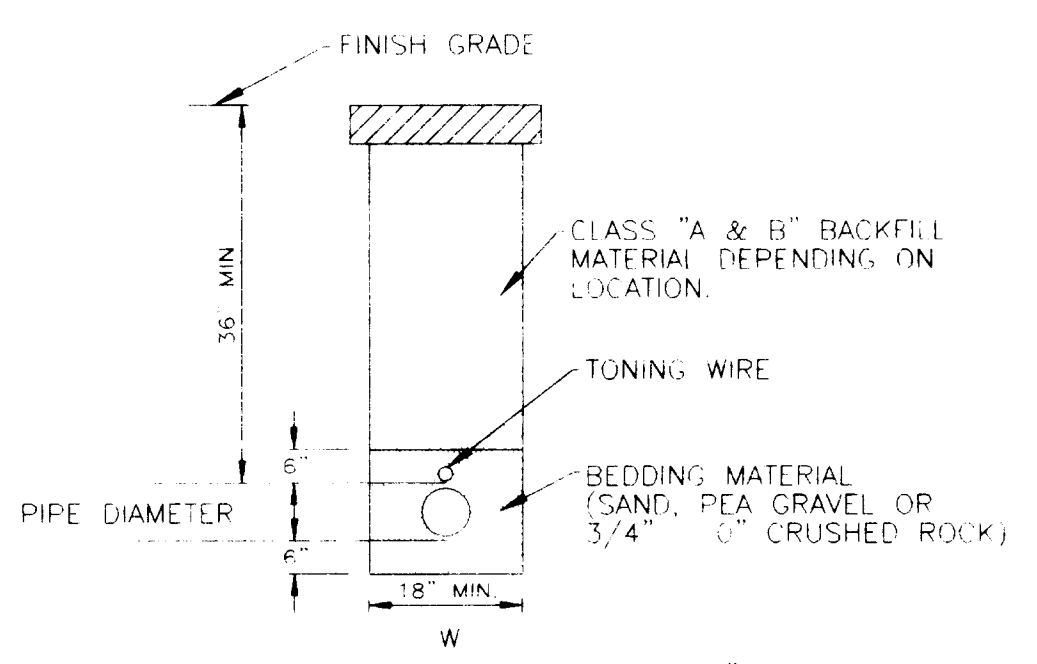
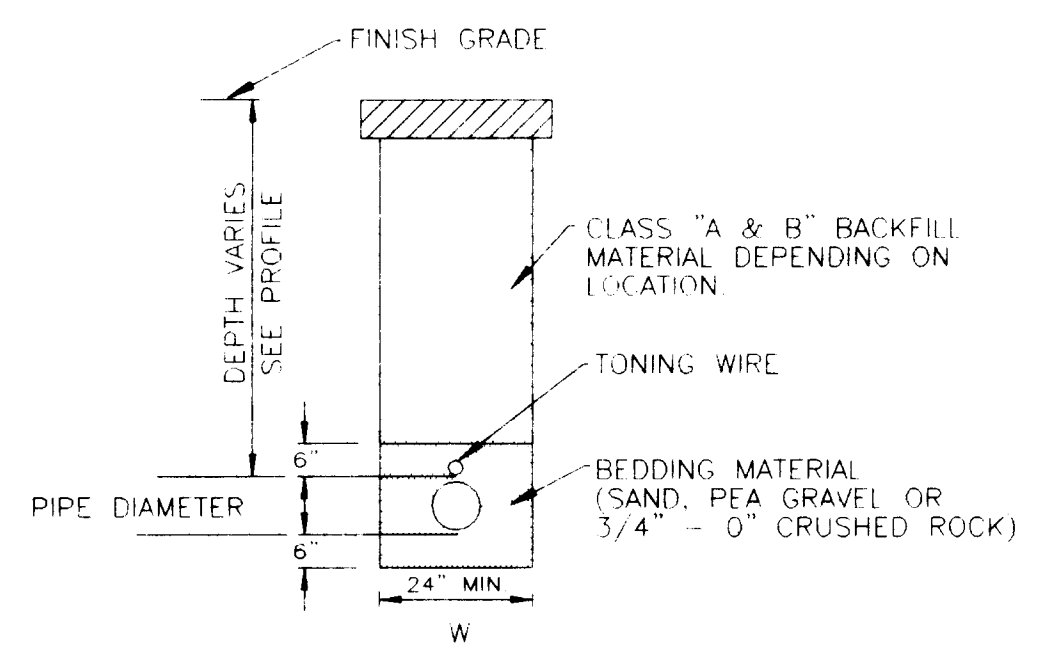


