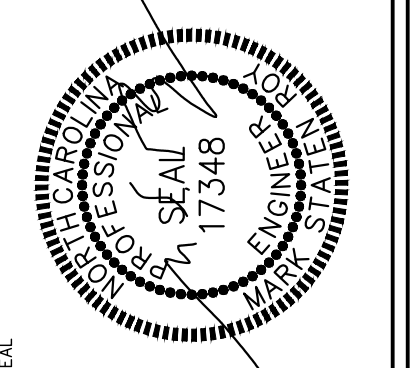


FOUNDATION PLAN
 1/16" = 1'-0"
 NORTH

- PLAN NOTES:**
1. FOR RETAINING WALL LOCATIONS AND OTHER INFORMATION, PLEASE SEE CIVIL DRAWINGS.
 2. FOOTING AND WALL WIDTHS VARY FROM WHAT IS SHOWN ON PLANS. SEE WALL SECTIONS FOR ACTUAL FOOTING DIMENSIONS.
 3. WALL AND FOOTING STEPS LOCATIONS INDICATED ARE APPROXIMATED. ADJUST AS REQUIRED PER ACTUAL SITE CONDITIONS AND CIVIL DRAWINGS.
 4. SEE S/S2.1 FOR STEPPED WALL FOOTING. TYP. U.N.O.
 5. T/W DENOTES TOP OF THE WALL.
 6. B/W DENOTES BOTTOM OF WALL/GRADE

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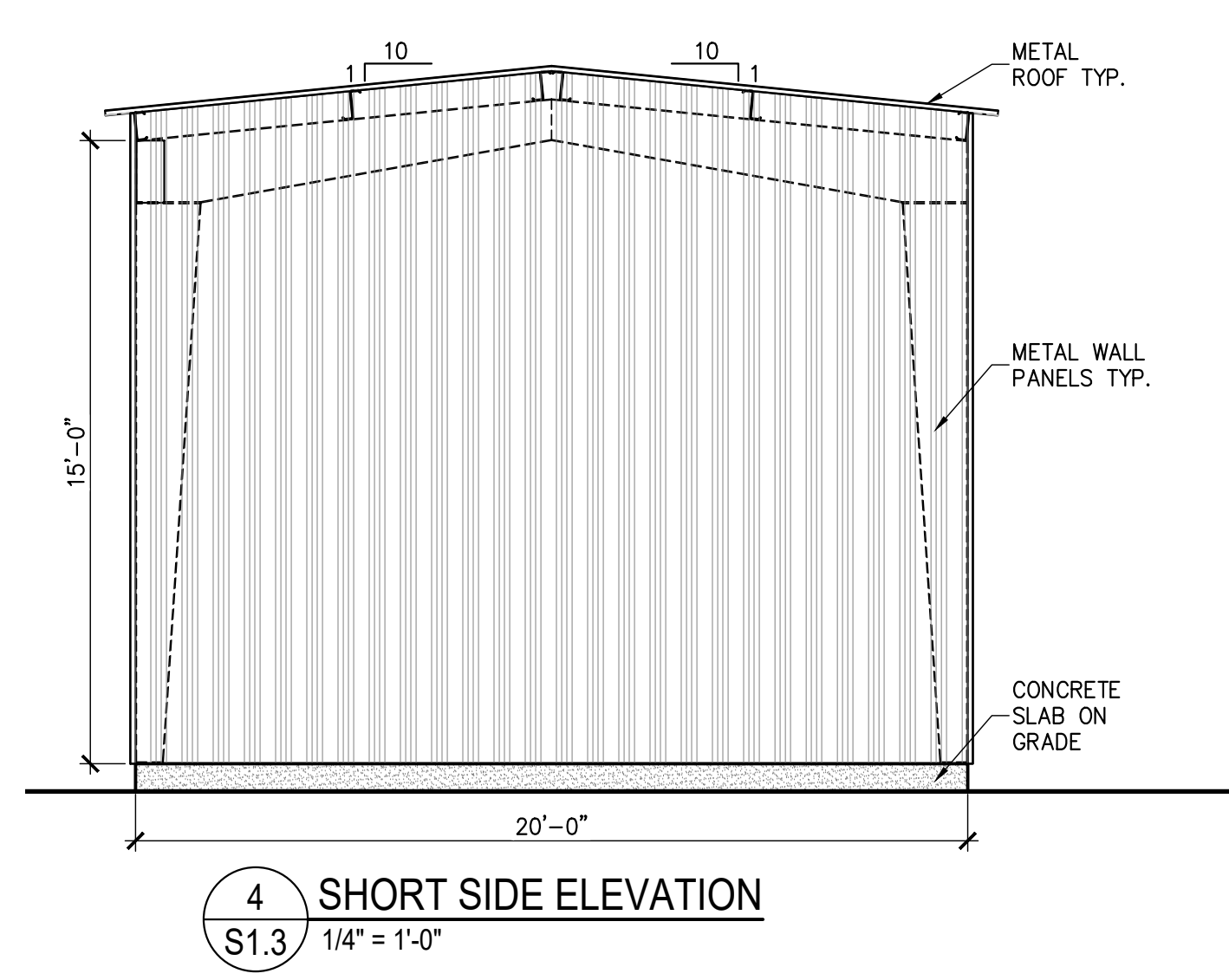
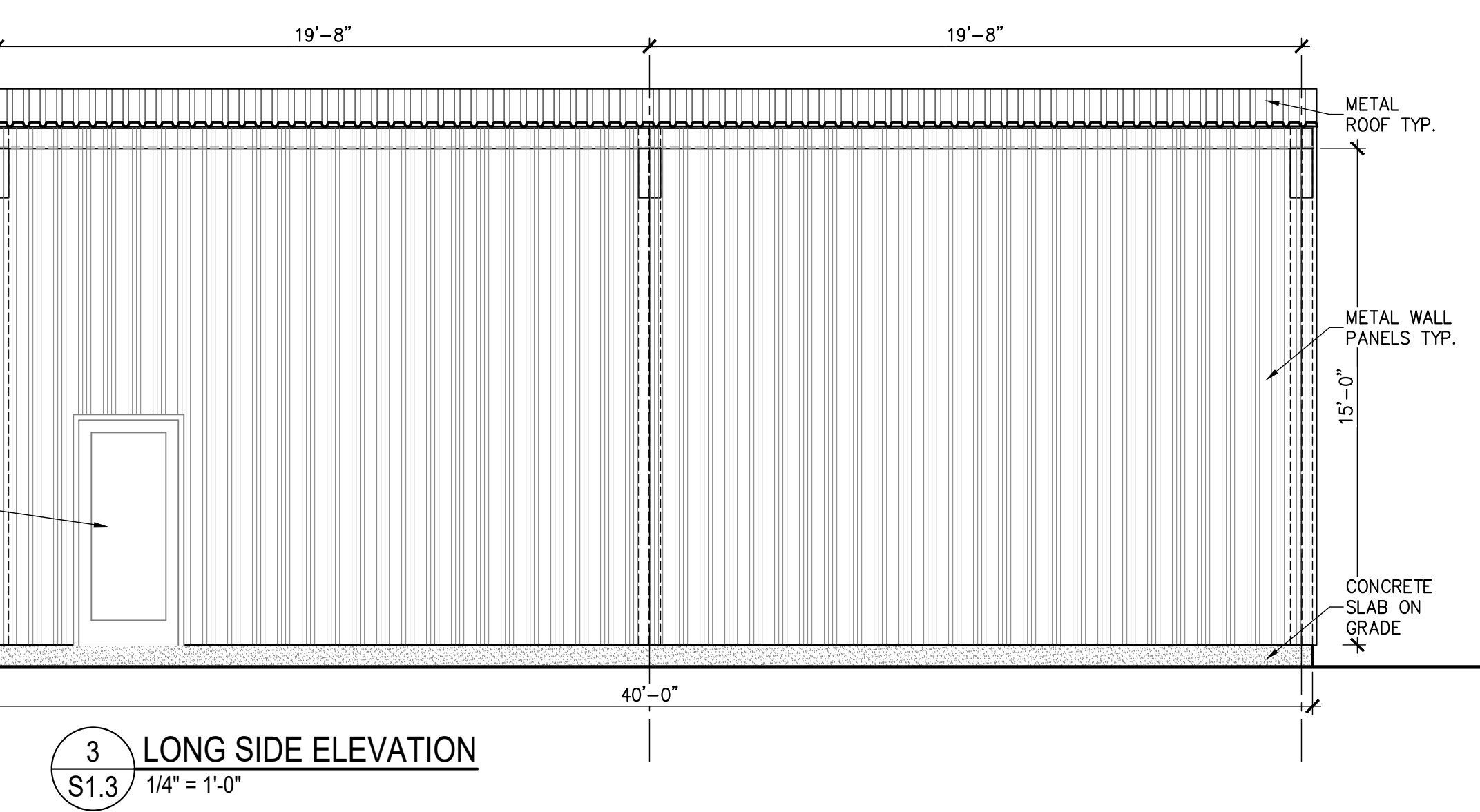
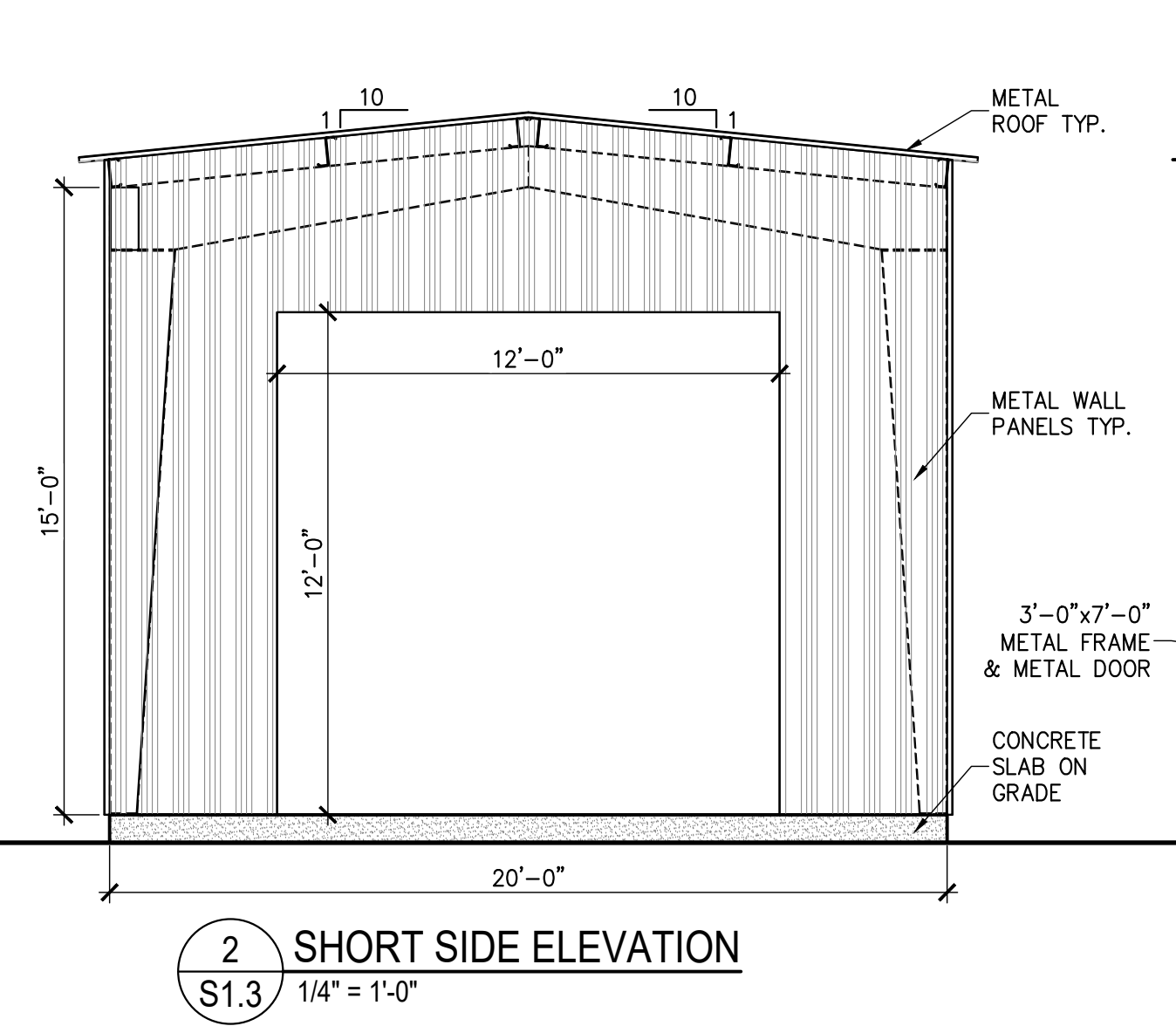
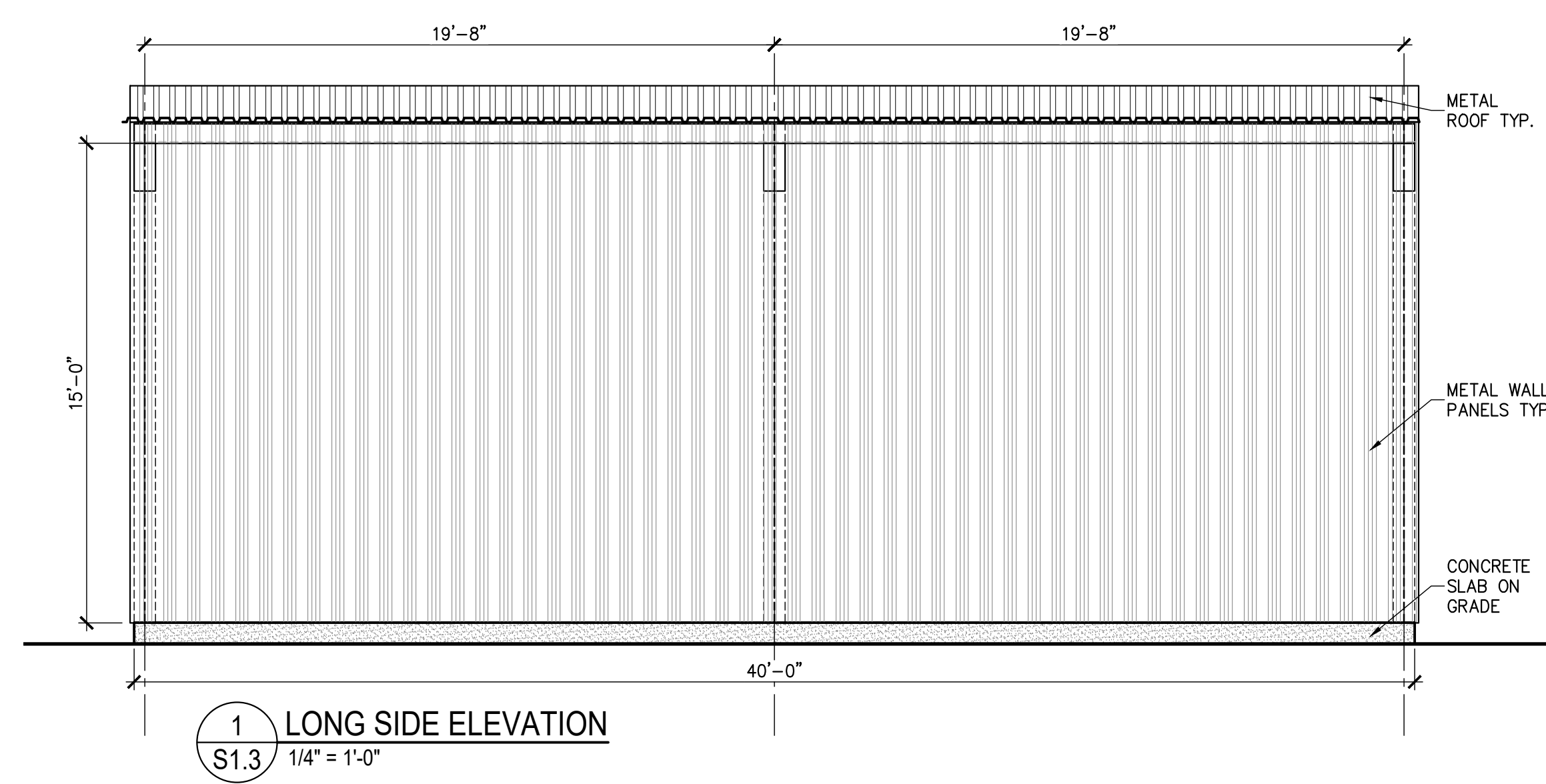
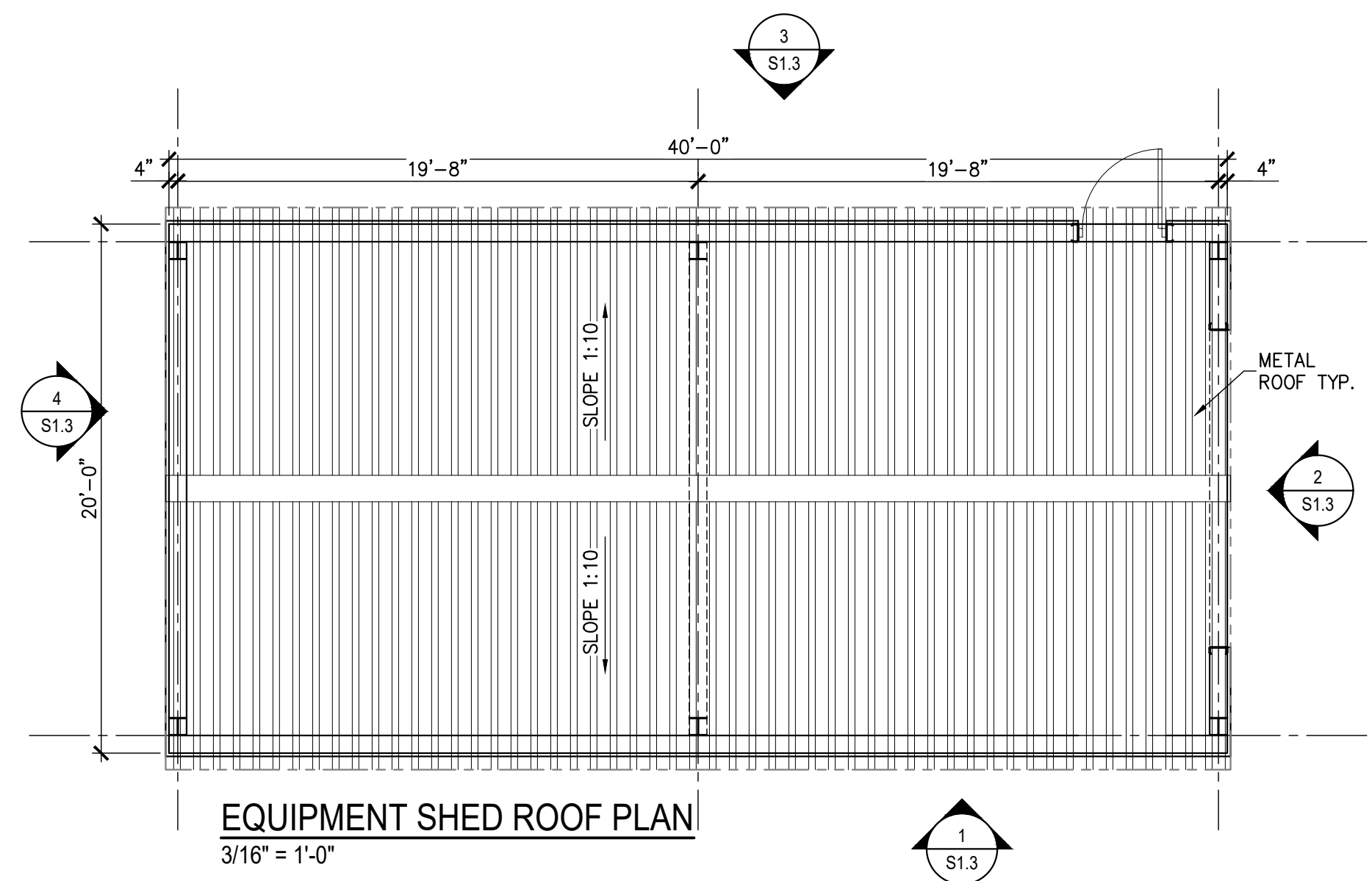
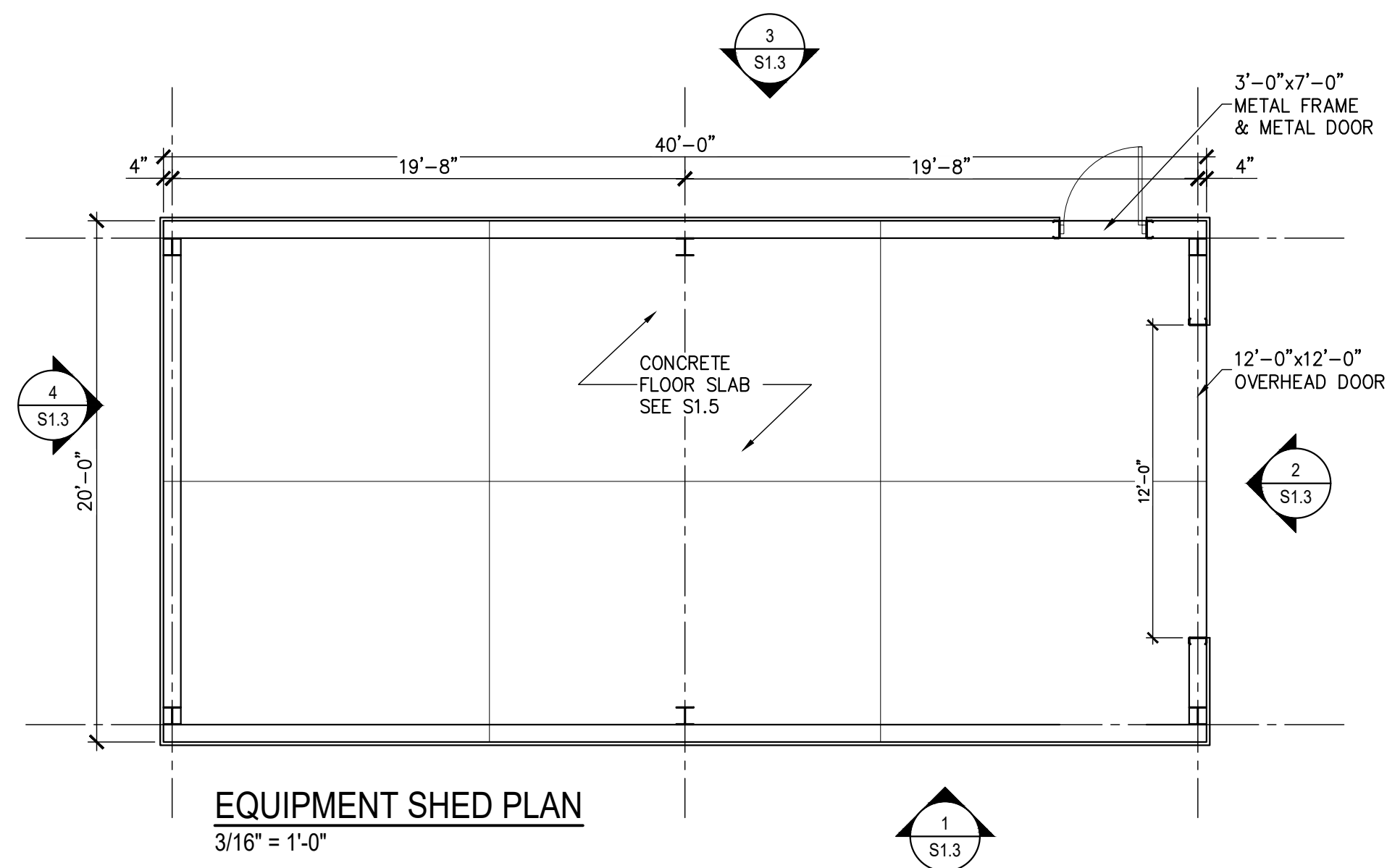
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DRAWING TITLE
RETAINING WALL PLAN

