

GENERAL NOTES (continued)

REINFORCING STEEL

REINFORCING STEEL SHALL BE NEW BILLET STEEL DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60. REINFORCING TO BE WELDED [INCLUDING DEFORMED BAR ANCHORS/DBA] CONFORMING TO ASTM A706.

WELDED WIRE FABRIC SHALL BE COLD DRAWN, CONFORMING TO ASTM SPECIFICATION A185, A82 WITH SIZES AS INDICATED ON THE DRAWINGS. [FURNISHED IN FLAT SHEETS ONLY]

BAR SUPPORTS, DESIGN, DETAILING, FABRICATION, AND PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 318-02, ACI 301R-95, AND THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315 (LATEST EDITION).

FOR SLABS ON GRADE, SLAB AND GRADE BEAM REINFORCING SHALL BE HELD IN PLACE BY BAR SUPPORTS WITH SAND PLATES, OR PRECAST CONCRETE BAR SUPPORTS AS DESCRIBED IN CHAPTER 3 OF THE CRSI MANUAL OF STANDARD PRACTICE. BAR SUPPORTS SHALL BE SPACED AT A MAXIMUM OF 4'-0" OC BOTH WAYS. ROCKS, CMU, OR CLAY BRICK WILL NOT BE USED AS SUPPORTS.

REFER TO THE DRAWINGS FOR REINFORCING LAP REQUIREMENTS, WHERE LAP SPLICES ARE NOT SHOWN, LAP PER ACI 318 OR CRSI STANDARDS. LAP WELDED WIRE FABRIC SHEETS 8 INCHES MINIMUM.

PROVIDE HORIZONTAL CORNER BARS AT CORNERS AND INTERSECTIONS OF WALLS AND INTERSECTIONS OF CONTINUOUS WALL FOOTINGS. BARS TO BE PLACED AT SPACING AND SIZE TO MATCH HORIZONTAL BARS. LAP SPlice TO BE 1'-6" EACH DIRECTION.

PROVIDE DOWELS IN WALL FOOTINGS TO MATCH WALL VERTICAL REINFORCING. LAP 30 BAR DIAMETERS [16 INCHES MINIMUM], EXTEND 8" MINIMUM INTO 12" FOOTINGS. USE STANDARD 90 DEGREE HOOK.

ALL FOOTING REINFORCING SHALL BE CONTINUOUS THROUGH WALL FOOTINGS AND ADJACENT COLUMN FOOTINGS. HORIZONTAL WALL REINFORCING SHALL BE CONTINUOUS THROUGH CONCRETE COLUMNS AND PIERS.

PROVIDE DIAGONAL BARS AT CORNERS AND RE-ENTRANT CORNERS OF OPENINGS IN SUPPORTED SLABS ON METAL DECK. USE 1-#4 x 4'-0" LONG AT EACH CORNER PLACED DIAGONALLY TO SIDES OF OPENING.

HEADED CONCRETE ANCHORS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A108, GRADES 1010, 1015, 1017, OR 1020. STUDS SHALL BE AUTOMATICALLY END WELDED IN THE SHOP OR FIELD IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

EMBED PLATES MUST BE SET IN THE FORM BEFORE PLACING CONCRETE, NOT PLACED INTO TOP OF WET CONCRETE. THE CONTRACTOR SHALL CONTACT THE ARCHITECT FOR CORRECTIVE DETAILS FOR ANY EMBED PLATES LEFT OUT OF CONCRETE POURS.

THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER FAR ENOUGH IN ADVANCE OF EACH CONCRETE PLACEMENT TO ALLOW AMPLE TIME TO CHECK THE LAYOUT OF THE STEEL BEFORE THE BEGINNING OF THE ACTUAL CONCRETE PLACEMENT, BUT NOT IN ADVANCE OF THE TIME THAT 90% OF THE STEEL HAVING BEEN PLACED.

