

NOTE: THIS FOUNDATION DESIGN BASED UPON GEOTECHNICAL REPORT PROVIDED BY KOOPER GROUP, INC., HGI JOB NO. 14404.

SEE (H) 52 FOR TYPICAL REINFORCEMENT AND LAP SPLICING LOCATIONS

FOUNDATION DIMENSIONS ARE FOR PIER AND/OR BEAM LOCATIONS ONLY. EXTERIOR CORNERS ARE TO BE LOCATED PER ARCHITECTURAL PLANS AND TO BE VERIFIED BY BUILDER

- Notes:
1. Slab thickness T = 4"
 2. Beam Depth D = 28"
 3. Beam Width W = 12"
 4. SIX" Denotes slab strand
 5. SIX"X Denotes beam strand
- PLAN LEGEND
- 1. Denotes one strand to be stressed
 - 2. Denotes two strands to be stressed
 - 3. Denotes three strands to be stressed
 - 4. Denotes factory seating end
 - 5. Denotes dimension to be verified
 - 6. Denotes concrete chair
 - 7. Denotes change in slab elevation

- BUILDING PAD PREPARATION NOTES:
1. VEGETATION SHALL BE STRIPPED FROM THE BUILDING AREA AND THREE FEET BEYOND.
 2. THE TOP TWELVE INCHES OF SUBGRADE SOIL SHALL THEN BE SCARIFIED, WATER ADDED, AND RECOMPACTED. THE ON-SITE SOIL SHALL BE COMPACTED TO THE RANGE OF 92 TO 98 PERCENT OF ASTM D698 (STANDARD PROCTOR) MAXIMUM DENSITY AT A MOISTURE CONTENT AT LEAST THREE PERCENT ABOVE OPTIMUM.
 3. A MINIMUM OF TWELVE INCHES OF SELECT FILL SHALL THEN BE USED IMMEDIATELY BENEATH THE FLOOR SLABS. THE SELECT FILL SHALL BE A NON-EXPANSIVE SOIL WITH A PLASTICITY INDEX BETWEEN FOUR AND TWELVE, SHALL BE PLACED IN THIN LIFTS (SIX TO TWELVE INCHES), AND SHALL BE UNIFORMLY COMPACTED TO A MINIMUM OF 95 PERCENT OF ASTM D698 (STANDARD PROCTOR) MAXIMUM DENSITY AT A MOISTURE CONTENT WITHIN THREE PERCENT OPTIMUM.

MOISTURE CONTENT AND IN-PLACE DENSITY OF THE ON-SITE SOIL AND SELECT FILL ARE CRITICAL TO THE SUCCESSFUL PERFORMANCE OF THE SHALLOW FOUNDATION SYSTEM. THE SOIL SHALL BE TESTED IN-PLACE AT A MINIMUM FREQUENCY OF ONE TEST PER 5,000 SQUARE FEET, PER COMPACTED LIFT TO ASSURE THE FILL IS PROPERLY PLACED.

DESIGN:

- DESIGN OF THIS FOUNDATION IS BASED UPON:
1. 2015 INTERNATIONAL RESIDENTIAL CODE AND GENERALLY ACCEPTED ENGINEERING PRACTICE.
 2. ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE ACI 318 AMERICAN CONCRETE INSTITUTE.
 3. SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS ACI 301 AMERICAN CONCRETE INSTITUTE.
 4. CONTROL OF CRACKING IN CONCRETE STRUCTURES, ACI 224R, AMERICAN CONCRETE INSTITUTE.

LOADS: LIVE FLOORS: 40 PSF

DEAD LOADS HAVE BEEN CONSIDERED IN THE DESIGN FOR HEIGHT OF STRUCTURAL MEMBERS (WALLS, ATTIC, ETC.)

MATERIALS:

1. ALL TENDONS SHALL BE FABRICATED FROM 1/2" DIA. 270 KSI LON TENDONS SHALL BE GREASED WITH A CORROSION INHIBITOR AND PROTECTED WITH A PLASTIC SHEATH.
2. STRAND LENGTHS SHALL BE THE RESPONSIBILITY OF THE SUPPLIER.
3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
4. CONCRETE SHALL BE IN ACCORDANCE WITH ACI-318, ACI-301, AND ASTM C94. SLAB SHOULD BE STRESSED WITHIN 7 TO 10 DAYS AFTER CONCRETE PLACEMENT.
5. WATER CONTENT SHALL BE CONTROLLED AND MINIMIZED IN ACCORDANCE WITH ACI BUILDING CODE REQUIREMENTS AS REFERENCED ABOVE.
6. ALL CONVENTIONAL REINFORCEMENT SHALL BE GRADE 60 UNLESS SPECIFIED ON CONTRACT DOCUMENTS AND SHALL CONFORM TO ASTM A615.

GENERAL NOTES:

1. SITE, SUBGRADE, CONCRETE AND CURING SHALL CONFORM TO THE ACI 302 RECOMMENDED PRACTICE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION.
2. FOUNDATION SHALL BE PLACED MONOLITHICALLY TO AVOID "COLD JOINTS". I.E. PLACEMENT SHALL PROCEED FROM START TO FINISH IN A MONOLITHIC FASHION WHERE COLD JOINTS ARE UNAVOIDABLE DUE TO DELAYS, CONTRACTOR SHALL CONSOLIDATE CONCRETE BY VIBRATING THROUGH COLD JOINT BOUNDARY. IF LONG DELAY IS ANTICIPATED, CONTRACTOR SHALL FORM BULKHEAD OR OTHERWISE CREATE A VERTICAL CONTROL SURFACE FOR INSERTION OF #4 DEFORMED DOWELS AT 18" O.C. IN SLAB AND (2) #5 DEFORMED DOWELS TOP AND BOTTOM OF BEAMS. DOWELS SHALL BE 12" LONG.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION.
4. THESE PLANS ARE FOR BEAM AND REINFORCEMENT PLACING ONLY. WHERE THERE ARE DISCREPANCIES BETWEEN THE FOUNDATION AND ARCHITECTURAL FLOOR PLAN, THE FLOOR PLAN SHALL CONTROL.
5. COORDINATE THESE DRAWINGS WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ALL DROPS, OPENINGS, INSERTS AND RELATED ITEMS.
6. GRADE BEAMS SIZES SHALL BE NOTED ON PLAN. SEE DETAIL 'R' ON DETAIL SHEET FOR STEEL REINFORCEMENT.
7. THIS PLAN FOR USE ONLY AT LOCATION NOTED IN THE TITLE BLOCK.

