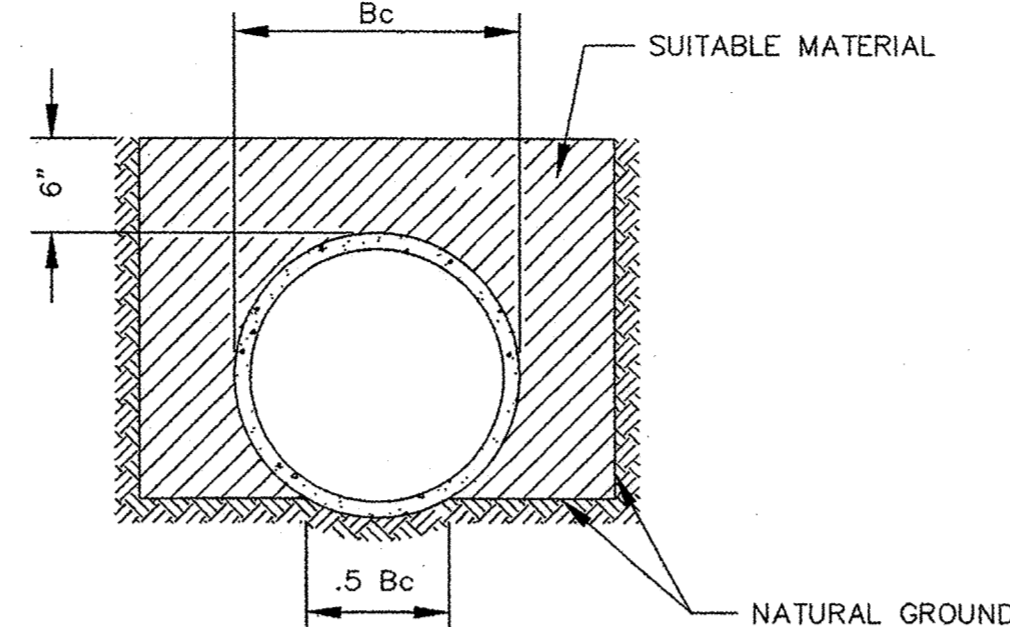


NOTE: ALL COSTS OF EXCAVATION BELOW GRADE AND PLACEMENT OF GRANULAR BEDDING SHALL BE INCLUDED IN THE BID PRICES FOR PIPE ITEMS.

