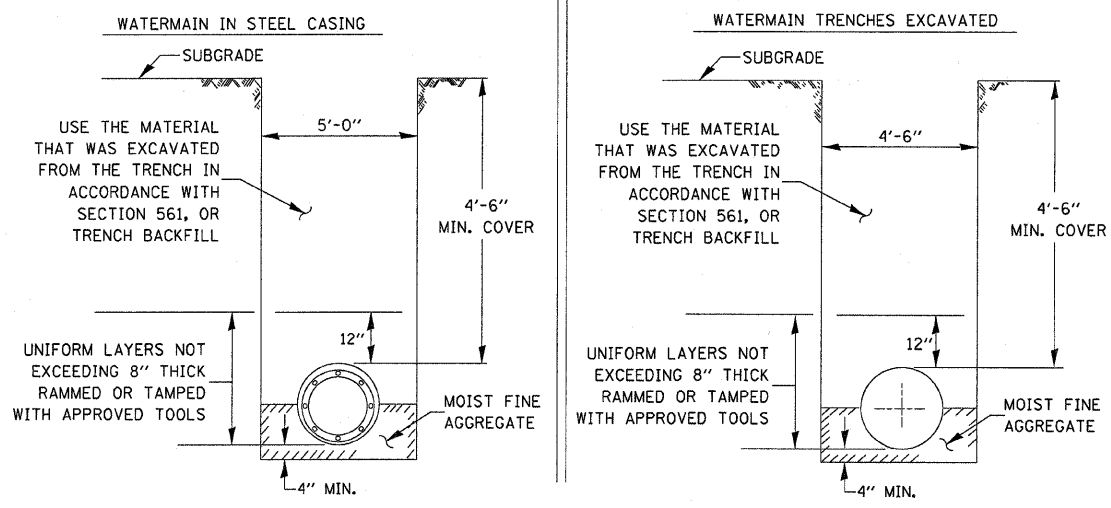
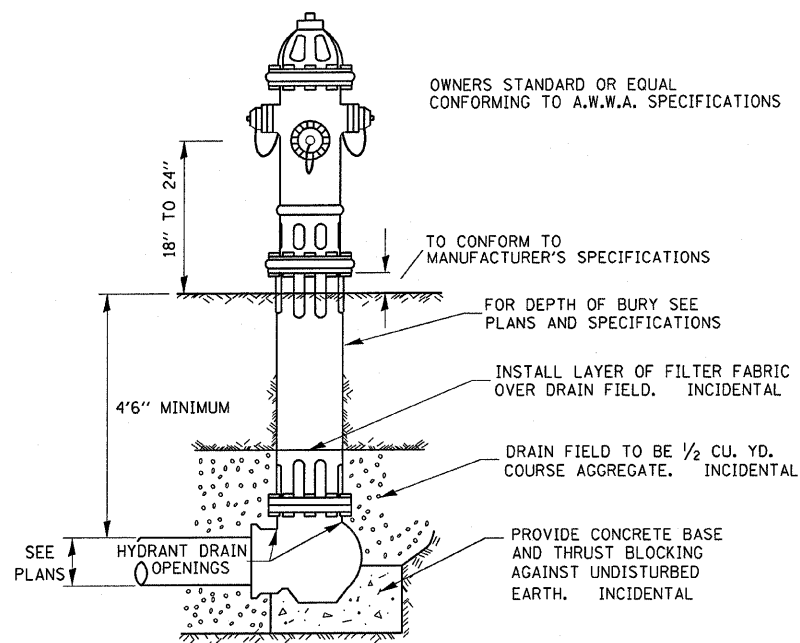


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
326		LIVINGSTON	354	162
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
*(123,123X)RS-3, (124)RS-5, (123)BR-3				

