

T.I.P. NO.	SHEET NO.
U-5996	UC-1

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

**UTILITY CONSTRUCTION PLANS
 NASH COUNTY**

LOCATION: WIDEN SR 1603 (N. OLD CARRIAGE RD.)
 FROM NORTH OF SR 1770 (EASTERN AVE. / SUNSET AVE.)
 TO SR 1601 (REGES STORE RD.) / SR 1609 (GREEN HILLS RD.).
 TYPE OF WORK: WET UTILITIES

TIP PROJECT: U-5996

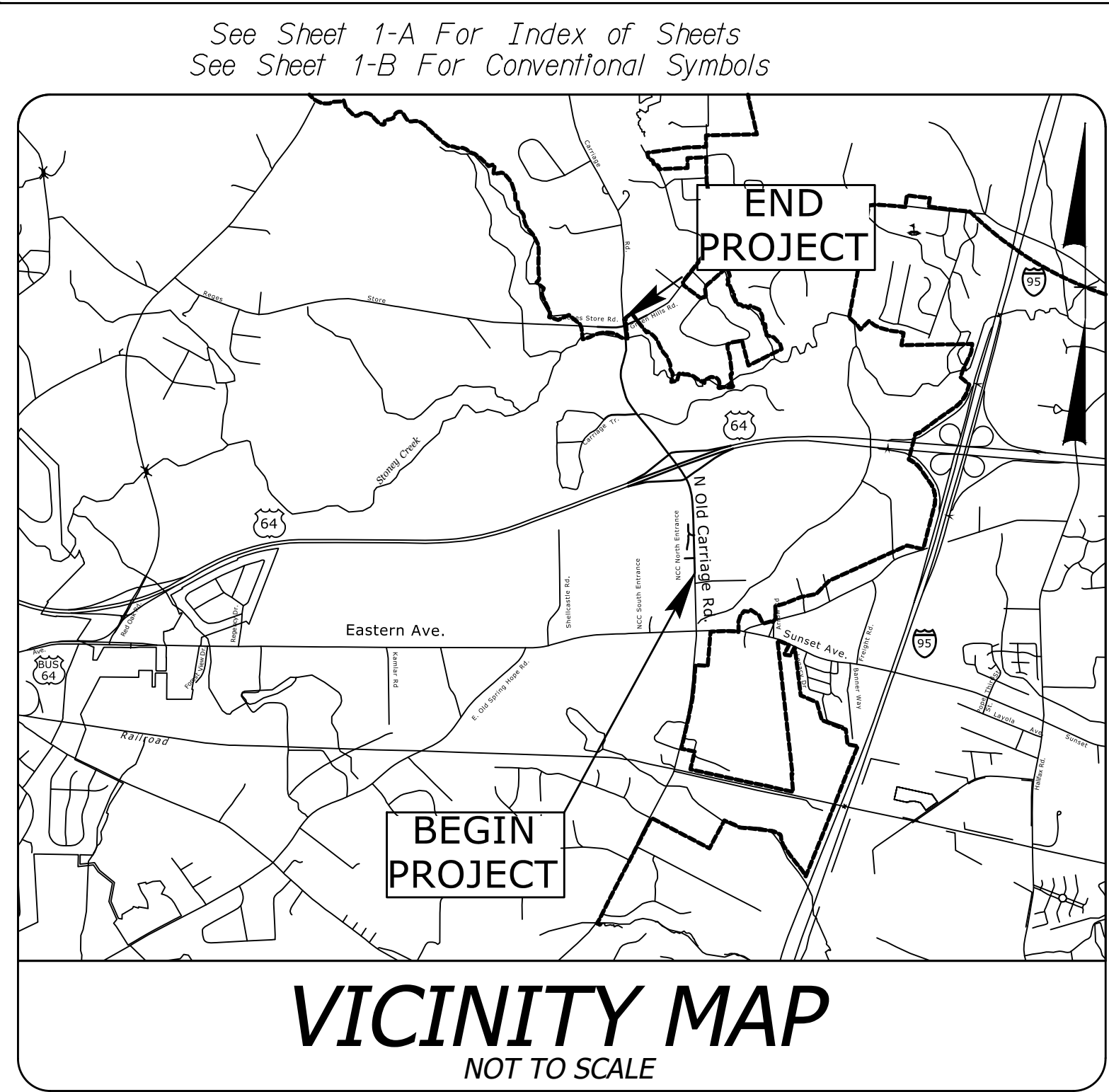
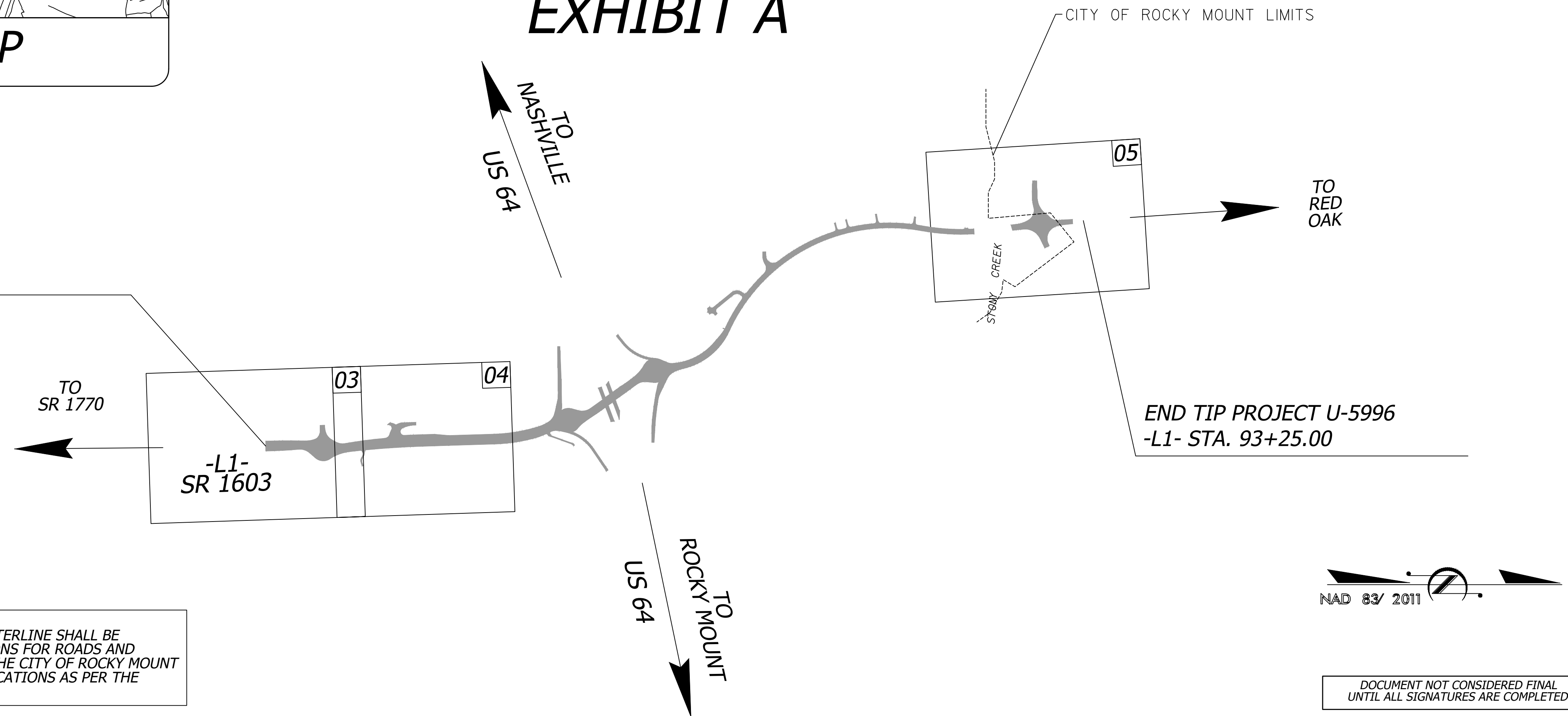


EXHIBIT A

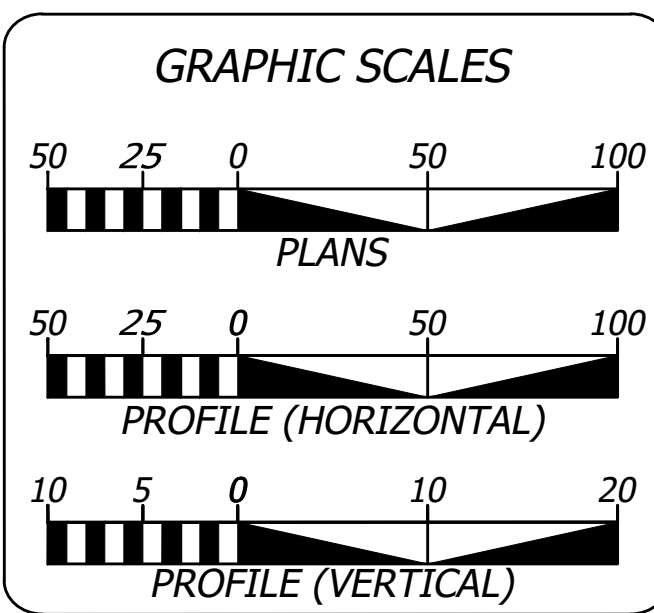


BEGIN TIP PROJECT U-5996
 -L1- STA. 30+70.00 =
 -L1- STA. 30+69.99 (U-5026/R-5720)

END TIP PROJECT U-5996
 -L1- STA. 93+25.00

SPECIFICATIONS:
 ALL WORK ASSOCIATED WITH THE INSTALLATION OF WATERLINE SHALL BE COMPLETED AS PER THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, LATEST EDITION AND SUPPLEMENTED BY THE CITY OF ROCKY MOUNT ENGINEERING DEPARTMENT (CRMED) STANDARD SPECIFICATIONS AS PER THE CONTRACT SPECIAL PROVISIONS.

DOCUMENT NOT CONSIDERED FINAL
 UNTIL ALL SIGNATURES ARE COMPLETED



SHEET NO.:	DESCRIPTION:
UC-1	TITLE SHEET
UC-2	SPECIAL PROVISIONS
UC-3 THRU UC-5	UTILITY CONSTRUCTION PLAN AND PROFILE SHEETS
UC-DT-1 THRU UC-DT-4	DETAILS

WATER AND SEWER OWNERS ON PROJECT	
(A) WATER CITY OF ROCKY MOUNT	
(B) SANITARY SEWER CITY OF ROCKY MOUNT	
(C) SANITARY SEWER TOWN OF RED OAK	
LEN. 6" WL	ROCKY MOUNT = 260 FT.
LEN. 12" WL	ROCKY MOUNT = 250 FT.
LEN. 24" WL	ROCKY MOUNT = 1,565 FT.
LEN. 8" SS	ROCKY MOUNT = 64 FT.
LEN. 16" SS STEEL	RED OAK = 55 FT.

PREPARED IN THE OFFICE OF

940 Main Campus Drive, Suite 500
 Raleigh, NC 27606
 NC License No. C-3705

John M. Kamprath, PE	CONSULTANT CONTACT #1
Brandon Barham, PE	CONSULTANT CONTACT #2
Jonathan Soika, PE	CONSULTANT CONTACT #3

SEAL

12/14/2021

**DIVISION OF HIGHWAYS
 DIVISION 4**
 509 WARD BLVD
 WILSON NC 27895
 PHONE (252) 640-6400
 FAX (252) 234-6174

Kevin G. Bowen, PE	UTILITIES REGIONAL ENGINEER
Russell Broadway, PE	PROJECT ENGINEER
Kim Moore	DIVISION UTILITY ENGINEER

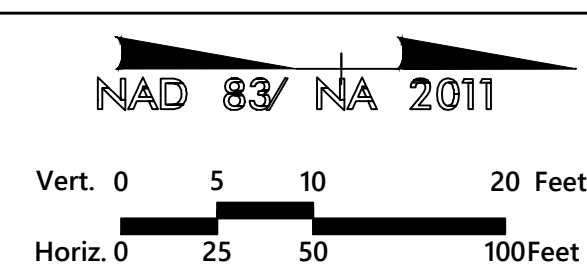
Friday, December 10, 2021 11:00 AM
\\vnb.com\gbl\proj\Roleigh\3856420 NCDOT U-5996 Div4 Adm\NCDOT\Utilities\RDY_UH_Proj\Plan Sheets\U-5996-uc-PS\Ildwg John.Townsend

LEGEND

	24" W	EX. WATERLINE TO REMAIN
	24" W	EX. WATERLINE TO BE REMOVED/ABANDONED
	24" W	PROPOSED RIDIP WATERLINE
	8" SS	PROPOSED 8" PVC SANITARY SEWER
		PROPOSED PUBLIC UTILITY EASEMENT

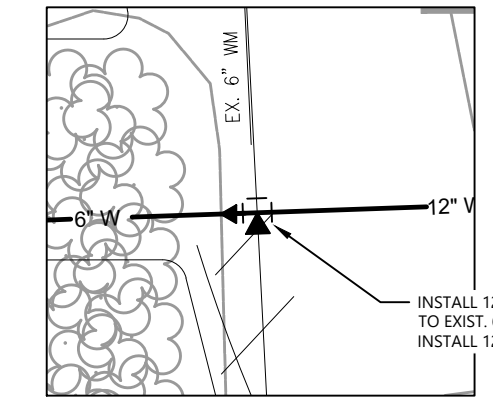
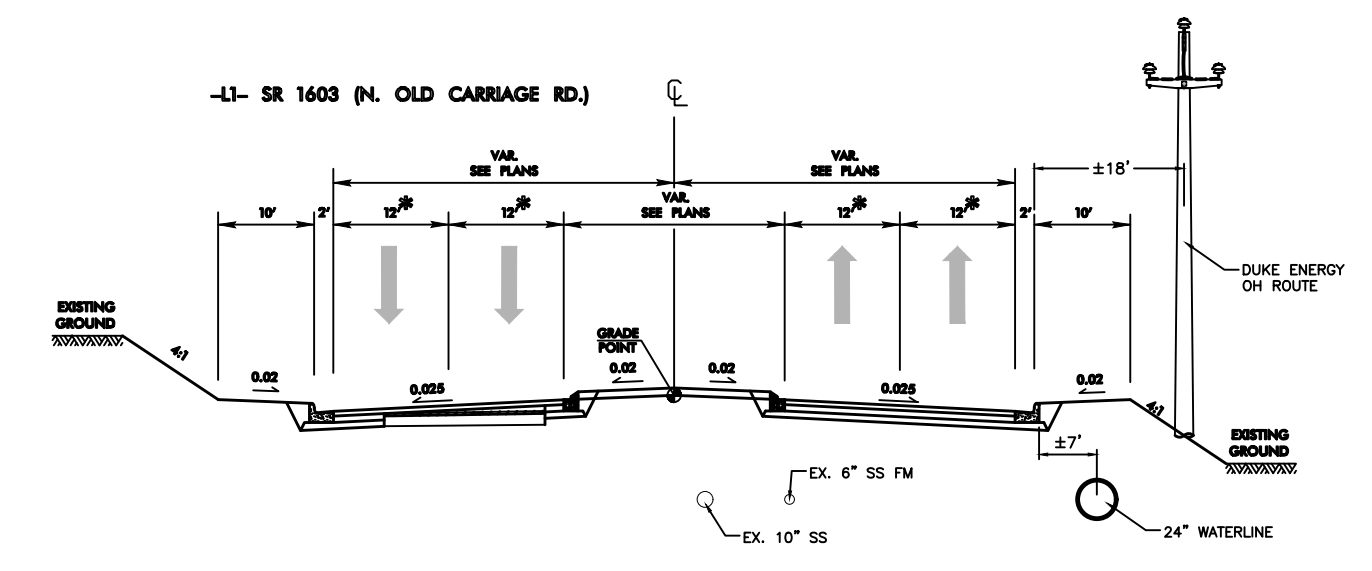
- ### NOTES KEYED TO PLAN
- CONNECT TO EX. 24" WATERLINE WITH 24" TEE AND BUTTERFLY VALVE. COORDINATE WATERLINE SHUT DOWN WITH CRMED. INSTALL 24" DI PLUG ON NORTH LEG AND THRUST COLLAR ON NEW 24" WATERLINE.
 - REMOVE EX. FIRE HYDRANT ASSEMBLY.
 - EXTEND 12" RIDIP WATERMAIN TO 12" MJ TEE AND CONNECT TO EXISTING SITE SERVICE. INSTALL FIRE HYDRANT ASSEMBLY. INSTALL THRUST BLOCK ON EX. LINE AT CONNECTION.
 - MAKE WATERTIGHT CONNECTION TO EXISTING MANHOLE AND EXTEND 8" PVC SEWER MAIN 15' PAST 24" WATERMAIN. INSTALL 5' DIA MANHOLE.

- ### Notes
- ALL WORK ASSOCIATED WITH THE INSTALLATION OF WATERLINE SHALL BE COMPLETED AS PER THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, LATEST EDITION, SUPPLEMENTED WITH THE CITY OF ROCKY MOUNT ENGINEERING DEPARTMENT (CRMED) STANDARD SPECIFICATIONS AS DESCRIBED IN THE PROJECT SPECIFIC SPECIAL PROVISIONS.
 - ALL WATER LINES SHALL BE INSTALLED WITH A MINIMUM OF 42 INCHES OF COVER.
 - WATER MAINS SHALL BE AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWERS. WHERE LOCAL CONDITIONS PREVENT A SEPARATION OF 10 FEET, THE WATER MAIN MAY BE LAID CLOSER, PROVIDED THAT THE ELEVATION OF THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER WITH A HORIZONTAL SEPARATION OF AT LEAST 3 FEET.
 - WATER MAINS SHALL MAINTAIN A MINIMUM 24" HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN THE WATER MAIN AND STORM SEWER OR OTHER DRY UTILITIES.
 - WHEN A PROPOSED WATER MAIN CROSSES UNDER A PROPOSED OR EXISTING SEWER, CONSTRUCT BOTH THE WATER MAIN AND THE SEWER OF FERROUS MATERIALS WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. CENTER THE SECTION OF WATER PIPE AT THE POINT OF CROSSING.
 - VERIFY ALL ILLUSTRATED UTILITY CROSSINGS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IF CONFLICTS ARE ENCOUNTERED.
 - CONTRACTOR SHALL COORDINATE UTILITY RELOCATION OR ABANDONMENT WITH LOCAL UTILITY COMPANIES AS REQUIRED.
 - ALL NEW WATER MAINS SHALL BE MECHANICAL JOINT RESTRAINED JOINT DUCTILE IRON PIPE WITH CEMENT MORTAR LINING AND BITUMINOUS COATING. LINING AND COATING SHALL BE SEALED WITH TOPCOAT.
 - BUTTERFLY VALVES ARE TO BE INSTALLED ON MAINS 16" AND LARGER.
 - ALL CONNECTIONS TO EXISTING WATER MAINS TO BE MADE WITH THRUST COLLAR AS PER THE DETAIL OF THESE PLANS.

