

NOTES:

1. DESIGN LOADS

TOP SLAB
HS20 WHEEL LOAD AS DEFINED BY AASHTO, 2002,
(16 KIP CONCENTRATED LOAD AT LOCATION ON
STRUCTURE PRODUCING THE MAXIMUM STRESS),
AND LOADS INDICATED FOR THE WALLS AND BASE BELOW.

WALL AND BASE
LOAD COMBINATIONS PRODUCED FROM LATERAL SOIL
PRESSURE, 100 YEAR FLOOD WATER ELEVATION AND
HS20 VEHICLE SURCHARGE ADJACENT TO STRUCTURE.

2. MATERIALS

CONCRETE
JUNCTION BOXES AND CONCRETE FILL: CLASS A, $f'_c = 4000$ PSI
REINFORCING BARS
ASTM A 615 GRADE 60, DEFORMED $F_y = 60$ KSI
STEEL
ASTM A 36 $F_y = 36$ KSI

3. ALL UNSUITABLE FOUNDATION MATERIAL SHALL BE REMOVED WITH FOOTINGS RESTING ON UNDISTURBED SOIL OR SUITABLE FILL WITH A MINIMUM BEARING CAPACITY OF 1500 PSF AT STRUCTURES. WHERE REMOVAL OF UNSUITABLE MATERIAL RESULTS IN OVER EXCAVATION, BACKFILL WITH MINIMUM 6" OF NO. 57 STONE AND VAPOR BARRIER WILL BE REQUIRED.

4. WHERE ROCK IS ENCOUNTERED IN ANY FOOTING EXCAVATION, UNDERCUT TO A DEPTH OF NOT LESS THAN 6 INCHES BELOW ELEVATION OF BOTTOM OF FOOTING AND PROVIDE SELECT BEDDING TO REQUIRED ELEVATION.

5. NO FOUNDATION CONCRETE SHALL BE INSTALLED UNTIL ALL FOUNDATION WORK HAS BEEN COORDINATED WITH UNDERGROUND UTILITIES. REPORT CONFLICTS TO THE OWNER AND MAINTAIN UTILITY SERVICE UNTIL DIRECTED OTHERWISE.

6. TO MINIMIZE WEATHERING, THE LAST 6 INCHES OF EXCAVATION FOR ALL FOOTINGS SHALL BE MADE IMMEDIATELY PRIOR TO PLACEMENT OF FOOTINGS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING "AND DEWATERING" OF EXCAVATIONS DURING CONSTRUCTION.

8. DEVELOPMENT AND SPLICE LENGTHS ARE IN TENSION UNLESS OTHERWISE INDICATED. TENSION LAP SPLICES SHALL BE AS TABULATED IN THE TABLE ON THIS SHEET, UNLESS OTHERWISE INDICATED.

9. CONTINUOUS REINFORCING IN WALLS AND SLABS MAY BE SPLICED, AS REQUIRED, PROVIDING BARS ARE OF THE LONGEST PRACTICABLE LENGTH AND ALL SPLICES ARE SHOWN ON REINFORCING SHOP DRAWINGS. WHEREVER POSSIBLE, SPLICES SHALL BE STAGGERED. FIELD CUTTING OF REINFORCEMENT WILL NOT BE PERMITTED.

10. UNLESS OTHERWISE NOTED, PROVIDE CONCRETE PROTECTION FOR ALL REINFORCING IN ACCORDANCE WITH PARAGRAPH 7.7 OF BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-11).

11. PROVIDE DOWELS TO MATCH REINFORCEMENT IN ALL WALLS AND SLABS.

12. PROVIDE ADEQUATE INSPECTION PANELS IN WALL FORMING TO FACILITATE CONCRETE PLACEMENT, TO ENSURE THAT ADEQUATE COMPACTION IS OBTAINED AND NO VOIDS OCCUR.

