



PROJECT MANAGER Mr. Robert Ridgell, PE - VDOT Fredericksburg District - (540) 372-3549
SURVEYED BY, DATE Dewberry Consultants LLC - (703) 468-2252, 01/17
DESIGNED BY Dewberry Consultants LLC - (703) 849-0168
SUBSURFACE UTILITY BY, DATE So-Deep Inc. - (703) 361-6005, 01/17

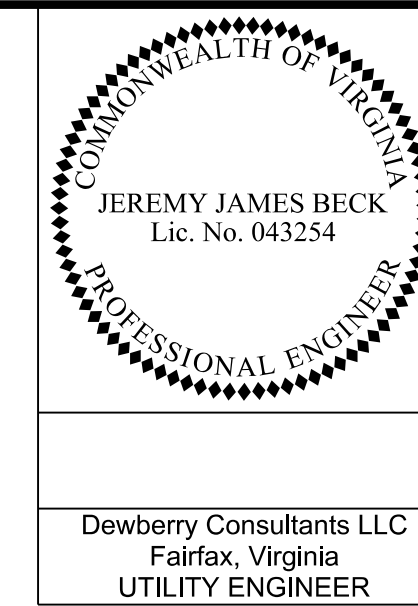
WATER AND SEWER RECONSTRUCTION GENERAL NOTES

GENERAL NOTES

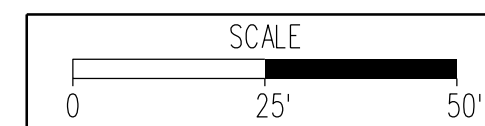
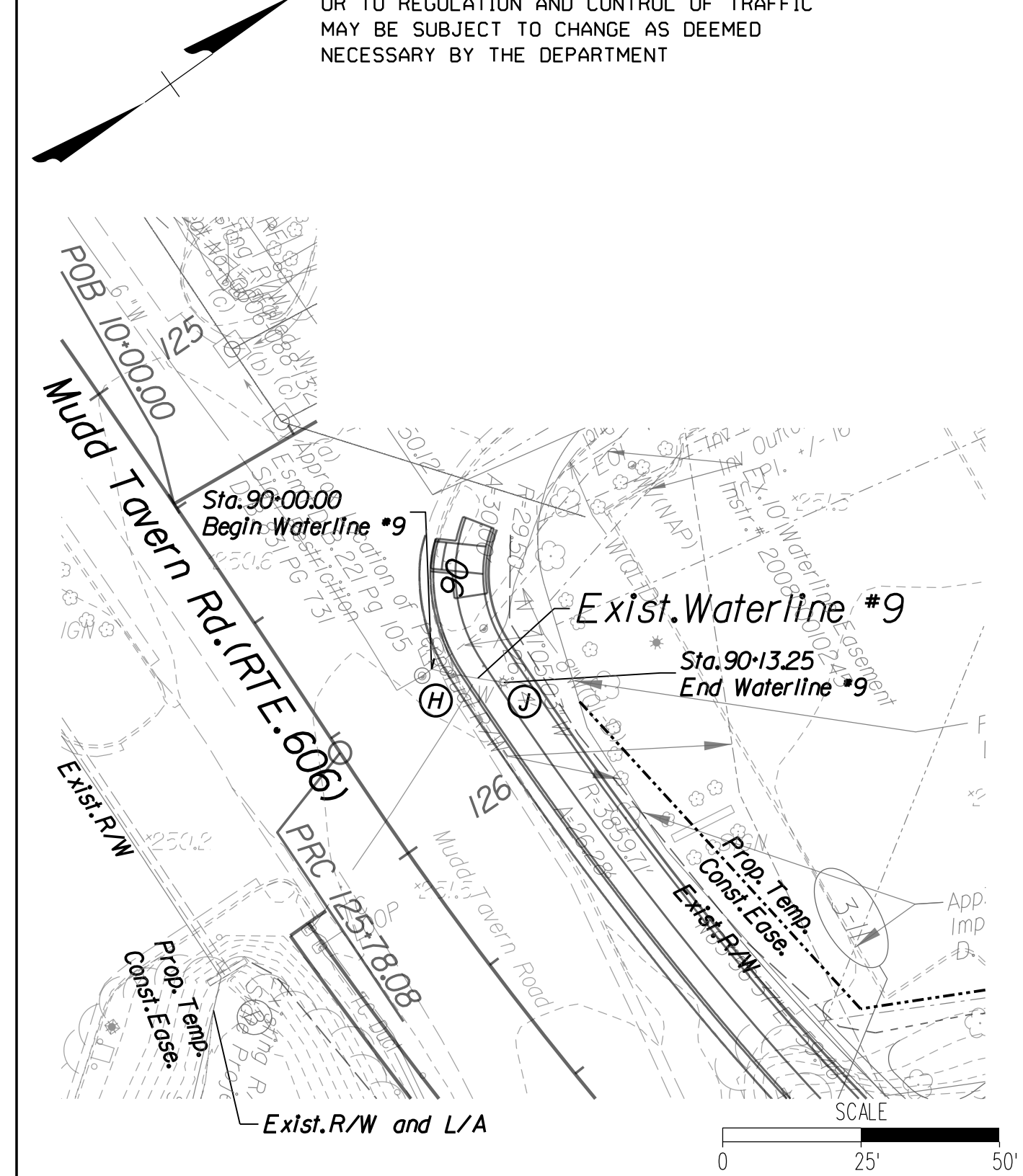
- All Water And Sewer Lines And Construction Thereof Shall Comply With The Latest Version Of The Spotsylvania County Department Of Utilities Water And Sewer Design And Construction Standards Manual.
- When The Spotsylvania County Water And Sewer Design And Construction Standards Contain A Project Category In The Approved Materials And Manufacturers List, Only Those Products Specifically Listed May Be Used.
- All Changes To The Approved Construction Plans Must Be Approved In Advance By The Utility Department.
- All Water Lines Shall Be Pressure Class 350 Or Class 52 Ductile Iron, Conforming To ANSI-A21.51 (AWWA C151). Ductile Iron Pipe Shall Have Cement Mortar Lining And Seal Coating In Accordance With ANSI A21.4 (AWWA C104). Bituminous Outside Coating Shall Be In Accordance With ANSI/AWWA C104. All Pipes Regardless Of Material Shall Have 10 Gauge Solid Copper Insulated Tracer Wire Installed Adjacent To The Pipe. See Section 3.2.3.9 In The Design And Construction Standards For More Details.
- Pipe Fittings Shall Conform To ANSI/AWWA A21.10/C110 For Standard Size Fitting Or ANSI/AWWA A21.52/C153 For Compact Fittings. All Joints Shall Be Either Mechanical Joint Or Push-On Joint Conforming To ANSI/AWWA A21.11/C111. Fittings Shall Be Cement Mortar Lined With A Seal Coat In Accordance With ANSI/AWWA A21.4/C104. All Fittings Shall Have A Minimum Pressure Rating Of 250.Lr On Profiles Indicates Length Of Restrained Pipe At Fitting.
- The Contractor Shall Verify All Dimensions And Elevations In The Field Before Starting Construction And Notify The Engineer Of Any Discrepancies.
- There Shall Be A 10' Horizontal Separation Between Water Lines And/Or Sewer Lines And A Vertical Separation Of 18" Between The Bottom Of The Water Main And The Top Of The Sewer Main Unless Approved Otherwise By The Spotsylvania County Department Of Utilities. This Applies To Building Sewer Laterals Also.
- All Bacteriological Samples Of Water Lines Shall Be Taken By Spotsylvania County Department Of Utilities Personnel. A Minimum Of 48 Hours Notice Is Required To Schedule These Samples.
- All Water Line And Sewer Line Select Backfill, Structural Backfill, And Pipe Bedding Material Shall Be Compacted To 95% VTM-1 Dry Density. All Controlled Fill In Trenches Under Pavement Or Where Otherwise Specified Shall Be Compacted To VTM-1 Dry Density. Compaction Reports May Be Required To Be Submitted. Refer To Sheet 2A(3) For Open Cut Installation Detail Within Paved Roadways.
- No Existing Water Main Is To Be Tampered With By Tapping, Opening, Or Closing Valves Without A Utility Department Inspector Present On The Job Site.
- No New Water Lines Are To Be Filled Or Flushed Without A Spotsylvania County Department Of Utilities Inspector Present.
- The Contactor Is Responsible For Daily As-Built Plans On All Construction. All Laterals And Appurtenances Shall Be Referenced From The Nearest Manhole.
- All Manholes Shall Be Waterproofed On Exterior Surface By The Manufacturer In Accordance With Spotsylvania County Department Of Utilities Specifications.
- Sewer Connections To Existing Sanitary Manholes Shall Be Made By Core Drilling Manhole And Installing A Rubber Boot To Create A Watertight Connection.
- "Doghouse" Manholes Are Not Allowed Unless Approved By The Spotsylvania County Department Of Utilities.
- A Cleanout Cover Assembly In Accordance With The Standard Details Shall Be Installed On Each Sewer Lateral Cleanout.
- An Air Test Is Required On New Sanitary Sewer Lines. A Vacuum Test Is Required On New Manholes.
- All Gravity Sanitary Sewer Mains And Laterals Shall Be PVC Sewer Pipe Type PSM Poly-Vinyl Chloride Unless Noted Otherwise On The Plans. Pipe And Fittings Shall Meet ASTM Designation D-3034-73. Minimum Designation Used Shall Be SDR-35. Class A Bedding Shall Be Used On Depths Exceeding 24 Feet.
- All Sanitary Sewer Laterals Shall Be Installed At A Minimum Grade Of 1/4" Per Foot (2.08%) Unless Approved By The Engineer And/Or Spotsylvania County Department Of Utilities.
- The Contractor Shall Be Responsible For Installing All Sewer Laterals To Each Lot As Shown On The Construction Plans Under The Inspection And Approval Of The Spotsylvania County Department Of Utilities.
- Contact The Spotsylvania County Department Of Utilities Cross/Connection And Backflow Coordinator For Requirements For Backflow Prevention.
- The Contractor Is Responsible For Responding To Miss Utility Requests Until Water And Sewer Lines Are Accepted. Any Damage To Water And Sewer Mains Must Be Repaired Prior To Acceptance.
- Refer To Sheet 1F For Survey Control Information.
- A Preconstruction Meeting Shall Be Held With The Spotsylvania County Department Of Utilities Inspection Section Prior To Beginning Any Work. At Least Two County Working Days Advance Notice Shall Be Given.
- The Contractor Shall Comply With Requirements Of Permits Issued By Spotsylvania County, VDOT, And Other Applicable Agencies.
- Refer to Sheet 1H For Underground Utility Test Hole Information.
- The Contractor Shall Coordinate Shutoff Of Existing Water Main With the Spotsylvania County Department of Utilities.
- All Restrained Joint Stations Are Based On The Minimum Length Of Restrained Joints. Restrained Joints Shall Extend Further As Necessary To An Existing Joint As Located In The Field.

