HEITER RESIDENCE FOUNDATION ENGINEERING
29550 CO RD 14D
STEAMBOAT SPRINGS,
CO 80487

REVIEWED
FOR CODE
COMPLIANCE
03/07/2023

MARTIN/MARTIN PROJECT NO. 21.0119.S.01
100% CONSTRUCTION DOCUMENTS
5/27/2022

AERIAL PHOTO

VICINITY MAP

CONSULTANT

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03/06/2023

OWNER'S REPRESENTATIVE

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DRAWING INDEX

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
-	GRID LINES
X / XX	SECTION OR DETAIL CUT; SHEET NUMBER
X / XX	ELEVATION CUT; SHEET NUMBER
XXX'-XX"	ELEVATION CALLOUT
X	DRAWING REVISION NUMBER
	CURRENT REVISION CLOUD
	WELDED-WIRE REINFORCEMENT
	ROUGHENED SURFACE, INTENTIONALLY ROUGHEN TO 1/4" AMPLITUDE, UNO
	SERVICE LOAD PROVIDED FOR SPECIALTY DESIGNER
	STEP
	SLOPE
1	KEY NOTE
	SUBGRADE
	FORM SAVER

SYMBOL	DESCRIPTION
	CAST-IN-PLACE CONCRETE
	OVERFRAMING

SYMBOL	DESCRIPTION
SOGXXA / XXX'-XX"	SLAB TYPE; SLAB THICKNESS; TYPE; T/SLAB
F1 / XX'-X"	**F**TG MARK (SF = **S**TRIP **F**TG); T/FTG EL
CXX / BP-X	**C**OLUMN SIZE OR MARK; **B**ASE **P**LATE TYPE
EP1	**E**MBED **P**LATE, SEE [ ]
YW1	WALLS, Y = (**F**)ND, (**C**)IP CONC, (**P**)RECAST, (**M**)AS, (**R**)ETAINING, CIP CONC (**S**)HEARWALL

STEEL BEAM — SHEAR STUD QUANTITY

XXk BEAM SIZE [XX] c=X" XXk

(XXX'-XX")

ULTIMATE BM REACTION USING LRFD LOAD COMBINATIONS (KIPS) — CAMBER (INCHES) — EL OF T/STEEL

NOTES:
1. ITEMS NOT DESIGNED BY M/M ARE SHOWN HALFTONED,
2. ITEMS INCLUDE:
   - EXISTING CONSTRUCTION
   - PERFORMANCE SPECIFIED ITEMS (STAIRS, RAILINGS, ETC.)

FOUNDATION NOTES

1) DESIGN CRITERIA:
THE GEOTECHNICAL REPORT PREPARED BY NORTHWEST COLORADO CONSULTANTS, INC, DATED 3/24/2009 PROVIDED CRITERIA FOR THE FOUNDATION DESIGN FOR THE PROJECT.

2) FOOTINGS:
2A) FOOTING DESIGN CRITERIA:
- MAXIMUM TOTAL LOAD BEARING PRESSURE = 3000 PSF
- MINIMUM DEAD LOAD BEARING PRESSURE = 600 PSF
- ULTIMATE COEFFICIENT OF FRICTION TO RESIST LATERAL LOADS = 0.4
- FROST DEPTH TO BOTTOM OF FOUNDATION = 48 IN

3) BASEMENT RETAINING WALLS:
3A) EQUIVALENT FLUID PRESSURES USED FOR WALL DESIGN:
- "ACTIVE" CONDITION = 35 PCF
- "AT REST" CONDITION = 45 PCF
- "PASSIVE" CONDITION = 250 PCF
- LATERAL PRESSURE DUE TO SURCHARGE = 50 PSF
- GROUND WATER FLUID PRESSURE ON SITE WALLS = 0 PSF
- ULTIMATE COEFFICIENT OF FRICTION TO RESIST LATERAL LOADS = 0.4

3B) WALL DESIGN BASED ON IMPORTED GRANULAR BACKFILL ADJACENT TO FOUNDATION WALLS. SEE GEOTECHNICAL REPORT FOR REQUIREMENTS.

DEFERRED SUBMITTALS

1) GENERAL:
1A) THE FOLLOWING PORTIONS OF THE STRUCTURAL DESIGN WILL NOT BE SUBMITTED AT THE TIME OF PERMIT APPLICATION. WHEN RECEIVED AND REVIEWED, THESE DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL BY THE CONTRACTOR:
- PREFABRICATED BUILDINGS
- PERMANENT EARTH SHORING SYSTEMS

1B) CONNECTION OF DEFERRED SUBMITTAL ITEMS TO PRIMARY STRUCTURE BY DEFERRED SUBMITTAL SUPPLIER. DEFERRED SUBMITTAL SUPPLIER TO PROVIDE CONNECTIONS AND FRAMING ARRANGEMENT TO AVOID LOADING WHICH EXCEEDS THE CAPACITY OF THE ELEMENT BEING ATTACHED TO.

1C) ALL DEFERRED SUBMITTALS TO BE ATTACHED TO PRIMARY STRUCTURE WITH A PINNED CONNECTION. MOMENT CONNECTIONS TO PRIMARY STRUCTURE NOT PERMITTED UNLESS NOTED ON DRAWINGS OR APPROVED BY ENGINEER IN WRITING PRIOR TO SUBMITTAL OF DRAWINGS OR CALCULATIONS.

1D) LOADING AND LOCATION FOR ATTACHMENT OF DEFERRED SUBMITTAL ITEMS ARE NOTED ON DRAWINGS AND ARE NOT TO BE RE-LOCATED OR INCREASED WITHOUT WRITTEN APPROVAL.

1E) SUBMIT STAMPED STRUCTURAL CALCULATIONS FOR ALL DEFERRED SUBMITTAL ITEMS PRIOR TO OR CONCURRENTLY WITH DRAWINGS OR PRODUCT DATA. INCLUDE ANALYSIS OF ATTACHMENT TO PRIMARY STRUCTURE. INCLUDE CURRENT ICC REPORT WITH ALL PROPRIETARY STRUCTURAL ELEMENTS AND ANCHORS/FASTENERS.

DESIGN CRITERIA

1) CODES AND STANDARDS:
1A) GENERAL DESIGN
- INTERNATIONAL BUILDING CODE 2018 WITH ROUTT COUNTY AMENDMENTS

1B) LOADS
- ASCE/SEI 7-16 "MINIMUM DESIGN LOAD FOR BUILDINGS AND OTHER STRUCTURES" WHERE INDICATED ON DRAWINGS INDIVIDUAL UNFACTORED LOAD COMPONENTS (D, Di, L, Lr, R, S, H, F, Fa, E, W, Wi, T) ARE AS DEFINED AND DETERMINED BY THE BUILDING CODES AND STANDARDS INDICATED. LOAD COMPONENTS SHALL BE COMBINED USING THE LOAD COMBINATIONS OF THE BUILDING CODE FOR SPECIALTY DESIGN BY OTHERS.

1C) CONCRETE
- ACI 301-LATEST EDITION "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
- ACI 318-14 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"

1D) STEEL
- ANSI/AISC 360-16 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" LOAD AND RESISTANCE FACTOR DESIGN

1E) WOOD
- ANSI/AWC NDS-2018 "NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION - WITH 2018 NDS SUPPLEMENT"

2) SEISMIC LOADS
- SEISMIC DESIGN CATEGORY = C (ROUTT COUNTY AMENDMENT)
- RISK CATEGORY = II
- EARTHQUAKE IMPORTANCE FACTOR, Ie = 1.00
- MAPPED SPECTRAL RESPONSE ACCELERATION, Ss = 61.90 %g
- MAPPED SPECTRAL RESPONSE ACCELERATION, S1 = 10.60%g
- DESIGN SPECTRAL RESPONSE COEFFICIENT, SDs = 0.333 (ROUTT COUNTY AMENDMENT)
- DESIGN SPECTRAL RESPONSE COEFFICIENT, SD1 = 0.133 (ROUTT COUNTY AMENDMENT)
- SOIL SITE CLASS = D (ASSUMED)
- BASIC STRUCTURAL SYSTEM: STRUCTURAL STEEL AND WOOD BEARING WALLS SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE, REINFORCED CONCRETE BASEMENT WALLS NOT SPECIFICALLY DETAILED FOR SEISMIC.
- STRUCTURAL SEISMIC LATERAL SYSTEM: REINFORCED CONCRETE BASEMENT WALLS. LIGHT FRAME (WOOD) WALLS WITH STRUCUTRAL WOOD SHEAR PANELS. SINGLE FAMILY PRE-MANUFACTURED STRUCTURE BY OTHERS
- RESPONSE MODIFICATION FACTOR, R = 6.5
- SEISMIC RESPONSE COEFFICIENT, Cs = 0.051
- SYSTEM OVERSTRENGTH FACTOR, OMEGA = 2.5
- DESIGN BASE SHEAR EAST-WEST DIRECTION = 11.6 K
- DESIGN BASE SHEAR NORTH-SOUTH DIRECTION = 11.6 K
- SEISMIC ANALYSIS PROCEDURE: Equivalent Lateral-Force Analysis

3) WIND LOADS
- RISK CATEGORY = II
- BASIC ULTIMATE WIND SPEED, Vult = 115 mph
- BASIC NOMINAL WIND SPEED, Vasd = 89 mph
- EXPOSURE CATEGORY = C
- INTERNAL PRESSURE COEFFICIENT, Gcpi = +/-0.18

4) DESIGN WIND PRESSURE FOR COMPONENTS AND CLADDING AND ELEMENTS DESIGNED BY THE CONTRACTOR
4A) LISTED COMPONENT AND CLADDING WIND PRESSURES ARE INCLUDED FOR REFERENCE ONLY. FINAL CALCULATIONS SHALL BE COMPLETED BY CONTRACTOR

4B) PRESSURES LISTED BELOW ARE ULTIMATE

4c) COMPONENT AND CLADDING SURFACE PRESSURES (PSF)
- **WALLS PRESSURES**

WALLS AREA	**10 SF**	**100 SF**	**200 SF**	**500 SF**
WALLS INTERIOR NEG (ZONE 4)	-23.1	-19.9	-19.0	-17.7
WALLS CORNER NEG (ZONE 5)	-28.4	-22.1	-20.2	-17.7
WALLS POSITIVE ZONE 4 & 5	21.3	18.1	17.2	16.0

5) LATERAL LOAD RESISTING SYSTEM DESCRIPTION:
- ORDINARY REINFORCED CONCRETE FOUNDATION WALLS AND WOOD FRAMED SHEAR WALL. WOOD BRACING AT DECK STRUCTURE.

6) GRAVITY LOADS
6A) ASSUMED GRAVITY LOADS IMPOSED ON BASEMENT STRUCTURE FROM SINGLE FAMILY PRE-MANUFACTURED HOME.
- LOADING AT PERIMETER, DEAD = 290 PLF
- LOADING AT INTERIOR BEAM, DEAD = 580 PLF

6B) INTERIOR RESIDENCE: LIVE LOAD = 40 PSF
DECK LOADING: LIVE LOAD = 60 PSF

6C) DRIFTING, SLIDING AND UNBALANCED SNOW
- GROUND SNOW LOAD = 99 PSF
- SNOW EXPOSURE FACTOR, Ce = 1.0
- SNOW LOAD IMPORTANCE FACTOR, Is = 1.0
- THERMAL FACTOR, Ct = 1.00
- UNIFORM ROOF SNOW LOAD = 21.0 PSF
- FLAT ROOF SNOW LOAD = 70.0 PSF

7) RAIN LOADS:
7A) DESIGN RAIN INTENSITY = 1.5 INCHES PER HOUR
7B) DESIGN RAIN ROOF PRESSUE = 5.2 psf

8) FIRE RESISTANCE, CONDITIONS OF RESTRAINT:
8A) FOR DETERMINING FIRE-RESISTANCE RATINGS PER IBC SECTION 703, ALL STEEL FRAMING IS ASSUMED TO BE UNRESTRAINED.

GENERAL NOTES

1) GENERAL:
1A) ENGINEER: REFERENCES ON THE STRUCTURAL DRAWINGS TO 'ENGINEER' MEAN THE STRUCTURAL ENGINEER OF RECORD. OTHER ENTITIES ARE SPECIFICALLY NOTED AS "CONTRACTOR'S ENGINEER", "MECHANICAL ENGINEER", ETC.

1B) UNDERGROUND UTILITIES: LOCATE EXISTING UTILITIES AND NOTIFY ARCHITECT OF EXISTING UTILITIES OR SUBGRADE CONDITIONS WHICH INTERFERE WITH WORK.

1C) STRUCTURAL ELEMENTS ARE CENTERED ON GRID LINES AND GRID LINE INTERSECTIONS UNLESS DIMENSIONED OTHERWISE.

2) USE OF DRAWINGS:
2A) DO NOT SCALE DRAWINGS.

2B) DETAILS ON DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

2C) DETAILS NOTED TYPICAL APPLY TO ALL SIMILAR CONDITIONS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ELSEWHERE ON THE PROJECT.

2D) WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES AND SPECIFICATIONS:
- CONTACT THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION
- THE MORE STRINGENT REQUIREMENTS SHALL GOVERN FOR BIDDING / PRICING

3) COORDINATION:
3A) STRUCTURAL DRAWINGS ARE NOT STAND-ALONE DOCUMENTS AND ARE INTENDED TO BE USED IN CONJUNCTION WITH CIVIL, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND DRAWINGS FROM OTHER DISCIPLINES. THE CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS INTO SHOP DRAWINGS AND WORK.

3B) COORDINATE DIMENSIONS OF ALL OPENINGS, BLOCKOUTS, DEPRESSIONS, ETC., WITH ARCHITECTURAL DRAWINGS, DRAWINGS FROM OTHER DISCIPLINES, AND FIELD CONDITIONS PRIOR TO SHOP DRAWING SUBMITTAL.

4) SUBMITTALS AND SUBSTITUTIONS:
4A) SUBMITTALS:
- IF THE CONTRACTOR REQUESTS A CHANGE FROM THE STRUCTURAL DRAWINGS, IT SHALL BE APPROVED BY THE ARCHITECT AND DESIGNED BY MARTIN/MARTIN, INC. PRIOR TO SUBMITTING SHOP DRAWINGS. VARIATION SHALL BE INDICATED ON THE SHOP DRAWINGS. CONTRACTOR SHALL COMPENSATE MARTIN/MARTIN, INC. FOR MAKING THE CHANGE.
- CONSTRUCTION DOCUMENTS SHALL NOT BE REPRODUCED FOR USE IN SUBMITTALS
- ALL SHOP DRAWINGS SHALL REFERENCE THE STRUCTURAL DRAWING NUMBER AND DETAIL USED TO PREPARE THE SUBMITTAL
- SUBMIT A STATEMENT OF RESPONSIBILITY FOR CONSTRUCTION OF THE LATERAL LOAD RESISTING SYSTEM IDENTIFIED IN THE DESIGN CRITERIA IN ACCORDANCE WITH [IBC 2018 SECTION 1704]

4B) SUBSTITUTIONS: ENGINEER'S APPROVAL SHALL BE SECURED FOR ALL SUBSTITUTIONS

4C) NONCONFORMANCE: NOTIFY ENGINEER OF CONDITIONS NOT CONSTRUCTED PER THE CONTRACT DOCUMENTS PRIOR TO PROCEEDING WITH CORRECTIVE WORK. SUBMIT PROPOSED REPAIR TO THE ARCHITECT FOR ACCEPTANCE. CONTRACTOR SHALL COMPENSATE MARTIN/MARTIN, INC. FOR DESIGNING THE REPAIR.

4D) ALL SHOP DRAWINGS SHALL BE SUBMITTED IN ELECTRONIC FORMAT ONLY.

5) TEMPORARY CONDITIONS, CONSTRUCTION ENGINEERING, AND OSHA STANDARDS:
5A) THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION AND ONLY FOR LOADS ANTICIPATED DURING THE STRUCTURE'S SERVICE LIFE.

5B) THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL TEMPORARY BRACING AND/OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES. REFER TO "LATERAL LOAD RESISTING SYSTEM DESCRIPTION" IN DESIGN CRITERIA FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL PROVIDE ALL REQUIRED ENGINEERING AND OTHER MEASURES TO ACHIEVE THE MEANS, METHODS, AND SEQUENCES OF WORK WHICH MAY INCLUDE, BUT IS NOT LIMITED TO:
- LAYOUT
- DESIGN FOR FORMWORK, SHORING, AND RESHORING
- DESIGN OF CONCRETE MIXES
- ERECTION PROCEDURES WHICH ADDRESS STABILITY OF THE FRAME DURING CONSTRUCTION
- WELD PROCEDURES
- DESIGN OF TEMPORARY BRACING OF WALLS FOR WIND, SEISMIC, OR SOIL LOADS
- SURVEYING TO VERIFY CONSTRUCTION TOLERANCES
- EVALUATION OF TEMPORARY CONSTRUCTION LOADS ON STRUCTURE DUE TO EQUIPMENT AND MATERIALS
- STRUCTURAL ENGINEERING TO RESIST ANY OTHER LOADS NOT IDENTIFIED ON DESIGN DRAWINGS

5C) FOUNDATION WALLS SHALL NOT BE BACKFILLED UNTIL THE SLABS-ON-GRADE IN-PLACE AND REACH FULL STRENGTH UNLESS ADEQUATE BRACING IS PROVIDED. USE ONLY HAND OPERATED TOOLS FOR COMPACTION ADJACENT TO FOUNDATION WALLS AND GRADE BEAMS. STEM WALLS SHALL BE BACKFILLED EVENLY ON BOTH SIDES.

5D) NOTHING SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE CONSTRUED AS ELIMINATING THE NEED FOR THE CONTRACTOR TO COMPLY WITH ALL OSHA REQUIREMENTS. WHERE THE STRUCTURAL DRAWINGS APPEAR TO CONFLICT WITH OSHA REQUIREMENTS, THE STRUCTURAL DRAWINGS REPRESENT FINAL CONDITIONS ONLY.
- THE CONTRACTOR SHALL ADD ALL ERECTION FRAMING NECESSARY TO COMPLY WITH OSHA.
- THE CONTRACTOR SHALL ADD ALL NECESSARY BOLTS, ANCHOR BOLTS, PLATES, STIFFENER PLATES, STABILIZER PLATES, BRIDGING, BRACING, BEARING SEATS, COLUMN SPLICES, ETC., AS WELL AS CLOSURES FOR OPENINGS.

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03/06/2023

REVIEWED FOR CODE COMPLIANCE
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HEITER RESIDENCE FOUNDATION ENGINEERING

29550 CO RD 14D
STEAMBOAT SPRINGS, CO 80487

REVISIONS

NO.	ISSUE	DATE

100% CONSTRUCTION DOCUMENTS

PROJECT NO: 22.0119.S01
DATE: 5/27/2022

SHEET TITLE:
NOTES

SHEET NUMBER:
S001

MM JOB #: 21.0119.S.01
PRINCIPAL: Nick Ereckson
EOR: Enter EOR's Name Here
PROJECT MANAGER: Andrew Lack
DESIGNERS: Enter Designer's Name Here
LEAD REVIT TECH: Enter Lead Revit Tech's Name Here
DATE PRINTED: 3/6/2023 12:29:43 AM
FILE PATH: BIM 360://MartinMartin Structural - Revit 2021 Projects/22.0119.S.01-Heiter Residence Foundation Engineering.rvt

STEEL NOTES

1) CONNECTIONS:
1A) PROVIDE CONNECTIONS AS SHOWN IN THE 'STEEL BEAM CONNECTION SCHEDULES' AND DETAILS HEREIN.

2) STEEL MATERIALS:
2A) SEE 'STEEL MATERIAL TABLE'

3) WELDING REQUIREMENTS:
3A) WELDERS: HAVE IN POSSESSION CURRENT EVIDENCE OF PASSING THE APPROPRIATE AWS. QUALIFICATION TESTS.

3B) MINIMUM WELDS: AISC SPECIFICATION, NOT LESS THAN 3/16" FILLET, CONTINUOUS UNLESS OTHERWISE NOTED.

3C) WELD SIZES AND LENGTHS CALLED FOR ON THE DRAWINGS ARE THE NET EFFECTIVE REQUIRED. INCREASE WELD SIZE IF GAPS EXIST AT THE FAYING SURFACE.

3D) FIELD WELDING SYMBOLS INDICATE SEQUENCE CONSIDERED DURING DESIGN. THE CONTRACTOR SHALL REQUEST APPROVAL FROM THE ENGINEER TO MODIFY WELD INSTALLATION LOCATION INDICATED ON THE DOCUMENTS:
- FROM SHOP TO FIELD
- FROM FIELD TO SHOP

4) STRUCTURAL STEEL INSTALLATION:
4A) UNLESS INDICATED OTHERWISE, SNUG TIGHTEN ALL JOINTS AS DEFINED BY AISC
CONNECTIONS AS INDICATED BELOW SHALL BE PRETENSIONED PER TABLE J3.1 OF ANSI/ AISC 360-16
- WHERE NOTED ON THE DRAWINGS AS "PT"

STEEL MATERIAL TABLE

STEEL ELEMENT	ASTM/TYPE	Fy (KSI)	Fu (KSI)	COMMENTS
ANCHOR RODS	F1554 GR 55	55	75	WELDABLE, HEAVY HEX HEADED
BOLTS	F3125 - TYPE A325 OR F1852	--	120	BOLTS ARE 3/4"Ø UNO, USE TENSION-CONTROLLED WHERE POSSIBLE
OTHER SHAPES	A36	36	58	--
PIPE	A53 GR B	35	60	--
PLATES	A36	36	58	--
RECT HSS	A500 GR C	50	62	--
ROUND HSS	A500 GR C	46	62	--
WELDING ELECTRODES, THICKNESS OF THINNER PART > 0.1 INCHES (12 GA)	E70			PER AWS
WF, WT	A992	50	65	--

POST INSTALLED ANCHOR NOTES

1) PERSONNEL REQUIREMENTS:
1A) THE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. SUBMIT DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS HAVE PASSED THE TRAINING COURSE PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.

1B) PERSONNEL WHO WILL INSTALL HORIZONTAL OR UPWARDLY INCLINED ADHESIVE ANCHORS IN CONCRETE THAT SUPPORT SUSTAINED TENSION LOADS SHALL BE CERTIFIED BY THE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM. THESE ANCHORS ARE DESIGNATED WITH A (CERT) AFTER THE ANCHOR CALL OUT. SUBMIT DOCUMENTED CONFIRMATION THAT PERSONNEL HAVE PASSED THE TRAINING COURSE PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.

2) INSTALLATION REQUIREMENTS:
2A) ALL POST-INSTALLED ANCHORS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS AND PER MANUFACTURER'S ON-SITE TRAINING.

2B) ALL ADHESIVE ANCHORS AND ADHESIVE ANCHORED REINFORCEMENT DESIGNS ARE FOR INSTALLATION IN THE FOLLOWING CONDITIONS, UNLESS NOTED OTHERWISE. WRITTEN APPROVAL MUST BE RECEIVED FROM ENGINEER PRIOR TO INSTALLATION IN ALTERNATE CONDITIONS.
- DRY CONCRETE, UNLESS NOTED OTHERWISE.
- CONCRETE TEMPERATURE AT TIME OF INSTALLATION THROUGH CURE TIME MUST BE WITHIN THE TEMPERATURE RANGE SPECIFIED IN MANUFACTURER'S PRINTED INSTALLATION INSTRUCTION FOR ADHESIVE GEL AND CURE TIMES.
- ANCHOR HOLES TO BE HAMMER DRILLED AND CLEANED.
- CONCRETE MUST BE AT LEAST 21 DAYS OLD BEFORE INSTALLATION OF ANCHORS.
- HOLES TO BE CLEANED AND PREPARED IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS AND EVALUATION REPORT PRIOR TO ADHESIVE INJECTION.

2C) THE POSITION OF EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE SHALL BE LOCATED PRIOR TO INSTALLING POST INSTALLED ANCHORS OR REINFORCEMENT. EXISTING REINFORCEMENT SHALL BE LOCATED USING A SCANNER, GPR, X-RAY, CHIPPING OR OTHER MEANS. DO NOT DAMAGE OR CUT EXISTING REINFORCEMENT.

3) SUBSTITUTION REQUESTS:
3A) SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS MUST BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER PRIOR TO USE. CONTRACTOR SHALL PROVIDE CALCULATIONS AND PRODUCT DATA DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS IN COMPLIANCE WITH THE RELEVANT BUILDING CODES, LOAD RESISTANCE, INSTALLATION CATEGORY, CREEP APPROVAL, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE OF THE SPECIFIED PRODUCT.

POST-INSTALLED ANCHOR TABLE - DEWALT

ANCHOR TYPE	PRODUCT	Fy (KSI)	Fu (KSI)	COMMENT
ADHESIVE (IN CONCRETE)		-	-	SUBMIT CALCULATIONS FOR SUBSTITUTIONS
ADHESIVE (IN CONCRETE W/>12" EMBEDMENT)		-	-	SUBMIT CALCULATIONS FOR SUBSTITUTIONS
ADHESIVE ANCHOR RODS	-	36 MIN	58 MIN	THREADED ROD, UNGREASED
EXPANSION ANCHORS (IN CONCRETE)	SIMPSON STRONG BOLT	-	-	SUBMIT CALCULATIONS FOR SUBSTITUTIONS
SCREW ANCHORS	SIMPSON TITEN HD	-	-	SUBMIT CALCULATIONS FOR SUBSTITUTIONS

CONCRETE NOTES

1) GENERAL:
1A) ALL WORK SHALL CONFORM WITH ACI 301-10, UNLESS NOTED OTHERWISE IN DRAWINGS OR PROJECT SPECIFICATIONS.

1B) DETAIL BARS IN ACCORDANCE WITH THE DRAWINGS, PROJECT SPECIFICATIONS, AND ACI PUBLICATION SP-66 (2004): "ACI DETAILING MANUAL"

2) REINFORCING MATERIALS:
2A) SEE 'REINFORCING MATERIAL TABLE'

3) REINFORCING FABRICATION:
3A) SPLICES:
- NO SPLICING OF REINFORCEMENT PERMITTED EXCEPT AS NOTED ON DRAWINGS. MAKE BARS CONTINUOUS AROUND CORNERS WHERE DETAIL NOT PROVIDED. WHERE PERMITTED, SPLICES MAY BE MADE BY CONTACT LAPS.
- SEE 'LAP SPLICE SCHEDULE' FOR LAP LENGTHS.
- SPLICE CONTINUOUS TOP AND BOTTOM BARS IN WALLS, BEAMS, AND GRADE BEAMS 'LTS' UNLESS NOTED OTHERWISE.
- SPLICE TOP BARS AT MIDSPAN AND BOTTOM BARS OVER SUPPORT UNLESS NOTED OTHERWISE.

3B) MISCELLANEOUS REINFORCING REQUIREMENTS:
- PROVIDE ADDITIONAL BARS OR STIRRUPS REQUIRED TO SECURE REINFORCING IN PLACE DURING CONCRETE PLACEMENT.
- MAKE ALL REINFORCING BAR BENDS IN THE FABRICATOR'S SHOP UNLESS NOTED.
- NO WELDING OF REINFORCING PERMITTED UNLESS NOTED ON DRAWINGS. WHERE PERMITTED, PERFORM WELDING IN ACCORDANCE WITH AWS D1.4-2011.
- PROVIDE ADDED REINFORCING TO TRIM ALL OPENINGS, NOTCHES, AND REENTRANT CORNERS AS NOTED IN TYPICAL DETAILS.

4) STRUCTURAL CONCRETE MIX REQUIREMENTS:
4A) SEE 'CONCRETE MIX TABLE'

5) SLAB-ON-GRADE:
5A) VERIFY ALKALINITY OF CONCRETE SURFACE, SLAB VAPOR TRANSMISSION, AND SLAB FLATNESS/LEVELNESS ARE COMPATIBLE WITH FLOORING SYSTEM AND ADHESIVES PRIOR TO INSTALLING FLOORING.

5B) TAKE PRECAUTIONS TO MINIMIZE SLAB CURLING. GRIND SLAB OR USE LEVELING COMPOUND IF FLOOR FLATNESS AND LEVELNESS VALUES ARE NOT ACCEPTABLE TO THE ARCHITECT.

6) NON-SHRINK GROUT:
6A) CONFORM TO ASTM C1107

6B) ACHIEVE 6000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.

7) PLACING REINFORCEMENT:
7A) REINFORCEMENT PROTECTION:
- SEE 'REBAR COVER TABLE'
- SEE ACI 117-10 FOR REINFORCEMENT PLACING TOLERANCES

7B) PROVIDE ACCESSORIES NECESSARY TO PROPERLY SUPPORT REINFORCING AND WELDED WIRE REINFORCEMENT AT POSITIONS SHOWN ON PLANS. ALL REINFORCING, DOWELS, BOLTS, AND EMBEDDED PLATES SHALL BE SET AND TIED IN PLACE BEFORE THE CONCRETE IS POURED. "STABBING" INTO PREVIOUSLY PLACED CONCRETE IS NOT PERMITTED.

8) CONSTRUCTION/CONTROL JOINTS:
8A) SUBMIT DRAWINGS SHOWING CONSTRUCTION AND CONTROL JOINT LOCATIONS ALONG WITH THE SEQUENCE OF POURS. CONSTRUCTION JOINT LOCATIONS AND CASTING SEQUENCE SHALL BE ARRANGED TO MINIMIZE THE EFFECTS OF ELASTIC AND LONG-TERM SHORTENING/SHRINKAGE.

