

GENERAL DESIGN NOTES

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STRUCTURAL DESIGN IS BASED ON THE INTERNATIONAL BUILDING CODE, 2009 EDITION AND THE ASCE 7 STANDARD

DESIGN LOADS:

WIND:

BASIC WIND SPEED: 90 MPH (3-SEC GUST)
IMPORTANCE FACTOR: 1.00
STRUCTURE CLASS: II
EXPOSURE: C

ROOF LIVE LOAD = 12 PSF (REDUCED)

STEEL MATERIAL NOTES:

1. ALL STEEL SHAPES & PLATES SHALL CONFORM w/ ASTM A36, U.N.O.
2. ALL BOLTS FOR STEEL-TO-STEEL CONNECTIONS SHALL CONFORM w/ ASTM A325N, U.N.O.
3. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS IN ACCORDANCE w/ THE LATEST VERSION OF THE AMERICAN WELDING SOCIETY AWS D1.1.
4. ALL BOLTED CONNECTIONS SHALL BE TIGHTENED TO "SNUG-TIGHT" CONDITION AS DEFINED BY THE AISC MANUAL.
5. ALL STEEL SHAPES, PLATES, AND HARDWARE EXPOSED TO WEATHER SHALL BE GALVANIZED, STAINLESS STEEL, OR OTHERWISE PROTECTED FROM WEATHER.
6. STEEL SHAPES, PLATES, AND HARDWARE EXPOSED TO CORROSIVE MATERIALS SHALL BE STAINLESS STEEL.

REINFORCING STEEL NOTES:

1. REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615 GRADE 60.
2. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
3. MINIMUM LAP OF WELDED WIRE FABRIC SHALL BE 6 INCHES OR ONE FULL MESH AND ONE HALF, WHICH EVER IS GREATER.
4. ALL BARS SHALL BE MARKED SO THEIR IDENTIFICATION CAN BE MADE WHEN THE FINAL IN-PLACE INSPECTION IS MADE.
5. REBAR SPLICES ARE TO BE: CLASS "B".
6. REINFORCING SPLICES SHALL BE MADE ONLY WHERE INDICATED ON THE DRAWINGS.
7. DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME GRADE, SIZE AND SPACING OR NUMBER AS THE VERTICAL REINFORCING, RESPECTIVELY.

CONCRETE:

