

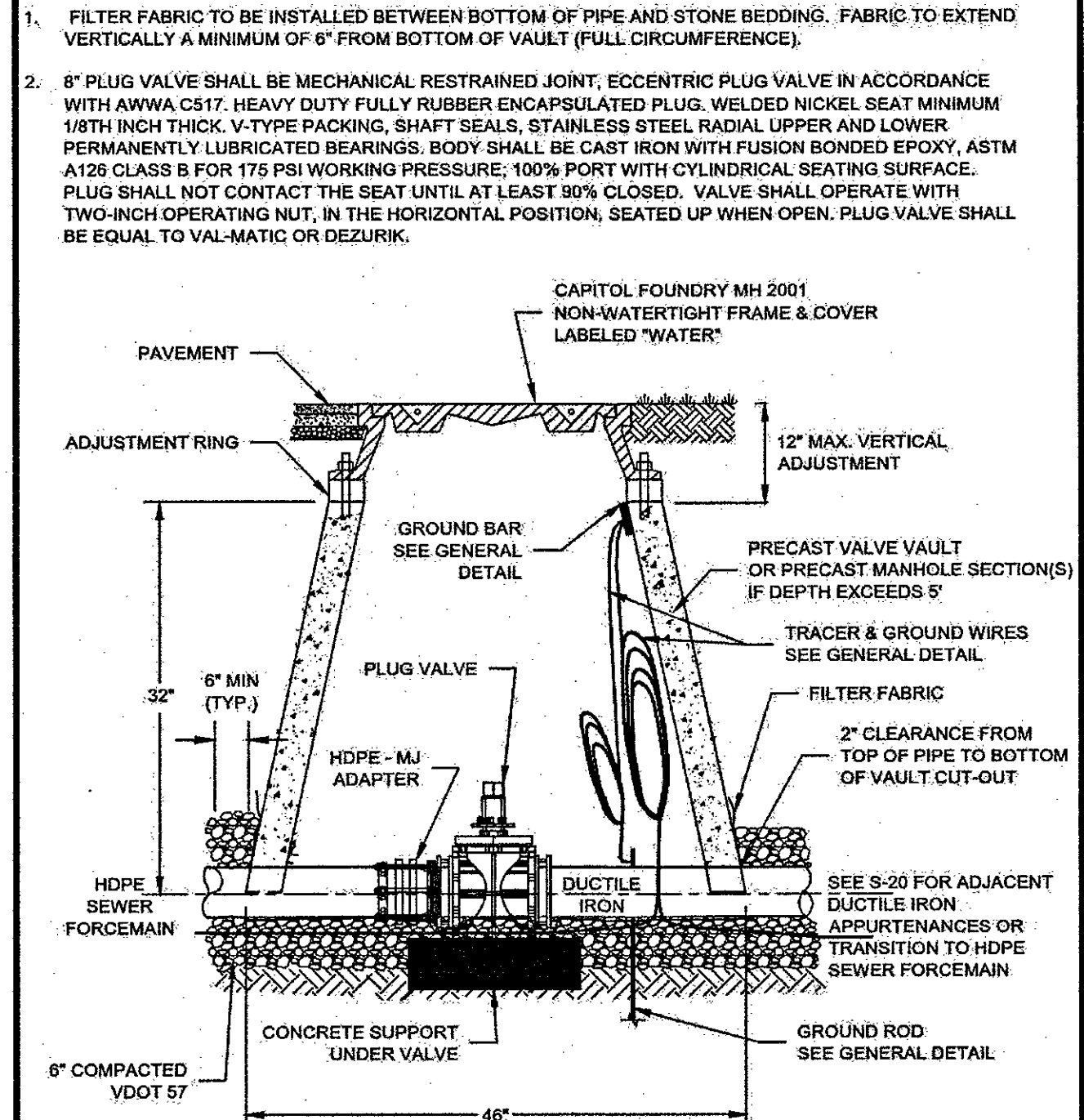
NOTES:

1. CLEAR FLOW VALVE SHIPPED ASSEMBLED WEIGHING APPROXIMATELY 38,000 LBS.
2. 8\"/>

SUMMIT VIEW BUSINESS PARK UTILITY IMPROVEMENTS PHASE 2

PLATE TITLE:	8-INCH METER VAULT	
PLATE #:	W-26	DATE: 06/13/18

SCALE: N.T.S.



