

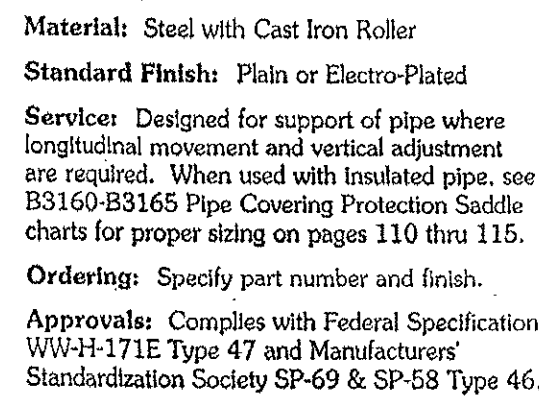


Figure B3118SL Adjustable Roller Stand with Base Plate

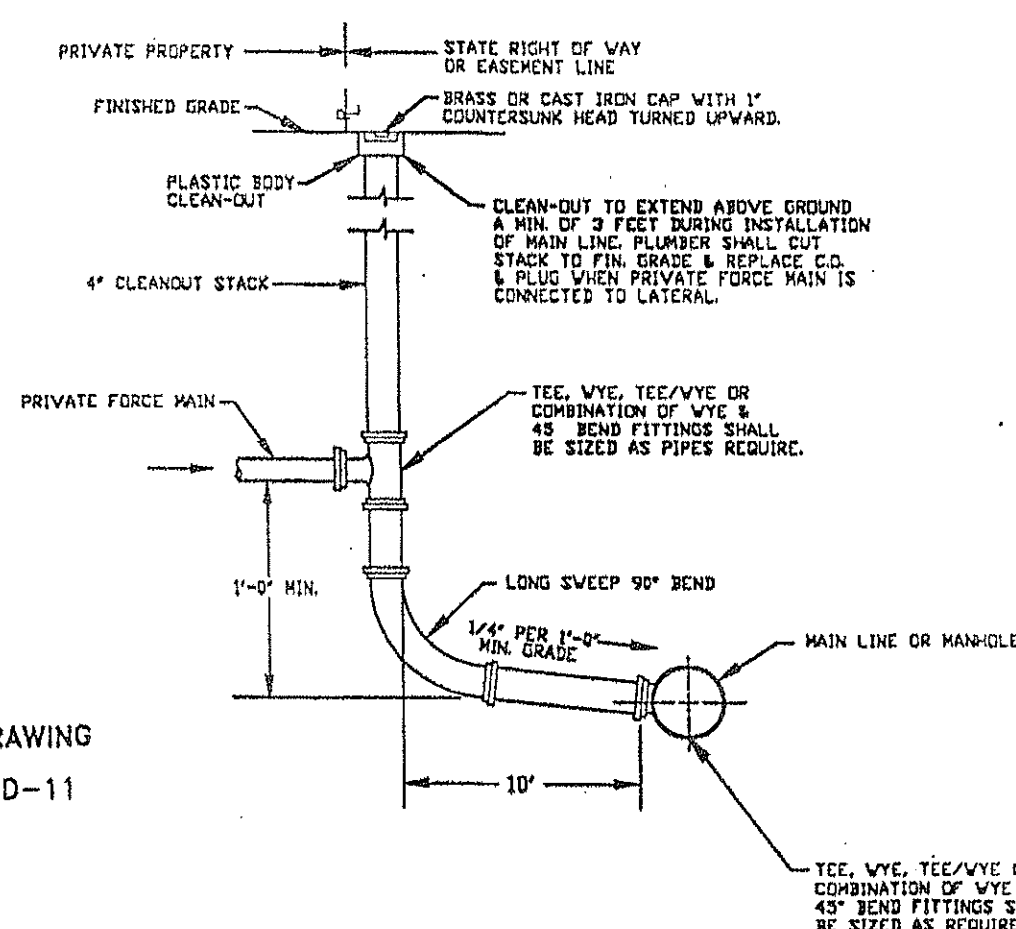
Port No.	Nominal Pipe Size	A	B	C	D
B3118SL-2 to 3 1/2"	2" (50)	6 7/8" (174.6)	6" (152.4)	4 3/4" (120.6)	5 7/8" (149.2)
	2 1/2" (63.5)	6 7/8" (174.6)	6" (152.4)	5" (127.0)	5 7/8" (149.2)
	3" (80)	6 7/8" (174.6)	6" (152.4)	5 1/4" (134.9)	5 7/8" (149.2)
	3 1/2" (90)	6 7/8" (174.6)	6" (152.4)	5 9/16" (141.3)	5 7/8" (149.2)
B3118SL-4 to 6"	4" (100)	8 1/4" (206.4)	6" (152.4)	6 1/8" (157.2)	7 7/8" (198.9)
	5" (125)	8 1/4" (206.4)	6" (152.4)	6 3/4" (171.4)	8" (203.2)
	6" (150)	8 1/4" (206.4)	6" (152.4)	7 1/4" (184.1)	8 1/2" (215.9)
	8" (200)	10 1/2" (269.9)	8" (203.2)	10 1/4" (265.2)	11 1/4" (286.9)
B3118SL-8 to 10"	10" (250)	10 1/2" (269.9)	8" (203.2)	11 1/2" (284.2)	12 1/2" (323.8)
	12" (300)	13" (330.2)	8" (203.2)	12 1/2" (323.8)	14 1/4" (365.8)
B3118SL-12 to 14"	14" (350)	13" (330.2)	8" (203.2)	13 1/8" (339.7)	15 1/4" (385.1)
	16" (400)	14 1/4" (371.9)	10" (254.0)	15 1/8" (390.5)	17 1/4" (438.1)
	18" (450)	14 7/8" (379.5)	10" (254.0)	16 1/8" (415.9)	18 1/4" (463.5)
	20" (500)	14 7/8" (379.5)	10" (254.0)	17 1/4" (441.3)	19" (488.9)
B3118SL-24"	24" (600)	15 1/4" (400.0)	10" (254.0)	19 1/4" (488.9)	21 1/4" (539.7)
	30" (750)	19 1/4" (488.9)	10 1/2" (266.7)	24 1/4" (620.7)	26 1/8" (677.9)

