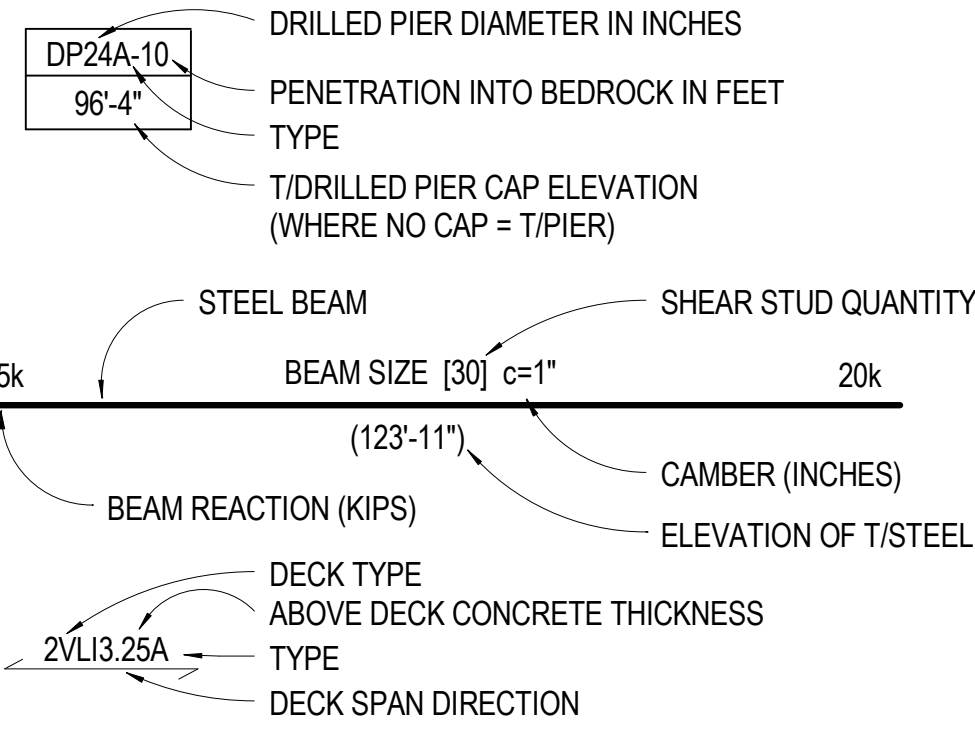


SYMBOLS LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
YW1	WALLS, Y = (M)ASONRY,		ELEVATION SYMBOL
	DRILLED PIER DIAMETER IN INCHES		STEP
	PENETRATION INTO BEDROCK IN FEET		SLOPE
	TYPE		KEY NOTE
	T/DRILLED PIER CAP ELEVATION (WHERE NO CAP = T/PIER)		SUBGRADE
	STEEL BEAM		FORM SAVER
	SHEAR STUD QUANTITY		DRAWING REVISION NUMBER
	BEAM SIZE [30] c=1"		CURRENT REVISION CLOUD
	BEAM REACTION (KIPS)		CAST-IN-PLACE CONCRETE (ON PLAN)
	DECK TYPE ABOVE DECK CONCRETE THICKNESS		BUILDING SECTION OR DETAIL CUT
	DECK SPAN DIRECTION		ON SHEET DRAWN
	NEW GRID LINES		WELDED-WIRE REINFORCEMENT
	EXISTING GRID LINES		



ABBREVIATIONS

/	Per	FAB	Fabricate	OAE	Or Approved Equivalent
@	At	FF	Finished Floor	OC	On Center
AB	Anchor Bolt	FIN	Finish(ed)	OD	Outside Diameter
ADDNL	Additional	FLG	Flange	O.F.	Outside Face
AFF	Above Finished Floor	FLR	Floor	OH	Opposite Hand
ALT	Alternate	FND	Foundation	OPNG	Opening
ALUM	Aluminum	FO	Face Of	OPP	Opposite
APA	American Plywood Association	FP	Full Penetration or Fire Proofing	OVS	Oversized
APPROX	Approximate	FRAM	Framing	PAF	Power Actuated Fastener
ARCH	Architect or Architectural	FS	Far Side	PC	Precast
B/	Bottom of	FT	Foot or Feet	PEN	Penetration
BAL	Balance	FTG	Footing	PERP	Perpendicular
BD	Board	FV	Field Verify	PL	Plate (Steel)
BG	Backgouge	GA	Gage or Gauge	PLF	Pounds Per Lineal Foot
BL	Brick Ledge	GALV	Galvanized	PREFAB	Prefabricated
BLDG	Building	GL	GL-lam	PRELIM	Preliminary
BLKG	Blocking	GR	Grade or Grind	PS	Prestressed
BM	Beam	GR BM	Grade Beam	PSF	Pounds Per Square Foot
BN	Boundary Nail	HDAR	Headed Anchor Rod	PSI	Pounds Per Square Inch
BO	Bottom of	HD	Headed or Holdown	PT	Point or Post-Tension
BOT or B	Bottom	HAS or HDAS	Headed Anchor Stud	QTY	Quantity
BOS	Bottom of Steel	HDG	Hot Dipped Galvanized	RAD or R	Radius
BRG	Bearing	HK	Hook	RB	Precast Rectangular Beam
BSMT	Basement	HORIZ	Horizontal	RC	Reinforced Concrete
BWN	Between	HT	Height	RE: or REF	Refer to (Reference)
CC	Center to Center	HVAC	Heating-Ventilating and A/C	REIN	Reinforce(ing)(d)(ment)
CG	Center of Gravity	ID	Inside Diameter	RET	Return
CIP	Cast-In-Place	I.F.	Inside Face	REQD	Required
CJ	Control Joint	IN	Inch	REQT(S)	Requirement(s)
CJP	Complete Joint Penetration	INT	Interior	RO	Rough Opening
CL	Centerline	IT	Precast Inverted Tee Beam	ROF	Random Oriented Fiber
CLG	Ceiling	JST	Joist	(S)	Salvaged
CLR	Clear	JT	Joint	SC	Slip Critical
CMU	Concrete Masonry Unit	k	Kip	SCHED	Schedule
COL	Column	L or LG	Length	SECT	Section
CONC	Concrete	LB(S)	Pound(s)	SIM	Similar
CONN	Connection	LB	Precast L-Shaped Beam	SLH	Short Leg Horizontal
CONST	Construction	LCE	Compression Embedment	SLV	Short Leg Vertical
CONT	Continue or Continuous	LCS	Compression Lap Splice	SOG	Slab on Grade
CONTR	Contractor	LDH	Hook Development Length	S	South
COORD	Coordinate	LL	Long Leg Horizontal	SP @	Space At
CSJ	Construction Joint	LLV	Long Leg Vertical	SP	Space(s)
CTR(D)	Center(ed)	LOC(S)	Location(s) or Locate	SPECS	Specifications
d	Penny	LONG	Longitudinal	SPRT	Support
DAS	Deformed Anchor Stud	LONG	Longitudinal	SS	Stainless Steel
DBL	Double	LST	Laminated Strand Lumber	STD	Standard
DIA or Ø	Diameter	LT	Light	STIFF	Stiffener
DIAG	Diagonal	LTE	Tension Embedment	STL	Steel
DIM	Dimension	LTS	Tension Lap Splice Length	STR	Structural
DL	Dead Load	LT WT	Lightweight Lumber	SW	Shearwall
DN	Down	LVL	Level or Laminated Veneer Lumber	SYM	Symmetrical
DO	Ditto	LWC	Light Weight Concrete	T&B	Top & Bottom
DP	Drilled Pier or Deep	MACH	Machine	T	Top
DT	Precast Double Tee	MACH RM	Machine Room	T/	Top of
DTL(S)	Detail(s)	MAS	Masonry	THK	Thick or Thickness
DWG(S)	Drawing(s)	MATL	Material	TL	Total Load
DWL(S)	Dowel(s)	MAX	Maximum	T.O.	Top of
(E) or EXIST	Existing	MBS	Metal Building Supplier	TOC	Top of Concrete
EA	Each	MCJ	Masonry Control Joint	TOF	Top of Footing
EC	Epoxy Coated	MECH	Mechanical	TOM	Top of Masonry
EE	Each End	MEP	Mech/Elect/Plumb	TOPG	Topping
EF	Each Face	MIN	Minimum	TOS	Top of Steel
EJ	Expansion Joint	MISC	Miscellaneous	TOW	Top of Wall
EL	Elevation	ML	Micro-Lam	TRANS	Transverse
ELEV	Elevator	MLS	Masonry Lap Splice	TYP	Typical
EMBED	Embedded	mm	Millimeter	ULT	Ultimate
EN	Edge Nail	MNFR	Manufacturer	UNO	Unless Noted Otherwise
ENGR	Engineer	MO	Masonry Opening	VERT	Vertical
EOR	Engineer-of-Record	MTL	Metal	VIF	Verify in Field
EOS	Edge of Slab	N	North	W/O	Without
EQ	Equal	NM	Non-Metallic	W/	With
EQ SP	Equally Spaced	NS	Non-Shrink or Near Side	WD	Width or Wood
EQUIP	Equipment	N-S	North-South	WF	Wide Flange
ES	Each Side	NIC	Not in Contract	WP	Working Point or Waterproofing
EW	Each Way	NO or #	Number	WT	Weight
E-W	East-West	NOM	Nominal	WWR	Welded Wire Reinforcement
EXP ANCH	Expansion Anchor	NTS	Not To Scale	WxH	Width x Height
EXP	Expansion	NWC	Normal Weight Concrete		
EXT	Exterior				

STRUCTURAL DRAWING LIST

SHEET NUMBER	SHEET TITLE
S0.01	NOTES
S0.02	DESIGN CRITERIA AND NOTES
S0.03	NOTES
S0.04	ISOMETRIC AND SECTION VIEWS
S1.00	BASEMENT PLAN
S1.01	LEVEL 1 PLAN
S1.02	LEVEL 2 PLAN
S1.03	ROOF PLAN
S3.00	TYPICAL CONCRETE DETAILS
S3.10	TYP DRILLED PIER DETAILS
S3.11	TYP FOUNDATION WALL DETAILS
S3.12	TYP STRUCTURAL SOG DETAILS
S4.00	TYP MASONRY DETAILS
S4.01	TYP MASONRY DETAILS
S5.10	TYP STEEL DETAILS
S5.11	STEEL DETAILS
S5.20	STAIR DETAILS

Henderson Stair Towers
university of colorado | boulder colorado
ucb project number: **PRO04804**

ISSUED FOR	DATE
DESIGN DEVELOPMENT	04.01.10
100% CD	04.28.10
FOR CONSTRUCTION	05.14.10

PROJECT NO.	SHEET
19132-S-89	08.28.09
DRAWN	DRAWN
DNE	BN
SHEET TITLE 1	
NOTES	
SHEET NO. 1	

DESIGN CRITERIA

- 1. CODES AND STANDARDS:**
1A. GENERAL DESIGN
 - INTERNATIONAL BUILDING CODE 2006
1B. LOADS
 - ASCE/SEI 7-05 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES"
1C. CONCRETE
 - ACI 301-05 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
 - ACI 318-05 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE"
1D. MASONRY
 - ACI 530-05/ASCE 5-05: "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"
 - ACI 530.1-05/ASCE 6-05: "SPECIFICATION FOR MASONRY STRUCTURES"
1E. STEEL
 - ANS/AISC 341-05: "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS"
 - ANS/AISC 360-05: "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"
2. SEISMIC LOADS
 - SEISMIC DESIGN CATEGORY = B
 - OCCUPANCY CATEGORY = II
 - EARTHQUAKE IMPORTANCE FACTOR, $I_e = 1.00$
 - MAPPED SPECTRAL RESPONSE ACCELERATION, $S_s = 23.8$
 - MAPPED SPECTRAL RESPONSE ACCELERATION, $S_1 = 5.9$
 - DESIGN SPECTRAL RESPONSE COEFFICIENT, $S_Ds = 0.167$
 - DESIGN SPECTRAL RESPONSE COEFFICIENT, $S_D1 = 0.067$
 - SOIL SITE CLASS = C
 - BASIC STRUCTURAL SYSTEM: BEARING WALL SYSTEM
 - STRUCTURAL SEISMIC LATERAL SYSTEM: ORDINARY REINFORCED MASONRY SHEAR WALLS
 - RESPONSE MODIFICATION FACTOR, $R = 2.0$
 - SEISMIC RESPONSE COEFFICIENT, $C_s = .095$
 - SYSTEM OVERSTRENGTH FACTOR, $\Omega = 2.5$
 - SEISMIC ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
3. WIND LOADS
 - OCCUPANCY CATEGORY = II
 - WIND IMPORTANCE FACTOR $I_w = 1.00$
 - BASIC WIND SPEED = 110 MPH
 - EXPOSURE CATEGORY = C
 - INTERNAL PRESSURE COEFFICIENT, $G_Cp_i = +/- 0.18$
4. LATERAL LOAD RESISTING SYSTEM DESCRIPTION:
 - WIND AND SEISMIC LOADS ARE CARRIED BY CONCRETE FLOOR AND METAL ROOF DECK DIAPHRAGMS TO MASONRY SHEAR WALLS.
5. GRAVITY LOADS
 5A. SEE GRAVITY LOADS TABLE
 5B. DRIFTING, SLIDING AND UNBALANCED SNOW
 - GROUND SNOW LOAD = 25 PSF
 - SNOW EXPOSURE FACTOR $C_e = 1.0$
 - SNOW LOAD IMPORTANCE FACTOR $I_s = 1.0$
 - THERMAL FACTOR $C_t = 1.0$
 - FLAT ROOF SNOW LOAD $P_f = 30$ PSF

GRAVITY LOADS TABLE					
LOCATION	SUPERIMPOSED DEAD LOAD (PSF)	LIVE LOAD (PSF)	LIVE LOAD REDUCTION	PARTITION LOAD (PSF)	POINT LOAD (LB)
ROOF	40 (INCLUDES 15 TILE LOAD)	30 MIN UNIFORM LOAD, SEE NOTE 5B FOR SNOW LOADS	No	--	--
LOBBIES, EXIT FACILITIES	15	100	No	--	2000

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. THESE NOTES SUPPLEMENT THE SPECIFICATIONS, WHICH SHALL BE REFERENCED FOR ADDITIONAL REQUIREMENTS.
1C. UNDERGROUND UTILITIES: LOCATE EXISTING UTILITIES AND NOTIFY ARCHITECT OF EXISTING UTILITIES OR SUBGRADE CONDITIONS WHICH INTERFERE WITH WORK.
1D. STRUCTURAL ELEMENTS ARE CENTERED ON GRID LINES AND GRID LINE INTERSECTIONS UNLESS DIMENSIONED OTHERWISE.
2. EXISTING STRUCTURES:
2A. CONTRACT DOCUMENTS HAVE BEEN PREPARED USING AVAILABLE DRAWINGS AND SITE OBSERVATION AS PERMITTED BY ACCESS RESTRICTIONS DURING DESIGN.
2B. DURING CONSTRUCTION, THE CONTRACTOR MAY ENCOUNTER EXISTING CONDITIONS WHICH ARE NOT NOW KNOWN OR ARE AT VARIANCE WITH PROJECT DOCUMENTATION. CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ALL CONDITIONS NOT PER THE CONTRACT DOCUMENTS. EXAMPLES INCLUDE:
 - SIZES OR DIMENSIONS OTHER THAN THOSE SHOWN
 - DAMAGE OR DETERIORATION TO MATERIALS AND COMPONENTS
 - CONDITIONS OF INSTABILITY OR LACK OF SUPPORT
 - ITEMS NOTED AS EXISTING ON THE DRAWINGS BUT NOT FOUND IN THE FIELD
2C. PREPARE DIMENSIONAL DRAWINGS OF ALL DISCOVERED ITEMS.
2D. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING STRUCTURAL CONDITIONS PRIOR TO SUBMITTING SHOP DRAWINGS.
2E. CONTRACTOR SHALL MAKE ALLOWANCE FOR THE RESOLUTION OF SUCH DISCOVERIES IN THE CONSTRUCTION SCHEDULE.
2F. SUBMIT A DIMENSIONED DRAWING OF ALL NEW OPENINGS THROUGH EXISTING STRUCTURE AND SECURE APPROVAL PRIOR TO CUTTING. DRAWING SHALL SHOW VERTICAL & HORIZONTAL LOCATION AND SIZE OF PROPOSED OPENING.
3. USE OF DRAWINGS:
3A. DO NOT SCALE DRAWINGS.
3B. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN. DETAILS ON DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. DETAILS NOTED TYPICAL APPLY TO ALL SIMILAR CONDITIONS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ELSEWHERE ON THE PROJECT.
4. TEMPORARY CONDITIONS:
4A. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. 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.
4B. FOUNDATION WALLS SHALL NOT BE BACKFILLED UNTIL THE SLABS-ON-GRADE AND UPPER SLABS ARE 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. GRADE BEAMS SHALL BE BACKFILLED EVENLY ON BOTH SIDES.
5. SUBMITTALS AND SUBSTITUTIONS:
5A. SUBMITTALS: REFER TO SPECIFICATIONS FOR DETAILED REQUIREMENTS.
 - 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 THE CONSTRUCTION THE LATERAL LOAD RESISTING SYSTEM IDENTIFIED IN THE DESIGN CRITERIA IN ACCORDANCE WITH IBC SECTION 1706
5B. SUBSTITUTIONS: ARCHITECTS APPROVAL SHALL BE SECURED FOR ALL SUBSTITUTIONS
5C. NONCONFORMANCE: NOTIFY ARCHITECT 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.
6. OSHA STANDARDS:
6A. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. NOTHING SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE CONSTRUED AS ELIMINATING THE NEED FOR THE CONTRACTOR TO COMPLY WITH ALL OSHA REQUIREMENTS.
7. CONSTRUCTION ENGINEERING:
7A. THE STRUCTURE DEFINED ON THE CONTRACT DOCUMENTS HAS BEEN DESIGNED ONLY FOR LOADS ANTICIPATED ON THE STRUCTURE DURING ITS SERVICE LIFE. PROVIDE ALL REQUIRED ENGINEERING AND OTHER MEASURES TO ACHIEVE THE MEANS, METHODS, AND SEQUENCES OF WORK. SUCH ENGINEERING MAY INCLUDE, BUT IS NOT LIMITED TO:
 - LAYOUT
 - DESIGN FOR FORMWORK
 - DESIGN OF CONCRETE MIXES
 - ERECTION PROCEDURES
 - DESIGN OF TEMPORARY BRACING OF WALLS FOR WIND, SEISMIC, OR SOIL LOADS
 - EVALUATION OF TEMPORARY CONSTRUCTION LOADS ON STRUCTURE DUE TO EQUIPMENT AND MATERIALS
 - STRUCTURAL ENGINEERING TO RESIST ANY OTHER LOADS NOT IDENTIFIED ON DESIGN DRAWINGS
8. COORDINATION:
8A. 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.
8B. COORDINATE DIMENSIONS OF ALL OPENINGS, BLOCKOUTS, DEPRESSIONS, ETC., WITH ARCHITECTURAL DRAWINGS, DRAWINGS FROM OTHER DISCIPLINES, AND FIELD CONDITIONS PRIOR TO SHOP DRAWING SUBMITTAL.
8C. SEE ARCHITECTURAL PLANS FOR INTERIOR PARTITIONS. PARTITION FRAMING SHALL BE CONNECTED TO THE PRIMARY STRUCTURE IN SUCH A WAY SO AS TO ALLOW FOR VERTICAL LIVE LOAD DEFLECTIONS OF SPAN/360 OF THE FLOOR FRAMING. DO NOT MAKE RIGID VERTICAL AND HORIZONTAL CONNECTIONS TO THE PRIMARY STRUCTURE IN THE PLANE OF THE WALL.
9. DEFERRED SUBMITTALS:
9A. 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:
 - STEEL STAIRS/ RAILINGS

FOUNDATION NOTES

- 1. DESIGN CRITERIA:**
 THE GEOTECHNICAL REPORT PREPARED BY GROUND ENGINEERING CONSULTANTS, NUMBER 10-3006, DATED FEBRUARY 8, 2010, PROVIDED CRITERIA FOR THE FOUNDATION DESIGN FOR THE PROJECT.
2. DRILLER PIERS:
 - MAXIMUM ALLOWABLE END BEARING PRESSURE = 25,000 PSF
 - MAXIMUM ALLOWABLE SKIN FRICTION = 2,500 PSF
 - MINIMUM DEAD LOAD PRESSURE = 10,000 PSF
3. RETAINING WALLS:
 EQUIVALENT FLUID PRESSURES USED FOR WALL DESIGN FOR ON-SITE SOILS:
 - "AT-REST" EQUIVALENT FLUID WEIGHT= 73 PCF

CONCRETE NOTES

- 1. GENERAL:**
1A. ALL WORK SHALL CONFORM WITH ACI 301, LATEST EDITION, UNLESS NOTED OTHERWISE IN DRAWINGS OR PROJECT SPECIFICATIONS.
1B. DETAIL BARS IN ACCORDANCE WITH THE LATEST EDITIONS OF PUBLICATION SP-66: "ACI DETAILING MANUAL" WITH ADDED REQUIREMENTS OF THE PROJECT SPECIFICATION AND ACI 318: "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE."
2. REINFORCING MATERIALS:
2A. SEE 'REINFORCING MATERIALS TABLE'
3. REINFORCING FABRICATION:
3A. SPLICES:
 - NO SPLICING OF REINFORCEMENT PERMITTED EXCEPT AS NOTED ON DRAWINGS. MAKE BARS CONTINUOUS AROUND CORNERS. WHERE PERMITTED, SPLICES MAY BE MADE BY CONTACT LAPS
 - SEE 'LAP SPLICE SCHEDULE' FOR LAP LENGTHS.
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.
 - PROVIDE ADDED REINFORCING TO TRIM ALL OPENINGS, NOTCHES, AND REINFRANT CORNERS AS NOTED IN TYPICAL DETAILS.
4. STRUCTURAL CONCRETE MIX REQUIREMENTS:
4A. SEE 'CONCRETE MIX TABLE'
5. NON-SHRINK GROUT:
5A. CONFORM TO ASTM C1107, GRADES B, OR C.
5B. ACHIEVE 6000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
6. PLACING REINFORCEMENT:
6A. REINFORCEMENT PROTECTION:
 - SEE 'CONCRETE COVER TABLE'
 - SEE ACI 318-05 7.5 FOR REINFORCEMENT PLACING TOLERANCES AND ACI 117 FOR ADDITIONAL REQUIREMENTS
6B. PROVIDE ACCESSORIES NECESSARY TO PROPERLY SUPPORT REINFORCING AND WELDED WIRE FABRIC 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.
7. MEP AND OTHER OPENINGS AND EMBEDMENTS:
7A. PROVIDE SLEEVES AT OPENINGS (SUCH AS THOSE REQUIRED FOR PLUMBING AND ELECTRICAL PENETRATIONS) BEFORE PLACING CONCRETE. REMOVE METAL DECK AT SLEEVES AFTER CONCRETE HAS CURED. DO NOT CUT REINFORCING WHICH MAY CONFLICT. CORING OF CONCRETE IS NOT PERMITTED.
7B. REFER TO TYPICAL DETAILS FOR SPACING LIMITS ON SLEEVES AND FOR REQUIREMENTS FOR EMBEDDED CONDUIT AND PIPE.

REINFORCING MATERIAL TABLE				
REINF ELEMENT	ASTM	Fy (KSI)	Fu (KSI)	COMMENTS
TYP REINFORCING	A615	60	90	--
WELDED & FIELD BENT REINF	A706	60	80	--
WELDED WIRE REINFORCING, SMOOTH	A185	65	75	--
WELDED WIRE REINFORCING, DEFORMED	A497	70	80	--
TENDONS	A416	--	270	--

CONCRETE COVER	
CASE	COVER (IN)
COLUMNS, GIRDERS, AND BEAMS	1 1/2
CONCRETE PLACED AGAINST EARTH	3
CONCRETE PLACED IN FORMS, EXPOSED TO WEATHER OR EARTH	2
CONCRETE PLACED ON VOID FORMS WITH MASONITE OR PLYWOOD COVERING	2
JOISTS	1 1/2
SLABS OR WALLS NOT EXPOSED TO EARTH OR WEATHER	1

CONCRETE MIX TABLE											
CONC MIX TYPE	INTENDED USE	28 DAY STRENGTH, f_c (KSI)	CONCRETE WEIGHT	MAX WC RATIO, INCLUDING FLY ASH	MIN CEMENT MATERIAL (#CY), INCLUDING FLY ASH	MAX AGGREGATE SIZE (IN), NOTE a	SLUMP LIMITS (IN), TOLERANCE = +1 1/2", -1 1/2"	TOTAL AIR CONTENT (%), NOTE b	CEMENT TYPE	REQUIRED ADMIXTURES, NOTE c	OTHER REQUIREMENTS, NOTE d
1	FOUNDATION WALLS	5	NWC	-	470	3/4	4	5	I / II	AE	-
2	SLAB-ON-VOID	5	NWC	0.40	564	3/4	4	NP	I / II	--	--
3	DRILLED PIERS	3	NWC	-	470	1	7	6	I / II	NOTE E	HRNP
4	INT TOPPING SLABS, SLABS ON DECK	3.5	NWC	0.50	517	3/4	4	NP	I / II	--	--
5	ALL CONC OTHERWISE NOT SPECIFIED	4	NWC	0.50	517	3/4	4	6	I / II	AE	--

- CONCRETE MIX TABLE NOTES:**
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. TOTAL AIR CONTENT LIMITS INCLUDE BOTH ENTRAINED AND ENTRAPPED AIR +/- 1 1/2%. 'NP' IN COLUMN INDICATES ADDITION OF ENTRAINED AIR IS NOT PERMITTED.
c. ABBREVIATIONS FOR REQUIRED ADMIXTURES AS FOLLOWS:
 AE = AIR-ENTRAINING ADMIXTURE. DO NOT USE ENTRAINED AIR FOR STEEL TROWELED FINISHED FLOORS.
 WRA = WATER REDUCING ADMIXTURE.
d. FOR CONCRETE PLACED BY PUMPING PROVIDE CONCRETE MIX FLOWABILITY TO FACILITATE PUMPING. ENTRAINED AIR MAY BE USED IF IT CAN BE SHOWN THAT THE FLOOR WILL HAVE A FINISH ACCEPTABLE TO THE ARCHITECT WITHOUT BLISTERS.
e. FOR DRILLED PIERS CASED DURING CONSTRUCTION PROVIDE CONCRETE MIX WITH FLOWABILITY TO PREVENT ARCHING WHEN CASING IS PULLED.

