

DESIGN SPECIFICATIONS

DESIGN CODE: 2023 FLORIDA BUILDING CODE - RESIDENTIAL

DESIGN IS VOID ONE YEAR AFTER THE DATE OF THE ORIGINAL PLANS, UNLESS PLANS HAVE BEEN REVIEWED FOR CODE COMPLIANCE.

DESIGN LOADS: ACTUAL AND UNIFORM

FLOOR ROOF LOADS: (per 125) 20 psf (ARCH SHINGLES) 10 psf (TILE SHINGLES) 10 psf (TILE SHINGLES) 5 psf

WIND LOADING: ASCE 7/22 FOR WIND UPLIFT, TRUSSES SHALL BE DESIGNED WITH A MIN. DEAD LOAD CONDITION OF 5 PSF TOP CHORD AND 5 PSF BOTTOM CHORD. REACTIONS CALCULATED FOR THE BEARING POINTS OF ROOF TRUSSES SHALL BE REDUCED, SPECIFICALLY, ATTIC FLOOR LIVE LOADS COMBINED WITH ROOF LIVE LOADS SHALL BE MULTIPLIED BY 0.75 WHEN COMBINED w/ DEAD LOAD.

BASIC WIND SPEED (ASCE 7-22) 130 MPH

IMPORTANCE FACTOR 1.0

MEAN ROOF HEIGHT 20.0 FT

ROOF PITCH 7/12

BUILDING CATEGORY II

EXPOSURE CATEGORY C

ENCLOSURE CLASSIFICATION C-ENCLOSED

INTERNAL PRESSURE COEFFICIENT +/- .18

MATERIAL SPECIFICATIONS

HARDWARE AND ANCHORS: ANCHOR BOLTS & THREADED ROD: SHALL BE IN ACCORDANCE WITH ASTM A 307 OR ASTM F 1554 GRADE 36. WASHERS: SHALL BE IN ACCORDANCE WITH ASTM A500 (GRADE B). NUTS: SHALL BE IN ACCORDANCE WITH ASTM A 563 GRADE A HEX. METAL CONNECTORS: ALL METAL CONNECTORS WHICH ARE EXPOSED TO EXTERIOR SHALL BE GALVANIZED. RETROFIT REBAR/ROD INSTALLATION: EMBEDMENT OF RODS OR REBAR DOWELS SHALL BE 12 BAR DIAMETER MINIMUM. HOLES SHALL BE 1/4" LARGER THAN REBAR SIX AND 1/2" LARGER THAN THREADED ROD SIZE. (U.O.N.) ANCHORING ADHESIVE: SHALL BE ONE OF THE FOLLOWING PRODUCTS (DUAL CARTRIDGE INSTALLATION ONLY): EPOXY: 11W RED HEAD A7 REINFORCING STEEL: SHALL BE ASTM A615, GRADE 60. STRUCTURAL STEEL: SHALL BE ASTM A992, GRADE 50. WELDED WIRE FABRIC (WFW): SHALL BE ASTM A185. LAMINATED VENEER LUMBER (LVL): ALL LAMINATED VENEER LUMBER SHALL MEET OR EXCEED THE FOLLOWING DESIGN PROPERTIES - ELASTIC MODULUS (E):1,900ksi, BENDING STRESS (Fb) 2600psi

COMPONENTS & CLADDING ALLOWABLE DESIGN PRESSURES

TRIBUTARY AREA (sf)	INTERIOR ZONE (PSF)		EDGE STRIP (PSF): 'a' = 4'-6"	
	10	50	+25.5 -27.7	+22.9 -28.8
10				
50				
100				

THE VALUES ABOVE ARE ALLOWABLE WIND PRESSURE VALUES (ASD). THE ABOVE WIND PRESSURES HAVE BEEN REDUCED BY 0.60 AS PERMITTED BY THE ALLOWABLE STRESS DESIGN METHODOLOGY. NO FURTHER REDUCTION SHALL BE PERMITTED.

COMPONENT & CLADDING WALL ELEMENTS SHALL BE DESIGNED FOR BOTH POSITIVE AND NEGATIVE PRESSURES SHOWN IN TABLE ABOVE.

LINEAR INTERPOLATION IS PERMISSIBLE.

PLUS = PRESSURE AND MINUS = SUCTION.

DESIGN OF WINDOWS/DOORS FASTENING TO THE WALL FRAMING IS THE RESPONSIBILITY OF THE WINDOW/DOOR MANUF./SUPPLIER & SHALL MEET THE ABOVE NOTED POSITIVE AND NEGATIVE PRESSURES.

