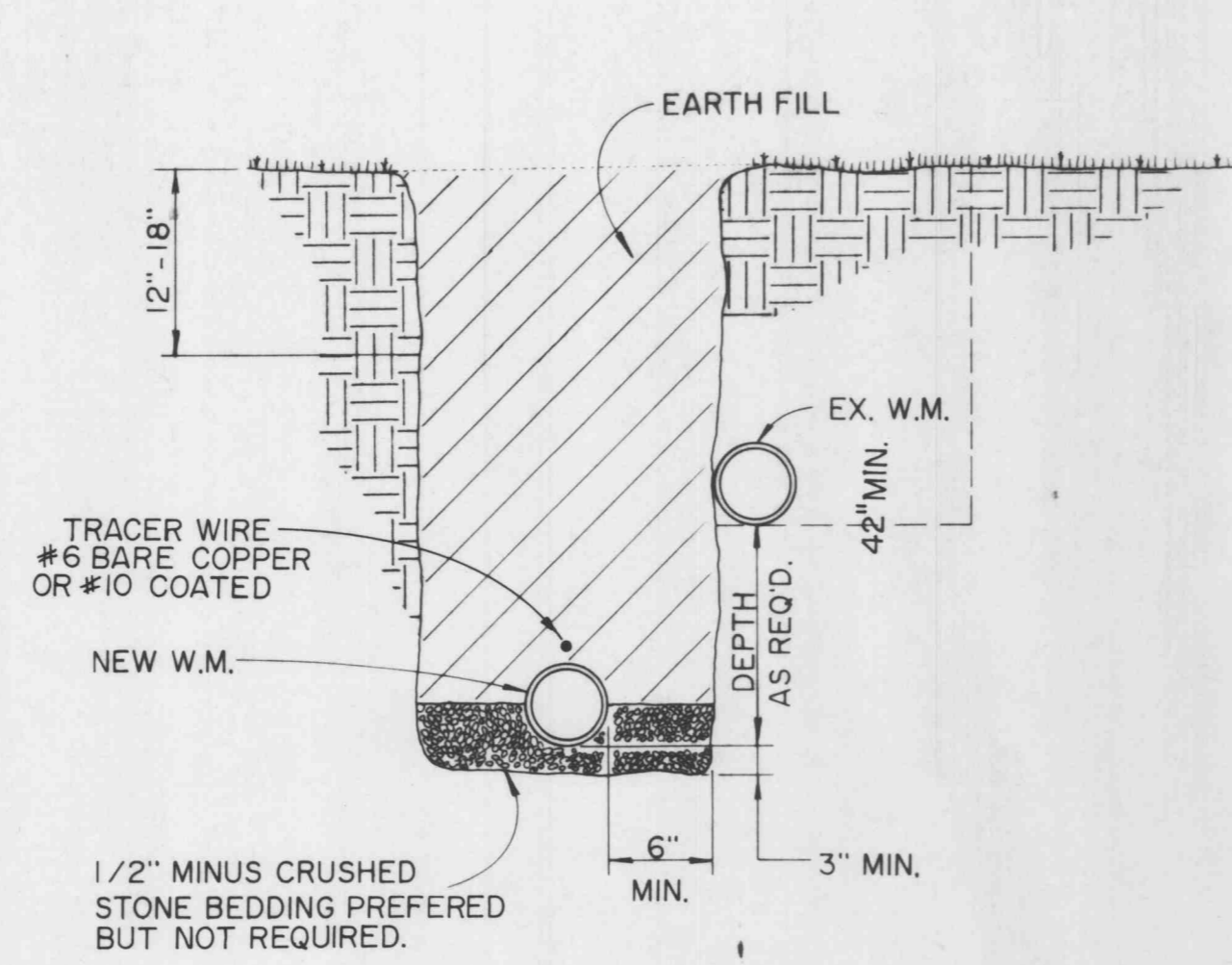


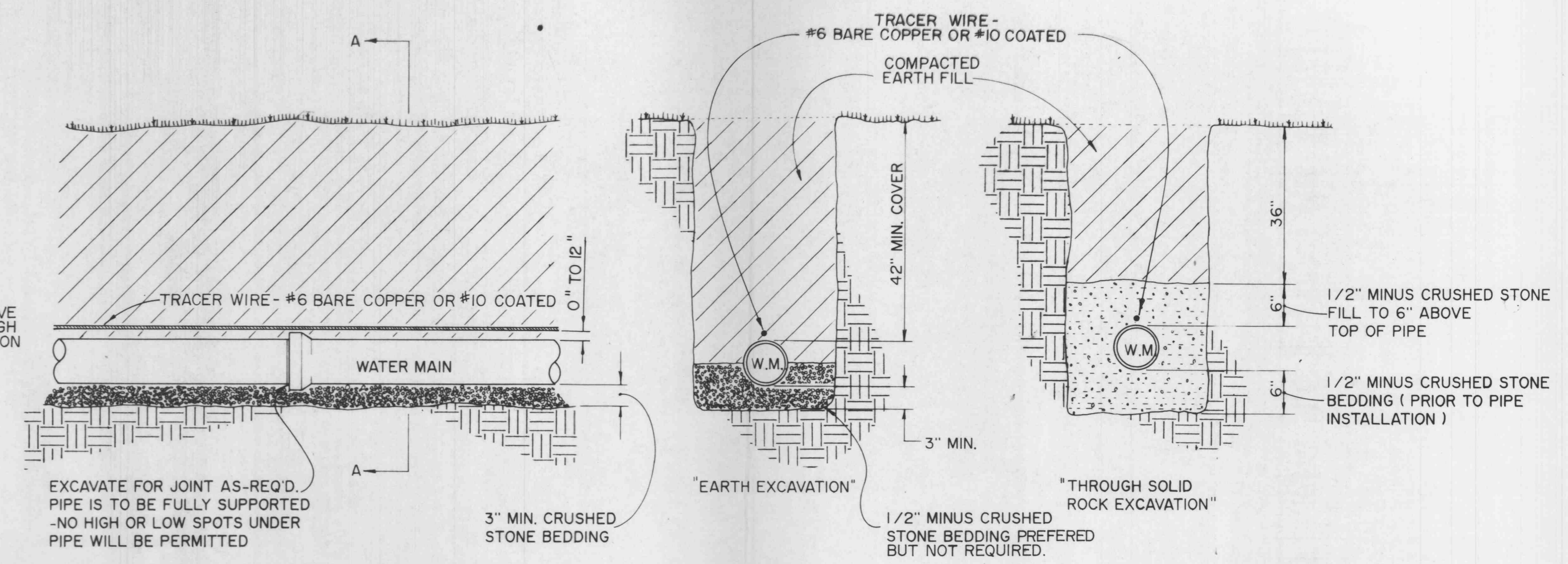
TYPICAL PAVED STREET OR ROAD TRENCH BACKFILL & SURFACE REPLACEMENT DETAIL

N.T.S.



