

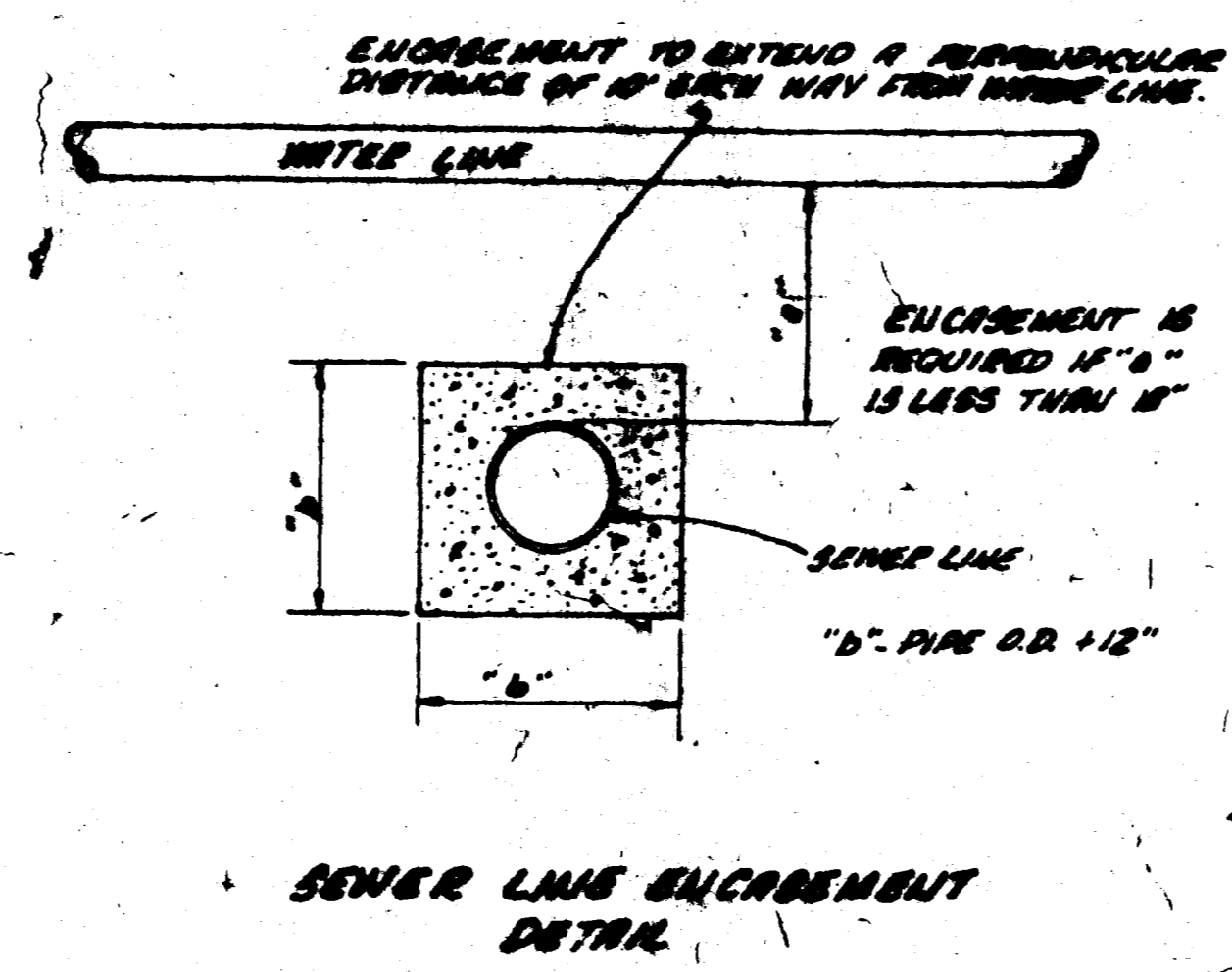
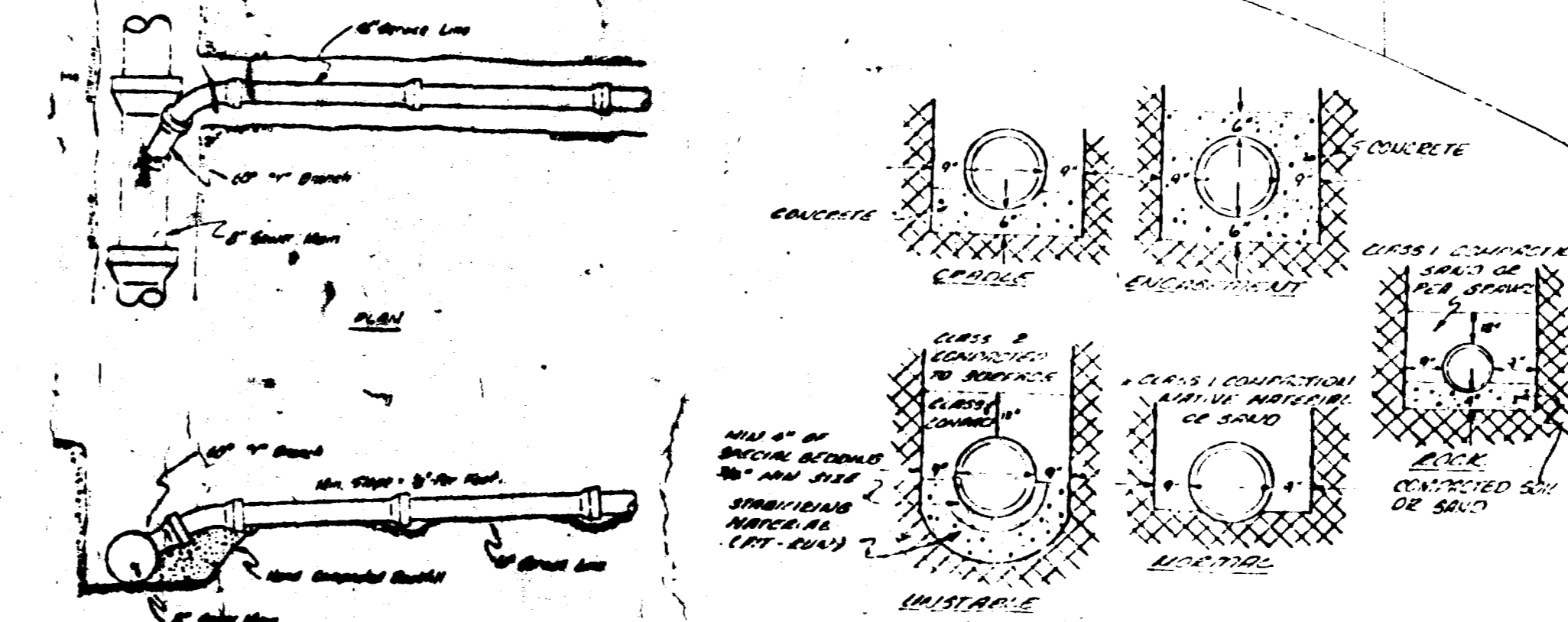