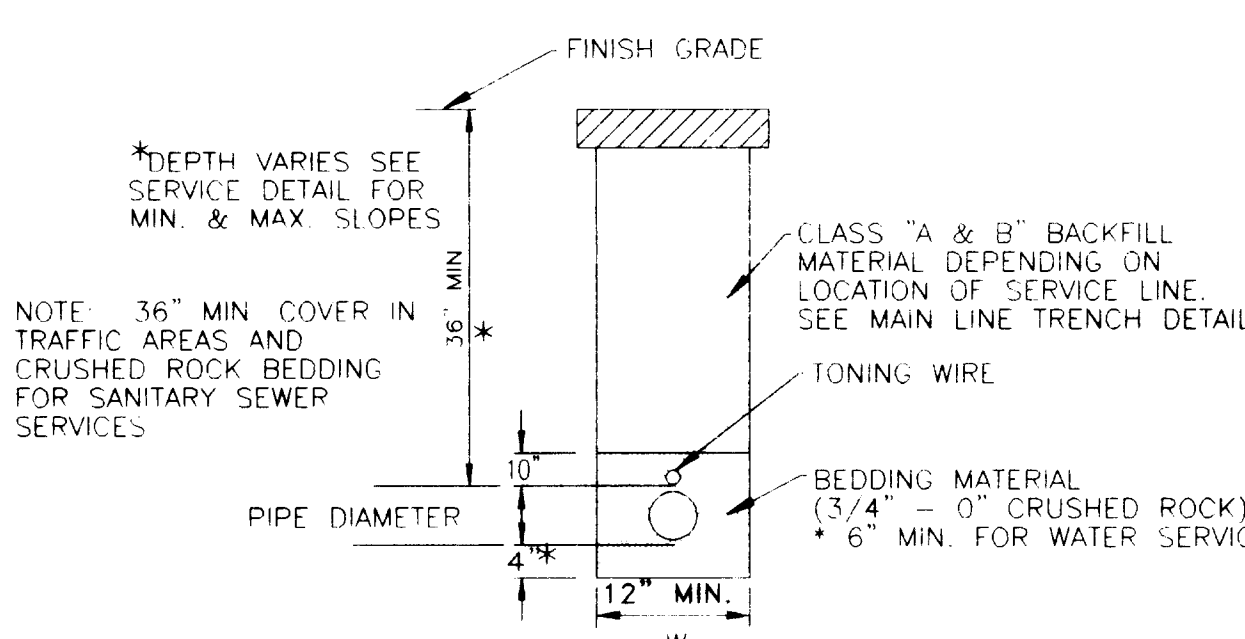
TYPICAL SEWER MAINLINE TRENCH DETAIL



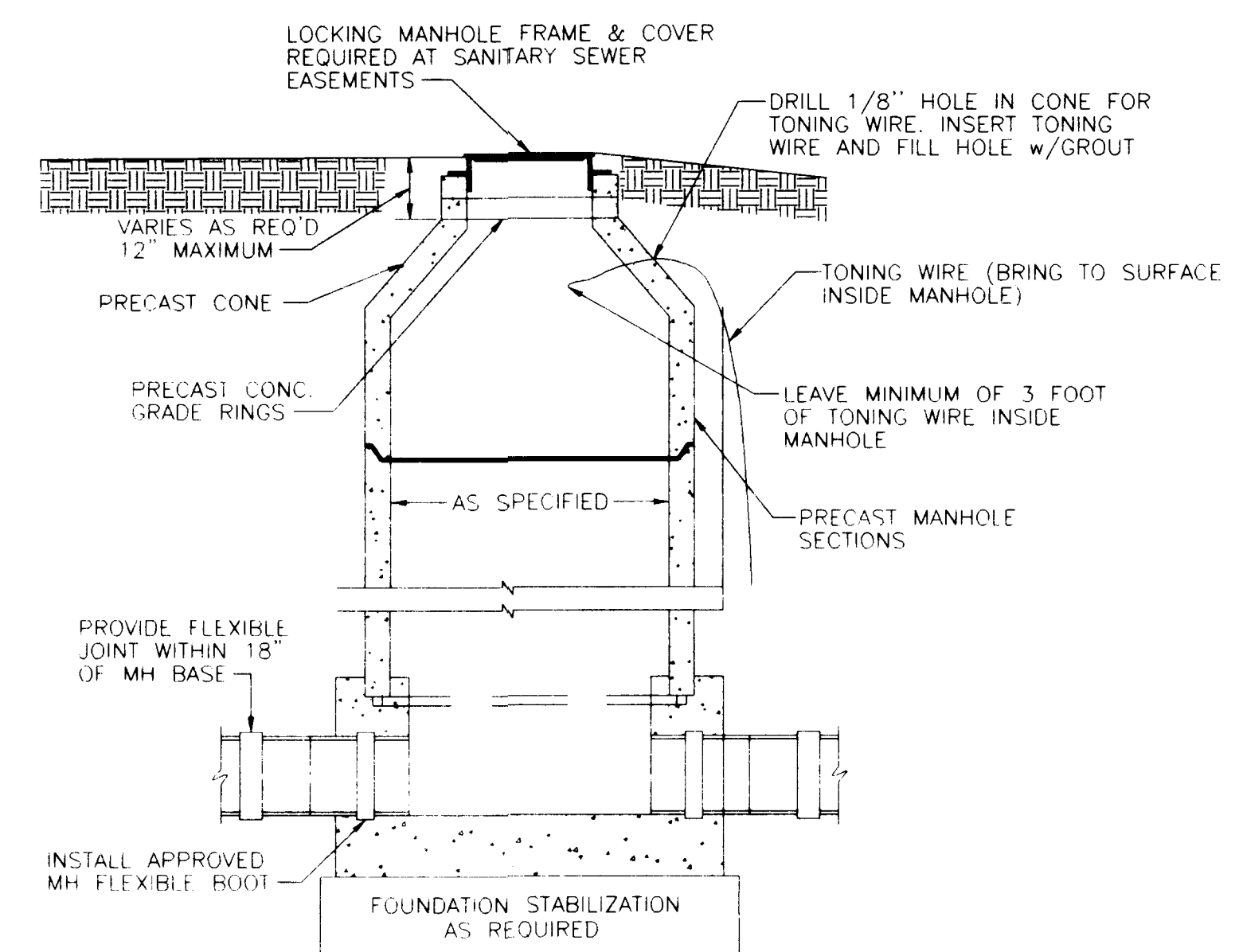
TYPICAL WATER MAINLINE TRENCH DETAIL



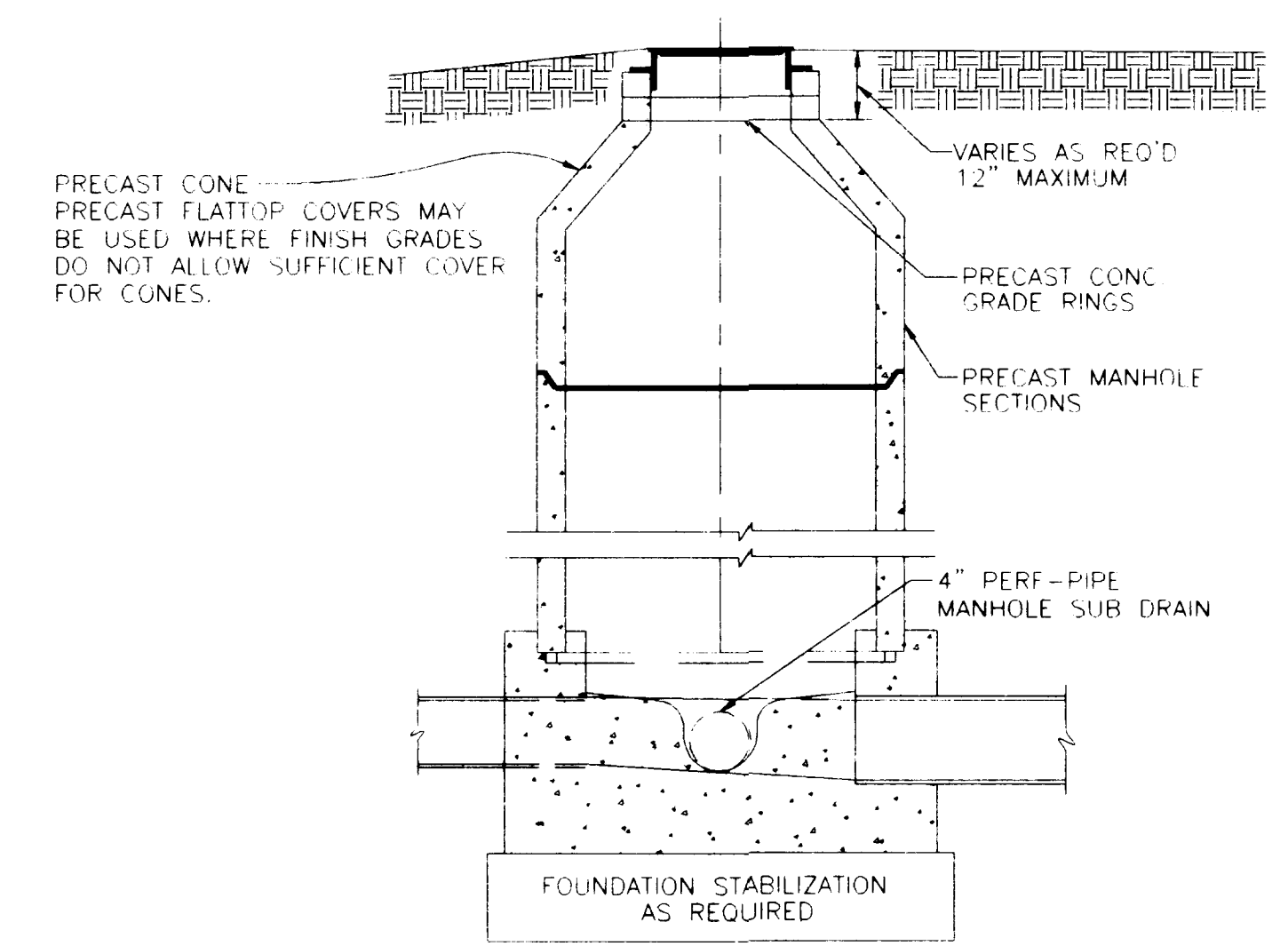