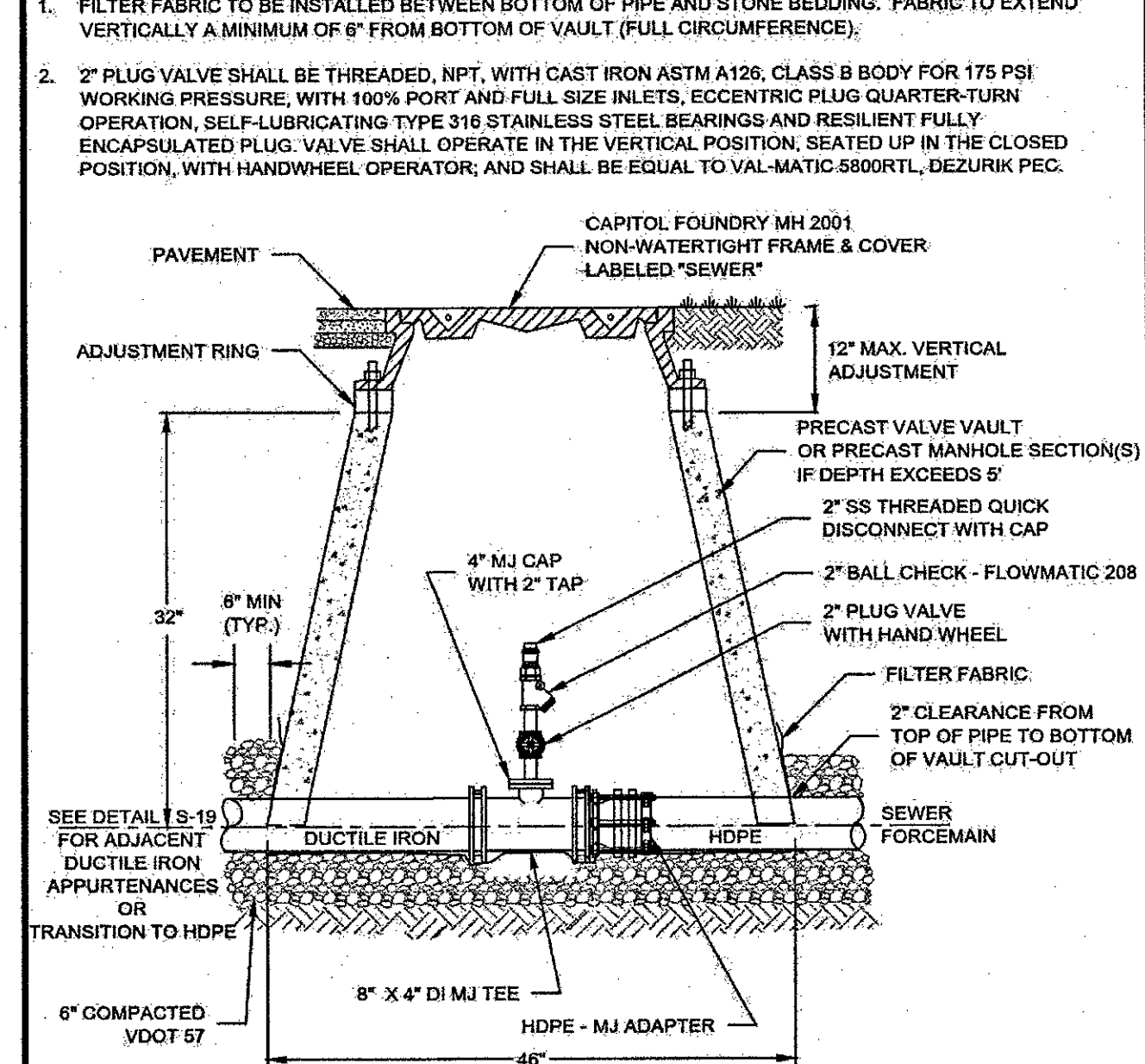
SUMMIT VIEW BUSINESS PARK UTILITY IMPROVEMENTS PHASE 1

CONSTRUCTION DETAIL

SEWER FORCE MAIN PLUG VALVE & VAULT

05/24/18

S-19



SUMMIT VIEW BUSINESS PARK UTILITY IMPROVEMENTS PHASE 1

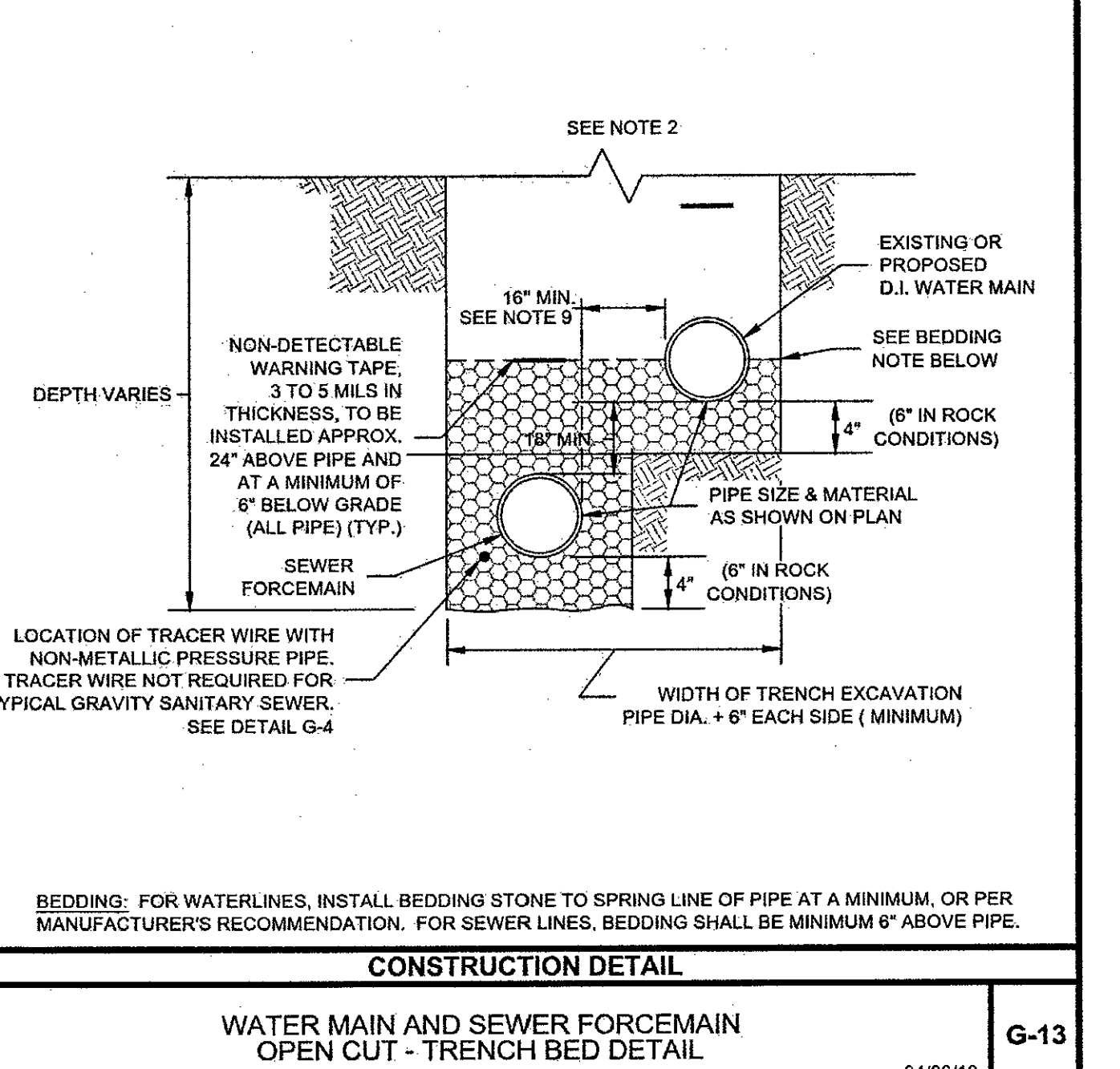
CONSTRUCTION DETAIL