Part No.	E	F	Asst. Dir.	Design Load	Wt.
	lb.	lb.	lb.	lb.	lb.
B3118SL-2 to 3 1/2"	1" (25.4)	1" (25.4)	1/4" (12.7)	390 (1.73)	1100 (498.9)
B3118SL-4 to 6"	1" (25.4)	1" (25.4)	3/4" (19.0)	950 (4.22)	1310 (594.6)
B3118SL-8 to 10"	1" (25.4)	1 1/4" (31.8)	1 1/2" (38.1)	2100 (9.34)	2725 (1236.0)
B3118SL-12 to 14"	1" (25.4)	1 3/4" (44.5)	1 3/4" (44.5)	3075 (13.68)	3612 (1638.4)
B3118SL-16 to 20"	1" (25.4)	1 7/8" (47.6)	1 7/8" (47.6)	4980 (22.15)	6394 (2895.8)
B3118SL-24"	1 1/4" (31.8)	1 3/4" (44.5)	1 3/4" (44.5)	7100 (31.7)	8437 (3827.0)
B3118SL-30"	1" (25.4)	1 1/4" (31.8)	1 1/4" (31.8)	6500 (33.36)	12528 (5682.0)

GENERAL NOTES:

1. TRAFFIC BEARING BZ. REQUIRED IN TRAFFIC AREAS.
 2. ALL PIPE AND FITTINGS SHALL BE OF SIMILAR MATERIAL.
 3. ALL PIPE SHALL BE OF SAME SIZE.
 4. NO BENDS ARE ALLOWED IN THE LATERAL FROM MAIN TO THE CLEAN-OUT STACK WYE. (EXCEPT AS NOTED)
 5. ALL MAIN LINE TAPS ON ACTIVE MAINS WILL BE PERFORMED BY RAINBOWCreek UTILITY DEPT.
 6. MINIMUM COVER FOR ALL 36" DIAMETERS SHALL BE THREE (3) FEET
 7. GRAVITY SEWER CONNECTION AND CLEANOUT SHALL BE 6" DIA. FOR PUBLIC FORCE MAINS AND 4" DIA. FOR PRIVATE FORCE MAINS
 8. PUBLIC FORCE MAINS SHALL CONNECT TO SEWER MANHOLE.
- FORCE MAIN
TO GRAVITY LATERAL
CONNECTION

