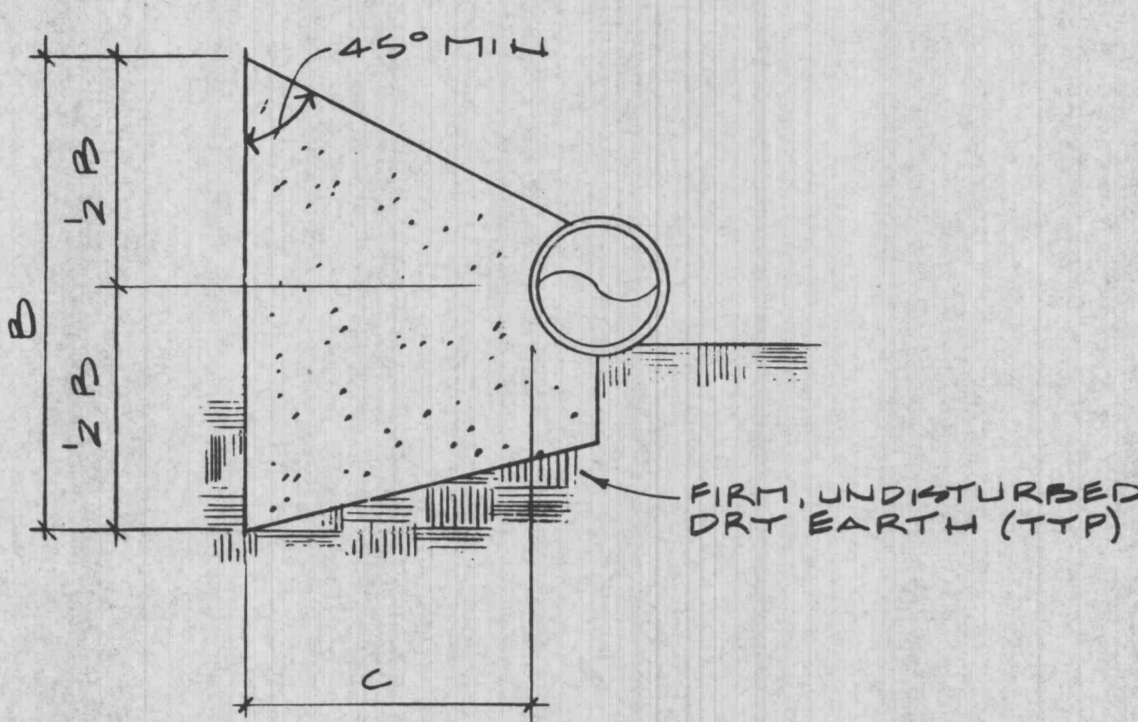


PLAN



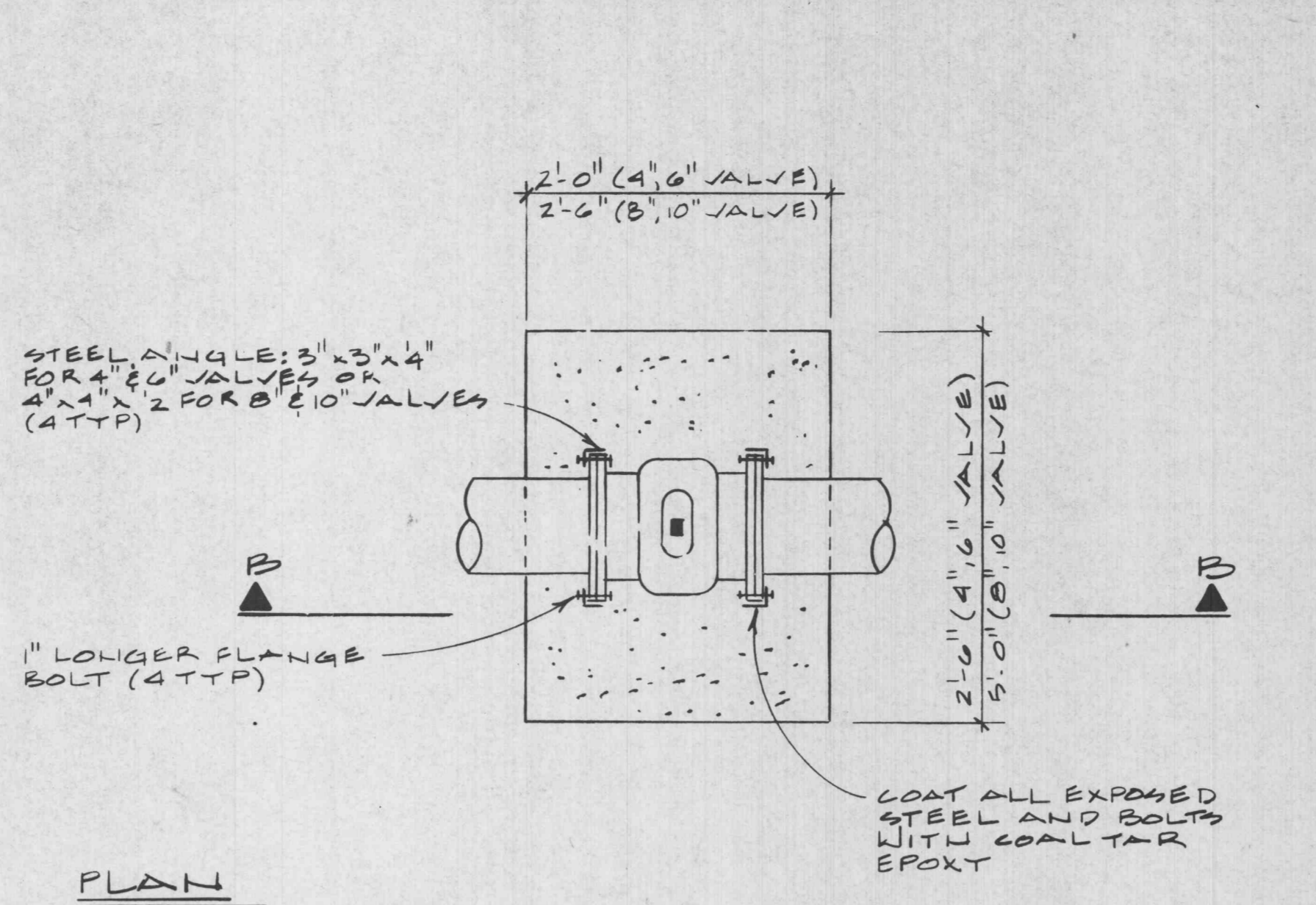
SECTION A-A

MINIMUM THRUST RESTRAINT DIMENSIONS

