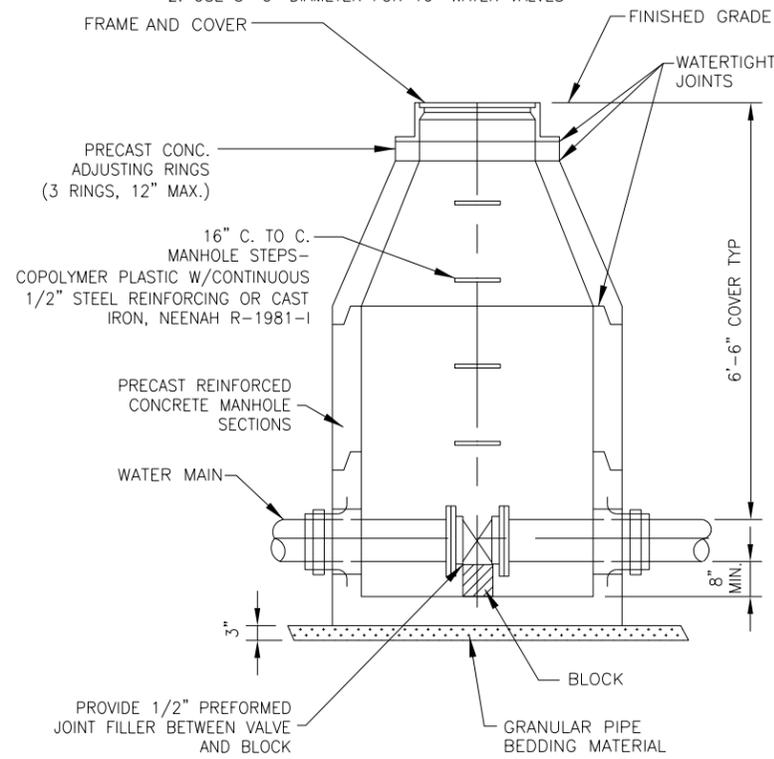
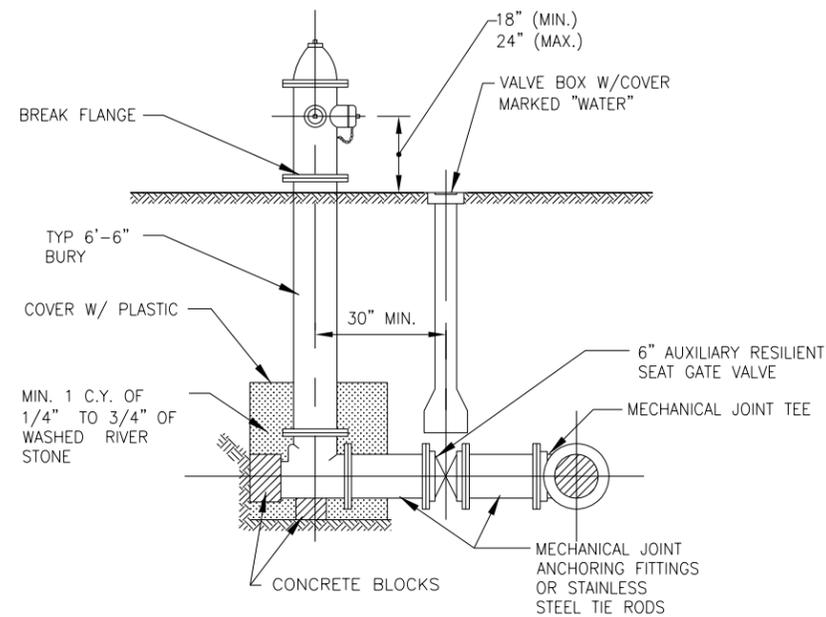