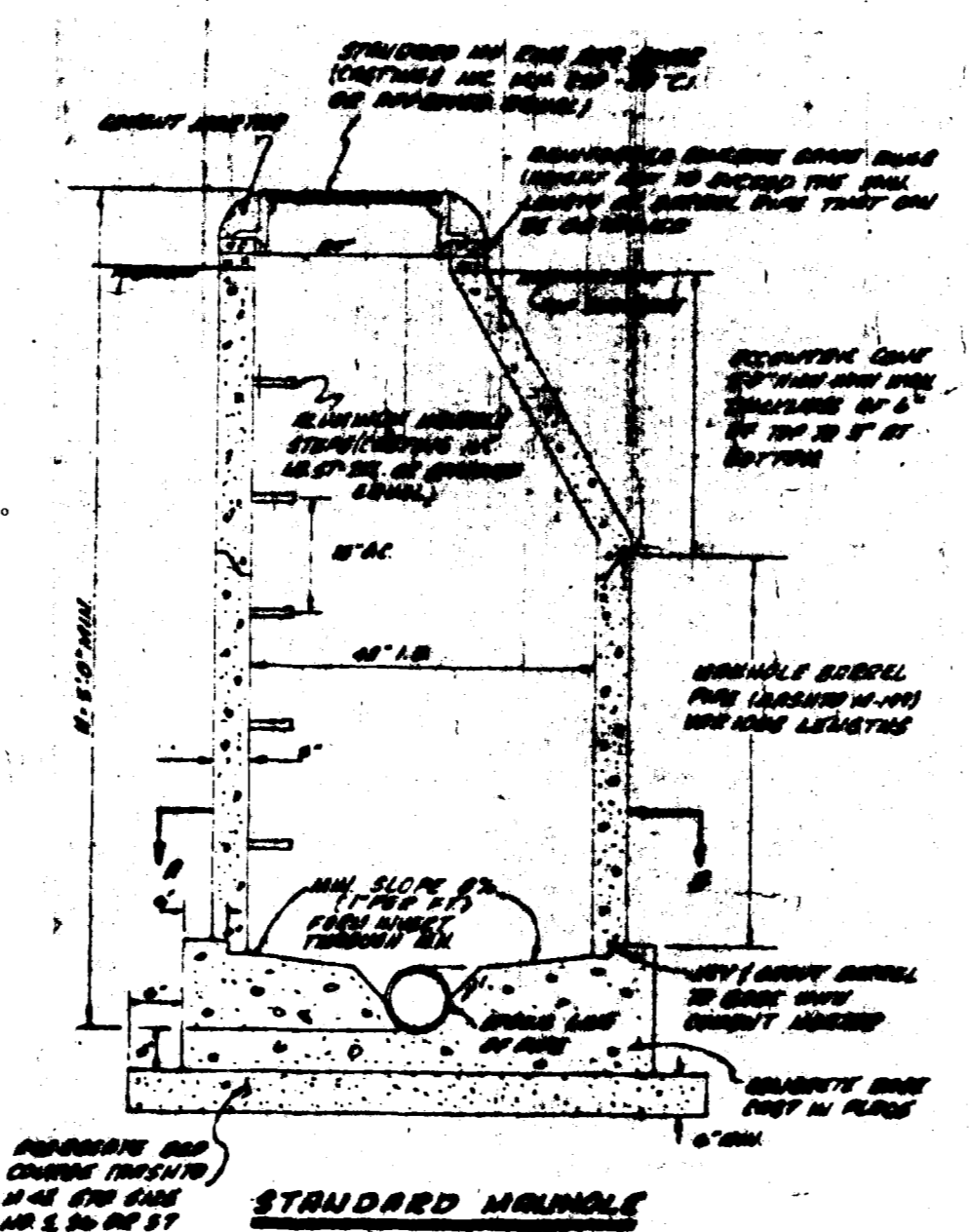
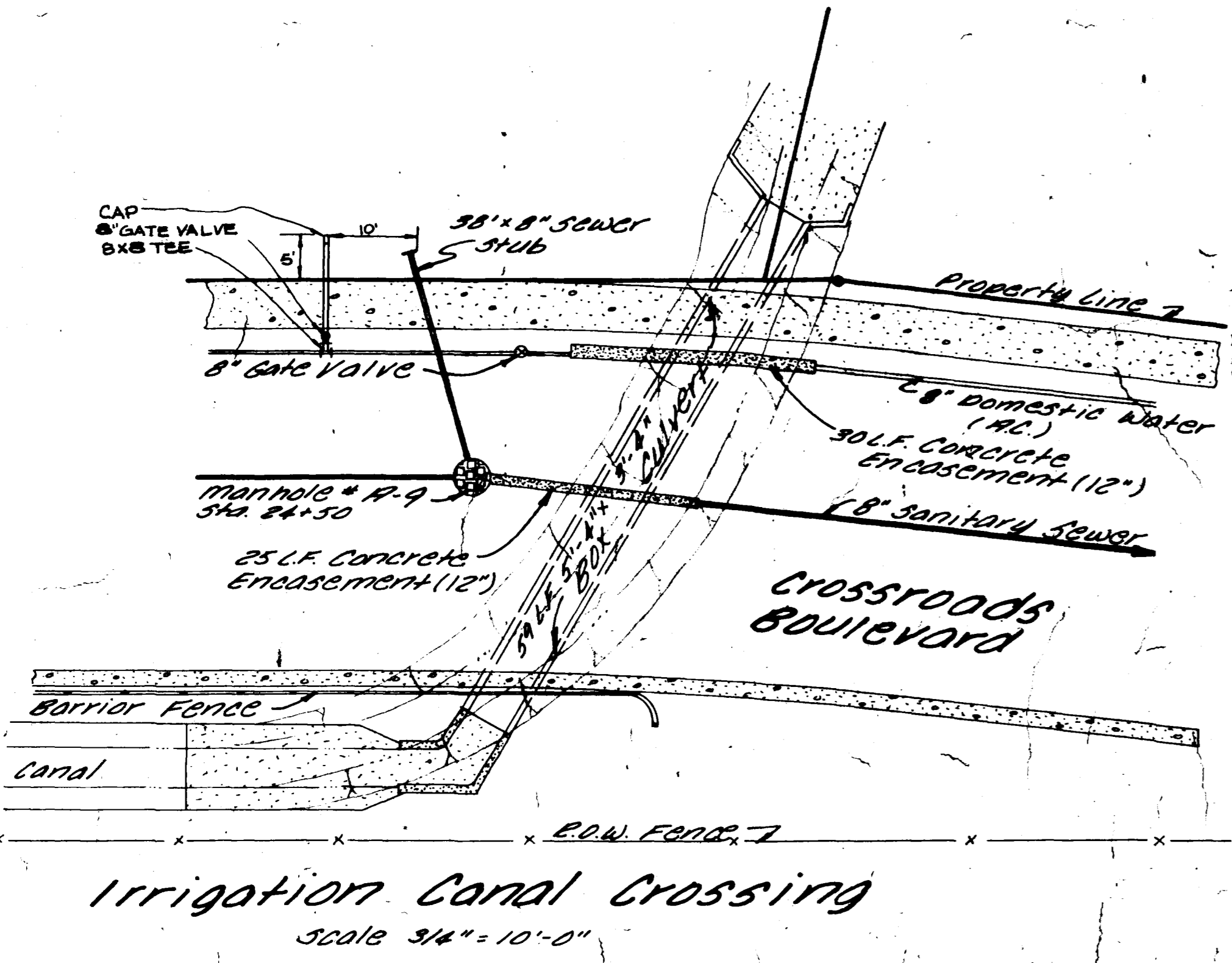
