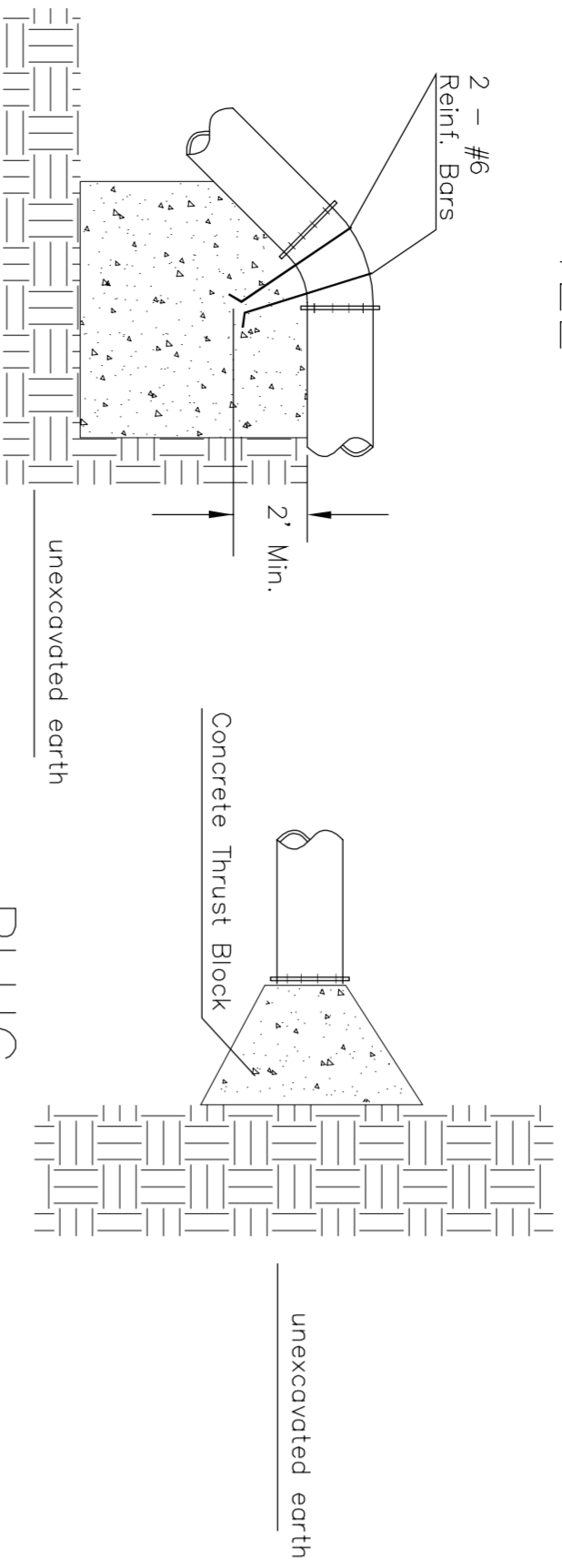


TEE



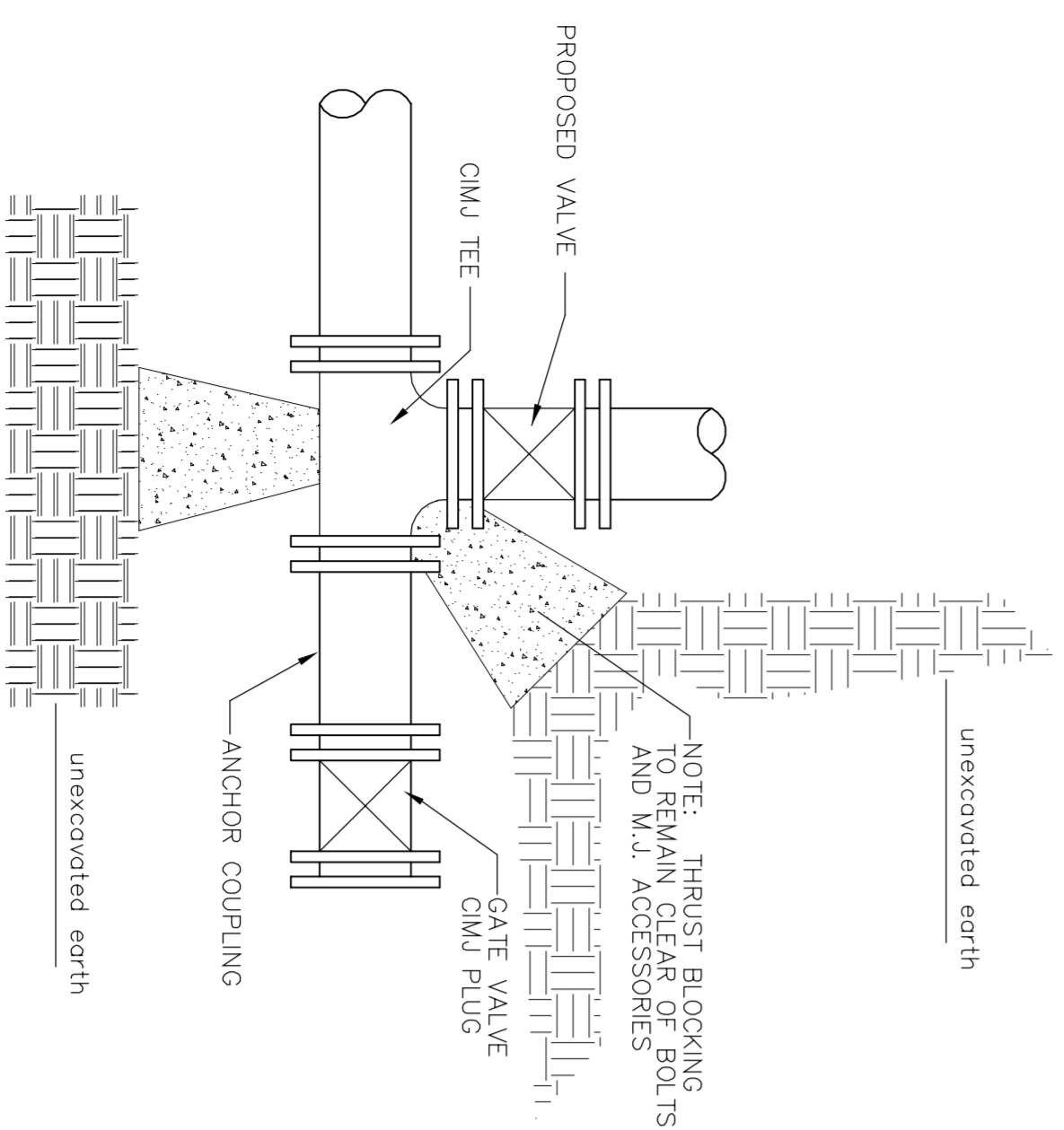
PLUG

VERTICAL BEND