PROJECT NO.
2025162

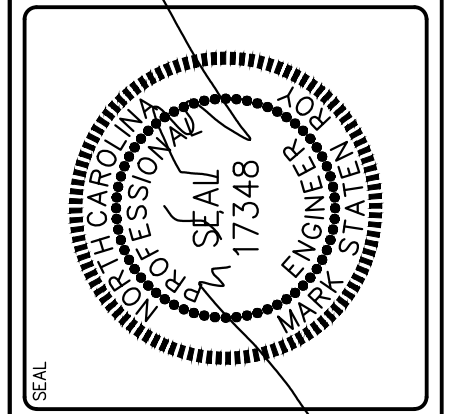
DATE
03.31.2026
 DRAWN: GBP, CHECKED: MSR, APPROVED: MSR

SHEET NO.
S1.1



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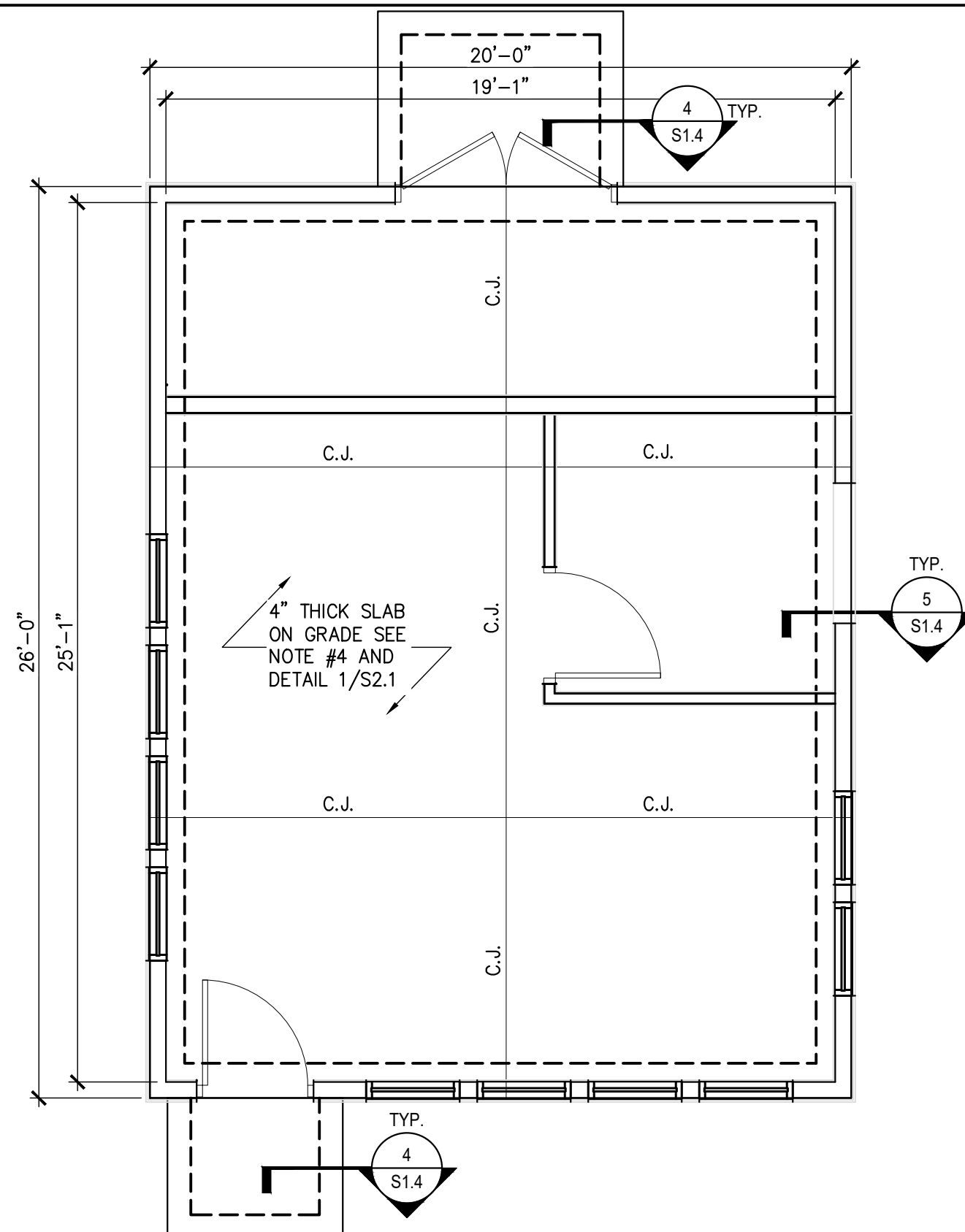
BEAUFORT COUNTY
 STILLEY STATION RD CONVENIENCE SITE
 STILLEY STATION RD
 BEAUFORT COUNTY, NC

DRAWING TITLE
 MATERIAL CANOPY AND CANOPY AT CUSTOMER AREA BUILDING PLANS

PROJ. NO.
 2025162

DATE
 03.31.2026
 DRAWN: GBP CHECKED: MSR APPROVED: MSR

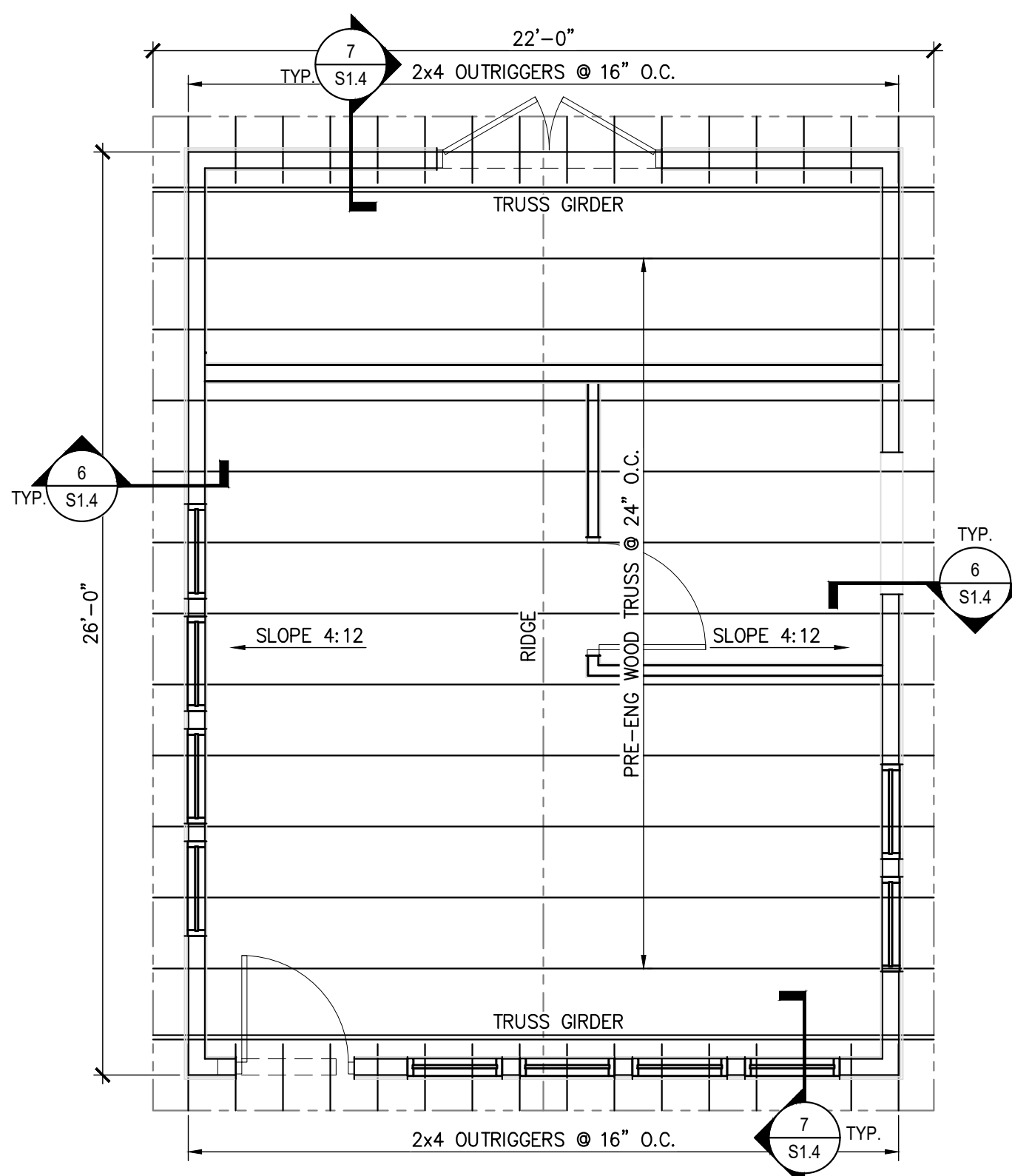
SHEET NO.
S1.3



ATTENDANT BUILDING FOUNDATION PLAN
1/4" = 1'-0"

FOUNDATION PLAN NOTES:

- SEE SHEET S4.1 FOR DESIGN CRITERIA, GENERAL STRUCTURAL NOTES AND SCHEDULES.
- ALL BUILDING DIMENSIONS ARE FROM FACE TO FACE OF STUD WALLS, U.N.O.
- SEE ARCH DWGS FOR ADDITIONAL DIMENSIONS, WALL OPENINGS, ETC.
- TOP OF SLAB REFERENCE ELEVATION = 0'-0" UNLESS OTHERWISE NOTED. SEE CIVIL DRAWINGS FOR ACTUAL SITE ELEVATIONS.
- CONCRETE FLOOR SLAB IS 4" THICK WITH 6 x 6 - W 2.1 x W 2.1 WELDED WIRE FABRIC, PROVIDE 10 MIL VAPOR BARRIER AND 4" COMPACTED GRANULAR BASE UNDER SLAB. SEE DETAIL 1/S1.4
- C.J. DENOTES DENOTES SLAB ON GRADE CONSTRUCTION OR SAWCUT CONTROL JOINT - SEE DETAILS 3/S1.4 AND 2/S1.4 FOR ADDITIONAL INFORMATION



ATTENDANT BUILDING ROOF FRAMING PLAN
1/4" = 1'-0"

ROOF FRAMING PLAN NOTES:

- SEE SHEET S4.1 FOR DESIGN CRITERIA, GENERAL STRUCTURAL NOTES AND SCHEDULES.
- ALL BUILDING DIMENSIONS ARE FROM FACE TO FACE OF STUD WALLS, U.N.O.
- SEE ARCH DWGS FOR ADDITIONAL DIMENSIONS, WALL OPENINGS, ETC.
- VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.
- TRUSS BEARING ELEVATION IS X'-X", ABOVE GROUND LEVEL SLAB. SEE ARCHITECTURAL/CIVIL DRAWINGS FOR ACTUAL FINISHED FLOOR ELEVATION.
- SEE MECHANICAL, PLUMBING DRAWINGS FOR OPENINGS LOCATIONS NOT SHOWN.

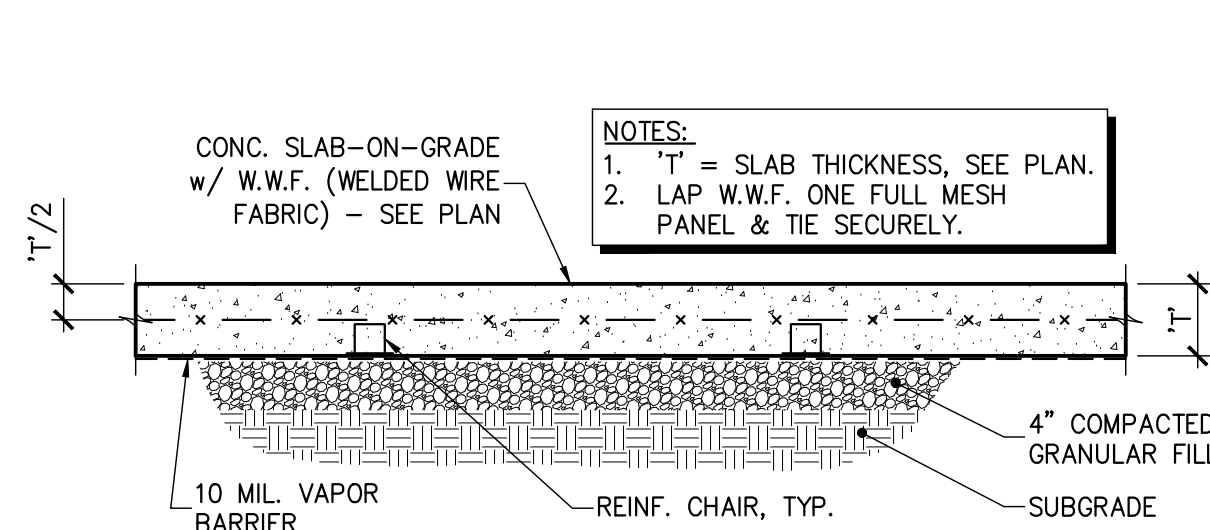
GENERAL STRUCTURAL NOTES:

- GENERAL NOTES**
 - METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.
 - THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR SLEEVES, CURBS, INSERTS OR OPENINGS NOT HEREIN INDICATED.
 - COORDINATE THESE DRAWINGS WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DRAWINGS.
 - VERIFY ALL FLOOR AND ROOF OPENING SIZES AND LOCATIONS, EQUIPMENT PAD SIZES AND LOCATIONS, ANCHOR BOLT LAYOUTS, ETCETERA, WITH EQUIPMENT SELECTED.
 - VERIFY BUILDING LOCATION AND ORIENTATION WITH OWNER AND LOT SETBACK REQUIREMENTS BEFORE ANY CONSTRUCTION IS STARTED ON THE PROJECT.
 - CONTRACTOR IS RESPONSIBLE FOR DESIGN AND INSTALLATION OF ALL SHORING REQUIRED TO SUPPORT NEW AND EXISTING STRUCTURAL ELEMENTS.
- FOUNDATION**
 - ALL FOOTINGS SHALL BE ON UNDISTURBED SOIL OR 98% COMPACTED FILL PER ASTM D698.
 - NO FOOTINGS OR SLABS SHALL BE POURED INTO OR AGAINST SUBGRADE CONTAINING FREE WATER, FROST, ICE OR LOOSE MATERIAL.
 - EXCAVATIONS FOR FOOTINGS SHALL HAVE THE SIDES AND BOTTOMS TEMPORARILY LINED WITH 6 MIL. POLYETHYLENE IF PLACEMENT OF CONCRETE DOES NOT OCCUR WITHIN 24 HRS OF THE EXCAVATION OF THE FOOTING.
 - ADVERSE FOUNDATION CONDITIONS NOTED DURING CONSTRUCTION SUCH AS SOFT SOILS, ORGANIC MATTER, ETCETERA, SHALL BE REPORTED TO THE ENGINEER BEFORE FURTHER CONSTRUCTION IS ATTEMPTED.
 - IF UNDERMINING OF FOOTINGS OCCURS, FILL VOIDS WITH LEAN CONCRETE MIX. DO NOT ATTEMPT TO REPLACE AND RECOMPACT SOIL.
- CONCRETE**
 - ALL PLACED CONCRETE, SHALL HAVE NORMAL WEIGHT COARSE AGGREGATES UNLESS OTHERWISE NOTED, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f_c) AT 28 DAYS AS SHOWN ON THE CONCRETE MATERIALS SCHEDULE.
 - GROUT FOR BASE PLATES SHALL BE NON-METALLIC, NON-SHRINKABLE GROUT, AND SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH, AT 28 DAYS, OF 5000 PSI.
 - NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.
 - CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH 3/4" x 45 DEGREE CHAMFER, UNLESS OTHERWISE NOTED.
 - HORIZONTAL FOOTING AND HORIZONTAL WALL REINFORCING SHALL BE CONTINUOUS, AND SHALL HAVE 90 DEGREE BENDS AND EXTENSIONS, OR CORNER BARS OF EQUIVALENT SIZE LAPPED, WITH A CLASS B TENSION SPLICE, AT CORNERS AND INTERSECTIONS. TOP BAR CRITERIA SHALL APPLY IF 12" OR MORE OF FRESH CONCRETE IS PLACED BELOW BAR.
 - SEE ARCHITECTURAL DRAWINGS FOR ALL WATERPROOFING / DAMPPROOFING DETAILS.
 - ALL DOWELS SHALL MATCH SIZE AND NUMBER OF MAIN REINFORCING, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - SEE ARCHITECTURAL DRAWINGS FOR TYPE AND LOCATION OF FLOOR FINISHES.
 - SEE MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DRAWINGS FOR ADDITIONAL WALL / SLAB OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
 - ALL REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60.
 - WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
 - DETAIL AND FABRICATE REINFORCING STEEL IN ACCORDANCE WITH THE ACI DETAILING MANUAL.
 - IN-PLACE REINFORCING STEEL, SHALL BE REVIEWED BY THE ENGINEER PRIOR TO PLACEMENT OF CONCRETE.
 - AT CORNERS AND INTERSECTIONS, PROVIDE BARS OF THE SAME NUMBER AND SIZE AS THE LONGITUDINAL BARS IN THE FOOTING.
 - CONCRETE MATERIALS SHALL BE AS FOLLOWS:
 - USE TYPE I/II PORTLAND CEMENT CONFORMING TO ASTM C150
 - AGGREGATE SHALL CONFORM TO ASTM C33 (FINE AND COURSE AGGREGATES)
 - AIR ENTRAINING ADMIXTURE SHALL CONFORM TO ASTM C260
 - PLASTICIZER CAN BE USED TO IMPROVE WORKABILITY IF REQUIRED
- PRE-ENGINEERED METAL BUILDINGS**
 - CONFIGURATION, COLUMN LOCATIONS, EAVE HEIGHTS, ROOF SLOPE, ETCETERA, SHALL BE AS SHOWN ON THE DRAWINGS. SHOULD BUILDING MANUFACTURER WISH TO FURNISH A SYSTEM THAT WILL DIFFER FROM THAT SHOWN, WRITTEN APPROVAL SHALL BE OBTAINED FROM THE ARCHITECT/ENGINEER OF RECORD PRIOR TO BIDDING.
 - BUILDING DESIGN AND LOAD APPLICATION SHALL CONFORM TO THE CURRENT NORTH CAROLINA STATE BUILDING CODE. THE COLLATERAL LOAD SHALL NOT BE USED TO REDUCE THE EFFECTS OF WIND LOADS ON THE BUILDING.