OR

STRUCTURAL DRAWINGS MUST DEFINE LOCATIONS AND POUR DELAYS FOR POUR STRIPS AND OTHER SEQUENCING ISSUES WHICH IMPACT FINAL PERFORMANCE OF THE STRUCTURE. PROJECTS WHERE SHOWING JOINTS ON THE STRUCTURAL DRAWINGS MAY BE APPROPRIATE INCLUDE LARGE PLAN AREAS WITH NO EXPANSION JOINTS, POST-TENSIONED SLABS, ETC. FOR SUCH PROJECTS, USE THE NOTE BELOW:

8B) CONSTRUCTION JOINT LOCATION AND CASTING SEQUENCE SHOWN ON THE DRAWINGS IS SUGGESTED AND HAS BEEN ARRANGED TO MINIMIZE THE EFFECTS OF ELASTIC AND LONG-TERM SHORTENING. SUBMIT DRAWINGS SHOWING PROPOSED CONSTRUCTION JOINT LOCATION AND CASTING SEQUENCE.

8C) CONCRETE CONSTRUCTION JOINT SURFACE SHALL BE CLEANED AND ALL LAITANCE AND LOOSE MATERIAL REMOVED PRIOR TO SECOND CONCRETE PLACEMENT.

9) MODIFICATIONS TO HARDENED OR EXISTING CONCRETE
9A) UNLESS NOTED ON THE STRUCTURAL DOCUMENTS MODIFICATIONS AS LISTED BELOW SHALL NOT BE MADE TO HARDENED OR EXISTING CONCRETE WITHOUT APPROVAL OF THE ARCHITECT:
- SAW CUTTING
- CORING
- CHIPPING

9B) DO NOT CUT OR DAMAGE ANY REINFORCING WITHOUT APPROVAL OF THE ARCHITECT

10) SLEEVES, OPENINGS, AND EMBEDED PIPE/CONDUITS:
10A) GENERAL
- REFER TO TYPICAL DETAILS FOR REQUIREMENTS FOR CONDUIT AND PIPE EMBEDDED IN WALLS AND SLABS
- REFER TO TYPICAL DETAILS FOR SPACING AND LAYOUT LIMITATIONS FOR SLEEVES AND OPENINGS
- FORM OPENINGS AND PROVIDE SLEEVES BEFORE PLACING CONCRETE, CORING OF CONCRETE IS NOT PERMITTED
- AT COMPOSITE SLABS DO NOT CUT DECK FOR AT LEAST 7 DAYS AFTER CONCRETE PLACEMENT

10B) REINFORCING
- REFER TO TYPICAL DETAILS FOR REINFORCEMENT REQUIREMENTS AT SLEEVES, OPENINGS OR CONDUIT
- DO NOT CUT REINFORCING WHICH MAY CONFLICT

REINFORCING MATERIAL TABLE

REINF ELEMENT	ASTM	Fy (KSI)	Fu (KSI)	COMMENTS
TYP REINFORCING	A615	60	90	-
WELDED & FIELD BENT REINF	A706	60	80	-

CONCRETE MIX TABLE

CONC MIX TYPE	INTENDED USE	28 DAY STRENGTH f'c (KSI)	CONC WEIGHT	MAX W/C RATIO, INCLUDING FLY ASH	MAX AGGREGATE SIZE (IN), NOTE a	TOTAL AIR CONTENT (%), NOTE b	OTHER REQTS, NOTE c
1	FOOTINGS	4.5	NWC	-	1	-	-
2	BSMT WALLS EXPOSED TO MOISTURE	4.5	NWC	0.45	3/4	6	-
3	INT SLABS ON GRADE	3.5	NWC	-	1	NP	-
4	ALL CONC OTHERWISE NOT SPECIFIED	4	NWC	0.50	3/4	6	-

CONCRETE MIX TABLE NOTES:

PROPORTIONS OF MATERIALS IN CONCRETE MIX SHALL BE ESTABLISHED TO:

- PROVIDE THE MINIMUM COMPRESSIVE STRENGTH AS INDICATED IN THE MIX TABLE. DO NOT EXCEED THE MAXIMUM WATER-CEMENT RATIO NOTED.

- PROVIDE WORKABILITY AND CONSISTENCY TO PERMIT CONCRETE TO BE WORKED READILY INTO FORMS AND AROUND REINFORCEMENT UNDER CONDITIONS OF PLACEMENT TO BE EMPLOYED, WITHOUT SEGREGATION OR EXCESSIVE BLEEDING. CONTRACTOR SHALL SELECT APPROPRIATE SLUMP. USE ADMIXTURES AS REQUIRED TO OBTAIN DESIRED RESULTS.

USE TYPE I / II PORTLAND CEMENT UNLESS NOTED OTHERWISE. FOR CONCRETE MIXES USED ON FLOORS MINIMUM CEMENTITIOUS CONTENT SHALL BE 540 POUNDS PER CUBIC YARD.

FOR CONCRETE PLACED BY PUMPING PROVIDE CONCRETE MIX FLOWABILITY TO FACILITATE PUMPING. ENTRAINED AIR MAY BE USED TO FACILITATE PUMPING SUBJECT TO THE PROVISIONS OF NOTE b BELOW.

a. FOR THE MAXIMUM COARSE AGGREGATE SIZE INDICATED, USE THE FOLLOWING AGGREGATE SIZE NUMBERS PER ASTM C33:

3/4": #67 AGGREGATE
1": #57 AGGREGATE

b. WHERE AIR CONTENT IS INDICATED IN THE MIX TABLE, PROVIDE AIR ENTRAINING ADMIXTURE. TOTAL AIR CONTENT LIMITS INCLUDE BOTH ENTRAINED AND ENTRAPPED AIR +/- 1 1/2%. 'NP' IN COLUMN INDICATES ADDITION OF ENTRAINED AIR IS NOT PERMITTED EXCEPT WHERE CONTRACTOR CAN DEMONSTRATE THAT SLABS WITH ENTRAINED AIR WILL HAVE A FINISH ACCEPTABLE TO THE ARCHITECT WITHOUT BLISTERS. AIR CONTENT NOTED IS BASED ON 3/4" AGGREGATE. IF 3/8" AGGREGATE IS USED, INCREASE AIR CONTENT BY 1 1/2%.

WOOD NOTES

1) LAMINATED MEMBER SIZES:
1A) (LVL, PSL, LSL, GLU-LAM AND OTHER FABRICATED MEMBERS (TJI) SIZES SHOWN ARE NET. OTHER MEMBER SIZES ARE NOMINAL.

2) FRAMING LUMBER:
2A) DRY (19% MAXIMUM MOISTURE CONTENT AT THE TIME OF INSTALLATION), HEM-FIR WITH MINIMUM DESIGN VALUES BASED ON THE 2018 NDS. SEE 'FRAMING LUMBER TABLE' FOR MINIMUM GRADES.

2B) BEAMS AND STRINGERS USED WITH CANTILEVERS OR CONTINUOUS SPANS SHALL BE GRADED TO PROVIDE THE SPECIFIED ALLOWABLE STRESSES OVER THE ENTIRE MEMBER LENGTH.

3) FABRICATED LUMBER:
3A) FABRICATED LUMBER DESIGNATIONS ARE THOSE MANUFACTURED BY iLEVEL, BOISE, IDAHO.

3B) FABRICATED LUMBER IS DESIGNATED ON THE DRAWINGS AS ONE OF THE FOLLOWING: TJI JOISTS, MICROLLAM (LVL), PARALLAM (PSL), TIMBERSTRAND (LSL) OR RIMBOARD.

3C) THE MANUFACTURER SHALL PROVIDE WEB STIFFENERS ON I-JOISTS, END BLOCKING, BRIDGING, AND ERECTION BRACING AS REQUIRED. SEE "DESIGN CRITERIA" FOR DESIGN DEAD AND LIVE LOADS.

3D) FABRICATED LUMBER SHALL BE DRY.

3E) SEE 'FABRICATED LUMBER TABLE' FOR MINIMUM PROPERTIES (AT NORMAL LOAD DURATIONS).

4) SHEATHING:
4A) WOOD STRUCTURAL PANELS (WSP)
- WOOD STRUCTURAL PANELS SHALL BE APA RATED SHEATHING CONFORMING TO U.S. DEPARTMENT OF COMMERCE STANDARD PS 2-10.
- ALL WOOD PANELS SHALL BE EXPOSURE 1.

5) NAILING:
- UNLESS NOTED OTHERWISE ON THE DRAWINGS, PROVIDE BOX NAILS COMMON NAILS SINKERS WITH SIZES SHOWN IN THE TABLE BELOW. MINIMUM NAILING SHALL BE IN ACCORDANCE WITH THE TYPICAL WOOD CONNECTION SCHEDULE AND IBC 2018 TABLE 2304.10.1

5B) WHERE COMMON NAILS ARE SPECIFIED, BOX NAILS OF EQUAL LENGTH MAY BE SUBSTITUTED PROVIDED ONE BOX NAIL IS ADDED FOR EVERY THREE COMMON NAILS SPECIFIED.

6) METAL CONNECTORS:
6A) FRAMING CONNECTORS SHALL CONFORM TO IBC 2018 SECTION 2303.5 FRAMING CONNECTOR DESIGNATIONS ARE THOSE MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, SAN LEANDRO, CALIFORNIA. OTHER MANUFACTURER'S PRODUCTS MAY BE USED IF APPROVED BY THE ENGINEER. FURNISH NAILS AND/OR BOLTS OF DIAMETER, LENGTH, AND NUMBER SPECIFIED BY THE MANUFACTURER FOR EACH CONNECTOR.

6B) ALL CONNECTOR HOLES SHALL BE FILLED WITH PROPER NAILS/BOLTS INCLUDING OPTIONAL NAIL LOCATIONS FOR UPLIFT. ALL BOLT HOLES SHALL BE DRILLED INTO FRAMING MEMBERS. MAXIMUM HOLE DIAMETER IS 1/16" LARGER THAN THE BOLT DIAMETER.

7) OPENINGS:
7A) OPENING, POCKETS, ETC., SHALL NOT BE PLACED IN BEAMS, JOISTS, RAFTERS, STUDS, POSTS, COLUMNS, TIMBER AND OTHER STRUCTURAL MEMBERS UNLESS DETAILED ON THE STRUCTURAL DRAWINGS.

FRAMING LUMBER SCHEDULE

TYPE OF USE	GRADE	Fb (PSI)	Fv (PSI)	E (PSI)
EXTERIOR STUDS	NO. 2			
LOAD BEARING STUDS (AND COLUMNS ASSEMBLED FROM STUDS)	NO. 2			
NON-LOAD BEARING STUDS	STUD			
BEAMS & STRINGERS	NO. 1			
POSTS & TIMBER	NO. 1			
EXPOSED FRAMING	NO. 1			
DECKING	SELECT DX			
ALL OTHER	NO. 1			

FABRICATED LUMBER TABLE

PRODUCT	SIZE	TYPE	Fb (PSI)	Fv (PSI)	Ft (PSI)	E (KSI)	REMARKS
PARALLEL STRAND BEAM	--	PSL	2000	290	2025	2000	--
LAMINATED STRAND BEAM	--	LSL	2250	400	1075	1500	--
LAMINATED VENEER BEAM	--	LVL	2600	285	1555	1900	--

APA RATED SHEATHING

PANEL SPAN RATING	PANEL THICKNESS
24/16	7/16"
32/16	15/32", 1/2"
40/20	19/32", 5/8"
48/24	23/32", 3/4"

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COLORADO LICENSED PROFESSIONAL ENGINEER NICHOLAS J. ERICKSON 41674
03/06/2023

REVIEWED FOR CODE COMPLIANCE
03/07/2023

HEITER RESIDENCE FOUNDATION ENGINEERING

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STEAMBOAT SPRINGS, CO 80487

REVISIONS		
NO.	ISSUE	DATE

100% CONSTRUCTION DOCUMENTS

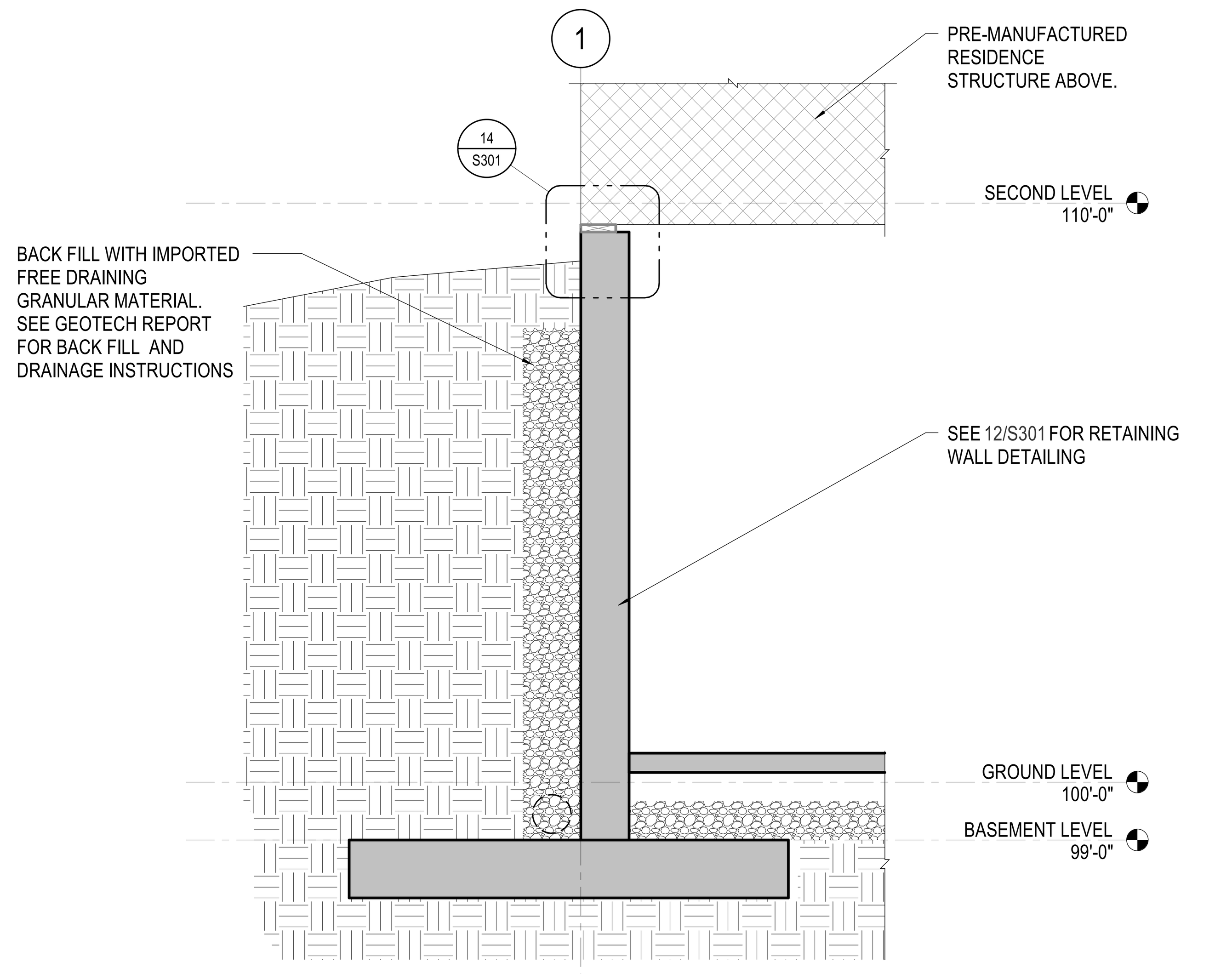
PROJECT NO: 22.0119.S01
DATE: 5/27/2022

SHEET TITLE: NOTES

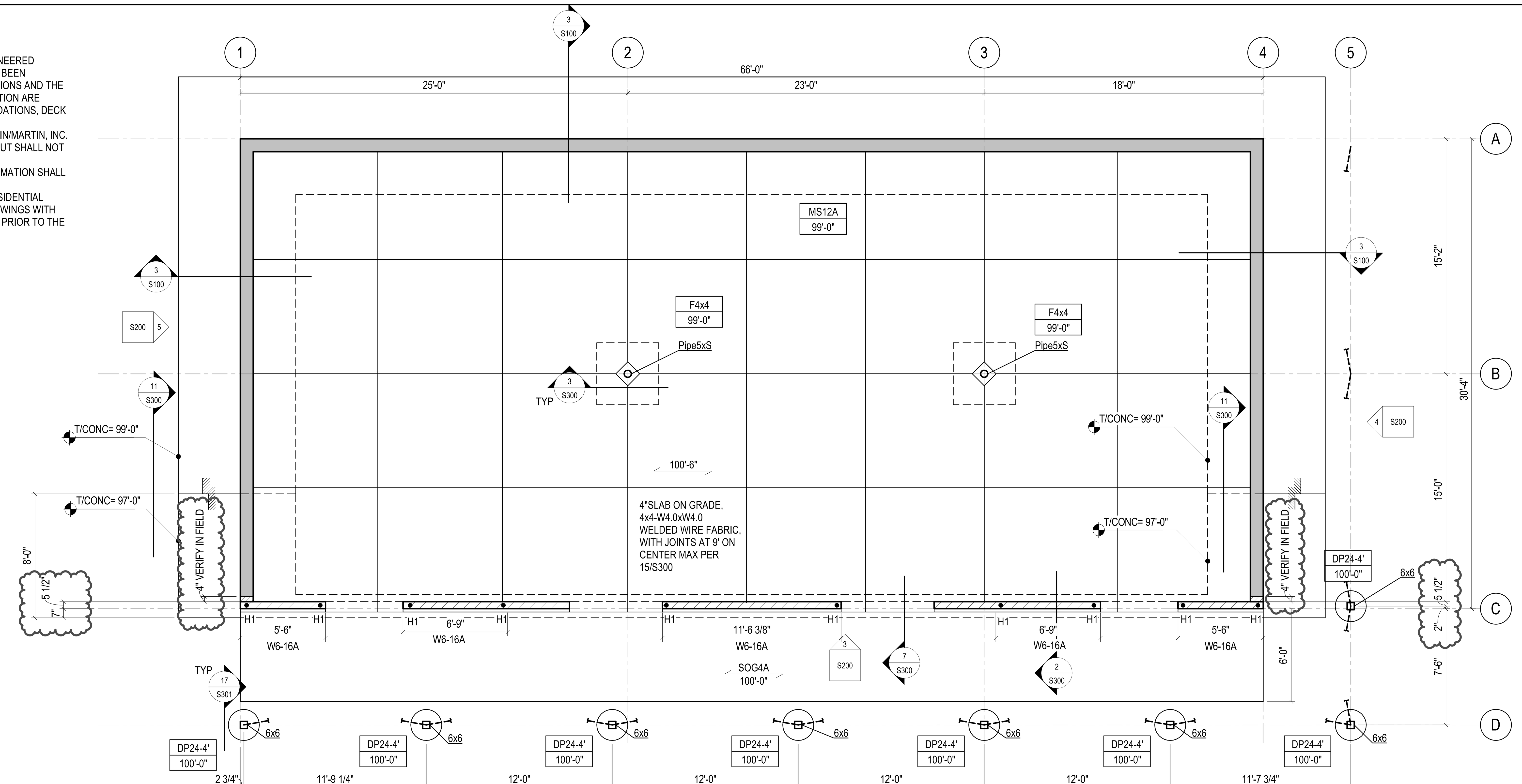
SHEET NUMBER: S002

PRE-ENDINEERED RESIDENTIAL BUILDING CRITERIA

1. MARTIN/MARTIN, INC. HAS BE RETAINED TO PROVIDE STRUCTURAL ENGINEERING SERVICES FOR FOUNDATIONS SUPPORTING A PRE-ENGEINEERED MODULAR HOME AND GARAGE AND FOR STRUCTURAL ENGINEERING SERVICES FOR A DECK FRAMED INTO THE HOME. FOUNDATIONS HAVE BEEN DESIGNED BY M/M BASED ON LIMITED INFORMATION MADE AVAILABLE TO M/M BY THE CLIENT. INTERFACE DETAILS BETWEEN THE FOUNDATIONS AND THE PRE-FABRICATED STRUCTURES SHALL BE CONSIDERED AS PRELIINARY, AS THE HOME AND GARAGE ENGINEERING AND DRAWING PRODUCTION ARE COMPLETED ALL STRUCTRUALLY RELEVANT INFORMATION SHALL BE MADE AVAILABLE TO M/M FOR REVIEW. MODIFICATIONS TO THE FOUNDATIONS, DECK FRAMING AND INTERFACE DETAILS / CONNECTIONS MAY BE REQUIRED PRIOR TO CONSTRUCTION.
2. THE STRUCTURAL ENGINEERING OF THE HOME AND THE GARAGE STRUCTURES ARE NOT INCLUDED WITHIN THE SCOPE OF WORK OF MARTIN/MARTIN, INC.
3. FINAL ATTACHMENT DESIGN BETWEEN THE FOUNDATIONS AND THE PRE-FRABRICATED STRUCTURES IS THE RESPONSIBILITY OF OTHERS BUT SHALL NOT BE LESS THAN THE INDICIATED MIMIMUM ATTACHMENTS INCLUDED WITHIN THESE DOCUMENTS.
4. ALL DIMENSIONAL AND LAYOUT INFORMATION PROVIDED HEREIN SHALL BE CONSIDERED PRELIMINARY. FINAL DIMENSIONAL LAYOUT INFORMATION SHALL BE COORDINATED BY THE CONTRACTOR.
5. FOUNDATION PLAN LOCATIONS AND BEARING ELEVATION IS BASED ON THE LIMITED INFORMATION PROVIDED BY THE PRE-ENGINEERED RESIDENTIAL CONTRACTOR. THE CONTRACTOR SHALL COORDINATE FOUNDATION LOCATIONS AND/OR ELEVATIONS SHOWN IN THESE STRUCTURAL DRAWINGS WITH THE PRE-ENGINEERED RESIDENTIAL BUILDING CONTRACTOR PRIOR TO CONSTRUCTION. NOTIFY MARTIN/MARTIN IF THERE DISCREPENCIES PRIOR TO THE START OF CONSTRUCTION.

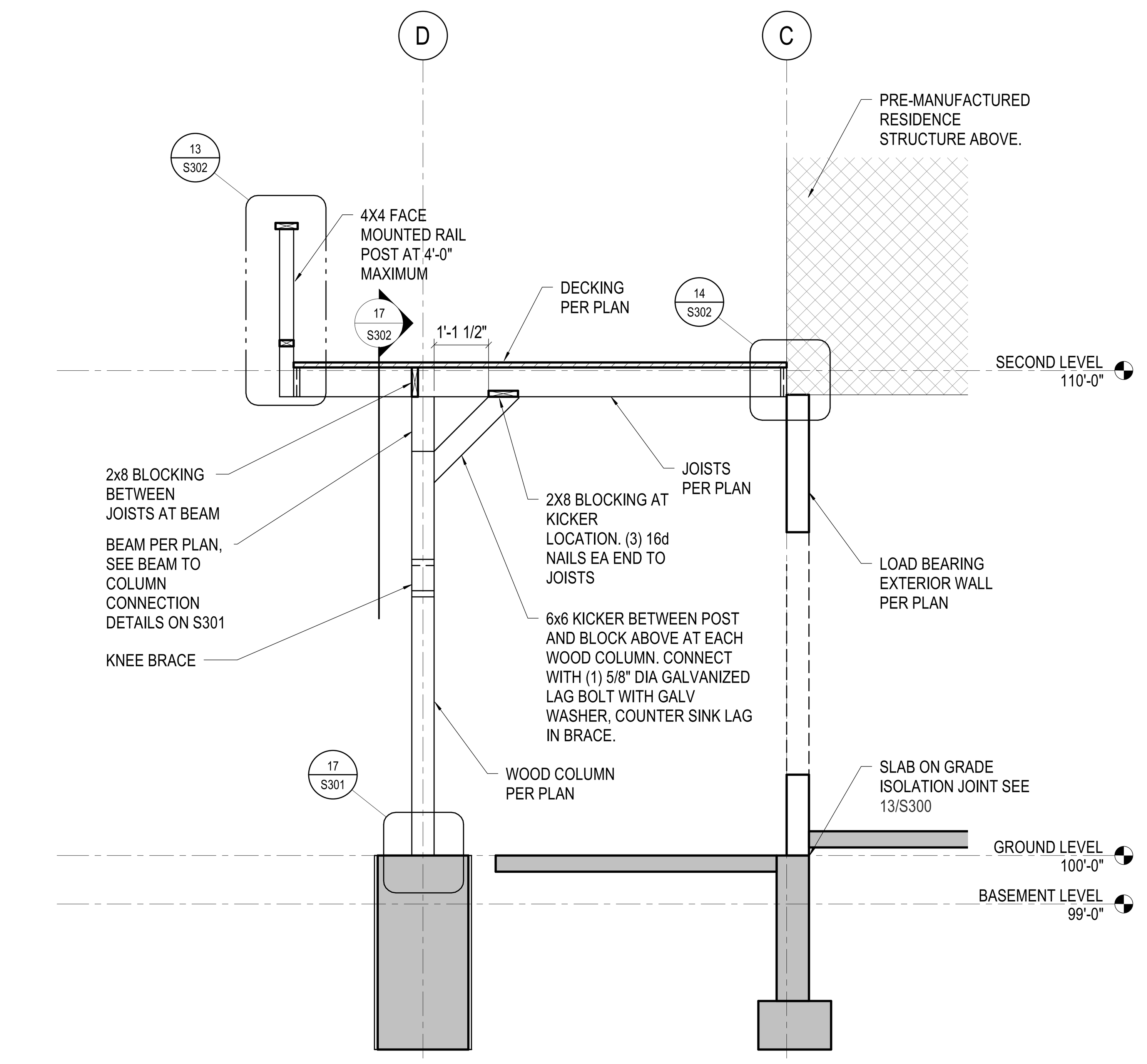


3 RETAINING WALL SECTION
1/2" = 1'-0"

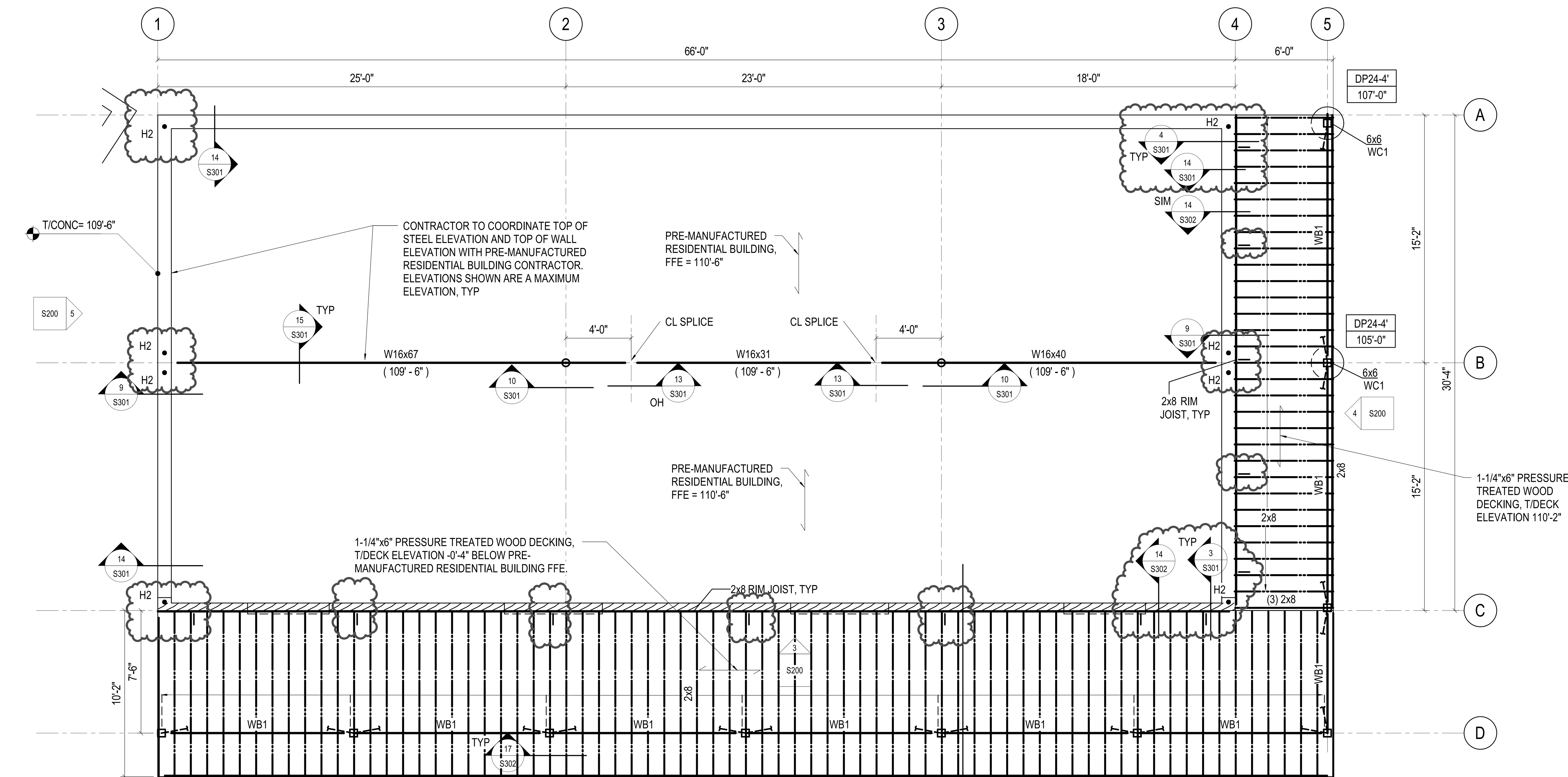


NOTES:
1. REFER TO SHEET S303 FOR WOOD COLUMN SCHEDULE.
2. REFER TO 2/S200 FOR HOLD DOWN SCHEDULE.