13. CONCRETE WALLS SHALL BE TEMPORARILY BRACED AGAINST FORCES OTHER THAN EARTH PRESSURE UNTIL TOP SLABS ARE IN PLACE AND HAVE ATTAINED REQUIRED STRENGTHS. BACKFILLING OF WALLS PRIOR TO CONSTRUCTION OF THE TOP SLAB IS PERMITTED.

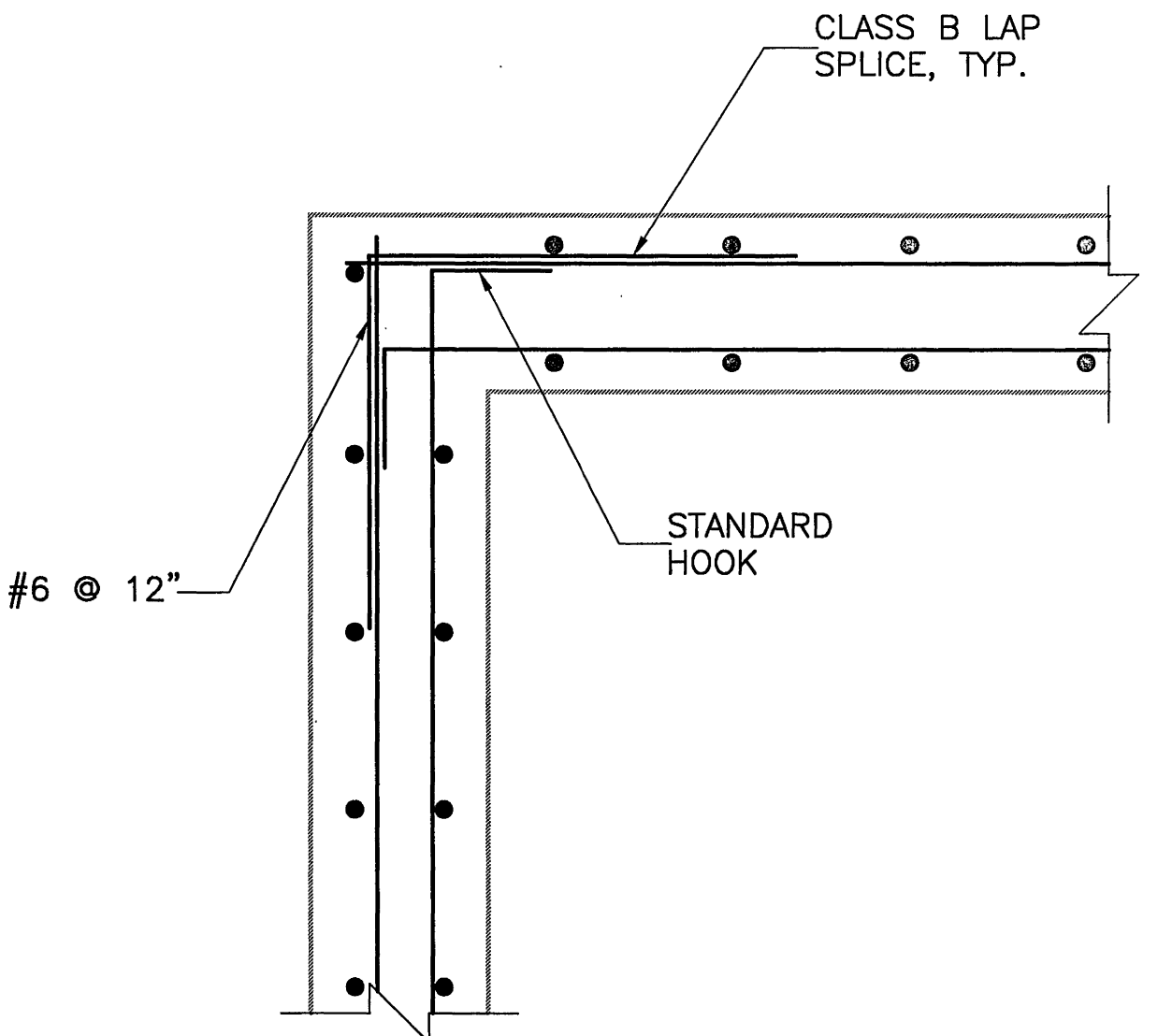
14. THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES, INSERTS, ETC., WITH SHOP DRAWINGS OF THE EQUIPMENT TO BE INSTALLED.