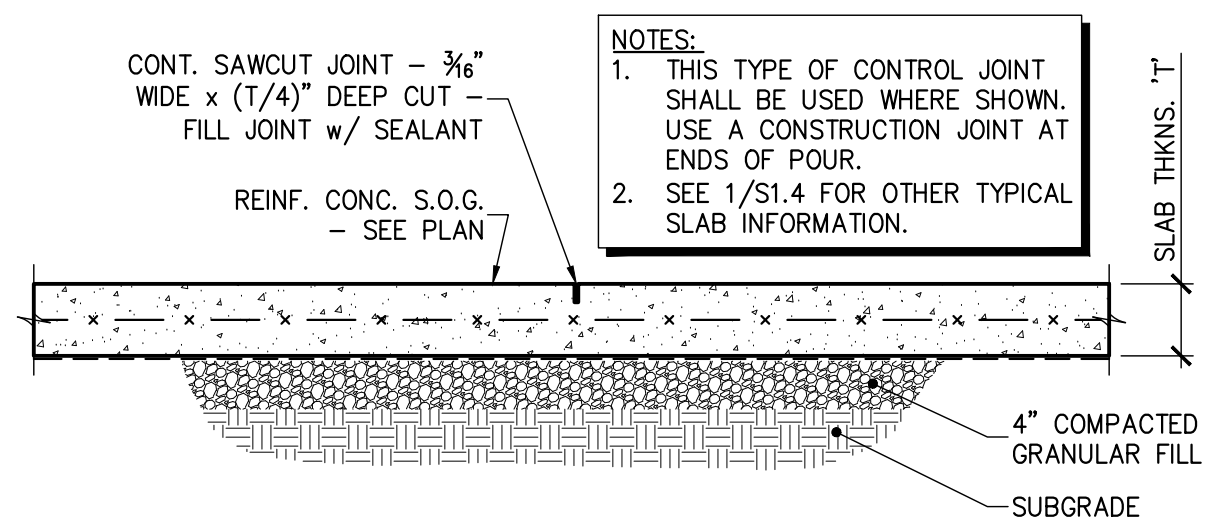
ROOF LIVE LOAD	20 PSF
COLLATERAL ROOF DEAD LOAD	10 PSF
WIND LOAD	70 MPH
EXPOSURE	C
IMPORTANCE FACTOR	1.0

 REFER TO THE "GENERAL" SECTION OF THE STRUCTURAL NOTES FOR ADDITIONAL LOADING INFORMATION.
 - THE METAL BUILDING FRAMES SHALL BE DESIGNED SUCH THAT THE MAXIMUM HORIZONTAL DRIFT DUE TO WIND AND SEISMIC LOADING SHALL SATISFY AN H / 180 CRITERIA. THE MAXIMUM VERTICAL DEFLECTION OF PRIMARY AND SECONDARY FRAMING MEMBERS SHALL BE WITHIN THE TOLERANCES PROSCRIBED BY THE NC STATE BUILDING CODE. MANUFACTURER SHALL VERIFY THAT THE DEFLECTION CRITERIA ARE COMPATIBLE WITH EXTERIOR AND INTERIOR FINISHES SUPPORTED BY THE METAL BUILDING STRUCTURE.
 - THE FOOTING DESIGN IS BASED UPON AN ASSUMED LOADING OF THE METAL BUILDING SUPER-STRUCTURE. THE FOUNDATIONS SHALL NOT BE CONSTRUCTED UNTIL THE STRUCTURAL ENGINEER HAS REVIEWED THE ACTUAL DESIGN REACTIONS SUPPLIED BY THE MANUFACTURER.
- WOOD FRAMING**
 - ALL STRUCTURAL WOOD MEMBERS SHALL BE No. 2 SOUTHERN YELLOW PINE, 19% MAXIMUM MOISTURE CONTENT, UNLESS OTHERWISE NOTED. INTERIOR NON BEARING PARTITIONS MAY BE No. 2 SPRUCE (SPF).
 - ALL WOOD FRAMING, DIRECTLY EXPOSED TO WEATHER, OR IN DIRECT CONTACT WITH MASONRY, SOIL OR CONCRETE, SHALL BE PRESSURE TREATED, UNLESS OTHERWISE NOTED.
 - ALL LVLS, DIRECTLY EXPOSED TO WEATHER, OR IN DIRECT CONTACT WITH MASONRY, SOIL OR CONCRETE, SHALL BE EXTERIOR GRADE, UNLESS NOTED OTHERWISE.
 - ALL METAL CONNECTORS SHALL BE HOT DIP GALVANIZED. INSTALL ALL CONNECTORS PER THE MANUFACTURER'S RECOMMENDATIONS. METAL CONNECTOR DESIGNATIONS INDICATED ON PLANS, ARE FOR 'SIMPSON STRONG-TIE' ANCHORS. ANCHORS FROM OTHER MANUFACTURERS MAY BE USED, PROVIDED THEY HAVE EQUIVALENT STRENGTH. ALL NAILED CONNECTIONS SHALL BE IN ACCORDANCE WITH NORTH CAROLINA STATE BUILDING CODE TABLE 2304.9.1 - FASTENING SCHEDULE, UNLESS OTHERWISE NOTED.
 - FRAMING CONNECTIONS THAT ARE BOLTED OR SCREWED, SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD.
 - PROVIDE STUDS AND HEADERS AT ALL EXTERIOR WALLS AND INTERIOR BEARING WALLS AS FOLLOWS, UNLESS OTHERWISE NOTED:

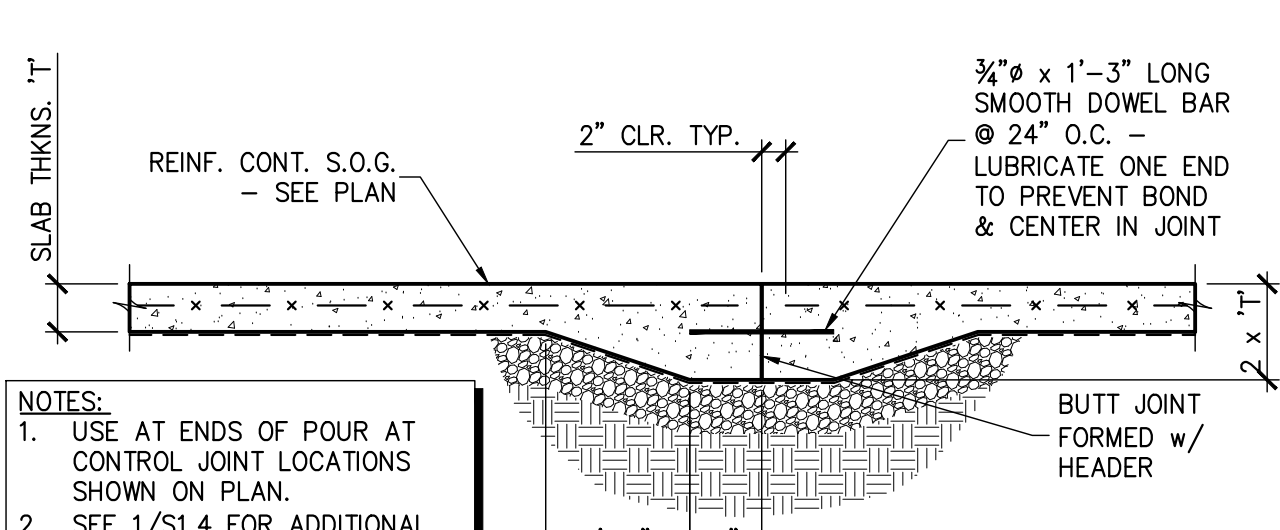
OPENING WIDTH	STUDS	HEADER
0'-0" TO 6'-0"	2 KING STUDS, 1 JACK STUD	(2) 2 x 10 @ 2 x 4 WALL (3) 2 x 10 @ 2 x 6 WALL
6'-1" TO 8'-0"	2 KING STUDS, 2 JACK STUDS	(2) 2 x 10 @ 2 x 4 WALL (3) 2 x 10 @ 2 x 6 WALL
8'-1" TO 12'-0"	3 KING STUDS, 2 JACK STUDS	(2) 2 x 12 @ 2 x 4 WALL (3) 2 x 12 @ 2 x 6 WALL
- WOOD DECKING/SHEATHING**
 - WALL SHEATHING SHALL BE 1/2" PLYWOOD OR ORIENTED STRAND BOARD (OSB), UNLESS OTHERWISE NOTED. ATTACH WALL SHEATHING TO FRAMING WITH 10d NAILS AT 4" O.C. AT PANEL EDGES AND 12" O.C. AT INTERIOR MEMBERS. PROVIDE SOLID BLOCKING AT PANEL EDGES (48" O.C.).
 - ROOF SHEATHING SHALL BE 1/2" PLYWOOD OR ORIENTED STRAND BOARD (OSB), UNLESS OTHERWISE NOTED. ATTACH ROOF SHEATHING TO FRAMING WITH 8d NAILS AT 4" O.C. AT PANEL EDGES AND 12" O.C. AT INTERIOR MEMBERS. PROVIDE SOLID BLOCKING AT PANEL EDGES (48" O.C.).



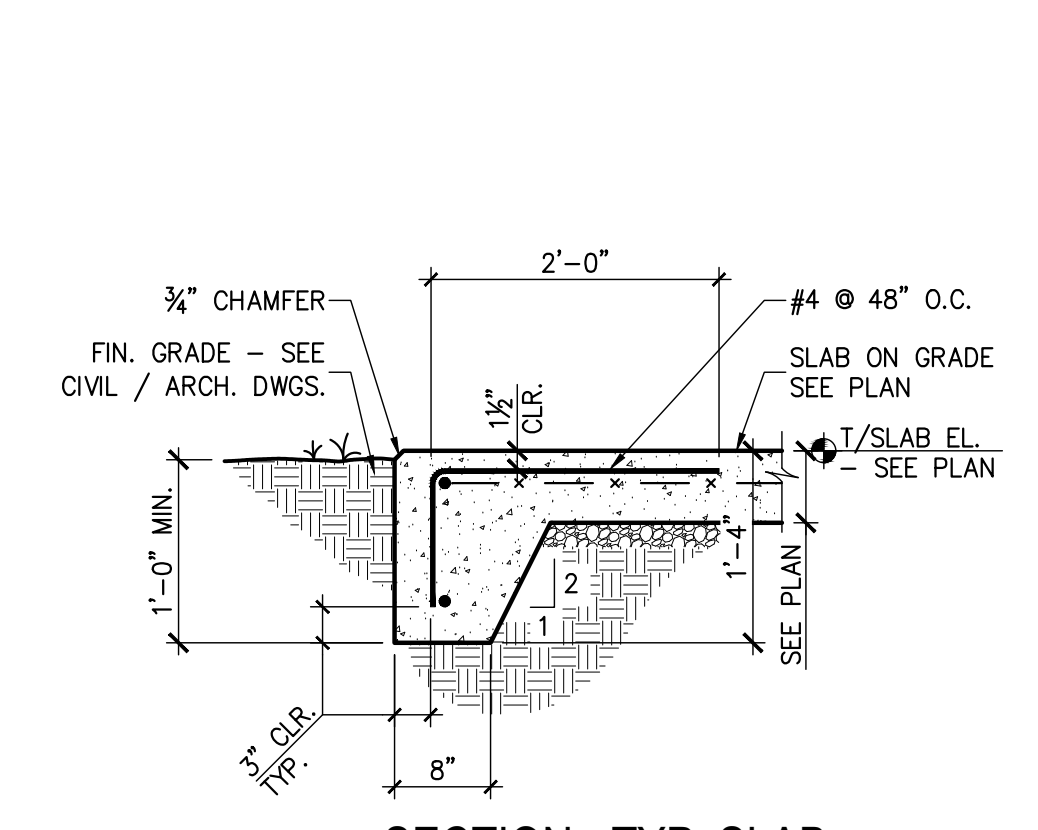
1 SECTION - TYP. SLAB ON GRADE
S1.4 3/4" = 1'-0"



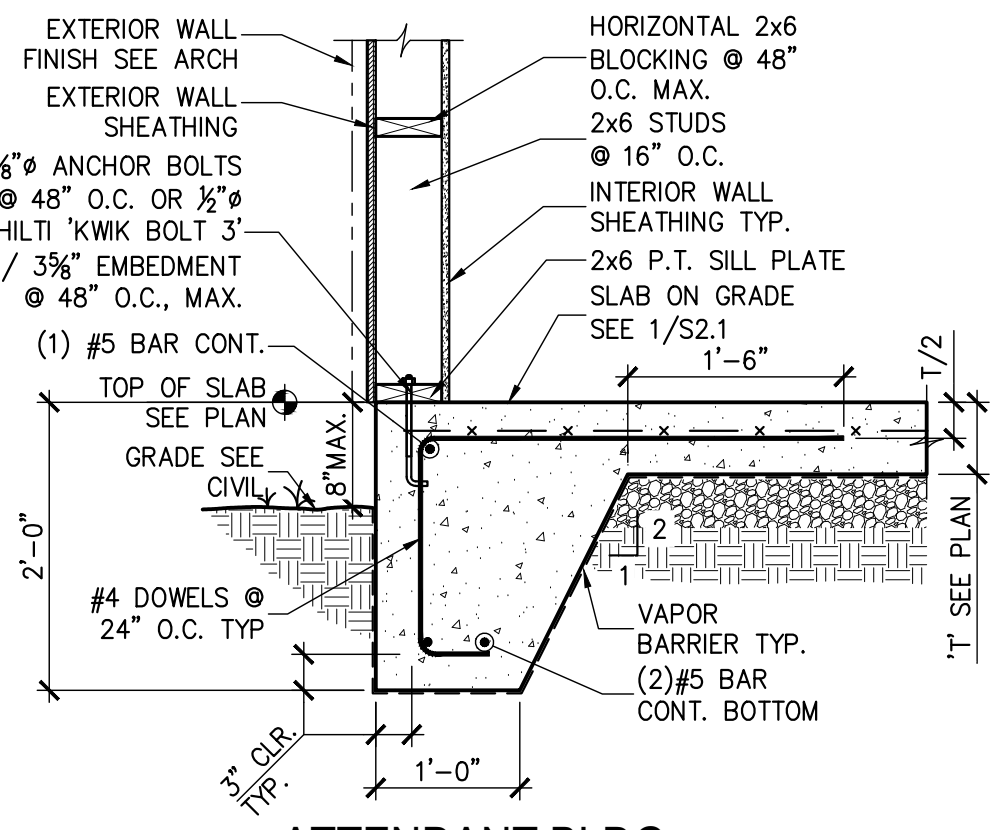
2 SECTION - TYP. CONTROL JOINT
S1.4 3/4" = 1'-0"



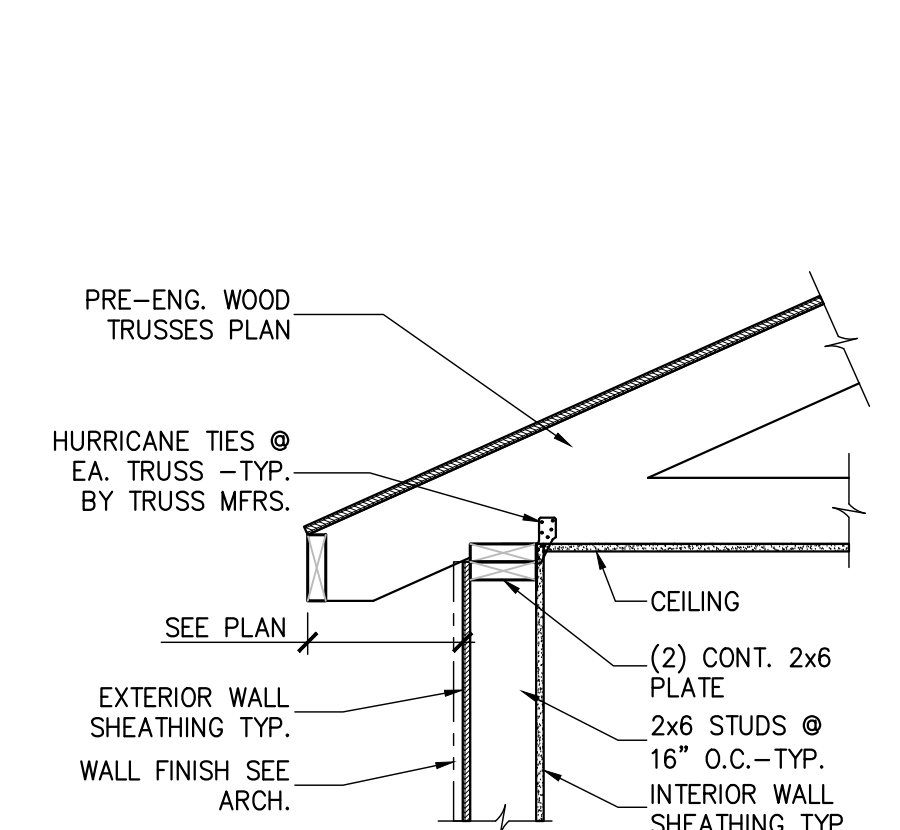
3 SECTION - TYP. CONSTRUCTION JOINT
S1.4 3/4" = 1'-0"



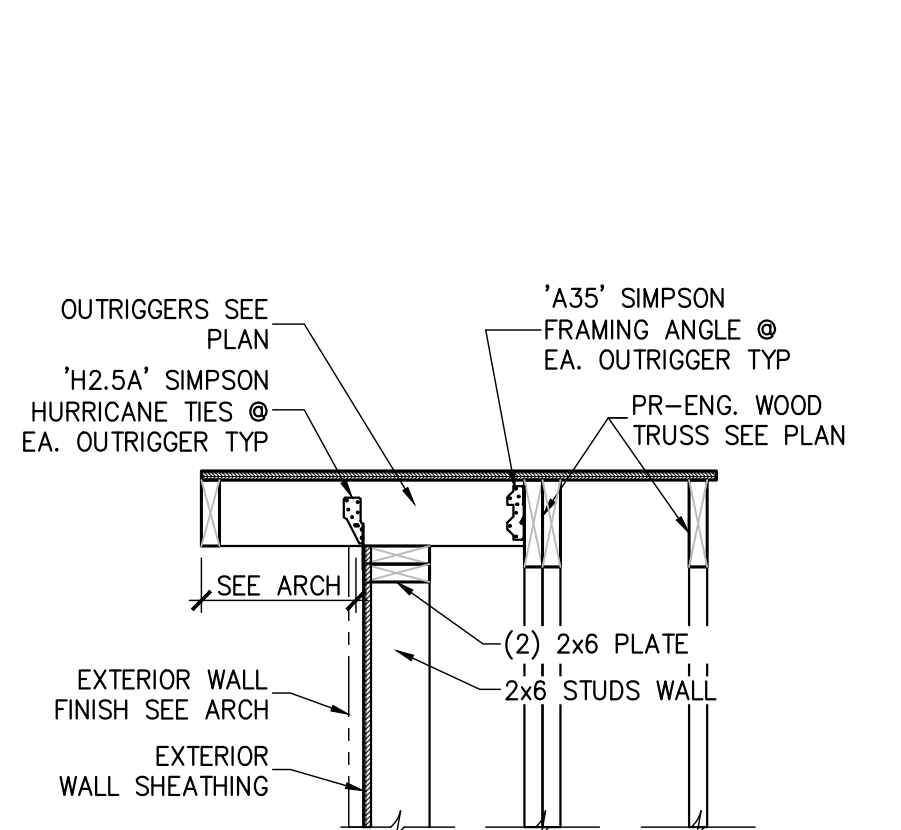
4 SECTION - TYP. SLAB EDGE W/ TURN-DOWN
S1.4 3/4" = 1'-0"



5 SECTION - TYP. GRADE BEAM
S1.4 3/4" = 1'-0"



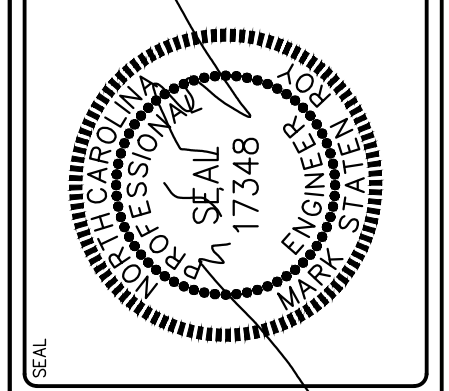
6 ROOF AT STUD WALL
S1.4 3/4" = 1'-0"



7 OUTRIGGERS @ GABLE END WALL
S1.4 3/4" = 1'-0"

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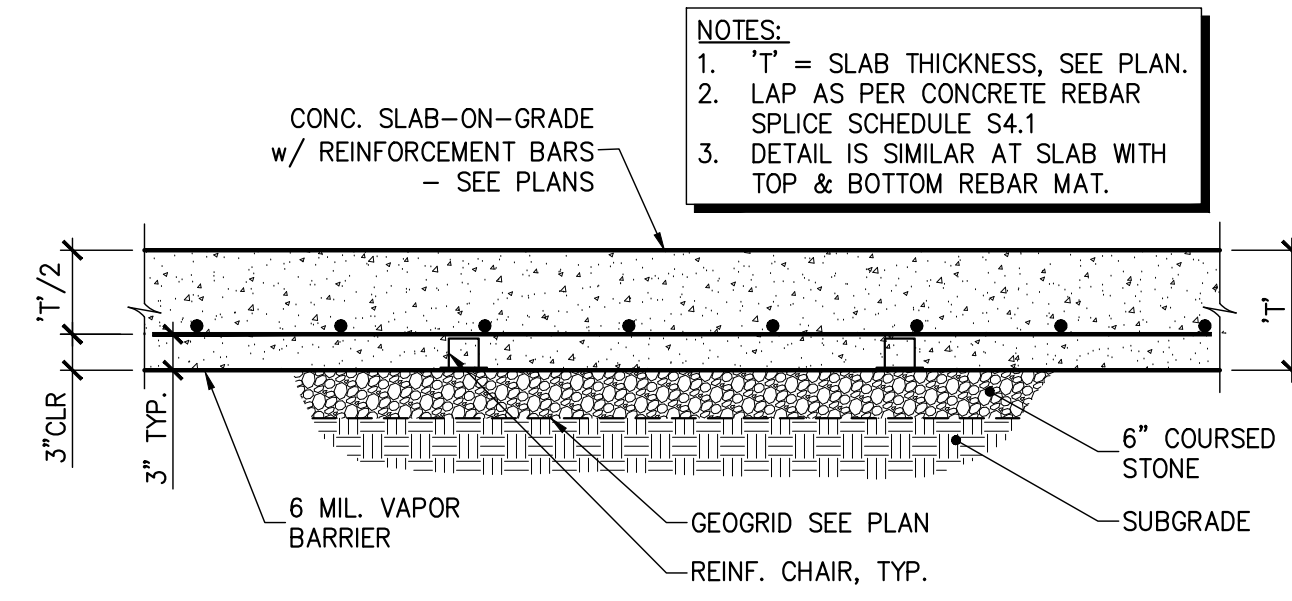
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ATTENDANT BUILDING PLANS AND ELEVATION