MASONRY NOTES

- 1. DEFINITIONS:**
 1A. STRUCTURAL MASONRY IS DEFINED AS BEING EITHER LOAD BEARING AND/OR SERVING AS PART OF THE LATERAL LOAD RESISTING SYSTEM. STRUCTURAL MASONRY IS SHOWN ON THE STRUCTURAL PLANS AND DEFINED IN SCHEDULES AND DETAILS ON THE STRUCTURAL DRAWINGS.
 1B. SEE ARCHITECTURAL DRAWINGS FOR LOCATION, THICKNESS AND EXTENT OF MASONRY PARTITIONS. SEE DETAILS ON THE STRUCTURAL DRAWINGS FOR GENERAL MASONRY PARTITION REQUIREMENTS.
 1C. SEE ARCHITECTURAL DRAWINGS FOR ALL MASONRY VENEER REQUIREMENTS. SEE DETAILS ON THE STRUCTURAL DRAWINGS FOR MASONRY VENEER LOOSE LINTELS.
- 2. DESIGN STRENGTH:**
 2A. DEVELOP 2000 PSI COMPRESSIVE STRENGTH (f_m) IN 28 DAYS.
 2B. STEEL REINFORCING:
 - PRIMARY REINFORCING: ASTM A615, 60 KSI
 - HORIZONTAL JOINT REINFORCING: ASTM A82, PREFABRICATED, LADDER TYPE
- 3. SPLICES:**
 3A. SEE MASONRY LAP SPLICE SCHEDULE FOR LAP LENGTHS
- 4. INSTALLATION REQUIREMENTS:**
 4A. GROUT SOLID ALL CELLS CONTAINING REINFORCING, EMBEDDED ITEMS, AND ALL OTHER CELLS NOTED ON THE CONTRACT DOCUMENTS.

STEEL NOTES

- 1. CONNECTIONS:**
 1A. PROVIDE CONNECTIONS AS SHOWN IN THE DETAILS HEREIN.
- 2. WELDING REQUIREMENTS:**
 2A. WELDERS: HAVE IN POSSESSION CURRENT EVIDENCE OF PASSING THE APPROPRIATE A.W.S. QUALIFICATION TESTS.
 2B. MINIMUM WELDS: AISC SPECIFICATION, NOT LESS THAN 3/16" FILLET, CONTINUOUS UNLESS OTHERWISE NOTED.
 2C. WELD SIZES AND LENGTHS CALLED FOR ON THE DRAWINGS ARE THE NET EFFECTIVE REQUIRED. INCREASE WELD SIZE IF GAPS EXIST AT THE FAYING SURFACE.
 2D. WELD SIZES SHALL BE AS SHOWN UNLESS A GREATER SIZE IS REQUIRED BY ANSIAISC 360-05 TABLES J2.3 AND J2.4.
 2E. ALL GROOVE WELDS SHALL BE COMPLETE PENETRATION UNLESS NOTED.
 2F. FIELD WELDING SYMBOLS INDICATE SUGGESTED CONSTRUCTION PROCEDURES.
- 3. METAL DECK:**
 3A. SEE 'METAL DECK SCHEDULE' FOR MATERIALS, PROFILE, AND CONNECTIONS TO STRUCTURE.
 3B. DECK DESIGN IS IN ACCORDANCE WITH STEEL DECK INSTITUTE (SDI) PUBLICATION NO. 31 AND DIAPHRAGM DESIGN MANUAL, LATEST EDITIONS.
 3C. PLACE CONCRETE ON METAL DECK IN ACCORDANCE WITH SDI PUBLICATION NO. 31 TO LIMIT CONSTRUCTION LOADS TO ALLOWABLE MAGNITUDES.
 3D. REINFORCE OPENINGS IN METAL ROOF DECK AND FLOOR DECK SUPPORTING CONCRETE FILL IN ACCORDANCE WITH TYPICAL DECK OPENING DETAILS.
 3E. INSTALL DECK OVER 4 SUPPORTS (3 SPAN CONTINUOUS) UNLESS NOTED OTHERWISE. DO NOT INSTALL DECK AS SINGLE SPAN UNLESS SPECIFICALLY SHOWN ON DRAWINGS.
 3F. PROVIDE DECK ATTACHMENTS AS NOTED ON DRAWINGS.
 3G. HANGERS: SEE TYPICAL METAL DECK DETAILS FOR ALLOWABLE HANGER LOADS, SPACING AND ATTACHMENT.

METAL GAGE CONVERSION	
GAUGE	MINIMUM THICKNESS (MILS)
12	97
14	68
16	54
18	43
20	33
22	27

STEEL MATERIAL TABLE				
STEEL ELEMENT	ASTM/TYPE	F _y (KSI)	F _u (KSI)	COMMENTS
ADHESIVE	HILTI HY 150 OR EQUIV	--	--	
ADHESIVE ANCHORS	A193 B7	--	125	THREADED ROD
ANCHOR RODS	F1554 GR 55	55	75	WELDABLE, HEAVY HEX HEADED
BOLTS	A325 OR F1852	--	120	BOLTS ARE 3/4"Ø UNO, USE TENSION-CONTROLLED WHERE POSSIBLE
COLD-FORMED STUDS/PLATE, 33 AND 43 MIL	A1003	33	--	--
COLD-FORMED STUDS/PLATE, 54 MIL AND HEAVIER	A1003	50	--	--
COLD-FORMED TRACK, ALL THICKNESSES	A1003	33	--	--
DAS	A496	70	80	--
EXPANSION ANCHORS	HILTI KWIK BOLT 3 OR EQUIV	--	--	SUBMIT ICC EVALUATION REPORT
HAS	A108	51	65	STUDS ARE 3/4"Ø UNO
OTHER SHAPES	A36	36	58	--
PIPE	A53 GR B	35	60	--
PLATES	A36	36	58	--
RECT HSS	A500 GR B	46	58	--
ROUND HSS	A500 GR B	42	58	--
SCREW ANCHORS	HILTI HUS-H OR EQUIV	--	--	SUBMIT ICC EVALUATION REPORT
SLEEVE ANCHORS	HILTI HLC OR EQUIV	--	--	SUBMIT ICC EVALUATION REPORT
STUD RAIL SYSTEMS	SUNCOAST SRS OR DECON STUDRAIL OR EQUIV	--	--	SUBMIT ICC EVALUATION REPORT: SUNCOAST SRS - ESR-1170 DECON STUDRAIL - ESR-2494
WELDING ELECTRODES	E70	--	--	PER AWS
WF, WT	A992	50	65	--

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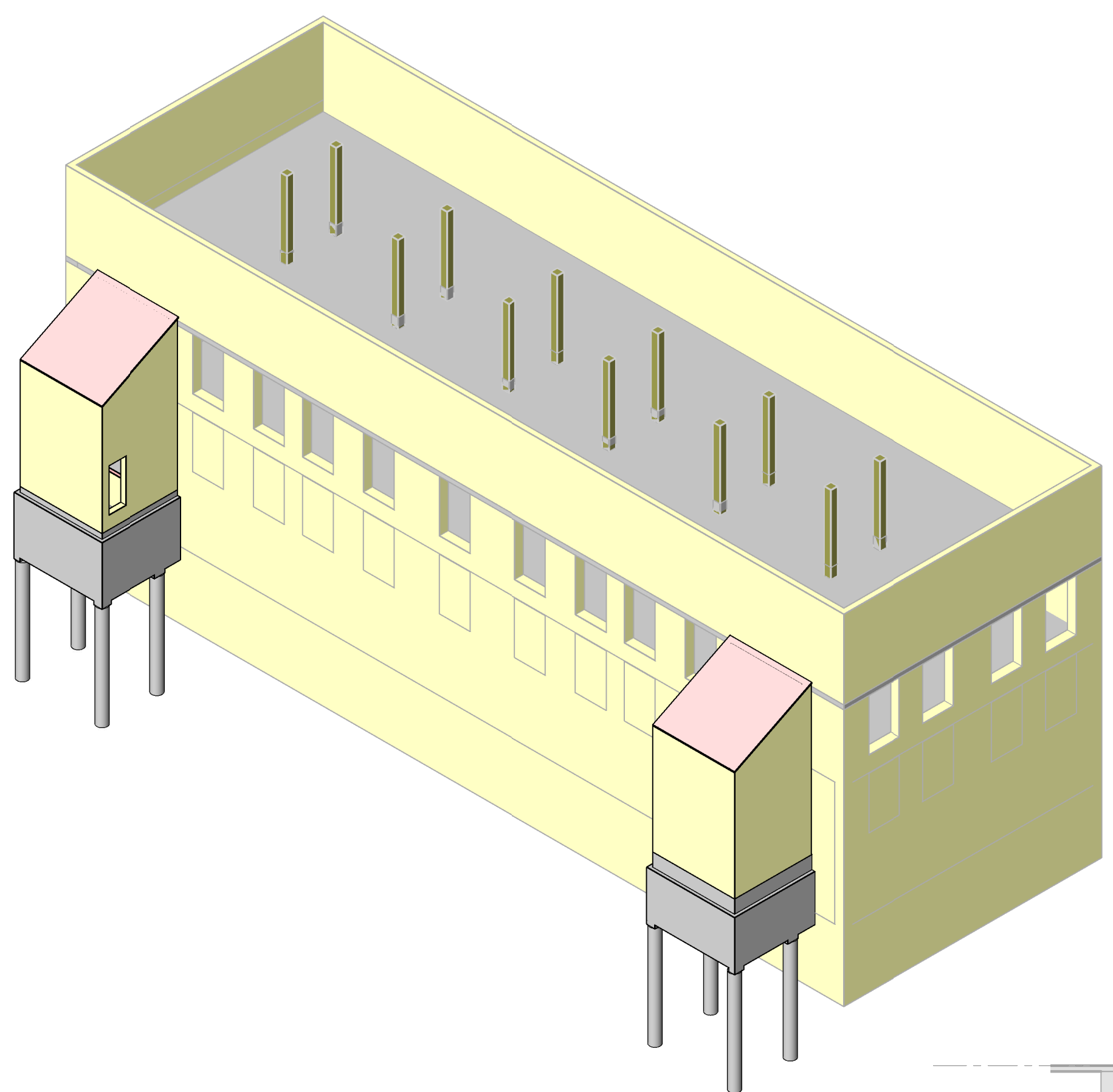
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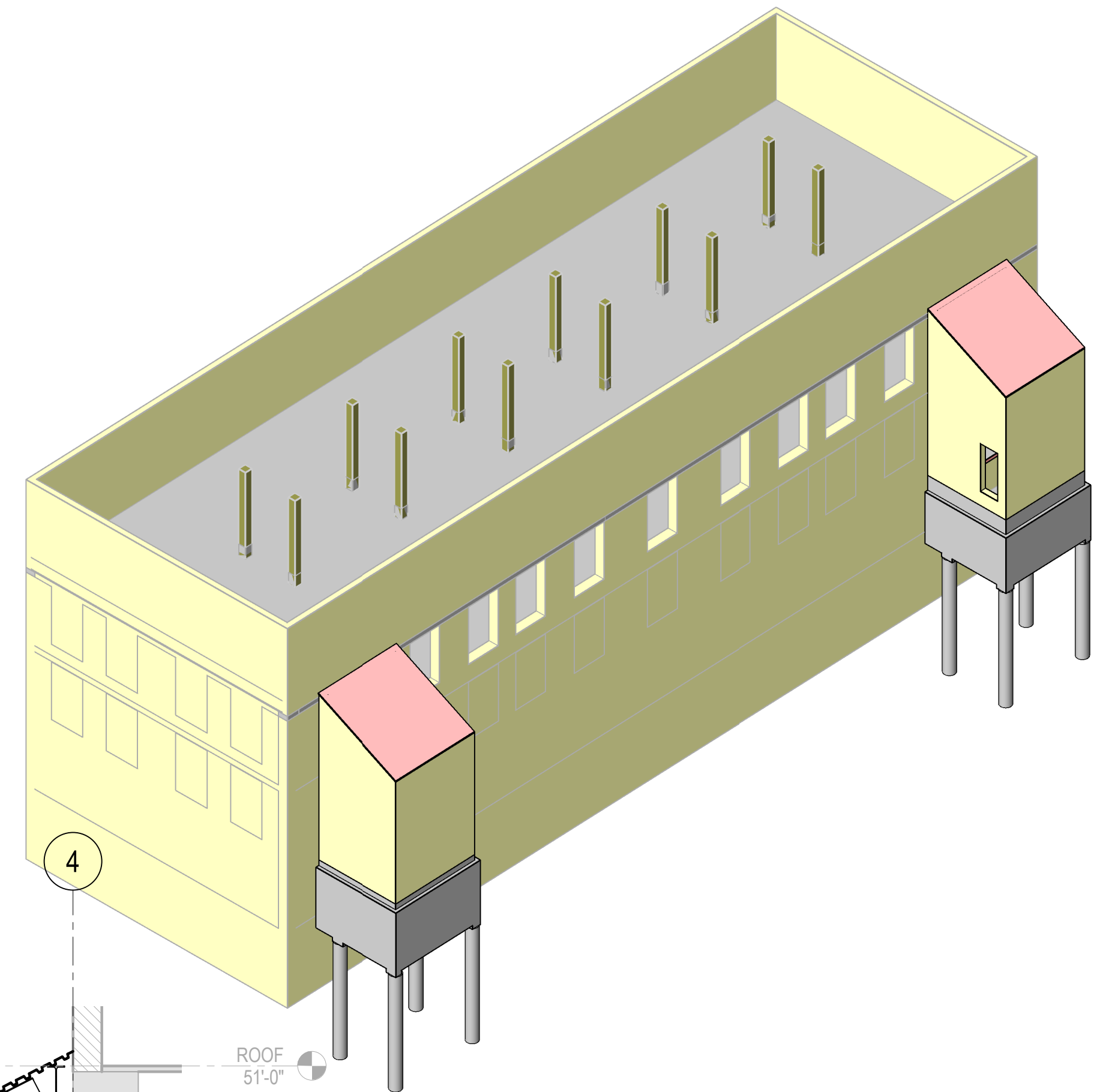
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S0.03

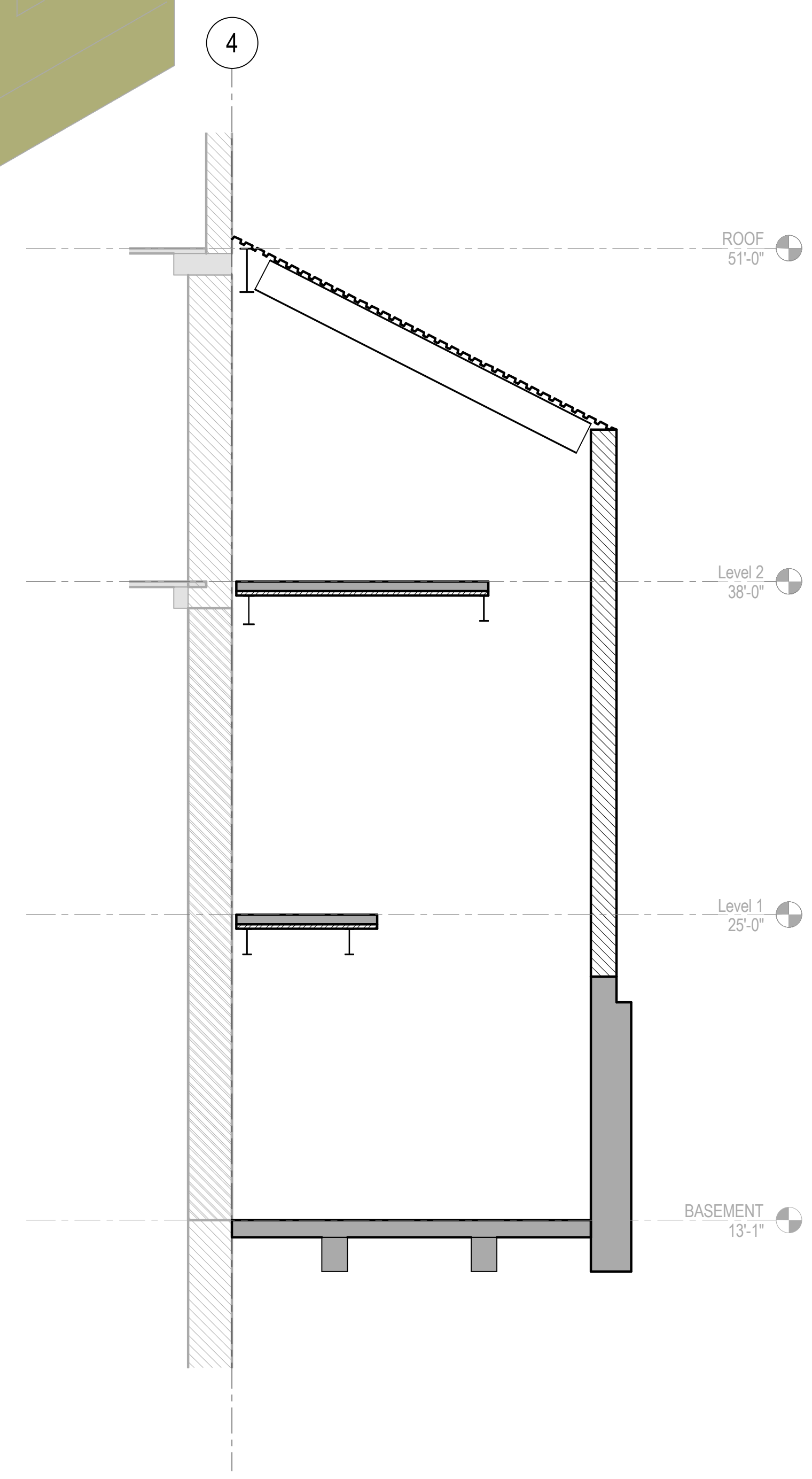
ISOMETRICS AND SECTION DRAWINGS ARE FOR REFERENCE ONLY.



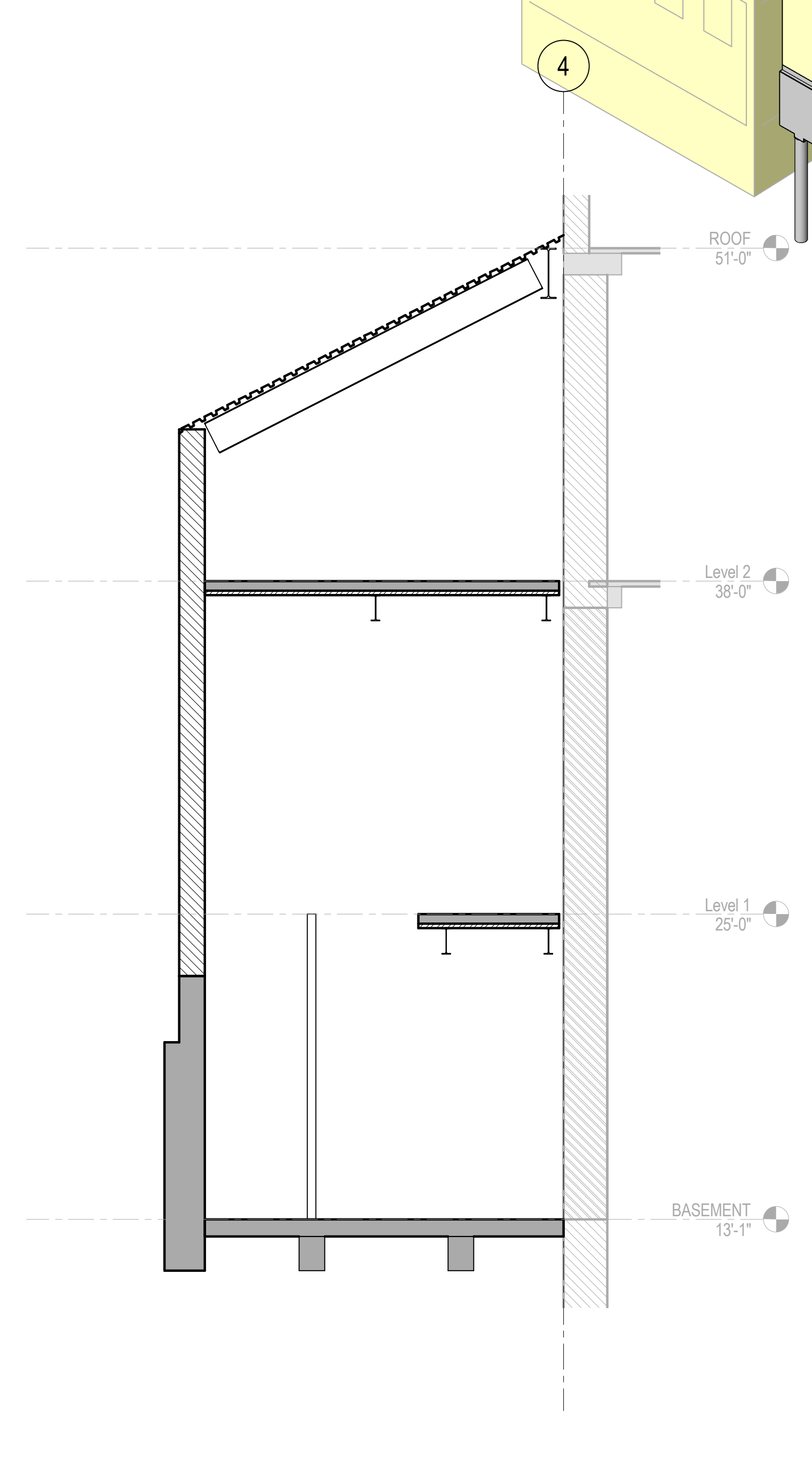
1 NO SCALE SOUTH EAST VIEW



2 NO SCALE SOUTH WEST VIEW



3 1/4" = 1'-0" WEST STAIR, NORTH-SOUTH SECTION



4 1/4" = 1'-0" EAST STAIR, NORTH-SOUTH SECTION

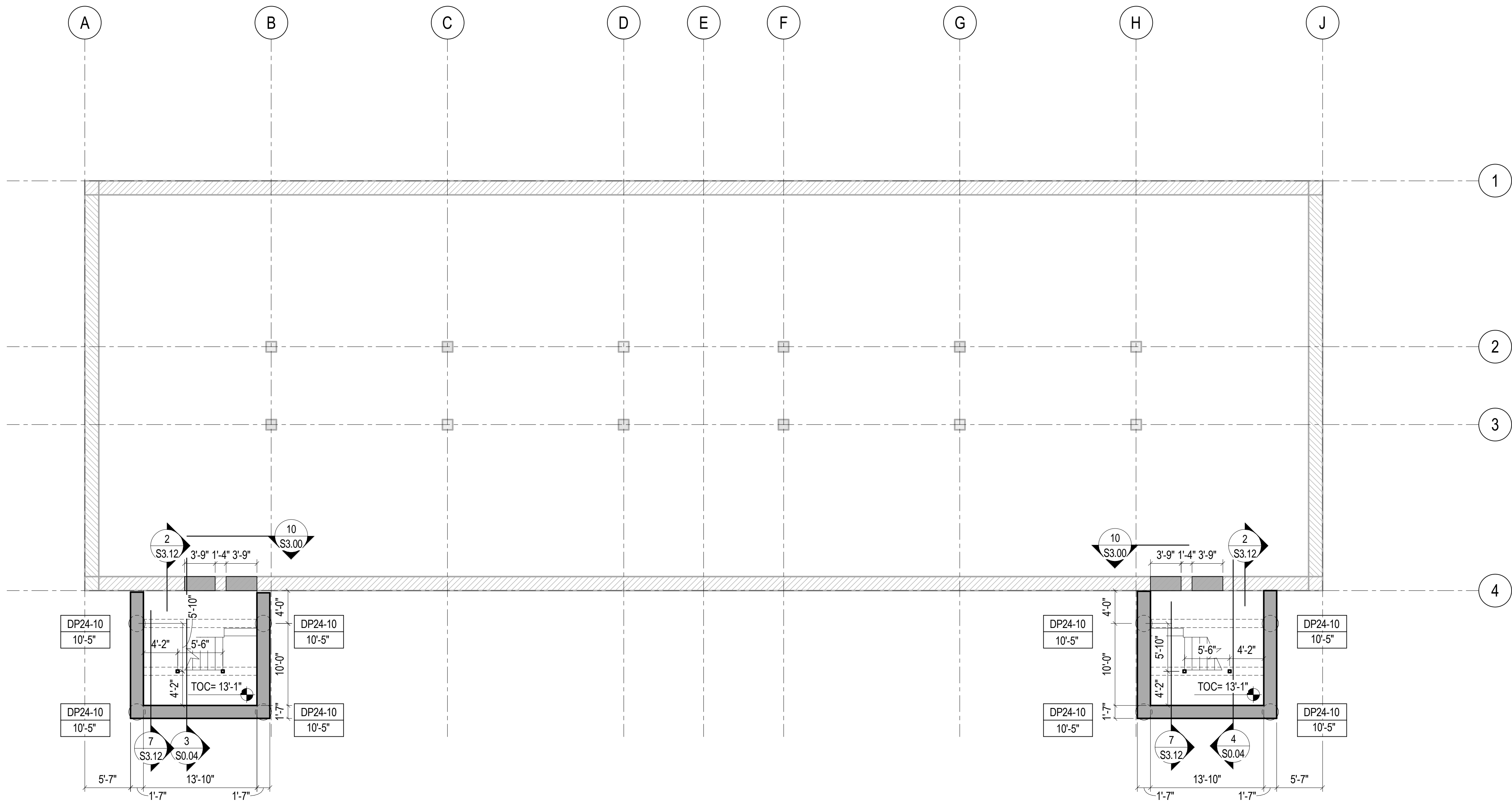
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ISOMETRIC AND SECTION VIEWS
SHEET NO.:
S0.04



BASEMENT

1/8" = 1'-0"

FOUNDATION NOTES

1. SEE S0 SERIES SHEETS FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. SEE S300 SERIES SHEETS FOR TYPICAL CONCRETE DETAILS.
3. SEE S3.12 FOR TYPICAL SLAB-ON-VOID DETAILS.
4. ALL DRILLER PIERS ARE CENTERED ON WALLS UNLESS DIMENSIONED OTHERWISE ON PLAN.
5. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SLAB SLOPES, DEPRESSIONS, FILL, PADS, AND CURBS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
6. SEE S3.10 FOR TYPICAL DRILLED PIER DETAILS.

