

WMG SHELL - CLERMONT FL

WMG # FL22-0695 FL Highway 50/ W. Colonial Drive Clermont, FL 34711

CODE INFORMATION

- USE AND OCCUPANCY CLASSIFICATION (302.0)
PROPOSED MIXED USE - BUSINESS USE GROUP (B), ASSEMBLY (A2)
- CONSTRUCTION TYPE (601.0):
TYPE V-B CONSTRUCTION (NON-SPRINKLED)
- BUILDING HEIGHT (504.0)
ALLOWABLE HEIGHT (STORY/FEET) 1-STORIES/ 40'-0"
ACTUAL HEIGHT (STORY/FEET) 1-STORY/ 26'-0"
- BUILDING AREA (506.0)
ALLOWABLE BUILDING AREA PER FLOOR
B-USE - 9,000 SF
A-2 USE - 6,000 SF.
ACTUAL BUILDING AREA:
TENANT A: A-2 USE 2,615 SF
TENANT B: B-USE 4,365 SF
TOTAL 6,980 SF
- SEPARATED OCCUPANCIES (508.4): 2-HR FIRE SEPARATION BETWEEN A-2 AND B USE GROUPS
ALLOWABLE AREA: (508.4.2) $\frac{2,615 \text{ SF (TENANT A)}}{6,000 \text{ SF}} + \frac{4,365 \text{ (TENANT B)}}{9,000 \text{ SF}} = \frac{44 + 48}{110} = \frac{92}{110}$ (LESS THAN 1.0)
- FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (601)
A. STRUCTURAL FRAME (INCLUDING COLUMNS, GIRDERS, TRUSSES): 0 HR(S)
B. BEARING WALLS (INTERIOR & EXTERIOR): 0 HR(S)
C. NONBEARING WALLS & PARTITIONS (INTERIOR & EXTERIOR): 0 HR(S)
D. FLOOR CONSTRUCTION (INCLUDING SUPPORTING BEAMS & JOISTS): 0 HR(S)
E. ROOF CONSTRUCTION (INCLUDING SUPPORTING BEAMS & JOISTS): 0 HR(S)

DESIGN SUMMARY

SYNOPSIS:
THE SCOPE OF WORK CONSISTS OF A SINGLE STORY, MULTI-TENANT SHELL (ONLY) BUILDING TO BE LOCATED IN CLERMONT, FL.

THE STRUCTURE INCLUDES, BUT IS NOT LIMITED TO, CMU EXTERIOR BEARING WALLS, LEAVE-OUT SLAB AND OPEN WEB STEEL JOISTS FOR ROOF SUPPORT. PROVIDE INFRASTRUCTURE/UTILITIES BASED ON KNOWN TENANT REQUIREMENTS. ALL NEW CONSTRUCTION WILL MATCH THAT ALLOWED IN TYPE V-B CONSTRUCTION.

TENANT TO PROVIDE DOCUMENTS FOR TENANT IMPROVEMENTS UNDER SEPARATE PERMIT.

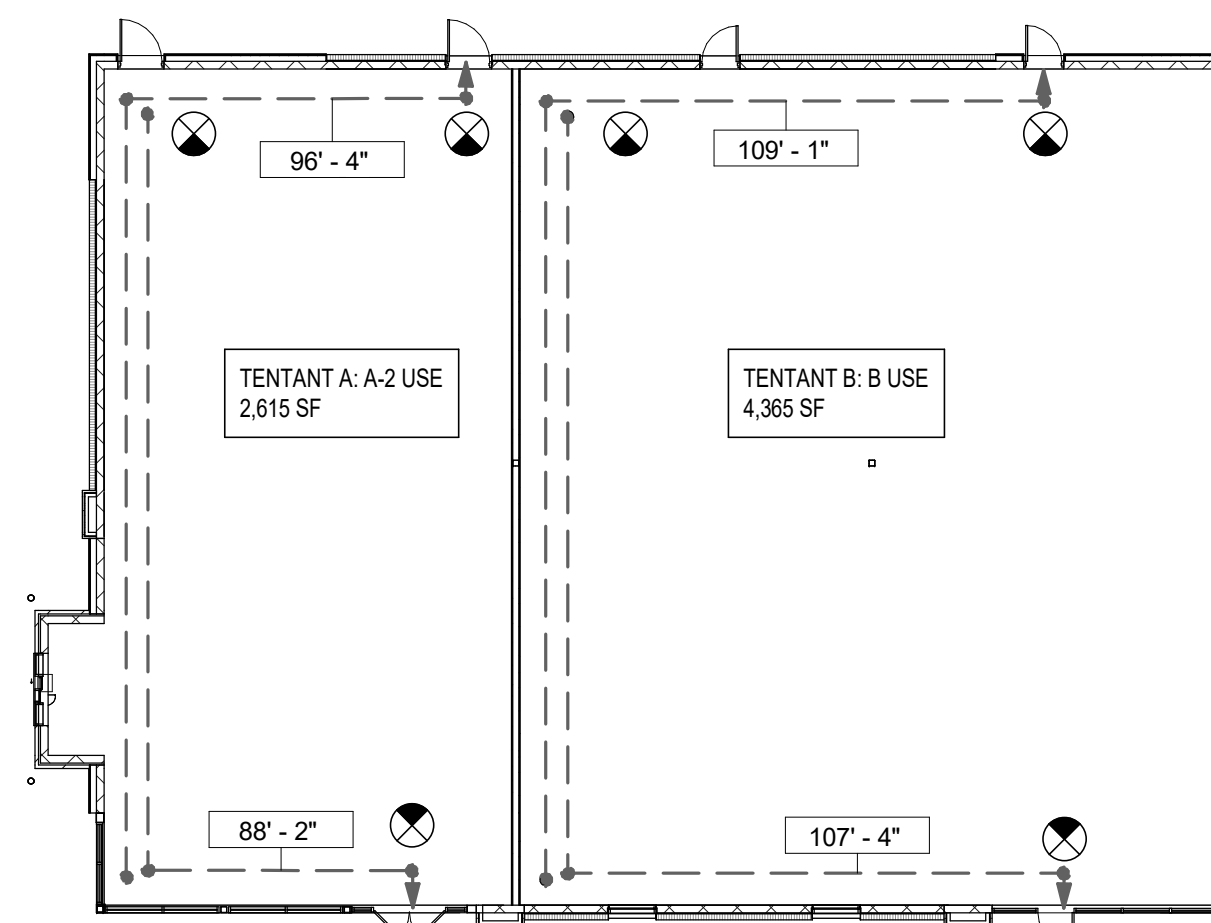
WIND SPEED: 135MPH.

OCCUPANCY CLASSIFICATION:
IBC CLASSIFICATION - BUSINESS* (DENTAL OFFICE)
- ASSEMBLY (RESTAURANT)

*PER IBC 303.1.1, ALL ROOMS HAVING LESS THAN 50 PEOPLE AND HAVING NO MORE THAN 750 SQ. FT. SHALL BE CLASSIFIED AS SUPPORT SPACE FOR BUSINESS OCCUPANCY.

NOTE: OCCUPANT LOAD FOR SHELL PURPOSE IS BASED ON KNOWN TENANT USE AND WORST CASE OCCUPANT-TO-FLOOR RATIO. THE TENANT'S ARCHITECT OF RECORD SHALL SUBMIT FINAL OCCUPANT LOADS PER THE TENANT'S DOCUMENTS.
PLUMBING FIXTURES AND CALCULATIONS SHALL BE PROVIDED BY THE TENANT'S ARCHITECT OF RECORD AS PART OF THE TENANT'S DOCUMENTS

LIFE SAFETY



PROJECT NOTES

GENERAL NOTES

- DO NOT SCALE DRAWINGS. USE WRITTEN DIMENSIONS ONLY. SUBMIT ANY DISCREPANCIES TO THE ARCHITECT FOR CLARIFICATION
- ALL WORK SHALL BE IN COMPLIANCE WITH THE STANDARD BUILDING RECOGNIZED INDUSTRY STANDARDS. CRAFTSMANSHIP STANDARDS IN THE AREA, ALL MANUFACTURER RECOMMENDATIONS, AND ALL OTHER APPLICABLE CODES
- PROVIDE ACCESSIBILITY FOR THE PHYSICALLY HANDICAPPED CONFORMING TO THE AMERICANS WITH DISABILITIES ACT OF 2010. TO THE BEST OF OUR KNOWLEDGE, THIS BUILDING HAS BEEN DESIGNED IN ACCORDANCE WITH THE 2012 IBC AND THE RULES AND REGULATIONS OF NEW CONSTRUCTION PER ADA
- THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR THIS PROJECT IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS UNLESS A WRITTEN NOTIFICATION FROM THE OWNER OR ARCHITECT TO THE CONTRARY IS RECEIVED
- THE ARCHITECT DOES NOT GUARANTEE THE PERFORMANCE OF THE PROJECT IN ANY RESPECT OTHER THAN THAT OUR ARCHITECTURAL WORK AND JUDGEMENT RENDERED MEETS THE STANDARDS OF CARE OF OUR PROFESSION
- THE LOCATION OF THE EXISTING UTILITIES AND STRUCTURES SHOWN HEREON ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND ACTUAL LOCATION OF SUCH, WHETHER SHOWN HEREON OR NOT, PRIOR TO ANY EXCAVATION. ANY DAMAGES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR
- THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACING AND SHORING FOR ALL WORK DURING THE CONSTRUCTION PERIOD
- PROVIDE ILLUMINATED EXIT SIGNS WITH BATTERY BACKUP DESIGNATING EXITS AND WAYS OF TRAVEL THERETO
- FIRE BARRIER SHALL BE CONTINUOUS FROM OUTSIDE WALL TO OUTSIDE WALL, FROM A FIRE BARRIER TO ANOTHER FIRE BARRIER, OR A COMBINATION THEREOF, INCLUDING CONTINUITY THROUGH ALL CONCEALED SPACES SUCH AS THOSE FOUND ABOVE A CEILING, INCLUDING INTERSTITIAL SPACES
- PASSAGES OF PIPES, CONDUITS, BUS DUCTS, CABLES, WIRES, AIRDUCTS, PNEUMATIC DUCTS, AND SIMILAR BUILDING SERVICE EQUIPMENT THROUGH FIRE BARRIERS SHALL BE PROTECTED AS FOLLOW
 - THE SPACE BETWEEN PENETRATING ITEM AND FIRE BARRIER SHALL BE FILLED WITH A MATERIAL CAPABLE OF MAINTAINING THE FIRE RESISTANCE RATINGS OF THE FIRE BARRIER PRODUCT. PRODUCT USED MUST MEET TEST METHODS ASTM E814 OR UL 1479 FOR FIRE RATING (PER 714.4.1.2 & 714.5.1.2 IBC 2012)
 - FIRE BARRIERS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH 2" STENCILING (AT 12" O.C.) ABOVE ANY DECORATIVE CEILING AND CONCEALED SPACES WITH THE FOLLOWING:
 - FIRE/SMOKE BARRIER
 - PROTECT ALL OPENINGS
- PROVIDE AT LEAST 1 CLASS ABC 5 POUND FIRE EXTINGUISHER TO BE MOUNTED WHERE READILY VISIBLE AND ACCESSIBLE. ADDITIONAL UNITS MAY BE REQUIRED TO MEET A 75 FT. TRAVEL DISTANCE LIMITATION. INSTALL IN ACCORDANCE WITH NFPA 10 OR PER LOCAL AUTHORITY.
- WHEN A BEAM OR COLUMN BECOMES PART OF A FIRE RATED WALL OR CEILING IT MUST BE PROTECTED AND BE FIRE RATED AS IS THE WALL OR CEILING.
- SHELL MECHANICAL ROOM SHALL BE SEPARATED FROM THE REST OF THE BUILDING BY ONE HOUR RATED FIRE-RESISTIVE CONSTRUCTION WITH ALL OPENINGS PROTECTED BY 45 MINUTE LABELED FIRE DOOR ASSEMBLY. ALL RATED WALLS, WINDOWS, AND DOORS SHALL BE CLEARLY IDENTIFIED ON ARCHITECTURAL DRAWINGS.
- THE FLOOR ON BOTH SIDES OF A DOOR SHALL BE LEVEL AND SHALL HAVE THE SAME ELEVATION ON BOTH SIDES OF THE DOOR, FOR A DISTANCE ON EACH SIDE EQUAL TO THE WIDTH OF THE WIDEST SINGLE DOOR.
- DOORS IN EXITS SHALL NOT BE SUBJECT TO THE USE OF A KEY FOR OPERATION FROM THE INSIDE OF THE BUILDING.
- EVERY INTERIOR AND EXTERIOR DOOR IN THE BUILDING SHALL BE PROVIDED WITH HANDICAP HARDWARE (LEVERS, PANIC HARDWARE, OR U-SHAPE DESIGNED DEVICES, ETC.)
- PROVIDE J-MOLDS AND CORNER BEADS AT THE EDGES OF ALL EIFS SYSTEMS AND GYPSUM BOARD.
- PROVIDE CONTINUOUS BLOCKING IN ALL STUD WALLS THAT ARE TO RECEIVE GRAB BARS, TOILET PARTITIONS, ETC.
- ALL METAL STUD GAUGE DESIGN SHALL BE AS REQUIRED BY PERFORMANCE AND AS INDICATED IN THE DRAWINGS.
- PROVIDE SEPARATION BETWEEN ALL DISSIMILAR METALS INCLUDING SCREWS, NAILS AND OTHER FASTENING DEVICES.
- WHERE MATERIAL FASTENERS ARE NOT INDICATED, PROVIDE AS SPECIFIED BY THE MATERIAL MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES
- USE ONLY LEAD-FREE PIPE AND SOLDER FOR DOMESTIC WASTE SYSTEM (SAFE DRINKING WATER ACT OF 1986 AND S.S.P.C. SECTION 1210.1.4)
- GENERAL CONTRACTOR SHALL TREAT THE SOIL BENEATH THE SUITE SPACES WITH TERMITICIDE POISON PER MANUFACTURER'S RECOMMENDATIONS
- ALL WALLS TO BE ANCHORED BY POWER ACTUATED FASTENERS
- ALL WOOD THAT IS IN DIRECT CONTACT WITH CEMENT, MASONRY OR EARTH SHALL BE PRESSURE TREATED
- BUILDING SIGNAGE IS TO BE PERMITTED UNDER SEPARATE COVER
- GYPSUM BOARD WALLS AND CEILINGS SHALL BE INSTALLED PER THE GYPSUM CONSTRUCTION HANDBOOK, 6TH EDITION. LEVELS OF FINISH PER THE FOLLOWING:
 - IN CONCEALED SPACES, PLENUMS ABOVE CEILINGS, SERVICE CORRIDORS AND SPACES NOT OPEN TO PUBLIC VIEW
 - IN WAREHOUSE AND STORAGE SPACES
 - IN AREAS TO RECEIVE HEAVY TEXTURED WALL FINISHES, COMMERCIAL GRADE (HEAVY-DUTY) WALL COVERING
 - IN AREAS TO RECEIVE FLAT PAINTS, LIGHT TEXTURES, RESIDENTIAL (LIGHT-DUTY) WALL COVERING
 - IN AREAS TO RECEIVE GLOSS, SEMI-GLOSS, OR ENAMEL PAINTS, UNTEXTURED FINISHES AND IN CRITICAL LIGHTING AREAS

INSULATION NOTES

- PROVIDE FOIL-FACED BATT TYPE INSULATION IN EXTERIOR STUD WALLS TO MEET MINIMUM R-19
- FLAMESPREAD AND SMOKE DEVELOPMENT RATINGS FOR BATT INSULATION VAPOR RETARDER SHALL BE AS FOLLOWS
 - FLAMESPREAD: 25
 - SMOKE DEVELOPMENT: 450

JOINTS AND SEALANT NOTES

- PROVIDE CONTINUOUS WATERPROOFING SILICONE BASED SEALANT AND BACKER ROD AT ALL STOREFRONT AND MASONRY JUNCTIONS AND TERMINATIONS. SEALANT SHALL MATCH STOREFRONT
- PROVIDE CONTINUOUS SEALANT AND BACKER ROD AT ALL JUNCTIONS BETWEEN DISSIMILAR MATERIALS, I.E. BRICK TO EIFS ETC. DOW/CORNING #790
- THE METAL EDGE SECUREMENT, EXCEPT GUTTER, SHALL BE INSTALLED AS TESTED IN ACCORDANCE WITH MOST CURRENT VERSION OF THE ANSIS/SPRI EX-1, AMERICAN NATIONAL STANDARD FOR EDGE SYSTEMS USED WITH LOW-SLOPE ROOFING SYSTEMS
- PROVIDE STANDING SEAM JOINTS AT ALL COPING SLICES FOR THERMAL EXPANSION. ALL SEAMS SHALL BE SEALED WITH DOW/CORNING #795 TYP.
- PROVIDE CLOSURE END CAPS AND 90 DEGREE TRANSITIONS AT ALL EXPANSION JOINTS AND END WALL CAPS AT GRAVELSTOPS, TYP.
- ALL METAL VENTS AND FLUES SHALL BE FLASHED WITH PORTALS PLUS FLASHING BOOT, TYP. SEAL ALL METAL TO METAL CONNECTIONS WITH DOW/CORNING #795 (NOTE: NO CLEAR SILICONE SEALANT SHALL BE ALLOWED)
- ANCHOR ALL PRESSURE TREATED WOOD BLOCKING AT TOP OF MASONRY WALLS UNDER COPING WITH 3/8" DIA. HOT DIPPED GALVANIZED ANCHORS AT 36" O.C.
- ALL EXTERIOR JOINTS IN THE BUILDING ENVELOPE THAT ARE SOURCES OF AIR LEAKS SHALL BE CAULKED, GASKETED, WEATHER STRIPPED, OR OTHERWISE SEALED IN ACCORDANCE WITH SPECIFICATIONS
- PROVIDE CONTROL JOINTS IN GYPSUM BOARD PER ASTM C-840 AND GA-216-10

CONTACTS

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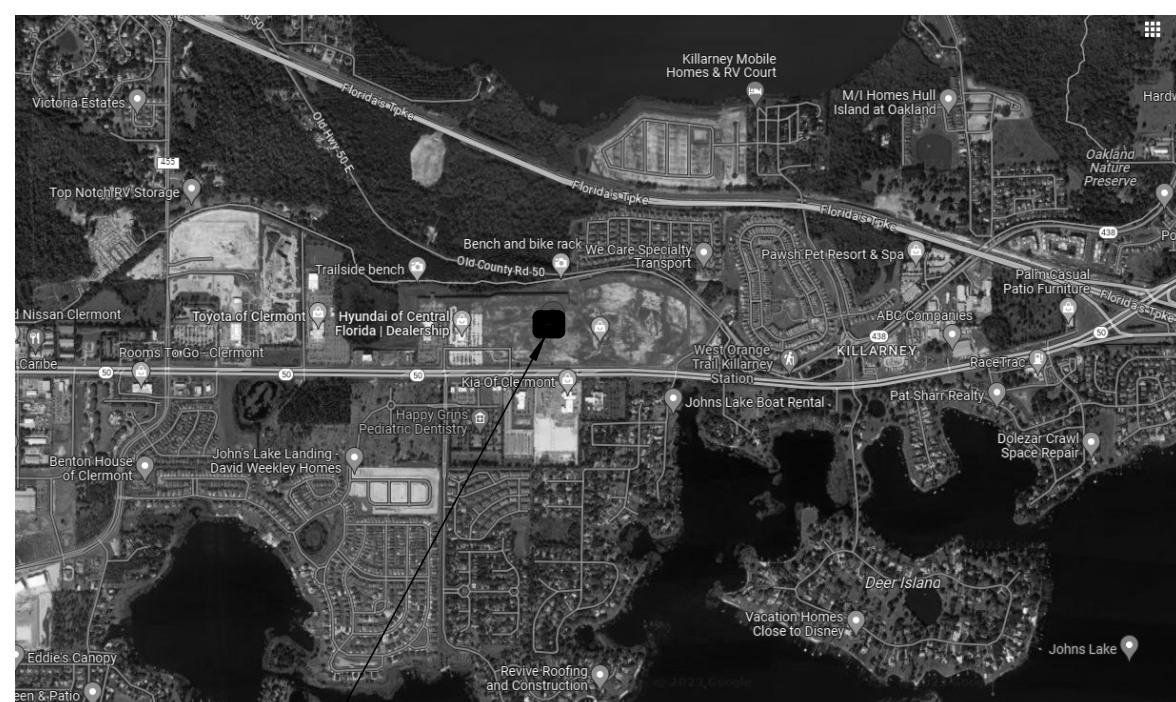
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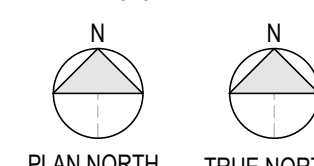
DESIGN CODES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH:
- 2020 FLORIDA BUILDING CODE (7TH EDITION)
 - NATIONAL FIRE PROTECTION AGENCY (NFPA) 101
 - 2020 FLORIDA BUILDING CODE, MECHANICAL (7TH EDITION)
 - 2017 NATIONAL ELECTRICAL CODE (NFPA 70)
 - 2020 FLORIDA BUILDING CODE, PLUMBING (7TH EDITION)
 - 2020 FLORIDA FIRE PREVENTION CODE (7TH EDITION)
 - 2020 FLORIDA BUILDING CODE - FUEL GAS (7TH EDITION)
 - 2020 FLORIDA BUILDING CODE, ENERGY CONSERVATION (7TH EDITION)
 - 2020 FLORIDA BUILDING CODE, ACCESSIBILITY (7TH EDITION)

VICINITY PLAN



PROJECT LOCATION
IMAGERY 2023 LAKE COUNTY, MAXAR TECHNOLOGIES, U.S. GEOLOGICAL SURVEY, MAP DATA 2023



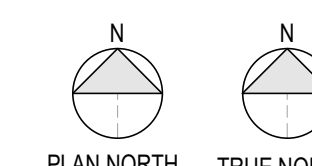
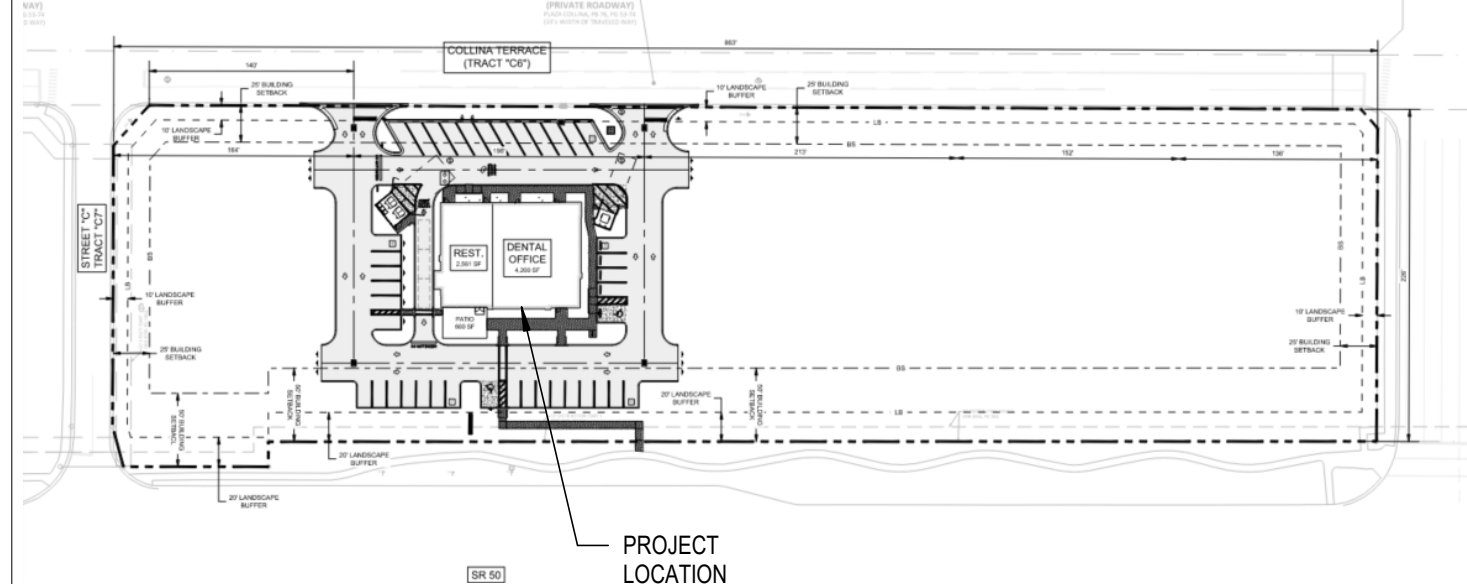
DRAWING INDEX

SHEET	DRAWING NAME	PERMIT SET 11/15/2023	ADDENDUM #1 01/05/2024
S101B	FOUNDATION PLAN - AREA B	•	
S111A	ROOF FRAMING PLAN - AREA A	•	
01 GENERAL			
G003	ARCHITECTURAL SITE PLAN	•	
05 STRUCTURAL			
S001	GENERAL NOTES	•	
S002	SPECIAL INSPECTIONS	•	
S101A	FOUNDATION PLAN - AREA A	•	
S111B	ROOF FRAMING PLAN - AREA B	•	
S201	TYPICAL FOUNDATION AND MASONRY DETAILS	•	
S202	FOUNDATION SECTIONS AND DETAILS	•	
S301	TYPICAL FRAMING DETAILS	•	
S302	FRAMING SECTIONS AND DETAILS	•	
S303	FRAMING SECTIONS AND DETAILS	•	
10 ARCHITECTURAL			
A100	FLOOR PLAN	•	•
A101	PLAN AND UL DETAILS	•	
A110	REFLECTED CEILING PLAN	•	
A120	ROOF PLAN	•	•
A121	ROOF DETAILS	•	
A201	EXTERIOR ELEVATIONS	•	
A202	EXTERIOR ELEVATIONS	•	•
A301	BUILDING SECTIONS	•	
A302	WALL SECTIONS	•	
A303	WALL SECTIONS	•	
A304	WALL SECTIONS	•	
A305	WALL SECTIONS	•	
A320	SECTION DETAILS	•	
A321	SECTION DETAILS	•	
A412	DUMPSTER ENCLOSURE PLAN, ELEVS AND DETAILS	•	
A413	DUMPSTER ENCLOSURE PLAN, ELEVS AND DETAILS	•	
A600	LEGENDS AND DOOR SCHEDULE AND DETAILS	•	
A601	DOOR AND STOREFRONT DETAILS	•	
A700	SPECIFICATIONS	•	
A701	SPECIFICATIONS	•	
A702	SPECIFICATIONS	•	
A703	SPECIFICATIONS	•	
A704	SPECIFICATIONS	•	
A705	SPECIFICATIONS	•	
30 MECHANICAL			
M001	MECHANICAL SPECS AND NOTES	•	•
M101	MECHANICAL SHELL PLAN	•	•
40 PLUMBING			
P001	PLUMBING SPECS AND NOTES	•	•
P101	PLUMBING SHELL PLAN	•	•
50 ELECTRICAL			
E001	ELECTRICAL LEGEND	•	•
E100	ELECTRICAL - SITE PLAN	•	•
E101	ELECTRICAL FLOOR PLAN	•	•
E500	ELECTRICAL SCHEDULES	•	•
E511	ELECTRICAL DETAILS	•	•

FLORIDA PRODUCT DATA INDEX

PRODUCT TYPE	PRODUCT DESCRIPTION	MANUFACTURER	FL APPROVAL NO.
PANEL WALLS	ALUMN. STOREFRONT (NON-IMPACT)	KAWNEER	FL2723-R9
PANEL WALLS	BRICK BASE	GLEN GARY	-
PANEL WALLS	EIFS	DRIVET	FL3423
PANEL WALLS	SIDING	NICHIHA CORPORATION	FL12098-R9
EXTERIOR DOORS	ALUMN. ENTRANCES (NON-IMPACT)	KAWNEER	FL7273-R9
EXTERIOR DOORS	COMMERCIAL STEEL DOORS	CECO DOOR PRODUCTS	FL4553-R11
ROOFING	SINGLE-PLY ROOFING SYSTEMS (TPO)	FIRESTONE BLDG. PRODUCTS.	FL10264-R14
WINDOWS	PASS-THRU	QUIKSERV	NOA 21020508

KEY PLAN



Mark S. Salopek, LLC

701 W. Lakeside Ave, Apt # 503
Cleveland, OH 44113
Phone 330.572.2112

FOR BIDDING
ONLY.
NOT FOR
CONSTRUCTION.

WMG DEVELOPMENT
WMG DEVELOPMENT
1200 Network Centre Drive
Effingham, IL 62401

WMG SHELL - CLERMONT FL

WMG # FL22-0695
FL Highway 50/ W. Colonial Drive
Clermont, FL 34711

1/24/24 BID SET
11/15/23 PERMIT SET

mk date issue

TITLE SHEET
& DRAWING
INDEX

G000

DRAWN BY
JB

CHECKED BY
RD

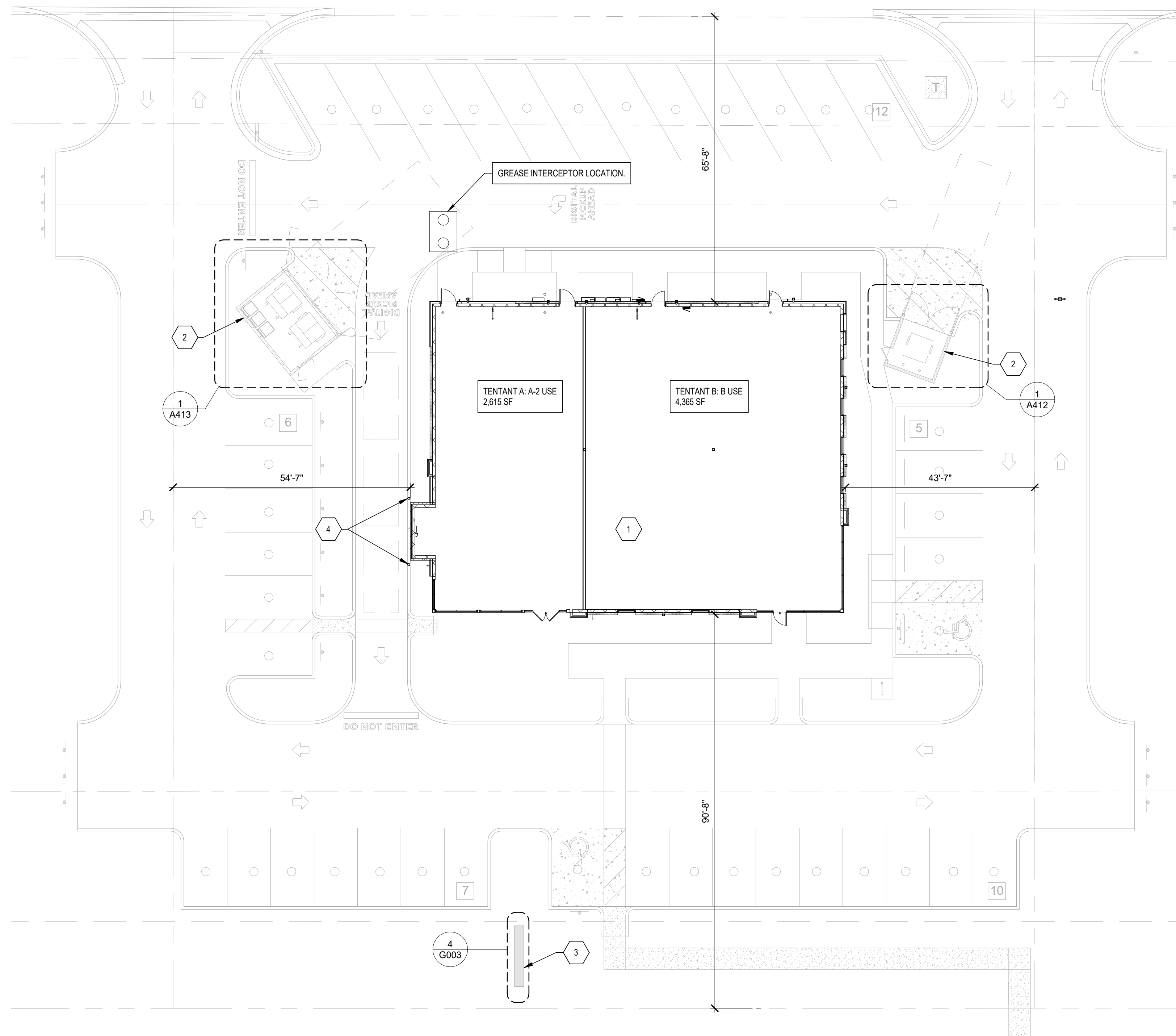
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GENERAL NOTES

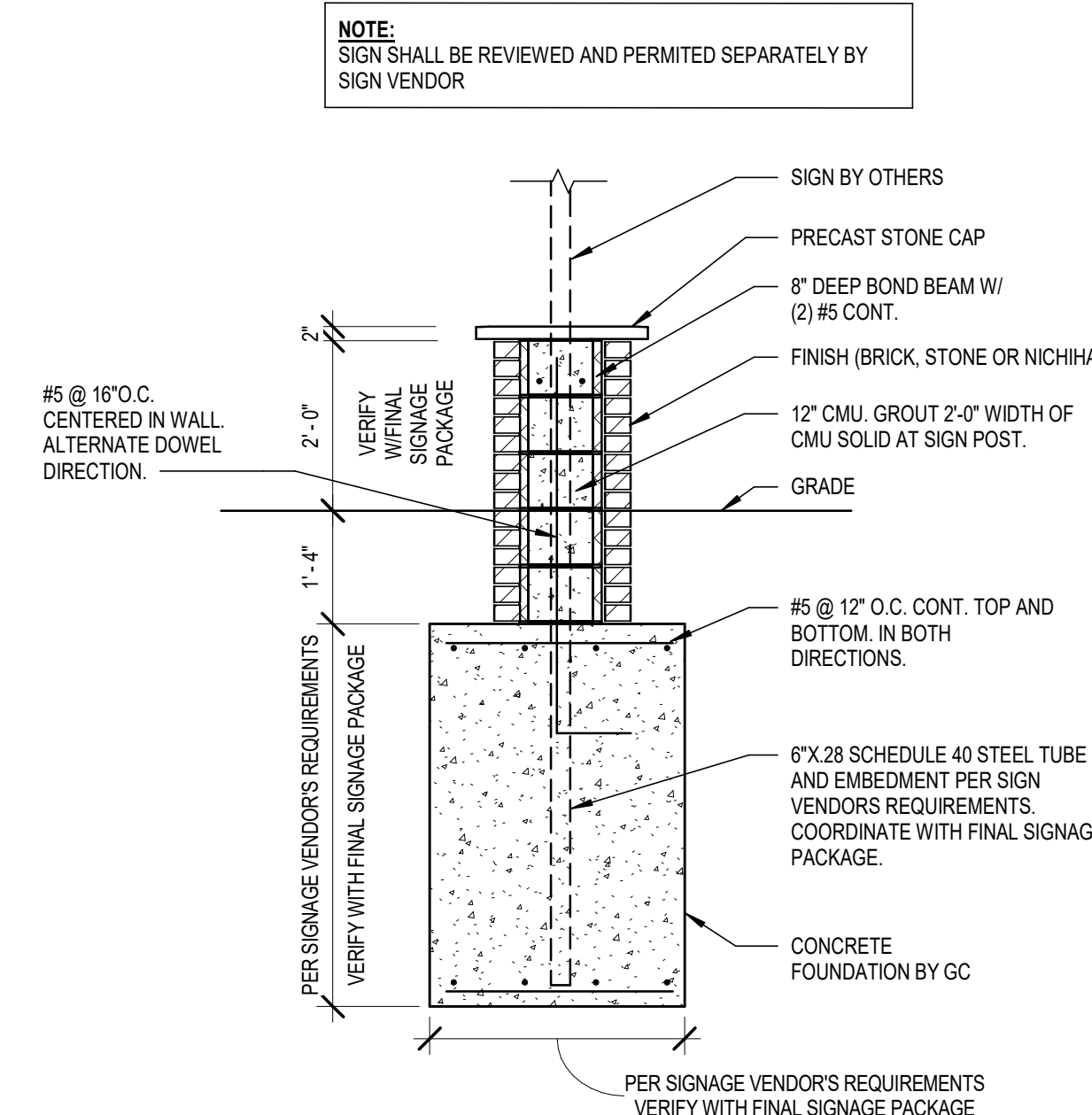
- A. DO NOT SCALE DRAWINGS.
- B. THE SITE PLAN INFORMATION CONTAINED ON THIS SHEET IS PROVIDED FOR REFERENCE ONLY. REFER TO CIVIL DRAWINGS FOR DETAILED SITE INFORMATION. CIVIL DRAWINGS ARE CONTAINED IN A SEPARATE PERMIT PACKAGE.
- C. REFER TO CIVIL DRAWINGS FOR GRADING, BUILDING LOCATION AND ALL UTILITY LOCATIONS.
- D. THIS IS NOT A SURVEY. REFER TO THE PATTED SURVEY FOR ACCURACY.
- E. SIGNAGE SHOWN IS FOR REFERENCE ONLY. NO SIGNAGE IS INCLUDED IN THIS PACKAGE. ALL SIGNAGE MUST BE PERMITTED SEPARATELY.
- F. SEE CIVIL DRAWINGS FOR PARKING SUMMARY AND PARKING COUNTS.

SITE KEYNOTES

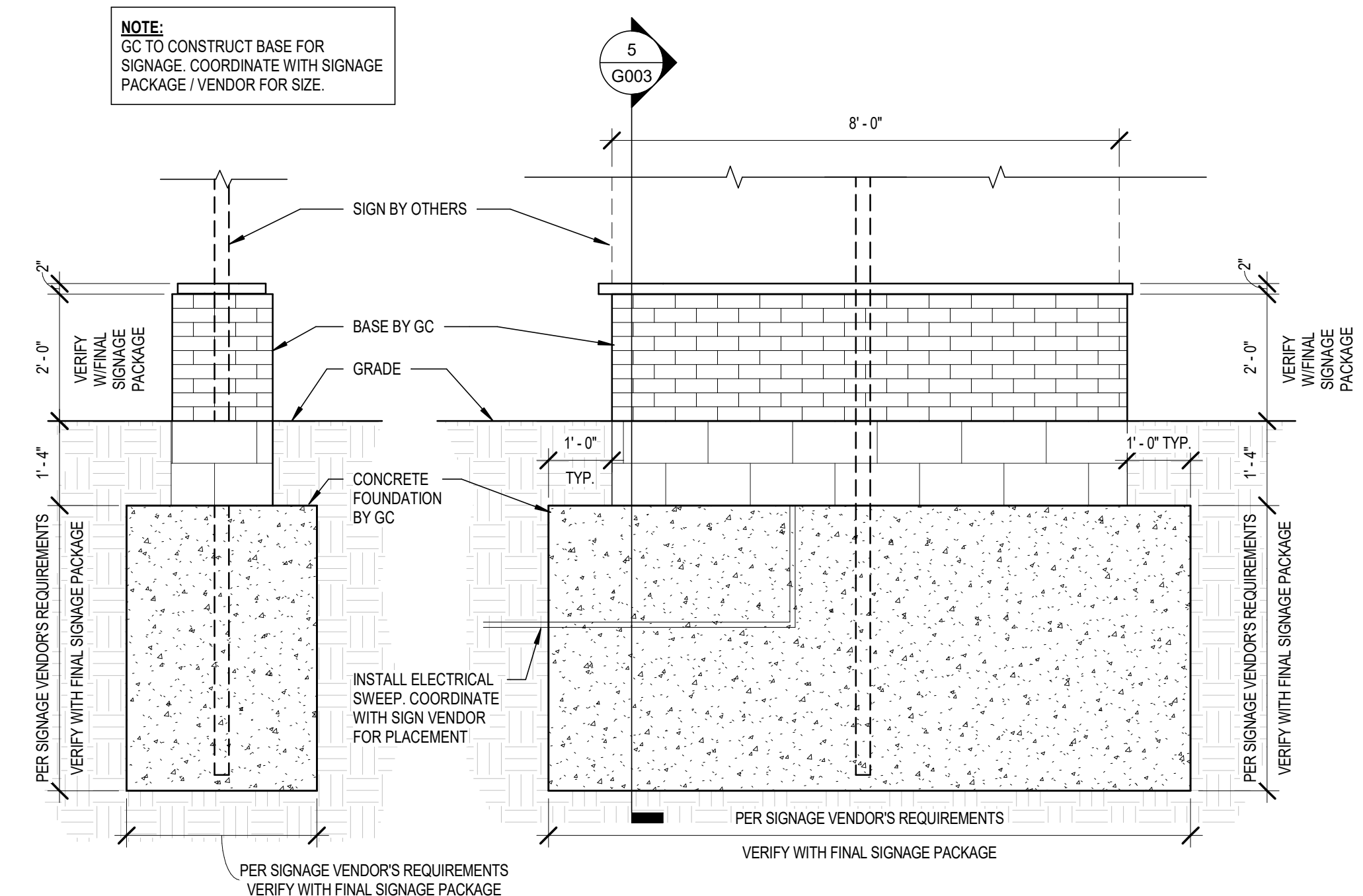
KEYNOTE NUMBER	NOTE
1	BUILDING LOCATION.
2	DUMPSTER LOCATION.
3	MONUMENT SIGN. SEE CIVIL FOR SPECIFIC LOCATION.
4	BOLLARDS. SEE CIVIL.



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



5 MONUMENT SIGN SECTION (ALT DESIGN)
1/2" = 1'-0"



4 MONUMENT SIGN DETAIL (ALT DESIGN)
1/2" = 1'-0"

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WMG DEVELOPMENT
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WMG SHELL - CLERMONT FL
WMG # FL22-0606
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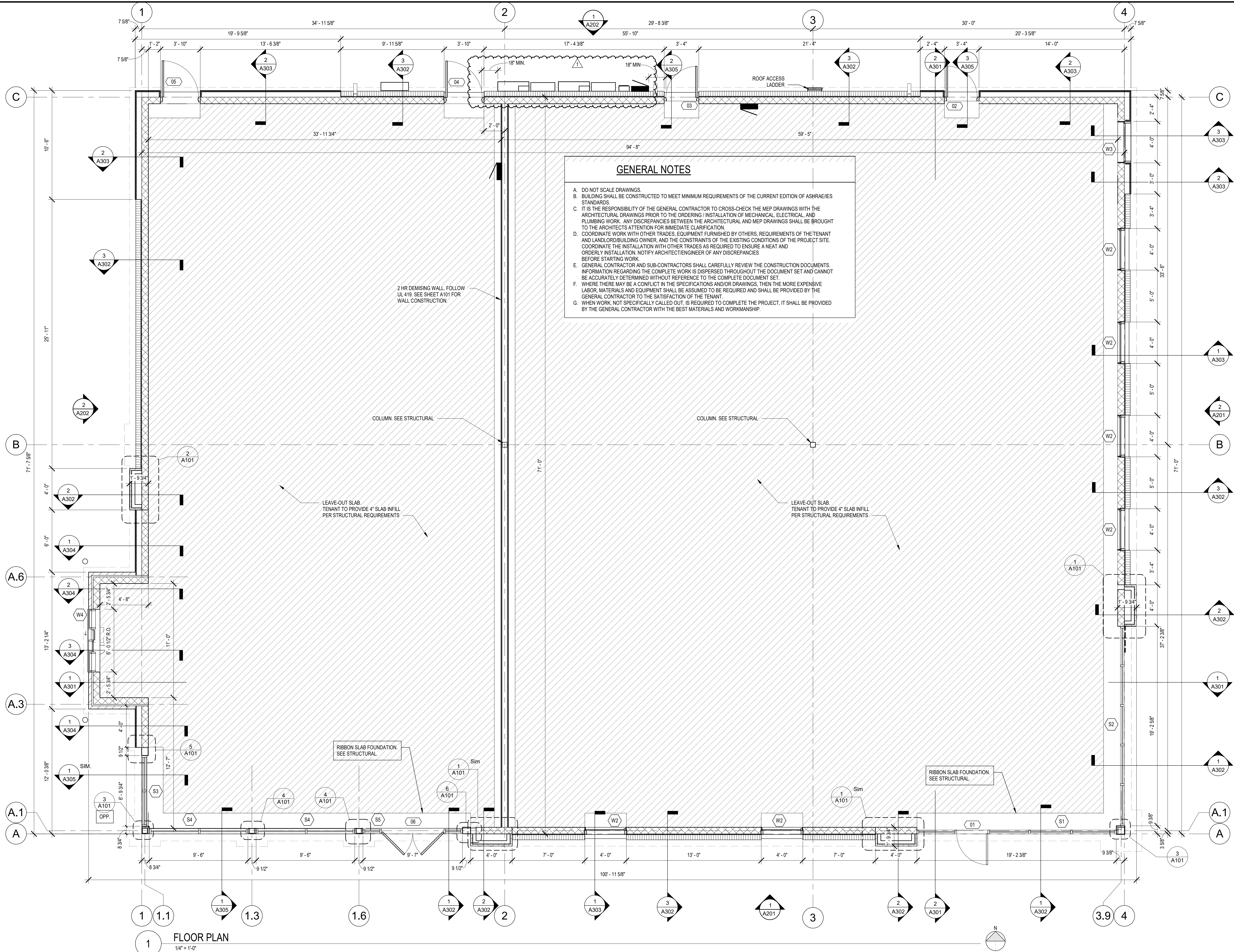
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ARCHITECTURAL SITE PLAN

G003

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GENERAL NOTES

- DO NOT SCALE DRAWINGS.
- BUILDING SHALL BE CONSTRUCTED TO MEET MINIMUM REQUIREMENTS OF THE CURRENT EDITION OF ASHRAE/IES STANDARDS.
- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CROSS-CHECK THE MEP DRAWINGS WITH THE ARCHITECTURAL DRAWINGS PRIOR TO THE ORDERING / INSTALLATION OF MECHANICAL, ELECTRICAL, AND PLUMBING WORK. ANY DISCREPANCIES BETWEEN THE ARCHITECTURAL AND MEP DRAWINGS SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION FOR IMMEDIATE CLARIFICATION.
- COORDINATE WORK WITH OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE TENANT AND LANDLORD/BUILDING OWNER, AND THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. COORDINATE THE INSTALLATION WITH OTHER TRADES AS REQUIRED TO ENSURE A NEAT AND ORDERLY INSTALLATION. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES BEFORE STARTING WORK.
- GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.
- WHERE THERE MAY BE A CONFLICT IN THE SPECIFICATIONS AND/OR DRAWINGS, THEN THE MORE EXPENSIVE LABOR, MATERIALS AND EQUIPMENT SHALL BE ASSUMED TO BE REQUIRED AND SHALL BE PROVIDED BY THE GENERAL CONTRACTOR TO THE SATISFACTION OF THE TENANT.
- WHEN WORK, NOT SPECIFICALLY CALLED OUT, IS REQUIRED TO COMPLETE THE PROJECT, IT SHALL BE PROVIDED BY THE GENERAL CONTRACTOR WITH THE BEST MATERIALS AND WORKMANSHIP.

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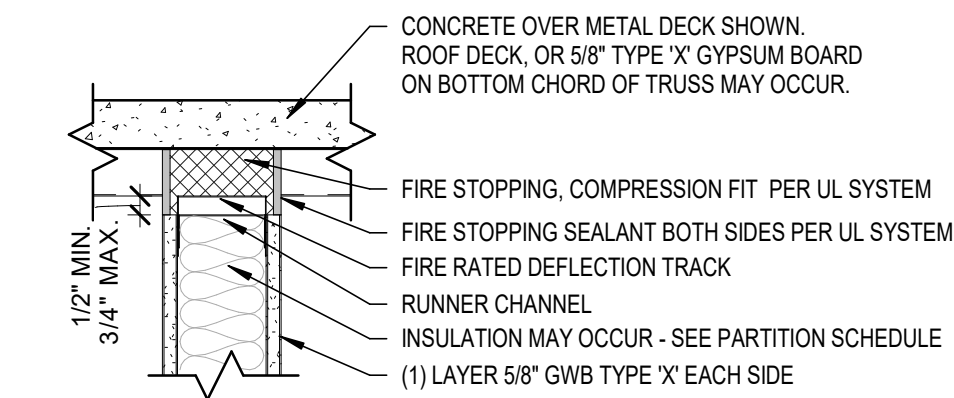
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FLOOR PLAN

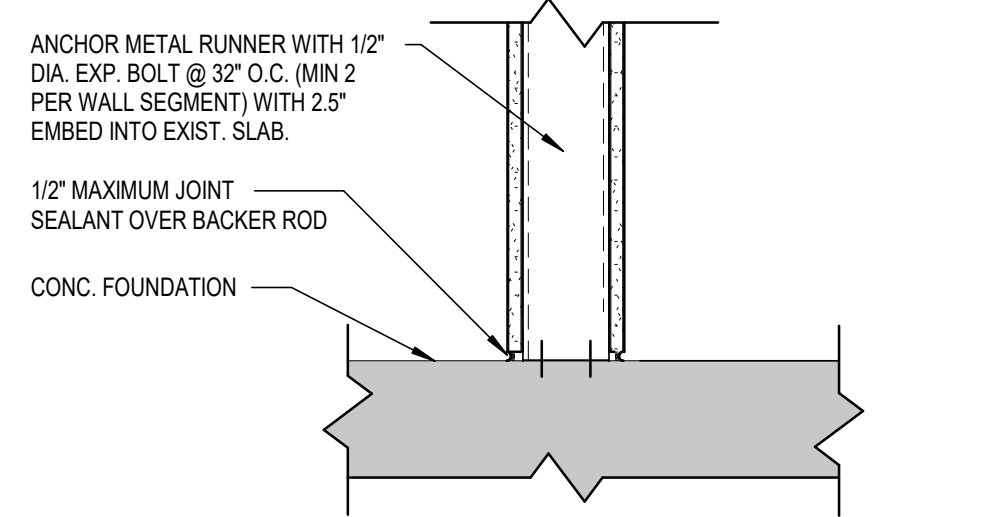
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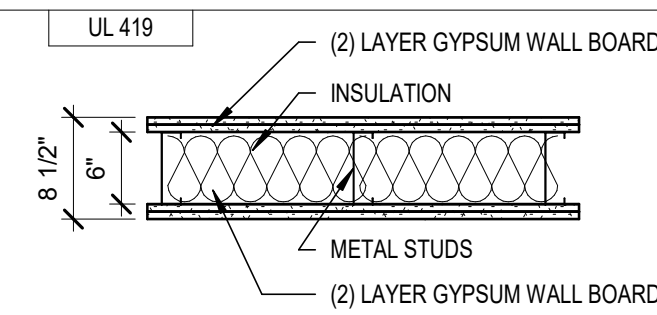
A2
TYPICAL FIRE RATED GWB HEAD OF WALL DETAIL
 1 1/2" = 1'-0"



A1
WALL DETAIL
 1 1/2" = 1'-0"

PARTITION SCHEDULES

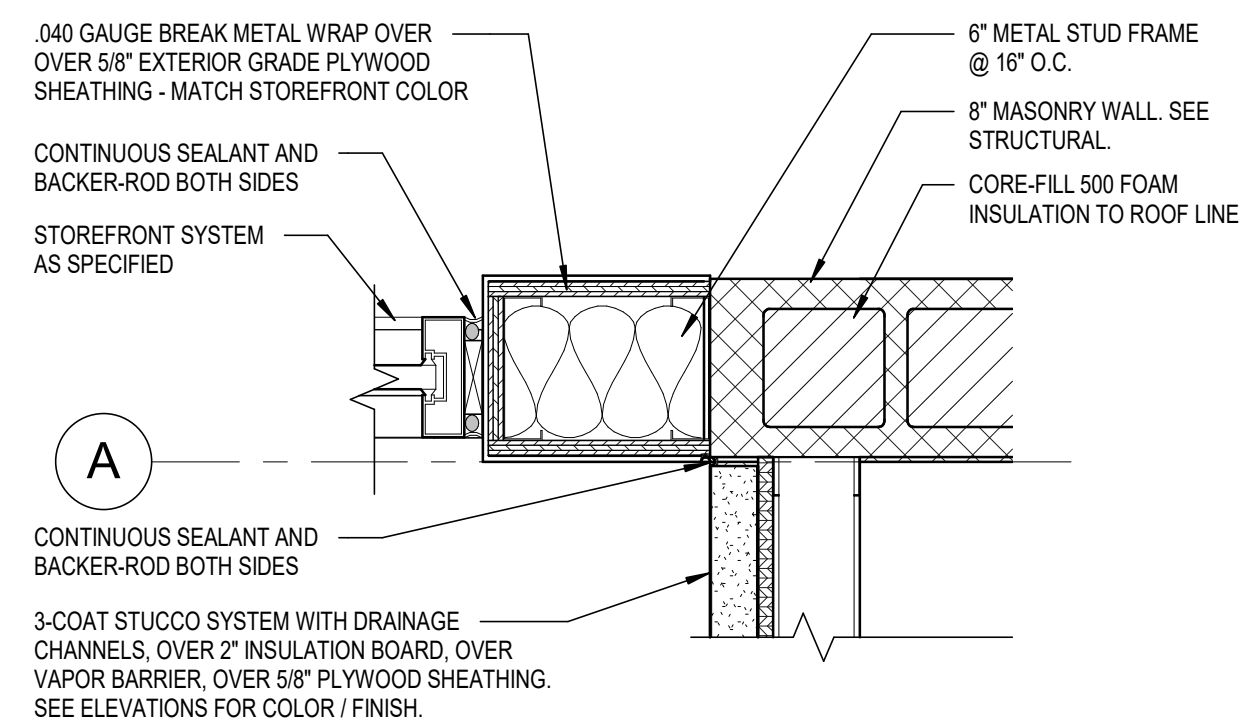
2 HR FIRE RATED: METAL STUD WITH GWB PARTITION SCHEDULE



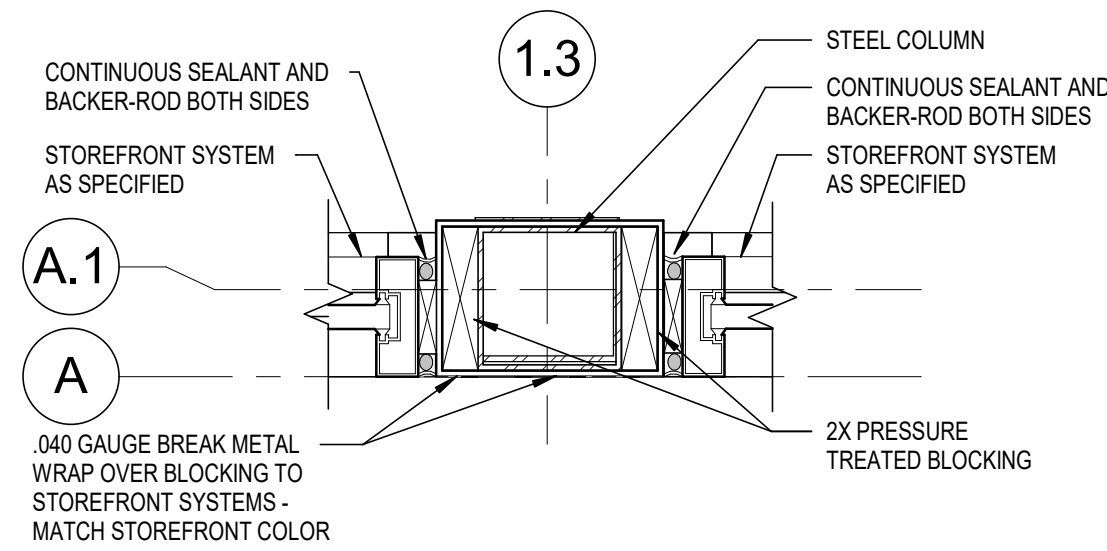
MARK	PLAN DEPTH	FIRE RATING	PARTITION DESCRIPTION	HEAD DETAIL	BASE DETAIL
P6F	8 1/2"	2 HR	METAL STUDS 6" AT 16" O.C. MAX. FULL HEIGHT TO UNDERSIDE OF DECK. SOUND ATTENUATION INSULATION. (2) LAYER 5/8" TYPE 'X' GYPSUM WALL BOARD EACH SIDE.	A2 / A101	A1/A101

GENERAL NOTES

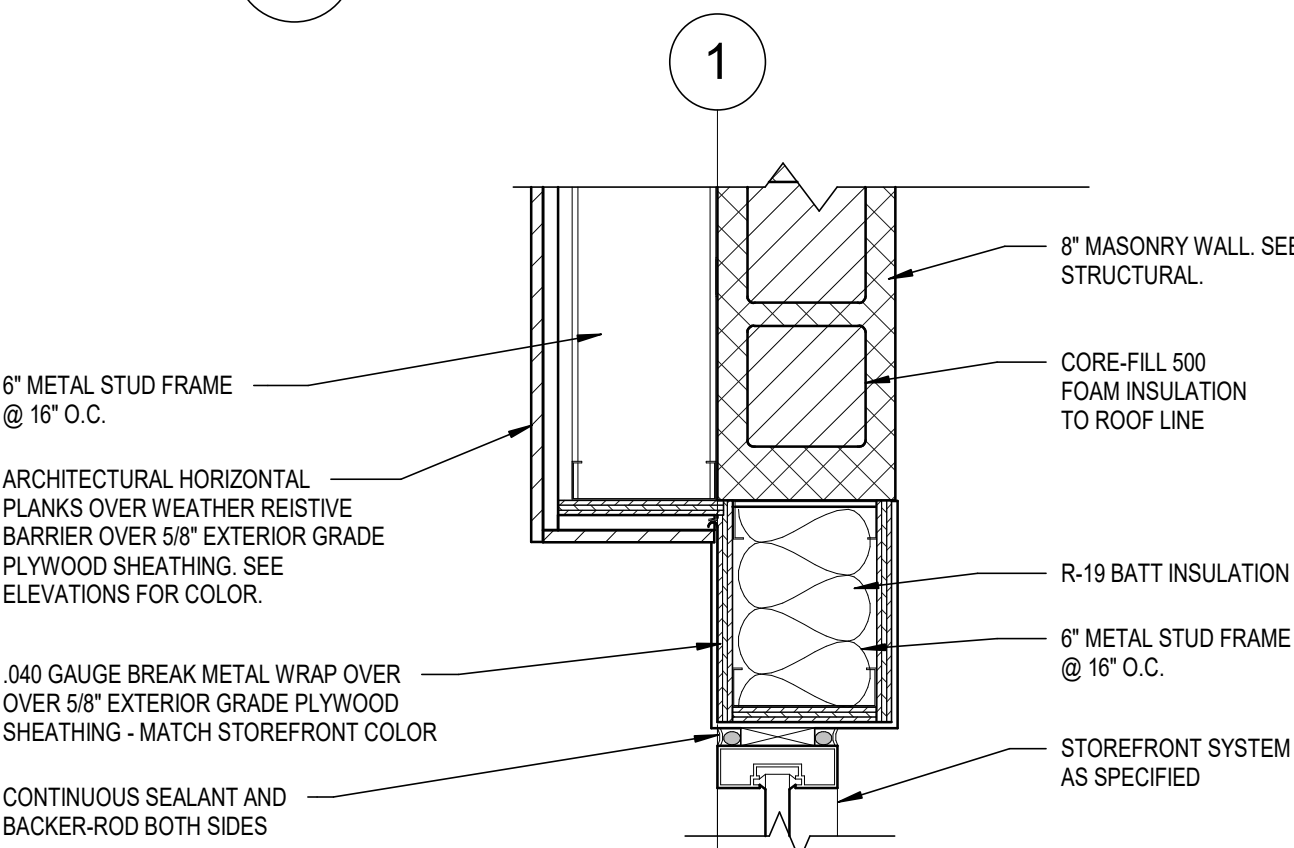
- SEAL ALL TOPS, BOTTOMS, ENDS, AND PENETRATIONS WITH FIRE STOPPING SEALANT AND FIRE STOPPING MATERIAL AS REQUIRED BY UL RATED SYSTEM BEING USED.
- PROVIDE TYPE 'X' MOISTURE RESISTANT GYPSUM BOARD AT ALL WET WALL LOCATIONS. EXTEND FROM THE CENTER LINE OF ALL PLUMBING FIXTURES MIN. 4'-0" ABOVE FINISH FLOOR AND 3'-0" MIN. EACH SIDE. U.N.O.
- SEALANT SHALL BE PAINTABLE AT ALL EXPOSED TO VIEW LOCATIONS.
- PROVIDE 16 GA. METAL REINFORCING FOR ALL WALL MOUNTED ITEMS, INCLUDING OWNER PROVIDED ITEMS.



