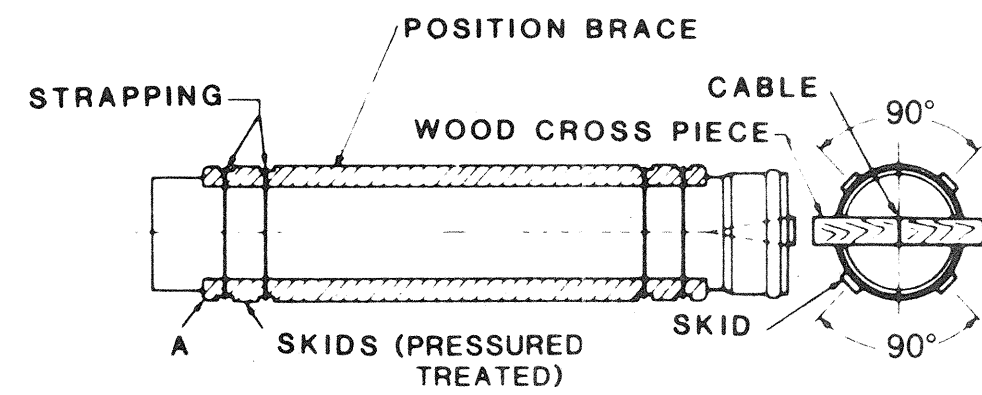


TABLE OF CASING SIZES

PIPE SIZE (DIAMETER IN INCHES)	CASING SIZE (DIAMETER IN INCHES)
4	10
6	12
8	16
10	18
12	20
15	24

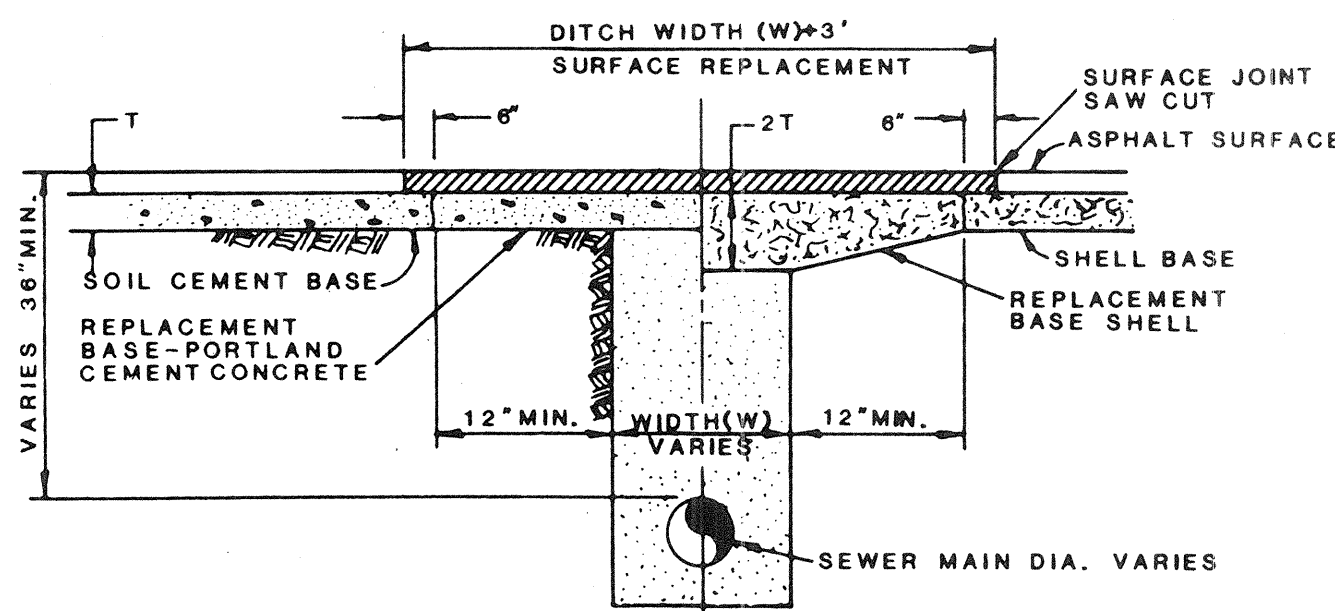


NOTES

- 1) Skids should extend for the full length of the pipe with the exception of the bell area and spigot area necessary for assembly. They should also be high enough to allow for clearance between the bell and the casing bottom.
- 2) The leading or forward ends of the skids should be rounded as shown in "A" above. Notch the skids as shown for the strapping or wire to control the strapping operation and to prevent undue movement of the straps. Fasten skids securely to pipe with heavy steel strapping or wire. The spacing arrangement of the skids should be according to diagram shown above.
- 3) Pipes 12" and under require 4 skids and position braces. Pipes over 12" require more than 4 skids and position braces.