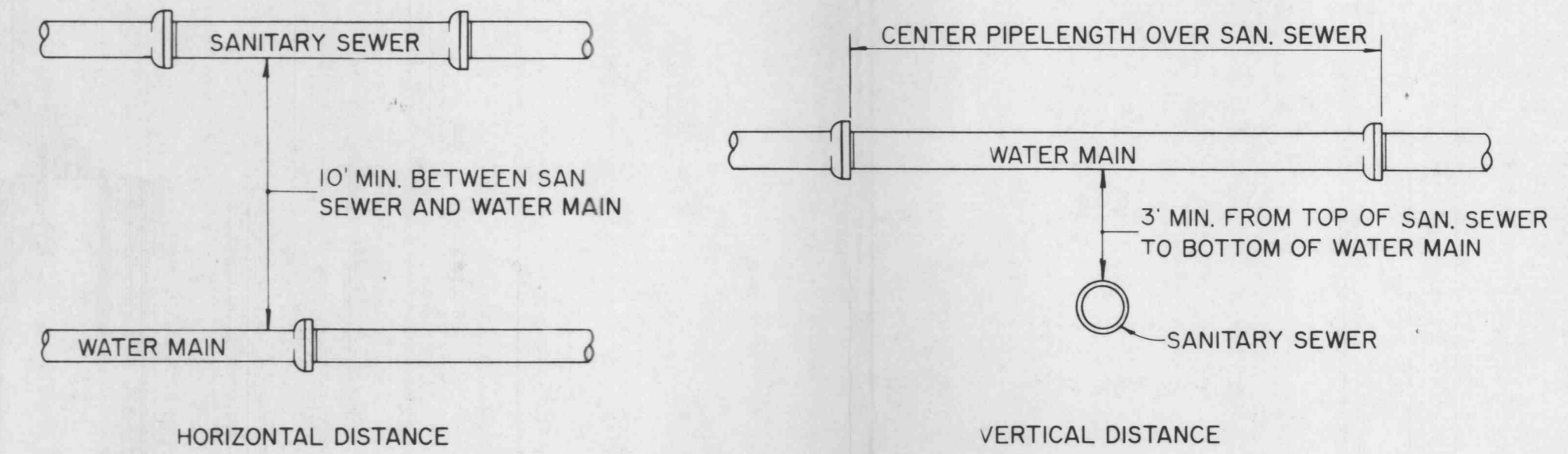
TYPICAL WATER MAIN LOWERING DETAIL

N.T.S.



