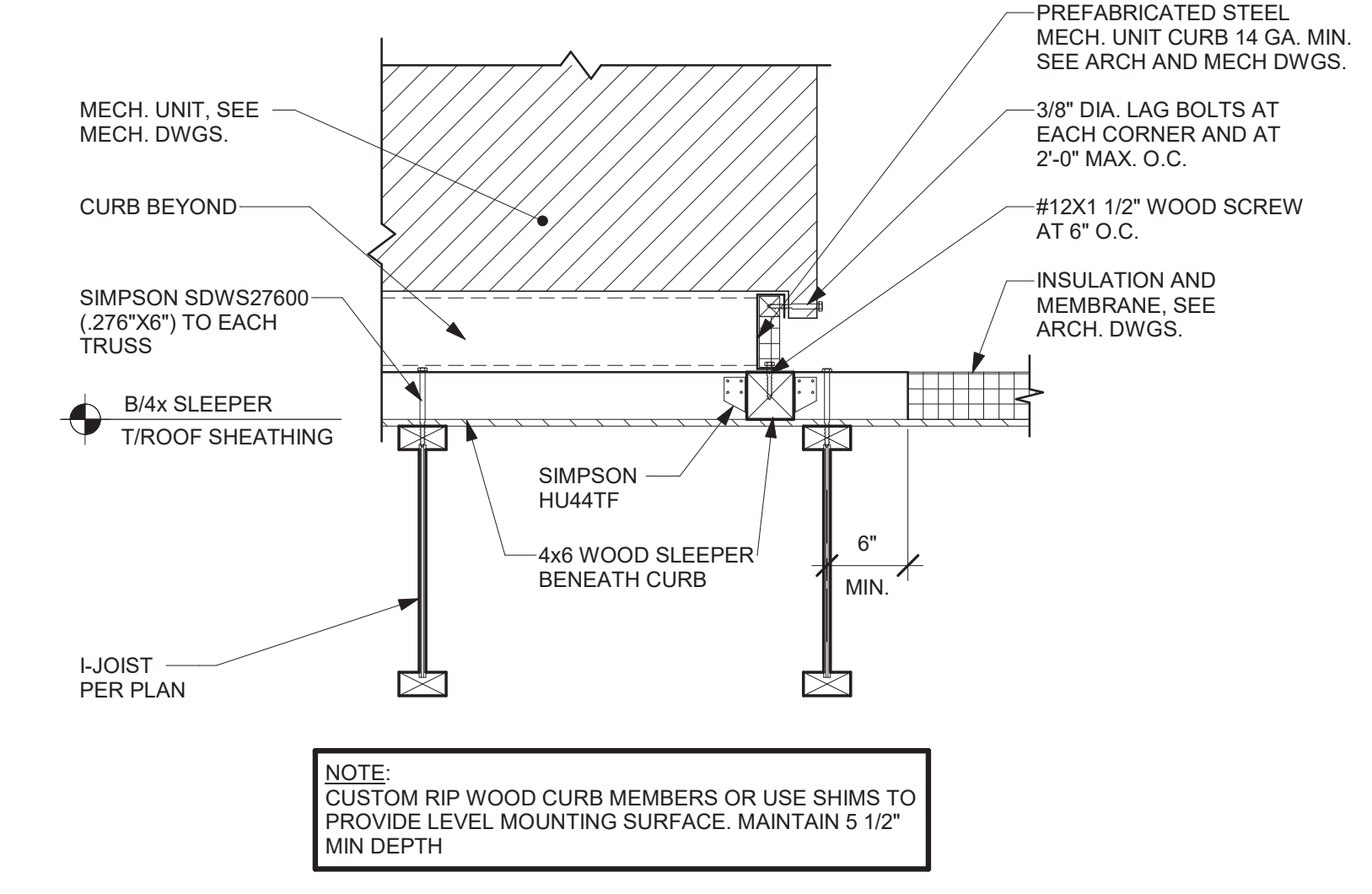
8 TYP. WOOD HEADER CONNECTION
Scale: 3/4" = 1'-0"



1 TYP. JOIST PERPENDICULAR TO EXT. WALL
Scale: 3/4" = 1'-0"



2 TYP. JOIST PARALLEL TO EXT. WALL
Scale: 3/4" = 1'-0"



4 MECHANICAL UNIT CONNECTION
Scale: 1" = 1'-0"

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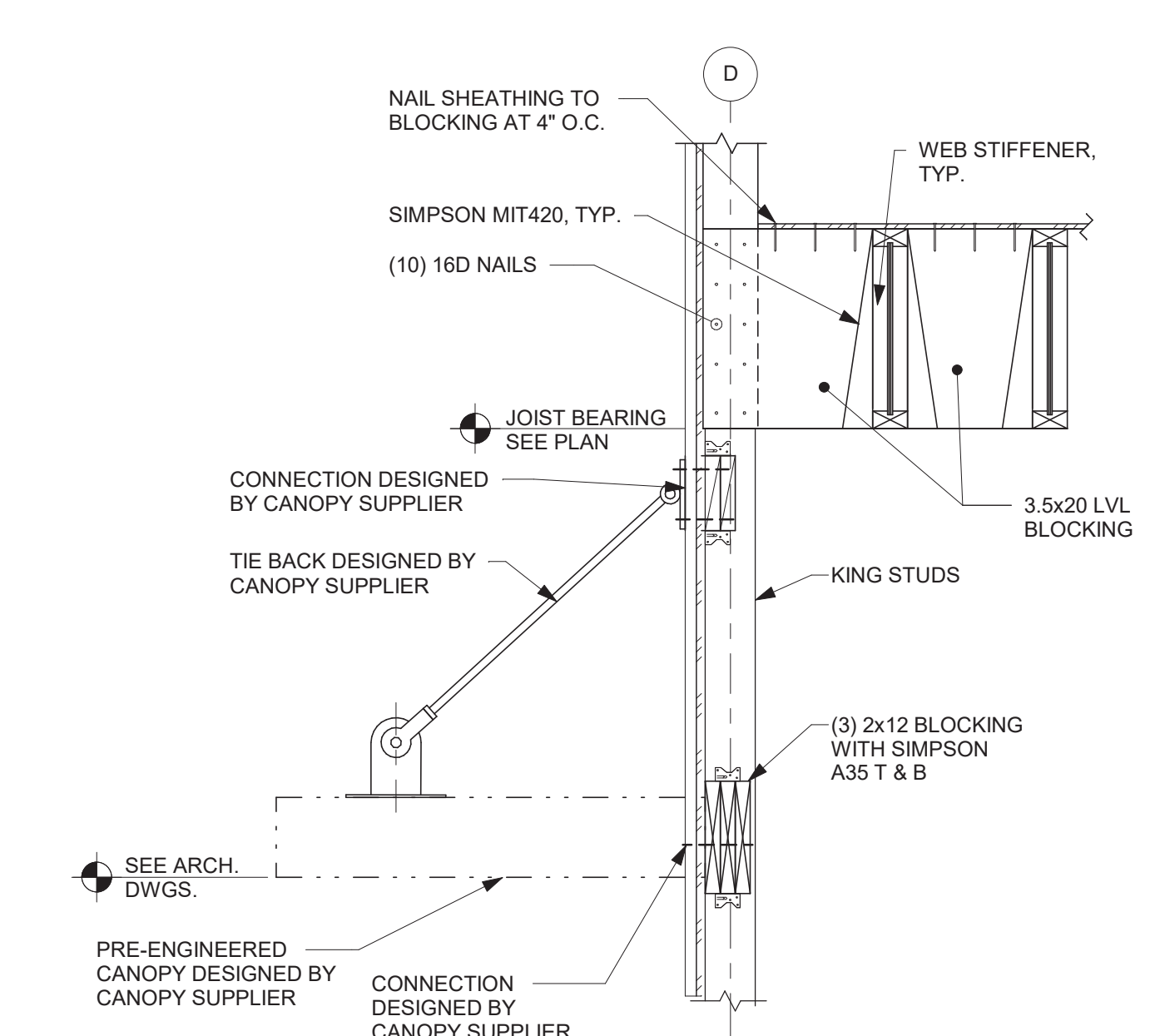
STRUCTURAL SECTIONS & DETAILS

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	-/-/-
RECORD	-/-/-

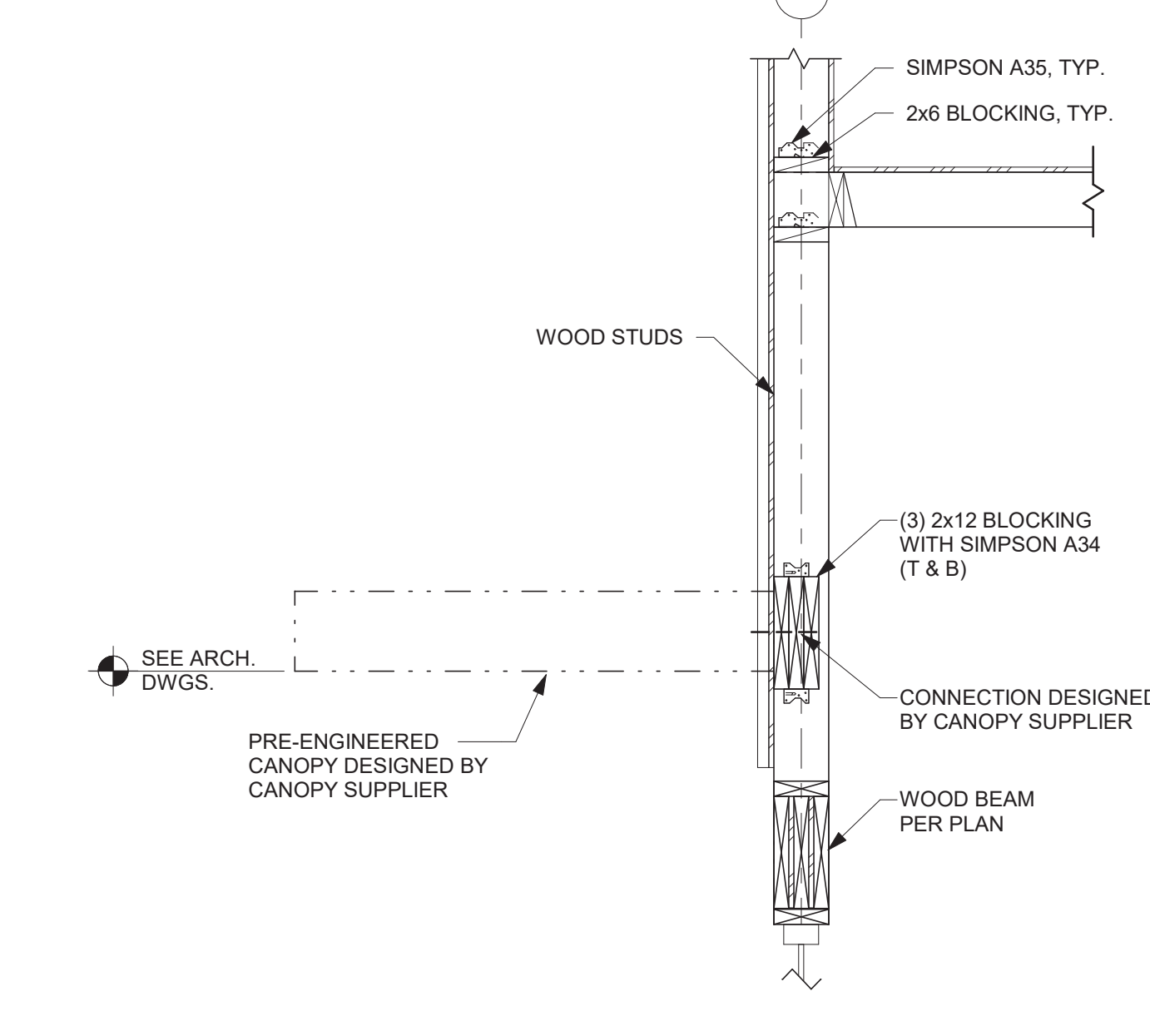
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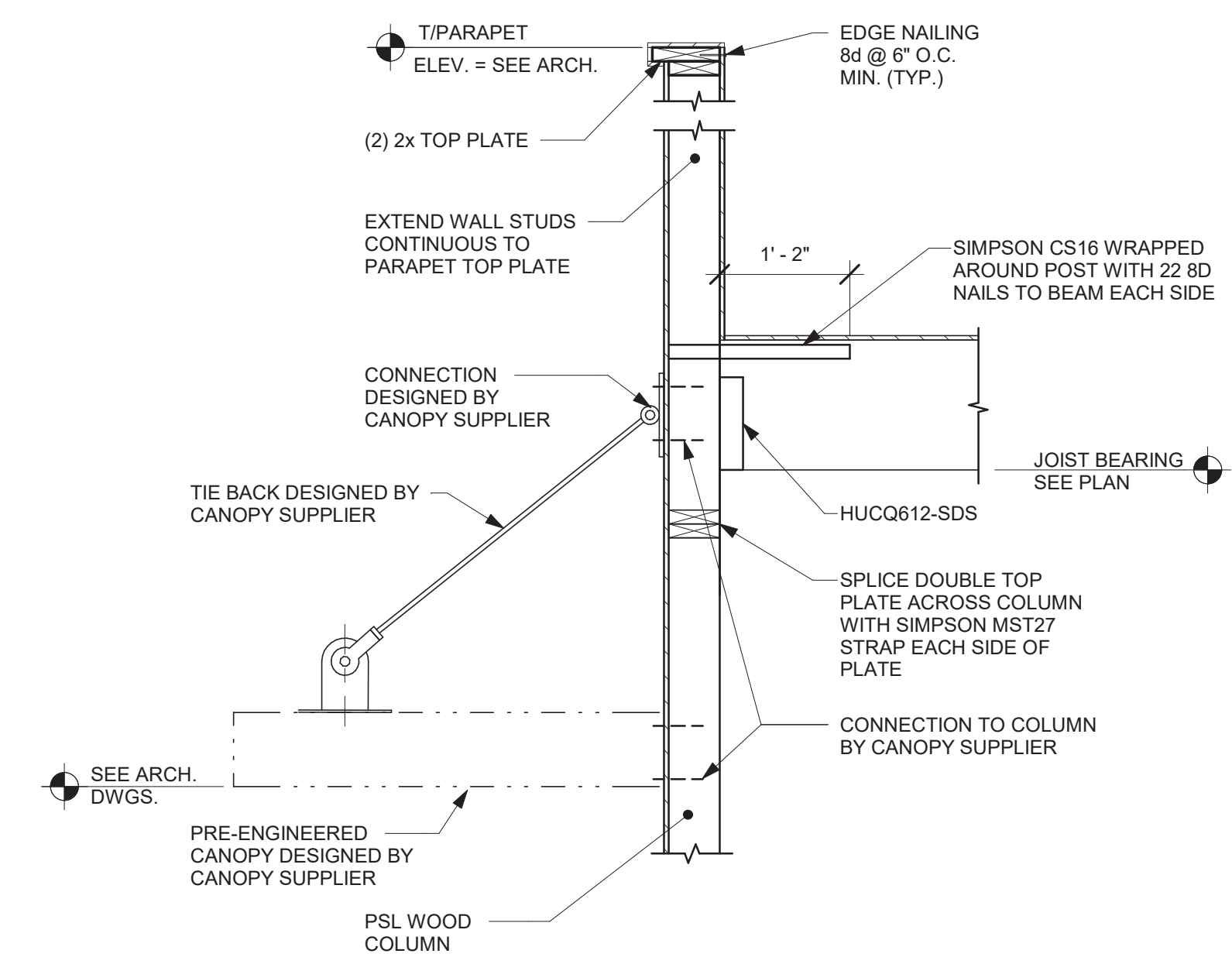
S5003



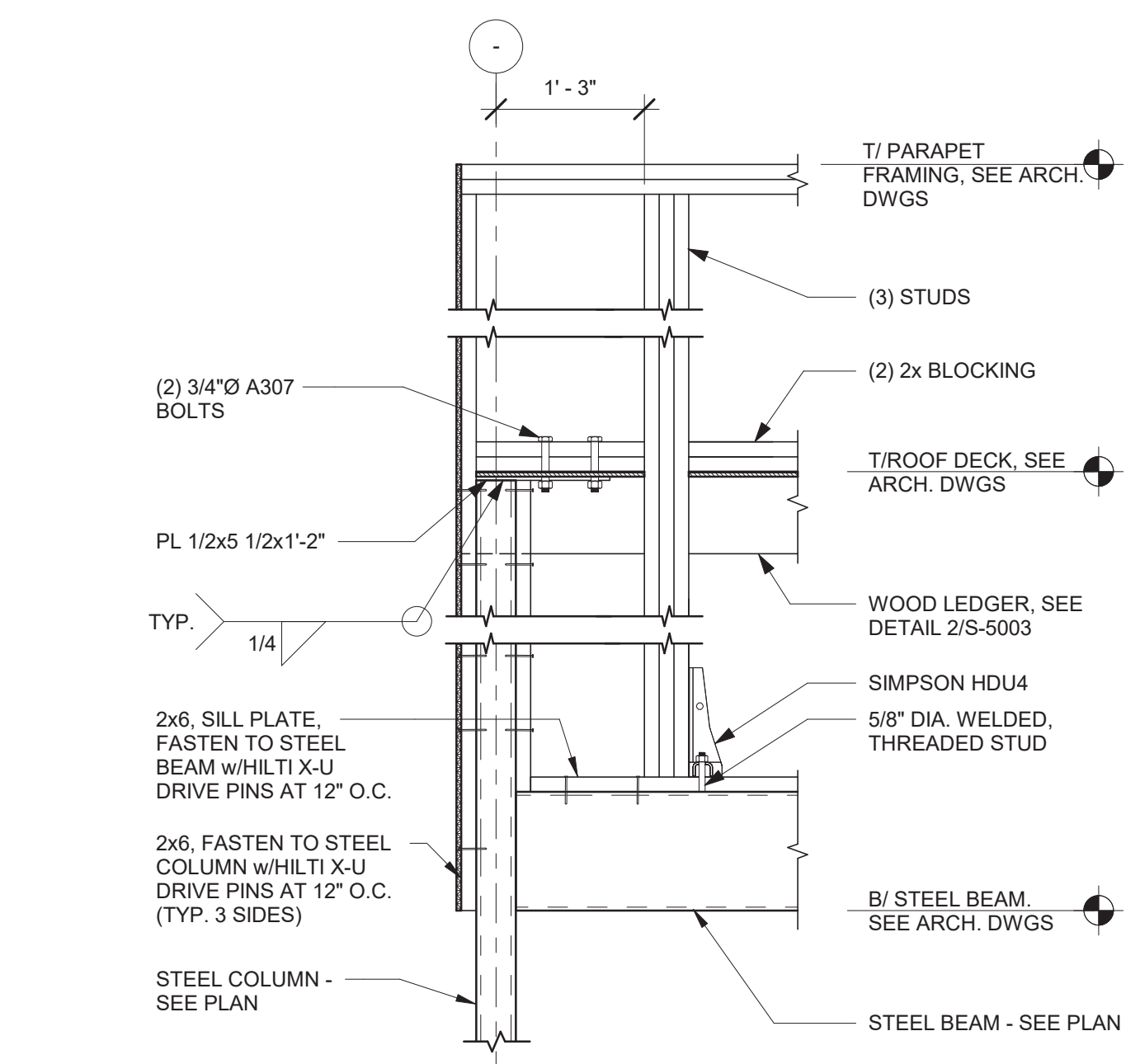
9 SECTION AT REAR CANOPY
Scale: 3/4" = 1'-0"



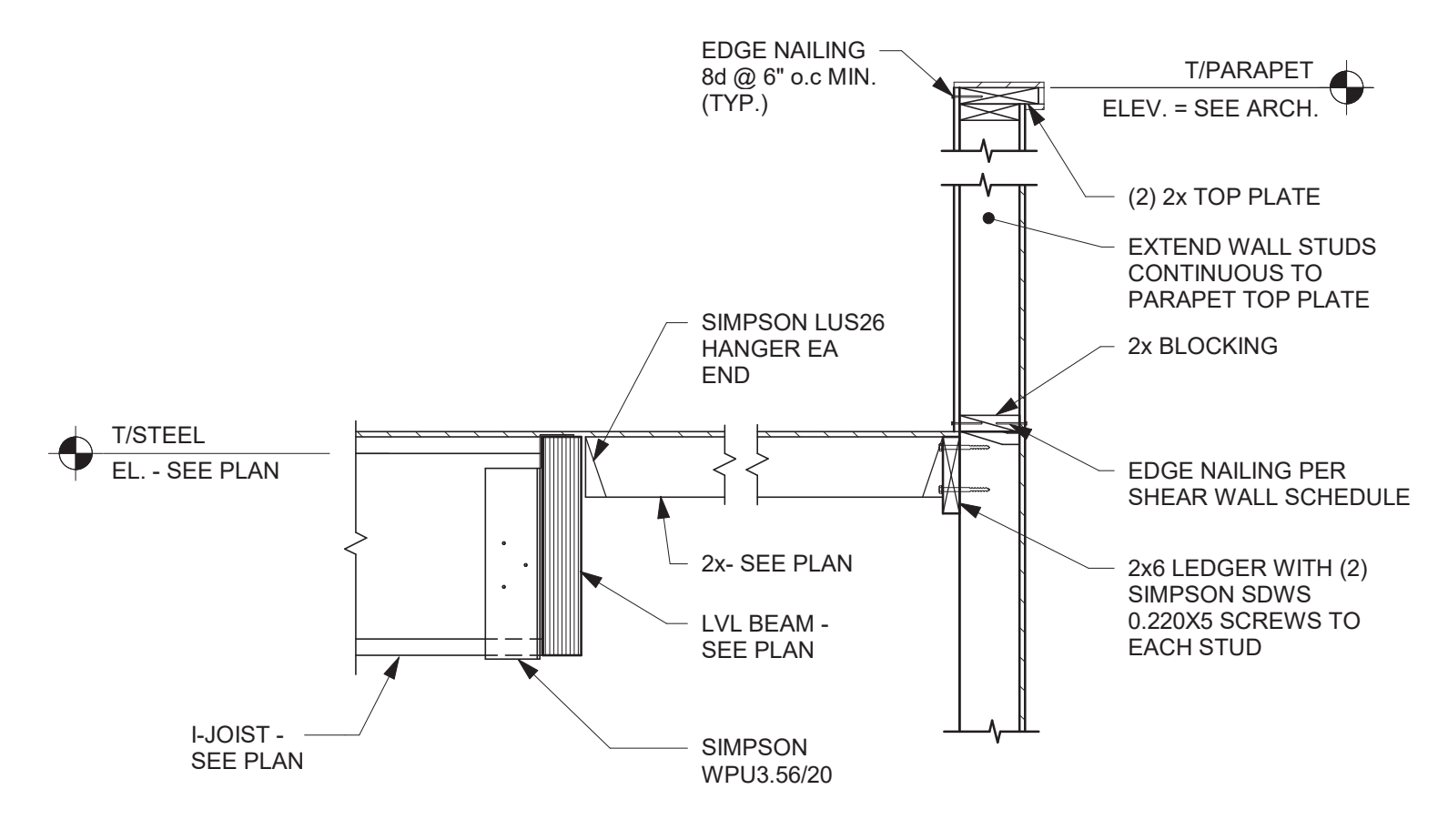
10 DRIVE-THRU CANOPY SECTION
Scale: 3/4" = 1'-0"



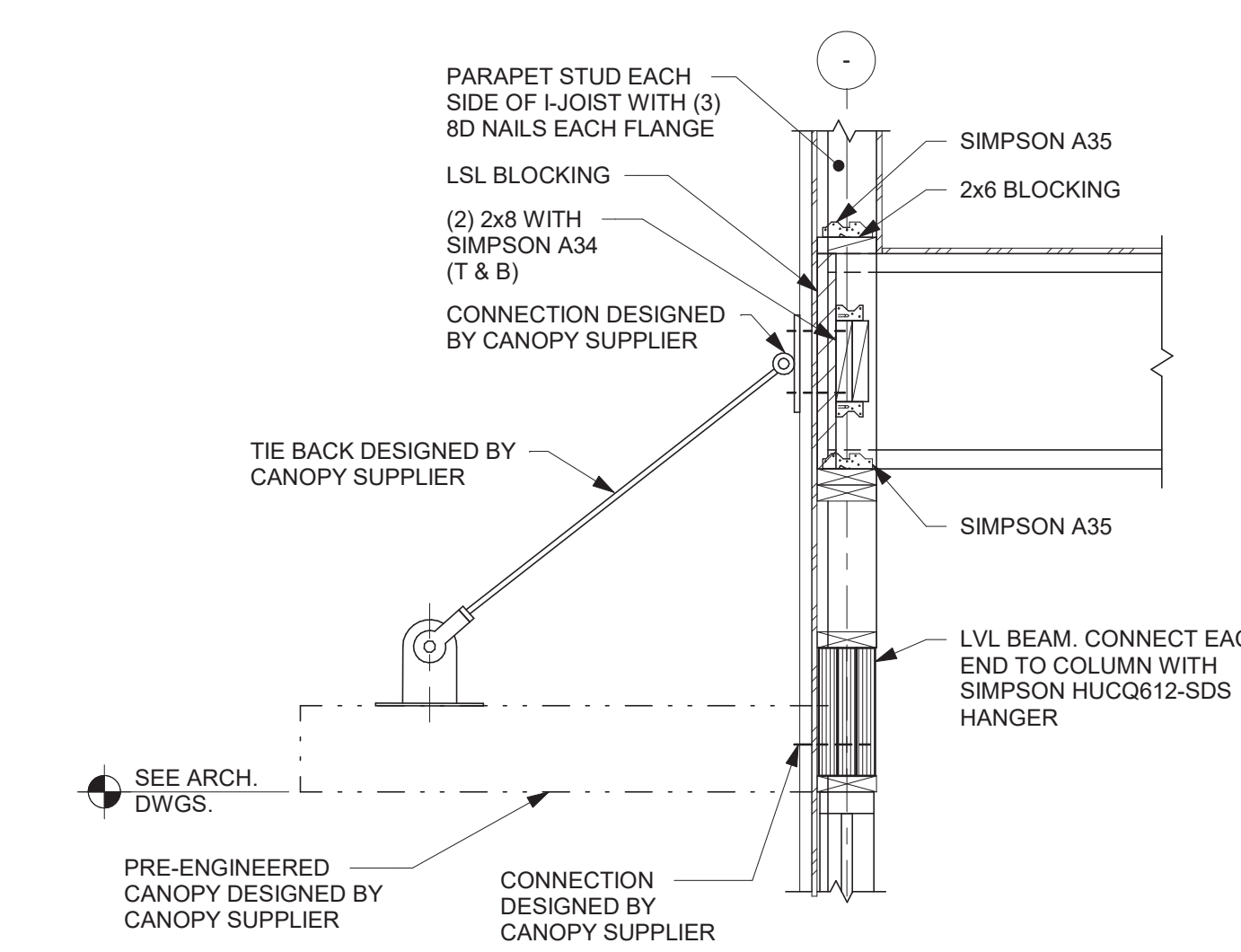
11 CANOPY SECTION AT WOOD COLUMN
Scale: 3/4" = 1'-0"



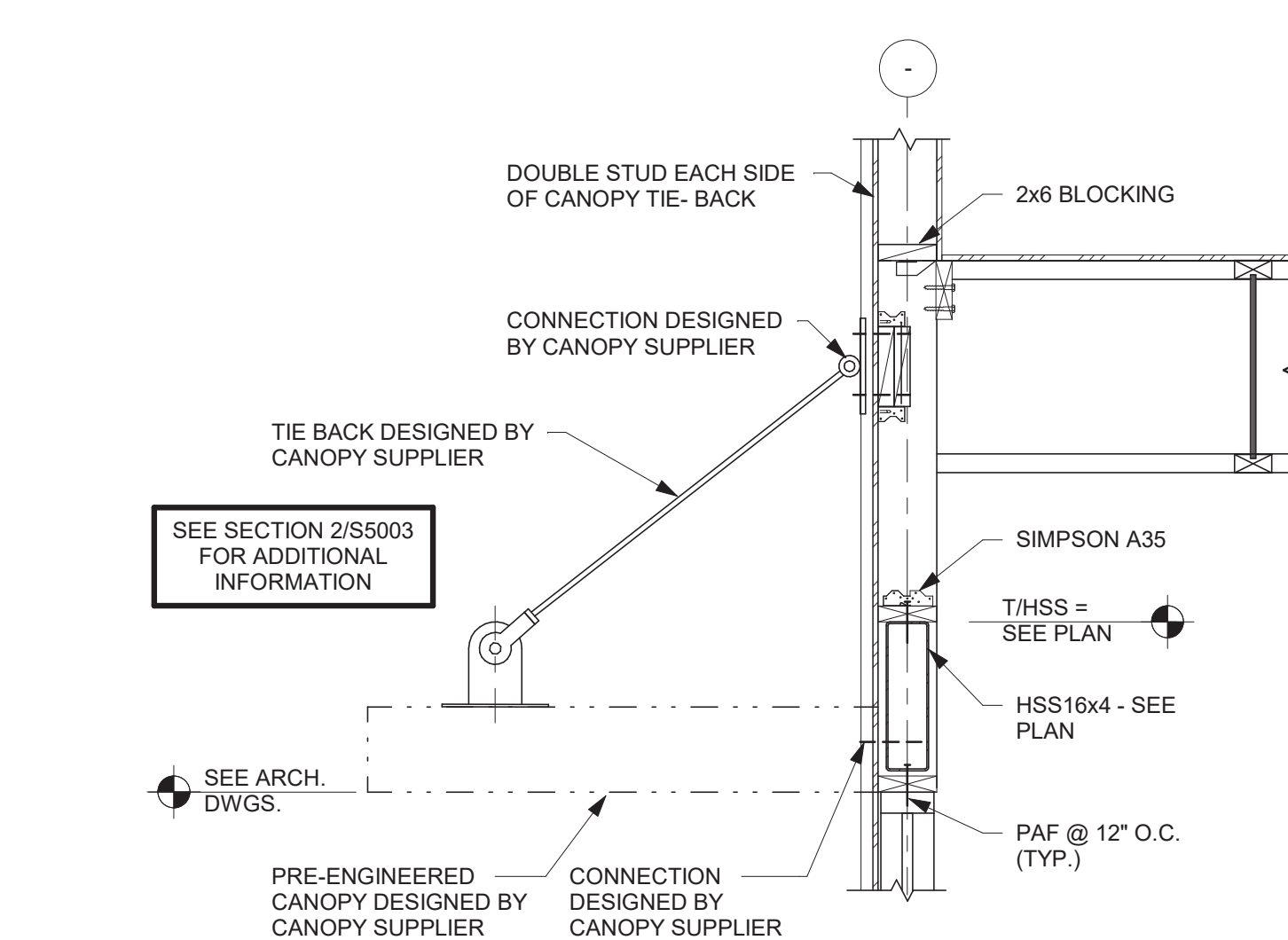
5 SECTION
Scale: 3/4" = 1'-0"



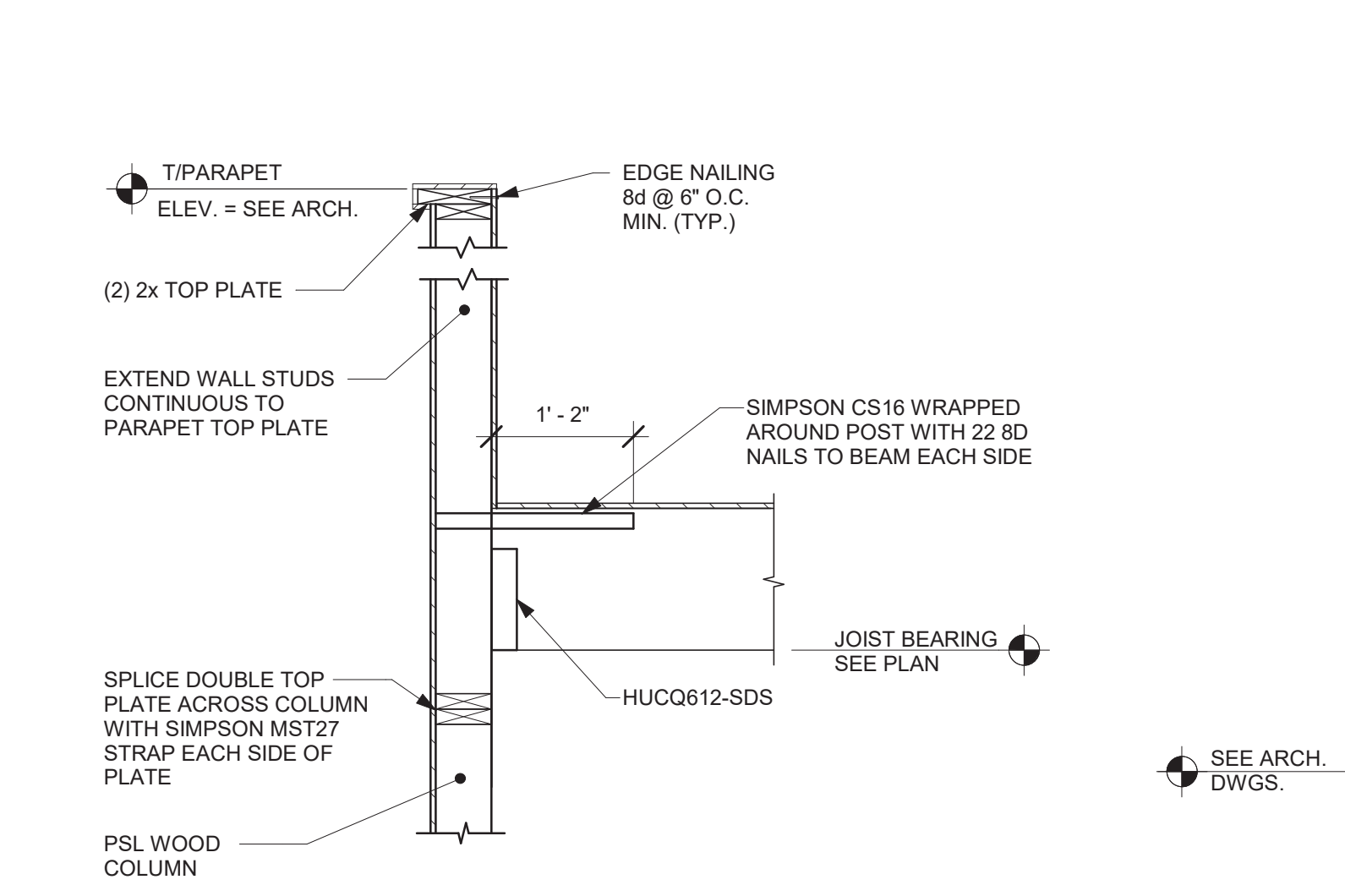
7 SECTION
Scale: 3/4" = 1'-0"



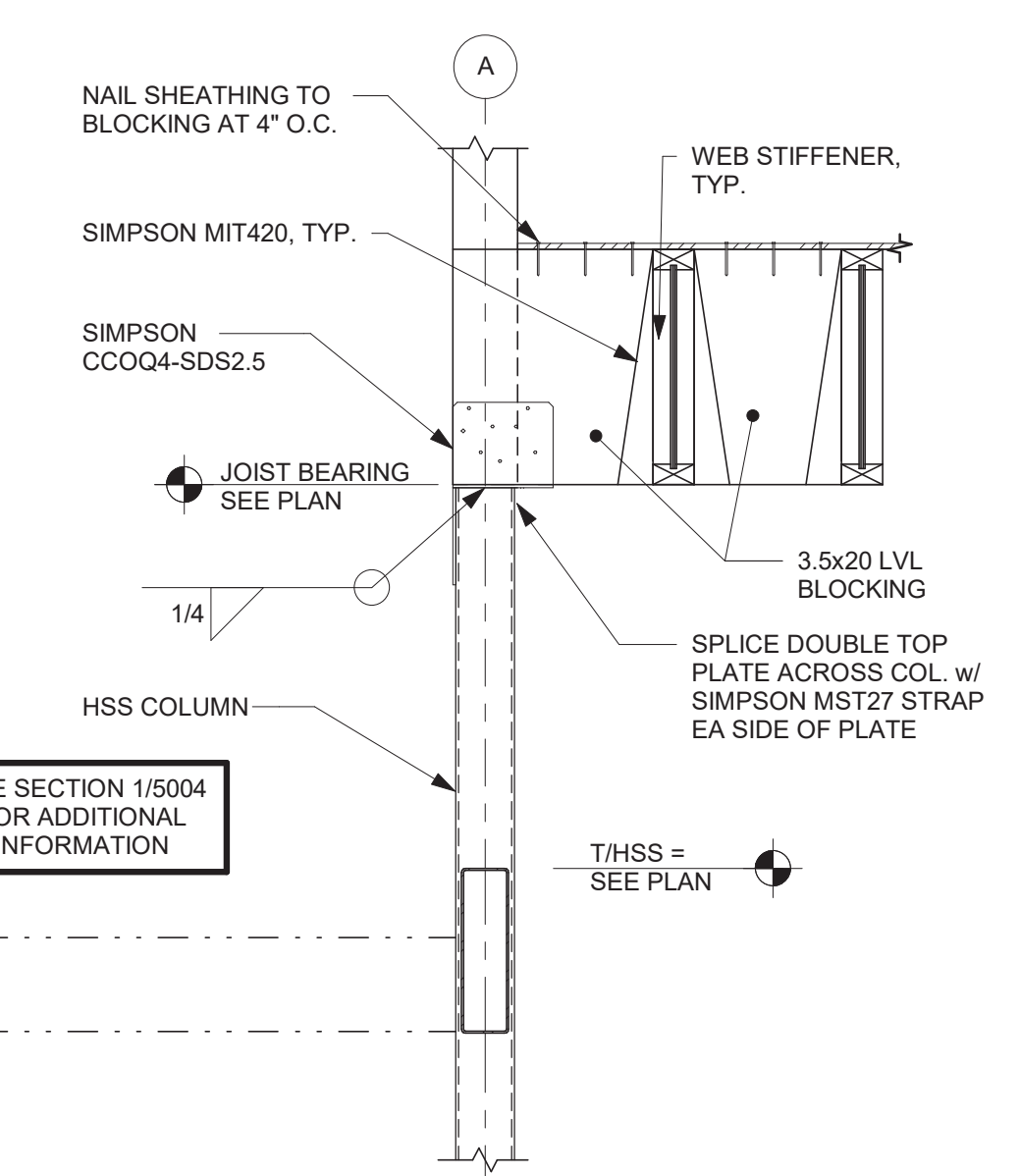
1 CANOPY SECTION AT LVL BEAM
Scale: 3/4" = 1'-0"



2 CANOPY SECTION AT HSS BEAM
Scale: 3/4" = 1'-0"

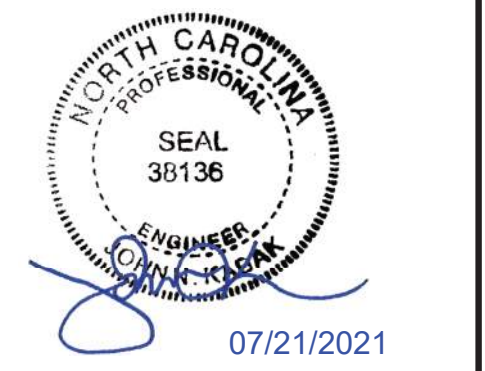


3 SECTION AT COLUMN
Scale: 3/4" = 1'-0"



4 CANOPY SECTION AT STEEL COLUMN
Scale: 3/4" = 1'-0"

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CANOPY FRAMING SECTIONS AND
DETAILS

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	-/-/-
RECORD	DATE
	-/-/-

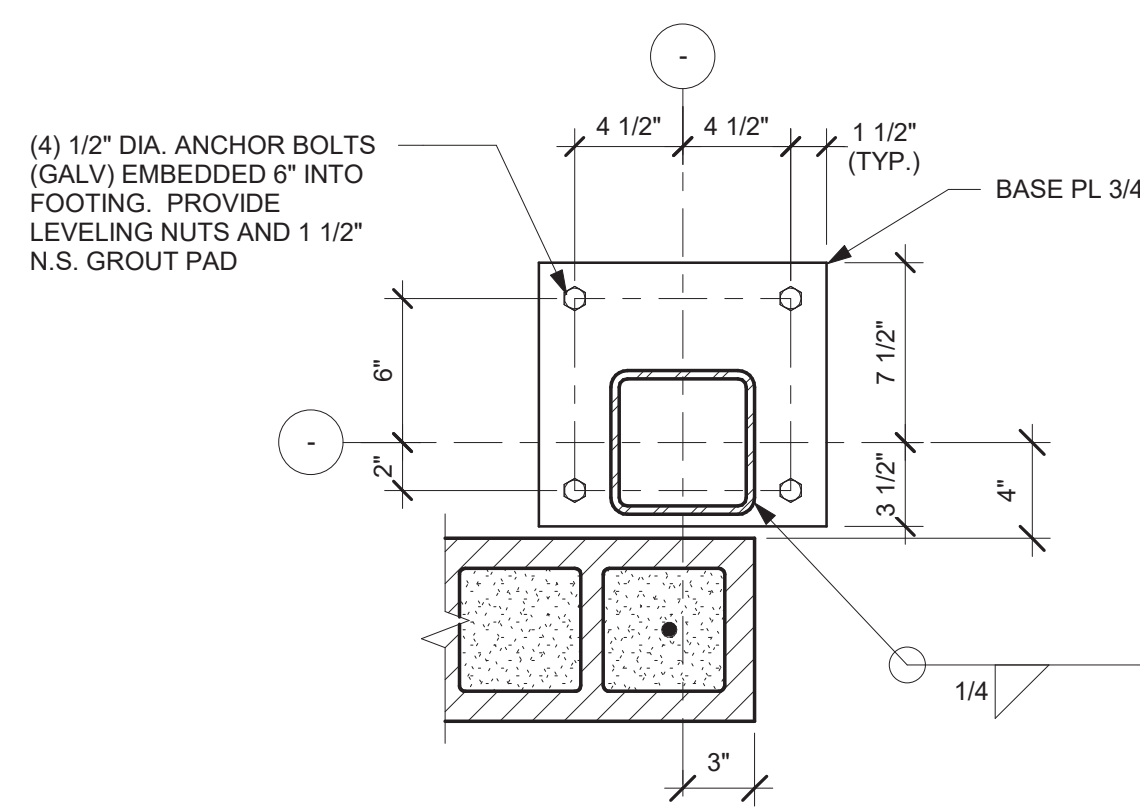
PROJECT MANAGER	DESIGNER
AK	GM

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S5004

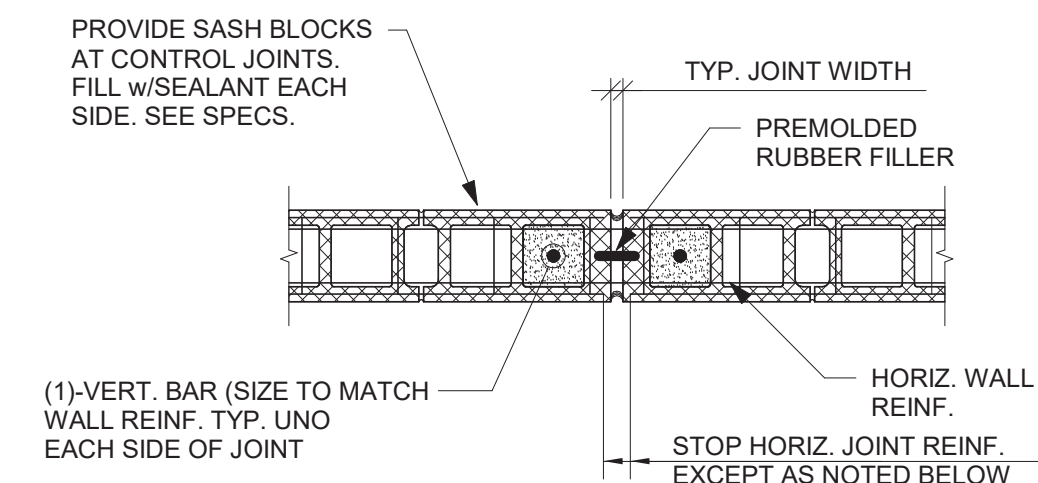
GENERAL NOTES

- FOR STRUCTURAL GENERAL NOTES & DESIGN CRITERIA, REFERENCE SHEET S0001.
- SEE CIVIL DRAWINGS FOR FINISH GRADE.
- COORDINATE ALL DIMENSIONS AND DETAILS WITH ARCHITECTURAL DRAWINGS.
- SEE SITE PLAN FOR LOCATION.
- FOOTINGS ARE DESIGNED BASED ON A PRESUMPTIVE MINIMUM ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF.



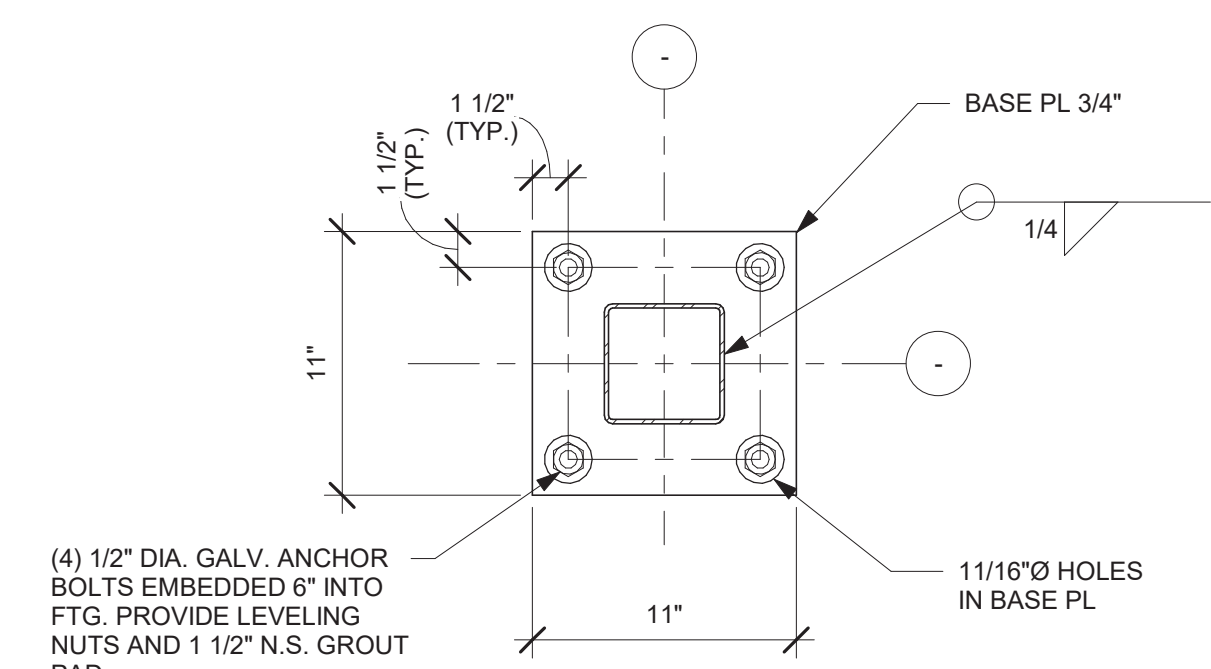
NOTE: SEE PLAN FOR ORIENTATION

5 GATE POST BASE DETAIL (2 REQD.)
Scale: 1 1/2" = 1'-0"



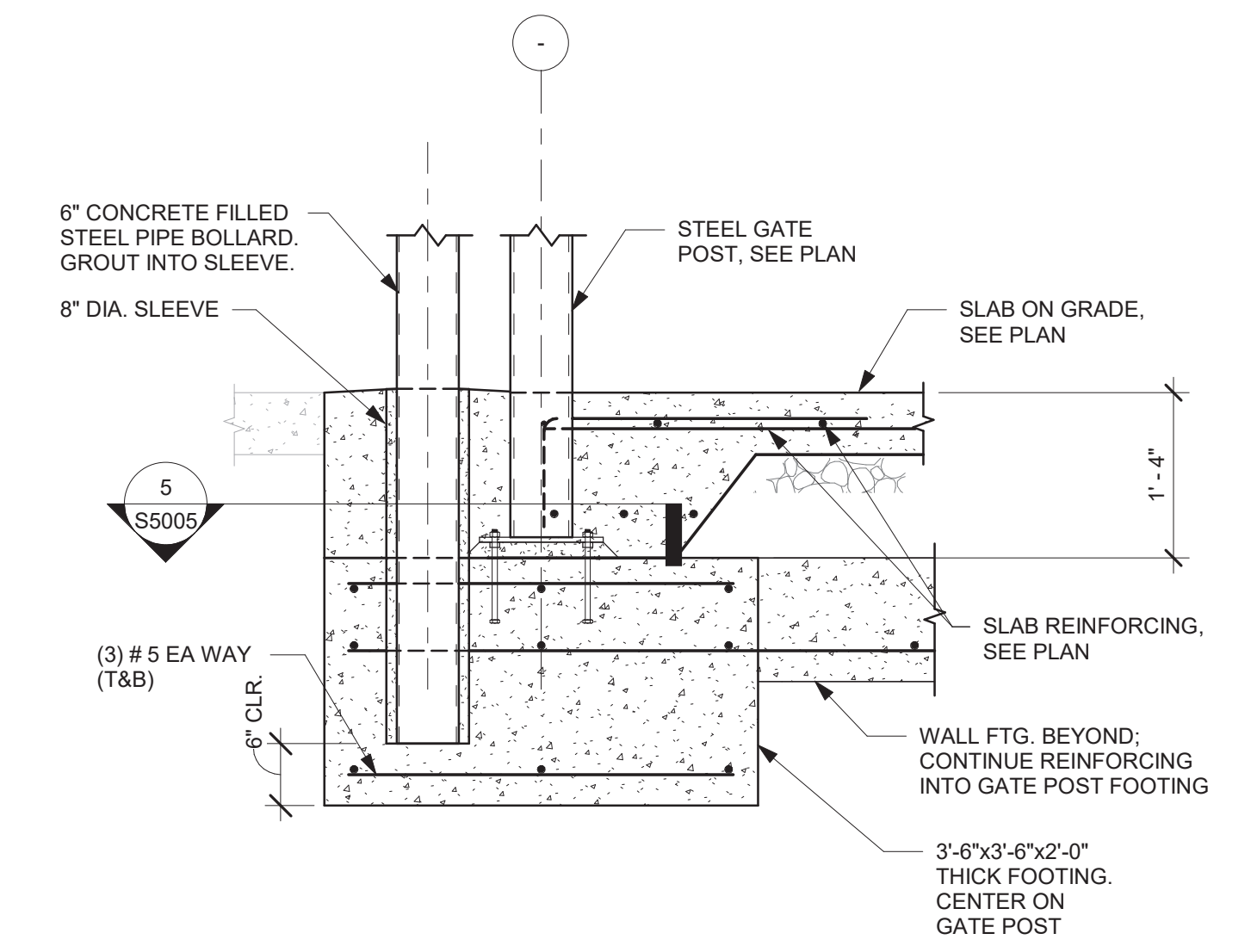
- PROVIDE SASH BLOCKS AT CONTROL JOINTS. FILL W/SEALANT EACH SIDE. SEE SPECS.
- TYP. JOINT WIDTH
- PREMOLDED RUBBER FILLER
- HORIZ. WALL REINF.
- STOP HORIZ. JOINT REINF. EXCEPT AS NOTED BELOW
- (1) VERT. BAR (SIZE TO MATCH WALL REINF. TYP. UNO EACH SIDE OF JOINT)

6 TYPICAL MASONRY CONTROL JOINT
Scale: 3/4" = 1'-0"

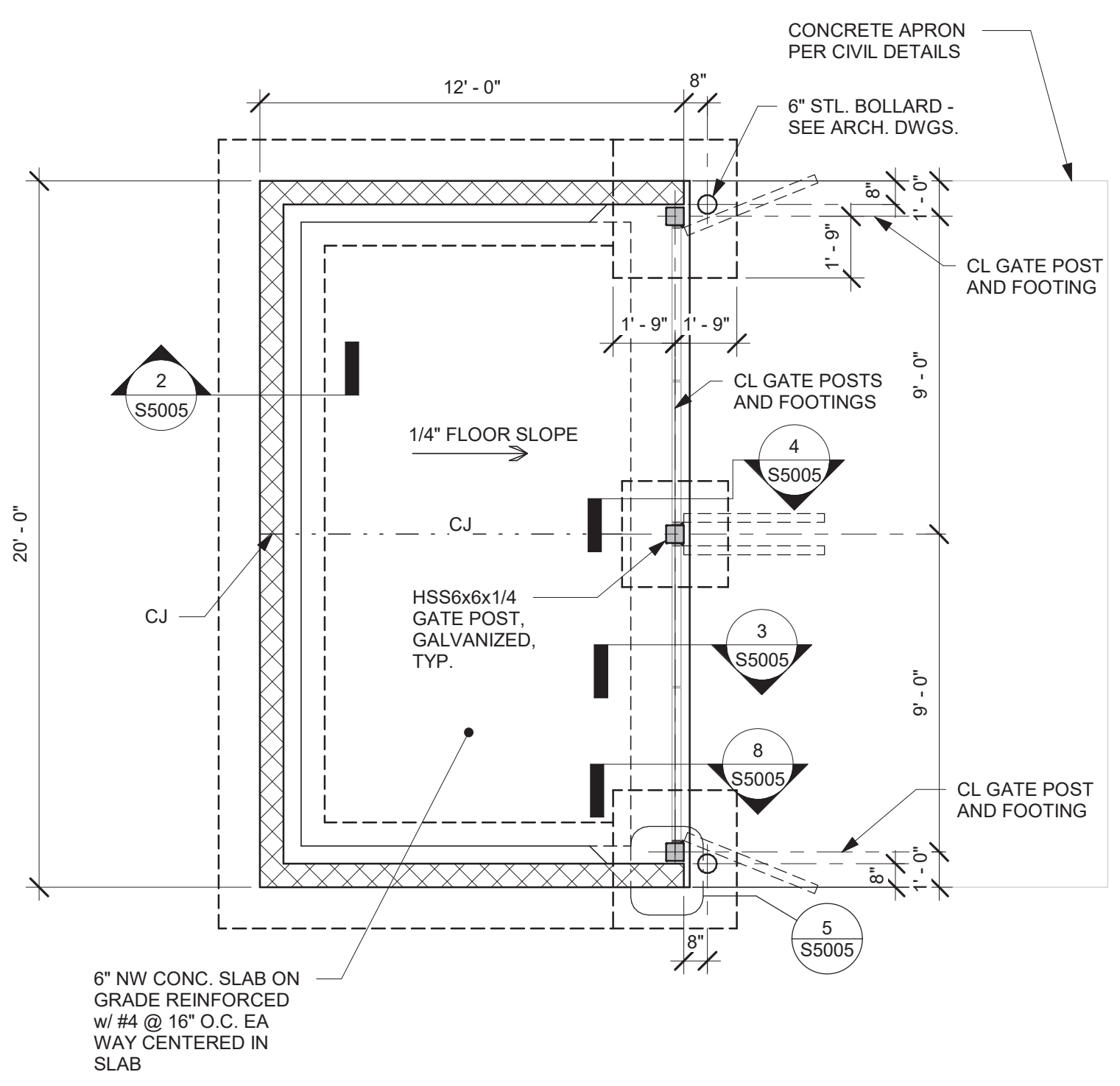


- (4) 1/2" DIA. GALV. ANCHOR BOLTS EMBEDDED 6" INTO FTG. PROVIDE LEVELING NUTS AND 1 1/2" N.S. GROUT PAD
- BASE PL 3/4"
- 11/16" Ø HOLES IN BASE PL

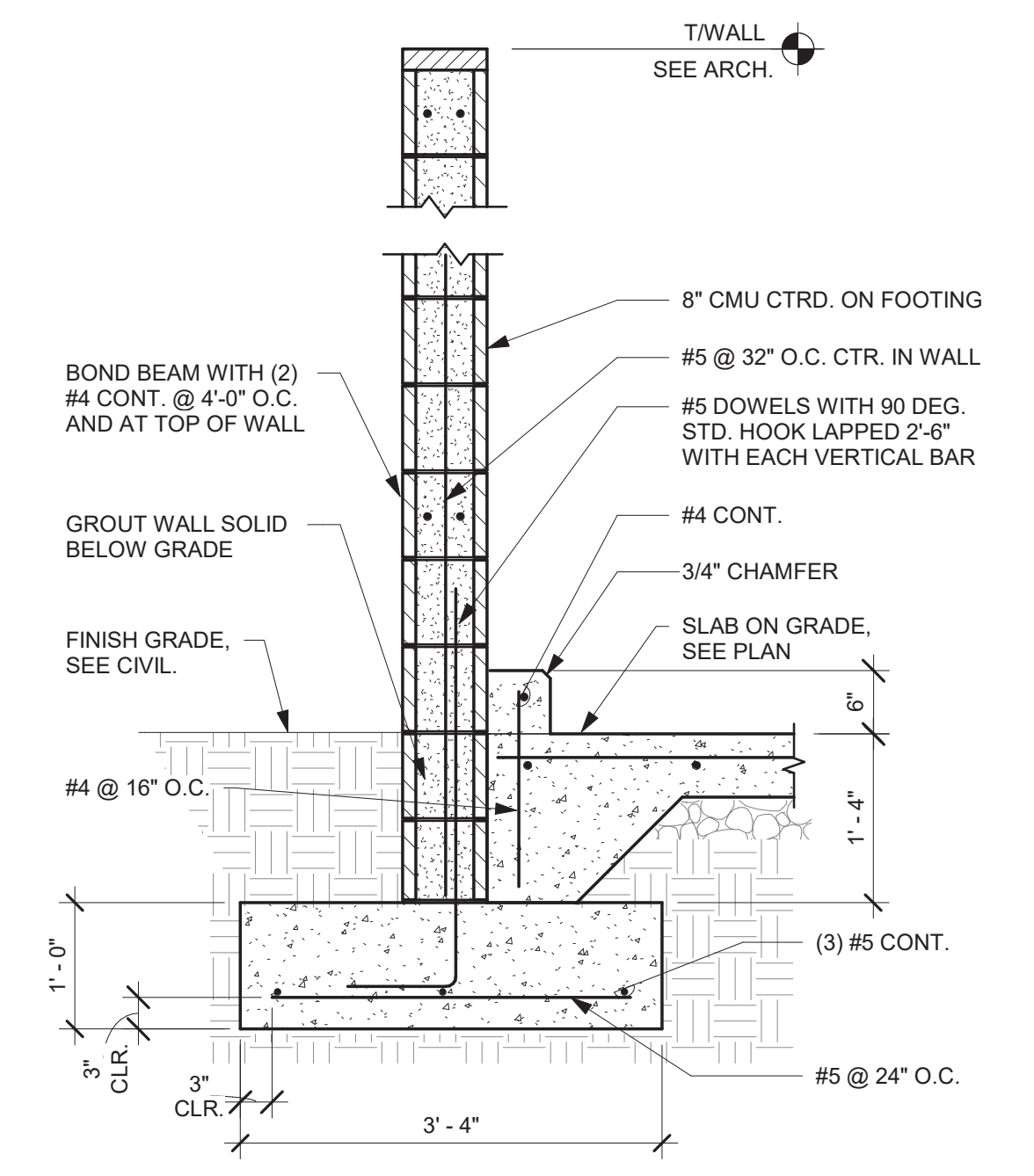
7 GATE POST BASE DETAIL
Scale: 1 1/2" = 1'-0"



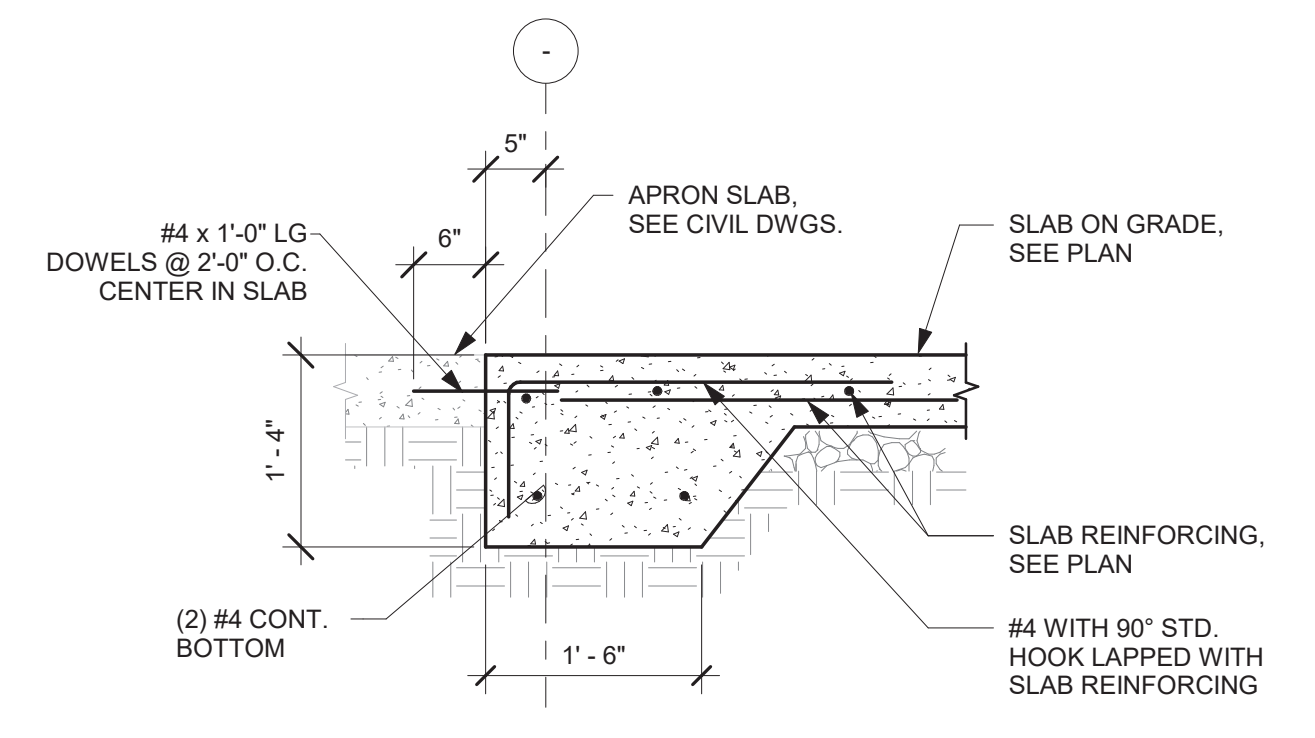
8 SECTION AT GATE POST w/ BOLLARD
Scale: 3/4" = 1'-0"



