

SOIL BEARING
1. WALL AND COLUMN FOOTINGS DESIGNED FOR AN ASSUMED SOIL BEARING OF 3000 PSF.
2. IF ADEQUATE SOIL BEARING IS NOT ENCOUNTERED AT THE INDICATED BOTTOM OF FOOTING LOCATION, CONTRACTOR IS TO REPORT TO THE ARCHITECT BEFORE PROCEEDING WITH THAT PART OF THE WORK.
3. ALL EXCAVATIONS FOR THE FOUNDATION SHALL BE APPROVED BY THE ARCHITECT BEFORE PLACING ANY CONCRETE FOOTING.

CONCRETE
1. STRENGTH OF CONCRETE AT 28 DAYS TO BE 3000 PSI; EXCEPT FOR: SLABS, BEAMS AND COLUMNS TO BE 4000 PSI AND EXTERIOR SLABS TO BE 3000 PSI.
2. ALL EXTERIOR FOOTINGS TO BE MIN. 4'-6" BELOW FINISH GRADE.
3. TOP OF ALL FOOTINGS TO BE MIN. 7" BELOW BOTTOM OF FLOOR SLAB UNLESS INDICATED OTHERWISE.
4. BOTTOM OF ALL FOOTINGS TO BE ON ADEQUATE SOIL BEARING.
5. ALL SLABS ON FILL TO BE 5" THICK UNLESS SHOWN OTHERWISE.
6. SLABS AND BEAMS UNDER CONCRETE WALLS SHALL BE ADEQUATELY SHORED UNTIL WALLS ARE SET.
7. IF BASEMENT AND FIRST FLOOR SLABS ARE NOT POURED BEFORE BACKFILLING, FOUNDATION WALLS TO BE ADEQUATELY BRACED BEFORE BACKFILLING AND UNTIL ABOVE SLABS ARE PLACED AND SET.
8. SEE SPECIFICATIONS FOR SPECIAL REQUIREMENTS FOR ARCHITECTURAL EXPOSED CONCRETE ANCHORING OF MASONRY TO CONCRETE WALLS AND COLUMNS AND CHAMFER OF EXTERNAL CORNERS OF CONCRETE BEAMS, GIRDERS, COLUMNS, ETC.
9. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS FOR SIZE AND LOCATION OF DOOR FRAMES, THRESHOLDS, ETC., AND CONCRETE PADS, PIERS, PIPE SLEEVES, ETC.
10. ALL WOOD NAILERS ON CONCRETE OR MASONRY TO BE ANCHORED WITH 1/2" DIA. ANCHOR BOLTS SPACED AT 2'-8" O.C., AND EXTENDED 1'-0" INTO CONCRETE OR MASONRY.
11. CONCRETE FILL FOR BEAM LINTEL BLOCKS, BOND BEAMS AND CONCRETE BLOCKS USED AS SOLID MASONRY UNITS TO BE CONCRETE TESTING 3,000 PSI AT 28 DAYS.

CONCRETE REINFORCING
1. ALL REINFORCING STEEL TO BE ASTM-A615 GRADE 60, DETAILED AND FABRICATED IN ACCORDANCE WITH THE "ACI MANUAL OF STANDARD PRACTICE" (ACI-315-LATEST).
2. REINFORCEMENT TO HAVE MIN. CONCRETE COVER AS FOLLOWS:
A. CONCRETE DEPOSITED AGAINST GROUND, INCLUDING FOOTINGS:----- 3"
B. CONCRETE EXPOSED TO EARTH OR WEATHER, INCLUDING WALKS, PIERS, WALLS, COLUMNS AND EXTERIOR SLABS:----- 2"
C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
I. SLABS, WALLS AND JOISTS:----- 3/4"
II. BEAMS AND COLUMNS, TIES, STIRRUPS, REINFORCEMENT:----- 1-1/2"
3. PROVIDE ADEQUATE KEYS AND DOWELS AT ALL WALL INTERSECTIONS AND CONSTRUCTION JOINTS.
4. LAP ALL REINFORCEMENT 40 BAR DIAMETERS @ SPLICES, UNLESS SHOWN OTHERWISE.
5. AT ALL OPENINGS IN STRUCTURAL SLABS, PROVIDE ONE HALF THE NUMBER OF INTERRUPTED BARS PLACED ON EACH SIDE OF THE OPENING AND STAGGERED WITH OTHER SLAB BARS. PROVIDE #4 X 5'-0" LONG DIAGONAL BAR TOP AND BOTTOM AT EACH CORNER OF OPENING, UNLESS OTHERWISE SHOWN.
6. PROVIDE DOWELS IN WALLS AND COLUMN FOOTINGS EQUIVALENT IN SIZE AND NUMBER TO VERTICAL STEEL EXTENDING 24 BAR DIA. INTO FOOTING AND INTO WALL OR COLUMN UNLESS SHOWN OTHERWISE. LOWER END OF DOWELS SHALL HAVE 90° BEND WITH 4" MIN. HORIZONTAL DIMENSION AND ALL DOWELS SHALL BE SET IN PLACE BEFORE CONCRETE IS PLACED.
7. DISCONTINUOUS ENDS OF ALL TOP REINFORCING BARS TO BE HOOKED.
8. ALL CONCRETE WALLS ON LEDGE TO HAVE #8 DOWELS X 3'-0" LONG, GROUDED 1'-6" INTO LEDGE AND SPACED @ 3'-0" + o.c.
9. ALL CONCRETE PIERS ON LEDGE TO HAVE 2 - #8 DOWELS X 3'-0" LONG, GROUDED 1'-6" INTO LEDGE.
10. ALL 4" THICK CONCRETE SLABS ON FILL TO BE REINFORCED WITH FIBER REINFORCING, UNLESS SHOWN OTHERWISE.
11. ALL CONCRETE SLABS, PADS, BEAMS AND PIERS SHALL HAVE REINFORCEMENT THAT WILL HAVE A MIN. RATIO OF REINFORCEMENT AREA TO GROSS CONCRETE AREA OF 0.0033, UNLESS OTHERWISE NOTED.