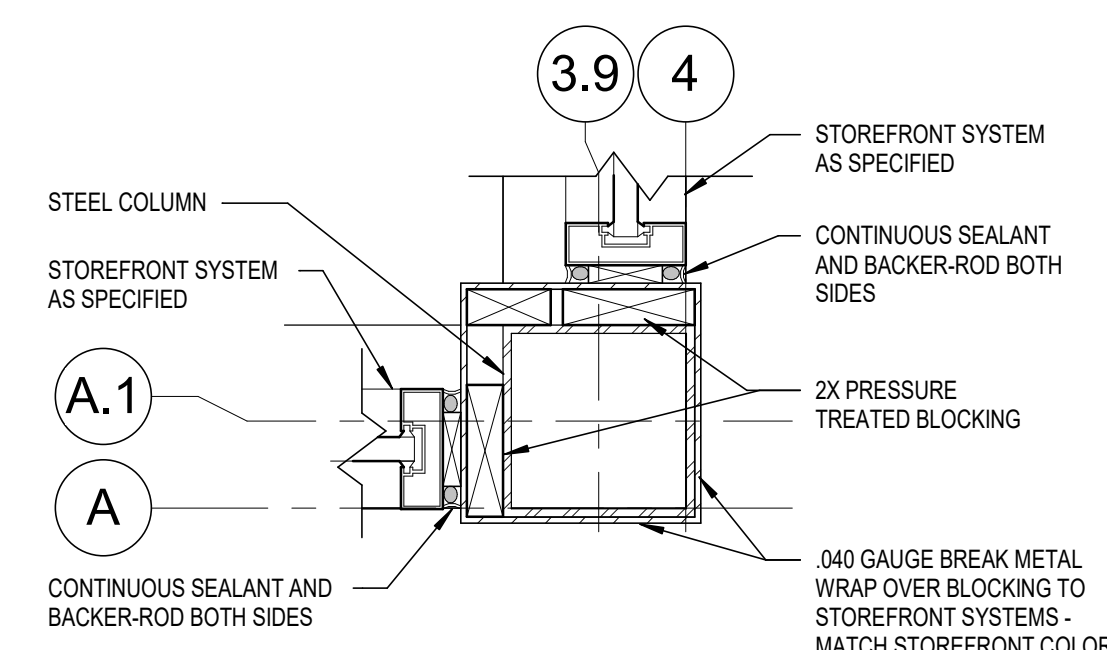
6
STOREFRONT DETAIL
 1 1/2" = 1'-0"



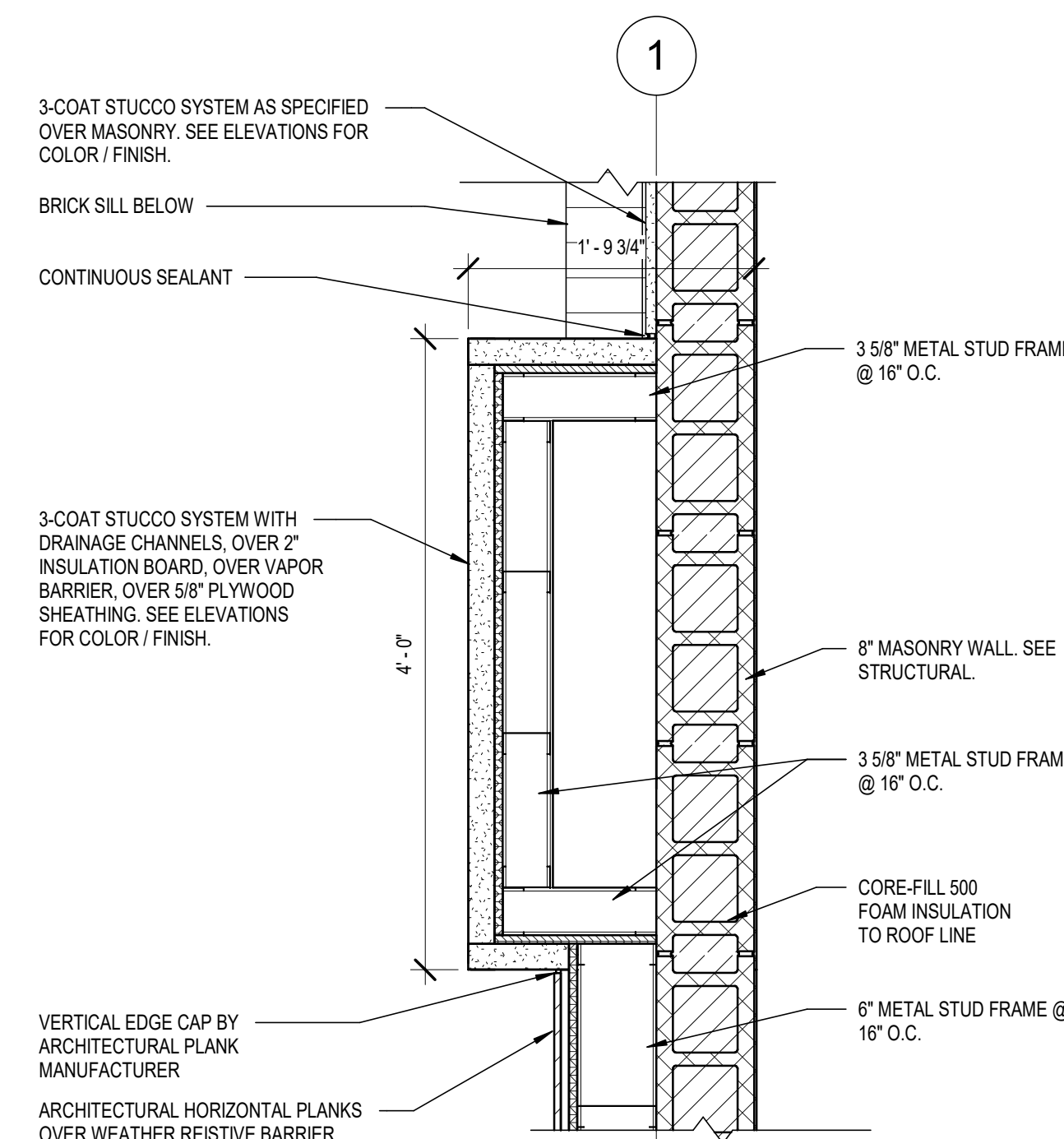
4
STOREFRONT DETAIL
 1 1/2" = 1'-0"



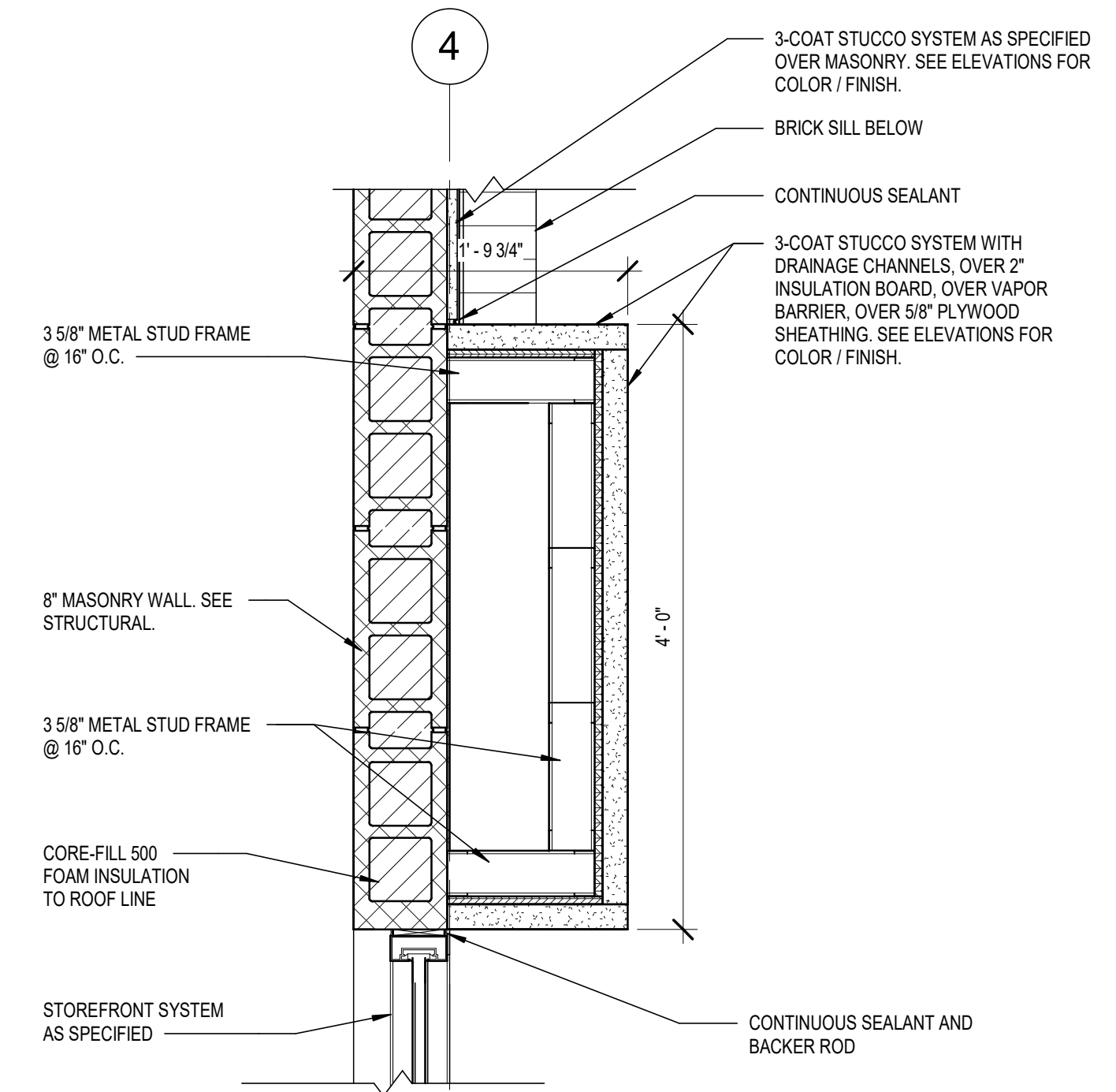
5
STOREFRONT DETAIL
 1 1/2" = 1'-0"



3
STOREFRONT CORNER DETAIL
 1 1/2" = 1'-0"



2
ENLARGED PLAN DETAIL
 1" = 1'-0"



1
ENLARGED PLAN DETAIL
 1" = 1'-0"

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11/15/23	PERMIT SET
mk	date issue

PLAN AND UL DETAILS

A101

DRAWN BY JB	CHECKED BY DR
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2023064.21

RCP LEGEND

REFLECTED CEILING PLAN LEGEND	
	STRIP FIXTURE
	EMERGENCY EXIT SIGN
	EXTERIOR SCONCE
	DOWNLIGHT
*REFER TO ELECTRICAL DRAWINGS FOR LIGHT FIXTURE SPECIFICATIONS	

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mk	date issue

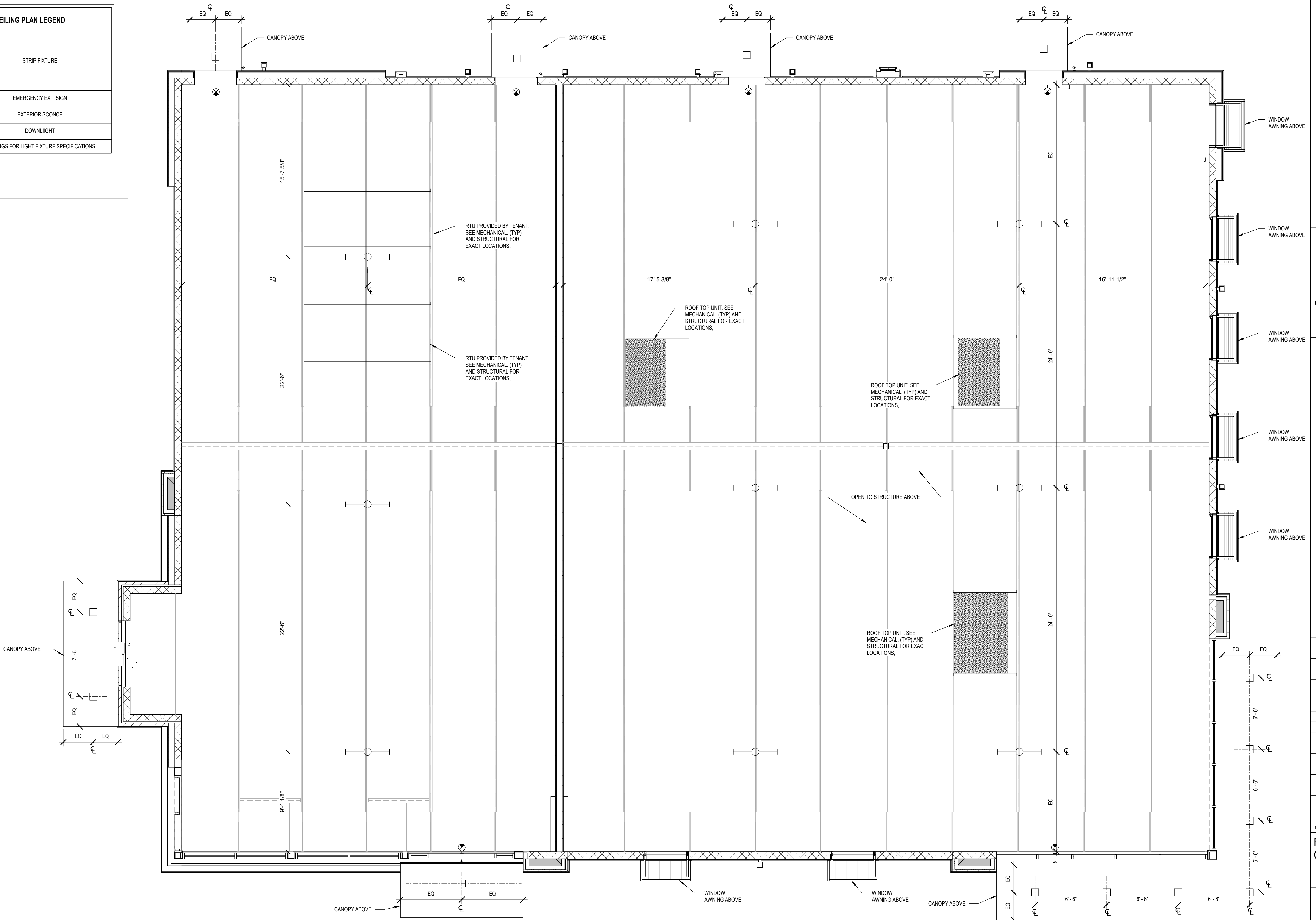
REFLECTED
CEILING PLAN

A110

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JB

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DR

2023064.21



1 REFLECTED CEILING PLAN
1/4" = 1'-0"

1/23/2024 3:58:28 PM

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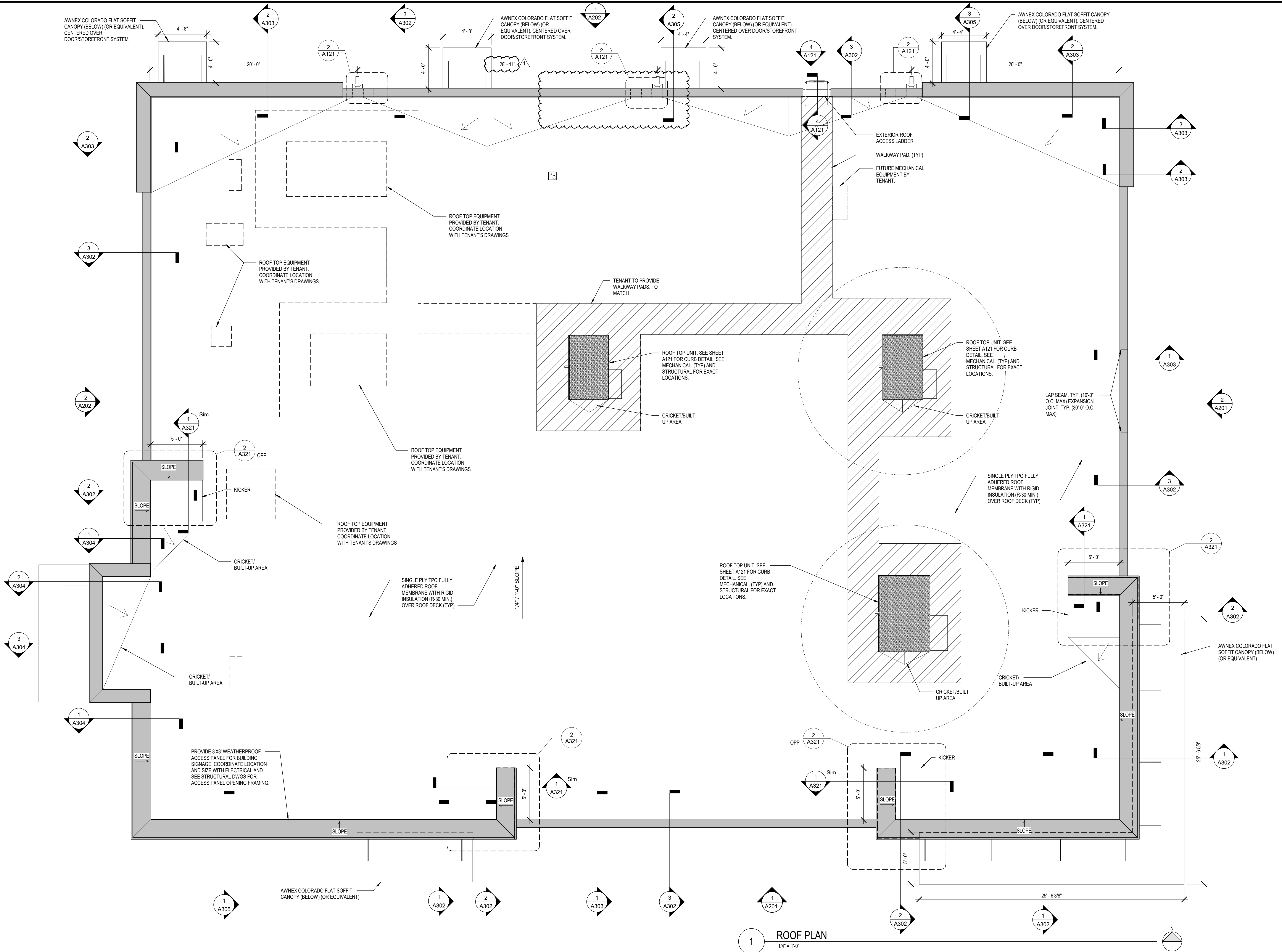
**WMG SHELL -
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1/24/24	BID SET
1	01/12/24 ADDENDUM #1
11/15/23	PERMIT SET
mk	date issue

ROOF PLAN

A120

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DR
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1 ROOF PLAN
1/4" = 1'-0"

1/24/2024 11:42:33 AM

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11/15/23	PERMIT SET
mk	date issue

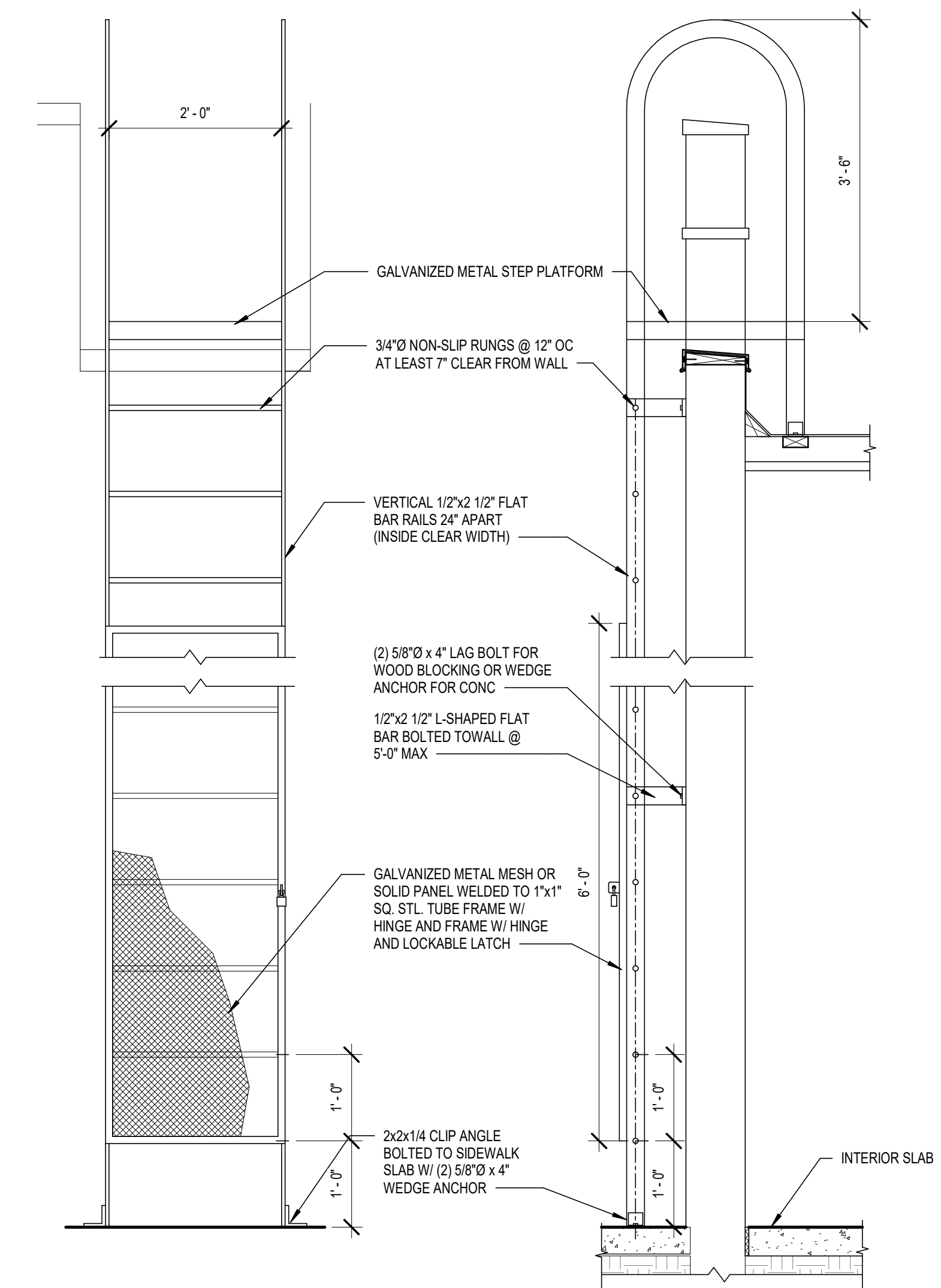
ROOF DETAILS

A121

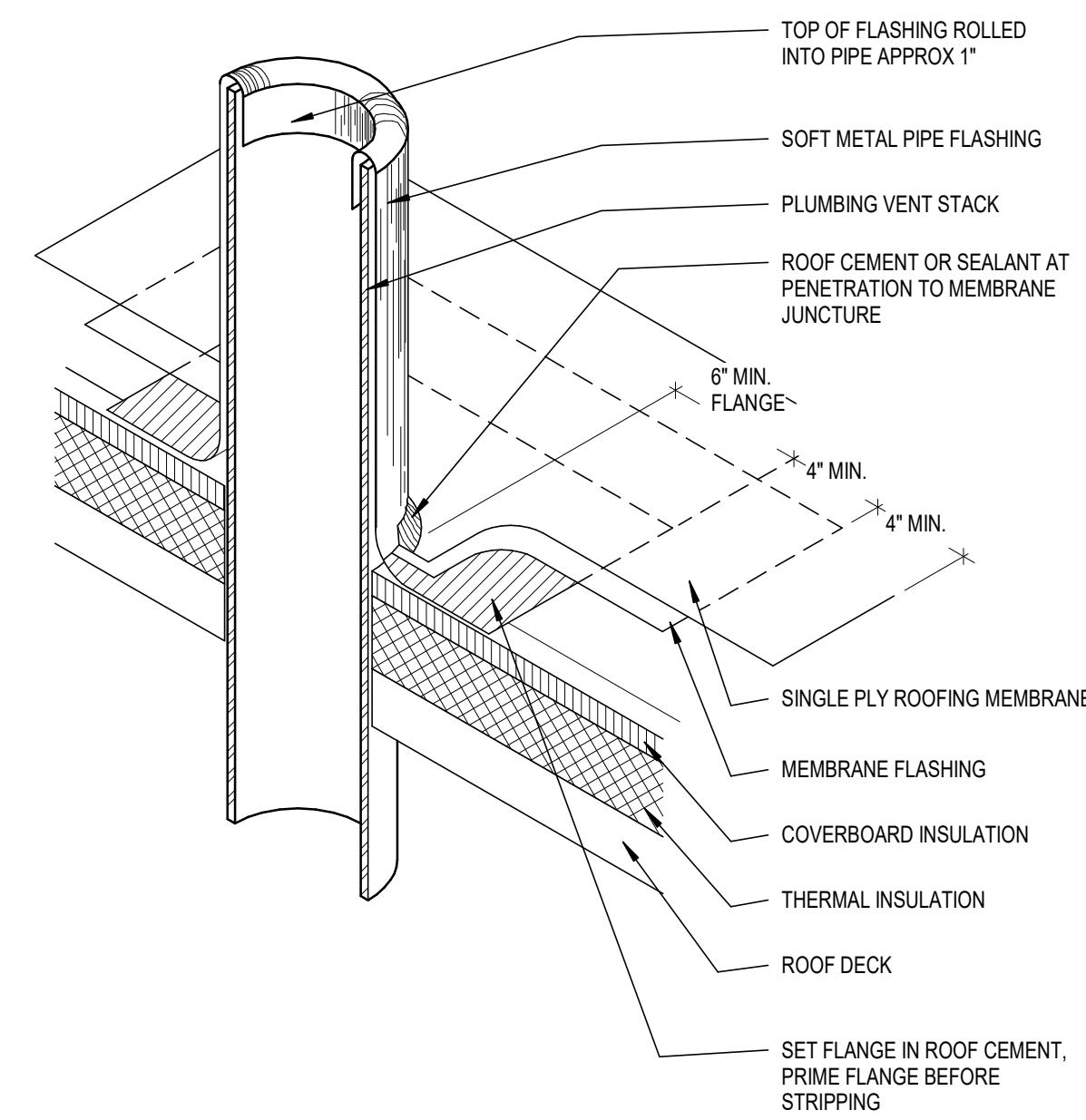
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JB

CHECKED BY
DR

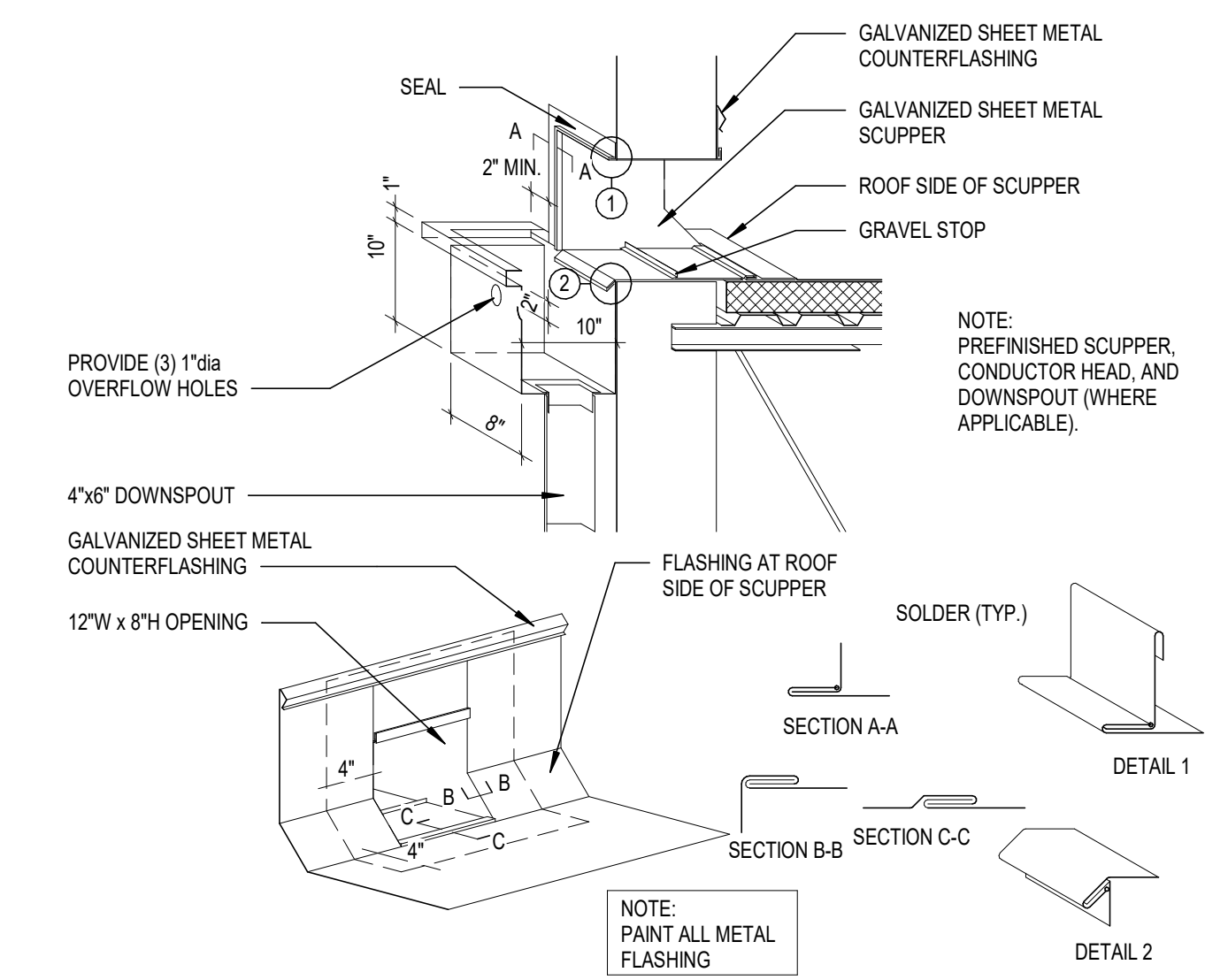
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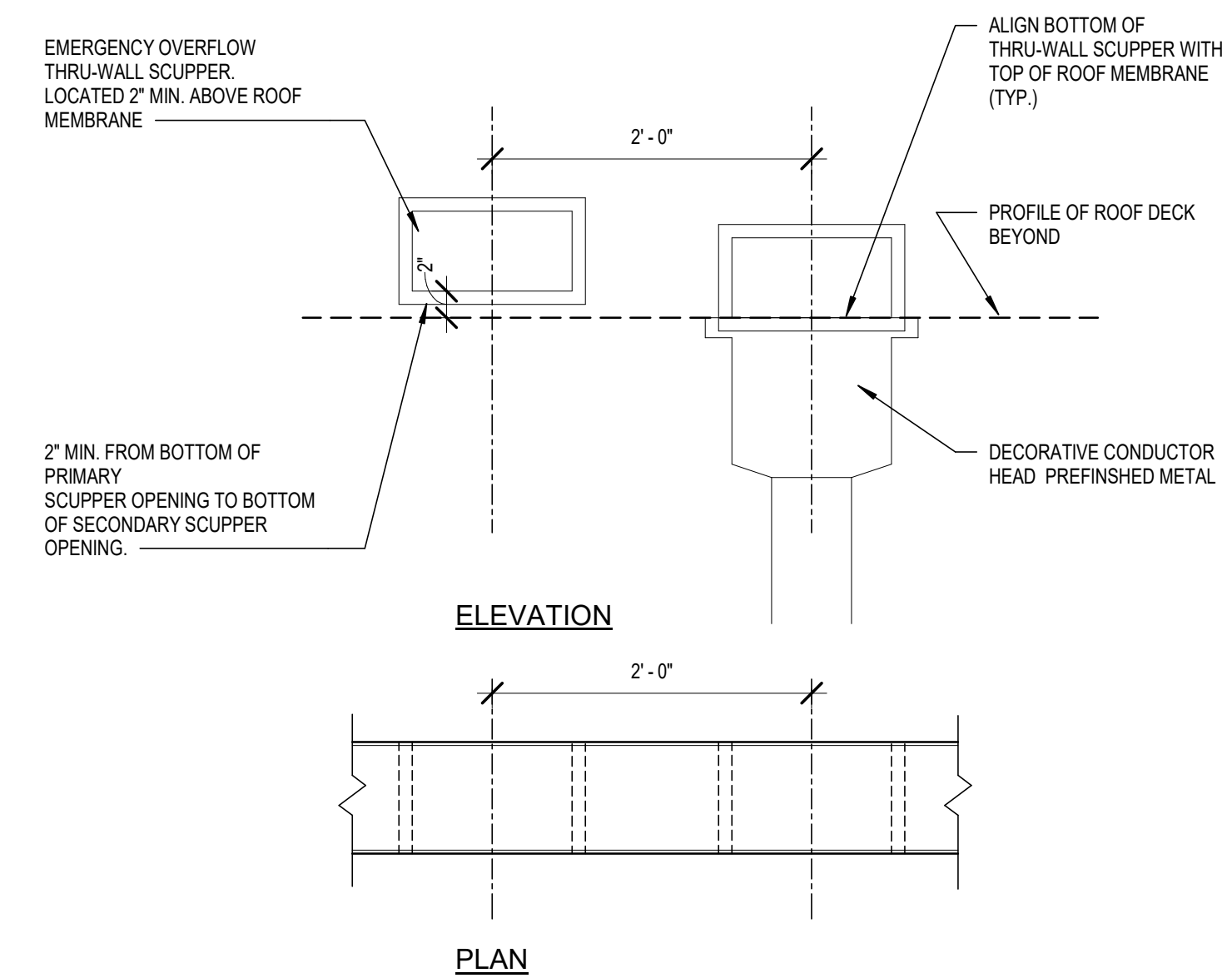
4 EXTERIOR ROOF LADDER
3/4" = 1'-0"



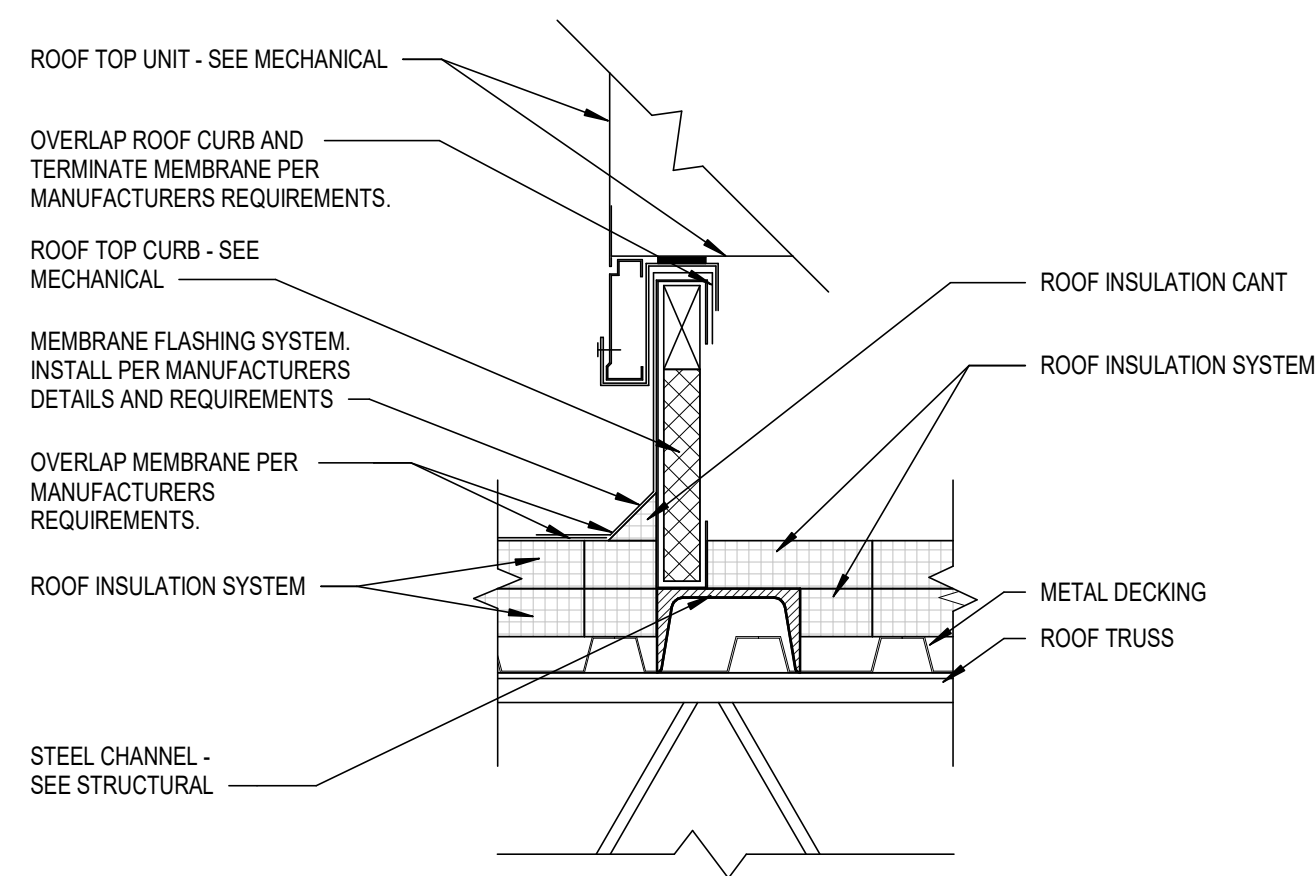
5 VENT THRU ROOF DETAIL
1 1/2" = 1'-0"



1 THROUGH WALL SCUPPER DETAIL
1" = 1'-0"



2 ENLARGED SCUPPER ELEVATION
1" = 1'-0"



3 RTU CURB DETAIL
1 1/2" = 1'-0"

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GENERAL NOTES

- DO NOT SCALE DRAWINGS.
- BUILDING SHALL BE CONSTRUCTED TO MEET MINIMUM REQUIREMENTS OF THE CURRENT ENERGY CODES AND ASHRAE/IES STANDARDS.
- IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CROSS-CHECK THE MEP DRAWINGS WITH THE ARCHITECTURAL DRAWINGS PRIOR TO THE ORDERING / INSTALLATION OF MECHANICAL, ELECTRICAL, AND PLUMBING WORK. ANY DISCREPANCIES BETWEEN THE ARCHITECTURAL AND MEP DRAWINGS SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION FOR IMMEDIATE CLARIFICATION.
- COORDINATE WORK WITH OTHER TRADES. EQUIPMENT FURNISHED BY OTHERS. REQUIREMENTS OF THE TENANT AND LANDLORD/BUILDING OWNER, AND THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. COORDINATE THE INSTALLATION WITH OTHER TRADES AS REQUIRED TO ENSURE A NEAT AND ORDERLY INSTALLATION. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES BEFORE STARTING WORK.
- GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.
- WHERE THERE MAY BE A CONFLICT IN THE SPECIFICATIONS AND/OR DRAWINGS, THEN THE MORE EXPENSIVE LABOR, MATERIALS AND EQUIPMENT SHALL BE ASSUMED TO BE REQUIRED AND SHALL BE PROVIDED BY THE GENERAL CONTRACTOR TO THE SATISFACTION OF THE TENANT.
- WHEN WORK, NOT SPECIFICALLY CALLED OUT, IS REQUIRED TO COMPLETE THE PROJECT, IT SHALL BE PROVIDED BY THE GENERAL CONTRACTOR WITH THE BEST MATERIALS AND WORKMANSHIP.
- PROVIDE CONCEALED BLOCKING BEHIND LOCATIONS OF ALL ATTACHED BUILDING SIGNAGE.

SIGNAGE NOTES

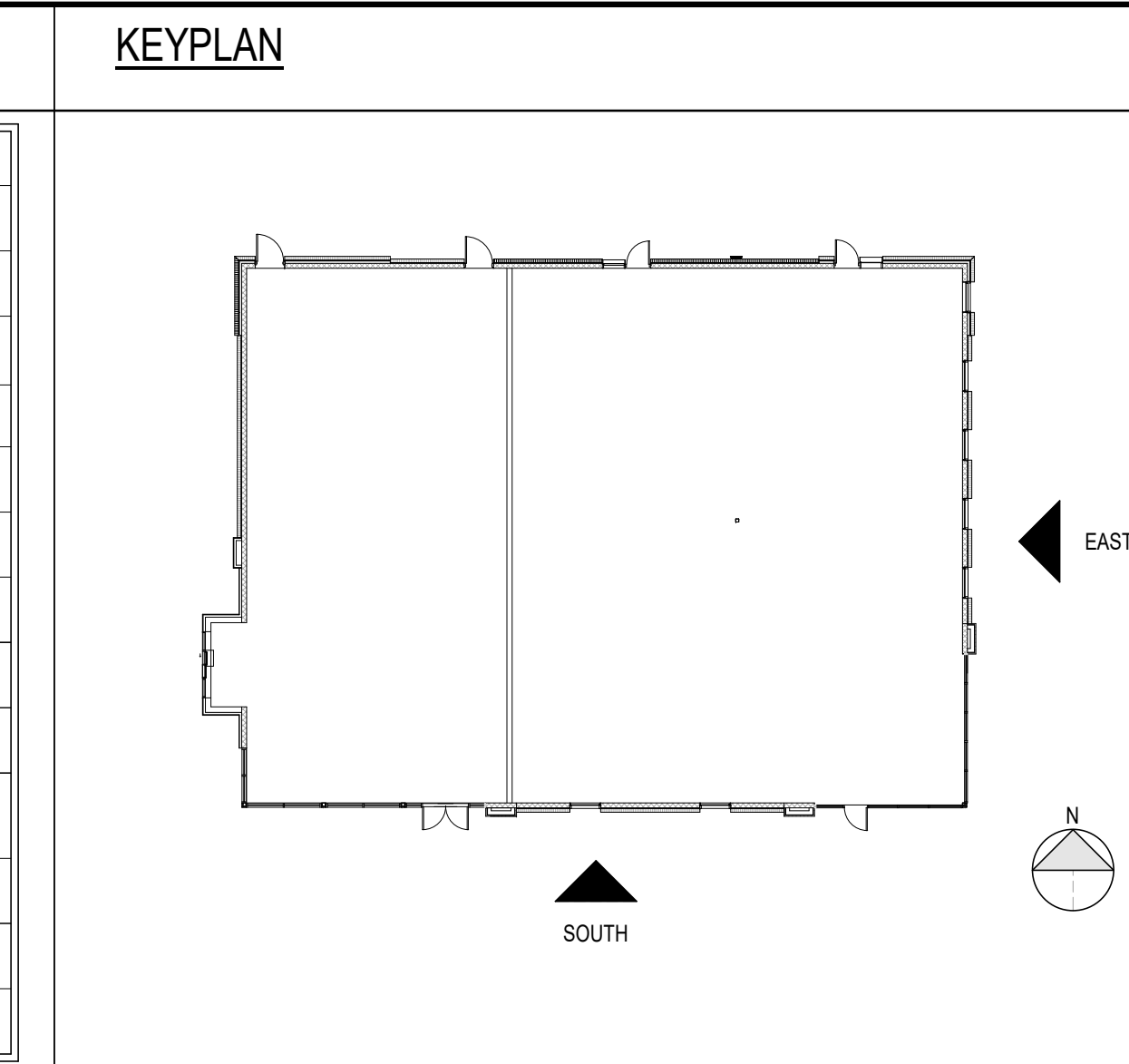
- GC TO COORDINATE WITH SIGN VENDOR AND HEARTLAND DENTAL DESIGN MANAGER, TO OBTAIN SHOP DRAWINGS.
- GC TO COORDINATE ALL ANCHOR REQUIREMENTS, BLOCKING, AND LIGHTING REQUIREMENTS WITH SIGN VENDOR.
- SIGN VENDOR IS RESPONSIBLE FOR ALL PERMITTING REQUIREMENTS AND VERIFYING WITH AUTHORITY HAVING JURISDICTION (AHJ) FOR ALLOWABLE SIGNAGE SIZE AND REQUIREMENTS.
- AHJ IS CITY OF CLERMONT. MAXIMUM SQUARE FEET OF SIGNAGE AREA IS 60 SQUARE FEET. SIGNAGE VENDOR TO VERIFY.

ELEVATION KEYNOTES

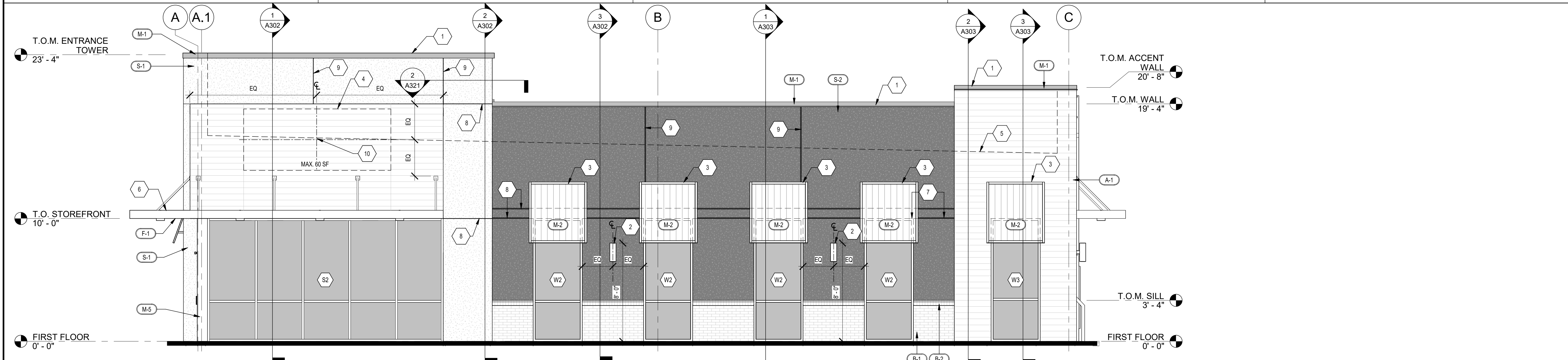
KEYNOTE NUMBER	NOTE
1	PRE-FINISHED METAL COPING WITH CONTINUOUS CLEAT.
2	LIGHT FIXTURE REFER TO ELECTRICAL DRAWINGS.
3	ALUMINUM FRAMED STANDING SEAM AWNING COLOR TO BE BLACK. 4'-8"x6'-0" CENTERED OVER WINDOW / DOOR.
4	LOCATION OF FUTURE SIGNAGE BY TENANT. PROVIDE BLOCKING IN THIS AREA FOR TENANT SIGNAGE.
5	ROOF LINE BEYOND.
6	AWNEX COLORADO CANOPY SYSTEM, FLAT SOFFIT, 8" SMOOTH FASCIA - BY MANUFACTURER. RECESSED DOWNLIGHTING INTEGRATED INTO CANOPY. LIGHTING PROVIDED BY OWNER PREFERRED LIGHTING VENDOR. SEE STRUCTURAL FOR CONNECTION DETAILS.
7	ALIGN CONTROL JOINT WITH TOP OF WINDOW.
8	HORIZONTAL CONTROL JOINT.
9	VERTICAL CONTROL JOINT.
10	GC TO INSTALL JUCTION BOX CENTERED ON ELEVATION, BELOW ROOF LINE, AND ABOVE CEILING.
11	ALUMINUM AWNING
12	CT CABINET AND ELECTRICAL GEAR. SEE ELECTRICAL SHEETS.
13	ELECTRICAL METER. SEE ELECTRICAL SHEETS.

EXTERIOR FINISH SCHEDULE

SYMBOL	CATEGORY	MANUFACTURER	PRODUCT	NOTES
A-1	ARCHITECTURAL PANEL	NICHHA	VINTAGEWOOD - "CEDAR"	TYPE: AWP 3030
B-1	BRICK	GLEN GERY	STEEL GREY - KLAYCOAT	
B-2	BRICK SILL	GLEN GERY	STEEL GREY - KLAYCOAT	
B-3	# 6 BRICK SOLDIER COURSE	GLEN GERY	STEEL GREY - KLAYCOAT	
M-1	METAL COPING	-----	"URBAN BRONZE"	SUBMIT SAMPLES FOR APPROVAL.
M-2	STANDING SEAM AWNINGS	-----	"BLACK"	SUBMIT SAMPLES FOR APPROVAL.
M-3	STOREFRONT	KAWNEER	URBAN BRONZE / CLEAR GLAZING (LOW-E)	NON-IMPACT RATED GLASS
M-4	DOWNSPOUTS & SCUPPERS	BERRIDGE	"MATCH STUCCO"	COLOR TO MATCH STUCCO
M-5	BREAK METAL	-----	MATCH STOREFRONT	
F-1	ALUMINUM CANOPIES	AWNEX COLORADO	2-COAT KYNAR FINISH COLOR TO MATCH STOREFRONT	AWNEX CANTILEVERCANOPY SYSTEM
P-1	DOORS & MISC. METALWORK	-----	"URBAN BRONZE"	
S-1	STUCCO	DRYVIT	PAINTED SW 7014 EIDER WHITE	SANDPEBBLE FINE
S-2	STUCCO	DRYVIT	PAINTED SW 7014 AMAZING GREY	SANDPEBBLE FINE

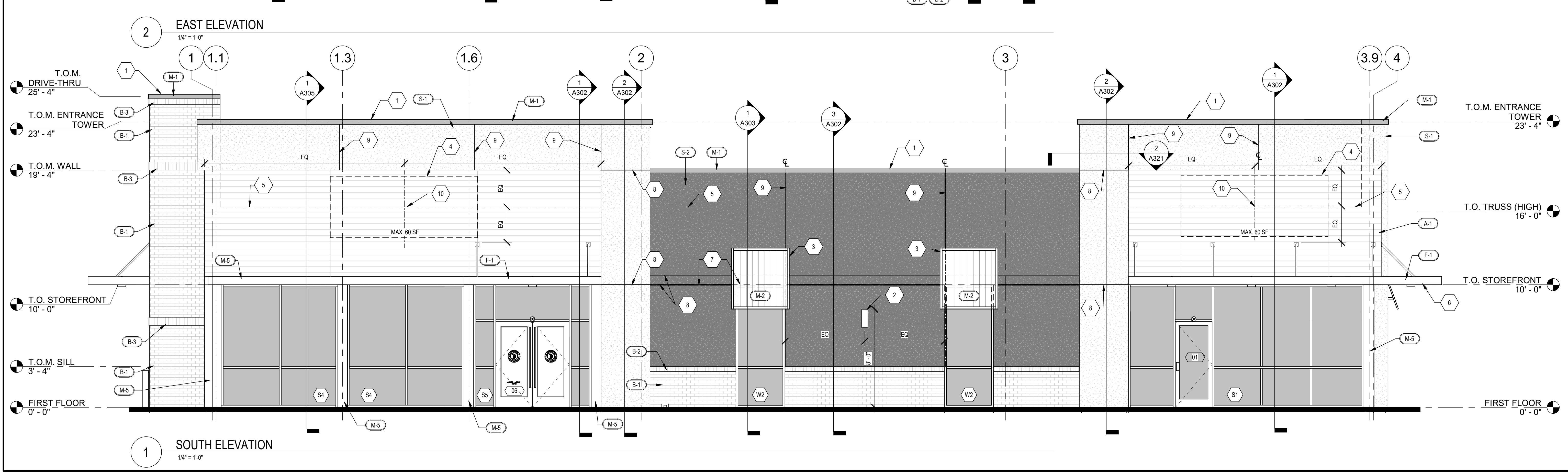


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date	issue
1/24/24	BID SET
11/15/23	PERMIT SET
mk	date
	issue

EXTERIOR ELEVATIONS

A201

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GENERAL NOTES

- DO NOT SCALE DRAWINGS.
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SIGNAGE NOTES

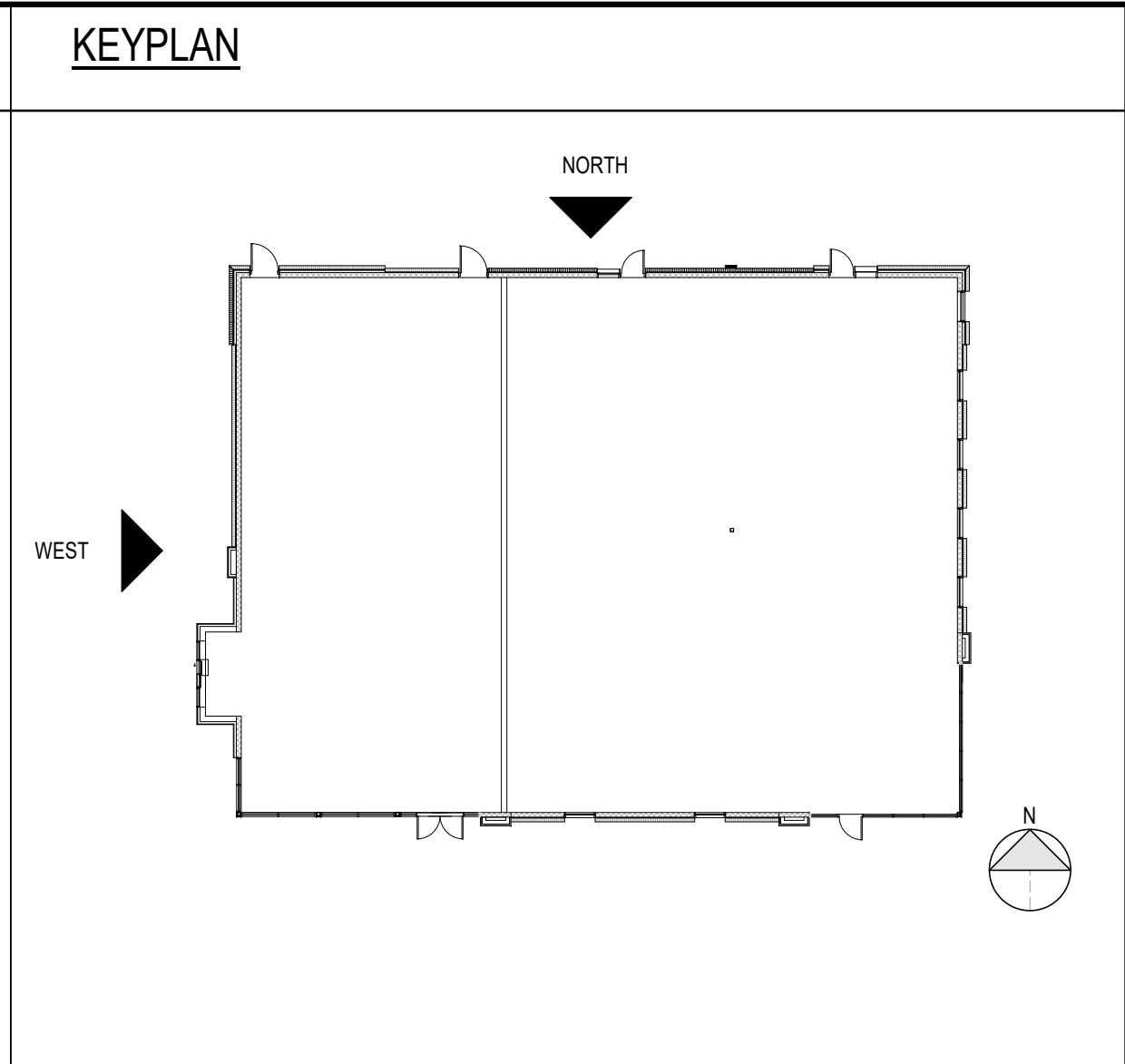
- GC TO COORDINATE WITH SIGN VENDOR AND HEARTLAND DENTAL DESIGN MANAGER, TO OBTAIN SHOP DRAWINGS.
- GC TO COORDINATE ALL ANCHOR REQUIREMENTS, BLOCKING, AND LIGHTING REQUIREMENTS WITH SIGN VENDOR.
- SIGN VENDOR IS RESPONSIBLE FOR ALL PERMITTING REQUIREMENTS AND VERIFYING WITH AUTHORITY HAVING JURISDICTION (AHJ) FOR ALLOWABLE SIGNAGE SIZE AND REQUIREMENTS.
- AHJ IS CITY OF CLEERMONT. MAXIMUM SQUARE FEET OF SIGNAGE AREA IS 80 SQUARE FEET. SIGNAGE VENDOR TO VERIFY.

ELEVATION KEYNOTES

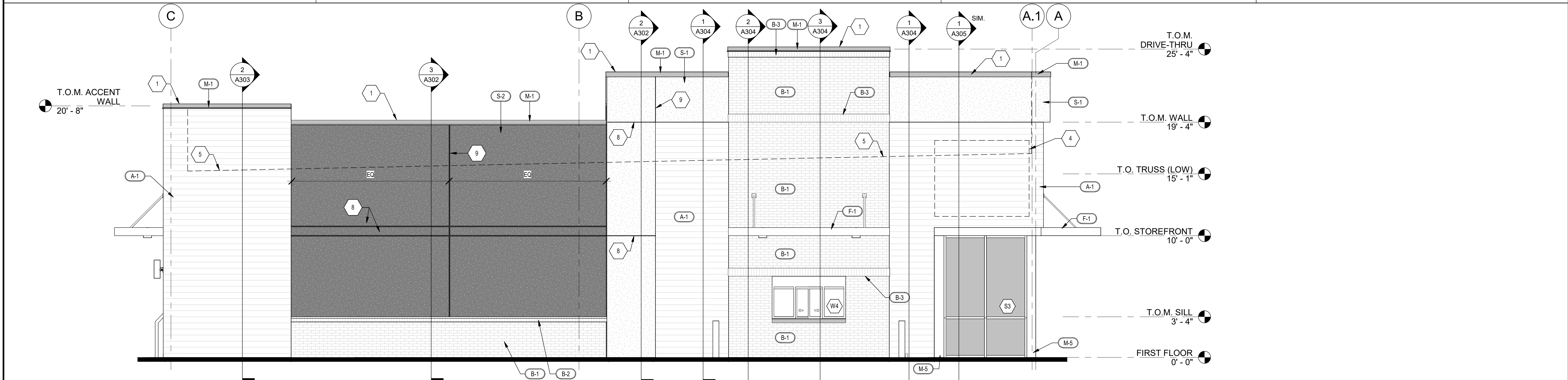
KEYNOTE NUMBER	NOTE
1	PRE-FINISHED METAL COPING WITH CONTINUOUS CLEAT.
2	LIGHT FIXTURE. REFER TO ELECTRICAL DRAWINGS.
3	ALUMINUM FRAMED STANDING SEAM AWNING COLOR TO BE BLACK. 4'-8"x6'-0" CENTERED OVER WINDOW / DOOR.
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9	VERTICAL CONTROL JOINT.
10	GC TO INSTALL JUNCTION BOX CENTERED ON ELEVATION, BELOW ROOF LINE, AND ABOVE CEILING.
11	ALUMINUM AWNING.
12	CT CABINET AND ELECTRICAL GEAR. SEE ELECTRICAL SHEETS.
13	ELECTRICAL METER. SEE ELECTRICAL SHEETS.

