PROJECT MANAGER: Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY, DATE Quantum - Spatial - (703) 471-4510, 06/20
DESIGN BY Dewberry Engineers, Inc. - (703) 208-1757
SUBSURFACE UTILITY BY, DATE SAM, LLC - (703) 361-6005, 07/20

FOR INDEX OF SHEETS SEE SHEET 1B

THIS PROJECT WAS DEVELOPED UTILIZING VDOT'S ENGINEERING DESIGN PACKAGE (GEOPAK).
GEOPAK Computer Identification No. 108720

SHIRLEY CONTRACTING COMPANY, LLC
Dewberry

FHWA 534 DATA 43103

STATE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
VA.	NHPP-5A01(810) NHPP-5B01(078)	28	0028-029-269 P101, R201, C501	1

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA		
	ROUTE 28 - S OF COMPTON RD	ROUTE 28 - N OF NEW BRADDOCK RD
From: To:	100' North of Route 28 Bull Run Bridge 0.15 Miles North of Old Centreville Road	
FUNCTIONAL CLASSIFICATION	Other Principal Arterial GS-5	
MIN. DESIGN SPEED	50	50
ADT (2016)	47,900	59,700
ADT (2023) - OPENING YEAR	56,100	69,900
ADT (2040)	61,800	77,000
DHV	4,640	5,140
D (%) (design hour)	0.62	0.57
T (%) (design hour)	2%	2%
Posted Speed (mph)	45	45

COUNTY OF FAIRFAX
DEPARTMENT OF TRANSPORTATION

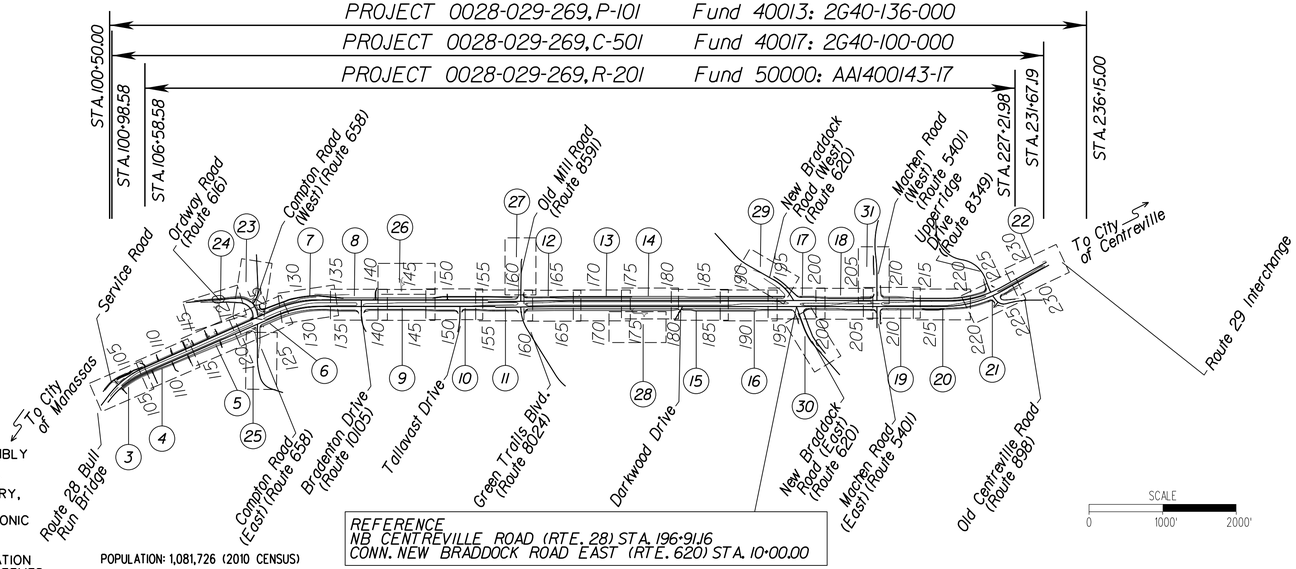
PLAN AND PROFILE OF PROPOSED STATE HIGHWAY FAIRFAX COUNTY DESIGN-BUILD PROJECT CENTREVILLE ROAD WIDENING 60% DESIGN SUBMISSION OCTOBER 2020

FROM: 100' NORTH OF ROUTE 28 BULL RUN BRIDGE TO: 0.15 MILES NORTH OF OLD CENTREVILLE ROAD

CONVENTIONAL SIGNS

STATE LINE
COUNTY LINE
CITY,TOWN OR VILLAGE
RIGHT OF WAY LINE
FENCE LINE
UNFENCED PROPERTY LINE
FENCED PROPERTY LINE
WATER LINE
SANITARY SEWER LINE
GAS LINE
ELECTRIC UNDERGROUND CABLE
TRAVELED WAY
GUARD RAIL
RETAINING WALL
RAILROADS
BASE OR SURVEY LINE

LEVEE OR EMBANKMENT
BRIDGES
CULVERTS
DROP INLET
POWER POLES
TELEPHONE OR TELEGRAPH POLES
TELEPHONE OR TELEGRAPH LINES
HEDGE
TREES
HEAVY WOODS
GROUND ELEVATION
GRADE ELEVATION



REFERENCE
NB CENTREVILLE ROAD (RTE. 28) STA. 196+91.16
CONN. NEW BRADDOCK ROAD EAST (RTE. 620) STA. 10+00.00

POPULATION: 1,081,726 (2010 CENSUS)

THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY AS AWARDED, HAS BEEN SEALED AND SIGNED USING DIGITAL SIGNATURES AND THE OFFICIAL PLAN ASSEMBLY IN ELECTRONIC FORMAT IS STORED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY, INCLUDING ALL SUBSEQUENT REVISIONS, WILL BE THE OFFICIAL CONSTRUCTION PLANS. FOR INFORMATION RELATIVE TO ELECTRONIC FILES AND LAYERED PLANS, SEE THE GENERAL NOTES.

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH VDOT'S 2016 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL, REV 1 AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND WIDENED IN ACCORDANCE WITH STANDARD TC-5.11R AND TC-5.11U EXCEPT WHERE OTHERWISE NOTED.

THE ORIGINAL APPROVED TITLE SHEET(S), INCLUDING ORIGINAL SIGNATURES, ARE FILED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY. ANY MISUSE OF ELECTRONIC FILES, INCLUDING SCANNED SIGNATURES, IS ILLEGAL AND ENFORCED TO THE FULL EXTENT OF THE LAW.

STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	EQUALITIES	LENGTH INCLUDING BRIDGE(S)		LENGTH EXCLUDING BRIDGE(S)		BRIDGE PLAN NO.	TYPE PROJECT	DESCRIPTION
					FEET	FEET	MILES	FEET	MILES			
0028-029-269	P-101	NHPP-5A01(810)	PENG	108720	N/A	13,550.15	2.566	13,550.15	2.566	N/A	Preliminary Engineering	From: 100' North of Route 28 Bull Run Bridge To: 0.24 Miles North of Old Centreville Road
0028-029-269	R-201	NHPP-5B01(078)	ROWA	108720	N/A	12,064.00	2.285	12,064.00	2.285	N/A	Right of Way	From: 0.125 Miles North of Route 28 Bull Run Bridge To: 0.065 Miles North of Old Centreville Road
0028-029-269	C-501	NHPP-5B01(078)	1000	108720	N/A	13,069.00	2.475	13,069.00	2.475	N/A	Construction	From: 100' North of Route 28 Bull Run Bridge To: 0.15 Miles North of Old Centrevill Road

Project Lengths are based on Route 28 Northbound Baseline

TIER 1 PROJECT

LOCALLY ADMINISTERED PROJECTS
LOUDOUN COUNTY
NAME OF LOCALITY

RECOMMENDED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION
DATE — TITLE OF POSITION

RECOMMENDED FOR APPROVAL FOR CONSTRUCTION
DATE — INFRASTRUCTURE INVESTMENT DIRECTOR
DATE — STATE LOCATION AND DESIGN ENGINEER
DATE — STATE STRUCTURE AND BRIDGE ENGINEER
DATE — CHIEF FINANCIAL OFFICER

APPROVED FOR CONSTRUCTION
DATE — CHIEF ENGINEER

APPROVED
DATE — DIVISION ADMINISTRATOR
FEDERAL HIGHWAY ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION

REVISED

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

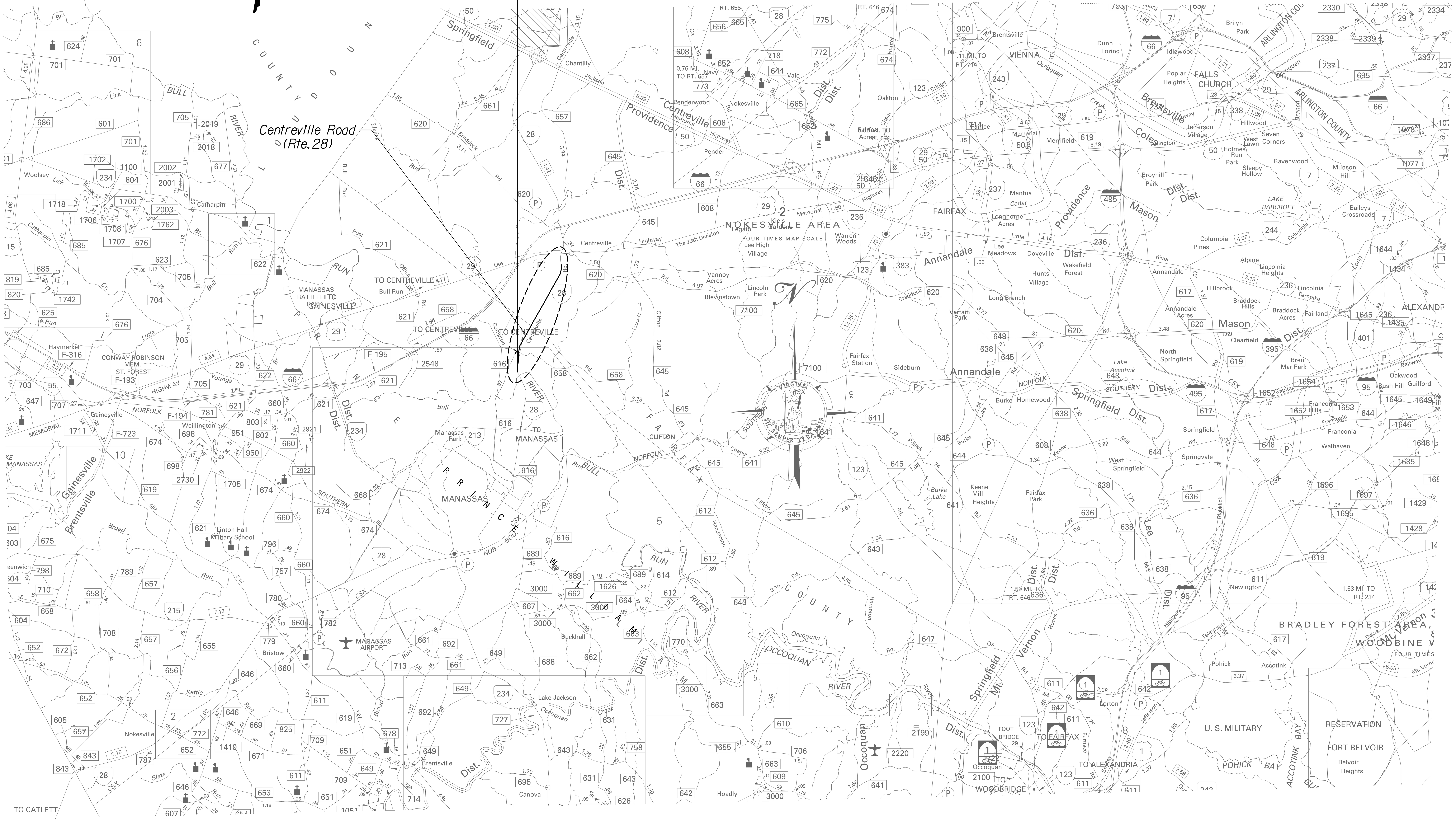
LOCATION MAP

Fairfax County, VA

Proposed Project
0028-029-269
P101, R201, C501

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	1A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



SCALE	PROJECT	SHEET NO.
0 5000' 10000'	0028-029-269	1A

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
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INDEX OF SHEETS

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IB

DESIGN FEATURES RELATING TO CONSTRUCTION
OR TO REGULATION AND CONTROL OF TRAFFIC
MAY BE SUBJECT TO CHANGE AS DEEMED
NECESSARY BY THE DEPARTMENT

Total Cross Section Sheets - 127 (See Cross Section Index on Sheet X-1)

* Denotes Sheets Submitted for the Advanced TTC Plans
** Denotes Sheets Not Included In this Submission

N.T.S.	PROJECT 0028-029-269	SHEET NO. IB

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
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TEMPORARY TRAFFIC CONTROL & SEQUENCE OF CONSTRUCTION

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IK

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

STAGE 1A GENERAL NOTES

1. The traffic control devices and safety measures shall be in conformance with the following and the most recent revisions thereto:
   A. The Manual on Uniform Traffic Control Devices, 2009 (Inc. Revisions thru 05/2012)
   B. The Virginia Work Area Protection Manual (WAPM), 2011 (thru Revision 2 dated 9/1/2019)
   C. The Virginia Road and Bridge Standards, 2016 (Inc. All Revisions)
   D. The Virginia Road and Bridge Specifications, 2016 (Inc. All Revisions)
2. Unless otherwise approved or directed by the engineer, the contractor shall plan and prosecute the work in accordance with the following sequence of construction and temporary traffic control plans.
3. It is not the intent of the Sequence of Construction plan to enumerate every detail which must be considered in the construction of each stage, but only to show the general handling of traffic.
4. All areas excavated below existing pavement surface and within the clear zone, of the conclusion of each workday, shall be back filled as required by the VAWPM where backfill is required. It shall form an approximate 6:1 wedge, against the existing pavement surface for the safety and protection of vehicular traffic.
5. Traffic barrier service shall be installed and removed so as not to present any blunt end or hazard to the motoring public.
6. The sequence of construction / traffic control plans show only the major traffic patterns necessary to construct this project. The contractor will also be responsible for daily traffic control such as lane closures, flagging, etc. to properly maintain traffic throughout the project.
7. Access must be maintained at all times for all existing local streets, driveways, and adjacent properties affected by the construction, unless otherwise shown on plans. The contractor shall install "Rough Road" and "Bump" warning signs per the VWAPM as necessary for temporary driveway and local street access.
8. The clear zone shall be free of stored materials and parked equipment (for clear zone widths, refer to the Virginia Work Area Protection Manual-Appendix A). Where material is stored or vehicles are parked behind guardrail, a minimum offset of 5' shall be maintained from the face of the guardrail to any material, equipment or vehicles. Sight distances at intersections should not be impacted by materials, equipment, or traffic control devices. Nothing shall be stored within the temporary barrier manufacturer's recommended clear zone or within 200' downstream of a barrier opening.
9. When implementing a new traffic pattern, all existing pavements markers (and markers) in conflict with the new traffic pattern shall be completely removed and/ or covered to not conflict new markings and/or markers for the new traffic pattern.
10. Advance signing, traffic barrier service concrete, and any other traffic control devices shall be installed prior to the beginning of each stage of construction and shall be removed as necessary prior to the next stage.
11. Pinned barrier service (MB-11A) will be required adjacent to open cut excavations greater than 4' within 2' of the back of the barrier, on bridge decks, and when fixed objects are within the temporary barrier manufacturer's recommended clear zone.
12. See Sheet IK(12) for TTC typical sections and temporary pavement sections.
13. Temporary lane widths shall be no less than 11 feet (or existing width if existing width is less than 11') and shoulder widths shall be no less than 1 foot on Route 28.
14. The contractor shall install 48"x48" diamond shaped "Construction Entrance" signs in advance of construction entrances. All construction Entrances shall be installed per the Virginia Work Area Protection Manual requirements.
15. On Route 28, the contractor shall install temporary pavement markers per Figure TTC 60.0 of the WAPM in lane shifts and per Standard PM-8 in all other areas that lanes have been re-aligned. Also, the contractor shall remove the lenses from the existing raised pavement markers where lanes have been re-aligned.
16. For Route 28 and all other roadways the contractor shall use, Type D Class II or Type D Class III removable tape on final surfaces, and Type A paint for all other conditions. Markings in conflict with temporary markings for any given stage shall be eradicated or completely covered with Type E tape.
17. All long-term temporary signs shall be installed on breakaway wood posts or breakaway square tube steel sign posts unless installed behind barrier temporary sign stands may be used.
18. Signs are only shown for major construction stages. Additional signs may be required to provide positive guidance for interim stages or changes to construction sequence.
19. Unless otherwise shown, the contractor shall maintain and relocate (if necessary) all existing regulatory, warning, and guide signs until the new facilities are opened. As facilities are open to final configurations, the contractor shall install traffic control devices per the signing and marking plans.

STAGE 1A GENERAL NOTES (Cont.)

20. Signs to be temporarily covered shall be completely covered by a non-transparent material and maintained.
21. See Transportation Management Plan (TMP) on the Sheet IL series for the Public Communications Plan, Transportation Operations Plan, Incident Management Plan, and additional temporary traffic control information.
22. Active local streets within the project limits shall not be used for equipment and material storage, except for during construction on the particular local street.
23. Contractor shall maintain positive drainage during construction phasing.
24. All existing marked pedestrian crossings shall be maintained throughout construction unless otherwise noted.
25. The PCMS depicted on plans shall be installed prior to Stage 1A work activities.
26. Access to closed sidewalks, trails, and curb ramps shall be physically blocked using orange safety fence or TY. 3 barricade.
27. See Transportation Management Plan (TMP) Sheet IL series for the Typical Traffic Control Figures in the VA Work Area Protection Manual for daily short-term lane and shoulder closures.
28. See Erosion and Sediment Control Plans (Sheet 2D Series) for temporary drainage.
29. Existing traffic signals shall remain in current configuration during Stage 1A, which may require adjustment to existing loop detector lead-ins, junction boxes, and camera detection.
30. The contractor shall be responsible for coordinating through FCDOT for Fairfax County Police and/or Virginia State Police service during Temporary Traffic Control operations involving lane closures and/or rolling lane closures, and any other operation as covered in Appendix C of the Virginia Work Area Protection Manual.
31. The contractor shall maintain existing lighting during construction and to the maximum extent possible maintain existing roadway lighting levels.
32. The existing pavement edge lines may not necessarily indicate the edge of the mainline pavement structure, and it is the contractor's responsibility to identify the limits of the existing full-strength mainline pavement prior to saw-cutting the pavement or setting barrier for widening of existing pavement.
33. Temporary Lane closures shall be implemented per the hours specified in Table 1 on page 16 (Sheet IL(6)) of the Transportation Management Plan (TMP). See the TMP (Sheet IL series) for the lane closure request procedure and requirements.
34. Type III barricades with RII-2 signs mounted on front of barricades shall be 8' wide. See Section 6F.76 of the VA Work Area Protection Manual for mounting RII-2 signs on Type III Barricades.
35. The contractor shall use a barrier clamp device for construction signs to be installed on temporary barrier (detail on Sheet IK(12). The ground mount or temp sign stands behind the barrier.
36. The contractor shall maintain existing bus stops during construction unless otherwise approved by the transit operator(s). The contractor is to coordinate impacts to existing bus stops (such as bus stop relocation) with the transit operator(s) prior to impacts.
37. If through field measurements, existing pavement width is sufficient to not require a shift for future construction no temporary work will be required.
38. If existing pavement markings are impacted they will be replaced with Type A paint.
39. The contractor shall ensure tack is installed in conformance with VDOT standards and specifications at the interface between existing pavement and temporary widening.
40. Attenuators may be eliminated assuming barrier flare rate and clear zone requirements are met.

STAGE 1B CONSTRUCTION

PURPOSE: Shift traffic onto the temporary pavement constructed in Stage 1A. Construct permanent roadway widening work on the outside of northbound Route28 from Compton Road/Ordway Road to Old Mill Road/Green Trails Boulevard. The inside permanent roadway for northbound is to be constructed from Old Mill Road/Green Trails Boulevard to New Braddock Road. Southbound Route 28 the permanent widening is to be constructed along the inside of the existing lanes. Temporary pavement is be added along the inside of southbound to prepare for Stage 3A lane shifts and permanent construction activities.

The connections at Tallavast Drive and Bradenton Drive are also be constructed in this stage. The new shared use path along northbound Route 28 is to be constructed while maintaining the existing path at all times.

Install signs, channelizing devices, and all other temporary traffic controls as shown on Stage IB TTC plans (Sheet IM Series).

Once Stage IB paving is complete, channelizing devices and associated shoulder closure signs may be removed.

STAGE 2 CONSTRUCTION

PURPOSE: During off-peak lane closure operations, variable depth asphalt buildup will be constructed within the limits of the Stage IB widening and the portion of existing pavement that will accommodate Stage 3A travel lanes. This includes the upper lifts of asphalt paving on the Stage IB widened pavement concurrent with asphalt buildup on the existing lanes.

Upon completion of each off-peak overlay operation, lanes will be shifted from the Stage IB configuration into the Stage 3A configuration.

STAGE 3A CONSTRUCTION

PURPOSE: Shift Route 28 traffic onto permanent widening constructed in Stage IB during Stage 2 overlay operations. Northbound traffic is to be shifted to the east from Compton Road/Ordway Road to Old Mill Road/Green Trails Boulevard along with barrier being installed on the westbound side. From Old Mill Road/Green Trails Boulevard to Upperridge Drive, northbound Route 28 traffic is to be shifted to the west to construct the permanent roadway widening. Southbound Route 28 traffic will be shifted towards the median.

Connections to Compton Road West, Old Mill Road, New Braddock Road, and Machen Road. The eastern part of Ordway Road are to be completed. The western side of Upperridge Drive is to be completed.

The shared use path along NB Route 28 is to be constructed from New Braddock Road to Upperridge Road, while maintaining the existing trail.

STAGE 3B CONSTRUCTION

PURPOSE: Southbound traffic is to remain in the same location from Stage 3A. Northbound traffic is to remain in the same location from Stage 3A from Compton Road/Ordway Road to Old Mill Road/Green Trails Boulevard. Northbound Route 28 traffic is to be shifted to the west from New Braddock Road to Upperridge Drive to construct the inside permanent roadway widening. The western part of Ordway Road and New Braddock Road is to be constructed. The median along Upperridge Road is to be constructed. The shared use path along northbound from Old Mill/ Road to Green Trails Boulevard is to be constructed while maintaining the exiting trail.

Pavement Marking Legend

DESCRIPTION				WHITE	YELLOW
DASHED LINE - 4"	10'	30'	10'	A	
DASHED LINE - 6"	10'	30'	10'	S	
DASHED LINE - 8"	10'	30'	10'	W	
DASHED LINE - 12"	10'	30'	10'	T	
SOLID LINE - 4"				B	H
SOLID LINE - 6"				N	O
SOLID LINE - 8"				C	I
SOLID LINE - 12"				D	L
SOLID LINE - 24"				E	J
DOTTED LINE - 4"	2' DOT-6' SPACE			F	R
DOTTED LINE - 8"	2' DOT-6' SPACE			V	X
DOTTED LINE - 4"	3' DOT-9' SPACE			P	
DOTTED LINE - 6"	3' DOT-9' SPACE			Y	
DOTTED LINE - 8"	3' DOT-9' SPACE			M	
DOTTED LINE - 12"	3' DOT-9' SPACE			U	
DBL SOLID LINE - 4"				Z	K
DBL SOLID LINE - 4"	10'	30'	10'		Q
PVT MKG MESSAGE	ONLY			G	

NOTE: DUE TO THE CURRENT STATE OF EMERGENCY DECLARED BY THE GOVERNOR, ALL WORK ZONE TRAFFIC CONTROL CERTIFICATIONS SCHEDULED TO EXPIRE BETWEEN MARCH AND DECEMBER 2020, ARE GRANTED A ONE-YEAR EXTENSION FROM THEIR ORIGINAL EXPIRATION DATE.
SOURCE:
HTTP://WWW.VIRGINIADOT.ORG/BUSINESS/TRAFFICENG-WZS.ASP

WORK ZONE TRAINING CERTIFICATION

Commonwealth of Virginia
Virginia Department of Transportation
VDOT

VERIFICATION OF COMPLETION OF
ADVANCED WORK ZONE TRAFFIC CONTROL TRAINING

This is to verify that **Gerard Mrykalo** has successfully completed training and an examination by the Department on the proper practices and methods for the installation, maintenance and removal of temporary traffic control devices.

Date: 8/25/2016
State Traffic Engineer
Verification No. : 082516042
Expiration Date: 8/31/2020

INDEX:

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL STAGE 1B

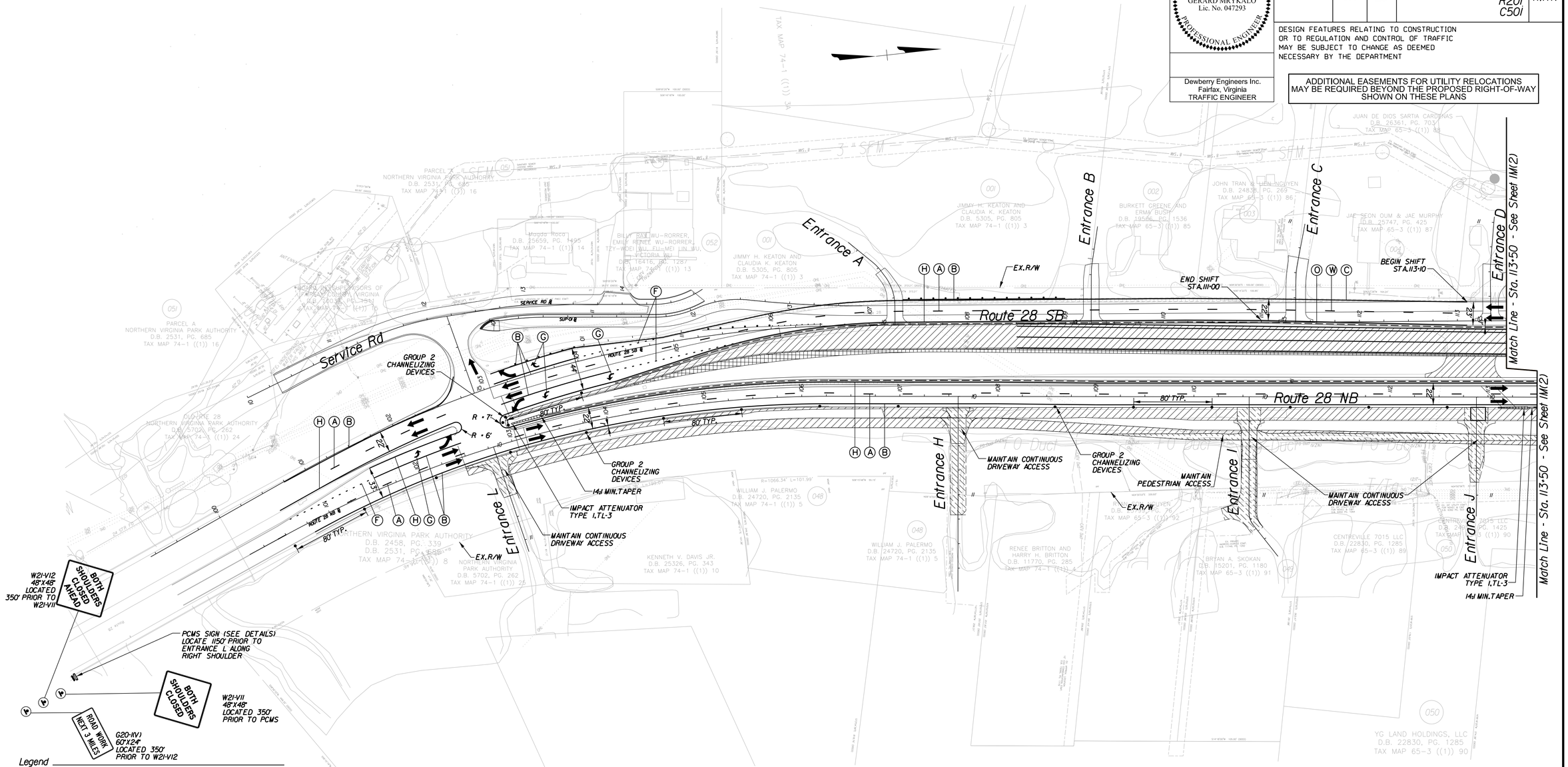
COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IM(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

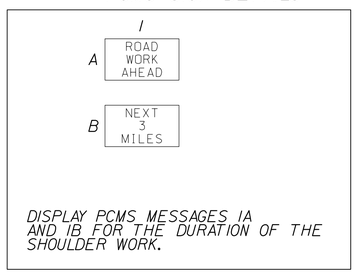


Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- • Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

PCMS SIGN DETAILS



DISPLAY PCMS MESSAGES IA AND IB FOR THE DURATION OF THE SHOULDER WORK.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IM(1)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 1B

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IM(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Match Line - See Sheet IM(11)

Match Line - Sta. 11+50 - See Sheet IM(11)

Match Line - Sta. 113+50 - See Sheet IM(1)

Match Line - Sta. 127+50 - See Sheet IM(3)

Entrance E

Entrance F

Entrance G

ROUTE 28 SB

ROUTE 28 NB

ORDWAY RD (ROUTE 616)

COMPTON RD (EAST) (ROUTE 658)

PROP.TEMP.CONST.ESM'T.

END SHIFT STA. 116+33

BEGIN SHIFT STA. 118+28

PROP.R/W

EX.R/W

GROUP 2 CHANNELIZING DEVICES

IMPACT ATTENUATOR TYPE 1,TL-3

14d MIN.TAPER

MAINTAIN PEDESTRIAN ACCESS DURING CONSTRUCTION

MAINTAIN DRIVEWAY ACCESS DURING CONSTRUCTION

RIGHT TURN LANE

Compton Rd

M4-VP1a 54"x15"

CUSTOM SIGN 54"x48"

YIELD

RI-2 60"x60"x60"

G20-2(V) 60"x24" LOCATED AT STA.117+64

END ROAD WORK

RIGHT SHOULDER CLOSED

W21-5aR 48"x48" LOCATED 270' PRIOR TO FIRST DRUM

RIGHT SHOULDER CLOSED AHEAD

W21-5bR 48"x48" LOCATED 350' PRIOR TO W21-5aR

ROAD WORK AHEAD

W20-1 48"x48" LOCATED 350' PRIOR TO W21-5bR

Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IM(2)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 1B EARLY

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IM (2A)

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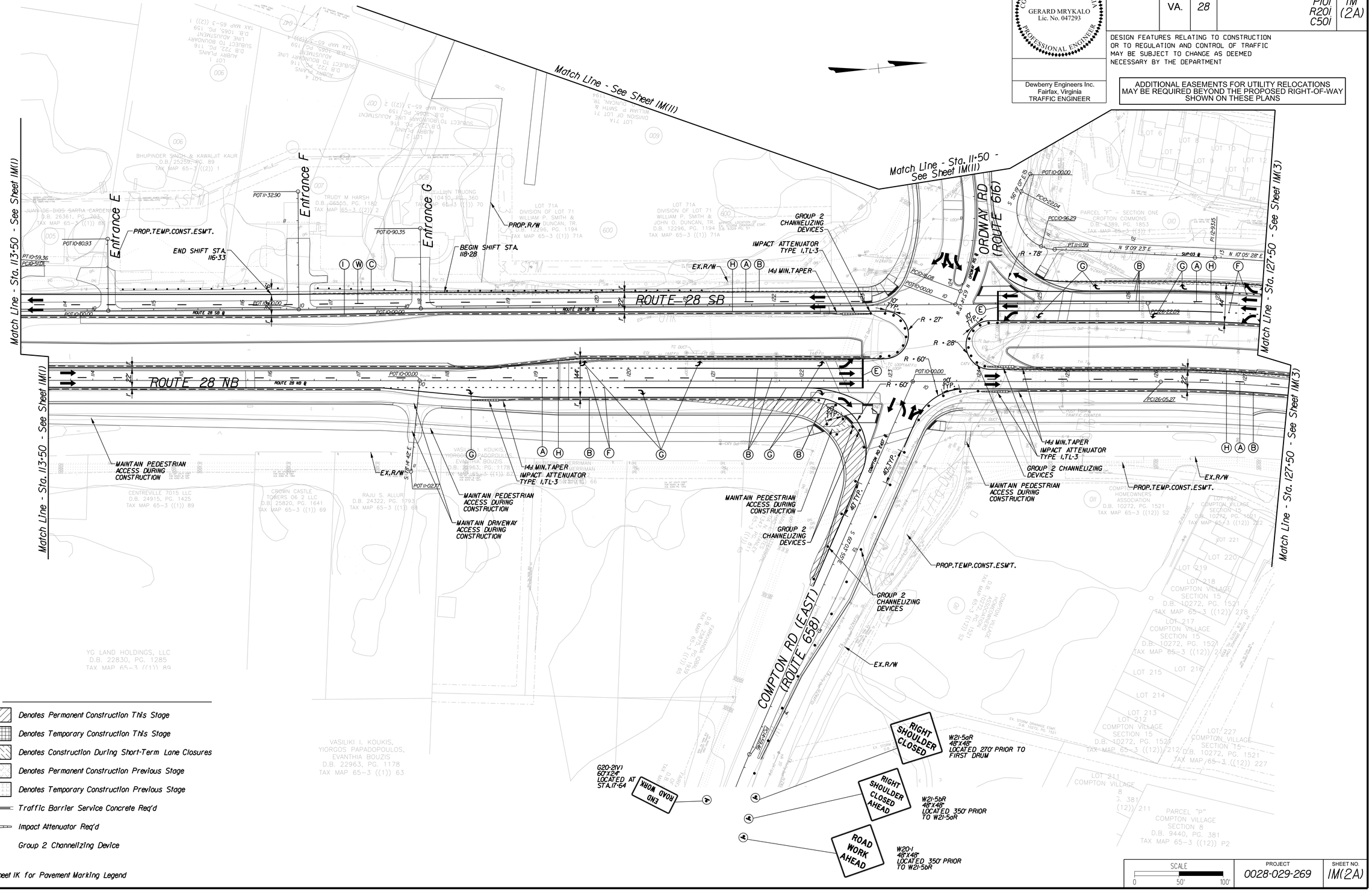

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IM(2A)

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TEMPORARY TRAFFIC CONTROL STAGE 1B

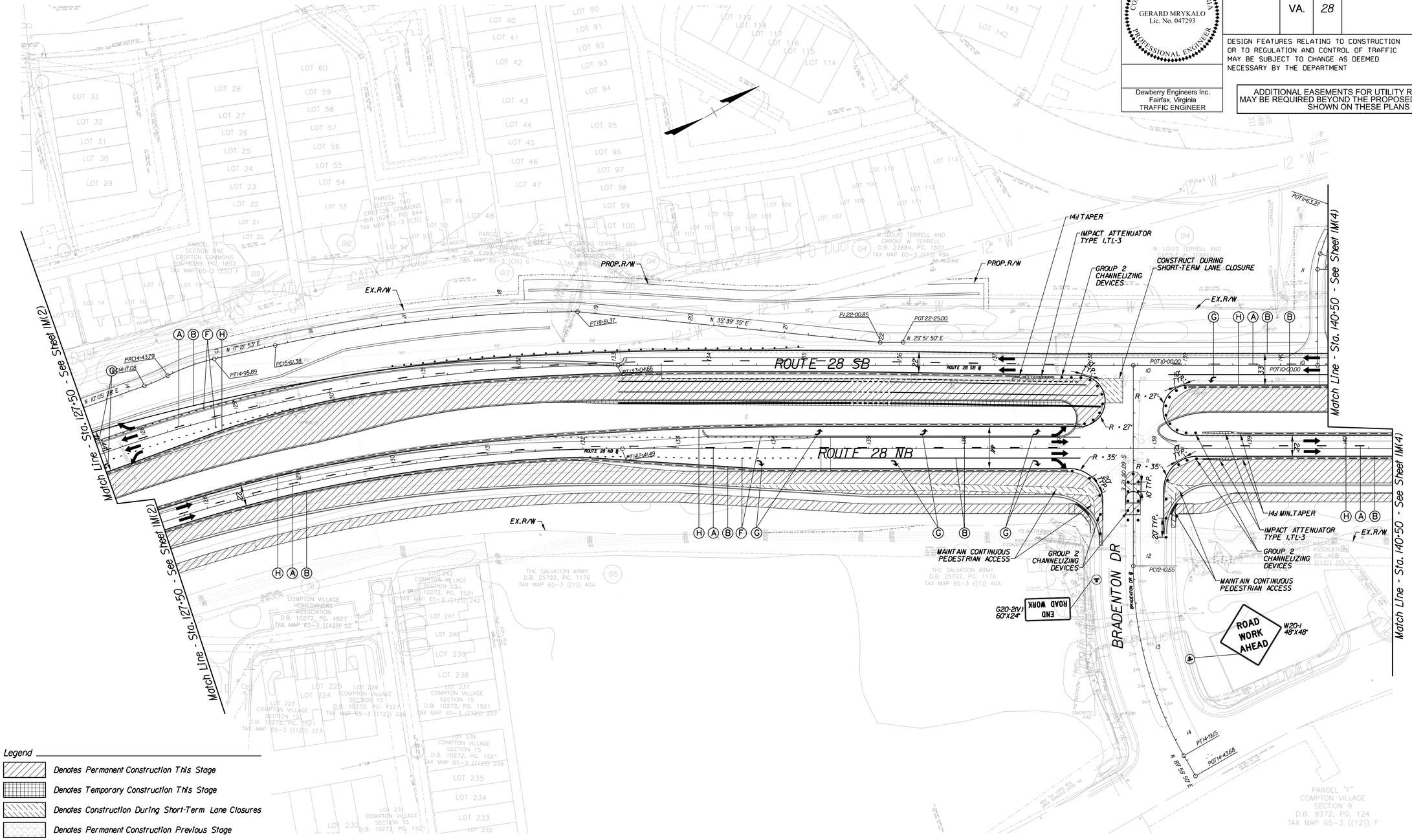
COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IM(3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- • Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IM(3)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL STAGE 1B

COMMONWEALTH OF VIRGINIA
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Dewberry Engineers Inc.
Fairfax, Virginia
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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IM(4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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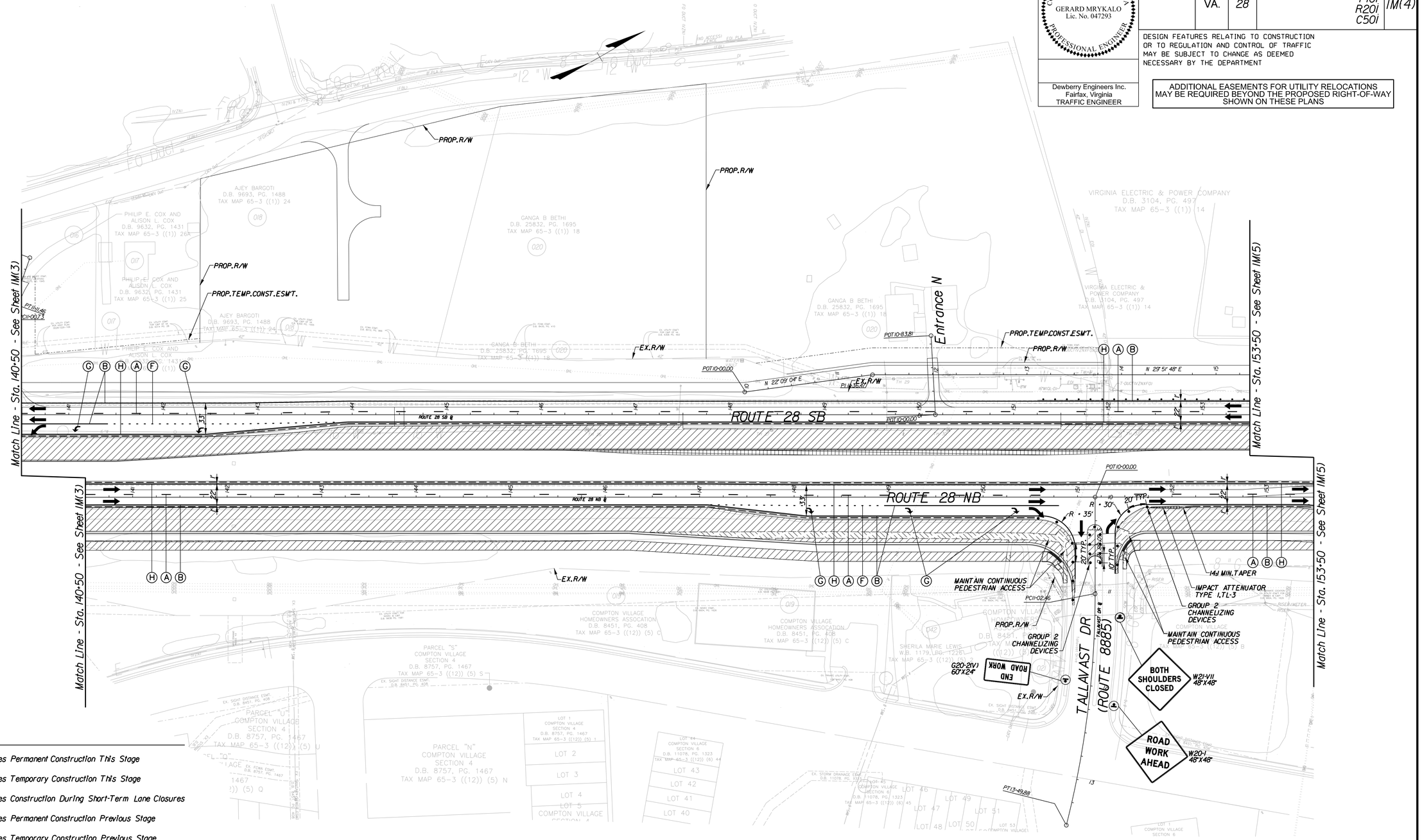

Legend

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Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IM(4)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 1B

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IM(5)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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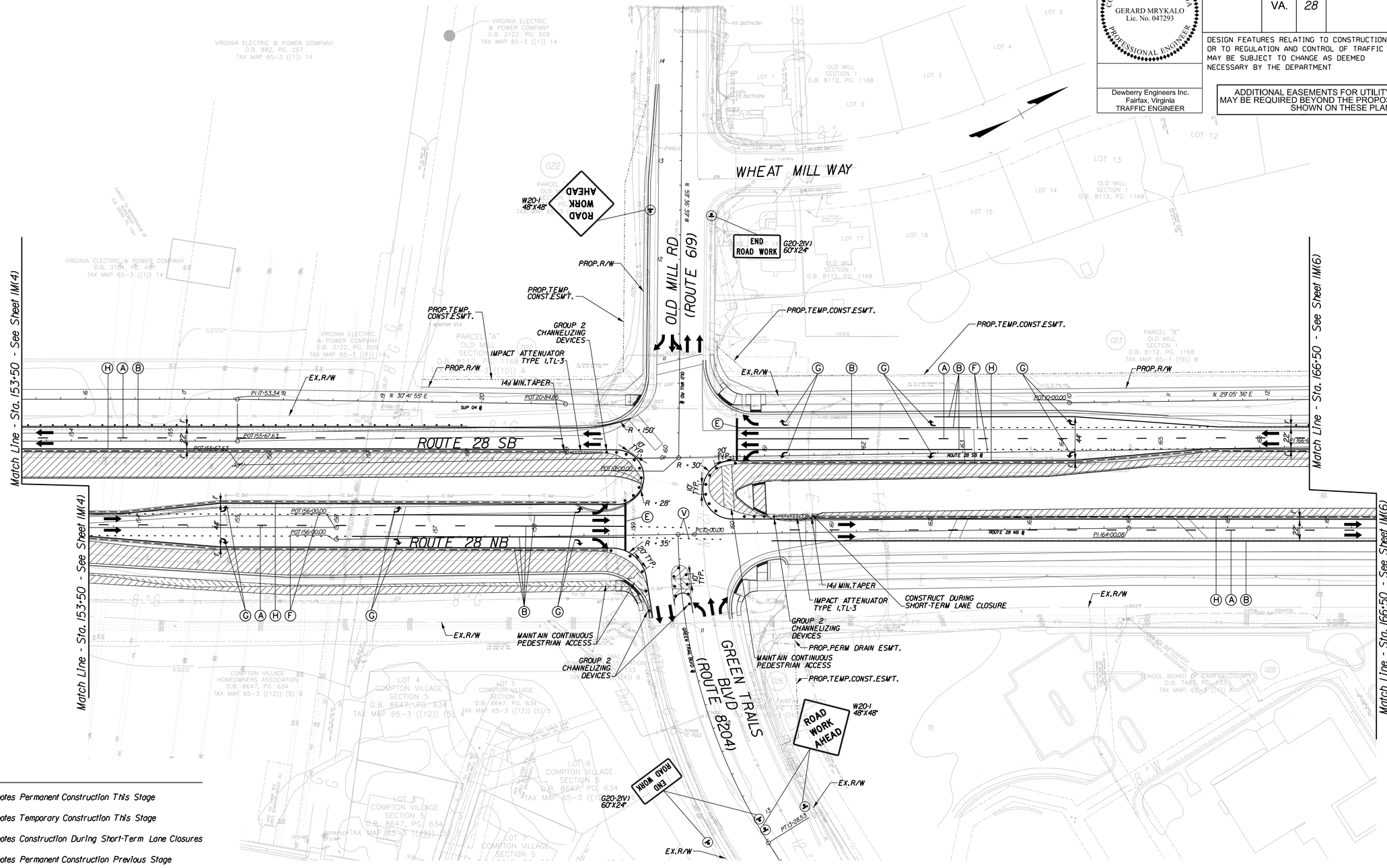

Legend

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- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
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- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IM(5)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 1B

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IM(6)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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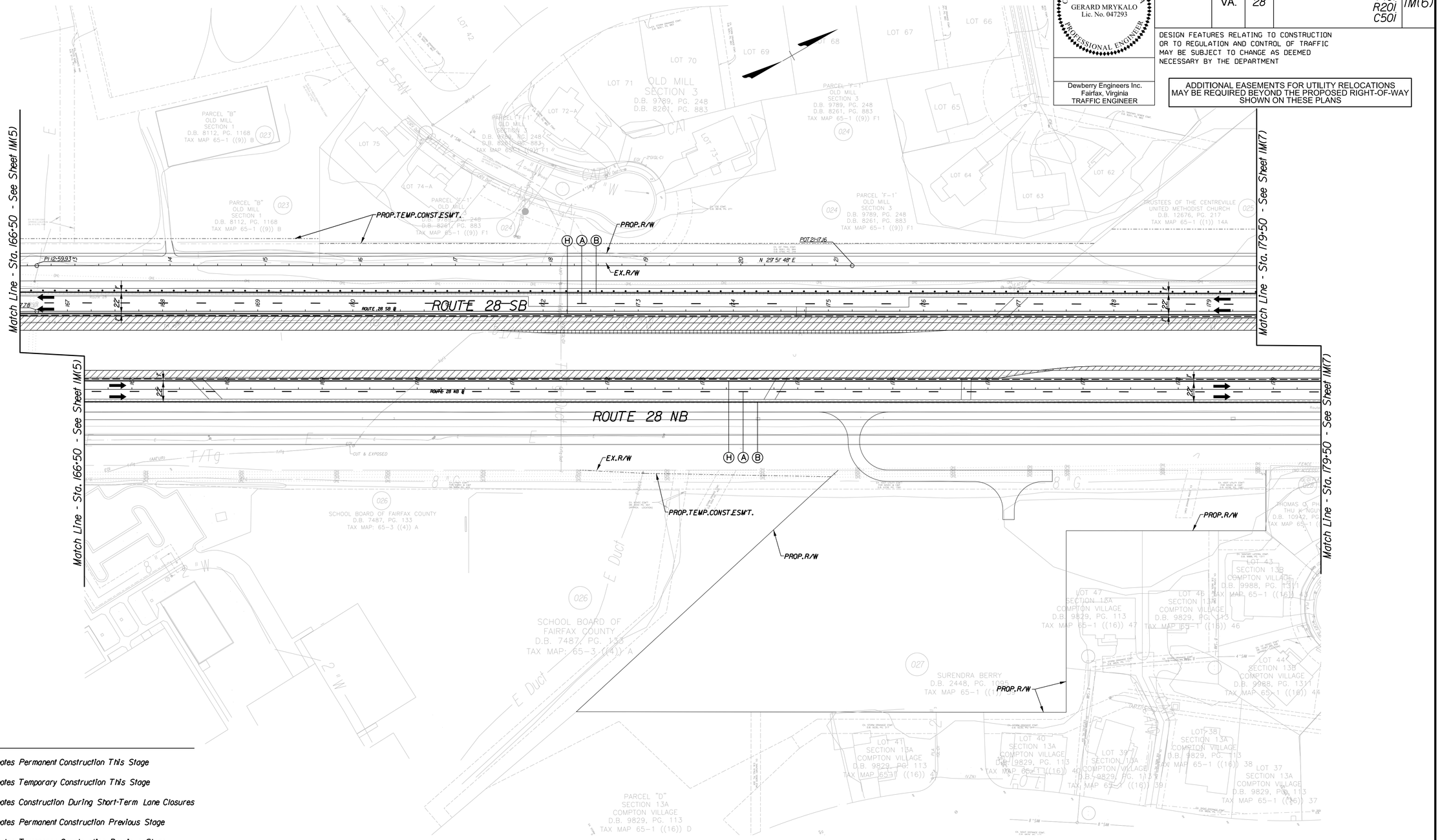

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- Denotes Permanent Construction Previous Stage
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SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IM(6)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 1B

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IM(7)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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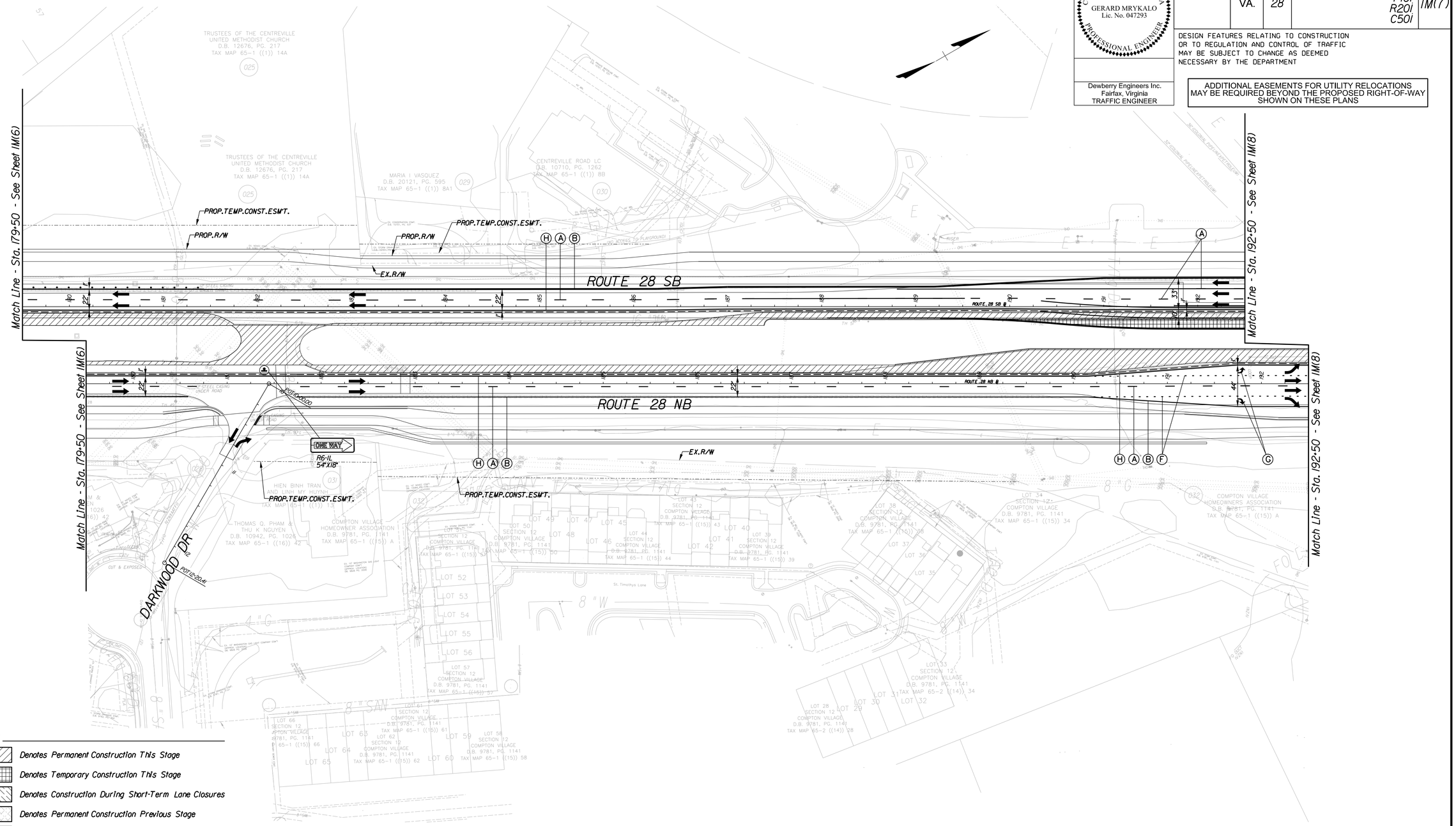

Legend

- *Denotes Permanent Construction This Stage*
- *Denotes Temporary Construction This Stage*
- *Denotes Construction During Short-Term Lane Closures*
- *Denotes Permanent Construction Previous Stage*
- *Denotes Temporary Construction Previous Stage*
- *Traffic Barrier Service Concrete Req'd*
- *Impact Attenuator Req'd*
- *Group 2 Channelizing Device*

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IM(7)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 1B

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IM(8)

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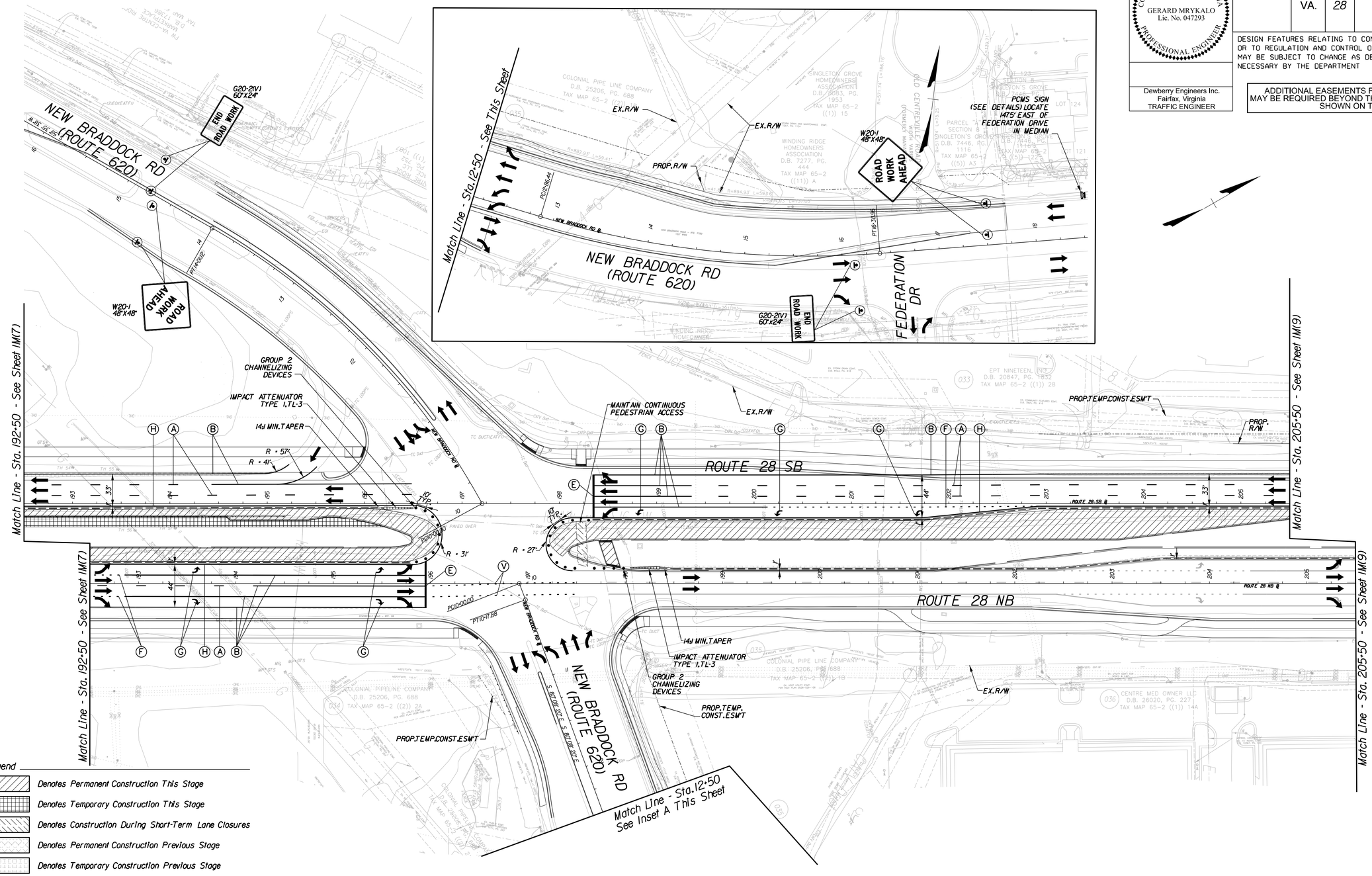

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SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IM(8)

Dewberry

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IM(9)

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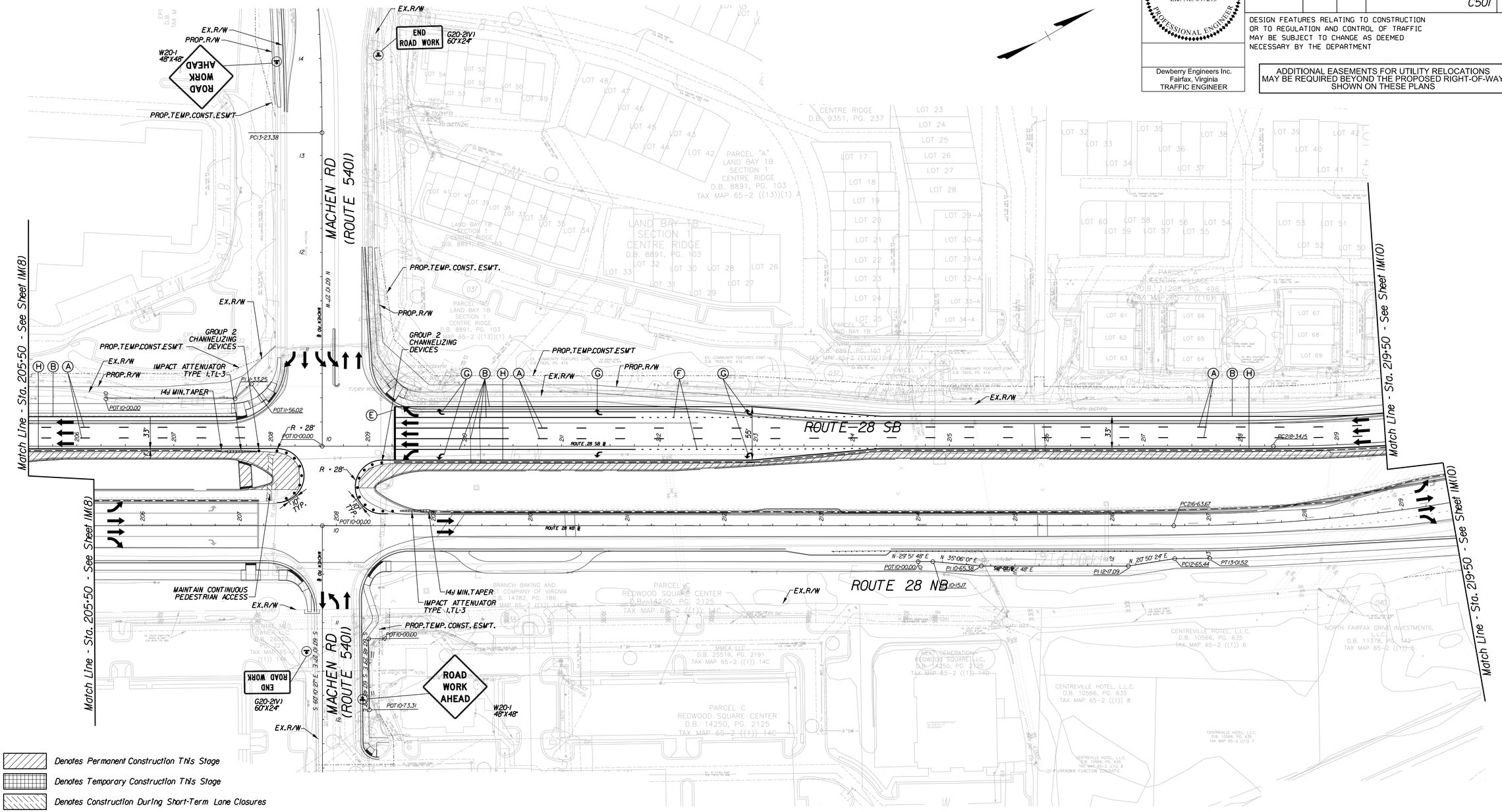

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Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IM(9)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 1B

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IM(10)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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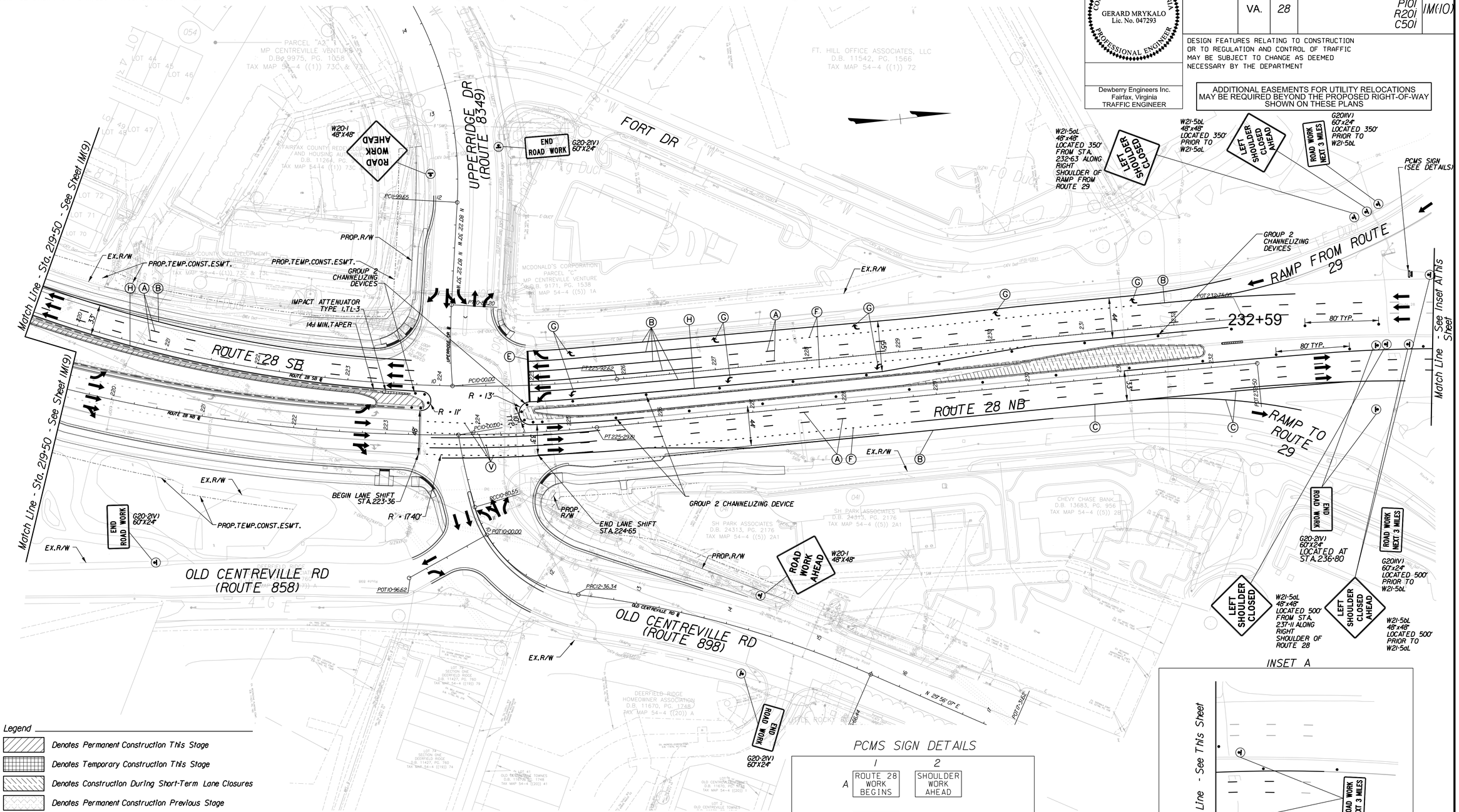

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Note: See Sheet IK for Pavement Marking Legend

ADDITIONAL PCMS SIGNS

1. PCMS SIGN (SEE DETAILS) LOCATED ON I-66W NEAR AUDREY DRIVE ALONG THE RIGHT SHOULDER.
2. PCMS SIGN (SEE DETAILS) LOCATED 700' UPSTREAM OF THE GORE ALONG THE RIGHT SHOULDER ON 28 SOUTHBOUND
3. PCMS SIGN (SEE DETAILS) LOCATED ON EASTBOUND ROUTE 29 NEAR CENTREWOOD DRIVE ALONG THE RIGHT SHOULDER.
4. PCMS SIGN (SEE DETAILS) LOCATED ON WESTBOUND ROUTE 29 800' WEST OF BRADDOCK ROAD/ OLD CENTREVILLE ROAD.

PCMS SIGN DETAILS

	1	2
A	ROUTE 28 WORK BEGINS	SHOULDER WORK AHEAD
B	ON OR ABOUT XX/XX	

DISPLAY PCMS MESSAGES 1A AND 1B 1 WEEK PRIOR TO SHOULDER CLOSURE.

DISPLAY PCMS MESSAGE 2A FOR THE DURATION OF STAGE 1A

XX/XX = ABBREVIATED MONTH/DATE

INSET A

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IM(10)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 1B

COMMONWEALTH OF VIRGINIA
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Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IM(II)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

PCMS SIGN (SEE DETAILS) LOCATE 100' NORTH OF RICHARD SIMPSON LANE ALONG RIGHT SHOULDER (LOCATED AT STA.17+30)

W20-1 48"X48" ROAD WORK AHEAD

END ROAD WORK G20-2(V) 60"x24"

COMPTON RD (ROUTE 658)

PARCEL "B" SECTION TWO CROFTON COMMONS D.B. 6281, PG. 844 TAX MAP 65-3 ((3)) B

CAPITAL WORSHIP CENTRE, LLC D.B. 23586, PG. 550 TAX MAP 65-3 ((1)) 73

CAPITAL WORSHIP CENTRE, LLC D.B. 23586, PG. 550 TAX MAP 65-3 ((1)) 72

TUAN ANH LUU TRAN & HAN NGOC NGUYEN D.B. 25990, PG. 1614 TAX MAP 65-3 ((1)) 76D

ISHWAR RYAN MAHEEPAT D.B. 23712, PG. 241 TAX MAP 65-3 ((1)) 76E

LOT 1 LOT 2 LOT 3 LOT 4 LOT 5 LOT 29 LOT 30 LOT 31 LOT 32 LOT 33

EX.R/W

PROP.TEMP.CONST.ESMT.

PCI0-07.12

PT12+16.45

PCI0+00.00

PT14+55.47

ORDWAY RD (ROUTE 6/6)

S 24° 31' 44" W

N 20° 55' 47" W

PROP.R/W

END ROAD WORK G20-2(V) 60"x24"

ROAD WORK AHEAD W20-1 48"X48"

PCMS SIGN (SEE DETAILS) LOCATED AT STA.3+10 ALONG RIGHT SHOULDER

Match Line - See Sheet 2K(2)

Match Line - Sta. 11+50 - See Sheet 1M(2)

PCMS SIGN DETAILS

	1	2
A	SHOULDER WORK BEGINS	SHOULDER WORK
B	ON OR ABOUT XX/XX	NEXT 3 MILES

DISPLAY PCMS MESSAGES 1A AND 1B 1 WEEK PRIOR TO SHOULDER CLOSURE.

DISPLAY PCMS MESSAGES 2A AND 2B FOR THE DURATION OF THE SHOULDER WORK.

Legend

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- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IM(II)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
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TEMPORARY TRAFFIC CONTROL STAGE 2

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
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PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IN(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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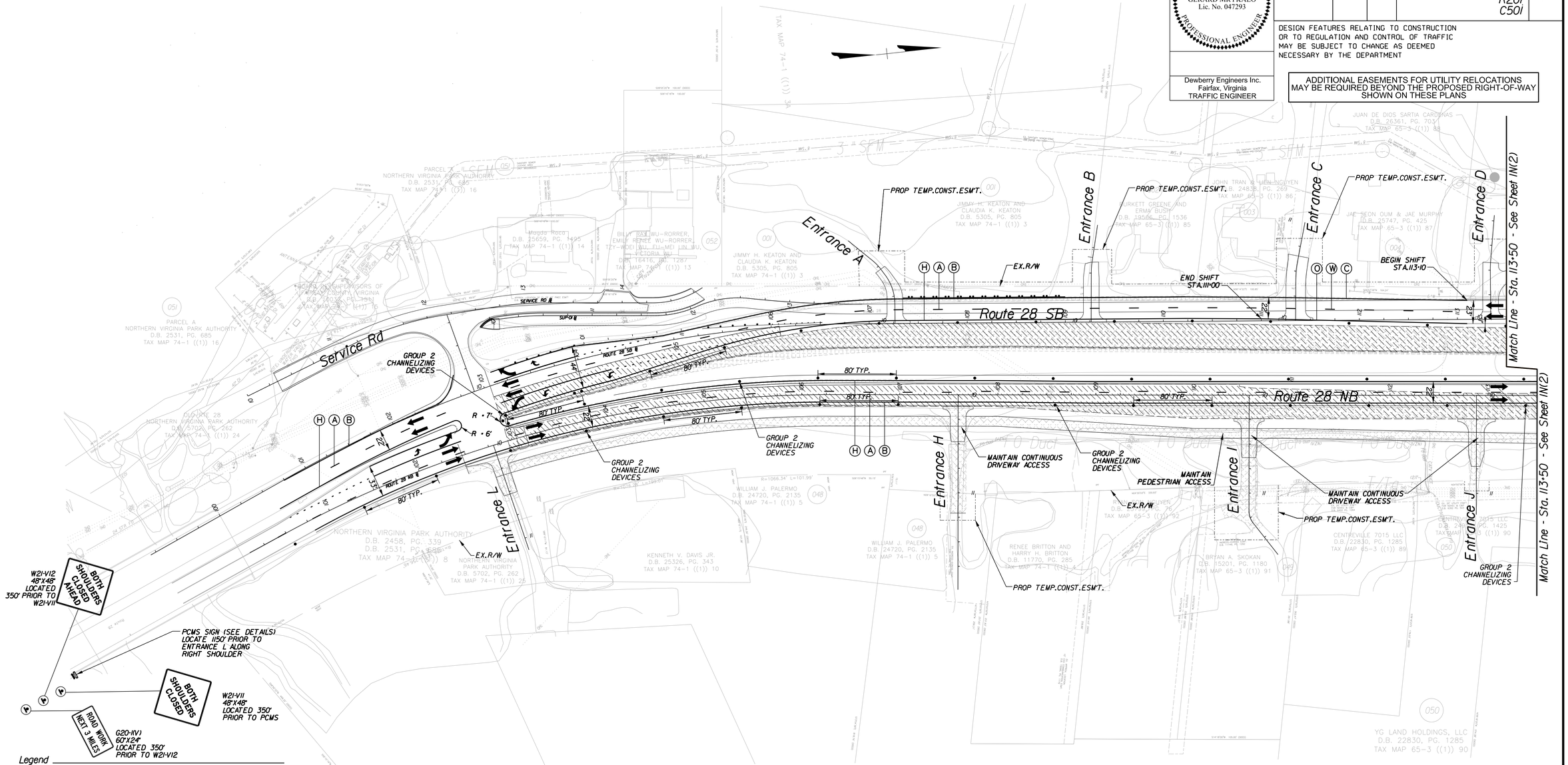

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- Denotes Permanent Construction Previous Stage
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- Denotes Intersection Build Up During Short-Term Lane Closures
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- Impact Attenuator Req'd
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Note: See Sheet IK for Pavement Marking Legend

PCMS SIGN DETAILS

I

A — ROAD WORK AHEAD

B — NEXT 3 MILES

DISPLAY PCMS MESSAGES IA AND IB FOR THE DURATION OF THE SHOULDER WORK.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IN(1)

10/11/2020
1:31:13 PM

T108720-IN(02).dgn
Plotted By: gmrykalo

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
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TEMPORARY TRAFFIC CONTROL STAGE 2

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IN(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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Match Line - See Sheet IN(11)

Match Line - Sta. 11+50 - See Sheet IN(11)

Match Line - Sta. 113+50 - See Sheet IN(1)

Match Line - Sta. 127+50 - See Sheet IN(3)

Entrance E

Entrance F

Entrance G

PROP.TEMP.CONST.ESMT.

PROP.R/W

END SHIFT STA. 116+33

BEGIN SHIFT STA. 118+28

EX.R/W

GROUP 2 CHANNELIZING DEVICES

ROUTE 28 NB

ROUTE 28 SB

80' TYP.

COMPTON RD (EAST) (ROUTE 658)

COMPTON RD (ROUTE 658)

M4-VPIa 54"x15"

CUSTOM SIGN 54"x48"

Compton Rd

RIGHT TURN LANE

MAINTAIN PEDESTRIAN ACCESS DURING CONSTRUCTION

RI-2 60"x60"x60"

G20-2(V) 60"x24" LOCATED AT STA.117+64

END ROAD WORK

RIGHT SHOULDER CLOSED

W21-5aR 48"x48" LOCATED 270' PRIOR TO FIRST DRUM

RIGHT SHOULDER CLOSED AHEAD

W21-5bR 48"x48" LOCATED 350' PRIOR TO W21-5aR

ROAD WORK AHEAD

W20-1 48"x48" LOCATED 350' PRIOR TO W21-5bR

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Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IN(2)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 2

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-	VA.	28	0028-029-269 P101 R201 C501	IN(3)

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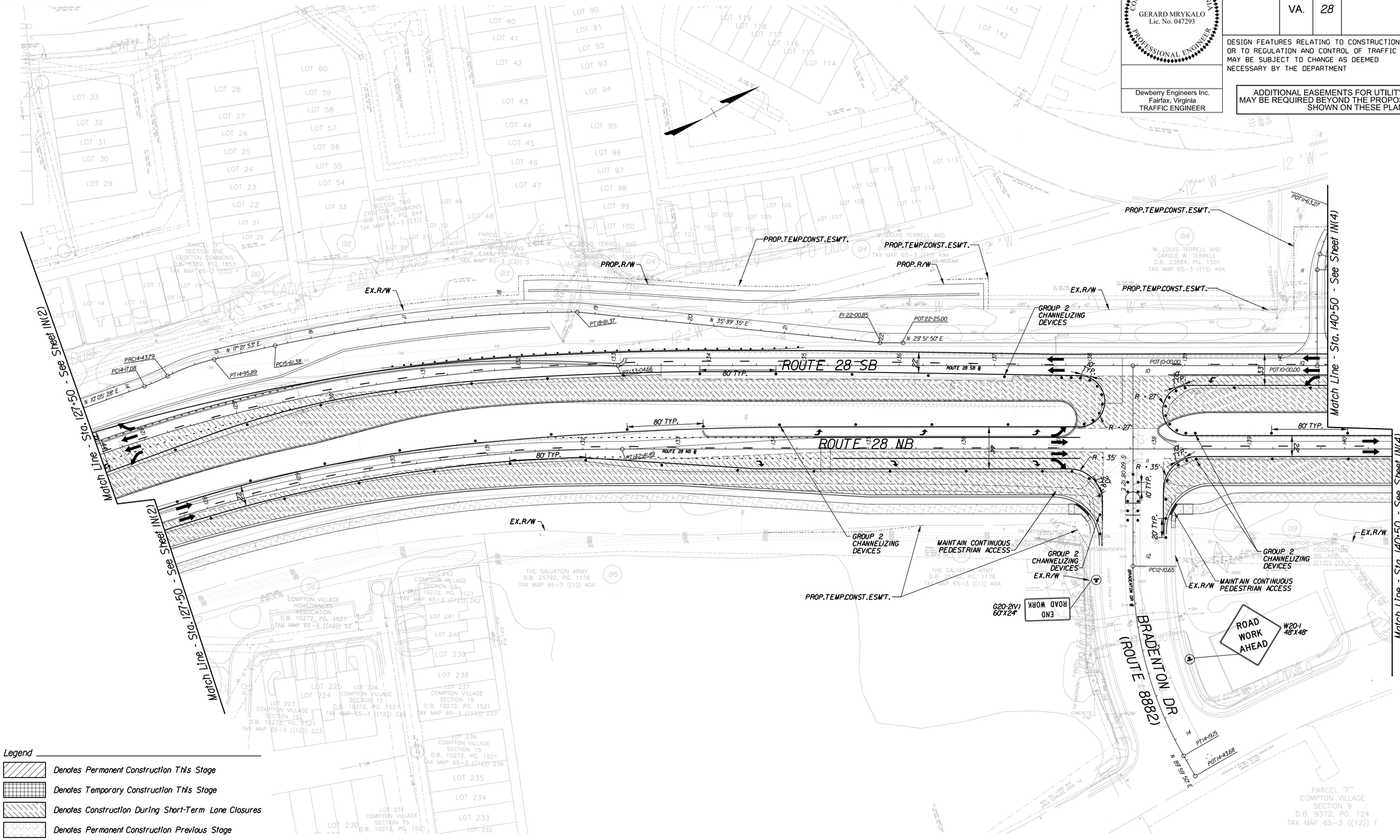

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SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IN(3)

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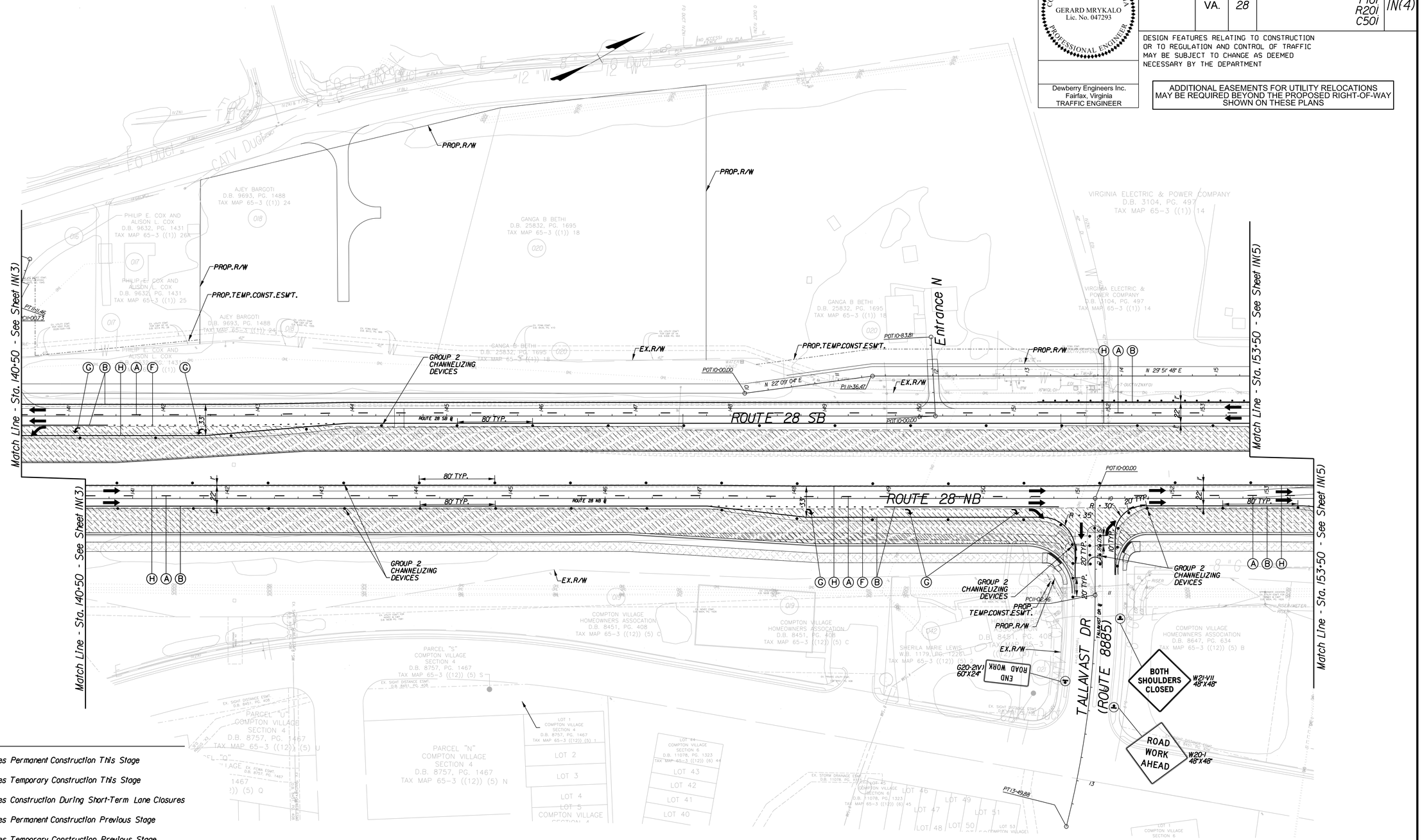
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IN(4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Denotes Intersection Build Up During Short-Term Lane Closures
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IN(4)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL STAGE 2

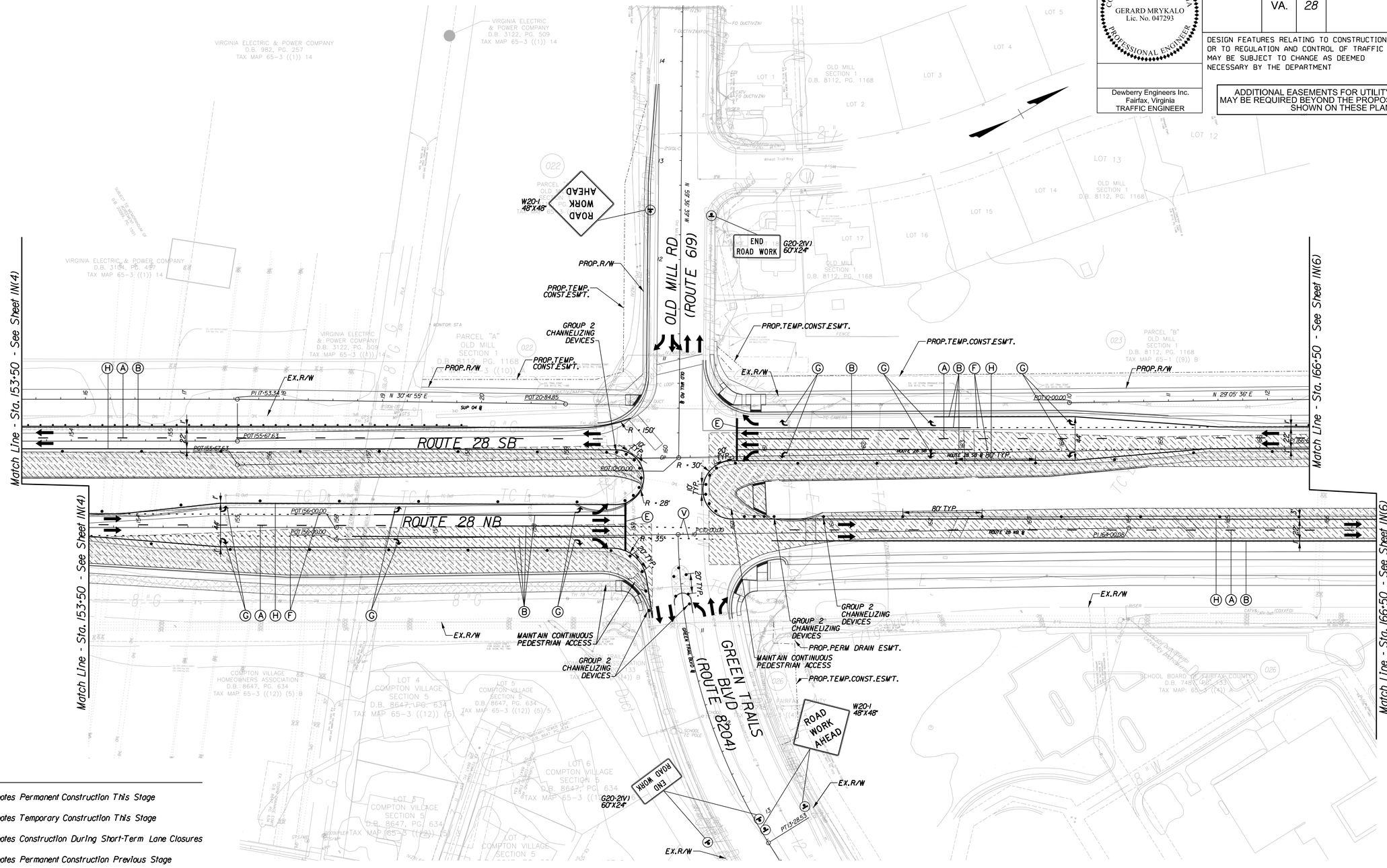
COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IN(5)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



Legend

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- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Denotes Intersection Build Up During Short-Term Lane Closures
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- • Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IN(5)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
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SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL STAGE 2

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IN(6)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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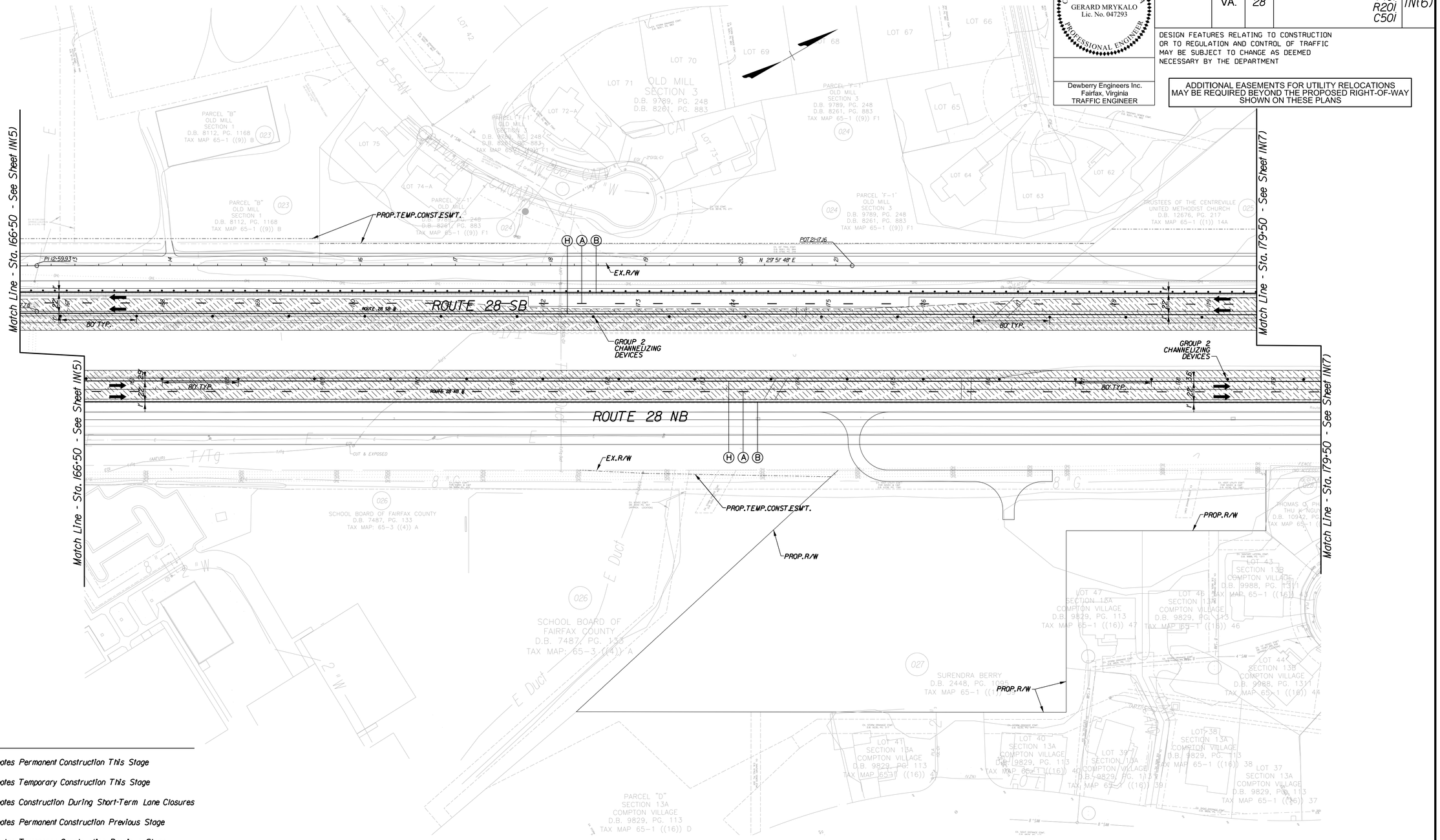

Legend

- *Denotes Permanent Construction This Stage*
- *Denotes Temporary Construction This Stage*
- *Denotes Construction During Short-Term Lane Closures*
- *Denotes Permanent Construction Previous Stage*
- *Denotes Temporary Construction Previous Stage*
- *Denotes Intersection Build Up During Short-Term Lane Closures*
- *Traffic Barrier Service Concrete Req'd*
- *Impact Attenuator Req'd*
- *Group 2 Channelizing Device*

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IN(6)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
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TEMPORARY TRAFFIC CONTROL STAGE 2

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IN(7)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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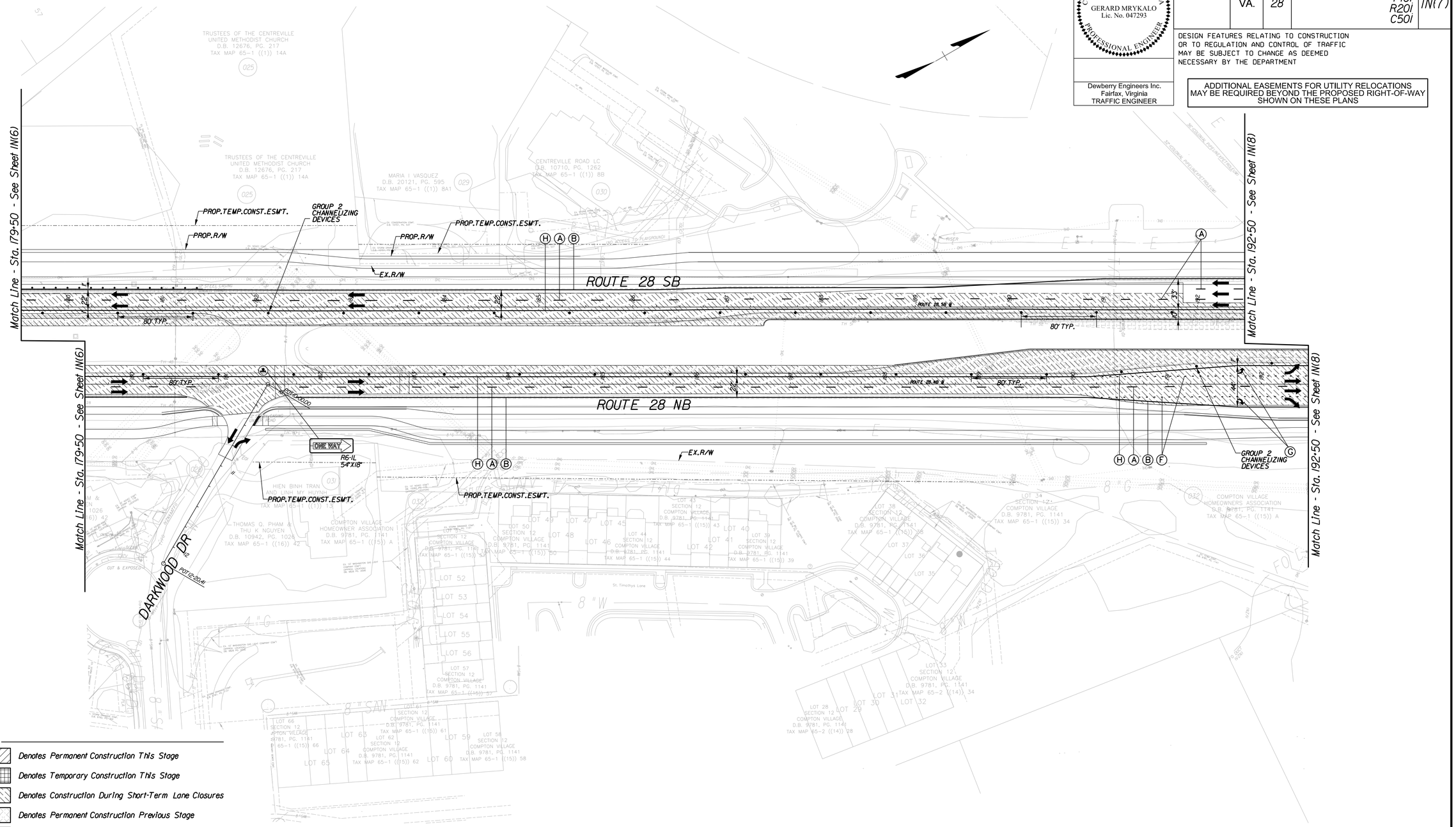

Legend

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- • Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IN(7)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
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TEMPORARY TRAFFIC CONTROL STAGE 2

COMMONWEALTH OF VIRGINIA
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Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IN(8)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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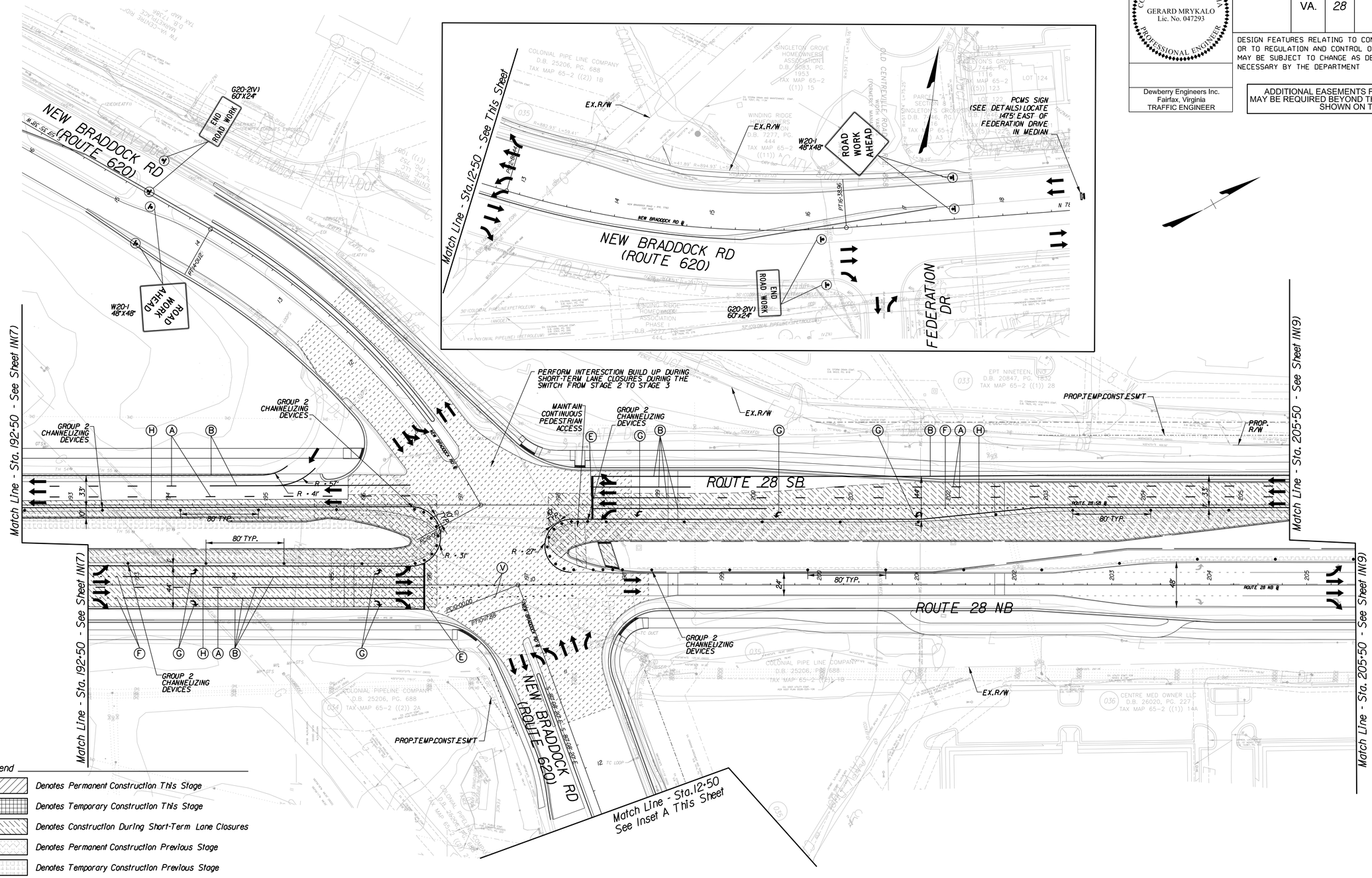

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- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IN(8)

Dewberry

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SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
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TEMPORARY TRAFFIC CONTROL STAGE 2

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IN(9)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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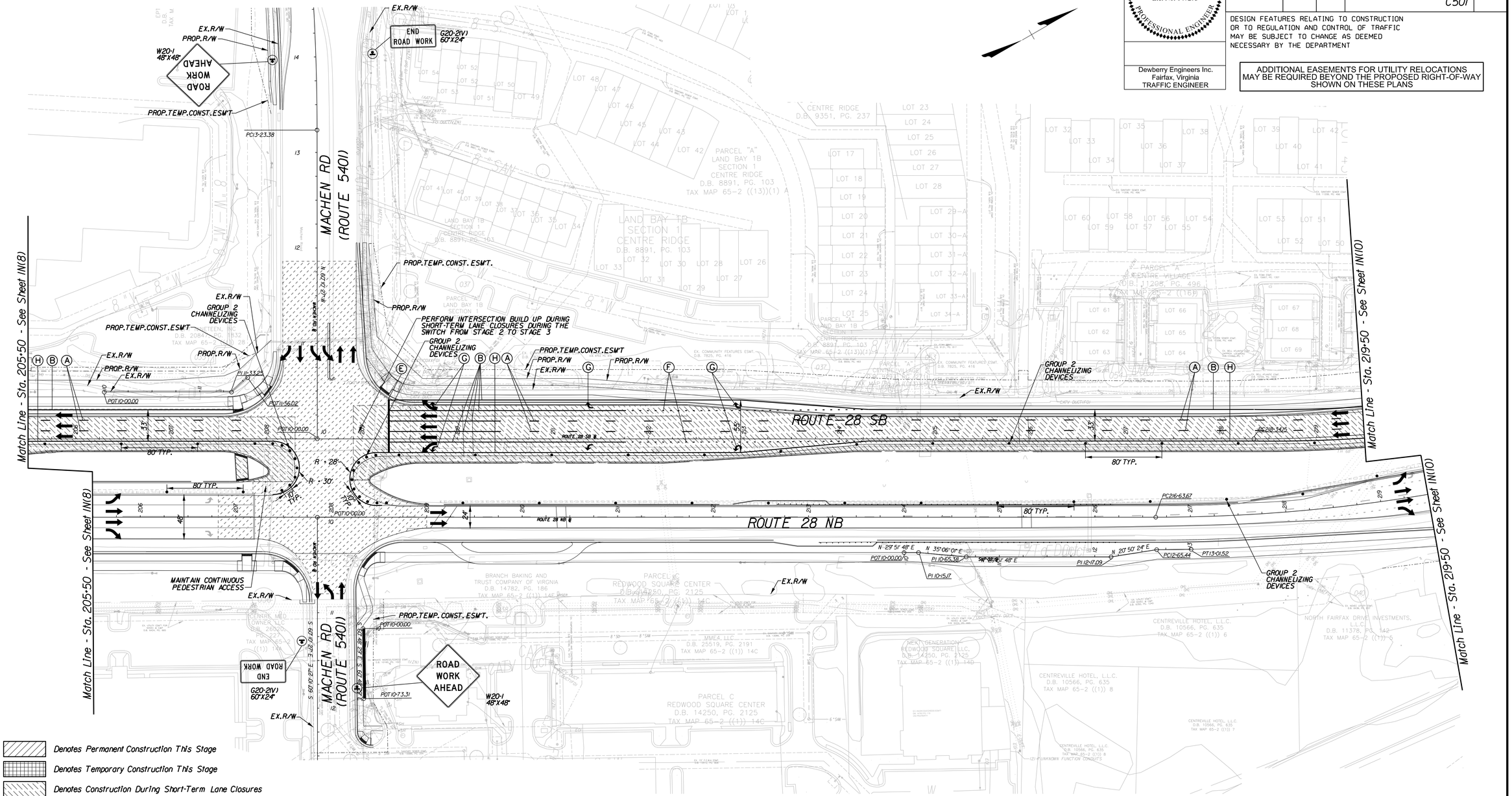

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- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- • Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IN(9)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 2

COMMONWEALTH OF VIRGINIA
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PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IN(10)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Match Line - Sta. 219+50 - See Sheet IN(9)

ROUTE 28 SB

ROUTE 28 NB

UPPERRIDGE DR (ROUTE 8349)

FORT DR

OLD CENTREVILLE RD (ROUTE 858)

OLD CENTREVILLE RD (ROUTE 898)

RAMP FROM ROUTE 29

RAMP TO ROUTE 29

Match Line - See Inset A This Sheet

W20-1 48"x48" ROAD WORK AHEAD

G20-2(V) 60"x24" END ROAD WORK

PERFORM INTERSECTION BUILD UP DURING SHORT-TERM LANE CLOSURES DURING THE SWITCH FROM STAGE 2 TO STAGE 3

GROUP 2 CHANNELIZING DEVICES

TIE INTO EXISTING PAVEMENT MARKING AT SB STA.230+24

PROP.TEMP.CONST.ESM'T.

PROP.R/W

EX.R/W

BEGIN LANE SHIFT STA.223+36

END LANE SHIFT STA.224+65

R = 13'

R = 11'

R = 1740'

W21-5aL 48"x48" LOCATED 350' PRIOR TO W21-5aL

LEFT SHOULDER CLOSED AHEAD

G20(IV) 60"x24" LOCATED 350' PRIOR TO W21-5aL

ROAD WORK NEXT 3 MILES

PCMS SIGN (SEE DETAILS)

G20-2(V) 60"x24" LOCATED AT STA.236+80

LEFT SHOULDER CLOSED

W21-5aL 48"x48" LOCATED 500' FROM STA. 237+11 ALONG RIGHT SHOULDER OF ROUTE 28

LEFT SHOULDER CLOSED AHEAD

W21-5aL 48"x48" LOCATED 500' PRIOR TO W21-5aL

INSET A

Match Line - See This Sheet

G20(IV) 60"x24" LOCATED 500' PRIOR TO W21-5aL

Legend

- Denotes Permanent Construction This Stage
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- Denotes Temporary Construction Previous Stage
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- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

ADDITIONAL PCMS SIGNS

1. PCMS SIGN (SEE DETAILS) LOCATED ON I-66W NEAR AUDREY DRIVE ALONG THE RIGHT SHOULDER.
2. PCMS SIGN (SEE DETAILS) LOCATED 700' UPSTREAM OF THE GORE ALONG THE RIGHT SHOULDER ON 28 SOUTHBOUND
3. PCMS SIGN (SEE DETAILS) LOCATED ON EASTBOUND ROUTE 29 NEAR CENTREWOOD DRIVE ALONG THE RIGHT SHOULDER.
4. PCMS SIGN (SEE DETAILS) LOCATED ON WESTBOUND ROUTE 29 800' WEST OF BRADDOCK ROAD/ OLD CENTREVILLE ROAD.

PCMS SIGN DETAILS

	1	2
A	ROUTE 28 WORK BEGINS	SHOULDER WORK AHEAD
B	ON OR ABOUT XX/XX	

DISPLAY PCMS MESSAGES 1A AND 1B 1 WEEK PRIOR TO SHOULDER CLOSURE.

DISPLAY PCMS MESSAGE 2A FOR THE DURATION OF STAGE 1A

XX/XX = ABBREVIATED MONTH/DATE

SCALE 0 50' 100'

PROJECT	SHEET NO.
0028-029-269	IN(10)

10/10/2020
6:35:52 PM

T108720-IN(II).dgn
Plotted By: mvivona

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL STAGE 2

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IN(II)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

PCMS SIGN (SEE DETAILS) LOCATE 100' NORTH OF RICHARD SIMPSON LANE ALONG RIGHT SHOULDER (LOCATED AT STA.17+30)

ROAD WORK AHEAD W20-1 48"x48"

END ROAD WORK G20-2(V) 48"x48"

COMPTON RD (WEST) (ROUTE 658)

ORDWAY RD (ROUTE 616)

PROP.TEMP.CONST.ESWT.

EX.R/W

PROP.R/W

PCMS SIGN (SEE DETAILS) LOCATED AT STA.3+40 ALONG RIGHT SHOULDER

S 24°31'44" W

PCT2+34.44

PCC0+07.12

PCC0+00.00

PT4+15.47

PT12+16.45

N 20°58'

Match Line - Sta. 11+50 - See Sheet IN(2)

Match Line - See Sheet 2K(2)

PARCEL "B" SECTION TWO CROFTON COMMONS D.B. 6281, PG. 844 TAX MAP 65-3 ((3)) B

TUAN ANH LUU TRAN & HAN NGOC NGUYEN D.B. 25990, PG. 1614 TAX MAP 65-3 ((1)) 76D

ISHWAR RYAN MAHEEPAT D.B. 23712, PG. 241 TAX MAP 65-3 ((1)) 76E

CAPITAL WORSHIP CENTRE, LLC D.B. 23586, PG. 550 TAX MAP 65-3 ((1)) 73

CAPITAL WORSHIP CENTRE LLC D.B. 23586, PG. 550 TAX MAP 65-3 ((1)) 72

LOT 1 LOT 2 LOT 3 LOT 4 LOT 5 LOT 33 LOT 32 LOT 31 LOT 30 LOT 29

Legend

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- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

PCMS SIGN DETAILS

	1	2
A	SHOULDER WORK BEGINS	SHOULDER WORK
B	ON OR ABOUT XX/XX	NEXT 3 MILES

DISPLAY PCMS MESSAGES 1A AND 1B 1 WEEK PRIOR TO SHOULDER CLOSURE.