PROJ. NO.
2025162

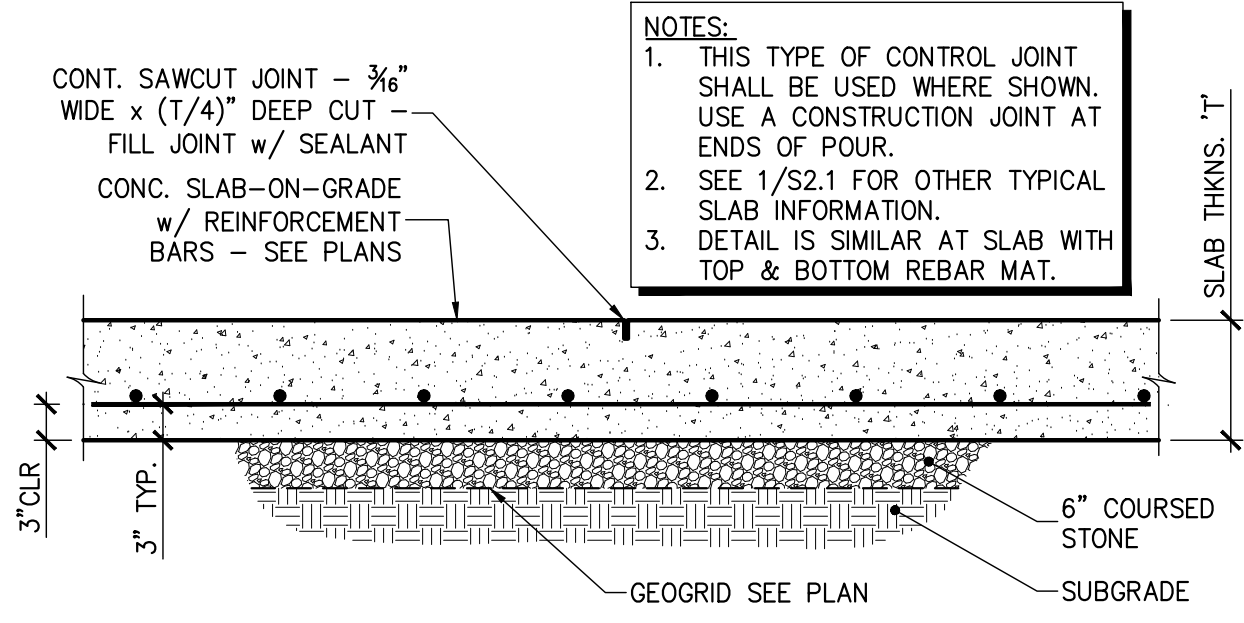
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GBP	MSR	MSR

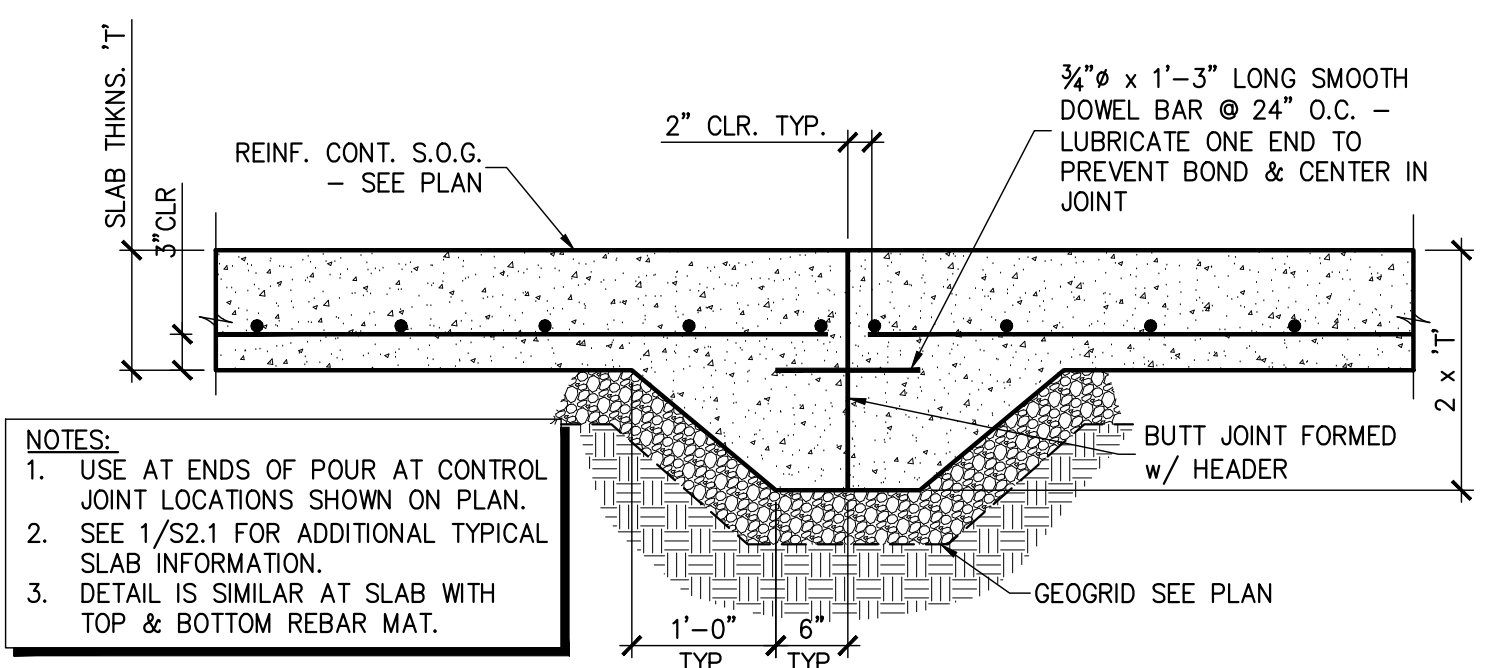
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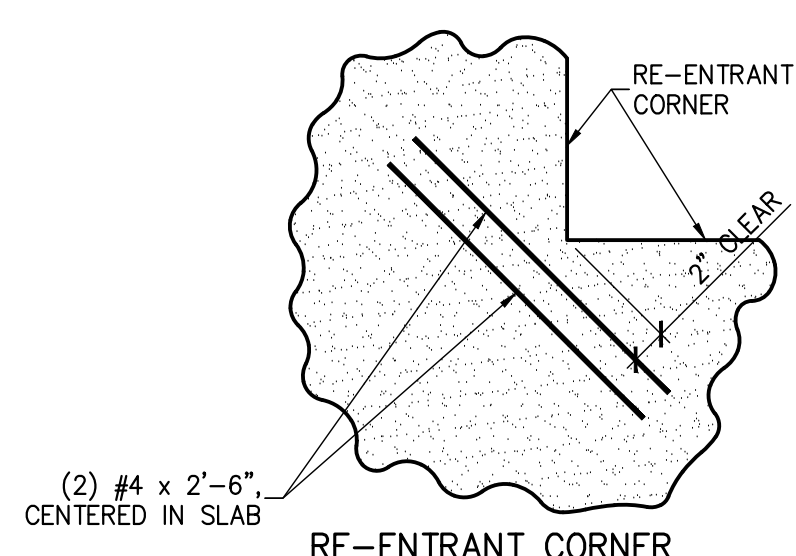
1 SECTION - TYP. SLAB ON GRADE
S2.1 3/4" = 1'-0"



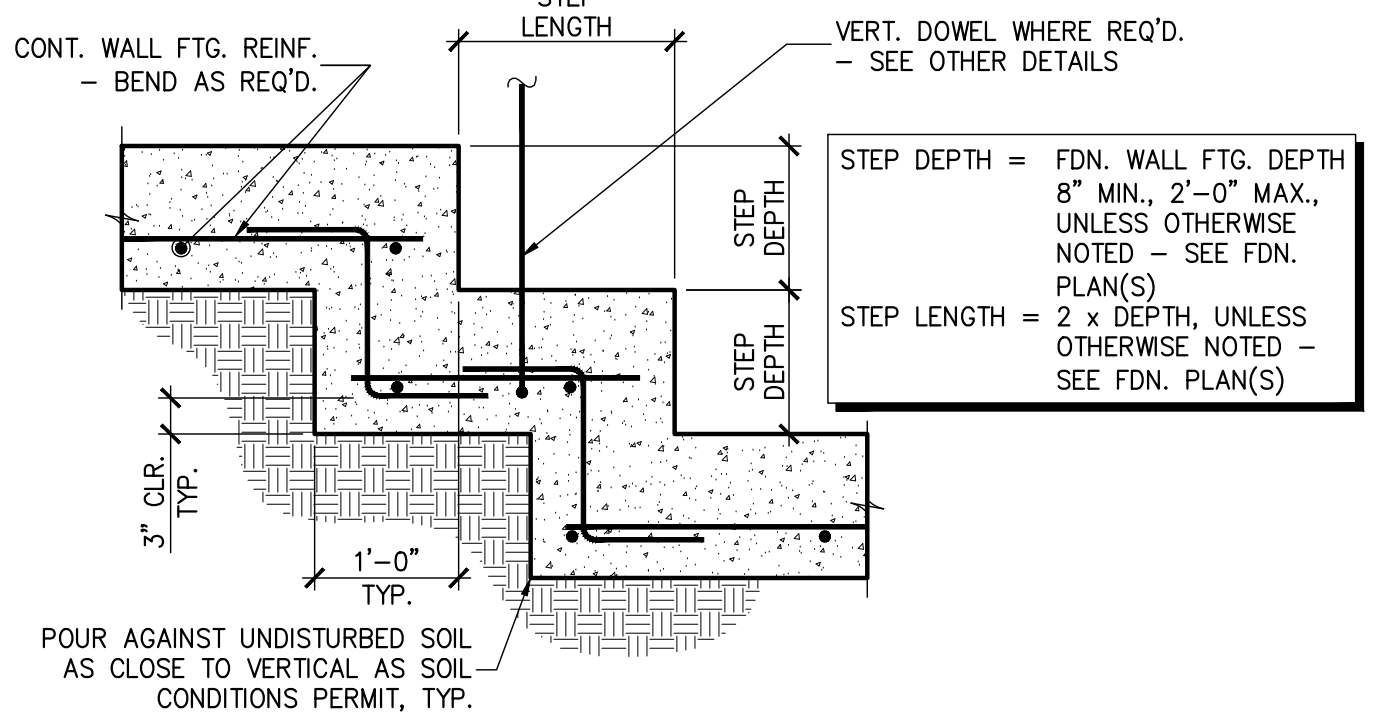
2 SECTION - TYP. CONTROL JOINT
S2.1 3/4" = 1'-0"



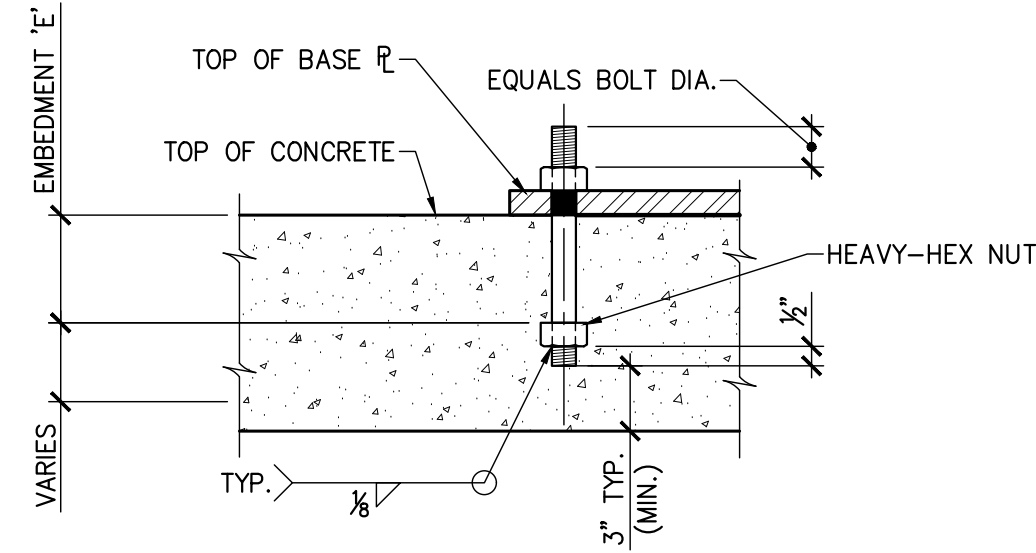
3 SECTION - TYP. CONSTRUCTION JOINT
S2.1 3/4" = 1'-0"



4 REINF. @ SLAB CORNERS
S2.1 3/4" = 1'-0"

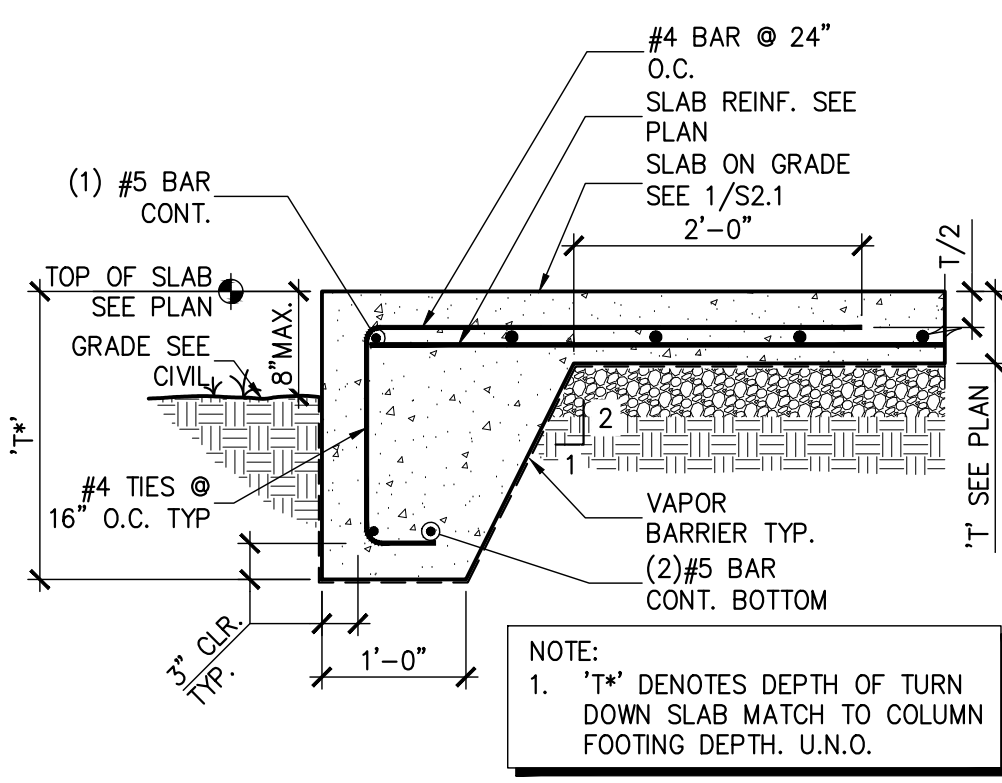


5 SECTION - TYP. STEPPED FTG.
S2.1 3/4" = 1'-0"

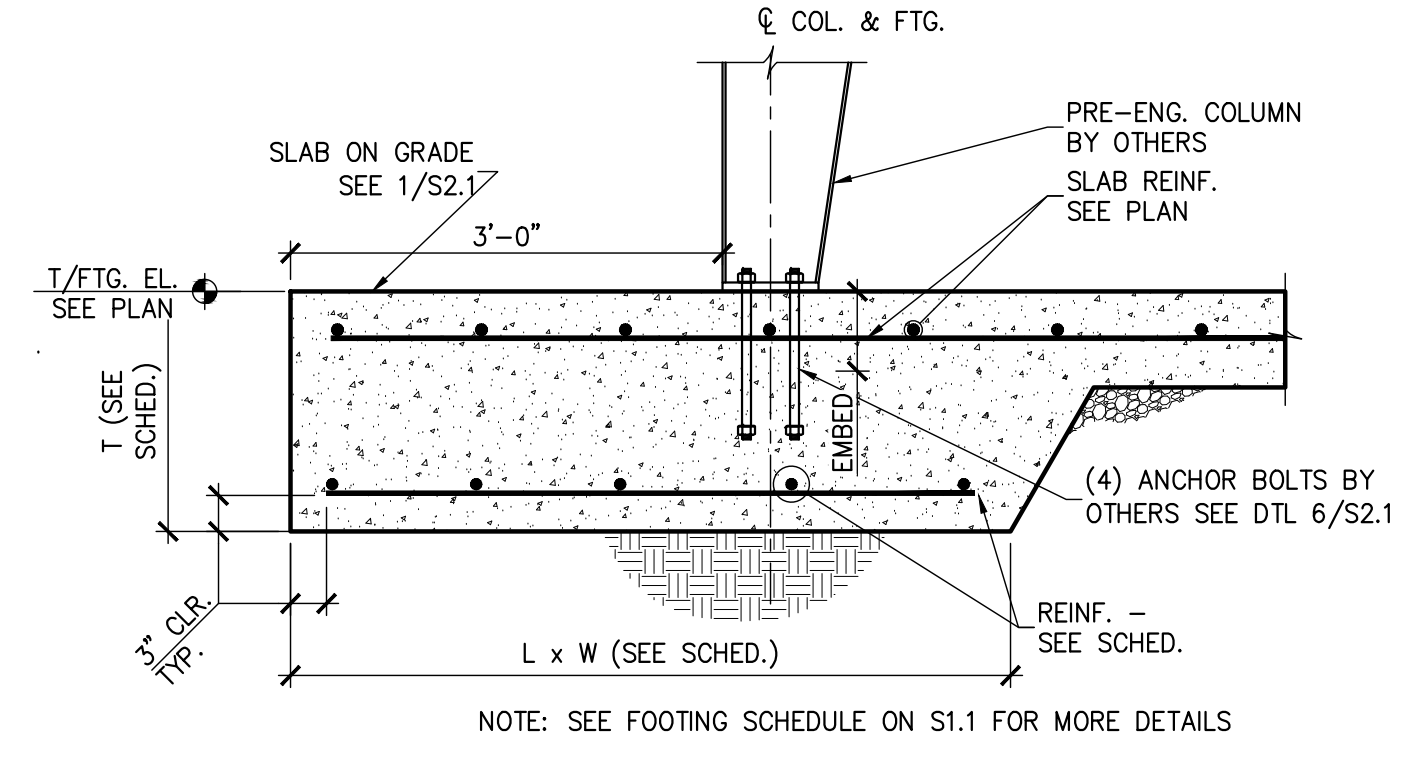


6 TYPICAL ANCHOR BOLT DETAIL
S2.1 N.T.S.

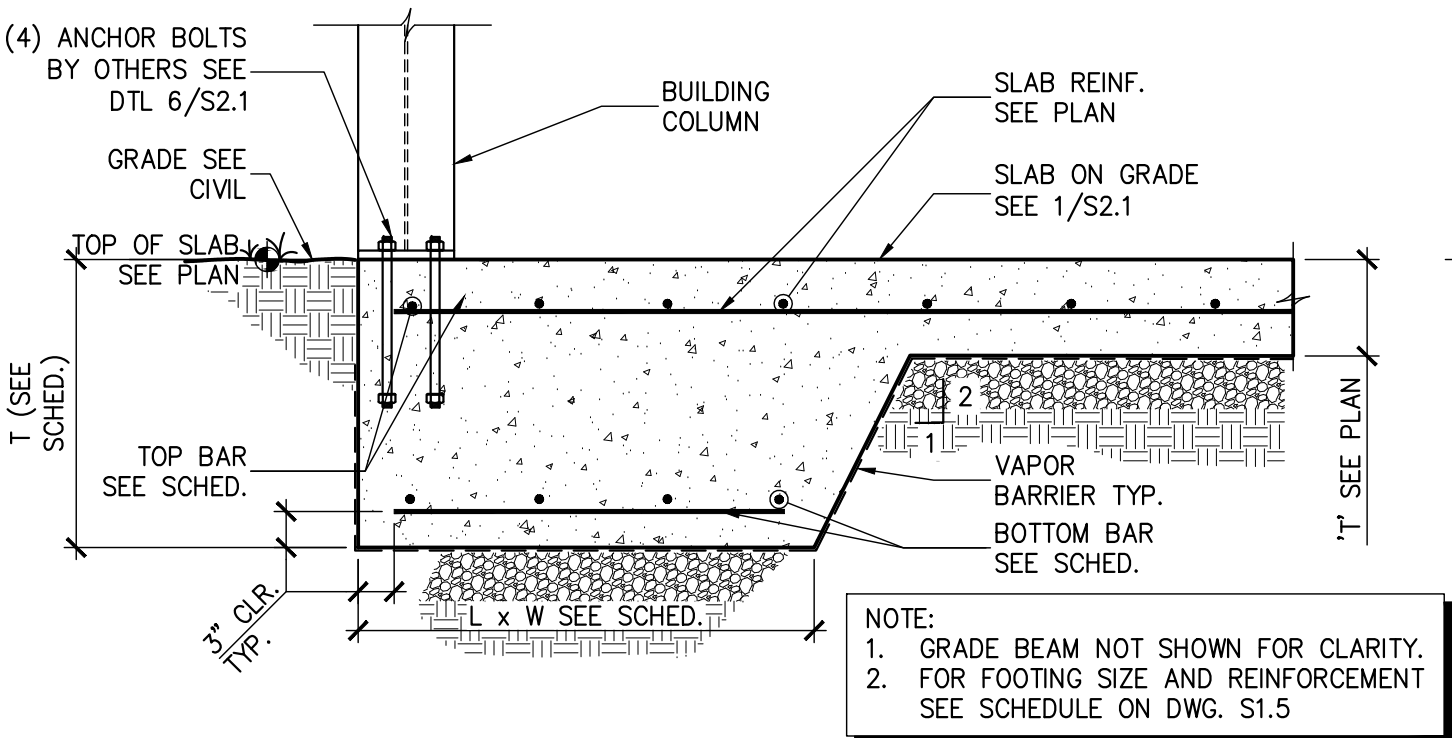
BOLT DIA. 'D'	EMBEDMENT 'E'	REMARKS
3/8"	0'-7 1/2"	-
1/2"	0'-9"	-
3/4"	1'-0"	-