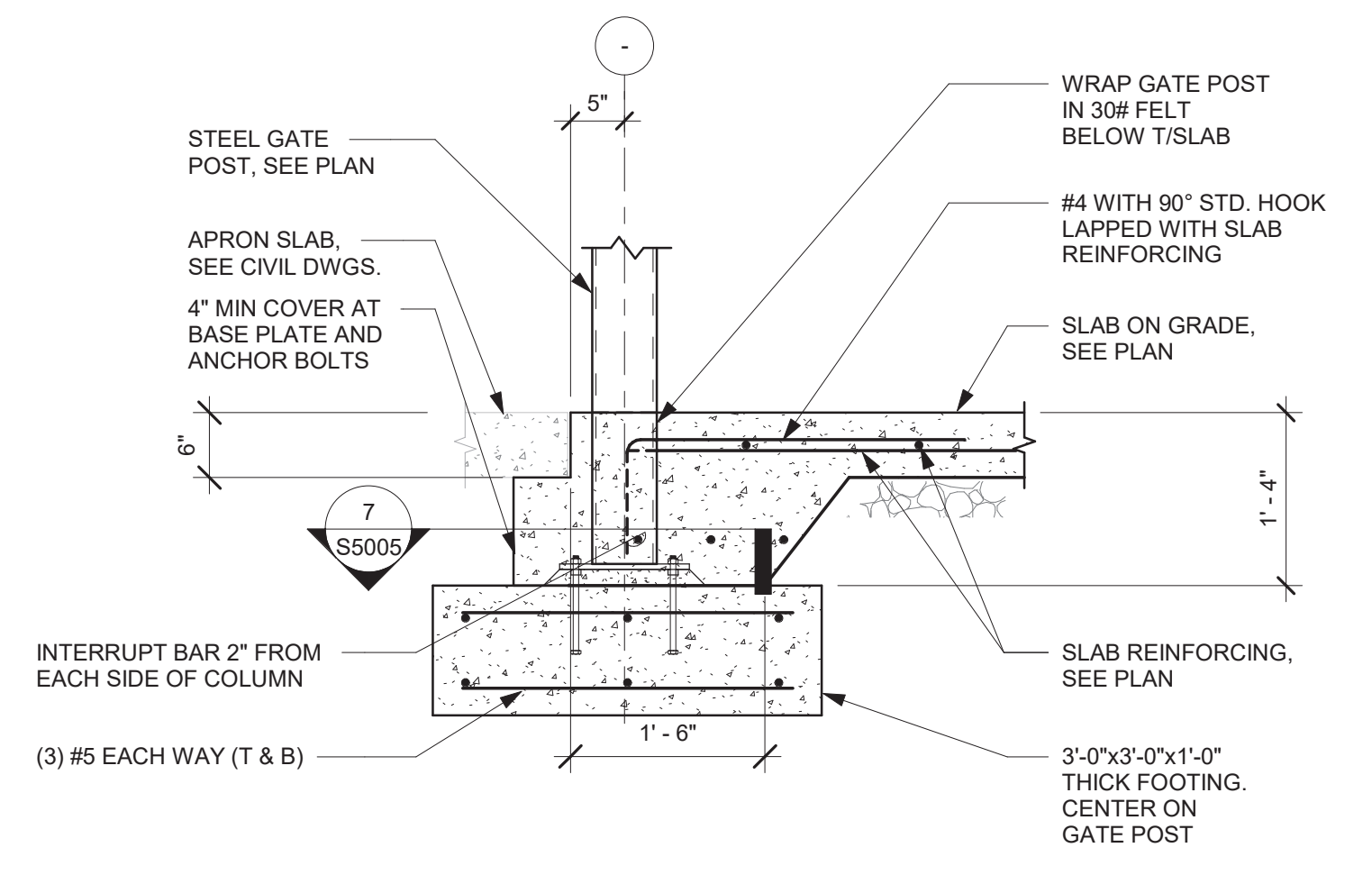
1 FOUNDATION PLAN
Scale: 1/4" = 1'-0"



2 SECTION AT TRASH ENCLOSURE WALL
Scale: 3/4" = 1'-0"



3 SECTION AT SLAB EDGE
Scale: 3/4" = 1'-0"



4 SECTION AT GATE POST
Scale: 3/4" = 1'-0"

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DUMPSTER ENCLOSURE STRUCTURAL PLANS AND DETAILS

PERMIT	DATE
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	07/21/2021
CONSTRUCTION	DATE
	-/-/-
RECORD	DATE
	-/-/-

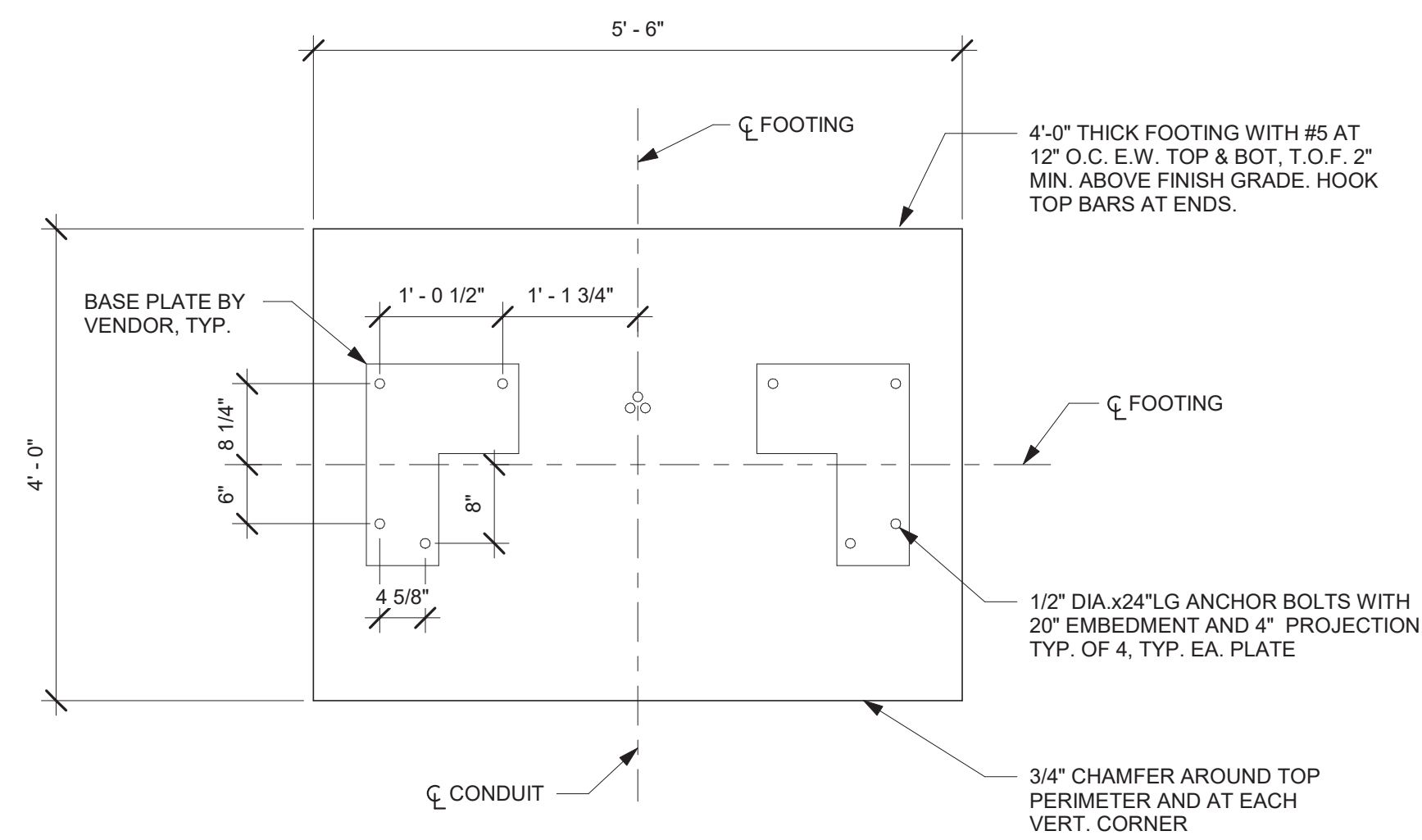
PROJECT MANAGER	DESIGNER
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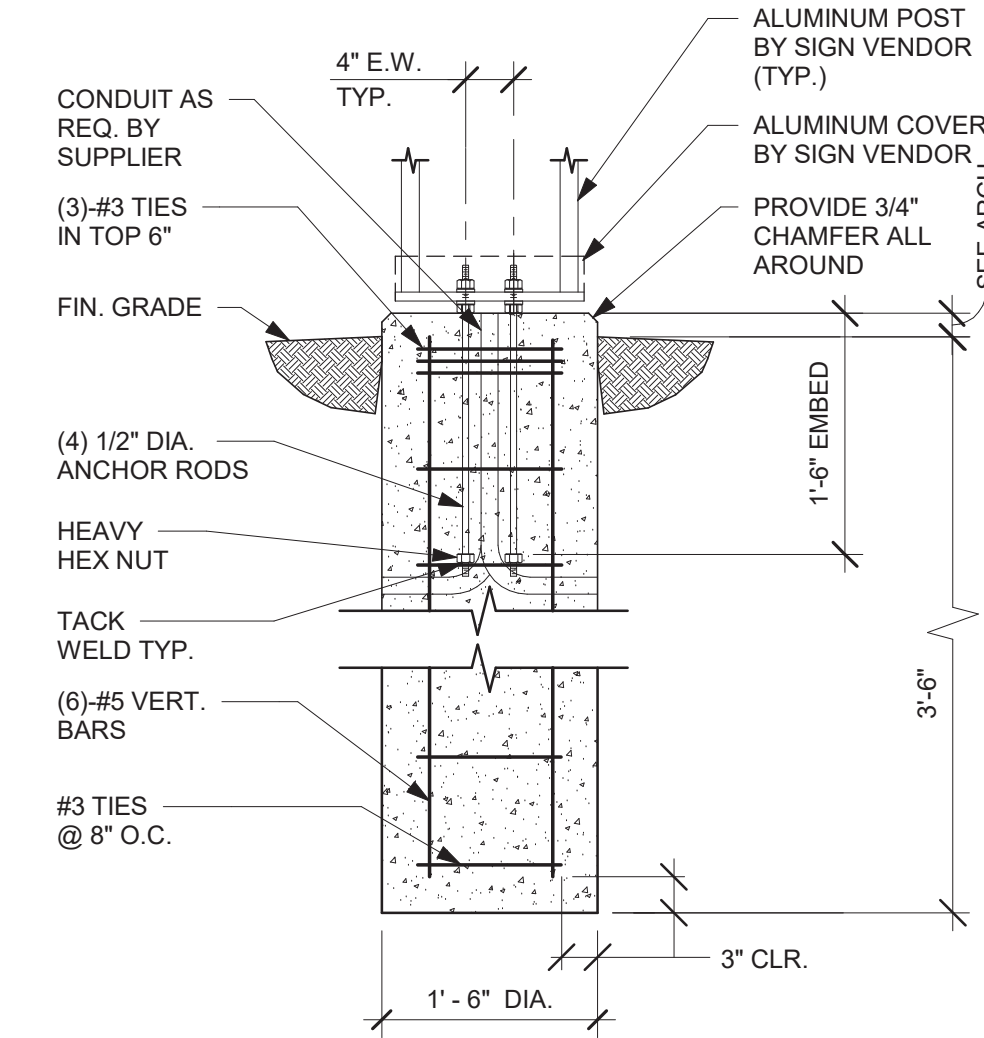
S5005

SITE FOUNDATION NOTES:

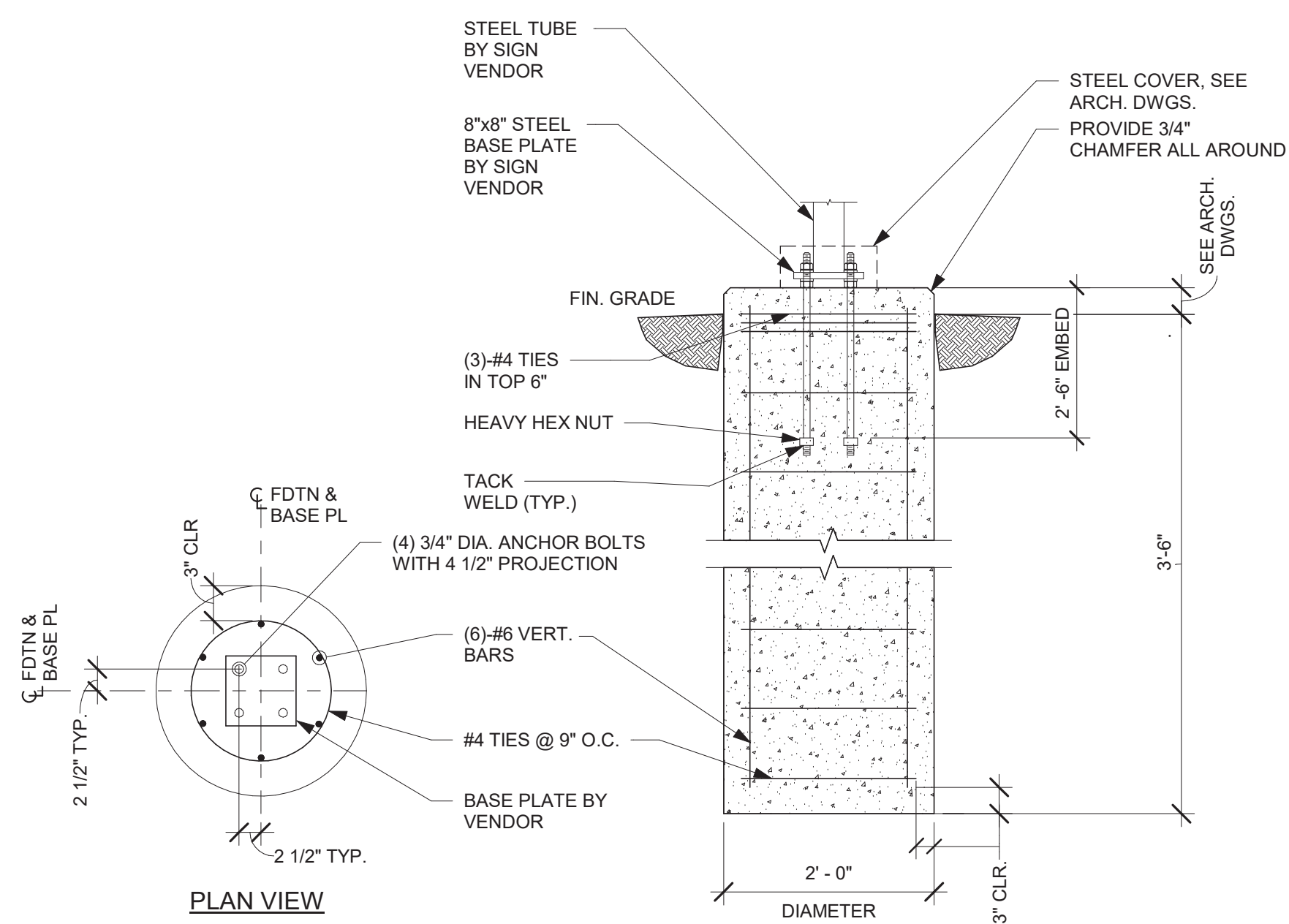
1. VENDOR TO SUPPLY CONTRACTOR WITH ANCHOR BOLT TEMPLATE.
2. ANY BASE LOCATED WITHIN 1'-0" OF PAVED SURFACE SHALL BE PAINTED WITH (2) COATS OF SAFETY YELLOW TRAFFIC RATED PAINT.
3. COORDINATE ANCHOR BOLT AND CONDUIT LOCATIONS WITH VENDOR SHOP DRAWINGS.
4. SEE SHEET S0001 FOR GENERAL NOTES.
5. ANCHOR BOLTS TO BE HOT-DIP GALVANIZED OR STAINLESS STEEL.
6. SEE SITE PLAN FOR LOCATIONS AND ORIENTATIONS.



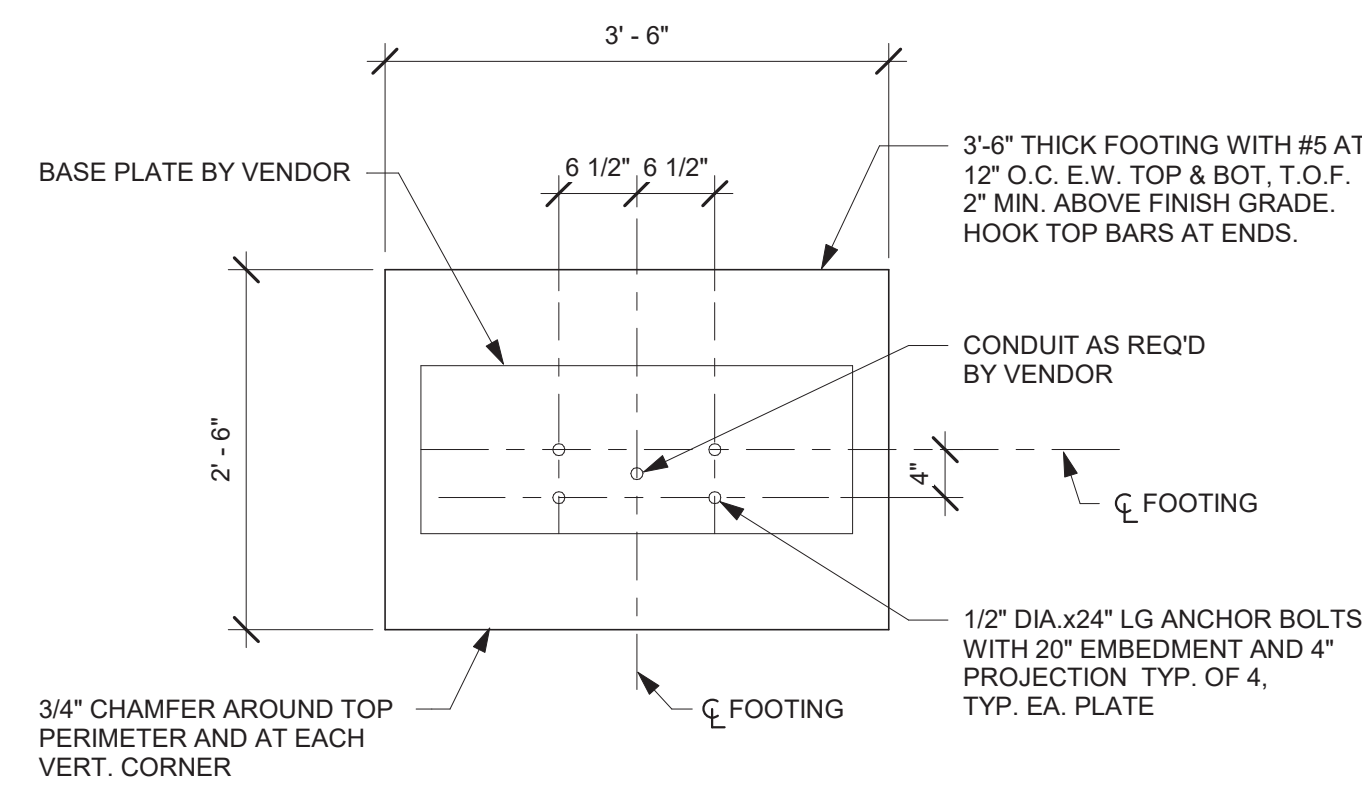
4 PLAN-CANOPY/ DIGITAL ORDER SCREEN FOUNDATION
Scale: 3/4" = 1'-0"



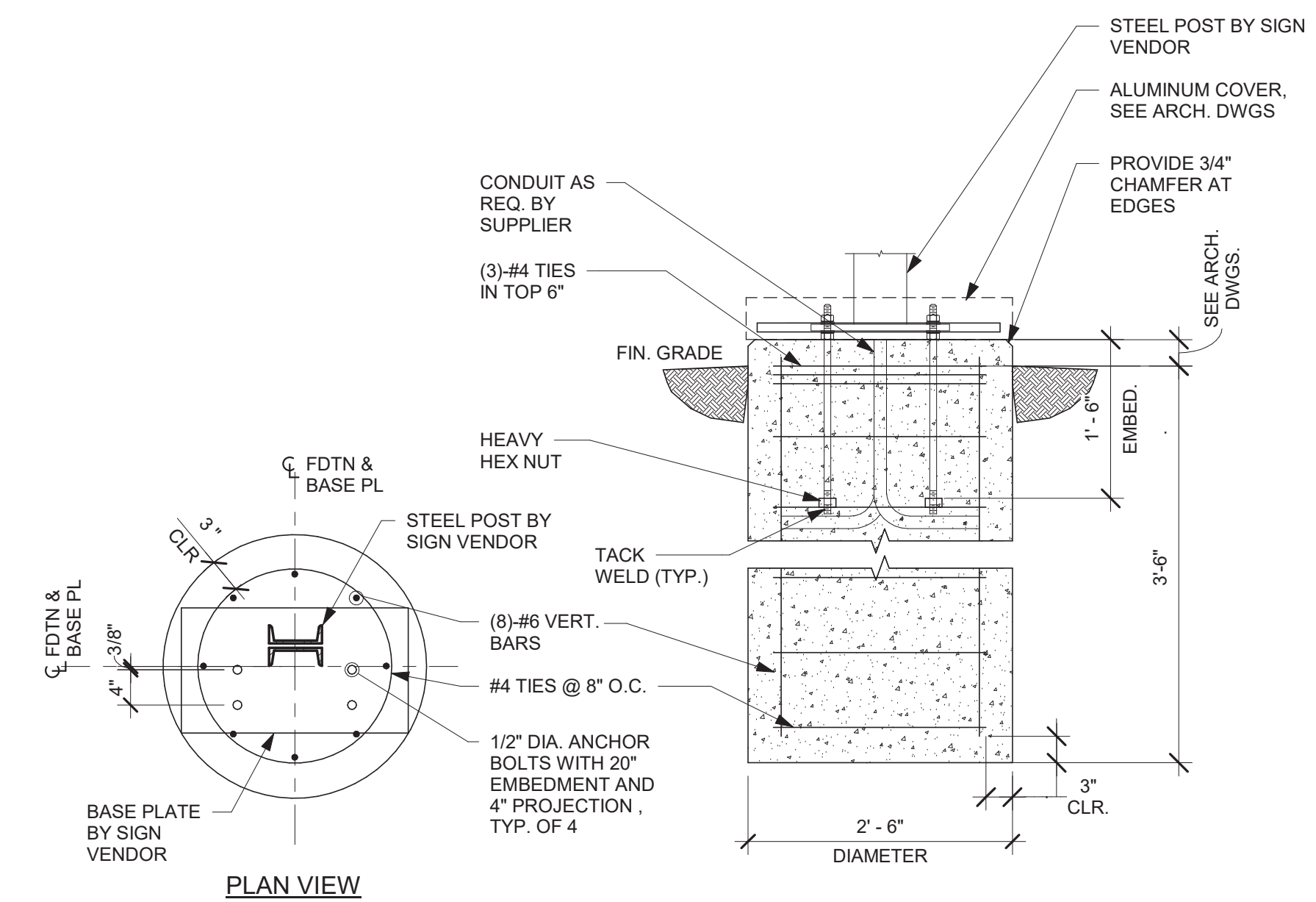
5 DT DIRECTIONAL FOUNDATION DETAIL
Scale: 3/4" = 1'-0"



1 CLEARANCE BAR FOUNDATION DETAIL
Scale: 3/4" = 1'-0"

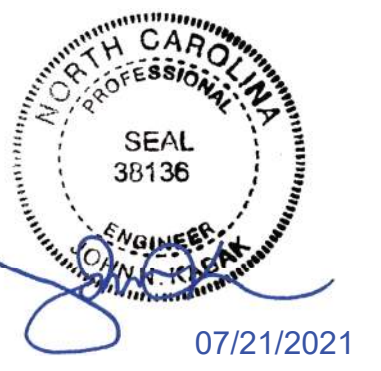


2 PLAN- MENU BOARD FOUNDATION
Scale: 3/4" = 1'-0"



3 PRE-MENU BOARD FOUNDATION DETAIL
Scale: 3/4" = 1'-0"

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SITE FOUNDATION DETAILS

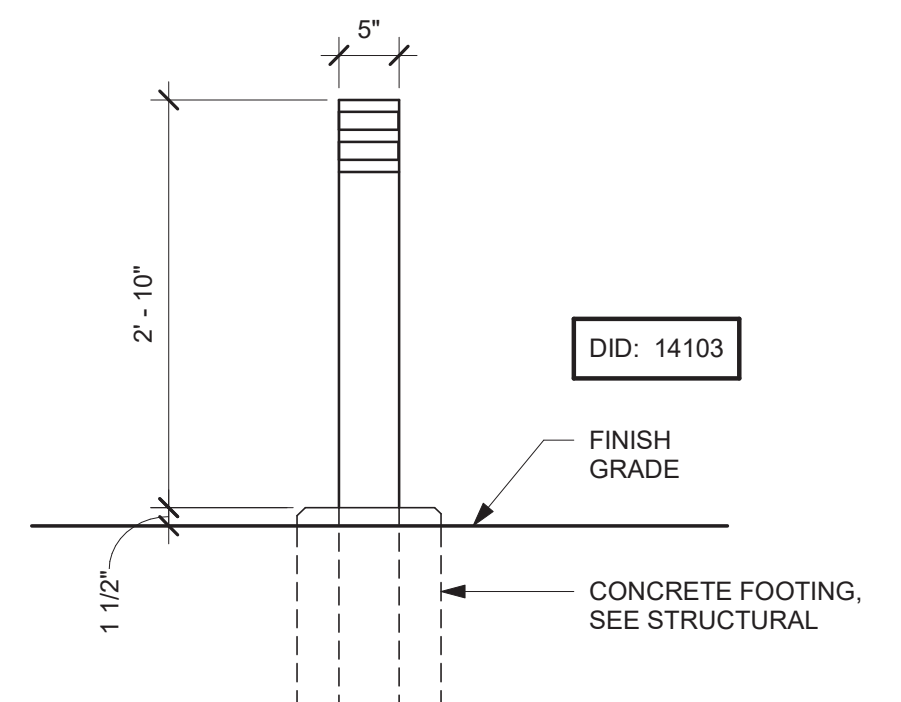
PERMIT	DATE
	07/21/2021
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	07/21/2021
CONSTRUCTION	DATE
	-/-/-
RECORD	DATE
	-/-/-

PROJECT MANAGER	DESIGNER
AK	GM

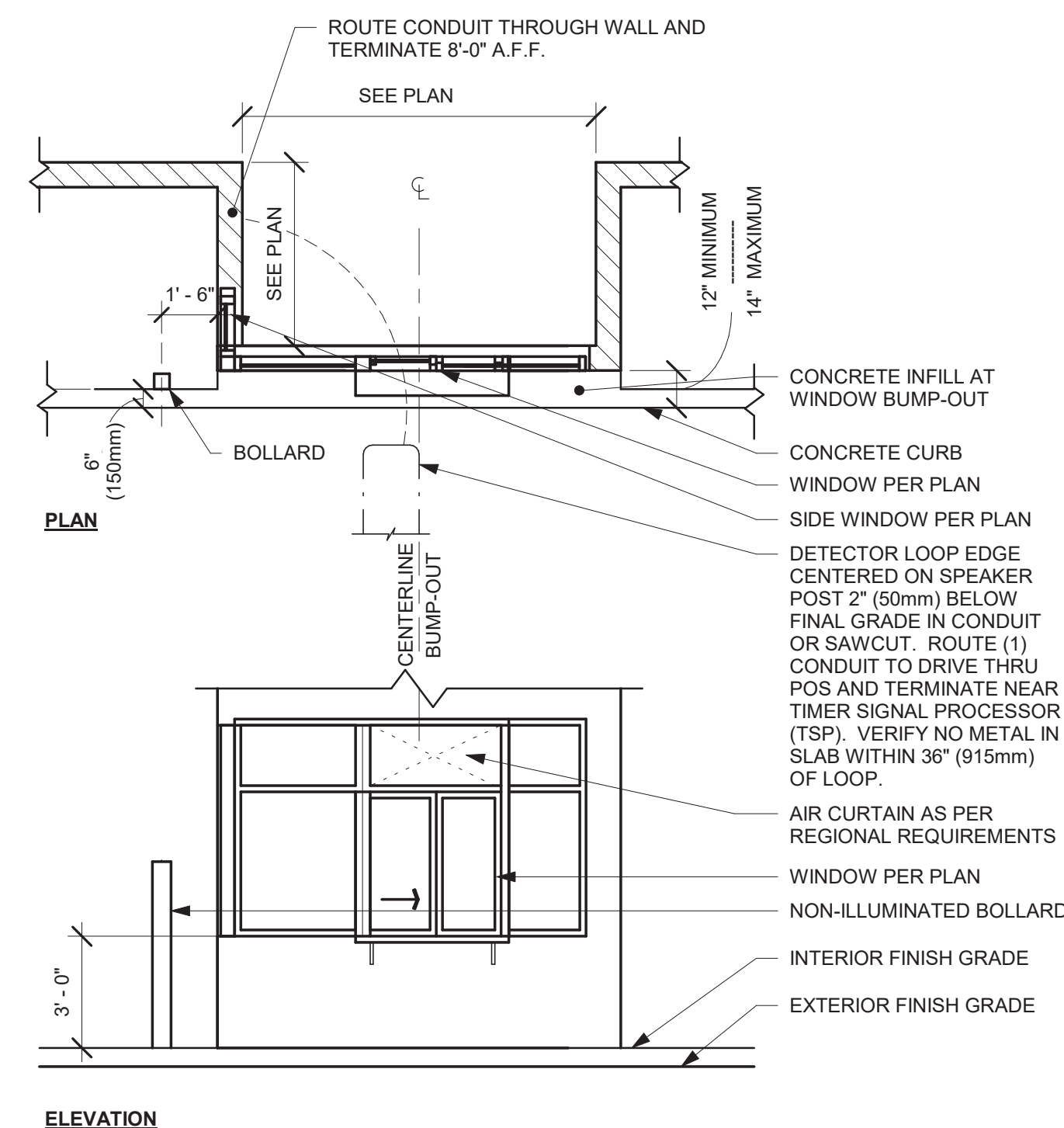
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2020379.19

S5006

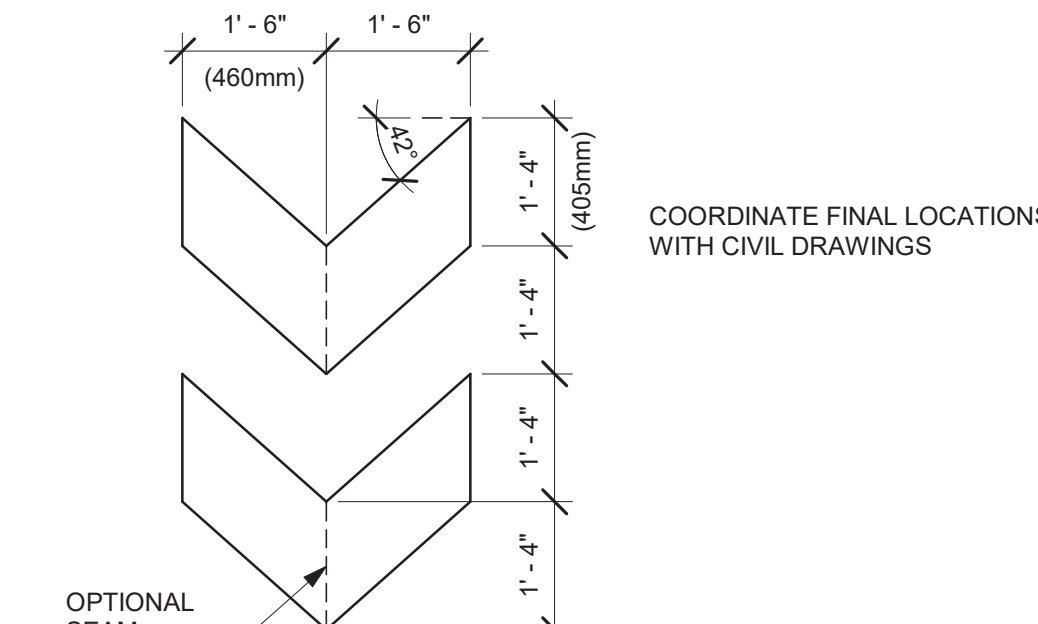
NOTES:
REFERENCE STRUCTURAL DRAWINGS FOR FOUNDATION DESIGN.
ANCHOR BOLT DESIGN BY SIGN VENDOR. FABRICATION SHOP DRAWINGS TO BE SUBMITTAL FOR AHJ APPROVAL BY SIGN VENDOR.
REFER TO TENANT DRAWINGS FOR FINAL LOCATION OF DRIVE-THRU EQUIPMENT AND BOLLARDS.



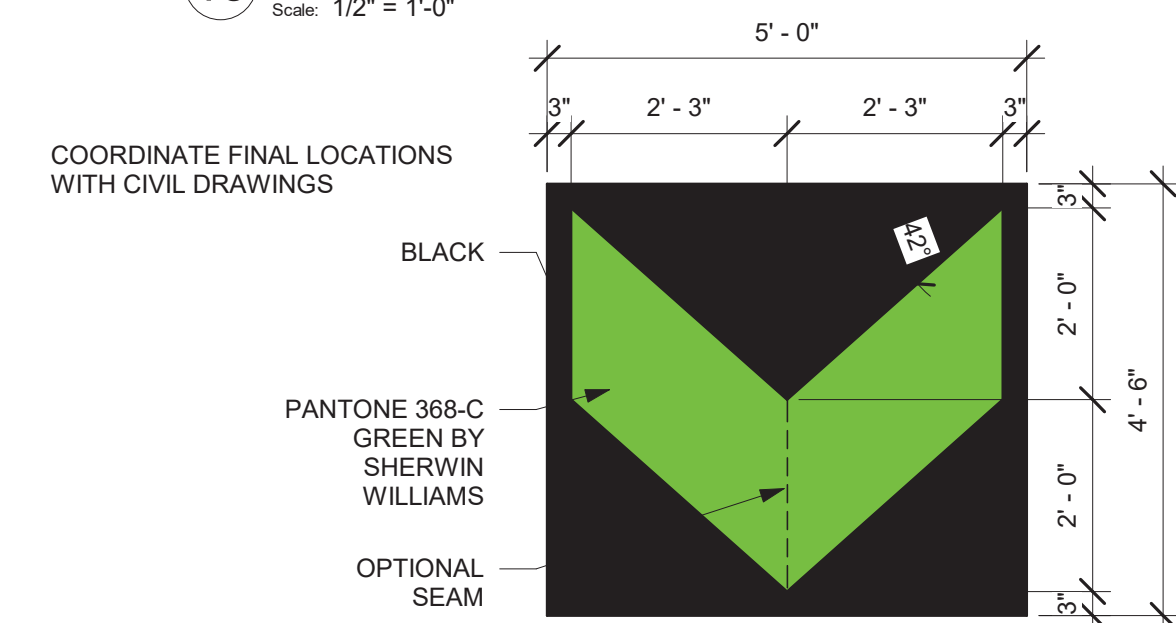
8 DTE - NON-ILLUMINATED BOLLARD
Scale: 3/4" = 1'-0"



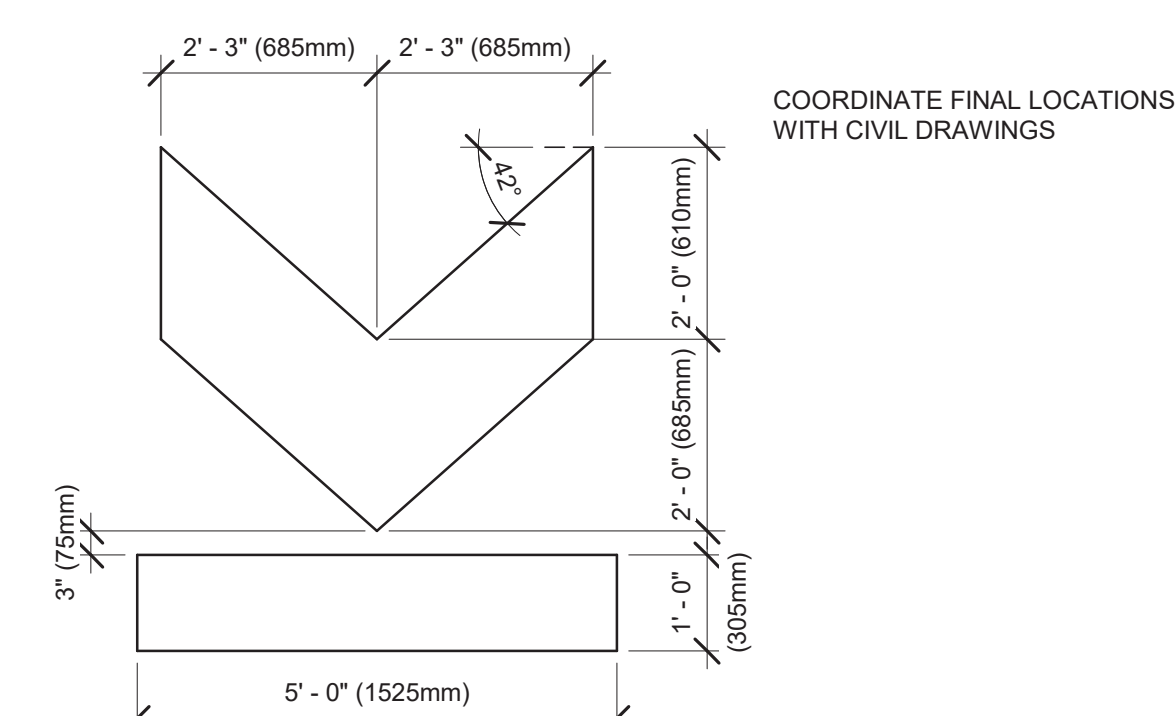
10 DTE - DRIVE THRU WINDOW BUMP-OUT
Scale: 1/4" = 1'-0"



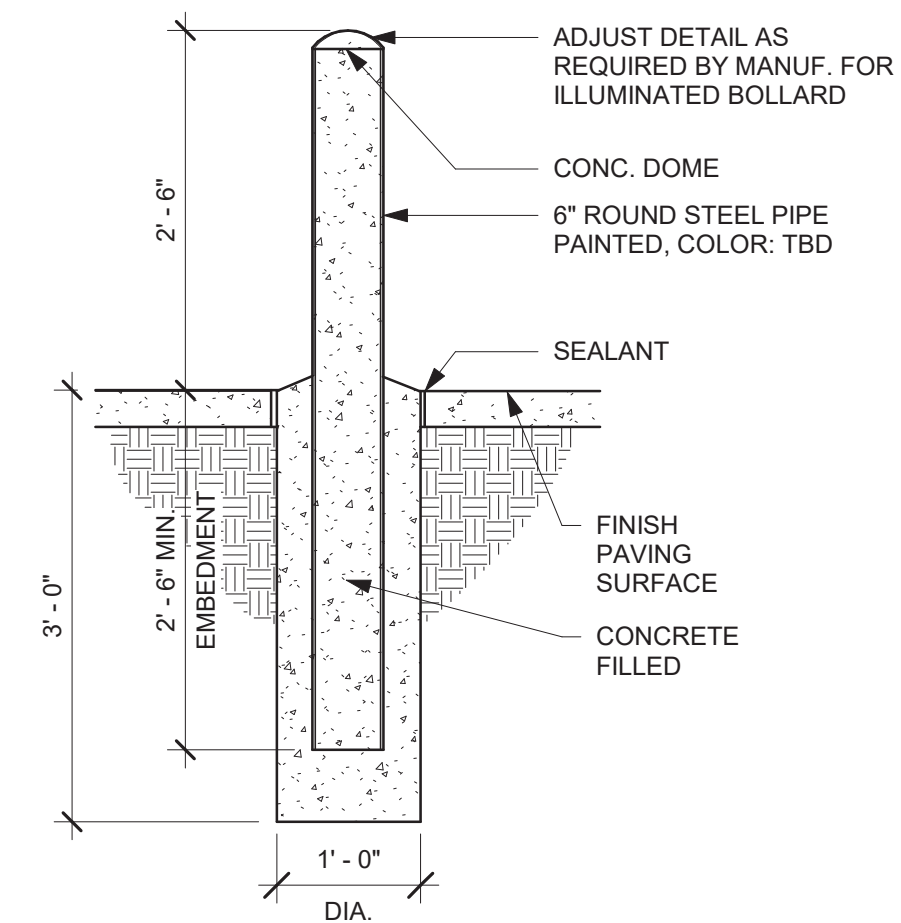
13 DTE - WAYFINDING GRAPHIC ARROW - DOUBLE
Scale: 1/2" = 1'-0"



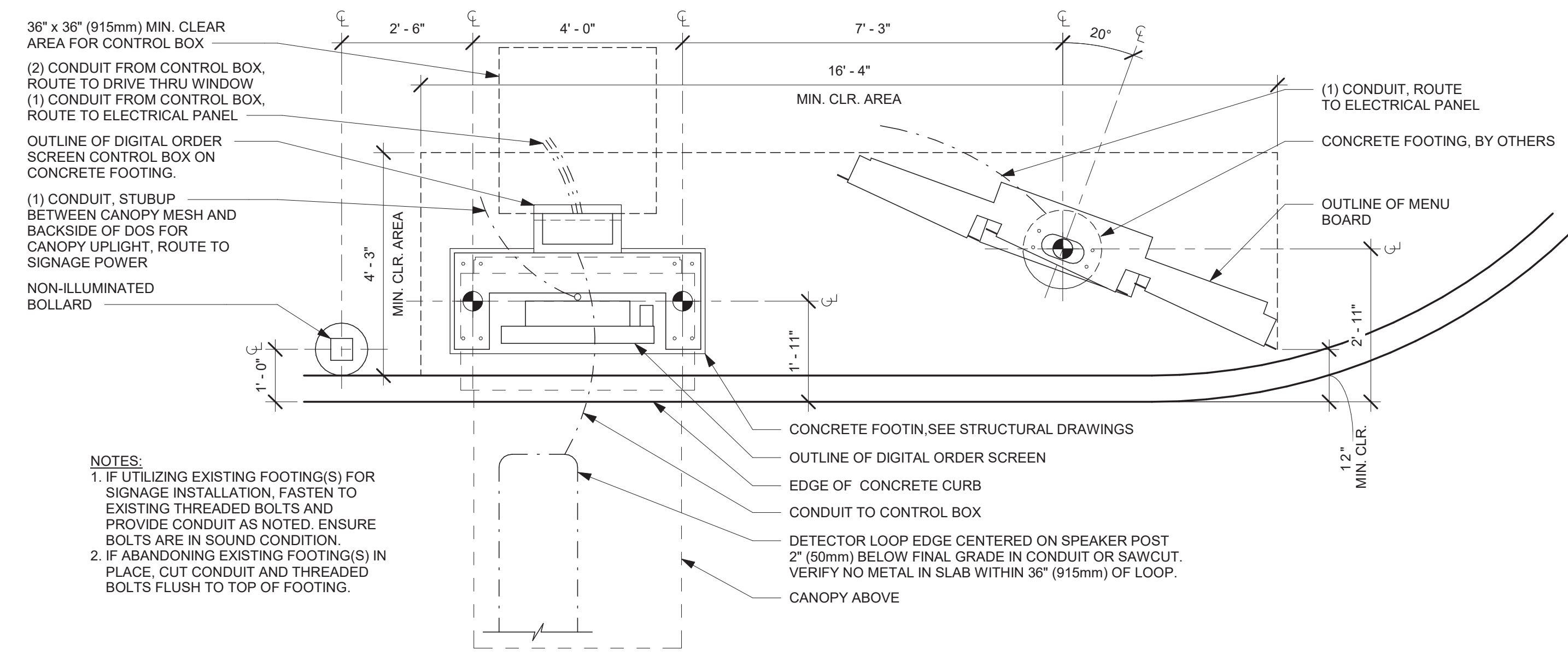
12 DTE - WAYFINDING GRAPHIC ARROW - SINGLE
Scale: 1/2" = 1'-0"



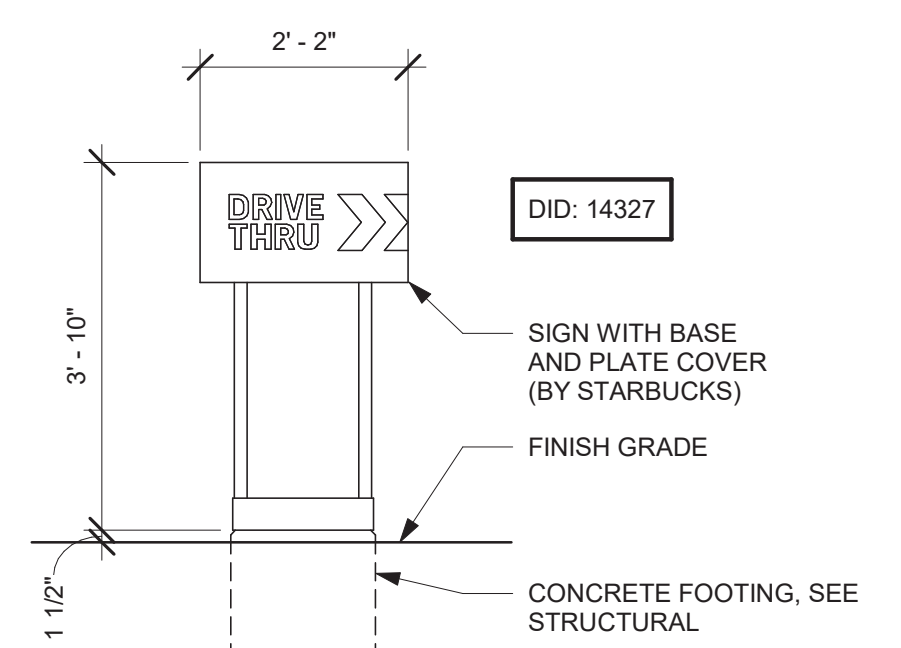
11 DTE - WAYFINDING GRAPHIC ARROW - EXIT
Scale: 1/2" = 1'-0"



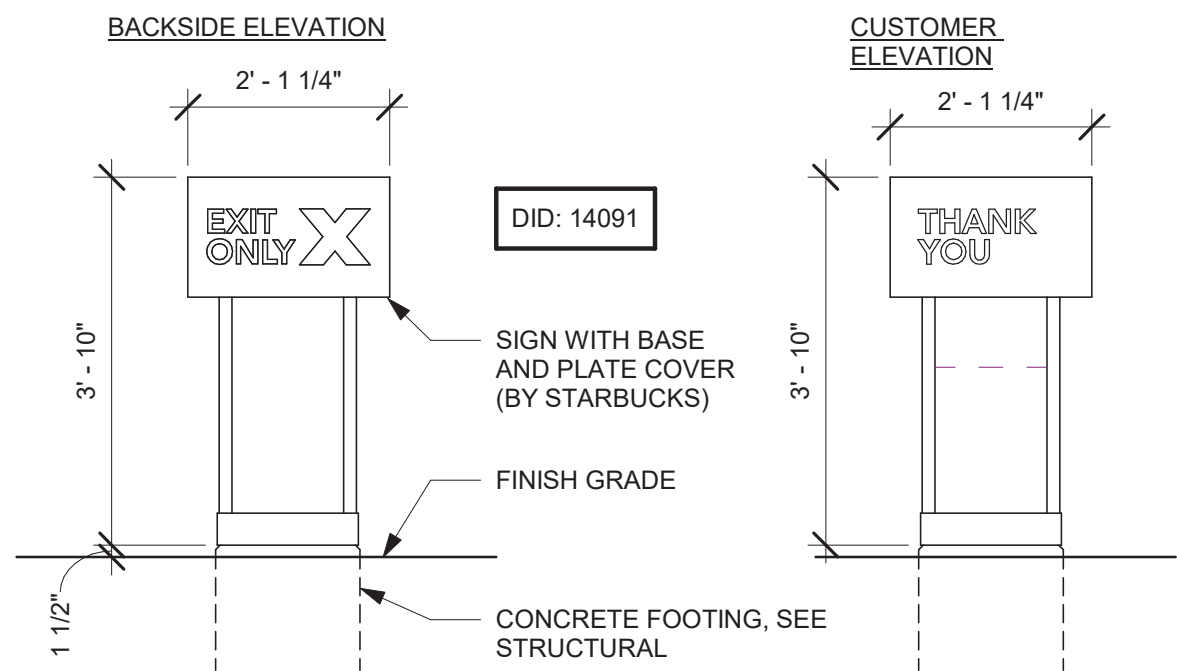
6 SITE - BOLLARD DETAIL
Scale: 3/4" = 1'-0"



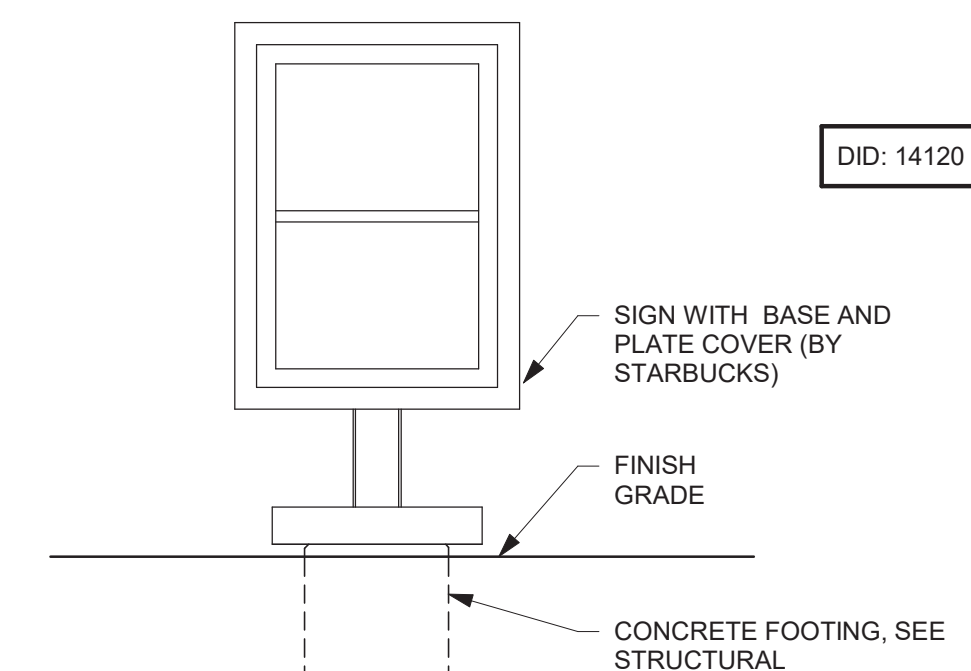
7 DTE - 5 PANEL 20° DT MENU BOARD, DIGITAL ORDER SCREEN WITH CANOPY
Scale: 1/2" = 1'-0"



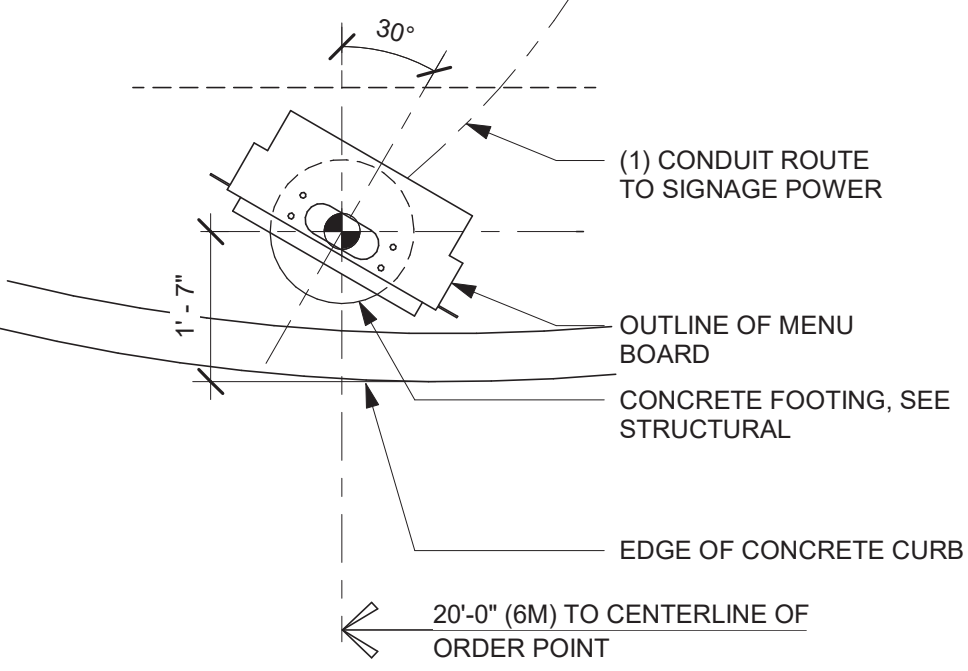
1 DTE - DIRECTIONAL SIGN - ENTRY
Scale: 1/2" = 1'-0"



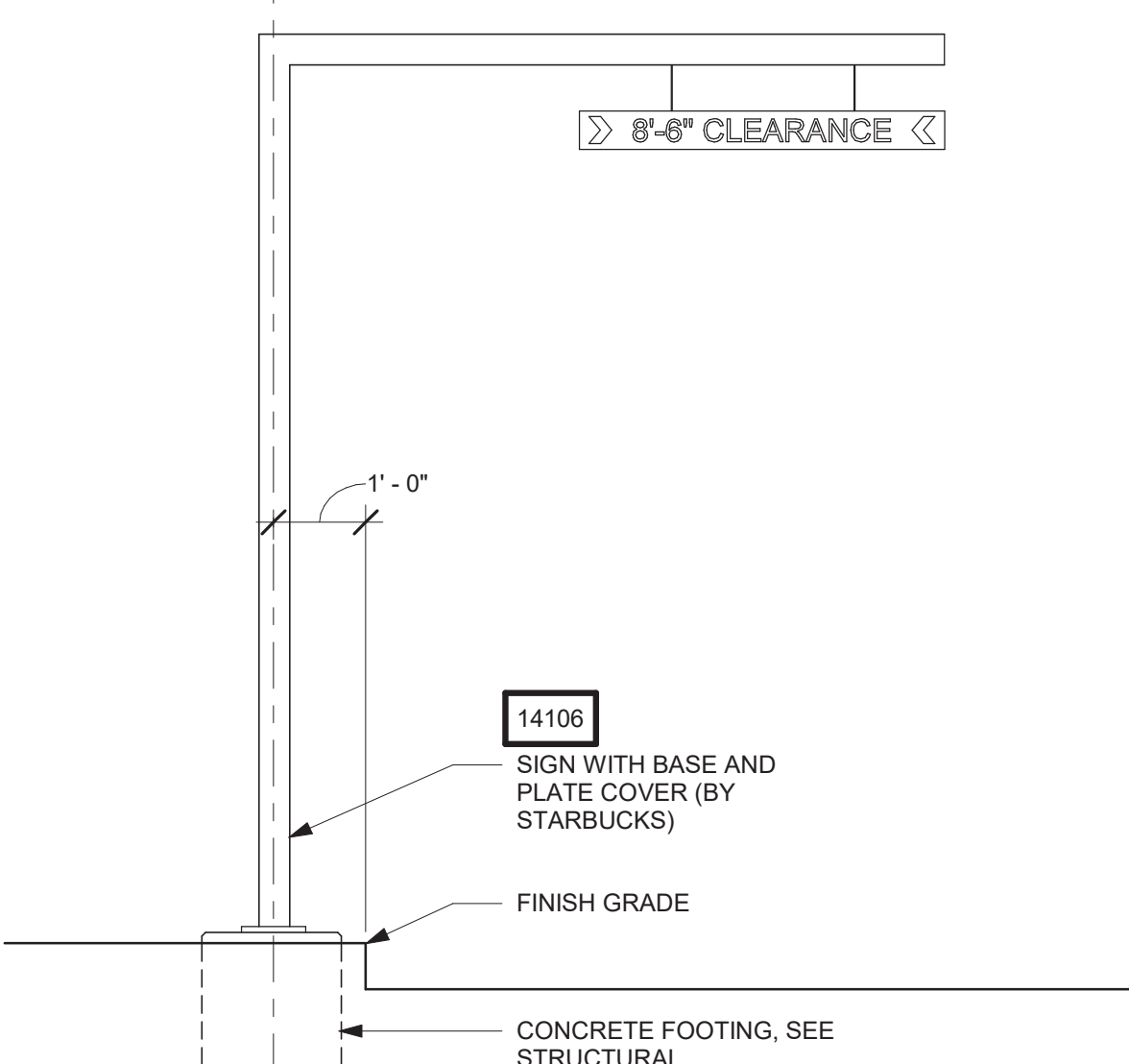
2 DTE - DIRECTIONAL SIGN
Scale: 1/2" = 1'-0"



3 DTE - PRE-MENU FREESTANDING
Scale: 1/2" = 1'-0"

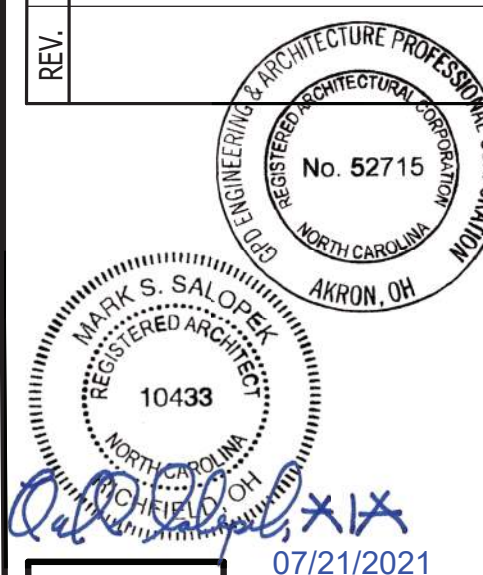


4 DTE - PRE-MENU 30 DEG
Scale: 1/2" = 1'-0"



5 DTE - CLEARANCE BAR
Scale: 1/2" = 1'-0"

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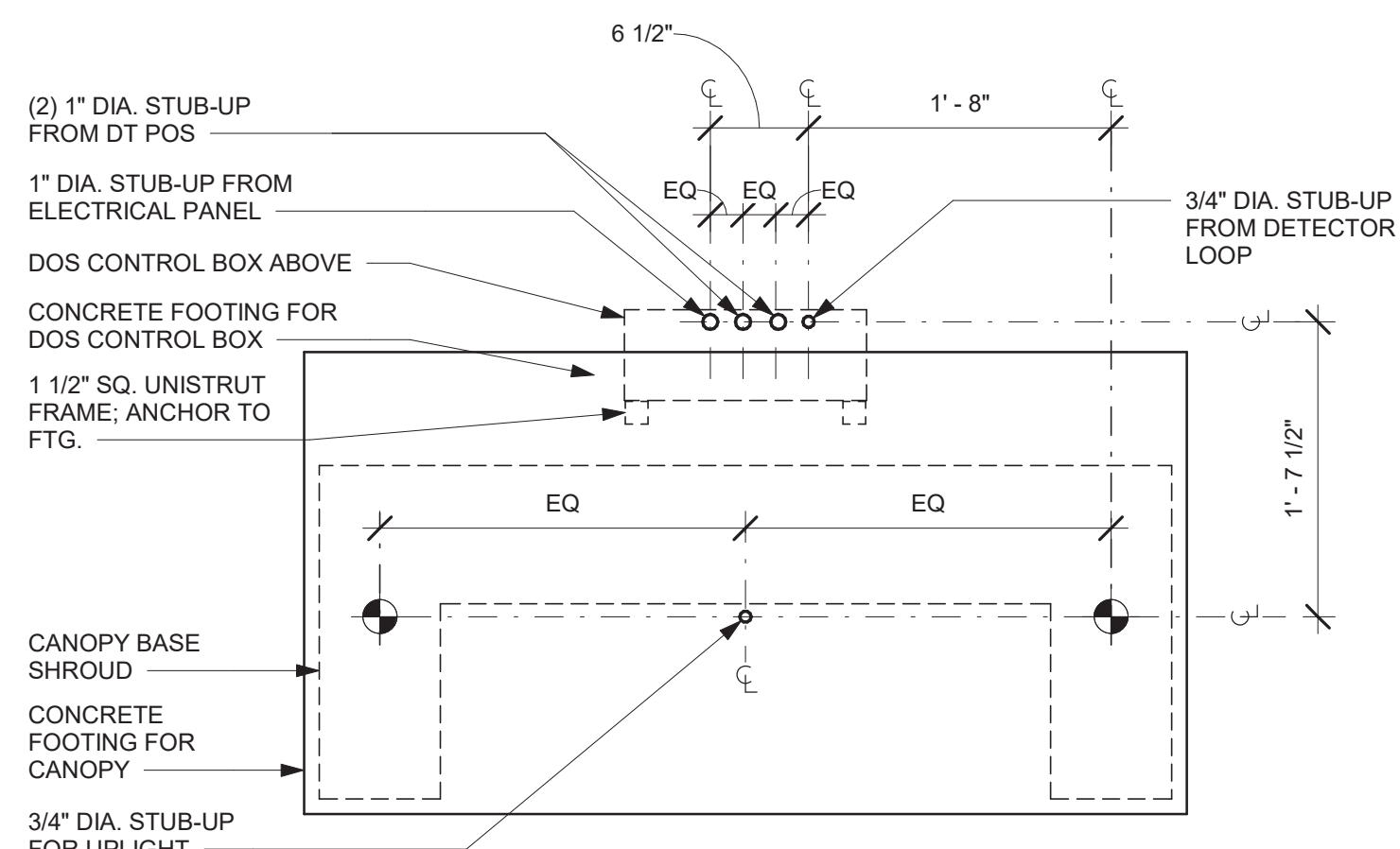
SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

ARCHITECTURAL SITE DETAILS

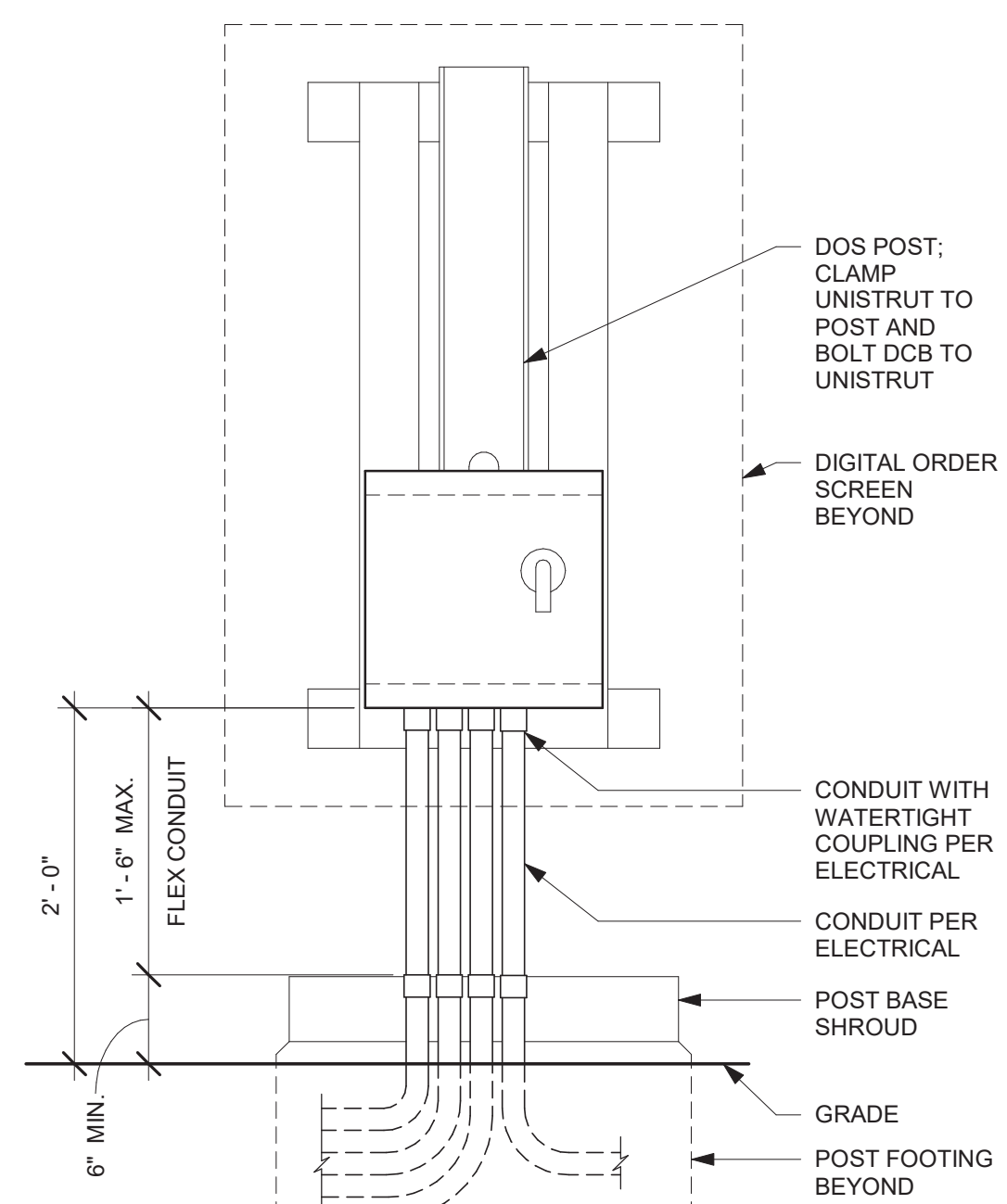
PERMIT	DATE
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	07/21/2021
CONSTRUCTION	
	-/-/-
RECORD	
	-/-/-
PROJECT MANAGER	DESIGNER
AK	DB