DISPLAY PCMS MESSAGES 2A AND 2B FOR THE DURATION OF THE SHOULDER WORK.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IN(II)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL STAGE 3A

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	IP(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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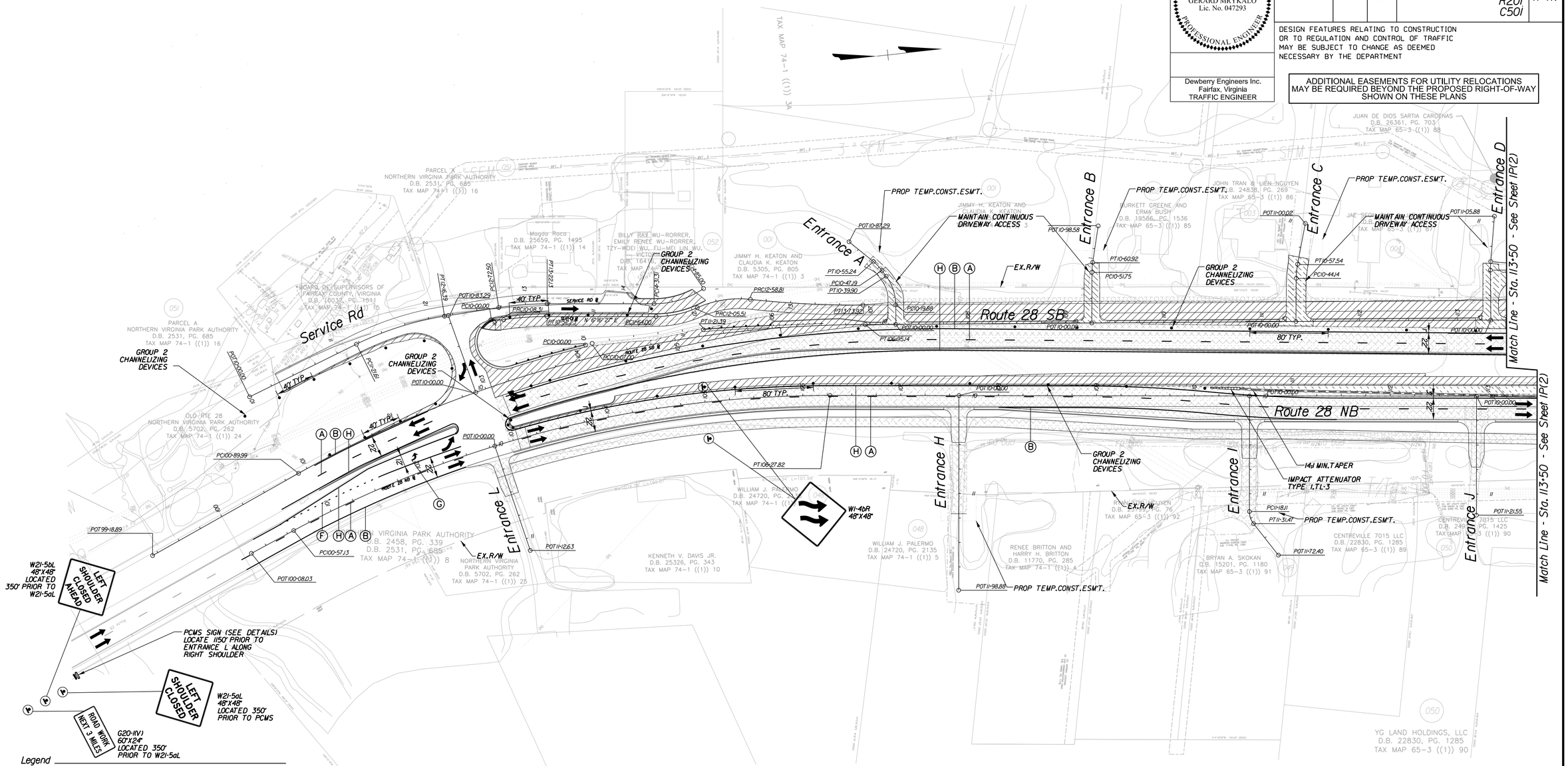

Legend

- Denotes Permanent Construction This Stage
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- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Denotes Permanent Overlay This Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

PCMS SIGN DETAILS

	1	2
A	NEW TRAFFIC PATTERN	ROAD WORK AHEAD
B	ON OR ABOUT XX/XX	NEXT 3 MILES

DISPLAY PCMS MESSAGES 1A AND 1B 1 WEEK PRIOR TO SHOULDER CLOSURE.

DISPLAY PCMS MESSAGES 2A AND 2B FOR THE DURATION OF THE SHOULDER WORK.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IP(1)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
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TEMPORARY TRAFFIC CONTROL STAGE 3A

COMMONWEALTH OF VIRGINIA
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Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IP(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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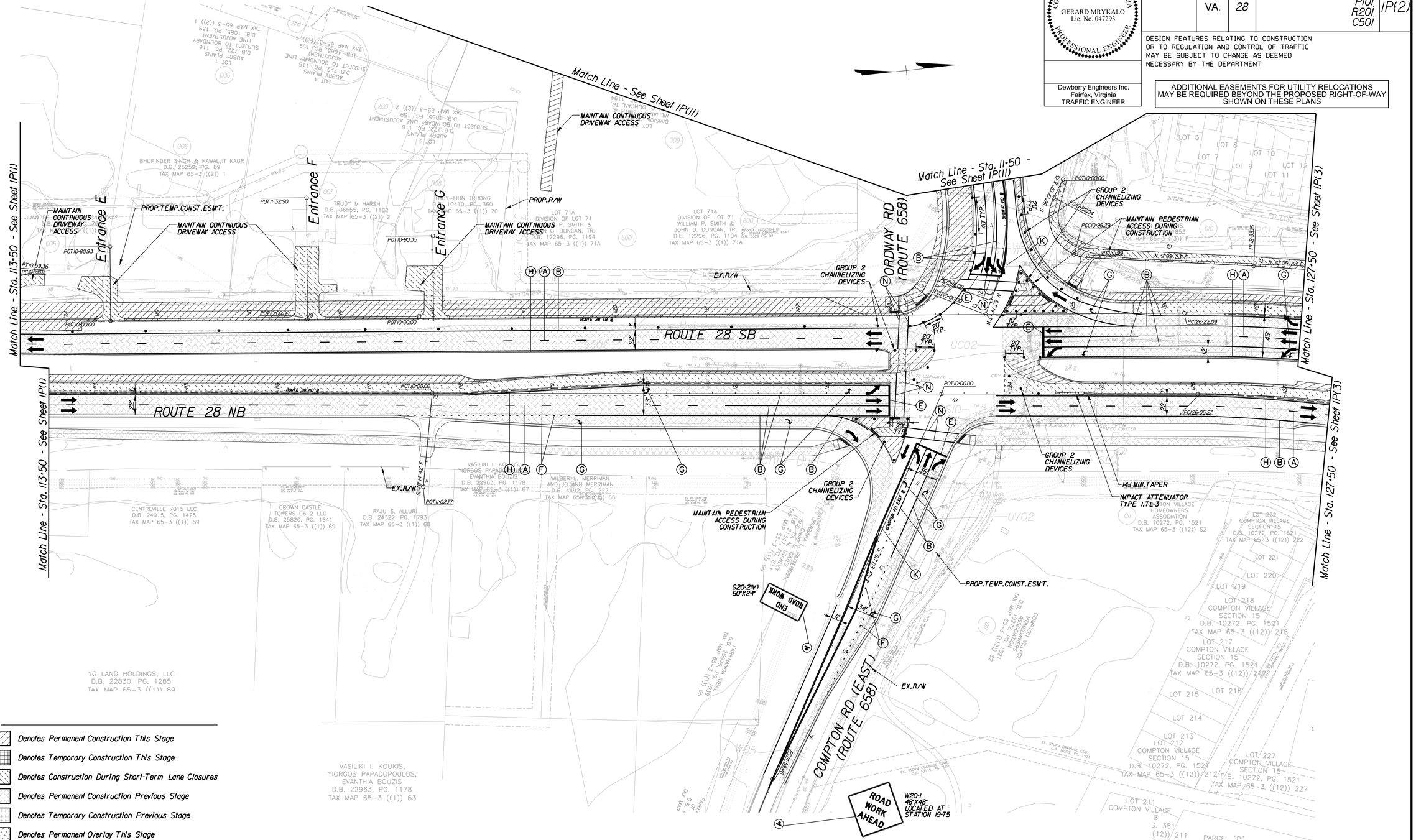

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- Denotes Temporary Construction Previous Stage
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Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IP(2)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 3A

COMMONWEALTH OF VIRGINIA
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Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IP(3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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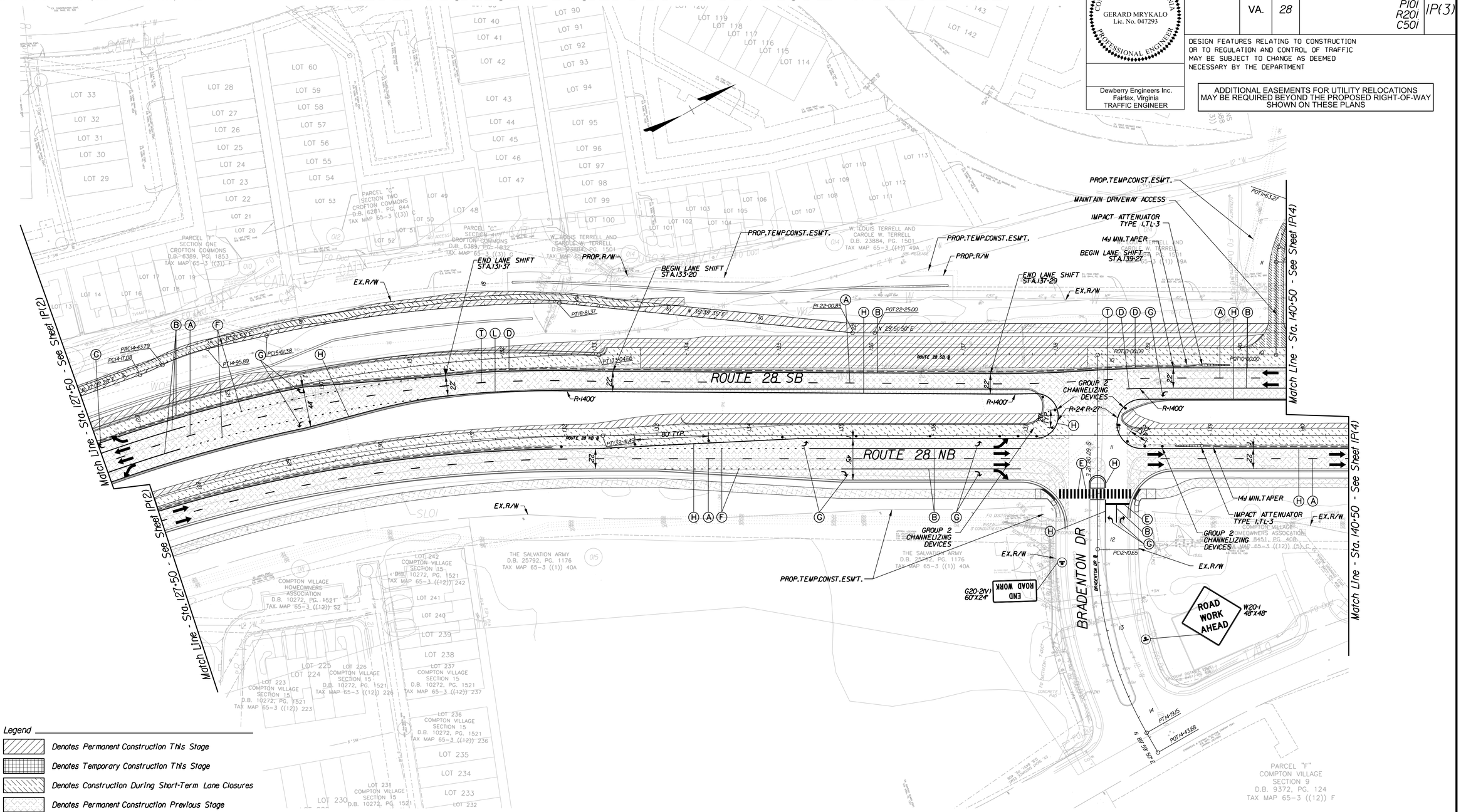

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Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IP(3)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 3A

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IP(4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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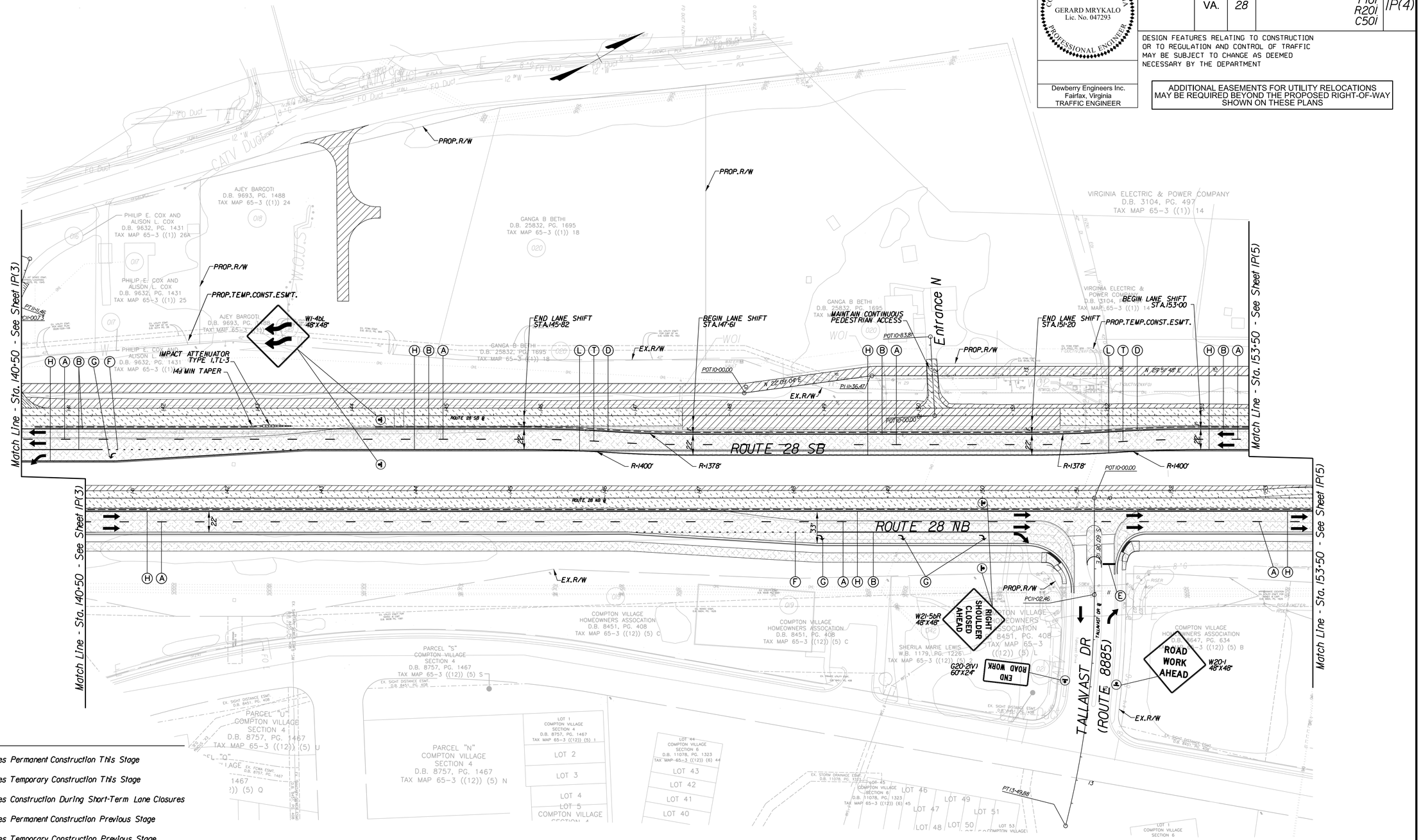

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Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IP(4)

10/11/2020
10:18:15 PM

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Plotted By: kperando

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL STAGE 3A

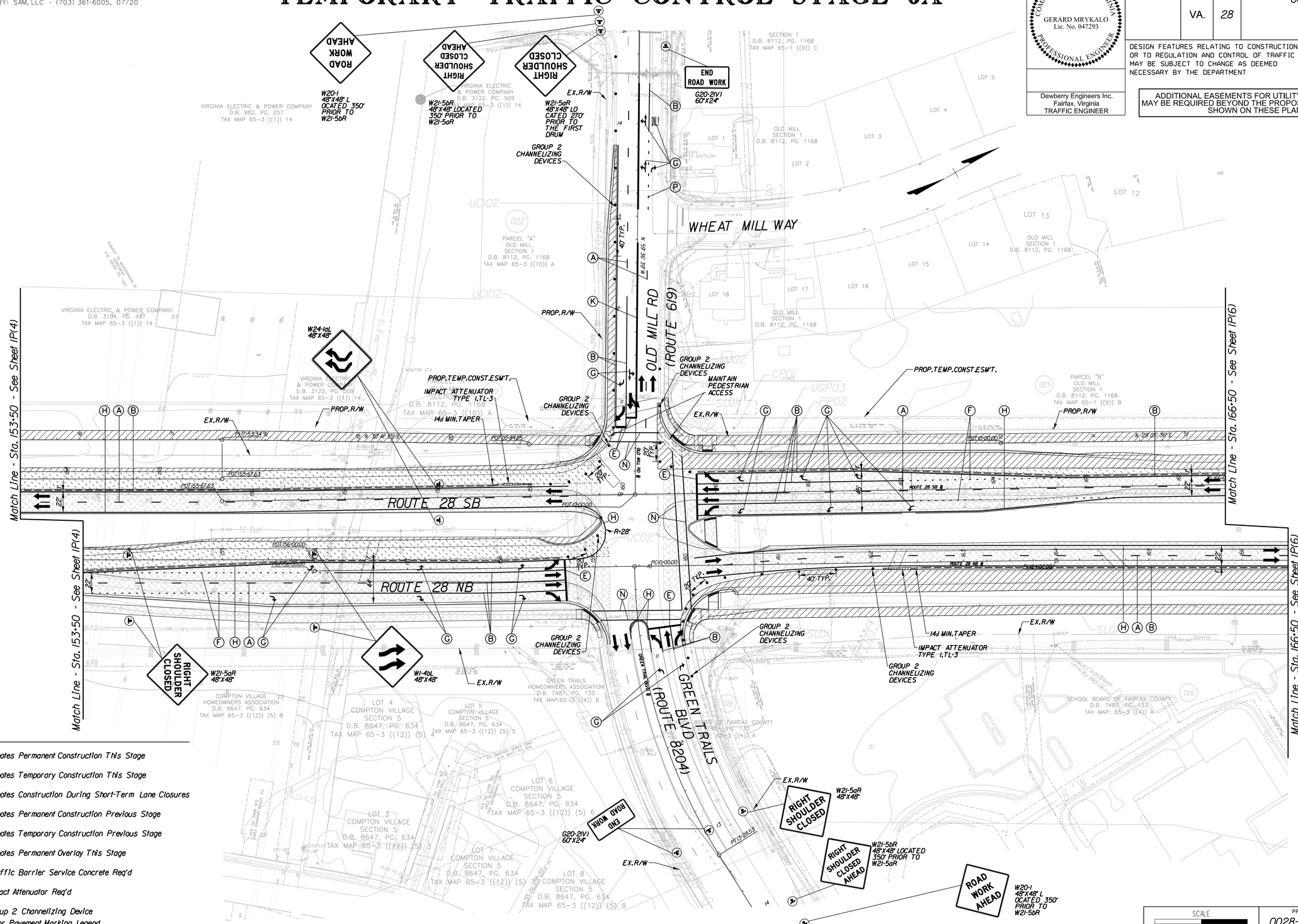
COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IP(5)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IP(5)

10/11/2020
10:18:23 PM

T108720-IP(06).dgn
Plotted By: kperando

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
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TEMPORARY TRAFFIC CONTROL STAGE 3A

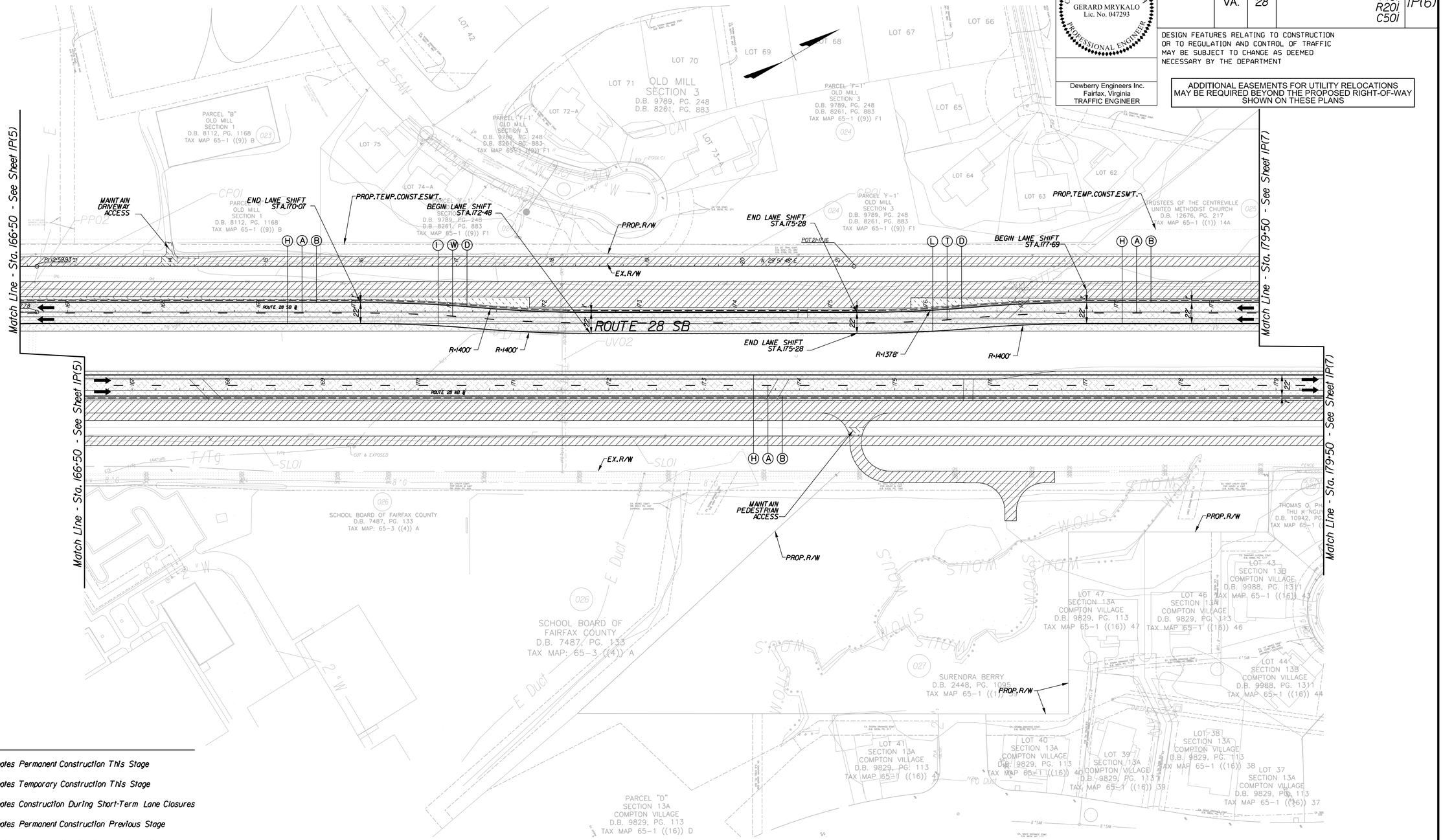
COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IP(6)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Denotes Permanent Overlay This Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IP(6)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL STAGE 3A

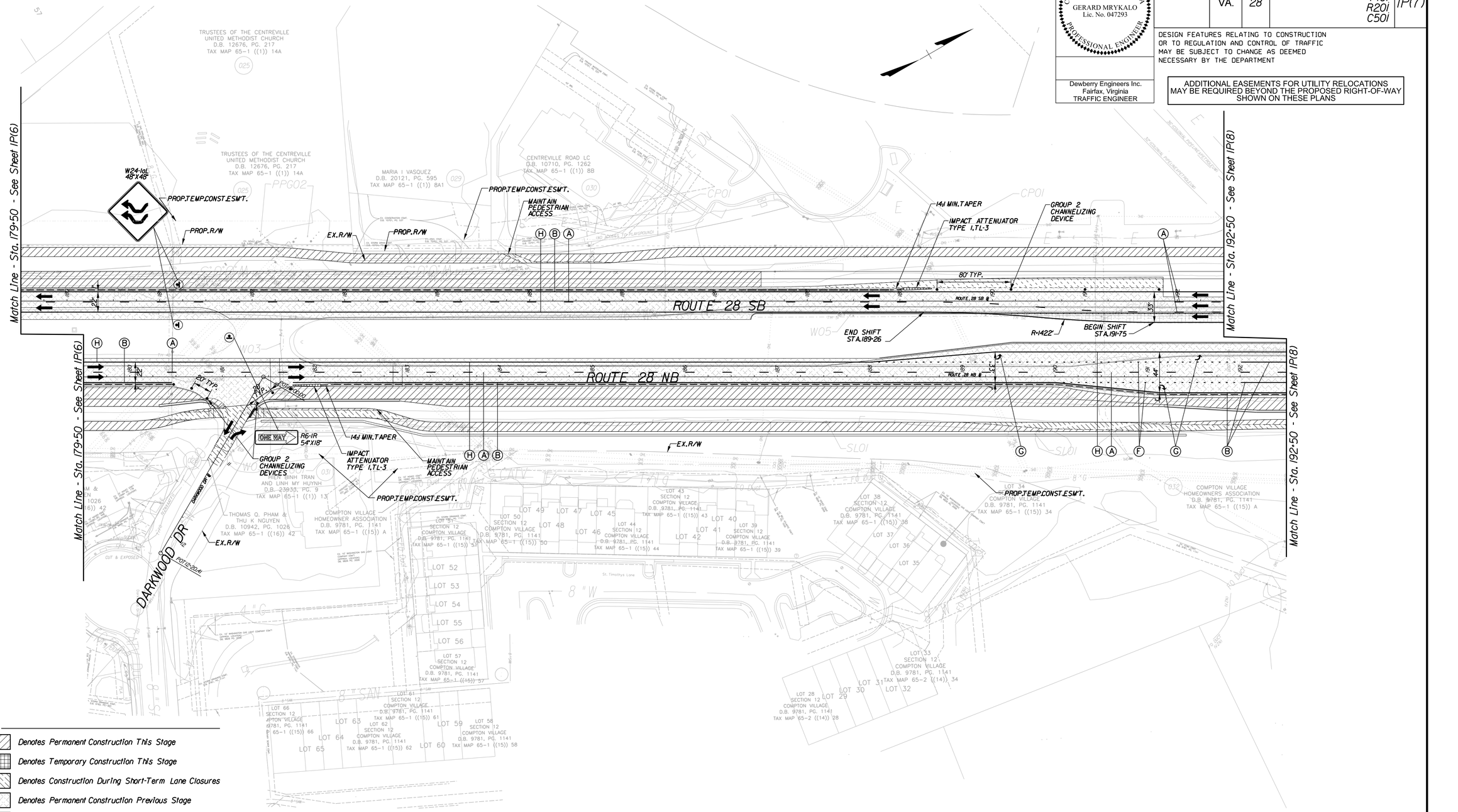
COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	IP(7)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Denotes Permanent Overlay This Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE: 0 50' 100'	PROJECT 0028-029-269	SHEET NO. IP(7)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
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SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL STAGE 3A

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IP(8)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

G20(2V) 60'X24" LOCATED 500' PRIOR TO GROUP 2 CHANNELIZING DEVICE

END ROAD WORK

GROUP 2 CHANNELIZING DEVICES TO EXTEND FOR 600' PAST WORK ZONE ALONG RIGHT SHOULDER

ROAD WORK AHEAD

RIGHT SHOULDER CLOSED AHEAD

RIGHT SHOULDER CLOSED

W20-1 48"X48" LOCATED 350' PRIOR TO W21-5bR

W21-5bR 48"X48" LOCATED 350' PRIOR TO W21-5aR

W21-5aR 48"X48" LOCATED 350' PRIOR TO FIRST GROUP 2 CHANNELIZING DEVICE

GROUP 2 CHANNELIZING DEVICES

NEW BRADDOCK RD (ROUTE 620)

W1-4bR 48"X48"

INSET A

W21-5aR 48"X48" LOCATED 600' PRIOR TO LAST GROUP 2 CHANNELIZING DEVICE

W21-5bR 48"X48" LOCATED 350' PRIOR TO W21-5aR

W20-1 48"X48" LOCATED 350' PRIOR TO W21-5bR

RIGHT SHOULDER CLOSED

RIGHT SHOULDER CLOSED AHEAD

ROAD WORK AHEAD

PROP. TEMP. CONST. ESMT.

EX. R/W

GROUP 2 CHANNELIZING DEVICES

Match Line - Sta.12+50 - See This Sheet

NEW BRADDOCK RD (ROUTE 620)

FEDERATION DR

PCMS SIGN (SEE DETAILS) LOCATE 1475' EAST OF FEDERATION DRIVE IN MEDIAN

Match Line - Sta. 192+50 - See Sheet IP(7)

W1-4bL 48"X48"

GROUP 2 CHANNELIZING DEVICES

MAINTAIN CONTINUOUS PEDESTRIAN ACCESS

END LANE SHIFT STA.199+46

BEGIN LANE SHIFT STA.201+95

PROP. R/W

ROUTE 28 SB

ROUTE 28 NB

MAINTAIN PEDESTRIAN ACCESS

PROP. TEMP. CONST. ESMT.

14:1 MIN. TAPER

IMPACT ATTENUATOR TYPE I,TL-3

CENTRE MED OWNER LLC D.B. 26020, PG. 227 TAX MAP 65-2 ((1)) 14A

COLONIAL PIPELINE COMPANY D.B. 25206, PG. 688 TAX MAP 65-2 ((2)) 1B

Match Line - Sta. 205+50 - See Sheet IP(9)

Match Line - Sta.12+50 See Inset A This Sheet

Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Denotes Permanent Overlay This Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IP(8)

10/11/2020
10:18:46 PM

T108720-IP(09).dgn
Plotted By: kperando

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
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SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL STAGE 3A

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IP(9)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Match Line - Sta. 14+50- See Inset B This Sheet

INSET B

Match Line - Sta. 14+50- See This Sheet

Match Line - Sta. 205+50 - See Sheet IP(8)

Match Line - Sta. 219+50 - See Sheet IP(10)

MACHEN RD (ROUTE 540I)

ROUTE 28 SB

ROUTE 28 NB

GROUP 2 CHANNELIZING DEVICES

PROP.TEMP. CONST. ESM'T.

PROP.R/W

EX.R/W

RIGHT SHOULDER CLOSED W21-5aR 48"X48"

ROAD WORK AHEAD W20-1 48"X48"

W20-1 48"X48" LOCATED 200' PRIOR TO W21-5aR

W21-5aR 48"X48" LOCATED 200' PRIOR TO W21-5bR

W21-5bR 48"X48" LOCATED 200' PRIOR TO FIRST DRUM

G20-2(V) 60"X24" END ROAD WORK

14d MIN. TAPER

IMPACT ATTENUATOR TYPE I, TL-3

MAINTAIN PEDESTRIAN ACCESS

EX. R/W

80' TYP.

20' TYP.

40' TYP.

22'

44'

PARCEL "A" CENTRE VILLAGE D.B. J1208, PG. 496 TAX MAP 65-2 ((16)) A

PARCEL "A" LAND BAY 1B SECTION 1 CENTRE RIDGE D.B. 8891, PG. 103 TAX MAP 65-2 ((13))(1) A

PARCEL "A" CENTRE VILLAGE D.B. 25921, PG. 1271 TAX MAP 65-2 ((13))(6) A

EPT NINETEEN, INC. D.B. 20847, PG. 1 TAX MAP 65-2 ((13)) 33

CENTRE MED OWNER LLC D.B. 26020, PG. 227 TAX MAP 65-2 ((1)) 14A

MME4, LLC D.B. 25519, PG. 2191 TAX MAP 65-2 ((1)) 14C

NEXT GENERATION REDWOOD SQUARE LLC, D.B. 14250, PG. 2125 TAX MAP 65-2 ((1)) 14D

PARCEL C REDWOOD SQUARE CENTER D.B. 14250, PG. 2125 TAX MAP 65-2 ((1)) 14C

CENTREVILLE HOTEL, L.L.C. D.B. 10566, PG. 635 TAX MAP 65-2 ((1)) 6

CENTREVILLE HOTEL, L.L.C. D.B. 10566, PG. 635 TAX MAP 65-2 ((1)) 8

NORTH FAIRFAX DRIVE INVESTMENTS, L.L.C. D.B. 11378, PG. 142 TAX MAP 65-2 ((1)) 5

Denotes Permanent Construction This Stage
Denotes Temporary Construction This Stage
Denotes Construction During Short-Term Lane Closures
Denotes Permanent Construction Previous Stage
Denotes Temporary Construction Previous Stage
Denotes Permanent Overlay This Stage
Traffic Barrier Service Concrete Req'd
Impact Attenuator Req'd
Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IP(9)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 3A

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
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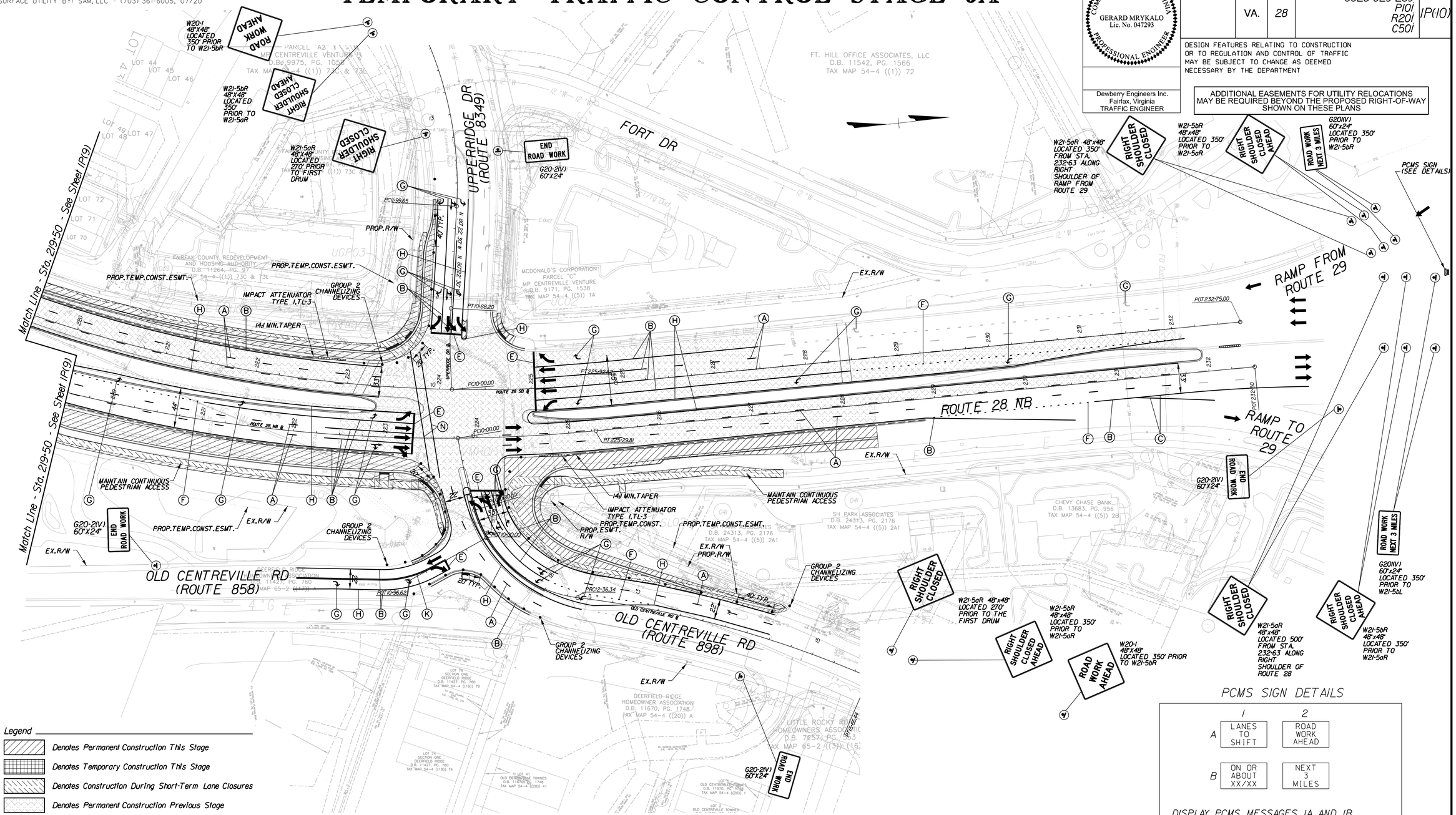
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IP(10)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



PCMS SIGN DETAILS

	1	2
A	LANES TO SHIFT	ROAD WORK AHEAD
B	ON OR ABOUT XX/XX	NEXT 3 MILES

DISPLAY PCMS MESSAGES 1A AND 1B 1 WEEK PRIOR TO SHOULDER CLOSURE.

DISPLAY PCMS MESSAGES 2A AND 2B FOR THE DURATION OF THE SHOULDER WORK.

Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Denotes Permanent Overlay This Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

ADDITIONAL PCMS SIGNS

1. PCMS SIGN (SEE DETAILS) LOCATED ON I-66W NEAR AUDREY DRIVE ALONG THE RIGHT SHOULDER.
2. PCMS SIGN (SEE DETAILS) LOCATED 700' UPSTREAM OF THE GORE ALONG THE RIGHT SHOULDER ON 28 SOUTHBOUND
3. PCMS SIGN (SEE DETAILS) LOCATED ON EASTBOUND ROUTE 29 NEAR CENTREWOOD DRIVE ALONG THE RIGHT SHOULDER.
4. PCMS SIGN (SEE DETAILS) LOCATED ON WESTBOUND ROUTE 29 800' WEST OF BRADDOCK ROAD/ OLD CENTREVILLE ROAD.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IP(10)

Dewberry

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SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL STAGE 3A

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IP(II)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

PCMS SIGN DETAILS

	1	2
A	SHOULDER WORK BEGINS	SHOULDER WORK
B	ON OR ABOUT XX/XX	NEXT 3 MILES

DISPLAY PCMS MESSAGES 1A AND 1B 1 WEEK PRIOR TO SHOULDER CLOSURE.

DISPLAY PCMS MESSAGES 2A AND 2B FOR THE DURATION OF THE SHOULDER WORK.

Legend

- Denotes Permanent Construction This Stage
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- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Denotes Permanent Overlay This Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IP(II)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
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TEMPORARY TRAFFIC CONTROL STAGE 3B

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IR(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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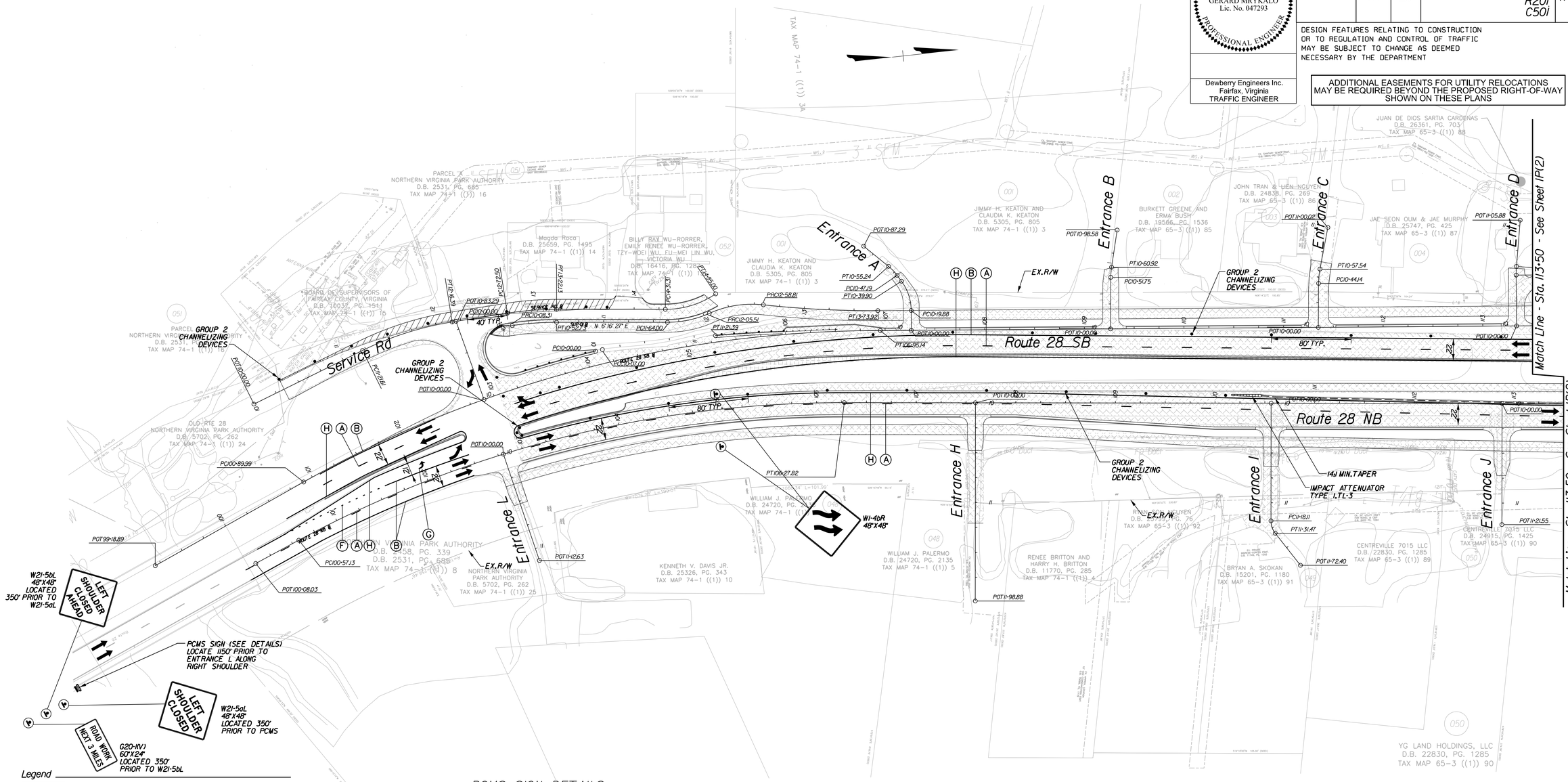

Legend

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- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- • Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

PCMS SIGN DETAILS

	1	2
A	SHOULDER WORK BEGINS	SHOULDER WORK
B	ON OR ABOUT XX/XX	NEXT 3 MILES

DISPLAY PCMS MESSAGES 1A AND 1B 1 WEEK PRIOR TO SHOULDER CLOSURE.

DISPLAY PCMS MESSAGES 2A AND 2B FOR THE DURATION OF THE SHOULDER WORK.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IR(1)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 3B

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IR(7)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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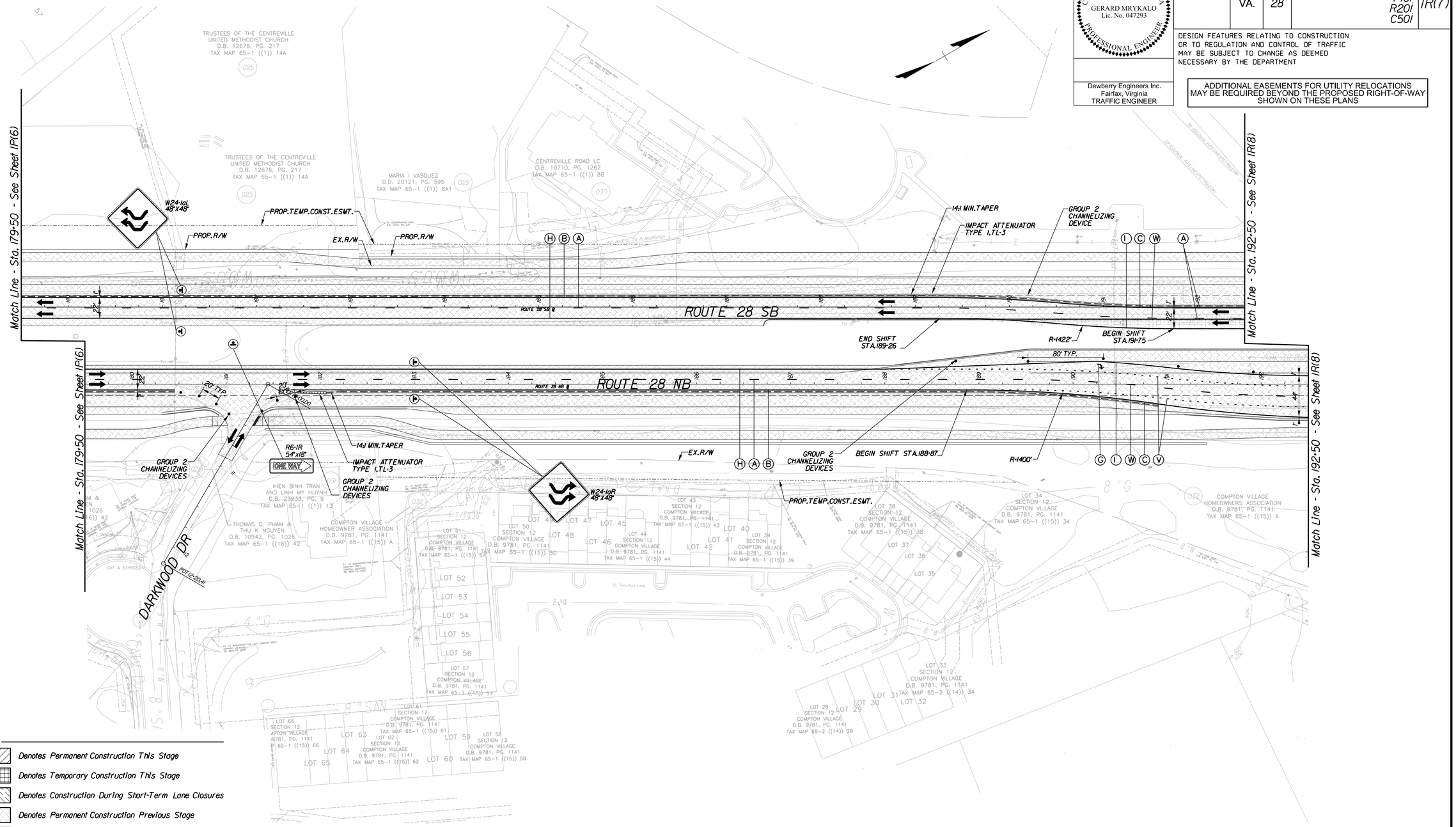

Legend

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- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- • Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IR(7)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 3B

GERARD MRYKALO
Lic. No. 047293
COMMONWEALTH OF VIRGINIA
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IR(8)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Match Line See Inset B This Sheet- Sta. 16+23

G20-2(V) 60"x24" END ROAD WORK

NEW BRADDOCK RD (ROUTE 620)

40' TYP.

GROUP 2 CHANNELIZING DEVICES

INSET A

Match Line - Sta.12+50 - See This Sheet

PROP.TEMP.CONST.ESMT

EX.R/W

W21-5aL 48"x48" LOCATED 600' PRIOR TO FIRST GROUP 2 CHANNELIZING DEVICE

W21-5bL 48"x48" LOCATED 350' PRIOR TO W21-5aL

W20-1 48"x48" LOCATED 350' PRIOR TO W21-5bL

LEFT SHOULDER CLOSED AHEAD

LEFT SHOULDER CLOSED

ROAD WORK AHEAD

GROUP 2 CHANNELIZING DEVICES

NEW BRADDOCK RD (ROUTE 620)

FEDERATION DR

PCMS SIGN (SEE DETAILS) LOCATE 1475' EAST OF FEDERATION DRIVE IN MEDIAN

G20(2V) 60"x24" LOCATED 500' EAST OF FEDERATION DRIVE

END ROAD WORK

Match Line - Sta. 192+50 - See Sheet IR(7)

W1-4bR 48"x48"

IMPACT ATTENUATOR TYPE I,TL-3

14d MIN.TAPER

GROUP 2 CHANNELIZING DEVICES

MAINTAIN PEDESTRIAN ACCESS

EX.R/W

END LANE SHIFT STA.199+46

PERM.UTILITY ESMT.

BEGIN LANE SHIFT STA.201+94

GROUP 2 CHANNELIZING DEVICES

W1-4bL 48"x48"

PROP. R/W

Match Line - Sta. 205+50 - See Sheet IR(9)

80' TYP.

ROUTE 28 SB

ROUTE 28 NB

PC(10+00.00

PT(10+17.28

PROP. R/W

14d MIN.TAPER

IMPACT ATTENUATOR TYPE I,TL-3

GROUP 2 CHANNELIZING DEVICES

GROUP 2 CHANNELIZING DEVICES

PROP.TEMP.CONST.ESM'T

NEW BRADDOCK RD (ROUTE 620)

Match Line See Inset A This Sheet - Sta.12+50

INSET B

G20-2(V) 60"x24" LOCATED 500' PRIOR TO LAST DRUM

END ROAD WORK

NEW BRADDOCK RD (ROUTE 620)

ROAD WORK AHEAD

W20-1 48"x48" LOCATED 350' PRIOR TO W21-5bL

LEFT SHOULDER CLOSED

W21-5bL 48"x48" LOCATED 350' PRIOR TO W21-5aL

LEFT SHOULDER CLOSED AHEAD

W21-5aL 48"x48" LOCATED 600' PRIOR TO FIRST GROUP 2 CHANNELIZING DEVICE

GROUP 2 CHANNELIZING DEVICES

Match Line See This Sheet- Sta. 16+23

Legend

- Denotes Permanent Construction This Stage
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- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IR(8)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 3B

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
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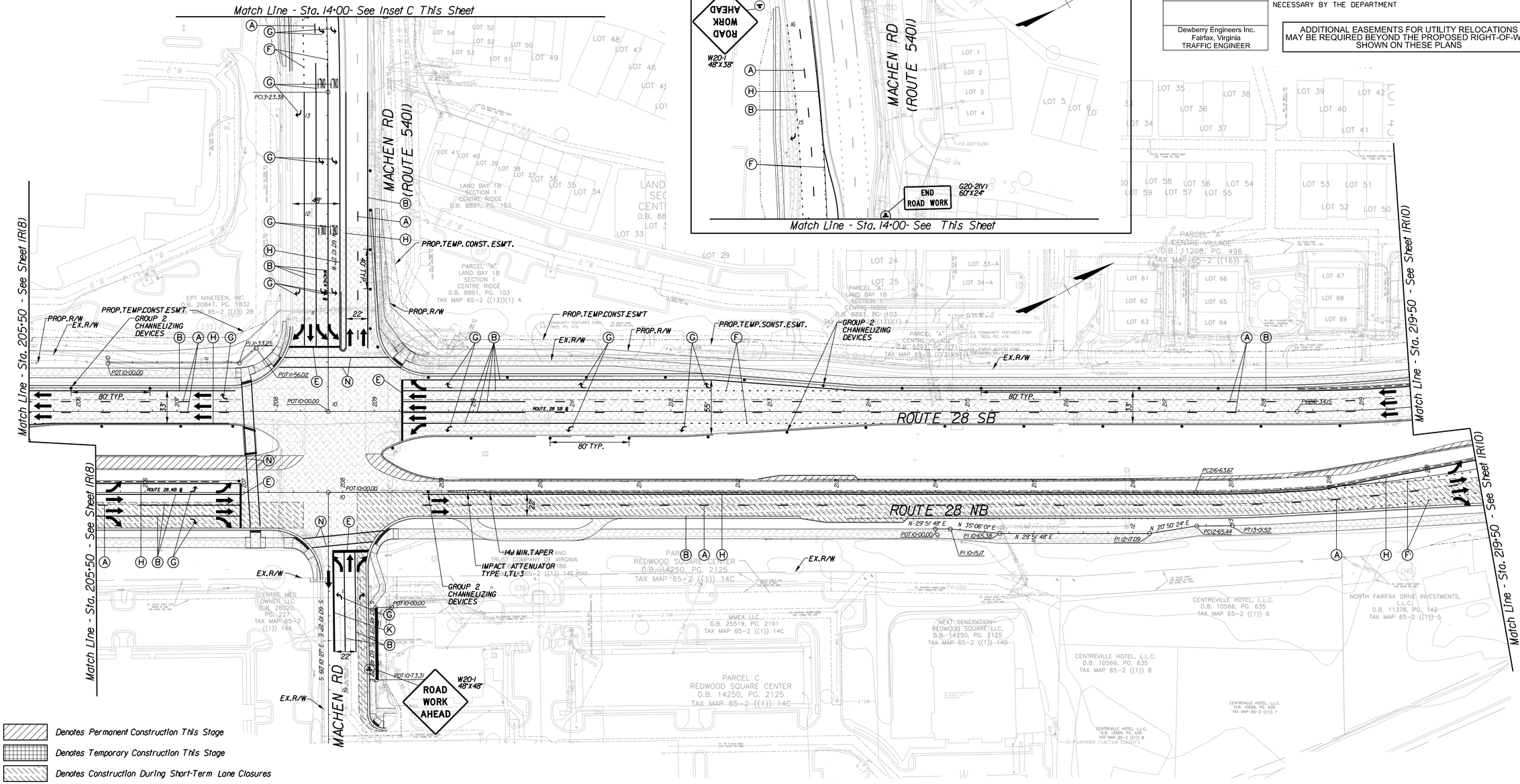
Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IR(9)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- • Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IR(9)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL STAGE 3B

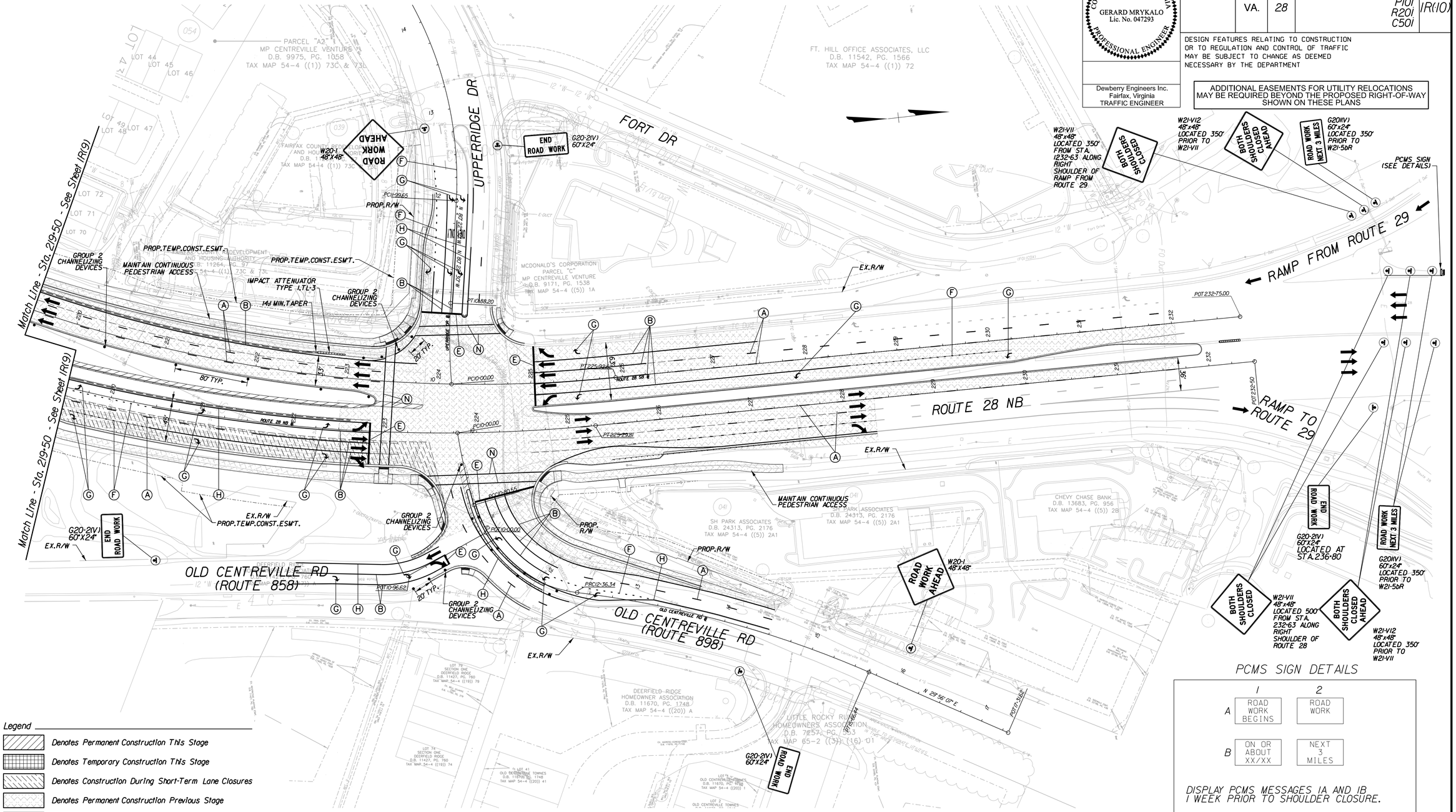
COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IR(10)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



PCMS SIGN DETAILS

	1	2
A	ROAD WORK BEGINS	ROAD WORK
B	ON OR ABOUT XX/XX	NEXT 3 MILES

DISPLAY PCMS MESSAGES 1A AND 1B 1 WEEK PRIOR TO SHOULDER CLOSURE.

DISPLAY PCMS MESSAGES 2A AND 2B FOR THE DURATION OF THE SHOULDER WORK.

Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- • Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

ADDITIONAL PCMS SIGNS

1. PCMS SIGN (SEE DETAILS) LOCATED ON I-66W NEAR AUDREY DRIVE ALONG THE RIGHT SHOULDER.
2. PCMS SIGN (SEE DETAILS) LOCATED 700' UPSTREAM OF THE GORE ALONG THE RIGHT SHOULDER ON 28 SOUTHBOUND
3. PCMS SIGN (SEE DETAILS) LOCATED ON EASTBOUND ROUTE 29 NEAR CENTREWOOD DRIVE ALONG THE RIGHT SHOULDER.
4. PCMS SIGN (SEE DETAILS) LOCATED ON WESTBOUND ROUTE 29 800' WEST OF BRADDOCK ROAD/ OLD CENTREVILLE ROAD.

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-029-269	IR(10)

Dewberry

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TEMPORARY TRAFFIC CONTROL STAGE 3B

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	IR(II)

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

PCMS SIGN DETAILS

	1	2
A	SHOULDER WORK BEGINS	SHOULDER WORK
B	ON OR ABOUT XX/XX	NEXT 3 MILES

DISPLAY PCMS MESSAGES 1A AND 1B 1 WEEK PRIOR TO SHOULDER CLOSURE.

DISPLAY PCMS MESSAGES 2A AND 2B FOR THE DURATION OF THE SHOULDER WORK.

Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd
- Group 2 Channelizing Device

Note: See Sheet IK for Pavement Marking Legend

SCALE 0 50' 100'

PROJECT	SHEET NO.
0028-029-269	IR(II)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL TYPICAL SECTIONS AND DETAILS

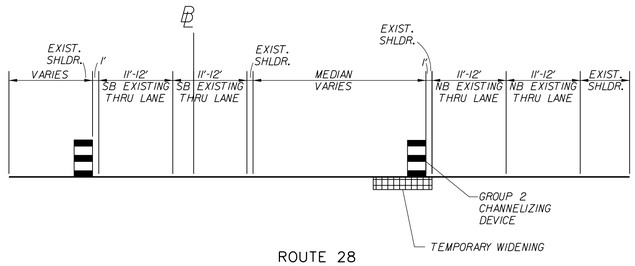
COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

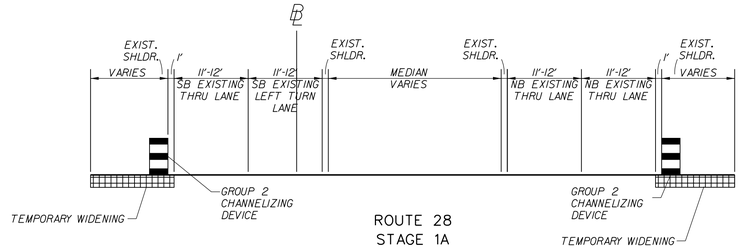
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IS(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

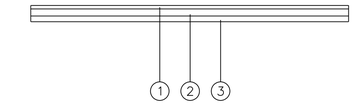


ROUTE 28
STAGE 1A
SB STA. 117+00
NB STA. 114+69



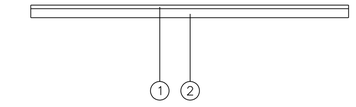
ROUTE 28
STAGE 1A
SB STA. 171+00
NB STA. 170+32

TEMPORARY PAVEMENT SECTION (OUTSIDE & MEDIAN TEMPORARY WIDENING) OPTION 1



1. 2.0" Intermediate Course, Asphalt Concrete, Type IM-19.0A at 234 lbs./sy
2. Base Course, Ashpalt Concrete, 5.0", Type BM-25.0A
3. 4.0" Plain Aggregate Material, Type I, Size 21B

TEMPORARY PAVEMENT SECTION (OUTSIDE & MEDIAN TEMPORARY WIDENING) OPTION 2



1. 2.0" Intermediate Course, Asphalt Concrete, Type IM-19.0A at 234 lbs./sy
2. Base Course, Ashpalt Concrete, 6.5", Type BM-25.0A

NOTE THE CONTRACTOR HAS TWO OPTIONS TO SELECT FOR TEMPORARY PAVEMENT SECTION

Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- • Group 2 Channelizing Device
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd

Note: See Sheet IK for Pavement Marking Legend

Dewberry

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TEMPORARY TRAFFIC CONTROL
TYPICAL SECTIONS AND DETAILS

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
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Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IS(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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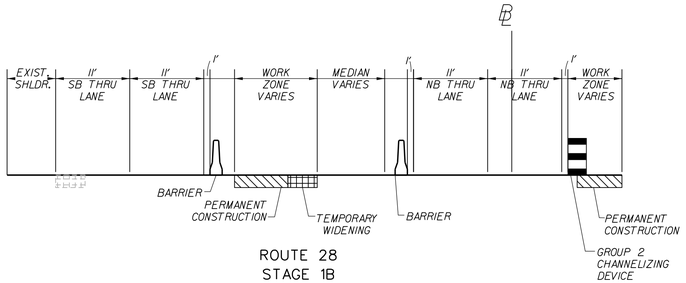
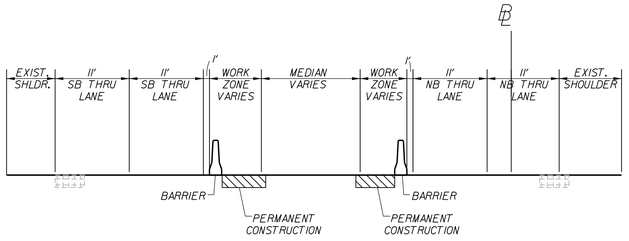
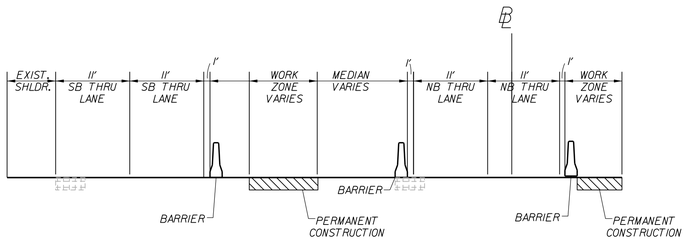


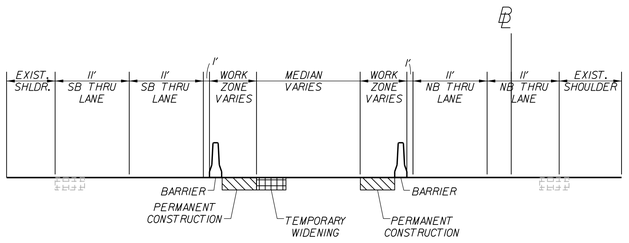
ROUTE 28
STAGE 1B
SB STA. 111+50
NB STA. 111+00



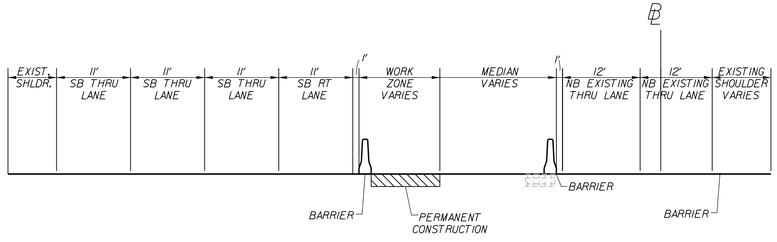
ROUTE 28
STAGE 1B
SB STA. 169+67
NB STA. 169+00



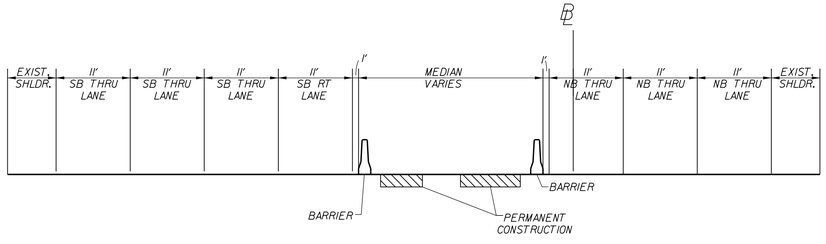
ROUTE 28
STAGE 1B
SB STA. 117+50
NB STA. 117+00



ROUTE 28
STAGE 1B
SB STA. 171+67
NB STA. 171+00



ROUTE 28
STAGE 1B
SB STA. 200+67
NB STA. 200+00



ROUTE 28
STAGE 1B
SB STA. 230+36
NB STA. 200+00

Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- • Group 2 Channelizing Device
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd

Note: See Sheet IK for Pavement Marking Legend

N.T.S.	PROJECT 0028-029-269	SHEET NO. IS(2)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL
TYPICAL SECTIONS AND DETAILS

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IS(3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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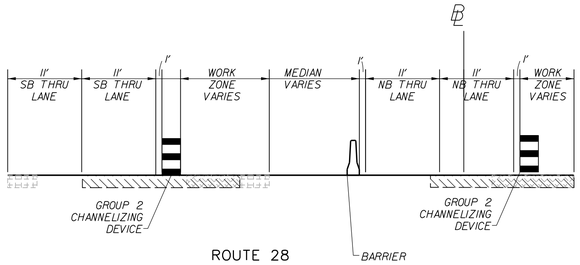
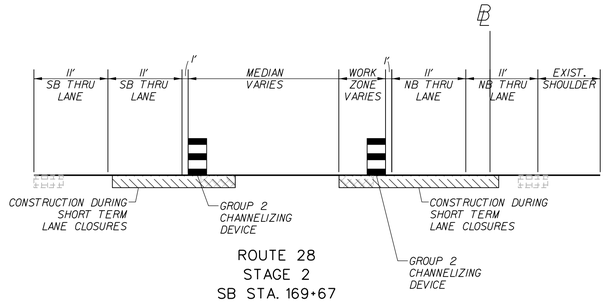
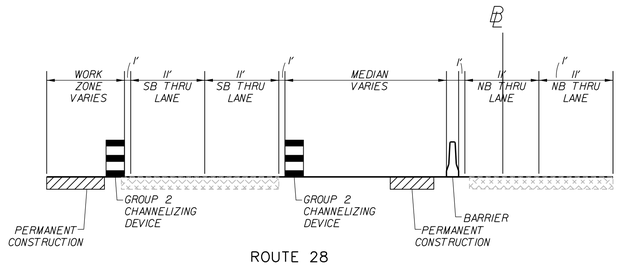


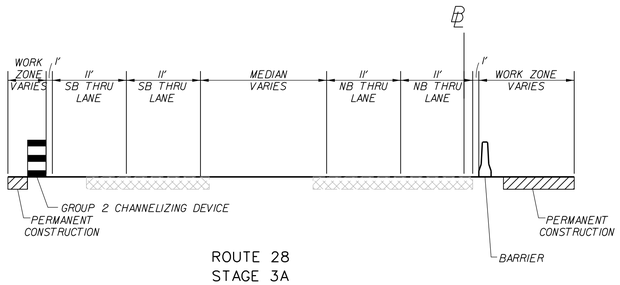
ROUTE 28
STAGE 2
SB STA. 111+50
NB STA. 111+00



ROUTE 28
STAGE 2
SB STA. 169+67
NB STA. 169+00



ROUTE 28
STAGE 3A
SB STA. 111+50
NB STA. 111+00



ROUTE 28
STAGE 3A
SB STA. 169+67
NB STA. 169+00

Legend

- Denotes Permanent Construction This Stage
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- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
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- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd

Note: See Sheet IK for Pavement Marking Legend

N.T.S.	PROJECT 0028-029-269	SHEET NO. IS(3)

Dewberry

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SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TEMPORARY TRAFFIC CONTROL
TYPICAL SECTIONS AND DETAILS

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IS(4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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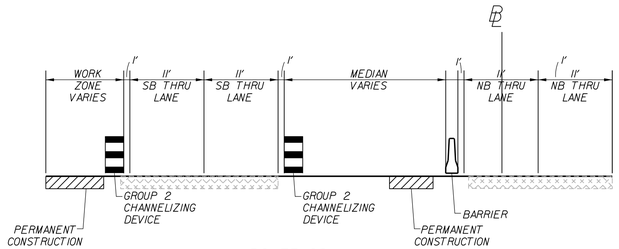
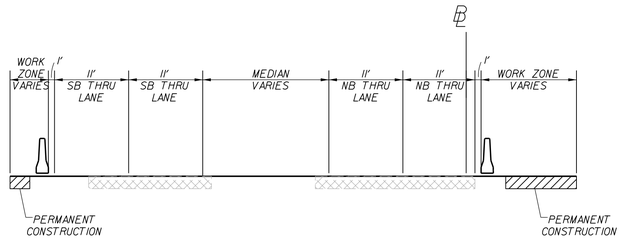
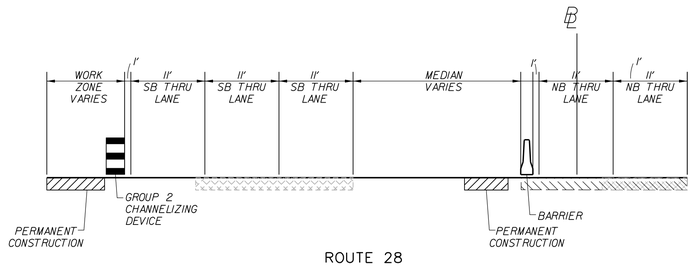


ROUTE 28
STAGE 3B
SB STA. 111+50
NB STA. 111+00



ROUTE 28
STAGE 3B
SB STA. 169+67
NB STA. 169+00



ROUTE 28
STAGE 3B
SB STA. 215+67
NB STA. 215+00

Legend

- Denotes Permanent Construction This Stage
- Denotes Temporary Construction This Stage
- Denotes Construction During Short-Term Lane Closures
- Denotes Permanent Construction Previous Stage
- Denotes Temporary Construction Previous Stage
- • Group 2 Channelizing Device
- Traffic Barrier Service Concrete Req'd
- Impact Attenuator Req'd

Note: See Sheet IK for Pavement Marking Legend

N.T.S.	PROJECT 0028-029-269	SHEET NO. IS(4)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TRANSPORTATION MANAGEMENT PLAN

PAGES 1 - 3

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IU(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

TRANSPORTATION MANAGEMENT PLAN

Route 28 (Centreville Road) Widening

SHIRLEY CONTRACTING COMPANY, LLC

Dewberry

October 2020

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LIST OF FIGURES

N.T.S.	PROJECT 0028-029-269	SHEET NO. IU(1)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TRANSPORTATION MANAGEMENT PLAN

PAGES 4 - 6

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IU(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

LIST OF TABLES

ABBREVIATIONS & TERMINOLOGY

ADT	Average Daily Traffic
E&S	Erosion and Sediment Control
FCDOT	Fairfax County Department of Transportation
HOA	Homeowners Association
LCAMS	Lane Closure Advisory Management System
LCR	Lane and Shoulder Closure Request
LOS	Level of Service
MOE	Measure of Effectiveness
MOT	Maintenance of Traffic
MPH	Miles Per Hour
MUTCD	Manual on Uniform Traffic Control Devices
NRO	VDOT Northern Region Operations
PCMS	Portable Changeable Message Sign
RFP	Request for Proposal
RPM	Raised Pavement Marker
Rt. 28	Virginia Route 28 – Centreville Road
Rt. 29	Virginia Route 29 – Lee Highway
Rt. 616	Virginia Route 616 – Ordway Road
Rt. 658	Virginia Route 658 – Compton Road
Rt. 8882	Virginia Route 8882 – Bradenton Drive
Rt. 8885	Virginia Route 8885 – Tallavast Drive
Rt. 619	Virginia Route 8024/619 – Green Trails Boulevard / Old Mill Road
Rt. 620	Virginia Route 620 – New Braddock Road
Rt. 5401	Virginia Route 5401– Machen Road
I-66	Interstate 66
Sta.	Station
TCP	Traffic Control Plan
TMA	Truck Mounted Attenuator
TMP	Transportation Management Plan
TOC	Traffic Operations Center
TTC	Typical Traffic Control or Temporary Traffic Control
WAPM	Virginia Work Area Protection Manual
VDOT	Virginia Department of Transportation

I.

INTRODUCTION

N.T.S.	PROJECT 0028-029-269	SHEET NO. IU(2)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TRANSPORTATION MANAGEMENT PLAN

PAGES 7 - 9

COMMONWEALTH OF VIRGINIA
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PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IU(3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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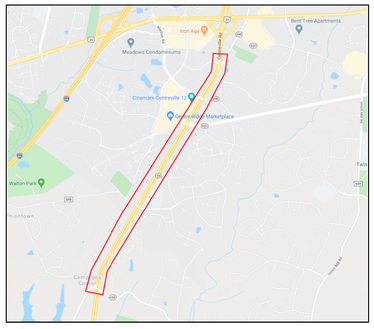
Introduction

This Transportation Management Plan (TMP) was developed based on the Virginia Department of Transportation's "IIM-241.7 – Transportation Management Plan Requirements" dated January 3, 2017. These requirements satisfy the Federal Highway Administration's final rule on Work Zone Safety and Mobility, 23 CFR 630 Subpart J. Per IIM-241.7, this project is a Type B Category IV (significant) project. The purpose of this TMP is to identify work zone impacts in an effort to promote work zone mobility in a manner that is safe for motorists, pedestrians, and construction personnel.

This project includes the widening of Route 28 from south of Compton Road/Ordway Road in Fairfax, VA to north of Upperridge Drive in Fairfax, Virginia. This existing 2.3-mile-long two-lane section of Route 28 experiences significant congestion.

Project goals include relieving congestion and improving safety. This is a design-build project to be constructed by Shirley Contracting Company, LLC, and designed by Dewberry Engineers Inc.

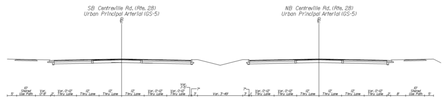
Figure 1: Project Location Map



Route 28 will be widened from the existing 4-lane section to a 6-lane section between Compton Road/Ordway Road and Upperridge Drive with provisions for future widening to 8-lanes. Proposed lanes will be 12' wide. Figure 2 below shows the proposed Route 28 typical section.

All existing traffic signals within the project limits will be modified to accommodate the additional thru lanes. The intersections with Route 28 to receive new signals or signal modifications are at Compton Road/Ordway Road (Route 658/ Route 616), Green Trails Boulevard/Old Mill Rd (Route 619), New Braddock Road (Route 620) , Machen Road (Route 5401), and Upperridge Drive (Route 898).

Figure 2: Proposed Typical Section



Route 28 (Centreville Road) is classified as an "Urban Principal Arterial" within the project limits, with a design speed of 50 mph and a posted speed limit of 45 mph. Route 28 is a 47 mile long Virginia Primary Route beginning at Catlett Road (US 29/15) in Bealeton, VA and ending at Harry Bryd Highway (Route 7) in Sterling, Va. Primary travelers within the project limits include commuters, commercial, and local traffic. See the Transportation Operations Plan section of this TMP for the Route 28 (Centreville Road) traffic and travel characteristics.

Additional intersecting streets included in this project (from south to north) are:

Compton Road/Ordway Road (Route 658/Route 616), Bradenton Drive (Route 8882), Tallavast Drive (Route 8885), Old Mill Rd / Green Trails Boulevard (Route 8591/Route 8024), Darkwood Drive, New Braddock Road (Route 620), Machen Road (Route 5401), and Upperridge Drive (Route 898).

II.

TEMPORARY TRAFFIC CONTROL PLAN

N.T.S.	PROJECT 0028-029-269	SHEET NO. IU(3)

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TRANSPORTATION MANAGEMENT PLAN

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COMMONWEALTH OF VIRGINIA
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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IU(4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Temporary Traffic Control Plan

Site specific detailed temporary traffic control plans (TTC plans) have been developed for each stage of construction in accordance with the Virginia Department of Transportation's IIM-241.7, the VDOT Road and Bridge Specifications dated January 2016, the Virginia Work Area Protection Manual dated 2011, the Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition, and the VDOT Road and Bridge Standards dated 2016.

The traffic control plans are found in the construction plan set, and include a detailed sequence of construction, general notes, typical sections, pedestrian accommodations, temporary drainage, temporary signing and marking, temporary signalization, and all other requirements for a Type B project. Major goals in development of the traffic control plans were to maximize traveler mobility and access, and to maximize vehicular, pedestrian, and worker safety. The general sequence of construction is described below.

Stage 1B: Shift traffic onto the temporary pavement constructed in Stage 1A. Construct permanent roadway widening work on the outside of northbound Route 28 from Compton Road/Ordway Road to Old Mill Road/Green Trails Boulevard.

The inside permanent roadway for northbound is to be constructed from Old Mill Road/Green Trails Boulevard to New Braddock Road. Southbound Route 28 the permanent widening is to be constructed along the inside of the existing lanes. Also, temporary Pavement is be added along the inside of southbound to prepare for Stage 3A lane shifts and permanent construction activities.

The medians at Tallavast Drive and Bradenton Drive are also be constructed in this stage. The new shared use path along northbound Route 28 is to be constructed while maintaining the existing path at all times.

The anticipated duration of Stage 1B is 10 months starting in June 2021.

Stage 2: During off-peak lane closure operations, variable depth asphalt buildup will be constructed within the limits of the Stage 1B widening and the portion of exiting pavement that will accommodate Stage 3A travel lanes. This includes the upper lifts of asphalt paving on the Stage 1B widened pavement concurrent with asphalt buildup on the existing lanes. Upon completion of each off-peak overlay operation, lanes will be shifted from the Stage 1B configuration into the Stage 3A configuration.

The anticipated duration of Stage 2 is 3 months starting in April 2022.

Stage 3A: Shift Route 28 traffic onto permanent widening constructed in Stage 1B during Stage 2 overlay operations. Northbound traffic is to be shifted to the east from Compton Road/Ordway Road to Old Mill Road/Green Trails Boulevard along with barrier being installed on the westbound side. From Old Mill Road/Green Trails Boulevard to Upperridge Drive, northbound Route 28 traffic is to be shifted to the west to construct the permanent roadway widening. Southbound

Route 28 traffic will be shifted towards the median. The permanent buildup behind the barrier is to be constructed during stage.

Connections to Compton Road West, Old Mill Road, New Braddock Road, and Machen Road. The eastern part of Ordway Road are to be completed. The western side of Upperridge Drive will also be completed.

The shared use path along NB Route 28 is to be constructed from New Braddock Road to Upperridge Road, while maintaining the existing trail.

The duration of Stage 3A is 9 months starting in June 2022.

Stage 3B: Route 28 southbound traffic is to remain in the same location as in the previous Stage 3A. Northbound Route 28 traffic is to remain in the same location as in Stage 3A from Compton Road/Ordway Road to Old Mill Road/Green Trails Boulevard. Northbound Route 28 traffic is to be shifted to the west from New Braddock Road to Upperridge Drive to construct the inside permanent roadway widening.

The western roadway of Ordway Road and New Braddock Road is to be constructed. The median along Upperridge Road is to be constructed. The shared use path along northbound from Old Mill/ Road to Green Trails Boulevard is to be constructed while maintaining the exiting trail.

The duration of Stage 3B is 3 months starting in March 2023.

The temporary traffic control can be found in the following locations in the construction plan set:

Sheet 1K Series:	Stage 1A temporary traffic control plans
Sheet 1M Series:	Stage 1B temporary traffic control plans
Sheet 1N Series:	Stage 2 temporary traffic control plans
Sheet 1P Series :	Stage 3A temporary traffic control plans
Sheet 1R Series:	Stage 3B temporary traffic control plans
Sheet 1S Series:	Temporary traffic control typical sections

Traveler Access Considerations:

Maintaining traveler access is one of the major goals of this project. Therefore, Route 28 and all signalized intersecting streets will remain open during this stage.

Driveway access to all properties to be retained upon the completion of construction will be maintained continuously throughout construction. Driveway tie-in construction will be completed during least disruptive hours, such as weekday non-peak hours for residences.

Intersecting streets and turn lanes will be available for use in case of vehicle breakdown. Where possible, shoulders wide enough to accommodate stalled vehicles will be provided.

Pedestrian and Transit Considerations:

Pedestrian and transit access and safety during construction have been carefully considered. Safe pedestrian access will be maintained throughout this project for the existing pedestrian movements. Pedestrians facilities are located in most areas of the project, including sidewalks and shared use paths. There are pedestrian crossings at most signalized intersections.

Temporary pedestrian facilities will include use of existing sidewalks, and trails, existing asphalt pavement, and temporary pavement. Existing pedestrian signalization will also be maintained throughout construction. Pedestrian signing, pavement markings, and signals can be found in the temporary traffic control plans and will be designed in conformance with the Virginia Work Area Protection Manual.

Construction Access Considerations:

Construction access points are shown graphically in the temporary traffic control plans and construction entrances are shown in the erosion and sediment control plans. Construction access openings will be installed in accordance with Appendix A of the Virginia Work Area Protection Manual, and "Construction Entrance" warning signs will be utilized.

Daily Lane and Shoulder Closures:

The temporary traffic control shown in the plans includes long-term stages of construction. Daily short-term lane and shoulder closures per hours outlined in the Transportation Operations Plan section of this TMP are to be implemented using Typical Traffic Control figures (TTC) in the Virginia Work Area Protection Manual. The contractor should refer to the following TTC figures which are anticipated to be commonly implemented during construction:

- Work Beyond the Shoulder (TTC-1.1)
- Stationary Operation on Shoulder (TTC-4.2)
- Moving / Mobile Operations on Multi-Lane Roadway (TTC-13.2)
- Outside Lane Closure Operation on a Four-Lane Roadway (TTC-16.2)
- Inside Lane Closure Operation on a Four-Lane Roadway (TTC-17.2)
- Lane Closure Operation – Near Side of Intersection (TTC-26.2)
- Lane Closure Operation – Far Side of Intersection (TTC-27.2)
- Lane Closure Operation in an Intersection (TTC-28.2)
- Turn Lane Closure Operation (TTC-29.2)
- Flagging Operation at a Signalized Intersection (TTC-30.2)

N.T.S.	PROJECT 0028-029-269	SHEET NO. IU(4)

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TRANSPORTATION MANAGEMENT PLAN

PAGES 13 - 15

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IU(5)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

- End of Day Signing for Partial Paving Operations on a Multi-Lane Roadway (TTC-57.2)
- End of Day Signing for Paving Operations on a Multi-Lane Roadway (TTC-58.1)
- Slow Roll Operation on a Multi-Lane Roadway (TTC-66.1)

Equipment and Material Storage:

All equipment and material shall be stored outside of the clear zone or be protected by temporary concrete barrier. Equipment and materials will also be stored along Route 28 where protected by temporary barrier but shall not be stored within the 2' deflection zone behind temporary concrete barrier or within 200' downstream of a barrier opening.

Impact Management Strategies:

In addition to the minimum temporary traffic control measures required by the Virginia Work Area Protection Manual, the following strategies will be utilized in an effort to increase mobility and safety for all parties through the heavily travelled work area:

- Maintaining at least 2 thru lanes in each direction during peak periods throughout construction in order to maximize capacity during hours of greatest demand.
- Reduced channelizing device spacing for non-typical shaped work areas or along roadways with tight curvature, which enhances safety by reducing the likelihood of an errant vehicle entering the work space.
- Use of portable changeable message signs (PCMS) throughout construction to warn travelers of upcoming traffic switches or disruptions.
- Use of temporary plastic pavement markers on Route 28 to increase driver alertness of temporary lane configurations.
- Wider than required markings for extra visibility for lane shifts on Route 28.
- Maintenance of paved shoulder along Route 28 when possible.
- Use of lane shift tapers exceeding full posted speed limit on Route 28.

Typical Sections:

Detailed typical sections are included in the temporary traffic control plans (Sheet 1S Series). Typical sections have been developed for each significant stage of construction. The typical sections show lane configurations, lane widths, shoulder widths, temporary barrier, work area locations, and other pertinent features.

Crash Data Investigation:

The four year crash history (2016 through 2020) has been investigated for Route 28 between Compton Road/Ordway Road and Upperridge Road. Crash data was obtained from VDOT's online database for this 2.3 mile section of roadway that includes 5 existing traffic signals. In the four year period, there were a total of 415 crashes, of which 1 was a fatality crash, and 183 resulted in personal injury.

Of the 415 crashes, 298 were rear-end, 65 were angled, 22 were fixed object-off road, 14 were sideswipe, 4 were "other", 4 were head-on, 2 were non-collision, 2 were deer, 2 were pedestrian, 1 was backed into, and 1 was fixed object in road. Of the 415 crashes, 3 occurred in a work zone. The vast majority of crashes were either rear-end or angled likely associated with congestion and / or distracted driving.

III.

PUBLIC COMMUNICATIONS PLAN

N.T.S.	PROJECT 0028-029-269	SHEET NO. IU(5)

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TRANSPORTATION MANAGEMENT PLAN

PAGES 16 - 18

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IU(6)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Public Communications Plan

A proactive communications and outreach plan is imperative to keep all stakeholders aware of changing roadway conditions and roadway disruptions (such as lane closures or temporary stoppages). In order to attain this awareness, notification processes need to be implemented between all parties. These stakeholders include the Design-Build Team, the contractor's Work Zone Traffic Control Coordinator, FCDOT, VDOT Traffic Operations, VDOT Public Affairs, Local government, County Police, State Police, Fire and Rescue, Schools, Transit agencies, Local businesses, local residents, and local and long-distance travelers.

Contractor's Notification Process:

1. The contractor shall be responsible for maintaining project lane closure information on LCAMS and VaTraffic throughout the duration of the project in accordance with IIM-OD-16-03, dated December 16, 2016. All lane and/or shoulder closures shall be entered into LCAMS at least ten (10) days in advance of the proposed lane and/or shoulder closure and no later than close of business Wednesday the week prior (Sunday through Saturday) to the closure stating the location, purpose, date, time and duration of closure. Any conflicts generated from LCAMS shall be resolved no later than close of business Thursday the week prior to the closure. Allowable lane closure hours are found in Table 1 on page 16 of this TMP.

2. After entering lane closure requests into LCAMS, the contractor shall send the LCR information to Shirley's Public Relations Manager in one of two possible formats:
   a. A screenshot of the LCMS entry
   a. A list of lane closures that contains the following information:
      i. LCAMS # (LCAMS ID number)
      ii. Route Name (the road name and/or route number)
      iii. Direction (northbound, southbound, eastbound, westbound)
      iv. Type of Closure (which lane(s) or shoulder(s) will be closed and any other anticipated traffic impacts)
      v. Date(s) (dates that the lane closure may be implemented)
      vi. Start time and stop time (From Time and To Time in LCAMS)
      vii. From and To (the starting point and stopping point of the lane closure using cross-streets or other landmarks as references)
      viii. Activity Type (the type of work requiring the lane closure)

3. If police presence is requested, the request must be submitted to Shirley's Public Relations Manager along with the LCR by 5:00 PM each Wednesday for the following week (Sunday through Saturday).

4. Shirley's Public Relations Manager will assemble the approved LCRs for the upcoming week and email the Weekly Lane Closure Report to FCDOT, VDOT NOVA Communications, the VDOT Project Manager (or their designee), Shirley Team's Design-Build Project Manager, and Shirley Team's Construction Manager by 9:00 AM on Thursday. Requests for police presence that have been approved by the Shirley Team's Design-Build Project Manager will be conveyed to the VDOT Project

Construction Manager at that time. Approved LCRs are also to be submitted into VA Traffic (with copy to VDOT Project Manager) in accordance with IIM-OD-16-03, dated December 16, 2016.

5. The Contractor shall confirm at least 24 hours before any scheduled LCR's with the VDOT NOVA Traffic Operations Center and shall provide an email to the VDOT Construction Manager verifying proposed tasks and a listing of materials, labor, and equipment to be utilized.

6. The Contractor shall be responsible for contacting the VDOT NOVA Traffic Operations Center 15 to 45 minutes prior to executing lane and/or shoulder closures and contact the Traffic Operations Center once the lane and/or shoulder closures have been removed, so that closures are reflected on VDOT's 511 system.

7. FCDOT and VDOT have the right to direct the Contractor to modify, adjust, or remove lane closures based on traffic or weather conditions.

8. The Contractor shall continually monitor all lane and/or shoulder closures and detour routes throughout the duration of the project and make spot adjustments as needed / available to ease undue backups, delays, or queuing. Lane and/or shoulder closures should not begin if heavy traffic or significant queuing and backups are already present. Lane and/or shoulder closure hours of operation may be adjusted by VDOT during the contract at any time, as necessary, if significant queueing or backups routinely develops as a result of the project.

9. The Contractor shall notify and/or coordinate with the various local area schools, depending on time of year, of all closures, times and any detour routes for situational awareness.

VDOT's Agency Notification Process:

1. Once a lane or shoulder closure is approved, VDOT will use LCAMS to convey approved closures to the VDOT NRO Traffic Operations Center (TOC) for internal management and public affairs personnel.

Public Notification Process:

1. Provide to the FCDOT Project Manager information for Traffic Alerts whenever there are new impacts to motorists. All information for Traffic Alerts must be submitted at least one week in advance of the traffic impact. If the impact is major (changes or additional lane closures that are anticipated to cause traffic delays that exceed existing conditions), FCDOT must be notified one month in advance.

2. Provide to FCDOT's Project Manager an emergency contact list of Project personnel and response plan to respond to any onsite emergency, including any work zone incidents in accordance with IIM-241.

3. Maintain a log or database of questions, complaints, and/or comments received from stakeholders and the public either via public outreach efforts or direct contact, along with dates received, responses generated, and how the issues or concerns are addressed. If appropriate, this list of questions and responses will be posted on FCDOT's website.

4. Conduct "Pardon our Dust" meetings with businesses and communities, before construction begins and prior to major phases of construction, and in a format that includes opportunities for questions and answers.

5. Coordinate with FCDOT and VDOT to ensure compliance with applicable local ordinances and provide appropriate modifications to affected property owners.

Lane Closure Schedule:

Table 1 below is the schedule of allowable lane and shoulder closure hours to be used for this project. The source of the lane closures is the Request for Proposal, Technical Requirements, Section 2.10.3 "Lane and Road Closure Restrictions". FCDOT and VDOT reserve the right to monitor traffic conditions impacted by the work and to make additional restrictions as may be necessary (i.e., terminate a lane closure early).

Table 1: Allowable Lane Closure Hours*

Roadway	Single Lane Closures	Temporary 20 minute Complete Stoppages
Route 28 NB and SB New Braddock Road (Route 620)	**Mon-Thurs** 9:30 AM – 3:00 PM 10:00 PM – 5:00 AM (next day) **Fri** 9:30 AM – 2:00 PM 10:00 PM – 9:00 AM (Sat) **Sat** 10:00 PM – 8:00 AM (Sun) **Sun** 10:00 PM – 5:00 AM (Mon)	**Mon-Sun** 12:00 AM – 4:00 AM
Connecting Roadways	**Mon-Thurs** 9:00 AM – 3:30 PM 9:00 PM – 5:00 AM (next day) **Fri** 9:00 AM – 2:00 PM 10:00 PM – 9:00 AM (Sat) **Sat** 9:00 PM – 9:00 AM (Sun) **Sun** 10:00 PM – 5:00 AM (Mon)	**All other road's hours**

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TRANSPORTATION MANAGEMENT PLAN

PAGES 19 - 21

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IU(7)

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ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

*Any request for deviation from the allowable lane closure hours shall be submitted to FCDOT and VDOT NRO for a review a minimum of fourteen (14) days in advance of work.

*FCDOT reserve the right to monitor traffic conditions impacted by the work and to make additional restrictions as may be necessary or as emergency situations dictate. Additional restrictions for other holidays or special local events may be necessary, and, in these situations, FCDOT will endeavor to inform the Design-Builder at the earliest and in no case less than forty-eight (48) hours prior to the event. Lane and/or shoulder closure hours of operation may also be adjusted by VDOT during the contract at any time, as necessary, if significant queuing or backups routinely develop as a result of the project.

Table 2 listed below is the holiday schedule to be used for this project. This is referenced from Part 5 section 108.02 of the contract. Lane closures will not be permitted between 12:00 noon on the Friday preceding and 12:00 noon Tuesday following Memorial Day and Labor Day; or any other state or federal holiday if these holidays occur on a Saturday, Sunday, or Monday. If any state or federal holiday falls on a weekday other than Monday, there shall be no temporary lane closures between 12:00 noon the day before and 12:00 noon the day after each of these holidays. No lane closures shall take place between 12:00 noon the Wednesday preceding and 12:00 noon the Monday following Thanksgiving.

Table 2: Holiday Schedule

Holiday	Date or Day
New Year's Day	January 1
Martin Luther King Jr. Day	3rd Monday in January
President's Day	3rd Monday in February
Easter Sunday Weekend (Fri-Sun)	March or April (Varies)
Memorial Day	Last Monday in May
Independence Day	July 4
Labor Day	1st Monday of September
Columbus Day	2nd Monday in October
Election Day	1st Tuesday after Nov. 1st
Veteran's Day	November 11
Thanksgiving Day	4th Thursday in November (noon on the Wednesday preceding Thanksgiving Day)
Day after Thanksgiving	Friday After Thanksgiving to Noon on the Monday following Thanksgiving Day
Christmas Day	December 25

IV.

TRANSPORTATION OPERATIONS PLAN

Transportation Operations Plan

This Transportation Operations Plan contains procedures and processes to respond to incidents in the work zone, and to modify temporary traffic control plans to improve operations if necessary. It also contains the work zone traffic analyses for long-term temporary lane configurations, short-term detours, and temporary traffic signals. Processes for public outreach, including coordination with FCDOT and the NRO TOC are found in the "Public Communications Plan" section.

Incident Management:

Timely response to an incident is extremely important to achieve swift fire and rescue response, and to restore traffic operations. In the event of a traffic crash or other emergency situation in the work zone, the Contractor should immediately notify the appropriate emergency response agencies (911) and FCDOT. In the event that the Contractor's equipment, material, or personnel is involved in the incident, or if the incident is within the limits of a temporary lane closure, the Contractor should make incident area accessible to emergency vehicles when feasible, and shall be ready to follow the direction of the Police and FCDOT in order to restore normal operations.

Wrecker service is to be provided to remove disabled vehicles within the project limits and will remain on site whenever long-term work is in place. Disabled vehicles will be placed at the park and ride lot in the southwest corner of the New Braddock Road and Route 28 intersection. The wrecker shall be equipped with overhead emergency lights, rear flood lights, wheel lift and all other standard safety items. Vehicles in a crash will not be removed or disturbed until approval is given from Fairfax County Police, Virginia State Police, and other law enforcement agency.

Coordination will be provided with TOC when an incident requires a detour and will be established with one (1) hour from 5AM -9PM daily and two (2) hours during all other times not referenced.

FCDOT and VDOT should notify additional VDOT personnel and agencies of the incident and the resulting traffic delays as appropriate. These may include VDOT NRO TOC, VDOT Public Affairs, Transit Agencies, and Schools for example. The contact list for local emergency response agencies is as follows:

- Virginia State Police – Division 7 Headquarters
  Phone: 911 or (703)803-2660 or (703)803-0026 (After hours)
- Fairfax County Police – Sully District
  Phone: 911 or (703)814-7000
- City of Manassas Police
  Phone: 911 or (703)257-8000
- Prince William County Police
  Phone: 911 or (703)792-6500
- Fairfax County Fire Station – Centreville, Station 17
  Phone: 911 or (703)830-1901
- Fairfax County Fire Station – West Centreville, Station 38
  Phone: 911 or (703)802-2806
- Yorkshire Volunteer Fire and Rescue
  Phone: 911 or (703)368-4433

N.T.S.	PROJECT 0028-029-269	SHEET NO. IU(7)

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TRANSPORTATION MANAGEMENT PLAN

PAGES 22 - 24

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IU(8)

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Incident Review and Traffic Control Plan Modification:

For notable incidents, it is recommended that an accident report is developed by the VDOT inspectors and forwarded to VDOT and FCDOT for review and approval. The accident report should be thoroughly reviewed by stakeholders for the purpose of modifying the temporary traffic control plans to reduce the frequency and severity of future incidents. Recommendations made should be implemented by the Contractor.

Traffic and Travel Characteristics at the Project Location:

Route 28 (Centreville Road) in the project limits primarily functions as a significant commuter route between Prince William and Fairfax Counties. It experiences high traffic volumes during the morning and evening peak hours. The morning peak direction of travel is northbound, and the evening peak direction of travel is southbound. Traffic volumes are predominately commuters and local traffic, with a mix of commercial and light industrial. Northbound commuters and commercial traffic either continue north on Route 28 or use I-66 and Route 29 (Lee Highway) toward Washington D.C., Arlington County, and eastern Fairfax County. The traffic patterns are opposite in the afternoon, as southbound traffic on Route 28 combines with significant volume exiting I-66, and Route 29 (Lee Highway) heading south towards Manassas. Route 28 is a divided two-lane roadway with two 11'-12' thru lanes in each direction. Shoulders vary from no shoulder (some sections curb & gutter) to a 4'-8' right paved shoulder. The existing speed limit on Route 28 within the project limits is 45 mph.

Please see Introduction section of this Transportation Management Plan for traffic and travel characteristics for streets intersecting Route 28 in this project.

Existing Traffic Data:

As part of the scope of this project, the design-build team utilized turning movement counts within the project limits from May 2016 at all signalized intersections between Compton Road/Ordway Road to Upperridge Drive. This collected data accurately reflects 2016 traffic conditions, and therefore is used as the existing data for this TMP.

The existing ADT for Route 28 is based on tube counts collected in September 2016.The existing traffic data described above is shown in Table 3, Table 4, Table 5 and on Sheet 1U(11).

Table 3: Existing ADT's

Roadway	Year	ADT (vehicles/day)
Route 28 (south of Green Trails Boulevard)	2016	47,849
Route 28 (north of Green Trails Boulevard)	2016	59,685

Table 4: Existing 2016 Route 28 Hourly Volumes South of Green Trails Boulevard

Hour	NB Hourly % of Daily Traffic	NB Volume (vehicles/hour)	SB Hourly % of Daily Traffic	SB Volume (vehicles/hour)	NB & SB Hourly % of Daily Traffic	NB & SB Volume (vehicles/hour)
0:00	0.5%	118	1.3%	323	0.9%	441
1:00	0.3%	79	0.7%	164	0.5%	243
2:00	0.5%	118	0.5%	117	0.5%	235
3:00	1.1%	257	0.3%	75	0.7%	332
4:00	3.3%	791	0.6%	138	1.9%	929
5:00	7.8%	1838	1.5%	355	4.6%	2193
6:00	7.0%	1648	3.4%	815	5.1%	2463
7:00	6.3%	1494	4.5%	1093	5.4%	2587
8:00	6.4%	1514	4.2%	1005	5.3%	2519
9:00	6.3%	1484	3.9%	937	5.1%	2421
10:00	5.5%	1308	4.3%	1028	4.9%	2336
11:00	5.1%	1197	4.6%	1104	4.8%	2301
12:00	5.1%	1206	5.1%	1227	5.1%	2433
13:00	5.3%	1263	5.6%	1362	5.5%	2625
14:00	5.3%	1265	6.7%	1623	6.0%	2888
15:00	5.2%	1239	7.5%	1810	6.4%	3049
16:00	5.3%	1265	7.8%	1882	6.6%	3147
17:00	5.3%	1250	8.0%	1943	6.7%	3193
18:00	5.0%	1181	8.0%	1939	6.5%	3120
19:00	4.2%	987	6.6%	1600	5.4%	2587
20:00	3.3%	774	5.0%	1210	4.1%	1984
21:00	3.0%	706	4.4%	1073	3.7%	1779
22:00	1.9%	439	3.4%	822	2.6%	1261
23:00	1.0%	240	2.2%	543	1.6%	783
Total	100.0%	23,661	100.0%	24,188	100.0%	47,849

Table 5: Existing 2016 Route 28 Hourly Volumes North of Green Trails Boulevard

Hour	NB Hourly % of Daily Traffic	NB Volume (vehicles/hour)	SB Hourly % of Daily Traffic	SB Volume (vehicles/hour)	NB & SB Hourly % of Daily Traffic	NB & SB Volume (vehicles/hour)
0:00	0.6%	173	1.5%	402	1.0%	575
1:00	0.4%	112	0.8%	220	0.6%	332
2:00	0.5%	167	0.5%	143	0.5%	310
3:00	1.0%	306	0.4%	107	0.7%	413
4:00	3.1%	958	0.6%	169	2.0%	1127
5:00	7.5%	2307	1.5%	416	4.7%	2723
6:00	7.3%	2239	3.1%	846	5.3%	3085
7:00	7.0%	2131	4.5%	1213	5.8%	3344
8:00	7.0%	2127	4.3%	1171	5.7%	3298
9:00	6.8%	2089	4.2%	1148	5.6%	3237
10:00	5.4%	1652	4.2%	1148	4.9%	2800
11:00	5.0%	1529	4.4%	1202	4.7%	2731
12:00	4.8%	1480	5.4%	1454	5.1%	2934
13:00	4.9%	1487	6.2%	1674	5.5%	3161
14:00	4.8%	1454	7.5%	2033	6.0%	3487
15:00	4.8%	1468	0.8%	2226	6.2%	3694
16:00	5.3%	1633	7.6%	2057	6.4%	3690
17:00	5.4%	1659	7.6%	2054	6.4%	3713
18:00	4.8%	1481	7.7%	2088	6.2%	3569
19:00	4.2%	1276	7.9%	2139	5.9%	3415
20:00	3.5%	1061	6.8%	1830	5.0%	2891
21:00	2.9%	877	5.4%	1454	4.0%	2331
22:00	1.9%	581	4.2%	1134	3.0%	1715
23:00	1.1%	333	2.9%	777	1.9%	1110
Total	100.0%	30,580	100.0%	27,101	100.0%	59,685

N.T.S.	PROJECT 0028-029-269	SHEET NO. IU(8)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TRANSPORTATION MANAGEMENT PLAN

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COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IU(9)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

TMP Traffic Data:

The next step was to re-distribute the existing volumes based on the roadway network to be in place during each stage of construction. During Stage 1A, the existing roadway network will remain in place, so no re-distribution is necessary.

Existing traffic volumes were grown from their existing numbers by 1.0% per year to future volumes in 2023. The 1.0% growth rate is the consistent with what the RFP used to estimate future volumes. These volumes shown in Table 6, Table 7, Table 8, and Sheet 1U(11) are used for stage 1B operational analysis.

Table 6: 2023 ADT's

Roadway	Year	ADT (vehicles/day)
Route 28 (south of Green Trails Boulevard)	2023	51,301
Route 28 (north of Green Trails Boulevard)	2023	61,842

Table 7: 2023 Route 28 Hourly Volumes South of Green Trails Boulevard

Hour	NB Hourly % of Daily Traffic	NB Volume (vehicles/hour)	SB Hourly % of Daily Traffic	SB Volume (vehicles/hour)	NB & SB Hourly % of Daily Traffic	NB & SB Volume (vehicles/hour)
0:00	0.5%	127	1.3%	346	0.9%	473
1:00	0.3%	85	0.7%	176	0.5%	261
2:00	0.5%	127	0.5%	125	0.5%	252
3:00	1.1%	276	0.3%	80	0.7%	356
4:00	3.3%	848	0.6%	148	1.9%	996
5:00	7.8%	1971	1.5%	381	4.6%	2351
6:00	7.0%	1767	3.4%	874	5.1%	2641
7:00	6.3%	1602	4.5%	1172	5.4%	2774
8:00	6.4%	1623	4.2%	1077	5.3%	2701
9:00	6.3%	1591	3.9%	1005	5.1%	2596
10:00	5.5%	1402	4.3%	1102	4.9%	2505
11:00	5.1%	1283	4.6%	1184	4.8%	2467
12:00	5.1%	1293	5.1%	1316	5.1%	2609
13:00	5.3%	1354	5.6%	1460	5.5%	2814
14:00	5.3%	1356	6.7%	1740	6.0%	3096
15:00	5.2%	1328	7.5%	1941	6.4%	3269
16:00	5.3%	1356	7.8%	2018	6.6%	3374
17:00	5.3%	1340	8.0%	2083	6.7%	3423
18:00	5.0%	1266	8.0%	2079	6.5%	3345
19:00	4.2%	1058	6.6%	1715	5.4%	2774
20:00	3.3%	830	5.0%	1297	4.1%	2127
21:00	3.0%	757	4.4%	1150	3.7%	1907
22:00	1.9%	471	3.4%	881	2.6%	1352
23:00	1.0%	257	2.2%	582	1.6%	839
Total	100.0%	25,368	100.0%	25,933	100.0%	51,301

Table 8: 2023 Route 28 Hourly Volumes North of Green Trails Boulevard

Hour	NB Hourly % of Daily Traffic	NB Volume (vehicles/hour)	SB Hourly % of Daily Traffic	SB Volume (vehicles/hour)	NB & SB Hourly % of Daily Traffic	NB & SB Volume (vehicles/hour)
0:00	0.6%	185	1.5%	431	1.0%	616
1:00	0.4%	120	0.8%	236	0.6%	356
2:00	0.5%	179	0.5%	153	0.5%	332
3:00	1.0%	328	0.4%	115	0.7%	443
4:00	3.1%	1027	0.6%	181	2.0%	1208
5:00	7.5%	2473	1.5%	446	4.7%	2919
6:00	7.3%	2401	3.1%	907	5.3%	3308
7:00	7.0%	2285	4.5%	1301	5.8%	3585
8:00	7.0%	2280	4.3%	1255	5.7%	3536
9:00	6.8%	2240	4.2%	1231	5.6%	3471
10:00	5.4%	1771	4.2%	1231	4.9%	3002
11:00	5.0%	1639	4.4%	1289	4.7%	2928
12:00	4.8%	1587	5.4%	1559	5.1%	3146
13:00	4.9%	1594	6.2%	1795	5.5%	3389
14:00	4.8%	1559	7.5%	2180	6.0%	3739
15:00	4.8%	1574	0.8%	2387	2.9%	3960
16:00	5.3%	1751	7.6%	2205	6.4%	3956
17:00	5.4%	1779	7.6%	2202	6.4%	3981
18:00	4.8%	1588	7.7%	2239	6.2%	3826
19:00	4.2%	1368	7.9%	2293	5.9%	3661
20:00	3.5%	1138	6.8%	1962	5.0%	3100
21:00	2.9%	940	5.4%	1559	4.0%	2499
22:00	1.9%	623	4.2%	1216	3.0%	1839
23:00	1.1%	357	2.9%	833	1.9%	1190
Total	100.0%	32,786	100.0%	31,204	100.0%	63,990

N.T.S.	PROJECT 0028-029-269	SHEET NO. IU(9)

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TRANSPORTATION MANAGEMENT PLAN

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COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IU(10)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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Measures of Effectiveness Goals:

Measures of effectiveness goals are necessary to evaluate the acceptability of long-term temporary lane configurations and temporary traffic signals. The measures of effectiveness goals used for the analyses are listed below. In general, only minor impacts are desired during peak hours in order to maximize mobility and safety, while activities with more significant impacts should be performed during off peak hours. These measures of effectiveness goals are generally consistent with those for VDOT's "Virginia MegaProjects Program".