SITE PREPARATION NOTES:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ANY EXISTING UTILITIES PRIOR TO EXCAVATING. THE CONTRACTOR SHALL EXERCISE CAUTION WHILE EXCAVATING TO AVOID CUTTING OR DAMAGING UNDERGROUND UTILITY LINES. THE CONTRACTOR SHALL INFORM UTILITY OWNERS IN ADVANCE TO ENABLE THEM TO IDENTIFY AND LOCATE ROUTE OR TO MAKE OTHER ADJUSTMENTS IN ORDER FOR WORK TO PROCEED WITH MINIMAL DELAYS.
2. ALL FOUNDATION EXCAVATIONS SHOULD BE PROPERLY MONITORED TO ASSURE THAT UNDESIRABLE LOOSE MATERIALS ARE REMOVED.
3. EXPOSED SOILS SHOULD BE PROTECTED AGAINST RAIN AND EXCESSIVE DRYING.
4. SELECT FILL MATERIAL SHALL BE COMPACTED ACCORDING TO THE PROJECT'S GEOTECHNICAL REPORT, WHEN PROVIDED.
5. SITE GRADING AND DRAINAGE AROUND THE FOUNDATION SHALL BE MAINTAINED AT ALL TIMES IN SUCH A MANNER THAT SURFACE OF GROUND WATER WILL NOT COLLECT AROUND OR UNDER THE SLAB. IF WATER COLLECTS ON THE SITE, THE SITE SOILS ENGINEER SHALL BE CONTACTED FOR CORRECTIVE ACTION. IF TREES OR HIGH DENSITY BRUSH ARE REMOVED, CONTRACTOR SHALL FOLLOW GUIDELINES FOR PAD PREPARATION OUTLINED BY THE SOILS ENGINEER. TREES WHOSE CANOPY EXTENDS OVER THE SLAB ARE NOT ADVISED SINCE ROOT SYSTEMS COULD EXTEND UNDER THE SLAB.

OWNER RESPONSIBILITIES:

1. OWNER MUST ENSURE THAT MOISTURE CONTENT OF THE SOIL IS MAINTAINED AT A CONSTANT LEVEL. DRAINAGE SHALL BE MAINTAINED SUCH THAT FLOODING OF WATER DOES NOT DEVELOP. IF WATER IS PERSISTENT, BUILDER SHOULD BE CONTACTED TO IMPROVE DRAINAGE. MOISTURE VARIATION IS THE MOST COMMON SOURCE OF SLAB DISTRESS.
2. OWNER SHOULD NOT PLANT TREES ADJACENT TO THE SLAB SUCH THAT THE ROOT SYSTEM CAN GET UNDER THE SLAB.
3. OWNER SHOULD CONTINUALLY INSPECT THE SLAB DURING HOT OR DRY PERIODS TO ENSURE THAT WATERING IS ADEQUATE SUCH THAT SOIL IS NOT SEPARATING OR PULLING BACK FROM THE SLAB.
4. TREES AND SHRUBS SHOULD NOT BE LOCATED CLOSER TO THE FOUNDATION THAN A HORIZONTAL DISTANCE EQUAL TO ROUGHLY 1/2 OF THE TREE'S OR SHRUB'S MATURE HEIGHT.
5. IRRIGATION SYSTEMS SHOULD NOT SPRAY DIRECTLY ON FOUNDATION.
6. LANDSCAPING SHALL NOT AFFECT FINAL GRADE. EXCAVATION OF SOILS ADJACENT TO FOUNDATION FOR PURPOSE OF LANDSCAPING ARE PROHIBITED. LANDSCAPING SHALL BE PLACED ON TOP OF FINAL GRADE. SOLID LANDSCAPE EDGING SHALL NOT BE USED.

CONSTRUCTION:

1. THERE SHALL BE A MINIMUM OF FOUR INCHES (4") CLEARANCE BETWEEN THE TOP OF THE BRICK LEDGE AND GRADE WHEN BRICK IS PRESENT AND SIX INCHES (6") CLEARANCE BETWEEN THE TOP OF THE SLAB AND GRADE WHEN WOOD IS PRESENT.
2. ALL FILL SHALL BE PLACED IN ACCORDANCE WITH F.H.A. DATA SHEET TWO AND/OR A SOILS ENGINEER'S SPECIFICATIONS AND COMPACTED TO 95% PROCTOR DENSITY.
3. A MINIMUM TWELVE INCHES (12") OF SELECT FILL SHALL BE PLACED BETWEEN THE SAND AND THE SLAB.
4. THERE SHALL BE A LAYER OF 6 MIL POLY. WITH LAPPED JOINTS, BETWEEN THE SAND AND THE SLAB.
5. CONSTRUCTION JOINTS SHALL NOT BE PERMITTED UNLESS SHOWN ON THE PLAN.
6. TENDONS AND BARS SHALL BE SUPPORTED ON CHAIRS SPACED AT FOUR FOOT (4'-0") INTERVALS AND TIED AT ALL INTERSECTIONS TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT. USE OF S-HOOKS SHALL NOT BE PERMITTED.
7. SLAB STRAND LOCATIONS MAY BE PLACED WITHIN 8" OF PLAN LOCATION TO MAINTAIN PROPER CLEARANCES.
8. HORIZONTAL DEVIATIONS OF SLAB STRANDS UP TO TWELVE INCHES (12") ARE ACCEPTABLE PROVIDED A MAXIMUM 12 TO 1 RATIO IS MAINTAINED.
9. CONCRETE SHALL BE VIBRATED TO INSURE CONSOLIDATION AROUND TENDON ANCHORAGES.
10. BEAM TRENCHES SHALL BE CLEAN AND SIZED PER PLAN.
11. TRENCHES FOR PLUMBING SHALL NOT BE LOCATED DIRECTLY UNDER BEAMS. PLUMBING TRENCHES SHALL BE LOCATED BETWEEN BEAMS AND TIES AT RIGHT ANGLES UNDER BEAMS.
12. CONCRETE SHALL BE WELL CONSOLIDATED AROUND REINFORCEMENT. UPON COMPLETION OF THE FINAL GRADING, ALL BEAMS SHALL HAVE A MINIMUM COVER OF TWENTY INCHES (20").
13. BEAM TRENCHES SHALL BE FREE OF LOOSE DEBRIS PER PLAN.
14. BEAM BOTTOMS MUST BE FOUNDED IN AT LEAST 12" OF UNDISTURBED SOIL OR PROPERLY COMPACTED FILL, UNLESS PIERS ARE SPECIFIED.
15. COORDINATE STRUCTURAL DRAWINGS WITH ARCHITECTURAL DRAWINGS FOR ALL OPENINGS, DROPS, INSERTS, SLUGS, BRICK-LEDGES AND OTHER RELATED ITEMS.
16. IF SOLID FILL IS ENCOUNTERED DURING TRENCHING OF BEAMS, CONTACT ENGINEER.
17. PLUMBING LINES SHALL NOT BE LOCATED PARALLEL TO THE INSIDE OF THE BEAMS.
18. SIDEWALKS AND DRIVES SHALL BE GRADED TO SLOPE AWAY FROM THE FOUNDATION TO ELIMINATE AND PREVENT FLOODING OF WATER.
19. SAND OR GRAVEL BEDDING MATERIAL FOR UTILITIES SHALL NOT BE PLACED WITHIN 8" OF FOUNDATION EDGE. A CLAY PLUG SHALL BE PROVIDED TO PREVENT WATER INFILTRATION UNDER SLAB.
20. WATER CUTOFF VALVES AND FITTINGS SHALL NOT BE INSTALLED WITHIN 5" OF FOUNDATION EDGE.