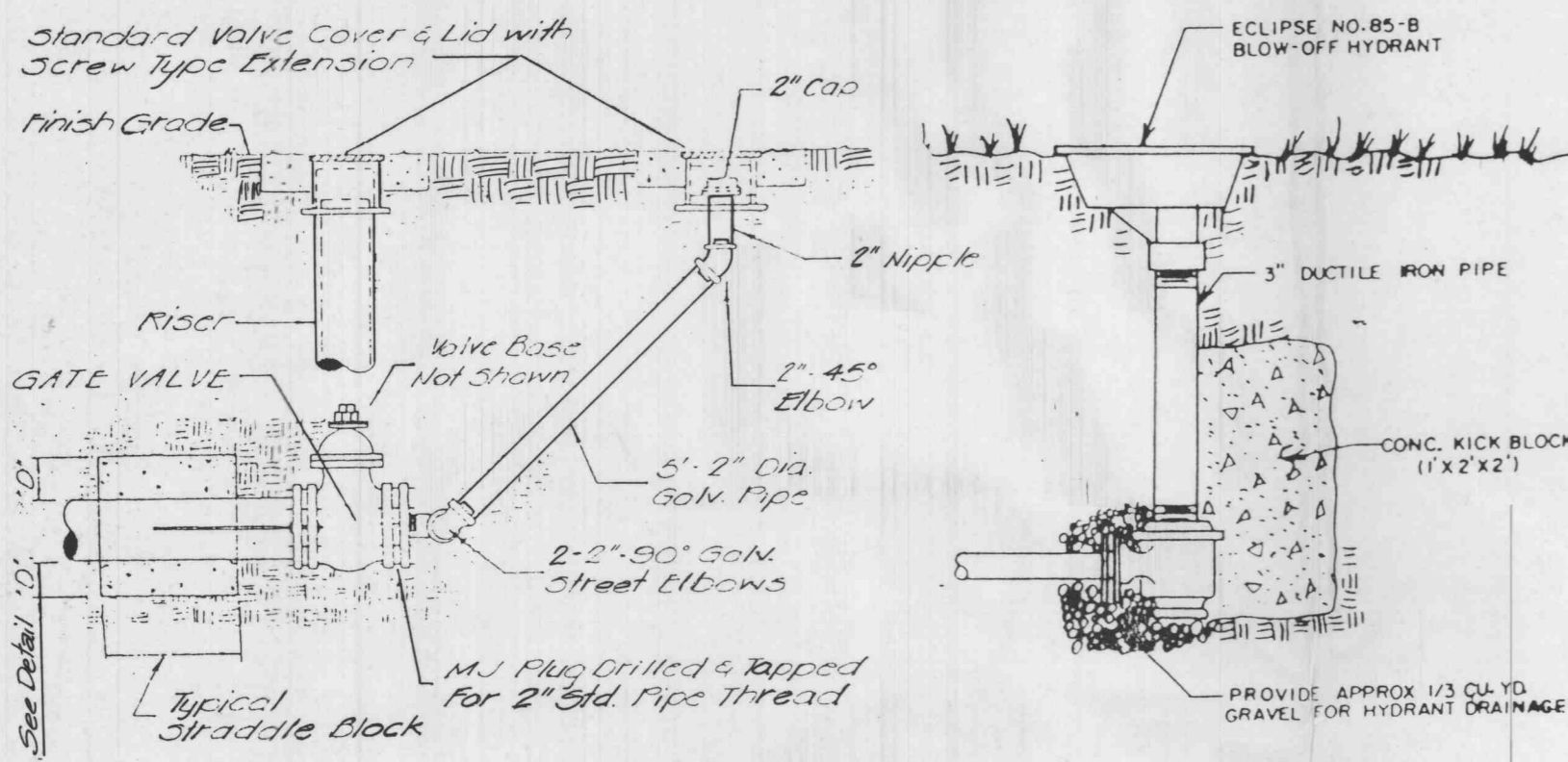
TYPICAL WATER MAIN INSTALLATION DETAIL

N.T.S.