DEMOLITION NOTES

1. DOOR OPENINGS TO BE CUT ARE SHOWN ON PLAN SHADED ALONG EXISTING GRID 4.
2. REFER TO DETAIL 10/S3.00 FOR OPENING SUPPORT.
3. DO NOT OVERCUT CORNERS.
4. CONTRACTOR TO TAKE CARE TO MINIMIZE DEMOLITION SOUNDS AND VIBRATION.



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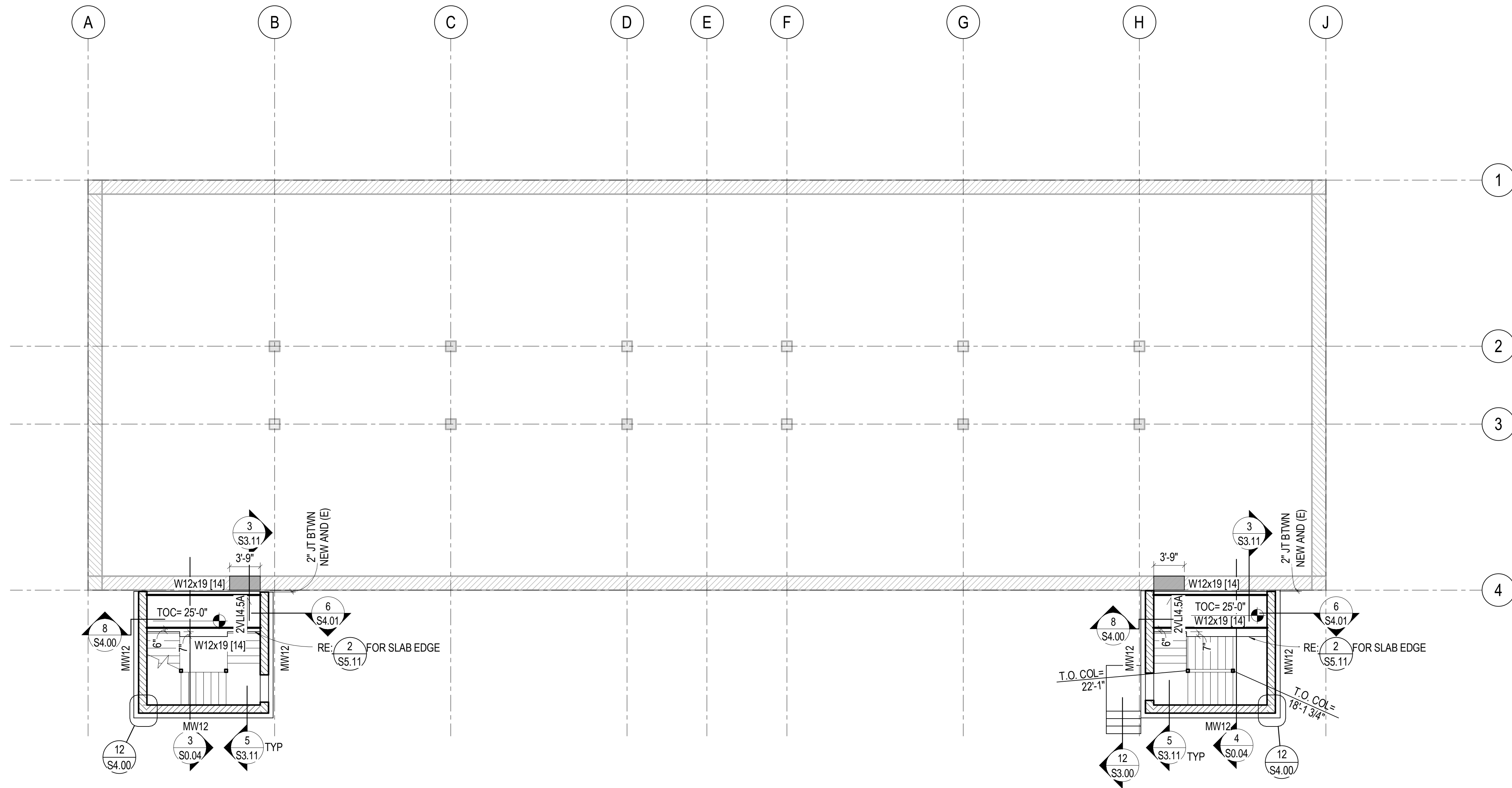
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DNE	BN

SHEET TITLE: 1
BASEMENT PLAN
SHEET NO.: 1

S1.00



Level 1

1/8" = 1'-0"



STEEL FLOOR / ROOF FRAMING PLAN NOTES

1. SEE S0 SERIES SHEETS FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. SEE S5 SERIES SHEETS FOR TYPICAL STEEL DETAILS.
3. SEE S5.01, S5.10 FOR TYPICAL METAL DECK DETAILS AND SCHEDULE.
4. SPACE BEAMS AND JOISTS EQUALLY BETWEEN GRID LINES UNLESS DIMENSIONED OTHERWISE.
5. TOP OF BEAM ELEVATION = BOTTOM OF METAL DECK UNLESS NOTED OTHERWISE ON PLAN.
6. SEE S4.00, S4.01 FOR TYPICAL STRUCTURAL MASONRY WALL DETAILS.
7. CONTRACTOR TO PROVIDE TEMPORARY BRACING AT THE STAIR COLUMNS UNTIL STAIRS ARE INSTALLED.

DEMOLITION NOTES

1. DOOR OPENINGS TO BE CUT ARE SHOWN ON PLAN SHADED ALONG EXISTING GRID 4.
2. REFER TO DETAIL 3/S4.01 FOR OPENING SUPPORT.
3. DO NOT OVERCUT CORNERS.
4. CONTRACTOR TO TAKE CARE TO MINIMIZE DEMOLITION SOUNDS AND VIBRATION.

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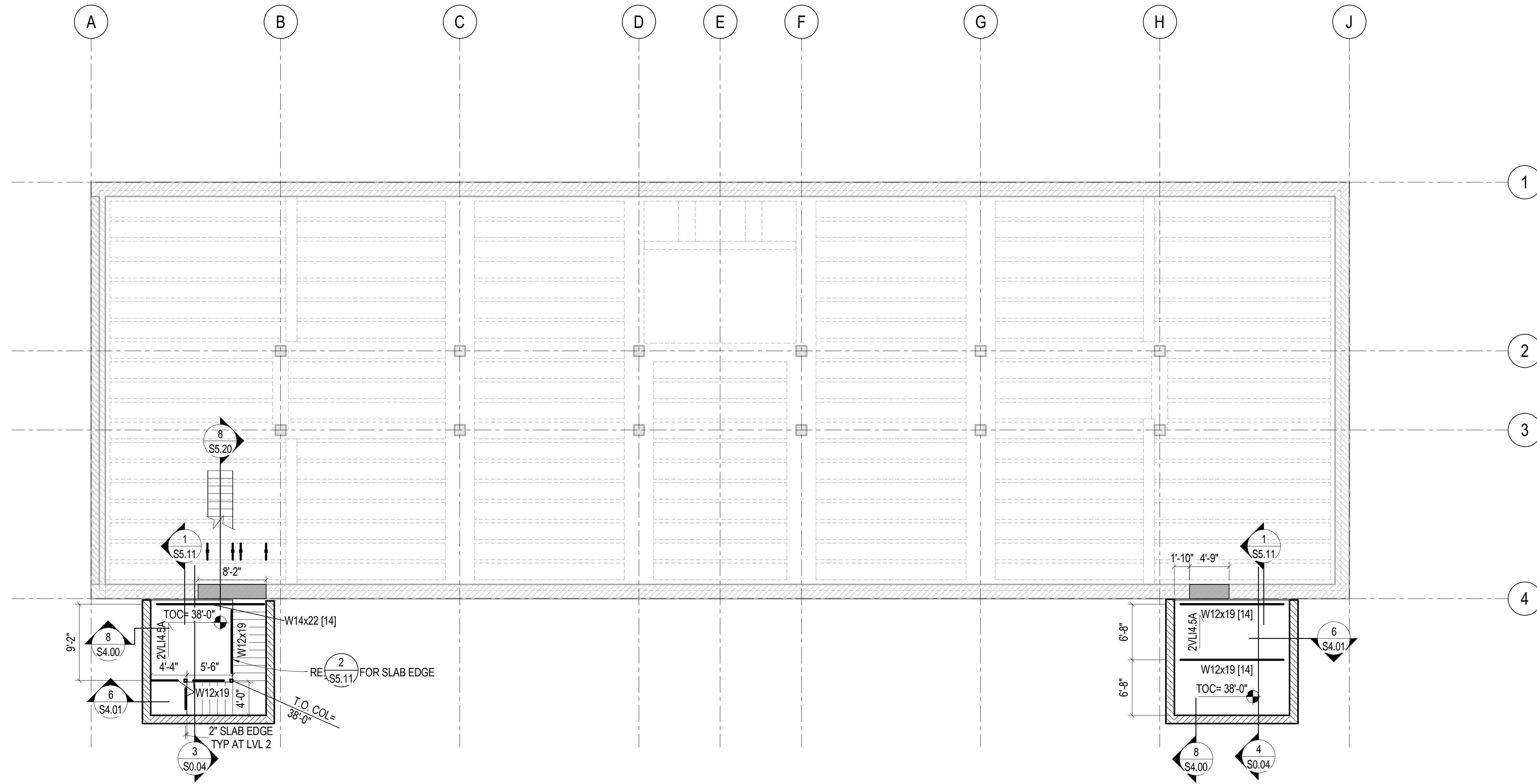
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DNE	BN

SHEET TITLE: 1
LEVEL 1 PLAN
SHEET NO.: 1

S1.01

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Level 2

1/8" = 1'-0"



STEEL FLOOR / ROOF FRAMING PLAN NOTES

1. SEE S0 SERIES SHEETS FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. SEE S5 SERIES SHEETS FOR TYPICAL STEEL DETAILS.
3. SEE S5.01, S5.10 FOR TYPICAL METAL DECK DETAILS AND SCHEDULE.
4. SPACE BEAMS AND JOISTS EQUALLY BETWEEN GRID LINES UNLESS DIMENSIONED OTHERWISE.
5. TOP OF BEAM ELEVATION = BOTTOM OF METAL DECK UNLESS NOTED OTHERWISE ON PLAN.
6. SEE S4.00, S4.01 FOR TYPICAL STRUCTURAL MASONRY WALL DETAILS.

DEMOLITION NOTES

1. DOOR OPENINGS TO BE CUT ARE SHOWN ON PLAN SHADED ALONG EXISTING GRID 4.
2. REFER TO DETAIL 3/S4.01 FOR OPENING SUPPORT.
3. DO NOT OVERCUT CORNERS.
4. CONTRACTOR TO TAKE CARE TO MINIMIZE DEMOLITION SOUNDS AND VIBRATION.

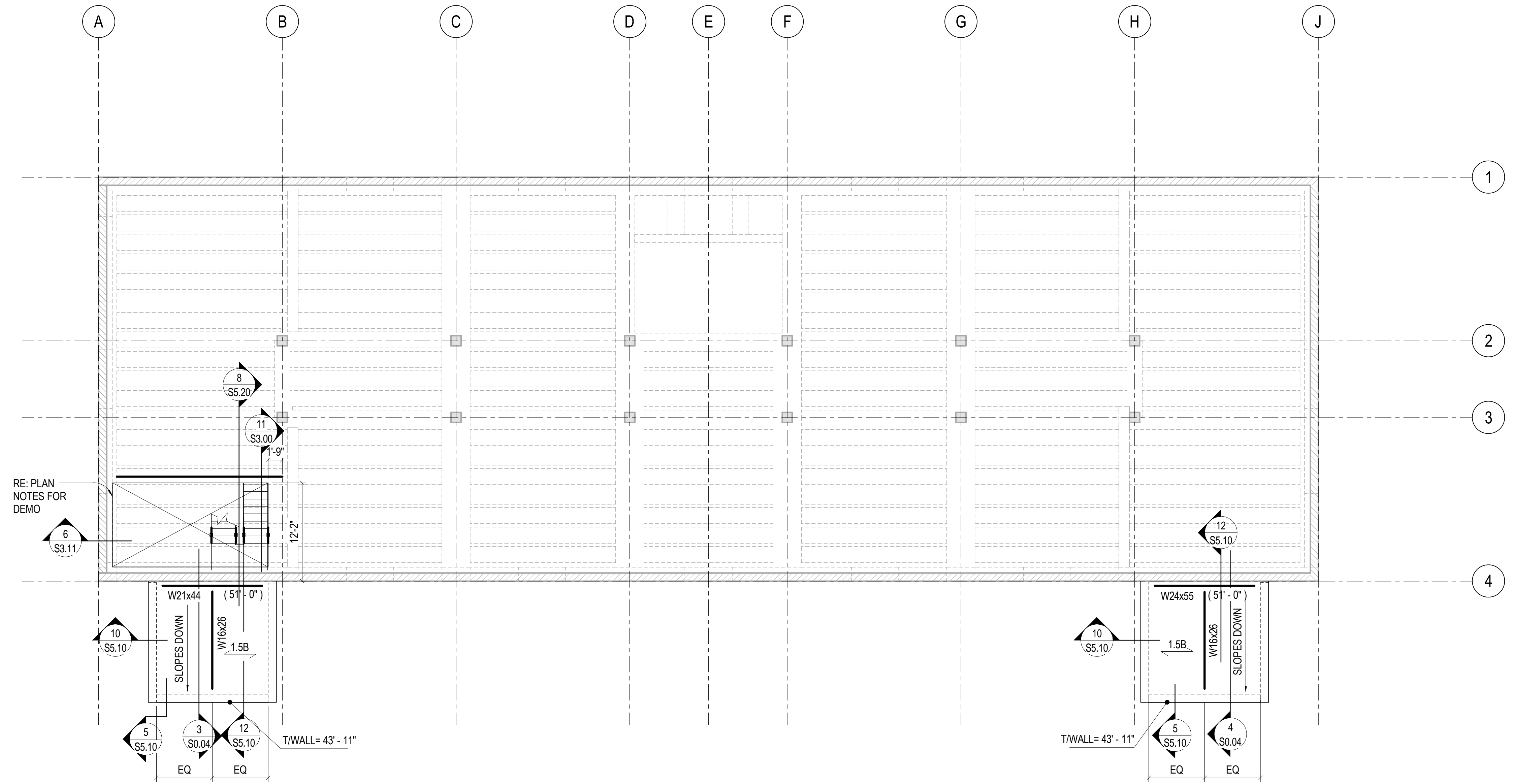
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DESIGNED	BN

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LEVEL 2 PLAN
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S1.02



ROOF

1/8" = 1'-0"



STEEL FLOOR / ROOF FRAMING PLAN NOTES

1. SEE S0 SERIES SHEETS FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. SEE S5 SERIES SHEETS FOR TYPICAL STEEL DETAILS.
3. SEE S5.01, S5.10 FOR TYPICAL METAL DECK DETAILS AND SCHEDULE.
4. SPACE BEAMS AND JOISTS EQUALLY BETWEEN GRID LINES UNLESS DIMENSIONED OTHERWISE.
5. TOP OF BEAM ELEVATION = BOTTOM OF METAL DECK UNLESS NOTED OTHERWISE ON PLAN.
6. SEE S4.00, S4.01 FOR TYPICAL STRUCTURAL MASONRY WALL DETAILS.

DEMOLITION NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION DIMENSIONS.
2. WELD A TERMINATION ANCHOR TO ALL 'TOP' REINFORCING BARS IN JOISTS ALONG EXISTING GRID 'B' AND GROUT BACK SOLID. REFER TO DETAIL 11/S3.00.
3. CONTRACTOR TO TAKE CARE TO MINIMIZE DEMOLITION SOUNDS AND VIBRATION.

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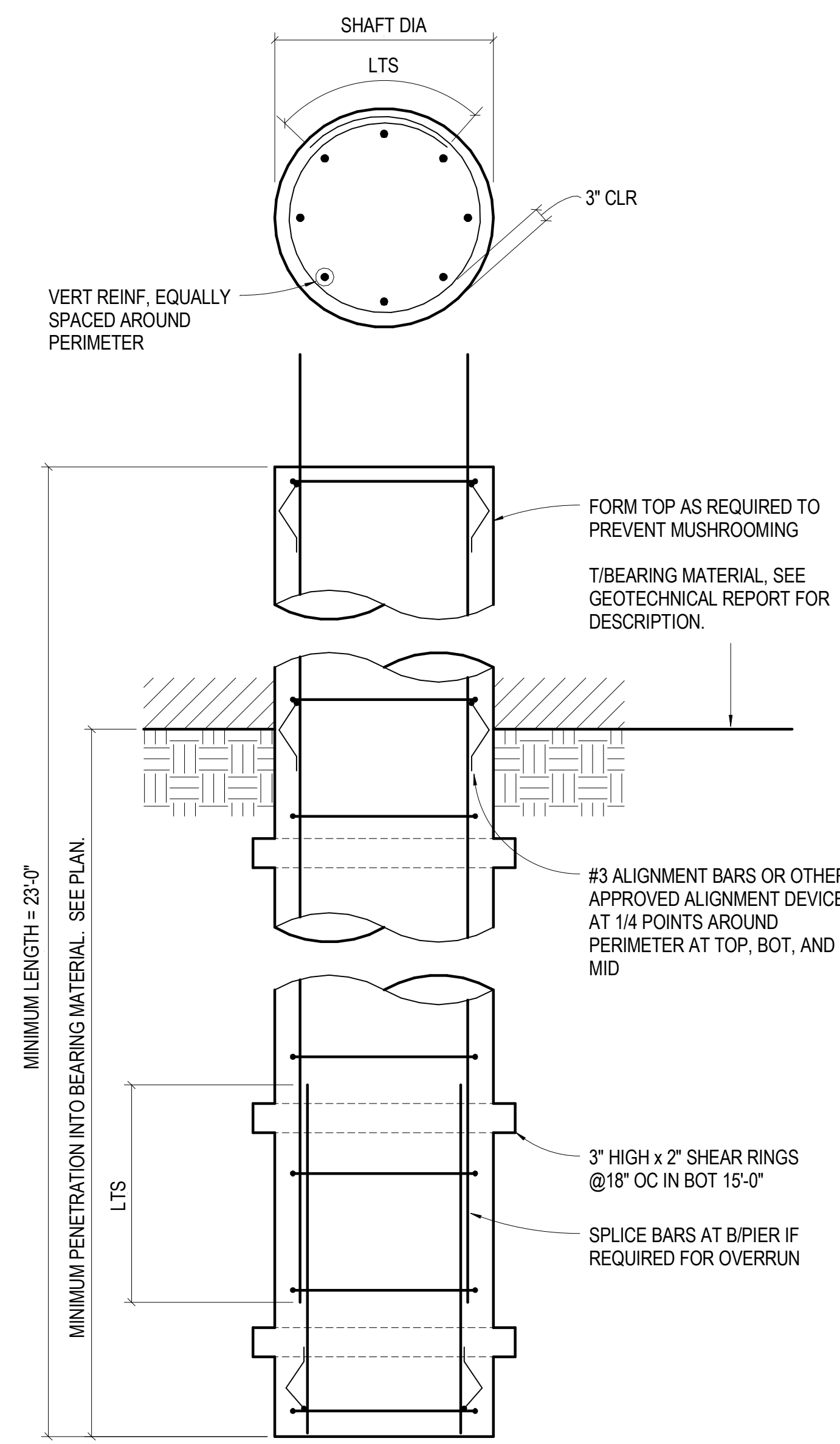
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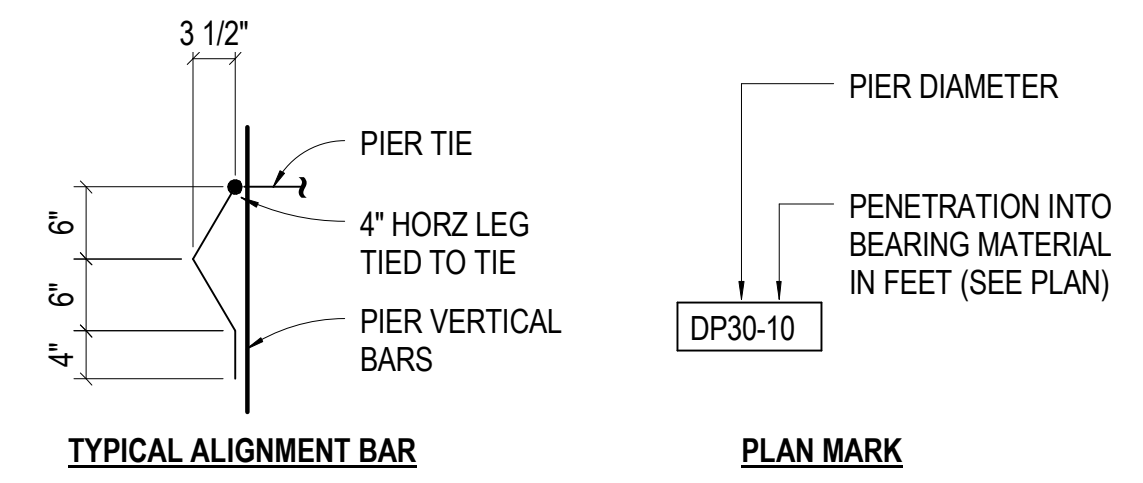
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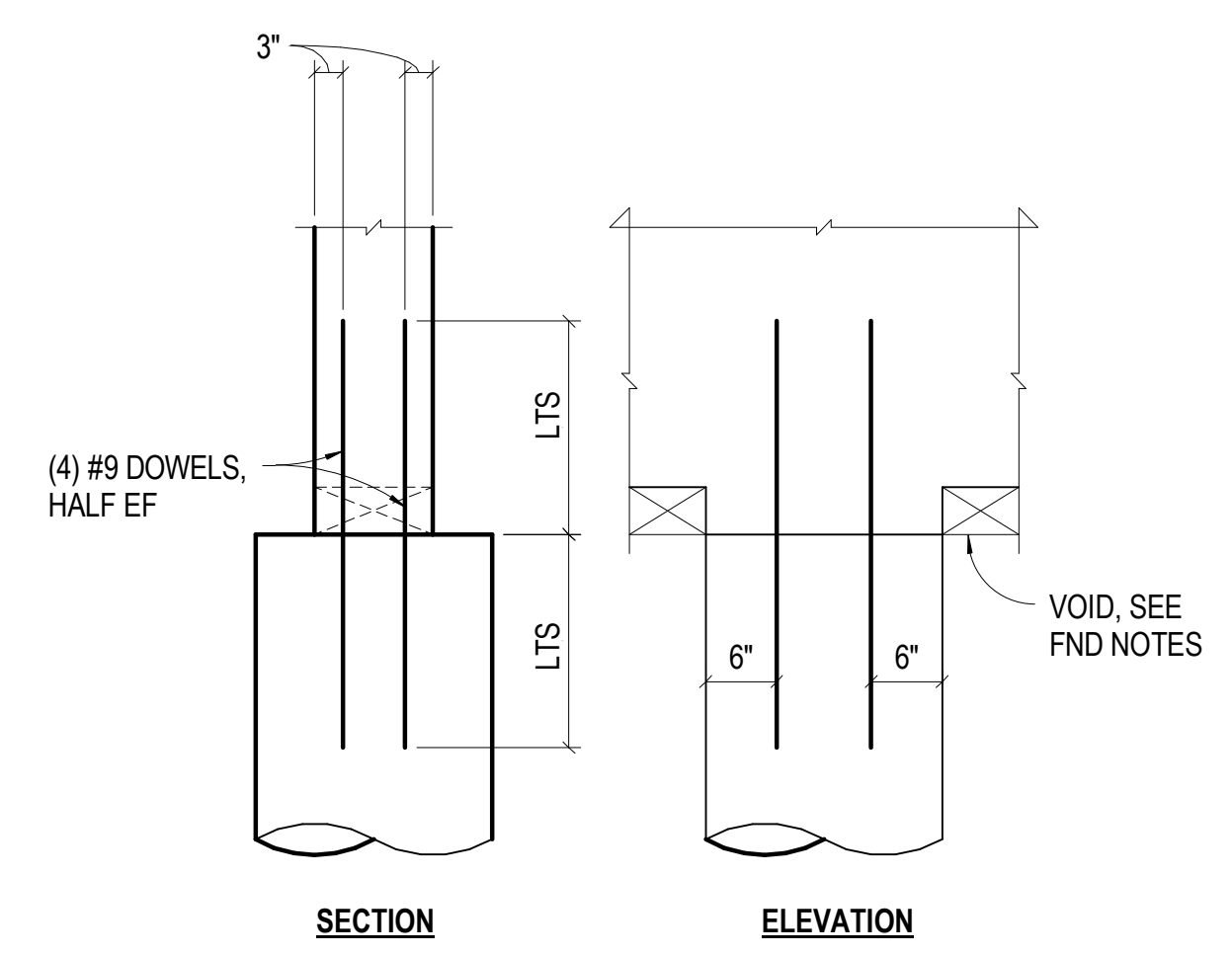
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ROOF PLAN
SHEET NO.: 1