DRILLED PIERS:

1. FOUNDATION DESIGN IS BASED ON VALUES AS RECOMMENDED IN GEOTECHNICAL REPORT IF PROVIDED TO THIS OFFICE.
2. DRILLED CONCRETE PIERS SHALL BE 12" IN DIAMETER STRAIGHT SHAFT AND PENETRATE GREY LIMESTONE MIN. 2 FT. UNO.
3. ANY PIER DEPTH NOTED SHALL BE MEASURED FROM BOTTOM OF GRADE BEAM.
4. ALL PIER INSTALLATIONS SHALL BE OBSERVED BY JENSEN ENGINEERS, INC. CONTRACTOR TO CONTACT THIS OFFICE FOR SCHEDULING.
5. THE CONTRACTOR AND TESTING LAB SHALL TAKE ACCURATE MEASUREMENTS OF THE DEPTH OF PENETRATION INTO THE BEARING STRATUM AND SUBMIT A REPORT OF DEPTHS OF PENETRATION DRILLED TO THE ENGINEER.
6. PIER HOLES SHALL BE COMPLETED AND FILLED WITH CONCRETE WITHIN 8 HOURS OF BORING.
7. REMOVE EXCESS CONCRETE AT THE TOP OF THE PIER BEYOND THE LIMITS OF THE PIER DIAMETER. FORM SIDES OF PIER EXTENSIONS USING SAME DIAMETER SCHEDULE COLLAR FORMS TO MAINTAIN SAME SHAPE.
8. CONTRACTOR SHALL PROVIDE ADDITIONAL PIER REINFORCING STEEL (TIES AND VERTICAL REINFORCING), AS REQUIRED TO FACILITATE PLACEMENT OF THE REINFORCING CAGE WITHOUT BUCKLING, COLLAPSE, OR EXCESSIVE DEFLECTION.
9. TEMPORARY CASING SHALL BE USED WHERE GROUND WATER SEEPAGE IS ENCOUNTERED. THE CASING SHALL BE SEALED IN THE BEARING STRATUM WITH ALL WATER AND MOST LOOSE MATERIAL REMOVED PRIOR TO THE BEGINNING OF THE DESIGNED PENETRATION.

LIMITATIONS:

1. JENSEN ENGINEERS, INC. ADVISES ALL CONTRACTORS THAT CONSTRUCTION OBSERVATIONS ARE AVAILABLE PRIOR TO CONCRETE POUR AND DURING POUR. IF THESE OBSERVATIONS ARE NOT PERFORMED BY JENSEN ENGINEERS, INC. ENGINEERS, INC. ACCEPTS NO RESPONSIBILITY WHATSOEVER FOR THE PROPER IMPLEMENTATION OF ITS PLANS AND SPECIFICATIONS AND HAS NO OBLIGATION TO ENSURE THAT THE PLANS AND SPECIFICATIONS PROVIDED ARE FOLLOWED.
2. IN THE EVENT A GEOTECHNICAL REPORT ON THE SPECIFIC TRACT OF LAND UPON WHICH THE PROPOSED STRUCTURE IS TO BE CONSTRUCTED IS PROVIDED BY THE CLIENT TO JENSEN ENGINEERS, INC., JENSEN ENGINEERS, INC. WILL RELY ON THE INFORMATION IN SUCH REPORT IN DESIGNING ITS PLANS AND SPECIFICATIONS FOR THE CLIENT. HOWEVER, JENSEN ENGINEERS, INC. DOES NOT ASSUME OR TAKE ANY RESPONSIBILITY WHATSOEVER FOR THE ACCURACY OF THE GEOTECHNICAL REPORT PROVIDED OR ANY INFORMATION CONTAINED THEREIN WHICH MAY BE RELIED UPON BY JENSEN ENGINEERS, INC. IN DESIGNING THE FOUNDATION FOR THE PROPOSED STRUCTURE.

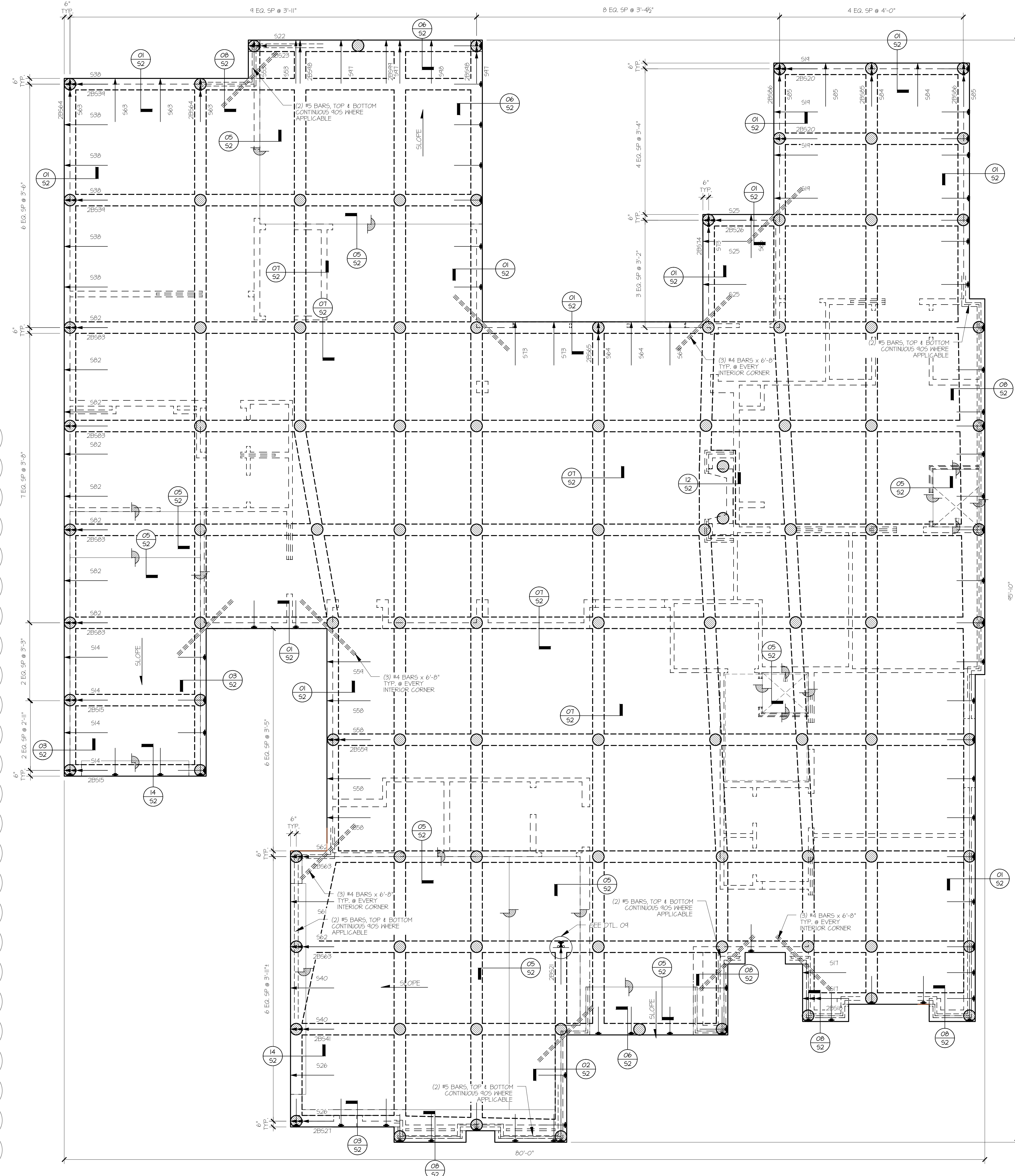
PLAN AND SECTION NOTES:

- SOME SECTIONS SHOWN MAY NOT BE APPLICABLE TO EACH PROJECT. FOR "P" AND "W" DIMENSIONS SEE PLAN SHEET.
1. # DENOTES DIMENSIONS TO BE VERIFIED.
 2. # DENOTES REINFORCEMENT SUPPORTED BY TWO INCH (2") CHAIR (4 FT. MAX. O.C.E.W.)