1 BASEMENT LEVEL PLAN
1/4" = 1'-0"



4 CANTILEVERED JOISTS WITH DROPPED BEAM
1/2" = 1'-0"



NOTES:
1. REFER TO SHEET S303 FOR WOOD COLUMN AND BEAM SCHEDULE.
2. PROVIDE DECK TENSION TIE WHERE SHOWN PER 4/S301
3. REFER TO 2/S200 FOR HOLD DOWN SCHEDULE AND 19/S302 FOR H2 HOLD DOWN DETAILS. H2 LOCATIONS SHOWN ARE APPROXIMATE AND ARE TO BE COORDINATED WITH PRE-FAB STRUCTURE.

2 FIRST LEVEL PLAN
1/4" = 1'-0"

MM JOB #:21.0119.S.01
PRINCIPAL: Nick Ereckson
EOR:Enter EOR's Name Here
PROJECT MANAGER: Andrew Lack
DESIGNERS: Enter Designer's Name Here
LEAD REVIT TECH:Enter Lead Revit Tech's Name Here

DATE PRINTED:3/6/2023 12:29:44 AM
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COLORADO LICENSED PROFESSIONAL ENGINEER NICHOLAS J. ERECKSON 41674
03/06/2023

REVIEWED FOR CODE COMPLIANCE
03/07/2023

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REVISIONS

NO.	ISSUE	DATE
1	ADD NO. 1	2/20/2023

100% CONSTRUCTION DOCUMENTS

PROJECT NO: 22.0119.S01
DATE: 5/27/2022

SHEET TITLE:
FLOOR PLANS

SHEET NUMBER:
S100

PRE-ENDINEERED RESIDENTIAL BUILDING CRITERIA

1. MARTIN/MARTIN, INC. HAS BE RETAINED TO PROVIDE STRUCTURAL ENGINEERING SERVICES FOR FOUNDATIONS SUPPORTING A PRE-ENGEINEERED MODULAR HOME AND GARAGE AND FOR STRUCTURAL ENGINEERING SERVICES FOR A DECK FRAMED INTO THE HOME. FOUNDATIONS HAVE BEEN DESIGNED BY M/M BASED ON LIMITED INFORMATION MADE AVAILABLE TO M/M BY THE CLIENT. INTERFACE DETAILS BETWEEN THE FOUNDATIONS AND THE PRE-FABRICATED STRUCTURES SHALL BE CONSIDERED AS PRELIINARY, AS THE HOME AND GARAGE ENGINEERING AND DRAWING PRODUCTION ARE COMPLETED ALL STRUCTRUALLY RELEVANT INFORMATION SHALL BE MADE AVAILABLE TO M/M FOR REVIEW. MODIFICATIONS TO THE FOUNDATIONS, DECK FRAMING AND INTERFACE DETAILS / CONNECTIONS MAY BE REQUIRED PRIOR TO CONSTRUCTION.
2. THE STRUCTURAL ENGINEERING OF THE HOME AND THE GARAGE STRUCTURES ARE NOT INCLUDED WITHIN THE SCOPE OF WORK OF MARTIN/MARTIN, INC.
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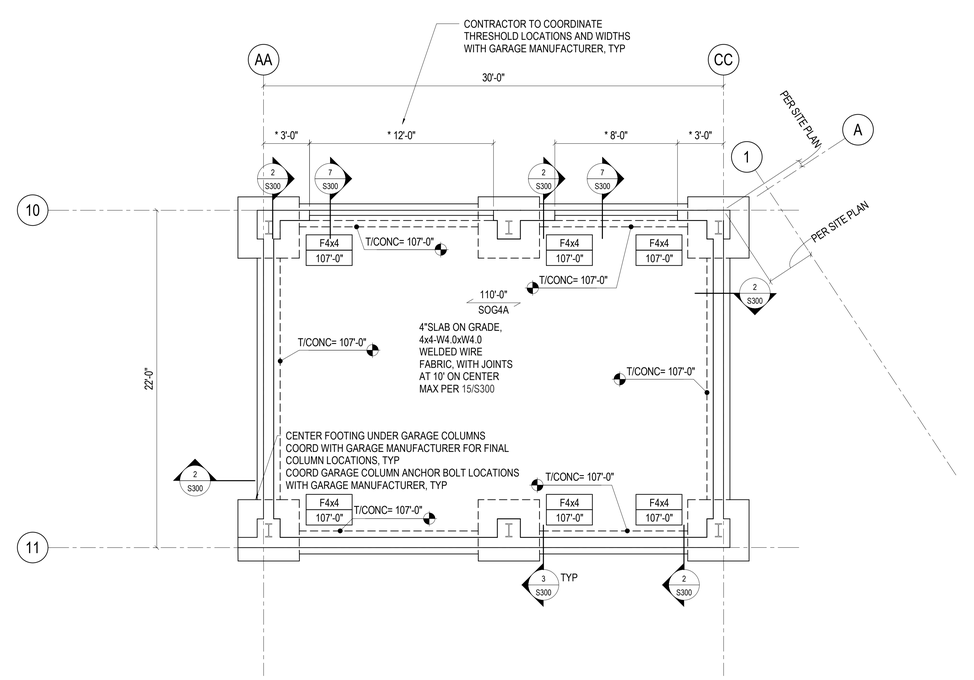

1 GARAGE PLAN

1/4" = 1'-0"

Not included under Routt County Permit PRPF220565 Open separate permit and submit plans for garage.

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PROJECT NO: 22.0119.S01
DATE: 5/27/2022

SHEET TITLE:
GARAGE FOUNDATION

SHEET NUMBER:
S101

MM JOB #: 21.0119.S.01
PROJECT ENGINEER: Nicholas J. Erickson
EOR: Enter EOR's Name Here
PROJECT MANAGER: Andrew Lack
DESIGNER: Enter Designer's Name Here
LEAD ARCHITECT: Enter Lead Architect's Name Here
DATE PRINTED: 5/6/2023 12:29:45 AM
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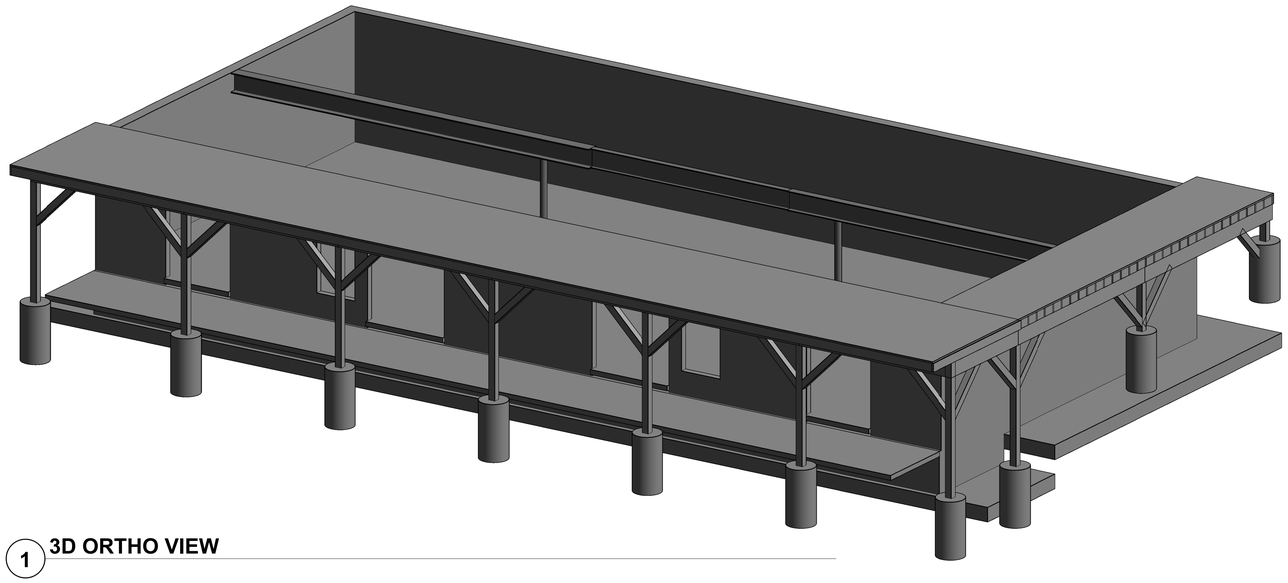


1 3D ORTHO VIEW

WOOD WALL SHEATHING SCHEDULE 10d NAILS

MARK	SHEATHING	BLOCKED EDGES	EDGE NAILING	ANCHORAGE TO FOUNDATION	PLATE WASHER REQUIRED AT BASE ANCHORS	CONNECTION AT SILL PLATE	WOOD NAILER AT STEEL	CONNECTION AT TOP PLATE	VW/OMEGA	VS/OMEGA	REMARKS
A	15/32"	YES	10d @ 6" OC	@ 24" OC	YES	16d @ 4"OC	(2) 0.177"Ø PAF @ 8" OC	SIMPSON A35 @ 18" OC	435 PLF	310 PLF	--

WOOD HOLD DOWN SCHEDULE

MARK	HOLD DOWN TYPE	INTERMEDIATE LEVEL STRAP TYPE	ANCHOR REQTS	MINIMUM STUD PACK AT HOLD DOWN	NUMBER OF PAF	REMARKS
H1	HDU2-SDS2.5	N/A	SSTB16	(2) DF #2 STUDS	11	6" MIN STEMWALL, 15/S302
H2	DTT2Z-SDS2.5	N/A	1/2" DIA	SEE 19/S302	-	-

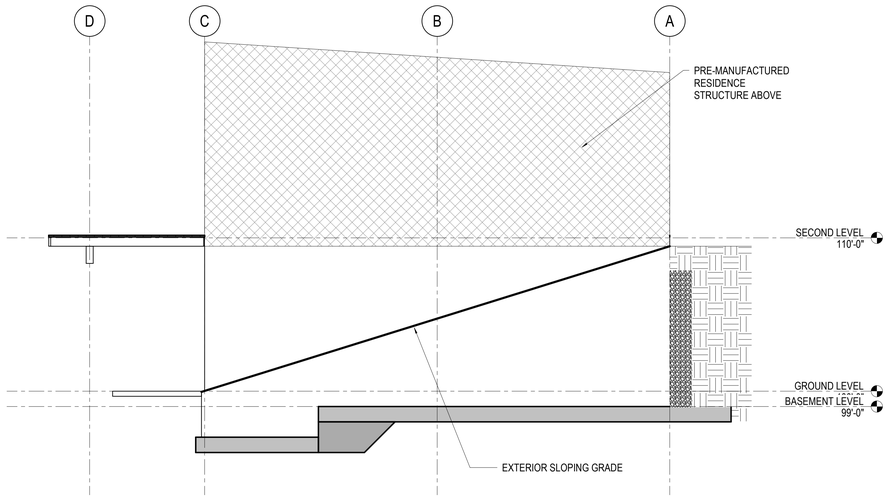
1

WOOD WALL FRAMING SCHEDULE

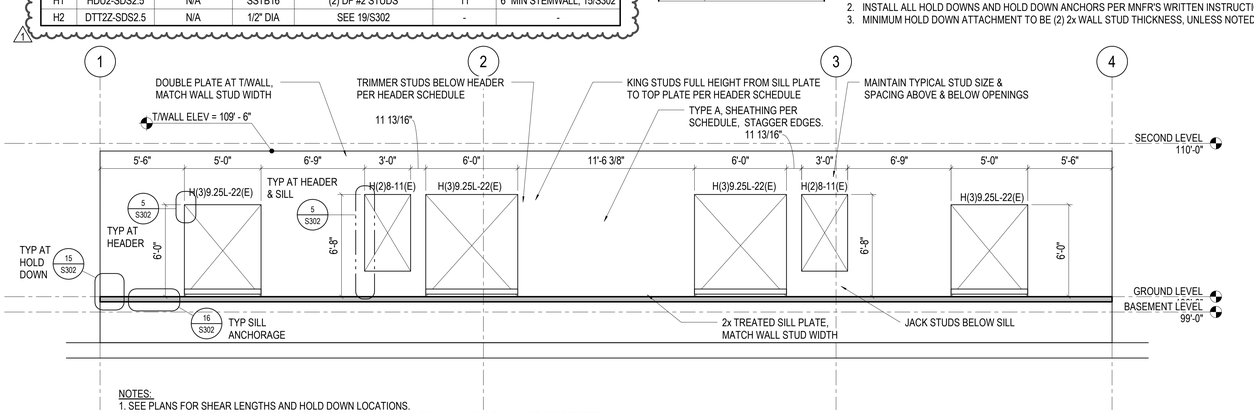
MARK	STUD SIZE & SPACING
W6-16	2x6 DF #2 @ 16" OC

WALL FRAMING NOTES:
1. SHEATHING PER SCHEDULE, STAGGER EDGES
2. ALL EXTERIOR STRUCTURAL WOOD WALLS SHALL BE W6-X16, UNO
3. SHEATHING TO BE APA-RATED SHEATHING, SEE TABLE IN GENERAL NOTES FOR ADDITIONAL INFORMATION.
4. SHEATHING NAILS SHALL BE INSTALLED A MINIMUM OF 3/8" FROM PANEL EDGES
5. SHEATHING TO BE BACKED WITH 2" NOMINAL OR WIDER MEMBERS
   A. NAILS SPACED AT 3" OC OR LESS SHALL BE BACKED WITH 3" NOMINAL OR WIDER MEMBERS, INCLUDING SILL CONDTIONS.
6. FIELD NAILING SHALL BE 10d NAILS @ 12" OC AT SHEATHING
7. SHEATHING NAILS TO BE COMMON
8. CONNECT SHEATHING DIRECTLY TO STUDS
9. ALL WALL NAILING AT WALLS, INCLUDING HEADERS, BLOCKING, RIMBOARDS, ETC SHALL CONFORM TO REQUIREMENTS OF NAILING SCHEDULE IN IBC 2018, TABLE 2304.10.1 UNLESS MORE STRINGENT REQUIREMENTS ARE SHOWN IN DRAWINGS.

HOLD DOWN NOTES:
1. HOLD DOWN LOCATIONS AS SHOWN ON PLAN
2. INSTALL ALL HOLD DOWNS AND HOLD DOWN ANCHORS PER MNFR'S WRITTEN INSTRUCTIONS
3. MINIMUM HOLD DOWN ATTACHMENT TO BE (2) 2x WALL STUD THICKNESS, UNLESS NOTED OTHERWISE

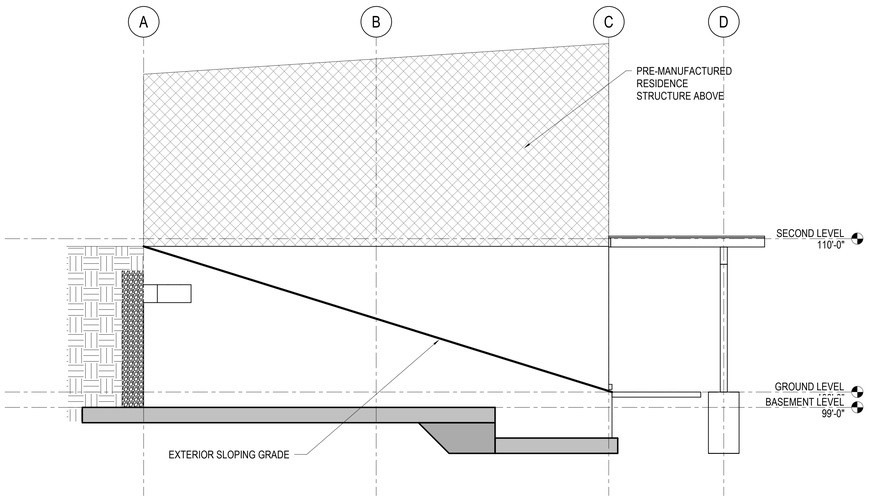


4 EAST ELEVATION
1/4" = 1'-0"

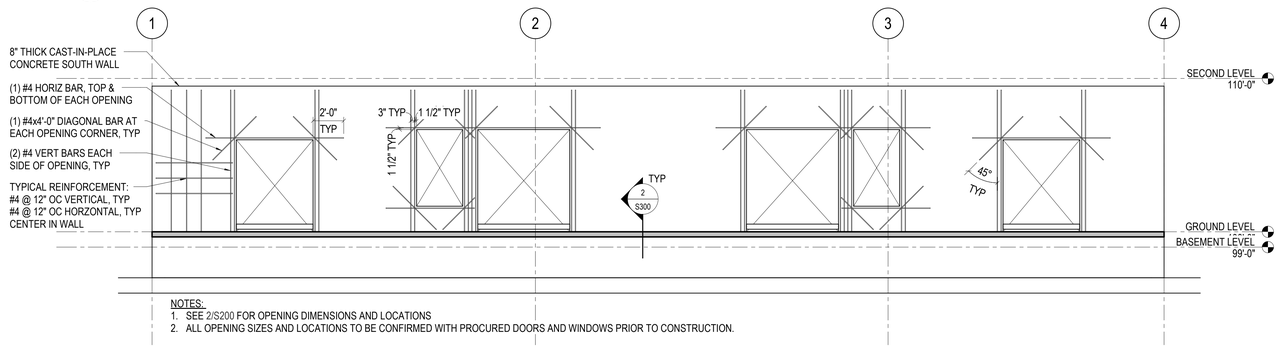


NOTES:
1. SEE PLANS FOR SHEAR LENGTHS AND HOLD DOWN LOCATIONS.
2. SEE TYPICAL WOOD FRAMING DETAILS ON SHEET S302 FOR WALL FRAMING, HOLD DOWN AND HEADER DETAILS.
3. ALL OPENING SIZES AND LOCATIONS TO BE CONFIRMED WITH PROCURED DOORS AND WINDOWS PRIOR TO CONSTRUCTION.

2 SOUTH ELEVATION AND WALL FRAMING NOTES
1/4" = 1'-0"



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



NOTES:
1. SEE 2/S200 FOR OPENING DIMENSIONS AND LOCATIONS
2. ALL OPENING SIZES AND LOCATIONS TO BE CONFIRMED WITH PROCURED DOORS AND WINDOWS PRIOR TO CONSTRUCTION.

SOUTH ELEVATION AND WALL FRAMING NOTES CIP CONCRETE OPTION
3
1/4" = 1'-0"

REVISIONS		
NO.	ISSUE	DATE
1	ADD NO. 1	2/20/2023

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PROJECT NO: 22.0119.S01
DATE: 5/27/2022

SHEET TITLE:
ELEVATIONS

SHEET NUMBER:
S200

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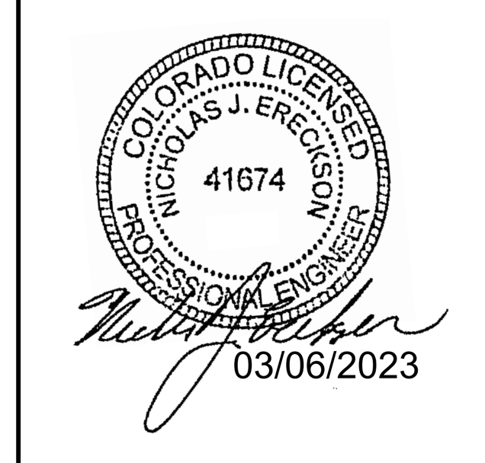

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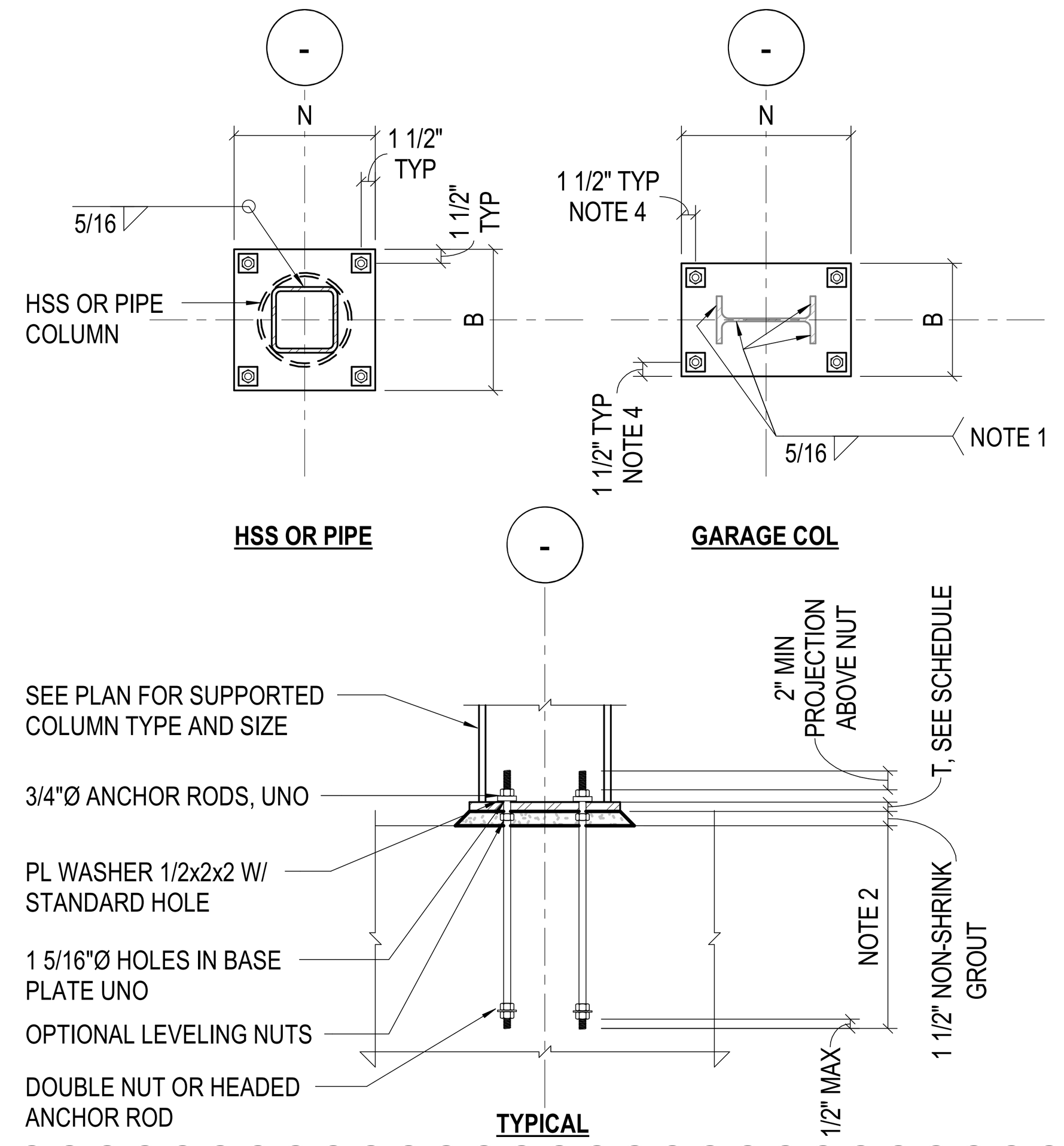
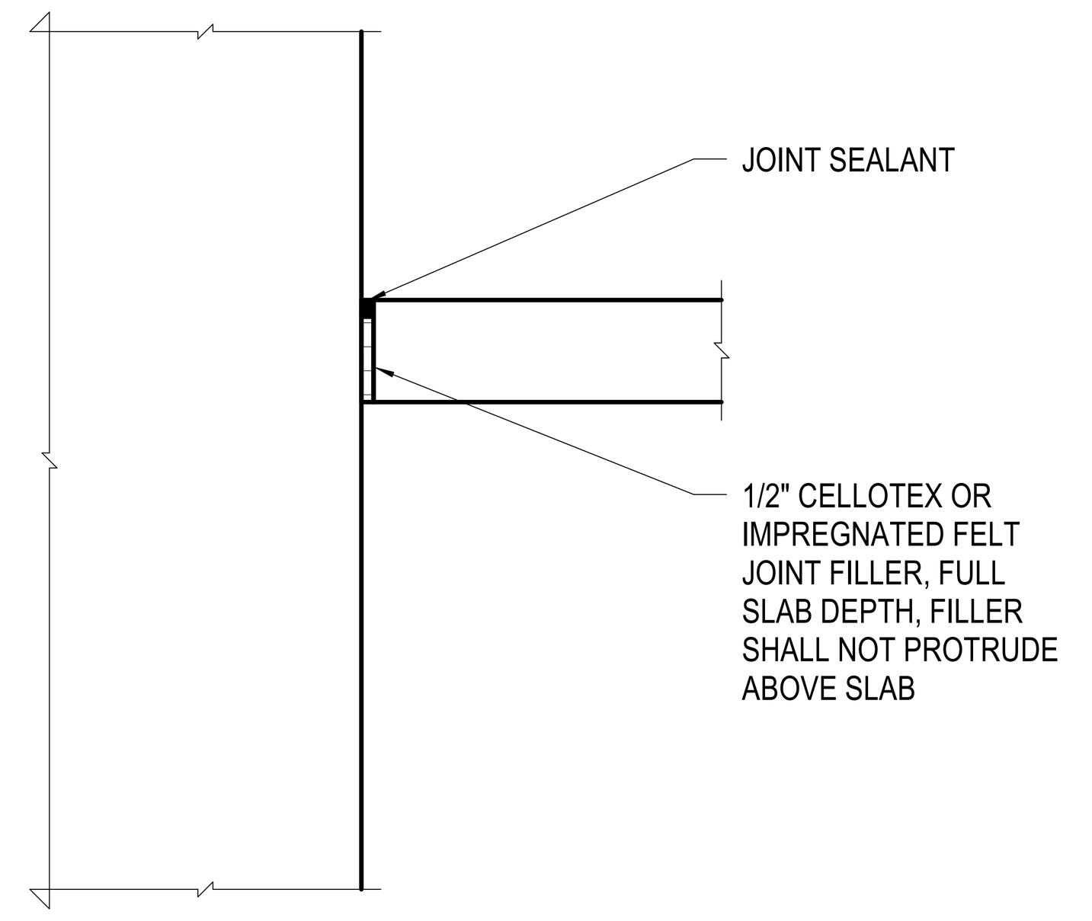


NOTES:
1. ALL AROUND WELD MAY BE USED IN LIEU OF THE WELD SHOWN
2. GREATER OF 9" OR 8xANCHOR ROD Ø
   A. DECREASE AS REQUIRED TO PROVIDE 3" CLEAR COVER AT FOOTING LOCATIONS
3. 2"Ø MAXIMUM GROUT HOLE AT CONTRACTOR'S OPTION. ONE OR TWO GROUT HOLES RECOMMENDED FOR BASE PLATES LARGER THAN 24" IN WIDTH.
4. COORDINATE GARAGE COLUMN ANCHOR BOLT LOCATIONS WITH GARAGE MANUFACTURE
5. AT PIPE COLUMN'S IT IS ACCEPTABLE TO SUBSITITUTE EMBEDDED ANCHOR RODS WITH 3/4" Ø x 10" LONG SIMPSON TITEN HD SCREW ANCHORS.