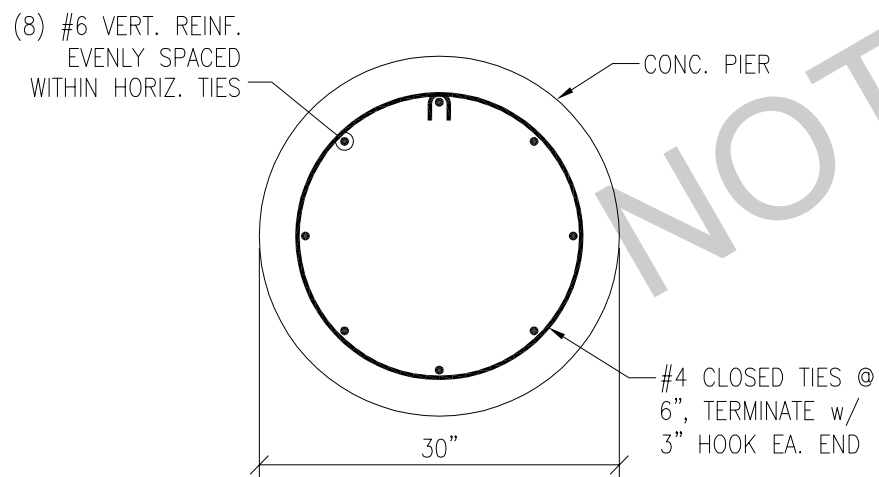
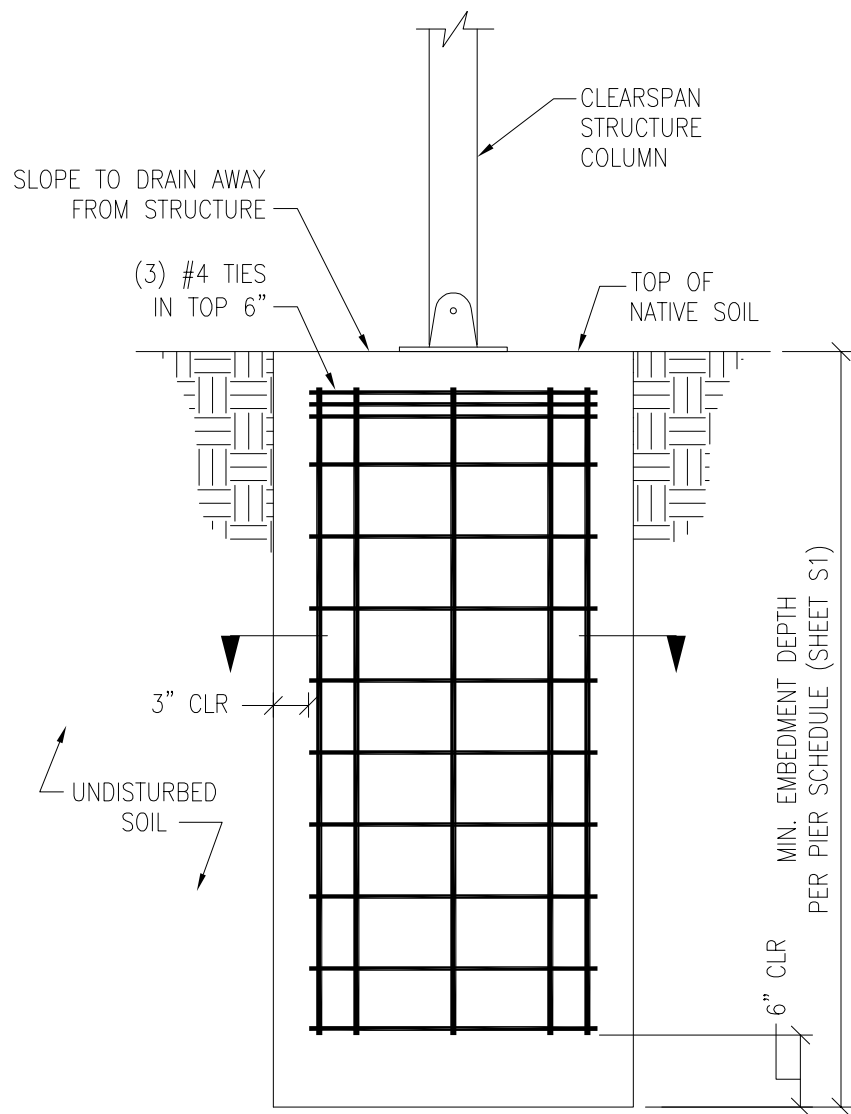
1. ALL PHASES OF WORK PERTAINING TO THE CONCRETE CONSTRUCTION SHALL CONFORM TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318 LATEST APPROVED EDITION) WITH MODIFICATIONS AS NOTED IN THE DRAWINGS AND SPECIFICATIONS.
2. REINFORCED CONCRETE DESIGN IS BY THE "ULTIMATE STRENGTH DESIGN METHOD", ACI 318-(LATEST EDITION).
3. ALL STRUCTURAL CONCRETE SHALL HAVE A MIN. 28-DAY STRENGTH OF 4500 PSI.
4. CONCRETE MIX DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL WITH THE FOLLOWING REQUIREMENTS:
 - 4.1. COMPRESSIVE STRENGTH AT AGE 28 DAYS AS SPECIFIED ABOVE.
 - 4.2. LARGE AGGREGATE-HARDROCK, $\frac{3}{4}$ " MAXIMUM SIZE CONFORMING TO ASTM C-33.
 - 4.3. CEMENT-ASTM C-150, TYPE V PORTLAND CEMENT.
 - 4.4. MAXIMUM SLUMP 5-INCHES MAX WATER CEMENT RATIO 0.45
 - 4.5. NO ADMIXTURES, EXCEPT FOR ENTRAINED AIR, AND AS APPROVED BY THE ENGINEER.
