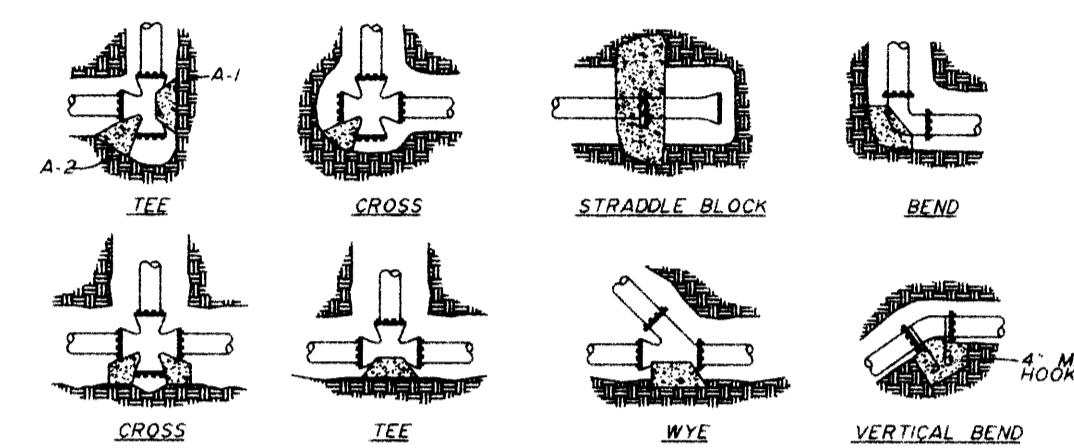


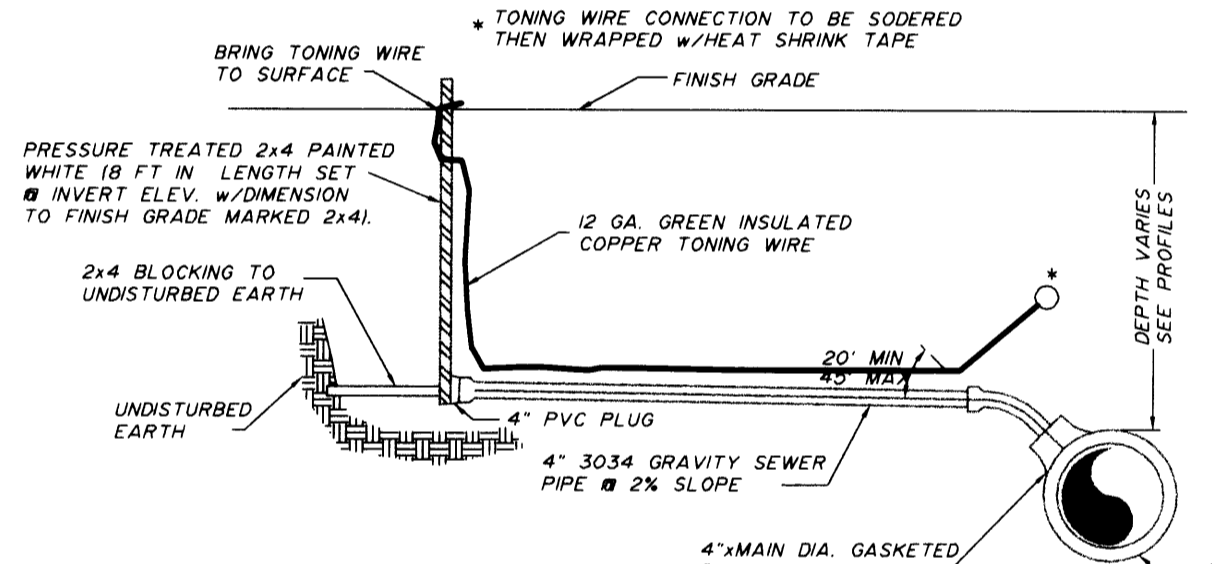
(HORIZONTAL) BEARING AREA OF THRUST BLOCKS IN SQUARE FEET				(VERTICAL) VOLUME OF THRUST BLOCK IN CUBIC YARDS			
FITTING SIZE	TEE, WYE AND HYDRANT	STRADDLE BLOCK	TEE PLUGGED OVER W/ROD	45° BEND	22 1/2° BEND	1/4" BEND	90° BEND
2	0.2	0.4	0.6	0.4	0.2
3	0.5	0.8	1.2	0.8	0.5	0.2	1.3
4	1.0	1.6	1.4	1.9	1.4	1.0	...
6	2.1	3.7	3.0	4.3	3.0	1.6	1.0
8	3.8	6.5	5.3	7.6	5.4	2.9	1.5
10	5.9	10.2	8.4	11.8	8.4	4.6	2.4
12	8.5	14.7	12.0	17.0	12.0	6.6	3.4
14	11.5	...	16.3	23.0	16.3	8.9	4.6
16	15.0	26.1	21.3	30.0	21.3	11.6	6.0
18	19.0	...	27.0	38.0	27.0	14.8	7.6
20	23.5	40.8	33.3	47.0	33.3	18.1	9.4
24	34.0	58.8	48.0	68.0	48.0	26.2	13.6