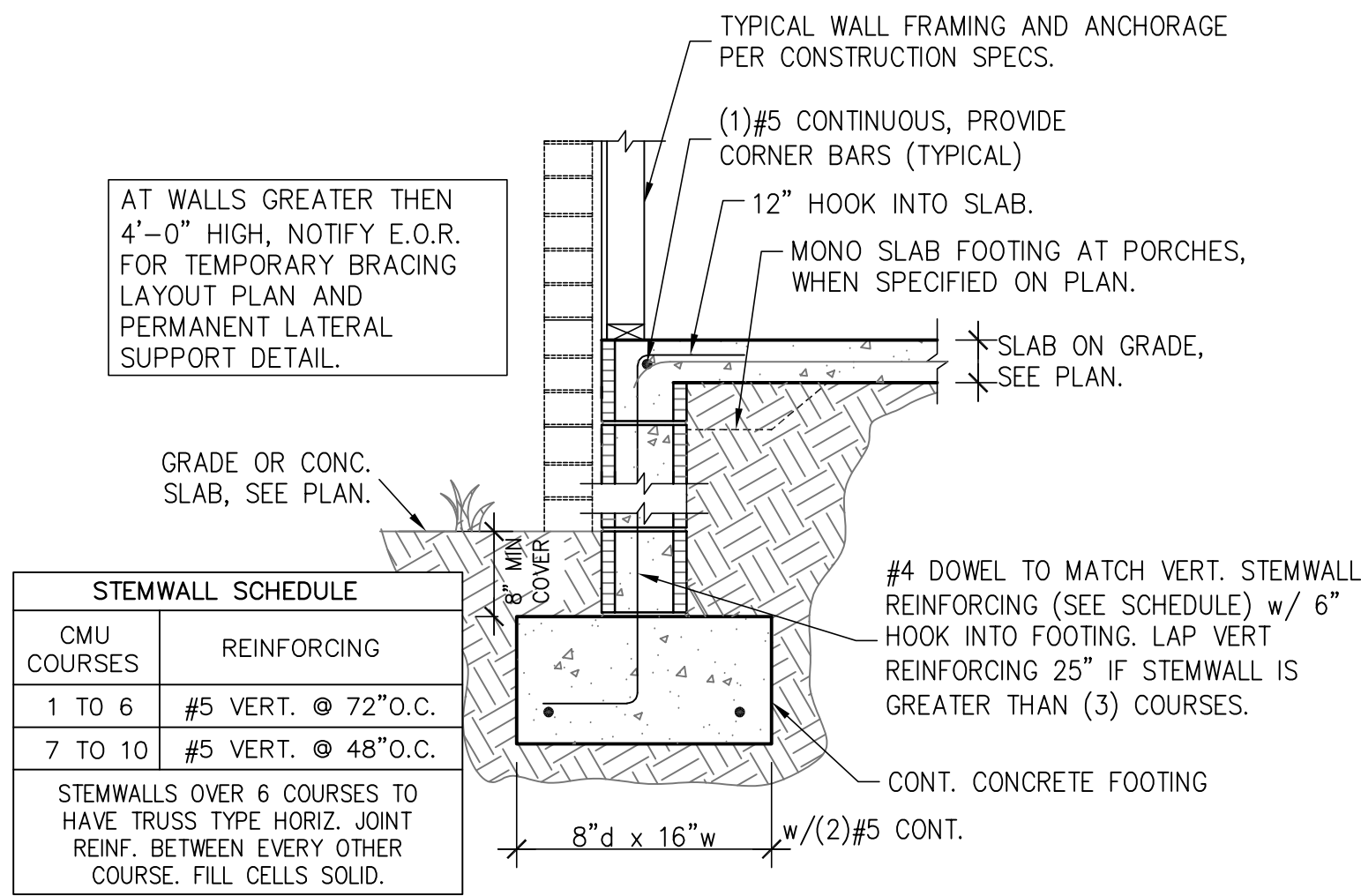
SCOPE OF SERVICE

MEANS AND METHODS: THE STRUCTURAL ENGINEER SHALL NOT HAVE CONTROL OR BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES, OR SEQUENCES; FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR OR ANY OTHER PERSONS PERFORMING THE WORK OR FOR THE FAILURE FOR ANY OF THEM TO CONSTRUCT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

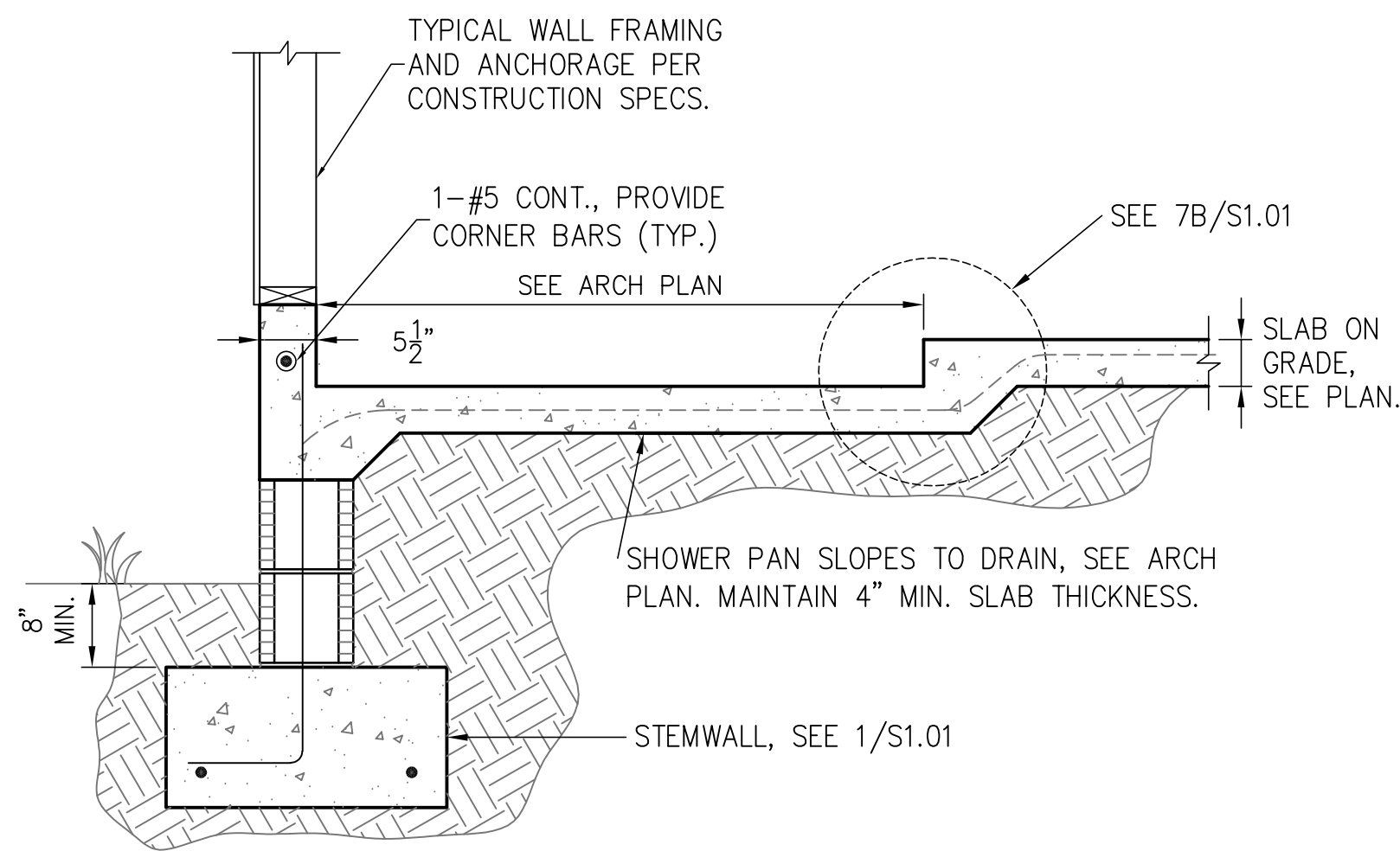
LIMITS OF STRUCTURAL ENGINEERING DESIGN RESPONSIBILITIES: THE ITEMS SPECIFICALLY DESIGNED BY THE STRUCTURAL ENGINEER ARE LIMITED TO THE FOLLOWING: CONTINUOUS LOAD PATH FOR WIND UPLIFT, WOOD PANEL SHEARWALLS, WALL FRAMING AND REQUIRED SHEATHING AND HEADERS DIRECTLY SUPPORTING ROOF FRAMING. ITEMS NOT DESIGNED PER ENGINEERED WOOD FLOOR AND ROOF TRUSSES, FLOOR FRAMING NOT SPECIFICALLY ADDRESSED, TRUSS-TO-TRUSS CONNECTION, AND ANY ARCHITECTURAL, MECHANICAL OR ELECTRICAL SYSTEM.