EXTERIOR FINISH SCHEDULE

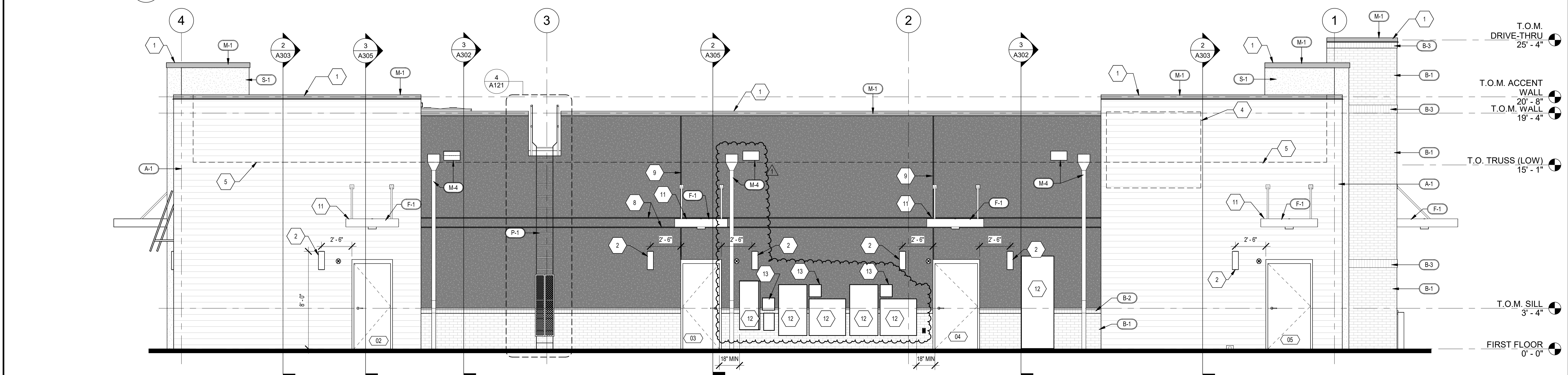
SYMBOL	CATEGORY	MANUFACTURER	PRODUCT	NOTES
A-1	ARCHITECTURAL PANEL	NICHIHA	VINTAGEWOOD - "CEDAR"	TYPE: AWP 3030
B-1	BRICK	GLEN GERY	STEEL GREY - KLAYCOAT	
B-2	BRICK SILL	GLEN GERY	STEEL GREY - KLAYCOAT	
B-3	# 6 BRICK SOLDIER COURSE	GLEN GERY	STEEL GREY - KLAYCOAT	
M-1	METAL COPING	-----	"URBAN BRONZE"	SUBMIT SAMPLES FOR APPROVAL
M-2	STANDING SEAM AWNINGS	-----	"BLACK"	SUBMIT SAMPLES FOR APPROVAL
M-3	STOREFRONT	KAWNEER	URBAN BRONZE / CLEAR GLAZING (LOW-E)	NON-IMPACT RATED GLASS
M-4	DOWNSPOUTS & SCUPPERS	BERRIDGE	"MATCH STUCCO"	COLOR TO MATCH STUCCO
M-5	BREAK METAL	-----	MATCH STOREFRONT	
F-1	ALUMINUM CANOPIES	AWNEX COLORADO	2-COAT KYNAR FINISH COLOR TO MATCH STOREFRONT	AWNEX CANTILEVERCANOPY SYSTEM
P-1	DOORS & MISC. METALWORK	-----	"URBAN BRONZE"	
S-1	STUCCO	DRYVIT	PAINTED SW 7014 EIDER WHITE	SANDPEBBLE FINE
S-2	STUCCO	DRYVIT	PAINTED SW 7014 AMAZING GREY	SANDPEBBLE FINE



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



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

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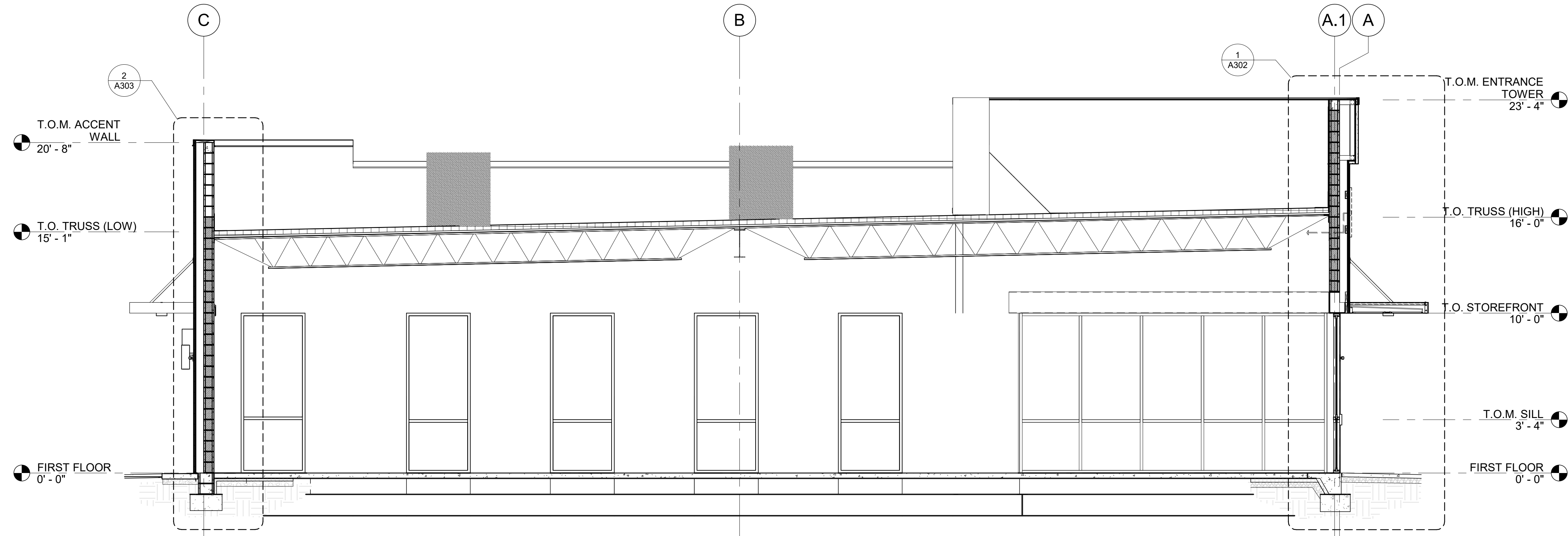
WMG SHELL - CLEERMONT FL
 WMG # FL22-0606
 FL Highway 501 W, Colonial Drive
 Clermont, FL 34711

mk	date	issue
1	01/12/24	ADDENDUM #1
	11/15/23	PERMIT SET

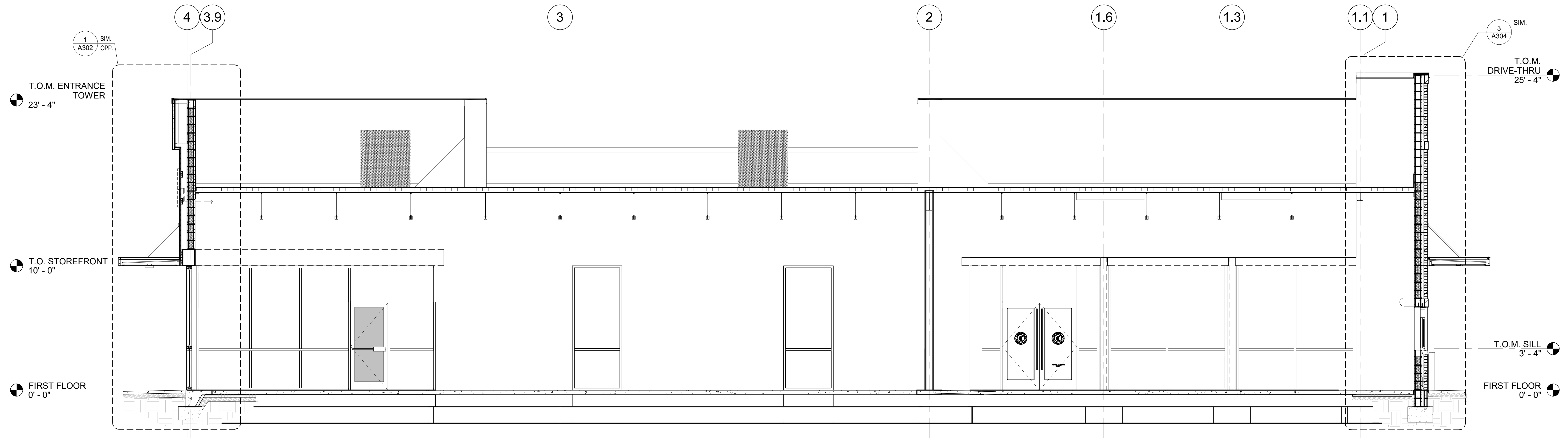
EXTERIOR ELEVATIONS

A202

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 CHECKED BY: DR
 2023064.21



2 BUILDING SECTION FRONT TO BACK
1/4" = 1'-0"



1 BUILDING SECTION LEFT TO RIGHT
1/4" = 1'-0"

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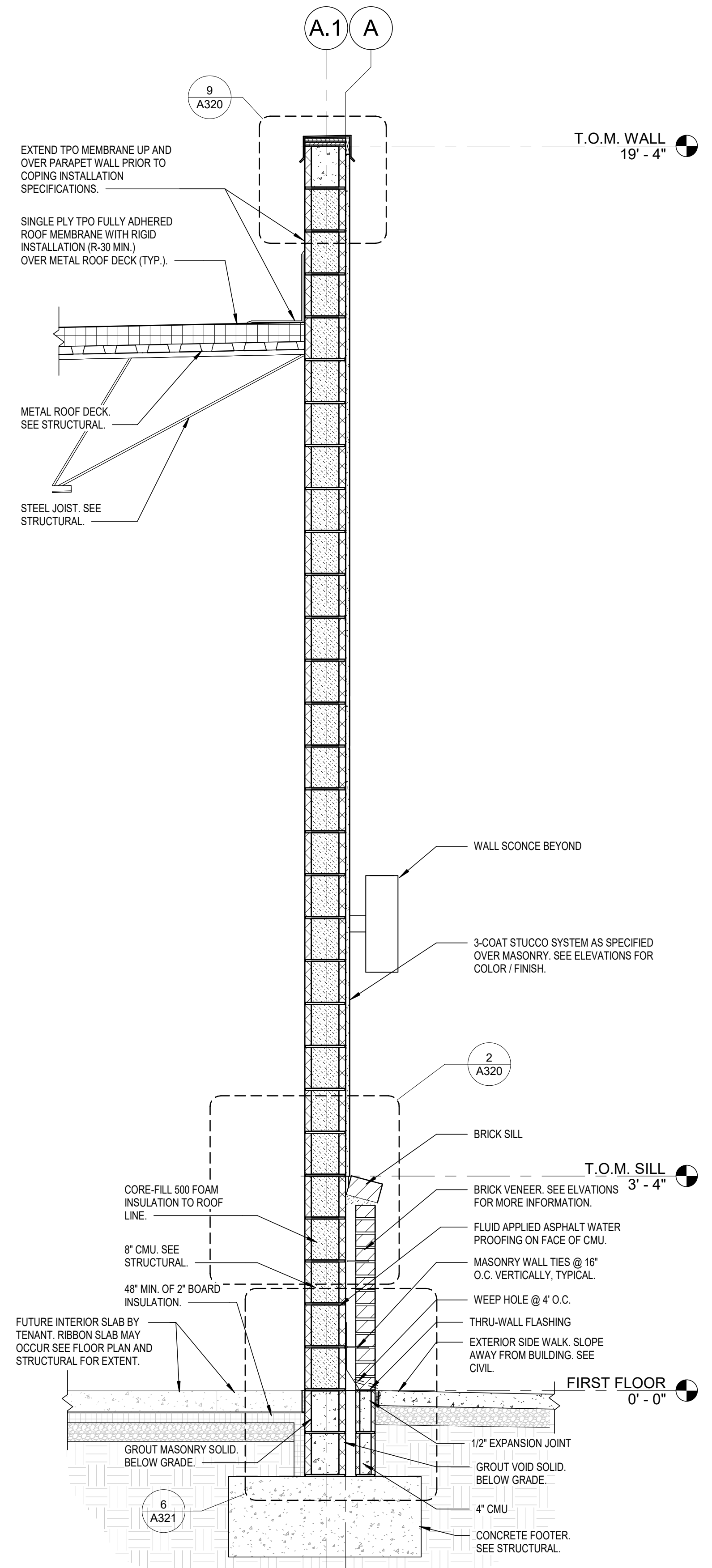
**WMG SHELL -
CLERMONT FL**
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FL Highway 501 W, Colonial Drive
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1/24/24	BID SET
11/15/23	PERMIT SET
mk	date
	issue

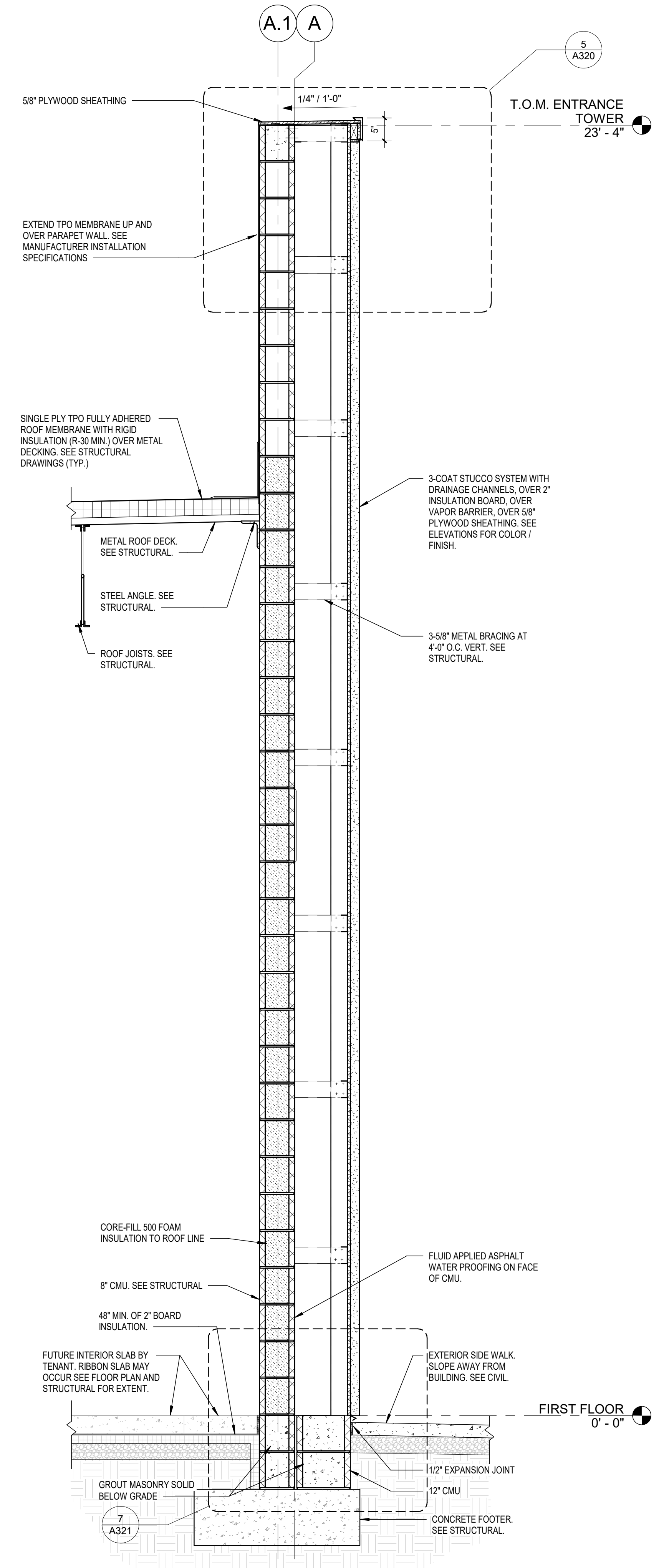
BUILDING SECTIONS

A301

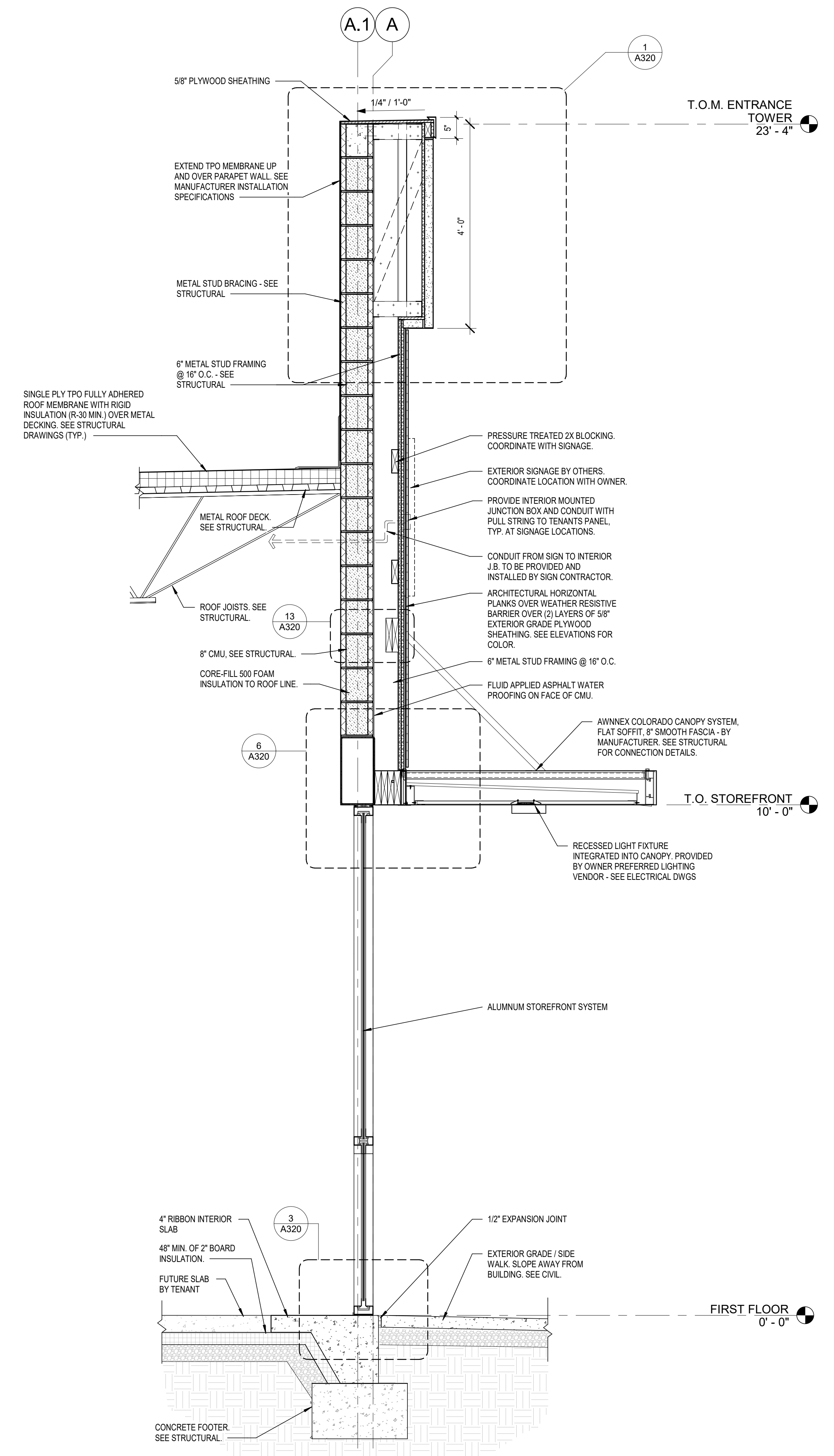
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2023064.21	



3 WALL SECTION
3/4" = 1'-0"



2 WALL SECTION
3/4" = 1'-0"



1 WALL SECTION
3/4" = 1'-0"

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WMG # FL22-0606
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Clermont, FL 34711

mk	date	issue
	1/24/24	BID SET
	11/15/23	PERMIT SET

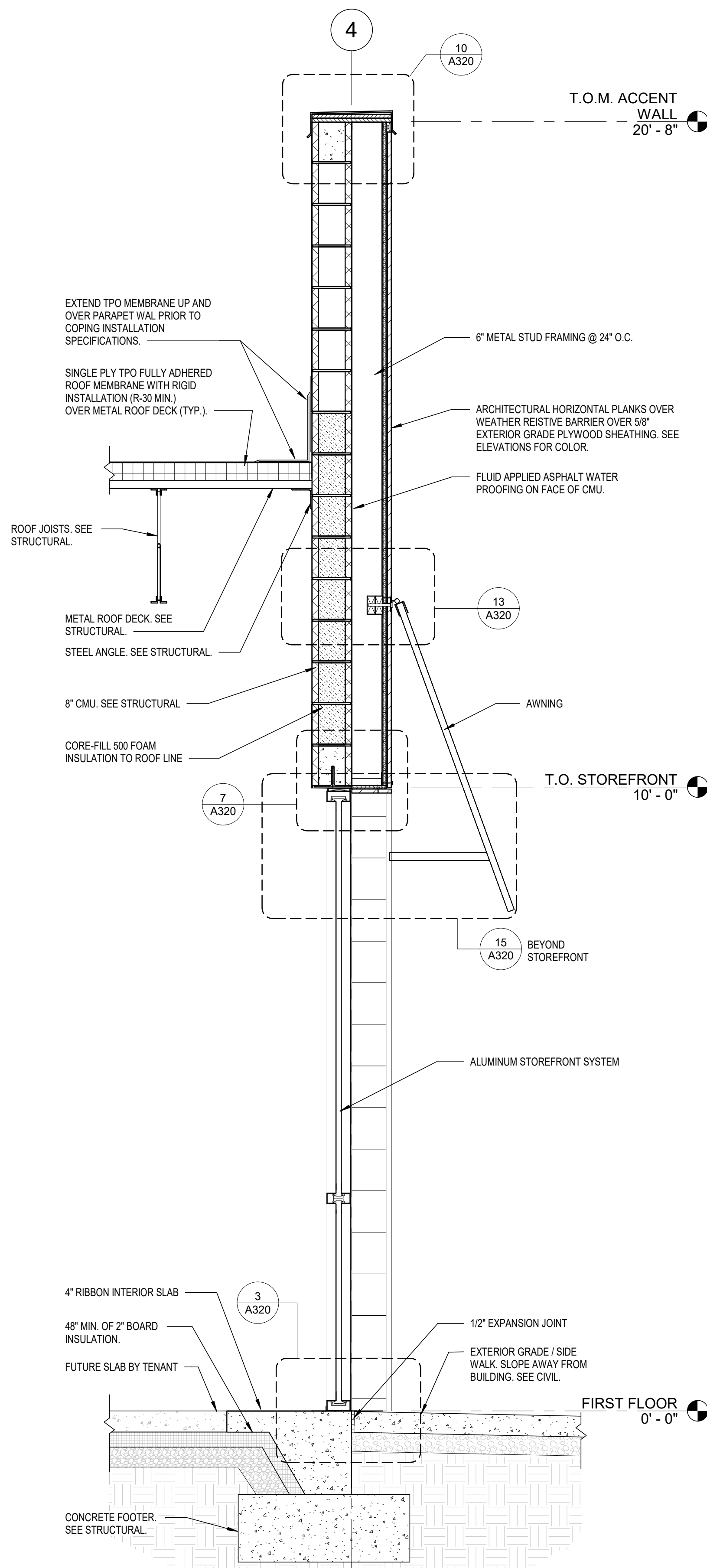
WALL SECTIONS

A302

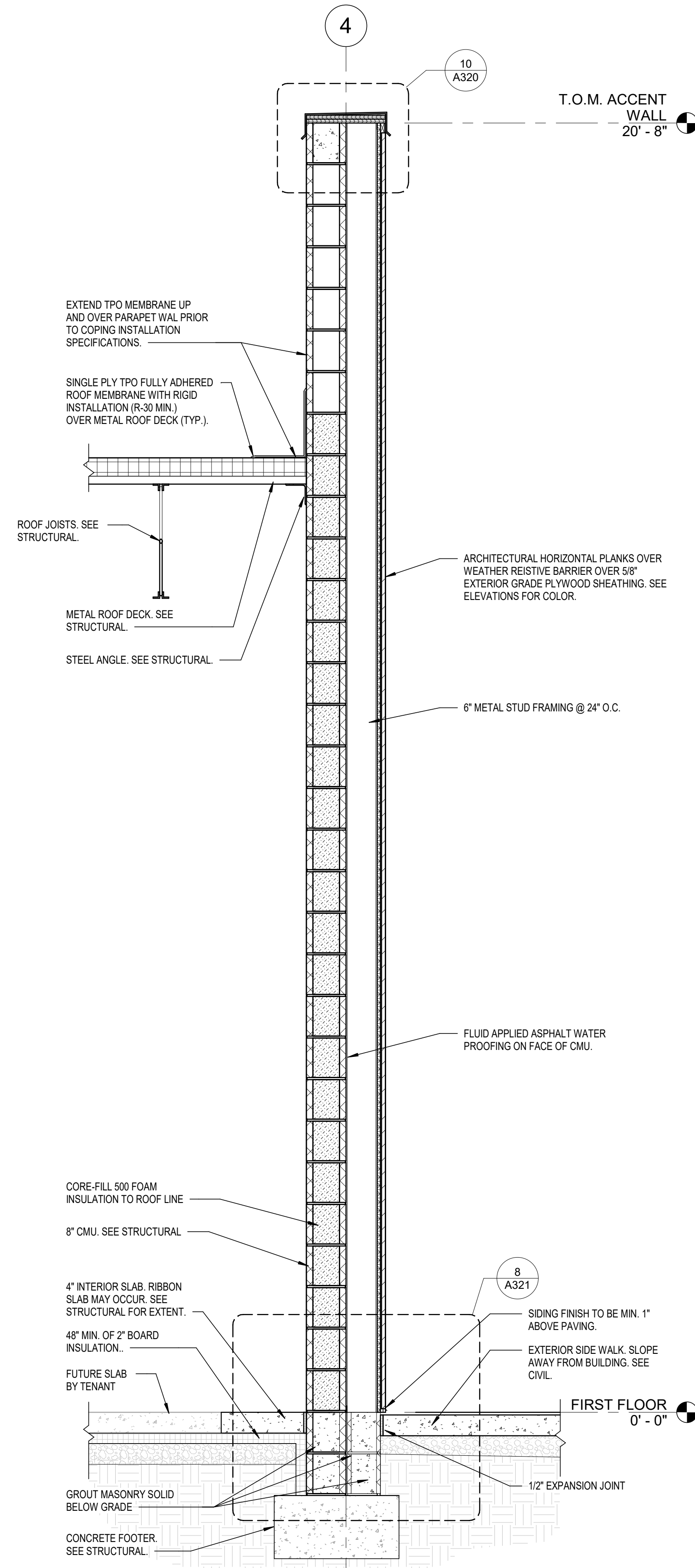
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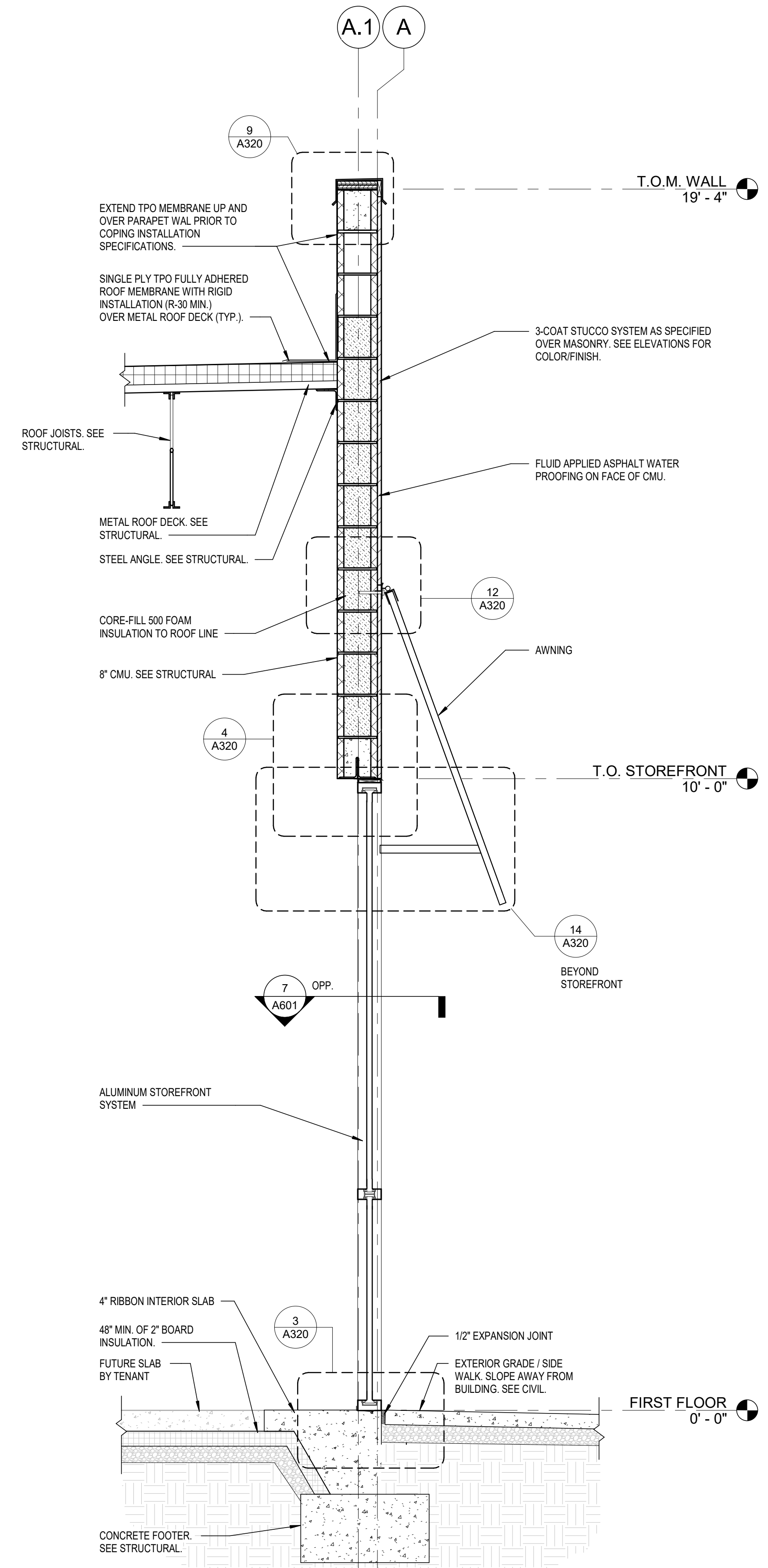
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3 WALL SECTION
3/4" = 1'-0"



2 WALL SECTION
3/4" = 1'-0"



1 WALL SECTION
3/4" = 1'-0"

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WMG # FL22-0605
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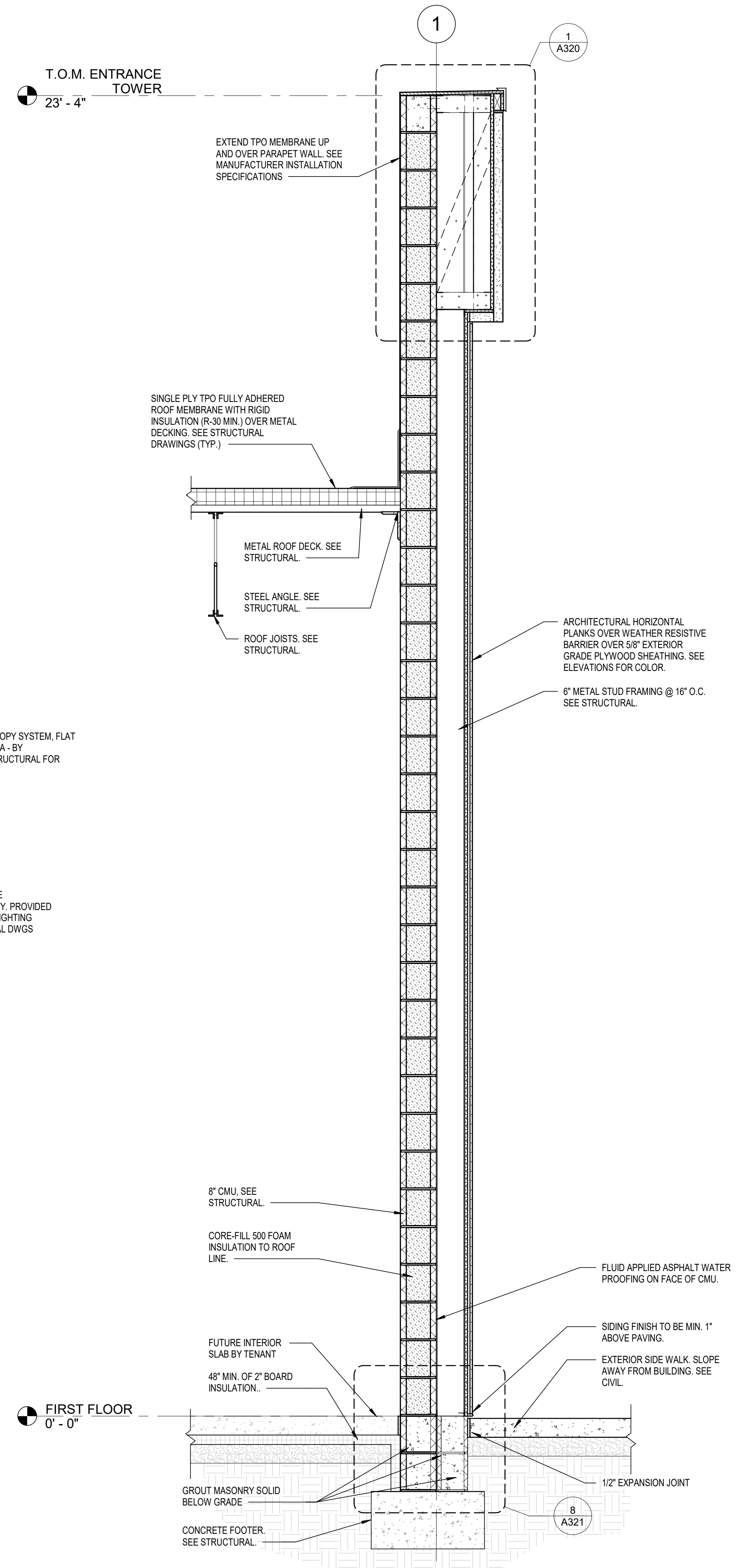
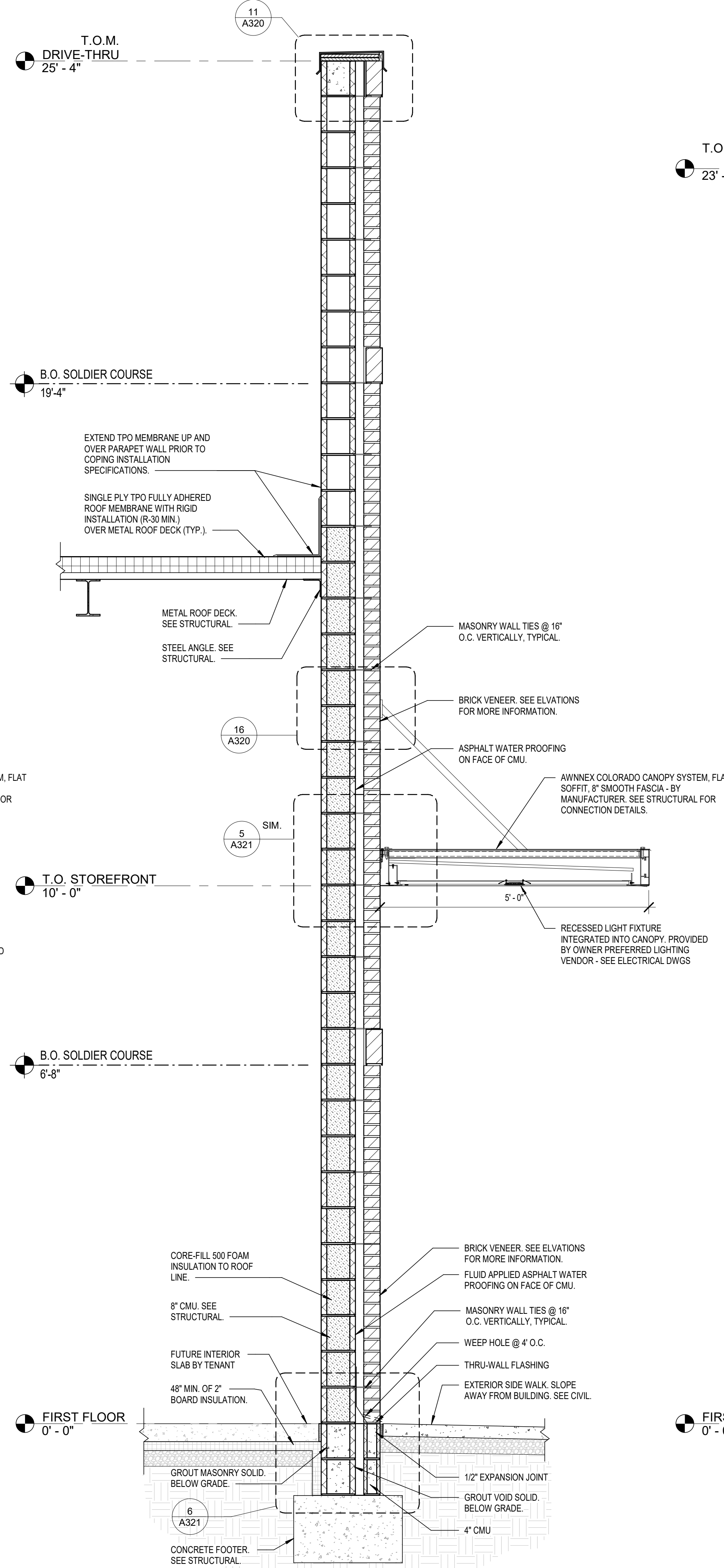
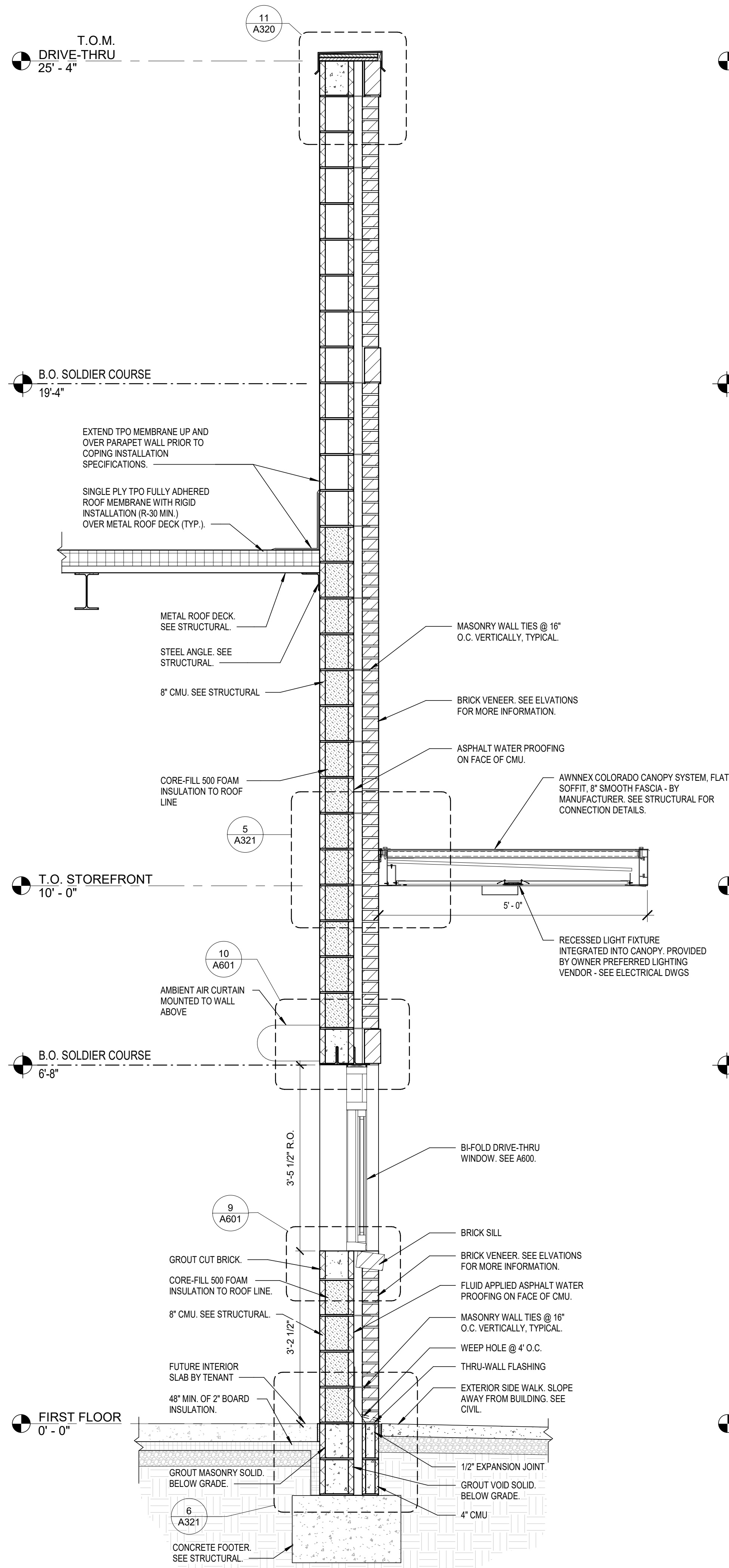
1/24/24	BID SET
11/15/23	PERMIT SET
mk	date issue

WALL SECTIONS

A303

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1/24/24	BID SET
11/15/23	PERMIT SET
mk	date
	issue

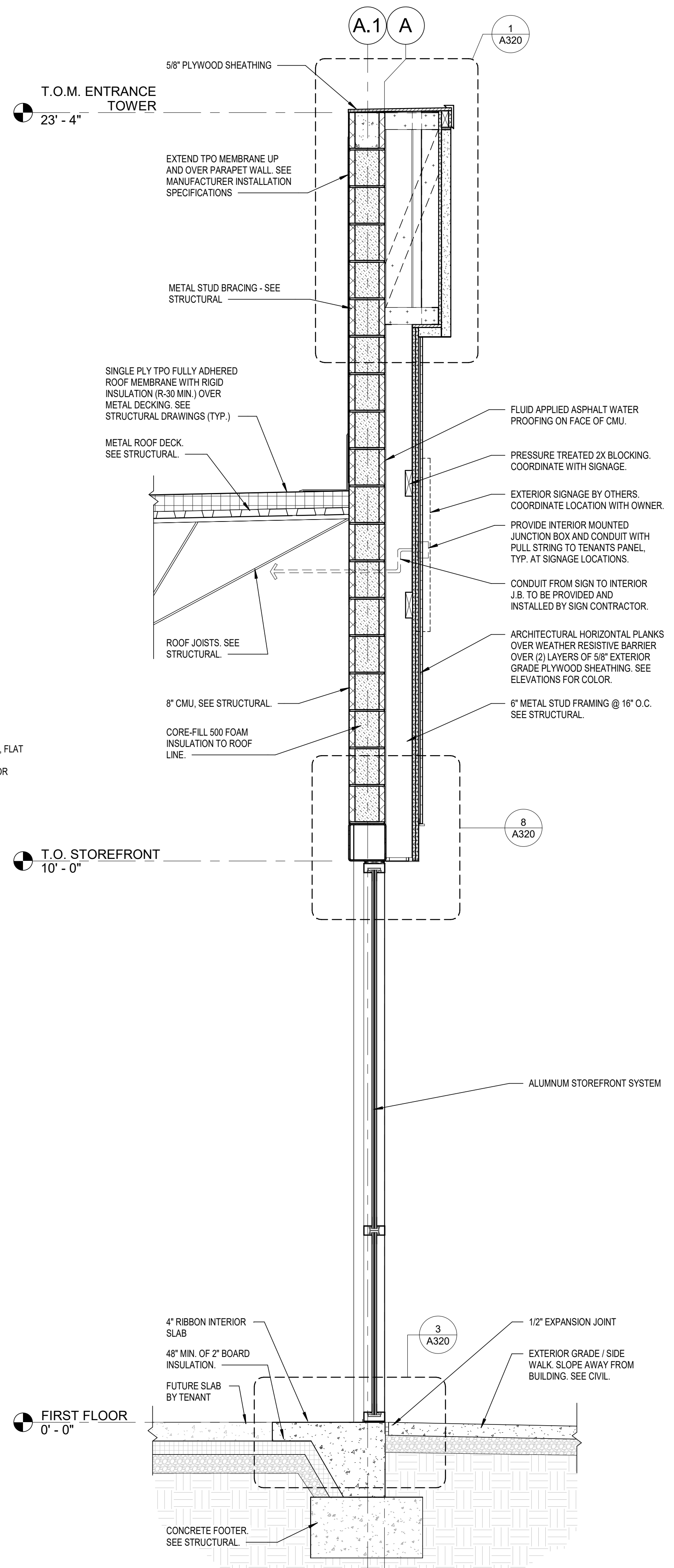
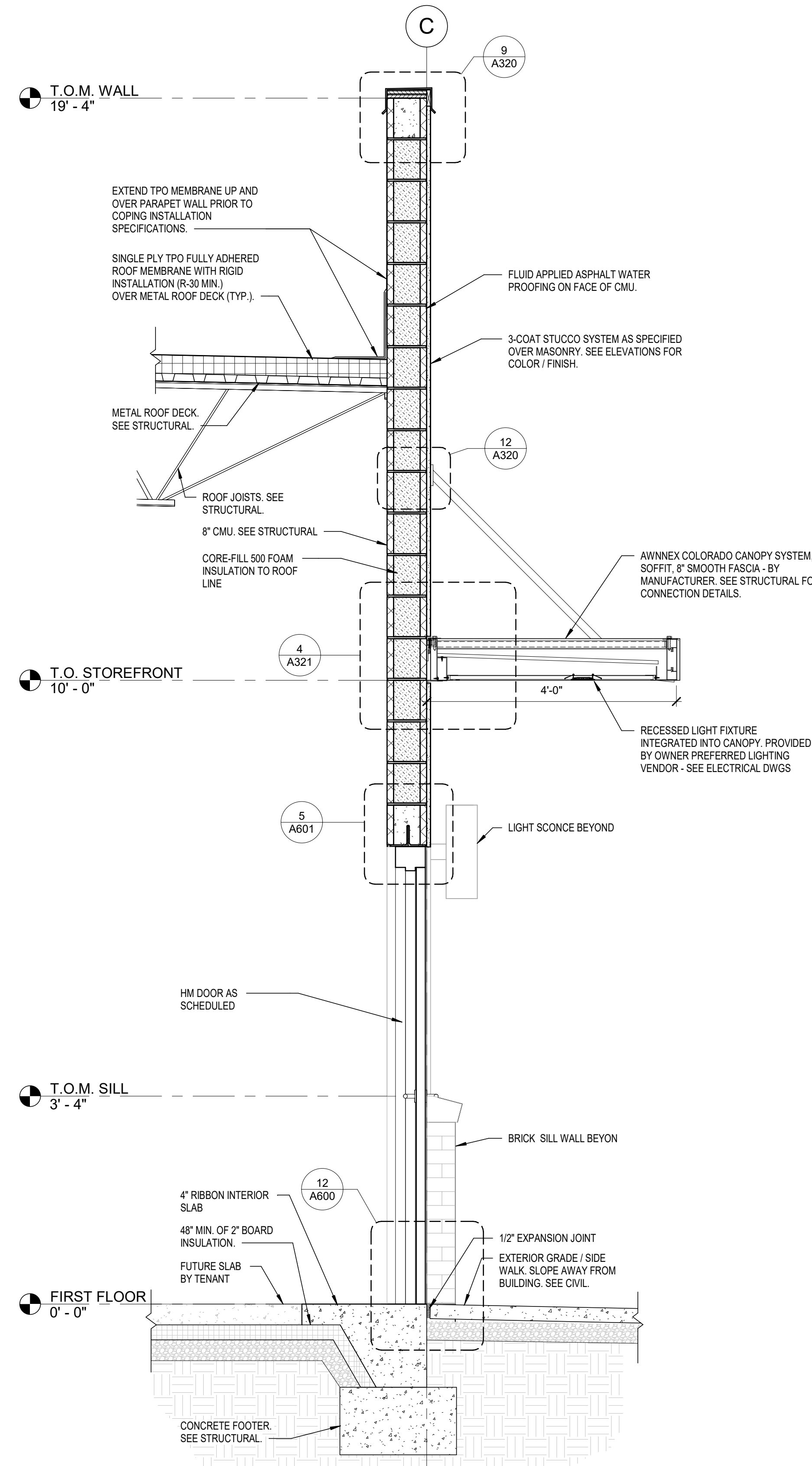
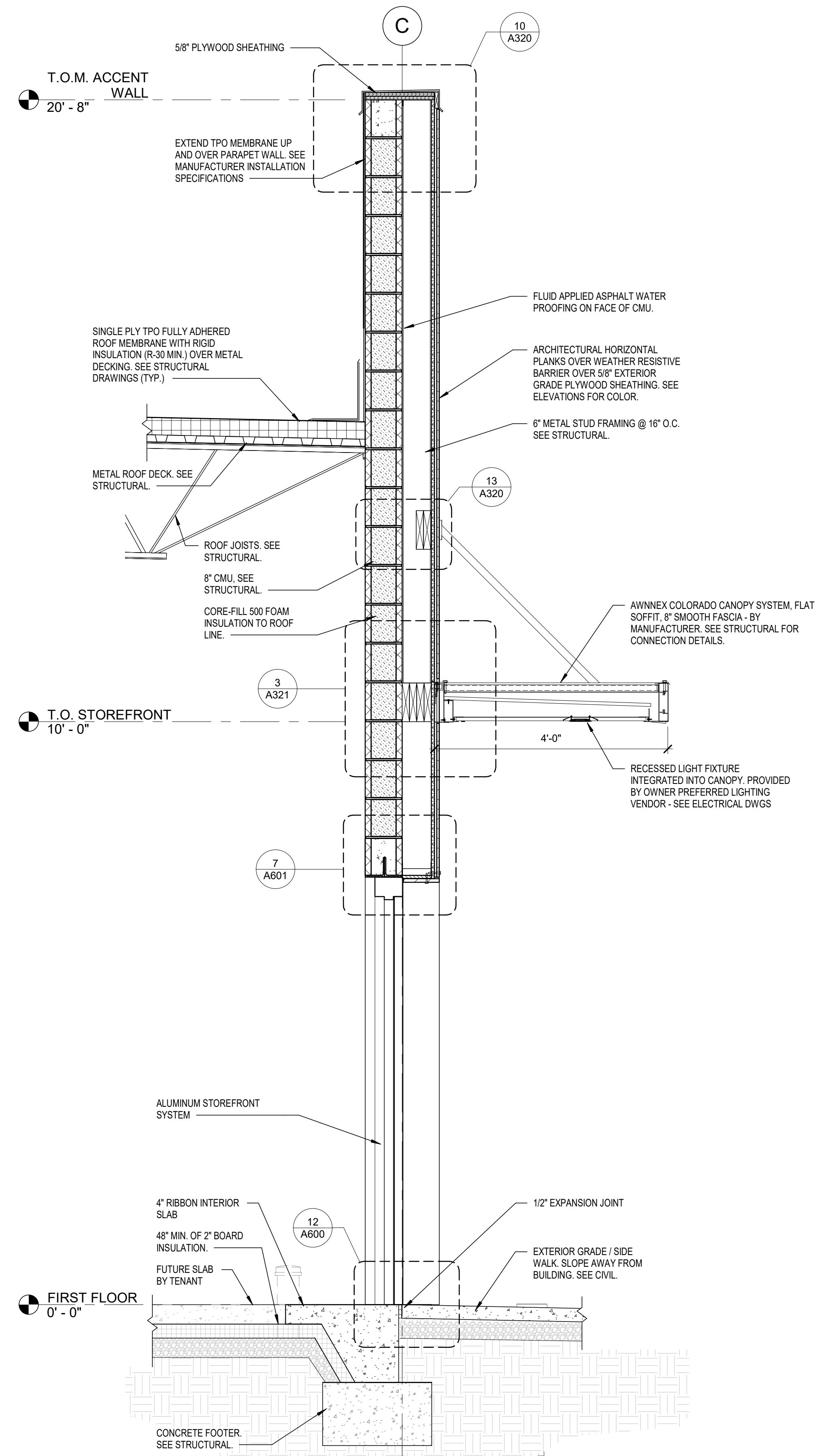
WALL SECTIONS

A304

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Clermont, FL 34711

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WALL SECTIONS

A305

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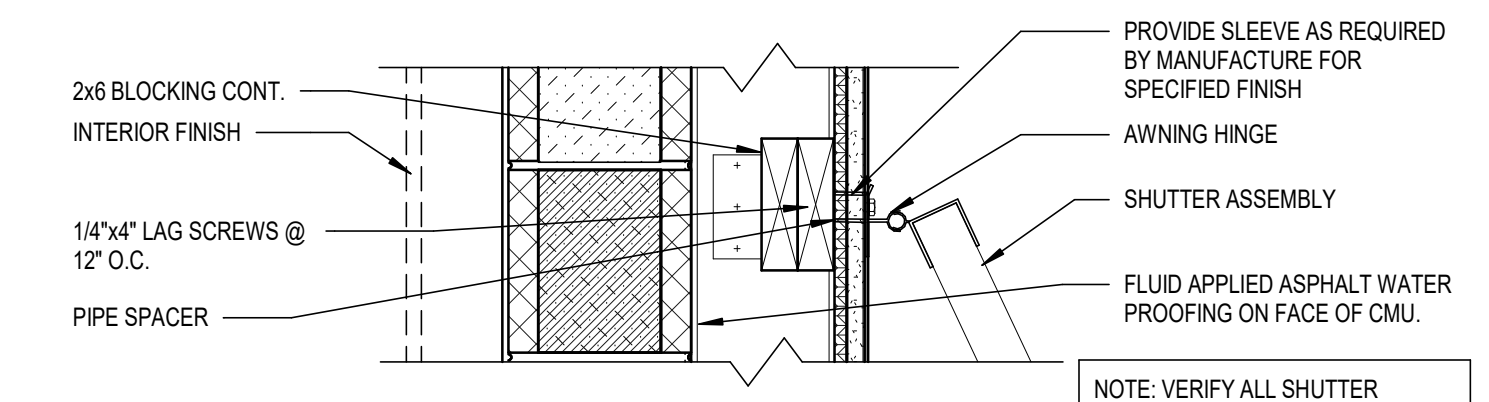
WMG SHELL - CLERMONT FL
WMG # FL22-0695
FL Highway 501 W, Colonial Drive
Clermont, FL 34711

1/24/24	BID SET
11/15/23	PERMIT SET
mk	date issue

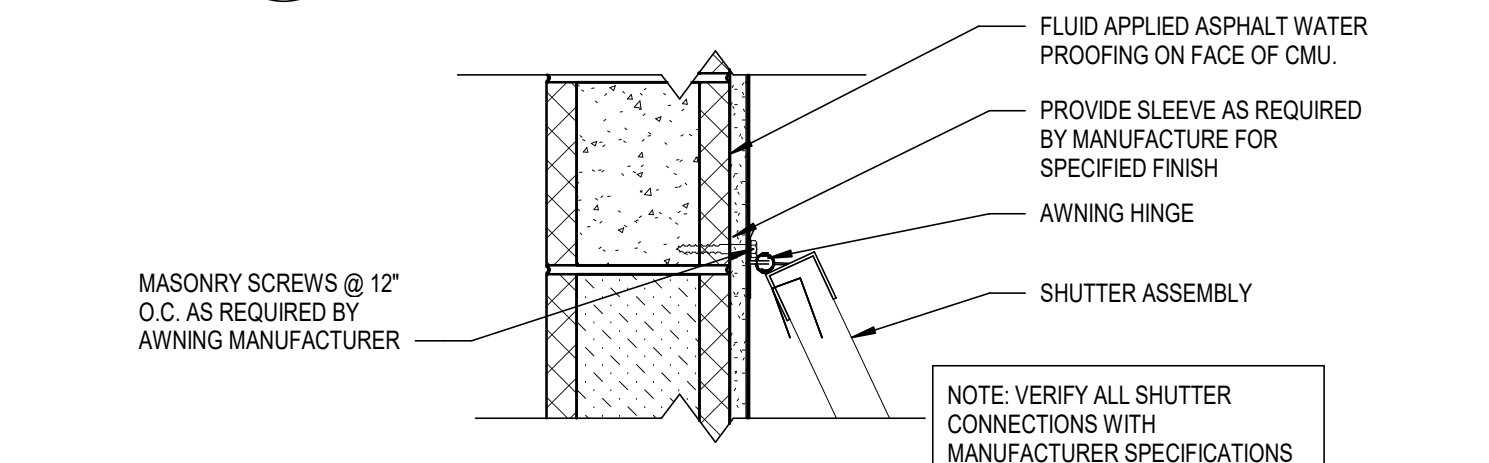
SECTION DETAILS

A320

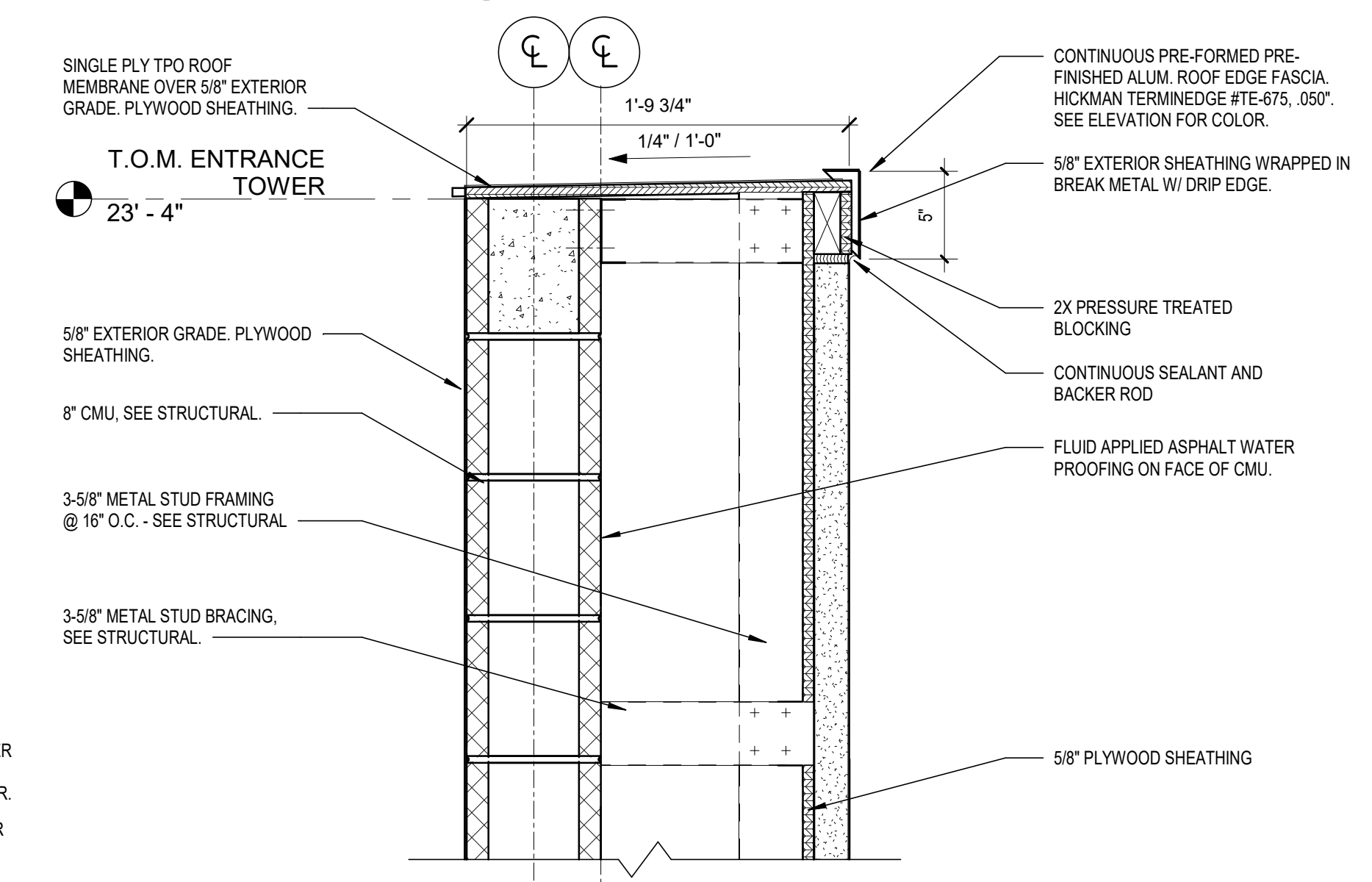
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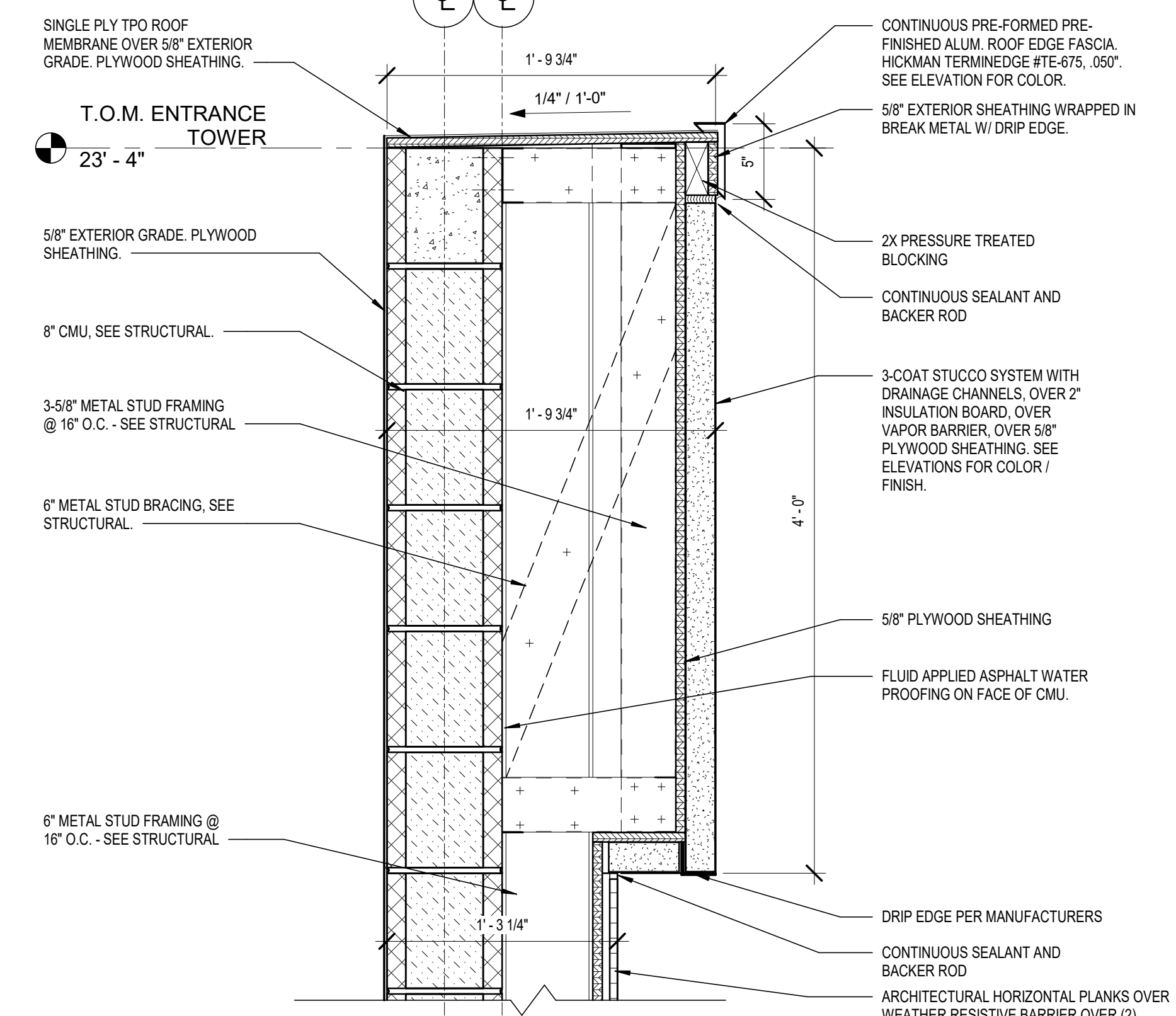
13 AWNING ATTACHMENT DETAIL
1 1/2" = 1'-0"



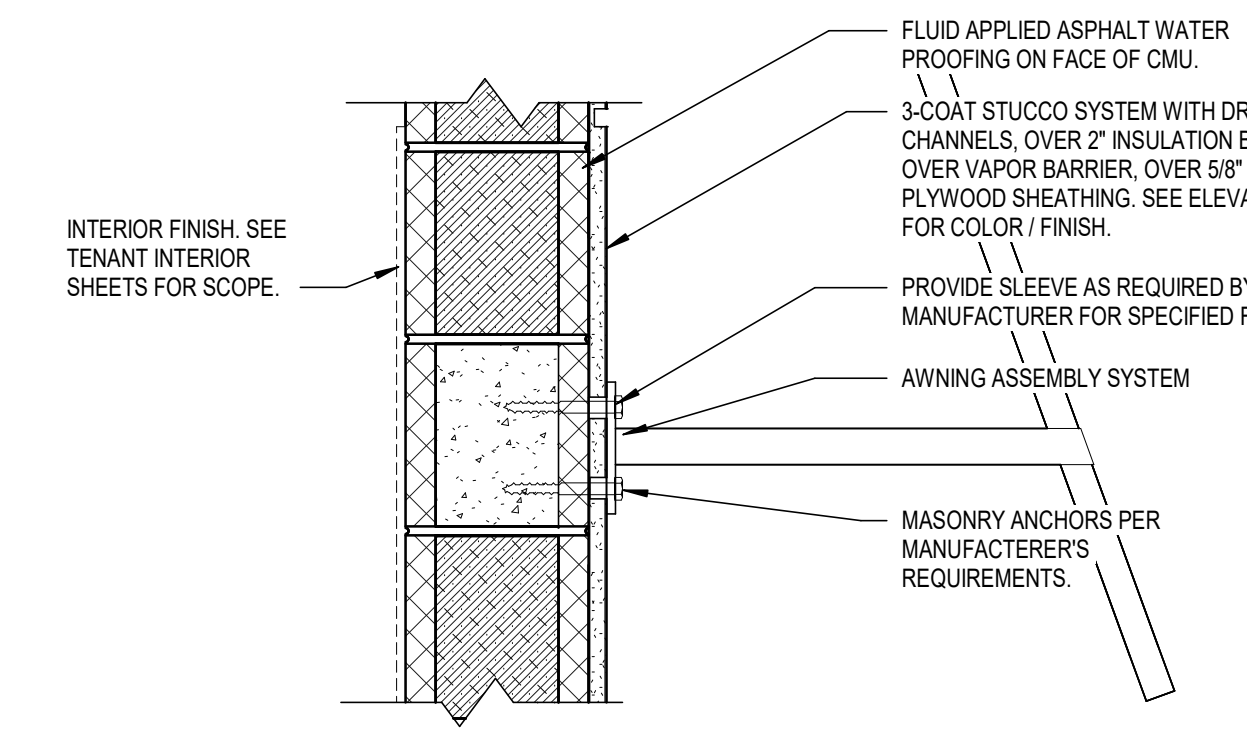
12 AWNING ATTACHMENT DETAIL
1 1/2" = 1'-0"



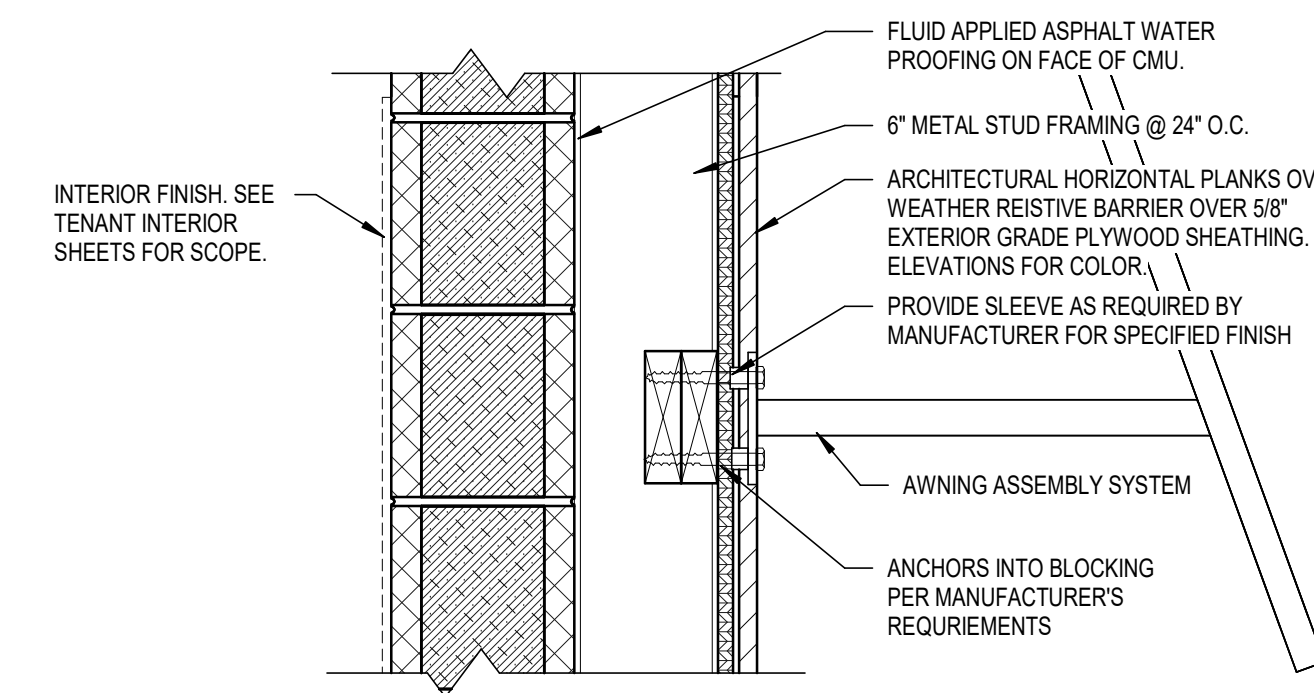
5 CORNICHE DETAIL
1 1/2" = 1'-0"