TYPICAL STORM SEWER TRENCH DETAIL



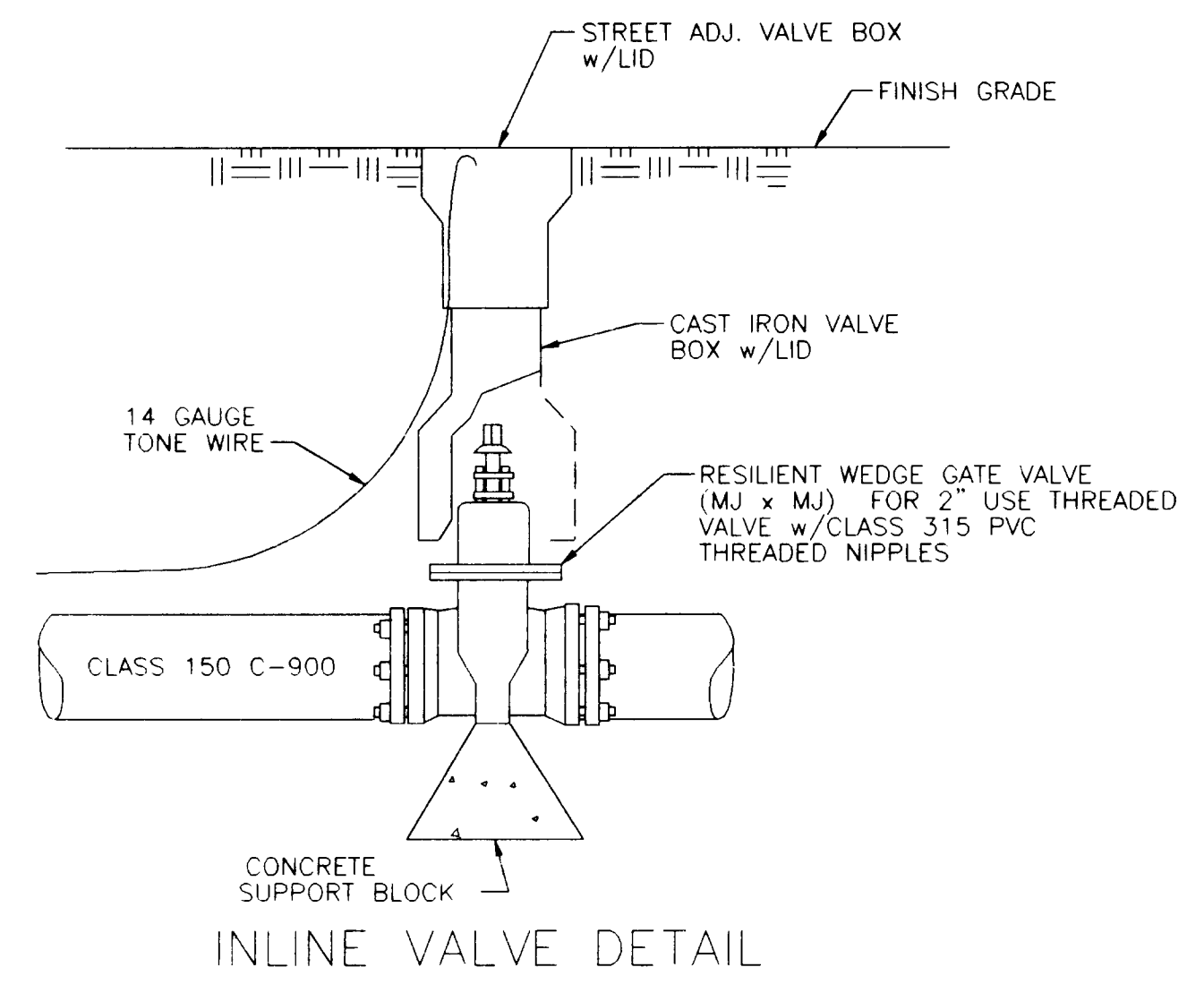
TYPICAL SERVICE LINE TRENCH DETAIL



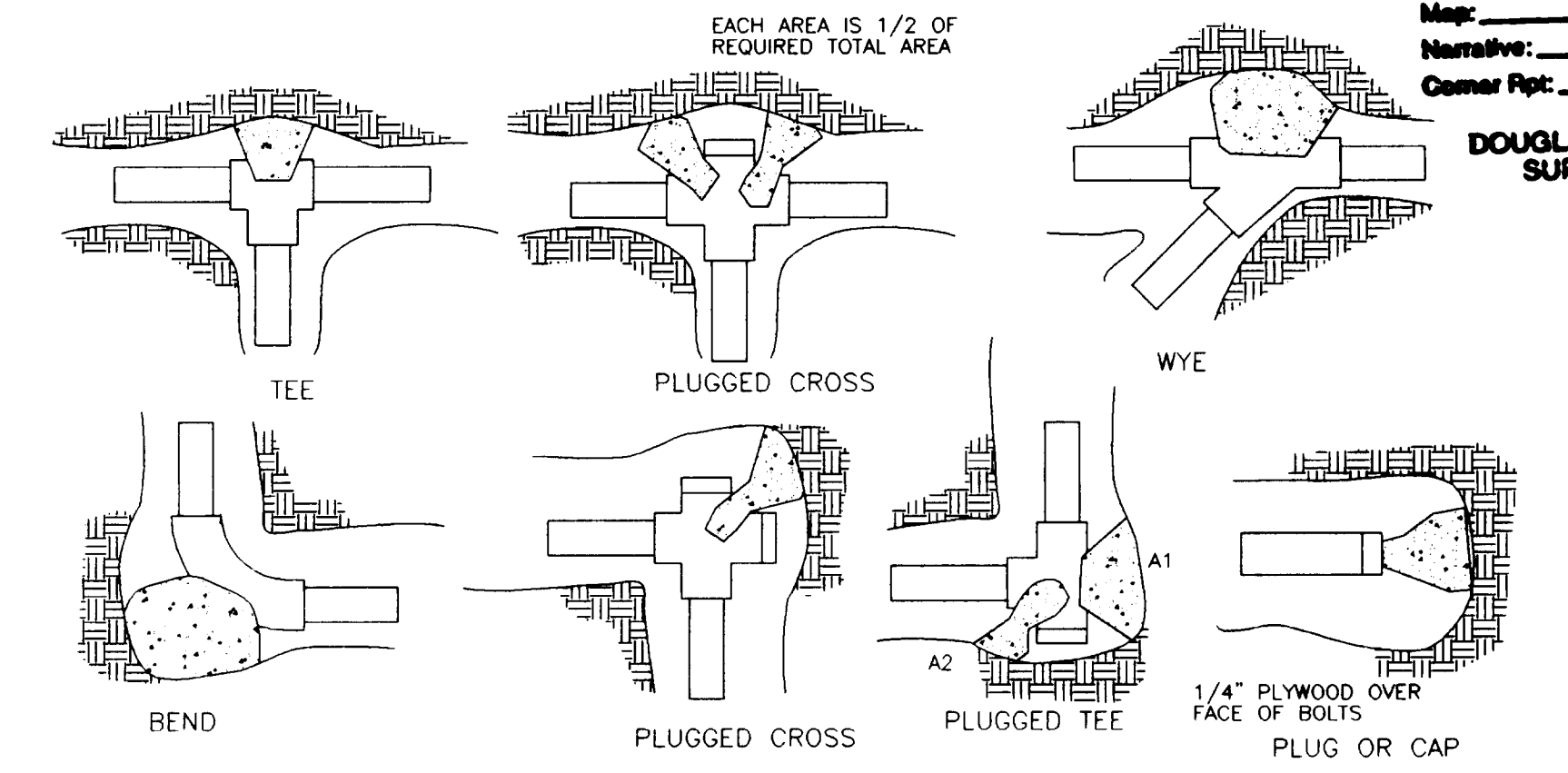
TYPICAL SANITARY MANHOLE DETAIL