USP CONNECTORS				
CONNECTOR	UPLIFT		FASTENERS	FL# CODE
	SYP	SPF		
USP A35	450	450	(9)10dx1½"	
USP RT7	585	495	(5)8d EA. END	
USP RT8A	775	650	(5)10dx1½" EA. END	
USP MTW12	1195	860	(7)10dx1½" EA. END	
USP HTW20	1450	1245	(12)10dx1½" EA. END	
USP MSTA24	1640	1455	(9)10d EA. END	
USP MSTA36	2065	2065	(13)10d EA. END	
USP L1TS20B	1105	1105	½" ROD TO FTG.	
USP JUS28	1305	1305	(6)10d TO HEADER	
USP HTT16	4290	4290	¾" ROD TO FTG.	
USP HTT22	5370	5370	¾" ROD TO FTG.	
USP PAU44	2535		¾" ROD w/ (12)16d	
USP PAU66	2535		¾" ROD w/ (12)16d	
USP MSTM24	1545	1455	(5)¼"x2-¼" TAPCONS	

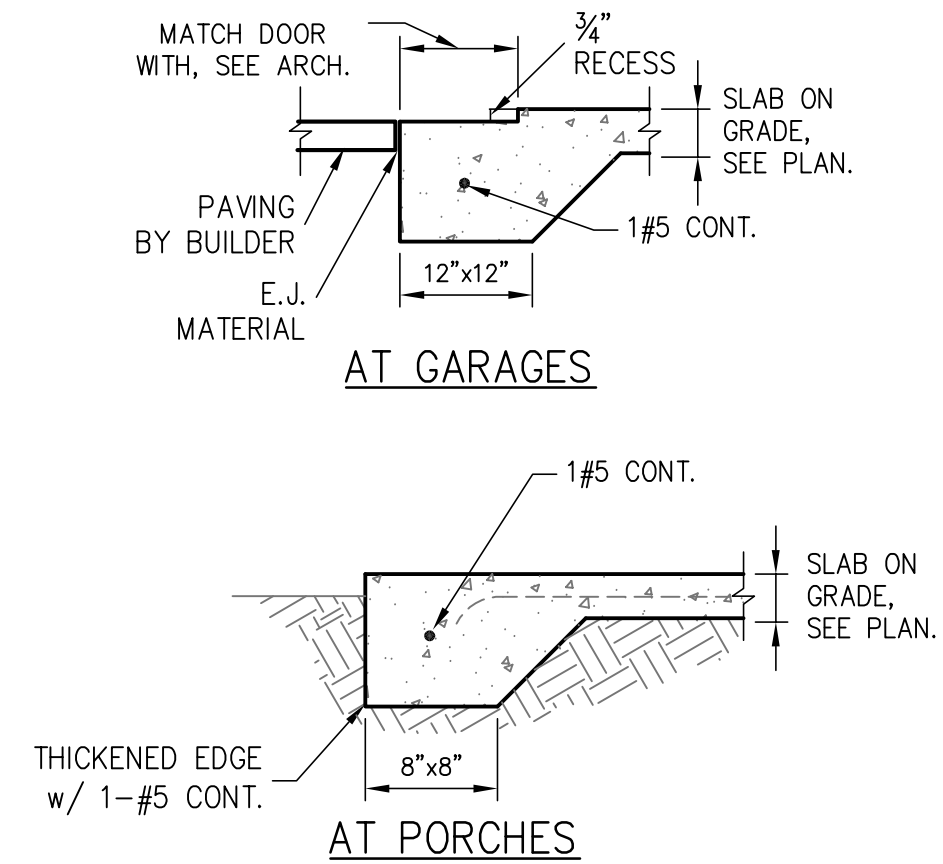
SIMPSON CONNECTORS				
CONNECTOR	UPLIFT		FASTENERS	FL# CODE
	SYP	SPF		
A35	450	450	12-8dx1½"	10446.4
H2.5T	600	520	5-8d EA. END	11478.3
HTS16	1150	1085	16-10d EA. END	10456.6
MTS12	1000	860	7-10dx1½" EA. END	10456.3
HTS20	1450	1245	24-10dx1½" EA. END	13872.3
MSTA24	1765	1270	9-10d EA. END	13872.4
MSTA36	2050	1870	13-10d EA. END	13872.8
HTT4	3480	3080	18-16d TO TRUSS/BEAM 1-¾" ROD TO FTG.	11496.2
HTT5	5250	4670	32-16d TO TRUSS/BEAM 1-¾" ROD TO FTG.	11496.2
LUS28	930	780	6-10d TO HEADER 4-10d TO JOIST	10655.13
HU140	905	785	14-16d TO HEADER 6-16d TO JOIST	10531.36
ABU44	2200		¾" ROD EPOXIED 6" MIN	10849.6
ABU66	2300		¾" ROD EPOXIED 6" MIN	10849.6
SET	N/A	N/A	SIMPSON EPOXY-TIE	11506.4
LTT20B	1675	1675	10-16d TO STUD/BEAM/POST 1-½" ROD TO FTG.	11496.3
LSTA12	805	695	10-10d	13872.5
CS16	1705	1705	13-8d	10852.1



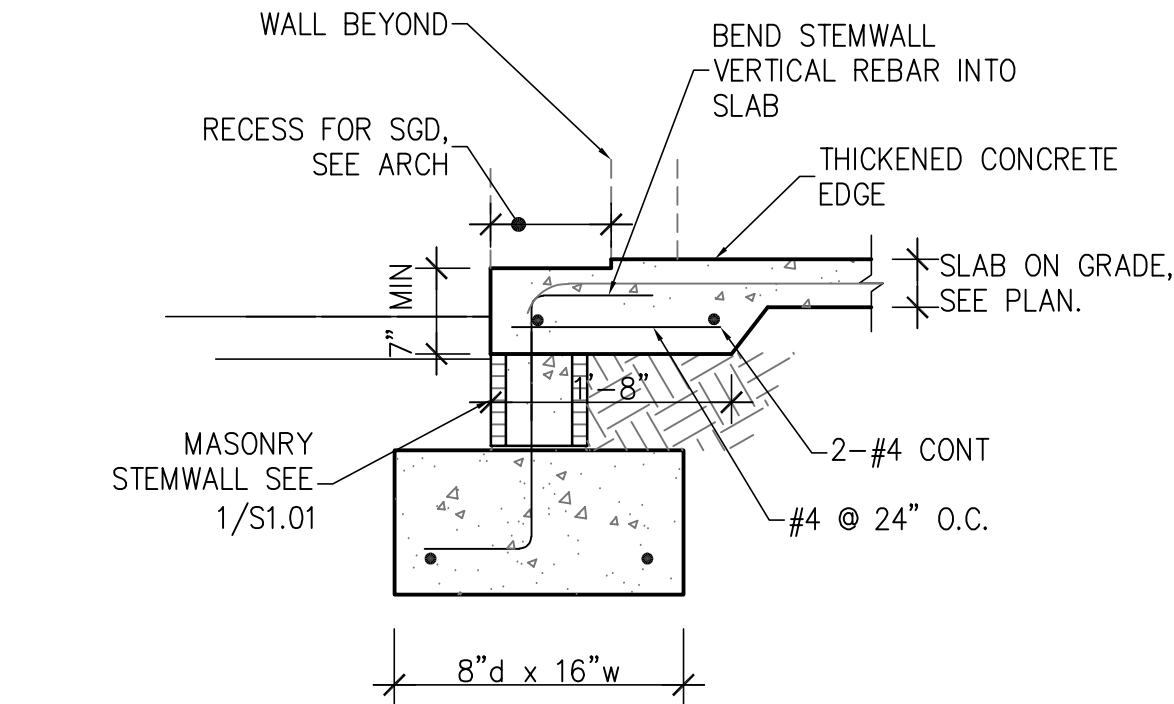
1 STEMWALL FOOTING
S1.01 SCALE: 3/4" = 1'-0"



