

PLANS ARE FOR STRAND AND BEAM PLACEMENT ONLY. SET FORMS, DROPS, BRICK LEDGES, HANDICAP RAMPS, ETC., BY ARCHITECTURAL FLOOR PLAN OR AS SPECIFIED BY OWNER/GENERAL CONTRACTOR.

FOUNDATION REQUIREMENTS:

- THICKNESS T = 4"
- BEAM WIDTH W = 10"
- BEAM DEPTH:
INTERIOR D = 30"
EXTERIOR D = 36"
- AREA = 2631 SQ. FT.
- ***EST. CONCRETE = 98 YDS.
- SOIL REPORT:
EYNCON, LLC
117 N. DALLAS ST.
ENNIS, TX 75119
PROJECT NO.: 1117056
DATED: DECEMBER 13, 2017

NOTE:

TRANSITION

BEAM DEPTH @

MIN. 1:6 SLOPE

STRAND MATERIAL LIST

Qty.	Strand Mark	-10% (in)	Elongation (in)	+10% (in)
2	S20	1 3/8"	1 1/2"	1 11/16"
28	S52	3 9/16"	3 15/16"	4 3/8"
6	S58	3 15/16"	4 7/16"	4 7/8"
2	BS20	1 3/8"	1 1/2"	1 11/16"
1	BS21	1 7/16"	1 5/8"	1 3/4"
20	BS53	3 5/8"	4"	4 7/16"
4	BS59	4 1/16"	4 1/2"	4 15/16"

SITE PREPARATIONS:

THIS FOUNDATION DESIGN IS FOR WATER BASED CHEMICAL INJECTION ONLY. THE POTENTIAL VERTICAL MOVEMENTS SHOULD BE LOWERED BY INJECTING WATER/CHEMICAL TO A DEPTH OF 6 FEET. PREPARE A BUILDING PAD OF MINIMUM ONE-FOOT THICKNESS OR MORE DEPENDING ON THE REQUIRED FINISHED FLOOR ELEVATION (FFE) USING COMPACTED SELECT FILL PLACED IMMEDIATELY BELOW THE FLOOR SLAB "FOLLOWING" THE INJECTION, WHEN THE GROUND IS WORKABLE. THE COMPACTED SELECT FILL WILL HELP THE WATER/CHEMICAL INJECTED SOIL MASS RETAIN ITS MOISTURE AND PROVIDE A UNIFORM COMPACTED SUPPORT FOR THE FOUNDATION. INJECTION SEQUENCE FOLLOWS:

- INJECTION INTO NATIVE SOIL (WITH VEGETATION)
- WHEN GROUND IS WORKABLE FOLLOWING INJECTION REMOVE VEGETATION (APPROX 4")
- IMMEDIATELY AFTER REMOVING VEGETATION, ADD SELECT FILL IN LIFTS COMPACTED TO REQUIRED FFE AND DENSITY
- ALLOW A MINIMUM OF 2 WEEKS BEFORE PLACING CONCRETE TO ENABLE SOME MOISTURE EQUILIBRATION TO OCCUR SEE CORRESPONDING SOIL REPORT FOR DETAILED PROCESS & REQUIREMENTS

NOTES:

- TO PREVENT SETTLEMENT DUE TO SOIL CONSOLIDATION, ALL EXTERIOR FOUNDATION BEAMS MUST BE FOUNDED A MINIMUM OF 12 INCHES INTO UNDISTURBED SOIL OR UNIFORMLY COMPACTED SELECT FILL, UNLESS PIERS ARE INSTALLED. THE SELECT FILL SHOULD BE NON-EXPANSIVE SOIL WITH A PLASTICITY INDEX BETWEEN 10 TO 15, AND SHOULD BE PLACED IN LIFTS OF 6 TO 8 INCHES AND UNIFORMLY COMPACTED TO A MINIMUM OF 95% OF ASTM D698 (STANDARD PROCTER) MAXIMUM DENSITY AT A MOISTURE CONTENT IN BETWEEN OPTIMUM AND +3% OF OPTIMUM. WHEN FOUNDATION SITE CONTAINS FILL (MAX. 3'-0"), THE DEEPEN BEAM DETAIL SHOULD BE USED IN THESE FILLED AREAS. FOR SITES WHERE FILL IS GREATER THAN 3'-0", PLEASE CONTACT EYNCON ENGINEERING TO INCORPORATE PIERS INTO THE DESIGN.
- ALL CONCRETE SHALL BE NORMAL WEIGHT, WITH MINIMUM STRENGTH OF 3000 PSI AFTER 28 DAYS AND SHALL CONFORM TO ACI 318, ACI 301, AND ASTM C94, MOST CURRENT EDITIONS.
- CONCRETE SHALL NOT BE PLACED WITH SLUMP GREATER THAN 5 INCHES.
- WHEN SPECIFIED ALL #3 BARS SHALL BE 40 GRADE STEEL AND ALL #4 OR LARGER BARS SHALL BE ASTM A-615 GRADE 60.
- PLUMBING MAY CROSS BEAMS BUT NOT BE PLACED IN BEAMS.
- ALL GRADE BEAMS AND SLAB AREA SHALL BE FREE OF ANY STANDING WATER AT THE TIME OF CONCRETE PLACEMENT.
- 1'-2" OF CUSHION (LEVELING) SAND UNDER CONCRETE SLAB IS RECOMMENDED TO ACHIEVE A LEVEL SURFACE.
- PROVIDE A 6 MIL POLYETHYLENE MOISTURE RETARDER BENEATH SLAB AREA.
- ALL STRANDS 1/2" DIA. - 270 KSI.
- THIS FOUNDATION DESIGN IS CONSIDERED INVALID UNLESS ACCOMPANIED BY A LETTER FROM EYNCON ENGINEERING AUTHORIZING ITS USE ON A SPECIFIC LOT & BLOCK, OR ADDRESS.
- PLANS CAN BE REVERSED ON LOT AT BUILDERS DISCRETION.
- PLANS ARE FOR STRAND AND BEAM PLACEMENT ONLY. SET FORMS, DROPS, BRICK LEDGES, HANDICAP RAMPS, ETC., BY ARCHITECTURAL FLOOR PLAN OR AS SPECIFIED BY OWNER/GENERAL CONTRACTOR.
- AT CONTRACTORS OPTION, LIVE END AND DEAD END REVERSAL IS PERMITTED.
- AT CONTRACTORS OPTION, BRICK LEDGE MAY BE INCLUDED OR OMITTED AT EXTERIOR DOOR OPENINGS.
- TO INSURE PROPER DRAINAGE AS STATED BELOW, THE ELEVATION OF THE TOP OF SLAB SHALL BE A MINIMUM OF 12 INCHES ABOVE THE HIGHEST NATURAL GRADE ELEVATION AROUND THE PERIMETER OF THE SLAB. WITHIN A MIN. DISTANCE OF 5', STANDING WATER (PONDING) WITHIN 10' OF THE FOUNDATION PERIMETER WILL RESULT IN SOIL EXPANSION WHICH WILL CAUSE FOUNDATION PROBLEMS.
- A PARTIAL (PRE) STRESS OF THE CABLES IS HIGHLY RECOMMENDED IN ORDER TO MINIMIZE CRACKING. PARTIAL STRESSING SHOULD BE WITHIN 24 TO 48 HOURS, AT 30% OF MAX STRESS.
- DROPS: THE AMOUNT OF DROP AND EXACT LOCATION IS TO BE DETERMINED BY ARCHITECTURAL PLAN OR AS DIRECTED BY OWNER/CONTRACTOR. DROP MAY VARY FROM 1 1/2" TO 12". SEE STANDARD DROP DETAIL.
- DRAINAGE, DRAINAGE, DRAINAGE, DRAINAGE ALL AROUND A FOUNDATION IS CRITICAL IN AREAS WHERE EXPANSIVE SOIL EXIST. STANDING WATER WITHIN 10 FEET OF A FOUNDATION WILL RESULT IN SOIL HEAVE AND UPWARD FOUNDATION MOVEMENT. AS SOON AS CABLES ARE CUT, PROPER ROUGH GRADING IS REQUIRED. TO INSURE THAT THERE ARE NO LOW SPOTS ADJACENT TO THE FOUNDATION WHERE WATER CAN STAND, THESE AREAS NEED TO BE FILLED AND ROUGH GRADED TO INSURE WATER FLOWS AWAY FROM THE FOUNDATION. STANDING WATER ADJACENT TO THE FOUNDATION IN THESE HIGH CLAY CONTENT SOIL AREAS, WILL CAUSE THE FOUNDATION TO HEAVE (MOVE-UP) AND RESULT IN FOUNDATION PROBLEMS. THE FINAL GRADE (AFTER CABLES ARE CUT) AROUND THE FOUNDATION SHALL BE 8" BELOW THE TOP OF THE FOUNDATION AND SLOPE AWAY FROM THE FOUNDATION A MINIMUM OF 6" IN 5'-0".
- IN AREAS WHERE EXPANSIVE OR COLLAPSIBLE SOILS ARE KNOWN TO EXIST, ALL DWELLINGS SHALL HAVE A CONTROLLED METHOD OF WATER DISPOSAL FROM ROOFS THAT WILL COLLECT AND DISCHARGE ROOF DRAINAGE TO THE GROUND SURFACE AT LEAST 5 FEET (1524 MM) FROM FOUNDATION WALLS OR TO AN APPROVED DRAINAGE SYSTEM.
- WOOD SOLE PLATES AT ALL EXTERIOR WALLS ON MONOLITHIC SLABS, WOOD SOLE PLATES OF BRACED WALL PANELS AT BUILDING INTERIORS ON MONOLITHIC SLABS AND ALL WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH MINIMUM 1/2" INCH DIAMETER (12.7 MM) ANCHOR BOLTS SPACED A MAXIMUM OF 6 FEET (1829 MM) ON CENTER OR APPROVED ANCHORS OR ANCHOR STRAPS SPACED AS REQUIRED TO PROVIDE EQUIVALENT ANCHORAGE TO 1/2" DIAMETER (12.7 MM) ANCHOR BOLTS. BOLTS SHALL EXTEND A MINIMUM OF 7 INCHES (178 MM) INTO CONCRETE OR GROUTED CELLS OR CONCRETE MASONRY UNITS. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE. A NUT AND WASHER SHALL BE TIGHTENED ON EACH ANCHOR BOLT. THERE SHALL BE A MINIMUM OF TWO BOLTS PER PLATE SECTION WITH ONE BOLT LOCATED NOT MORE THAN 12 INCHES (305 MM) OR LESS THAN SEVEN BOLT DIAMETERS FROM EACH END OF THE PLATE SECTION. INTERIOR BEARING WALL SOLE PLATES ON MONOLITHIC SLAB FOUNDATION THAT ARE NOT PART OF A BRACED WALL PANEL SHALL BE POSITIVELY ANCHORED WITH APPROVED FASTENERS. SILL PLATES AND SOLE PLATES SHALL BE PROTECTED AGAINST DECAY AND TERMITES WHERE REQUIRED BY SECTION R317 AND R318. THIS "FOUNDATION ANCHORAGE" REQUIREMENT IS AS PER IRC 2015, SECTION R403.1.6
- CAUTION: IN THE EVENT THAT A CABLE PASSES THROUGH A PLUMBING OPENING, MOVE CABLE TO EDGE OF OPENING. CABLE SPACING CAN BE ADJUSTED, BUT IN NO EVENT CAN CABLE SPACING BE GREATER THAN 5'-0" O.C.
- CAUTION: VIBRATE CONCRETE AT ALL CABLE LIVE AND DEAD END LOCATIONS, ESPECIALLY AT CORNERS WHERE SEVERAL CABLES ARE ANCHORED. MAXIMUM CONCRETE DENSITY IS REQUIRED TO ENSURE THAT A "BLOW-OUT" DOES NOT OCCUR DURING CABLE STRESSING.
- TREE REMOVAL: COMPLETELY REMOVE ALL TREES WITHIN 10' OF FOUNDATION. BACKFILL AND MOISTURE CONDITION ALL VOIDS LEFT BY TREE IN 6" LIFTS COMPACTED TO 95% AND WITHIN 3% OF OPTIMUM MOISTURE. TREES CAN CAUSE EXCESSIVE DRYING OF SOILS WHICH LEAD TO EDGE DROP AND FOUNDATION PROBLEMS. IF TREES ARE NOT REMOVED, BEAM DEPTH SHOULD BE MINIMUM 36" SPANNING 15 FT IN EACH DIRECTION AWAY FROM THE LOCATION OF THE TREE.
- ***THE CONCRETE "ESTIMATE" SHOULD NOT BE USED TO CALCULATE TOTAL VOLUME. BUILDER MUST RELY ON SUB-CONTRACTOR'S TAKE OFF BASED ON SITE ELEVATIONS AND UNKNOWN VARIABLES THAT INFLUENCE ACTUAL CONCRETE USED. EYNCON, LLC CANNOT BE HELD LIABLE FOR MATERIAL TAKE OFFS (MTO) DISCREPANCIES.
- PRE-POUR INSPECTION BY EYNCON ENGINEERING REQUIRED.