5. CONCRETE MIXING OPERATIONS, ETC, SHALL CONFORM TO ASTM C-94.
6. PLACEMENT OF CONCRETE SHALL CONFORM TO ACI STANDARD 614 AND PROJECT SPECIFICATIONS
7. CLEAR COVERAGE OF CONCRETE OVER OUTER REINFORCING BARS SHALL BE AS FOLLOWS: CONCRETE POURED DIRECTLY AGAINST EARTH - 3 INCHES CLEAR STRUCTURAL SLABS - $\frac{3}{4}$ INCHES CLEAR (TOP AND BOTTOM) FORMED CONCRETE WITH EARTH BACK FILL - 2 INCHES CLEAR
8. ALL REINFORCING BARS, ANCHOR BOLTS AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACING CONCRETE.
9. REINFORCING BARS SHALL BE EPOXY COATED.
10. MODULUS OF ELASTICITY OF CONCRETE, WHEN TESTED IN ACCORDANCE WITH ASTM C-460, SHALL BE AT LEAST THE VALUE GIVEN BY THE EQUATIONS IN SECTION 8.5.1. OF ACI 318 FOR THE SPECIFIED 28-DAY STRENGTH.
11. SHRINKAGE OF CONCRETE, WHEN TESTED IN ACCORDANCE WITH ASTM C-157, SHALL NOT EXCEED 0.00040 INCHES/INCH.