Curve No.	Location		Delta	Degree	Radius (Ft.)	Tangent (Ft.)	Length (Ft.)	Back Tangent Chord Forward Tangent	Northing	Easting
WATL01	PC Sta.	53+04.39	03°37'22.32" (RI.)	19°05'54.94"	300.00	9.49	18.97	S 64°29'18.55" E	170,890.0300	3,566,173.2217
	PI Sta.	53+13.87						S 60°51'56.23" E	170,855.9437	3,566,181,7844
	Pt Sta.	53+23.36						S 62°40'37.39" E	170,881.3245	3,566,190,0718
WATL02	PC Sta.	70+79.04	9°54'07.38" (RI.)	19°05'54.94"	300.00	25.99	51.85	N 25°30'41.45" E	171,004.9459	3,566,115,9376
	PI Sta.	71+05.03						N 30°27'45.14" E	171,028.4002	3,566,127,1305
	Pt Sta.	71+30.89						N 35°24'48.83" E	171,049.5804	3,566,142,1900
WATL03	PC Sta.	72+47.69	3°58'38.83" (RI.)	19°05'54.94"	300.00	10.42	20.83	N 35°24'48.83" E	171,144,7707	3,566,209,8722
	PI Sta.	72+58.10						N 37°24'08.25" E	171,153,2606	3,566,215,9086
	Pt Sta.	72+68.51						N 39°23'27.66" E	171,161,3113	3,566,222,5194

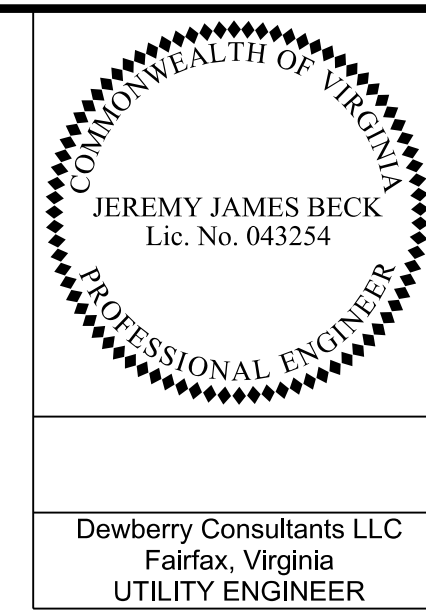
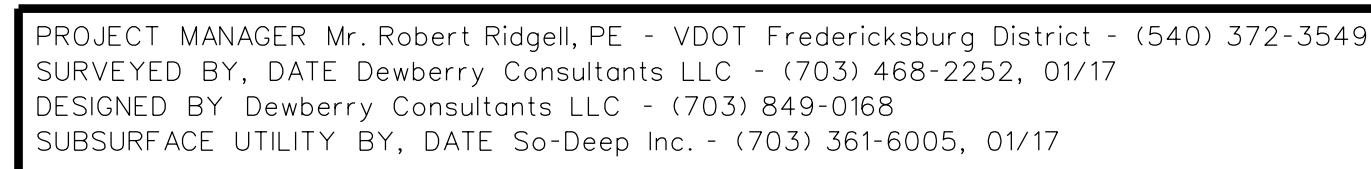
	12/19/17	STATE	ROUTE	STATE PROJECT	SHEET NO. 20(1)
	VA.	606	0606-088-622 C-501, B634 0606-088-653 RW-201, C-501		
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT					
Dewberry Consultants LLC Fairfax, Virginia UTILITY ENGINEER					



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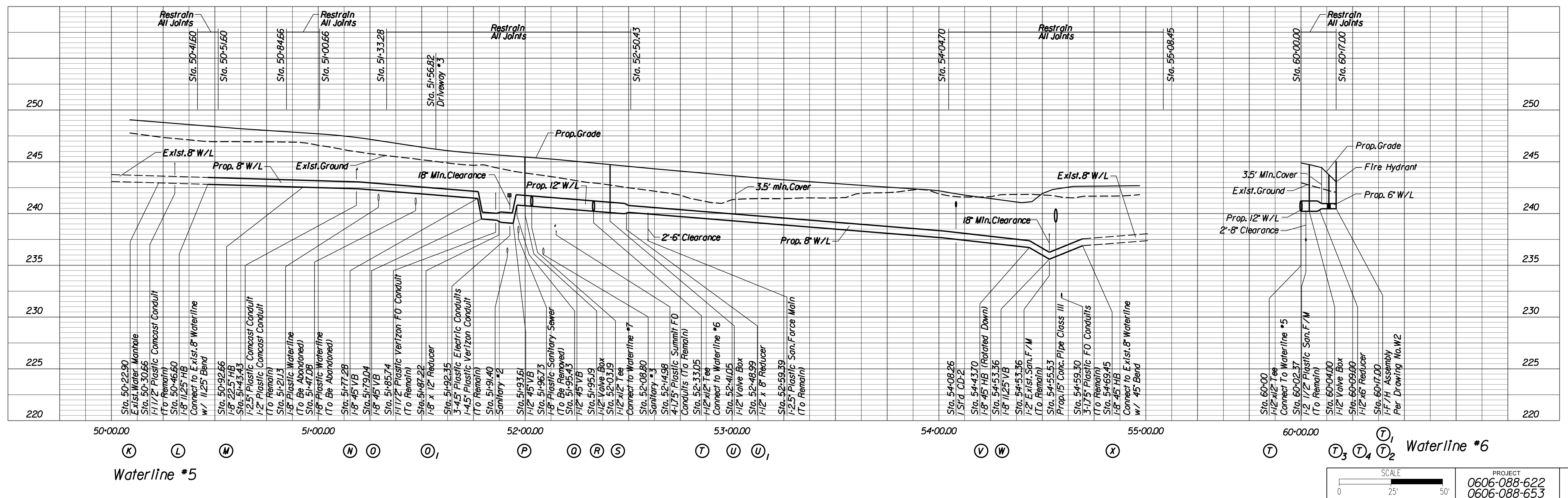
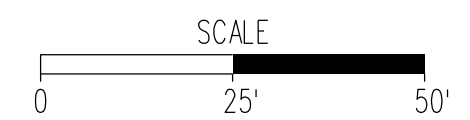