NOTES:
 1. ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 LBS PER SQ. FT. 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)
 2. ABOVE VOLUMES BASED ON TEST PRESSURE OF 150 PSI AND THE WEIGHT OF CONCRETE = 4050 LBS PER CU. YD. TO COMPUTE FOR DIFFERENT TEST PRESSURES USE THE FOLLOWING EQUATION:
 VOLUME = (TEST PRESSURE/150) x (TABLE VALUE)



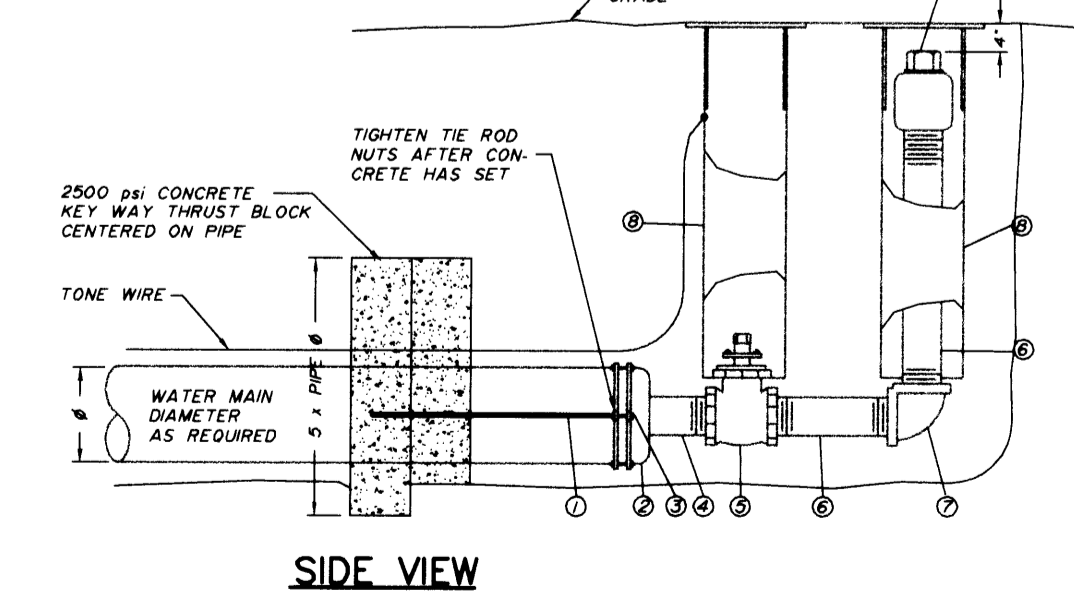
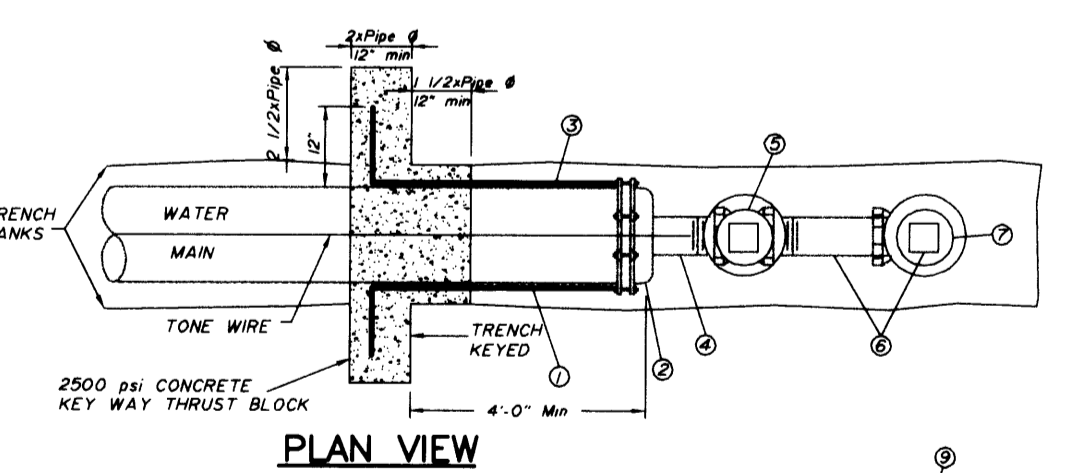
NOTES:
 1. CONCRETE BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
 2. ALL CONCRETE TO BE CLASS 2400 MINIMUM.
 3. INSTALL ISOLATION MATERIAL BETWEEN PIPE AND/OR FITTINGS BEFORE POURING CONCRETE BLOCKING.
 4. CONCRETE SHALL BE KEPT CLEAR OF ALL JOINTS AND ACCESSORIES.
 5. THE RODS SHALL BE DEFORMED GALVANIZED COIL ROLLED STEEL, 4000 PSI TENSILE STRENGTH.