STRESSING NOTES:

1. EACH STRAND DURING STRESSING OPERATIONS SHALL BE INITIALLY STRESSED TO 33.0 KIPS AND SEATED AT 28.4 KIPS.

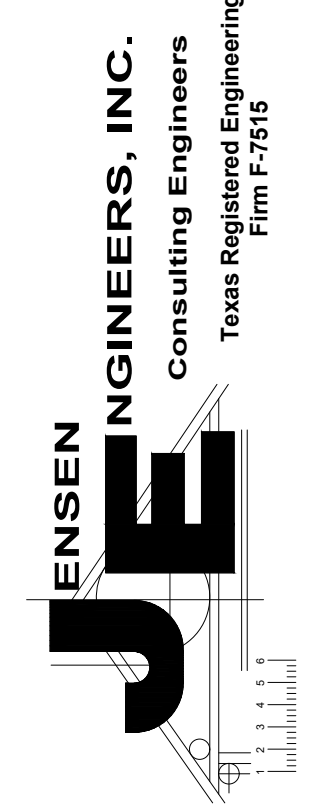
▲ DENOTES POINT LOAD FROM ABOVE CONTINUOUS SOLID BLOCK, TYP.



FOUNDATION PLAN

SCALE: 1/4" = 1'-0"

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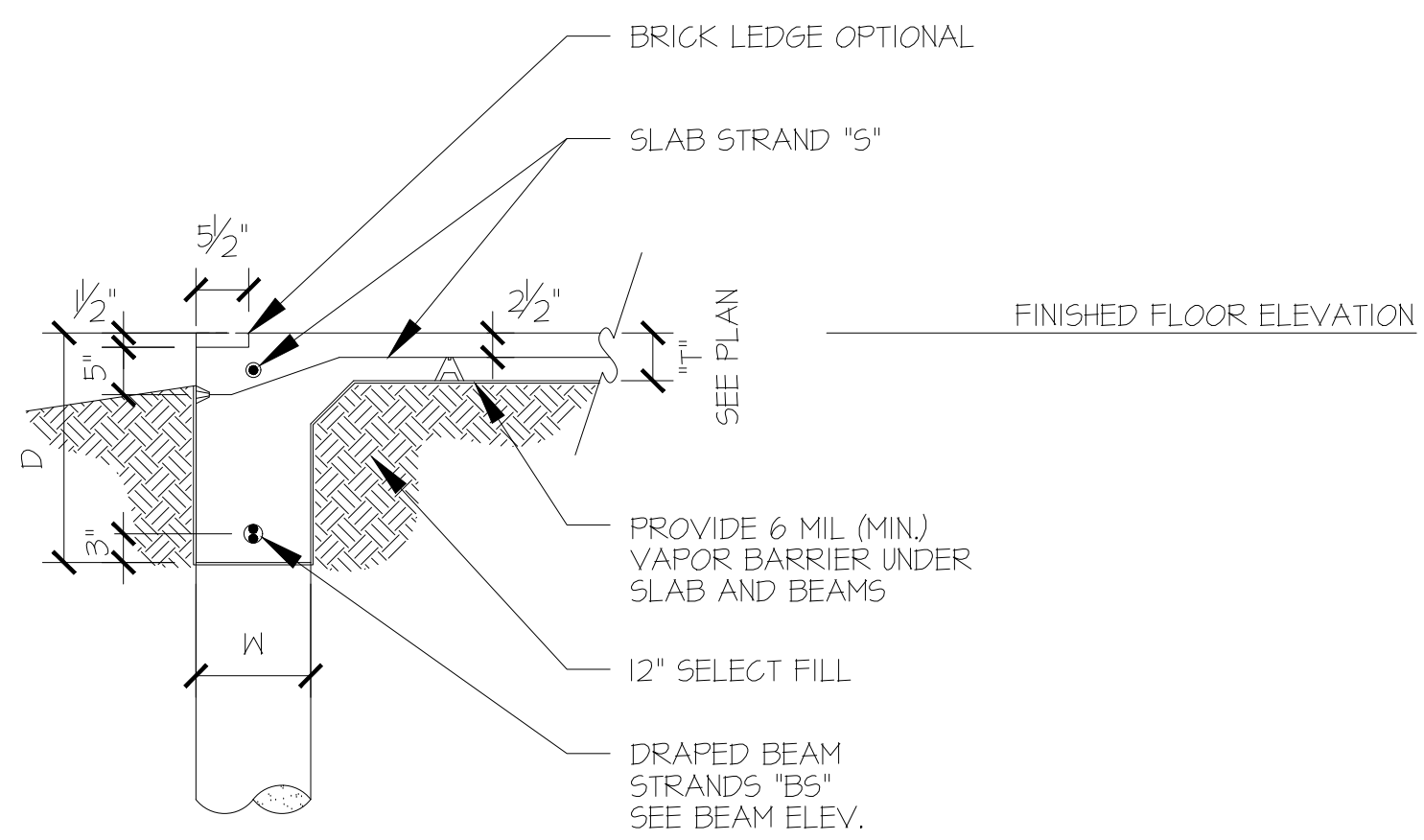
PROJECT:
NEW RESIDENCE FOR SHARIF & MUNIR
6443 STEFANI DRIVE
LOT: 10 BLOCK: C / 5477
DALLAS, TEXAS