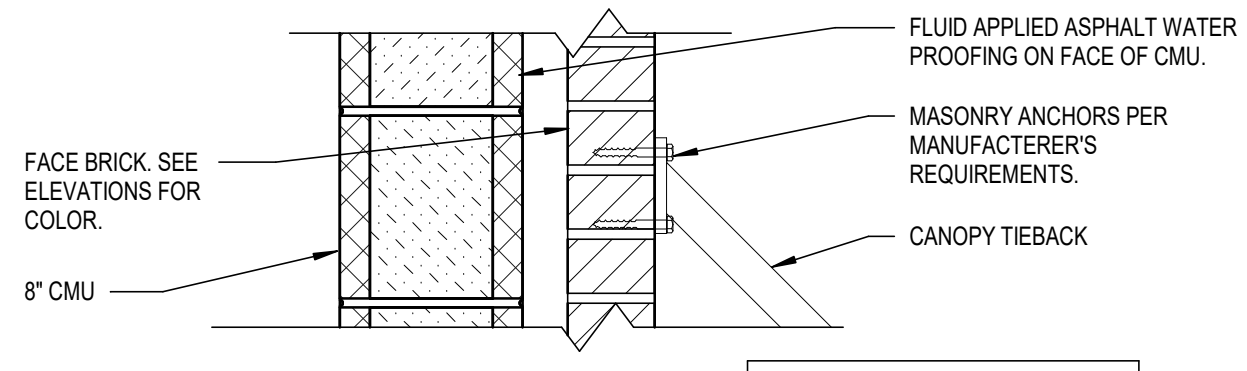
1 CORNICHE DETAIL
1 1/2" = 1'-0"



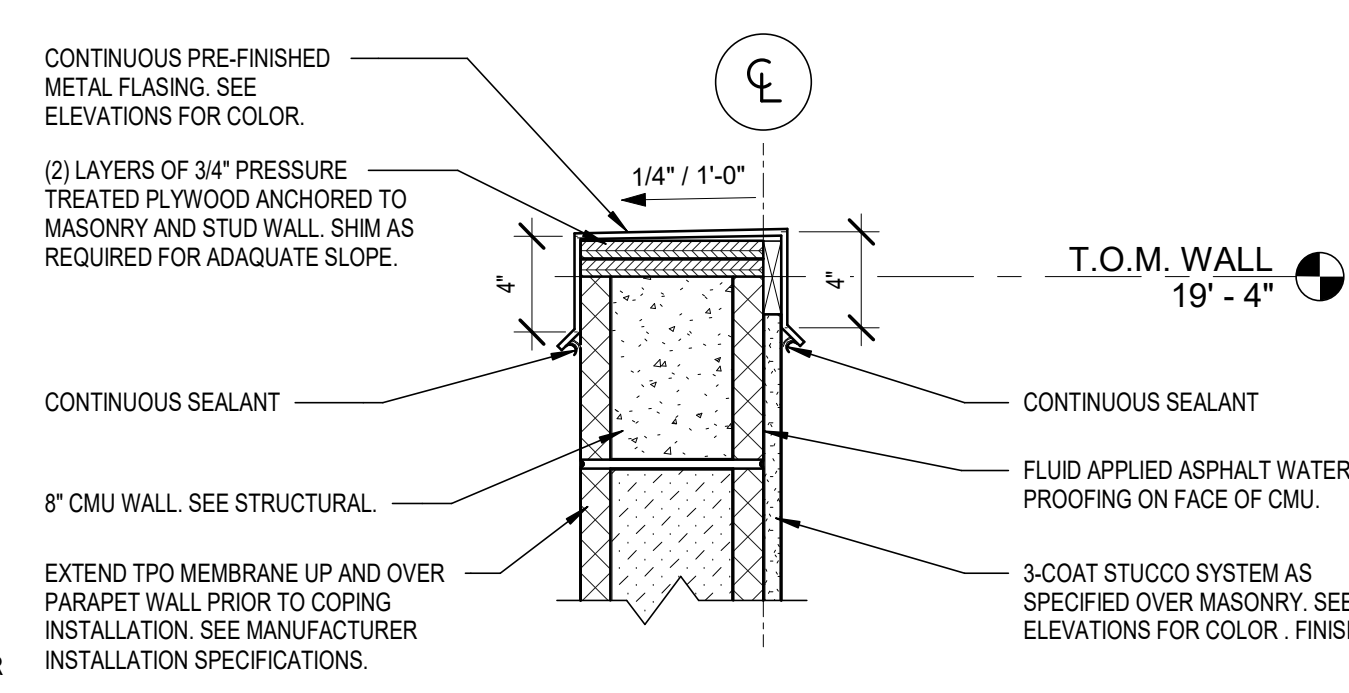
14 AWNING ATTACHMENT DETAIL
1 1/2" = 1'-0"



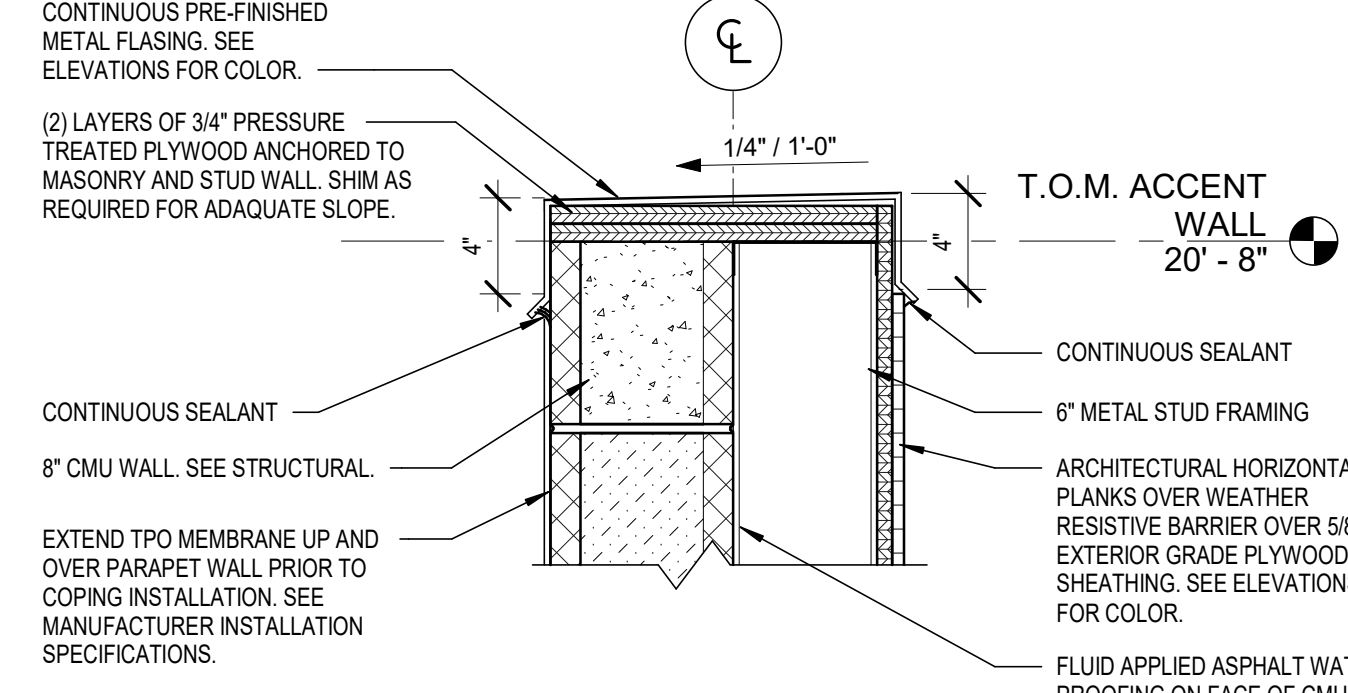
15 AWNING ATTACHMENT DETAIL
1 1/2" = 1'-0"



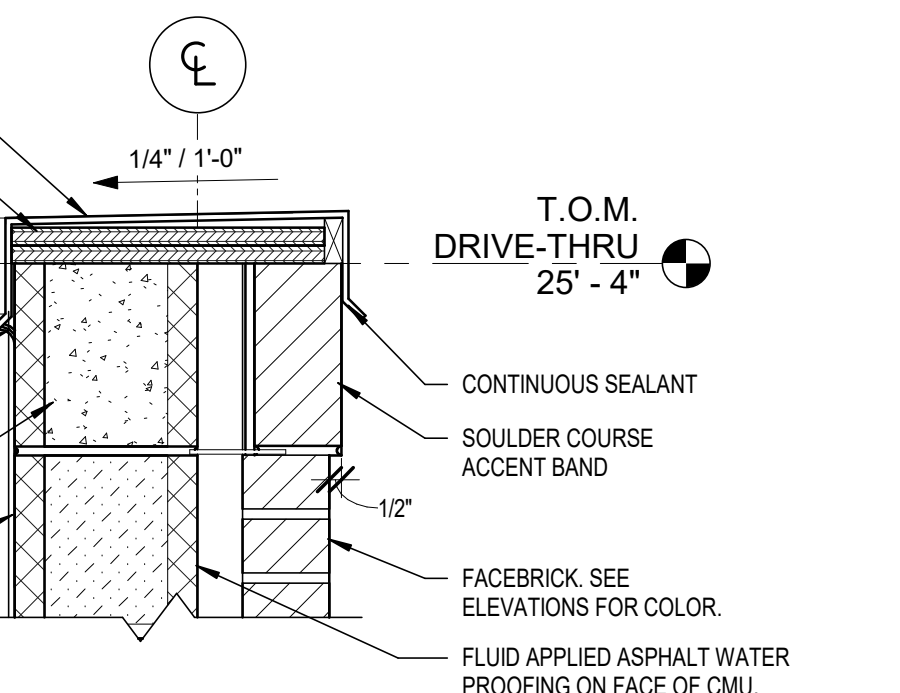
16 BRICK TIEBACK ANCHOR DETAIL
1 1/2" = 1'-0"



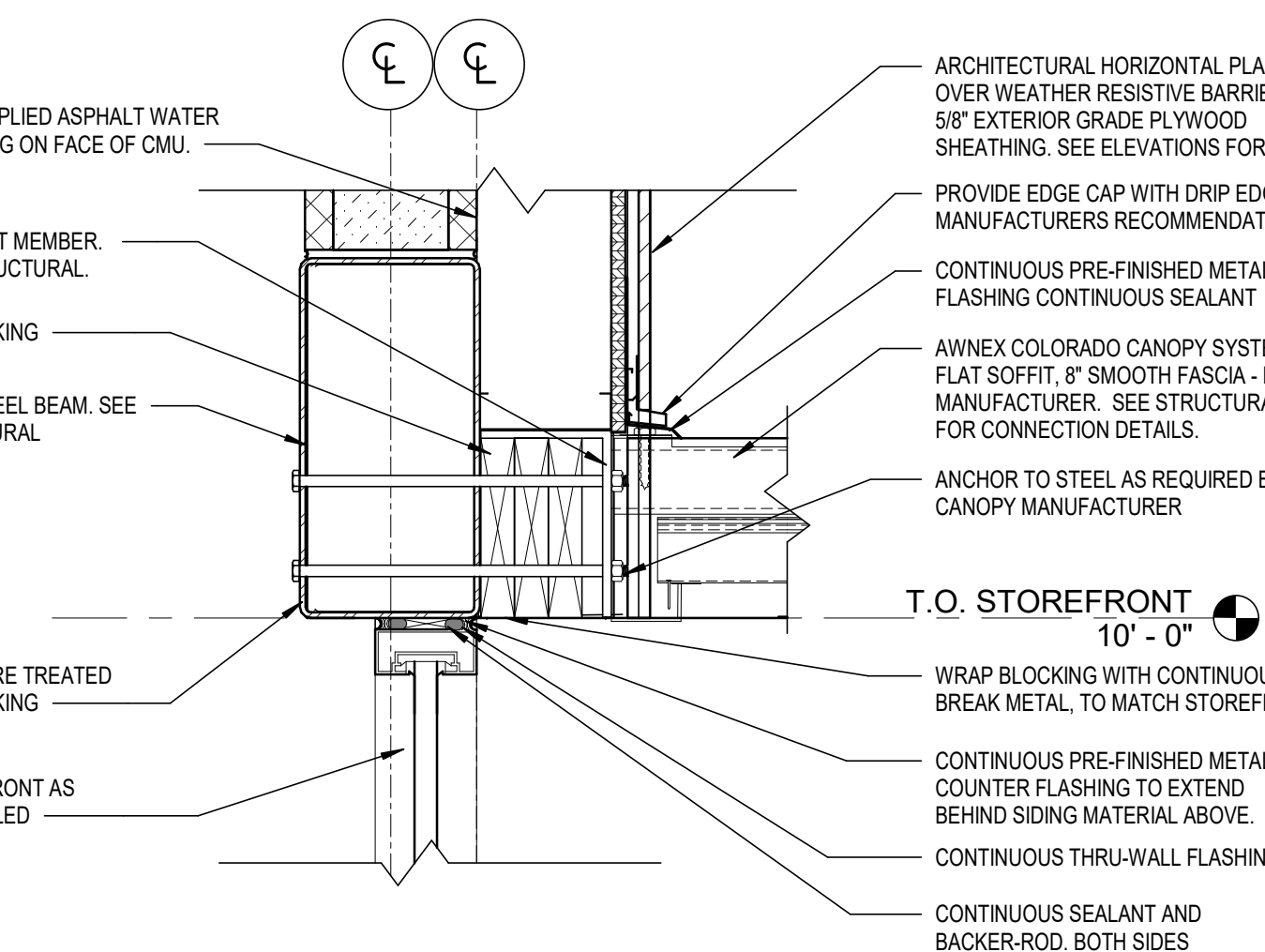
9 PARAPET DETAIL @ STUCCO WALL
1 1/2" = 1'-0"



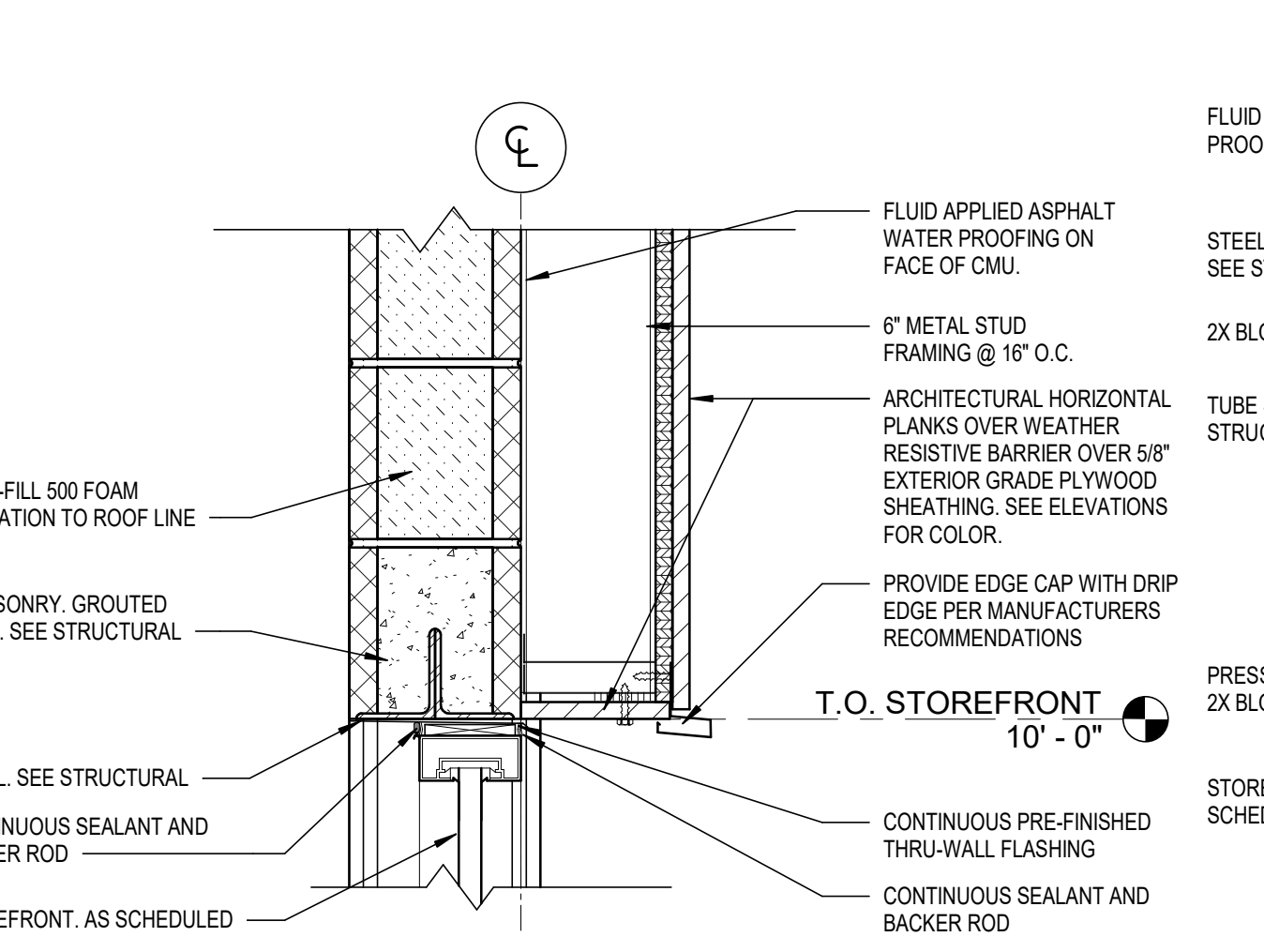
10 PARAPET DETAIL @ BUMP-OUT
1 1/2" = 1'-0"



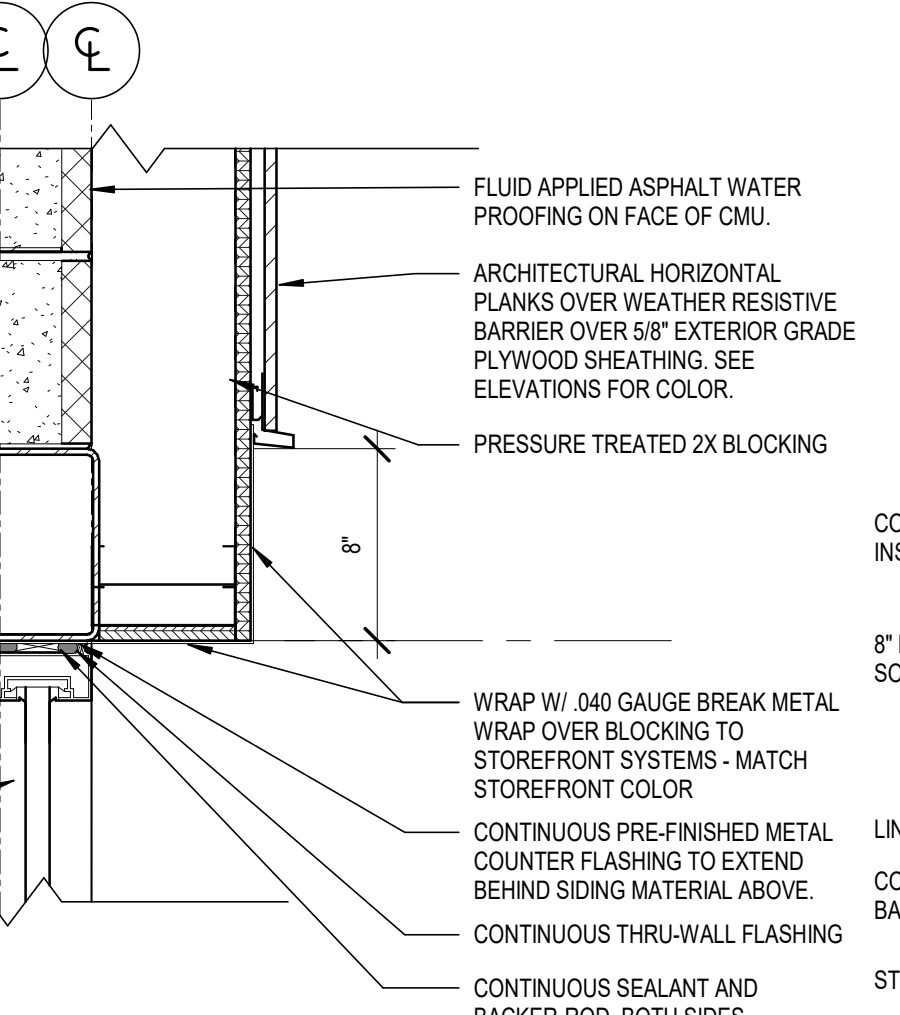
11 WALL SECTION @ DRIVE-THRU 01 - Callout 1
1 1/2" = 1'-0"



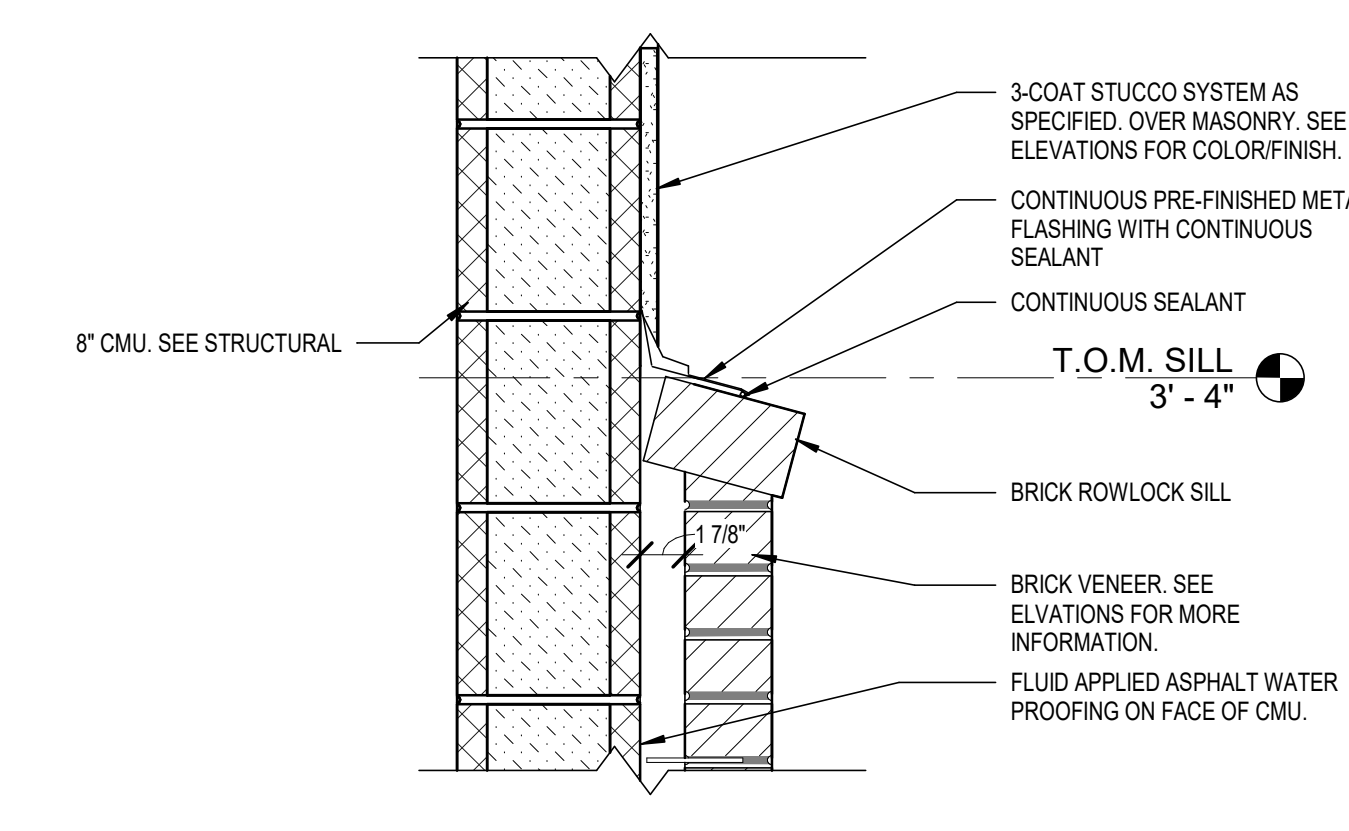
6 CANOPY DETAIL
1 1/2" = 1'-0"



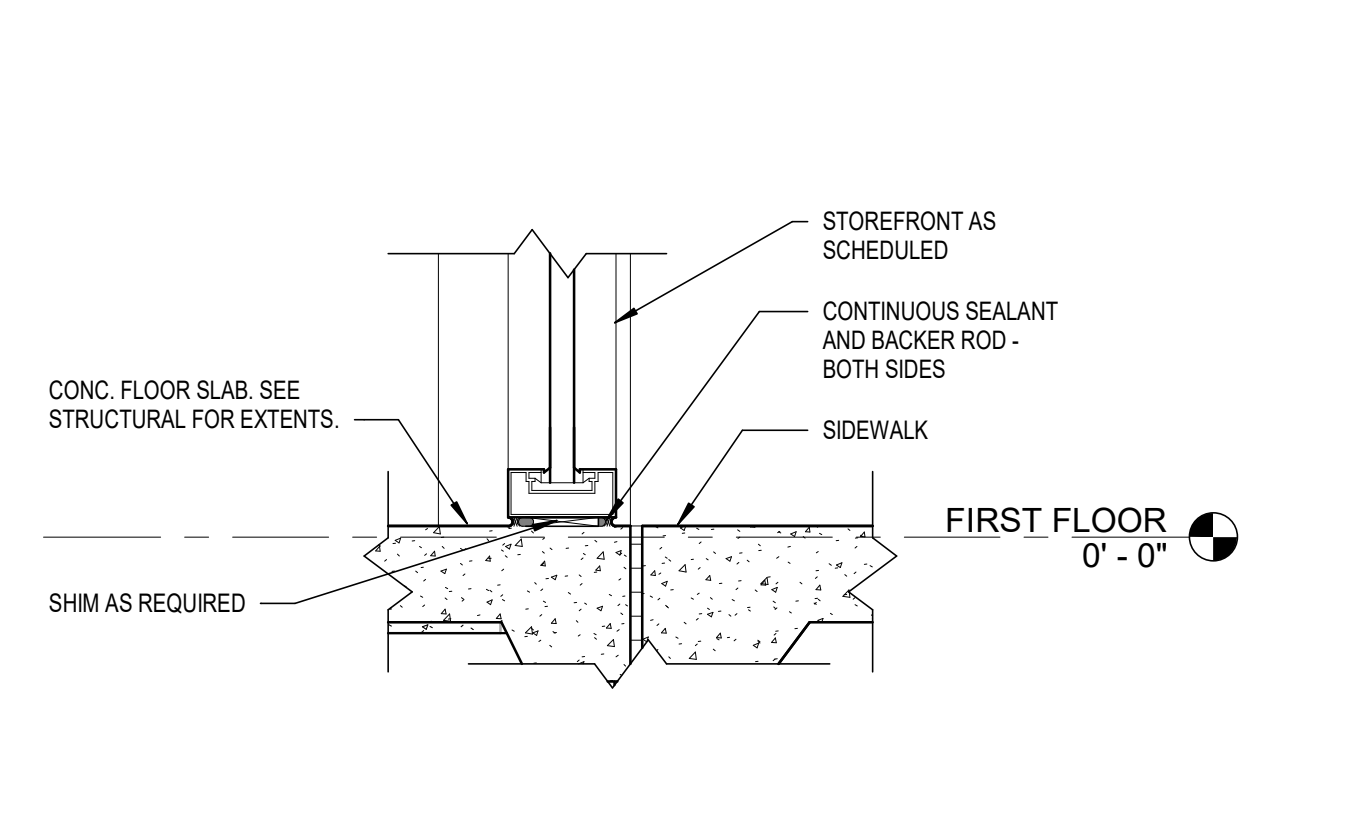
7 STOREFRONT HEAD DETAIL
1 1/2" = 1'-0"



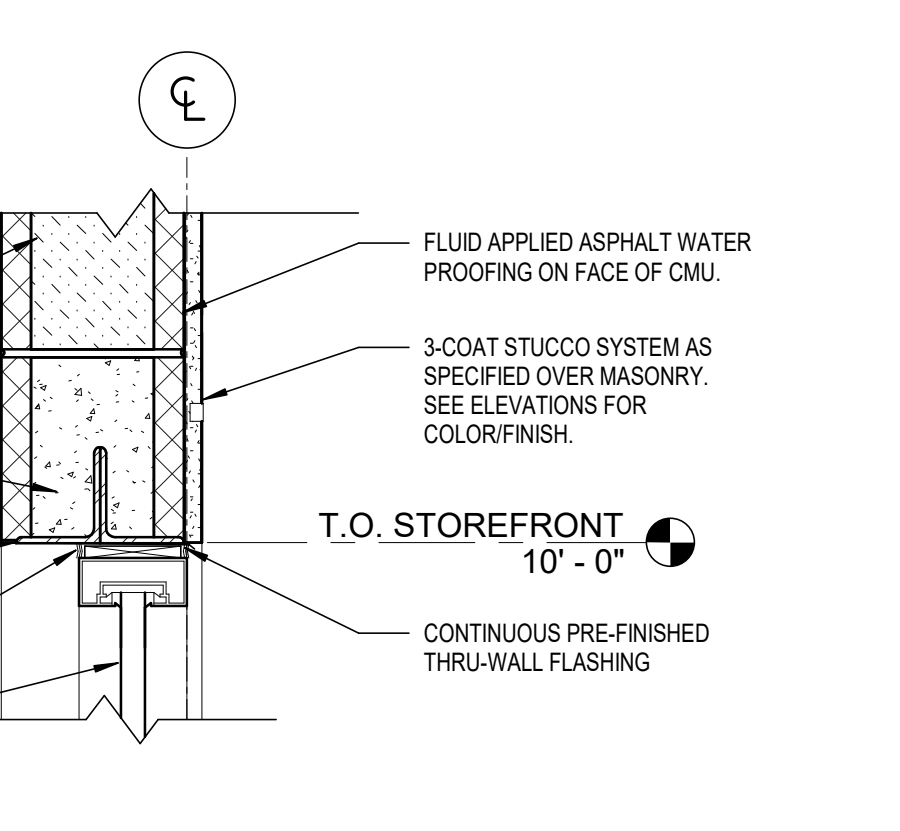
8 STOREFRONT HEAD DETAIL
1 1/2" = 1'-0"



2 SILL DETAIL
1 1/2" = 1'-0"

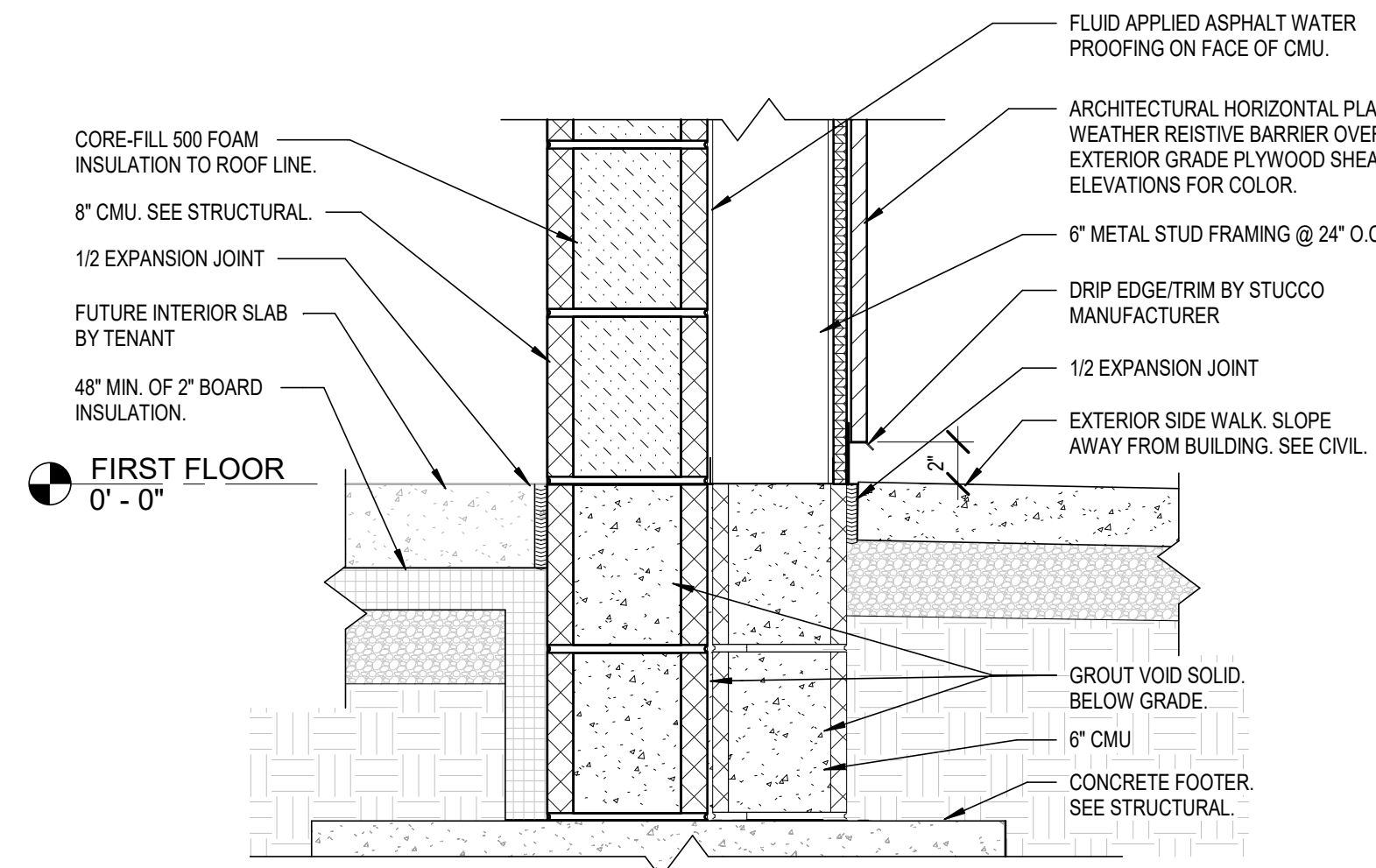


3 STOREFRONT SILL DETAIL
1 1/2" = 1'-0"

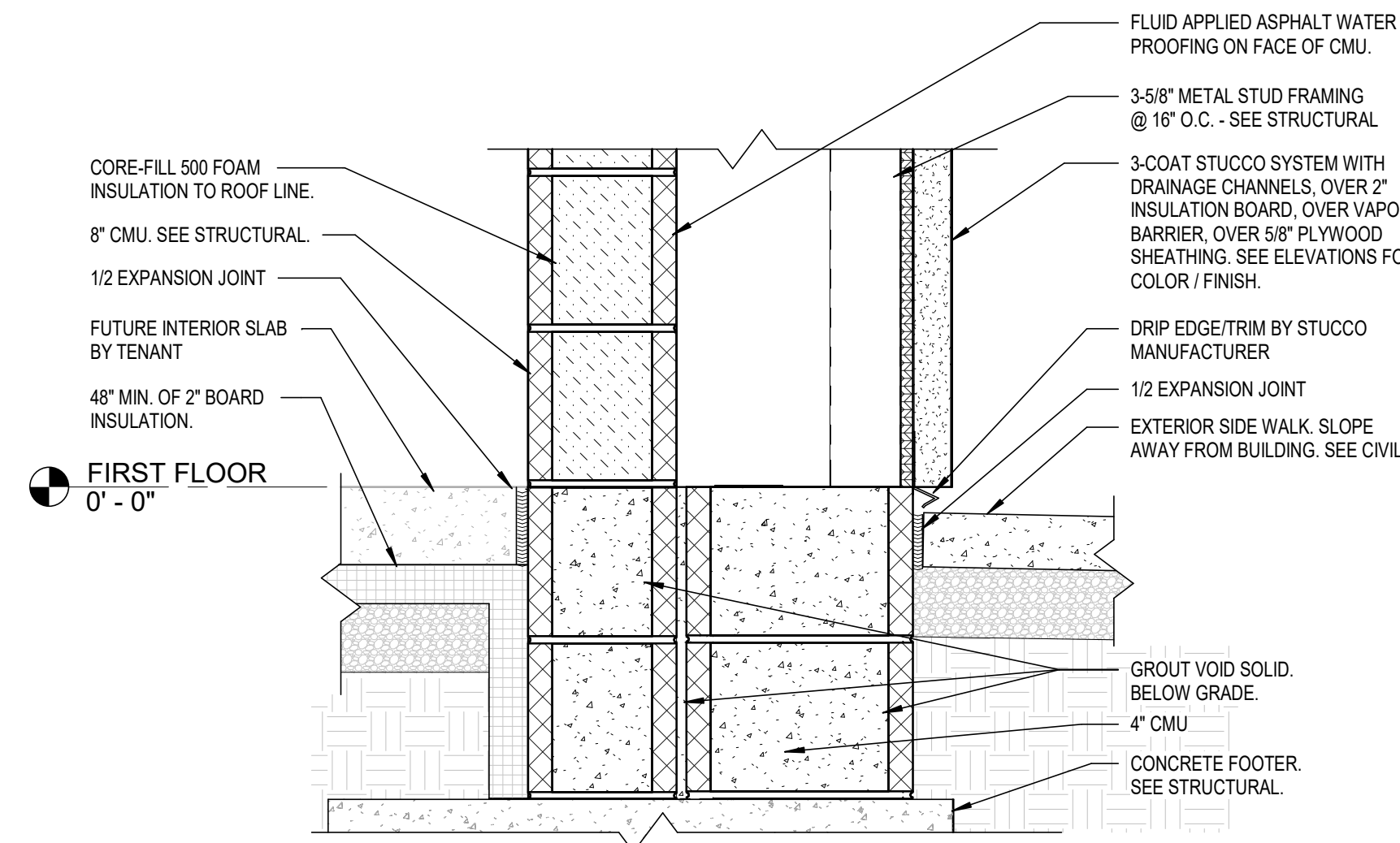


4 STOREFRONT HEAD DETAIL
1 1/2" = 1'-0"

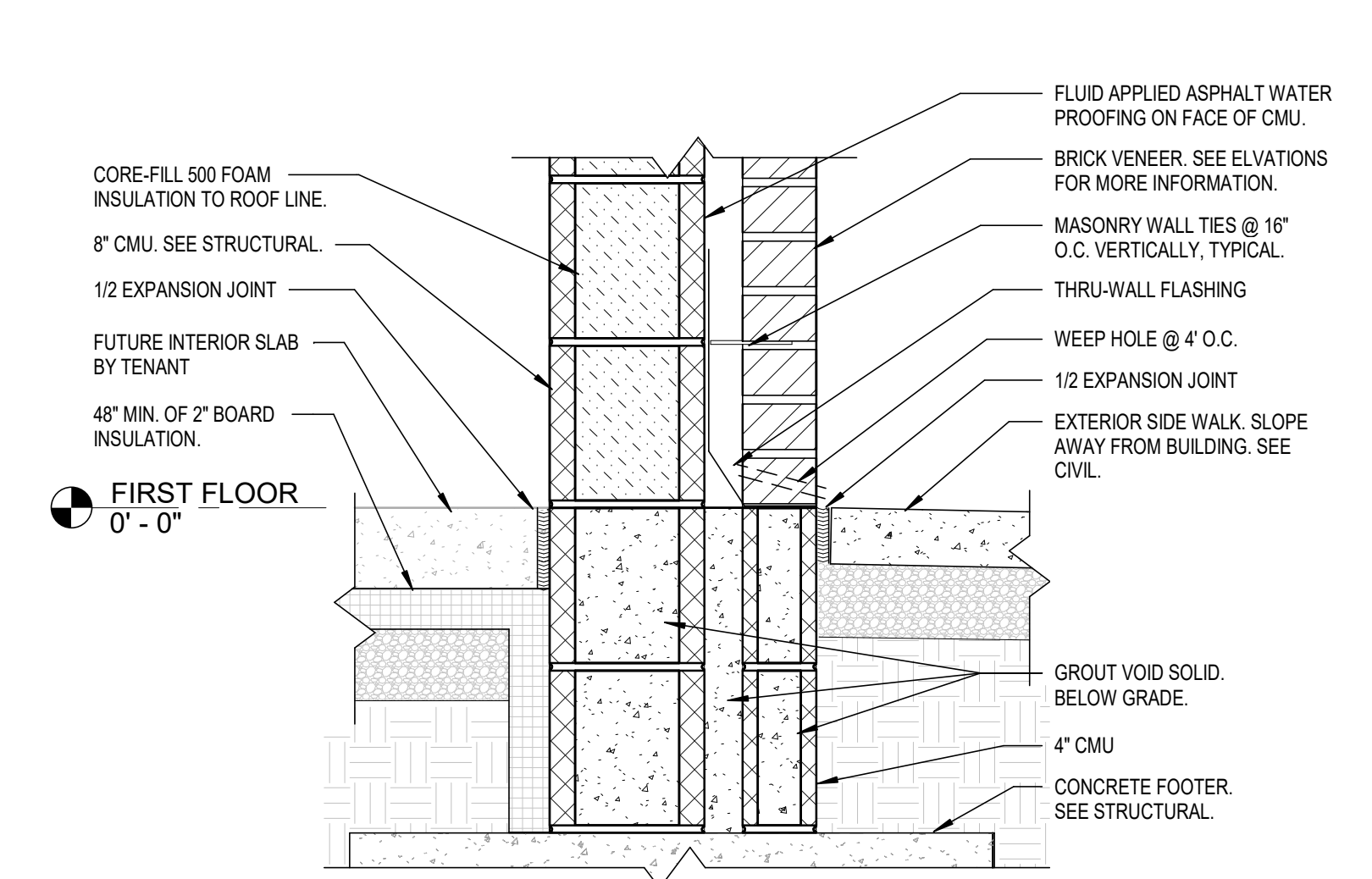
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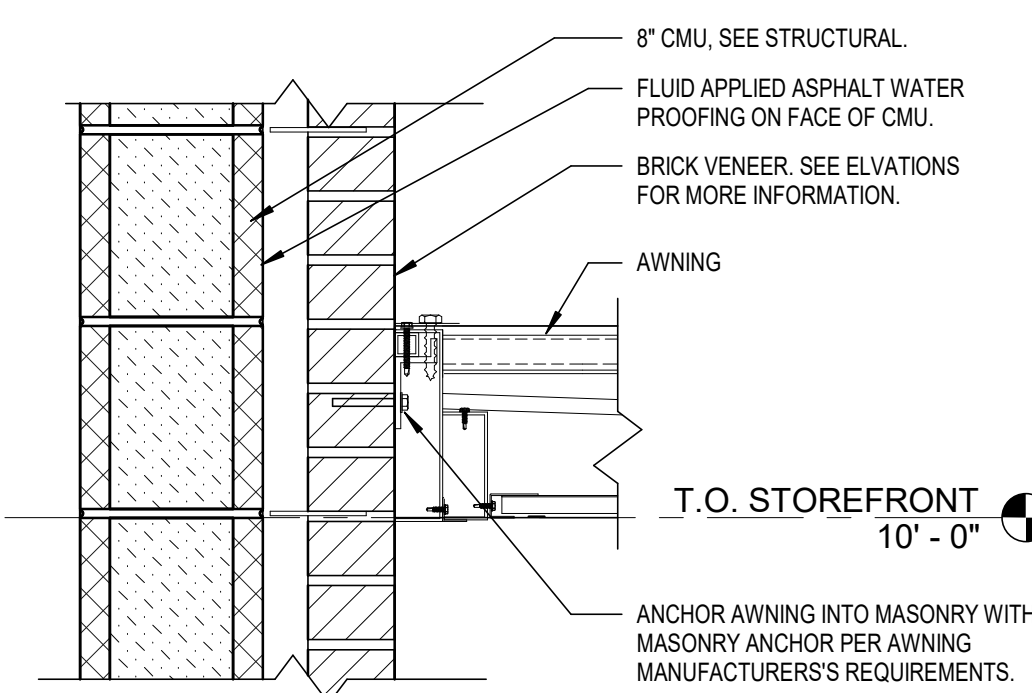
8 FOUNDATION DETAIL
1 1/2" = 1'-0"



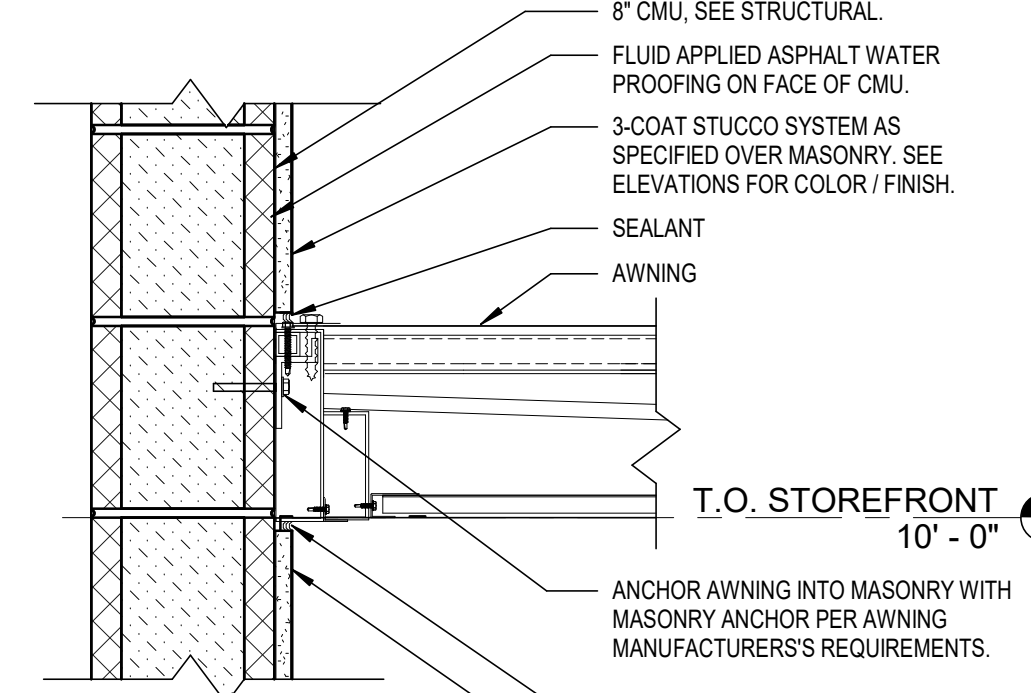
7 FOUNDATION DETAIL
1 1/2" = 1'-0"



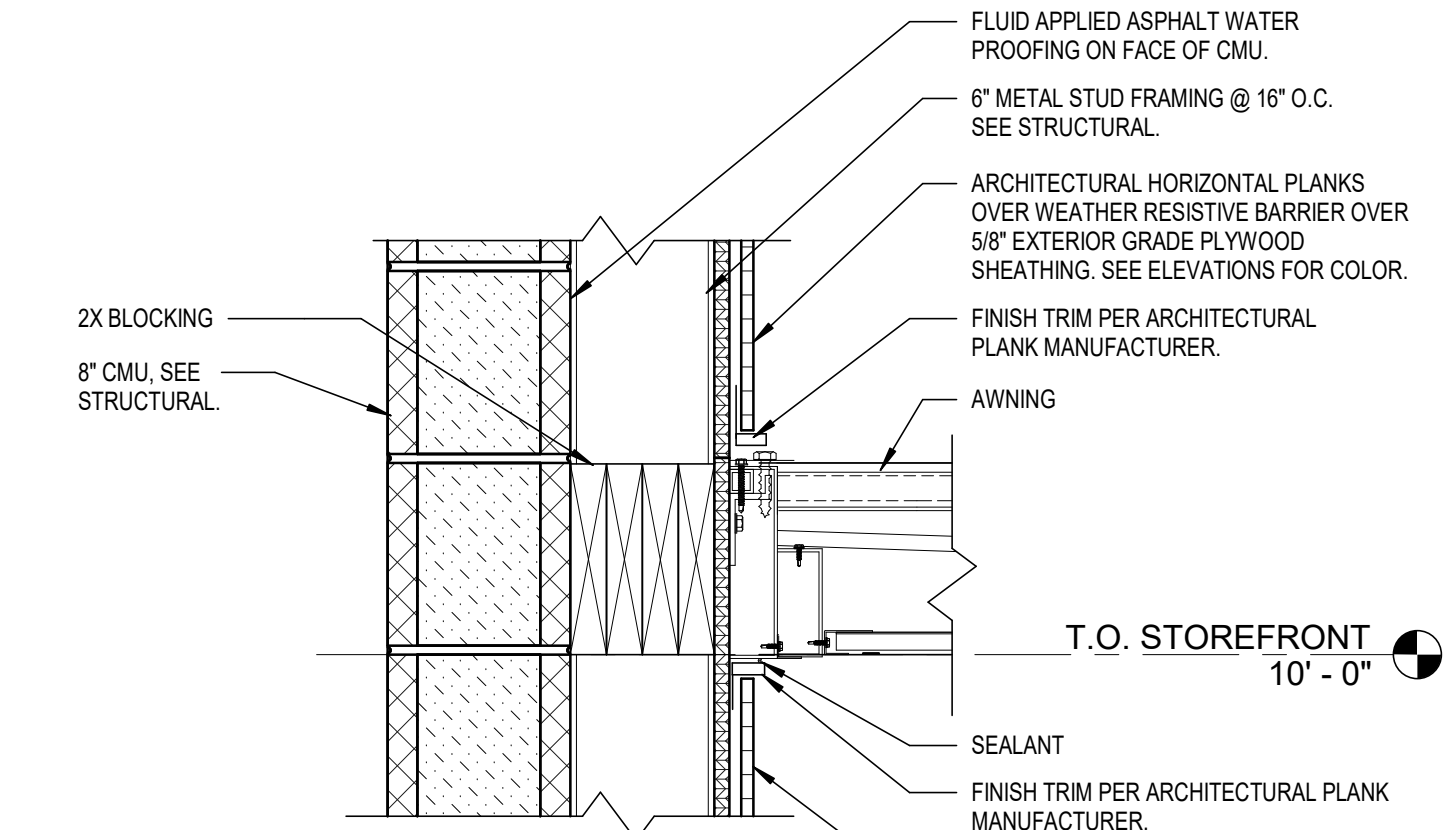
6 FOUNDATION DETAIL
1 1/2" = 1'-0"



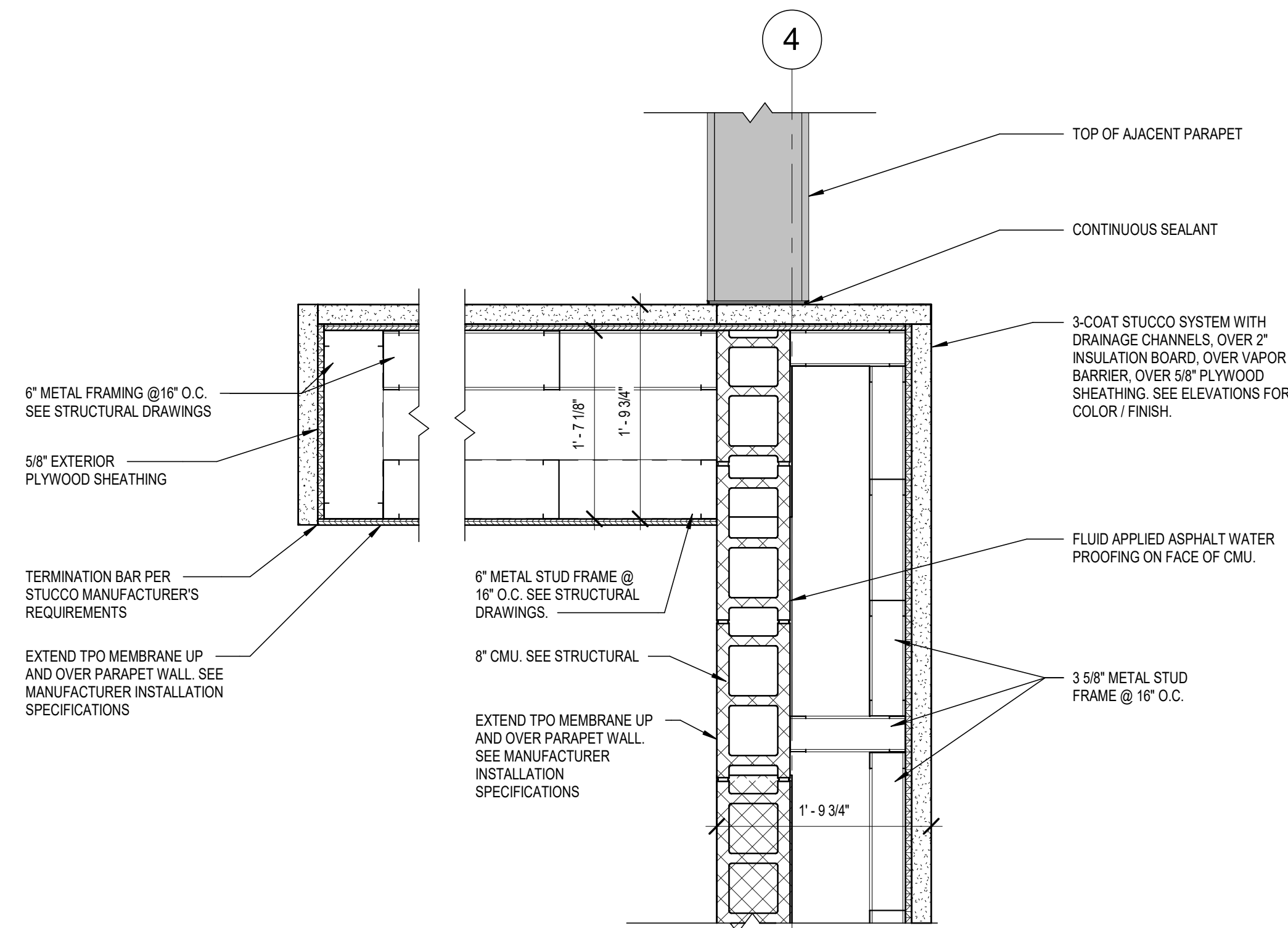
5 AWNING ATTACHMENT DETAIL
1 1/2" = 1'-0"



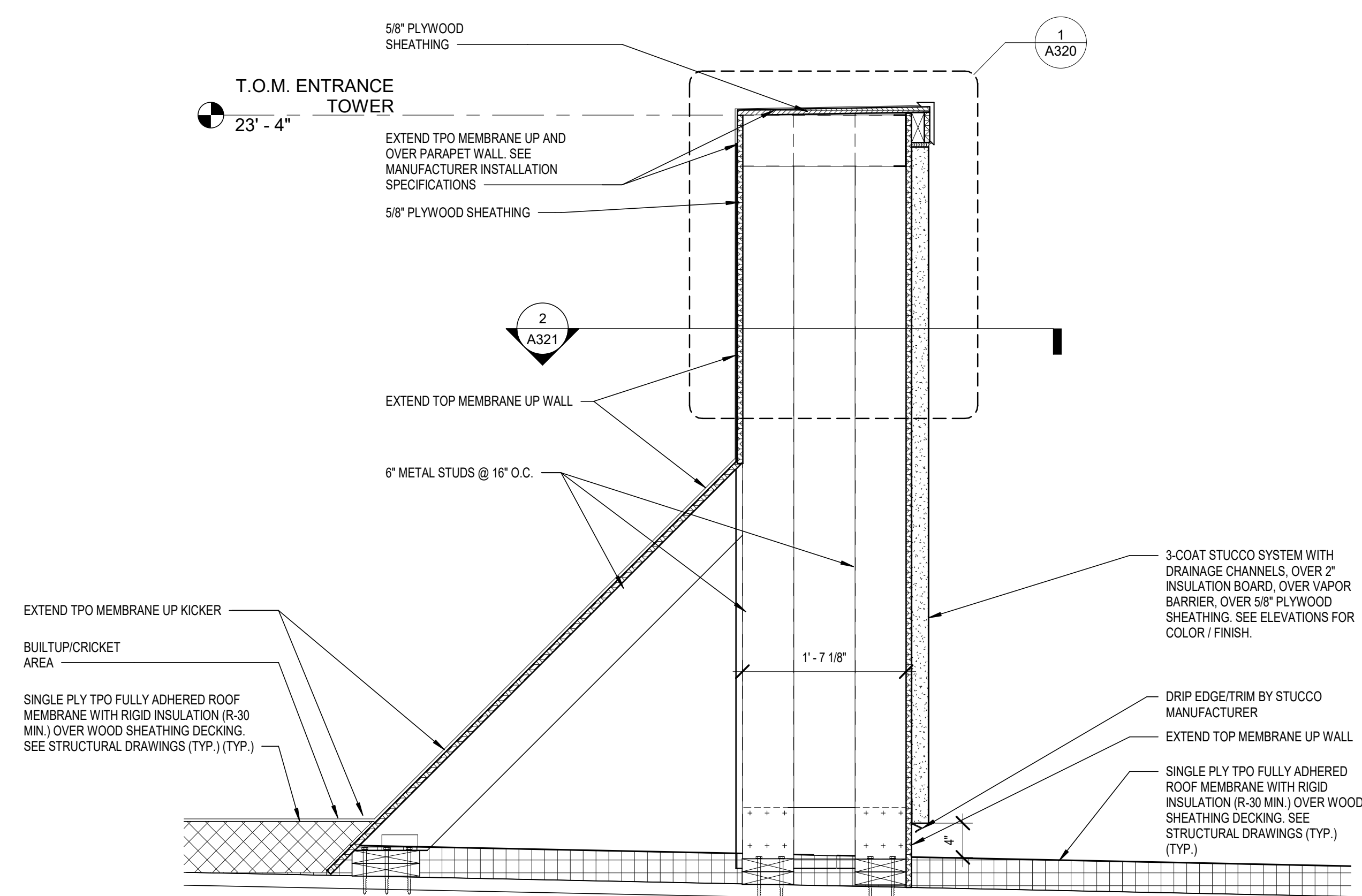
4 AWNING ATTACHMENT DETAIL
1 1/2" = 1'-0"



3 AWNING ATTACHMENT DETAIL
1 1/2" = 1'-0"



2 PARAPET DETAIL
1" = 1'-0"



1 PARAPET SECTION
1" = 1'-0"

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Effingham, IL 62401

WMG SHELL -
CLERMONT FL

WMG # FL22-0695
FL Highway 501 W, Colonial Drive
Clermont, FL 34711

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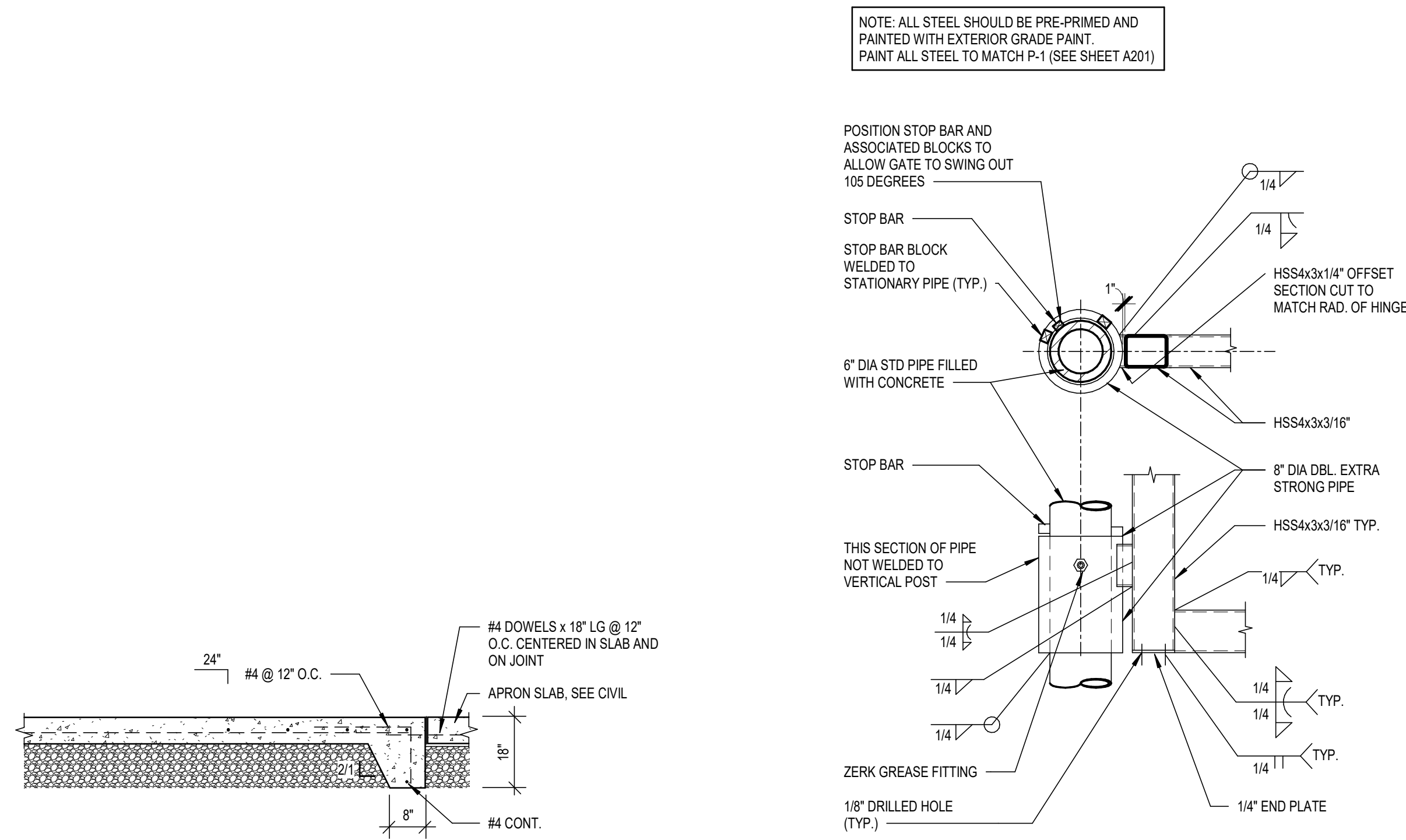
SECTION DETAILS