PROJECT	0606-088-622
	0606-088-653



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COMMONWEALTH OF VIRGINIA

JEREMY JAMES BECK

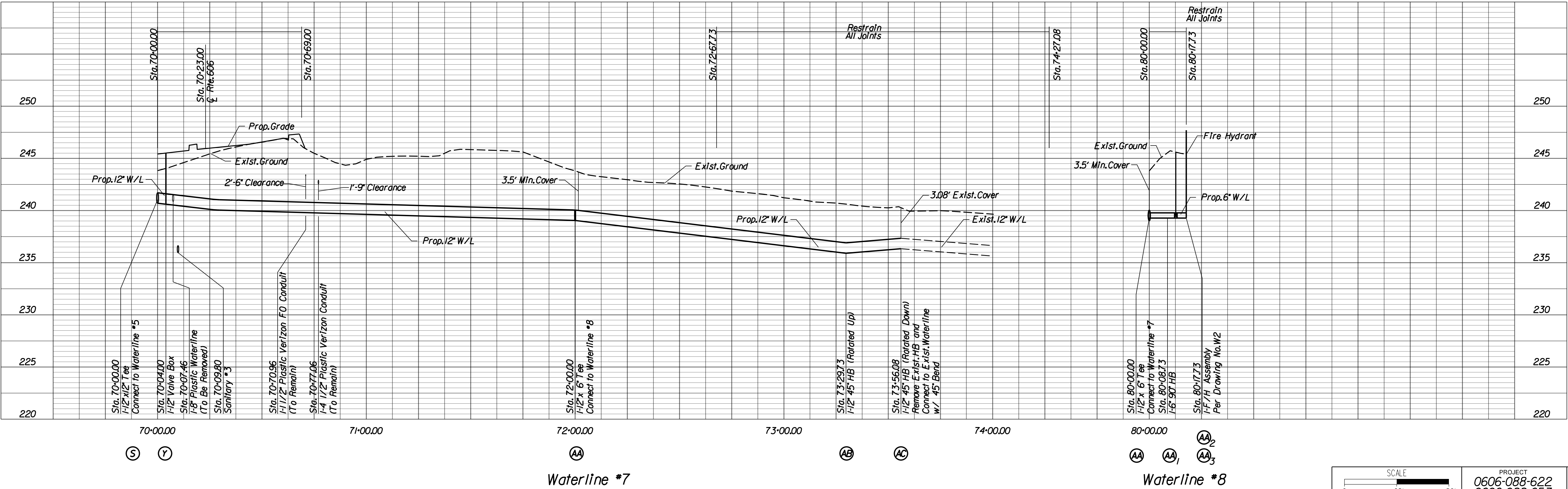
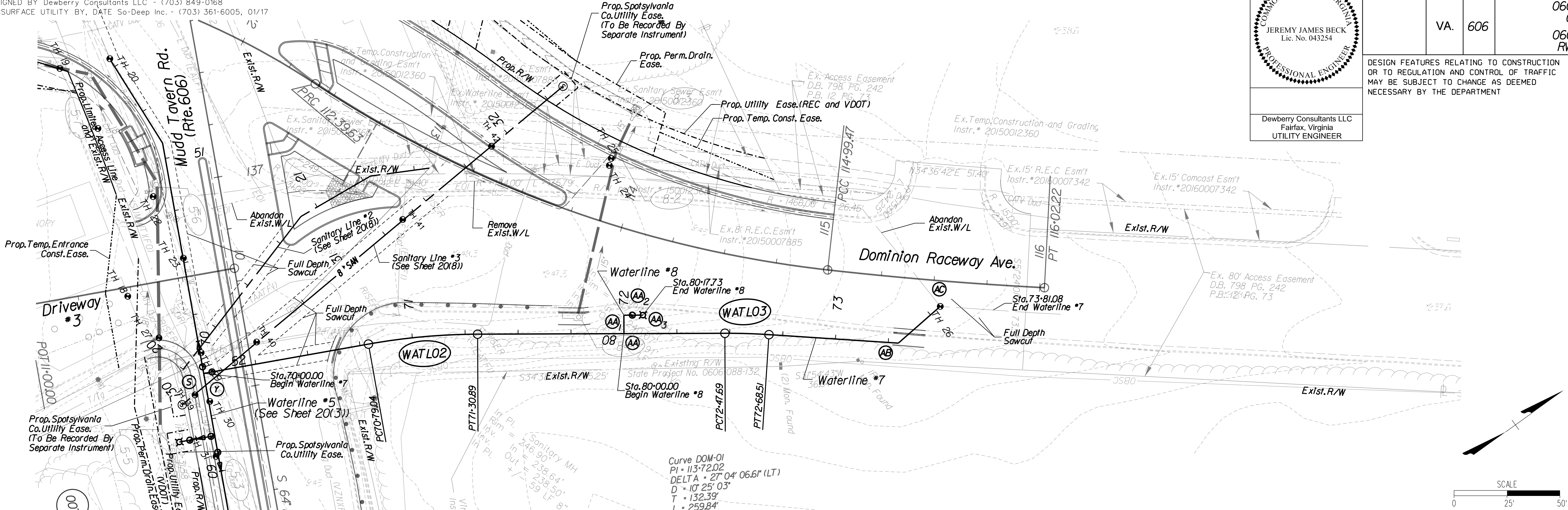
Lic. No. 043254

PROFESSIONAL ENGINEER

Dewberry Consultants LLC
Fairfax, Virginia
UTILITY ENGINEER

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SCALE

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PROJECT

0606-088-622
0606-088-653

SHEET NO.