15. WHERE NEW STRUCTURES ARE LOCATED NEXT TO EXISTING UTILITIES OR STRUCTURES, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, ETC. NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW STRUCTURE. THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS NECESSARY FOR PROPER FABRICATION AND ERECTION OF ALL STRUCTURAL MEMBERS.

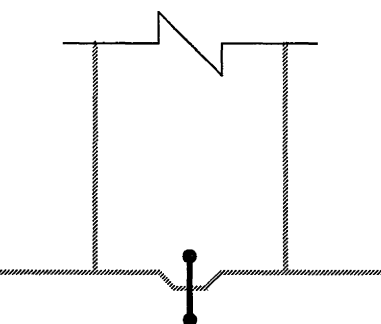
16. BEFORE PROCEEDING WITH ANY WORK WITHIN OR ADJACENT TO THE EXISTING STRUCTURE, THE CONTRACTOR SHALL BECOME FAMILIAR WITH EXISTING CONDITIONS. DURING THE PROCESS OF CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF THE EXISTING STRUCTURE WHERE THE EXISTING STRUCTURE IS MODIFIED TO ACCOMMODATE NEW CONSTRUCTION AND TO PROTECT FROM DAMAGE THOSE PORTIONS OF THE EXISTING STRUCTURE WHICH ARE TO REMAIN.