FOUNDATION NOTES:

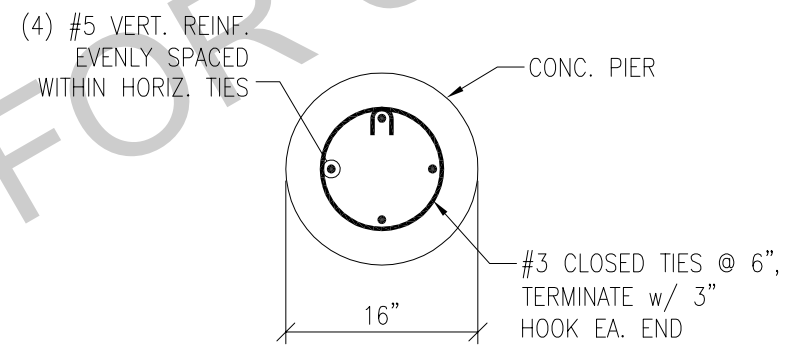
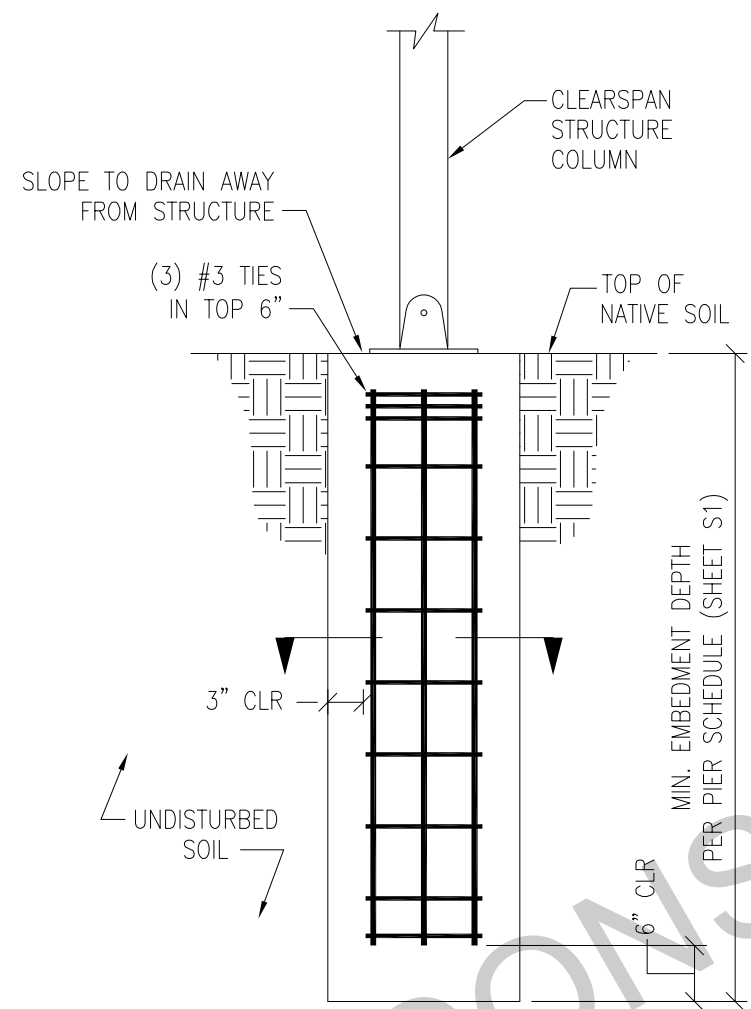
1. FOOTINGS ARE BASED ON AN ALLOWABLE SOIL PRESSURE OF 4000 PSF AND AN EQUIVALENT ALLOWABLE BEARING PRESSURE OF 200 PSF PER FOOT OF EMBEDMENT BASED ON THE FOLLOWING SOILS REPORT:
GEOTECHNICAL ENGINEER: CONVERSE CONSULTANTS
PROJECT NUMBER: 01-33106-03
REPORT DATE: AUGUST 3, 2001
UPDATE LETTER: NOVEMBER 17, 2003
2. CONTRACTOR SHALL PROVIDE FOR PROPER DE-WATERING OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER, SEEPAGE, ETC.
3. FOOTINGS SHALL BE PLACED ACCORDING TO DEPTHS SHOWN ON THE DRAWINGS.
4. THE TOP OF FOUNDATION SHALL BE LEVEL AND NON-SLOPING, U.N.O.

