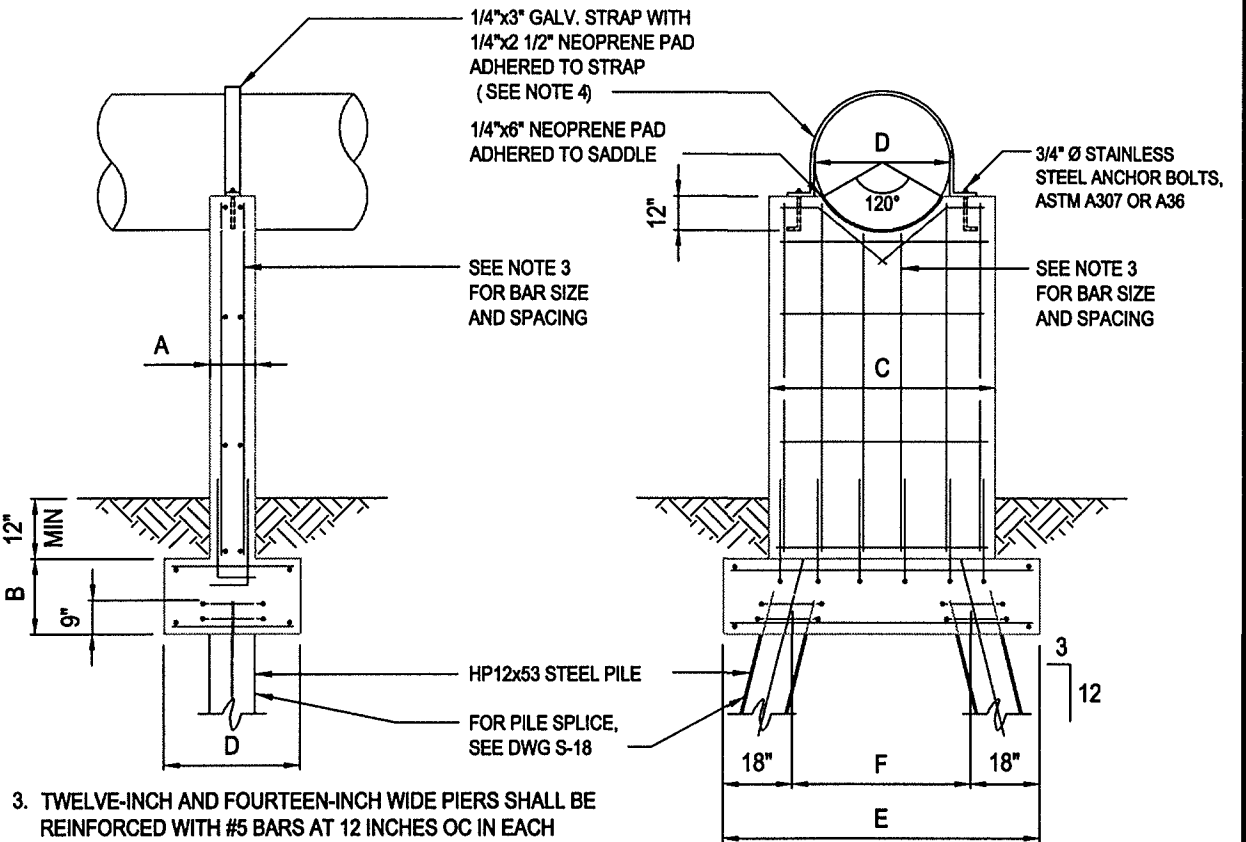


# PILE SUPPORTED PIER DETAIL

CASING PIPE DIA. "D" (IN.)	PIER THICKNESS "A" (IN.)	FOOTING THICKNESS "B" (IN.)	PIER WIDTH "C" (FT.)	FOOTING WIDTH "D" (FT.)	FOOTING LENGTH "E" (FT.)	PILE SPACING "F" (FT.)
6-12	12	20	2'-4"	3'-0"	6'-0"	3'-0"
14-20	12	20	3'-0"	3'-0"	8'-0"	5'-0"
22-28	18	26	3'-8"	4'-0"	8'-9"	5'-9"
30-36	18	26	4'-4"	4'-0"	9'-0"	6'-0"
38-48	18	26	5'-4"	5'-0"	9'-6"	6'-6"
51-60	18	26	6'-4"	5'-0"	9'-10"	6'-10"

**NOTES:**

- PILE SUPPORTED PIER FOUNDATION DESIGN SHOWN ON THIS DETAIL IS BASED ON THE FOLLOWING PARAMETERS:  
 MINIMUM CAPACITY OF HP12x53 PILE = 30 TONS  
 CONCRETE COMPRESSIVE STRENGTH = 4000 PSI  
 GRADE 60 REINFORCING STEEL  
 MAXIMUM STREAM VELOCITY = 10 FT/SEC  
 IF FIELD CONDITIONS REQUIRE ANY DEVIATION FROM THESE PARAMETERS, THE FOUNDATION DESIGN SHALL BE REVIEWED BY THE ENGINEER.
- LENGTH OF PILES SHALL BE AS REQUIRED TO DEVELOP 30 TON CAPACITY BY EITHER END BEARING, FRICTION OR A COMBINATION OF END BEARING AND FRICTION. AS A MINIMUM, PILES SHALL BE DRIVEN AT LEAST 15 FEET INTO UNDISTURBED SOIL.



- TWELVE-INCH AND FOURTEEN-INCH WIDE PIERS SHALL BE REINFORCED WITH #5 BARS AT 12 INCHES OC IN EACH DIRECTION ON EACH FACE. EIGHTEEN-INCH WIDE PIERS SHALL BE REINFORCED WITH #7 BARS AT 12 INCHES OC IN EACH DIRECTION ON EACH FACE. FOOTINGS SHALL BE REINFORCED TYPICALLY TO PIERS.
- EIGHTEEN-INCH WIDE PIERS SHALL REQUIRE TWO STRAPS OVER THE PIPE INSTEAD OF ONE (AS SHOWN).
- WHEN CONCRETE SUPPORTS ARE REQUIRED TO BE LOCATED WITHIN A STREAM AND ARE NOT COVERED WITH BACKFILL, SEE STD. DWG. 4.30 FOR MODIFICATIONS TO UPSTREAM FACE OF SUPPORT.

## AERIAL PIPE CROSSING (SHEET 5 OF 8)

CITY OF ROCKY MOUNT  
 DEPT. OF ENGINEERING

APPROVED  
 -  
 DATE  
 04-22-04

STD. NO.  
 4.28  
 REVISION  
 -

REVISIONS		
NO	DATE	DESCRIPTION