JACK AND BORING DETAIL

N.T.S.

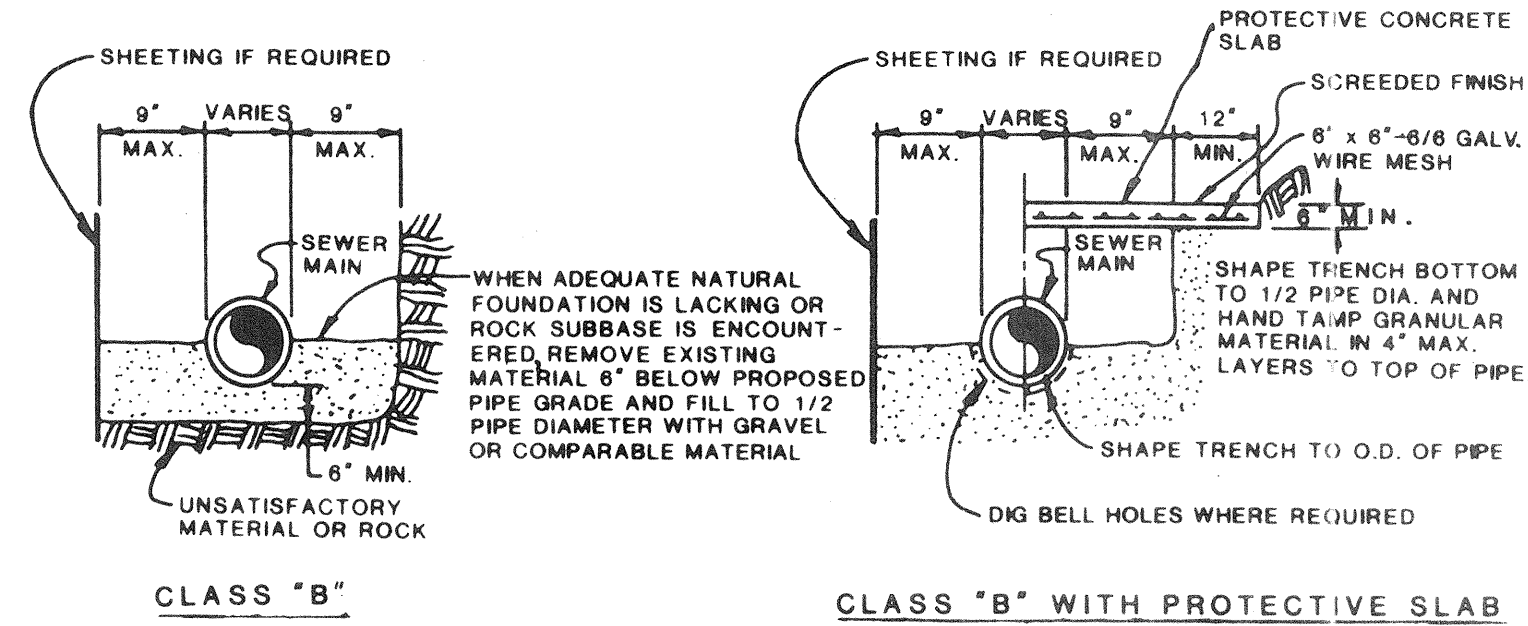


REPLACEMENT OF FLEXIBLE PAVEMENT

- 1) Shell base material shall be compacted to 98% density, A.A.S.H.T.O. T-180.
- 2) Approved sub-base shall be compacted in 6" layers to a maximum density of 98%, A.A.S.H.T.O. T-180.
- 3) Asphalt concrete pavement joints shall be mechanically saw cut.
- 4) Surface material will be consistent with the existing surface.
- 5) Surface treated pavement joints shall be lapped and feathered.
- 6) Sub-base material shall be approved by the County Engineer.
- 7) Shell surfaced roads shall be compacted as specified with shell base and surface to match existing.
- 8) County R.O.W. utilization permit has to be secured prior to work being done in the County R.O.W. and cutting pavement.