Temporary Lane Configurations (such as long-term lane closures, shoulder closures, etc.)

It is desirable to limit construction caused delays to public traffic to a maximum of 5 minutes per passage through the project.

Short-Term Detour Routes

Detours which cause peak hour delay of less than 10 minutes per vehicle are desirable. Detours are only planned for construction activities that do not have a feasible alternative based on safety or constructability.

Signalized Intersections

It is desirable to limit intersection control delay increases during MOT operations to not more than a 50% increase.

Temporary Stoppages

Off-Peak queues of up to 1/2 mile and delay of up to 20 minutes per vehicle are desirable for activities such as traffic signal installation and removal.

Analysis Tool Selection Methodology and Justification:

The software packages listed below were used to analyze the temporary traffic control plans. The specific analysis tool selected – as necessary – for each phase of construction for each roadway varied based on the roadway type, location of the work zone on the roadway, and complexity of the temporary traffic control (i.e. lane closure, temporary stoppages, etc.).

- Highway Capacity Manual and Software (HCS+)
  Used to analyze the impacts of temporary lane configurations

Traffic Analysis for Long-Term Conditions:

The following analyses are for temporary lane configurations on Route 28 (long-term work zone conditions as defined by the Virginia WAPM), such as long-term lane closures and shoulder closures with temporary barrier or channelizing devices. The stage with the most disruptive impacts to traffic was analyzed (all other stages will have equal or lesser impacts).

Stage 1B Analysis

During Stage 1B of construction, minimal long-term impacts to existing traffic are expected. Both existing thru lanes will be maintained in each direction, with existing lane widths maintained and shoulder widths at 1' minimum. These reductions in shoulder width are necessary to allow for construction. The length of shoulder closures is about 12,150 ft. Stage 1B is estimated to reduce the free-flow speed on Route 28 by 2.3 mph based on Chapter 21 of the *Highway Capacity Manual*. The calculations for these results are as follows:

The work zone free flow speed was calculated as 48.96 mph using Formula 21-1 of the *Highway Capacity Manual* (Free Flow Speed) where:

Work Zone Conditions

Work Zone FFS = BFFS - f_{LW} - f_{LC} - f_M - f_A
Work Zone FFS = 55 – 1.9 – 3.6 –0 – 0.54
Work Zone FFS = 48.96 mph

Assumptions:
BFFS (Base Free Flow Speed) = 55 mph
f_{LW} (Adjustment for 11' lane width) = 1.9
f_{LC} (Adjustment for 2' total shoulder lateral clearance) = 3.6
f_M (Adjustment for a divided highway) = 0
f_A (Adjustment for an average of 2 access points per mile) = 0.54

Normal Conditions

To determine the delay caused by the work zone, the normal (non work zone) free flow speed was calculated as a baseline to compare to the work zone free flow speed. The normal free flow speed was calculated as 51.26 mph using Formula 23-1 of the *Highway Capacity Manual* (Free Flow Speed) where:

Normal FFS = BFFS - f_{LW} - f_{LC} - f_M - f_A
Normal FFS = 55 – 1.9 – 1.3 – 0 – 0.54
Normal FFS = 51.26 mph

Assumptions:
BFFS (Base Free Flow Speed) = 55 mph
f_{LW} (Adjustment for 11' lane width) = 1.9
f_{LC} (Adjustment for 6' total shoulder lateral clearance) = 1.3

f_M (Adjustment for a divided highway) = 0
f_A (Adjustment for an average of 2 access points per mile) = 0.54

The Route 28 work zone capacity is estimated at 1,979 pc/h/ln (total capacity of 3,958) pch/hr) based on Exhibit 21-2 of the Highway Capacity Manual (LOS Criteria for Multilane Highways). Since the peak hour volume is 2,401 below the capacity, the work zone is not anticipated to cause queues on Route 28.

N.T.S.	PROJECT 0028-029-269	SHEET NO. IU(10)

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SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TRANSPORTATION MANAGEMENT PLAN

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
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PROFESSIONAL ENGINEER

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IU(11)

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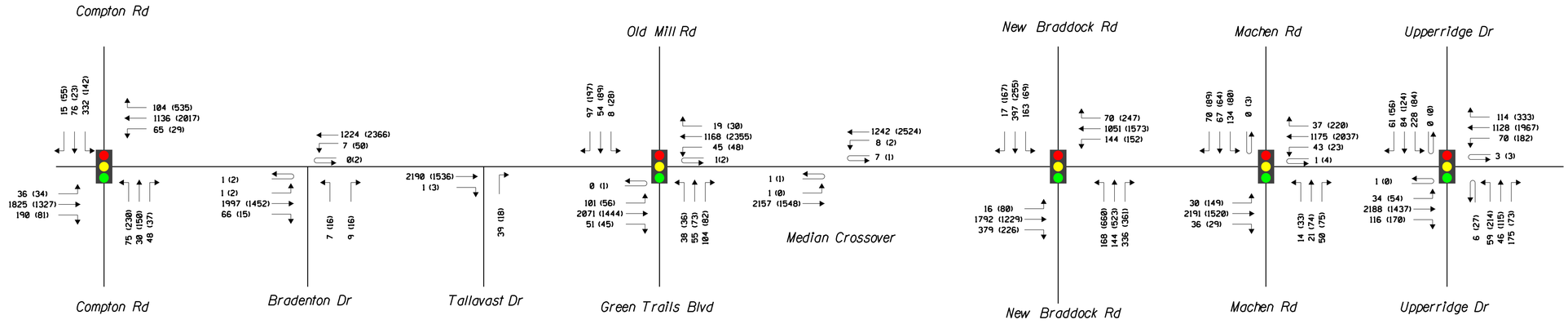
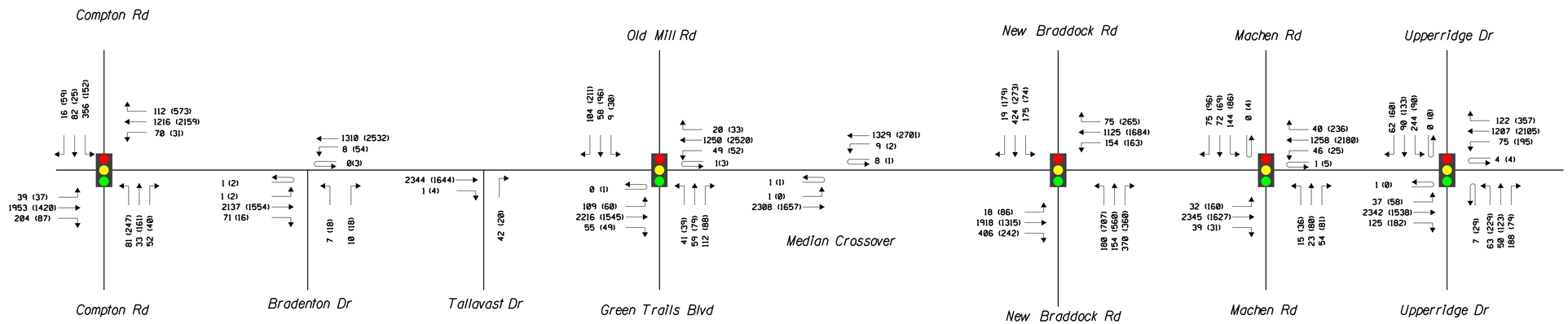
2016 Existing Volumes
AM (PM) Peak Hour Volumes



2023 Volumes



N.T.S.	PROJECT 0028-029-269	SHEET NO. IU(11)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

GENERAL NOTES

GRADING

G-1 The grade line denotes top of finished pavement unless shown otherwise on typical sections or plans.

G-3 Earthwork quantities on this project are based on anticipated settlement and may require adjusting during construction. Payment will be made only for quantities actually moved.

G-4 The cost of removal of all existing concrete items located in the area to be graded, including, but not limited to the following, shall be included in the price bid for regular excavation:
Sidewalk, Curb, Curb & Gutter, Raised Concrete Medians, Paved Ditches, Storm Sewer Pipe, Endwalls, Headwalls and End Sections

G-5 The excavation of unsuitable material as specified on these plans is based on previously conducted subsurface soil investigation. If, during construction, it is deemed necessary to change the depth more than 1 foot (0.3 m) or the limits of such excavation, such change shall be made at the direction of the Engineer.

G-6 The borrow material for this project shall be a minimum CBR 5.0 or as approved by the Materials Engineer.

G-7 Material from regular excavation which is suitable for stabilization with hydraulic cement (lime) shall be placed in the top portion of the subgrade.

DRAINAGE

D-1 The horizontal location of all drainage structures shown on these plans is approximate only, with the exception of structures showing specific stations, special design bridges and storm sewer systems.

D-2 The horizontal location and invert elevations shown for proposed culverts and storm sewer outfall pipes are based on existing survey data and required design criteria. If during construction, it is found that the horizontal location or invert elevations shown on the plans differ significantly from the horizontal location or elevations of the stream or swale in which the culvert or storm sewer outfall pipe is to be placed, the Engineer shall confer with, and get approval from, the applicable District Drainage Engineer before installing the culvert or storm sewer outfall pipe.

D-3 The "H" dimension shown on plans for drop inlets and junction boxes measures from the proposed invert elevations to the anticipated top (rim) elevations based on proposed finished grade. The "H" dimension for manholes measures from the proposed invert elevations to the top of the masonry structure (not including required 8" frame and cover). Plan "H" dimensions are approximate only and the actual dimensions shall be determined by the contractor from field conditions.

D-6 Pipes shall conform to any of the allowable types shown on sheet number 32(7), within the applicable height of cover limitations. For strength, sheet thickness, or class designation; available sizes; height of cover limitations, and other restrictions for a particular pipe type or height of cover, see the VDOT Road and Bridge Standard PC-1. Structural plate pipe may be substituted for corrugated pipe of the same size, provided the substitution complies with the applicable sections of the VDOT Road and Bridge Standard PC-1.

D-8 Where open joint pipe is to be used, no joint shall be opened a distance exceeding 25% of the spigot length. Sealing of the pipe joint shall be in accordance with Section 302 of the applicable VDOT Road and Bridge Specifications.

D-9 A pipe joint length different from that stated on the plans may be used. An adjustment in the percentage of open joint (not to exceed 25% of the spigot length) or amount of bevel shall be made that will obtain the radius stated on the plans. Extra payment for this adjustment will not be allowed. The proposed adjustment shall be approved by the Engineer prior to installation of the pipe line.

D-10 The proposed riprap may be omitted by the Engineer if the slope designated for placement of riprap is found to be comprised of solid rock or closely consolidated boulders with soundness, size and weight equal to, or exceeding, the specifications for the proposed riprap.

D-12 All existing drainage facilities labeled "To Be Abandoned" or "To Be Removed" shall either be left in place, backfilled and plugged or removed (at the discretion of the Contractor) in accordance with the VDOT Road and Bridge Standard PP-1. Basis of Payment will be C.Y. of Flowable Backfill.

D-13 Existing drainage facilities being utilized as a part of the drainage system, and designated on the plans "To Be Cleaned Out", shall be cleaned as directed by the Engineer. The cost incidental to this shall be included in the contract price for other items.

D-14 Proposed drop inlets with a height (H) less than the standard minimum shown in the VDOT Road and Bridge Standards shall be considered and paid for as Standard Drop Inlets for the type specified. Pipes with less than standard minimum finished height of cover shall be noted as such in the drainage description for the pipe. Specific pipe bedding and cover requirements are provided in the applicable PB-1 and PC-1 standard drawings of the VDOT Road and Bridge Standards.

D-16 When CG-6 or CG-7 is specified on a radius (such as at a street intersection), the Engineer may approve a decrease in the cross slope of the gutter to facilitate proper drainage.

D-17 St'd. SL-1 Safety slab locations are based on the assumed use of precast structures. If cast-in-place structures are utilized, and the interior chamber dimensions (length and width, or diameter) are less than 4 feet, the safety slabs shall not be installed.

PAVEMENT

P-2 The pavement materials on this project will be paid for on a tonnage basis. The weight will vary in accordance with the specific gravity of the aggregates and the asphaltic content of the mix actually used to secure the design depth. The weight of the asphalt concrete is based on 95% of theoretical maximum density.

INCIDENTALS

I-5 That portion of the right of way lying within the Clear Zone or within a minimum of 30 feet from the edge of pavement or surfacing or within the limits of the construction slopes beyond 10 feet, shall be cleared and grubbed in accordance with the applicable VDOT Road and Bridge Specifications, Section 301, where sufficient right of way or construction easement is provided.

I-7 Where Standard slope roundoffs would damage trees, bushes or other desirable vegetation, they shall be omitted when so ordered by the Engineer.

I-9 When no centerline alignment is shown for a proposed entrance, the entrance shall be constructed in the same location as the existing entrance.

I-12 St'd. RM-2 right of way monuments shall be set by the Contractor.

I-16 The "Underground Utilities" survey data on this project has been provided by consultant and copies are available from the Department.

I-18 All pavement markings and traffic flow arrows shown on the roadway construction plans are schematic only. The actual location and application of pavement markings shall be in accordance with Section 704 of the applicable VDOT Road and Bridge Specifications, MUTCD, sequence of construction/traffic control plans, pavement marking plan sheets, and as directed by the Engineer.

I-19 The following sources, under contract with VDOT, have provided information on this project:

Hydraulic Design - Dewberry Engineers Inc.
Roadway Design - Dewberry Engineers Inc.
Utility Design -Dewberry Engineers Inc.
Utility Designation - SAM
Utility Location - SAM
Survey - Dewberry Engineers Inc. / Quantum Spatial
Bridge Design - Dewberry Engineers Inc.
Traffic Design - Dewberry Engineers Inc.
Landscape Design - Dewberry Engineers Inc.

If questions or problems arise during construction, please contact the Project Designer. DO NOT CONTACT THE OUTSIDE SOURCES.

I-20 The Official Electronic PDF Version of the plans will override the paper copies or prints of specific layers. Portions of this plan assembly have been CADD generated. To assist in construction of the project, Microstation format (.dgn) files will be made available to the prime contractor during bids and after award of the contract.

I-21 All electronic plan assemblies will include the construction plans in two formats: PDF files and Microstation format (.dgn) files. Only the PDF files will be considered as part of the official plan assembly.

The MicroStation format (.dgn) files are furnished only as information for the contractor. These plans are developed in layers (levels) to aid in readability. However, the construction items may or may not be in the proper layering scheme as described in the VDOT CADD Manual. The MicroStation files will only match the scanned files if all levels are turned on. A MicroStation Software license is required to be able to read these files.

STORMWATER MANAGEMENT

S-1 CLEARING AND GRUBBING OF SWM BASIN SITE - The area where the dam is to be constructed and the area upstream of the dam, to an elevation equal to the crest of the dam (maximum ponded water elevation), shall be cleared and grubbed in accordance with Section 301 of the applicable VDOT Road and Bridge Specifications.

S-2 SWM BASIN DAM CONSTRUCTION - The dam for detention basins (no permanent pool) shall conform to the details contained in the plans and shall be constructed in accordance with Section 303 of the applicable VDOT Road and Bridge Specifications. The native material on which the dam will set shall meet the specifications for AASHTO Type A-4 or finer material. Where the native material does not meet this requirement, the area beneath the dam is to be excavated to a minimum of 4' and backfilled with a material meeting the AASHTO Type A-4 or finer classification, unless otherwise specified in the plans. The material used for the embankment of the dam shall be AASHTO Type A-4 or finer or as otherwise specified in the plans. Dams with foundation and embankment material not meeting the above requirements, dams greater than 15' in height, or dams for retention basins (permanent pool) shall incorporate a membrane-lined trench, a homogenous embankment with seepage controls, a zoned embankment or other such approved designs as specified in the plans.

S-3 SWM BASIN OUTLET PIPE - The pipe culvert under or through the dam for detention basins (no permanent pool) shall be reinforced concrete pipe with rubber gaskets in accordance with Section 232 and 212 of the applicable VDOT Road and Bridge Specifications. A concrete cradle shall extend the full length of the pipe culvert in accordance with the Standard Drawings. The connection between the pipe culvert and the SWM-1 Drainage Structure (or other control structure) shall be made watertight as approved by the Engineer and the cost shall be included in the price bid for the pipe.

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DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER

S-4 The SWM-1 Drainage Structure (or other control structure) shall have 4" high numbers and 1" wide stripes painted at 1' intervals as shown on the Standard Drawings or detail sheets. The numbers and stripes are to be installed at the time of the initial installation of the SWM-1 Drainage Structure (or other control structure). Paint and application shall be in accordance with Section 231 and 411 of the applicable VDOT Road and Bridge Specifications and the cost is to be included in the price bid for the applicable structure.

EROSION AND SEDIMENT CONTROL (ESC)

E-1 If the removal of Brush Silt Barrier is specified by the plans or required by the Engineer, the cost of removal and disposal of brush shall be in accordance with Section 109 of the applicable VDOT Road and Bridge Specifications.

E-2 Rock for Check Dams, Inlet Protection, Erosion Control Stone and Riprap shall be in accordance with Section 203 and Section 414 of the applicable VDOT Road and Bridge Specifications.

E-3 The following symbols are used to depict Erosion Control items in the plan assembly:

- EC-2, Ty. I / EC-2, Ty. II / EC-2, Ty. III / EC-2, Ty. IV — Denotes Protective Covering, St'd. EC-2
- EC-3, Ty. I / EC-3, Ty. II / EC-3, Ty. III — Denotes Soil Stabilization Mat. St'd. EC-3 Type 1, 2 or 3
- IFB — Denotes Temporary Filter Barrier, St'd EC-5
- TSF-A / TSF-B — Denotes Temporary Silt Fence, St'd EC-5
- TDC — Denotes Temporary Diversion Channel, St'd EC-12
- DD — Denotes Temporary Diversion Dike, St'd EC-9
- TC-I — Denotes Turbidity Curtain, Type - Impervious
- TC-P — Denotes Turbidity Curtain, Type - Pervious
- RCD-1 — Denotes Rock Check Dam, Type I: St'd EC-4
- RCD-2 — Denotes Rock Check Dam, Type II: St'd EC-4
- IP-A — Denotes Inlet Protection, Type A: St'd EC-6
- IP-B — Denotes Inlet Protection, Type B: St'd EC-6
- TD — Denotes Slope Interrupter, St'd EC-15

MISCELLANEOUS

Manual adjustments have been made to the computer generated cross sections. The applicable computer earthwork listings do NOT reflect the corrections and/or additions.

Maintenance mowing within the confines of the SWM Basins shall be completed by the contractor as necessary.

ADDITIONAL NOTES

1 Overhead power line locations are not shown on these plans. Only the overhead power pole locations are identified. It is the Contractor's responsibility to verify all overhead power locations and coordinate construction accordingly. Work adjacent to power lines shall be in accordance with clearances and buffers as required by the power company/companies and the Virginia High Voltage Protection Act.

2 Post-construction pipe installation inspections are required and shall be in accordance with Section 302.03(d) of the VDOT 2016 Supplemental Road & Bridge Specifications.

3 Call miss utility of Virginia at 811 or 1-800-552-7001 prior to digging. www.va811.com

MAINTENANCE OF TRAFFIC / SEQUENCE OF CONSTRUCTION

See sheet 1K for notes related to Maintenance of Traffic and Sequence of Construction.

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TYPICAL SECTIONS

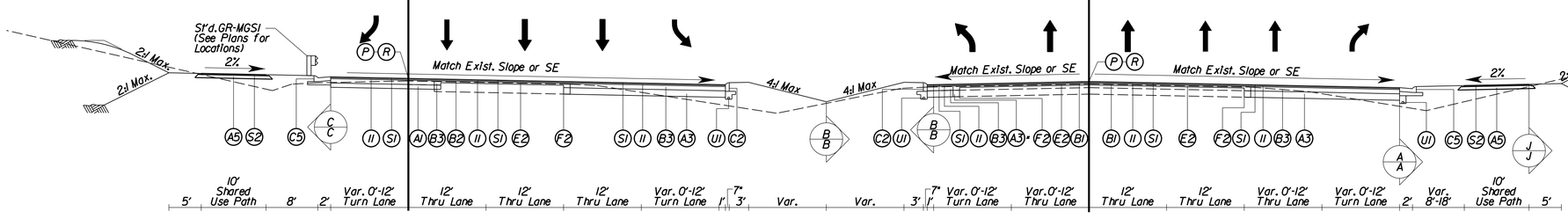
Geoconcepts Engineering, Inc. Chantilly, Virginia MATERIALS ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	2A(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

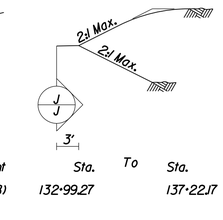
SB Centreville Rd. (Rte. 28) Urban Principal Arterial (GS-5)



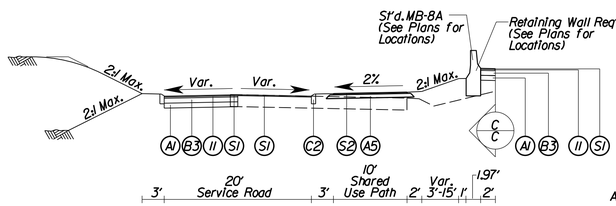
Alignment	Sta.	To	Sta.
SB Centreville Rd. (Rte. 28)	100+90.00		155+67.63

NB Centreville Rd. (Rte. 28) Urban Principal Arterial (GS-5)

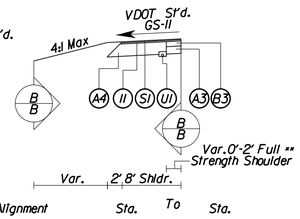
Alignment	Sta.	To	Sta.
NB Centreville Rd. (Rte. 28)	100+88.95		156+00.00



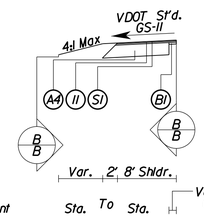
Alignment	Sta.	To	Sta.
NB Centreville Rd. (Rte. 28)	132+99.27		137+22.17



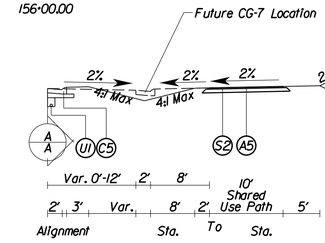
Alignment	Sta.	To	Sta.
SB Centreville Rd. (Rte. 28) Service Road	104+09.88		105+29.89



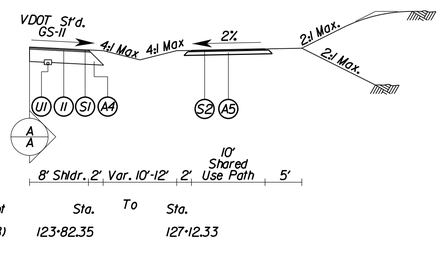
Alignment	Sta.	To	Sta.
NB Centreville Rd. (Rte. 28)	106+98.33		118+00.03



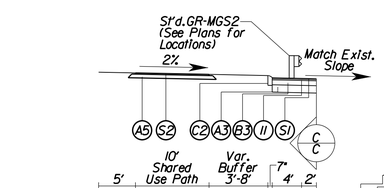
Alignment	Sta.	To	Sta.
NB Centreville Rd. (Rte. 28)	153+26.49		154+83.44



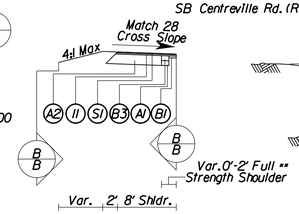
Alignment	Sta.	To	Sta.
NB Centreville Rd. (Rte. 28)	113+00.00 127+12.33		121+80.34 130+82.23



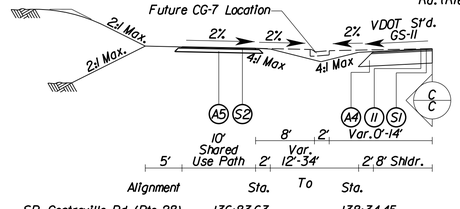
Alignment	Sta.	To	Sta.
NB Centreville Rd. (Rte. 28)	123+82.35		127+12.33



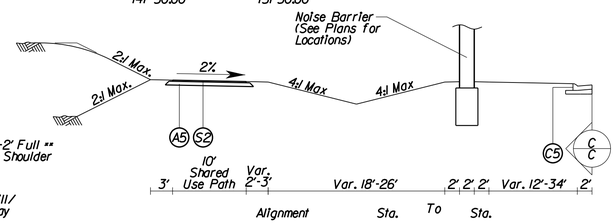
Alignment	Sta.	To	Sta.
SB Centreville Rd. (Rte. 28)	105+97.31		107+00.00



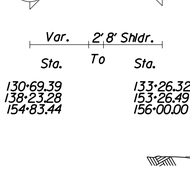
Alignment	Sta.	To	Sta.
NB Centreville Rd. (Rte. 28)	127+13.41		130+69.39



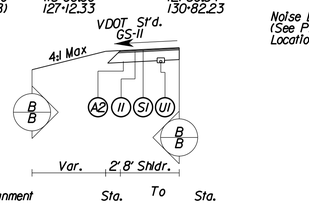
Alignment	Sta.	To	Sta.
SB Centreville Rd. (Rte. 28)	136+83.63 147+50.00		138+34.45 151+50.00



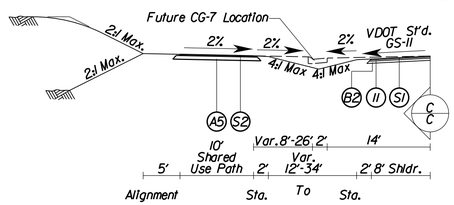
Alignment	Sta.	To	Sta.
SB Centreville Rd. (Rte. 28)	125+74.09		132+34.48



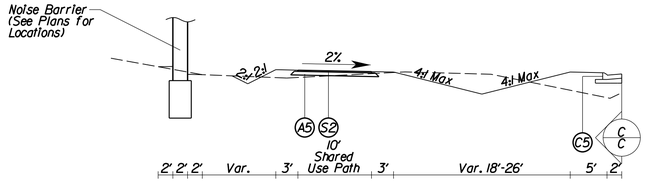
Alignment	Sta.	To	Sta.
NB Centreville Rd. (Rte. 28)	130+26.32 153+26.49 154+83.44		130+69.39 138+23.28 156+00.00



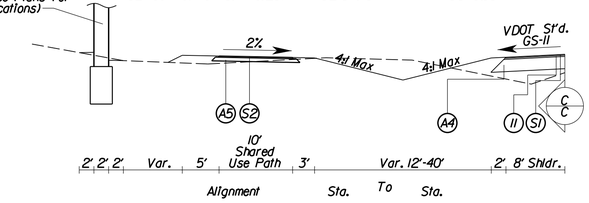
Alignment	Sta.	To	Sta.
NB Centreville Rd. (Rte. 28)	104+10.67		106+98.33



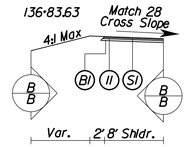
Alignment	Sta.	To	Sta.
SB Centreville Rd. (Rte. 28)	138+34.45 151+50.00		147+50.00 155+67.63



Alignment	Sta.	To	Sta.
SB Centreville Rd. (Rte. 28)	132+34.48		133+10.98



Alignment	Sta.	To	Sta.
SB Centreville Rd. (Rte. 28)	133+10.98		136+83.63



Alignment	Sta.	To	Sta.
NB Centreville Rd. (Rte. 28)	130+69.39		133+26.32

* Use (A1) Subbase from sta. 125+08.84 to 127+13.41

** 2' Full Strength Shoulder Required From Station:
- 110+99.96 to 121+80.34
- 127+13.41 to 132+25.20

Key Legend

(X/Y) Replacement Section See Sheet

(S1) 1.5" Surface Course, Asphalt Concrete, Type SM-9.5D @ 165 Lbs./SY Req'd.
(S2) 2" Surface Course, Asphalt Concrete, Type SM-9.5A @ 220 Lbs./SY Req'd.
(I1) 2" Intermediate Course, Asphalt Concrete, Type IM-19.0A @ 220 Lbs./SY Req'd.
(B1) 3" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
(B2) 3.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
(B3) 8" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
(B4) 5.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
(B5) 2.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
(F1) Not Used
(F2) Full Depth Sawcut, VDOT St'd. WP-2 Req'd.
(A1) 8" Stabilized Aggr. Base Material, No.21A Pugmill Mixed With 4% Cement by Weight Req'd.
(A2) 16" Stabilized Aggr. Base Material, No.21A Pugmill Mixed With 4% Cement by Weight Req'd.
(A3) 12" Aggr. Base Material, Type I, No.21B, Connected to UD-4
(A4) 20" Aggr. Base Material, Type I, No.21B, Connected to UD-4
(A5) 6" Aggr. Base Material, Type I, No.21B Extended 6" on Either Side of Surface Req'd.
(A6) 4" Aggr. Base Material, Type I, No. 21A or No. 21B Extended 4" on Either Side of Surface Req'd.
(A7) 8" Aggr. Base Material, Type I, No.21B, Connected to UD-4
(A8) 14" Aggr. Base Material, Type I, No.21B, Connected to UD-4
(E1) Mill Exist. Pavement 1.5"
(E2) Mill Exist. Pavement 2"
(UI) Pavement Underdrain, St'd.UD-4 or Mod.6" UD-4 Req'd. (See Plan Sheets for Schematic Layout and Locations)
(C1) 6" Curb, St'd. CG-2 Req'd.
(C2) 4" Curb, St'd. CG-3 Req'd.
(C3) 6" Curb and Gutter, St'd. CG-6 Req'd.
(C4) 4" Curb and Gutter, St'd. CG-7 Req'd.
(M1) Conc. Raised Median, St'd. MS-1 or MS-1A with 4" Curb Req'd. (See Special Provision for Stamped Cement Concrete)
(M2) Conc. Raised Median, St'd. MS-1 or MS-1A with 6" Curb Req'd. (See Special Provision for Stamped Cement Concrete)
(M3) Grass Raised Median, St'd. MS-2 with 4" Curb Req'd.
(M4) Grass Raised Median, St'd. MS-2 with 6" Curb and Gutter Req'd.
(W1) 4" Sidewalk, Hydraulic Cement Conc. Class A3 (See Plan Sheets for Locations and Widths)
(W2) 7" Sidewalk, Hydraulic Cement Conc. Class A3 (See Plan Sheets for Locations and Widths)
(P) Profile Grade Line
(R) Point of Rotation

SCALE	PROJECT	SHEET NO.
0 10' 20'	0028-029-269	2A(1)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TYPICAL SECTIONS

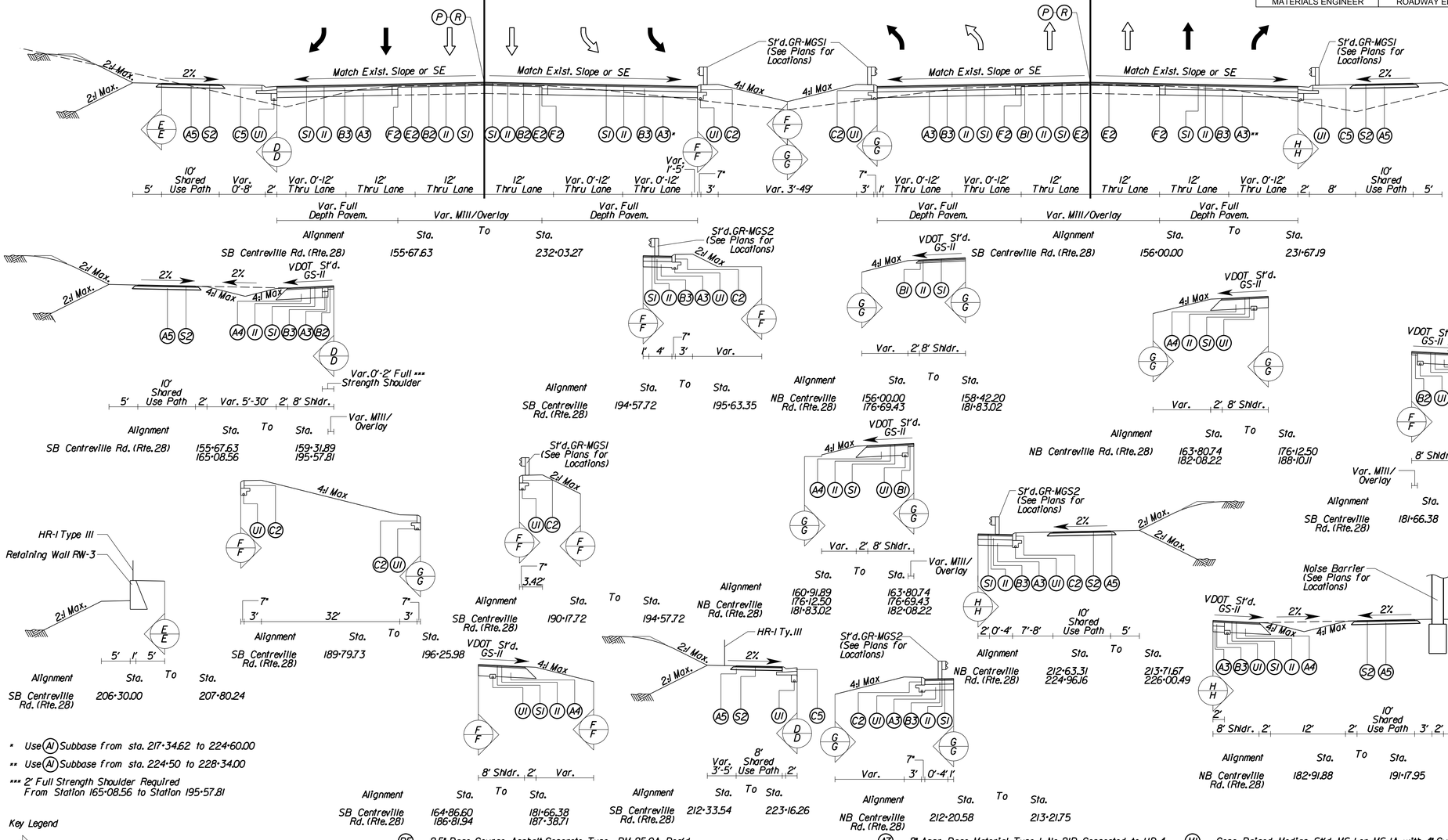
Geoconcepts Engineering, Inc. Chantilly, Virginia MATERIALS ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	2A(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

SB Centreville Rd. (Rte. 28)
Urban Principal Arterial (GS-5)



* Use (A1) Subbase from sta. 217+34.62 to 224+60.00

** Use (A1) Subbase from sta. 224+50 to 228+34.00

*** 2' Full Strength Shoulder Required From Station 165+08.56 to Station 195+57.81

Notes: SB crown shift occurs from sta.155+67.63 to 166+67.68
NB crown shift occurs from sta.156+00.00 to 164+00.08
See Plans for locations

Key Legend

X / Y — Replacement Section See Sheet

(SI) 1.5" Surface Course, Asphalt Concrete, Type SM-9.5D @ 165 Lbs./SY Req'd.
(S2) 2" Surface Course, Asphalt Concrete, Type SM-9.5A @ 220 Lbs./SY Req'd.
(II) 2" Intermediate Course, Asphalt Concrete, Type IM-19.0A @ 220 Lbs./SY Req'd.
(BI) 3" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
(B2) 3.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
(B3) 8" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
(B4) 5.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
(B5) 2.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
(F1) Not Used
(F2) Full Depth Sawcut, VDOT St'd. WP-2 Req'd.
(AI) 8" Stabilized Aggr. Base Material, No.21A Pugmill Mixed With 4% Cement by Weight Req'd.
(A2) 16" Stabilized Aggr. Base Material, No.21A Pugmill Mixed With 4% Cement by Weight Req'd.
(A3) 12" Aggr. Base Material, Type I, No.21B, Connected to UD-4
(A4) 20" Aggr. Base Material, Type I, No.21B, Connected to UD-4
(A5) 6" Aggr. Base Material, Type I, No.21B Extended 6" on Either Side of Surface Req'd.
(A6) 4" Aggr. Base Material, Type I, No. 21A or No. 21B Extended 4" on Either Side of Surface Req'd.
(A7) 8" Aggr. Base Material, Type I, No.21B, Connected to UD-4
(A8) 14" Aggr. Base Material, Type I, No.21B, Connected to UD-4
(E1) Mill Exist. Pavement 1.5"
(E2) Mill Exist. Pavement 2"
(UI) Pavement Underdrain, St'd.UD-4 or Mod.6" UD-4 Req'd. (See Plan Sheets for Schematic Layout and Locations)
(C1) 6" Curb, St'd. CG-2 Req'd.
(C2) 4" Curb, St'd. CG-3 Req'd.
(C3) 6" Curb and Gutter, St'd. CG-6 Req'd.
(C4) 4" Curb and Gutter, St'd. CG-7 Req'd.
(M1) Conc. Raised Median, St'd. MS-1 or MS-1A with 4" Curb Req'd. (See Special Provision for Stamped Cement Concrete)
(M2) Conc. Raised Median, St'd. MS-1 or MS-1A with 6" Curb Req'd. (See Special Provision for Stamped Cement Concrete)
(M3) Grass Raised Median, St'd. MS-2 with 4" Curb Req'd.
(M4) Grass Raised Median, St'd. MS-2 with 6" Curb and Gutter Req'd.
(W1) 4" Sidewalk, Hydraulic Cement Conc. Class A3 (See Plan Sheets for Locations and Widths)
(W2) 7" Sidewalk, Hydraulic Cement Conc. Class A3 (See Plan Sheets for Locations and Widths)
(P) Profile Grade Line
(R) Point of Rotation

SCALE 0 10' 20'	PROJECT 0028-029-269	SHEET NO. 2A(2)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TYPICAL SECTIONS

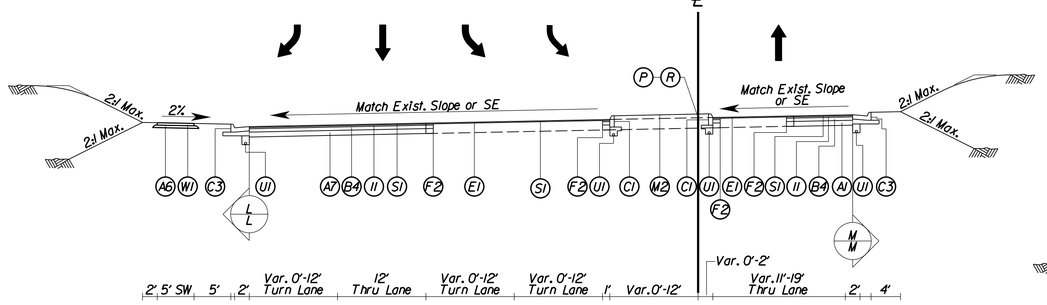
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	2A(3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

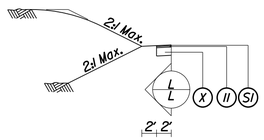
Geoconcepts Engineering, Inc. Chantilly, Virginia MATERIALS ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

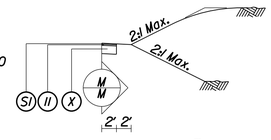
Ordway Rd. (Rte.616) Urban Minor Arterial (GS-6)



Alignment	Sta.	To	Sta.
Ordway Rd. (Rte.616)	10+00.00		20+16.50

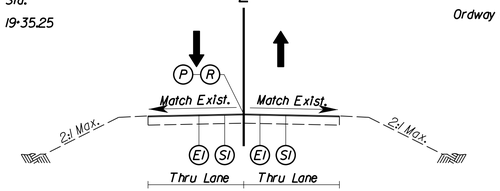


Alignment	Sta.	To	Sta.
Ordway Rd. (Rte.616)	17+33.19		19+35.25



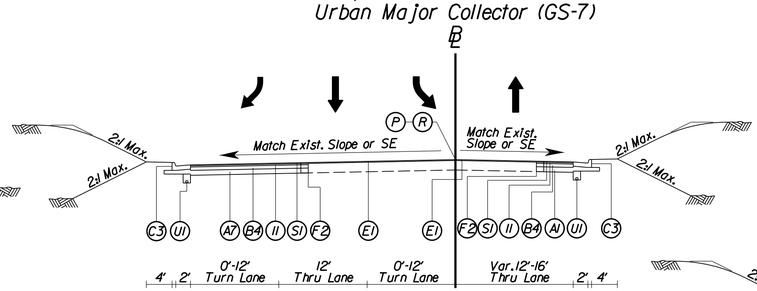
Alignment	Sta.	To	Sta.
Ordway Rd. (Rte.616)	17+77.01		20+16.50

Ordway Rd. (Rte.616) Urban Minor Arterial (GS-6)



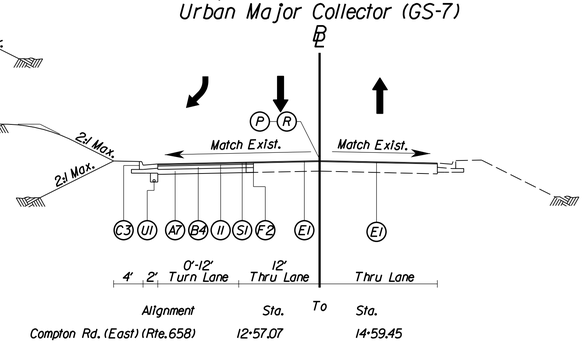
Alignment	Sta.	To	Sta.
Ordway Rd. (Rte.616)	20+16.50		21+10.45

Compton Rd. (East) (Rte.658) Urban Major Collector (GS-7)



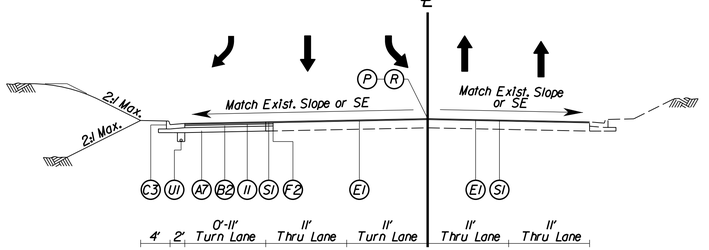
Alignment	Sta.	To	Sta.
Compton Rd. (East) (Rte.658)	10+00.00		12+57.07

Compton Rd. (East) (Rte.658) Urban Major Collector (GS-7)



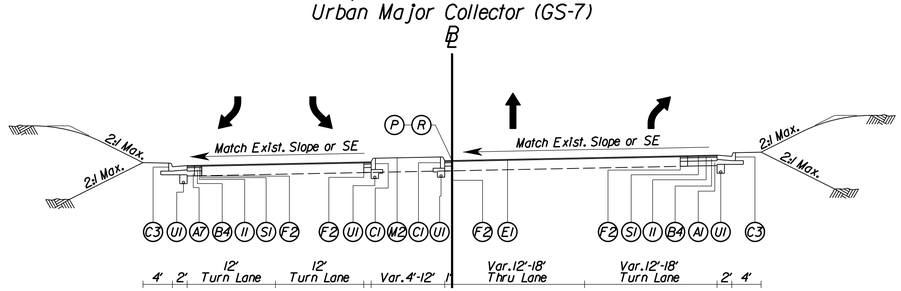
Alignment	Sta.	To	Sta.
Compton Rd. (East) (Rte.658)	12+57.07		14+59.45

Old Mill Rd. (Rte.859I) Urban Major Collector (GS-7)



Alignment	Sta.	To	Sta.
Old Mill Rd. (Rte. 859I)	10+00.00		13+76.67

Compton Rd. (West) (Rte.658) Urban Major Collector (GS-7)



Alignment	Sta.	To	Sta.
Compton Rd. (West) (Rte.658)	10+00.00		12+51.76

Key Legend

X / Y — Replacement Section See Sheet

S1 — 1.5" Surface Course, Asphalt Concrete, Type SM-9.5D @ 165 Lbs./SY Req'd.
S2 — 2" Surface Course, Asphalt Concrete, Type SM-9.5A @ 220 Lbs./SY Req'd.
I1 — 2" Intermediate Course, Asphalt Concrete, Type IM-19.0A @ 220 Lbs./SY Req'd.
B1 — 3" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
B2 — 3.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
B3 — 8" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
B4 — 5.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
B5 — 2.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
F1 — Not Used
F2 — Full Depth Sawcut, VDOT Std. WP-2 Req'd.
A1 — 8" Stabilized Aggr. Base Material, No.21A Pugmill Mixed With 4% Cement by Weight Req'd.
A2 — 16" Stabilized Aggr. Base Material, No.21A Pugmill Mixed With 4% Cement by Weight Req'd.
A3 — 12" Aggr. Base Material, Type I, No.21B, Connected to UD-4
A4 — 20" Aggr. Base Material, Type I, No.21B, Connected to UD-4
A5 — 6" Aggr. Base Material, Type I, No.21B Extended 6" on Either Side of Surface Req'd.
A6 — 4" Aggr. Base Material, Type I, No. 21A or No. 21B Extended 4" on Either Side of Surface Req'd.
A7 — 8" Aggr. Base Material, Type I, No.21B, Connected to UD-4
A8 — 14" Aggr. Base Material, Type I, No.21B, Connected to UD-4
E1 — Mill Exist. Pavement 1.5"
E2 — Mill Exist. Pavement 2"
U1 — Pavement Underdrain, Std.UD-4 or Mod.6" UD-4 Req'd. (See Plan Sheets for Schematic Layout and Locations)
C1 — 6" Curb, Std. CG-2 Req'd.
C2 — 4" Curb, Std. CG-3 Req'd.
C3 — 6" Curb and Gutter, Std. CG-6 Req'd.
C4 — 4" Curb and Gutter, Std. CG-7 Req'd.
M1 — Conc. Raised Median, Std. MS-1 or MS-1A with 4" Curb Req'd. (See Special Provision for Stamped Cement Concrete)
M2 — Conc. Raised Median, Std. MS-1 or MS-1A with 6" Curb Req'd. (See Special Provision for Stamped Cement Concrete)
M3 — Grass Raised Median, Std. MS-2 with 4" Curb Req'd.
M4 — Grass Raised Median, Std. MS-2 with 6" Curb and Gutter Req'd.
W1 — 4" Sidewalk, Hydraulic Cement Conc. Class A3 (See Plan Sheets for Locations and Widths)
W2 — 7" Sidewalk, Hydraulic Cement Conc. Class A3 (See Plan Sheets for Locations and Widths)
P — Profile Grade Line
R — Point of Rotation

SCALE 0 10' 20'	PROJECT	SHEET NO.
	0028-029-269	2A(3)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TYPICAL SECTIONS

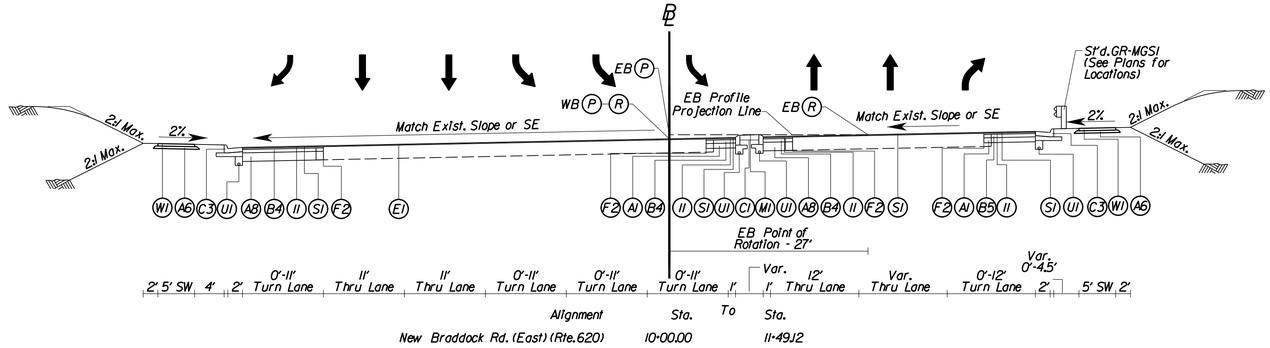
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	2A(4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

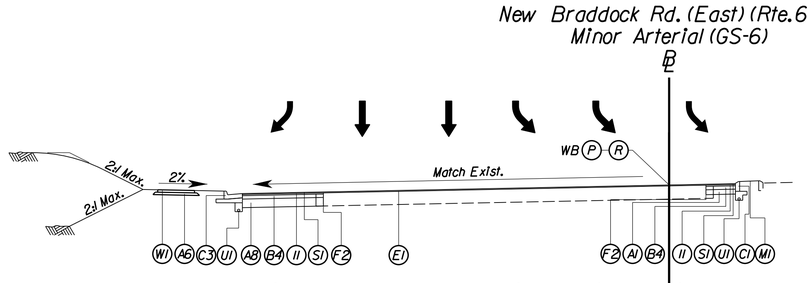
Geoconcepts Engineering, Inc. Chantilly, Virginia MATERIALS ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

New Braddock Rd. (East) (Rte.620) Minor Arterial (GS-6)



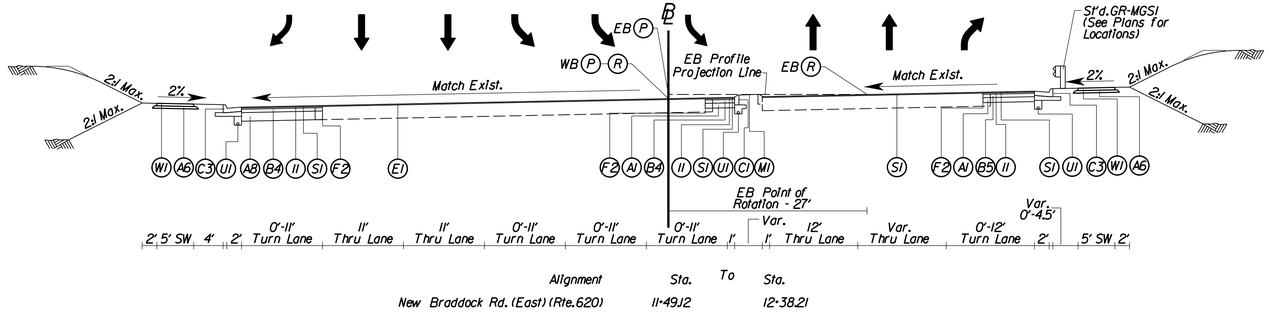
Alignment	Sta.	To	Sta.
New Braddock Rd. (East) (Rte.620)	10+00.00		11+49.12

New Braddock Rd. (East) (Rte.620) Minor Arterial (GS-6)



Alignment	Sta.	To	Sta.
New Braddock Rd. (East) (Rte.620)	12+38.21		17+71.31

New Braddock Rd. (East) (Rte.620) Minor Arterial (GS-6)



Alignment	Sta.	To	Sta.
New Braddock Rd. (East) (Rte.620)	11+49.12		12+38.21

Key Legend

X/Y Replacement Section See Sheet

- S1 1.5" Surface Course, Asphalt Concrete, Type SM-9.5D @ 165 Lbs./SY Req'd.
- S2 2" Surface Course, Asphalt Concrete, Type SM-9.5A @ 220 Lbs./SY Req'd.
- I1 2" Intermediate Course, Asphalt Concrete, Type IM-19.0A @ 220 Lbs./SY Req'd.
- B1 3" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- B2 3.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- B3 8" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- B4 5.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- B5 2.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- F1 Not Used
- F2 Full Depth Sawcut, VDOT Std. WP-2 Req'd.
- A1 8" Stabilized Aggr. Base Material, No.21A Pugmill Mixed With 4% Cement by Weight Req'd.
- A2 16" Stabilized Aggr. Base Material, No.21A Pugmill Mixed With 4% Cement by Weight Req'd.
- A3 12" Aggr. Base Material, Type I, No.21B, Connected to UD-4
- A4 20" Aggr. Base Material, Type I, No.21B, Connected to UD-4
- A5 6" Aggr. Base Material, Type I, No.21B Extended 6" on Either Side of Surface Req'd.
- A6 4" Aggr. Base Material, Type I, No. 21A or No. 21B Extended 4" on Either Side of Surface Req'd.
- A7 8" Aggr. Base Material, Type I, No.21B, Connected to UD-4
- A8 14" Aggr. Base Material, Type I, No.21B, Connected to UD-4
- E1 Mill Exist. Pavement 1.5"
- E2 Mill Exist. Pavement 2"
- U1 Pavement Underdrain, Std.UD-4 or Mod.6" UD-4 Req'd. (See Plan Sheets for Schematic Layout and Locations)
- C1 6" Curb, Std. CG-2 Req'd.
- C2 4" Curb, Std. CG-3 Req'd.
- C3 6" Curb and Gutter, Std. CG-6 Req'd.
- C4 4" Curb and Gutter, Std. CG-7 Req'd.
- M1 Conc. Raised Median, Std. MS-1 or MS-1A with 4" Curb Req'd. (See Special Provision for Stamped Cement Concrete)
- M2 Conc. Raised Median, Std. MS-1 or MS-1A with 6" Curb Req'd. (See Special Provision for Stamped Cement Concrete)
- M3 Grass Raised Median, Std. MS-2 with 4" Curb Req'd.
- M4 Grass Raised Median, Std. MS-2 with 6" Curb and Gutter Req'd.
- W1 4" Sidewalk, Hydraulic Cement Conc. Class A3 (See Plan Sheets for Locations and Widths)
- W2 7" Sidewalk, Hydraulic Cement Conc. Class A3 (See Plan Sheets for Locations and Widths)
- P Profile Grade Line
- R Point of Rotation

SCALE	PROJECT	SHEET NO.
0 10' 20'	0028-029-269	2A(4)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TYPICAL SECTIONS

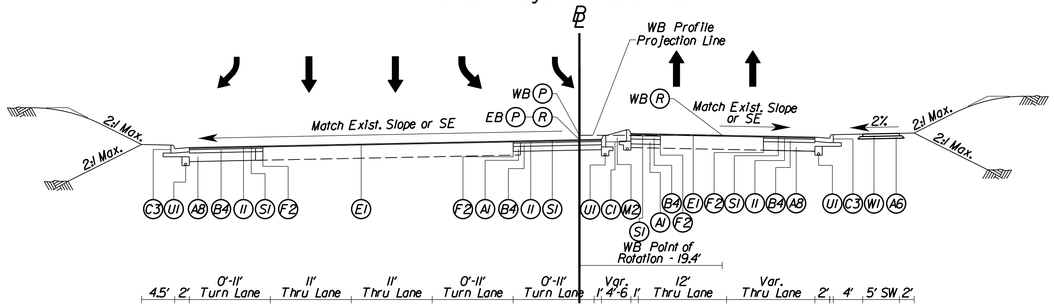
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	2A(5)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

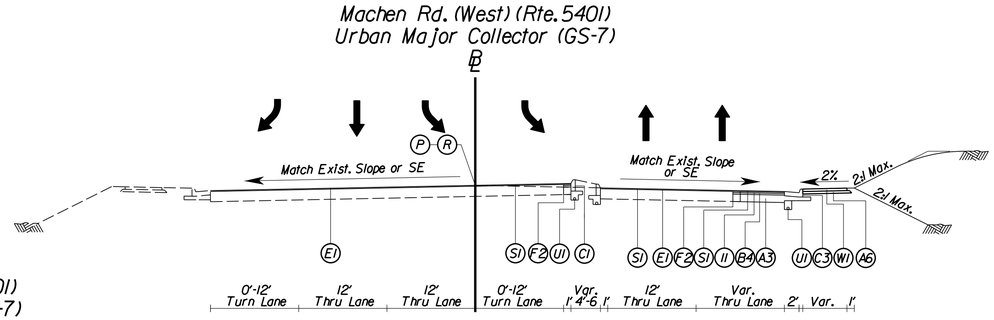
Geoconcepts Engineering, Inc. Chantilly, Virginia MATERIALS ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

New Braddock Rd. (West) (Rte.620) Urban Major Collector (GS-7)



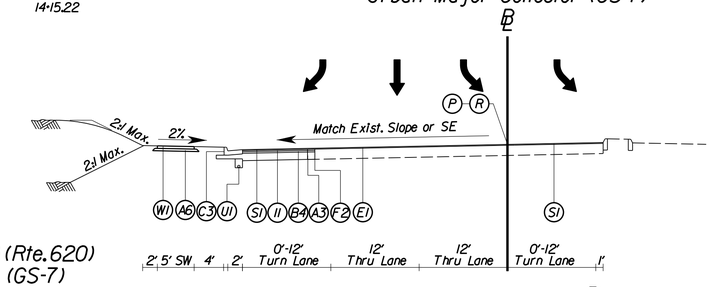
Alignment	Sta.	To	Sta.
New Braddock Rd. (West) (Rte.620)	10+00.00		14+15.22

Machen Rd. (West) (Rte.5401) Urban Major Collector (GS-7)



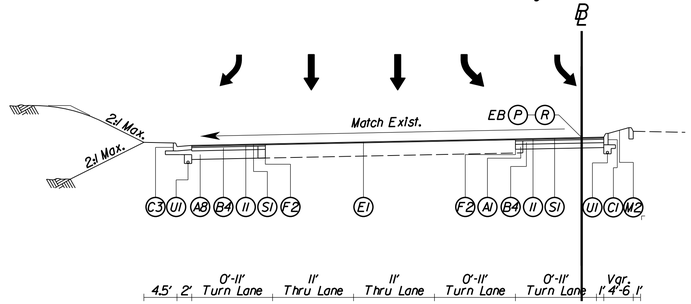
Alignment	Sta.	To	Sta.
Machen Rd. (West) (Rte.5401)	10+00.00		12+05.45

Machen Rd. (West) (Rte.5401) Urban Major Collector (GS-7)



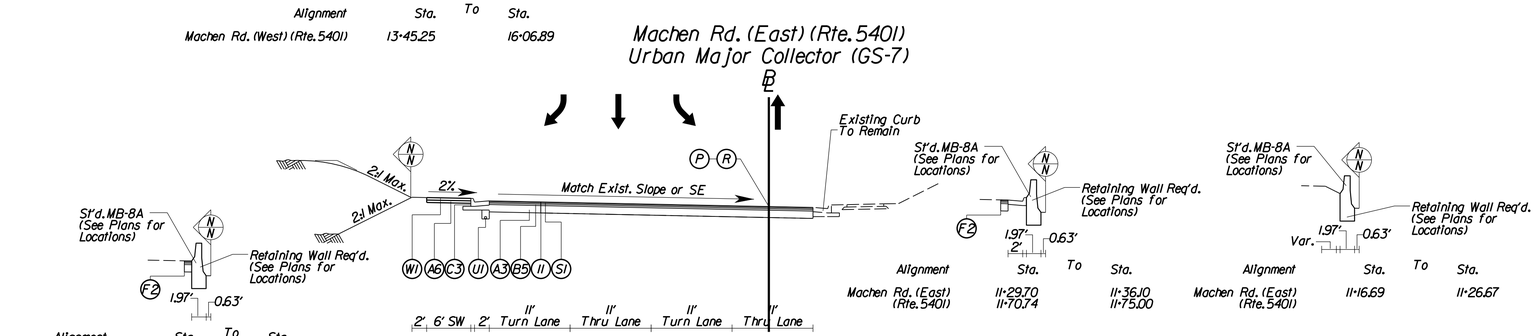
Alignment	Sta.	To	Sta.
Machen Rd. (West) (Rte.5401)	13+45.25		16+06.89

New Braddock Rd. (West) (Rte.620) Urban Major Collector (GS-7)



Alignment	Sta.	To	Sta.
New Braddock Rd. (West) (Rte.620)	14+15.22		17+01.33

Machen Rd. (East) (Rte.5401) Urban Major Collector (GS-7)



Alignment	Sta.	To	Sta.
Machen Rd. (East) (Rte.5401)	10+00.00		12+43.11

Alignment	Sta.	To	Sta.
Machen Rd. (East) (Rte.5401)	11+26.67		11+36.10
	11+70.74		

Alignment	Sta.	To	Sta.
Machen Rd. (East) (Rte.5401)	11+29.70		11+36.10
	11+70.74		11+75.00

Alignment	Sta.	To	Sta.
Machen Rd. (East) (Rte.5401)	11+16.69		11+26.67

Key Legend

X / Y — Replacement Section See Sheet

- (S1) 1.5" Surface Course, Asphalt Concrete, Type SM-9.5D @ 165 Lbs./SY Req'd.
- (S2) 2" Surface Course, Asphalt Concrete, Type SM-9.5A @ 220 Lbs./SY Req'd.
- (I1) 2" Intermediate Course, Asphalt Concrete, Type IM-19.0A @ 220 Lbs./SY Req'd.
- (B1) 3" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- (B2) 3.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- (B3) 8" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- (B4) 5.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- (B5) 2.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- (F1) Not Used
- (F2) Full Depth Sawcut, VDOT St'd. WP-2 Req'd.
- (A1) 8" Stabilized Aggr. Base Material, No.21A Pugmill Mixed With 4% Cement by Weight Req'd.
- (A2) 16" Stabilized Aggr. Base Material, No.21A Pugmill Mixed With 4% Cement by Weight Req'd.
- (A3) 12" Aggr. Base Material, Type I, No.21B, Connected to UD-4
- (A4) 20" Aggr. Base Material, Type I, No.21B, Connected to UD-4
- (A5) 6" Aggr. Base Material, Type I, No.21B Extended 6" on Either Side of Surface Req'd.
- (A6) 4" Aggr. Base Material, Type I, No. 21A or No. 21B Extended 4" on Either Side of Surface Req'd.
- (A7) 8" Aggr. Base Material, Type I, No.21B, Connected to UD-4
- (A8) 14" Aggr. Base Material, Type I, No.21B, Connected to UD-4
- (E1) Mill Exist. Pavement 1.5"
- (E2) Mill Exist. Pavement 2"
- (U1) Pavement Underdrain, St'd.UD-4 or Mod.6" UD-4 Req'd. (See Plan Sheets for Schematic Layout and Locations)
- (C1) 6" Curb, St'd. CG-2 Req'd.
- (C2) 4" Curb, St'd. CG-3 Req'd.
- (C3) 6" Curb and Gutter, St'd. CG-6 Req'd.
- (C4) 4" Curb and Gutter, St'd. CG-7 Req'd.
- (M1) Conc. Raised Median, St'd. MS-1 or MS-1A with 4" Curb Req'd. (See Special Provision for Stamped Cement Concrete)
- (M2) Conc. Raised Median, St'd. MS-1 or MS-1A with 6" Curb Req'd. (See Special Provision for Stamped Cement Concrete)
- (M3) Grass Raised Median, St'd. MS-2 with 4" Curb Req'd.
- (M4) Grass Raised Median, St'd. MS-2 with 6" Curb and Gutter Req'd.
- (W1) 4" Sidewalk, Hydraulic Cement Conc. Class A3 (See Plan Sheets for Locations and Widths)
- (W2) 7" Sidewalk, Hydraulic Cement Conc. Class A3 (See Plan Sheets for Locations and Widths)
- (P) Profile Grade Line
- (R) Point of Rotation

SCALE	PROJECT	SHEET NO.
0 10' 20'	0028-029-269	2A(5)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

TYPICAL SECTIONS

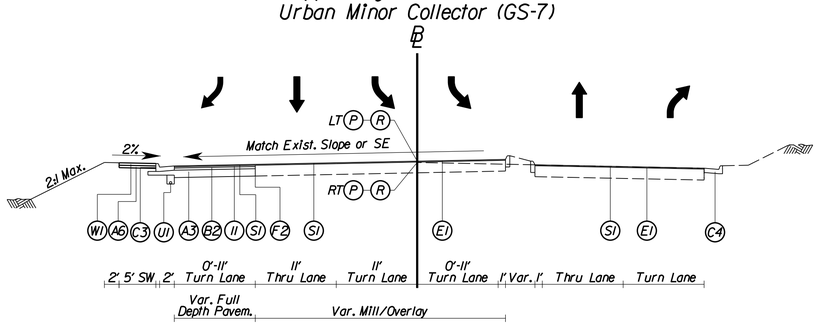
Geoconcepts Engineering, Inc. Chantilly, Virginia MATERIALS ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	2A(6)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

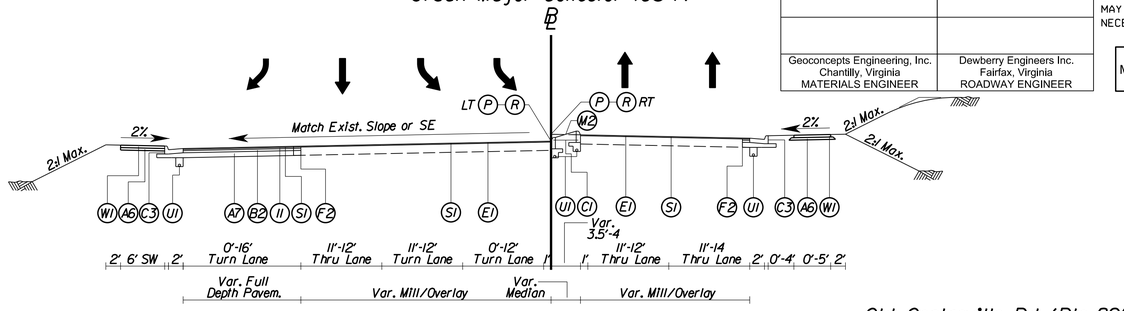
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Upperridge Dr. (Rte.8349) Urban Minor Collector (GS-7)



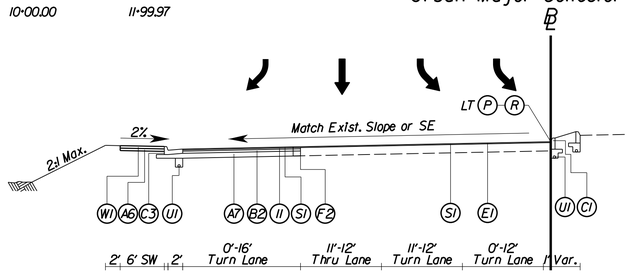
Alignment	Sta.	To	Sta.
Upperridge Dr. (Rte. 8349)	10+00.00		12+06.12

Old Centreville Rd. (Rte.898) Urban Major Collector (GS-7)



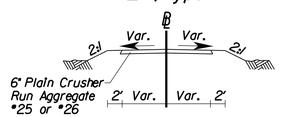
Alignment	Sta.	To	Sta.
Old Centreville Rd. (Rte. 898)	10+00.00		11+99.97

Old Centreville Rd. (Rte.898) Urban Major Collector (GS-7)



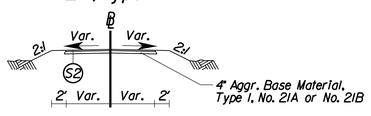
Alignment	Sta.	To	Sta.
Old Centreville Rd. (Rte. 898)	11+99.97		13+66.97

Private Entrances (PE-1, Type I)



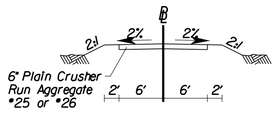
Alignment
Entrance A
Entrance B
Entrance D
Entrance R

Private Entrances (PE-1, Type III)

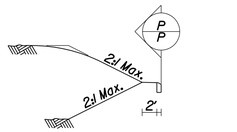


Alignment
Entrance C
Entrance E
Entrance F
Entrance G
Entrance H
Entrance I
Entrance J
Entrance K
Entrance L
Entrance N
Entrance P
Darkwood Drive

SWM Access

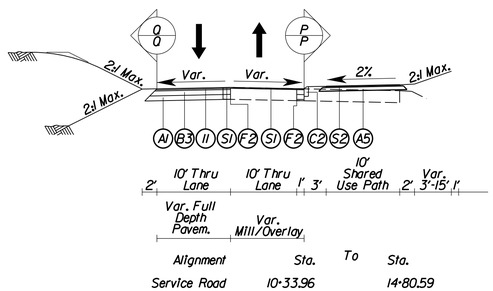


Service Road



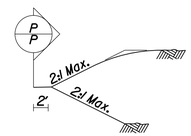
Alignment	Sta.	To	Sta.
Service Road	14+04.32		14+74.48

Service Road



Alignment	Sta.	To	Sta.
Service Road	10+33.96		14+80.59

Service Road



Alignment	Sta.	To	Sta.
Service Road	10+33.96		11+82.85

Key Legend

- X / Y — Replacement Section See Sheet
- (S1) 1.5" Surface Course, Asphalt Concrete, Type SM-9.5D @ 165 Lbs./SY Req'd.
- (S2) 2" Surface Course, Asphalt Concrete, Type SM-9.5A @ 220 Lbs./SY Req'd.
- (I1) 2" Intermediate Course, Asphalt Concrete, Type IM-19.0A @ 220 Lbs./SY Req'd.
- (B1) 3" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- (B2) 3.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- (B3) 8" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- (B4) 5.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- (B5) 2.5" Base Course, Asphalt Concrete, Type BM-25.0A Req'd.
- (F1) Not Used
- (F2) Full Depth Sawcut, VDOT Std. WP-2 Req'd.
- (A1) 8" Stabilized Aggr. Base Material, No. 21A Pugmill Mixed With 4% Cement by Weight Req'd.
- (A2) 16" Stabilized Aggr. Base Material, No. 21A Pugmill Mixed With 4% Cement by Weight Req'd.
- (A3) 12" Aggr. Base Material, Type I, No. 21B, Connected to UD-4
- (A4) 20" Aggr. Base Material, Type I, No. 21B, Connected to UD-4
- (A5) 6" Aggr. Base Material, Type I, No. 21B Extended 6" on Either Side of Surface Req'd.
- (A6) 4" Aggr. Base Material, Type I, No. 21A or No. 21B Extended 4" on Either Side of Surface Req'd.
- (A7) 8" Aggr. Base Material, Type I, No. 21B, Connected to UD-4
- (A8) 14" Aggr. Base Material, Type I, No. 21B, Connected to UD-4
- (E1) Mill Exist. Pavement 1.5"
- (E2) Mill Exist. Pavement 2"
- (U1) Pavement Underdrain, Std. UD-4 or Mod. 6" UD-4 Req'd. (See Plan Sheets for Schematic Layout and Locations)
- (C1) 6" Curb, Std. CG-2 Req'd.
- (C2) 4" Curb, Std. CG-3 Req'd.
- (C3) 6" Curb and Gutter, Std. CG-6 Req'd.
- (C4) 4" Curb and Gutter, Std. CG-7 Req'd.
- (M1) Conc. Raised Median, Std. MS-1 or MS-1A with 4" Curb Req'd. (See Special Provision for Stamped Cement Concrete)
- (M2) Conc. Raised Median, Std. MS-1 or MS-1A with 6" Curb Req'd. (See Special Provision for Stamped Cement Concrete)
- (M3) Grass Raised Median, Std. MS-2 with 4" Curb Req'd.
- (M4) Grass Raised Median, Std. MS-2 with 6" Curb and Gutter Req'd.
- (W1) 4" Sidewalk, Hydraulic Cement Conc. Class A3 (See Plan Sheets for Locations and Widths)
- (W2) 7" Sidewalk, Hydraulic Cement Conc. Class A3 (See Plan Sheets for Locations and Widths)
- (P) Profile Grade Line
- (R) Point of Rotation

SCALE	PROJECT	SHEET NO.
0 10' 20'	0028-029-269	2A(6)

Dewberry

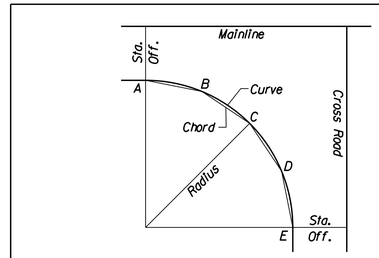
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

CURB RETURNS DETAILS

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	2A(7)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Curb Return	Sheet	Alignment		Sta.	Offset (ft.) (Rt./Lt.)	Radius (ft.)	Length (ft.)	Chord (ft.)	Elevation (Ft.)				
									A	B	C	D	E
CR 01	6	Mainline	SB Route 28	123+04.04	0.00 (Lt.)	50.00	58.47	14.57	225.01	225.46	225.75	226.04	225.83
		Cross Road	Ordway Rd.	10+08.86	62.13 (Lt.)								
CR 02	6	Mainline	SB Route 28	125+55.59	12.00 (Lt.)	110.00	167.85	41.71	232.95	231.13	230.30	229.47	226.67
		Cross Road	Ordway Rd.	11+19.63	18.02 (Rt.)								
CR 03	6	Mainline	NB Route 28	123+82.35	30.00 (Rt.)	52.00	60.26	15.01	225.30	224.75	224.45	224.15	223.37
		Cross Road	Compton Rd. East	10+52.35	33.00 (Lt.)								
CR 04	6	Mainline	NB Route 28	121+80.34	36.00 (Rt.)	70.00	130.11	32.24	221.01	219.50	218.85	217.25	215.64
		Cross Road	Compton Rd. East	11+46.56	21.04 (Rt.)								
CR 05	8	Mainline	NB Route 28	136+94.84	48.15 (Rt.)	50.00	82.03	20.36	264.43	263.49	263.08	262.67	261.74
		Cross Road	Bradenton Dr.	11+89.15	33.14 (Rt.)								
CR 06	8	Mainline	NB Route 28	138+60.70	36.00 (Rt.)	50.00	82.03	20.36	265.36	264.16	263.75	263.34	262.15
		Cross Road	Bradenton Dr.	11+77.02	32.97 (Lt.)								
CR 07	10	Mainline	NB Route 28	150+46.57	48.00 (Rt.)	50.00	81.11	20.14	289.06	288.65	288.25	287.85	287.01
		Cross Road	Tallavast Dr.	11+00.57	22.07 (Rt.)								
CR 08	10	Mainline	NB Route 28	151+73.37	36.00 (Rt.)	40.20	62.53	15.53	289.93	289.31	289.00	288.69	287.49
		Cross Road	Tallavast Dr.	10+80.86	22.05 (Lt.)								
CR 09	11	Mainline	SB Route 28	159+31.92	34.03 (Lt.)	52.00	80.91	20.10	290.33	290.54	290.80	291.06	291.28
		Cross Road	Old Mill Rd.	10+83.91	31.14 (Lt.)								
CR 10	11	Mainline	SB Route 28	160+91.32	42.29 (Lt.)	52.00	84.97	21.10	291.52	291.40	291.30	291.20	291.15
		Cross Road	Old Mill Rd.	10+98.80	24.20 (Rt.)								
CR 11	11	Mainline	NB Route 28	160+47.50	24.00 (Rt.)	52.00	91.85	22.78	291.16	290.15	289.70	289.25	287.98
		Cross Road	Green Trails Blvd.	10+93.29	45.03 (Lt.)								
CR 12	11	Mainline	NB Route 28	158+65.35	36.00 (Rt.)	52.00	77.54	19.27	289.46	289.48	289.50	289.12	288.20
		Cross Road	Green Trails Blvd.	10+79.78	33.18 (Rt.)								
CR 13	17	Mainline	SB Route 28	195+63.81	24.00 (Lt.)	40.00	91.66	22.60	342.97	340.18	339.73	338.51	337.37
		Cross Road	New Braddock Rd.	11+52.26	53.36 (Lt.)								
CR 14	17	Mainline	SB Route 28	198+24.11	36.00 (Lt.)	100.00	75.15	18.76	338.95	339.25	339.45	339.65	339.84
		Cross Road	New Braddock Rd.	10+36.51	61.05 (Rt.)								
CR 15	17	Mainline	NB Route 28	198+37.78	24.00 (Rt.)	54.00	103.68	25.67	338.63	337.91	337.40	336.89	336.90
		Cross Road	New Braddock Rd.	11+23.46	56.88 (Lt.)								
CR 16	17	Mainline	NB Route 28	196+01.36	36.00 (Rt.)	77.00	87.91	21.90	339.71	339.57	339.48	339.22	338.53
		Cross Road	New Braddock Rd.	10+69.32	46.50 (Lt.)								
CR 17	19	Mainline	SB Route 28	207+54.85	24.00 (Lt.)	62.00	97.57	24.24	346.57	346.65	346.75	344.38	342.01
		Cross Road	Machen Rd.	10+86.21	36.22 (Lt.)								
CR 18	19	Mainline	SB Route 28	209+54.00	36.00 (Lt.)	52.00	78.53	19.52	344.34	343.74	343.35	342.96	342.13
		Cross Road	Machen Rd.	10+84.82	49.02 (Rt.)								
CR 19	19	Mainline	NB Route 28	208+75.55	24.00 (Rt.)	52.00	82.29	20.44	344.96	344.87	344.78	344.69	344.07
		Cross Road	Machen Rd.	10+76.63	38.04 (Lt.)								
CR 20	19	Mainline	NB Route 28	207+27.66	36.00 (Rt.)	52.00	82.57	20.51	343.62	343.66	343.42	343.20	343.30
		Cross Road	Machen Rd.	10+88.84	5.83 (Rt.)								
CR 21	21	Mainline	SB Route 28	223+23.34	34.37 (Lt.)	52.00	82.01	20.37	352.18	350.61	349.03	347.45	345.88
		Cross Road	Upperridge Dr.	10+85.85	31.00 (Lt.)								
CR 22	21	Mainline	NB Route 28	224+96.16	36.00 (Rt.)	42.00	96.74	23.85	354.07	354.28	354.39	354.47	354.54
		Cross Road	Old Centreville Rd.	11+58.91	52.32 (Lt.)								
CR 23	21	Mainline	NB Route 28	223+16.07	36.00 (Rt.)	52.00	66.99	16.68	358.10	357.95	357.90	357.87	357.80
		Cross Road	Old Centreville Rd.	10+67.74	30.79 (Rt.)								
CR 24	23	Mainline	Ordway Rd.	12+78.55	16.00 (Rt.)	52.00	82.05	20.38	223.86	224.24	224.97	225.70	226.12
		Cross Road	Compton Rd. West	10+84.59	32.87 (Lt.)								
CR 25	23	Mainline	Ordway Rd.	11+44.40	18.96 (Rt.)	77.00	74.49	18.58	226.16	226.20	226.28	226.55	227.30
		Cross Road	Compton Rd. West	10+58.92	18.00 (Rt.)								

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
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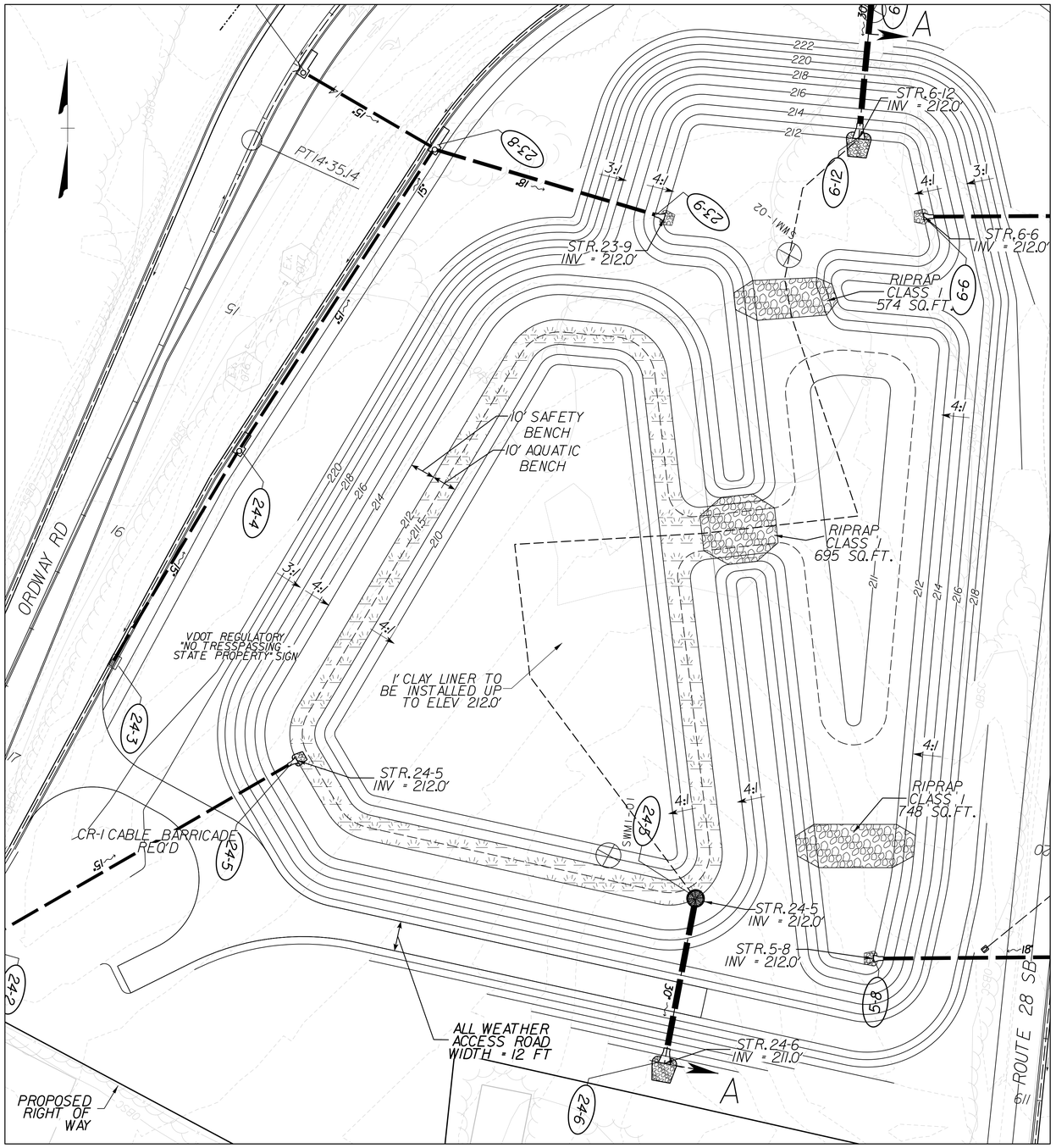
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

STORMWATER MANAGEMENT

SWM 1 WET POND LEVEL 2



REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	2B(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
HYDRAULIC ENGINEER

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

NOTES:

1. INSTALLING THE STEPS AND TRASH RACK TO THE CONTROL STRUCTURE, THE CONTRACTOR SHALL ENSURE THAT THE STEPS AND TRASH RACK ACCESS DOOR ARE ORIENTED TO THE EMBANKMENT SIDE OF THE CONTROL STRUCTURE, AND TO THE EXTENT POSSIBLE, ARE IN DIRECT ALIGNMENT WITH EACH OTHER.
2. STEPS ARE TO BE INSTALLED ON THE INSIDE OF THE WATER QUALITY STRUCTURE AND ACCESSIBLE FROM THE EMBANKMENT SIDE ON THE OUTSIDE OF THE STRUCTURE.
3. A HINGED, LOCKABLE ACCESS DOOR WITH A MINIMUM 2'X2' CLEAR OPENING, SHALL BE PROVIDED ON ALL TRASH RACKS AND ALIGNED DIRECTLY OVER THE STEPS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPOSED BMP'S ONCE ALL CONNECTIONS HAVE BEEN COMPLETED, AND SHALL CERTIFY THAT THE BMP'S HAVE BEEN MAINTAINED PER MANUFACTURER'S MAINTENANCE GUIDELINES OR IN ACCORDANCE WITH THE TYPICAL INDUSTRY MAINTENANCE STANDARDS. THE BMPS WILL ULTIMATELY BE OWNED AND MAINTAINED BY VDOT ONCE THE PROJECT IS COMPLETE.
5. REMOVE ALL EXISTING TREES WITHIN 15 FEET OF THE EMBANKMENT AND 25 FEET OF THE OUTLET STRUCTURE.
6. INSTALL A METERED ROD IN THE SEDIMENT FOREBAY.
7. THE CONTRACTER SHALL INSTALL AN AERATION MECHANISM THAT SATISFIES VA DCR STORMWATER DESIGN SPECIFICATION NO.14, SECTION 6.8.
8. WHEN THE BMP IS ACCEPTED, VDOT SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE STORMWATER FACILITY. MAINTENANCE RESPONSIBILITIES SHALL BE ESTABLISHED IN THE REQUIRED DEED OF DEDICATION.

AS-BUILT DRAWING OF STORMWATER MANAGEMENT FACILITIES:

THE CONTRACTOR SHALL PROVIDE 'AS-BUILT' DRAWINGS OF ALL STORMWATER MANAGEMENT FACILITIES LOCATED ON THE SHEET. THE 'AS-BUILT' DRAWINGS SHALL SHOW THE ACTUAL FINISHED GROUND CONTOURS, OUTLET STRUCTURE DIMENSIONS AND ELEVATIONS, ETC. AS THEY EXIST AT THE COMPLETION OF THE PROJECT. THESE DRAWINGS SHALL BE SIGNED AND SEALED BY THE PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF VIRGINIA.

SWM 1

THIS WATER QUALITY FACILITY TREATS 14.36 ACRES AND ACHIEVES A TOTAL PHOSPHORUS LOAD REDUCTION OF 15.25 LB/YR

SWM 1 Treatment Requirements

BMP Type:	Wet Pond	
Level:	2	
Treated Drainage Area:	14.36	acres
Impervious:	7.74	acres
Managed Turf:	6.62	acres
Wooded:	0.00	acres
Weighted Rv:	0.62	
Required Tv:	1.12	ac-ft
Required Tv:	48608	cu. ft
Required Tv Elevation:	211.45	ft
Elev Tv Provided:	**212.00**	**ft**
Tv Provided:	**68963**	**cu.ft**

POST - CONDITIONS DISCHARGES

2 YEAR = 0.51 CFS
10 YEAR = 2.31 CFS
100 YEAR = 39.09 CFS

POST - CONDITIONS WATER SURFACE (WS) ELEVATIONS

2 YEAR WS ELEV. = 213.66 FT
10 YEAR WS ELEV. = 214.59 FT
100 YEAR WS ELEV = 215.52 FT

TREATMENT VOLUME PROVIDED = 1.58 ACRE-FT
TREATMENT VOLUME ELEVATION = 212.0 FT

SUMMARY TABLE:

SWM	WET POND									OUTLET STRUCTURE	
	DRAINAGE AREA (AC)	PERMANENT POOL AREA (SF)	PERMANENT POOL ELEV. (FT)	TOP OF DAM (FT)	DESIGN 10-YR WSE (FT)	DESIGN 100-YR WSE (FT)	FREEBOARD (100-YR) (FT)	PRE-TREATMENT METHOD	WATER TABLE ELEV. (FT)	STRUCTURE TYPE	TOP OF STR. (FT)
1	17.7	27403	212.0	218.0	214.6	215.5	2.5	FOREBAY	NOT ENCOUNTERED	SWM-1	214.5

SCALE
0 25' 50'

AQUATIC BENCH
0-1.0' POOL DEPTH

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
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STORMWATER MANAGEMENT

SWM 1 WET POND LEVEL 2

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	2B(2)

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Dewberry Engineers Inc.
Fairfax, Virginia
HYDRAULIC ENGINEER

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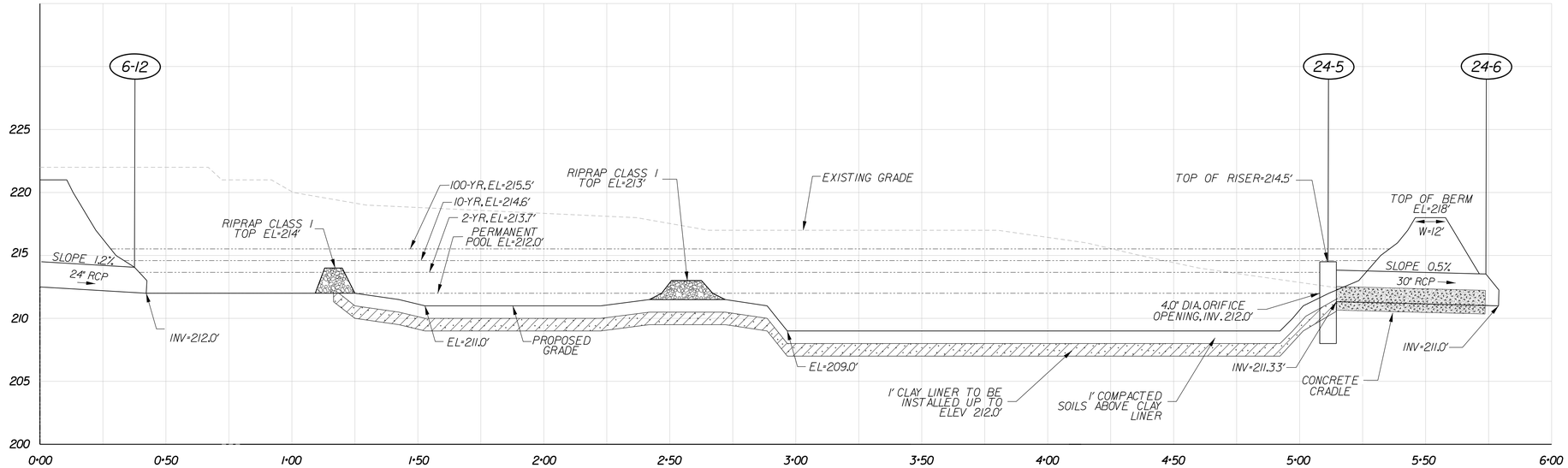
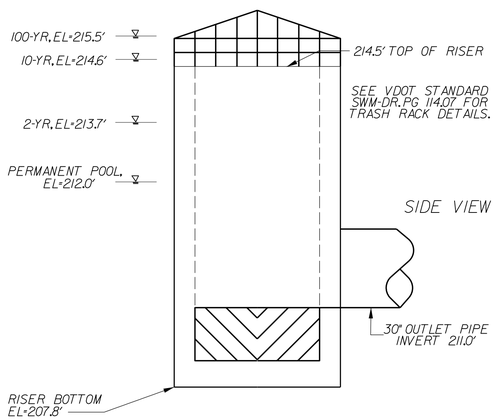


SECTION A-A

SWM 1 WET POND LEVEL 2

HORIZONTAL 1"=25'
VERTICAL 1"=5'



RISER STRUCTURE 24-5
(SWM 1) (NTS)

WET POND LEVEL 2 DESIGN COMPLIANCE

$TV_{ww} = (1.0 * Rv * (A/12)) *$ ANY REMAINING VOLUME FROM UPSTREAM BMP	REQUIRED	$TV = (1.5 * 0.62 * (14.36/12)) * 43560$ FT/AC = 48,608 CU.FT.
	PROVIDED	68,963 CU.FT AT EL.= 212 FT
MULTIPLE CELL DESIGN	PROVIDED (2 FOREBAYS, 1 WETLAND, 1 PERMANENT POOL)	
LENGTH/WIDTH RATIO OR FLOW PATH = 3:1 OR MORE; LENGTH OF SHORTEST FLOW PATH / OVERALL LENGTH = 0.8 OR MORE	LENGTH (360') / WIDTH (120') = 3.0	
	SHORTEST PATH (323') / OVERALL (360') = 0.9	
WETLANDS MORE THAN 10% OF POND AREA	PROVIDED	
TREES, SHRUBS, AND HERBACEOUS PLANTS IN POND BUFFERS	PROVIDED	
AERATION	PROVIDED	

STAGE-STORAGE RELATIONSHIP SWM 1

Elevation (ft)	Discharge (cfs)	Stoarge (cu.ft)	Storage (acre-ft)
212.00	0.0	0.0	0.00
212.50	0.2	25340.7	0.58
213.00	0.4	50681.3	1.16
213.50	0.5	80248.6	1.84
214.00	0.6	109815.8	2.52
214.50	0.6	142646.8	3.27
215.00	20.8	175477.8	4.03
215.50	38.8	212008.0	4.87
216.00	42.6	248538.1	5.71
216.50	46.0	288255.9	6.62
217.00	49.2	327973.7	7.53
218.00	55.0	411347.9	9.44

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STORMWATER MANAGEMENT
SWM 1 TEMPORARY SEDIMENT BASIN

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	2B(2A)

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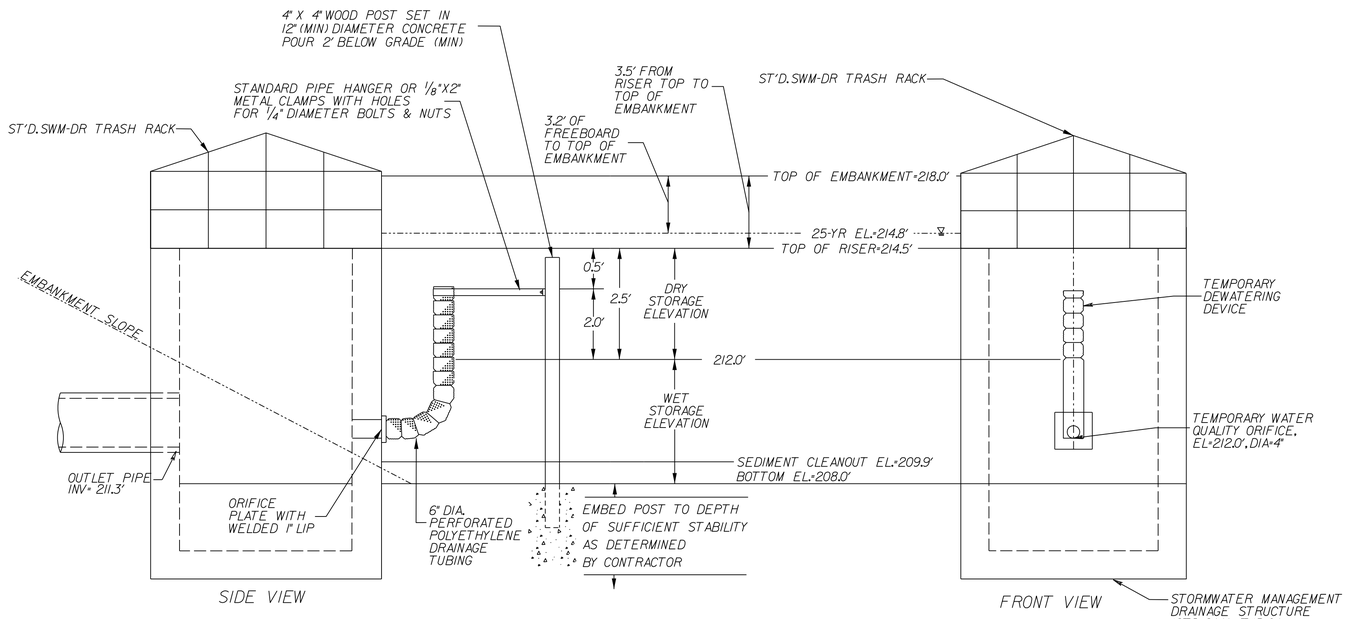
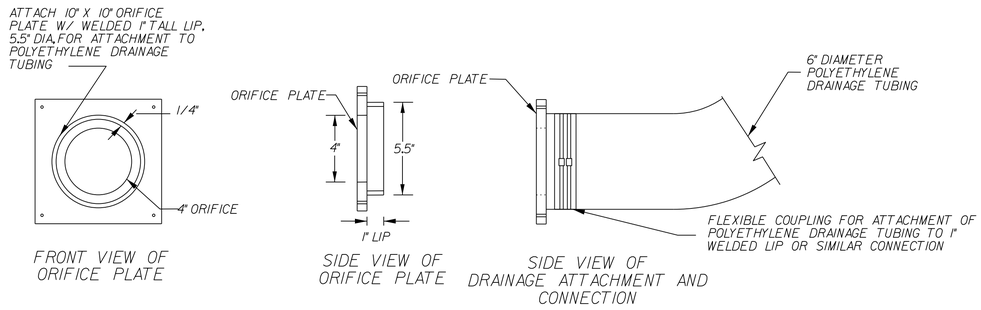


SWM-1 AND SWM-DR TEMPORARY SEDIMENT BASIN CONFIGURATION
(TYPICAL DETAILS NTS)



SEDIMENT BASIN CONTROL CONNECTION
(NTS)

NOTES:

1. DETAILS ON THIS SHEET ARE TO BE USED TO MODIFY THE PERMANENT STORMWATER MANAGEMENT DRAINAGE STRUCTURE (SWM-1 RISER) WHERE THE STORMWATER MANAGEMENT BASIN IS TO BE USED FOR A TEMPORARY SEDIMENT BASIN DURING PROJECT CONSTRUCTION.
2. GRADE STORMWATER MANAGEMENT BASIN AS SHOWN IN PLANS. ELEVATIONS AND VOLUME PER TEMPORARY SEDIMENT BASIN SUMMARY TABLE.
3. DEWATERING DEVICE AND COMPONENTS AND TEMPORARY WATER TIGHT PLATES (IF ANY), AS SHOWN IN THE DETAIL, ARE TO BE REMOVED AND PERMANENT WATER QUALITY ORIFICE STEEL PLATE IS TO BE INSTALLED WHEN BASIN IS CONVERTED TO PERMANENT CONFIGURATION.
4. WHEN INSTALLING THE STEPS AND TRASH RACK TO THE CONTROL STRUCTURE, THE CONTRACTOR SHALL ENSURE THAT THE STEPS AND TRASH RACK HINGED ACCESS DOOR ARE ORIENTED TO THE EMBANKMENT SIDE OF THE CONTROL STRUCTURE, AND ARE TO THE EXTENT POSSIBLE, IN DIRECT ALIGNMENT WITH EACH OTHER (SEE NOTE 7).
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPOSED BMPS ONCE ALL CONNECTIONS HAVE BEEN COMPLETED, AND SHALL CERTIFY THAT THE BMPS HAVE BEEN MAINTAINED PER MANUFACTURER'S MAINTENANCE GUIDELINES OR IN ACCORDANCE WITH THE TYPICAL INDUSTRY MAINTENANCE STANDARDS PRIOR TO TRANSFER TO VDOT.
6. TEMPORARY SEDIMENT BASIN SHOULD NOT BE CONVERTED TO PERMANENT BASIN DESIGN CONFIGURATIONS UNTIL CONSTRUCTED AREA WITHIN THE DRAINAGE AREA TO BASIN HAS ACHIEVED FINAL STABILIZATION PER DEQ SPECIFICATION 3.14.
7. REFERENCE VDOT ROAD AND BRIDGE STANDARDS 2016 - SWM-1 & SWM-DR FOR RISER DETAILS.

TEMPORARY SEDIMENT BASIN SUMMARY

POND ID	CONTRIBUTING DRAINAGE AREA	WET STORAGE REQUIRED	WET STORAGE PROVIDED	DRY STORAGE REQUIRED	DRY STORAGE PROVIDED	SEDIMENT CLEANOUT ELEVATION	TOP OF WET STORAGE	TOP OF DRY STORAGE
	(AC)	(CY)	(CY)	(CY)	(CY)	(FT)	(FT)	(FT)
SWM 1	17.7	1185.9	2554.2	1185.9	5282.1	209.9	212.0	214.5

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STORMWATER MANAGEMENT

SWM 3 BIORETENTION LEVEL I

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	2B(3)

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Fairfax, Virginia
HYDRAULIC ENGINEER

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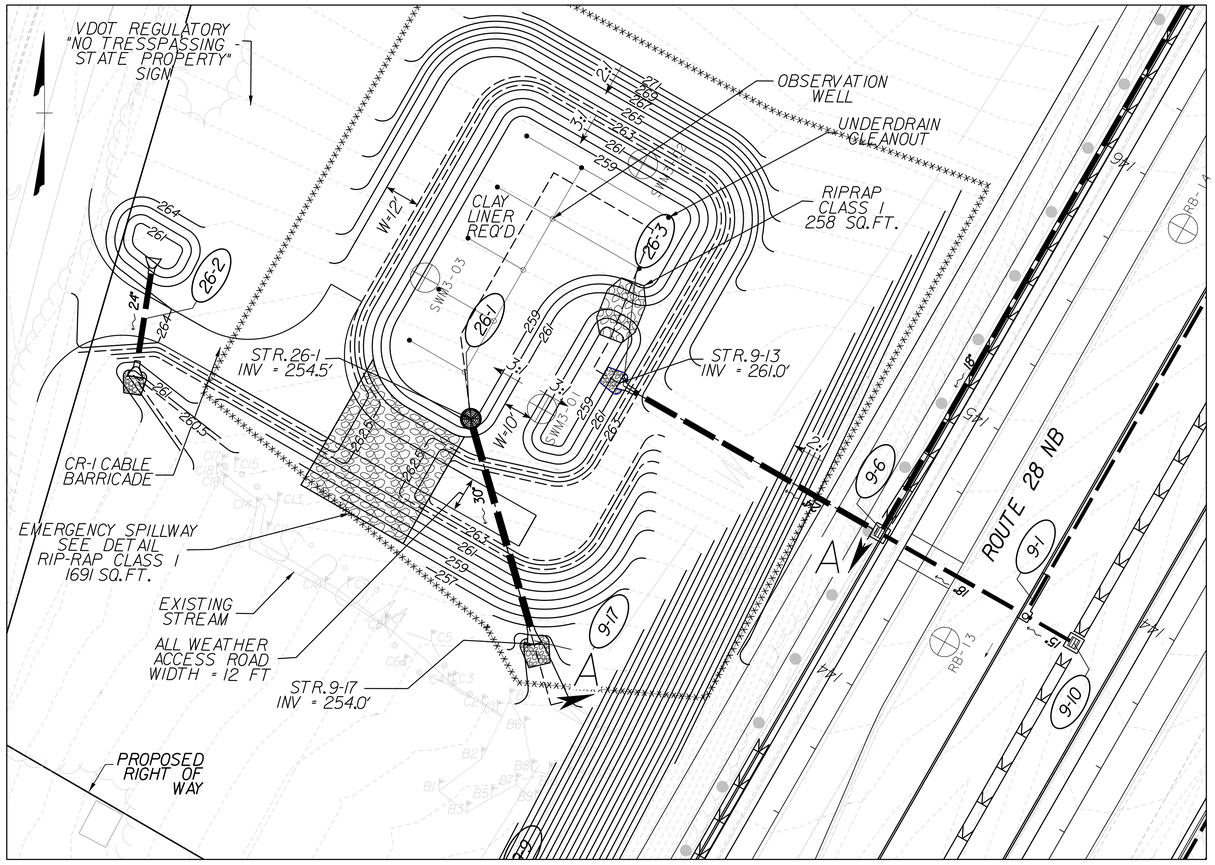

NOTES:

1. WHEN INSTALLING THE STEPS AND TRASH RACK TO THE CONTROL STRUCTURE, THE CONTRACTOR SHALL ENSURE THAT THE STEPS AND TRASH RACK ACCESS DOOR ARE ORIENTED TO THE EMBANKMENT SIDE OF THE CONTROL STRUCTURE, AND TO THE EXTENT POSSIBLE, ARE IN DIRECT ALIGNMENT WITH EACH OTHER.
2. STEPS ARE TO BE INSTALLED ON THE INSIDE OF THE WATER QUALITY STRUCTURE AND ACCESSIBLE FROM THE EMBANKMENT SIDE ON THE OUTSIDE OF THE STRUCTURE.
3. A HINGED, LOCKABLE ACCESS DOOR WITH A MINIMUM 2'X2' CLEAR OPENING, SHALL BE PROVIDED ON ALL TRASH RACKS AND ALIGNED DIRECTLY OVER THE STEPS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPOSED BMP'S ONCE ALL CONNECTIONS HAVE BEEN COMPLETED, AND SHALL CERTIFY THAT THE BMP'S HAVE BEEN MAINTAINED PER MANUFACTURER'S MAINTENANCE GUIDELINES OR IN ACCORDANCE WITH THE TYPICAL INDUSTRY MAINTENANCE STANDARDS. THE BMPS WILL ULTIMATELY BE OWNED AND MAINTAINED BY VDOT ONCE THE PROJECT IS COMPLETE.
5. REMOVE ALL EXISTING TREES WITHIN 15 FEET OF THE EMBANKMENT AND 25 FEET OF THE OUTLET STRUCTURE.
6. INSTALL A METERED ROD IN THE SEDIMENT FOREBAY.
7. WHEN THE BMP IS ACCEPTED, VDOT SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE STORMWATER FACILITY. MAINTENANCE RESPONSIBILITIES SHALL BE ESTABLISHED IN THE REQUIRED DEED OF DEDICATION.

AS-BUILT DRAWING OF STORMWATER MANAGEMENT FACILITIES:

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SWM 3

THIS WATER QUALITY FACILITY TREATS 4.25 ACRES AND ACHIEVES A TOTAL PHOSPHORUS LOAD REDUCTION OF 2.86 LB/YR

SWM 3 Treatment Requirements

BMP Type:	Bioretention	
Level:	1	
Proposed Treatment Area:	4.25	acres
Impervious:	1.84	acres
Managed Turf 'A' Soil:	0.00	acres
Managed Turf 'B' Soil:	0.00	acres
Managed Turf 'D' Soil:	2.14	acres
Forested 'B' Soil:	0.00	acres
Forested 'D' Soil:	0.27	acres
Weighted Rv:	0.54	
Required Tv:	0.19	ac-ft
Required Tv:	8287	cu. ft
Volume From Upstream:	0	cu. ft
Total Tv:	8287	cu. ft
Pre- Treatment Cells:		
Required Volume:	1243	cu. Ft
Provided Volume:	1384	cu. ft

Provided Tv: 9406 *cu.ft
* Taken from stage-storage at 0.5 foot ponding depth

POST - CONDITIONS DISCHARGES

2 YEAR = 4.4 CFS
10 YEAR = 13.7 CFS
100 YEAR = 38.5 CFS

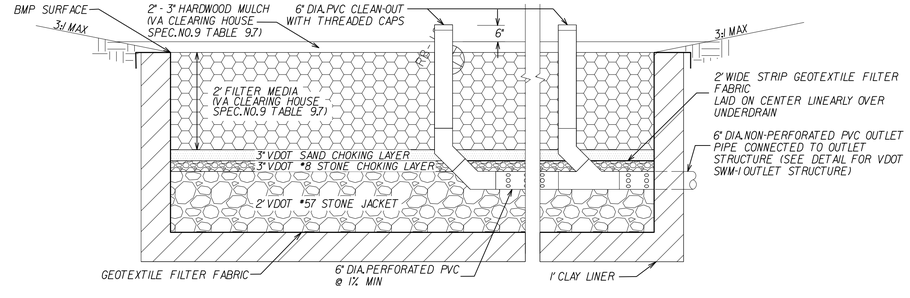
POST - CONDITIONS WATER SURFACE (WS) ELEVATIONS

2 YEAR WS ELEV.= 261.5 FT
10 YEAR WS ELEV.= 261.9 FT
100 YEAR WS ELEV = 262.4 FT

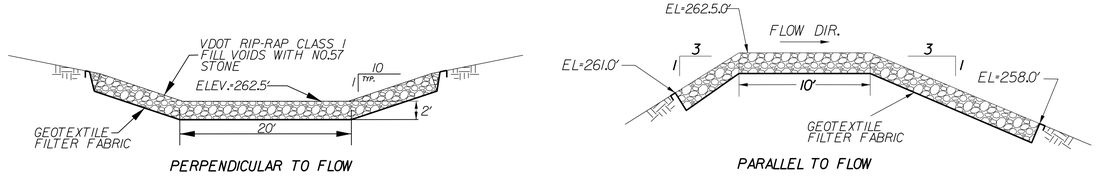
TREATMENT VOLUME PROVIDED = 0.22 ACRE-FT
TREATMENT VOLUME ELEVATION = 260.0 FT

SUMMARY TABLE:

SWM	BIORETENTION FILTER								PRE-TREATMENT METHOD	UNDERDRAIN					OUTLET STRUCTURE		
	DRAINAGE AREA	IMPERVIOUS AREA	SURFACE AREA	SURFACE ELEV.	TOP OF DAM	DESIGN 10-YR WSE	DESIGN 100-YR WSE	FREEBOARD (100-YR)		WATER TABLE ELEV.	UPPER INV.	OUTLET INV.	6" PIPE QUANTITY	NO. OF CLEANOUTS/ OBS. WELLS	STRUCTURE TYPE	TOP OF STR.	INV. (OUT)
	(AC)	(AC)	(SF)	(FT)	(FT)	(FT)	(FT)	(FT)		(FT)	(FT)	(FT)	(LF)			(FT)	(FT)
3	4.25	1.84	6626.0	260.0	263.5	261.9	262.4	1.1	PRE-TREATMENT CELL	NOT ENCOUNTERED	256.3	254.5	270	8/4	RISER STRUCTURE	261.50'	254.5



BIORETENTION - LEVEL I DETAIL
N.T.S.