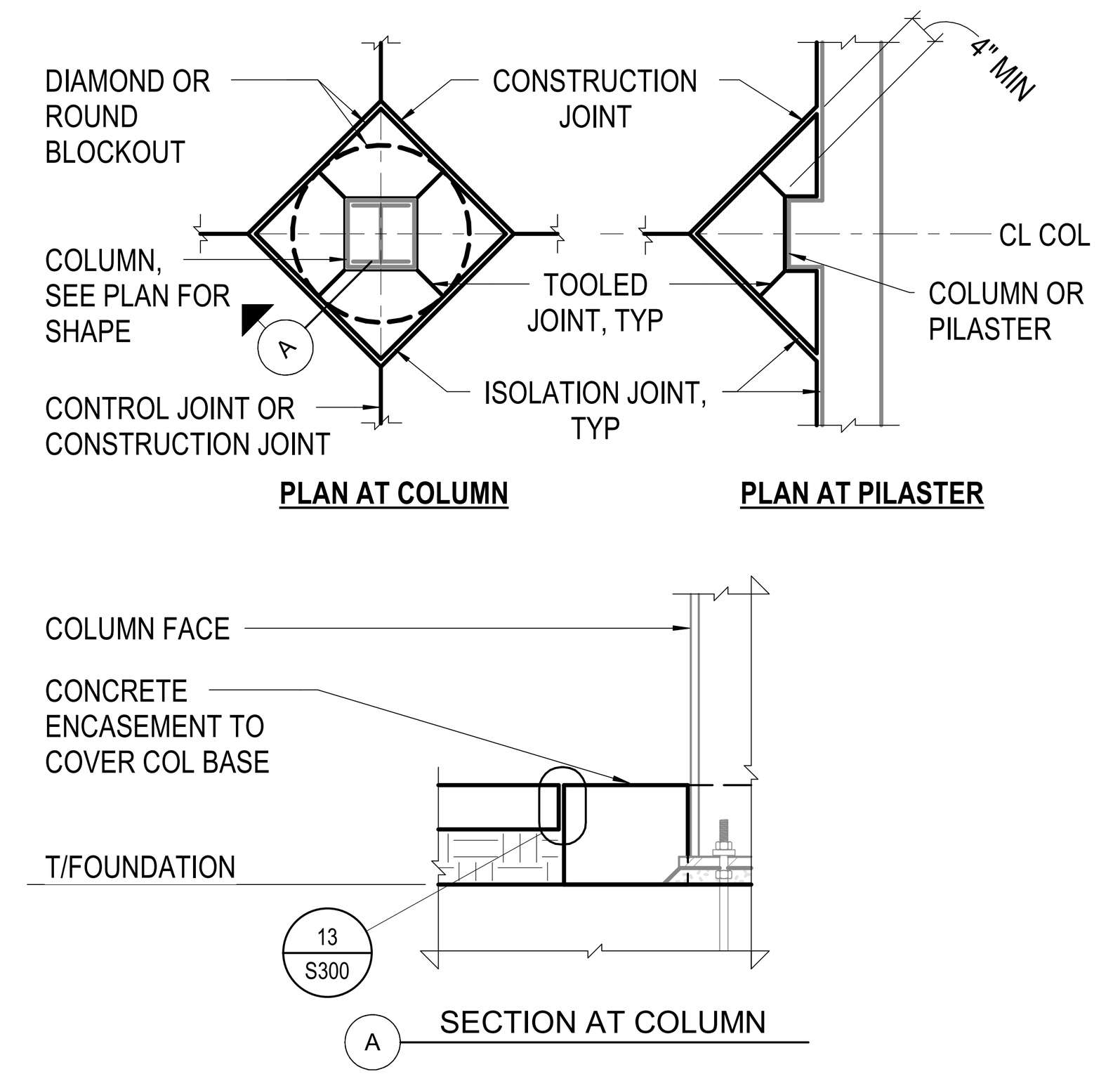
BASE PLATE DIMENSIONS

COLUMN SIZE	PLATE THICKNESS, T (in)	B, (in)	N, (in)
Pipe 5 STD	3/4	12	12
PEMB COL	3/4	12	16

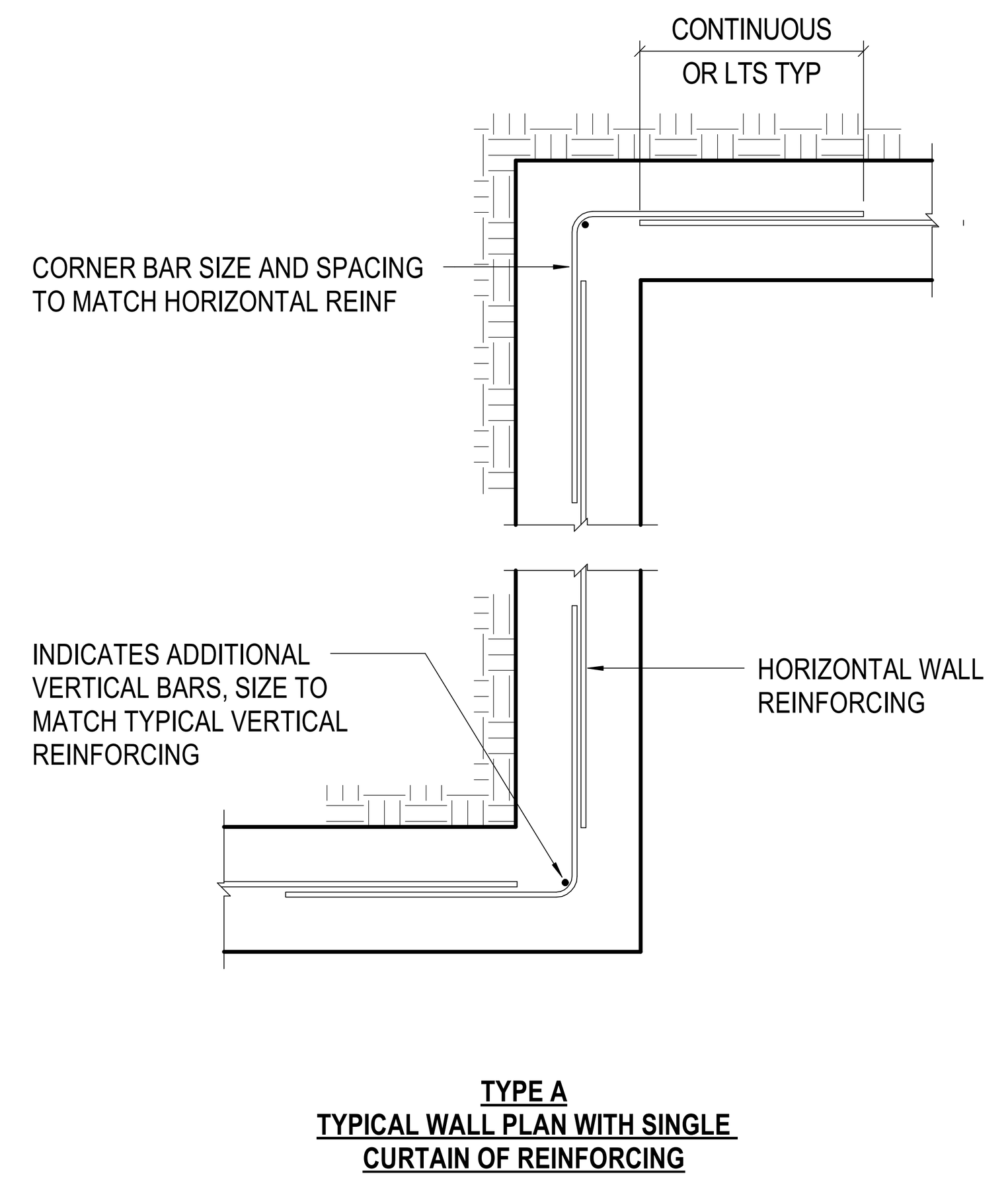
18 3/4" = 1'-0" TYPICAL GRAVITY COLUMN BASE PLATE



13 NO SCALE TYP SOG ISOLATION JOINT

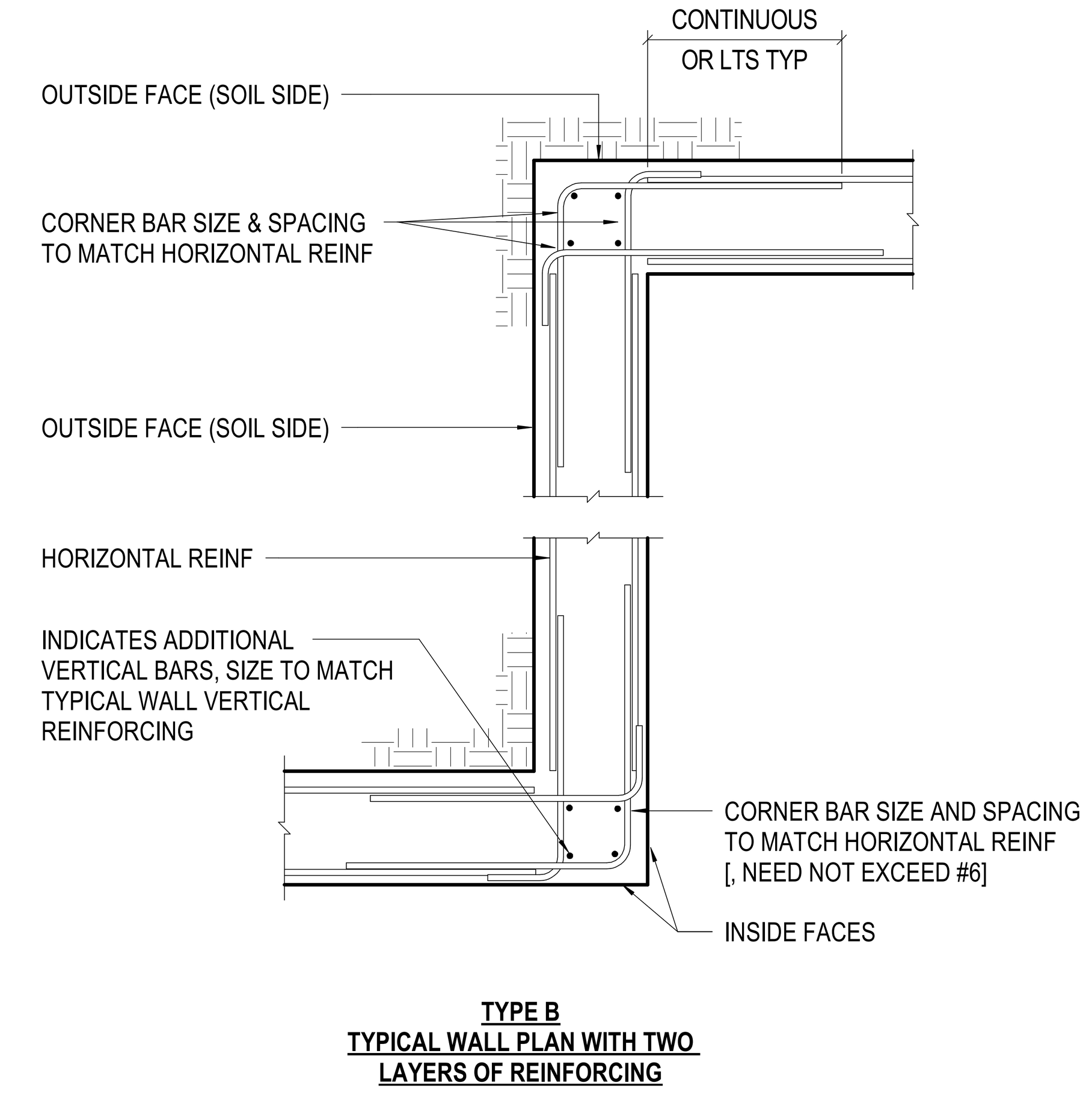


14 3/4" = 1'-0" SOG BLOCKOUT AT COLUMN/PILASTER



TYPE A
TYPICAL WALL PLAN WITH SINGLE CURTAIN OF REINFORCING

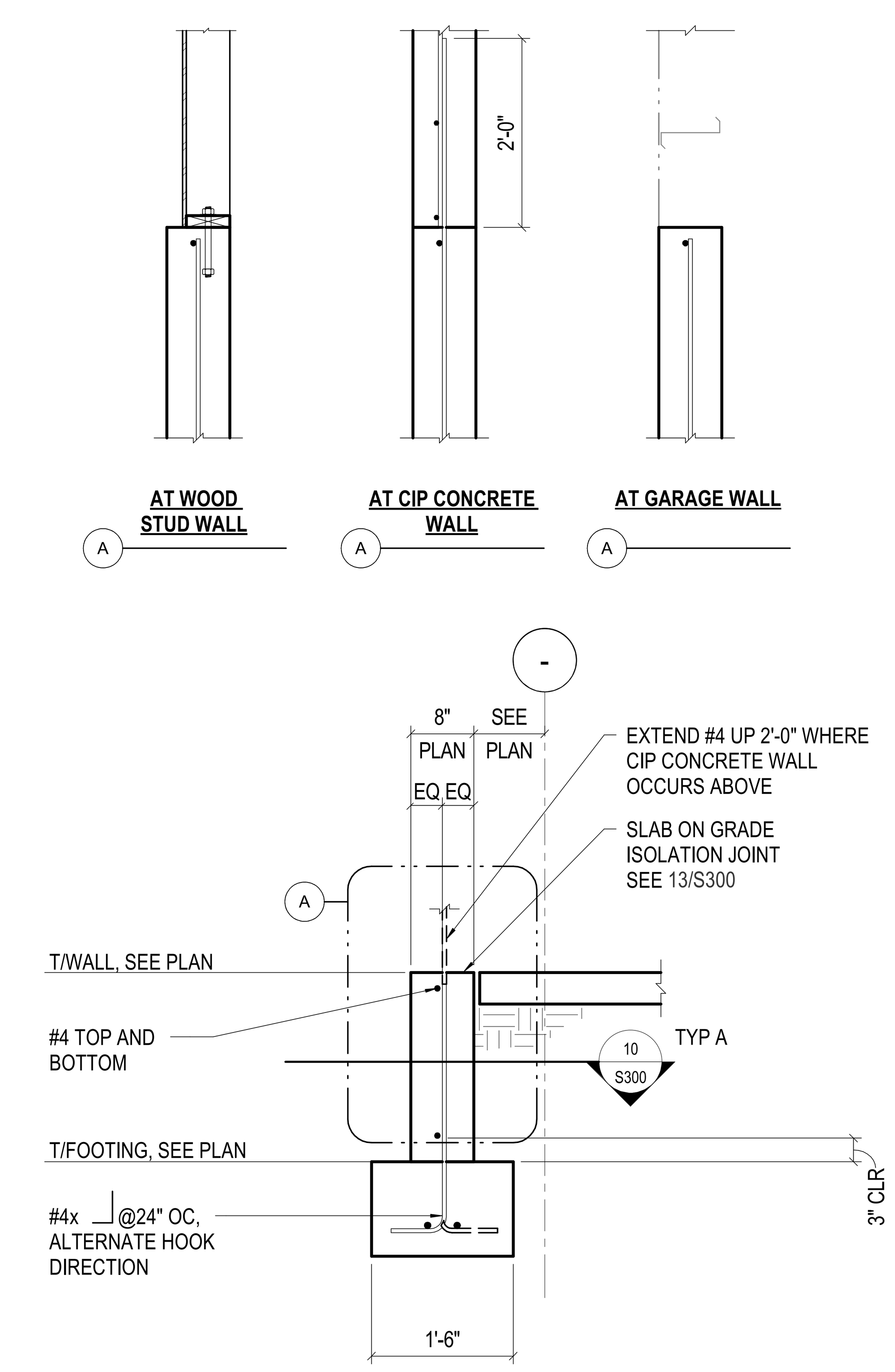
NOTES:
1. TYPICAL VERTICAL REINFORCING NOT SHOWN
2. SEE WALL DETAILS FOR BAR LAYERING
3. DETAIL IS SIMILAR WHERE SOIL OCCURS ON BOTH SIDES OF WALL



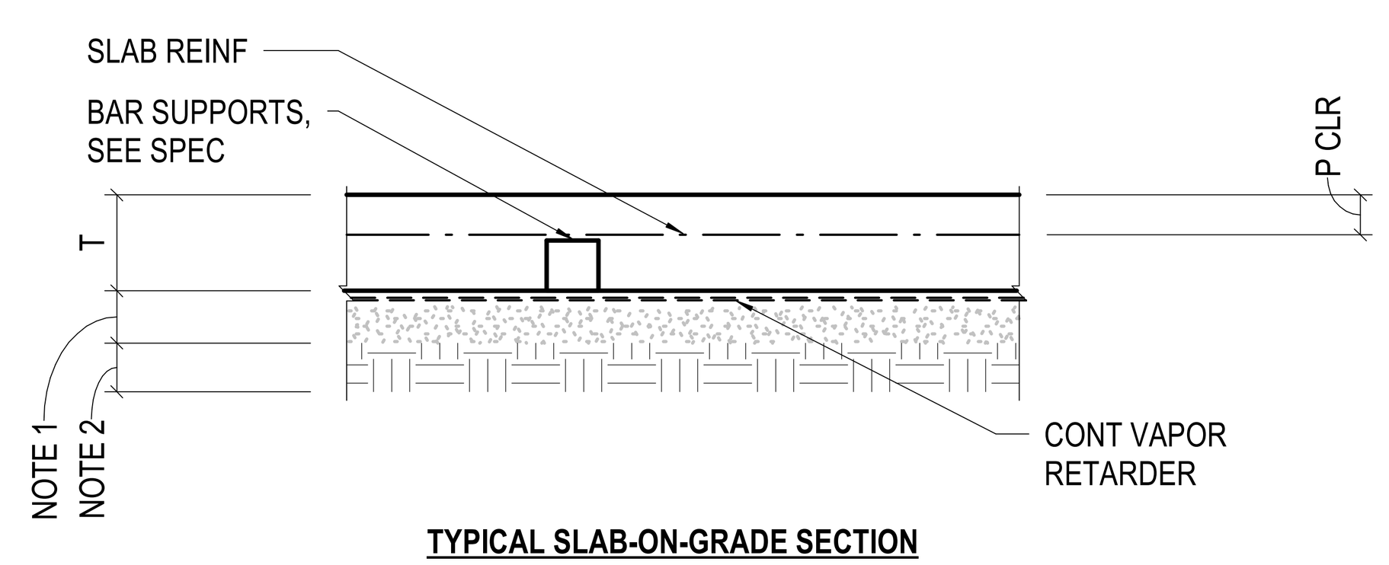
TYPE B
TYPICAL WALL PLAN WITH TWO LAYERS OF REINFORCING

NOTES:
1. TYPICAL VERTICAL REINFORCING NOT SHOWN
2. SEE WALL DETAILS FOR BAR LAYERING
3. DETAIL IS SIMILAR WHERE SOIL OCCURS ON BOTH SIDES OF WALL

10 3/4" = 1'-0" TYPICAL HORIZONTAL REINFORCING AT BASEMENT AND FOUNDATION WALLS

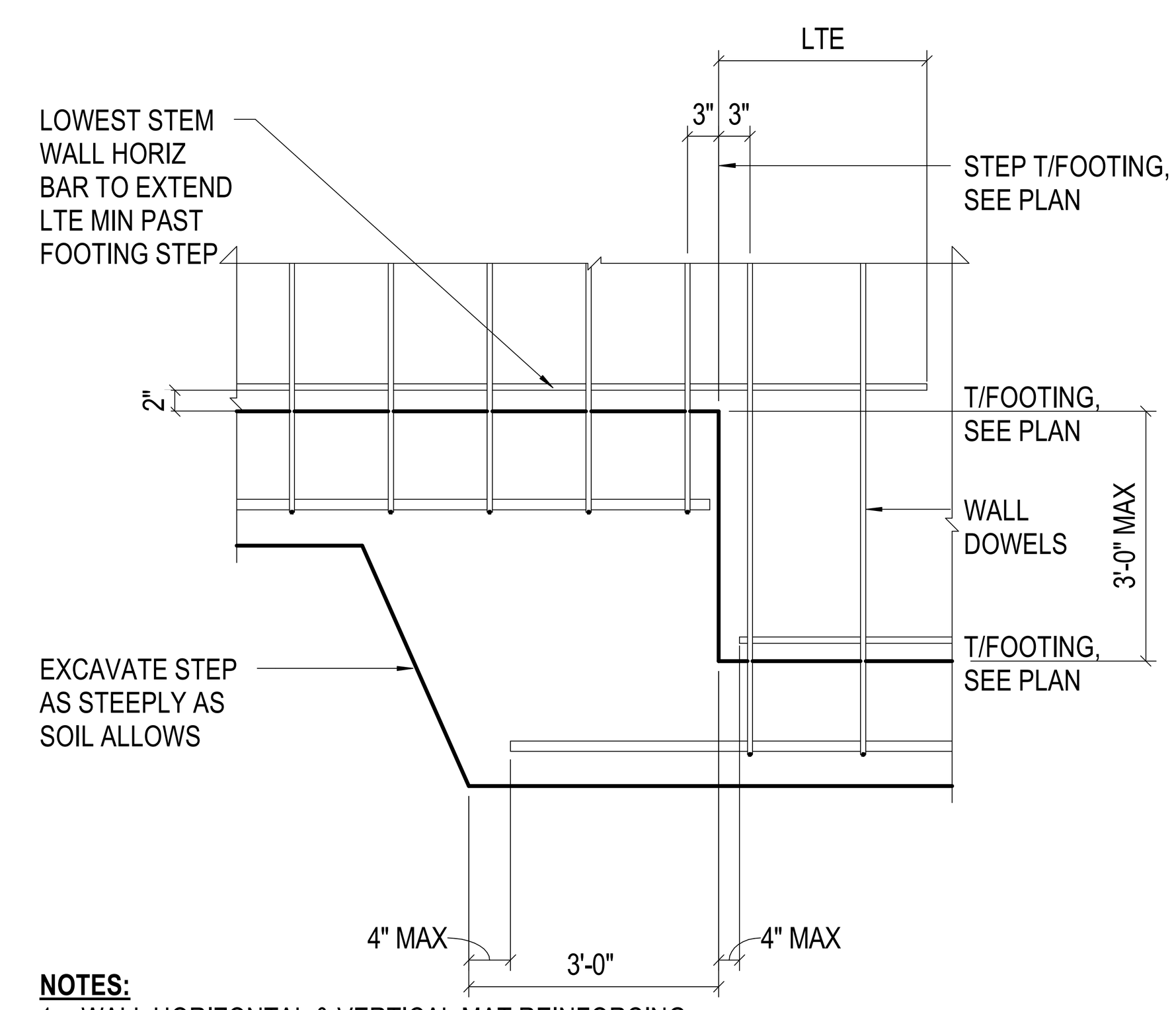


2 3/4" = 1'-0" STEM WALL AT WEST PERIMETER



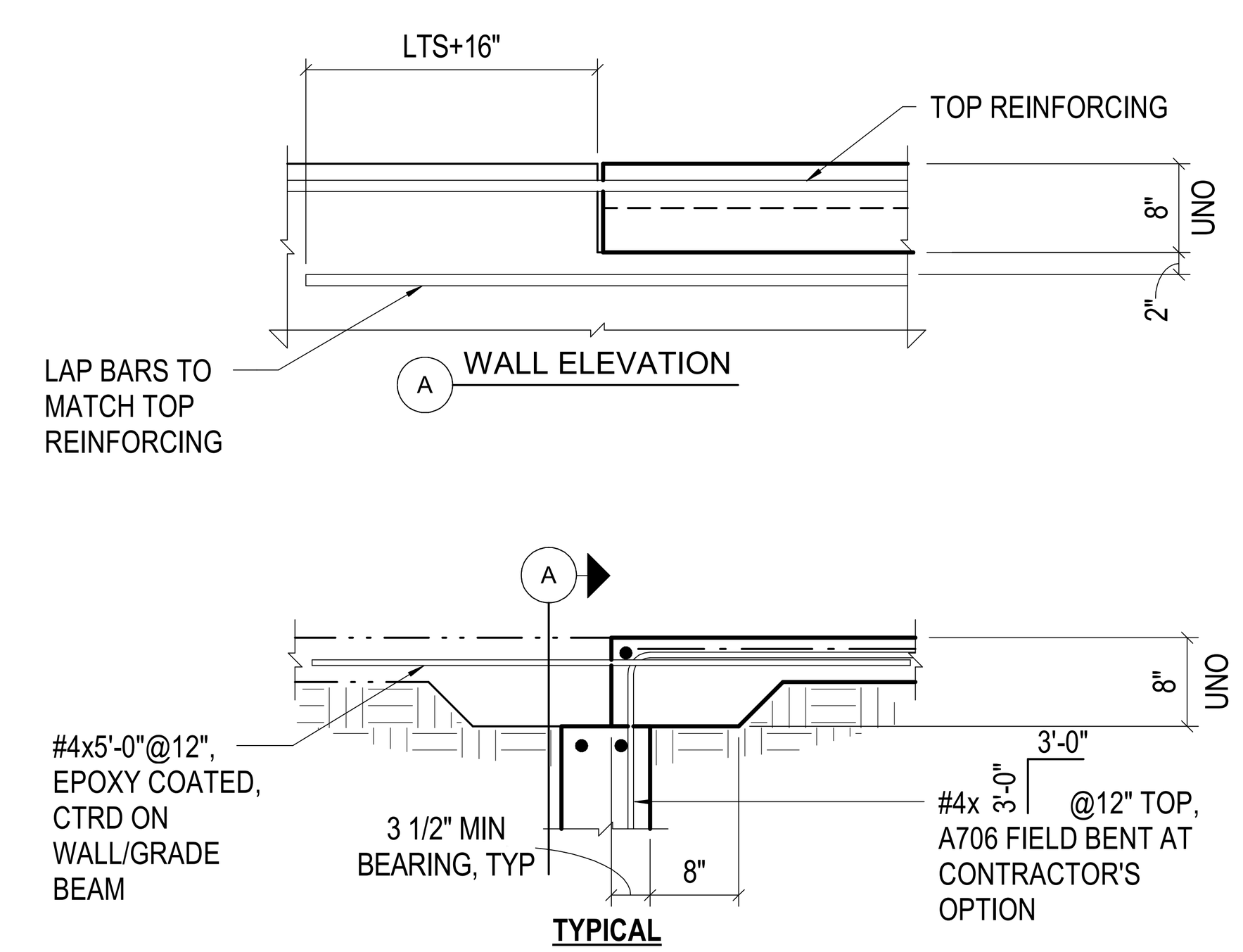
NOTES:
1. GRANULAR COURSE: 6" MIN COMPACTED FREE DRAINING GRANULAR FILL
2. PREPARED/COMPACTED SUBGRADE PER GEOTECHNICAL REPORT