CLEAR COVER OF REINFORCING STEEL FROM FACE OF CAST IN PLACE CONCRETE SHALL BE AS FOLLOWS UNLESS NOTED ON CONTRACT DRAWINGS:

FOOTINGS AND OTHER PRINCIPAL STRUCTURAL MEMBERS IN WHICH THE CONCRETE IS DEPOSITED AGAINST THE GROUND.....3 INCHES

MEMBERS WITH FORMED SURFACES EXPOSED TO THE WEATHER OR GROUND:
 A. #6 BARS OR LARGER2 INCHES
 B. #5 BARS OR SMALLER1 1/2 INCHES

CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
 A. WALLS.....3/4 INCHES
 B. COLUMN PIERS, TIES.....1 1/2 INCHES

REINFORCING IN SLABS ON GRADE.....1-1/2 INCHES FROM TOP OF SLAB.

MASONRY

CONCRETE MASONRY UNITS (CMU) SHALL BE LIGHT WEIGHT CELLULAR UNITS CONFORMING TO THE STANDARD SPECIFICATIONS FOR HOLLOW CONCRETE MASONRY UNITS ASTM C-90. CONCRETE MASONRY UNIT COMPRESSIVE STRENGTH SHALL BE NO LESS THAN 2,000 psi IN ACCORDANCE WITH ASTM C-140, AND THE UNIT WEIGHT SHALL NOT EXCEED 105 PCF. DESIGN COMPRESSIVE STRENGTH OF CONCRETE MASONRY FOR $F_m = 1,500$ psi. THESE STRENGTH VALUES SHALL BE ON A NET CONCRETE MASONRY AREA FOR ALL HOLLOW UNITS. SUBMIT EVIDENCE IN WRITING TO THE ARCHITECT TO SUBSTANTIATE THESE VALUES.

MORTAR SHALL CONFORM TO ASTM C-270. GROUT SHALL CONFORM TO ASTM C-476. MORTAR SHALL BE TYPE "S" WITH A MINIMUM AVERAGE 28-DAY COMPRESSIVE STRENGTH OF 2,000 psi. GROUT FOR ALL REINFORCED MASONRY SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 3,000 psi.

BOND BEAMS, LINTEL BEAMS, AND REINFORCED MASONRY WALLS SHALL BE FILLED SOLID WITH GROUT, NOT MORTAR. HOLLOW CONCRETE MASONRY UNITS SHALL BE LAID WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS AND WEBS. FILL ALL CELLS OF CONCRETE MASONRY UNITS BELOW GRADE WITH GROUT.

SPLICED REINFORCING SHALL BE LAPPED 48 BAR DIAMETERS [24 INCHES MINIMUM] OR AS SHOWN ON THE DRAWINGS, WHICHEVER IS GREATER. ALL SPLICES SHALL BE WIRE TIED TOGETHER