STRUCTURAL STEEL
1. STRUCTURAL STEEL SHALL BE ASTM A992, GR. 50 (Fy = 50 KSI), STRUCTURAL TUBING TO BE ASTM A500 GRADE "B" (Fy = 46 KSI), UNLESS NOTED OTHERWISE.
2. FABRICATION SHALL NOT BEGIN UNTIL SHOP DRAWINGS HAVE BEEN APPROVED.
3. CONNECTIONS SHALL BE DESIGNED BY THE STEEL FABRICATOR, TYPICALLY.
4. BASE PLATES AND BEARING PLATES SHALL BE GROUDED WITH NON-SHRINK GROUT AND AT PROPER GRADE, BEFORE PLACING STEEL.
5. STEEL BEAMS TO RECEIVE WOOD NAILERS SHALL HAVE BOLT HOLES DRILLED FOR 1/2" DIA. BOLTS AT 2'-6" +/- O.C. STAGGERED.
6. VERIFY WITH MECHANICAL/ELECTRICAL ARCHITECTURAL DRAWINGS ALL LOCATIONS OF OPENINGS, DUCTS, PIPING, ETC. THROUGH FLOORS, WALLS AND ROOFS, PRIOR TO DEMOLITION OR CONSTRUCTION.
7. ALL STEEL CONNECTIONS NOT SPECIFICALLY DETAILED IN STRUCTURAL DRAWINGS TO BE DESIGNED AND DETAILED BY A PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF MAINE, HIRED BY THE STEEL FABRICATOR.
8. THE COMPLETE CONNECTION DESIGN PACKAGE WITH ALL SUPPORTING CALCULATIONS SHALL BE STAMPED BY THE PROFESSIONAL ENGINEER AND FORWARDED TO HARRIMAN ASSOCIATES PRIOR TO, OR WITH, THE STRUCTURAL STEEL SHOP DRAWINGS FOR REVIEW AND APPROVAL. SHOP DRAWINGS WILL NOT BE REVIEWED WITHOUT ALL SUPPORTING CONNECTION CALCULATIONS PROVIDED.

MISCELLANEOUS
1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE PROCEEDING WITH THE WORK.
2. CONTRACTOR SHALL REPORT ANY VARIATIONS FOUND AT SITE BEFORE PROCEEDING WITH THAT PART OF THE WORK.

DESIGN CODE = 2003 IBC AND ASCE 7-02.

DESIGN LOADS
LIVE LOADS - LOBBIES AND CORRIDORS = 100 PSF
LABORATORIES, CLINICAL, AND OFFICES = 100 PSF (SLAB ON GRADE)
SHOW LOAD - Pw = 60 PSF
Ce = 1.0
Ct = 1.0
Iw = 1.0
Pf = 42 PSF

WIND LOAD - BASIC WIND SPEED (V) = 100 MPH (3 SEC GUST)
Iw = 1.0 (CATEGORY I)
EXPOSURE CATEGORY - B
INT. PRESSURE COEF. (Cp) = +/- 0.18

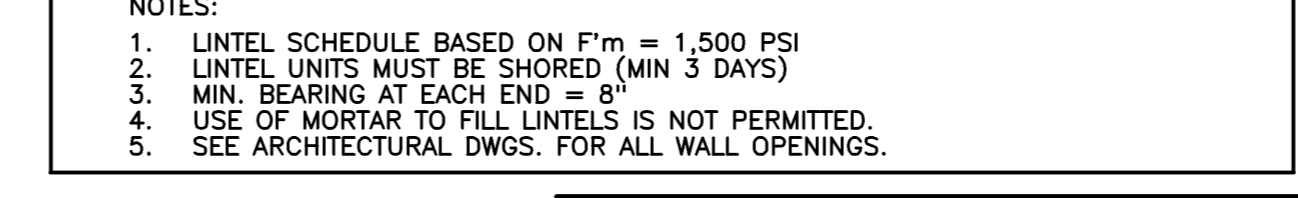
COMPONENTS AND CLADDING:
WIND PRESSURE = -25 PSF (FIELD WALLS)
= -30 PSF (CORNER WALLS)

Project Title
MERCY HEALTH CENTER WESTGATE PLAZA
PORTLAND, MAINE
HA Project No. 07182
Key Plan