15 NO SCALE TYP SOG SCHEDULE

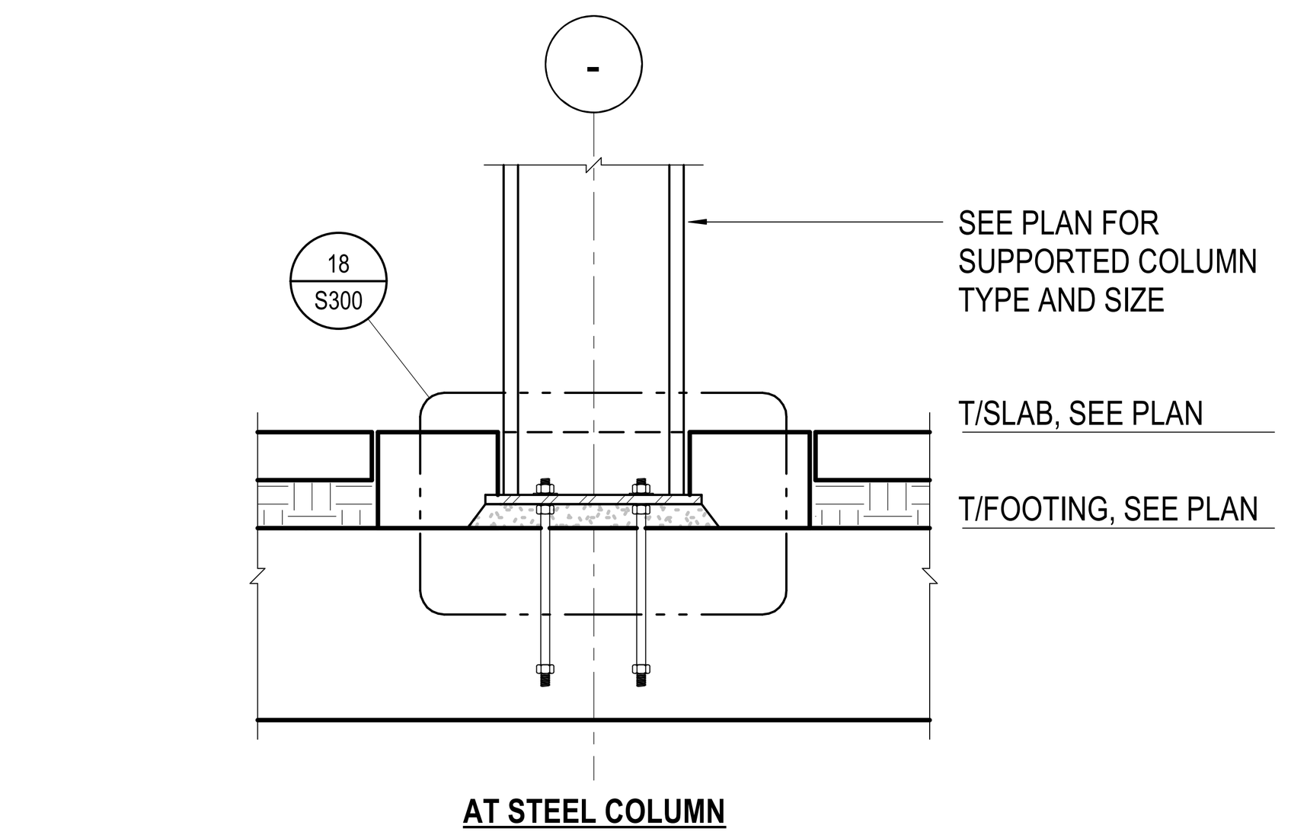


NOTES:
1. WALL HORIZONTAL & VERTICAL MAT REINFORCING NOT SHOWN TO BE CONTINUOUS THROUGH STEP

11 NO SCALE STRIP FOOTING w/CIP STEM WALL STEP, 3'-0" AND LESS



7 NO SCALE TYP SOG EXT THRESHOLD

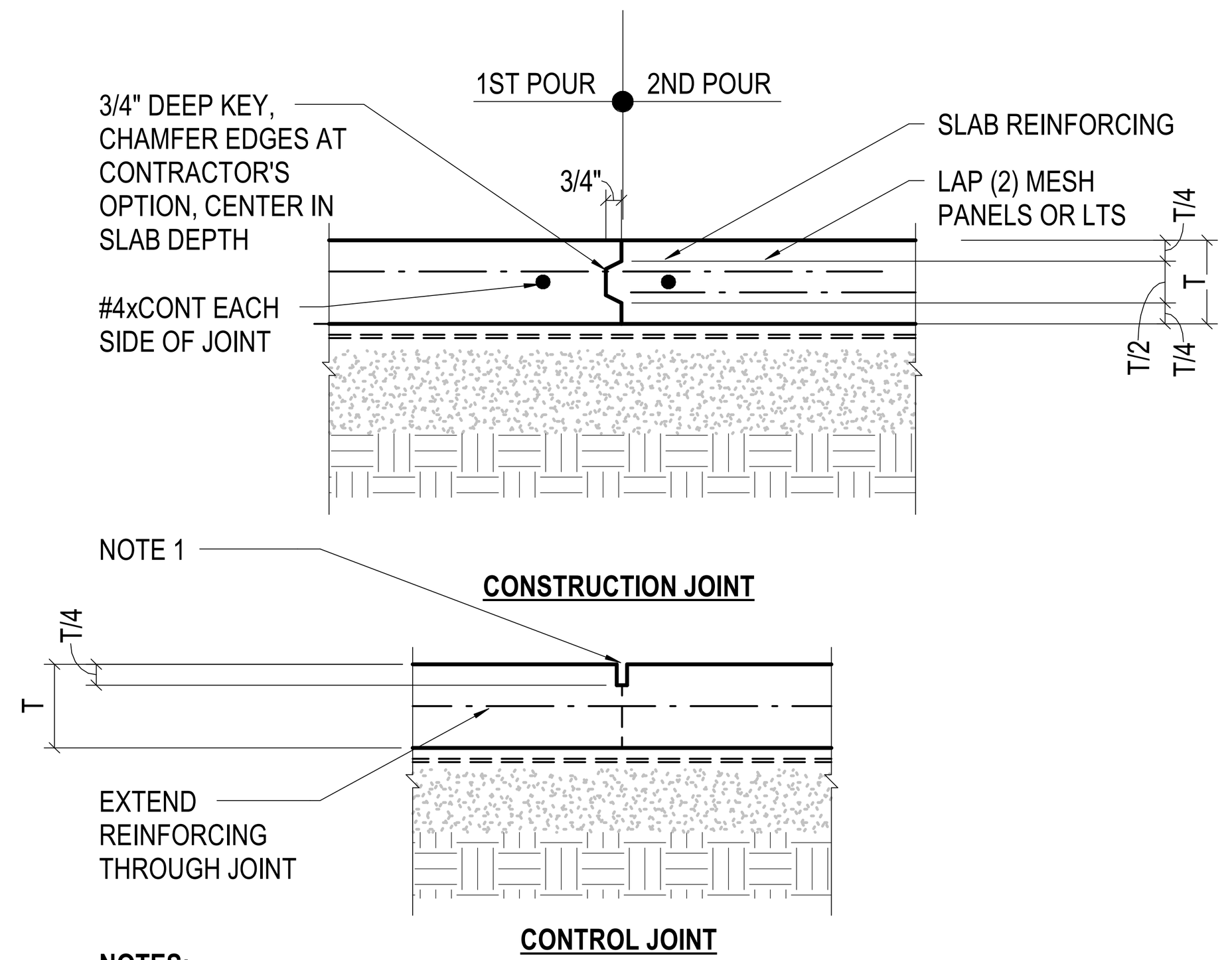


NOTES:
1. SPREAD FOOTING REINFORCING NOT SHOWN

SPREAD FOOTING SCHEDULE
SOIL ALLOWABLE PRESSURE = 3000 PSF

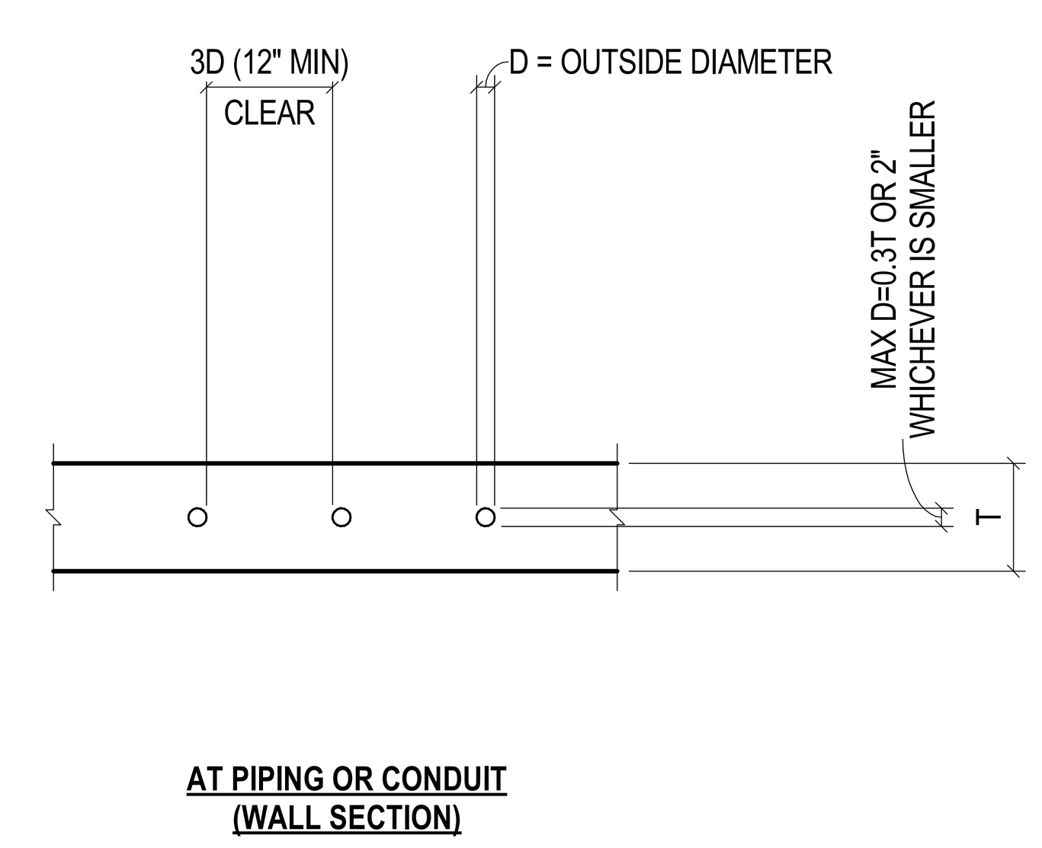
MARK	FOOTING SIZE L x W x T	REINFORCING	SERVICE CAPACITY (KIPS)	REMARKS
F4x4	4'-0"x4'-0"x1'-0"	(4) #5 EW BOT	48	-

3 3/4" = 1'-0" INTERIOR COLUMN AT SPREAD FOOTING

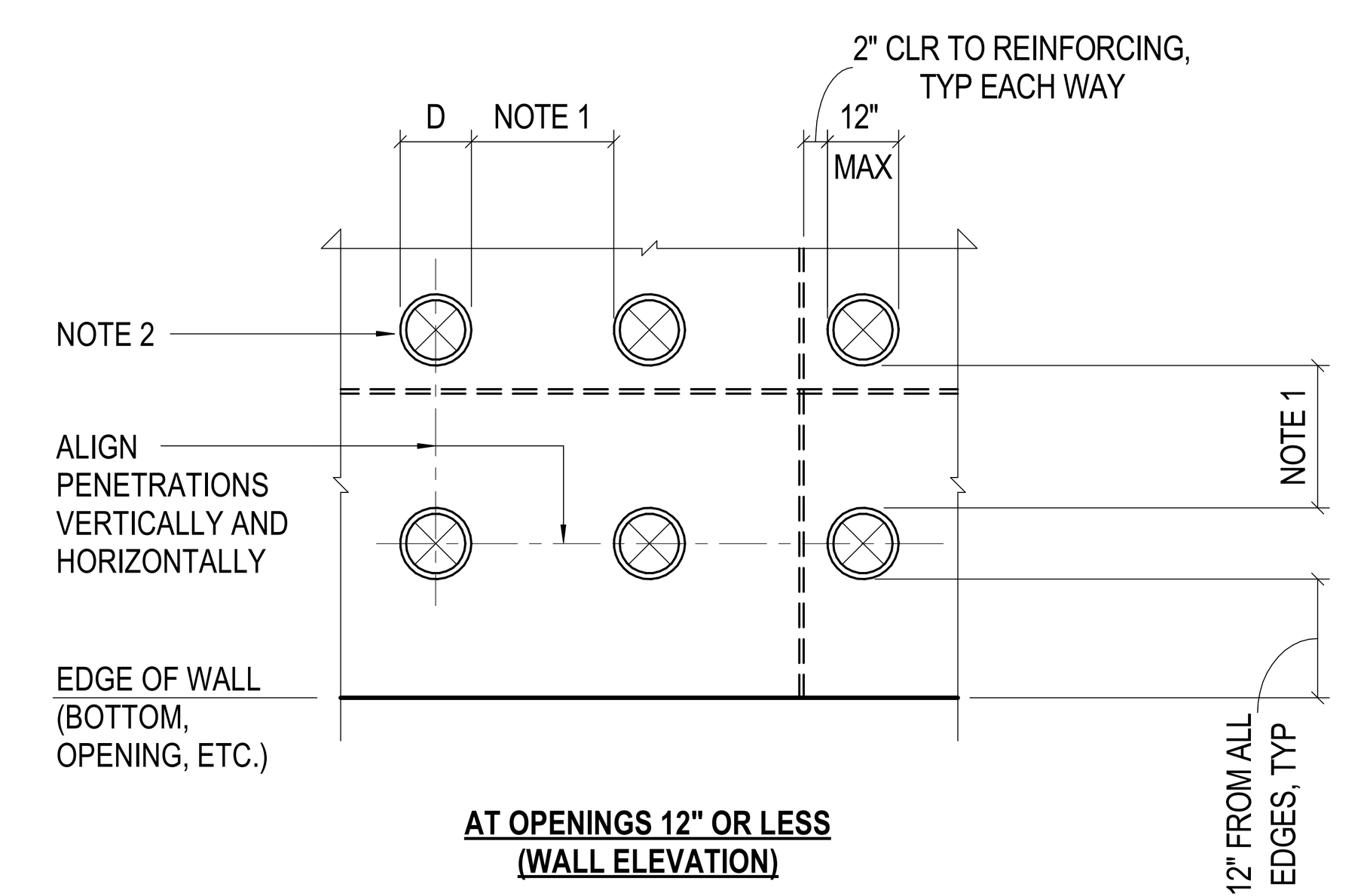


NOTES:
1. PROVIDE TOOLED JOINT OR SAW CUT AS SOON AS THE CONCRETE HAS HARDENED SUFFICIENTLY TO PERMIT CUTTING WITHOUT CHIPPING, SPALLING, OR TEARING (BUT NOT MORE THAN 12 HOURS AFTER CASTING)

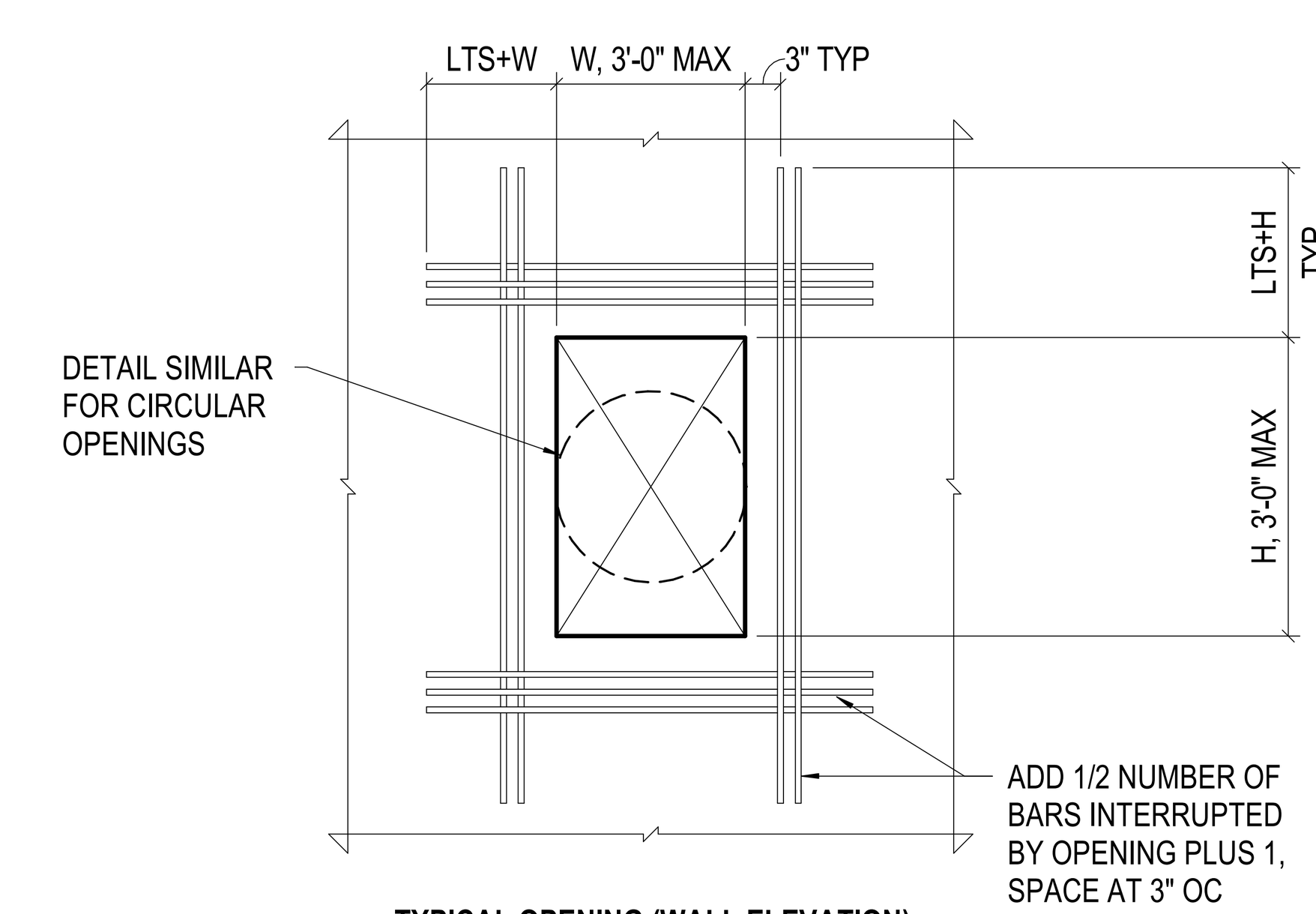
16 NO SCALE SLAB-ON-GRADE JOINTS, NON-INDUSTRIAL



NOTES:
1. WHERE CLEAR DISTANCE BETWEEN PIPING/CONDUIT CAN NOT BE ACHIEVED AS SHOWN, STRUCTURAL ENGINEER OF RECORD SHALL BE NOTIFIED FOR REVIEW
2. IN WALL PIPING/CONDUITS GREATER THAN [0.3T] SHALL BE SUBMITTED FOR REVIEW
3. LOCATE PIPING/CONDUITS WITHIN MIDDLE THIRD (T/3) OF WALL



NOTES:
1. GREATER OF 2xD AND 12", WHERE CLEAR DISTANCE IS NOT ACHIEVABLE, TREAT AREA AS SINGLE OPENING REINFORCED PER "TYPICAL OPENING" DETAIL
2. DO NOT CORE OPENINGS, SLEEVE OPENINGS PRIOR TO PLACING CONCRETE
3. DO NOT CUT REBAR AT PENETRATION LOCATIONS. REBAR MAY BE MOVED 8" MAX TO ACCOMMODATE PENETRATIONS
4. SCHEDULE 40 STEEL SLEEVES SHALL BE USED IN CRITICAL AREAS OF THE WALL AND SLABS AS DETERMINED BY STRUCTURAL ENGINEER OF RECORD



NOTES:
1. DETAIL APPLIES UNLESS REINFORCING IS SPECIFICALLY DETAILED ON THE DRAWINGS
2. HOOK BARS WITH STANDARD HOOK WHERE LTS CANNOT BE ACHIEVED

12 3/4" = 1'-0" CAST IN PLACE WALL PENETRATIONS

REVISIONS

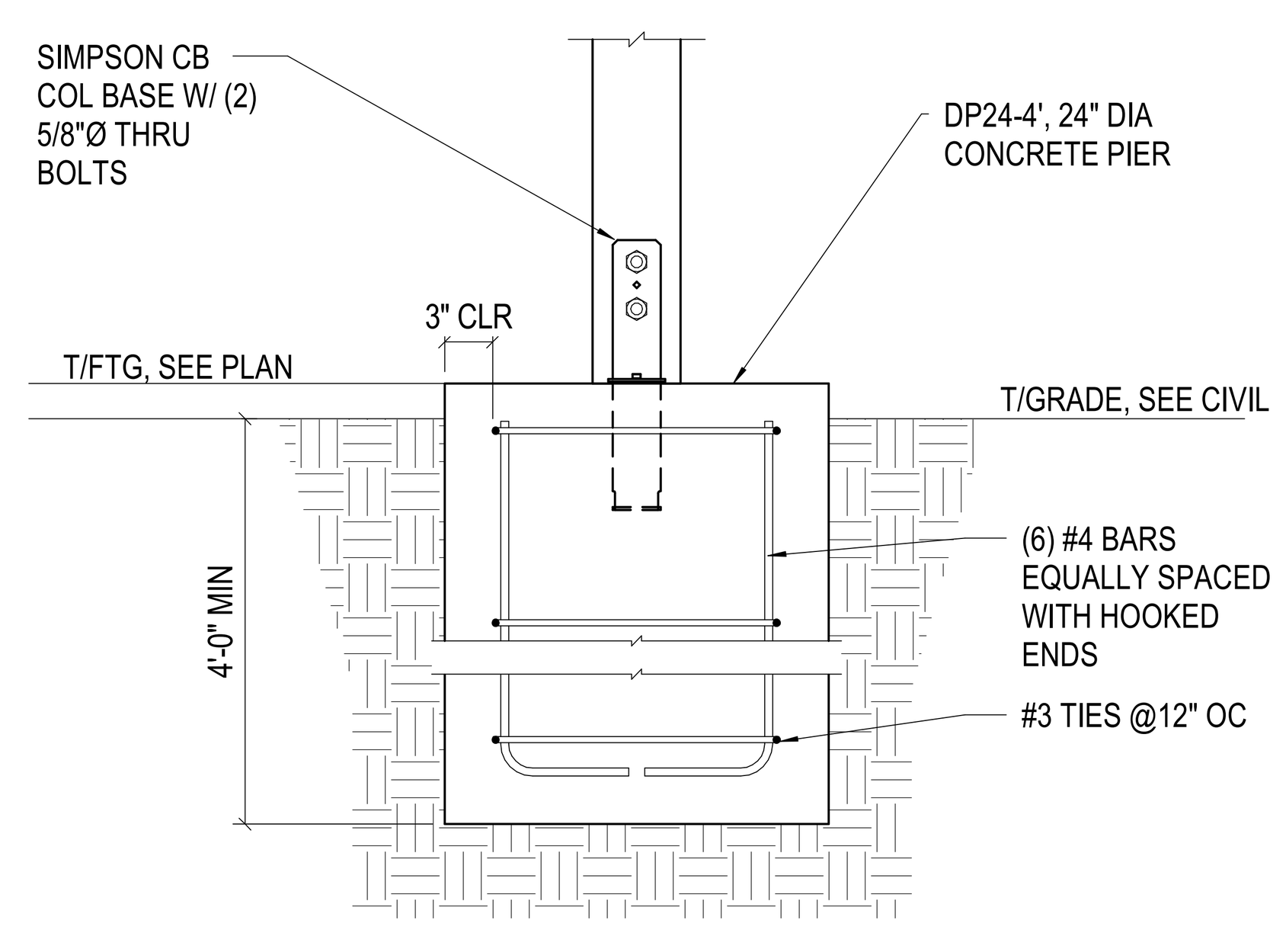
NO.	ISSUE	DATE
1	ADD NO. 1	2/20/2023

100% CONSTRUCTION DOCUMENTS

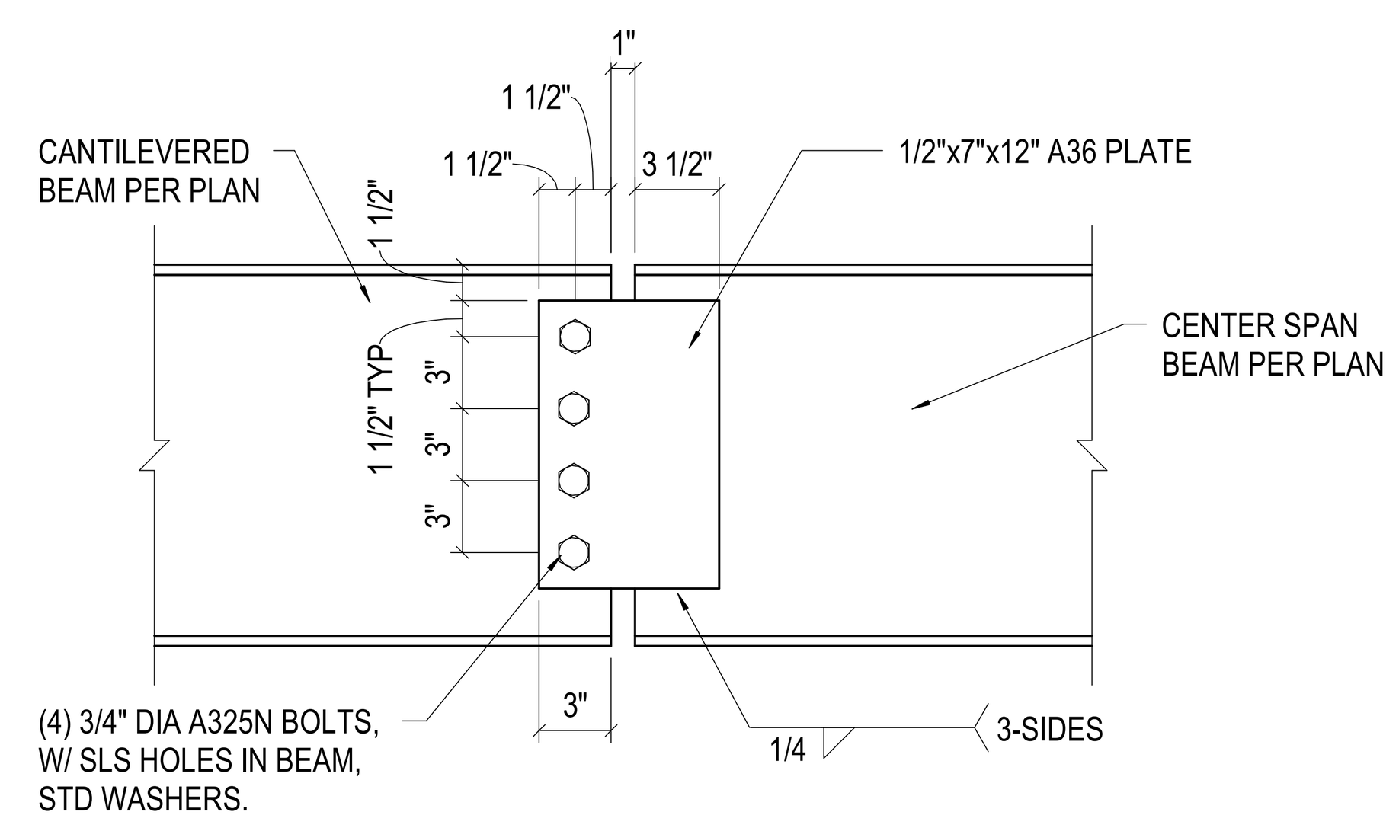
PROJECT NO: 22.0119.S01
DATE: 5/27/2022

SHEET TITLE: DETAILS
SHEET NUMBER: S300

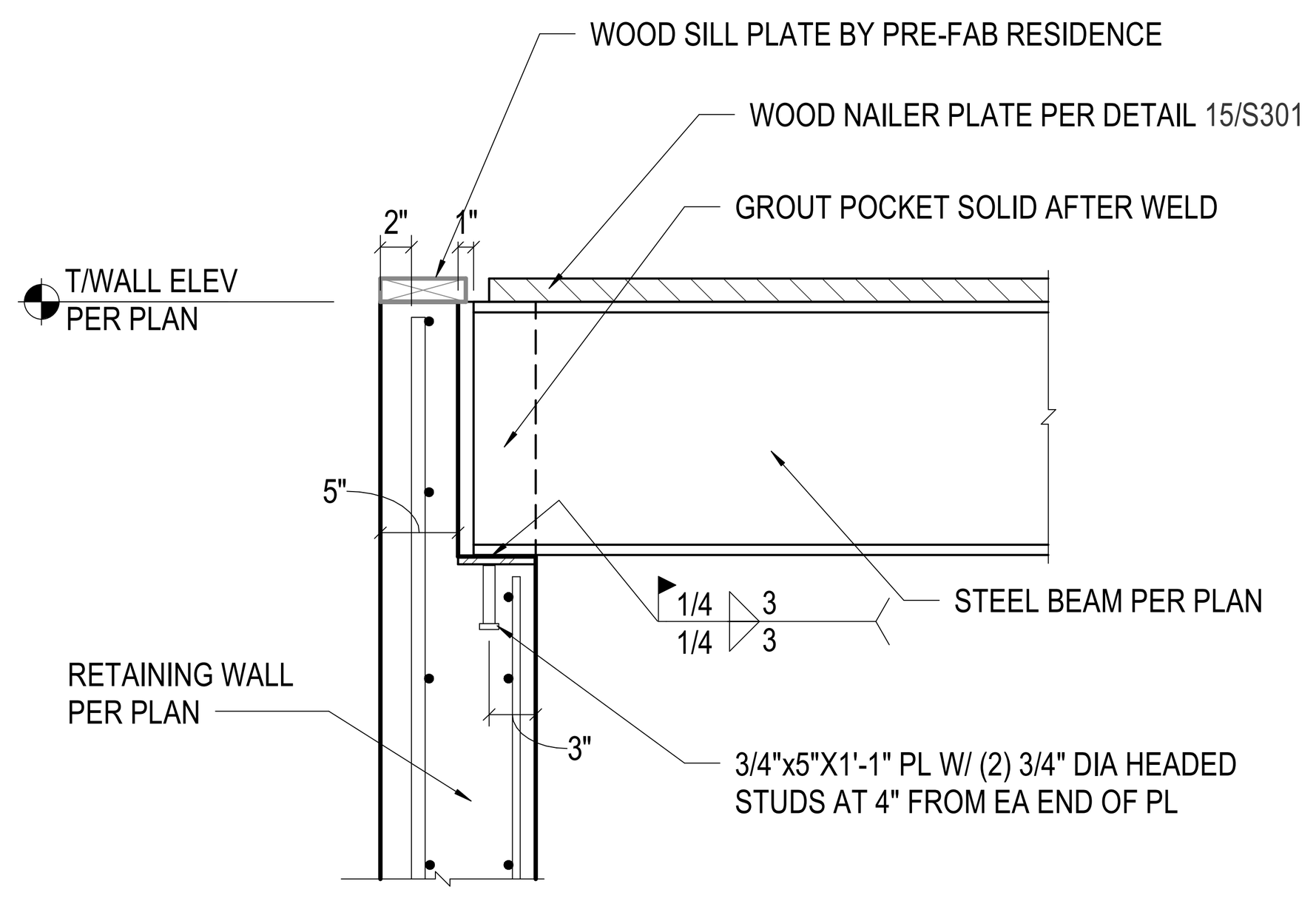
MM JOB # 21.0119.S.01
PRINCIPAL: Nick Erickson
EOR: Enter EOR's Name Here
PROJECT MANAGER: Andrew Lack
DESIGNERS: Enter Designer's Name Here
LEAD REVIT TECH: Enter Lead Revit Tech's Name Here
DATE PRINTED: 3/6/2023 12:29:50 AM
FILE PATH: BIM 360://MartinMartin Structural - Revit 2021 Projects/22.0119.S.01-Heiter Residence Foundation Engineering.rvt