WATERMAIN INSTALLATION REQUIREMENTS

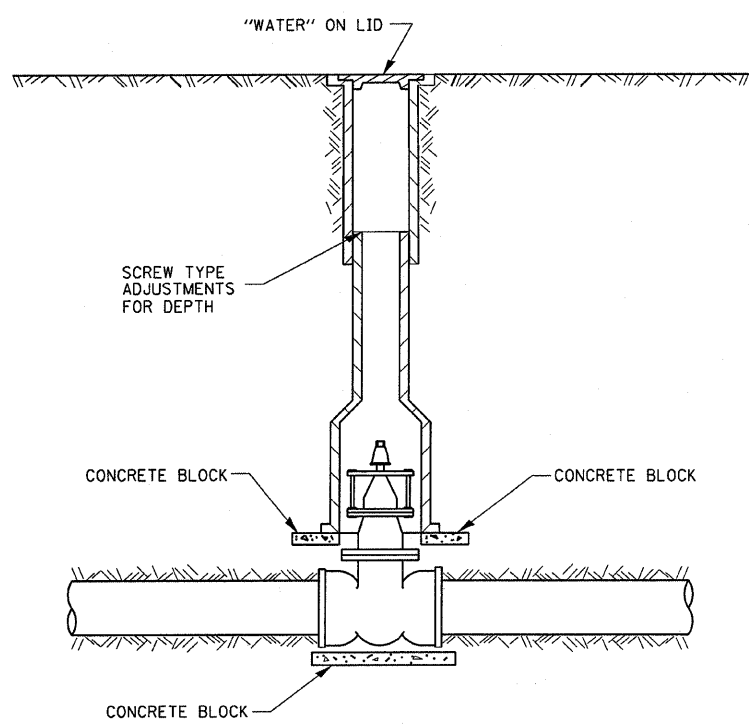


- GENERAL NOTES:
1. ANY SOFT OR SPONGY MATERIAL ENCOUNTERED BELOW THE ELEVATION OF THE PIPE SHALL BE REMOVED AND REPLACED WITH WELL COMPACTED MOIST FINE AGGREGATE.
 2. ANY ROCK ENCOUNTERED IN THE TRENCH SHALL BE REMOVED TO A DEPTH OF AT LEAST 8 INCHES BELOW THE PIPE GRADE AND REPLACED WITH WELL COMPACTED MOIST FINE AGGREGATE.
 3. THE SIDES OF THE TRENCH MAY BE SLOPED OR BENCHED ABOVE A 5 FT. TRENCH DEPTH OR ABOVE THE ELEVATION OR THE TOP OF PIPE, WHICHEVER IS GREATER, IN LIEU OF COMPLETE SHORING OR SHEETING OF THE FULL TRENCH DEPTH.
- BACKFILL OPTIONS:
- METHOD 1: UNIFORM LAYERS NOT EXCEEDING 12" THICK RAMMED OR TAMPED WITH APPROVED TOOLS
 METHOD 2: UNIFORM LAYERS NOT EXCEEDING 12" THICK INUNDATED OR DEPOSITED IN WATER
 METHOD 3: FILL TRENCH WITH LOOSE MATERIAL THEN JET WITH WATER, 6 FT MINIMUM SPACING OF HOLES

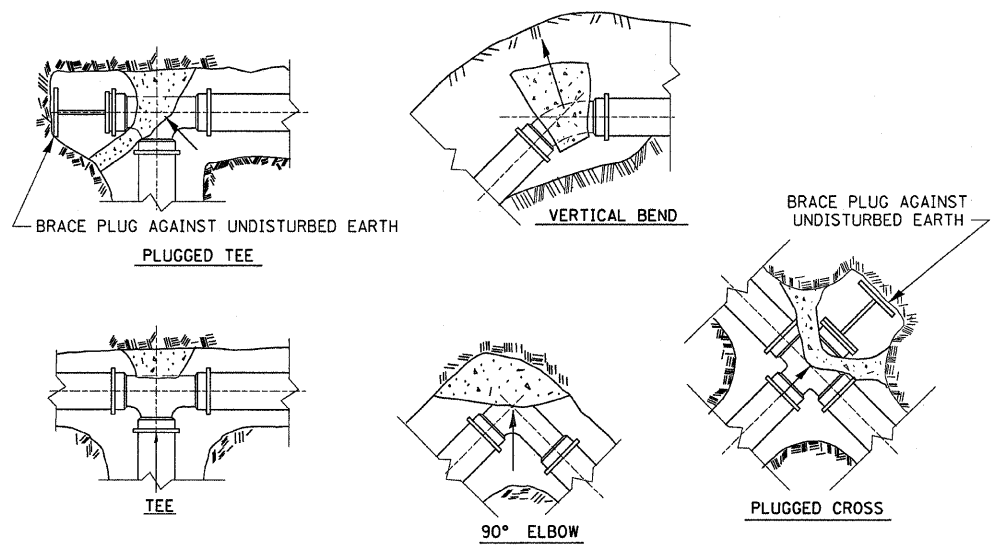


NOTE:
CONCRETE BASE AND BLOCKING MATERIAL SHALL NOT BLOCK NOR OBSTRUCT HYDRANT DRAIN.

TYPICAL HYDRANT INSTALLATION

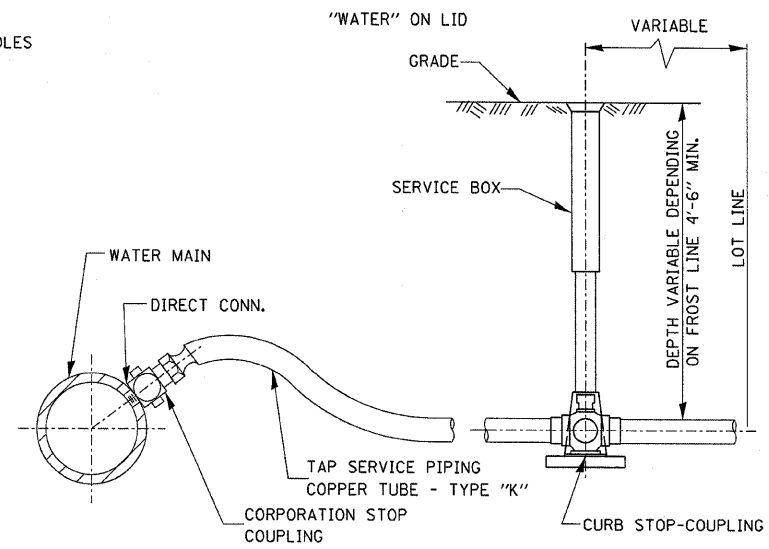


TYPICAL VALVE BOX INSTALLATION



- NOTES:
- ALL BLOCKS BEAR AGAINST UNDISTURBED EARTH.
 - ALL BLOCKING SHALL BE 3,000 P.S.I. POURED CONCRETE.
 - ARROWS INDICATE DIRECTION OF THRUST.
 - ALL FITTINGS SHOWN IN PLAN EXCEPT VERTICAL BEND.

TYPICAL THRUST BLOCK INSTALLATIONS



TYPICAL TAP SERVICE PIPING (COPPER)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

WATERMAIN DETAILS

SCALE: VERT. HORIZ.
DATE

DRAWN BY
CHECKED BY