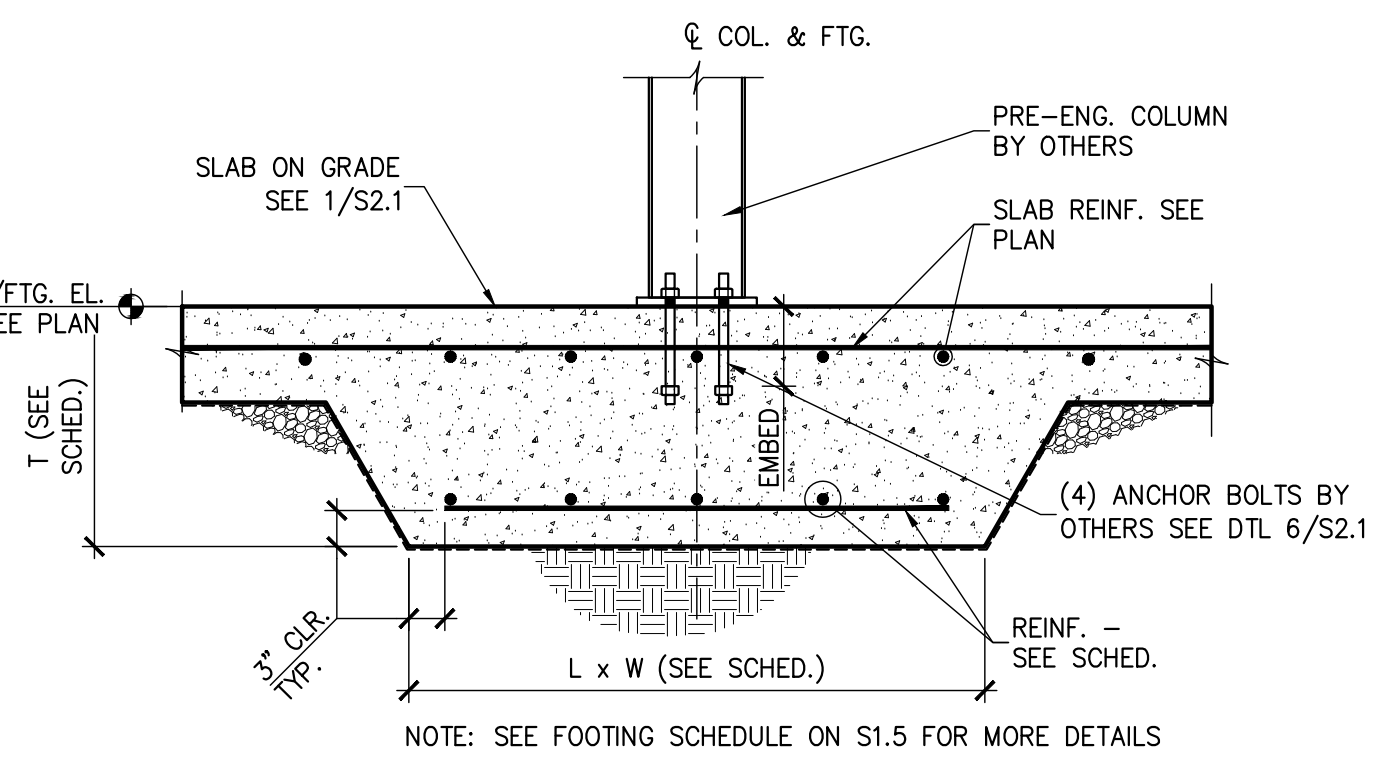
7 SECTION - TYP. GRADE BEAM
S2.1 3/4" = 1'-0"



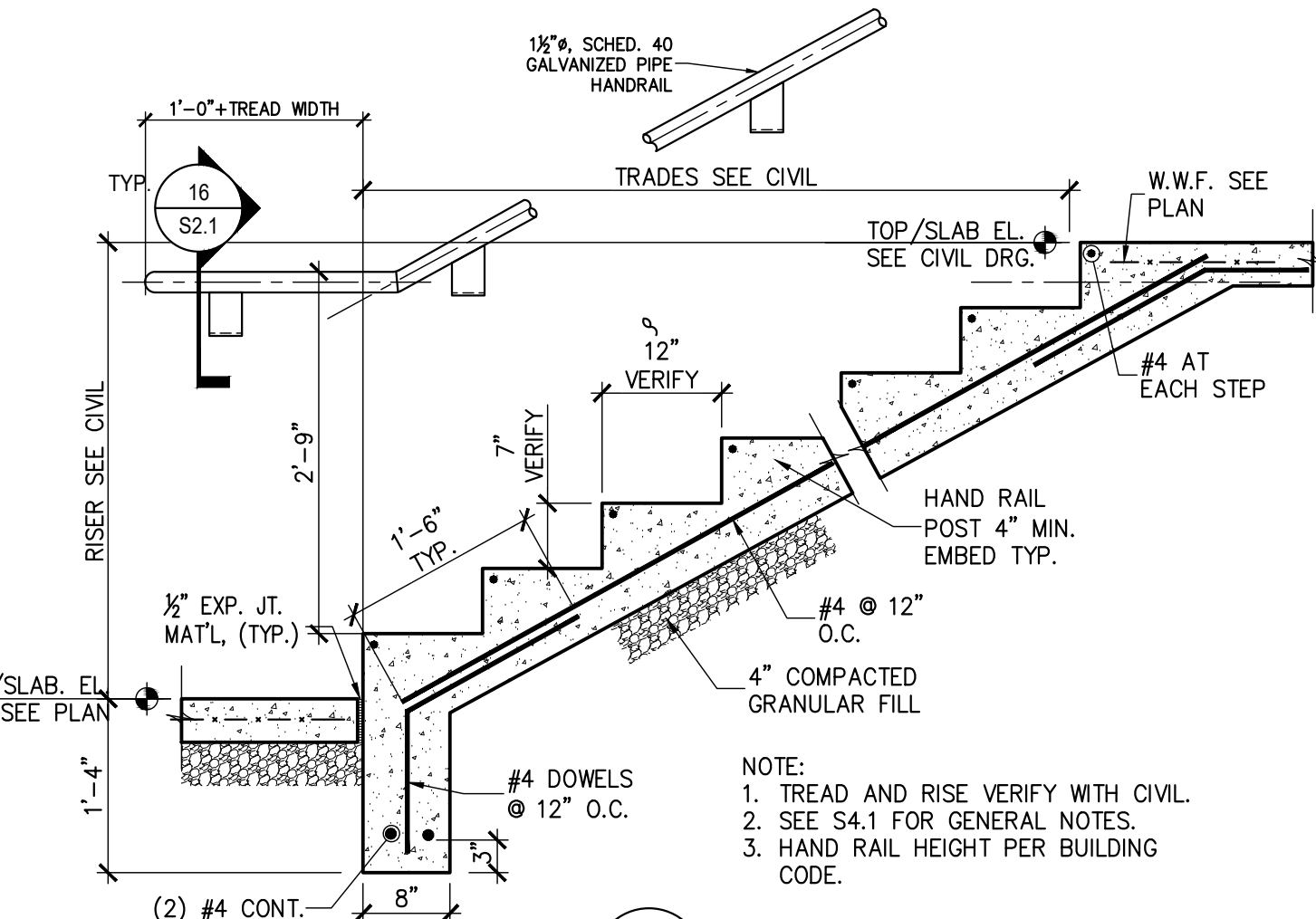
8 SECTION - TYP. PEMB COLUMN FTG.
S2.1 3/4" = 1'-0"



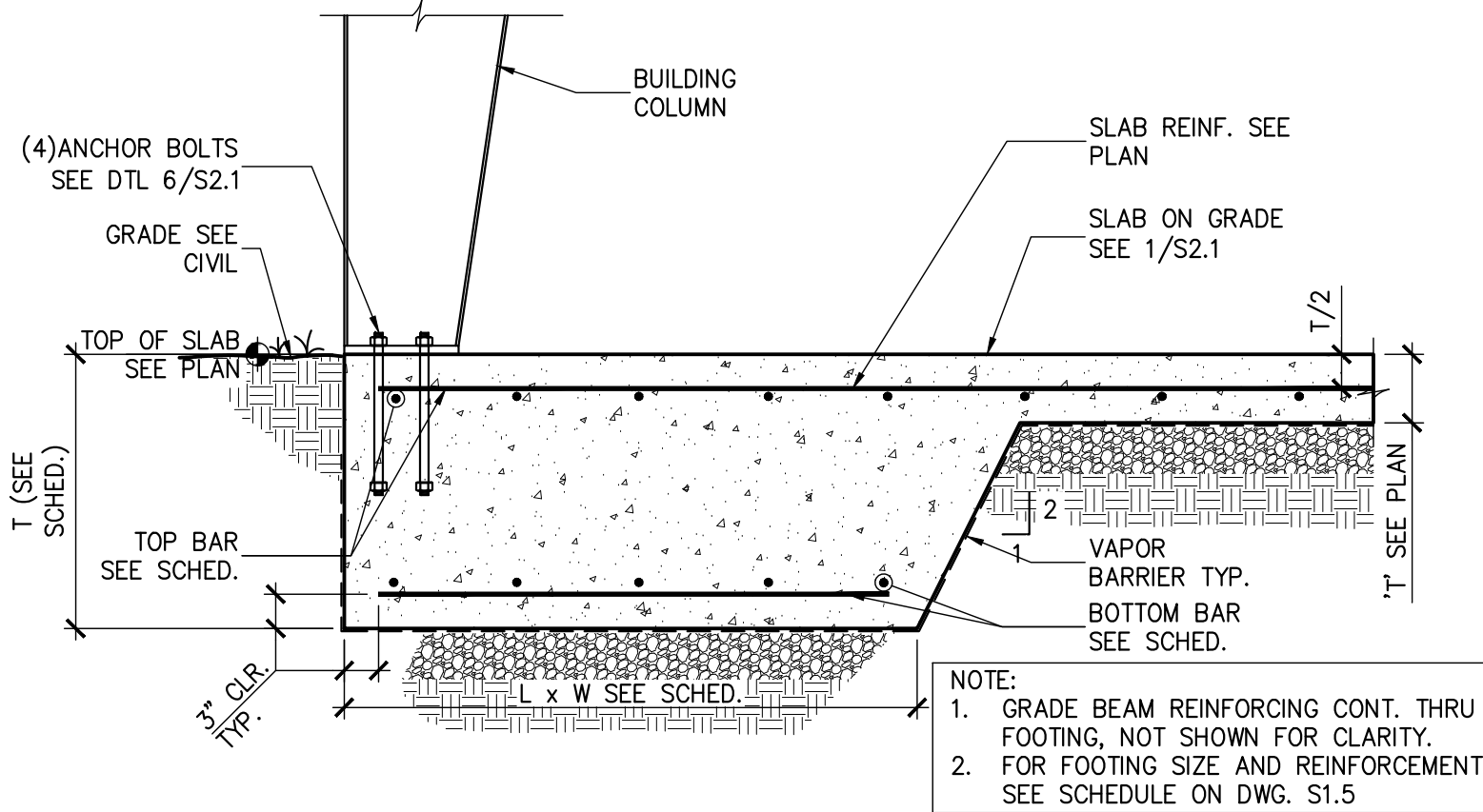
9 SECTION - TYP. PEMB COLUMN FOOTING
S2.1 3/4" = 1'-0"



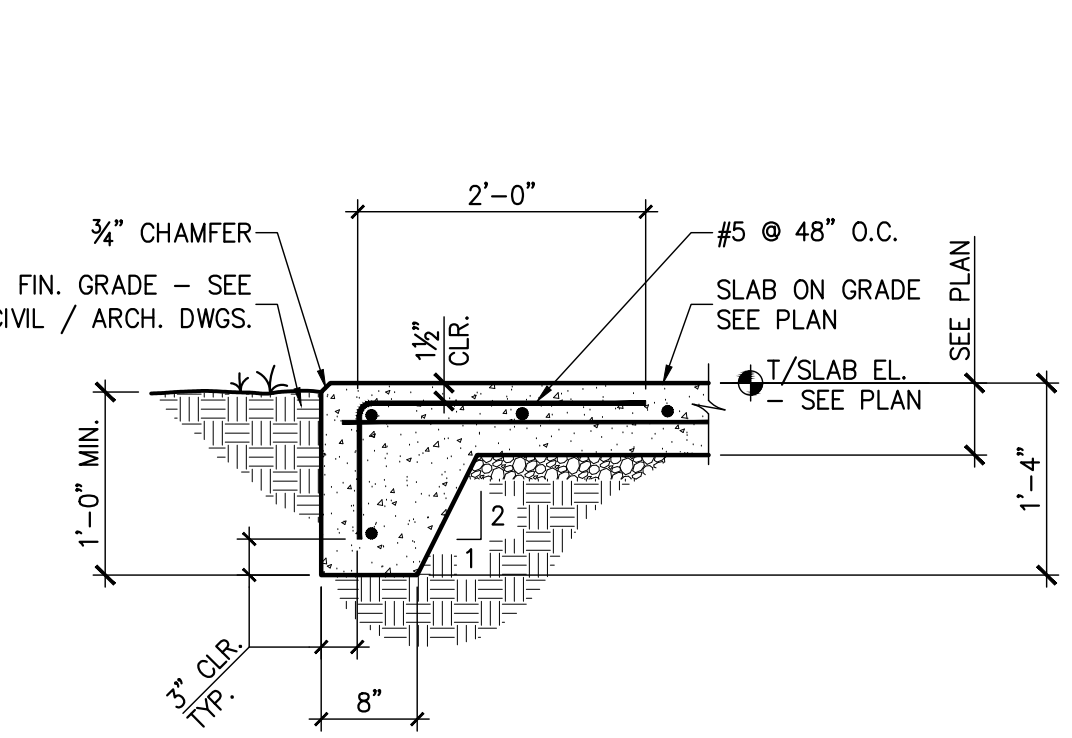
10 SECTION - TYP. PEMB COLUMN. FTG.
S2.1 3/4" = 1'-0"



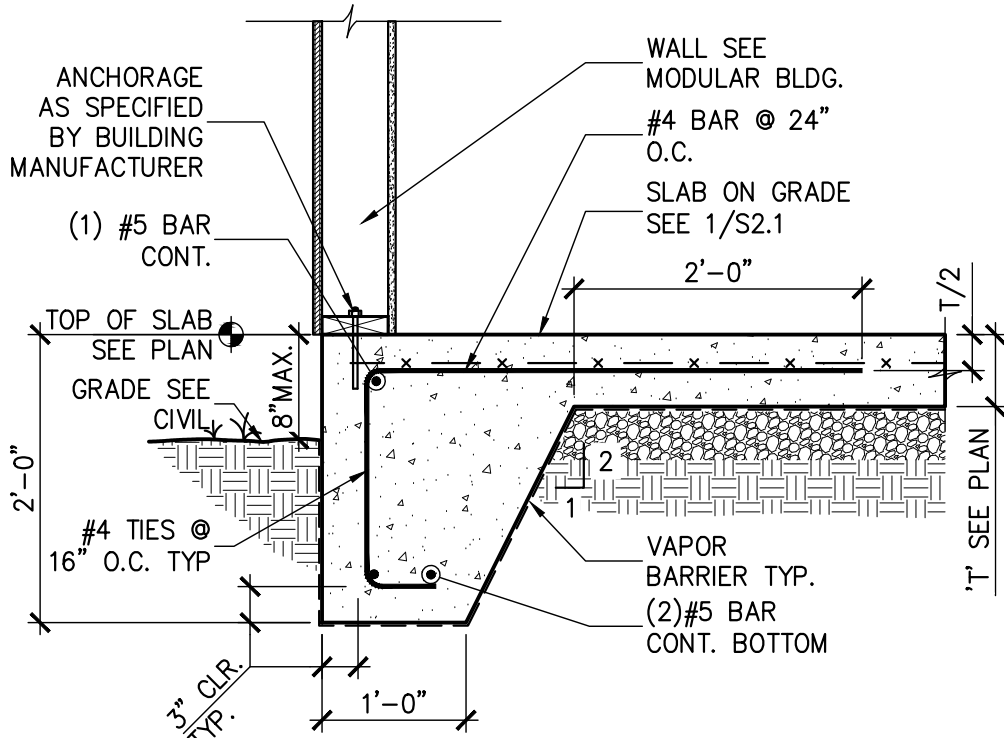
11 SECTION - EXTERIOR STAIRS
S1.2 3/4" = 1'-0"



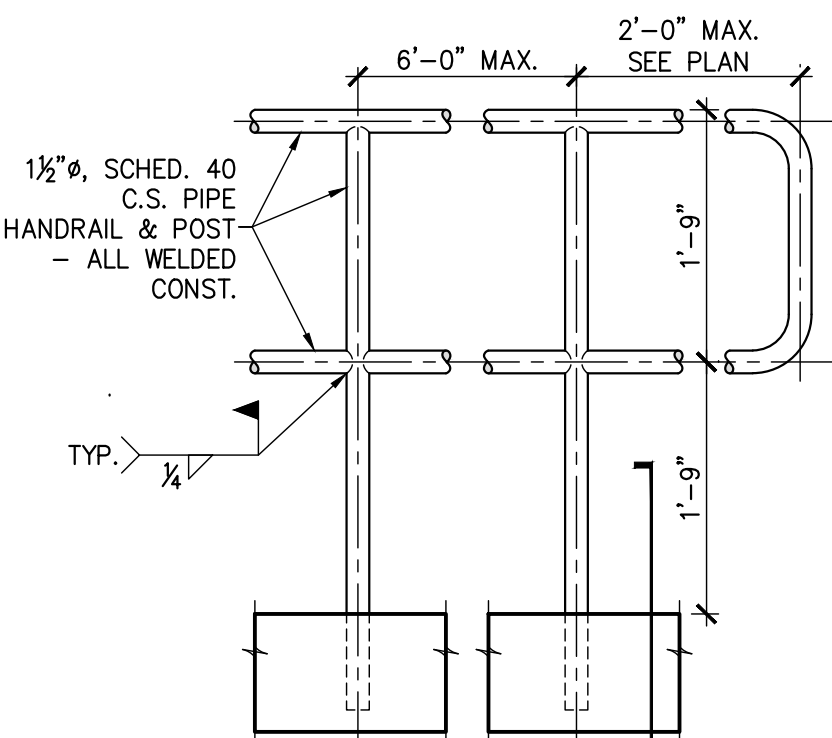
12 SECTION - TYP. COLUMN FOOTING
S2.1 3/4" = 1'-0"



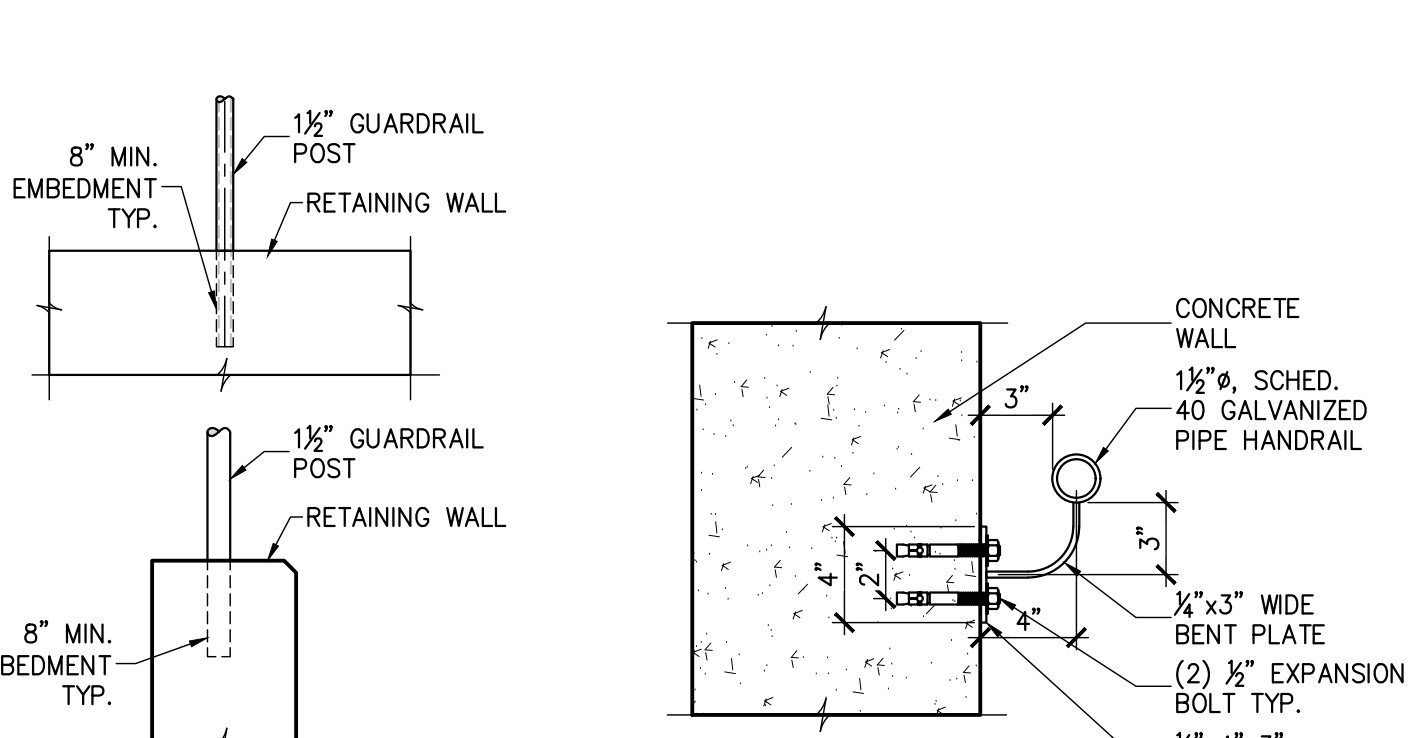
13 SECTION - TYP. SLAB EDGE w/ TURN-DOWN
S2.1 3/4" = 1'-0"