A321

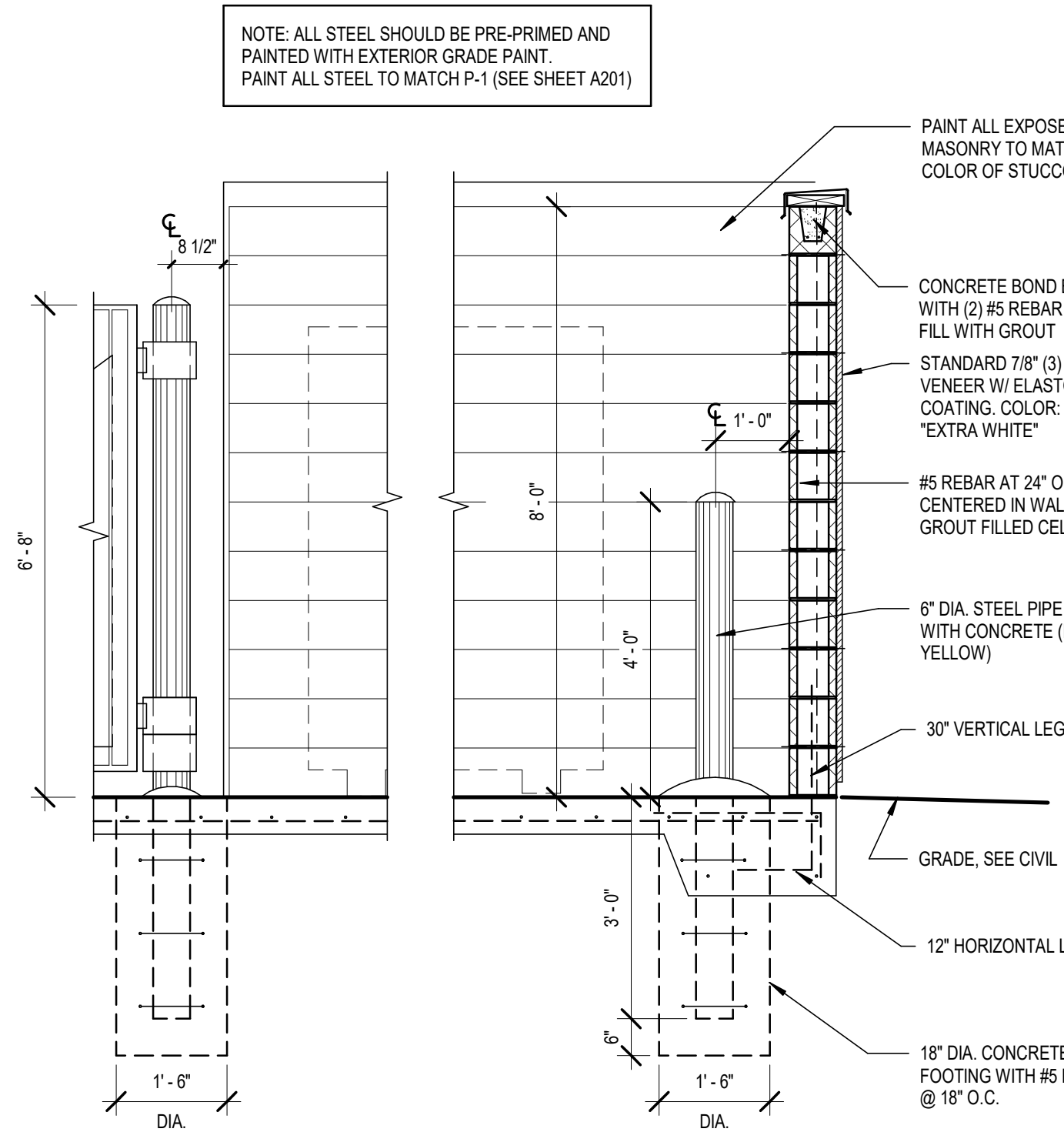
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JB

CHECKED BY
DR

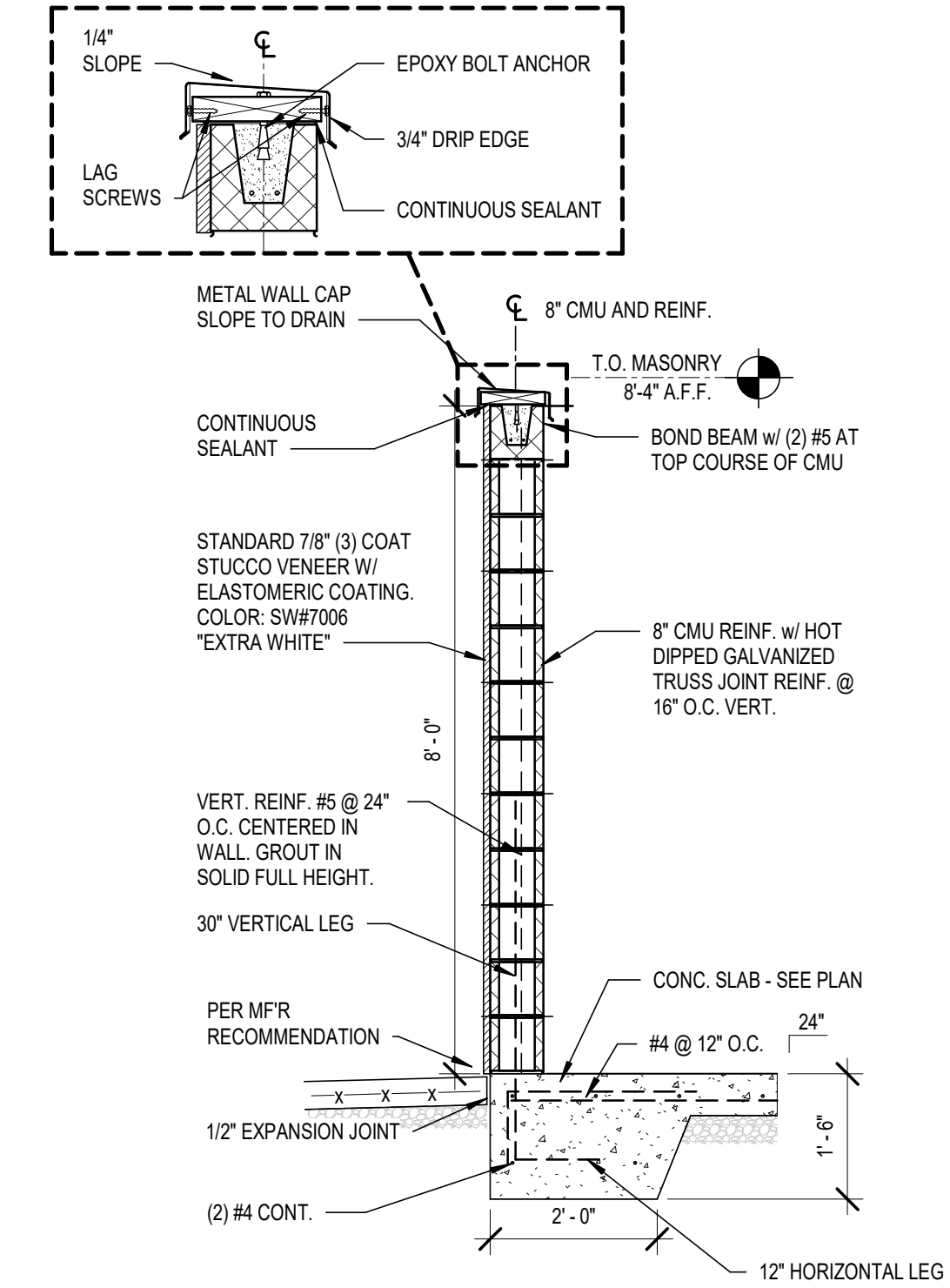
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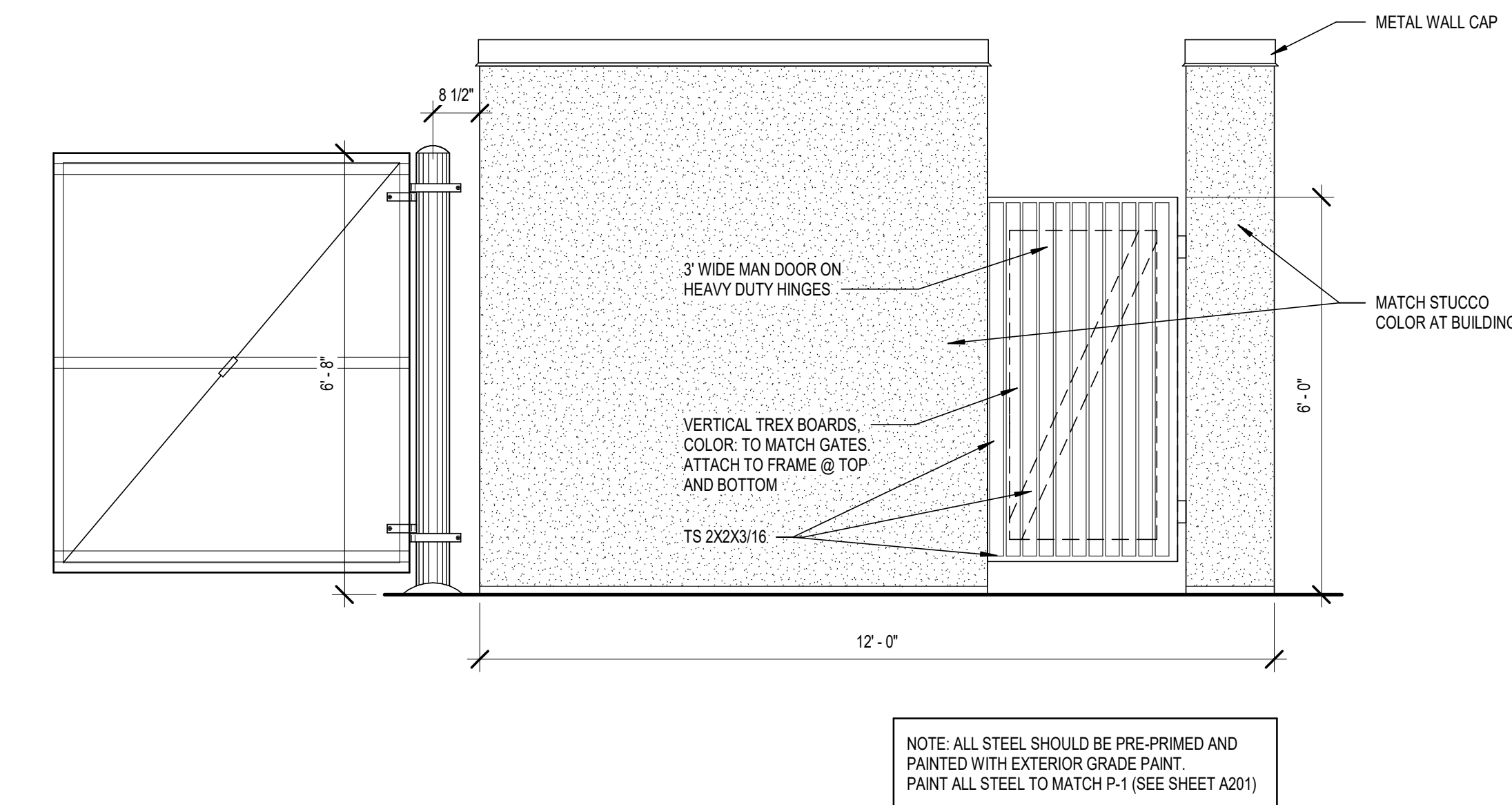
7 DUMPSTER PAD SECTION
N.T.S.



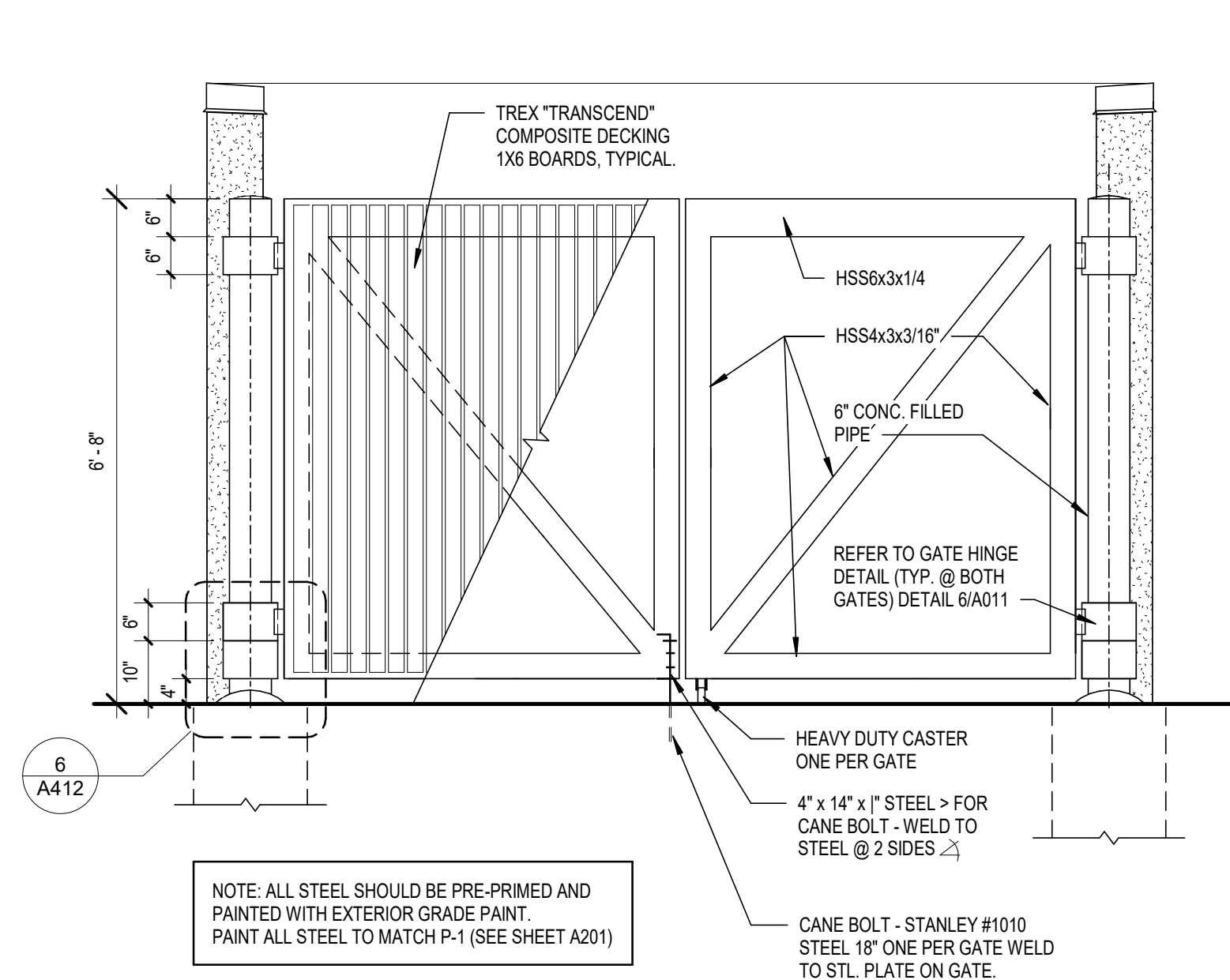
5 DUMPSTER SECTION
1/2" = 1'-0"



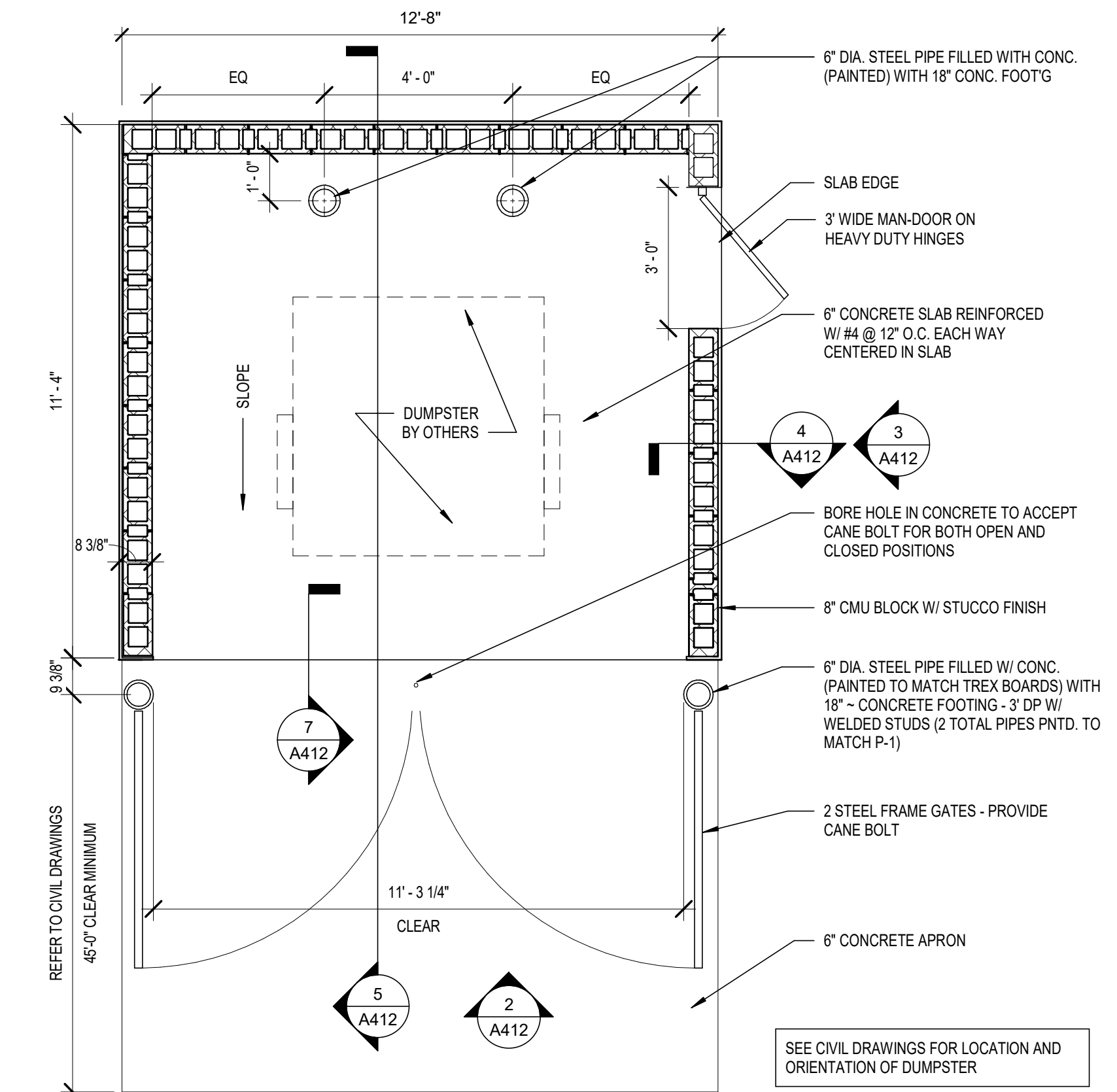
4 DUMPSTER WALL SECTION
1/2" = 1'-0"



3 DUMPSTER SIDE ELEVATION
1/2" = 1'-0"



2 DUMPSTER FRONT ELEVATION
1/2" = 1'-0"



1 DUMPSTER PLAN
3/8" = 1'-0"

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DUMPSTER ENCLOSURE PLAN, ELEVS AND DETAILS

A412

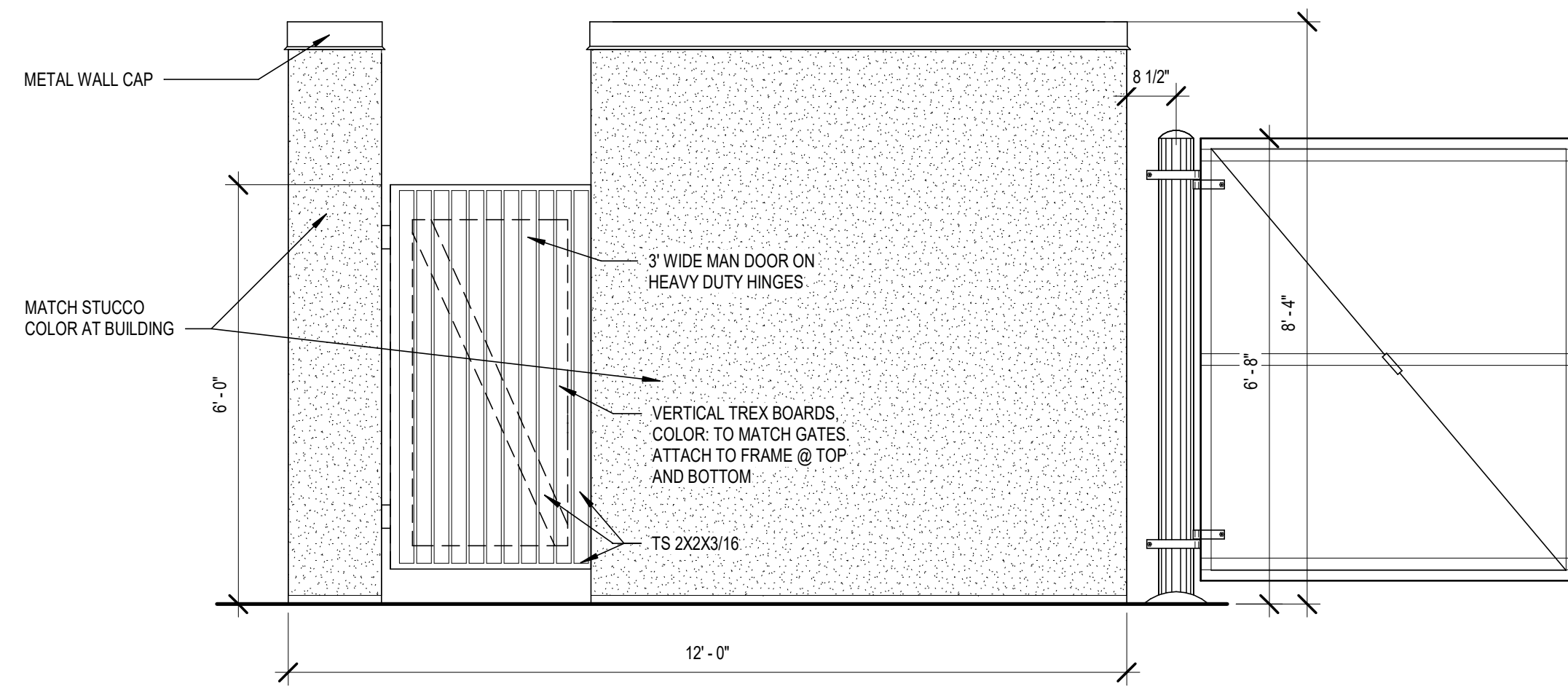
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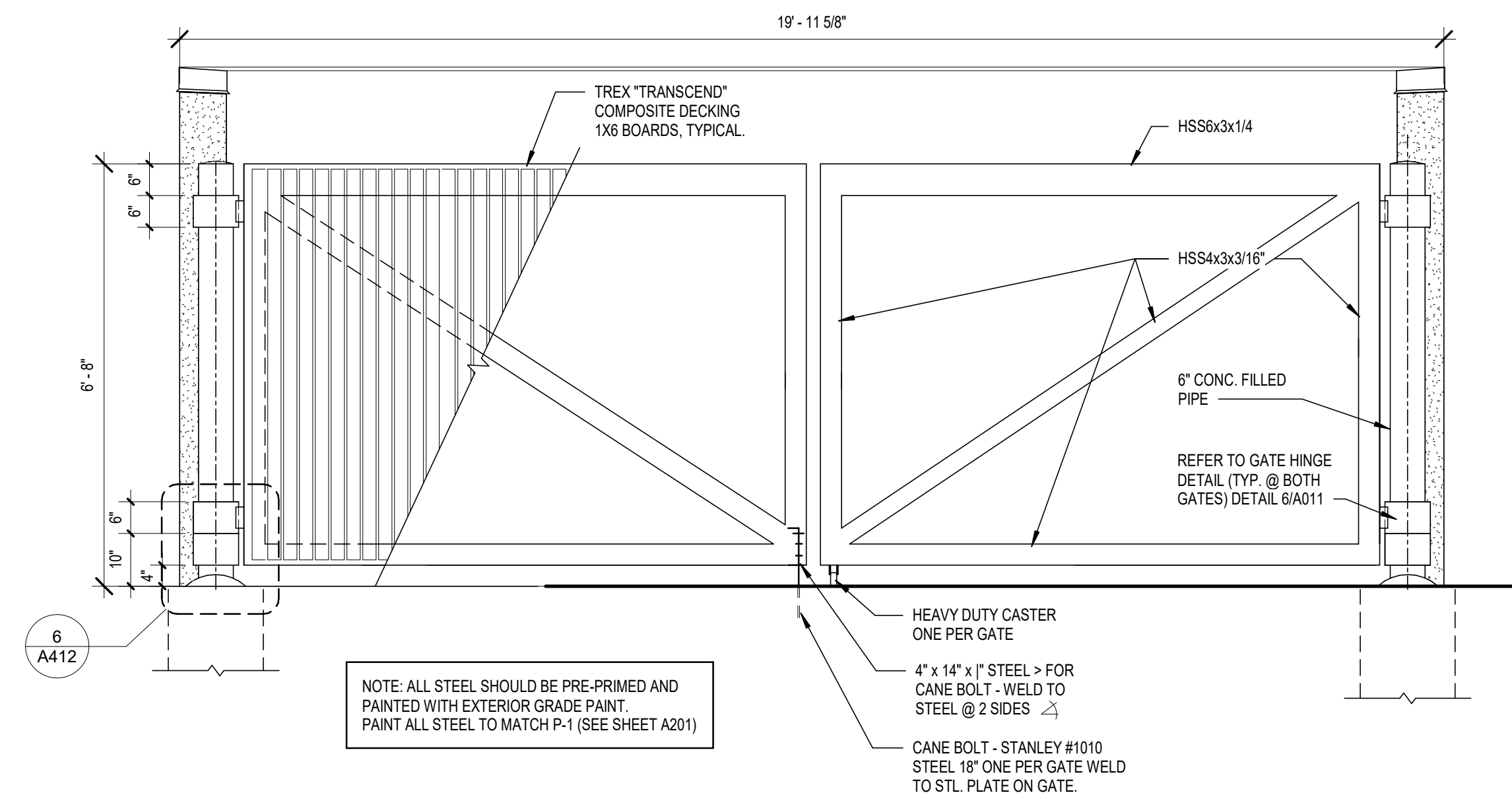
WMG DEVELOPMENT
Heartland Dental
1200 Network Centre Drive
Effingham, IL 62401

**WMG SHELL -
CLERMONT FL**
WMG # FL22-0606
FL Highway 501 W, Colonial Drive
Clermont, FL 34711



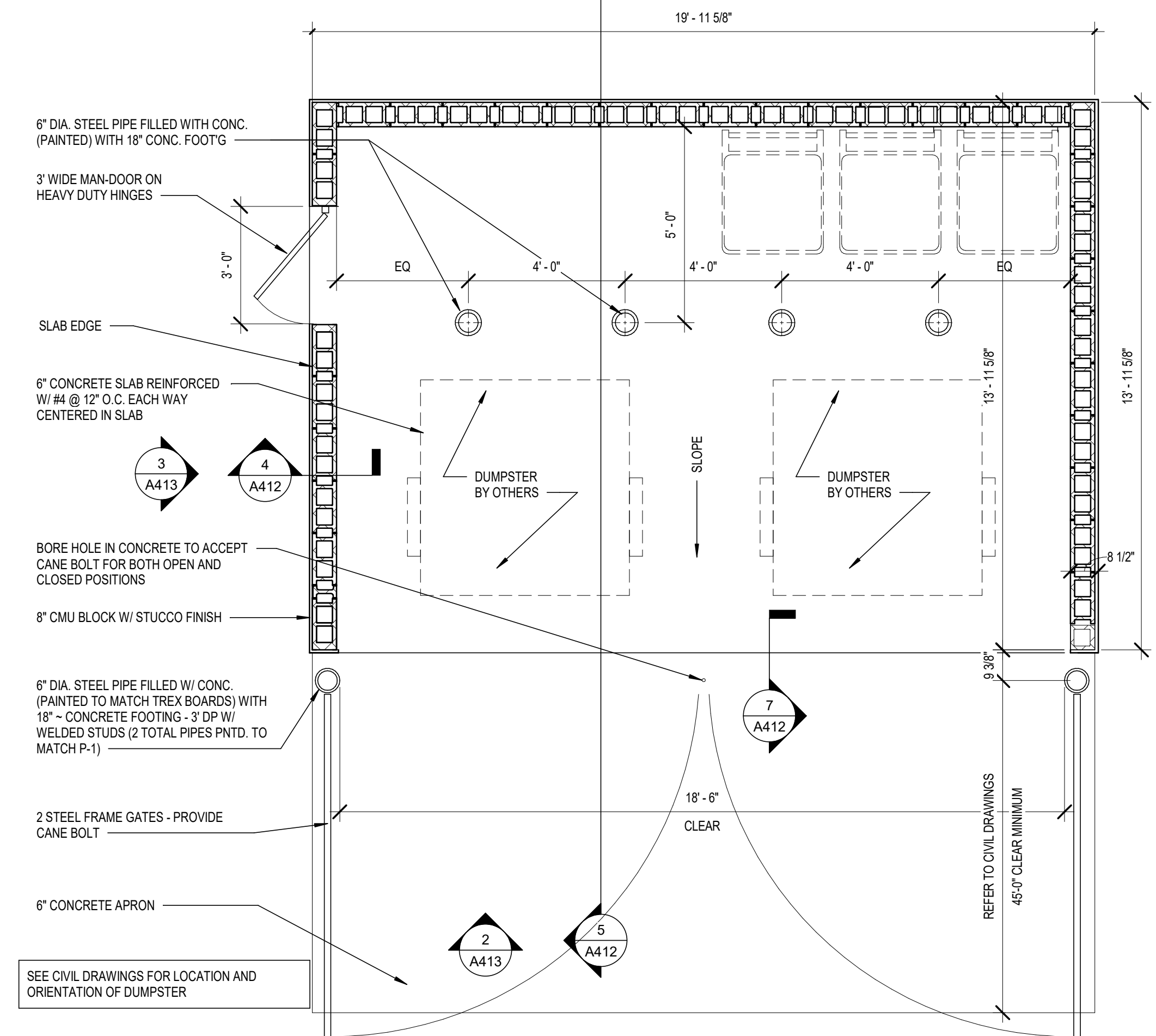
NOTE: ALL STEEL SHOULD BE PRE-PRIMED AND PAINTED WITH EXTERIOR GRADE PAINT. PAINT ALL STEEL TO MATCH P-1 (SEE SHEET A201)

3 DUMPSTER SIDE ELEVATION
1/2" = 1'-0"



NOTE: ALL STEEL SHOULD BE PRE-PRIMED AND PAINTED WITH EXTERIOR GRADE PAINT. PAINT ALL STEEL TO MATCH P-1 (SEE SHEET A201)

2 DUMPSTER FRONT ELEVATION
1/2" = 1'-0"



SEE CIVIL DRAWINGS FOR LOCATION AND ORIENTATION OF DUMPSTER

1 DUMPSTER PLAN
3/8" = 1'-0"

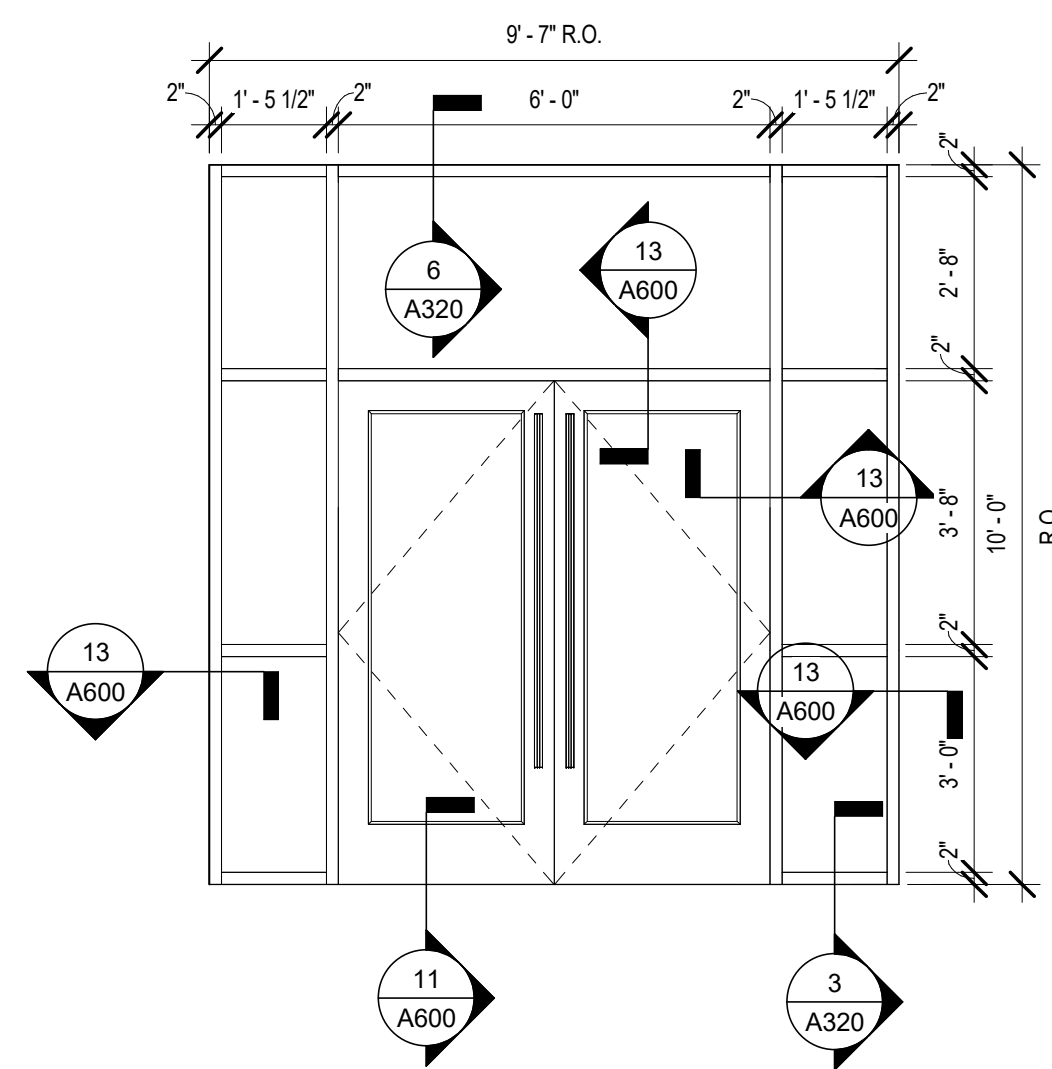
1/24/24	BID SET
11/15/23	PERMIT SET
mk	date issue

**DUMPSTER
ENCLOSURE PLAN,
ELEVS AND
DETAILS**

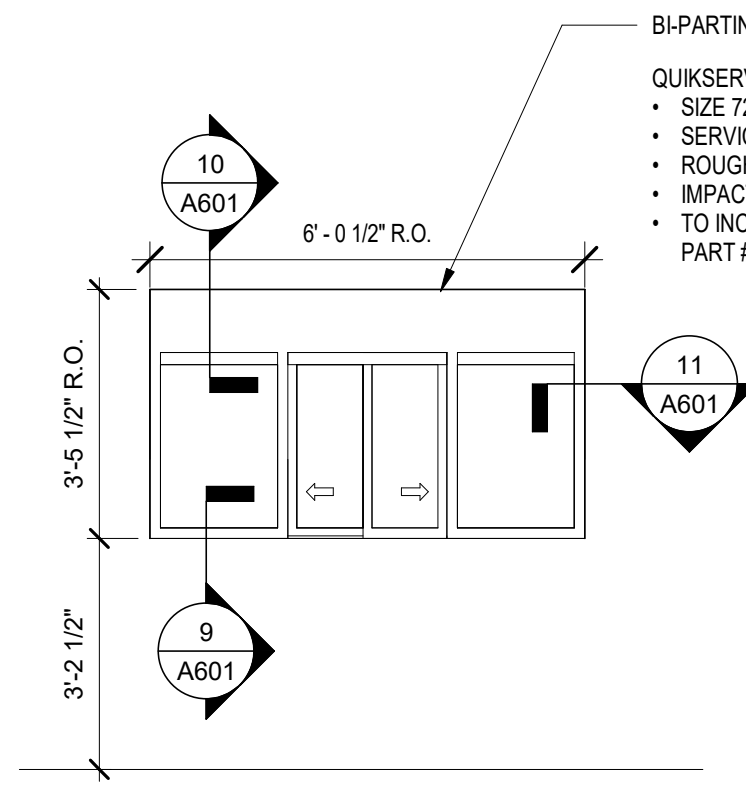
A413

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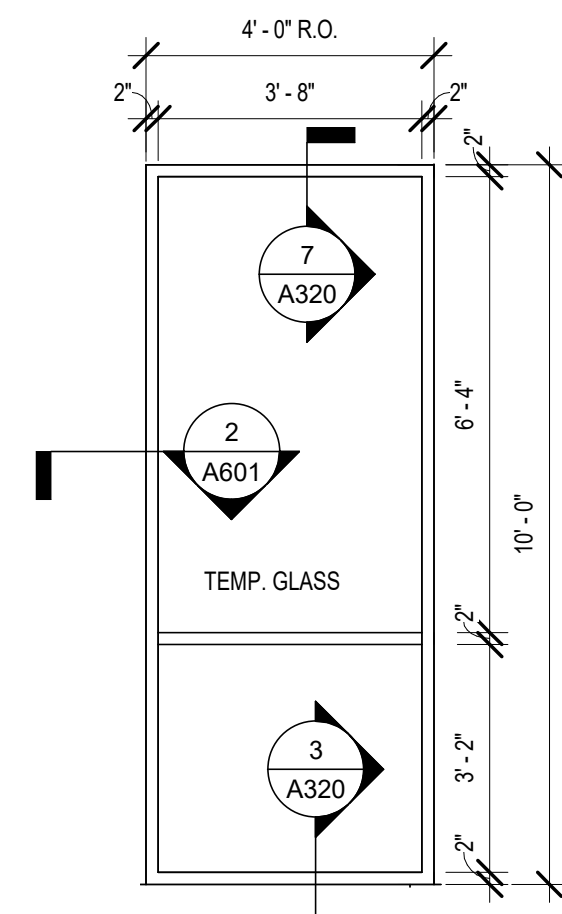
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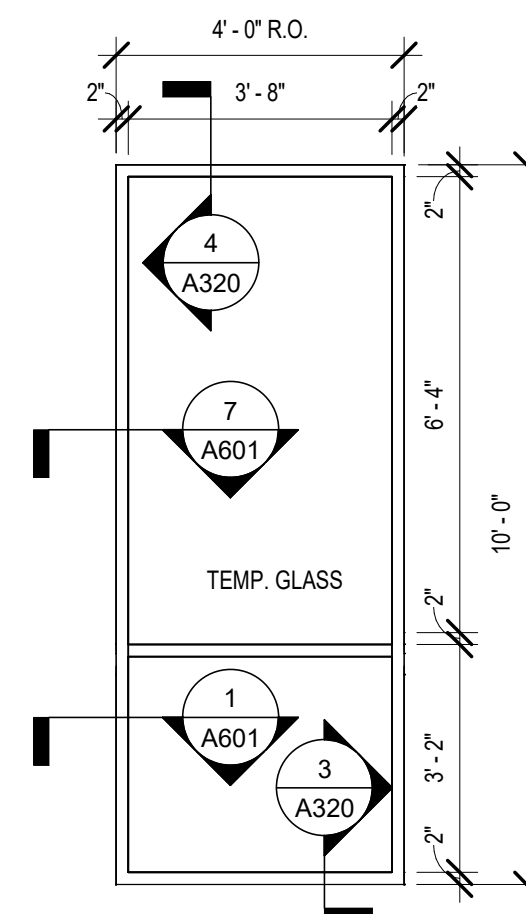
8 STOREFRONT - S5
3/8" = 1'-0"



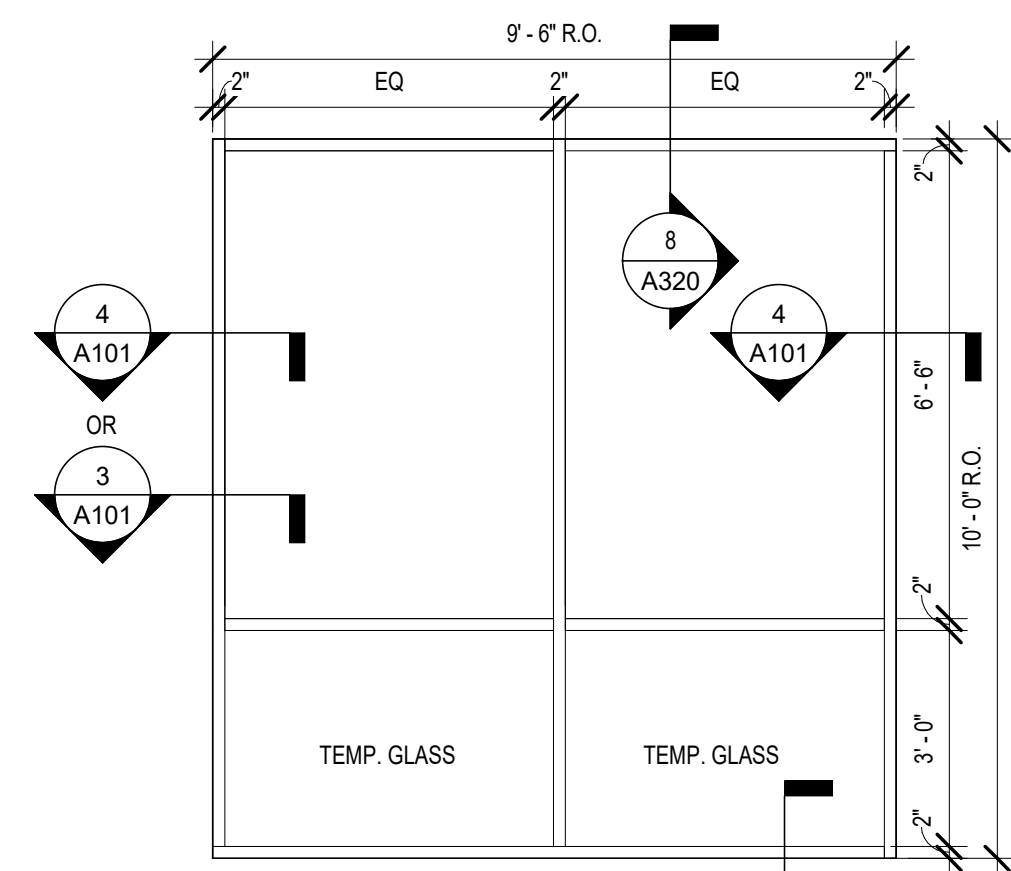
7 DRIVE-THRU WINDOW - W4
3/8" = 1'-0"



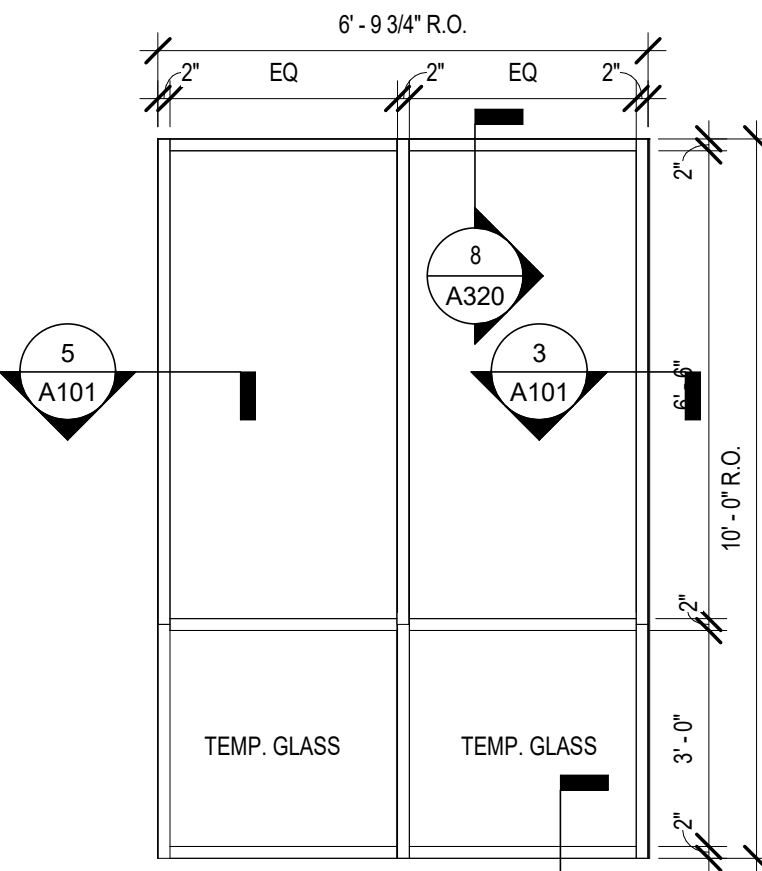
6 STOREFRONT - W3
3/8" = 1'-0"



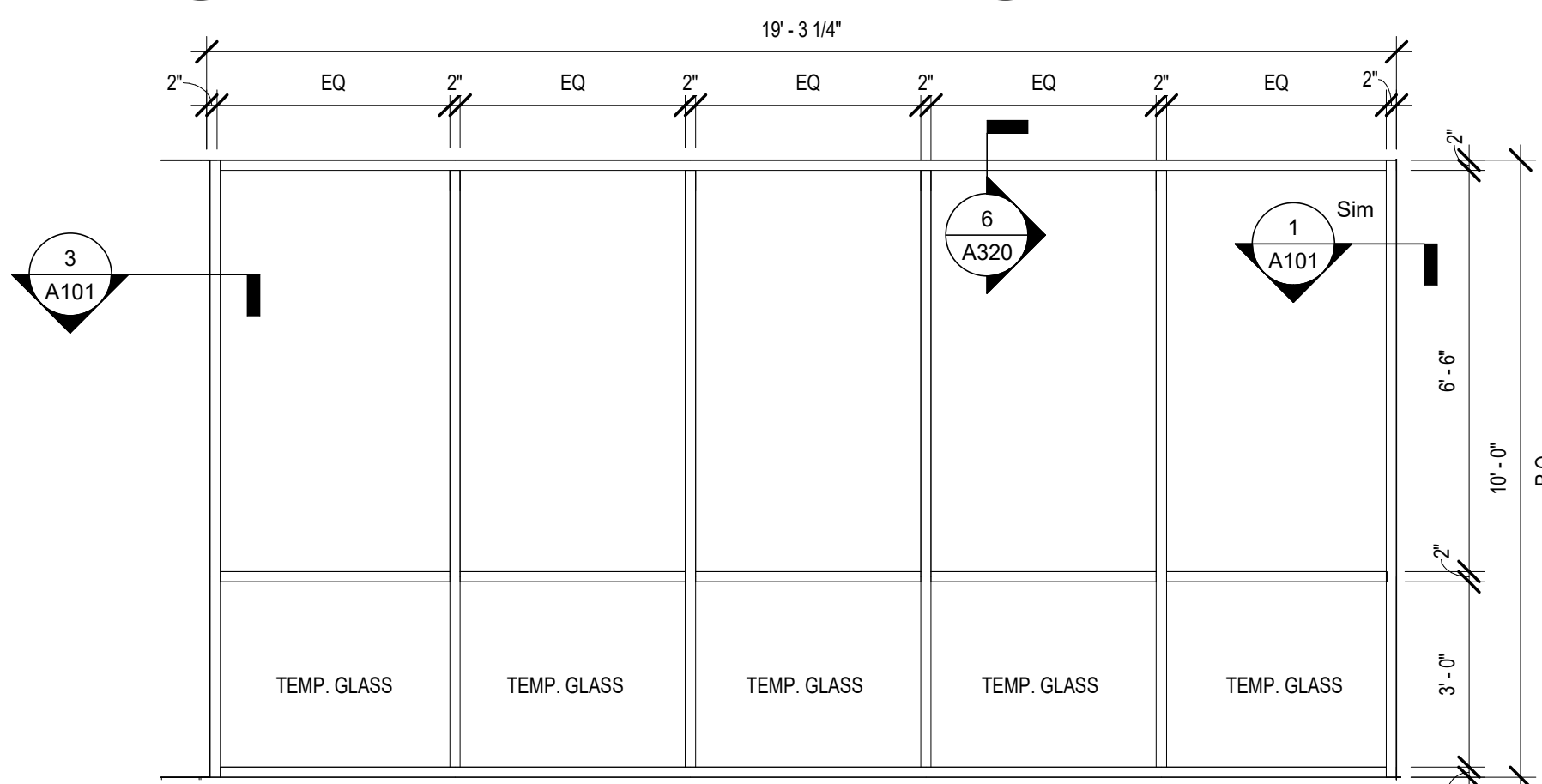
5 STOREFRONT W2
3/8" = 1'-0"



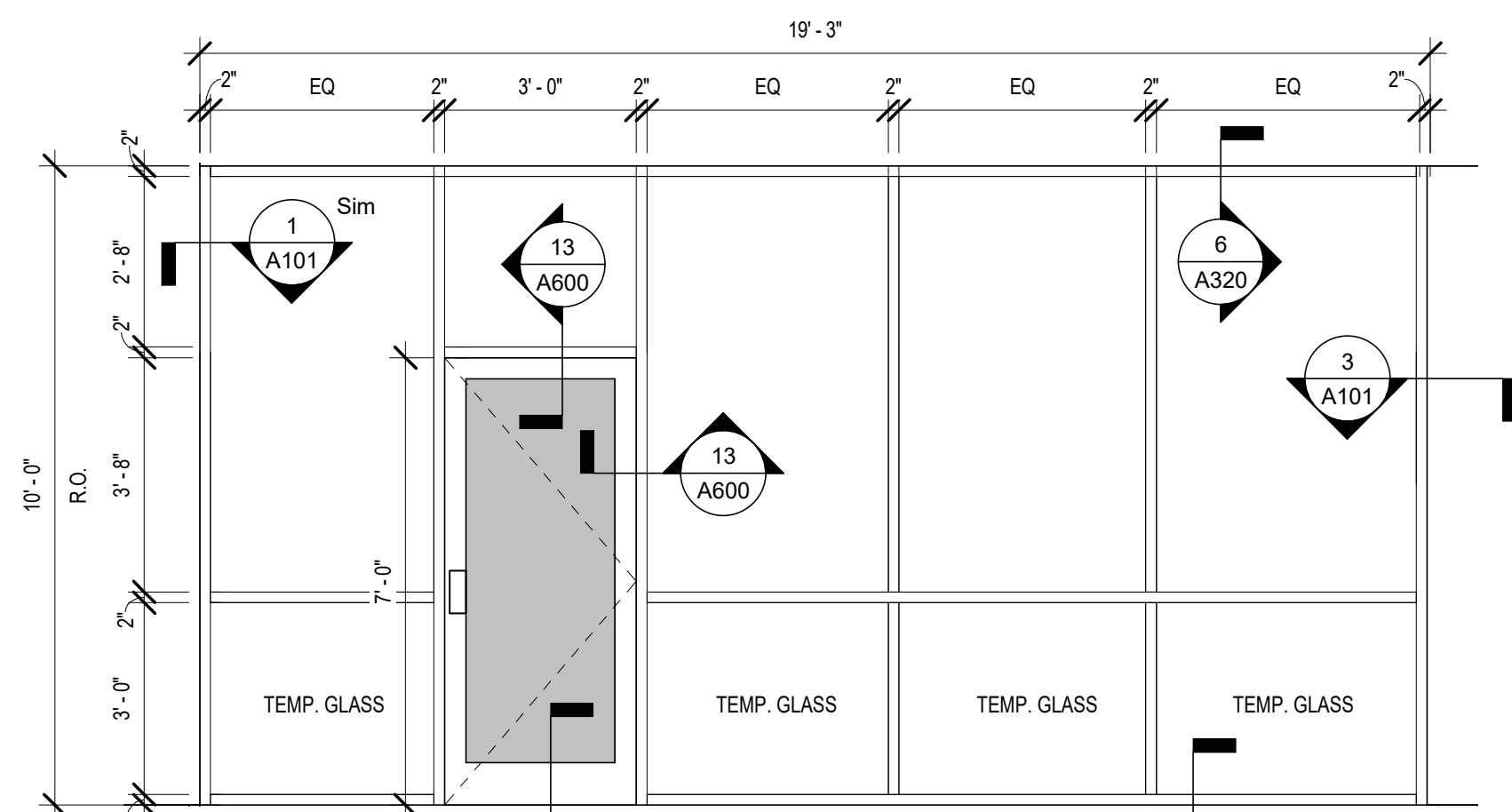
4 STOREFRONT - S4
3/8" = 1'-0"



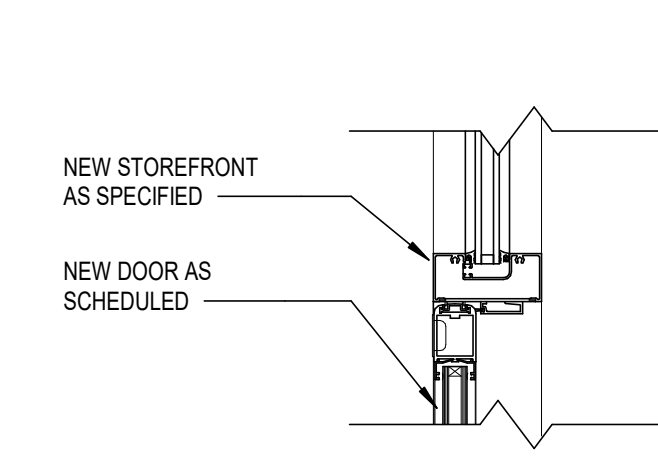
3 STOREFRONT - S3
3/8" = 1'-0"



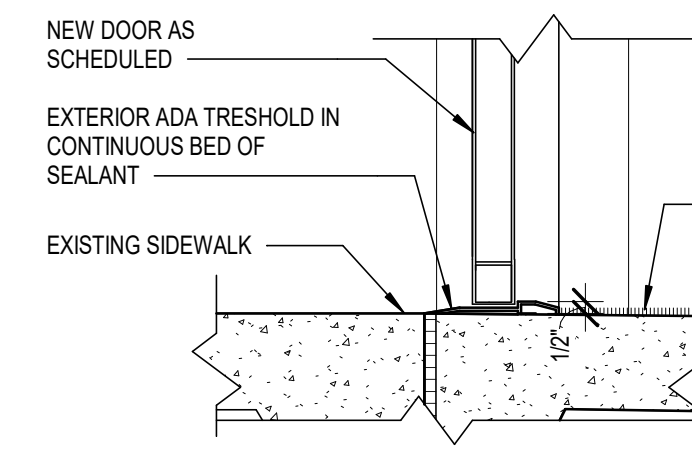
2 STOREFRONT - S2
3/8" = 1'-0"



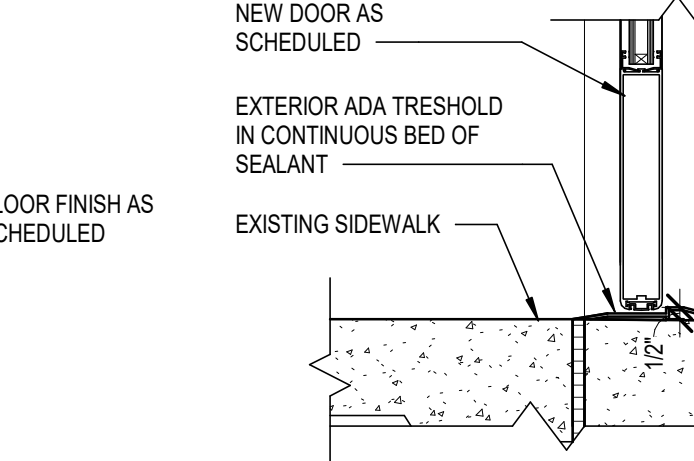
1 STOREFRONT - S1
3/8" = 1'-0"



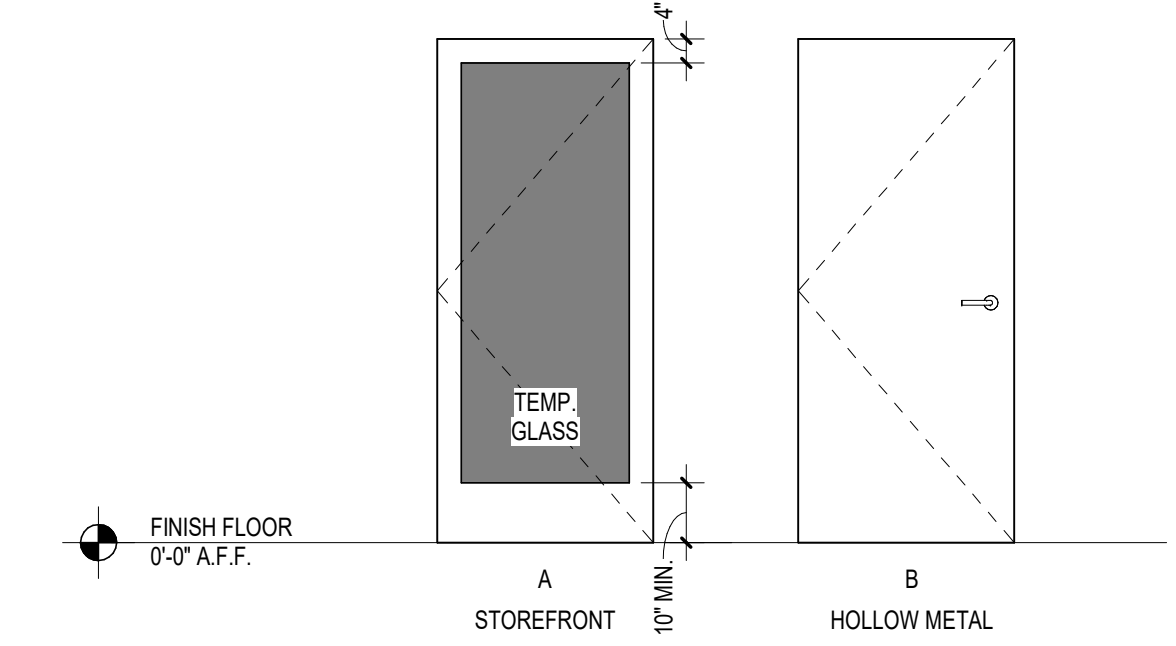
13 STOREFRONT HEAD/JAMB
1 1/2" = 1'-0"



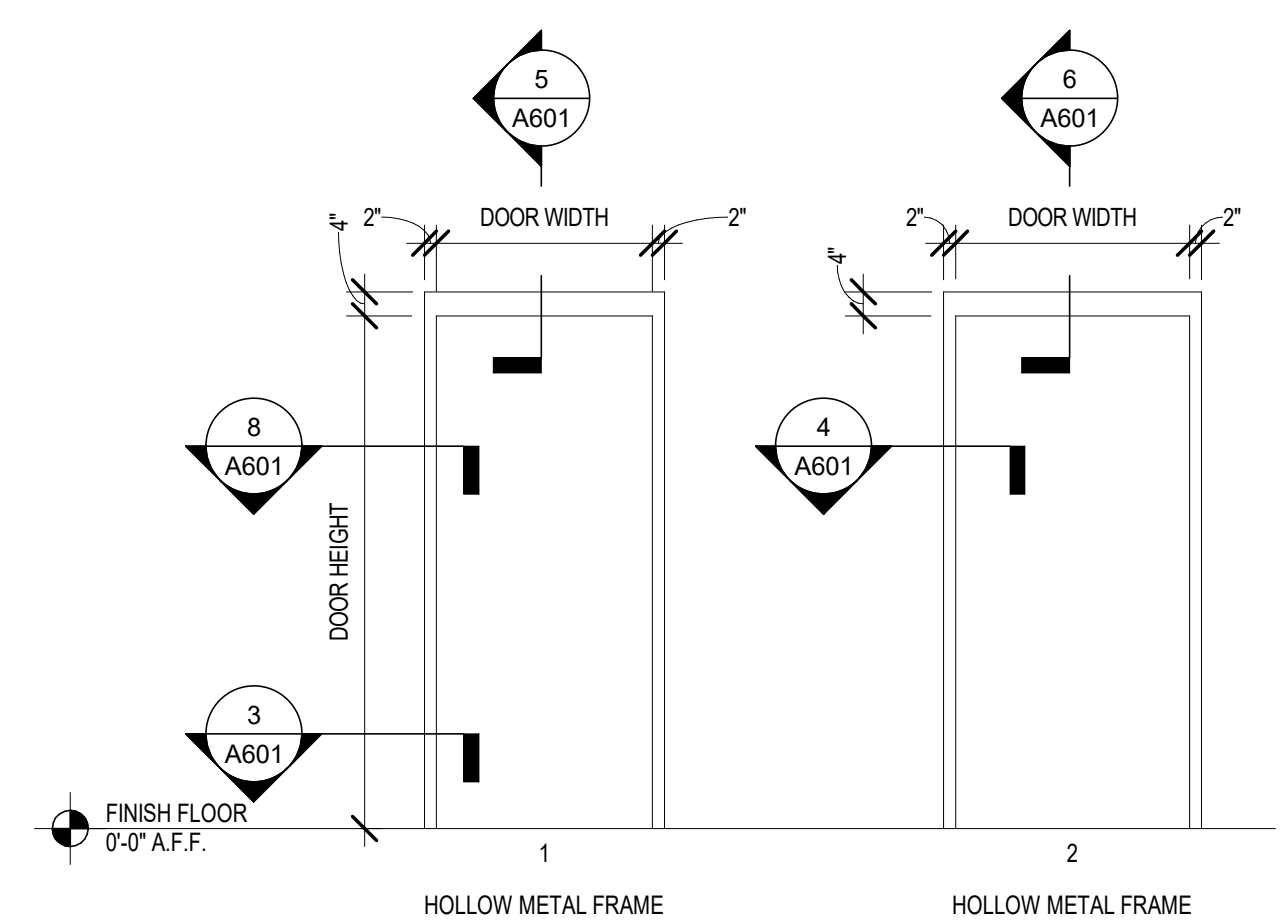
12 EXTERIOR DOOR SILL
1 1/2" = 1'-0"



11 STOREFRONT DOOR SILL
1 1/2" = 1'-0"



A DOOR TYPES
SCALE: 3/8" = 1'-0"



B FRAME TYPES
SCALE: 3/8" = 1'-0"

BI-PARTING IMPACT SLIDER SERVING WINDOW
QUIKSERV MODEL: BP-7241E-IP-CHPOTLE, COMPLETE UNIT
• SIZE 72"W x 41"H
• SERVICE OPENING: 29-1/2"W x 27"H
• ROUGH OPENING: 72-1/2"W x 41-1/2"H
• IMPACT RESISTANT GLASS
• TO INCLUDE AMBIENT AIR CURTAIN MODEL: GSK1025AA-BK, PART #9345, MOUNT ON WALL ABOVE.

EXTERIOR GLAZING TO BE 1" INSULATED LAMINATED (IMPACT RATED) SAFETY GLAZING.

EXTERIOR GLAZING TO BE 1" INSULATED LAMINATED (IMPACT RATED) SAFETY GLAZING.

EXTERIOR GLAZING TO BE 1" INSULATED LAMINATED (IMPACT RATED) SAFETY GLAZING.

EXTERIOR GLAZING TO BE 1" INSULATED LAMINATED (IMPACT RATED) SAFETY GLAZING.