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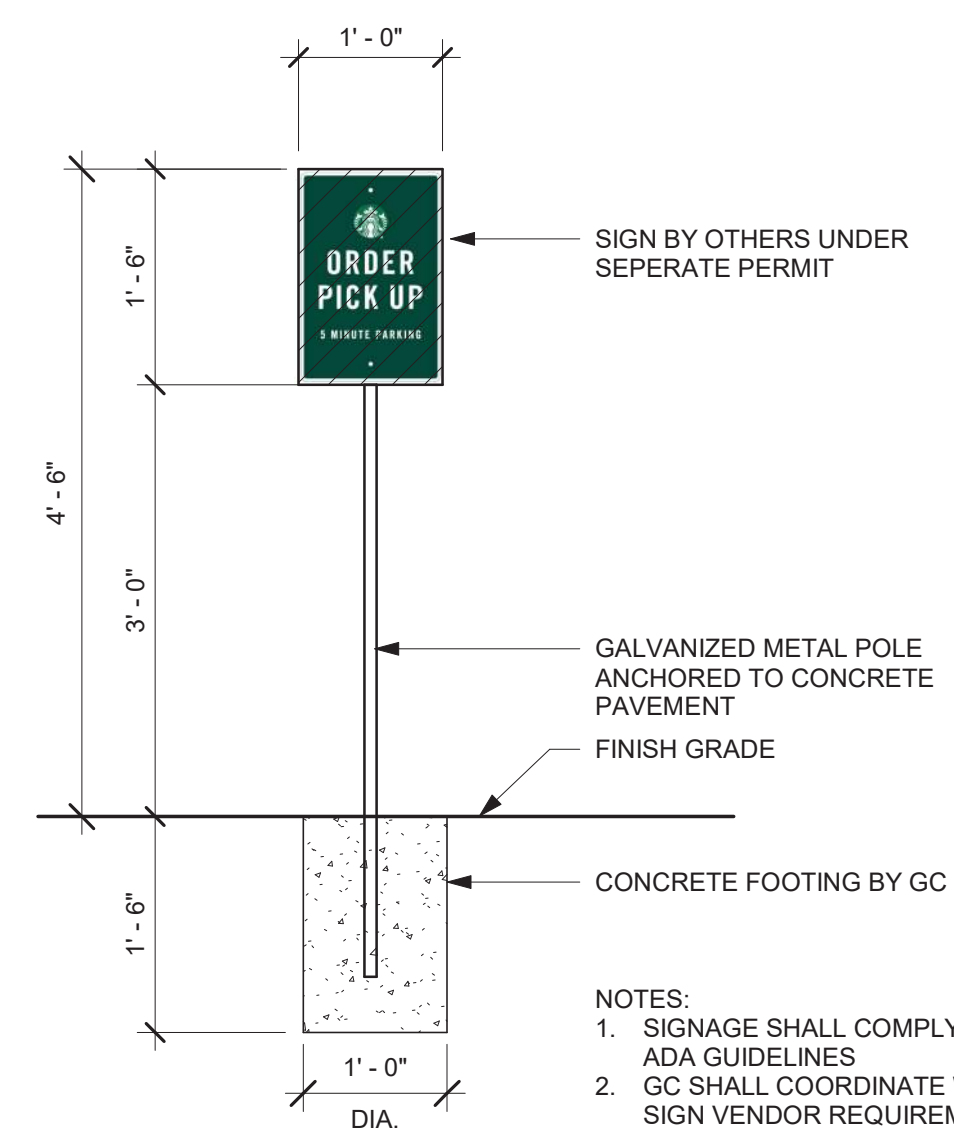
A0002



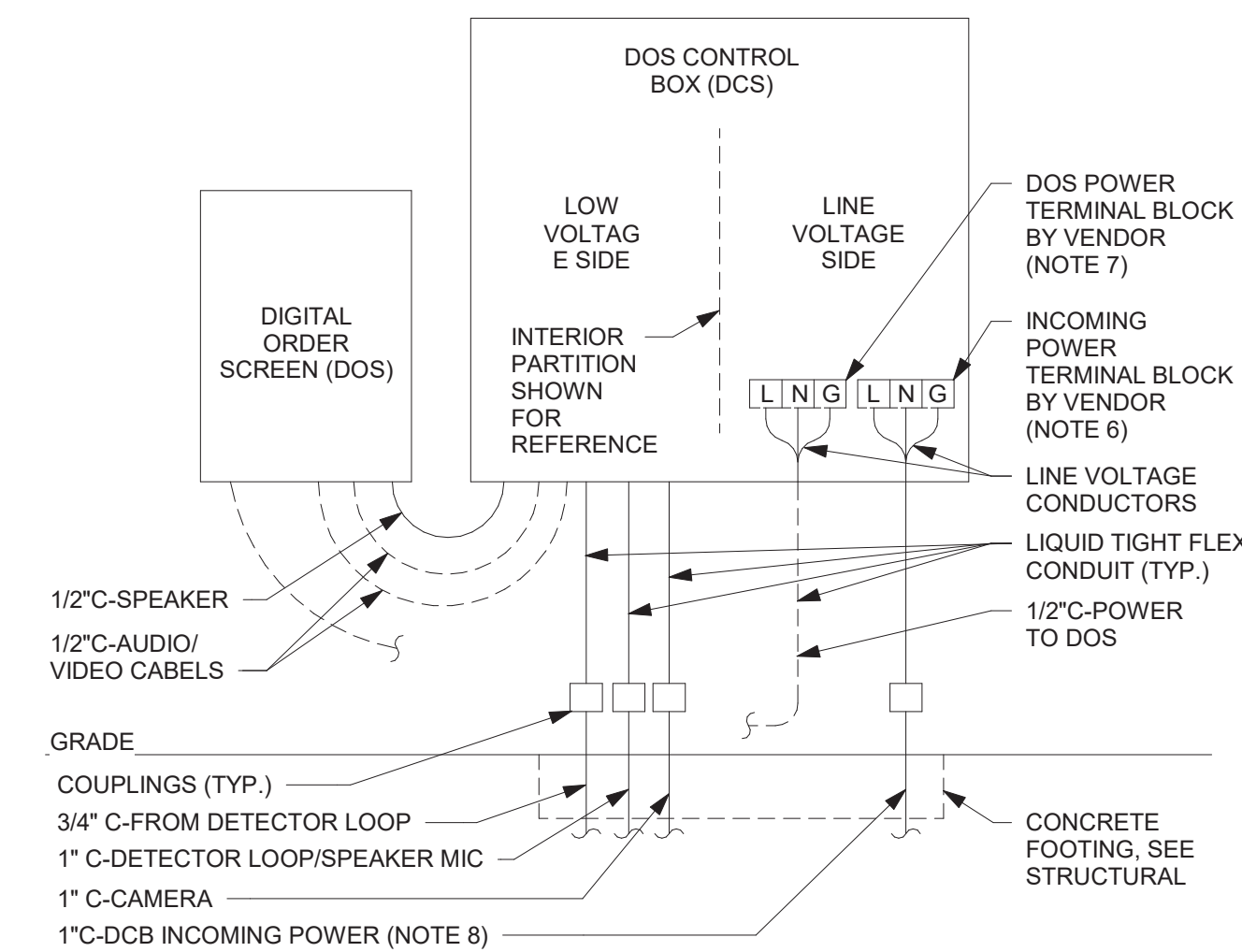
3 DTE - DOS CONTROL BOX CONDUIT STUB-UPS AT CANOPY
Scale: 1" = 1'-0"



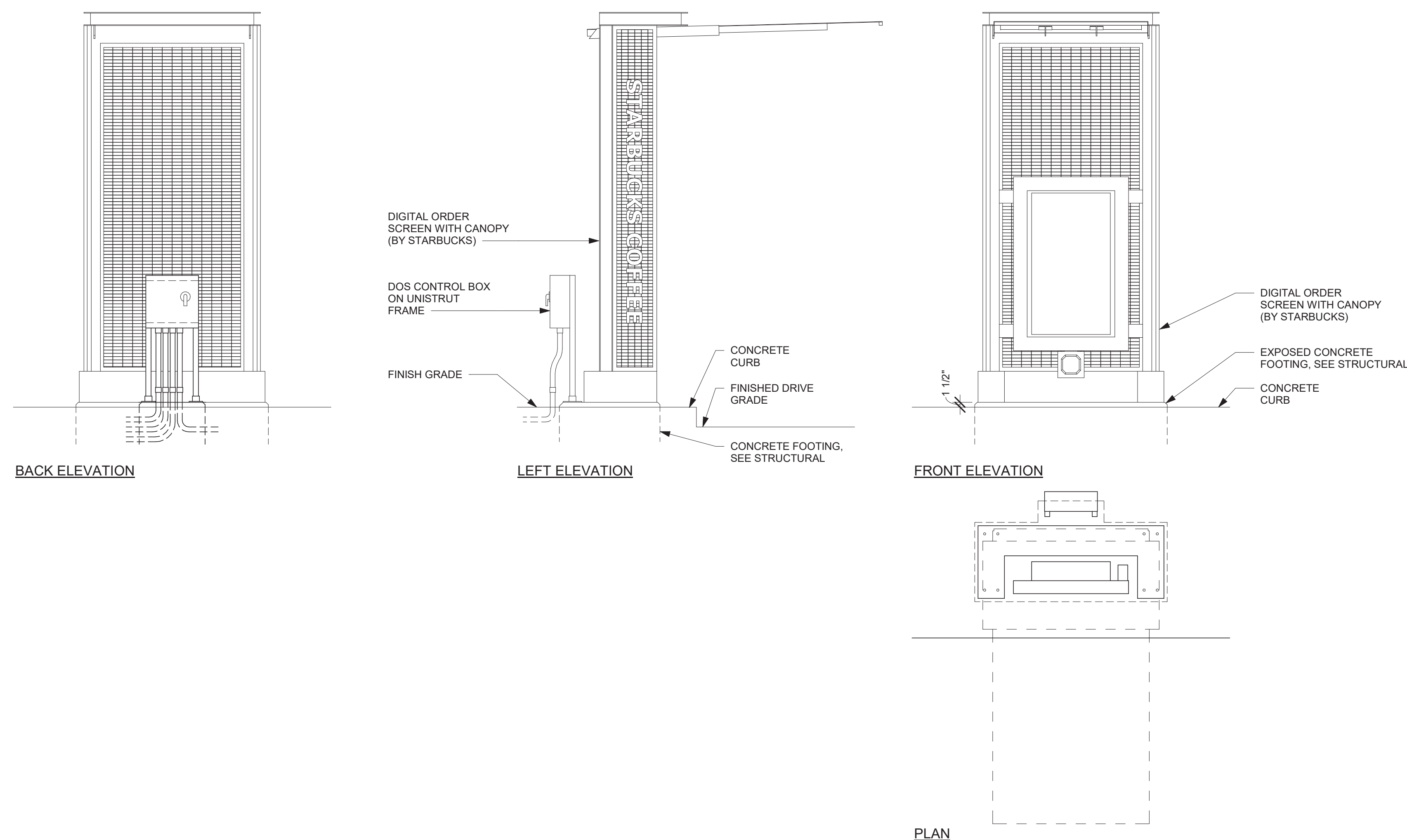
4 DOS CONTROL BOX ON DOS POST
Scale: 1" = 1'-0"



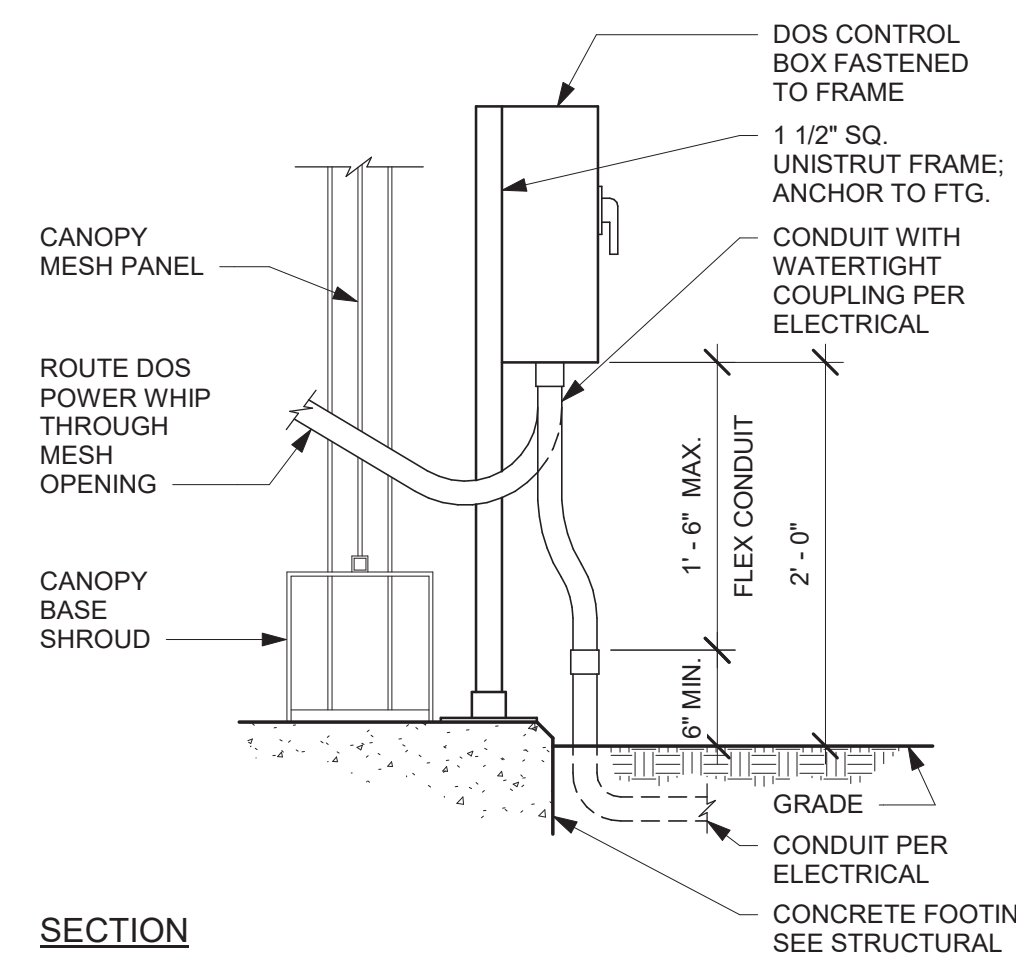
6 MOP FOOTING (BY GC.)
Scale: 3/4" = 1'-0"



5 DTE - DOS CONTROL BOX WIRING
Scale: 12" = 1'-0"



1 DTE - DIGITAL ORDER SCREEN AND CONTROL BOX WITH CANOPY
Scale: 1/2" = 1'-0"



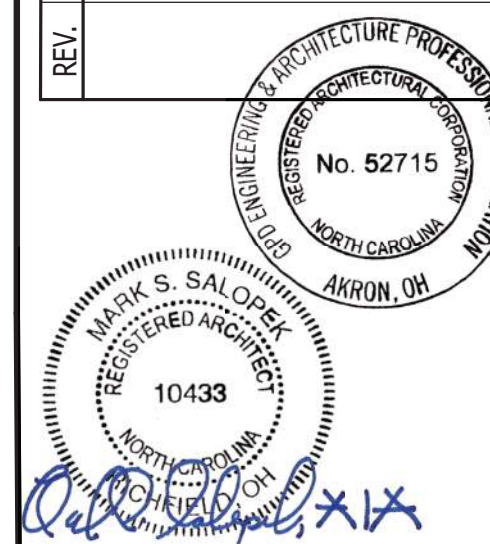
2 DTE - DOS CONTROL BOX AT CANOPY - SECTION
Scale: 1" = 1'-0"

LEGEND

---	DOS WHIP
---	CONDUIT BY EC

- NOTES:
1. ALL SHOWN SHALL BE INSTALLED PER THIS DETAIL, CODE AND MANUFACTURER'S INSTRUCTIONS.
 2. CONFIRM MOUNTING POSITIONS OF ALL DEVICES SHOWN WITH GC AND VENDOR.
 3. EC TO PROVIDE, INSTALL AND CONNECT ALL LINE VOLTAGE CONDUCTORS.
 4. EC TO CONNECT DEDICATED POWER BETWEEN DOS AND DCB.
 5. DCB VENDOR TO CONNECT ALL LOW VOLTAGE CABLING, INCLUDING DOS WHIPS TO DCB.
 6. TERMINATE INCOMING POWER ON TERMINAL BLOCKS LABELED INCOMING DEDICATED POWER.
 7. TERMINATE POWER TO DOS ON TERMINAL BLOCKS LABELED DOS DEDICATED POWER.
 8. POWER TO DCB SHALL BE INDIVIDUAL BRANCH CIRCUIT IN DEDICATED CONDUIT (I.E. NOT BE ON EMS OR LIGHTING CONTROL).

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ARCHITECTURAL SITE DETAILS

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CONSTRUCTION	DATE
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RECORD	DATE
	-/-/-

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AK	DB

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A0003

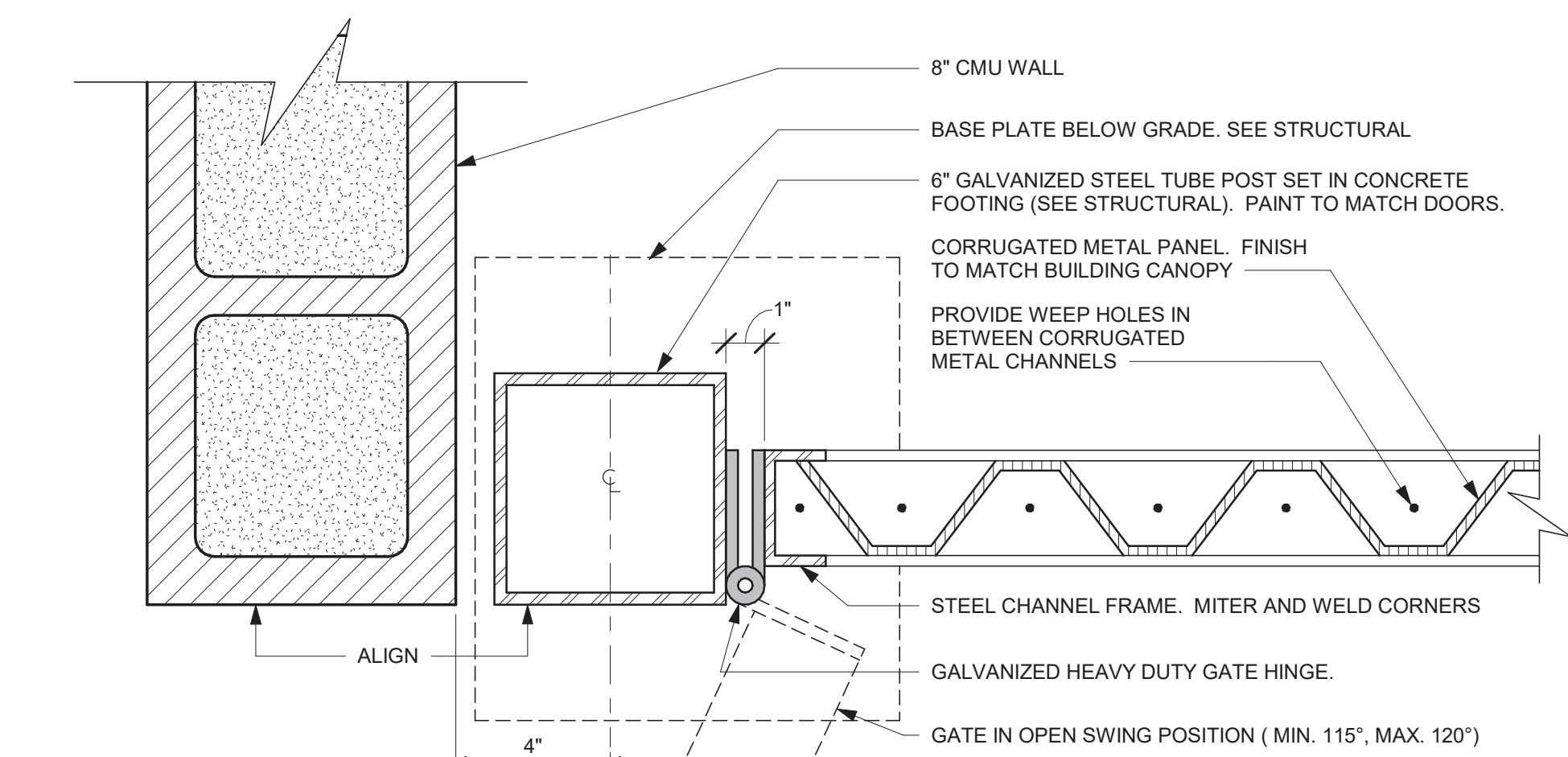


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EXTERIOR FINISH NOTES

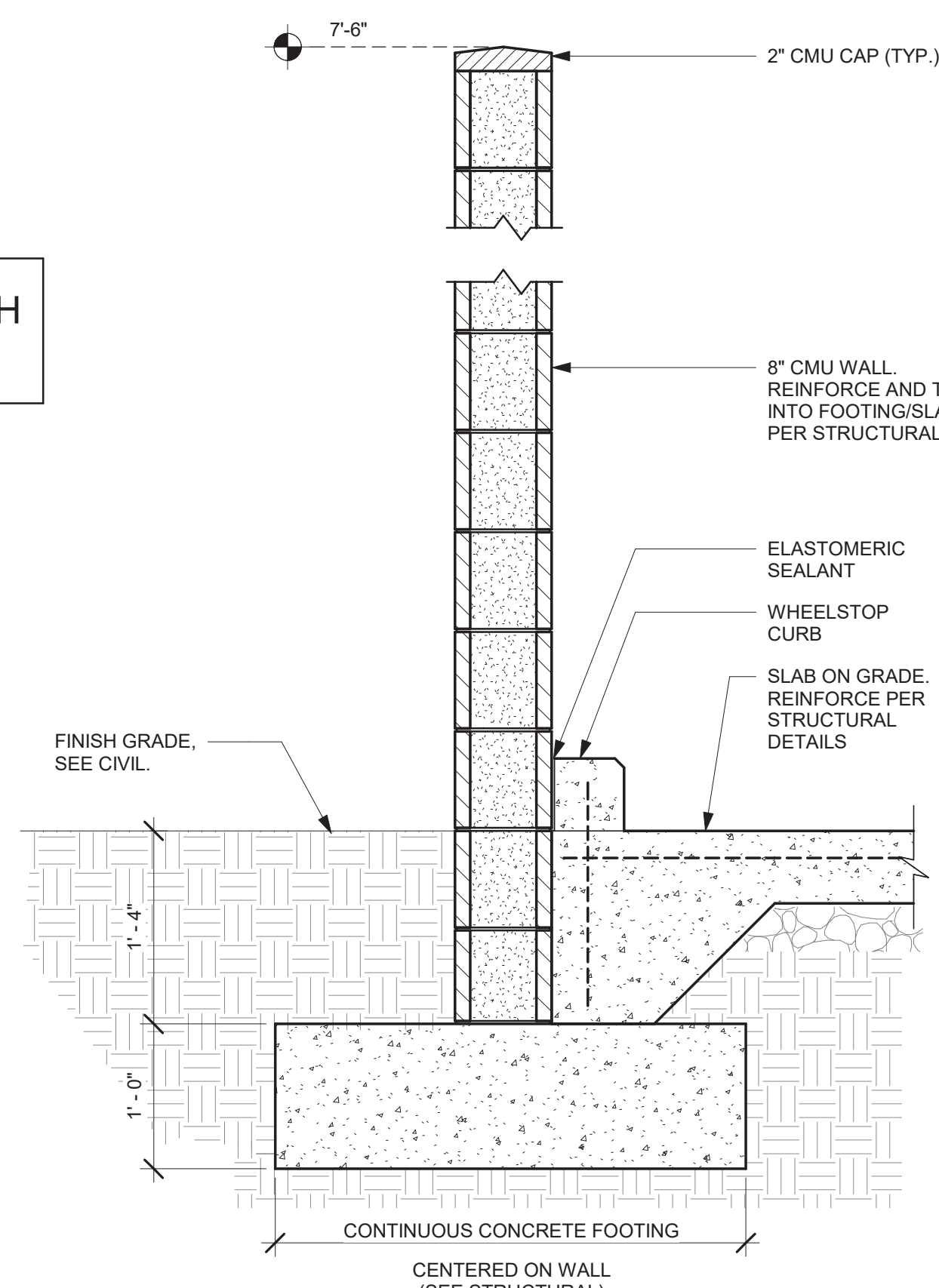
1. THE INTERIOR WALL SURFACES OF THE TRASH ENCLOSURE ARE TO BE SMOOTH, SEALED AND WASHABLE. APPLY ONE COAT EPOXY FILLER/SEALER AND ONE COAT GLOSS POLYURETHANE.
2. RUNNING BOND INTEGRAL CMU COLOR OR CMU PAINTED TO MATCH SW7504 KEYSTONE GRA.

NOTE: SEE CIVIL DRAWINGS FOR TRASH ENCLOSURE LOCATION.



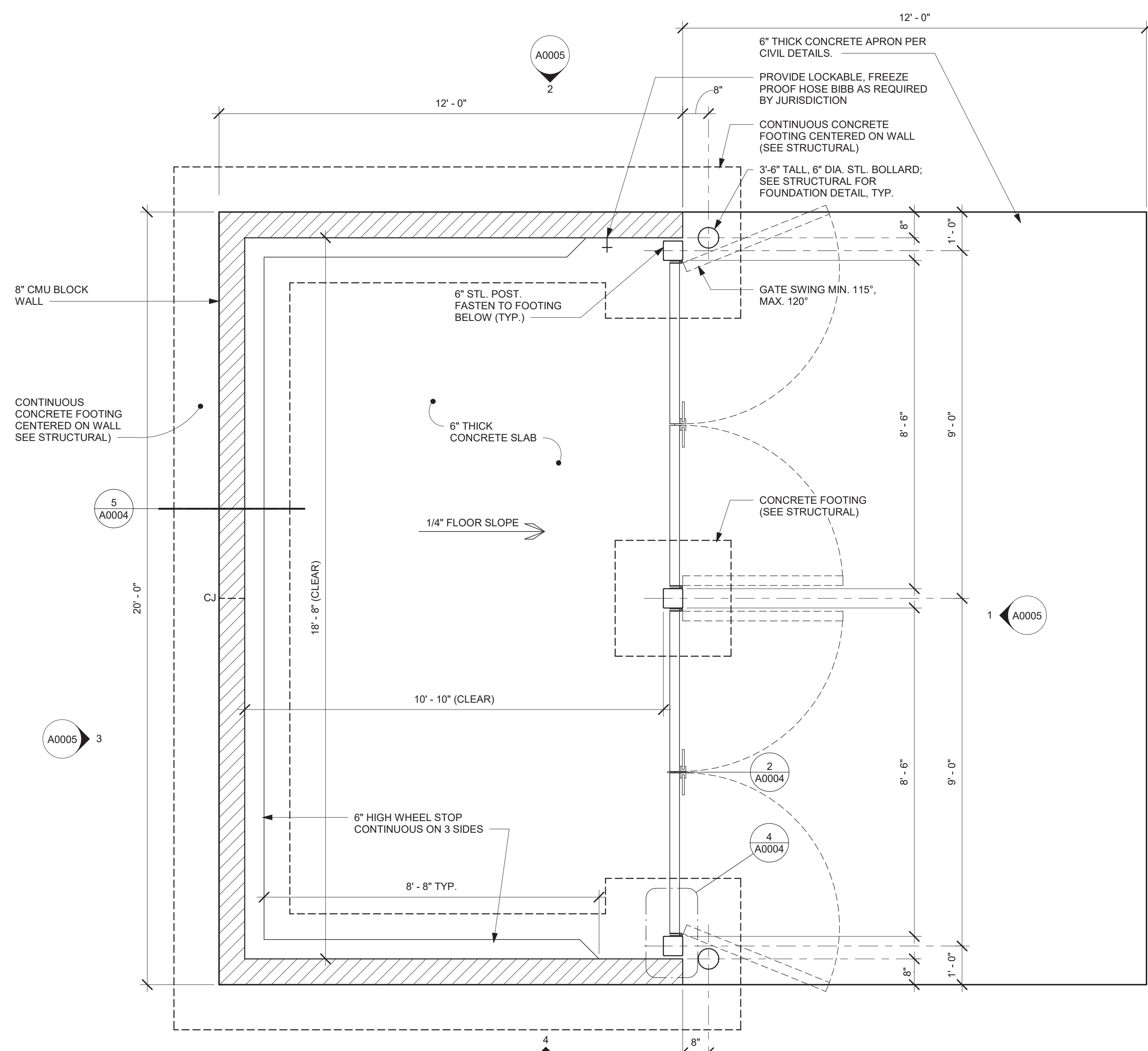
4 GATE HINGE DETAIL

Scale: 3" = 1'-0"



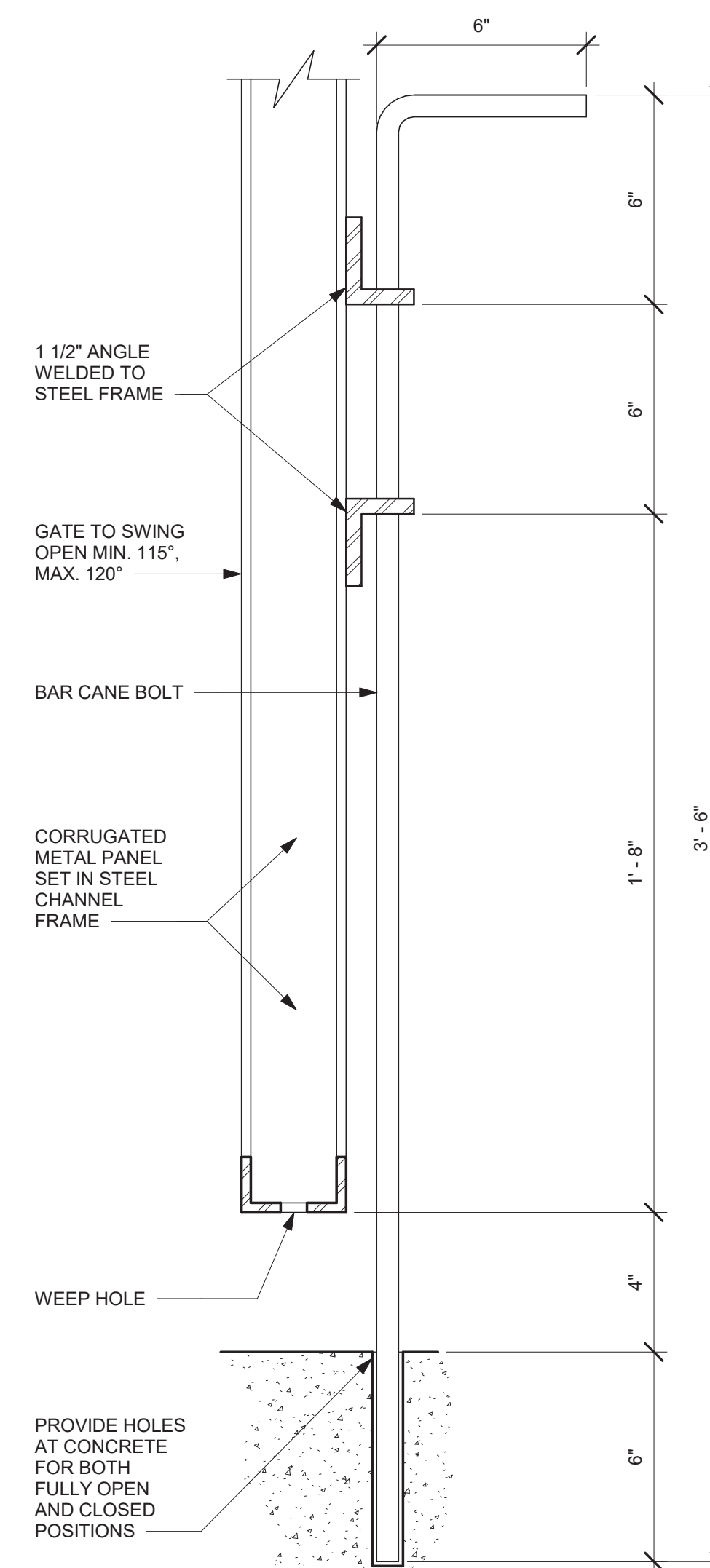
5 TYPICAL CMU WALL FOOTING

Scale: 1" = 1'-0"



1 FLOOR PLAN

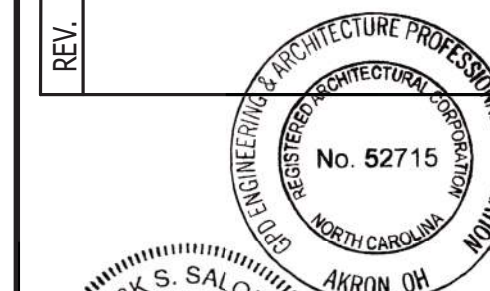
Scale: 1/2" = 1'-0"



2 SECTION AT CANE BOLT

Scale: 3" = 1'-0"

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TRASH ENCLOSURE

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PERMIT	07/21/2021
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RECORD	-/-/-

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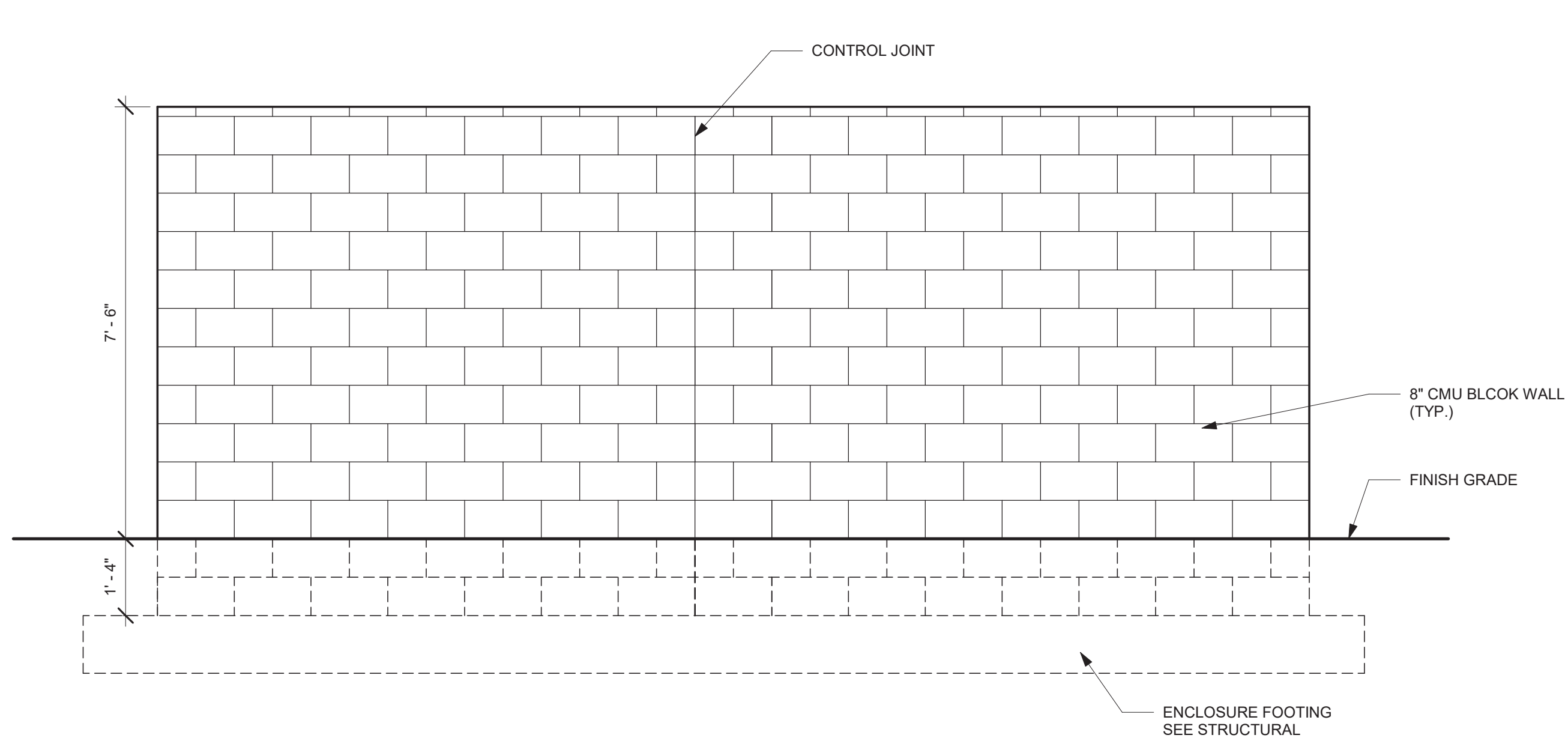
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A0004

EXTERIOR FINISH NOTES

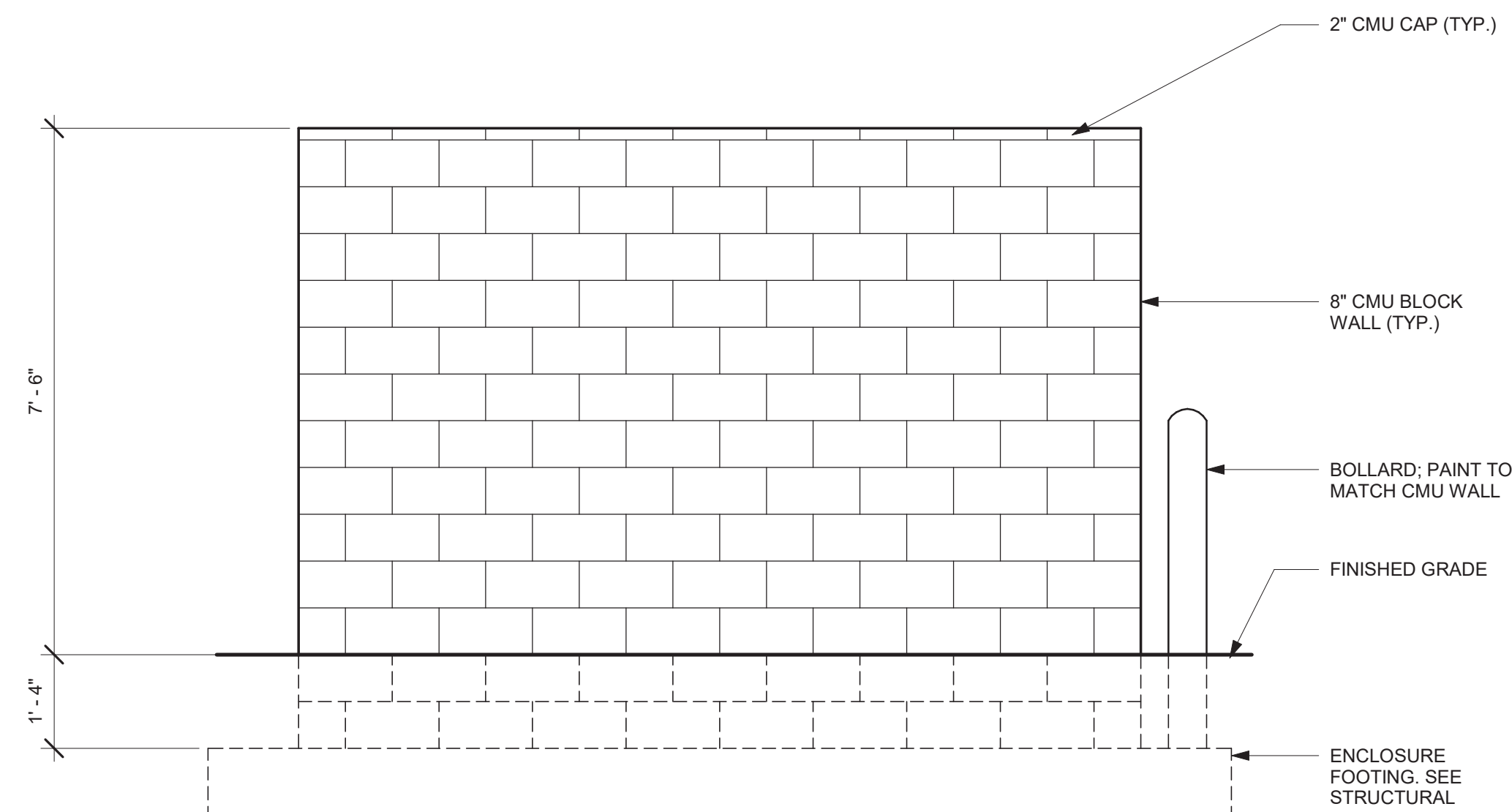
1. THE INTERIOR WALL SURFACES OF THE TRASH ENCLOSURE ARE TO BE SMOOTH, SEALED AND WASHABLE. APPLY ONE COAT EPOXY FILLER/SEALER AND ONE COAT GLOSS POLYURETHANE.
2. RUNNING BOND INTEGRAL CMU COLOR OR CMU PAINTED TO MATCH SW7504 KEYSTONE GRAY.

NOTE: SEE CIVIL DRAWINGS FOR TRASH ENCLOSURE LOCATION.



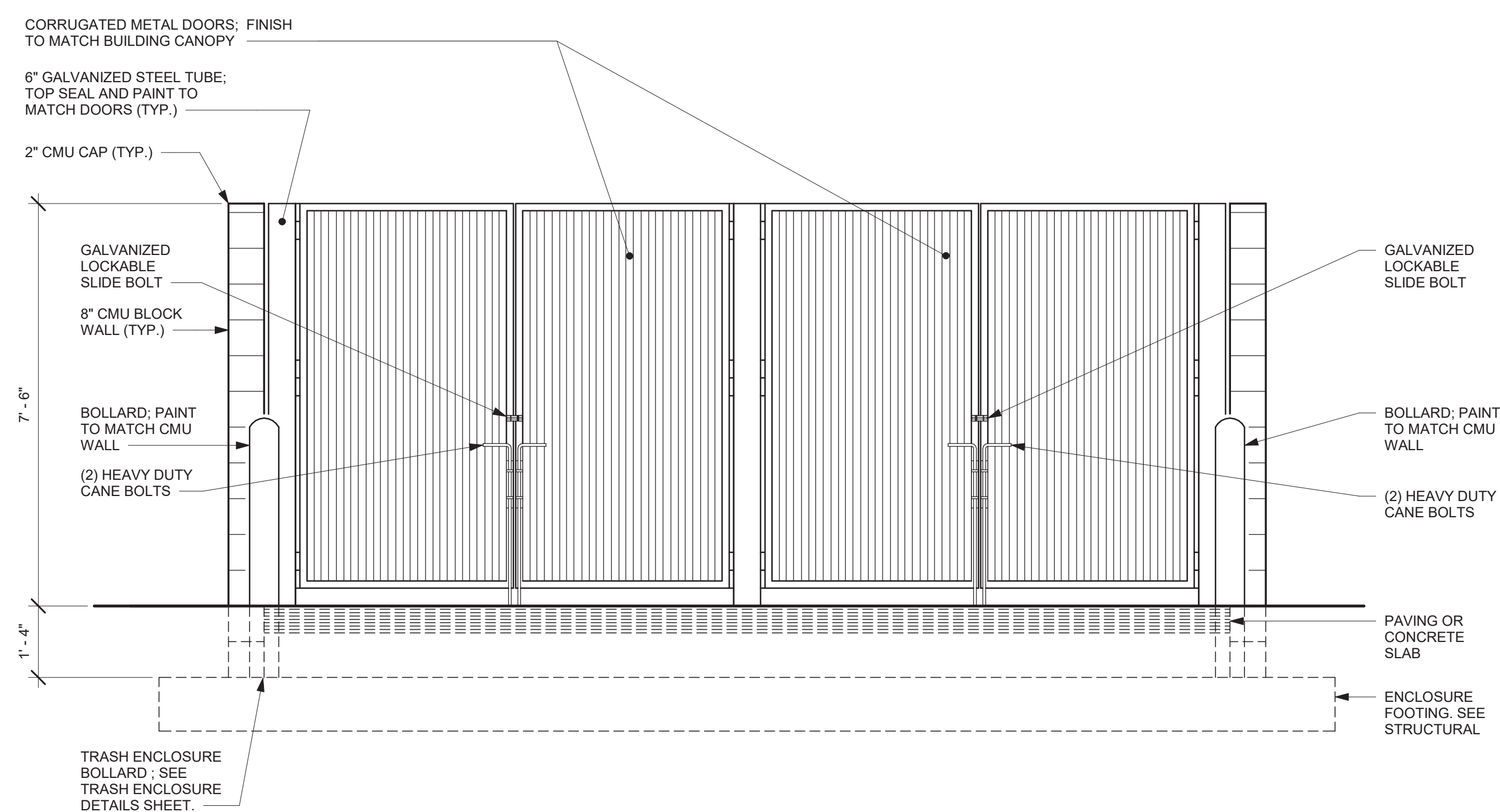
3 BACK ELEVATION

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



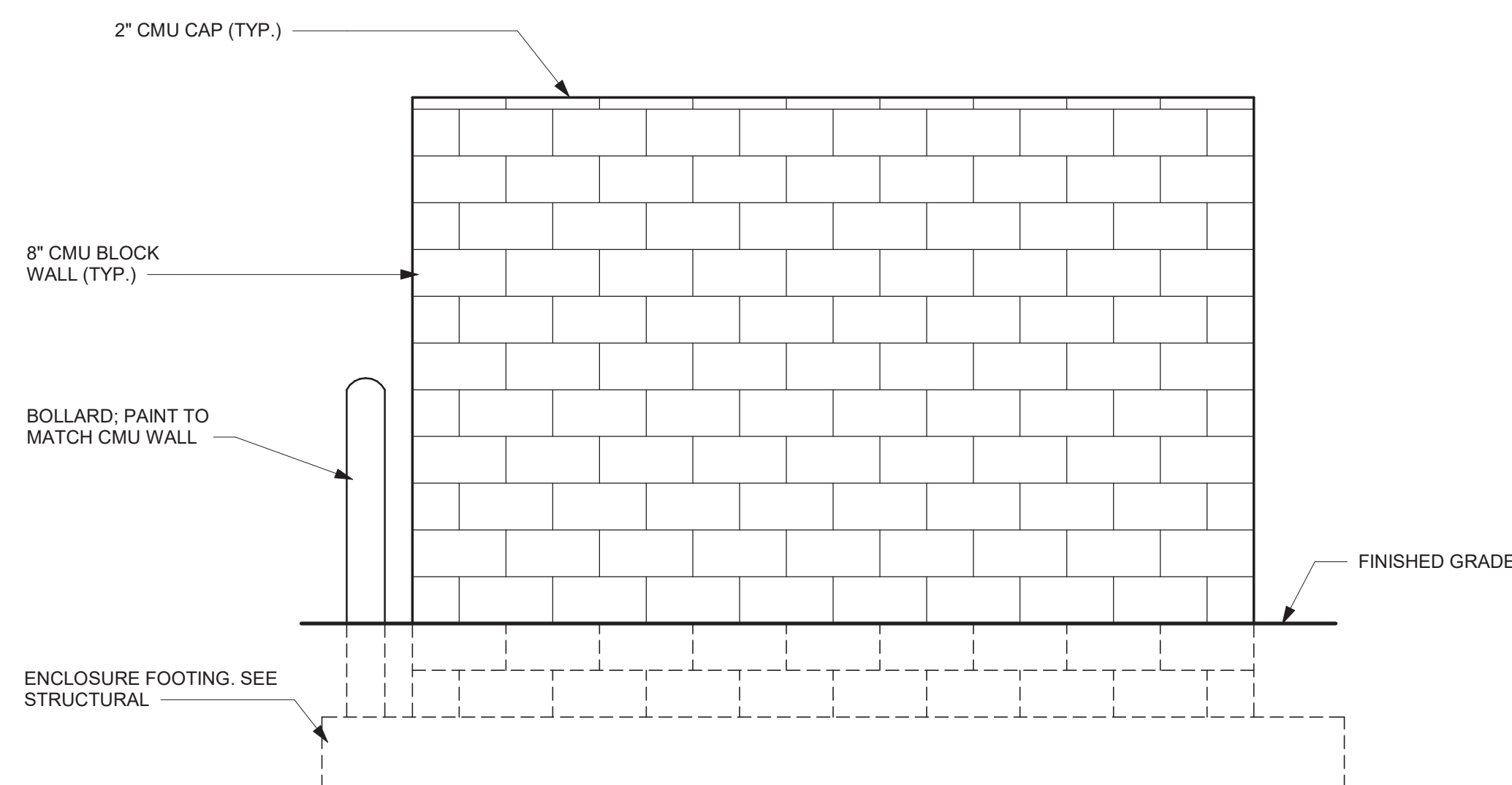
4 SIDE ELEVATION

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



1 FRONT ELEVATION

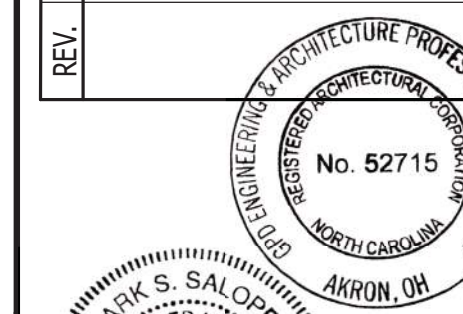
Scale: 1/2" = 1'-0"



2 SIDE ELEVATION

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

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TRASH ENCLOSURE

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RECORD	-/-/-

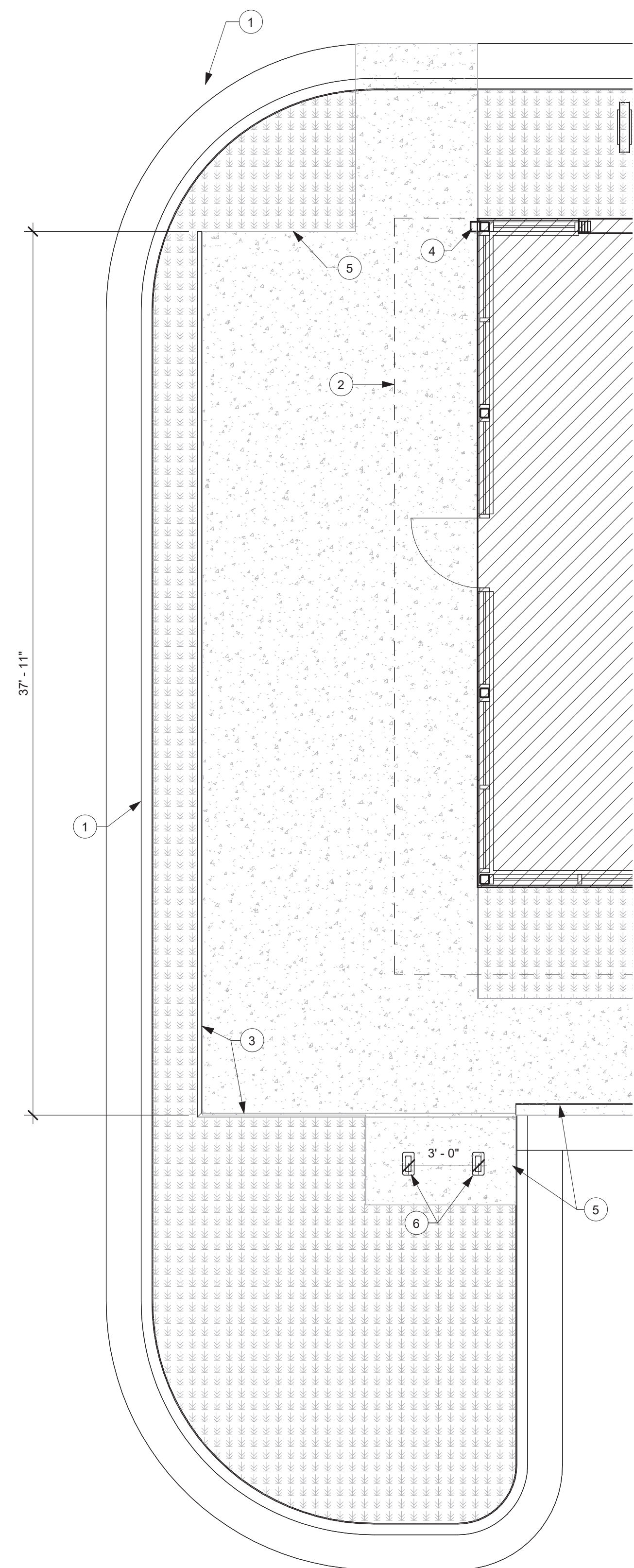
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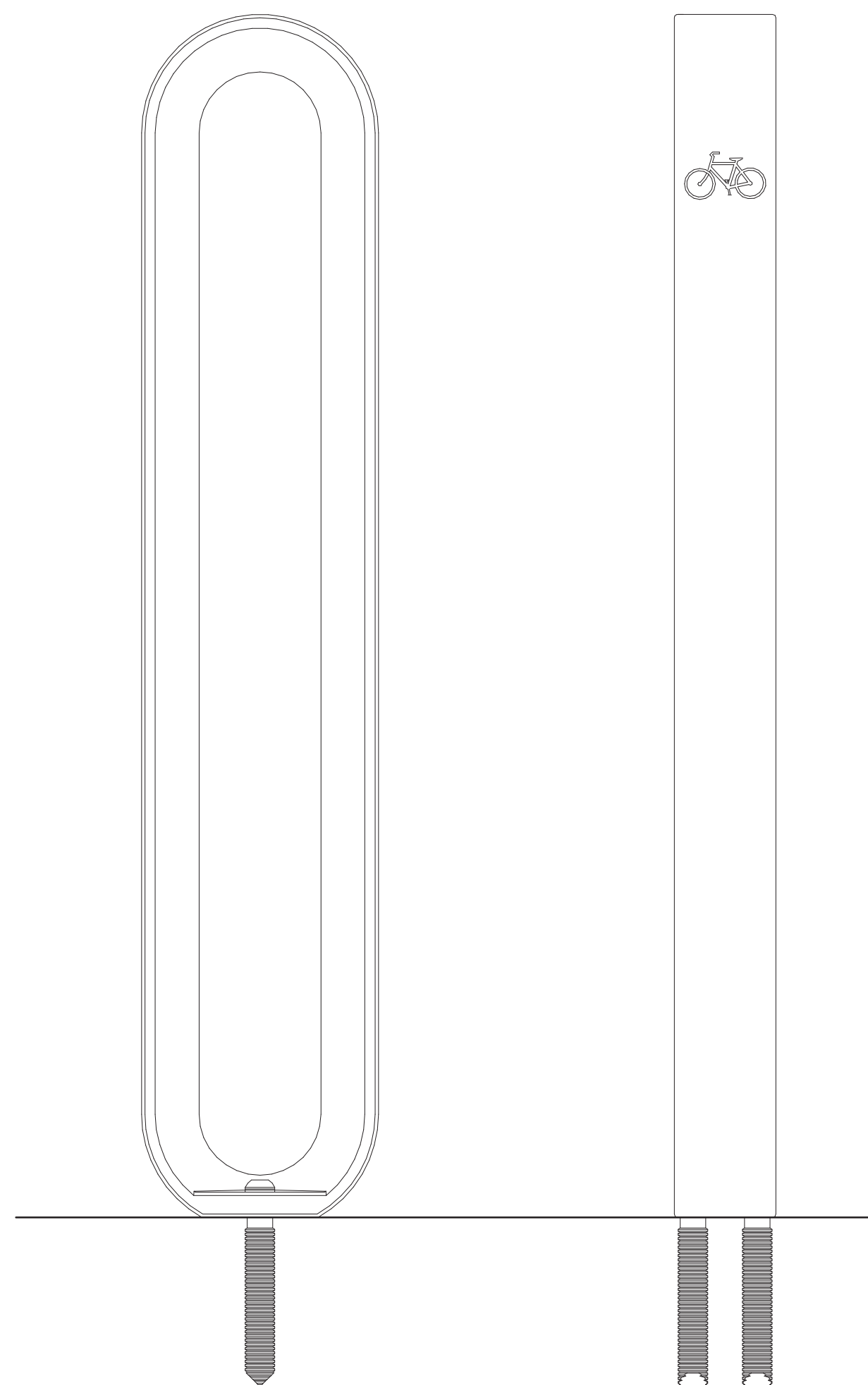
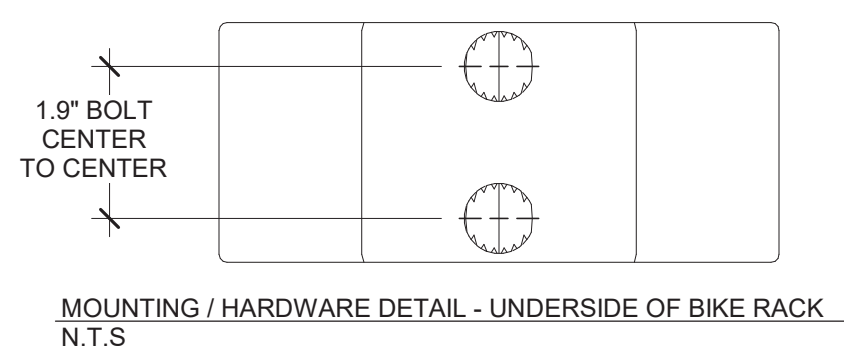
A0005

KEYED NOTES

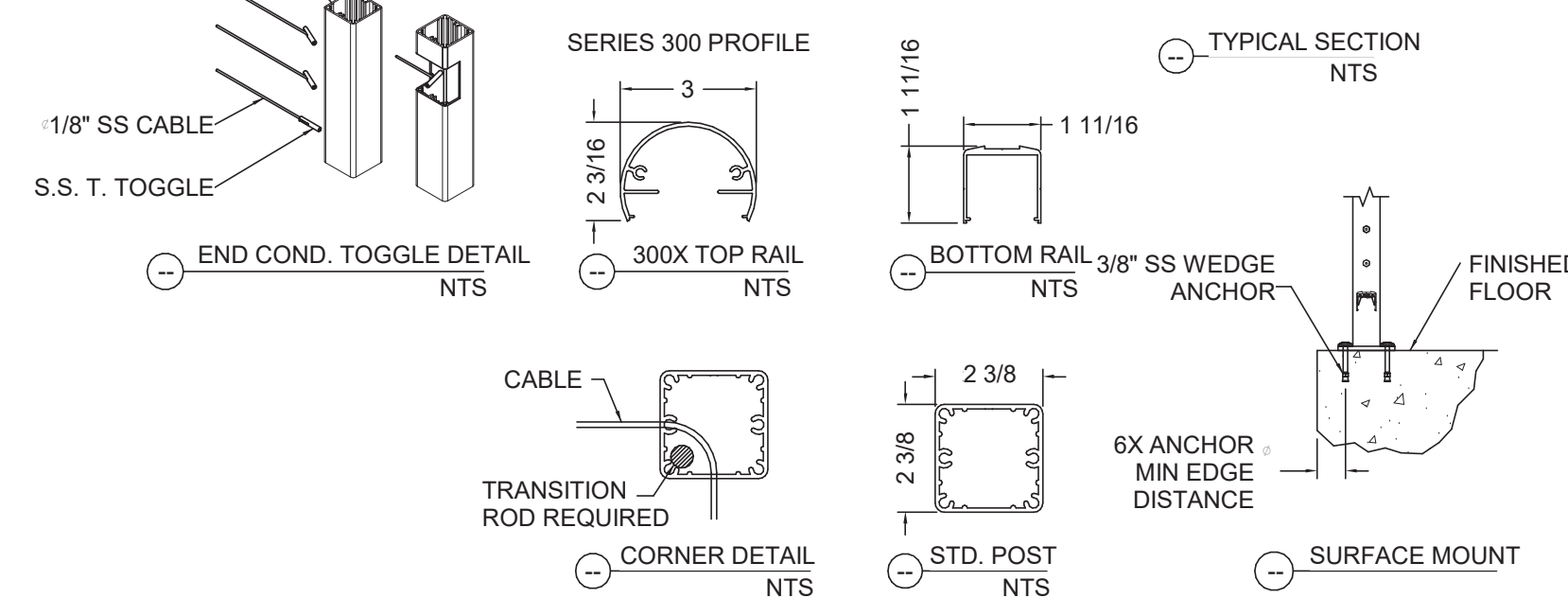
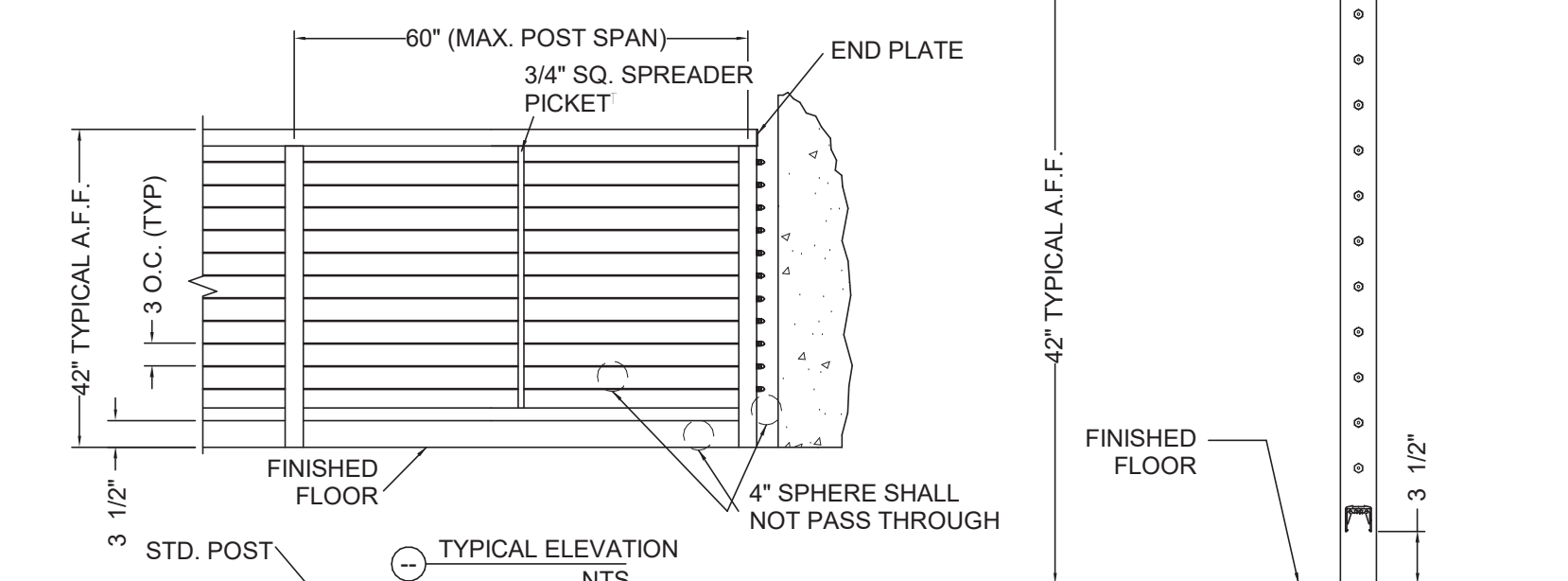
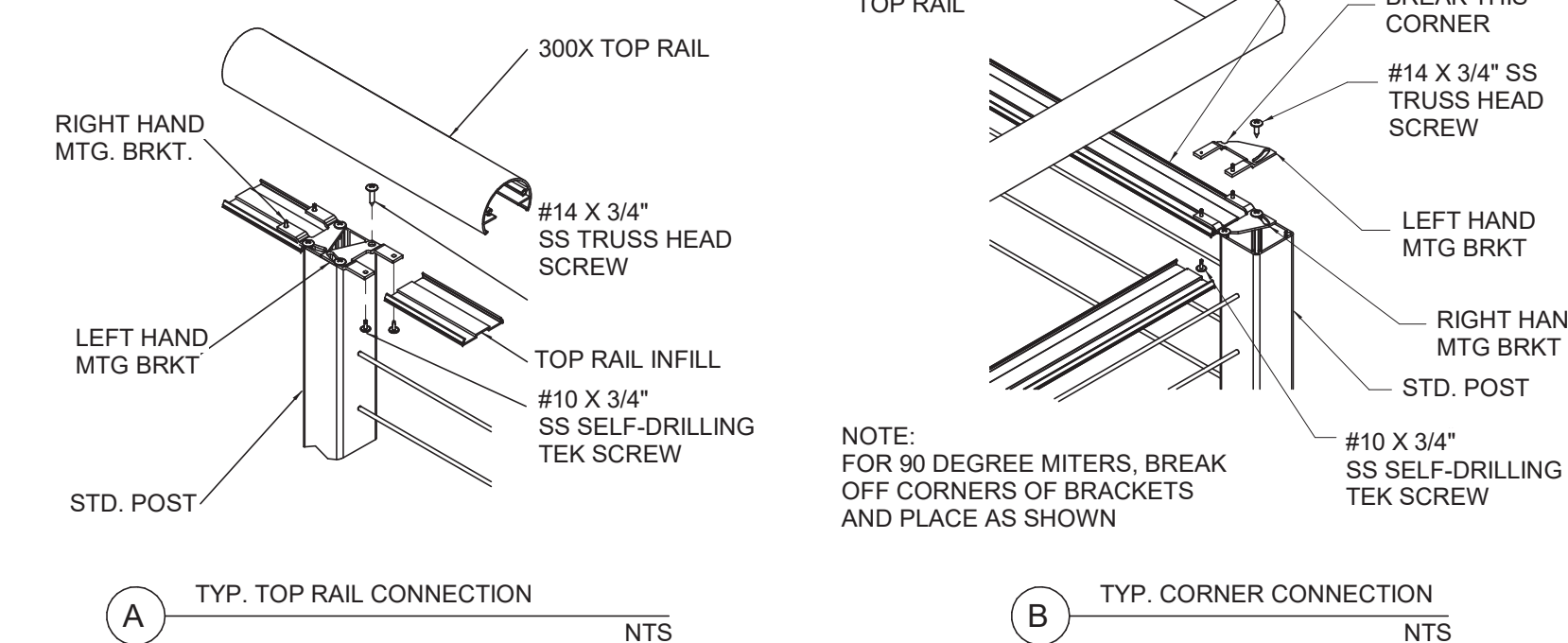
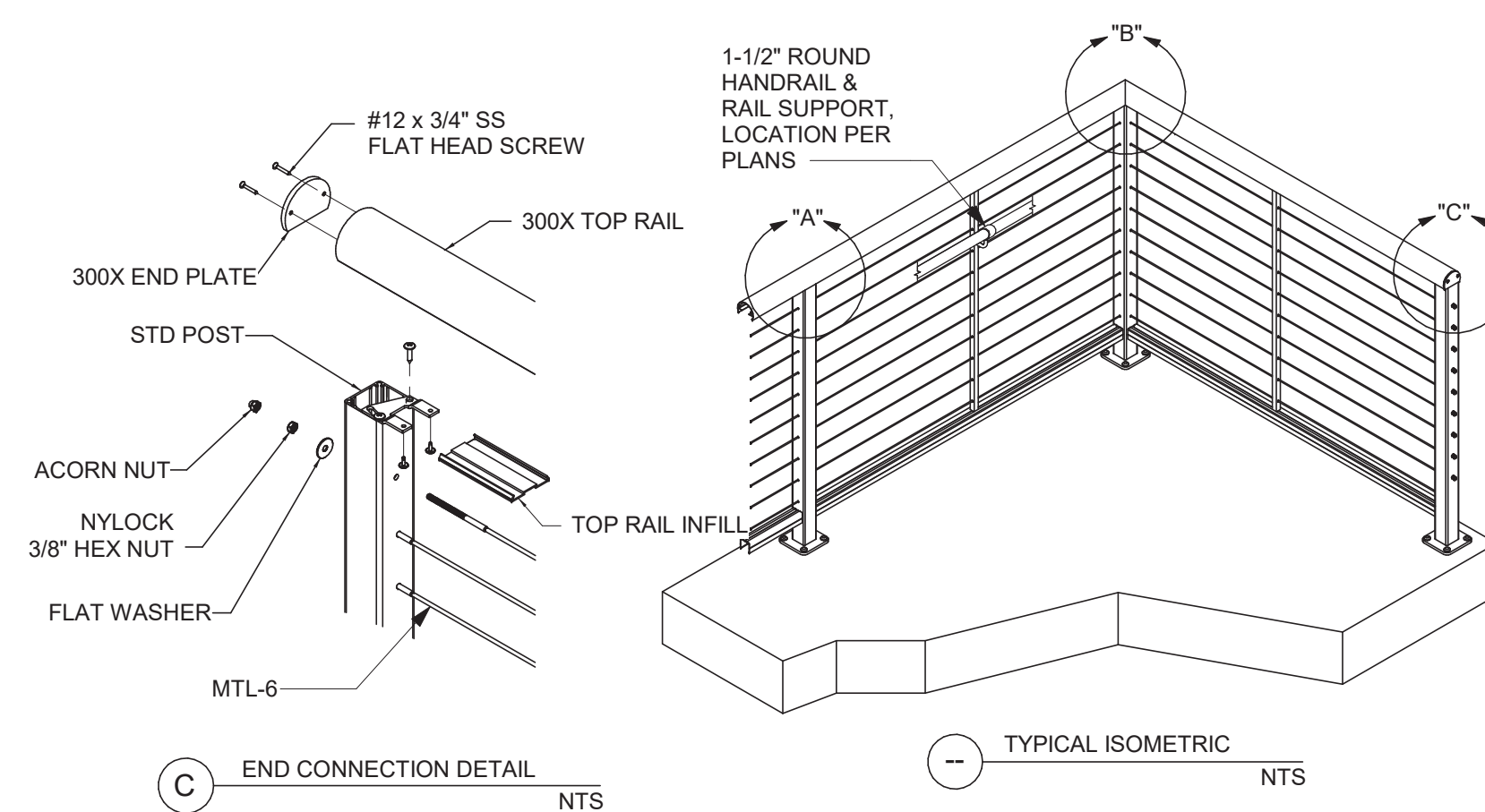
- 6" HIGH CONCRETE CURB. SEE CIVIL PLANS.
- LIMITS OF CANOPY (ABOVE). SEE ROOF PLAN AND CANOPY DETAILS.
- PATIO RAILING. MAINTAIN 8" CLEAR BETWEEN EDGE OF CURB AND RAILING. VERIFY RAILING DIMENSIONS IN FIELD. SEE DETAILS ON THIS SHEET.
- CANOPY DOWNSPOUT. HOLD TIGHT TO STEEL COLUMN AND CONNECT TO UNDERGROUND STORM. TYPICAL. SIZE HORIZONTAL AND VERTICAL LEADERS PER RAINFALL RAIT. MINIMUM PER 2018 IPC. WHERE ALLOWABLE, PROVIDE 2 X 4 VERTICAL DOWNSPOUTS.
- EDGE OF SIDEWALK. COORDINATE WITH CIVIL.
- BIKE RACK. FORMS + SURFACES; OLYMPIA BIKE RACK. SEE DETAILS ON THIS SHEET. COORDINATE FINAL LOCATION WITH TENANT DRAWINGS.