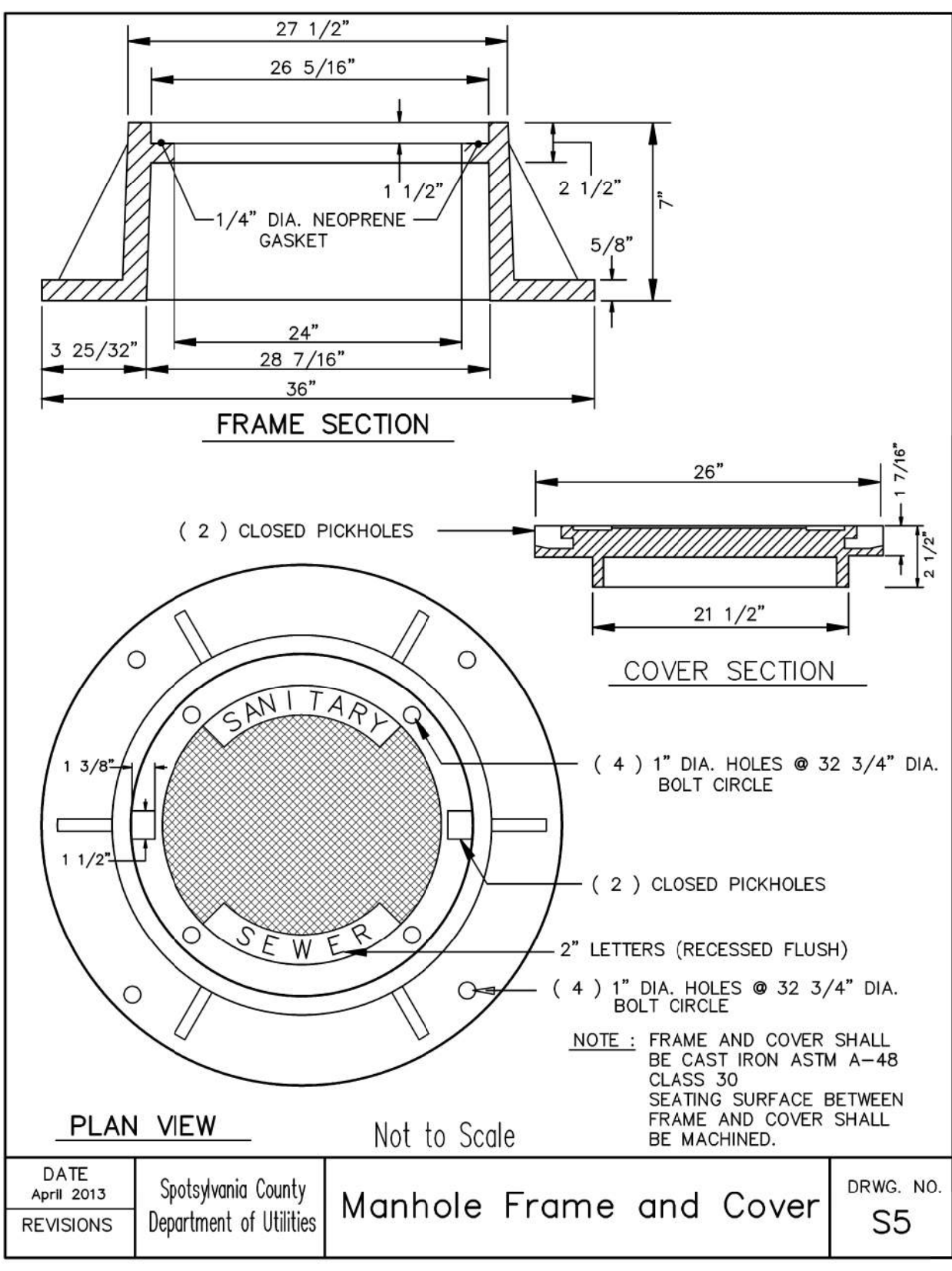
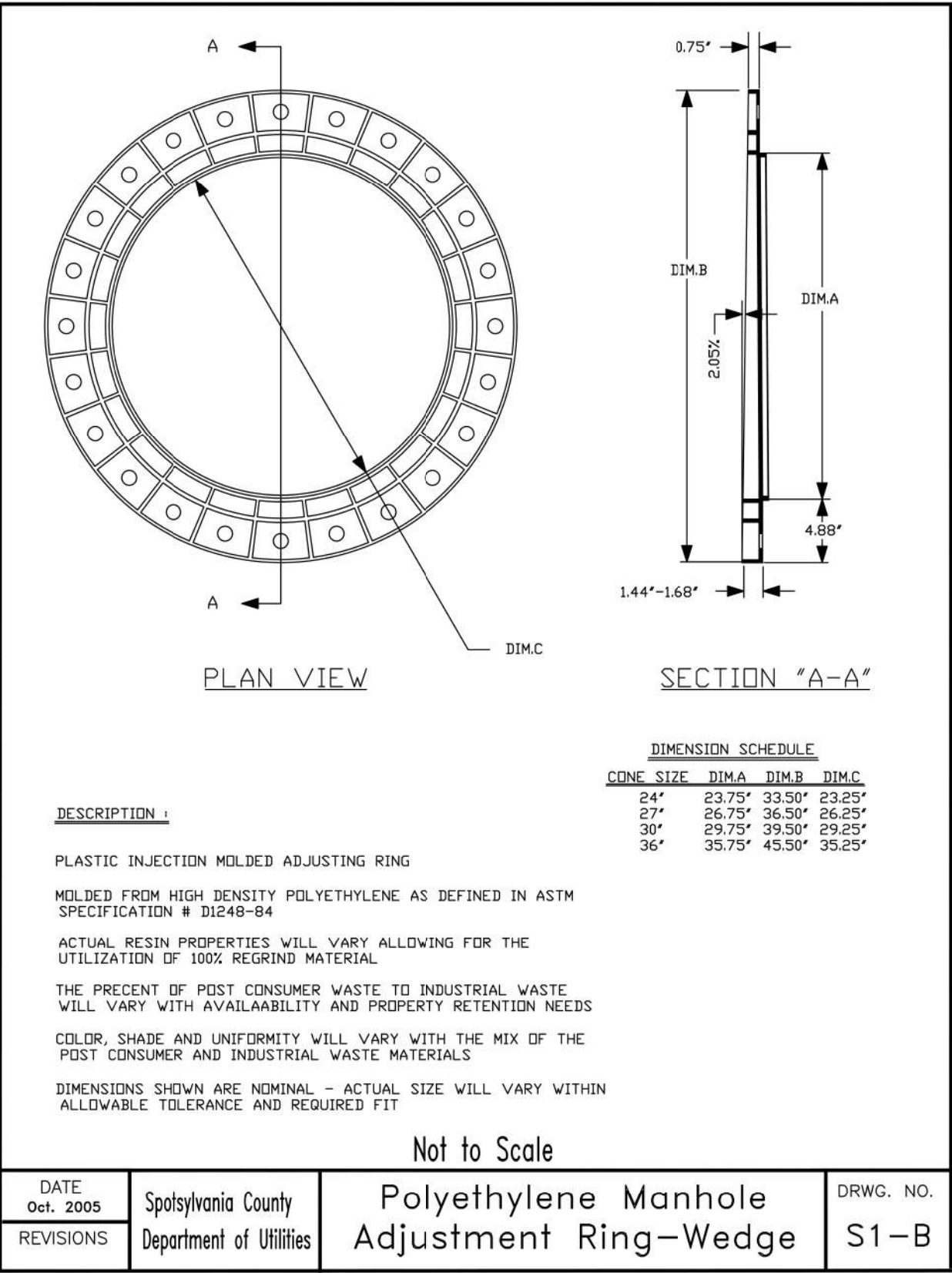
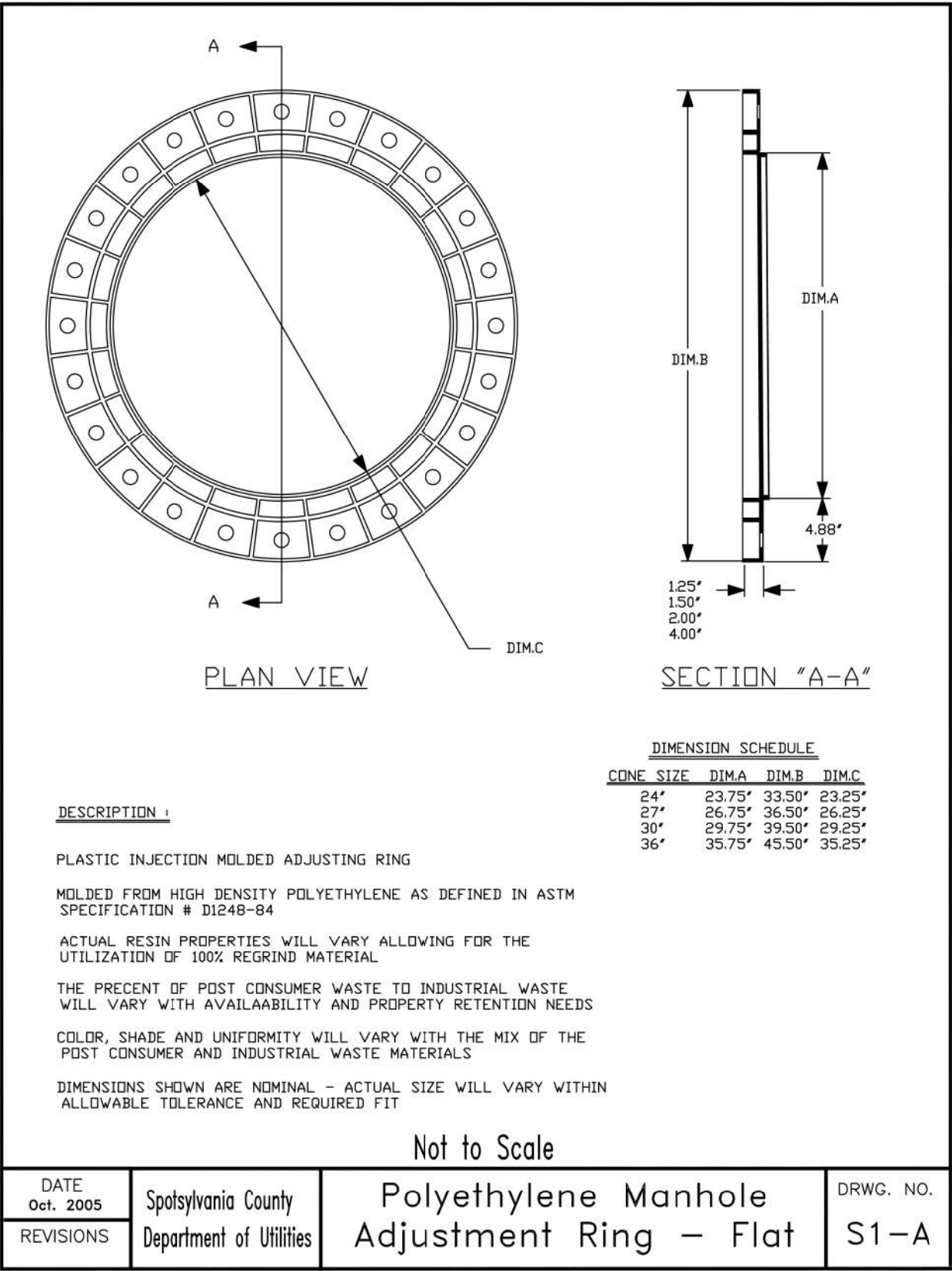