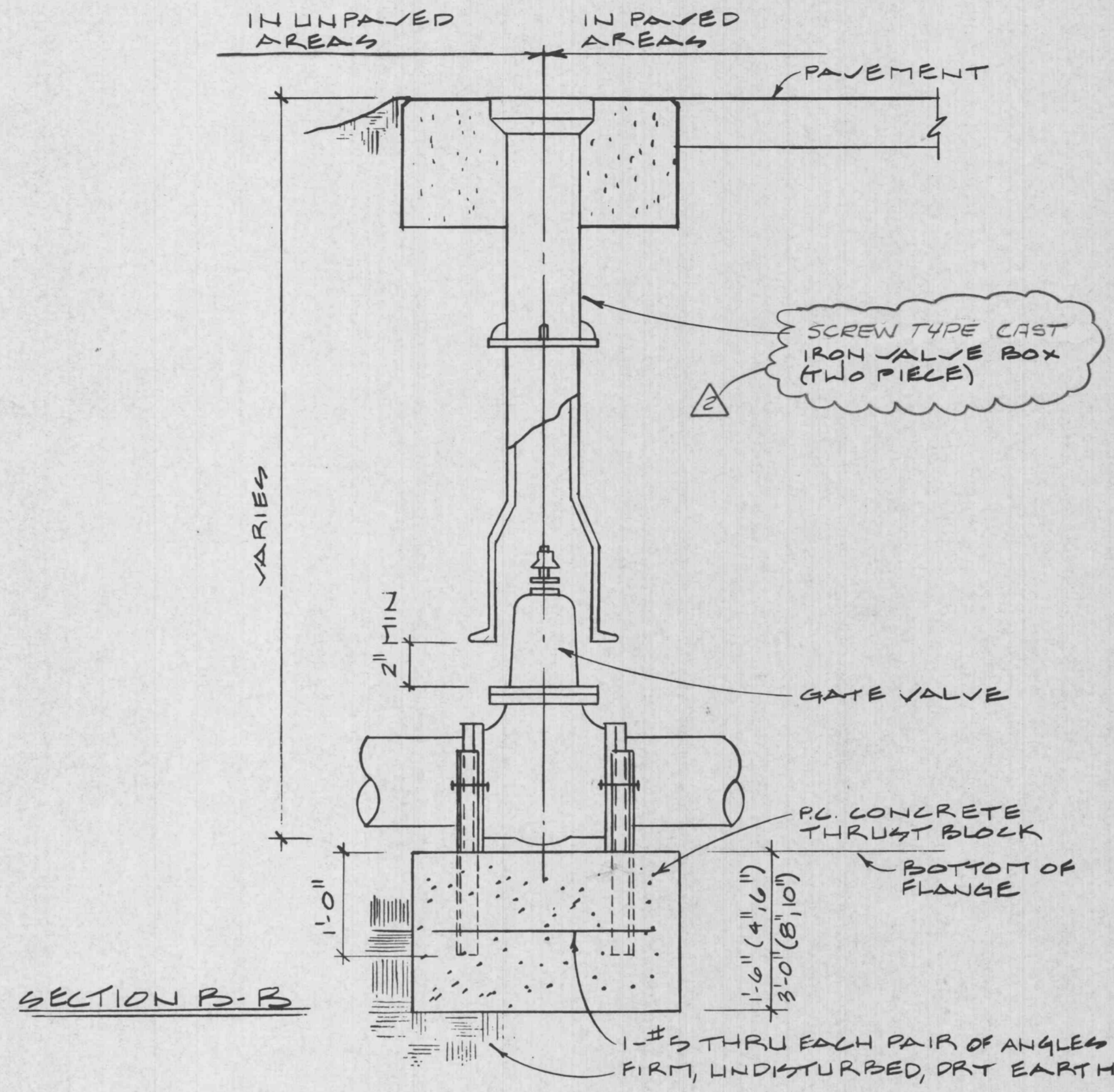
PIPE SIZE	TEE, DEAD END		90° BEND		45° BEND		11 1/2°, 22 1/2° BEND	
	A	B	A	B	A	B	A	B
2'-4"	2'-0"	1'-0"	2'-0"	1'-0"	1'-6"	1'-0"	1'-0"	1'-0"
6"	2'-0"	1'-0"	2'-9"	2'-0"	2'-0"	1'-0"	1'-0"	1'-0"
8"	3'-2"	2'-0"	3'-9"	2'-0"	2'-0"	2'-0"	1'-6"	1'-6"
10"	4'-3"	2'-6"	5'-0"	3'-0"	3'-3"	2'-6"	2'-9"	1'-6"