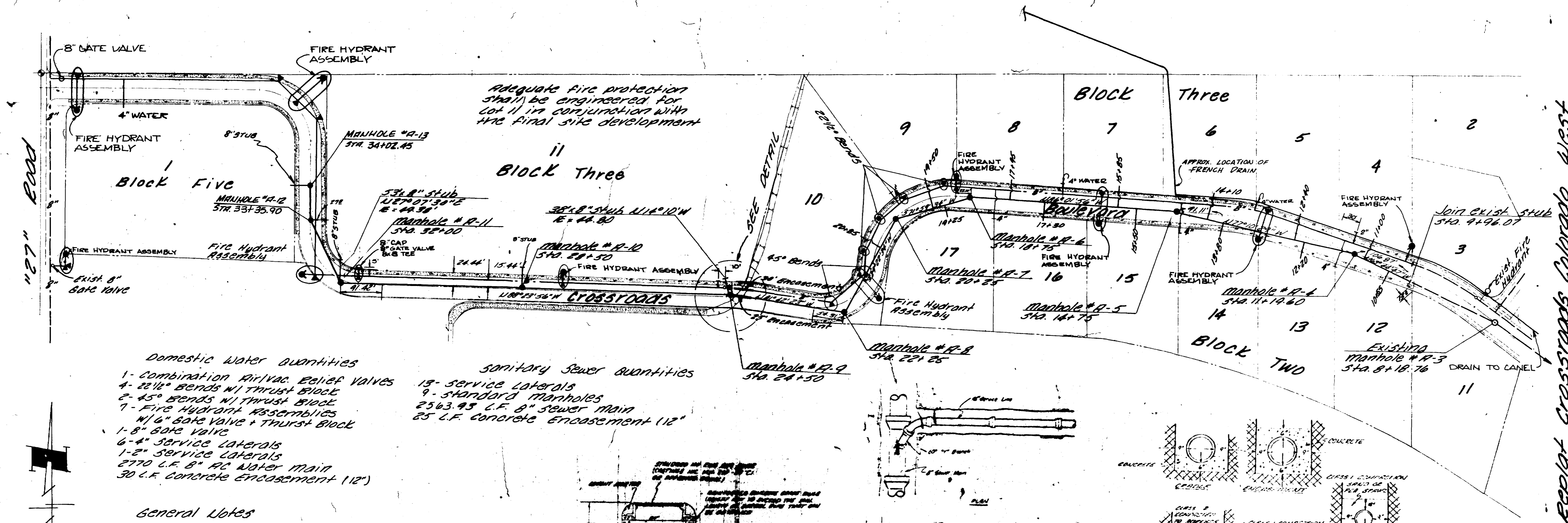
CHECKED	
DATE	March, 1980
SCALE	As Shown
REVISIONS	BY
Misc. 12/80	KEM