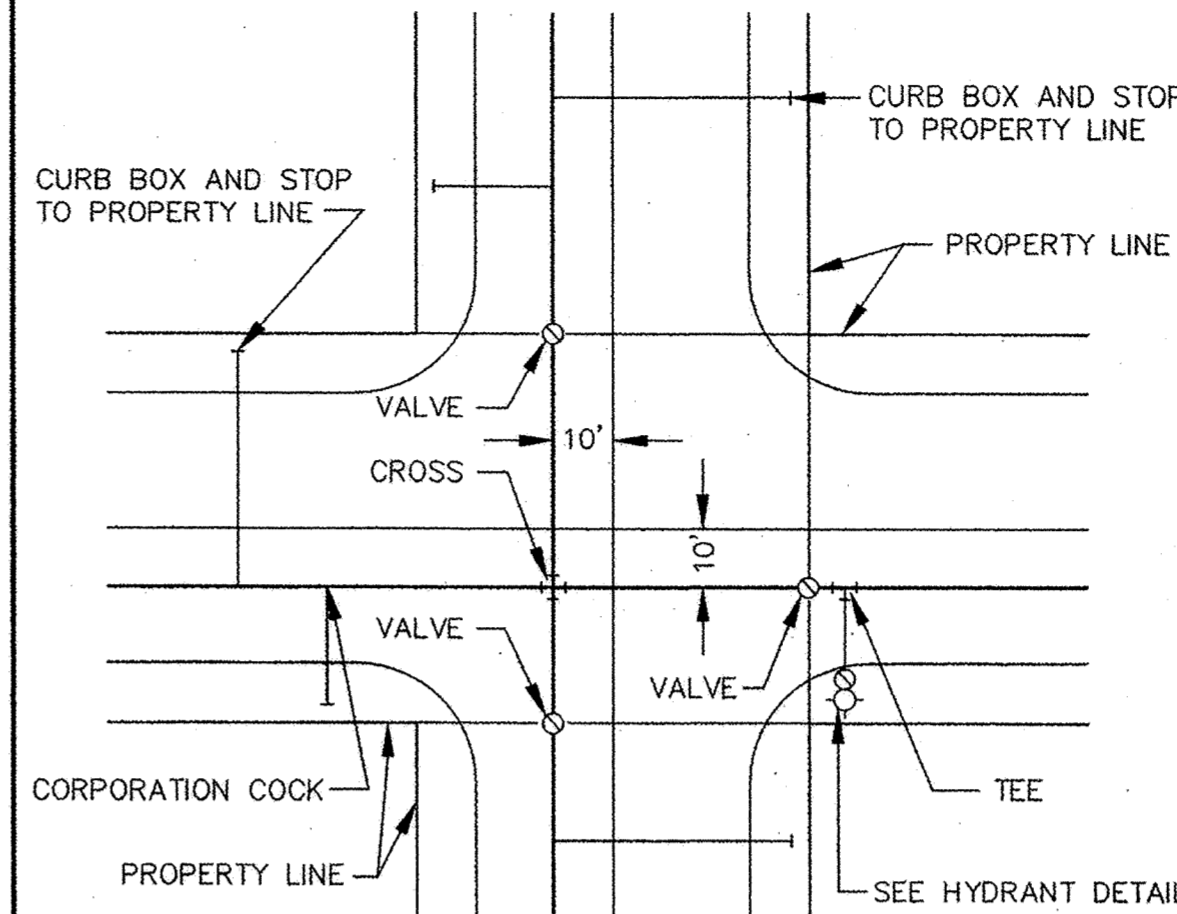
CLASS B PIPE BEDDING



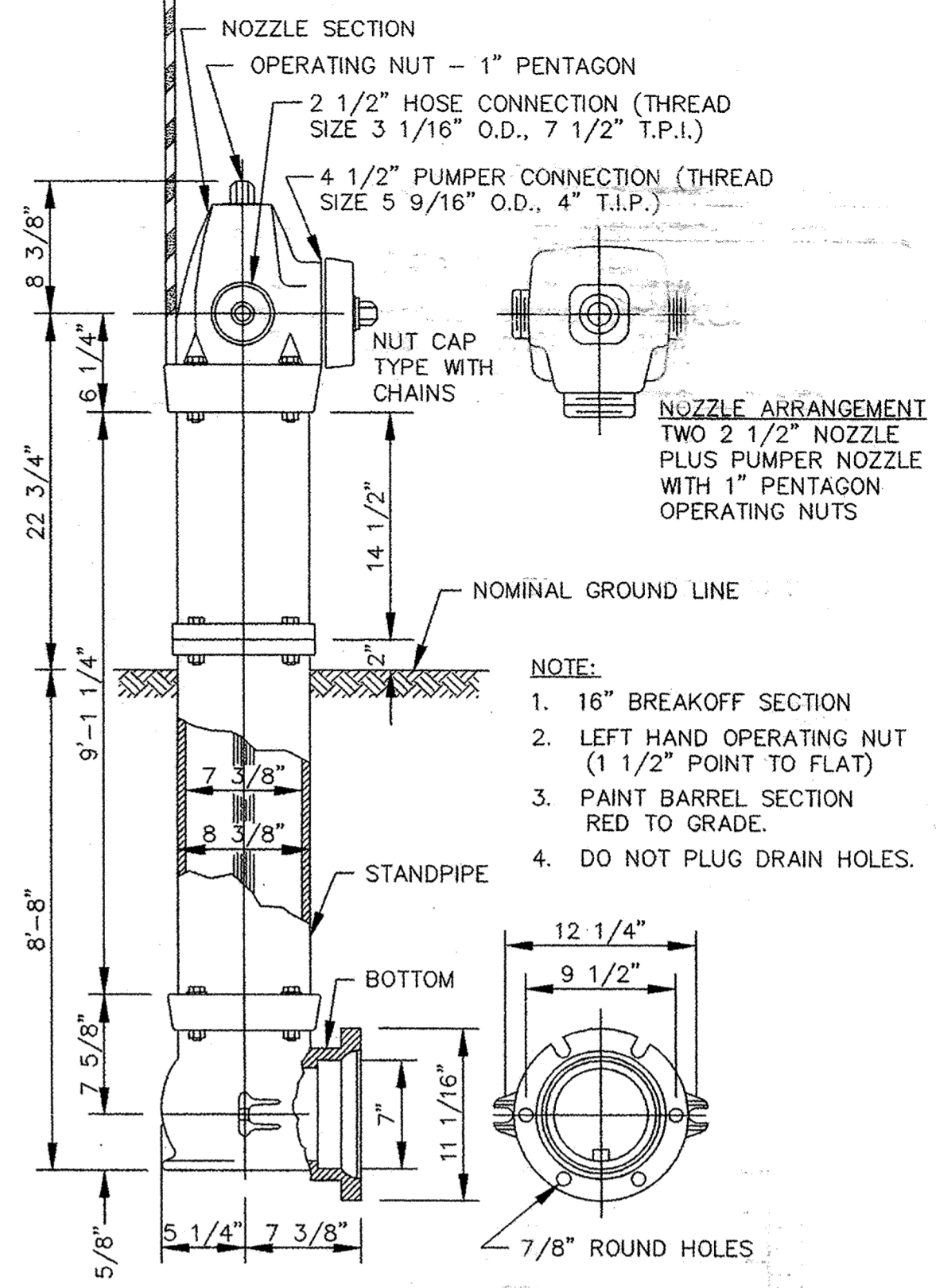
THE BOTTOM OF THE TRENCH SHALL BE SHAPED TO FIT THE PIPE BARREL FOR AT LEAST 50% OF THE OUTSIDE DIAMETER. THE REMAINDER OF THE PIPE IS SURROUNDED TO A HEIGHT OF AT LEAST 6" ABOVE ITS TOP BY SELECT FILL MATERIALS, PLACED BY HAND TOOLS AND COMPACTED TO COMPLETELY FILL ALL SPACES UNDER AND ADJACENT TO THE PIPE.

NOTE: ALL COSTS OF EXCAVATION BELOW GRADE AND PLACEMENT OF GRANULAR BEDDING SHALL BE INCLUDED IN THE BID PRICES FOR PIPE ITEMS.