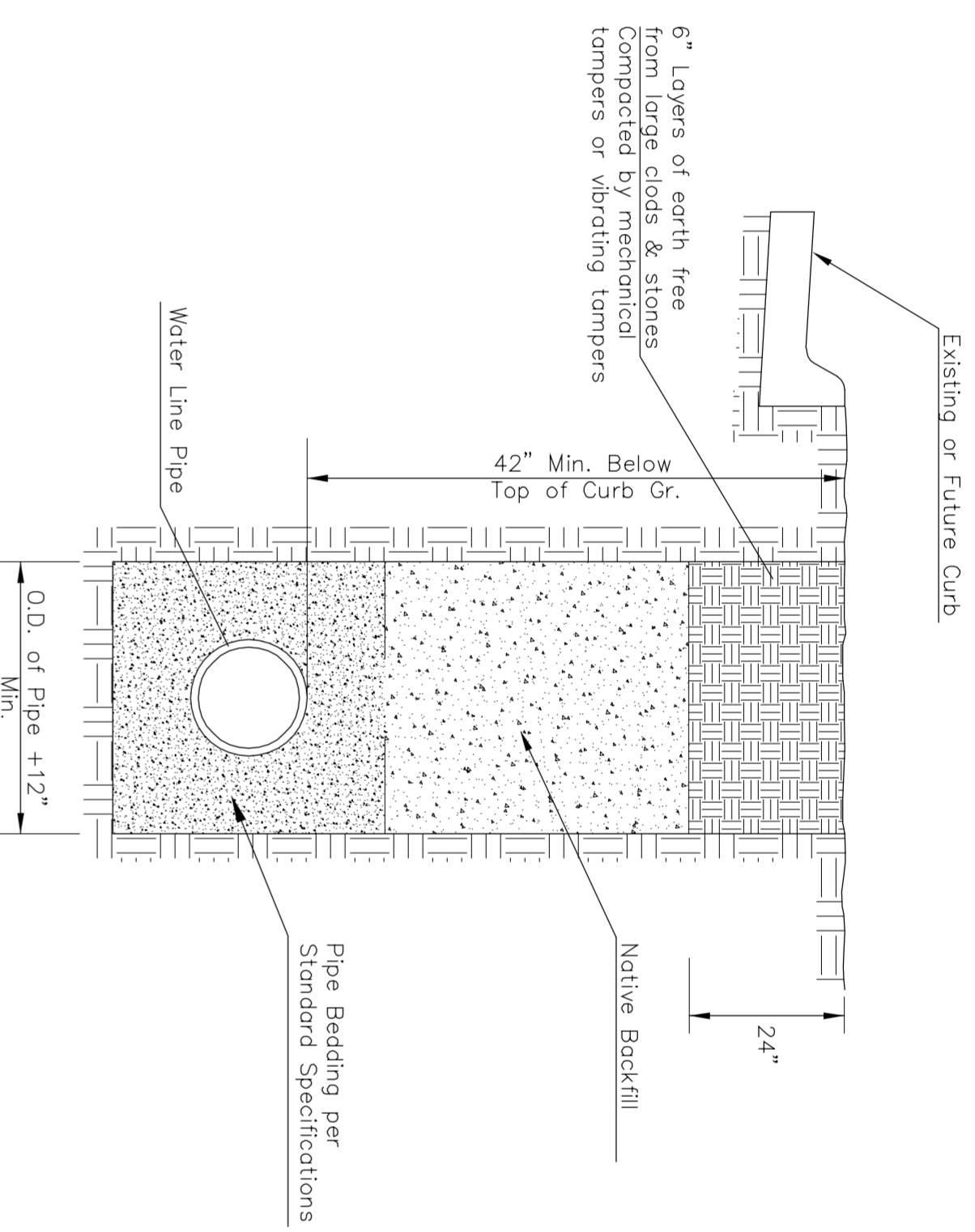
BEND

PIPE SIZE	THRUST AT FITTINGS IN TONS- AT 150#/IN ² P
6"	2.8
8"	4.9
12"	11.4
16"	20.15
20"	31.15
24"	44.55
	90°
	45°
	22 1/2°
	11 1/4°
	TEE
	.55
	.96
	11.4
	20.15
	31.15
	44.55
	63.0
	84.1
	17.4
	8.75
	44.55