**PARAGON ENGINEERING, INC.**  
 P.O. Box 2872  
 Grand Junction, Colorado 81501 (303) 243-4968



Crossroads Colorado West  
 Filing No. Two  
 City of Grand Junction, Colo.  
 Sanitary Sewer & Domestic Water Plan

SHEET	1
OF	3
SHEETS	

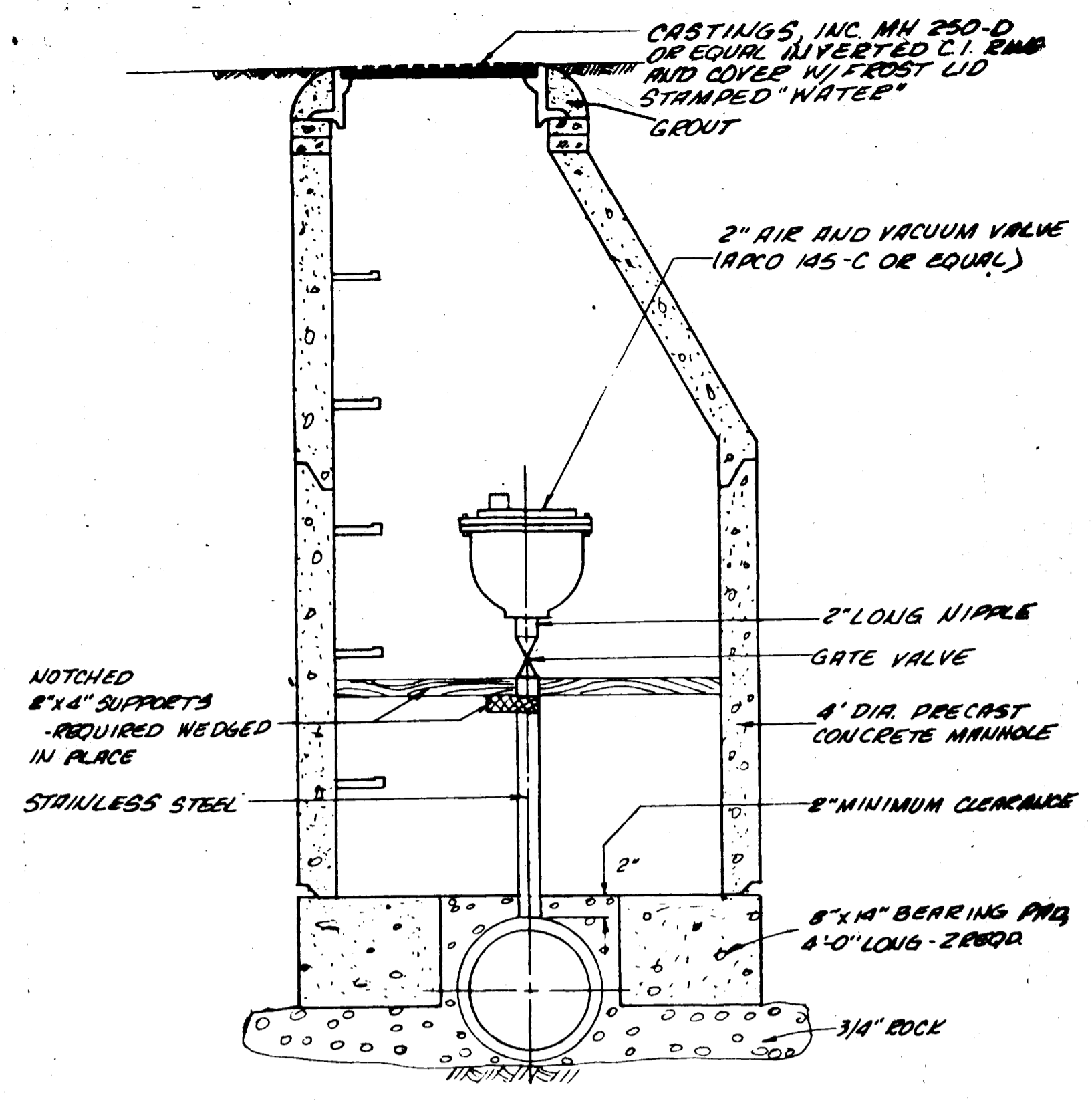


Approved: \_\_\_\_\_ Date: \_\_\_\_\_  
 City of Grand Junction Engineering

Approved: \_\_\_\_\_ Date: \_\_\_\_\_  
 Ute Water Conservancy District

AS BUILT DRAWINGS

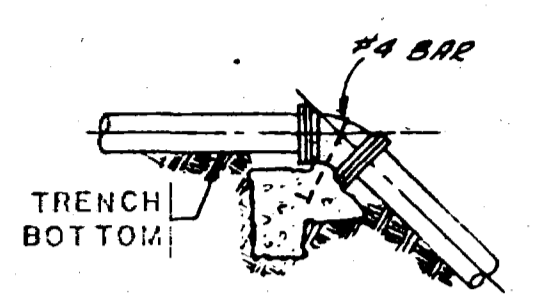
NOTE:  
 This is to certify that the system infiltration does not exceed 200 gallons per inch diameter per mile of length per day



COMBINATION AIR/VACUUM VALVE

**TABLE OF BEARING AREAS IN SQ. FT. FOR CONCRETE THRUST BLOCKING**

SIZE	BENDS				TEES	GATE VALVES	DEAD ENDS
	90°	45°	22 1/2°	11 1/4°			
3	1.0	0.6	0.3	0	0.7	0.5	0.7
4	1.8	1.0	0.5	0	1.3	0.5	1.3
6	4.0	2.2	1.1	0	2.8	0.7	2.8
8	7.1	3.8	2.0	1.0	5.0	2.4	5.0
10	11.1	6.0	3.0	1.5	7.8	4.5	7.8
12	16.0	8.6	4.4	2.2	11.3	7.3	11.3