SPECIAL INSPECTIONS / QUALITY ASSURANCE:

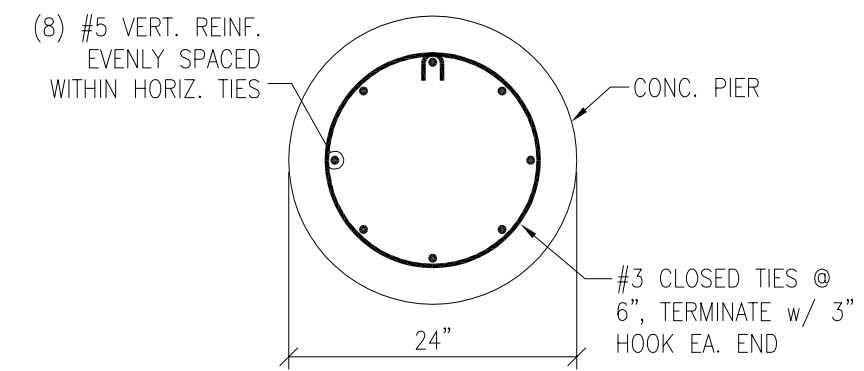
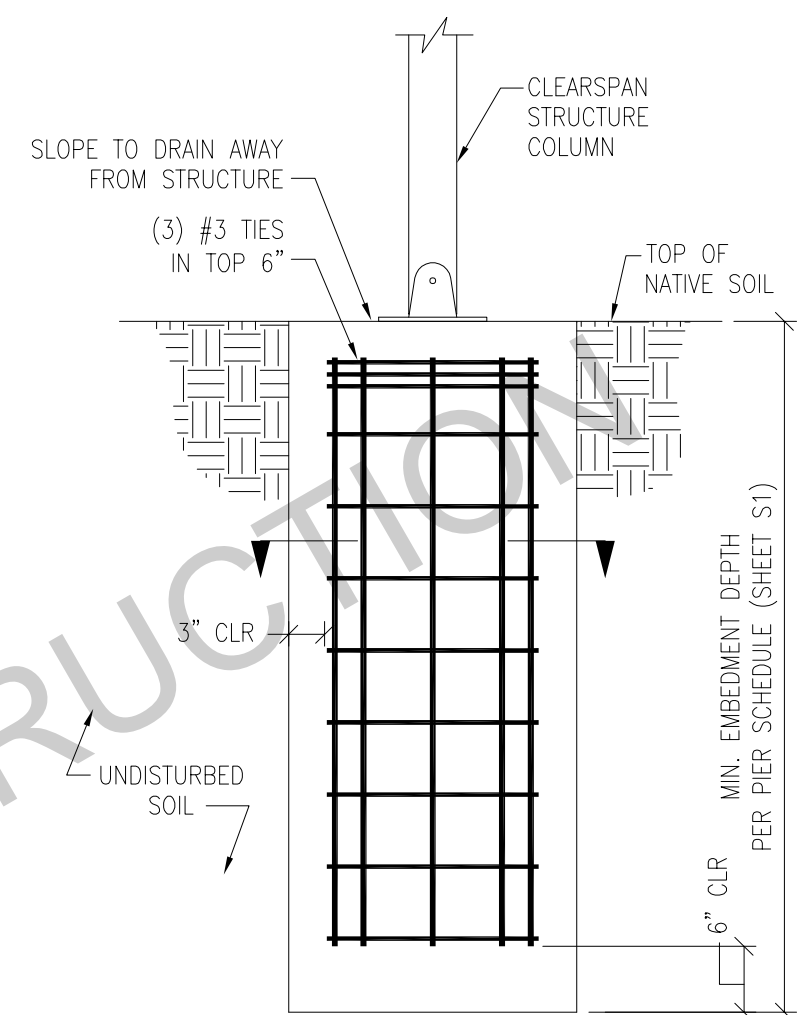
1. SPECIAL INSPECTIONS SHALL BE REQUIRED FOR:
 - ALL POST-INSTALLED ANCHORAGE TO CONCRETE
 - CONCRETE PIER EXCAVATION: EMBEDMENT DEPTH, PLUMBNESS & DIAMETER
 - CONCRETE REINFORCEMENT SIZE & PLACEMENT
 - a. THE OWNERS SHALL EMPLOY SPECIAL INSPECTORS WHO SHALL PROVIDE ADDITIONAL INSPECTIONS DURING CONSTRUCTION IN ACCORDANCE WITH IBC SECTION 17.
 - b. ALL SPECIAL INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT CERTIFIED INSPECTOR FROM AN ESTABLISHED TESTING AGENCY, LICENSED AND APPROVED BY THE BUILDING DEPARTMENT
 - c. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO VECTOR STRUCTURAL ENGINEERS AND ALL INTERESTED PARTIES.
 - d. ALL MASONRY CONSTRUCTION SHALL REQUIRE LEVEL 1 SPECIAL INSPECTION.
2. STRUCTURAL TESTING IS NOT REQUIRED.
 3. ALL REPORTS SHALL BE DISTRIBUTED ON A MONTHLY BASIS TO THE ENGINEER OF RECORD, OWNER, CONTRACTOR, AND TO THE BUILDING OFFICIAL.
 4. NO STRUCTURAL OBSERVATION IS REQUIRED. HOWEVER, THE ENGINEER OF RECORD RESERVES THE RIGHT TO MAKE FIELD OBSERVATIONS DURING CONSTRUCTION APPROXIMATELY ONCE PER WEEK.