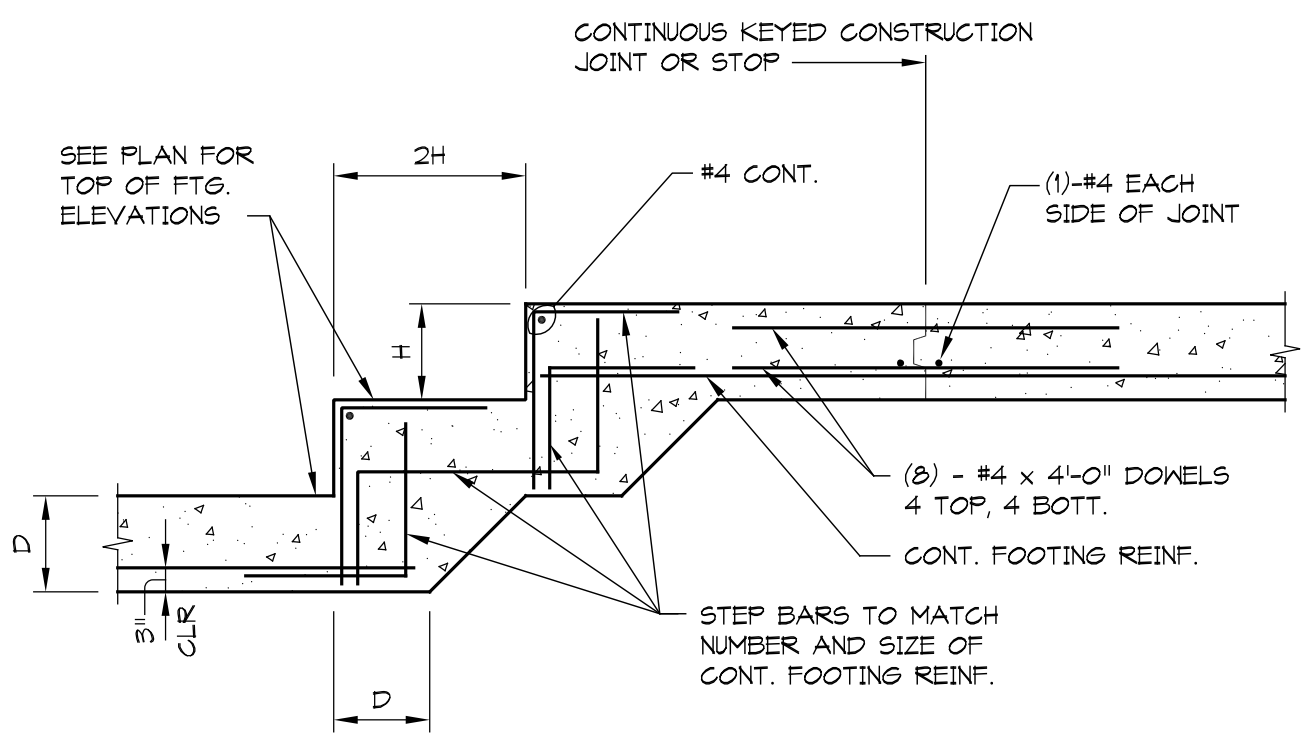
PROVIDE REINFORCING BAR POSITIONERS FOR ALL VERTICAL AND HORIZONTAL REINFORCING PLACED IN CMU WALLS. BAR POSITIONERS SHALL BE 9 GAGE, HOT DIPPED GALVANIZED AND FABRICATED TO ACCOMMODATE CONCRETE MASONRY UNITS.

PROVIDE MINIMUM MASONRY WALL REINFORCING STEEL TO COMPLY WITH ACI 530 AS FOLLOWS:

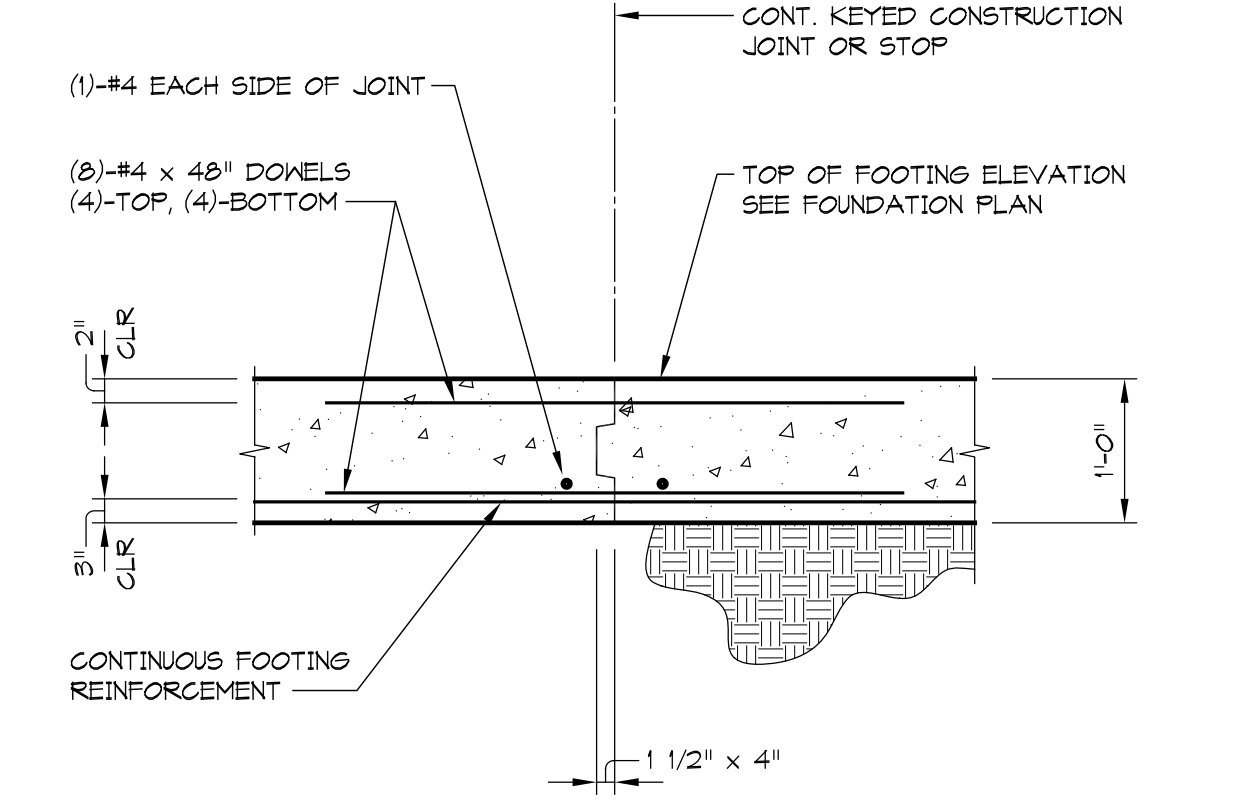
- A. VERTICAL REINFORCING: NUMBER, SIZE, AND LOCATED AT:
 1. (3)-#5 LOCATED AT EACH CORNER OF ALL WALLS
 2. (2)-#5 LOCATED AT EACH SIDE OF EACH OPENING
 3. (1)-#5 LOCATED AT ENDS OF WALLS
- B. HORIZONTAL REINFORCING (2)-#5 CONT. IN CMU BOND BEAM LOCATED AT:
 1. TOP OF ALL DOOR OPENINGS OR WALL OPENINGS, EXTEND 24" PAST OPENING EACH SIDE
 2. AT ROOF LEVEL UNDER STRUCTURAL BEARING AND AT TOP OF WALLS
 3. AT BOTTOM OF WALL OR IN FOUNDATION WHEN WALL DOWELED TO FOOTING