TYPICAL STORM MANHOLE DETAIL



INLINE VALVE DETAIL

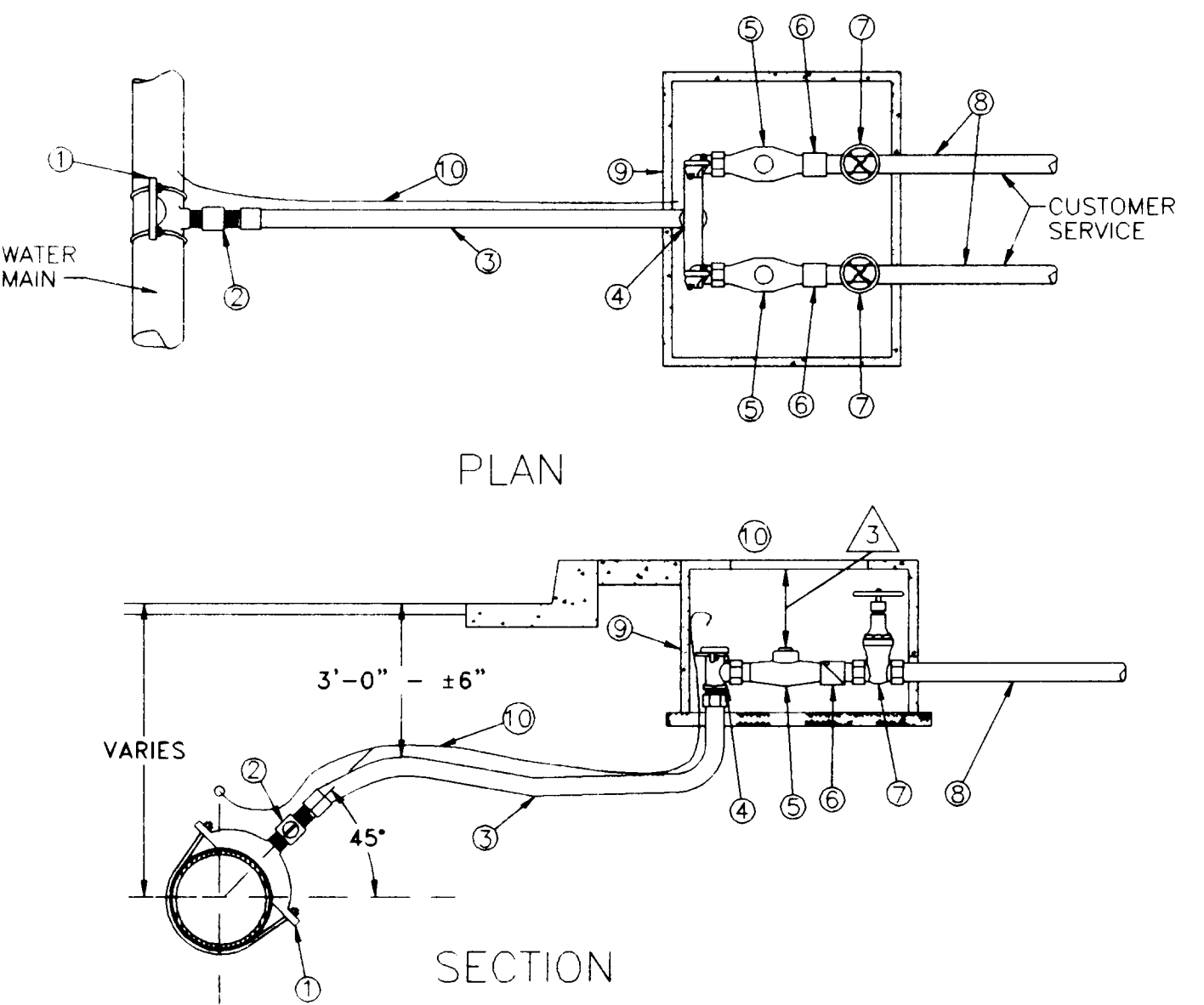


FITTING SIZE	TEE, WYE, PLUG OR CROSS	90° BEND PLUGGED CROSS	TEE PLUGGED ON RUN		45° BEND	22 1/2° BEND	11 1/4° BEND
			A1	A2			
2	0.2	0.4	0.6	0.4	0.2	--	--
3	0.5	0.8	1.2	0.8	0.5	0.2	--
4	1.0	1.4	1.9	1.4	1.0	0.4	0.2
6	2.1	3.0	4.3	3.0	1.6	1.0	0.5
8	3.8	5.3	7.6	5.4	2.9	1.5	1.0
10	5.9	8.4	11.8	8.4	4.6	2.4	1.2
12	8.5	12.0	17.0	12.0	6.6	3.4	1.7
14	11.5	16.3	23.0	16.3	8.9	4.6	2.3
16	15.0	21.3	30.0	21.3	11.6	6.0	3.0
18	19.0	27.0	38.0	27.0	14.6	7.6	3.8
20	23.5	33.3	47.0	33.3	18.1	9.4	4.7
24	34.0	48.0	68.0	48.0	26.2	13.6	6.8