EMERGENCY SPILLWAY DETAIL
N.T.S.

	PROJECT	SHEET NO.
	0028-029-269	2B(3)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

STORMWATER MANAGEMENT

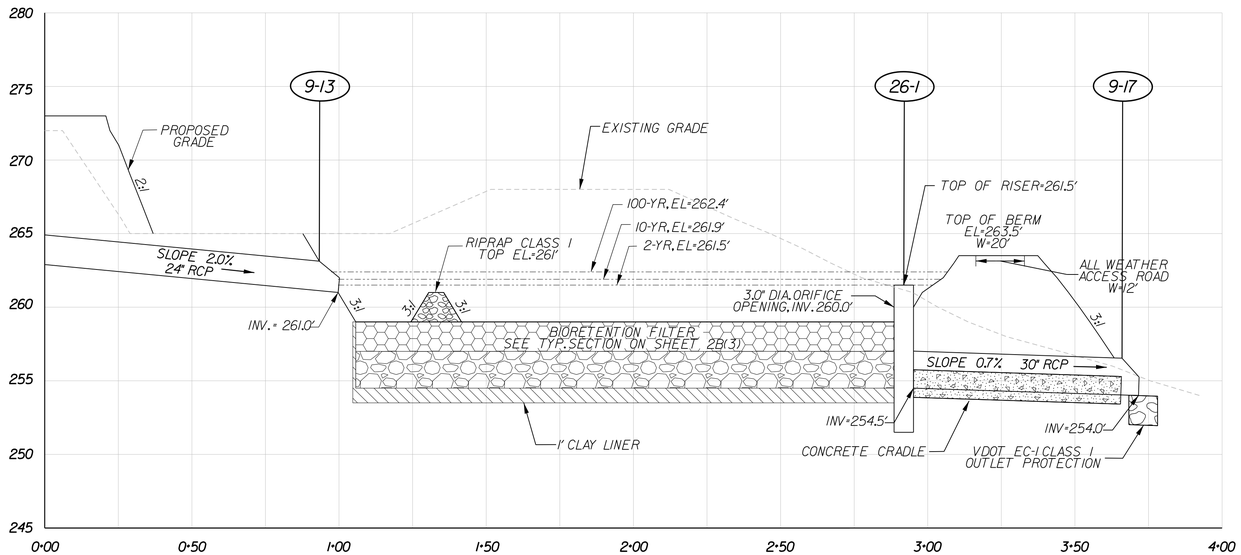
SWM 3 BIORETENTION LEVEL I

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	2B(4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
HYDRAULIC ENGINEER

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

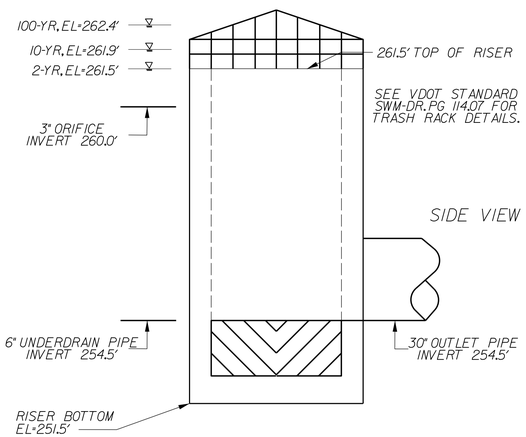


SECTION A-A
SWM 3 BIORETENTION LEVEL I

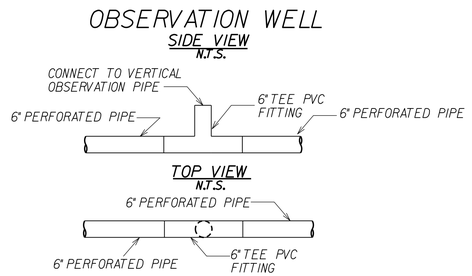
HORIZONTAL 1"=25'
VERTICAL 1"=5'

BIORETENTION LEVEL I DESIGN COMPLIANCE

TV_{req} = (1.0 × Rv × (A/12)) × ANY REMAINING VOLUME FROM UPSTREAM BMP	REQUIRED	TV = (1.0 × 0.54 × (4.25/12)) × 43560 FT/AC = 8287 CU.FT.
	PROVIDED	9406.3 CU.FT AT EL.= 260.0 FT
MAX. DRAINAGE AREA = 2.5 AC (5 WITH APPROVAL)	DA = 4.25 AC IMPERVIOS = 1.84 AC	
MAX. PONDING DEPTH = 6" TO 12"	12"	
FILTER MEDIA DEPTH = 24" TO 48"	24"	
LENGTH OF SHORTEST FLOW PATH/ OVERALL LENGTH = 0.3 OR MORE	SHORTEST PATH (107') / OVERALL (107') = 1.00	
CONVEYANCE AND OVERFLOW	ON-LINE	



RISER STRUCTURE 26-1
(SWM 3) (NTS)



STAGE-STORAGE RELATIONSHIP SWM 3

Elevation (ft)	Discharge (cfs)	Storage (cu.ft)	Storage (ac ft)
256.50	0.00	0	0.000
256.75	0.06	497	0.011
257.00	0.12	870	0.020
259.00	0.20	3443	0.079
260.00	0.20	9406	0.216
261.00	0.20	16728	0.384
261.50	0.20	21217	0.487
262.00	16.86	25705	0.590
263.50	66.64	41927	0.963

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
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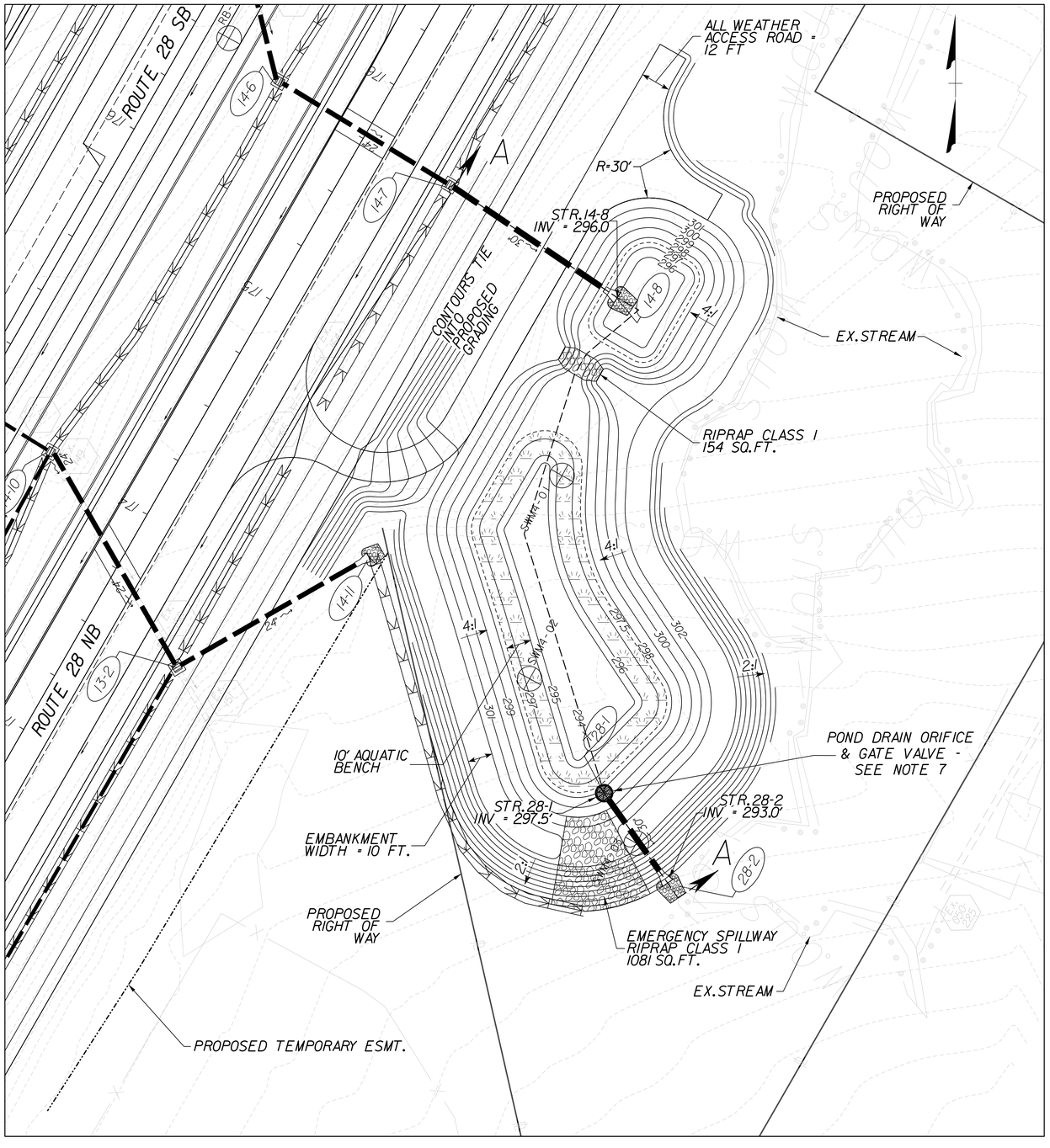
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

STORMWATER MANAGEMENT

SWM 4 WET POND LEVEL 1



REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	2B(5)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
HYDRAULIC ENGINEER

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

NOTES:

1. WHEN INSTALLING THE STEPS AND TRASH RACK TO THE CONTROL STRUCTURE, THE CONTRACTOR SHALL ENSURE THAT THE STEPS AND TRASH RACK ACCESS DOOR ARE ORIENTED TO THE EMBANKMENT SIDE OF THE CONTROL STRUCTURE, AND TO THE EXTENT POSSIBLE, ARE IN DIRECT ALIGNMENT WITH EACH OTHER.

2. STEPS ARE TO BE INSTALLED ON THE INSIDE OF THE WATER QUALITY STRUCTURE AND ACCESSIBLE FROM THE EMBANKMENT SIDE ON THE OUTSIDE OF THE STRUCTURE.

3. A HINGED, LOCKABLE ACCESS DOOR WITH A MINIMUM 2'X2' CLEAR OPENING, SHALL BE PROVIDED ON ALL TRASH RACKS AND ALIGNED DIRECTLY OVER THE STEPS.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPOSED BMP'S ONCE ALL CONNECTIONS HAVE BEEN COMPLETED, AND SHALL CERTIFY THAT THE BMP'S HAVE BEEN MAINTAINED PER MANUFACTURER'S MAINTENANCE GUIDELINES OR IN ACCORDANCE WITH THE TYPICAL INDUSTRY MAINTENANCE STANDARDS. THE BMPS WILL ULTIMATELY BE OWNED AND MAINTAINED BY VDOT ONCE THE PROJECT IS COMPLETE.

5. REMOVE ALL EXISTING TREES WITHIN 15 FEET OF THE EMBANKMENT AND 25 FEET OF THE OUTLET STRUCTURE.

6. INSTALL A METERED ROD IN THE SEDIMENT FOREBAY.

7. GATE VALVE TO BE OF INDUSTRIAL GRADE METAL, COMPLETE WITH APPROPRIATE STEM EXTENSION AND GATE WHEEL. GATE VALVE TO BE CHOSEN BY CONTRACTOR AND APPROVED BY VDOT.

8. 7. WHEN THE BMP IS ACCEPTED, VDOT SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE STORMWATER FACILITY. MAINTENANCE RESPONSIBILITIES SHALL BE ESTABLISHED IN THE REQUIRED DEED OF DEDICATION.

AS-BUILT DRAWING OF STORMWATER MANAGEMENT FACILITIES:

THE CONTRACTOR SHALL PROVIDE 'AS-BUILT' DRAWINGS OF ALL STORMWATER MANAGEMENT FACILITIES LOCATED ON THE SHEET. THE 'AS-BUILT' DRAWINGS SHALL SHOW THE ACTUAL FINISHED GROUND CONTOURS, OUTLET STRUCTURE DIMENSIONS AND ELEVATIONS, ETC. AS THEY EXIST AT THE COMPLETION OF THE PROJECT. THESE DRAWINGS SHALL BE SIGNED AND SEALED BY THE PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF VIRGINIA.

SWM 4

THIS WATER QUALITY FACILITY TREATS 4.84 ACRES AND ACHIEVES A TOTAL PHOSPHORUS LOAD REDUCTION OF 3.42 LB/YR

SWM 4 Treatment Requirements

BMP Type:	Wet Pond	
Level:	1	
Treated Drainage Area:	4.84	acres
Impervious:	2.56	acres *
Managed Turf:	2.28	acres
Wooded:	0.00	acres
Weighted Rv:	0.62	
Required Tv:	0.25	ac-ft
Required Tv:	10897	cu. ft **
Required Tv Elevation:	297.35	ft
Elev Tv Provided:	**297.50**	**ft**
Tv Provided:	**11959**	**cu.ft**

*0.49 acres of impervious land cover removed from treatment requirement because of DS pond ID # 1141DP.

**Required Tv reflects reduction in impervious cover.

POST - CONDITIONS DISCHARGES

2 YEAR = 1.2 CFS
10 YEAR = 14.5 CFS
100 YEAR = 40.0 CFS

POST - CONDITIONS WATER SURFACE (WS) ELEVATIONS

2 YEAR WS ELEV. = 300.1 FT
10 YEAR WS ELEV. = 300.5 FT
100 YEAR WS ELEV = 300.9 FT

TREATMENT VOLUME PROVIDED = 0.27 ACRE-FT
TREATMENT VOLUME ELEVATION = 297.5 FT

SUMMARY TABLE:

SWM	WET POND									OUTLET STRUCTURE	
	DRAINAGE AREA (AC)	PERMANENT POOL AREA (SF)	PERMANENT POOL ELEV. (FT)	TOP OF DAM (FT)	DESIGN 10-YR WSE (FT)	DESIGN 100-YR WSE (FT)	FREEBOARD (100-YR) (FT)	PRE-TREATMENT METHOD	WATER TABLE ELEV. (FT)	STRUCTURE TYPE	TOP OF STR. (FT)
4	7.47	6,220	297.5	302.0	300.5	300.9	1.1	FOREBAY	NOT ENCOUNTERED	SWM-1	300.0

AQUATIC BENCH
0-1.5' POOL DEPTH

SCALE
0 25' 50'

	PROJECT	SHEET NO.
	0028-029-269	2B(5)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

STORMWATER MANAGEMENT

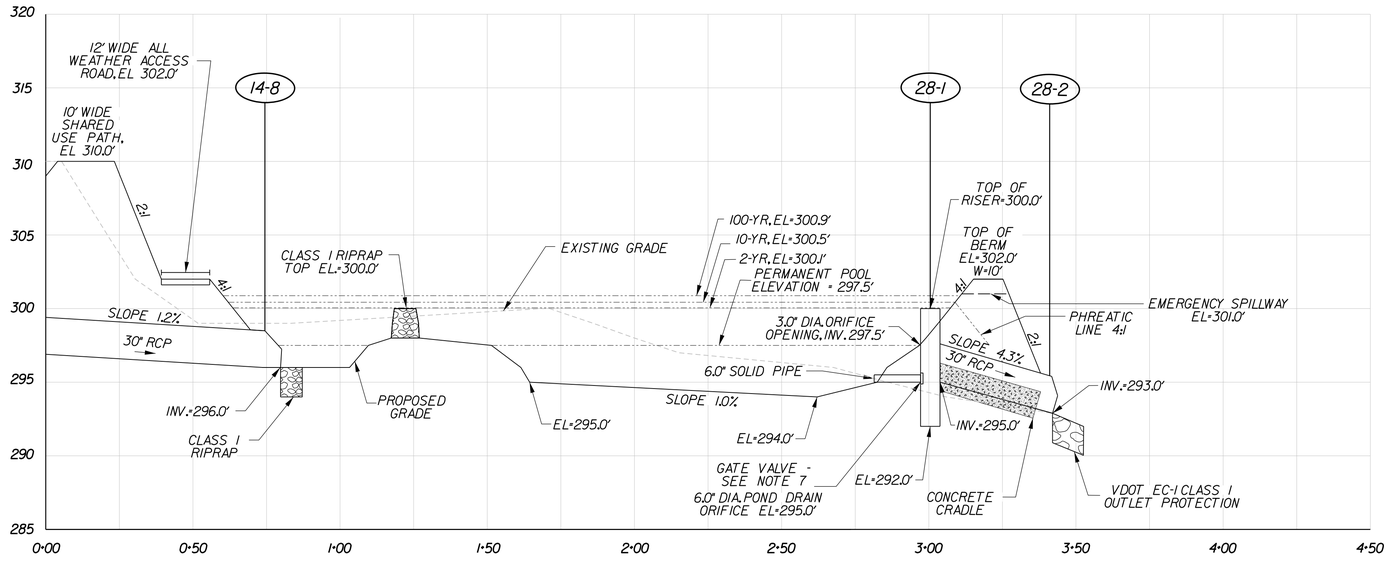
SWM 4 WET POND LEVEL I

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	2B(6)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

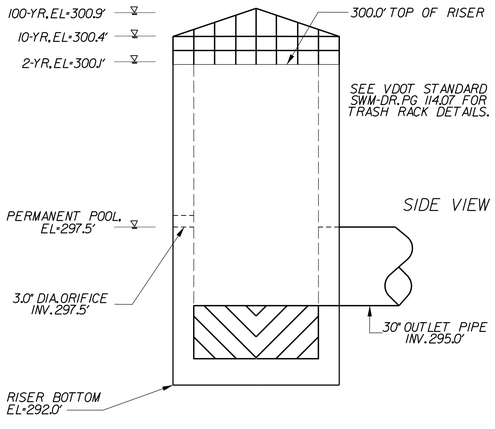
Dewberry Engineers Inc.
Fairfax, Virginia
HYDRAULIC ENGINEER

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

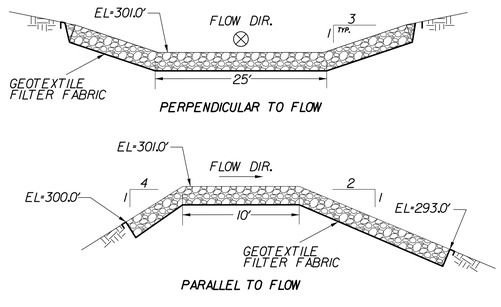


WET POND LEVEL I DESIGN COMPLIANCE

TVBMP = (1.0 * Rv * (A/12)) * ANY REMAINING VOLUME FROM UPSTREAM BMP	REQUIRED	10897 CU.FT.
	PROVIDED	11959 CU.FT AT EL.= 297.5 FT
SINGLE POND CELL (WITH FOREBAY)	PROVIDED	
LENGTH/WIDTH RATIO OR FLOW PATH = 2:1 OR MORE; LENGTH OF SHORTEST FLOW PATH / OVERALL LENGTH = 0.5 OR MORE	LENGTH (200') / WIDTH (77') = 2.6	
	SHORTEST PATH (200') / OVERALL (200') = 1.00	
STANDARD AQUATIC BENCHES	PROVIDED	
TURF IN POND BUFFERS	PROVIDED	
NO INTERNAL POND MECHANISMS	CONDITION MET	



RISER STRUCTURE 28-1
(SWM 4) (NTS)



EMERGENCY SPILLWAY DETAIL

N.T.S.

STAGE-STORAGE RELATIONSHIP SWM 4

Elevation (ft)	Discharge (cfs)	Storage (cu.ft)	Storage (ac.ft)
294.0	0.0	0.0	0.00
295.0	0.0	724.9	0.02
296.0	0.0	3619.7	0.08
297.0	0.0	8509.4	0.20
297.5	0.0	11959.4	0.27
298.0	0.0	16171.2	0.37
299.0	0.0	26505.6	0.61
300.0	0.4	39086.2	0.90
301.0	45.0	54023.0	1.24
302.0	126.4	71688.7	1.65

PROJECT	SHEET NO.
0028-029-269	2B(6)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

STORMWATER MANAGEMENT

SWM 9 UNDERGROUND SAND FILTER

12' x 7' BOX CULVERT, 160' LONG

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	2B(7)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
HYDRAULIC ENGINEER

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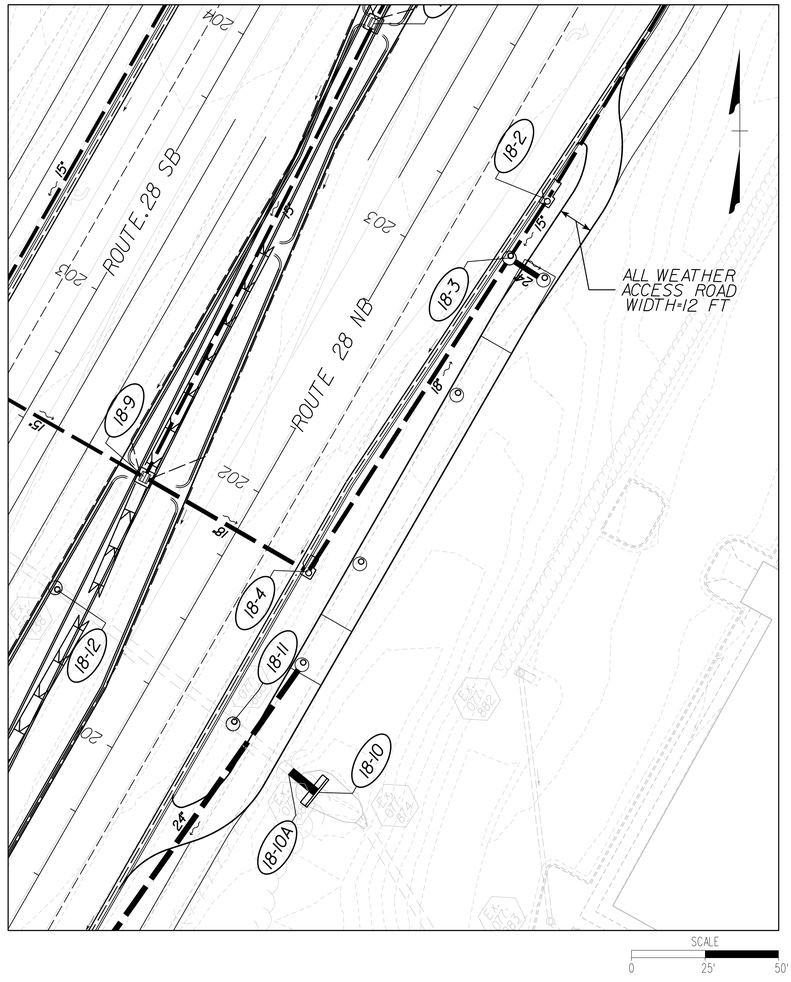
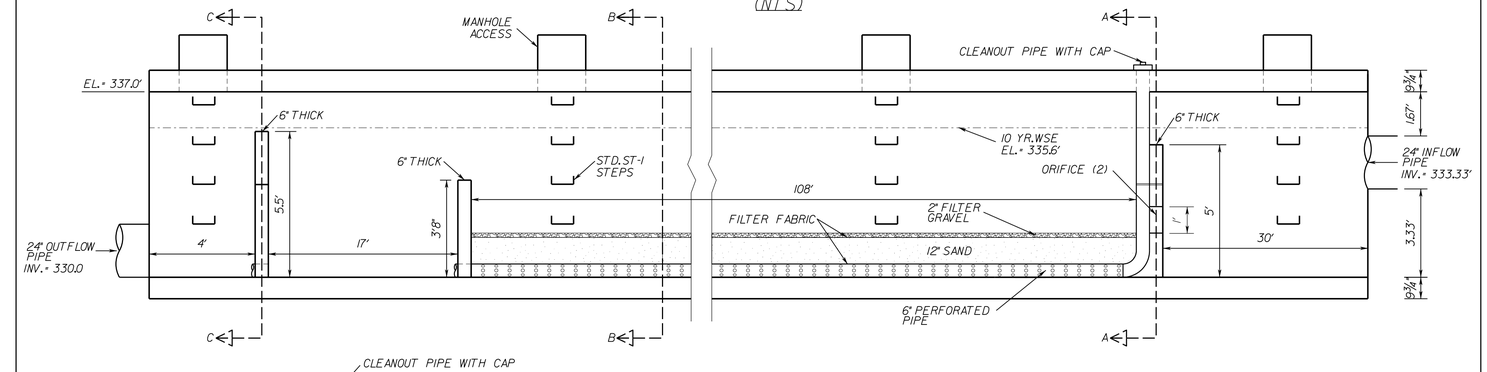
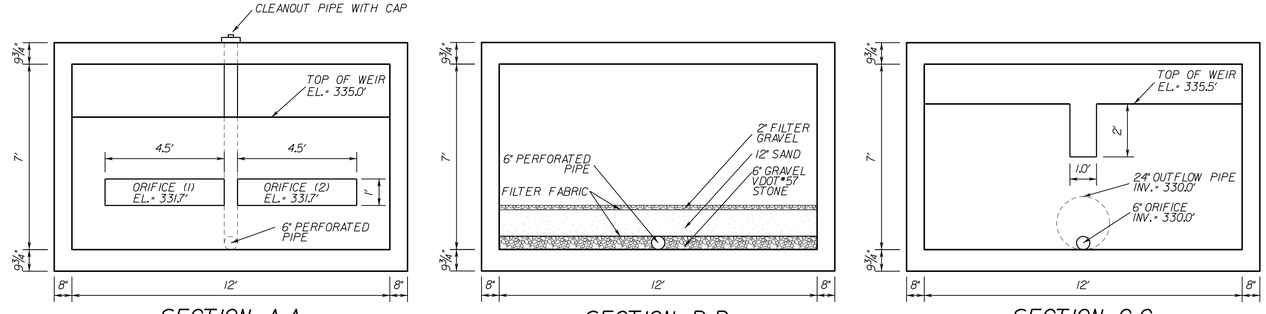


12' x 7' BOX CULVERT / UNDERGROUND SAND FILTER SCHEMATIC

(NTS)





SECTION A-A | SECTION B-B | SECTION C-C

SWM 9

THIS WATER QUALITY FACILITY TREATS 3.26 ACRES AND ACHIEVES A TOTAL PHOSPHORUS LOAD REDUCTION OF 1.95 LB/YR

SWM 9 Treatment Requirements

BMP Type:	Underground Sand Filter	
Level:	1	
Proposed Drainage Area:	1.50	acres
Impervious:	1.50	acres
Managed Turf:	0.00	acres
Wooded:	0.00	acres
Weighted Rv:	0.95	
Required Tv:	0.12	ac-ft
Required Tv:	5173	cu. ft
Required Tv Storage	**3879.75**	**cu.ft** *
Provided Tv Storage	**4392.00**	**cu.ft**

*Required Treatment Volume Storage (V_R) = 0.75(T_V)

POST - CONDITIONS DISCHARGES

2 YEAR = 6.8 CFS
10 YEAR = 13.0 CFS

POST - CONDITIONS WATER SURFACE (WS) ELEVATIONS

2 YEAR WS ELEV.= 334.9 FT
10 YEAR WS ELEV.= 335.6 FT

TREATMENT VOLUME STORAGE PROVIDED = 0.10 ACRE-FT
SURFACE AREA PROVIDED = 1296 SQ FT

NOTES:

1. STEPS ARE TO BE INSTALLED ON THE INSIDE OF THE WATER QUALITY STRUCTURE AND ACCESSIBLE FROM THE MANHOLE ON THE TOP OF THE STRUCTURE.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPOSED BMP'S ONCE ALL CONNECTIONS HAVE BEEN COMPLETED, AND SHALL CERTIFY THAT THE BMP'S HAVE BEEN MAINTAINED PER MANUFACTURER'S MAINTENANCE GUIDELINES OR IN ACCORDANCE WITH THE TYPICAL INDUSTRY MAINTENANCE STANDARDS. THE BMPS WILL ULTIMATELY BE OWNED AND MAINTAINED BY VDOT ONCE THE PROJECT IS COMPLETE.

3. WHEN THE BMP IS ACCEPTED, FAIRFAX COUNTY SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE STORMWATER FACILITY. MAINTENANCE RESPONSIBILITIES SHALL BE ESTABLISHED IN THE REQUIRED DEED OF DEDICATION.

AS-BUILT DRAWING OF STORMWATER MANAGEMENT FACILITIES:

THE CONTRACTOR SHALL PROVIDE 'AS-BUILT' DRAWINGS OF ALL STORMWATER MANAGEMENT FACILITIES LOCATED ON THE SHEET. THE 'AS-BUILT' DRAWINGS SHALL SHOW THE ACTUAL FINISHED GROUND CONTOURS, OUTLET STRUCTURE DIMENSIONS AND ELEVATIONS, ETC. AS THEY EXIST AT THE COMPLETION OF THE PROJECT. THESE DRAWINGS SHALL BE SIGNED AND SEALED BY THE PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF VIRGINIA.

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

STORMWATER MANAGEMENT

SWM 10 UNDERGROUND DETENTION FACILITY

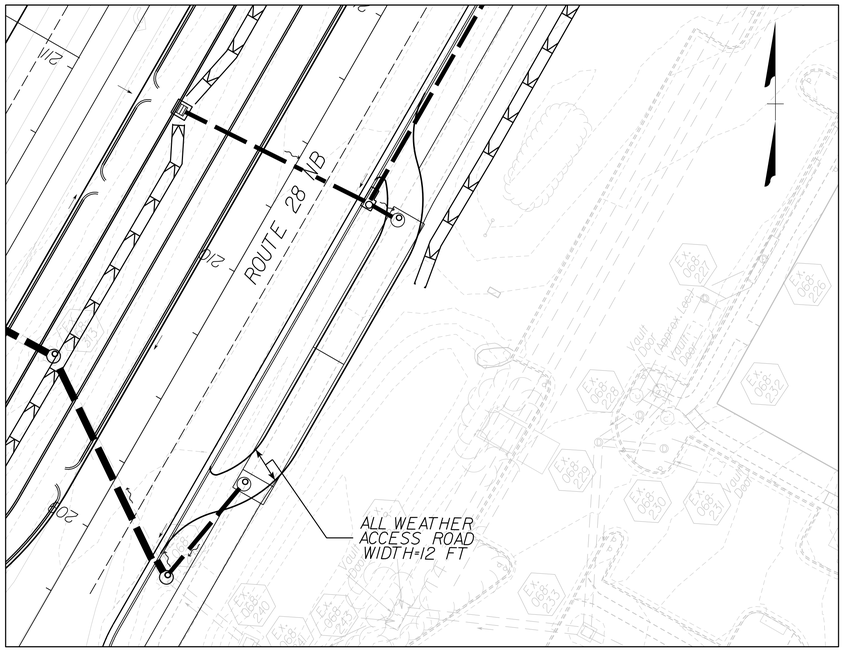
12' x 6' BOX CULVERT, 110' LONG

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	2B(8)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
HYDRAULIC ENGINEER

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



NOTES:

1. STEPS ARE TO BE INSTALLED ON THE INSIDE OF THE WATER QUALITY STRUCTURE AND ACCESSIBLE FROM THE MANHOLE ON THE TOP OF THE STRUCTURE.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPOSED BMP'S ONCE ALL CONNECTIONS HAVE BEEN COMPLETED, AND SHALL CERTIFY THAT THE BMP'S HAVE BEEN MAINTAINED PER MANUFACTURER'S MAINTENANCE GUIDELINES OR IN ACCORDANCE WITH THE TYPICAL INDUSTRY MAINTENANCE STANDARDS. THE BMPS WILL ULTIMATELY BE OWNED AND MAINTAINED BY VDOT ONCE THE PROJECT IS COMPLETE.

3. WHEN THE BMP IS ACCEPTED, FAIRFAX COUNTY SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE STORMWATER FACILITY. MAINTENANCE RESPONSIBILITIES SHALL BE ESTABLISHED IN THE REQUIRED DEED OF DEDICATION.

AS-BUILT DRAWING OF STORMWATER MANAGEMENT FACILITIES:

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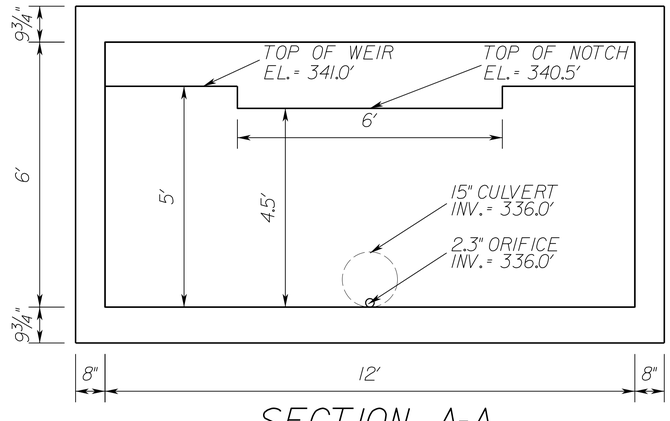
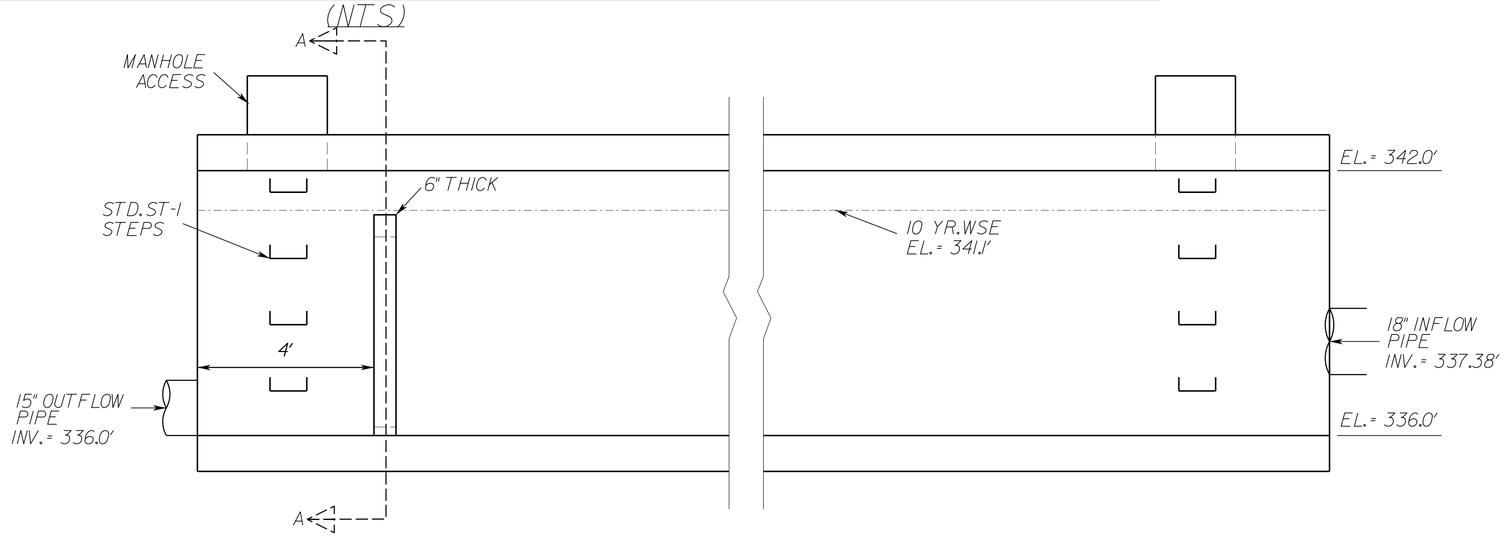
12' x 6' BOX CULVERT / UNDERGROUND DETENTION SCHEMATIC

(NTS)



SECTION A-A



PROJECT	SHEET NO.
0028-029-269	2B(8)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

STORMWATER MANAGEMENT

SWM II UNDERGROUND DETENTION FACILITY

12' X 7' BOX CULVERT, 80' LONG

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	2B(9)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
HYDRAULIC ENGINEER

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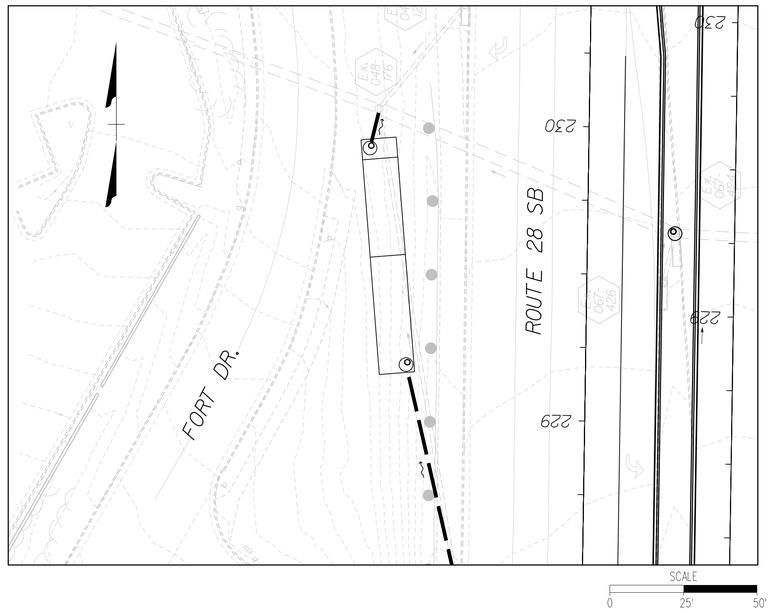


NOTES:

1. STEPS ARE TO BE INSTALLED ON THE INSIDE OF THE WATER QUALITY STRUCTURE AND ACCESSIBLE FROM THE MANHOLE ON THE TOP OF THE STRUCTURE.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPOSED BMP'S ONCE ALL CONNECTIONS HAVE BEEN COMPLETED, AND SHALL CERTIFY THAT THE BMP'S HAVE BEEN MAINTAINED PER MANUFACTURER'S MAINTENANCE GUIDELINES OR IN ACCORDANCE WITH THE TYPICAL INDUSTRY MAINTENANCE STANDARDS. THE BMPS WILL ULTIMATELY BE OWNED AND MAINTAINED BY VDOT ONCE THE PROJECT IS COMPLETE.

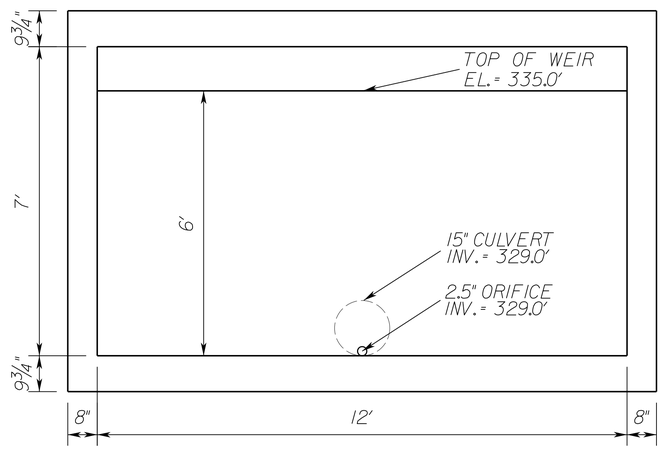
3. WHEN THE BMP IS ACCEPTED, FAIRFAX COUNTY SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE STORMWATER FACILITY. MAINTENANCE RESPONSIBILITIES SHALL BE ESTABLISHED IN THE REQUIRED DEED OF DEDICATION.

AS-BUILT DRAWING OF STORMWATER MANAGEMENT FACILITIES:

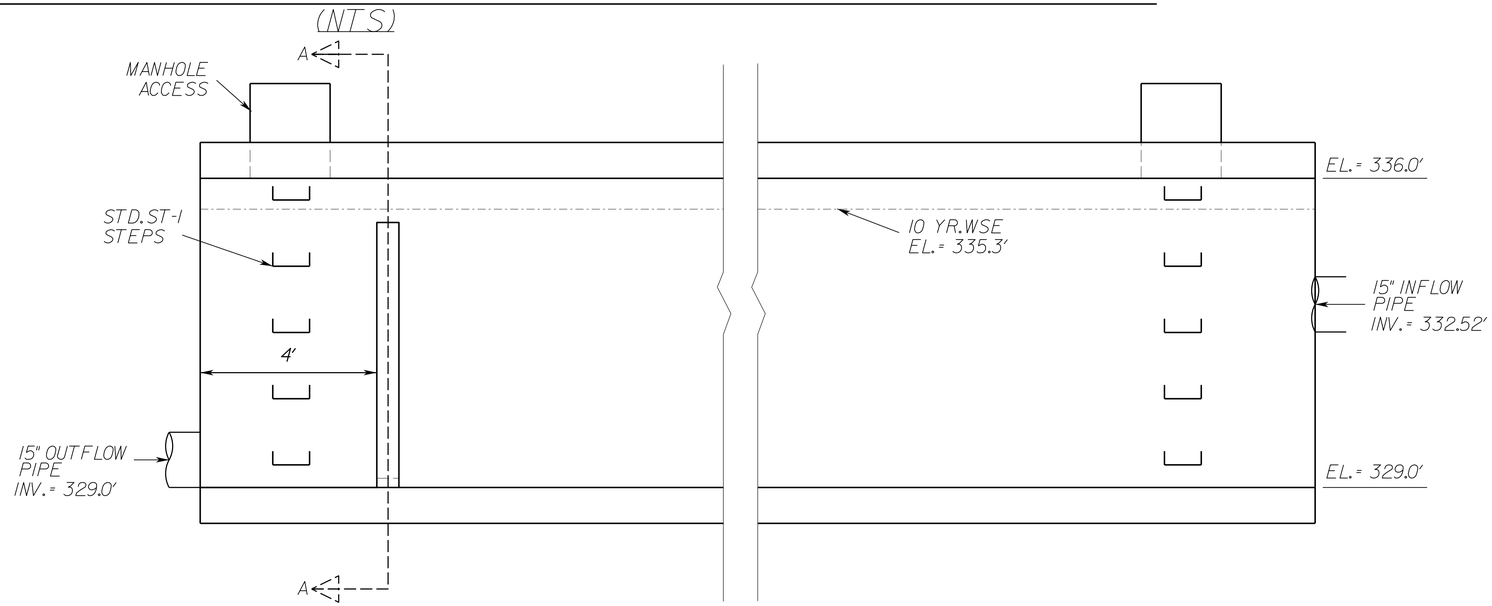
THE CONTRACTOR SHALL PROVIDE 'AS-BUILT' DRAWINGS OF ALL STORMWATER MANAGEMENT FACILITIES LOCATED ON THE SHEET. THE 'AS-BUILT' DRAWINGS SHALL SHOW THE ACTUAL FINISHED GROUND CONTOURS, OUTLET STRUCTURE DIMENSIONS AND ELEVATIONS, ETC. AS THEY EXIST AT THE COMPLETION OF THE PROJECT. THESE DRAWINGS SHALL BE SIGNED AND SEALED BY THE PROFESSIONAL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF VIRGINIA.

12' x 7' BOX CULVERT / UNDERGROUND DETENTION SCHEMATIC

(NTS)



SECTION A-A



PROJECT	SHEET NO.
0028-029-269	2B(9)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

EROSION AND SEDIMENT CONTROL GENERAL NOTES

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	2D

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

PROJECT DESCRIPTION

This Project Widens Existing Route 28 (Centreville Road) From 2 Lanes In Each Directions To 3 Lanes In Each Direction From The Fairfax County/Prince William County Line To The Route 29 Interchange. The Approximate Length Of The Project Is 2.5 Miles. The Purpose Is To Provide This Corridor An Improved Facility For Increasing Traffic Volumes. The Project Will Also Improve The Side Roads Connected To Route 28 Throughout The Corridor.

The Phase 1B(0), 1B(1)/2, and 3 Erosion And Sediment Control Plans Herein Are To Be Coordinated With The Phase 1B(1), 2, 3A, and 3B Construction/TTC Design Plans. The Total Disturbed Area Of This Project Is Approximately 66.64 Acres.

SITE CONDITIONS & ADJACENT AREAS

Currently The 4-Lane Section Of Route 28 Runs From The Route 29 Interchange To The Fairfax County/Prince William County Line Where The Road Continues With The 4-Lane Section To The South. There Are No Bridges Within The Project Area Of Route 28 (Centreville Road). Land Adjacent To Route 28 Includes Dense Vegetation And Heavily Wooded Areas As Well As Neighborhood Subdivisions/Commerical Developments On Both Sides of Route 28 South Of Old Mill Road/Green Trails Blvd. To The East Of Route 28, and North Of Green Trails Blvd. Is Centreville Elementary School. Within The Northern Region Of The Project Is A More Commercially Developed Area. To The East Of Route 28, and North Of New Braddock Road Is A Small Professional Center With 5 Buildings Containing Doctors Offices, Banks, And A Children's School Academy Which Will Be Slightly Effected By The Project. At The Northern Most Part Of The Job Is A Mcdonalds And Burger King As Well As Multiple Townhouse Subdivisions (All Located On Either Side Of Route 28).

PERMANENT AND TEMPORARY SEEDING

The Project Shall Be Stabilized After Construction By Providing Permanent Seeding. Permanent Or Temporary Soil Stabilization Shall Be Applied To Denuded Areas Within Seven Days After Final Grading Is Reached On Any Portion Of The Site. Temporary Soil Stabilization Shall Be Applied Within Seven Days To Denuded Areas That May Not Be At Final Grade But Will Remain Dormant For Longer Than Fourteen Days. Permanent Soil Stabilization Shall Be Applied To Areas That Are To Be Left Dormant For More Than Six Months. For Winter Stabilization, Any Area Denuded For More Than Fourteen Days After November 1 And Before March 1 Shall Be Mulched And Seeded Appropriate To The Season And Site Conditions. Preparation Of Areas For Permanent Stabilization Shall Be Performed In Accordance With Standard Specification *3.32 Of The Virginia Erosion And Sediment Control Handbook (VESCH).

OFF-SITE AREAS

At The Time Of Plan Preparation, No Off Site Locations For Borrow Or Waste Material Were Considered Necessary. It Is The Responsibility Of The Contractor To Make Sure These Sites (If Needed) Conform To All Pertinent Current Virginia Codes And Standards And That The Proper Permits Have Been Obtained.

CRITICAL AREAS

Jurisdictional Waters Of The United States And Wetland Areas Have Been Denoted On The Phase 1B(0) Erosion And Sediment Control Plans. These Critical Areas Shall Be Demarcated By Orange Safety Fence And/Or Flagged Prior To The Start Of Any Adjacent Construction Activities. Jurisdictional Areas Delineated On The Plans Shall Only Be Impacted As Approved And Permitted.

STORM WATER RUNOFF CONSIDERATION

Stormwater Runoff Will Be Addressed, As Necessary, By The Erosion And Sediment Control Measures Denoted On The Erosion And Sediment Control Plans.

MAINTENANCE PROGRAM

The Contractor Shall Make A Visual Inspection Of All Mechanical Controls And Newly Stabilized Areas (I.E. Seeded And Mulched, Or Sodded Areas) On A Daily Basis And After Each Rainfall Event To Ensure That All Controls Are Functioning Properly. The Following Items Will Be Checked Regularly. In Particular: The Silt Fence Barrier Will Be Checked For Undermining, Collapse, Or Deterioration Of The Fabric: And The Seeded Areas Will Be Checked To Ensure That A Good Stand Of Grass Is Maintained. Any Denuded Areas Shall Be Re-Seeded, Mulched, And Fertilized As Required. Any Damaged Controls Shall Be Repaired By The End Of The Work Day, Including Re-Seeding And Mulching If Necessary. The Contractor May Install Additional Measures As Deemed Necessary And At The Approval Of The Project's ESC Inspector.

EROSION AND SEDIMENT CONTROL MEASURES

All Vegetative And Structural Erosion And Sediment Control Practices Shall Be Constructed And Maintained According To The Minimum Standards And Specifications Detailed In The Virginia Erosion And Sediment Control Handbook (VESCH) 3rd Edition, 1992, And Shall Be Adhered To Unless Otherwise Waived Or Approved By A Variance.

EROSION AND SEDIMENT CONTROL NARRATIVE

Each E&S Phase Follows The Construction Sequence Detailed By The Temporary Traffic Control Plans.

*Maintain E&S Measures On A Regular Basis As Outlined In VESCH.

**The Contractor Is Not To Disturb Areas Beyond The Limits Of Disturbance (LOD) Shown On The Plans And Is Not To Drive Equipment Or Place Equipment Or Supplies Beyond The LOD.

Phase 1B(0)

The Purpose Of The E&S Phase 1B(0) Is To Protect Existing Conditions And Set Perimeter Controls. Conflicting Protections From Phase 1A Shall Be Removed Or Moved As Specified In The Plans. If Disturbance Is Necessary In An Area Where Final Right Of Way Has Not Yet Been Acquired, E&S Controls Shall Be Placed At The Existing Right Of Way Line.

E&S Sequence Of Construction

1. Flag Limits Of Wetlands Which Are Not To Be Disturbed.

2. Complete Clearing As Needed To Construct E&S Controls.

3. Place Silt Fences And Safety Fences Around Wetlands As Shown In Plans.

4. Install Silt Fence, Check Dams, Inlet Protection, Culvert Protections, Temporary Diversion Channels, And Temporary Diversion Dikes Along Job Site Where Disturbance Is Anticipated. Install sediment traps as detailed in E&S plans and accompanying computations.

5. Provide Temporary Seeding And Mulch To Denuded Areas And Stockpiles Within 7 Days If Not Planned To Be Disturbed Within 14 Days.

Phase 1B(1)/2

The Purpose Of The E&S Phase 1B(1)/2 Is To Facilitate Full Construction Of Portions Of Route 28, Medians, Private Entrances, And Side Roads. The Full Construction Begins In TTC Stage 1B And Continues In Phase 2. The Pavement Is Milled Down In Phase 1B And In Phase 2, Asphalt Is Overlayed On Previously Milled Areas. TTC Stage 1B And 2 Disturb The Same Area, So Both Stages Are Protected Concurrently In One E&S Phase.

Refer To TTC Stage 1B And TTC Stage 2 On The Temporary Traffic Control Sequence Of Construction Sheet For A Detailed Description Of The Roadway Construction That Will Take Place At The Time This E&S Phase Is In Place.

E&S Sequence Of Construction

1. Install Silt Fence, Check Dams, Inlet Protection, And Culvert Protections Along Job Site Where Disturbance Is Anticipated (As Shown In Plans). Modify Previously Constructed Protections As Outlined In Plans.

2. Construct Sediment Basin As Shown In The Storm Water Management Detail Sheets. Maintain Protections Around Basins Until Storm Sewer Outlet Structures Are Completed Or As Shown In Future Erosion And Sediment Control Phases.

3. Construct Permanent And Temporary Drainage Structures As Shown In This Phase To Facilitate Proper Water Removal Off-Site Prior To Roadway Improvements.

4. In The Median, Set Proposed Inlet Tops To Temporary Grade Until Construction Of The Median Is Completed In A Future Phase. Set The Tops Of Curb Inlets To Temporary Grade Until The Curb Is Constructed.

5. Ensure Protections Around Sediment Basin And Stormwater Management Ponds Are In Place From Previous Phase.

Phase 3A/3B

The Purpose Of The E&S Phase 3A/3B Is To Complete Full Construction Of The Remainder Of Route 28 Permanent Pavement, Medians, Driveways, And Side Roads, As Well As Pave To Finished Grade In All Areas Along The Project. TTC Stage 3B Continues The Same Construction As In Stage 3A But Adds Additional Areas Where New Construction Will Be Completed. Both Stages Are Protected Concurrently In E&S Phase 3A/3B.

Refer To TTC Stage 3A And TTC Stage 3B On The Temporary Traffic Control Sequence Of Construction Sheet For A Detailed Description Of The Roadway Construction That Will Take Place At The Time This E&S Phase Is In Place.

E&S Sequence Of Construction

1. Install Silt Fence And Check Dams Along Job Site Where Disturbance Is Anticipated (As Shown In Plans). Modify Previously Constructed Protections As Outlined In Plans.

2. Install Inlet Protections On Any Structures Not Previously Protected In Prior Phases.

3. Construct Permanent And Temporary Drainage Structures As Shown In This Phase To Facilitate Proper Water Removal Off-Site Prior To Roadway Improvements.

4. Adjust Any Permanent Drainage Structures To Finished Grade Elevations.

5. As Permanent Construction Is Completed And The Disturbed Area Is Permanently Stabilized, Conflicting Diversions And Other Protections Will Be Removed And Proposed Structures Will Be Protected As Seen In Future Phases.

STRUCTURAL PRACTICES

Safety Fence 3.01

Safety Fence Shall Be Used To Prohibit The Undesirable Use Of An Erosion Control Measure By The Public. Safety Fence Shall Be Checked Regularly For Weather-Related Or Other Damage. Any Necessary Repairs Must Be Made Immediately.

Temporary Stone Construction Entrance 3.02

Temporary Stone Construction Entrances Shall Be Used To Reduce The Amount Of Mud Transported Onto Paved Public Roads By Motor Vehicles Or Runoff, If The Conditions Of The Site Are Such That The Majority Of The Mud Is Not Removed By The Vehicle Traveling Over The Stone, Then The Tires Of The Vehicle Must Be Washed Before Entering The Public Road. The Entrance Shall Be Maintained In A Condition Which Will Prevent Tracking Or Flow Of Mud Onto The Public Roadway. The Construction Entrance Will Be Checked Regularly And May Require Periodic Top Dressing With Stones Or The Washing And Reworking Of Existing Stone As Conditions Demand. (Per VDOT Std. Ec-11)

The Minimum Length For A Temporary Gravel Construction Entrance Must Be 75 Feet And A Woven Filter Fabric Underliner Is Required. If The Action Of Vehicles Traveling Over The Gravel Pad Is Not Sufficient To Remove The Majority Of The Mud, Then A Wash Rack Is Required With An Appropriate Water Source To Wash The Mud Off The Tires Before Entering The Public Road.

Silt Fence/Super Silt Fence 3.05

Silt Fence And Super Silt Fence Shall Be Used To Intercept And Detain Small Amounts Of Sediment From Disturbed Areas Of Limited Extent In Order To Prevent Sediment From Leaving The Construction Site And To Decrease The Velocity Of Sheet Flows. Silt Fence And Super Silt Fence Shall Be Inspected Immediately After Each Rainfall And At Least Daily During Prolonged Rainfall. Any Required Repairs Shall Be Made Immediately. Sediment Deposit Should Be Removed After Each Storm Event. Sediment Deposits Must Be Removed When Deposits Reach Approximately One-Half The Height Of The Barrier. (Super Silt Fence Per Ffx. Co. PFM Plate 5-11)

Storm Drain Inlet Protection 3.07

Storm Drain Inlet Protection Shall Be Used To Prevent Sediment From Entering Storm Drain Systems Prior To Permanent Stabilization Of The Disturbed Area. The Structure Shall Be Inspected After Each Rain Event And Repairs Made As Needed. Sediment Shall Be Removed And The Trap Restored To It's Original Dimensions When The Sediment Has Accumulated To One Half The Design Depth Of The Control. Removed Sediment Shall Be Deposited In A Suitable Area And In Such A Manner That It Will Not Erode. (Per VDOT Std. Ec-6 Ty. A And B)

Culvert Inlet Protection 3.08

Culvert Inlet Protection Shall Be Used To Prevent Sediment From Entering, Accumulating In And Being Transferred By A Culvert And Associated Drainage System Prior To Permanent Stabilization Of A Disturbed Project Area And Also To Provide Erosion Control At Culvert Inlets During The Phase Of Construction Where Elevations And Drainage Patterns Change, Causing Original Control Measures To Be Ineffective Or In Need Of Removal. (Per VDOT Std. Ec-6 Ty. C)

Temporary Diversion Dike 3.09

Temporary Diversion Dikes Shall Be Used To Divert Storm Runoff From Upslope Drainage Areas Away From Unprotected Disturbed Areas And Slopes To A Stabilized Outlet Or A Sediment-Trapping Facility. Diversion Dikes Shall Be Inspected After Every Storm And Repairs Made As Necessary.

Diversion 3.10

Diversions Shall Be Used To Reduce Slope Lengths And To Intercept And Divert Stormwater Runoff To Stabilized Outlets At Non-Erosive Velocities. Diversions Shall Have Adequate Outlets Which Will Convey Concentrated Runoff Without Erosion. Before Final Stabilization, The Diversion Should Be Inspected After Every Rainfall And At Least Once Every Two Weeks. Sediment Shall Be Removed From The Channel

Temporary Sediment Trap 3.13

Sediment Traps Shall Be Constructed As A First Step In Any Land-Disturbing Activity And Shall Be Made Functional Before Upslope Land Disturbance Takes Place. Sediment Must Be Periodically Removed From The Trap To Maintain The Required Volume. Sediment Traps Must Be Removed After The Contributing Drainage Area Is Stabilized. Sediment Shall Be Removed And The Trap Restored To Its Original Dimensions When The Sediment Has Accumulated To One Half The Design Volume Of The Wet Storage. Sediment Removal From The Basin Shall Be Deposited In A Suitable Area And In Such A Manner That It Will Not Erode And Cause Sedimentation Problems. Filter Stone Shall Be Regularly Checked To Ensure That Filtration Performance Is Maintained. Stone Choked With Sediment Shall Be Removed And Cleaned Or Replaced. The Structure Should Be Checked Regularly To Ensure That It Is Structurally Sound And Has Not Been Damaged By Erosion Or Construction Equipment. The Height Of The Stone Outlet Should Be Checked To Ensure That Its Center Is At Least 1 Foot Below The Top Of The Embankment.

Outlet Protection 3.18

Outlet Protection Shall Be Used To Prevent Scour At Storm Water Outlets, To Protect The Outlet Structure, And To Minimize The Potential For Downstream Erosion By Reducing The Velocity And Energy Of Concentrated Storm Water Flows. (Per VDOT Std. Ec-1)

Rip Rap 3.19

Rip Rap Shall Be Used To Protect The Soil From Erosive Forces Of Concentrated Runoff, To Slow The Velocity Of Concentrated Runoff While Enhancing The Potential For Infiltration, And To Stabilize Slopes With Seepage Problems And/Or Non-Cohesive Soils. Rip Rap Should Require Very Little Maintenance If Installed Properly.

Rock Check Dams 3.20

Rock Check Dams Shall Be Used To Reduce The Velocity Of Concentrated Storm Water Flows, Thereby Reducing Erosion Of The Swale Or Ditch. This Practice Also Traps Sediment Generated From Adjacent Areas Or The Ditch Itself, Mainly By Ponding Of Storm Water Runoff. Check Dams Should Be Checked For Sediment Accumulation After Each Runoff Producing Storm Event. Sediment Should Be Removed When It Reaches One Half Of The Original Height Of The Control. (Per VDOT Std. Ec-4)

Temporary Seeding 3.31

Temporary Seeding Shall Be Used To Reduce Erosion And Sedimentation By Stabilizing Disturbed Areas That Will Not Be Brought To Final Grade For A Period Of More Than 14 Days.

Permanent Seeding 3.32

All Areas Disturbed By Construction Shall Be Stabilized With Permanent Seeding Immediately Following Finished Grading. Seeding Shall Be Done According To The Virginia Erosion And Sediment Control Handbook Standard And Specification *3.32, Permanent Seeding.

Dust Control 3.39

Dust Control Shall Be Used To Prevent Surface And Air Movement Of Dust From Exposed Soil Surfaces And Reduce The Presence Of Airborne Substances Which May Present Health Hazards, Traffic Safety Problems Or Harm Animal Or Plant Life.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. Unless Otherwise Indicated, All Vegetative And Structural Erosion And Sediment Control Practices Will Be Constructed And Maintained According To Minimum Standards And Specifications Of The Virginia Erosion And Sediment Control Handbook And Virginia Regulations 4Vac50-30 Erosion And Sediment Control Regulations.

2. The Plan Approving Authority Must Be Notified One Week Prior To The Pre-Construction Conference, One Week Prior To The Commencement Of Land Disturbing Activity, And One Week Prior To The Final Inspection.

3. All Erosion And Sediment Control Measures Are To Be Placed Prior To Or As The First Step In Clearing.

4. A Copy Of The Approved Erosion And Sediment Control Plan Shall Be Maintained On Site At All Times.

5. Prior To Commencing Land Disturbing Activities In Areas Other Than Indicated On These Plans (including, But Not Limited To, Off Site Borrow Or Waste Areas), The Contractor Shall Submit A Supplementary Erosion Control Plan To The Owner For Review And Approval By The Plan Approving Authority.

6. The Contractor Is Responsible For Installation Of Any Additional Erosion Control Measures Necessary To Prevent Erosion Sedimentation As Determined By The Plan Approving Authority.

7. The Contractor Shall Inspect All Erosion Control Measures Periodically And After Each Runoff Producing Rain Event. Any Necessary Repairs Or Cleanup To Maintain Effectiveness Of The Erosion Control Devices Shall Be Made Immediately.

8. The Project's ESC Inspector Has The Authority To Add Or Delete Erosion And Sediment Control Measures As Site Conditions Warrant.

9. All Temporary Widening Or Shoulder Strengthening Implemented On The High Side Of A Superelevated Section Of Roadway Shall Be Constructed In Such A Manner As To Provide Positive Drainage Toward The Adjacent Erosion And Sediment Control Measures And Prevent Sediment Discharge Across The Existing Roadway Until The Work Area Is Stabilized And The Top Course Of Temporary Pavement Is In Place.

10. In Relation To Stage 1A General Note *36 (See Sheet 1K), If Through Field Measurements The Existing Pavement Width Is Sufficient To Not Require Construction Of Temporary Pavement Or Shoulder Widening, The Erosion And Sediment Control Measures Shown Herein To Control Runoff From Said Areas Where Land Disturbance Has Been Removed Will Not Be Required. These Modifications To The Erosion And Sediment Control Measures Shall Be Coordinated And Approved From The Projects' ESC Inspector Prior To Implementation.

This Erosion & Sediment Control Plan Is Consistent With The Following Minimum Standards:

MS-1 All Denuded Areas Requiring Temporary Or Permanent Stabilization Shall Be Stabilized.
MS-2 All Stockpiles Shall Be Stabilized With Seeding And/Or Controlled With Sediment Trapping Measures.
MS-3 Permanent Vegetation Shall Provide Adequate Stabilization.
MS-4 Sediment Trapping Facilities Shall Be Constucted As A First Step In Land Disturbing Activities.
MS-5 Sediment Trapping Measures Constructed Of Earth Shall Be Stabilized.
MS-6 Sediment Traps Shall Be Installed Where Needed In Locations Shown On The Plans.
MS-7 Finished Cut And Fill Slopes Shall Be Adequately Stabilized.
MS-8 Concentrated Runoff On Cut And Fill Slopes Shall Be Concentrated Within A Temporary Or Permannent Channel, Flume, Or Slope Drain Structure.
MS-9 Adequate Drainage Or Protection Shall Be Provide If Water Seeps From A Slope Face.
MS-10 All Operational Storm Sewer Inlets Shall Have Adequate Inlet Protection.
MS-11 Stormwater Conveyance Channels Are Not Applicable To This Project.
MS-12 Live Watercourse Precautions Are Not Applicable To This Project.
MS-13 Temporary Stream Crossings Are Not Applicable To This Project.
MS-14 Live Watercourse Work Is Not Applicable To This Project.
MS-15 Stream Beds Shall Be Restablilized After Consruction Is Complete.
MS-16 Utility Trenches Shall Be Stabilized Properly.
MS-17 Soil And Mud Must Be Kept Off Public Roadways At Intersections With Site Access Roads.
MS-18 Temporary Control Structures Shall Be Removed When No Longer Needed.
MS-19 Properties And Waterways Downstream From Development Shall Be Adequately Protected From Erosion And Sediment Deposition.

	PROJECT	SHEET NO.
	0028-029-269	2D

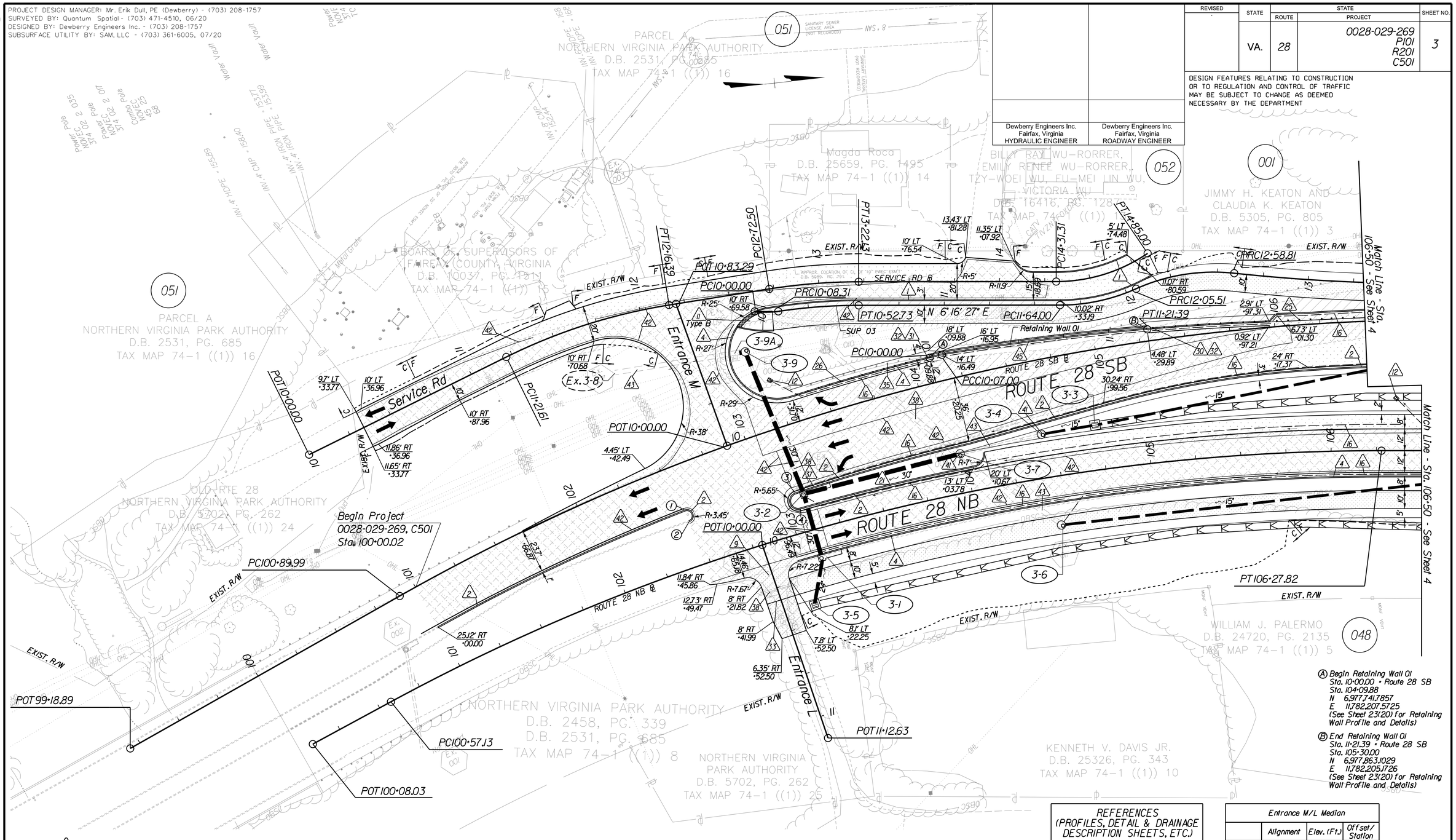
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	3

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER



Ⓐ Begin Retaining Wall 01
Sta. 10+00.00 • Route 28 SB
Sta. 104+09.88
N 6,977,741.7857
E 11,782,207.5725
(See Sheet 23(20) for Retaining Wall Profile and Details)

Ⓑ End Retaining Wall 01
Sta. 11+21.39 • Route 28 SB
Sta. 105+30.00
N 6,977,863.1029
E 11,782,205.1726
(See Sheet 23(20) for Retaining Wall Profile and Details)

Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. MS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-WI, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGS1 Req'd.
24 Guardrail, Std. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Acharage, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(1)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(1)
E&S Phase 3	2G(1)
Profiles	3A-3B
Drainage Descriptions	33

Entrance M/L Median

	Alignment	Elev. (Ft.)	Offset/ Station
1	SB Rte. 28	180.98	25' RT •54.51
2	NB Rte. 28	180.51	24.82' LT •46.18
3	SB Rte. 28	181.80	37' RT •16.87
4	NB Rte. 28	181.62	13' LT •05.99

SCALE	PROJECT	SHEET NO.
0 25' 50'	0028-029-269	3

Dewberry

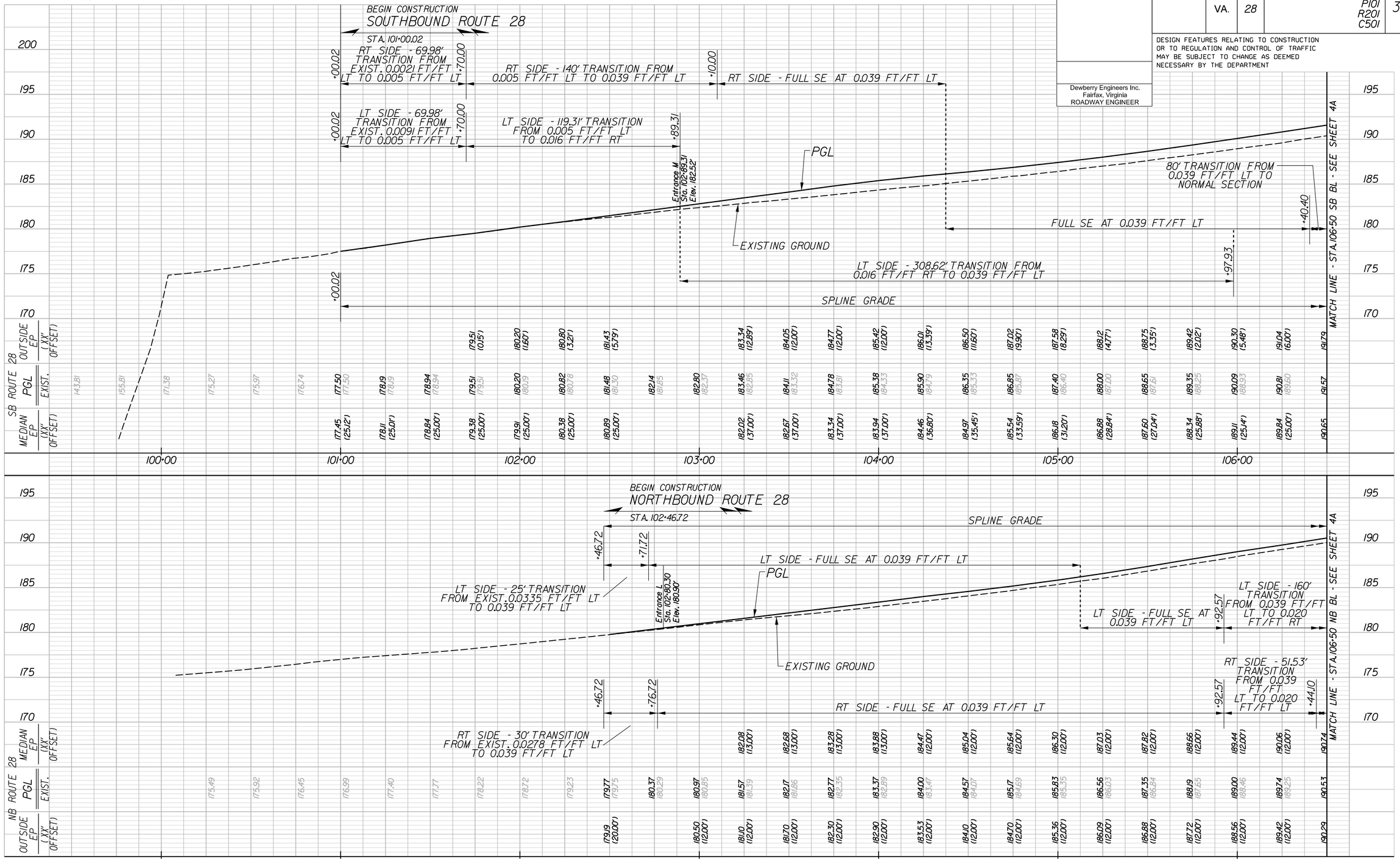
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	3A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



NB ROUTE 28

HORIZ.	PROJECT	SHEET NO.
VERT.	0028-029-269	3A

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
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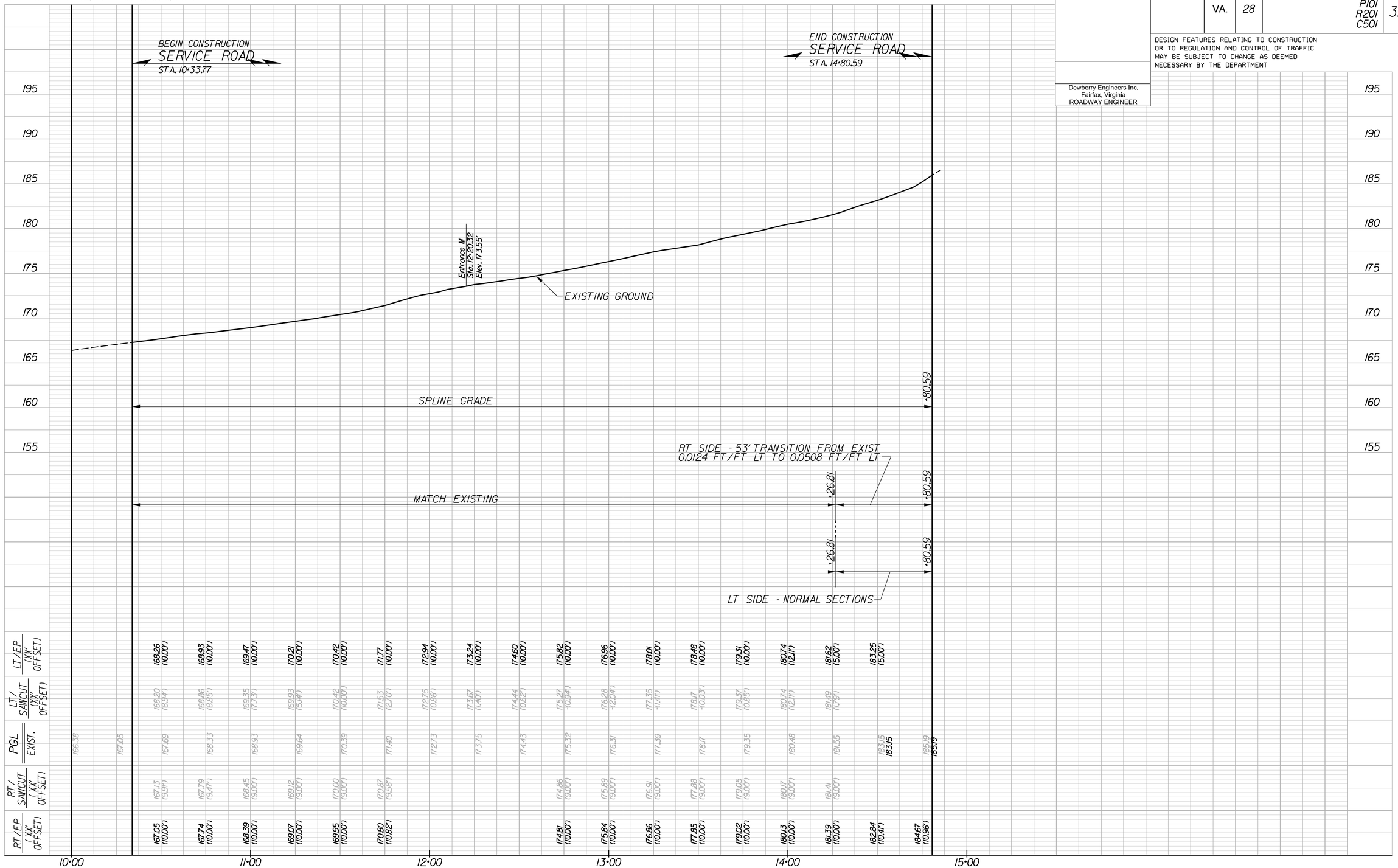
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SERVICE ROAD

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	3B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



	RT./EP (XX' OFFSET)	RT./ SAWCUT (XX' OFFSET)	PGL EXIST.	LT./ SAWCUT (XX' OFFSET)	LT./EP (XX' OFFSET)
10+00	167.05 (10.00')	167.13 (9.91')	166.38 167.05		
11+00	167.74 (10.00') 168.39 (10.00')	167.79 (9.47') 168.45 (9.00')	167.69 168.33 168.93	168.20 (6.54') 168.86 (8.85') 169.35 (7.73')	168.26 (10.00') 168.93 (10.00') 169.47 (10.00')
12+00	169.07 (10.00') 169.95 (10.00') 170.80 (10.82')	169.12 (9.00') 170.00 (9.00') 170.87 (9.58')	169.64 170.39 171.40	169.93 (5.41') 170.42 (10.00') 171.53 (2.70')	170.21 (10.00') 170.42 (10.00') 171.17 (10.00')
13+00	174.81 (10.00') 175.84 (10.00')	174.86 (9.00') 175.89 (9.00')	171.40 172.73 173.75 174.43 175.32 176.31	172.75 (0.26') 173.67 (1.40') 174.44 (0.62') 175.27 (10.94') 176.28 (12.04')	172.94 (10.00') 173.24 (10.00') 174.60 (10.00') 175.82 (10.00') 176.96 (10.00')
14+00	176.86 (10.00') 177.85 (10.00') 179.02 (10.00') 180.13 (10.00')	176.91 (9.00') 177.88 (9.00') 179.05 (9.00') 180.17 (9.00')	177.39 178.17 179.35 180.48	177.35 (1.41') 178.17 (10.03') 179.37 (0.85') 180.74 (12.11')	178.01 (10.00') 178.48 (10.00') 179.31 (10.00') 180.74 (12.11')
15+00	181.39 (10.00') 182.84 (10.41') 184.67 (10.96')	181.41 (9.00') 183.16 185.19	181.55 183.15 185.19	181.49 (1.79')	181.62 (5.00') 183.25 (5.00')

HORIZ.	PROJECT	SHEET NO.
0 25' 50'	0028-029-269	3B
VERT. 0 5' 10'		

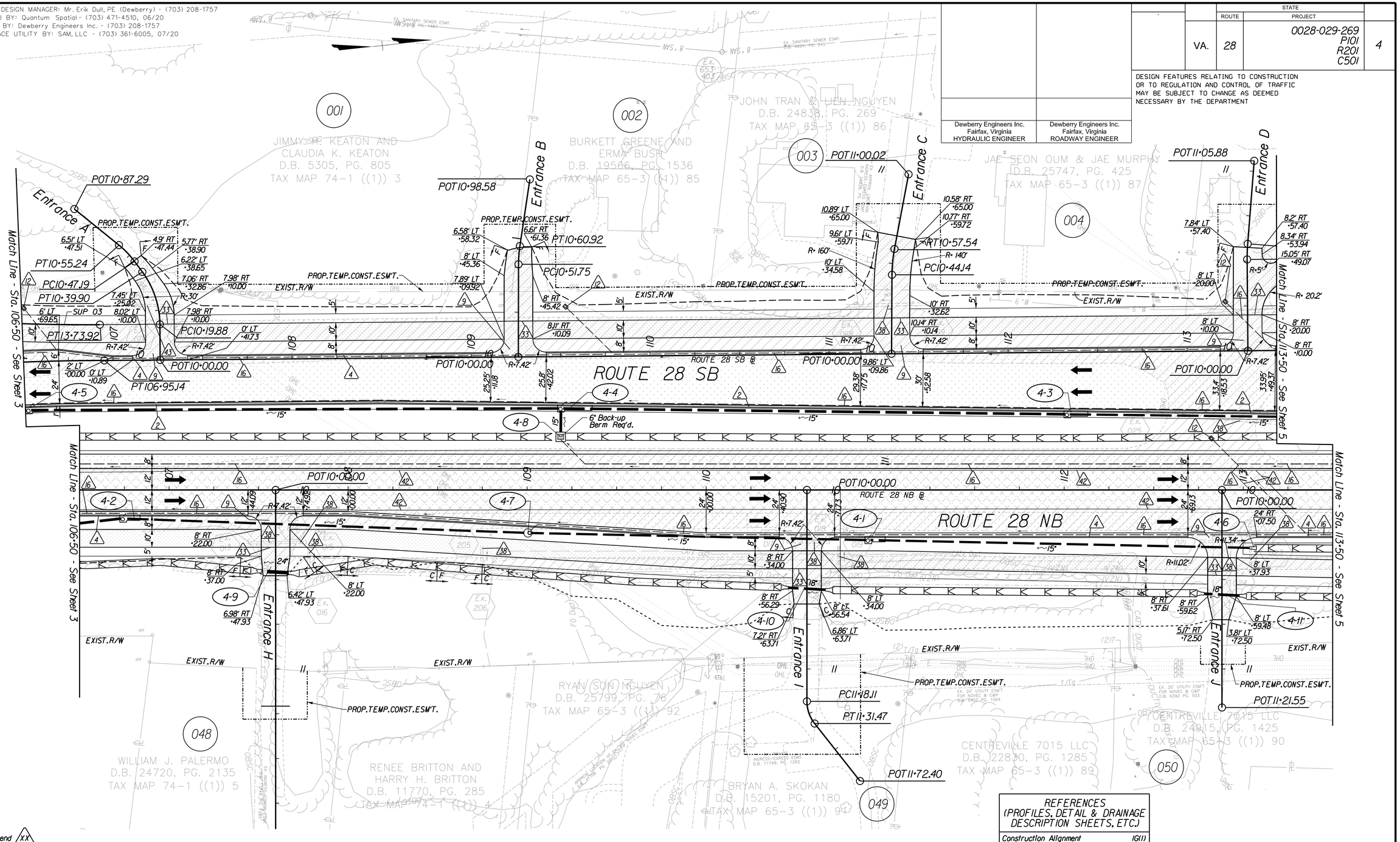
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

		STATE	
	ROUTE	PROJECT	
VA.	28	0028-029-269 P101 R201 C501	4

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER



Key Legend (XX)

1	6" Curb, Std. CG-2 Req'd.	11	Curb Ramp, Std. CG-12 Req'd.	23	Guardrail, Std. GR-MGS1 Req'd.	35	Remove Exist. Guardrail
2	4" Curb, Std. CG-3 Req'd.	12	Underdrain Endwall, Std. EW-12 Req'd.	24	Guardrail, Std. GR-MGS1A Req'd.	36	Remove Exist. Fence
3	6" Curb and Gutter, Std. CG-6 Req'd.	13	Not Used	25	Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.	37	Remove Exist. Structure
4	4" Curb and Gutter, Std. CG-7 Req'd.	14	Groundwater Underdrain, Std. UD-1 Req'd.	26	Guardrail Trailing End Acharage, Std. GR-MGS3 Req'd.	38	Remove Or Abandon and Fill Exist. Pipe
5	Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.	15	Curb-Cut Opening, Drainage Flume	27	Guardrail, Std. GR-10, Type I Req'd.	39	Remove Exist. Pole
6	See Special Provision for Stamped Cement Concrete	16	Pavement Underdrain, Std. UD-4 Req'd.	28	Guardrail, Std. GR-10, Type II Req'd.	40	Ad Just Exist. Structure
7	Conc. Raised Median, Std. MS-1A (6" Curb)	17	Pavement Underdrain, Mod. 6" UD-4 Req'd.	29	Guardrail, Std. GR-10, Type III Req'd.	41	Clean Out Exist. Structure
8	Grass Raised Median, Std. MS-2 (6" Curb)	18	Crossdrain, Std. CD-1 Req'd.	30	Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.	42	Full Depth Sawcut
9	Entrance Gutter, Std. CG-9D Req'd.	19	Crossdrain, Std. CD-2 Req'd.	31	Fixed Object Att., Std. GR-FOA-2 Ty. II Req'd.	43	Clean Out Exist. Pipe
10	Entrance, Std. CG-11 Req'd.	20	Woven Wire Fence, Std. FE-WI, W2 Req'd.	32	Guardrail Transition, Std. GR-MGS4 Req'd.	44	10" Gutter Run Out
		21	Grass Raised Median, Std. MS-2 (4" Curb)	33	End CG-9D Entrance Type	45	Median Barrier, Std. MB-8A Req'd.
		22	Chain Link Fence, Std. FE-CL Req'd.	34	Handrail, Std. HR-1 Type III Req'd.	46	Pavement Demarcation Line

Denotes Full Depth Pavement

Denotes SUP/Driveway /Private Entrance Pavement

Denotes Pavement Demolition

Denotes Milling and Overlay / Variable Depth Overlay

(CR) (XX) Curb Return See Sheet 2A(7)

C Denotes Construction Limits In Cuts

F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(1)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(1)-2F(2)
E&S Phase 3	2G(1)-2G(2)
Profiles	4A
Drainage Descriptions	33

SCALE 0 25' 50'

0028-029-269	4

Dewberry

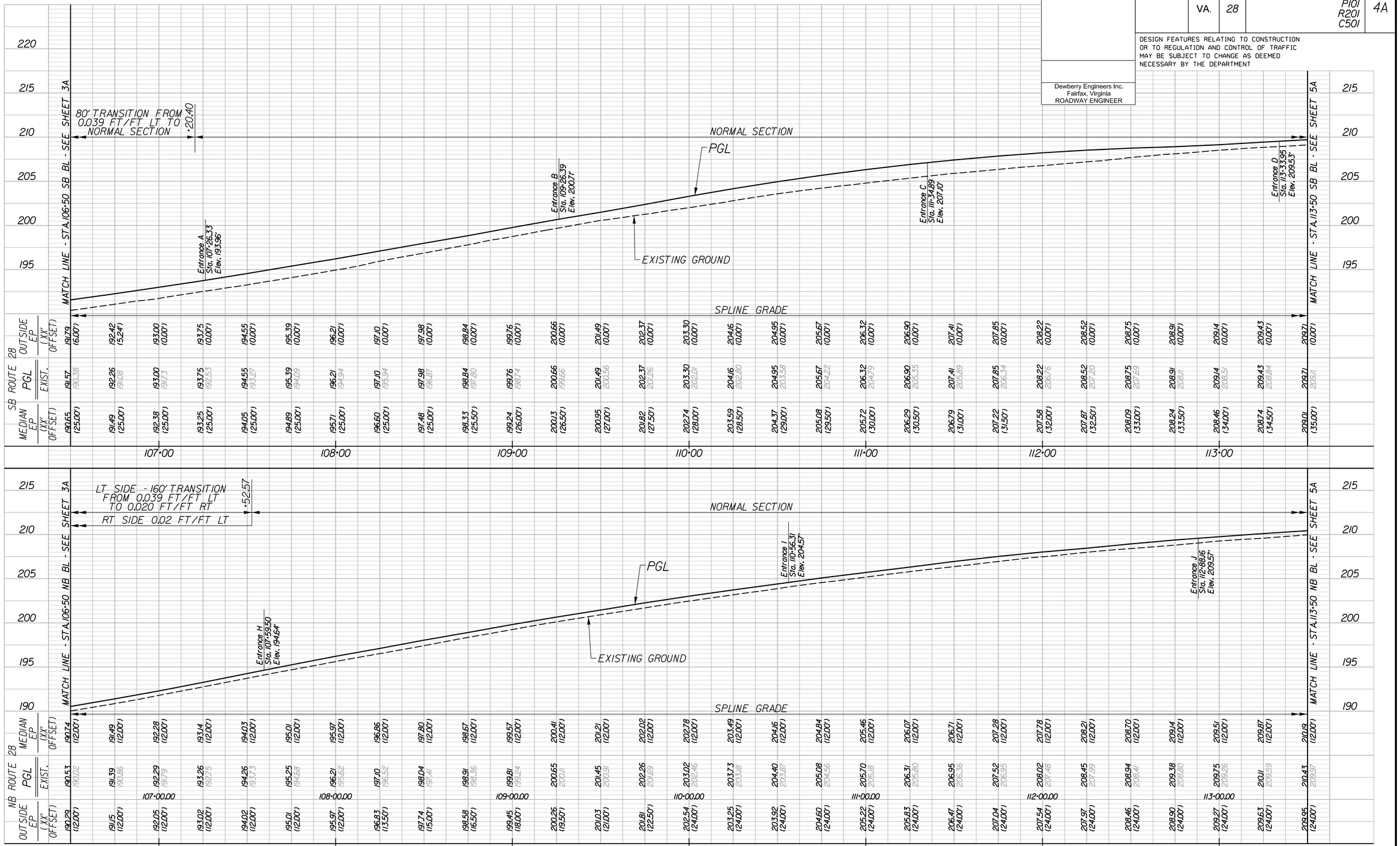
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	4A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



NB ROUTE 28

HORIZ.	PROJECT	SHEET NO.
0 25' 50'	0028-029-269	4A
VERT. 0 5' 10'		

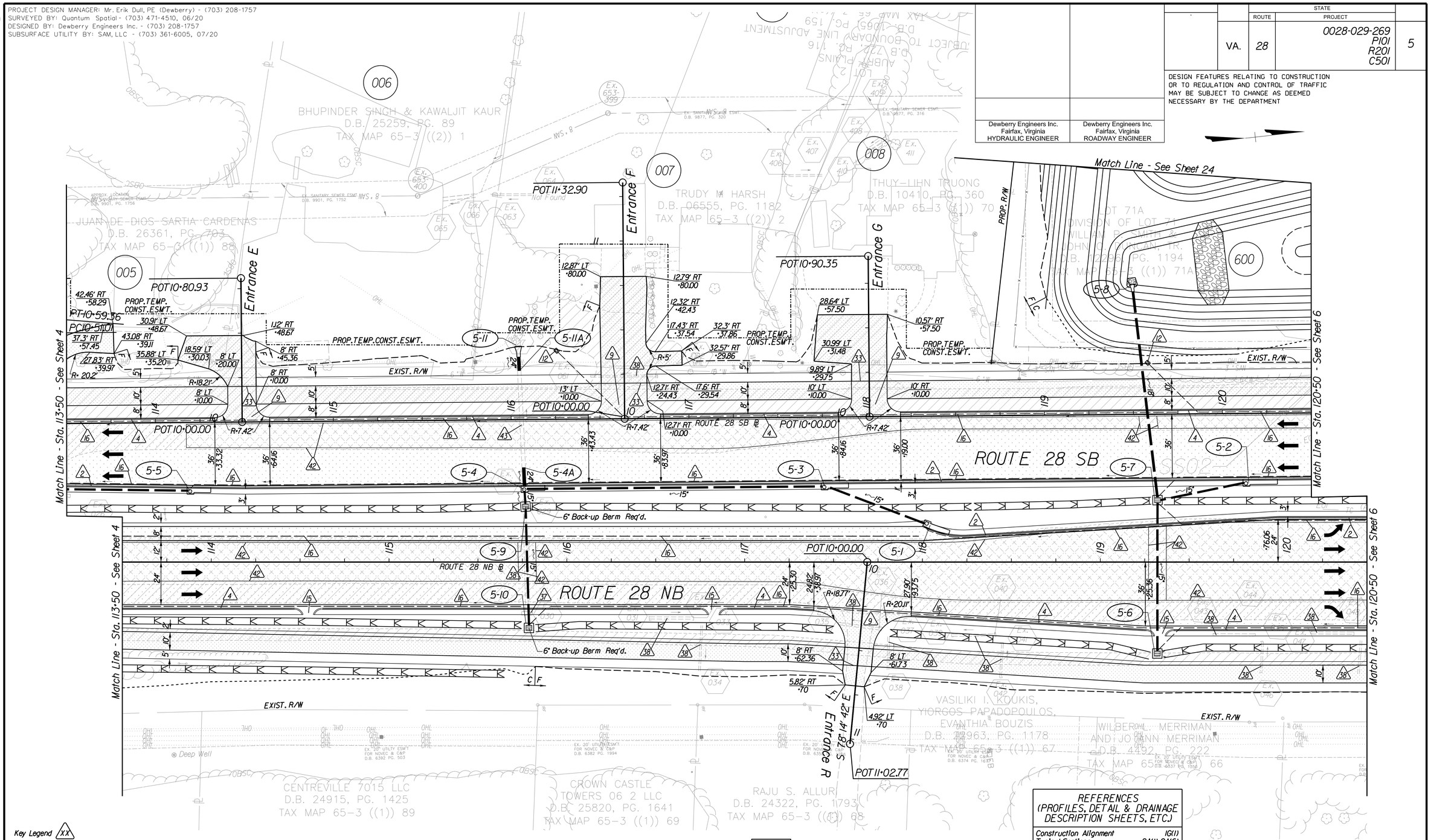
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

		STATE		
		ROUTE	PROJECT	
	VA.	28	0028-029-269 P101 R201 C501	5

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER



Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. MS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-WI, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGS1 Req'd.
24 Guardrail, Std. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR) XX — Curb Return See Sheet 2A(7)
C — Denotes Construction Limits In Cuts
F — Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(1)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(2)
E&S Phase 3	2G(2)
Profiles	5A
Drainage Descriptions	33

SCALE 0 25' 50'

10/12/2020
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Plotted By: cjennings

Dewberry

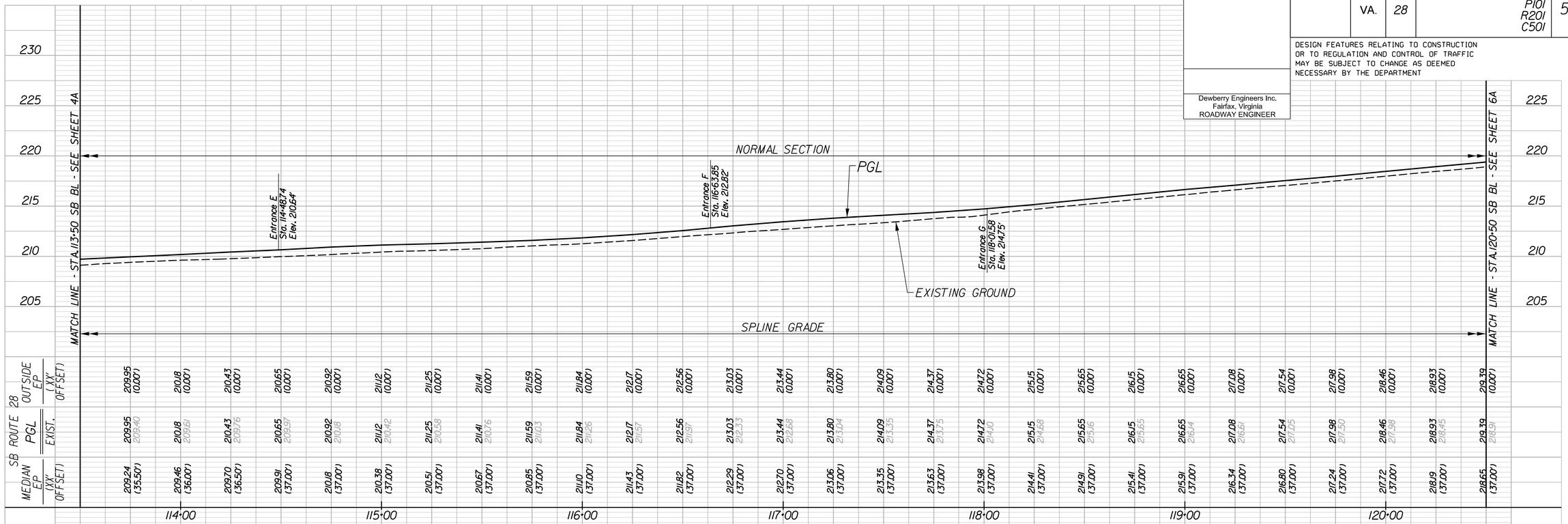
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	5A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER

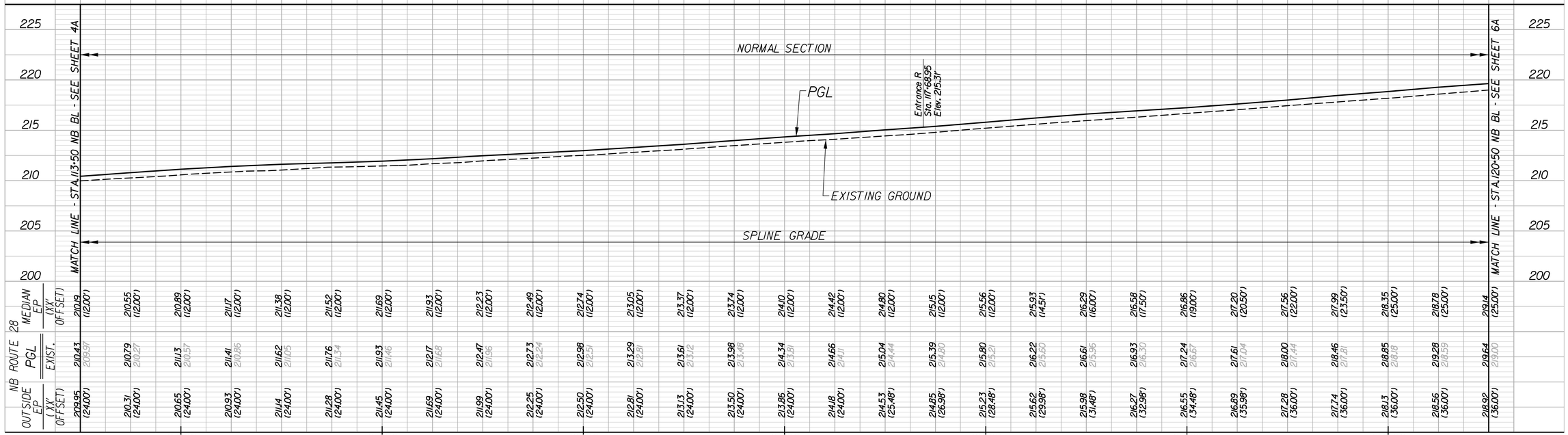


SB ROUTE 28	114+00	115+00	116+00	117+00	118+00	119+00	120+00
MEDIAN EP (XX' OFFSET)	209.24 (35.50')	209.46 (36.00')	209.70 (36.50')	209.91 (37.00')	210.18 (37.00')	210.38 (37.00')	210.51 (37.00')
PGL EXIST.	209.95 209.40	210.18 209.61	210.43 209.76	210.65 209.97	210.92 210.18	211.12 210.42	211.25 210.58
OUTSIDE EP (XX' OFFSET)	209.95 (0.00')	210.18 (0.00')	210.43 (0.00')	210.65 (0.00')	210.92 (0.00')	211.12 (0.00')	211.25 (0.00')

SB ROUTE 28	121+00	122+00	123+00	124+00	125+00	126+00	127+00
MEDIAN EP (XX' OFFSET)	210.67 (37.00')	210.85 (37.00')	211.10 (37.00')	211.43 (37.00')	211.82 (37.00')	212.29 (37.00')	212.70 (37.00')
PGL EXIST.	211.41 210.76	211.59 211.03	211.84 211.26	212.17 211.57	212.56 211.97	213.03 212.55	213.44 212.68
OUTSIDE EP (XX' OFFSET)	211.41 (0.00')	211.59 (0.00')	211.84 (0.00')	212.17 (0.00')	212.56 (0.00')	213.03 (0.00')	213.44 (0.00')

SB ROUTE 28	128+00	129+00	130+00	131+00	132+00	133+00	134+00
MEDIAN EP (XX' OFFSET)	213.06 (37.00')	213.35 (37.00')	213.63 (37.00')	213.98 (37.00')	214.41 (37.00')	214.91 (37.00')	215.41 (37.00')
PGL EXIST.	213.80 213.04	214.09 213.35	214.37 213.75	214.72 214.10	215.15 214.68	215.65 215.06	216.15 215.65
OUTSIDE EP (XX' OFFSET)	213.80 (0.00')	214.09 (0.00')	214.37 (0.00')	214.72 (0.00')	215.15 (0.00')	215.65 (0.00')	216.15 (0.00')

SB ROUTE 28	135+00	136+00	137+00	138+00	139+00	140+00	141+00
MEDIAN EP (XX' OFFSET)	215.91 (37.00')	216.34 (37.00')	216.80 (37.00')	217.24 (37.00')	217.72 (37.00')	218.19 (37.00')	218.65 (37.00')
PGL EXIST.	216.65 216.14	217.08 216.61	217.54 217.05	217.98 217.50	218.46 217.98	218.93 218.45	219.39 218.91
OUTSIDE EP (XX' OFFSET)	216.65 (0.00')	217.08 (0.00')	217.54 (0.00')	217.98 (0.00')	218.46 (0.00')	218.93 (0.00')	219.39 (0.00')



NB ROUTE 28	114+00	115+00	116+00	117+00	118+00	119+00	120+00
OUTSIDE EP (XX' OFFSET)	209.95 (24.00')	210.31 (24.00')	210.65 (24.00')	210.93 (24.00')	211.14 (24.00')	211.28 (24.00')	211.45 (24.00')
PGL EXIST.	210.43 209.97	210.79 210.27	211.13 210.57	211.41 210.86	211.62 211.05	211.76 211.34	211.93 211.46
MEDIAN EP (XX' OFFSET)	210.19 (12.00')	210.55 (12.00')	210.89 (12.00')	211.17 (12.00')	211.38 (12.00')	211.52 (12.00')	211.69 (12.00')

NB ROUTE 28	121+00	122+00	123+00	124+00	125+00	126+00	127+00
OUTSIDE EP (XX' OFFSET)	211.69 (24.00')	211.99 (24.00')	212.25 (24.00')	212.50 (24.00')	212.81 (24.00')	213.13 (24.00')	213.50 (24.00')
PGL EXIST.	211.93 211.68	212.17 211.88	212.47 212.16	212.73 212.24	212.98 212.51	213.29 212.81	213.61 213.12
MEDIAN EP (XX' OFFSET)	211.93 (12.00')	212.17 (12.00')	212.47 (12.00')	212.73 (12.00')	212.98 (12.00')	213.29 (12.00')	213.61 (12.00')

NB ROUTE 28	128+00	129+00	130+00	131+00	132+00	133+00	134+00
OUTSIDE EP (XX' OFFSET)	213.86 (24.00')	214.18 (24.00')	214.53 (25.48')	214.85 (26.98')	215.23 (28.48')	215.62 (29.98')	215.98 (31.48')
PGL EXIST.	213.98 213.61	214.34 213.81	214.66 214.11	215.04 214.44	215.39 214.80	215.80 215.21	216.22 215.60
MEDIAN EP (XX' OFFSET)	213.98 (12.00')	214.34 (12.00')	214.66 (12.00')	215.04 (12.00')	215.39 (12.00')	215.80 (12.00')	216.22 (14.51')

NB ROUTE 28	135+00	136+00	137+00	138+00	139+00	140+00	141+00
OUTSIDE EP (XX' OFFSET)	216.27 (32.98')	216.55 (34.48')	216.89 (35.98')	217.28 (36.00')	217.74 (36.00')	218.13 (36.00')	218.56 (36.00')
PGL EXIST.	216.93 216.30	217.24 216.67	217.61 217.04	218.00 217.44	218.46 217.81	218.85 218.18	219.28 218.59
MEDIAN EP (XX' OFFSET)	216.58 (17.50')	216.86 (19.00')	217.20 (20.50')	217.56 (22.00')	217.99 (23.50')	218.35 (25.00')	218.78 (25.00')

NB ROUTE 28	142+00
OUTSIDE EP (XX' OFFSET)	219.02 (36.00')
PGL EXIST.	219.64 219.00
MEDIAN EP (XX' OFFSET)	219.14 (25.00')

NB ROUTE 28

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	5A

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

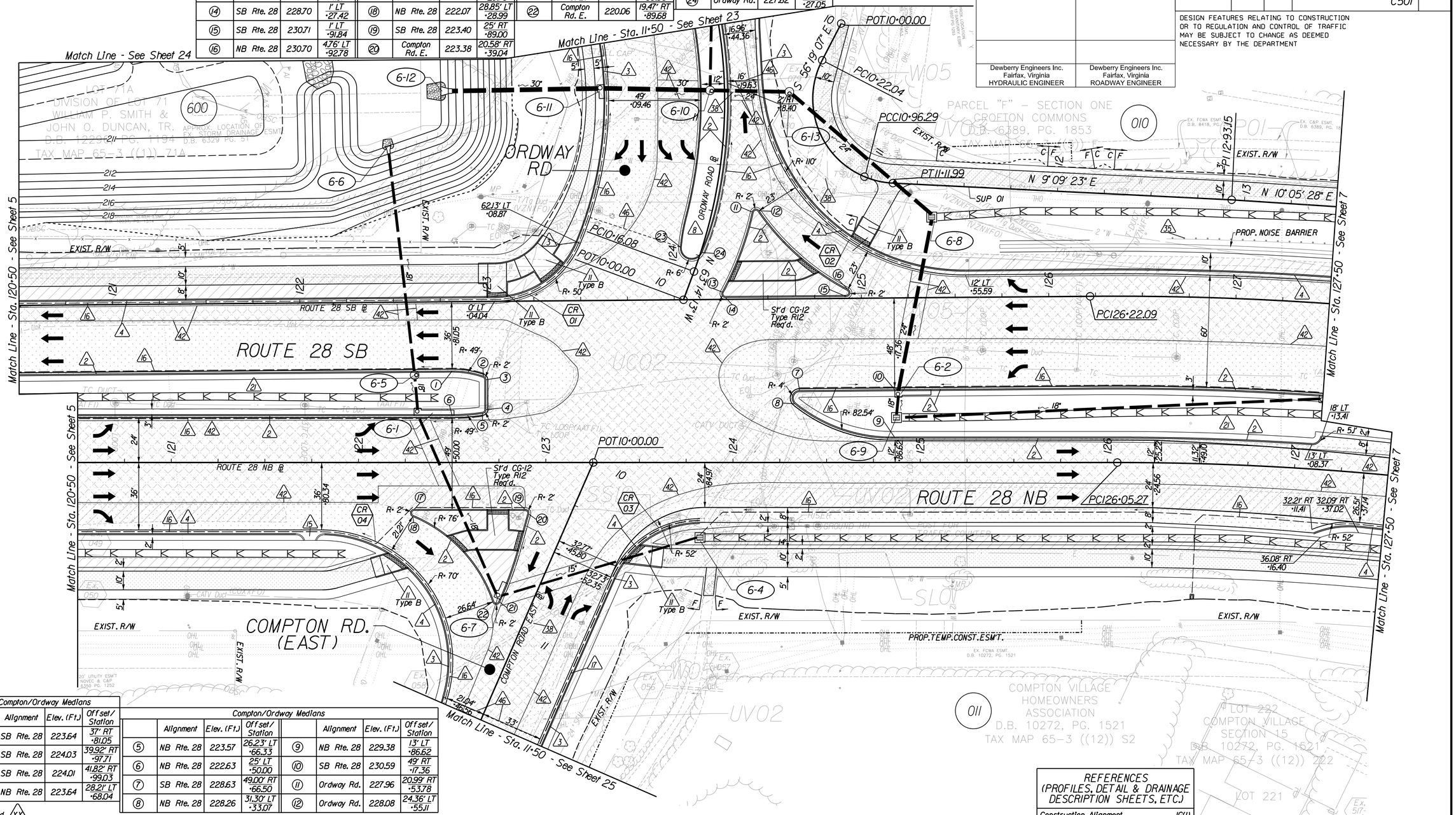
Compton/Ordway Medians											
	Alignment	Elev. (Ft.)	Offset/ Station		Alignment	Elev. (Ft.)	Offset/ Station		Alignment	Elev. (Ft.)	Offset/ Station
(13)	Ordway Rd.	228.44	17.96' RT -11.11	(17)	NB Rte. 28	222.19	25' RT -29.76	(21)	Compton Rd. E.	220.06	16' RT -88.33
(14)	SB Rte. 28	228.70	1' LT -27.42	(18)	NB Rte. 28	222.07	28.85' LT -28.99	(22)	Compton Rd. E.	220.06	19.47' RT -89.68
(15)	SB Rte. 28	230.71	1' LT -91.84	(19)	SB Rte. 28	223.40	25' RT -89.00				
(16)	NB Rte. 28	230.70	4.76' LT -92.78	(20)	Compton Rd. E.	223.38	20.58' RT -39.04				

