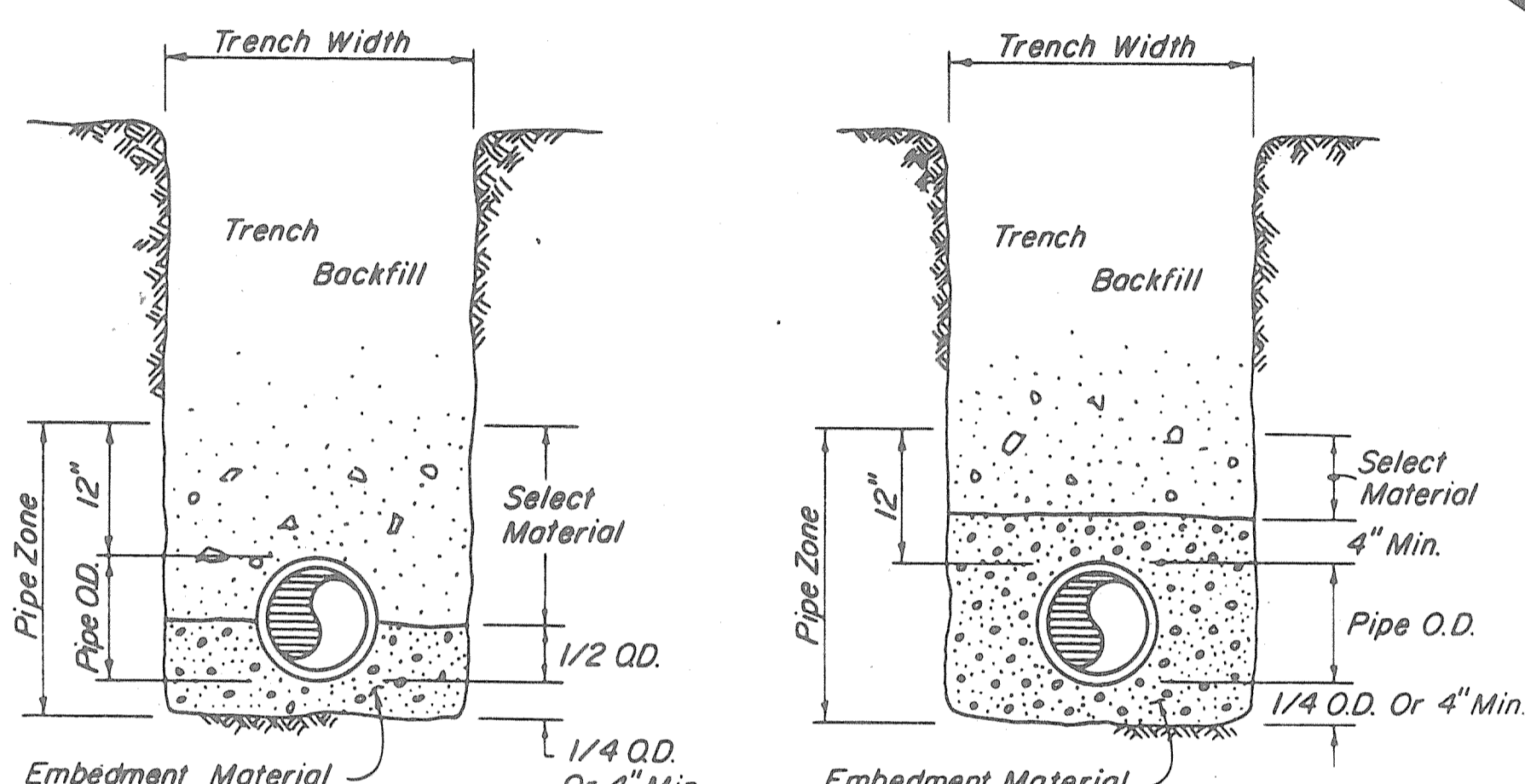