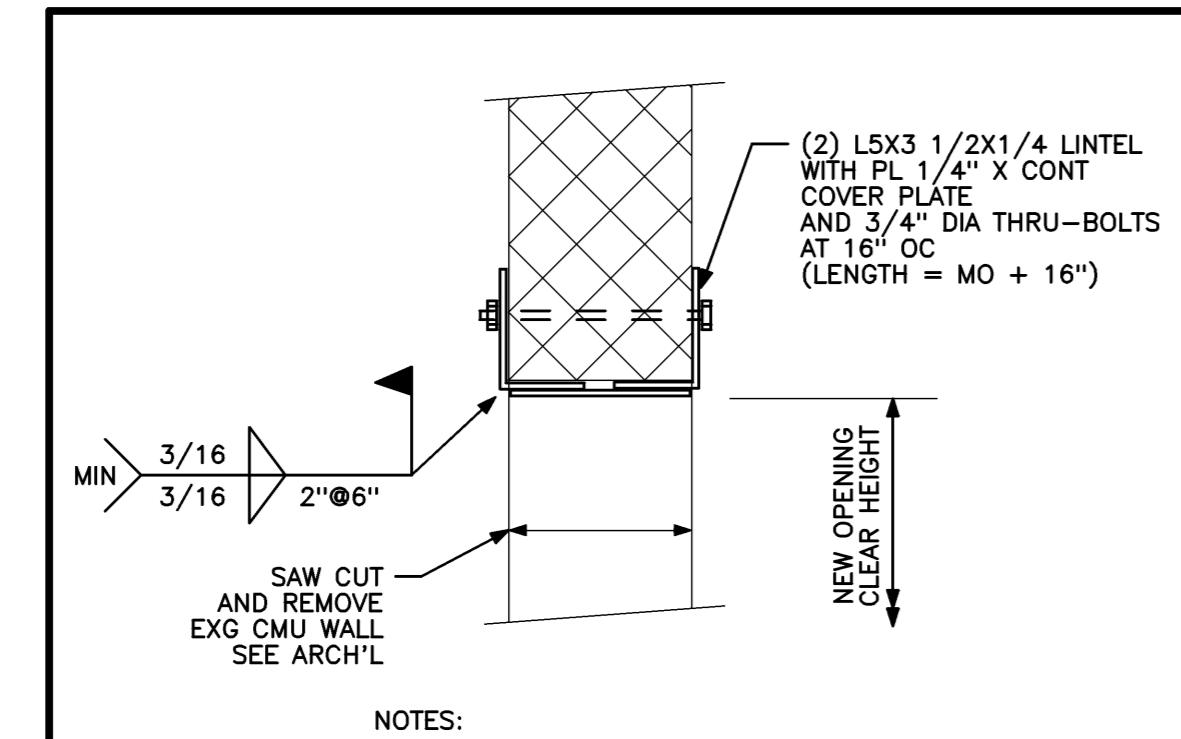


CONCRETE MASONRY LINTEL SCHEDULE

NOM. BLOCK WIDTH	NOM. BLOCK HEIGHT	REINFORCING	MASONRY OPENING
6"	8"	(1) #5	6'-0" OR LESS
8"	8"	(2) #5	7'-0" OR LESS
8"	16"	(2) #5	7'-0" TO 12'-10"
12"	8"	(2) #5	7'-0" OR LESS
12"	16"	(2) #5	7'-0" TO 12'-10"



NOTES:
1. LINTEL SCHEDULE BASED ON F'm = 1,500 PSI
2. LINTEL UNITS MUST BE SHORED (MIN 3 DAYS)
3. MIN. BEARING AT EACH END = 8"
4. USE OF MORTAR TO FILL LINTELS IS NOT PERMITTED.
5. SEE ARCHITECTURAL DWGS. FOR ALL WALL OPENINGS.



NOTES:
1. INSTALL LINTEL ANGLES ONE SIDE OF THE WALL AT A TIME.
2. SAW CUT EXG CMU WALL AS REQUIRED TO FIT HORIZ LEG OF FIRST NEW ANGLE INTO KERF. GROUT NEW LINTEL ANGLE INTO PLACE WITH EXPANSIVE GROUT.
3. DRILL THROUGH ANGLE AND CMU FOR BOLTS.
4. INSTALL SECOND NEW ANGLE SIMILARLY TO FIRST. MATCH BOLT HOLES AND GROUT FOR BOLTS.
5. BOLT ANGLES.
6. POSITION AND WELD NEW COVER PLATE.

TYPICAL DETAIL FOR NEW LINTELS IN EXISTING CMU WALLS

CONCRETE MASONRY LINTEL SCHEDULE

MASONRY OPENING	SIZE	BEARING
4'-10" OR LESS	L4x3 1/2x5/16 (LLV)	8" MIN. ON SGMU
4'-10" TO 7'-0"	L5x3 1/2x5/16 (LLV)	8" MIN. ON SGMU
7'-0" TO 9'-0"	L6x3 1/2x3/8 (LLV)	8" MIN. ON SGMU

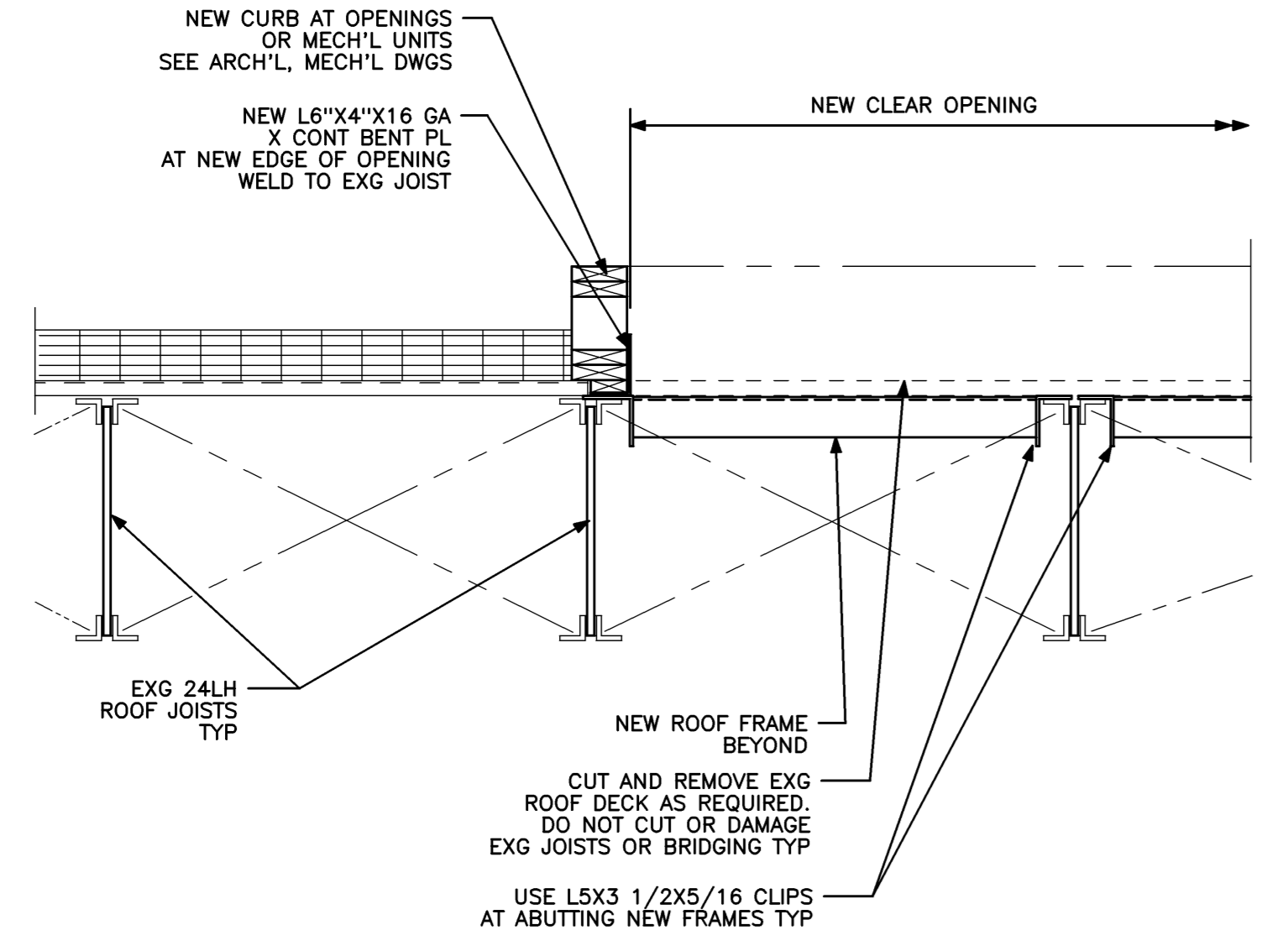
NOTES:
1. ONE ANGLE REQUIRED FOR EVERY 4" OF MASONRY.
2. MULTIPLE ANGLES SHALL BE WELDED BACK TO BACK.
3. "SGMU" INDICATES SOLID GROUDED MASONRY UNIT.