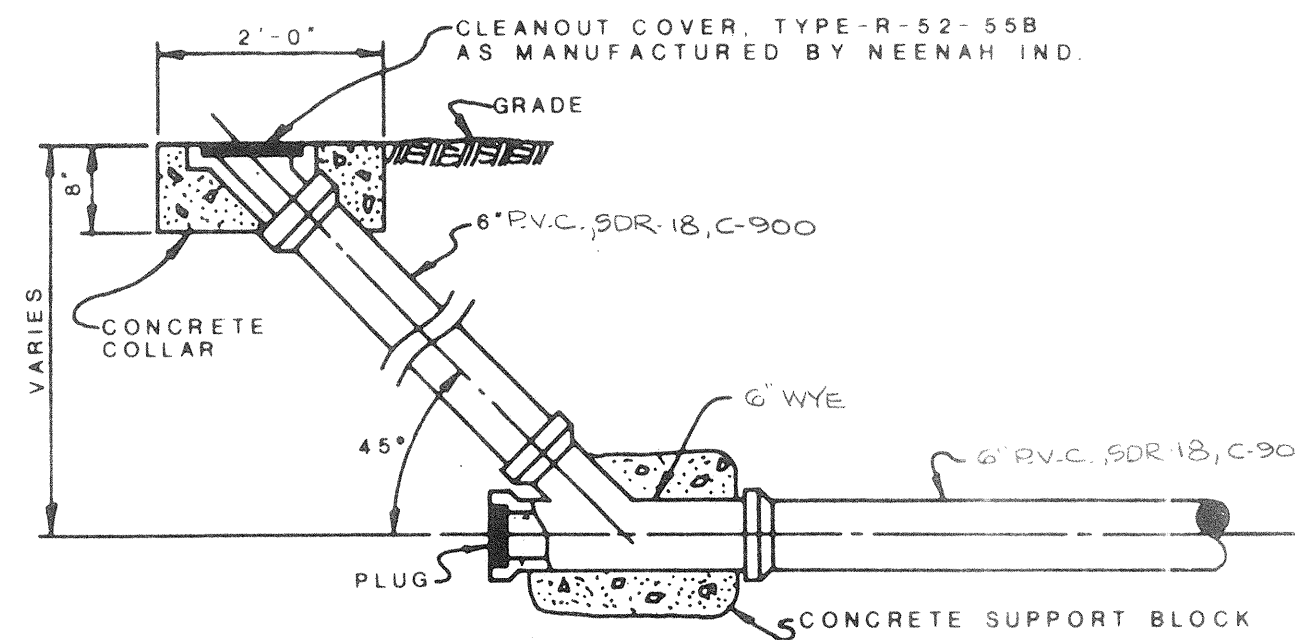
OPEN CUT ROAD RESTORATION DETAIL

N.T.S.