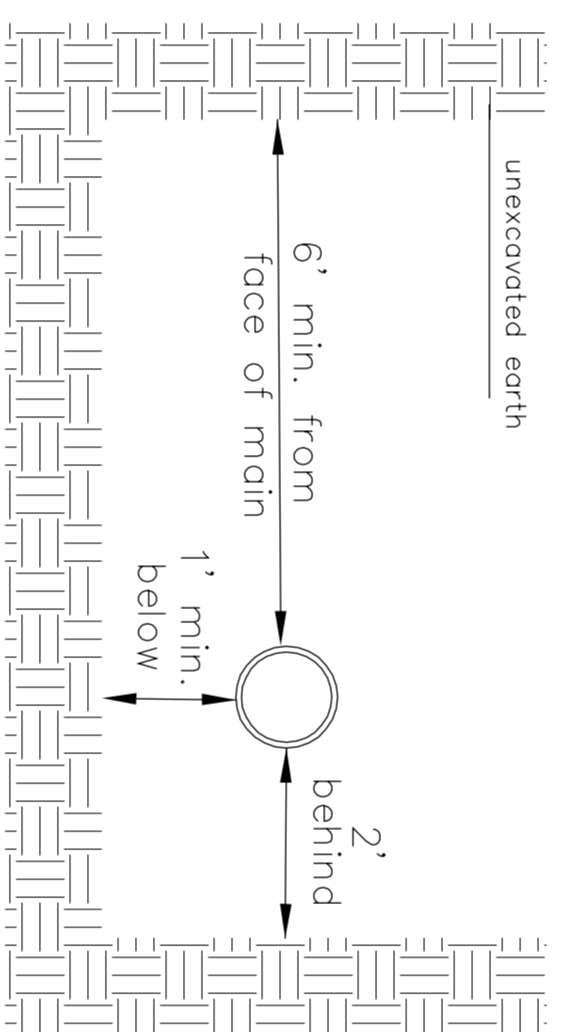
TYPICAL THRUST BLOCKS



KEY BLOCK DETAIL



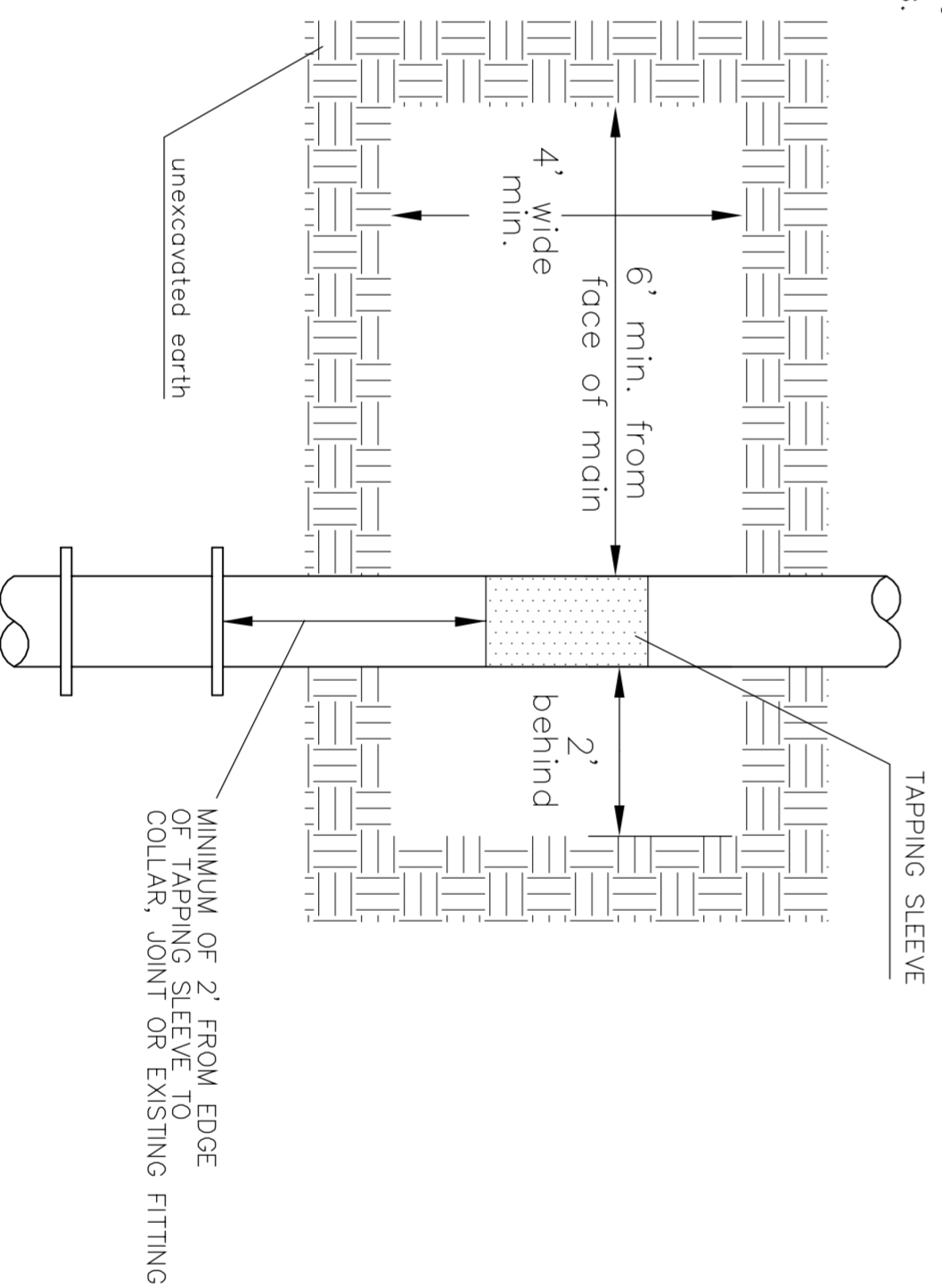
TRENCH COMPACTION IN ROAD RIGHT-OF-WAY