17. ALL EDGES OF PERMANENTLY EXPOSED CONCRETE SURFACES SHALL BE CHAMFERED $\frac{3}{4}$ INCH.

BAR SIZE	TENSION LAP SPLICE (IN.)	
	$f'_c = 4000$ PSI	
	TOP BARS	OTHER BARS
#5	23	18
#6	36	27
#7	42	33

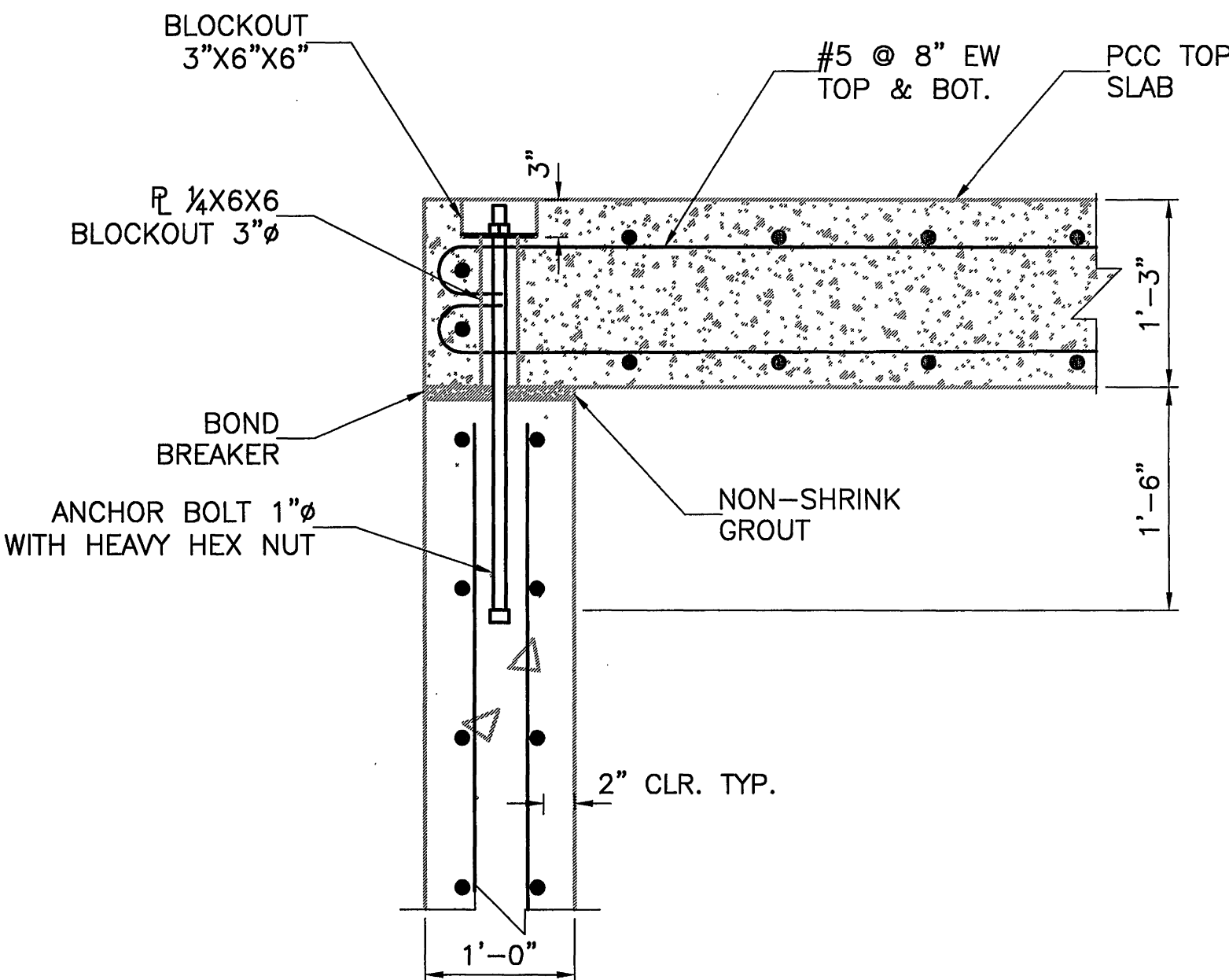


TYPICAL DETAIL AT CORNERS
SCALE: 1" = 1'-0"



NOTE: WALLS HAVE KEY $2\frac{1}{2}$ "
DEEP BY APPROXIMATELY
 $\frac{1}{3}$ THICKNESS OF WALL.