NOTE: ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 p.s.i. AND AN ALLOWABLE SOIL BEARING STRESS OF 2,000 lbs. PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE/150) x (2000/SOIL BEARING STRESS) x (TABLE VALUE)

- NOTES:
1. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
 2. KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES.
 3. THE REQUIRED THRUST BEARING AREAS FOR SPECIAL CONNECTIONS ARE SHOWN ENCIRCLED ON THE PLANS, e.g. (3) INDICATES 15 SQUARE FEET BEARING AREA REQUIRED.
 4. IF NOT SHOWN ON PLANS REQUIRED BEARING AREAS AT FITTING SHALL BE AS INDICATED BELOW ADJUSTED IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS(ES) STATED IN THE SPECIAL SPECIFICATIONS.
 5. BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS. TAKE PRECEDENCE OVER BEARING AREAS AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL.

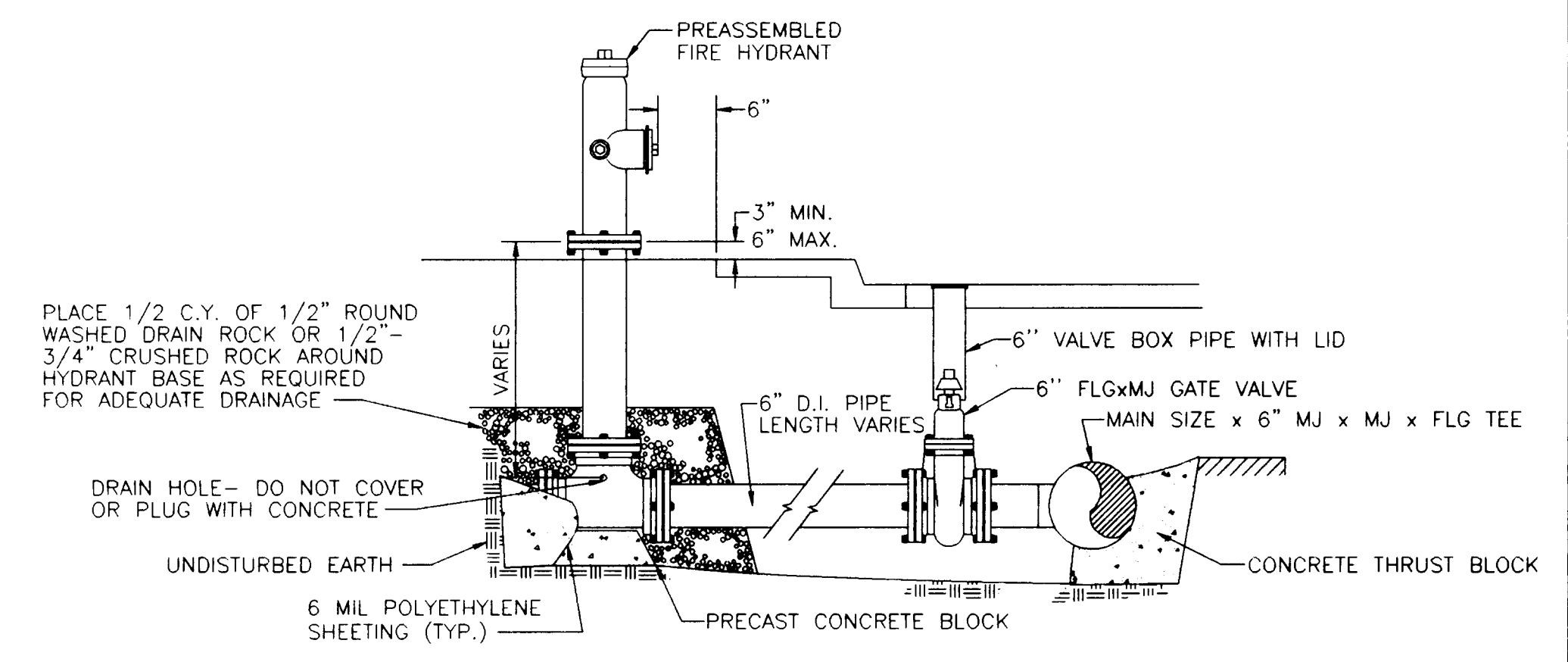
THRUST BLOCK DETAILS AND INFORMATION NO SCALE