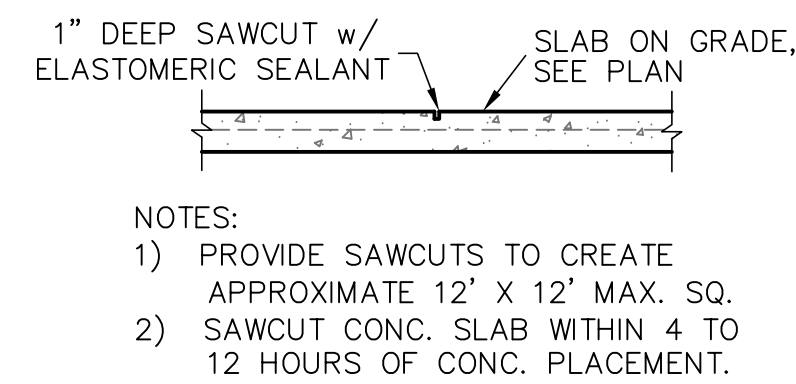
2 FOOTING W/ SHOWER RECESS
S1.01 SCALE: 3/4" = 1'-0"



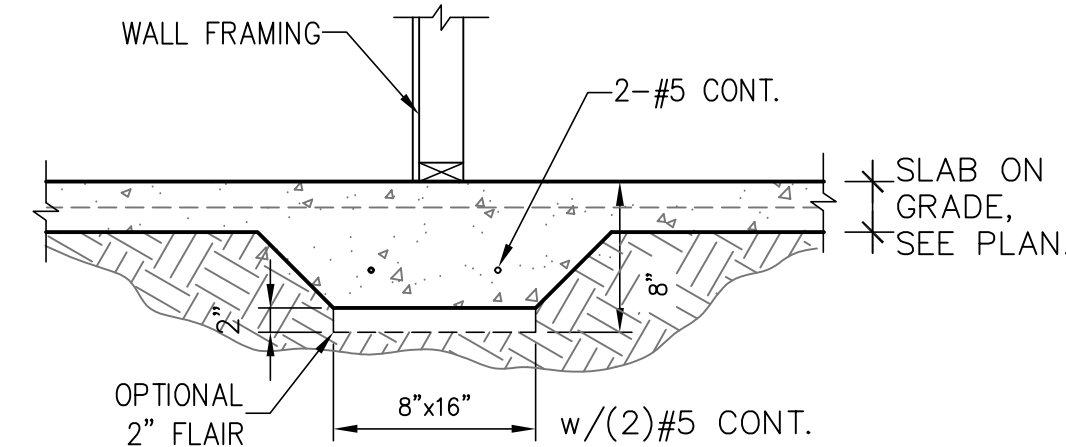
3 THICKENED SLAB
S1.01 SCALE: 3/4" = 1'-0"



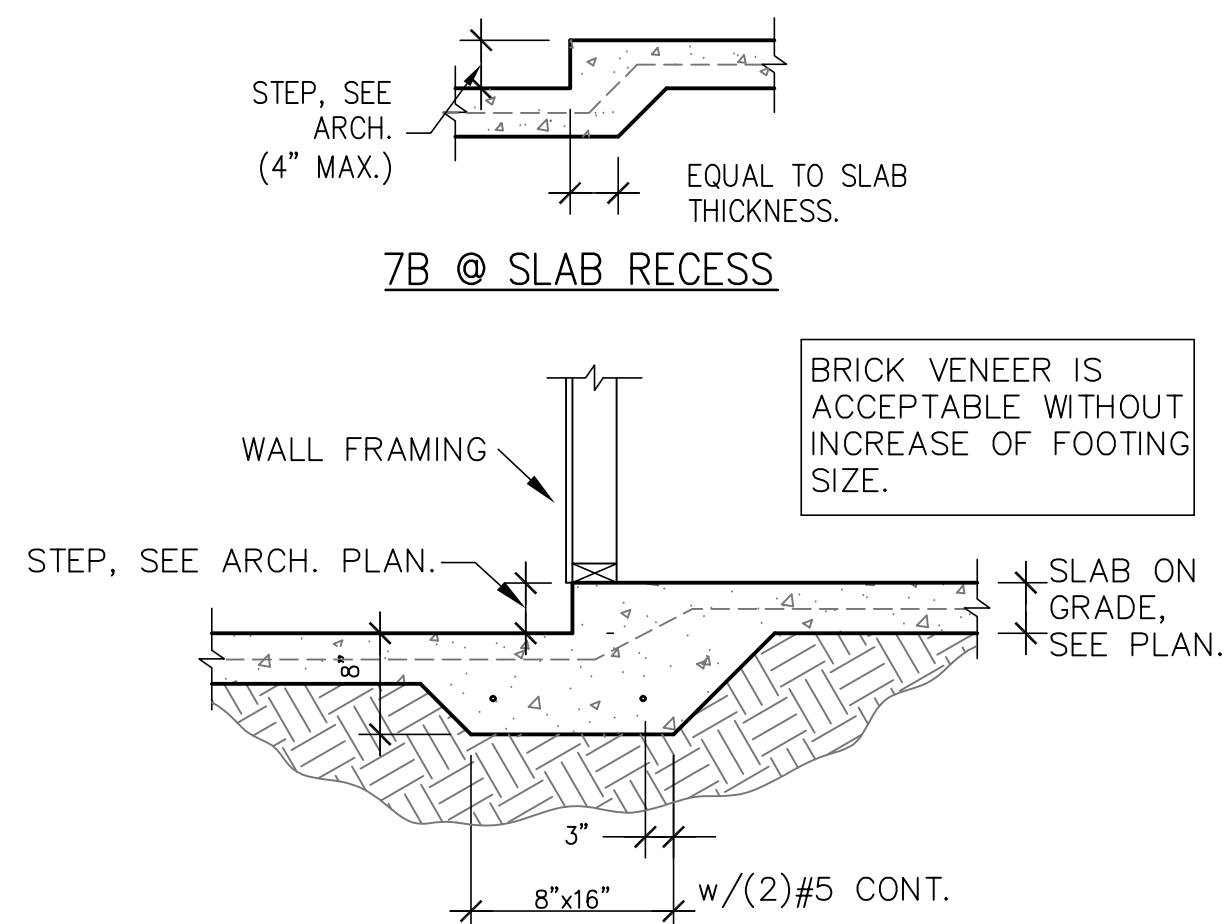
4 STEMWALL FOOTING AT SLIDER
S1.01 SCALE: 3/4" = 1'-0"