TYPE	SHAFT DIA	REINFORCEMENT		REMARKS
		VERTICAL	TIES	
DP24	24"	(6) #6	#4@36"	



5 NO SCALE TYP DRILLED PIER AND SCHEDULE



3 NO SCALE TYP WALL/GR BM DOWELS AT PIER

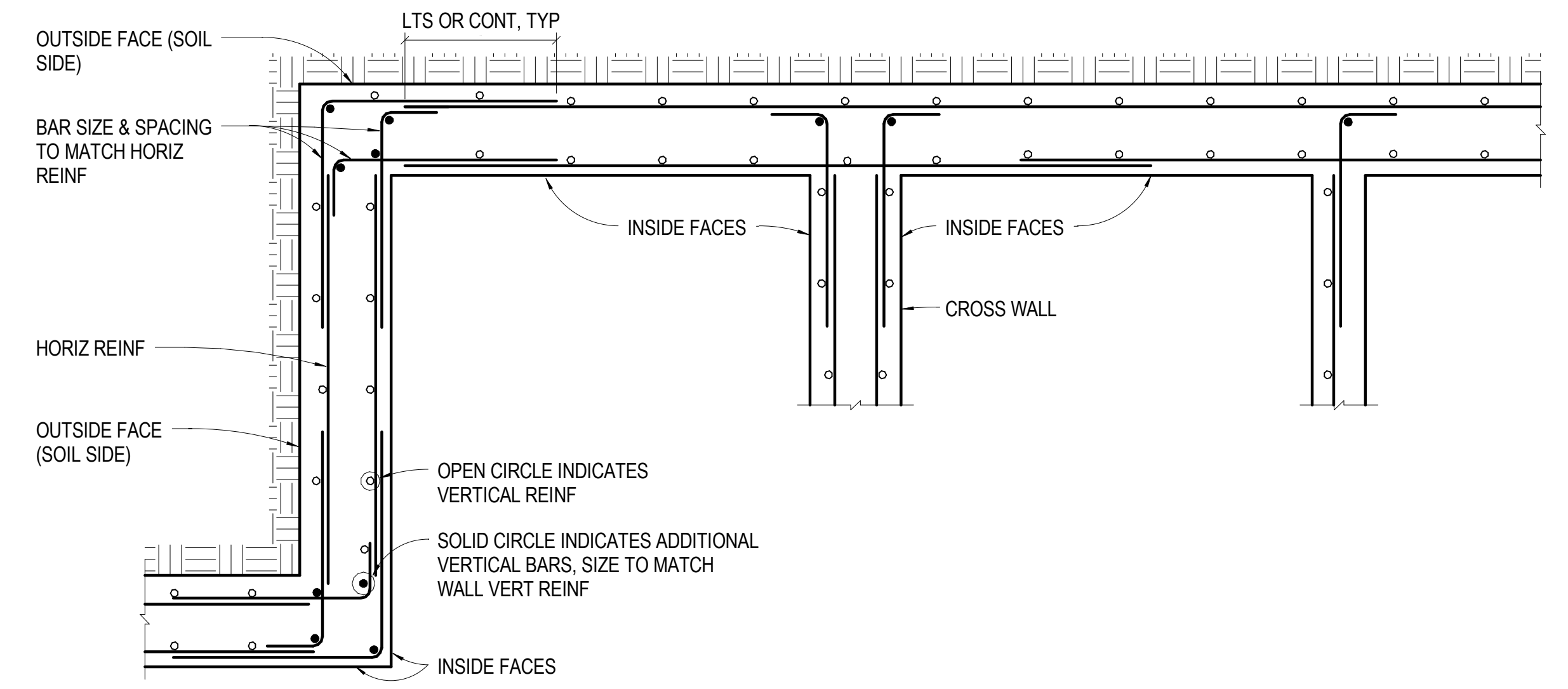
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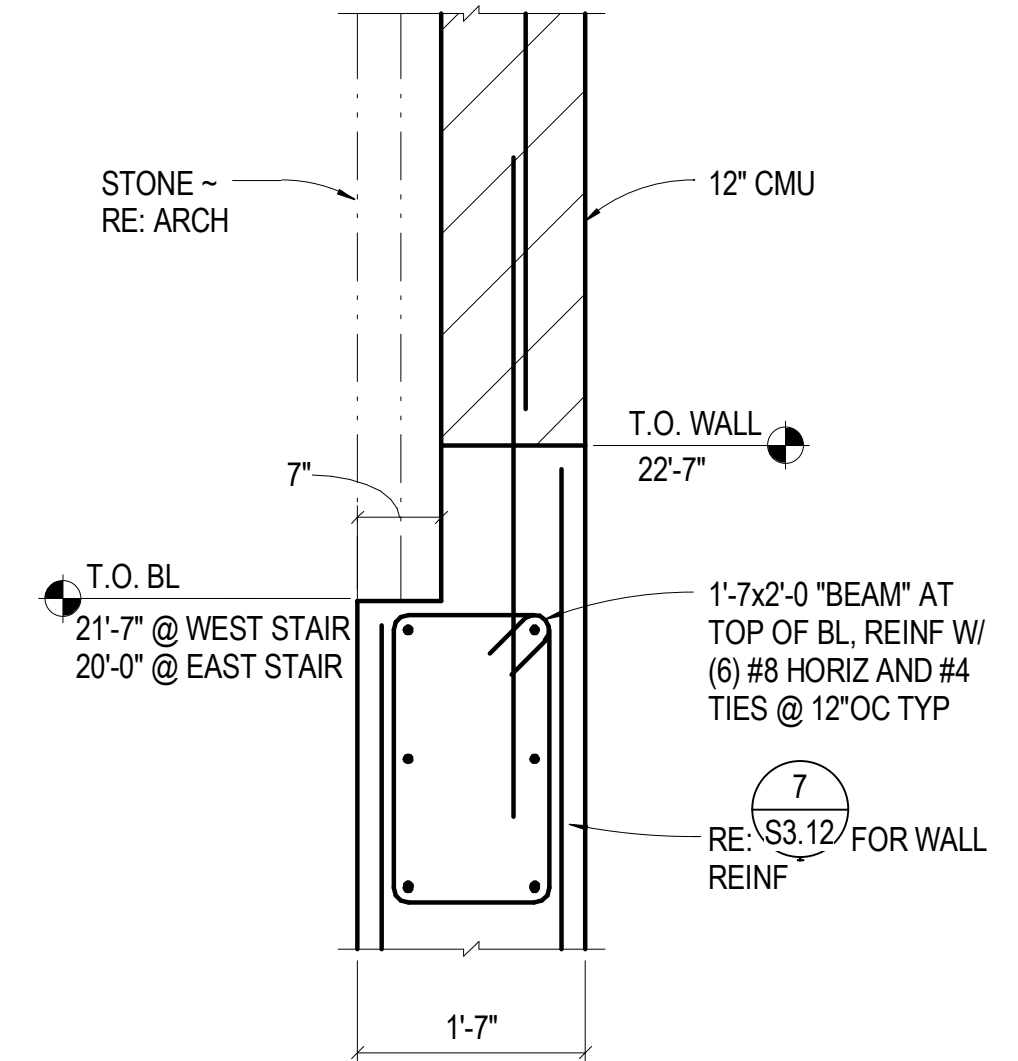
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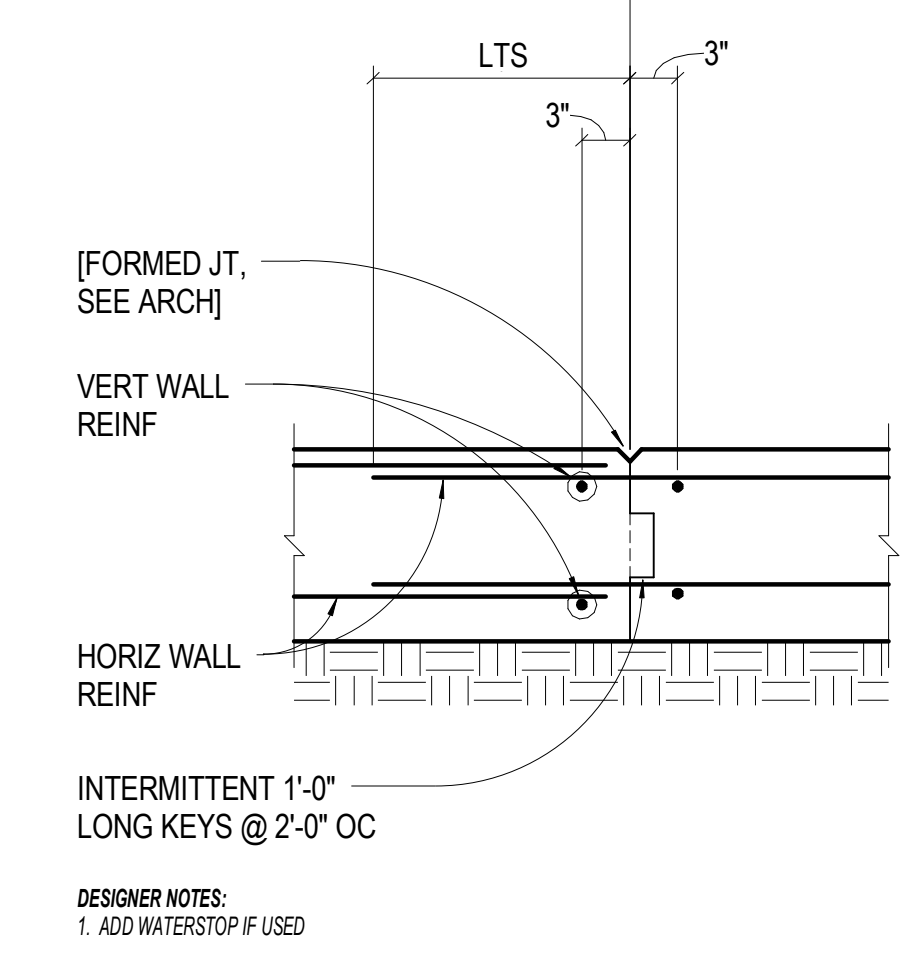
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TYP DRILLED PIER DETAILS
SHEET NO.: 1



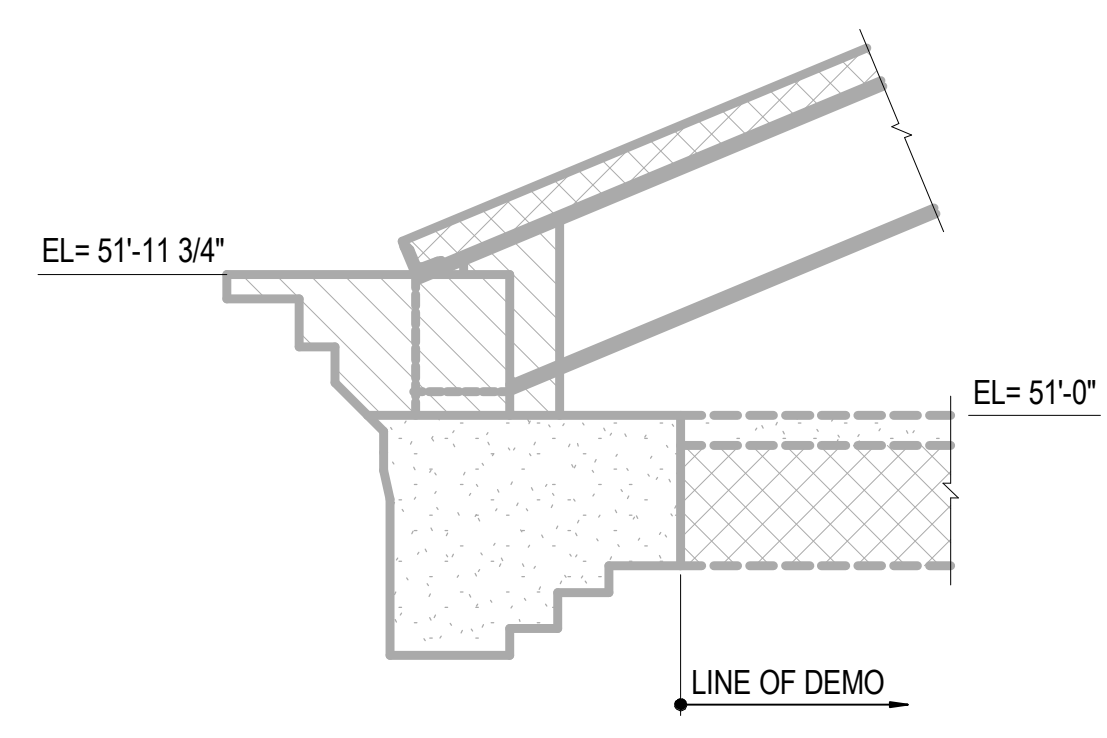
4 NO SCALE TYP GR BEAM/FND WALL W/TWO LAYERS REINF



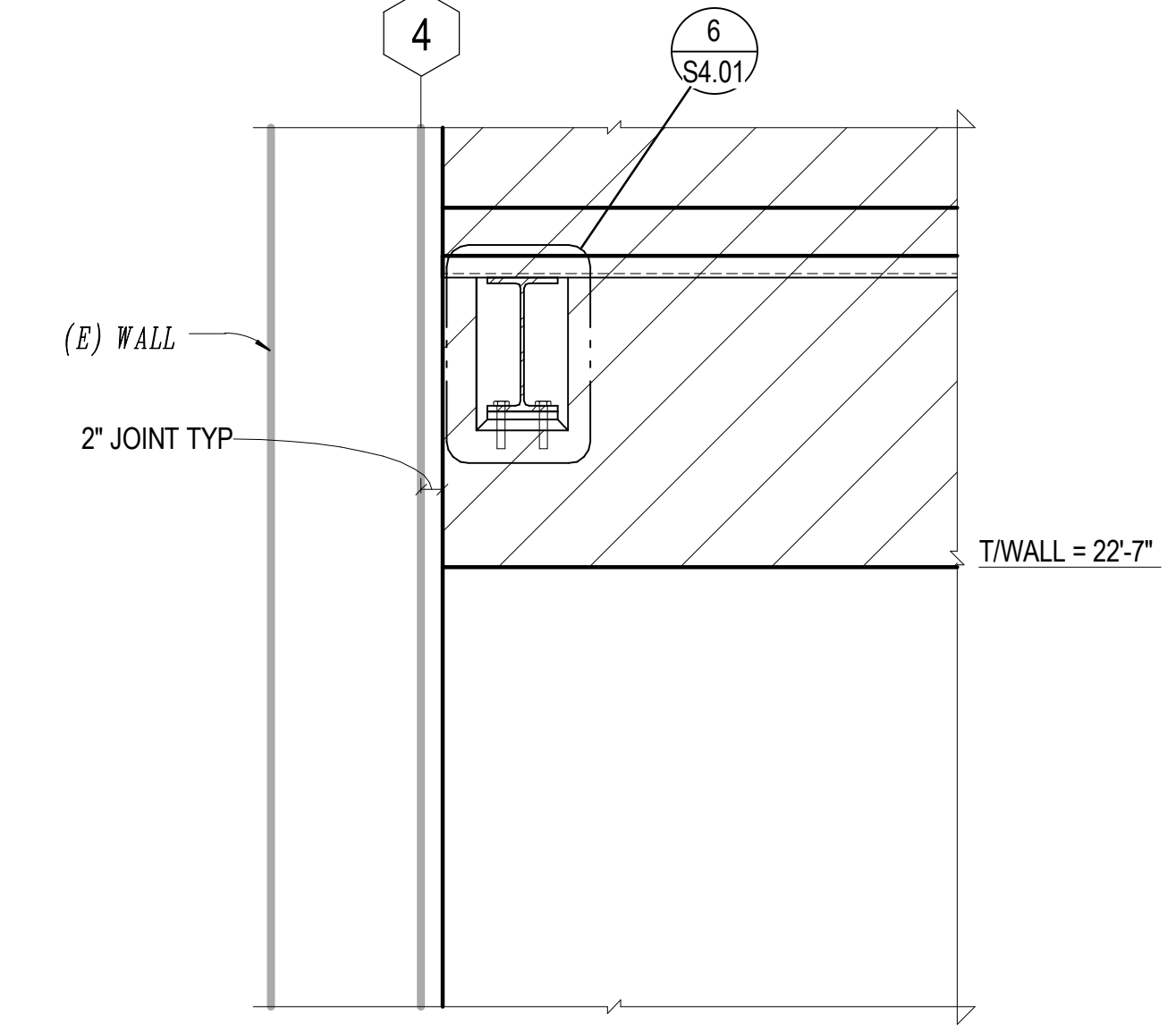
5 3/4" = 1'-0" TYPICAL TOP OF FOUNDATION WALL



2 NO SCALE TYP WALL VERTICAL CONST JOINT



6 NO SCALE DEMO AT WEST WALL



3 3/4" = 1'-0" INTERFACE AT EXISTING

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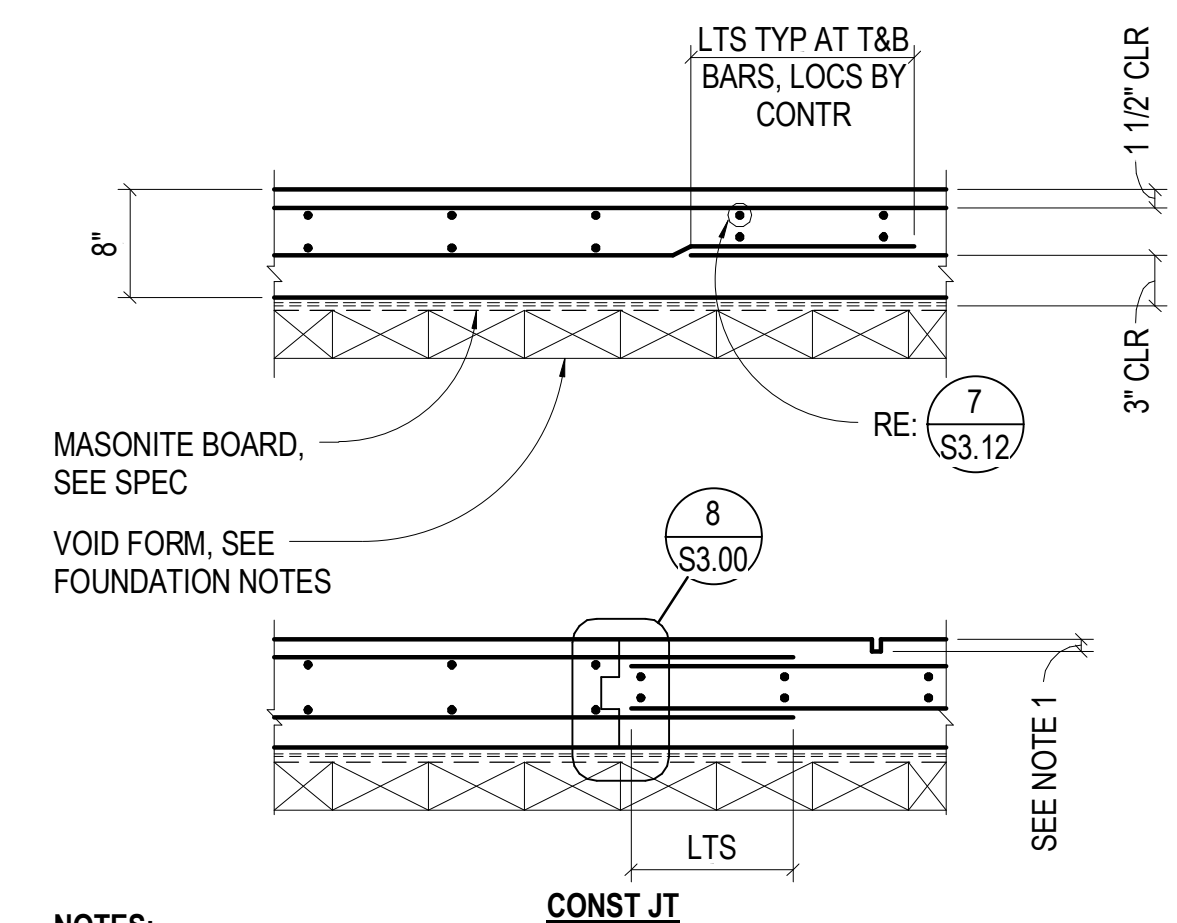
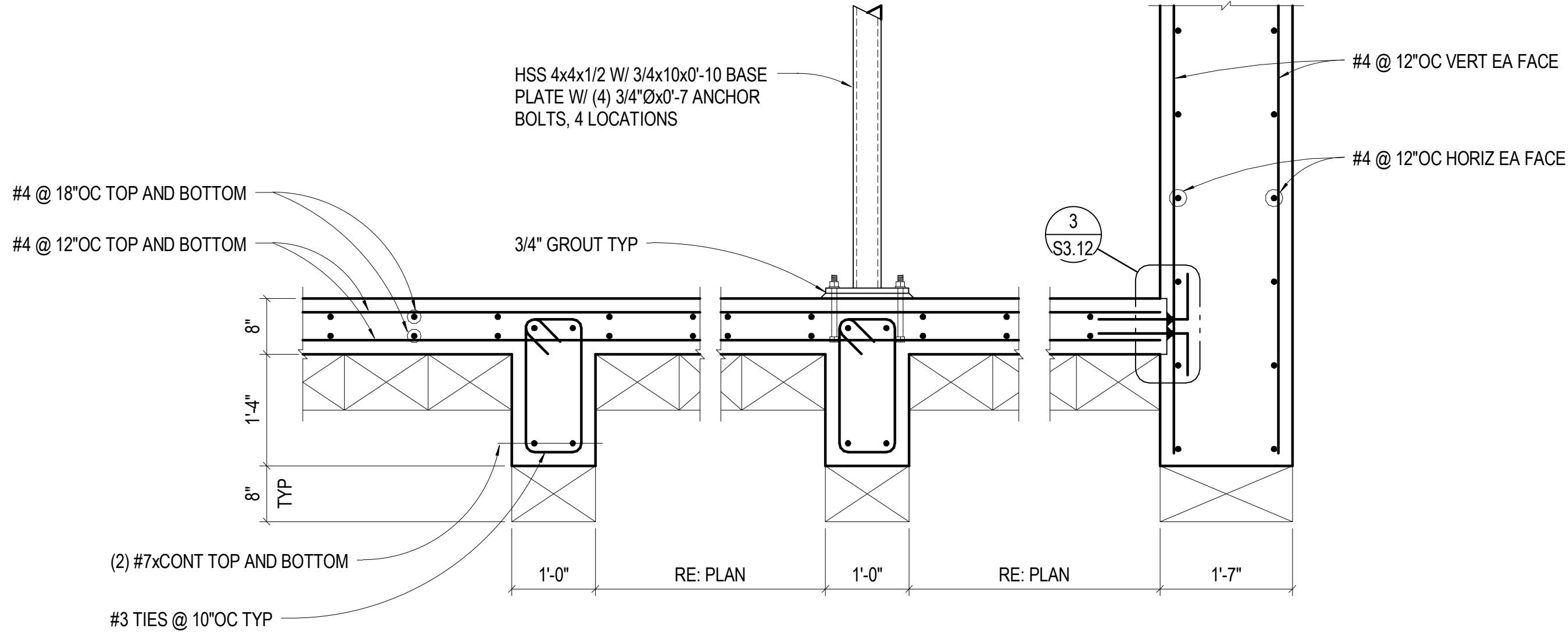
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DRAWN	DWG
DNE	BN