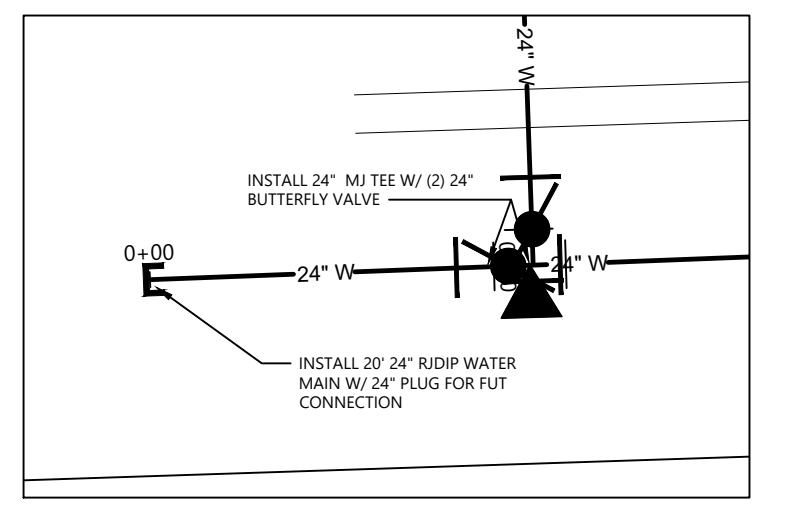


- ### GENERAL NOTES:
- EX. TOPOGRAPHIC SURVEY AND SUE BY OTHERS. CONTRACTOR TO CONFIRM FINAL CONNECTION POINTS IN FIELD.
 - EX. WATER MAIN DEPTH SHOWN APPROX. ACTUAL DEPTH TO BE CONFIRMED IN FIELD.
 - EX. WATER MAIN MATERIAL UNKNOWN. CONTRACTOR IS RESPONSIBLE TO PROVIDE ADEQUATE PIPE MATERIAL TRANSITION AT ALL CONNECTIONS.

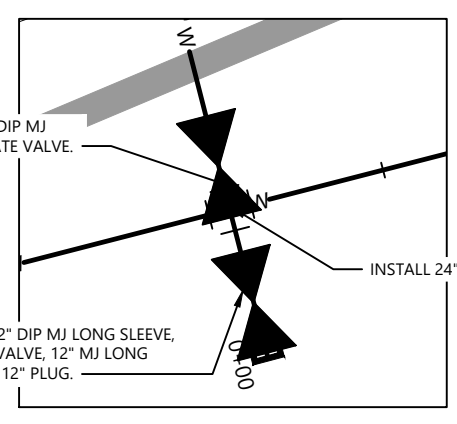
PROJECT REFERENCE NO. U-5996	SHEET NO. UC-3
REVISION NO. 1 - 3/23/20 - RDWY & DRN REV. 2 - 4/4/20 - SPEC. REV. 3 - 10/21 - UTL REV.	UTILITIES ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Prepared by 	
VHB Engineering NC, P.C. (C-3705) 940 Main Campus Drive, Suite 500 Raleigh, NC 27606	



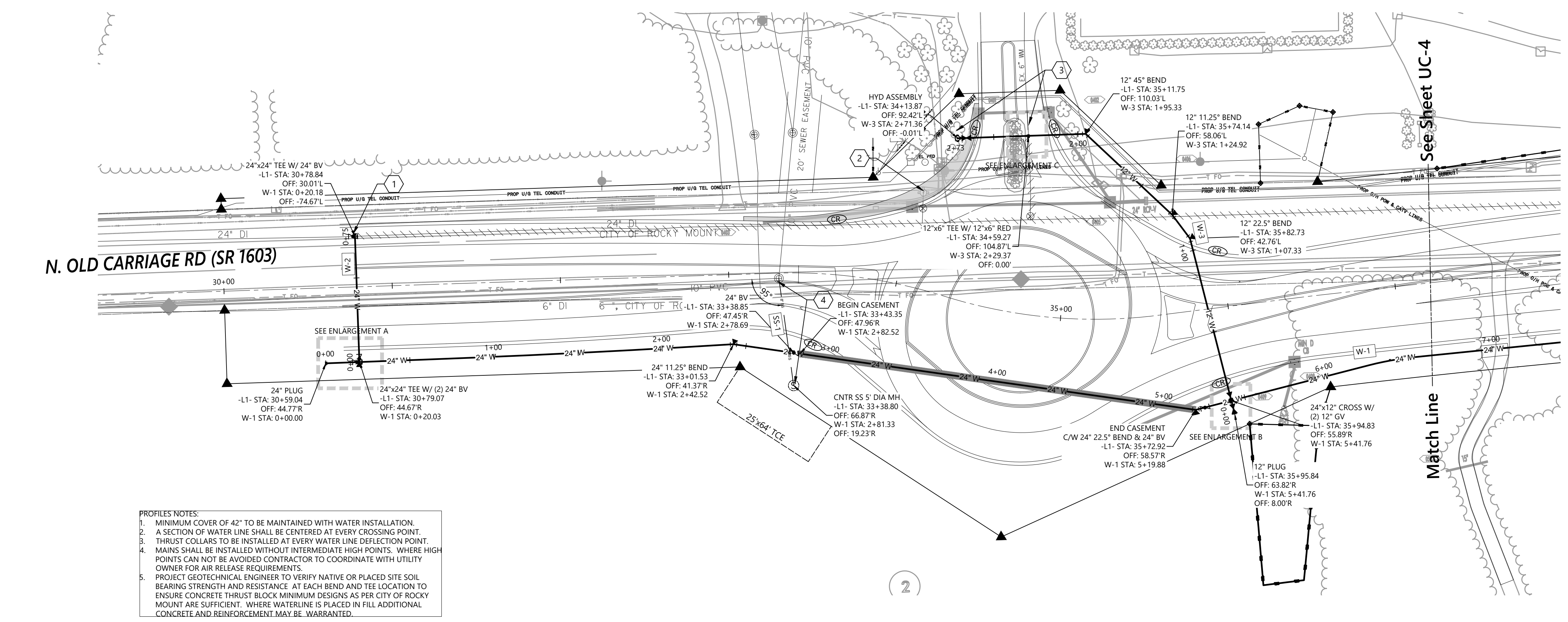
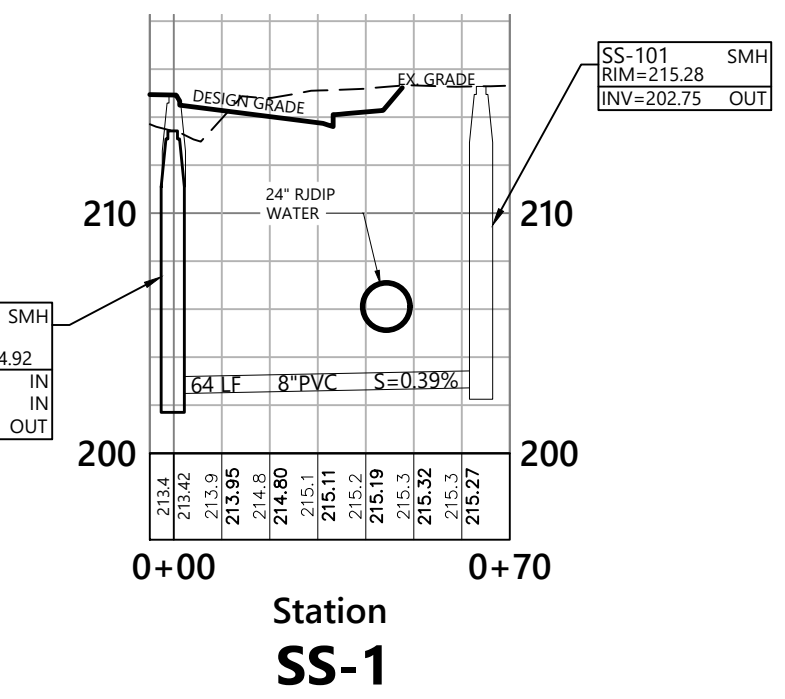
ENLARGEMENT C
SCALE 1" = 10'



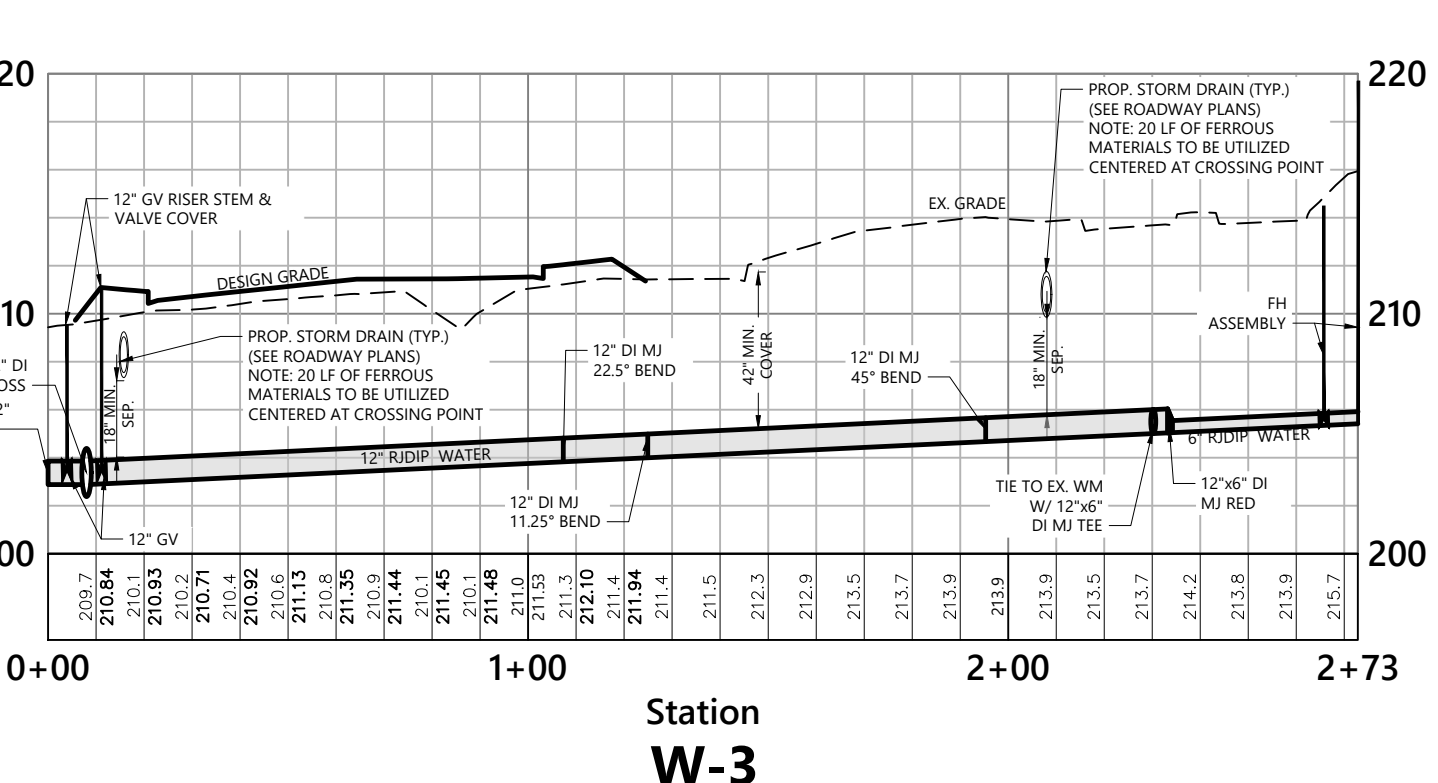
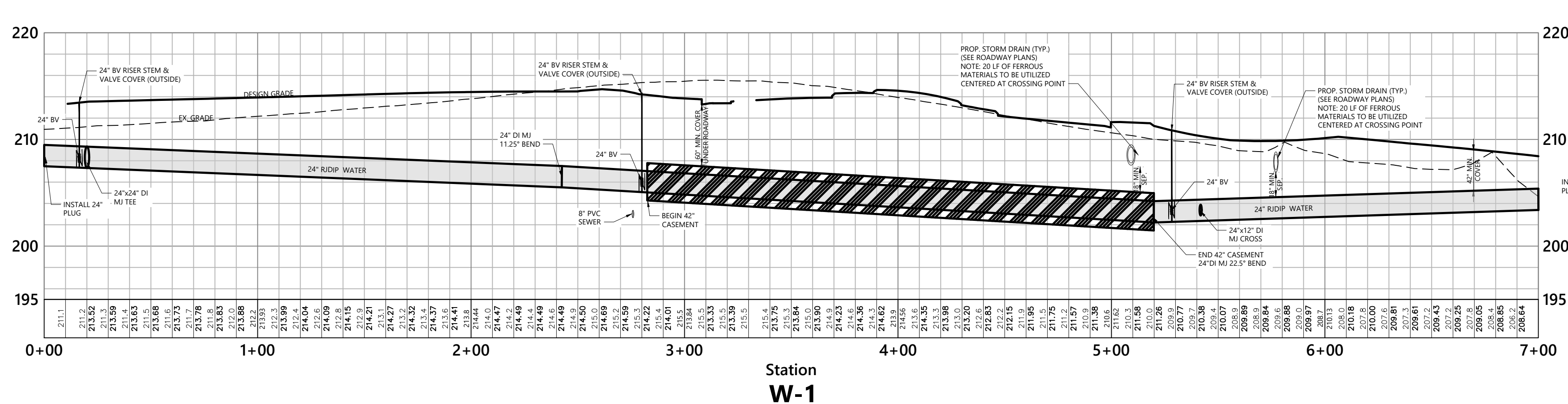
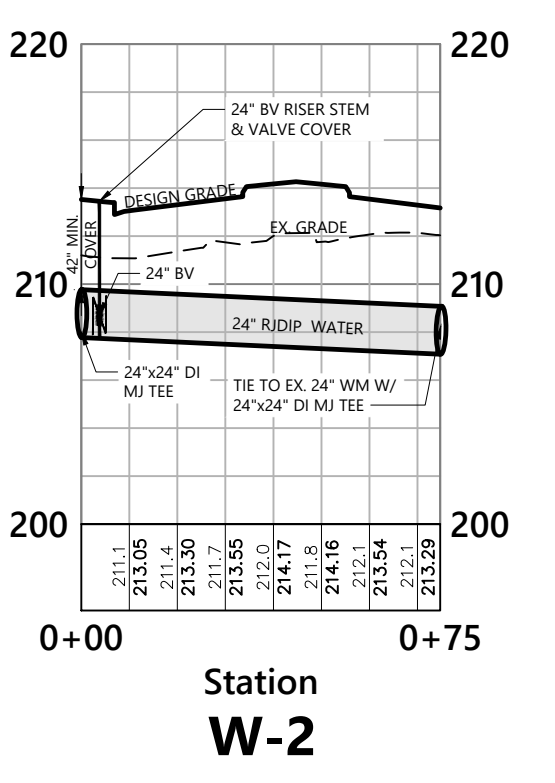
ENLARGEMENT A
SCALE 1" = 10'



ENLARGEMENT B
SCALE 1" = 10'



- ### PROFILES NOTES:
- MINIMUM COVER OF 42" TO BE MAINTAINED WITH WATER INSTALLATION.
 - A SECTION OF WATER LINE SHALL BE CENTERED AT EVERY CROSSING POINT.
 - THRUST COLLARS TO BE INSTALLED AT EVERY WATER LINE DEFLECTION POINT.
 - MAINS SHALL BE INSTALLED WITHOUT INTERMEDIATE HIGH POINTS. WHERE HIGH POINTS CAN NOT BE AVOIDED CONTRACTOR TO COORDINATE WITH UTILITY OWNER FOR AIR RELEASE REQUIREMENTS.
 - PROJECT GEOTECHNICAL ENGINEER TO VERIFY NATIVE OR PLACED SITE SOIL BEARING STRENGTH AND RESISTANCE. AT EACH BEND AND TEE LOCATION TO ENSURE CONCRETE THRUST BLOCK MINIMUM DESIGNS AS PER CITY OF ROCKY MOUNT ARE SUFFICIENT. WHERE WATERLINE IS PLACED IN FILL ADDITIONAL CONCRETE AND REINFORCEMENT MAY BE WARRANTED.



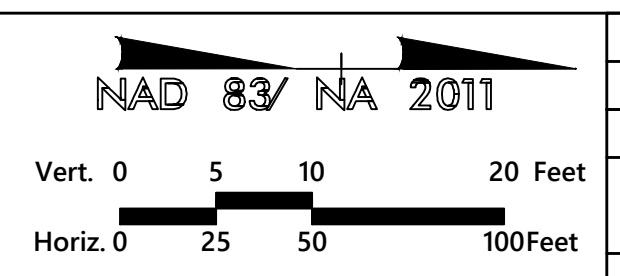
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LEGEND

	EX. WATERLINE TO REMAIN
	EX. WATERLINE TO BE REMOVED/ABANDONED
	PROPOSED RDIP WATERLINE
	PROPOSED PUBLIC UTILITY EASEMENT

- NOTES KEYED TO PLAN**
- 1 RELOCATE FIRE HYDRANT AND PLUG EX. FIRE HYDRANT LEG.
 - 2 INSTALL 24"x12" TEE W/ 24" BUTTERFLY VALVE AND 12" GATE VALVE. EXTEND 12" DIP WATERMAIN AND MAKE CONNECTION TO EXISTING WATERLINE W/ THRUST BLOCK.
 - 3 REMOVE EX. FIRE HYDRANT ASSEMBLY.
 - 4 INSTALL NEW FIRE HYDRANT ASSEMBLY AND CONNECT TO MAIN WITH 24" X 6" TEE.

- Notes**
1. ALL WORK ASSOCIATED WITH THE INSTALLATION OF WATERLINE SHALL BE COMPLETED AS PER THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, LATEST EDITION, SUPPLEMENTED WITH THE CITY OF ROCKY MOUNT ENGINEERING DEPARTMENT (CRMED) STANDARD SPECIFICATIONS AS DESCRIBED IN THE PROJECT SPECIFIC SPECIAL PROVISIONS.
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 5. WHEN A PROPOSED WATER MAIN CROSSES UNDER A PROPOSED OR EXISTING SEWER, CONSTRUCT BOTH THE WATER MAIN AND THE SEWER OF FERROUS MATERIALS WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. CENTER THE SECTION OF WATER PIPE AT THE POINT OF CROSSING.
 6. VERIFY ALL ILLUSTRATED UTILITY CROSSINGS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IF CONFLICTS ARE ENCOUNTERED.
 7. CONTRACTOR SHALL COORDINATE UTILITY RELOCATION OR ABANDONMENT WITH LOCAL UTILITY COMPANIES AS REQUIRED.
 8. ALL NEW WATER MAINS SHALL BE MECHANICAL JOINT RESTRAINED JOINT DUCTILE IRON PIPE WITH CEMENT MORTAR LINING AND BITUMINOUS COATING. LINING AND COATING SHALL BE SEALED WITH TOPCOAT.
 9. BUTTERFLY VALVES ARE TO BE INSTALLED ON MAINS 16" AND LARGER.
 10. ALL CONNECTIONS TO EXISTING WATER MAINS TO BE MADE WITH THRUST COLLAR AS PER THE DETAIL OF THESE PLANS.