14 SECTION - TYP. GRADE BEAM ATTENDANT BLDG.
S2.1 3/4" = 1'-0"

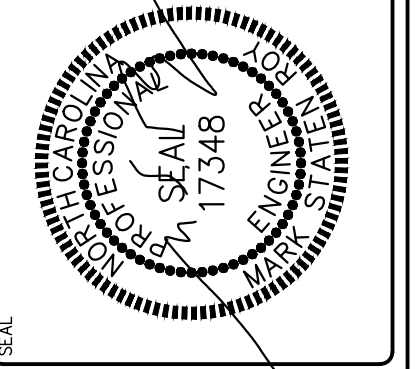


15 DETAIL - TYP. HANDRAIL
S2.1 1" = 1'-0"



16 RAIL CONN. TO WALL
S2.1 1 1/2" = 1'-0"

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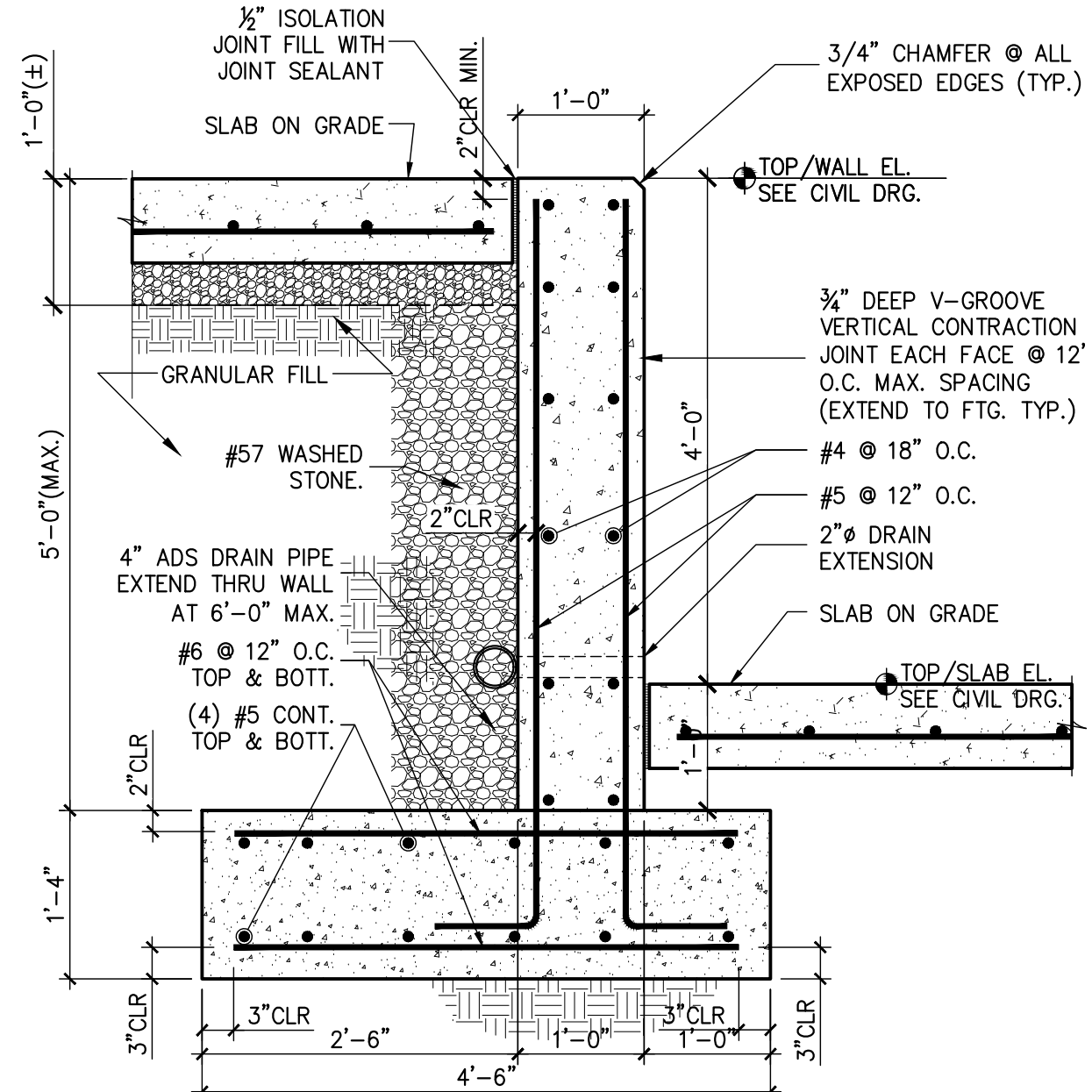
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DRAWING TITLE
FOOTING SECTION AND DETAILS

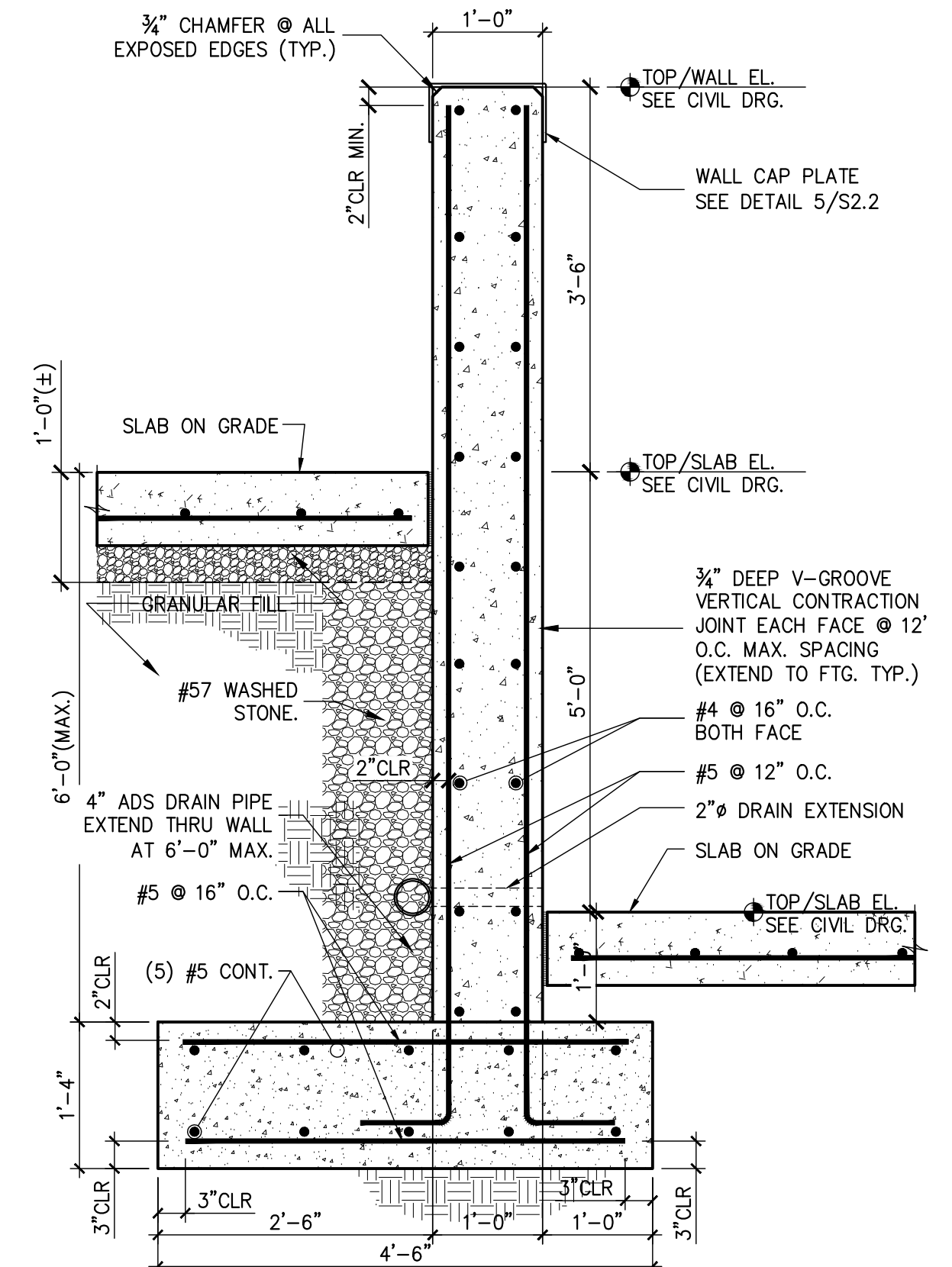
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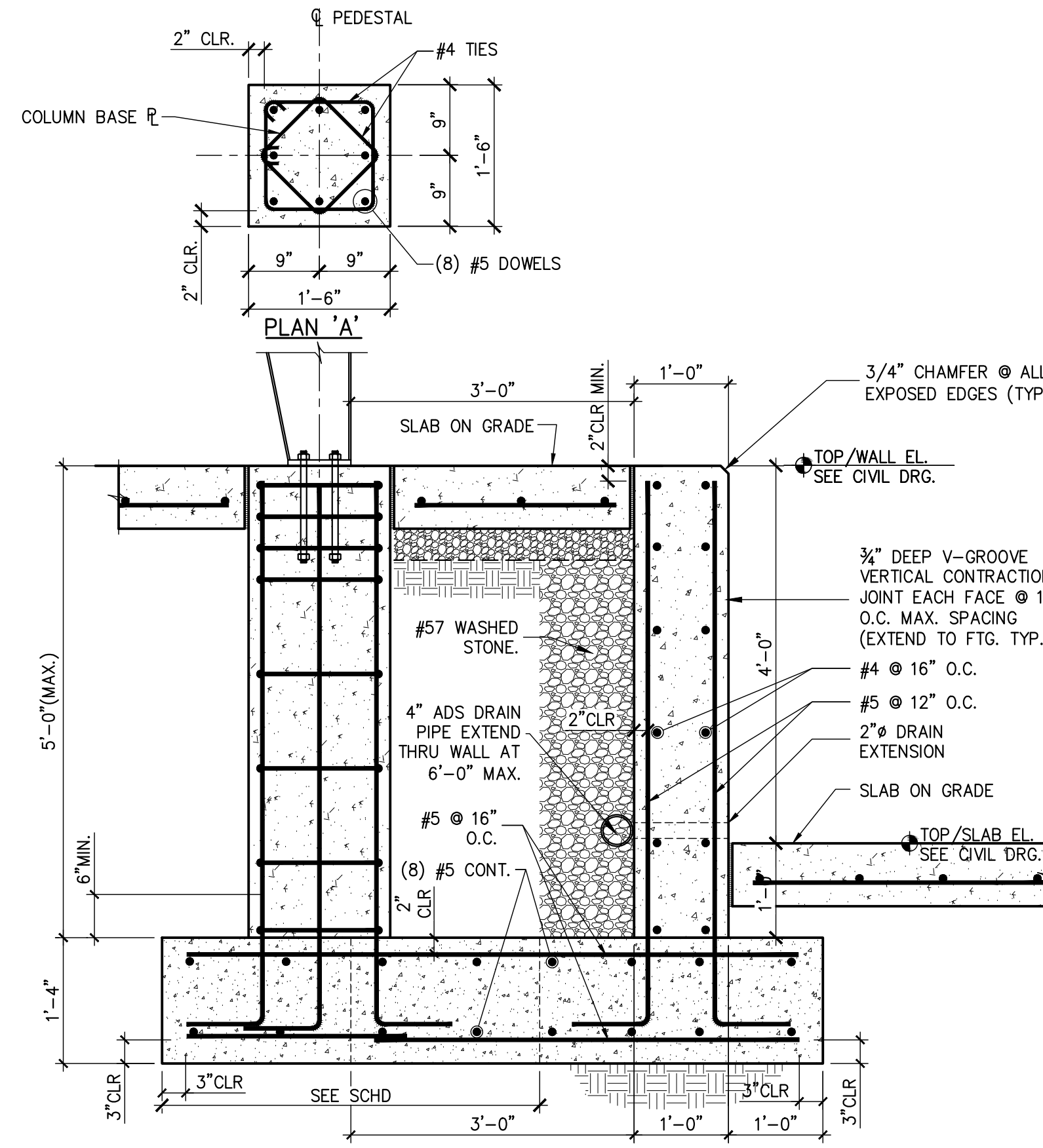
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S2.1



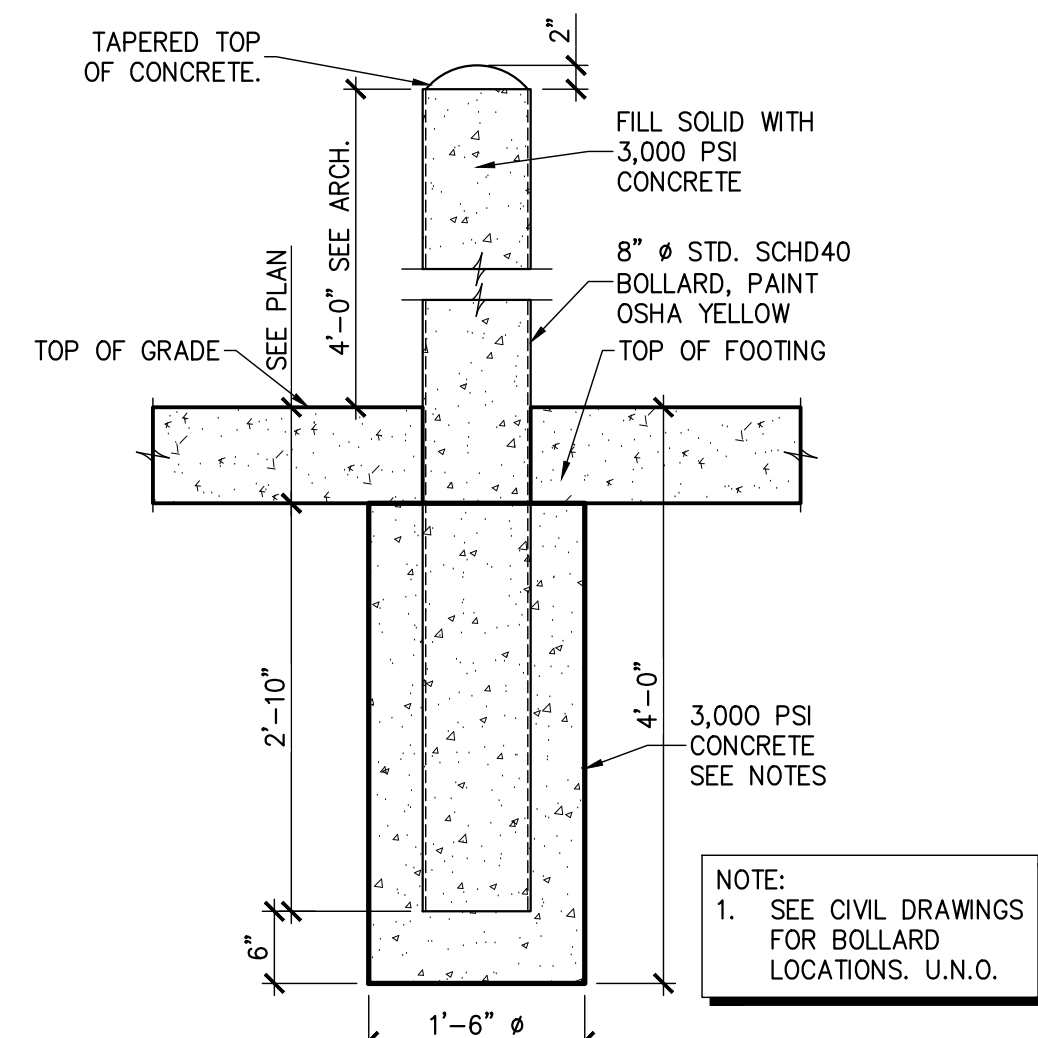
1 SECTION - RETAINING WALL
S2.2 3/4" = 1'-0"
(UP TP 5'-0")



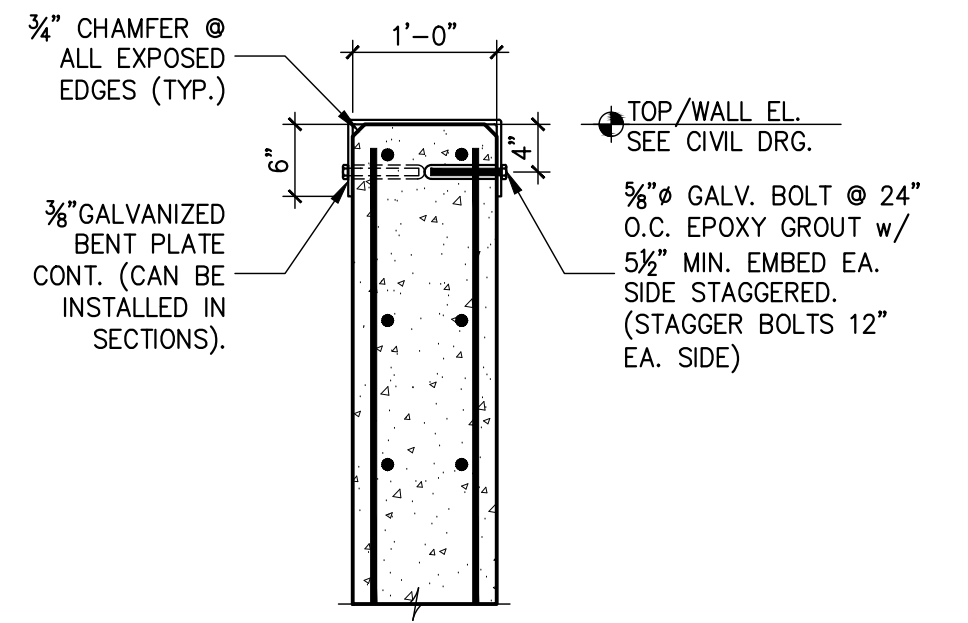
2 SECTION - RETAINING WALL
S2.2 3/4" = 1'-0"
(UP TP 5'-0")



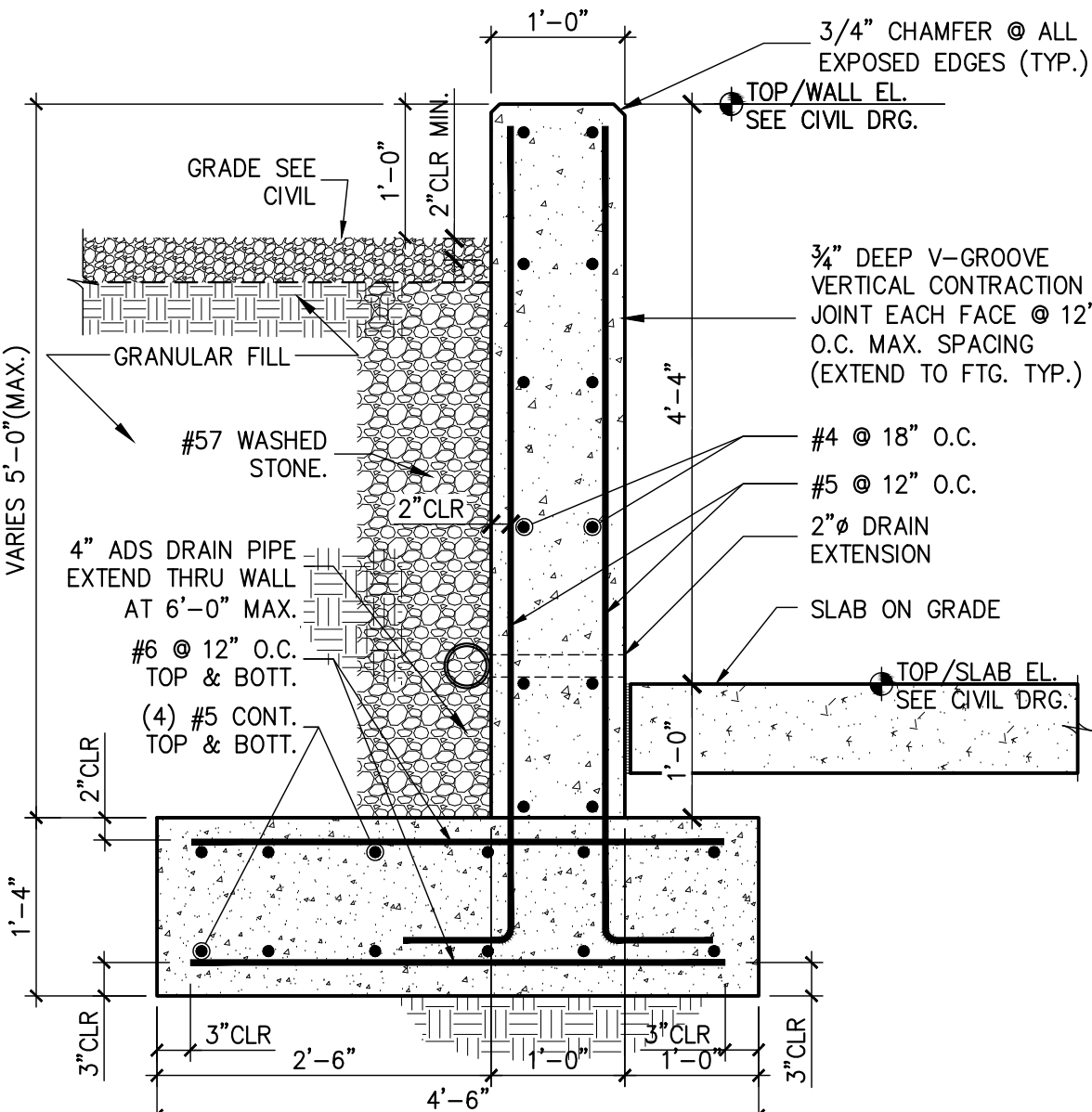
3 SECTION - PEMB COL FTG.
S2.2 3/4" = 1'-0"
(AT RETAINING WALL)