CLASS C PIPE BEDDING

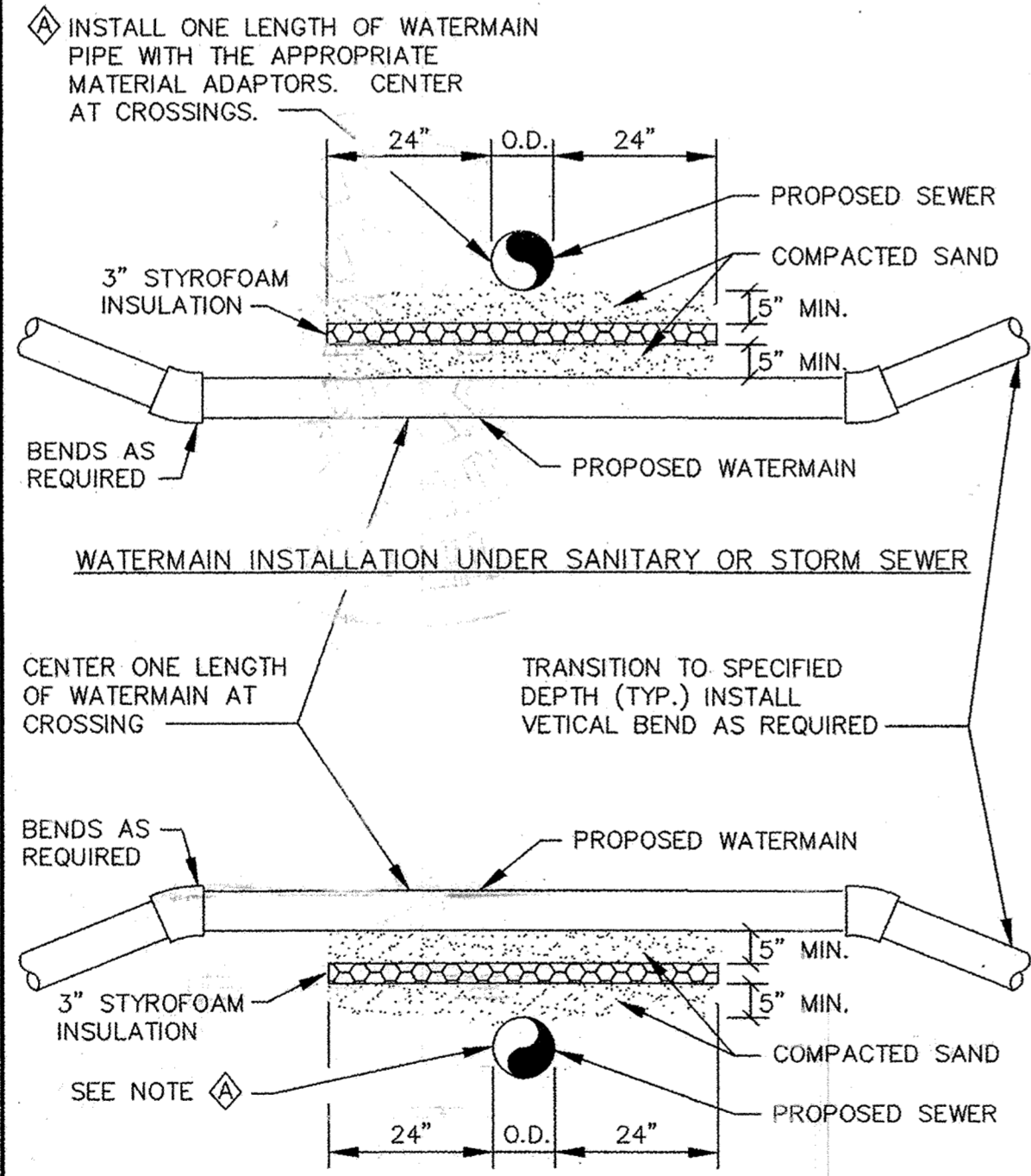


TYPICAL WATER LAYOUT