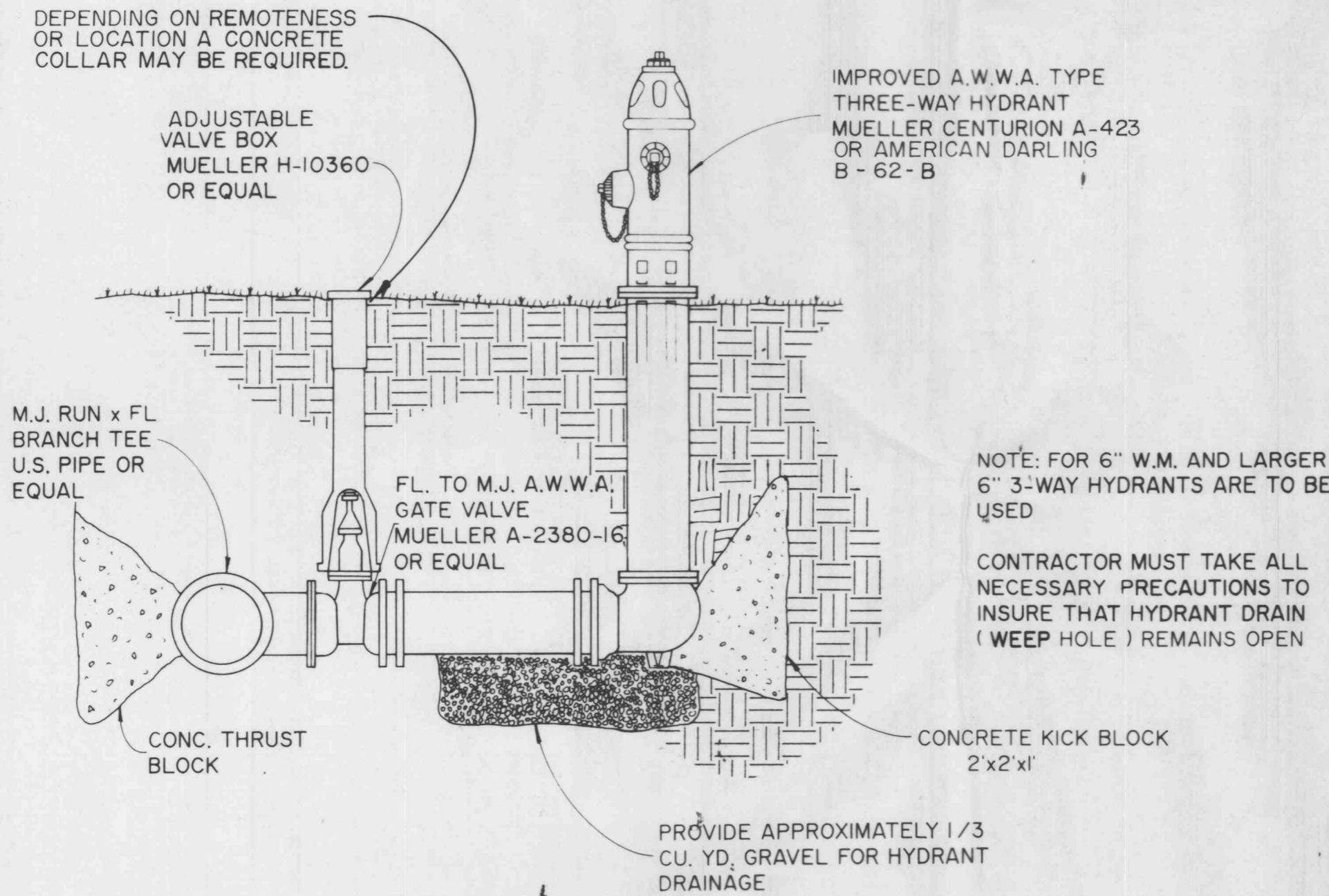


TYPICAL WATER & SEWER SEPARATION

N.T.S.



BLOW-OFF DETAILS



FIRE HYDRANT INSTALLATION DETAIL

N.T.S.