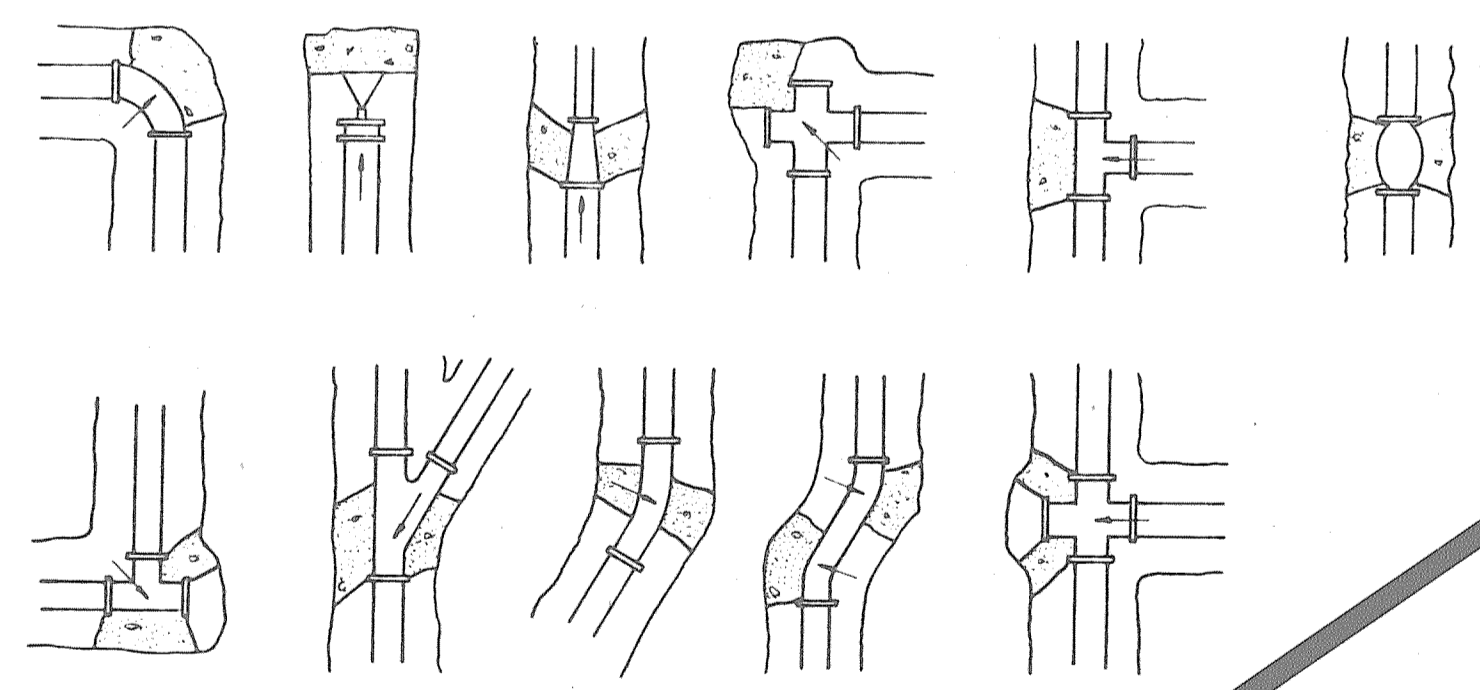