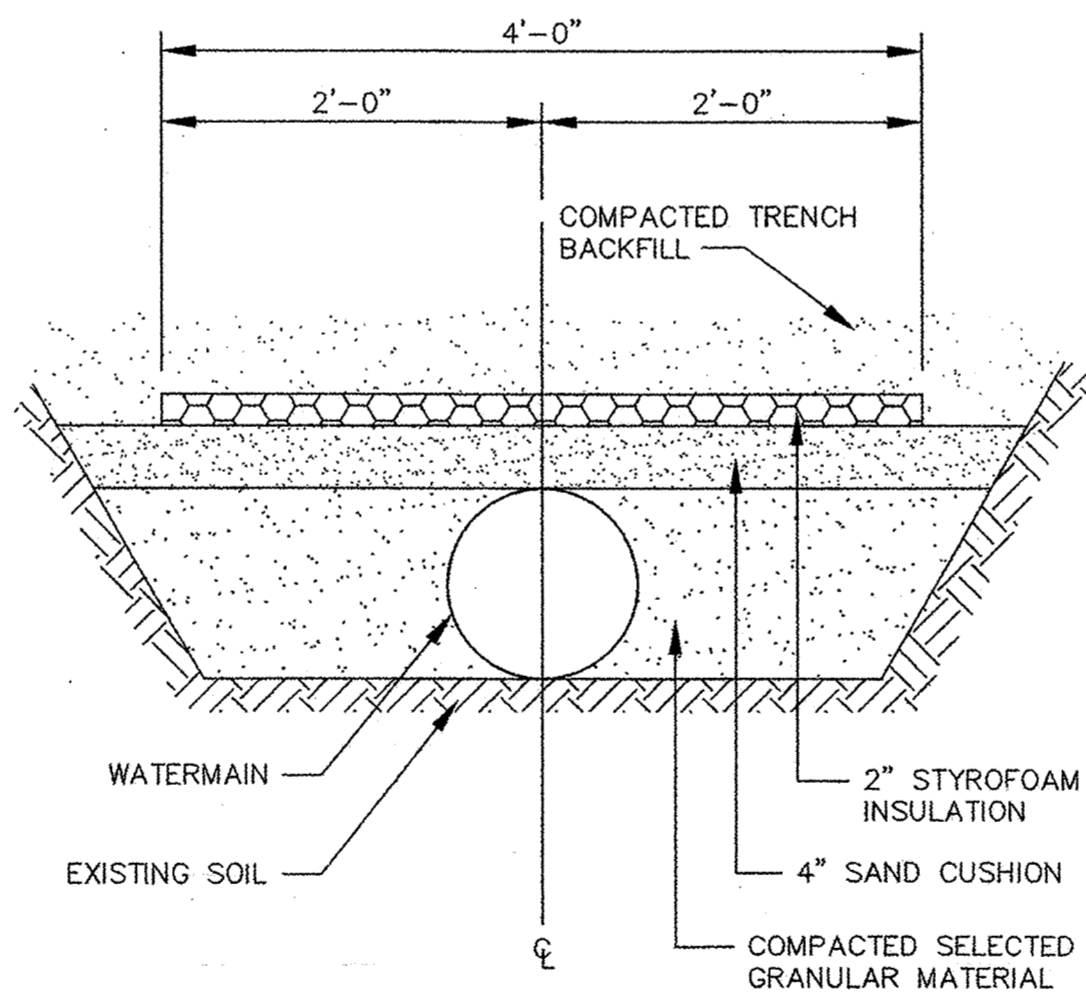
NOTE: HYDRANT LOCATING DEVICES REQUIRED - SEE SPECIFICATIONS.