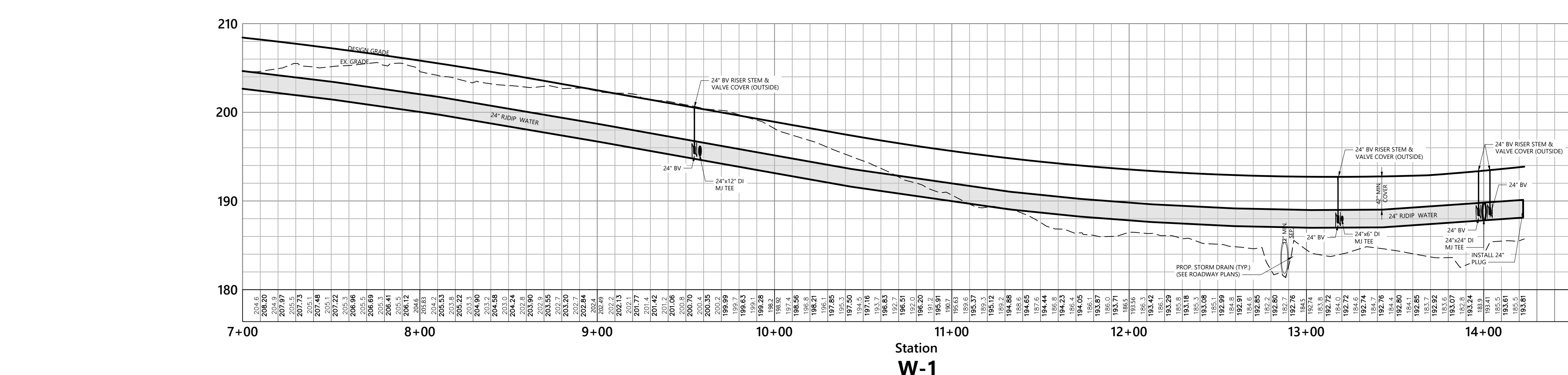
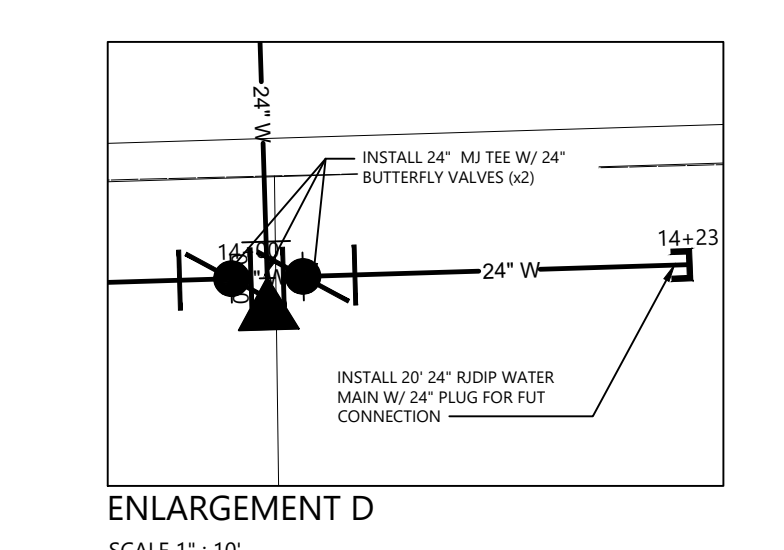
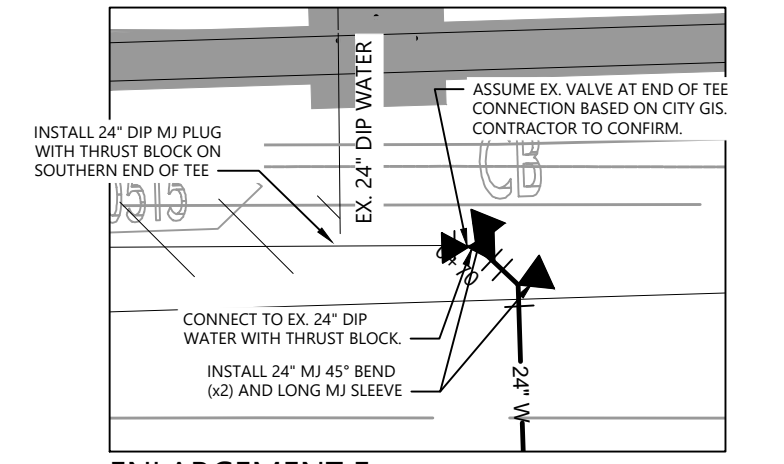
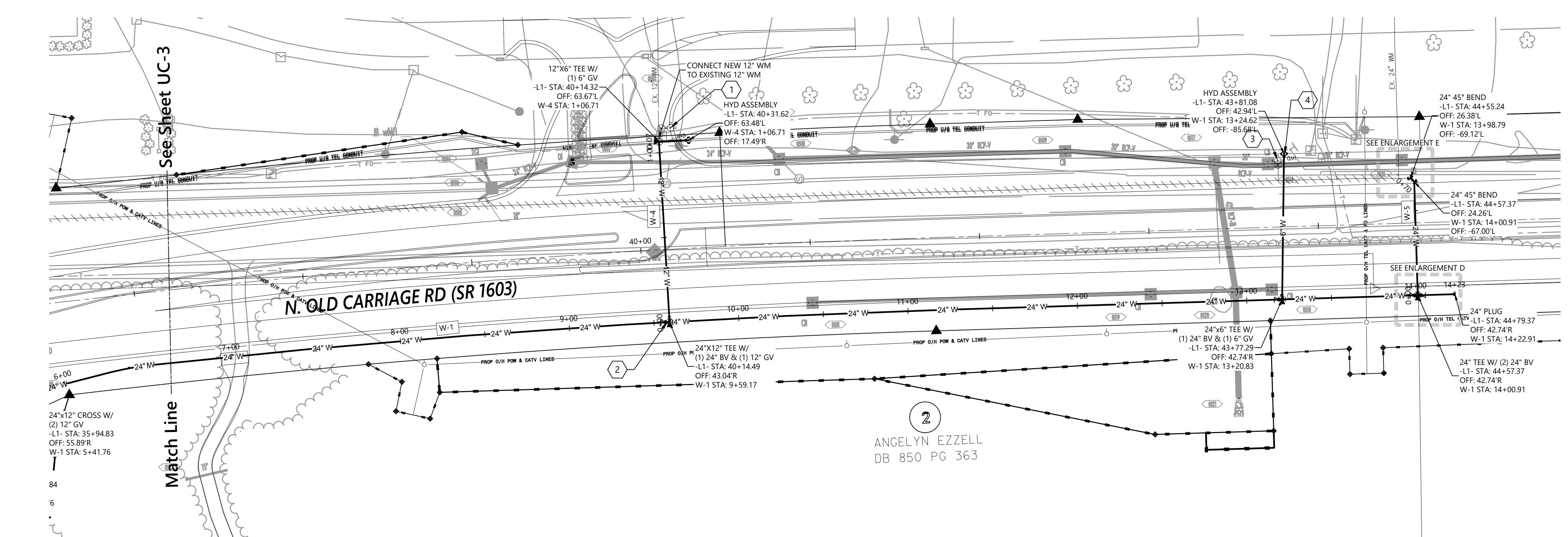
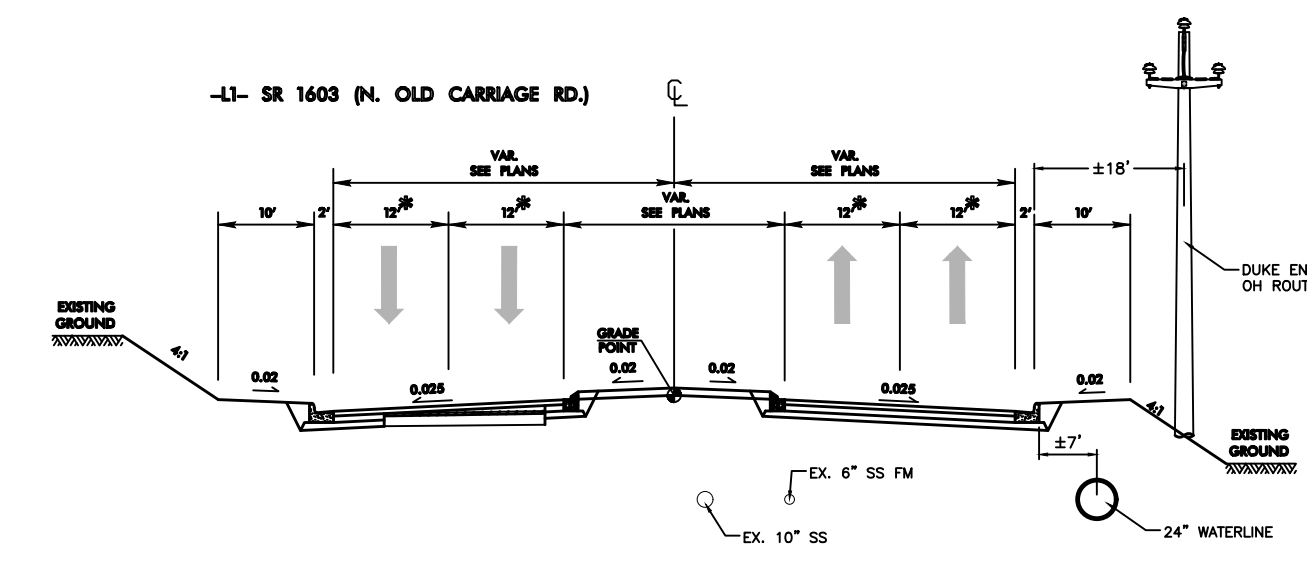
- GENERAL NOTES:**
1. EX. TOPOGRAPHIC SURVEY AND SUE BY OTHERS. CONTRACTOR TO CONFIRM FINAL CONNECTION POINTS IN FIELD.
 2. EX. WATER MAIN DEPTH SHOWN APPROX. ACTUAL DEPTH TO BE CONFIRMED IN FIELD.
 3. EX. WATER MAIN MATERIAL UNKNOWN. CONTRACTOR IS RESPONSIBLE TO PROVIDE ADEQUATE PIPE MATERIAL TRANSITION AT ALL CONNECTIONS.

PROJECT REFERENCE NO. U-5996	SHEET NO. UC-4
REVISION NO. 1 - 3/23/20 - RDWY & DRN REV. 2 - 4/14/20 - SPEC. REV. 3 - 10/21 - UTL. REV.	UTILITIES ENGINEER

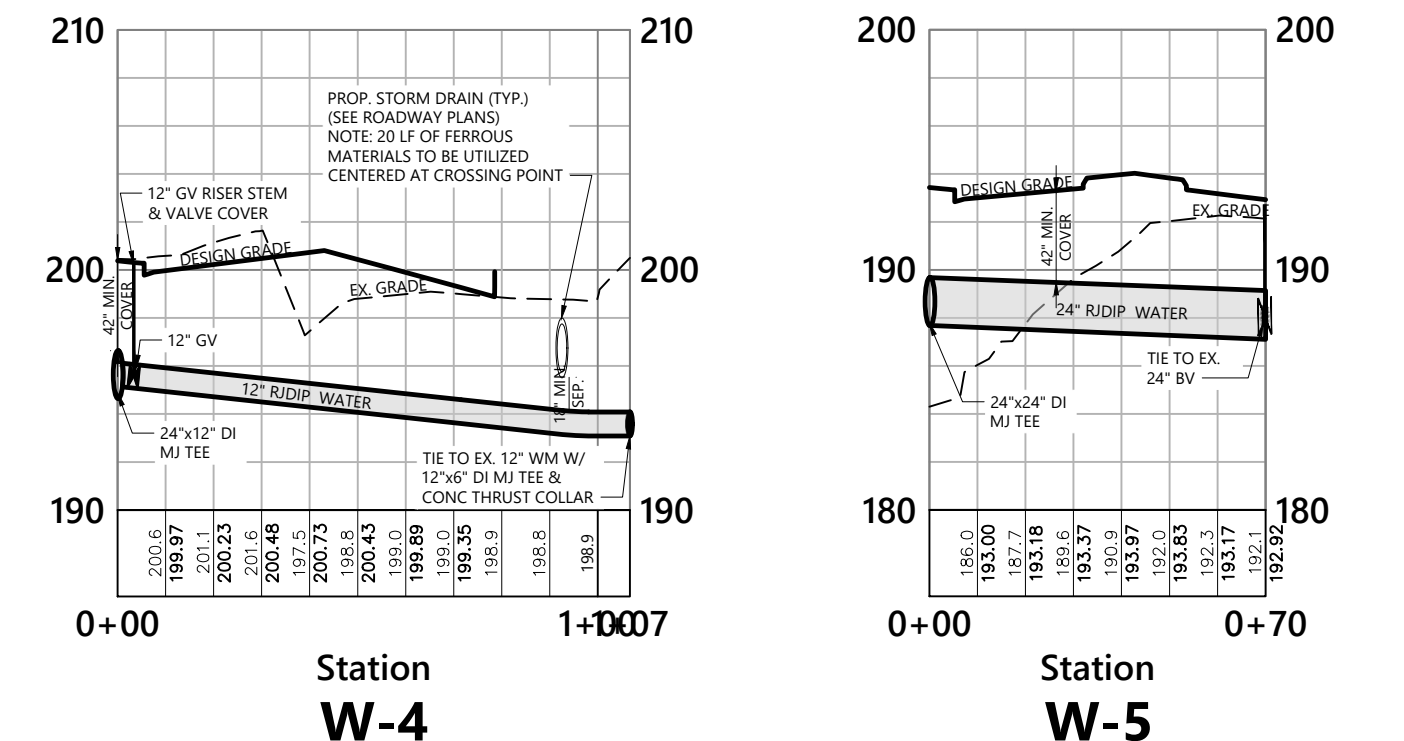
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared by

VHB Engineering NC, P.C. (C-3705)
940 Main Campus Drive, Suite 500
Raleigh, NC 27606

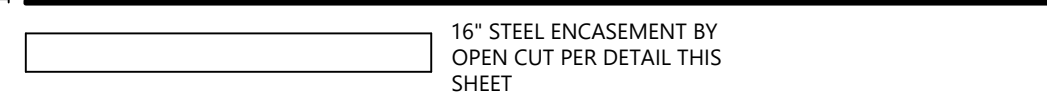


- PROFILES NOTES:**
1. MINIMUM COVER OF 42" TO BE MAINTAINED WITH WATER INSTALLATION.
 2. A SECTION OF WATER LINE SHALL BE CENTERED AT EVERY CROSSING POINT.
 3. THRUST COLLARS TO BE INSTALLED AT EVERY WATER LINE DEFLECTION POINT.
 4. MAINS SHALL BE INSTALLED WITHOUT INTERMEDIATE HIGH POINTS. WHERE HIGH POINTS CAN NOT BE AVOIDED CONTRACTOR TO COORDINATE WITH UTILITY OWNER FOR AIR RELEASE REQUIREMENTS.
 5. PROJECT GEOTECHNICAL ENGINEER TO VERIFY NATIVE OR PLACED SITE SOIL BEARING STRENGTH AND RESISTANCE AT EACH BEND AND TIE LOCATION TO ENSURE CONCRETE THRUST BLOCK MINIMUM DESIGNS AS PER CITY OF ROCKY MOUNT ARE SUFFICIENT. WHERE WATERLINE IS PLACED IN FILL ADDITIONAL CONCRETE AND REINFORCEMENT MAY BE WARRANTED.



12/10/2021 10:21:10 AM Friday, December 10, 2021 ANS1 Full Bleed D (22.00 X 34.00) Inches

LEGEND

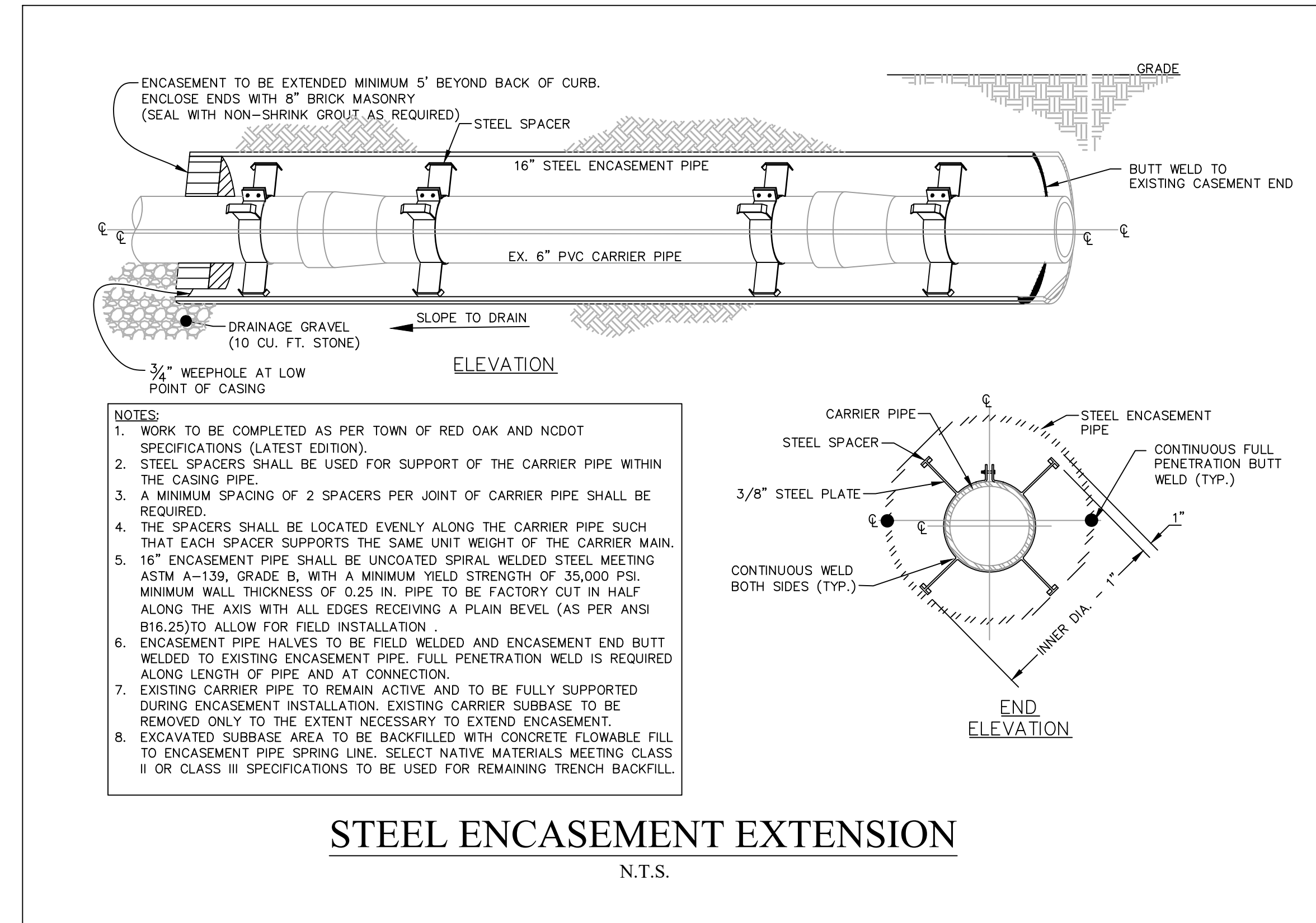


NOTES KEYED TO PLAN

- 1 INSTALL ~ 10 LF 16" STEEL ENCASUREMENT EXTENSION.
- 2 INSTALL ~ 45 LF 16" STEEL ENCASUREMENT EXTENSION.