CONCRETE CRADLE AND ENCASEMENT DETAILS

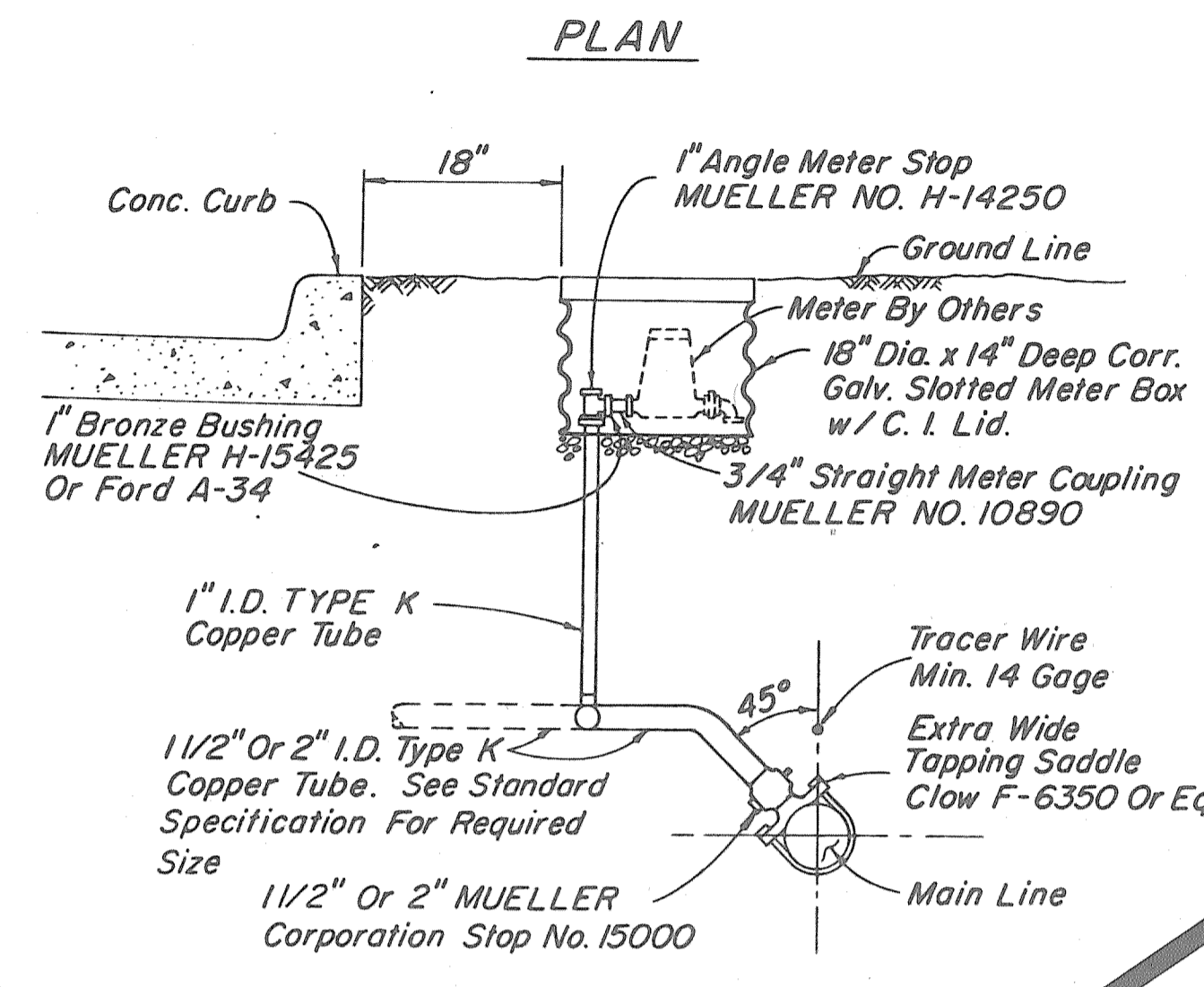