1 ENLARGED PATIO PLAN
Scale: 1/4" = 1'-0"

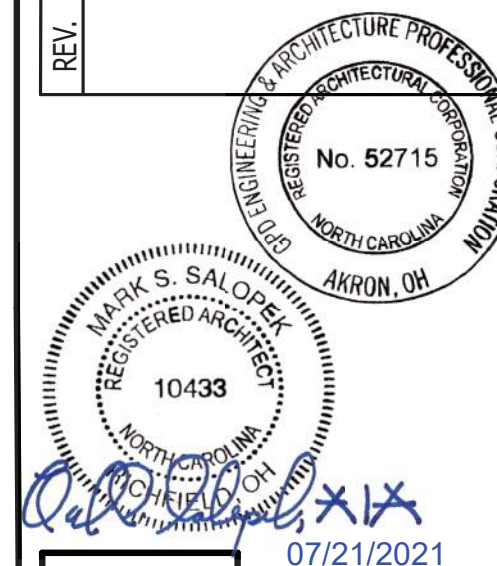


3 BIKE RACK DETAIL
Scale: 3" = 1'-0"



2 RAILING DETAILS
Scale: N.T.S.

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PATIO DETAILS

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RECORD	DATE
	-/-/-

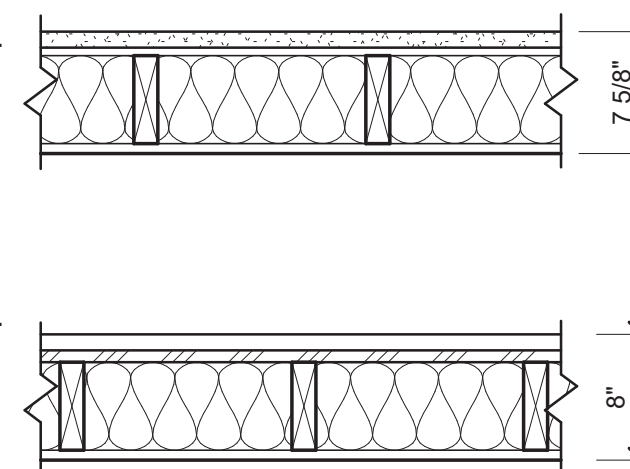
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A0006

WALL TYPE LEGEND

- 1A P.T. 2X6 STUDS @ 16 O.C. WITH R-19 THERMAL BATT INSULATION AND 5/8" TYPE "X" GWB, FIRE TAPED AND BEDDED, PLUMB AND SQUARE TO UNDERSIDE OF ROOF DECK ON INTERIOR SIDE, 1/2" EXTERIOR-GRADE PLYWOOD SHEATHING ON EXTERIOR SIDE, WEATHER BARRIER, AND CEMENT PLASTER
- 1B P.T. 2X6 STUDS @ 16 O.C. WITH R-19 THERMAL BATT INSULATION AND 5/8" TYPE "X" GWB, FIRE TAPED AND BEDDED, PLUMB AND SQUARE TO UNDERSIDE OF ROOF DECK, 3/4" EXTERIOR-GRADE PLYWOOD SHEATHING ON EXTERIOR SIDE, WEATHER BARRIER, AND FIBER CEMENT PANEL SYSTEM

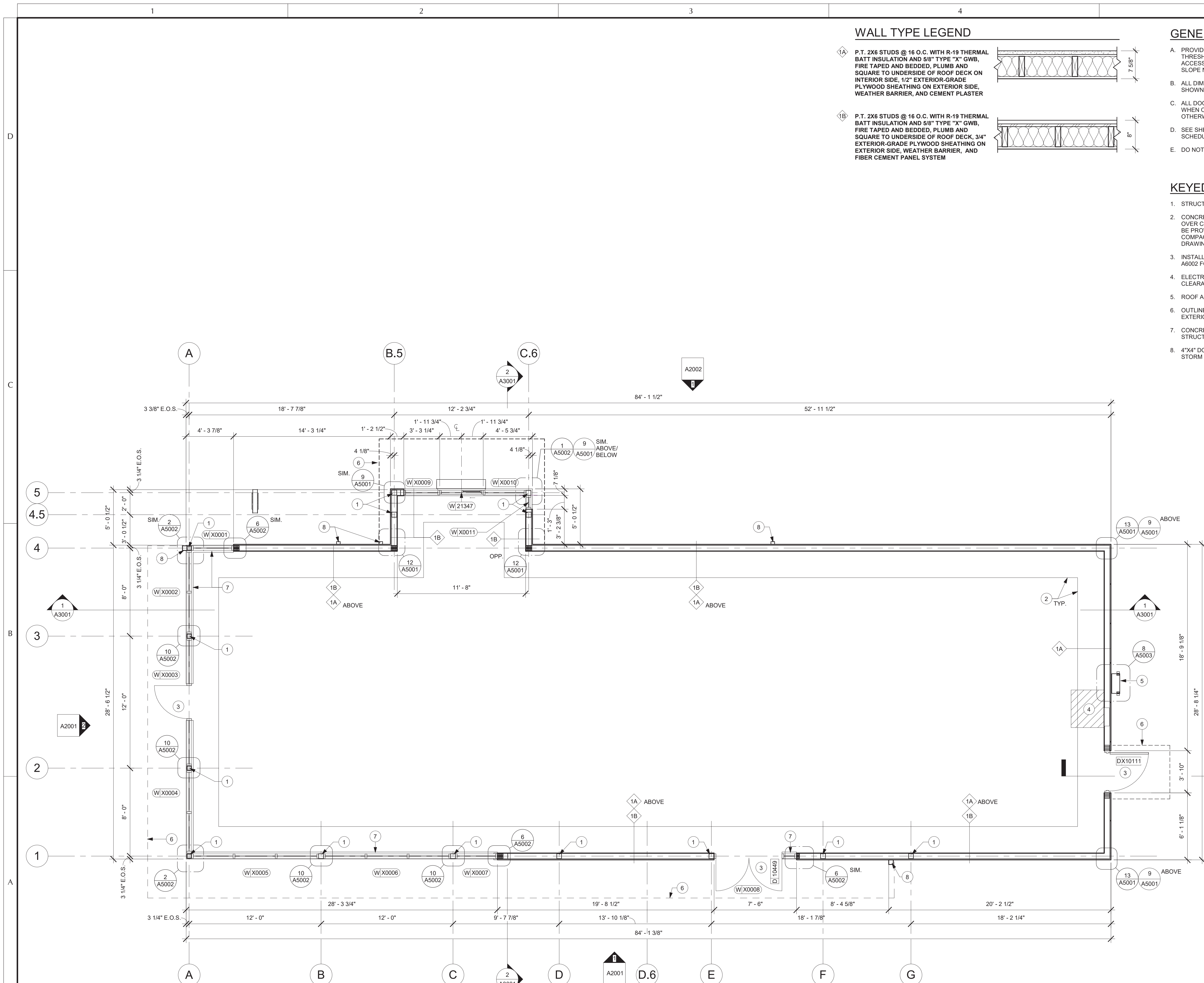


GENERAL NOTES

- A. PROVIDE ACCESSIBLE THRESHOLDS, RAISED THRESHOLDS AND FLOOR LEVEL CHANGES AT ACCESSIBLE DOORWAYS TO BE BEVELED WITH A SLOPE NO GREATER THAN 1:12.
- B. ALL DIMENSIONS ARE TO FINISHED FACE UNLESS SHOWN OR NOTED OTHERWISE.
- C. ALL DOORS SHALL BE 32" MINIMUM CLEAR OPENING WHEN OPENED TO 90 DEGREE POSITION UNLESS OTHERWISE NOTED.
- D. SEE SHEET A6002 FOR DOOR AND WINDOW SCHEDULES.
- E. DO NOT SCALE DRAWINGS.

KEYED NOTES

- 1. STRUCTURAL COLUMN. SEE STRUCTURAL.
- 2. CONCRETE RIBBON SLAB OVER VAPOR BARRIER OVER COMPACTED FILL. SLAB LEAVE-OUT AREA TO BE PROVIDED TO FUTURE TENANT WITH CLEAN COMPACTED FILL 4" BELOW FFE. SEE STRUCTURAL DRAWINGS.
- 3. INSTALL NEW DOORS AS INDICATED. SEE SHEET A6002 FOR DOOR AND HARDWARE TYPE.
- 4. ELECTRICAL PANEL LOCATIONS. MAINTAIN MINIMUM CLEARANCE AS REQUIRED BY CODE.
- 5. ROOF ACCESS LADDER. SEE DETAILS ON A5003.
- 6. OUTLINE OF CANOPY ABOVE. SEE ROOF PLAN AND EXTERIOR ELEVATIONS.
- 7. CONCRETE SILL BELOW STOREFRONT. SEE STRUCTURAL DRAWINGS.
- 8. 4"X4" DOWNSPOUT. CONNECT TO UNDERGROUND STORM DRAINAGE.



REV.	DATE	DESCRIPTION

Professional Engineer
No. 52715
AKRON, OH
07/21/2021

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DIMENSIONED FLOOR PLAN

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PROJECT MANAGER	DESIGNER
AK	DB

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A1101

1 DIMENSIONED FLOOR PLAN
Scale: 1/4" = 1'-0"





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520 S. MAIN ST., SUITE 2531
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GENERAL NOTES

- A. GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY STARBUCKS CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ALL DIMENSIONS TO BE TAKEN FROM DESIGNATED DATUM POINT.
- B. ROOF TOP PLUMBING VENTS ARE NOT SHOWN FOR CLARITY. REFER TO PLUMBING DRAWINGS FOR THRU-ROOF PENETRATIONS.

KEYED NOTES

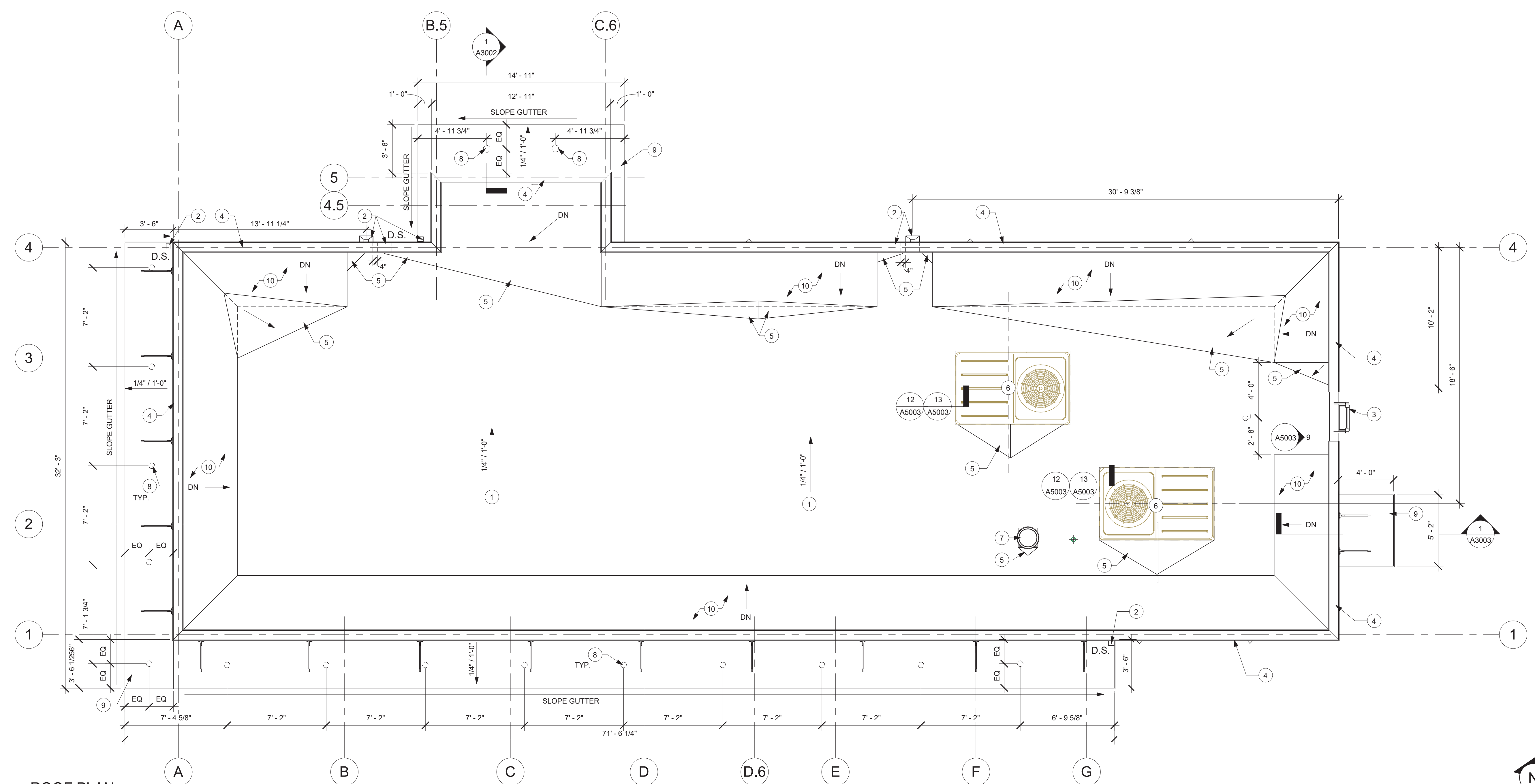
1. TPO MEMBRANE ROOFING PER SPECIFICATION. SEE BUILDING SECTIONS FOR ROOF CONSTRUCTION.
2. DOWN SPOUT CONNECTED TO UNDERGROUND STORM DRAIN - REFER TO CIVIL DRAWINGS FOR CONTINUATION. PROVIDE THRU WALL OVERFLOW SCUPPER. SEE DETAILS ON A5003.
3. ROOF ACCESS LADDER.
4. PRE-FINISHED METAL COPING (TYP.).
5. ROOF CRICKET SLOPE AT 1/4" PER 12".
6. ROOF TOP EQUIPMENT. SEE MECHANICAL.
7. RESTROOM EXHAUST FAN. SEE MECHANICAL AND DETAIL ON A5003.
8. PROVIDE RECESSED LIGHTING IN CANOPY, TYPICAL.
9. PRE-FABRICATED METAL CANOPY INSTALLED BY GC. BASIS OF DESIGN: 'SUPER LUMIDECK' BY MAPES ARCHITECTURAL CANOPIES. GC TO COORDINATE WITH CANOPY VENDOR.
10. KICKER. SEE BUILDING SECTIONS AND STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

D

C

B

A



REV.	DATE	DESCRIPTION

Professional Engineer
No. 52715
10433
07/21/2021

SPOUT SPRINGS
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ROOF PLAN

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	-/-/-

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A1501

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

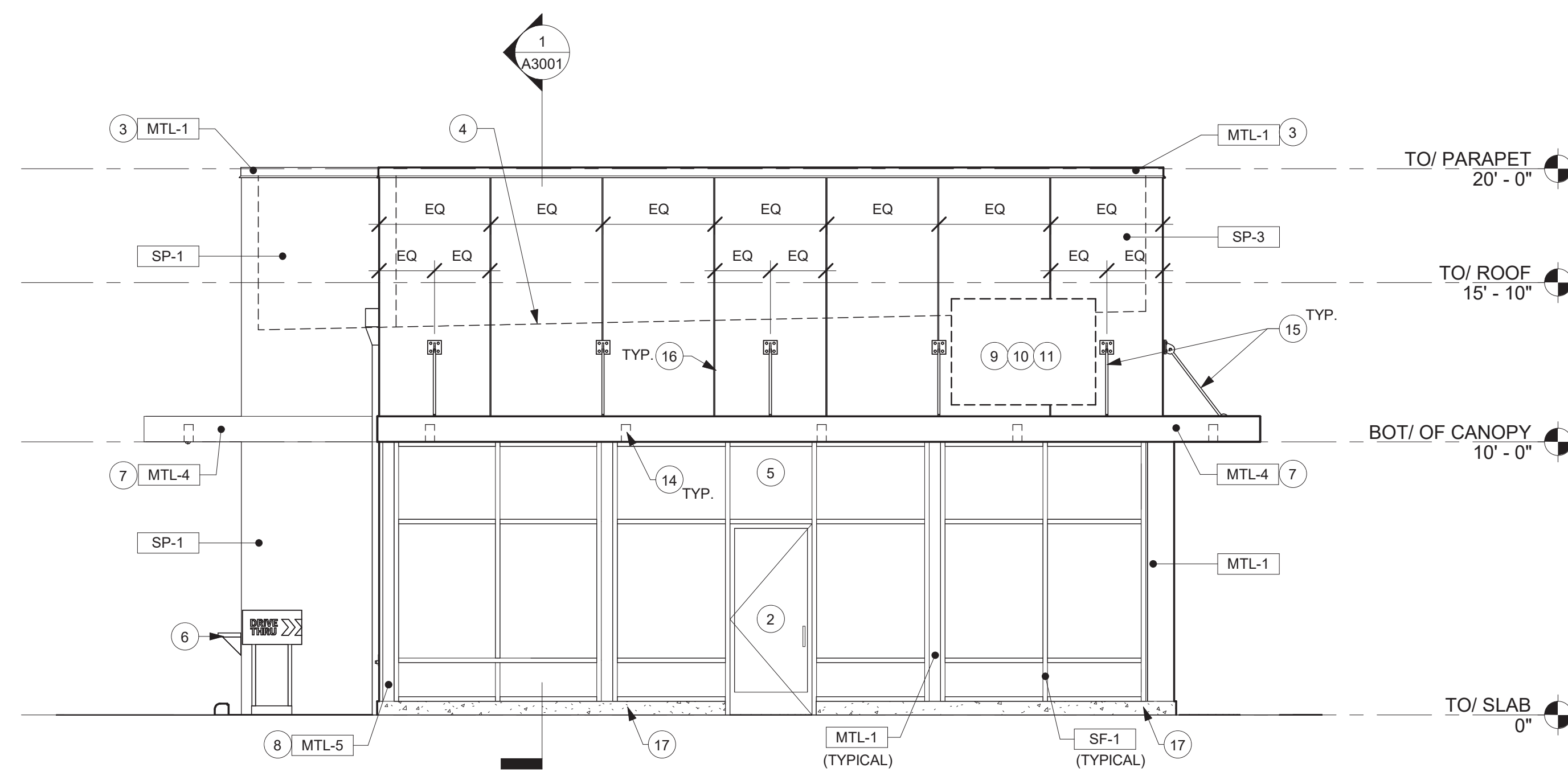
GENERAL NOTES

- A. GENERAL CONTRACTOR TO COORDINATE AND SCHEDULE SIGNAGE INSTALLATION WITH THE SIGNAGE CONTRACTOR PROVIDING A MINIMUM SCHEDULING NOTICE OF 4 WEEKS AND 1 WEEK PRIOR TO SCHEDULED DATE OF INSTALLATION. CONSTRUCTION MANAGER TO PROVIDE GENERAL CONTRACTOR WITH SIGNAGE CONTRACTOR CONTACT INFORMATION.
- B. GENERAL CONTRACTOR SHALL COORDINATE ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL ELECTRICAL CIRCUITS INCLUDING ALL CONDUIT, WIRE, CONNECTIONS AND BREAKER AT PANEL BOARD NECESSARY TO SERVE SIGNAGE.
- C. SIGNAGE CONTRACTOR TO INSTALL SIGNAGE IN COMPLIANCE WITH LOCAL CODES AND OBTAIN PERMIT.

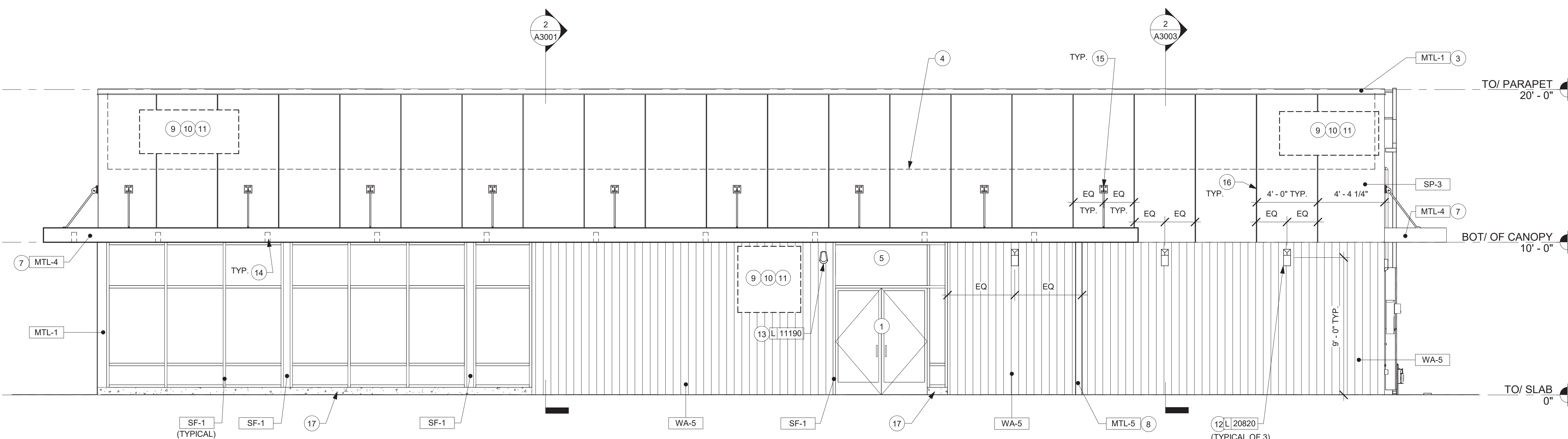
KEYED NOTES

- 1. PRIMARY ENTRANCE DOOR(S)
- 2. SECONDARY (PATIO) ENTRANCE DOOR
- 3. PRE-FINISHED METAL COPING, TYPICAL
- 4. OUTLINE OF ROOF BEYOND
- 5. STORE ADDRESS: PROVIDE 3" HIGH BLACK ACRYLIC STORE ADDRESS ON GLAZING ABOVE MAIN ENTRY DOOR.
- 6. DT WINDOW SHELF: INSTALL SERVICE WINDOW SHELF AT 36" AFF INSIDE AND 42" AFF OUTSIDE, AS MEASURED ABOVE THE DT SURFACE.
- 7. PRE-FABRICATED METAL CANOPY INSTALLED BY GC. BASIS OF DESIGN: "SUPER LUMIDECK" BY MAPES ARCHITECTURAL CANOPIES. GC TO COORDINATE WITH CANOPY VENDOR.
- 8. CANOPY DOWNSPOUTS: CONNECT TO UNDERGROUND STORM DRAIN.
- 9. FUTURE SIGNAGE BY OTHERS (SHOWN FOR REFERENCE ONLY).
- 10. PROVIDE J-BOX WITH PULL STRING FOR FUTURE BUILDING SIGNAGE. COORDINATE LOCATION WITH SIGN VENDOR.
- 11. PROVIDE 3/4" MARINE GRADE PLYWOOD BLOCKING FOR EXTERIOR SIGNAGE. EXTEND BLOCKING 8" MINIMUM BEYOND EDGES OF SIGNAGE.
- 12. EXTERIOR SCENCE LIGHTING
- 13. EXTERIOR EGRESS LIGHTING
- 14. PROVIDE RECESSED LIGHTING IN CANOPY. SEE ROOF PLAN.
- 15. CLEVIS AND TIE-ROD BY CANOPY MANUFACTURER INSTALLED BY CONTRACTOR.
- 16. CEMENT PLASTER CONTROL JOINT.
- 17. CONCRETE SILL BELOW STOREFRONT. SEE STRUCTURAL.

EXTERIOR FINISH SCHEDULE		
FINISH ID	DESCRIPTION	SPECIFICATIONS
MTL-1	PREFINISHED COPING	PRE-FINISHED COLOR: MATCH RAL#7021 MATTE MT0028 - "FLAT BLACK"
MTL-3	H.M. DOOR AND FRAME	COLOR: MATCH RAL#7021 MATTE MT0028 - "FLAT BLACK"
MTL-4	METAL CANOPY	POWDERCOAT COLOR: MATCH RAL#7021 MATTE MT0028 - "FLAT BLACK" UNDERSIDE OF CANOPIES TO VARY. COORDINATE FINAL FINISH SELECTIONS WITH ARCHITECT.
MTL-5	METAL DOWNSPOUT	COLOR: MATCH RAL#7021 MATTE MT0028 - "FLAT BLACK"
MTL-6	ROOF ACCESS LADDER	COLOR: MATCH RAL#7021 MATTE MT0028 - "FLAT BLACK"
SF-1	ANNODIZED STOREFRONT	COLOR: MATCH RAL#7021 MATTE MT0028 - "FLAT BLACK"
SP-1	STUCCO, FINE FINISH	CEMENT PLASTER SYSTEM COLOR: MATCH SW7026 GRIFFIN
SP-3	STUCCO, FINE FINISH	CEMENT PLASTER SYSTEM COLOR: MATCH SW7504 KEYSTONE GRAY
WA-5	FIBER CEMENT PANEL	NICHIHA VINTAGE WOOD COLOR: BARK; AWP 1818

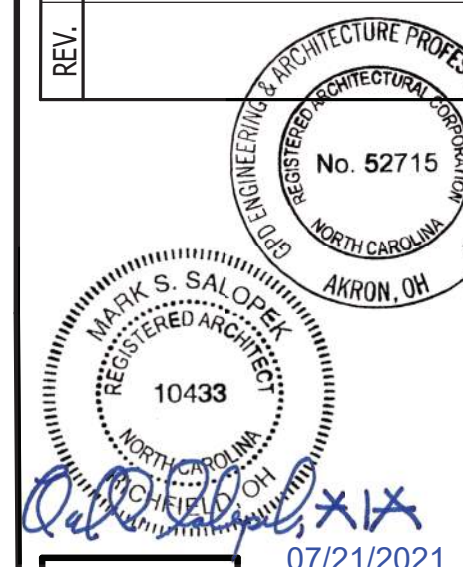


2 WEST ELEVATION
Scale: 1/4" = 1'-0"



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

REV.	DATE	DESCRIPTION



SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

EXTERIOR ELEVATIONS

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	-/-/-
RECORD	-/-/-

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

A2001

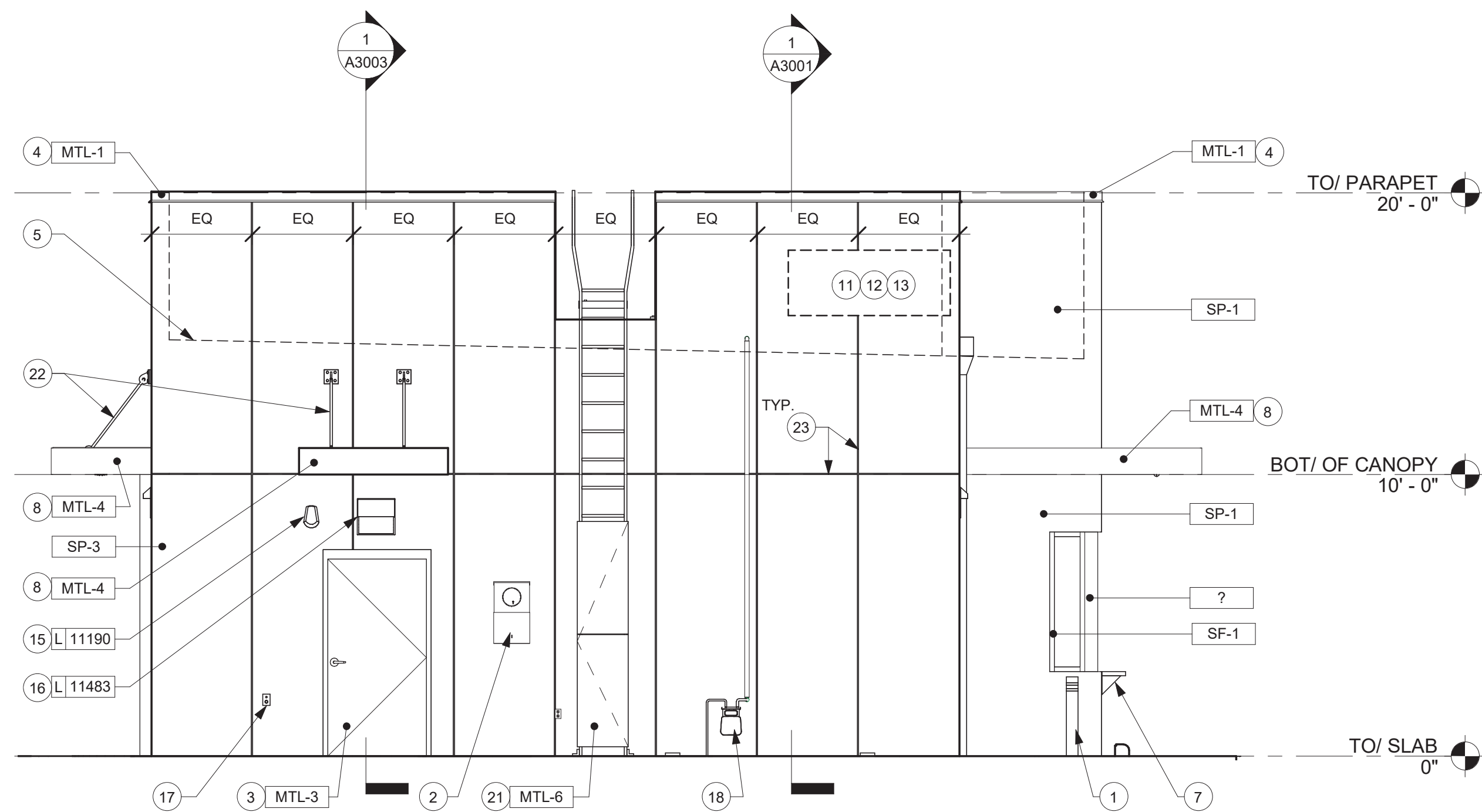
GENERAL NOTES

- A. GENERAL CONTRACTOR TO COORDINATE AND SCHEDULE SIGNAGE INSTALLATION WITH THE SIGNAGE CONTRACTOR PROVIDING A MINIMUM SCHEDULING NOTICE OF 4 WEEKS AND 1 WEEK PRIOR TO SCHEDULED DATE OF INSTALLATION. CONSTRUCTION MANAGER TO PROVIDE GENERAL CONTRACTOR WITH SIGNAGE CONTRACTOR CONTACT INFORMATION.
- B. GENERAL CONTRACTOR SHALL COORDINATE ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL ELECTRICAL CIRCUITS INCLUDING ALL CONDUIT, WIRE, CONNECTIONS AND BREAKER AT PANEL BOARD NECESSARY TO SERVE SIGNAGE.
- C. SIGNAGE CONTRACTOR TO INSTALL SIGNAGE IN COMPLIANCE WITH LOCAL CODES AND OBTAIN PERMIT.

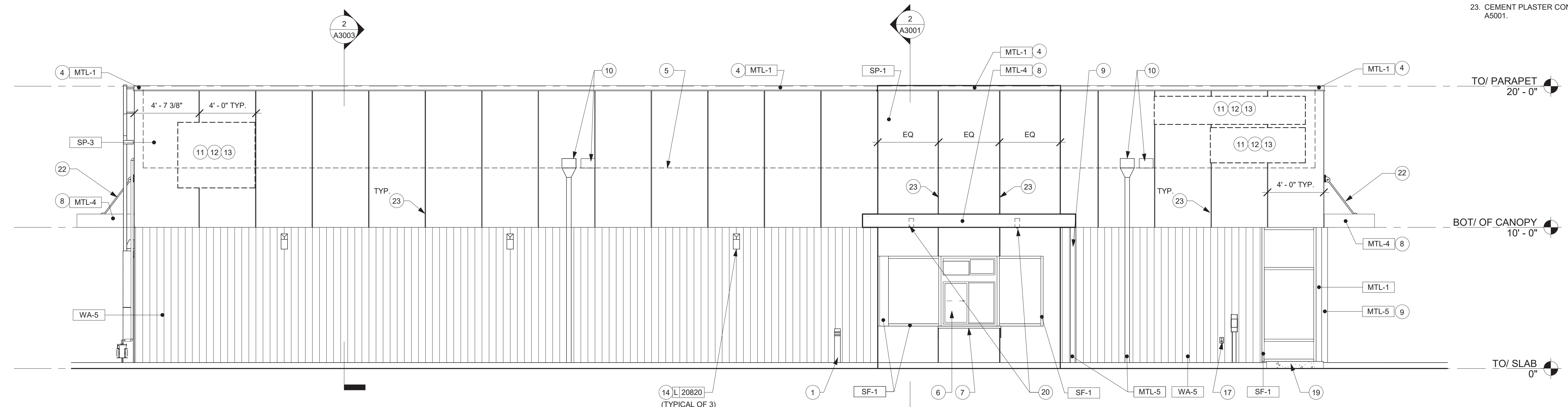
KEYED NOTES

- 1. NON-ILLUMINATED PROTECTIVE BOLLARD
- 2. ELECTRICAL METER
- 3. SERVICE DOOR
- 4. PRE-FINISHED METAL COPING, TYPICAL
- 5. OUTLINE OF ROOF BEYOND
- 6. DT WINDOW: PROVIDE READY ACCESS 800 SERIES SINGLE PANEL SLIDER WITH MOER, LOW E INSULATED GLASS AND 16" SPLIT TRANSOM. USE WITH AA100 AIR CURTAIN. WINDOW AND AIR CURTAIN FINISH TO MATCH ADJACENT STOREFRONT.
- 7. DT WINDOW SHELF: INSTALL SERVICE WINDOW SHELF AT 36" AFF INSIDE AND 42" AFF OUTSIDE, AS MEASURED ABOVE THE DT SURFACE.
- 8. PRE-FABRICATED METAL CANOPY INSTALLED BY GC. BASIS OF DESIGN: "SUPER LUMIDECK" BY MAPES ARCHITECTURAL CANOPIES. GC TO COORDINATE WITH CANOPY VENDOR.
- 9. CANOPY DOWNSPOUTS: CONNECT TO UNDERGROUND STORM DRAIN.
- 10. ROOF SCUPPER AND EMERGENCY OVERFLOW: CONNECT VERTICAL LEADERS TO UNDERGROUND STORM DRAIN.
- 11. FUTURE SIGNAGE BY OTHERS (SHOWN FOR REFERENCE ONLY).
- 12. PROVIDE J-BOX WITH PULL STRING FOR FUTURE BUILDING SIGNAGE. COORDINATE LOCATION WITH SIGN VENDOR.
- 13. PROVIDE 3/4" MARINE GRADE PLYWOOD BLOCKING FOR EXTERIOR SIGNAGE. EXTEND BLOCKING 8" MINIMUM BEYOND EDGES OF SIGNAGE.
- 14. EXTERIOR SCENCE LIGHTING
- 15. EXTERIOR EGRESS LIGHTING
- 16. EXTERIOR SECURITY LIGHTING.
- 17. LOCKABLE HOSE BIB, SEE PLUMBING DRAWINGS
- 18. GAS METER, SEE PLUMBING SHEETS FOR ADDITIONAL INFORMATION.
- 19. CONCRETE SILL BELOW STOREFRONT. SEE STRUCTURAL.
- 20. PROVIDE RECESSED LIGHTING IN DT CANOPY.
- 21. ROOF ACCESS LADDER. SEE DETAILS ON A5003.
- 22. CLEVIS AND TIE-ROD BY CANOPY MANUFACTURER INSTALLED BY CONTRACTOR.
- 23. CEMENT PLASTER CONTROL JOINT. SEE DETAILS ON A5001.

EXTERIOR FINISH SCHEDULE		
FINISH ID	DESCRIPTION	SPECIFICATIONS
MTL-1	PREFINISHED COPING	PRE-FINISHED COLOR: MATCH RAL#7021 MATTE MT0028 - "FLAT BLACK"
MTL-3	H.M. DOOR AND FRAME	COLOR: MATCH RAL#7021 MATTE MT0028 - "FLAT BLACK"
MTL-4	METAL CANOPY	POWDERCOAT COLOR: MATCH RAL#7021 MATTE MT0028 - "FLAT BLACK" UNDERSIDE OF CANOPIES TO VARY. COORDINATE FINAL FINISH SELECTIONS WITH ARCHITECT.
MTL-5	METAL DOWNSPOUT	COLOR: MATCH RAL#7021 MATTE MT0028 - "FLAT BLACK"
MTL-6	ROOF ACCESS LADDER	COLOR: MATCH RAL#7021 MATTE MT0028 - "FLAT BLACK"
SF-1	ANNODIZED STOREFRONT	COLOR: MATCH RAL#7021 MATTE MT0028 - "FLAT BLACK"
SP-1	STUCCO, FINE FINISH	CEMENT PLASTER SYSTEM COLOR: MATCH SW7026 GRIFFIN
SP-3	STUCCO, FINE FINISH	CEMENT PLASTER SYSTEM COLOR: MATCH SW7504 KEYSTONE GRAY
WA-5	FIBER CEMENT PANEL	NICHIHA VINTAGE WOOD COLOR: BARK; AWP 1818

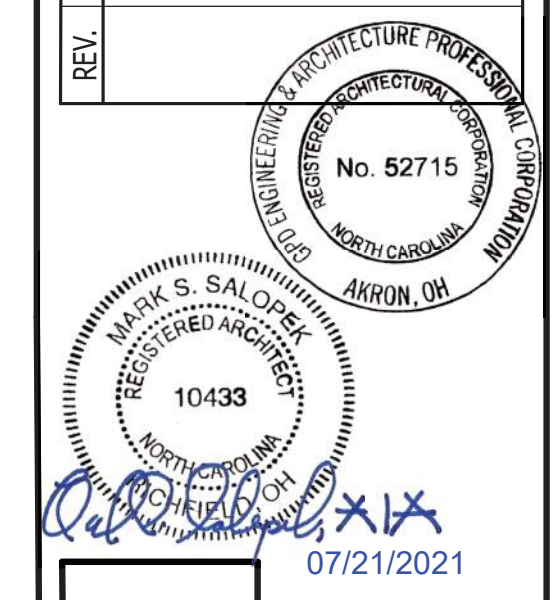


2 EAST ELEVATION
Scale: 1/4" = 1'-0"



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

REV.	DATE	DESCRIPTION



SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

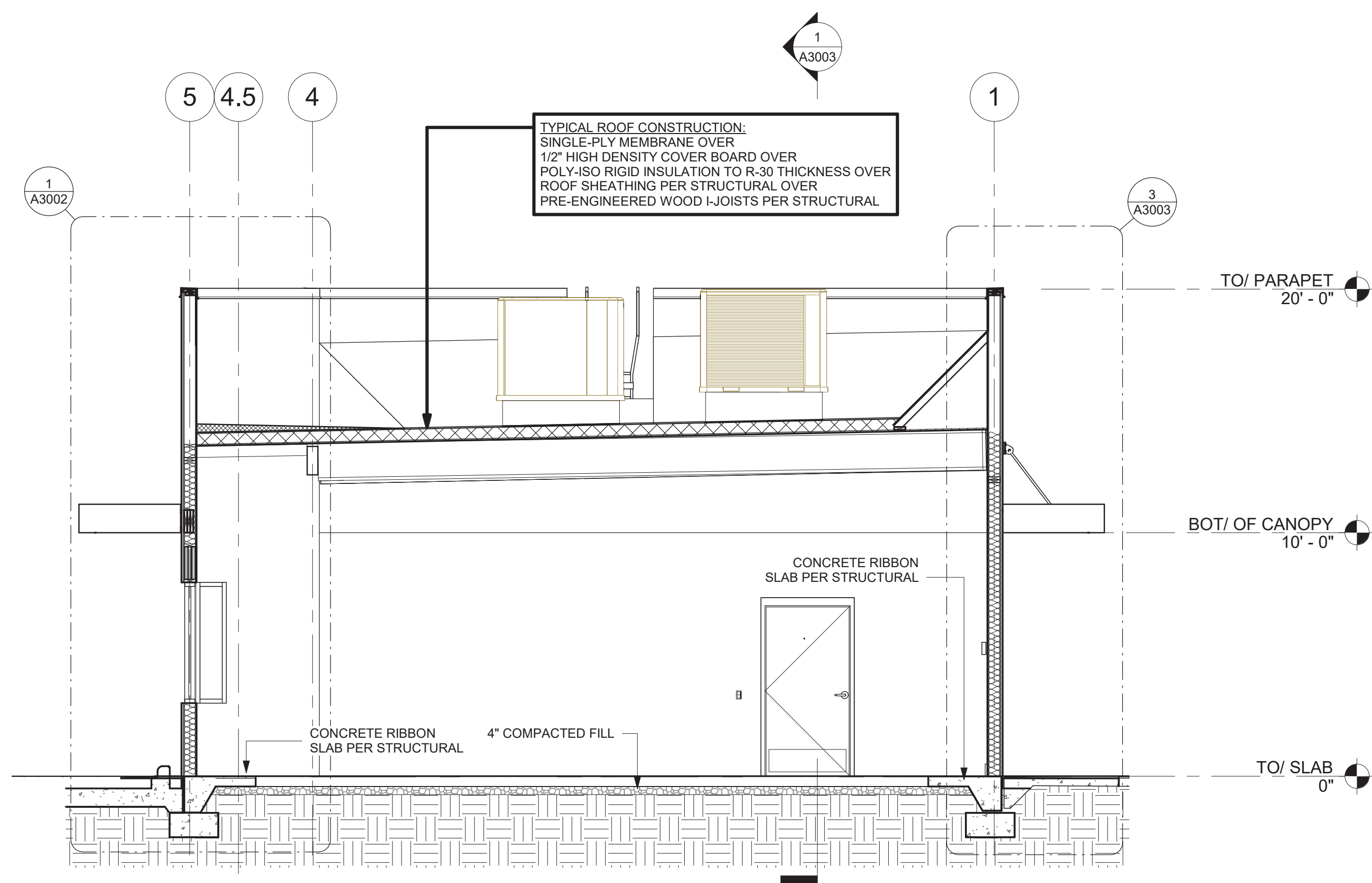
EXTERIOR ELEVATIONS

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	-/-/-
RECORD	-/-/-

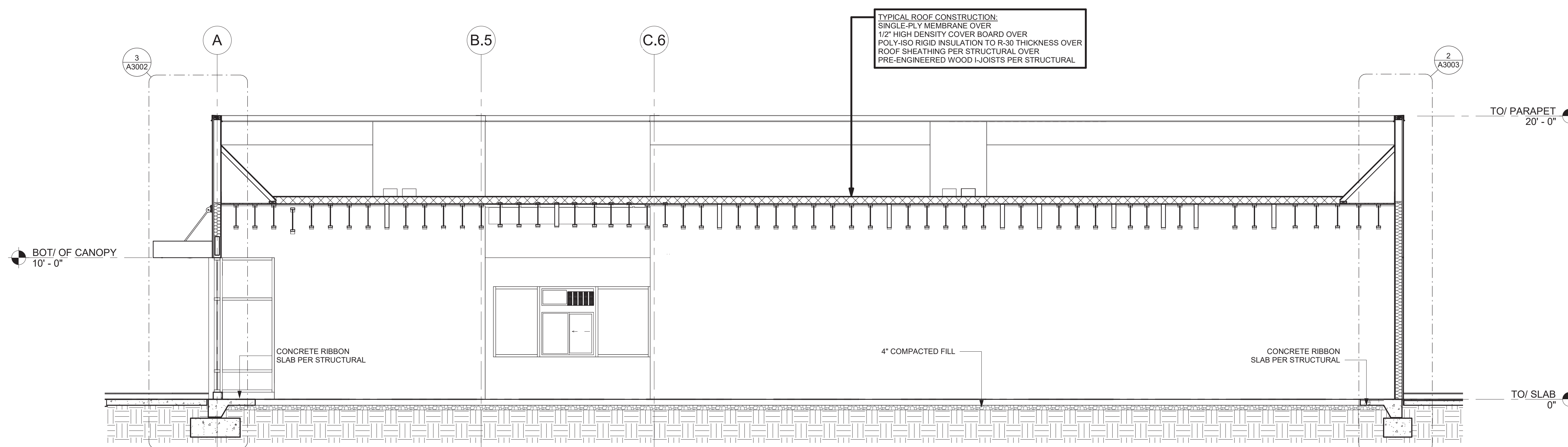
PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

A2002

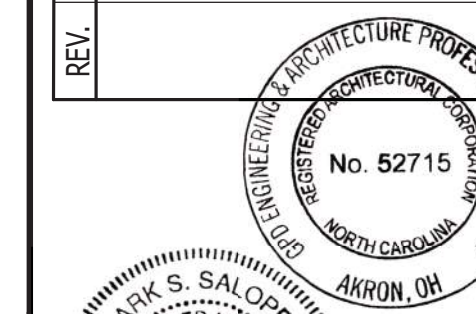


2 TRANSVERSE BUILDING SECTION
Scale: 1/4" = 1'-0"



1 LONGITUDINAL BUILDING SECTION
Scale: 1/4" = 1'-0"

REV.	DATE	DESCRIPTION



SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

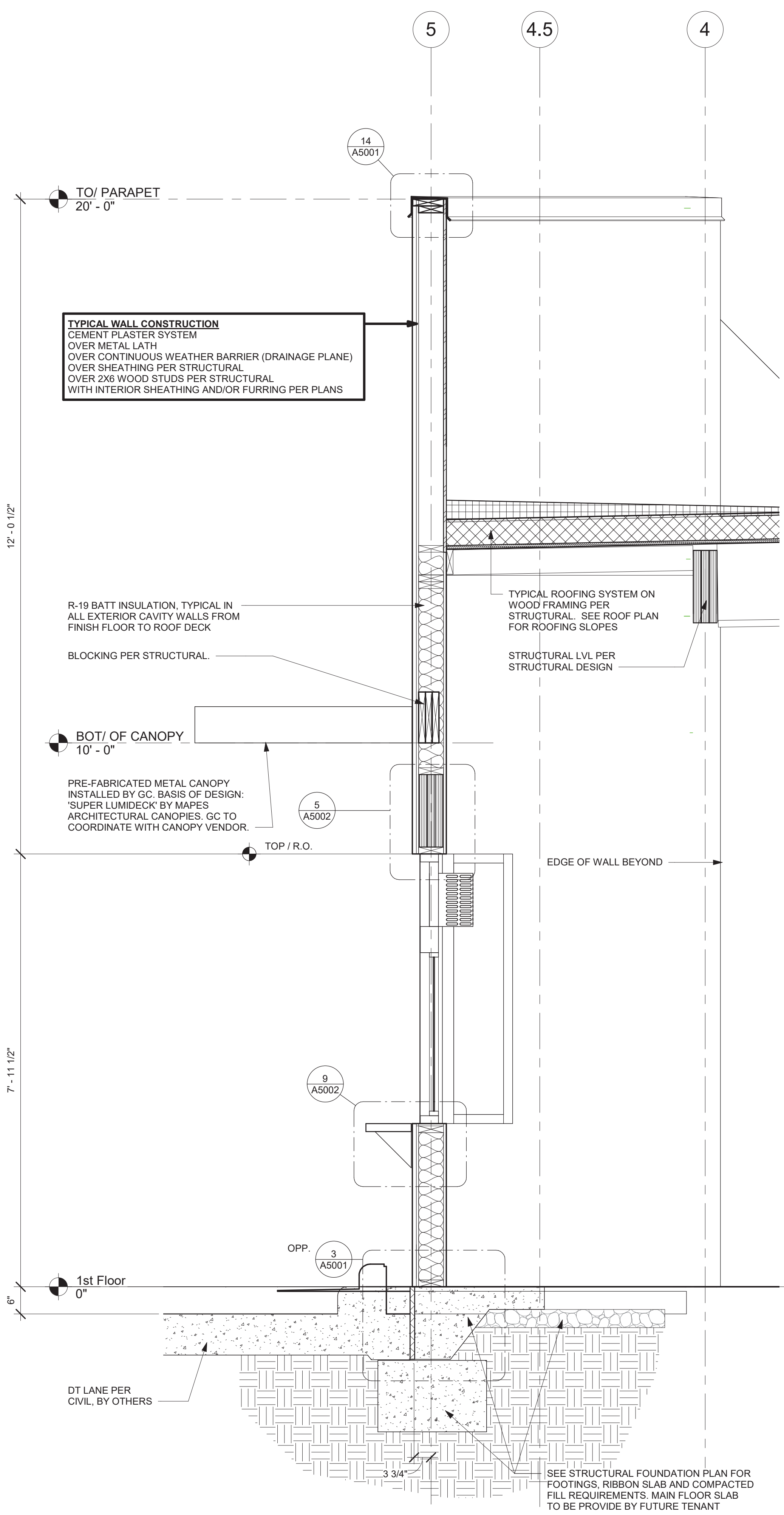
BUILDING SECTIONS

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	--/--
RECORD	--/--

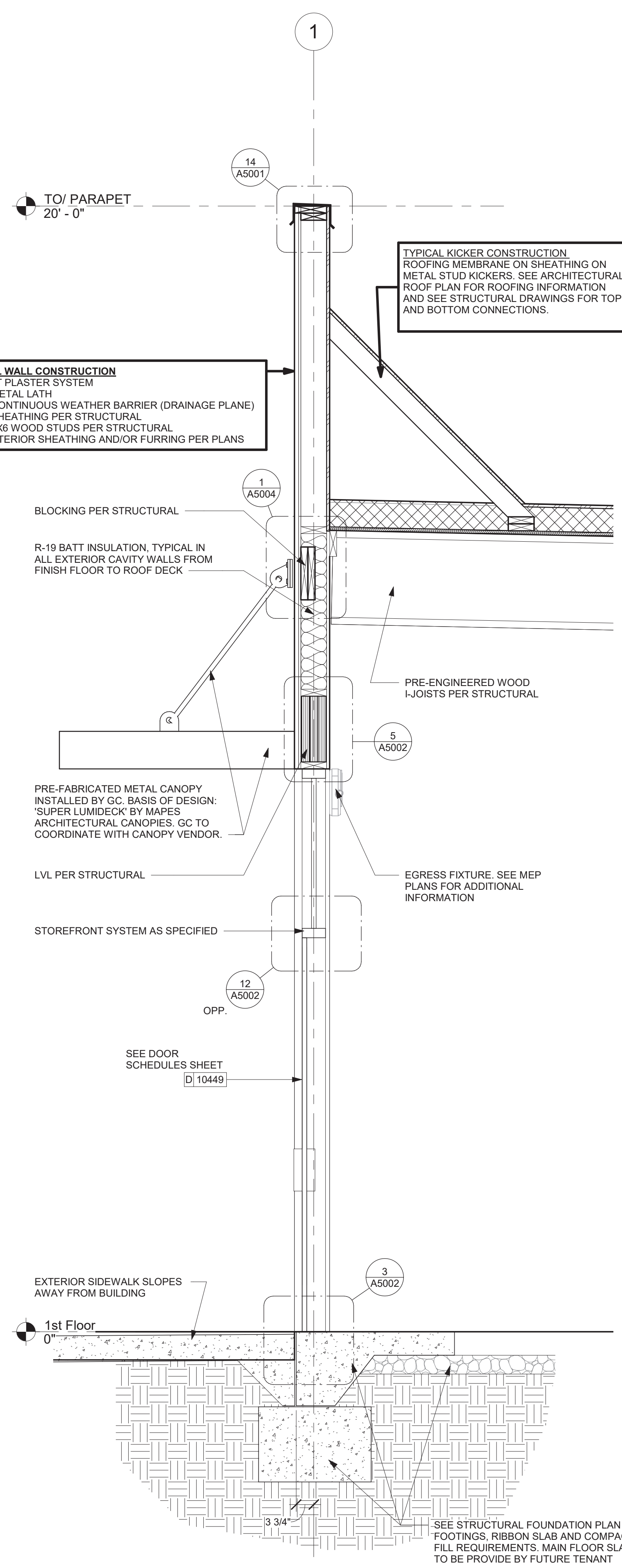
PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