17 NO SCALE TYP WOOD POST BASE AND DP24 FOOTING



13 1 1/2" = 1'-0" BEAM TO BEAM CONNECTION



9 1" = 1'-0" CONCRETE BEAM BEARING POCKET

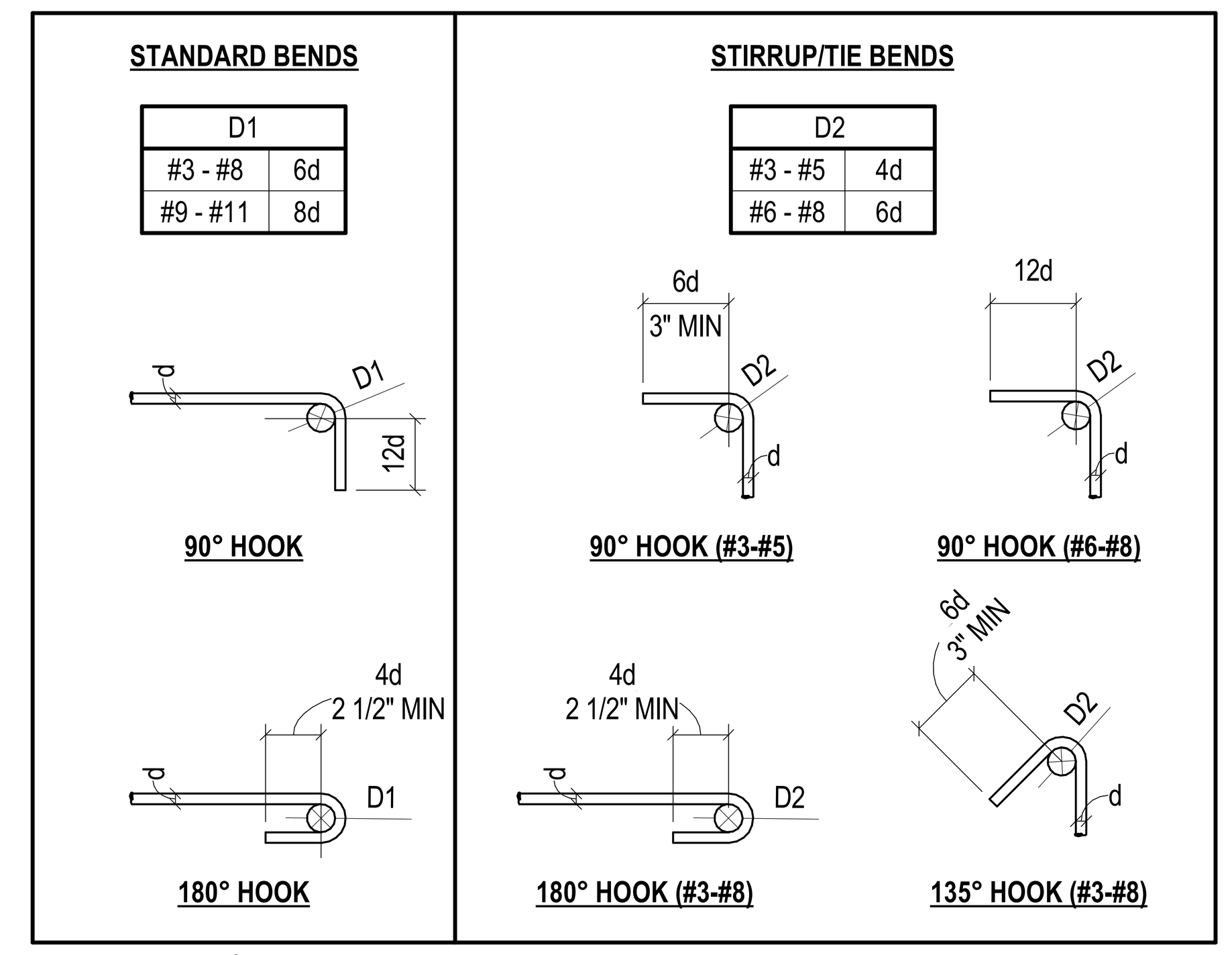
LAP SPLICE & DEVELOPMENT LENGTHS (INCHES) F'c=4,000 PSI, Fy=60,000 PSI												
CLEAR COVER				1"	1.5"	2"+	1"	1.5"	2"+	1"	1.5"	2"+
BAR SIZE	LDH	LCE	LCS	LTE			LTE TOP & LTS			LTS TOP		
#3	6	8	12	12			12			15		
#4	7	10	15	12			15			20		
#5	9	12	19	17	15		23	19		29	25	
#6	10	15	23	24	18		31	23		40	29	
#7	12	17	27	38	29	25	50	37	33	65	48	43
#8	14	19	30	48	36	29	62	47	37	81	61	49
#9	15	22	34	58	44	36	75	57	46	98	74	60
#10	17	24	38	69	53	43	89	69	56	116	89	72
#11	19	27	42	80	62	51	104	80	66	135	104	85

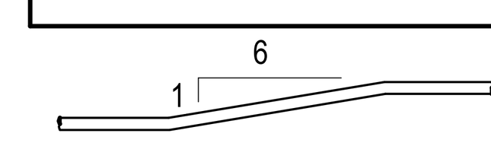
REBAR COVER TABLE	
CASE	COVER (IN)
CONCRETE PLACED AGAINST EARTH	3
CONCRETE PLACED IN FORMS, EXPOSED TO WEATHER OR EARTH	2
SLABS OR WALLS NOT EXPOSED TO EARTH OR WEATHER	1

GENERAL NOTES:
1. LENGTHS SPECIFICALLY DETAILED ON DRAWINGS SHALL GOVERN IN LIEU OF LAP LENGTHS SCHEDULED
2. ABBREVIATIONS:
   A. 'LCE' = COMPRESSION EMBEDMENT LENGTH
   B. 'LCS' = COMPRESSION LAP SPLICE LENGTH
   C. 'LDH' = HOOK DEVELOPMENT LENGTH
   D. 'LTE' = TENSION EMBEDMENT LENGTH
   E. 'LTS' = TENSION LAP SPLICE LENGTH
3. 'TOP' BARS ARE HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12 IN OF FRESH CONCRETE IS CAST BELOW THE BAR
4. CLEAR COVER IS DEFINED FROM THE NEAREST FACE OF CONCRETE TO THE BAR BEING DEVELOPED OR SPLICED
5. UNLESS NOTED OTHERWISE, ALL HOOK BARS SHALL EXTEND TO THE FAR FACE LESS 2" COVER
6. IF A NOTE OR DETAIL CALLS FOR A BAR TO BE EMBEDDED Ld (DEVELOPMENT LENGTH) INTO CONCRETE, THIS SHALL CORRESPOND TO A 'LTE' LENGTH
7. IF A NOTE OR DETAIL REQUIRES A BAR TO HAVE A DEVELOPMENT OR LAP LENGTH BUT INSUFFICIENT DIMENSION IS AVAILABLE FOR THE LENGTH SCHEDULED, EXTEND BAR TO FAR FACE OF CONCRETE LESS 2" COVER AND HOOK

LAP SPLICE NOTES:
1. ALL SPLICES SHALL BE WIRED IN CONTACT
2. ALL SPLICES ARE 'LTS' UNLESS NOTED OTHERWISE
3. SMALLER BAR LAP LENGTH SHALL BE USED WHEN SPLICING DIFFERENT SIZED BARS
   A. COMPRESSION LAP LENGTH SHALL NOT BE LESS THAN 'LCE' OF THE LARGER BAR
   B. TENSION LAP LENGTH SHALL NOT BE LESS THAN 'LTE' OF THE LARGER BAR
4. BUNDLED BAR SPLICES:
   A. INDIVIDUAL BAR SPLICES WITHIN THE BUNDLE SHALL BE STAGGERED
5. TOP AND BOTTOM BEAM SPLICES SHALL BE STACKED VERTICALLY

HOOK EMBEDMENT NOTES:
1. SCHEDULED HOOK EMBEDMENT LENGTHS ASSUME:
   A. SIDE COVER IS 2 1/2 INCHES OR GREATER
   B. COVER BEYOND IS 2 INCHES OR GREATER
2. IF REINFORCING IS SPECIFIED AS EPOXY COATED, INCREASE SCHEDULED LENGTHS BY 20%
3. IF LIGHTWEIGHT AGGREGATE IS SPECIFIED, INCREASE SCHEDULED LENGTHS BY 30%
4. IF SIDE COVER IS LESS THAN 2 1/2 INCHES, INCREASE LENGTHS BY 40%

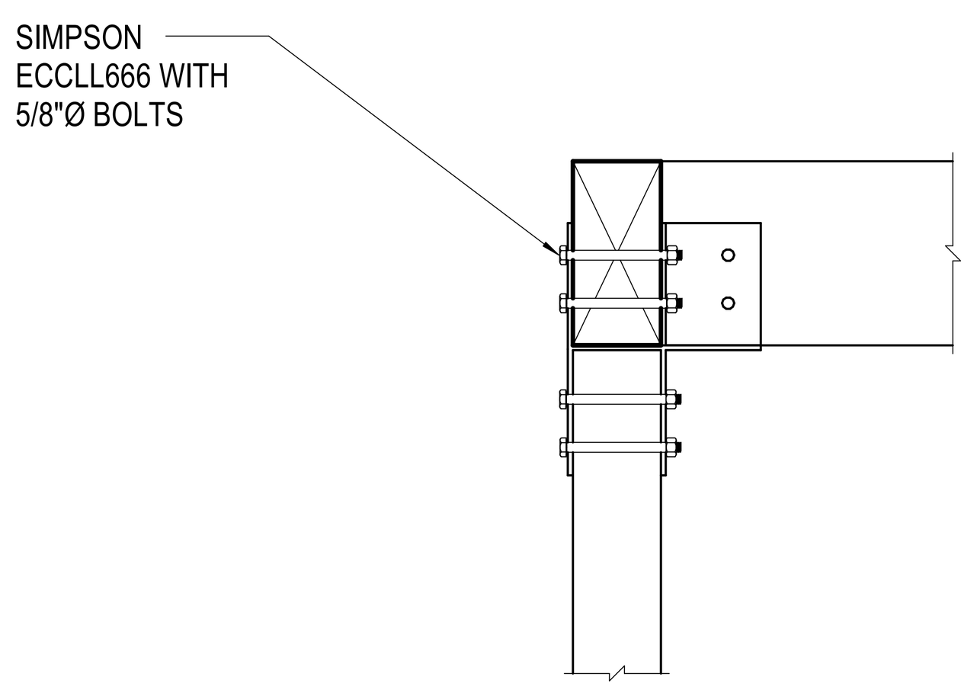




MAX OFFSET BEND

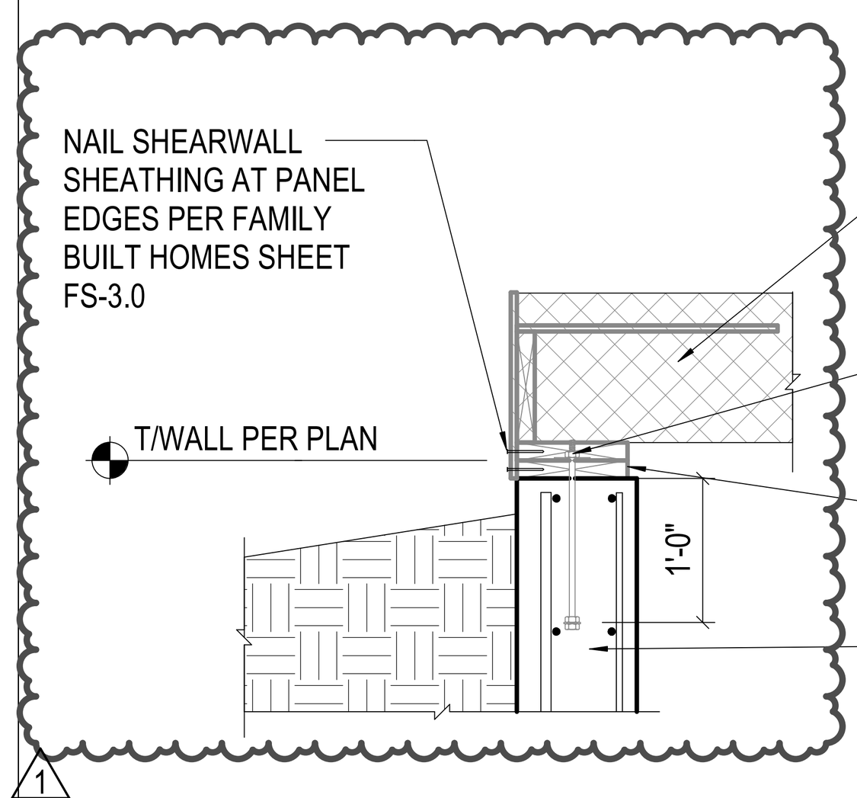
NOTES:
1. ALL BENDS SHALL BE MADE COLD
2. #14 & #18 BARS SHALL BE BEND TESTED & LAB APPROVED PRIOR TO BENDING

TYPICAL REINFORCING BENDS

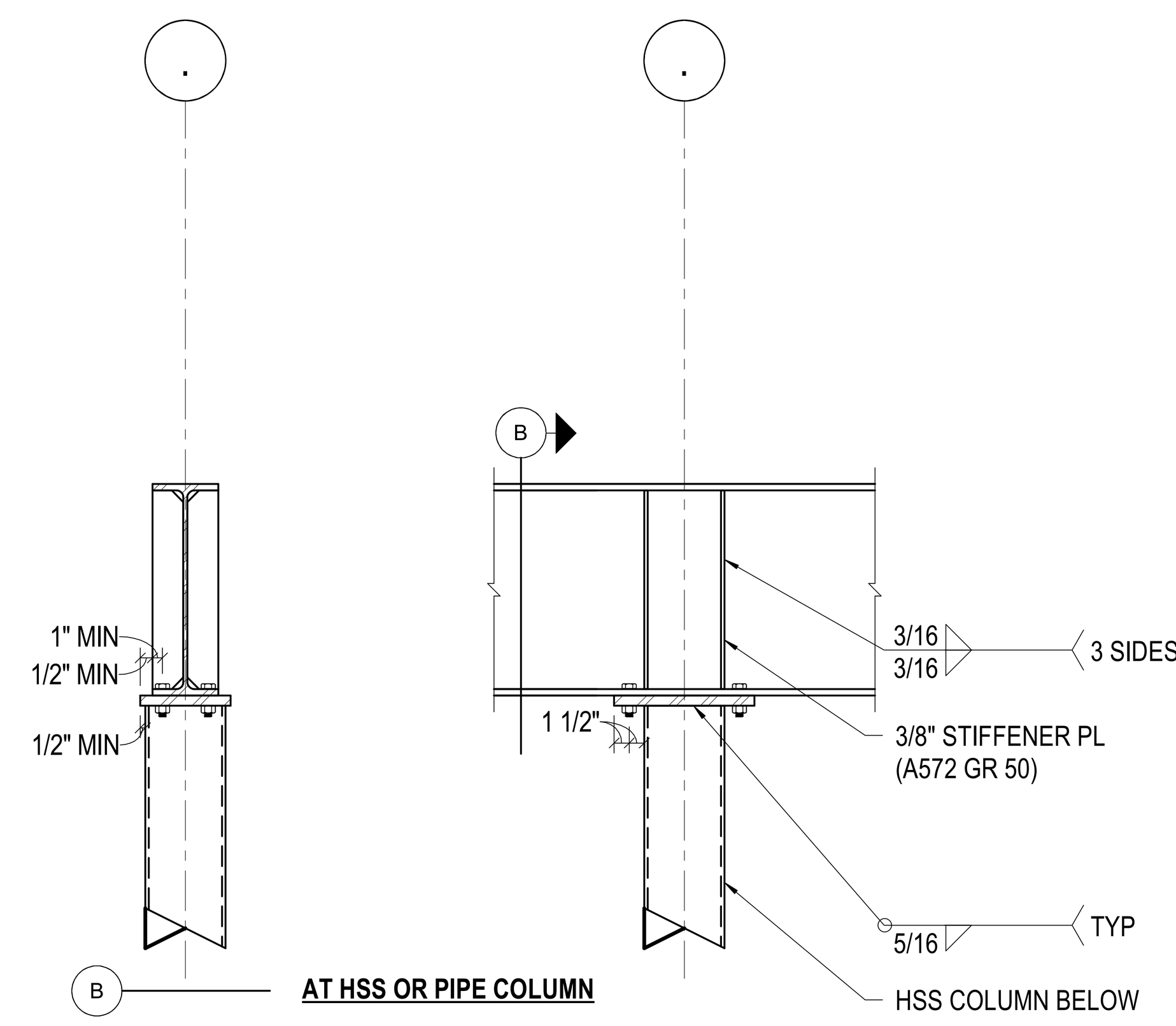


NOTES:
1. ALL SIMPSON HARDWARE AND BOLTS TO BE HDG

18 NO SCALE COLUMN CAP AT CORNER CONNECTION

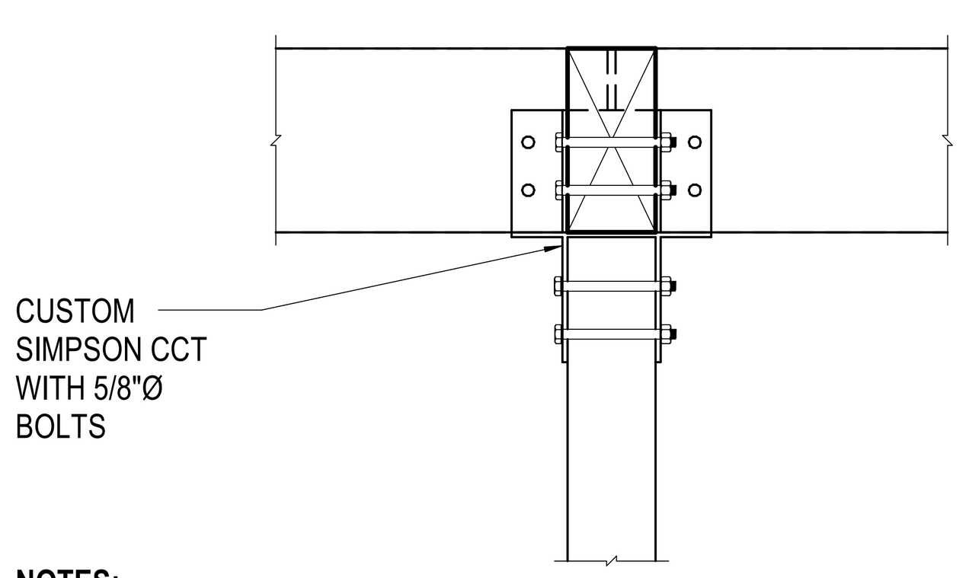


14 NO SCALE SILL PLATE ANCHOR DETAIL



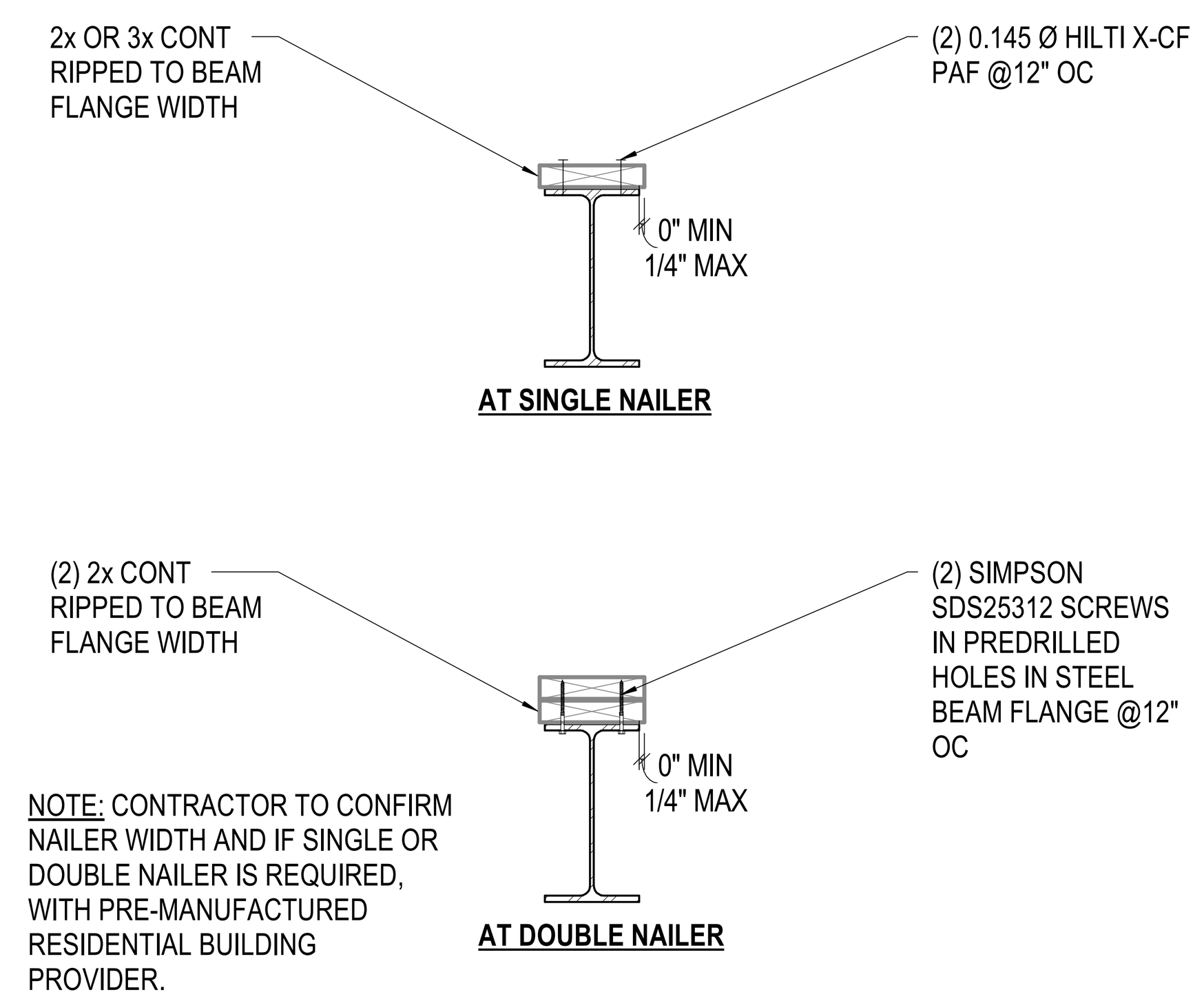
10 3/4" = 1'-0" BEAM TO COLUMN

6 NO SCALE REINFORCING DEVELOPMENT, PLACEMENT, AND BEND INFO



NOTES:
1. ALL SIMPSON HARDWARE AND BOLTS TO BE HDG

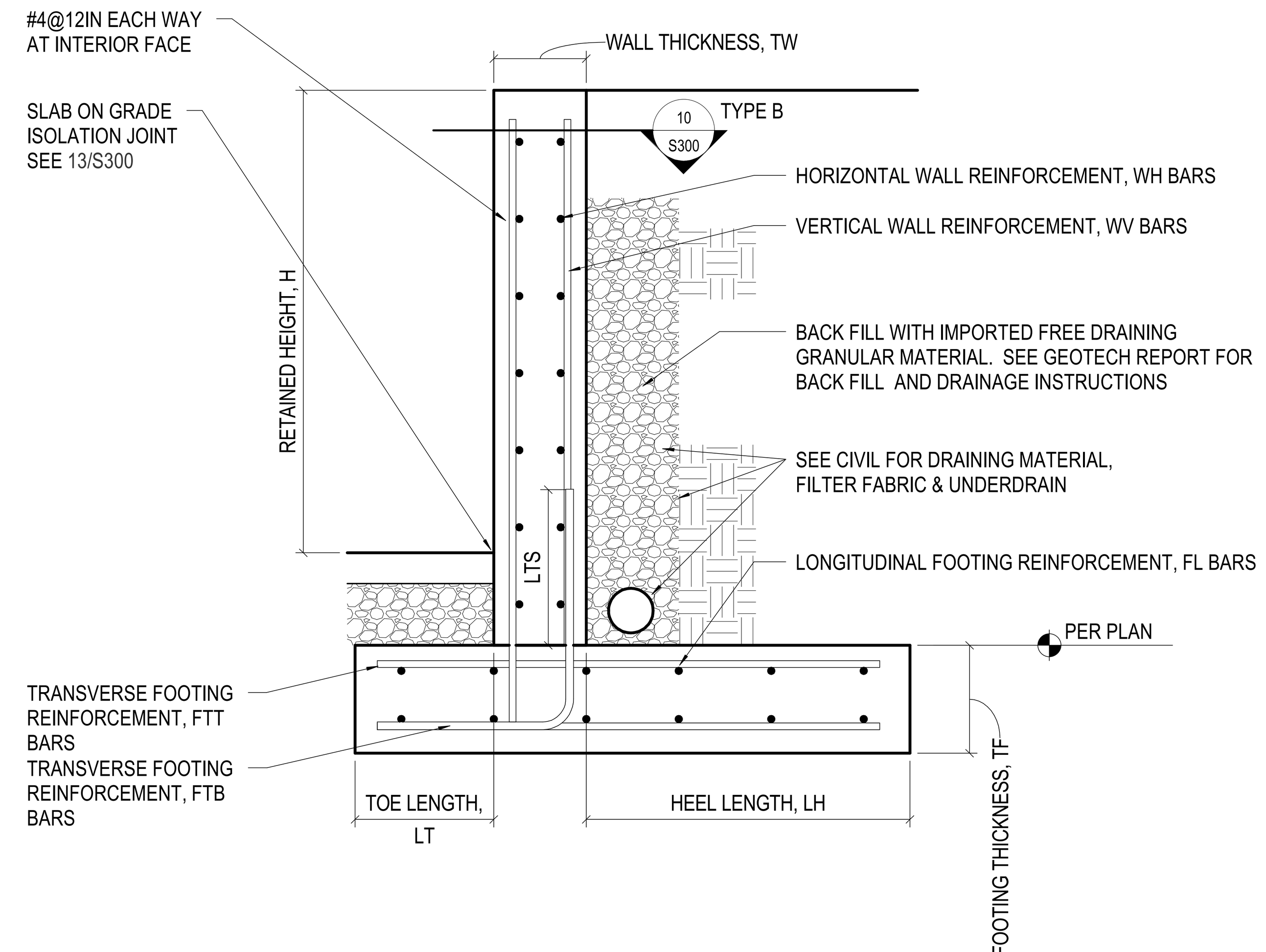
19 NO SCALE COLUMN CAP AT (3) BEAM CONNECTION



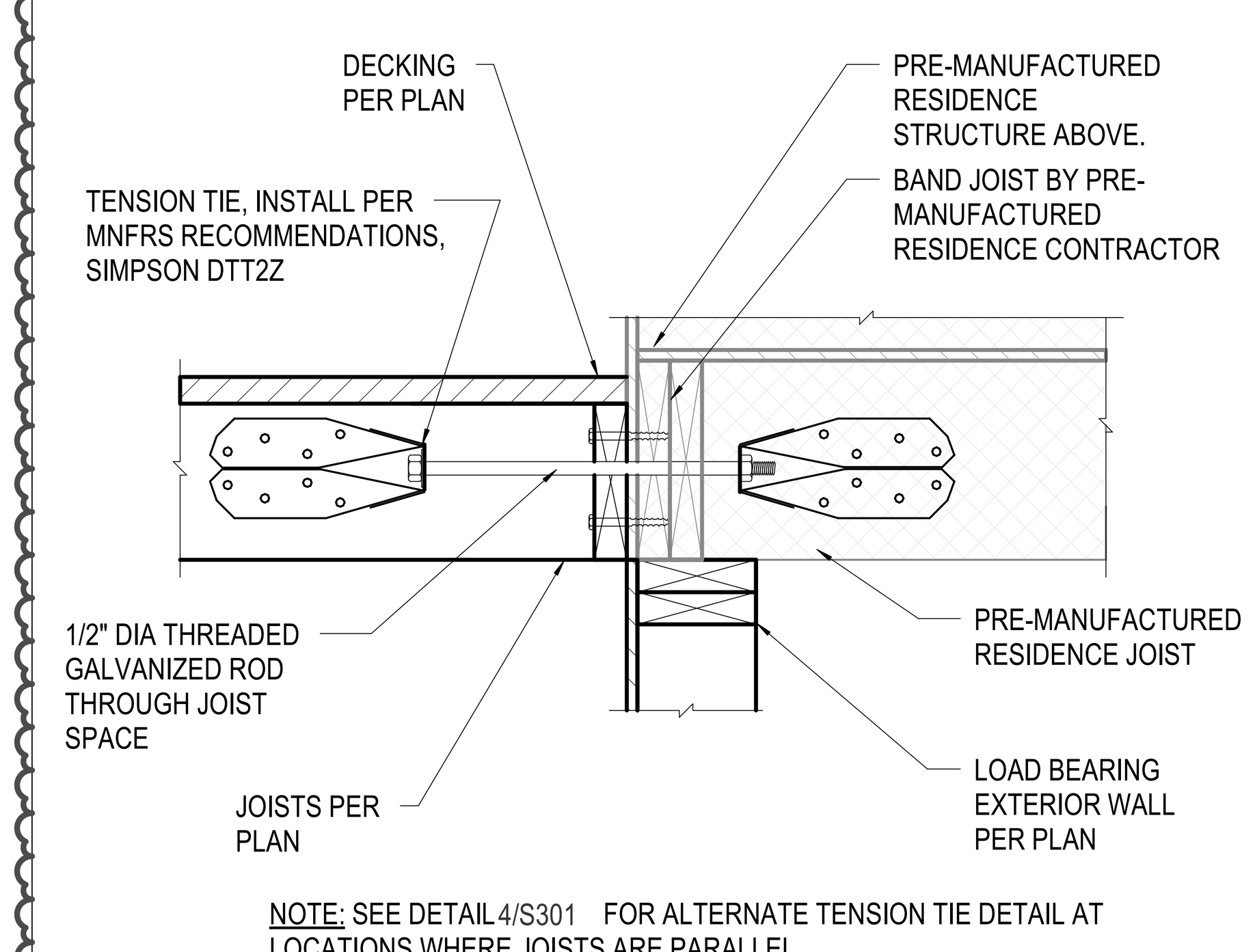
NOTE: CONTRACTOR TO CONFIRM NAILER WIDTH AND IF SINGLE OR DOUBLE NAILER IS REQUIRED, WITH PRE-MANUFACTURED RESIDENTIAL BUILDING PROVIDER.