DRAWN BY:
FSG
CHECKED BY:
KU / MJ
ISSUED ON:
01/06/2020

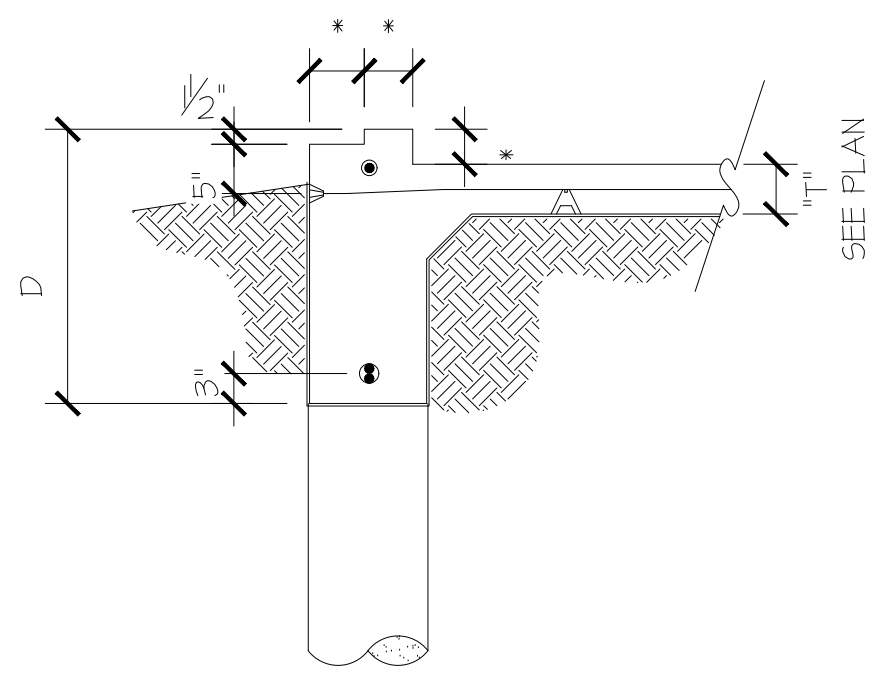
REVISIONS:
REVISED NOTES 01/06/2020

SHEET
S1

1 of 2
PROJECT NUMBER:
193-19

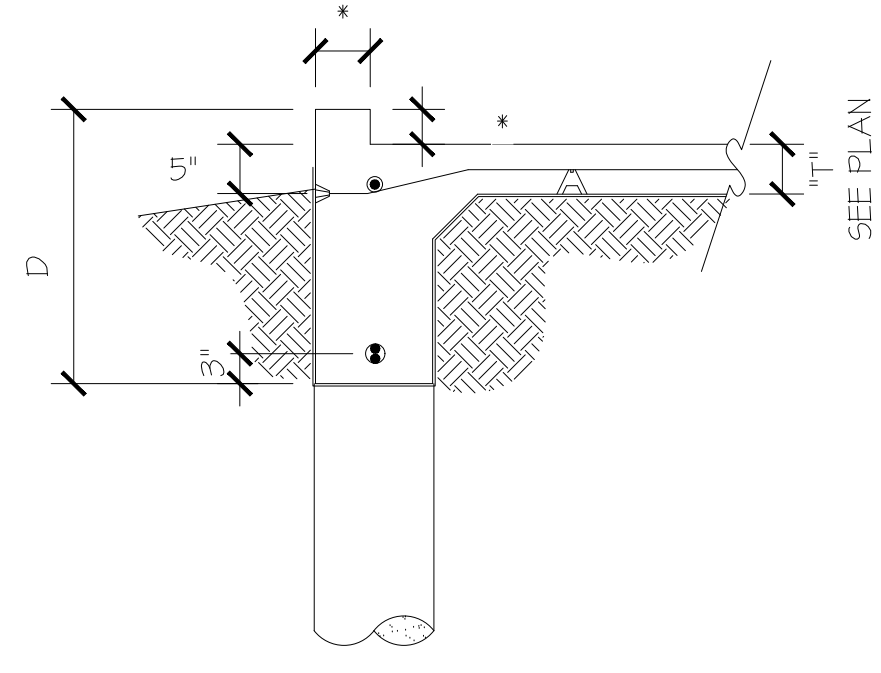


01 SECTION
NT.5.



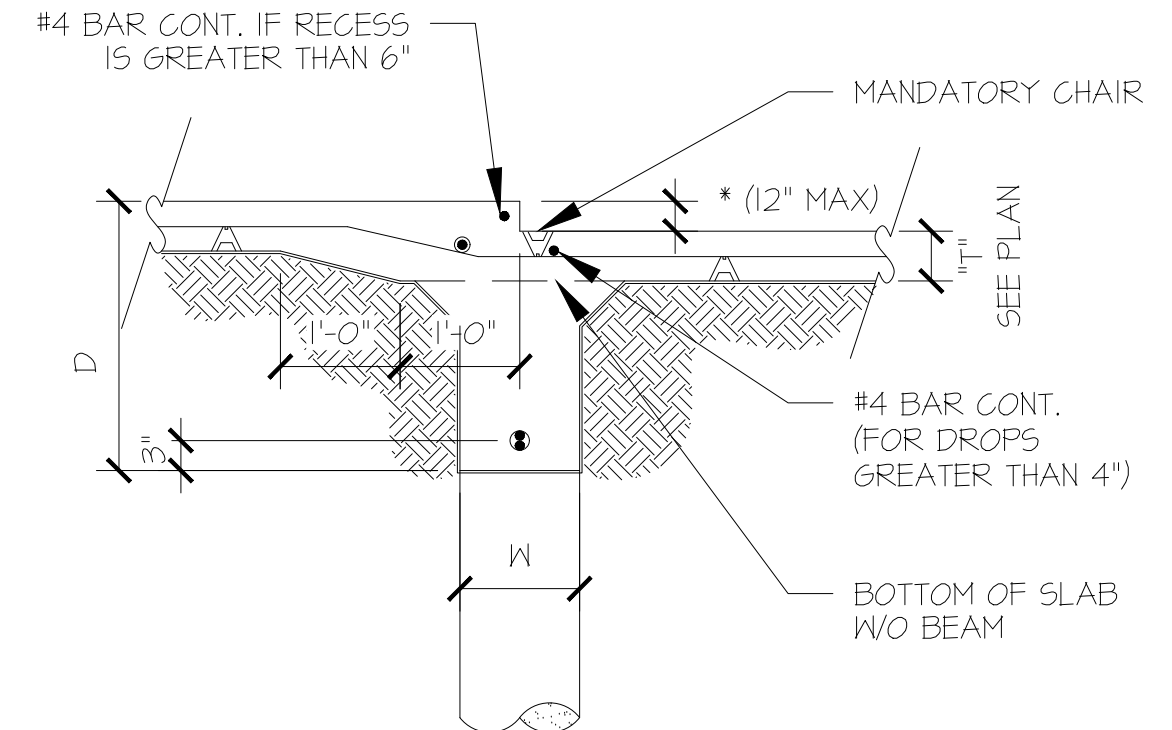
02 SECTION
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SEE ① FOR ADDITIONAL INFORMATION



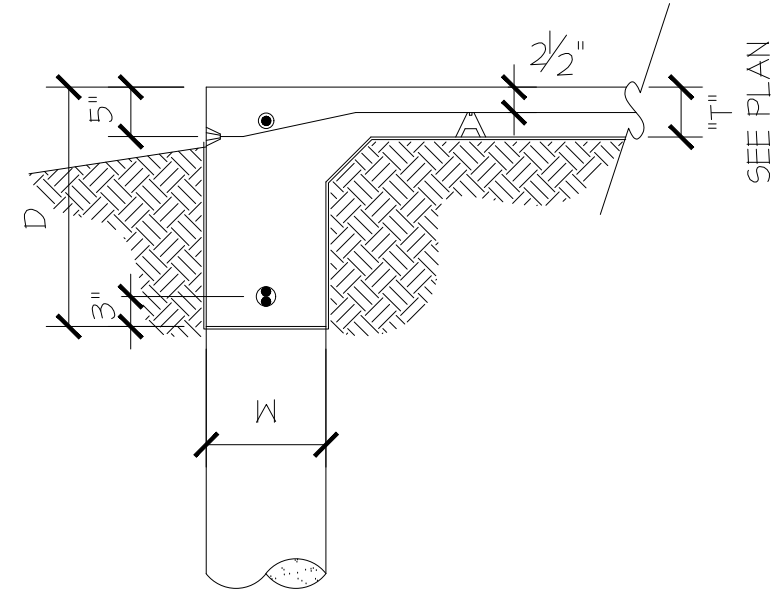
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SEE ① FOR ADDITIONAL INFORMATION