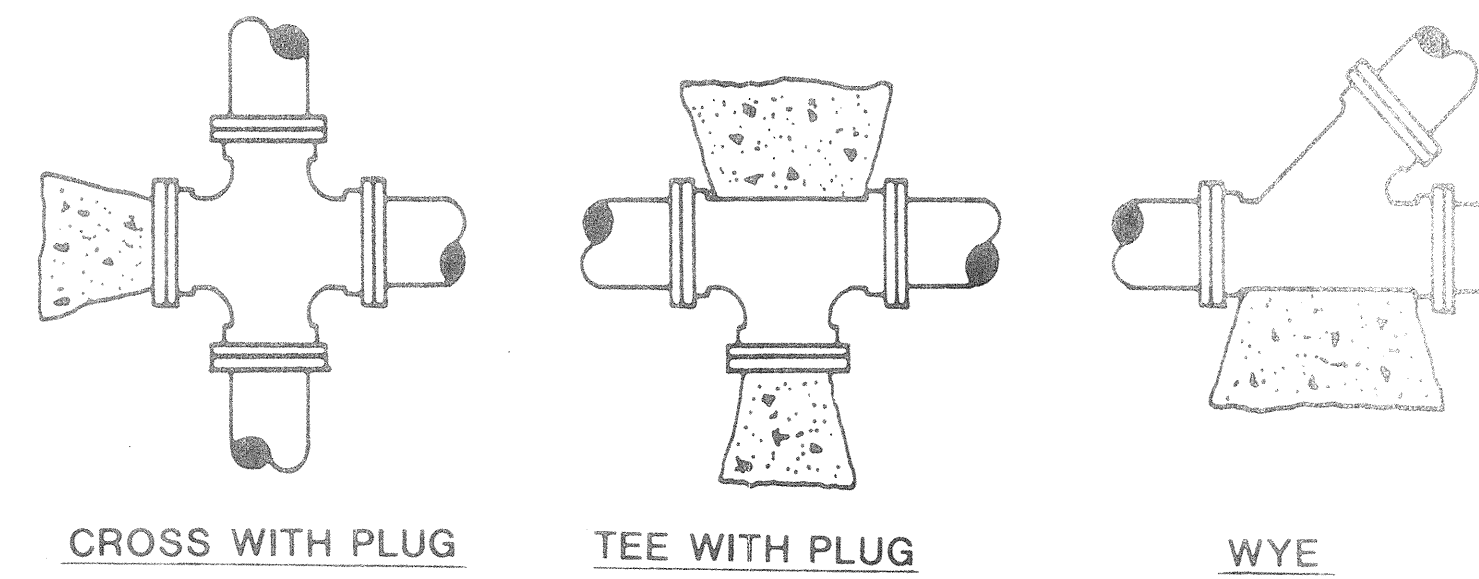
TYPICAL TRENCH AND BEDDING DETAILS

N.T.S.



CLEANOUT DETAIL

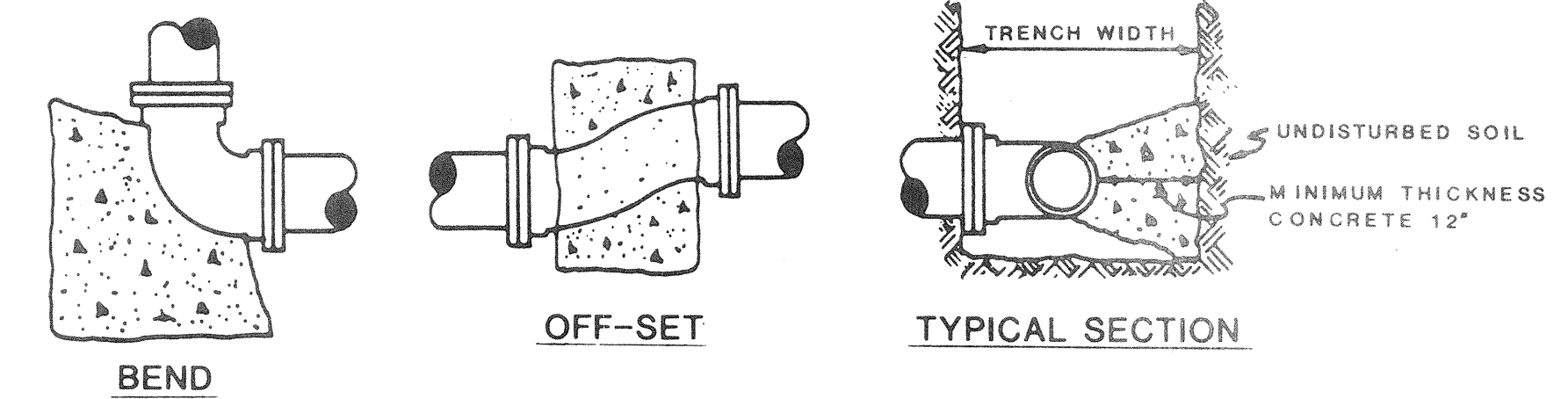
N.T.S.