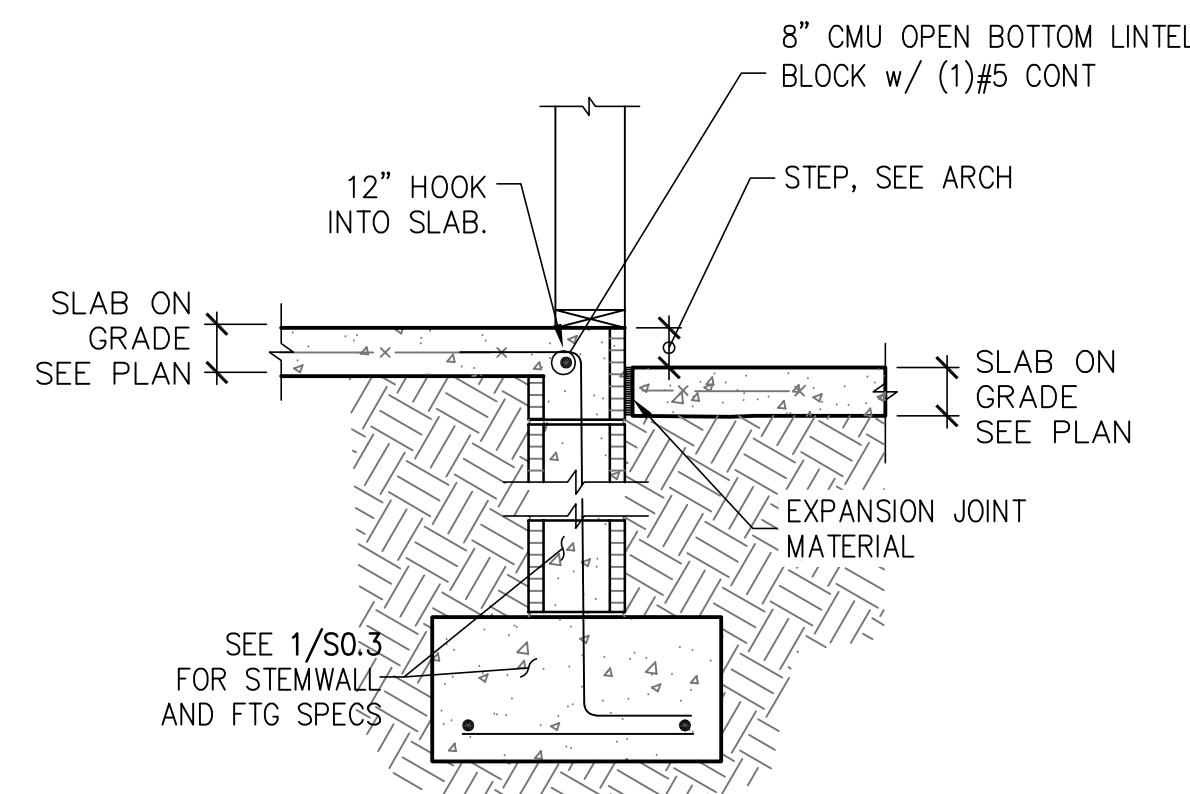
5 SAW CUT DETAIL
S1.01 SCALE: 3/4" = 1'-0"



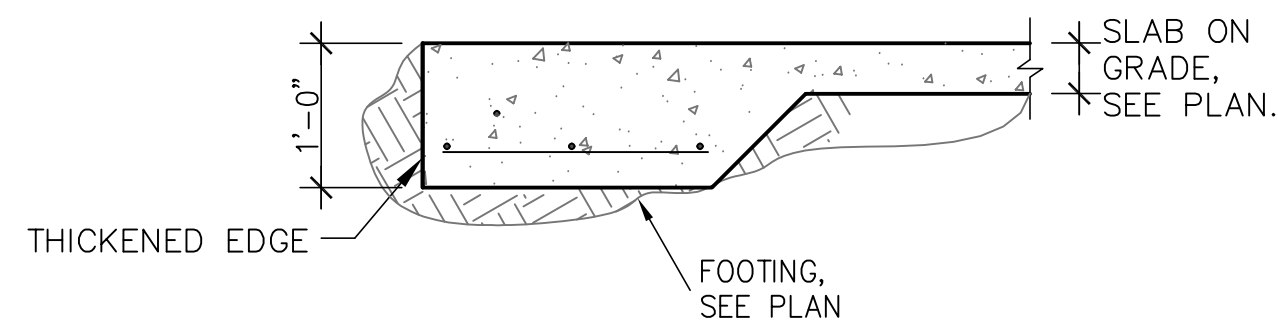
6 BEARING AT INTERIOR
S1.01 SCALE: 3/4" = 1'-0"