PACER HYDRANT DETAIL

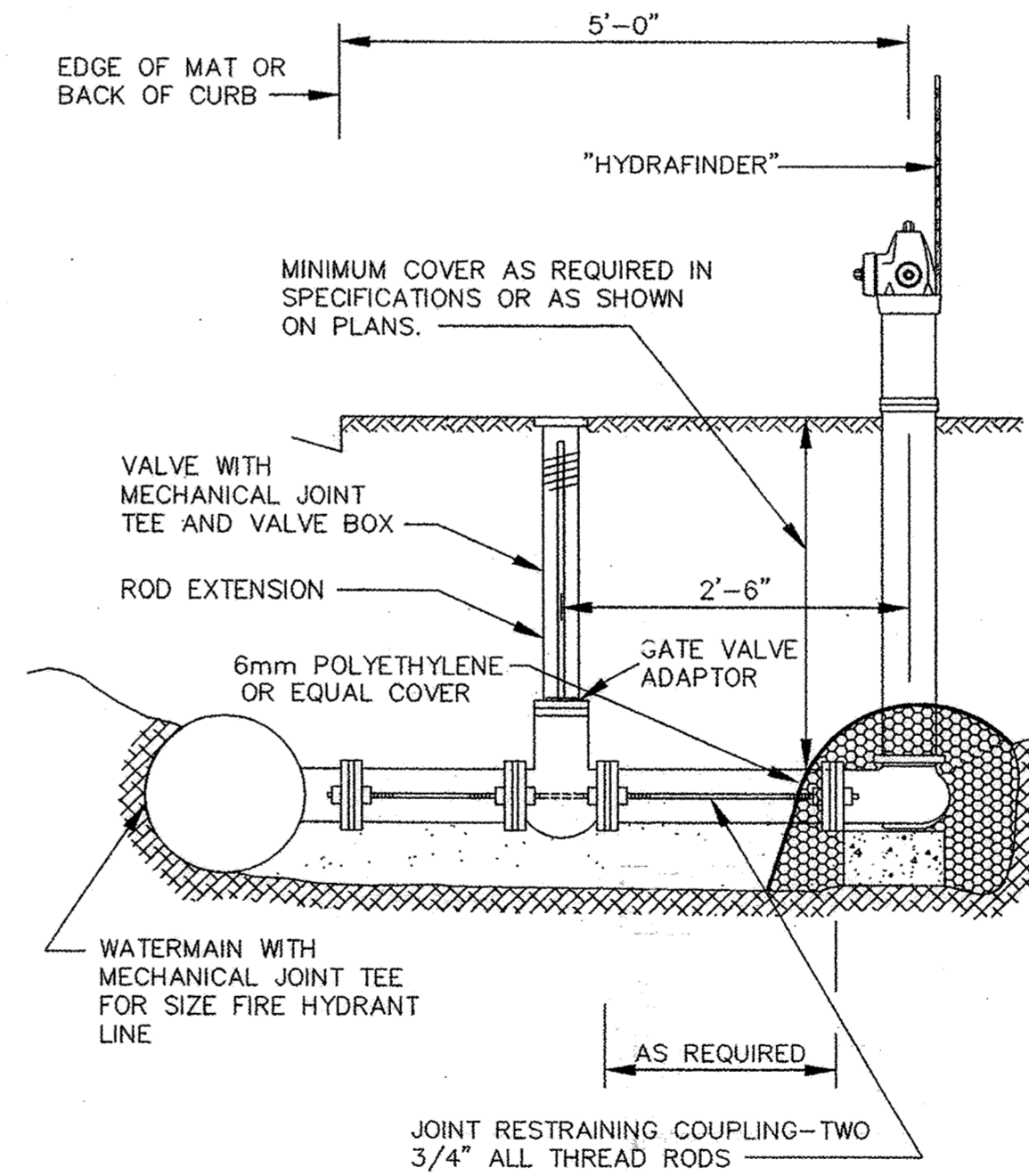


NOTES:
1. WHEN WATERMAIN AND SANITARY SEWER CROSSINGS HAVE LESS THAN 18" VERTICAL SEPARATION, INSTALL CROSSING AS SHOWN.
2. WHEN WATERMAIN COVER IS LESS THAN 7.5 FEET, INSTALL WATERMAIN UNDER SANITARY SEWER.