DETAIL NOT TO SCALE REF: S20.1 C5

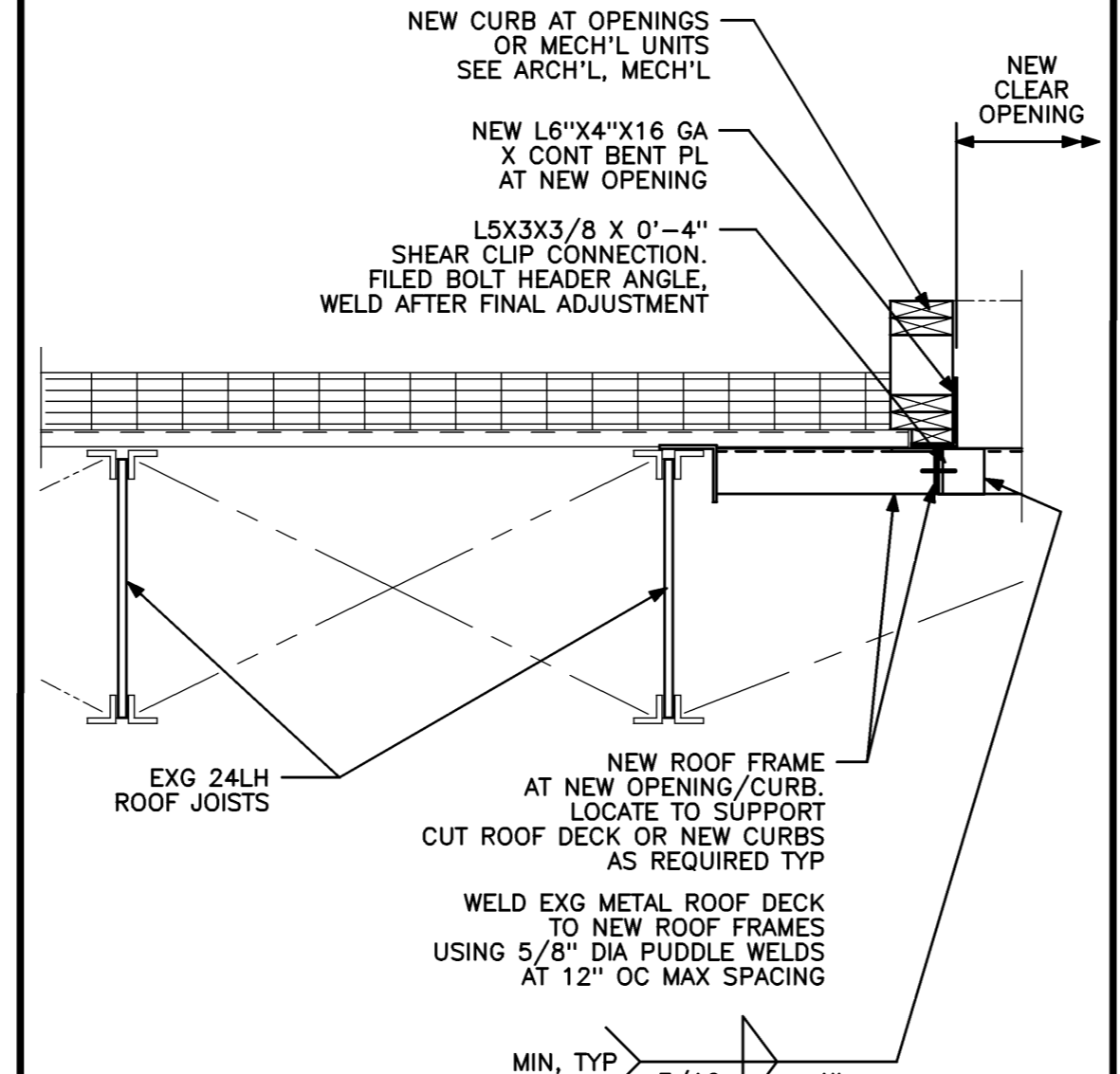
STEEL LINTEL SCHEDULE NOT TO SCALE REF: S20.1 C4