THRUST BLOCK DETAILS AND INFORMATION

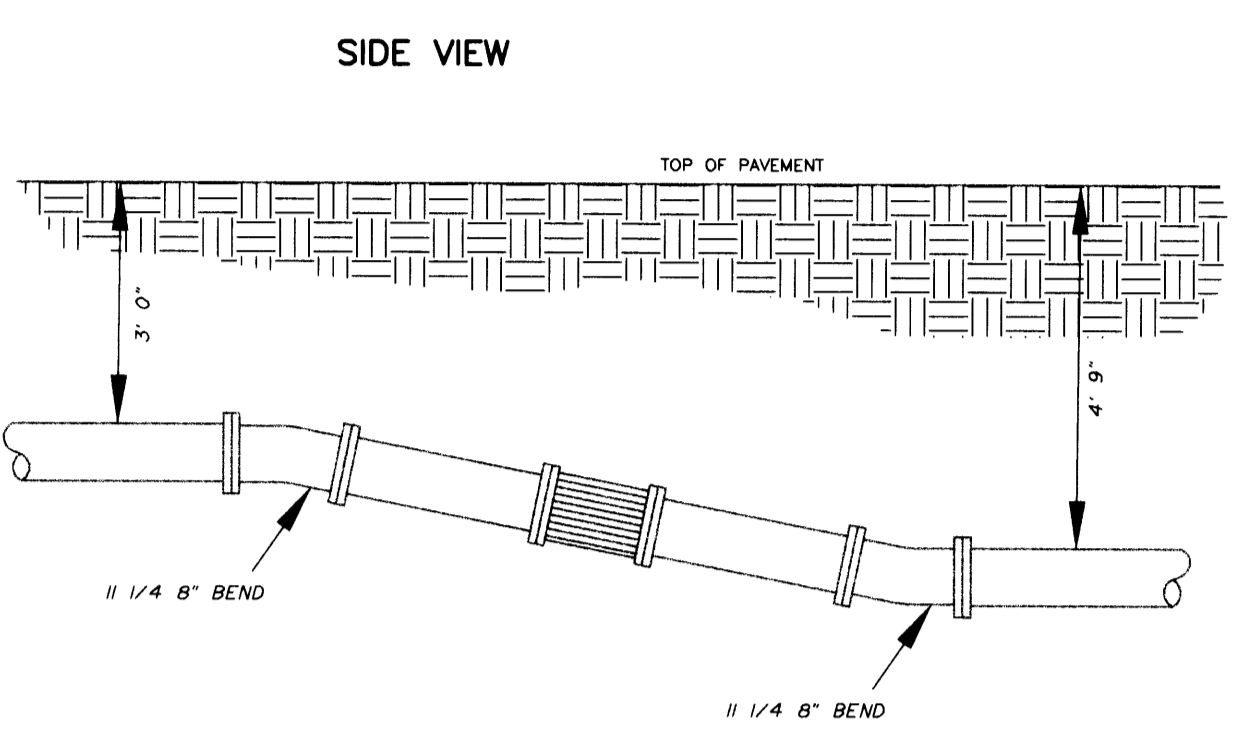


NOTES:
 1. PIPE AND FITTINGS SHALL BE COMPATIBLE. ONLY MANUFACTURED FITTINGS SHALL BE USED.
 2. MINIMUM DEPTH AT RIGHT OF WAY OR EASEMENT LINE SHALL BE 4 FEET.
 3. MARKER POSTS AND BLOCKING SHALL BE TREATED WOOD. POST SHALL BE 2"x4" FIRE PRESSURE TREATED, 6 FEET LONG. EXPOSED AREAS SHALL BE PAINTED WHITE.
 4. WHEN REQUIRED, A CLEANOUT SHALL BE INSTALLED.