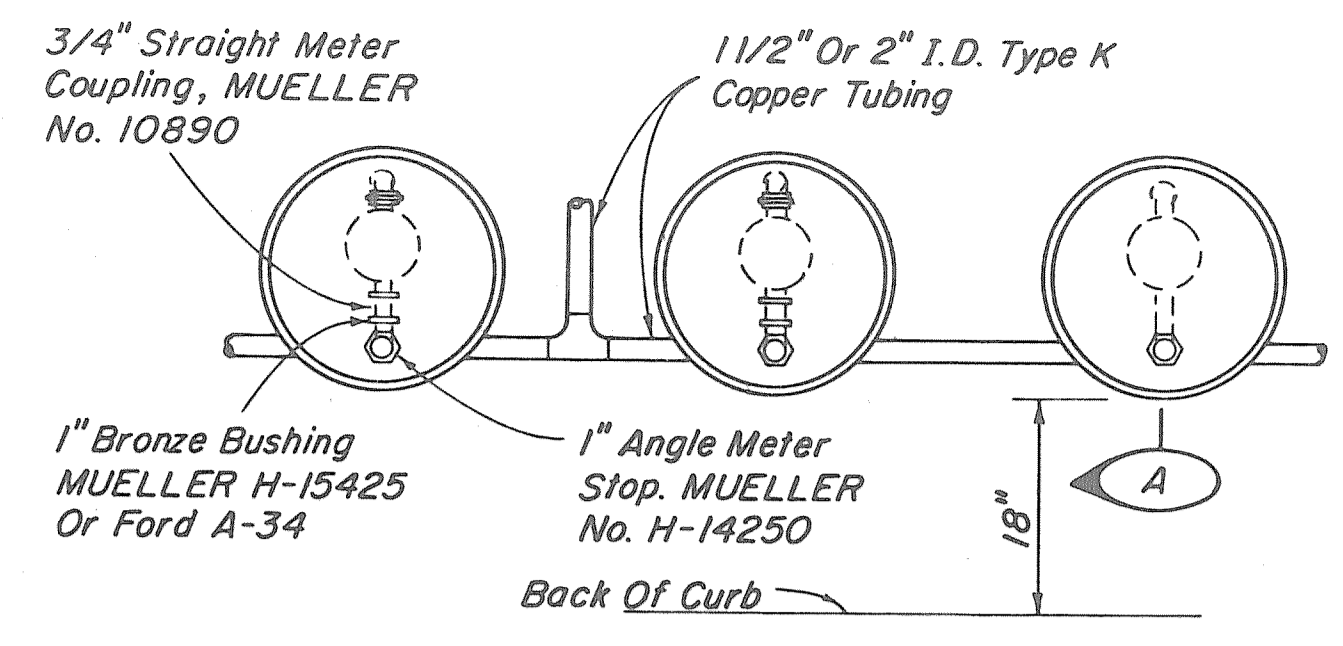