CONCRETE MASONRY LINTEL SCHEDULE

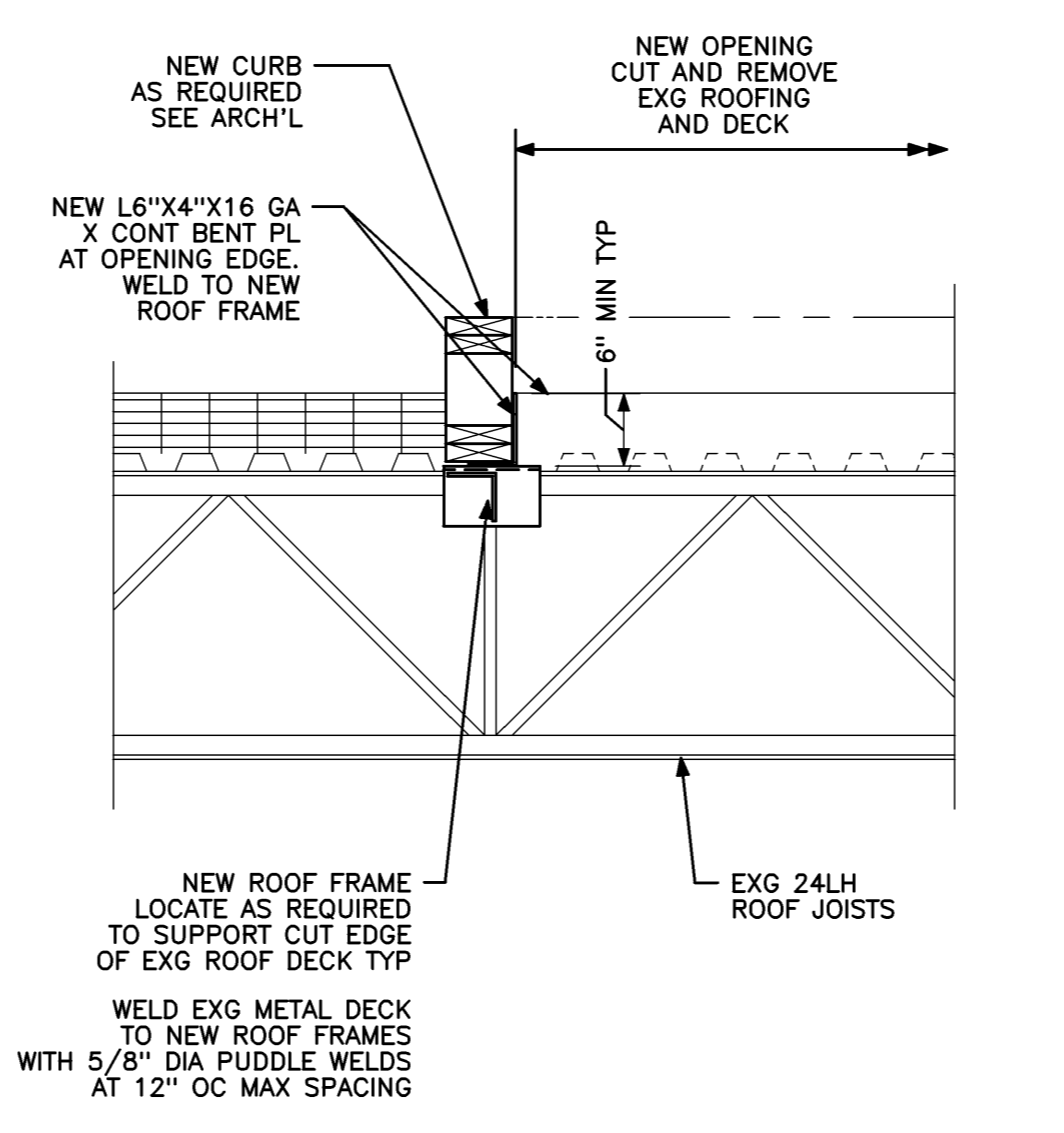
NOT TO SCALE REF: S20.1 C2



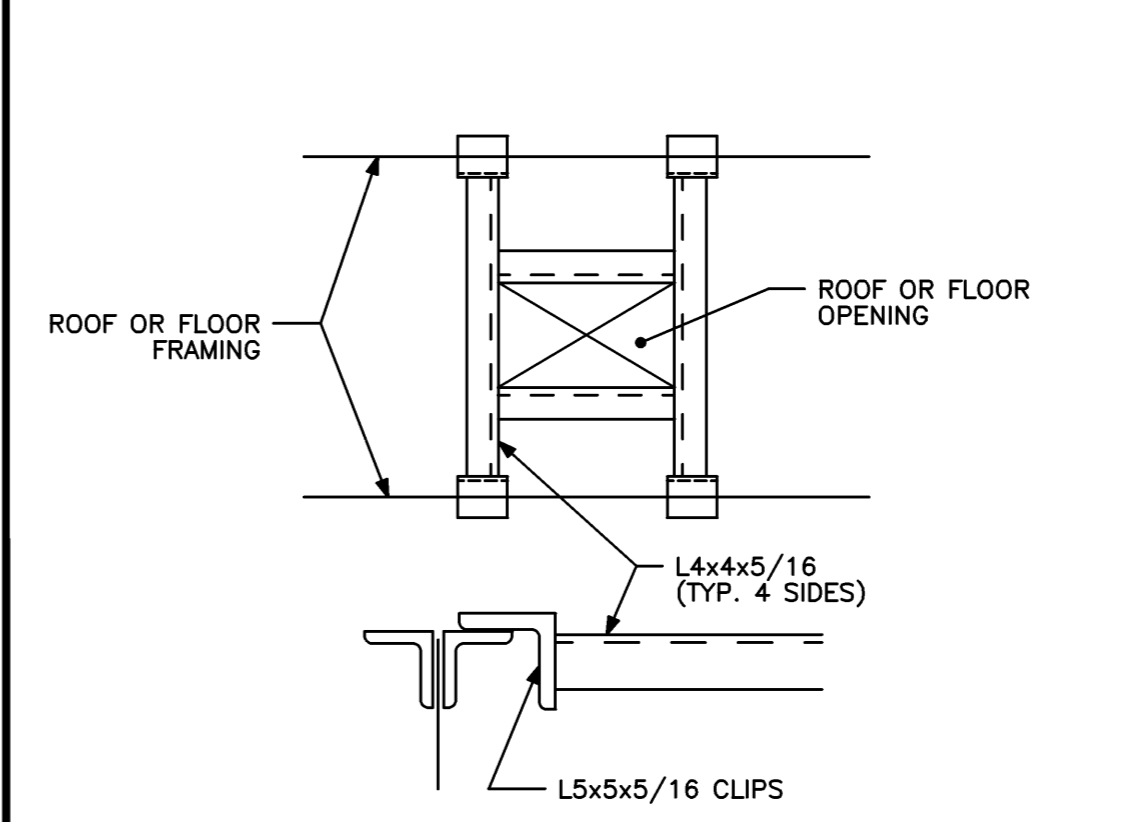