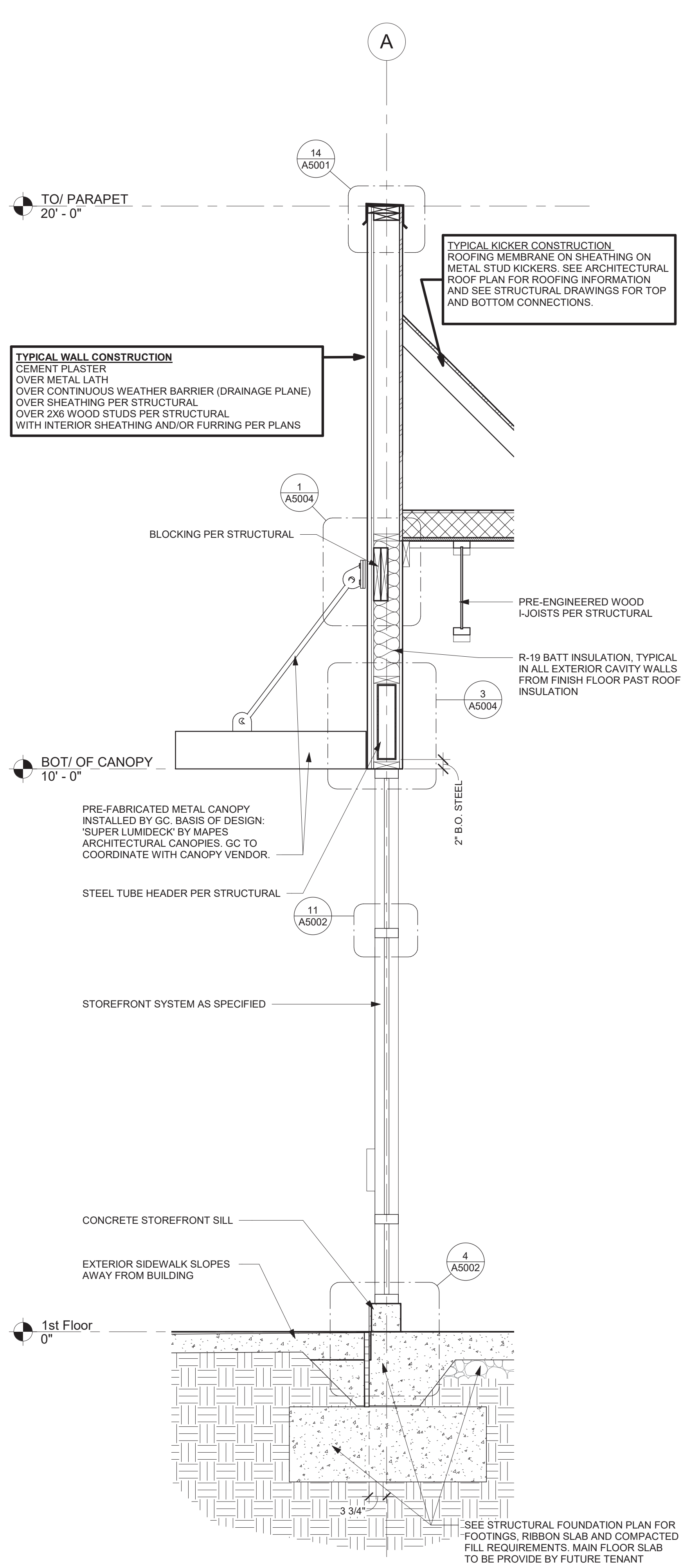
A3001



1 SECTION AT DT BUMP OUT
 Scale: 3/4" = 1'-0"



2 SECTION AT ENTRY
 Scale: 3/4" = 1'-0"



3 SECTION AT PATIO STOREFRONT
 Scale: 3/4" = 1'-0"

REV.	DATE	DESCRIPTION

Professional Engineer
 No. 52715
 10433
 07/21/2021

SPOUT SPRINGS
 2778 NC-24
 CAMERON, NC 28236
 WALL SECTIONS

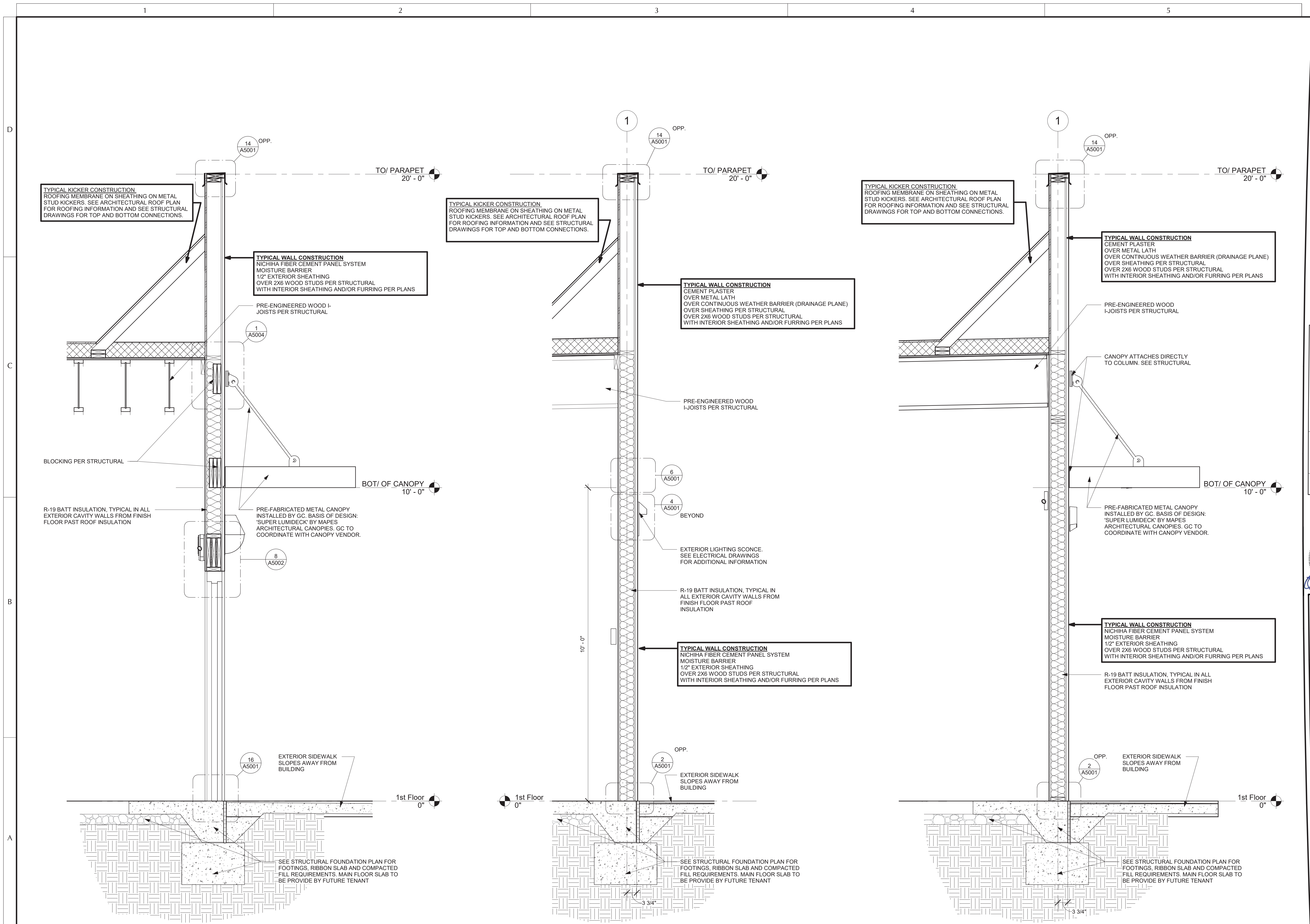
PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
	-/-/-
RECORD	DATE
	-/-/-

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
 2020379.19

A3002

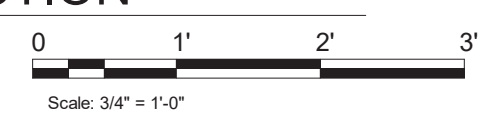




1 WALL SECTION AT REAR DOOR
 Scale: 3/4" = 1'-0"

2 TYPICAL WALL CONSTRUCTION
 Scale: 3/4" = 1'-0"

3 WALL CONSTRUCTION @ CANOPY COLUMN CONNECTION
 Scale: 3/4" = 1'-0"



REV.	DATE	DESCRIPTION

Professional Engineer
 No. 52715
 State of Ohio
 10433
 07/21/2021

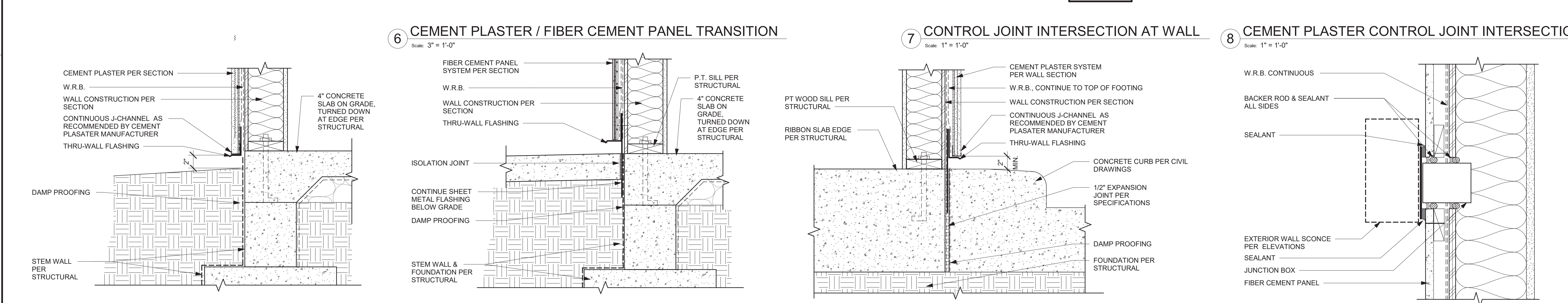
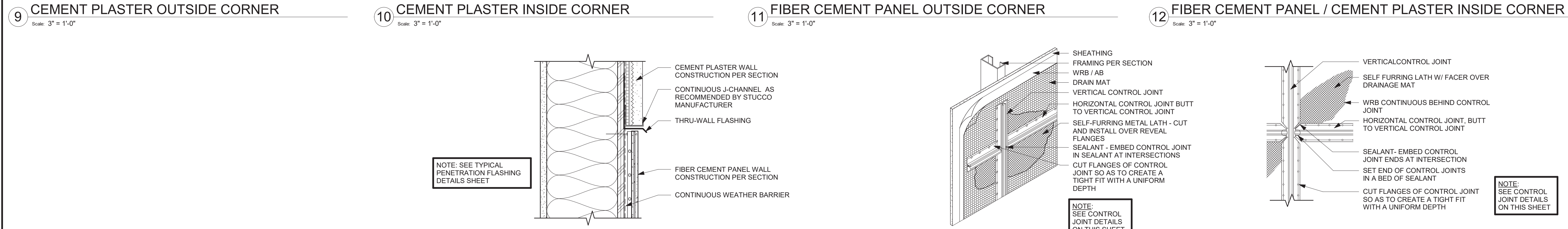
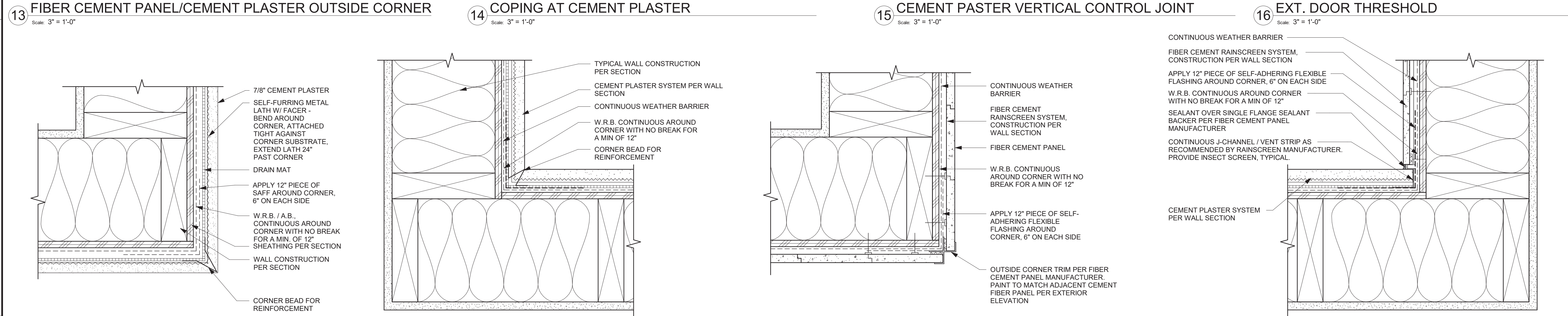
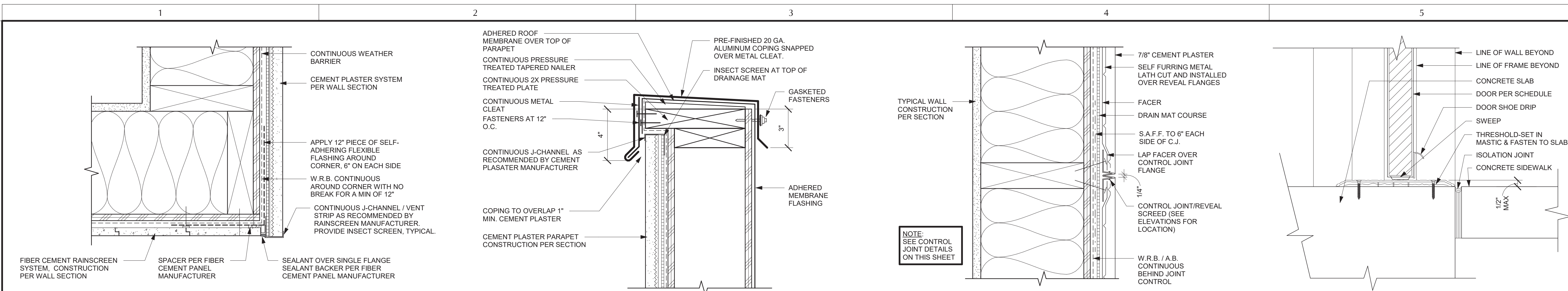
SPOUT SPRINGS
 2778 NC-24
 CAMERON, NC 28236
 WALL SECTIONS

PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
	--/--
RECORD	DATE
	--/--

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
 2020379.19

A3003



REV.	DATE	DESCRIPTION



10433
07/21/2021

SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

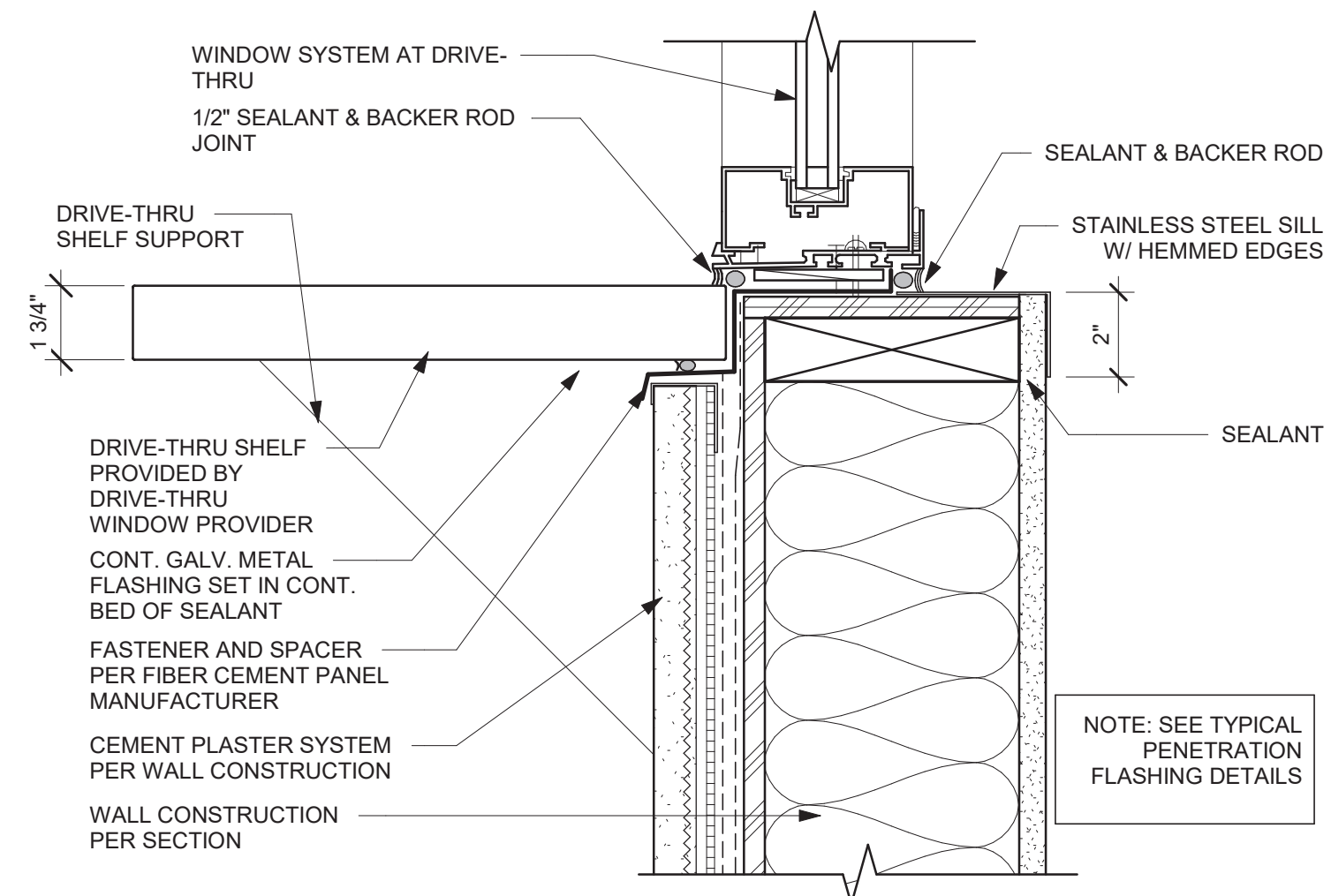
BUILDING DETAILS

PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
	-/-/-
RECORD	DATE
	-/-/-

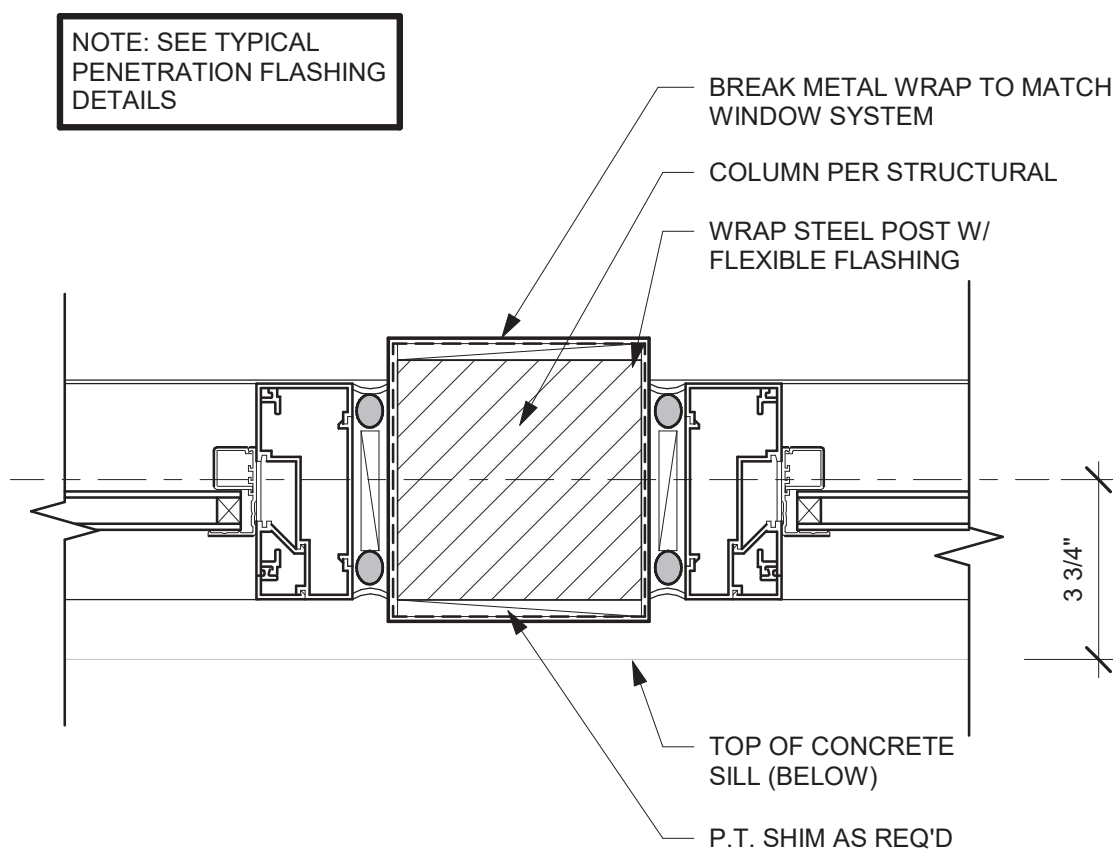
PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

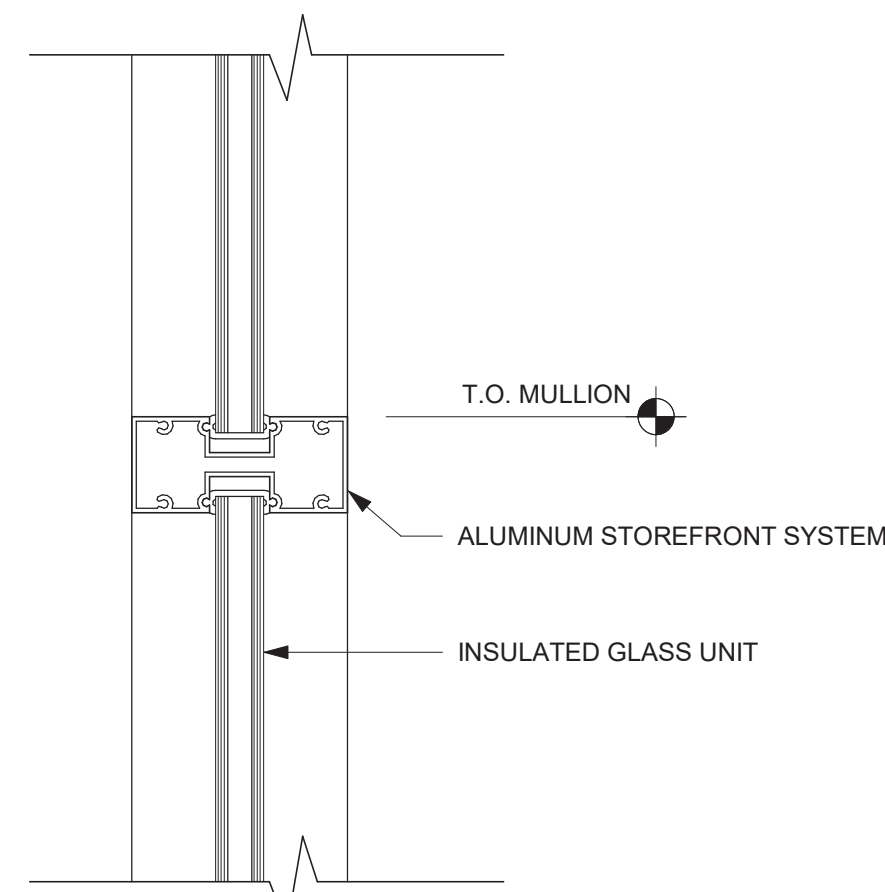
A5001



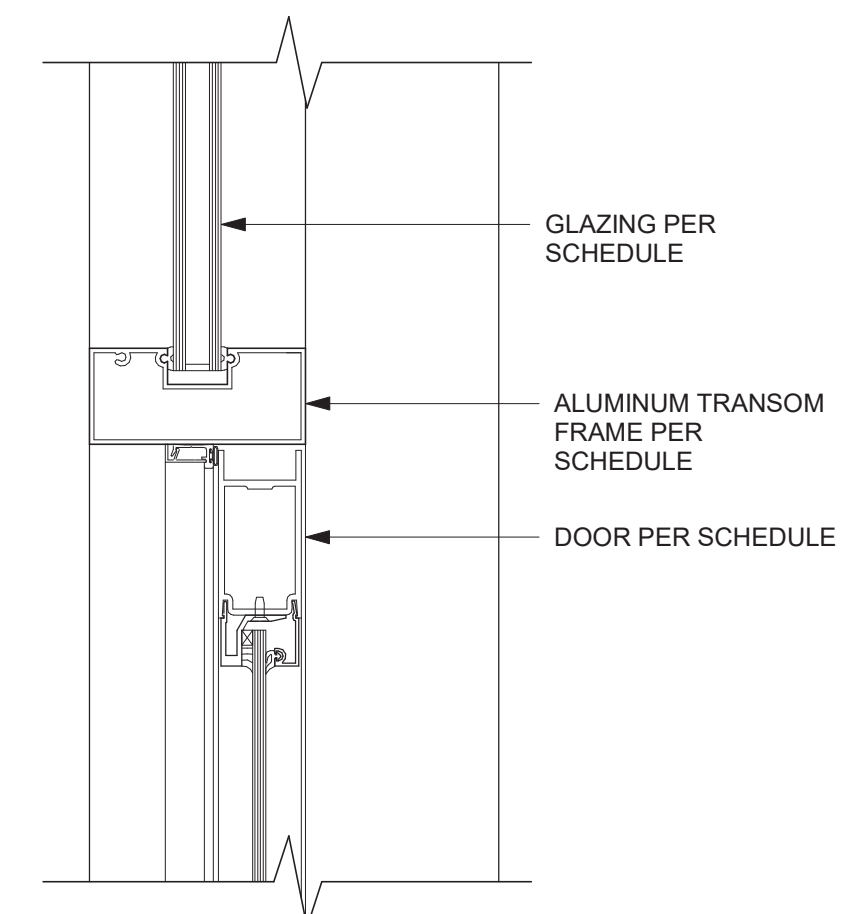
9 STOREFRONT SILL AT DRIVE-THRU
Scale: 3" = 1'-0"



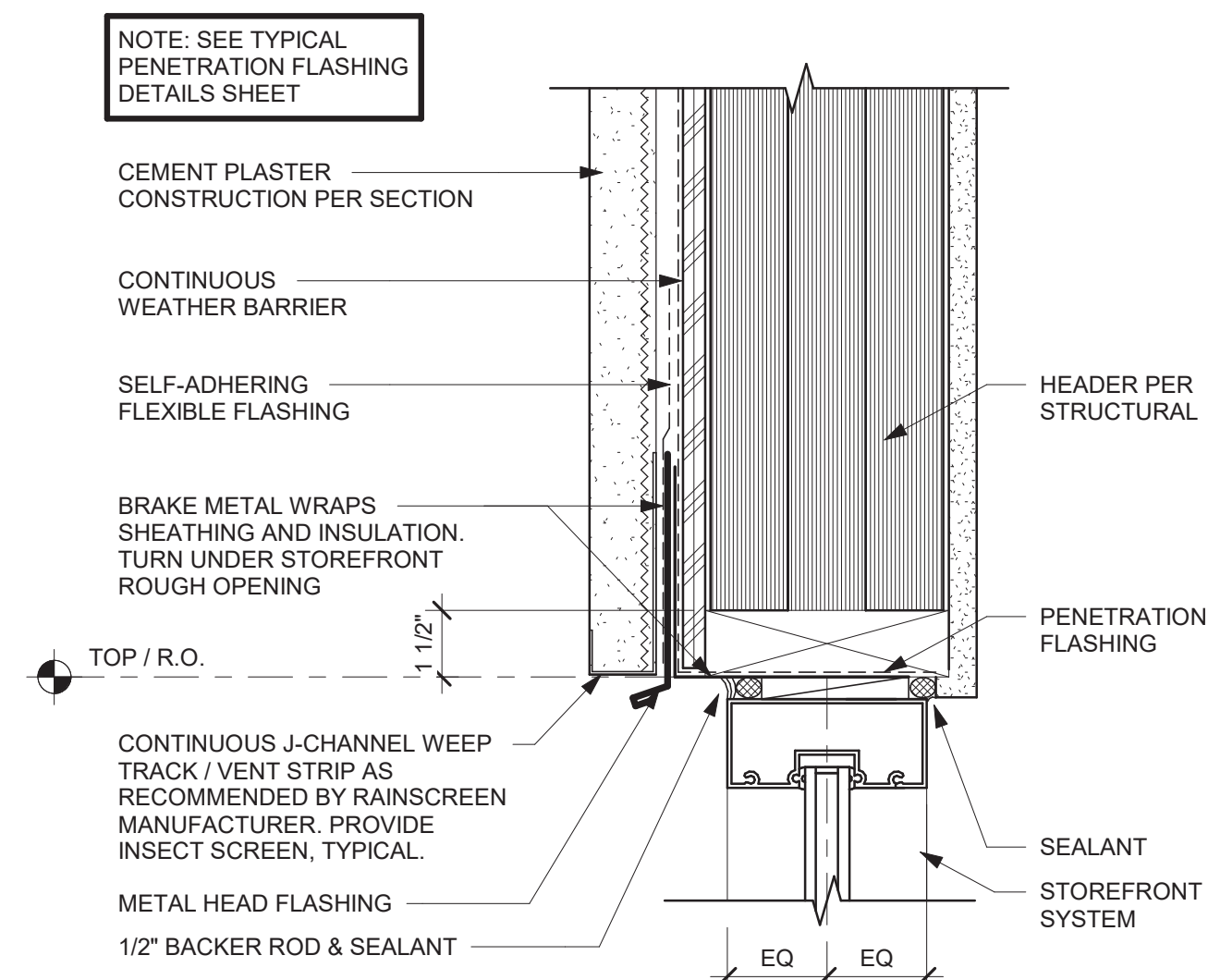
10 STOREFRONT JAMB AT POST
Scale: 3" = 1'-0"



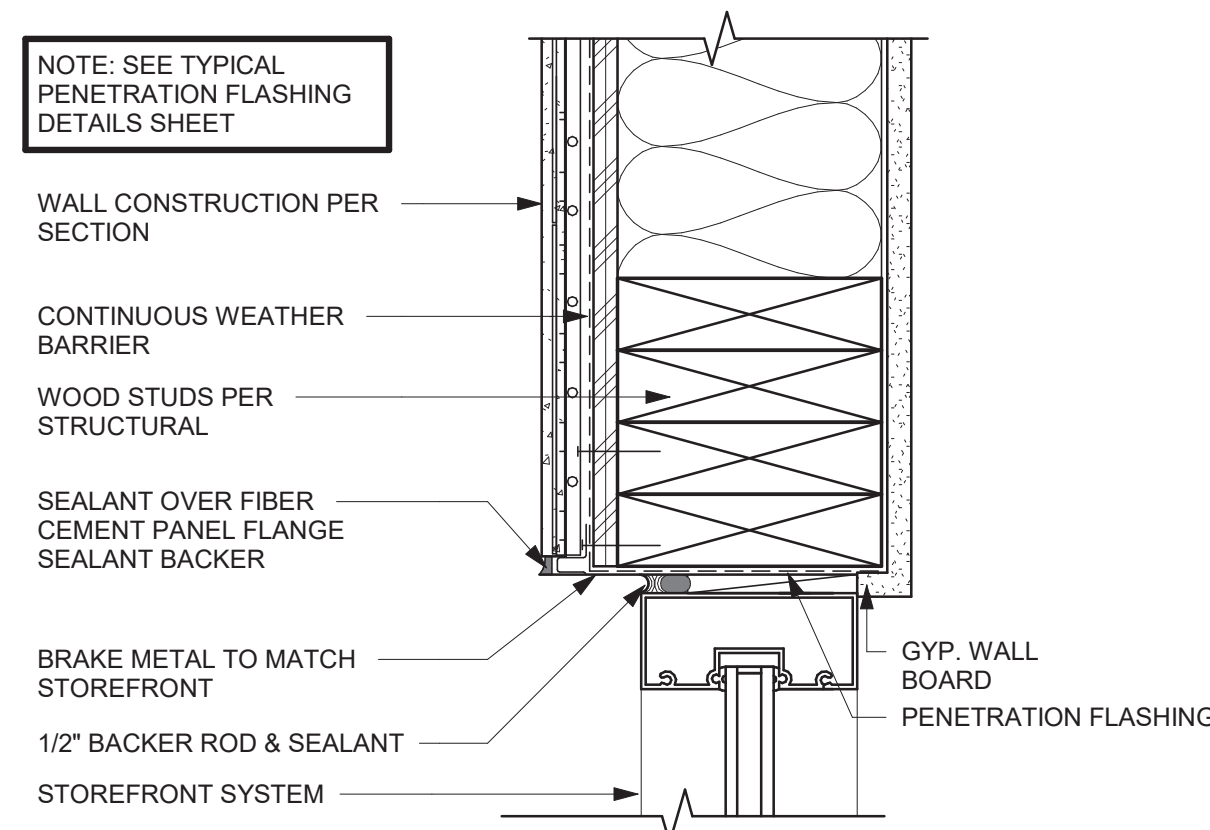
11 STOREFRONT MULLION TYP.
Scale: 3" = 1'-0"



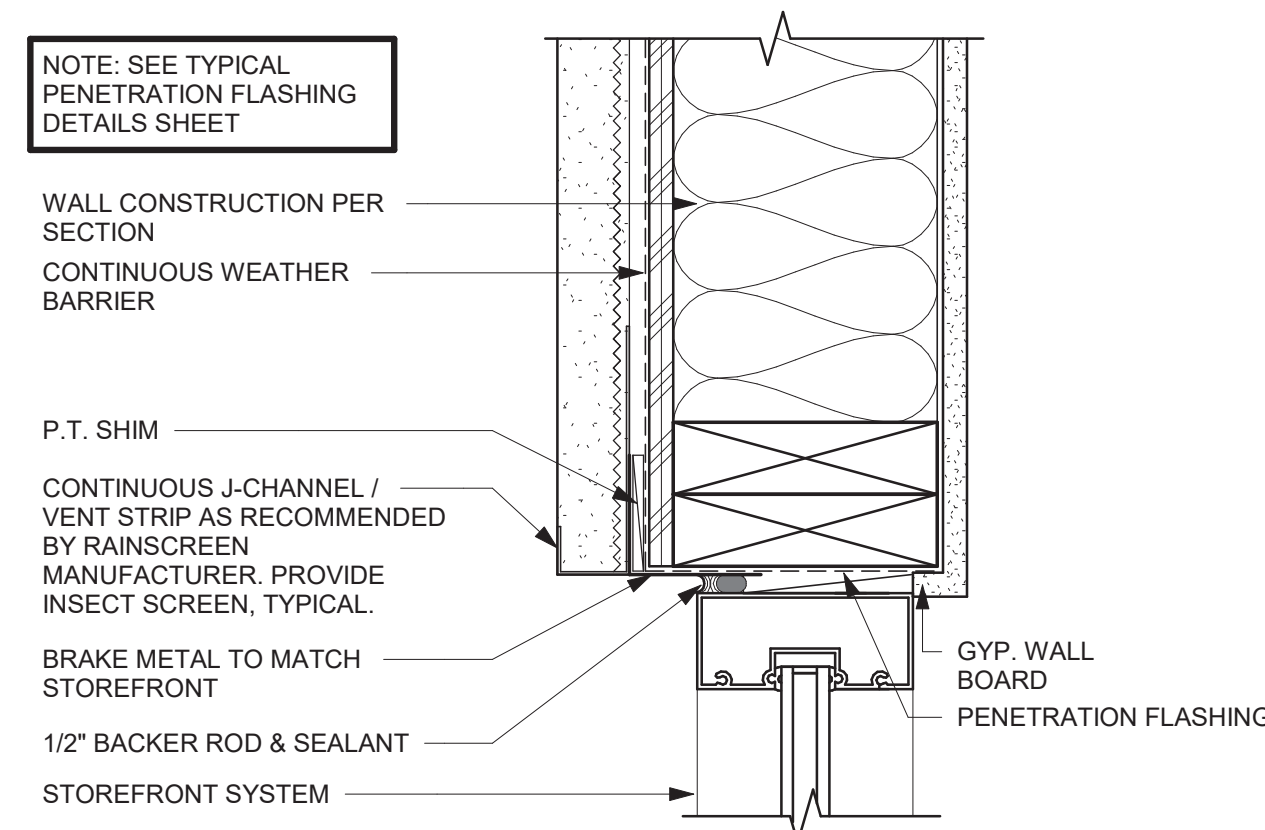
12 STOREFRONT DOOR TRANSOM
Scale: 3" = 1'-0"



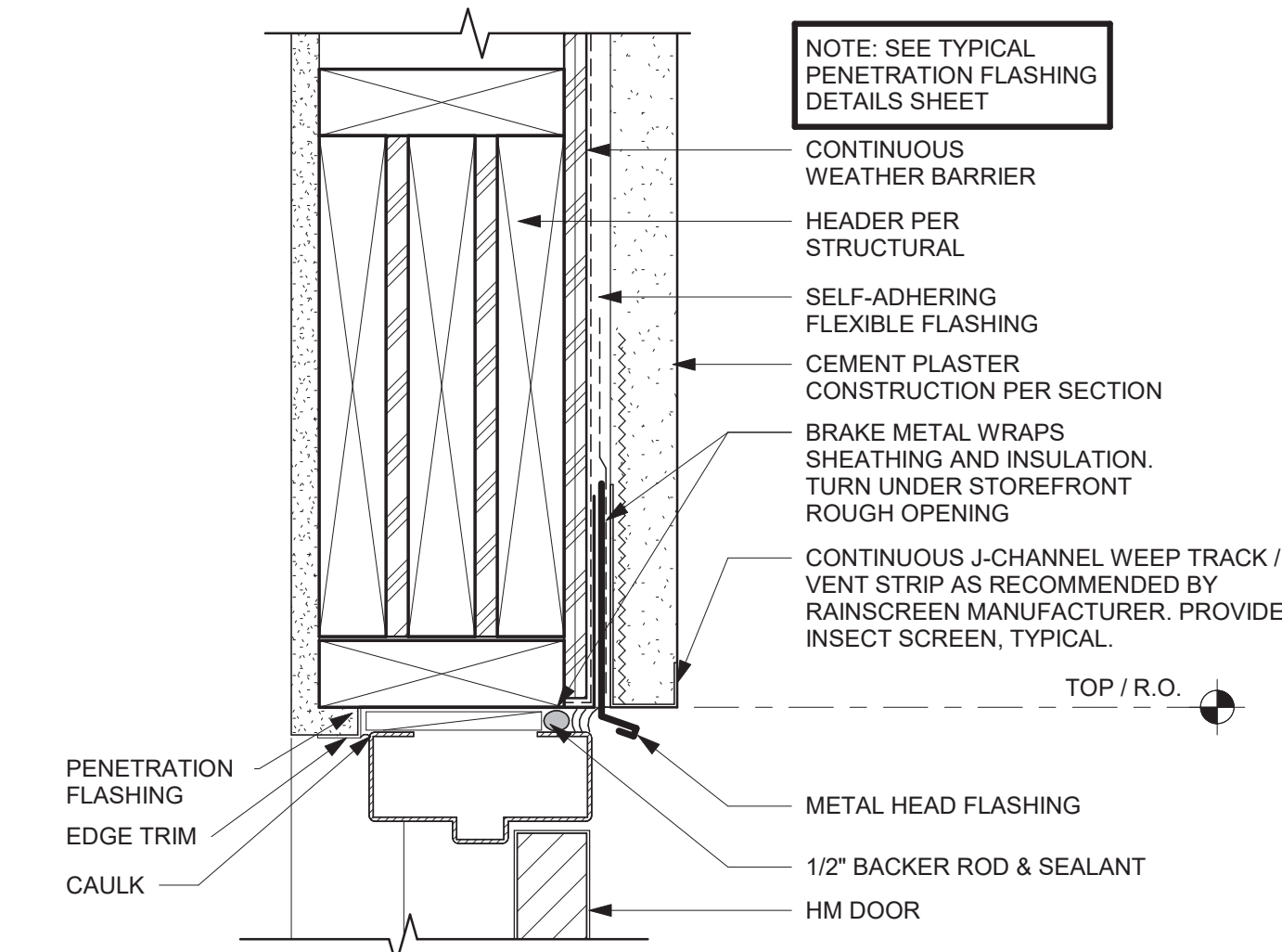
5 STOREFRONT HEAD AT CEMENT PLASTER
Scale: 3" = 1'-0"



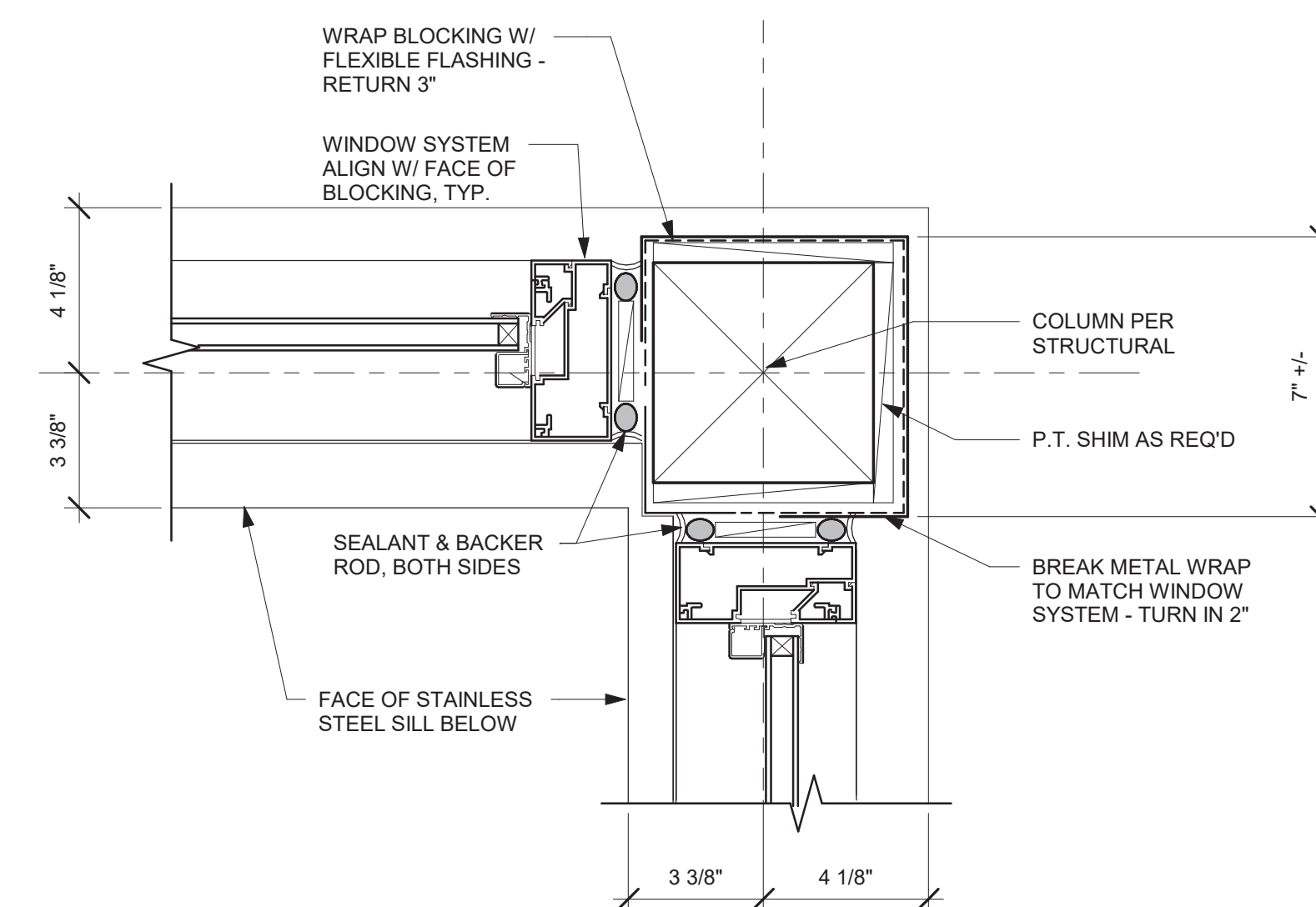
6 STOREFRONT JAMB AT FIBER CEMENT PANEL
Scale: 3" = 1'-0"



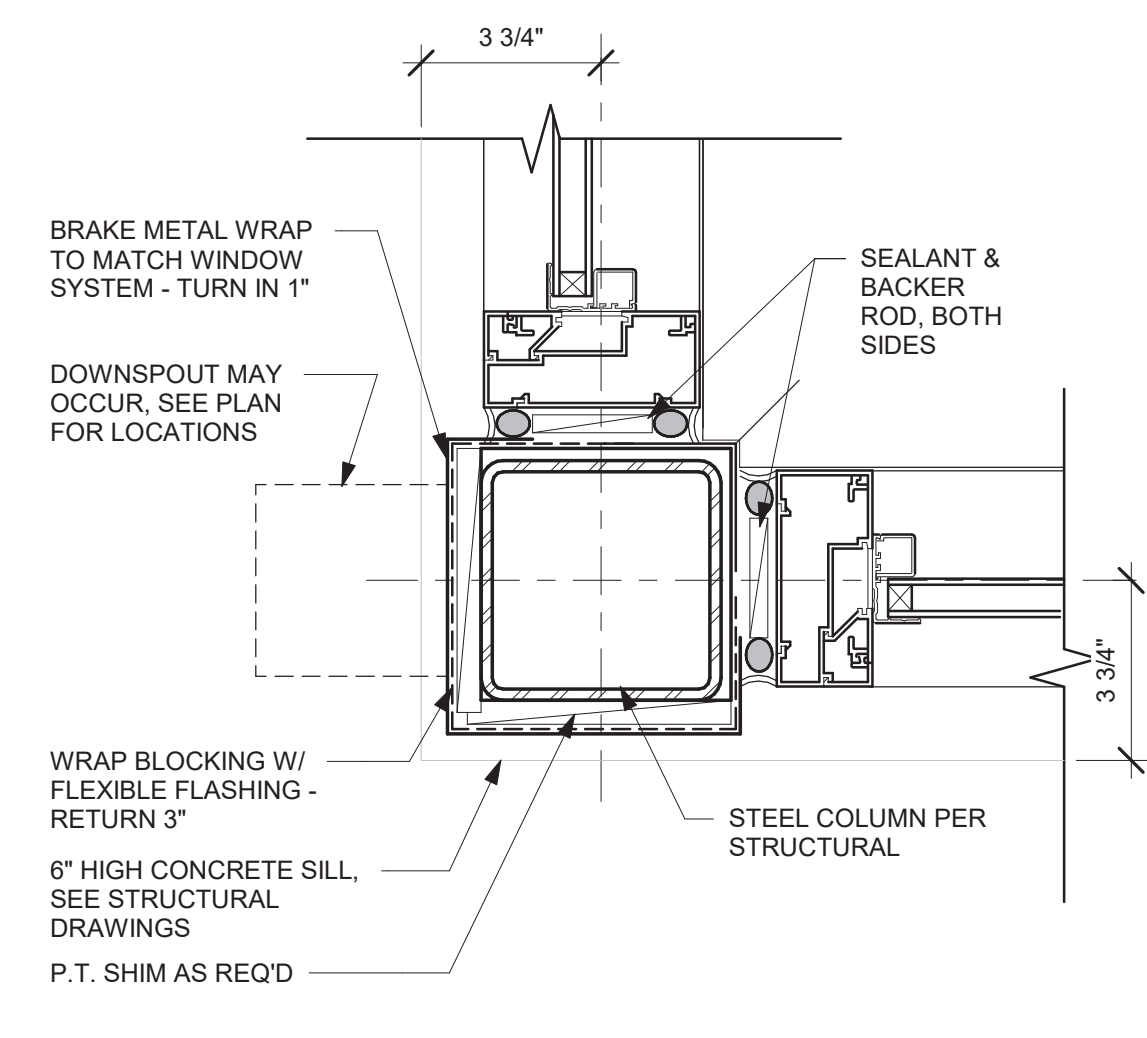
7 STOREFRONT JAMB AT CEMENT PLASTER
Scale: 3" = 1'-0"



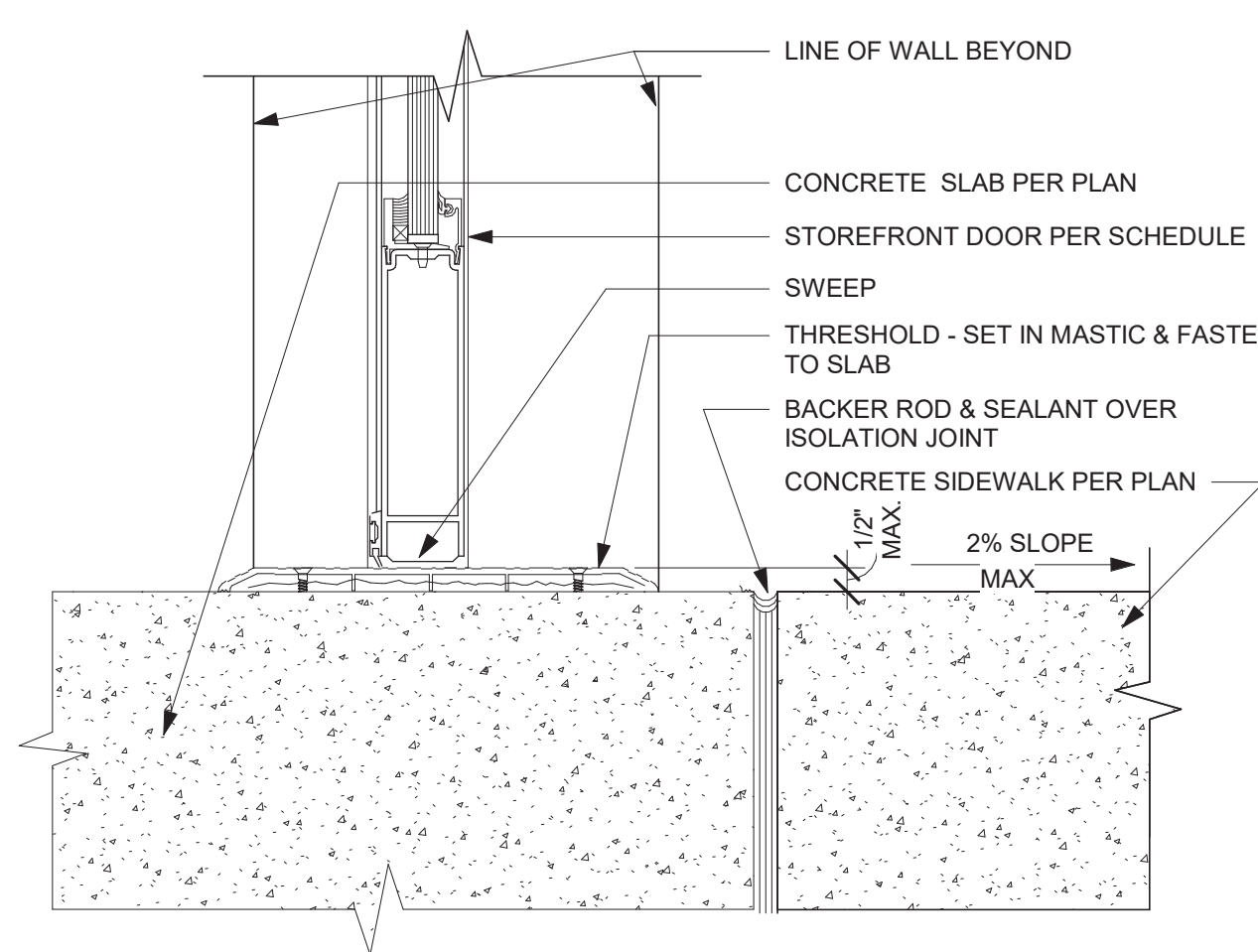
8 EXT. DOOR HEAD
Scale: 3" = 1'-0"



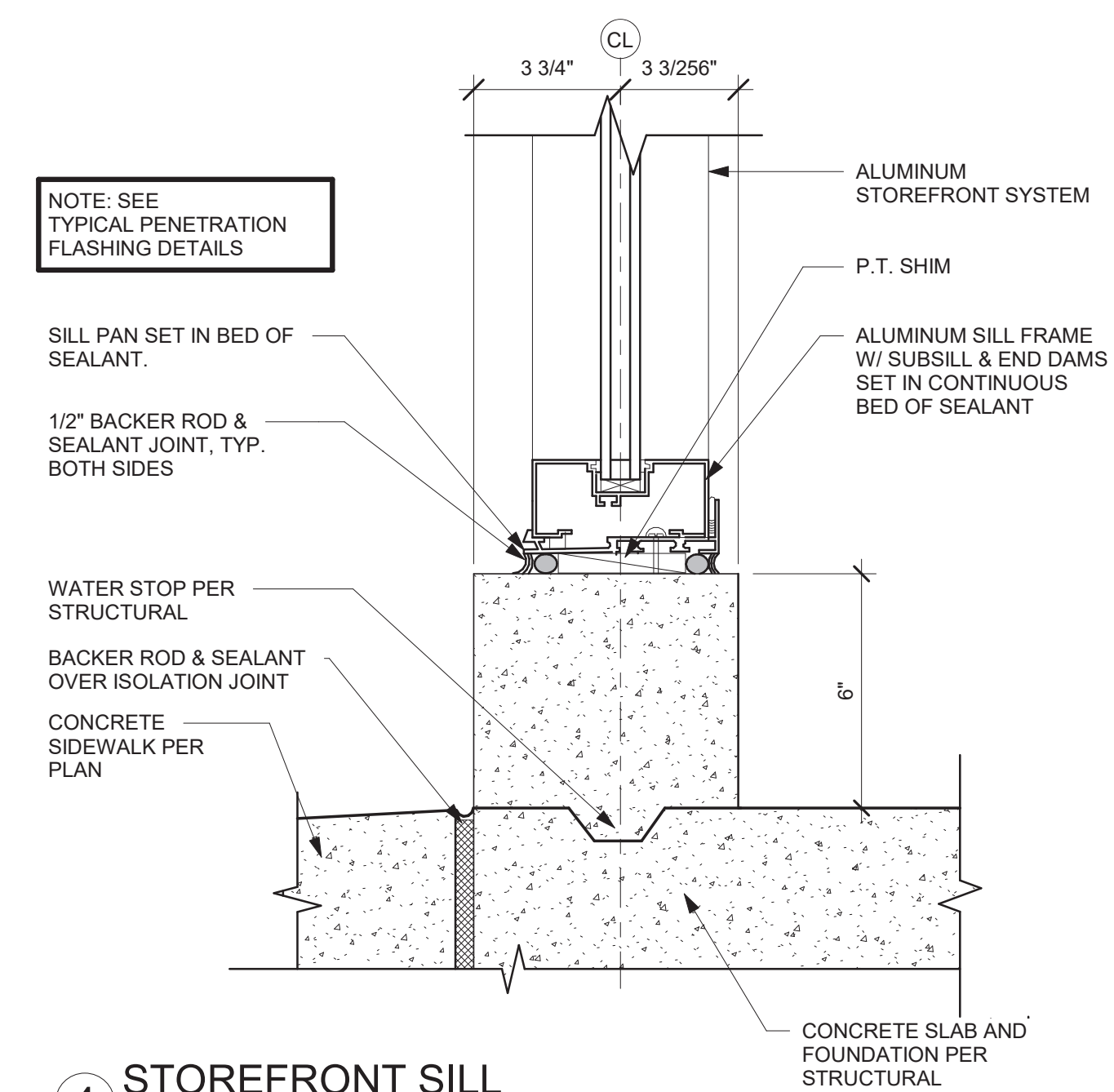
1 DRIVE THRU CORNER
Scale: 3" = 1'-0"



2 FRONT STOREFRONT CORNER
Scale: 3" = 1'-0"



3 STOREFRONT DOOR SILL
Scale: 3" = 1'-0"



4 STOREFRONT SILL
Scale: 3" = 1'-0"

REV.	DATE	DESCRIPTION

10433
07/21/2021

SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236
BUILDING DETAILS

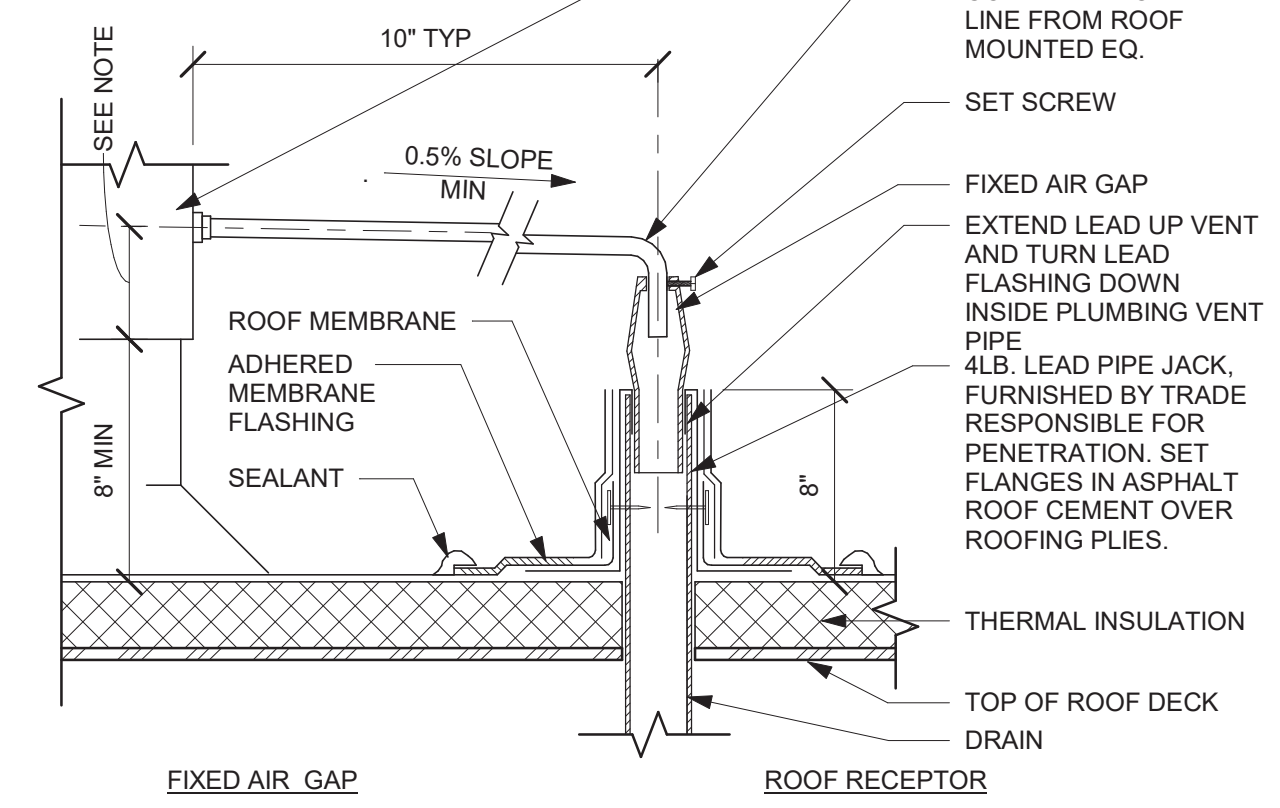
PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
	-/-/-
RECORD	DATE
	-/-/-

PROJECT MANAGER	DESIGNER
AK	DB

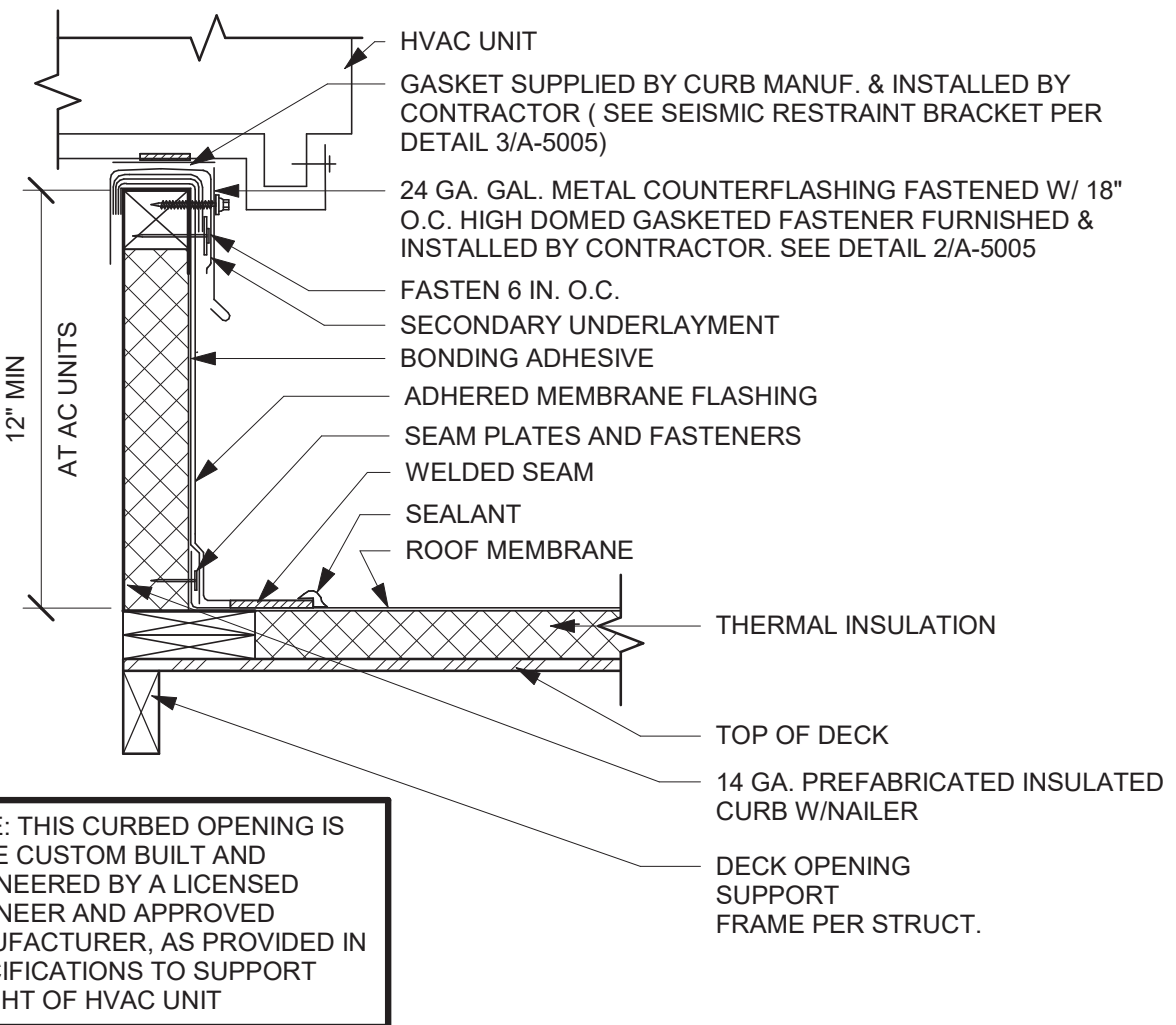
JOB NO.
2020379.19

A5002

NOTE: MECHANICAL, PLUMBING AND ROOFING CONTRACTORS TO COORDINATE CURB HEIGHT WITH EQUIPMENT. TYPE OF DRAIN, ACTUAL DISTANCE FROM UNIT TO DRAIN AND AMOUNT OF CONDENSATE LINE FALL REQUIRES