ISSUED FOR	DATE
DESIGN DEVELOPMENT	04.01.10
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DRAWN	DNE
CHECKED	BN

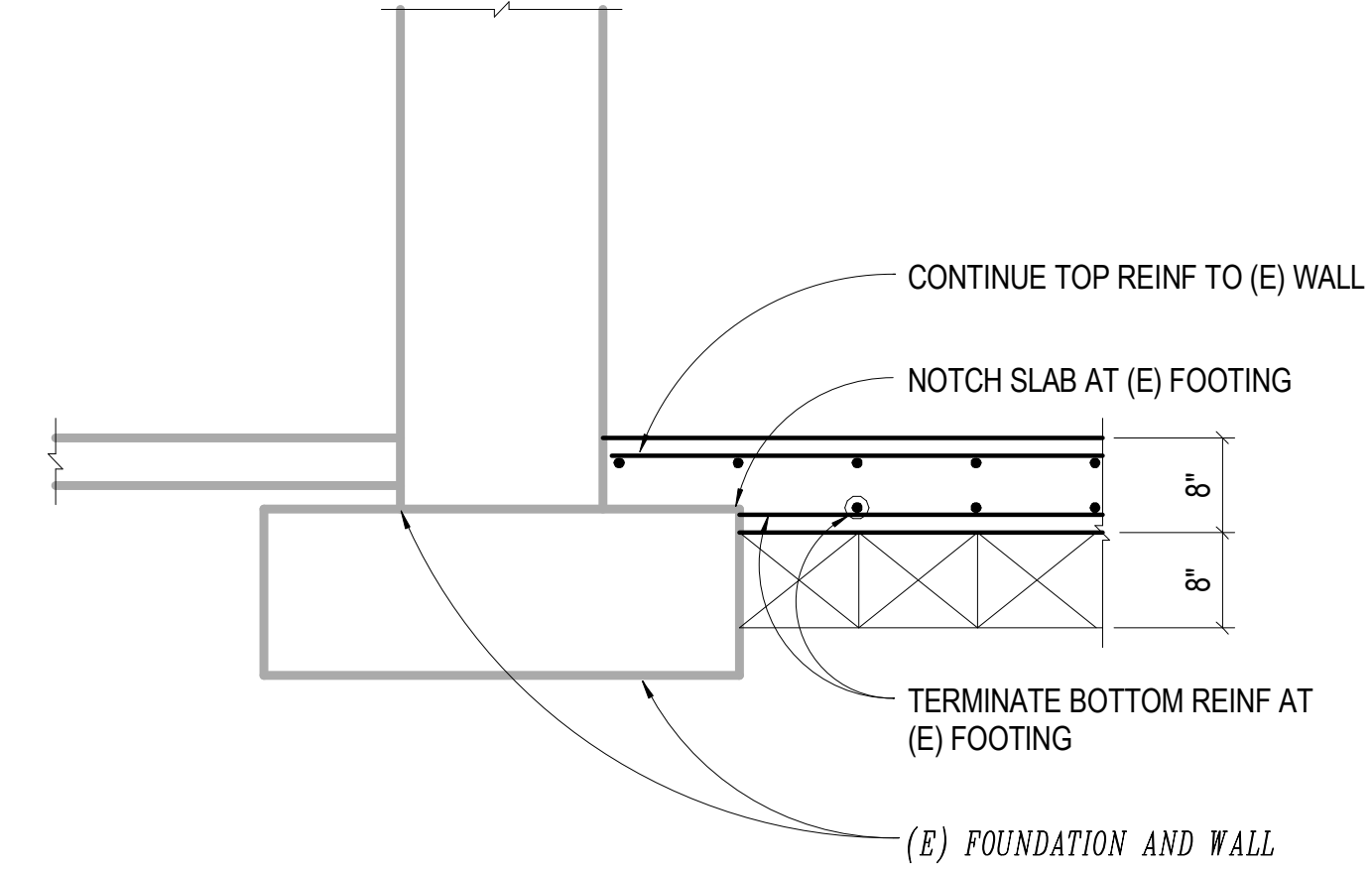
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TYP STRUCTURAL SOG DETAILS
SHEET NO.: 1



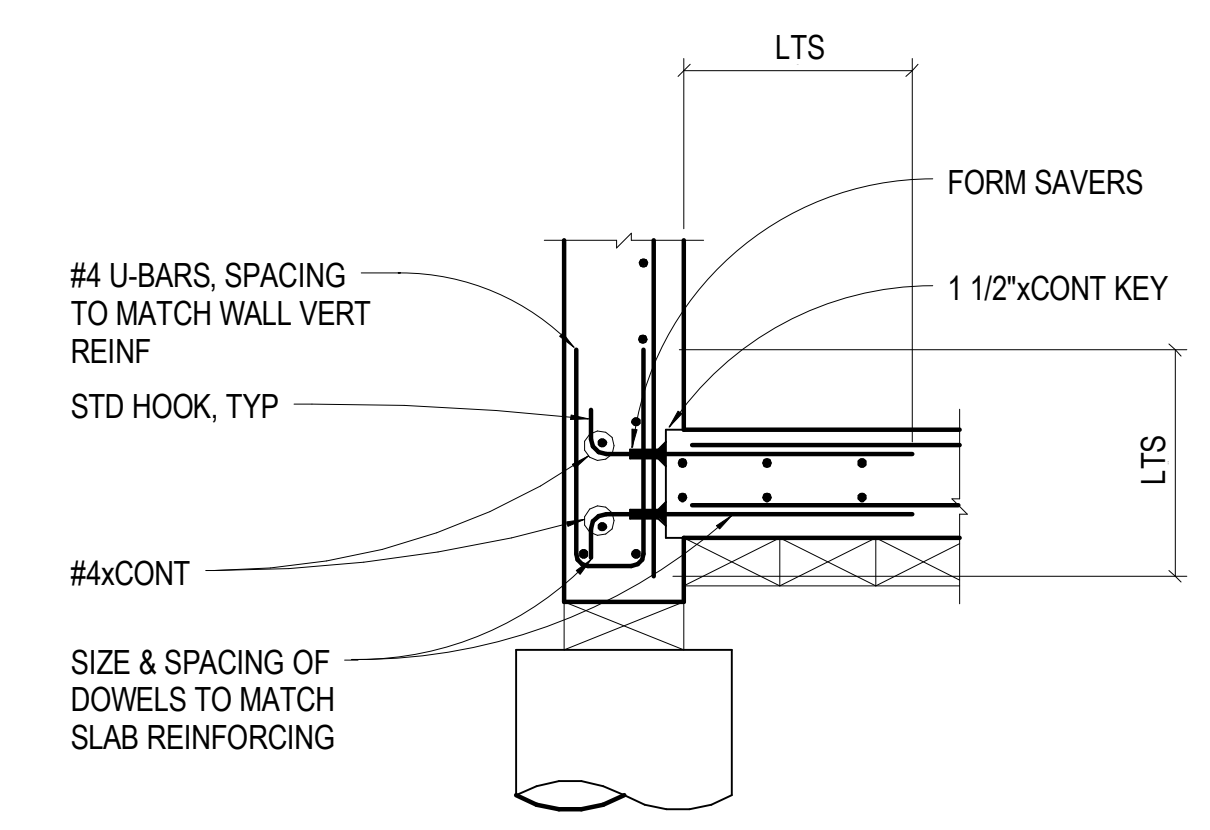
NOTES:
1. MAX DEPTH OF SCORES/SAWCUTS IN SLAB IS 1/8\".

7 3/4" = 1'-0" FOUNDATION AT CIP BEAMS

1 NO SCALE TYP STR SOG

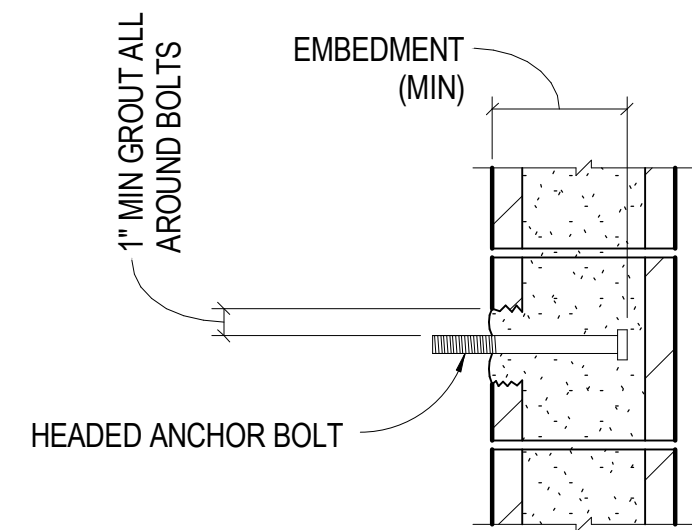


2 3/4" = 1'-0" FOUNDATION AT (E) BUILDING



3 NO SCALE TYP STR SOG AT B/WALL

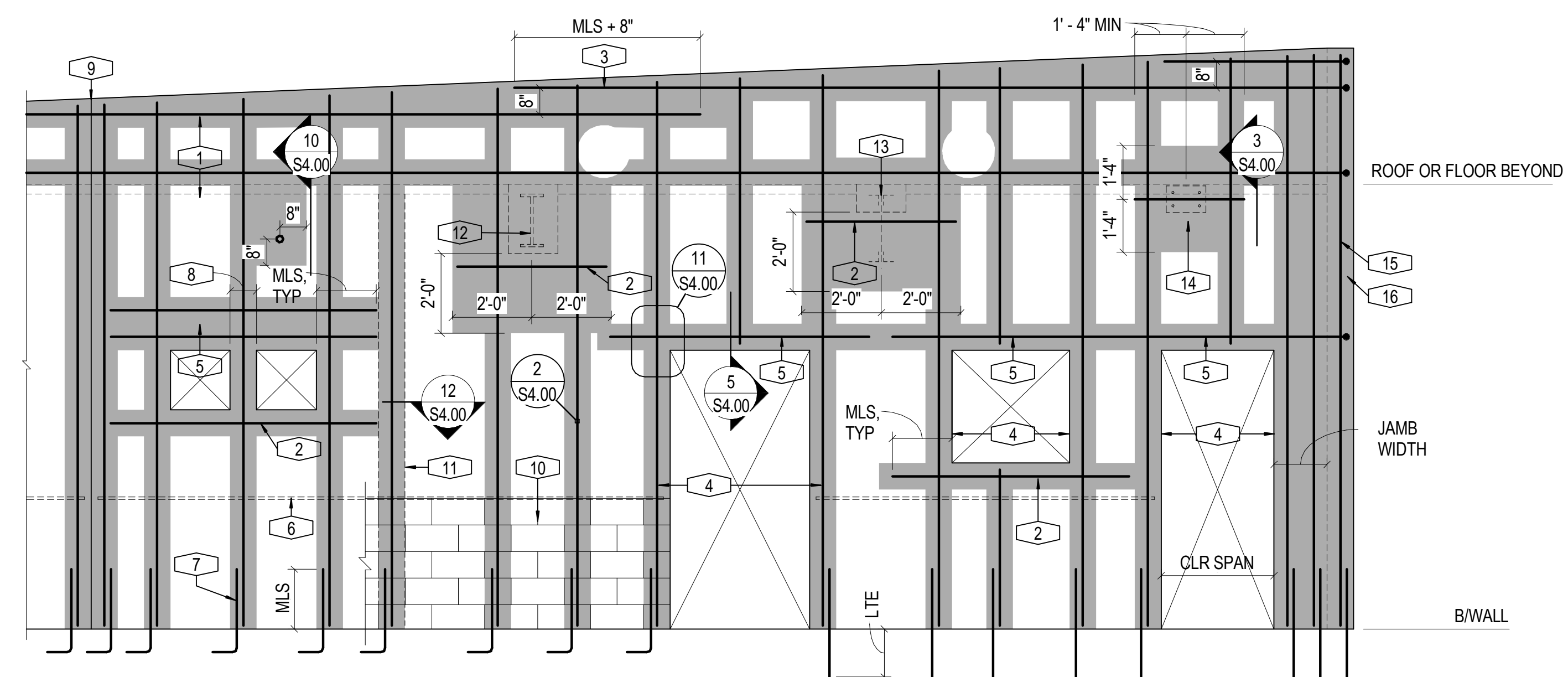
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BOLT	EMBEDMENT	MIN SPACING	MIN EDGE DIST
1/2"Ø	4"	8"	4"
5/8"Ø	4"	8"	4"
3/4"Ø	5"	10"	5"
7/8"Ø	6"	12"	6"

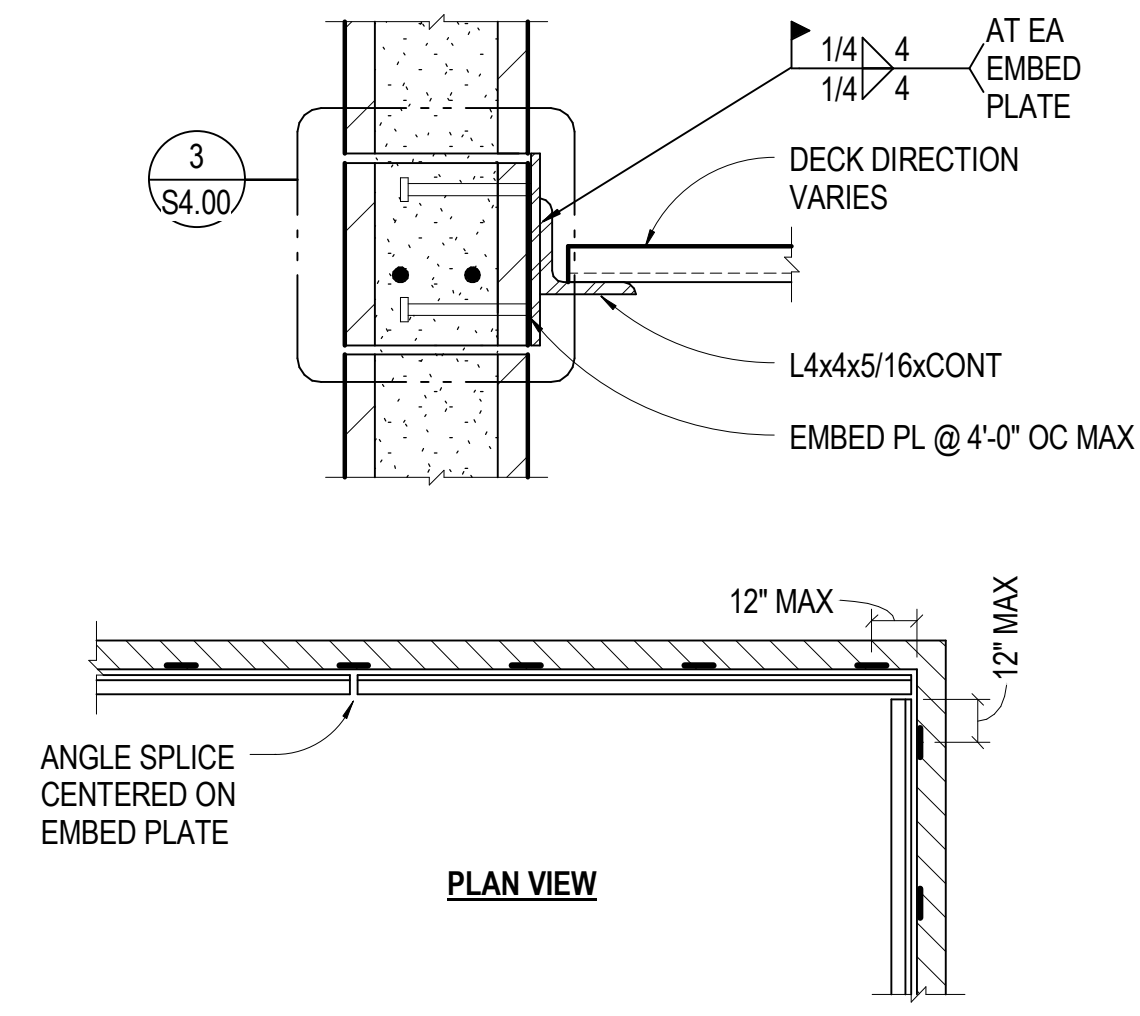
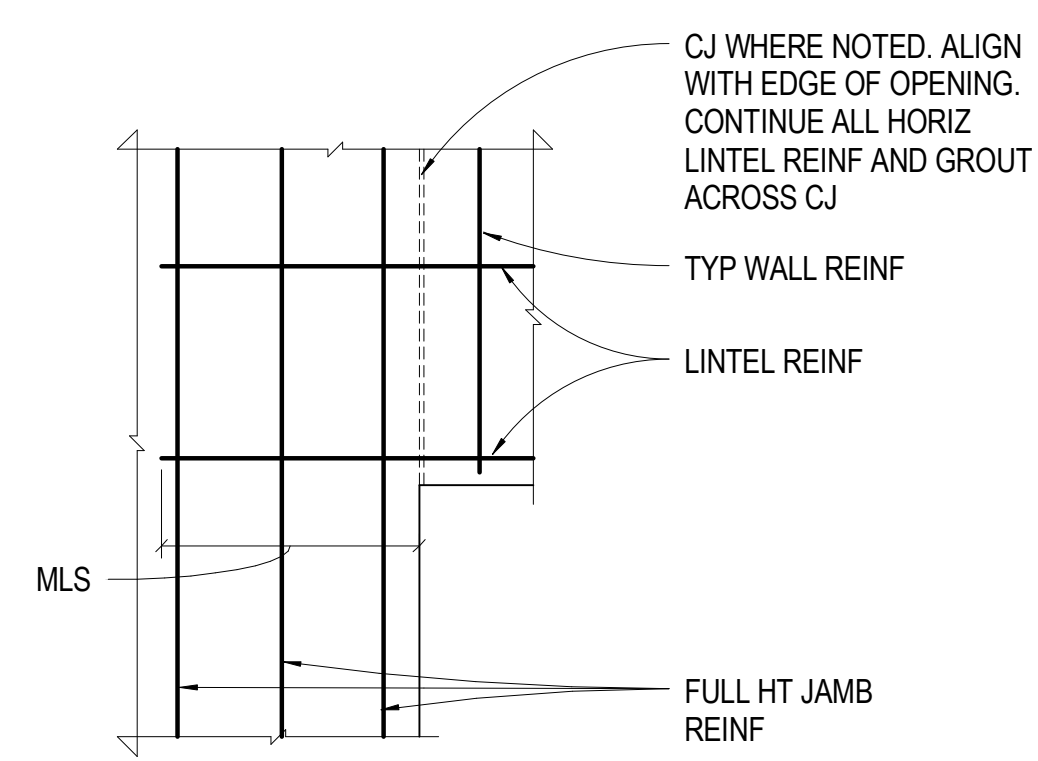
NOTES:
1. PROVIDE 3/4"Ø ANCHOR BOLTS UNO.

- KEYNOTES:**
- BOND BEAM W/ (2) #4 AT T/PARAPET AND EACH FLOOR AND ROOF LEVEL
 - BOND BEAM W/ (2) #4 AT BOTTOM OF ALL OPNGS
 - STEP BOND BEAM
 - JAMB REINF EACH SIDE OF ALL OPENINGS, FULL HEIGHT
 - MASONRY LINTEL
 - HORIZ JOINT REINF, SEE 'STRUCTURAL WALL SCHEDULE'
 - DOWELS TO MATCH LOCATION OF VERTICAL BARS. HOOK IF STRAIGHT BAR CANNOT BE EMBEDDED INTO CONCRETE LTE
 - AT SERIES OF TWO OR MORE OPNGS, MASONRY LINTEL REINF SHALL BE CONT. IF SPACE BTWN OPNGS IS NOT SUFFICIENT TO ACCOMMODATE 'TYP JAMB REINF' FOR BOTH OPENINGS. USE OVERALL WIDTH OF SERIES OR OPNGS TO DETERMINE LINTEL DEPTH AND REINF
 - CONTROL JOINT (CJ) OR END OF WALL
 - RUNNING BOND PATTERN, TYP, UNO.
 - PERPENDICULAR WALL BEYOND
 - STEEL BEAM BEYOND
 - STEEL JOIST BEYOND
 - EMBED PLATE BEYOND
 - VERT REINF ALL CORNERS
 - GROUT CELLS WITH REINFORCEMENT AND ALL SHADED AREAS



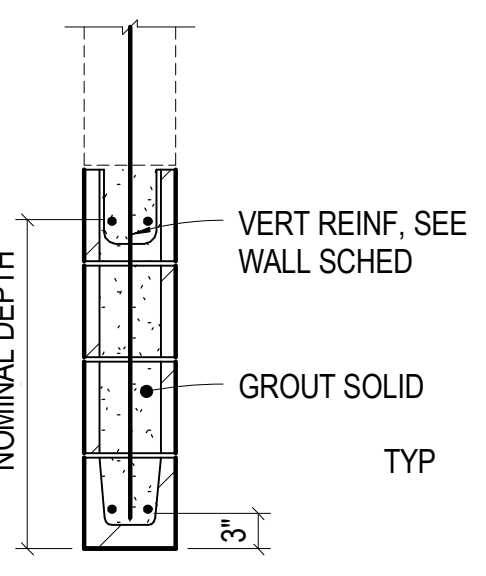
10 NO SCALE TYP EMBED BOLT IN MAS SCHEDULE

7 NO SCALE TYP STRUCTURAL MASONRY WALL ELEV



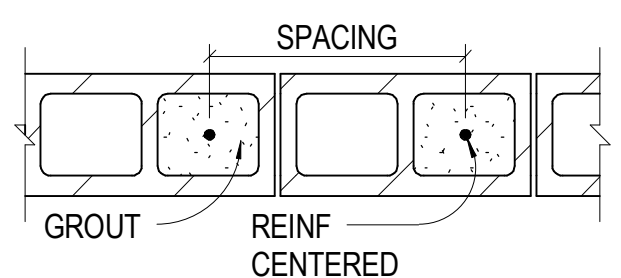
REINFORCED MASONRY LINTEL SCHEDULE

CLEAR SPAN, L	NOMINAL DEPTH	REINF
L ≤ 4'-0"	8"	(2) #4 BOT
4'-0" < L ≤ 8'-0"	16"	(2) #4 T&B
8'-0" < L ≤ 10'-0"	24"	(2) #5 T&B
10'-0" < L ≤ 12'-0"	32"	(2) #5 T&B
12'-0" < L ≤ 14'-0"	40"	(2) #6 T&B
14'-0" < L ≤ 16'-0"	48"	(4) #6 BOT (2 LAYERS) (2) #6 TOP
L > 16'-0"		REQUEST DESIGN FROM ENGINEER



STRUCTURAL MASONRY WALL SCHEDULE

MARK	WALL THK	REINFORCING				GROUT SOLID
		JOINT	VERT	HORIZ	DOWELS	
MW12	12"	NOTE 2	#5@8"	2-#5 @ 4'-0" OC	#5@8"	YES



NOTES:
1. ALL VERTICAL REINFORCEMENT SHALL BE CENTERED IN GROUTED CELLS
2. PROVIDE 'LADDER' TYPE HORIZONTAL JOINT REINFORCEMENT WITH 2-W1.7 WIRES (MIN) AT 16" OC, TYPICAL, AND AT 8" OC IN PARAPETS.