15 1" = 1'-0" WOOD NAILER TO STEEL BEAM

RETAINING WALL DIMENSIONS & REINFORCEMENT									
H (FT)	LH (IN)	LT (IN)	TW (IN)	TF (IN)	WH	WV	FTT BARS	FTB BARS	FL BARS
9, MAX	48	33	10	12	#4@12IN	#6@6IN	#5@18IN	#5@6IN	8 #4 TOP & BOTTOM

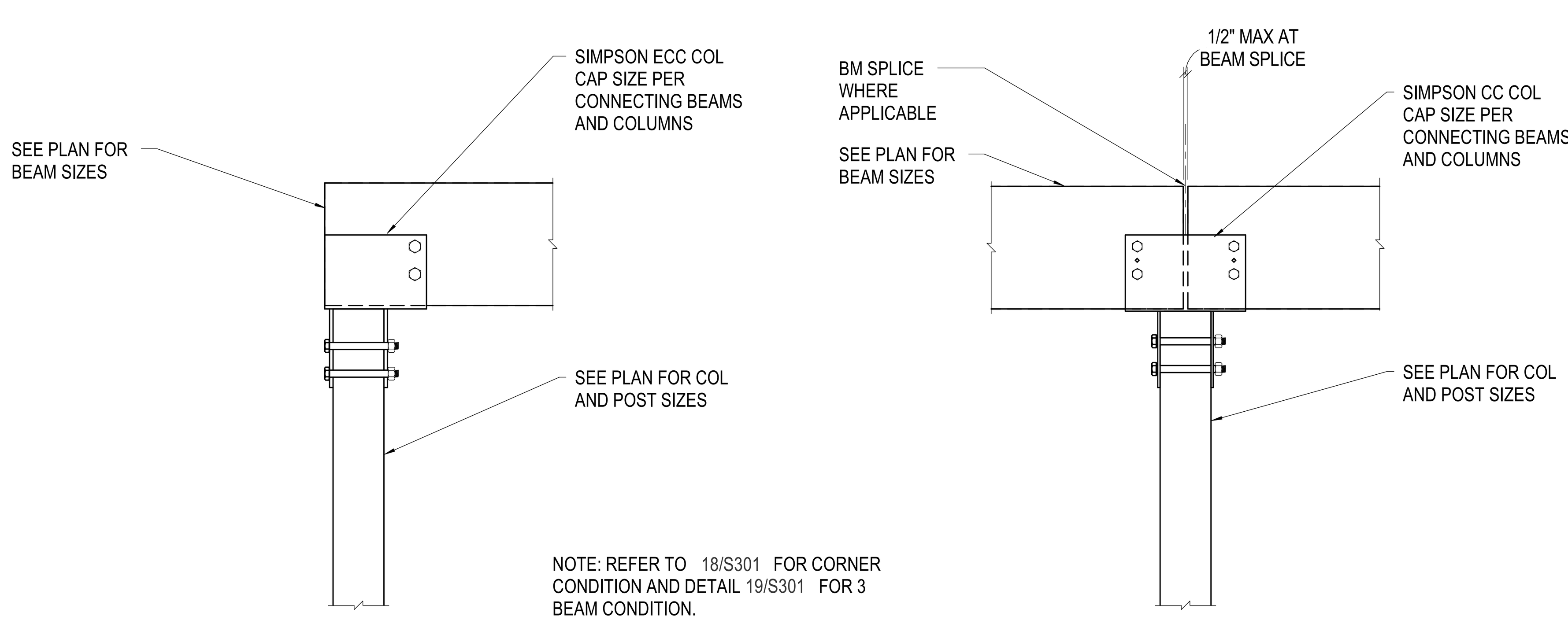


12 NO SCALE RETAINING WALL AT BASEMENT



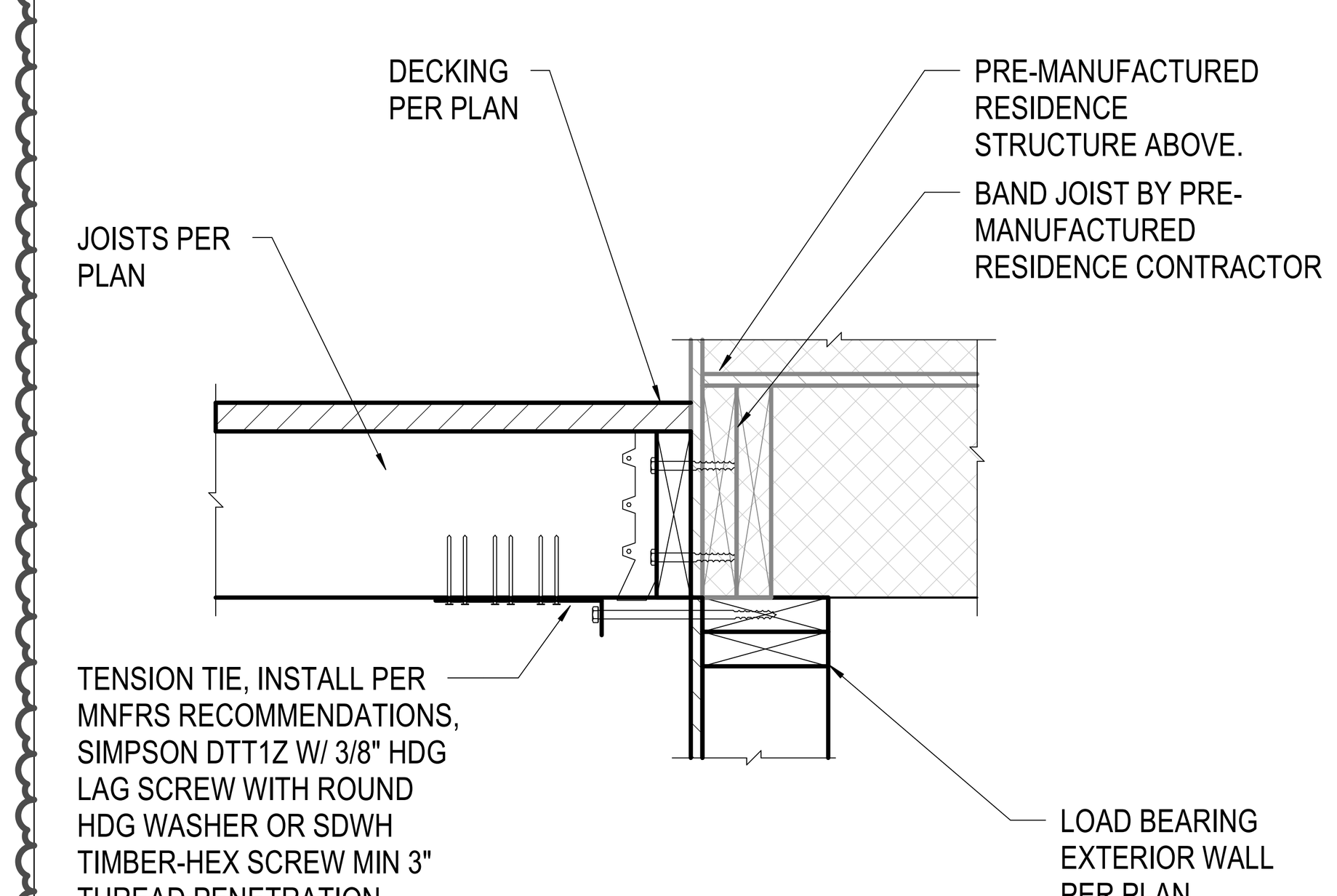
NOTE: SEE DETAIL 4/S301 FOR ALTERNATE TENSION TIE DETAIL AT LOCATIONS WHERE JOISTS ARE PARALLEL

3 NO SCALE DECK LEDGER TENSION TIE DETAIL AT PERPENDICULAR JOISTS



NOTE: REFER TO 18/S301 FOR CORNER CONDITION AND DETAIL 19/S301 FOR 3 BEAM CONDITION.

20 NO SCALE TYP WOOD BEAM AT WOOD POST



4 NO SCALE DECK LEDGER TENSION TIE ALTERNATE DETAIL

MARTIN/MARTIN CONSULTING ENGINEERS
12499 WEST COLFAX AVENUE, LAKEWOOD, COLORADO 80215
MAIN 303.431.6100 MARTINMARTIN.COM

COLORADO LICENSED PROFESSIONAL ENGINEER NICHOLAS J. ERICKSON 41674 03/06/2023

REVIEWED FOR CODE COMPLIANCE 03/07/2023

HEITER RESIDENCE FOUNDATION ENGINEERING

29550 CO RD 14D
STEAMBOAT SPRINGS, CO 80487

REVISIONS		
NO.	ISSUE	DATE
1	ADD NO. 1	2/20/2023

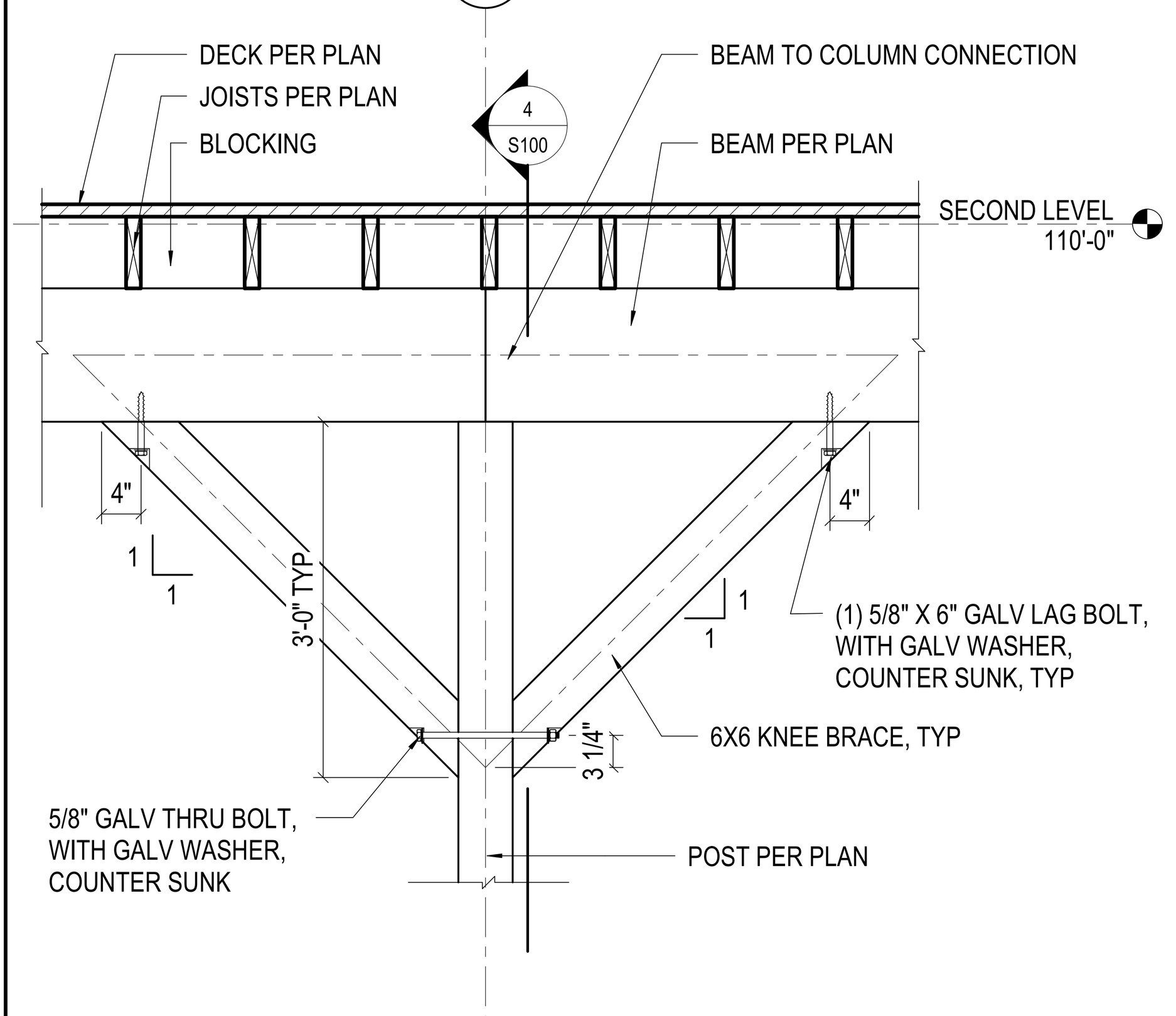
100% CONSTRUCTION DOCUMENTS

PROJECT NO: 22.0119.S01
DATE: 5/27/2022

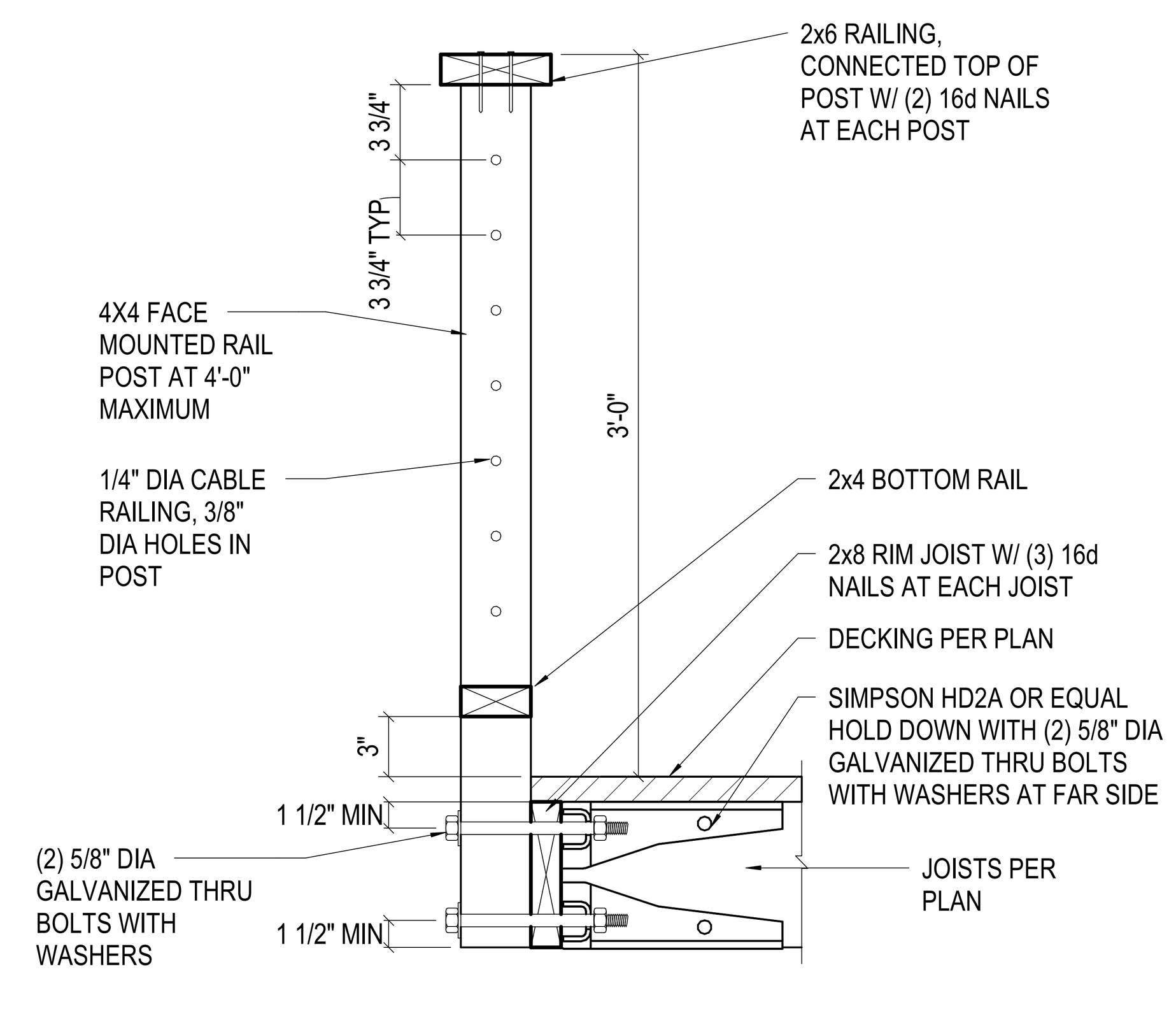
SHEET TITLE: DETAILS

SHEET NUMBER: S301

MM JOB # 21.0119.S.01
PRINCIPAL: Nick Erickson
EOR: Enter EOR's Name Here
PROJECT MANAGER: Andrew Lack
DESIGNERS: Enter Designer's Name Here
LEAD REVIT TECH: Enter Lead Revit Tech's Name Here
FILE PATH: BIM 360://MartinMartin Structural - Revit 2021 Projects/22.0119.S.01-Heiter Residence Foundation Engineering.rvt



17 — 3/4" = 1'-0" — KNEE BRACE DETAIL AT DECK



13 — 1 1/2" = 1'-0" — BALCONY RAILING POST DETAIL

WOOD HANGER SCHEDULE

JOIST / BEAM	FACE MOUNT HANGER		
	TYPE	DOWN CAPACITY (LBS)	UPLIFT CAPACITY (LBS)
2x8	LUS26	865	1165

NOTES:

1. ALL HANGERS SHALL BE MANUFACTURED BY SIMPSOM STRONG TIE, INC.

9 — 1" = 1'-0" — TYPICAL WOOD HANGER SCHEDULE

WOOD HEADER SCHEDULE - 2x6 WALLS

HEADER MARK	HEADER SIZE	#TRIMMERS	#KINGS
		LEVEL 1	EXTERIOR
H(2)8	(2) 2x8	(2) 2x6	(2) 2x6
H(3)12	(3) 2x12	(3) 2x6	(2) 2x6
H(3)9.25L	(3) 1 3/4" x 9 1/4"	(4) 2x6	(3) 2x6

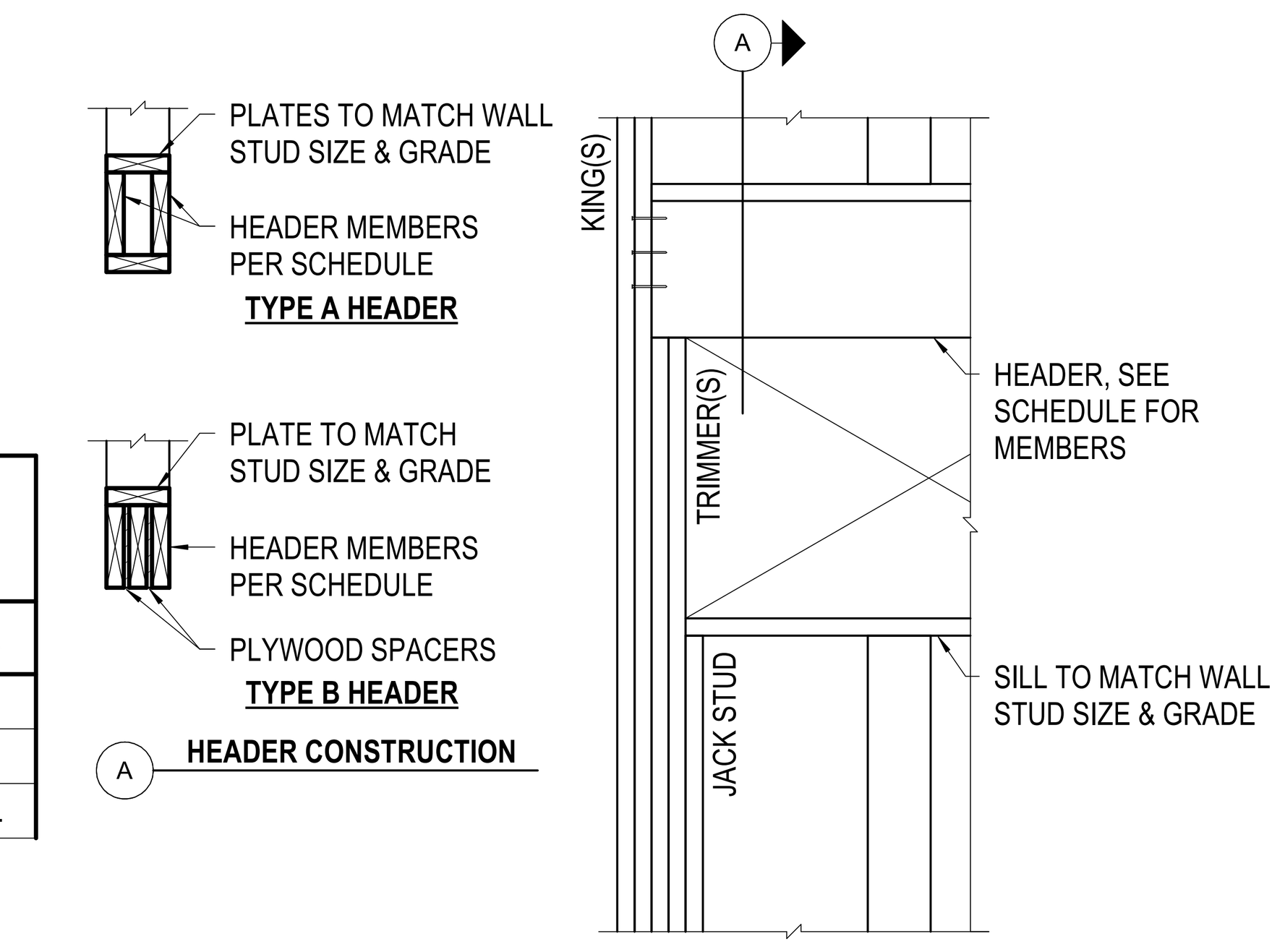
NOTES:

1. HEADERS WITH 2 MEMBERS SHALL BE BUILT PER TYPE A REQUIREMENTS.
2. HEADERS WITH 3 MEMBERS SHALL BE BUILT PER TYPE B REQUIREMENTS.
3. HEADERS IN EXTERIOR WALL SHALL HAVE TYPE 1 NAILING BETWEEN MEMBERS PER 10/S302 A UNO
4. PROVIDE TRIMMER AND KING STUDS AS SHOWN IN SCHEDULE UNLESS NOTED OTHERWISE ON PLAN.

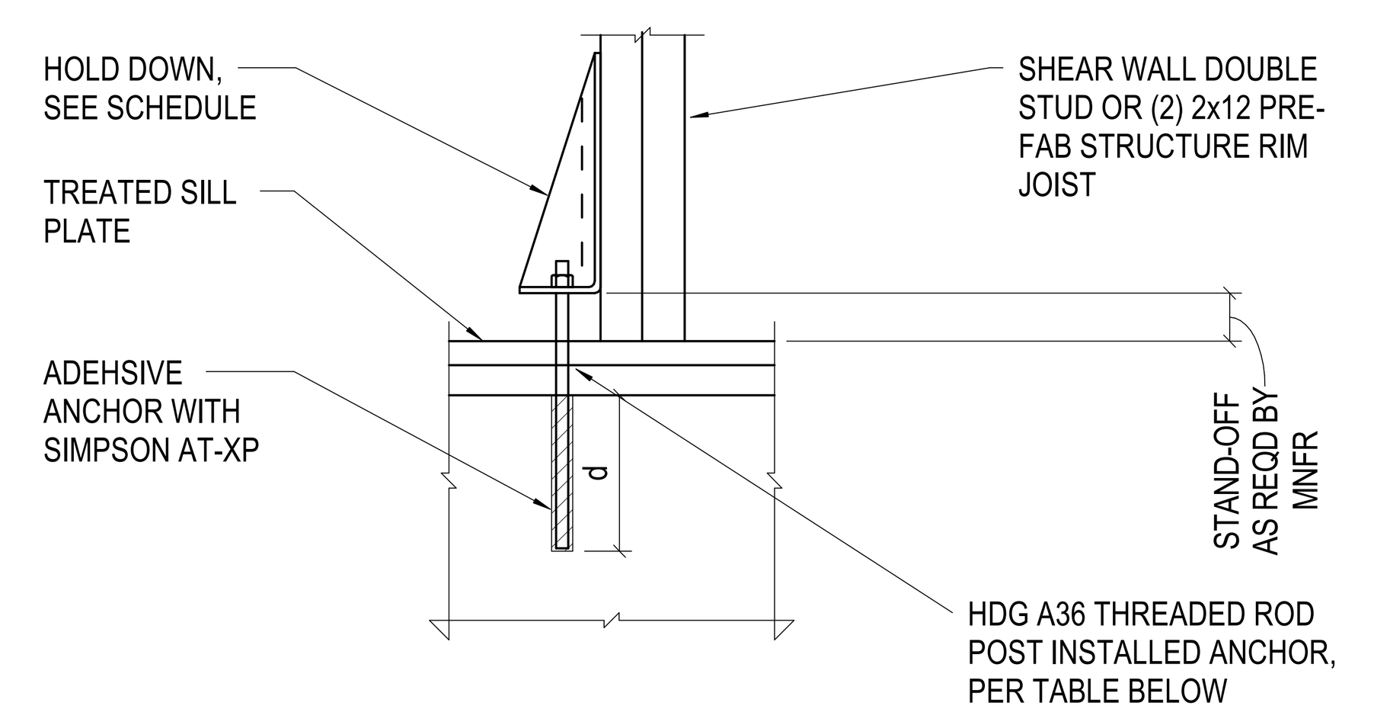
HEADER TO JAMB CONNECTION — # TRIMMER STUDS — # KING STUDS — HEADER MARK — EXTERIOR (WHERE NOTED)
H2LA-22(E)
LVL (WHERE NOTED)

EXTERIOR HEADER SPAN TABLE

CLEAR SPAN, L	HEADER
L ≤ 3'-0"	H(2)8
3'-0" < L ≤ 5'-0"	H(3)12
5'-0" < L ≤ 7'-0"	H(3)9.25L



5 — 3/4" = 1'-0" — WALL HEADER CONSTRUCTION

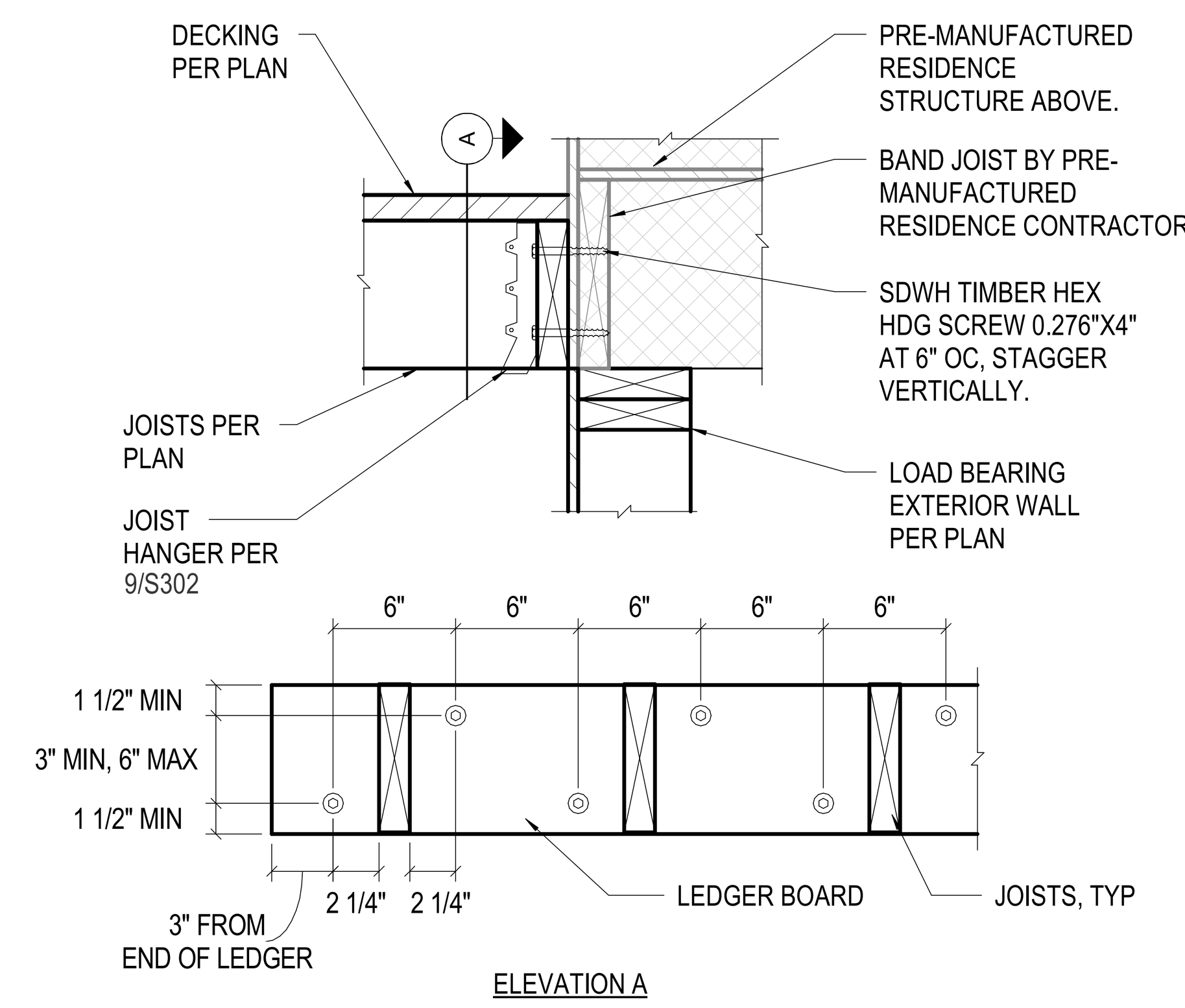


TYPE	HOLD DOWN	ANCHOR DIA	EMBED DEPTH, d
H1	HDU2-SDS2.5	5/8"	13"
H2	DTT2Z-SDS2.5	1/2"	6"