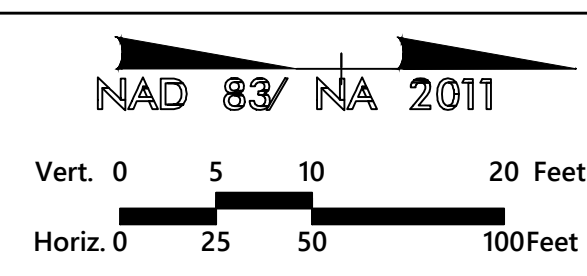
Notes

1. ALL WORK ASSOCIATED WITH THE INSTALLATION OF THE SANITARY SEWER FORCE MAIN ENCASUREMENT EXTENSION SHALL BE COMPLETED AS PER THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, LATEST EDITION.
2. VERIFY ALL ILLUSTRATED UTILITY CROSSINGS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IF CONFLICTS ARE ENCOUNTERED.
3. CONTRACTOR SHALL COORDINATE UTILITY RELOCATION OR ABANDONMENT WITH LOCAL UTILITY COMPANIES AS REQUIRED.
4. EX. TOPOGRAPHIC SURVEY AND SUE BY OTHERS. CONTRACTOR TO CONFIRM FINAL CONNECTION POINTS IN FIELD.
5. LIMITS OF EXISTING SANITARY SEWER FORCE MAIN ENCASUREMENT SHOWN BASED ON LEVEL A SUE BY SO-DEEP / SAM NC PERFORMED ON NOV. 29, 2019.
6. BOREHOLE #7: NORTHING: 816840.5 EASTING: 2325062.1 DEPTH=5'
7. BOREHOLE #8: NORTHING: 816929.9 EASTING: 2325035.9 DEPTH=4.6'

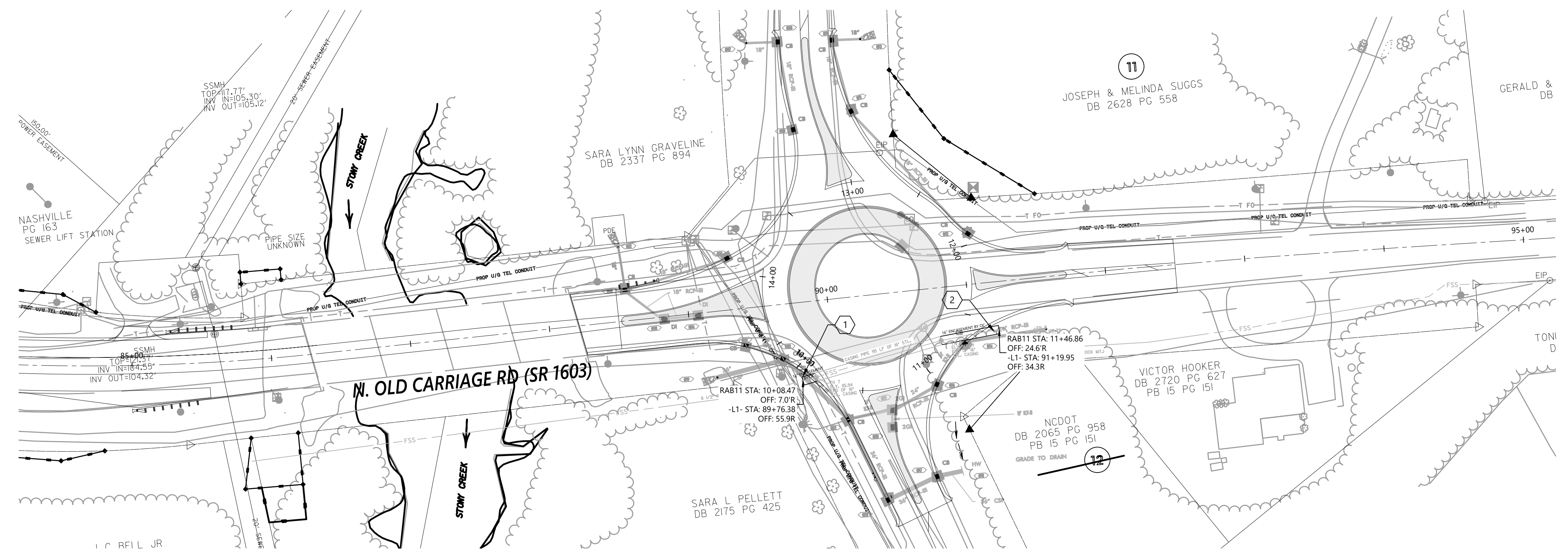


STEEL ENCASUREMENT EXTENSION

N.T.S.

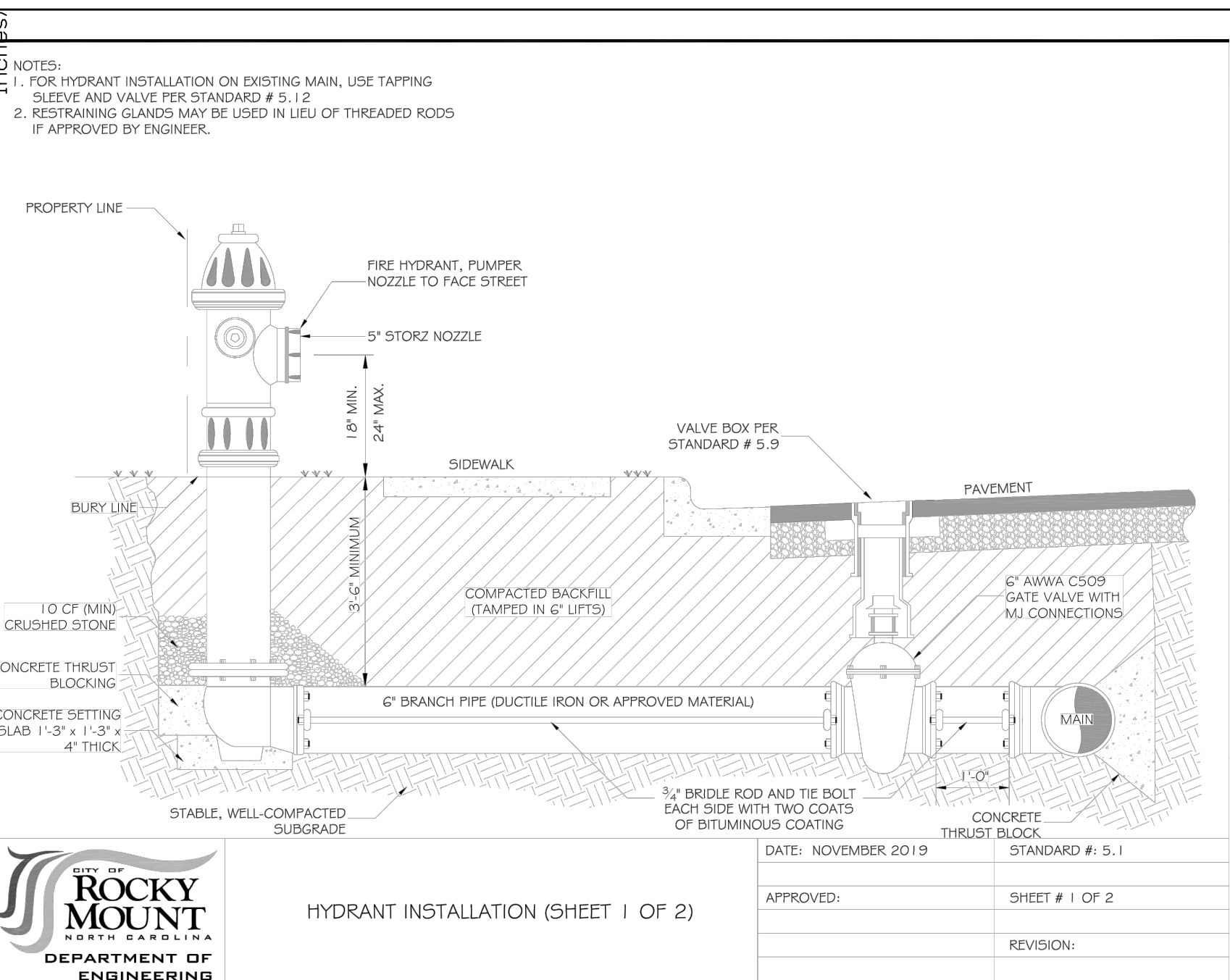


PROJECT REFERENCE NO. U-5996		SHEET NO. UC-5
REVISION NO.		UTILITIES ENGINEER
1 - 3/23/20 - RDWY & DRN REV.		
2 - 4/4/20 - SPEC. REV.		
3 - 10/21 - UTL. REV.		12/14/2021
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Prepared by 		
VHB Engineering NC, P.C. (C-3705) 940 Main Campus Drive, Suite 500 Raleigh, NC 27606		



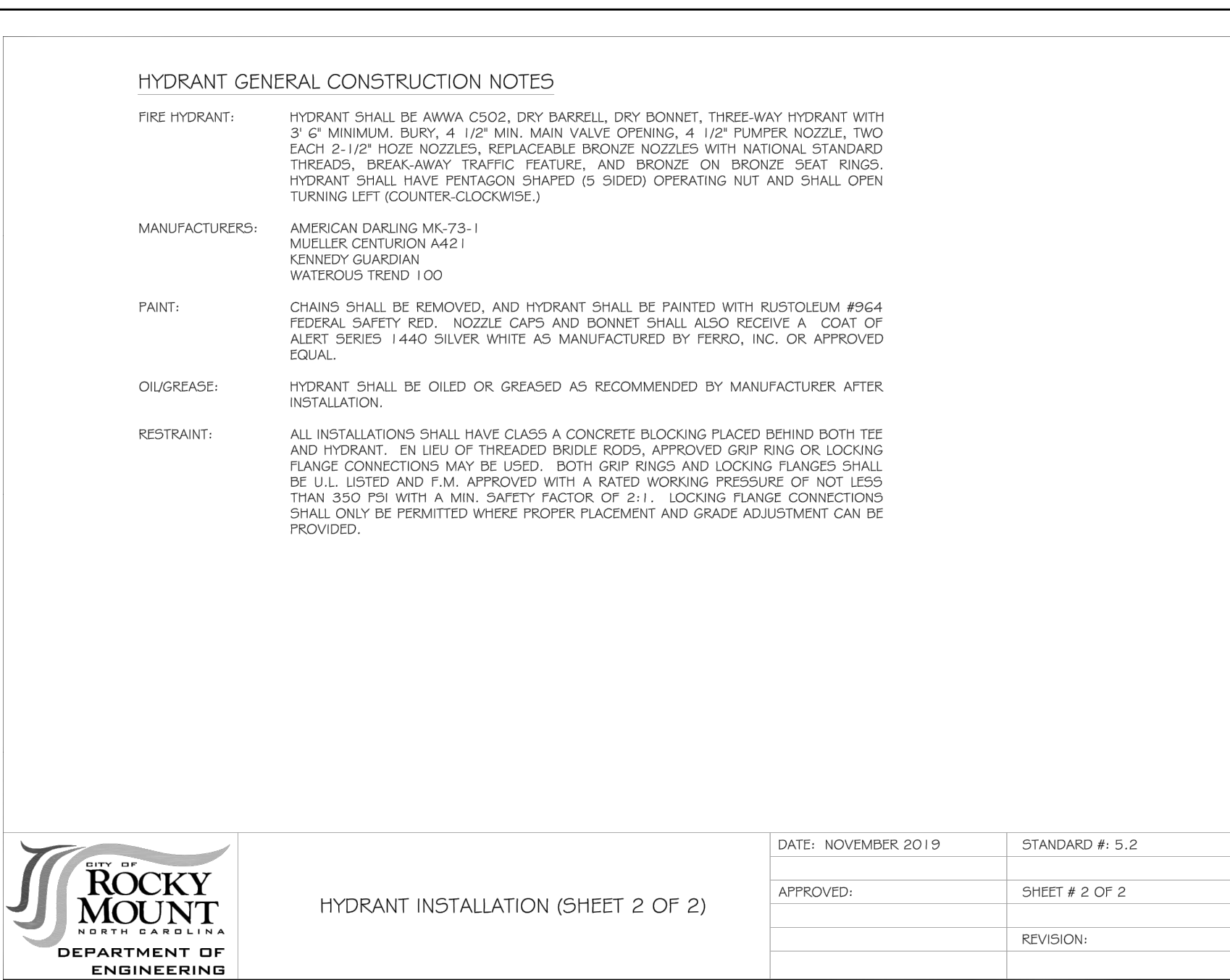
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Friday, December 10, 2021 10:21 AM ANSI Full Bleed D (25.00 X 34.00)



CITY OF ROCKY MOUNT
 NORTH CAROLINA
 DEPARTMENT OF ENGINEERING

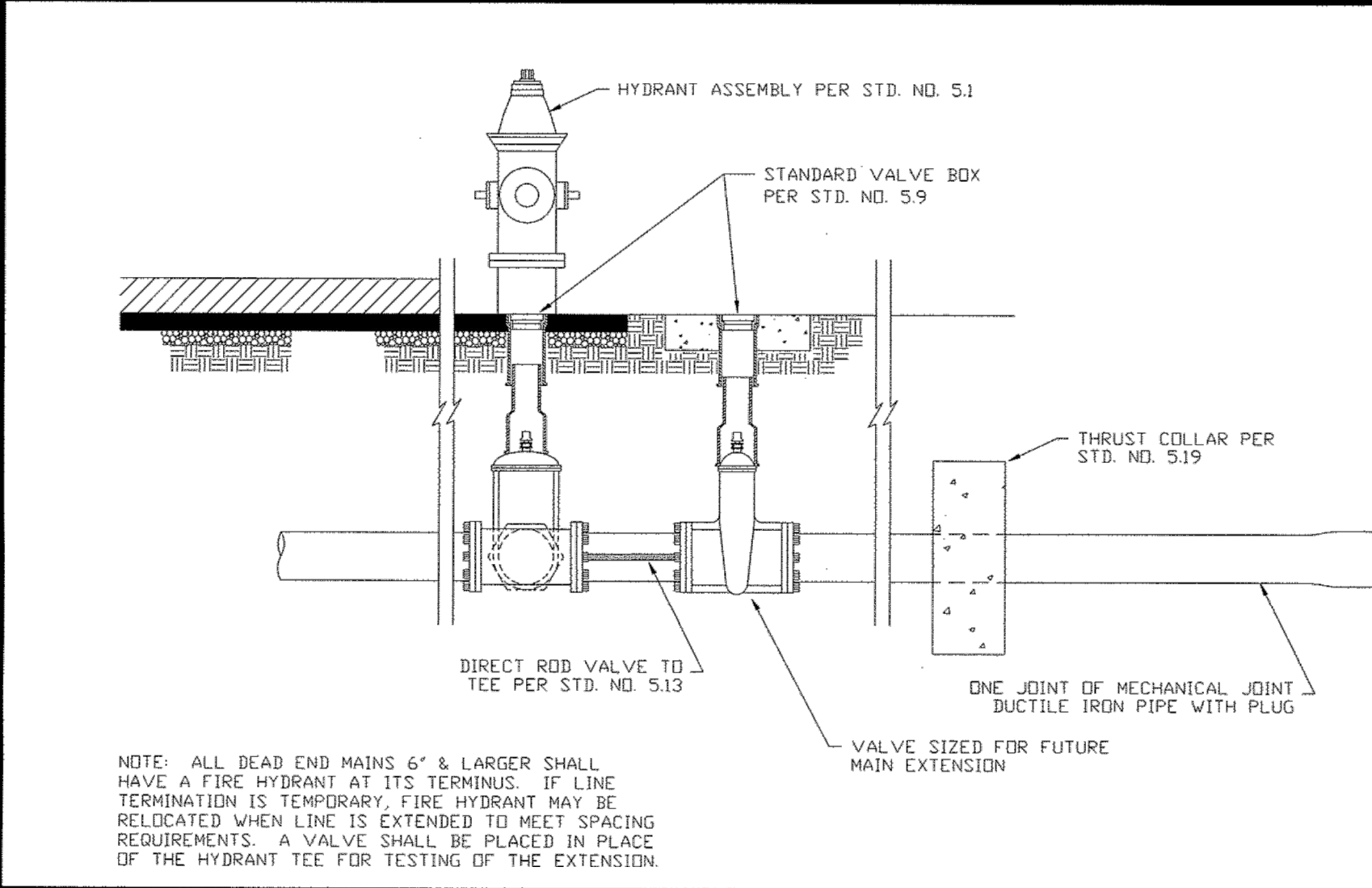
HYDRANT INSTALLATION (SHEET 1 OF 2)



CITY OF ROCKY MOUNT
 NORTH CAROLINA
 DEPARTMENT OF ENGINEERING

HYDRANT INSTALLATION (SHEET 2 OF 2)

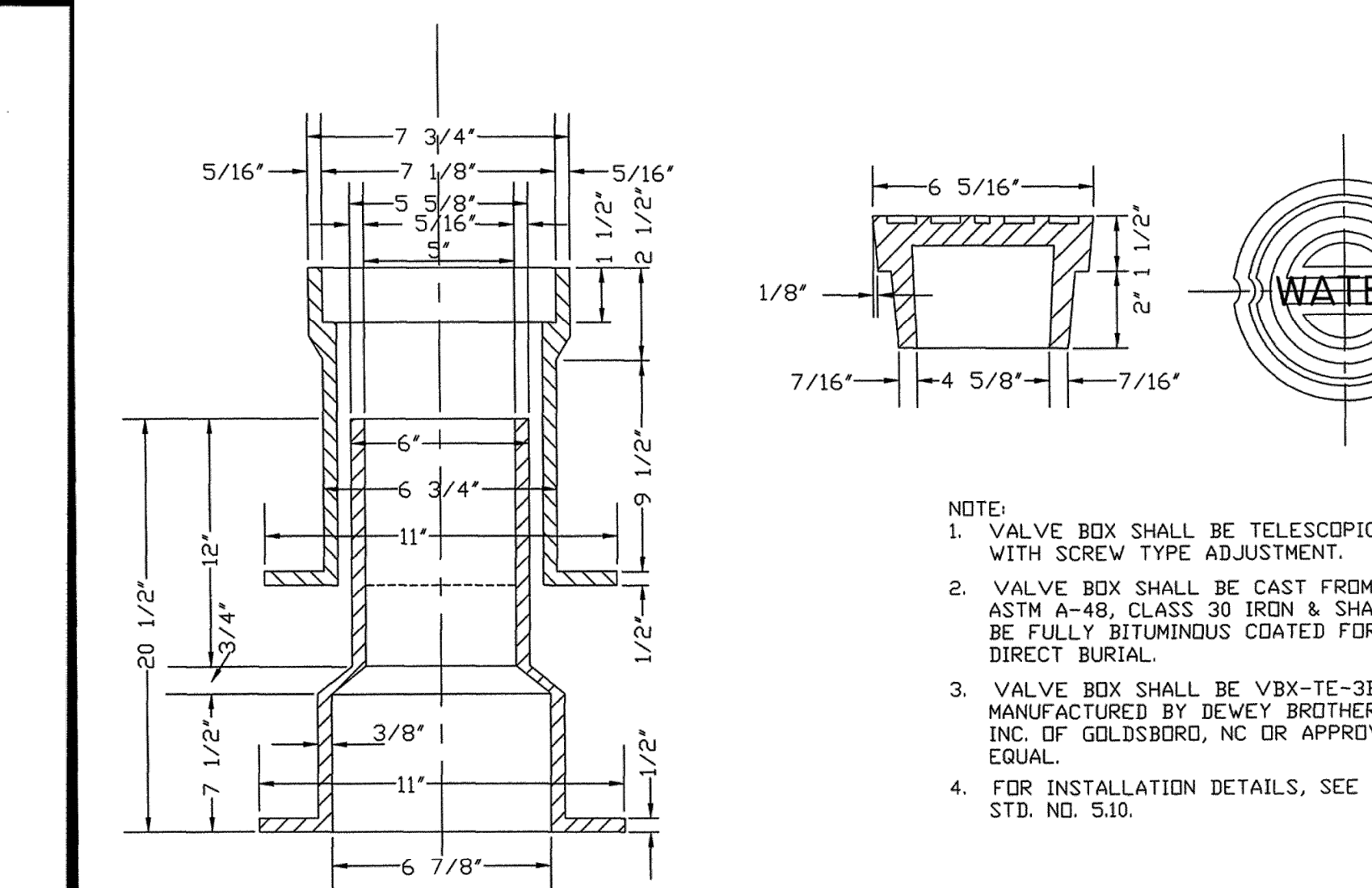
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REVISION NO. 1 - 3/23/20 - RDWY & DRN REV.	UTILITIES ENGINEER 12/14/2021
2 - 4/14/20 - SPEC. REV.	
3 - 10/21 - UTL. REV.	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Prepared by VHB Engineering NC, P.C. (C-3705) 940 Main Campus Drive, Suite 500 Raleigh, NC 27606	