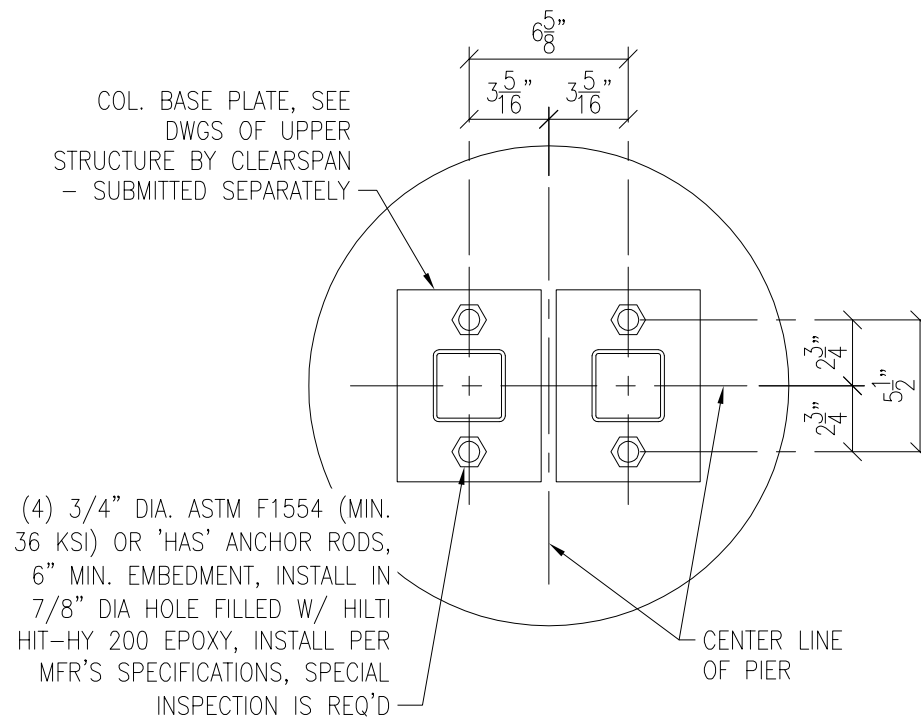
CONCRETE PIER



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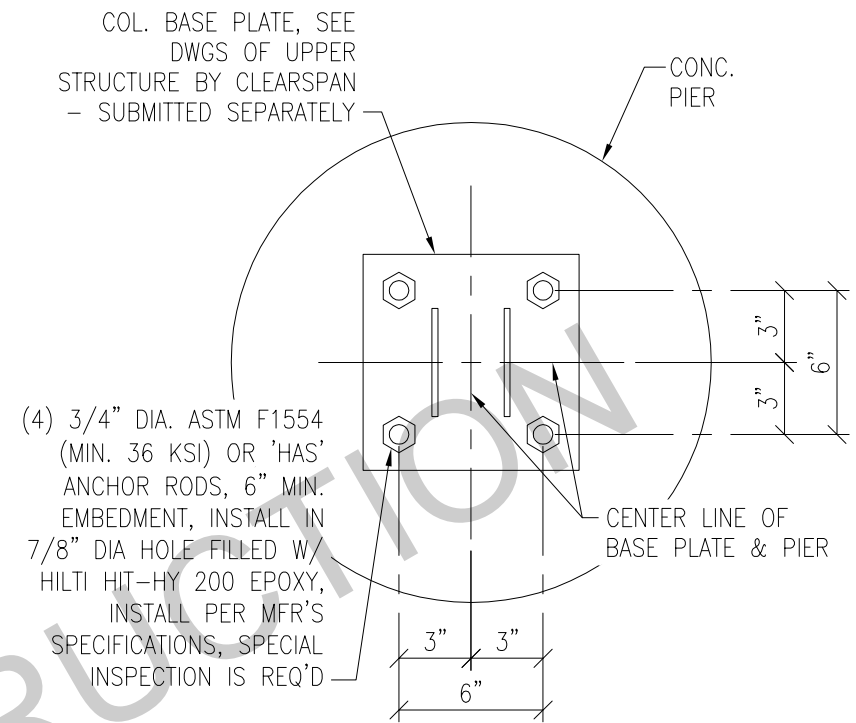
CONCRETE PIER