CROSS WITH PLUG

TEE WITH PLUG

WYE



BEND

OFF-SET

TYPICAL SECTION

THRUST BLOCK AREAS IN SQUARE FEET

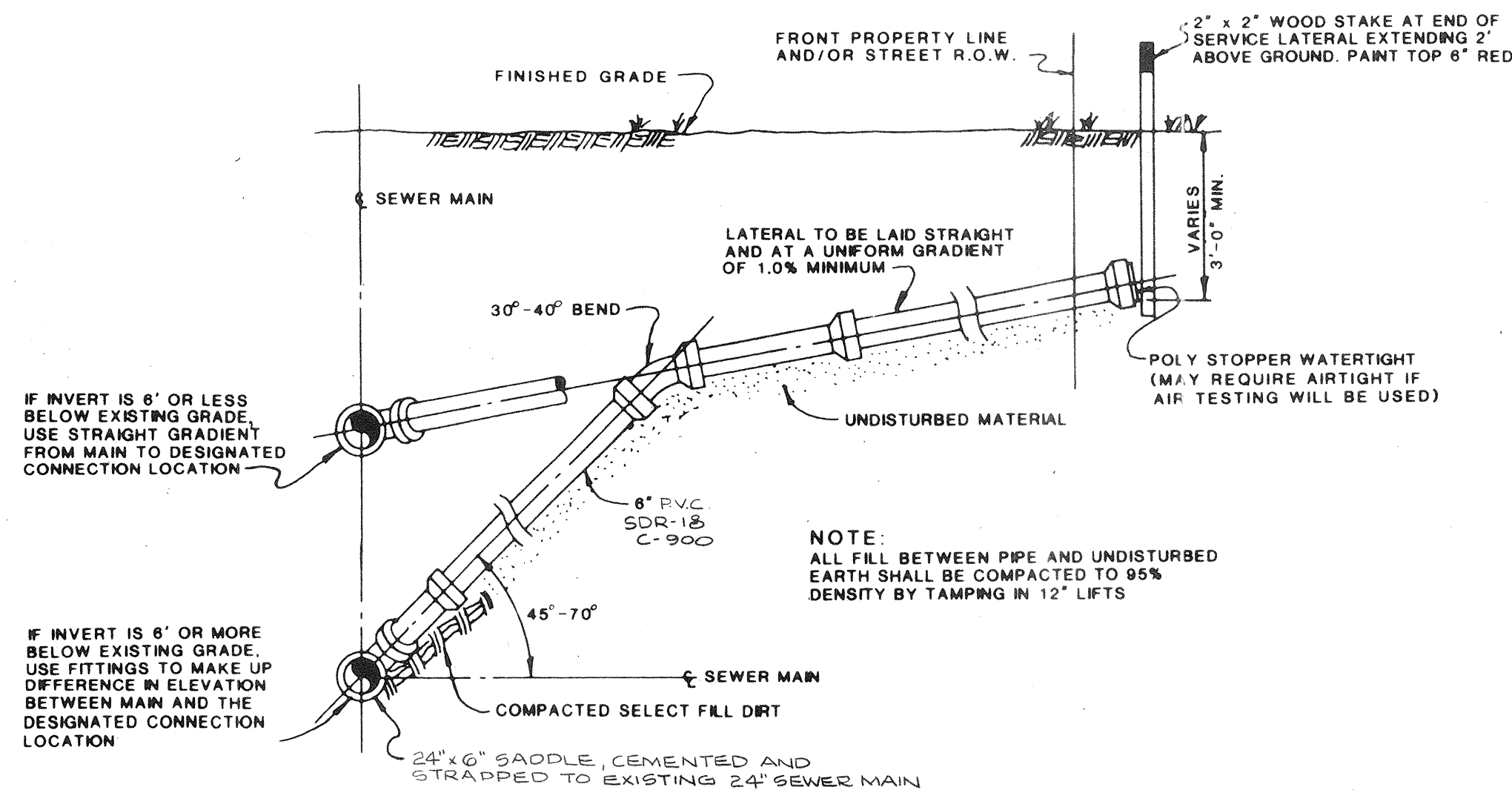
PIPE SIZE	TEE	90° BEND	45° BEND	22 1/2° BEND
4"	1.8	2.5	1.4	0.7
6"	4.0	5.5	3.0	1.5
8"	7.0	10.0	5.5	3.0
10"	10.0	14.0	7.0	5.0
12"	15.0	20.0	10.0	7.0
14"	21.0	28.4	15.4	8.8
16"	27.8	37.0	20.0	10.2
18"	35.0	46.8	25.4	12.9
20"	43.4	57.9	31.2	16.0

NOTES

- 1) Size of concrete thrust block to be determined by the Engineer of Record due to variable bearing load of soils.
- 2) Use a minimum 100 p.s.i. pressure for force main thrust block calculations.
- 3) Thrust block bearing areas shall be poured against undisturbed material, where trench walls have been disturbed, excavate all loose material and extend to undisturbed material.
- 4) Extend thrust block full length of fittings, put board in front of plug before pouring concrete. Joint fittings shall not be covered by thrust block.
- 5) Rough blocking forms shall be used along sides of thrust block.
- 6) Thrust blocks shall be used in combination, as required to suit the specific fitting arrangement.
- 7) Precast thrust blocks are not acceptable.

THRUST BLOCK DETAIL

N.T.S.



TYPICAL SEWER SERVICE LATERAL

N.T.S.

FOR: JOHN BAILEY, 7215 BROUGHTON STREET, SARASOTA, FLORIDA 34243 PH: 355-0452
 CONSTRUCTION PLANS / WASTEWATER COLLECTION SYSTEM DETAILS
 TRITON COVE
 LONGBOAT KEY, FLORIDA
 STEVEN M. HOUGHTON, P.E.
 CONSULTING ENGINEER
 SARASOTA, FLORIDA
 DATE: JULY, 1989
 SCALE: AS SHOWN
 DRAWN: CHKC
 TELEPHONE: 922-6256
 LUG: SMP
 P.L.A. CERT. NO. 2737

OCT 02 1989