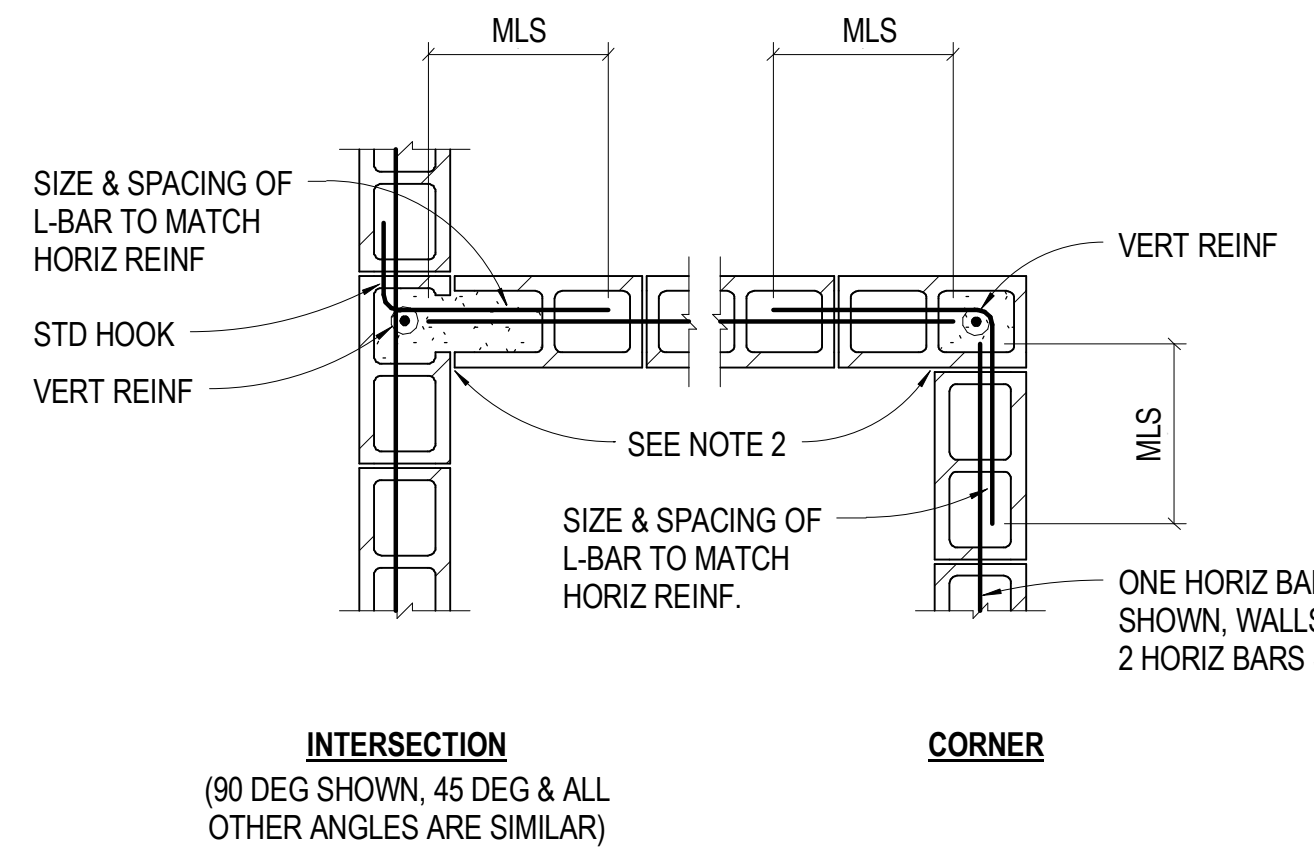
11 NO SCALE TYP STR MAS LINTEL SUPPORT

8 NO SCALE TYP STR MAS / MTL DECK

5 NO SCALE TYP STR MAS LINTEL

2 NO SCALE STR MASONRY WALL SCHEDULE

NOTES:
1. 90 DEG CORNER & INTERSECTION IS SHOWN. WALLS MEETING AT OTHER ANGLES SHALL HAVE (a) BLOCK OVERLAPPING 4" MIN AT ALL HEAD JOINTS OR (b) FACE SHELL BROKEN OPEN AND COMMON CORE GROUTED
2. IF HEAD JOINT ALIGNS OVER THE FULL WALL HEIGHT, BREAK OPEN FACE SHELLS AND GROUT WALLS TOGETHER FULL HEIGHT, TYP AT ALL CORNERS AND INTERSECTIONS

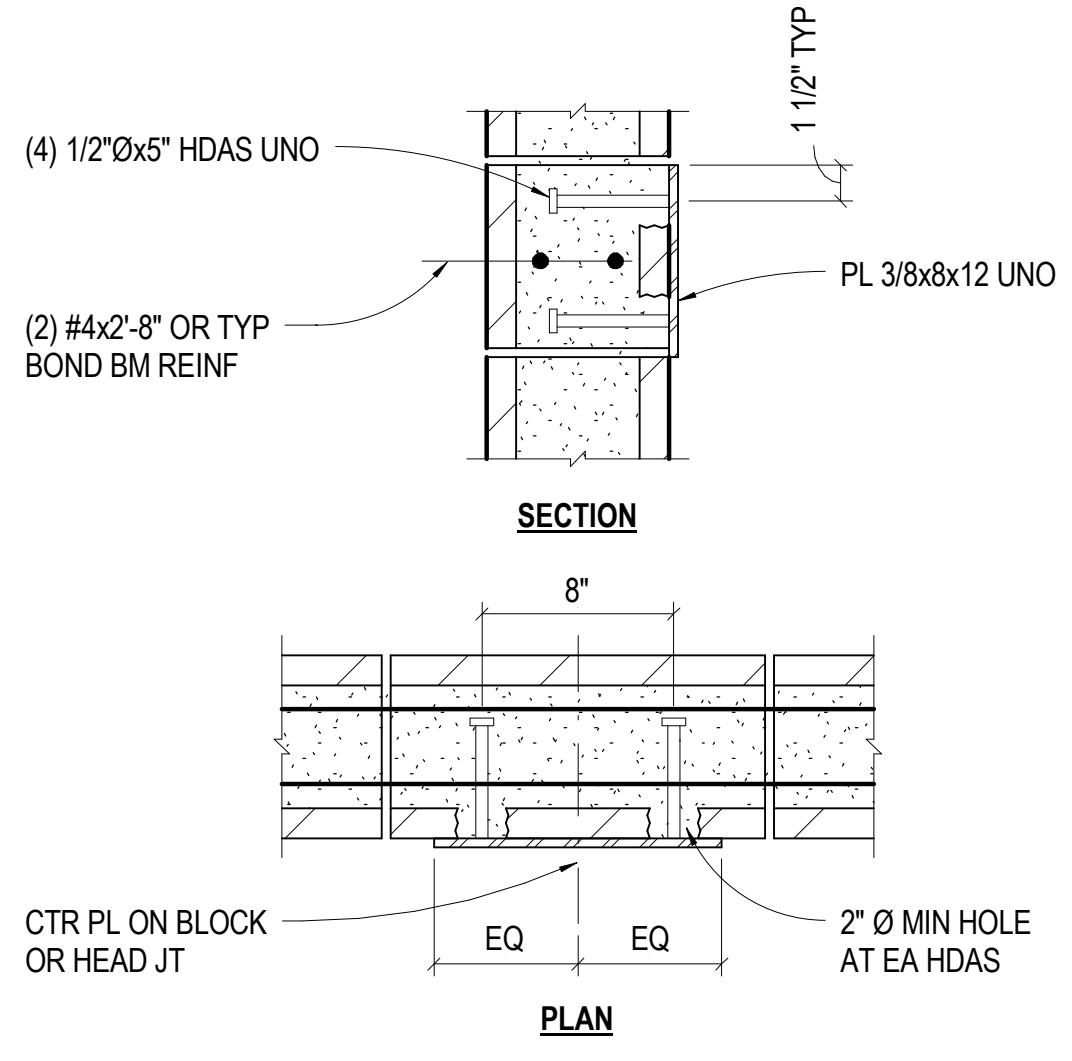


MASONRY LAP SPLICE (MLS) & DEVELOPMENT LENGTH SCHEDULE

$f_m = 1500 \text{ psi}$
 $f_y = 60 \text{ ksi}$
IBC 2006

BAR SIZE	8" CMU	12" CMU		8" CMU		12" CMU	
		REINF CENTERED (IN)	MIN REINF SPACING (IN)	REINF AT FACE (IN)	MIN REINF SPACING (IN)	REINF AT FACE (IN)	MIN REINF SPACING (IN)
#3	#10	16	8	16	8	16	8
#4	#13	21	8	21	8	26	8
#5	#16	26	16	26	8	40	8
#6	#19	43	24	40	16	54	8
#7	#22	60	24	46	24	63	16
#8	#25	72	32	61	24	72	24
#9	#29	81	40	73	32	81	24

NOTES:
1. IF REINF SPACING IS LESS THAN MINIMUM SPACING NOTED, USE LAP SPLICE LENGTH OF 72 x BAR DIAMETER.
2. SMALLER BAR LAP LENGTH SHALL BE USED WHEN SPICING DIFFERENT SIZED BARS.
3. LAP LENGTHS SPECIFICALLY DETAILED ON DRAWINGS SHALL GOVERN INSTEAD OF SCHEDULED LAP LENGTHS
4. IF REINFORCING IS SPECIFIED AS EPOXY COATED, INCREASE LENGTHS BY 50%



12 NO SCALE TYP STR MASONRY WALL CORNER REINF

6 NO SCALE MASONRY LAP SPLICE SCHEDULE

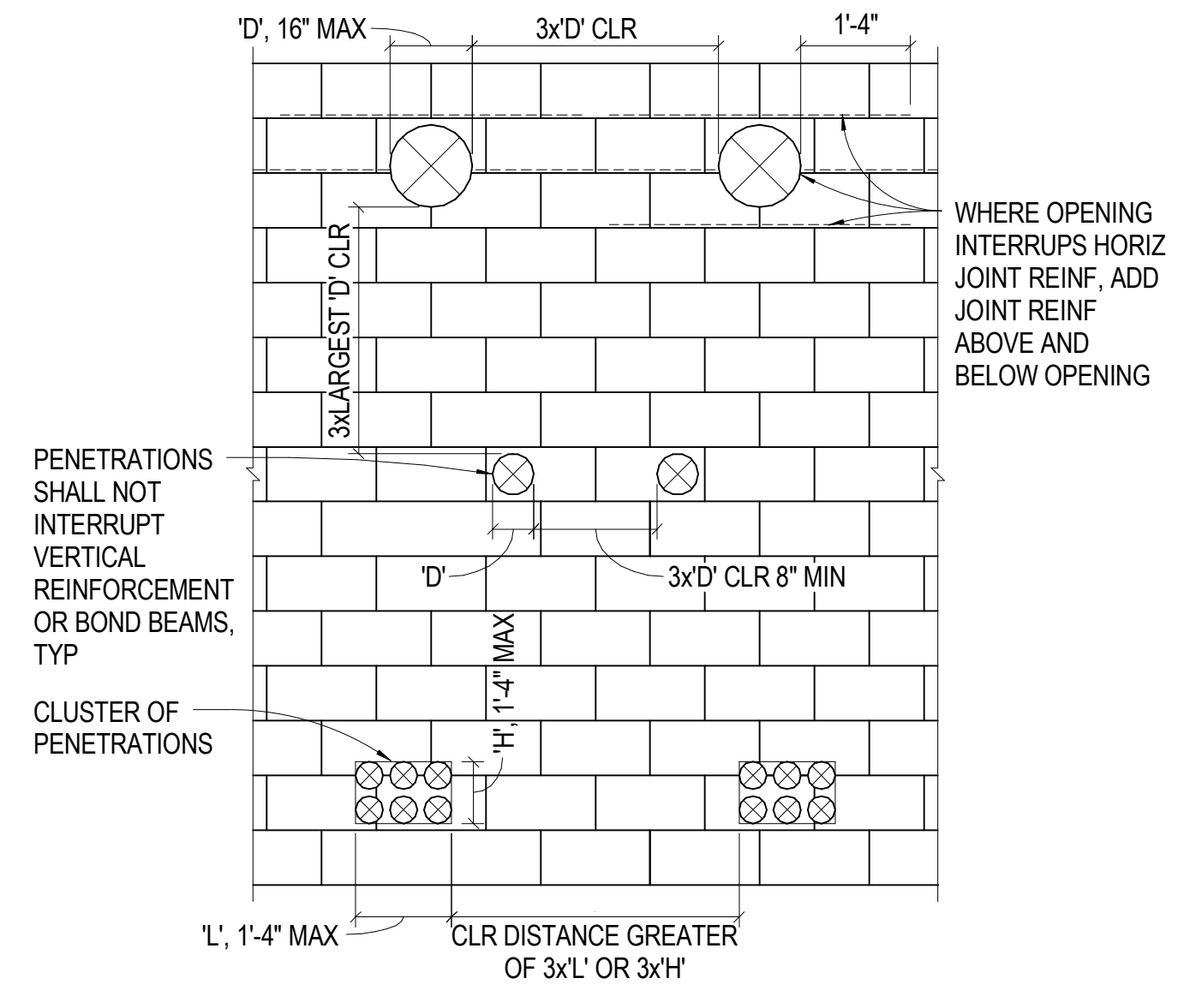
3 NO SCALE TYP EMBED PLATE TO MAS WALL

DESIGNERS: EMILY GUGLIELMO
PRINCIPAL: BEN NELSON
EOR: BEN NELSON
PROJECT MANAGER: EMILY GUGLIELMO
MM JOB #: 19132.S.89
DATE PRINTED: 5/14/2010 8:25:02 AM

ISSUED FOR	DATE
DESIGN DEVELOPMENT	04.01.10
100% CD	04.28.10
FOR CONSTRUCTION	05.14.10

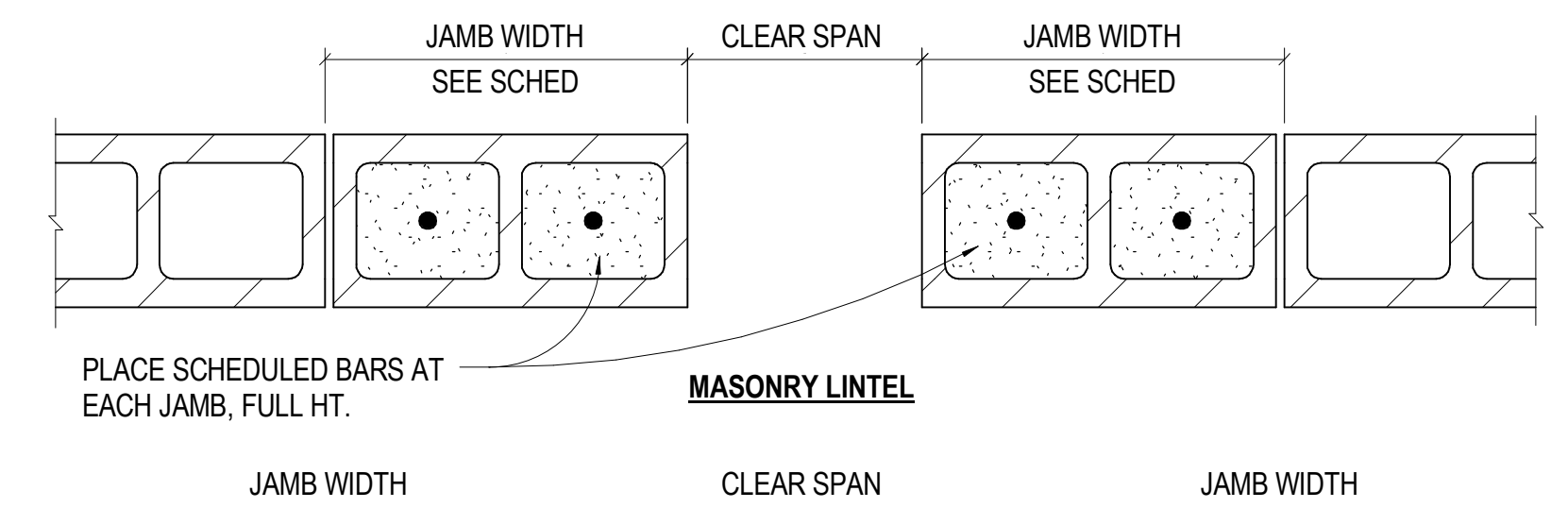
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PROJECT NO: 19132.S.89
DATE: 08.28.09
DRAWN: DNE
CHECKED: BN
SHEET TITLE: TYP MASONRY DETAILS
SHEET NO.: 1

\$4.00

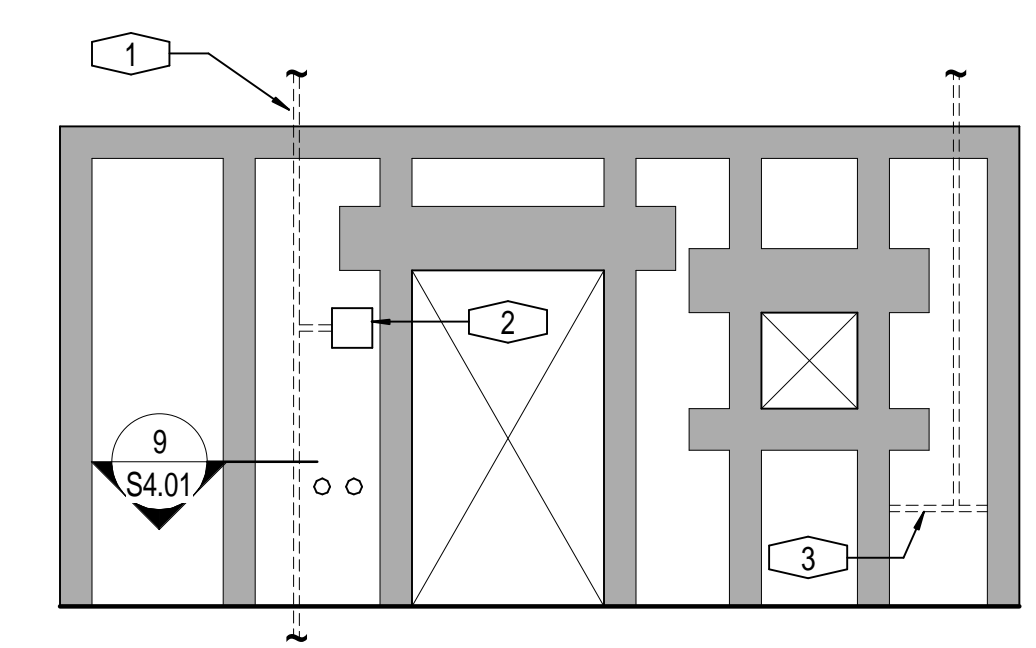


EXTERIOR MASONRY WALL JAMB SCHEDULE

LINTEL CLEAR SPAN	REINF FULL HT WALL	JAMB WIDTH
L ≤ 4'-0"	(2) #5	8"
4'-0" < L ≤ 6'-8"	(2) #6	8"
6'-8" < L ≤ 10'-0"	(4) #5	16"
10'-0" < L ≤ 12'-0"	(4) #6	16"
12'-0" < L ≤ 16'-0"	(6) #6	24"
L < 16'-0"	REQUEST FROM ENGR	

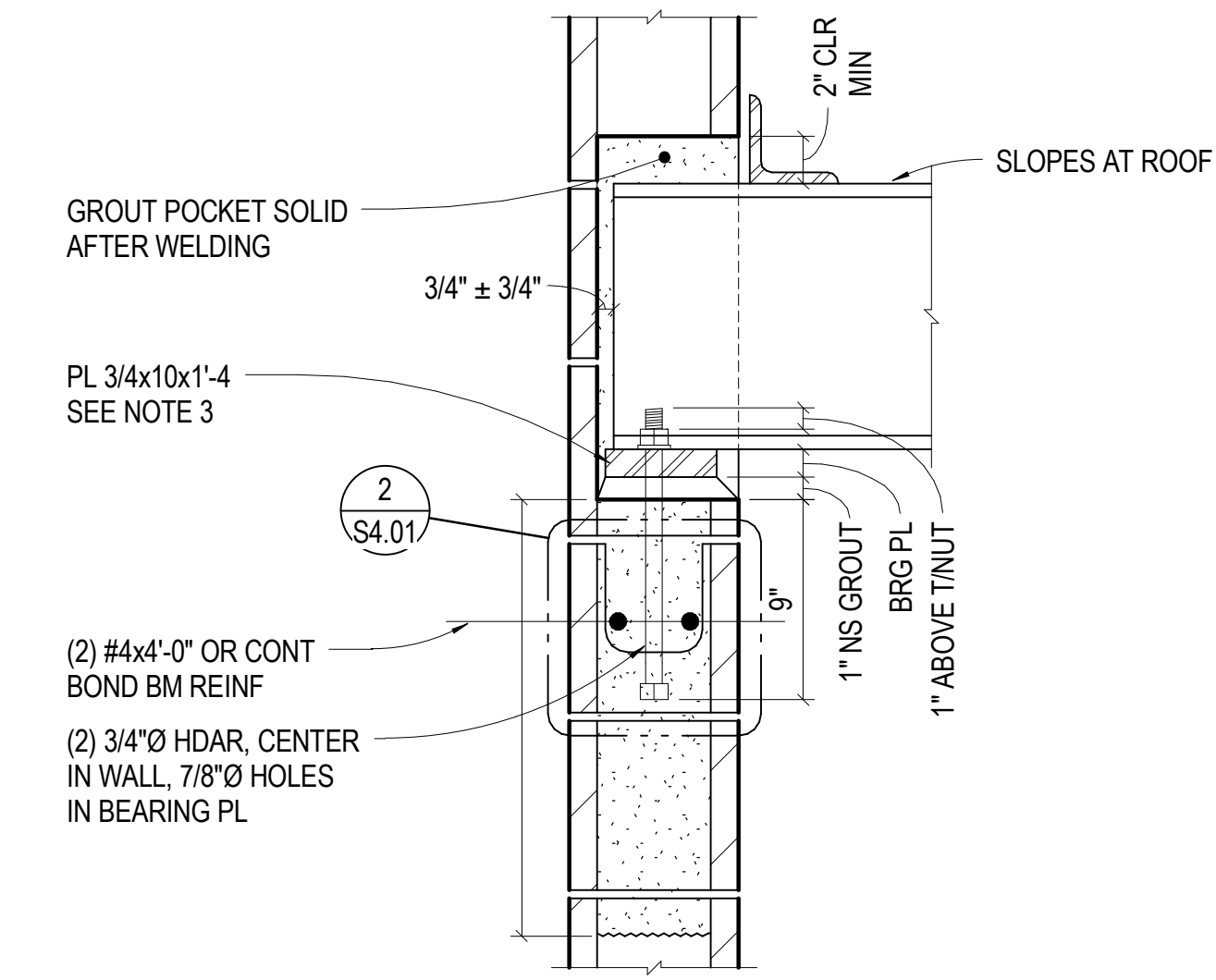
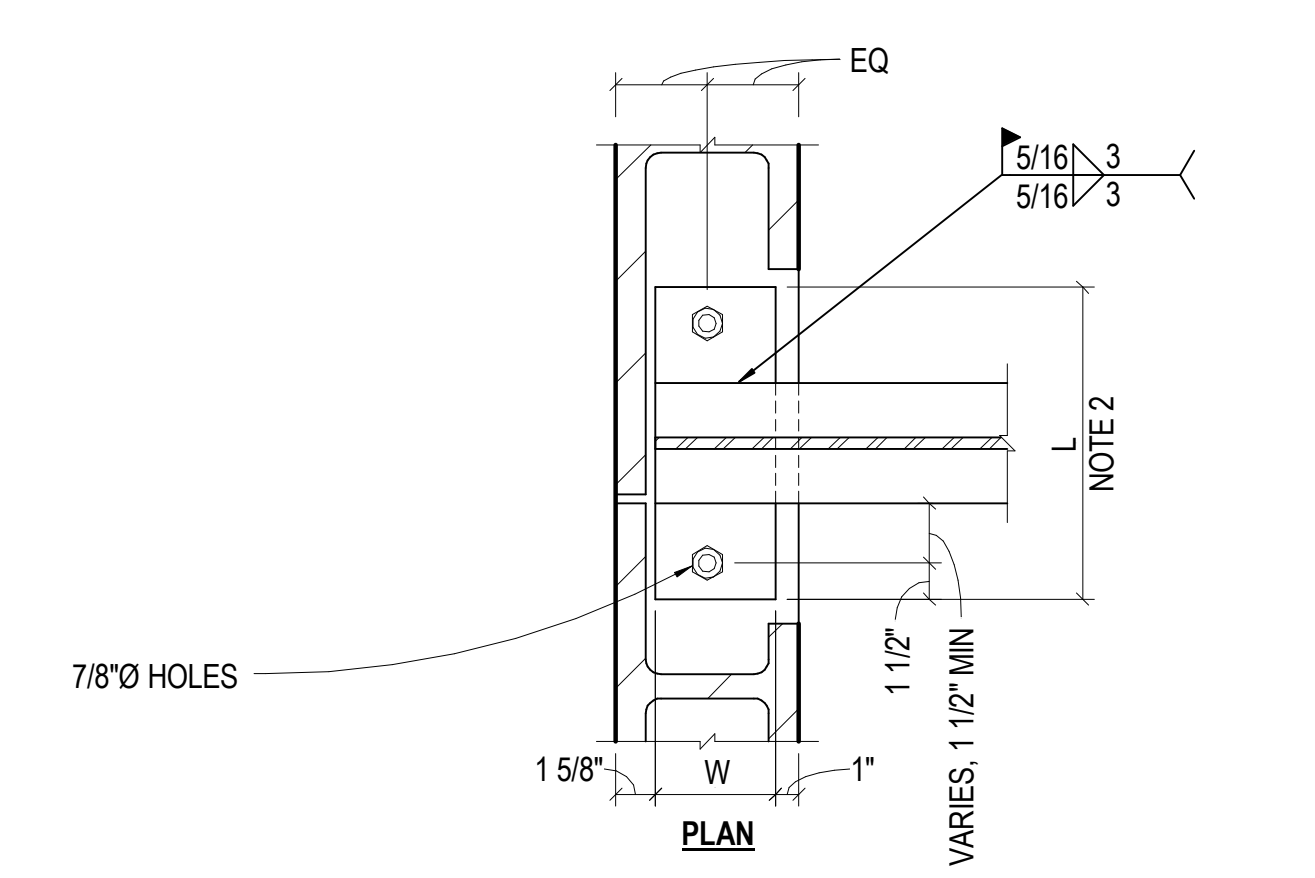


7 NO SCALE TYP STR MAS / PIPING



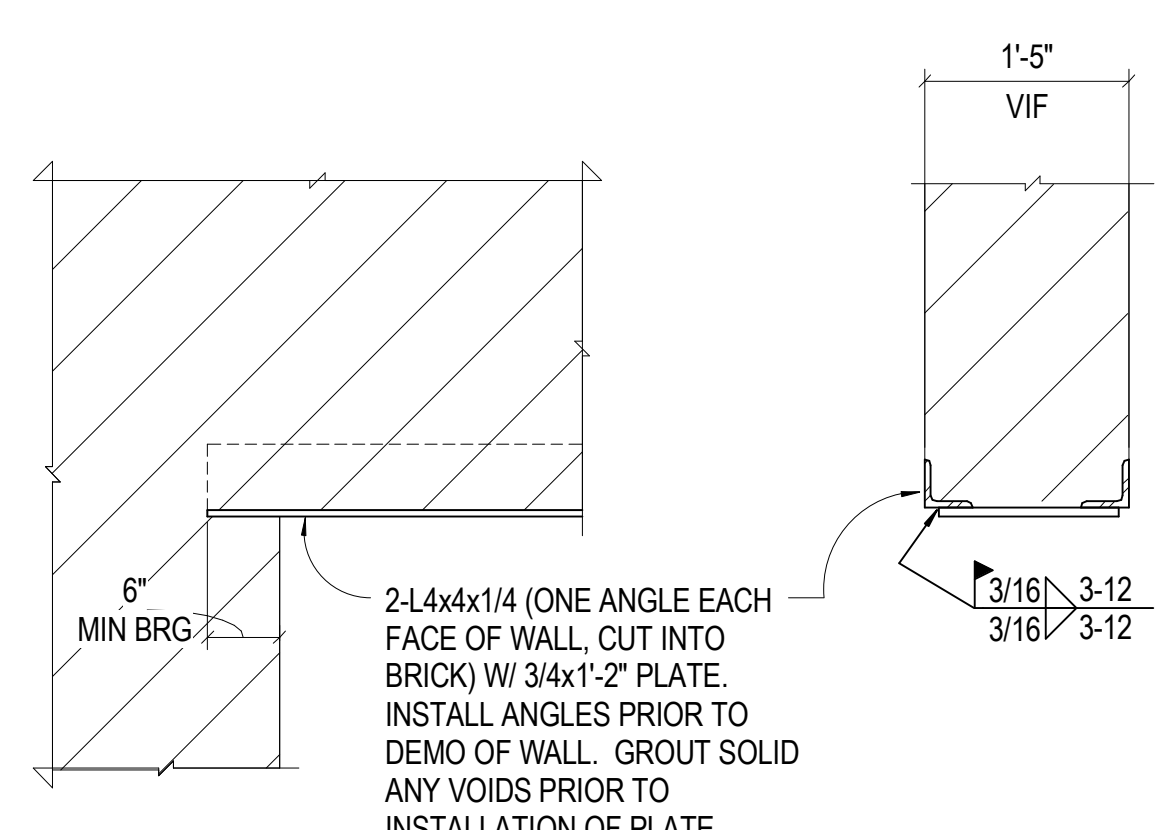
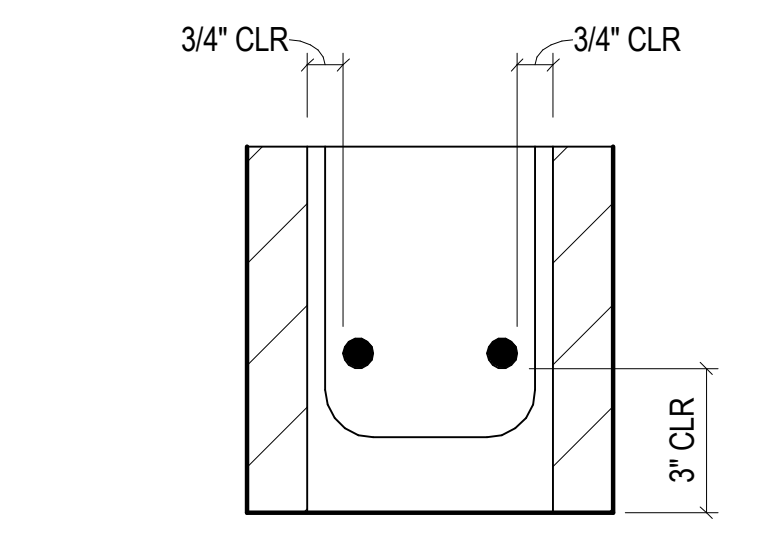
- NOTES:**
- MECHANICAL AND PLUMBING PIPING SHALL NOT RUN IN MASONRY WALLS, COLUMNS, AND PILASTERS
 - VERT CONDUIT RUNS PERMITTED IN UNREINFORCED VERT CELLS. VERT CONDUIT IS NOT PERMITTED IN REINFORCED CELLS OR LINTELS
 - JUNCTION BOXES NOT PERMITTED IN REINFORCED CELLS
 - HORIZ CONDUIT RUNS ARE NOT PERMITTED THRU REINFORCED CELLS, IN LINTELS, OR IN BOND BEAMS
- INDICATES REINFORCED AND GROUTED CELLS