FORCE MAIN
TO GRAVITY LATERAL
CONNECTION



DRAWING
DD-11

STRUCTURAL GENERAL NOTES

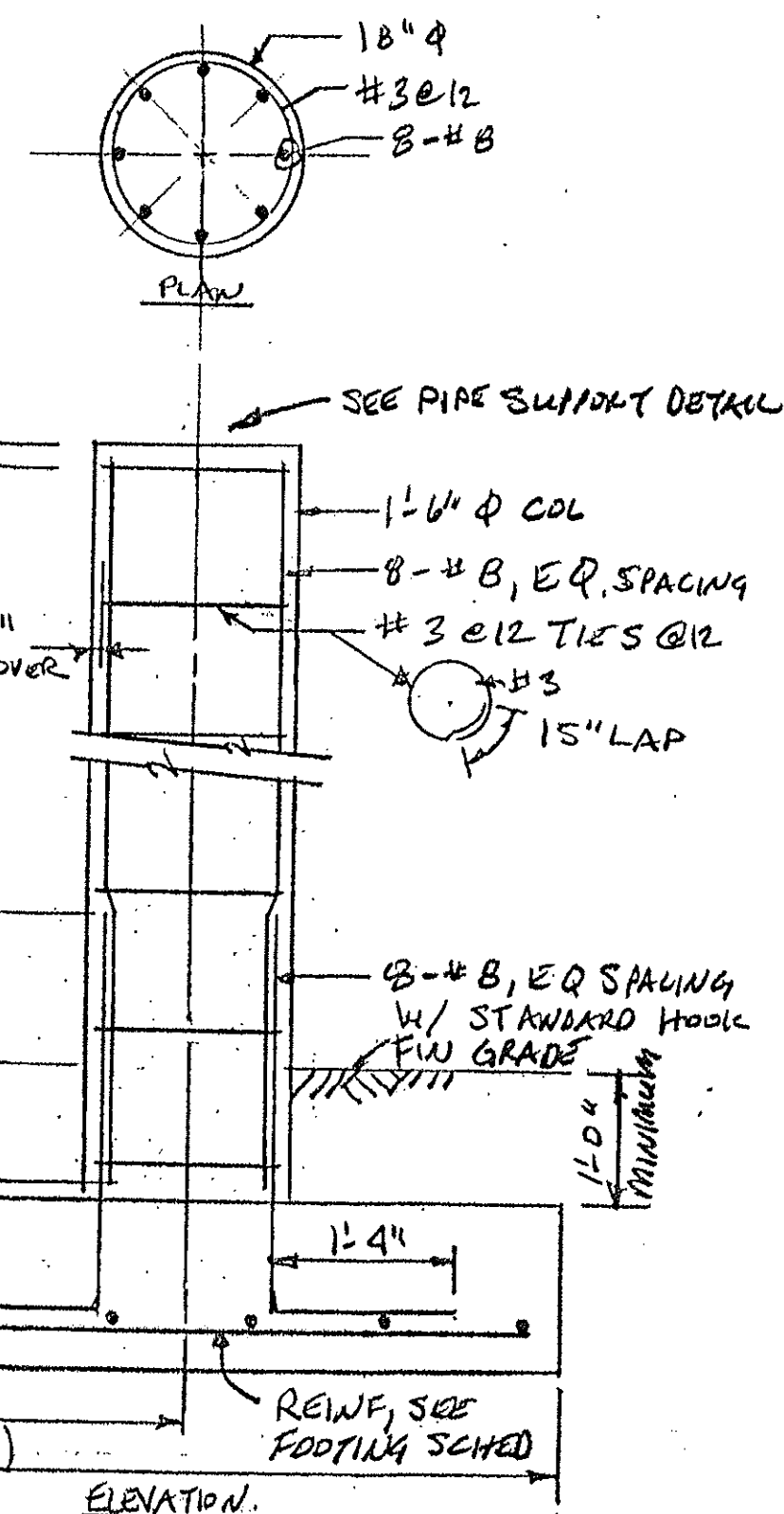
1. MATERIAL DESIGN STRENGTHS:
 CAST-IN-PLACE CONCRETE:----- $f'_c = 4,000$ PSI
 REINFORCING STEEL, DEFORMED ----- $f_y = 60,000$ PSI
 STAINLESS STEEL, TYPE 316L----- $F_y = 25,000$ PSI
 SOIL BEARING CAPACITY:
 SPREAD FOOTINGS: [ASSUMED] ----- $q = 1,250$ PSF
WELDING ELECTRODES
 TYPE 316L TO TYPE 316L-----TYPE E316L FILLER METAL
 TYPE 316L TO CARBON STEEL----- TYPE E309L FILLER METAL
2. DESIGN CODES:
 ACI 318-95 "BUILDING CODE REQUIREMENTS FOR REINFORCED
 CONCRETE"
 VIRGINIA UNIFORM STATEWIDE BUILDING CODE, 2000 EDITION,
 (BOCA 1995)
3. DESIGN LOADS:
 PIPE WEIGHT PLUS FULL WATER.
 WIND LOAD @ 20 PSF WITH REDUCTION
4. FOOTING ELEVATIONS SHOWN INDICATE THE MINIMUM DEPTH THAT THE
FOOTING SHALL BE PLACED. FOOTINGS SHALL BE LOWERED AS REQUIRED TO
OBTAIN SUITABLE BEARING. ALL UNSUITABLE FOUNDATION MATERIAL SHALL