BASE ANCHORAGE

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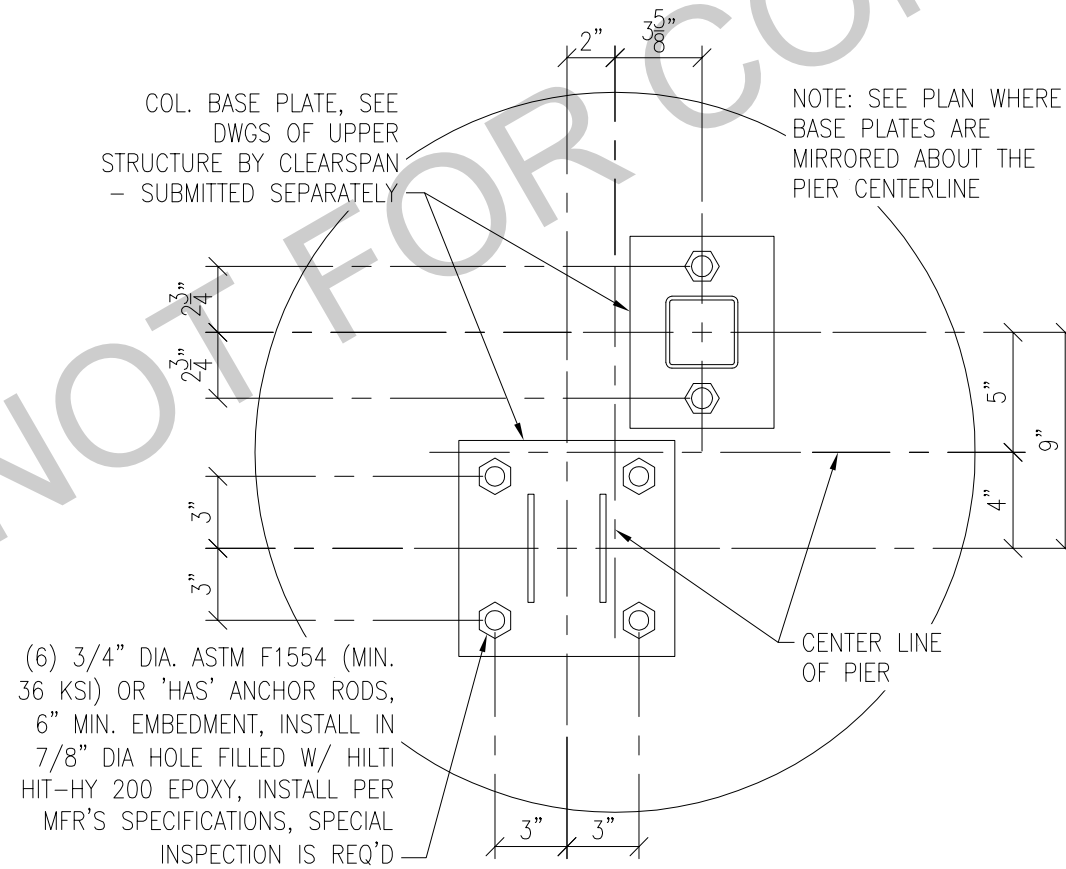
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BASE ANCHORAGE

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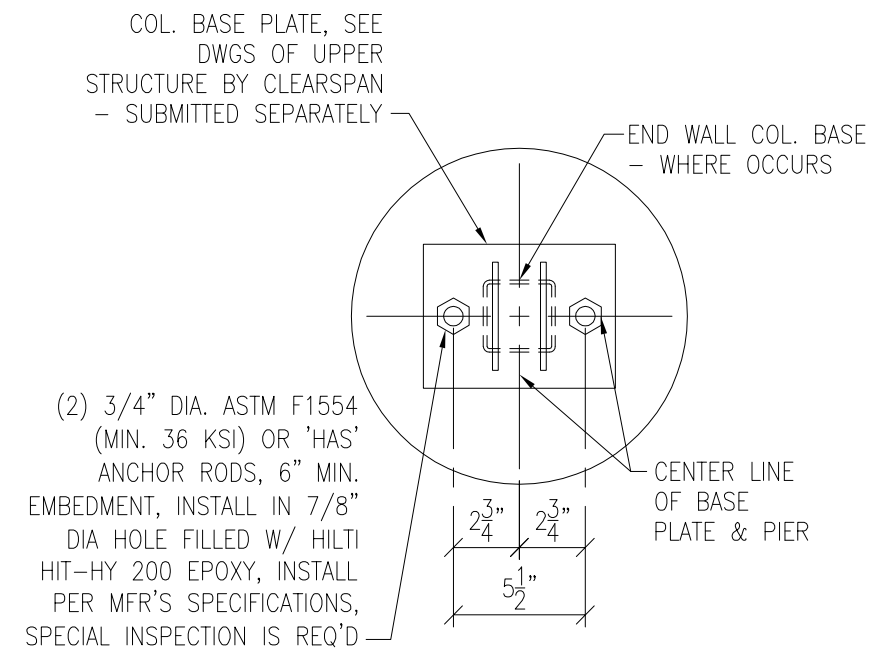
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BASE ANCHORAGE

N.T.S.

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BASE ANCHORAGE

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