WATERMAIN CROSSING

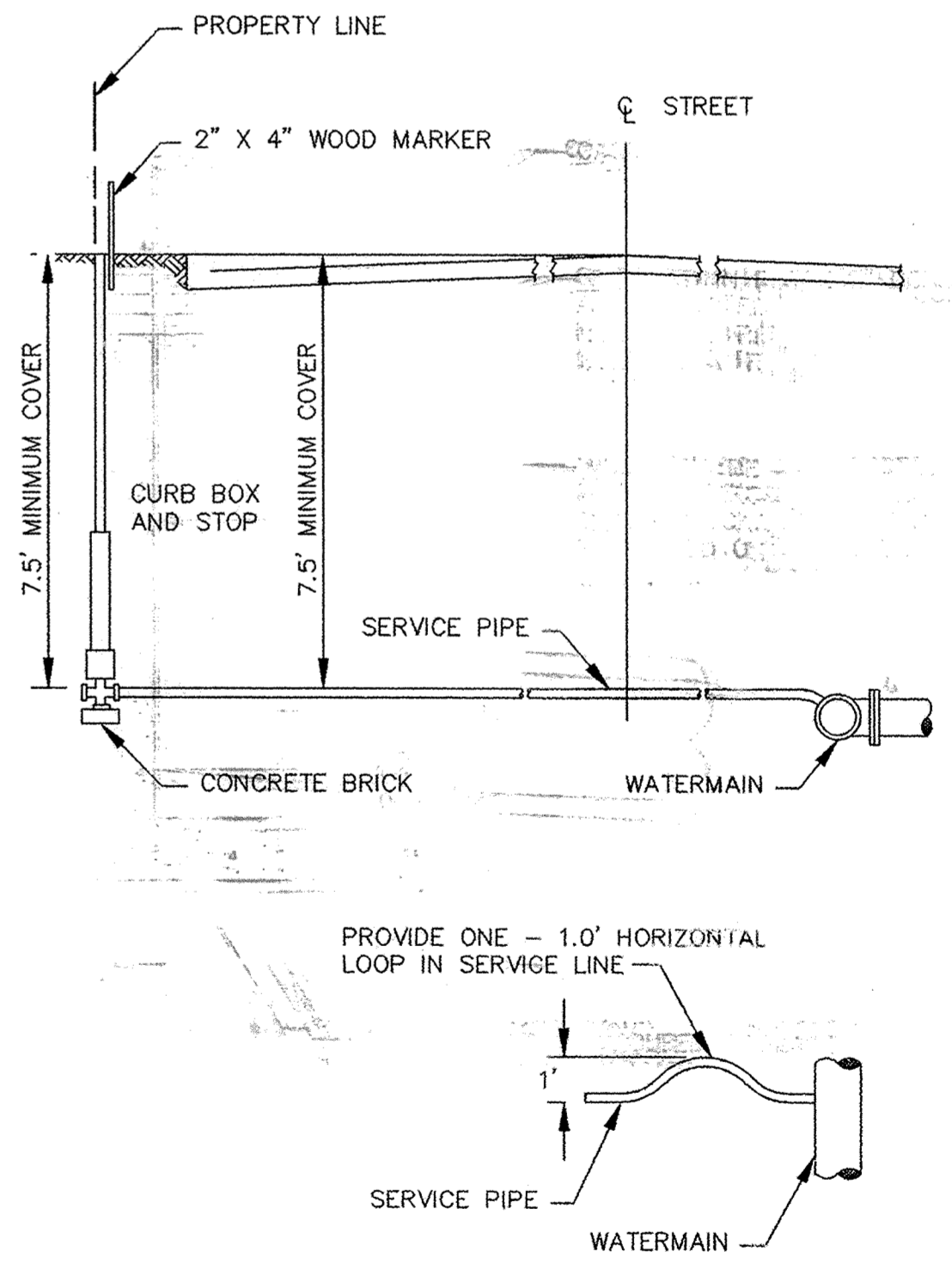


PIPE INSULATION DETAIL



NOTE: ALL HYDRANT LEADS SHALL BE RESTRAINED FROM THE MAIN TO THE HYDRANT THROUGH THE USE OF THREADED RODS OR MEGALUGS AS RESTRAINTS IN ACCORDANCE WITH THE STANDARD DETAIL PLATES.

RODDING DETAIL



TYPICAL SERVICE DETAIL

Westwood Professional Services, Inc.
7699 Anagram Drive
Eden Prairie, MN 55344
PHONE 952-937-5150
FAX 952-937-5822
TOLL FREE 1-888-937-5150
Westwood www.westwoodps.com
PREPARED FOR:
D.R. Horton, Inc.
20860 Kenbridge Court, Suite 100
Lakeville, MN 55044

CONTRACTOR: Ryan Contracting Co.
8700 13th Ave. East
Shakopee, MN 55379
952-894-3200
RECORD DRAWING
CONFORMING TO CONSTRUCTION RECORDS.
BY STEVE PHILIPSEN DATE 12/08/06
WESTWOOD PROFESSIONAL SERVICES

P:\20041209\DWG\RECORD\20041209DE@2.dwg 10/12/2006 12:28:13 PM CST

DESIGNED BY: _____ DRAWN BY: _____
APPROVED: _____ JOB NUMBER: _____
CAD DATE: April 14, 1999 11:14:59 a.m.
CAD FILE: 230000m\ER-SM.DWG

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
DATE 09/21/06 REG. NO. _____

NO.	DATE	BY	REVISION DESCRIPTION
09/21/06			RECORD DRAWING (JRM/GHG)

1326 ENERGY PARK DRIVE
ST. PAUL, MINNESOTA 55108
(612) 644-4389
Howard R. Green Company
CONSULTING ENGINEERS

CITY OF ELK RIVER
TROTT BROOK FARMS 11TH ADDITION
WATER MAIN DETAILS

SHEET NO.
8
OF
10