DOOR NO.	Description	DOOR					FRAME					HARDWARE SET	RATING	COMMENTS
		WIDTH	HEIGHT	THICKNESS	MATERIAL	TYPE	MATERIAL	TYPE	HEAD	JAMB	SILL			
01	FRONT ENTRANCE	3'-0"	7'-0"	1.34"	ALUM / GLAZING	A	ALUM.	---	13/A600	13/A600	11/A600	1	---	STOREFRONT DOOR & HARDWARE. EXIT DOORS ON TENANT SPACE TO BE KEYPED ON MASTER SYSTEM. SAME KEY ALL DOORS.
02	REAR EGRESS	3'-0"	7'-0"	1.34"	HOLLOW METAL	B	H.M.	2	6/A601	4/A601	12/A600	2	---	HOLLOW METAL DOOR & HARDWARE. EXIT DOORS ON TENANT SPACE TO BE KEYPED ON MASTER SYSTEM. SAME KEY ALL DOORS.
03	REAR EGRESS	3'-0"	7'-0"	1.34"	HOLLOW METAL	B	H.M.	1	5/A601	3/A601 8/A601	12/A600	2	---	HOLLOW METAL DOOR & HARDWARE. EXIT DOORS ON TENANT SPACE TO BE KEYPED ON MASTER SYSTEM. SAME KEY ALL DOORS.
04	REAR EGRESS	3'-0"	7'-0"	1.34"	HOLLOW METAL	B	H.M.	1	5/A601	3/A601 8/A601	12/A600	4	---	HOLLOW METAL DOOR & HARDWARE. EXIT DOORS ON TENANT SPACE TO BE KEYPED ON MASTER SYSTEM. SAME KEY ALL DOORS.
05	REAR EGRESS	3'-0"	7'-0"	1.34"	HOLLOW METAL	B	H.M.	2	6/A601	4/A601	12/A600	5	---	HOLLOW METAL DOOR & HARDWARE. EXIT DOORS ON TENANT SPACE TO BE KEYPED ON MASTER SYSTEM. SAME KEY ALL DOORS.
06	FRONT ENTRANCE	6'-0"	7'-0"	1.34"	ALUM / GLAZING	A	ALUM.	---	13/A600	13/A600	11/A600	3	---	STOREFRONT DOOR & HARDWARE. EXIT DOORS ON TENANT SPACE TO BE KEYPED ON MASTER SYSTEM. SAME KEY ALL DOORS.

HARDWARE SETS OWNER PROVIDED, INSTALLED BY G.C.

<p>SET NO. 1 - FOR EACH ALUMINUM ENTRANCE DOOR:</p> <ul style="list-style-type: none"> 1 CYLINDER SCHLAGE 20-001x114 (628 FINISH) 1 DEADLOCK ADAMS-RITE 4510-36-1 W/ 4560 LEVER 1 SET OFFSET HINGES BY DOOR MANUFACTURER 1 CLOSER BY DOOR MANUFACTURER 1 HEAD & SILL SWEEP BY DOOR MANUFACTURER 1 THRESHOLD BY DOOR MANUFACTURER 1 SET PUSH/PULL BY DOOR MANUFACTURER 1 SET WEATHERSTRIPPING BY DOOR MANUFACTURER 	<p>SET NO. 2 - FOR EACH EXTERIOR HOLLOW METAL DOOR:</p> <ul style="list-style-type: none"> 1 LOCKSET CORBIN CL3857 NZD 626 3 HINGES STANLEY FBB 179 4 1/2 x 4 1/2 (US26D) 1 SET WEATHERSTRIPPING NGP 160S 1 HEAD & SILL SWEEP NGP 97V 1 THRESHOLD NGP 804V - 1 SET PANIC HARDWARE 1 DRIP CAP NGP 16A 1 CLOSER LCN 1461-CUSH + TBWMS (ALUM. FINISH)
<p>SET NO. 3 - FOR EACH ALUMINUM ENTRANCE DOOR:</p> <ul style="list-style-type: none"> 1 HINGE HAGER 780-224HD-83"-CLR 1 MORTISE CYLINDER SCHLAGE 80-103 BRUSHED CHROME, C.O. CYLINDER @34" MIN AFF. 1 TEMP CORE SCHLAGE 80-035 INTERCHANGEABLE CORE, (BRUSHED CHROME) 2 PUSH HARDWARE ADAMS RITE 8611-36 (ALUM. FINISH, 36" DR), C.O. EXIT DEVICE AT 38" AFF. 2 PULL HARDWARE HAGER 4G US32D (8" CTC), CENTER ON DOOR STILE 2 CLOSER DORMA 8916-AF89P-689 (TOP JAMB), (ALUM) 2 DOOR STOP IVES FS18S, (ALUM) 2 OVERHEAD STOP GLYNN-JOHNSON 454S-SP28 (ALUM) 2 CLOSER BACK PLATE DORMA BP89, ALUM 1 THRESHOLD REESE S238A-42 (SIZE 42) 1 SMOKE SEAL REESE 797B-21 2 DOOR SWEEP PEMKO SFSC-200-36 (36"DR) 	<p>SET NO. 4 - FOR EACH ALUMINUM ENTRANCE DOOR:</p> <ul style="list-style-type: none"> 1 HINGE HAGER 780-224HD-83"-CLR 1 PUSH HARDWARE ADAMS RITE 8611-36-628 (ALUM. FINISH, 36" DR), C.O. EXIT DEVICE AT 38" AFF. 1 PULL HARDWARE HAGER 4G US32D (8" CTC), CENTER ON DOOR STILE 1 CLOSER DORMA 8916-AF89P-689 (TOP JAMB), (ALUM) 1 CLOSER BACK PLATE DORMA BP89, ALUM 1 OVERHEAD STOP GLYNN-JOHNSON 454S-US32D (ALUM) 1 THRESHOLD REESE S424A-36 (SIZE 36") (CONFIRM WITH TENANT) 1 SMOKE SEAL REESE 797B-21 2 DOOR SWEEP PEMKO SFSC-200-36 (36"DR) 1 DOOR STOP IVES FS18S, (ALUM)

<p>SET NO. 5 - FOR EACH ALUMINUM ENTRANCE DOOR:</p> <ul style="list-style-type: none"> 1 HINGE HAGER 780-224HD-83"-CLR 1 PUSH HARDWARE FALCON 25-R-EO-4-US28 (SIZE 42) 1 PULL HARDWARE FALCON 510L-DANE-LHR-US26D, ALUM (EXTERIOR SIDE) 1 RM CYLINDER GLS RCIC-7LZ626 1 TEMP CORE SCHLAGE 80-035 INTERCHANGEABLE CORE (BRUSHED CHROME) 1 CLOSER DORMA 8916-AF89P-689 (TOP JAMB), (ALUM) 1 CLOSER BACK PLATE DORMA BP89, ALUM 1 THRESHOLD REESE S238A-42 (SIZE 42) 1 WEATHERSTRIP REESE DS75C-4070 1 DOOR SWEEP PEMKO SFSC-200-42 (42") (BLACK) OWNER FURNISHED 1 DOOR VIEWER IVES U688B26D, C.O. VIEWER AT 60" FROM BOTTOM OF DOOR 1 DOOR SILENCERS IVES SR64 1 DOOR BUZZER TRINE 240 1 KICKPLATE HAWATHA KP834-US32D
--

DOOR AND HARDWARE NOTES:
 1. PROVIDE ADA AND EGRESS DOOR HARDWARE AS REQUIRED BY CODE. ALL DOOR HARDWARE TO COMPLY WITH 2018 IBC 1010.1.9 AND 2009 ANSII 117.1.
 2. DOOR SUPPLIER TO PROVIDE FINAL HARDWARE AND KEYING SCHEDULE TO OWNER FOR APPROVAL.
 3. ALL HARDWARE FINISHES TO BE 626 SATIN CHROMIUM PLATED (US26D) UNLESS NOTED OTHERWISE.

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 1200 Network Centre Drive
 Effingham, IL 62401

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LEGENDS AND DOOR SCHEDULE AND DETAILS

A600

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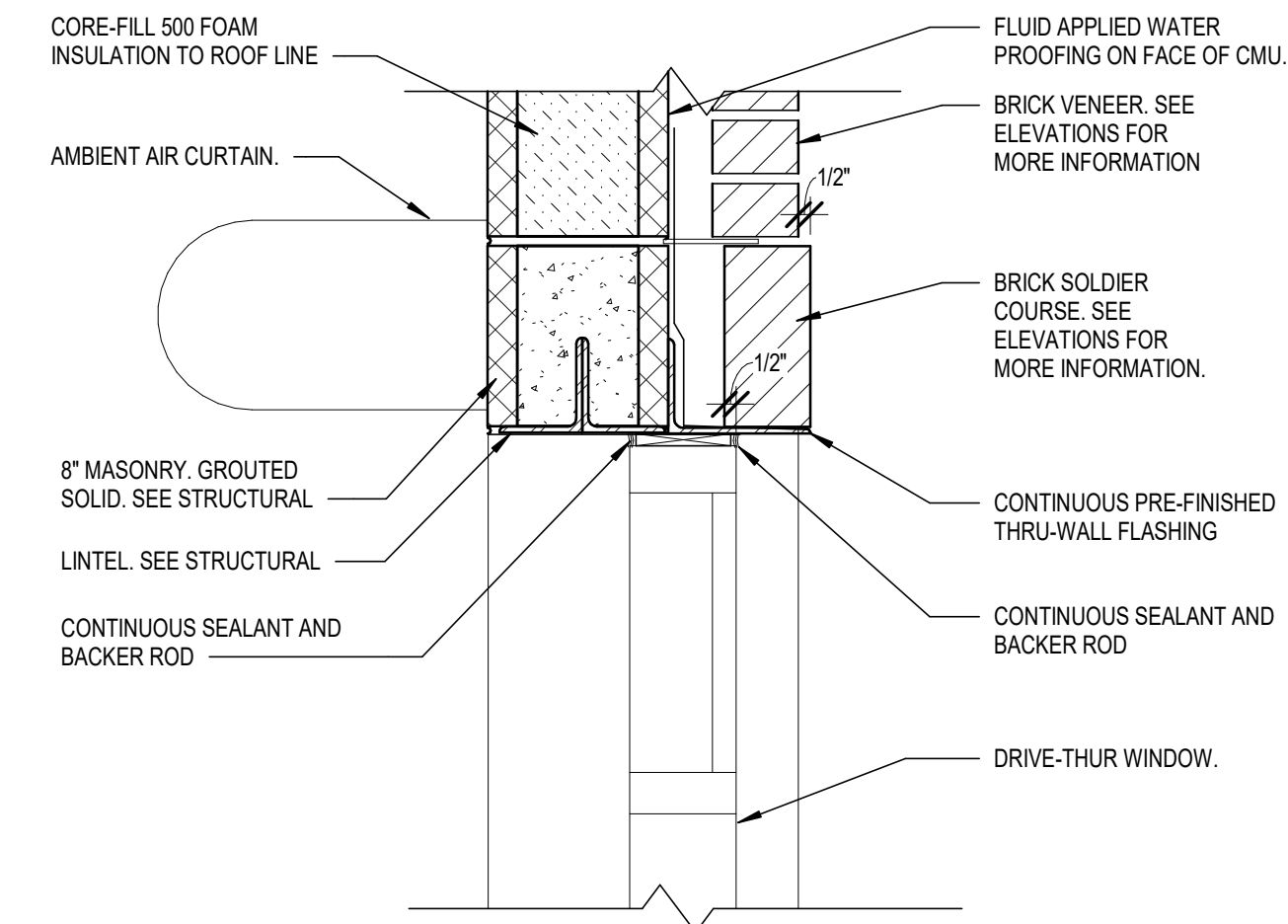
WMD SHELL - CLERMONT FL
WMD # FL22-0606
FL Highway 501 W, Colonial Drive
Clermont, FL 34711

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11/15/23	PERMIT SET
mk	date issue

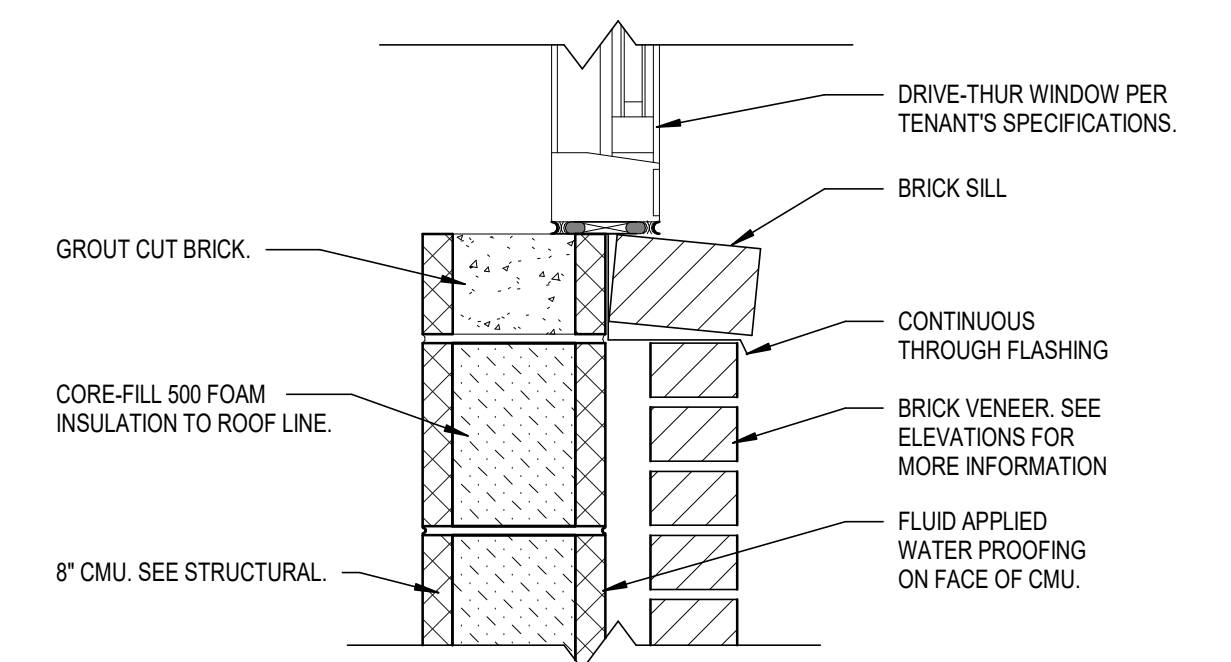
DOOR AND STOREFRONT DETAILS

A601

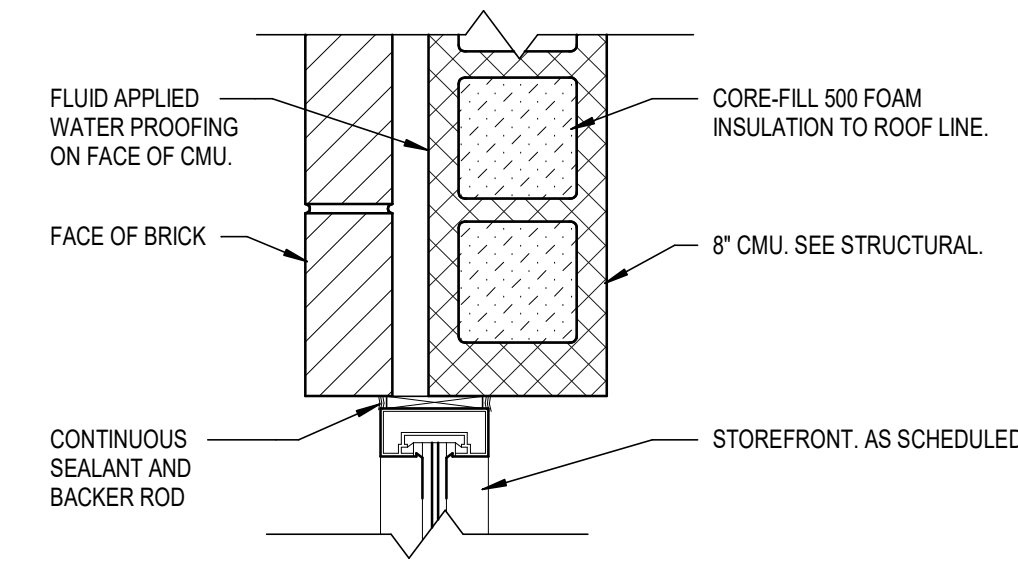
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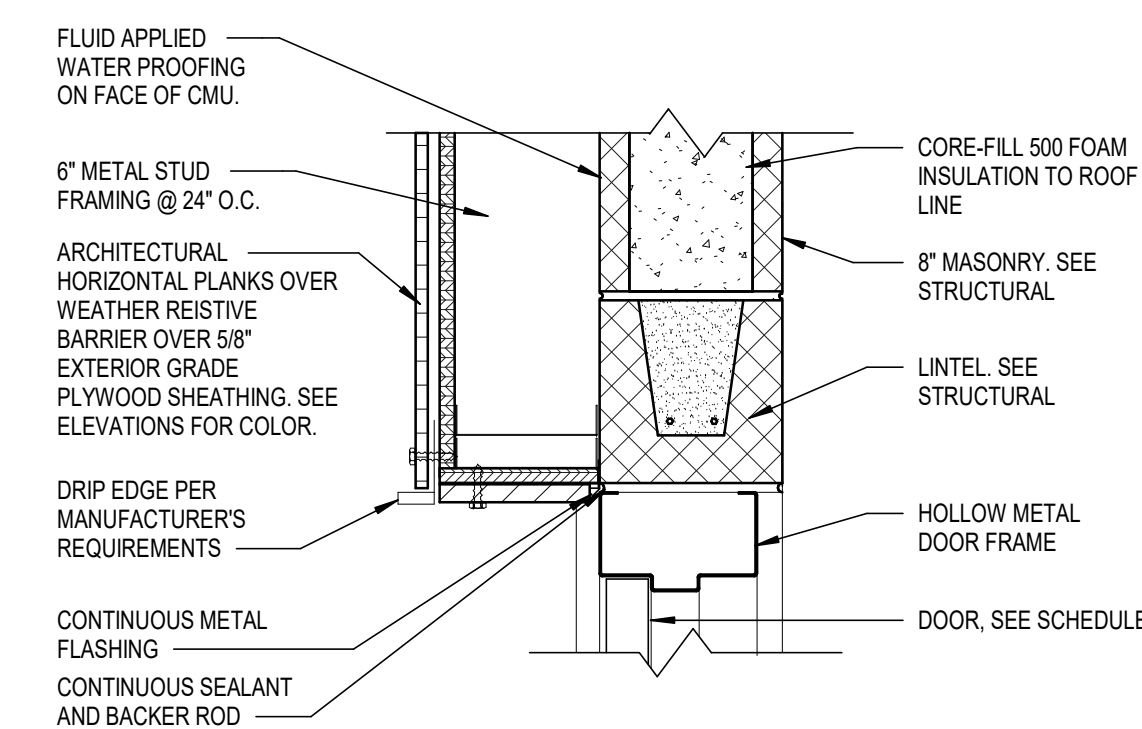
10 DRIVE-THRU WINDOW HEAD
1 1/2" = 1'-0"



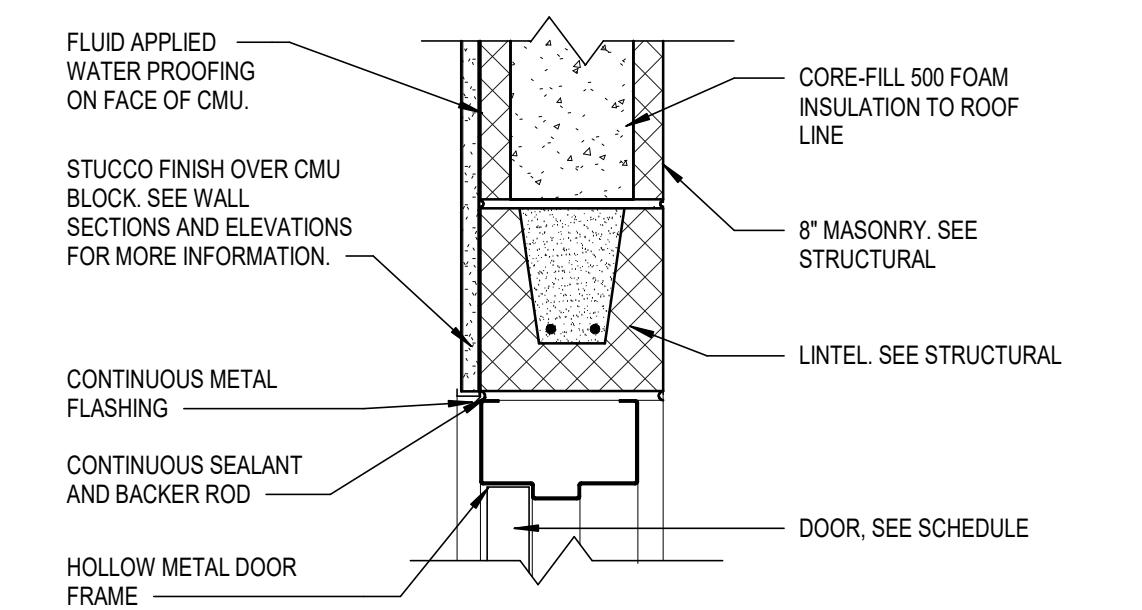
9 DRIVE-THRU WINDOW SILL
1 1/2" = 1'-0"



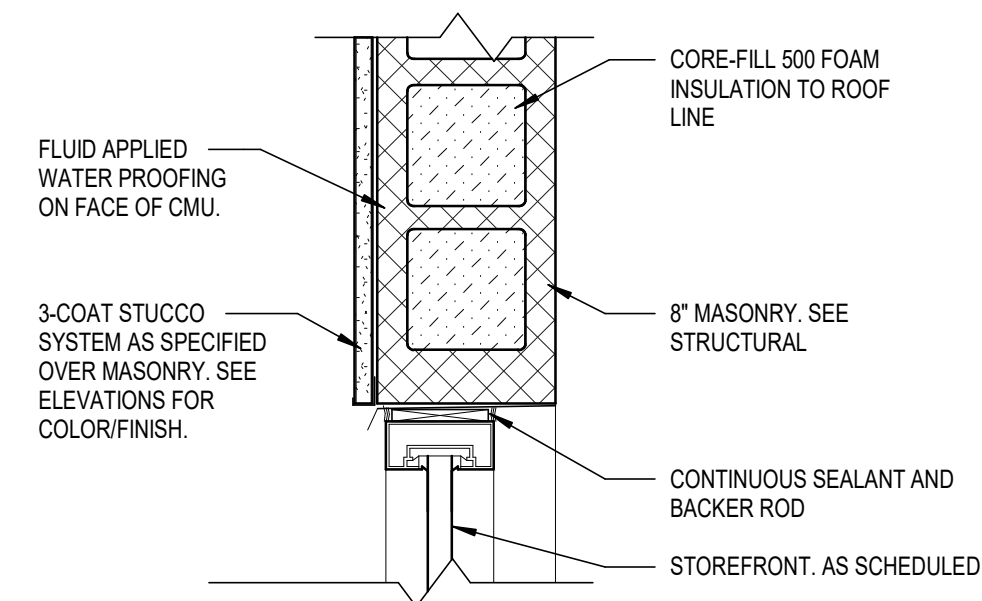
11 DRIVE-THRU WINDOW - JAMB
1 1/2" = 1'-0"



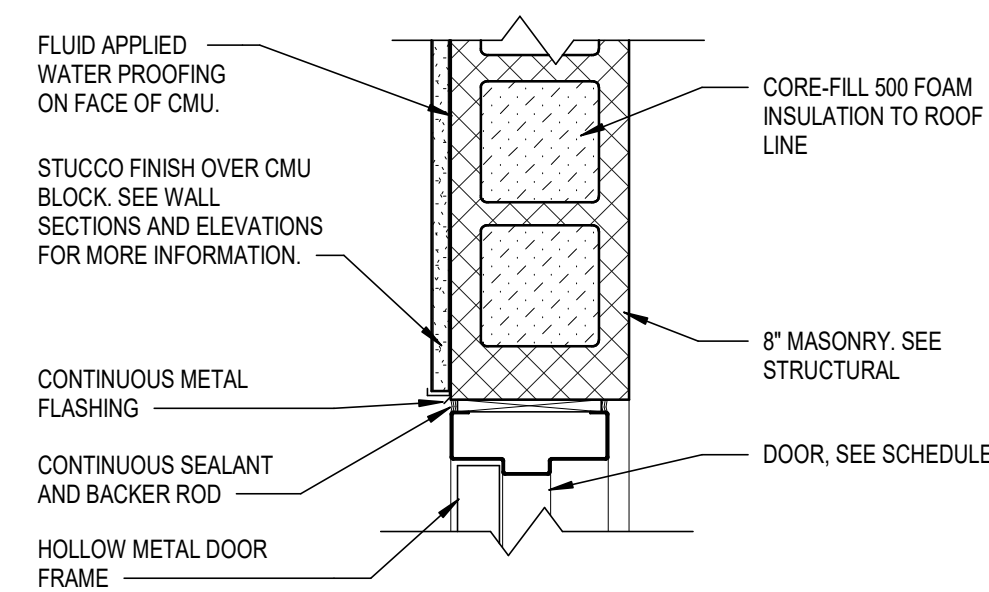
6 EXTERIOR DOOR HEAD (NICHIA)
1 1/2" = 1'-0"



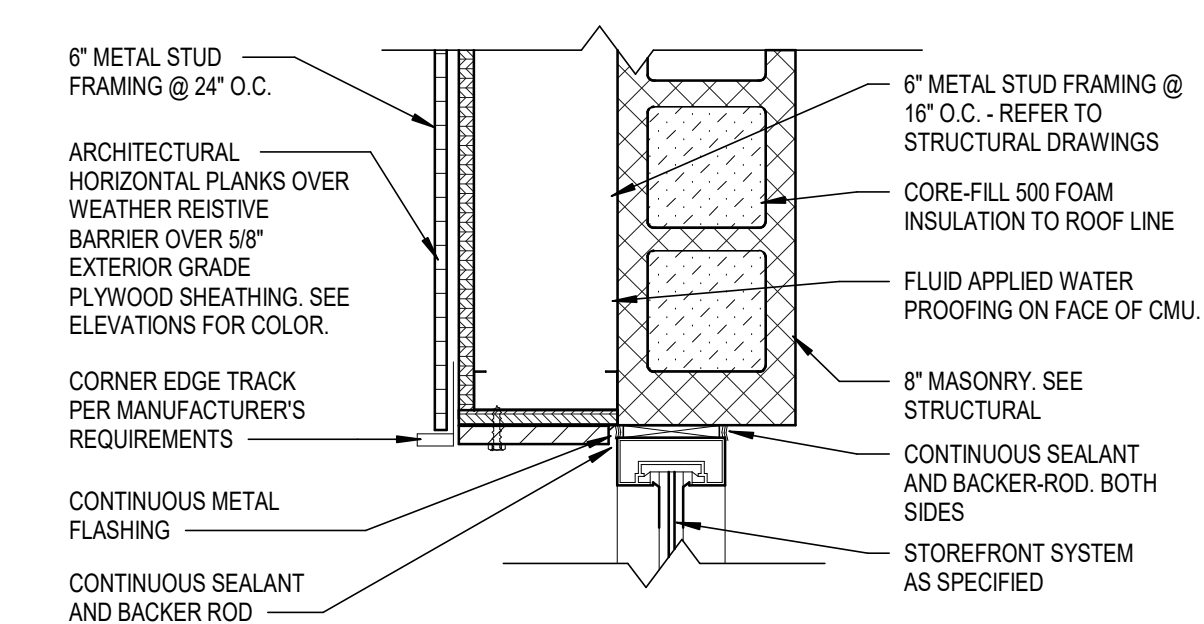
5 EXTERIOR DOOR HEAD (STUCCO)
1 1/2" = 1'-0"



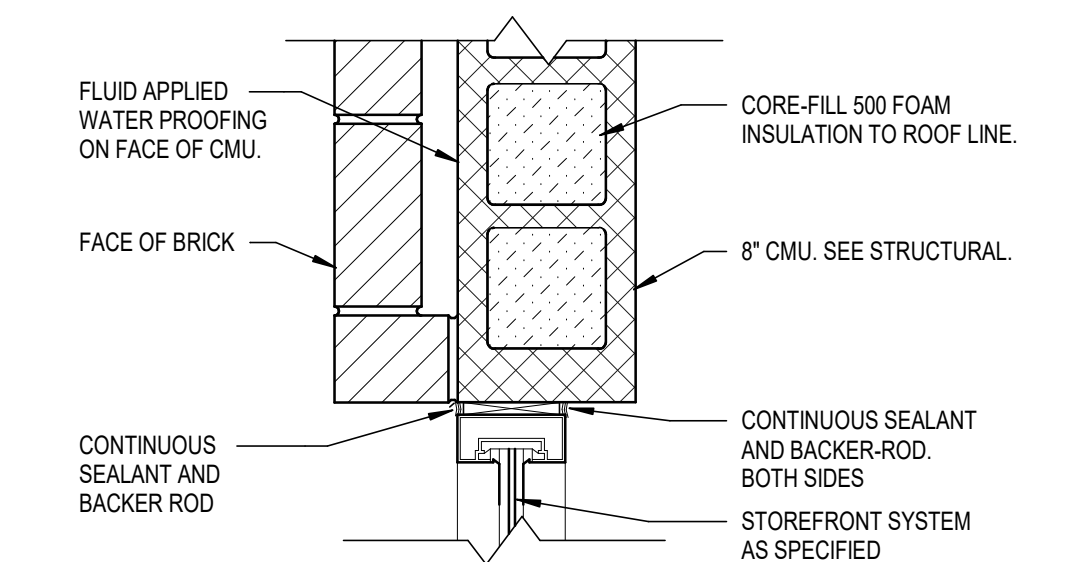
7 STOREFRONT JAMB - HIGH
1 1/2" = 1'-0"



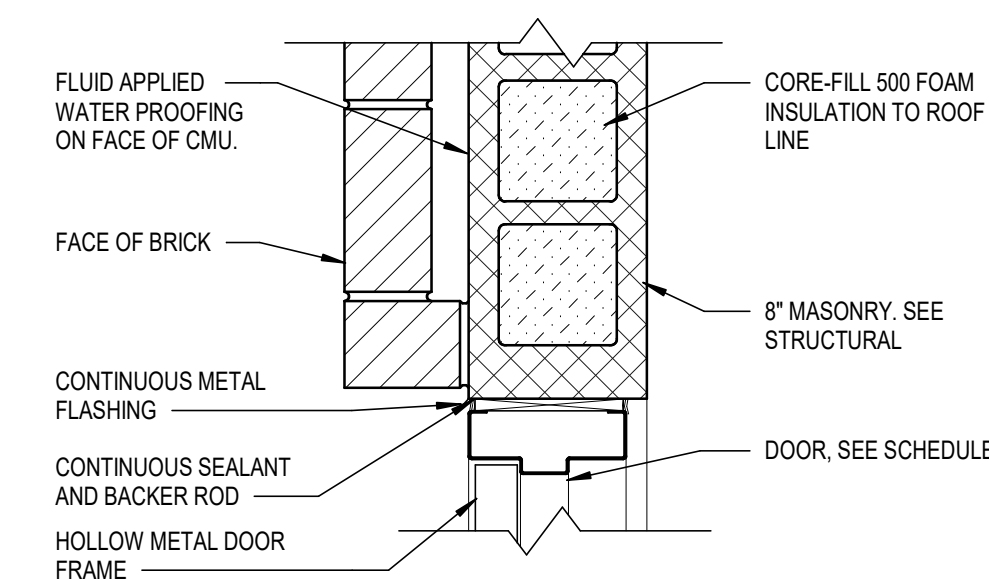
8 EXTERIOR DOOR JAMB (HIGH)
1 1/2" = 1'-0"



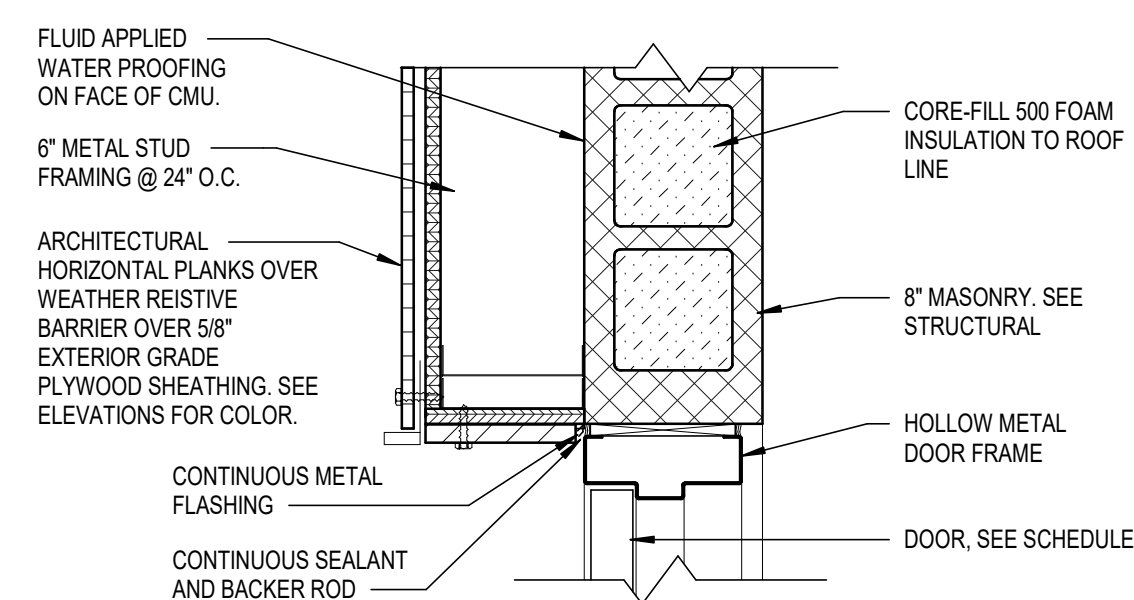
2 STOREFRONT JAMB - AT BUMPOUT - HIGH
1 1/2" = 1'-0"



1 STOREFRONT JAMB - LOW
1 1/2" = 1'-0"



3 EXTERIOR DOOR JAMB (LOW)
1 1/2" = 1'-0"



4 EXTERIOR DOOR JAMB (NICHIA)
1 1/2" = 1'-0"

SECTION 011000 - SUMMARY

- 1.1 PROJECT INFORMATION
A. Project Identification: A New Shell Building and Tenant Finish for Professional A. Project Identification: A New Shell Building
B. Project Location: FL Highway 50 W. Colonial Drive, Clermont, FL 34711
C. Architect: WMG, 1200 NETWORK CENTRE DRIVE, EPPINGHAM, IL 62401
D. The Work consists of: A New Shell Building of approximately 6,980 S.F., for a new dental office within the new shell building.

SECTION 012500 - SUBSTITUTION PROCEDURES

- 1.1 SUBSTITUTION PROCEDURES
A. Substitutions include changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by the Contractor.
B. Substitution Requests: Submit three (3) copies of each request for consideration. Identify product or fabrication or installation method to be replaced.
C. Architect will review proposed substitutions and notify Contractor of their acceptance or rejection.
D. Do not submit unapproved substitutions on Shop Drawings or other submittals.

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

- 1.1 CONTRACT MODIFICATION PROCEDURES
A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustments to the Contract Sum or the Contract Time.
B. Owner-initiated Proposal Request: Architect will issue a detailed description of proposed changes in the Work.
C. Contractor-initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect.
D. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.
E. Architect may issue a Construction Change Directive on AIA Document G714.
F. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.

SECTION 013000 - ADMINISTRATIVE REQUIREMENTS

- 1.1 PROJECT MANAGEMENT AND COORDINATION
A. Subcontract List: Submit a written summary identifying individuals of firms proposed for each portion of the Work.
B. Key Personnel Names: Within fifteen (15) business days of starting Construction Operations, submit a list of key personnel assignments.
C. Coordinate construction operations including in different Sections of the Specifications to ensure efficient and orderly installations for each part of the Work.
D. Requests for Information (RFIs): On discovery of the need for additional information or interpretation of the Contract Documents, Contractor shall prepare and submit and RFI.
E. Provide a weekly or biweekly report by electronic communication (e-mail) to the Owner's Representative and Architect on progress against project schedule.
F. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect.
G. Contractor's Construction Schedule Submittal Procedure:
1. Submit required submittals in the following format:
a. PDF electronic file.
1.3 SUBMITTAL PROCEDURES
A. General Submittal Procedure Requirements: Prepare and submit submittals required by individual Specification Sections.
1.4 ACTION SUBMITTALS
A. If Paper Copies are used: Submit four (4) paper copies of each submittal unless otherwise indicated.

SECTION 014200 - REFERENCES

- 1.1 GENERAL REQUIREMENTS
A. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.
AWI Architectural Woodwork Institute
ANSI American National Standards Institute (Formerly: American Wood Preservers' Association)
AWS American Welding Society
BHMA Builders Hardware Manufacturers Association
CIMA Cellulose Insulation Manufacturers Association
CSI Ceilings & Interior Systems Construction Association
CRI Carpet and Rug Institute (The)
CSI Cast Stone Institute
CSI Construction Specification Institute (The)
DHI Door and Hardware Institute
EIMA EIFS Industry Members Association
EJMA Expansion Joint Manufacturers Association, Inc.
FM Approvals FM Approvals LLO
GA Gypsum Association
GANA Glass Association of North America
HMMA Hollow Metal Manufacturers Association
HPVA Hardwood Plywood & Veneer Association
ICBO International Conference of Building Officials
ISSFA International Solid Surface Fabricators Association
KCMSA Kitchen Cabinet Manufacturers Association
LGSEA Light Gauge Steel Engineers Association
MCA Metal Construction Association
MFMA Marble Flooring Manufacturers Association, Inc.
MFMA Metal Framing Manufacturers Association, Inc.
MHIA Material Handling Industry of America
MIA Marble Institute of America
MPI Master Painters Institute
NAMA North American Insulation Manufacturers Association
NBQQA National Building Granite Quarries Association, Inc.
NCMA National Concrete Masonry Association
NECA National Electrical Contractors Association
NELMA Northeastern Lumber Manufacturers' Association
NEMA National Electrical Manufacturers Association
NGA National Glass Association
NOMMA National Ornamental & Miscellaneous Metals Association
NSSGA National Stone, Sand & Gravel Association
NTMA National Terrazzo & Mosaic Association, Inc. (The)
NFCA National Floor Covering Institute
SDI Steel Door Institute
SJI Steel Joist Institute
SMACNA Sheet Metal and Air Conditioning Contractors' National Association
SPFA Spray Polyurethane Foam Alliance (SP/SPFD - The Society of the Plastics Industry, Inc.; Spray Polyurethane Foam Division)
TCNA Tile Council of North America, Inc.
TIA/EIA Telecommunications Industry Association/Electronic Industries Alliance
TMS The Masonry Society
UL Underwriters Laboratories Inc.
USGBC U.S. Green Building Council
WMA Window Covering Manufacturers Association
WDMA Window & Door Manufacturers Association (Formerly: NWVDA - National Wood Window and Door Association)
WII Woodwork Institute (Formerly: WIC - Woodwork Institute of California)
WIC Woodwork Institute of California (Now WII)
WMPMA Wood Moulding & Millwork Products Association

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

- 1.1 SECTION REQUIREMENTS
A. Use Changes: Installation and removal of and use changes for temporary facilities shall be included in the Contract Sum unless otherwise indicated.
B. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service.
C. Accessible Temporary Egress: Comply with applicable provisions in ICC A117.1.
1.2 TEMPORARY FACILITIES
A. Provide field offices, storage and fabrication sheds, and other support facilities as necessary for construction operations.
1.3 EQUIPMENT
A. Fire Extinguisher: Portable, UL-rated, with class and extinguishing agent as required by locations and classes of fire exposures.
B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
1.4 TEMPORARY UTILITY INSTALLATION
A. General: Install temporary service or connect to existing service.
B. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking-water fixtures.
C. Heating and Cooling: Provide temporary heating and cooling required for curing or drying of completed installations.
1.5 SECURITY AND PROTECTION FACILITIES INSTALLATION
A. Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations.
B. Pest Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests.
1.6 OPERATIONS, TERMINATION, AND REMOVAL
A. Supervision: Enforce strict discipline in use of temporary facilities.
B. Remove each temporary facility when need for its service has ended.
C. At Substantial Completion, repair, renovate, and clean permanent facilities used during construction period.

SECTION 016000 - PRODUCT REQUIREMENTS

- 1.1 SECTION REQUIREMENTS
A. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
B. Comparable Product Request: Submit request for consideration of each comparable product.
C. Compatibility of Options: If Contractor is given option of selecting between two or more products, select product compatible with products previously selected.
D. Deliver, store, and handle products using means and methods that will prevent damage, deterioration and loss.
E. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents.
1.2 PRODUCT SELECTION PROCEDURES
A. Provide products that comply with the Contract Documents, are undamaged, and, unless otherwise indicated, are new at the time of installation.
B. Where the following headings are used to list products or manufacturers, the Contractor's options for product selection are as follows:
C. Where Specifications require "match Architect's sample," provide a product that complies with requirements and matches Architect's sample.
D. Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements.
E. Where Specifications include the phrase "select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items."

1.3 COMPARABLE PRODUCTS

- A. Architect will consider Contractor's request for comparable product when the following conditions are satisfied:
1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
2. Detailed comparison of significant qualities of proposed product with those named in the Specifications
3. List of similar installations for completed projects, if requested.
4. Samples, if requested.

SECTION 017000 - EXECUTION AND CLOSEOUT REQUIREMENTS

- 1.1 EXECUTION REQUIREMENTS
A. Cutting and Patching:
1. Structural Elements: When cutting and patching structural elements, notify Architect of locations and details of cutting and await directions from Architect before proceeding.
2. Operational Elements: Do not cut and patch operation elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.
1.2 CLOSEOUT SUBMITTALS
A. Contractor's List of Incomplete Items: Initial submittal at Substantial Completion.
B. Certified List of Incomplete Items: Final Submittal at Final Completion.
C. Operation and Maintenance Data: Submit one (1) copy of manual.
D. PDF Electronic File: Assemble manual into a composite electronically indexed file.
E. Record Drawings: Submit one (1) set of annotated record prints.
F. Record Digital Data Files: Submit data file and one (1) set of plots.
1.3 SUBSTANTIAL COMPLETION PROCEDURES
A. Prepare a list of items to be completed and corrected ("punch list"), the value of items on the list, and reasons why the Work is not complete.
B. Submittals Prior to Substantial Completion: Before requesting Substantial Completion, complete the following:
1. Obtain and submit releases from authorities having jurisdiction permitting Owner unrestricted use of the Work and access to services and utilities.
2. Submit closeout submittals specified in other sections, including project record documents, operations and maintenance manuals, property surveys, similar final record information, warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
3. Submit maintenance material submittals specified in other sections, including tools, spare parts, extra materials, and similar items, and deliver to location designated by Architect.
4. Submit test/adjust/balance records.
5. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
C. Procedures Prior to Substantial Completion: Before requesting Substantial Completion, complete the following:
1. Advise Owner of pending insurance changeover requirements.
2. Make final changeover of permanent locks and deliver keys to Owner.
3. Complete startup and testing of systems and equipment.
4. Perform preventive maintenance on equipment used prior to Substantial Completion.
5. Advise Owner of changeover in heat and other utilities.
6. Participate with Owner in conducting inspection and walk-through with local emergency responders.
7. Remove temporary facilities and controls.
8. Complete final cleaning requirements, including touchup painting.
9. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
D. Inspection: Submit a written request for inspection for substantial completion.
1.4 FINAL COMPLETION PROCEDURES
A. Submittals Prior to Final Completion: Before requesting inspection for determining final completion, complete the following:
1. Submit a final Application for Payment.
2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect.
3. Certificate of Insurance: Submit evidence of final, continuing insurance coverage complying with insurance requirements.
4. Submit pest-control final inspection report.
B. Submit a written request for final inspection for acceptance.
1.5 MATERIALS
A. In-place Materials: Use materials for patching identical to in-place materials.
B. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned.
1.6 OPERATION AND MAINTENANCE DOCUMENTATION
A. Directory: Prepare a single, comprehensive directory of emergency, operation, and maintenance data and materials, listing items and their location to facilitate ready access to desired information.
B. Organization: Unless otherwise indicated, organize manual into separate sections for each system and subsystems, and separate sections for each piece of equipment not part of a system.
C. Organize data into three-ring binders with identification on front and spine of each binder, and envelopes for folded drawings.
1.7 RECORD DRAWINGS
A. Record Prints: Maintain a set of prints of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
1.8 EXAMINATION AND PREPARATION
A. Existing Condition: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed.

- E. Verify space requirements and dimensions of items shown diagrammatically on Drawings.
1.9 INSTALLATION
A. Locate the Work and component of the Work accurately, in correct alignment and elevation, as indicated.
1. Make vertical work plumb and make horizontal work level.
2. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
3. Maintain minimum headroom clearance of 96 inches in occupied spaces and 90 inches in unoccupied spaces.
B. Comply with manufacturer's written instructions and recommendations.
C. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
D. Templates: Obtain and distribute to the parties' involved templates for work specified to be factory prepared and field installed.
E. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place.
F. Joints: Make joints of uniform width.
G. Use products, cleaners, and installation materials that are not considered hazardous.
1.10 CUTTING AND PATCHING
A. Provide temporary support of work to be cut.
B. Protection: Protect in-place construction during cutting and patching to prevent damage.
C. Where existing services/systems are required to be removed, relocated, or abandoned, by such services/systems before cutting to minimize or prevent interruption to occupied areas.
D. Cutting: Cut in-place construction using methods least likely to damage elements related or adjoining construction.
E. Patch with durable seams that are as invisible as possible.
1.11 CLEANING
A. Clean Project site and work areas daily, including common areas.
1. Remove liquid spills promptly.
2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
3. Remove debris from concealed spaces before enclosing the space.
B. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion:
1. Clean Project site, yard, and grounds, in areas disturbed by construction activities.
2. Sweep paved areas; remove stains, spills, and foreign deposits.
3. Remove labels that are not permanent.
4. Clean transparent materials, including mirrors.
5. Clean exposed glazing components.
6. Clean exposed finishes to a dust-free condition, free of stains, films, and foreign substances.
7. Wipe surfaces of mechanical and electrical equipment.
8. Replace disposable air filters and clean permanent air filters.
1.12 OPERATION AND MAINTENANCE MANUAL PREPARATION
A. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
B. Manufacturer's Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed.
1.13 DEMONSTRATION AND TRAINING
A. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystem, and equipment not part of a system.
1.14 QUALITY ASSURANCE
A. In addition to requirements of these specifications, comply with manufacturer's instructions and recommendations for preparing substrate and application.
1.20 PRODUCTS
2.1 SOIL TREATMENT SOLUTION
A. General: Use an emulsible, concentrated, termiticide that dilutes with water, specially formulated to prevent termites infestation.
3.0 EXECUTION
A. Post signs in areas of application to warn workers that soil termiticide treatment has been applied.
B. Reapply soil treatment solution to areas disturbed by subsequent excavation, landscape grading, or other construction activities following application.

SECTION 022800 - TERMITES CONTROL

- 1.0 GENERAL
A. Submittals:
1. Product data and application instructions.
2. Certification that products used comply with U.S. Environmental Protection Agency (EPA) regulations for termiticides.
1.1 QUALITY ASSURANCE
A. In addition to requirements of these specifications, comply with manufacturer's instructions and recommendations for preparing substrate and application.
1.2 JOB CONDITIONS
A. Restrictions:
1. Do not apply soil treatment solution until excavating, filling, and grading operations are completed.
2. To ensure penetration, do not apply soil treatment to frozen or excessively wet soils during inclement weather.
1.3 WARRANTY
A. Warranty: Furnish written warranty, executed by Applicator and Contractor, certifying that applied soil termiticide treatment will prevent infestation of subterranean termites.
2.0 PRODUCTS
2.1 SOIL TREATMENT SOLUTION
A. General: Use an emulsible, concentrated, termiticide that dilutes with water, specially formulated to prevent termites infestation.
3.0 EXECUTION
A. Post signs in areas of application to warn workers that soil termiticide treatment has been applied.
B. Reapply soil treatment solution to areas disturbed by subsequent excavation, landscape grading, or other construction activities following application.

Mark S. Salopek, LLC

701 W. Lakeside Ave, Apt # 503
Cleveland, OH 44113
Phone 330.572.2112

FOR BIDDING ONLY. NOT FOR CONSTRUCTION.

Heartland Dental
1200 Network Centre Drive
Eppingham, IL 62401



WMG SHELL - CLERMONT FL
WMG # FL22-0695
FL Highway 501 W, Colonial Drive
Clermont, FL 34711

Table with 2 columns: Date, Description. Includes dates 1/24/24 and 11/15/23.

Table with 2 columns: Date, Description. Includes date 11/15/23 and description PERMIT SET.

Table with 2 columns: Date, Description. Includes date 11/15/23 and description PERMIT SET.

SPECIFICATIONS

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HEARTLAND DENTAL PROVIDED SPECIFICATIONS ON THESE SHEETS ARE FOR REFERENCE ONLY. SPECIFICATIONS PROVIDED ARE NOT MEANT TO REPRESENT AN EXHAUSTIVE OR ALL ENCOMPASSING LIST OF THE PROJECT REQUIREMENTS. ALL SPECIFICATIONS SHALL BE COORDINATED WITH THE OWNER PRIOR TO START OF WORK.

SECTION 033000 - CAST-IN-PLACE CONCRETE
1.0 GENERAL
1.1 SECTION REQUIREMENTS
 A. Submittals: Product Data
 B. Ready-Mixed Concrete Producer Qualifications: ASTM C 94/C 94M
1.2 PERFORMANCE REQUIREMENTS
 A. Comply with ACI 301, "Specification for Structural Concrete," and with ACI 117, "Specification for Tolerances for Concrete Construction and Materials."
2.0 PRODUCTS
2.1 MATERIALS
 A. Portland Cement: ASTM C 150, Type I or II
 B. Fly Ash: ASTM C 618, Class C or F
 C. Silica Fume: ASTM C 1240, amorphous silica
 D. Aggregates: ASTM C 33, Class SS coarse aggregate or better, graded.
 1. Maximum Aggregate Size: 1/2 inch (13 mm)
 E. Air-Entraining Admixture: ASTM C 260
 F. Chemical Admixtures: ASTM C 494, water reducing and accelerating. Do not use calcium chloride or admixtures containing calcium chloride.
 G. Synthetic Fiber: ASTM C 1116/C 1116M, Type III, polypropylene fibers, 1/2 to 1-1/2 inches (13 to 38 mm) long
 H. Below Slab Vapor Retarder: Reinforced sheet, ASTM E 1745, Class A, min. 15 mil polyolefin unless noted otherwise.
 1. Product:
 a. Poly-Aemula, LP - Husky Yellow Guard system
 b. Stego Industries, LLC, Stego Wrap Vapor Barrier system
 c. W. R. Meadows, Sealtight Perimeter system
 I. Clear, Waterborne, Membrane-Forming Curable Compounding: ASTM C 309, Type 1, Class A & B.
 1. Product:
 a. Davton Superior: Clear Resin Cure, J11W
 2. Residue Membrane is to be removed 7 days prior to application of Vapor Retarder
 J. Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber, or ASTM D 1752, cork or self-expanding cork.
2.2 CONCRETE MIXTURES
 A. Prepare design mixtures, proportioned according to ACI 301.
 B. Normal-Weight Concrete:
 1. Minimum Compressive Strength: 4000 psi at 28 days.
 2. Maximum Water-Cementitious Materials Ratio: 0.45.
 3. Slump Limit: 5 inches for concrete with verified slump of 2 to 4 inches before adding high-range water reducing admixture or plasticizing admixture, plus or minus 1 inch.
 4. Air Content: Maintain within range permitted by ACI 301. Do not allow air content of floor slabs to receive troweled finishes to exceed 4 percent.
 5. Use fly ash, pozzolan, and silica fume as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 40 percent.
 C. Measure, batch, mix and deliver concrete according to ASTM C 94/C 94M.
 1. When air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.
3.0 EXECUTION
3.1 CONCRETE
 A. Construct formwork according to ACI 301 and maintain tolerances and surface irregularities within ACI 347R limits of Class A, 1/8 inch for concrete to view surfaces.
 B. Place vapor retarder on prepared subgrade, with joints lapped 6 inches (150 mm) and sealed.
 C. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
 D. Install construction, isolation, and contraction joints Per CRSI or where indicated. Install full-depth joint-filler strips at isolation joints.
 E. Place concrete in a continuous operation and consolidate using mechanical vibrating equipment.
 F. Protect concrete from physical damage, premature drying, and reduced strength due to hot or cold weather during mixing, placing, and curing.
 G. Formed Surface Finish: Smooth-formed finish for concrete exposed to view, coated, or covered by waterproofing or other direct-applied material; rough-formed finish elsewhere.
 H. Slab Finishes: Comply with ACI 302.1R for screeding, restraining, and finishing operations for concrete surfaces. Do not wet concrete surfaces. Provide the following finishes:
 1. Scratch finish for surfaces to receive mortar setting beds.
 2. Troweled finish for floor surfaces and floors to receive floor coverings, paint, or other thin film-finish coatings.
 3. Trowel and fine-broom finish for surfaces to receive thin-set tile.
 4. Nonslip-broom finish to exterior concrete platforms, steps, and ramps.
 I. Cure formed surfaces by moisture curing for at least seven days.
 J. Begin curing concrete slabs after finishing. Apply membrane-forming curing compound to concrete.
 K. Owner may engage a testing agency to perform field tests and to submit test reports.
 L. Protect concrete from damage. Repair and patch defective areas.

SECTION 048150 - BRICK UNIT MASONRY
1.0 GENERAL
1.1 SUMMARY
 A. This Section includes unit masonry assemblies consisting of the following:
 1. Face brick
 2. Mortar and grout materials
 3. Ties and anchors
 4. Embedded flashing
 5. Miscellaneous masonry accessories.
1.2 SUBMITTALS
 A. Product Data: For each different masonry unit, accessory, and other manufactured product specified.
 B. Samples for Verification: For the following:
 1. Full-size units for each different exposed masonry unit required, showing the full range of exposed colors, textures, and dimensions to be expected in the completed construction.
 2. Colored mortar Samples for each color required, showing the full range of colors expected in the finished construction. Make samples using the same sand and mortar ingredients to be used on Project.
 3. Accessories embedded in the masonry.
1.3 QUALITY ASSURANCE
 A. Source Limitations for Masonry Units: Obtain exposed masonry units of a uniform texture and color, or a uniform blend within the ranges accepted for these characteristics, through one source from a single manufacturer for each product required.
 B. Sample Panels: Before installing unit masonry, build sample panels, using materials indicated for the completed work, to verify selections made under sample Submittals and to demonstrate aesthetic effects. Build sample panels for each type of exposed unit masonry assembly in sizes approximately 48 inches long by 48 inches high by full thickness.
 1. Locate panels in the locations indicated or, if not indicated, as directed by Architect.
 2. Clean exposed faces of panels with masonry cleanser indicated.
 3. Protect approved sample panels from the elements with weather-resistant membrane.
 4. Maintain sample panels during construction in an undisturbed condition as a standard for judging the completed Work.
 5. Approval of sample panels is for color, texture, and blending of masonry units, relationship of mortar and sealant colors to masonry unit colors, tooling of joints, aesthetic qualities of workmanship, and other material and construction qualities specifically approved by Architect in writing.
 a. Approval of sample panels does not constitute approval of deviations from the Contract Documents contained in sample panels, unless such deviations are specifically approved by Architect in writing.
 b. Demolish and remove sample panels when directed.
1.4 DELIVERY, STORAGE, AND HANDLING
 A. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.
 B. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.
1.5 PROJECT CONDITIONS
 A. Protection of Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed masonry when construction is not in progress.
 1. Extend cover a minimum of 24 inches down both sides and hold cover securely in place.
 B. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.
 C. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.
 1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is 40 deg F and above and will remain so until masonry has dried, but not less than 7 days after completing cleaning.
 D. Hot-Weather Requirements: Protect unit masonry work when temperature and humidity conditions produce excessive evaporation of water from mortar and grout. Provide shade and wind breaks and use cooled materials as directed.
 1. When ambient temperature exceeds 100 deg F, or 90 deg F with a wind velocity greater than 8 mph, do not spread mortar beds more than 48 inches ahead of masonry. Set masonry units within one minute of spreading mortar.
2.0 PRODUCTS
2.1 BRICK
 A. General: Provide shapes indicated and as follows, with exposed surfaces matching finish and color of exposed faces of adjacent units:
 1. For ends of sills and caps and for similar applications that would otherwise expose unfinished brick surfaces, provide units without cores or frogs and with exposed surfaces finished.
 2. Provide special shapes for applications where stretcher units cannot accommodate special conditions, including those at corners, movement joints, bond beams, sashes, and lintels.
 3. Provide special shapes for applications requiring brick of size, form, color, and texture on exposed surfaces that cannot be produced by sawing.
 4. Provide special shapes for applications where shapes produced by sawing would result in sawed surfaces being exposed to view.
 B. Clay Face Brick
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 a. General Shale, Inc.: Color and type per exterior finish schedule.
 2. Grade: SW.
 3. Type: FBS.
 4. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of 3350 psi.
 5. Initial Rate of Absorption: Less than 30 g/30 sq. in. per minute when tested according to ASTM C 67.
 6. Efflorescence: Provide brick that has been tested according to ASTM C 67 and is rated "not effloresced."
 7. Surface Coating: Brick with colors or textures produced by application of coatings shall withstand 50 cycles of freezing and thawing according to ASTM C 67 with no observable difference in the applied finish when viewed from 10 feet.
 8. Size: Modular.

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2.2 MORTAR AND GROUT MATERIALS
 A. Colored Cement Products: Packaged blend made from masonry cement and mortar pigments, all complying with specified requirements, and containing no other ingredients.
 1. Colored Masonry Cement:
 a. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 b. Argos USA, Color and type per exterior finish schedule.
 2. Formulate blend as required to produce color as selected from manufacturer's standard colors.
 3. Pigments shall not exceed 5 percent of masonry cement by weight.
 B. Aggregate for Mortar: ASTM C 144
 1. For mortar that is exposed to view, use washed aggregate consisting of natural sand or crushed stone.
 2. Colored-Mortar Aggregates: Natural sand or crushed stone of color necessary to produce required mortar color.
 C. Aggregate for Grout: ASTM C 404.
 D. Cold-Weather Admixture: Nonchloride, noncorrosive, accelerating admixture complying with ASTM C 494/C 494M, Type C, and recommended by manufacturer for use in masonry mortar of composition indicated.
 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
 a. BASF Corp. - Construction Chemicals
 b. Euclid Chemical Company (The), an RPM company.
 c. GCP Applied Technologies Inc. (formerly Gaco Construction Products).
 E. Water: Potable

2.3 TIES AND ANCHORS, GENERAL
 A. Anchors: Type and size indicated, fabricated from Type 304 stainless steel complying with ASTM A 240/A 240M, ASTM A 276, or ASTM A 666.
 B. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 1. Heckmann Building Products, Post-Tie w/ Thermal-Clip Double Pirle Wire Tie
 2. Heckmann Building Products, D-Seal Thermal Wing Nut Anchor
2.4 EMBEDDED FLASHING MATERIALS
 A. Contractor's Option for Concealed Flashing:
 1. Rubberized-Asphalt Flashing: Manufacturer's standard composite flashing product consisting of a pliable and highly adhesive rubberized-asphalt compound, bonded to a high-density, cross-laminated polyethylene film to produce an overall thickness of 0.040 inch.
 2. Adhesives, Primers, and Seam Tapes for Flashings: Flashing manufacturer's standard products or products recommended by the flashing manufacturer for bonding flashing sheets to each other and to substrates.
 C. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 1. Rubberized-Asphalt Flashing:
 a. Dur-O-Wall, Inc., Dur-O-Barrier
 b. W. R. Grace & Co., Construction Products Division, Perm-A-Barrier Wall Flashing
 c. Hohmann & Barnard, Inc., Tetroflash
 d. Polyguard Products, Inc., Polyguard 400
2.5 MOISTURE BARRIER
 A. Asphalt-saturated, organic roofing felt complying with ASTM D 4869 Type IV and ASTM D 226, Type II (# 30 asphalt felt).
 B. Miscellaneous Masonry Accessories:
 A. Compressible Filler: Premolded filler strips complying with ASTM D 1056, Grade 2A1; compressible up to 35 percent; of width and thickness indicated; formulated from neoprene urethane or PVC.
 B. Bond-Breaker Strips: Asphalt-saturated, organic roofing felt complying with ASTM D 226, Type I (No. 15 asphalt felt).
 C. Expansion Joints: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 1. 2-inch expansion joints: 2 inches wide by 2-1/2-inch depth.
 a. EMSEAL Joint Systems, Ltd.; Selmec Coloreal - color as selected by Architect.
 2. 1-inch expansion joints: 1 inch wide by 1-3/4 inches depth.
 a. EMSEAL Joint Systems, Ltd.; Colorseal - color as selected by Architect.
 3. 1/2-inch or smaller expansion joints: Rod and sealant. Refer to Section 07920.0 - color as selected by Architect.
 D. Cavity Drainage Material: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 1. Advanced Building Products, Inc.; Mortar Break II;
 2. Hohmann & Barnard, Inc.; Mortar Trap.
 E. Weep Material: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
 1. Advanced Building Products, Inc.; Mortar Maze;
 2. Hohmann & Barnard, Inc.; Series 341W/S.

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 2. 1-inch expansion joints: 1 inch wide by 1-3/4 inches depth.
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 1. Advanced Building Products, Inc.; Mortar Maze;
 2. Hohmann & Barnard, Inc.; Series 341W/S.

2.5 MOISTURE BARRIER
 A. Job-Mixed Detergent Solution: Solution of 1/2-cup dry measure tetrasodium polyphosphate and 1/2-cup dry measure laundry detergent dissolved in 1 gal. of water.
3.0 EXECUTION
3.1 EXAMINATION
 A. Examine conditions, with installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
 B. Proceed with installation only after unsatisfactory conditions have been corrected.
 C. Inspect and insure the entire exterior building area that is to receive brick has the specified moisture barrier properly installed in accordance with the manufacturer's specifications and The Brick Institute over the building sheathing.
 D. Coordinate with responsible entity to correct any unsatisfactory conditions prior to proceeding with the brick installation.
3.2 INSTALLATION, GENERAL
 A. Build chases and recesses to accommodate items specified in this Section and in other Sections of the Specifications.
 B. Leave openings for equipment to be installed before completing masonry. After installing equipment, complete masonry to match the construction immediately adjacent to the opening.
 C. Cut masonry units with motor-driven saws to provide clean, sharp, unchipped edges. Cut units as required to provide a continuous pattern and to fit adjoining construction. Where units are cut with water-cooled saws to dry before placing, unless wetting of units is specified, install cut units with cut surfaces and, where possible, cut edges concealed.
 D. Select and arrange units for exposed unit masonry to produce a uniform blend of colors and textures.
 1. Mix units from several pallets or cubes as they are placed.
3.3 CONSTRUCTION TOLERANCES
 A. Comply with tolerances in ACI 530.1/ASCE 6/TMS 602 and the following:
 B. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/4 inch in 20 feet, nor 1/2 inch maximum.
 C. For vertical alignment of exposed head joints, do not vary from plumb by more than 1/4 inch in 10 feet, nor 1/2 inch maximum.
 D. For conspicuous horizontal lines, such as exposed lintels, sills, parapets, and reveals, do not vary from level by more than 1/4 inch in 20 feet, nor 1/2 inch maximum.
 E. For exposed bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch. Do not vary from bed-joint thickness of adjacent courses by more than 1/8 inch.
 F. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch. Do not vary from adjacent bed-joint and head-joint thicknesses by more than 1/8 inch.

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 A. Examine conditions, with installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
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 A. Build chases and recesses to accommodate items specified in this Section and in other Sections of the Specifications.
 B. Leave openings for equipment to be installed before completing masonry. After installing equipment, complete masonry to match the construction immediately adjacent to the opening.
 C. Cut masonry units with motor-driven saws to provide clean, sharp, unchipped edges. Cut units as required to provide a continuous pattern and to fit adjoining construction. Where units are cut with water-cooled saws to dry before placing, unless wetting of units is specified, install cut units with cut surfaces and, where possible, cut edges concealed.
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 E. For exposed bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch. Do not vary from bed-joint thickness of adjacent courses by more than 1/8 inch.
 F. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch. Do not vary from adjacent bed-joint and head-joint thicknesses by more than 1/8 inch.