	Alignment	Elev. (Ft.)	Offset/ Station
(23)	Ordway Rd.	227.18	11.16' LT -26.20
(24)	Ordway Rd.	227.62	0.66' RT -27.05

		STATE	
	ROUTE	PROJECT	
VA.	28	0028-029-269 P101 R201 C501	6

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER



Compton/Ordway Medians											
	Alignment	Elev. (Ft.)	Offset/ Station		Alignment	Elev. (Ft.)	Offset/ Station		Alignment	Elev. (Ft.)	Offset/ Station
(1)	SB Rte. 28	223.64	37' RT -81.05	(5)	NB Rte. 28	223.57	26.23' LT -66.33	(9)	NB Rte. 28	229.38	13' LT -86.62
(2)	SB Rte. 28	224.03	39.92' RT -97.71	(6)	NB Rte. 28	222.63	25' LT -50.00	(10)	SB Rte. 28	230.59	49' RT -17.36
(3)	SB Rte. 28	224.01	41.82' RT -99.03	(7)	SB Rte. 28	228.63	49.00' RT -66.50	(11)	Ordway Rd.	227.96	20.99' RT -53.78
(4)	NB Rte. 28	223.64	28.21' LT -68.04	(8)	NB Rte. 28	228.26	31.30' LT -33.07	(12)	Ordway Rd.	228.08	24.36' LT -55.11

Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. MS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-WI, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGSI Req'd.
24 Guardrail, Std. GR-MGSIA Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Construction Alignment	1G(1)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(2)
E&S Phase 3	2G(2)
Profiles	6A
Drainage Descriptions	33

SCALE 0 25' 50'

0028-029-269	6

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Plotted By: cjennings

Dewberry

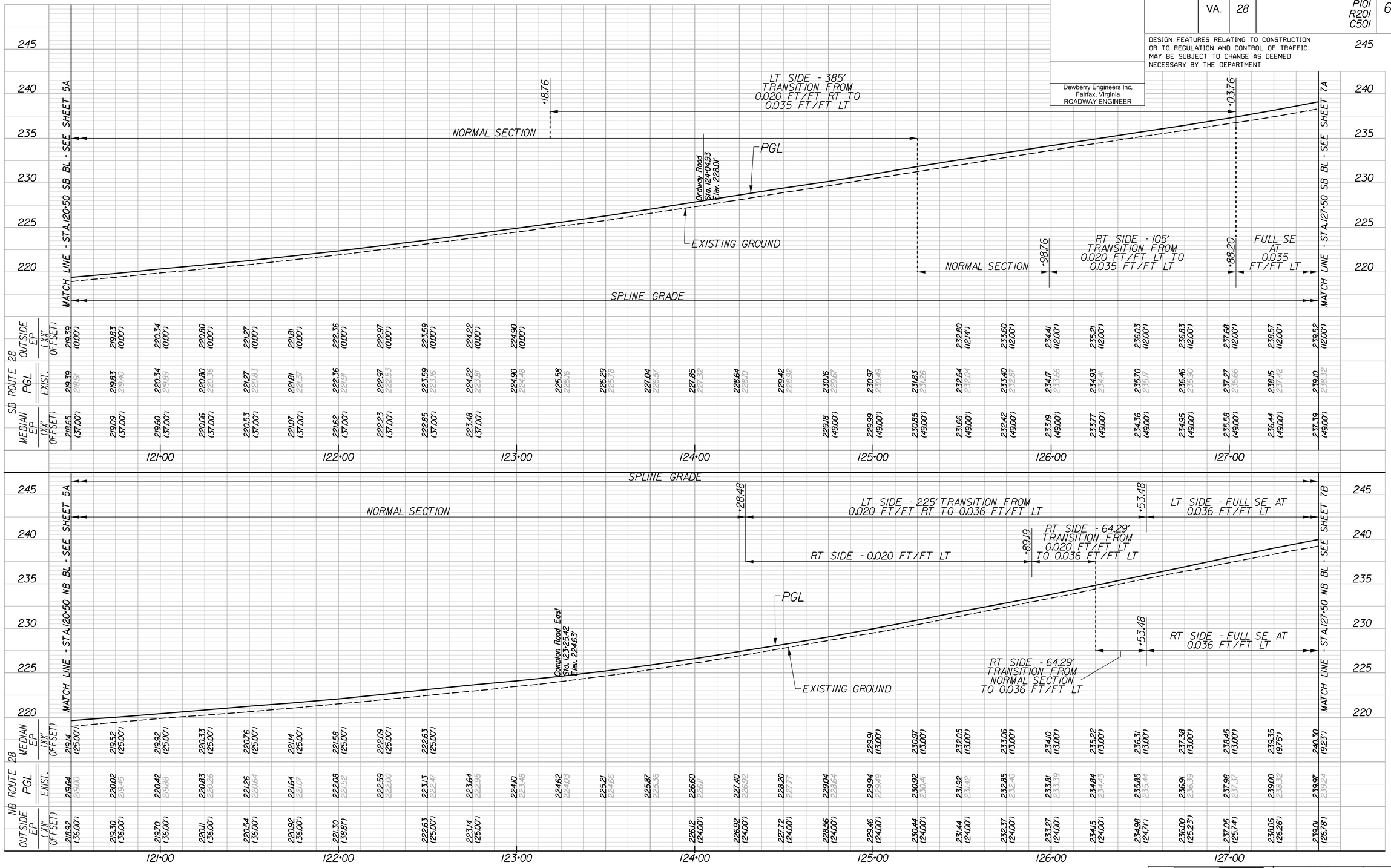
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	6A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



NB ROUTE 28

HORIZ.	PROJECT	SHEET NO.
VERT.	0028-029-269	6A

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

STATE	ROUTE	PROJECT	
VA.	28	0028-029-269 P101 R201 C501	7

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

Key Legend XX

1 6" Curb, St'd. CG-2 Req'd.
2 4" Curb, St'd. CG-3 Req'd.
3 6" Curb and Gutter, St'd. CG-6 Req'd.
4 4" Curb and Gutter, St'd. CG-7 Req'd.
5 Conc. Raised Median, St'd. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, St'd. MS-1A (6" Curb)
8 Grass Raised Median, St'd. MS-2 (6" Curb)
9 Entrance Gutter, St'd. CG-9D Req'd.
10 Entrance, St'd. CG-11 Req'd.
11 Curb Ramp, St'd. CG-12 Req'd.
12 Underdrain Endwall, St'd. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, St'd. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, St'd. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, St'd. CD-1 Req'd.
19 Crossdrain, St'd. CD-2 Req'd.
20 Woven Wire Fence, St'd. FE-W1, W2 Req'd.
21 Grass Raised Median, St'd. MS-2 (4" Curb)
22 Chain Link Fence, St'd. FE-CL Req'd.
23 Guardrail, St'd. GR-MGS1 Req'd.
24 Guardrail, St'd. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, St'd. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, St'd. GR-MGS3 Req'd.
27 Guardrail, St'd. GR-10, Type I Req'd.
28 Guardrail, St'd. GR-10, Type II Req'd.
29 Guardrail, St'd. GR-10, Type III Req'd.
30 Fixed Object Att., St'd. GR-FOA-2 Ty. 1 Req'd.
31 Fixed Object Att., St'd. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, St'd. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, St'd. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, St'd. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

CR XX Curb Return See Sheet 2A(7)
C Denotes Construction Limits in Cuts
F Denotes Construction Limits in Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(1)-1G(2)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(3)
E&S Phase 3	2G(3)
Profiles	7A-7B
Drainage Descriptions	33

SCALE 0 25' 50'

Dewberry

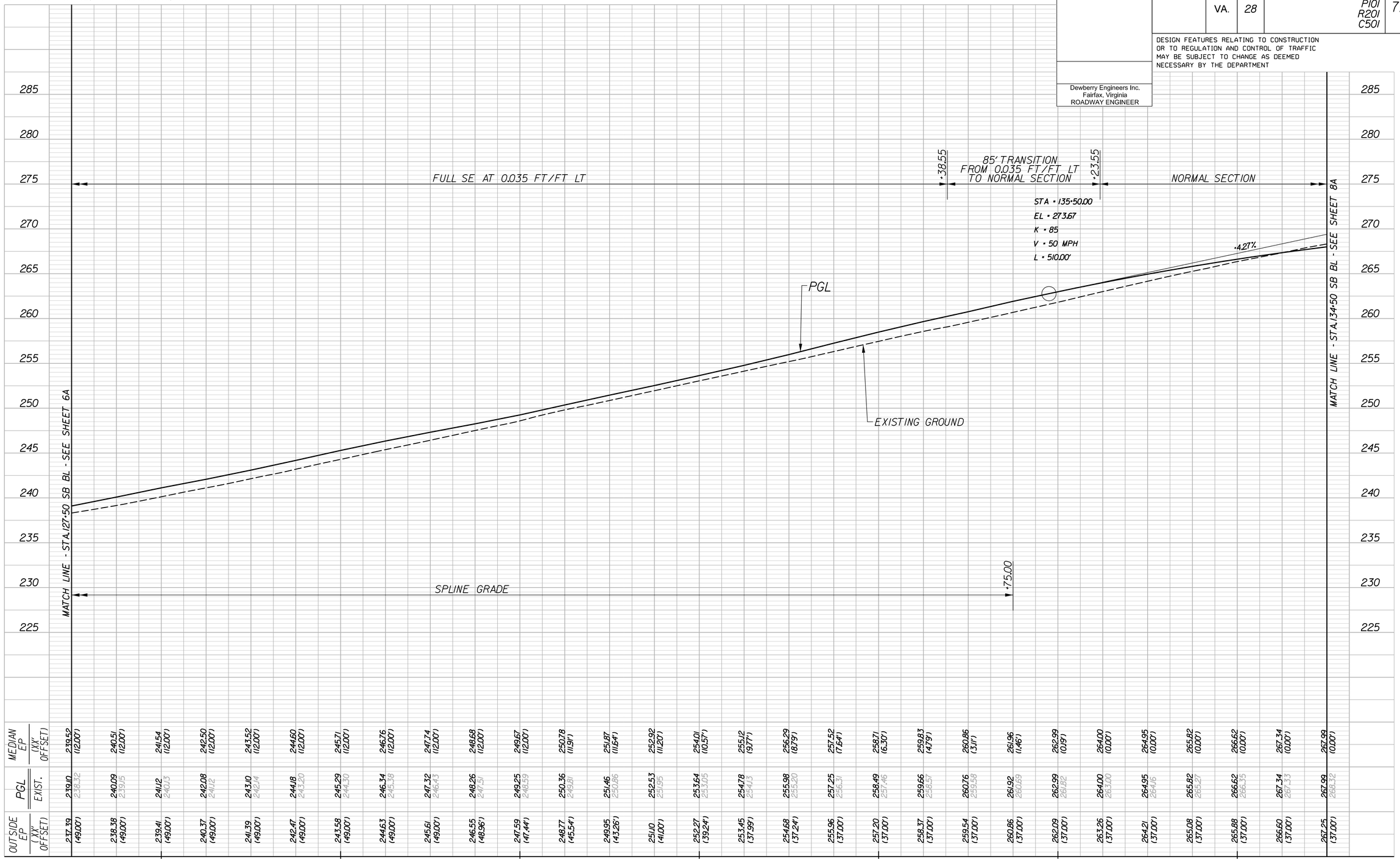
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	7A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



OUTSIDE EP (XX' OFFSET)	PGL EXIST.	MEDIAN EP (XX' OFFSET)
237.39 (49.00')	238.32	239.52 (12.00')
238.38 (49.00')	239.25	240.51 (12.00')
239.41 (49.00')	240.23	241.54 (12.00')
240.37 (49.00')	241.12	242.50 (12.00')
241.39 (49.00')	242.04	243.52 (12.00')
242.47 (49.00')	243.20	244.60 (12.00')
243.58 (49.00')	244.30	245.71 (12.00')
244.63 (49.00')	245.38	246.76 (12.00')
245.61 (49.00')	246.43	247.74 (12.00')
246.55 (48.96')	247.51	248.68 (12.00')
247.59 (47.44')	248.59	249.67 (12.00')
248.77 (45.54')	249.81	250.78 (11.91')
249.95 (43.26')	250.86	251.87 (11.64')
251.10 (41.00')	251.95	252.92 (11.20')
252.27 (39.24')	253.05	254.01 (10.57')
253.45 (37.99')	254.13	255.12 (9.77')
254.68 (37.24')	255.20	256.29 (8.79')
255.96 (37.00')	256.31	257.52 (7.64')
257.20 (37.00')	257.46	258.71 (6.30')
258.37 (37.00')	258.57	259.83 (4.79')
259.54 (37.00')	259.58	260.86 (3.11')
260.86 (37.00')	260.89	261.96 (1.46')
262.09 (37.00')	262.82	262.99 (0.19')
263.26 (37.00')	263.00	264.00 (0.00')
264.21 (37.00')	264.06	264.95 (0.00')
265.08 (37.00')	265.27	265.82 (0.00')
265.88 (37.00')	266.35	266.62 (0.00')
266.60 (37.00')	267.33	267.34 (0.00')
267.25 (37.00')	268.32	267.99 (0.00')

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	7A

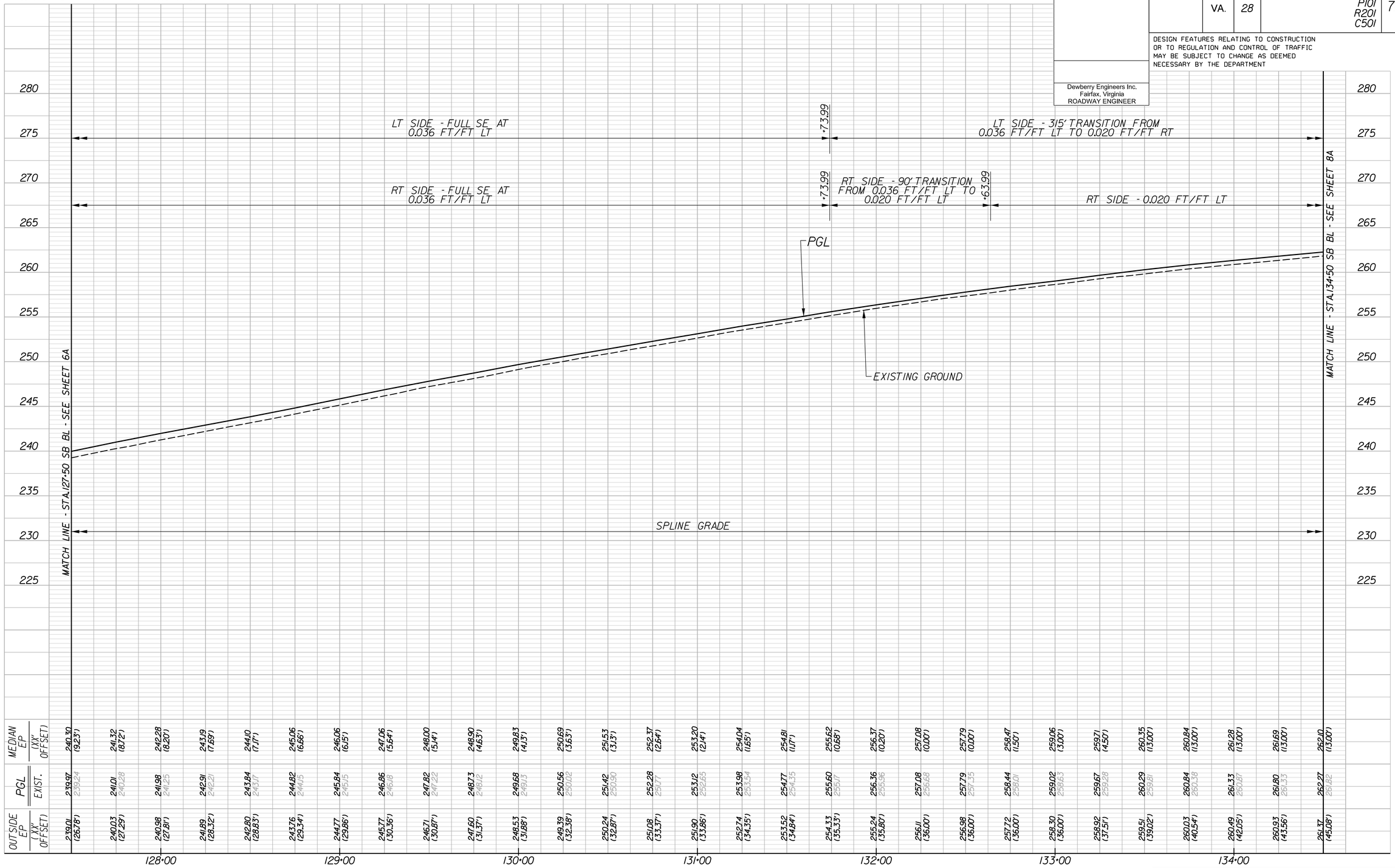
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	7B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



OUTSIDE EP (XX' OFFSET)	PGL / EXIST.	MEDIAN EP (XX' OFFSET)
239.01 (26.78')	239.97 239.24	240.30 (9.23')
240.03 (27.29')	241.01 240.28	241.32 (8.72')
240.98 (27.81')	241.98 241.25	242.28 (8.20')
241.89 (28.32')	242.91 242.21	243.19 (7.69')
242.80 (28.83')	243.84 243.17	244.10 (7.17')
243.76 (29.34')	244.82 244.15	245.06 (6.66')
244.77 (29.86')	245.84 245.15	246.06 (6.15')
245.77 (30.36')	246.86 246.18	247.06 (5.64')
246.71 (30.87')	247.82 247.22	248.00 (5.14')
247.60 (31.37')	248.73 248.12	248.90 (4.63')
248.53 (31.88')	249.68 249.13	249.83 (4.13')
249.39 (32.38')	250.56 250.02	250.69 (3.63')
250.24 (32.87')	251.42 250.90	251.53 (3.13')
251.08 (33.37')	252.28 251.77	252.37 (2.64')
251.90 (33.86')	253.12 252.65	253.20 (2.14')
252.74 (34.35')	253.98 253.54	254.04 (1.65')
253.52 (34.84')	254.77 254.35	254.81 (1.17')
254.33 (35.33')	255.60 255.17	255.62 (0.68')
255.24 (35.80')	256.36 255.96	256.37 (0.20')
256.11 (36.00')	257.08 256.68	257.08 (0.00')
256.98 (36.00')	257.79 257.45	257.79 (0.00')
257.72 (36.00')	258.44 258.01	258.47 (1.50')
258.30 (36.00')	259.02 258.63	259.06 (3.00')
258.92 (37.51')	259.67 259.28	259.71 (4.50')
259.51 (39.02')	260.29 259.81	260.35 (13.00')
260.03 (40.54')	260.84 260.38	260.84 (13.00')
260.49 (42.05')	261.33 260.87	261.28 (13.00')
260.93 (43.56')	261.80 261.33	261.69 (13.00')
261.37 (45.08')	262.27 261.82	262.10 (13.00')

NB ROUTE 28

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT 0028-029-269

SHEET NO. 7B

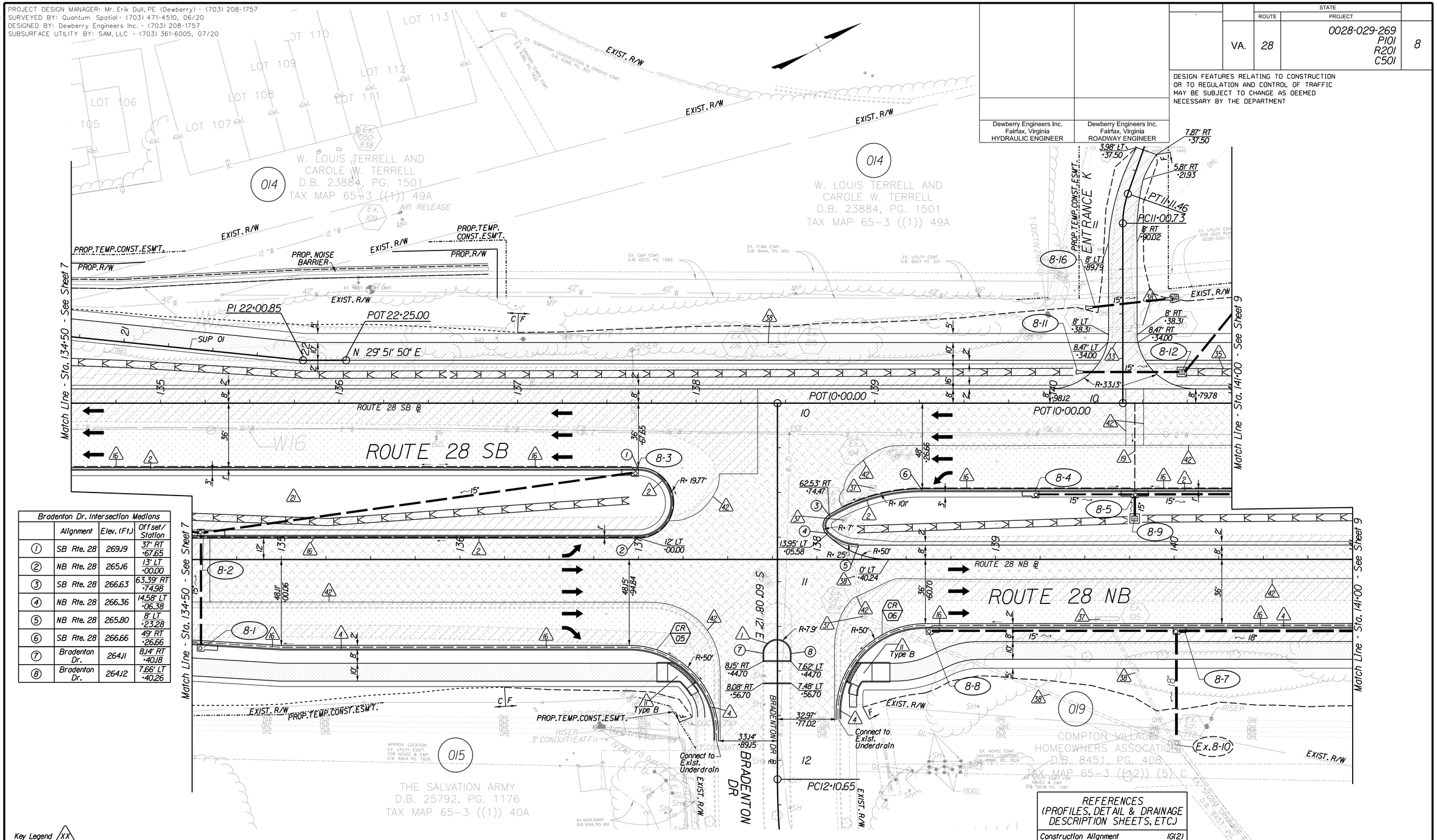
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

STATE			
ROUTE	PROJECT		
VA.	28	0028-029-269 P101 R201 C501	8

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Bradenton Dr. Intersection Medians			
	Alignment	Elev. (Ft.)	Offset / Station
①	SB Rte. 28	269.19	37' RT 67.65
②	NB Rte. 28	265.16	13' LT 00.00
③	SB Rte. 28	266.63	63.39' RT 74.98
④	NB Rte. 28	266.36	14.58' LT 06.38
⑤	NB Rte. 28	265.80	8' LT 23.28
⑥	SB Rte. 28	266.66	49' RT 26.66
⑦	Bradenton Dr.	264.11	8.14' RT 40.18
⑧	Bradenton Dr.	264.12	7.66' LT 40.26

Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. MS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-WI, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGS1 Req'd.
24 Guardrail, Std. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(2)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(3)-2F(4)
E&S Phase 3	2G(3)-2G(4)
Profiles	8A-8B
Drainage Descriptions	33

SCALE 0 25' 50'

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Plotted By: cjennings

Dewberry

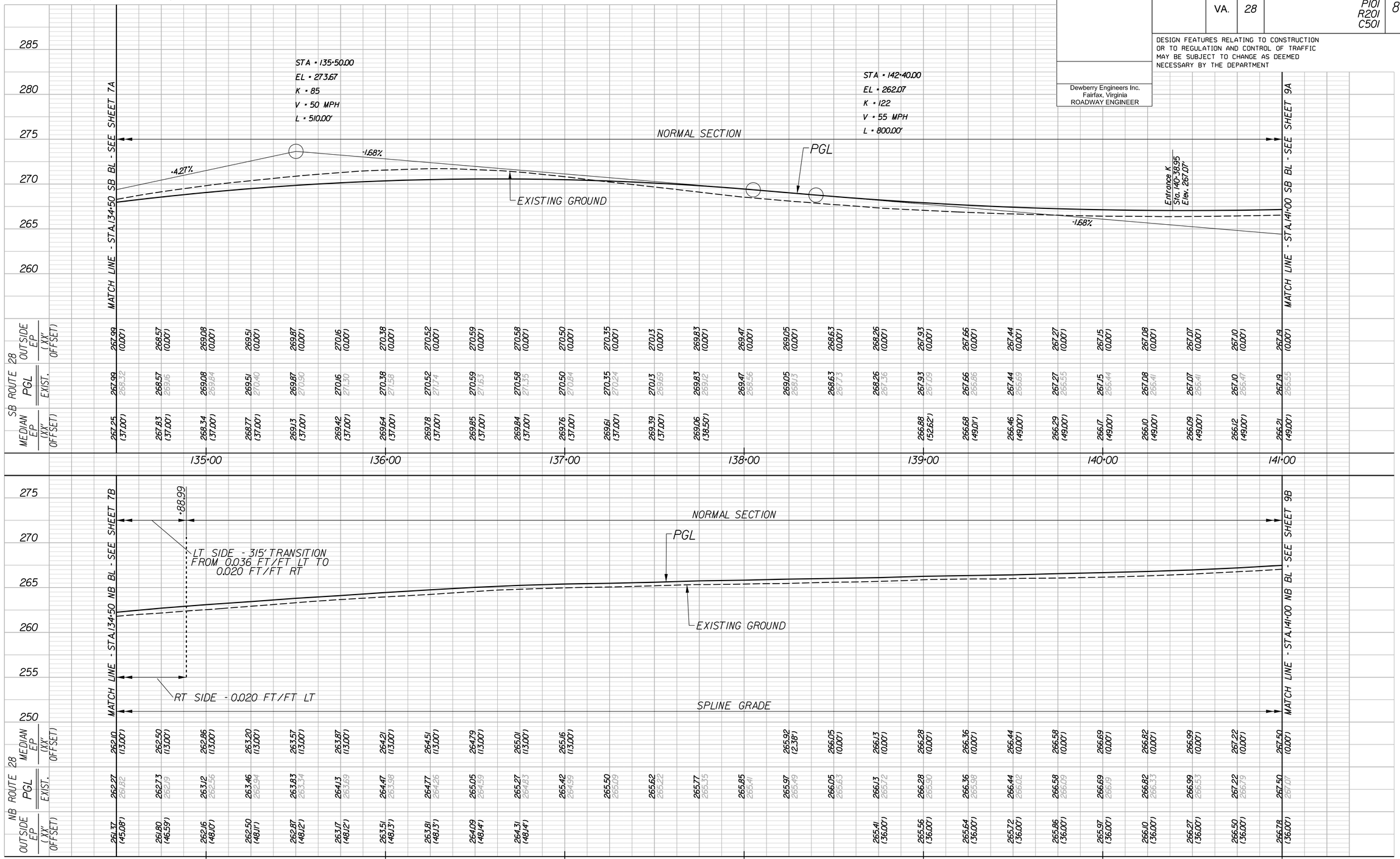
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	8A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



NB ROUTE 28

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	8A

Dewberry

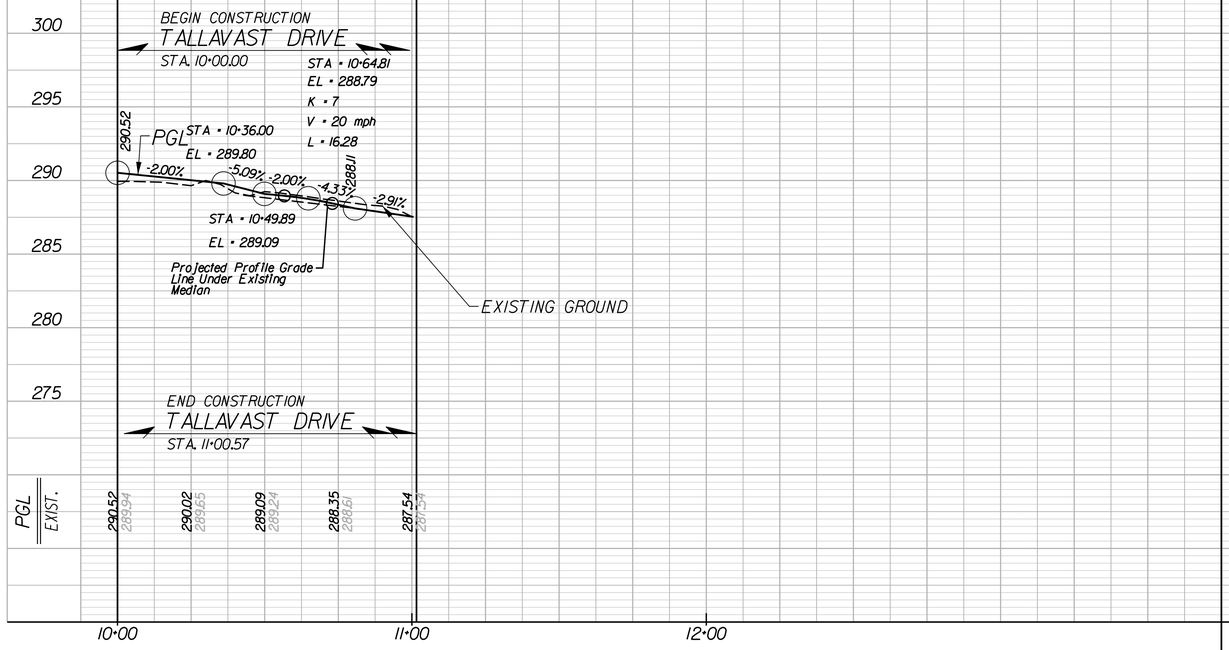
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

BRADENTON DRIVE

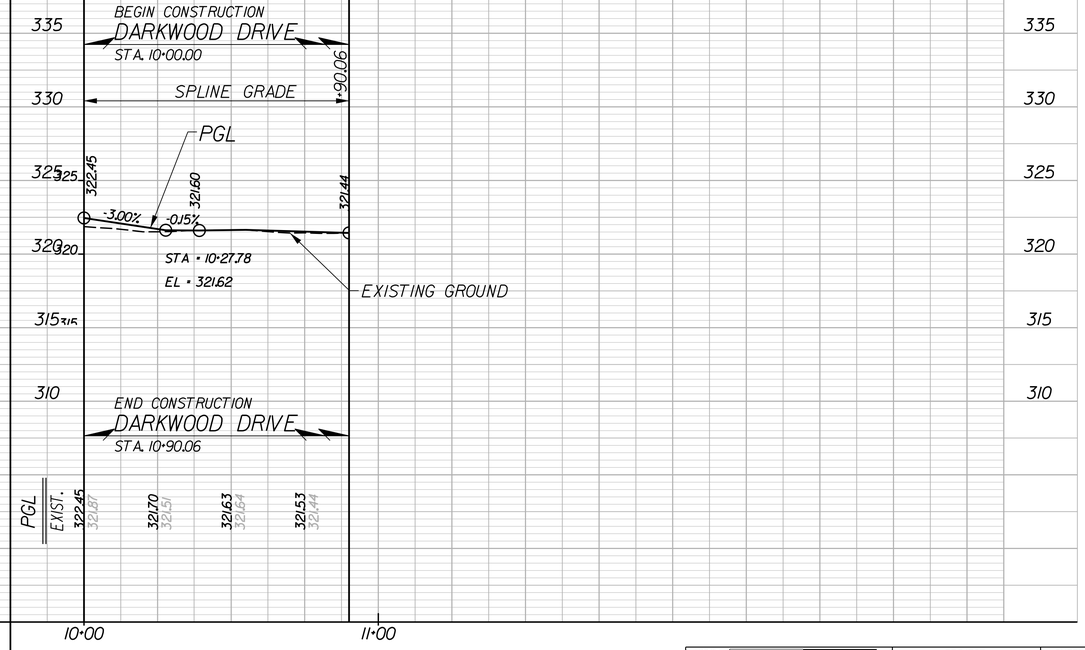
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	8B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



TALLAVAST DRIVE



DARKWOOD DRIVE

HORIZ.	0	25'	50'
VERT.	0	5'	10'

PROJECT	SHEET NO.
0028-029-269	8B

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Plotted By: jhouser

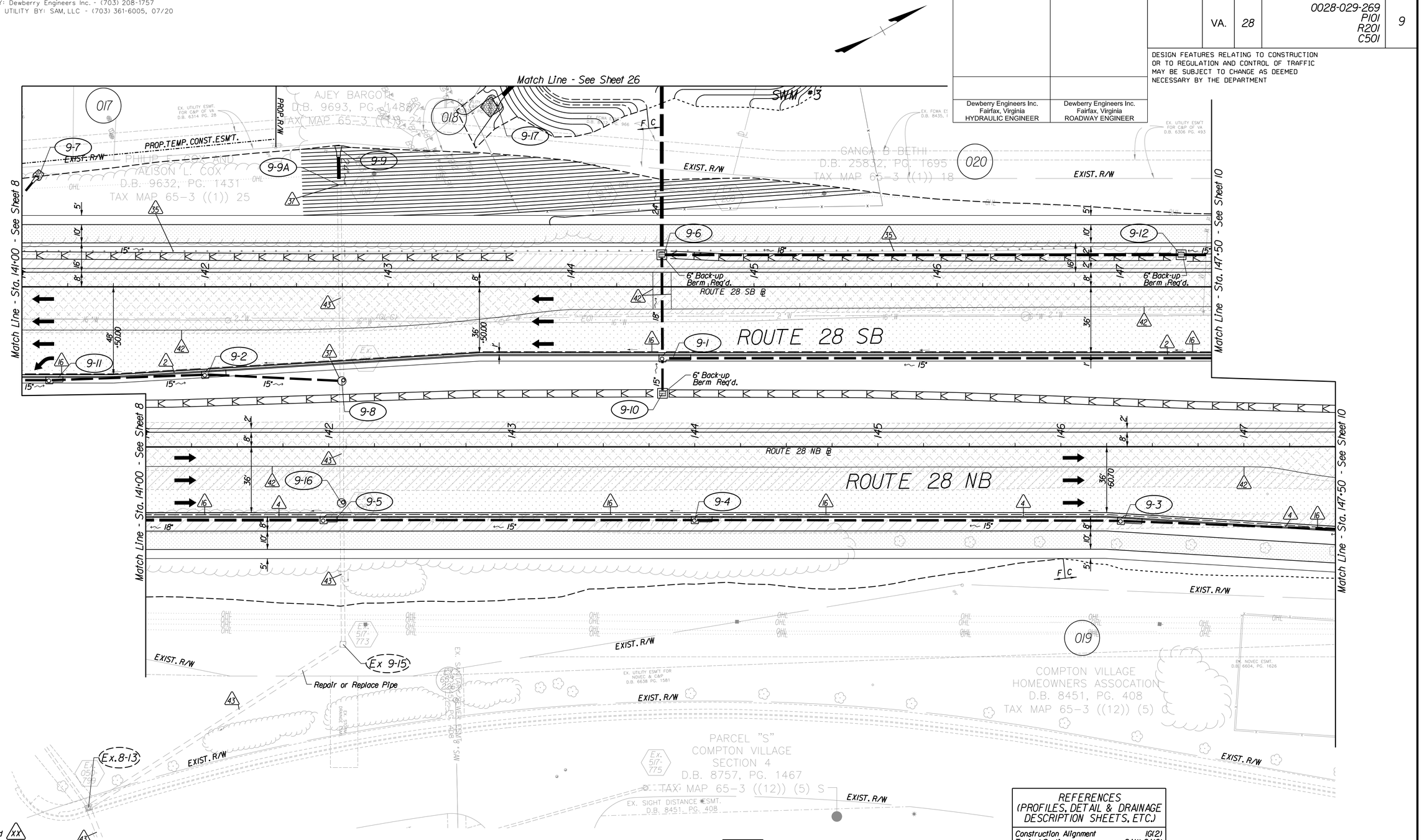
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

	STATE ROUTE	STATE PROJECT	
VA.	28	0028-029-269 P101 R201 C501	9

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Key Legend XX

1	6" Curb, Std. CG-2 Req'd.	11	Curb Ramp, Std. CG-12 Req'd.	23	Guardrail, Std. GR-MGS1 Req'd.	35	Remove Exist. Guardrail
2	4" Curb, Std. CG-3 Req'd.	12	Underdrain Endwall, Std. EW-12 Req'd.	24	Guardrail, Std. GR-MGS1A Req'd.	36	Remove Exist. Fence
3	6" Curb and Gutter, Std. CG-6 Req'd.	13	Not Used	25	Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.	37	Remove Exist. Structure
4	4" Curb and Gutter, Std. CG-7 Req'd.	14	Groundwater Underdrain, Std. UD-1 Req'd.	26	Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.	38	Remove Or Abandon and Fill Exist. Pipe
5	Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.	15	Curb-Cut Opening, Drainage Flume	27	Guardrail, Std. GR-10, Type I Req'd.	39	Remove Exist. Pole
		16	Pavement Underdrain, Std. UD-4 Req'd.	28	Guardrail, Std. GR-10, Type II Req'd.	40	Adjust Exist. Structure
6	See Special Provision for Stamped Cement Concrete	17	Pavement Underdrain, Mod. 6" UD-4 Req'd.	29	Guardrail, Std. GR-10, Type III Req'd.	41	Clean Out Exist. Structure
		18	Crossdrain, Std. CD-1 Req'd.	30	Fixed Object Att., Std. GR-FOA-2 Ty.1 Req'd.	42	Full Depth Sawcut
7	Conc. Raised Median, Std. MS-1A (6" Curb)	19	Crossdrain, Std. CD-2 Req'd.	31	Fixed Object Att., Std. GR-FOA-2 Ty.2 Req'd.	43	Clean Out Exist. Pipe
8	Grass Raised Median, Std. MS-2 (6" Curb)	20	Woven Wire Fence, Std. FE-WI, W2 Req'd.	32	Guardrail Transition, Std. GR-MGS4 Req'd.	44	10' Gutter Run Out
9	Entrance Gutter, Std. CG-9D Req'd.	21	Grass Raised Median, Std. MS-2 (4" Curb)	33	End CG-9D Entrance Type	45	Median Barrier, Std. MB-8A Req'd.
10	Entrance, Std. CG-11 Req'd.	22	Chain Link Fence, Std. FE-CL Req'd.	34	Handrail, Std. HR-1 Type III Req'd.	46	Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

CR XX Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

SCALE 0 25' 50'

0028-029-269	9

10/12/2020
11:19:46 AM

d108720-09A.dgn
Plotted By: cjennings

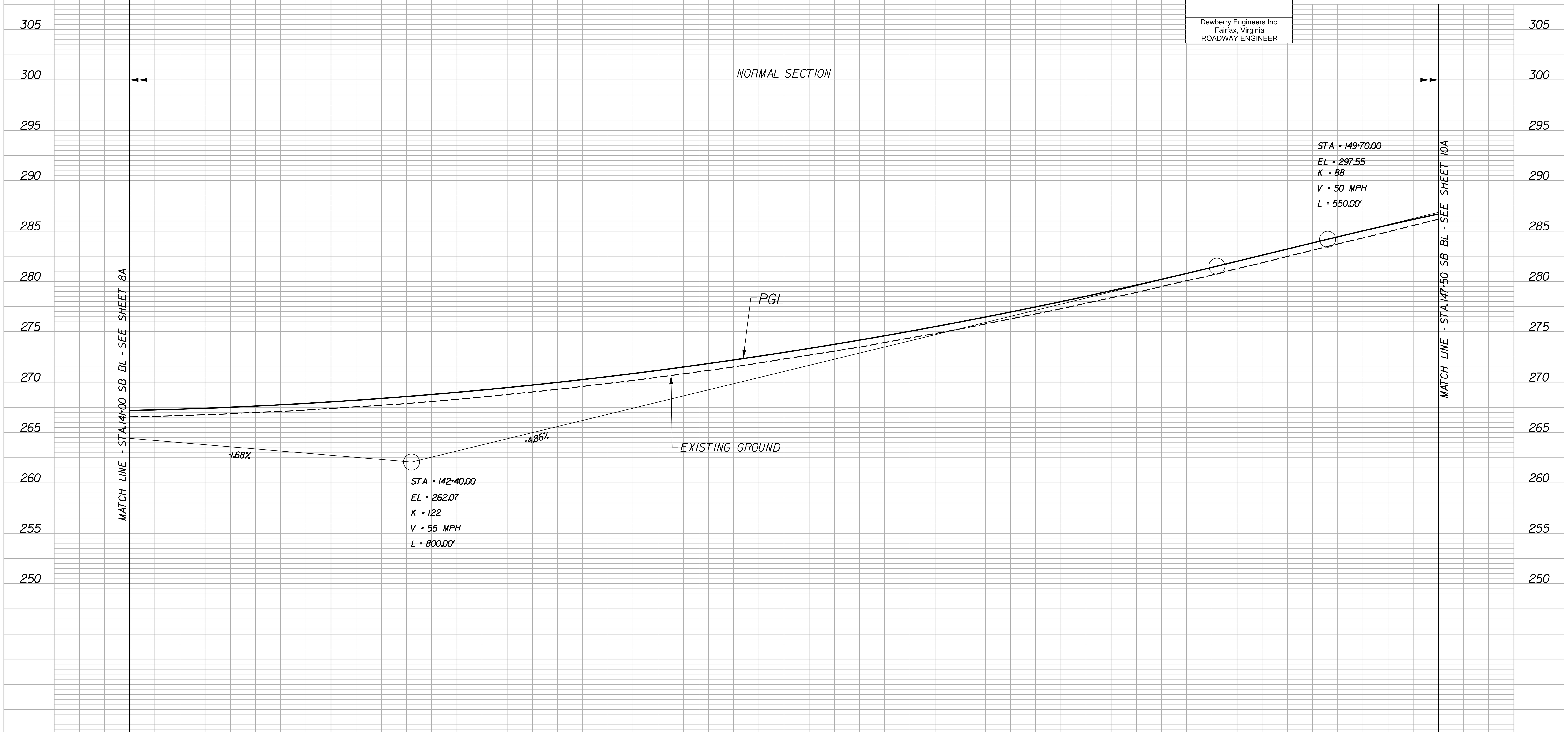
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	9A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



SB ROUTE 28

Station	OUTSIDE EP (XX' OFFSET)	PGL	EXIST.	MEDIAN EP (XX' OFFSET)
141+00	267.19 (0.00')	267.19	266.55	266.21 (49.00')
	267.32 (0.00')	267.32	266.69	266.34 (49.00')
	267.51 (0.00')	267.51	266.87	266.53 (49.00')
	267.75 (0.00')	267.75	267.10	266.80 (47.50')
142+00	268.04 (0.00')	268.04	267.39	267.12 (46.00')
	268.38 (0.00')	268.38	267.71	267.49 (44.50')
	268.77 (0.00')	268.77	268.08	267.91 (43.00')
	269.22 (0.00')	269.22	268.53	268.39 (41.50')
143+00	269.71 (0.00')	269.71	269.02	268.91 (40.00')
	270.26 (0.00')	270.26	269.58	269.49 (38.50')
	270.85 (0.00')	270.85	270.17	270.11 (37.00')
	271.50 (0.00')	271.50	270.83	270.76 (37.00')
144+00	272.20 (0.00')	272.20	271.51	271.46 (37.00')
	272.95 (0.00')	272.95	272.30	272.21 (37.00')
	273.75 (0.00')	273.75	273.08	273.01 (37.00')
	274.60 (0.00')	274.60	273.94	273.86 (37.00')
145+00	275.51 (0.00')	275.51	274.83	274.77 (37.00')
	276.46 (0.00')	276.46	275.78	275.72 (37.00')
	277.47 (0.00')	277.47	276.78	276.73 (37.00')
	278.52 (0.00')	278.52	277.83	277.78 (37.00')
146+00	279.63 (0.00')	279.63	278.90	278.89 (37.00')
	280.79 (0.00')	280.79	280.07	280.05 (37.00')
	282.00 (0.00')	282.00	281.26	281.26 (37.00')
	283.21 (0.00')	283.21	282.48	282.47 (37.00')
147+00	284.43 (0.00')	284.43	283.71	283.69 (37.00')
	285.59 (0.00')	285.59	284.93	284.85 (37.00')
	286.69 (0.00')	286.69	286.17	285.95 (37.00')

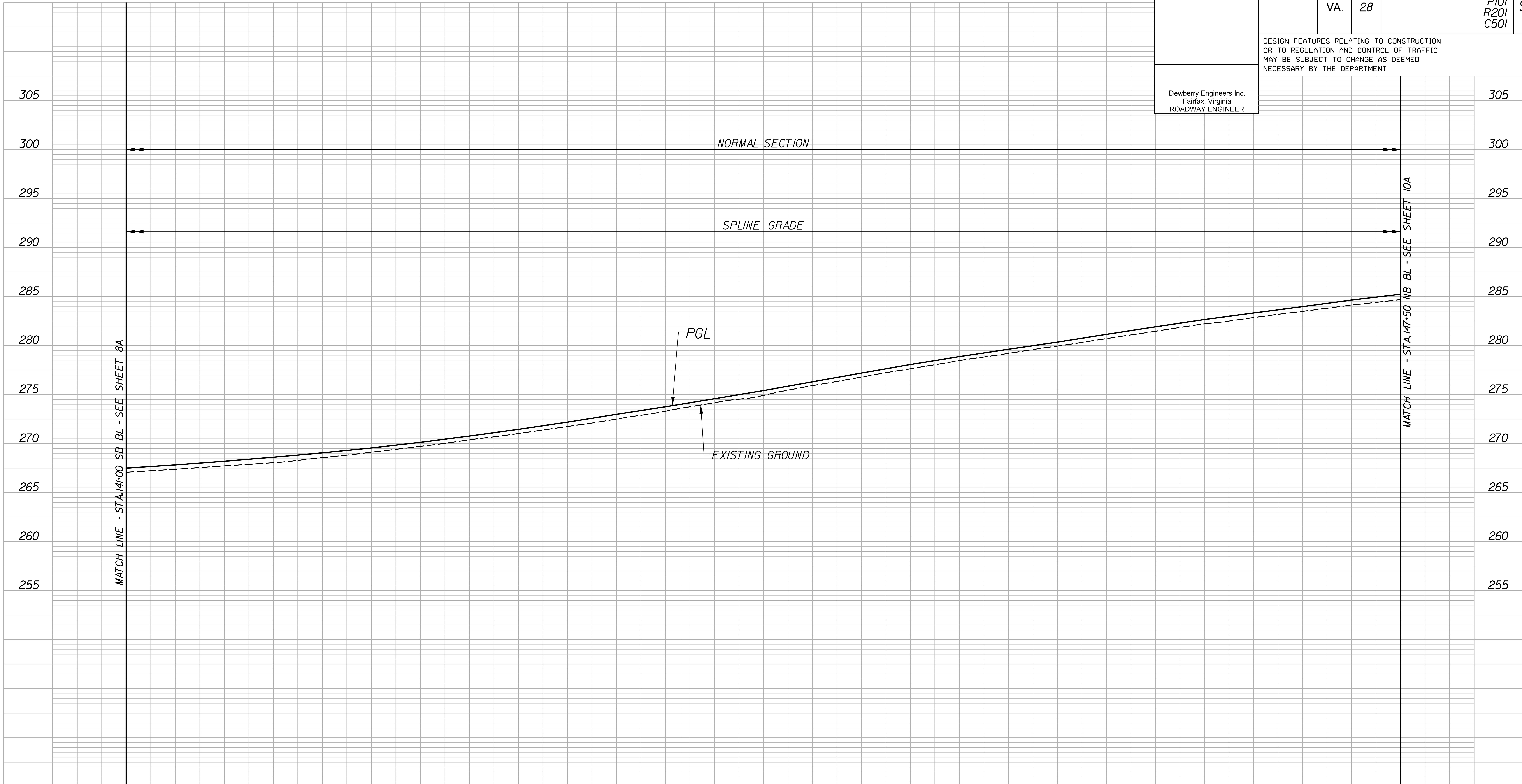
HORIZ. 0 25' 50' / VERT. 0 5' 10'	PROJECT 0028-029-269	SHEET NO. 9A

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	9B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



NB ROUTE 28

Station	MEDIAN EP (XX' OFFSET)	PGL	EXIST.	OUTSIDE EP (XX' OFFSET)
141+00	267.50 (0.00')	267.50	267.07	266.78 (36.00')
	267.83 (0.00')	267.83	267.39	267.11 (36.00')
	268.20 (0.00')	268.20	267.72	267.48 (36.00')
	268.61 (0.00')	268.61	268.05	267.89 (36.00')
142+00	269.06 (0.00')	269.06	268.56	268.34 (36.00')
	269.56 (0.00')	269.56	269.12	268.84 (36.00')
	270.13 (0.00')	270.13	269.72	269.41 (36.00')
	270.77 (0.00')	270.77	270.39	270.05 (36.00')
143+00	271.45 (0.00')	271.45	271.03	270.73 (36.00')
	272.19 (0.00')	272.19	271.75	271.47 (36.00')
	272.99 (0.00')	272.99	272.51	272.27 (36.00')
	273.76 (0.00')	273.76	273.31	273.04 (36.00')
144+00	274.58 (0.00')	274.58	274.17	273.86 (36.00')
	275.41 (0.00')	275.41	274.92	274.69 (36.00')
	276.31 (0.00')	276.31	275.92	275.59 (36.00')
	277.20 (0.00')	277.20	276.79	276.48 (36.00')
145+00	278.08 (0.00')	278.08	277.64	277.36 (36.00')
	278.88 (0.00')	278.88	278.47	278.16 (36.00')
	279.63 (0.00')	279.63	279.21	278.91 (36.00')
	280.36 (0.00')	280.36	279.96	279.64 (36.00')
146+00	281.15 (0.00')	281.15	280.72	280.43 (36.00')
	281.92 (0.00')	281.92	281.47	281.20 (36.00')
	282.66 (0.00')	282.66	282.22	281.91 (37.50')
	283.33 (0.00')	283.33	282.86	282.55 (39.00')
147+00	283.98 (0.00')	283.98	283.50	283.17 (40.50')
	284.65 (0.00')	284.65	284.13	283.81 (42.00')
	285.25 (0.00')	285.25	284.70	284.38 (43.50')

HORIZ. 0 25' 50'
VERT. 0 5' 10'

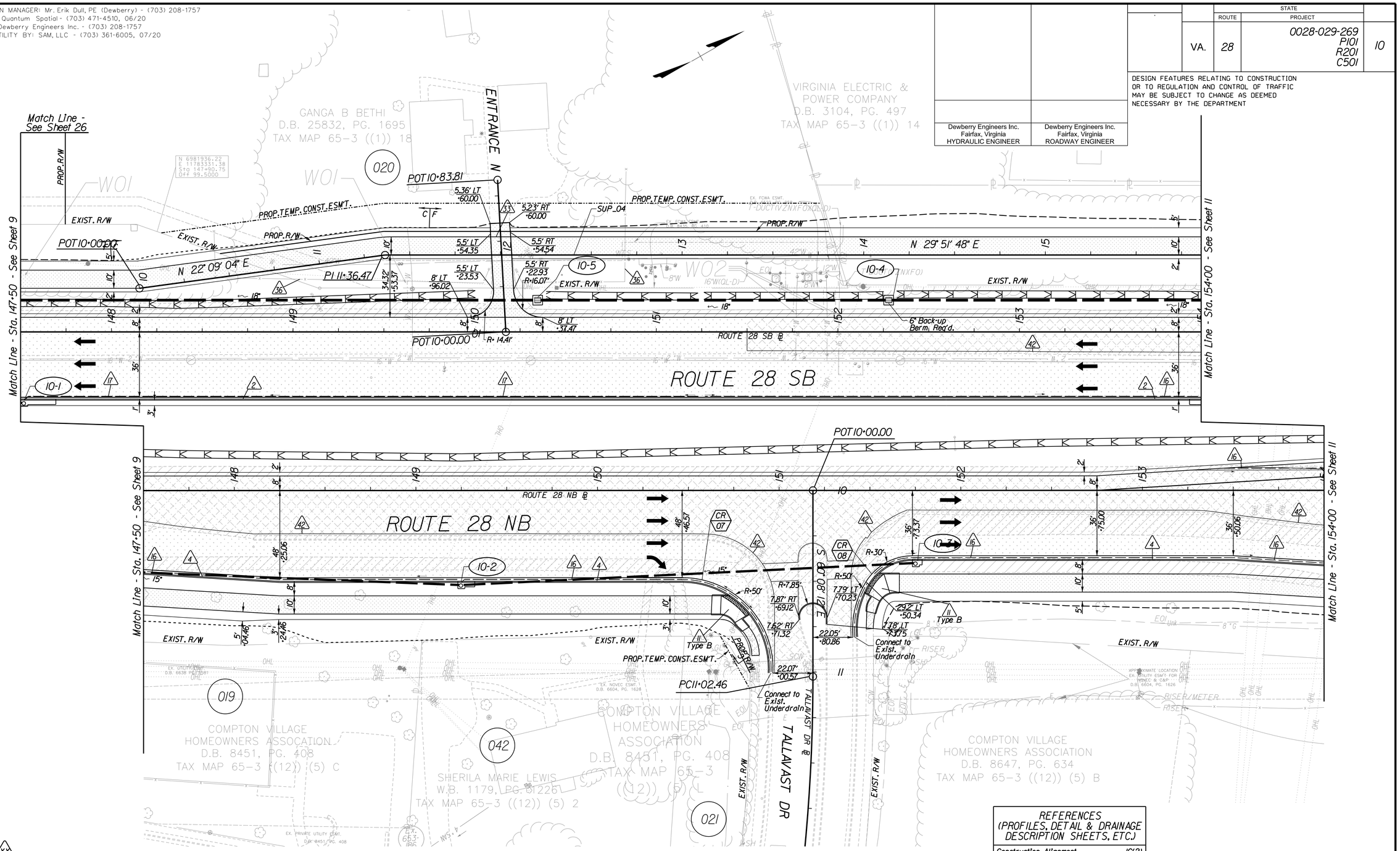
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

		STATE	
	ROUTE	PROJECT	
VA.	28	0028-029-269 P101 R201 C501	10

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER



Key Legend (XX)

1	6" Curb, Std. CG-2 Req'd.	11	Curb Ramp, Std. CG-12 Req'd.	23	Guardrail, Std. GR-MGS1 Req'd.	35	Remove Exist. Guardrail
2	4" Curb, Std. CG-3 Req'd.	12	Underdrain Endwall, Std. EW-12 Req'd.	24	Guardrail, Std. GR-MGS1A Req'd.	36	Remove Exist. Fence
3	6" Curb and Gutter, Std. CG-6 Req'd.	13	Not Used	25	Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.	37	Remove Exist. Structure
4	4" Curb and Gutter, Std. CG-7 Req'd.	14	Groundwater Underdrain, Std. UD-1 Req'd.	26	Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.	38	Remove Or Abandon and Fill Exist. Pipe
5	Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.	15	Curb-Cut Opening, Drainage Flume	27	Guardrail, Std. GR-10, Type I Req'd.	39	Remove Exist. Pole
6	See Special Provision for Stamped Cement Concrete	16	Pavement Underdrain, Std. UD-4 Req'd.	28	Guardrail, Std. GR-10, Type II Req'd.	40	Adjust Exist. Structure
7	Conc. Raised Median, Std. MS-1A (6" Curb)	17	Pavement Underdrain, Mod. 6" UD-4 Req'd.	29	Guardrail, Std. GR-10, Type III Req'd.	41	Clean Out Exist. Structure
8	Grass Raised Median, Std. MS-2 (6" Curb)	18	Crossdrain, Std. CD-1 Req'd.	30	Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.	42	Full Depth Sawcut
9	Entrance Gutter, Std. CG-9D Req'd.	19	Crossdrain, Std. CD-2 Req'd.	31	Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.	43	Clean Out Exist. Pipe
10	Entrance, Std. CG-11 Req'd.	20	Woven Wire Fence, Std. FE-WI, W2 Req'd.	32	Guardrail Transition, Std. GR-MGS4 Req'd.	44	10' Gutter Run Out
		21	Grass Raised Median, Std. MS-2 (4" Curb)	33	End CG-9D Entrance Type	45	Median Barrier, Std. MB-8A Req'd.
		22	Chain Link Fence, Std. FE-CL Req'd.	34	Handrail, Std. HR-1 Type III Req'd.	46	Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

SCALE 0 25' 50'

0028-029-269	10

10/12/2020
11:20:18 AM

d108720-10A.dgn
Plotted By: cjennings

Dewberry

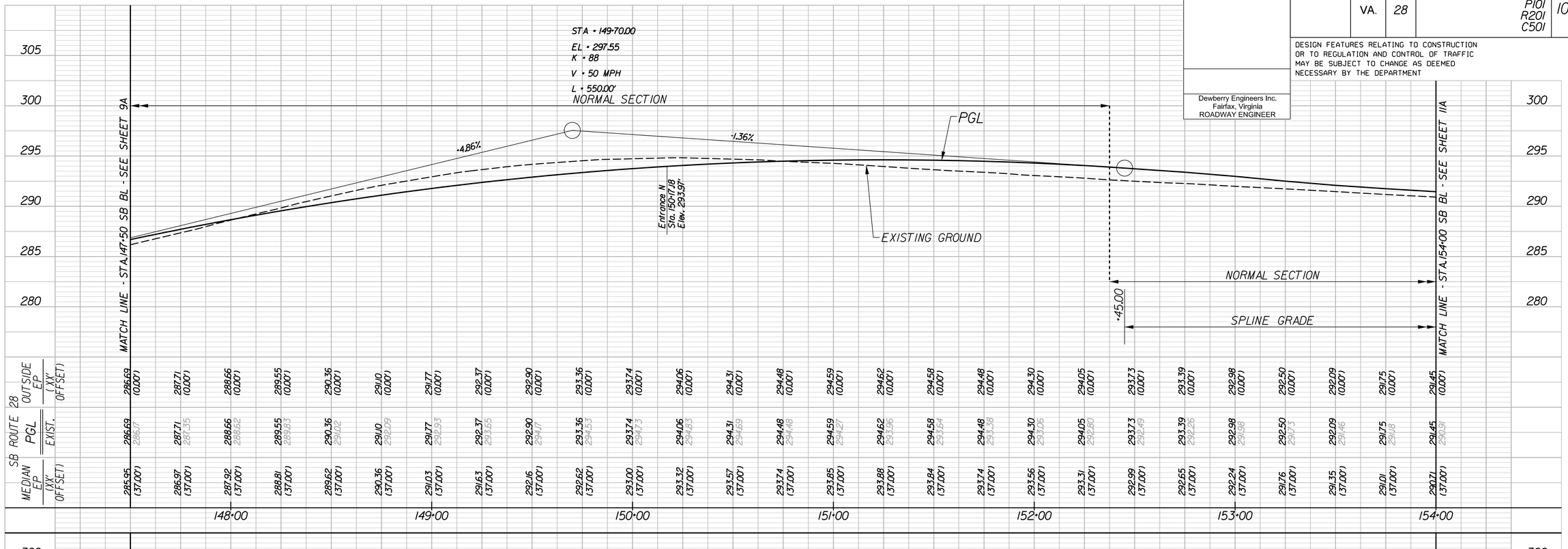
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

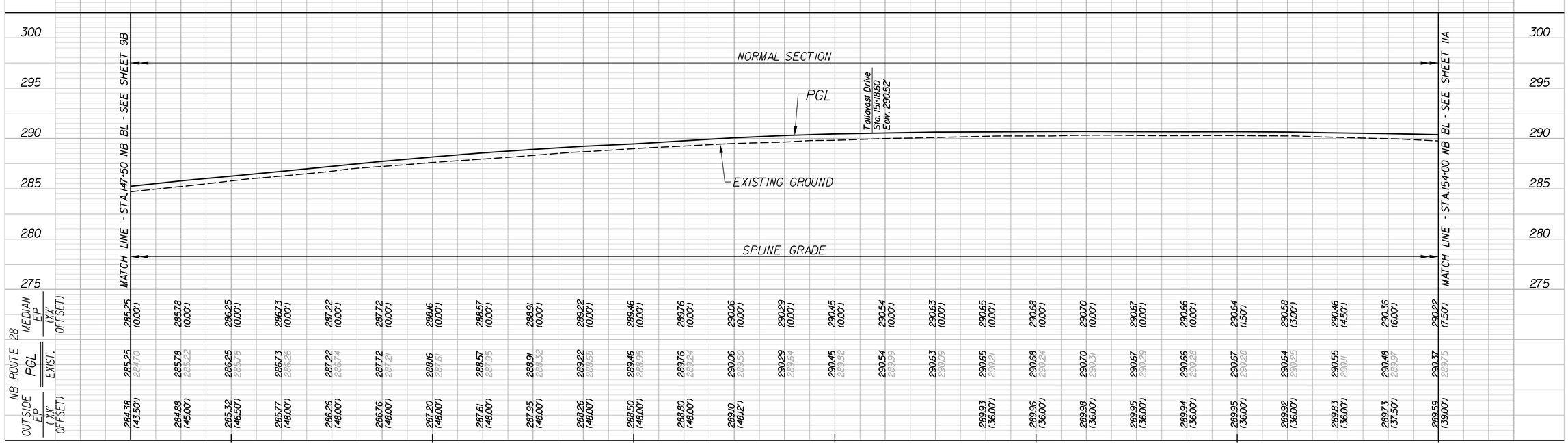
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	10A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



SB ROUTE 28	148+00	149+00	150+00	151+00	152+00	153+00	154+00
OUTSIDE EP (XX' OFFSET)	286.69 (0.00')	287.71 (0.00')	288.66 (0.00')	289.55 (0.00')	290.36 (0.00')	291.10 (0.00')	291.77 (0.00')
	292.37 (0.00')	292.90 (0.00')	293.36 (0.00')	293.74 (0.00')	294.06 (0.00')	294.31 (0.00')	294.48 (0.00')
	294.59 (0.00')	294.62 (0.00')	294.58 (0.00')	294.48 (0.00')	294.30 (0.00')	294.05 (0.00')	293.73 (0.00')
	293.39 (0.00')	292.98 (0.00')	292.50 (0.00')	292.09 (0.00')	291.75 (0.00')	291.45 (0.00')	
PGL / EXIST.	286.69 286.41	287.71 287.35	288.66 288.62	289.55 289.83	290.36 291.02	291.10 292.09	291.77 292.93
	292.37 293.65	292.90 294.11	293.36 294.53	293.74 294.73	294.06 294.83	294.31 294.69	294.48 294.48
	294.59 294.27	294.62 293.96	294.58 293.64	294.48 293.38	294.30 293.06	294.05 292.80	293.73 292.49
	293.39 292.26	292.98 291.98	292.50 291.73	292.09 291.46	291.75 291.18	291.45 290.91	
MEDIAN EP (XX' OFFSET)	285.95 (37.00')	286.97 (37.00')	287.92 (37.00')	288.81 (37.00')	289.62 (37.00')	290.36 (37.00')	291.03 (37.00')
	291.63 (37.00')	292.16 (37.00')	292.62 (37.00')	293.00 (37.00')	293.32 (37.00')	293.57 (37.00')	293.74 (37.00')
	293.85 (37.00')	293.84 (37.00')	293.74 (37.00')	293.56 (37.00')	293.31 (37.00')	292.99 (37.00')	292.65 (37.00')
	292.24 (37.00')	291.76 (37.00')	291.35 (37.00')	291.01 (37.00')	290.71 (37.00')		



NB ROUTE 28	148+00	149+00	150+00	151+00	152+00	153+00	154+00
MEDIAN EP (XX' OFFSET)	285.25 (0.00')	285.78 (0.00')	286.25 (0.00')	286.73 (0.00')	287.22 (0.00')	287.72 (0.00')	288.16 (0.00')
	288.57 (0.00')	288.91 (0.00')	289.22 (0.00')	289.46 (0.00')	289.76 (0.00')	290.06 (0.00')	290.29 (0.00')
	290.45 (0.00')	290.54 (0.00')	290.63 (0.00')	290.65 (0.00')	290.68 (0.00')	290.70 (0.00')	290.67 (0.00')
	290.66 (0.00')	290.67 (1.50')	290.64 (3.00')	290.55 (4.50')	290.48 (6.00')	290.37 (7.50')	
PGL / EXIST.	285.25 284.70	285.78 285.22	286.25 285.78	286.73 286.26	287.22 286.74	287.72 287.21	288.16 287.61
	288.57 287.95	288.91 288.52	289.22 288.68	289.46 288.98	289.76 289.24	290.06 289.50	290.29 289.64
	290.45 289.82	290.54 289.99	290.63 290.09	290.65 290.21	290.68 290.24	290.70 290.31	290.67 290.29
	290.66 290.28	290.67 290.28	290.64 290.25	290.55 290.01	290.48 289.97	290.37 289.75	
OUTSIDE EP (XX' OFFSET)	284.38 (43.50')	284.88 (45.00')	285.32 (46.50')	285.77 (48.00')	286.26 (48.00')	286.76 (48.00')	287.20 (48.00')
	287.61 (48.00')	287.95 (48.00')	288.26 (48.00')	288.50 (48.00')	288.80 (48.00')	289.10 (48.12')	
	289.93 (36.00')	289.96 (36.00')	289.98 (36.00')	289.95 (36.00')	289.94 (36.00')	289.95 (36.00')	289.92 (36.00')
	289.83 (36.00')	289.73 (37.50')	289.59 (39.00')				

NB ROUTE 28

HORIZ.	0	25'	50'
VERT.	0	5'	10'

PROJECT	SHEET NO.
0028-029-269	10A

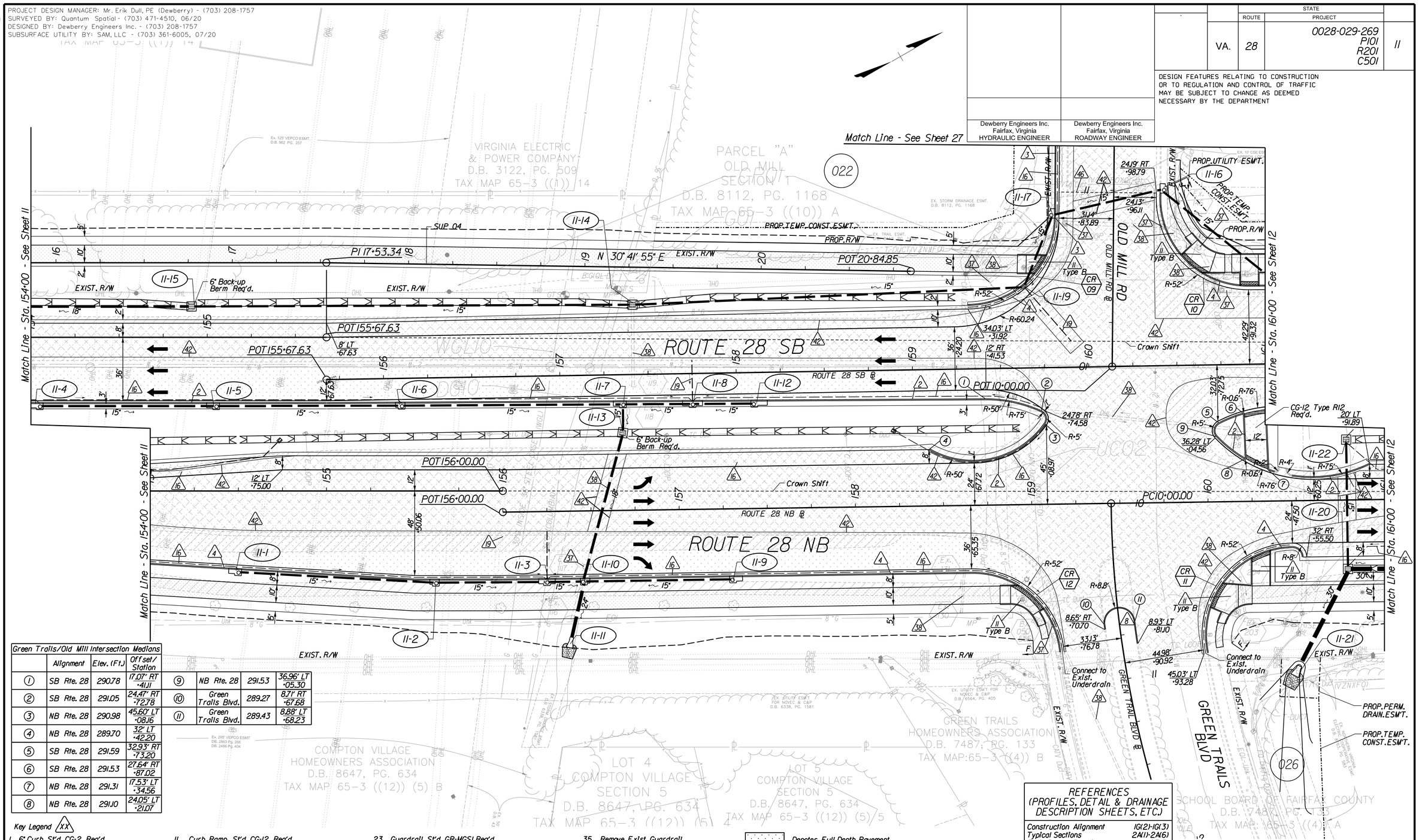
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

		STATE	
	ROUTE	PROJECT	
VA.	28	0028-029-269 P101 R201 C501	11

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER



Green Trails/Old Mill Intersection Medians							
	Alignment	Elev. (Ft.)	Offset/ Station				
①	SB Rte. 28	290.78	17.07' RT •41.11	⑨	NB Rte. 28	291.53	36.96' LT •05.30
②	SB Rte. 28	291.05	24.47' RT •72.78	⑩	Green Trails Blvd.	289.27	8.71' RT •67.68
③	NB Rte. 28	290.98	45.60' LT •08.16	⑪	Green Trails Blvd.	289.43	8.88' LT •68.23
④	NB Rte. 28	289.70	32' LT •42.20				
⑤	SB Rte. 28	291.59	32.93' RT •73.20				
⑥	SB Rte. 28	291.53	27.64' RT •87.02				
⑦	NB Rte. 28	291.31	17.53' LT •34.56				
⑧	NB Rte. 28	291.10	24.05' LT •21.07				

Key Legend (XX)

1 6" Curb, Sl'd. CG-2 Req'd.
2 4" Curb, Sl'd. CG-3 Req'd.
3 6" Curb and Gutter, Sl'd. CG-6 Req'd.
4 4" Curb and Gutter, Sl'd. CG-7 Req'd.
5 Conc. Raised Median, Sl'd. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Sl'd. MS-1A (6" Curb)
8 Grass Raised Median, Sl'd. MS-2 (6" Curb)
9 Entrance Gutter, Sl'd. CG-9D Req'd.
10 Entrance, Sl'd. CG-11 Req'd.
11 Curb Ramp, Sl'd. CG-12 Req'd.
12 Underdrain Endwall, Sl'd. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Sl'd. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Sl'd. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Sl'd. CD-1 Req'd.
19 Crossdrain, Sl'd. CD-2 Req'd.
20 Woven Wire Fence, Sl'd. FE-WI, W2 Req'd.
21 Grass Raised Median, Sl'd. MS-2 (4" Curb)
22 Chain Link Fence, Sl'd. FE-CL Req'd.
23 Guardrail, Sl'd. GR-MGS1 Req'd.
24 Guardrail, Sl'd. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, Sl'd. GR-MGS2 Req'd.
26 Guardrail Trailing End Acharge, Sl'd. GR-MGS3 Req'd.
27 Guardrail, Sl'd. GR-10, Type I Req'd.
28 Guardrail, Sl'd. GR-10, Type II Req'd.
29 Guardrail, Sl'd. GR-10, Type III Req'd.
30 Fixed Object Att., Sl'd. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Sl'd. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Sl'd. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Sl'd. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Sl'd. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Construction Alignment	IG(2)-IG(3)
Typical Sections	2A(1)-2A(6)
E&S Phase IB(1)/2	2F(5)
E&S Phase 3	2G(5)
Profiles	IIA-IIB
Drainage Descriptions	33

SCALE 0 25' 50'

0028-029-269	11

10/12/2020
11:20:34 AM

d108720-IIAdgn
Plotted By: cjennings

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IIA

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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Fairfax, Virginia
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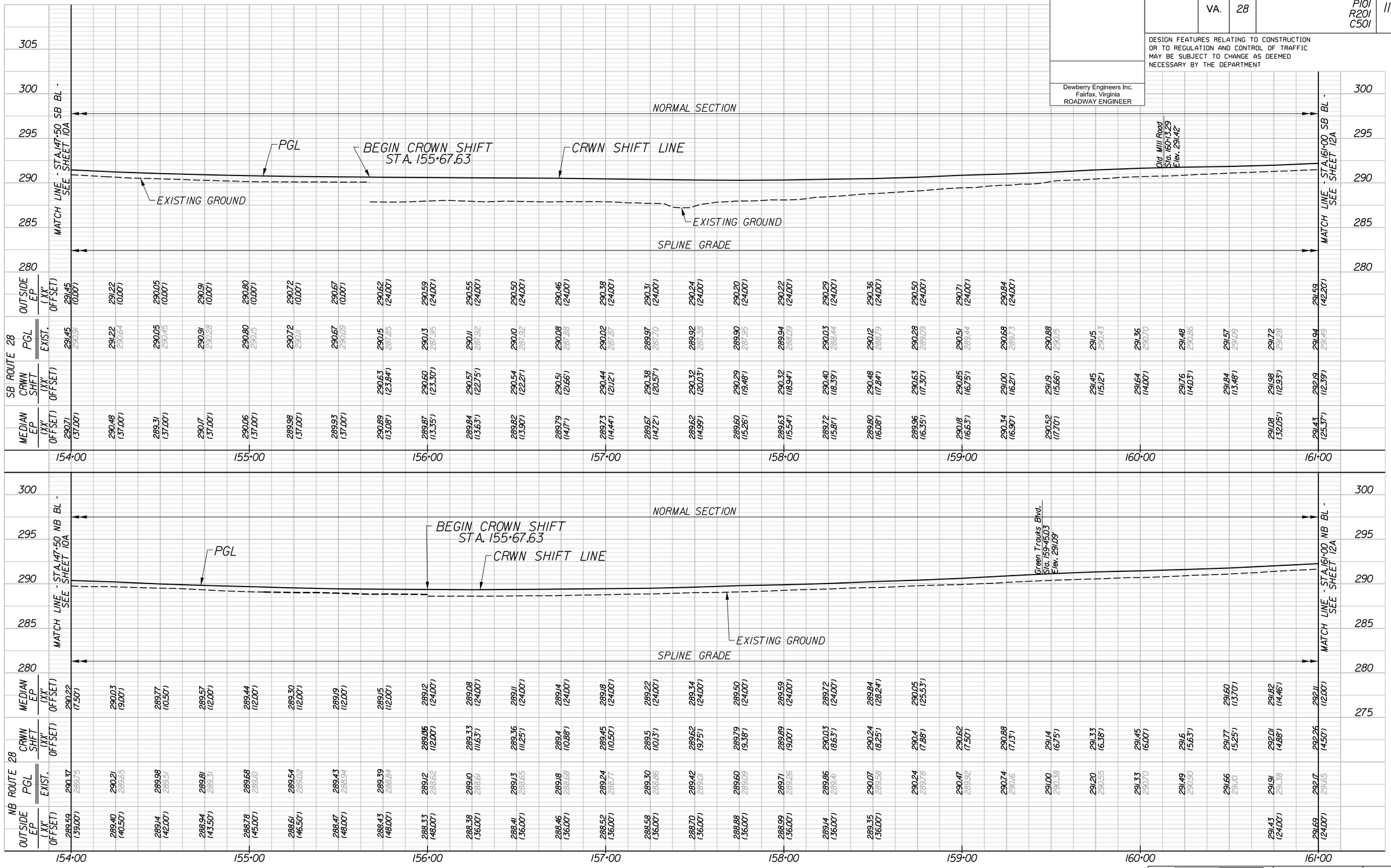

NB ROUTE 28

HORIZ.	0	25'	50'
VERT.	0	5'	10'

PROJECT	SHEET NO.
0028-029-269	IIA

10/12/2020
11:20:40 AM

d108720-IIB.dgn
Plotted By: cjennings

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

OLD MILL ROAD

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	IIB

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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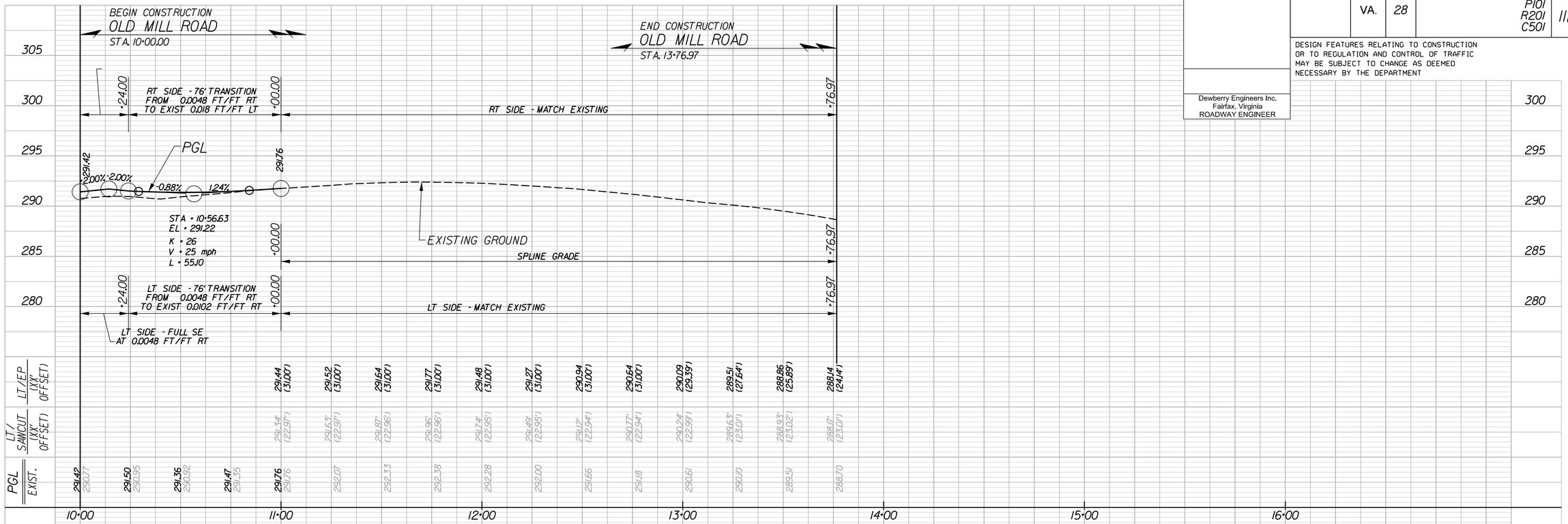
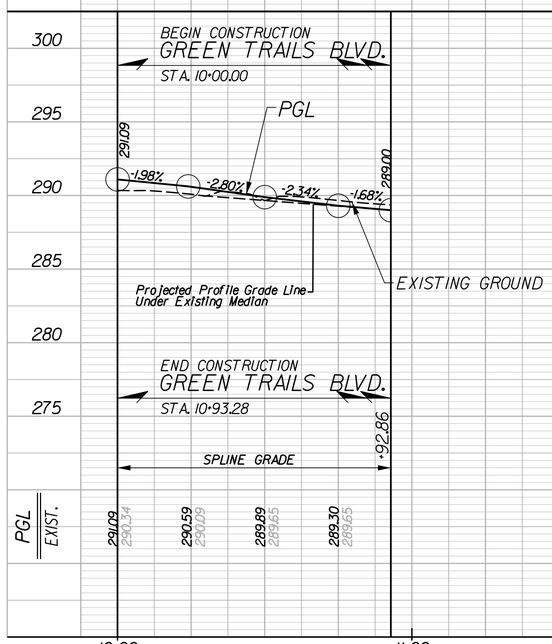
Fairfax, Virginia
ROADWAY ENGINEER





GREEN TRAILS BLVD.

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	IIB

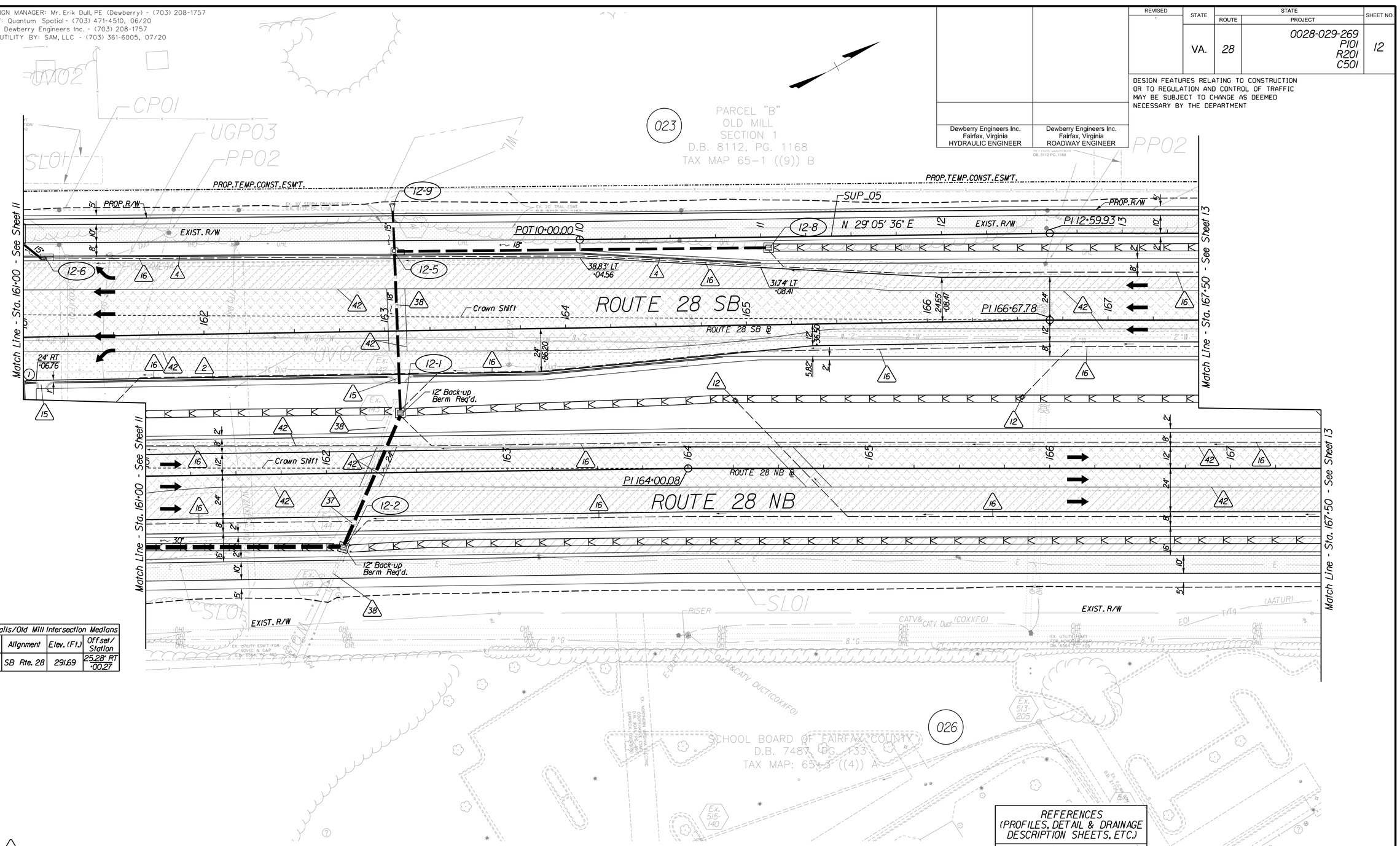
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	12

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Green Trails/Old Mill Intersection Medians			
	Alignment	Elev. (Ft.)	Offset/ Station
①	SB Rte. 28	291.69	25.28' RT -00.27

Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. WS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-WI, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGS1 Req'd.
24 Guardrail, Std. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Aft., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Aft. Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Construction Alignment	1G(3)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(5)-2F(6)
E&S Phase 3	2G(5)-2G(6)
Profiles	12A
Drainage Descriptions	33

SCALE	PROJECT	SHEET NO.
0 25' 50'	0028-029-269	12

Dewberry

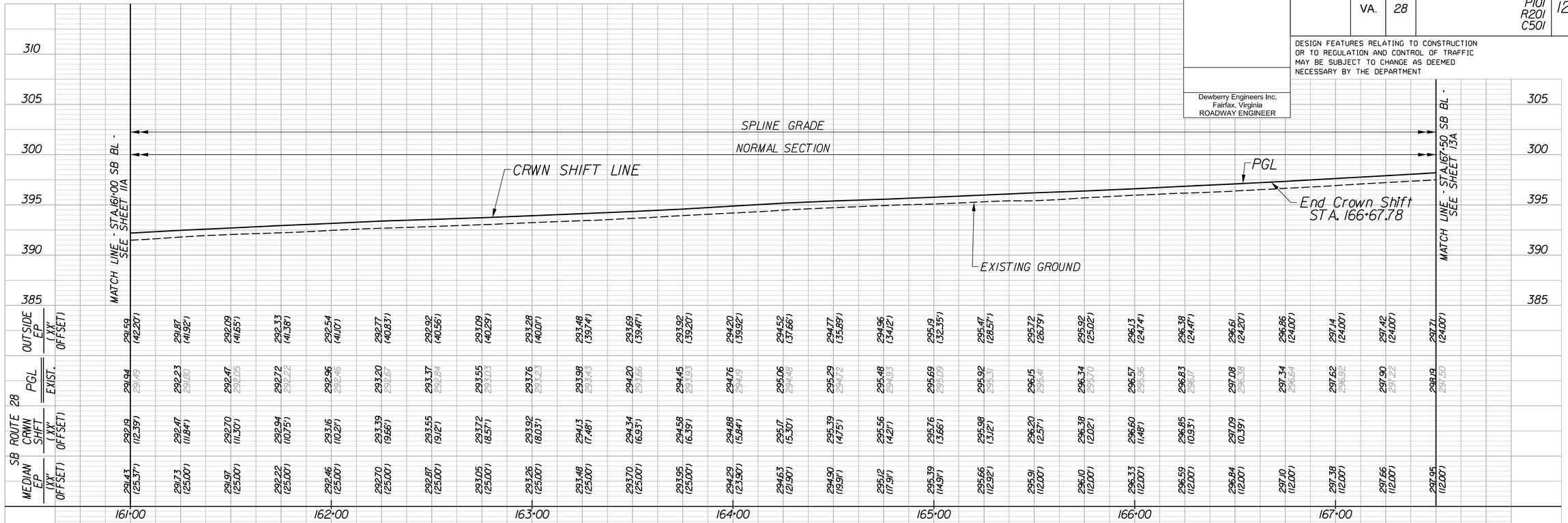
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	12A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



SB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	29.43 (25.37')	29.73 (25.00')	29.97 (25.00')	29.22 (25.00')	29.46 (25.00')	29.70 (25.00')	29.87 (25.00')
CRWN SHIFT (XX' OFFSET)	292.19 (12.39')	292.47 (11.84')	292.70 (11.30')	292.94 (10.75')	293.16 (10.21')	293.39 (9.66')	293.55 (9.12')
PGL EXIST.	29.94 29.49	292.23 29.80	292.47 29.05	292.72 29.22	292.96 29.46	293.20 29.67	293.37 29.84
OUTSIDE EP (XX' OFFSET)	29.59 (42.20')	29.87 (41.92')	292.09 (41.65')	292.33 (41.38')	292.54 (41.01')	292.77 (40.83')	292.92 (40.56')

SB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	29.87 (12.00')	292.09 (12.00')	292.33 (12.00')	292.54 (12.00')	292.77 (12.00')	292.92 (12.00')	293.09 (12.00')
CRWN SHIFT (XX' OFFSET)	293.09 (40.29')	293.28 (40.01')	293.48 (39.74')	293.69 (39.47')	293.92 (39.20')	294.20 (39.92')	294.52 (37.66')
PGL EXIST.	293.55 293.03	293.76 293.23	293.98 293.43	294.20 293.66	294.45 293.91	294.76 294.19	295.06 294.48
OUTSIDE EP (XX' OFFSET)	293.72 (40.29')	293.92 (40.01')	294.13 (39.74')	294.34 (39.47')	294.58 (39.20')	294.88 (39.92')	295.17 (37.66')

SB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	29.46 (25.00')	29.70 (25.00')	29.87 (25.00')	29.05 (25.00')	29.26 (25.00')	29.48 (25.00')	29.70 (25.00')
CRWN SHIFT (XX' OFFSET)	293.55 (9.12')	293.72 (8.57')	293.92 (8.03')	294.13 (7.48')	294.34 (6.93')	294.58 (6.39')	294.88 (5.84')
PGL EXIST.	293.37 292.84	293.55 293.03	293.76 293.23	293.98 293.43	294.20 293.66	294.45 293.91	294.76 294.19
OUTSIDE EP (XX' OFFSET)	292.92 (40.56')	293.09 (40.29')	293.28 (40.01')	293.48 (39.74')	293.69 (39.47')	293.92 (39.20')	294.20 (39.92')

SB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	29.73 (25.00')	29.97 (25.00')	29.22 (25.00')	29.46 (25.00')	29.70 (25.00')	29.87 (25.00')	29.05 (25.00')
CRWN SHIFT (XX' OFFSET)	293.72 (8.57')	293.92 (8.03')	294.13 (7.48')	294.34 (6.93')	294.58 (6.39')	294.88 (5.84')	295.17 (5.30')
PGL EXIST.	293.55 293.03	293.76 293.23	293.98 293.43	294.20 293.66	294.45 293.91	294.76 294.19	295.06 294.48
OUTSIDE EP (XX' OFFSET)	293.09 (40.29')	293.28 (40.01')	293.48 (39.74')	293.69 (39.47')	293.92 (39.20')	294.20 (39.92')	294.52 (37.66')

SB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	29.26 (25.00')	29.48 (25.00')	29.70 (25.00')	29.87 (25.00')	29.05 (25.00')	29.26 (25.00')	29.48 (25.00')
CRWN SHIFT (XX' OFFSET)	294.02 (5.30')	294.13 (4.75')	294.34 (4.21')	294.58 (3.66')	294.88 (3.12')	295.17 (2.57')	295.39 (2.02')
PGL EXIST.	293.79 293.48	294.02 293.66	294.13 293.87	294.34 294.08	294.58 294.30	294.88 294.50	295.17 294.72
OUTSIDE EP (XX' OFFSET)	293.63 (40.29')	293.84 (40.01')	294.04 (39.74')	294.25 (39.47')	294.48 (39.20')	294.75 (39.92')	295.06 (37.66')

SB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	29.48 (25.00')	29.70 (25.00')	29.87 (25.00')	29.05 (25.00')	29.26 (25.00')	29.48 (25.00')	29.66 (25.00')
CRWN SHIFT (XX' OFFSET)	294.34 (6.93')	294.58 (6.39')	294.88 (5.84')	295.17 (5.30')	295.39 (4.75')	295.56 (4.21')	295.76 (3.66')
PGL EXIST.	294.20 293.66	294.45 293.91	294.76 294.19	295.06 294.48	295.29 294.72	295.48 294.93	295.69 295.09
OUTSIDE EP (XX' OFFSET)	293.92 (39.20')	294.20 (39.92')	294.52 (37.66')	294.77 (35.89')	295.19 (32.35')	295.47 (28.57')	295.72 (26.79')

SB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	29.70 (25.00')	29.87 (25.00')	29.05 (25.00')	29.26 (25.00')	29.48 (25.00')	29.66 (25.00')	29.84 (25.00')
CRWN SHIFT (XX' OFFSET)	294.58 (6.39')	294.88 (5.84')	295.17 (5.30')	295.39 (4.75')	295.56 (4.21')	295.76 (3.66')	295.98 (3.12')
PGL EXIST.	294.45 293.91	294.76 294.19	295.06 294.48	295.29 294.72	295.48 294.93	295.69 295.09	295.92 295.31
OUTSIDE EP (XX' OFFSET)	294.20 (39.20')	294.52 (37.66')	294.77 (35.89')	295.19 (32.35')	295.47 (28.57')	295.72 (26.79')	295.92 (25.02')

SB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	29.87 (25.00')	29.05 (25.00')	29.26 (25.00')	29.48 (25.00')	29.66 (25.00')	29.84 (25.00')	29.97 (25.00')
CRWN SHIFT (XX' OFFSET)	295.17 (5.30')	295.39 (4.75')	295.56 (4.21')	295.76 (3.66')	295.98 (3.12')	296.20 (2.57')	296.38 (2.02')
PGL EXIST.	295.06 294.48	295.29 294.72	295.48 294.93	295.69 295.09	295.92 295.31	296.15 295.41	296.34 295.70
OUTSIDE EP (XX' OFFSET)	294.77 (35.89')	295.19 (32.35')	295.47 (28.57')	295.72 (26.79')	295.92 (25.02')	296.13 (24.74')	296.38 (24.47')

SB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	29.05 (25.00')	29.26 (25.00')	29.48 (25.00')	29.66 (25.00')	29.84 (25.00')	29.97 (25.00')	29.13 (25.00')
CRWN SHIFT (XX' OFFSET)	295.39 (4.75')	295.56 (4.21')	295.76 (3.66')	295.98 (3.12')	296.20 (2.57')	296.38 (2.02')	296.60 (1.48')
PGL EXIST.	295.29 294.72	295.48 294.93	295.69 295.09	295.92 295.31	296.15 295.41	296.34 295.70	296.57 295.86
OUTSIDE EP (XX' OFFSET)	295.19 (32.35')	295.47 (28.57')	295.72 (26.79')	295.92 (25.02')	296.13 (24.74')	296.38 (24.47')	296.61 (24.20')

SB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	29.26 (25.00')	29.48 (25.00')	29.66 (25.00')	29.84 (25.00')	29.97 (25.00')	29.13 (25.00')	29.32 (25.00')
CRWN SHIFT (XX' OFFSET)	295.76 (3.66')	295.98 (3.12')	296.20 (2.57')	296.38 (2.02')	296.60 (1.48')	296.85 (0.93')	297.09 (0.39')
PGL EXIST.	295.69 295.09	295.92 295.31	296.15 295.41	296.34 295.70	296.57 295.86	296.83 296.17	297.08 296.38
OUTSIDE EP (XX' OFFSET)	295.47 (28.57')	295.72 (26.79')	295.92 (25.02')	296.13 (24.74')	296.38 (24.47')	296.61 (24.20')	296.86 (24.00')

SB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	29.48 (25.00')	29.66 (25.00')	29.84 (25.00')	29.97 (25.00')	29.13 (25.00')	29.32 (25.00')	29.48 (25.00')
CRWN SHIFT (XX' OFFSET)	296.38 (2.02')	296.60 (1.48')	296.85 (0.93')	297.09 (0.39')	297.31 (0.00')		
PGL EXIST.	296.34 295.70	296.57 295.86	296.83 296.17	297.08 296.38	297.34 296.64	297.62 296.92	297.90 297.22
OUTSIDE EP (XX' OFFSET)	296.13 (24.74')	296.38 (24.47')	296.61 (24.20')	296.86 (24.00')	297.14 (24.00')	297.42 (24.00')	297.71 (24.00')

NB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	292.11 (12.00')	292.36 (12.00')	292.55 (12.00')	292.73 (12.00')	292.95 (12.00')	293.14 (12.00')	293.40 (12.00')
CRWN SHIFT (XX' OFFSET)	293.63 (12.00')	293.84 (12.00')	294.11 (12.00')	294.32 (12.00')	294.54 (12.00')	294.75 (12.00')	295.00 (12.00')
PGL EXIST.	293.79 293.48	294.02 293.66	294.31 293.96	294.52 293.87	294.76 294.08	294.99 294.30	295.24 294.50
OUTSIDE EP (XX' OFFSET)	293.31 (24.00')	293.54 (24.00')	293.83 (24.00')	294.04 (24.00')	294.28 (24.00')	294.51 (24.00')	294.76 (24.00')

NB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	292.36 (12.00')	292.55 (12.00')	292.73 (12.00')	292.95 (12.00')	293.14 (12.00')	293.40 (12.00')	293.63 (12.00')
CRWN SHIFT (XX' OFFSET)	293.84 (12.00')	294.11 (12.00')	294.32 (12.00')	294.54 (12.00')	294.75 (12.00')	295.00 (12.00')	295.19 (12.00')
PGL EXIST.	293.48 293.66	293.79 293.96	294.02 294.31	294.25 294.52	294.48 294.76	294.75 294.99	295.00 295.24
OUTSIDE EP (XX' OFFSET)	293.26 (24.00')	293.48 (24.00')	293.70 (24.00')	293.95 (24.00')	294.29 (23.90')	294.63 (21.90')	294.90 (19.91')

NB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	292.55 (12.00')	292.73 (12.00')	292.95 (12.00')	293.14 (12.00')	293.40 (12.00')	293.63 (12.00')	293.84 (12.00')
CRWN SHIFT (XX' OFFSET)	294.11 (12.00')	294.32 (12.00')	294.54 (12.00')	294.75 (12.00')	295.00 (12.00')	295.19 (12.00')	295.34 (12.00')
PGL EXIST.	293.79 293.48	294.02 293.66	294.31 293.96	294.52 293.87	294.76 294.08	294.99 294.30	295.24 294.50
OUTSIDE EP (XX' OFFSET)	293.54 (24.00')	293.83 (24.00')	294.04 (24.00')	294.28 (24.00')	294.51 (24.00')	294.76 (24.00')	294.95 (24.00')

NB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	292.73 (12.00')	292.95 (12.00')	293.14 (12.00')	293.40 (12.00')	293.63 (12.00')	293.84 (12.00')	294.11 (12.00')
CRWN SHIFT (XX' OFFSET)	295.00 (12.00')	295.19 (12.00')	295.34 (12.00')	295.51 (12.00')	295.72 (12.00')	295.89 (12.00')	296.04 (12.00')
PGL EXIST.	294.75 294.48	295.00 294.66	295.19 294.83	295.34 295.00	295.51 295.17	295.72 295.36	295.89 295.59
OUTSIDE EP (XX' OFFSET)	294.54 (12.00')	294.77 (12.00')	295.00 (12.00')	295.19 (12.00')	295.34 (12.00')	295.51 (12.00')	295.72 (12.00')

NB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	293.14 (12.00')	293.40 (12.00')	293.63 (12.00')	293.84 (12.00')	294.11 (12.00')	294.32 (12.00')	294.54 (12.00')
CRWN SHIFT (XX' OFFSET)	295.34 (12.00')	295.51 (12.00')	295.72 (12.00')	295.89 (12.00')	296.04 (12.00')	296.24 (12.00')	296.49 (12.00')
PGL EXIST.	295.17 294.83	295.34 295.00	295.51 295.17	295.72 295.36	295.89 295.59	296.04 295.78	296.28 295.98
OUTSIDE EP (XX' OFFSET)	294.95 (24.00')	295.10 (24.00')	295.27 (24.00')	295.48 (24.00')	295.65 (24.00')	295.80 (24.00')	296.00 (24.00')

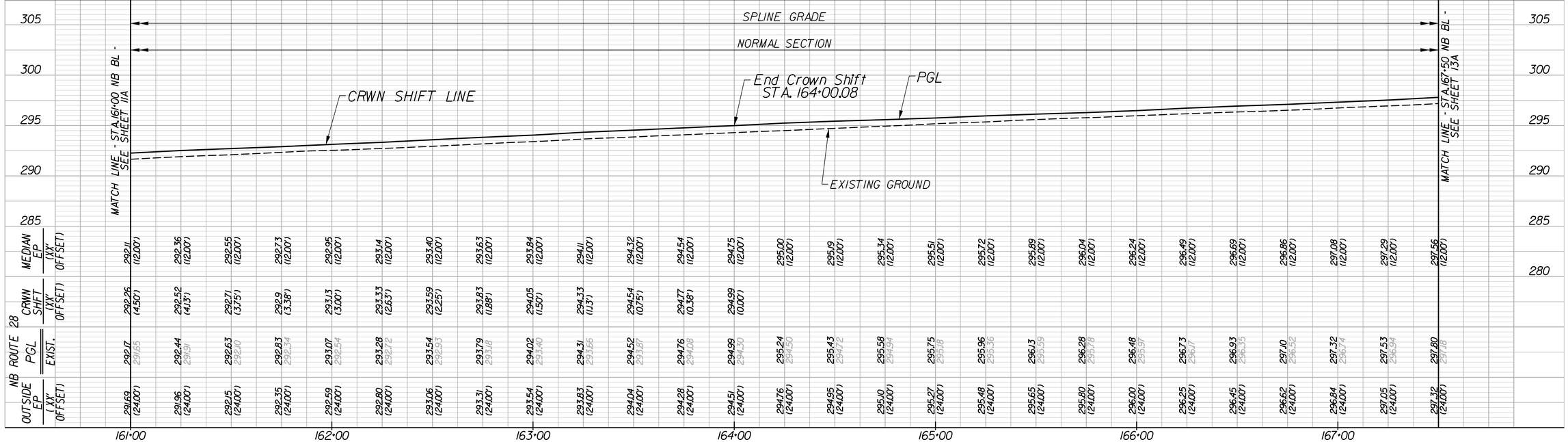
NB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	293.40 (12.00')	293.63 (12.00')	293.84 (12.00')	294.11 (12.00')	294.32 (12.00')	294.54 (12.00')	294.75 (12.00')
CRWN SHIFT (XX' OFFSET)	295.51 (12.00')	295.72 (12.00')	295.89 (12.00')	296.04 (12.00')	296.24 (12.00')	296.49 (12.00')	296.69 (12.00')
PGL EXIST.	295.34 295.00	295.51 295.17	295.72 295.36	295.89 295.59	296.04 295.78	296.28 295.98	296.48 295.97
OUTSIDE EP (XX' OFFSET)	295.10 (24.00')	295.27 (24.00')	295.48 (24.00')	295.65 (24.00')	295.80 (24.00')	296.00 (24.00')	296.25 (24.00')

NB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	293.63 (12.00')	293.84 (12.00')	294.11 (12.00')	294.32 (12.00')	294.54 (12.00')	294.75 (12.00')	295.00 (12.00')
CRWN SHIFT (XX' OFFSET)	295.72 (12.00')	295.89 (12.00')	296.04 (12.00')	296.24 (12.00')	296.49 (12.00')	296.69 (12.00')	296.86 (12.00')
PGL EXIST.	295.48 295.17	295.69 295.36	295.92 295.59	296.13 295.78	296.34 295.97	296.57 296.17	296.83 296.38
OUTSIDE EP (XX' OFFSET)	295.27 (24.00')	295.48 (24.00')	295.65 (24.00')	295.80 (24.00')	296.00 (24.00')	296.25 (24.00')	296.45 (24.00')

NB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	293.84 (12.00')	294.11 (12.00')	294.32 (12.00')	294.54 (12.00')	294.75 (12.00')	295.00 (12.00')	295.19 (12.00')
CRWN SHIFT (XX' OFFSET)	296.04 (12.00')	296.24 (12.00')	296.49 (12.00')	296.69 (12.00')	296.86 (12.00')	297.08 (12.00')	297.29 (12.00')
PGL EXIST.	295.89 295.59	296.04 295.78	296.28 295.98	296.48 295.97	296.73 296.17	296.93 296.35	297.10 296.52
OUTSIDE EP (XX' OFFSET)	295.65 (24.00')	295.80 (24.00')	296.00 (24.00')	296.25 (24.00')	296.45 (24.00')	296.62 (24.00')	296.84 (24.00')

NB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	294.11 (12.00')	294.32 (12.00')	294.54 (12.00')	294.75 (12.00')	295.00 (12.00')	295.19 (12.00')	295.34 (12.00')
CRWN SHIFT (XX' OFFSET)	296.24 (12.00')	296.49 (12.00')	296.69 (12.00')	296.86 (12.00')	297.08 (12.00')	297.29 (12.00')	297.56 (12.00')
PGL EXIST.	296.04 295.78	296.28 295.98	296.48 295.97	296.73 296.17	296.93 296.35	297.10 296.52	297.32 296.74
OUTSIDE EP (XX' OFFSET)	295.80 (24.00')	296.00 (24.00')	296.25 (24.00')	296.45 (24.00')	296.62 (24.00')	296.84 (24.00')	297.05 (24.00')

NB ROUTE 28	161+00	162+00	163+00	164+00	165+00	166+00	167+00
MEDIAN EP (XX' OFFSET)	294.32 (12.00')	294.54 (12.00')	294.75 (12.00')	295.00 (12.00')	295.19 (12.00')	295.34 (12.00')	295.51 (12.00')
CRWN SHIFT (XX' OFFSET)	296.49 (12.00')	296.69 (12.00')	296.86 (12.00')	297.08 (12.00')	297.29 (12.00')	297.56 (12.00')	297.80 (12.00')
PGL EXIST.	296.28 295.98	296.48 295.97	296.73 296.17	296.93 296.35	297.10 296.52	297.32 296.74	297.53 296.94
OUTSIDE EP (XX' OFFSET)	296.00 (24.00')	296.25 (24.00')	296.45 (24.00')	296.62 (24.00')	296.84 (24.00')	297.05 (24.00')	297.32 (24.00')