MISCELLANEOUS METALS

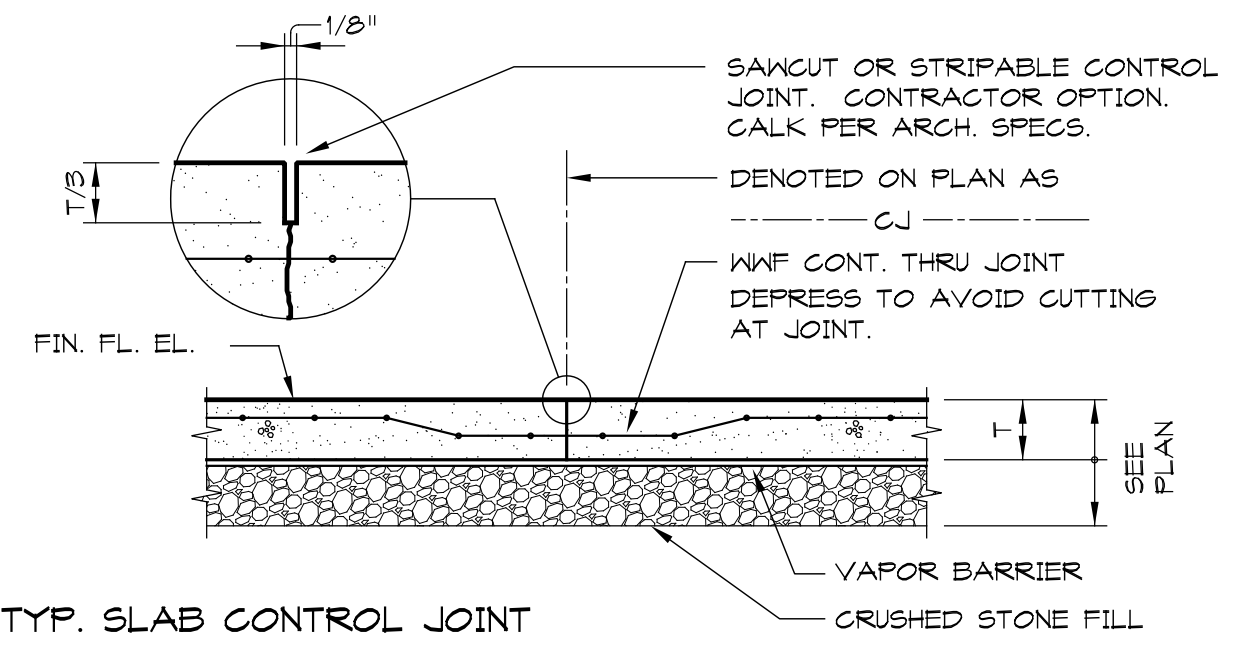
SHOP DRAWINGS FOR THE FABRICATION AND ERECTION OF ALL ASSEMBLIES OF MISCELLANEOUS IRON WORK WHICH ARE NOT COMPLETELY SHOWN BY MANUFACTURER'S DATA SHEETS. INCLUDE PLANS AND ELEVATIONS AT NOT LESS THAN 1" TO 1'-0" SCALE, AND INCLUDE DETAILS OF SECTIONS AND CONNECTIONS AT NOT LESS THAN 3/4" TO 1'-0" SCALE. SHOW ANCHORAGE AND ACCESSORY ITEMS. ENGINEERING DATA: BEFORE ANY STAIRS, LADDERS AND RAILINGS ARE FABRICATED, SUBMIT ENGINEERING DATA DRAWINGS TO THE ARCHITECT FOR REVIEW INDICATING HOW PERFORMANCE STANDARDS SPECIFIED HERE SHALL BE MET. THE CONTRACTOR IS RESPONSIBLE FOR THE STRUCTURAL DESIGN AND SUPPORTS FOR THESE SYSTEMS AND MUST SHOW HIS PROPOSED SYSTEMS ON THESE DRAWINGS. THESE DRAWINGS MUST SHOW ALL LOAD CONDITIONS AND DESIGN CALCULATIONS RELATIVE TO CONNECTIONS, FASTENING DEVICES AND ANCHORAGE, AS WELL AS SIZE AND GAUGE OF MEMBERS. CALCULATIONS AND DRAWINGS MUST BE PREPARED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF NORTH CAROLINA AND SHALL BE SIGNED AND SEALED BY THIS ENGINEER.