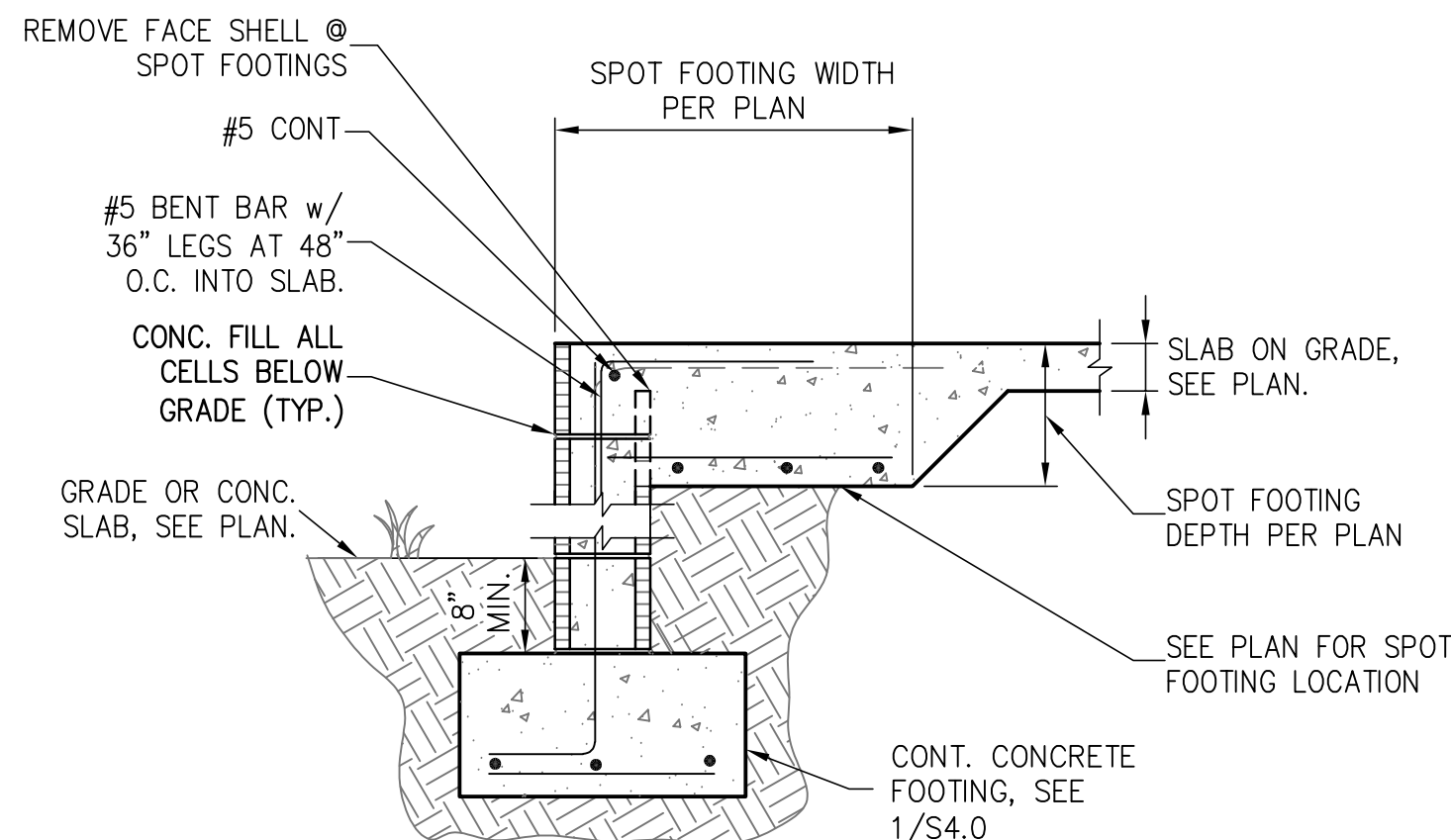
7 MONO. FOOTING AT STEP-DOWN
S1.01 SCALE: 3/4" = 1'-0"



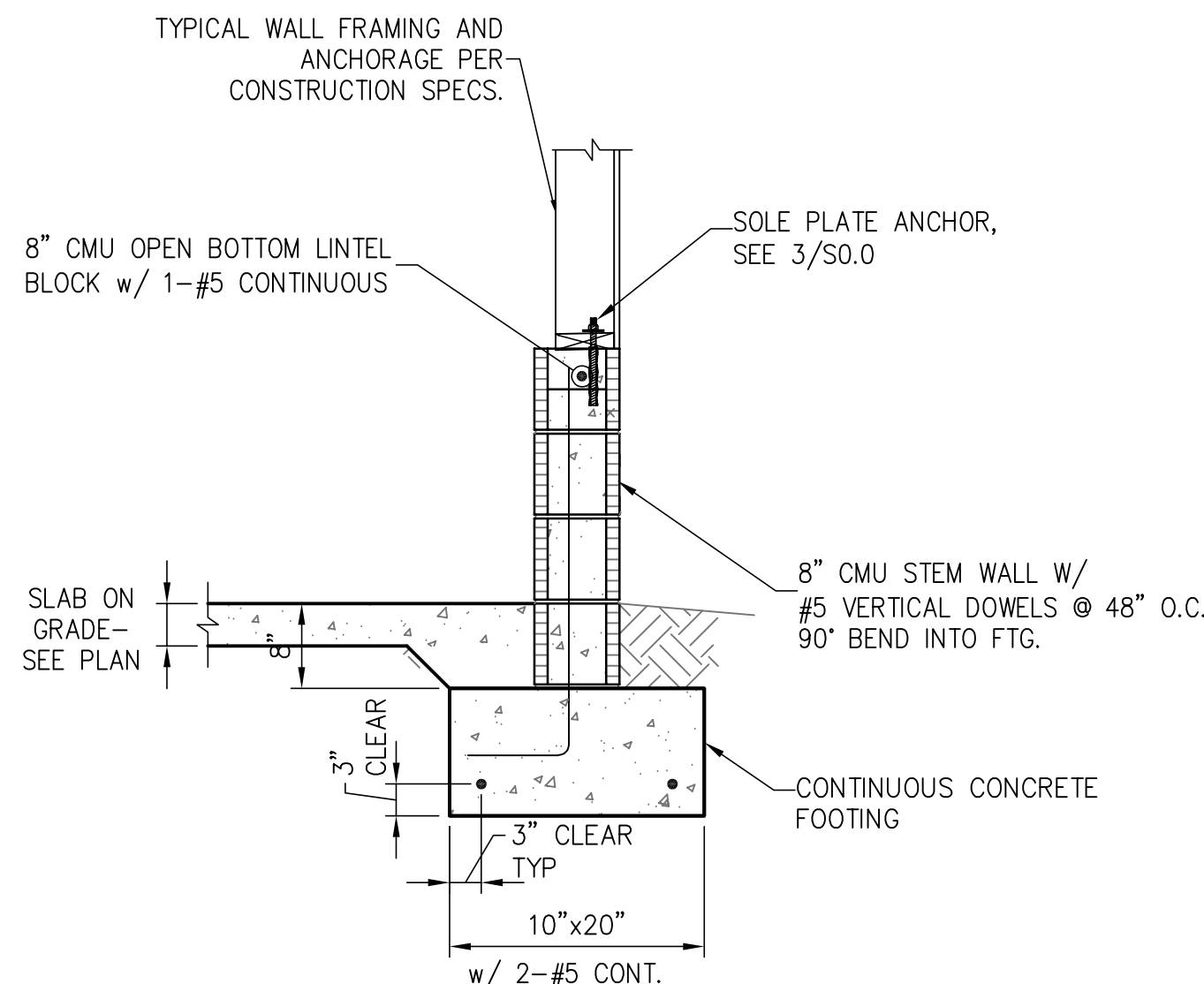
8 STEP AT STEMWALL
S1.01 SCALE: 3/4" = 1'-0"