SECTION 3/4"=1'-0" REF: S20.1 B5



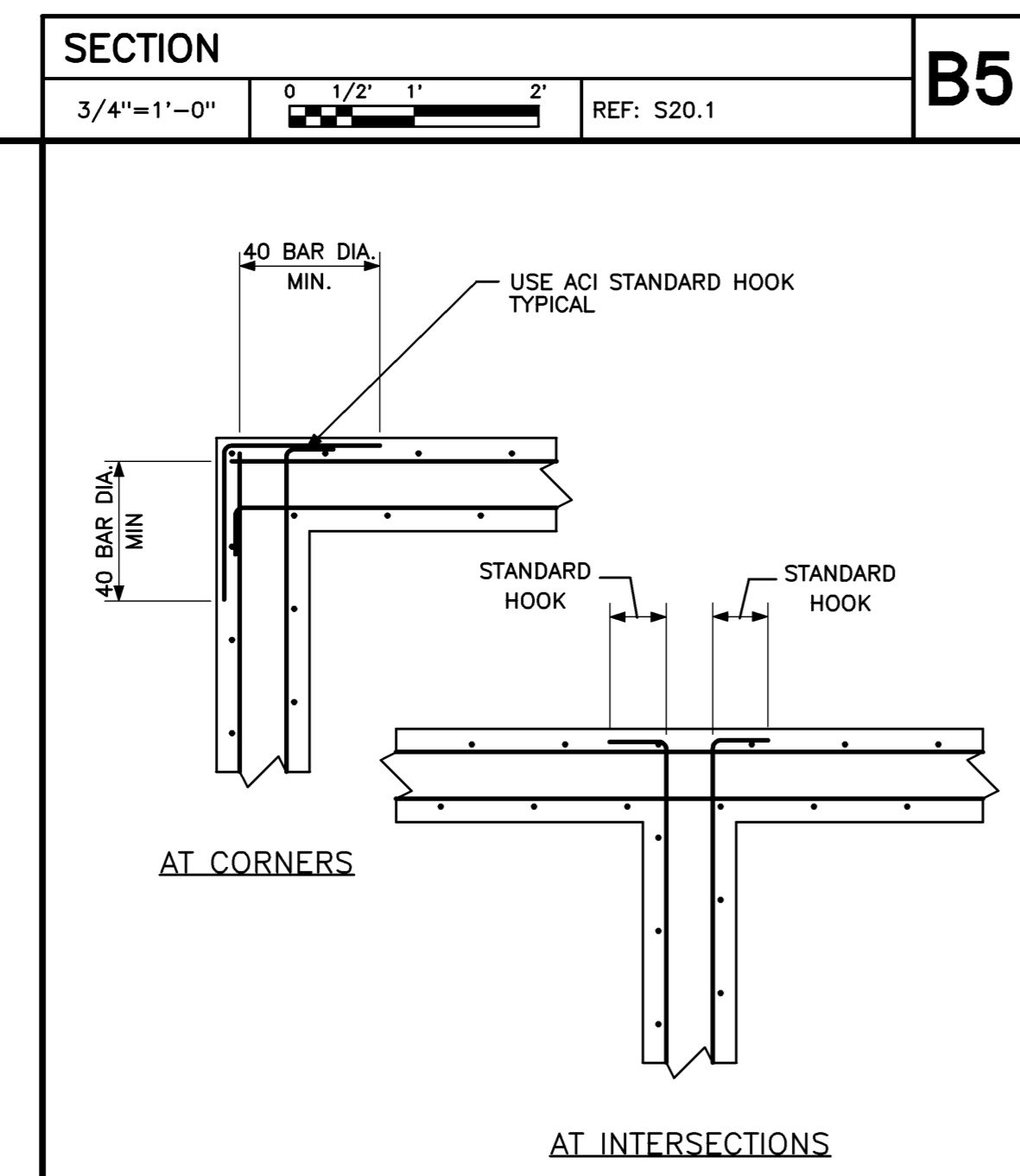
SECTION 3/4"=1'-0" REF: S20.1 B4



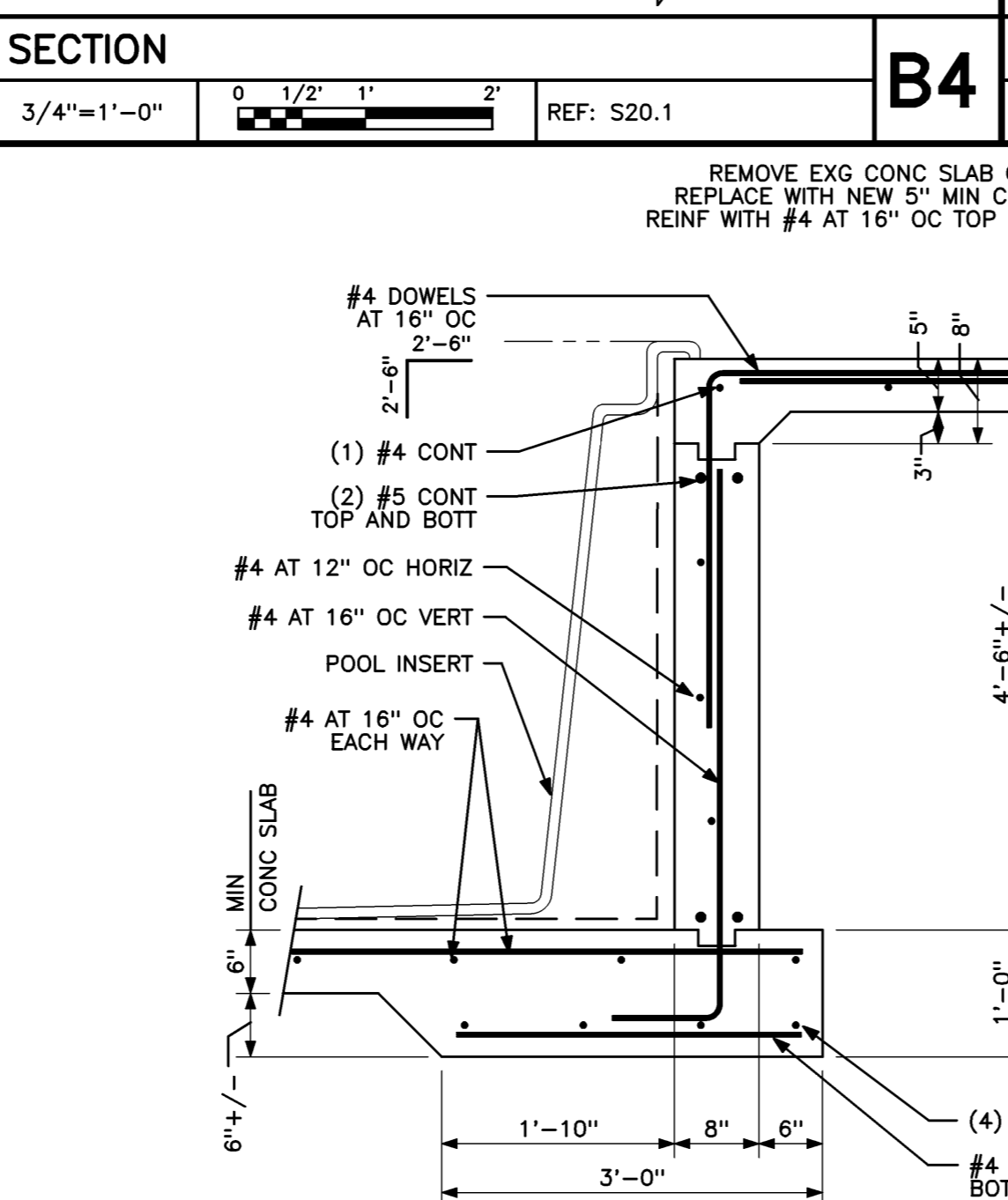