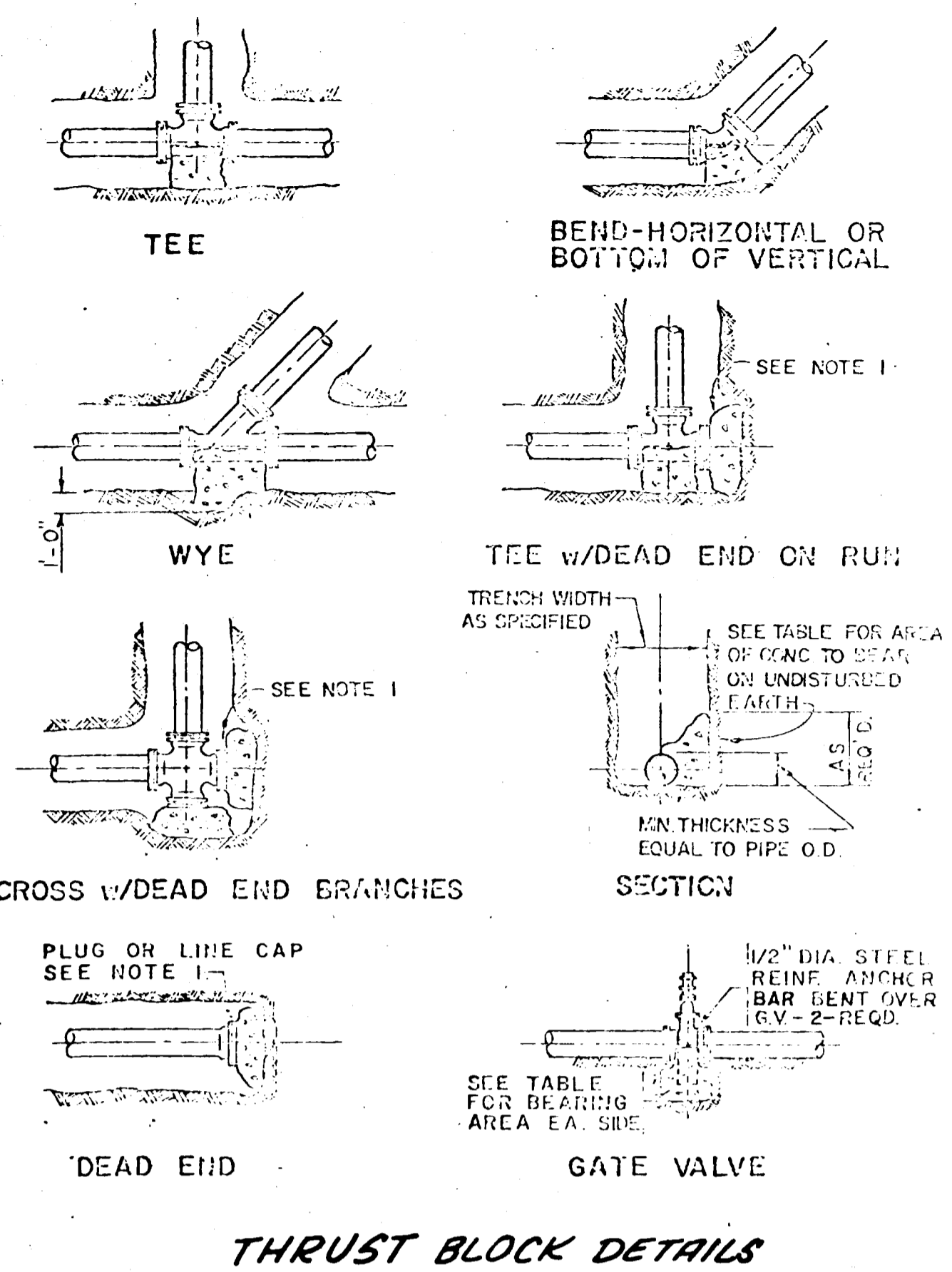


TOP OF VERT. BEND

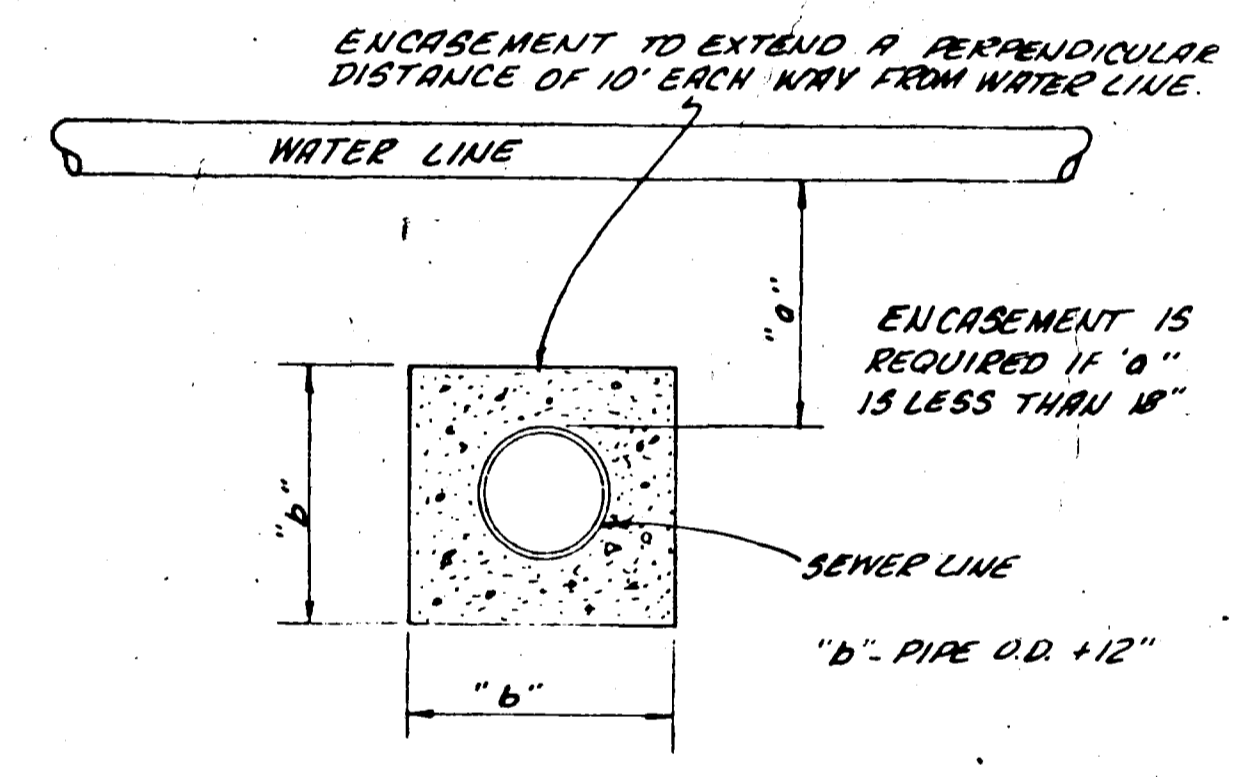
**TABLE OF VOLUMES OF CONCRETE (IN CU. FT.)**