CITY OF ROCKY MOUNT
 DEPT. OF ENGINEERING

TEMPORARY LINE TERMINUS (6" & LARGER MAINS)

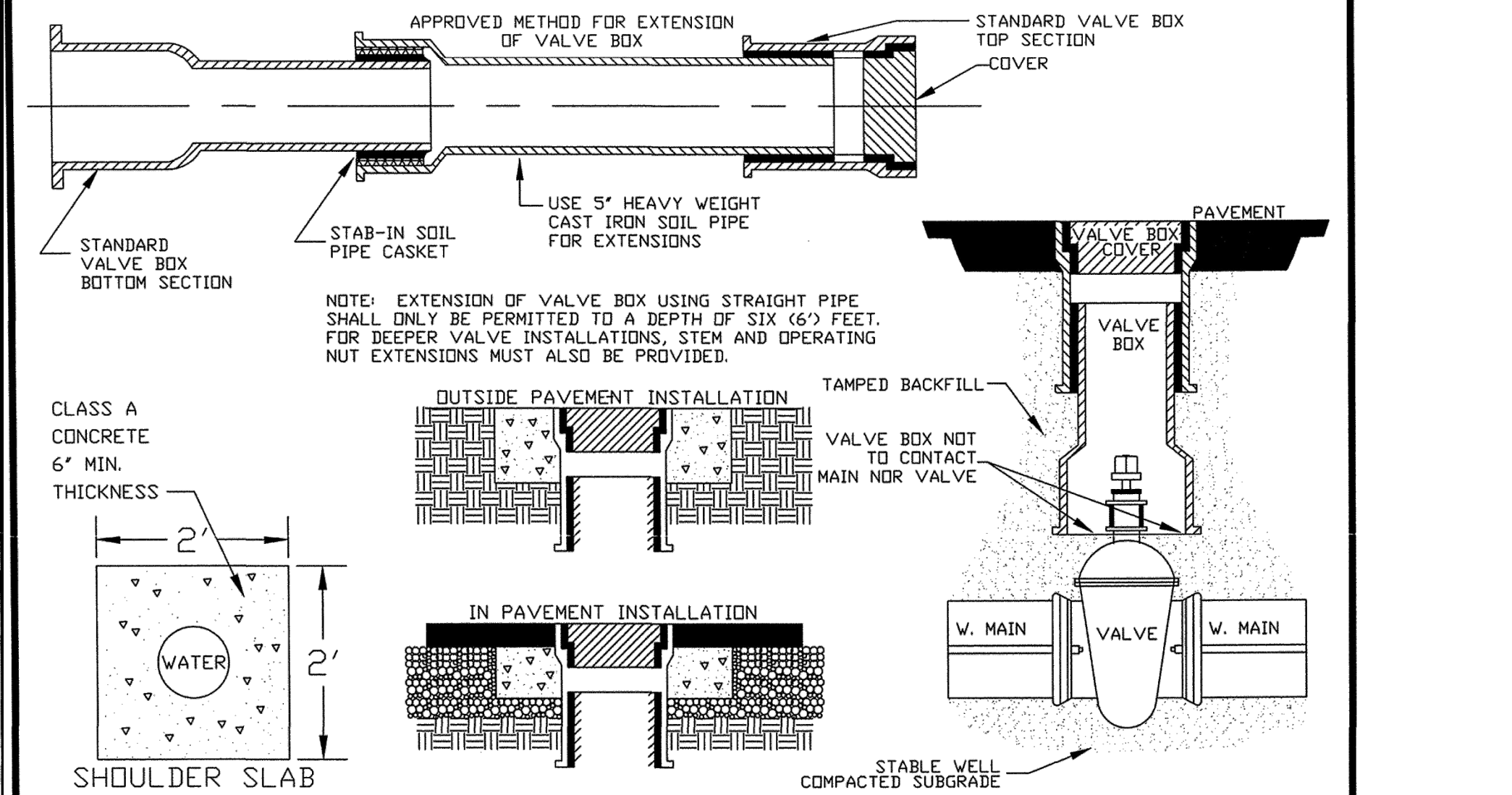
NO.	DATE	DESCRIPTION	APPROVED	STD. NO.
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	06-25-09			REVISION



CITY OF ROCKY MOUNT
 DEPT. OF ENGINEERING

STANDARD VALVE BOX

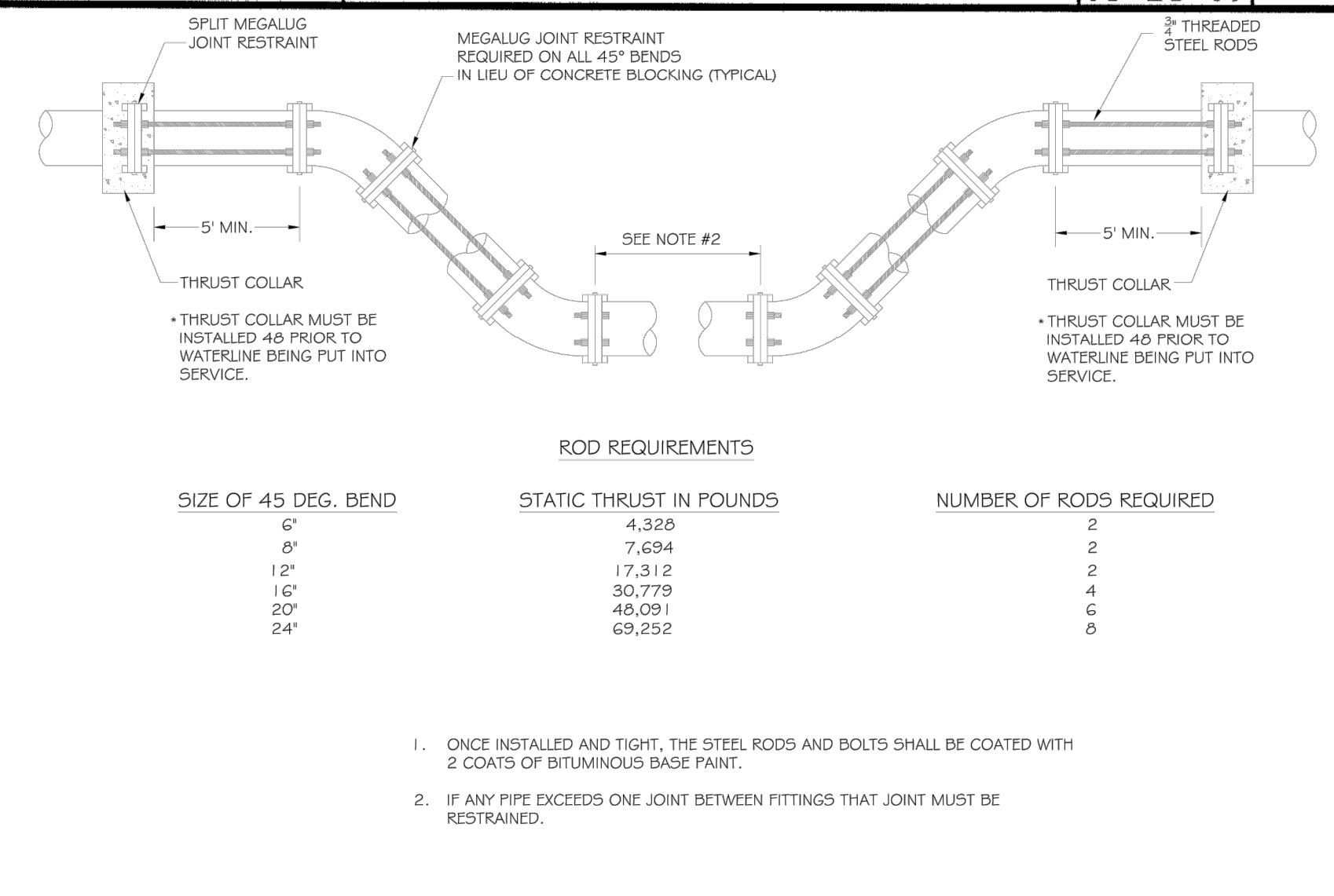
NO.	DATE	DESCRIPTION	APPROVED	STD. NO.
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	04-07-00			REVISION



CITY OF ROCKY MOUNT
 DEPT. OF ENGINEERING

VALVE BOX INSTALLATION DETAILS

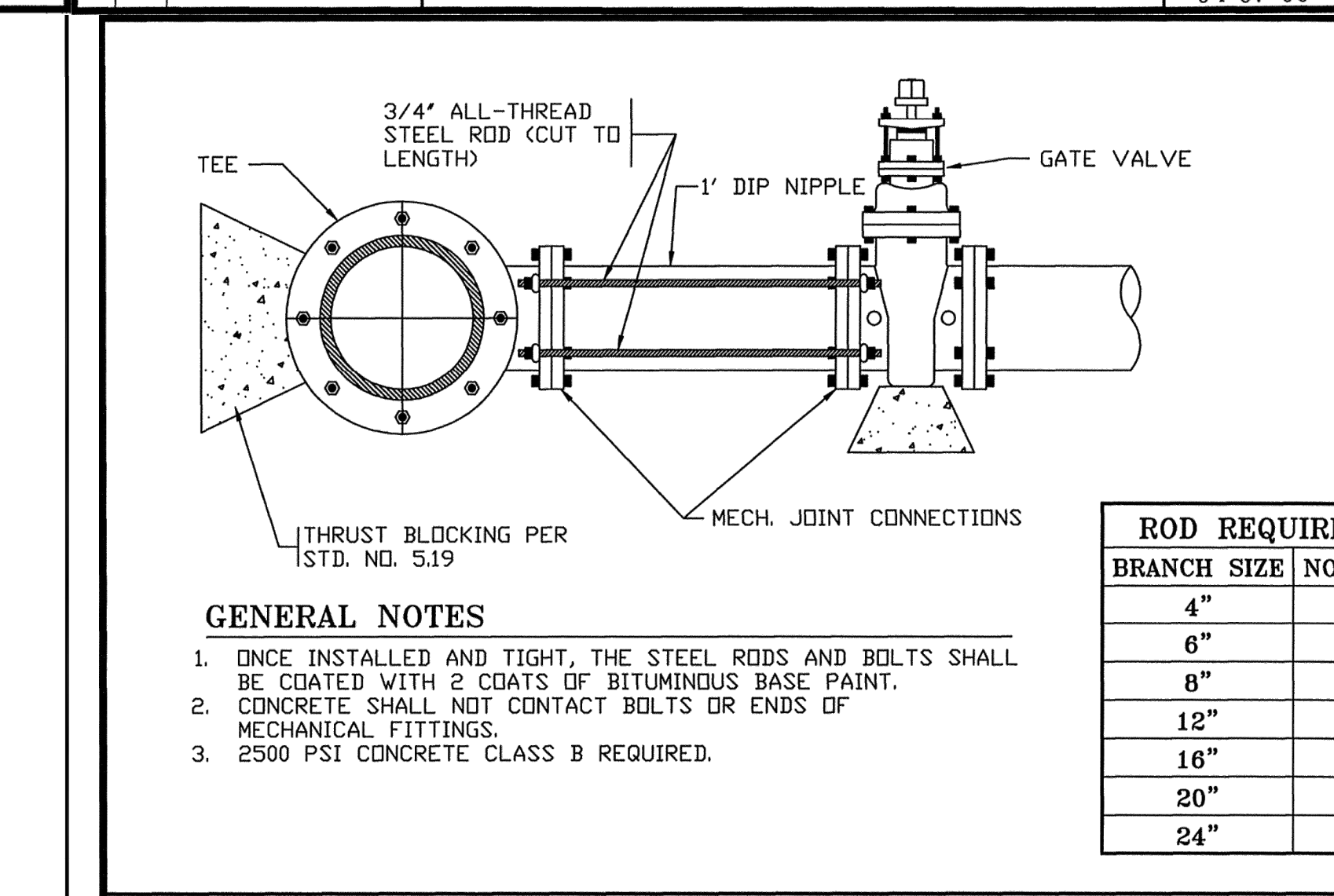
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				5.10
	04-07-00			REVISION



CITY OF ROCKY MOUNT
 NORTH CAROLINA
 DEPARTMENT OF ENGINEERING

STANDARD VERTICAL ADJUSTMENT

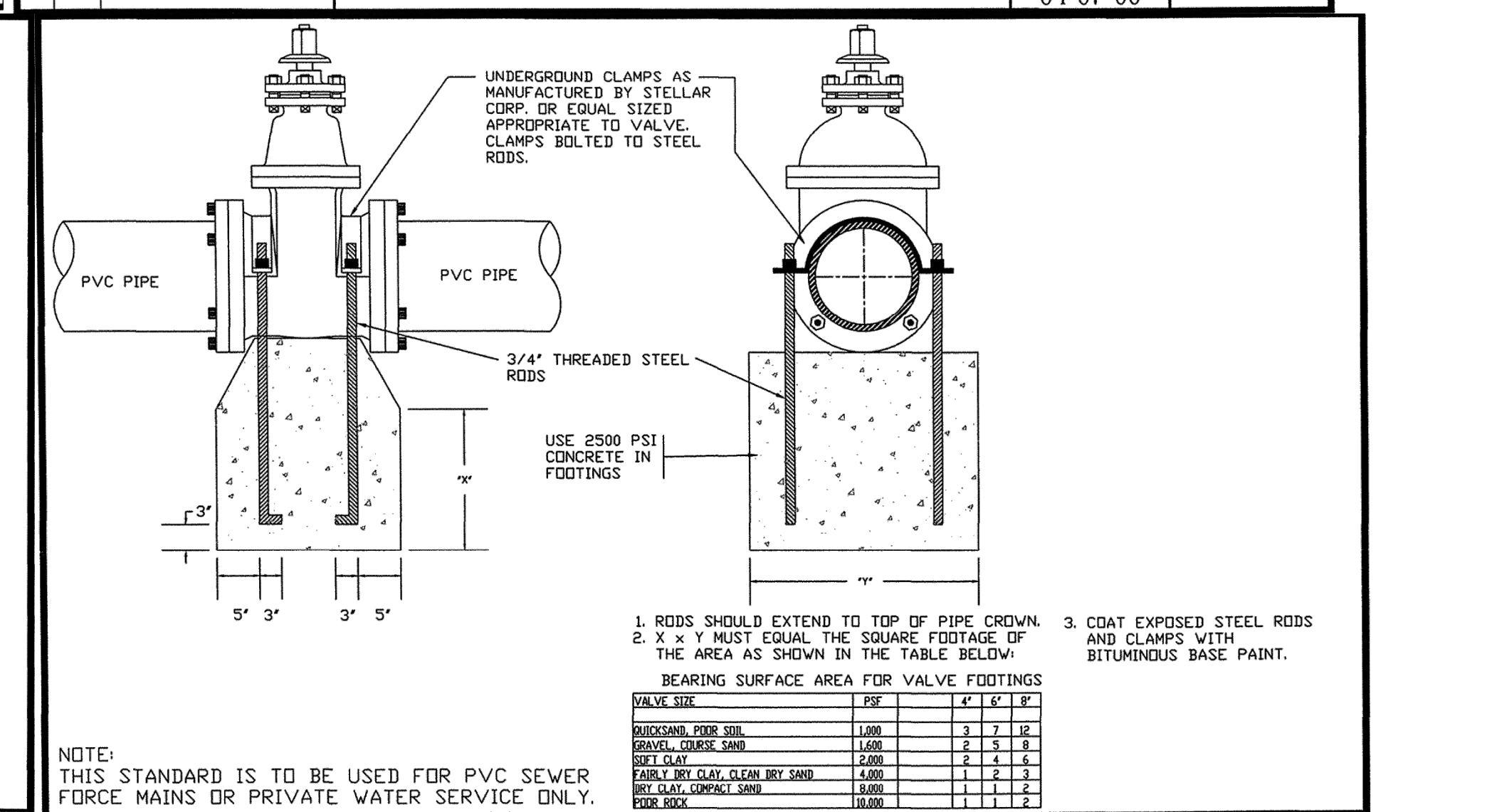
DATE: FEBRUARY 2020 STANDARD #: 5.1.1
 APPROVED: SHEET # 1 OF 1
 REVISION:



CITY OF ROCKY MOUNT
 DEPT. OF ENGINEERING

RESTRAINED TEE & VALVE FOR BRANCH LINES

NO.	DATE	DESCRIPTION	APPROVED	STD. NO.
				5.13
	03-05-03			REVISION



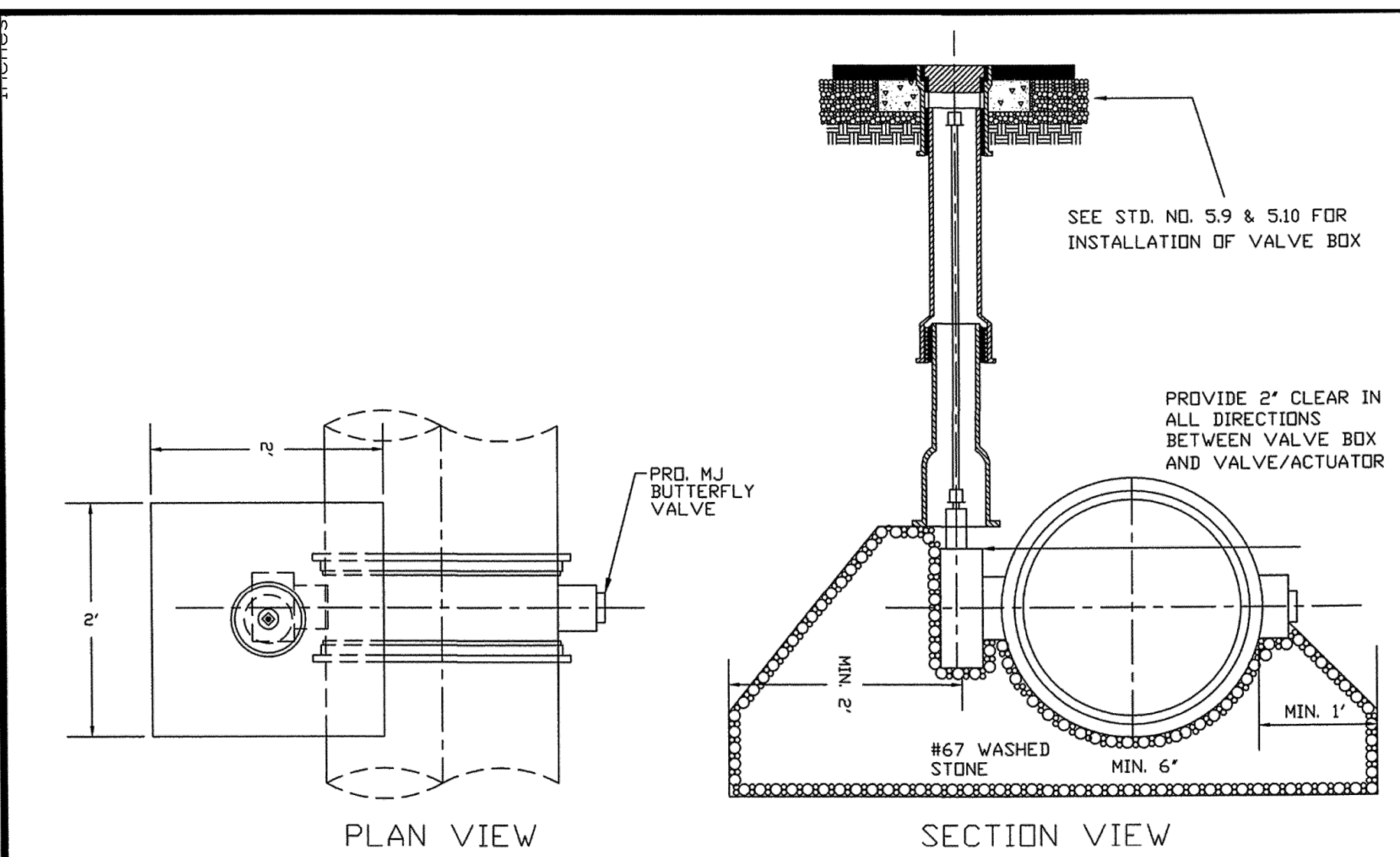
CITY OF ROCKY MOUNT
 DEPT. OF ENGINEERING

VALVE FOOTING

NO.	DATE	DESCRIPTION	APPROVED	STD. NO.
				5.14
	04-07-00			REVISION

12/10/2021 \\vnb.com\gb\p\proj\RockyMount\Utilities\RDW\Plan Sheets\U-5996-uc.dft.dwg John Townsend

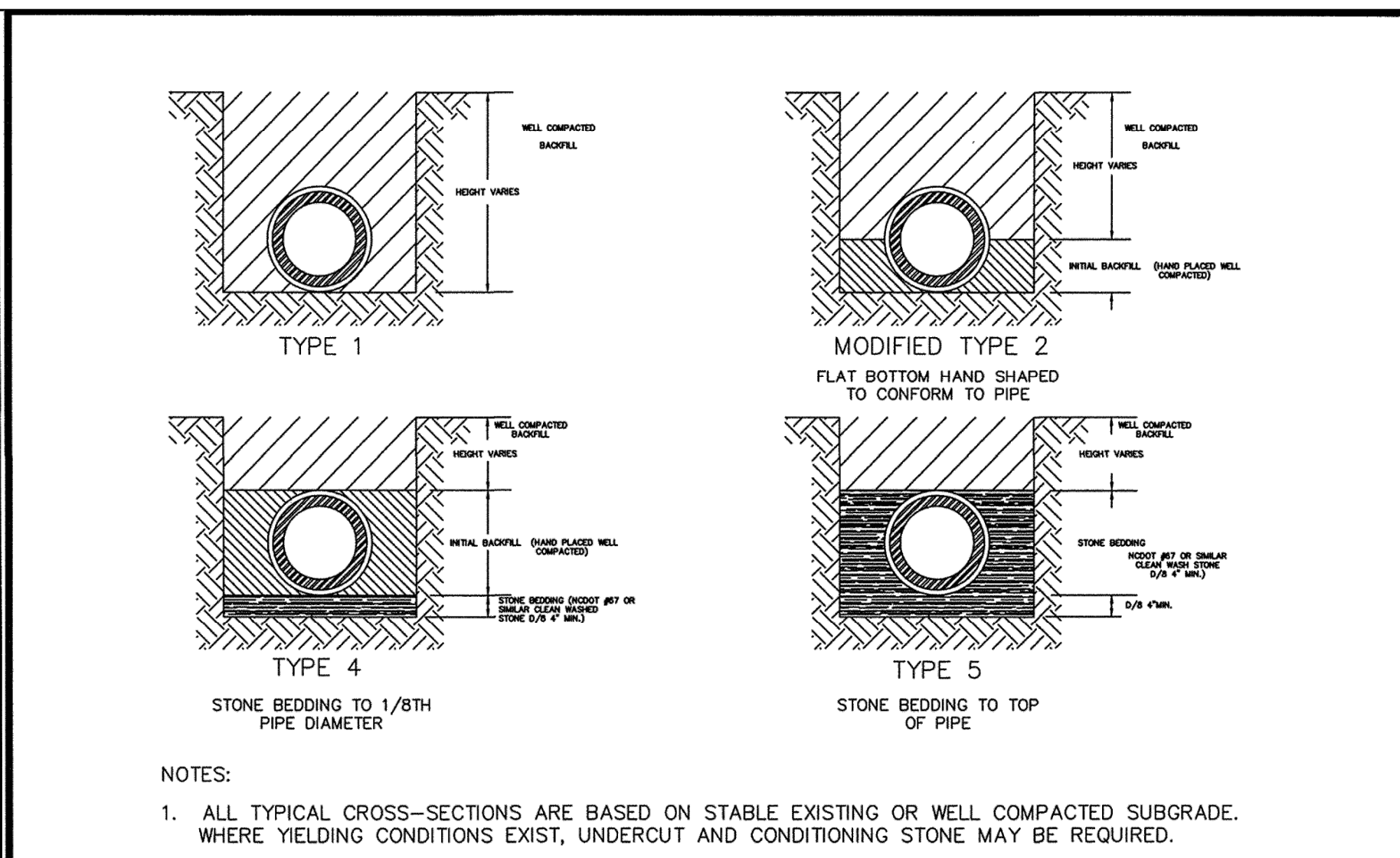
Friday, December 10, 2021 ANSI Full Bleed D (22.00 X 34.00)



REVISIONS		APPROVED	STD. NO.
NO.	DATE DESCRIPTION	DATE	REVISION
		04-07-00	5.15

BUTTERFLY VALVE INSTALLATION

CITY OF ROCKY MOUNT
DEPT. OF ENGINEERING

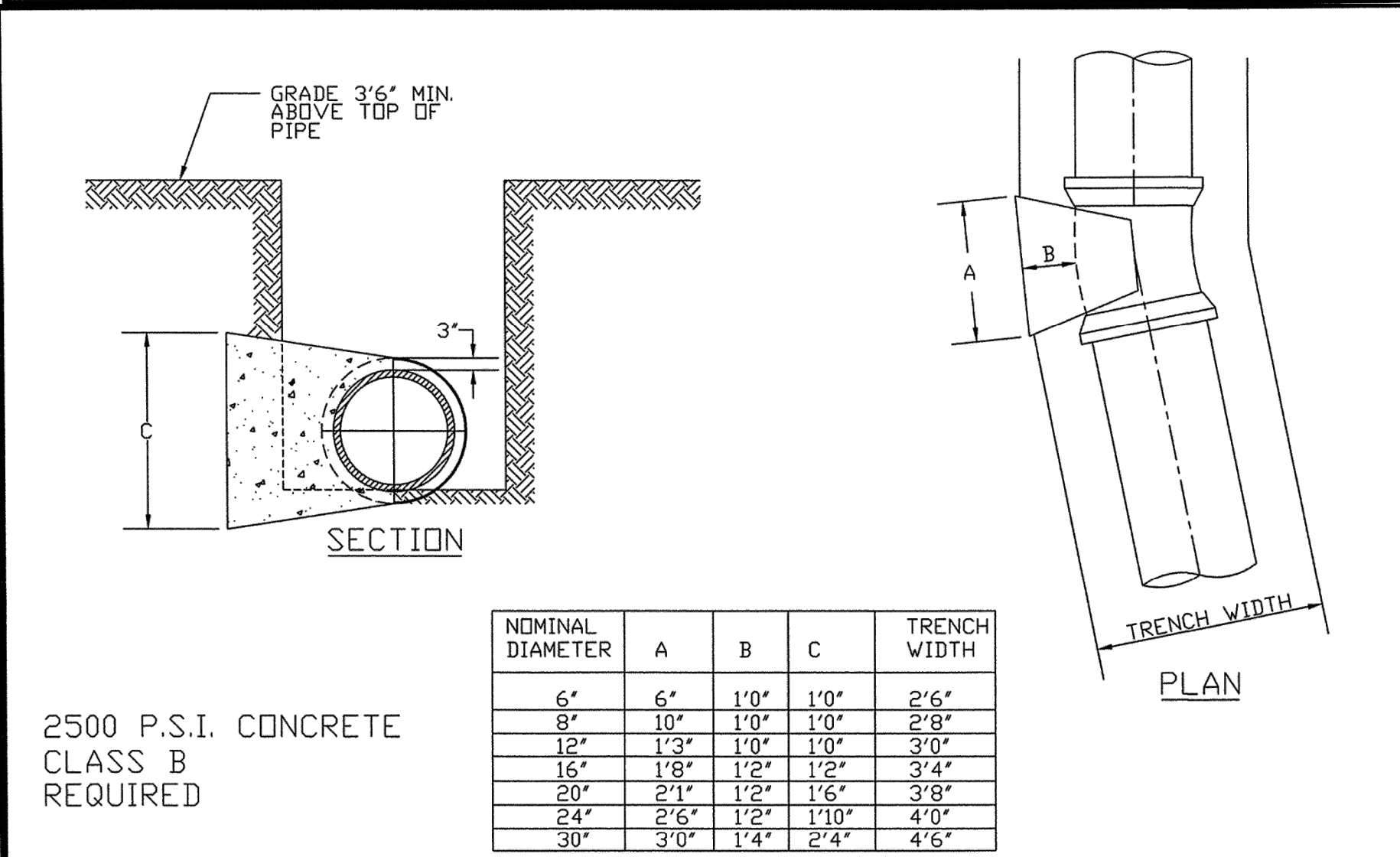


NOTES:
1. ALL TYPICAL CROSS-SECTIONS ARE BASED ON STABLE EXISTING OR WELL COMPACTED SUBGRADE. WHERE YIELDING CONDITIONS EXIST, UNDERCUT AND CONDITIONING STONE MAY BE REQUIRED.

REVISIONS		APPROVED	STD. NO.
NO.	DATE DESCRIPTION	DATE	REVISION
		04-14-04	1.4

BEDDING DETAIL FOR DUCTILE IRON PIPE

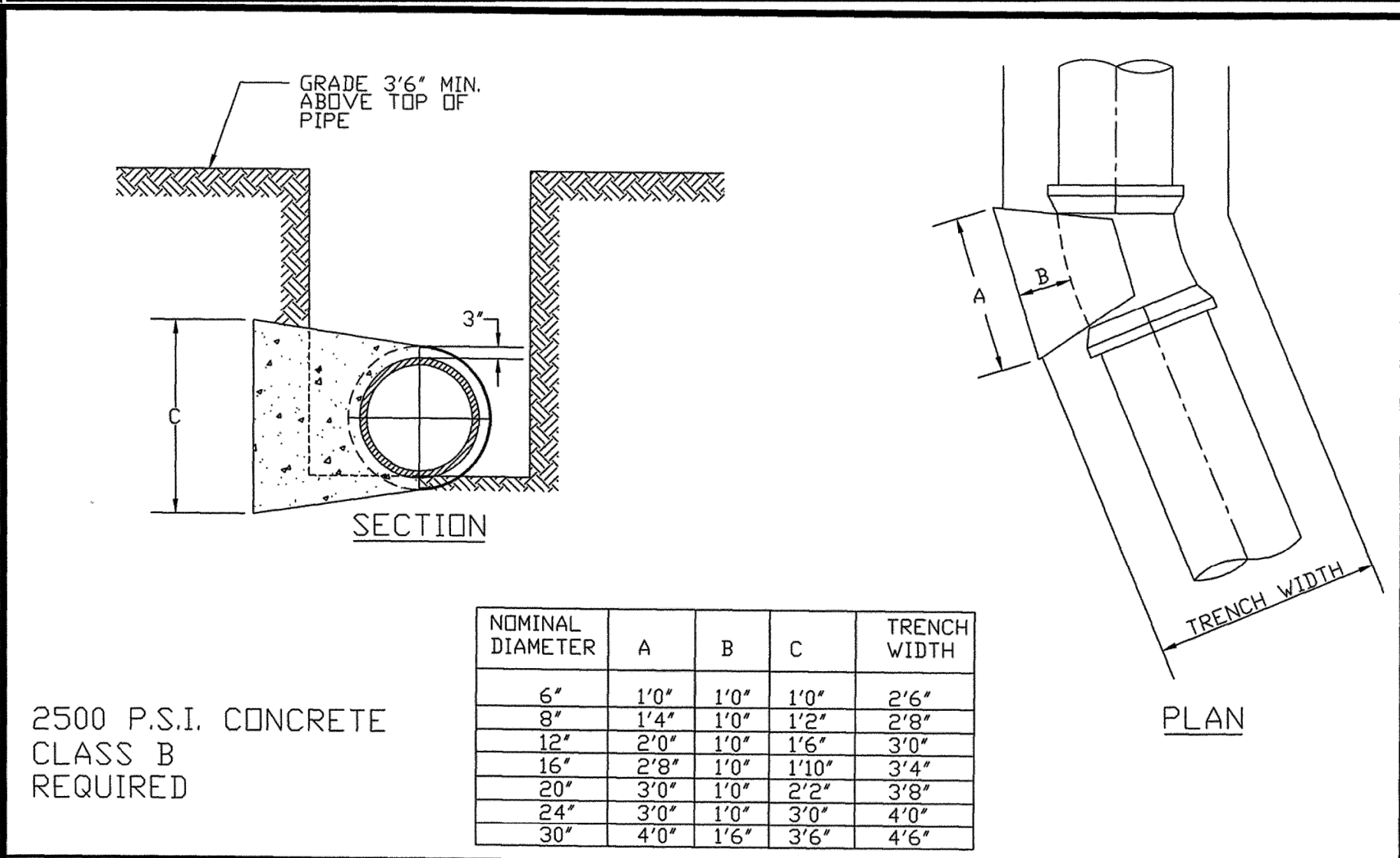
CITY OF ROCKY MOUNT
DEPT. OF ENGINEERING



REVISIONS		APPROVED	STD. NO.
NO.	DATE DESCRIPTION	DATE	REVISION
		07-13-01	5.20

BEND & BLOCKING OF 11 1/4° BENDS

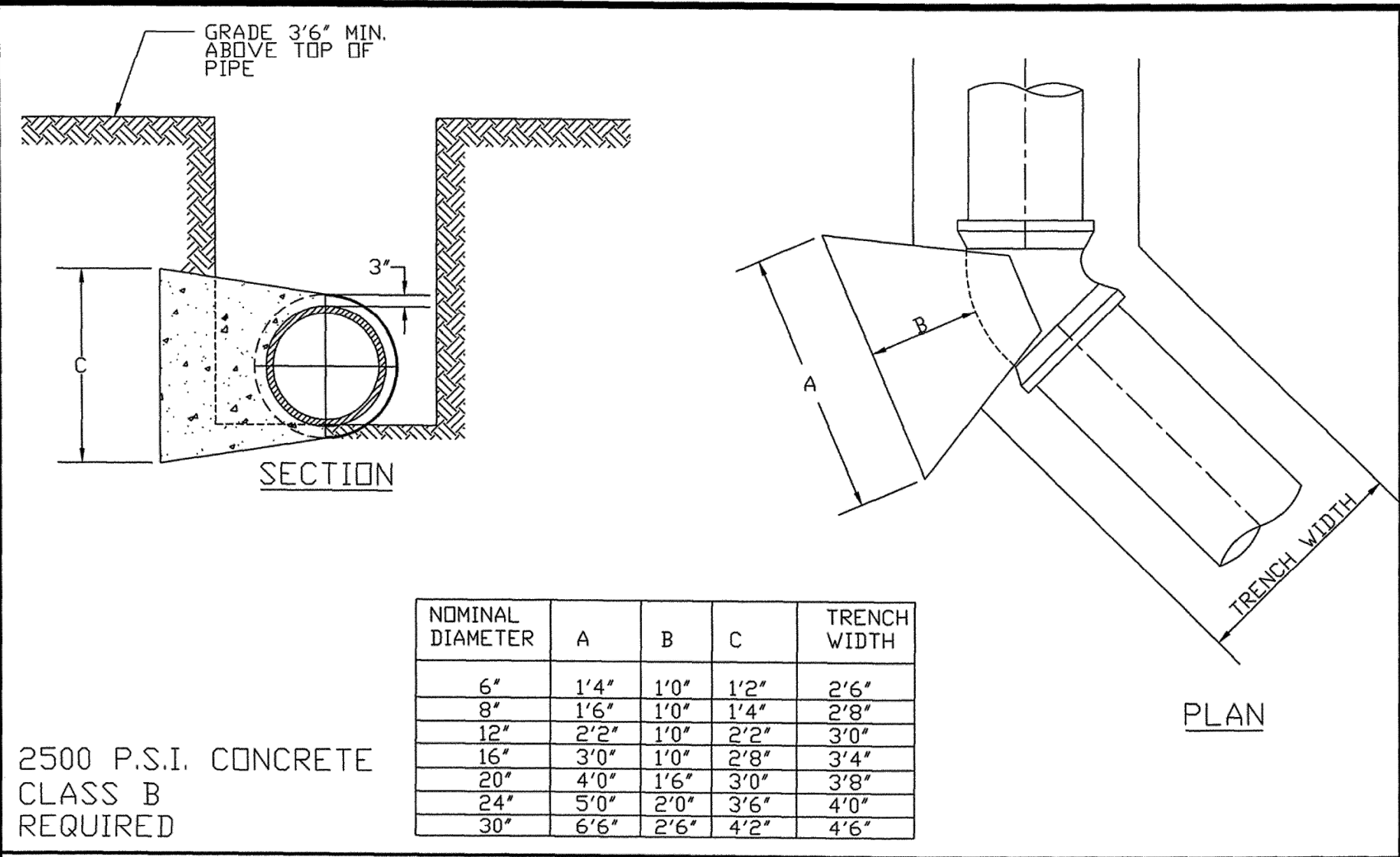
CITY OF ROCKY MOUNT
DEPT. OF ENGINEERING