3.4 LAYING MASONRY WALLS
 A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.
 B. Bond Pattern for Exposed Masonry: Lay exposed masonry in the following bond pattern; do not use units with less than nominal 4-inch horizontal face dimensions at corners or jambs.
 1. As indicated on Drawings.
 C. Stopping and Resuming Work: In each course, rack back one-half-unit length for one-half-running bond or one-third-unit length for one-third running bond; do not tooth. Clean exposed surfaces of set masonry, wet clay masonry units lightly if required, and remove loose masonry units and mortar before laying fresh masonry.
 D. Built-in Work: As construction progresses, build in items specified under this and other Sections of the Specifications. Fill in solidly with masonry around built-in items.
3.5 MORTAR BEDDING AND JOINTING
 A. Lay solid brick-size masonry units with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not deftly pour bed joints or slash head joints.
 B. At cavity walls, bevel beds away from cavity, to minimize mortar protrusions into cavity. As work progresses, trowel mortar fins protruding into cavity flat against the cavity face of the brick.
 C. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than the joint thickness, unless otherwise indicated.
 D. Cut joints flush for masonry walls to receive plaster or other direct-applied finishes (other than paint), unless otherwise indicated.
3.6 ANCHORING BRICK VENEERS
 A. Anchor brick veneers to steel-stud wall assemblies with specified anchors to comply with the following requirements:
 1. Space anchors as indicated, but not more than 18 inches o.c. vertically and 24 inches o.c. horizontally, with not less than 1 anchor for each 2 sq. ft. of wall area. Install additional anchors within 12 inches of openings and at intervals, not exceeding 8 inches, around the perimeter.
3.7 CONTROL AND EXPANSION JOINTS
 A. General: Install control and expansion joints in unit masonry where indicated. Built-in related items as masonry progresses. Do not form a continuous span through movement joints unless provisions are made to prevent in-place restraint of wall or partition movement.
 B. Form expansion joints in brick made from clay or shale as follows:
 1. Form open joint of width indicated, but not less than 3/8 inch for installation of sealant and backer rod specified in Division 7 Section "Joint Sealants." Keep joint free and clear of mortar.
 2. Install expansion joints as indicated on drawings. Spacing not to exceed 25'-4" maximum.
3.8 FLASHING, WEEP HOLES, AND VENTS
 A. General: Install embedded flashing and weep holes in masonry at shelf angles, lintels, ledges, sills, base of CMU, and other obstructions to downward flow of water in wall, and where indicated.
 1. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Unless otherwise indicated, place through-wall flashing on sloping bed of mortar and cover with mortar. Before covering with mortar, seal penetrations in flashing with adhesive, sealant, or tape as recommended by flashing manufacturer.
 C. Install flashing as follows:
 1. At lintels and shelf angles, extend flashing a minimum of 4 inches into masonry at each end. At heads and sills, extend flashing 4 inches at ends and turn mortar back not less than 2 inches to form a pan.
 2. Cut flashing off flush with face of wall after masonry wall construction is completed.
 D. Install weep holes in the head joints in exterior wythes of the first course of masonry immediately above embedded flashing and as follows:
 1. Use wicking material to form weep holes above flashing in brick sills. Turn wicking down at lip of sill to be as inconspicuous as possible.
 2. Space weep holes 24 inches o.c.
 3. Place cavity drainage material immediately above flashing in cavities.
 E. Trim wicking material used in weep holes flush with outside face of wall after mortar has set.
 1. Close cavities off vertically and horizontally with blocking in manner indicated. Install through-wall flashing and weep holes above horizontal blocking.

3.9 REPAIRING, POINTING, AND CLEANING
 A. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install new units in place.
 B. Pointing: During the toling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance.
 C. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.
 D. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
 1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
 2. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before proceeding with cleaning of masonry.
 3. Clean brick by the bucket-and-brush hand-cleaning method described in BIA Technical Notes No.20, using job-mixed detergent solution.

SECTION 051200 - STRUCTURAL STEEL
PART 1 - GENERAL
1.1 RELATED DOCUMENTS
 A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
1.2 SUMMARY
 A. Section Includes:
 1. Structural steel.
 2. Grout for baseplates and bearing plates.
 B. Related Sections:
 1. Division 01 Section "Quality Requirements" for independent testing agency procedures and administrative requirements.
 2. Division 03 Section "Cast-in-Place Concrete" for setting anchor rods and embedded plates in concrete.
 3. Division 05 Section "Metal Fabrications" for steel lintels and shelf angles not attached to structural-steel frame, miscellaneous steel fabrications and other metal items not defined as structural steel.
 4. Division 09 painting Sections for surface-preparation, priming requirements and touch up painting.

1.3 DEFINITIONS
 A. Structural Steel: Elements of structural-steel frame, as classified by AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."
 B. The drawings indicate typical connection details, specify connection details and/or connection details indicating design intent for the various connections locations required by the drawings. Simple connections may not be detailed on the drawings. The steel fabricator shall provide connection details of all connections including the connectors not specifically detailed, following the intent of the drawings. The connection design shall be done under the supervision of a qualified professional engineer registered in the state that the project is located. The connections shall be designed for loads shown on the drawings. Where the reactions of beams and girders are not shown, the connections shall be designed to support the maximum allowable uniform loads as indicated in the load tables of the AISC Manual of Steel Construction for the given beam size and span. Double angle and single plate connections detailed in accordance to the AISC Manual of Steel Construction 14th edition are acceptable; single angle connections are not permitted.
 1. Select and complete connections using schematic details indicated and AISC 360.

1.5 SUBMITTALS
 A. Product Data: For each type of product indicated.
 B. Shop Drawings
 1. Provide shop drawings including erection drawings and detail sheets of all structural steel components.
 a. Erection drawings shall include at a minimum:
 1) Anchor rod plans and embedment plans showing templates and directions for installation of anchor rods and other anchorages and embedded items to be installed by other.
 2) Floor and roof plans.
 3) Entrances and canopies.
 4) Plans shall include member marks and all dimensions and elevations required to erect the structural steel.
 5) Details and/or sections of all erections that include field welding, assembly, processes, field alignment, etc.
 b. Detailed drawings of structural steel members and components, including at a minimum sizes, lengths, steel grade, and finish.
 c. For erection drawings and detail drawings:
 1) Include details of cuts, connections, splices, holes, and other pertinent data.
 2) Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld. Show backing bars that are to be removed and supplemental field welds where backing bars are to remain.
 3) Indicate type, size, and length of bolts, distinguishing between shop and field bolts. Identify pretensioned and slip-critical high-strength bolted connections.
 2. The electronic files of the project's structural drawings will be provided upon request for use in the preparation of fabrication or erection drawings.
 a. Prior to receiving the drawing files, the contractor is required to sign an "Agreement for Transfer and Use of Electronic Files."
 b. The electronic files are not contract documents. Significant differences may exist between the electronic files and the corresponding hard copy documents due to addenda, change orders, revisions, layer visibility or other reasons. In the event of a conflict, printed hard copy drawings and specifications shall take precedence over electronic files. The Contractor is responsible to verify the accuracy of all data contained in the electronic files.
 c. If the electronic files are imported into other software or applications packages for the purpose of preparing fabrication, erection, manufacturing drawings or any other type of document, the contractor shall verify all dimensions, lines, reference points, etc. with annotated dimensions found elsewhere in the contract documents. The Contractor is responsible to adjust the file accordingly prior to their use of the files.

C. Qualification Data: For qualified installer fabricator and testing agency.
 D. Welding certificates.
 E. Paint Compatibility Certificates: From manufacturers of topcoats applied over shop primers, certifying that shop primers are compatible with topcoats.
 F. Mill test reports for structural steel, including chemical and physical properties, to comply with ASTM A6 or ASTM A568.
 G. Product Test Reports: For the following:
 1. Bolts, nuts, and washers including mechanical properties and chemical analysis.
 2. Tension-control, high-strength bolt-nut-washer assemblies.
 3. Shop primers.
 4. Nonstick grout.
 H. Source quality-control reports.

1.6 QUALITY ASSURANCE
 A. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
 1. Welders and welding operators performing work on bottom-flange, demand-critical welds shall pass the supplemental welder qualification testing, as required by AWS D1.8. FCWV- S and FCWV-G shall be considered separate processes for welding performance qualification.
 B. Inspection of welding shall comply with AWS D1.1 standards and IBC requirements.
 C. Comply with applicable provisions of the following specifications and documents:
 1. AISC 303.
 2. AISC 335 Section A3.4.
 3. AISC 341 and AISC 341s1.
 4. AISC 360.
 5. AISC LRFD Section A3.3.
 6. AISC LRFD Section M2.5.
 7. RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
 D. Preinstallation Conference: Conduct conference at Project site.
 1. Lay solid brick-size masonry units with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not deftly pour bed joints or slash head joints.
 B. Store materials to permit easy access for inspection and identification. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers. Protect steel members and packaged materials from corrosion and deterioration.
 1. Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged members or structures as directed.
 B. Store fasteners in a protected place in sealed containers with manufacturer's labels intact.
 1. Fasteners may be repackaged provided Owner's testing and inspecting agency observes repackaging and seals containers.
 2. Clean and lubricate bolts and nuts that become dry or rusty before use.
 3. Comply with manufacturers' written recommendations for cleaning and lubricating ASTM F 1652 fasteners and for releasing fasteners after lubrication.

1.8 COORDINATION
 A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' recommendations to ensure that shop primers and topcoats are compatible with one another.
 B. Coordinate installation of anchorage items to be embedded in or attached to other construction without delaying the Work. Provide setting diagrams, sheet metal templates, instructions, and directions for installation.
PART 2 - PRODUCTS
2.1 STRUCTURAL-STEEL MATERIALS
 A. W-Shapes: ASTM A992/A992M Grade 50.
 B. Channels & Angles: ASTM A36/A36M.
 C. Plate and Bar: ASTM A36/A36M or as noted on drawings.
 D. Cold-Formed Hollow Structural Sections: ASTM A500/A500M, Grade B.
 E. Welding Electrodes: Comply with AWS requirements, AISC ASD Section A3.6 and AISC LRFD Section A3.5.
2.2 BOLTS, CONNECTORS, AND ANCHORS
 A. High-Strength Bolts, Nuts, and Washers: ASTM A 325, Type 1, heavy-hex steel structural bolts; ASTM A 563, Grade C, heavy-hex carbon-steel nuts; and ASTM F 436, Type 1, hardened carbon-steel washers, all with plain finish.
 B. For bolts noted on drawings as A990 provide High-Strength Bolts, Nuts, and Washers: ASTM A 490, Type 1, heavy-hex steel structural bolts; ASTM A 563, Grade DH, heavy-hex carbon-steel nuts; and ASTM F 436, Type 1, hardened carbon-steel washers with plain finish.
2.3 PRIMER
 A. Primer: Fabricator's standard lead- and chrome-free, nonaplastic, rust-inhibiting primer complying with MP#179 and compatible with topcoat see General notes for primer color.
 B. Galvanizing Repair Paint: MP#16, MP#19, or SSPC-Paint 20.
2.4 GROUT
 A. Nonmetallic, Shrinkage-Resistant Grout: ASTM C 1107, factory-packaged, nonmetallic aggregate grout, noncorrosive and nonstaining, mixed with water to consistency suitable for application and a 30-minute working time.
2.5 FABRICATION
 A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC's "Code of Standard Practice for Steel Buildings and Bridges" and AISC 360.
 1. Identify high-strength structural steel according to ASTM A 618/A 618M and maintain markings until structural steel has been erected.
 2. Mark and match-mark materials for field assembly.
 3. Complete structural-steel assemblies, including welding of units, before starting shop-priming operations.
 B. Thermal Cutting: Perform thermal cutting by machine to greatest extent possible.
 1. Plane thermally cut edges to be welded to comply with requirements in AWS D1.1/D1.1M.
 C. Bolt Holes: Cut, drill, or punch standard bolt holes perpendicular to metal surfaces.
 D. Finishing: Accurately finish ends of columns and other members transmitting bearing loads.
 E. Cleaning: Clean and prepare steel surfaces that are to remain unpainted according to SSPC-SP 3, "Power Tool Cleaning."
 F. Holes: Provide holes required for securing other work to structural steel and for other work to pass through steel framing members.

SECTION 051200 - STRUCTURAL STEEL (continued)
 1. Cut, drill, or punch holes perpendicular to steel surfaces. Do not thermally cut bolt holes or enlarge holes by burning.
 2. Baseplate Holes: Cut, drill, mechanically thermal cut, or punch holes perpendicular to steel surfaces.
 3. Weld threaded nuts to framing and other specialty items indicated to receive other work.
 2.6 SHOP CONNECTIONS:
 A. High-Strength Bolts: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
 1. Joint Type: Snug tightened and slip critical where indicated on the drawings.
 B. Weld Connections: Comply with AWS D1.1/D1.1M (Structural welding code) and AWS D1.8/D1.8M (Structural welding code, Seismic Supplement) for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.
 1. Assemble and weld built-up sections by methods that will maintain true alignment of axes without exceeding tolerances in AISC 303 for mill material.
 2.7 SHOP PRIMING
 A. Shop prime steel surfaces except the following:
 1. Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches (50 mm).
 2. Surfaces to be field welded.
 3. Surfaces to be high-strength bolted with slip-critical connections.
 4. Galvanized surfaces.
 B. Surface Preparation: Clean surfaces to be painted. Remove loose rust and mill scale and spatter, slag, or flux deposits. Prepare surfaces according to the following specifications and standards:
 1. All exterior steel exposed to weathers SSPC - SP10/NACE No. 2 near white blast cleaned.
 2. All other steel SSPC - SP3 power tool cleaned.
 C. Priming: Immediately after surface preparation, apply primer according to manufacturer's written instructions and at rate recommended by SSPC to give to a minimum dry film thickness of 1.5 mils (0.038 mm). Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.
 2.8 GALVANIZING
 A. Hot-Dip Galvanized Finish: Apply zinc coating by the hot-dip process to structural steel indicated on drawings according to ASTM A 123/A 123M.
 1. Fit vent and drain holes that will be exposed in the finished Work unless they will function as weep holes, by plugging with zinc solder and filing off smooth.
 2.9 SOURCE QUALITY CONTROL
 A. Testing Agency: Owner will engage a special inspector and qualified testing and inspecting agency to perform shop tests and inspections and prepare test reports.
 1. Provide special inspector and testing agency with access to places where structural-steel work is being fabricated or produced to perform tests and inspections.
 B. Correct deficiencies in Work that test reports and inspections indicate does not comply with the Contract Documents.
 C. Bolted Connections: Shop-bolted connections will be inspected according to RCSC's "

SECTION 054000 - COLD-FORMED METAL FRAMING

1.0 GENERAL
1.1 QUALITY ASSURANCE
A. Installer Qualifications: Engage an experienced Installer who has completed cold-formed metal framing similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.
B. Welding Standards: Comply with applicable provisions of AWS D1.1 "Structural Welding Code-Steel" and AWS D1.3, "Structural Welding Code-Sheet Steel"
1.2 DELIVERY, STORAGE, AND HANDLING
A. Protect cold-formed metal framing from corrosion, deformation, and other damage during delivery, storage, and handling.
2.0 PRODUCTS
2.1 MATERIALS
A. Galvanized-Steel Sheet: ASTM A 442, zinc coated according to ASTM A 525 as follows:
1. G 60 typical coating except as noted below.
2. G 90 coating for studs used as brick back-up.
3. Grade: Grade A, 33,000 psi minimum yield strength, 20 percent elongation.
2.2 WALL FRAMING
A. Steel Studs: Manufacturer's standard C-shaped steel studs of web depths and gage indicated, with lipped flanges, and complying with the following:
1. Flange Width: 1-5/8 inches minimum.
2. Web: Punched.
B. Steel Track: Manufacturer's standard U-shaped steel track, unpunched, of web depths indicated, with straight flanges, and complying with the following:
1. Design Uncoated-Steel Thickness: Matching steel studs.
2. Flange Width: Manufacturers standard deep flange where indicated, standard flange elsewhere.
2.3 FRAMING ACCESSORIES
A. Fabricate steel-framing accessories of the same material and finish used for framing members, with a minimum yield strength of 33,000 psi.
2.4 ANCHORS, CLIPS, AND FASTENERS
A. Steel Shapes and Clips: ASTM A 36, zinc coated by the hot-dip process according to ASTM A 123.
B. Expansion Anchors: Fabricated from corrosion-resistant materials, with capability to sustain, without failure, a load equal to 5 times the design load, as determined by testing per ASTM E 488 conducted by a qualified independent testing agency.
C. Powder-Actuated Anchors: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with capability to sustain, without failure, a load equal to 10 times the design load, as determined by testing per ASTM E 1190 conducted by a qualified independent testing agency.
D. Mechanical Fasteners: Corrosion-resistant coated, self-drilling, self-threading steel drill screws.
E. Head Type: Low-profile head beneath sheathing, manufacturer's standard elsewhere.
F. Welding Electrodes: Comply with AWS standards.
2.5 MISCELLANEOUS MATERIALS
A. Galvanizing Repair Paint: SSPC-Paint 20 or DOD-P-21035, with dry film containing a minimum of 94 percent zinc dust by weight.
2.6 FABRICATION
A. Fabricate cold-formed metal framing and accessories plumb, square, true to line, and with connections securely fastened, according to manufacturer's recommendations and the requirements of this Section.
B. Fabricate framing assemblies in jig templates.
C. Cut framing members by sawing or shearing; do not torch cut.
D. Fasten cold-formed metal framing members by welding or screw fastening, as standard with fabricator. Wire tying of framing members is not permitted.
E. Comply with AWS requirements and procedures for welding, appearance and quality of welds, and methods used in correcting welding work.
F. Locate mechanical fasteners and install according to cold-framed metal framing manufacturer's instructions with screw penetrating joined members by not less than 3 exposed screw threads.
G. Fasten other materials to cold-formed metal framing by welding, bolting, or screw fastening, according to manufacturer's recommendations.
H. Reinforce, stiffen, and brace framing assemblies to withstand handling, delivery, and erection stresses. Lift fabricated assemblies to prevent damage or distortion.
I. Fabrication Tolerances: Fabricate assemblies to a maximum allowable tolerance variation from plumb, level, and true to line of 1/8 inch in 10 feet (1/60) and as follows:
1. Spacing: Space individual framing members no more than plus or minus 1/8 inch from plan location. Cumulative error shall not exceed minimum fastening requirements of sheathing or other finishing materials.
2. Squariness: Fabricate each cold-formed metal framing assembly to a maximum out-of-square tolerance of 1/8 inch.
3.0 EXECUTION
3.1 EXAMINATION
A. Examine supporting substrates and abutting structural framing for compliance with requirements, including installation tolerances and other conditions affecting performance of cold-formed metal framing. Do not proceed with installation until unsatisfactory conditions have been corrected.
3.2 PREPARATION
A. Grout bearing surfaces uniform and level to ensure full contact of bearing flanges or track webs on supporting concrete or masonry construction.
3.3 INSTALLATION - GENERAL
A. Cold-formed metal framing may be shop or field fabricated for installation, or it may be field assembled.
B. Install cold-formed metal framing and accessories plumb, square, true to line, and with connections securely fastened, according to manufacturer's recommendations and the requirements of this Section.
C. Cut framing members by sawing or shearing; do not torch cut.
D. Fasten cold-formed metal framing members by welding or screw fastening, as standard with fabricator. Wire tying of framing members is not permitted.
E. Comply with AWS requirements and procedures for welding, appearance and quality of welds, and methods used in correcting welding work.
F. Locate mechanical fasteners and install according to cold-framed metal framing manufacturer's instructions with screw penetrating joined members by not less than 3 exposed screw threads.
G. Install framing members in one-piece lengths, unless splice connections are indicated for track or tension members.
H. Provide temporary bracing and leave in place until framing is permanently stabilized.
I. Do not bridge building expansion and control joints with cold-formed metal framing. Independently frame both sides of joints.
J. Erection Tolerances: Install cold-formed metal framing to a maximum allowable tolerance variation from plumb, level, and true to line of 1/8 inch in 10 feet (1/60) and as follows:
3.5 NONLOAD-BEARING CURTAIN WALL INSTALLATION
A. Install continuous tracks sized to match studs. Align tracks accurately and securely anchor to supporting structure as indicated.
B. Squarely seat studs against webs of top and bottom tracks except where deflection tracks are detailed.
C. Fasten both flanges of studs to top and bottom track, unless otherwise indicated.
D. Isolate steel framing from building structure at locations indicated to prevent transfer of vertical loads while providing lateral support.
E. Install deflection track where indicated and anchor to building structure.
F. Connect studs with vertical side clips where indicated to continuous angles or supplementary framing anchored to building structure.
G. Space studs as indicated.
H. Set studs plumb, except as needed for diagonal bracing or required for nonplumb walls or warped surfaces and similar requirements.
I. Install horizontal bridging in curtain wall studs, spaced in rows not more than 48 inches apart. Fasten at each stud intersection.
J. Install additional row of horizontal bridging in curtain wall stud beneath deflection track when curtainwall studs are not fastened to an additional top track.
K. Bridging: Cold-rolled steel channel, clip angle fastened to webs of punched studs.
L. Install miscellaneous framing and connections, including stud kickers, web stiffeners, clip angles, continuous angles, anchors, fasteners, and stud girts, to provide a complete and stable curtain wall framing system.
3.6 REPAIRS AND PROTECTION
A. Galvanizing Repairs: Prepare and repair damaged galvanized coatings on fabricated and installed cold-formed metal framing with galvanizing repair paint according to ASTM A 780 and the manufacturer's instructions.

SECTION 061000 - ROUGH CARPENTRY

1.0 GENERAL
1.1 SUBMITTALS
A. Product Data: Submit manufacturer's specifications and installation instructions for materials listed below:
1. Insulating sheathing.
B. Wood Treatment Data: Submit chemical treatment manufacturer's instructions for handling, storing, installation and finishing of treated material.
C. Preservative Treatment: For each type specified, include certification by treating plant stating type of preservative solution and pressure process used, net amount of preservative retained and conformance with applicable standards.
D. For water-borne treatment, include statement that moisture content of treated materials was reduced to levels indicated prior to shipment to project site which will be 15 percent m.c. on plywood or 19 percent on lumber 2" thick or less.
E. Fire Retardant Treatment: Include certification by treating plant that treatment material complies with specified standard. Materials shall be fire retardant if required by local authority.
1.2 PROJECT CONDITIONS
A. Coordination: Fit carpentry work to other work; scribe and cope as required for accurate fit. Correlate location of furring, nailers, blocking, grounds and similar supports to allow proper attachment of other work.
2.0 PRODUCTS
2.1 LUMBER, GENERAL
A. Lumber Standards: Manufacture lumber to comply with PS 20 "American Softwood Lumber Standard" and with applicable grading rules of inspection agencies certified by American Lumber Standards Committee's (ALSC) Board of Review.
B. Inspection Agencies: Inspection agencies and the abbreviations used to reference with lumber grades and species include the following:
NLGA National Lumber Grades Authority
SPB Southern Pine Inspection Bureau
WCLB West Coast Lumber Inspection Bureau
WWPA Western Wood Products Association
C. Grade Stamps: Factory-mark each piece of lumber with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying grading agency, grade, species, moisture content at time of surfacing, and mill.
D. For exposed lumber apply grade stamps to ends or back of each piece or omit grade stamps entirely and issue certificate of grade compliance from inspection agency in lieu of grade stamp.
E. Nominal sizes are indicated, except as shown by detail dimensions. Provide actual sizes as required by PS 20, for moisture content specified for each use.
F. Provide dressed lumber, S4S, unless otherwise indicated.
G. Provide seasoned lumber with 19% maximum moisture content at time of dressing and shipment for sizes 2" or less in nominal thickness, unless otherwise indicated.
2.2 DIMENSION LUMBER
A. For light framing (nominal 2" to 4" thick, 2" to 4" wide) provide the following grade, any species.
B. Standard grade, Any species graded under WWPA or WCLB rules. Southern Pine graded under SPB rules. Spruce-Pine-Fir graded under NLGA rules.
C. For structural light framing (nominal 2" to 4" thick, 2" to 4" wide), provide the following grade and species:
D. No. 2 grade. Same species as indicated for structural framing grade below.
2.3 BOARDS
A. Exposed Boards: Where boards will be exposed in the finished work, provide the following:
B. Moisture Content: 19 percent maximum, "S-DRY".
C. Where transparent or natural finish or no finish is indicated, provide Clear Douglas Fir. Select per WCLB or WWPA rules.
D. Where painted finish is indicated, provide Southern Pine, No. 2 Boards per SPB, or Douglas Fir Construction Boards per WCLB or WWPA rules.
E. Concealed Boards: Where boards will be concealed by other work, provide lumber of 19% maximum moisture content (S-DRY) and of following species and grade:
F. Southern Pine No. 2 Boards per SPB rules, or any species grade Construction Boards per WCLB or WWPA rules.
2.4 MISCELLANEOUS LUMBER
A. Provide wood for support or attachment of other work including cant strips, bucks, nails, blocking, furring, grounds, stripping and similar members. Provide lumber of sizes indicated, worked into shapes shown, and as follows:
1. Moisture content: 19 percent maximum for lumber items not specified to receive wood preservative treatment.
2. Grade: Standard Grade light framing size lumber of any species or board size lumber as required. No. 3 Common or Standard grade boards per WCLB or WWPA rules or No. 3 boards per SPB rules.
3. Span Rating: As required to suit joist spacing indicated.
4. Wall Sheathing: APA RATED SHEATHING
5. Exposure Durability Classification: EXTERIOR
6. Span Rating: As required to suit stud spacing indicated.
7. Roof Sheathing: APA RATED SHEATHING
8. Exposure Durability Classification: EXTERIOR
9. Span Rating: As required to suit rafter spacing indicated.
B. Plywood Backing Panels: For mounting electrical or telephone equipment, provide fire-retardant treated plywood panels with grade designation, APA C-D PLUGGED INT with exterior glue, in thickness indicated, or, if not otherwise indicated, not less than 3/4".
C. Fiberboard Sheathing: Provide insulating board complying with ASTM C 208 for grade and other requirements listed below:
1. Grade: Regular
2. Size and Edges: 1/2" thick x 2' wide x 8' long, with "V"- shaped edges.
2.5 GYPSUM SHEATHING
A. Gypsum Sheathing Standards: Provide gypsum sheathing board complying with FS S5L-30 for Type II (sheathing), Class 2 (water- resistant surfaces), Form a (plain back), Grade (core) and Style indicated below; and with ASTM C 79.
B. Grade W: Water-resistant treated core.
C. Style: V-longue and groove long edges, square ends.
D. Thickness: 1/2" - or as called for on drawings.
E. Size: 2'-0" x 8'-0".
2.6 MISCELLANEOUS MATERIALS
A. Fasteners and Anchors: Provide size, type, material and finish as indicated and as recommended by applicable standards, complying with applicable Federal Specifications for nails, staples, screws, bolts, nuts, washers and anchoring devices. Provide metal hangers and framing anchors of the size and type recommended by the manufacturer for each use including resistance to weather.
B. Where rough carpentry work is exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners and anchors with a hot-dip zinc coating (ASTM A 153).
C. Building Paper: ASTM D 226, Type I, asphalt saturated felt, non-perforated, 15-lb. type or as shown on drawings.
2.8 WOOD TREATMENT
A. Preservative Treatment: Where lumber or plywood is indicated as "P-T" or "Treated" or is specified herein to be treated, comply with applicable requirements of AWPB Standards C2 (Lumber) and C9 (Plywood) and of AWPB Standards listed below. Mark each treated item with the AWPB Quality Mark Requirements.
B. Pressure-treat above-ground items with water-borne preservatives to comply with AWPB LP-2. After treatment, kiln-dry lumber and plywood to a maximum moisture content, respectively, of 19% and 15%. Treat indicated items and the following:
C. Wood cants, nailers, curbs, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers and waterproofing.
D. Wood sills, sleepers, blocking, furring, stripping and similar concealed members in contact with masonry or concrete.
E. Wood framing members less than 18" above grade.
F. Complete fabrication of treated items prior to treatment, where possible. If cut after treatment, coat cut surfaces with heavy brush coat of same chemical used for treatment and to comply with AWPB M4. Inspect each piece of lumber or plywood after drying and discard damaged or defective pieces.
G. Fire Retardant & Treatment: Refer to p. 6100-2.
3.0 EXECUTION
3.1 INSTALLATION - GENERAL
A. Discard units of material with defects which might impair quality of work, and units which are too small to use in fabricating work with minimum joints or optimum joint arrangement.
B. Set carpentry work to required levels and lines, with members plumb and true and as required by recognized standards. Countersink nail heads on exposed carpentry work and fill holes.
C. Securely attach carpentry work to substrate by anchoring and fastening as shown and as required by recognized standards. Countersink nail heads on exposed carpentry work and fill holes.
D. Use common wire nails, except as otherwise indicated. Use finishing nails for finish work. Select fasteners of size that will not penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without spilling of wood, presill as required.
3.2 WOOD GROUNDS, NAILERS, BLOCKING, AND SLEEPERS
A. Provide wherever shown and where required for screening or attachment of other work. Form to shapes as shown and out as required for true line and level of work to be attached. Coordinate location with other work involved.
B. Attach to substrates as required to support applied loading. Countersink bolts and nuts flush with surfaces, unless otherwise show. Build into masonry during installation of masonry work. Where possible, anchor to formwork before concrete placement.
C. Provide permanent grounds of dressed, preservative treated, key-beveled lumber not less than 1-1/2" wide and of thickness required to bring face of ground to exact thickness of finish material involved. Remove temporary grounds when no longer required.
3.3 WOOD FURRING
A. Install plumb and level with closure strips at edges and openings. Shim with wood as required for tolerance of finished work.
B. Firestop furred spaces on walls at each floor level and at ceiling line of top story, with wood blocking or noncombustible materials, accurately fitted to close furred spaces.
C. Use "W-Seal" or equal at roof line.
D. Furring to Receive Gypsum Drywall: Unless otherwise shown, provide 1" x 2" furring at 16" o.c., vertically (unless called for otherwise on the drawings).
3.4 WOOD FRAMING - GENERAL
A. Provide framing members of sizes and on spacings shown, and frame openings as shown, or if not shown, comply with recommendations of "Manual for House Framing" of National Forest Products Association (N.F.P.A.). Do not splice structural members between supports.
B. Anchor and nail as shown, and to comply with "Recommended Nailing Schedule" of "Manual for House Framing" and "National Design Specifications for Wood Construction" published by N.F.P.A.
C. Firestop concealed spaces with wood framed walls and partitions at each floor level and at the ceiling line of the top story. Where firestops are not automatically provided by the framing system used, use closely fitted wood blocks of nominal 2" thick lumber of the same width as framing members.
3.5 STUD FRAMING
A. Construct corners and intersections with not less than 3 studs. Provide miscellaneous blocking and framing as shown and as required for support of facing materials, fixtures, specialty items and trim.
B. Provide continuous horizontal blocking row at mid-height of single-story partitions over 8' high and at midpoint of multi-story partitions, using 2" thick members of same width as wall or partitions.
C. Frame openings with multiple studs and headers. Provide nailed header members of thickness equal to width of studs. Set headers on edge and support on jamb studs.
D. For non-bearing partitions, provide double-jamb studs and headers not less than 4" deep for openings 3' and less in width, and not less than 6" deep for wider openings. For load-bearing partitions, provide double-jamb studs for openings 6' and less in width, and triple-jamb studs for wider openings. Provide headers of depth shown, or if not shown, provide as recommended by N.F.P.A. "Manual for House Framing".
E. Provide diagonal bracing in stud framing of exterior walls, except as otherwise indicated. Brace both walls at each external corner, full story height, at a 45-degree angle, using either a let-in 1 x 4 or 2 x 4 blocking or metal diagonal bracing.
F. Plywood sheathing or corner bracing, 4" wide panels vertically.
3.6 GYPSUM WALL SHEATHING
A. General: Provide gypsum board sheathing where shown. Fasten to exterior face of stud framing for exterior walls. Use 1-1/2" long, 11 gage galvanized roofing nails with 3/8" head or 15 gage, divergent point galvanized staples 1/2" wide x 1-1/2" long. Keep perimeter fasteners 3/8" from edges and ends of board units. Fit boards tightly against each other and around openings.
B. Install 2 x 8 sheathing horizontally with long edges at right angles to studs with grooved edge down. Center end joints over supports and stagger in each course. Nail or staple to each support in accordance with manufacturer's recommended spacing but provide not less than 4 fasteners per 2' width per stud if framing is diagonally braced, or not less than 7 fasteners per 2' width per stud if not braced.

SECTION 072410 - EXTERIOR INSULATION AND FINISH SYSTEMS- CLASS PB

1.0 GENERAL
A. Exterior insulation and finish system (EIFS) applied over masonry surfaces.
B. Exterior insulation and finish system (EIFS) applied over gypsum sheathing.
1.2 DEFINITIONS
A. Class PB Exterior Insulation and Finish System (EIFS) is defined by ASTM PS 49 as a "nonload bearing, exterior wall cladding system that consists of an insulation board attached either adhesively, mechanically, or both to the substrate; an integrally reinforced base coat; and a texture protective finish coat."
B. Systems refer to Class PB EIFS. System manufacturer refers to EIFS manufacturer.
1.3 PERFORMANCE REQUIREMENTS
A. Provide systems that comply with the following performance requirements:
B. Bond Integrity: Free from bond failure within system components or between system and supporting wall construction, resulting from exposure to fire, wind loads, weather, or other in-service conditions.
C. Weather-tightness: Resistant to water penetration from exterior into system and assemblies behind it or through them into interior of building that results in deterioration of thermal-insulating effectiveness or other degradation of system and assemblies behind it, including substrates, supporting wall construction, and interior finish.
1.4 SUBMITTALS
A. Product Data: For each component of EIFS specified.
B. Samples for Initial Selection: Manufacturer's color charts and small-scale samples consisting of units or sections of units showing the full range of colors, textures, and patterns available for each finish choice indicated.
C. Submit sealant manufacturer's standard bead samples consisting of strips of actual products showing the full range of colors available.
1.5 QUALITY ASSURANCE
A. Installer Qualifications: Engage an experienced installer who has completed systems similar in material, design, and extent to those indicated for this Project and with a record of successful in-service performance.
B. Manufacturer Qualifications: Engage a firm experienced in manufacturing systems similar to those indicated for this Project and with a record of successful in-service performance.
C. Source Limitations: Obtain materials for system from one source and by a single manufacturer or by manufacturers approved by EIFS manufacturer as compatible with other system components.
1.6 DELIVERY, STORAGE, AND HANDLING
A. Deliver materials in original, unopened packages with manufacturer's labels intact and clearly identifying products.
B. Store materials inside and under cover; keep them dry and protected from the weather, direct sunlight, surface contamination, aging, corrosion, damaging temperatures, construction traffic, and other causes.
C. Stack insulation board flat and off the ground.
2.0 PRODUCTS
2.1 MANUFACTURERS
A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering Class PB systems that may be incorporated into the Work include, but are not limited to, the following:
1. Bostik W/R Bostik Co.
2. Duvul Systems, Inc.
3. Parex Incorporated
4. Senergy Division of Harris Specialty Chemicals, Inc.
5. Slo Corporation: Slo Finish Systems Div.
2.2 MATERIALS
A. Compatibility: Provide substrates, adhesive, board insulation, reinforcing meshes, base-and finish-coat materials, sealants, and accessories that are compatible with one another and approved for use by system manufacturer for Project.
B. Colors, Textures, and Patterns of Finish Coat: Comply with the following requirements:
C. Provide Architect's selections from system manufacturer's full range of colors, textures, and patterns for type of finish coat indicated.
D. Mixed-Polysiloxane Board Insulation: Rigid, cellular thermal insulation formed by expansion of polysiloxane resin beads or granules in a closed mold. Comply with system manufacturer's requirements, ASTM C 578 for Type I, and TEMA Guideline Specification for Expanded Polysiloxane (EPS) Insulation Board" for more stringent requirements for material performance and qualities of insulation, including dimensions and permissible variations, and the following:
E. Before cutting and shipping, age insulation in block form by air drying for not less than six weeks or by another method approved by EMA that produces equivalent results.
F. Provide insulation in boards not more than 24 by 48 inches and in thickness indicated but not more than 4 inches or less than that allowed by ASTM PS 49.
G. Reinforcing Mesh: Balanced, alkali-resistant, open-weave glass-fiber mesh treated for compatibility with other system materials, made from continuous multiend strands with retained mesh tensile strength of not less than 120 lb/in. per EIMA 105.01, complying with ASTM D 578 and the following requirements for minimum weight.
H. Standard Reinforcing Mesh: Not less than 4.0 oz./sq. yd.
I. Base-Coat Materials: System manufacturer's standard mixture complying with the following requirements for material composition and method of combining materials:
1. Factory-mixed formulation of polymer-emulsion adhesive and inert fillers that is ready to use without adding other materials
2. Factor-blended dry formulation of Portland cement, dry polymer admixture, and inert fillers to which only water is added at Project site
3. Job-combined formulation of manufacturer's standard polymer-emulsion adhesive and manufacturer's standard dry mix containing Portland cement
4. Job-mixed formulation of Portland cement complying with ASTM 150, Type I, white or natural color; and manufacturer's standard polymer-emulsion adhesive designed for use indicated.
5. Any formulation indicated above.
J. Finish-Coat Materials: System manufacturer's standard mixture complying with the following requirements for material composition and method of combining materials:
K. Factory-mixed formulation of polymer-emulsion binder, colorfast mineral pigments, sound stone particles, and fillers.
L. Aggregate: marble chips of size and color to match Architect's sample.
M. Mechanical Fasteners: System manufacturer's standard corrosion-resistant fasteners consisting of thermal cap, standard washer and shaft attachments, and fastener indicated below; selected for properties of pullout, tensile, and shear strength required to resist design loads of application indicated; capable of pulling fastener head below surface of insulation board; and of the following description:
1. For attachment to steel studs from 0.033 to 0.112 inch in thickness, provide steel drill screws complying with ASTM C 954.
2. For attachment to light-gage steel framing members not less than 0.0179 inch in thickness, provide steel drill screws complying with ASTM C 1002.
3. For attachment to wood framing members and plywood sheathing, provide steel drill screws complying with ASTM C 1002, Type W.
4. For attachment to masonry and concrete substrates, provide sheathing dowel in the form of a plastic wing-tipped fastener with thermal cap, sized to fit insulation thickness indicated and to penetrate substrate to depth required to secure anchorage.
2.3 MIXING
A. Comply with system manufacturer's requirements for combining and mixing materials. Do not introduce admixtures, water, or other materials except as recommended by system manufacturer. Mix materials in clean containers. Use materials within time period specified by system manufacturer or manufacturer's literature.
3.0 EXECUTION
3.1 PREPARATION
A. Protect contiguous work from moisture deterioration and soiling caused by application of systems. Provide temporary covering and other protection needed to prevent spattering of exterior finish coats on other work.
B. Protect system, substrates, and wall construction behind them from inclement weather during installation. Prevent infiltration of moisture behind system and deterioration of substrates.
C. Prepare and clean substrates to comply with system manufacturer's written requirements to obtain optimum bond between substrate and adhesive for insulation.
3.2 INSTALLATION
A. Comply with ASTM PS 49 and system manufacturer's written instructions for installation of system as applicable to each type of substrate indicate.
B. Apply trim accessories at perimeter of system, at expansion joints, and elsewhere, as indicated. Use drip screed at bottom edge of system, unless otherwise indicated. Use casing beads at other locations.
C. Adhesively and mechanically attach insulation to comply with ASTM PS 49.
3.3 INSTALLATION OF JOINT SEALANTS
A. Prepare joints and apply sealants, of type and at locations indicated, to comply with applicable requirements in Division 7 Section "Joint Sealants" and in "EIMA Guide for Use of Sealants with Exterior Insulation and Finish Systems, Class PB."
B. Clean surfaces to receive sealants to comply with indicated requirements and system manufacturer's written instructions.
C. Apply primer recommended in writing by sealant manufacturer for surfaces to be sealed.
D. Install sealant backing to control depth and configuration of sealant joint and to prevent sealant from adhering to back of joint.
E. Apply masking tape to protect areas adjacent to sealant joints. Remove tape immediately after tooling joints, without disturbing joint seal.
F. Remove sealant sufficiently from surface of system so an additional sealant application, including backing rod, can be installed without protruding beyond system surface.
3.4 CLEANING AND PROTECTING
A. Remove temporary covering and protection of other work. Promptly remove coating materials from window and door frames and other surfaces outside areas indicated to receive system coatings.
B. Provide final protection and maintain conditions, in a manner acceptable to Installer and system manufacturer, that ensure system is without damage or deterioration at the time of Substantial Completion.

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FOR BIDDING ONLY. NOT FOR CONSTRUCTION.

Heartland Dental
1200 Network Centre Drive
Effingham, IL 62401

WMG SELL - CLERMONT FL
WMG # FL22-0695
FL Highway 501 WJ, Colonial Drive
Clermont, FL 34711

Table with 2 columns: Date, Description. Rows for 1/24/24 BID SET, 11/15/23 PERMIT SET.

Table with 2 columns: Date, Description. Row for 1/24/24 BID SET.

SPECIFICATIONS

A702

DRAWN BY: JB, CHECKED BY: DR, 2023064.21

HEARTLAND DENTAL PROVIDED SPECIFICATIONS ON THESE SHEETS ARE FOR REFERENCE ONLY. SPECIFICATIONS PROVIDED ARE NOT MEANT TO REPRESENT AN EXHAUSTIVE OR ALL ENCOMPASSING LIST OF THE PROJECT REQUIREMENTS. ALL SPECIFICATIONS SHALL BE COORDINATED WITH THE OWNER PRIOR TO START OF WORK.

SECTION 072500 - WATER BARRIERS

1.0 GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Section Includes: 1. Building wrap. 2. Flexible flashing.
- C. Action Submittals: 1. Product Data: For each type of product. 2. Shop Drawings: Show details of building wrap at terminations, openings, and penetrations. Show details of flexible flashing applications.

2.1 WATER-RESISTIVE BARRIER

- A. Building Wrap: ASTM E 2556, Type 1 water-resistive barrier; with flame-spread and smoke-developed indexes of less than 25 and 450, respectively, when tested according to ASTM E84; UV stabilized; and acceptable to authorities having jurisdiction. 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following: a. Box Chemical Company (The). b. DuPont de Nemours, Inc. c. Raven Industries, Inc. 2. Water-Vapor Permeance: Not less than 75 perms (4300 ng/Pa x s x m per ASTM E96/E96M, Desiccant Method (Procedure A)). 3. Air Permeance: Not more than 0.004 cm³/sq. ft. at 0.3-inch wg (0.02 L/s x sq. m at 75 Pa) when tested according to ASTM E2178. 4. Allowable UV Exposure Time: Not less than three months. 5. Flame Propagation Test: Materials and construction shall be as tested according to NFPA 285.
- B. Building-Wrap Tape: Pressure-sensitive plastic tape recommended by building-wrap manufacturer for sealing joints and penetrations in building wrap.

2.2 FLEXIBLE FLASHING

- A. Butyl Rubber Flashing: Composite, self-adhesive, flashing product consisting of a pliable, butyl rubber compound, bonded to a high-density polyethylene film, aluminum foil, or spunbonded polyolefin to produce an overall thickness of not less than 0.025 inch (0.6 mm). 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following: a. DuPont de Nemours, Inc. b. Proctelo Wrap Company. c. Raven Industries, Inc. 2. Flame Propagation Test: Materials and construction shall be as tested according to NFPA 285.
- C. Primer for Flexible Flashing: Product recommended in writing by flexible flashing manufacturer for substrate.
- D. Nails and Staples: Product recommended in writing by flexible flashing manufacturer and complying with ASTM F1667.

3.1 WATER-RESISTIVE BARRIER INSTALLATION

- A. Cover exposed exterior surface of sheathing with water-resistive barrier securely fastened to framing immediately after sheathing is installed.
- B. Cover sheathing with water-resistive barrier as follows: 1. Cut back barrier 1/2 inch (13 mm) on each side of the break in supporting members at expansion- or control-joint locations. 2. Apply barrier to cover vertical flashing with a minimum 4-inch (100-mm) overlap unless otherwise indicated.
- C. Building Paper: Apply horizontally with a 2-inch (50-mm) overlap and a 6-inch (150-mm) end lap; fasten to sheathing with galvanized staples or roofing nails.
- D. Building Wrap: Comply with manufacturer's written instructions and warranty requirements. 1. Seal seams, edges, fasteners, and penetrations with tape. 2. Extend into joints of openings and seal corners with tape.
- E. At Stone Veneer: Install two (2) layers of water-resistive barrier behind stone veneer over wood construction. The first layer (directly over sheathing) serves as the wall system's air and water barrier and shall be integrated with window and door flashings, the weep screed at the bottom of the wall, and any through wall flashing or expansion joints. Lath shall be installed over the intervening layer (second layer) in accordance with ASTM C1063-03. Standard Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster, and applicable codes.

3.2 FLEXIBLE FLASHING INSTALLATION

- A. Apply flexible flashing where indicated to comply with manufacturer's written instructions. 1. Prime substrates as recommended by flashing manufacturer. 2. Lap seams and junctures with other materials at least 4 inches (100 mm) except that at flashing flanges of other construction, laps need not exceed flange width. 3. Lap flashing over water-resistive barrier at bottom and sides of openings. 4. Lap water-resistive barrier over flashing at heads of openings. 5. After flashing has been applied, roll surfaces with a hard rubber or metal roller to ensure that flashing is completely adhered to substrates.

3.3 DRAINAGE MATERIAL INSTALLATION

- A. Install drainage material over building wrap and flashing to comply with manufacturer's written instructions.

SECTION 074646 - FIBER-CEMENT SIDING

1.0 GENERAL

1.1 SUMMARY

- A. Section includes fiber-cement siding and soffit.
- B. Related requirements: 1. Section 061000 "Rough Carpentry" for wood furring, grounds, nailers, and blocking. 2. Section 072500 "Weather Barriers" for weather-resistive barriers.
- C. Coordinate siding installation with flashings and other adjoining construction to ensure proper sequencing.
- D. Action Submittals: 1. Product data: For each type of product. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes. 2. Samples for verification: For each type, color, texture, and pattern required. 1. 12-inch-long-by-actual-width sample of siding. 2. 24-inch-wide-by-36-inch-high sample panel of siding assembled on plywood backing. 3. 12-inch-long-by-actual-width sample of soffit. 4. 12-inch-long-by-actual-width samples of trim and accessories.

1.2 COORDINATION

- A. Coordinate siding installation with flashings and other adjoining construction to ensure proper sequencing.

1.3 ACTION SUBMITTALS

- A. Product data: For each type of product. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Samples for verification: For each type, color, texture, and pattern required. 1. 12-inch-long-by-actual-width sample of siding. 2. 24-inch-wide-by-36-inch-high sample panel of siding assembled on plywood backing. 3. 12-inch-long-by-actual-width sample of soffit. 4. 12-inch-long-by-actual-width samples of trim and accessories.

1.4 INFORMATIONAL SUBMITTALS

- A. Product certificates: For each type of fiber-cement siding and soffit.
- B. Product test reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for fiber-cement siding.
- C. Research/evaluation reports: For each type of fiber-cement siding required, from ICC-ES.
- D. Sample warranty: For special warranty.

1.5 QUALITY ASSURANCE

- A. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and to set quality standards for fabrication and installation. 1. Build mockups for fiber-cement siding and soffit including accessories. B. Size: 46 inches long by 60 inches high. C. Include outside corner on one end of mockup and inside corner on another end. 1. Approval of mockups does not constitute approval of deviations from the contract documents contained in mockups unless architect specifically approves such deviations in writing. 2. Subject to compliance with requirements, approved mockups may become part of the completed work if undisturbed at time of substantial completion.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store packaged materials in original containers with labels intact until time of use.
- B. Store materials on elevated platforms, under cover, and in a dry location.

1.7 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace products that fail in materials or workmanship within specified warranty period. 1. Failures include, but are not limited to, the following: B. Structural failures including cracking and deforming. C. Deterioration of materials beyond normal weathering. 1. Warranty period: 25 years from date of substantial completion.

2.0 PRODUCTS

2.1 MANUFACTURERS

- A. Source limitations: Obtain products, including related accessories, from single source from single manufacturer.

2.2 FIBER-CEMENT SIDING

- A. General: ASTM C 1186, Type A, Grade II, fiber-cement board, noncombustible when tested according to ASTM E 136; with a flame-spread index of 25 or less when tested according to ASTM E 84. 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the work include, but are not limited to the following: a. CertainTeed Corporation. b. James Hardie Building Products, Inc. c. Nichia Fiber Cement B. Labeling: Provide fiber-cement siding that is tested and labeled according to ASTM C 1186 by a qualified testing agency acceptable to authorities having jurisdiction. C. Nominal thickness: Not less than 5/16 inch. D. Horizontal pattern: As shown in construction drawings. 1. Texture: As shown in construction drawings. E. Vertical pattern: As shown in construction drawings. F. Shingle pattern: As shown in construction drawings. G. Panel texture: As shown in construction drawings. H. Factory priming: Manufacturer's standard acrylic primer.

2.3 FIBER-CEMENT SOFFIT

- A. General: ASTM C 1186, Type A, Grade II, fiber-cement board, noncombustible when tested according to ASTM E 136; with a flame-spread index of 25 or less when tested according to ASTM E 84. 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the work include, but are not limited to the following: a. CertainTeed Corporation. b. James Hardie Building Products, Inc. c. Nichia Fiber Cement B. Nominal thickness: Not less than 5/16 inch. C. Pattern: As shown in construction drawings. D. Ventilation: Provide unperforated soffit unless otherwise indicated. E. Factory priming: Manufacturer's standard acrylic primer.
- A. ACCESSORIES 1. Siding accessories, general: Provide starter strips, edge trim, outside and inside corner caps, and other items as recommended by siding manufacturer for building configuration. 1. Provide accessories matching color and texture of adjacent siding unless otherwise indicated. B. Decorative accessories: Provide the following fiber-cement decorative accessories as indicated: 1. Corner posts. 2. Door and window casings. 3. Fasciae. 4. Moldings and trim.

SECTION 074646 - FIBER-CEMENT SIDING (continued)

- C. Flashing: Provide aluminum flashing complying with Section 076200 "Sheet Metal Flashing and Trim" at window and door heads and where indicated. 1. Finish for aluminum flashing: Factory-prime coating. D. Fasteners: 1. For fastening to wood, use ribbed bugle-head screws of sufficient length to penetrate a minimum of 1 inch into substrate. 2. For fastening to metal, use ribbed bugle-head screws of sufficient length to penetrate a minimum of 1/4 inch, or three screw-threads, into substrate. 3. For fastening fiber cement, use stainless-steel fasteners. E. Insect screening for soffit vents: Aluminum, 18-by-16 mesh. F. Continuous soffit vents: Aluminum, half-channel shape, with perforations; 2 inches wide and not less than 96 inches long. 1. Net-free area: 6 sq. ft./linear ft. 2. Finish: Mill finish.

3.0 EXECUTION

- 3.1 EXAMINATION A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of fiber-cement siding and soffit and related accessories. B. Proceed with installation only after unsatisfactory conditions have been corrected.
- 3.2 PREPARATION A. Clean substrates of projections and substances detrimental to application.
- 3.3 INSTALLATION A. General: Comply with manufacturer's written installation instructions applicable to products and applications indicated unless more stringent requirements apply. 1. Do not install damaged components. 2. Install fasteners no more than 24 inches o.c. B. Install joint seals as specified in Section 079200 "Joint Sealants" and to produce a weathertight installation.
- 3.4 ADJUSTING AND CLEANING A. Remove damaged, improperly installed, or otherwise defective materials and replace with new materials complying with specified requirements. B. Clean finished surfaces according to manufacturer's written instructions and maintain in a clean condition during construction.

SECTION 075400 - THERMOPLASTIC MEMBRANE ROOFING

1.0 GENERAL

- 1.1 SUMMARY A. Contractor shall furnish and install a 60 Mil, single ply membrane roofing system that is fabricated of a wet-inserted low shrink, anti-wicking polyester fabric and has a thermoplastic coating laminated to both sides.
- 1.2 SUBMITTALS A. Product Data: For each type of product indicated. 1.3 QUALITY ASSURANCE B. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's warranty. C. Source Limitations: Obtain components for membrane roofing from or approved by roofing membrane manufacturer. D. Fire-Test-Response Characteristics: Provide membrane roofing materials with the fire-test-response characteristics indicated as determined by testing identical products per test method below by UL, FMG, or another testing and inspecting agency acceptable to authorities having jurisdiction. Materials shall be identified with appropriate markings of applicable testing and inspecting agency. 1. Exterior Fire-Test Exposure: Class [A][B][C]; ASTM E 106, for application and roof slopes indicated.
- 1.4 WARRANTY A. Special Warranty: Manufacturer's standard form, without monetary limitation, in which manufacturer agrees to repair or replace components of membrane roofing system that fail in materials or workmanship within specified warranty period. Failure includes roof leaks. 1. Special warranty includes roofing membrane, base flashings, roofing membrane accessories, roof insulation, fasteners, walkway products, and other components of membrane roofing system. 2. Warranty Period: 15 years from date of Substantial Completion.

2.0 PRODUCTS

- 2.1 THERMOPLASTIC POLYOLEFIN ROOFING MEMBRANE A. Fabric-Reinforced Thermoplastic Polyolefin Sheet: Uniform, flexible sheet formed from a thermoplastic polyolefin, internally fabric or scrim reinforced, and as follows: 1. Manufacturers: a. Carlisle SynTec Incorporated. b. Firestone Building Products Company. c. GAF Materials Corporation. d. GenFlex Roofing Systems. e. Johns Manville International, Inc. f. Sarnafil, Inc. g. Stevens Roofing Systems; Div. of JPS Elastomers h. Versico Inc. 2. Thickness: 60 Mil, nominal. 3. Exposed Face Color: White. 4. SRI: 3 year aged (Solar Reflection Index) = 85 min. to comply with 2021 IECC.
- 2.2 AUXILIARY MATERIALS A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with membrane roofing. B. Bonding Adhesive: Manufacturer's standard solvent-based bonding adhesive for membrane, and solvent-based bonding adhesive for base flashing. C. Metal Termination Bars: Manufacturer's standard predrilled stainless-steel or aluminum bars, approximately 1 by 1/8 inch (25 by 3 mm) thick; with anchors. D. Metal Battens: Manufacturer's standard aluminum-zinc-alloy-coated or zinc-coated steel sheet, approximately 1 inch (25 mm) wide by 0.05 inch (1.3 mm) thick, prepunched. E. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening membrane to substrate, and acceptable to membrane roofing system manufacturer. F. Miscellaneous Accessories: Provide coverable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, termination grids, pour strips, and other accessories.

2.3 ROOF INSULATION

- A. Polyisocyanurate Board Insulation: ASTM C 1289, Type II, felt or glass-fiber mat facer on both major surfaces. 1. Manufacturers: a. AlliedSignal Inc. - Commercial Roofing Systems b. Apache Chemical Company. c. Atlas Roofing Corporation. d. Carlisle SynTec Incorporated. e. Celotex Corporation. f. Firestone Building Products Company. g. GAF Materials Corporation. h. GenFlex Roofing Systems. i. Hunter Panels, LLC. j. Johns Manville International, Inc. k. Koppers Industries. l. RMAX
- 2.4 INSULATION ACCESSORIES A. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening roof insulation to substrate, and acceptable to roofing system manufacturer. B. Cold Fluid-Applied Adhesive: Manufacturer's standard cold fluid-applied adhesive formulated to adhere roof insulation to substrate.
- 2.5 WALKWAYS A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, solid-rubber, slip-resistant, surface-textured walkway pads or rolls, approximately 3/16 inch thick, and acceptable to membrane roofing system manufacturer.

3.0 EXECUTION

- 3.1 SUBSTRATE BOARD INSTALLATION A. Install substrate board with long joints in continuous straight lines, perpendicular to roof slopes with end joints staggered between rows. Tightly butt substrate boards together.
- 3.2 INSULATION INSTALLATION A. Coordinate installing membrane roofing system components, so insulation is not exposed to precipitation or left exposed at the end of the workday. B. Comply with membrane roofing system manufacturer's written instructions for installing roof insulation. C. Install lapped insulation under area of roofing to conform to slopes indicated. D. Trim surface of insulation where necessary at roof drains so completed surface is flush and does not restrict flow of water. E. Mechanically Fastened Insulation: Install each layer of insulation and secure to deck using mechanical fasteners specifically designed and sized for fastening specified board-type roof insulation to deck type.
- 3.3 MECHANICALLY FASTENED ROOFING MEMBRANE INSTALLATION A. Install roofing membrane over area to receive roofing according to roofing system manufacturer's written instructions. Unroll roofing membrane and allow to relax before installing. 1. Install sheet according to ASTM D 5092. B. Mechanically or adhesively fasten roofing membrane securely at terminations, penetrations, and perimeter of roofing. C. Apply roofing membrane with side laps shingled with slope of roof deck where possible. D. Seams: Clean seam areas, overlap roofing membrane, and hot-air weld side and end laps of roofing membrane according to manufacturer's written instructions to ensure a watertight seam installation. 1. Repair tears, voids, and lapped seams in roofing membrane that does not meet requirements. E. In-Splice Attachment: Secure one edge of roofing membrane using fastening plates or metal battens centered within membrane splice and mechanically fasten roofing membrane to roof deck. Field-splice seam. F. Through-Membrane Attachment: Secure roofing membrane using fastening plates or metal battens and mechanically fasten roofing membrane to roof deck. Cover battens and fasteners with a continuous cover strip.

3.4 BASE FLASHING INSTALLATION

- A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer's written instructions. B. Apply solvent-based bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply bonding adhesive to seam area of flashing. C. Flash penetrations and field-formed inside and outside corners with sheet flashing. D. Clean seam areas and overlap and firmly roll sheet flashings into the adhesive. Weld side and end laps to ensure a watertight seam installation. E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.
- 3.5 WALKWAY INSTALLATION A. Flexible Walkways: Install walkway products in locations indicated. Heat weld to substrate or adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions.

3.6 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform roof tests and inspections and to prepare test reports. B. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion and submit report to Architect. 1. Notify Architect or Owner 48 hours in advance of date and time of inspection. C. Repair or remove and replace components of membrane roofing system where test results or inspections indicate that they do not comply with specified requirements.

SECTION 076200 - SHEET METAL FLASHING AND TRIM

1.0 GENERAL

- 1.1 SUMMARY A. This Section includes sheet metal flashing and trim in the following categories: 1. Exposed trim 2. Gravel stops 3. Fasciae 4. Copings 5. Metal Flashing
- 1.2 QUALITY ASSURANCE A. Installer Qualifications: Engage an experienced installer who has completed sheet metal flashing and trim work similar in material, design, and extent to that indicated for this Project and with a record of successful in-service performance.
- 1.3 PROJECT CONDITIONS A. Coordinate Work of this Section with interfacing and adjoining Work for proper sequencing of each installation. Ensure best possible weather resistance, durability of Work, and protection of materials and finishes.

2.0 PRODUCTS

- 2.1 METALS A. Galvanized Steel Sheet: ASTM A 526, G 90, commercial quality, or ASTM A 527, G 90, lock-forming quality, hot-dip galvanized steel sheet with 0.20 percent copper, mill phosphated where indicated for painting, not less than 0.036 inch thick, unless otherwise indicated. B. Cold-Coated Galvanized Steel Sheet: Zinc-coated, commercial-quality steel sheet conforming to ASTM A 755, G 90 coating designation, coil coated with high-performance fluoropolymer coating as specified in "Cold-Coated Galvanized Steel Sheet Finish" Article; not less than 0.0336 inch thick, unless otherwise indicated.
- 2.2 FABRICATION - GENERAL A. Sheet Metal Fabrication Standard: Fabricate sheet metal flashing and trim to comply with recommendations of SMACNA's Architectural sheet Metal Manual that apply to the design, dimensions, metal, and other characteristics of the item indicated. B. Comply with details shown to fabricate sheet metal flashing and trim that fit substrates and result in waterproof and weather-resistant performance once installed: Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal. C. Form exposed sheet metal Work that is without excessive curving, buckling, and tool marks and that is true to line and levels indicated; with exposed edges folded back to form hempan. D. Sealed Joints: Form nonpenetrating, but movable, joints in metal to accommodate elastic sealant to comply with SMACNA standards. E. Separate metal from noncompatible metal or corrosive substrates by coating concealed surfaces at locations of contact with asphalt mastic or other permanent separation as recommended by manufacturer. F. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of sheet metal exposed to public view. G. Fabricate cleats and attachment devices from same material as sheet metal component being anchored or from compatible, noncorrosive metal recommended by sheet metal manufacturer. H. Size: As recommended by SMACNA manual or sheet metal manufacturer for application but never less than thickness of metal being secured.

2.3 SHEET METAL FABRICATIONS

- A. Fabricate sheet metal items in thickness or weight needed to comply with performance requirements but not less than that listed below for each application and metal. B. Gutters with Girth up to 15 inches: Fabricate from the following material: 1. Aluminum: 0.0320 inch thick 2. Galvanized Steel: 0.0217 inch thick 3. Cold-Coated Galvanized Steel: 0.0217 inch thick C. Gutters with Girth 16 to 20 inches: Fabricate from the following material: 1. Aluminum: 0.040 inch thick 2. Galvanized Steel: 0.0276 inch thick 3. Cold-Coated Galvanized Steel: 0.0276 inch thick D. Downspouts: Fabricate from the following material: 1. Aluminum: 0.024 inch thick 2. Galvanized Steel: 0.0217 inch thick 3. Cold-Coated Galvanized Steel: 0.0217 inch thick E. Conductor Heads: Fabricate from the following material: 1. Aluminum: 0.0320 inch thick 2. Galvanized Steel: 0.0276 inch thick 3. Cold-Coated Galvanized Steel: 0.0276 inch thick F. Soffers: Fabricate from the following material: 1. Aluminum: 0.0320 inch thick 2. Galvanized Steel: 0.0276 inch thick 3. Cold-Coated Galvanized Steel: 0.0276 inch thick G. Exposed Trim, Gravel Stops, and Fasciae: Fabricate from the following material: 1. Aluminum: 0.050 inch thick 2. Galvanized Steel: 0.0276 inch thick 3. Cold-Coated Galvanized Steel: 0.0276 inch thick H. Copings: Fabricate from the following material: 1. Aluminum: 0.050 inch thick 2. Galvanized Steel: 0.0396 inch thick 3. Cold-Coated Galvanized Steel: 0.0396 inch thick

2.4 COIL-COATED GALVANIZED STEEL SHEET FINISH

- A. High-Performance Organic Coating Finish: Apply the following system by coil-coating process on galvanized steel sheet as recommended by coating manufacturers and applicator. B. Cold-Coated Steel Sheet Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to the following: 1. Atlas Aluminum Corporation. 2. IMI Systems Corporation. 3. Peterson Aluminum Corporation.