SEWER FORCE MAIN FLUSHING ASSEMBLY

05/24/18

S-20

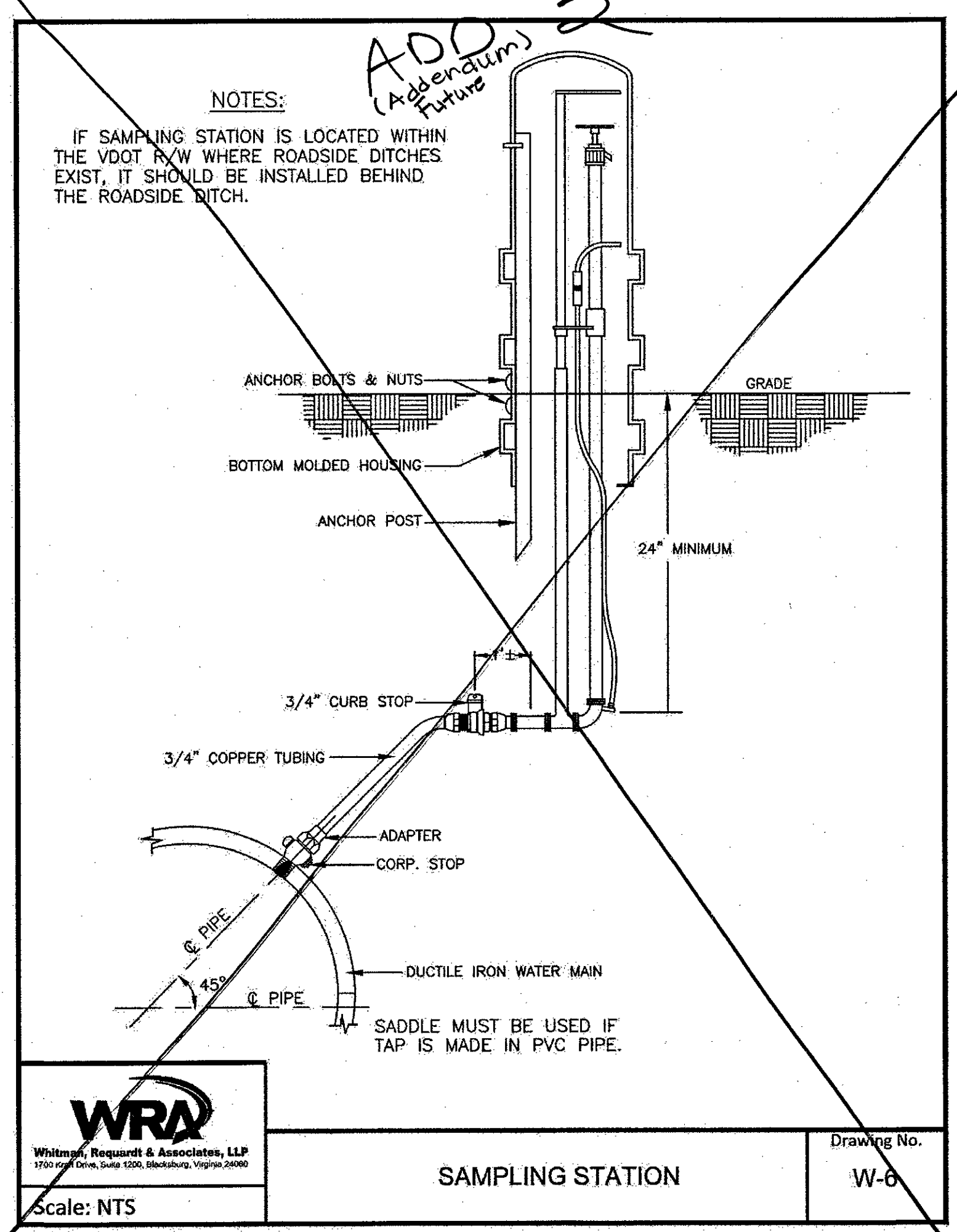
1. USE THIS DETAIL ANY TIME HORIZONTAL SEPARATION BETWEEN WATER MAIN AND SEWER FORCE MAIN IS LESS THAN 10-Feet.
2. FOR INITIAL BACKFILL AND SURFACE RESTORATION REQUIREMENTS, SEE DETAIL G-12 OR G-11 OR AS APPLICABLE.
3. BEDDING AND HAUNCHING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THIS DETAIL AND MANUFACTURER'S RECOMMENDATION.
4. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED VDOT #57 OR #68 STONE.
5. IN AREAS SUBJECT TO VEHICULAR TRAFFIC, BEDDING STONE SHALL BE PLACED IN 6\"/>