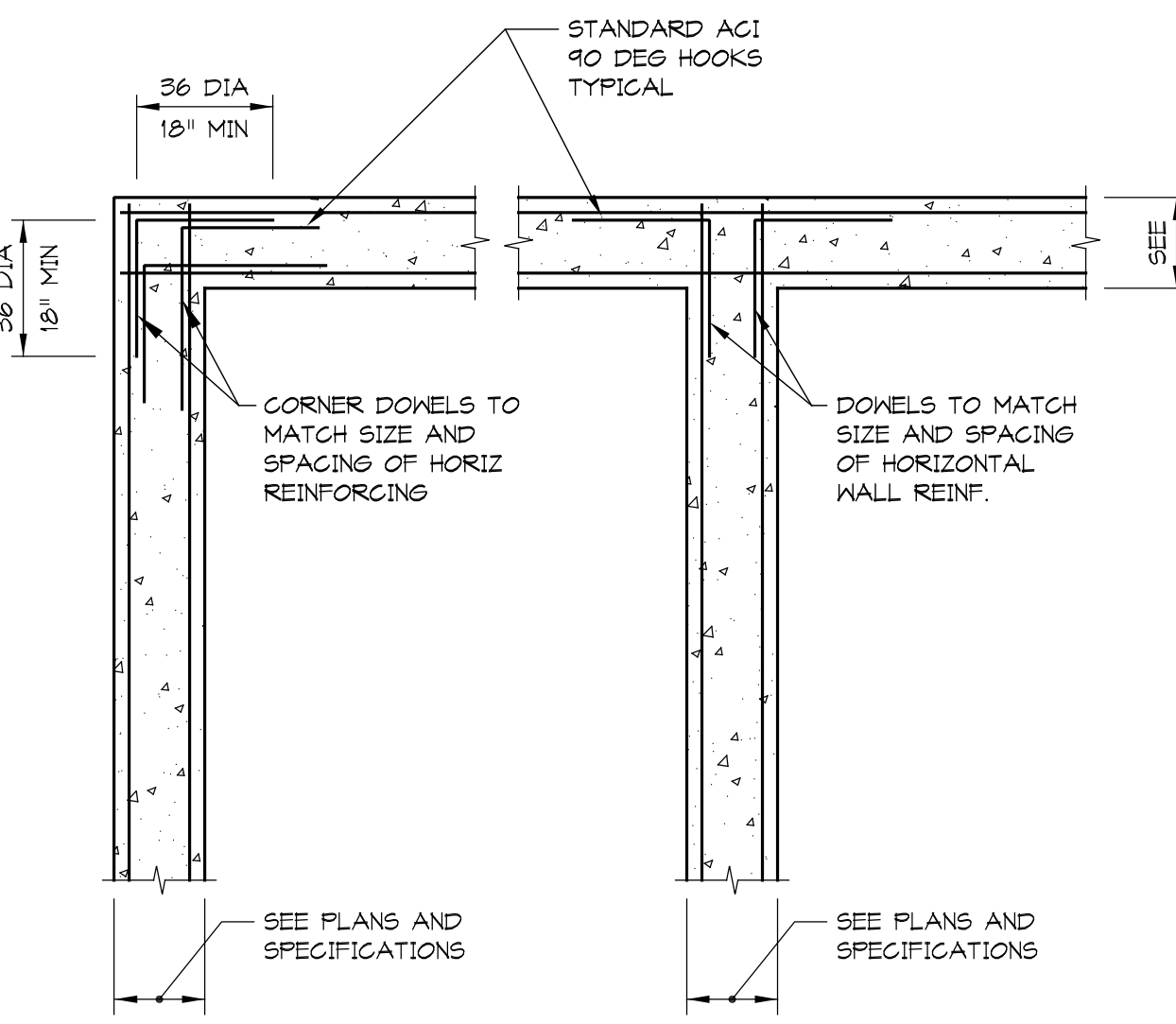
3 TYPICAL STEPPED FOOTING DETAIL



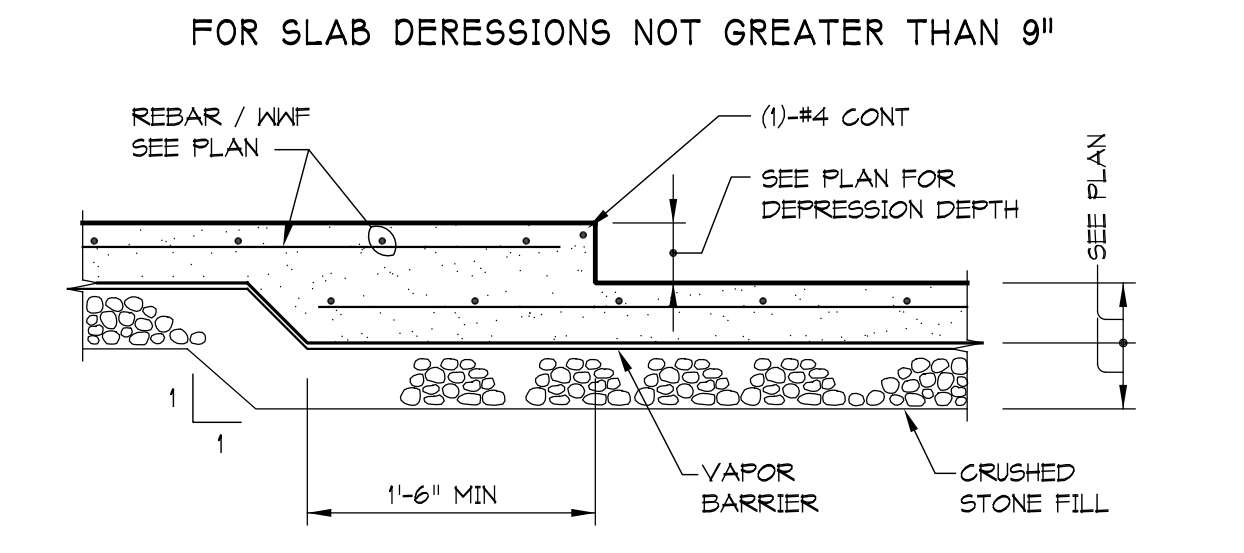
1 TYPICAL FOOTING CONSTRUCTION JOINT



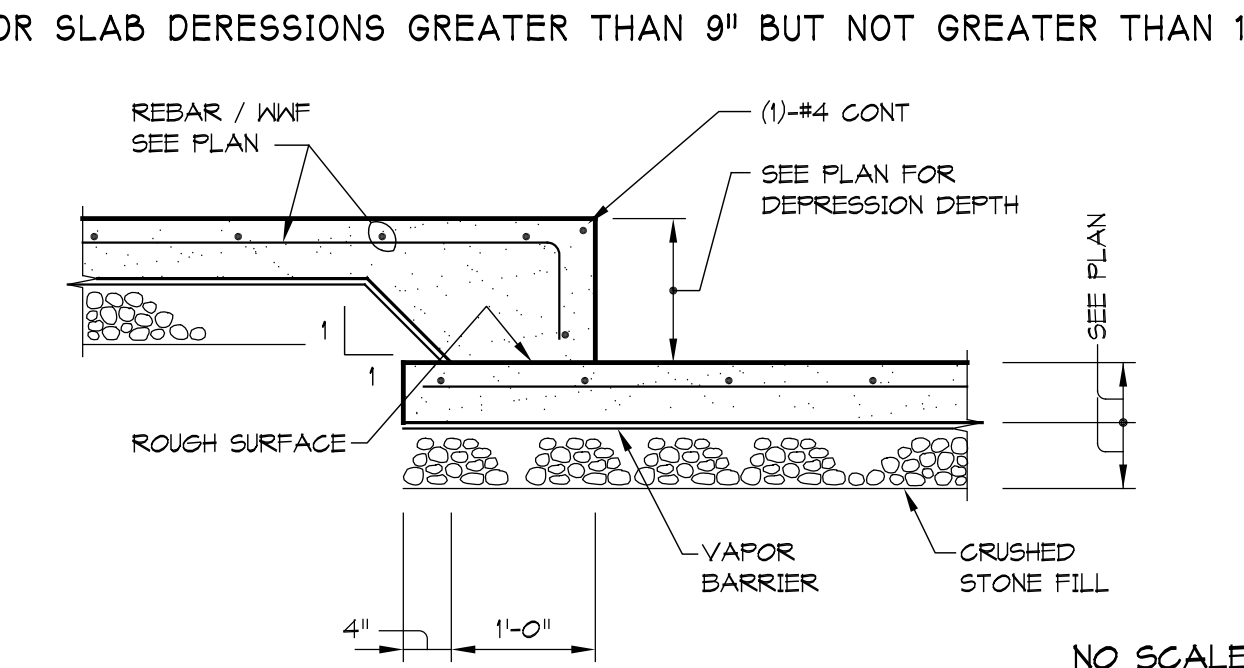
4 TYP. SLAB CONSTRUCTION / CONTROL JOINT



2 TYPICAL WALL/FTG CORNER BAR DETAILS



5 TYPICAL SLAB DEPRESSION



GENERAL NOTES & ABBREV.'S CONT'd, W/ DETAILS

ROWAN COUNTY AIRPORT

Terminal Expansion