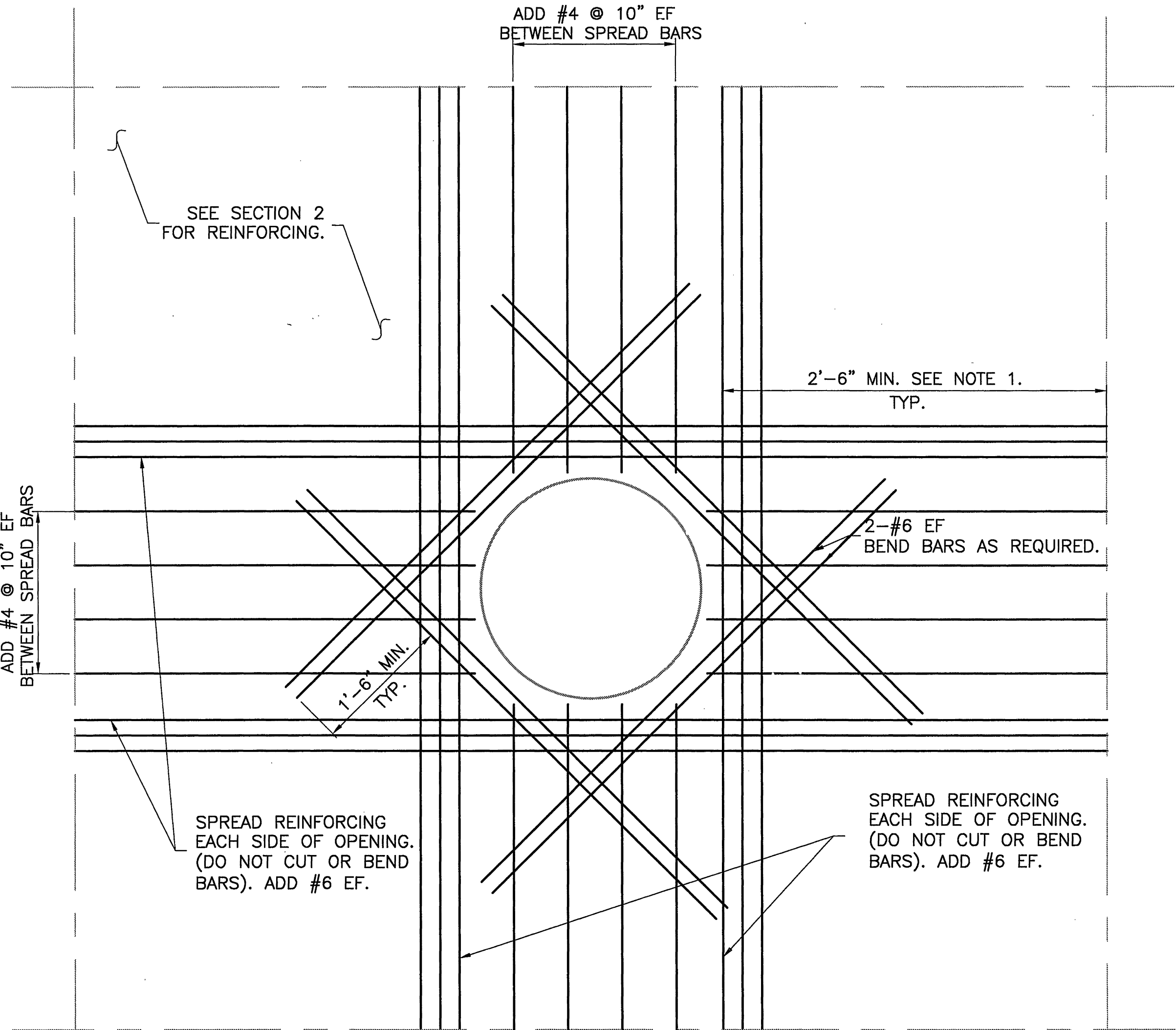
CONSTRUCTION JOINT
SCALE: 1" = 1'-0"



NOTES:

1. PROVIDE 316 STAINLESS STEEL ANCHOR BOLTS. SEE TOP VIEWS FOR LOCATIONS.
2. PROVIDE PERMANENT GALVANIZED LIFTING LUGS RECESSED SIMILAR TO ANCHOR BOLTS SHOWN ABOVE.