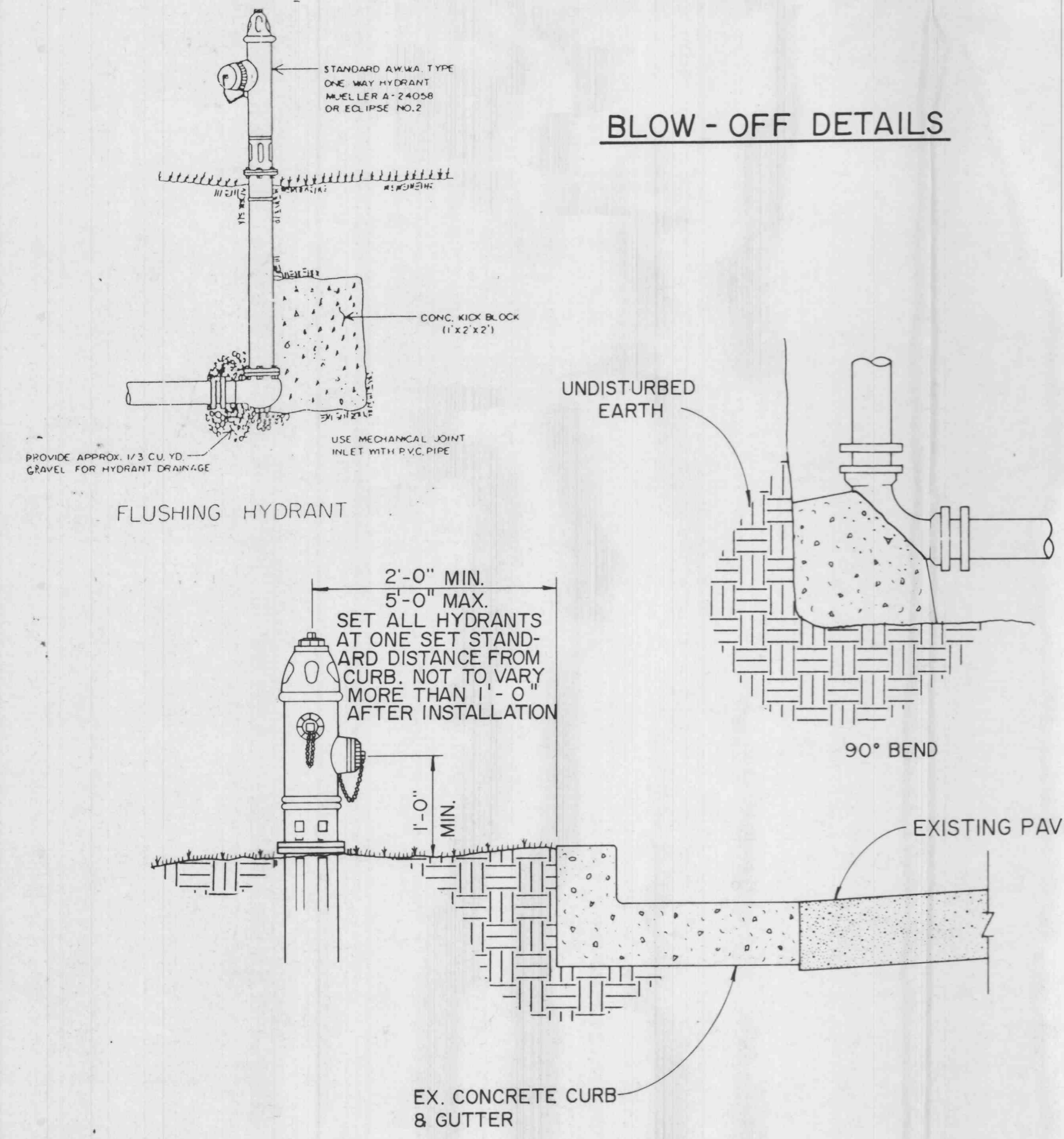
SECTION 1-1						SECTION 2-2				
BENDS	B	C	D	E	F	TEES	G	H	J	K
6" 11 1/2°	8"	15"	12"	24"	10"	6" x 6" x 6"	12"	24"	24"	18"
6" 22 1/2°	8"	19"	12"	24"	13"	8" x 8" x 6"	12"	24"	24"	18"
6" 45°	8"	30"	12"	24"	14"	8" x 8" x 8"	12"	24"	24"	18"
6" 90°	8"	30"	12"	24"	21"	12" x 12" x 6"	12"	24"	24"	18"
8" 11 1/2°	8"	20"	12"	24"	10"	12" x 12" x 8"	12"	24"	24"	18"
8" 22 1/2°	8"	22"	12"	24"	17"	12" x 12" x 12"	12"	36"	24"	36"
8" 45°	8"	30"	12"	24"	24"					
8" 90°	8"	38"	12"	24"	36"					
12" 11 1/2°	8"	30"	12"	24"	15"					
12" 22 1/2°	8"	35"	12"	24"	25"					
12" 45°	8"	40"	12"	24"	40"					
12" 90°	8"	60"	12"	24"	52"					

THRUST BLOCK SCHEDULE

NOTES:
1. 2" & 4" FITTINGS EQUIVALENT TO 6" FITTINGS.
2. TAPPING SLEEVES TO HAVE BACKING BLOCKS SAME SIZE AS REQUIRED FOR TEES.