PIPE EMBEDMENT DETAILS

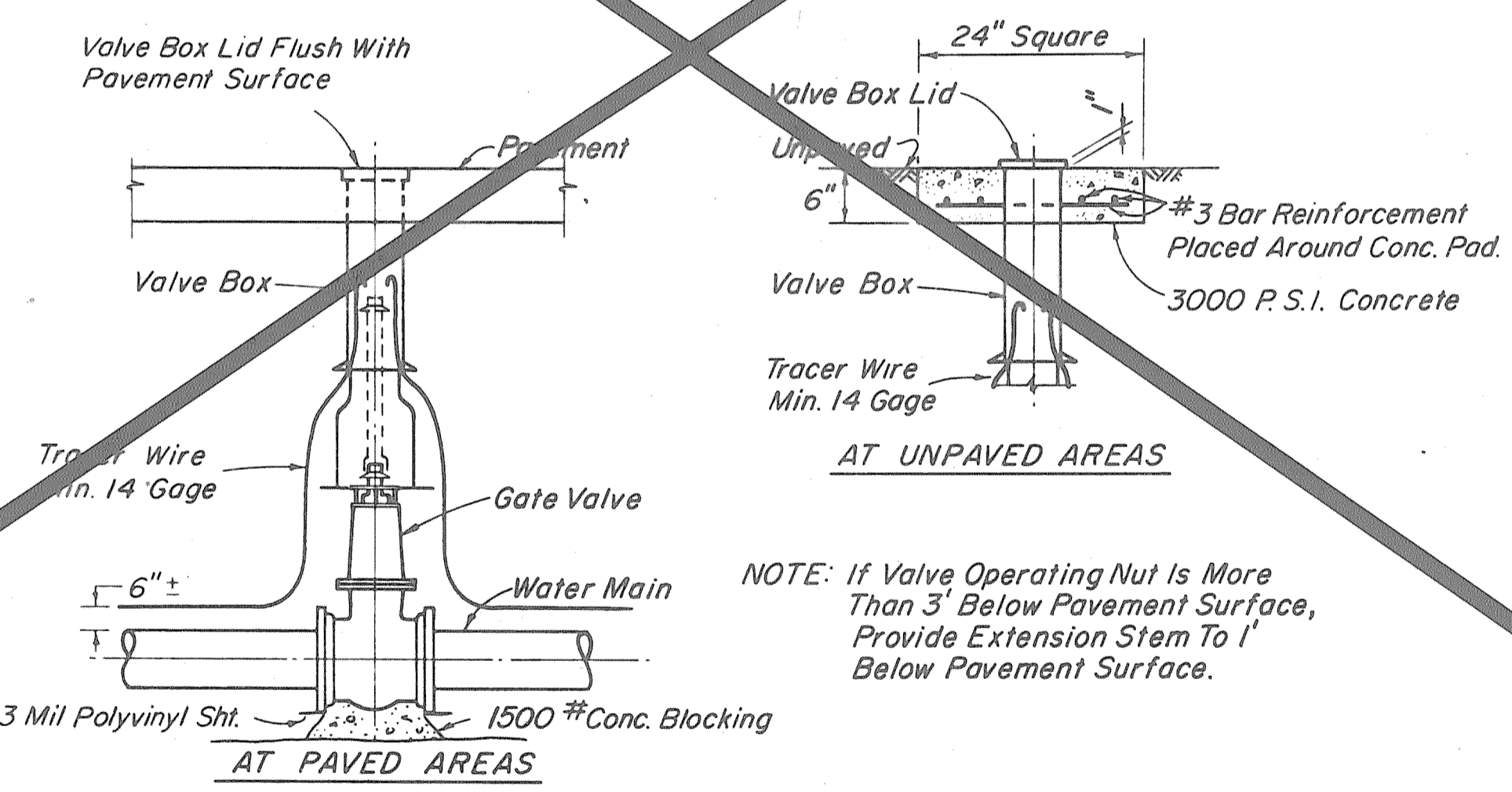


NOTES:

- The Earth Bearing Surface Shall Be Undisturbed Material. Keep All Joints Free From Concrete. Thrust Block To Be Constructed Of 1,500 P.S.I. (28 Day) Concrete And Placed As Shown On "Typical Thrust Blocking Details" Above.
- It Shall Be The Responsibility Of The Contractor To Install Adequate Thrust Blocking. The HORIZONTAL BLOCKING TABLE Shows The Minimum Thrust Blocking Area Required (In Square Feet) Bearing Against Undisturbed Trench Wall.
- All Fittings Shall Be Blocked Regardless Of The Angle Or Direction, Except As Noted In The Chart
- Soil Bearing Strength Is Assumed To Be 2000 P.S.F. Site Conditions May Vary Which Will Require Modifications To The Blocking Calculations.