CONCRETE THRUST RESTRAINT AT SINGLE FITTING
NO SCALE

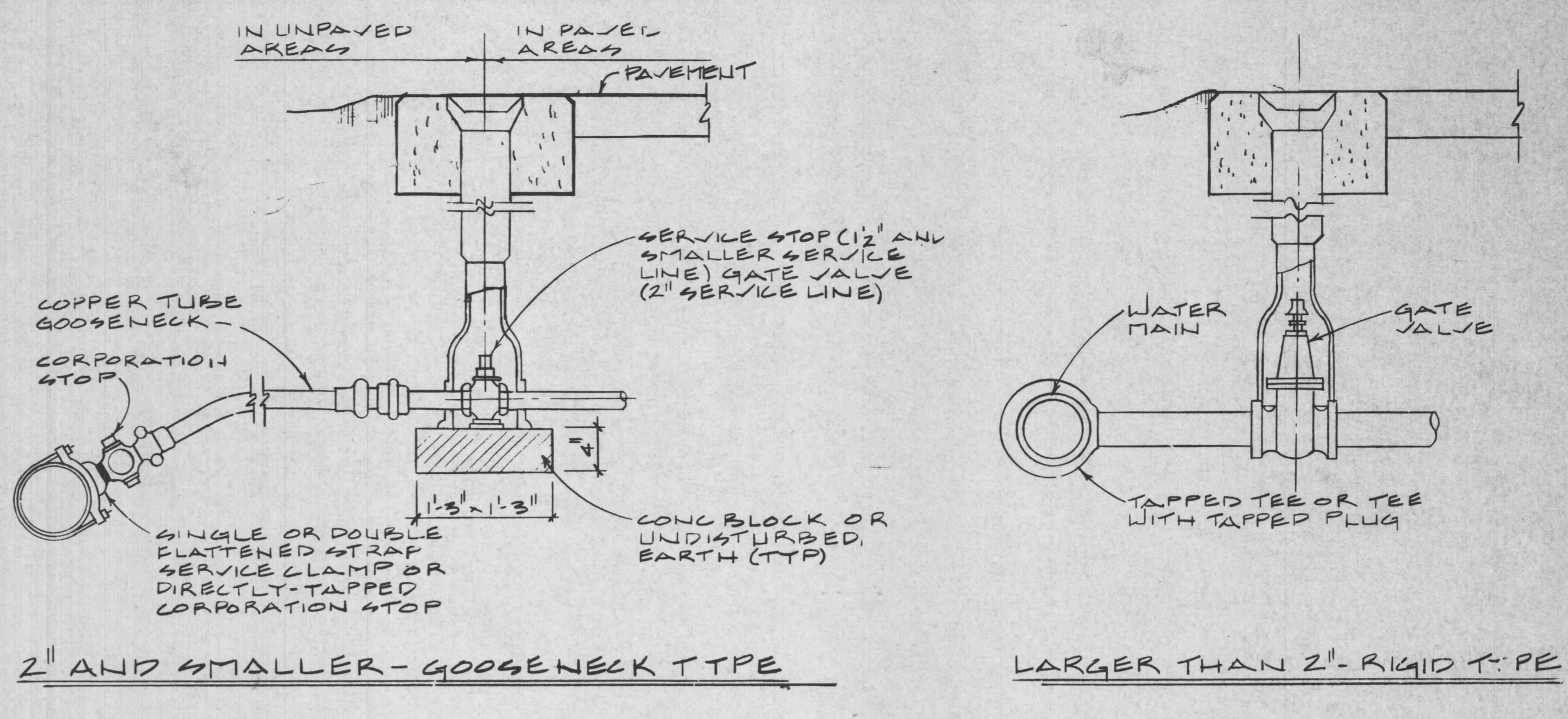
1. THE ABOVE THRUST RESTRAINT APPLIES ONLY TO SINGLE FITTINGS.
2. WHERE UNDISTURBED EARTH IS NOT AVAILABLE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.
3. NO THRUST RESTRAINT SHALL BEAR AGAINST AN ADJOINING PIPE.