JOB:

POST TENSION FOUNDATION

KYLE HAND

107 BRIERWOOD DR.

PALESTINE, TX 75601

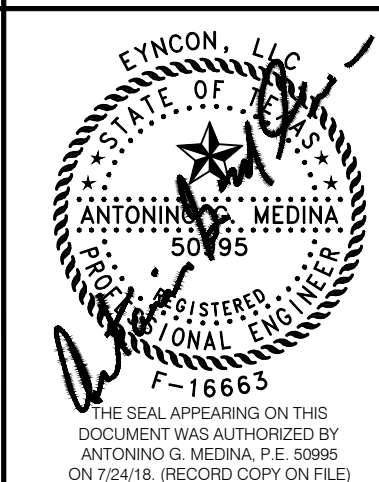
CONTACT: KYLE HAND - (903) 229-3883

Eyncon
ENGINEERING

117 N. DALLAS ST.
ENNIS, TX 75119

TELE: (409) 478-3033

EMAIL: info@eyncon.com
www.eyncon.com



DRAWN BY: M. TAY

SCALE: 1/8" = 1'-0"

DATE: JUNE 24, 2018

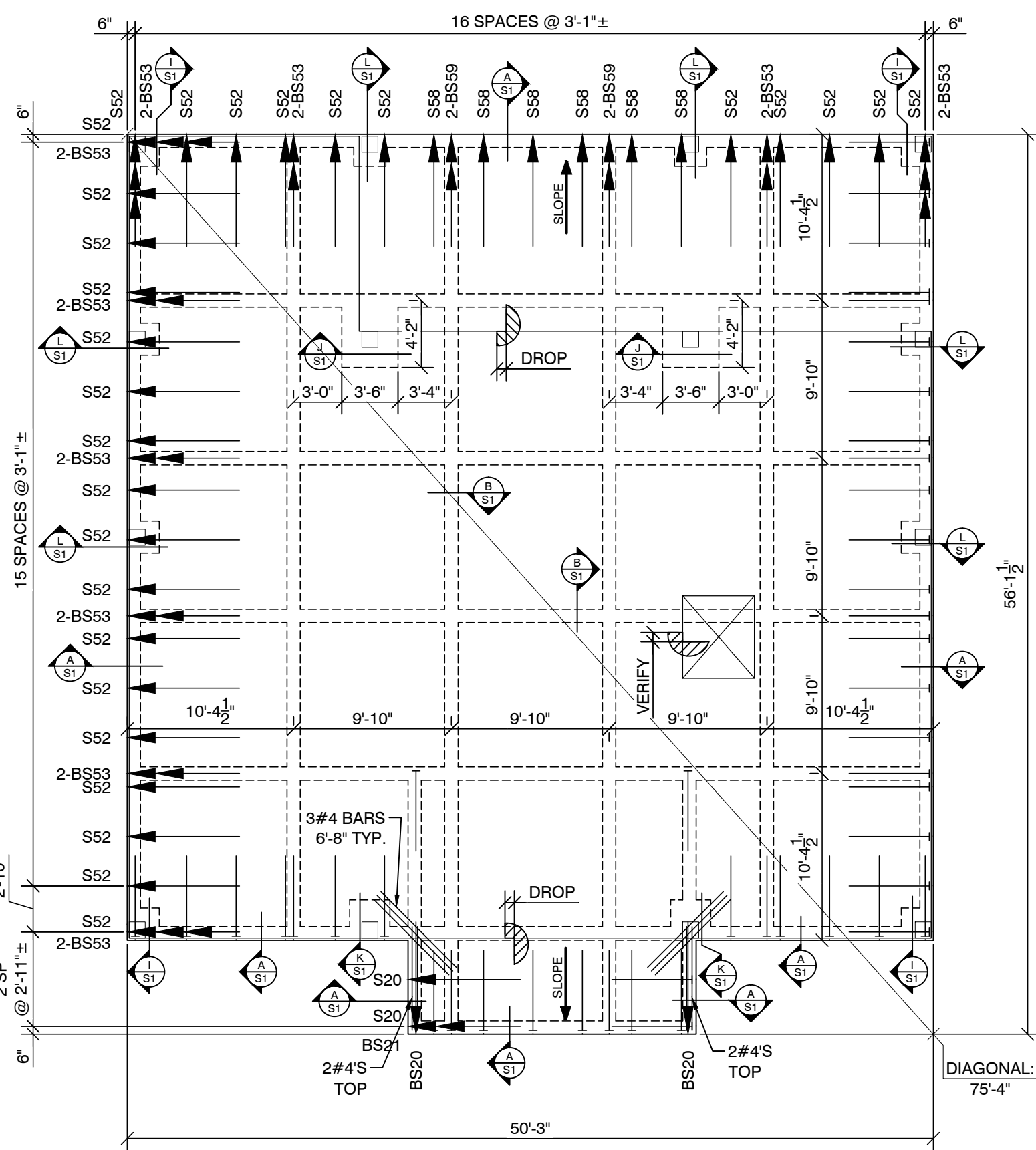
REVISION:

JOB CODE:
1117056

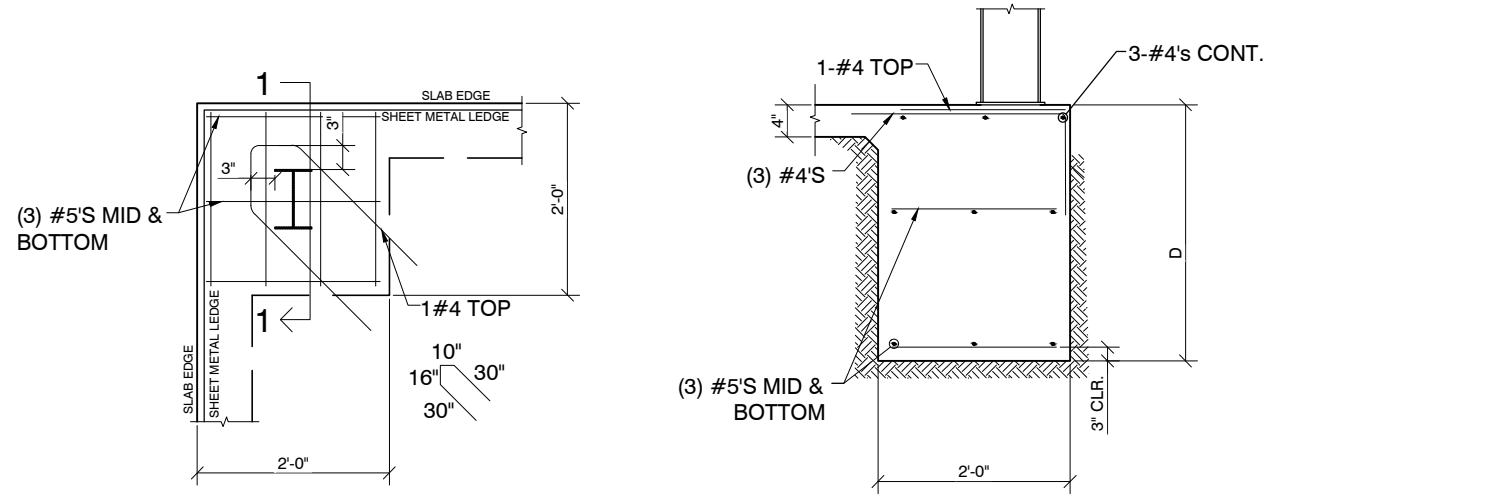
SHEET

PTF-1

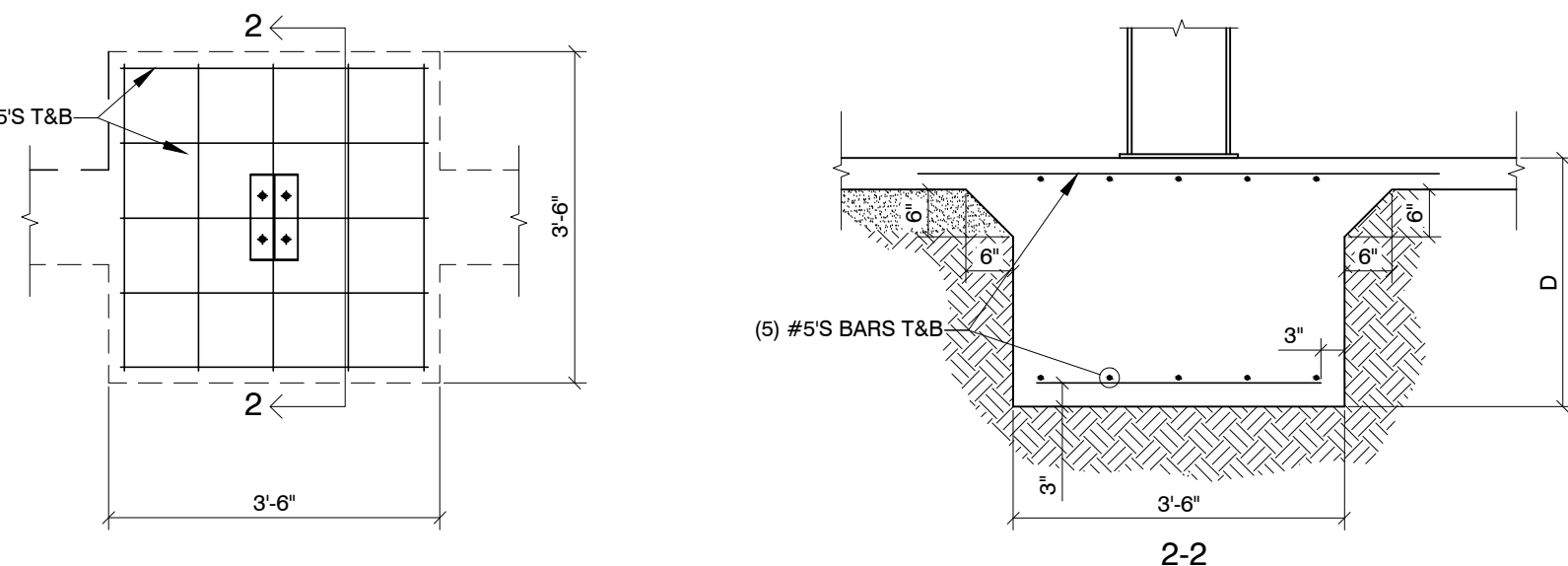
OF 1 SHEET



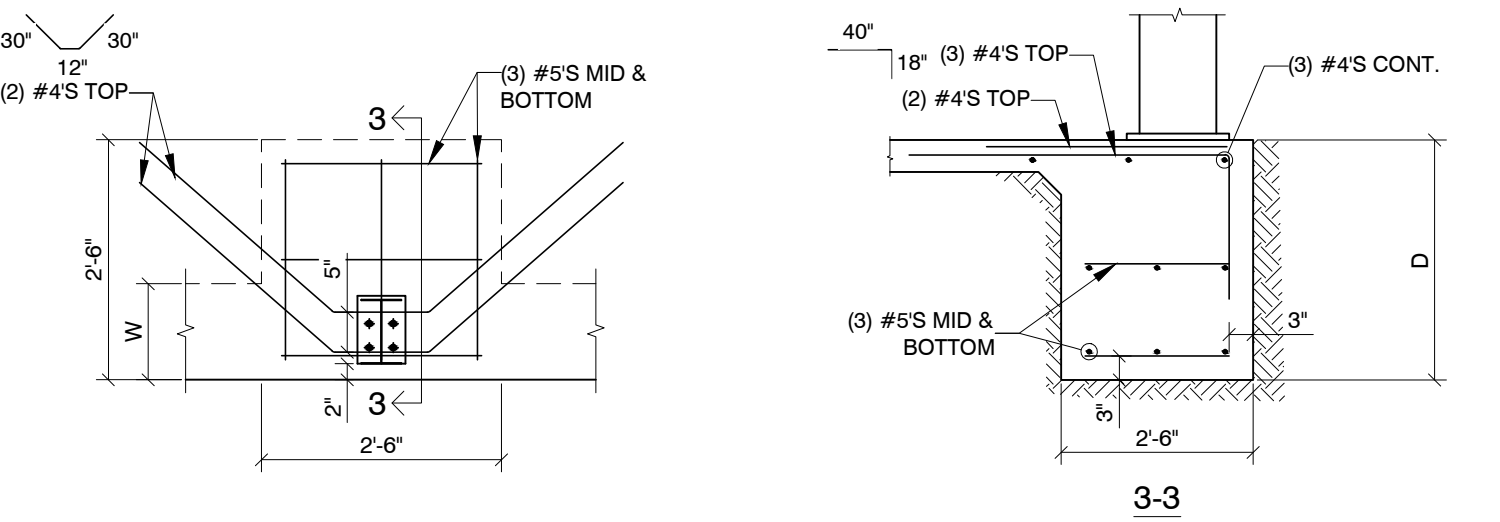
BUILDER/GENERAL CONTRACTOR
TO VERIFY ALL COLUMN LOCATIONS.