MULTIMETER SERVICE CONNECTION
 Not To Scale



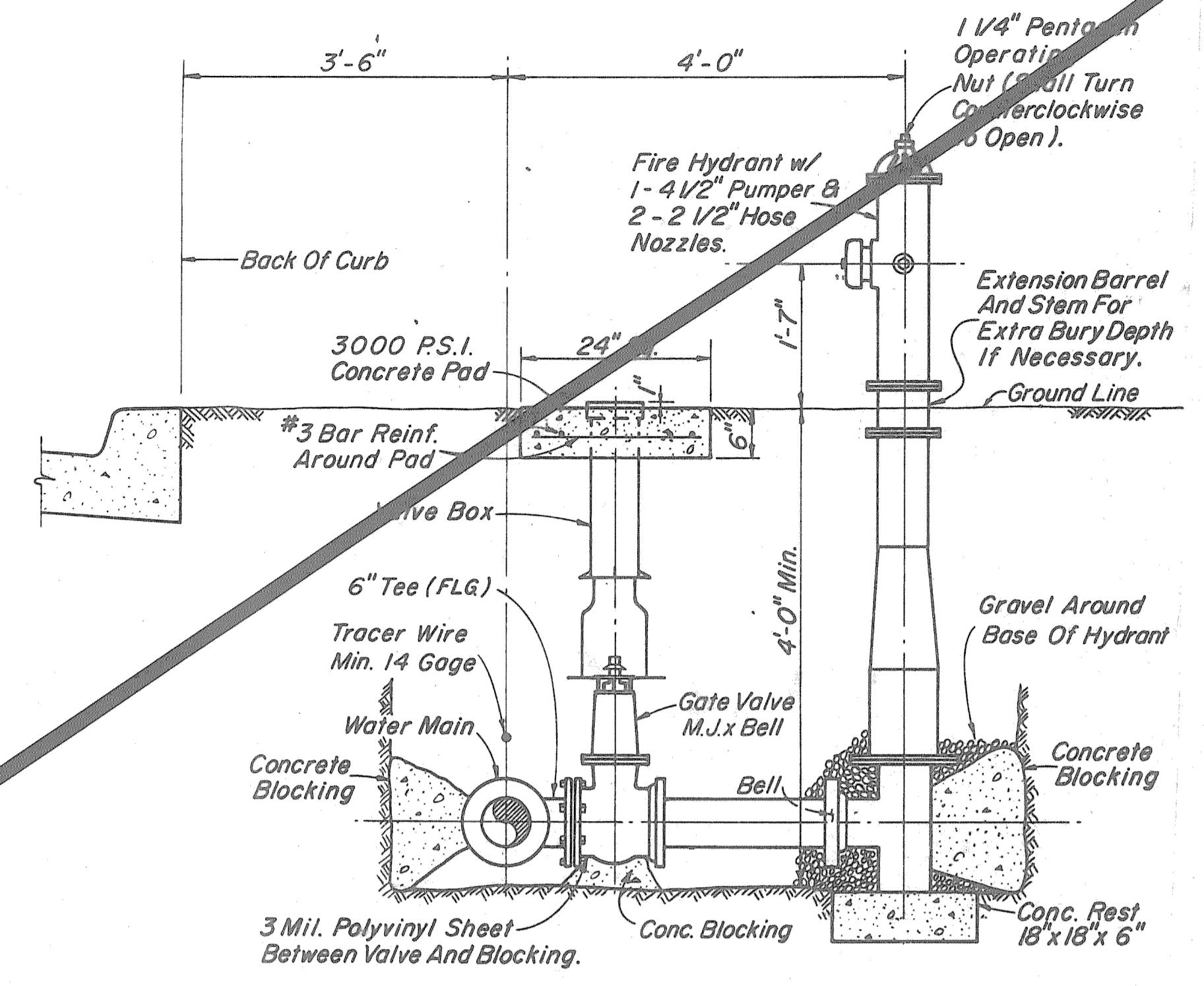
TYPICAL GATE VALVE AND BOX EXTENSION STEM DETAIL
 Not To Scale