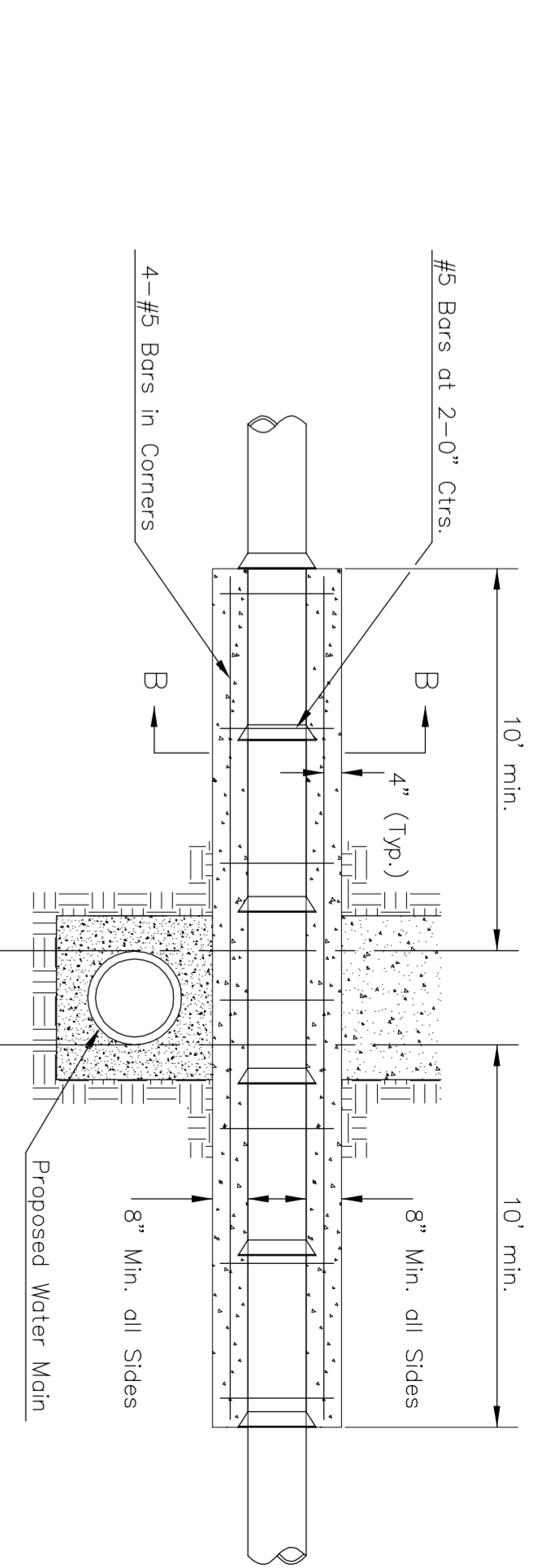
SIDE VIEW

Note: When shoring is required it is to be per The City of Wichita Standard Specifications.

