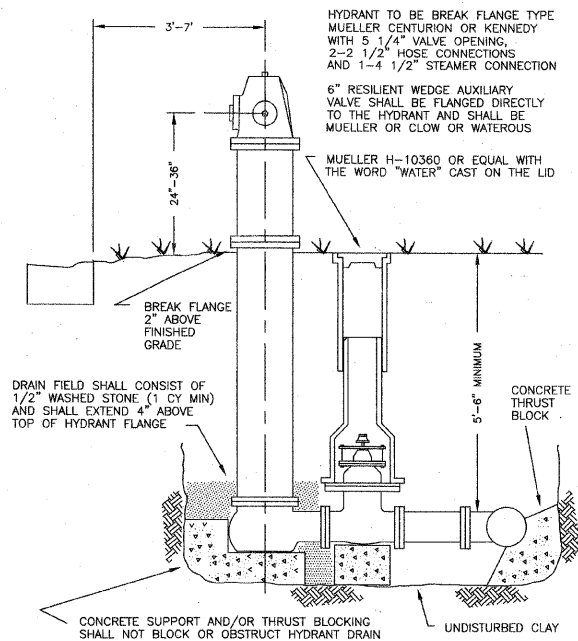
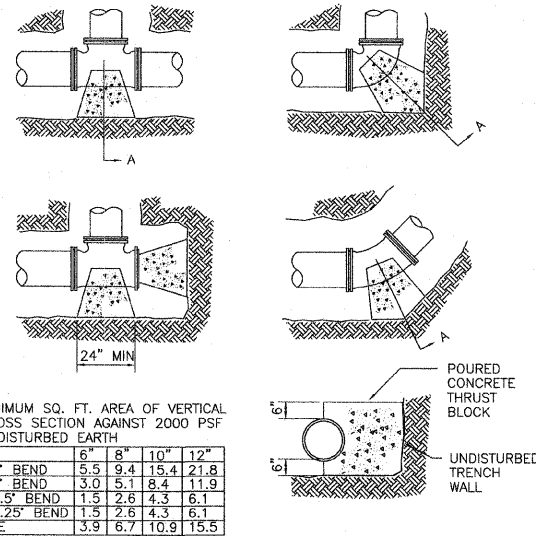


FIRE HYDRANT

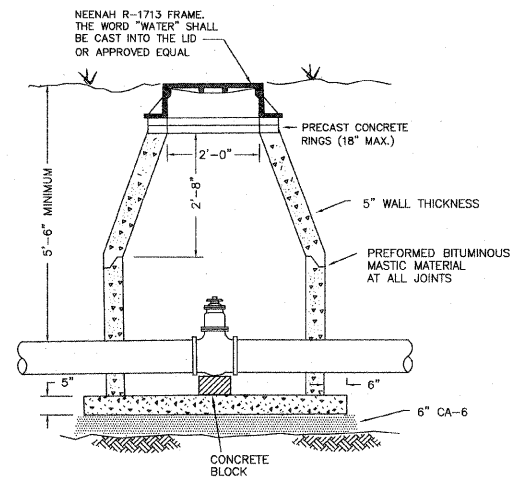


THRUST BLOCK INSTALLATION



THRUST BLOCKING TO PREVENT MOVEMENT OF LINES UNDER PRESSURE AT BENDS, TEES, CAPS, VALVES, HYDRANTS AND AT POINTS SPECIFIED BY THE ENGINEER SHALL BE CLASS "X" CONCRETE, A MINIMUM OF 12" THICK, PLACED BETWEEN SOLID GROUND AND FITTING, AND SHALL BE ANCHORED IN SUCH A MANNER THAT PIPE AND FITTING WILL BE ACCESSIBLE FOR REPAIRS. THRUST BLOCKS SHALL BE PLACED AT BENDS OF 11-1/4 DEGREES OR MORE. RETAINER GLANDS MAY BE USED IN PLACE OF THRUST BLOCKS. THE COST OF THRUST BLOCKS OR RETAINER GLANDS SHALL BE INCLUDED IN THE COST OF THE FITTING.

WATER VALVE VAULT



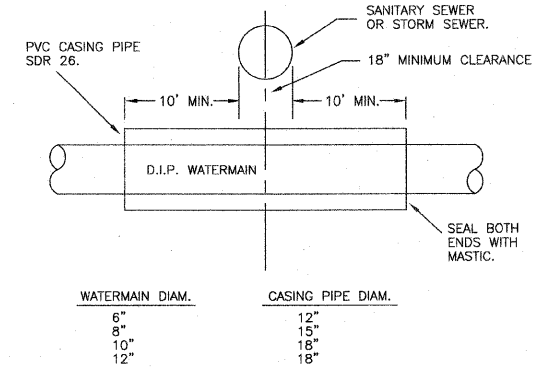
INSIDE DIAMETER SHALL BE 48" FOR WATER MAIN 6" THROUGH 10" AND 60" FOR WATER MAIN 12" AND OVER
VALVES SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO AWWA C509 AND SHALL BE MUELLER OR WATEROUS

WATERMAIN CONFLICTS

CONFLICTS OCCUR WHERE WATERMANS PASS WITHIN 18" OVER OR PASS UNDER A SANITARY AND/OR STORM SEWER AND SHALL BE PROVIDED FOR AS FOLLOWS:

SANITARY SEWER CONFLICTS:

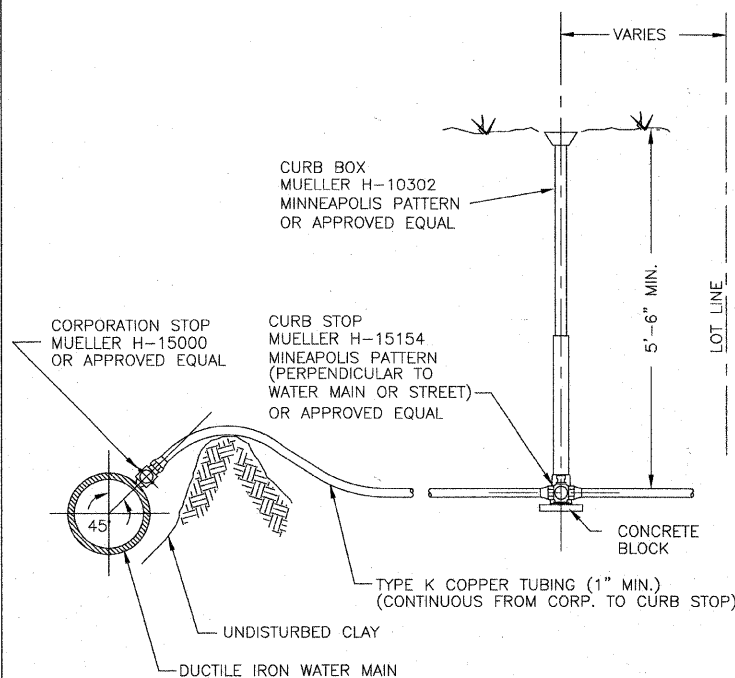
PROVIDE WATERMAIN EQUIVALENT PIPE AND JOINTS FOR THE SANITARY SEWER 10 FT. EITHER SIDE OF WATERMAIN CROSSING USING MISSION TYPE COUPLINGS TO MAKE THE TRANSITION BETWEEN THE TWO MATERIALS, OR ENCASE WATERMAIN AS SHOWN BELOW. REGARDLESS OF METHOD, THERE SHALL BE A MINIMUM 18" CLEARANCE BETWEEN TOP OF WATERMAIN AND THE BOTTOM OF THE SANITARY SEWER.



STORM SEWER CONFLICTS:

PROVIDE STORM SEWER PIPE WITH O-RING GASKET JOINTS CONFORMING TO ASTM C-443 10 FT. EITHER SIDE OF WATERMAIN CONFLICTS AND PROVIDE A MINIMUM CLEARANCE BETWEEN TOP OF WATERMAIN AND THE BOTTOM OF THE STORM SEWER.

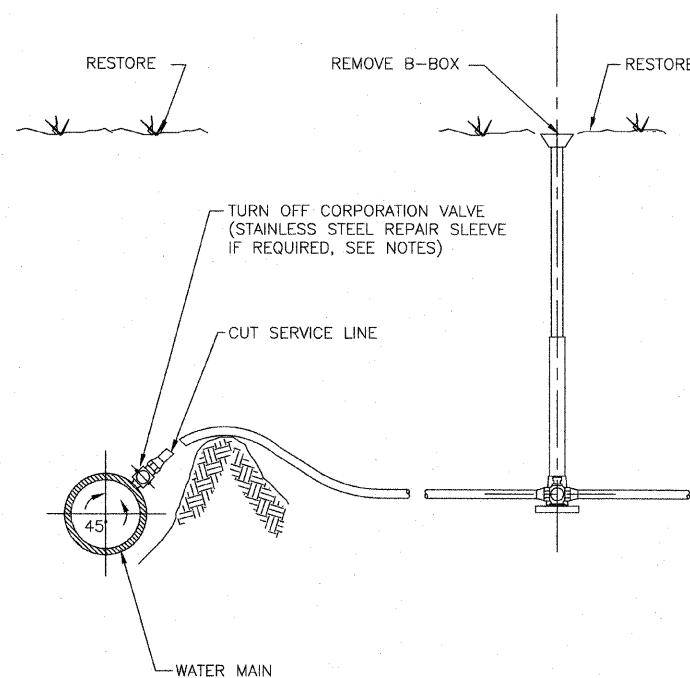
WATER SERVICE DETAIL



NOTES:

WATER SERVICE LINE SHALL BE IN A SEPARATE TRENCH 10 FT. FROM THE SANITARY SEWER SERVICE LINE OR IN THE SAME TRENCH BUT ON A SHELF 18" ABOVE THE SEWER LINE, IN WHICH CASE THE SEWER PIPE MATERIAL SHALL BE DUCTILE IRON OR SCHEDULE 40 PVC WITH SOLVENT WELD JOINTS.
TAPS TO HDPE WATER MAIN REQUIRE ELECTROFUSION SADDLE
TAPS TO PVC WATER MAIN REQUIRE STAINLESS STEEL TAPPING SLEEVE

WATER SERVICE DISCONNECTION



NOTES:

ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL, OR BETTER, CONDITION.
WATER SERVICE DISCONNECTIONS 3/4 AND 1" SHALL BE SHUT OFF AT WATER MAIN IF THE CORPORATION VALVE LEAKS, CORPORATION SHALL BE REMOVED, AND STAINLESS STEEL REPAIR SLEEVE SHALL BE PLACED OVER THE TAP.
WATER SERVICE DISCONNECTIONS GREATER THAN 1": CORPORATION VALVE SHALL BE REMOVED, AND A STAINLESS STEEL REPAIR SLEEVE SHALL BE PLACED OVER THE TAP.
DISCONNECTION INSPECTIONS AND MAIN SHUT DOWNS SHALL BE COORDINATED WITH PUBLIC WORKS UTILITY DIVISION.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION VILLAGE OF PALATINE PALATINE ROAD & PLUM GROVE ROAD RECONSTRUCTION SMITH STREET TO US 14 (NORTHWEST HIGHWAY) WATER MAIN DETAILS PALATINE ROAD
NAME	DATE	
		SCALE: VERT. HORIZ. DATE OCTOBER 19, 2009
		DRAWN BY CHECKED BY