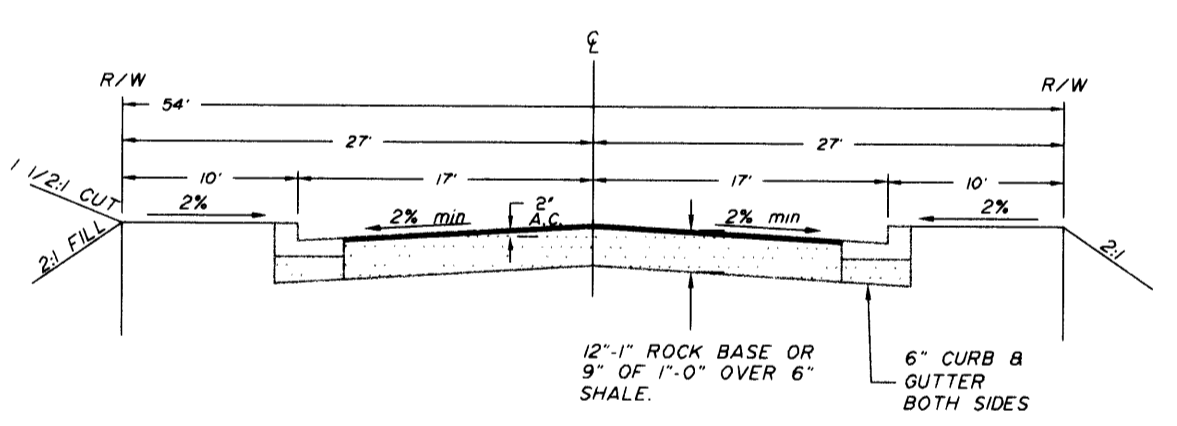
TYP. 4" SEWER SERVICE CONNECTION DETAIL



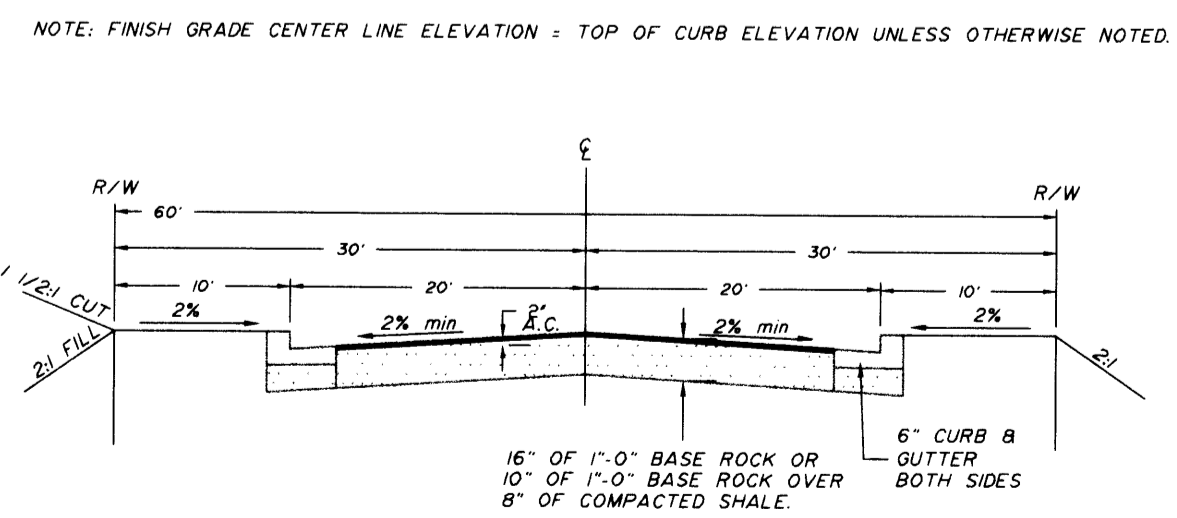
TYP. 2" BLOWOFF ASSEMBLY