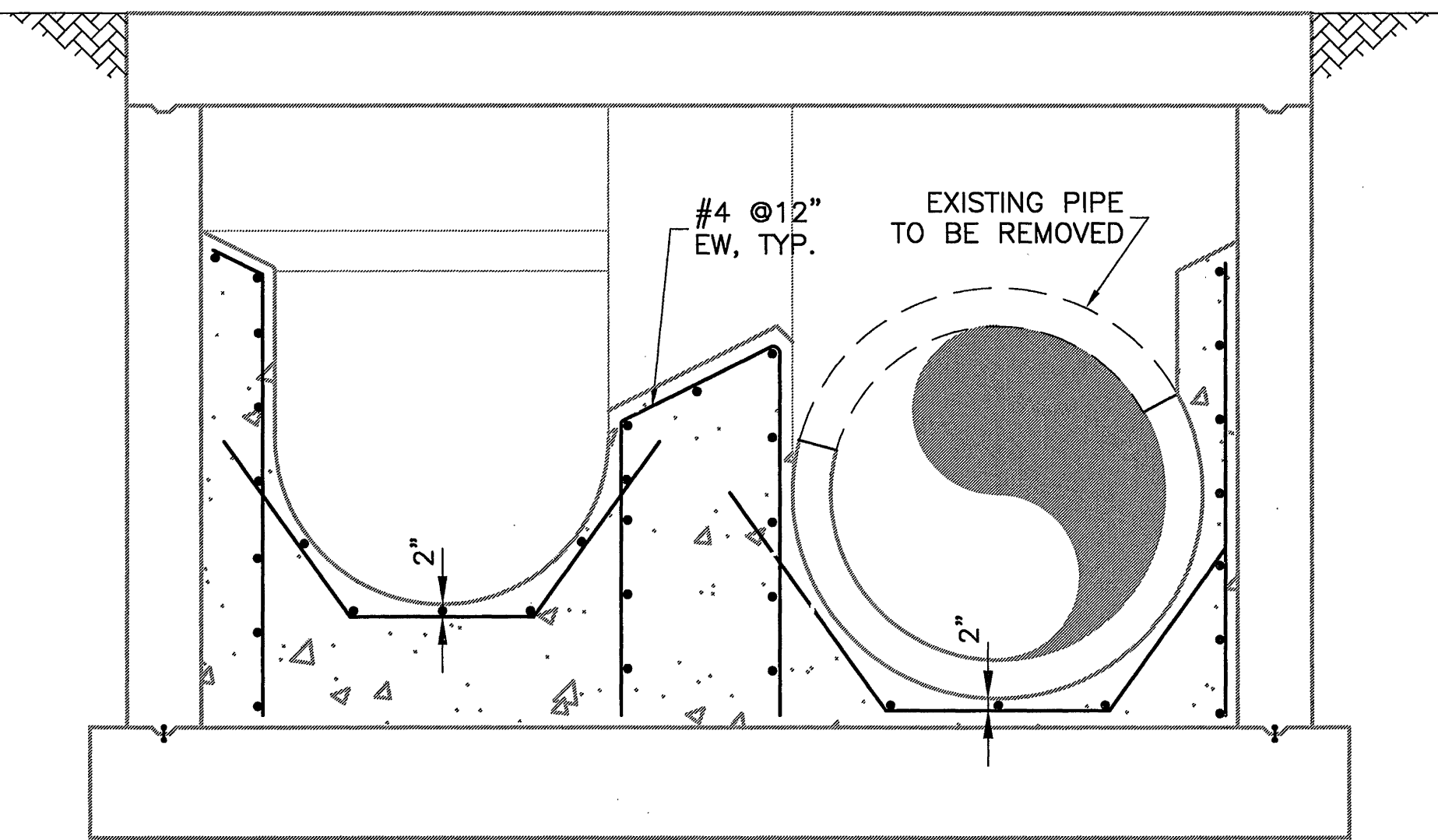
ALTERNATE TOP SLAB CONNECTION
SCALE: 1" = 1'-0"



REINFORCEMENT AT OPENING IN SLAB OR WALL
SCALE: 1" = 1'-0"

NOTES:

1. PROVIDE STANDARD HOOK IF 2'-6" MINIMUM IS NOT AVAILABLE.
2. SWELLSTOP WATERSTOPS ARE REQUIRED AROUND ALL PIPES IN THE CIRCULAR OPENINGS.

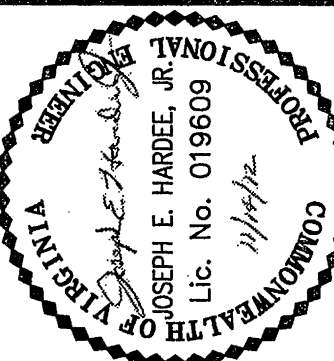


TYPICAL INTERIOR CONCRETE FILL REINFORCEMENT
SCALE: $\frac{1}{2}$ " = 1'-0"

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WESTERN VIRGINIA
WATER AUTHORITY

TINKER CREEK
54-INCH PARALLEL RELIEF SEWER
STRUCTURAL NOTES AND DETAILS



DATE: NOVEMBER 2012
JOB NO.: 11658086
LEAD ENGINEER: gee
DRAWN BY: czh
CHECKED: jeh
REVISION:

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