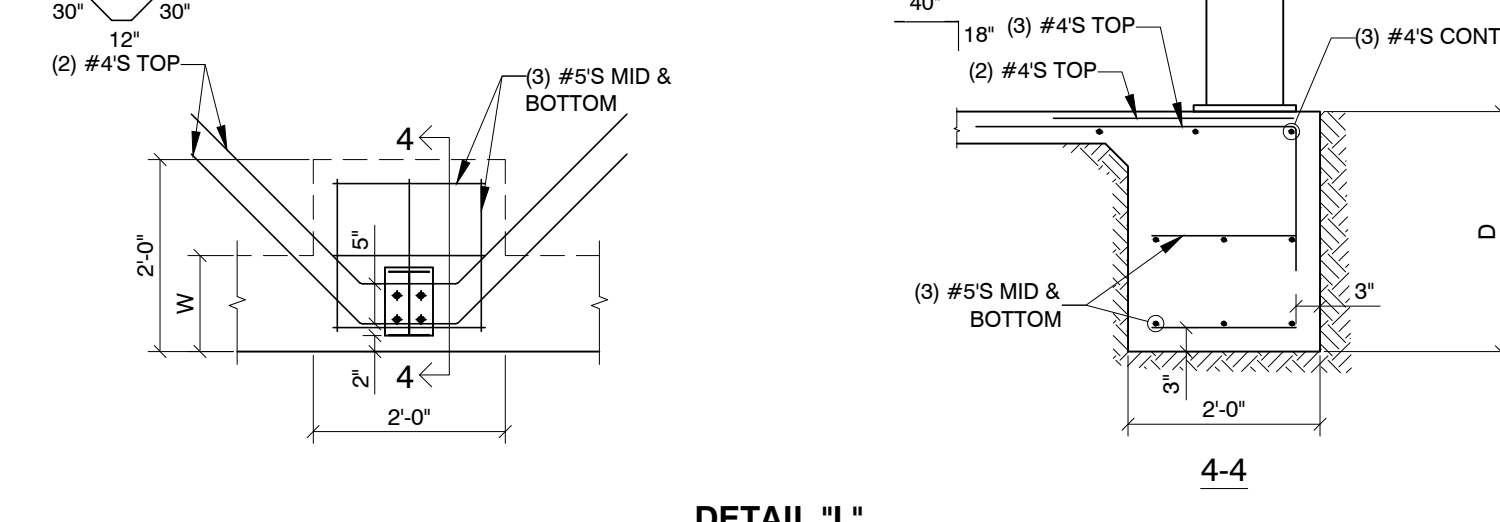
DETAIL "I"



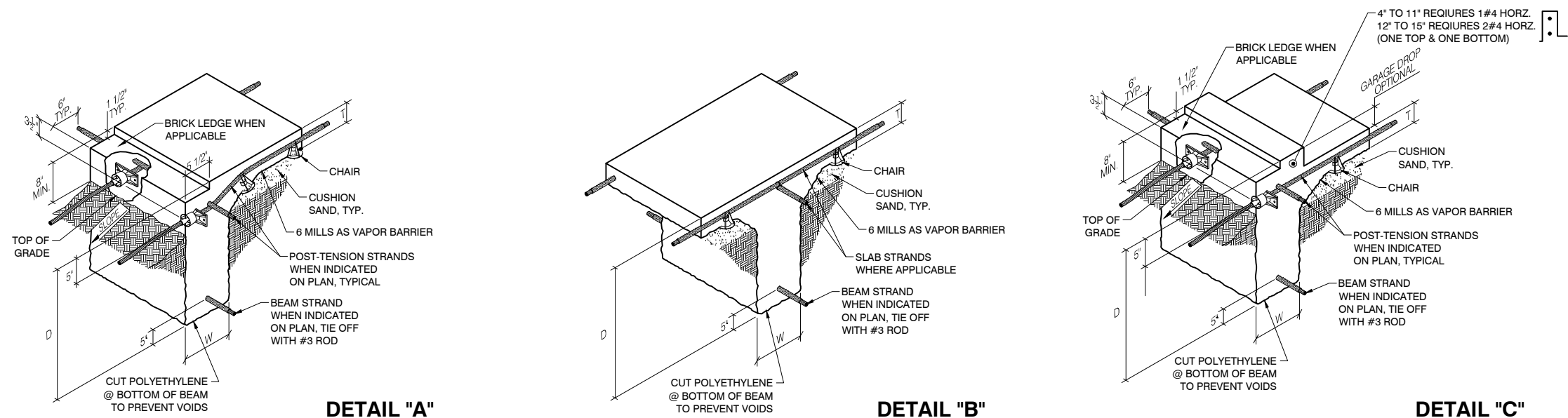
DETAIL "J"



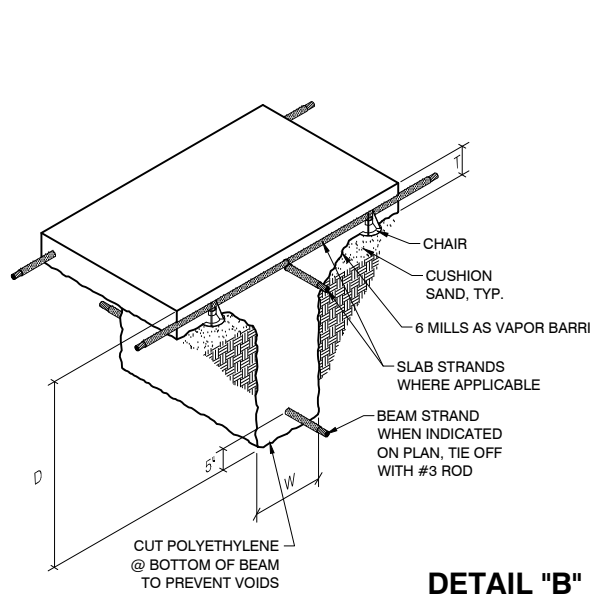
DETAIL "K"