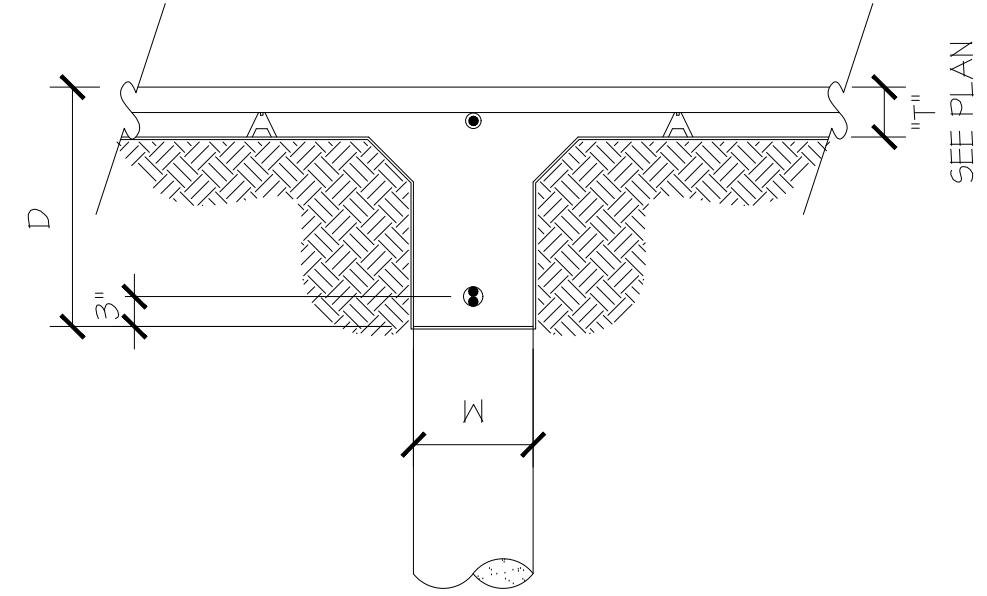
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SEE ① FOR ADDITIONAL INFORMATION



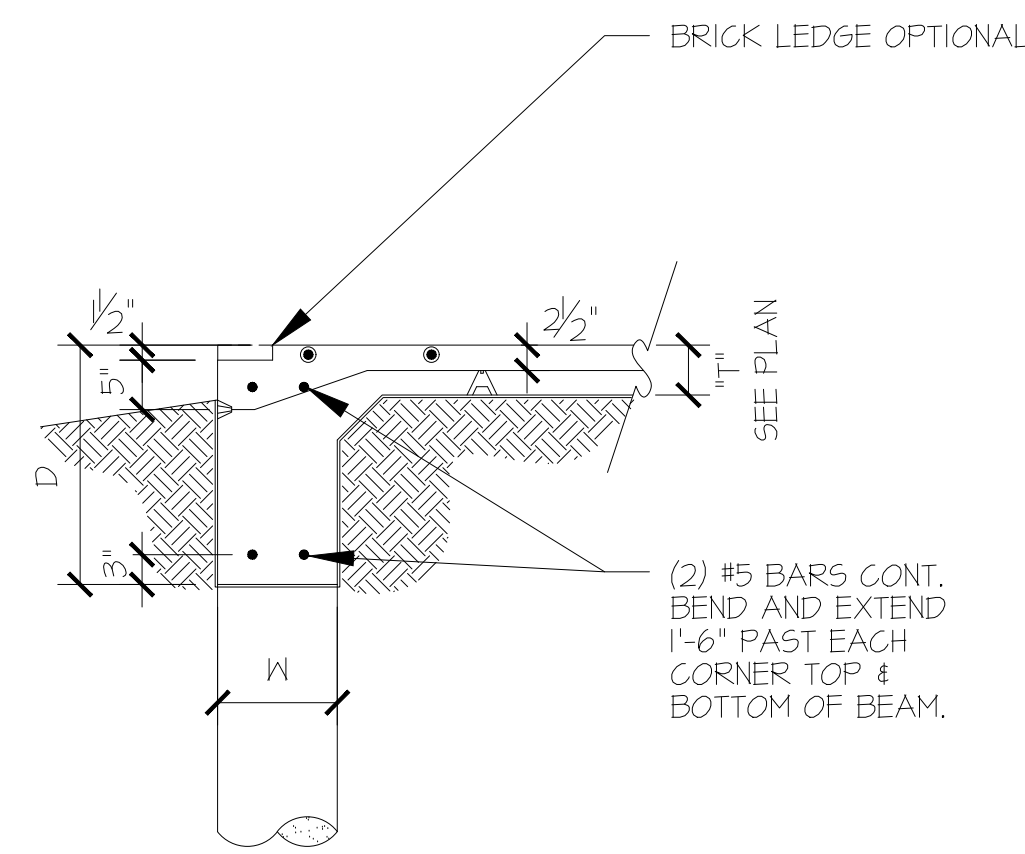
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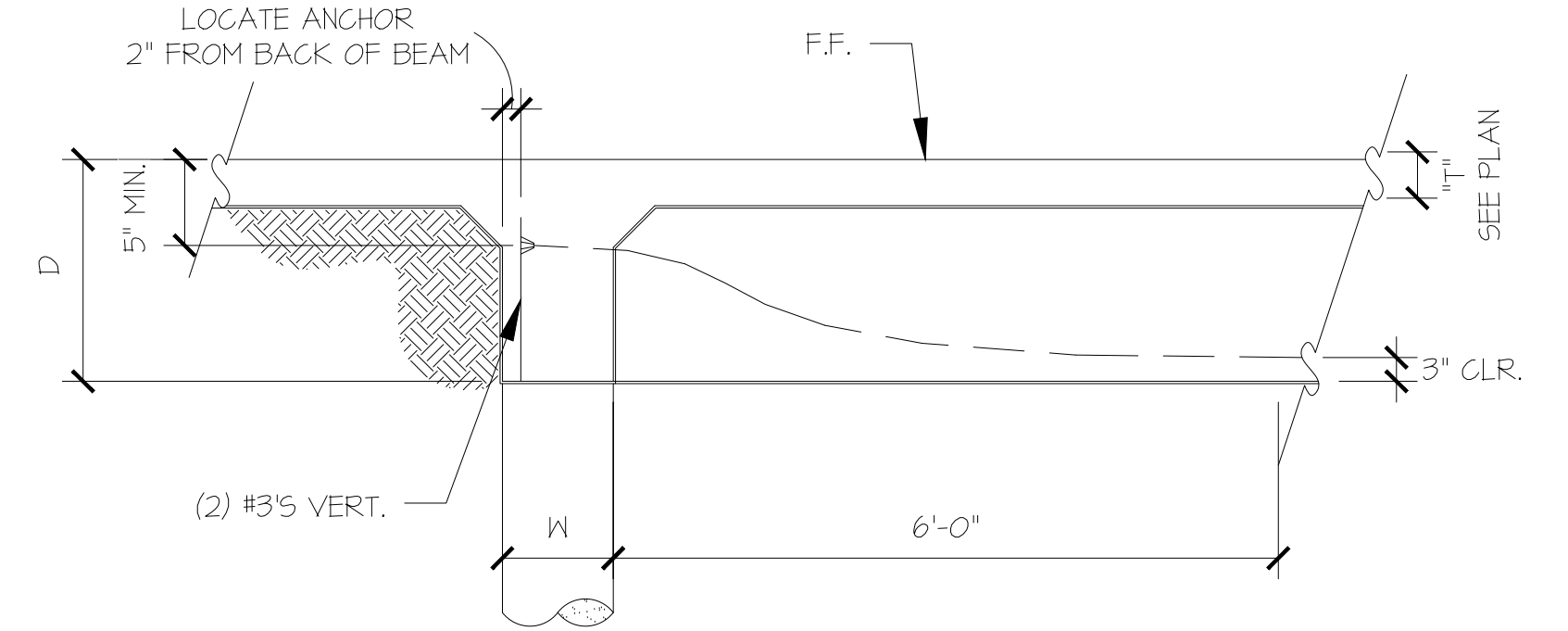
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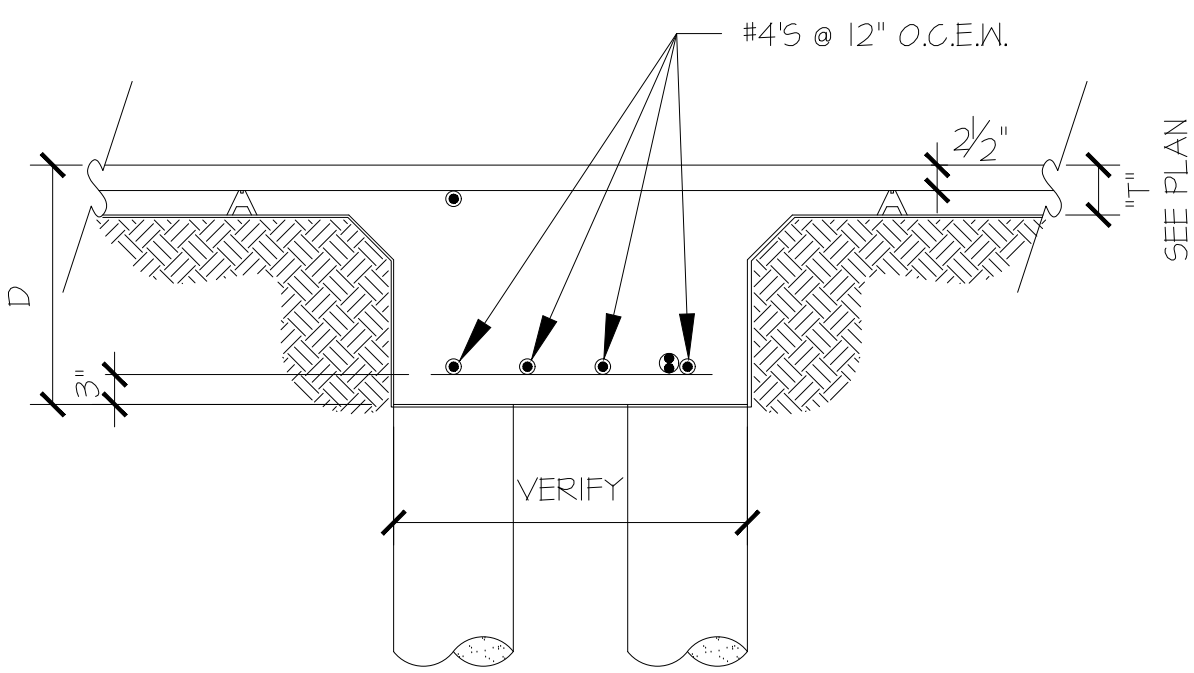
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SEE ① FOR ADDITIONAL INFORMATION