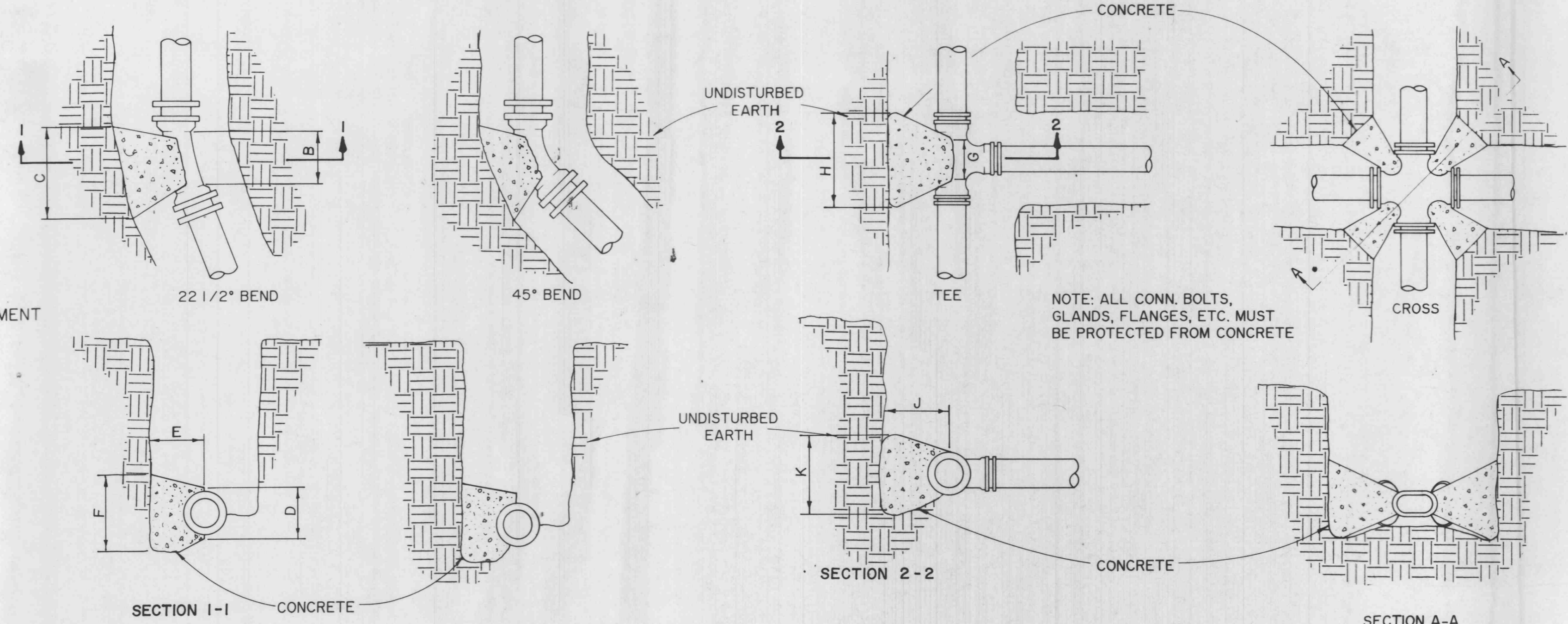
CUBIC FEET OF CONCRETE REQUIRED	BEND	11 1/4°	22 1/2°	45°	90°
6"	1.7	3.7	3.5	3.5	
8"	2.1	3.1	5.0	8.5	
12"	3.7	5.9	3.7	17.5	

TEE X	6"	8"	12"	PLUG
6"	4.0	~	4.0	
8"	4.0	5.0	~	5.0
12"	4.0	5.5	10.5	10.5



TYPICAL FIRE HYDRANT LOCATION DETAIL

N.T.S.



TYPICAL THRUST BLOCK DETAILS

N.T.S.

- GENERAL NOTES
- At road or driveway crossings, or under public paved areas, trench backfill is to be crushed stone or gravel, compacted by water jetting or by mechanical tamping in ten inch lifts to achieve 90% compaction determined by the Modified AASHTO T-180 Compaction Test.
 - All other trench backfill shall be placed in the trench and compacted by jetting or mechanical means to a density adequate to prevent ditch settlement.
 - All connections to the City water system shall be subject to the City Backflow Prevention Ordinance (Ordinance #1592) and all other regulations that may be adopted from time to time by the United States Environmental Protection Agency, the Missouri Department of Natural Resources, or the City of O'Fallon, Missouri.

NOTE: 4" WATERMAIN IS FOR SERVICE LINES ONLY!