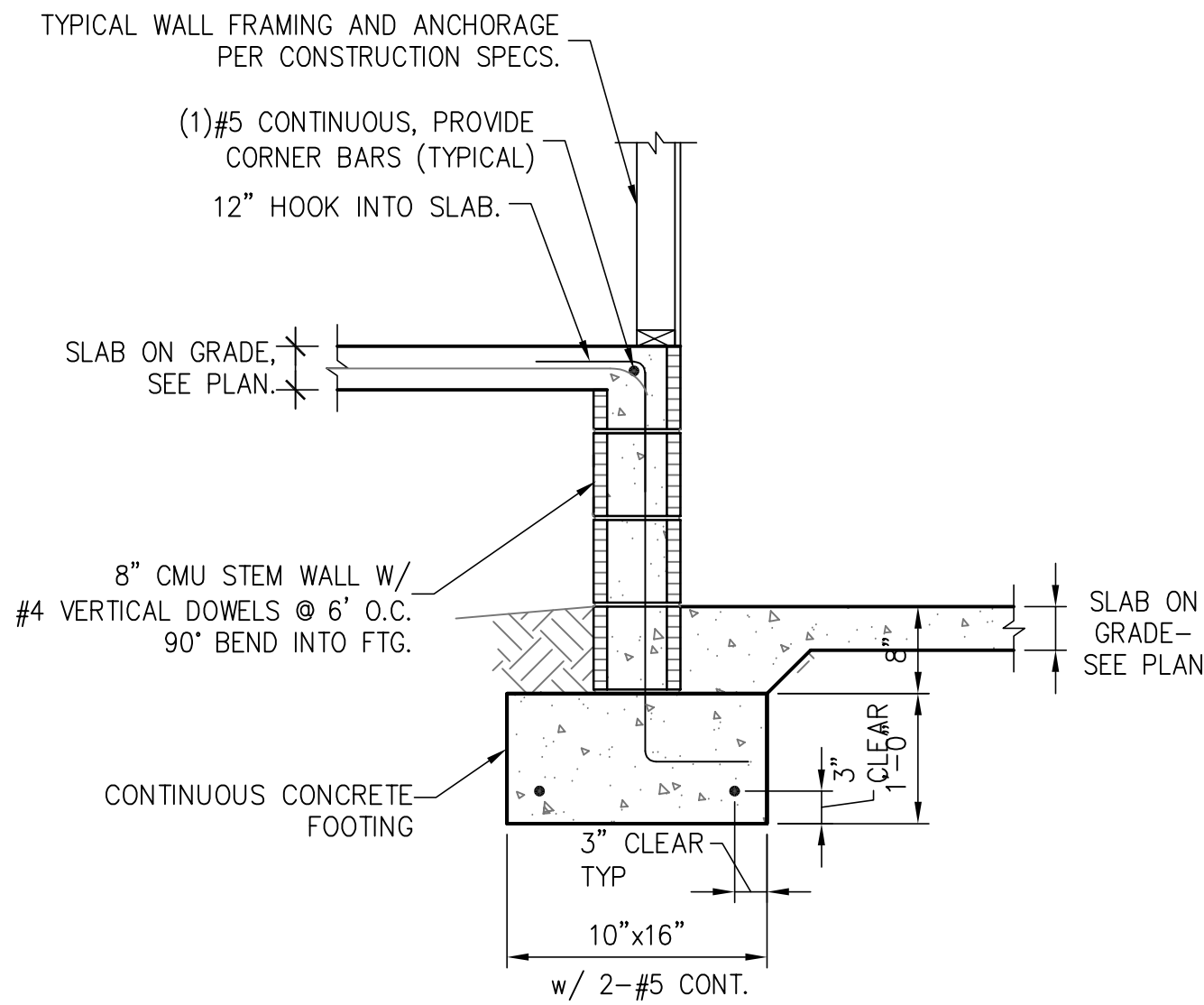
11 SPOT FOOTING AT PORCH SLAB
S1.01



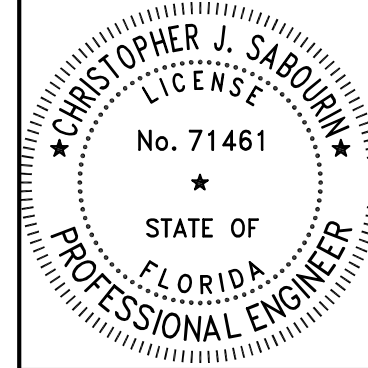
12 FOOTING AT TOP OF SLAB
S1.01



9 GARAGE STEM WALL
S1.01 SCALE: 3/4" = 1'-0"



10 STEMWALL AT GARAGE
S1.01 SCALE: 3/4" = 1'-0"



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PERMIT	07.15.24
REVISIONS	DATE