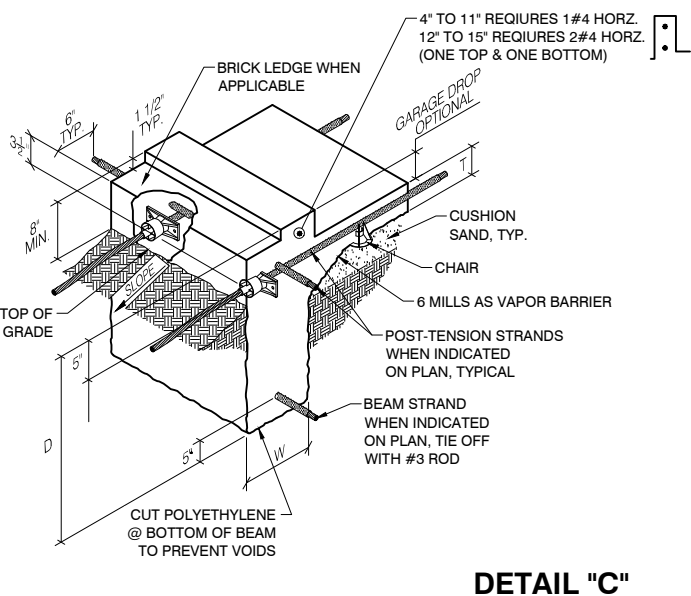
DETAIL "L"



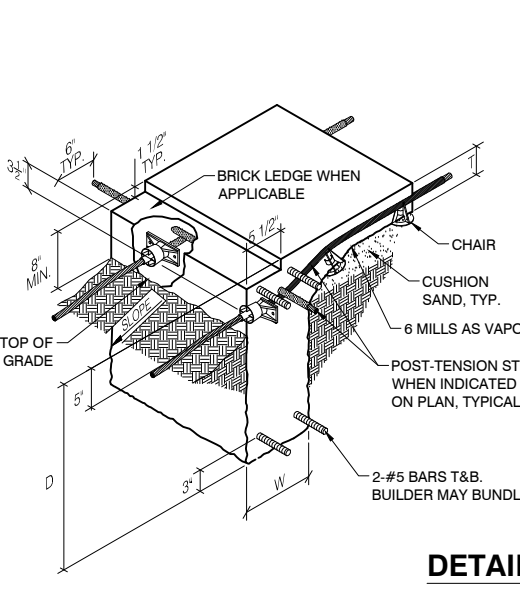
DETAIL "A"



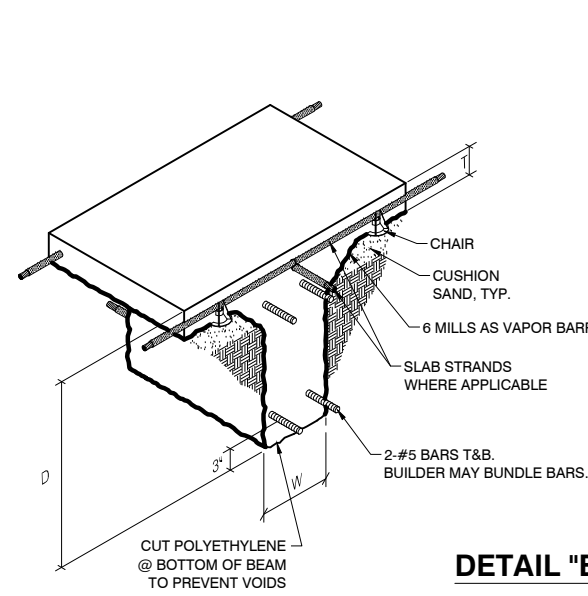
DETAIL "B"



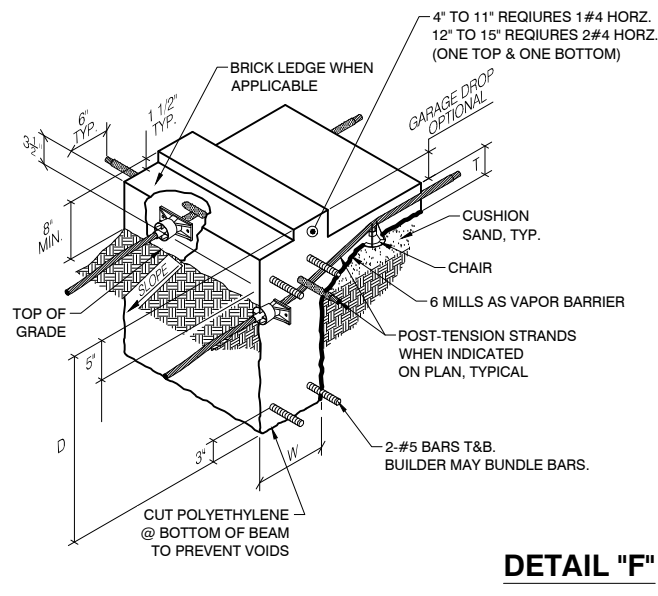
DETAIL "C"



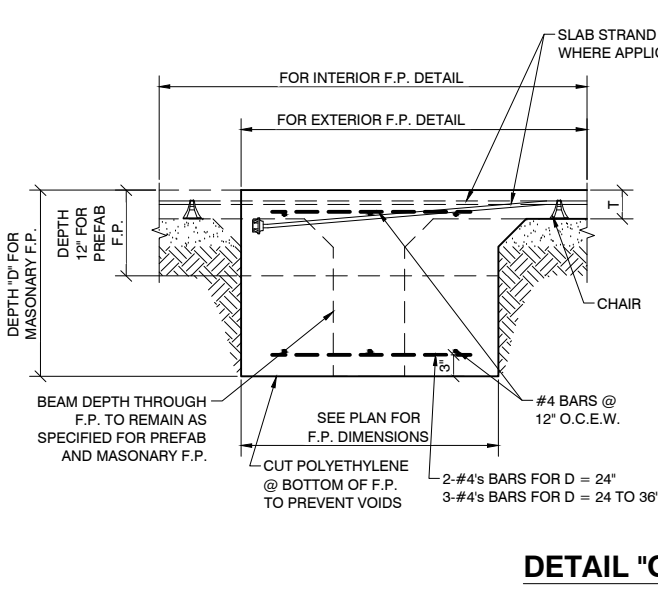
DETAIL "D"