3.0 EXECUTION

- 3.1 INSTALLATION A. Unless otherwise indicated, install sheet metal flashing and trim to comply with performance requirements, manufacturer's installation instructions, and SMACNA's Architectural Sheet Metal Manual. Anchor units of Work securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated. Install Work with laps, joints, and seams that will be permanently watertight and weathertight. B. Expansion Provisions: Provide for thermal expansion of exposed sheet metal Work. Space movement joints at maximum of 10 feet with no joints allowed within 24 inches of corner or intersection. Where lapped or bayonet-type expansion provisions in Work cannot be used or would not be sufficiently weathertight and waterproof, form expansion joints of intermeshed hooked fasteners, not less than 1 inch deep, filled with mastic sealant (concealed within joints).
- 3.2 CLEANING AND PROTECTION A. Clean exposed metal surfaces, removing substances that might cause corrosion of metal or deterioration of finishes. B. Provide final protection and maintain conditions that ensure sheet metal flashing and trim Work during construction is without damage or deterioration other than natural weathering at the time of Substantial Completion.

SECTION 078413 - PENETRATION FIRESTOPPING

1.1 SECTION REQUIREMENTS

- A. Submittals: Product Data and Installer certificates signed by installer certifying that products have been installed in compliance with requirements
- 2.1 PENETRATION FIRESTOPPING A. Manufacturers: One of the following: 1. Grace Construction Products. 2. Hill, Inc. 3. Johns Manville. 4. Rector Seal Corporation. 5. Specified Technologies, Inc. 6. 3M Fire Protection Products. 7. Tremco, Inc.; Tremco Fire Protection Systems Group. 8. USG Corporation B. Provide penetration firestopping materials that are compatible with one another, substrates, and penetrating items, if any. C. Penetration in Fire-Resistance-Rated Walls and Horizontal Assemblies: Provide penetration firestopping with ratings determined per ASTM E 814 or UL 1479, based on testing at a positive pressure differential of 0.01-inch wg. 1. F-Rating at Fire-Resistance-Rated Walls: Not less than that of construction penetrated. 2. F-Rating at Horizontal Assemblies: At least 1 hour, but not less than that of construction penetrated. 3. T-Rating at Horizontal Assemblies: At least 1 hour, but not less than the fire-resistance rating of construction penetrated except for penetrations within the cavity of a wall. D. Penetration in Smoke Barriers: Provide penetration firestopping with ratings determined per UL 1479. 1. L-Rating: Not exceeding 5.0 cm³/sq. ft. of penetration opening at 0.30-inch wg at both ambient and elevated temperatures E. Exposed Penetration Firestopping: Provide products with flame-spread and smoke-developed index of less than 25 and 450, respectively, as determined per ASTM E 84. F. Accessories: Provide components for each penetration firestopping system that are needed to install fill materials and to maintain ratings required. Use only those components specified by penetration firestopping manufacturer and approved by qualified testing and inspecting agency.

3.1 INSTALLATION

- A. General: Install penetration firestopping to comply with manufacturer's written installation instruction and published drawings for products and applications indicated. B. Identify penetration firestopping with preprinted metal or plastic labels. Attach labels permanently to surfaces adjacent to and within 6 inches (150 mm) of firestopping edge so labels will be visible to anyone seeking to remove penetrating items or firestopping. Include the following information on labels: 1. The words "Warning - Penetration Firestopping - Do Not Disturb. Notify Building Management of Any Damage." 2. Designation of applicable testing and inspecting agency. 3. Manufacturer's name. 4. Installer's name.
- 3.2 PENETRATION FIRESTOPPING SCHEDULE A. Basis for schedule: 3M Fire Protection Products 1. Firestopping with No Penetrating Items: FS-1: 3-M FireDam 150 + Acrylic Latex Sealant with 3-M Fire Barrier Packing Material PM4 with Sealant with gaps larger than 1 inch. 2. Firestopping for Metallic, Nonmetallic Pipes, Conduit, or Tubing: FS-2: 3-M Fire Barrier IC 15WB+ Sealant. 3. Firestopping for Plastic Piping Penetrations: FS-3: 3-M Fire Barrier Ultra Plus Plastic Pipe - 1 1/2 Hour rated for piping larger than 1 1/2-inch diameter. 4. Firestopping for Grouping of Penetrants: FS-4: 3-M Fire Barrier Pass through Devices - Size as required or STI Firestop - EZ Path # EZDP133CAK with IS. 5. Refer to MPIE Drawings for additional penetration firestopplings.

SECTION 079010 - JOINT SEALANTS

1.0 GENERAL

- 1.1 SUMMARY A. This Section includes joint sealants for the following locations: 1. Control and expansion joints in cast-in-place concrete 2. Control and expansion joints in unit masonry 3. Joints between different materials listed above. 4. Perimeter joints between materials listed above and frames of doors and windows 5. Other joints as indicated.
- 1.2 SYSTEM PERFORMANCE REQUIREMENTS A. Provide elastic joint sealants that have been produced and installed to establish and to maintain watertight and airtight continuous seals without causing staining or deterioration of joint substrates.
- 1.3 SUBMITTALS A. Product data from manufacturers for each joint sealant product required. B. Samples for initial selection purposes in form of manufacturer's standard bead samples, consisting of strips of actual products showing full range of colors available, for each product exposed to view.
- 1.4 QUALITY ASSURANCE A. Installer Qualifications: Engage an experienced Installer who has completed joint sealant applications similar in material, design, and extent to that indicated for Project that have resulted in construction with a record of successful in-service performance. B. Single Source Responsibility for Joint Sealant Materials: Obtain joint sealant materials from a single manufacturer for each different product required.
- 1.5 DELIVERY, STORAGE, AND HANDLING A. Deliver materials to Project site in original unopened containers or bundles with labels indicating manufacturer, product name and designation, color, expiration period for use, pot life, curing time, and mixing instructions for multi-component materials. B. Store and handle materials in compliance with manufacturer's recommendations to prevent their deterioration or damage due to moisture, high or low temperatures, contaminants, or other causes.
- 1.6 PROJECT CONDITIONS A. Environmental Conditions: Do not proceed with installation of joint sealants under the following conditions: 1. When ambient and substrate temperature conditions are outside the limits permitted by joint sealant manufacturer 2. When joint substrates are wet

2.0 PRODUCTS

- 2.1 MATERIALS - GENERAL A. Compatibility: Provide joint sealants, joint fillers, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience. B. Colors: Provide color of exposed joint sealants to comply with the following: 1. Provide selections made by Architect from manufacturer's full range of standard colors for products of type indicated
- 2.2 LATEX JOINT SEALANTS A. Provide manufacturer's standard one-part, nonsag, midew-resistant, paintable latex sealant of formulation indicated that is recommended for exposed applications on interior and protected exterior locations and that accommodates indicated percentage change in joint width existing at time of installation without failing either adhesively or cohesively. B. Acrylic-Emulsion Sealant: Provide product complying with ASTM C 834 that accommodates joint movement of not more than 5 percent in both extension and compression for a total of 10 percent. C. Silicon Emulsion Sealant: Provide product complying with ASTM C 834 and, except for weight loss measured per ASTM C 792, with ASTM C 920 that accommodates joint movement of not more than 25 percent in both extension and compression for a total of 50 percent. D. Available Products: Subject to compliance with requirements, latex joint sealants that may be incorporated in the Work include, but are not limited to, the following: 1. Products: Subject to compliance with requirements, provide one of the following: a. Acrylic-Emulsion Sealant: i. Pecora Corp.: AC-20; ii. Sonneborn Building Products Div., ChemRex, Inc.: Sonolac; iii. Tremco, Inc.: Tremco Acrylic Latex 834. b. Silicon-Emulsion Sealant: i. Dow Corning Corp.: Trade Mate Paintable Glazing Sealant.

2.3 JOINT SEALANT BACKING

- A. Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing. B. Plastic Foam Joint Fillers: Preformed, compressible, resilient, nonstaining, nonextruding strips of flexible plastic foam of material indicated below and of size, shape, and density to control sealant depth and otherwise contribute to producing optimum sealant performance: 1. Open-cell polyurethane foam
- 3.0 EXECUTION 3.1 PREPARATION A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with recommendations of joint sealant manufacturer and the following requirements: 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, paints (except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer), old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost. 2. Clean concrete, masonry, unglazed surfaces of ceramic tile, and similar porous joint substrate surfaces by brushing, grinding, blasting, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealant. Remove loose particles remaining from above cleaning operation by vacuuming or blowing out joints with oil-free compressed air. 3. Remove lantance and form release agents from concrete. 4. Clean metal, glass, porcelain enamel, glazed surfaces of ceramic tile, and other nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.

3.2 INSTALLATION OF JOINT SEALANTS

- A. Comply with joint sealant manufacturer's printed installation instructions applicable to products and applications indicated, except where more stringent requirements apply. B. Sealant Installation Standard: Comply with recommendations of ASTM C 1193 for use of joint sealants as applicable to materials, application, and conditions indicated. C. Installation of Sealants: Install sealants by proven techniques that result in sealants directly contacting and fully wetting joint substrates, completely filling recesses provided for each joint configuration, and providing uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant form movement. Install sealants at the same time sealant backings are installed. D. Tooling of nonsag Sealants: Immediately after sealant application and prior to time skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated, to eliminate air pockets, and to ensure contact and adhesion of sealant with sides of joint. Remove excess sealant from surfaces adjacent to joint. Do not use tooling agents that discolor sealants or adjacent surfaces or are not approved by sealant manufacturer. E. Provide concrete joint configuration per Figure 5A in ASTM C 1193, unless otherwise indicated.
- 3.4 CLEANING A. Clean off excess sealants or sealant smears adjacent to joints as work progresses by methods and with cleaning materials approved by manufacturers of joint sealants and of products in which joints occur.

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FOR BIDDING ONLY. NOT FOR CONSTRUCTION.

Heartland Dental
1200 Newkirk Centre Drive
Effingham, IL 62401

WVG SHELL - CLERMONT FL
WVG # FL22-0695
FL Highway 501 WJ, Colonial Drive
Clermont, FL 34711

	1/24/24	BID SET
	11/15/23	PERMIT SET
mk	date	issue

SECTION 081100 - STEEL DOORS AND FRAMES

1.0 GENERAL
1.1 SUMMARY
A. This section includes steel doors and frames.
1.2 SUBMITTALS
A. Shop Drawings showing fabrication and installation of steel doors and frames.
1.3 QUALITY ASSURANCE
A. Provide doors and frames complying with ANSISDI 100 "Recommended Specifications for Standard Steel Doors and Frames" and as specified.
1.4 DELIVERY, STORAGE, AND HANDLING
A. Deliver doors and frames cardboard-wrapped or crated to provide protection during transit and job storage.
2.0 PRODUCTS
2.1 MANUFACTURERS
A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:
1. Steel Doors and Frames:
a. Amweld Building Products, Inc.
b. Ceco Door Products.
c. Pioneer Builders Products.
2.2 MATERIALS
A. Hot-Rolled Steel Sheets and Strip: Commercial-quality carbon steel, pickled and oiled, complying with ASTM A 569.
2.3 DOORS
A. Steel Doors: Provide 1-3/4-inch thick doors of materials and ANSISDI 100 grades and model specified below:
1. Exterior Doors: Grade II, heavy-duty, Model 2, seamless design, minimum 0.0516-inch thick galvanized steel sheet faces.
2.4 FRAMES
A. Provide metal frames for doors, transoms, sidelights, borrowed lights, and other openings, according to ANSISDI 100. Fabricate frames of minimum 0.0478-inch thick cold-rolled steel sheet.
2.5 FABRICATION
A. Exposed Fasteners: Unless otherwise indicated, provide countersunk flat or oval heads for exposed screws and bolts.
2.6 FINISHES, GENERAL
A. Apply primers and organic finishes to doors and frames after fabrication.

SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

1.0 GENERAL
1.1 SECTION REQUIREMENTS
A. Submittals: Product Data and Shop Drawings.
2.0 PRODUCTS
2.1 HOLLOW METAL DOORS AND FRAMES
A. Manufacturers: One of the following:
1. Amweld Building Products, LLC.
2. Ceco Door Products: an Assa Abloy Group Company.
3. Curries Company, an Assa Abloy Group Company.
4. Fleming Door Products, LLC: an Assa Abloy Group Company.
5. Kiewit Corporation (The).
6. Pioneer Industries, Inc.
7. Steelcraft, an Ingersoll-Rand company, or Owner-approved equal.
B. Fire-Rated Doors and Frames: Labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, based on testing at positive pressure according to NFPA 252 or UL 10C.
1. Where indicated, provide doors that have a temperature rise rating of 450 deg. F (250 deg. C).

SECTION 081113 - HOLLOW METAL DOORS AND FRAMES (continued)

C. Doors: Complying with SDI A250.8 for level and model and SDI A250.4 for physical-endurance level indicated, 1-3/4 inches (44 mm) thick unless otherwise indicated.
1. Interior Doors: Level 1 and Physical Performance Level C (Standard Duty), Model 1 (Full Flush).
2. Exterior Doors (when required): Level 2 and Physical Performance Level B (Heavy Duty) Model 2 (Seamless), metallic-coated steel sheet faces.
a. Thermal-Rated (Insulated) Doors: Where indicated, provide doors with thermal-resistance value (R-Value) of not less than 2.1 deg. F x h sq. ft./Btu (0.370 K x sq.m/W) when tested according to ASTM C 1363. Minimum U value 3/8 to comply with 2021 IECC.
3. Hardware Reinforcement: Fabricate according to ANSISDI A250.8 with reinforcement plates from same material as door face sheets.
D. Frames: ANSISDI A250.8; conceal fasteners unless otherwise indicated.
1. Steel Sheet for Interior Frames: 0.042-inch- (1.0-mm-) minimum thickness.
2. Steel Sheet for Exterior Frames: 0.053-inch- (1.3-mm-) minimum thickness, metallic coated.
3. Interior Frame Construction: Knocked down or Face welded, per door schedule.
4. Exterior Frame Construction: Face welded.
5. Hardware Reinforcement: Fabricate according to ANSISDI A250.6 with reinforcement plates from same material as frames.
6. Frame Anchors: Not less than 0.042 inch (1.0 mm) thick.
E. Door Silencers: Three on strike jambs of single-door frames and two on heads of double-door frames.
F. Groat Guards: Provide where mortar might obstruct hardware operations.
G. Prepare doors and frames to receive mortised and concealed hardware according to SDI A250.6 and BHMA A156.115.
H. Reinforce doors and frames to receive surface-applied hardware.
I. Prime Finish: Manufacturer's standard, factory-applied coat of lead- and chromate-free primer complying with SDI A250.10 acceptance criteria.
2.2 MATERIALS
A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, suitable for exposed applications.
B. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, free of scale pitting, or surface defects.
C. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, G60 (Z180) or A60 (ZF180).
D. Frame Anchors: ASTM A 879/A 879M, 4Z (12G) coating designation, mill phosphatized.
1. For anchors built into exterior walls, sheet steel complying with ASTM A 1008/A 1008M or ASTM A 1011/A 1011M, hot-dip galvanized according to ASTM A 153A 153M, Class B.
E. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153A 153M.

3.0 EXECUTION

3.1 INSTALLATION
A. Install hollow metal frames to comply with SDI A250.11.
1. Fire-Rated Frames: Install according to NFPA 80.
B. Install doors to provide clearances between doors and frames as indicated in SDI A250.11.
C. Prime-Coat Touchup: Immediately after erection, sand smooth, nodule or damaged areas of prime coat and apply touchup of comparable air-drying rust-inhibitive primer. Use galvanizing repair paint for metallic coated surfaces.

SECTION 084113 - ALUMINIUM-FRAMED ENTRANCES AND STOREFRONTS

1.0 GENERAL
1.1 SUMMARY
A. Section includes:
1. Exterior storefront framing.
2. Storefront framing for punched openings.
3. Exterior manual-swing entrance doors and door frame units.
1.2 ACTION SUBMITTALS
A. Product Data: For each type of product.
1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
B. Shop Drawings: For aluminum-framed entrances and storefronts, include plans, elevations, sections, full-size details, and attachments to other work.
1. Include details of provisions for assembly expansion and contraction and for draining moisture occurring within the assembly to the exterior.
2. Include full-size isometric details of each vertical-to-horizontal intersection of aluminum-framed entrances and storefronts, showing the following:
a. Joinery, including concealed welds;
b. Anchorage;
c. Expansion provisions;
d. Glazing;
e. Flushing and drainage.
3. Show connection to and continuity with adjacent thermal, weather, air, and vapor barriers.
C. Entrance Door Hardware Schedule: Prepared by or under supervision of supplier, detailing fabrication and assembly of entrance door hardware, as well as procedures and diagrams: Coordinate final entrance door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of entrance door hardware.

1.3 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.
B. Energy Performance Certificates: For aluminum-framed entrances and storefronts, accessories, and components, from manufacturer.
C. Product Test Reports: For aluminum-framed entrances and storefronts, for tests performed by manufacturer and witnessed by a qualified testing agency.
D. Sample Warranties: For special warranties.
1.4 QUALITY ASSURANCE
A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.
1.5 WARRANTY
A. Special Warranty: Manufacturer agrees to repair or replace components of aluminum-framed entrances and storefronts that do not comply with requirements that do fail in materials or workmanship within specified warranty period
1. Failures include, but are not limited to, the following:
a. Structural failures including, but not limited to, excessive deflection.
b. Noise or vibration created by wind and thermal and structural movements.
c. Water penetration through fixed glazing and framing areas.
d. Failure of operating components.
2. Warranty Period: 10 years from date of Substantial Completion.
a. Special Finish Warranty: Standard form in which manufacturer agrees to repair finishes or replace aluminum that shows evidence of deterioration of factor applied finishes within specified warranty period.
3. Deterioration includes, but is not limited to, the following:
a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
d. Warranty Period: 10 years from date of Substantial Completion.

2.0 PRODUCTS

2.1 MANUFACTURERS
A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
1. CMJ Architects.
2. EFCO Corporation.
3. Kiewit North America, an Alcoa company.
4. TRACO.
5. Wissalw Architectural Products.
6. YKAP America Inc.
B. Source Limitations: Obtain all components of aluminum-framed entrance and storefront system, including framing and accessories, from single manufacturer.
2.2 PERFORMANCE REQUIREMENTS
A. General Performance: Comply with performance requirements specified, as determined by testing of aluminum-framed entrances and storefronts representing those indicated for this Project without failure due to defective manufacture, fabrication, installation, or other defects in construction.
1. Aluminum-framed entrances and storefronts shall withstand movements of supporting structure including, but not limited to, story drift, twist, column shortening, long term creep, and deflection from uniformly distributed and concentrated live loads.
2. Failure also includes the following:
a. Thermal stresses transferring to building structure.
b. Glass breakage.
c. Noise or vibration created by wind and thermal and structural movements.
d. Loosening or weakening of fasteners, attachments, and other components.
e. Failure of operating units.

B. Structural Loads:

1. Design Wind Pressures: Determine design wind pressures applicable to Project according to ASCE/SEI 7, based on heights above grade indicated on Drawings:
a. Basic Wind Speed: 135 mph;
b. Importance Factor: 1.0;
c. Exposure Category: C.
2. Other Design Loads: As indicated on Drawings.
C. Deflection of Frame Members: At design wind pressure, as follows:
1. Deflection Normal to Wall Plane: Limited to edge of glass in a direction perpendicular to glass plane not exceeding 1/175 of the glass edge length for each individual glazing lite or an amount that restricts edge deflection of individual glazing lites to 3/4 inch, whichever is less.
2. Deflection Parallel to Glazing Plane: Limited to 1/360 of clear span or 1/8 inch, whichever is smaller.
D. Structural: Test according to ASTM E 530 as follows:
1. When tested at positive and negative wind-load design pressures, assemblies do not evidence deflection exceeding specified limits.
2. When tested at 150 percent of positive and negative wind-load design pressures, assemblies, including anchorage, do not evidence material failures, structural distortion, or permanent deformation of main framing members exceeding 0.2 percent of span.
3. Test Durations: As required by design wind velocity, but not less than 10 seconds.
E. Air Infiltration: Test according to ASTM E 283 for infiltration as follows:
1. Fixed Framing and Glass Area
a. Maximum air leakage of 0.06 cfm/sq. ft. at a static-air-pressure differential of 0.624 lbf/sq. ft.
2. Entrance Doors:
a. Pair of Doors: Maximum air leakage of 0.01 cfm/sq. ft. at a static-air-pressure differential of 1.57 lbf/sq. ft.
b. Single Doors: Maximum air leakage of 0.5 cfm/sq. ft. at a static-air-pressure differential of 1.57 lbf/sq. ft.
F. Water Penetration: Test according to ASTM E 331 as follows:
1. No evidence of water penetration through fixed glazing and framing areas when tested according to a minimum static-air-pressure differential of 20 percent of positive wind-load design pressure, but not less than 15 lbf/sq. ft.
2. Maximum Water Leakage: No uncontrolled water penetrating assemblies or water appearing on assemblies' normally exposed interior surfaces from sources other than condensation. Water leakage does not include water controlled by flashing and gutters, or water that is drained to exterior.
3. Seismic Performance: Aluminum-framed entrances and storefronts shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.1. Seismic Drift Causing Glass Failure: Complying with criteria for passing based on building occupancy type when tested according to AAMA 501.6 at design displacement and 1.5 times the design displacement.
H. Energy Performance: Certify and label energy performance according to NFRC as follows:
1. Thermal Transmittance (U-factor): Fixed glazing and framing areas shall have U-factor of not more than 0.30 Btu/sq. ft. x h x deg. F as determined according to NFRC 100.
2. Solar Heat Gain Coefficient: Fixed glazing and framing areas shall have a solar heat gain coefficient of no greater than 0.40 as determined according to NFRC 200.
3. Condensation Resistance: Fixed glazing and framing areas shall have an NFRC-certified condensation resistance rating of no less than 35 as determined according to NFRC 500.
I. Noise Reduction: Test according to ASTM E 89, with ratings determined by ASTM E 1332, as follows:
1. Outdoor-Indoor Transmission Class: Minimum 30.
J. Windborne-Debris Impact Resistance: Pass missile-impact and cyclonic-pressure tests when tested according to ASTM E 1886 and testing information in ASTM E 1996 for Wind Zone 4.
1. Large-Missile Test: Enhanced Protection E for glazed openings located within 30 feet of grade.

K. Thermal Movements: Allow for thermal movements resulting from ambient and surface temperature changes:

1. Temperature Change: 120 deg. F ambient; 180 deg. F material surfaces.
2. Thermal Cycling: No backing stress on glass; sealant fatigue, excess stress on framing, anchors, and fasteners; or reduction of performance when tested according to AAMA 501.5.
a. High Exterior Ambient-Air Temperature: That which produces an exterior metal-surface temperature of 180 deg. F.
b. Low Exterior Ambient-Air Temperature: 0 deg. F.
c. Interior Ambient-Air Temperature: 75 deg. F.
2.3 FRAMING
A. Framing Members: Manufacturer's extruded- or formed-aluminum framing members of thickness required and reinforced as required to support imposed loads.
1. Construction: Thermally broken.
2. Glazing System: Retained mechanically with gaskets on four sides.
3. Glazing Plane: Front.
4. Finish: Color anodic finish.
5. Fabrication Method: Field-fabricated stick system.
B. Backer Plates: Manufacturer's standard, continuous backer plates for framing members, if not integral, where framing abuts adjacent construction.
C. Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with non-staining, non-ferrous shims for aligning system components.
D. Materials:
1. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.
a. Sheet and Plate: ASTM B 209.
b. Extruded Bars, Rods, Profiles, and Tubes: ASTM B 221.
c. Extruded Structural Pipe and Tubes: ASTM B 429/B 429M.
d. Structural Profiles: ASTM B 308/B 308M.
2. Steel Reinforcement: Manufacturer's standard zinc-rich, corrosion-resistant primer complying with SSPC-PS Guide No. 12.00, applied immediately after surface preparation and pretreatment. Select surface preparation methods according to recommendations in SSPC-SP COM, and prepare surfaces according to applicable SSPC standard.
a. Structural Shapes, Plates and Bars: ASTM A 36/A 36M.
b. Cold-Rolled Sheet and Strip: ASTM A 1008/A 1008M.
c. Hot-Rolled Sheet and Strip: ASTM A 1011/A 1011M.

2.4 ENTRANCE DOOR SYSTEMS

A. Entrance Doors: Manufacturer's standard glazed entrance doors for manual-swing operation.
1. Door Construction: 2-inch overall thickness, with minimum 0.125-inch thick, extruded-aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deeply penetrated and filed welded or that incorporate concealed tie rods.
2. Door Design: Wide stile; 5-inch nominal width.
3. Glazing Stops and Gaskets: Beveled or square, snap-on, extruded-aluminum stops and preformed gaskets.
2.5 ENTRANCE DOOR HARDWARE
A. General: Provide entrance door hardware and entrance door hardware sets indicated in door and frame schedule for each entrance door to comply with requirements in this Section.
1. Entrance Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and products complying with BHMA standard referenced.
2. Sequence of Operation: Provide electrified door hardware function, sequence of operation, and interface with other building control systems indicated.
3. Opening-Force Requirements:
a. Egress Doors: Not more than 15 lb to release the latch, not more than 30 lb to set the door in motion and not more than 15 lb to open the door to its minimum required width.
b. Accessible Interior Doors: Not more than 5 lb to fully open door.
B. Designations: Requirements for design, grade, function, finish, size, and other distinctive qualities of each type of entrance door hardware are indicated in "Entrance Door Hardware Sets" Article. Products are identified by using entrance door hardware designations as follows:
1. Named Manufacturers' Products: Manufacturer and product designation are listed for each door hardware type required for the purpose of establishing minimum requirements. Manufacturers' names are abbreviated in "Entrance Door Hardware Sets" Article.
2. References to BHMA Standards: Provide products complying with these standards and requirements for description, quality, and function.

C. Pivot Hinges: BHMA A156.4, Grade 1.
1. Offset Pivot Hinges: Provide top, bottom, and intermediate offset pivots at each door leaf.
D. Butt Hinges: BHMA A156.1, Grade 1, radius corner.
1. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while entrance door is closed.
2. Exterior Hinges: Stainless steel, with stainless-steel pin.
3. Qualifier: For panic protection, based on testing according to UL 305.
a. For doors up to 87 inches high, provide three hinges per leaf.
b. For doors more than 87 and up to 120 inches high, provide four hinges per leaf.
E. Mortise Auxiliary Locks: BHMA A156.5, Grade 1.
F. Automatic and Self-Latching Flush Bolts: BHMA A156.3, Grade 1.
G. Panic Exit Devices: BHMA A156.3, Grade 1, listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for panic protection, based on testing according to UL 305.
H. Cylinders: BHMA A156.5, Grade 1.
1. Keying: Master key system. Permanently inscribe each key with a visual key control number and include notation to be furnished by Owner.
I. Strikes: Provide strike with black-plastic dust box for each latch or lock bolt; fabricated for aluminum framing.
J. Operating Trim: BHMA A156.6.
K. Closers: BHMA A156.4, Grade 1, with accessories required for a complete installation, sized as required by door size, exposure to weather, and anticipated frequency of use; adjustable to comply with field conditions and requirements for opening force.
L. Concealed Overhead Holders: BHMA A156.8, Grade 1.
M. Door Stops: BHMA A156.16, Grade 1, floor or wall mounted, as appropriate for door location indicated, with integral rubber bumper.
N. Weather Stripping: Manufacturer's standard replaceable components.
1. Compression Type: Made of ASTM D 2000, molded neoprene, or ASTM D 2287, molded PVC.
2. Sliding Type: AAMA 701/02, made of wool, polypropylene, or nylon woven pile with nylon-fabric or aluminum-strip backing.
O. Weather Sweeps: Manufacturer's standard exterior-door bottom sweep with concealed fasteners on mounting strip.
P. Silencers: BHMA A156.16, Grade 1.
Q. Thresholds: BHMA A156.21, standard thresholds beveled with a slope of not more than 1:2, with maximum height of 1/4 inch.

2.6 GLAZING

A. Glazing: Comply with Section 088000 "Glazing".
2.7 ACCESSORIES
A. Fasteners and Accessories: Manufacturer's standard corrosion-resistant, non-staining, non-bleeding fasteners and accessories compatible with adjoining materials and recommended by manufacturer.
1. Use self-locking devices where fasteners are subject to loosening or turning out from thermal and structural movements, wind loads, or vibration.
2. Reinforce members as required to receive fastener threads.
B. Anchors: Three-way adjustable anchors with minimum adjustment of 1 inch that accommodate fabrication and installation tolerances in material and finish compatible with adjoining materials and recommended by manufacturer.
C. Concealed Flashing: Manufacturer's standard corrosion-resistant, non-staining, non-bleeding flashing compatible with adjacent materials.
D. Bituminous Paint: Cold-applied asphalt-mastic paint complying with SSPC-Paint 12 requirements except containing no asbestos, formulated for 30-mil thickness per coat.
2.8 FABRICATION
A. Form or extrude aluminum shapes before finishing.
B. Weld in concealed locations to greatest extent possible to minimize distortion or discoloration of finish. Remove weld spatter and welding oxides from exposed surfaces by descaling or grinding.
C. Fabricate components that, when assembled, have the following characteristics:
1. Profiles that are sharp, straight, and free of defects or deformations.
2. Physical and thermal isolation of glazing from framing members.
3. Accommodations for thermal and mechanical movements of glazing and framing to maintain required glazing edge clearances.
4. Provisions for field replacement of glazing from exterior.
5. Fasteners, anchors, and connection devices that are concealed from view to greatest extent possible.
D. Entrance Door Frames: Reinforce as required to support loads imposed by door operation and for installing entrance door hardware.
1. At exterior doors, provide compression weather stripping at fixed stops.
E. Entrance Doors: Reinforce doors as required for installing entrance door hardware.
1. At pairs of exterior doors, provide sliding-type weather stripping retained in adjustable strip and mortised into door edge.
2. At exterior doors, provide weather sweeps applied to door bottoms.
F. Entrance Door Hardware Installation: Factory install entrance door hardware to the greatest extent possible. Cut, drill, and tap for factory-installed entrance door hardware before applying finishes.
G. After fabrication, mark components to identify their locations in Project according to Shop Drawings.

2.9 ALUMINUM FINISHES

A. Color Anodic Finish: AAMA 611, AA-M1C22A42/A44, Class I, 0.018 mm or thicker.
1. Color: Black.
3.0 EXECUTION
3.1 EXAMINATION
A. Examine areas, with installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
B. Proceed with installation only after unsatisfactory conditions have been corrected.
3.2 INSTALLATION
A. General:
1. Comply with manufacturer's written instructions.
2. Do not install damaged components.
3. Fit joints to produce hairline joints free of burrs and distortion.
4. Rigidly secure non-movement joints.
5. Install anchors with separators and isolators to prevent metal corrosion and electrolytic deterioration and to prevent impeding movement of moving joints.
6. Seal perimeter and other joints watertight unless otherwise indicated.
B. Metal Protection:
1. Where aluminum is in contact with dissimilar metals, protect against galvanic action by painting contact surfaces with materials recommended by manufacturer for this purpose or by installing nonconductive spacers.
2. Where aluminum is in contact with concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.
C. Set continuous sill members and flashing in full sealant bed as specified in Section 079200 "Joint Sealants" to produce weathertight installation.
D. Install components plumb and true in alignment with established lines and grades.
E. Install glazing as specified in Section 088000 "Glazing".
1. Field-Installed Entrance Door Hardware: Install surface-mounted entrance door hardware according to entrance door hardware manufacturers' written instructions using concealed fasteners to greatest extent possible.

3.3 ERECTION TOLERANCES

A. Erection Tolerances: Install aluminum-framed entrances and storefronts to comply with the following maximum tolerances:
1. Plumb: 1/8 inch in 10 feet, 1/4 inch in 40 feet.
2. Level: 1/8 inch in 20 feet, 1/4 inch in 40 feet.
3. Alignment:
a. Where surfaces abut in line or are separated by reveal or protruding element up to 1/2 inch wide, limit offset from true alignment to 1/16 inch.
b. Where surfaces are separated by reveal or protruding element from 1/2 to 1 inch wide, limit offset from true alignment to 1/8 inch.
c. Where surfaces are separated by reveal or protruding element of 1 inch wide or more, limit offset from true alignment to 1/4 inch.
4. Location: Limit variation from plane to 1/8 inch in 12 feet; 1/2 inch over total length.
3.4 FIELD QUALITY CONTROL
A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
B. Field Quality-Control Testing: Perform the following test on representative areas of aluminum-framed entrances and storefronts.
1. Water-Spray Test: Before installation of interior finishes has begun, three areas designated by Architect shall be tested according to AAMA 501.2 and shall not evidence water penetration.
D. Prepare test and inspection reports.
3.5 MAINTENANCE SERVICE
A. Entrance Door Hardware:
1. Initial Maintenance Service: Beginning at Substantial Completion, provide six months' full maintenance by skilled employees of entrance door hardware installer, include quarterly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper entrance door hardware operation at rated speed and capacity. Use parts and supplies that are the same as those used in the manufacture and installation of original equipment.

SECTION 088000 - GLAZING

1.0 GENERAL
1.1 SUMMARY
A. Section includes:
1. Glass for windows, doors, and storefront framing.
2. Glazing sealants and accessories.
1.2 ACTION SUBMITTALS
A. Product Data: For each type of product.
B. Glass Samples: For each type of the following products; 12 inches square.
1. Insulated glazing units.
C. Glazing Accessory Samples: For sealants and colored spacers, in 12-inch lengths. Install sealant Samples between two strips of material representative in color of the adjoining framing system.
1.3 INFORMATIONAL SUBMITTALS
A. Qualification Data: For installer and manufacturers of insulating-glass units with spouter-coated, low-E coatings.
B. Product Certificates: For glass.
C. Product Test Reports: For coated glass, insulating glass, and glazing sealants, for tests performed by a qualified testing agency.
1. For glazing sealants, provide test reports based on testing current sealant formulations within previous 36-month period.
D. Sample Warranties: For special warranties.
1.4 QUALITY ASSURANCE
A. Manufacturer Qualifications for Insulating-Glass Units with Sputter-Coated, Low-E Coatings: A qualified insulating-glass manufacturer who is approved and certified by coated-glass manufacturer.
B. Installer Qualifications: A qualified installer who employs glass installers for this Project who are certified under the National Glass Association's Certified Glass Installer Program.
1.5 DELIVERY, STORAGE, AND HANDLING
A. Protect glazing materials according to manufacturer's written instructions. Prevent damage to glass and glazing materials from condensation, temperature changes, direct exposure to sun, or other causes.
B. Comply with insulating-glass manufacturer's written instructions for venting and sealing units to avoid hermetic seal ruptures due to altitude change.
1.6 FIELD CONDITIONS
A. Environmental Limitations: Do not proceed with glazing when ambient and substrate temperature conditions are outside limits permitted by glazing material manufacturers and when glazing channel substrates are wet from rain, frost, condensation, or other causes.
1. Do not install glazing sealants when ambient and substrate temperature conditions are outside limits permitted by sealant manufacturer or are below 40 deg. F.
1.7 WARRANTY
A. Manufacturer's Special Warranty for Coated-Glass Products: Manufacturer agrees to replace coated-glass units that deteriorate within specified warranty period. Deterioration of coated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in coating.
1. Warranty Period: 10 years from date of Substantial Completion.
B. Manufacturer's Special Warranty for Laminated Glass: Manufacturer agrees to replace laminated-glass units that deteriorate within specified warranty period. Deterioration of laminated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.
1. Warranty Period: 10 years from date of Substantial Completion.
C. Manufacturer's Special Warranty for Insulating Glass: Manufacturer agrees to replace insulating-glass units that deteriorate within specified warranty period. Deterioration of insulating glass is defined as failure of hermetic seal under normal use that is not attributed to glass breakage or to maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.
1. Warranty Period: 10 years from date of Substantial Completion.

2.0 PRODUCTS

2.1 MANUFACTURERS
A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
1. AGC Glass Company North America, Inc.
2. Cardinal Glass Industries.
3. Guardian Industries Corp.; SunGuard;
4. Oldcastle BuildingEnvelope;
5. Pilkington North America;
6. PPG Industries, Inc.; PPG Flat Glass;
7. Vitron, Inc.
B. Source Limitations for Glass: Obtain from single source from single manufacturer for each glass type.
C. Source Limitations for Glazing Accessories: Obtain from single source from single manufacturer for each product and installation method.
2.2 PERFORMANCE REQUIREMENTS
A. General: Installed glazing systems shall withstand normal thermal movement and wind and impact loads (where applicable) without failure, including loss of glass breakage attributable to the following: defective manufacture, fabrication, or installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; or other defects in construction.
B. Structural Performance: Glazing shall withstand the following design loads within limits and under conditions indicated determined according to the IBC and ASTM E 1300.
1. Design Wind Pressures: Determine design wind pressures applicable to Project according to ASCE/SEI 7, based on heights above grade indicated on Drawings:
a. Basic Wind Speed: 150 mph.
b. Importance Factor: 1.0.
c. Exposure Category: D.
2. Maximum Lateral Deflection: For glass supported on all four edges, limit center-of-glass deflection at design wind pressure to not more than 1/50 times the short-side length or 1 inch, whichever is less.
3. Differential Shading: Design glass to resist thermal stresses induced by differential shading within individual glass lites.
C. Windborne Debris Impact Resistance: Exterior glazing shall comply with enhanced protection testing requirements in ASTM E 1996 for Wind Zone 4 when tested according to ASTM E 1886. Test specimens shall be no smaller in width and length than glazing indicated for use on Project and shall be installed in same manner as glazing indicated for use on Project.
1. Large-Missile Test: Enhanced Protection E for glazed openings located within 30 feet of grade.
D. Thermal and Optical Performance Properties: Provide glass with performance properties specified, as indicated in manufacturer's published test data based on procedures indicated below.
1. For insulating-glass units, properties are based on units of thickness indicated for overall unit and for each lite.
2. U-Factors: Center-of-glazing values, according to NFRC 100 and based on LBL's WINDOW 5.2 program, expressed as Btu/sq. ft. x h x deg. F.
3. Solar Heat-Gain Coefficient and Visible Transmittance: Center-of-glazing values, according to NFRC 200 and based on LBL's WINDOW 5.2 computer program.

2.3 GLASS PRODUCTS - GENERAL

A. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below unless more stringent requirements are indicated. See these publications for glazing terms not otherwise defined in this Section or in referenced standards.
1. GANA Publications: "Laminated Glazing Reference Manual" and "Glazing Manual"
2. IGMA Publication for Insulating Glass: SIGMA TM-3000, "North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial and Residential Use".
B. Insulating-Glass Certification Program: Permanently marked either on spacers or on at least one component lite of units with appropriate certification label of IGCC.
C. Thickness: Where glass thickness is indicated, it is a minimum. Provide glass that complies with performance requirements and is not less than the thickness indicated.
2.4 GLASS PRODUCTS
A. Fully Tempered Float Glass: ASTM C 1048, Kind FT (fully tempered), Condition A (uncoated) unless otherwise indicated, Type I, Class 1 (clear), Quality-Q3.
1. Fabrication Process: By horizontal (roller-hearth) process with roll-wave distortion parallel to bottom edge of glass as installed unless otherwise indicated.
B. LAMINATED GLASS
A. Windborne Debris Impact-Resistant Laminated Glass: Comply with requirements specified above for laminated glass except laminate glass with one of the following to comply with interlayer manufacturer's written instructions:
1. Polyvinyl butyral interlayer;
2. Polyvinyl butyral interlayers reinforced with polyethylene terephthalate film;
3. Ionomeric polymer interlayer;
4. Cast-in-place and cured-transparent-resin interlayer;
5. Cast-in-place and cured-transparent-resin interlayer reinforced with polyethylene terephthalate film.
2.6 INSULATING GLASS
A. Insulating-Glass Units: Factory-assembled units consisting of sealed lites of glass separated by a dehydrated interspace, qualified according to ASTM E 2190.
1. Sealing System: Dual seal, with manufacturer's standard and secondary sealants.
2. Perimeter Spacer: Manufacturer's standard spacer material and construction.
3. Desiccant: Molecular sieve or silica gel, or a blend of both.

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FOR BIDDING ONLY. NOT FOR CONSTRUCTION.

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1200 Newkirk Centre Drive
Effingham, IL 62401

WMG SHELL - CLERMONT FL
WMG # FL22-0695
FL Highway 501, WJ, Colonial Drive
Clermont, FL 34711

Table with columns for date and bid set status. Includes rows for 1/24/24 BID SET, 11/15/23 PERMIT SET, and mk date issue.

SPECIFICATIONS

A704

DRAWN BY JB CHECKED BY DR

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HEARTLAND DENTAL PROVIDED SPECIFICATIONS ON THESE SHEETS ARE FOR REFERENCE ONLY. SPECIFICATIONS REFERRED TO ARE NOT MEANT TO REPRESENT AN EXHAUSTIVE OR ALL ENCOMPASSING LIST OF THE PROJECT REQUIREMENTS. ALL SPECIFICATIONS SHALL BE COORDINATED WITH THE OWNER PRIOR TO START OF WORK.

SECTION 092500 - GLAZING (continued)

2.7 GLAZING SEALANTS
A. Glazing Sealant: Neutral-curing silicone glazing sealant complying with ASTM C 920, Type S, Grade NS, Class 50, Use NT.
1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:
a. BASF Corporation Construction Systems
b. Dow Corning Corporation
c. GE Construction Sealants: Momenive Performance Materials Inc.
d. May National Associates, Inc.; a subsidiary of Sika Corporation
e. Pecora Corporation
f. Polymeric Systems, Inc.
g. Sika Corporation
h. Tremco Incorporated

2.8 GLAZING TAPES
A. Back-Bedding Mastic Glazing Tapes: Preformed, butyl-based, 100 percent solids elastomeric tape; non-staining and non-migrating in contact with nonporous surfaces; with or without spacer rod as recommended in writing by tape and glass manufacturers for application indicated; and complying with ASTM C 1281 and AAMA 800 for products indicated below.
1. AAMA 806.3 tape, for glazing applications in which tape is subject to continuous pressure.
B. Expanded Cellular Glazing Tapes: Closed-cell, PVC foam tapes; factory coated with adhesive on both surfaces; and complying with AAMA 800 for the following types:
1. AAMA 810.1, Type 1, for glazing applications in which tape acts as the primary sealant.
2. AAMA 810.1, Type 2, for glazing applications in which tape is used in combination with a full bead of liquid sealant.

2.9 MISCELLANEOUS GLAZING MATERIALS
A. General: Provide products of material, size, and shape complying with referenced glazing standard, with requirements of manufacturers of glass and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
B. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.
C. Setting Blocks: Elastomeric material with a Shore, Type A durometer hardness of 85, plus or minus 5.
D. Spacers: Elastomeric blocks or continuous extrusions of hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
E. Edge Blocks: Elastomeric material of hardness needed to limit glass lateral movement (side walking).
F. Cylindrical Glazing Sealant Backing: ASTM C 1330, Type O (open-cell material), of size and density to control glazing sealant depth and otherwise produce optimum glazing sealant performance.

2.10 FABRICATION OF GLAZING UNITS
A. Fabricate glazing units in sizes required to fit openings indicated for Project, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance requirements.
1. Allow for thermal movements from ambient and surface temperature changes acting on glass framing members and glazing components.
a. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

3.0 EXECUTION
3.1 EXAMINATION
A. Examine framing, glazing channels, and stops, with Installer present, for compliance with the following:
1. Manufacturing and installation tolerances, including those for size, squareness, and offsets at corners.
2. Presence and functioning of weep systems.
3. Minimum required face and edge clearances.
4. Effective sealing between joints of glass-framing members.
B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION
A. Clean glazing channels and other framing members receiving glass immediately before glazing. Remove coatings not firmly bonded to substrates.
B. Examine glazing units to locate exterior and interior surfaces. Label or mark units as needed so that exterior and interior surfaces are readily identifiable. Do not use materials that leave visible marks in the completed Work.

3.3 GLAZING, GENERAL
A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.
B. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass includes glass with edge damage or other imperfections that, when installed, could weaken glass, impair performance, or impair appearance.

C. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction testing.
D. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compressible sealant suitable for bead bead.
E. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
F. Provide spacers for glass lites where length plus width is larger than 50 inches.

1. Locate spacers directly opposite each other on both inside and outside faces of glass. Install correct size and spacing to preserve required face clearances, unless gaskets and glazing tapes are used that have demonstrated ability to maintain required face clearances and to comply with system performance requirements.
2. Provide 1/8-inch minimum bite of spacers on glass and use thickness equal to sealant width. With glazing tape, use thickness slightly less than final compressed thickness of tape.

G. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.
H. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.
I. Set glass lites with proper orientation so that coatings face exterior or interior as specified.
J. Where wedge-shaped gaskets are driven into one side of channel to presuritize sealant or gasket on opposite side, provide adequate anchorage so gasket cannot walk out when installation is subjected to movement.
K. Square cut wedge-shaped gaskets at corners and install gaskets in a manner recommended by gasket manufacturer to prevent corners from pulling away; seal corner joints and butt joints with sealant recommended by gasket manufacturer.

3.4 CLEANING AND PROTECTION
A. Protect glass from contact with contaminating substances resulting from construction operations. Examine glass surfaces adjacent to or below exterior masonry surfaces at frequent intervals during construction, but not less than once a month, for buildup of dirt, scum, alkaline deposits, or stains.
1. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended in writing by glass manufacturer. Remove and replace glass that cannot be cleaned without damage to coatings.
B. Remove and replace glass that is damaged during construction period.
C. Wash glass on both exposed surfaces not more than four days before date scheduled for inspections that establish date of Substantial Completion. Wash glass as recommended in writing by glass manufacturer.

3.5 INSULATING LAMINATED GLASS SCHEDULE
A. Glass Type GL-1: Low-E-coated, clear insulating laminated glass.
1. Overall Unit Thickness: 1-3/16 inch.
2. Minimum Thickness of Outdoor Lite: 6 mm.
3. Outdoor Lite: Fully tempered clear float glass.
4. Interspace Content: Air.
5. Indoor Lite: Clear laminated glass with two plies of fully tempered float glass.
a. Minimum Thickness of Each Glass Ply: 6 mm.
b. Interlayer Thickness: 0.080 inch.
6. Low-E Coating: Pyrolytic or sputtered on second or third surface.
7. Winter Nighttime U-Factor: 0.30 maximum.
8. Summer Daytime U-Factor: 0.30 maximum.
9. Visible Light Transmittance: 60 percent minimum.
10. Solar Heat Gain Coefficient: 0.30 maximum.
11. Safety glazing required.

SECTION 092550 - GYPSUM BOARD ASSEMBLIES

1.1 GENERAL
1.2 SUMMARY
A. This Section includes the following:
1. Non-load bearing steel framing members for gypsum board assemblies.
2. Gypsum board assemblies attached to steel framing.
1.3 DELIVERY, STORAGE, AND HANDLING
A. Deliver materials in original packages, containers, or bundles bearing brand name and identification of manufacturer or supplier.
B. Store materials inside under cover and keep them dry and protected against damage from weather, direct sunlight, surface contamination, corrosion, construction traffic, and other causes. Neatly stack gypsum panels flat to prevent sagging.
C. Handle gypsum board to prevent damage to edges, ends, and surfaces. Do not bend or otherwise damage metal corner beads and trim.

1.4 PROJECT CONDITIONS
A. Environmental Conditions, General: Establish and maintain environmental conditions for applying and finishing gypsum board to comply with ASTM C 840 and with gypsum board manufacturer's recommendations.
B. Room Temperatures: For non-adhesive attachment of gypsum board to framing, maintain not less than 40 deg F. For adhesive attachment and finishing of gypsum board, maintain not less than 50 deg F for 48 hours prior to application and continuously after until dry. Do not exceed 95 deg F when using temporary heat sources.
C. Ventilation: Ventilate building spaces, as required, for drying joint treatment materials. Avoid drafts during hot dry weather to prevent finishing materials from drying too rapidly.

2.1 PRODUCTS
2.2 MANUFACTURERS
A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Steel Framing and Furring:
a. Clark Steel Framing
b. Consolidated Systems, Inc.
c. Dale Industries, Inc.
d. Dietrich Industries, Inc.
e. Marino Industries Corp.
f. Gold Bond Building Products Div., National Gypsum Co.
g. Unimast Inc.
2. Gypsum Board and Related Products:
a. Dornier Gypsum
b. Georgia-Pacific Corp.
c. Gold Bond Building Products Div., National Gypsum Co.
d. United States Gypsum Co.

2.3 FRAMING COMPONENTS
A. Provide components with the following characteristics:
1. Minimum Thickness of Base (Uncoated) Metal: 0.0179 inch, unless otherwise indicated.
2. Depth: Indicated.
3. Protective Coating: Manufacturer's standard corrosion-resistant coating.
4. Steel Studs and Runners: ASTM C 645, with flange edges bent back 90 deg and doubled over to form 3/16 inch minimum lip (return).
5. Component Sizes and Spacings: As indicated but not less than that required to comply with ASTM C 754 with a maximum deflection of L/120 at 5 lb per sq ft, lateral loading condition.
6. Suspended Framing: Provide components of sizes indicated but not less than that required to comply with ASTM C 754 for conditions indicated.
7. Wire for Hangers and Ties: ASTM A 641, Class 1 zinc coating, soft temper.
8. Steel Rigid Furring Channels: ASTM C 645, hat-shaped, depth of 7/8 inch, and minimum thickness of base (uncoated) metal as follows:
9. Fasteners for Metal Framing: Provide fasteners of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel framing and furring members securely to substrates involved; complying with the recommendations of gypsum board manufacturers for applications indicated.

SECTION 099000 - PAINTING AND COATING

1.0 GENERAL
1.1 SECTION REQUIREMENTS
A. Submittals:
1. Product Data: Include printout of MPI's "MPI Approved Products List" with product highlighted.
2. Samples.
B. Mockups: Full-coat finish Sample of each type of coating, color, and substrate, applied where directed.
C. Extra Materials: Deliver to Owner 1 gal. (3.8 L) of each color and type of finish coat paint used on Project, in containers, properly labeled and sealed.

2.0 PRODUCTS
2.1 PAINT
A. Manufacturers:
1. Benjamin Moore & Co.
2. Sherwin-Williams Company (The).
B. MPI Standards: Provide materials that comply with MPI standards indicated and listed in its "MPI Approved Products List".
1. Interior Painting Materials:
a. Primer Sealer, Latex: MPI #50
b. Primer Sealer, Institutional Low Odor/VOC, MPI #149
c. Primer, Latex, for Interior Wood: MPI #59
d. Primer, Glavanzed, Water Based: MPI #134
e. Latex, Interior, Semigloss, (Gloss Level 5): MPI #54
f. Latex, Institutional Low Odor/VOC, Semigloss (Gloss Level 5): MPI #147
g. Latex, High Performance Architectural, Semigloss (Gloss Level 5): MPI #141
h. Alkyd, Interior, Semigloss (Gloss Level 5): MPI #47
i. Alkyd, Quick Dry, Semigloss (Gloss Level 5): MPI #61.
2. Staining and Clear Finishing Materials:
a. Wood Filler Paste: MPI #91
b. Alkyd, Sanding Sealer, Clear: MPI #102
c. Stain, Semitransparent, for Interior Wood: MPI #90
d. Varnish, Interior, Polyurethane, Oil-Modified, Satin (Gloss Level 4): MPI #57
e. Varnish, Interior, Polyurethane, Oil-Modified, Gloss (Gloss Level 6): MPI #56
f. Varnish, Polyurethane, Moisture-Cured, Gloss (Gloss Level 6): MPI #31
g. Varnish, Aliphatic Polyurethane, Two-Component (Gloss Level 6 or 7): MPI #78

C. Material Compatibility: Provide materials that are compatible with one another and with substrates.
1. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and one substrate indicated.
D. Use interior paints and coatings that comply with the following limits for VOC content:
1. Nonflat Paints, Coatings: 150 g/L
2. Dry-Fog Coatings: 400 g/L
3. Primers, Sealers, and Undercoaters: 200 g/L
4. Anticorrosive and Antirust Paints Applied to Ferrous Metals: 250 g/L
5. Clear Wood Finishes, Varnishes: 350 g/L
6. Clear Wood Finishes, Lacquers: 550 g/L
7. Stains: 250 g/L
E. Colors: As selected.

3.0 EXECUTION
3.1 PREPARATION
A. Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated.
B. Remove hardware, lighting fixtures, and similar items that are not to be painted. Mask items that cannot be removed. Reinstall items in each area after painting is complete.
C. Clean and prepare surface in an area before beginning painting in that area. Schedule painting so cleaning operations will not damage newly painted surfaces.

3.2 APPLICATION
A. Comply with recommendations in MPI's "MPI Architectural Painting Specification Manual" applicable to substrates indicated.
B. Paint exposed surfaces, new and existing, unless otherwise indicated.
1. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces.
2. Paint surfaces behind permanently fixed equipment or furniture with prime coat only.
3. Paint the back side of access panels.
4. Color-code mechanical piping in accessible ceiling spaces.
5. Do not paint prefinished items, items with an integral finish, operating parts, and labels unless otherwise indicated.
C. Apply paints according to manufacturer's written instruction.
1. Use brushes only for exterior painting and where the use of other applicators is not practical.
2. Use rollers for finish coat on interior walls and ceilings.
D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections, cut in sharp lines and color breaks.
1. If undercoats or other conditions show through topcoat, apply additional coats until cured fill has a uniform paint finish, color, and appearance.
E. Apply stains and transparent finishes to produce surface films without color irregularity, cloudiness, holidays, lap marks, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks. Use multiple coats to produce a smooth surface film of even luster.

3.3 INTERIOR PAINT APPLICATION SCHEDULE
A. Concrete Masonry Units:
1. Semigloss, Institutional Low-Odor/VOC Latex: Two coats over latex block filler: MPI INT 4.2E.
B. Steel:
1. Semigloss, Alkyd Enamel: Two coats over quick-drying alkyd primer: MPI INT 5.1E.
C. Galvanized Metal:
1. Semigloss, Institutional Low Odor/VOC Latex: One coat over waterborne galvanized-metal primer: MPI INT 5.3N.
D. Wood: Including non-stained architectural woodwork.
1. Semigloss, Institutional Low Odor/VOC Latex: Two coats over latex primer for wood: MPI INT 6.3V.
E. Gypsum Board:
1. Satin or Semigloss (verify with Owner) Institutional Low Odor/VOC Latex: Two Coats over low odor/VOC Tinted primer/sealer: MPI INT 9.2M
3.3 INTERIOR STAIN AND CLEAR FINISH APPLICATION SCHEDULE
A. Wood substrates, non-traffic surfaces, including wood trim, architectural woodwork, doors, windows, wood-based panel products.
1. Semitransparent Stain: Two coats: MPI INT 6.1G.
2. Semigloss of Gloss Alkyd Varnish over Stain: Two coats over sanding sealer and stain: MPI INT 6.1P.
3. Satin or Gloss Oil-Modified Polyurethane Varnish over Stain: Three coats over stain: MPI INT 6.1J.

SECTION 101400 - SIGNAGE

1.0 GENERAL
1.1 SECTION REQUIREMENTS
A. Submittals: Product Data, Shop Drawings, and Samples.
1.2 SIGNS, GENERAL
A. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Carriers Compliance Board's ADA/ABA Accessibility Guidelines and ICC A117.1.
2.0 PRODUCTS
2.1 PANEL SIGNS
A. Manufacturers: One of the following:
1. ASI Sign Systems, Inc.
2. Best Sign Systems, Inc.
3. Or approved equal.
B. Interior Panel Signs: Enamel-filled, reverse-engraved clear acrylic or Reverse silk-screened clear acrylic with opaque background with beveled edges and square or rounded corners.
1. Finishes and Colors: As selected from manufacturer's full range.
2. Tactile Characters: Characters and Grade 2 Braille raise 1/32 inch (0.8 mm) above surface with contrasting colors.
3. Provide signs for all rooms mounted on the wall beside the room door.

2.2 MATERIALS
A. Acrylic Sheet: ASTM D 4802, Category A-1 (cell-cast sheet), Type UVA (UV absorbing).
B. Plastic Laminate: High-pressure laminate engraving stock with face and core in contrasting colors.
3.0 EXECUTION
3.1 INSTALLATION
A. Locate signs where indicated or directed by Architect. Install signs level, plumb, and at heights indicated, with sign surfaces free from distortion and other defects in appearance.
B. Wall-Mounted Signs:
1. Two-Face Signs: Mount signs to smooth, non-porous surfaces, other than vinyl.
2. Mechanical Fasteners: Use non-removable mechanical fasteners placed through predrilled holes.

SECTION 104400 - FIRE PROTECTION SPECIALTIES

1.1 SECTION REQUIREMENTS
A. Submittals: Product Data.
2.1 FIRE EXTINGUISHERS AND BRACKETS
A. Portable Fire Extinguishers: NFPA 10, listed and labeled for the type, rating, and classification of extinguisher.
1. Manufacturers: One of the following:
a. Amerex Corporation
b. JLL Industries, Inc.; a division of Activar Construction Products Group.
c. Kidde Residential and Commercial Division; Subsidiary of Kidde PLC.
d. Larsen's Manufacturing Company.
2. Multipurpose Dry-Chemical Type: UL-rated 2-A-10-B-C, 5 lb nominal capacity, in enameled-steel container.
B. Mounting Brackets: Manufacturer's standard steel, designed to secure fire extinguisher to wall or structure, of size required for fire extinguishers indicated, with plated or baked-enamel finish.
3.1 INSTALLATION
A. Install Mounting brackets in locations indicated at 54 inches above finished floor to top of fire extinguisher or heights acceptable to authorities having jurisdiction.
B. Install fire extinguishers in mounting brackets where indicated.

SECTION 105300 - ANNEX COLORADO FLAT CANOPY

Part 1 General
1.1 Description of work
A. Work in this section includes furnishing and installation of extruded and/or formed aluminum overhead canopies, as furnished by AwneX Inc.
B. Related items and considerations:
1) Determine the method of wall connections, using either hanging brackets and rods, cantilever style brackets, or internal outriggers.
2) Flashing of various designs as required.
3) Determine wall construction, make-up, and thickness.
4) Ensure adequate wall construction to carry canopy loads as required.
5) Consider water drainage out of and away from canopy, with front located gutter drained via scupper, or rear located gutter drained via downspout supplied by AwneX or by others, as requested.
6) Consider any necessary removal or relocation of existing structures, obstructions or materials.
7) Lighting, wiring, and electrical diagrams, as required.
8) Canopy attachment hardware to match building and application.
9) Determine construction method, and materials to best match application and desired face height.
1.2 Quality Assurance
A. Products specified herein meet the established standard of quality required, as manufactured by AwneX Inc., Ball Ground, GA, 770-704-7140.
1.3 Field Measurement
A. Confirm dimension prior to shop drawings when possible or necessary.
B. If requested, supply manufacturer's standard literature and specifications for canopies.
B. Submit shop drawings showing structural component locations/positions, material dimensions, and details of construction and assembly.
1.4 Performance Requirements
A. Canopy must conform to local building codes.
B. Determine if specific load requirements have been established for canopies and if stamped calculations and drawings are required for location in which canopies to be installed.

1.5 Delivery, Storage, and Handling
A. Deliver and store all canopy components in protected areas until ready for installation.
1.6 References
A. American Architectural Manufacturers Association (AAMA)
1) 2603 Voluntary Specification: Performance Requirements and Test Procedures for Pigmented Organic Coatings on Architectural Extrusions and Panels.
B. American Society of Civil Engineers (ASCE) 7 - Minimum Design Loads for Buildings and Other Structures.
C. ASTM International (ASTM)
1) B-221 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles and Tubes.
2) D429 - Standard Specification for Aluminum-Alloy Extruded Pipe and Tube.
Part 2 Products
2.1 Manufacturer
A. AwneX Inc.
260 Valley St.
Ball Ground, Georgia
Phone: 770-704-7140
Fax: 770-704-7647

SECTION 105300 - ANNEX COLORADO FLAT CANOPY (Continued)

2.2 Materials
A. Rain pans shall be brake-formed sheets at 1/16" thickness (width varies), attached via #10 x 3/4" H.H. self-drilling screws.
B. Rear channel, at standard sizes of 8", 10", 12" shall be extruded aluminum alloy 6063-T5, at a nominal thickness of 1/8". If face size deviates from the standard sizes, rear channel, side and ace pieces shall be brake-formed sheet at 1/8" thickness.
C. Gutter members shall be brake-formed aluminum sheets at 1/8" thickness, or extruded aluminum, alloy 6063-T6 at a nominal thickness of 1/8".
D. Intermediate framing members (compression bars) shall be extruded aluminum, alloy 6063-T5, at a nominal thickness of 1/8".
E. Soffit support tubes shall be extruded aluminum, alloy 6063-T52, at a nominal thickness of 1/8".
F. Soffit trim angle shall be extruded aluminum, alloy 6063-T52, at a nominal thickness of 1/8".
G. Soffit shall be brake-formed aluminum sheets at 1/16" thickness.
H. Tie-back rods and exposed attachment brackets and hardware (as required) shall be powder coated.
I. Cantilever style brackets (as required) shall be welded aluminum flat bar, alloy 6061-T6511, 1 1/4" thickness.
J. Internal outriggers shall consist of minimum of 2" x 3" x 1/4" THK, carbon steel tube, welded to minimum 1/4" thickness steel plate.
K. End and face members for 8" flat, 8" open, and 10" open face configurations, shall be snap channel of extruded aluminum, alloy 6063-T5, at a nominal thickness of 1/8".
L. End and face members for 10", 12", 16" flat face configurations shall be extruded aluminum tube, alloy 6063-T52, at 1/8" thickness.
M. Faces that deviate from those specified in sections "K" and "L" shall be brake formed aluminum.
N. All aluminum sheet shall be alloy 3003-H14.
2.3 Facia shall be standard 8" flat face, 8" open channel face, or 10" open channel face, extruded aluminum, alloy 6063-T5 at a nominal thickness of 1/8". Elevation from these faces will require brake-formed or extruded aluminum pieces to be attached mechanically to the canopy frame.
2.4 Finishes
A. Standard Kynar finish shall conform with AAMA 2603 specifications. Color charts and samples are available upon request.
B. Optional finishes include standard and custom two-coat Kynar colors, wood-look "sublimated" finish, and wet paint.
2.5 Fabrication
A. All Colorado canopies are shipped in pre-assembled sections for ease of installation.
B. All connections shall be mechanically assembled, utilizing 410 stainless steel #10 and #14 size asteners with a minimum shear stress of 350 lb.
C. Concealed drainage. Water shall drain from covered surfaces into formed gutter located at the front for front drainage via scuppers, or the rear for round level discharge via one or more designated downspouts (as specified).

Part 3 Execution
3.1 Inspection
A. Confirm that surrounding area is ready for the canopy installation.
B. Installer shall confirm dimensions and elevations to be as shown on drawings provided by wneX Inc.
C. Erection shall be performed by a qualified installer of similar products and scheduled after all concrete, Masonry, and roofing in the area is completed.
3.2 Installation
A. Installation shall be performed in strict accordance with manufacturer's shop drawings. Particular attention should be given to protecting the finish during handling and installation.
3.3 After installation, entire system shall be cleaned, inspected, sealed, and left in a clean condition.

Mark S. Salopek, LLC

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Cleveland, OH 44113
Phone 330.572.2112

FOR BIDDING ONLY. NOT FOR CONSTRUCTION.

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Effingham, IL 62401

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WVG # FL22-0695
FL Highway 501 WJ, Colonial Drive
Clermont, FL 34711

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Table with 2 columns: Date, Description. Row: mk date issue

SPECIFICATIONS

A705

Table with 2 columns: Drawn By, Checked By. Row: JB, DR

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