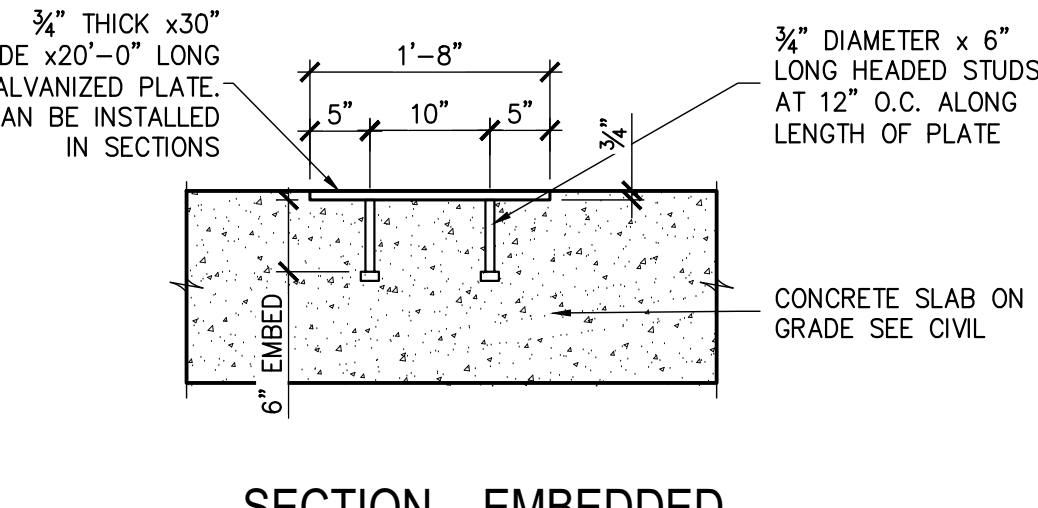
4 CONC. BOLLARD DETAIL
S2.2 3/4" = 1'-0"



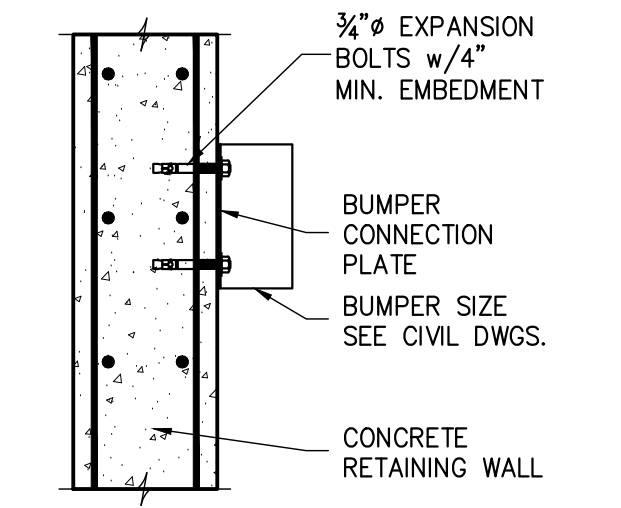
5 WALL CAP DETAIL
S2.2 3/4" = 1'-0"



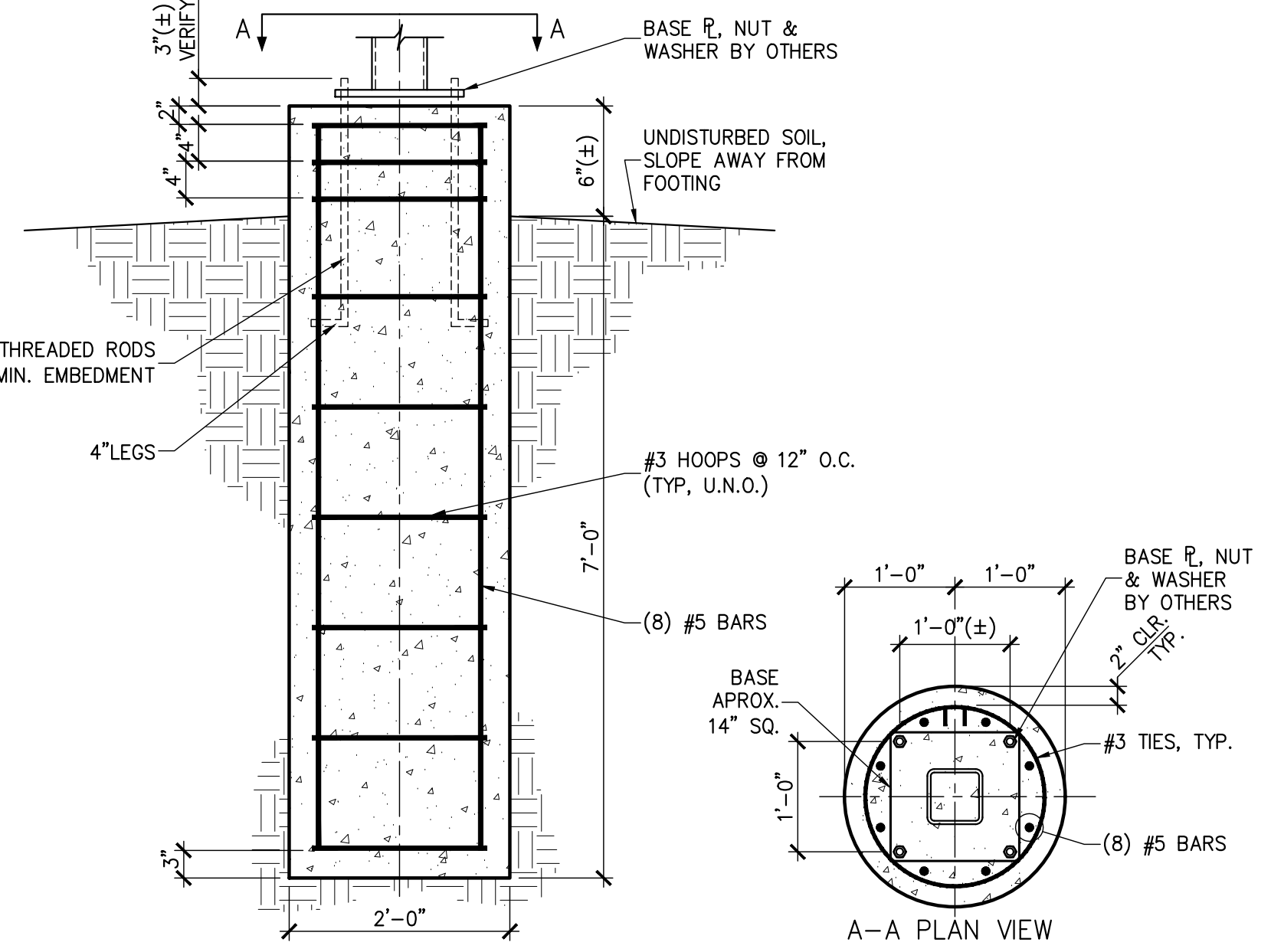
6 SECTION - RETAINING WALL AT RAMP
S2.2 3/4" = 1'-0"
(UP TP 5'-0")



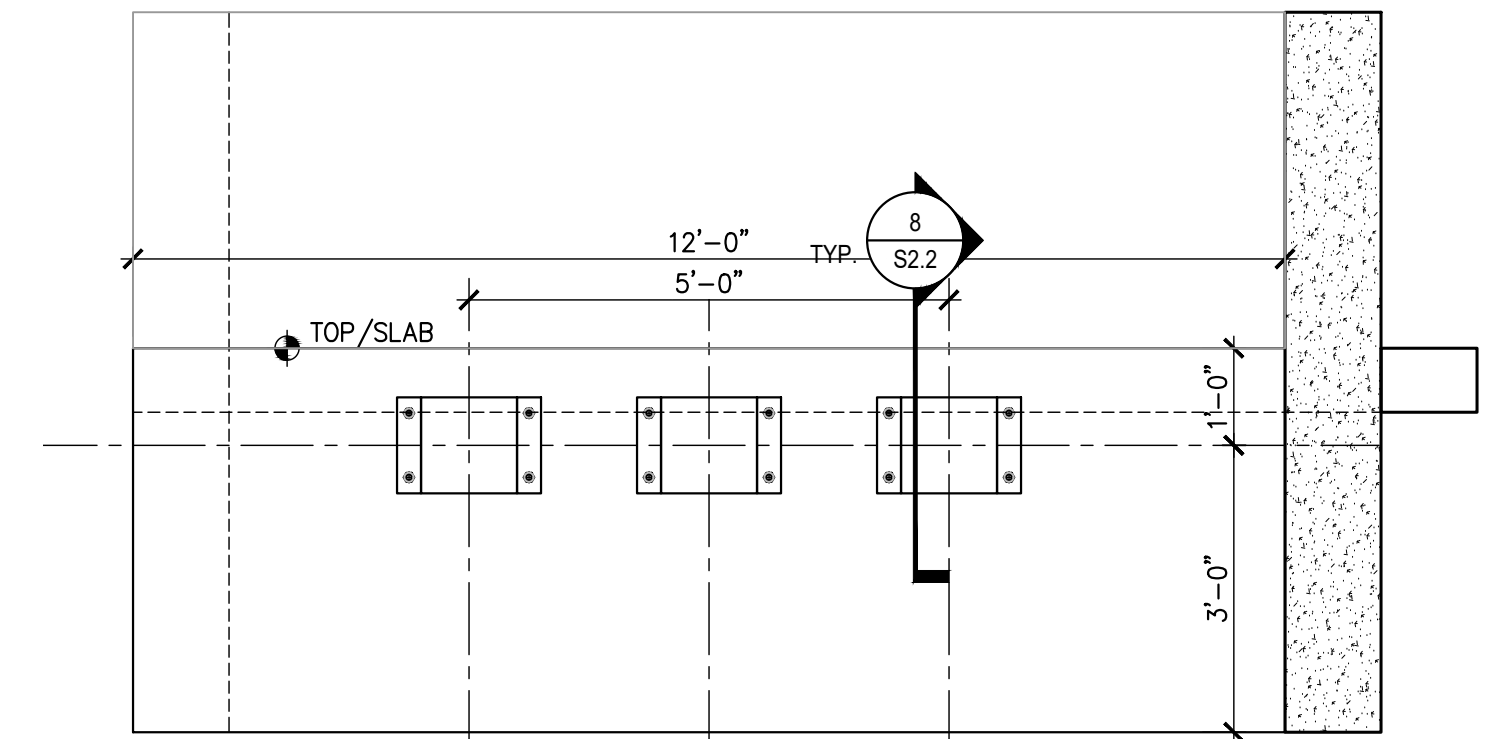
7 SECTION - EMBEDDED PLATE AT DUMPSTER PAD
S2.2 3/4" = 1'-0"



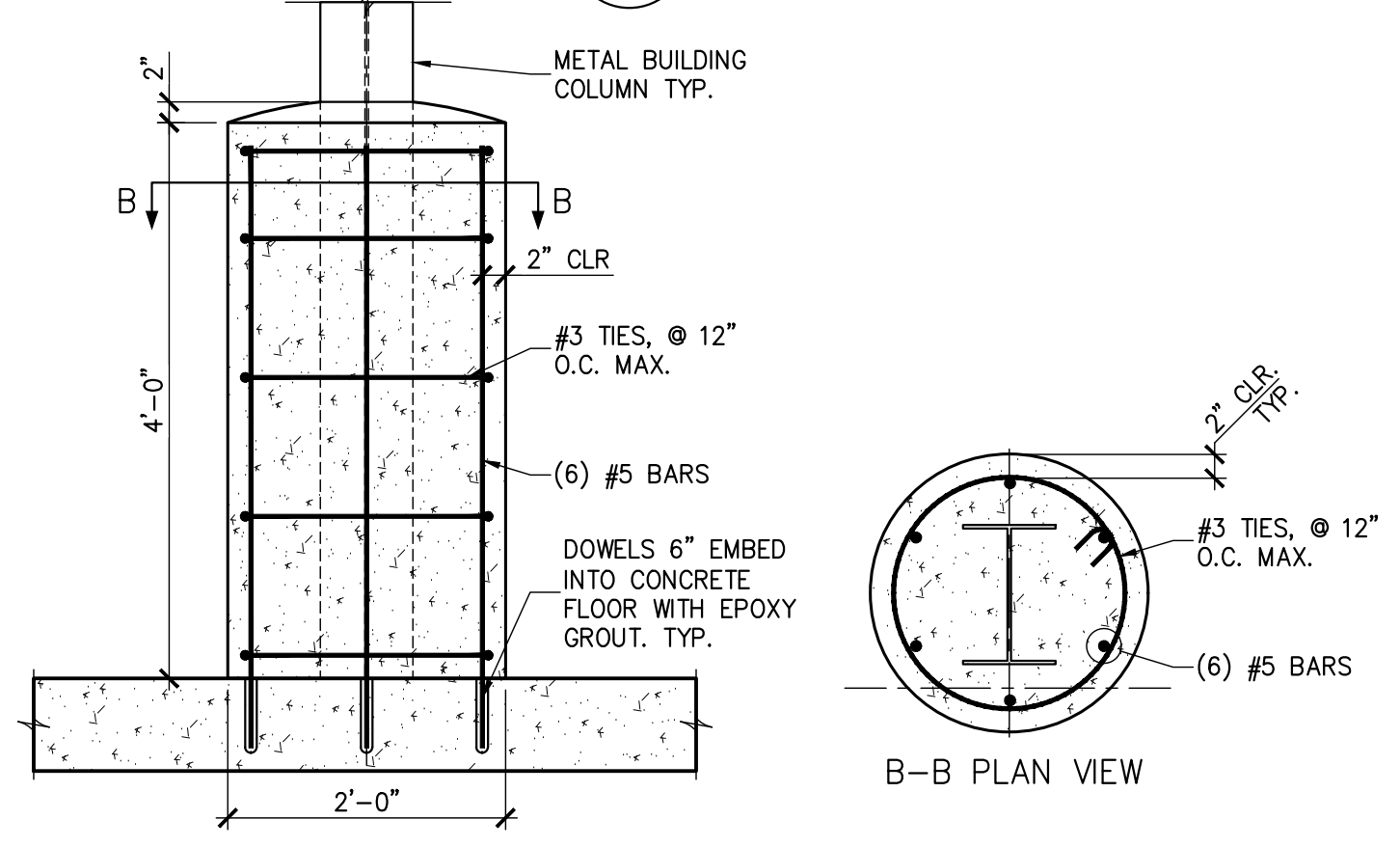
8 DOCK BUMPER CONN. DETAIL
S2.2 3/4" = 1'-0"



10 LIGHT POST FOUNDATION DETAIL
S2.2 3/4" = 1'-0"

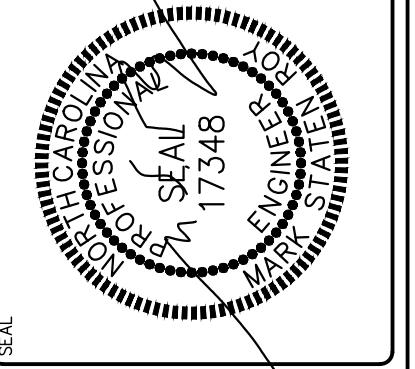


11 DOCK BUMPER ELEVATION
S2.2 1/2" = 1'-0"



12 CONCRETE WRAP AT COLUMN
S2.2 3/4" = 1'-0"

RPA ENGINEERING, P.A.
Structural Engineering Solutions
Engineering License Certificate No. C-2734
1 Commerce Square, Suite 202
Washington, NC 27889
Phone : 252-321-6027
Fax : 252-355-2179



BEAUFORT COUNTY
STILLEY STATION RD CONVENIENCE SITE
STILLEY STATION RD
BEAUFORT COUNTY, NC

DRAWING TITLE
FOOTING SECTION AND DETAILS

PROJ. NO.
2025162

DATE
03.31.2026
DRAWN: GBN
CHECKED: MSR
APPROVED: MSR

SHEET NO.
S2.2

GENERAL STRUCTURAL NOTES:

- GENERAL NOTES**
 - METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.
 - THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR SLEEVES, CURBS, INSERTS OR OPENINGS NOT HEREIN INDICATED.
 - COORDINATE THESE DRAWINGS WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DRAWINGS.
 - VERIFY ALL FLOOR AND ROOF OPENING SIZES AND LOCATIONS, EQUIPMENT PAD SIZES AND LOCATIONS, ANCHOR BOLT LAYOUTS, ETCETERA, WITH EQUIPMENT SELECTED.
 - VERIFY BUILDING LOCATION AND ORIENTATION WITH OWNER AND LOT SETBACK REQUIREMENTS BEFORE ANY CONSTRUCTION IS STARTED ON THE PROJECT.
 - DO NOT CUT, NOTCH, OR OTHERWISE MODIFY ANY STRUCTURAL MEMBERS UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS WITHOUT APPROVAL OF THE ENGINEER OF RECORD.
 - CUTTING OF STEEL MEMBERS AND INSTALLATION OF HOLES IN STEEL MEMBERS SHALL BE DONE BY CUTTING OR DRILLING. DO NOT USE TORCHES FOR CUTTING UNLESS APPROVED BY THE ENGINEER OF RECORD.
 - CONTRACTOR IS RESPONSIBLE FOR DESIGN AND INSTALLATION OF ALL SHORING REQUIRED TO SUPPORT NEW AND EXISTING STRUCTURAL ELEMENTS.
- FOUNDATION**
 - ALL FOOTINGS SHALL BE ON UNDISTURBED SOIL OR 98% COMPACTED FILL PER ASTM D698.
 - NO FOOTINGS OR SLABS SHALL BE POURED INTO OR AGAINST SUBGRADE CONTAINING FREE WATER, FROST, ICE OR LOOSE MATERIAL.
 - EXCAVATIONS FOR FOOTINGS SHALL HAVE THE SIDES AND BOTTOMS TEMPORARILY LINED WITH 6 MIL. POLYETHYLENE IF PLACEMENT OF CONCRETE DOES NOT OCCUR WITHIN 24 HRS OF THE EXCAVATION OF THE FOOTING.
 - ADVERSE FOUNDATION CONDITIONS NOTED DURING CONSTRUCTION SUCH AS SOFT SOILS, ORGANIC MATTER, ETCETERA, SHALL BE REPORTED TO THE ENGINEER BEFORE FURTHER CONSTRUCTION IS ATTEMPTED.
 - IF UNDERMINING OF FOOTINGS OCCURS, FILL VOIDS WITH LEAN CONCRETE MIX. DO NOT ATTEMPT TO REPLACE AND RECOMPACT SOIL.
- CONCRETE**
 - ALL PLACED CONCRETE, SHALL HAVE NORMAL WEIGHT COARSE AGGREGATES UNLESS OTHERWISE NOTED, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'_c) AT 28 DAYS AS SHOWN ON THE CONCRETE MATERIALS SCHEDULE.
 - GROUT FOR BASE PLATES SHALL BE NON-METALLIC, NON-SHRINKABLE GROUT, AND SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH AT 28 DAYS, OF 5000 PSI.
 - NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.
 - CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH $\frac{3}{4}$ " x 45 DEGREE CHAMFER, UNLESS OTHERWISE NOTED.
 - HORIZONTAL FOOTING AND HORIZONTAL WALL REINFORCING SHALL BE CONTINUOUS, AND SHALL HAVE 90 DEGREE BENDS AND EXTENSIONS, OR CORNER BARS OF EQUIVALENT SIZE LAPPED, WITH A CLASS B TENSION SPLICE, AT CORNERS AND INTERSECTIONS. TOP BAR CRITERIA SHALL APPLY IF 12" OR MORE OF FRESH CONCRETE IS PLACED BELOW BAR.
 - SEE ARCHITECTURAL DRAWINGS FOR ALL WATERPROOFING / DAMPPROOFING DETAILS.
 - ALL DOWELS SHALL MATCH SIZE AND NUMBER OF MAIN REINFORCING, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - SEE ARCHITECTURAL DRAWINGS FOR TYPE AND LOCATION OF FLOOR FINISHES.
 - SEE MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DRAWINGS FOR ADDITIONAL WALL / SLAB OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
 - ALL REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60.
 - WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
 - DETAIL AND FABRICATE REINFORCING STEEL IN ACCORDANCE WITH THE ACI DETAILING MANUAL.
 - AT CORNERS AND INTERSECTIONS, PROVIDE BARS OF THE SAME NUMBER AND SIZE AS THE LONGITUDINAL BARS IN THE FOOTING.
 - CONCRETE MATERIALS SHALL BE AS FOLLOWS:
 - USE TYPE I/II PORTLAND CEMENT CONFORMING TO ASTM C150
 - AGGREGATE SHALL CONFORM TO ASTM C33 FINE AND COURSE AGGREGATES
 - AIR ENTRAINING ADMIXTURE SHALL CONFORM TO ASTM C260
 - PLASTICIZER CAN BE USED TO IMPROVE WORKABILITY IF REQUIRED
 - CONCRETE MIX DESIGN:
 - MAXIMUM WATER/CEMENT RATIO - 0.50 FOR SLAB, 0.55 FOR FOOTINGS AND OTHER CONCRETE UNLESS OTHERWISE NOTED.
 - SUMP SHALL BE 4 INCHES TO 6 INCHES (WITHOUT PLASTICIZER)
 - AIR ENTRAINMENT SHALL BE 4% TO 6% (EXTERIOR CONCRETE)
 - CONCRETE SLAB SHALL BE CURED USING A WATER-BASED CURING COMPOUND. CURING COMPOUND SHALL BE APPLIED TO ALL HORIZONTAL SURFACES. ONCE THE SURFACE WATER DISSIPATES AND THE SURFACE IS NOT MARRED BY WALKING, APPLY PER MANUFACTURER'S SPECIFICATIONS.
 - CONDUCT SLUMP, AIR, AND STRENGTH TESTS OF CONCRETE IN ACCORDANCE WITH THE FOLLOWING PROCEDURES:
 - SECURE SAMPLES IN ACCORDANCE WITH "METHOD OF SAMPLING FRESH CONCRETE" (ASTM C 172). MOLD AND CURE FIVE SPECIMENS FROM EACH SAMPLE IN ACCORDANCE WITH "METHOD OF MAKING AND CURING CONCRETE COMPRESSION AND FLEXURE SPECIMENS IN THE FIELD" (ASTM C 31). FIVE SPECIMENS COMPRISE ONE TEST. TEST TWO SPECIMENS AT 7 DAYS (ASTM C 39). TEST TWO SPECIMENS AT 28 DAYS IN ACCORDANCE WITH "METHOD OF TEST FOR COMPRESSIVE STRENGTH OF MOLDED CONCRETE CYLINDERS" (ASTM C 39). TEST EVALUATION SHALL BE CONDUCTED IN ACCORDANCE WITH PROVISIONS OF ACI 318-05. KEEP ONE SPECIMEN IN RESERVE.
 - MAKE ONE STRENGTH TEST FOR EACH 100 CUBIC YARDS OR FRACTION THEREOF FOR EACH MIX DESIGN OF CONCRETE PLACED IN ONE DAY, EXCEPT THAT IN NO CASE SHALL A GIVEN MIX DESIGN BE REPRESENTED BY LESS THAN THREE TESTS.
- STRUCTURAL STEEL**
 - DETAILING OF STRUCTURAL STEEL CONNECTIONS, MUST BE CONSISTENT WITH RECOGNIZED, PUBLISHED METHODS, SUCH AS THE "AISC STEEL CONSTRUCTION MANUAL, 13TH EDITION", "DETAILING FOR STEEL CONSTRUCTION", OR "VOLUME II CONNECTIONS MANUAL OF STEEL CONSTRUCTION".
 - MEMBERS AND CONNECTIONS NOT FULLY DEVELOPED ON THE CONTRACT DRAWINGS, AND CONNECTIONS FOR ANY PORTION OF THE STRUCTURE NOT SHOWN ON THE CONTRACT DRAWINGS, SHALL BE DESIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER, AND DETAILED ON THE SHOP DRAWINGS. ALTERNATE CONNECTION DETAILS MAY BE SUBMITTED ON SHOP DRAWINGS BY THE CONTRACTOR, ONLY IF ACCOMPANIED BY COMPLETE STRUCTURAL CALCULATIONS, PREPARED AND SEALED BY AN ENGINEER, LICENSED IN THE PROJECT'S JURISDICTION. FAILURE TO SUBMIT SUCH CALCULATIONS FOR REVIEW, CONCURRENT WITH SHOP DRAWING ERECTION PLANS AND DETAILS, WILL BE CAUSE FOR REJECTION OF THAT SUBMITTAL.
 - STRUCTURAL STEEL DETAILING, FABRICATION AND ERECTION, SHALL CONFORM TO THE "AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (MARCH 9, 2005), AND THE "AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" (MARCH 18, 2005).
 - WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE, AWS D1.1. ELECTRODES FOR SHOP AND FIELD WELDS, SHALL BE CLASS E70XX. ALL WELDING SHALL BE DONE BY QUALIFIED, CERTIFIED WELDERS, PER THE ABOVE STANDARD.
 - SHOP AND FIELD TESTING OF WELDS AND BOLTS, SHALL BE PERFORMED AS OUTLINED IN THE SPECIFICATIONS.
 - ALL FILLET WELDS SHALL BE A MINIMUM OF $\frac{1}{8}$ INCH, UNLESS OTHERWISE NOTED.
 - THERE SHALL BE NO FIELD CUTTING OF STRUCTURAL STEEL MEMBERS, FOR THE WORK OF OTHER TRADES, WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER.
 - ALL STRUCTURAL STEEL SHAPES USED, SHALL BE IN ACCORDANCE WITH ASTM A992 SPECIFICATIONS ($F_y = 50$ KSI). ALL STRUCTURAL TUBING USED, SHALL BE IN ACCORDANCE WITH ASTM A500, GRADE B ($F_y = 46$ KSI). ALL PIPE USED, SHALL BE IN ACCORDANCE WITH ASTM A53 ($F_y = 35$ KSI). ALL MISCELLANEOUS STEEL USED, SHALL BE IN ACCORDANCE WITH ASTM A36 ($F_y = 36$ KSI).
 - ALL FIELD BOLTED CONNECTIONS, SHALL BE BEARING TYPE CONNECTIONS (THREADS INCLUDED IN THE SHEAR PLANE), WITH $\frac{3}{8}$ " DIAMETER, ASTM A325 HIGH STRENGTH BOLTS, UNLESS OTHERWISE NOTED ON THE DRAWING. ALL BOLTS SHALL BE TIGHTENED TO A "SNUG-TIGHT" CONDITION, UNLESS OTHERWISE NOTED.
 - THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED, TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT, UNTIL ALL PERMANENT BRACING, ROOF & WALL SHEATHING, OR METAL ROOF DECK ARE IN PLACE, TO RESIST LATERAL MOVEMENT OF THE FRAME.
 - ALL STEEL SHALL BE HOT TIP GALVANIZED, U.N.O.
- PRE-ENGINEERED METAL BUILDINGS**
 - CONFIGURATION, COLUMN LOCATIONS, EAVE HEIGHTS, ROOF SLOPE, ETCETERA, SHALL BE AS SHOWN ON THE DRAWINGS. SHOULD BUILDING MANUFACTURER WISH TO FURNISH A SYSTEM THAT WILL DIFFER FROM THAT SHOWN, WRITTEN APPROVAL SHALL BE OBTAINED FROM THE ARCHITECT/ENGINEER OF RECORD PRIOR TO BIDDING.
 - BUILDING DESIGN AND LOAD APPLICATION SHALL CONFORM TO THE CURRENT NORTH CAROLINA STATE BUILDING CODE. THE COLLATERAL LOAD SHALL NOT BE USED TO REDUCE THE EFFECTS OF WIND LOADS ON THE BUILDING. REFER TO THE 'GENERAL' SECTION OF THE STRUCTURAL NOTES FOR ADDITIONAL LOADING INFORMATION.
 - THE METAL BUILDING FRAMES SHALL BE DESIGNED SUCH THAT THE MAXIMUM HORIZONTAL DRIFT DUE TO WIND AND SEISMIC LOADING SHALL SATISFY AN H / 180 CRITERIA. THE MAXIMUM VERTICAL DEFLECTION OF PRIMARY AND SECONDARY FRAMING MEMBERS SHALL BE WITHIN THE TOLERANCES PROSCRIBED BY THE NC STATE BUILDING CODE. MANUFACTURER SHALL VERIFY THAT THE DEFLECTION CRITERIA ARE COMPATIBLE WITH EXTERIOR AND INTERIOR FINISHES SUPPORTED BY THE METAL BUILDING STRUCTURE.
 - THE FOOTING DESIGN IS BASED UPON AN ASSUMED LOADING OF THE METAL BUILDING SUPER-STRUCTURE. THE FOUNDATIONS SHALL NOT BE CONSTRUCTED UNTIL THE STRUCTURAL ENGINEER HAS REVIEWED THE ACTUAL DESIGN REACTIONS SUPPLIED BY THE MANUFACTURER. SOME ADJUSTMENTS TO FOOTING SIZES MAY BE REQUIRED BASED ON FINAL COLUMN REACTIONS.

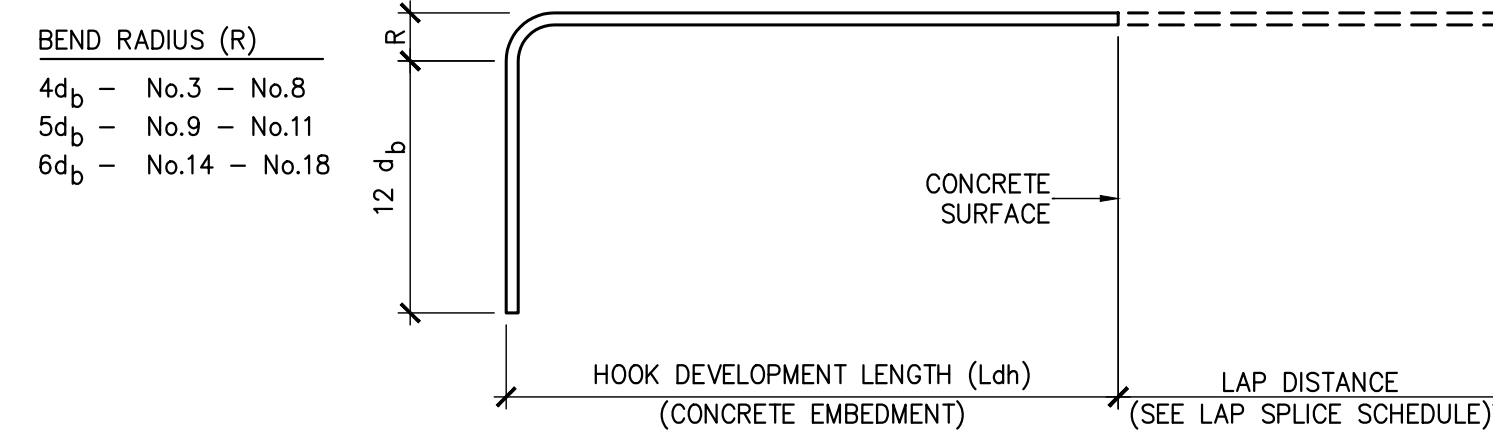
- METAL ROOF DECK**
 - METAL ROOF DECK SHALL BE CUT TO PROVIDE A MINIMUM THREE-SPAN CONDITION.
 - METAL ROOF DECK SHALL BE SCREWED THE SUPPORTING MEMBERS WITH #12 SCREWS AT 12" O.C. (36/4 PATTERN). USE SPACING OF 6" O.C. AT ROOF PERIMETER.
 - ALL METAL DECK SIDE-LAPS SHALL BE FASTENED WITH #12 SCREWS AT 12" O.C., MAXIMUM.
 - ALL METAL DECK SHALL BE FINISHED WITH A GALVANIZED COATING, CONFORMING TO ASTM A653 G60. DECK EXPOSED TO WEATHER SHALL CONFORM TO ASTM A653 G90.
 - PROVIDE A MINIMUM $\frac{1}{8}$ " DECK END BEARING (OR PER MANUFACTURER'S RECOMMENDATIONS IF GREATER).
 - ROOF DECK SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

20 GA. DECK	MOMENT OF INERTIA, I_x (BOTTOM OF DECK)	0.201 IN ⁴ /FT. WIDTH
	SECTION MODULUS, S_x (BOTTOM OF DECK)	0.234 IN ³ /FT. WIDTH
	MOMENT OF INERTIA, I_y (TOP OF DECK)	0.222 IN ⁴ /FT. WIDTH
	SECTION MODULUS, S_y (TOP OF DECK)	0.247 IN ³ /FT. WIDTH

- WOOD FRAMING**
 - ALL STRUCTURAL WOOD MEMBERS SHALL BE No. 2 SOUTHERN YELLOW PINE, 19% MAXIMUM MOISTURE CONTENT, UNLESS OTHERWISE NOTED. INTERIOR NON BEARING PARTITIONS MAY BE No. 2 SPRUCE (SPF).
 - ALL WOOD FRAMING, DIRECTLY EXPOSED TO WEATHER, OR IN DIRECT CONTACT WITH MASONRY, SOIL OR CONCRETE, SHALL BE PRESSURE TREATED, UNLESS OTHERWISE NOTED.
 - ALL LVLS, DIRECTLY EXPOSED TO WEATHER, OR IN DIRECT CONTACT WITH MASONRY, SOIL OR CONCRETE, SHALL BE EXTERIOR GRADE, UNLESS NOTED OTHERWISE.
 - ALL METAL CONNECTORS SHALL BE HOT DIP GALVANIZED. INSTALL ALL CONNECTORS PER THE MANUFACTURER'S RECOMMENDATIONS. METAL CONNECTOR DESIGNATIONS INDICATED ON PLANS, ARE FOR 'SIMPSON STRONG-TIE' ANCHORS. ANCHORS FROM OTHER MANUFACTURERS MAY BE USED, PROVIDED THEY HAVE EQUIVALENT STRENGTH.
 - ALL WALLED CONNECTIONS SHALL BE IN ACCORDANCE WITH NORTH CAROLINA STATE BUILDING CODE TABLE 2304.9.1 - FASTENING SCHEDULE, UNLESS OTHERWISE NOTED.
 - FRAMING CONNECTIONS THAT ARE BOLTED OR SCREWED, SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD.
 - PROVIDE STUDS AND HEADERS AT ALL EXTERIOR WALLS AND INTERIOR BEARING WALLS AS FOLLOWS, UNLESS OTHERWISE NOTED:

OPENING WIDTH	STUDS	HEADER
0'-0" TO 6'-0"	2 KING STUDS, 1 JACK STUD	(2) 2 x 10 @ 2 x 4 WALL (3) 2 x 10 @ 2 x 6 WALL
6'-1" TO 8'-0"	2 KING STUDS, 2 JACK STUDS	(2) 2 x 10 @ 2 x 4 WALL (3) 2 x 10 @ 2 x 6 WALL
8'-1" TO 12'-0"	3 KING STUDS, 2 JACK STUDS	(2) 2 x 12 @ 2 x 4 WALL (3) 2 x 12 @ 2 x 6 WALL

NOTE:
SEE PROJECT SPECIFICATIONS
FOR ADDITIONAL INFORMATION



STANDARD HOOKS IN TENSION (PER ACI 318-02)

BAR SIZE	HOOK DEVELOPMENT LENGTH L _{dh} (INCHES)		
	f'_c 3000 psi	f'_c 4000 psi	f'_c 5000 psi
#3	9	7	7
#4	11	10	9
#5	14	12	11
#6	17	15	13
#7	19	17	15

d_b = BAR DIAMETER

- NOTES:
- CONCRETE IS NORMAL WEIGHT CONCRETE. IF LIGHTWEIGHT CONCRETE IS USED, MULTIPLY LENGTHS IN TABLE BY 1.3.
 - BAR YIELD STRENGTH (f_y) IS 60 KSI.
 - SIDE COVER REQUIREMENTS OF ACI SECTION 25.4.3.2 ARE ASSUMED TO NOT BE MET.
 - THE OR STIRRUP REQUIREMENTS OF ACI SECTION 25.4.3.2 ARE ASSUMED TO NOT BE MET.
 - REDUCTION OF EXCESS REINFORCEMENT IS NOT TAKEN.
 - HOOK DEVELOPMENT LENGTH IS VALID FOR 180° HOOKS ALSO.

STRUCTURAL DESIGN CRITERIA:

- DESIGN LOADS: (PEMB AND MODULAR BLDGS)**
 - ROOF DEAD LOAD MAX MIN (FOR UPLIFT)
 ROOFING 3 PSF 2 PSF
 ROOF FRAMING 4 PSF 3 PSF
 COLLATERAL 3 PSF 0 PSF
 10 PSF 7 PSF
 - LIVE LOADS
 ROOF LIVE LOAD - ALL AREAS GREATER OF 20 PSF MINIMUM OR SNOW LOAD. LIVE LOAD REDUCTION CAN BE USED IN ACCORDANCE WITH 2018 NCBC, SECTION 1607.10
 CONCRETE PAD LIVE LOAD 250 PSF
 CONC. FLOOR ATTENDANT BLDG 50 PSF
 - SNOW LOAD
 GROUND SNOW LOAD = 10 PSF (BEAUFORT COUNTY)
 SNOW LOAD IMPORTANCE FACTOR: $I = 1.0$
 SNOW EXPOSURE FACTOR = 1.0
 SNOW THERMAL FACTOR = 1.0
 ROOF SNOW LOAD = 7 PSF
 BASIC DESIGN ROOF SNOW LOAD = 7.0 PSF
 - WIND LOAD
 BASIC WIND SPEED: $V_{ult} = 125$ MPH (BEAUFORT COUNTY)
 RISK CATEGORY: I X II III IV
 WIND EXPOSURE CATEGORY: 'C' (ASCE 7-10)
 SEISMIC LOADS (N.C. STATE BLDG. CODE):
 SEISMIC IMPORTANCE FACTOR: $I = 1.0$
 RISK CATEGORY: I X II III IV
 SEISMIC DESIGN CATEGORY: A B C D
 MAPPED SPECTRAL RESPONSE ACCELERATION: $S_{as} 1.17 \frac{g}{g}$ $S_{vs} 9.1 \frac{g}{g}$ $S_1 5.7 \frac{g}{g}$ S_2
 SPECTRAL RESPONSE COEFFICIENTS:
 SITE CLASSIFICATION: A B C X D E F
 - ALL DESIGN LOADS ARE PER NORTH CAROLINA STATE BUILDING CODE 2018 EDITION.
- FOUNDATION DESIGN CRITERIA:**
 - MINIMUM FOOTING BEARING DEPTH BELOW GRADE IS 12 INCHES.
 - FOUNDATION DESIGN IS BASED ON A PRESUMPTIVE MAXIMUM ALLOWABLE SOIL BEARING CAPACITY OF 1,500 PSF.
 - CONTRACTOR SHALL FIELD VERIFY THE SOIL BEARING CAPACITY PRIOR TO START OF CONSTRUCTION.

CONCRETE REBAR SPlice SCHEDULE

BAR SIZE	LAP LENGTH (in.)		
	$f'_c = 3000$ psi	$f'_c = 4000$ psi	$f'_c = 5000$ psi
#4	22	19	17
#5	28	24	21
#6	32	29	26
#7	48	42	37

- NOTES:
- CONCRETE IS NORMAL WEIGHT CONCRETE. IF LIGHTWEIGHT CONCRETE IS USED, MULTIPLY LENGTHS IN TABLE BY 1.3.
 - BAR YIELD STRENGTH (f_y) IS 60 KSI.
 - BAR SPACING AND COVER REQUIREMENTS OF ACI SECTION 25.4.2.2 ARE ASSUMED TO BE MET. IF NOT, MULTIPLY LENGTHS IN TABLE BY 1.5.
 - REDUCTION OF EXCESS REINFORCEMENT NOT TAKEN.
 - IF MORE THAN 12" OF FRESH CONCRETE IS CAST IN MEMBER BELOW HORIZONTAL SPlice, MULTIPLY LENGTHS IN TABLE BY 1.3.

EXPOSED CONCRETE FINISH SCHEDULE

AREA	FINISH	COMMENTS
ALL EXTERIOR WALLS, CURBS, UNLESS OTHERWISE NOTED	SMOOTH FORM	SEE NOTE 1
EXTERIOR CONCRETE PAVEMENT, SIDEWALKS	COARSE BROOM	SEE NOTE 1
SLAB ON GRADE	TROWEL	SEE NOTE 1
EXTERIOR STAIRS	COARSE BROOM	SEE NOTE 1

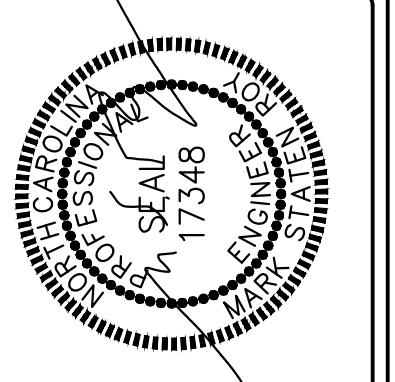
- NOTES:
- SEE SPECIFICATIONS SECTION, '033000 CAST-IN-PLACE CONCRETE', FOR ADDITIONAL INFORMATION.

CONCRETE MATERIALS SCHEDULE

LOCATION	MINIMUM COMPRESSIVE STRENGTH (AT 28 DAYS)	REMARKS
FOUNDATIONS	3000 PSI	-
SLAB ON GRADE	4000 PSI	-
WALLS	4000 PSI	-
MISCELLANEOUS	3000 PSI	-

NO.	DATE	REVISIONS

RPA ENGINEERING, P.A.
 Structural Engineering Solutions
 Engineering License Certificate No. C-2734
 1 Commerce Square, Suite 202
 Washington, NC 27889
 Phone : 252-321-6027
 Fax : 252-355-2179



BEAUFORT COUNTY
STILLEY STATION RD CONVENIENCE SITE
STILLEY STATION RD
BEAUFORT COUNTY, NC

DRAWING TITLE
STRUCTURAL NOTES DESIGN CRITERIA & SCHEDULES

PROJ. NO.
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DATE
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DRAWN	CHECKED	APPROVED
GBP	MSR	MSR

SHEET NO.
S4.1