BE REMOVED AND THE FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR
CONTROLLED FILL WITH A MINIMUM BEARING CAPACITY INDICATED.
COORDINATE WITH GEOTECHNICAL ENGINEER OF RECORD.
5. CONCRETE FOR FOUNDATIONS SHALL BE CAST IN THE EXCAVATED HOLE
AGAINST THE EXCAVATED SIDE WALLS OR EXISTING STRUCTURE. FORMS FOR
CONCRETE FOOTINGS BELOW GRADE SHALL NOT BE USED UNLESS
SPECIFICALLY APPROVED BY JPR ENGINEERING.
6. THE RECOMMENDATIONS OF ACI 305 "HOT WEATHER CONCRETING" AND
ACI 306 "COLD WEATHER CONCRETING" SHALL BE INCORPORATED AS
REQUIRED AND APPROPRIATE FOR THIS PROJECT.
7. ALL REINFORCING SHALL BE DETAILED, FABRICATED, AND PLACED IN
ACCORDANCE WITH ACI 315-92 UNLESS OTHERWISE NOTED. ALL COLUMN
TIES SHALL BE CLOSED TYPE (ACI TYPE T1) UNLESS OTHERWISE NOTED.
CONCRETE PROTECTION FOR REINFORCEMENT SHALL CONFORM TO ACI 301-
95 AND SHALL BE INDICATED ON THE SHOP DRAWINGS.