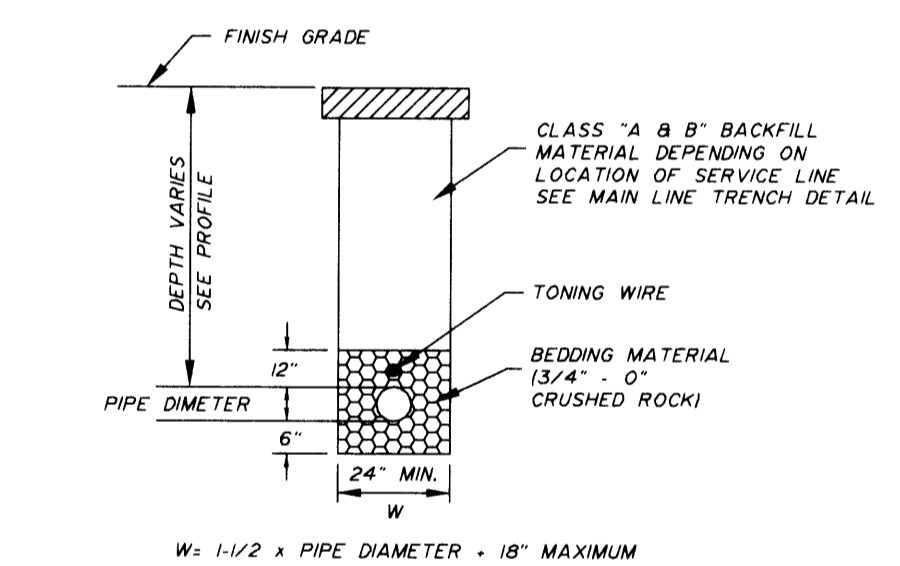
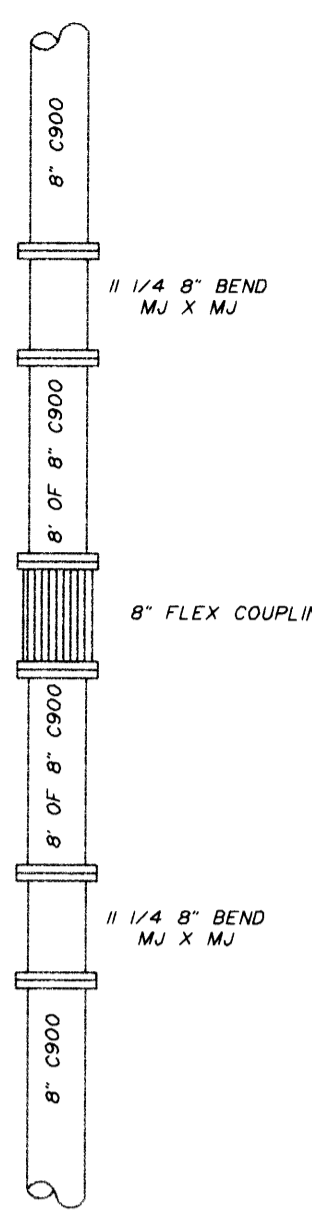
WATER CONNECTION DETAIL (CONNECTION BY CITY)