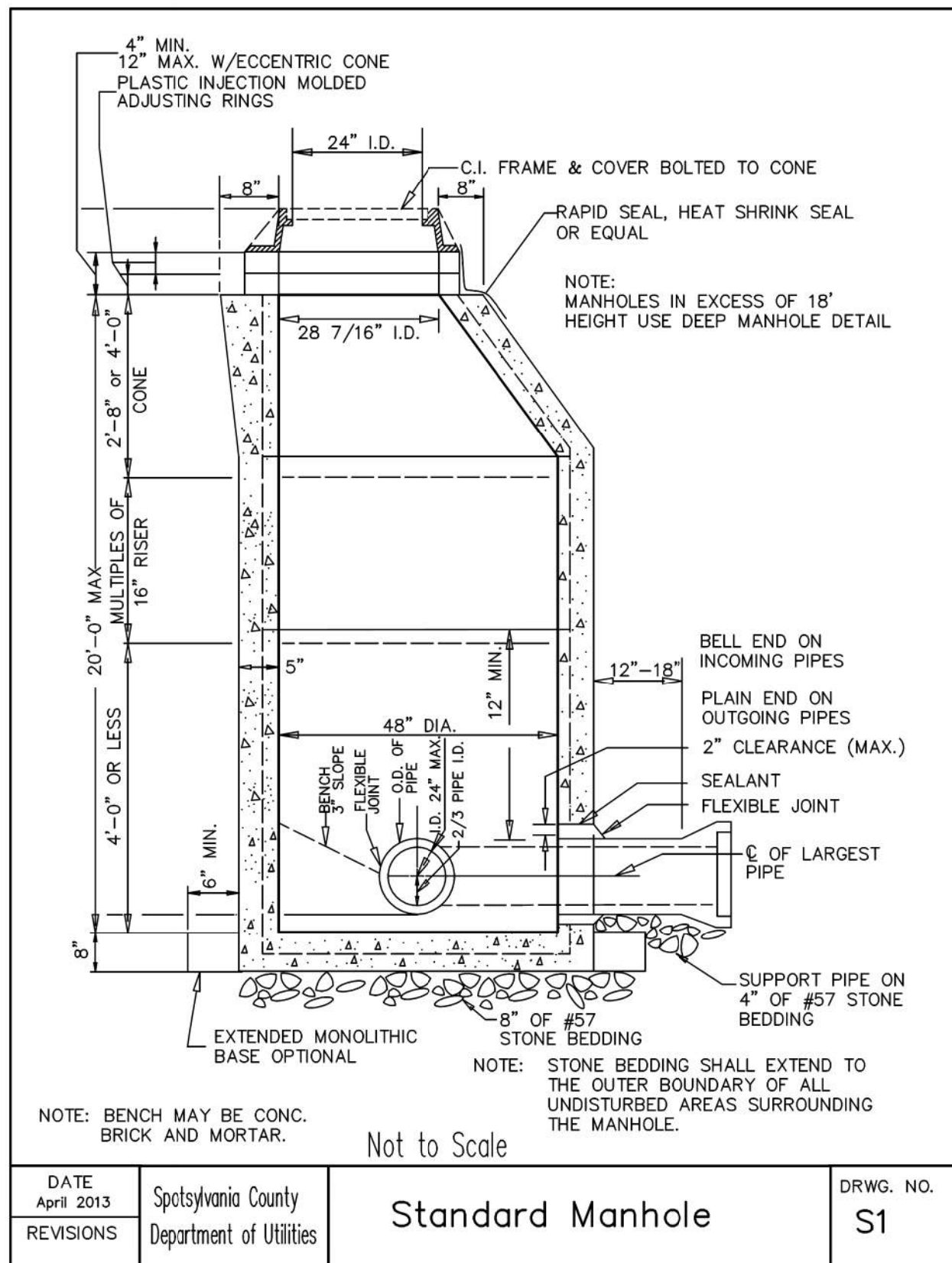
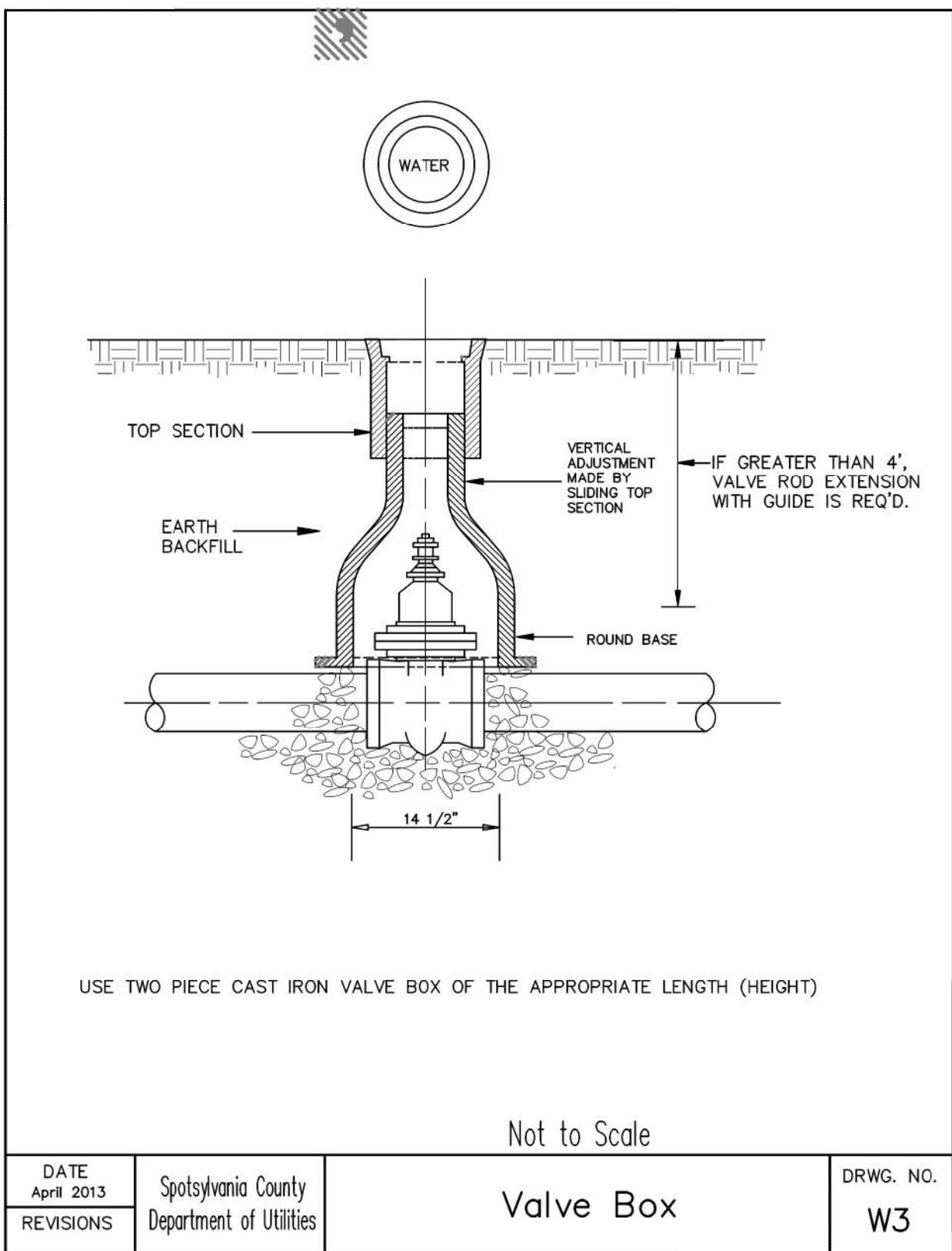
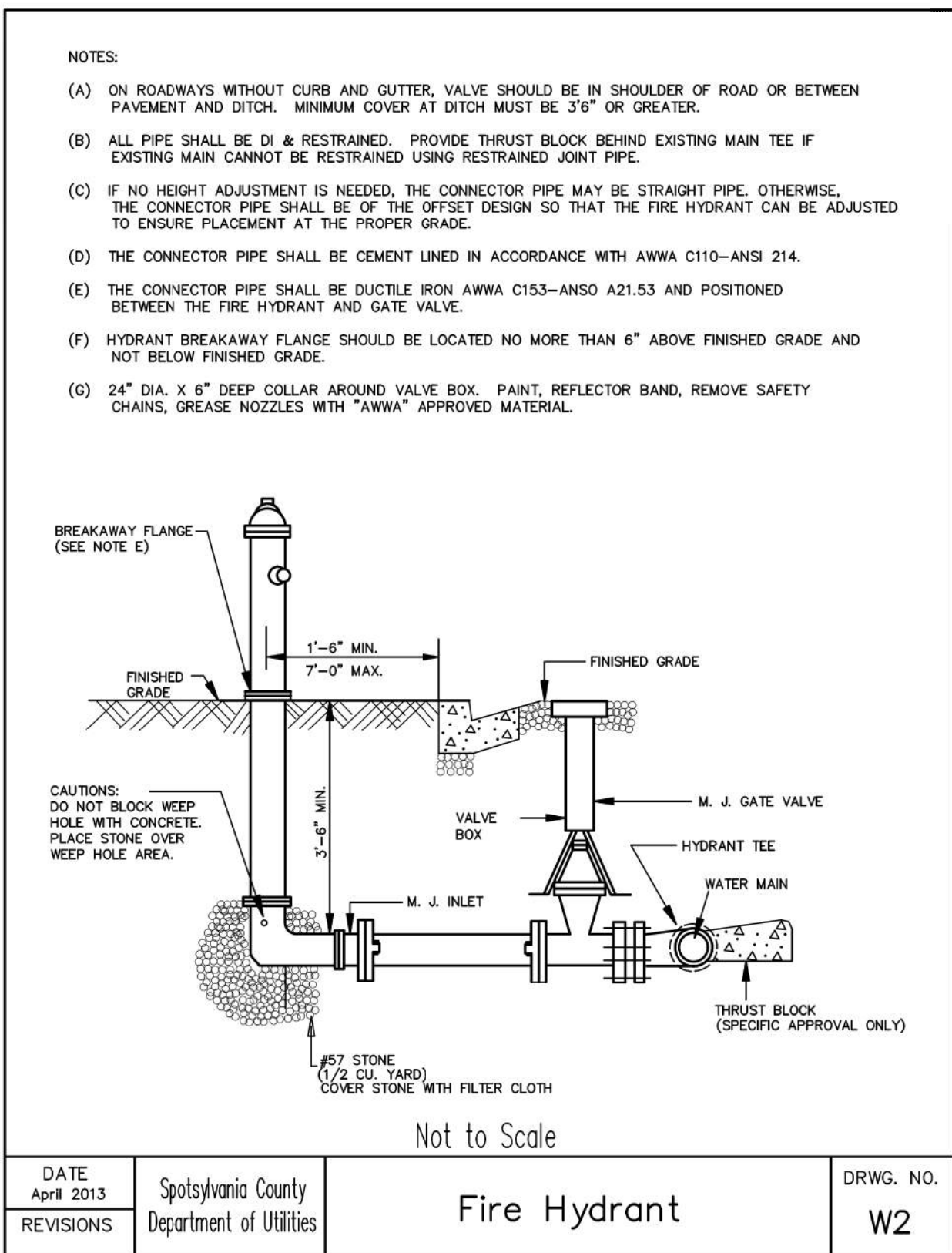
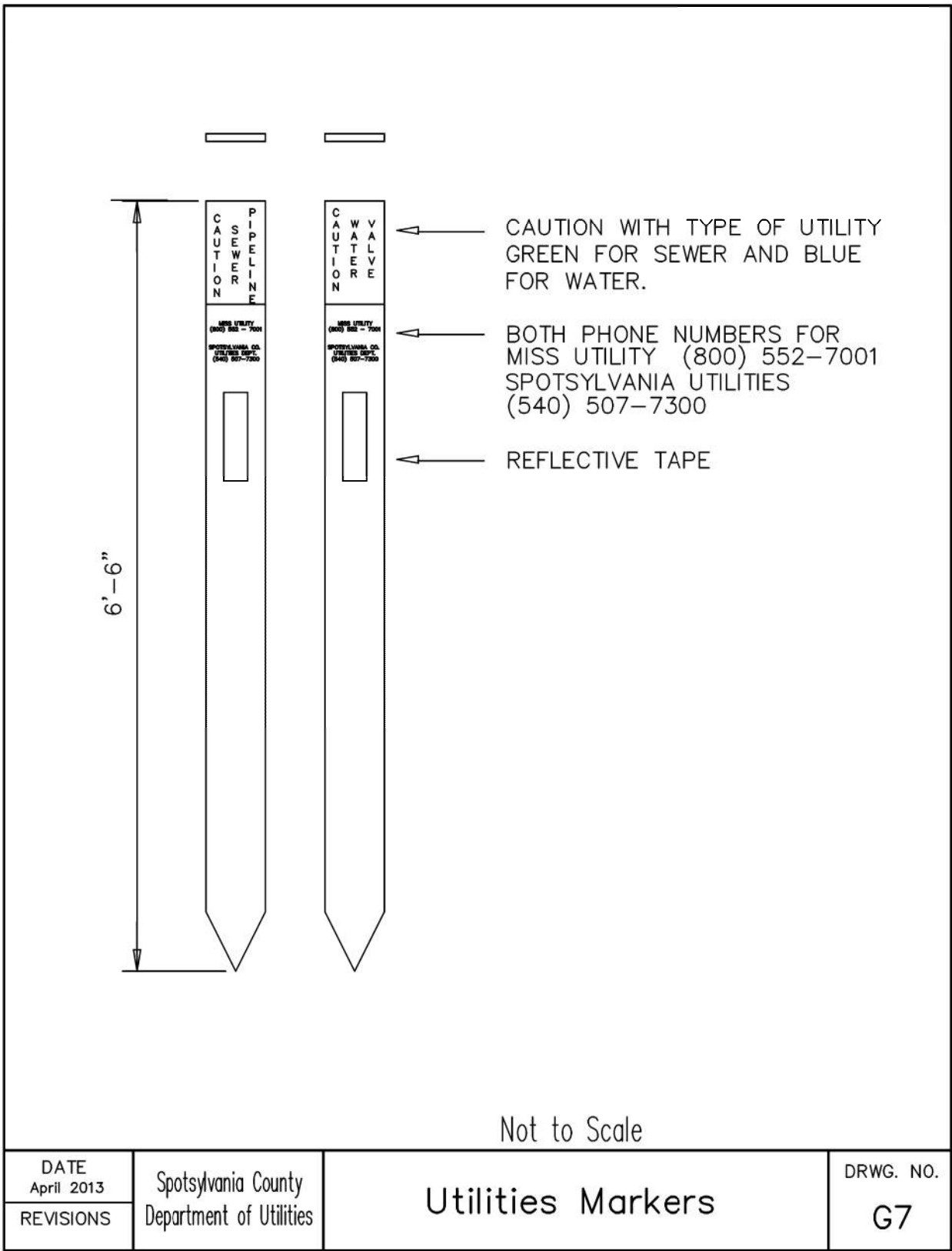