8. FIELD WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED FOR THE TYPE OF WELDING REQUIRED FOR THE PROJECT. WELDERS SHALL BE CERTIFIED IN ACCORDANCE WITH AWS D1.1-98, STRUCTURAL WELDING CODE-STEEL. CERTIFICATES SHALL BE PLACED ON FILE WITH THE GENERAL CONTRACTOR AND SHALL BE SUBMITTED TO JPR ENGINEERING FOR REVIEW.
9. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS FOR REQUIRED PROPER ALIGNMENT AND FIT OF ALL STEEL MEMBERS (ATTACHMENTS, EMBEDDED ITEMS) TO EACH OTHER AND TO THE WORK AND EQUIPMENT OF OTHER TRADES. FIELD VERIFY ALL DIMENSIONS OF EXISTING CONDITIONS.
10. THE CONTRACTOR SHALL FIELD VERIFY AND BE RESPONSIBLE FOR THE DIMENSIONS, ELEVATIONS, CLEARANCES, AND OTHER COORDINATING DATA REQUIRED FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW STRUCTURE.
11. TOUCH UP DAMAGED ZINC PLATED SURFACES WITH COLD GALVANIZING COMPOUND AS MANUFACTURED BY RUST-OLEUM CORPORATION, ZRC CHEMICAL COMPANY, OR EQUAL. AEROSOL SPRAY WILL BE ACCEPTABLE.
12. INTERFERENCES AND CONFLICTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF JPR ENGINEERING FOR RESOLUTION.

FOOTING SCHEDULE

PIER DESIGNATION	W x D x T	REINFORCEMENT	REMARKS
P1, P2, P3, P4	4'-3" x 4'-3" x 1'-0"	5-#5 EW, BOT	
P5, P6, P7	5'-6" x 5'-6" x 1'-3"	6-#6 EW, BOT	