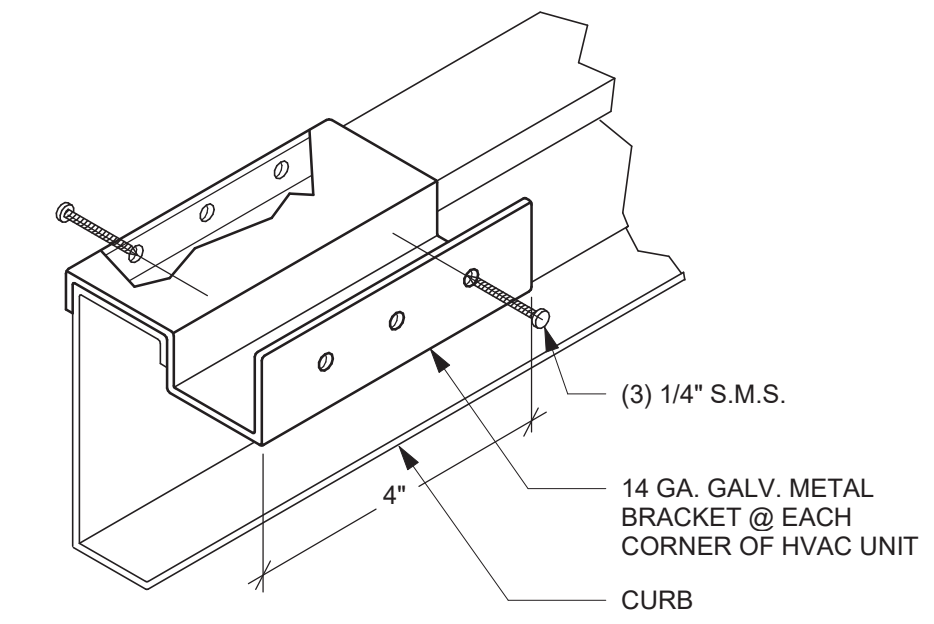


12 HVAC CONDENSATE DRAIN
 Scale: 1 1/2" = 1'-0"

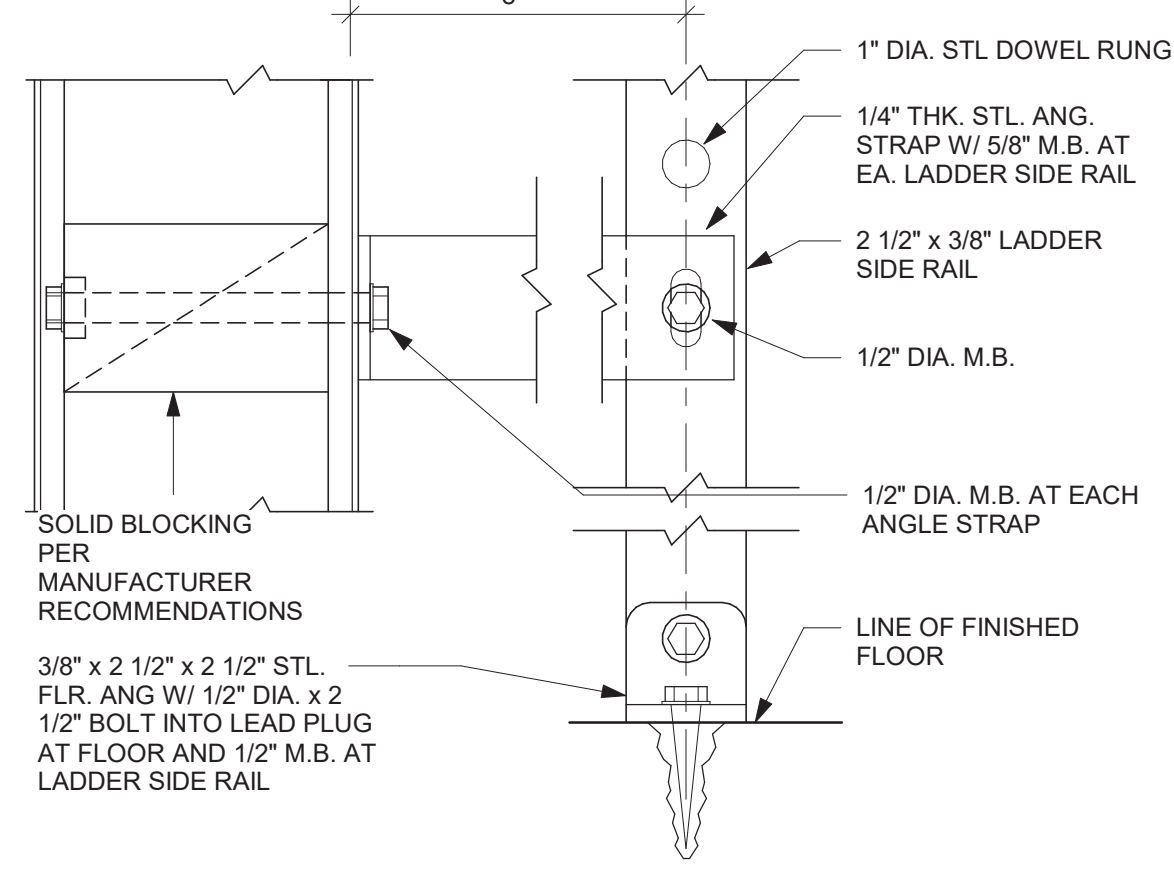


13 HVAC UNIT CURB
 Scale: 1 1/2" = 1'-0"

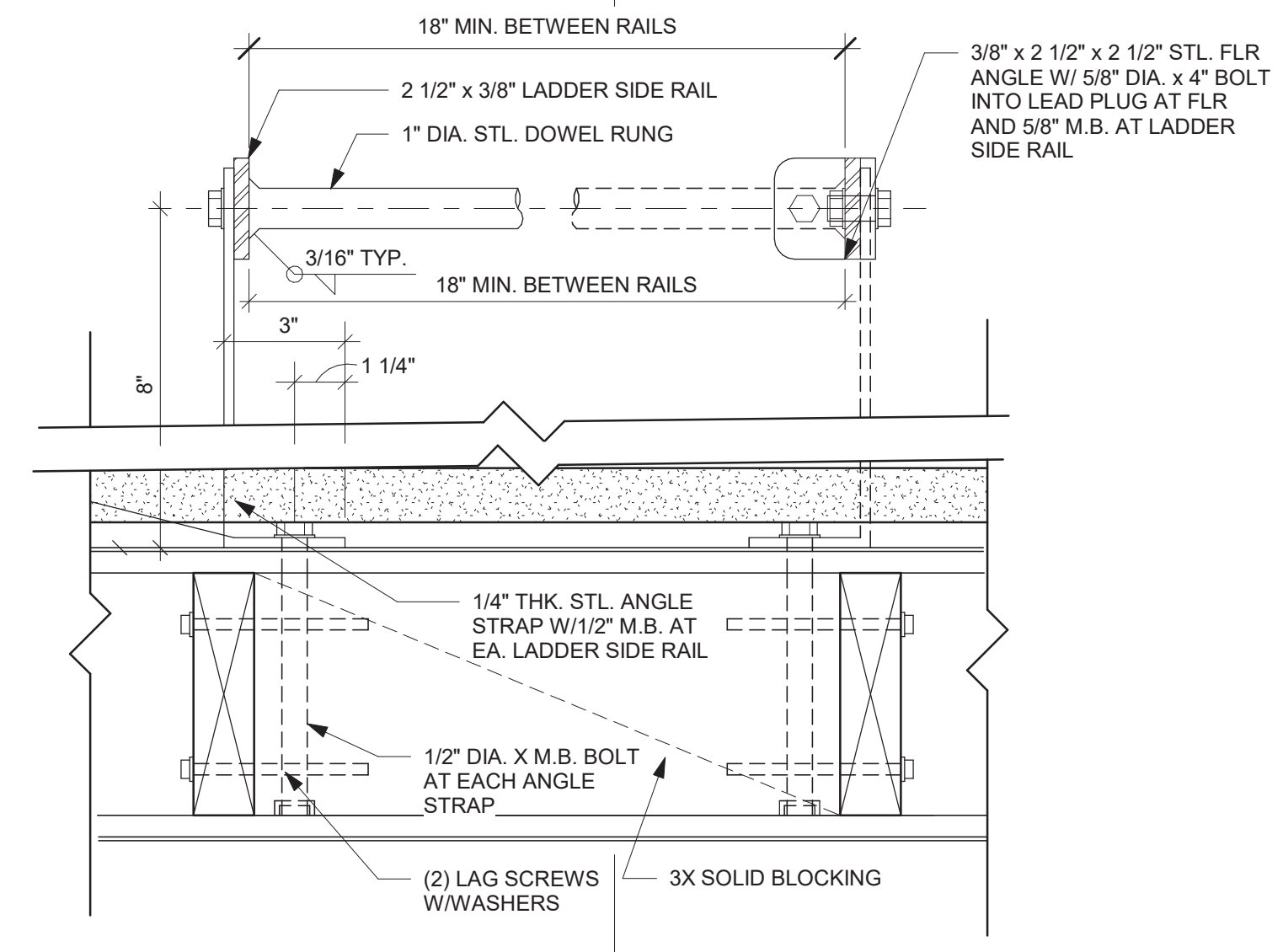
14 SEISMIC RESTRAINT BRACKET
 Scale: 3" = 1'-0"



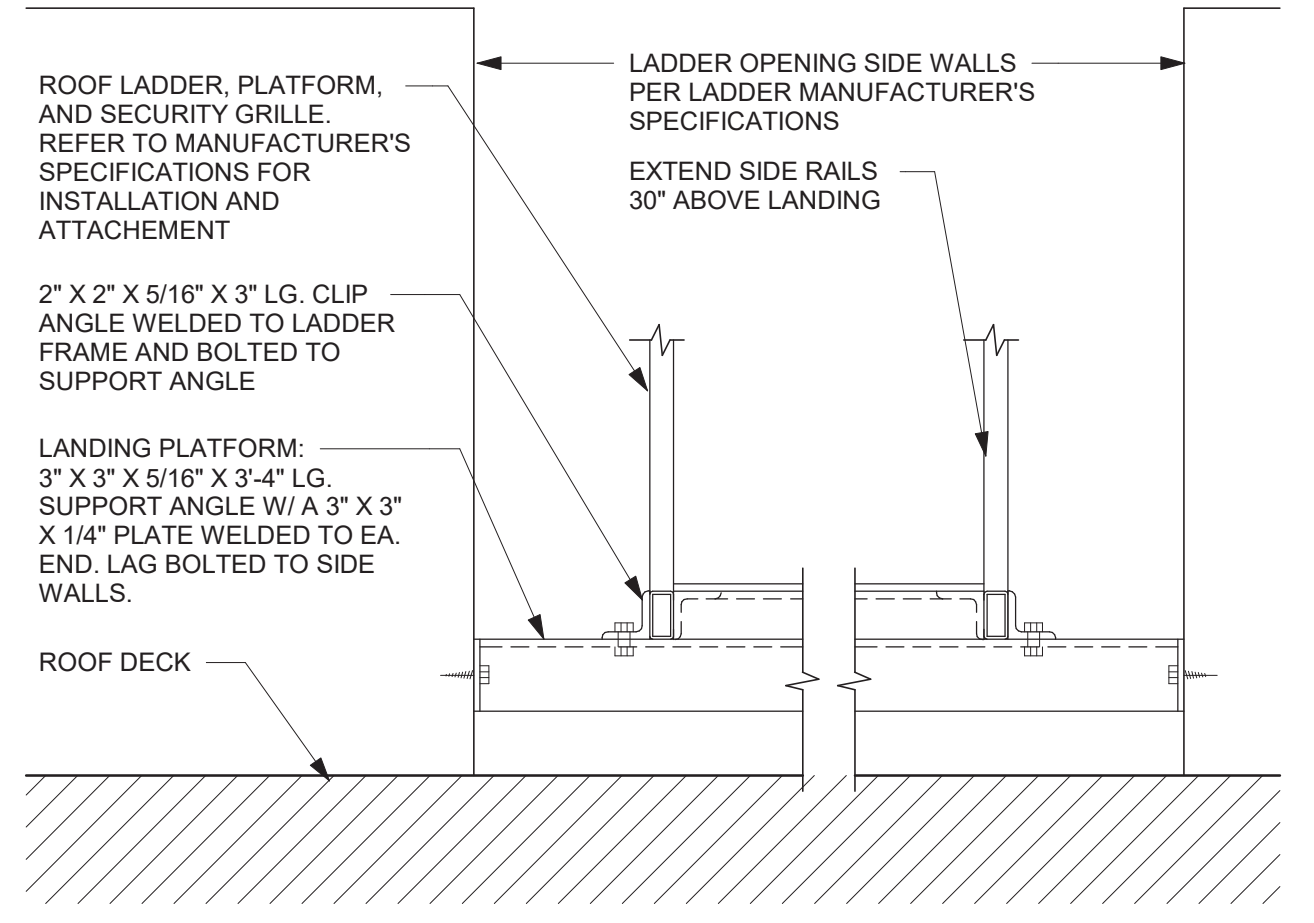
NOTE: RUNG SPACING NOT TO EXCEED 14" O.C.



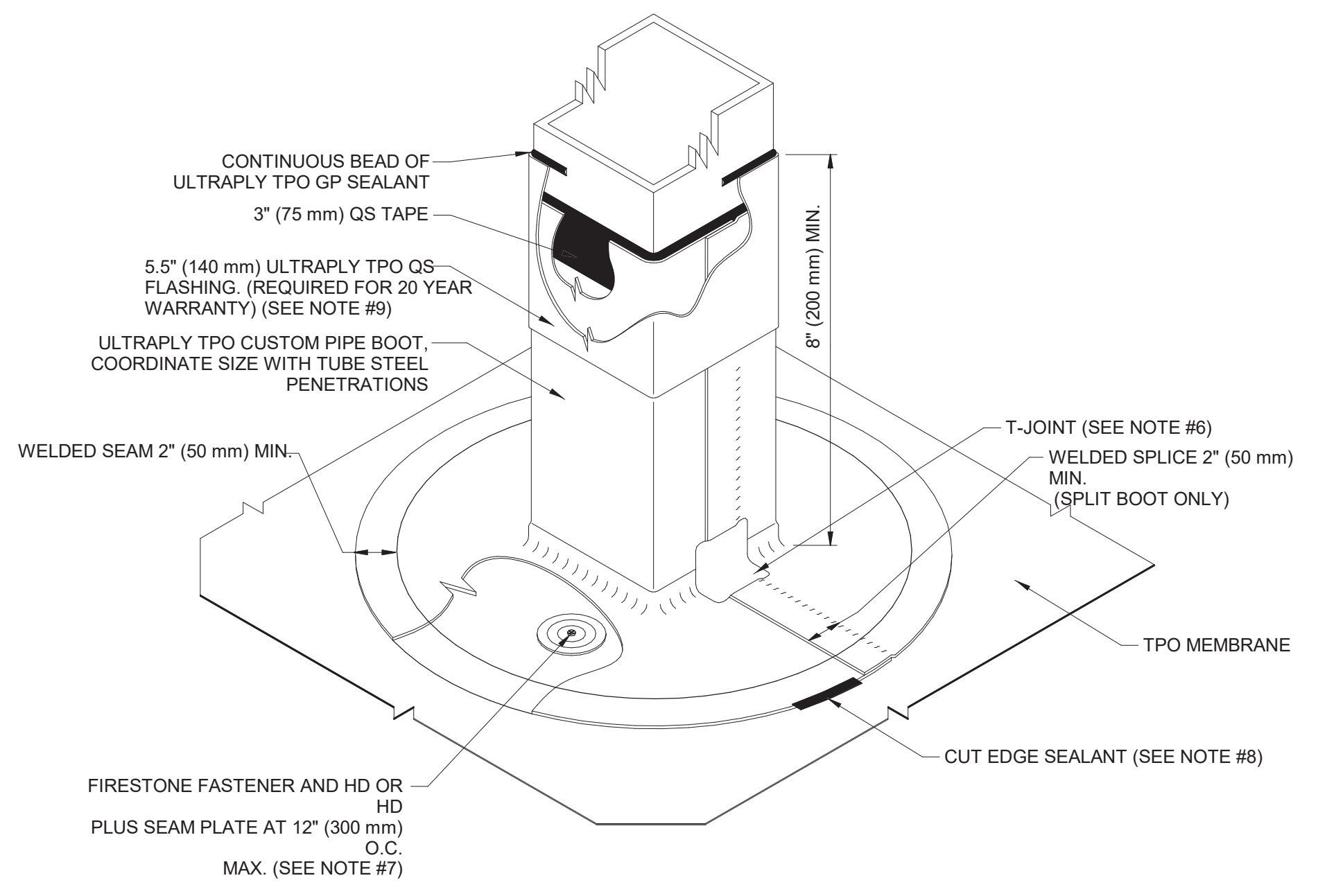
10 LADDER DETAIL
 Scale: 3" = 1'-0"



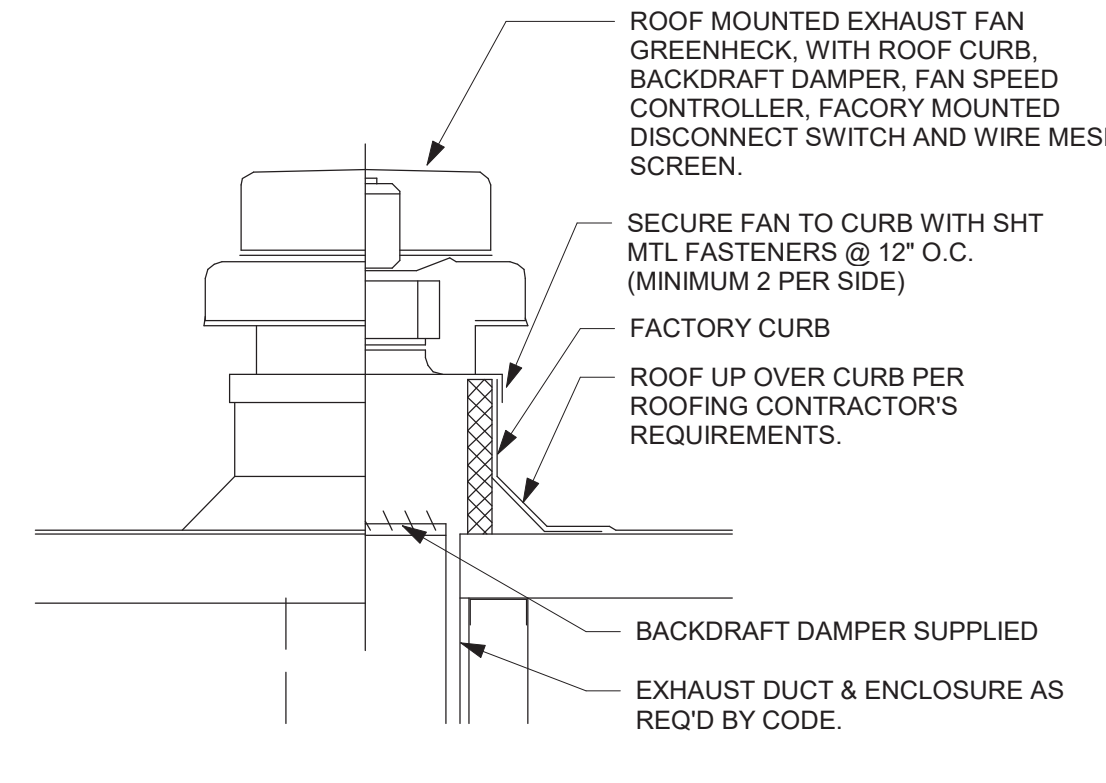
8 LADDER PLAN DETAIL
 Scale: 3" = 1'-0"



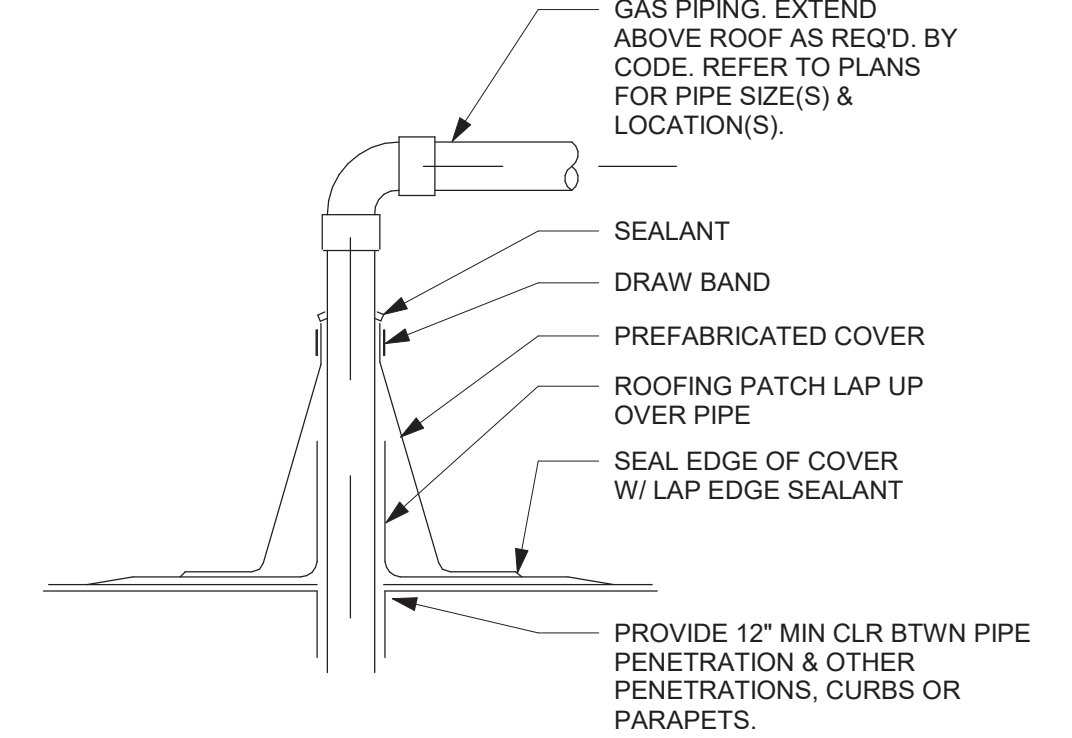
9 ROOF LADDER ELEVATION
 Scale: 1" = 1'-0"



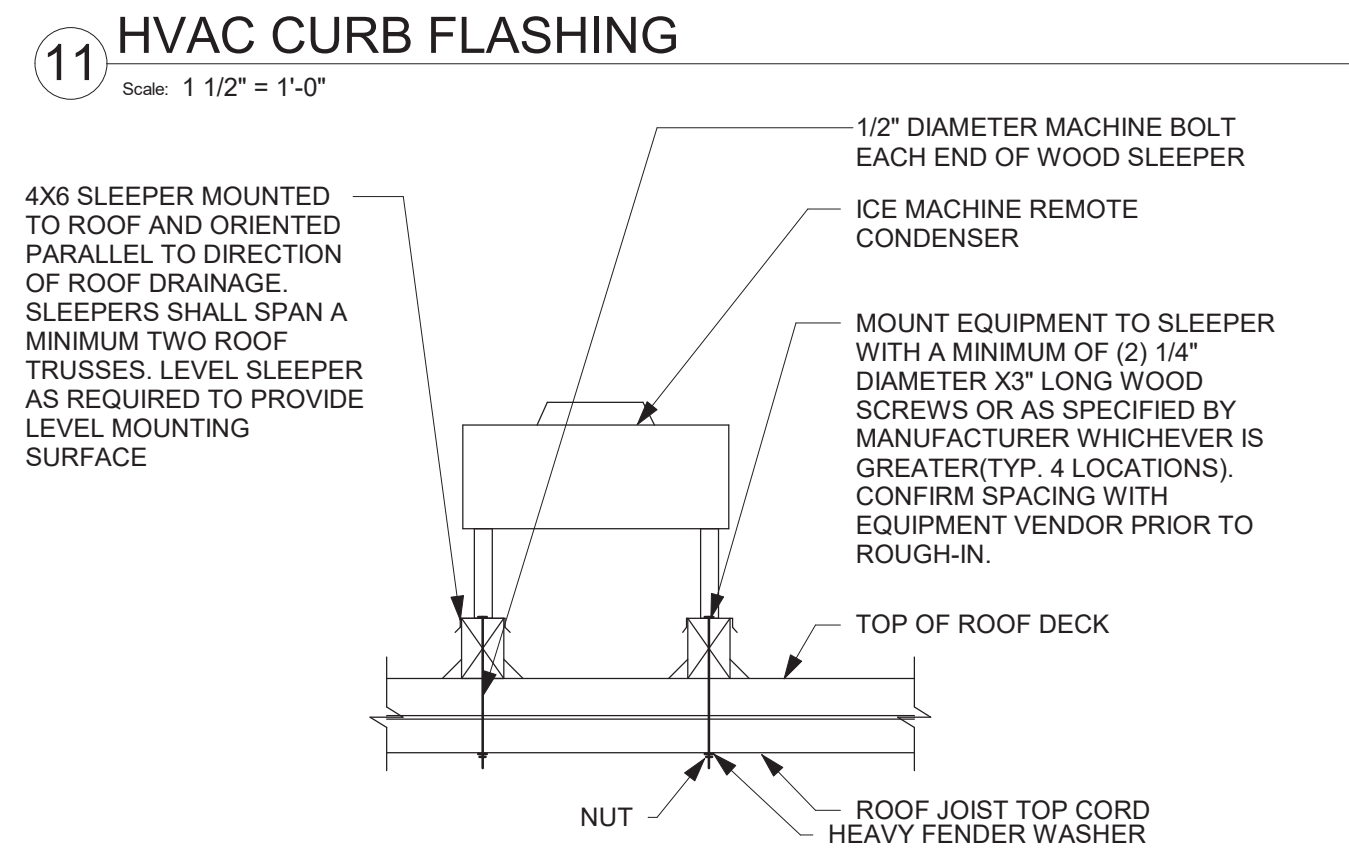
1 SQUARE PENETRATION WITH SQUARE TPO PIPE BOOT DETAIL
 Scale: 1 1/2" = 1'-0"



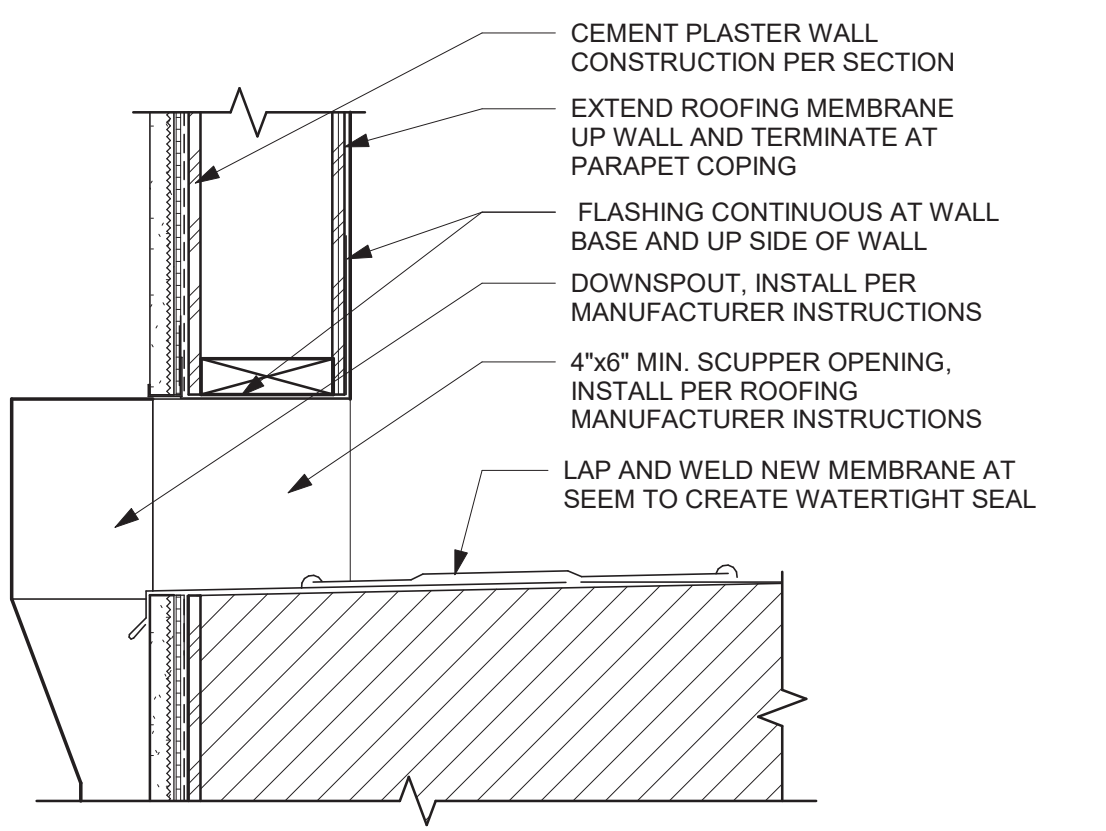
5 ROOF EXHAUST FAN
 Scale: 12" = 1'-0"



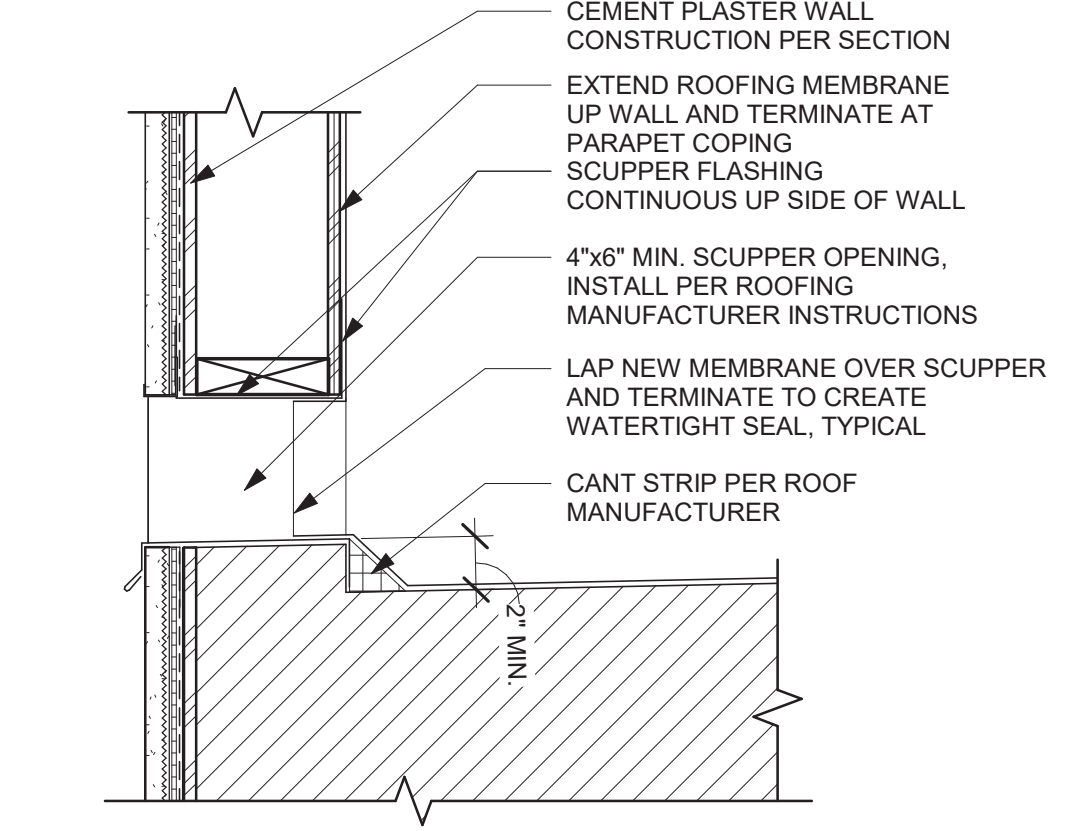
6 PIPE/ROOF PENETRATION DETAIL
 Scale: 12" = 1'-0"



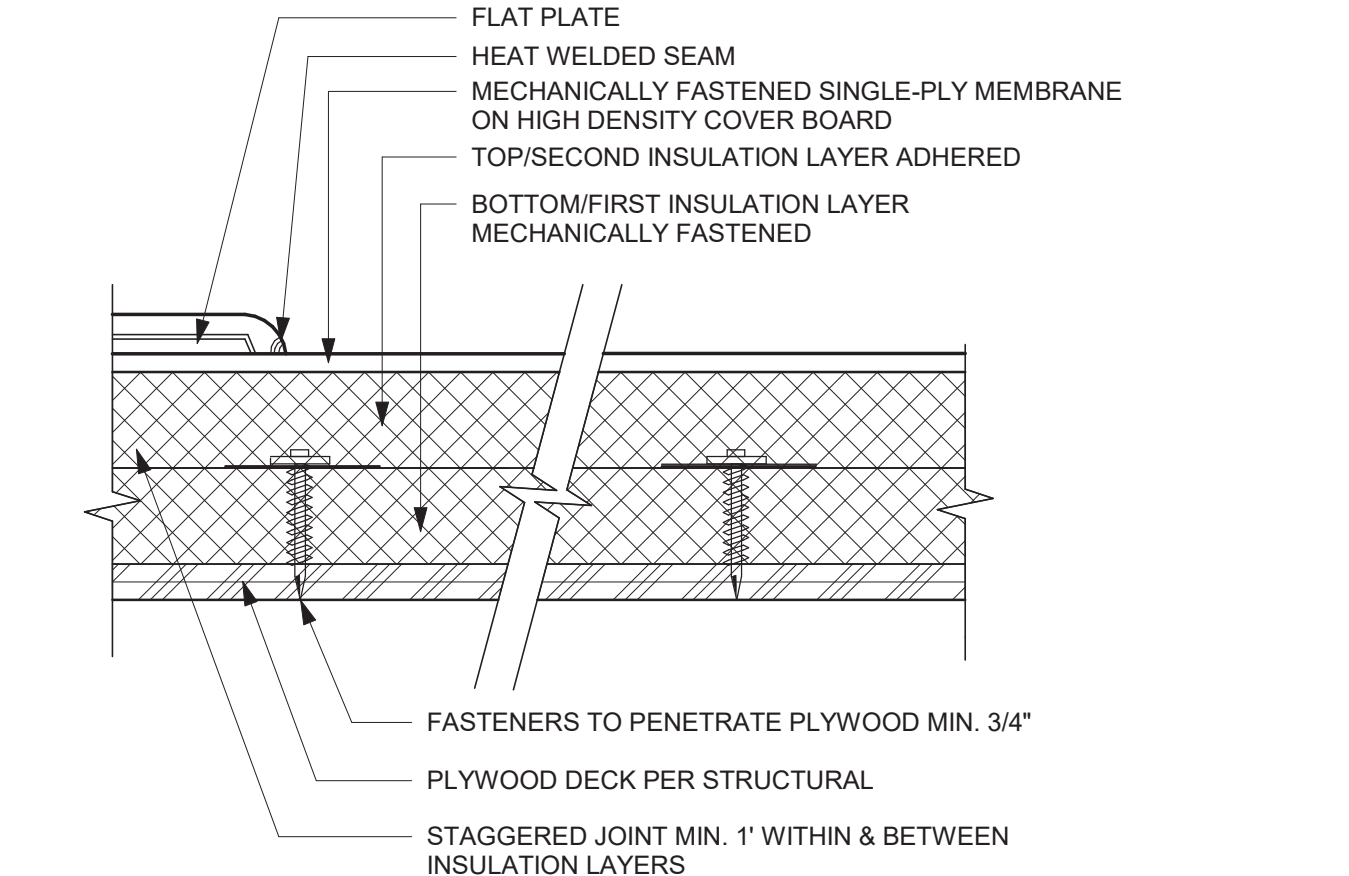
7 EQUIPMENT SUPPORT DETAIL
 Scale: NTS



2 SCUPPER / DOWNSPOUT DETAIL
 Scale: 1 1/2" = 1'-0"



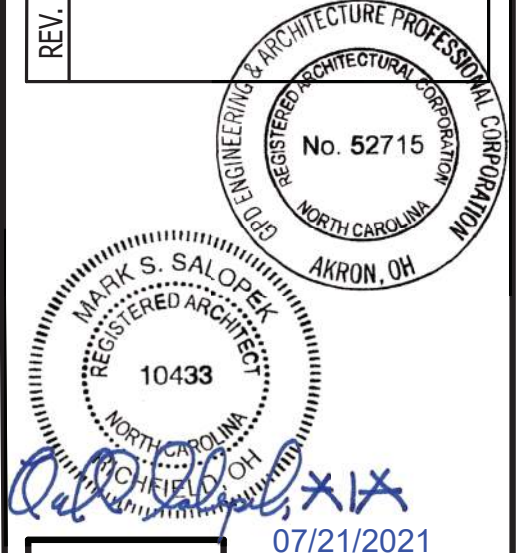
3 OVERFLOW SCUPPER DETAIL
 Scale: 1 1/2" = 1'-0"



4 ROOF SYSTEM ASSEMBLY
 Scale: 3" = 1'-0"

- NOTES *IF FIRESTONE TPO IS NOT SELECTED, USE DETAIL FROM TPO MANUFACTURER*
- REFER TO FIRESTONE WEBSITE FOR THE MOST CURRENT INFORMATION.
 - REMOVE ALL EXISTING FLASHING, LEAD, ETC. PIPE SURFACE MUST BE FREE OF ALL RUST, GREASE, INSULATION, ETC.
 - PIPE MUST BE ANCHORED TO ENSURE
 - 3" (75 mm) QS TAPE MUST BE INSTALLED WITH ULTRAPLY TPO QUICKPRIME.
 - DO NOT USE WHEN SERVICE LINE TEMP. EXCEEDS 180°F. REFER TO UT-P-6 & UT-P-7.
 - T-JOINT PATCH REQUIRED AT ALL VERTICAL TRANSITIONS ON NON-FACTORY WELDS
 - FIRESTONE FASTENER AND HD SEAM PLATE REQUIRE FOR MAS ONLY. IF FASTENER CANNOT BE INSTALLED AS ILLUSTRATED, CONTACT ROOFING MANUFACTURER.
 - CUT EDGE SEALANT SHALL BE APPLIED TO ANY EDGES WERE SCRIM REINFORCEMENTS IS EXPOSED PER DETAIL UT-LS-14.
 - FOR 20 YEAR WARRANTY, TOP TERMINATION OF SQUARE PIPE BOOT MUST BE FLASHED WITH 5.5" (140 mm) ULTRAPLY TPO QS FLASHING OVER THE 3" (75 mm) QS TAPE.

REV.	DATE	DESCRIPTION



SPOUT SPRINGS
 2778 NC-24
 CAMERON, NC 28236
 BUILDING DETAILS (ROOF)

PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
	-/-/-
RECORD	DATE
	-/-/-

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
 2020379.19

A5003

NOTE: 1. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 2. ROOFING SYSTEM TO BE CLASS "C" MIN.

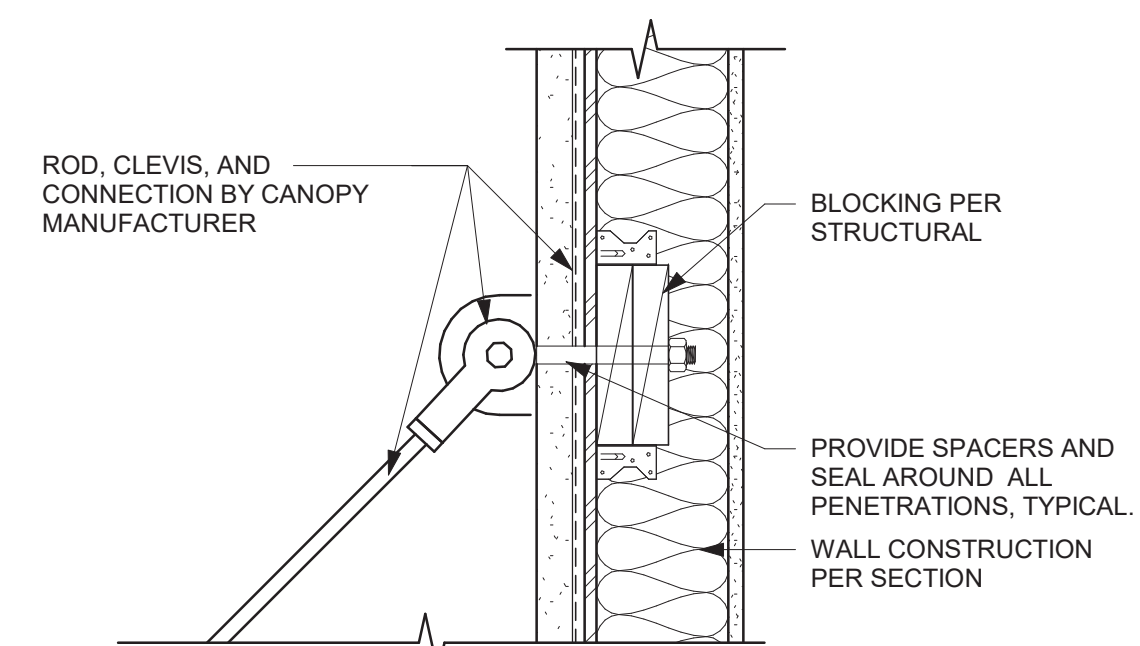
1 2 3 4 5

D

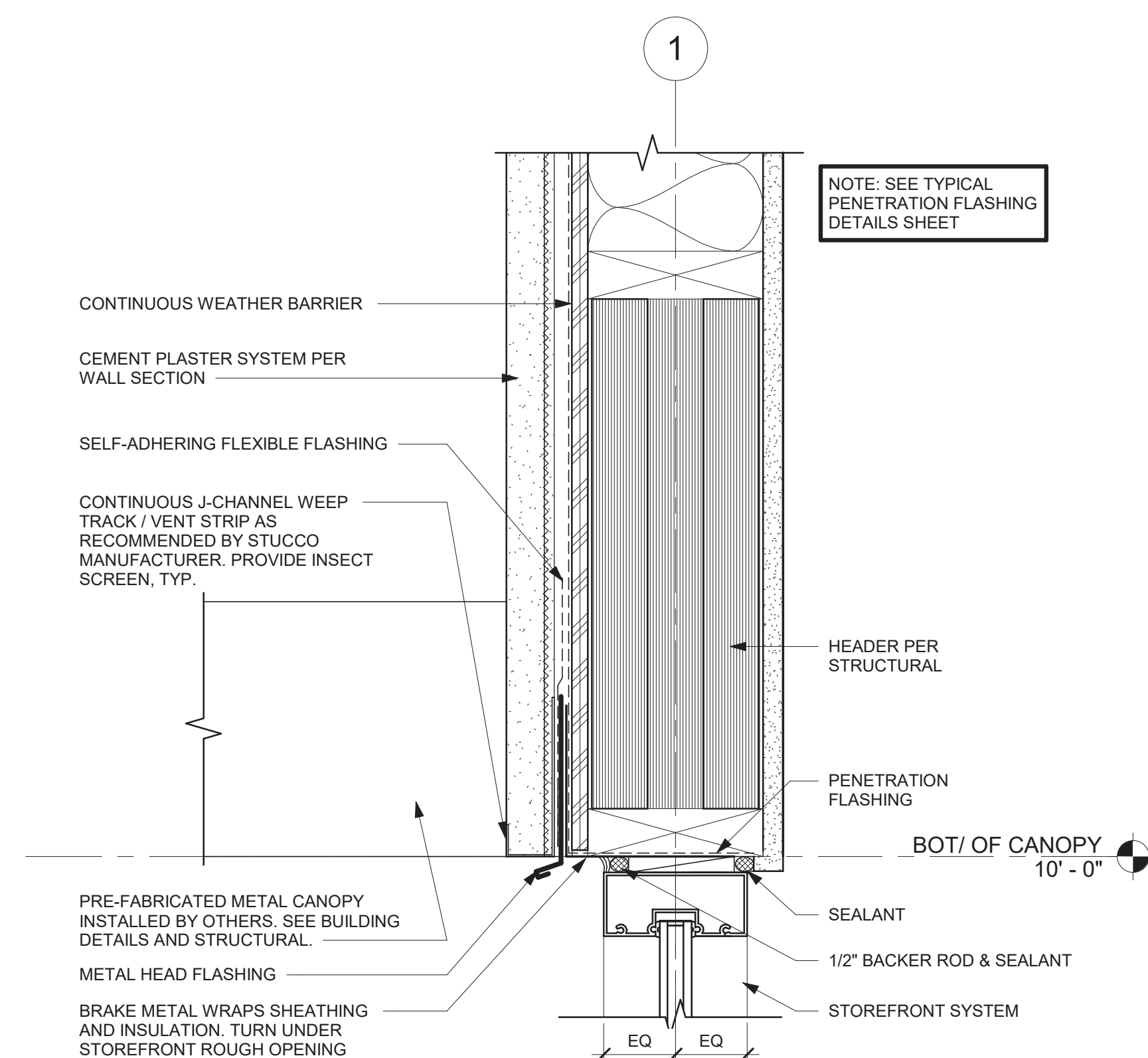
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B

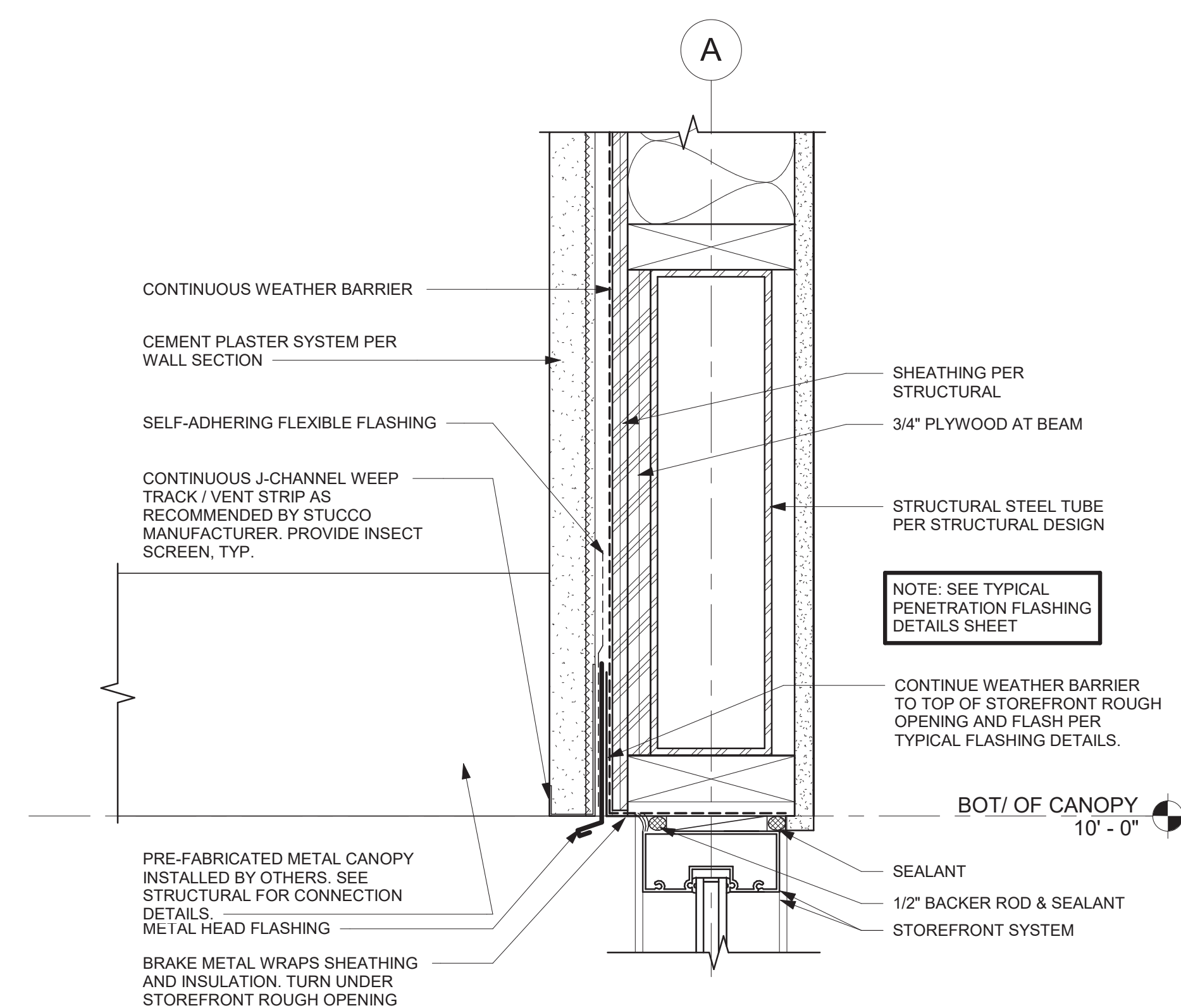
A



1 METAL PLATE ATTACHMENT
Scale: 1 1/2" = 1'-0"



2 SECTION DETAIL AT ENTRANCE CANOPY
Scale: 3" = 1'-0"



3 PATIO STOREFRONT HEAD (BETWEEN COLUMNS)
Scale: 3" = 1'-0"

REV.	DATE	DESCRIPTION

Professional Engineer
No. 52715
Mark S. Salopak
10433
07/21/2021

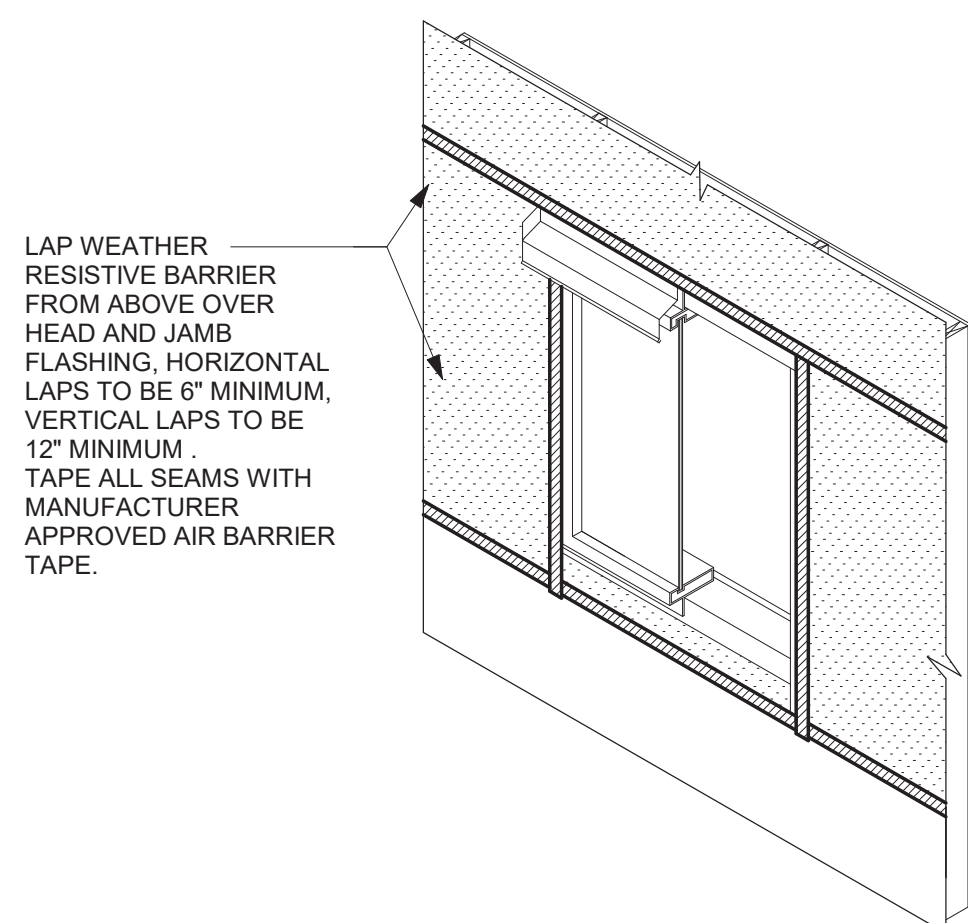
SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236
BUILDING DETAILS (CANOPY)

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	-/-/-
RECORD	-/-/-

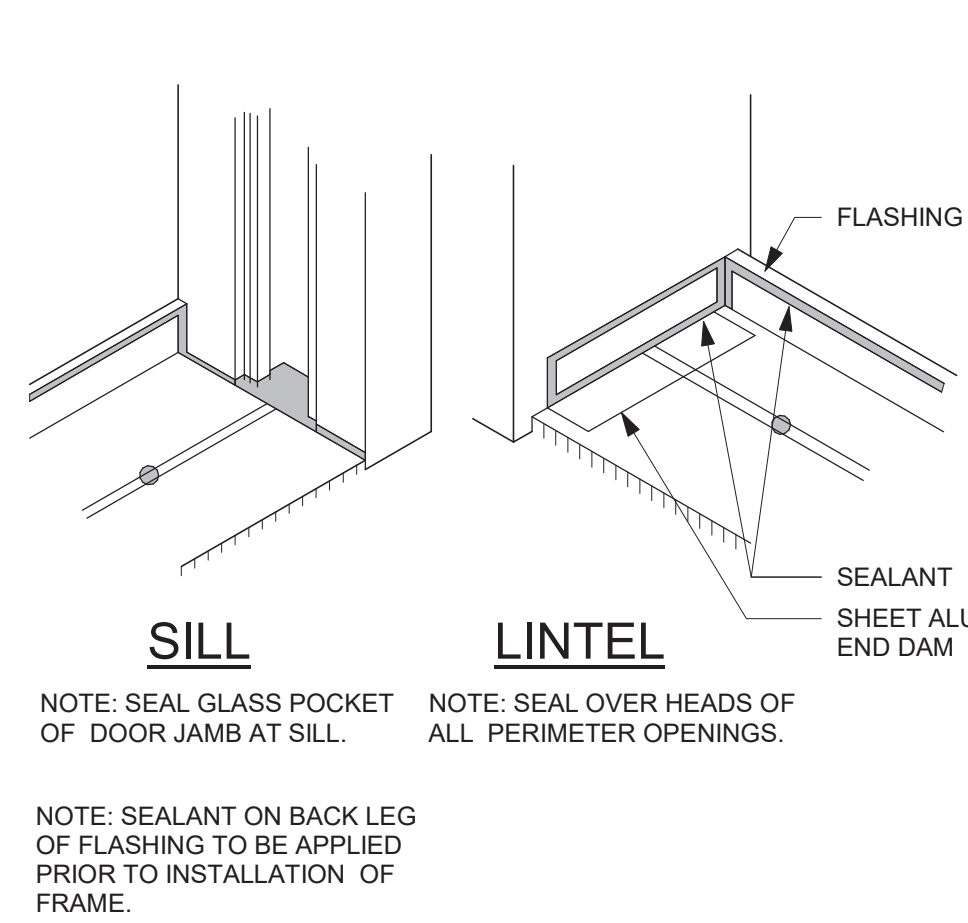
PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.19

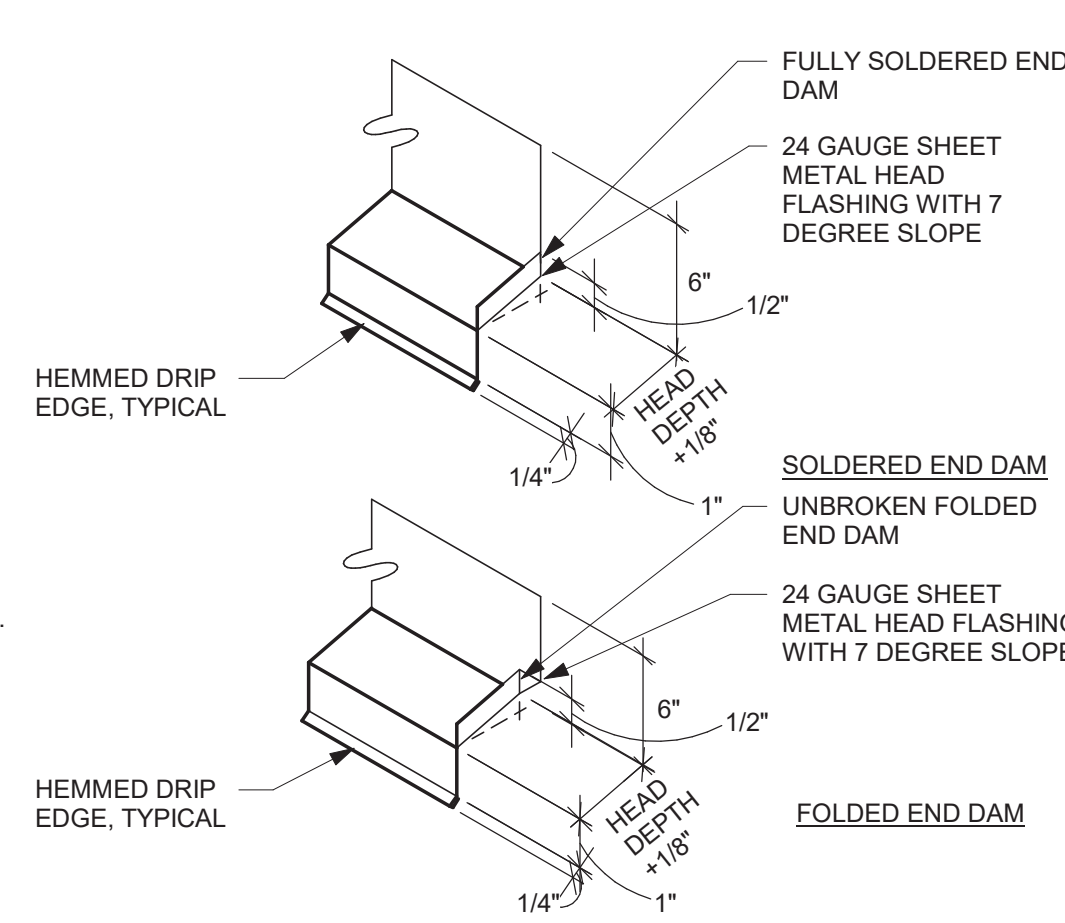
A5004



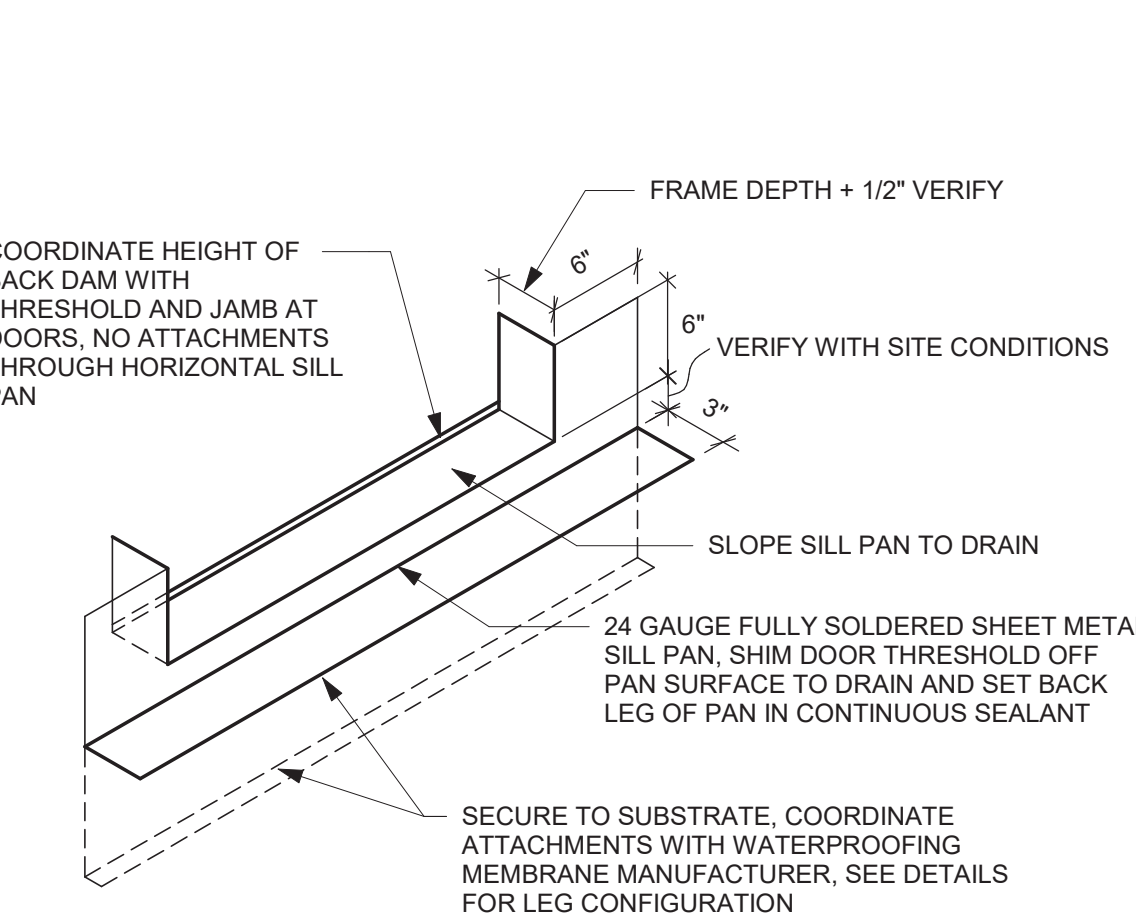
11 WEATHER RESISTIVE BARRIER
 Scale: 3/8" = 1'-0"



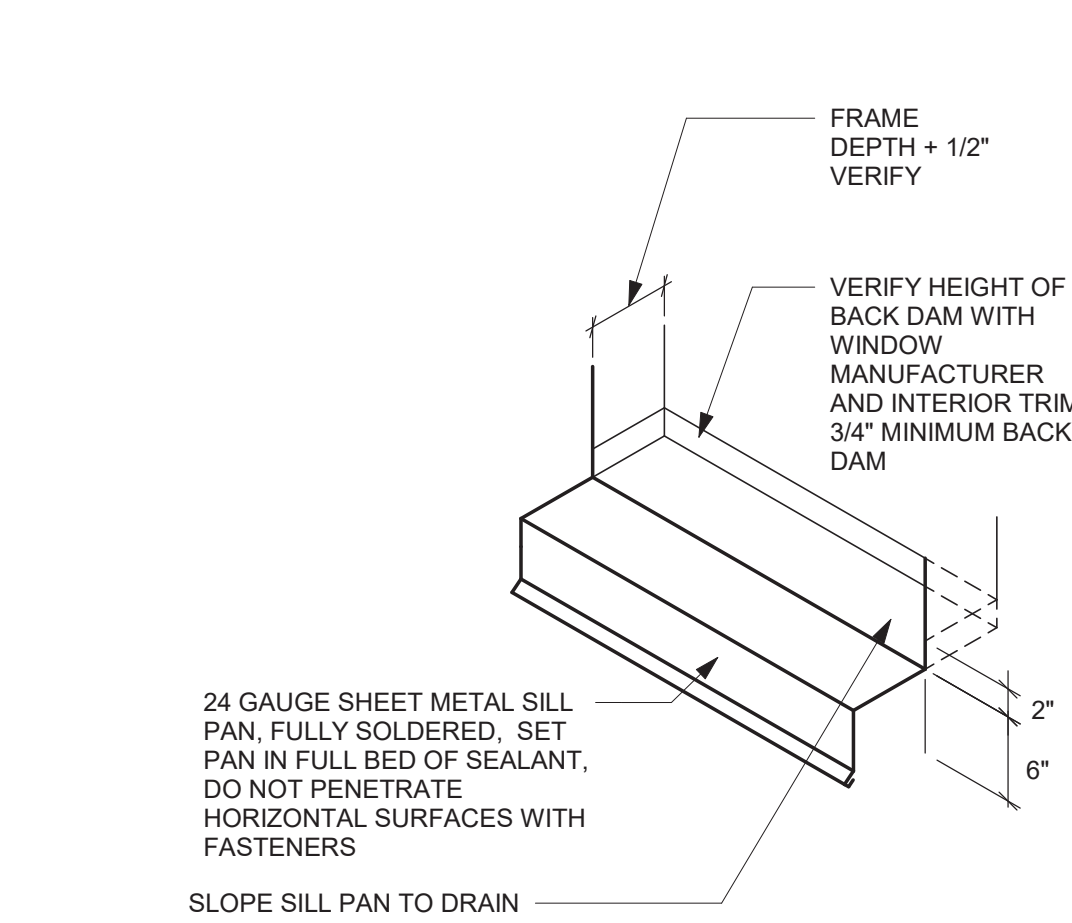
12 FLASHING DETAIL AT JAMB
 Scale: 1 1/2" = 1'-0"



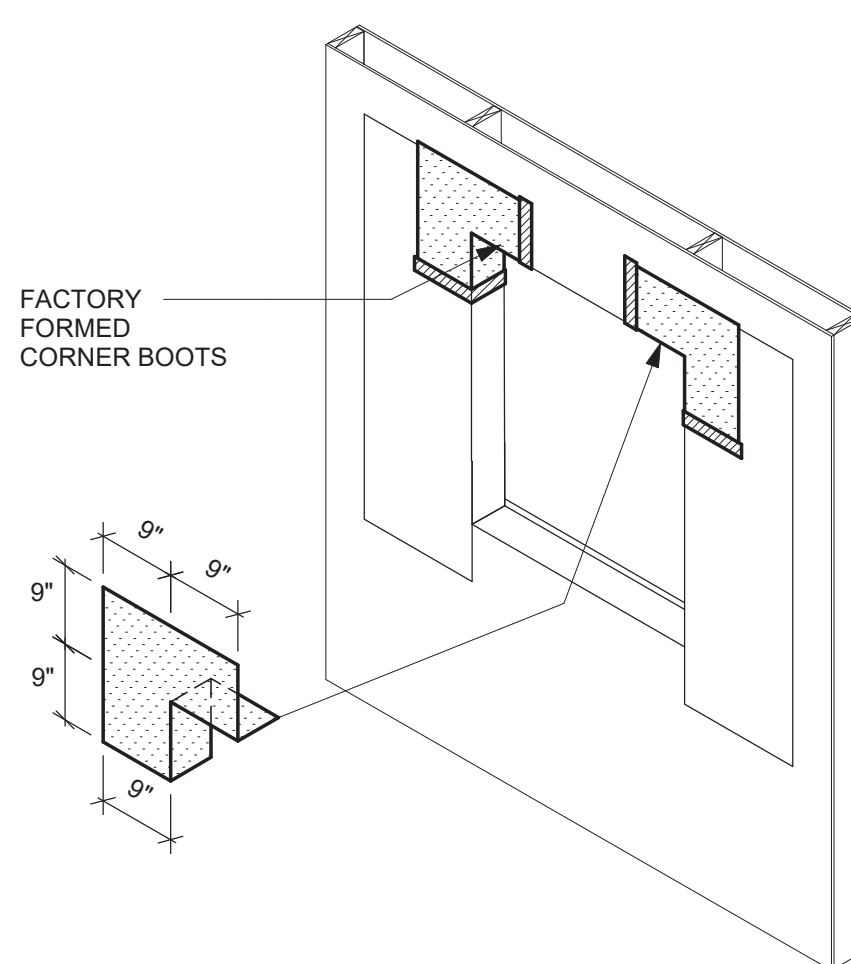
13 TYP. HEAD FLASHING
 Scale: 3/4" = 1'-0"