NB ROUTE 28

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	12A

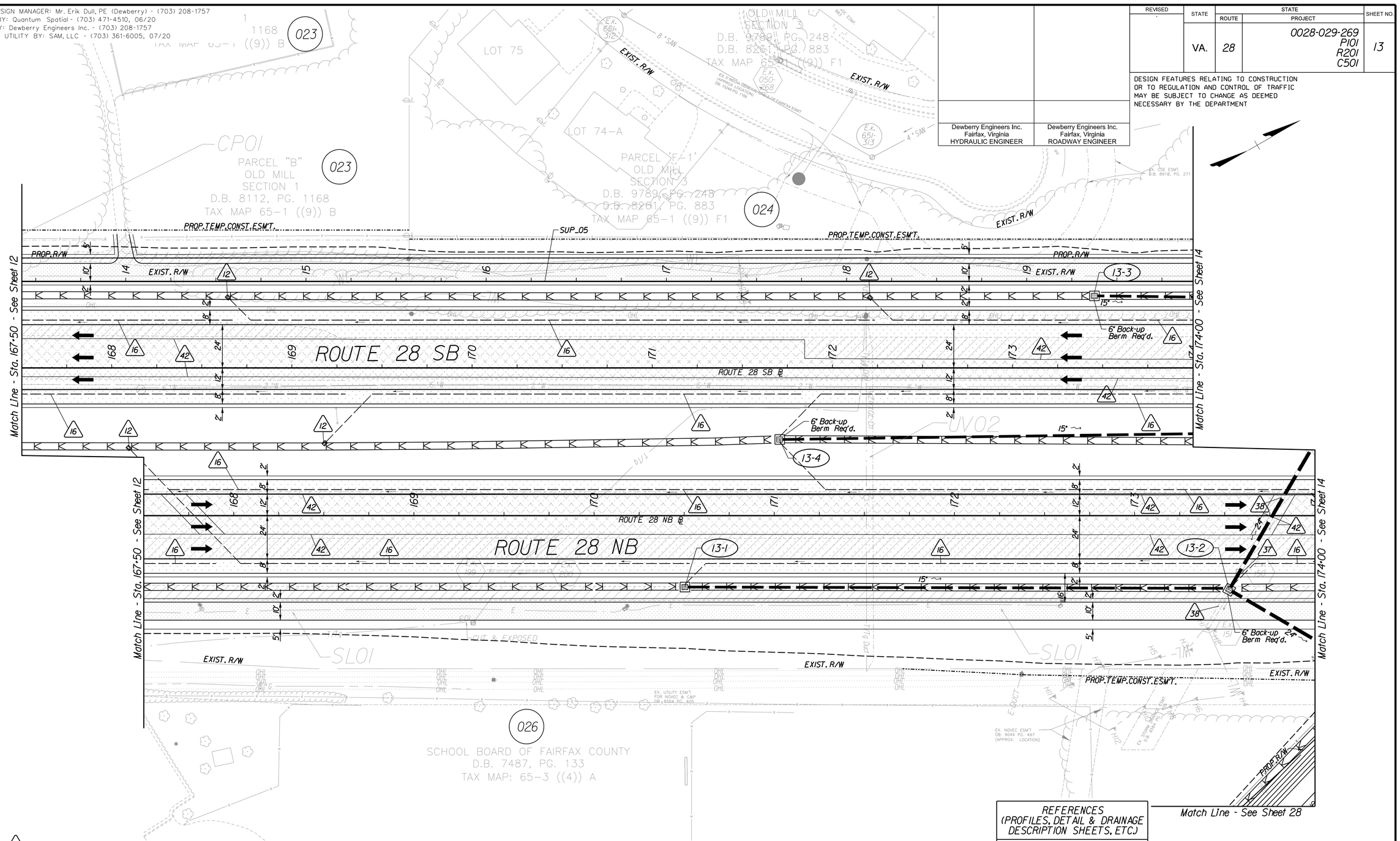
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	13

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER



Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. MS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-WI, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGS1 Req'd.
24 Guardrail, Std. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C ___ Denotes Construction Limits In Cuts
F ___ Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(3)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(6)
E&S Phase 3	2G(6)
Profiles	13A
Drainage Descriptions	33

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	13

Dewberry

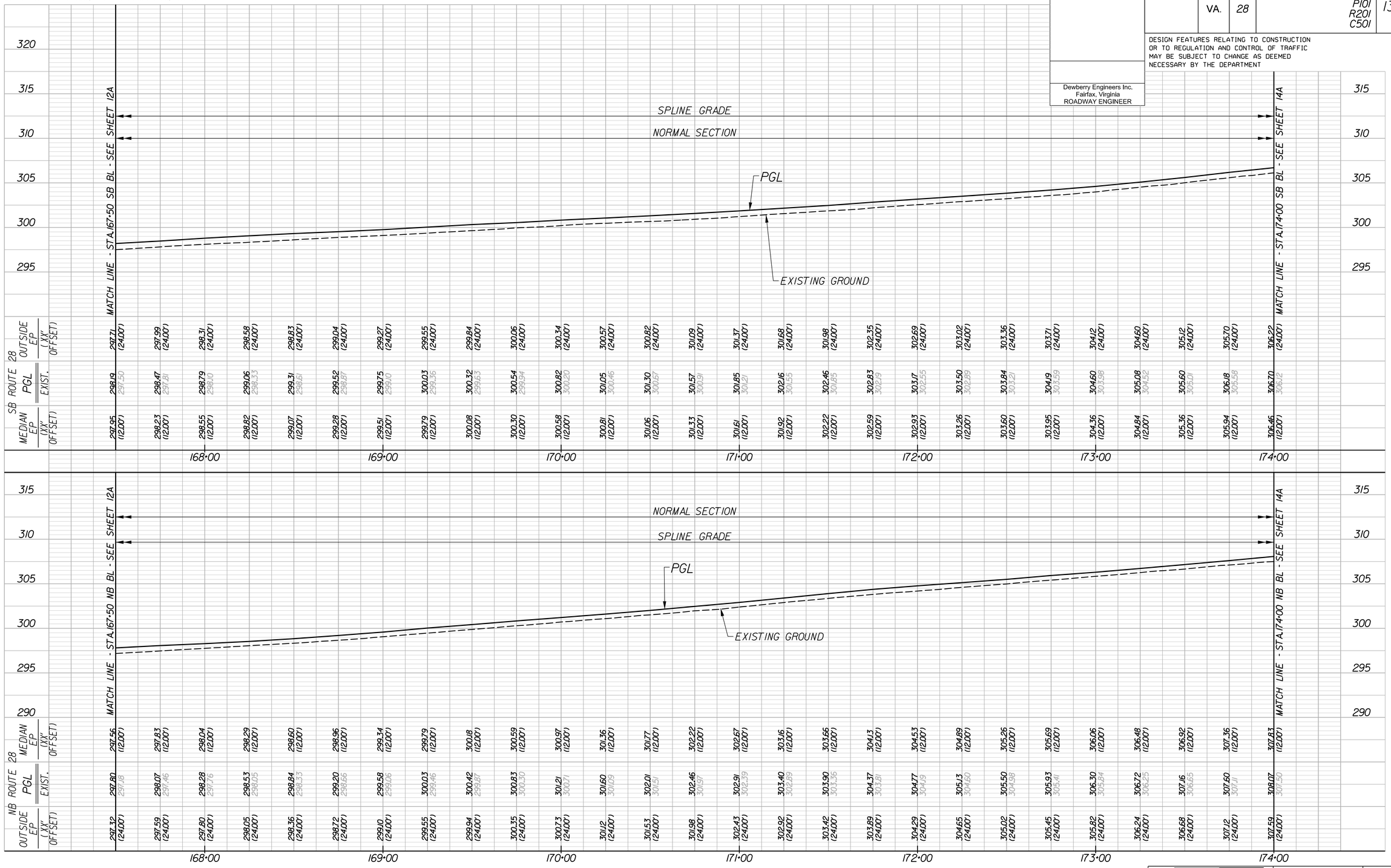
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	13A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



SB ROUTE 28	168+00	169+00	170+00	171+00	172+00	173+00	174+00
MEDIAN EP (XX' OFFSET)	297.95 (12.00')	298.23 (12.00')	298.55 (12.00')	298.82 (12.00')	299.07 (12.00')	299.28 (12.00')	299.51 (12.00')	299.79 (12.00')	300.08 (12.00')	300.30 (12.00')	300.58 (12.00')	300.81 (12.00')	301.06 (12.00')	301.33 (12.00')	301.61 (12.00')	301.92 (12.00')	302.22 (12.00')	302.59 (12.00')	302.93 (12.00')	303.26 (12.00')	303.60 (12.00')	303.95 (12.00')	304.36 (12.00')	304.84 (12.00')	305.36 (12.00')	305.94 (12.00')	306.46 (12.00')
PGL EXIST.	298.19 297.30	298.47 297.81	298.79 298.10	299.06 298.33	299.31 298.51	299.52 298.87	299.75 299.10	300.03 299.36	300.32 299.65	300.54 299.94	300.82 300.20	301.05 300.46	301.30 300.67	301.57 300.91	301.85 301.21	302.16 301.55	302.46 301.85	302.83 302.19	303.17 302.55	303.50 302.89	303.84 303.22	304.19 303.59	304.60 303.98	305.08 304.42	305.60 305.01	306.18 305.58	306.70 306.12
OUTSIDE EP (XX' OFFSET)	297.71 (24.00')	297.99 (24.00')	298.31 (24.00')	298.58 (24.00')	298.83 (24.00')	299.04 (24.00')	299.27 (24.00')	299.55 (24.00')	299.84 (24.00')	300.06 (24.00')	300.34 (24.00')	300.57 (24.00')	300.82 (24.00')	301.09 (24.00')	301.37 (24.00')	301.68 (24.00')	301.98 (24.00')	302.35 (24.00')	302.69 (24.00')	303.02 (24.00')	303.36 (24.00')	303.71 (24.00')	304.12 (24.00')	304.60 (24.00')	305.12 (24.00')	305.70 (24.00')	306.22 (24.00')

NB ROUTE 28	168+00	169+00	170+00	171+00	172+00	173+00	174+00
MEDIAN EP (XX' OFFSET)	297.56 (12.00')	297.83 (12.00')	298.04 (12.00')	298.29 (12.00')	298.60 (12.00')	298.96 (12.00')	299.34 (12.00')	299.79 (12.00')	300.18 (12.00')	300.59 (12.00')	300.97 (12.00')	301.36 (12.00')	301.77 (12.00')	302.22 (12.00')	302.67 (12.00')	303.16 (12.00')	303.66 (12.00')	304.13 (12.00')	304.53 (12.00')	304.89 (12.00')	305.26 (12.00')	305.69 (12.00')	306.06 (12.00')	306.48 (12.00')	306.92 (12.00')	307.36 (12.00')	307.83 (12.00')
PGL EXIST.	297.80 297.48	298.07 297.46	298.28 297.76	298.53 298.05	298.84 298.53	299.20 298.66	299.58 299.06	300.03 299.46	300.42 299.87	300.83 300.30	301.21 300.71	301.60 301.09	302.01 301.51	302.46 301.97	302.91 302.39	303.40 302.89	303.90 303.36	304.37 303.81	304.77 304.19	305.13 304.60	305.50 304.98	305.93 305.41	306.30 305.84	306.72 306.25	307.16 306.65	307.60 307.11	308.07 307.50
OUTSIDE EP (XX' OFFSET)	297.32 (24.00')	297.59 (24.00')	297.80 (24.00')	298.05 (24.00')	298.36 (24.00')	298.72 (24.00')	299.10 (24.00')	299.55 (24.00')	299.94 (24.00')	300.35 (24.00')	300.73 (24.00')	301.12 (24.00')	301.53 (24.00')	301.98 (24.00')	302.43 (24.00')	302.92 (24.00')	303.42 (24.00')	303.89 (24.00')	304.29 (24.00')	304.65 (24.00')	305.02 (24.00')	305.45 (24.00')	305.82 (24.00')	306.24 (24.00')	306.68 (24.00')	307.12 (24.00')	307.59 (24.00')

NB ROUTE 28

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT 0028-029-269

SHEET NO. 13A

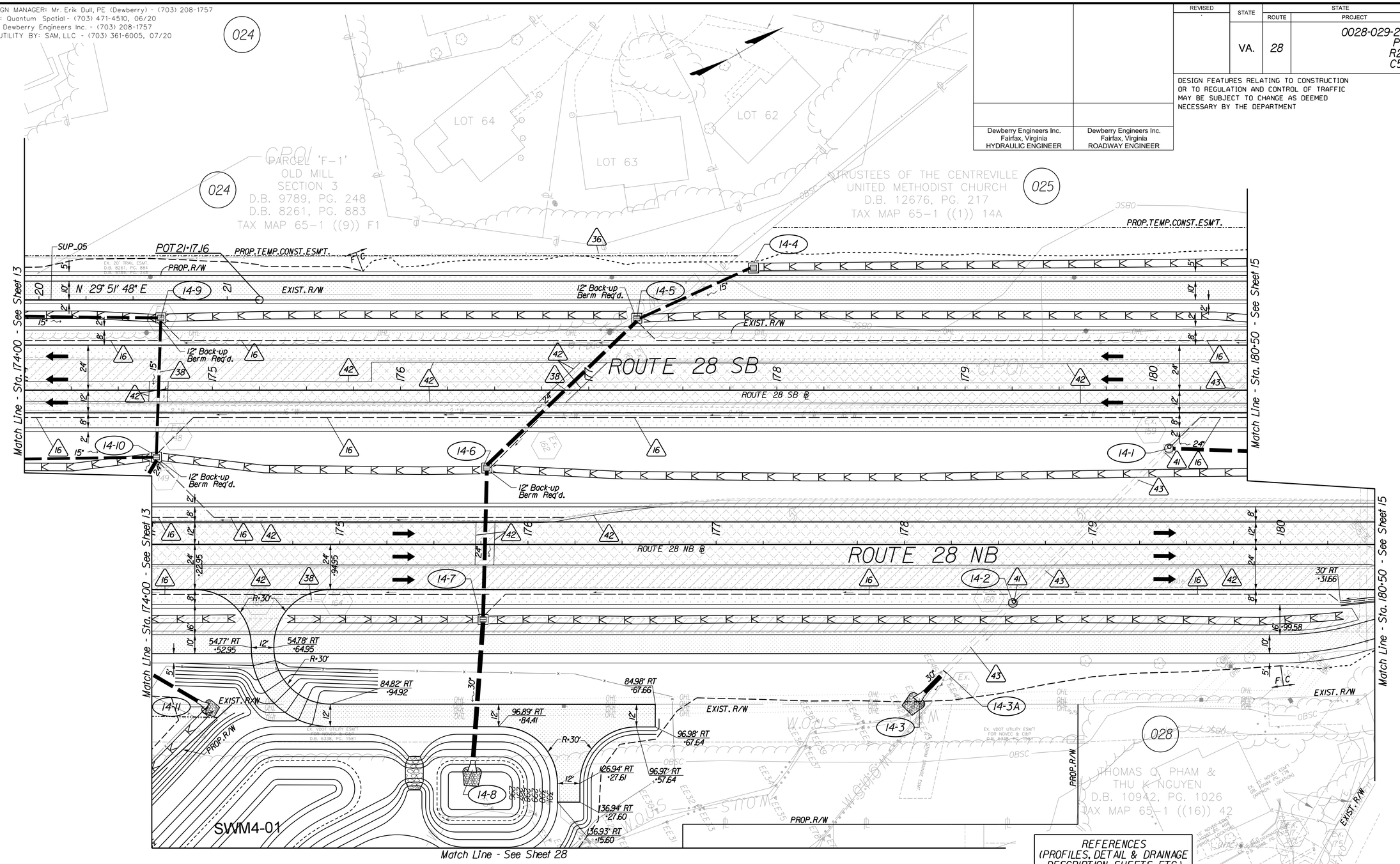
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	14

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER



REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(3)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(6)-2F(7)
E&S Phase 3	2G(6)-2G(7)
Profiles	14A
Drainage Descriptions	33

Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. MS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-WI, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGS1 Req'd.
24 Guardrail, Std. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C ___ Denotes Construction Limits In Cuts
F ___ Denotes Construction Limits In Fills

SCALE	PROJECT	SHEET NO.
0 25' 50'	0028-029-269	14

Dewberry

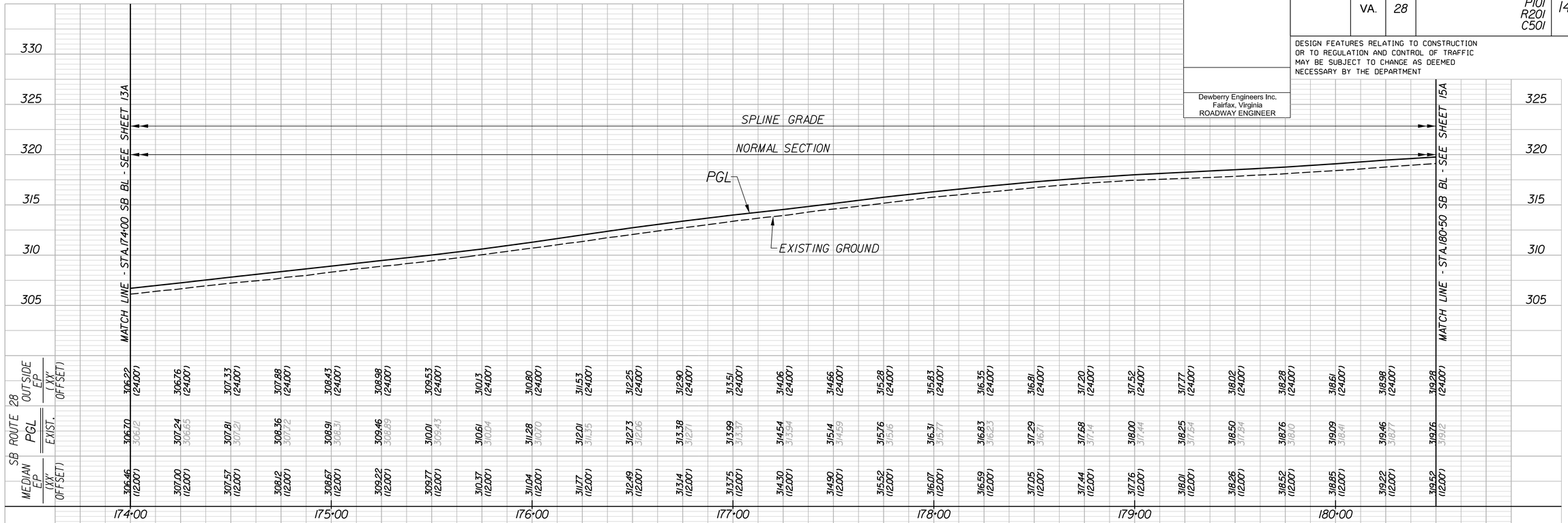
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	14A

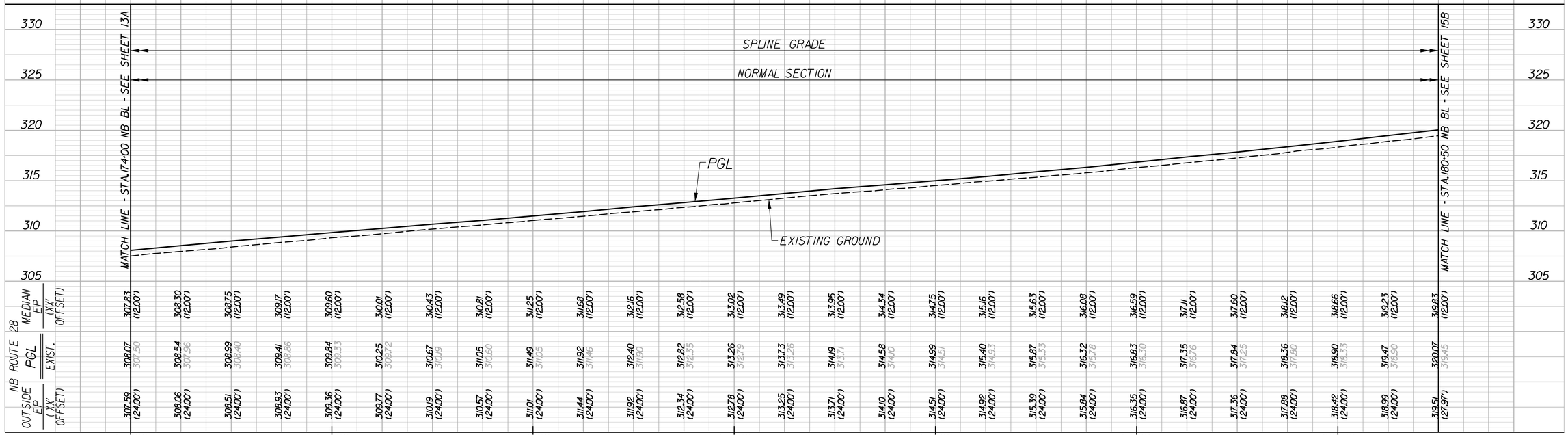
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



SB ROUTE 28	174+00	175+00	176+00	177+00	178+00	179+00	180+00
OUTSIDE EP (XX' OFFSET)	306.22 (24.00')	306.76 (24.00')	307.33 (24.00')	307.88 (24.00')	308.43 (24.00')	308.98 (24.00')	309.53 (24.00')
PGL	306.70	307.24	307.81	308.36	308.91	309.46	310.01
EXIST.	306.42	306.65	307.21	307.72	308.31	308.89	309.43
MEDIAN EP (XX' OFFSET)	306.46 (12.00')	307.00 (12.00')	307.57 (12.00')	308.12 (12.00')	308.67 (12.00')	309.22 (12.00')	309.77 (12.00')

SB ROUTE 28	180+50
OUTSIDE EP (XX' OFFSET)	319.28 (24.00')
PGL	319.76
EXIST.	319.12
MEDIAN EP (XX' OFFSET)	319.76 (12.00')



NB ROUTE 28	174+00	175+00	176+00	177+00	178+00	179+00	180+00
MEDIAN EP (XX' OFFSET)	307.83 (12.00')	308.30 (12.00')	308.75 (12.00')	309.17 (12.00')	309.60 (12.00')	310.01 (12.00')	310.43 (12.00')
PGL	308.07	308.54	308.99	309.41	309.84	310.25	310.67
EXIST.	307.50	307.96	308.40	308.86	309.33	309.72	310.19
OUTSIDE EP (XX' OFFSET)	307.59 (24.00')	308.06 (24.00')	308.51 (24.00')	308.93 (24.00')	309.36 (24.00')	309.77 (24.00')	310.19 (24.00')

NB ROUTE 28	180+50
MEDIAN EP (XX' OFFSET)	319.83 (12.00')
PGL	320.07
EXIST.	319.45
OUTSIDE EP (XX' OFFSET)	319.51 (27.97')

NB ROUTE 28

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	14A

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	15

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

TRUSTEES OF THE CENTREVILLE UNITED METHODIST CHURCH
D.B. 12676, PG. 217
TAX MAP 65-1 ((1)) 14A

MARIA I VASQUEZ
D.B. 20121, PG. 595
TAX MAP 65-1 ((1)) 8A1

CENTREVILLE ROAD LC
D.B. 10710, PG. 1262
TAX MAP 65-1 ((1)) 8B

HIEN BINH TRAN AND LINH MY HUYNH
D.B. 23935, PG. 9
TAX MAP 65-1 ((1)) 13

THOMAS Q. PHAM & THU K NGUYEN
D.B. 10942, PG. 1026
TAX MAP 65-1 ((16)) 42

COMPTON VILLAGE HOMEOWNER ASSOCIATION
D.B. 9781, PG. 1141
TAX MAP 65-1 (((15)) A

LOT 43 SECTION 12 COMPTON VILLAGE D.B. 9781, PG. 1141 TAX MAP 65-1 ((15)) 43

LOT 40 LOT 39 SECTION 12 COMPTON VILLAGE D.B. 9781, PG. 1141 TAX MAP 65-1 ((15)) 39

Match Line - Sta. 180+50 - See Sheet 14

Match Line - Sta. 187+50 - See Sheet 16

ROUTE 28 SB

ROUTE 28 SB ℄

ROUTE 28 NB

ROUTE 28 NB ℄

DARKWOOD DR

DARKWOOD DR ℄

PROP.TEMP.CONST.ESM'T.

PROP.R/W

PROP. NOISE BARRIER

24" Back-up Berm Req'd.

6" Back-up Berm Req'd.

12" Back-up Berm Req'd.

CG-12 Detectable Warning Surface Req'd.

15-1 15-2 15-3 15-4 15-5 15-6 15-7 15-8 15-9 15-11 Ex 15-10

P07+10.00 PT

41.91' LT ·99.86

41' LT ·19.38

41' LT ·74.82

58' LT ·59.13

48' LT ·68.91

20' RT ·38.71

24' RT ·91.88

34' RT ·52.20

32' RT ·44.09

38.22' RT ·80.94

49' RT ·31.56

7.87' RT ·16.77

8' RT ·90.73

8' LT ·89.40

8' LT ·38.62

R=25'

R=27'

R=100'

R=7'

Darkwood Intersection Medians			
	Alignment	Elev. (Ft.)	Offset/ Station
①	NB Rte. 28	320.39	25.23' RT ·74.51
②	Darkwood Dr.	321.00	27.38' RT ·52.72
③	NB Rte. 28	322.48	24' RT ·55.30
④	Darkwood Dr.	321.91	9.53' LT ·29.66

Key Legend (XX)

1 6" Curb, St'd. CG-2 Req'd.
2 4" Curb, St'd. CG-3 Req'd.
3 6" Curb and Gutter, St'd. CG-6 Req'd.
4 4" Curb and Gutter, St'd. CG-7 Req'd.
5 Conc. Raised Median, St'd. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, St'd. MS-1A (6" Curb)
8 Grass Raised Median, St'd. MS-2 (6" Curb)
9 Entrance Gutter, St'd. CG-9D Req'd.
10 Entrance, St'd. CG-11 Req'd.
11 Curb Ramp, St'd. CG-12 Req'd.
12 Underdrain Endwall, St'd. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, St'd. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, St'd. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, St'd. CD-1 Req'd.
19 Crossdrain, St'd. CD-2 Req'd.
20 Woven Wire Fence, St'd. FE-WI, W2 Req'd.
21 Grass Raised Median, St'd. MS-2 (4" Curb)
22 Chain Link Fence, St'd. FE-CL Req'd.
23 Guardrail, St'd. GR-MGSI Req'd.
24 Guardrail, St'd. GR-MGSIA Req'd.
25 Guardrail Tangent End Terminal, St'd. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, St'd. GR-MGS3 Req'd.
27 Guardrail, St'd. GR-10, Type I Req'd.
28 Guardrail, St'd. GR-10, Type II Req'd.
29 Guardrail, St'd. GR-10, Type III Req'd.
30 Fixed Object Att., St'd. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., St'd. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, St'd. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, St'd. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, St'd. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Construction Alignment	1G(3)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(7)
E&S Phase 3	2G(7)
Profiles	15A-15B
Drainage Descriptions	33

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	15

10/12/2020
11:21:43 AM

d108720-15Adgn
Plotted By: cjennings

Dewberry

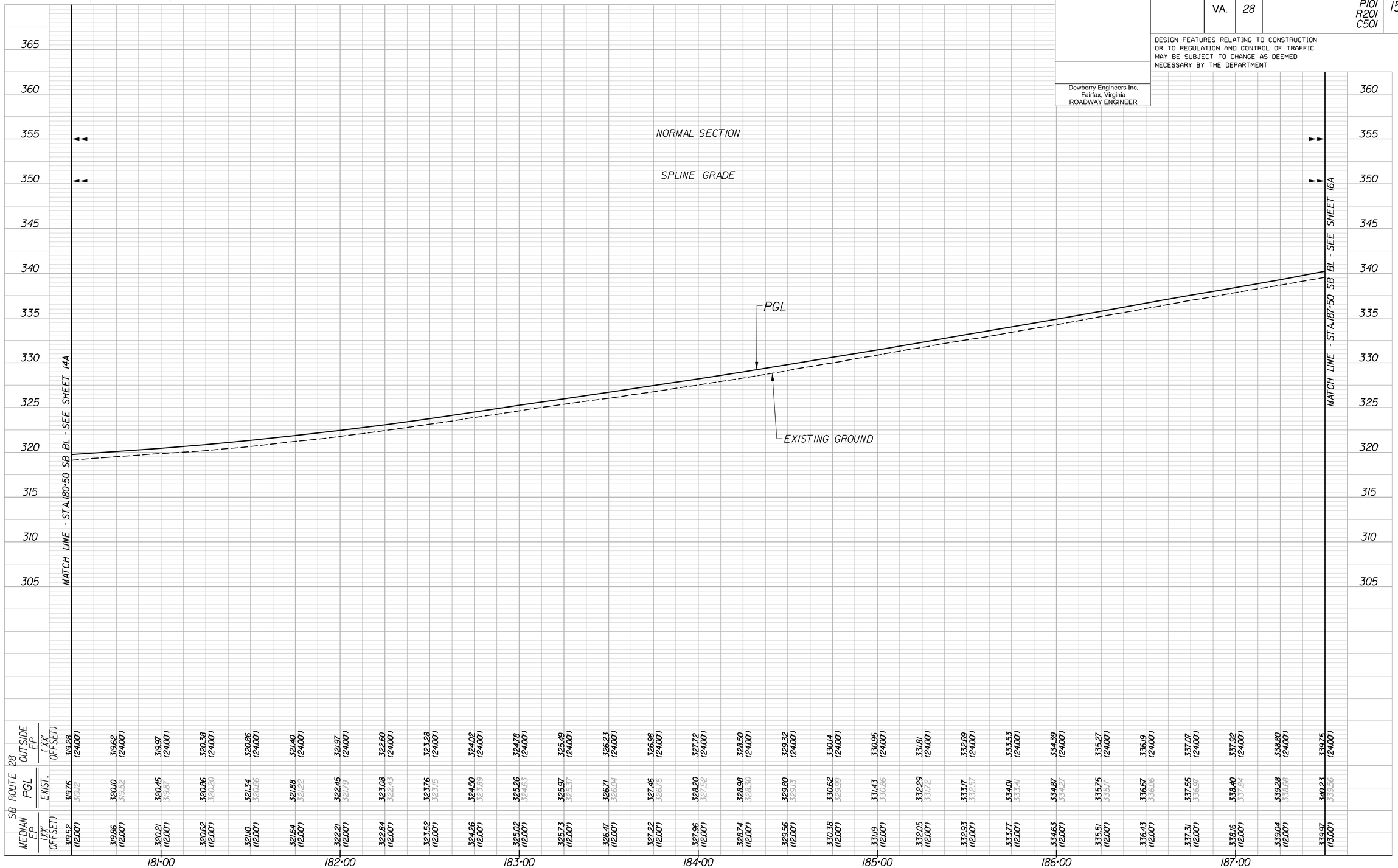
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	15A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



SB ROUTE 28	MEDIAN EP (XX' OFFSET)	PGL / EXIST.	OUTSIDE EP (XX' OFFSET)
181+00	319.52 (12.00')	319.76 319.12	319.28 (24.00')
181+50	319.86 (12.00')	320.10 319.52	319.62 (24.00')
182+00	320.21 (12.00')	320.45 319.87	319.97 (24.00')
182+50	320.62 (12.00')	320.86 320.20	320.38 (24.00')
183+00	321.10 (12.00')	321.34 320.66	320.86 (24.00')
183+50	321.64 (12.00')	321.88 321.22	321.40 (24.00')
184+00	322.21 (12.00')	322.45 321.79	321.97 (24.00')
184+50	322.84 (12.00')	323.08 322.43	322.60 (24.00')
185+00	323.52 (12.00')	323.76 323.15	323.28 (24.00')
185+50	324.26 (12.00')	324.50 323.89	324.02 (24.00')
186+00	325.02 (12.00')	325.26 324.63	324.78 (24.00')
186+50	325.73 (12.00')	325.97 325.37	325.49 (24.00')
187+00	326.47 (12.00')	326.71 326.04	326.23 (24.00')
187+50	327.22 (12.00')	327.46 326.78	326.98 (24.00')
188+00	327.96 (12.00')	328.20 327.52	327.72 (24.00')
188+50	328.74 (12.00')	328.98 328.30	328.50 (24.00')
189+00	329.56 (12.00')	329.80 329.13	329.32 (24.00')
189+50	330.38 (12.00')	330.62 329.99	330.14 (24.00')
190+00	331.19 (12.00')	331.43 330.86	330.95 (24.00')
190+50	332.05 (12.00')	332.29 331.72	331.81 (24.00')
191+00	332.93 (12.00')	333.17 332.67	332.69 (24.00')
191+50	333.77 (12.00')	334.01 333.41	333.53 (24.00')
192+00	334.63 (12.00')	334.87 334.27	334.39 (24.00')
192+50	335.51 (12.00')	335.75 335.17	335.27 (24.00')
193+00	336.43 (12.00')	336.67 336.06	336.19 (24.00')
193+50	337.31 (12.00')	337.55 336.97	337.07 (24.00')
194+00	338.16 (12.00')	338.40 337.84	337.92 (24.00')
194+50	339.04 (12.00')	339.28 338.68	338.80 (24.00')
195+00	339.97 (13.00')	340.23 339.56	339.75 (24.00')

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT 0028-029-269

SHEET NO. 15A

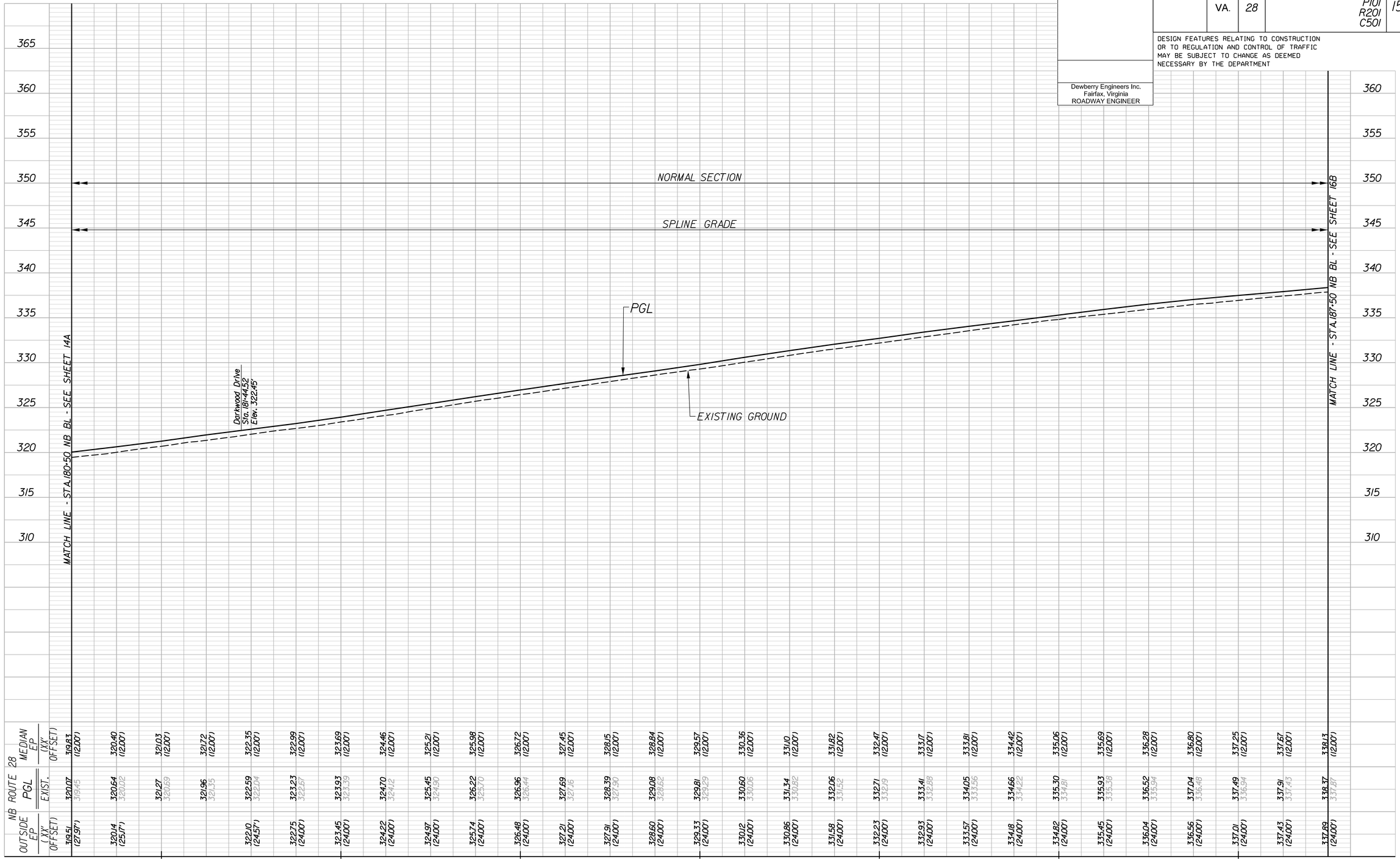
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	15B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



NB ROUTE 28

NB ROUTE 28	OUTSIDE EP (XX' OFFSET)	PGL / EXIST.	MEDIAN EP (XX' OFFSET)
180+50	319.51 (27.97')	320.07 319.45	319.83 (12.00')
181+00	320.14 (25.71')	320.64 320.02	320.40 (12.00')
181+50		321.27 320.69	321.03 (12.00')
182+00		321.96 321.35	321.72 (12.00')
182+50	322.10 (24.57')	322.59 322.04	322.35 (12.00')
183+00	322.75 (24.00')	323.23 322.67	322.99 (12.00')
183+50	323.45 (24.00')	323.93 323.39	323.69 (12.00')
184+00	324.22 (24.00')	324.70 324.12	324.46 (12.00')
184+50	324.97 (24.00')	325.45 324.90	325.21 (12.00')
185+00	325.74 (24.00')	326.22 325.70	325.98 (12.00')
185+50	326.48 (24.00')	326.96 326.44	326.72 (12.00')
186+00	327.21 (24.00')	327.69 327.16	327.45 (12.00')
186+50	327.91 (24.00')	328.39 327.90	328.15 (12.00')
187+00	328.60 (24.00')	329.08 328.62	328.84 (12.00')
187+50	329.33 (24.00')	329.81 329.29	329.57 (12.00')
188+00	330.12 (24.00')	330.60 330.06	330.36 (12.00')
188+50	330.86 (24.00')	331.34 330.82	331.10 (12.00')
189+00	331.58 (24.00')	332.06 331.52	331.82 (12.00')
189+50	332.23 (24.00')	332.71 332.19	332.47 (12.00')
190+00	332.93 (24.00')	333.41 332.88	333.17 (12.00')
190+50	333.57 (24.00')	334.05 333.56	333.81 (12.00')
191+00	334.18 (24.00')	334.66 334.22	334.42 (12.00')
191+50	334.82 (24.00')	335.30 334.81	335.06 (12.00')
192+00	335.45 (24.00')	335.93 335.38	335.69 (12.00')
192+50	336.04 (24.00')	336.52 335.94	336.28 (12.00')
193+00	336.56 (24.00')	337.04 336.48	336.80 (12.00')
193+50	337.01 (24.00')	337.49 336.94	337.25 (12.00')
194+00	337.43 (24.00')	337.91 337.43	337.67 (12.00')
194+50	337.89 (24.00')	338.37 337.87	338.13 (12.00')

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT 0028-029-269

SHEET NO. 15B

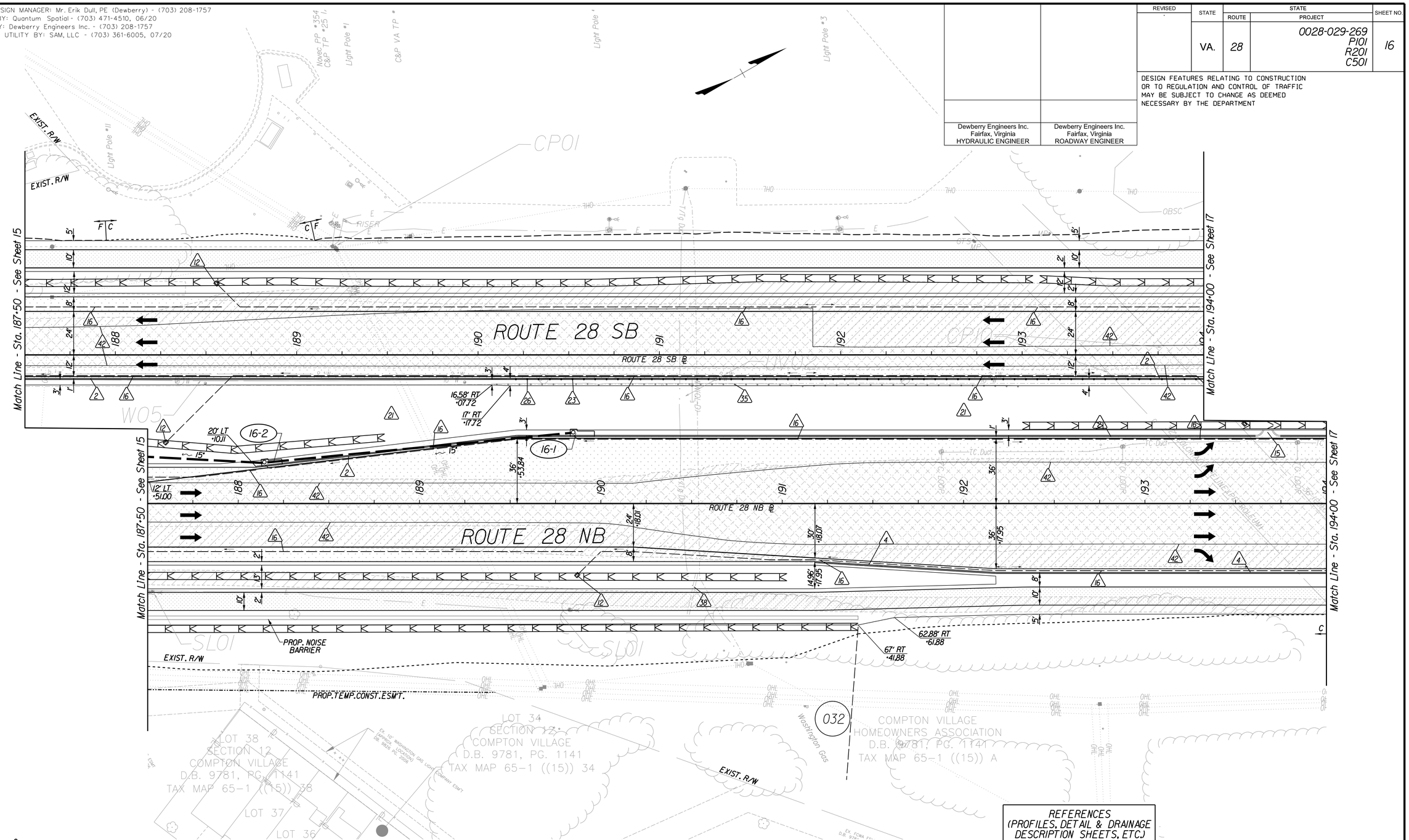
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	16

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Key Legend (XX)

1	6" Curb, Std. CG-2 Req'd.	11	Curb Ramp, Std. CG-12 Req'd.	23	Guardrail, Std. GR-MGS1 Req'd.	35	Remove Exist. Guardrail
2	4" Curb, Std. CG-3 Req'd.	12	Underdrain Endwall, Std. EW-12 Req'd.	24	Guardrail, Std. GR-MGS1A Req'd.	36	Remove Exist. Fence
3	6" Curb and Gutter, Std. CG-6 Req'd.	13	Not Used	25	Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.	37	Remove Exist. Structure
4	4" Curb and Gutter, Std. CG-7 Req'd.	14	Groundwater Underdrain, Std. UD-1 Req'd.	26	Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.	38	Remove Or Abandon and Fill Exist. Pipe
5	Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.	15	Curb-Cut Opening, Drainage Flume	27	Guardrail, Std. GR-10, Type I Req'd.	39	Remove Exist. Pole
6	See Special Provision for Stamped Cement Concrete	16	Pavement Underdrain, Std. UD-4 Req'd.	28	Guardrail, Std. GR-10, Type II Req'd.	40	Adjust Exist. Structure
7	Conc. Raised Median, Std. MS-1A (6" Curb)	17	Pavement Underdrain, Mod. 6" UD-4 Req'd.	29	Guardrail, Std. GR-10, Type III Req'd.	41	Clean Out Exist. Structure
8	Grass Raised Median, Std. MS-2 (6" Curb)	18	Crossdrain, Std. CD-1 Req'd.	30	Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.	42	Full Depth Sawcut
9	Entrance Gutter, Std. CG-9D Req'd.	19	Crossdrain, Std. CD-2 Req'd.	31	Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.	43	Clean Out Exist. Pipe
10	Entrance, Std. CG-11 Req'd.	20	Woven Wire Fence, Std. FE-WI, W2 Req'd.	32	Guardrail Transition, Std. GR-MGS4 Req'd.	44	10' Gutter Run Out
		21	Grass Raised Median, Std. MS-2 (4" Curb)	33	End CG-9D Entrance Type	45	Median Barrier, Std. MB-8A Req'd.
		22	Chain Link Fence, Std. FE-CL Req'd.	34	Handrail, Std. HR-1 Type III Req'd.	46	Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(3)-1G(4)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(7)-2F(8)
E&S Phase 3	2G(7)-2G(8)
Profiles	16A-16B
Drainage Descriptions	33

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	16

Dewberry

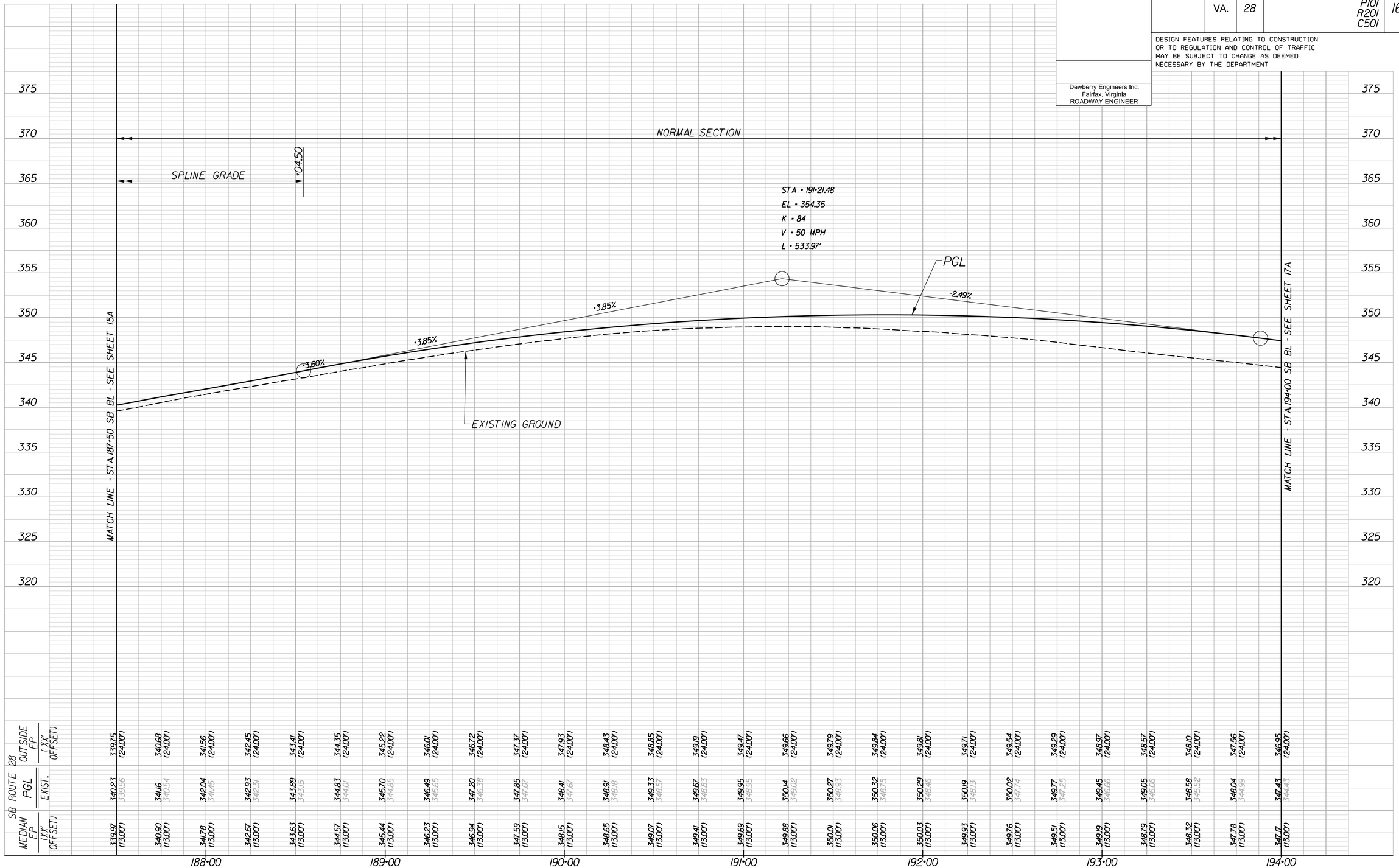
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	16A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



SB ROUTE 28	MEDIAN EP (XX' OFFSET)	PGL EXIST.	OUTSIDE EP (XX' OFFSET)
	339.97 (13.00')	340.21 339.56	339.75 (24.00')
	340.90 (13.00')	341.16 340.54	340.68 (24.00')
	341.78 (13.00')	342.04 341.45	341.56 (24.00')
	342.67 (13.00')	342.93 342.31	342.45 (24.00')
	343.63 (13.00')	343.89 343.25	343.41 (24.00')
	344.57 (13.00')	344.83 344.01	344.35 (24.00')
	345.44 (13.00')	345.70 344.85	345.22 (24.00')
	346.23 (13.00')	346.49 345.65	346.01 (24.00')
	346.94 (13.00')	347.20 346.38	346.72 (24.00')
	347.59 (13.00')	347.85 347.07	347.37 (24.00')
	348.15 (13.00')	348.41 347.67	347.93 (24.00')
	348.65 (13.00')	348.91 348.18	348.43 (24.00')
	349.07 (13.00')	349.33 348.57	348.85 (24.00')
	349.41 (13.00')	349.67 348.83	349.19 (24.00')
	349.69 (13.00')	349.95 348.95	349.47 (24.00')
	349.88 (13.00')	350.14 349.02	349.66 (24.00')
	350.01 (13.00')	350.27 349.15	349.79 (24.00')
	350.06 (13.00')	350.32 349.75	349.84 (24.00')
	350.03 (13.00')	350.29 349.46	349.81 (24.00')
	349.93 (13.00')	350.19 349.13	349.71 (24.00')
	349.76 (13.00')	350.02 349.74	349.54 (24.00')
	349.51 (13.00')	349.77 349.25	349.29 (24.00')
	349.19 (13.00')	349.45 348.66	348.97 (24.00')
	348.79 (13.00')	349.05 348.26	348.57 (24.00')
	348.32 (13.00')	348.58 347.52	348.10 (24.00')
	347.78 (13.00')	348.04 347.99	347.56 (24.00')
	347.17 (13.00')	347.43 347.43	346.95 (24.00')

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	16A

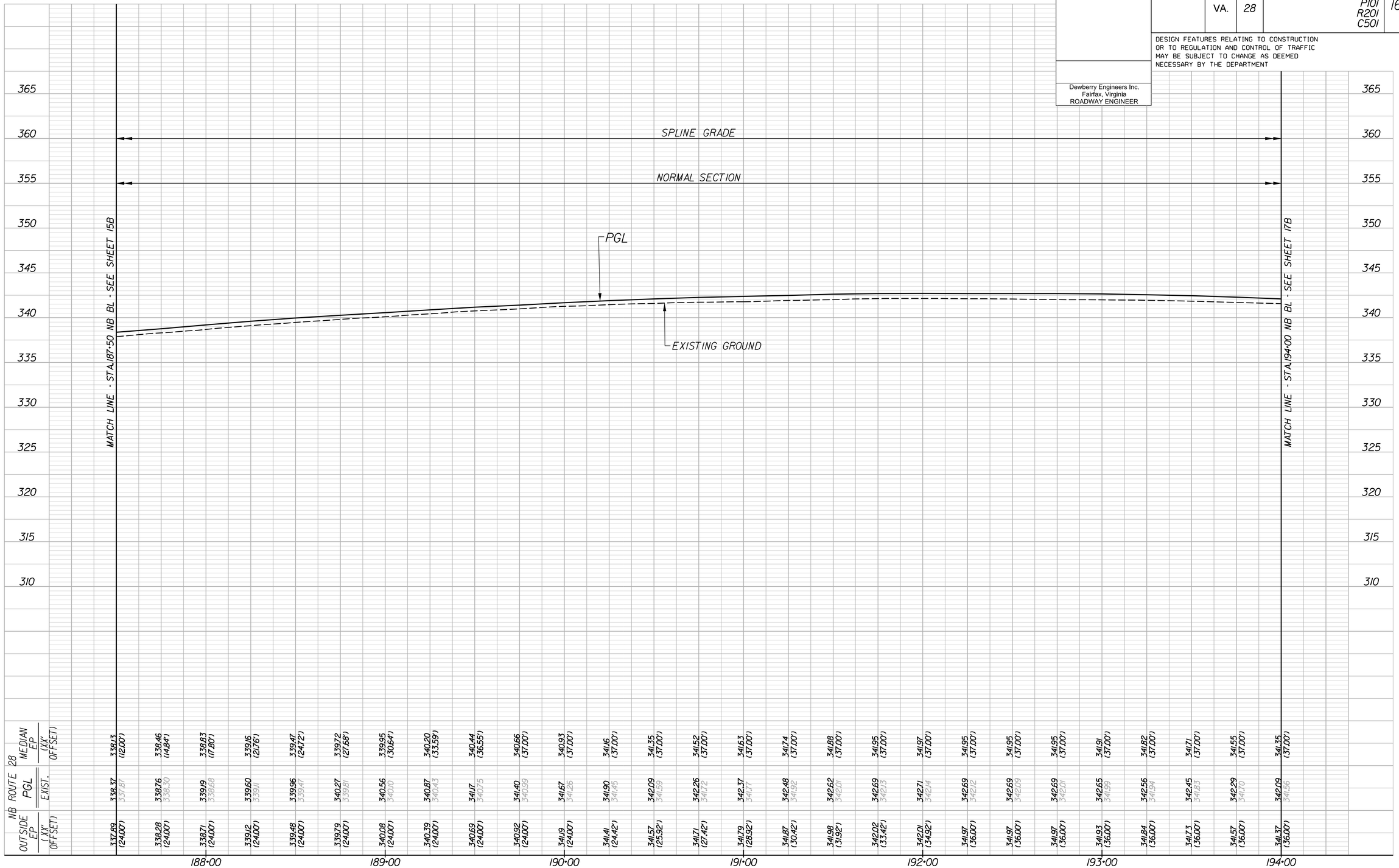
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	16B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



NB ROUTE 28	OUTSIDE EP (XX' OFFSET)	PGL EXIST.	MEDIAN EP (XX' OFFSET)
188+00	337.89 (24.00')	338.37 337.87	338.43 (12.00')
188+28	338.28 (24.00')	338.76 338.30	338.46 (14.84')
188+71	338.71 (24.00')	339.19 338.68	338.83 (17.80')
189+12	339.12 (24.00')	339.60 339.11	339.16 (21.76')
189+48	339.48 (24.00')	339.96 339.47	339.47 (24.72')
189+79	339.79 (24.00')	340.27 339.81	339.72 (27.68')
190+08	340.08 (24.00')	340.56 340.10	339.95 (30.64')
190+39	340.39 (24.00')	340.87 340.43	340.20 (33.59')
190+69	340.69 (24.00')	341.17 340.75	340.44 (36.55')
190+92	340.92 (24.00')	341.40 340.99	340.66 (37.00')
191+19	341.19 (24.00')	341.67 341.26	340.93 (37.00')
191+41	341.41 (24.42')	341.90 341.45	341.16 (37.00')
191+57	341.57 (25.92')	342.09 341.59	341.35 (37.00')
191+71	341.71 (27.42')	342.26 341.72	341.52 (37.00')
191+79	341.79 (28.92')	342.37 341.77	341.63 (37.00')
191+87	341.87 (30.42')	342.48 341.82	341.74 (37.00')
191+98	341.98 (31.92')	342.62 342.01	341.88 (37.00')
192+02	342.02 (33.42')	342.69 342.13	341.95 (37.00')
192+01	342.01 (34.92')	342.71 342.14	341.97 (37.00')
191+97	341.97 (36.00')	342.69 342.12	341.95 (37.00')
191+97	341.97 (36.00')	342.69 342.09	341.95 (37.00')
191+97	341.97 (36.00')	342.69 342.01	341.95 (37.00')
191+93	341.93 (36.00')	342.65 341.99	341.91 (37.00')
191+84	341.84 (36.00')	342.56 341.94	341.82 (37.00')
191+73	341.73 (36.00')	342.45 341.85	341.71 (37.00')
191+57	341.57 (36.00')	342.29 341.70	341.55 (37.00')
191+37	341.37 (36.00')	342.09 341.56	341.35 (37.00')

NB ROUTE 28

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT 0028-029-269

SHEET NO. 16B

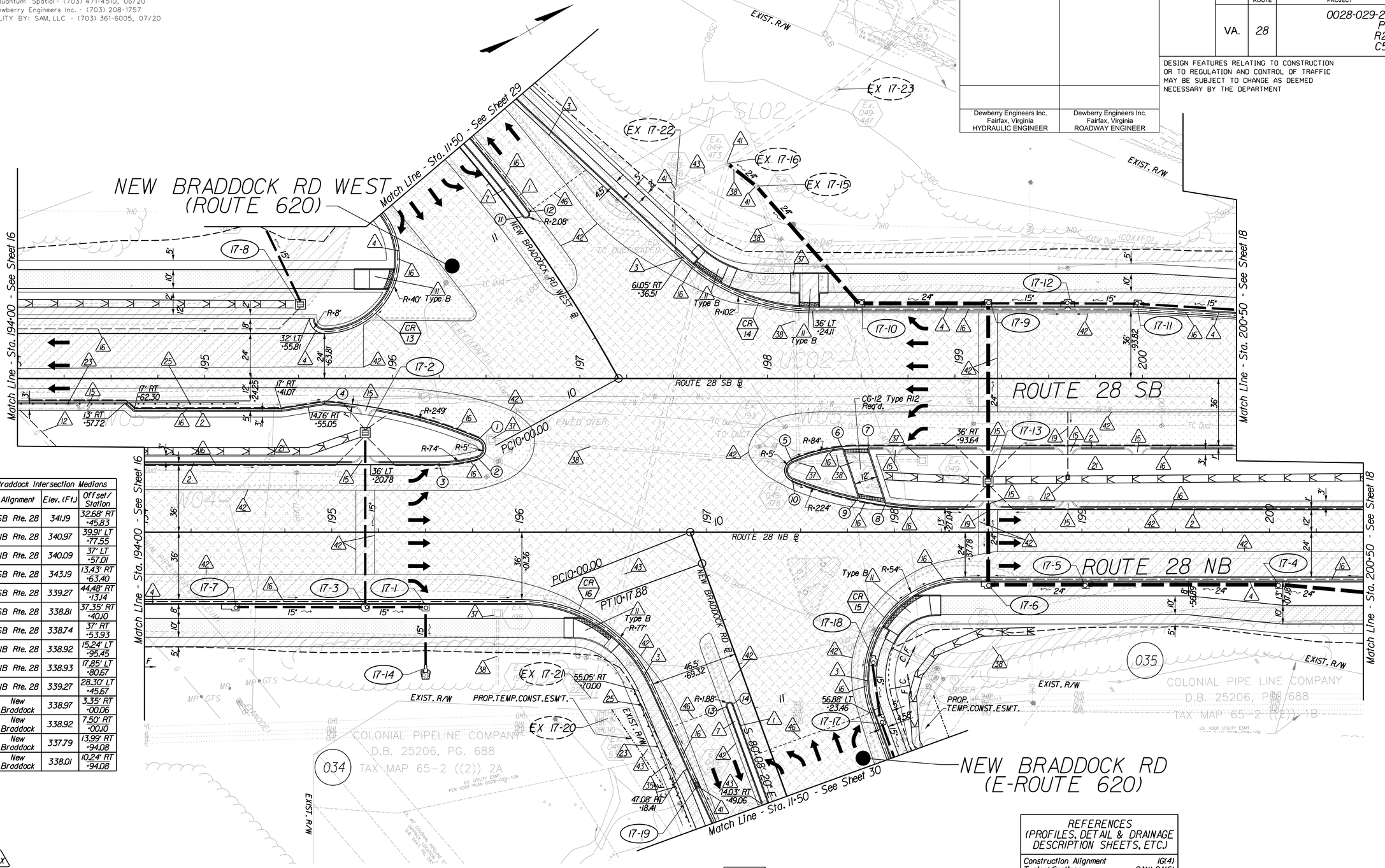
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	17

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



New Braddock Intersection Medians			
	Alignment	Elev. (Ft.)	Offset/ Station
1	SB Rte. 28	341.19	32.68' RT +45.83
2	NB Rte. 28	340.97	39.91' LT +77.55
3	NB Rte. 28	340.09	37' LT +57.01
4	SB Rte. 28	343.19	13.43' RT +63.40
5	SB Rte. 28	339.27	44.48' RT +13.14
6	SB Rte. 28	338.81	37.35' RT +40.10
7	SB Rte. 28	338.74	37' RT +53.93
8	NB Rte. 28	338.92	15.24' LT +95.45
9	NB Rte. 28	338.93	17.85' LT +80.67
10	NB Rte. 28	339.27	28.30' LT +45.67
11	New Braddock	338.97	3.35' RT +00.06
12	New Braddock	338.92	7.50' RT +00.10
13	New Braddock	337.79	13.99' RT +94.08
14	New Braddock	338.01	10.24' RT +94.08

Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. MS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-WI, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGSI Req'd.
24 Guardrail, Std. GR-MGSIA Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Construction Alignment	1G(4)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(8)
E&S Phase 3	2G(8)
Profiles	17A-17B
Drainage Descriptions	33

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	17

Dewberry

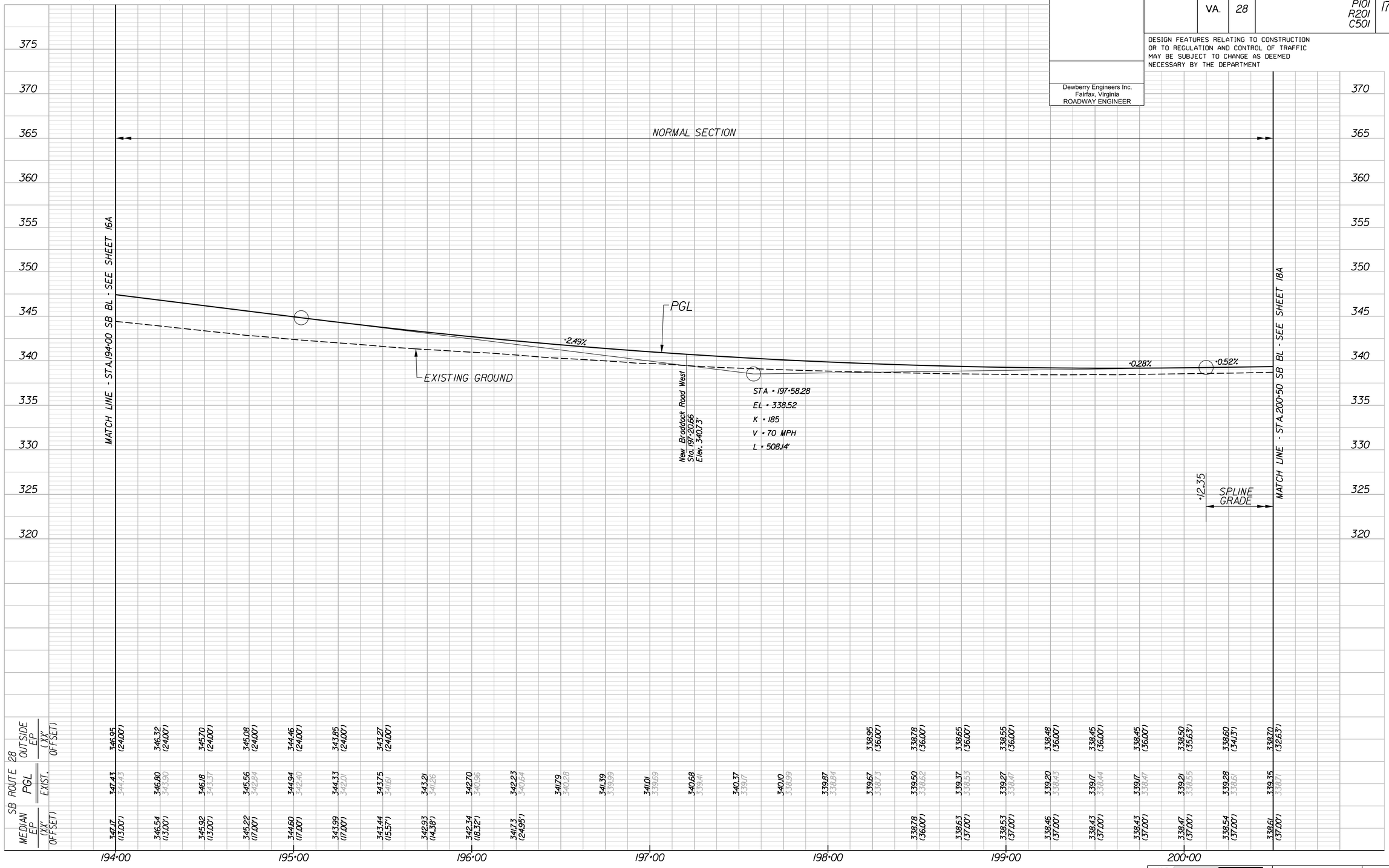
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	17A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



SB ROUTE 28

	MEDIAN EP (XX' OFFSET)	PGL	EXIST.	OUTSIDE EP (XX' OFFSET)
194+00	347.17 (13.00')	347.43	344.43	346.95 (24.00')
195+00	346.54 (13.00')	346.80	343.90	346.32 (24.00')
196+00	345.92 (13.00')	346.18	343.37	345.70 (24.00')
197+00	345.22 (17.00')	345.56	342.84	345.08 (24.00')
198+00	344.60 (17.00')	344.94	342.40	344.46 (24.00')
199+00	343.99 (17.00')	344.33	342.01	343.85 (24.00')
200+00	343.44 (15.57')	343.75	341.61	343.27 (24.00')
	342.93 (14.38')	343.21	341.26	
	342.34 (18.32')	342.70	340.96	
	341.73 (24.95')	342.23	340.64	
		341.79	340.28	
		341.39	339.99	
		341.01	339.69	
		340.68	339.41	
		340.37	339.17	
		340.10	338.99	
		339.87	338.84	
		339.67	338.73	338.95 (36.00')
	338.78 (36.00')	339.50	338.62	338.78 (36.00')
	338.63 (37.00')	339.37	338.55	338.65 (36.00')
	338.53 (37.00')	339.27	338.47	338.55 (36.00')
	338.46 (37.00')	339.20	338.43	338.48 (36.00')
	338.43 (37.00')	339.17	338.44	338.45 (36.00')
	338.43 (37.00')	339.17	338.47	338.45 (36.00')
	338.47 (37.00')	339.21	338.55	338.50 (35.63')
	338.54 (37.00')	339.28	338.61	338.60 (34.31')
	338.61 (37.00')	339.35	338.71	338.70 (32.63')

HORIZ.	VERT.	PROJECT	SHEET NO.
0 25' 50'	0 5' 10'	0028-029-269	17A

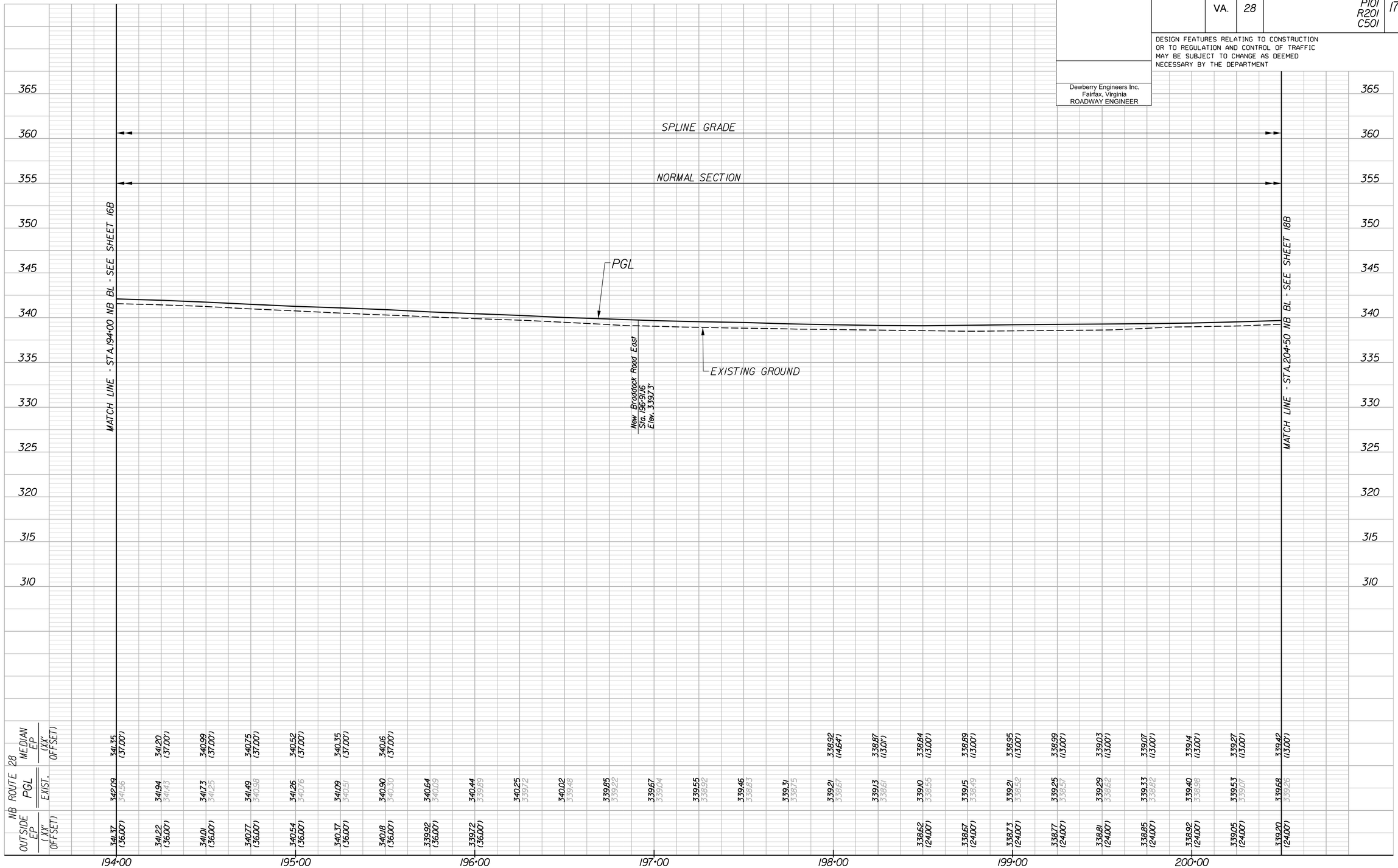
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	17B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



NB ROUTE 28	OUTSIDE EP (XY' OFFSET)	PGL EXIST.	MEDIAN EP (XY' OFFSET)
194+00	341.37 (36.00')	342.09 341.26	341.35 (37.00')
194+50	341.22 (36.00')	341.94 341.43	341.20 (37.00')
195+00	341.01 (36.00')	341.73 341.25	340.99 (37.00')
195+50	340.77 (36.00')	341.49 340.98	340.75 (37.00')
196+00	340.54 (36.00')	341.26 340.76	340.52 (37.00')
196+50	340.37 (36.00')	341.09 340.51	340.35 (37.00')
197+00	340.18 (36.00')	340.90 340.30	340.16 (37.00')
197+50	339.92 (36.00')	340.64 340.09	
198+00	339.72 (36.00')	340.44 339.89	
198+50		340.25 339.72	
199+00		340.02 339.48	
199+50		339.85 339.22	
200+00		339.67 339.04	
200+50		339.55 338.92	
201+00		339.46 338.83	
201+50		339.31 338.75	
202+00	338.92 (14.64')	339.21 338.67	
202+50	338.87 (13.01')	339.13 338.61	
203+00	338.84 (13.00')	339.10 338.55	338.62 (24.00')
203+50	338.89 (13.00')	339.15 338.49	338.67 (24.00')
204+00	338.95 (13.00')	339.21 338.52	338.73 (24.00')
204+50	338.99 (13.00')	339.25 338.57	338.77 (24.00')
205+00	339.03 (13.00')	339.29 338.62	338.81 (24.00')
205+50	339.07 (13.00')	339.33 338.82	338.85 (24.00')
206+00	339.14 (13.00')	339.40 338.58	338.92 (24.00')
206+50	339.27 (13.00')	339.53 339.07	339.05 (24.00')
207+00	339.42 (13.00')	339.68 339.26	339.20 (24.00')

NB ROUTE 28

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	17B

Dewberry

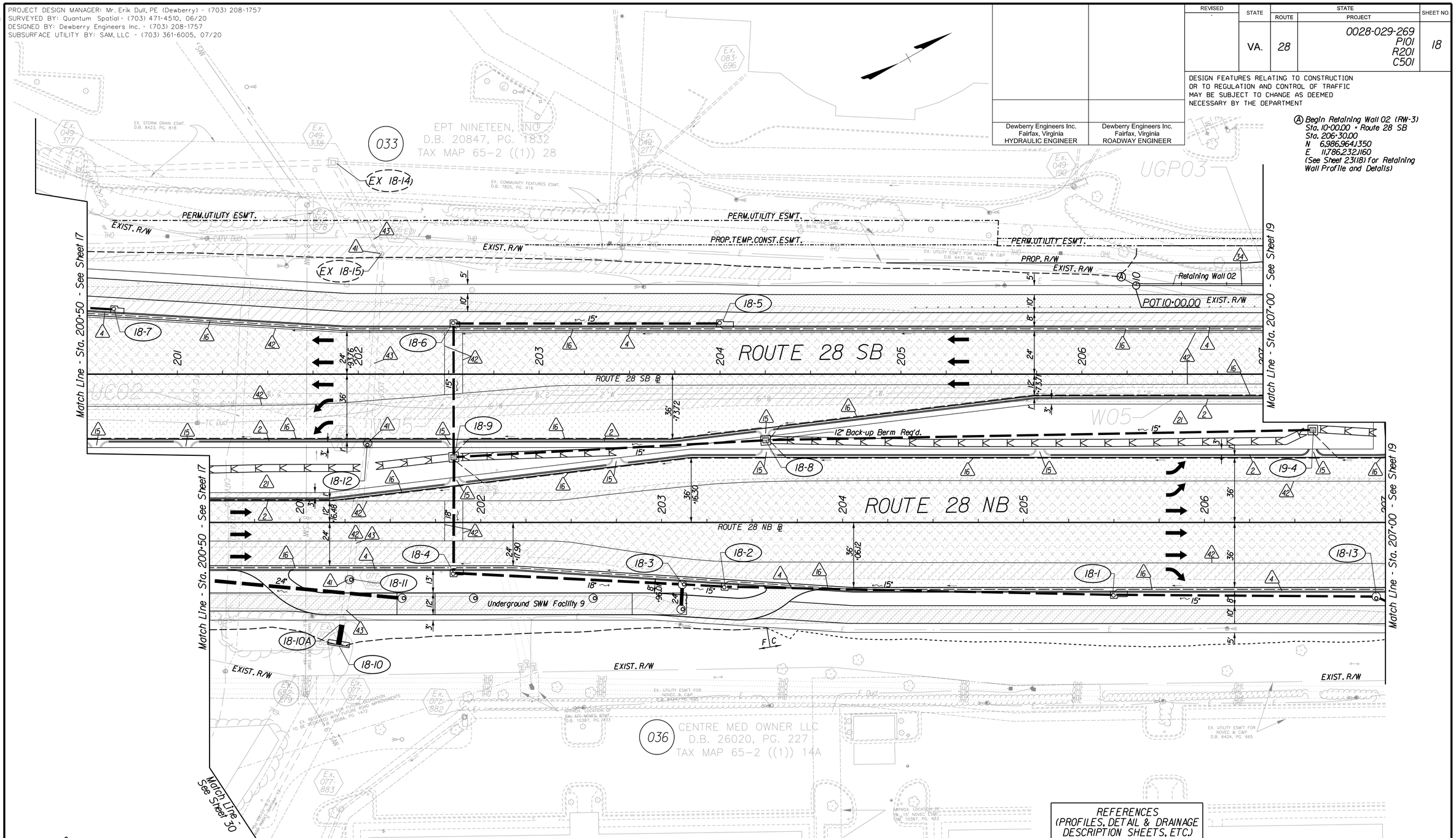
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	18

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Ⓐ Begin Retaining Wall 02 (RW-3)
Sta. 10+00.00 - Route 28 SB
Sta. 206+30.00
N 6,986,964.1350
E 11,786,232.1160
(See Sheet 23(18) for Retaining Wall Profile and Details)



Key Legend (XX)

1	6" Curb, Std. CG-2 Req'd.	11	Curb Ramp, Std. CG-12 Req'd.	23	Guardrail, Std. GR-MGS1 Req'd.	35	Remove Exist. Guardrail
2	4" Curb, Std. CG-3 Req'd.	12	Underdrain Endwall, Std. EW-12 Req'd.	24	Guardrail, Std. GR-MGS1A Req'd.	36	Remove Exist. Fence
3	6" Curb and Gutter, Std. CG-6 Req'd.	13	Not Used	25	Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.	37	Remove Exist. Structure
4	4" Curb and Gutter, Std. CG-7 Req'd.	14	Groundwater Underdrain, Std. UD-1 Req'd.	26	Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.	38	Remove Or Abandon and Fill Exist. Pipe
5	Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.	15	Curb-Cut Opening, Drainage Flume	27	Guardrail, Std. GR-10, Type I Req'd.	39	Remove Exist. Pole
6	See Special Provision for Stamped Cement Concrete	16	Pavement Underdrain, Std. UD-4 Req'd.	28	Guardrail, Std. GR-10, Type II Req'd.	40	Adjust Exist. Structure
7	Conc. Raised Median, Std. MS-1A (6" Curb)	17	Pavement Underdrain, Mod. 6" UD-4 Req'd.	29	Guardrail, Std. GR-10, Type III Req'd.	41	Clean Out Exist. Structure
8	Grass Raised Median, Std. MS-2 (6" Curb)	18	Crossdrain, Std. CD-1 Req'd.	30	Fixed Object Att., Std. GR-FOA-2 Ty. 1 Req'd.	42	Full Depth Sawcut
9	Entrance Gutter, Std. CG-9D Req'd.	19	Crossdrain, Std. CD-2 Req'd.	31	Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.	43	Clean Out Exist. Pipe
10	Entrance, Std. CG-11 Req'd.	20	Woven Wire Fence, Std. FE-WI, W2 Req'd.	32	Guardrail Transition, Std. GR-MGS4 Req'd.	44	10" Gutter Run Out
		21	Grass Raised Median, Std. MS-2 (4" Curb)	33	End CG-9D Entrance Type	45	Median Barrier, Std. MB-8A Req'd.
		22	Chain Link Fence, Std. FE-CL Req'd.	34	Handrail, Std. HR-1 Type III Req'd.	46	Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

SCALE	PROJECT	SHEET NO.
0 25' 50'	0028-029-269	18

Dewberry

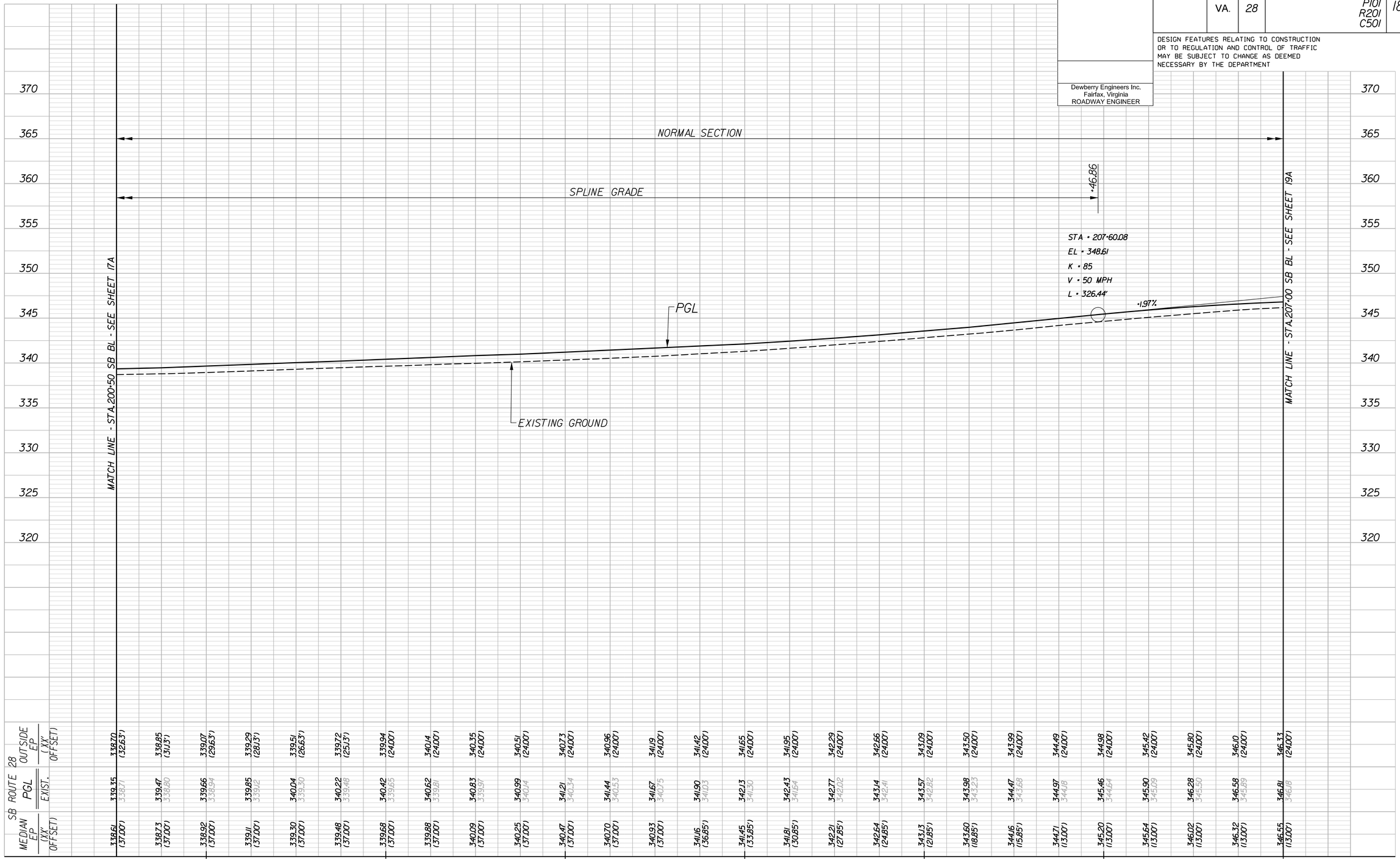
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	18A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



SB ROUTE 28	MEDIAN EP (XY' OFFSET)	PGL	EXIST.	OUTSIDE EP (XY' OFFSET)
	338.61 (37.00')	339.35	338.71	338.70 (32.63')
	338.73 (37.00')	339.47	338.80	338.85 (31.31')
	338.92 (37.00')	339.66	338.94	339.07 (29.63')
	339.11 (37.00')	339.85	339.12	339.29 (28.13')
	339.30 (37.00')	340.04	339.56	339.51 (26.63')
	339.48 (37.00')	340.22	339.98	339.72 (25.13')
	339.68 (37.00')	340.42	339.65	339.94 (24.00')
	339.88 (37.00')	340.62	339.81	340.14 (24.00')
	340.09 (37.00')	340.83	339.97	340.35 (24.00')
	340.25 (37.00')	340.99	340.14	340.51 (24.00')
	340.41 (37.00')	341.21	340.34	340.73 (24.00')
	340.70 (37.00')	341.44	340.53	340.96 (24.00')
	340.93 (37.00')	341.67	340.75	341.19 (24.00')
	341.16 (36.85')	341.90	341.03	341.42 (24.00')
	341.45 (33.85')	342.13	341.30	341.65 (24.00')
	341.81 (30.85')	342.43	341.64	341.95 (24.00')
	342.21 (27.85')	342.77	342.02	342.29 (24.00')
	342.64 (24.85')	343.14	342.41	342.66 (24.00')
	343.13 (21.85')	343.57	342.82	343.09 (24.00')
	343.60 (18.85')	343.98	343.23	343.50 (24.00')
	344.16 (15.85')	344.47	343.58	343.99 (24.00')
	344.71 (13.00')	344.97	344.18	344.49 (24.00')
	345.20 (13.00')	345.46	344.64	344.98 (24.00')
	345.64 (13.00')	345.90	345.09	345.42 (24.00')
	346.02 (13.00')	346.28	345.50	345.80 (24.00')
	346.32 (13.00')	346.58	345.89	346.10 (24.00')
	346.55 (13.00')	346.81	346.18	346.33 (24.00')

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	18A

10/12/2020
11:22:57 AM

d108720-18B.dgn
Plotted By: cjennings

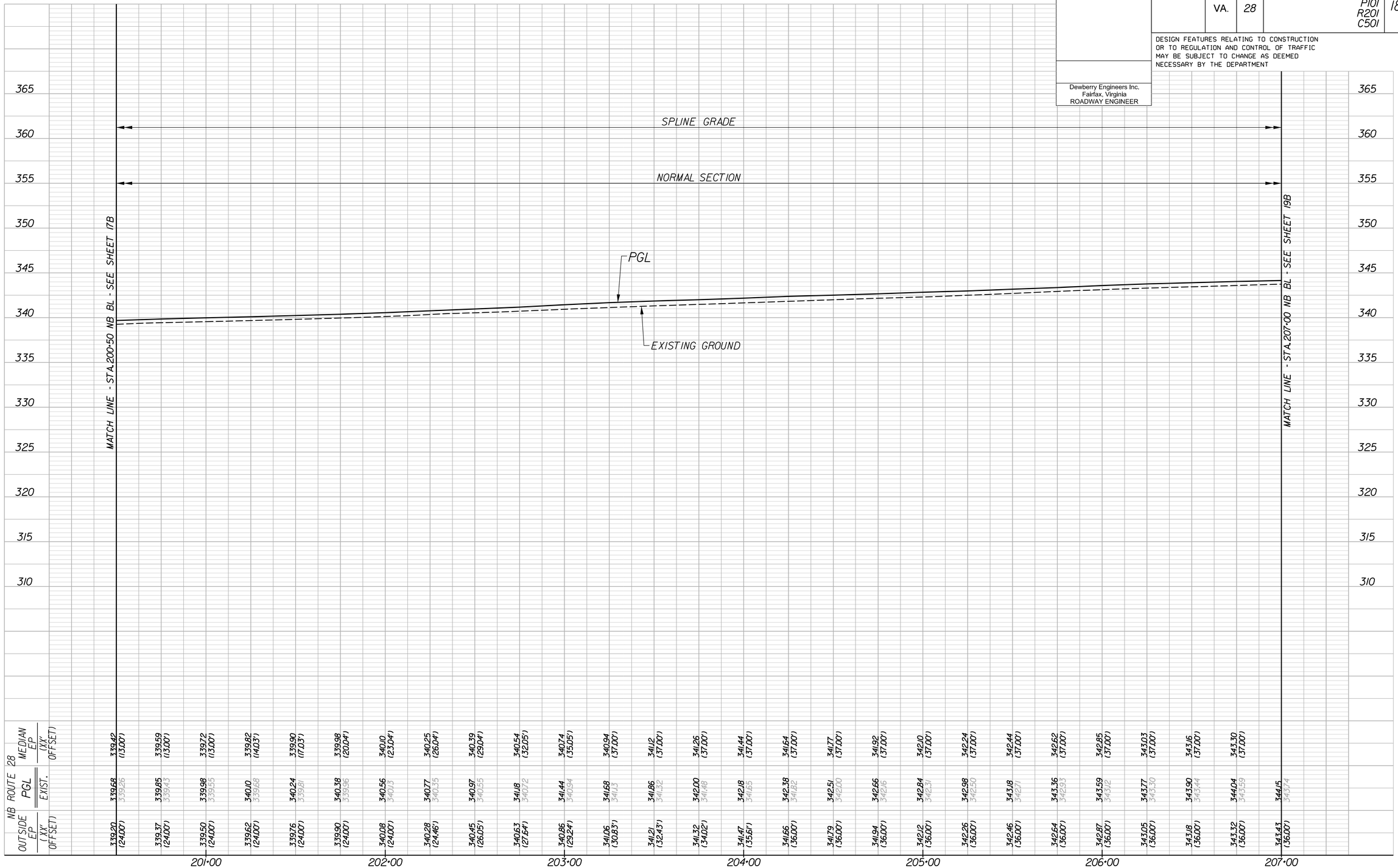
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	18B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



NB ROUTE 28

OUTSIDE EP (XX' OFFSET)	PGL EXIST.	MEDIAN EP (XX' OFFSET)
339.20 (24.00')	339.68 339.26	339.42 (13.00')
339.37 (24.00')	339.85 339.43	339.59 (13.00')
339.50 (24.00')	339.98 339.55	339.72 (13.00')
339.62 (24.00')	340.10 339.68	339.82 (14.03')
339.76 (24.00')	340.24 339.81	339.90 (17.03')
339.90 (24.00')	340.38 339.96	339.98 (20.04')
340.08 (24.00')	340.56 340.13	340.10 (23.04')
340.28 (24.46')	340.77 340.35	340.25 (26.04')
340.45 (26.05')	340.97 340.55	340.39 (29.04')
340.63 (27.64')	341.18 340.72	340.54 (32.05')
340.86 (29.24')	341.44 340.94	340.74 (35.05')
341.06 (30.83')	341.68 341.13	340.94 (37.00')
341.21 (32.43')	341.86 341.32	341.12 (37.00')
341.32 (34.02')	342.00 341.48	341.26 (37.00')
341.47 (35.61')	342.18 341.65	341.44 (37.00')
341.66 (36.00')	342.38 341.82	341.64 (37.00')
341.79 (36.00')	342.51 342.00	341.77 (37.00')
341.94 (36.00')	342.66 342.16	341.92 (37.00')
342.12 (36.00')	342.84 342.31	342.10 (37.00')
342.26 (36.00')	342.98 342.50	342.24 (37.00')
342.46 (36.00')	343.18 342.71	342.44 (37.00')
342.64 (36.00')	343.36 342.93	342.62 (37.00')
342.87 (36.00')	343.59 343.12	342.85 (37.00')
343.05 (36.00')	343.77 343.30	343.03 (37.00')
343.18 (36.00')	343.90 343.44	343.16 (37.00')
343.32 (36.00')	344.04 343.59	343.30 (37.00')
343.43 (36.00')	344.15 343.74	

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	18B

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	19

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Ⓐ End Retaining Wall 02 (RW-3)
Sta. 11+56.02 • Route 28 SB
Sta. 207+80.24
N 6,987,101.9728
E 11,786,293.7718
(See Sheet 41 for Retaining Wall Profile and Details)

Ⓑ Begin Retaining Wall 03
Sta. 10+00.00 • Machen East
Sta. 11+16.69
N 6,987,075.7892
E 11,786,581.8097
(See Sheet 41 for Retaining Wall Profile and Details)

Match Line - Sta. 11+75 - See Sheet 31

MACHEN RD WEST

ROUTE 28 SB

ROUTE 28 NB

MACHEN RD EAST

Match Line - Sta. 207+00 - See Sheet 18

Match Line - Sta. 213+50 - See Sheet 20

Match Line - Sta. 11+50 - See Inset A Sheet 31

Machen Rd. Intersection Medians			
	Alignment	Elev. (Ft.)	Offset / Station
①	SB Rte. 28	346.77	14.24' RT • 66.55
②	SB Rte. 28	346.68	18.21' RT • 80.11
③	SB Rte. 28	345.93	30.14' RT • 00.37
④	NB Rte. 28	345.55	43.28' LT • 31.10
⑤	NB Rte. 28	343.46	38.77' LT • 13.74
⑥	NB Rte. 28	343.38	37.21' LT • 00.54
⑦	SB Rte. 28	345.31	39.03' RT • 10.26
⑧	SB Rte. 28	344.43	25' RT • 62.43
⑨	NB Rte. 28	345.30	13' LT • 07.24
⑩	NB Rte. 28	339.27	34.63' LT • 42.06
⑪	Machen Rd.	344.05	12.88' RT • 63.82
⑫	Machen Rd.	343.58	17.02' RT • 64.53

Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. MS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-WI, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGS1 Req'd.
24 Guardrail, Std. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Acharage, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(4)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(9)
E&S Phase 3	2G(9)
Profiles	19A-19C
Drainage Descriptions	33

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	19

10/12/2020
11:23:13 AM

d108720-19A.dgn
Plotted By: cjennings

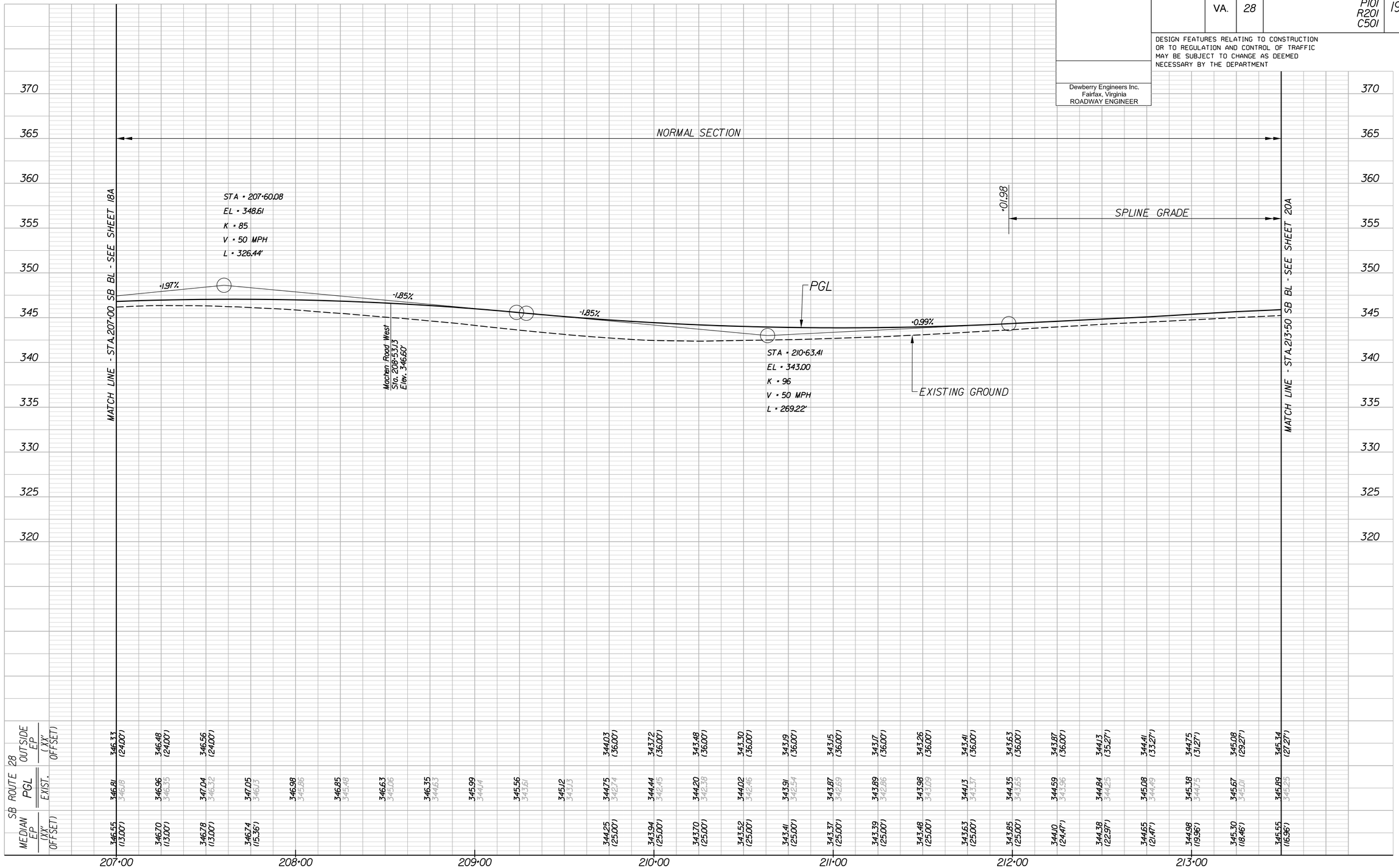
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	19A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



SB ROUTE 28	MEDIAN EP (XX' OFFSET)	PGL EXIST.	PGL (XX' OFFSET)	OUTSIDE EP (XX' OFFSET)
	346.55 (13.00')	346.81 346.86	346.81	346.33 (24.00')
	346.70 (13.00')	346.96 346.35	346.96	346.48 (24.00')
	346.78 (13.00')	347.04 346.32	347.04	346.56 (24.00')
	346.74 (15.36')	347.05 346.63	347.05	
		346.98 345.86	346.98	
		346.85 345.48	346.85	
		346.63 345.06	346.63	
		346.35 344.62	346.35	
		345.99 344.44	345.99	
		345.56 343.61	345.56	
		345.12 343.13	345.12	
	344.25 (25.00')	344.75 342.74	344.75	344.03 (36.00')
	343.94 (25.00')	344.44 342.45	344.44	343.72 (36.00')
	343.70 (25.00')	344.20 342.38	344.20	343.48 (36.00')
	343.52 (25.00')	344.02 342.46	344.02	343.30 (36.00')
	343.41 (25.00')	343.91 342.54	343.91	343.19 (36.00')
	343.37 (25.00')	343.87 342.69	343.87	343.15 (36.00')
	343.39 (25.00')	343.89 342.86	343.89	343.17 (36.00')
	343.48 (25.00')	343.98 343.09	343.98	343.26 (36.00')
	343.63 (25.00')	344.13 343.37	344.13	343.41 (36.00')
	343.85 (25.00')	344.35 343.65	344.35	343.63 (36.00')
	344.10 (24.47')	344.59 343.96	344.59	343.87 (36.00')
	344.38 (22.97')	344.84 344.25	344.84	344.13 (35.27')
	344.65 (21.47')	345.08 344.49	345.08	344.41 (33.27')
	344.98 (19.96')	345.38 344.75	345.38	344.75 (31.27')
	345.30 (18.46')	345.67 345.01	345.67	345.08 (29.27')
	345.55 (16.96')	345.89 345.25	345.89	345.34 (27.27')

HORIZ. 0 25' 50'
VERT. 0 5' 10'

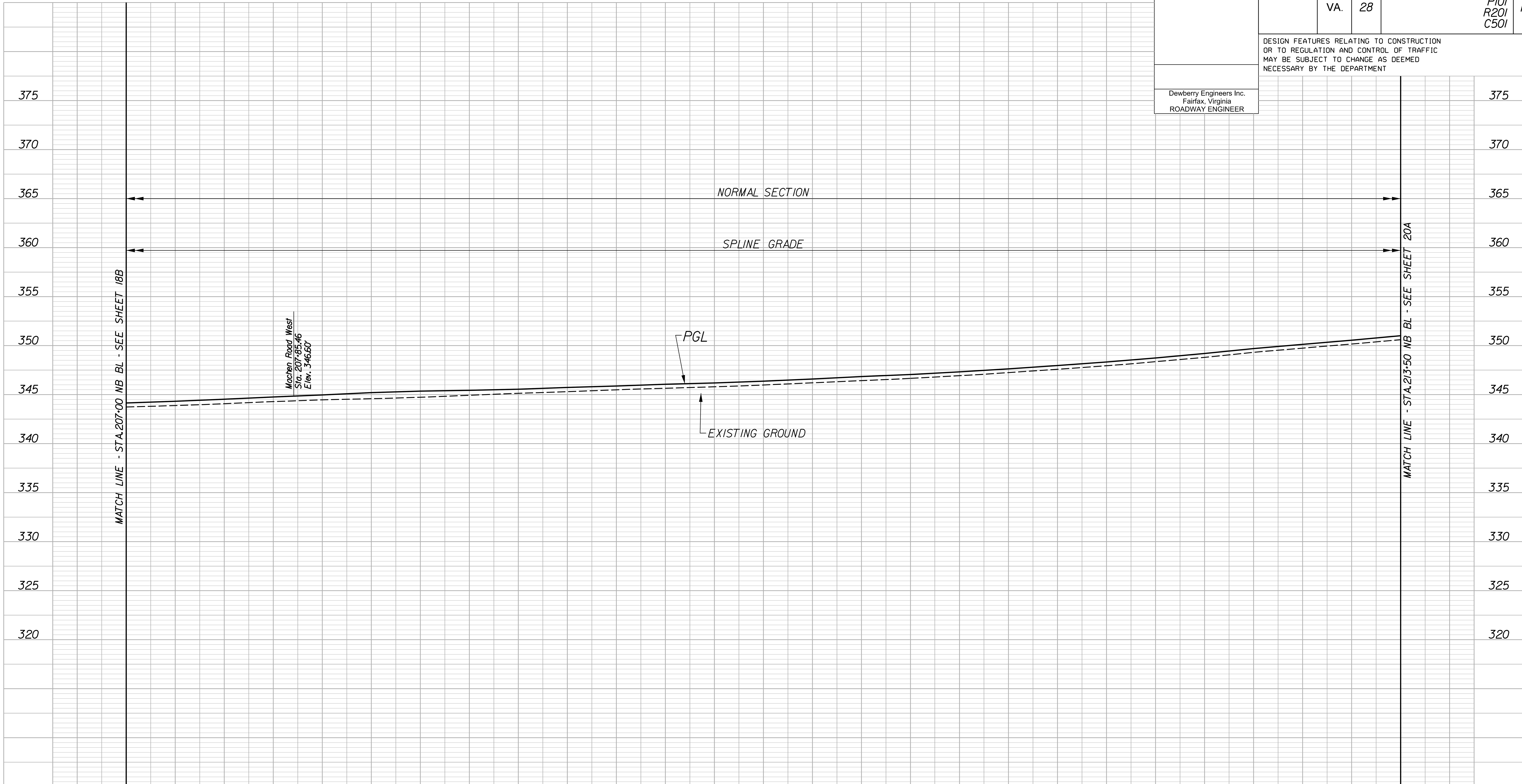
PROJECT	SHEET NO.
0028-029-269	19A

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	19B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



Station	NB ROUTE 28 MEDIAN EP (XX' OFFSET)	PGL	EXIST.	OUTSIDE EP (XX' OFFSET)
207+00		344.15	343.74	343.43 (36.00')
		344.32	343.89	343.60 (36.00')
		344.53	344.07	
		344.76	344.29	
208+00		344.97	344.47	
		345.20	344.58	
		345.36	344.73	
		345.44	344.93	
209+00		345.55	345.13	345.07 (24.00')
	345.47 (13.00')	345.73	345.30	345.25 (24.00')
	345.62 (13.00')	345.88	345.49	345.40 (24.00')
	345.80 (13.00')	346.06	345.65	345.58 (24.00')
210+00	345.93 (13.00')	346.19	345.80	345.71 (24.00')
	346.11 (13.00')	346.37	345.98	345.89 (24.00')
	346.33 (13.00')	346.59	346.20	346.11 (24.00')
	346.58 (13.00')	346.84	346.43	346.36 (24.00')
211+00	346.79 (13.00')	347.05	346.66	346.57 (24.00')
	347.06 (13.00')	347.32	346.93	346.84 (24.00')
	347.37 (13.00')	347.63	347.25	347.15 (24.00')
	347.71 (13.00')	347.97	347.59	347.49 (24.00')
212+00	348.07 (13.00')	348.33	347.95	347.85 (24.00')
	348.48 (13.00')	348.74	348.36	348.26 (24.00')
	348.94 (13.00')	349.20	348.80	348.72 (24.00')
	349.44 (13.00')	349.70	349.31	349.14 (27.87')
213+00	349.87 (13.00')	350.13	349.74	349.57 (28.00')
	350.29 (13.00')	350.55	350.16	349.99 (28.00')
	350.75 (13.00')	351.01	350.61	350.45 (28.00')

NB ROUTE 28

HORIZ. 0 25' 50'
VERT. 0 5' 10'

10/12/2020
11:23:25 AM

d108720-19C.dgn
Plotted By: cjennings

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

MACHEN ROAD EAST

BEGIN CONSTRUCTION
MACHEN ROAD EAST
STA. 10+00.00

END CONSTRUCTION
MACHEN ROAD EAST
STA. 12+43.11

LT SIDE - FULL SE AT 0.0068 FT/FT LT

LT SIDE - 56' TRANSITION FROM 0.0068 FT/FT LT TO 0.020 FT/FT LT

+24.00 | +80.00 | LT SIDE - FULL SE AT 0.020 FT/FT LT | +43.11

PGL

344.85 -2.00% 343.34 -2.58% -0.60%

STA = 10+63.30
EL = 343.35
K = 12.68
V = 15 mph
L = 31.96'

EXISTING GROUND

RT SIDE - FULL SE AT 0.0068 FT/FT LT

RT SIDE - 56' TRANSITION FROM 0.0068 FT/FT LT TO EXIST 0.0202 FT/FT LT

+24.00 | +80.00 | RT SIDE - MATCH EXISTING | +43.11

UPPERRIDGE DR.