SIZE	BEND		
	45°	22 1/2°	11 1/4°
3	7.4	3.8	1.8
4	13.0	6.6	2.9
6	29.2	15.0	7.4
8	52.0	26.4	13.2
10	81.0	41.4	20.6
12	117.0	60.0	29.6

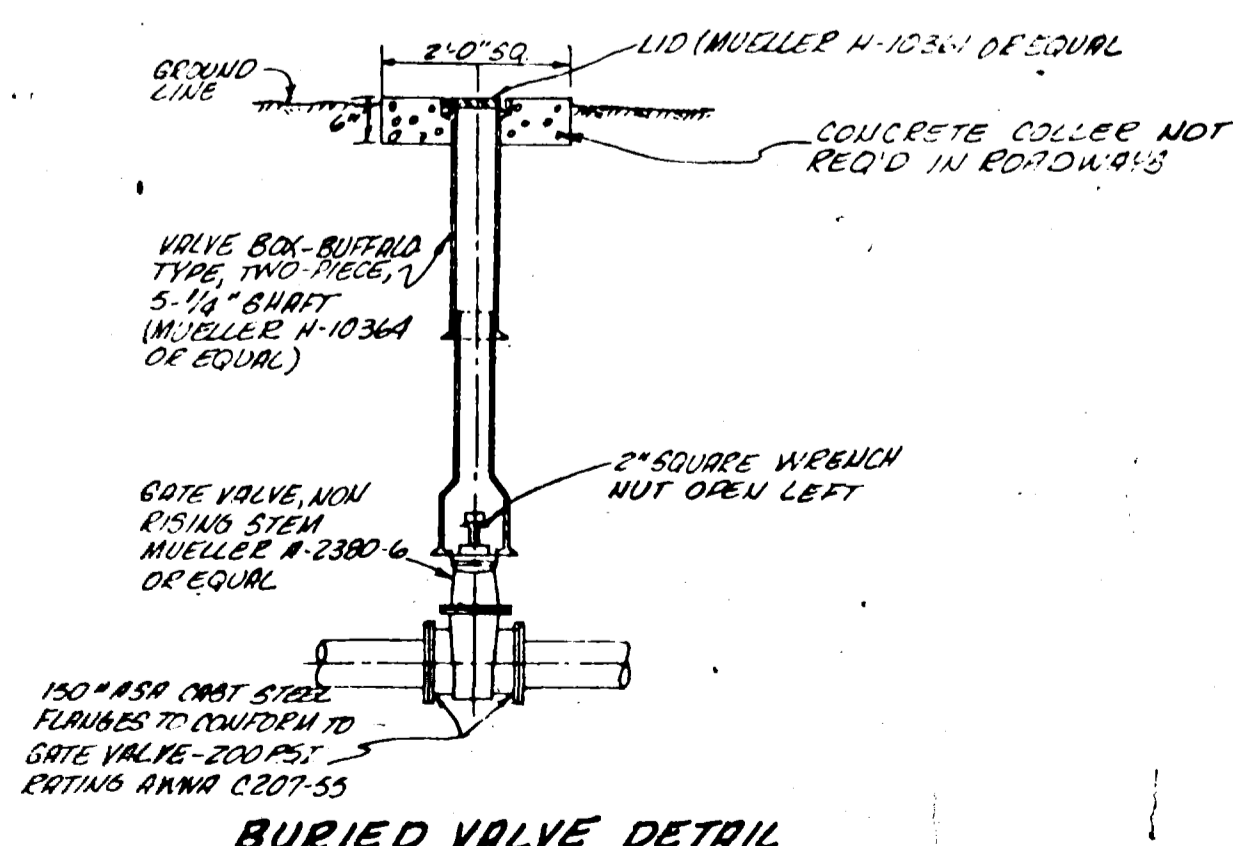
- NOTES FOR DRAWINGS
1. AT DEAD ENDS, WRAP FITTINGS WITH TAR PAPER, FELT, OR HEAVY KRAFT PAPER TO PROVIDE BOND BREAK BETWEEN CONCRETE AND FITTING.
  2. ALL THRUST BLOCKING SHALL BE CAST-IN-PLACE CONCRETE HAVING A MINIMUM YIELD STRENGTH OF 2000 PSI.
  3. THRUST BLOCKING SHALL BE CAST AGAINST UNDISTURBED EARTH. FORMS SHALL BE USED AS NECESSARY TO OBTAIN ADEQUATE BEARING AREA AND TO CONFINE THE CONCRETE. THRUST BLOCKING SHALL BEAD ON THE FITTING OR END CAP ONLY AND SHOULD NOT BE ALLOWED TO SPILL OVER THE JOINT OR AGAINST THE FITTING.