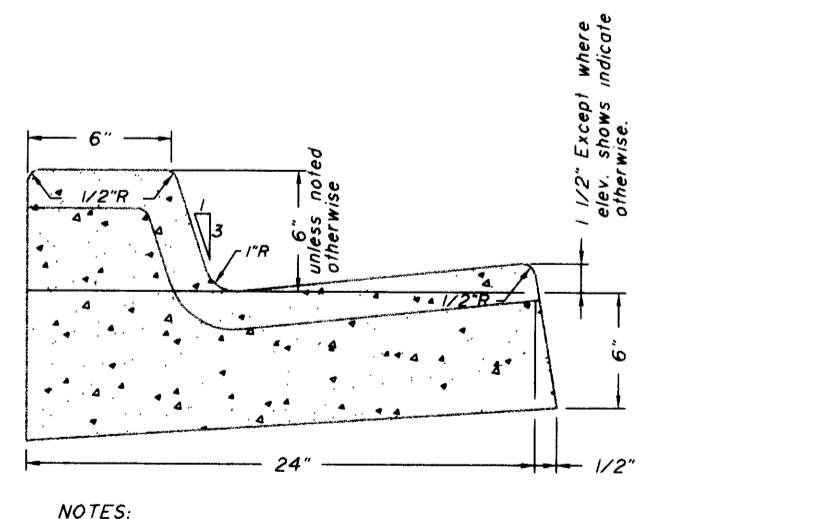
TYP. STREET SECTION WINGFOOT COURT



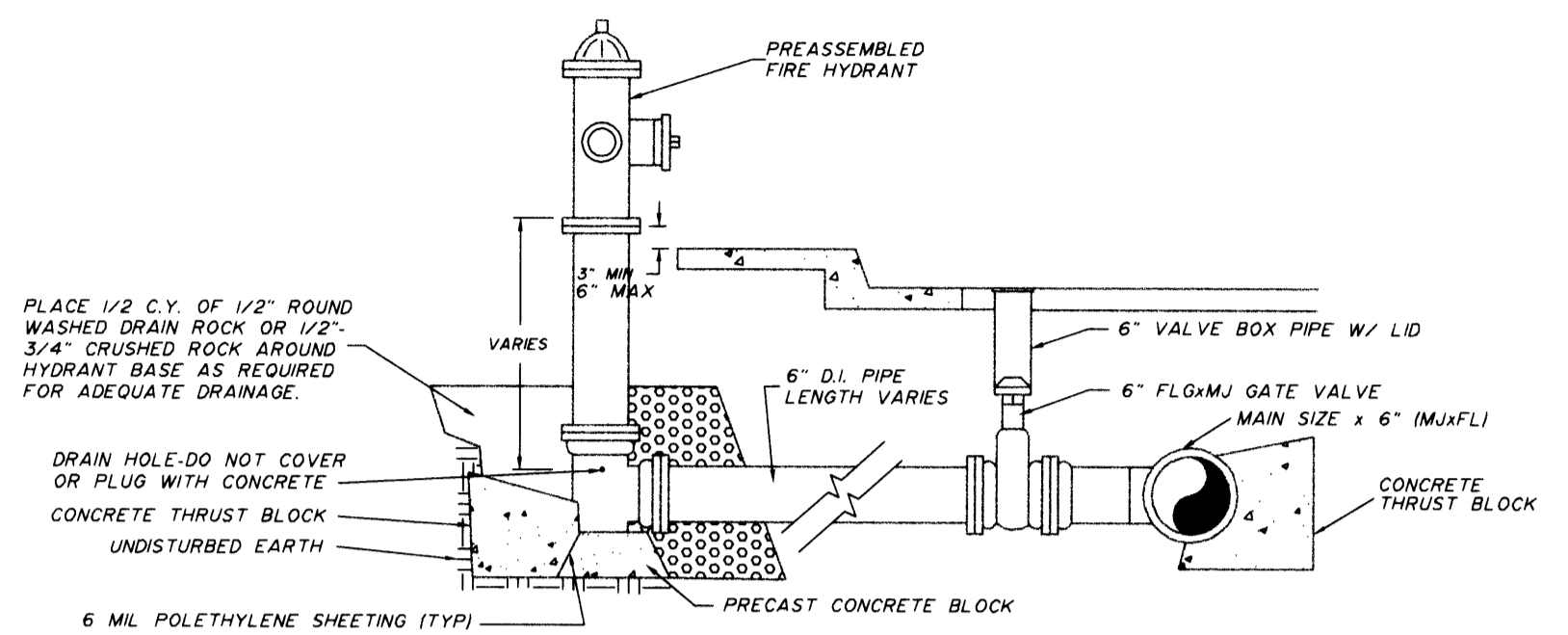
TYP. STREET SECTION STRAUSS AVENUE



TYP. SEWER MAINLINE TRENCH

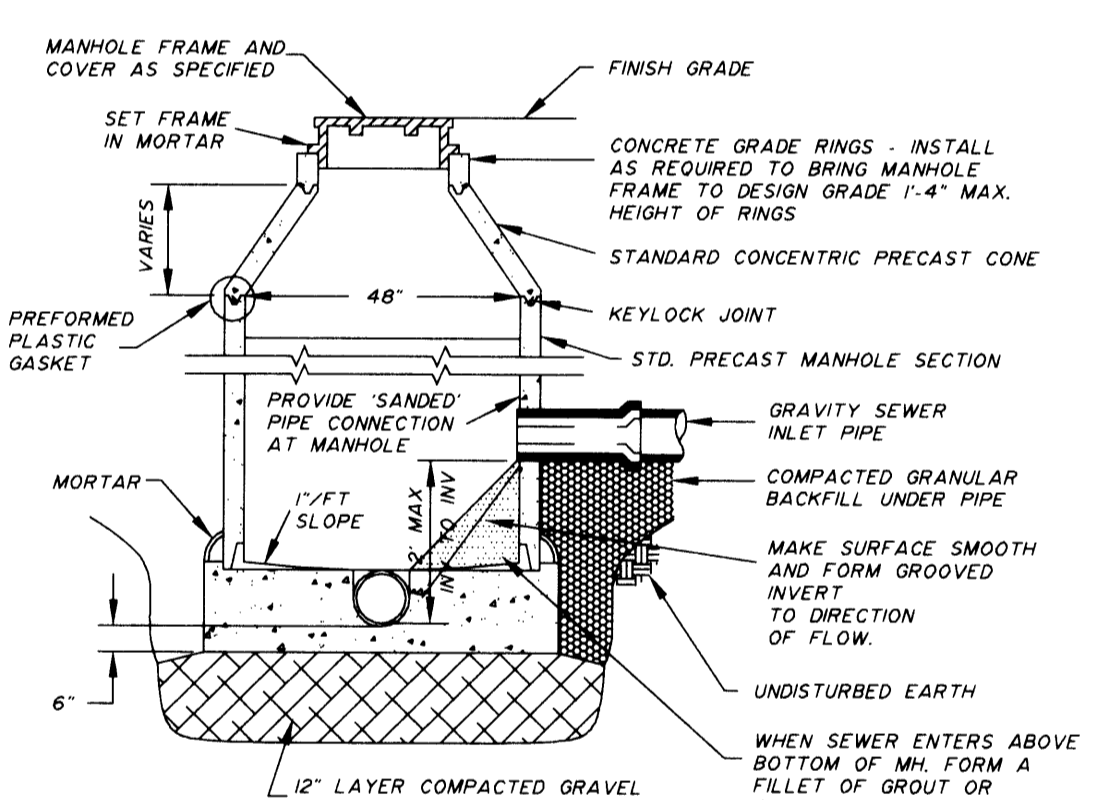


CURB & GUTTER MONOLITHIC

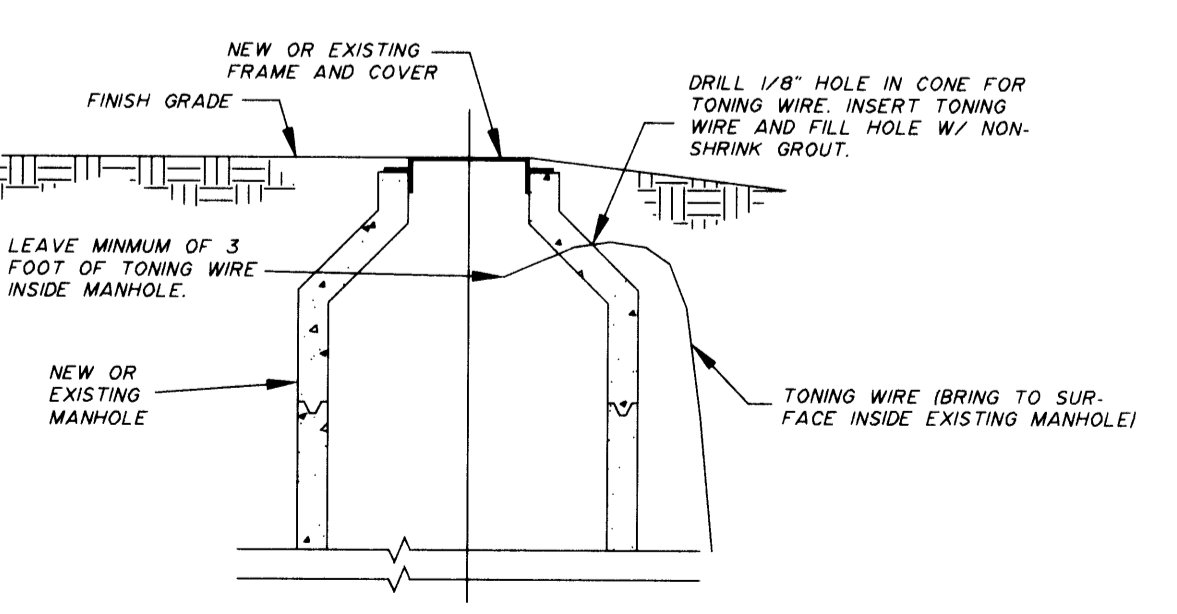


NOTES PER ENGINEER:
 1. WHEN PIPE IS SHORTER THAN 18', NO JOINTS ALLOWED. USE MECHANICAL JOINT RETAINER GLANDS. 3/4" GALVANIZED IRON RODS MAY BE USED IN PLACE OF THRUST BLOCKS FOR NOT EXCEEDING LESS THAN 10' LONG. THE RODS SHALL BE COATED WITH TWO COATS OF BIFUMASTIC.