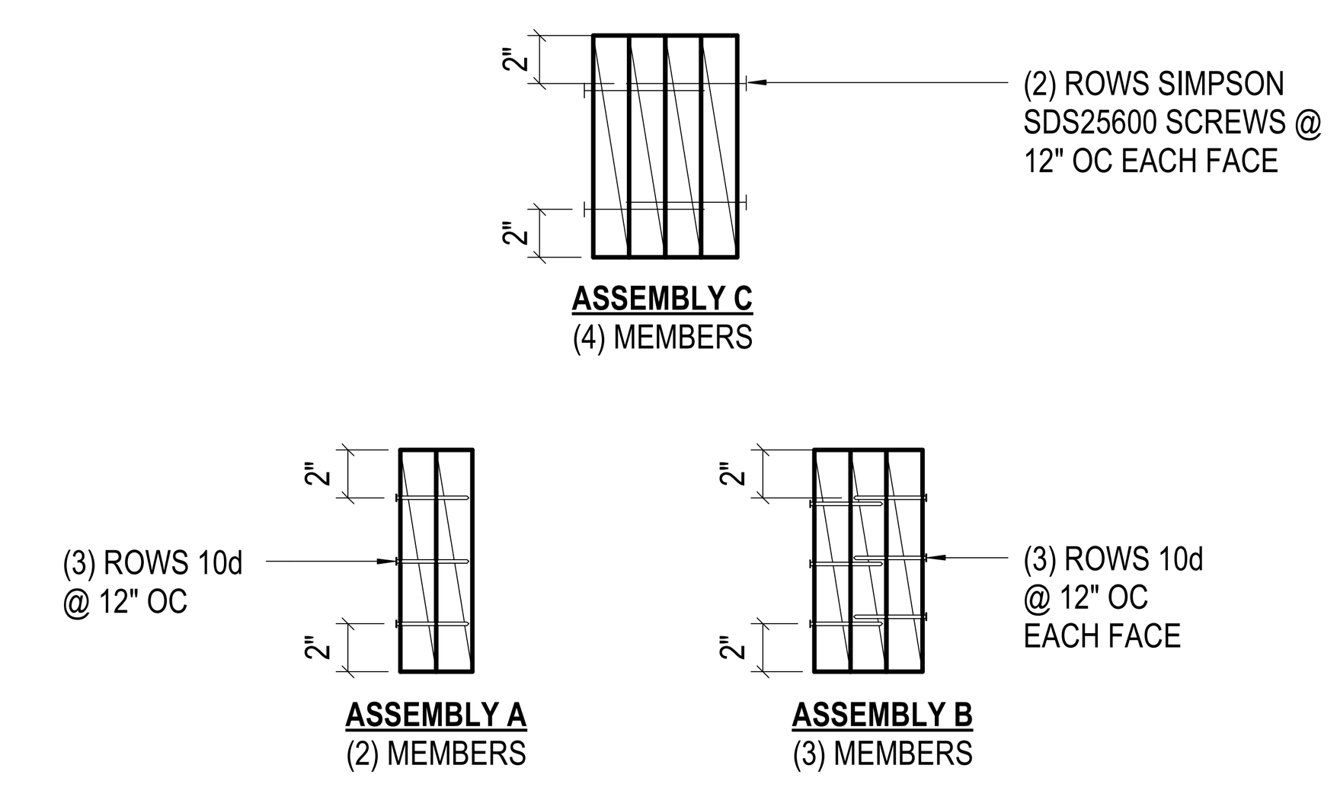
NOTES:

1. VERIFY SETBACK DIMENSIONS SHOWN ABOVE WITH HOLD DOWN MANUFACTURER.
2. NOTIFY ENGINEER OF ALL DISCREPANCIES PRIOR TO INSTALLING ANCHORS.
3. ANCHORS SHALL BE LOCATED AT CENTER OF SILL PLATE, UNO.
4. POST CONNECTORS ARE SIMPSON SDS SCREWS, OR EQUIVALENT, UNO.
5. MINIMUM OF 4" EDGE DISTANCE FOR ANCHORS

18 — NO SCALE — POST INSTALLED ANCHOR WOOD HOLD DOWN AT CONCRETE



14 — 1 1/2" = 1'-0" — DECK LEDGER BOARD DETAIL



NOTES:

1. 10" NOMINAL & SMALLER USE (2) ROWS OF SCREWS

10 — 1 1/2" = 1'-0" — SMALL PROJECT WOOD BEAM NAIL LAYOUT

POST AND COLUMN SCHEDULE

MARK	SIZE	TYPE	REMARKS
WC1	6x6	HEM-FIR #1	-

6 — 3/4" = 1'-0" — TYP WOOD COLUMN SCHEDULE

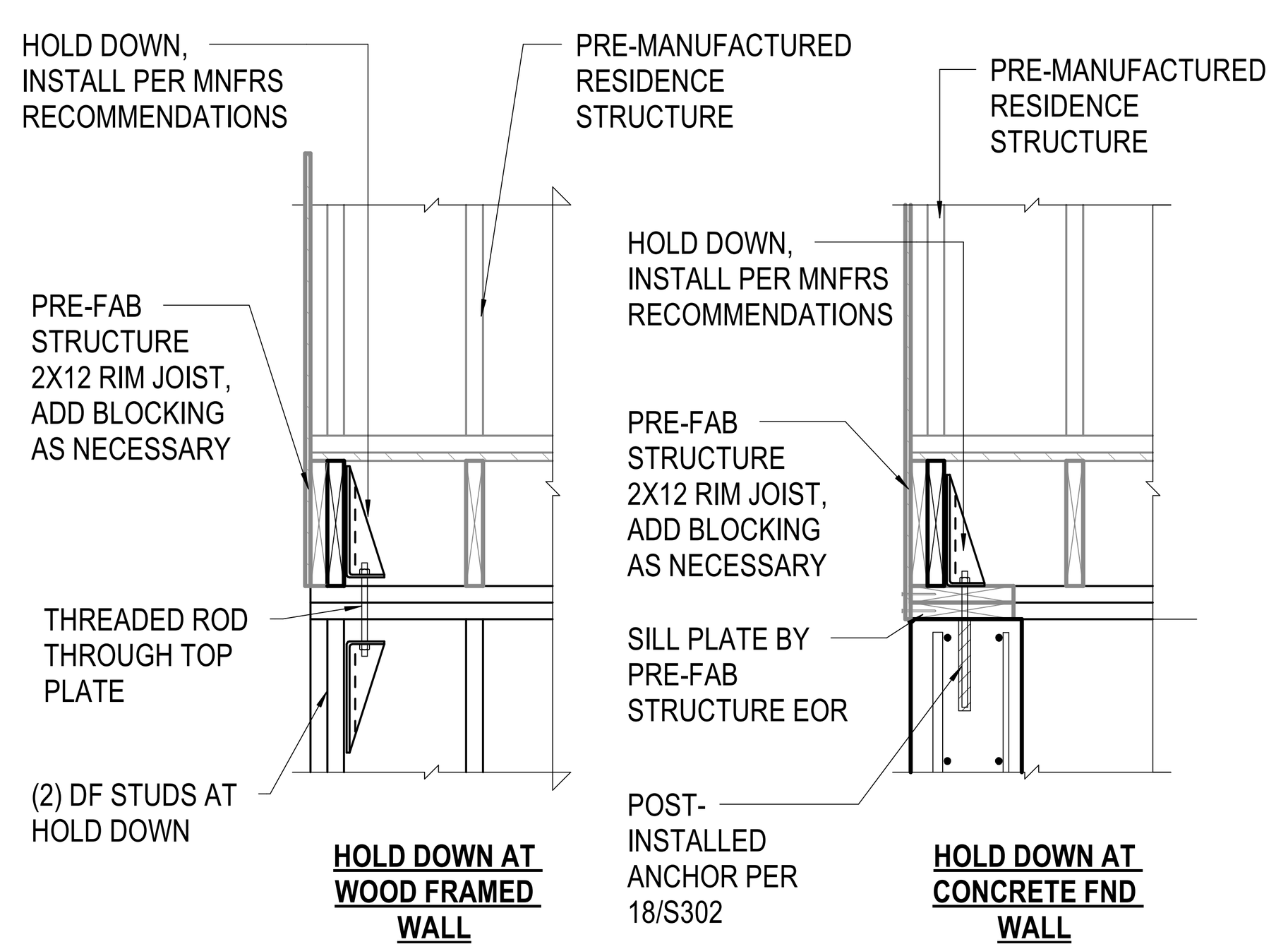
TYPICAL WOOD BEAM SCHEDULE

MARK	SIZE	TYPE	REMARKS
WB1	5 1/2"x13 1/2"	HEM-FIR #1	-
WB2	(3) 2"x8"	HEM-FIR #1	-

NOTES:

1. ALL BEAMS ARE SIMPLE SPAN, UNO

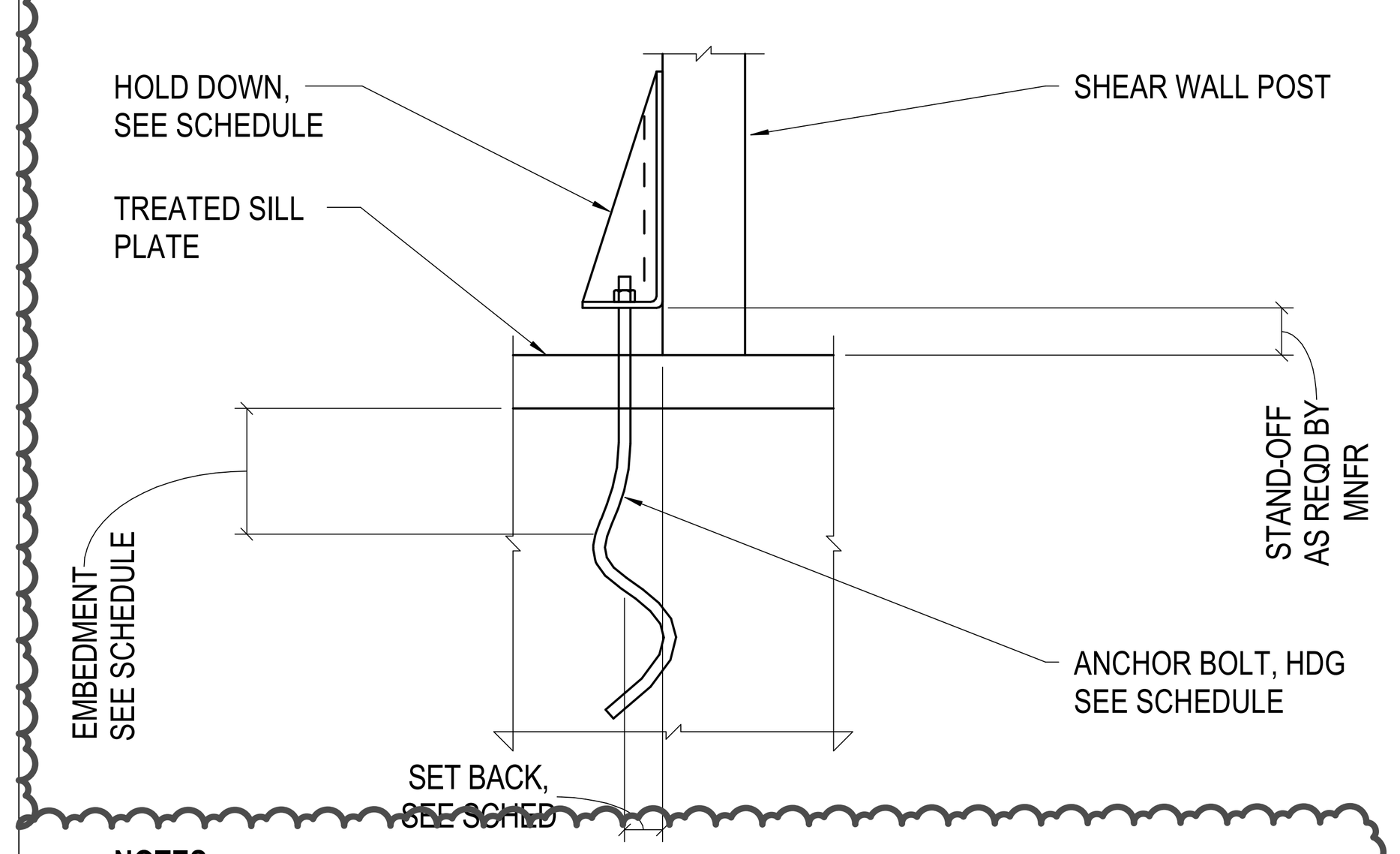
2 — 1" = 1'-0" — TYP WOOD BEAM SCHEDULE



NOTES:

1. COORDINATE HOLD DOWN LOCATIONS WITH PRE-MANUFACTURED RESIDENCE DRAWINGS AND STRAP LOCATIONS ON BUILT PRE-MANUFACTURED STRUCTURE

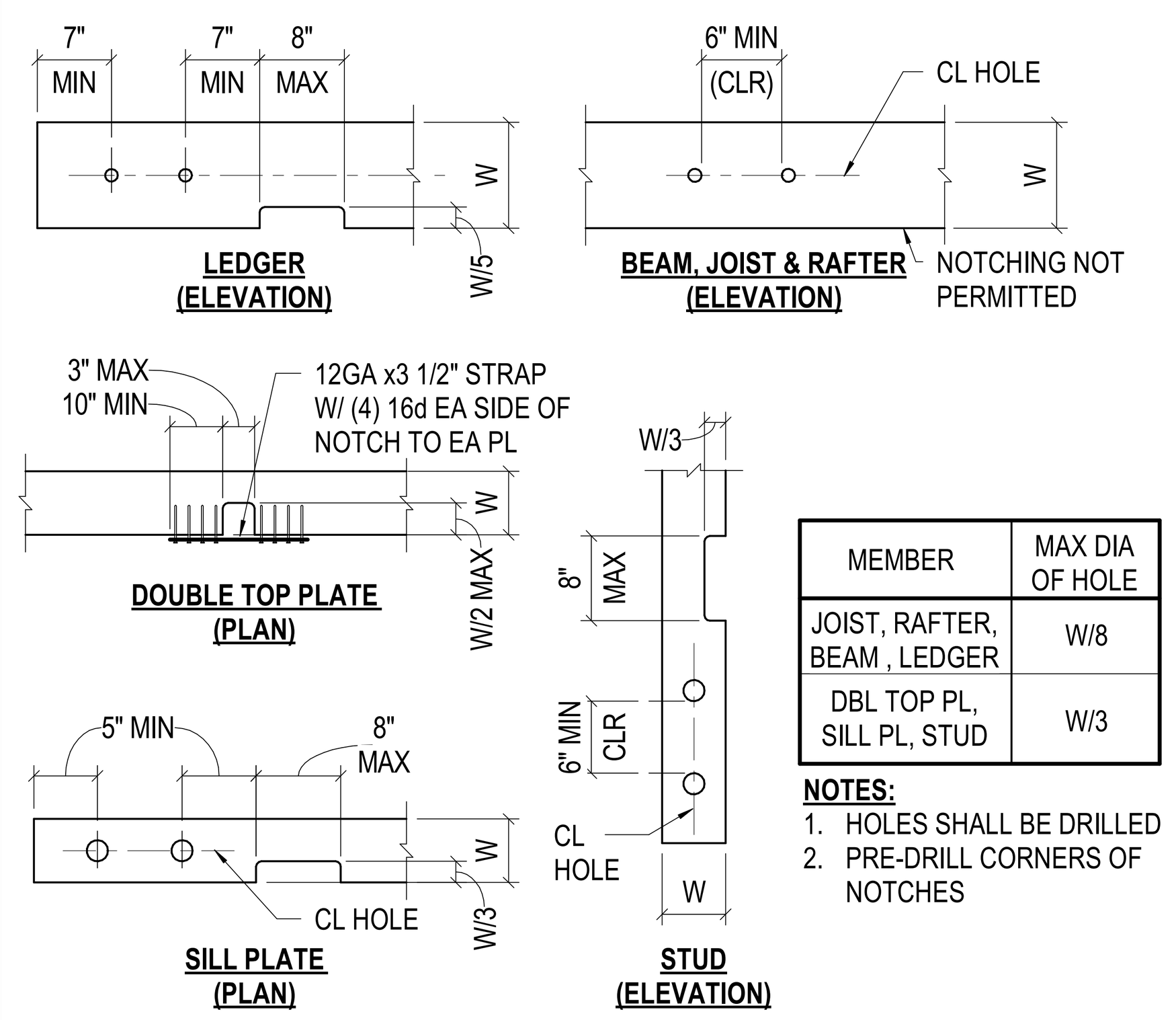
19 — NO SCALE — H2 WOOD HOLD DOWN DETAILS



NOTES:

1. VERIFY SETBACK DIMENSIONS SHOWN ABOVE WITH HOLD DOWN MANUFACTURER.
2. NOTIFY ENGINEER OF ALL DISCREPANCIES PRIOR TO INSTALLING ANCHORS.
3. ANCHORS SHALL BE LOCATED AT CENTER OF SILL PLATE, UNO.
4. POST CONNECTORS ARE SIMPSON SDS SCREWS, OR EQUIVALENT, UNO.
5. FOR POST INSTALLED ANCHORS REFER TO 18/S302

15 — NO SCALE — TYPICAL WOOD HOLD DOWN AT CONCRETE



MEMBER	MAX DIA OF HOLE
JOIST, RAFTER, BEAM , LEDGER	W/8
DBL TOP PL, SILL PL, STUD	W/3

NOTES:

1. HOLES SHALL BE DRILLED
2. PRE-DRILL CORNERS OF NOTCHES

11 — NO SCALE — TYPICAL WOOD HOLE & NOTCH REQUIREMENTS

WOOD MEMBER FASTENING SCHEDULE

#	DESCRIBTION OF BUILDING ELEMENTS	SPACING AND LOCATION	NUMBER AND TYPE OF FASTENER							
			8dC	10dC	16dC	20dC	10dB	16dB	3"x0.131"	3"S
8	STUD TO STUD (NOT AT BRACED WALL PANELS) 16" OC	FACE NAIL					1		3	3
8	STUD TO STUD (NOT AT BRACED WALL PANELS) 24" OC	FACE NAIL			1					
9	STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS) 12" OC	FACE NAIL						1	1	3
9	STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS) 16" OC	FACE NAIL			1					
10	BUILT-UP HEADER (2" TO 2" HEADER) 12"OC	FACE NAIL						1		
10	BUILT-UP HEADER (2" TO 2" HEADER) 16"OC	FACE NAIL			1					
11	CONTINUOUS HEADER TO STUD	TOENAIL	4				4			
12	TOP PLATE TO TOP PLATE 12" OC	FACE NAIL					1		1	1
12	TOP PLATE TO TOP PLATE 16"OC	FACE NAIL			1					
13	TOP PLATE TO TOP PLATE, AT END JOINTS (EACH SIDE OF END JOINT)	FACE NAIL (MINIMUM 24: LAP SPICE LENGTH EACH SIDE OF END JOINT)			8		12		12	12
16	STUD TO TOP OR BOTTOM PLATE	TOENAIL	4				4		4	4
16	STUD TO TOP OR BOTTOM PLATE	END NAIL			2		3		3	3
17	TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	FACE NAIL			2		3		3	3
21	RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	TOENAIL	3				3		3	3
22	RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	6" OC TOENAIL	1				1		1	1

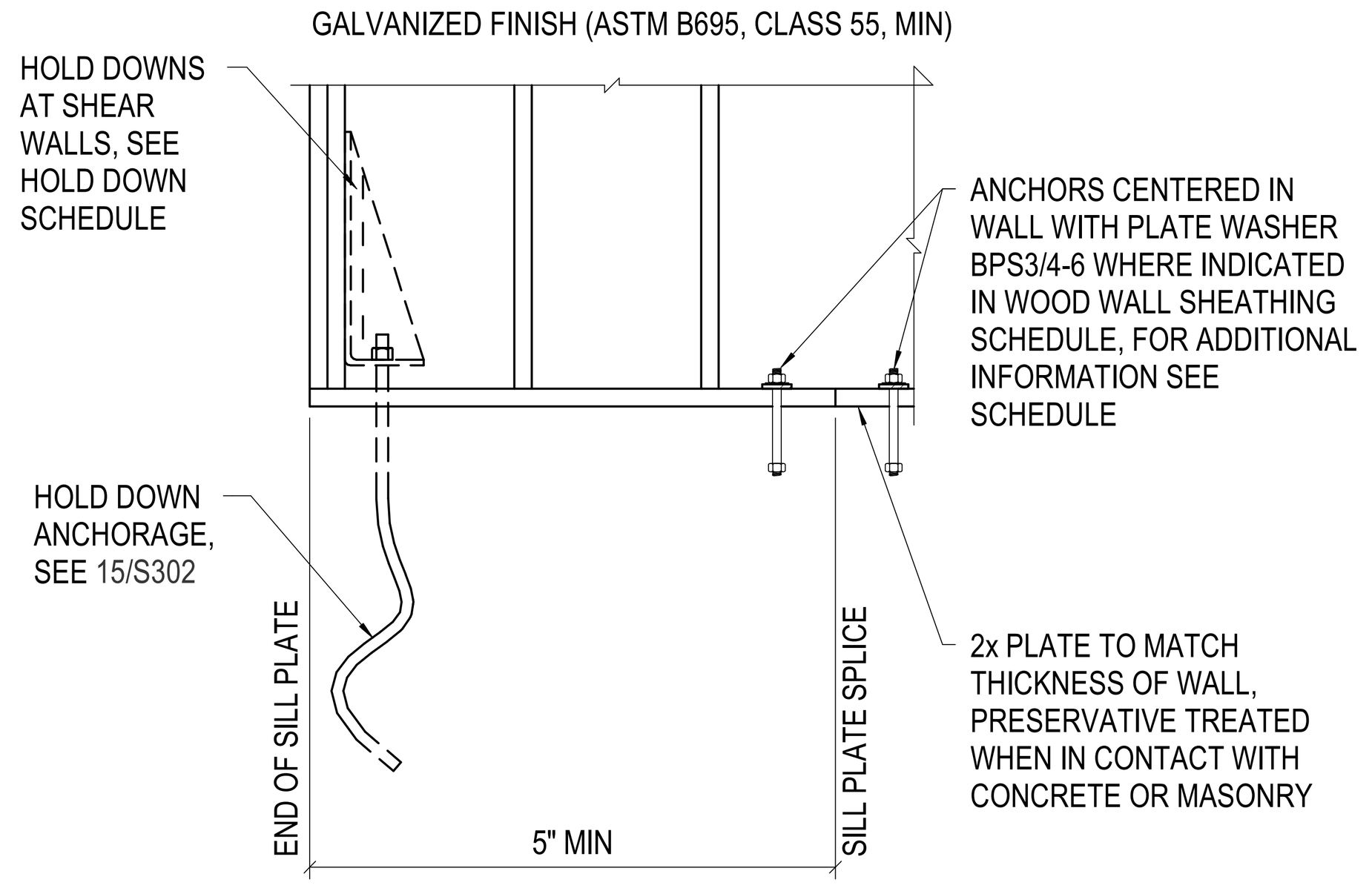
NOTES:

1. ALL HANGERS SHALL BE MANUFACTURED BY SIMPSON STRONG TIE, INC.
2. TYP WOOD MEMBER FASTENING REQUIREMENTS ARE TAKEN FROM] [IBC 2018 TABLE 2304.10.1].
3. THE ABOVE FASTENING REQUIREMENTS ARE A MINIMUM, AND SHOULD BE APPLIED ONLY TO TYPICAL SITUATIONS.
4. WOOD FASTENERS DEFINED AS FOLLOWS:8dC= 8d COMMON (2 1/2"x0.131"_ NAIL,
   10dC= 10d COMMON (3"x0.148") NAIL, 16dC=16d COMMON (3 1/2" x0.162") NAIL,
   20dC= 20d COMMON (4" x0.192") NAIL,
   10dB= 10d BOX NAILS (3"x0.128"),
   16dB= 16d BOX NAILS (3 1/2" x0.162"),
   3"S = 3" 14 GAGE STAPES, 7/16" CROWN

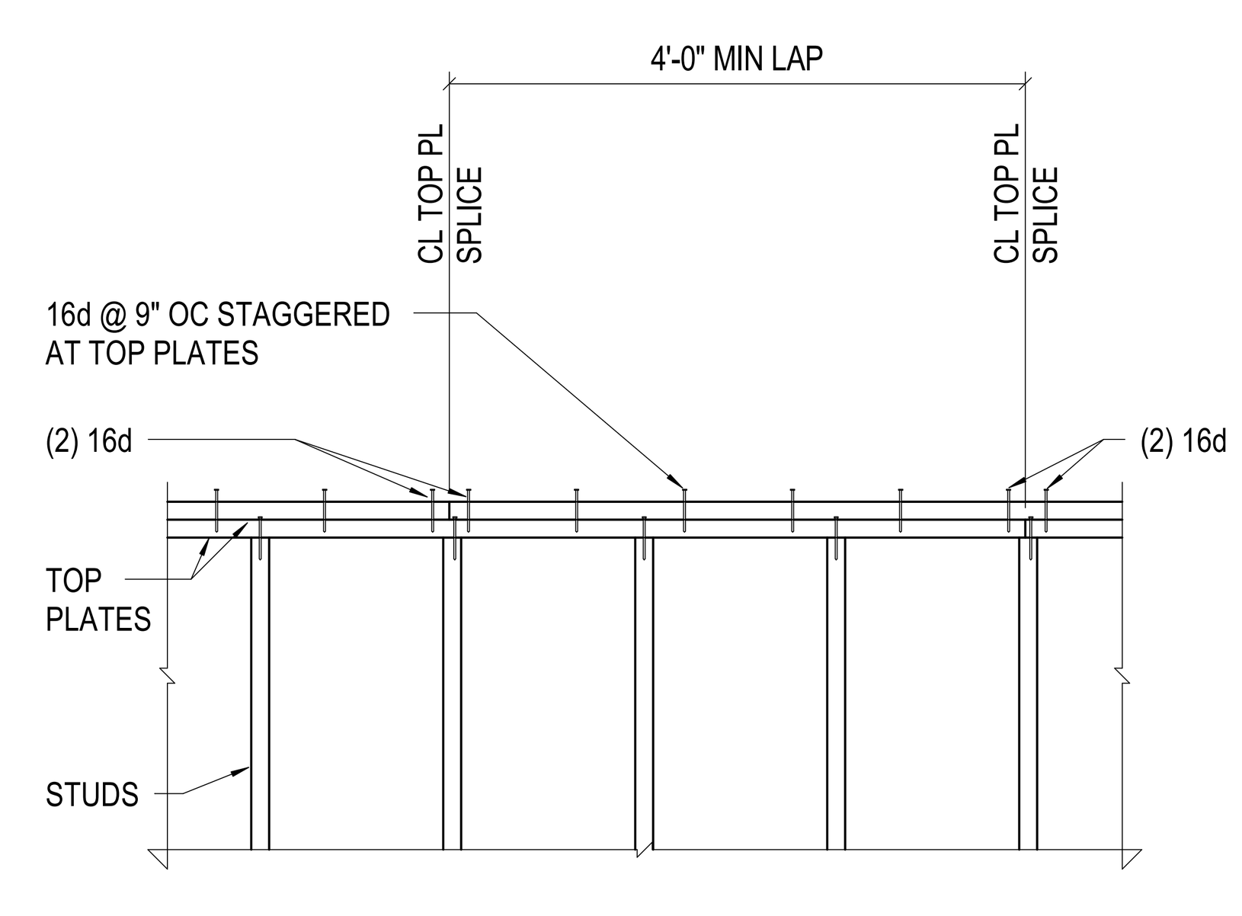
8 — 1" = 1'-0" — WOOD MEMBER FASTENING SCHEDULE

NOTES:

1. AT CONTRACTOR'S OPTION, ANCHORS MAY BE EITHER:
   A. 5/8"Ø CIP ANCHOR (HDG) W/ 7" EMBED OR
   B. 5/8"Ø SIMPSON TITEN HD W/ 5 1/2" EMBED & MECHANICALLY GALVANIZED FINISH (ASTM B695, CLASS 55, MIN)

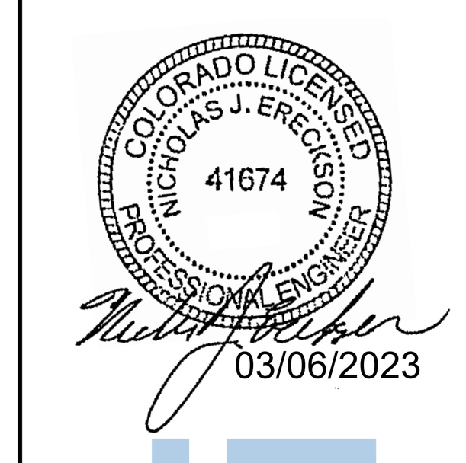


16 — NO SCALE — TYPICAL WOOD WALL ANCHORAGE TO FOUNDATION



12 — NO SCALE — TYPICAL WOOD TOP PLATE SPLICE

MARTIN/MARTIN CONSULTING ENGINEERS
12499 WEST COLFAX AVENUE, LAKEWOOD, COLORADO 80215
MAIN 303.431.6100 MARTINMARTIN.COM



Nicholas J. Ereckson
Digitally signed by Nicholas J. Ereckson DN: C=US, E=nereckson@martinmartin.com, O="Martin/Martin, Inc.", OU=Structural Department, CN=Nicholas J. Ereckson Date: 2023.03.06 14:50:50-07'00'

REVIEWED FOR CODE COMPLIANCE
03/07/2023

HEITER RESIDENCE FOUNDATION ENGINEERING

29550 CO RD 14D
STEAMBOAT SPRINGS, CO 80487

REVISIONS

NO.	ISSUE	DATE
1	ADD NO. 1	2/20/2023

100% CONSTRUCTION DOCUMENTS

PROJECT NO: 22.0119.S01
DATE: 5/27/2022

SHEET TITLE: DETAILS

SHEET NUMBER: S302

MM JOB # 21.0119.S.01
PRINCIPAL: Nick Ereckson
EOR: Enter EOR's Name Here
PROJECT MANAGER: Andrew Lack
DESIGNERS: Enter Designer's Name Here
LEAD REVIT TECH: Enter Lead Revit Tech's Name Here