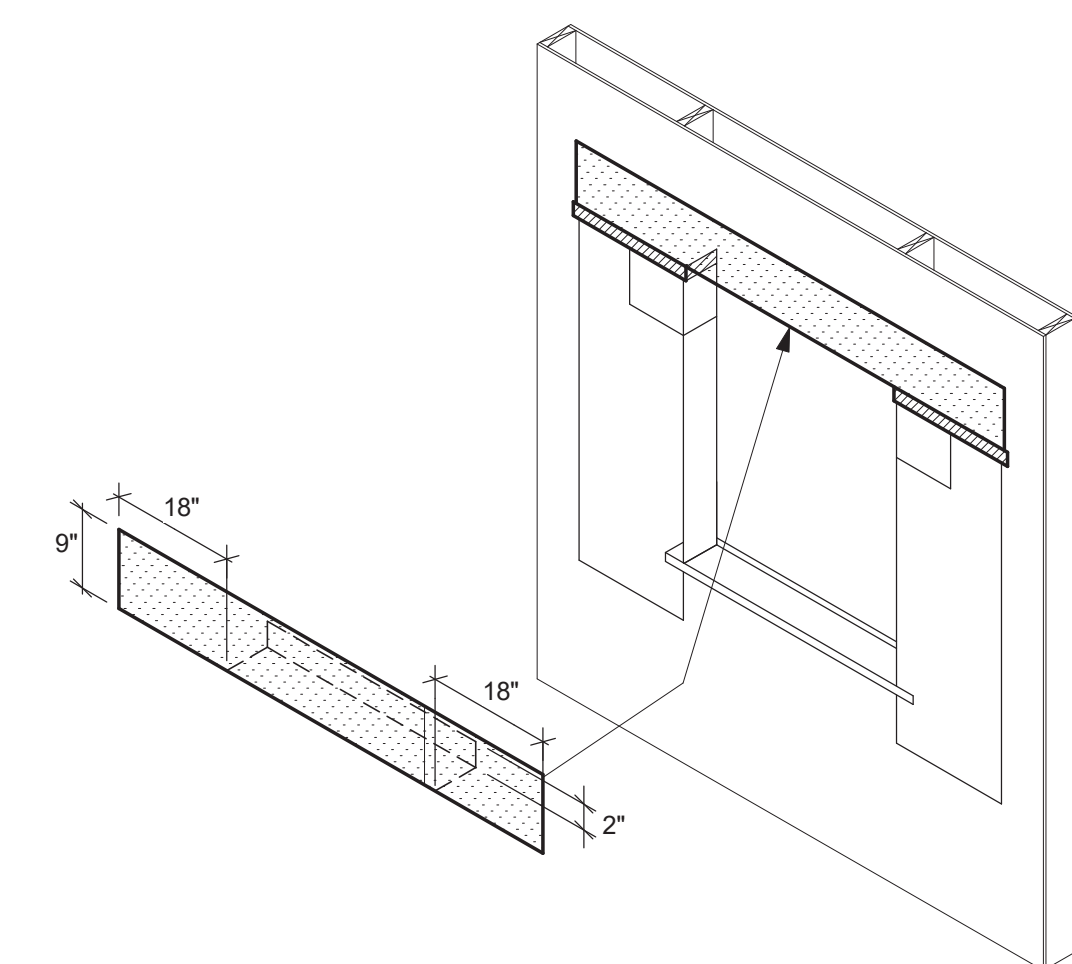
14 TYP. STOREFRONT & DOOR PAN (SHEET METAL)
 Scale: 1" = 1'-0"



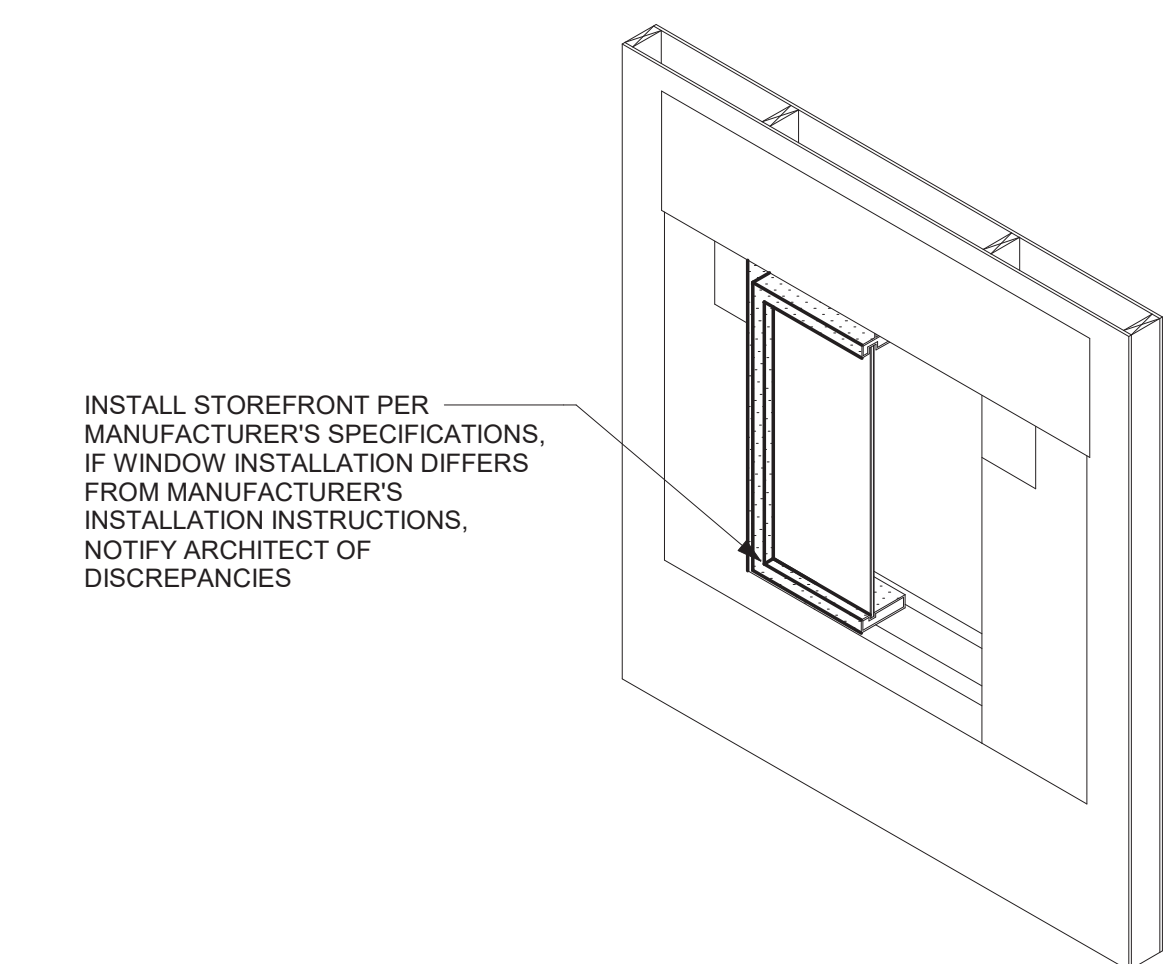
15 FLASHING - TYP. METAL WINDOW PAN
 Scale: 1" = 1'-0"



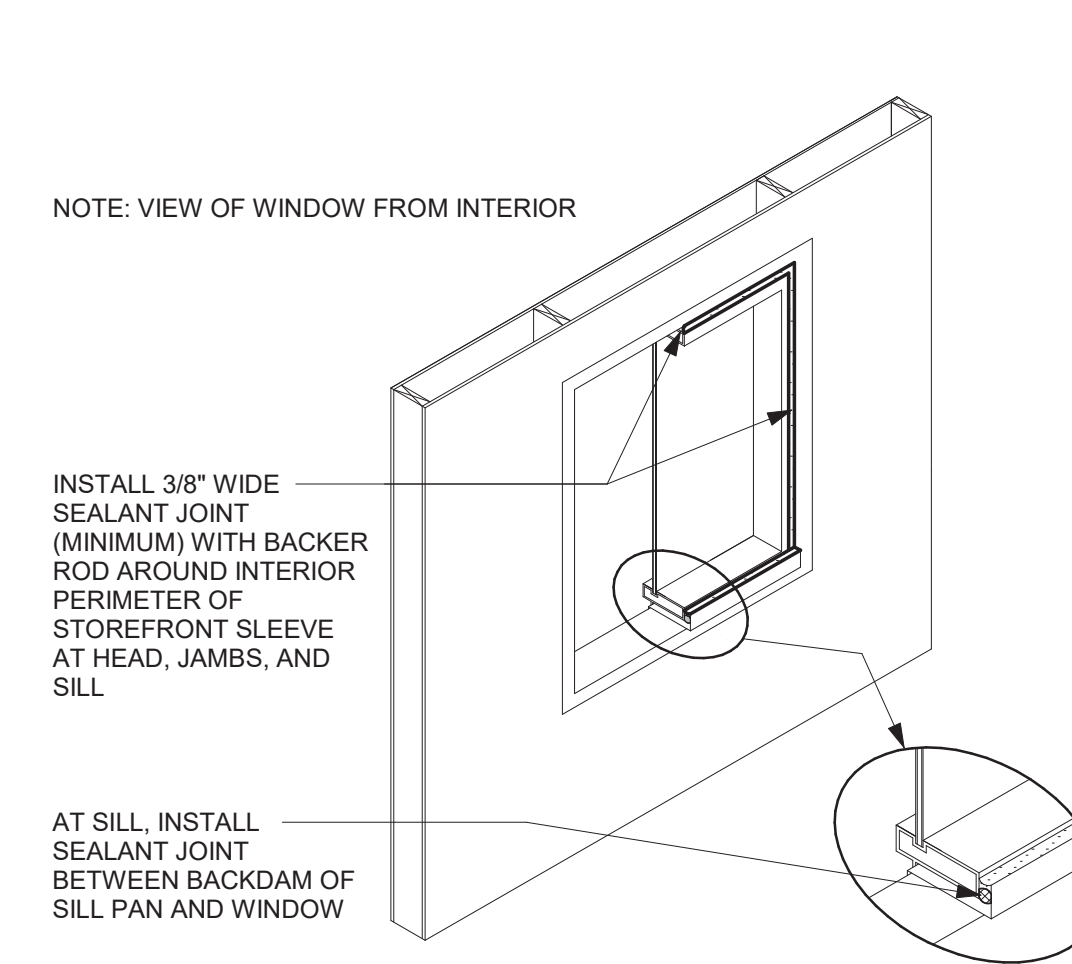
6 HEAD CORNER BOOTS
 Scale: 3/8" = 1'-0"



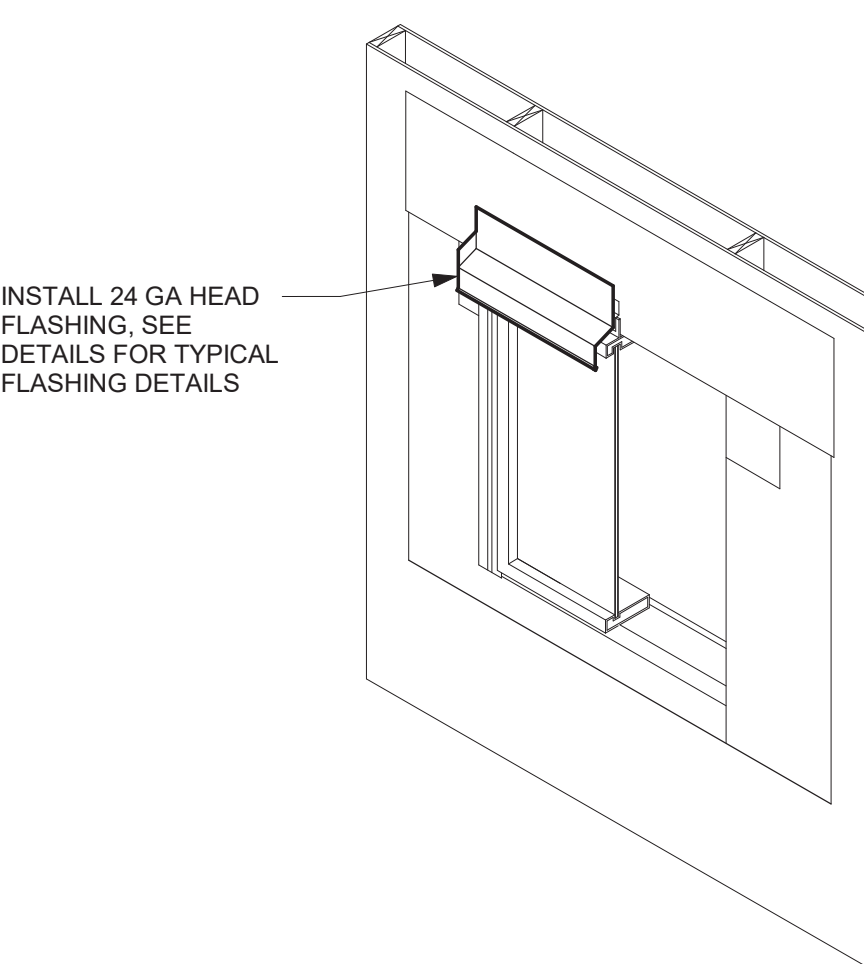
7 HEAD PENETRATION FLASHING
 Scale: 3/8" = 1'-0"



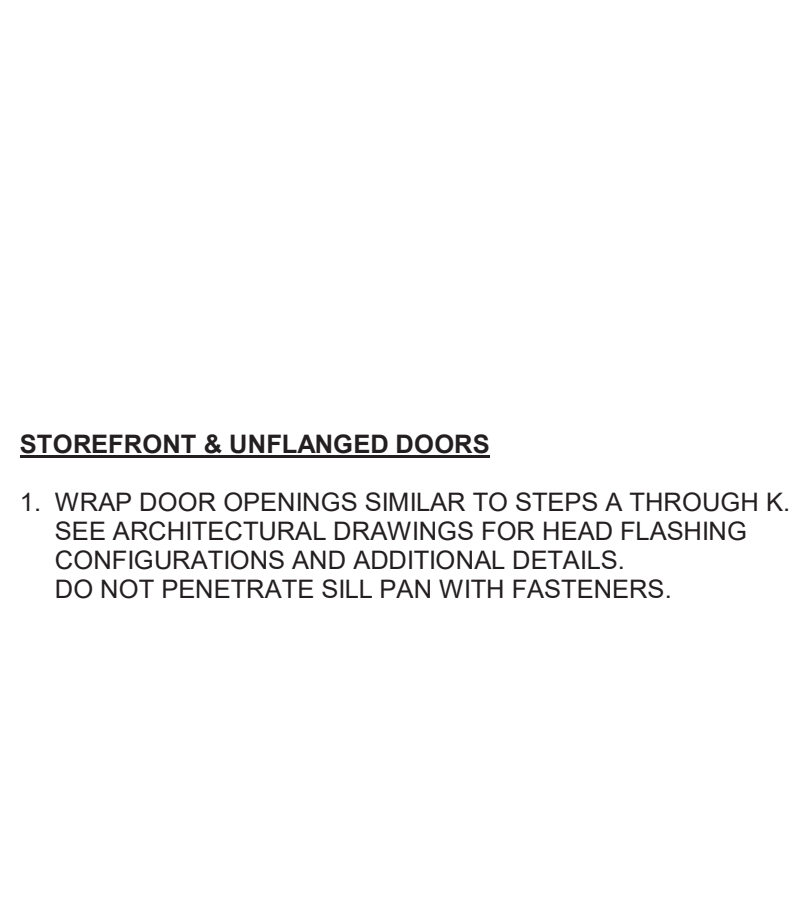
8 STOREFRONT
 Scale: 3/8" = 1'-0"



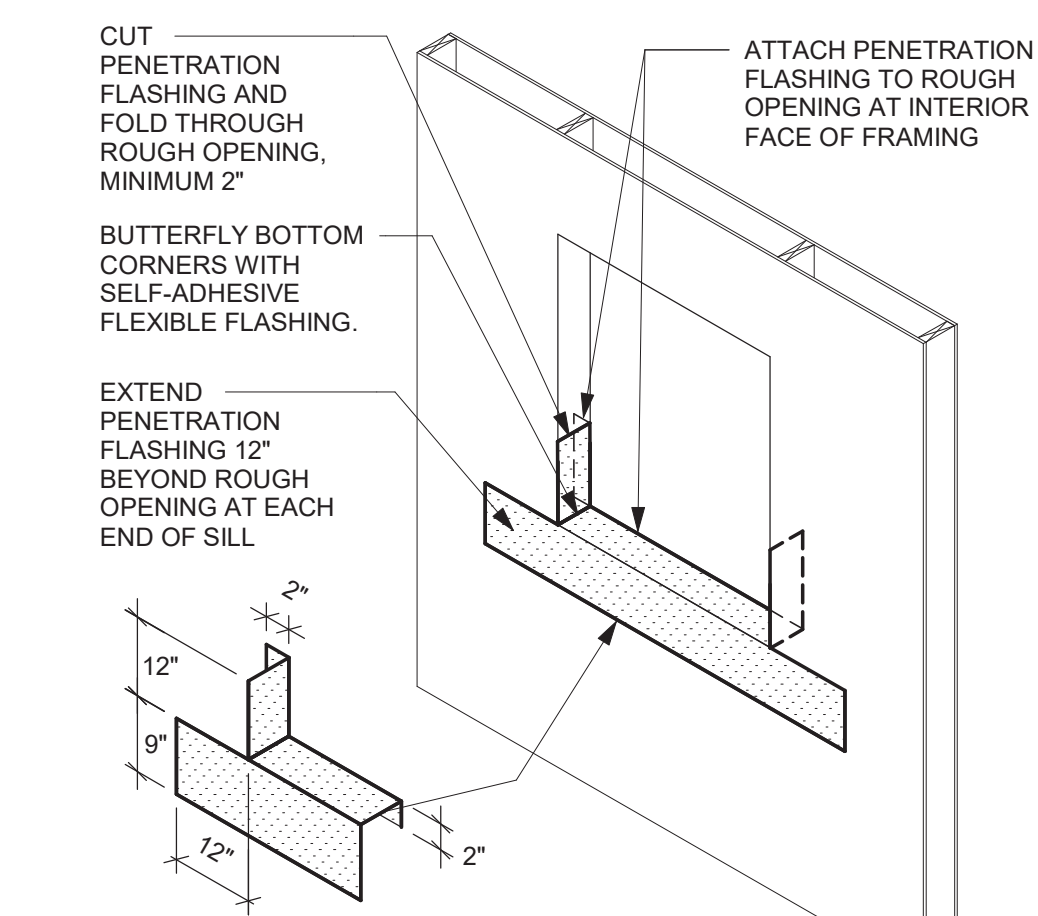
9 INTERIOR SEALANT JOINT
 Scale: 3/8" = 1'-0"



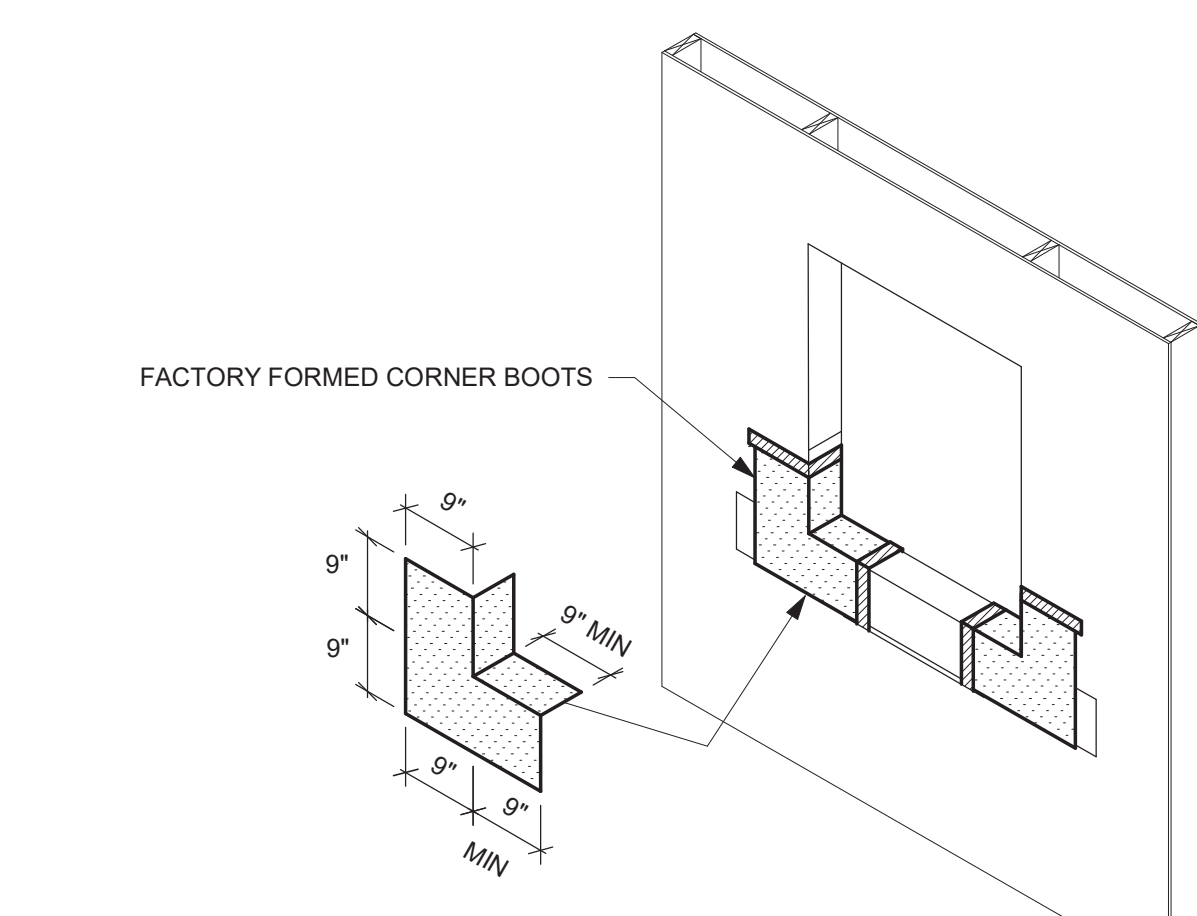
10 HEAD FLASHING
 Scale: 3/8" = 1'-0"



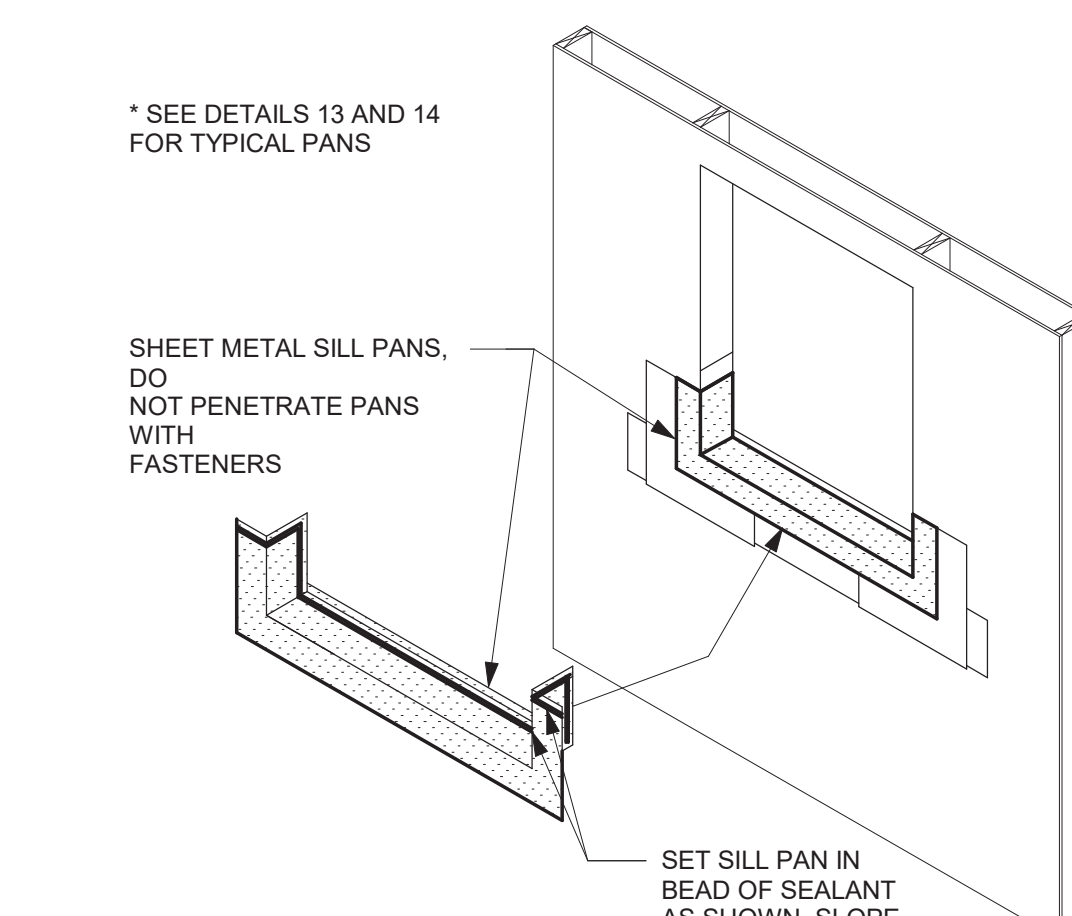
1 PENETRATION WRAP NOTES
 Scale: 3/8" = 1'-0"



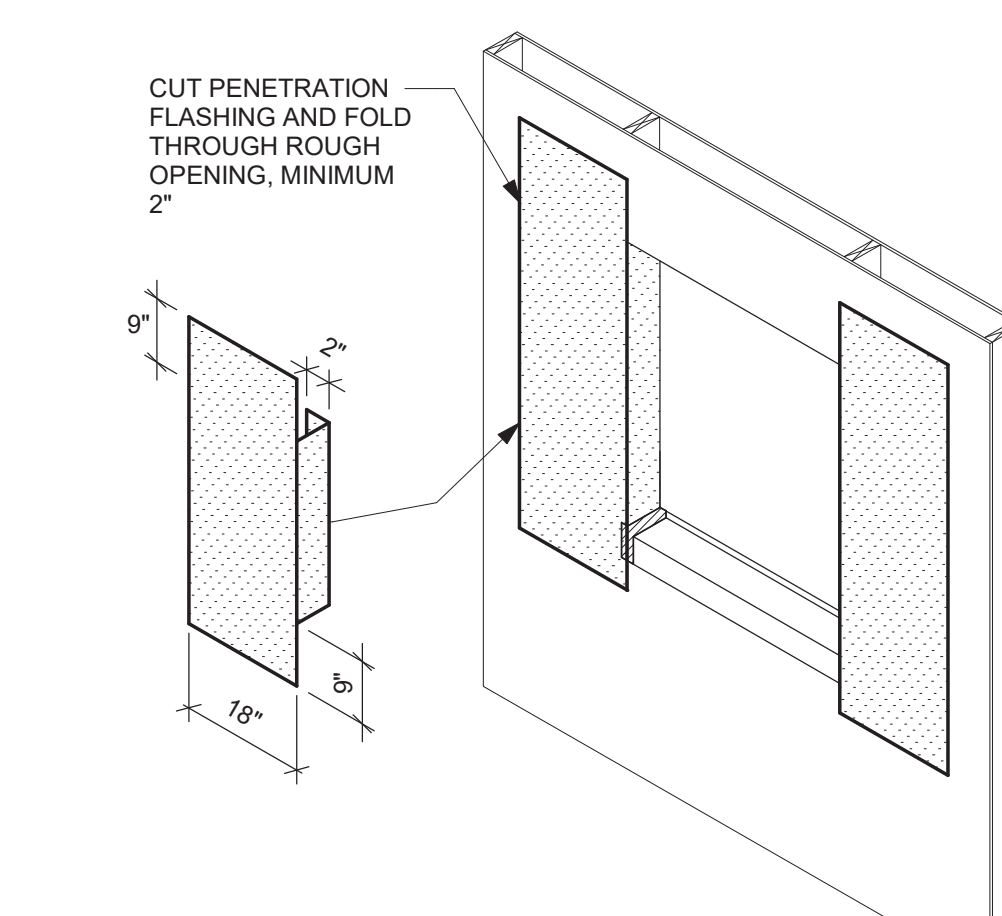
2 SILL PENETRATION FLASHING
 Scale: 3/8" = 1'-0"



3 SILL CORNER BOOTS
 Scale: 3/8" = 1'-0"

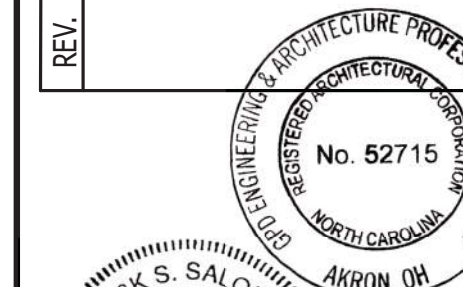


4 SILL PAN
 Scale: 3/8" = 1'-0"



5 JAMB PENETRATION FLASHING
 Scale: 3/8" = 1'-0"

REV.	DATE	DESCRIPTION



07/21/2021

SPOUT SPRINGS
 2778 NC-24
 CAMERON, NC 28236
 TYPICAL PENETRATION FLASHING
 DETAILS

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	-/-/-
RECORD	-/-/-

PROJECT MANAGER	DESIGNER
AK	DB

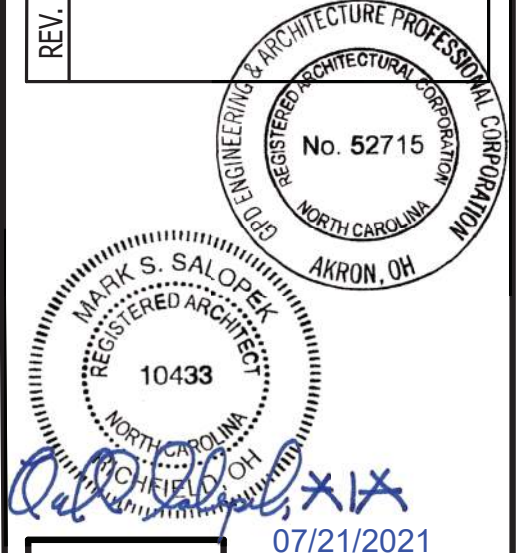
JOB NO.
 2020379.19

A6001

GENERAL NOTES

- A. STARBUCKS VENDOR TO PROVIDE DOOR HARDWARE COMPONENTS. GC TO INSTALL.
- B. SEE SHEET A1101 FOR TAGGED LOCATION OF EXTERIOR DOORS AND WINDOWS AND ASSOCIATED JAMB DETAILS.
- C. EGRESS SHALL NOT PASS THROUGH KITCHENS, STORAGE ROOMS, CLOSETS OR SIMILAR SPACES.
- D. PANIC AND FIRE EXIT HARDWARE, WHERE INSTALLED ON DOORS IN THIS BUILDING SHALL SATISFY THE FOLLOWING:
 - a) THE ACTUATION PORTION OF THE RELEASING DEVICE SHALL EXTEND AT LEAST ONE-HALF OF THE DOOR LEAF WIDTH.
 - b) THE MAXIMUM UNLATCHING FORCE DOES NOT EXCEED 15 POUNDS (6.8 KG).
 - c) PIVOTED OR BALANCED DOORS SHALL BE OF THE PUSH-PAD TYPE WHERE PANIC HARDWARE IS REQUIRED AND THE PAD SHALL NOT EXTEND ACROSS MORE THAN ONE-HALF OF THE DOOR.
 - d) PANIC HARDWARE LISTED IN ACCORDANCE WITH UL 305.
 - e) FIRE EXIT HARDWARE LISTED IN ACCORDANCE WITH UL 10C AND UL 305.

REV.	DATE	DESCRIPTION



SPROUT SPRINGS
2778 NC-24
CAMERON, NC 28236

DOOR & STOREFRONT SCHEDULES

PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
	--/--
RECORD	DATE
	--/--

PROJECT MANAGER	DESIGNER
AK	DB

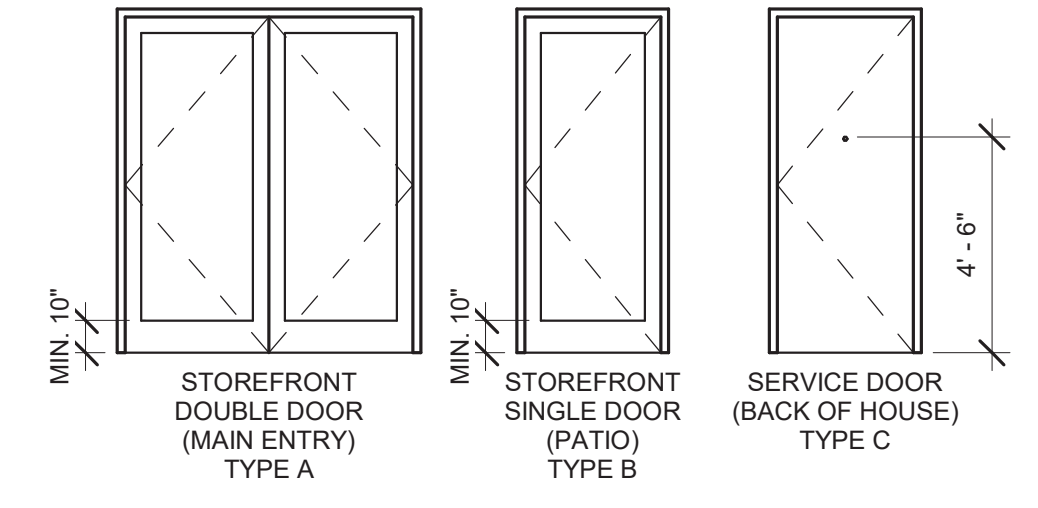
JOB NO.
2020379.19

A6002

WINDOW SCHEDULE - "W"			
DESIGN ID	COUNT	DESCRIPTION	COMMENTS
X0001	1	NORTH FACADE STOREFRONT	1" CLEAR INSULATED GLASS
X0002	1	PATIO FACADE STOREFRONT	1" CLEAR INSULATED GLASS
X0003	1	PATIO FACADE STOREFRONT	1" CLEAR INSULATED GLASS
X0004	1	PATIO FACADE STOREFRONT	1" CLEAR INSULATED GLASS
X0005	1	MAIN ENTRY FACADE STOREFRONT	1" CLEAR INSULATED GLASS
X0006	1	MAIN ENTRY FACADE STOREFRONT	1" CLEAR INSULATED GLASS
X0007	2	MAIN ENTRY FACADE STOREFRONT	1" CLEAR INSULATED GLASS
X0008	1	MAIN ENTRY FACADE STOREFRONT	1" CLEAR INSULATED GLASS
X0009	1	DT BUMP STOREFRONT	1" CLEAR INSULATED GLASS
X0010	1	DT BUMP STOREFRONT	1" CLEAR INSULATED GLASS
X0011	1	DT BUMP STOREFRONT	1" CLEAR INSULATED GLASS
WINDOW			
21347	1	WINDOW - DT WITH SPLIT TRANSOM - 48X60IN 1205X1510MM - LOW E INSULATED GLASS	

EXTERIOR DOOR SCHEDULE - "D"						
DESIGN ID	COUNT	DESCRIPTION	HEIGHT	WIDTH	FINISH	COMMENTS
DOOR						
10205	1	DOOR - STOREFRONT METAL FRAME SINGLE - TYPE B	7' - 0"	3' - 0"	ANODIZED	HARDWARE TYPE 2-A
10449	1	DOOR - STOREFRONT METAL FRAME DOUBLE - TYPE A	7' - 0"	6' - 0"	ANODIZED	HARDWARE TYPE 3-A
X10111	1	HOLLOW METAL EXTERIOR SERVICE DOOR - TYPE C	7' - 0"	3' - 6"	DESIGNER TO SPECIFY	HARDWARE TYPE 12

EXTERIOR DOOR LEGEND



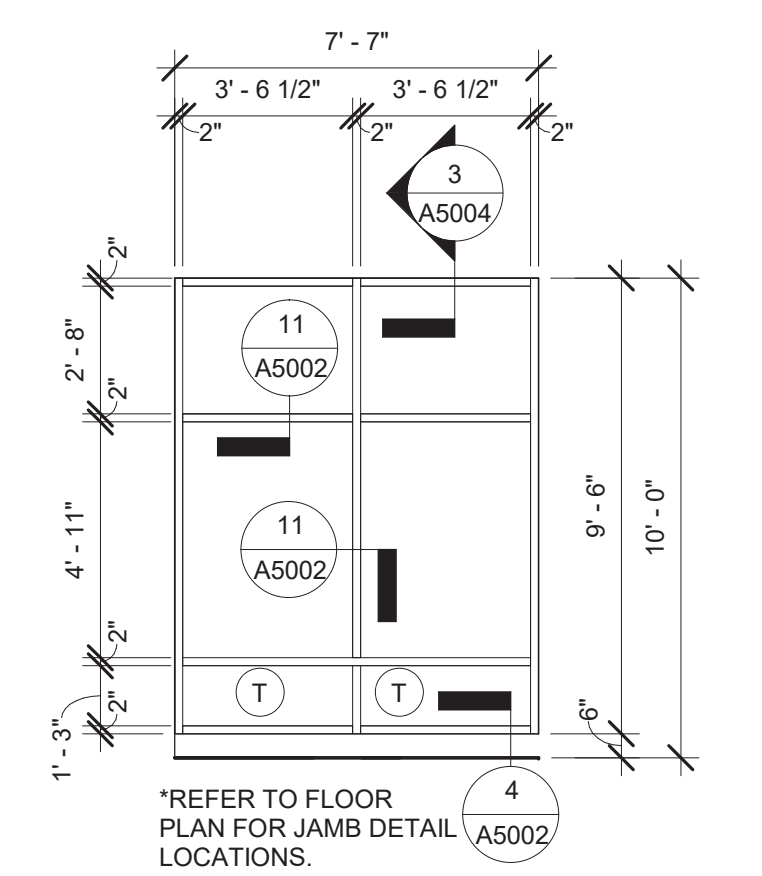
DOOR HARDWARE SET NO. 2-A - For new single aluminum secondary entry/exit door (50 or more occupancy)				
No.	Item	Description	Manufacturer	Finish
3	Hanging Devices	TH2314/MPB91	McKinney	630
1	Securing Devices	CD35A-NL-OP Panic Device	Von Duprin	628/630
2	Securing Devices	C607 7-Pin Core Combined "A" Keyway	Falcon Lock	626
1	Securing Devices	KB609-2 Cut Control Key "A" Keyway	Falcon Lock	---
9	Securing Devices	KB632-2 Cut User Key "A" Keyway	Falcon Lock	---
1	Securing Devices	C953 7-Pin Mortise Cylinder Housing	Falcon Lock	626
1	Securing Devices	C987 7-Pin Mortise Cylinder Housing w/AR Cam	Falcon Lock	626
1	Securing Devices	A08794-003 Adjustable Ring, Mortise Cyl. 5/16-13/32	Falcon Lock	626
1	Operating Trim	108 Door Pull Handle	Rockwood	630
1	Closing Devices	8916 Door Closer 8916 AF89P AL	Dorma	689
1	Stops and Holders	473 Door Stop w/Hook	Rockwood	626
1	Threshold	325 Half Saddle Threshold	National Guard	---
1	Sign	Vinyl Sign: "THIS DOOR MUST REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED"	Seton	---

*DOOR HARDWARE FINISH TO MATCH ADJACENT STOREFRONT FINISH, IF AVAILABLE.

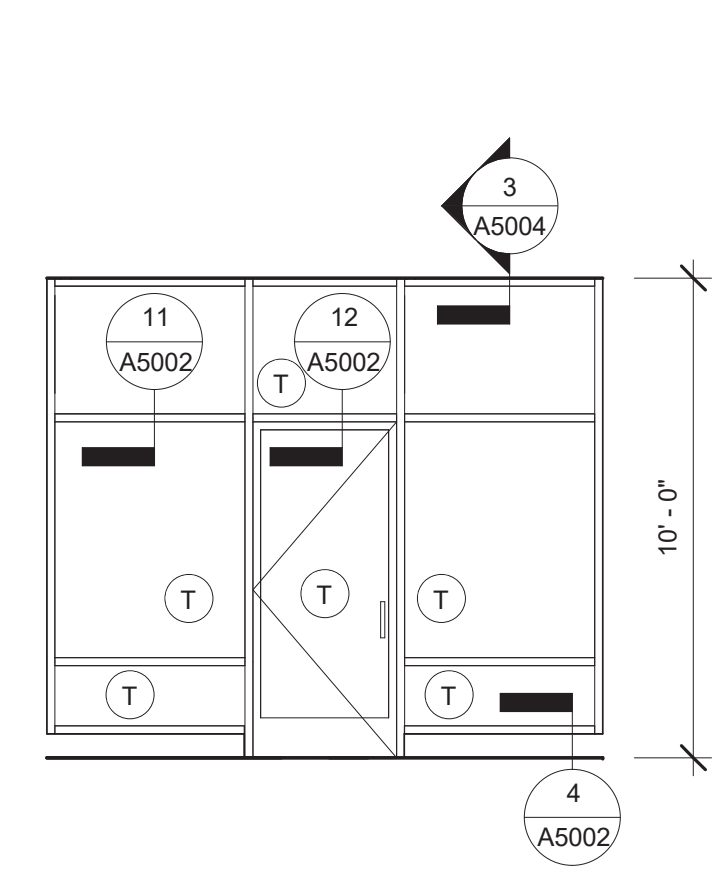
DOOR HARDWARE SET NO. 3-A - For pair aluminum main entry/exit doors (300 or less occupancy)				
No.	Item	Description	Manufacturer	Finish
6	Hanging Devices	TH2314/MPB91	McKinney	630
1	Securing Devices (active leaf)	MS1850S Deadbolt	Adams Rite	626
1	Securing Devices (inactive...)	MS1880 Two-Point Flushbolt	Adams Rite	626
2	Securing Devices (active leaf)	C607 7-Pin Core Combined "A" Keyway	Falcon Lock	626
1	Securing Devices (active leaf)	KB609-2 Cut Control Key "A" Keyway	Falcon Lock	---
9	Securing Devices (active leaf)	KB632-2 Cut User Key "A" Keyway	Falcon Lock	---
2	Securing Devices (active leaf)	C987 7-Pin Mortise Cylinder Housing w/AR Cam	Falcon Lock	626
2	Securing Devices (active leaf)	A08794-003 Adjustable Ring, Mortise Cyl. 5/16-13/32	Falcon Lock	626
2	Operating Trim	108 Door Pull Handle	Rockwood	630
2	Operating Trim	48 Push Bar x 31	Rockwood	630
2	Closing Devices	8916 Door Closer 8916 AF89P AL	Dorma	689
2	Stops and Holders	473 Door Stop w/Hook	Rockwood	626
2	Accessories	Door Sweep 18062CNB36	Pemko	A
1	Threshold	325 Half Saddle Threshold	National Guard	---
1	Sign	Vinyl Sign: "THIS DOOR MUST REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED"	Seton	---

*DOOR HARDWARE FINISH TO MATCH ADJACENT STOREFRONT FINISH, IF AVAILABLE.

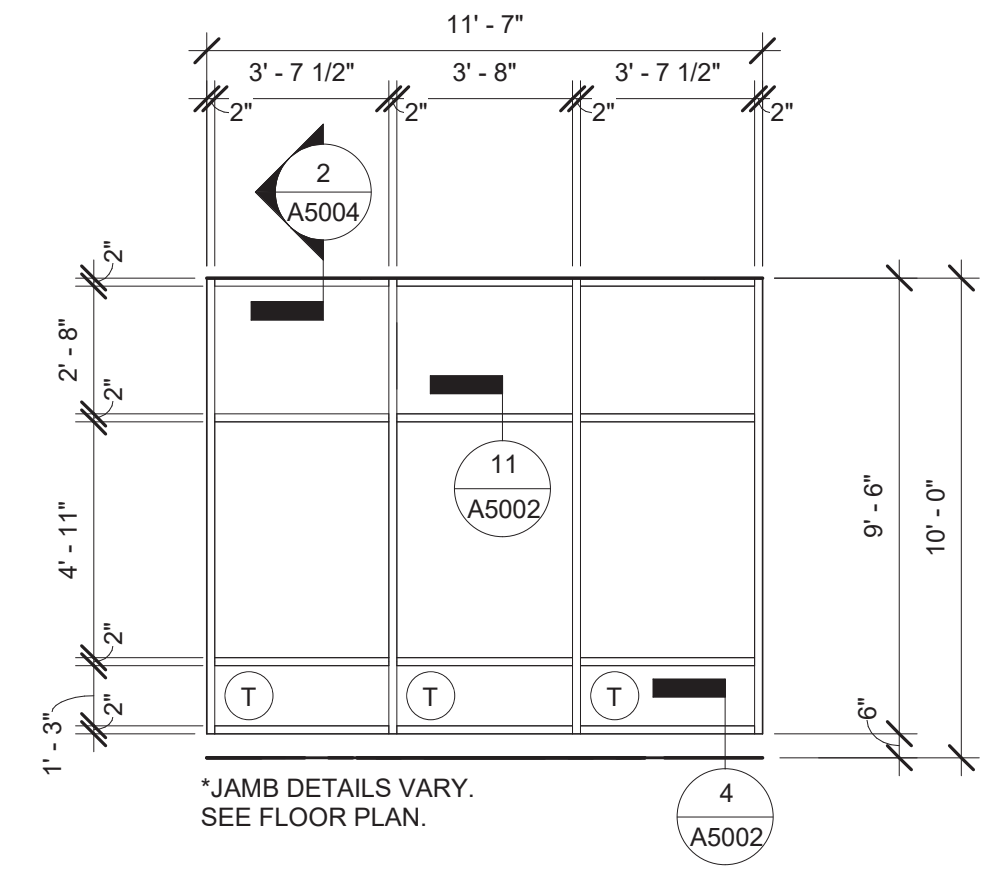
DOOR HARDWARE SET NO. 12 - For secondary 36" wide service door				
No.	Item	Description	Manufacturer	Finish
3	Hanging Devices	TH2314/MPB91 Hinge MacPro Bearing 4.5 x 4.5	McKinney	630
1	Securing Devices	C607 7-Pin Core Combined "A" Keyway	Falcon Lock	626
1	Securing Devices	I/O 2000L-03IC Auto Locking Door Alarm, IC. No CTR Includes Mortise Cylinder	Sur-Lock	---
1	Closing Devices	8916 Door Closer 8916 AF89P	Dorma	689
1	Protective Trim Units	K1050 B4E Kickplate 8" x 34"	Rockwood	630
1	Accessories	137NA Weather Strip 17" 36" x 84"	National Guard	A
1	Accessories	Door Sweep 18062CNB36	Pemko	A
1	Miscellaneous Items	DS/1000 Door Scope	Security...	Silver
1	Miscellaneous Items	MCV309NWHGL Door Bell	Nutone	As Selected



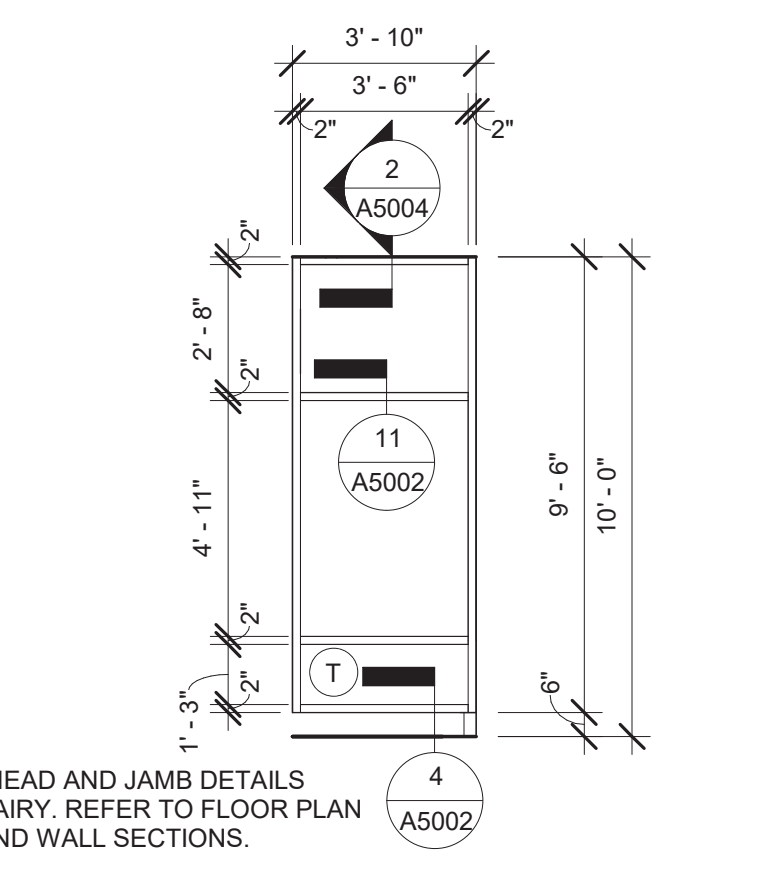
1 STOREFRONT X0002 / X0004
Scale: 1/4" = 1'-0"



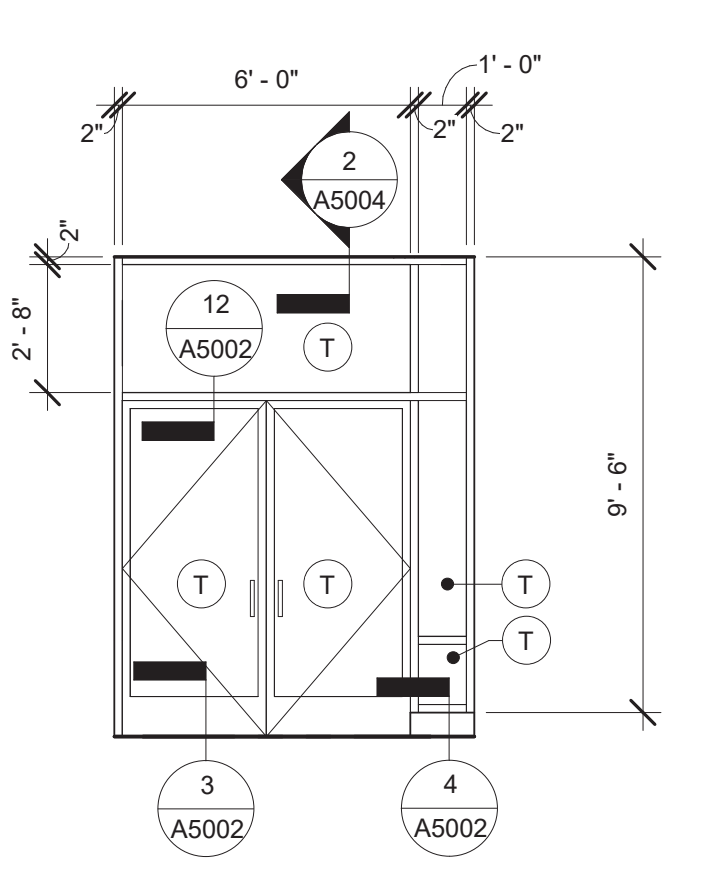
2 STOREFRONT X0003
Scale: 1/4" = 1'-0"



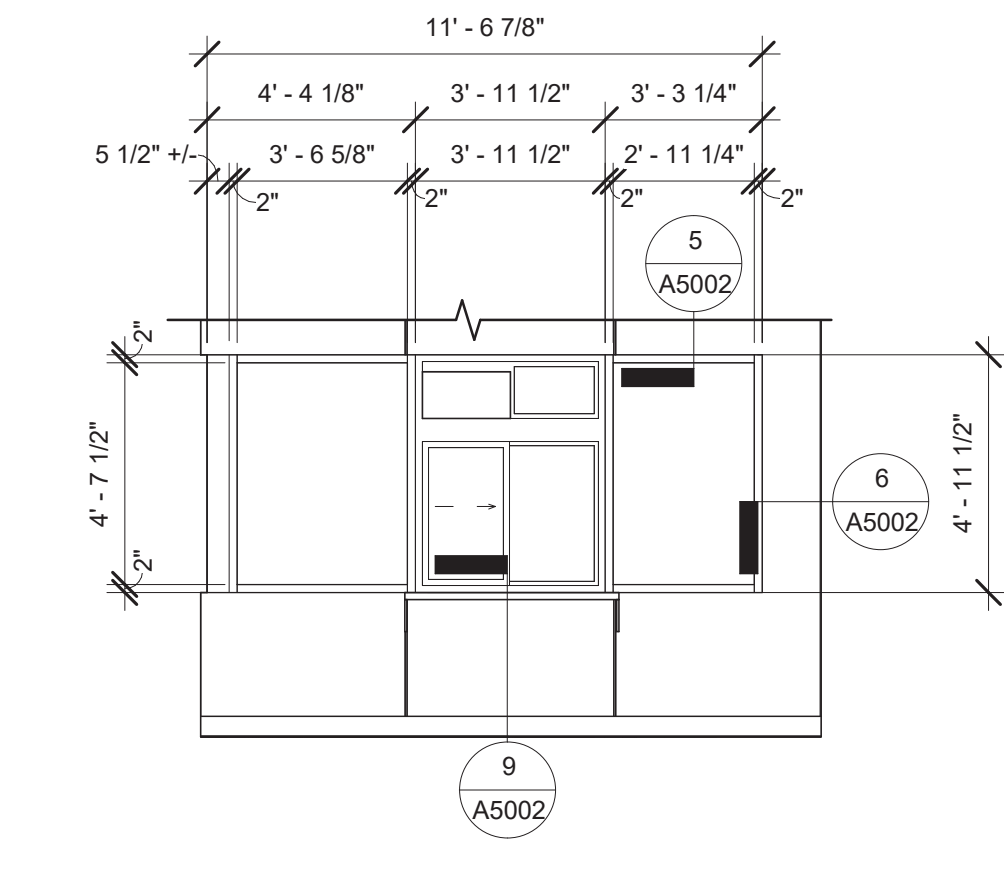
3 STOREFRONT X0005 / X0006
Scale: 1/4" = 1'-0"



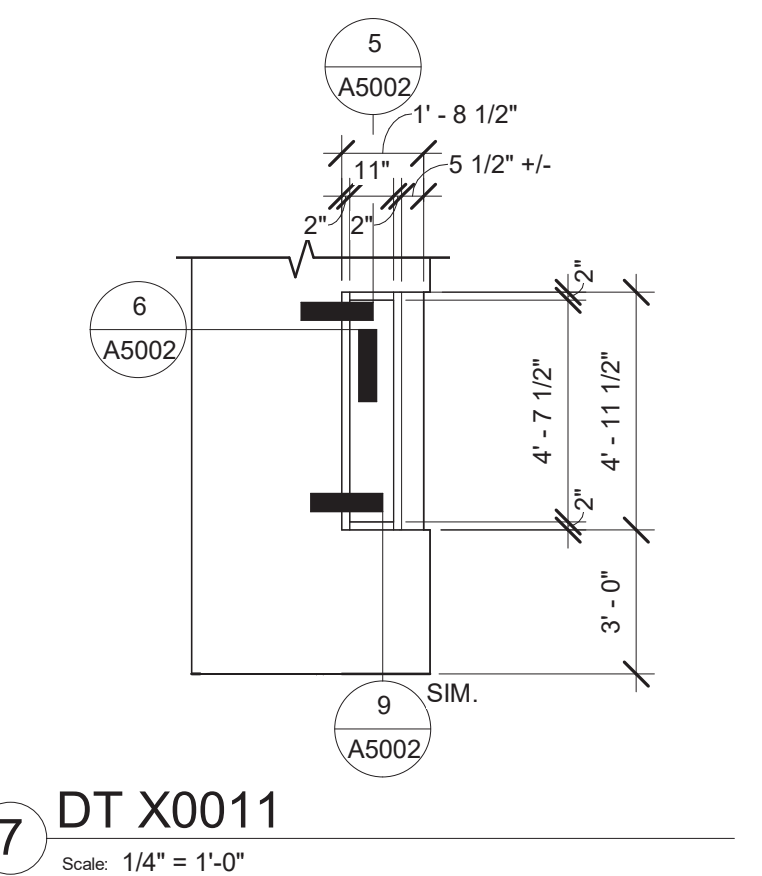
4 STOREFRONT X0001 / X0007
Scale: 1/4" = 1'-0"



5 STOREFRONT X0008
Scale: 1/4" = 1'-0"



6 DT X0009 / X0010 / X10889
Scale: 1/4" = 1'-0"



7 DT X0011
Scale: 1/4" = 1'-0"

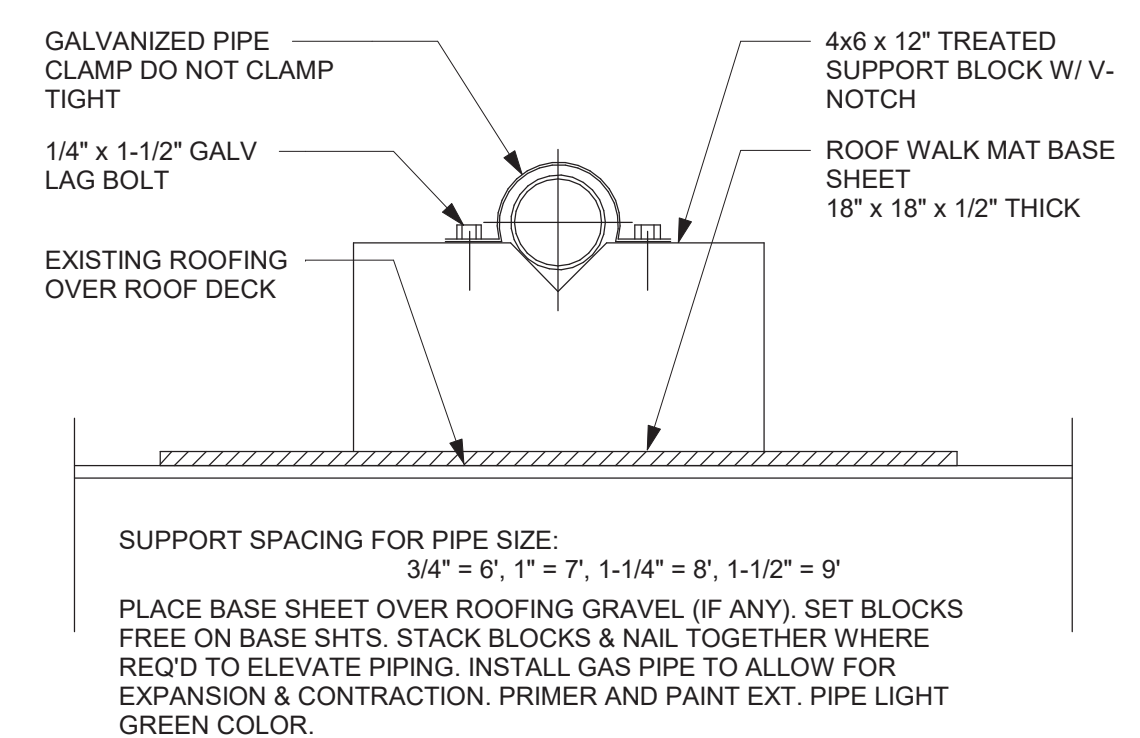
HVAC UNIT SCHEDULE SHELL																					
DESIGN ID	AREA SERVED	MANUFACTURER	MODEL	COOLING(MBH)95°F OA, 80° DB, AND 67°F WB				HEATING(MBH)				ECONOMIZER	DCV	VOLTAGE/PHASE/MCA/MOCP	INDOOR FAN SPEEDS	BLOWER HP	BLOWER CFM	BLOWER ESP*WG	UNIT WEIGHT(LBS.)	NOTES	
				COOLING STAGES	TOTAL	SENSIBLE	IEER	EER	HEATING TYPE	HEATING CAPACITY	STAGES										HEATING EFFICIENCY %
RTU-1	CAFE SEATING	TRANE	YHC120F	2	117.0	89.6	15.2	12.4	NATURAL GAS	250	2	80	Yes	YES	208v/3PH/48/60	VARIABLE	2.75	4000	1.0	1,500	1-9
RTU-2	BACKBAR/WORKROOM	TRANE	YHC120F	2	117.0	89.6	15.2	12.4	NATURAL GAS	250	2	80	Yes	YES	208v/3PH/48/60	VARIABLE	2.75	4000	1.0	1,500	1-9

- NOTES:
1. FACTORY MOUNTED, NON-FUSED DISCONNECT SWITCH AND SINGLE POINT POWER CONNECTION
2. 14" HIGH, INSULATED FACTORY ROOF CURB
3. THRU BASE ELECTRICAL CONNECTIONS
4. 7 DAY PROGRAMMABLE THERMOSTAT
5. HAIL GUARDS ON CONDENSER COILS
6. HINGED ACCESS DOORS
7. NON-POWERED CONVENIENCE OUTLET
8. SINGLE ENTHALPHY DRY BULB ECONOMIZER AND POWER EXHAUST.
9. FACTORY MOUNTED RETURN AIR SMOKE DETECTOR

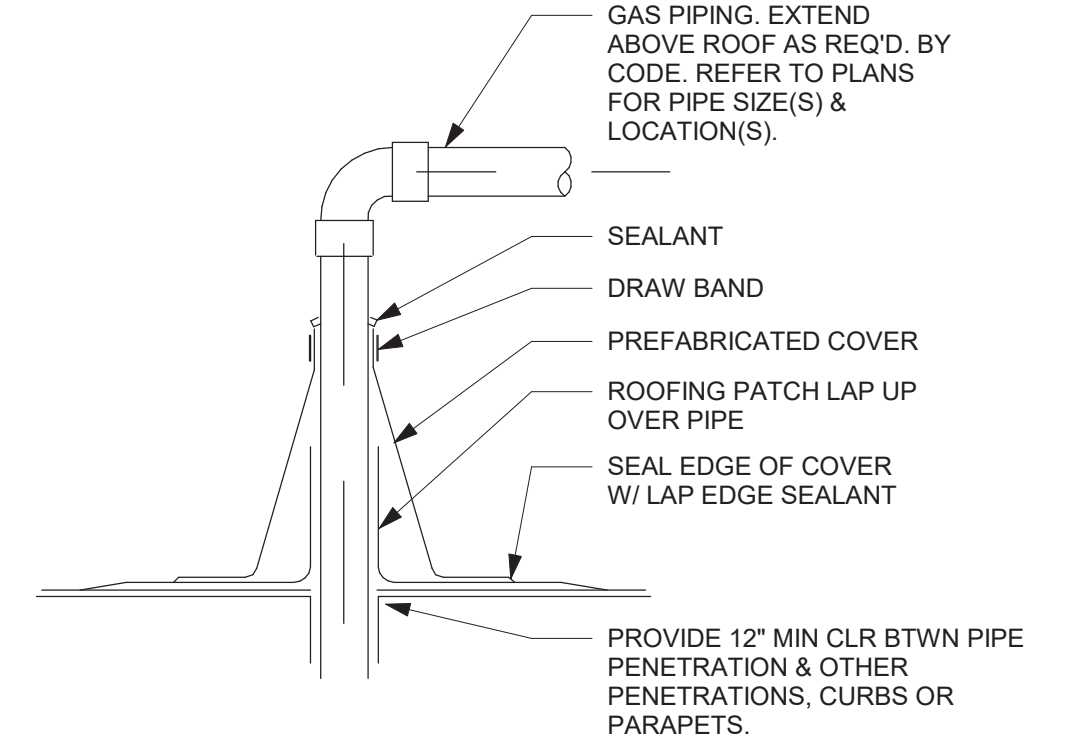
THERMOSTAT/SENSOR SCHEDULE SHELL			
DESIGN ID	COUNT	DESCRIPTION	COMMENTS
X0110	2	THERMOSTAT	TRANE, BAYSTAT 152A PROGRAMMABLE THERMOSTAT
X0111	2	REMOTE TEMPERATURE SENSOR	TRANE, BAYSEN077
X0112	2	CO2 SENSOR	TRANE, BAYCO2K001B WALL MOUNT CO2