- NOTES:
 1. CONCENTRIC CONE REQUIRED
 2. USE 5'-0" DIAMETER FOR 16" WATER VALVES



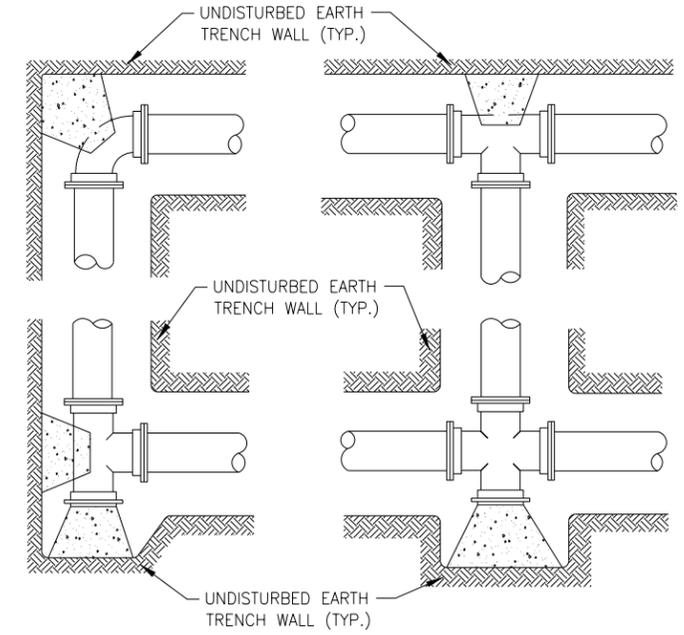
WATER VALVE VAULT DETAIL

NO SCALE

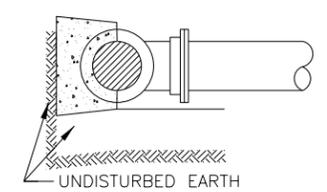


FIRE HYDRANT INSTALLATION DETAIL

NO SCALE



PLANS



SECTIONS

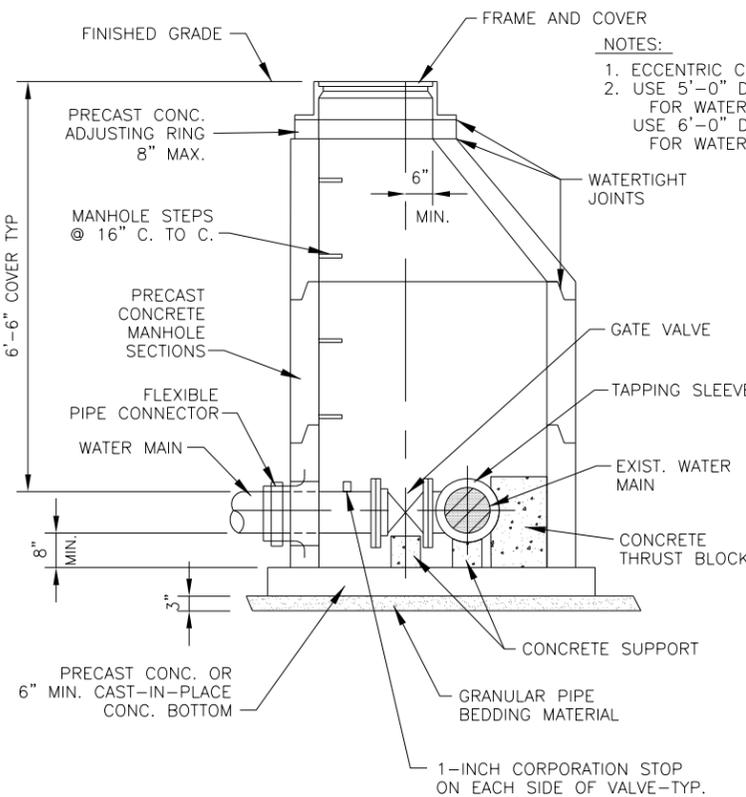
- NOTES:
 1. PROVIDE PRECAST OR CAST-IN-PLACE CONCRETE THRUST BLOCKS OF ADEQUATE SIZE AND THRUST BEARING SURFACE TO PREVENT MOVEMENT OF PIPELINE UNDER PRESSURE.
 2. PLACE THE BASE AND THRUST BEARING SIDES OF THRUST BLOCK DIRECTLY AGAINST UNDISTURBED EARTH.
 3. PLACE THRUST BLOCKING SO THE FITTING JOINTS WILL BE ACCESSIBLE FOR REPAIR.