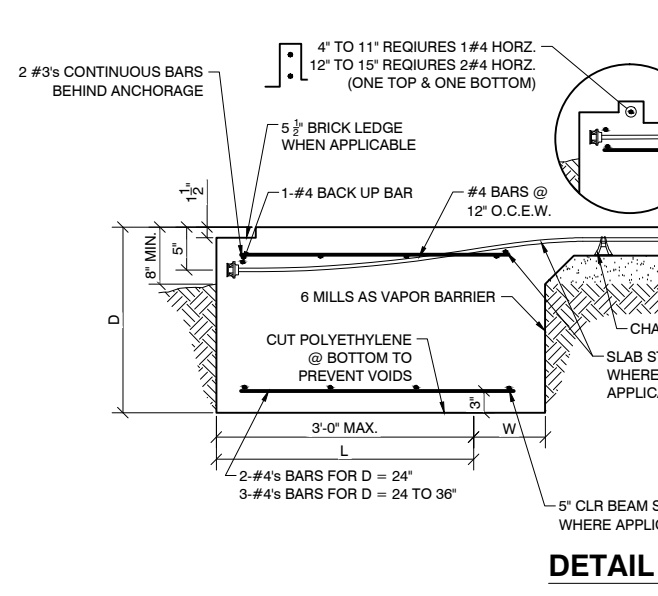
DETAIL "E"



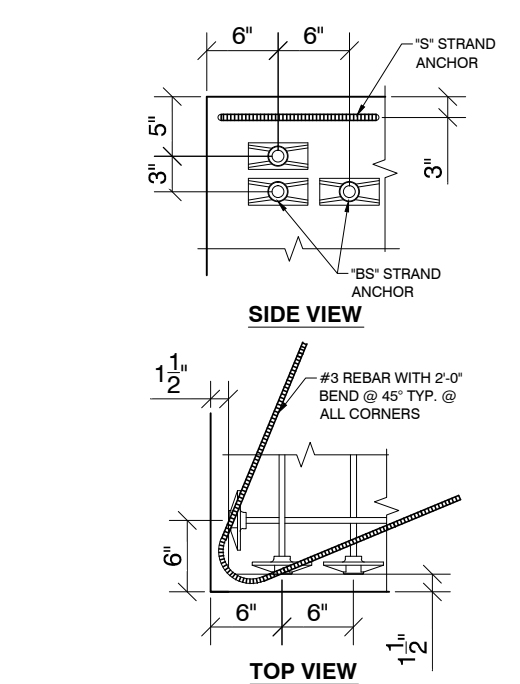
DETAIL "F"



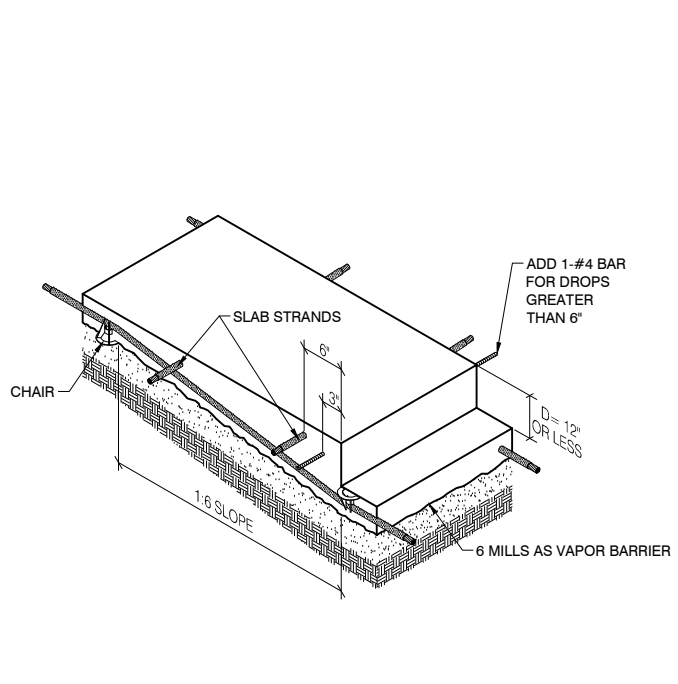
DETAIL "G"



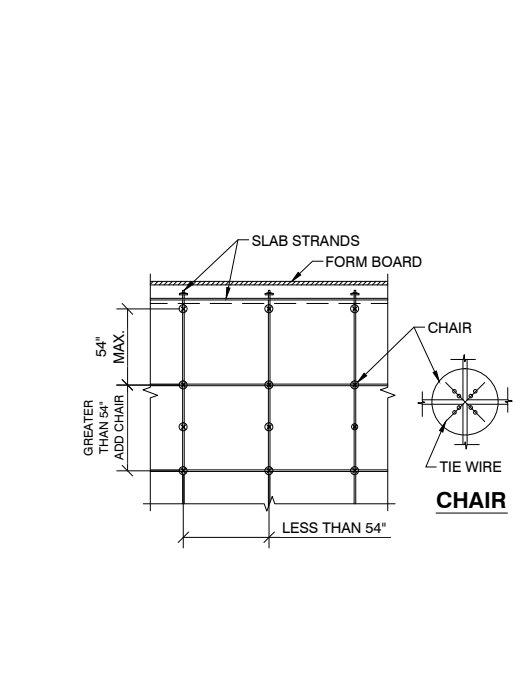
DETAIL "H"