- MASTER METER AND MASTER METER VAULTS:
- CONCRETE MASTER METER VAULTS SHALL BE PRECAST, FACTORY ASSEMBLED, COMPLETE WITH EQUIPMENT AS SHOWN IN THE STANDARD DETAILS AND SHALL BE MANUFACTURED BY GILLESPIE PRECAST AND MONARCH PRODUCTS COMPANY, CONCRETE PIPE & PRECAST OR APPROVED EQUAL AND IN ACCORDANCE WITH ASTM C858. THE VAULT SHALL BE DESIGNED FOR AASHTO HS-20 LOADING AND BUOYANCY RESISTANCE. MINIMUM CONCRETE COMPRESSIVE STRENGTH SHALL BE 5000 PSI AT 28 DAYS. DESIGN SHALL BE IN ACCORDANCE WITH ASTM C857 AND ACI-318. ADEQUATE PIPE SUPPORTS SHALL BE PROVIDED AND SHALL BE MADE OF ASTM A36 STEEL, PRIMED AND COATED WITH ENAMEL FINISH COAT, ADJUSTABLE AND ANCHORED TO THE FLOOR. VAULTS SHALL BE INSTALLED LEVEL ON A COMPACTED BED OF 8-INCHES OF VDOT #57 OR #68 STONE. VAULT HATCH SHALL BE WATERPROOF AND SLOPED TO ACCOMMODATE EXISTING GRADE.
 - METERS SHALL BE SENSUS OMNI T2 WITH STRAINER AND PROVIDED WITH RADIO READ REGISTERS COMPATIBLE WITH THE WESTERN VIRGINIA WATER AUTHORITY EXISTING METER READING SYSTEM. SENSUS 520Q SMARTPOINT RADIOS SHALL BE PROVIDED WITH EACH METER INSTALLATION. METERS SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA C701, CLASS II, NSF/ANSI 61 AND NSF/ANSI 372. METER BODY SHALL BE DUCTILE IRON WITH EPOXY COATING AND STRAINER SHALL BE STAINLESS STEEL.

PIPE SCHEDULE					
NAME	MATERIAL	JOINT TYPE	INTERIOR COATING	EXTERIOR COATING	STANDARD
OFF-SITE SEWER FORCE MAIN	HDPE *, C900 PVC, C900 PVC	FUSED, Fused, Fused	N/A	N/A	AWWA C906, AWWA C900, AWWA C900
WATER MAIN	DUCTILE IRON	GASKETED, MJ OR RESTRAINED, AS REQUIRED	CEMENT MORTAR	ASPHALTIC	AWWA C151
CREEK CROSSINGS: WATER MAINS AND SEWER FORCE MAINS	HDPE	FUSED	N/A	N/A	AWWA C906

* TRACER WIRE SHALL BE INSTALLED WITH ALL NON-METALLIC PRESSURE PIPE. SEE DETAIL G-4.