FAN SCHEDULE SHELL											
DESIGN ID	Count	DESCRIPTION	AREA SERVED	MANUFACTURER	MODEL	VOLTAGE/PHASE/FLA(AMPS)	BLOWER HP	BLOWER	BLOWER ESP*WG	UNIT WEIGHT(LBS.)	NOTES
10632	1	RESTROOM EXHAUST	RESTROOMS	GREENHECK	G-080-VG	115v/1PH/1.38	1/10	300 CFM	0.5	26	PROVIDE WITH DISCONNECT AND BIRD SCREEN
10721	1	FAN - DT AIR CURTAIN - 22IN 560MM	DRIVE-THRU	READY ACCESS	AA100	115v/1PH/3.0		600 FPM			INCLUDED AS PART OF DT WINDOW PACKAGE
10873	1	RESTROOM EXHAUST ROOF CURB AND DAMPER	RESTROOMS	GREENHECK	GPI-17-G12	N/A	N/A	N/A	N/A	14	PROVIDE WITH GREENHECK WD-100-PB-10x10 BACKDRAFT DAMPER

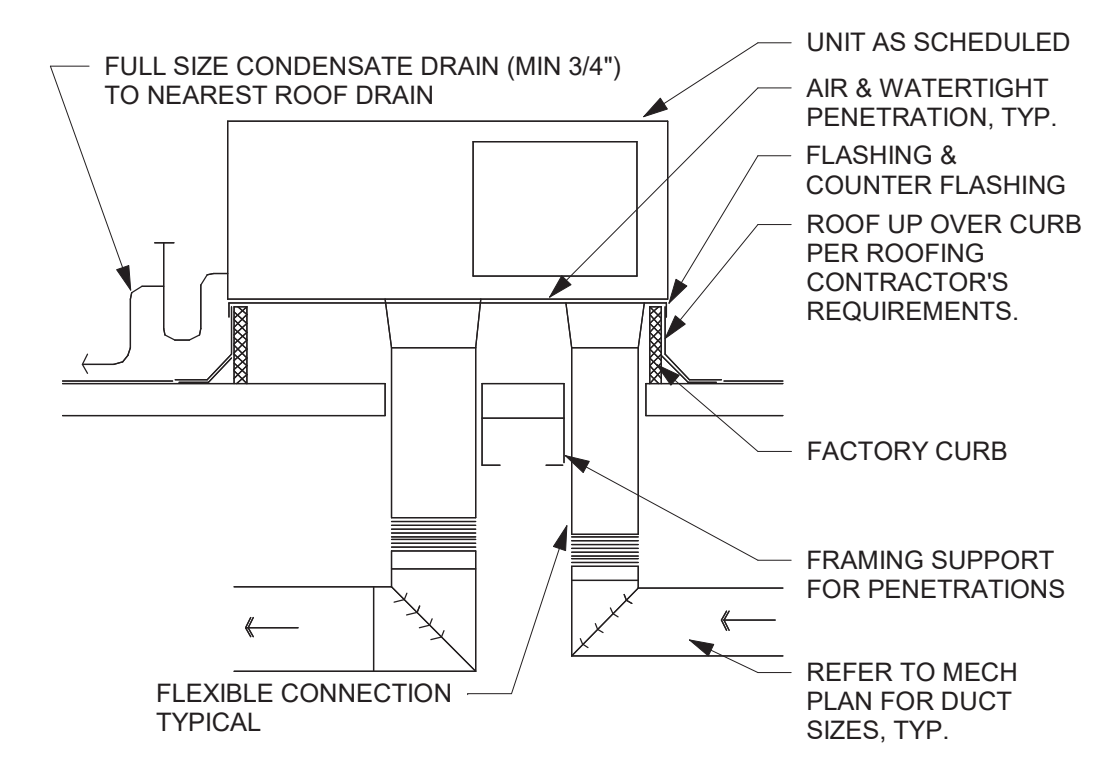
PLUMBING FIXTURE SCHEDULE - SHELL			
DESIGN ID	COUNT	DESCRIPTION	COMMENTS
X0102	3	GRADE CLEANOUT	ZURN ZN1474, GRADE CLEANOUT, NICKEL BRONZE COVER.
X0104	1	GREASE INTERCEPTOR 75 GPM	SCHIER PRODUCTS MODEL GB-75, 75GPM, 125 GAL. LIQUID CAPACITY
X0107	2	WALL HYDRANT	ZURN Z1321 WALL HYDRANT



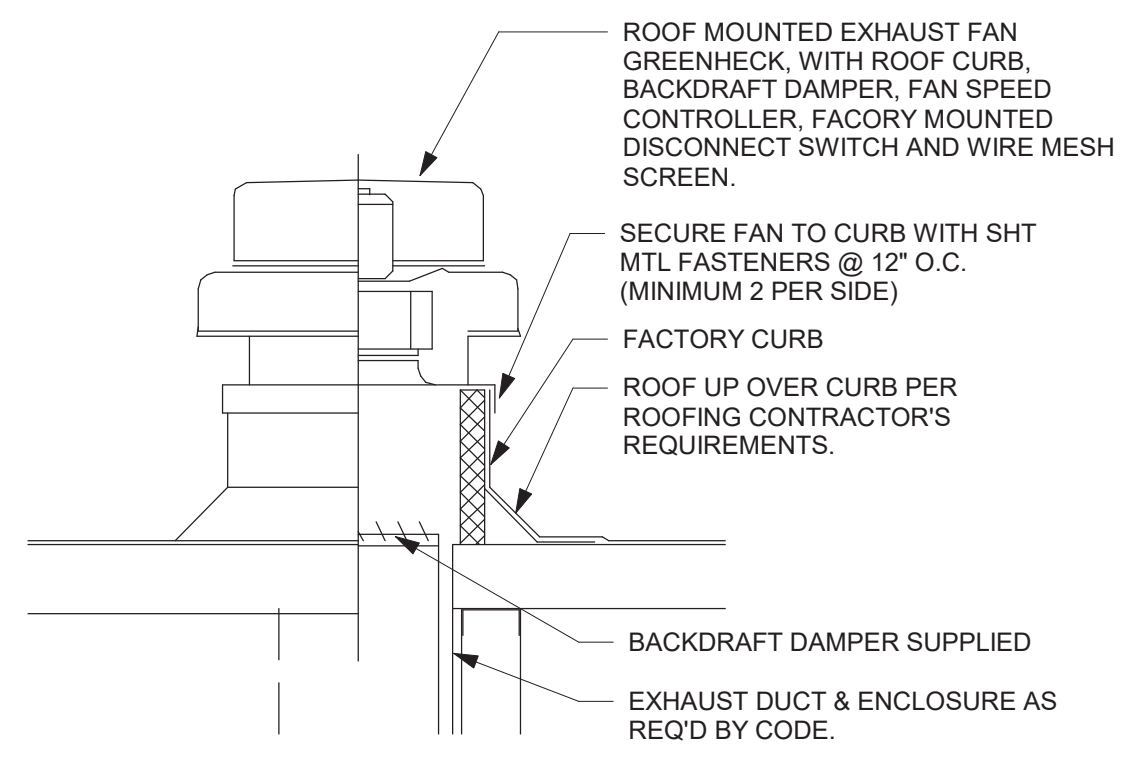
5 PIPE SUPPORT DETAIL 1
Scale: NTS



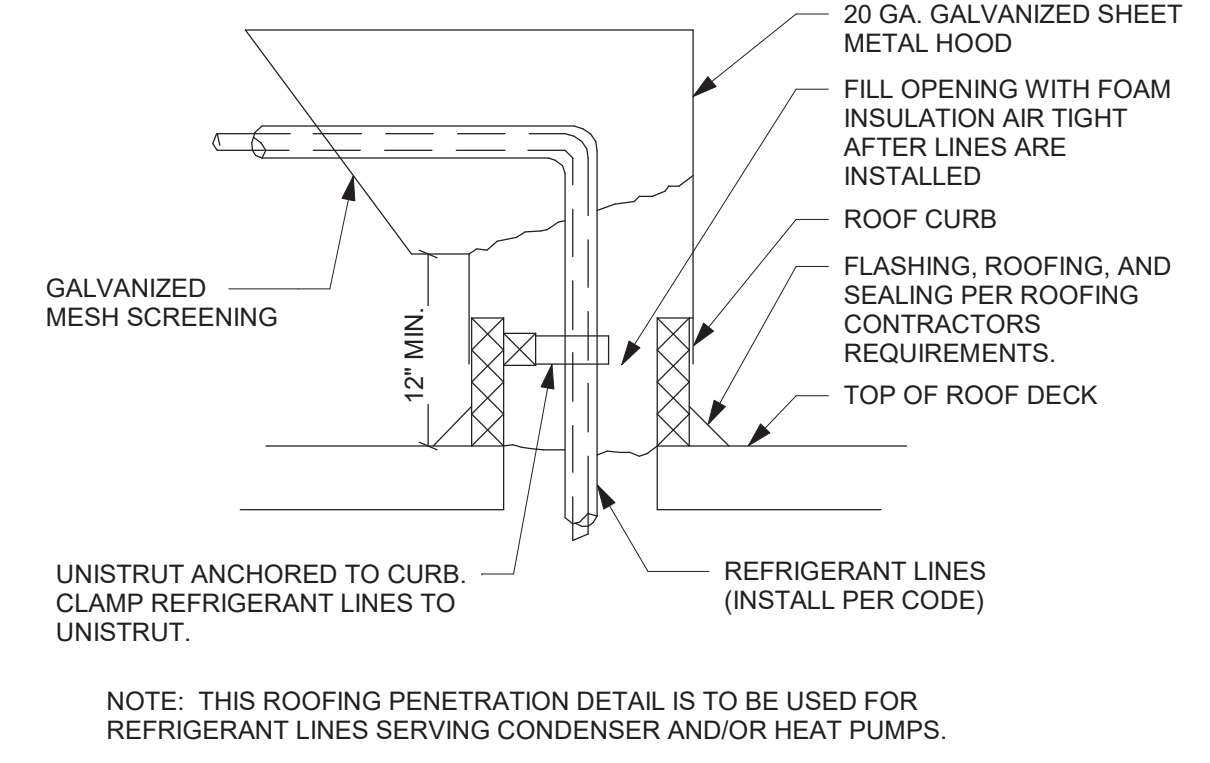
6 PIPE/ROOF PENETRATION DETAIL
Scale: NTS



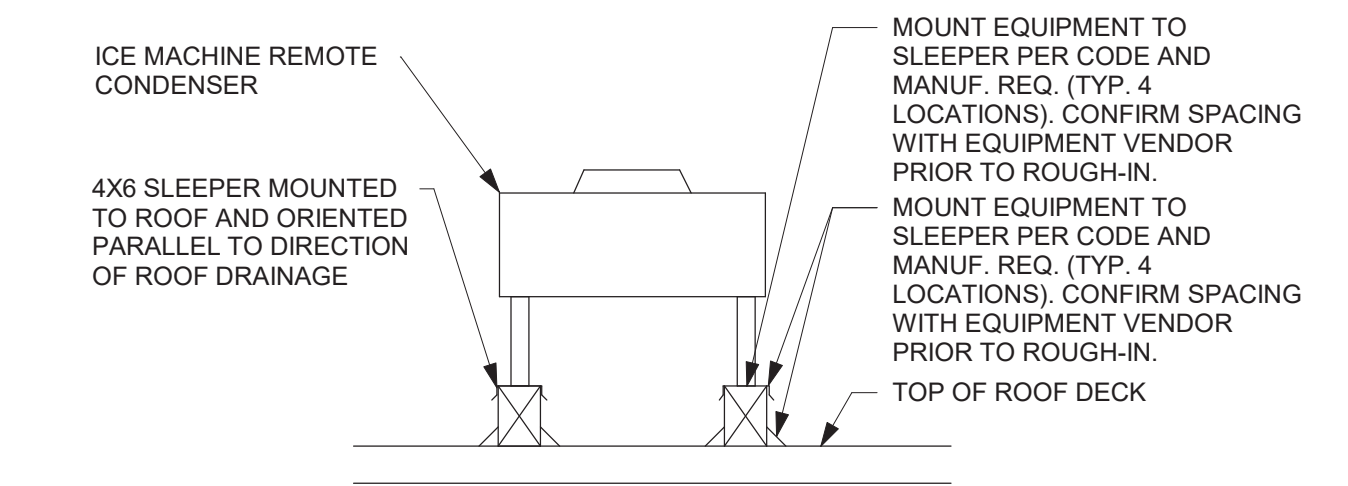
1 ROOFTOP AIR HANDLING UNIT
Scale: NTS



2 ROOF EXHAUST FAN
Scale: NTS



3 ROOF PENETRATION DETAIL
Scale: NTS



4 EQUIPMENT SUPPORT DETAIL
Scale: N.T.S.

REV.	DATE	DESCRIPTION



SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236
MECHANICAL & PLUMBING SCHEDULES
& DETAILS

PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
	-/-/-
RECORD	DATE
	-/-/-
PROJECT MANAGER	DESIGNER
AK	CK

JOB NO.
2020379.19

M1002

GENERAL ELECTRICAL NOTES

1. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ELECTRICAL WORK WITH OTHER TRADES. THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. DO NOT SCALE DISTANCES OFF THE ELECTRICAL DRAWINGS; USE ACTUAL BUILDING DIMENSIONS. OVERALL CASEWORK COMPONENT DIMENSIONING ON ELECTRICAL DETAILS ARE SHOWN FOR REFERENCE AND COORDINATION ONLY. SEE PROJECT MANUAL.
2. ALL ELECTRICAL SYSTEMS SHALL BE TESTED FOR PROPER OPERATION. BALANCE ALL BRANCH CIRCUIT LOADS BETWEEN THE PHASES OF THE SYSTEM WITHIN 10% OF THE HIGHEST PHASE LOAD IN EACH PANEL BOARD.
3. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR DE-ENERGIZING CIRCUITS IN DEMOLITION AREAS TO INSURE A SAFE CONDITION. ELECTRICAL DEVICES AND ASSOCIATED WIRING LOCATED WITHIN THE DEMOLITION AREA THAT WILL NO LONGER BE USED SHALL BE REMOVED AND PROPERLY DISPOSED OF AT CONTRACTORS EXPENSE UNLESS OTHERWISE NOTED.
4. THE ELECTRICAL CONTRACTOR SHALL SCHEDULE ALL ELECTRICAL SYSTEM OUTAGES WITH THE GENERAL CONTRACTOR AND LANDLORD AT LEAST 24 HOURS IN ADVANCE. UNLESS APPROVED OTHERWISE ALL OUTAGES SHALL OCCUR BETWEEN 11:00PM AND 5:00AM.
5. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY CONDUIT AND J-BOXES TO SUPPORT A COMPLETE SECURITY, PHONE, POS AND DATA SYSTEMS. SEE MANAGER WORKSTATION AND BAR POINT OF SALE (POS) POWER/TELECOM/SECURITY DIAGRAM. COORDINATE ALL DEVICE LOCATIONS AND MOUNTING HEIGHTS WITH SECURITY VENDOR PRIOR TO ROUGH-IN. PROVIDE END-TO-END PULL STRINGS IN ALL CONDUITS. LABEL EACH END OF THE PULL STRING WITH CONDUIT SYSTEM ("SECURITY") AND DESTINATION ("CAFÉ", "FRONT BAR", ETC.). PROVIDE INSULATED BUSHINGS ON ALL STUBBED-UP AND EXPOSED CONDUIT ENDS.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR TO PATCH AND REPAIR ALL EXISTING WALLS, FLOORS, CEILINGS OR OTHER SURFACES IDENTIFIED TO REMAIN THAT MAY BECOME DAMAGED DURING THE COURSE OF WORK.
7. EXPOSED/SURFACE MOUNTED CONDUITS SHALL ONLY BE ALLOWED WHERE NECESSARY IN EXPOSED CEILING AREAS. IF CONDUITS NEED TO BE SURFACE MOUNTED TO WALLS, COORDINATE WITH STARBUCKS CONSTRUCTION MANAGER FOR APPROVAL.
8. VERIFY LOCATION OF ALL OUTLETS AND SWITCHES WITH ARCHITECTURAL DRAWINGS, INTERIOR DETAILS, FINISH SCHEDULES, GENERAL CONTRACTOR, EQUIPMENT VENDORS, STARBUCKS AND EXISTING SITE CONDITIONS. VERIFY FINAL DOOR HINGE LOCATION PRIOR TO SWITCH INSTALLATION AND ADJUST SWITCH LOCATION IF NEEDED. DO NOT MOUNT RECEPTACLES/SWITCHES IN LOCATIONS THAT WOULD CONFLICT WITH MIRRORS, SEAMS OF WALLS, WAINSCOTS, TILE TRANSITIONS, ETC...

GENERAL NOTES

SCOPE
THE INTENT OF THE DRAWINGS AND PROJECT MANUAL IS TO PROVIDE A COMPLETE AND FULLY OPERATIONAL ELECTRICAL SYSTEM. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO COMPLETE THE ELECTRICAL WORK.

SITE EXAMINATION
THE ELECTRICAL CONTRACTOR SHALL THOROUGHLY EXAMINE ALL AREAS WHERE EQUIPMENT, CONDUIT, AND WIRING WILL BE INSTALLED AND WILL REPORT ANY CONDITION THAT, IN HIS OPINION, PREVENTS THE PROPER INSTALLATION OF THE ELECTRICAL WORK.

STANDARDS
EQUIPMENT AND MATERIALS SHALL CONFORM WITH APPROPRIATE PROVISIONS OF CSA, ULC, NEC, ASTM, UL, ETL, NEMA, ANSI, AS APPLICABLE TO EACH INDIVIDUAL UNIT OR ASSEMBLY.

CODES
ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE PROVINCIAL AND LOCAL CODES AND ORDINANCES. IN CASE OF CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS AND THE CODES, THE HIGHEST STANDARD SHALL APPLY. ELECTRICAL CONTRACTOR SHALL SATISFY CODE REQUIREMENTS AS A MINIMUM STANDARD WITHOUT ANY EXTRA COST TO STARBUCKS.

PERMITS AND FEES
THE ELECTRICAL CONTRACTOR SHALL PROCURE AND PAY FOR ALL PERMITS, FEES, AND INSPECTIONS NECESSARY TO COMPLETE THE ELECTRICAL WORK.

WARRANTY
THE ELECTRICAL CONTRACTOR SHALL UNCONDITIONALLY WARRANT ALL WORK TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY STARBUCKS AND WILL REPAIR OR REPLACE ANY DEFECTIVE WORK PROMPTLY AND WITHOUT CHARGE AND RESTORE ANY OTHER EXISTING WORK DAMAGED IN THE COURSE OF REPAIRING DEFECTIVE MATERIALS AND WORKMANSHIP.

SYSTEM COMMISSIONING

CONTRACTOR RESPONSIBILITIES FOR BUILDING COMMISSIONING

CONTRACTOR SHALL PROVIDE SUPPORT AND WORK AS SPECIFIED, NEEDED AND REQUIRED TO CONDUCT AND FACILITATE STARBUCKS STAFF BUILDING COMMISSIONING EFFORTS. THIS WORK WILL BE COMPRISED OF THREE DISTINCT EFFORTS:

- 1) SUPPORT STARBUCKS COMMISSIONING AGENT (CXA) DURING INSTALLATION VERIFICATION AND CORRECT DISCLOSED DEFICIENCIES;
- 2) PERFORM TESTING, ADJUSTING, BALANCING AND SYSTEM STARTUP AND SUPPORT FUNCTIONAL PERFORMANCE TESTING BY STARBUCKS CXA;
- 3) CORRECT DEFICIENCIES DISCLOSED BY FUNCTIONAL PERFORMANCE TESTING AND SUBMIT REPORTS. CONTRACTOR SHALL PERFORM AND PROVIDE THE FOLLOWING:
 - A. SYSTEMS SUBJECT TO COMMISSIONING MAY INCLUDE, BUT ARE NOT LIMITED TO DOMESTIC HOT WATER GENERATION, HVAC SYSTEMS, ROOFTOP UNITS, EXHAUST FANS, HVAC CONTROLS, LIGHTING CONTROLS, AIR CURTAINS, BUILT-IN REFRIGERATION EQUIPMENT, AND RENEWABLE ENERGY SYSTEMS.
 - B. CONTRACTOR SHALL INCLUDE COMMISSIONING ACTIVITIES IN PROJECT SCHEDULE AND SHOW INTERVALS FOR PERFORMANCE OF WORK FOR WHICH CONTRACTOR IS RESPONSIBLE AND INTERVALS FOR WORK PERFORMED BY STARBUCKS CXA. CONTRACTOR SHALL SHOW RESOURCES FOR PERFORMING ALL WORK RELATED TO COMMISSIONING ACTIVITIES ON A LINE ITEM IN THE SCHEDULE OF VALUES.
 - C. CONTRACTOR SHALL INSTALL EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AND ALL CONTRACT DOCUMENTS. ENSURE THAT ALL EQUIPMENT IS INSTALLED TOTALLY COMPLETE, AND ACCESSIBLE TO STARBUCKS CXA FOR INSTALLATION VERIFICATION AND FUNCTIONAL PERFORMANCE TESTING PRIOR TO THE SCHEDULED START OF INSTALLATION VERIFICATION.
 - D. INSTALLATION VERIFICATION SHALL BE PERFORMED BY STARBUCKS CXA. CONTRACTOR SHALL SUPPORT STARBUCKS CXA INSTALLATION VERIFICATION EFFORTS AS NECESSARY. PROVIDE ALL ACCESS AND EQUIPMENT NECESSARY FOR STARBUCKS STAFF TO VERIFY THAT THE EQUIPMENT IS INSTALLED CORRECTLY.
 - E. CONTRACTOR SHALL BE READILY AVAILABLE DURING INSTALLATION VERIFICATION TO CORRECT ANY DEFICIENCIES OR DEFECTS DISCLOSED BY THE INSTALLATION VERIFICATION PROCESS. CORRECTIONS SHALL BE MADE IN A TIMELY MANNER WITHOUT DISRUPTION OF THE CONSTRUCTION SCHEDULE.
 - F. ALL HVAC, EXHAUST FAN, AND AIR CURTAIN EQUIPMENT SHALL BE TESTED, ADJUSTED AND BALANCED BY THE CONTRACTOR'S TESTING, ADJUSTING AND BALANCE AGENT; SEE TESTING, ADJUSTING AND BALANCING) AFTER THE SYSTEM IS VERIFIED TO BE COMPLETE AND CORRECT BY STARBUCKS CXA, IN ACCORDANCE WITH THE REQUIREMENTS OF THESE DOCUMENTS. ALL HVAC CONTROL SYSTEMS SHALL BE TESTED TO ENSURE THAT CONTROL DEVICES, COMPONENTS, EQUIPMENT AND SYSTEMS ARE CALIBRATED, ADJUSTED AND OPERATE IN ACCORDANCE WITH THESE PLANS AND PROJECT MANUAL. SEQUENCES OF OPERATION SHALL BE TESTED TO ENSURE THAT THEY OPERATE IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS. DELIVERABLES: PRELIMINARY WRITTEN TESTING AND AIR BALANCE REPORT CONFORMING TO THE REQUIREMENTS SPECIFIED HEREIN, DOCUMENTING THE INFORMATION SPECIFIED, ETC. TO THE STARBUCKS CXA IMMEDIATELY UPON COMPLETION OF THE WORK.
 - G. CONTRACTOR SHALL INFORM STARBUCKS CXA WHEN EQUIPMENT IS READY FOR FUNCTIONAL PERFORMANCE TESTING. ALL EQUIPMENT SHALL BE READY FOR FUNCTIONAL PERFORMANCE TESTING PRIOR TO STARTING TESTING. CONTRACTOR SHALL OPERATE EQUIPMENT FOR STARBUCKS CXA AND VERIFY BY DEMONSTRATION THE CORRECT OPERATION OF EQUIPMENT, RESPONSE OF SENSORS, AND PROPER EXECUTION OF HVAC CONTROL AND LIGHTING SEQUENCES; INCLUDING BUT NOT LIMITED TO: AIR MOVEMENT, TEMPERATURE, SOUND, AND CONTROL RESPONSE. PROVIDE ANY SECURITY ACCESS, HARDWARE, SOFTWARE, OR OTHER SUPPORT AS NEEDED FOR THE STARBUCKS CXA TO EFFICIENTLY WITNESS AND DOCUMENT ALL EQUIPMENT TESTING. STARBUCKS CXA WILL RECORD THE EQUIPMENT OPERATION AND RESPONSE TO TESTING SEQUENCES AND PREPARE A LIST OF ANY DEFICIENCIES DISCLOSED BY THE FUNCTIONAL PERFORMANCE TESTS FOR CORRECTION BY THE CONTRACTOR. EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, AIR HANDLING UNITS, ROOFTOP AND SPLIT TYPE, CONDENSING UNITS, EXHAUST FANS, LIGHTING CONTROLS, ETC. DELIVERABLES: PROVIDE COMPLETED COPIES OF ALL START UP REPORTS, FILLED OUT ON THE MANUFACTURER'S FORMS, TO THE STARBUCKS CXA.
 - H. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY ISSUES OR DEFICIENCIES DISCLOSED DURING THE FUNCTIONAL PERFORMANCE TESTING PROCESS. CORRECTIONS SHOULD BE MADE IN A TIMELY MANNER WITHOUT DISRUPTION TO THE SYSTEM AND CONSTRUCTION SCHEDULE.
 - I. CONTRACTOR SHALL BE READILY AVAILABLE FOR ANY RE-TESTING OF EQUIPMENT DEEMED NECESSARY BY STARBUCKS CXA DURING INSTALLATION VERIFICATION AND FUNCTIONAL PERFORMANCE TESTING. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY ISSUES OR DEFICIENCIES FOUND IN THE SYSTEM DURING ANY AND ALL RE-TESTING. CORRECTIONS SHOULD BE MADE IN A TIMELY MANNER WITHOUT DISRUPTION TO THE SYSTEM AND CONSTRUCTION SCHEDULE. DELIVERABLES: FINAL BALANCE REPORT, DEFICIENCIES LIST NOTING CORRECTIVE ACTIONS PERFORMED BY CONTRACTOR IN RESPONSE TO INSTALLATION VERIFICATION AND FUNCTIONAL PERFORMANCE TEST RESULTS.
 - J. CONSTRUCTION AND POST CONSTRUCTION TESTING: ADDITIONAL TESTING MAY BE REQUIRED AND OTHER PROCESSES THAT MAY OCCUR OUT OF SEQUENCE WITH COMMISSIONING SERVICE. CONTRACTOR SHALL CONDUCT, DOCUMENT, SUPPORT AND SCHEDULE THIS TESTING AS DIRECTED BY STARBUCKS CXA.

ABBREVIATIONS

AFB	ABOVE FINISHED FLOOR
AHJ	AUTHORITIES HAVING JURISDICTION
APPROX	APPROXIMATE
BLDG	BUILDING
CKT	CIRCUIT
CLG	CEILING
CM	STARBUCKS CONSTRUCTION MANAGER
CONST	CONSTRUCTION
CW	COLD WATER
CXA	COMMISSIONING AGENT
DEG	DEGREES
DL	LIGHTS WITHIN DAYLIGHT ZONE
DM	STARBUCKS DESIGN MANAGER
DN	DOWN
DTL	DETAIL
DWG(S)	DRAWING(S)
EA	EACH
EC	ELECTRICAL CONTRACTOR
ECP	EQUIPMENT CONTROL PAC
EG	EXHAUST GRILLE
ELEC	ELECTRICAL
EM	EMERGENCY
EMS	ENERGY MANAGEMENT SYSTEM
EXIST	EXISTING
EXT	EXTERIOR
F&I	FURNISH & INSTALL
FOIC	FURNISHED BY OWNER, INSTALLED BY CONTRACTOR
FOIO	FURNISHED BY OWNER, INSTALLED BY OWNER
FLR	FLOOR
FT	FOOT/FEET
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HR	HOUR
HVAC	HEATING, VENTILATION, AIR CONDITIONING
HW	HOT WATER
LCP	LIGHTING CONTROL PANEL
LL	LANDLORD
LS	LIGHT SENSOR PHOTOCCELL
LV	LOW VOLTAGE
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MFG	MANUFACTURER
MIN	MINIMUM
NL	NIGHTLIGHT
NTS	NOT TO SCALE
OC	OVERCURRENT PROTECTION
REF	REFERENCE
REQ(D)	REQUIRE(D)
REV	REVISION
SF	SQUARE FEET
SHT	SHEET
SPECS	SPECIFICATION(S)
SST	STAINLESS STEEL
TEL	TELEPHONE
TEMP	TEMPORARY
TYP	TYPICAL
UC	UNDER COUNTER
UNO	UNLESS NOTED OTHERWISE
WH	WATER HEATER
WP	WEATHER PROOF

ELECTRICAL SYMBOLS LEGEND

⊕	JUNCTION BOX
⚡	SWITCH
☎	TELEPHONE
⊖	THERMOSTAT
⊖	RECEPTACLE: DATA
⊖	RECEPTACLE: DUPLEX
⊖	RECEPTACLE: DUPLEX - INDIVIDUAL BRANCH CIRCUIT
⊖	RECEPTACLE: HIGH VOLTAGE
⊖	RECEPTACLE: QUAD
⊖	RECEPTACLE: QUAD - INDIVIDUAL BRANCH CIRCUIT
⊖	RECEPTACLE: FLOOR DUPLEX
⊖	DUCT SMOKE DETECTOR



REV.	DATE	DESCRIPTION



07/21/2021

SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

ELECTRICAL NOTES

	DATE
PERMIT	07/21/2021
BID	07/21/2021
CONSTRUCTION	--/--
RECORD	--/--

PROJECT MANAGER	DESIGNER
AK	AS

JOB NO.
2020379.19

E1000

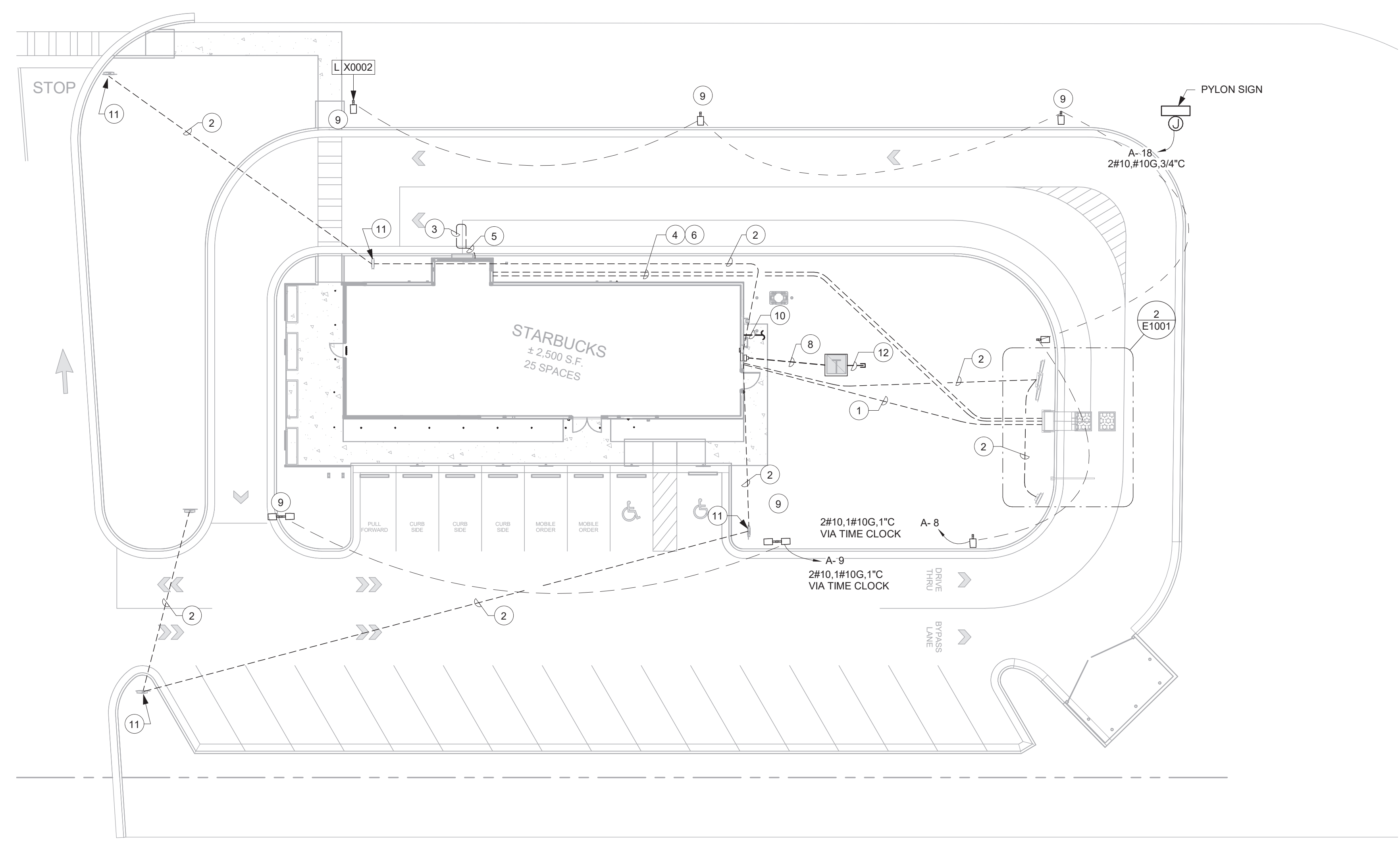
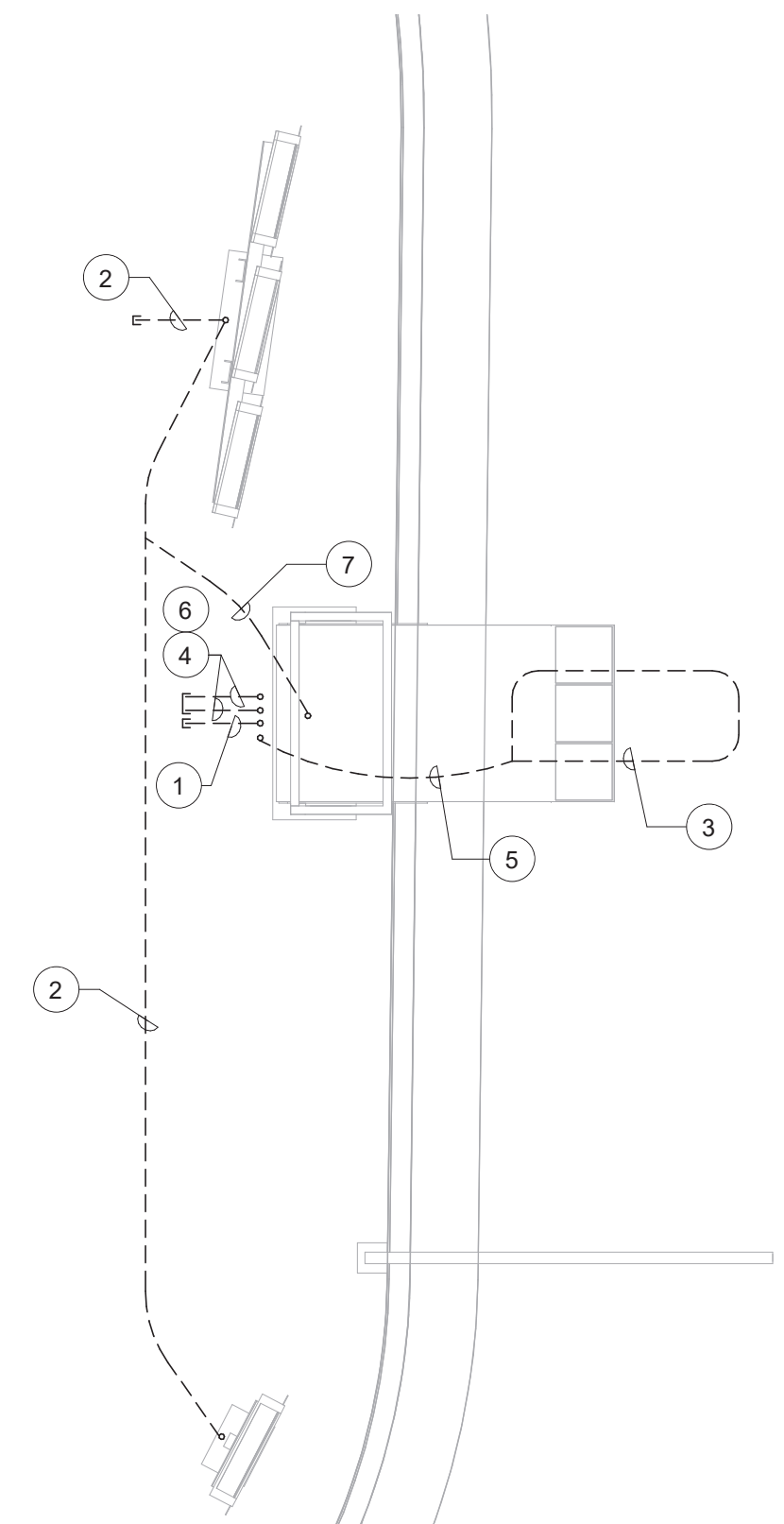
KEYED NOTES (xx)

1. 1" CONDUIT TO BE RAN UNDERGROUND FROM ORDER SCREEN TO STARBUCKS PANELS.
2. 1" CONDUIT TO BE RAN UNDERGROUND FROM DRIVE THRU SIGNS AND MENU BOARDS TO STARBUCKS PANELS.
3. DETECTOR LOOP TO BE CENTERED ON DT WINDOW/ORDER SPEAKER. COORDINATE WITH GC, TO BE 2" BELOW DT LANE PAVEMENT. SEE DETAIL ON THIS SHEET.
4. 1" CONDUIT TO BE RAN UNDERGROUND FROM ORDER SCREEN TO DT POS STUBBED UP IN WALL. COORDINATE LOCATION OF STUB UPS PRIOR TO POURING FOOTINGS.
5. 1" C FOR DETECTOR LOOP TO BE RAN UNDERGROUND REAR OF BUILDING. STUBBED UP WALL TO ABOVE CEILING.
6. 1" CONDUIT TO BE RAN UNDERGROUND FROM ORDER SCREEN TO DT POS STUBBED UP IN WALL FOR AUDIO/VIDEO AND DETECTOR LOOP DATA. COORDINATE LOCATION OF STUB UPS PRIOR TO POURING FOOTINGS.
7. 1" CONDUIT FOR LED LIGHT ON ORDER SCREEN CANOPY TO CONNECT WITH CONDUIT FOR MENU BOARDS
8. INCOMING ELECTRICAL SERVICE FROM PADMOUNT TRANSFORMER. SEE SINGLE-LINE DIAGRAM FOR MORE INFORMATION.
9. COORDINATE EXACT LOCATION, FIXTURE TYPE, AND QUANTITY WITH LIGHTING VENDOR AND STARBUCKS CONSTRUCTION SUPERVISOR PRIOR TO ROUGH IN.
10. PROVIDE (3) 4" CONDUITS WITH PULLSTRINGS TO TELECOMMUNICATION COMPANY POLE. COORDINATE WITH UTILITY COMPANY AND CIVIL. TERMINATE CONDUIT IN TENANT SPACE ABOVE MANAGERS DESK. COORDINATE WITH TENANT DRAWINGS.
11. DT DIRECTIONAL SIGN.
12. PRIMARY FEEDER FROM UTILITY COMPANY POLE. PROVIDE (2) 4" CONDUITS WITH PULLSTRINGS COORDINATE WITH UTILITY COMPANY AND CIVIL.

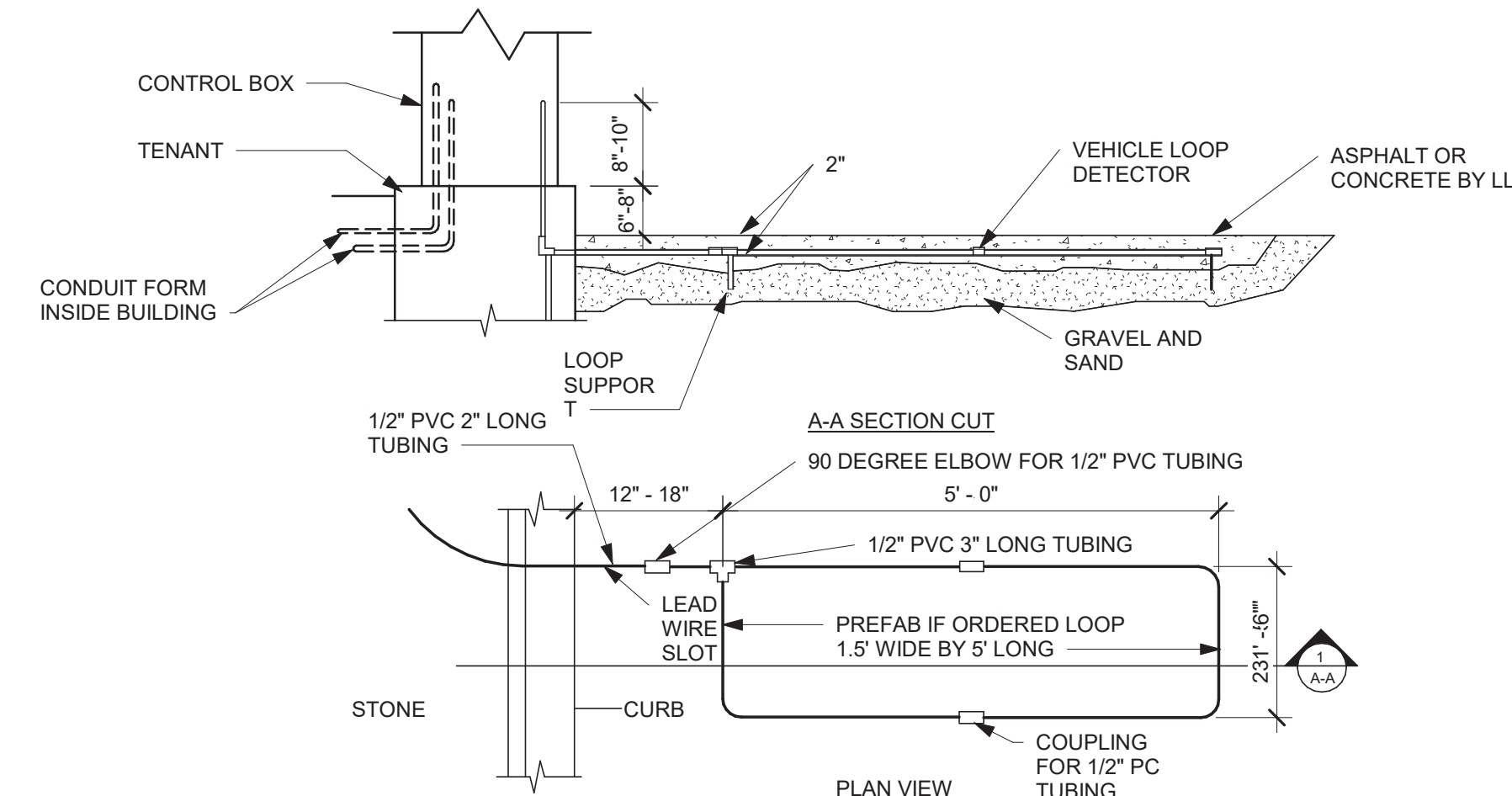
GENERAL NOTES

1. PROVIDE PULL STRINGS IN ALL CONDUITS FOR STARBUCKS USE.
2. CONDUITS TO STUB UP THRU FUTURE FOUNDATIONS OF STARBUCKS EQUIPMENT. REFER TO TENANT IMPROVEMENT DRAWINGS.

2 DT MENUS
Scale: 1/4" = 1'-0"



1 SITE PLAN - ELECTRICAL
Scale: 1/16" = 1'-0"



4 DT SENSOR LOOP DETAIL
Scale: N.T.S

REV.	DATE	DESCRIPTION



SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236

SITE PLAN - ELECTRICAL

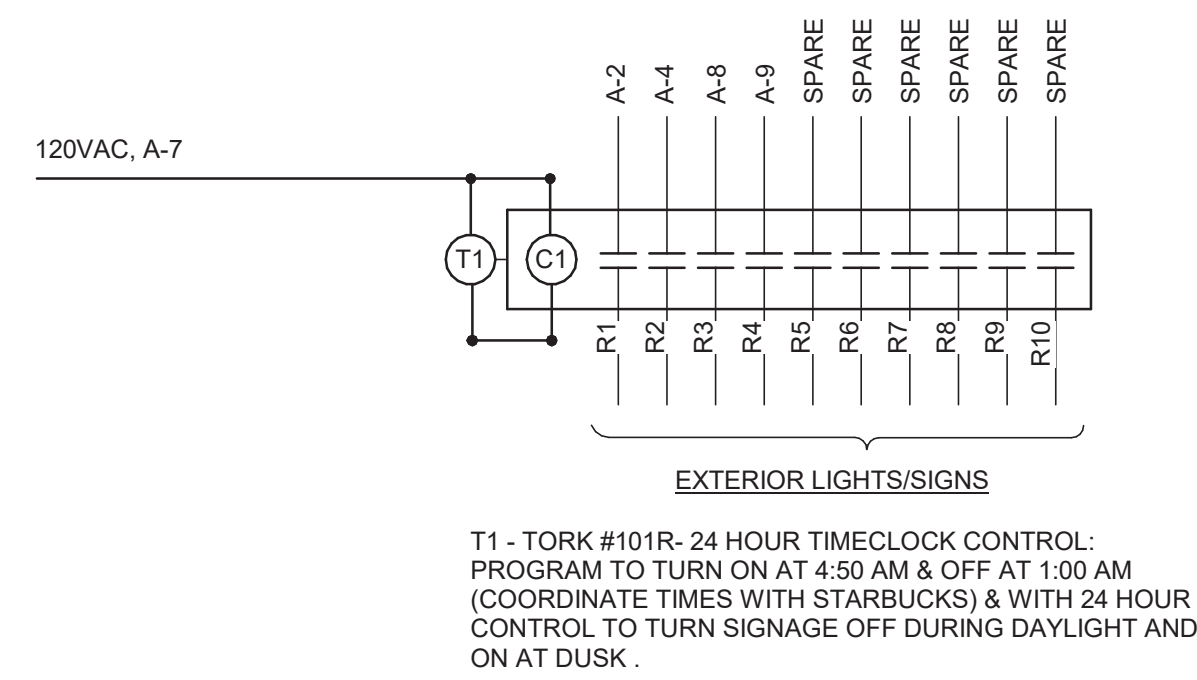
PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
	-/-/-
RECORD	DATE
	-/-/-

PROJECT MANAGER	DESIGNER
AK	AS

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E1001

LIGHTING FIXTURE SCHEDULE				
DESIGN ID	COUNT	DESCRIPTION	BULB	COMMENTS
24300	4	2' STRIPLIGHT WITH DIFFUSE LENS 3000LM 80CRI 3500K	LED	ZL1N L24 3000LM WHITE
X0002	9	LED PARKING LOT LIGHTING @45 - 2 @90 DEGREES	LED	HUBBELL LIGHTING: #RAR1-160L-100-4K7
ADDITIONAL LIGHTING EQUIP.				
T/C	1	TIME CLOCK		INTERMATIC 101R TIME CLOCK
EXIT				
11190	2	EXIT - EMERGENCY LIGHT - WHITE	LED	LITHONIA #AFN OEL
11483	1	EXIT - SECURITY LIGHT WALL MOUNTED	LED	
11517	3	EMERGENCY EXIT LIGHT - BLACK	LED	JUNO #NXP-3-G-BL
RECESSED CAN				
19023	2	CAN - LED MOUNTING FRAME - 2IN 50MM - NEW CEILING	LED	
19035	2	CAN - LED ADJUSTABLE GIMBAL WITH DRIVER - 2IN 50MM - BLACK - 600LM SPOT	LED	
X0005	14	CAN - RECESSED HOUSING FOR LED ROUND TRIM - 2IN - NEW EXTERIOR CEILING ROUND	LED	JUNO #MD1LG2-927-SP-WH
SCONCE				
20820	6	SCONCE - SONNEMAN TRIFORM - TEXTURED BRONZE	(1) 3.5W 25700K, OR EQUAL	



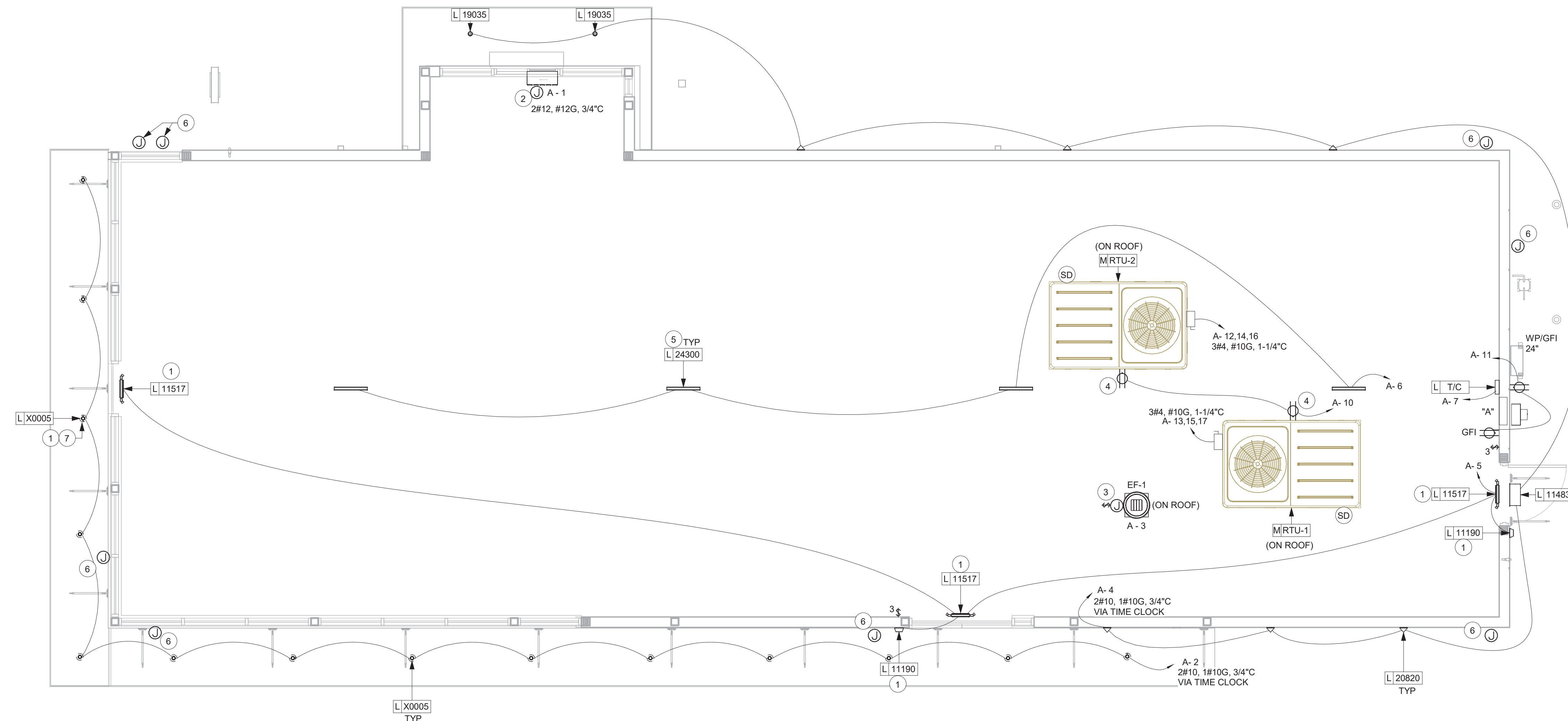
3 TIME CLOCK DETAIL
Scale: N.T.S

KEYED NOTES

- EMERGENCY/EXIT LIGHTS TO BE WIRED AHEAD OF ANY CONTROLS.
- COORDINATE INSTALLATION REQUIREMENTS FOR AIR CURTAIN AND DT WINDOW WITH MANUFACTURER SPECIFICATIONS.
- PROVIDE J-BOX AND WEATHER PROOF TOGGLE SWITCH FOR EXHAUST FAN. COORDINATE WIRING AND CONTROL WITH TENANTS CONSTRUCTION DOCUMENTS.
- RTU FURNISHED WITH WEATHER PROOF/GFCI RECEPTACLE. E.C. SHALL PROVIDE WIRING TO EACH RECEPTACLE.
- INTERIOR LIGHTING IS UNDER TENANT SCOPE OF WORK. PROVIDE TEMPORARY LIGHTS IN SHELL AS NEEDED TO MEET LOCAL CODE.
- PROVIDE J-BOX FOR FUTURE BUILDING SIGNS. STUB CONDUITS INTO BUILDING WITH PULLSTRINGS. COORDINATE LOCATIONS WITH SIGNAGE VENDOR AND ARCH. ELEVATIONS.
- PROVIDE EMERGENCY 90 MIN BACK UP BATTERY FOR NORMAL LIGHTING FIXTURE FOR EMERGENCY EGRESS PURPOSES, IN ACCORDANCE WITH LIFE SAFETY STANDARDS. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH LIGHTING VENDOR AND CONSTRUCTION SUPERVISOR PRIOR TO ROUGH-IN.

GENERAL NOTES

- ELECTRICAL CONTRACTOR SHALL COORDINATE WITH PLUMBING AND HEATING, VENTILATING, AND AIR CONDITIONING (HVAC) CONTRACTORS FOR ANY ADDITIONAL EQUIPMENT NEEDING POWER.
- EQUIPMENT REQUIRES CONNECTION TO THE BUILDING ELECTRICAL SYSTEM. FURNISH AND INSTALL ALL NECESSARY CONDUIT, WIRE, CONNECTIONS, RECEPTACLES AND OVERCURRENT PROTECTION NECESSARY TO ENSURE THE EQUIPMENT FUNCTIONS PROPERLY AND COMPLIES WITH ALL APPLICABLE LOCAL AND NATIONAL CODES. COORDINATE EQUIPMENT REQUIREMENTS WITH MANUFACTURER CUT SHEET PRIOR TO ROUGH-IN.
- REFERENCE LANDLORD WORK LETTER FOR DIVISION OF ELECTRICAL SCOPE OF WORK AND COORDINATE WITH STARBUCKS CONSTRUCTION MANAGER.



1 FLOOR/ROOF PLAN - ELECTRICAL
Scale: 1/4" = 1'-0"

REV.	DATE	DESCRIPTION



SPOUT SPRINGS
2778 NC-24
CAMERON, NC 28236
FLOOR/ROOF PLAN - ELECTRICAL

PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
	--/--
RECORD	DATE
	--/--

PROJECT MANAGER	DESIGNER
AK	AS

JOB NO.
2020379.19

E1002

Branch Panel: A

Location: STARBUCKS
Supply From: CT CAB/METER
Mounting: RECESSED
Enclosure: NEMA-1

Volts: 120/208
Phases: 3
Wires: 4

A.I.C. Rating: 42K (SEE NOTE)
Mains Type: MCB
Mains Rating: 400 A
MCB Rating: 400 A

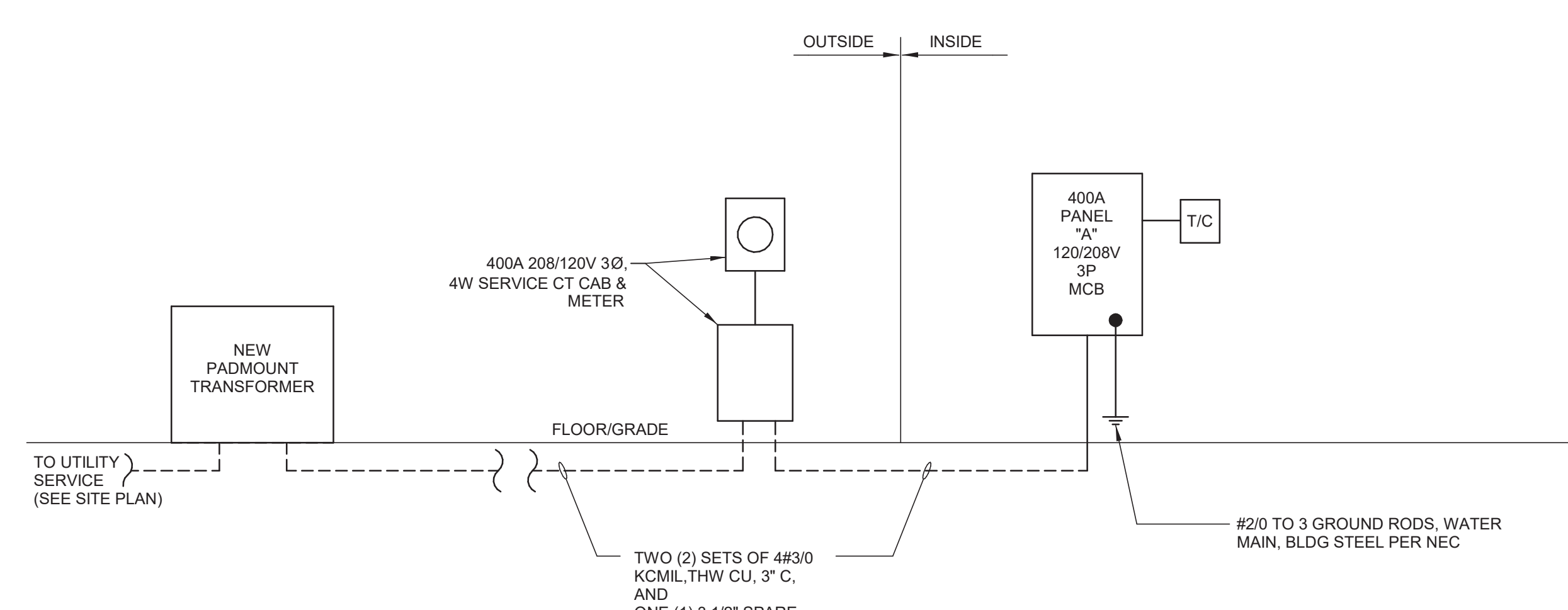
Notes:
PROVIDE PANEL WITH FEED-THRU LUGS TO SERVE FUTURE PANEL

NOTES	CKT	Load Name	Trip	Poles	A	B	C	Poles	Trip	Load Name	CKT	NOTES	
	1	AIR CURTAIN	20 A	1	3 VA	154 VA			1	20 A		CANOPY LIGHTS	2
	3	EF-1	20 A	1		180 VA	262 VA		1	20 A		EXTERIOR BUILDING LIGHTS	4
	5	EMERGENCY LIGHTS	20 A	1			30 VA	120 VA	1	20 A		INTERIOR LIGHTS	6
	7	TIME CLOCK	20 A	1	200 VA	450 VA			1	20 A		PARKING LOT LIGHTING	8
	9	PARKING LOT LIGHTING	20 A	1		360 VA	360 VA		1	20 A		RTU - RECEPTACLES	10
	11	RECEPTACLES	20 A	1			360 VA	5760...	3	60 A		RTU-2	12
	13	RTU-1	60 A	3	5760...	5760...			--	--			14
	15	--	--	--		5760...	5760...		--	--			16
	17	--	--	--			5760...	180 VA	1	20 A		MONUMENT SIGN	18
	19	Spare	20 A	1	0 VA	0 VA			1	20 A		Spare	20
	21	Spare	20 A	1		0 VA	0 VA		--	--		Space	22
	23	Space	--	--				0 VA	0 VA	--	--	Space	24
	25	Space	--	--	0 VA	0 VA			--	--		Space	26
	27	Space	--	--		0 VA	0 VA		--	--		Space	28
	29	Space	--	--				0 VA	0 VA	--	--	Space	30
	31	Space	--	--	0 VA	0 VA			--	--		Space	32
	33	Space	--	--		0 VA	0 VA		--	--		Space	34
	35	Space	--	--				0 VA	0 VA	--	--	Space	36
	37	Space	--	--	0 VA	0 VA			--	--		Space	38
	39	Space	--	--		0 VA	0 VA		--	--		Space	40
	41	Space	--	--				0 VA	0 VA	--	--	Space	42
Total Load:					12284 VA	12647 VA	12210 VA						
Total Amps:					102 A	105 A	102 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Other	30 VA	100.00%	30 VA	
Power	34923 VA	100.00%	34923 VA	Total Conn. Load: 37140 VA
Lighting	1507 VA	125.00%	1884 VA	Total Est. Demand: 37255 VA
Receptacle	720 VA	65.00%	468 VA	Total Conn. Current: 103 A
				Total Est. Demand Current: 103 A

Notes:
PANEL WILL CONTAIN GFCI BREAKERS. ENSURE MANUFACTURE CAN PROVIDE GFCI BREAKERS OVER 20A, INCLUDING 120V AND 208V LOADS. GFCI RELAYS ARE NOT PERMITTED. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY AND SHALL CALCULATE SHORT CIRCUIT FAULT CURRENT AND ARC FLASH AND PROVIDE LABELS ON ELECTRICAL EQUIPMENT PER N.E.C. AND LOCAL JURISDICTION. CONTRACTOR SHALL PROVIDE EQUIPMENT RATED FOR FAULT CURRENT.



- NOTES:**
- CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY AND CALCULATE SHORT CIRCUIT FAULT CURRENT AND ARC FLASH AND PROVIDE LABELS ON ELECTRICAL EQUIPMENT PER N.E.C. AND LOCAL JURISDICTION. CONTRACTOR SHALL PROVIDE EQUIPMENT RATED FOR AVAILABLE FAULT CURRENT.
 - CONTRACTOR SHALL COORDINATE WITH POWER COMPANY & PROVIDE CT CABINET & METER BASE PER POWER COMPANY REQUIREMENTS.
 - ALL TRENCHING, BACKFILL, SITE RESTORATION AND WARNING TAPE DETECTABLE BY CONTRACTOR. VERIFY DEPTHS OF CONDUITS COMPLY WITH NEC, POWER COMPANY JURISDICTION.
 - CONTRACTOR SHALL PROVIDE AN OUTDOOR DISCONNECT SWITCH IF LOCAL JURISDICTION OR POWER COMPANY REQUIRES ONE.
 - CONTRACTOR SHALL PROVIDE SLIP FITTERS IF REQUIRED BY LOCAL JURISDICTION.

1 SINGLE LINE DIAGRAM
Scale: NTS

REV.	DATE	DESCRIPTION



07/21/2021

SPROUT SPRINGS
2778 NC-24
CAMERON, NC 28236

SCHEDULES - ELECTRICAL

PERMIT	DATE
	07/21/2021
BID	DATE
	07/21/2021
CONSTRUCTION	DATE
	--/--
RECORD	DATE
	--/--

PROJECT MANAGER	DESIGNER
AK	AS

JOB NO.
2020379.19

E1003