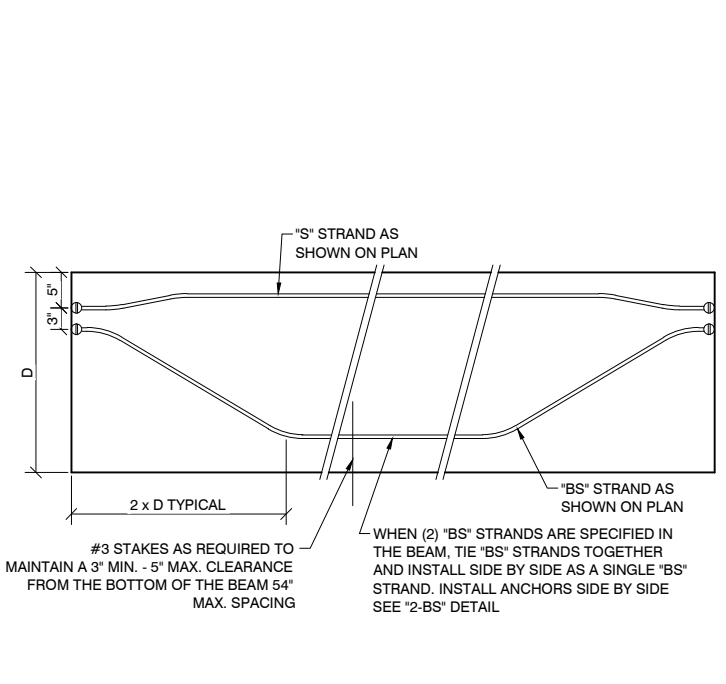
"2-BS" DETAIL



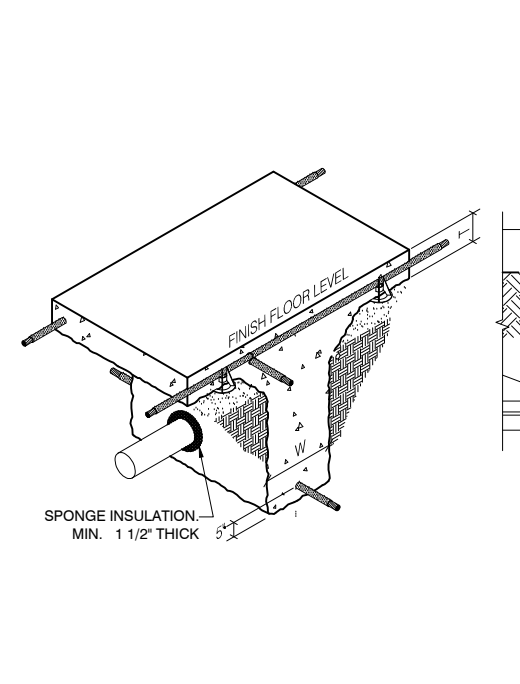
STANDARD DROP DETAIL



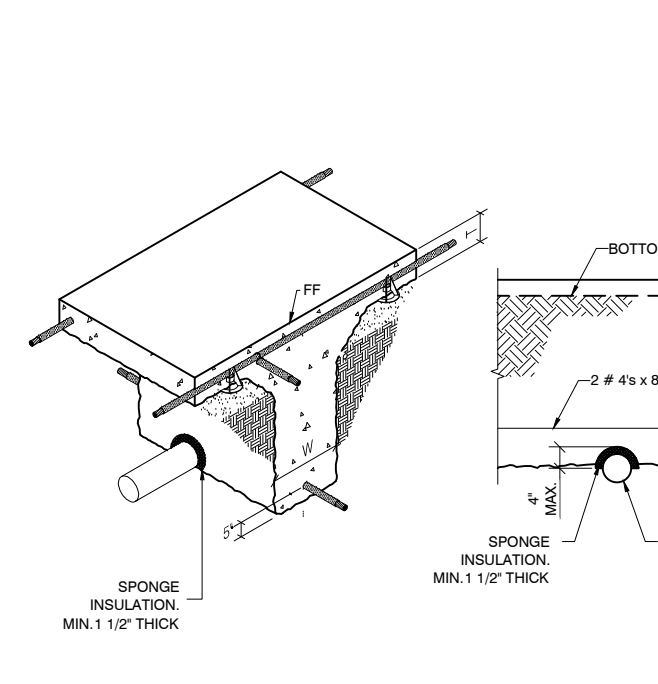
CHAIR LAYOUT



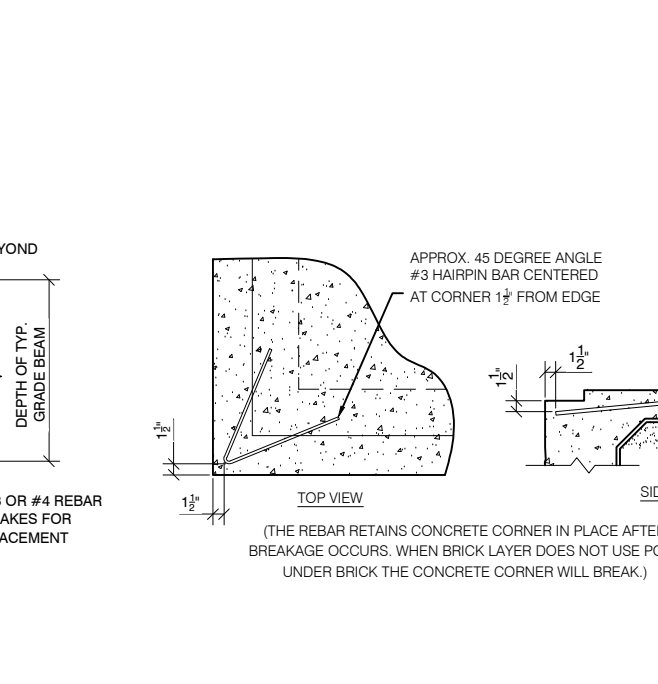
BEAM STRAND "BS" DETAIL



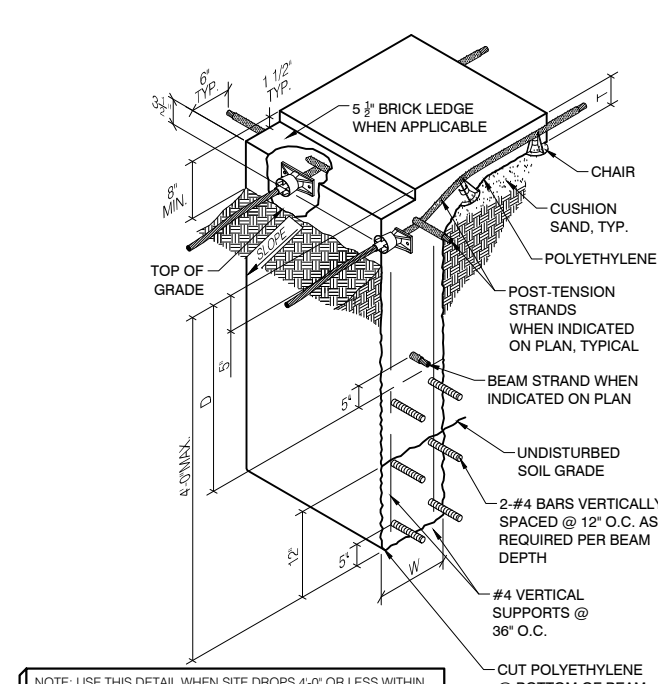
FULL PLUMBING PENETRATION



PARTIAL PLUMBING PENETRATION



TYP. CORNER STIFFENER BAR



STANDARD DEEPEN BEAM DETAIL