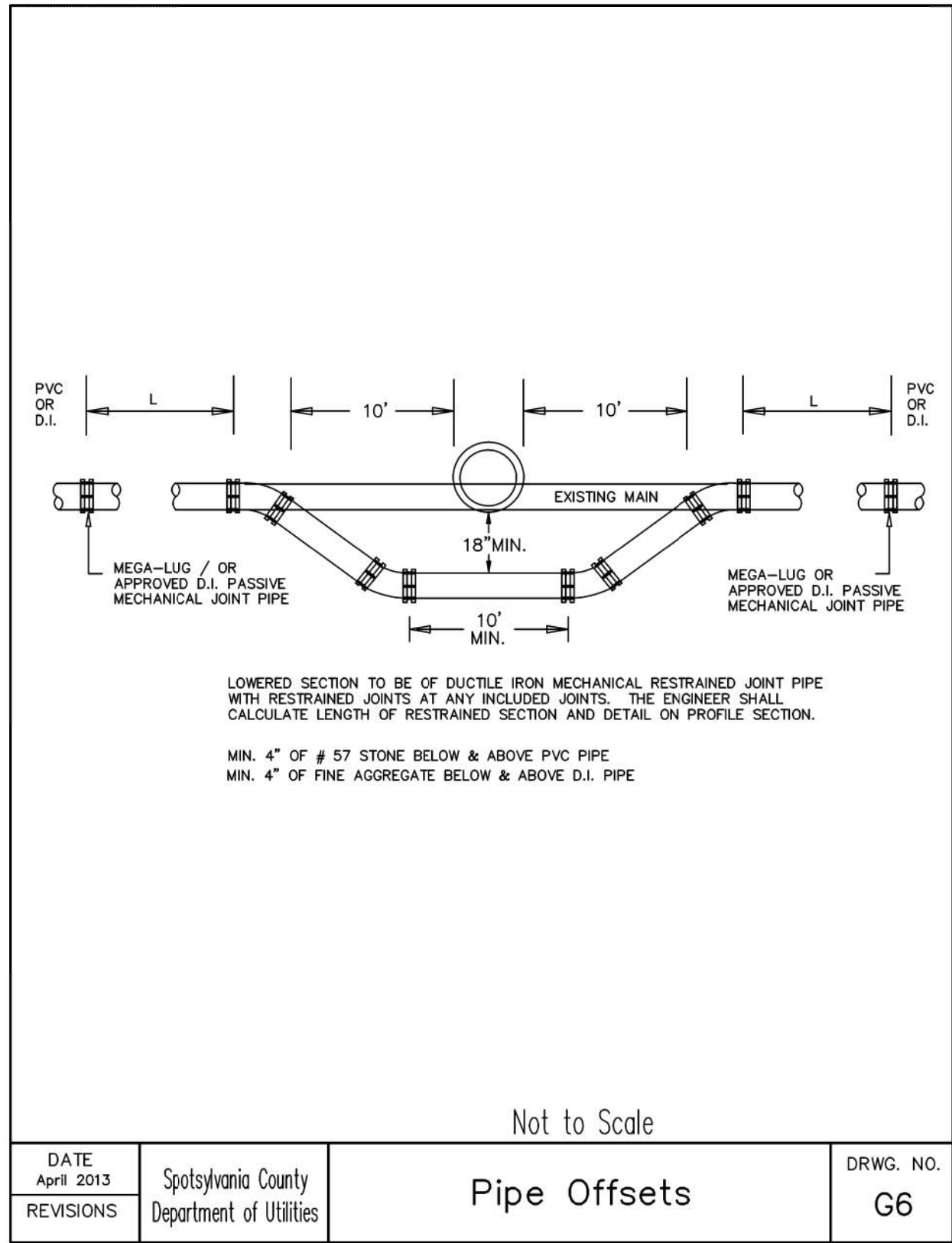
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WATER AND SEWER DETAILS