4 NO SCALE TYP STR MAS JAMB SCHEDULES & DETAILS

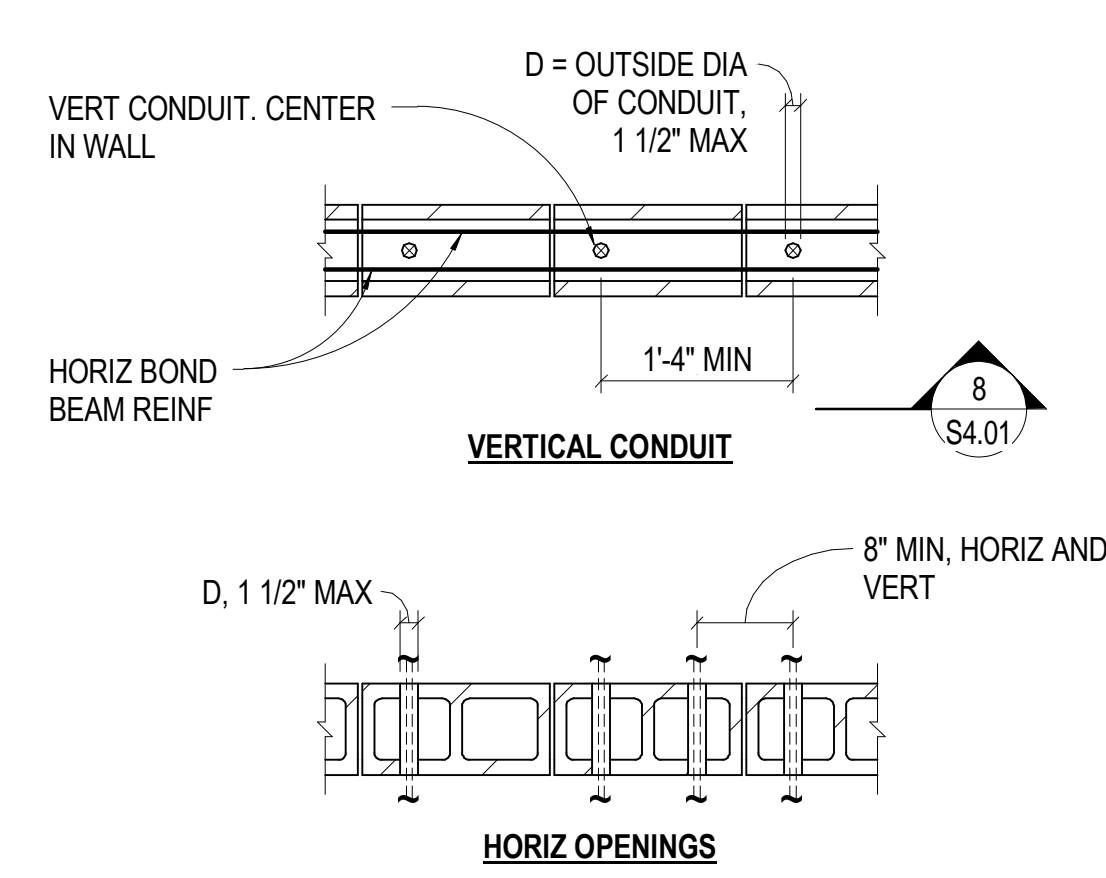


- NOTES:**
- IF REQD, INCREASE LENGTH OF BEARING PLATE TO PROVIDE 3" MIN ES OF BEAM FLANGE
 - SET BEARING PLATE TO MATCH SLOPE AT ROOF

2 NO SCALE TYP STR MAS BOND BEAM



8 NO SCALE TYP STR MAS / CONDUIT ELEV



9 NO SCALE TYP STR MAS / CONDUIT PLAN

6 NO SCALE TYP STR MAS BM BEARING

3 3/4" = 1'-0" STEEL LINTEL AT EXISTING BRICK WALL

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DATE PRINTED: 5/14/2010 8:25:03 AM
PROJECT MANAGER: EMILY GUGLIELMO

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DESIGN DEVELOPMENT	04.01.10
100% CD	04.28.10
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19132.S.89	08.28.09
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SHEET TITLE: 1
TYP MASONRY DETAILS
SHEET NO. 1

S4.01

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DESIGN DEVELOPMENT	04.01.10
100% CD	04.28.10
FOR CONSTRUCTION	05.14.10

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19132-S-89	08.28.09
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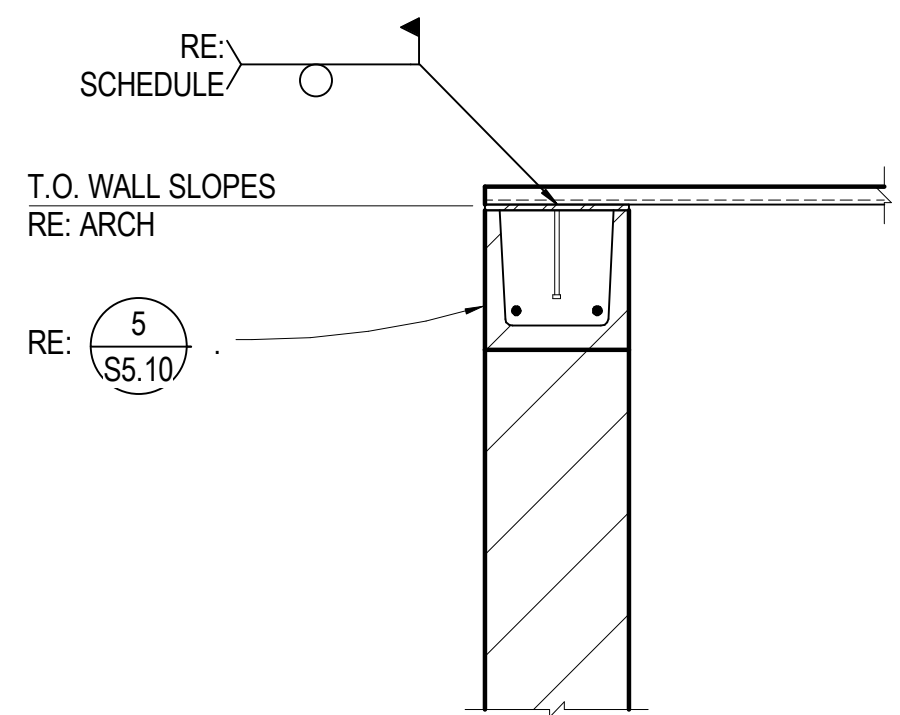
SHEET TITLE: 1
TYP STEEL DETAILS
SHEET NO.: 1

S5.10

METAL DECK/ SLAB SCHEDULE																			
DECK			CONCRETE SLAB						DECK PROPERTIES (MINIMUMS)										REMARKS
MARK	TYPE	DEPTH (IN)	CONC ABOVE DECK (IN)	ADDNL CONC (IN)	TOTAL THK (IN)	CONC TYPE (SEE GEN NOTES)	STUD LENGTH (IN)	SLAB REINF (NOTE 7)	DECK GAGE	DECK Fy (KSI)	PROPERTIES (PER FT)			MAX DECK CLEAR SPAN	DECK CONN TYPE (SEE SCHED)	DECK DIAPHRAGM SHEAR (PLF)	SUPERIMPOSED LOAD CAPACITY UNIFORM PSF	MAXIMUM HUNG LOAD FROM SLAB/ROOF DECK (LBS)	
											I (IN4)	S (POS) (IN3)	S (NEG) (IN3)						
1.5B	B	1 1/2	--	--	1 1/2	--	--	--	18	33	0.289	0.318	0.296	6'-9"	A	300	94	20	
2VLI4.5A	2VLI	2	4 1/2	--	6 1/2	NWC (4)	4	6x6-W2.9xW2.9WWR	18	40	0.557	0.512	0.518	9'-8"	B	---	222	20	

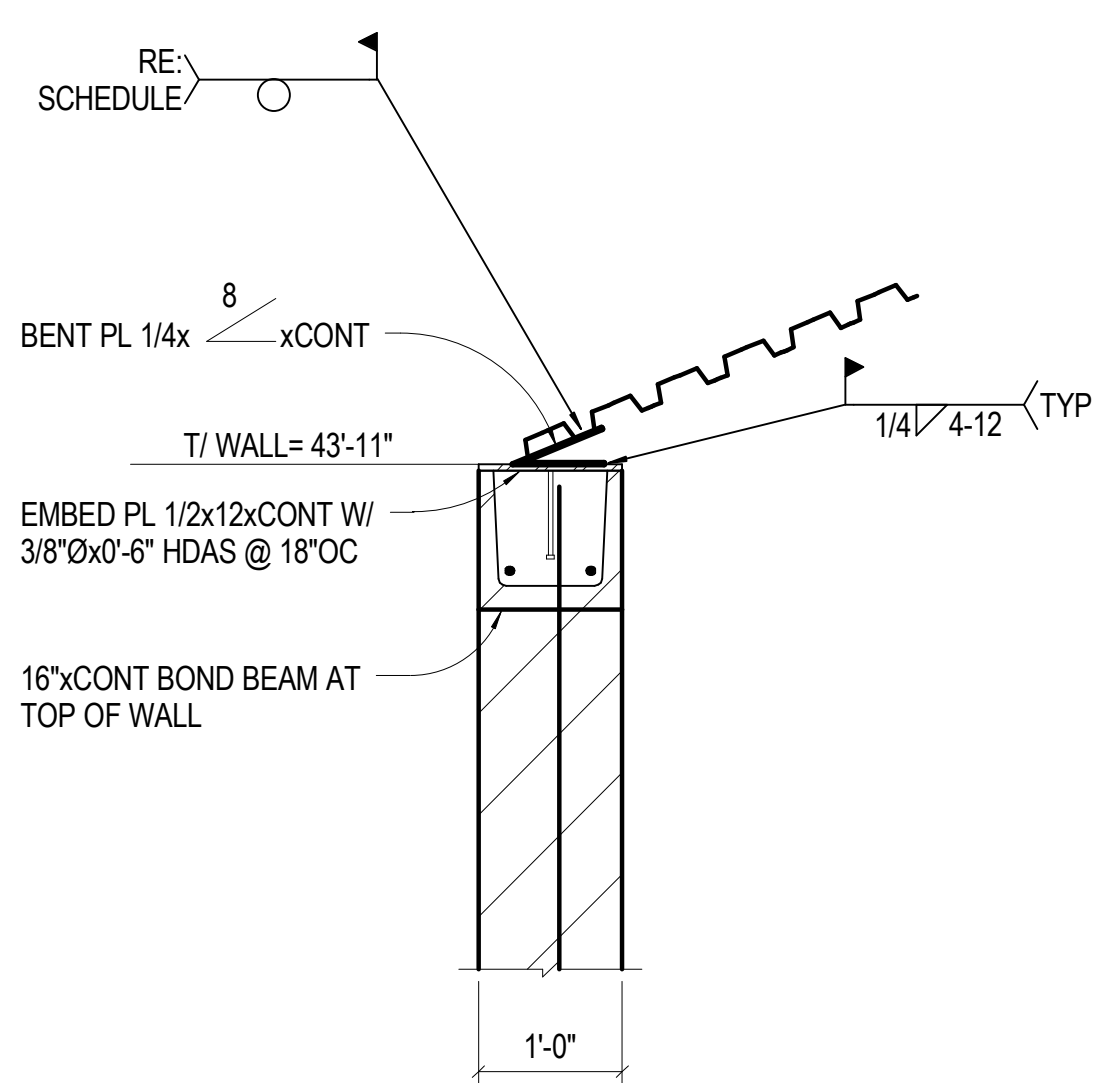
- NOTES:
 1. SEE SPECIFICATIONS FOR MINIMUM DECK CONNECTORS UNO IN SCHEDULE. BUTTON PUNCHING IS NOT PERMITTED FOR ROOF DECKS.
 2. SEE SPECIFICATIONS FOR FLOOR FINISH & FLATNESS REQUIREMENTS
 3. INSTALL DECK OVER 3 SUPPORTS (2 SPAN CONTINUOUS)
 4. DECK WITH HIGHER YIELD STRESS MAY BE USED WITH SP & SN REQUIRED VALUES ADJUSTED BY THE RATIO OF Fy/Fy(PROVIDED) PROVIDING "I" MINIMUM IS STILL PROVIDED

DECK CONNECTION SCHEDULE						
TYPE	PERP SUPPORT MEMBERS		PARALLEL SUPPORT MEMBERS		SIDELAPS	
	CONNECTION	PATTERN	CONNECTION	PATTERN	CONNECTION	PATTERN
A	5/8"Ø PUDDLE WELDS	36/7	5/8"Ø PUDDLE WELDS	12" OC	#10 TEK SCREWS	12" OC
B	3/4"Ø PUDDLE WELDS	36/4	3/4"Ø PUDDLE WELDS	12" OC	#10 TEK SCREWS	36" OC

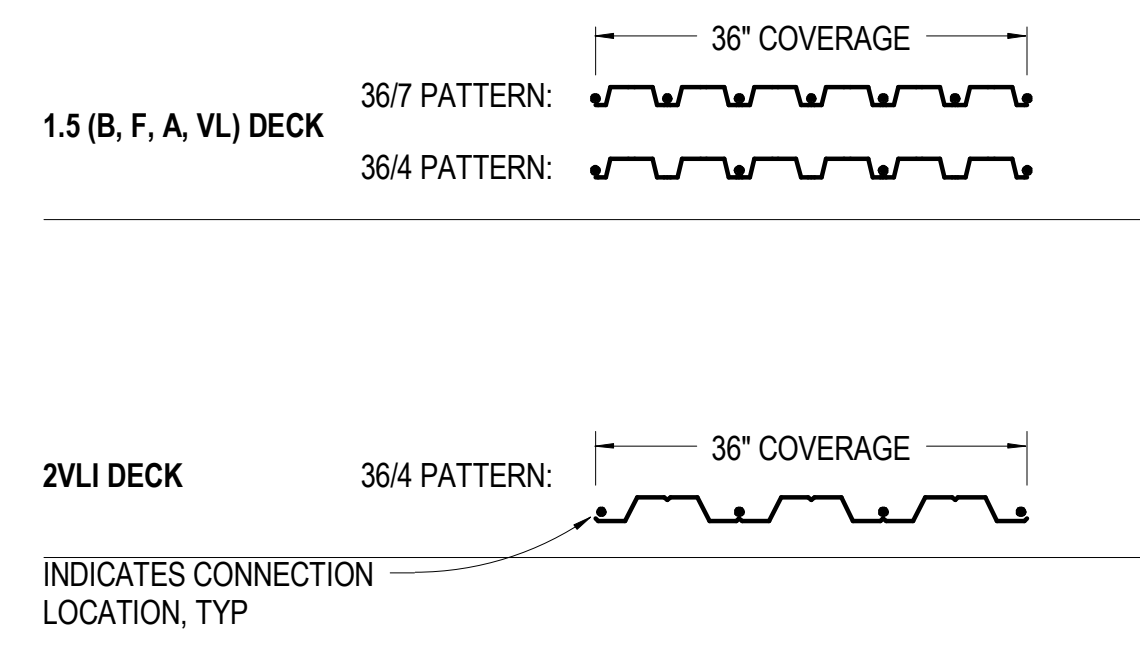


10 3/4" = 1'-0" SLOPED WALL AT ROOF DECK

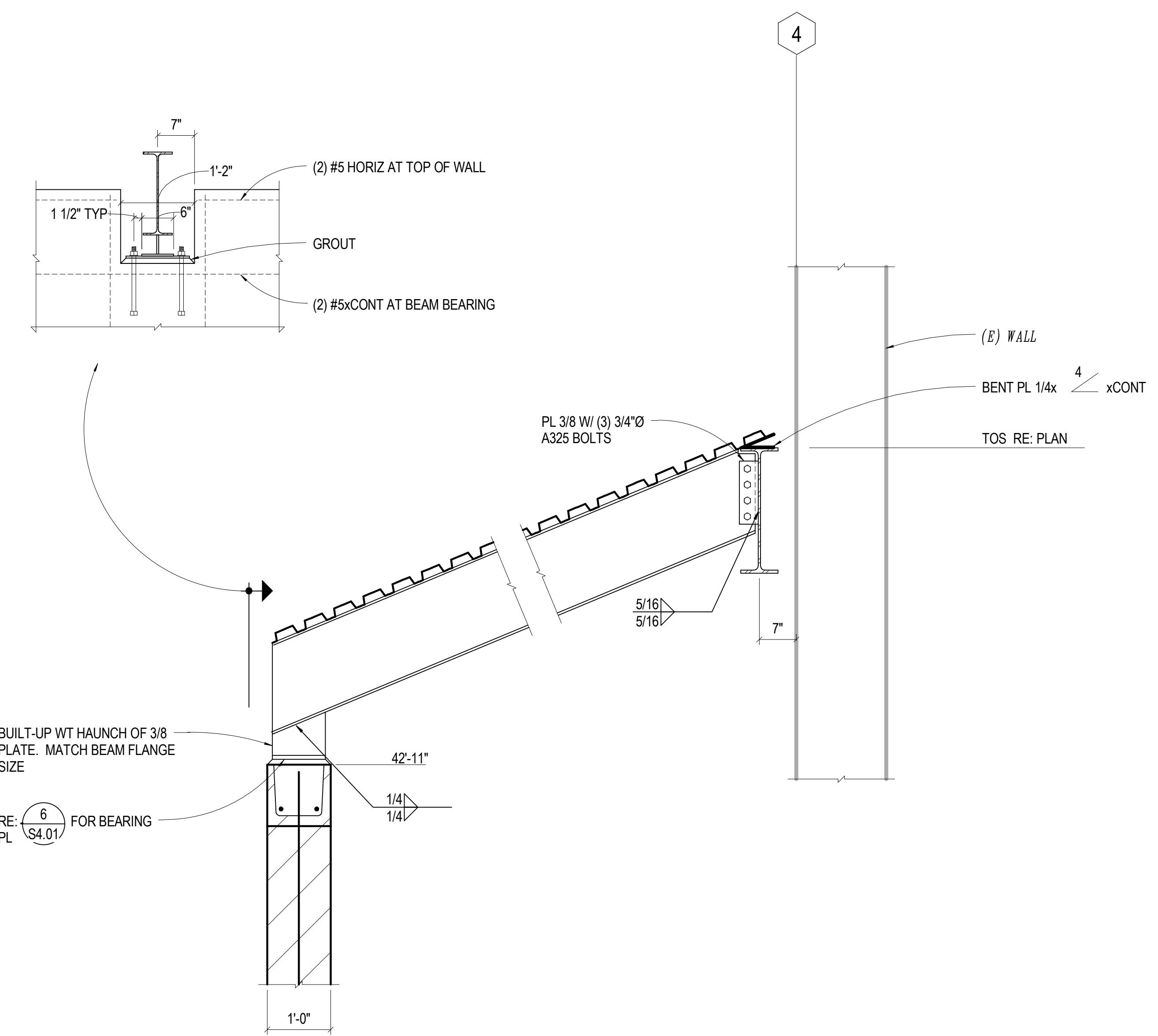
7 NO SCALE METAL DECK SLAB SCHEDULE



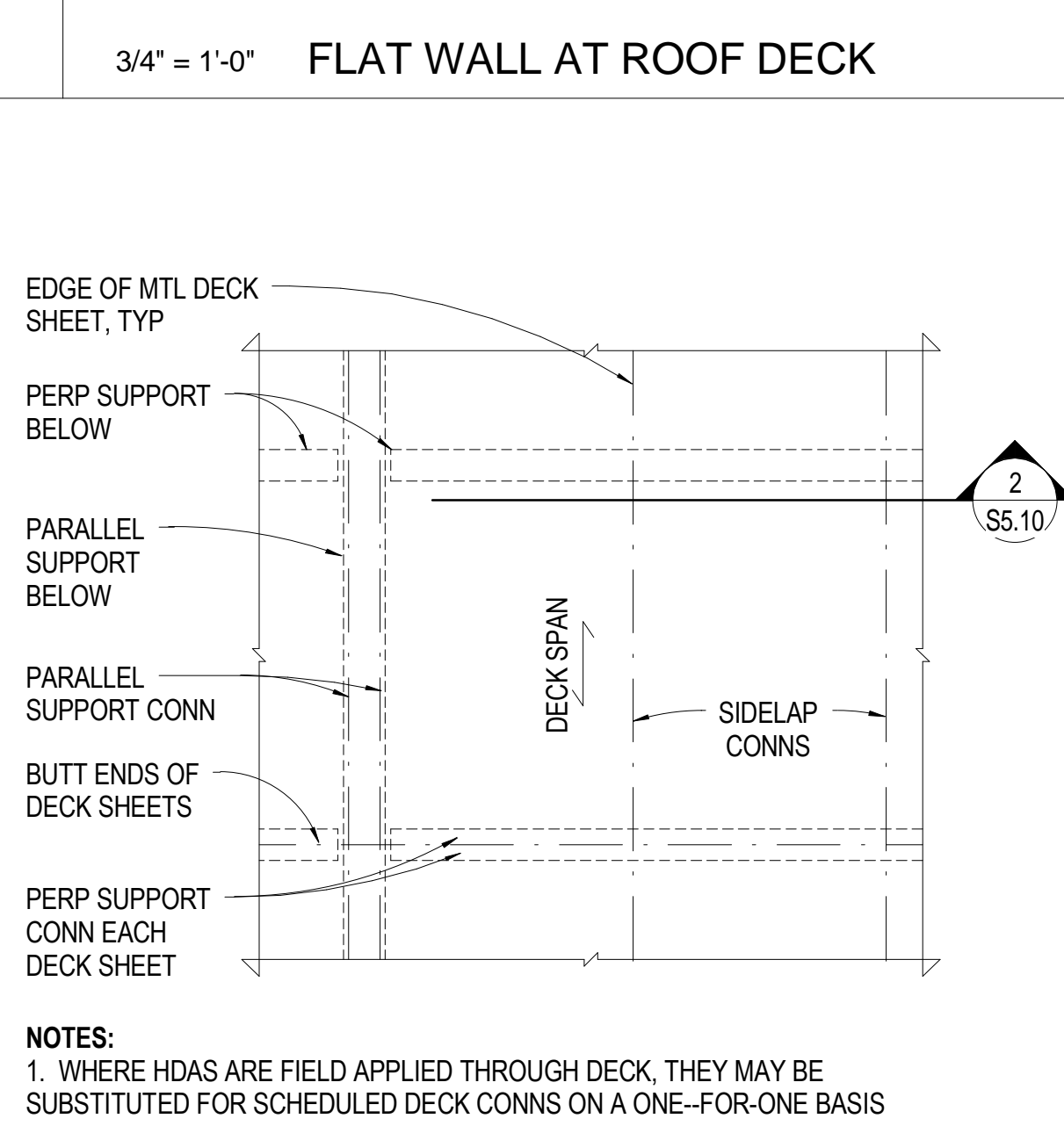
5 3/4" = 1'-0" FLAT WALL AT ROOF DECK



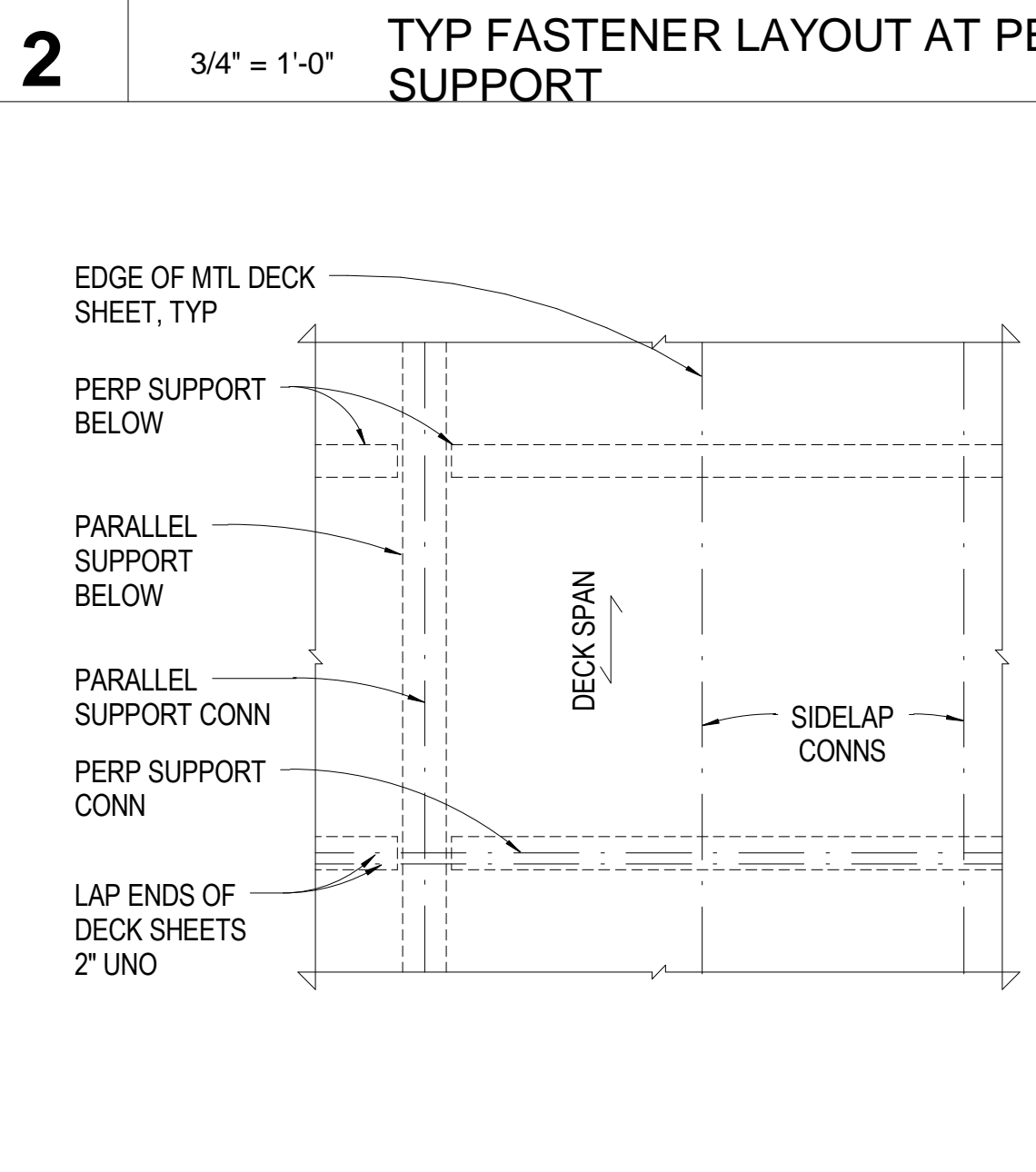
2 3/4" = 1'-0" TYP FASTENER LAYOUT AT PERP SUPPORT



