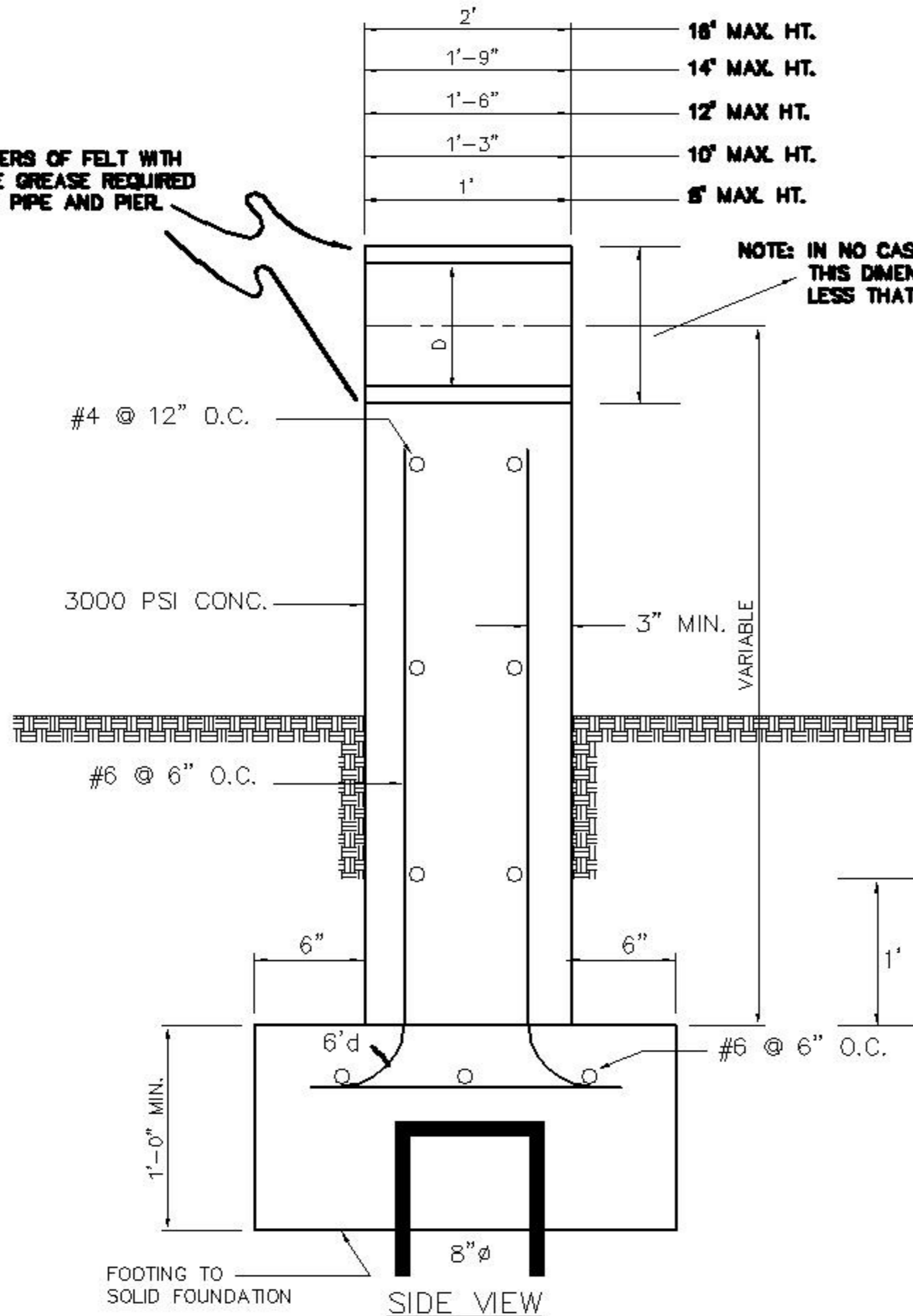


TWO LAYERS OF FELT WITH GRAPHITE GREASE REQUIRED BETWEEN PIPE AND PIER.