HORIZONTAL BLOCKING TABLE

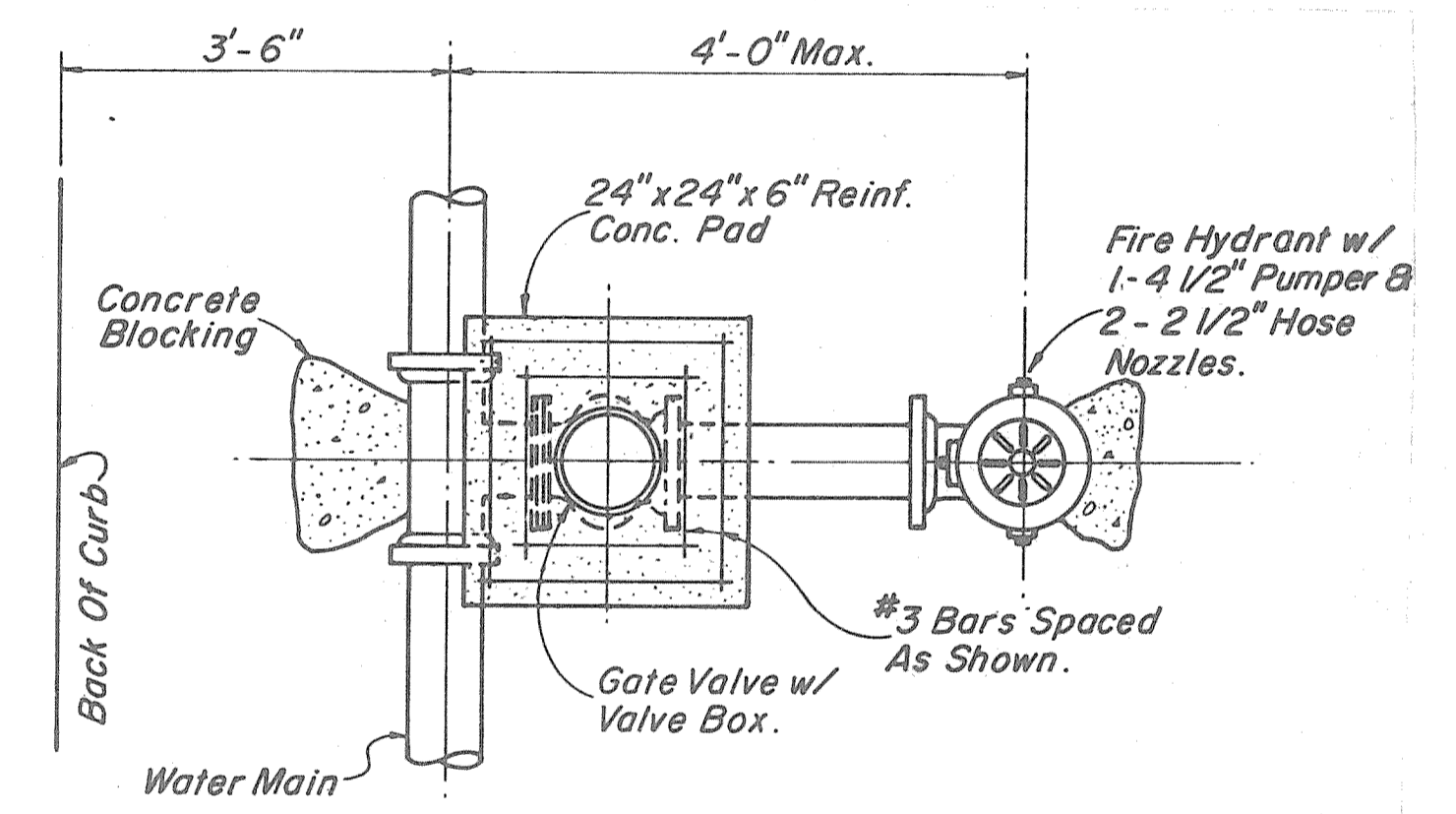
AREA REQUIRED (IN SQUARE FEET) BEARING AGAINST UNDISTURBED TRENCH WALL

PIPE SIZE (IN.)	THRUST (POUNDS)	BLOCKING (SQUARE FEET)					
		DEAD END AND TEE	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND	5° DEFLECT.
4	2,450	1.23	1.73	0.94	0.50	0.50	0.50
6	5,513	2.76	3.90	2.11	1.08	0.54	0.50
8	9,802	4.90	6.93	3.75	1.91	0.96	0.50
10	15,315	7.66	10.83	5.86	2.99	1.50	0.67
12	22,054	11.03	15.59	8.43	4.30	2.16	0.96

BASED ON 2,000 P.S.F. SOIL BEARING CAPACITY AND 195 P.S.I. LINE PRESSURE (150 P.S.I. WORKING PRESSURE PLUS 30% FOR WATER HAMMER).



TYPICAL FIRE HYDRANT DETAIL
 Not To Scale



TYPICAL FIRE HYDRANT INSTALLATION
 Not To Scale

WATER NOT IN THIS CONTRACT

ROCKWALL TOWNE CENTRE - PHASE II

WATER LINE DETAILS
 CONSTRUCTION PHASE II-A
DUNNING DEVELOPMENT CO.
 8235 DOUGLAS AVE. SUITE 818, DALLAS, TEXAS
 CITY OF ROCKWALL, TEXAS

PREPARED BY:
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 3908 SOUTH FREEWAY, FORT WORTH, TEXAS 76110 METRO 459-9007

DESIGNED BY: **RMG** DATE: **JUNE 1987** SHEET NO. **9**
 DRAWN BY: **DWH**
 CHECKED BY: SCALE: **AS SHOWN**