REVISIONS		APPROVED	STD. NO.
NO.	DATE DESCRIPTION	DATE	REVISION
		07-13-01	5.21

TRENCHING & BLOCKING OF 22 1/2° BENDS

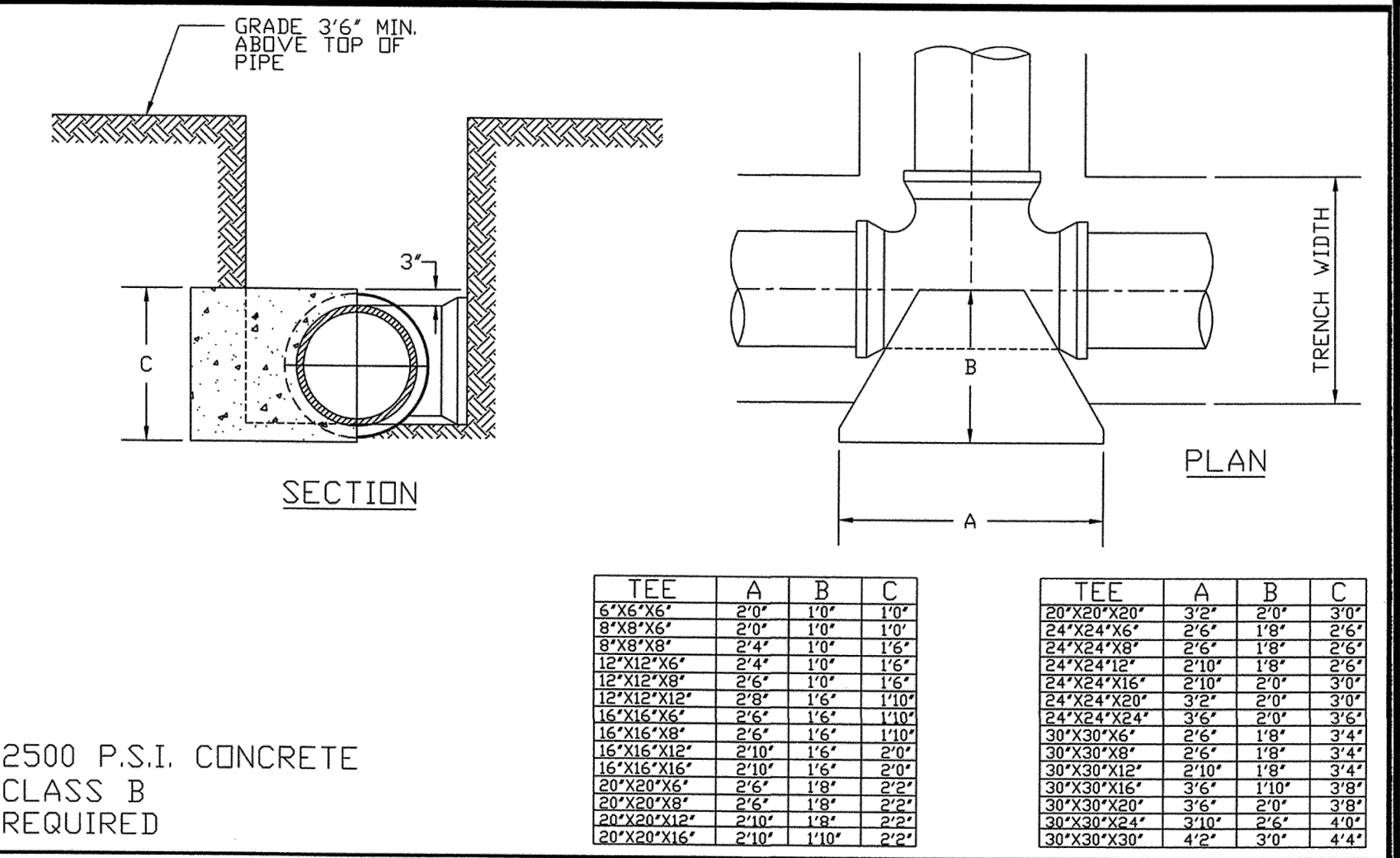
CITY OF ROCKY MOUNT
DEPT. OF ENGINEERING



REVISIONS		APPROVED	STD. NO.
NO.	DATE DESCRIPTION	DATE	REVISION
		07-13-01	5.22

BEND & BLOCKING OF 45° BENDS

CITY OF ROCKY MOUNT
DEPT. OF ENGINEERING

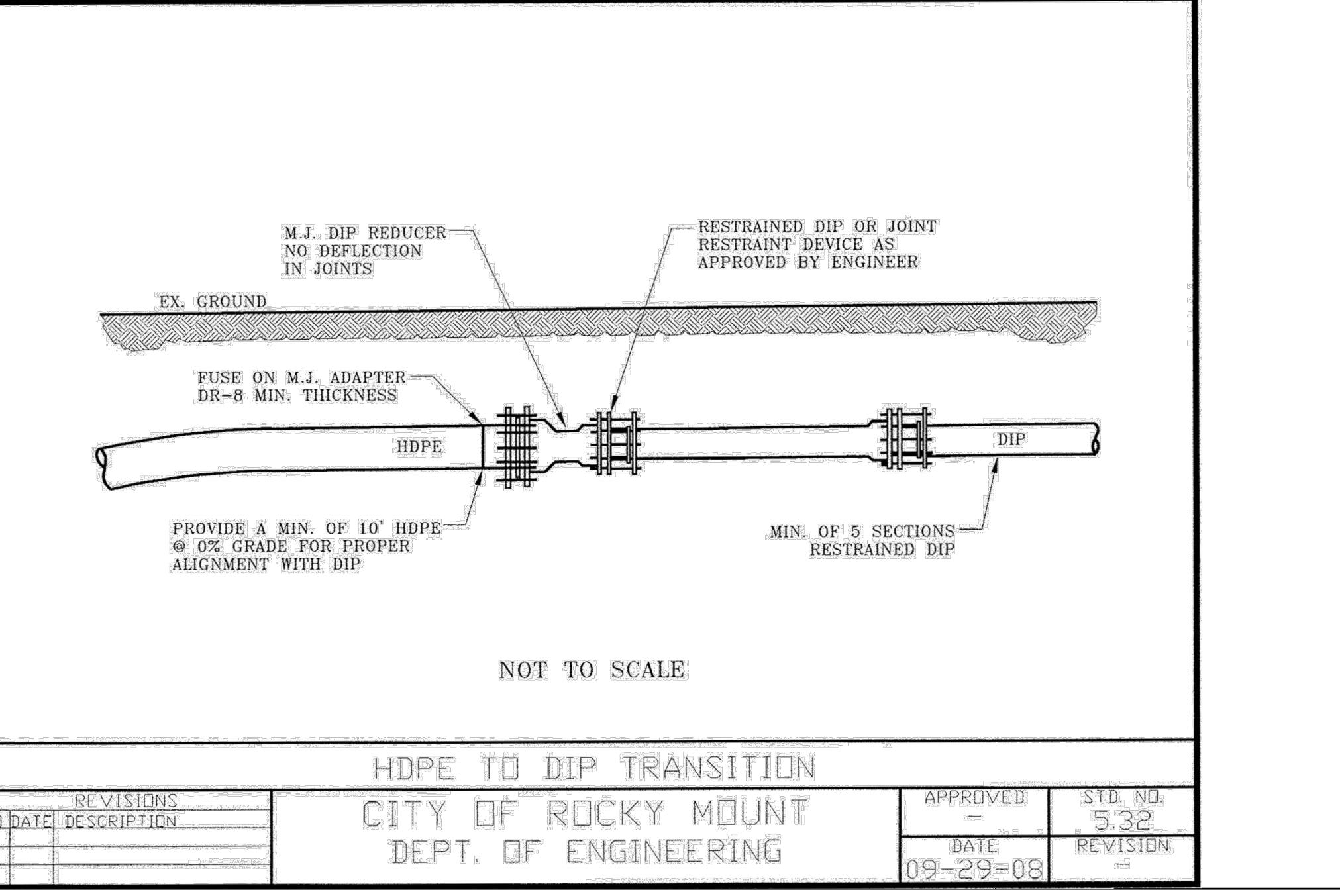
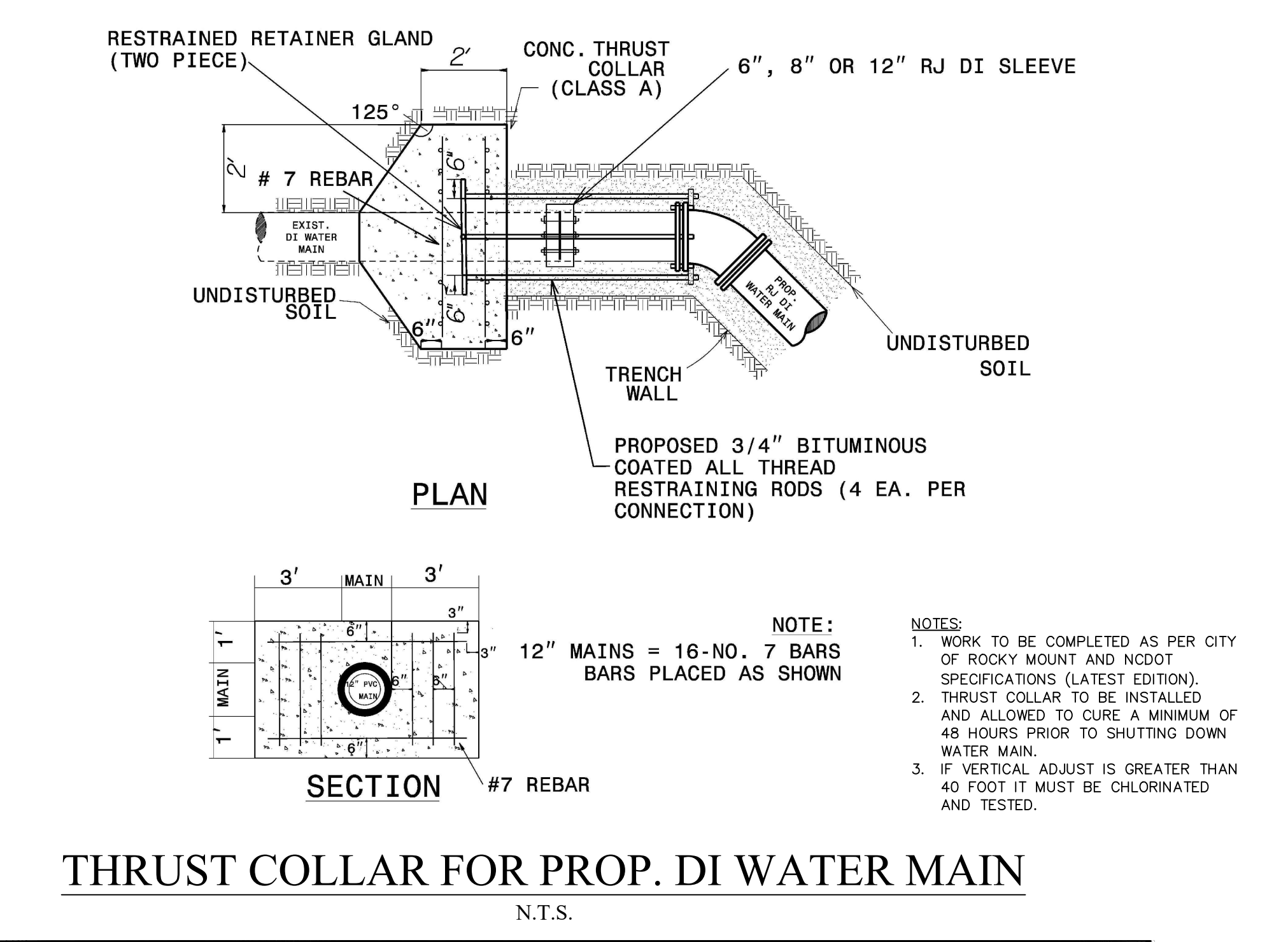


REVISIONS		APPROVED	STD. NO.
NO.	DATE DESCRIPTION	DATE	REVISION
		07-13-01	5.24

TRENCHING & BLOCKING OF TEES

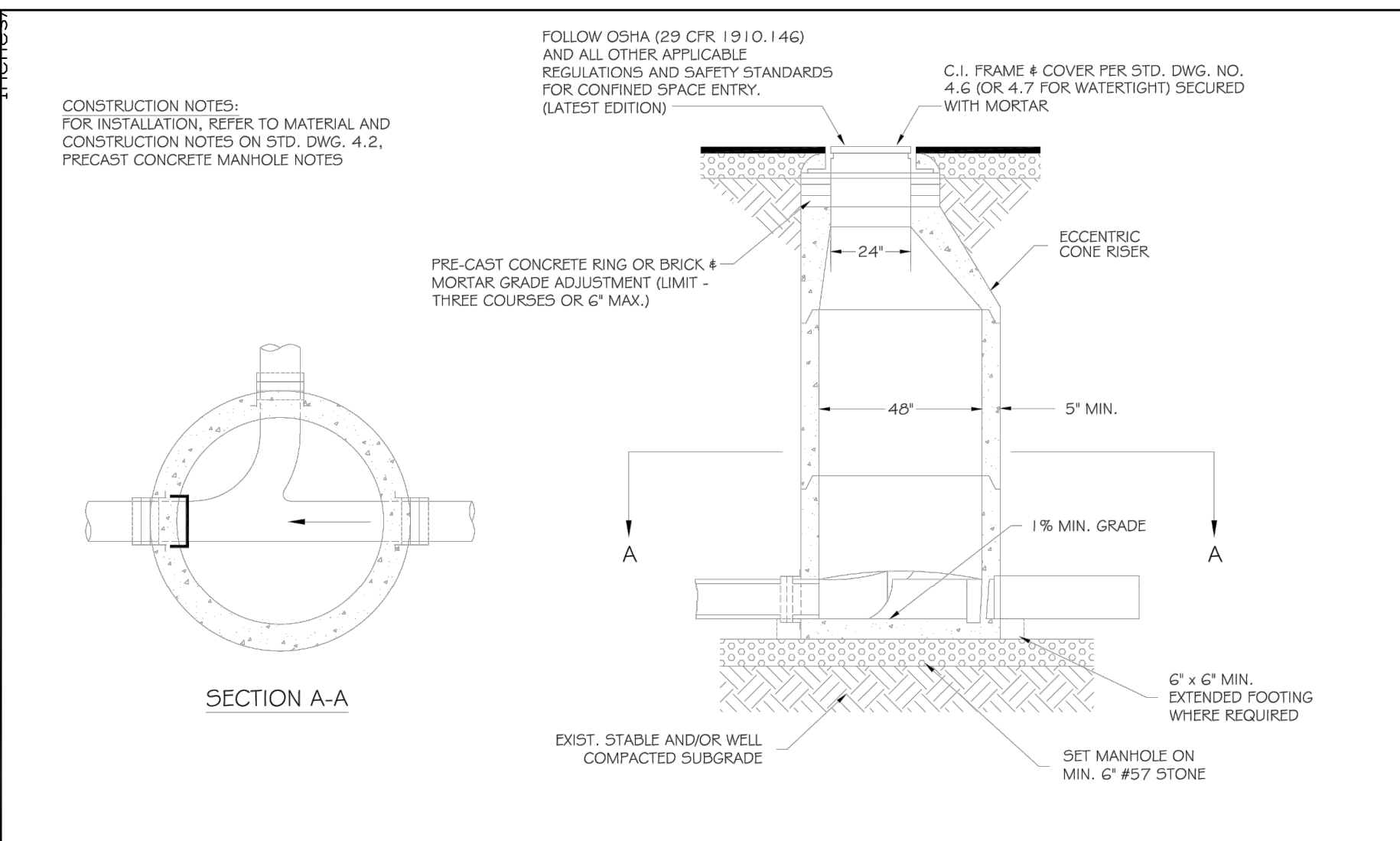
CITY OF ROCKY MOUNT
DEPT. OF ENGINEERING

PROJECT REFERENCE NO. U-5996	SHEET NO. UC-DT-2
REVISION NO. 1 - 3/23/20 - RDWY & DRN REV. 2 - 4/4/20 - SPEC. REV. 3 - 10/21 - UTL REV.	UTILITIES ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	
Prepared by VHB Engineering NC, P.C. (C-3705) 940 Main Campus Drive, Suite 500 Raleigh, NC 27606	



12/10/2021 \\vhs.com\gb\p\proj\Rocky\Role\gh\3856420 NCDOT_U-5996 Div 4 Adm\NCDOT\Utilities\Rocky\Plan Sheets\U-5996_uc.dwg John Townsend