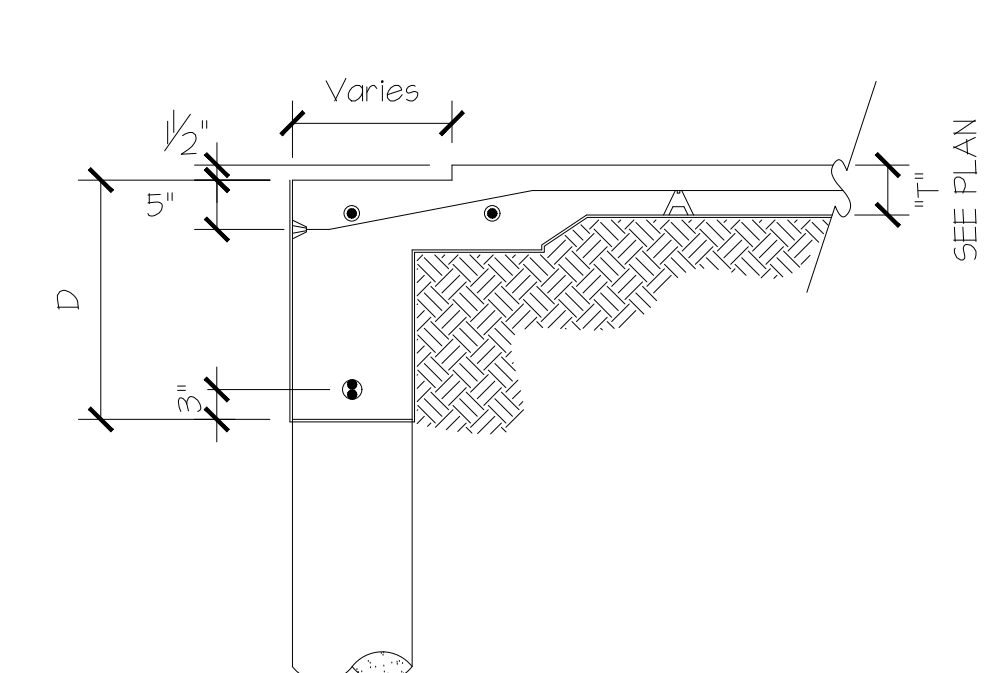
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SEE ① FOR ADDITIONAL INFORMATION



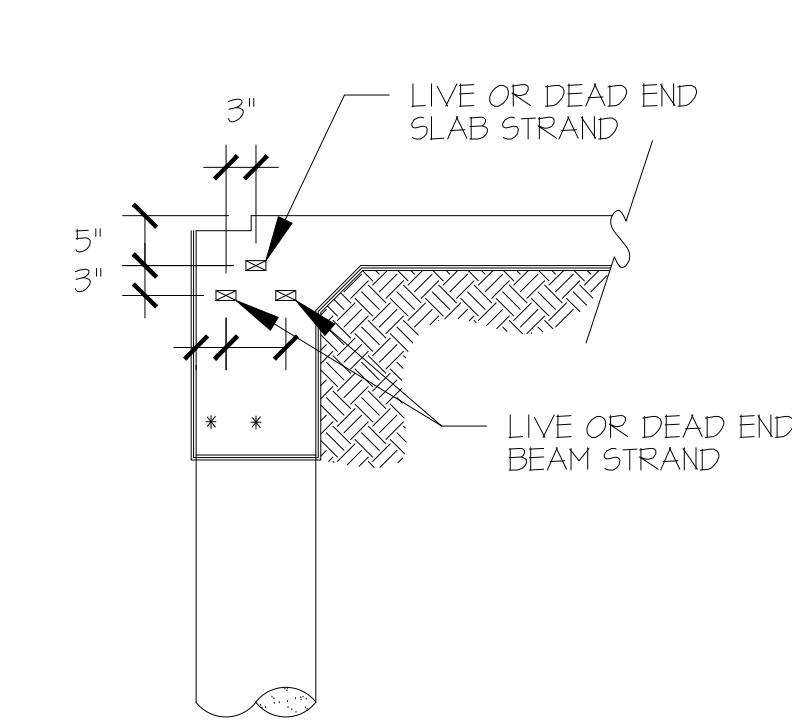
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NT.5.