SECTION 3/4"=1'-0" REF: S20.1 B3



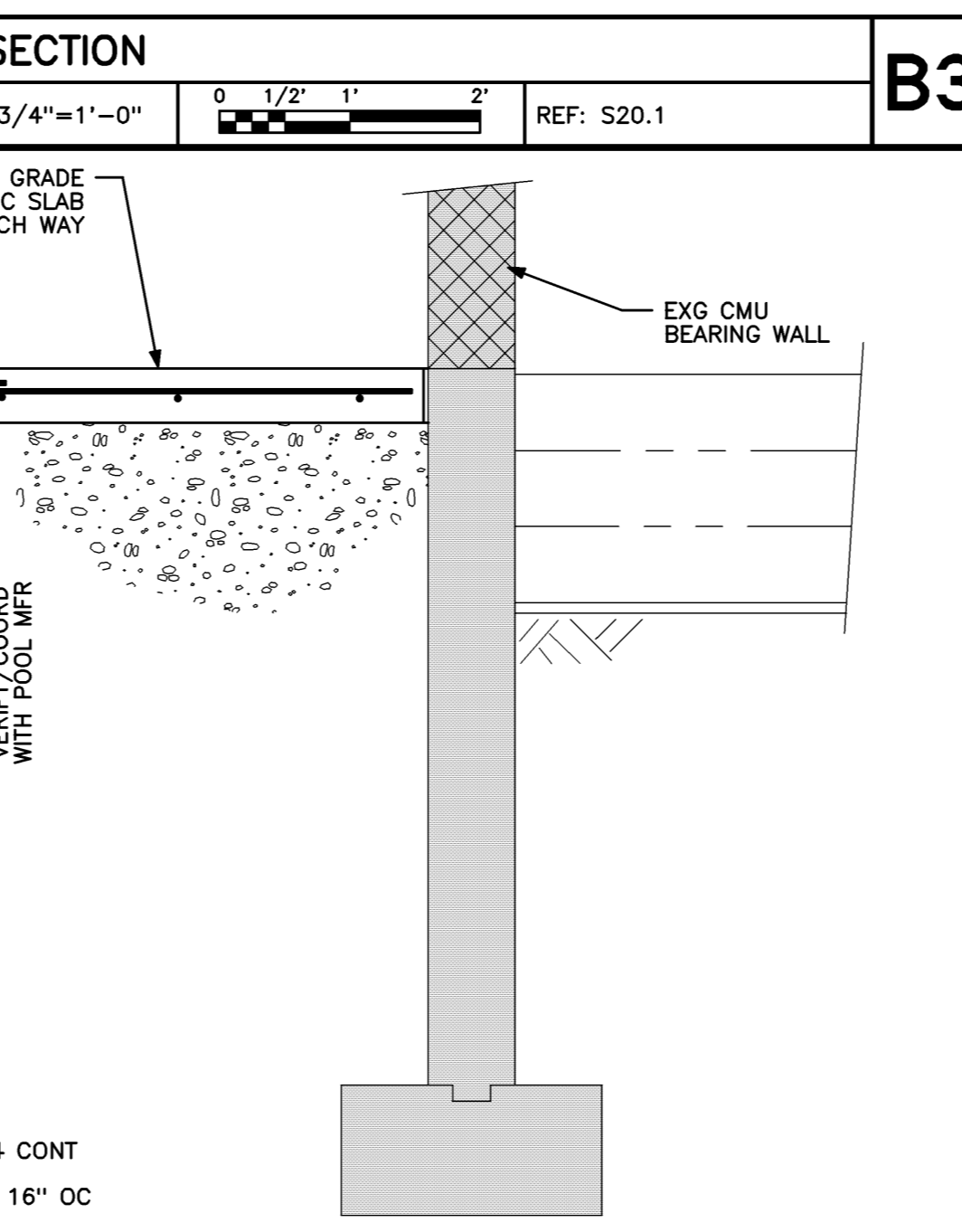
TYPICAL FRAME AT ROOF NOT TO SCALE REF: S20.1 B2