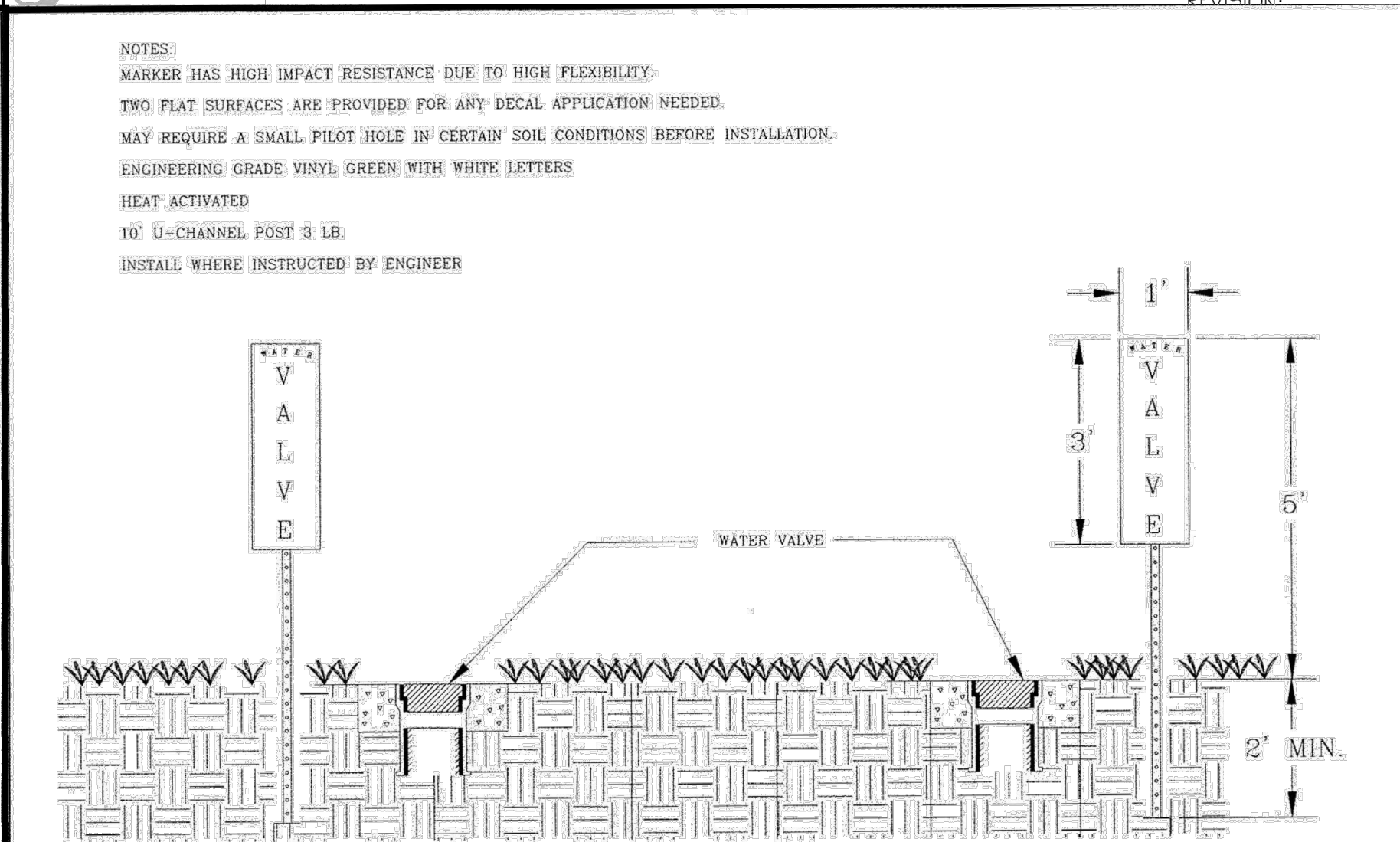
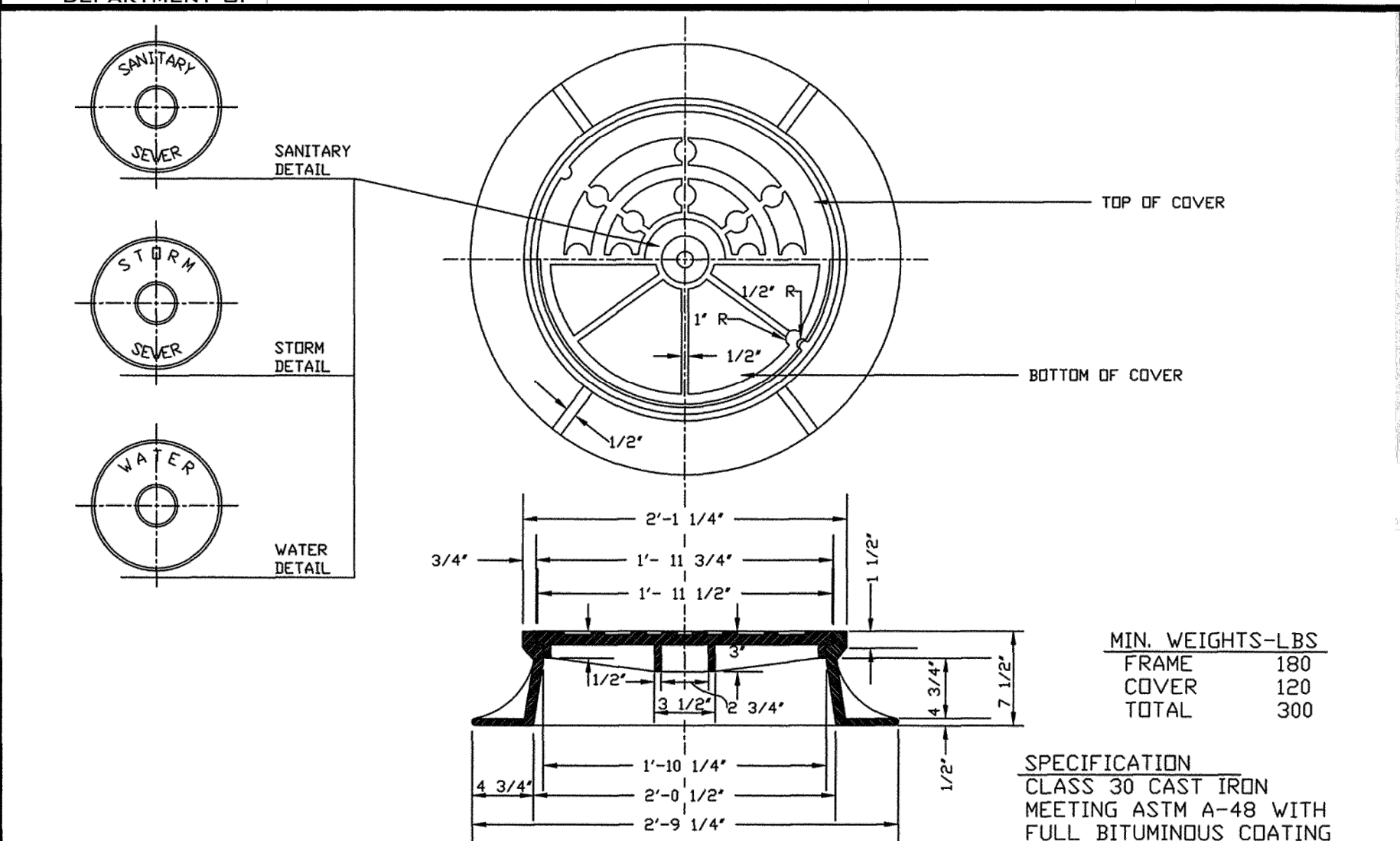
12/10/2021 12:00:00 PM Friday, December 10, 2021 ANSI Full Bleed D (25.00 X 34.00)



- NOTES:**
1. PRECAST CONCRETE MANHOLES SHALL MEET OR EXCEED THE REQUIREMENTS OF ASTM C 478. ALL SURFACES SHALL BE SMOOTH AND EVEN TEXTURED WITH A MINIMUM OF HONEYCOMB, FIN, AND OTHER IMPERFECTIONS.
 2. JOINTS BETWEEN MANHOLE SECTIONS SHALL BE SEALED WATERTIGHT USING EITHER O-RING GASKETS CONFORMING WITH ASTM C 443 OR BUTYL RESIN CONFORMING WITH AASHTO M-198.
 3. HOLES FOR CONNECTION OF PIPE TO MANHOLE SHALL BE PRECAST OR CORED. DIAMETER OF HOLE SHALL NOT EXCEED OUTSIDE DIAMETER OF PIPE BY MORE THAN 3 INCHES.
 4. CONNECTIONS OF PIPE TO MANHOLE SHALL BE MADE WATERTIGHT USING RESILIENT CONNECTORS CONFORMING TO ASTM C 929 OR NEOPRENE BOOTS EMBEDDED IN PRECAST BASE WITH STAINLESS STEEL COMPRESSION BANDS.
 5. MANHOLE INVERTS SHALL BE INSTALLED USING BRICK AND MORTAR, OR MANHOLES MAY BE PRECAST, MONOLITHIC SECTIONS WITH FORMED INVERTS.
 6. LIFT HOLES SHALL BE PLUGGED AND FILLED FLUSH WITH MORTAR.

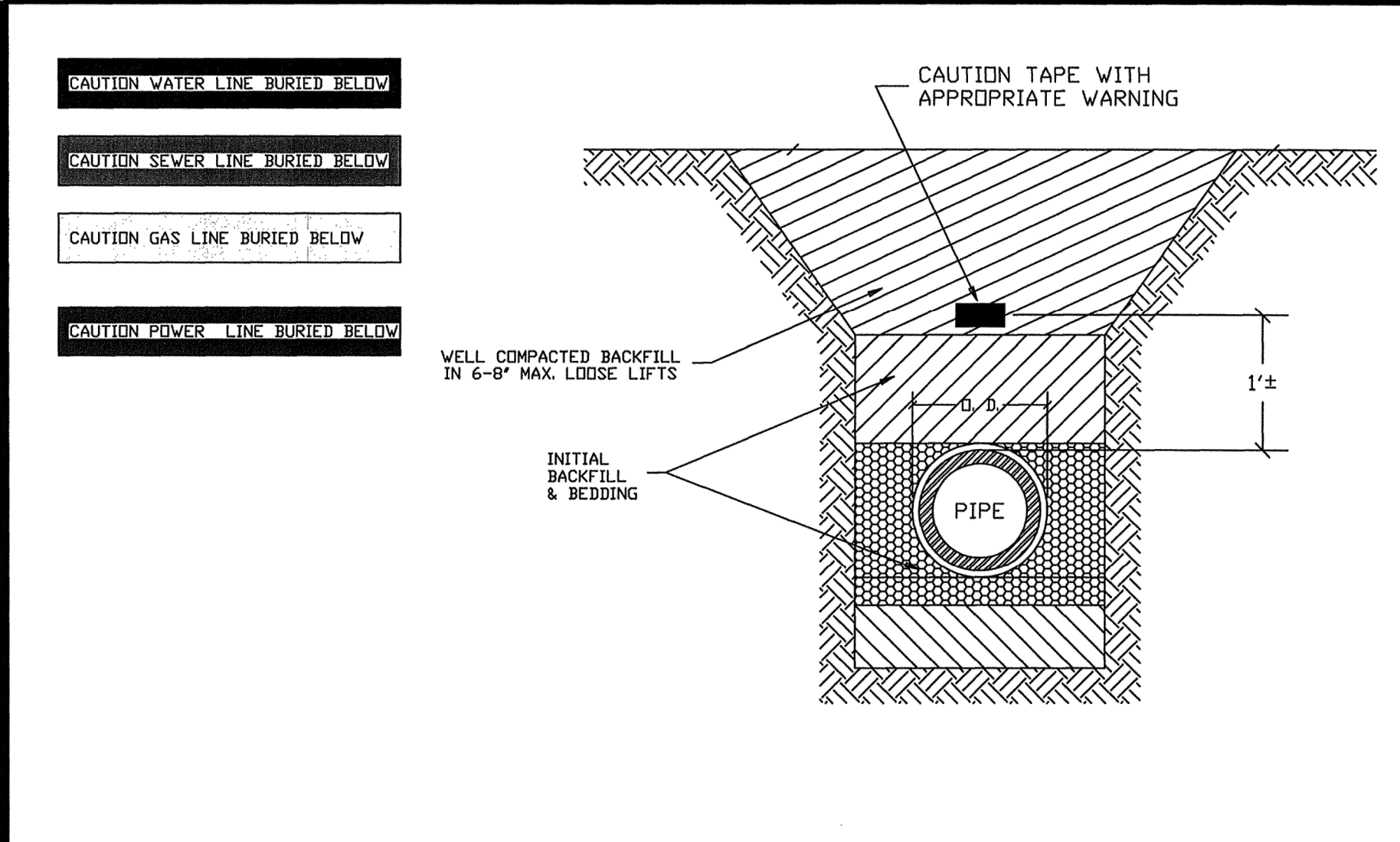
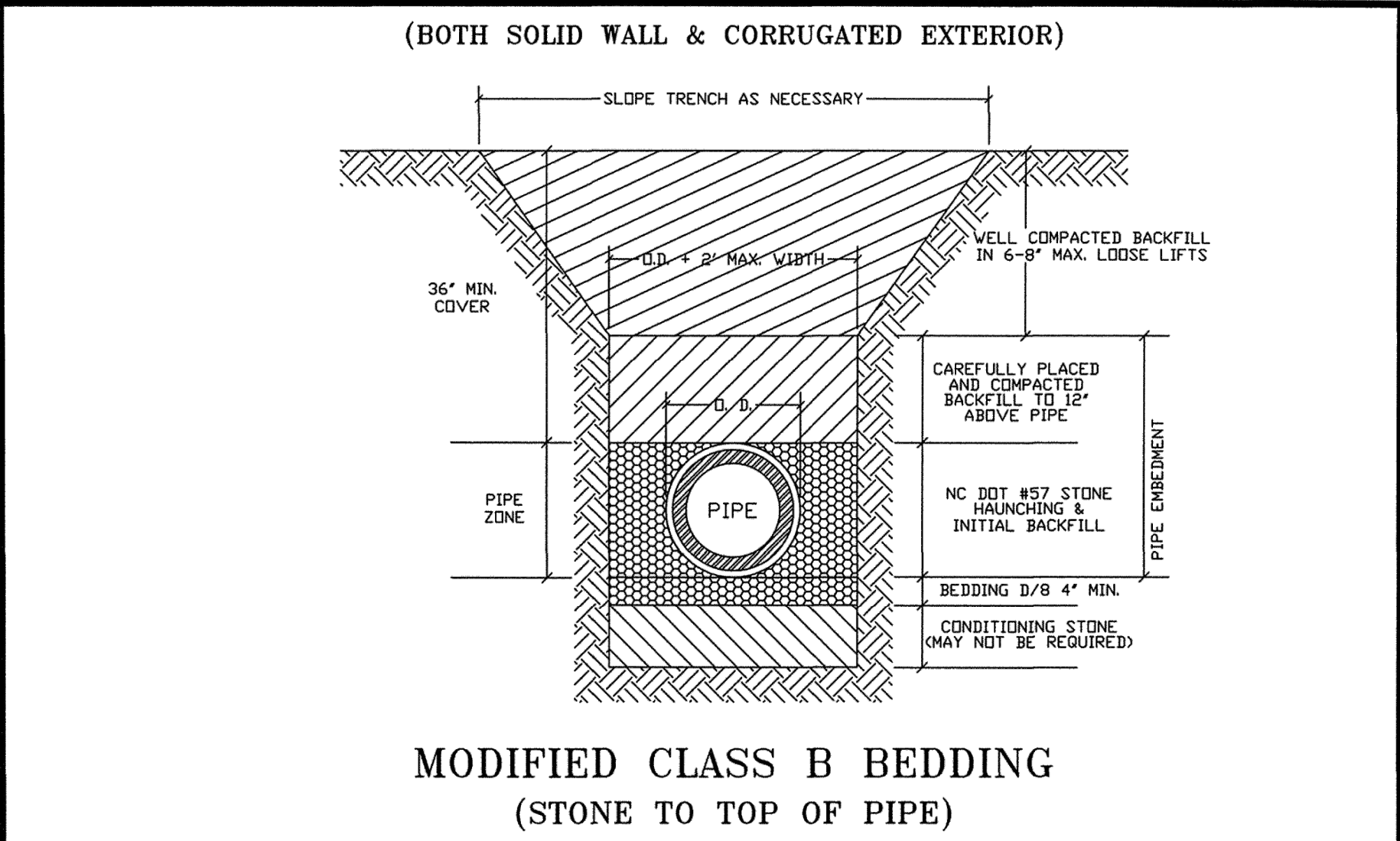
<p>CITY OF ROCKY MOUNT NORTH CAROLINA DEPARTMENT OF ENGINEERING</p>	PRECAST CONCRETE MANHOLE	DATE: FEBRUARY 2020	STANDARD #: 4.1
		APPROVED:	SHEET # 1 OF 1
		REVISION:	

<p>CITY OF ROCKY MOUNT NORTH CAROLINA</p>	PRECAST CONCRETE MANHOLE NOTES	DATE: FEBRUARY 2020	STANDARD #: 4.2
		APPROVED:	SHEET # 1 OF 1
		REVISION:	



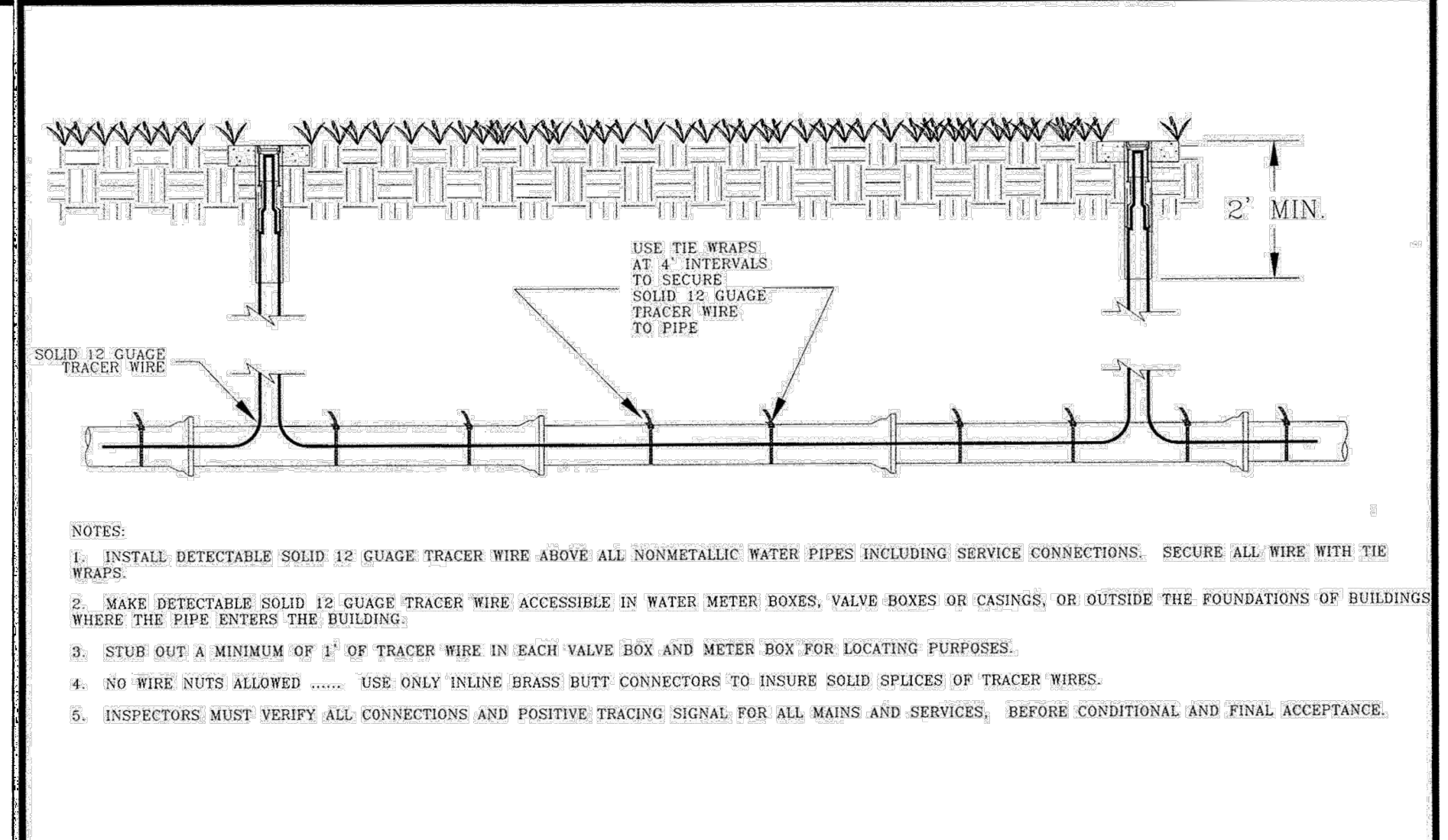
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NO	DATE	DESCRIPTION																
APPROVED	STD. NO. 4.6																	
DATE 02-19-03	REVISION																	

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NO	DATE	DESCRIPTION																
APPROVED	STD. NO. 1.15																	
DATE 08-27-08	REVISION																	



<table border="1"> <tr><th>NO</th><th>DATE</th><th>DESCRIPTION</th></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </table>	NO	DATE	DESCRIPTION										<p>BEDDING DETAIL FOR POLYVINYL CHLORIDE PIPE</p> <p>CITY OF ROCKY MOUNT DEPT. OF ENGINEERING</p>	<table border="1"> <tr><td>APPROVED</td><td>STD. NO. 1.5</td></tr> <tr><td>DATE 04-11-00</td><td>REVISION</td></tr> </table>	APPROVED	STD. NO. 1.5	DATE 04-11-00	REVISION
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APPROVED	STD. NO. 1.5																	
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NO	DATE	DESCRIPTION																
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DATE 01-29-03	REVISION																	



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NO	DATE	DESCRIPTION																
APPROVED	STD. NO. 1.17																	
DATE 09-23-08	REVISION																	

PROJECT REFERENCE NO. U-5996	SHEET NO. UC-DT-3
REVISION NO. 1 - 3/23/20 - RDWY & DRN REV.	<p>12/14/2021</p>
2 - 4/14/20 - SPEC. REV.	
3 - 10/21 - UTL. REV.	
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p> <p>Prepared by</p> <p>VHB Engineering NC, P.C. (C-3705) 940 Main Campus Drive, Suite 500 Raleigh, NC 27606</p>	

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