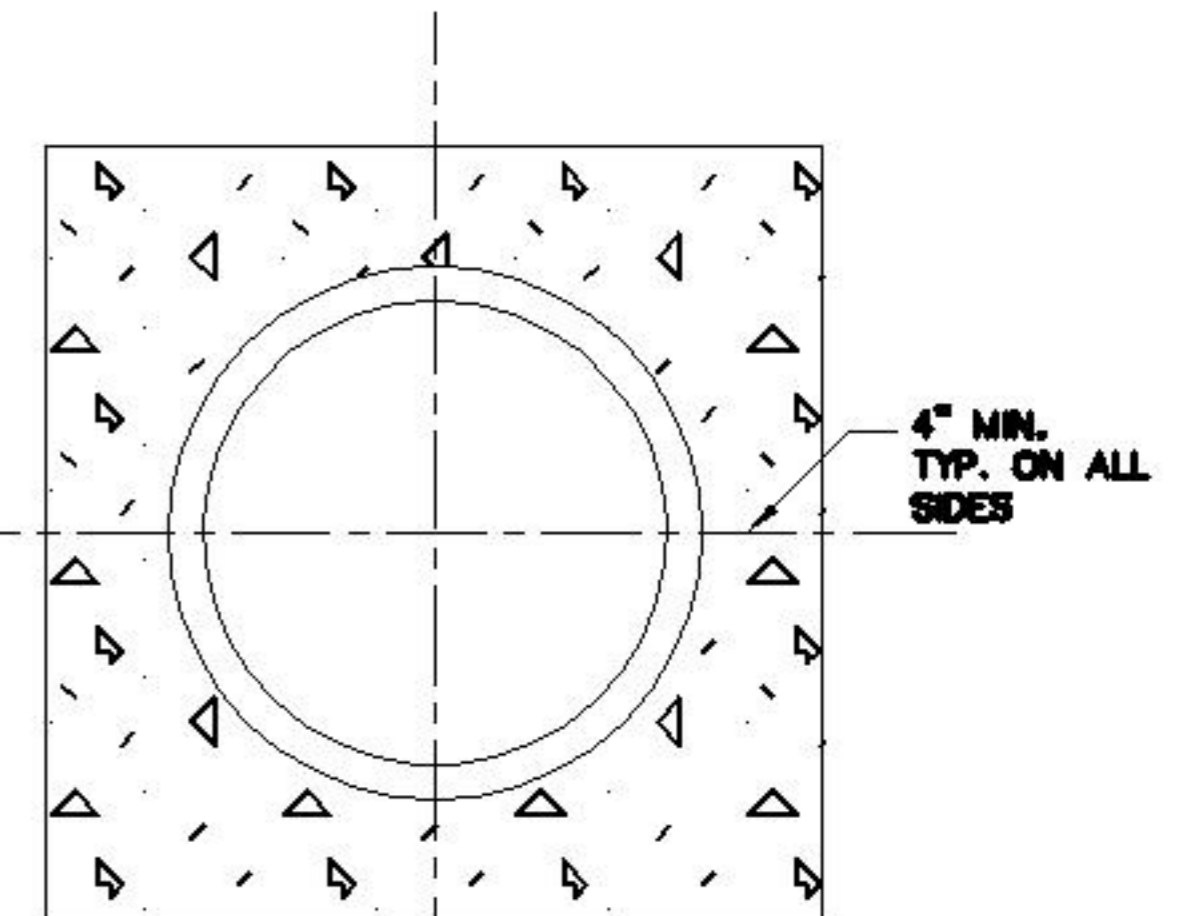
NOTE: IN NO CASE SHALL THIS DIMENSION BE LESS THAN (D+4)

NOTE: PILES ARE FOR USE ON ALL PIERS WHERE A ROCK FOOTING CAN NOT BE REACHED.

NOTE: PILES TO BE DRIVEN TO A BEARING OF 15,000 LBS. AS FIGURED BY THE FOLLOWING FORMULA:

$$P = \frac{2WH}{S + 0.7 \left(\frac{H}{15} \right)} \quad \text{FOR GRAVITY HAMMERS (FOR OTHER TYPES) (SEE CITY ENGINEER)}$$

P=BEARING IN POUNDS
 W=WIGHT (IN POUNDS) OF STRIKING PARTS OF HAMMER
 H=HEIGHT OF FALL IN FEET
 S=AVERAGE PENETRATION PER BLOW FOR LAST 8 TO 10 BLOWS



CONC. ENCASEMENT FOR SANITARY SEWER (N.T.S.)

REVISED	F.B.	PG.	DATE: MAY 29, 1974
5/30/86			SCALE: NTS
1/05/95			DRAWN BY: RMN, EZ
02/24/05			CHECKED BY: NBM, FAP
			CITY ENGINEER: JPB

STANDARD DETAIL

CONCRETE PIER DETAIL
 (THIS IS TO BE USED FOR ALL CREEK CROSSINGS)

OFFICE OF THE
 CITY ENGINEER
 GASTONIA, N.C.

FILE NO. **71B-15**