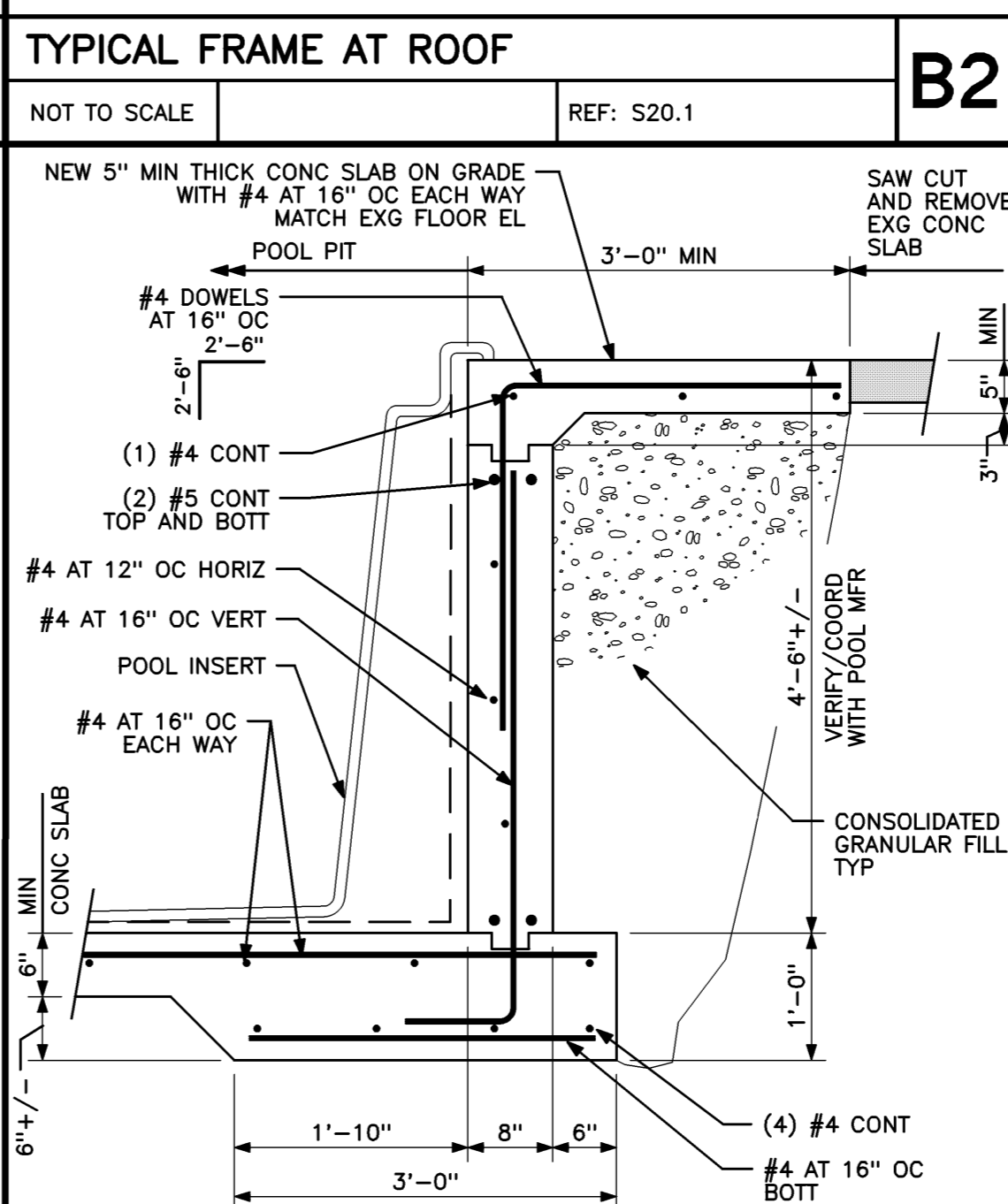
TYPICAL WALL CORNER/INTERSECTION REINF DETAIL NOT TO SCALE REF: S10.1 A5



SECTION AT THERAPY POOL 3/4"=1'-0" REF: S10.1 A3



SECTION AT THERAPY POOL 3/4"=1'-0" REF: S10.1 A2



SECTION AT THERAPY POOL 3/4"=1'-0" REF: S10.1 A1

GENERAL NOTES
NOT TO SCALE REF: NA

Mark	Date	Description
-	07-01-08	ISSUED FOR PERMIT
-	06-26-08	100% REVIEW SET
Issue Dates		
Drawing Status		

Drawing Title
STRUCTURAL DETAILS
PA / PE: SCH Drawn By: SJF
Drawing Number

S50.1