WATERMAIN THRUST BLOCKING DETAILS

NO SCALE

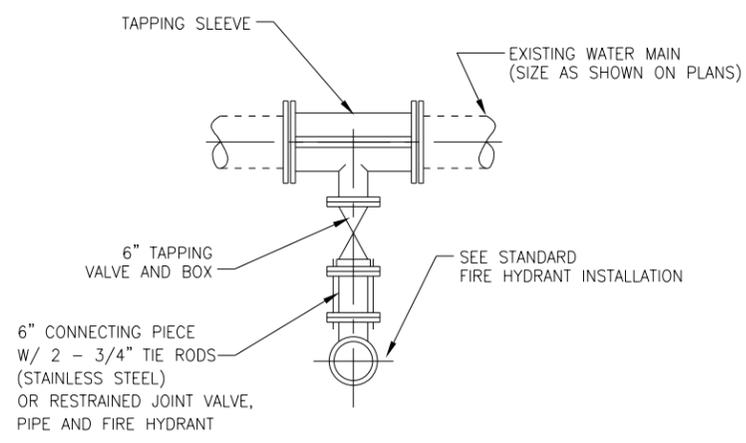
THRUST BLOCK SCHEDULE

FITTING	DIMENSION (FT.)				BEARING AREA (SQ. FT.)
	H	L	W	F	
20" X 20" X 20" TEE	6.0	7.0	2.0	2.0	41.2
20" X 90 DEGREE BEND	5.0	6.0	2.0	2.0	29.1
20" X 45 DEGREE BEND	4.0	4.0	2.0	2.0	15.8
20" X 22-1/2 DEGREE BEND	3.0	3.0	2.0	2.0	8.0
20" X 11-1/4 DEGREE BEND	2.0	2.0	2.0	2.0	4.0
16" X 16" X 16" TEE	5.0	6.0	2.0	2.0	26.7
16" X 90 DEGREE BEND	4.5	4.5	2.0	2.0	18.9
16" X 45 DEGREE BEND	3.0	3.5	2.0	2.0	10.2
16" X 22-1/2 DEGREE BEND	2.5	2.5	2.0	2.0	5.2
16" X 11-1/4 DEGREE BEND	1.5	2.0	2.0	2.0	2.6
12" X 12" X 12" TEE	4.0	4.0	1.5	1.5	15.4
12" X 90 DEGREE BEND	3.0	4.0	1.5	1.5	10.9
12" X 45 DEGREE BEND	2.0	3.0	1.5	1.5	5.9
12" X 22-1/2 DEGREE BEND	1.5	2.0	1.5	1.5	3.0
12" X 11-1/4 DEGREE BEND	1.0	1.5	1.5	1.5	1.5
10" X 10" X 10" TEE	3.0	4.0	1.5	1.5	10.9
10" X 90 DEGREE BEND	3.0	3.0	1.5	1.5	7.7
10" X 45 DEGREE BEND	2.0	3.0	1.5	1.5	4.2
10" X 22-1/2 DEGREE BEND	1.5	1.5	1.5	1.5	2.1
10" X 11-1/4 DEGREE BEND	1.0	1.5	1.5	1.5	1.1
8" X 8" X 8" TEE	2.5	3.0	1.0	1.0	7.2
8" X 90 DEGREE BEND	2.5	2.5	1.0	1.0	5.1
8" X 45 DEGREE BEND	1.5	2.0	1.0	1.0	2.8
8" X 22-1/2 DEGREE BEND	1.0	2.0	1.0	1.0	1.4
8" X 11-1/4 DEGREE BEND	1.0	1.0	1.0	1.0	1.0



PRESSURE CONNECTION WATER VALVE VAULT DETAIL

NO SCALE



FIRE HYDRANT - PRESSURE TAP

NO SCALE

COPYRIGHT © 2012 BY BAXTER & WOODMAN, INC.
 STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 1500 N. WOODSTOCK AVE., SUITE 200, DEERFIELD, IL 60015
 847.939.3300 FAX 847.939.3301
 WWW.BAXTERWOODMAN.COM



DESIGNED - MPK	REVISED -
DRAWN - KAR	REVISED -
CHECKED - MPK	REVISED -
DATE - APRIL 30, 2013	FILE - 110789-WaterMain-Details.dgn

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

NORTH PARK PUBLIC WATER DISTRICT
 ROUTE 173 WATER MAIN RELOCATION
 WATER MAIN REPLACEMENT DETAILS

SCALE: NONE

STA. TO STA.

F.A.P. 303	SECTION 129R	COUNTY WINNEBAGO	TOTAL SHEETS 968	SHEET NO. 479
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		