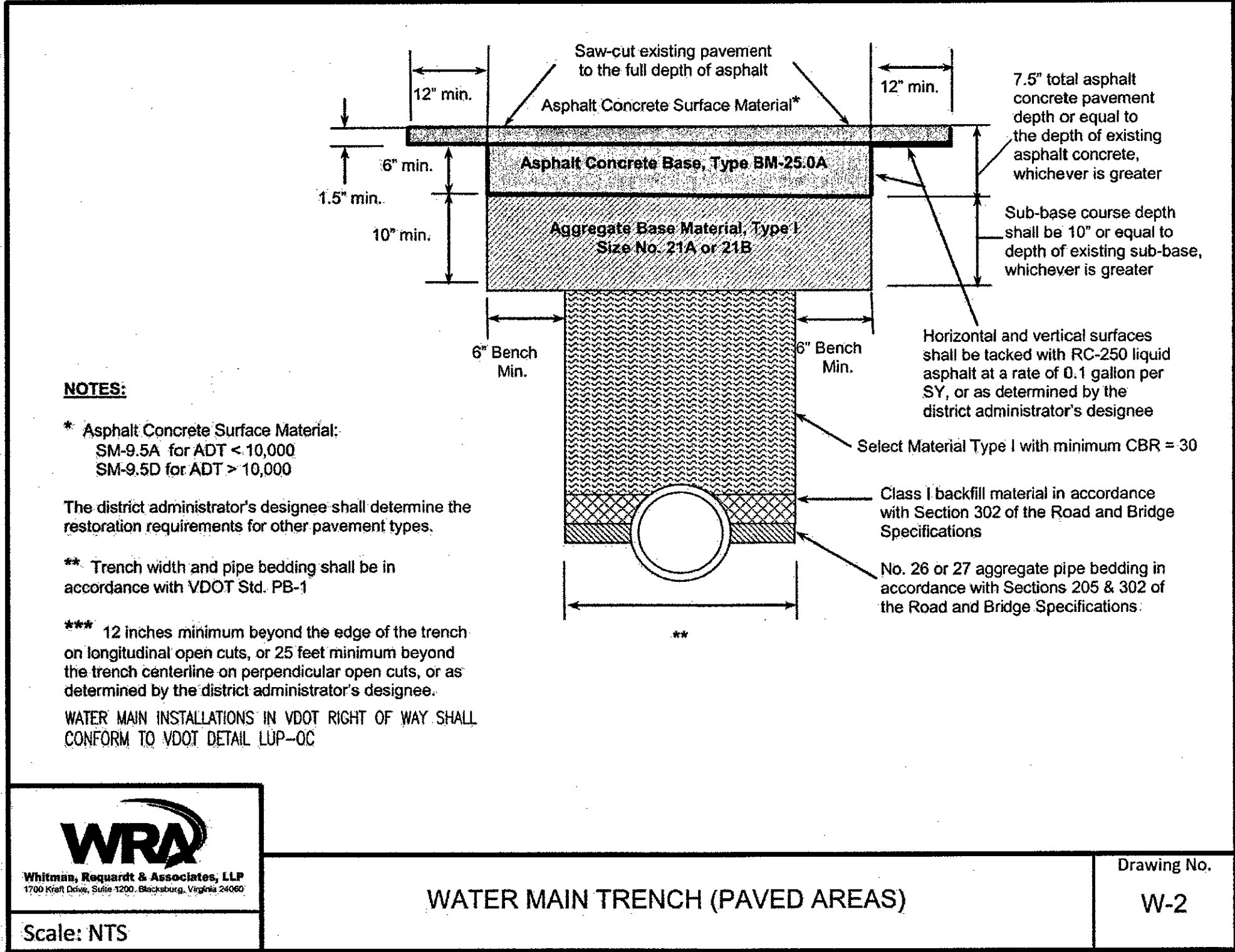
WRA

Whitman, Reardon & Associates, LLP

1700 Kraft Dr., Suite 1200, Blacksburg, Virginia 24060

Scale: NTS

Drawing No. W-6



WRA

Whitman, Reardon & Associates, LLP

1700 Kraft Dr., Suite 1200, Blacksburg, Virginia 24060

Scale: NTS

Drawing No. W-2

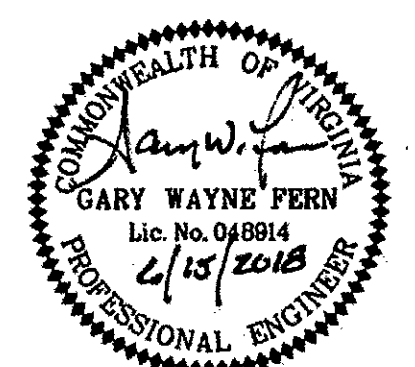
WATER MAIN TRENCH (PAVED AREAS)

WATER ONLY INSTALLED

REV	DATE	DESCRIPTION

DRAWING C1.06

SHEET 9



NOTE: THE CONTRACTOR SHALL UTILIZE THESE PLANS AND ALL APPLICABLE WATER AND SEWER SPECIFICATIONS AND DETAILS AS SHOWN IN THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS, LATEST EDITION.

WESTERN VIRGINIA WATER AUTHORITY

601 South Jefferson Street, Suite 300

Roanoke, Virginia 24011

DES: KN

DRAWN: JES

CHECK: GWF

DATE: 06/15/18

SCALE: N/A

HORIZ: N/A

VERT: N/A

SUMMIT VIEW BUSINESS PARK UTILITY IMPROVEMENTS PHASE 2

WATER & SEWER DETAILS