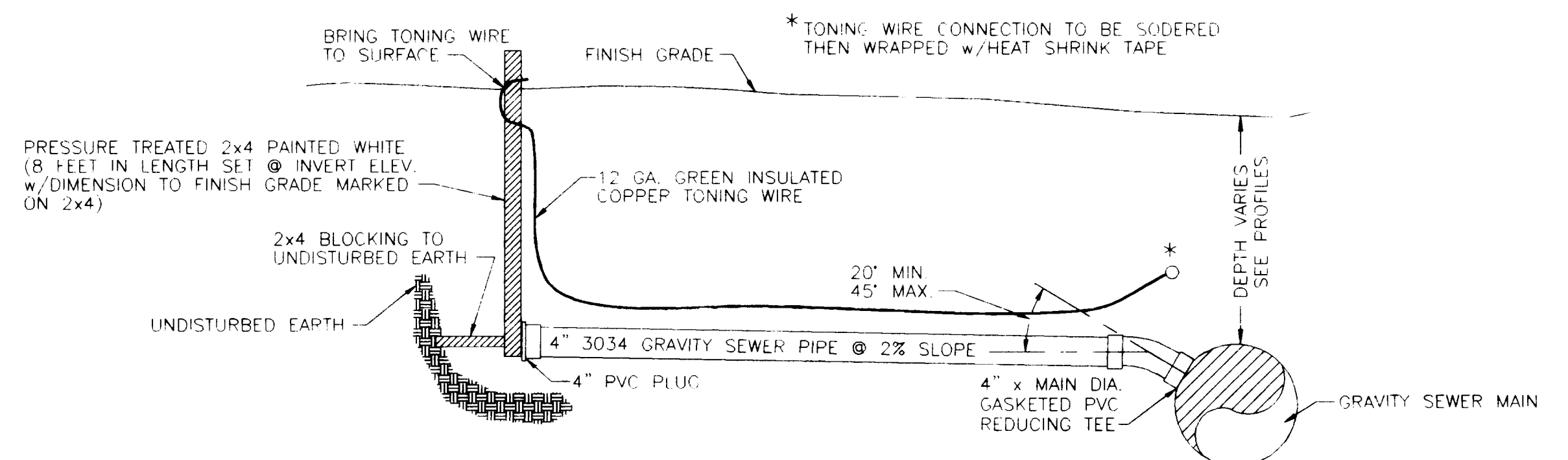
ITEM NO.	SIZE	DESCRIPTION	TYPE	QTY.
1	AS REQ'D	SERVICE SADDLE	FORD, BRASS S-91	1
2	1"	CORP STOP	FORD, F-1100	1
3	1"	SERVICE PIPE	200 HI MOLY POLYETHYLENE CTS PIPE	AS REQ'D
4	1"	BRANCH VALVE ASSEMBLY	FORD, UV-43-32 14" WIDTH	1
5	5/8"x3/4"	METER	NEPTUNE T-10 GALLONS READER	2
6	3/4"	STRAIGHT CHECK VALVE	HS-11323 (FIPT x FIPT)	2
7	3/4"	CUSTOMER VALVE	B-13-232W	2
8	-	CUSTOMER SERVICE	PER STATE PLUMBING CODE	-
9	-	METER BOX	PLASTIC	1
10	NO. 14	TOPE WIRE	BLUE	AS REQ'D

- 1 OR APPROVED EQUAL. SEE GENERAL SPECIFICATIONS.
 2 TYPE AS APPROVED BY MANUFACTURER FOR WATER MAIN TYPE & SIZE.
 3 TOP OF METER SHALL BE 4" TO 6" BELOW BOTTOM OF LID.

TYPICAL DUAL 5/8" x 3/4" METER INSTALLATION ASSEMBLY



TYPICAL FIRE HYDRANT INSTALLATION (THRUST BLOCKED)



TYPICAL 4" SEWER SERVICE CONNECTION DETAIL

i.e.
 ENGINEERING
 548 SE Jackson Street
 Roseburg, Oregon 97470
 PHONE (541) 673-0166
 FAX (541) 440-9392

Project Name: QUAIL HOLLOW SUBDIVISION

Rev.	Date	Dwg	Description
1	4/16/96	DAF	GREEN SANITARY DISTRICT REVIEW
2	4/16/96	DAF	DOUGLAS COUNTY REVIEW
3	4/25/96	DAF	ROBERTS CREEK WATER DIST. COMMENTS
4	5/8/96	DAF	DOUGLAS COUNTY COMMENTS
5	10/16/96	TAR	AS-BUILTS

Standard Details
 DES RJS PROJECT NO. 1155-01
 DWG DAF DATE: MARCH, 1996
 CHK CW SCALE: NO SCALE
 APP MAP SHEET 6 OF 6