12 3/4" = 1'-0" ROOF BEAM DETAIL



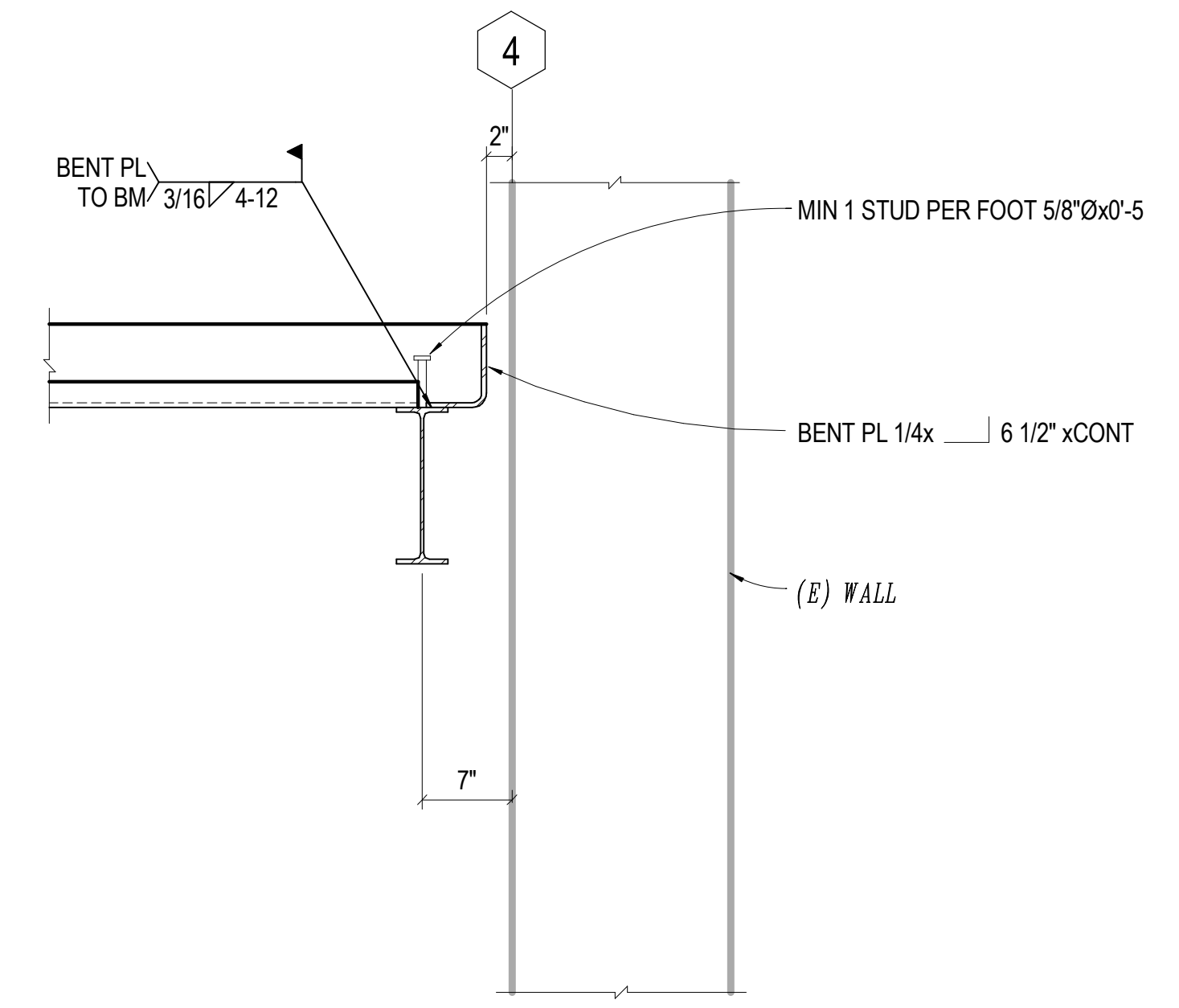
6 3/8" = 1'-0" COMPOSITE DECK CONNECTIONS



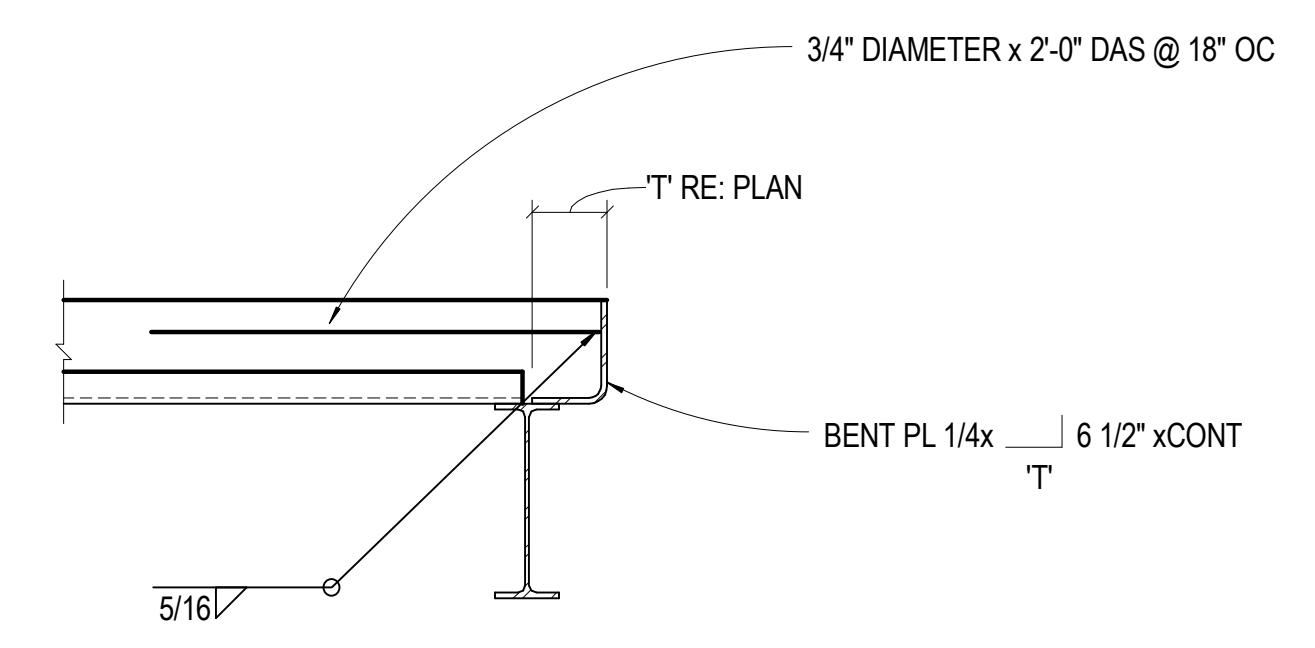
3 3/8" = 1'-0" ROOF DECK CONNECTIONS

MM JOB #: 19132.S.89
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 DATE PRINTED: 5/14/2010 8:25:05 AM
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1 1" = 1'-0" FLOOR SECTION AT EXISTING WALL



2 1" = 1'-0" TYPICAL INTERIOR SLAB EDGE

Henderson Stair Towers
 university of colorado | boulder colorado
 ucbl project number: **PRO04804**

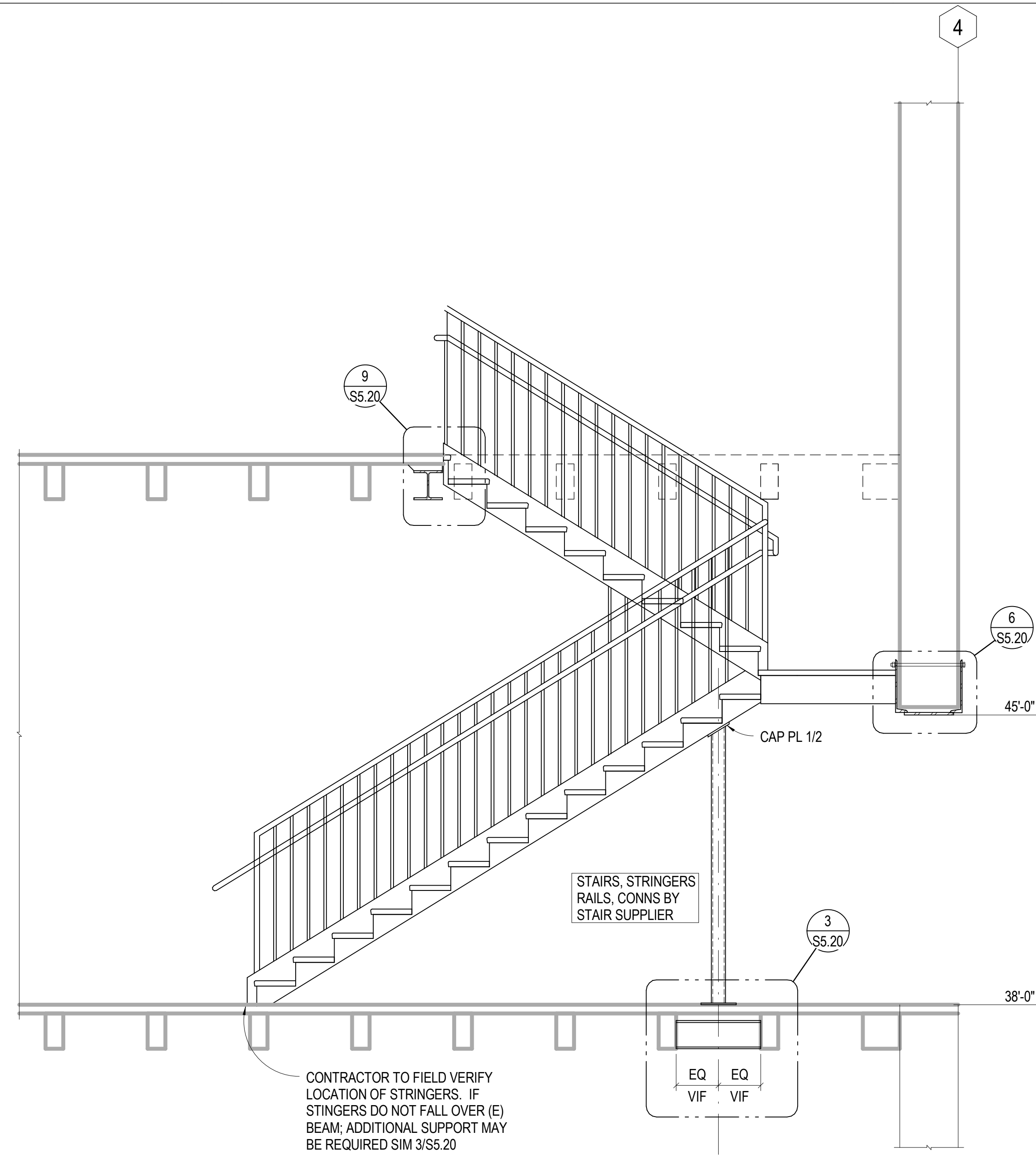
ISSUED FOR	DATE
DESIGN DEVELOPMENT	04.01.10
100% CD	04.28.10
FOR CONSTRUCTION	05.14.10

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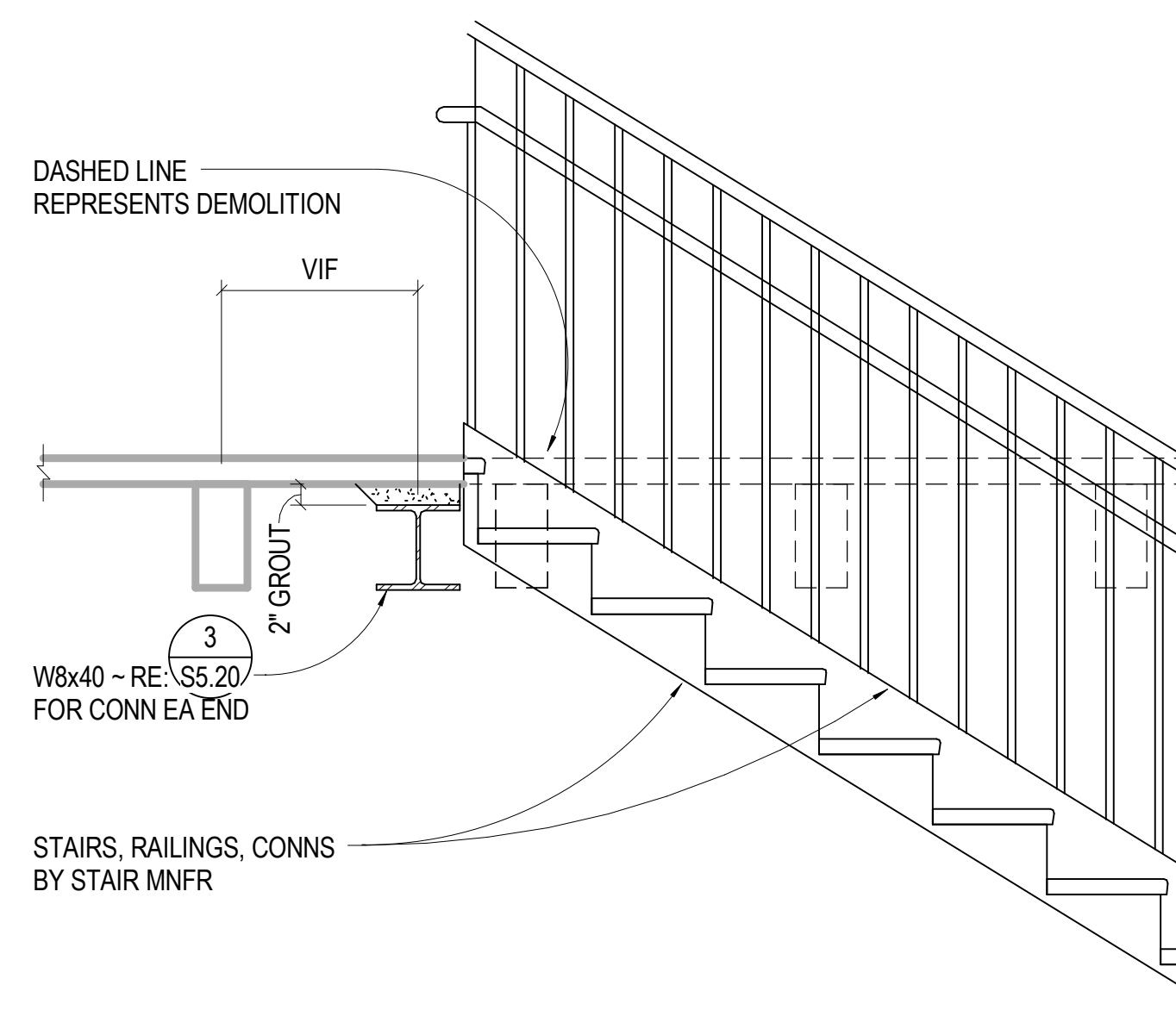
PROJECT NO.	SHEET
19132.S.89	08.28.09
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DNE	BN

SHEET TITLE 1
 STEEL DETAILS
 SHEET NO. 1

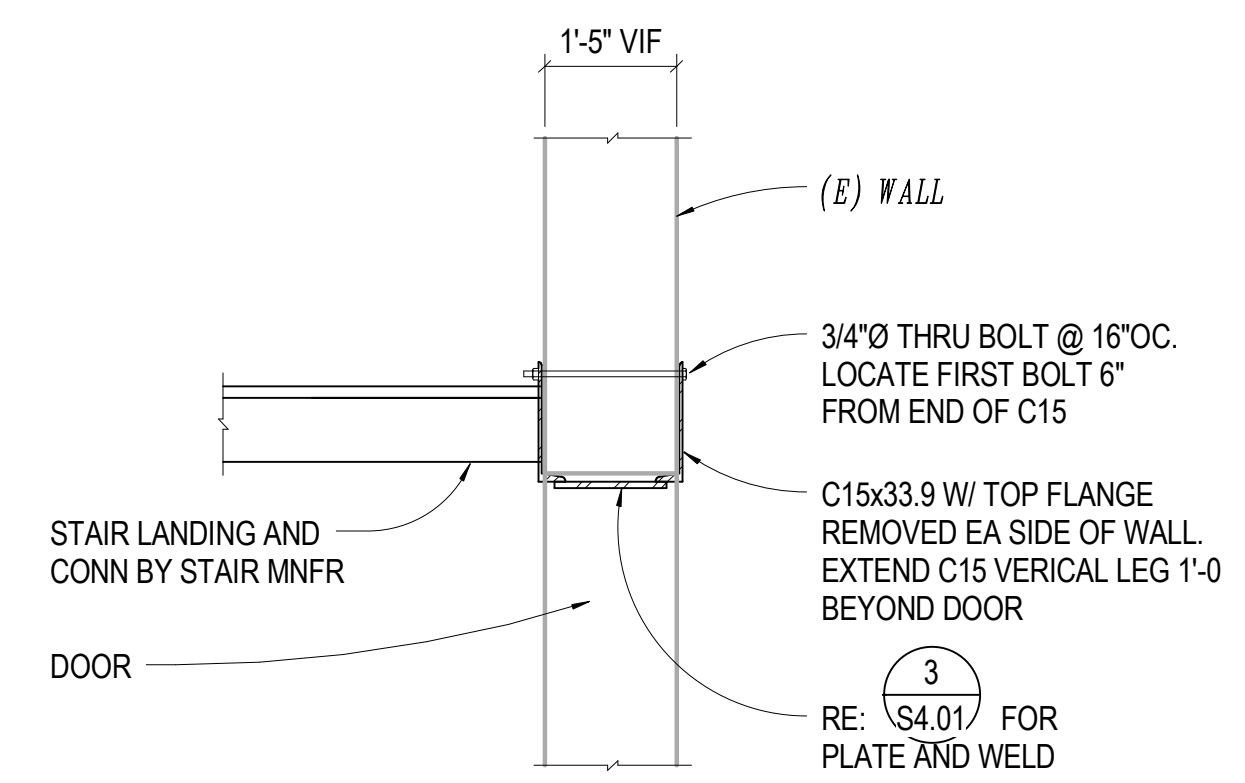
S5.11



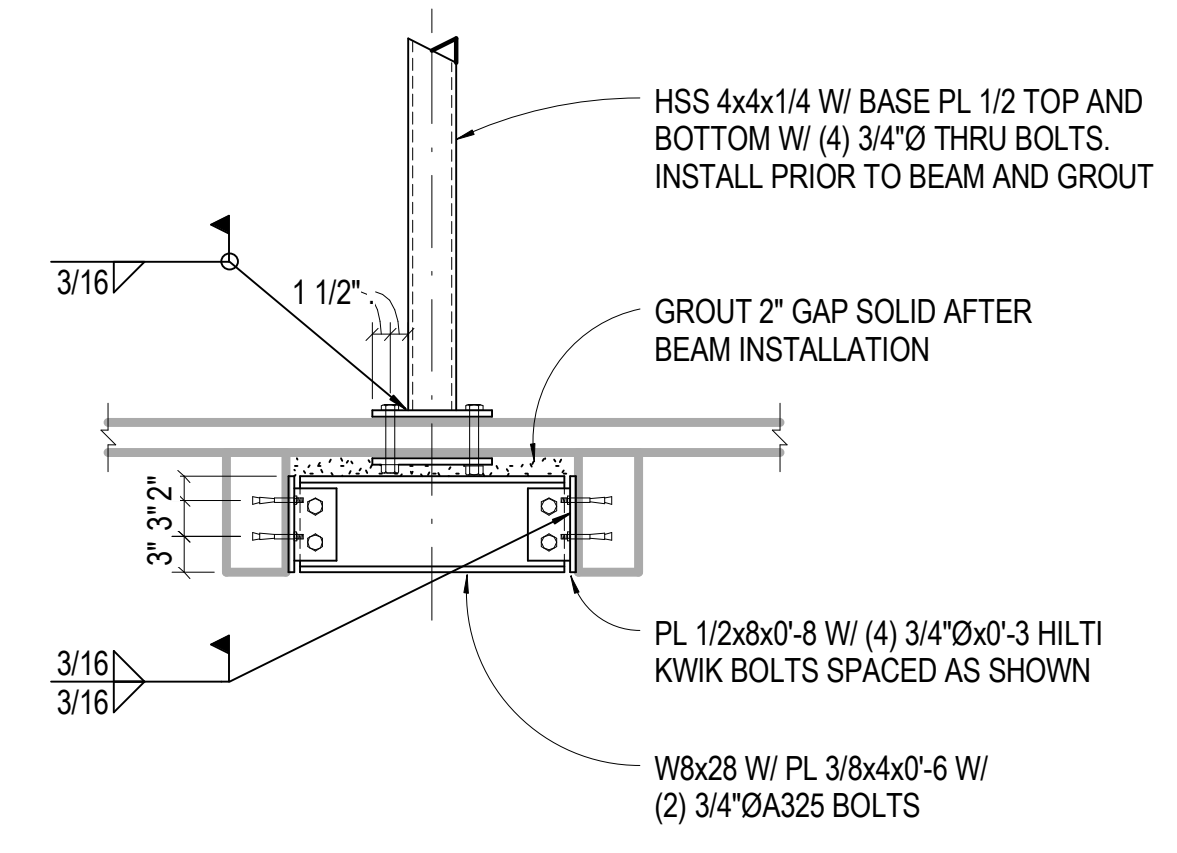
8 1/2" = 1'-0" STAIR ELEVATION



9 3/4" = 1'-0" STAIR DETAIL AT LOFT



6 1/2" = 1'-0" STAIR DETAIL AT LANDING



3 3/4" = 1'-0" STAIR DETAIL AT 2ND LEVEL

MM JOB #: 19132.S.89
DESIGNERS: EMILY GUGLIELMO
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DATE PRINTED: 5/14/2010 8:25:06 AM
PROJECT MANAGER: EMILY GUGLIELMO

ISSUED FOR	DATE
DESIGN DEVELOPMENT	04.01.10
100% CD	04.28.10
FOR CONSTRUCTION	05.14.10

PROJECT NO.	SHEET
19132.S.89	08.28.09
DNE	BN

STAIR DETAILS
SHEET NO. 1
S5.20