1. SEE DRAWING SHEET C-1, DATED 12/28/01 FOR LOCATION OF PIERS.
2. SEE PIER & FOOTING DETAIL FOR DOWELS IN FOOTINGS.

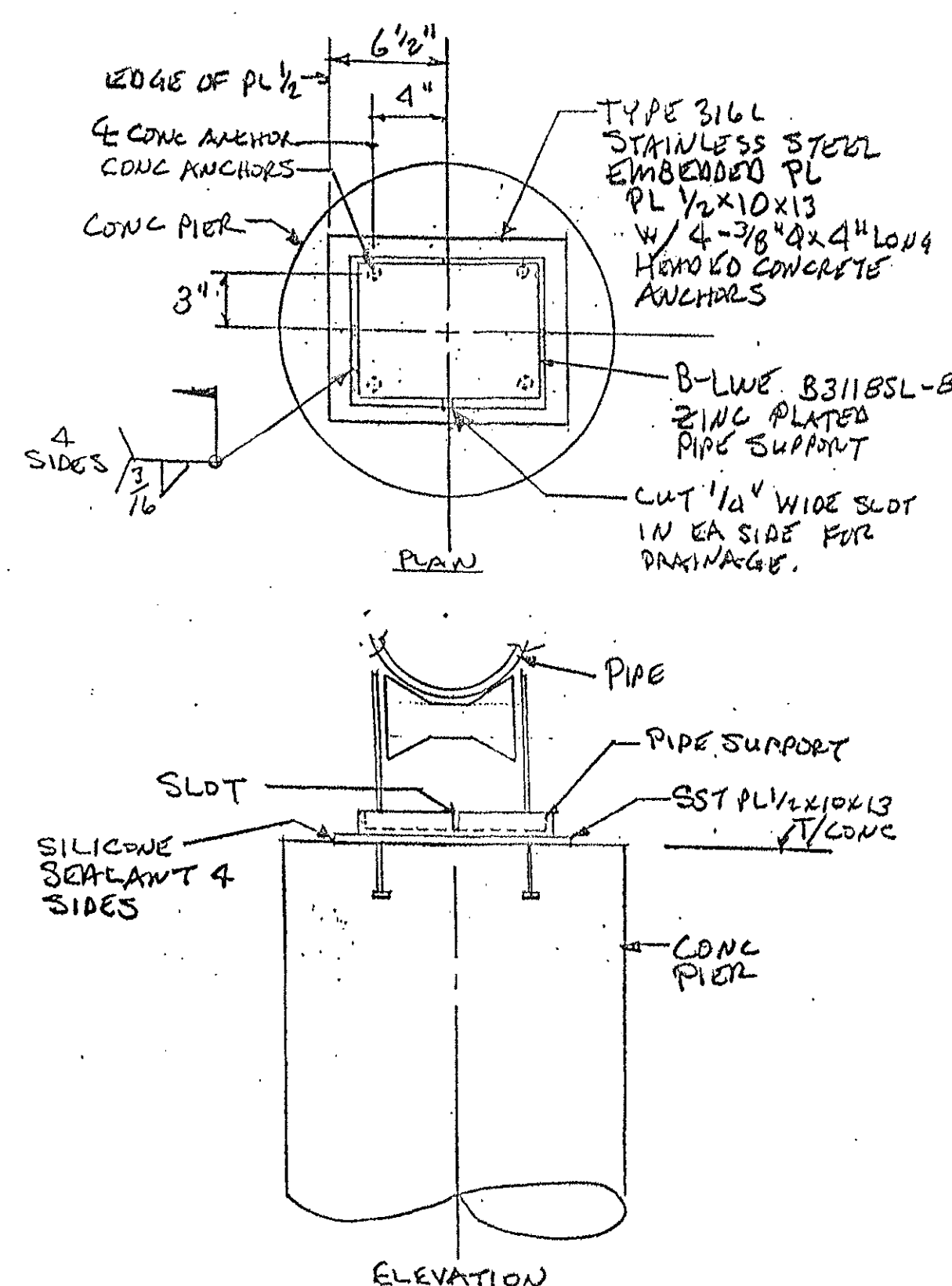


PIER & FOOTING DETAIL
3/d = 1-P

NOTE1. AT THE CONTRACTOR'S OPTION, THE LAPS MAY BE OMITTED AND REPLACED WITH SINGLE BARS WITH A STANDARD HOOK. THIS MODIFICATION IS ESPECIALLY ADAPTABLE FOR THE SHORT PIERS P1, P2, P3 AND P4.

NOTE 2. THE MAXIMUM SPAN BETWEEN CENTERLINES OF PIERS SHALL NOT EXCEED 40'-0". THE MAXIMUM SPAN OF THE PIPING SHALL NOT EXCEED 40'-0".

PIER NO.	TOP OF CONC. ELEV.
P1	1130.46'
P2	1030.28'
P3	1030.10'
P4	1029.92'
P5	1029.60'
P6	1029.40'
P7	1029.20'
P8	1029.00'
P9	1028.80'
P10	1028.60'
P11	1028.40'
P12	1028.20'
P13	1028.00'
P14	1027.81'
P15	1027.52'

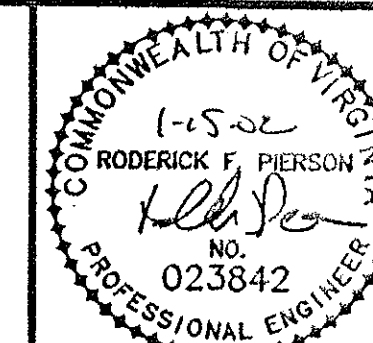


PIPE SUPPORT DETAIL
1/4" = 1'-0"

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	REV	DATE	DESCRIPTION

MISCELLANEOUS DETAILS
LINNMEAD SUBDIVISION
ROANOKE COUNTY, VIRGINIA



SCALE: 1" = 50'
COMM. NO. R200123
DATE: 12/28/01
SHEET 10