BEGIN CONSTRUCTION
UPPERRIDGE DRIVE
STA. 10+00.00

END CONSTRUCTION
UPPERRIDGE DRIVE
STA. 12+06.12

LT SIDE - FULL SE AT 0.0202 FT/FT LT

LT SIDE - 52' TRANSITION FROM 0.0202 FT/FT LT TO EXIST 0.0188 FT/FT RT

+24.00 | +76.20 | LT SIDE - MATCH EXISTING | +06.12

PGL RT

351.69 -5.96% -1.00% -4.98% 348.13 347.15

STA = 10+50.00
EL = 348.45
K = 26
V = 25 mph
L = 51.54'

PGL LT

EXISTING GROUND

RT SIDE - FULL SE AT 0.0202 FT/FT LT

RT SIDE - 46' TRANSITION FROM 0.0202 FT/FT LT TO EXIST 0.0318 FT/FT LT

+24.00 | +70.00 | RT SIDE - MATCH EXISTING | +06.12

RT/EP (XX' OFFSET)	PGL EXIST.	LT/EP (XX' OFFSET)	PGL LT EXIST.	PGL RT EXIST.	LT/ SAWCUT (XX' OFFSET)	LT/EP (XX' OFFSET)
	344.85 344.36		351.69 351.60	351.69 351.60		
	344.34 343.51		350.20 349.84	350.22 349.84		
	343.70 343.41		348.58 348.38	348.97 348.38		
	343.35 343.35	344.07 (38.05')	347.21 347.20	347.21 347.20	345.12 (22.32')	344.84 (30.90')
	343.57 343.57	344.33 (38.30')			343.41 (22.32')	343.14 (30.73')
	343.94 343.94	344.71 (38.58')			341.69 (22.29')	341.47 (30.57')
	344.35 344.35	344.13 (38.85')			340.06 (22.25')	340.00 (25.52')
	344.60 344.60	345.38 (39.13')			338.24 (22.42')	338.22 (23.43')
	344.88 344.88	345.67 (39.41')				
343.21 (1.47')	345.10 345.10	345.90 (39.70')				

10+00 | 11+00 | 12+00 | 13+00

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	19C

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT 0028-029-269

SHEET NO. 19C

10/12/2020
11:23:34 AM

d108720-20.dgn
Plotted By: cjennings

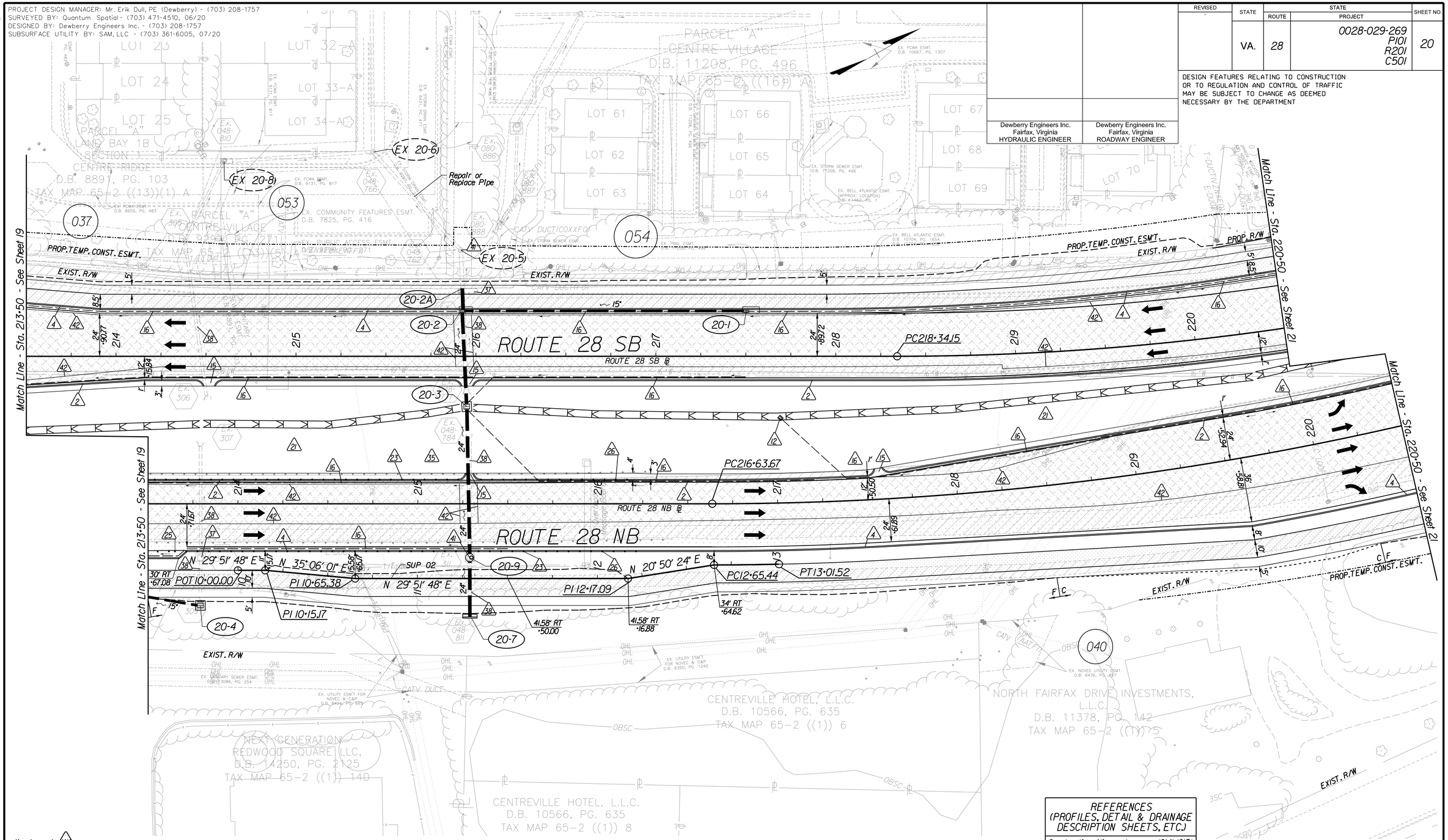
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	20

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Key Legend (XX)

1	6" Curb, Std. CG-2 Req'd.	11	Curb Ramp, Std. CG-12 Req'd.	23	Guardrail, Std. GR-MGS1 Req'd.	35	Remove Exist. Guardrail
2	4" Curb, Std. CG-3 Req'd.	12	Underdrain Endwall, Std. EW-12 Req'd.	24	Guardrail, Std. GR-MGS1A Req'd.	36	Remove Exist. Fence
3	6" Curb and Gutter, Std. CG-6 Req'd.	13	Not Used	25	Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.	37	Remove Exist. Structure
4	4" Curb and Gutter, Std. CG-7 Req'd.	14	Groundwater Underdrain, Std. UD-1 Req'd.	26	Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.	38	Remove Or Abandon and Fill Exist. Pipe
5	Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.	15	Curb-Cut Opening, Drainage Flume	27	Guardrail, Std. GR-10, Type I Req'd.	39	Remove Exist. Pole
6	See Special Provision for Stamped Cement Concrete	16	Pavement Underdrain, Std. UD-4 Req'd.	28	Guardrail, Std. GR-10, Type II Req'd.	40	Adjust Exist. Structure
7	Conc. Raised Median, Std. MS-1A (6" Curb)	17	Pavement Underdrain, Mod. 6" UD-4 Req'd.	29	Guardrail, Std. GR-10, Type III Req'd.	41	Clean Out Exist. Structure
8	Grass Raised Median, Std. WS-2 (6" Curb)	18	Crossdrain, Std. CD-1 Req'd.	30	Fixed Object Att., Std. GR-FOA-2 Ty.1 Req'd.	42	Full Depth Sawcut
9	Entrance Gutter, Std. CG-9D Req'd.	19	Crossdrain, Std. CD-2 Req'd.	31	Fixed Object Att., Std. GR-FOA-2 Ty.2 Req'd.	43	Clean Out Exist. Pipe
10	Entrance, Std. CG-11 Req'd.	20	Woven Wire Fence, Std. FE-WI, W2 Req'd.	32	Guardrail Transition, Std. GR-MGS4 Req'd.	44	10' Gutter Run Out
		21	Grass Raised Median, Std. MS-2 (4" Curb)	33	End CG-9D Entrance Type	45	Median Barrier, Std. MB-8A Req'd.
		22	Chain Link Fence, Std. FE-CL Req'd.	34	Handrail, Std. HR-1 Type III Req'd.	46	Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR) XX — Curb Return — See Sheet 2A(7)
C — Denotes Construction Limits In Cuts
F — Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(4)-1G(5)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(9)-2F(10)
E&S Phase 3	2G(9)-2G(10)
Profiles	20A
Drainage Descriptions	33

SCALE	PROJECT	SHEET NO.
0 25' 50'	0028-029-269	20

10/12/2020
11:23:40 AM

d108720-20Adgn
Plotted By: cjennings

Dewberry

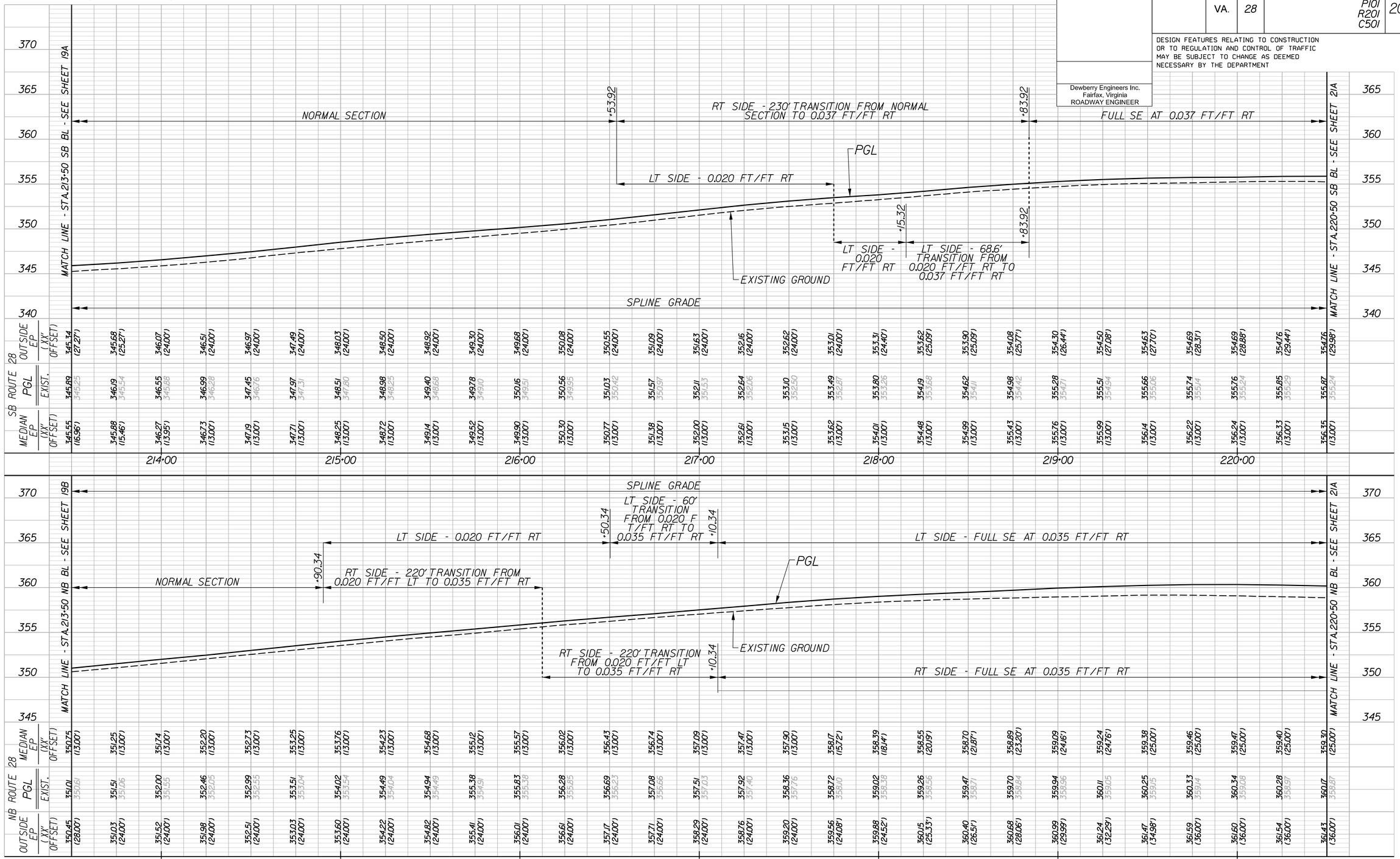
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	20A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



SB ROUTE 28	214+00	215+00	216+00	217+00	218+00	219+00	220+00
OUTSIDE EP (XX' OFFSET)	345.34 (27.27')	348.03 (24.00')	350.55 (24.00')	353.01 (24.00')	353.31 (24.40')	354.08 (25.77')	354.76 (29.98')
PGL EXIST.	345.89 345.25	348.51 347.80	351.03 350.42	353.49 352.87	353.80 353.26	354.98 354.42	355.87 355.24
MEDIAN EP (XX' OFFSET)	345.55 (16.96')	348.25 (13.00')	350.77 (13.00')	353.25 (13.00')	353.62 (13.00')	355.43 (13.00')	356.35 (13.00')

NB ROUTE 28	214+00	215+00	216+00	217+00	218+00	219+00	220+00
MEDIAN EP (XX' OFFSET)	350.75 (13.00')	353.25 (13.00')	355.57 (13.00')	357.74 (13.00')	358.17 (15.21')	359.38 (25.00')	359.30 (25.00')
PGL EXIST.	351.01 350.61	353.51 353.06	355.83 355.38	357.92 357.51	358.36 357.96	360.25 359.85	360.17 359.87
OUTSIDE EP (XX' OFFSET)	350.45 (28.00')	353.03 (24.00')	355.41 (24.00')	357.71 (24.00')	358.76 (24.00')	361.47 (34.98')	361.43 (36.00')

NB ROUTE 28	214+00	215+00	216+00	217+00	218+00	219+00	220+00
MEDIAN EP (XX' OFFSET)	351.25 (13.00')	353.76 (13.00')	356.02 (13.00')	357.09 (13.00')	357.47 (13.00')	359.46 (25.00')	359.40 (25.00')
PGL EXIST.	352.00 351.55	354.02 353.54	356.28 355.85	357.51 357.03	357.92 357.40	360.33 359.94	360.34 359.98
OUTSIDE EP (XX' OFFSET)	351.52 (24.00')	353.60 (24.00')	356.01 (24.00')	357.71 (24.00')	358.29 (24.00')	360.99 (29.99')	361.60 (36.00')

HORIZ.	0	25'	50'
VERT.	0	5'	10'

PROJECT 0028-029-269 | SHEET NO. 20A

NB ROUTE 28

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	21

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

Match Line - Sta. 11+50 - See Inset A Sheet 22

Match Line - Sta. 220+50 - See Sheet 20

Match Line - Sta. 227+50 - See Sheet 22

ROUTE 28 SB

ROUTE 28 NB

UPPERRIDGE DR

ENTRANCE P

OLD CENTREVILLE RD

PT10+88.20

PC10+00.00

PT225+92.62

PT225+29.81

PCC10+80.55

POT10+00.00

POT10+96.62

PRC12+36.34

Connect to Exist. Underdrain

PROP. R/W

PROP. TEMP. CONST. ESM'T.

EXIST. R/W

Upperridge/Centreville Intersection Medians			
	Alignment	Elev. (Ft.)	Offset/ Station
①	SB Rte. 28	354.63	13' RT +04.56
②	SB Rte. 28	355.20	17.54' RT +29.42
③	NB Rte. 28	354.79	28.36' LT +84.53
④	NB Rte. 28	356.91	25' LT +50.95
⑤	SB Rte. 28	352.17	25.93' RT +03.24
⑥	SB Rte. 28	350.71	25.06' RT +49.71
⑦	NB Rte. 28	352.02	13.59' LT +23.00
⑧	NB Rte. 28	351.41	21.39' LT +64.01
⑨	Upperridge	347.28	13.72' RT +76.44
⑩	Upperridge	347.23	17.65' RT +76.46
⑪	Old Centreville	357.39	3.84' RT +64.59
⑫	Old Centreville	357.27	0.32' LT +64.61

Key Legend (XX)

1	6" Curb, Std. CG-2 Req'd.	11	Curb Ramp, Std. CG-12 Req'd.	23	Guardrail, Std. GR-MGS1 Req'd.
2	4" Curb, Std. CG-3 Req'd.	12	Underdrain Endwall, Std. EW-12 Req'd.	24	Guardrail, Std. GR-MGS1A Req'd.
3	6" Curb and Gutter, Std. CG-6 Req'd.	13	Not Used	25	Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
4	4" Curb and Gutter, Std. CG-7 Req'd.	14	Groundwater Underdrain, Std. UD-1 Req'd.	26	Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.
5	Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.	15	Curb-Cut Opening, Drainage Flume	27	Guardrail, Std. GR-10, Type I Req'd.
6	See Special Provision for Stamped Cement Concrete	16	Pavement Underdrain, Std. UD-4 Req'd.	28	Guardrail, Std. GR-10, Type II Req'd.
7	Conc. Raised Median, Std. MS-1A (6" Curb)	17	Pavement Underdrain, Mod. 6" UD-4 Req'd.	29	Guardrail, Std. GR-10, Type III Req'd.
8	Grass Raised Median, Std. MS-2 (6" Curb)	18	Crossdrain, Std. CD-1 Req'd.	30	Fixed Object Att., Std. GR-FOA-2 Ty.1 Req'd.
9	Entrance Gutter, Std. CG-9D Req'd.	19	Crossdrain, Std. CD-2 Req'd.	31	Fixed Object Att., Std. GR-FOA-2 Ty.2 Req'd.
10	Entrance, Std. CG-11 Req'd.	20	Woven Wire Fence, Std. FE-WI, W2 Req'd.	32	Guardrail Transition, Std. GR-MGS4 Req'd.
		21	Grass Raised Median, Std. MS-2 (4" Curb)	33	End CG-9D Entrance Type
		22	Chain Link Fence, Std. FE-CL Req'd.	34	Handrail, Std. HR-1 Type III Req'd.

35	Remove Exist. Guardrail	46	Pavement Demarcation Line
36	Remove Exist. Fence		
37	Remove Exist. Structure		
38	Remove Or Abandon and Fill Exist. Pipe		
39	Remove Exist. Pole		
40	Adjust Exist. Structure		
41	Clean Out Exist. Structure		
42	Full Depth Sawcut		
43	Clean Out Exist. Pipe		
44	10' Gutter Run Out		
45	Median Barrier, Std. MB-8A Req'd.		

Denotes Full Depth Pavement

Denotes SUP/Driveway /Private Entrance Pavement

Denotes Pavement Demolition

Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)

C Denotes Construction Limits In Cuts

F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)	
Construction Alignment	1G(5)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(10)
E&S Phase 3	2G(10)
Profiles	21A-21B
Drainage Descriptions	33

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	21

Dewberry

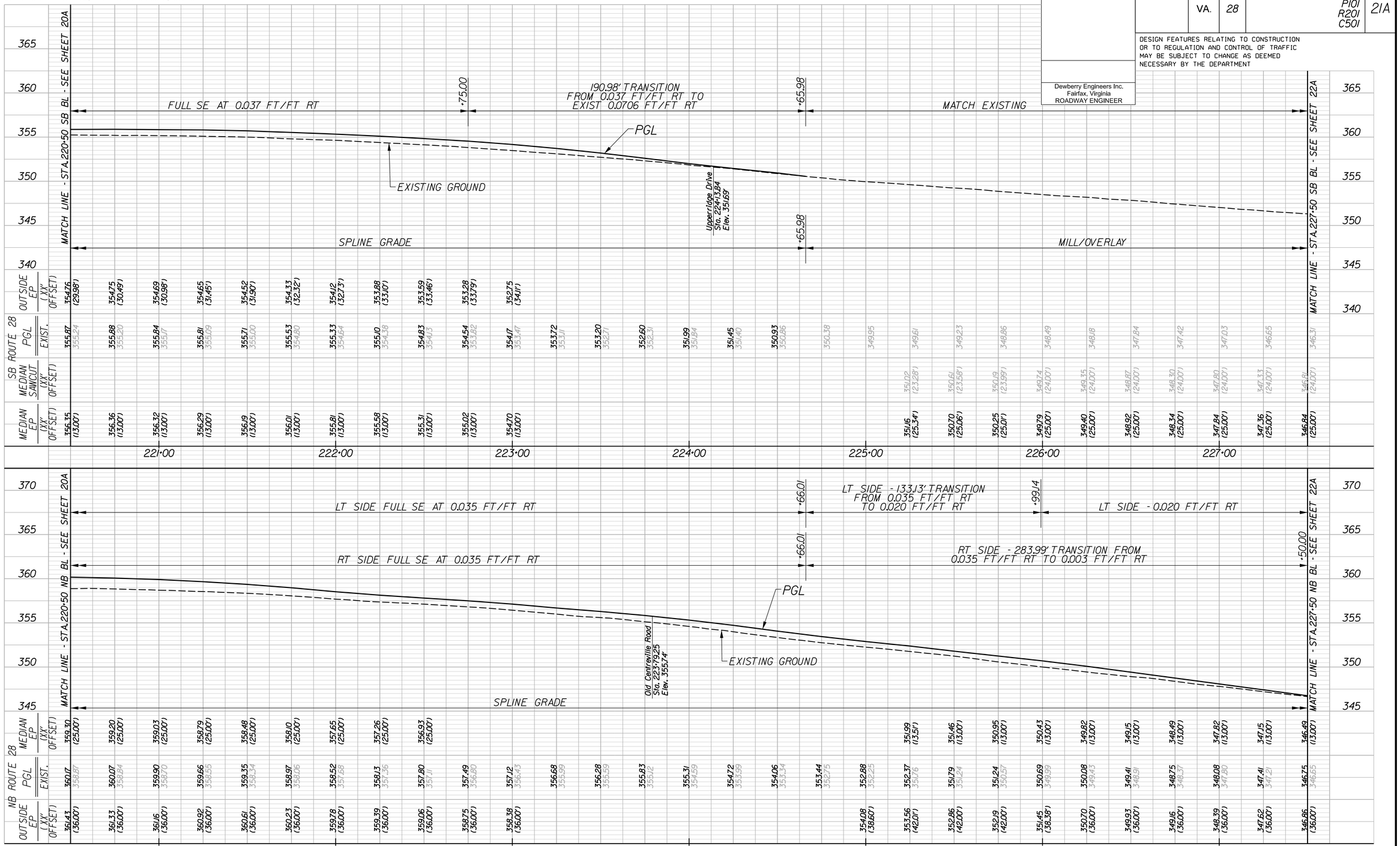
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	21A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



NB ROUTE 28

HORIZ.	0	25'	50'
VERT.	0	5'	10'

PROJECT	SHEET NO.
0028-029-269	21A

Dewberry

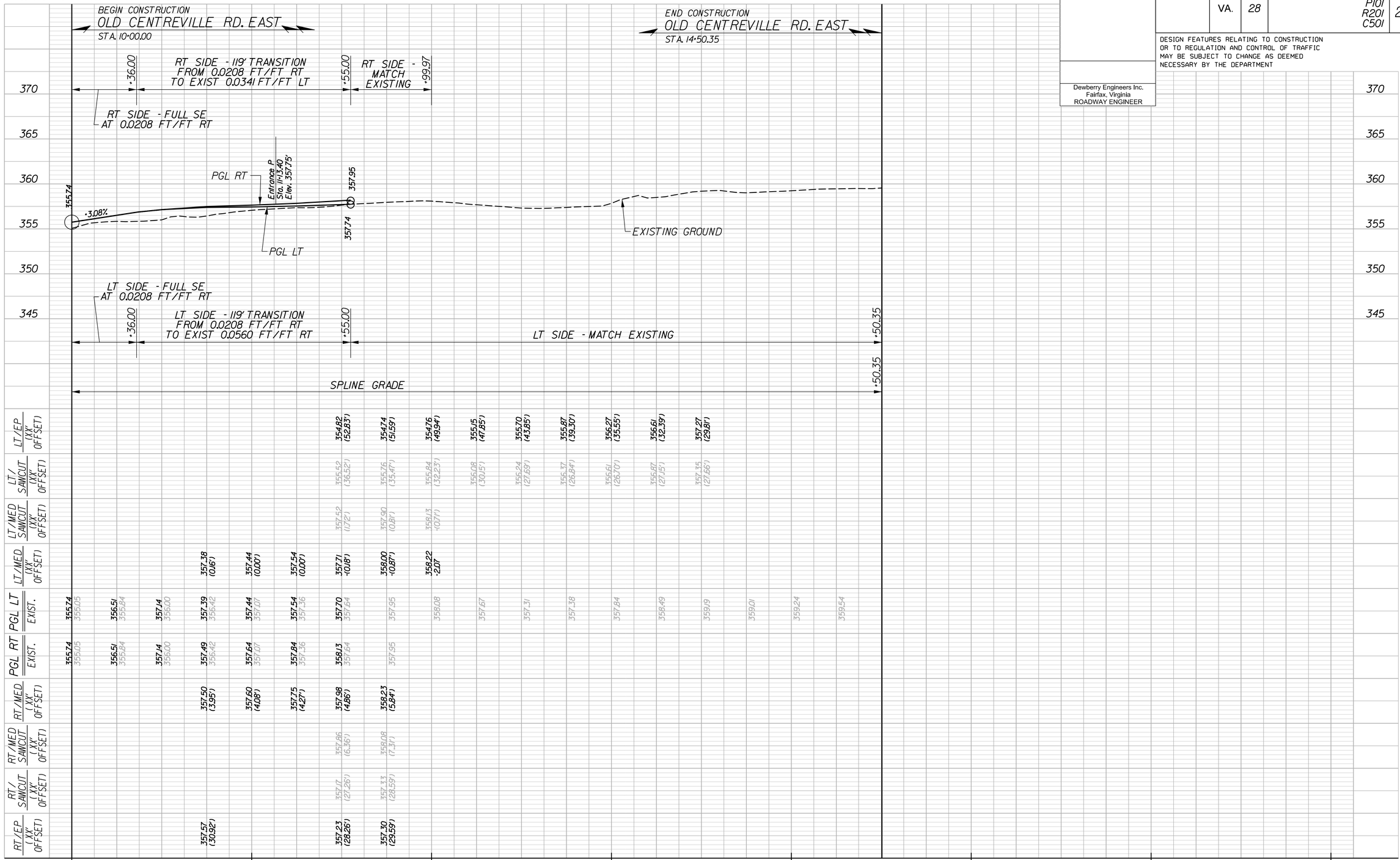
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

OLD CENTREVILLLE ROAD

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	21B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



RT/EP (XX' OFFSET)	RT/ SAWCUT (XX' OFFSET)	RT/MED SAWCUT (XX' OFFSET)	RT/MED (XX' OFFSET)	PGL RT EXIST.	PGL LT EXIST.	LT/MED (XX' OFFSET)	LT/MED SAWCUT (XX' OFFSET)	LT/ SAWCUT (XX' OFFSET)	LT/EP (XX' OFFSET)
				355.74	355.74				
				355.05	355.05				
				356.51	356.51				
				355.84	355.84				
				357.14	357.14				
				356.00	356.00				
357.57 (30.92')			357.50 (3.95')	357.49	357.39	357.38 (0.16')			
				356.42	356.42				
			357.60 (4.08')	357.64	357.44	357.44 (0.00')			
				357.07	357.07				
			357.75 (4.27')	357.84	357.54	357.54 (0.00')			
				357.56	357.56				
357.23 (28.26')	357.17 (27.26')	357.46 (6.36')	357.98 (4.86')	358.13	357.70	357.71 +0.18'	357.62 (1.12')	356.52 (36.52')	354.82 (52.83')
				357.64	357.64				
357.30 (29.59')	357.33 (28.59')	358.08 (7.31')	358.23 (5.84')	357.95	357.95	358.00 +0.87'	357.90 (0.81')	355.76 (35.47')	354.74 (51.59')
					358.08	358.22 -2.07'	358.13 (10.71')	355.84 (32.23')	354.76 (49.94')
					357.67			356.08 (30.45')	355.15 (47.85')
					357.31			356.24 (27.69')	355.70 (43.85')
					357.38			356.37 (26.84')	355.87 (39.30')
					357.84			356.61 (26.70')	356.27 (35.55')
					358.49			356.87 (27.51')	356.61 (32.39')
					359.19			357.35 (27.66')	357.27 (29.81')
					359.01				
					359.24				
					359.54				

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	21B

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	22

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ROUTE 28 SB
ROUTE 28 NB
ROUTE 28 SB ℄
ROUTE 28 NB ℄
EXIST. R/W
Underground SWM Facility II
Guardrail to be replaced if necessary
Remove Barrer
Impact Attenuator TL-3 Req'd.
POT 232+75.00
POT 232+50
R = 150.58'
R=5.74'
24.42' RT -24.39
24.36' RT -12.60
23.64' LT -36.48
12.96' LT -87.76
Match Line - Sta. 227+50 - See Sheet 21
Match Line - Sta. 11+50 - See Sheet 21
041
039
SIT PARK ASSOCIATES
D.B. 24313, PG. 2176
TAX MAP 54-4 ((5)) 2A1
CHEVY CHASE BANK
D.B. 13683, PG. 956
TAX MAP 54-4 ((5)) 2B
EX 22-1
EX 22-2
EX 22-3
EX 22-4
EX 22-5
EX 22-6
EX 22-7
EX 22-8
EX 22-9
EX 22-10
EX 22-11
EX 22-12
PC 11+99.65
UPPERRIDGE DR
PROP. TEMP. CONST. ESMT.
PROP R/W
237' LT -06.12
27.22' LT -68.08
R = 102'
R = 98'
N 80° 22' 30" W
INSET A

Key Legend (XX)

1	6" Curb, Std. CG-2 Req'd.	11	Curb Ramp, Std. CG-12 Req'd.	23	Guardrail, Std. GR-MGS1 Req'd.	35	Remove Exist. Guardrail
2	4" Curb, Std. CG-3 Req'd.	12	Underdrain Endwall, Std. EW-12 Req'd.	24	Guardrail, Std. GR-MGS1A Req'd.	36	Remove Exist. Fence
3	6" Curb and Gutter, Std. CG-6 Req'd.	13	Not Used	25	Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.	37	Remove Exist. Structure
4	4" Curb and Gutter, Std. CG-7 Req'd.	14	Groundwater Underdrain, Std. UD-1 Req'd.	26	Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.	38	Remove Or Abandon and Fill Exist. Pipe
5	Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.	15	Curb-Cut Opening, Drainage Flume	27	Guardrail, Std. GR-10, Type I Req'd.	39	Remove Exist. Pole
		16	Pavement Underdrain, Std. UD-4 Req'd.	28	Guardrail, Std. GR-10, Type II Req'd.	40	Adjust Exist. Structure
6	See Special Provision for Stamped Cement Concrete	17	Pavement Underdrain, Mod. 6" UD-4 Req'd.	29	Guardrail, Std. GR-10, Type III Req'd.	41	Clean Out Exist. Structure
		18	Crossdrain, Std. CD-1 Req'd.	30	Fixed Object Att., Std. GR-FOA-2 Ty.1 Req'd.	42	Full Depth Sawcut
7	Conc. Raised Median, Std. MS-1A (6" Curb)	19	Crossdrain, Std. CD-2 Req'd.	31	Fixed Object Att., Std. GR-FOA-2 Ty.2 Req'd.	43	Clean Out Exist. Pipe
8	Grass Raised Median, Std. MS-2 (6" Curb)	20	Woven Wire Fence, Std. FE-WI, W2 Req'd.	32	Guardrail Transition, Std. GR-MGS4 Req'd.	44	10' Gutter Run Out
9	Entrance Gutter, Std. CG-9D Req'd.	21	Grass Raised Median, Std. MS-2 (4" Curb)	33	End CG-9D Entrance Type	45	Median Barrier, Std. MB-8A Req'd.
10	Entrance, Std. CG-11 Req'd.	22	Chain Link Fence, Std. FE-CL Req'd.	34	Handrail, Std. HR-1 Type III Req'd.	46	Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(5)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(10)
E&S Phase 3	2G(10)
Profiles	22A
Drainage Descriptions	33

SCALE	PROJECT	SHEET NO.
0 25' 50'	0028-029-269	22

10/12/2020
11:24:17 AM

d108720-22Adgn
Plotted By: cjennings

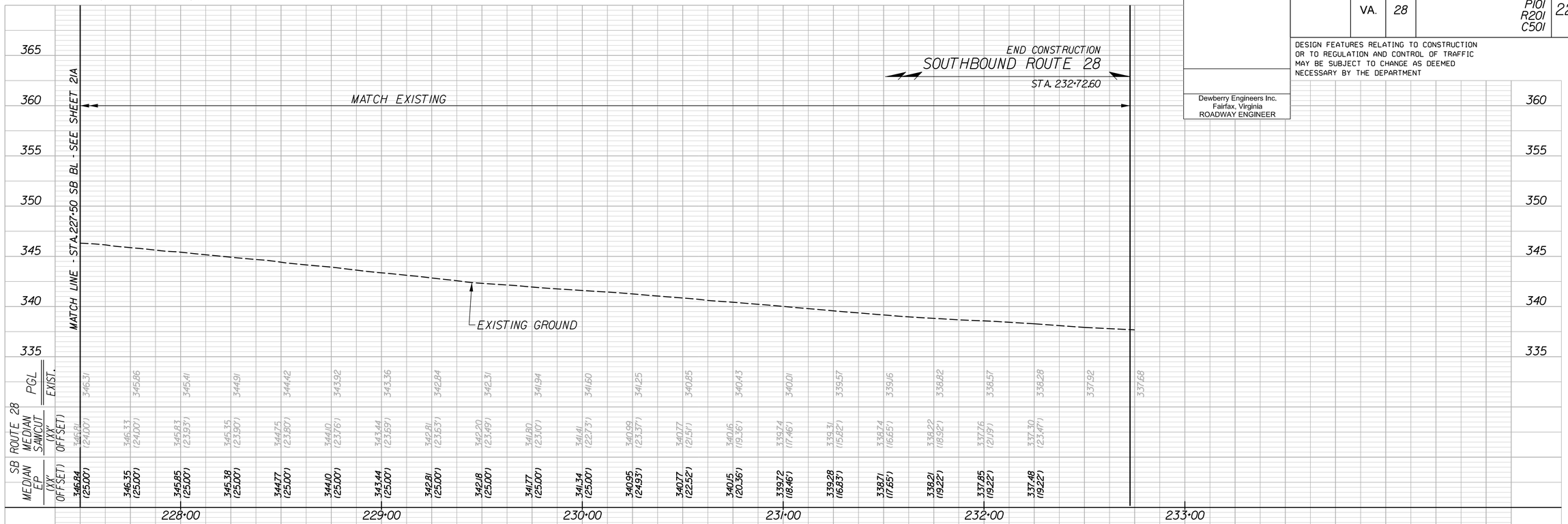
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SB ROUTE 28

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	22A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



NB ROUTE 28

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	22A

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	23

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

Match Line - Sta. 14+25 - See Sheet 24

Match Line - Sta. 11+50 - See Sheet 6

ORDWAY RD

COMPTON RD (WEST)

UD-4 to Buck Grade Connect to Str.23-7

PROP.TEMP. CONST.ESM'T.

EXIST. R/W

23-1 23-2 23-3 23-4 23-5 23-6 23-7 23-8 23-9

055
CAPITAL WORSHIP CENTRE, LLC
D.B. 23586, PG. 550
TAX MAP 65-3 ((1)) 72

CAPITAL WORSHIP CENTRE LLC
D.B. 23586, PG. 550
TAX MAP 65-3 ((1)) 71B

D.B. 23586, PG. 550
TAX MAP 65-3 ((1)) 73

010
PARCEL "E" - SECTION ONE
CROFTON COMMONS
D.B. 6389, PG. 1853
TAX MAP 65-3 ((3)) F

PARCEL "B"
SECTION TWO
CROFTON COMMONS
D.B. 6281, PG. 844
TAX MAP 65-3 ((3)) B

PC10+07.12
PT12+16.45
EOT10+00.00
N 62° 48' 07" W

Compton/Ordway Medians			
	Alignment	Elev. (FT)	Offset/ Station
①	Ordway Rd.	224.37	13' LT 71.51
②	Ordway Rd.	224.97	2' RT 71.51
③	Compton Rd. East	226.12	1' LT 41.18
④	Compton Rd. East	225.86	13.84' LT 42.66
⑤	Compton Rd. East	227.58	4.99' LT 19.52
⑥	Compton Rd. East	227.75	1' LT 19.35
⑦	Ordway Rd.	223.19	13' LT 42.92
⑧	Ordway Rd.	223.59	3' LT 42.92

Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. MS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-WI, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGS1 Req'd.
24 Guardrail, Std. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR) (XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(1)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(1)
E&S Phase 3	2G(1)
Profiles	23A-23B
Drainage Descriptions	33

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	23

10/12/2020
11:24:32 AM

d10BT20-23A.dgn
Plotted By: cjennings

Dewberry

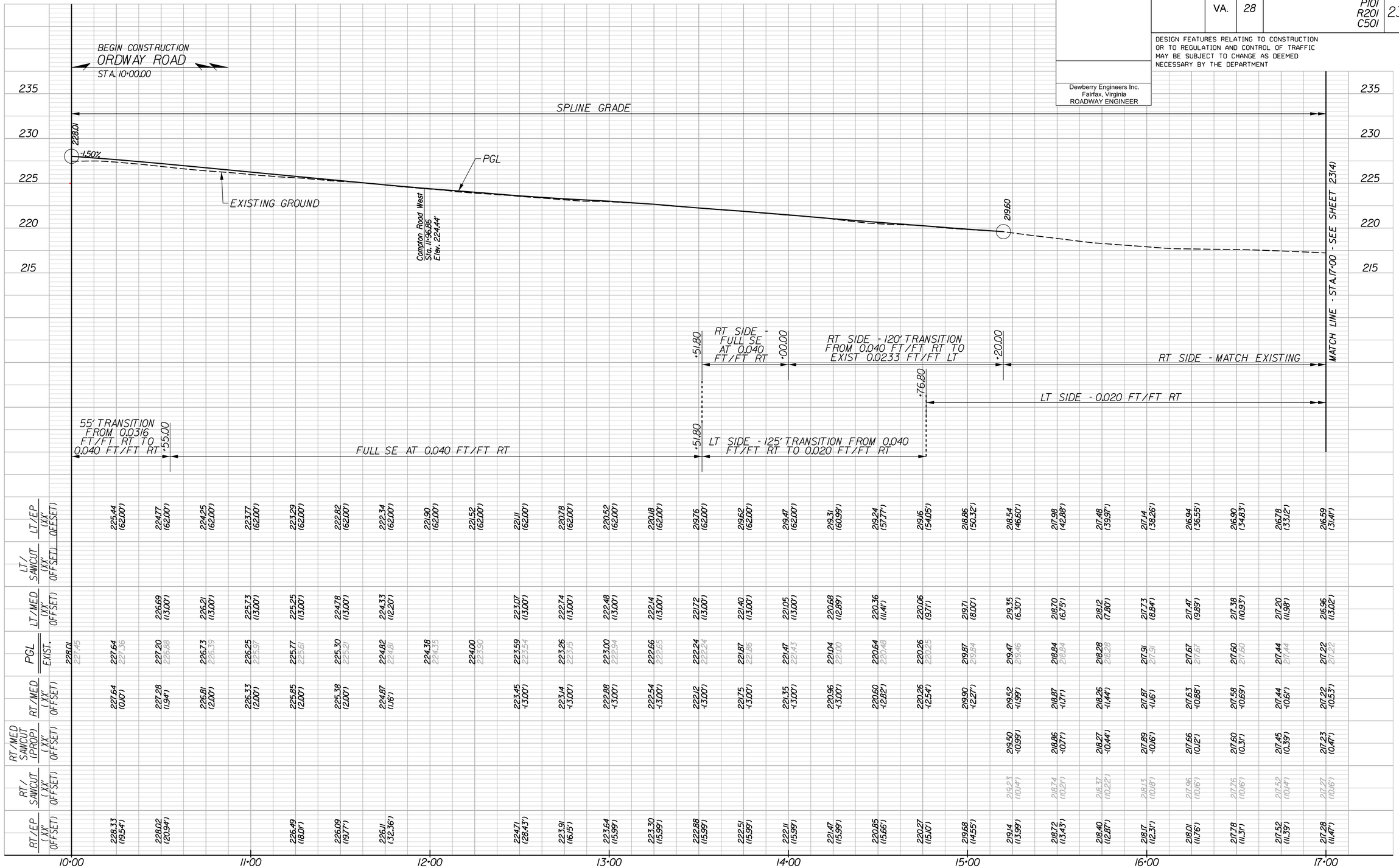
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

ORDWAY ROAD

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	23A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



RT / EP (XX' OFFSET)	RT / SAWCUT (XX' OFFSET)	RT / MED SAWCUT (PROP) (XX' OFFSET)	RT / MED (XX' OFFSET)	PGL EXIST.	PGL	LT / MED (XX' OFFSET)	LT / SAWCUT (XX' OFFSET)	LT / EP (XX' OFFSET)
				228.01	227.45			
228.33 (19.54')			227.64 (0.01')	227.64	227.36			225.44 (62.00')
228.02 (20.94')			227.28 (1.94')	227.20	226.88	226.69 (13.00')		224.77 (62.00')
			226.81 (2.00')	226.73	226.39	226.21 (13.00')		224.25 (62.00')
			226.33 (2.00')	226.25	225.97	225.73 (13.00')		223.77 (62.00')
226.49 (16.01')			225.85 (2.00')	225.77	225.61	225.25 (13.00')		223.29 (62.00')
226.09 (19.77')			225.38 (2.00')	225.30	225.21	224.78 (13.00')		222.82 (62.00')
226.11 (32.36')			224.87 (1.16')	224.82	224.81	224.33 (12.20')		222.34 (62.00')
				224.38	224.35			221.90 (62.00')
				224.00	223.90			221.52 (62.00')
224.71 (28.43')			223.45 +3.00')	223.59	223.54	223.07 (13.00')		221.11 (62.00')
223.91 (16.15')			223.14 +3.00')	223.26	223.15	222.74 (13.00')		220.78 (62.00')
223.64 (15.99')			222.88 +3.00')	223.00	222.94	222.48 (13.00')		220.52 (62.00')
223.30 (15.99')			222.54 +3.00')	222.66	222.65	222.14 (13.00')		220.18 (62.00')
222.88 (15.99')			222.12 +3.00')	222.24	222.24	221.72 (13.00')		219.76 (62.00')
222.51 (15.99')			221.75 +3.00')	221.87	221.86	221.40 (13.00')		219.62 (62.00')
222.11 (15.99')			221.35 +3.00')	221.47	221.45	221.05 (13.00')		219.47 (62.00')
221.47 (15.99')			220.96 +3.00')	221.04	221.00	220.68 (12.89')		219.31 (60.59')
220.85 (15.66')			220.60 +2.82')	220.64	220.48	220.36 (11.41')		219.24 (57.77')
220.27 (15.01')			220.26 +2.54')	220.26	220.25	220.06 (9.71')		219.16 (54.05')
219.68 (14.55')			219.90 +2.27')	219.87	219.84	219.71 (8.00')		218.86 (50.32')
219.14 (13.99')	218.23 (10.14')	219.50 +0.99')	219.52 +1.99')	219.47	219.46	219.35 (6.30')		218.54 (46.60')
218.72 (13.43')	218.74 (10.21')	218.86 +1.07')	218.87 +1.71')	218.84	218.84	218.70 (6.75')		217.98 (42.88')
218.40 (12.87')	218.43 (10.22')	218.27 +0.44')	218.26 +1.44')	218.28	218.28	218.12 (7.80')		217.48 (39.97')
218.17 (12.31')	218.13 (10.18')	217.89 +0.16')	217.87 +1.16')	217.91	217.91	217.73 (8.84')		217.14 (38.26')
218.01 (11.76')	217.96 (10.16')	217.66 (0.12')	217.63 +0.88')	217.67	217.67	217.47 (9.89')		216.94 (36.55')
217.78 (11.31')	217.76 (10.16')	217.60 (0.31')	217.58 +0.69')	217.60	217.60	217.38 (10.93')		216.90 (34.83')
217.52 (11.39')	217.52 (10.14')	217.45 (0.39')	217.44 +0.61')	217.44	217.44	217.20 (11.98')		216.78 (33.12')
217.28 (11.47')	217.27 (10.16')	217.23 (0.47')	217.22 +0.53')	217.22	217.22	216.96 (13.02')		216.59 (31.41')

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT 0028-029-269

SHEET NO. 23A

Dewberry

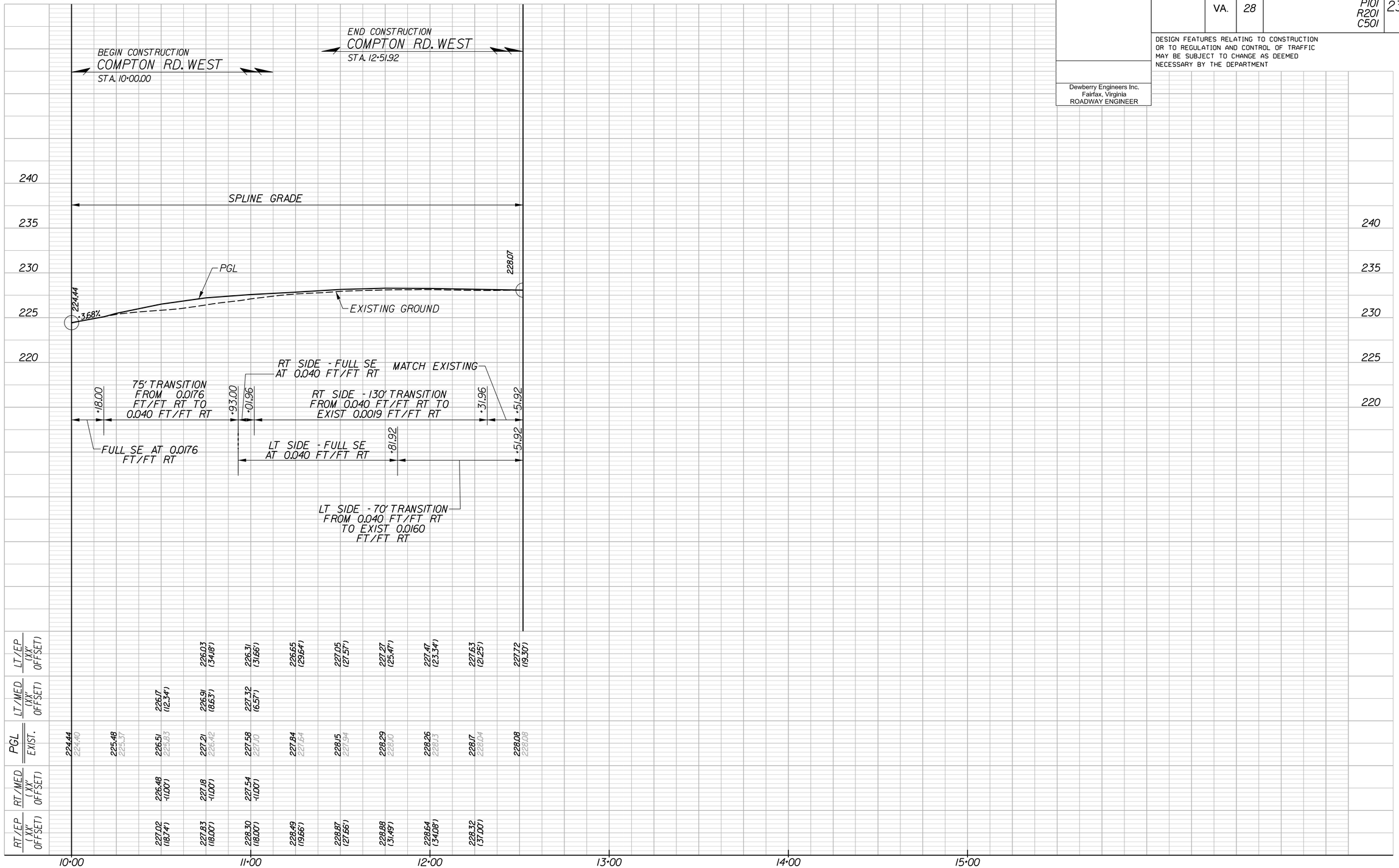
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

COMPTON ROAD WEST

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	23B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



	PGL EXIST.	RT/MED (XX' OFFSET)	RT/EP (XX' OFFSET)	LT/MED (XX' OFFSET)	LT/EP (XX' OFFSET)
10+00	224.44 224.40				
10+50	225.48 225.37				
10+75	226.51 225.83	226.48 -11.00')	227.02 (18.74')	226.17 (12.34')	
10+93	227.21 226.42	227.18 -11.00')	227.83 (18.00')	226.91 (18.63')	226.03 (34.18')
11+00	227.58 227.10	227.54 -11.00')	228.30 (18.00')	227.32 (16.57')	226.31 (31.66')
11+50	227.84 227.54		228.49 (19.66')		226.65 (29.84')
11+81.92	228.15 227.94		228.87 (27.66')		227.05 (27.57')
12+00	228.29 228.10		228.88 (31.49')		227.27 (25.47')
12+51.92	228.26 228.13		228.64 (34.08')		227.47 (23.34')
12+75	228.17 228.04		228.32 (37.00')		227.63 (21.25')
13+00	228.08 228.08				227.72 (19.30')

10+00 11+00 12+00 13+00 14+00 15+00

HORIZ. 0 25' 50' / VERT. 0 5' 10'	PROJECT	SHEET NO.
	0028-029-269	23B

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	24

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Match Line - See Sheet 5
Match Line - See Sheet 6
Match Line - See Sheet 23
Match Line - Sta. 14+25
PT 14+35.14
600
LOT 71A
DIVISION OF LOT 71
WILLIAM P. SMITH &
JOHN O. DUNCAN, TR.
D.B. 12296, PG. 1194
TAX MAP 65-3 ((1)) 71A
007
LOT 2
AUBRY PLAINS
D.B. 722, PG. 116
SUBJECT TO BOUNDARY LINE ADJUSTMENT
D.B. 1065, PG. 159
TAX MAP 65-3 ((2)) 2
900
LOT 1
AUBRY PLAINS
D.B 722, PG. 116
SUBJECT TO BOUNDARY
LINE ADJUSTMENT
D.B. 1065, PG. 159
TAX MAP 65-3 ((2)) 1
LOT 4
AUBRY PLAINS
D.B 722, PG. 116
SUBJECT TO BOUNDARY LINE
ADJUSTMENT
D.B. 1065, PG. 159
TAX MAP 65-3 ((2)) 4
047
CINDY THUY TRUONG
D.B. 25050, PG. 1821
TAX MAP 65-3 ((2)) 3
046
LOT 5
AUBRY PLAINS
D.B 722, PG. 116
SUBJECT TO BOUNDARY
LINE ADJUSTMENT
D.B. 1065, PG. 159
TAX MAP 65-3 ((2)) 5
JANICE A MITCHELL
D.B. 730, PG. 384
TAX MAP 65-3 ((2)) 4
ASTRIT VEIZI
D.B. 20822, PG. 1687
TAX MAP 65-3 ((2)) 5
CAPITAL WORSHIP CENTRE LLC
D.B. 23586, PG. 550
TAX MAP 65-3 ((1)) 71B
CAPITAL WORSHIP CENTRE LLC
D.B. 23586, PG. 550
TAX MAP 65-3 ((1))76B
CAPITAL WORSHIP CENTRE LLC
D.B. 23586, PG. 550
TAX MAP 65-3 ((1))76C
TUAN ANH LUU TRAN &
HUAN NGOC NGUYEN
D.B. 25980, PG. 1614
TAX MAP 65-3 ((1)) 76A
PLAT OF SURVEY RECORDED WITH 12726R-1124 SHOWS A "POB" AT FRONT OF THE SOUTHWEST CORNER
PROP. R/W
EXIST. R/W
PROP. TEMP. CONST. ESM'T.
ORDWAY RD
ORDWAY RD ⓑ
24-1
24-2
24-3
24-4
24-5
24-6
R = 30'
R=200'
R=3'
S 24° 31' 44" W
POT 21+34.44
UD-4 to Buck Grade Connect to Str. 23-T
3' LT ·32.26
5.93' LT ·30.36
40.98' LT ·64.91
29.12' LT ·33.19
12.79' LT ·29.52
11.09' LT ·10.45
10.75' RT ·99.44
Light Pole NOVEC 354 22 4 032
Light Pole NOVEC 354 22 4 031
Tele. Pole C & P VA 55 5 5 9 Abandoned
Tele. Pole C & P VA 1557
Power Pole NOVEC 54 22 4 030
Light Pole NOVEC 55 1/2 C & P VA

Ordway Medians			
	Alignment	Elev. (Ft.)	Offset/ Station
①	Ordway Rd.	216.53	15.07' LT ·48.91
②	Ordway Rd.	216.36	8.88' LT ·79.30
③	Ordway Rd.	216.59	3' LT ·79.08
④	Ordway Rd.	216.84	0.32' LT ·46.10

Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. MS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-WI, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGS1 Req'd.
24 Guardrail, Std. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR) (XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(1)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(1)
E&S Phase 3	2G(1)
Profiles	24A
Drainage Descriptions	33

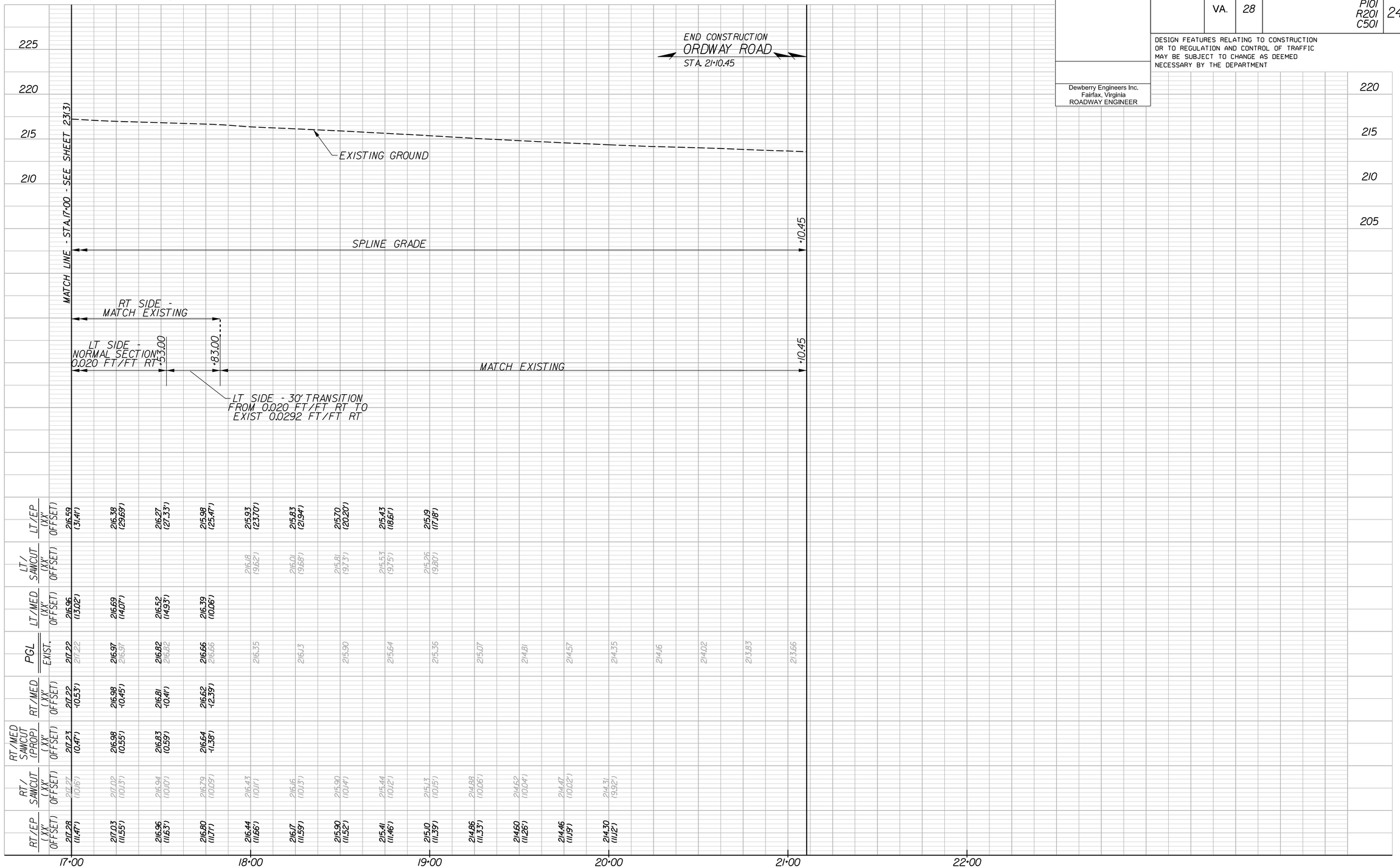
SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	24

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

ORDWAY ROAD



RT/EP (XX' OFFSET)	RT/SAWCUT (XX' OFFSET)	RT/MED SAWCUT (PROP) (XX' OFFSET)	RT/MED (XX' OFFSET)	PGL EXIST.	LT/MED (XX' OFFSET)	LT/SAWCUT (XX' OFFSET)	LT/EP (XX' OFFSET)
217.28 (11.47')	217.27 (10.16')	217.23 (0.47')	217.22 (+10.53')	217.22	216.96 (13.02')		216.59 (31.41')
217.03 (11.55')	217.02 (10.31')	216.98 (0.55')	216.98 (+10.45')	216.97	216.69 (14.07')		216.38 (29.69')
216.96 (11.63')	216.94 (10.01')	216.83 (0.59')	216.81 (+10.41')	216.82	216.52 (14.93')		216.27 (27.33')
216.80 (11.71')	216.79 (10.09')	216.64 (1.38')	216.62 (+12.39')	216.66	216.39 (10.06')		215.98 (25.47')
216.44 (11.66')	216.43 (10.11')			216.35		216.18 (9.82')	215.93 (23.70')
216.17 (11.59')	216.16 (10.31')			216.3		216.01 (9.68')	215.83 (21.94')
215.90 (11.52')	215.90 (10.44')			215.90		215.81 (9.73')	215.70 (20.20')
215.41 (11.46')	215.44 (10.12')			215.64		215.53 (9.75')	215.43 (18.61')
215.10 (11.39')	215.13 (10.15')			215.36		215.26 (9.80')	215.19 (17.18')
214.86 (11.33')	214.88 (10.08')			215.07			
214.60 (11.26')	214.62 (10.04')			214.81			
214.46 (11.19')	214.47 (10.02')			214.57			
214.30 (11.12')	214.31 (9.92')			214.35			
				214.16			
				214.02			
				213.83			
				213.66			

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	24A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT 0028-029-269

SHEET NO. 24A

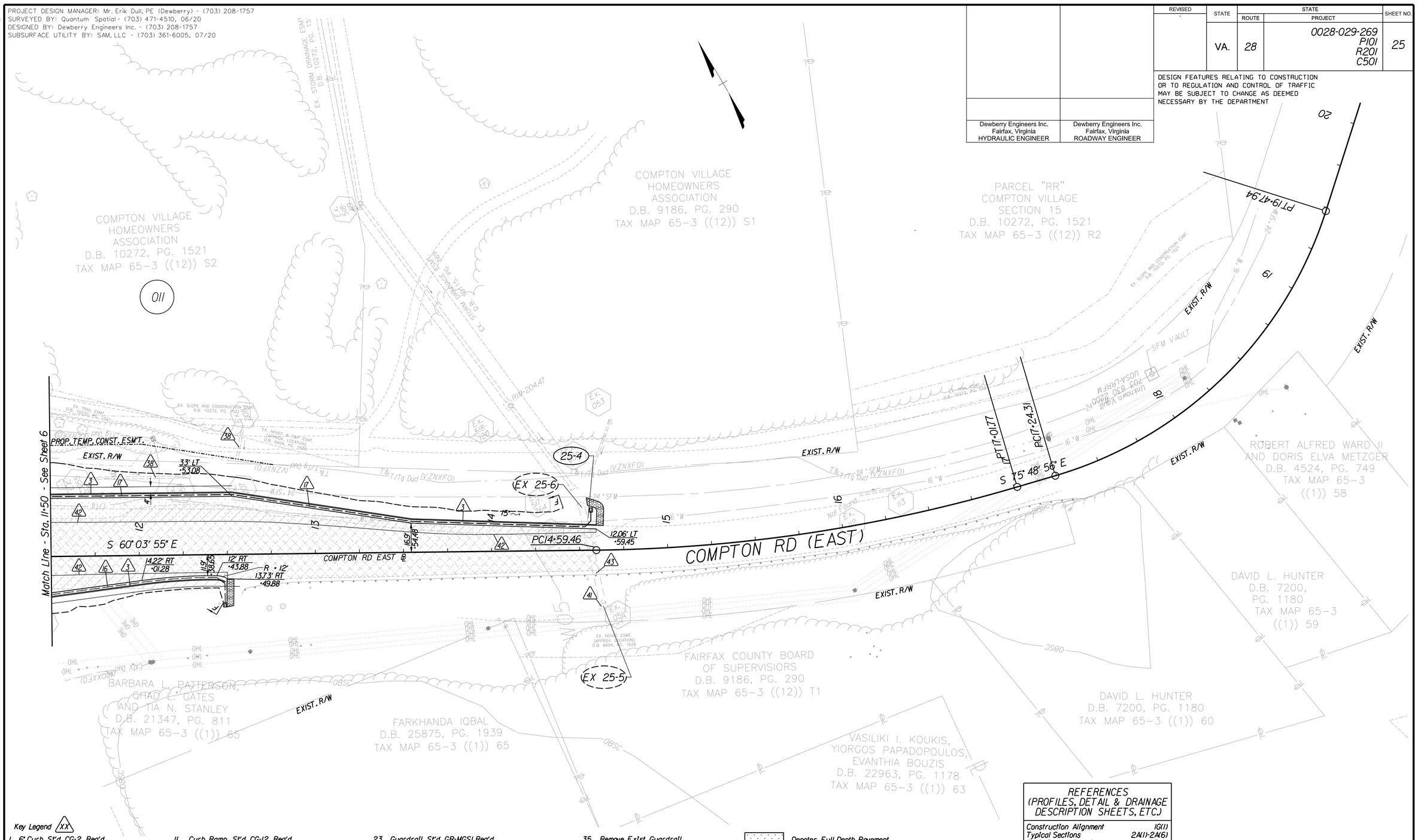
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	25

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Key Legend (XX)

1	6" Curb, Std. CG-2 Req'd.	11	Curb Ramp, Std. CG-12 Req'd.	23	Guardrail, Std. GR-MGS1 Req'd.	35	Remove Exist. Guardrail
2	4" Curb, Std. CG-3 Req'd.	12	Underdrain Endwall, Std. EW-12 Req'd.	24	Guardrail, Std. GR-MGS1A Req'd.	36	Remove Exist. Fence
3	6" Curb and Gutter, Std. CG-6 Req'd.	13	Not Used	25	Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.	37	Remove Exist. Structure
4	4" Curb and Gutter, Std. CG-7 Req'd.	14	Groundwater Underdrain, Std. UD-1 Req'd.	26	Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.	38	Remove Or Abandon and Fill Exist. Pipe
5	Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.	15	Curb-Cut Opening, Drainage Flume	27	Guardrail, Std. GR-10, Type I Req'd.	39	Remove Exist. Pole
6	See Special Provision for Stamped Cement Concrete	16	Pavement Underdrain, Std. UD-4 Req'd.	28	Guardrail, Std. GR-10, Type II Req'd.	40	Adjust Exist. Structure
7	Conc. Raised Median, Std. MS-1A (6" Curb)	17	Pavement Underdrain, Mod. 6" UD-4 Req'd.	29	Guardrail, Std. GR-10, Type III Req'd.	41	Clean Out Exist. Structure
8	Grass Raised Median, Std. MS-2 (6" Curb)	18	Crossdrain, Std. CD-1 Req'd.	30	Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.	42	Full Depth Sawcut
9	Entrance Gutter, Std. CG-9D Req'd.	19	Crossdrain, Std. CD-2 Req'd.	31	Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.	43	Clean Out Exist. Pipe
10	Entrance, Std. CG-11 Req'd.	20	Woven Wire Fence, Std. FE-WI, W2 Req'd.	32	Guardrail Transition, Std. GR-MGS4 Req'd.	44	10' Gutter Run Out
		21	Grass Raised Median, Std. MS-2 (4" Curb)	33	End CG-9D Entrance Type	45	Median Barrier, Std. MB-8A Req'd.
		22	Chain Link Fence, Std. FE-CL Req'd.	34	Handrail, Std. HR-1 Type III Req'd.	46	Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR) (XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(1)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(2)
E&S Phase 3	2G(2)
Profiles	25A
Drainage Descriptions	33

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	25

10/12/2020
11:25:09 AM

d108720-25A.dgn
Plotted By: cjennings

Dewberry

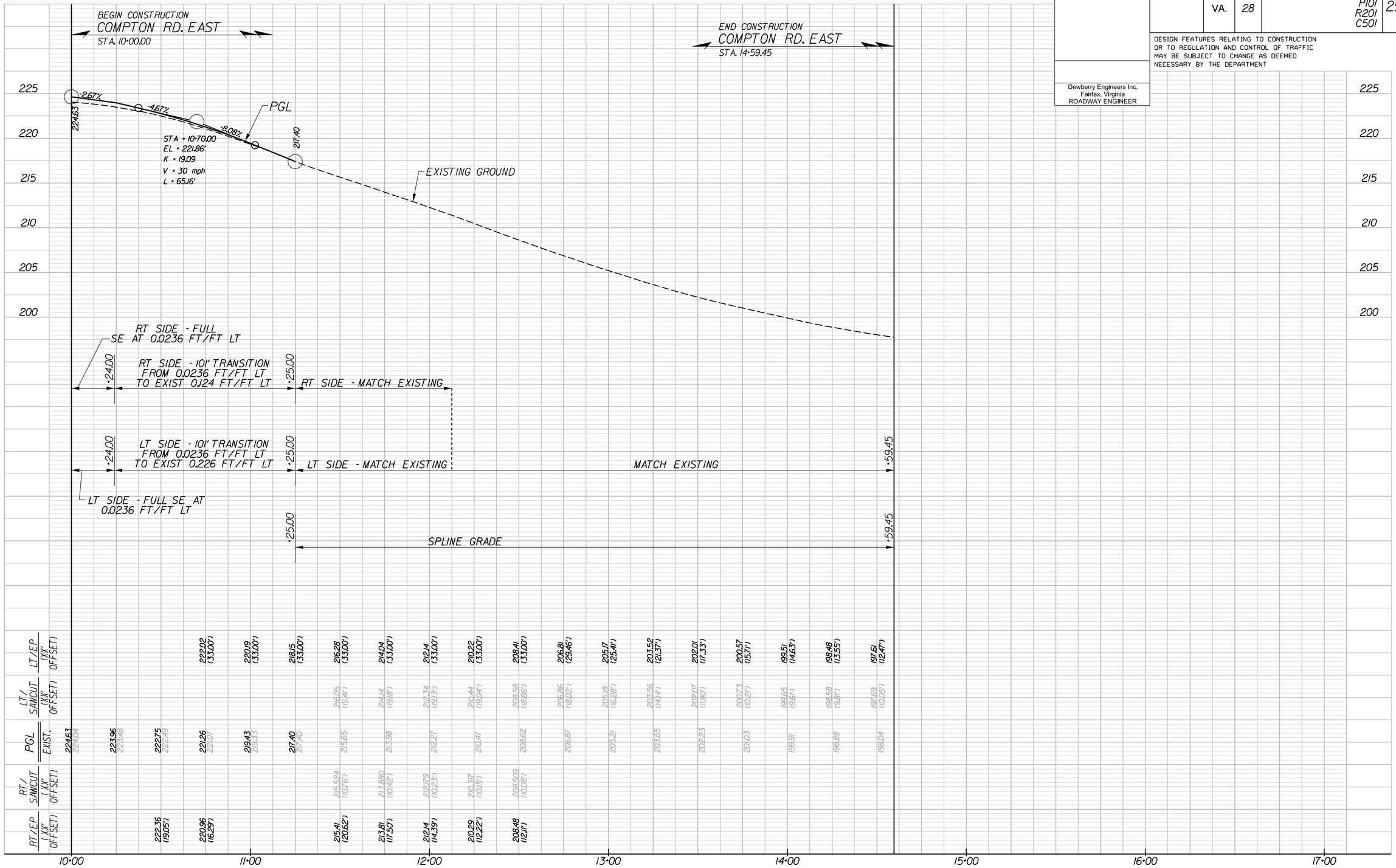
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

COMPTON ROAD EAST

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	25A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



	RT/EP (XX' OFFSET)	RT/SAWCUT (XX' OFFSET)	PGL EXIST.	LT/SAWCUT (XX' OFFSET)	LT/EP (XX' OFFSET)
10+00			224.63 224.04		
11+00	222.36 (19.05')		222.75 222.49		222.02 (33.00')
	220.96 (16.29')		221.26 221.07		220.9 (33.00')
12+00			219.43 218.93		218.15 (33.00')
	215.41 (20.62')	215.524 (10.76')	217.40 217.40	216.05 (19.41')	216.28 (33.00')
	213.81 (17.50')	213.880 (10.42')	215.65 215.98	214.4 (19.18')	214.04 (33.00')
13+00		212.179 (10.23')	213.98 212.27	212.34 (19.13')	212.14 (33.00')
	212.14 (14.39')	210.317 (10.15')	210.47 210.47	210.44 (19.04')	210.22 (33.00')
	210.29 (12.22')				
14+00	208.48 (12.11')	208.509 (10.08')	208.52 208.52	208.58 (18.86')	208.41 (33.00')
			206.87 206.87	206.86 (18.02')	206.81 (29.46')
15+00			205.21 205.21	205.18 (16.28')	205.17 (25.41')
			203.65 203.65	203.56 (14.44')	203.52 (21.37')
16+00			202.23 202.23	202.07 (11.90')	202.01 (17.33')
			201.03 201.03	200.73 (10.21')	200.57 (15.71')
17+00			199.91 199.91	199.65 (9.61')	199.51 (14.63')
			198.88 198.88	198.58 (9.81')	198.48 (13.55')
			198.04 198.04	197.69 (10.05')	197.61 (12.41')

HORIZ.	PROJECT	SHEET NO.
0 25' 50'	0028-029-269	25A
VERT. 0 5' 10'		

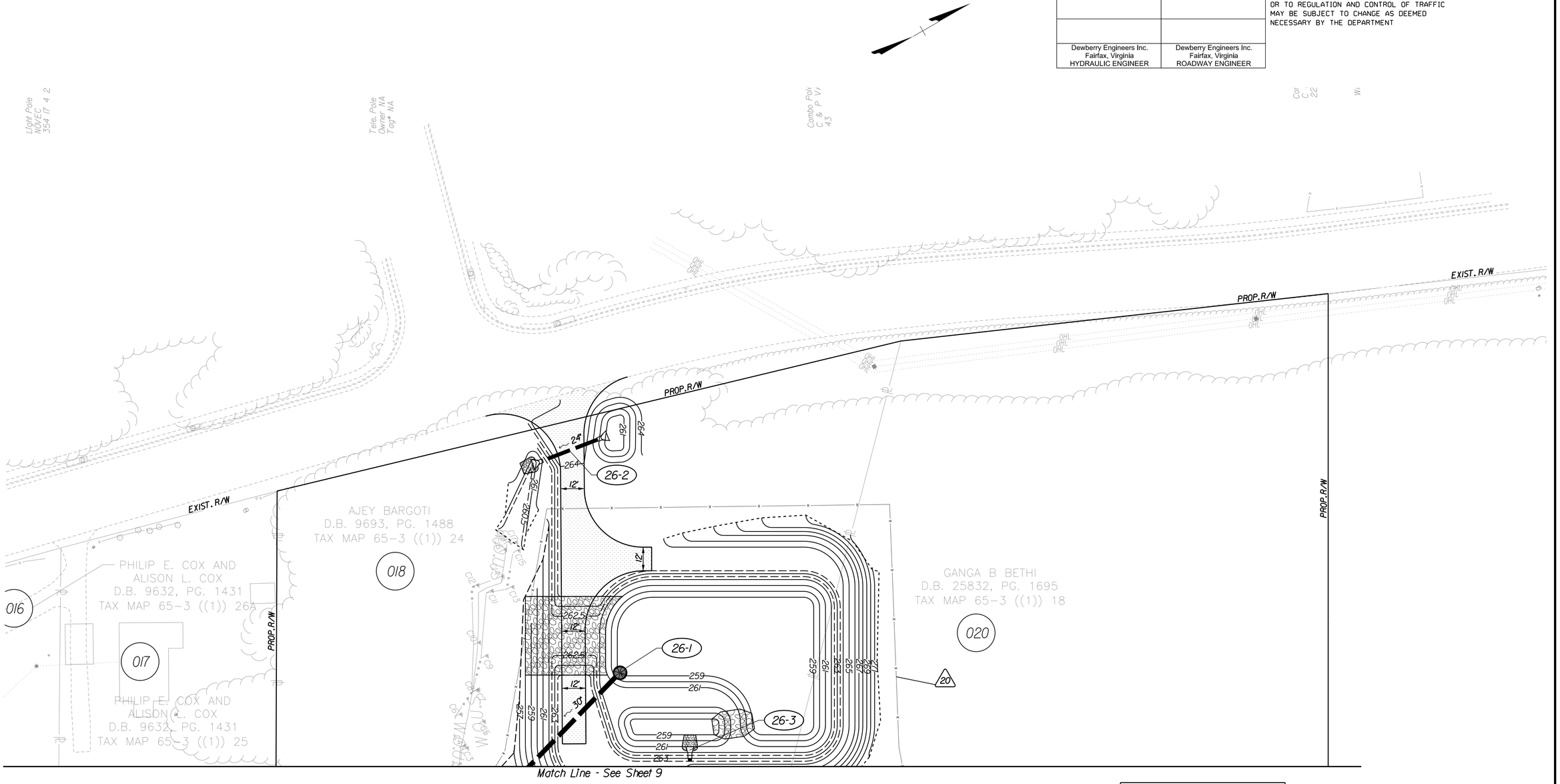
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	26

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. MS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-W1, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGS1 Req'd.
24 Guardrail, Std. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Acharge, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(2)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(4)
E&S Phase 3	2G(4)
Profiles	
Drainage Descriptions	33

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	26

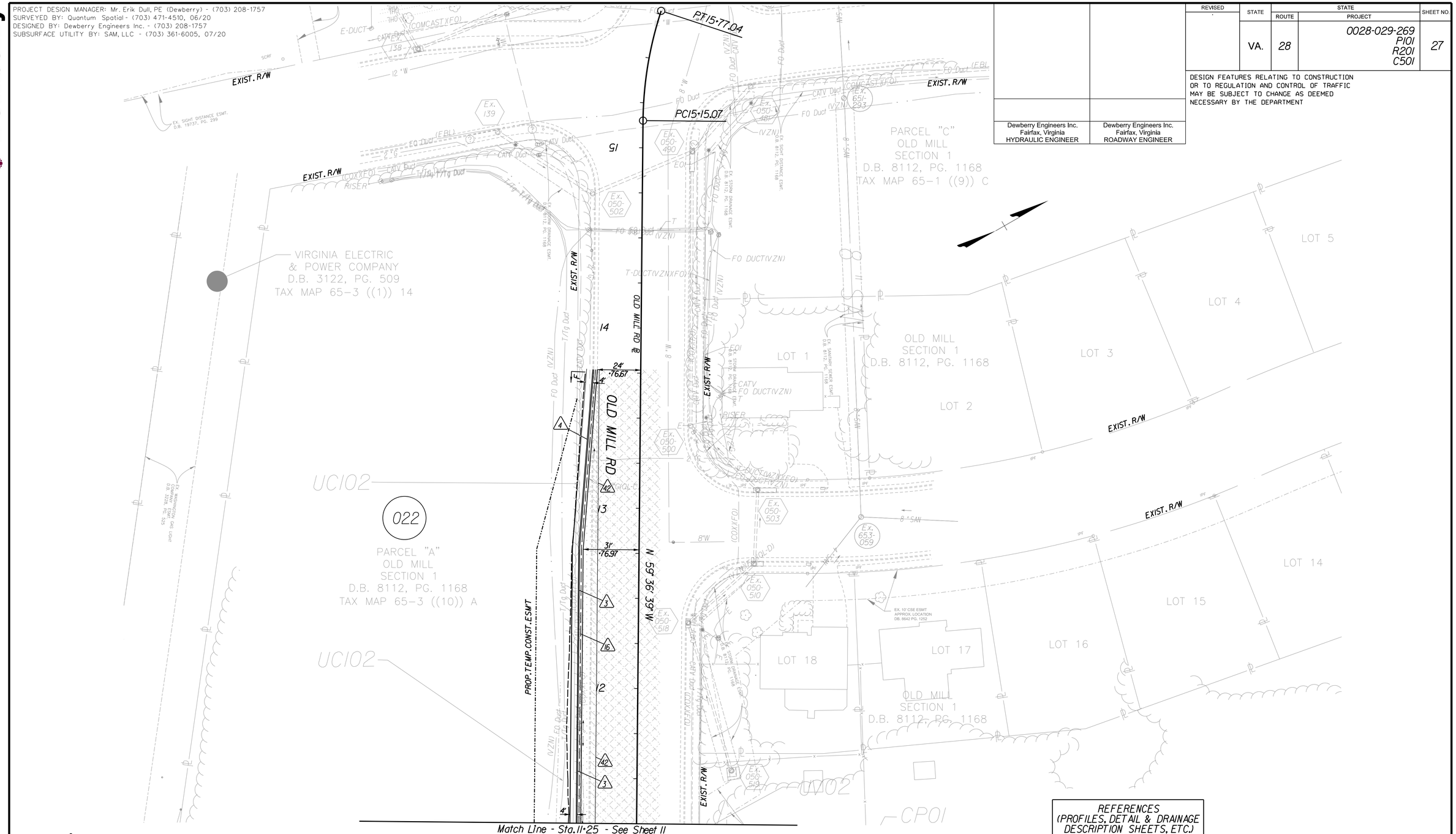
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	27

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER



Key Legend (XX)

1 6" Curb, Std. CG-2 Req'd.
2 4" Curb, Std. CG-3 Req'd.
3 6" Curb and Gutter, Std. CG-6 Req'd.
4 4" Curb and Gutter, Std. CG-7 Req'd.
5 Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, Std. MS-1A (6" Curb)
8 Grass Raised Median, Std. MS-2 (6" Curb)
9 Entrance Gutter, Std. CG-9D Req'd.
10 Entrance, Std. CG-11 Req'd.
11 Curb Ramp, Std. CG-12 Req'd.
12 Underdrain Endwall, Std. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, Std. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, Std. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, Std. CD-1 Req'd.
19 Crossdrain, Std. CD-2 Req'd.
20 Woven Wire Fence, Std. FE-WI, W2 Req'd.
21 Grass Raised Median, Std. MS-2 (4" Curb)
22 Chain Link Fence, Std. FE-CL Req'd.
23 Guardrail, Std. GR-MGS1 Req'd.
24 Guardrail, Std. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.
27 Guardrail, Std. GR-10, Type I Req'd.
28 Guardrail, Std. GR-10, Type II Req'd.
29 Guardrail, Std. GR-10, Type III Req'd.
30 Fixed Object Att., Std. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., Std. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, Std. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, Std. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, Std. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR) (XX) Curb Return See Sheet 2A(7)
C Denotes Construction Limits In Cuts
F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(3)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(5)
E&S Phase 3	2G(5)
Profiles	
Drainage Descriptions	33

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	27

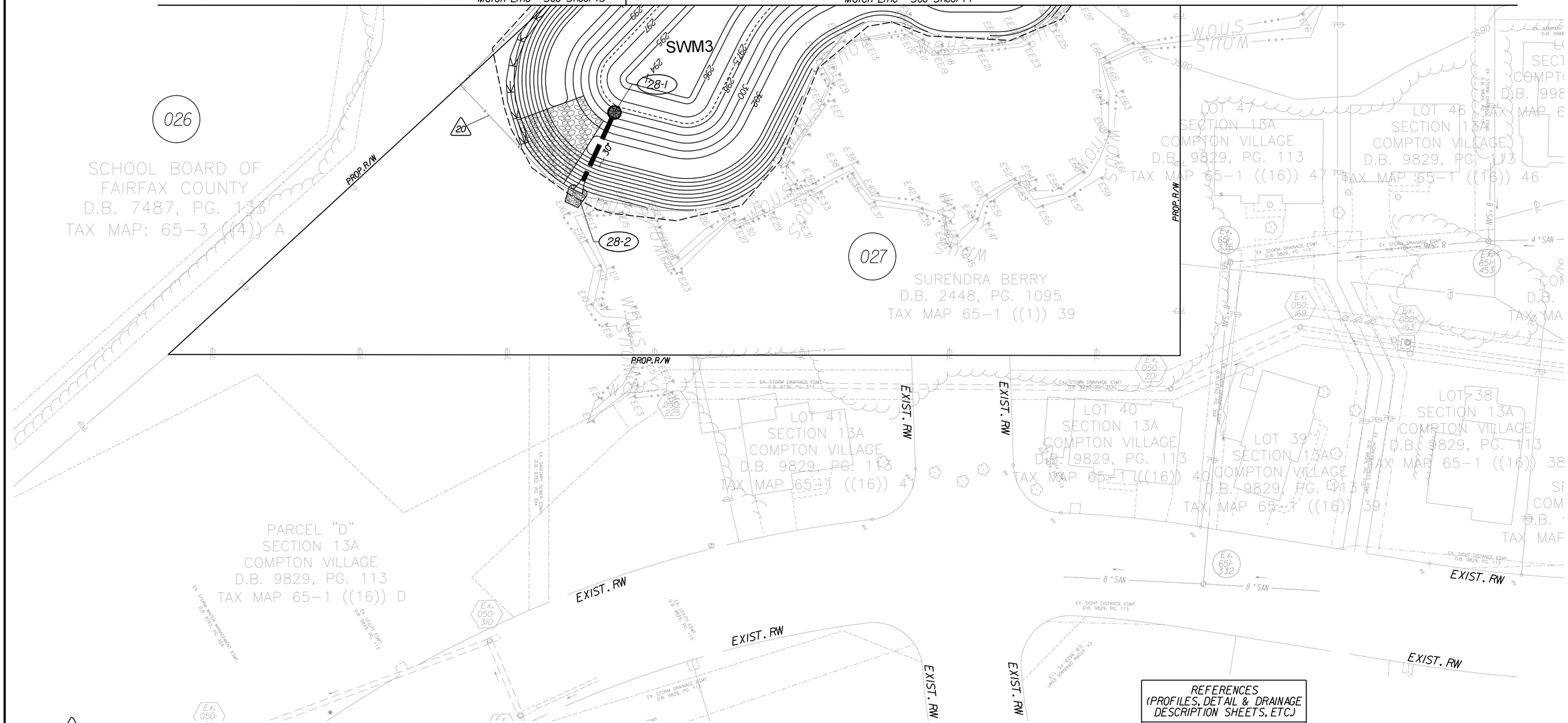
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	28

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT



Key Legend (XX)

1	6" Curb, St'd. CG-2 Req'd.	11	Curb Ramp, St'd. CG-12 Req'd.	23	Guardrail, St'd. GR-MGSI Req'd.	35	Remove Exist. Guardrail
2	4" Curb, St'd. CG-3 Req'd.	12	Underdrain Endwall, St'd. EW-12 Req'd.	24	Guardrail, St'd. GR-MGSIA Req'd.	36	Remove Exist. Fence
3	6" Curb and Gutter, St'd. CG-6 Req'd.	13	Not Used	25	Guardrail Tangent End Terminal, St'd.GR-MGS2 Req'd.	37	Remove Exist. Structure
4	4" Curb and Gutter, St'd. CG-7 Req'd.	14	Groundwater Underdrain, St'd. UD-1 Req'd.	26	Guardrail Trailing End Achorage, St'd.GR-MGS3 Req'd.	38	Remove Or Abandon and Fill Exist. Pipe
5	Conc. Raised Median, St'd. MS-1 with 4" Curb Req'd.	15	Curb-Cut Opening, Drainage Flume	27	Guardrail, St'd. GR-10, Type I Req'd.	39	Remove Exist. Pole
6	See Special Provision for Stamped Cement Concrete	16	Pavement Underdrain, St'd. UD-4 Req'd.	28	Guardrail, St'd. GR-10, Type II Req'd.	40	Adjust Exist. Structure
7	Conc. Raised Median, St'd. MS-1A (6" Curb)	17	Pavement Underdrain, Mod.6" UD-4 Req'd.	29	Guardrail, St'd. GR-10, Type III Req'd.	41	Clean Out Exist. Structure
8	Grass Raised Median, St'd. MS-2 (6" Curb)	18	Crossdrain, St'd. CD-1 Req'd.	30	Fixed Object Att., St'd. GR-FOA-2 Ty.1 Req'd.	42	Full Depth Sawcut
9	Entrance Gutter, St'd.CG-9D Req'd.	19	Crossdrain, St'd. CD-2 Req'd.	31	Fixed Object Att., St'd. GR-FOA-2 Ty.2 Req'd.	43	Clean Out Exist. Pipe
10	Entrance, St'd. CG-11 Req'd.	20	Woven Wire Fence, St'd. FE-WI, W2 Req'd.	32	Guardrail Transition, St'd.GR-MGS4 Req'd.	44	10' Gutter Run Out
		21	Grass Raised Median, St'd. MS-2 (4" Curb)	33	End CG-9D Entrance Type	45	Median Barrier, St'd. MB-8A Req'd.
		22	Chain Link Fence, St'd. FE-CL Req'd.	34	Handrail, St'd. HR-1 Type III Req'd.	46	Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

(CR XX) Curb Return See Sheet 2A(7)
C ___ Denotes Construction Limits In Cuts
F ___ Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	28

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	29

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

Key Legend (XX)

1 6" Curb, St'd. CG-2 Req'd.
2 4" Curb, St'd. CG-3 Req'd.
3 6" Curb and Gutter, St'd. CG-6 Req'd.
4 4" Curb and Gutter, St'd. CG-7 Req'd.
5 Conc. Raised Median, St'd. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, St'd. MS-1A (6" Curb)
8 Grass Raised Median, St'd. MS-2 (6" Curb)
9 Entrance Gutter, St'd. CG-9D Req'd.
10 Entrance, St'd. CG-11 Req'd.
11 Curb Ramp, St'd. CG-12 Req'd.
12 Underdrain Endwall, St'd. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, St'd. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, St'd. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, St'd. CD-1 Req'd.
19 Crossdrain, St'd. CD-2 Req'd.
20 Woven Wire Fence, St'd. FE-W1, W2 Req'd.
21 Grass Raised Median, St'd. MS-2 (4" Curb)
22 Chain Link Fence, St'd. FE-CL Req'd.
23 Guardrail, St'd. GR-MGS1 Req'd.
24 Guardrail, St'd. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, St'd. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, St'd. GR-MGS3 Req'd.
27 Guardrail, St'd. GR-10, Type I Req'd.
28 Guardrail, St'd. GR-10, Type II Req'd.
29 Guardrail, St'd. GR-10, Type III Req'd.
30 Fixed Object Att., St'd. GR-FOA-2 Ty. I Req'd.
31 Fixed Object Att., St'd. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, St'd. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, St'd. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, St'd. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

CR XX — Curb Return See Sheet 2A(7)
C - - - Denotes Construction Limits in Cuts
F — — Denotes Construction Limits in Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(4)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(8)
E&S Phase 3	2G(8)
Profiles	29A
Drainage Descriptions	33

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	29

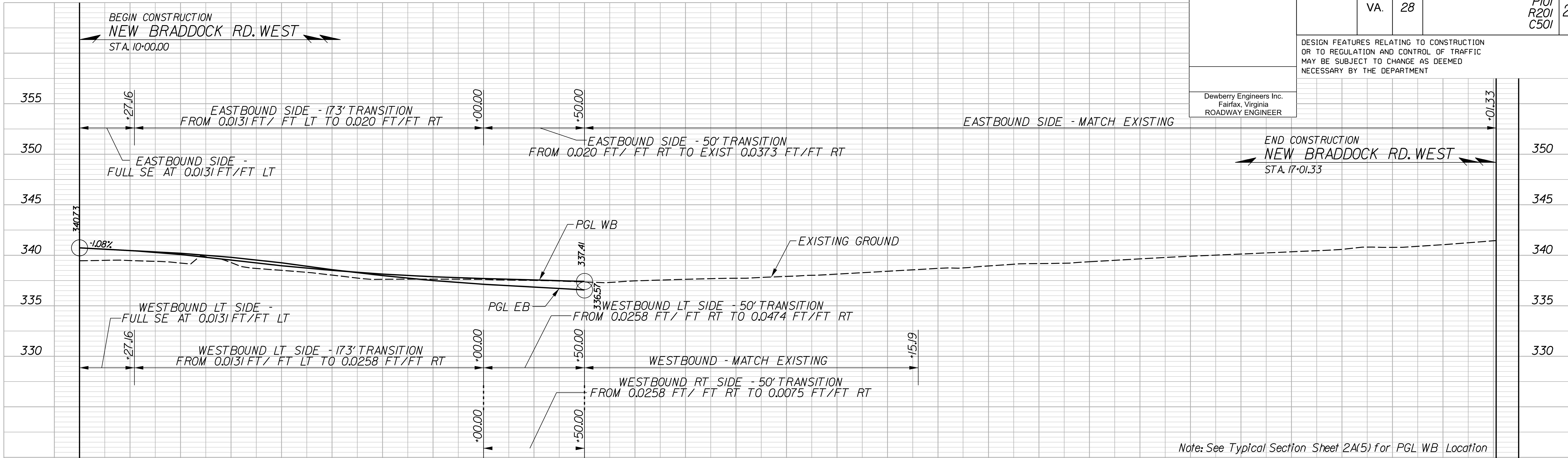
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

NEW BRADDOCK ROAD WEST

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	29A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



	10+00				11+00			
EB/LT EP (XX' OFFSET)							337.43 (53.39')	336.68 (53.59')
EB/LT SAWCUT (XX' OFFSET)								
EB/MED SAWCUT (XX' OFFSET)								
EB/MED (XX' OFFSET)					339.26 -(3.35')	338.59 -(2.98')	338.01 -(2.67')	337.54 -(2.41')
PGL EB / EXIST.	340.73 339.46	340.46 339.48	340.20 339.23	339.80 339.28	339.25 338.51	338.57 338.04	337.99 337.62	337.50 337.64
PGL WB / EXIST.	340.73 339.25	340.46 339.09	340.07 338.71	339.52 338.18	338.96 337.90	338.50 337.83	338.14 337.76	337.87 337.65
WB/MED (XX' OFFSET)					338.92 (7.50')	338.39 (7.50')	337.96 (7.50')	337.63 (7.50')
WB/MED SAWCUT (XX' OFFSET)					337.09 (8.63')	337.40 (9.05')	337.50 (9.18')	337.69 (9.42')
WB/RT SAWCUT (XX' OFFSET)					337.85 (31.00')	337.91 (31.00')	338.04 (31.00')	338.15 (31.00')
WB/RT EP (XX' OFFSET)			339.77 (57.16')	339.45 (50.74')	339.05 (45.34')	338.69 (40.91')	338.40 (37.44')	338.18 (34.90')

	12+00				13+00			
EB/LT EP (XX' OFFSET)	336.05 (53.79')	335.30 (53.94')	334.55 (54.02')	334.41 (54.05')	334.89 (54.03')	335.25 (53.95')	335.66 (53.81')	336.02 (53.62')
EB/LT SAWCUT (XX' OFFSET)				334.79 (44.71')	335.17 (44.77')	335.54 (44.67')	335.92 (44.55')	336.23 (44.48')
EB/MED SAWCUT (XX' OFFSET)				336.18 (11.27')	336.29 (11.07')	336.49 (11.24')	336.67 (11.04')	336.92 (10.90')
EB/MED (XX' OFFSET)	337.17 -(2.21')	336.91 -(2.06')	336.64 -(1.98')	336.83 -(1.94')	336.78 -(1.97')	336.84 -(2.05')	336.91 -(2.19')	337.23 -(2.39')
PGL EB / EXIST.	337.13 337.61	336.85 337.51	336.57 337.36	337.47	337.62	337.73	337.91	338.13
PGL WB / EXIST.	337.70 337.52	337.56 337.32	337.41 337.41					
WB/MED (XX' OFFSET)	337.39 (7.50')	337.12 (7.50')	336.84 (7.50')	337.07 (7.50')	337.37 (7.50')	337.45 (7.50')	337.65 (7.50')	337.82 (7.50')
WB/MED SAWCUT (XX' OFFSET)	337.83 (9.17')	337.91 (9.49')						
WB/RT SAWCUT (XX' OFFSET)	338.12 (31.00')	338.05 (31.20')						
WB/RT EP (XX' OFFSET)	338.06 (33.28')	337.78 (32.52')	337.50 (32.15')	337.89 (32.00')	337.93 (32.00')	338.06 (32.00')	338.17 (32.00')	338.15 (32.00')

	14+00				15+00			
EB/LT EP (XX' OFFSET)	336.28 (53.46')	336.63 (53.35')	336.94 (51.29')	337.20 (49.24')	337.03 (47.18')			
EB/LT SAWCUT (XX' OFFSET)	336.47 (44.36')	336.75 (44.35')	337.03 (44.29')	337.26 (44.36')	337.14 (44.65')			
EB/MED SAWCUT (XX' OFFSET)	337.20 (10.65')	337.37 (11.17')	337.51 (13.93')	337.70 (18.23')	337.89 (21.40')	338.19 (22.53')	338.44 (22.62')	338.72 (22.66')
EB/MED (XX' OFFSET)	337.46 -(2.64')	337.58 -(2.65')	337.66 -(2.65')	338.07 -(2.65')	338.25 -(2.65')	338.71 -(2.65')	338.93 -(2.65')	339.18 (1.05')
PGL EB / EXIST.	338.42	338.70	338.94	339.18	339.36	339.64	339.90	340.12
PGL WB / EXIST.								
WB/MED (XX' OFFSET)	337.90 (7.50')							
WB/MED SAWCUT (XX' OFFSET)								
WB/RT SAWCUT (XX' OFFSET)								
WB/RT EP (XX' OFFSET)	338.06 (32.20')							

	16+00				17+00
EB/LT EP (XX' OFFSET)					
EB/LT SAWCUT (XX' OFFSET)					
EB/MED SAWCUT (XX' OFFSET)	339.00 (22.67')	339.27 (22.71')	339.57 (22.76')	339.91 (22.80')	340.25 (22.83')
EB/MED (XX' OFFSET)	339.37 (4.94')	339.51 (8.82')	339.72 (12.71')	339.97 (16.59')	340.45 (20.48')
PGL EB / EXIST.	340.34	340.58	340.78	341.05	341.43
PGL WB / EXIST.					
WB/MED (XX' OFFSET)					
WB/MED SAWCUT (XX' OFFSET)					
WB/RT SAWCUT (XX' OFFSET)					
WB/RT EP (XX' OFFSET)					

HORIZ. 0 25' 50'
VERT. 0 5' 10'

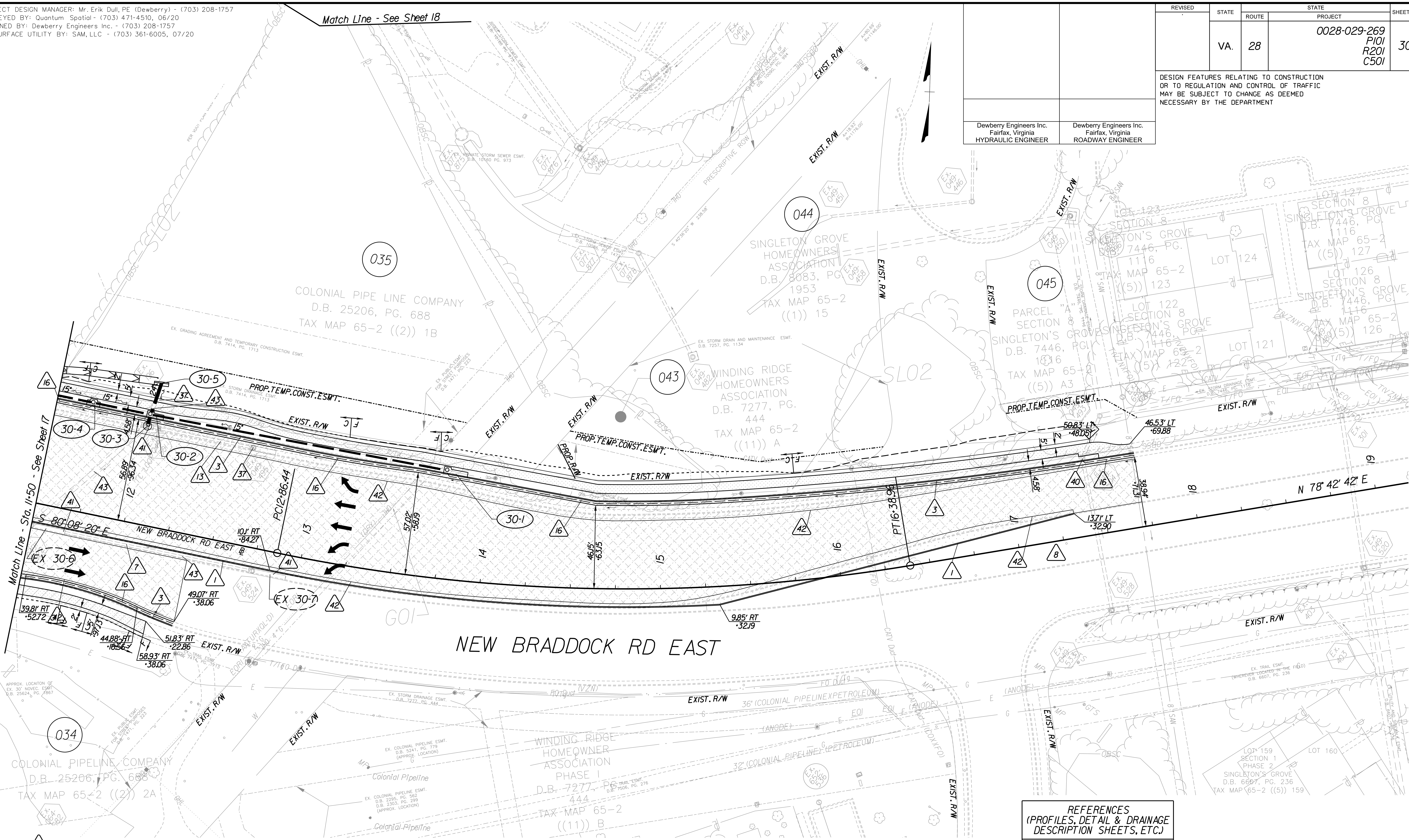
Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	ROUTE	PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	30

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER



Key Legend (XX)

1 6" Curb, St'd. CG-2 Req'd.
2 4" Curb, St'd. CG-3 Req'd.
3 6" Curb and Gutter, St'd. CG-6 Req'd.
4 4" Curb and Gutter, St'd. CG-7 Req'd.
5 Conc. Raised Median, St'd. MS-1 with 4" Curb Req'd.
6 See Special Provision for Stamped Cement Concrete
7 Conc. Raised Median, St'd. MS-1A (6" Curb)
8 Grass Raised Median, St'd. MS-2 (6" Curb)
9 Entrance Gutter, St'd. CG-9D Req'd.
10 Entrance, St'd. CG-11 Req'd.
11 Curb Ramp, St'd. CG-12 Req'd.
12 Underdrain Endwall, St'd. EW-12 Req'd.
13 Not Used
14 Groundwater Underdrain, St'd. UD-1 Req'd.
15 Curb-Cut Opening, Drainage Flume
16 Pavement Underdrain, St'd. UD-4 Req'd.
17 Pavement Underdrain, Mod. 6" UD-4 Req'd.
18 Crossdrain, St'd. CD-1 Req'd.
19 Crossdrain, St'd. CD-2 Req'd.
20 Woven Wire Fence, St'd. FE-W1, W2 Req'd.
21 Grass Raised Median, St'd. MS-2 (4" Curb)
22 Chain Link Fence, St'd. FE-CL Req'd.
23 Guardrail, St'd. GR-MGS1 Req'd.
24 Guardrail, St'd. GR-MGS1A Req'd.
25 Guardrail Tangent End Terminal, St'd. GR-MGS2 Req'd.
26 Guardrail Trailing End Achorage, St'd. GR-MGS3 Req'd.
27 Guardrail, St'd. GR-10, Type I Req'd.
28 Guardrail, St'd. GR-10, Type II Req'd.
29 Guardrail, St'd. GR-10, Type III Req'd.
30 Fixed Object Att., St'd. GR-FOA-2 Ty. 1 Req'd.
31 Fixed Object Att., St'd. GR-FOA-2 Ty. 2 Req'd.
32 Guardrail Transition, St'd. GR-MGS4 Req'd.
33 End CG-9D Entrance Type
34 Handrail, St'd. HR-1 Type III Req'd.
35 Remove Exist. Guardrail
36 Remove Exist. Fence
37 Remove Exist. Structure
38 Remove Or Abandon and Fill Exist. Pipe
39 Remove Exist. Pole
40 Adjust Exist. Structure
41 Clean Out Exist. Structure
42 Full Depth Sawcut
43 Clean Out Exist. Pipe
44 10' Gutter Run Out
45 Median Barrier, St'd. MB-8A Req'd.
46 Pavement Demarcation Line

Denotes Full Depth Pavement
Denotes SUP/Driveway /Private Entrance Pavement
Denotes Pavement Demolition
Denotes Milling and Overlay / Variable Depth Overlay

CR XX — Curb Return See Sheet 2A(7)
C - - - Denotes Construction Limits In Cuts
F - - - Denotes Construction Limits In Fills

REFERENCES
(PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(4)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(8), 2F(11)
E&S Phase 3	2G(8), 2G(11)
Profiles	30A-30B
Drainage Descriptions	33

SCALE 0 25' 50'

10/12/2020
11:26:38 AM

d108720-30Adgn
Plotted By: cjennings

Dewberry

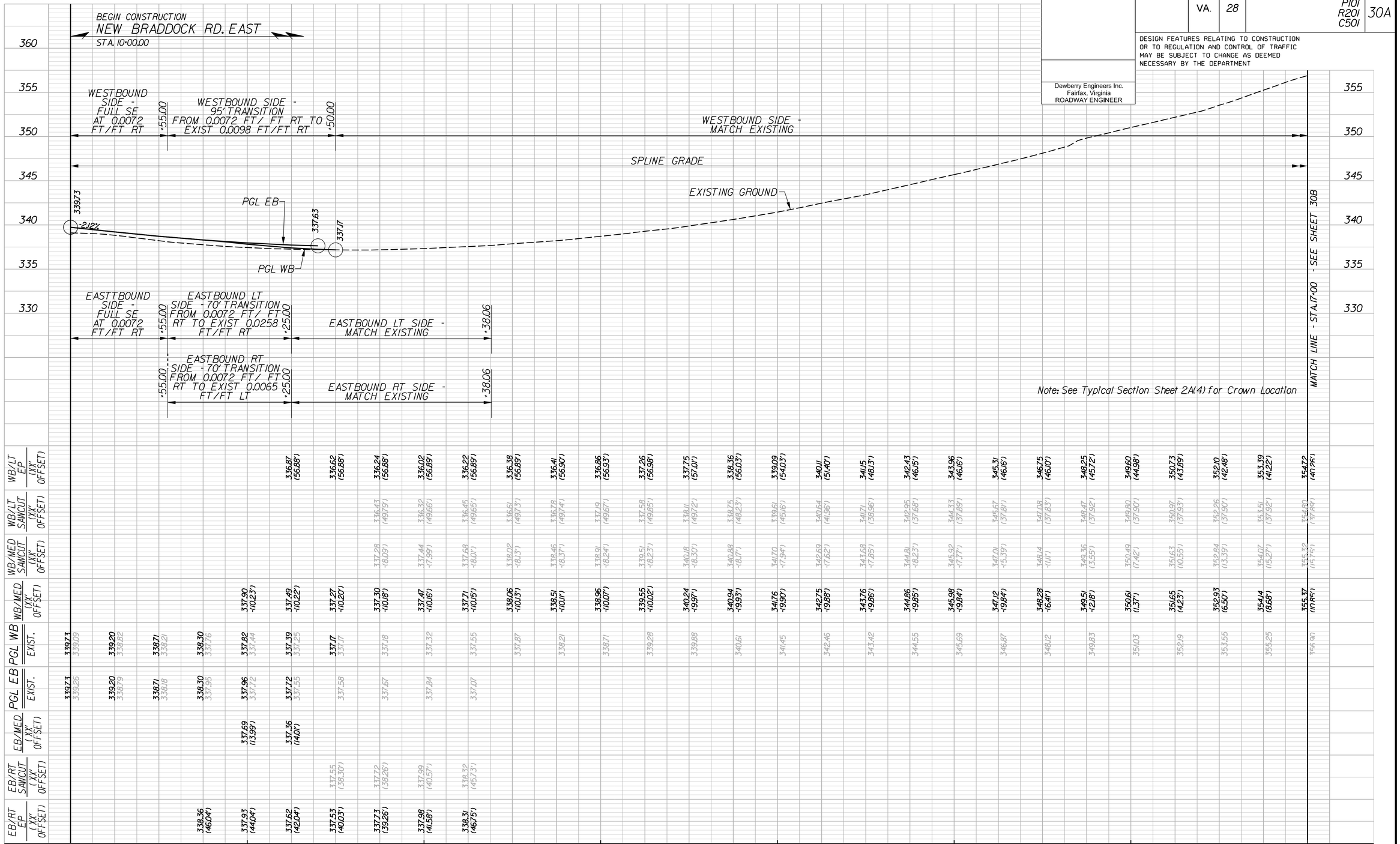
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

NEW BRADDOCK RD. EAST

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	30A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



EB/RT EP (XX' OFFSET)	EB/RT SAWCUT (XX' OFFSET)	EB/MED (XX' OFFSET)	PGL EB EXIST.	PGL WB EXIST.	WB/MED (XX' OFFSET)	WB/MED SAWCUT (XX' OFFSET)	WB/LT SAWCUT (XX' OFFSET)	WB/LT EP (XX' OFFSET)
			339.73 339.26	339.73 339.09				
			339.20 338.79	339.20 338.62				
			338.71 338.18	338.71 338.21				
338.36 (46.04')			338.30 337.95	338.30 337.76				
337.93 (44.04')		337.69 (13.99')	337.96 337.72	337.82 337.44	337.90 -(10.23')			
337.62 (42.04')		337.36 (14.01')	337.72 337.55	337.39 337.25	337.49 -(10.22')			336.87 (56.88')
337.53 (40.03')	337.55 (38.30')		337.58	337.17 337.17	337.27 -(10.20')			336.62 (56.88')
337.73 (39.26')	337.72 (38.26')		337.67	337.18	337.30 -(10.18')	337.28 -(8.09')	336.43 (49.79')	336.24 (56.88')
337.98 (41.58')	337.99 (40.57')		337.84	337.32	337.47 -(10.16')	337.44 -(7.99')	336.32 (49.66')	336.02 (56.89')
338.31 (46.75')	338.32 (45.73')		337.07	337.55	337.71 -(10.15')	337.68 -(8.01')	336.45 (49.65')	336.22 (56.89')
					338.06 -(10.13')	338.02 -(8.13')	336.61 (49.73')	336.38 (56.89')
				338.21	338.51 -(10.11')	338.46 -(8.37')	336.78 (49.74')	336.41 (56.90')
				338.71	338.96 -(10.07')	338.91 -(8.24')	337.19 (49.67')	336.86 (56.93')
				339.28	339.55 -(10.02')	339.51 -(8.23')	337.58 (49.85')	337.26 (56.98')
				339.88	340.24 -(9.97')	340.18 -(8.30')	337.88 (49.72')	337.75 (57.01')
				340.61	340.94 -(9.93')	340.88 -(8.17')	338.75 (48.23')	338.36 (56.03')
				341.45	341.76 -(9.90')	341.70 -(7.94')	339.61 (45.16')	339.09 (54.03')
				342.46	342.75 -(9.88')	342.69 -(7.62')	340.64 (41.96')	340.11 (51.40')
				343.42	343.76 -(9.86')	343.68 -(7.85')	341.71 (36.96')	341.15 (48.13')
				344.55	344.86 -(9.85')	344.81 -(8.23')	342.95 (37.68')	342.43 (46.15')
				345.69	345.98 -(9.84')	345.92 -(7.77')	344.33 (37.89')	343.96 (46.16')
				346.87	347.12 -(9.84')	347.01 -(5.59')	345.67 (37.81')	345.31 (46.16')
				348.12	348.28 -(6.41')	348.14 -(1.11')	347.08 (37.83')	346.75 (46.01')
				349.83	349.51 -(2.18')	349.36 (3.55')	348.47 (37.92')	348.25 (45.72')
				351.03	350.61 (1.37')	350.49 (7.42')	349.80 (37.90')	349.60 (44.98')
				352.19	351.65 (4.23')	351.63 (10.55')	350.97 (37.93')	350.73 (43.89')
				353.55	352.93 (6.50')	352.84 (13.39')	352.26 (37.90')	352.10 (42.48')
				355.25	354.14 (8.68')	354.07 (15.27')	353.51 (37.92')	353.39 (41.22')
				356.91	355.37 (11.86')	355.32 (15.76')	354.80 (37.96')	354.72 (40.96')

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT 0028-029-269

SHEET NO. 30A

10/12/2020
11:26:44 AM

d108720-30B.dgn
Plotted By: cjennings

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

NEW BRADDOCK RD. EAST

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	30B

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER

END CONSTRUCTION
New Braddock Rd East
STA. 17+71.31

MATCH LINE - STA. 17+00 - SEE SHEET 30A

EXISTING GROUND

WESTBOUND SIDE - MATCH EXISTING

+71.31

PGL EB EXIST.	PGL WB EXIST.	WB/MED (XX' OFFSET)	WB/MED SAWCUT (XX' OFFSET)	WB/LT SAWCUT (XX' OFFSET)	WB/LT EP (XX' OFFSET)
	356.90	**355.37 (10.85')**	355.32 (15.75')	354.80 (37.89')	**354.72 (40.26')**
	358.26	**356.58 (13.03')**	356.55 (15.31')	356.03 (37.89')	**355.97 (39.80')**
	359.32			357.23 (37.94')	**357.18 (39.21')**

380 375 370 365 360 355

17+00 18+00 19+00 20+00 21+00 22+00

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT 0028-029-269 | SHEET NO. 30B

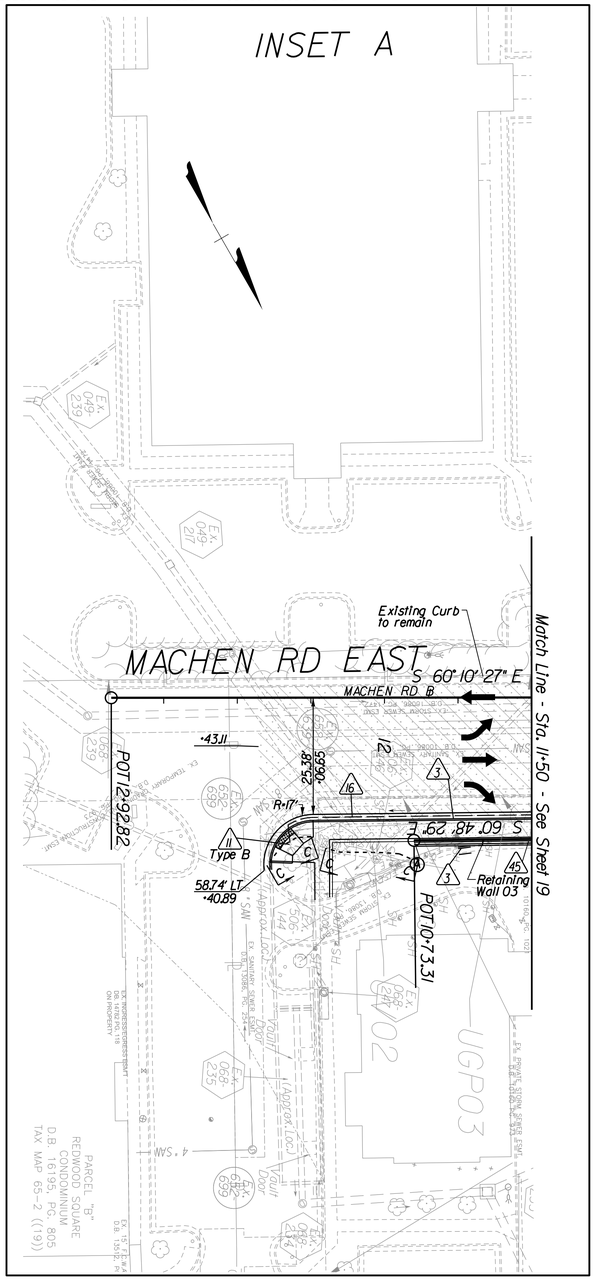
Dewberry

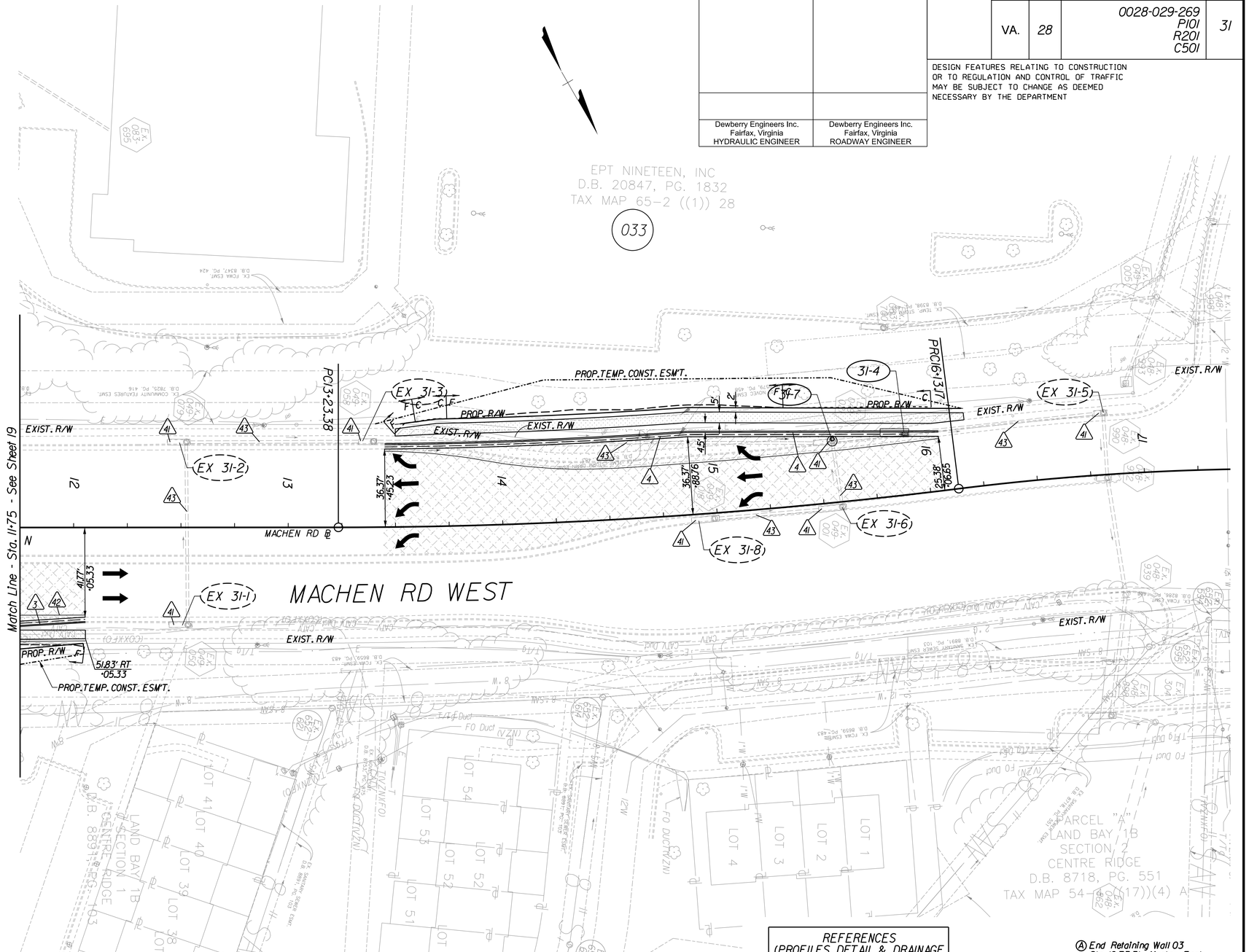
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

Dewberry Engineers Inc. Fairfax, Virginia HYDRAULIC ENGINEER	Dewberry Engineers Inc. Fairfax, Virginia ROADWAY ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
.	VA.	28	0028-029-269 P101 R201 C501	31

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT





Key Legend (XX)

1	6" Curb, Std. CG-2 Req'd.	11	Curb Ramp, Std. CG-12 Req'd.	23	Guardrail, Std. GR-MGS1 Req'd.
2	4" Curb, Std. CG-3 Req'd.	12	Underdrain Endwall, Std. EW-12 Req'd.	24	Guardrail, Std. GR-MGS1A Req'd.
3	6" Curb and Gutter, Std. CG-6 Req'd.	13	Not Used	25	Guardrail Tangent End Terminal, Std. GR-MGS2 Req'd.
4	4" Curb and Gutter, Std. CG-7 Req'd.	14	Groundwater Underdrain, Std. UD-1 Req'd.	26	Guardrail Trailing End Achorage, Std. GR-MGS3 Req'd.
5	Conc. Raised Median, Std. MS-1 with 4" Curb Req'd.	15	Curb-Cut Opening, Drainage Flume	27	Guardrail, Std. GR-10, Type I Req'd.
6	See Special Provision for Stamped Cement Concrete	16	Pavement Underdrain, Std. UD-4 Req'd.	28	Guardrail, Std. GR-10, Type II Req'd.
7	Conc. Raised Median, Std. MS-1A (6" Curb)	17	Pavement Underdrain, Mod. 6" UD-4 Req'd.	29	Guardrail, Std. GR-10, Type III Req'd.
8	Grass Raised Median, Std. MS-2 (6" Curb)	18	Crossdrain, Std. CD-1 Req'd.	30	Fixed Object Att., Std. GR-FOA-2 Ty.1 Req'd.
9	Entrance Gutter, Std. CG-9D Req'd.	19	Crossdrain, Std. CD-2 Req'd.	31	Fixed Object Att., Std. GR-FOA-2 Ty.2 Req'd.
10	Entrance, Std. CG-11 Req'd.	20	Woven Wire Fence, Std. FE-WI, W2 Req'd.	32	Guardrail Transition, Std. GR-MGS4 Req'd.
		21	Grass Raised Median, Std. MS-2 (4" Curb)	33	End CG-9D Entrance Type
		22	Chain Link Fence, Std. FE-CL Req'd.	34	Handrail, Std. HR-1 Type III Req'd.