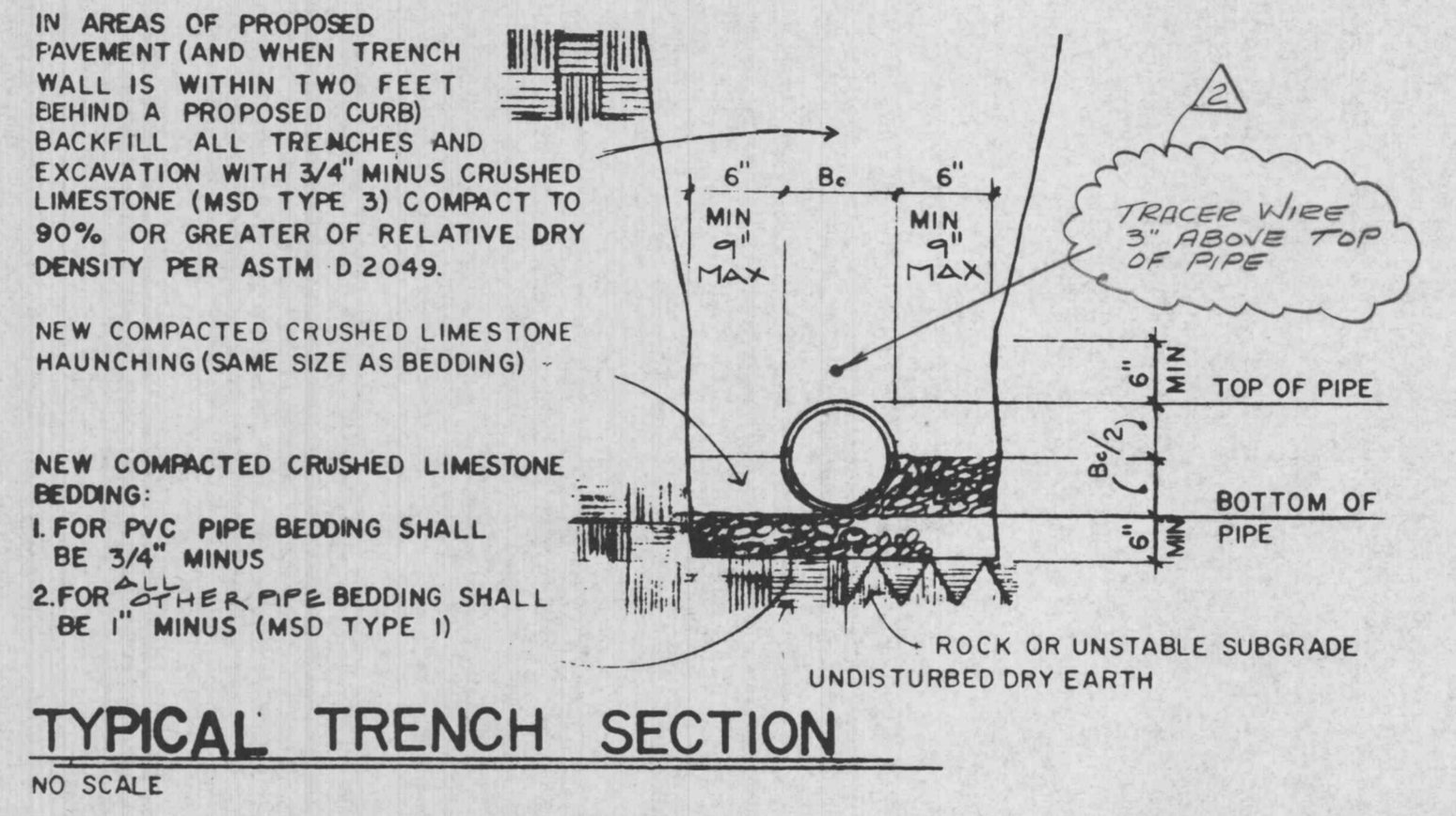
PLAN



SECTION B-B
GATE VALVE AND VALVE BOX WITH CONCRETE THRUST BLOCK
NO SCALE



TYPICAL SERVICE CONNECTIONS
NO SCALE

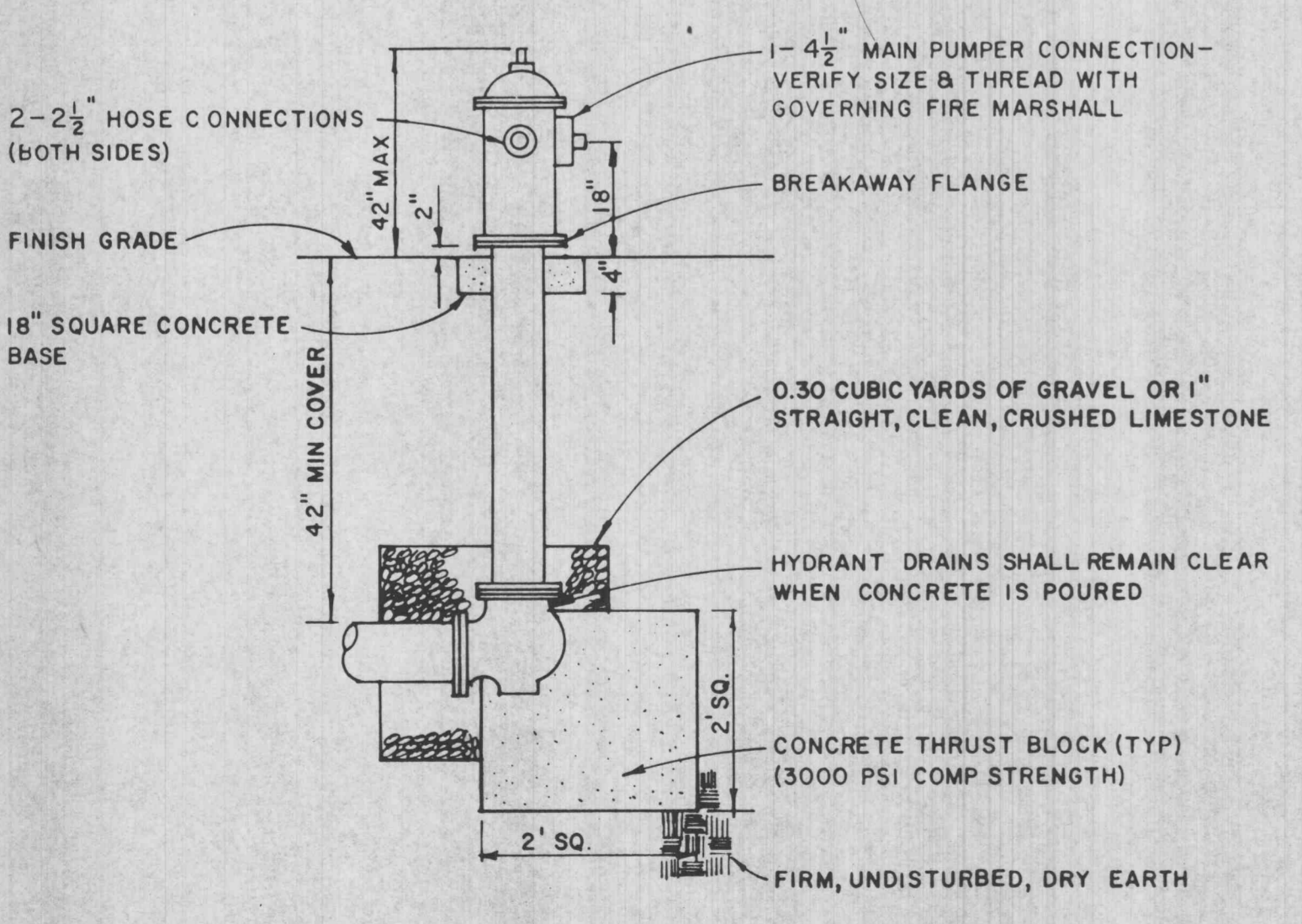


TYPICAL TRENCH SECTION
NO SCALE

1. TRENCHES BEHIND CURBS SHALL BE BACKFILLED W/ROCK TO WITHIN 12" OF SURFACE. REMAINING TRENCH SHALL BE FILLED W/6" CLEAN TOPSOIL ON 6" CLEAN EARTH. BACKFILL.
2. BACKFILL IN TRENCHES WHICH ARE NOT IN AREAS OF (OR NOT WITHIN TWO FEET OF) PAVING SHALL CONSIST OF SELECTED JOB-EXCAVATED EARTH THOROUGHLY COMPACTED BY WATER JETTING OR WITH SUITABLE MECHANICAL TAMPERS.

MARKING TAPE

The tape shall be of plastic material with integral wires, foil backing, or other means to enable detection by a metal detector. The tape shall be not less than 2" wide, and shall have an identifying phrase in black letters repeated at maximum intervals of 1'-0". The tape shall be of a type specifically manufactured for marking and locating underground utilities. The metallic core of the tape shall be encased in a protective plastic jacket or provided with other means to protect it from corrosion. The tape shall be installed during backfilling operations. Tape shall be located 1'-0" below finished grade. The tape shall be centered on the utility line with the identifying phrase on the top. The identifying phrase shall be WATER LINE BELOW.



FIRE HYDRANT DETAIL
NOT TO SCALE
REFER TO PLAN FOR BRANCH LINE SIZES



REVISIONS

NO.	DATE	DESCRIPTION
2	10-20-92	CITY COMMENTS
1	11-18-92	ISSUED FOR BIDD

PHOTOGRAPHIC STUDIO WAREHOUSE
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& engineers
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TITLE:
WATER MAIN DETAILS
DATE: 10-16-92
PROJECT NO.: 92106.2

SHEET:
C-9