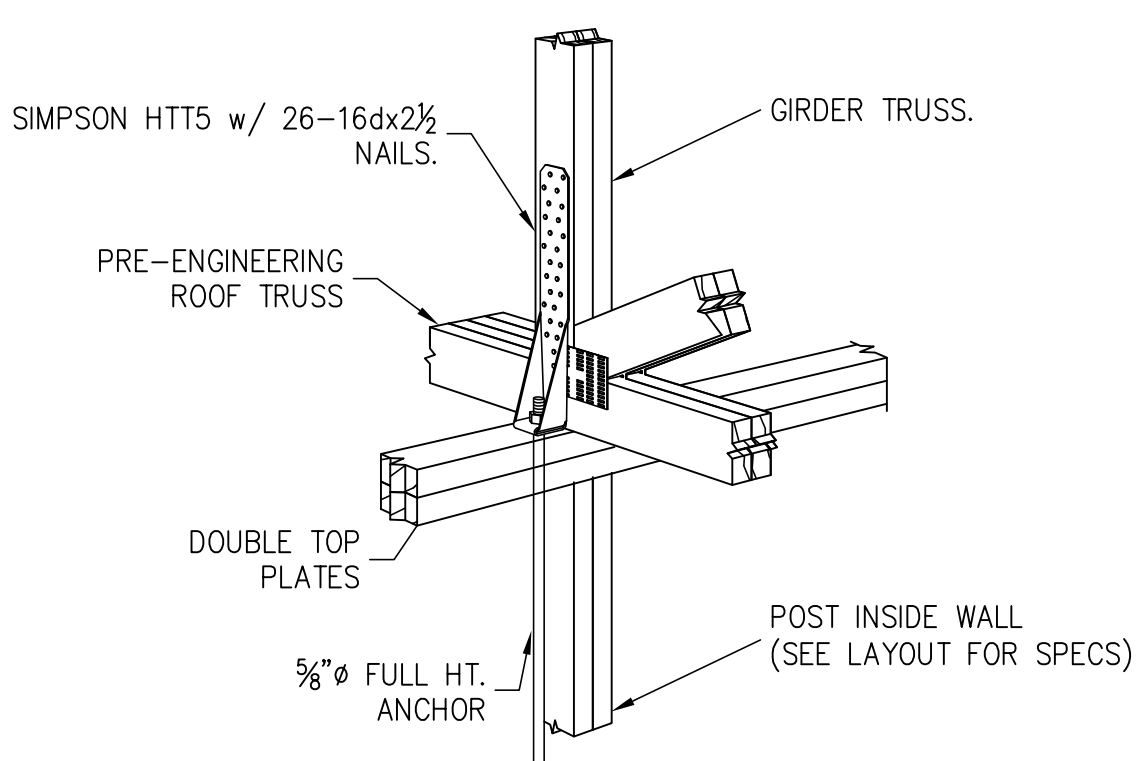
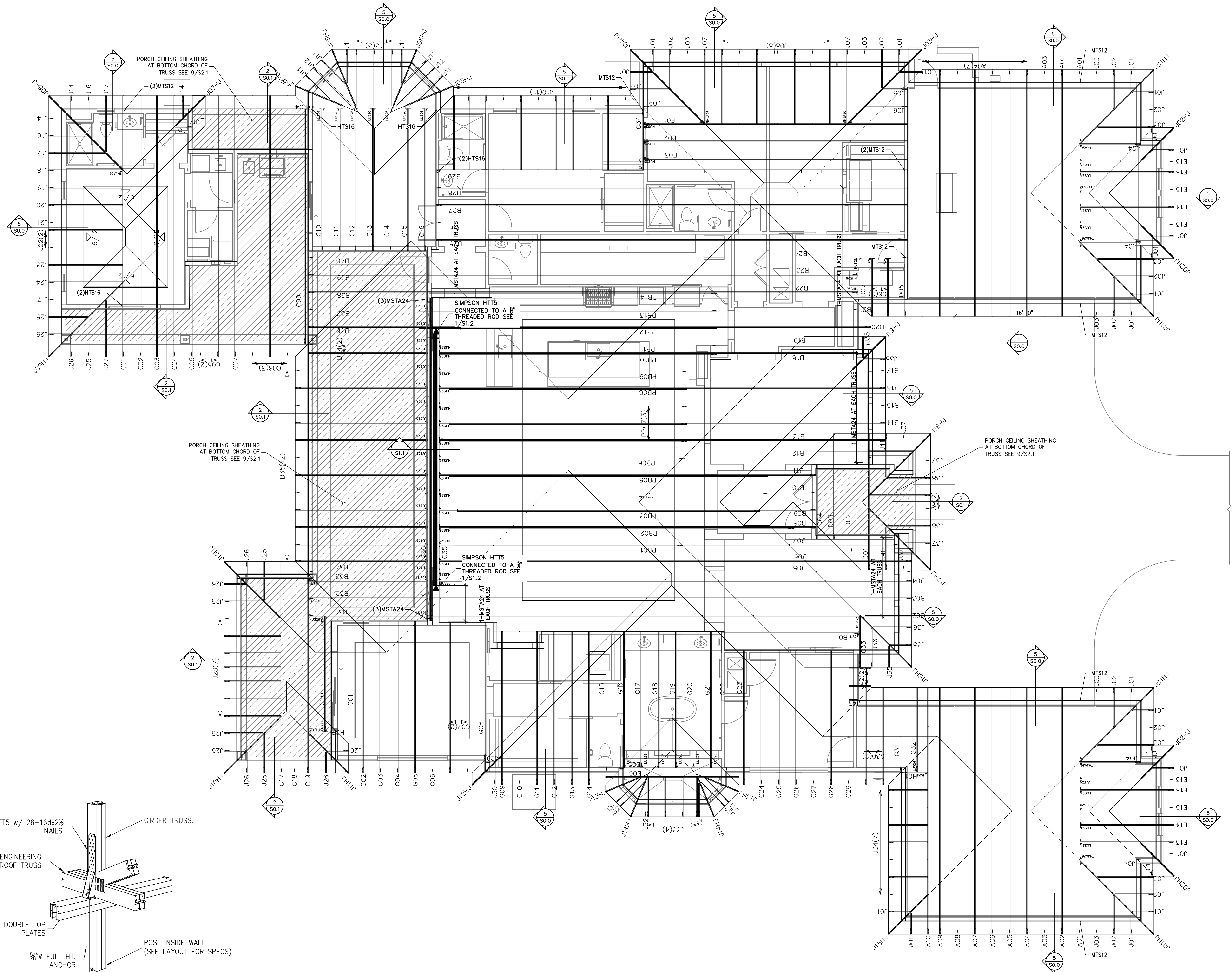
STRUCTURAL ENGINEERING FOR
THE JACK RESIDENCE

FIELD ALTERATION
CONTRACTOR SHALL CONTACT SABO STRUCTURAL ENGINEERING PRIOR TO MAKING ANY STRUCTURAL FIELD MODIFICATIONS WHICH MAY VARY FROM THE INTENT OF THE ORIGINAL CONSTRUCTION DOCUMENTS. ANY FIELD ALTERATIONS MADE PRIOR TO BEING APPROVED BY CHRISTOPHER SABOURIN MAY RESULT IN ADDITIONAL ENGINEERING OR INSPECTION FEES.

SCALING
DO NOT SCALE DIMENSIONS FROM THESE DRAWINGS. IF A DIMENSION IS UNCLEAR REFER TO THE ARCHITECTURAL DRAWINGS OR CONTACT THE E.O.R.

FOUNDATION
DETAILS

SHEET
S1.01
SHEET 4 OF 6



1 HTTS5 HIGH UPLIFT CONNECTION
S1.2 SCALE: N.T.S.

TRUSS / ROOF RAFTER NOTES: STRAPPING NOTES:
STRAP ROOF TRUSSES AND RAFTERS TO BEARING WITH
(2)12D TOENAILS & (1)SIMPSON SDWC15600 SCREW UNLESS
OTHERWISE NOTED.

ROOF TRUSS PLACEMENT PLAN
SCALE: 3/16" = 1'-0"

SYMBOLS LEGEND

HTS16
DESIGNATES UPLIFT CONNECTION.

TRUSS FASTENING DETAILS

STUD DIRECTLY BELOW TRUSS
TOP PLATE TO STUD SDWC15600

TRUSS TIE DOWN WITH SIMPSON SDWC

STUD DIRECTLY BELOW TRUSS
TOP PLATE TO STUD SDWC15600

SIMPSON SDWC INSTALLATION RANGE

STUD NOT DIRECTLY BELOW TRUSS
TOP PLATE TO STUD SDWC15600

SDWC INSTALLATION

STUD NOT DIRECTLY BELOW TRUSS
TOP PLATE TO STUD SDWC15600

SDWC INSTALLATION RANGE

STUD NOT DIRECTLY BELOW TRUSS
TOP PLATE TO STUD SDWC15600

SDWC AT TOP PLATE SPICE

STUD NOT DIRECTLY BELOW TRUSS
TOP PLATE TO STUD SDWC15600

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ROOF TRUSS
PLACEMENT
PLAN

SHEET
S1.2
SHEET 6 OF 6