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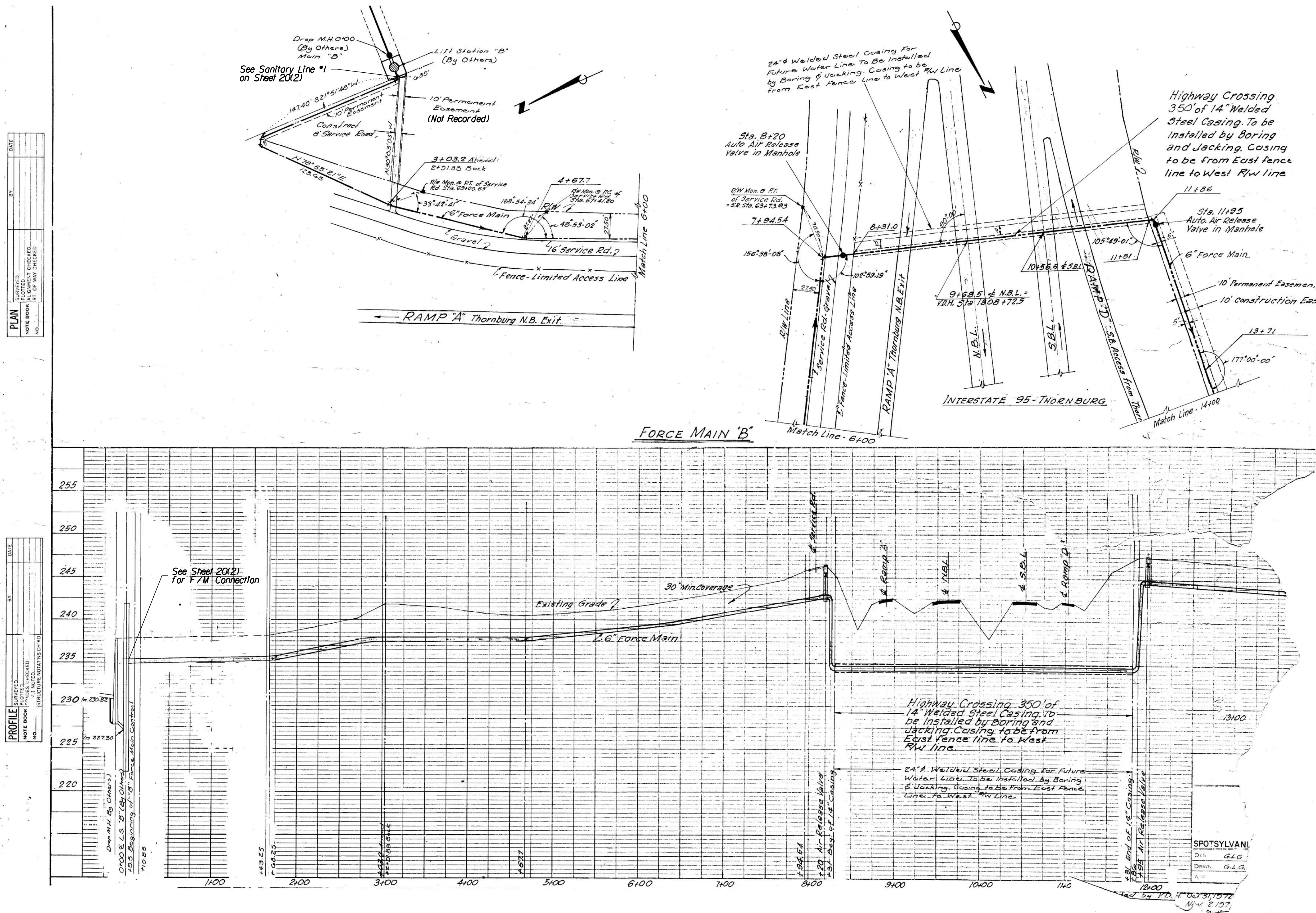