 2. WHEN PIPE IS LONGER THAN 18', RETAINER GLANDS NOT REQUIRED.
 3. THERE SHALL BE A MINIMUM OF 18" HORIZONTAL CLEARANCE AROUND HYDRANT.
 4. WHEN PLACED ADJACENT TO CURB, HYDRANT PORT SHALL BE 24" FROM FACE OF CURB.
 5. CONCRETE THRUST BLOCKS SHALL BE CONSTRUCTED AS PER THRUST BLOCK STANDARD DRAWING. DO NOT BLOCK DRAIN HOLES.
 6. EXTENSIONS REQUIRED FOR HYDRANT SYSTEMS SHALL BE INSTALLED TO THE MANUFACTURER'S SPECIFICATIONS.
 7. FIRE HYDRANTS SHALL BE PLACED TO PROVIDE A MINIMUM OF 5' CLEARANCE FROM DRIVEWAYS, POLES, AND OTHER OBSTRUCTIONS.
 8. HYDRANT PUMPER PORT SHALL FACE DIRECTION OF ACCESS.

TYP. FIRE HYDRANT INSTALLATION



MANHOLE



TYP. MANHOLE TONING WIRE DETAIL

FILED
 Date: 5/15/2002 By: JP
 This survey consists of:
 Map:
 Narrative:
 Corner Rpt:
 DOUGLAS COUNTY SURVEYOR



SURVEYING SERVICE, INC.
 ENGINEERING - SURVEYING - PLANNING
 3076 NE DIAMOND LAKE BLVD.
 ROSEBURG, OREGON 97470
 TEL (541) 672-2096
 FAX (541) 672-0611

Revision	12/96
Date	
Revision	
Date	

Drawn	RDM
Design	
Checked	
Reviewed	

DETAIL SHEET
 PROJECT NAME:
SADDLE BUTTE RANCH PHASE II
 AS-BUILTS

SHT.	7
OF	7

1822-962/1822-967.DWG

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