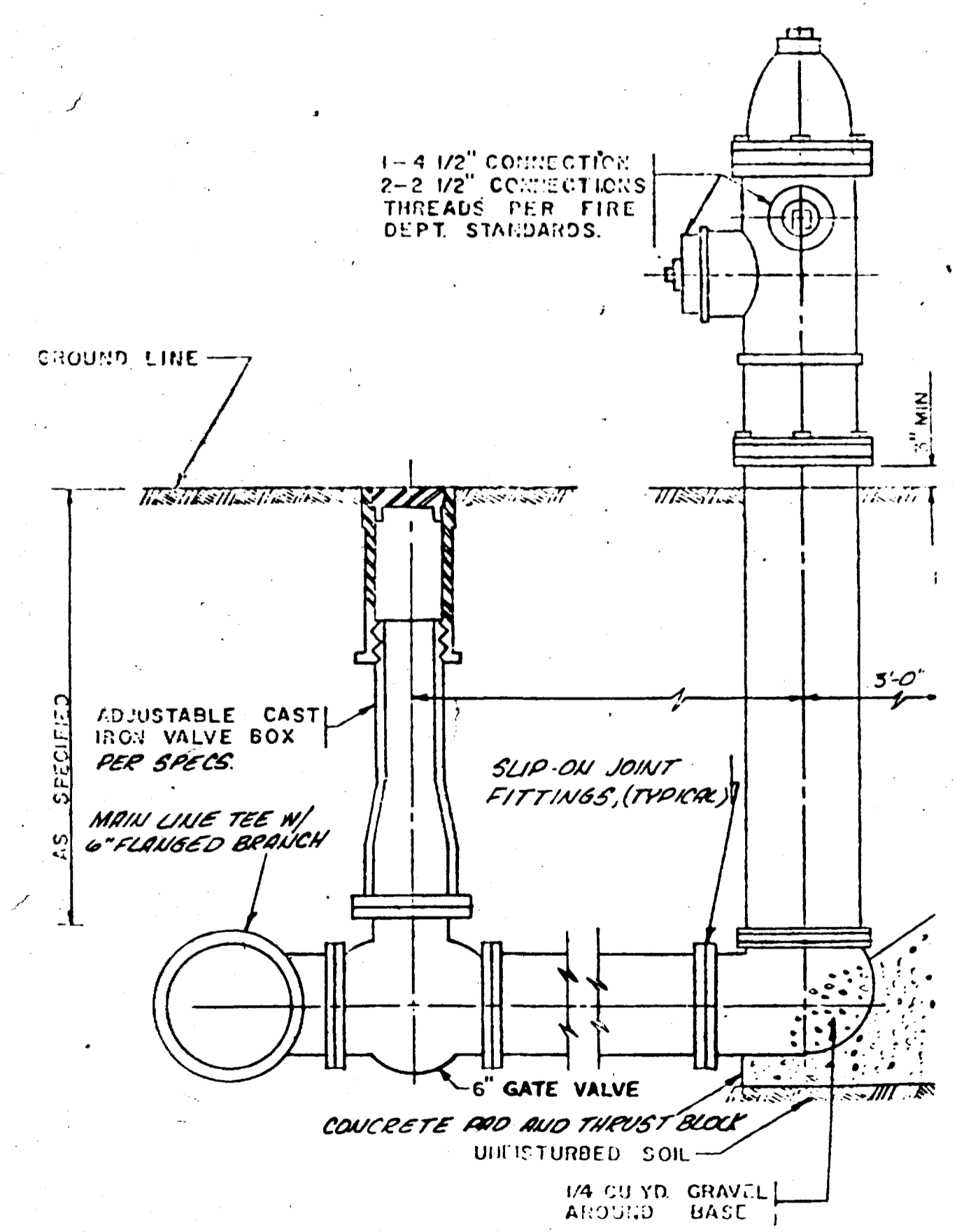
THRUST BLOCK DETAILS



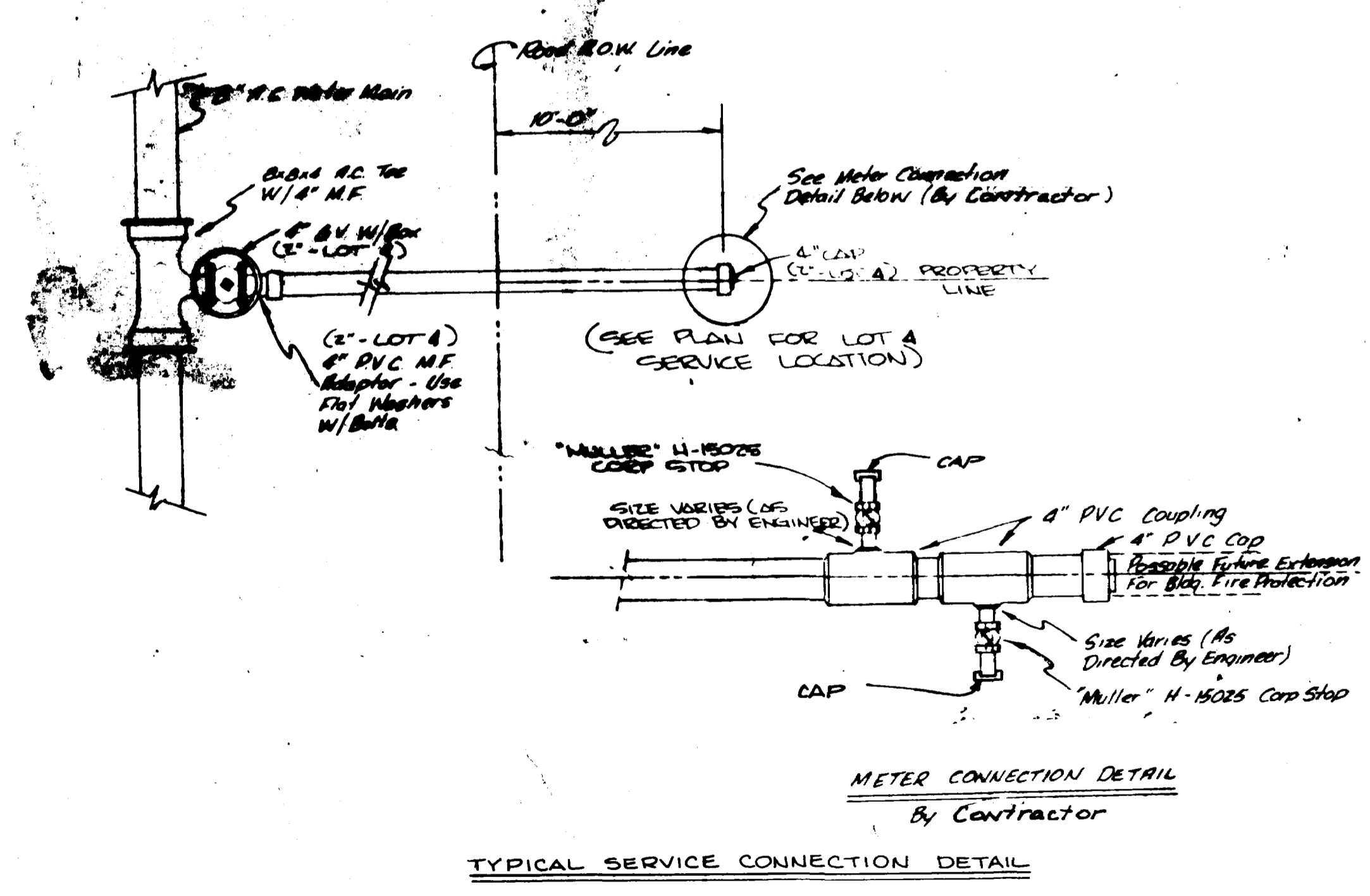
SEWER LINE ENCASEMENT DETAIL



BURIED VALVE DETAIL



FIRE HYDRANT DETAIL



TYPICAL SERVICE CONNECTION DETAIL

CHECKED  
DATE: March, 1980  
BY: As Shown

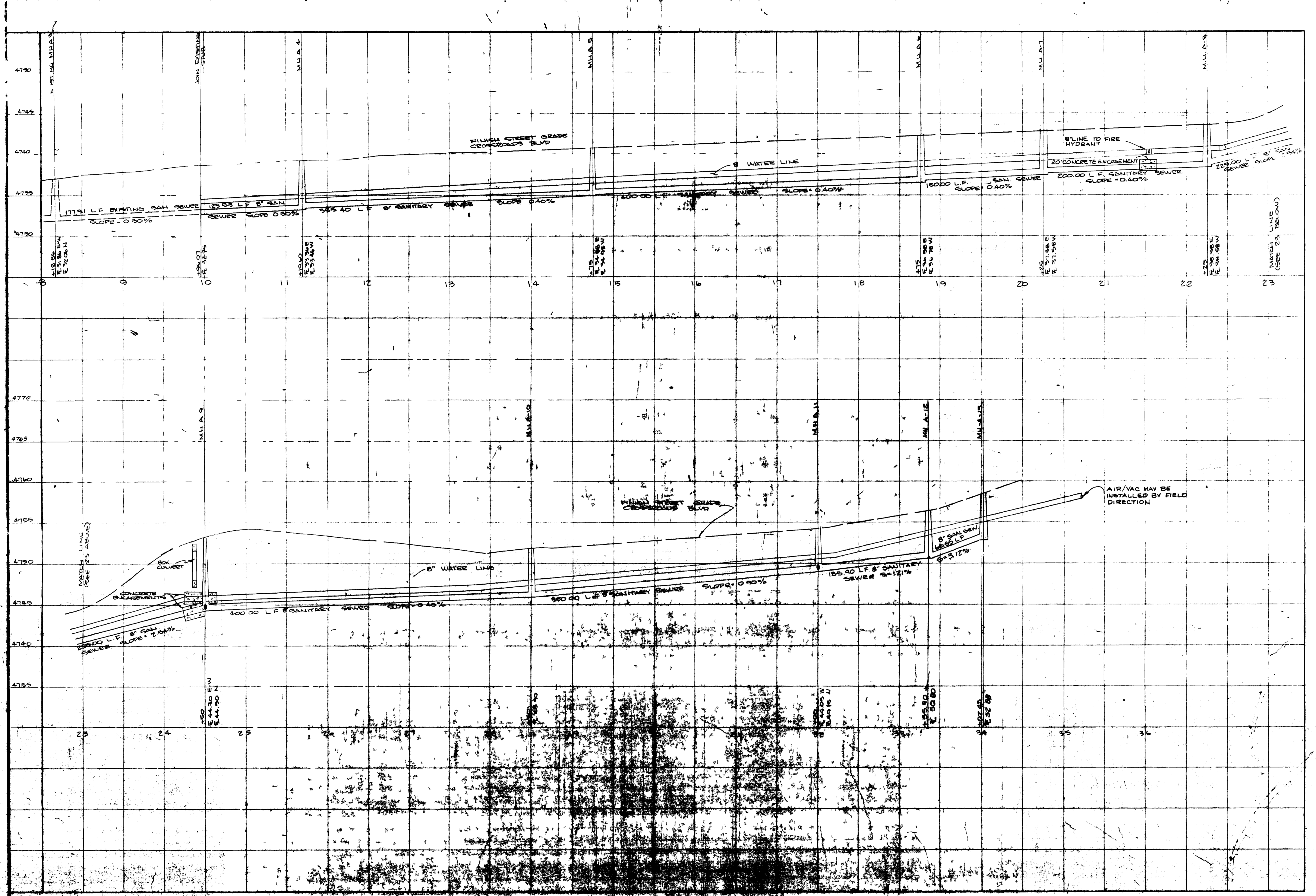
REVISIONS  
BY: [Blank]

PARAGON ENGINEERING, INC.  
P.O. Box 2872  
Grand Junction, Colorado 81501 (303) 245-1886

CROSSROADS COLORADO WEST  
FILING NO. TWO  
CITY OF GRAND JUNCTION, COLORADO  
DOMESTIC WATER DETAILS

SHEET 2 OF 3 SHEETS

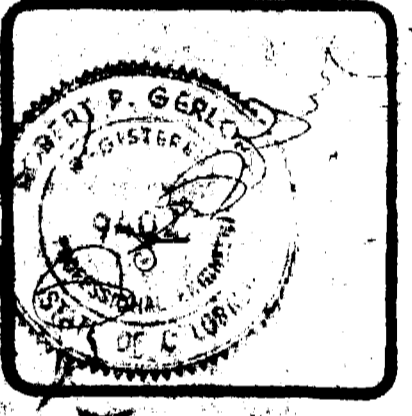
02-265-03 AB



CHECKED  
 DATE  
 FEBRUARY, 1980  
 SCALE  
 HORIZ. 1" = 50'  
 VERT. 1" = 5'

Misc 12/80 KFM

**PARAGON ENGINEERING, INC.**  
 P.O. Box 2877  
 Grand Junction, Colorado 81501 (970) 243-8888



CROSSROADS COLORADO WEST  
 FILING NO. TWO  
 SANITARY SEWER PROFILES

3

AS BUILT DRAWING