N.T.S

PROJECT
0606-088-622
0606-088-653

SHEET NO.
20(5)

	STATE	STATE		SHEET NO.
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			0606-088-653 RW-201, C-501	



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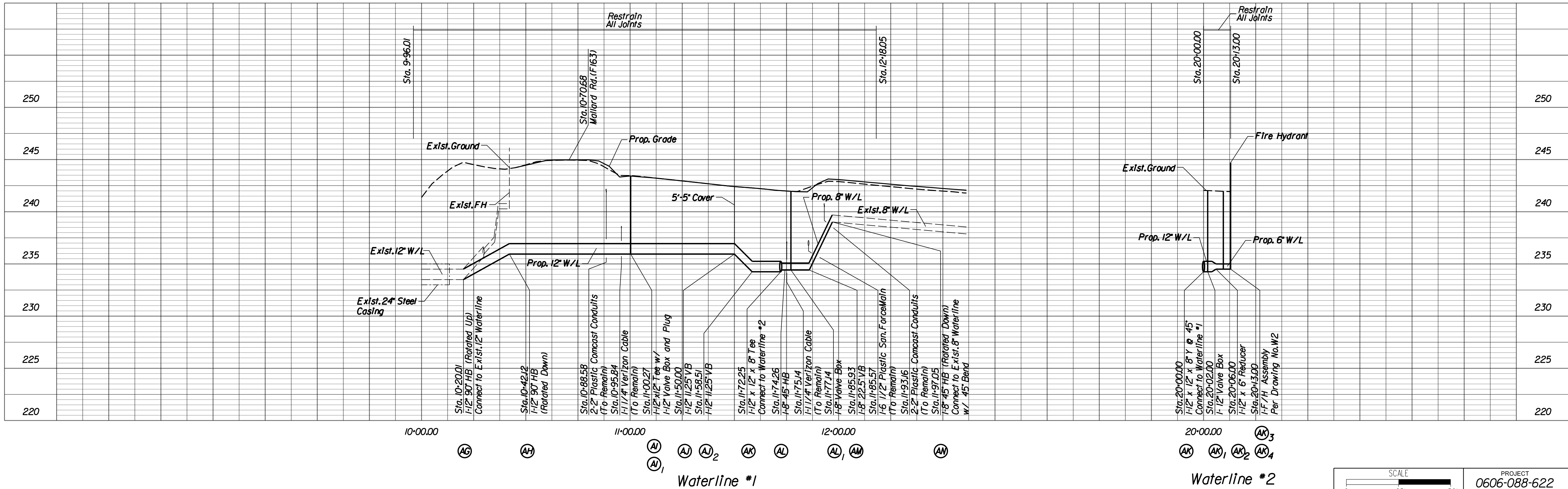
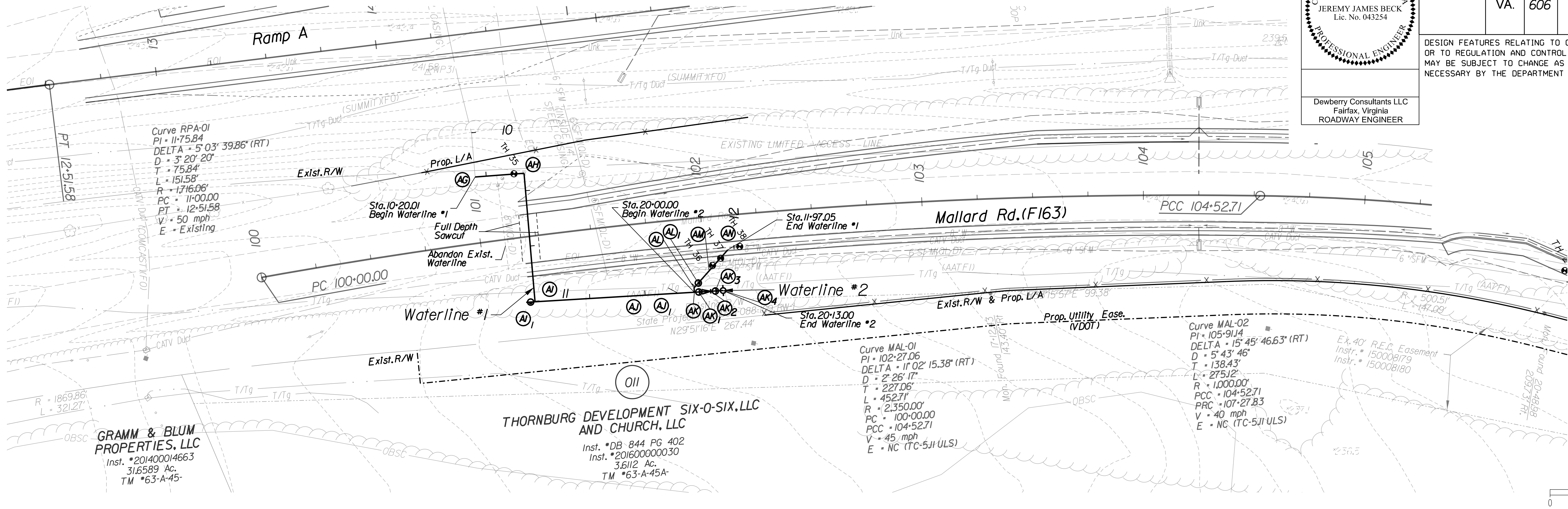
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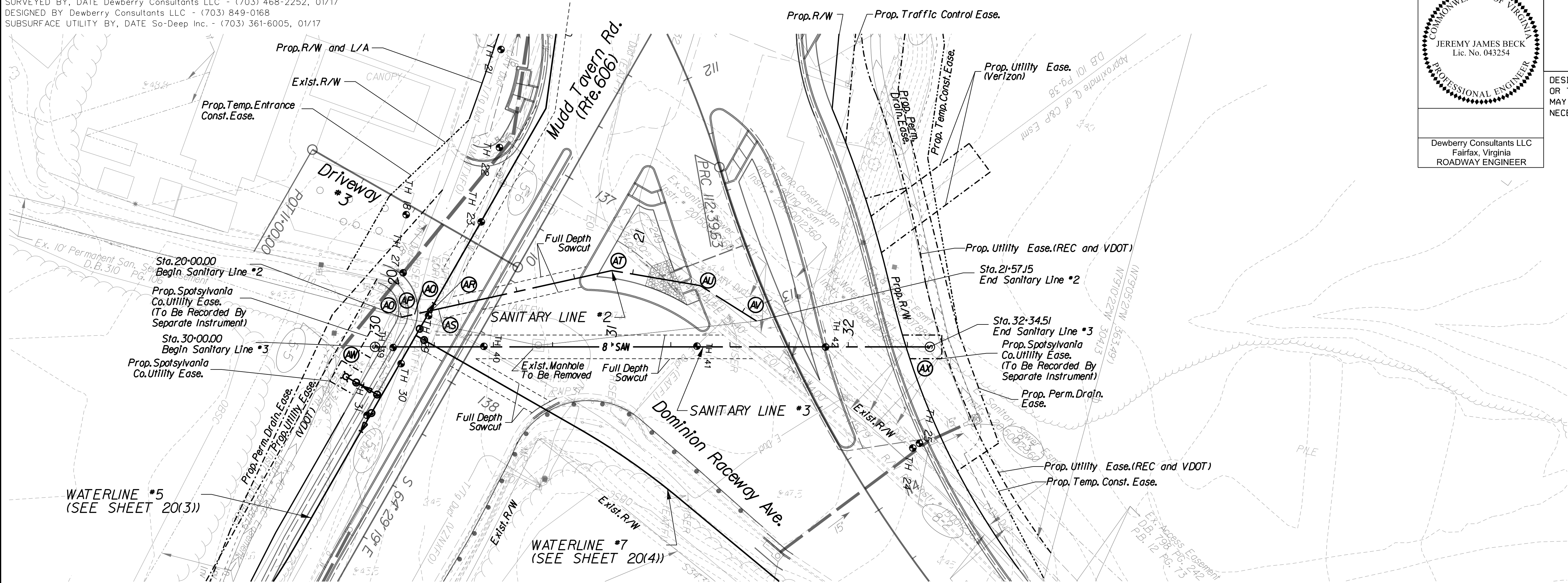
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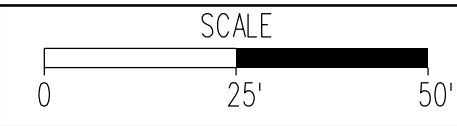
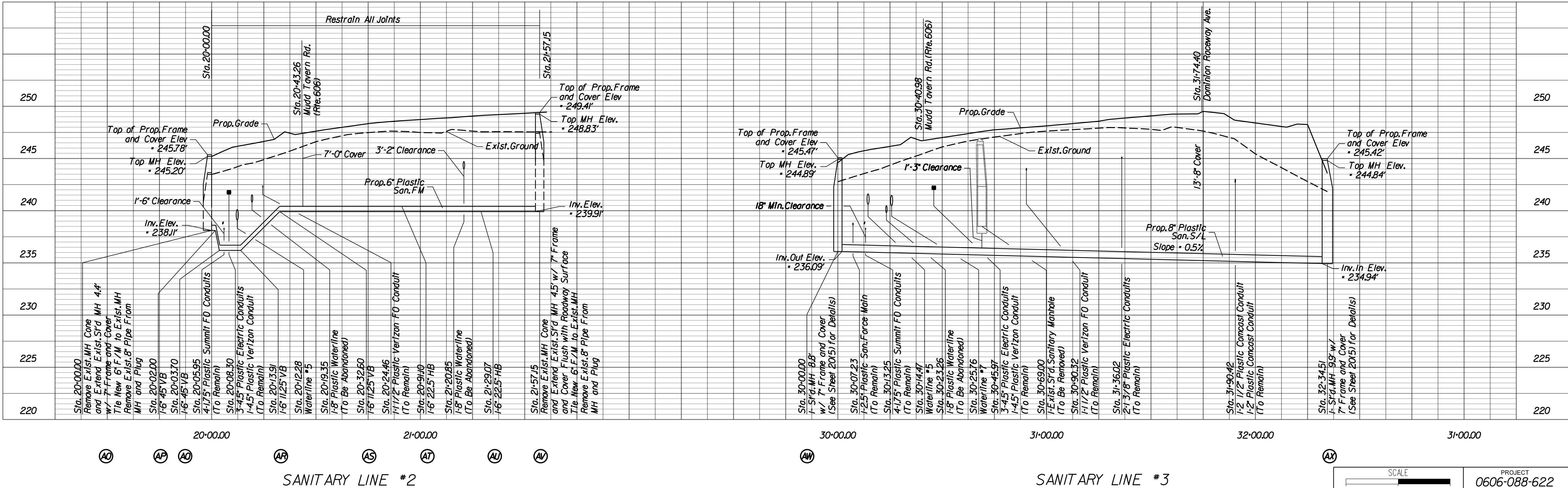
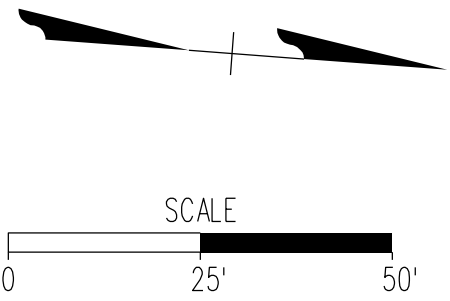
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