SEE ① FOR ADDITIONAL INFORMATION



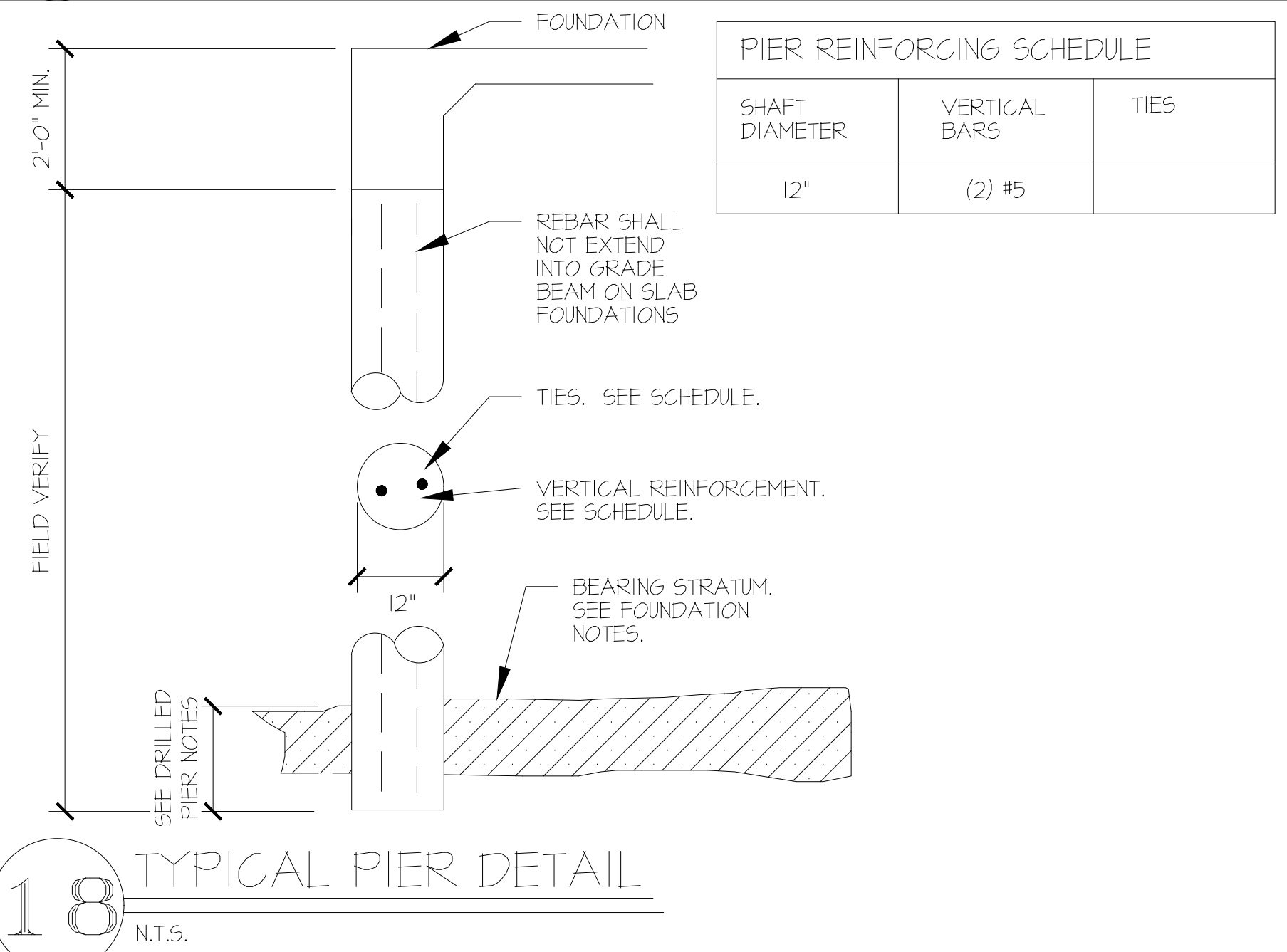
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SEE ① FOR ADDITIONAL INFORMATION

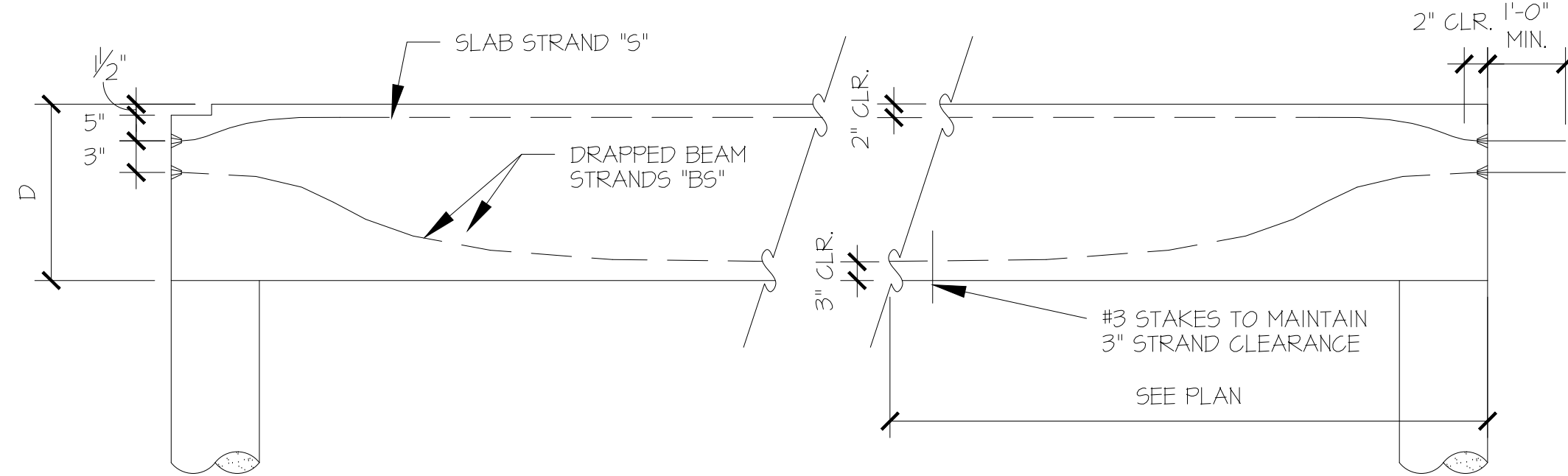


17 ANCHOR PLACEMENT

SEE ① FOR ADDITIONAL INFORMATION



18 TYPICAL PIER DETAIL
NT.5.



19 TYPICAL GRADE BEAM REINFORCEMENT DETAIL
NT.5.

SEE ① FOR ADDITIONAL INFORMATION

NOTE: BEAM STRANDS (B5) SHALL BE TIED TOGETHER AS IF THEY ARE ONE STRAND. ANCHORS OF BEAM STRANDS SHALL BE PLACED SIDE BY SIDE DIRECTLY UNDERNEATH THE SLAB STRAND (S)
SLAB STRANDS AND BEAM STRANDS SHALL MAINTAIN A MINIMUM OF 5" CLEARANCE FROM THE LOWEST EDGE FROM THE TOP OF THE SLAB TO THE CENTER OF THE ANCHOR. SLAB STRANDS AND BEAM STRANDS SHALL MAINTAIN A MINIMUM OF 2" CLEARANCE