TOP VIEW



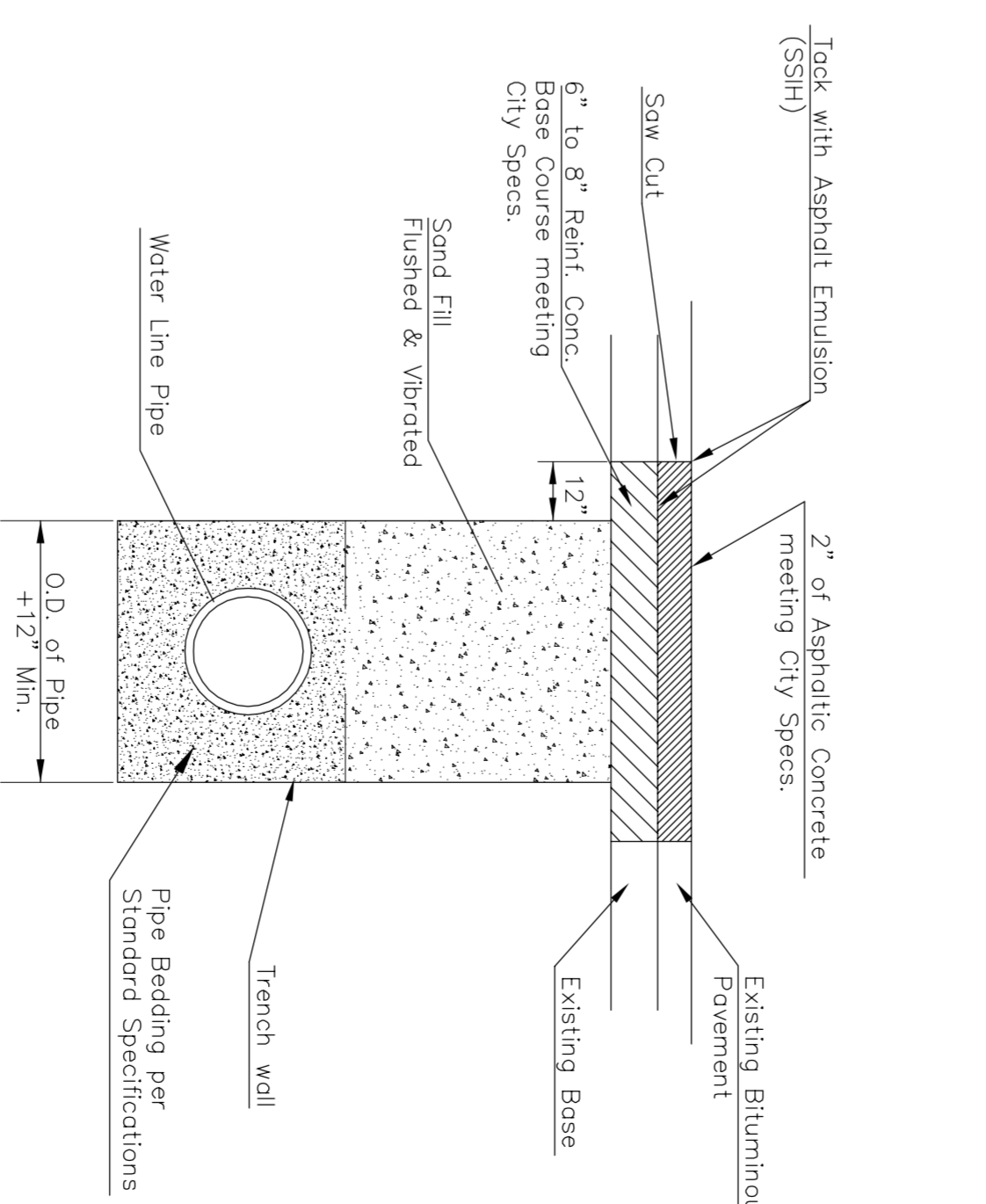
EXCAVATION FOR WET TAP



SECTION B-B

REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

Note: Encasement to begin and end at a Bell on Sanitary Sewer Pipe.



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS

REVISED APRIL 2014



04/30/13

		MISCELLANEOUS WATER DETAILS GARY JANZEN, P.E. CITY ENGINEER	
CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501		DATE	01/15
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION		SHEET	3 of 12

* PLANS GOVERN UNLESS OTHERWISE NOTED ON PLANS