35	Remove Exist. Guardrail		Denotes Full Depth Pavement
36	Remove Exist. Fence		Denotes SUP/Driveway /Private Entrance Pavement
37	Remove Exist. Structure		Denotes Pavement Demolition
38	Remove Or Abandon and Fill Exist. Pipe		Denotes Milling and Overlay / Variable Depth Overlay
39	Remove Exist. Pole		
40	Adjust Exist. Structure		
41	Clean Out Exist. Structure		
42	Full Depth Sawcut		
43	Clean Out Exist. Pipe		
44	10' Gutter Run Out		
45	Median Barrier, Std. MB-8A Req'd.		
46	Pavement Demarcation Line		

(CR XX) Curb Return See Sheet 2A(7)

C Denotes Construction Limits In Cuts

F Denotes Construction Limits In Fills

REFERENCES (PROFILES, DETAIL & DRAINAGE DESCRIPTION SHEETS, ETC.)

Construction Alignment	1G(4)
Typical Sections	2A(1)-2A(6)
E&S Phase 1B(1)/2	2F(9)
E&S Phase 3	2G(9)
Profiles	31A
Drainage Descriptions	33

Ⓐ End Retaining Wall 03
Sta. 10+73.31 • Machen East
Sta. 11+90.00
N 6,987,040.0333
E 11,786,645.8084
(See Sheet 41 for Retaining Wall Profile and Details)

SCALE	PROJECT	SHEET NO.
0 25' 50'	0028-029-269	31

10/12/2020
11:27:00 AM

d108720-31A.dgn
Plotted By: cjennings

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

MACHEN ROAD WEST

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	31A

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER

BEGIN CONSTRUCTION
MACHEN ROAD WEST
STA. 10+00.00

END CONSTRUCTION
MACHEN ROAD WEST
STA. 16+06.89

346.60
-2.00%
PGL
-5.50%
-4.03%
343.05
STA = 10+62.36
EL = 344.01
K = 26
V = 25 mph
L = 38.30'

+45.23
SPLINE GRADE
+06.89

WB SIDE- FULL SE AT 0.0103 FT/FT LT
+00.00
+24.00
+62.98
WB SIDE - MATCH EXISTING
+05.45
WB SIDE - 40' TRANSITION FROM 0.0103 FT/FT LT TO EXIST 0.0234 FT/FT LT

EXISTING GROUND

EB SIDE- FULL SE AT 0.0103 FT/FT LT
+00.00
+24.00
+86.20
EB RT SIDE - 62' TRANSITION FROM 0.0103 FT/FT LT TO EXIST 0.0099 FT/FT RT

+45.23
EB SIDE - MATCH EXISTING
+06.89

+24.00
+86.20
EB LT SIDE - 62' TRANSITION FROM 0.0103 FT/FT LT TO EXIST 0.0289 FT/FT RT

	10+00	11+00	12+00	13+00	14+00	15+00	16+00	17+00
EB LT / EP (XX' OFFSET)					328.37 (36.37')	326.58 (36.37')	324.44 (36.37')	322.33 (36.37')	320.34 (36.37')	318.32 (36.37')	316.33 (35.57')	314.57 (33.62')	312.78 (31.40')	311.18 (28.91')	309.75 (26.15')
EB LT / SAMCUT (XX' OFFSET)					328.40 (35.25')	326.65 (33.03')	324.69 (28.60')	322.71 (25.81')	320.74 (23.92')	318.73 (23.96')	316.77 (24.04')	314.84 (24.13')	312.98 (24.11')	311.29 (24.19')	309.76 (24.33')
EB/MED (XX' OFFSET)		343.59 (12.86)	342.84 (12.85)												
PGL EXIST.	346.60 345.01	346.07 344.75	344.70 344.05	343.51 343.38	342.63	341.81	340.81	339.69	338.47	337.16	335.75	334.29	332.75	330.96	329.21	327.42	325.48	323.46	321.41	319.40	317.46	315.75	313.46	311.52	309.97
WB RT / SAMCUT (XX' OFFSET)			341.80 (40.86')	341.05 (40.82')	340.07 (40.88')	339.02 (40.86')	337.90 (40.83')								
WB RT / EP (XX' OFFSET)			341.47 (48.11')	340.88 (46.61')	339.90 (45.11')	338.90 (43.61')	337.85 (42.12')								

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT 0028-029-269
SHEET NO. 31A

Dewberry

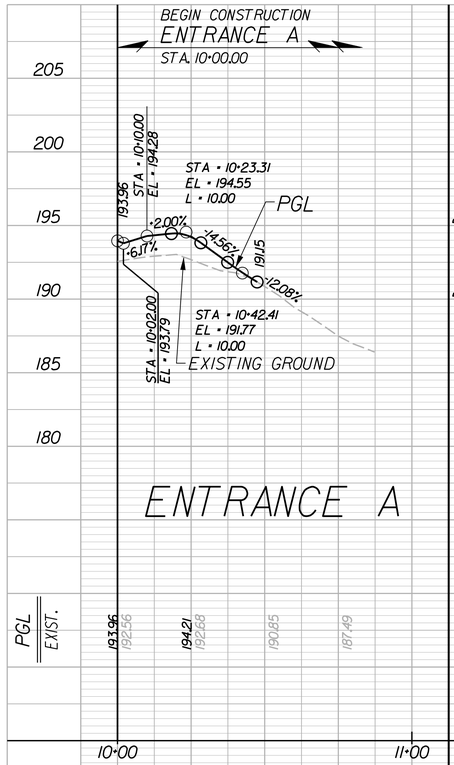
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	32(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER

ENTRANCE A



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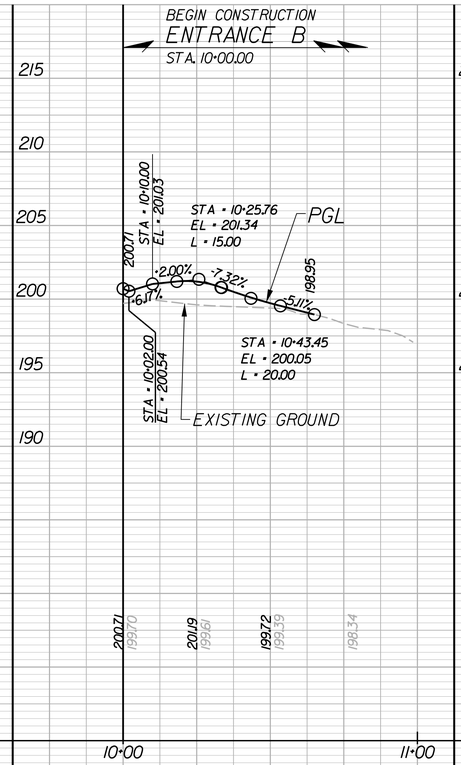

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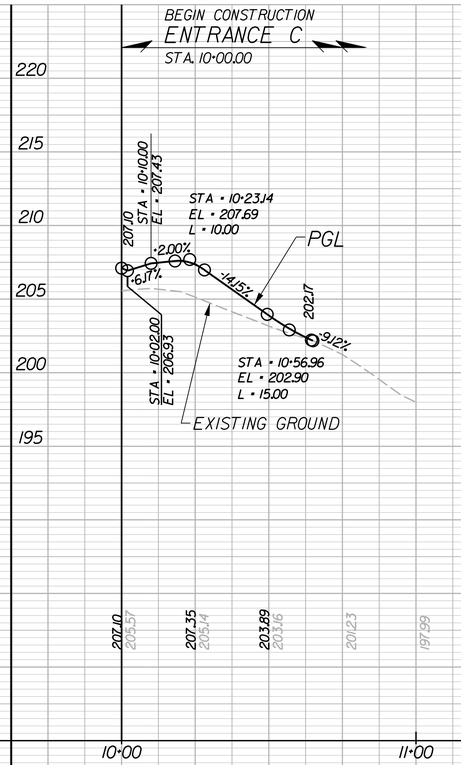

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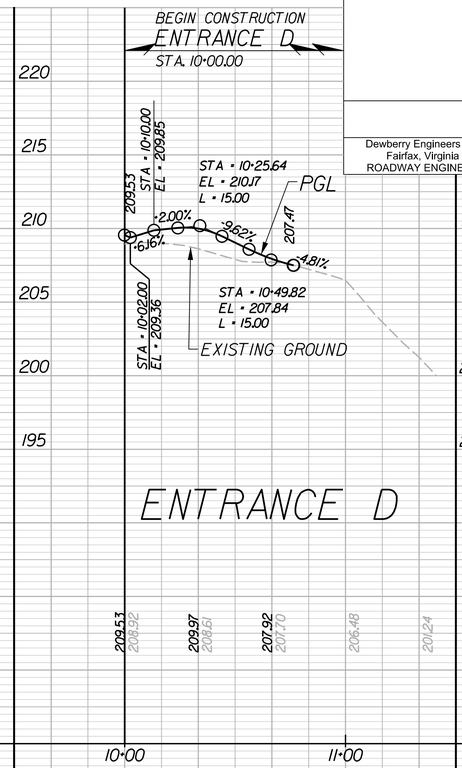
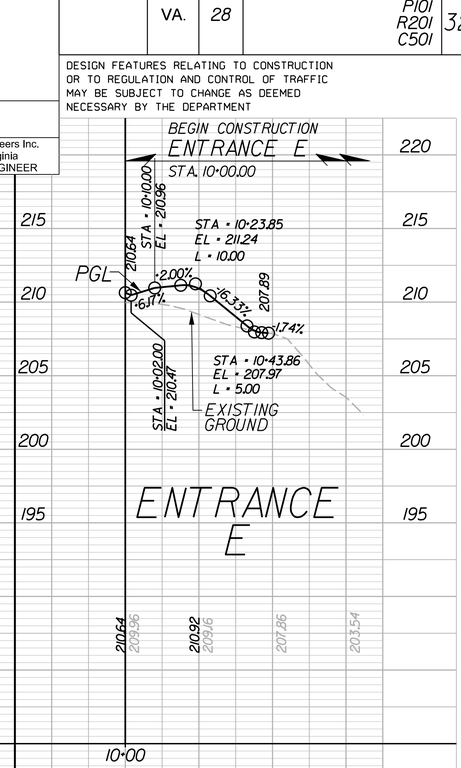


ENTRANCE E



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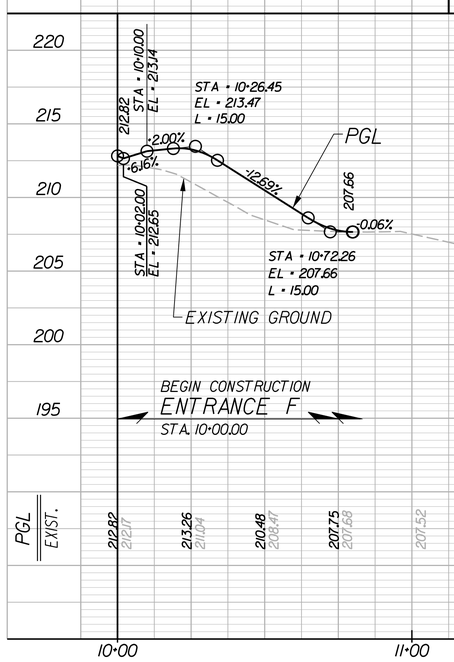

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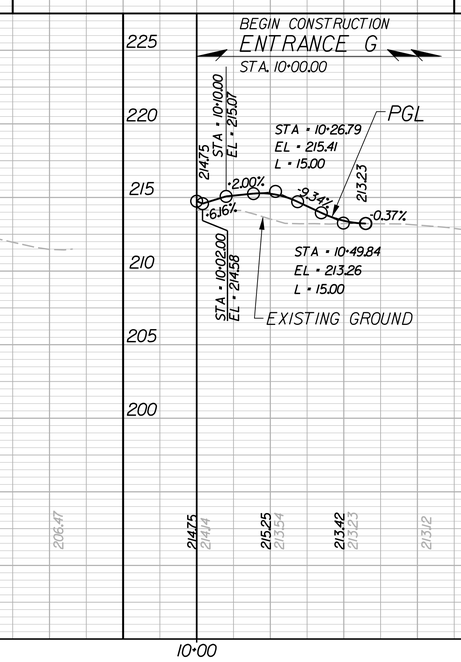

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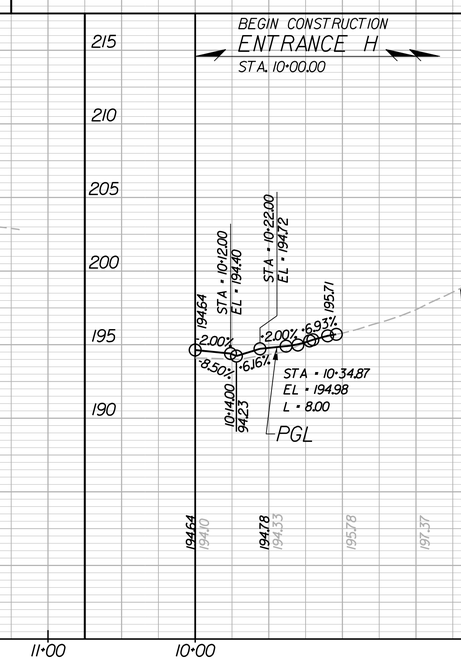
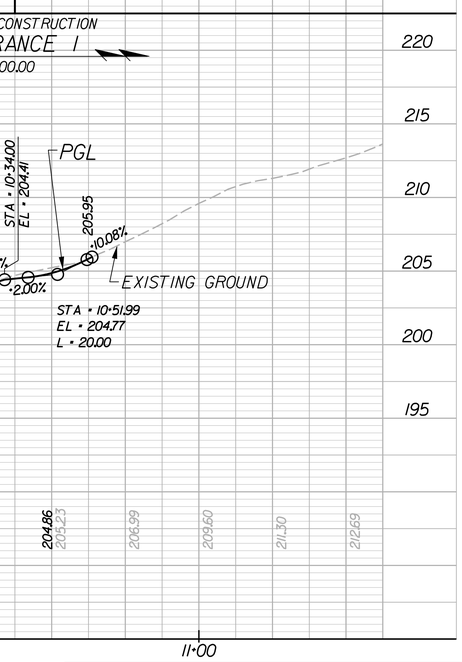


ENTRANCE I



HORIZ.	0	25'	50'
VERT.	0	5'	10'

PROJECT	SHEET NO.
0028-029-269	32(1)

10/12/2020
11:27:15 AM

d108720-32(2).dgn
Plotted By: cjennings

Dewberry

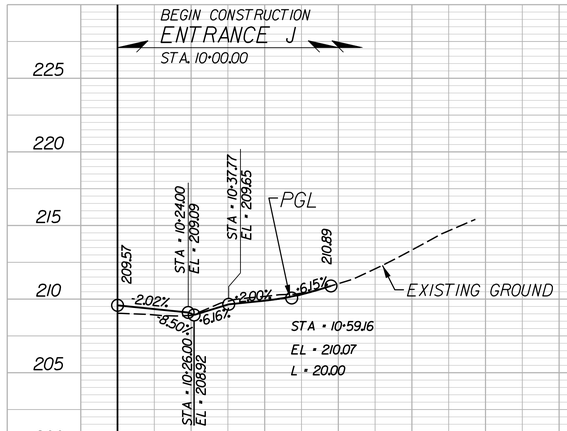
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	32 (2)

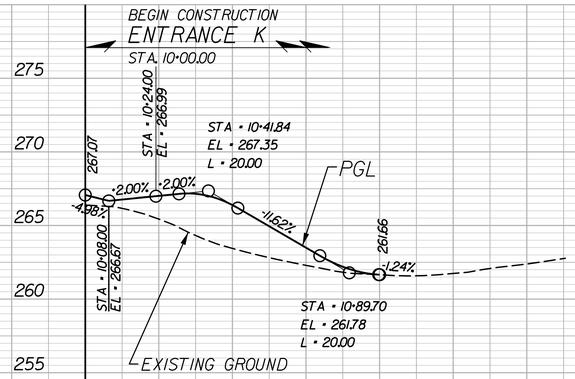
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER

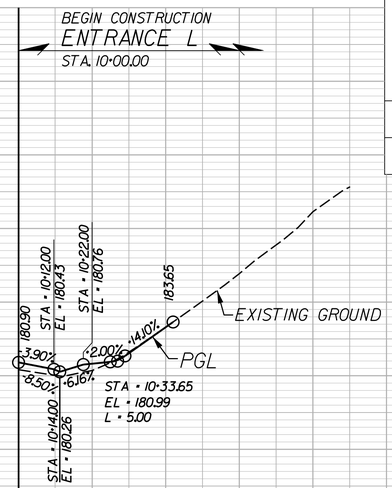
ENTRANCE J



ENTRANCE K



ENTRANCE L

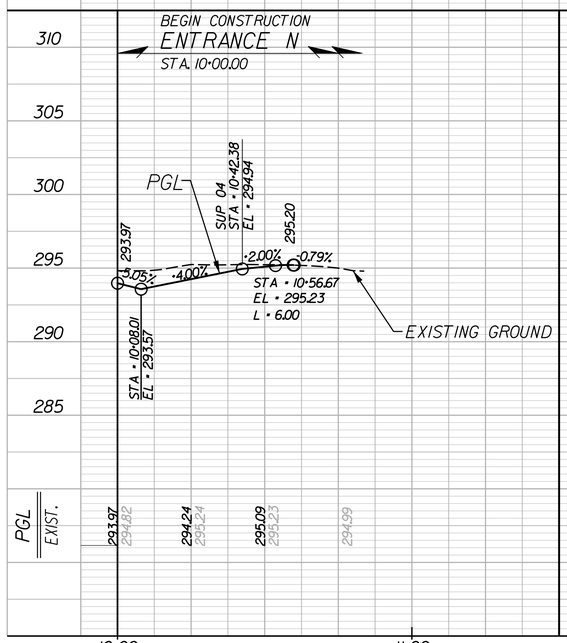


PGL	209.57	209.00	209.89		
EXIST.				211.05	213.33

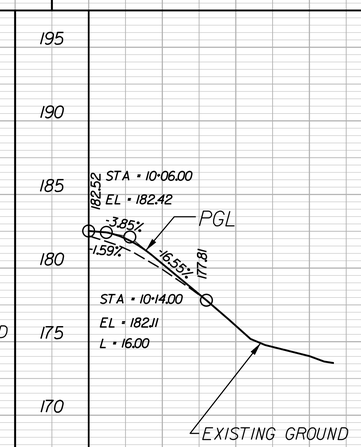
PGL	267.07	267.01	266.39	263.49	261.66		
EXIST.	266.39	265.43	263.44	262.29	261.66	261.74	262.38

PGL	180.90	180.82	183.29		
EXIST.	180.40	180.35	183.29	186.93	191.14

ENTRANCE N

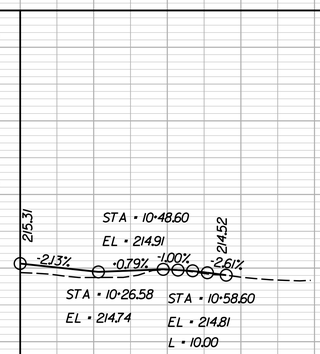


ENTRANCE M



ENTRANCE P

ENTRANCE R



PGL	293.97	294.24	295.09		
EXIST.	294.82	294.24	295.23	294.99	

PGL	182.52	180.29	176.09	174.01		
EXIST.	182.18	179.91	176.09	174.01	171.93	169.85

PGL	357.75	357.37	356.90	356.39		
EXIST.	357.22	357.14	356.70	356.39	356.08	355.78

PGL	215.31	214.77	214.90		
EXIST.	214.70	214.36	214.59	214.38	214.17

HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	32(2)

Dewberry

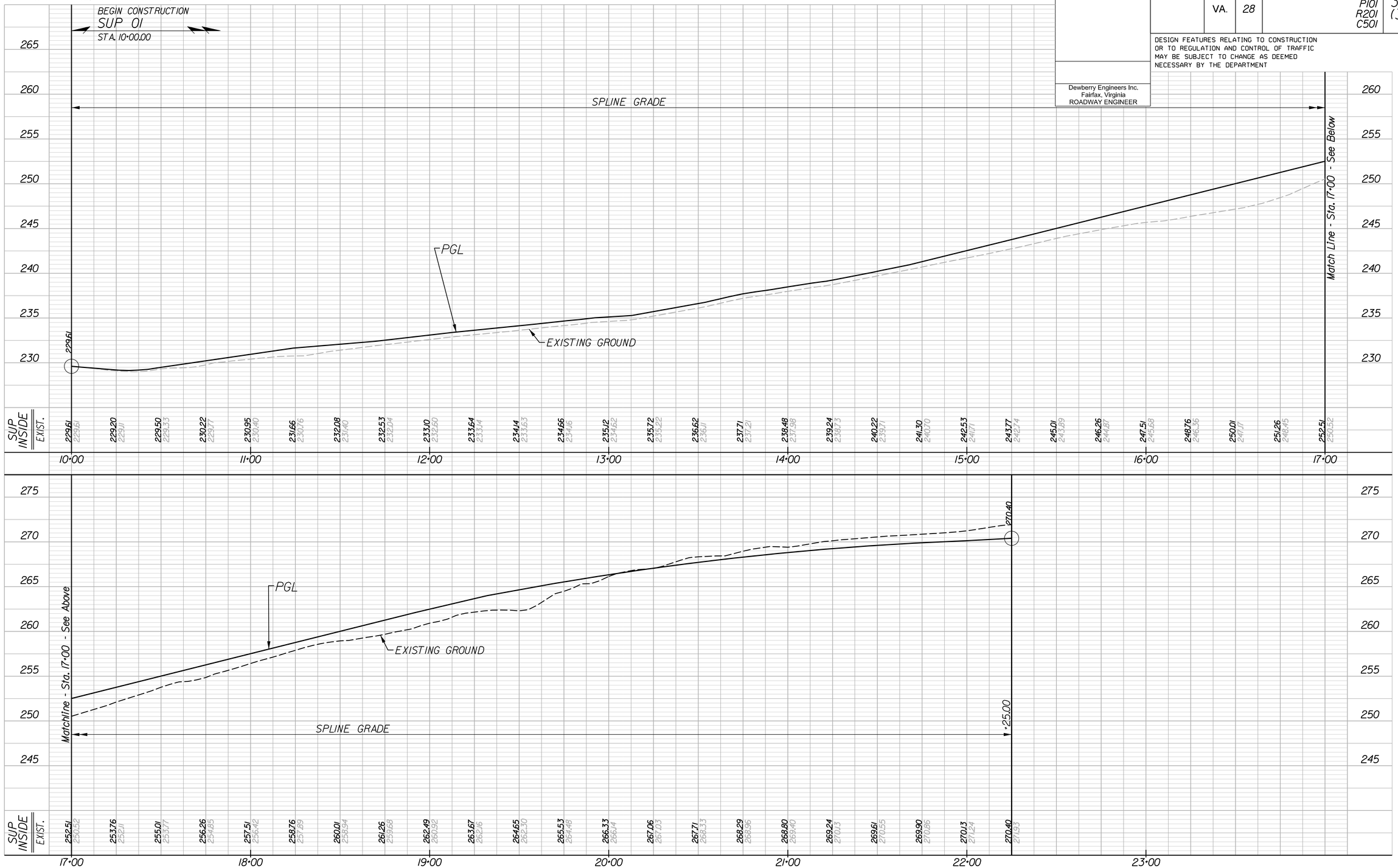
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SUP 01

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	32 (3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



HORIZ. 0 25' 50'
VERT. 0 5' 10'

PROJECT	SHEET NO.
0028-029-269	32(3)

10/12/2020
11:27:28 AM

d108720-32(4).dgn
Plotted By: cjennings

Dewberry

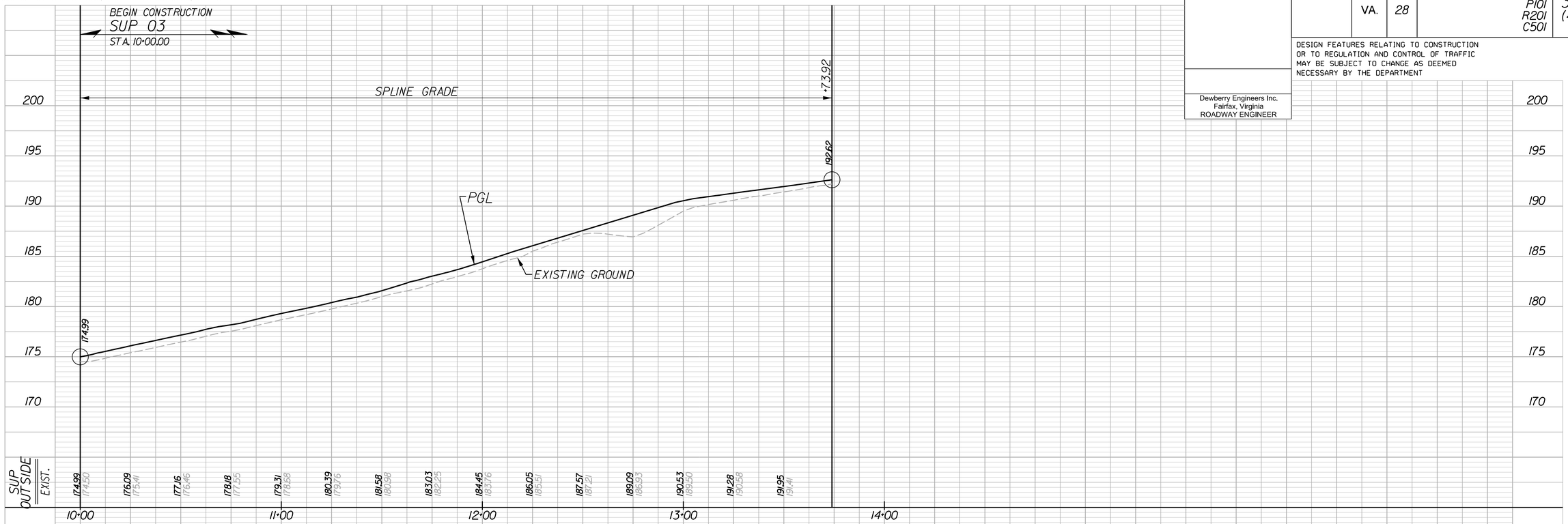
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

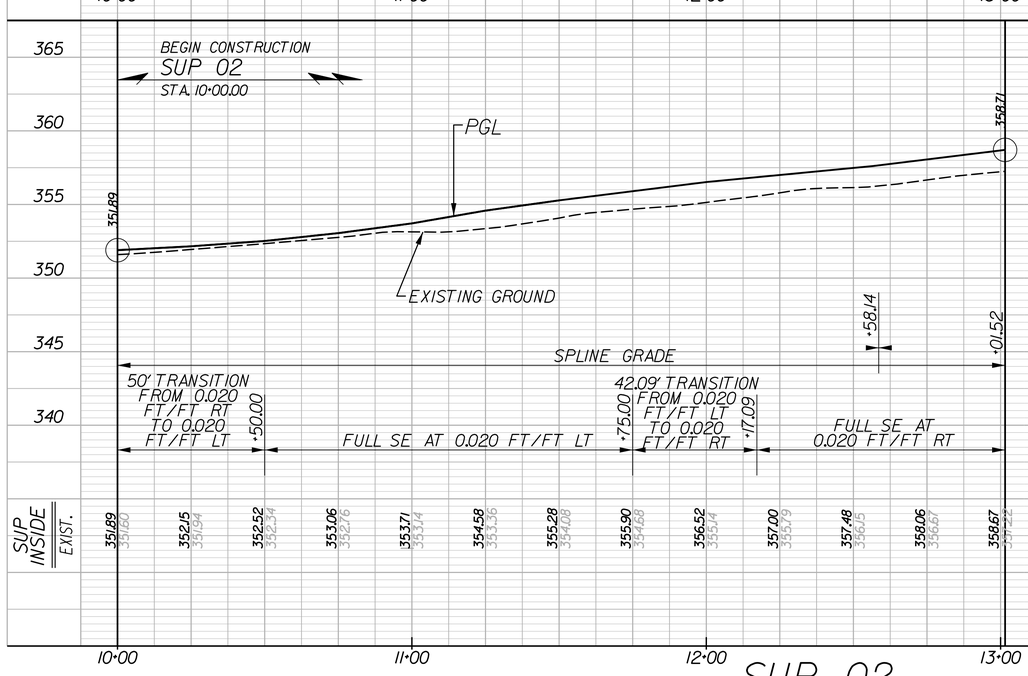
SUP 03

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	32 (4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER





SUP 02

HORIZ.	0	25'	50'
VERT.	0	5'	10'

PROJECT	SHEET NO.
0028-029-269	32(4)

10/12/2020
11:27:34 AM

d108720-32(5).dgn
Plotted By: cjennings

Dewberry

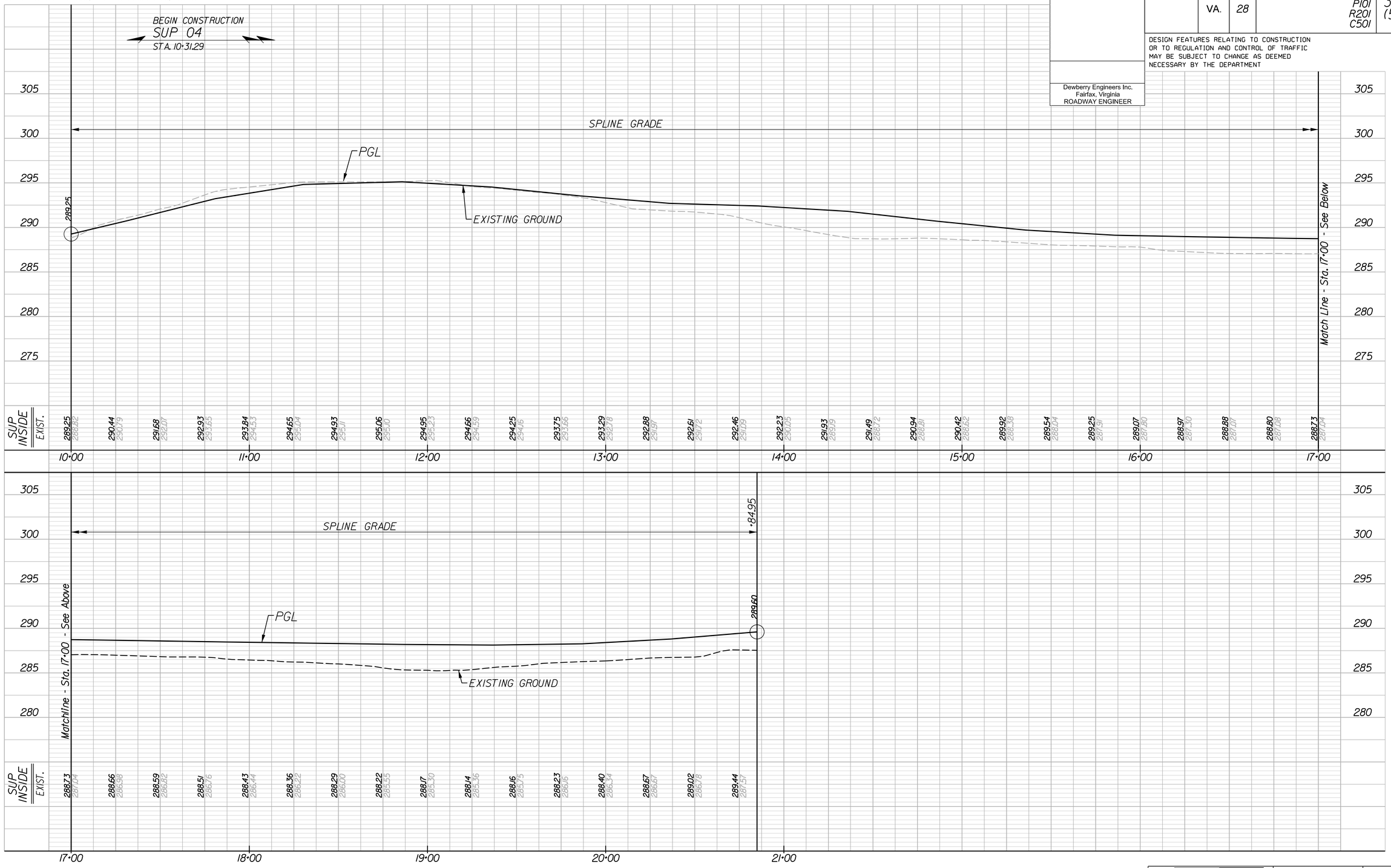
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SUP 04

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	32 (5)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



HORIZ.	0	25'	50'
VERT.	0	5'	10'

PROJECT	SHEET NO.
0028-029-269	32(5)

10/12/2020
11:27:40 AM

d108720-3261.dgn
Plotted By: cjennings

Dewberry

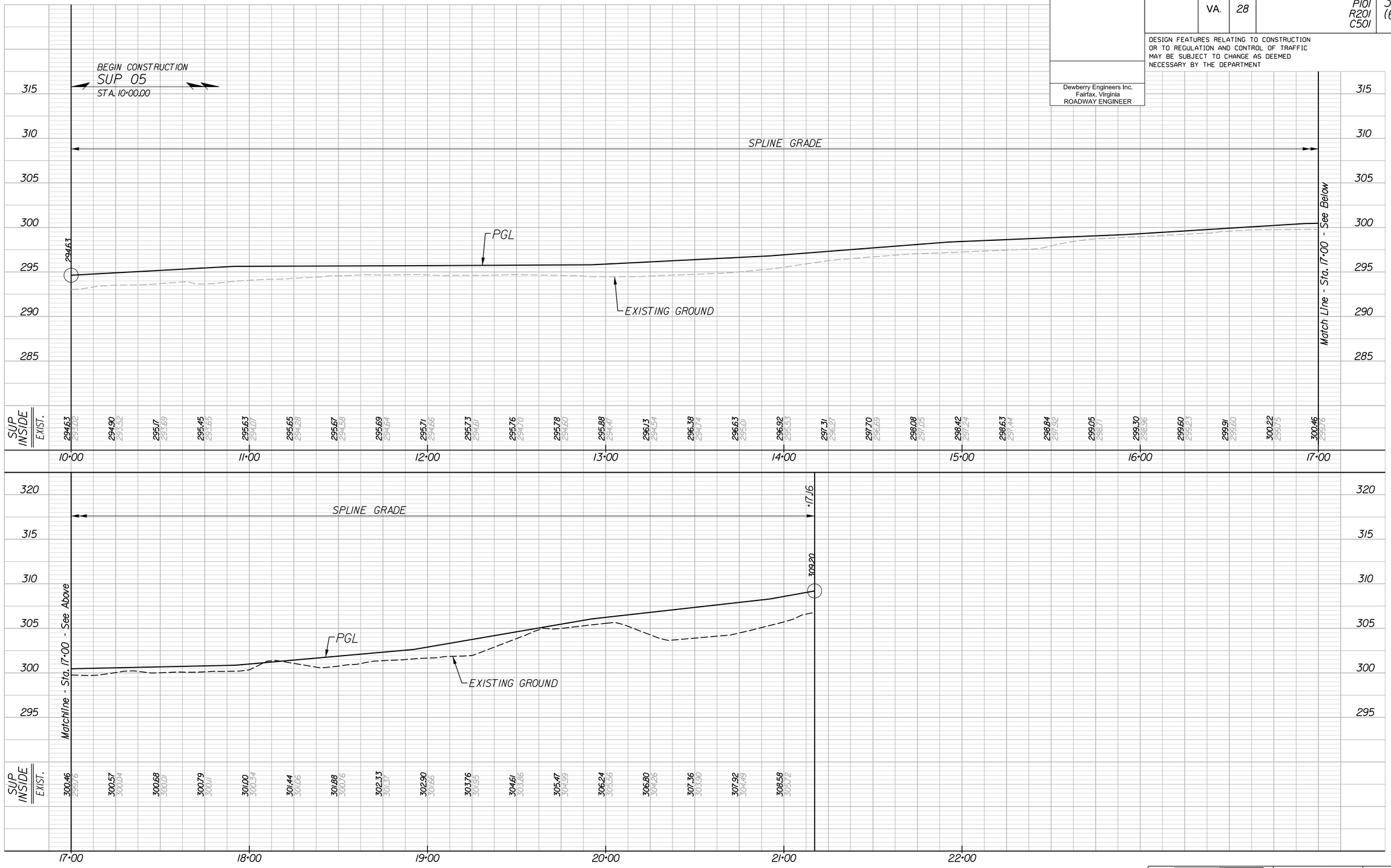
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SUP 05

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	32 (6)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



HORIZ.	0	25'	50'
VERT.	0	5'	10'

PROJECT	SHEET NO.
0028-029-269	32(6)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SIGNING & PAVEMENT MARKING PLAN

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-076-III RW-203 C-503	36

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

GENERAL NOTES

1. Unless otherwise approved by the engineer or indicated in the Temporary Traffic Control Plans. Existing traffic signs which are to be relocated shall remain in place until the new sign structure is in place.
2. The removal or modification of existing sign panels, structures, or foundations shall conform to section 510 of the specifications.
3. New materials and items required to complete the removal or modification of existing items shall be submitted to the engineer for review and approval in accordance with section 105 of the specifications.
4. All existing and proposed sign locations are approximate and shall be field verified by the contractor. All proposed sign locations shall be staked by the contractor and approved by the engineer.
5. All new longitudinal pavement line markings shall be Type B, Class I thermoplastic.
6. Any existing pavement markings which will conflict with proposed pavement markings shall be completely eradicated per VDOT Std. Specifications.
7. Limits of proposed pavement markings shown are approximate and shall be modified in the field until existing markings can be matched.
8. Plastic Inlaid Markers (PIM) shall be installed on Route 28 and all other roadways that currently have Raised Pavement Markers per Std. PM-8.
9. A/B — A. The top section indicates the type of structure. (See DEFINITION OF TYPES)
   B. The bottom section indicates the Measurement & Payment Item (See Section 510.04 Special Provision Copied Note)

   EXAMPLE:

   WP-I / A — Single Wood Post; Remove Existing Sign Structure
10. The sizes of all existing signs to be relocated shall be verified by the Contractor prior to relocation or fabrication of new post(s).
11. If permanent signs are installed prior to time they should be displayed, they shall be completely covered by a non-transparent material.
12. See Typical Sections (Sheet 2A(1)- 2A(5) for lane width dimensions. Thru lanes shall be 12' wide unless otherwise indicated.
13. An 8' mounting height to the bottom of the sign panel is required when the panel is within 3' of a pedestrian facility.
14. Sign sheeting for all signs is to be ASTM D4956 Type XI, except for brown and blue colors, which are to be ASTM D4956 Type IV, IX, or XI per VDOT Supplemental Specification SS701-002016-01.

EXISTING SIGN DISPOSITION

A. REMOVE EXISTING SIGN STRUCTURE, TYPE ( ),

B. RELOCATE EXISTING SIGN STRUCTURE, TYPE ( ),

C. REMOVE EXISTING SIGN TYPE ( ),

D. REMOVE EXISTING O/H SIGN STRUCTURE, TYPE ( ),

E. RELOCATE EXISTING SIGN PANEL TYPE ( ),

Index

* DENOTES TO BE INCLUDED IN NEXT SUBMISSION

Pavement Marking Legend

DESCRIPTION	10'	30'	10'	WHITE	YELLOW
DASHED LINE - 4"	10'	30'	10'	A	
DASHED LINE - 6"	10'	30'	10'	S	
DASHED LINE - 8"	10'	30'	10'	W	
DASHED LINE - 12"	10'	30'	10'	T	
SOLID LINE - 4"				B	H
SOLID LINE - 6"				N	O
SOLID LINE - 8"				C	I
SOLID LINE - 12"				D	L
SOLID LINE - 24"				E	J
DOTTED LINE - 4"	2' DOT-6' SPACE			F	R
DOTTED LINE - 8"	2' DOT-6' SPACE			V	X
DOTTED LINE - 4"	3' DOT-3' SPACE			Z	
DOTTED LINE - 4"	3' DOT-9' SPACE			P	
DOTTED LINE - 6"	3' DOT-9' SPACE			Y	
DOTTED LINE - 8"	3' DOT-9' SPACE			M	
DOTTED LINE - 12"	3' DOT-9' SPACE			U	
DBL SOLID LINE - 4"					K
DBL SOLID LINE - 4"	10'	30'	10'		Q
PVT MKG MESSAGE	ONLY				

Signing Legend

DESCRIPTION	Prop.	Ex.
SIGN NO. / TEXT NO.	123 / 12	
SIGN LOCATION (ONE POST)		
SIGN LOCATION (TWO POSTS)		
SIGN LOCATION (THREE POSTS)		

DEFINITION OF TYPES

TYPE	DESCRIPTION	SIZE
DP-1	O/H Double Pole	50 - 75 L.F.
DP-2	O/H Double Pole	76 - 101 L.F.
DP-3	O/H Double Pole	102 - 127 L.F.
DP-4	O/H Double Pole	128 - 153 L.F.
DP-5	O/H Double Pole	154 - 179 L.F.
DP-6	O/H Double Pole	180 - 205 L.F.
DC-1	O/H Double Pole & Cantilever	75 - 100 L.F.
DC-2	O/H Double Pole & Cantilever	101 - 126 L.F.
DC-3	O/H Double Pole & Cantilever	127 - 152 L.F.
DC-4	O/H Double Pole & Cantilever	153 - 178 L.F.
DC-5	O/H Double Pole & Cantilever	179 - 204 L.F.
DC-6	O/H Double Pole & Cantilever	205 - 230 L.F.
CS-1	O/H Single Arm Cantilever	25 - 40 L.F.
CS-2	O/H Single Arm Cantilever	41 - 60 L.F.
CD-1	O/H Double Arm Cantilever	50 - 74 L.F.
CD-2	O/H Double Arm Cantilever	75 - 125 L.F.
CD-3	O/H Double Arm Cantilever	126 - 175 L.F.
CD-4	O/H Double Arm Cantilever	176 - 225 L.F.
BM	O/H Bridge Mount	EA.
I	Non-breakaway Single Metal Pole	EA.
II	Non-breakaway Two Metal Poles	EA.
III	Non-breakaway Three Metal Poles	EA.
V	Breakaway Single Round Metal Pole	EA.
VA	Breakaway Single Metal Pole	EA.
VIA	Breakaway Two Metal Poles	EA.
VIA3	Breakaway Three Metal Poles	EA.
VIIA	3½" Rolled Roll Steel Pole	EA.
WP-1	Single Wood Post	EA.
WP-2	Two Wood Posts	EA.
WP-3	Three Wood Posts	EA.
ST-1	One Steel Post	EA.
ST-2	Two Steel Posts	EA.
STP-1	Breakaway Single Square Tube Post	EA.
STP-2	Breakaway Two Square Tube Posts	EA.
STP-3	Breakaway Three Square Tube Posts	EA.
SP-1	Sign Panel	0 - 100 S.F.
SP-2	Sign Panel	101 - 200 S.F.
SP-3	Sign Panel	201 - 300 S.F.
SP-4	Sign Panel	301 - 400 S.F.
SP-5	Sign Panel	401 - 500 S.F.
SP-6	Sign Panel	501 - 600 S.F.

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SIGNING & PAVEMENT MARKING PLAN

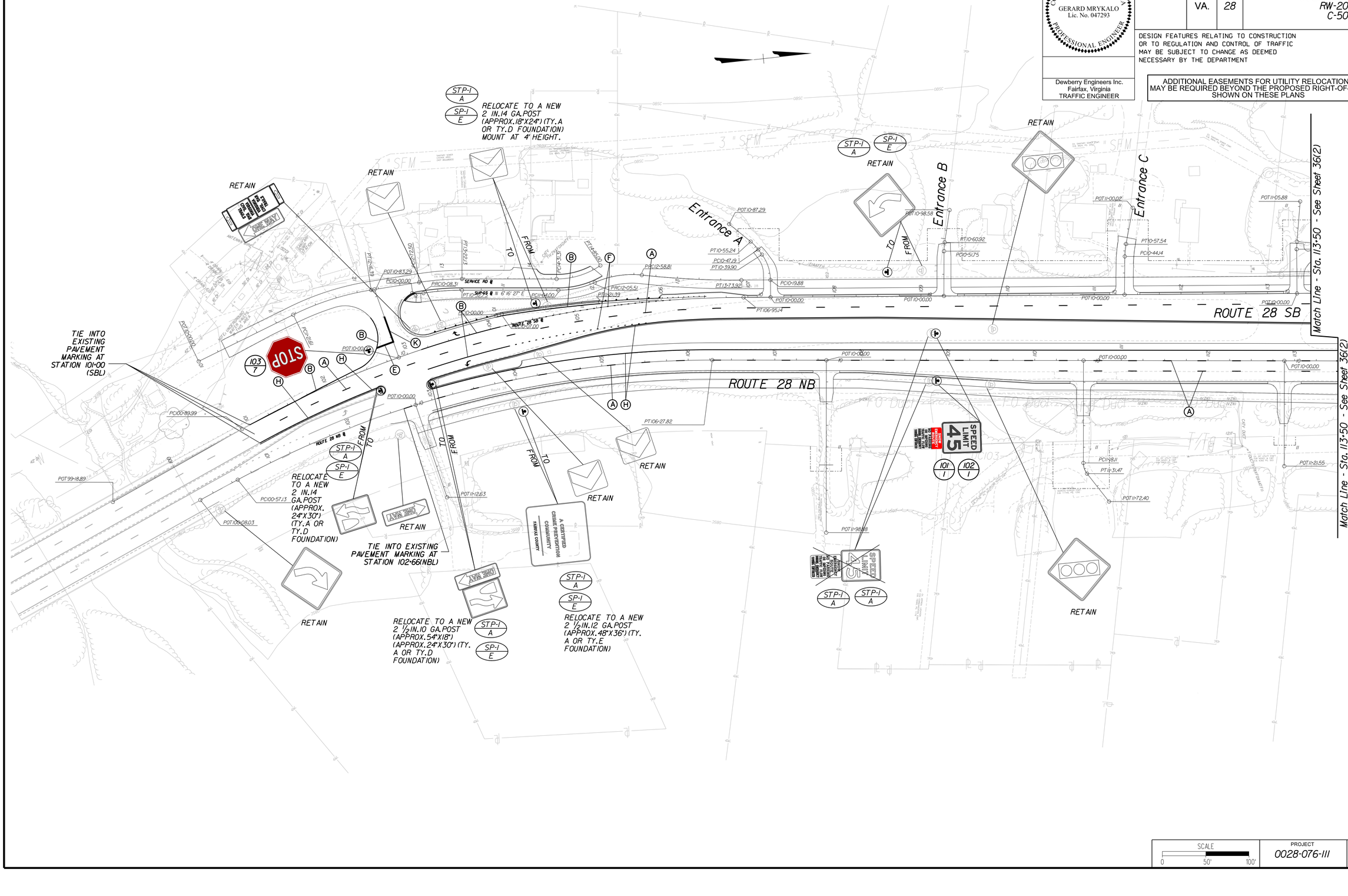
COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-076-III RW-203 C-503	36(1)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-076-III	36(1)

Dewberry

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Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-076-111 RW-203 C-503	36(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Match Line - Sta. 113+50 - See Sheet 36(1)

Match Line - Sta. 11+50 - See Sheet 36(1)

Match Line - Sta. 127+50 - See Sheet 36(3)

ROUTE 28 SB

ROUTE 28 NB

Entrance E

Entrance F

Entrance G

COMPTON RD (EAST) (ROUTE 658)

RELOCATE TO A NEW 2 1/2 IN.10 GA.WITH 2 3/16 IN 10 GA.INNER POST (APPROX.24"X12") (APPROX.24"X24") (APPROX.21"X15") (APPROX.24"X12") (APPROX.24"X24") (APPROX.21"X15") (APPROX.24"X12") (APPROX.24"X24") (APPROX 21"X15") (TY.B OR TY.C FOUNDATION)

RELOCATE TO A NEW 2 1/2IN.12 GA.POST (APPROX.30"X36") (APPROX.18"X24") (TY.A OR TY.E FOUNDATION)

RELOCATE TO A NEW 2 1/2 IN. 12 GA.POST (APPROX. 24"X36"X APPROX.30"X30"XTY.A OR TY.E FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA. POST (APPROX. 36"X36") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 1/2IN.10 GA.POST (APPROX.36"X36") (APPROX.24"X12") (APPROX.54"X18") (TY.B OR TY.C FOUNDATION)

RELOCATE TO A NEW 2 1/2IN.12 GA.POST (APPROX.36"X36") (APPROX.24"X12") (APPROX.24"X9") (TY.A OR TY.E FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA.POST (APPROX. 36"X30") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 1/2IN.12 GA. POST (APPROX. 36"X36") (24"X12") (TY.A OR TY.E FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA.POST (APPROX. 30"X36") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA.POST (APPROX.30"X36") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 1/2 IN.10 GA.POST (APPROX.36"X36") (APPROX.24"X12") (APPROX. 54"X18") (TY.B OR TY.C FOUNDATION)

TIE INTO EXISTING PAVEMENT MARKING AT STATION 14+59

RETAIN

RETAIN

FROM TO

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-076-111	36(2)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SIGNING & PAVEMENT MARKING PLAN

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-076-III RW-203 C-503	36(3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Match Line - Sta. 127+50 - See Sheet 36(2)

Match Line - Sta. 140+50 - See Sheet 36(4)

ROUTE 28 SB

ROUTE 28 NB

BRADENTON DR (ROUTE 8882)

Compton Rd NEXT SIGNAL — 301/70

Bradenton Dr NEXT RIGHT — 304/71

STP-3 A

STP-1 A / SP-1 E — RELOCATE TO A NEW 2 IN.14 GA.POST (APPROX.36"X36") (TY.A OR TY.D FOUNDATION)

STP-1 A / SP-1 E — RELOCATE TO A NEW 2 1/2 IN.12 GA.POST (APPROX.54"X18") (APPROX.24"X30"). (TY.A OR TY.E FOUNDATION)

STP-1 A / SP-1 E — RELOCATE TO A NEW 2 1/2 IN.12 GA.POST (APPROX.54"X18") (APPROX.12"X18"X APPROX. 24"x18") (TY.A OR TY.E FOUNDATION)

SP-1 E / STP-1 A — RELOCATE TO A NEW 2 IN. 14 GA.POST (APPROX. 24"X30") (TY.A OR TY.D FOUNDATION)

STP-1 A / SP-1 E — RELOCATE TO A NEW 2 IN. 14 GA. POST (APPROX. 30"X36") (TY.A OR TY.D FOUNDATION)

302/2 — 303/2 — SPEED LIMIT 45

DO NOT ENTER — 305/71 — 306/2

ONE WAY — NO MOTOR VEHICLES — 307/6

STOP — 308/7 — 309/7

WP-1 A / WP-1 A

STP-1 A / SP-1 E — RELOCATE TO A NEW 2 IN.14 GA. POST (APPROX. 30"X36") (TY.A OR TY.D FOUNDATION)

STP-1 A / SP-1 E — RELOCATE TO A NEW 2 IN.14 GA. POST (APPROX. 30"X36") (TY.A OR TY.D FOUNDATION)

I B — RELOCATE

STP-1 A / SP-1 E — RELOCATE TO A NEW 2 IN.14 GA.POST (APPROX.24"X30") (APPROX.24"X9") (TY.A OR TY.D FOUNDATION)

TIE INTO EXISTING PAVEMENT MARKING AT STATION 11+89

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-076-III	36(3)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
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SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SIGNING & PAVEMENT MARKING PLAN

COMMONWEALTH OF VIRGINIA
GERARD MRYKALO
Lic. No. 047293
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-076-III RW-203 C-503	36(4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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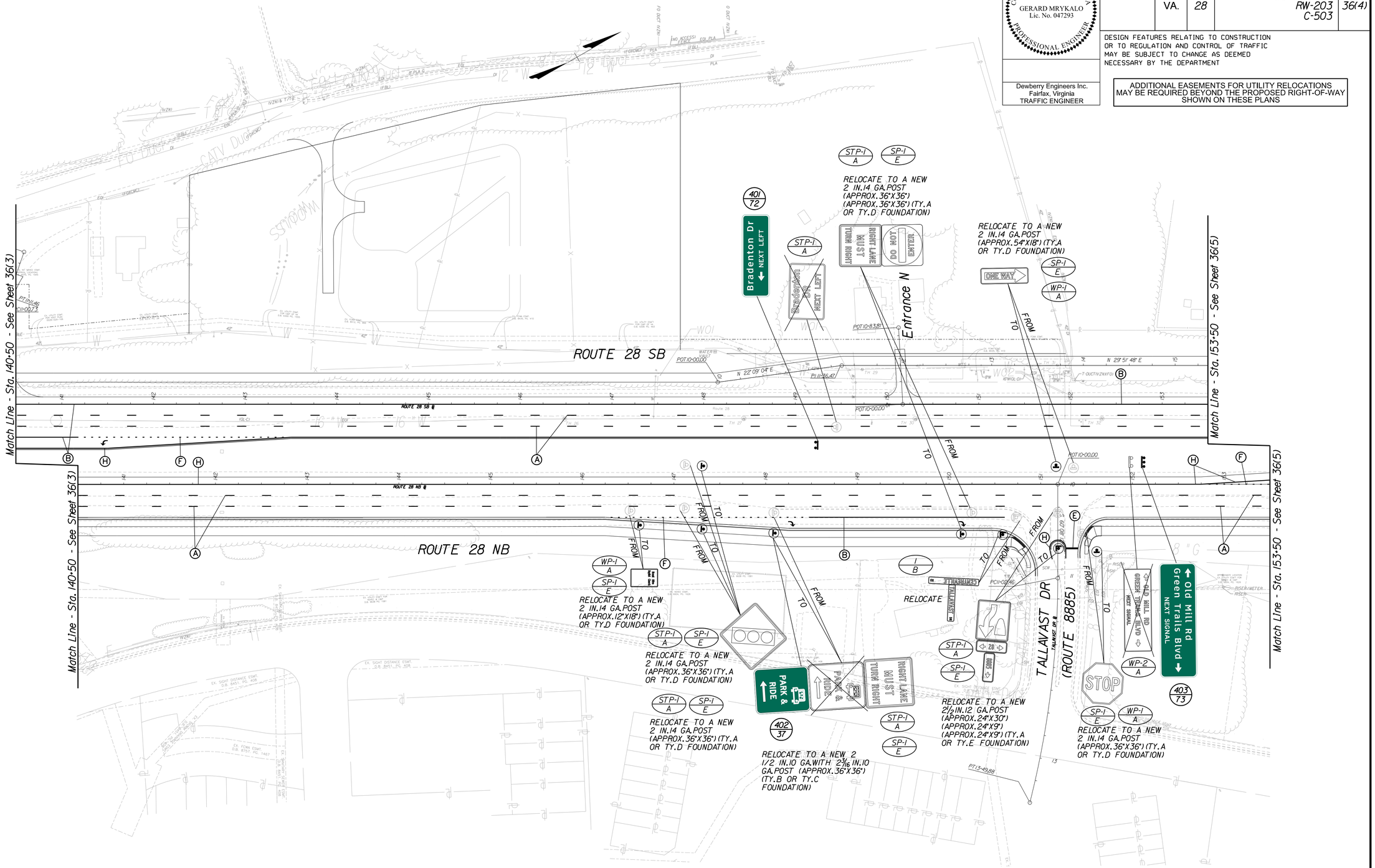

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-076-III	36(4)

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-076-111 RW-203 C-503	36(5)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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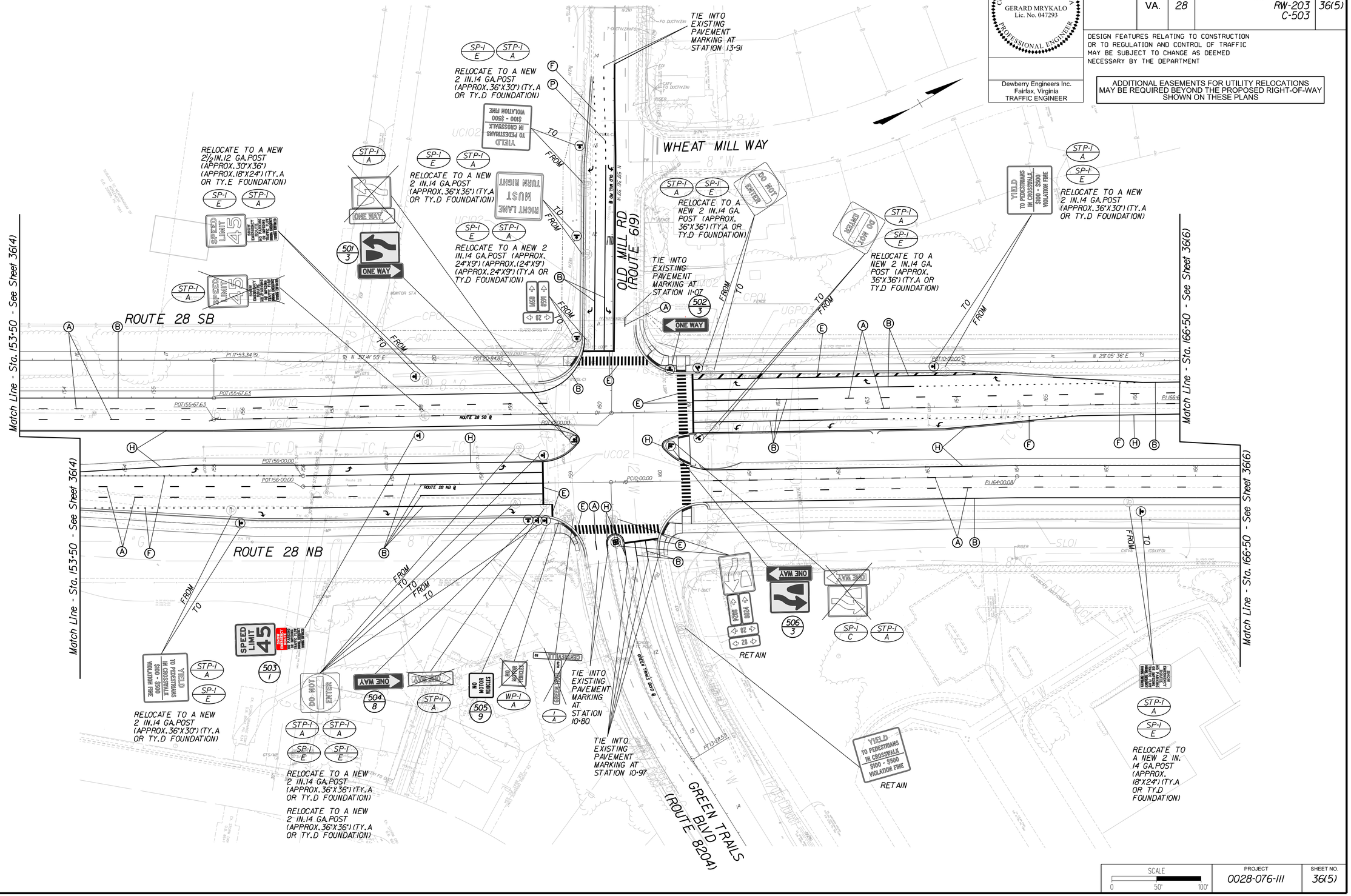

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-076-111	36(5)

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SIGNING & PAVEMENT MARKING PLAN

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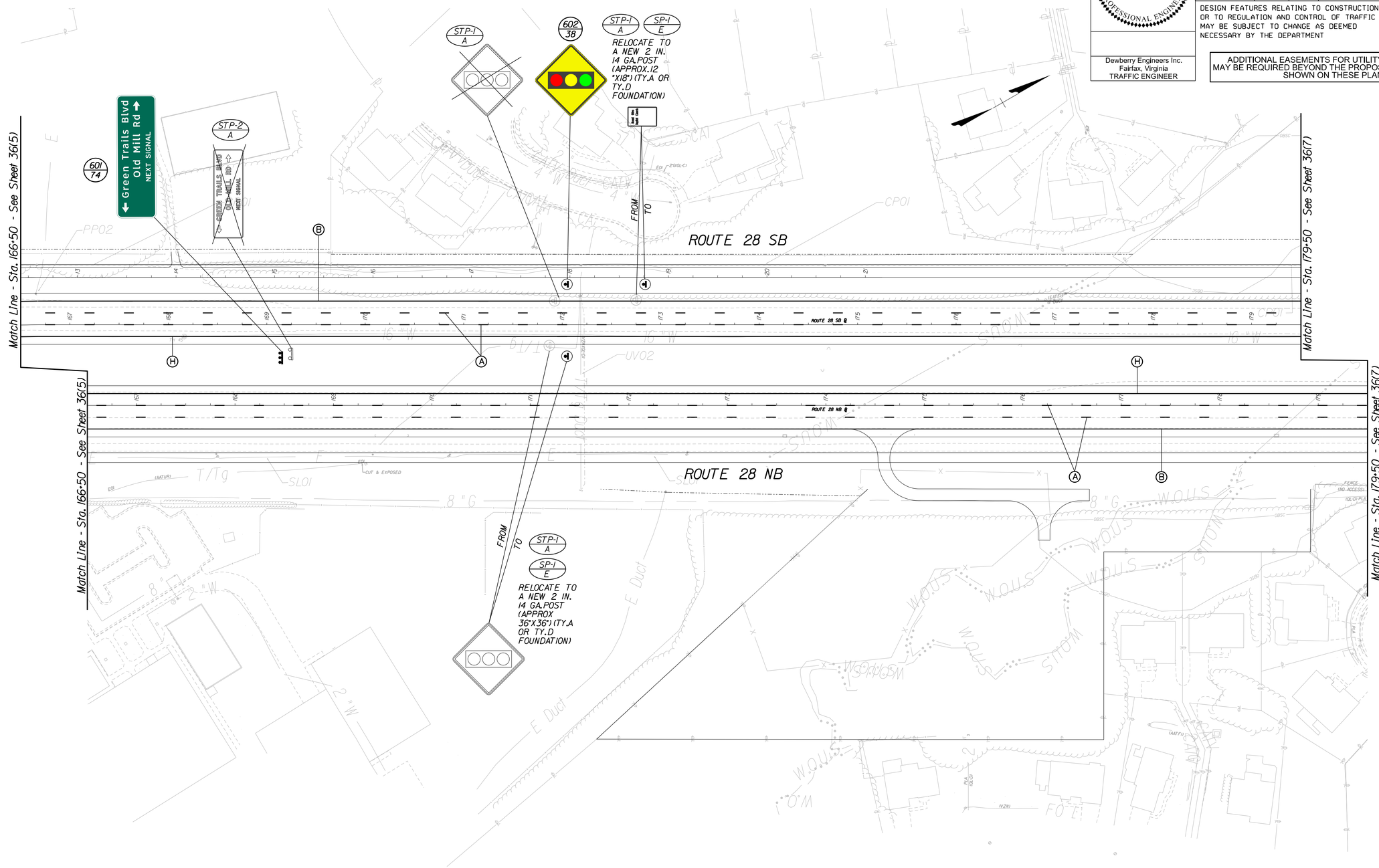
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-076-111 RW-203 C-503	36(6)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-076-111	36(6)

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-076-III RW-203 C-503	36(7)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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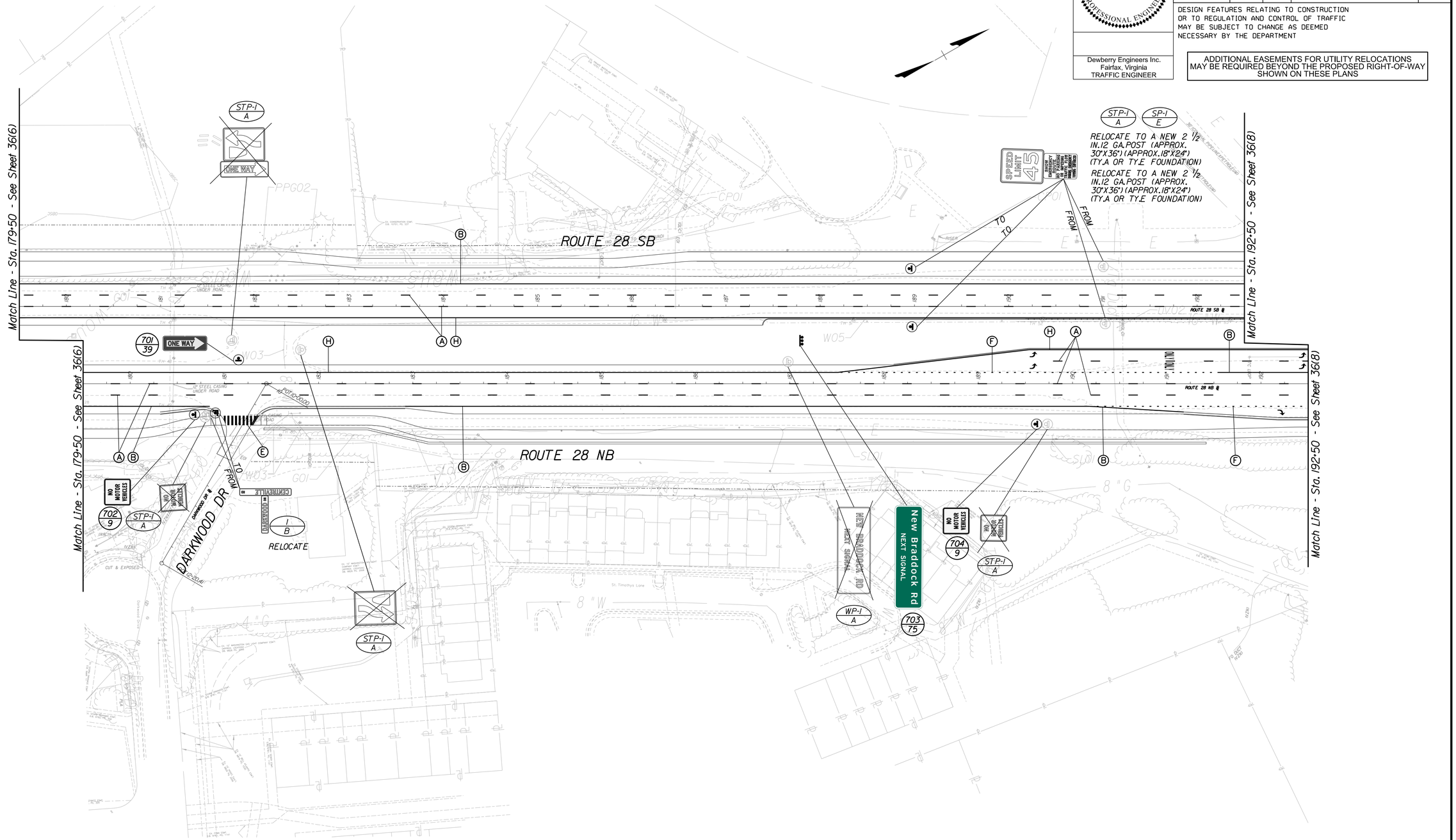

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-076-III	36(7)

10/11/2020
2:48:53 PM

T108720-36(08).dgn
Plotted By: gmrykalo

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
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SIGNING & PAVEMENT MARKING PLAN

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REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-076-111 RW-203 C-503	36(8)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

TIE INTO EXISTING PAVEMENT MARKING AT STATION 17+00

RETAIN

TIE INTO EXISTING PAVEMENT MARKING AT STATION 14+16

NEW BRADDOCK RD (ROUTE 620)

RELOCATE TO A NEW 2 ½ IN.10 GA. POST (APPROX. 24"X12") (APPROX. 24"X24") (APPROX. 2'X15') (APPROX. 24"X12") (APPROX. 24"X24") (APPROX. 2'X15') TY.B OR TY.C FOUNDATION)

RELOCATE TO A NEW 2 ½ IN.10 GA.POST (APPROX.24"X12") (APPROX.24"X24") (APPROX. 2'X15') (APPROX.24"X12") (APPROX. 24"X24") (APPROX.2'X15') (TY.B OR TY.C FOUNDATION)

RELOCATE TO A NEW 2 ½ IN.14 GA.POST (APPROX.54"X18") (APPROX.24"X30") (TY.A OR TY.E FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA.POST (APPROX.36"X36") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA. POST (APPROX. 36"X30") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA.POST (APPROX. 36"X30") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA.POST (APPROX. 42"X30") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA.POST (APPROX. 36"X48") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA.POST (APPROX.36"X36") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA. POST (APPROX. 36"X30") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA. POST (APPROX. 42"X30") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA. POST (APPROX. 42"X30") (TY.A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA. POST (APPROX. 36"X30") (TY. A OR TY.D FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA.POST (APPROX.18"X18") (TY.A OR TY.D FOUNDATION)

TIE INTO EXISTING PAVEMENT MARKING AT STATION 12+38

ROUTE 28 SB

ROUTE 28 NB

Match Line - Sta. 192+50 - See Sheet 36(7)

Match Line - Sta. 205+50 - See Sheet 36(9)

Match Line - Sta. 12+50 See Inset A Sheet 36(11)

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-076-111	36(8)

Dewberry

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SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
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SIGNING & PAVEMENT MARKING PLAN

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COMMONWEALTH OF VIRGINIA
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-076-III RW-203 C-503	36(9)

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Match Line - Sta. 205+50 - See Sheet 36(8)

Match Line - Sta. 219+50 - See Sheet 36(10)

MACHEN RD (ROUTE 5401)

ROUTE 28 SB

ROUTE 28 NB

TIE INTO EXISTING PAVEMENT MARKING AT STATION 16+06

RELOCATE TO A NEW 2 1/2 IN.10 GA.POST WITH 2 POST (APPROX. 78"X30") (TY.A OR TY.E FOUNDATION)

RELOCATE TO A NEW 2 IN.14 GA.POST (APPROX. 36"X36") (TY.A OR TY.D FOUNDATION)

RETAIN

TIE INTO EXISTING PAVEMENT MARKING AT STATION 12+05

RELOCATE TO A NEW 2 1/2 IN. 12 GA.POST. (APPROX. 18"X24"XAPPROX. 30"36"XTY.A OR TY.E FOUNDATION)

RETAIN

RELOCATE TO A NEW 2 IN.12 GA.POST (APPROX.54"X18") (APPROX.24"X30") (TY.A OR TY.E FOUNDATION).

RETAIN

RELOCATE TO A NEW 2 1/2 IN. 12 GA.POST (APPROX.54"X18") (APPROX.24"X30") (TY.A OR TY. E FOUNDATION)

RELOCATE TO A NEW 2 1/2 IN.12 GA. POST (APPROX. 48"X36") (TY.A OR TY.E FOUNDATION)

RELOCATE TO NEW OH SIGN STRUCTURE (APPROX.20'-0" x 7'-6")

(SEE SHEET 38 SERIES FOR ITS PLAN DETAILS)

O/H LOCATION NO.1

RELOCATE TO A NEW 2 1/2 IN. 10 GA.WITH 2 3/8 IN.10 GA.POST (2 POSTS) (APPROX.72"X84 *XTY.B OR TY.C FOUNDATION)

Old Centreville Rd NEXT SIGNAL

Machen Rd NEXT SIGNAL

Commuter Information 800-745-RIDE COMMUTER CONNECTIONS

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-076-III	36(9)

Dewberry

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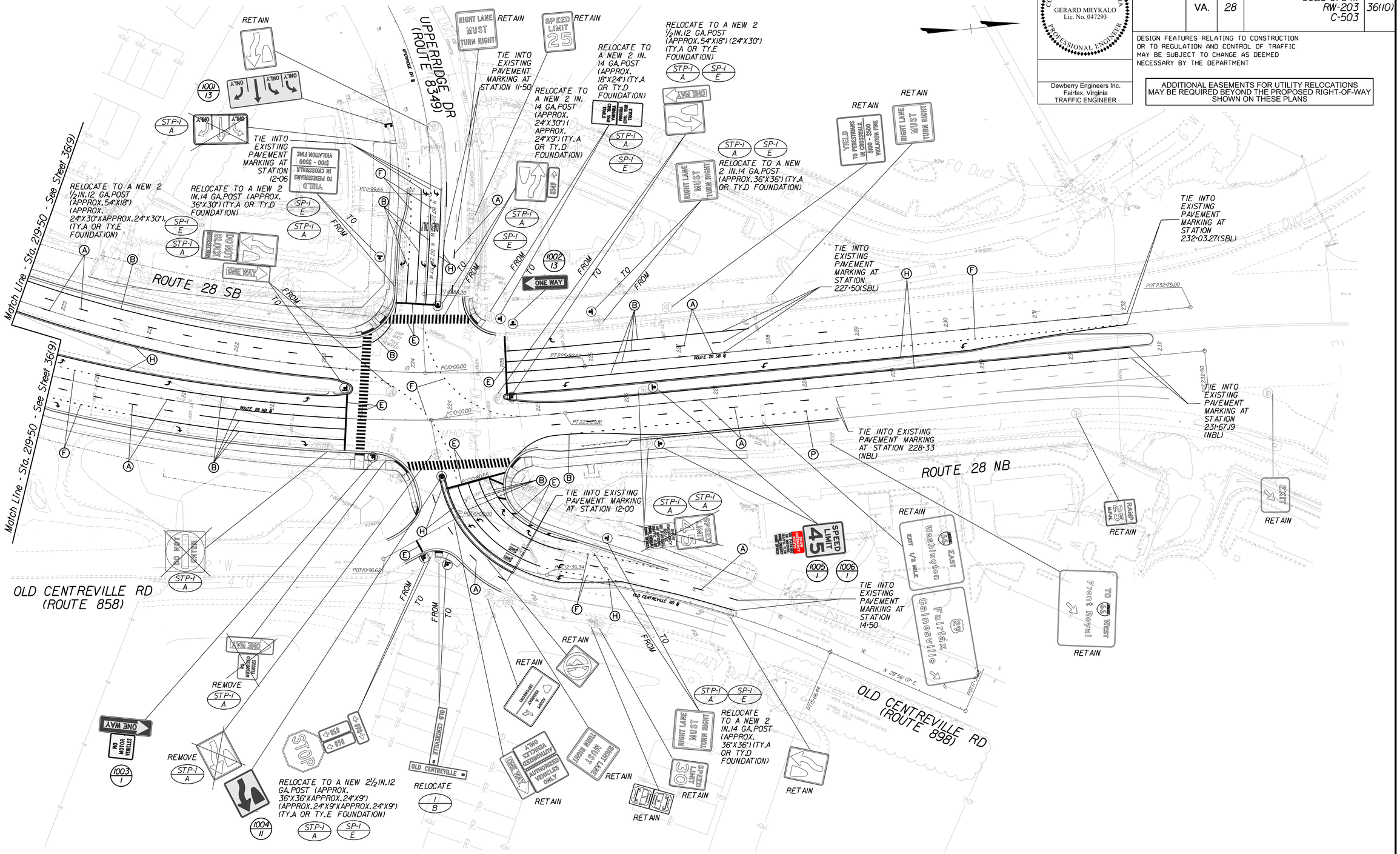
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-076-III RW-203 C-503	36(10)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS



SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-076-III	36(10)

Dewberry

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SIGNING & PAVEMENT MARKING PLAN

GERARD MRYKALO
Lic. No. 047293
COMMONWEALTH OF VIRGINIA
PROFESSIONAL ENGINEER

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-076-III RW-203 C-503	36(II)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

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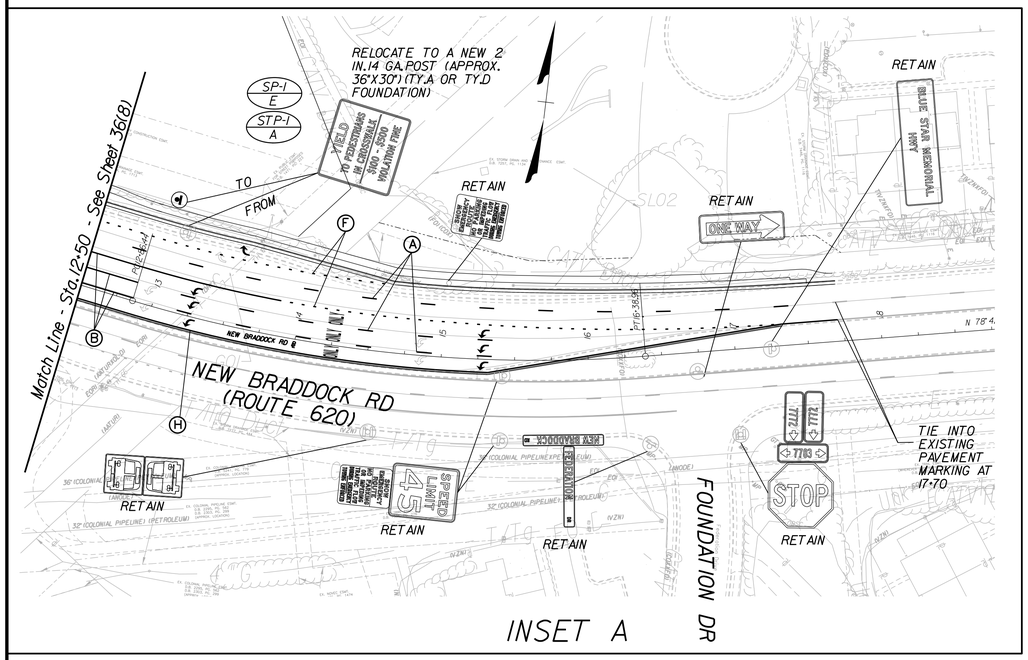

SCALE	PROJECT	SHEET NO.
0 50' 100'	0028-076-III	36(III)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

PERMANENT SIGNALIZATION PLAN NOTES

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	37(A)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

TRAFFIC SIGNAL GENERAL NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2009 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE 2016 VDOT ROAD AND BRIDGE SPECIFICATIONS (INCLUDING ALL REVISIONS), THE 2016 VDOT ROAD AND BRIDGE STANDARDS, AND VIRGINIA SUPPLEMENT TO THE 2009 MUTCD, 2011 EDITION.
2. TRAFFIC SIGNAL COMMUNICATION MUST BE MAINTAINED FOR THE DURATION OF CONSTRUCTION FOR ALL SIGNALS WITHIN THE EXISTING VDOT SIGNAL SYSTEM. IF THE PROJECT INCLUDES UTILITY RELOCATION FOR ANY OF THE TEN (10) EXISTING SIGNALIZED INTERSECTIONS WITHIN THE PROJECT AREA AND THE RELOCATION IMPACTS THE EXISTING BROADBAND COMMUNICATION CIRCUIT TO THE EXISTING CABINETS THE PROJECT SHALL WORK DIRECTLY WITH COX COMMUNICATION AND/OR THE PROJECT'S UTILITY CONTRACTOR TO ENSURE THAT THE UTILITY RELOCATIONS PROVIDE THE REQUIRED BROADBAND TAP WITHIN VDOT'S RIGHT OF WAY AND ON THE SAME QUADRANT AS THE EXISTING/ PROPOSED CABINET.
3. MAINTENANCE AND REPAIR OF THE TRAFFIC SIGNAL AND ANY NECESSARY MODIFICATIONS DURING CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING TRAFFIC CONTROL ON ALL APPROACHES OF THE INTERSECTION (OR AS SHOWN ON THE APPROVED PLANS) AT ALL TIMES, AND THROUGHOUT ALL PHASES OF CONSTRUCTION UNTIL THE NEW SIGNALS ARE OPERATIONAL.
5. THE CONTRACTOR SHALL PROCURE THE 2070 CONTROLLERS AND CABINETS FROM VDOT'S NORTHERN REGION OPERATIONAL INSTALLATION & CONSTRUCTION (NROIC) SECTION OF THE NORTHERN DISTRICT. ALL CONTROLLERS AND CABINETS FOR THIS PROJECT WILL BE CHARGED TO THE PROJECT'S UPC. THE CONTRACTOR SHALL CONTACT MR. CLIFFORD MERRICK AT CLIFFORD.MERRICK@VDOT.VIRGINIA.GOV TWO MONTHS PRIOR TO REQUIRING THE 2070 CONTROLLER AND CABINET TO CONFIRM THE CHARGE CODE FOR AND TO SCHEDULE PICK-UP OF THIS EQUIPMENT. TWO WEEKS PRIOR TO THE DESIRED PICK UP DATE, THE CONTRACTOR SHALL COORDINATE WITH NROIC TO VERIFY EQUIPMENT IS AVAILABLE AND ARRANGE A PICK UP DATE. THE EQUIPMENT CAN BE PICKED UP FROM VDOT'S NROIC TFO LOCATION AT 8010 MASON KING COURT, MANASSAS, VA 20109. UPON RECEIPT OF THE 2070 CONTROLLER AND CABINET FROM VDOT, THE CONTRACTOR'S QUALIFIED REPRESENTATIVE SHALL WIRE THE CABINET, PROGRAM, AND TEST THE PHASING OF THE INTERSECTION AS SHOWN ON THE APPROVED SIGNAL PLANS. THE CONTRACTOR SHALL PROVIDE A CERTIFICATION LETTER TO VDOT INDICATING THAT THE WORK IS IN COMPLIANCE WITH VDOT STANDARDS, VDOT NRO REQUIREMENTS, AND THE APPROVED SIGNAL PLANS. AS PART OF THE INSTALLATION, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE VDOT STANDARD CF-3 CONCRETE FOUNDATION PER 2016 R&B STANDARDS.
6. FIVE (5) WORKING DAYS PRIOR TO COMMENCING TRAFFIC SIGNAL WORK AT ANY LOCATION IN NORTHERN VIRGINIA, THE CONTRACTOR MUST NOTIFY THE VDOT NOVA DISTRICT PERMITS SECTION IN WRITING, WITH THE NAME, DAYTIME PHONE NUMBERS AND EMERGENCY PHONE NUMBERS FOR THE CONTRACTOR, AND GIVE THE LOCATION OF THE WORK SITE INCLUDING STREET NAMES, ROUTE NUMBERS, TYPE AND DETAILS OF CONSTRUCTION AND WORK SCHEDULE.
7. THE VDOT ENGINEER, PRIOR TO CONSTRUCTION, SHALL VERIFY THE LOCATIONS OF THE POLE(S) AND CONTROLLER CABINET.
8. THE CONTRACTOR SHALL PERFORM TEST PITS AND EXERCISE CARE IN PLACEMENT OF SIGNAL COMPONENTS IF ADJUSTMENTS IN POLE LOCATIONS ARE REQUIRED. THE CONTRACTOR SHALL NOTIFY THE VDOT ENGINEER PRIOR TO COMMENCING SUCH WORK.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL UTILITIES WITHIN THE PROJECT LIMITS ARE IDENTIFIED AND LOCATED BEFORE BEGINNING WORK. THE CONTRACTOR SHALL CONTACT 'MISS UTILITY OF VIRGINIA' AT 1-800-522-7001 48 HOURS PRIOR TO ANY SIGNAL CONSTRUCTION ACTIVITY.
10. THE TRAFFIC SIGNAL SHALL NOT BE PLACED INTO FLASHING OR FULL COLOR OPERATION WITHOUT THE PRIOR NOTIFICATION AND APPROVAL FROM A VDOT NROIC ENGINEER. ARRANGEMENTS SHALL BE MADE BY THE VDOT ENGINEER TO SCHEDULE THE NROIC FIELD PERSONNEL, PROVIDING A MINIMUM OF 48 HOURS ADVANCE NOTICE.
11. NO TRAFFIC SIGNAL SHALL BE PLACED INTO OPERATION UNTIL THE LOCATION IS 100% COMPLETE. THIS INCLUDES ANY NECESSARY PAVEMENT MARKINGS AND SIGNS SHOWN ON THE PLANS AND THAT THE TRAFFIC SIGNAL COMMUNICATION REQUIREMENTS ARE COMPLETE AND OPERATIONAL. THE CONTRACTOR SHALL NOTIFY THE VDOT ENGINEER, WHO WILL NOTIFY THE VDOT NROIC ENGINEER A MINIMUM OF 48 HOURS PRIOR TO PLACING THE SIGNAL INTO OPERATION.
12. THE NEW TRAFFIC SIGNAL INSTALLATION SHALL NOT BE PLACED INTO FULL COLOR OPERATION ON MONDAYS, FRIDAYS, HOLIDAYS OR DAYS PRECEDING OR FOLLOWING HOLIDAYS, UNLESS DIRECTED BY THE VDOT NORTHERN REGION OPERATIONS ENGINEER.
13. ALL NEWLY CONSTRUCTED TRAFFIC SIGNALS MUST BE INSPECTED BY A VDOT DESIGNATED SIGNAL TECHNICIAN AND VDOT'S STRUCTURE AND BRIDGE SECTION INSPECTOR, AND ALL PUNCH-LIST ITEMS MUST BE SATISFIED BEFORE THEY ARE TURNED OVER TO VDOT FOR MAINTENANCE AND OPERATIONS.
14. ALL PEDESTRIAN PUSHBUTTONS (AS SPECIFIED ON THE PLAN) SHALL BE INSTALLED AS ACCESSIBLE PEDESTRIAN SIGNALS AND ACCESSIBLE PEDESTRIAN PUSHBUTTONS WITH ALL SIGNS, WIRING, INDICATIONS, TONES, AND OTHER ELEMENTS INSTALLED IN ACCORDANCE WITH CONSTRUCTION CONTRACT DOCUMENTS.
15. FOR MODIFICATIONS INSTALL NEW APS PUSHBUTTONS BETWEEN 3'-4" AND 3'-10" ABOVE THE PEDESTRIAN PATH AT EACH PUSHBUTTON LOCATION. IN LOCATIONS WHERE AN EXISTING PUSHBUTTON IS BEING REPLACED WITH AN APS UNIT, THE NEW APS PUSHBUTTON HOUSING MAY BE LARGER THAN THE EXISTING PUSHBUTTON HOUSING. IF THE EXISTING SIGN LOCATION CONFLICTS WITH THE MOUNTING HEIGHT OF THE NEW PUSHBUTTON, THE CONTRACTOR SHALL RELOCATE SIGN DIRECTLY ABOVE THE NEW APS PUSHBUTTON HOUSING.

TRAFFIC SIGNAL GENERAL NOTES (CONT.):

16. THE PROJECT SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING COMMUNICATION TO THE TRAFFIC SIGNAL CONTROLLER AT ALL TIMES. THE PROJECT IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH PROVIDING COMMUNICATION TO THE TRAFFIC SIGNAL. THE PROJECT SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION AND THE INSTALLATION OF THE COMMUNICATION CIRCUIT CONDUIT(S) AND EQUIPMENT TO THE TRAFFIC SIGNAL CONTROLLER CABINET FOR THE DESIGNATED COMMUNICATION PLATFORM.
17. THE PROJECT SHALL CONTACT VDOT'S NORTHERN REGION OPERATIONS COMMUNICATIONS GROUP AT NOVATFOCOMM@VDOT.VIRGINIA.GOV NINETY (90) DAYS PRIOR TO THE START OF THE TRAFFIC SIGNAL CONSTRUCTION TO IDENTIFY THE DESIGNATED COMMUNICATION PLATFORM AND TO INITIATE THE BROADBAND CIRCUIT ORDERING PROCESS.
18. THIS PROPOSED TRAFFIC SIGNAL PROJECT SHALL UTILIZE VDOT'S NORTHERN REGION WIRELESS COMMUNICATION PLATFORM. THE PROJECT SHALL CONTACT VDOT'S COMM GROUP AS DETAILED IN NOTE 16 AT NOVATFOCOMM@VDOT.VIRGINIA.GOV REGARDING THE INSTALLATION REQUIREMENTS AND WIRELESS COMMUNICATION EQUIPMENT DETAILS.
19. THE 1" METAL CONDUIT THAT IS INSTALLED AS PART OF THE COMMUNICATION CIRCUIT (ST'D CC-2 ON THE CONTROLLER CABINET) SHALL BE TERMINATED INTO A ST'D JB-S1 JUNCTION BOX LOCATED 12" TO 24" FROM THE CONTROLLER CABINET FOUNDATION. THE 2" CONDUIT FROM THE DESIGNATED COMMUNICATION PROVIDER CONNECTION POINT TO THE CONTROLLER CABINET SHALL BE TERMINATED INTO THIS JB-S1. THE REQUIRED GROUND ELECTRODE FOR THE COMMUNICATION CIRCUIT SHALL BE INSTALLED IN THIS JB-S1. THE COVER SHALL HAVE "COMM" CAST IN THE DEPRESSION ON TOP AS DETAILED IN THE ST'D JB-S1. PULL ROPE RATED AT 1100 LBS. SHALL BE INSTALLED IN ALL COMMUNICATION CONDUITS. REFER TO VDOT R&B ST'D CF-3 1301.31 (REVISION DATE 2/2016).
20. THE RADIO AND CCTV INFORMATION PROVIDED RELATES TO CURRENT CONDITIONS AT THE TIME OF THR PLAN REVIEW. CHANGES IN DESIGN AND TECHNOLOGIES MAY REQUIRE REVISIONS/CHANGES AS DEEMED NECESSARY BY VDOT NRO ITS/COMM GROUP.

NOTES FOR SIGNAL:

A. POLES AND FOUNDATIONS:

1. MAST ARM LENGTH IS TO BE AS SHOWN ON PLAN AND ALL MAST ARMS ARE TO BE FIELD DRILLED ONLY.
2. SIGNAL POLE, ARM AND FOUNDATION SHALL BE DESIGNED TO ACCOMMODATE AN ADDITIONAL 5-SECTION SIGNAL HEAD FOUR FEET FROM THE TIP (FREE END) OF THE ARM AND AN ADDITIONAL MUTCD R10-12 (30"x36") SIGN ONE FOOT FROM THE TIP OF THE ARM FOR 78' MAST ARM POLES. ALL OTHER POLES NEED TO BE DESIGNED TO SUPPORT THE MAXIMUM ALLOWABLE LOADING FOR THE MAST ARM LENGTH DEPICTED IN THE STANDARD DRAWING MP-3.
3. SIGNAL POLE FOUNDATIONS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 1310.2 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS. FOUNDATION SHALL BE DESIGNED PER NOTE 2 ABOVE AND SUBMITTED TO VDOT FOR APPROVAL. THE MAST ARM POLE FOUNDATION SHALL BE IN ACCORDANCE WITH ST'D. PF-8.
4. PROPOSED MAST ARM POLES AND FOUNDATIONS SHALL BE DESIGNED BASED ON THE MAXIMUM LOADING OF THE PROPOSED, FUTURE PERMANENT, AND FUTURE TEMPORARY DESIGNS.
5. PEDESTAL POLE FOUNDATIONS SHALL BE INSTALLED IN ACCORDANCE WITH ST'D. PF-2. PEDESTAL POLE SHALL BE 12' HEIGHT UNLESS STATED OTHERWISE.
6. ALL EXISTING SIGNAL POLES TO REMAIN WITH ADDITIONAL LOADS OR MODIFICATIONS SHOULD BE RECERTIFIED.

B. CONTROLLERS AND FOUNDATIONS:

1. THE CONTROLLER CABINET FOUNDATION SHALL BE ST'D. CF-3 TO INCLUDE TWO 4" CONDUITS, AND ONE SPARE 3" CONDUIT TIED INTO THE JB-S3. THE CONTROLLER CABINET FOUNDATION SHALL HAVE A SEPARATE 1¼" METAL CONDUIT TIED INTO THE SERVICE METER EQUIPMENT. THE 2016 VDOT R&B STANDARDS FOR THE CF-3 SHALL BE USED FOR ALL CONTROLLER CABINET FOUNDATIONS.
3. ALL RIGHT TURN OVERLAPS SHALL BE WIRED TO THE OVERLAP LOAD SWITCH POSITION.
5. A 72 HOUR NOTICE IS REQUIRED PRIOR TO DISCONNECTING THE CONTROLLER COMMUNICATION FOR ANY REASON.
6. THE CONTRACTOR SHALL PROVIDE, INSTALL, AND ADJUST CONTROLLER TIMINGS TO PROVIDE ORDERLY FLOW OF TRAFFIC, OR AS DIRECTED BY THE VDOT NROIC ENGINEER. THE CONTRACTOR SHALL HAVE HIS QUALIFIED REPRESENTATIVE PRESENT TO MONITOR A MINIMUM OF TWO CONSECUTIVE MORNING AND EVENING RUSH HOUR PERIODS, OR AS DIRECTED BY THE VDOT NROIC ENGINEER.
7. THE CONTRACTOR SHALL LABEL ALL SPARE WIRES IN THE CONTROLLER CABINET, IN ACCORDANCE WITH SECTION 700.04(G) OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.

NOTES FOR SIGNAL (CONT'D.):

C. TRAFFIC SIGNAL HEADS:

1. ALL PERMANENT VEHICULAR TRAFFIC SIGNALS MUST BE LED PER VDOT SPECIFICATIONS.
2. ALL VEHICULAR TRAFFIC SIGNAL HEAD SECTIONS SHALL BE CAST ALUMINUM.
3. ALL VEHICLE SIGNAL HEADS SHALL HAVE HIGH VISIBILITY BACKPLATES. BACKPLATE HARDWARE SHALL BE STAINLESS STEEL.
4. HANGER ASSEMBLY BRACKETS FOR ANGLED TRAFFIC SIGNAL HEADS SHALL BE SUCH THAT BACKPLATES CAN BE INSTALLED WITHOUT ALTERATION OR MODIFICATION.
5. DURING CONSTRUCTION AND WHEN NOT IN USE, NEW TRAFFIC SIGNAL HEADS SHALL BE COVERED WITH A DURABLE NON-TRANSPARENT COVER UPON INSTALLATION. THE CONTRACTOR SHALL MAINTAIN THE COVERS UNTIL THE NEW TRAFFIC SIGNAL SYSTEM IS OPERATIONAL.

D. DETECTORS:

1. 6'x40' LOOP DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH ST'D TD-1C AND SHALL BE PLACED 5' IN FRONT OF THE STOP LINE.
2. 6'x6' LOOP DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH ST'D. TD-1B.
3. 14/1 ENCLOSED CONDUCTOR CABLE LEAD-IN REQUIRES 5/8" SAWCUT.
4. LOOP DETECTOR MODULES SHALL BE ONE FOR EACH LOOP EXCEPT THAT, WHEN THERE ARE SETS OF 6'x6' LOOPS, ONLY THE FARTHEST FROM THE STOP BAR SHALL HAVE A SEPARATE DETECTOR.
5. EMERGENCY SIGNAL PREEMPTION WILL BE INSTALLED BY FAIRFAX COUNTY PERSONNEL AFTER PROJECT COMPLETION FOR ALL UPGRADED OR NEW TRAFFIC SIGNALS.

E. CONDUIT, CONDUCTORS & ELECTRICAL:

1. FOR INSTALLATION OF CONDUIT, NO OPEN CUT WILL BE ALLOWED IN PERMANENT ROADWAY SURFACE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND PROVIDING ELECTRICAL SERVICE TO THE CONTROLLER AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION AND THE INSTALLATION OF THE ELECTRICAL SERVICE FOR THE TRAFFIC SIGNAL WITH THE LOCAL UTILITY COMPANY. ELECTRICAL SERVICE SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD SE-5 AS SHOWN ON THE PLAN AND SECTION 238.02(H) OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS WHICH SHALL INCLUDE TWO (2) 60 AMP BREAKERS. ELECTRICAL SERVICE SHALL BE METERED.
3. JUNCTION BOX COVERS SHALL HAVE THE LETTERS "TRAF" CAST IN THE TOP SURFACE DEPRESSION FOR ALL TRAFFIC SIGNAL RELATED JUNCTION BOXES CONTAINING CABLE WITH LESS THAN 50 VOLTS. ALL OTHER JUNCTION BOX COVERS SHALL HAVE THE LETTERS "ELEC" CAST IN THE TOP DEPRESSION.
4. NO JB-S1, S2, OR S3 JUNCTION BOXES SHALL BE INSTALLED IN PAVED SHOULDERS, SIDEWALKS, OR SHARED-USE PATHS.
5. ALL JUNCTION BOXES SHALL BE INSTALLED IN ACCORDANCE WITH ST'D. JB-S2 UNLESS OTHERWISE INDICATED ON THE SIGNAL PLANS.
6. (S) DENOTES CABLE TO BE SHIELDED. (M) DENOTES METAL CONDUIT. (EGC) DENOTES EQUIPMENT GROUNDING CONDUCTOR.

F. SIGNS AND PAVEMENT MARKINGS:

1. DURING CONSTRUCTION AND WHEN NOT IN USE, NEW TRAFFIC SIGNAL SIGNS SHALL BE COVERED WITH A DURABLE NON-TRANSPARENT COVER UPON INSTALLATION. THE CONTRACTOR SHALL MAINTAIN THE COVERS UNTIL THE NEW TRAFFIC SIGNAL SYSTEM IS OPERATIONAL.
2. PAVEMENT MARKINGS SHOWN ON THE PLAN ARE APPROXIMATE. REFER TO THE PAVEMENT MARKING PLAN FOR DIRECTION ON MODIFYING MARKINGS IN THE FIELD WHEN THE SIGNAL IS INSTALLED.
3. ANY EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS SHALL BE COMPLETELY ERADICATED.
4. LIMITS SHOWN ON THE PROPOSED MARKINGS ARE APPROXIMATE AND SHALL BE MODIFIED IN THE FIELD TO ENSURE THAT THE PROPOSED PAVEMENT MARKINGS CONTINUE UNTIL THE EXISTING PAVEMENT MARKINGS CAN BE MATCHED. PAVEMENT MARKING INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR.

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
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SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

PERMANENT SIGNALIZATION PLAN NOTES

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	37(B)

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Fairfax, Virginia
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NOTES FOR SIGNAL (CONT'D.):

G. ARTERIAL CCTV:

1. PRIOR TO INSTALLATION THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS/CUT SHEETS FOR ALL PROPOSED CAMERA, POWER INJECTOR AND COMMUNICATIONS EQUIPMENT (INCLUDING MOUNTS) FOR APPROVAL BY THE ENGINEER. WHEN THE CAMERA SYSTEM PROPOSED TO BE SET ON THE MAST ARM, TRAFFIC ENGINEERING SHALL BE INFORMED BY THE CONTRACTOR, TO VERIFY WHETHER OR NOT THE STRUCTURE HAD CONSIDERED FUTURE MODIFICATION IN THE ORIGINAL DESIGN. IF NOT, STRUCTURE COMPETENCE SHALL BE FURTHER VERIFIED BY THE ENGINEER FOR ADDITIONAL LOADINGS BEING ADDED, IN ORDER TO RECERTIFY THE STRUCTURE.

2. THE CONTRACTOR SHALL FURNISH AND INSTALL CCTV CAMERA SYSTEMS AND COMMUNICATIONS EQUIPMENT TO PROVIDE FULLY FUNCTIONAL SURVEILLANCE SYSTEMS CONTROLLABLE FROM THE PSTOC. PROJECT WILL NOT BE CONSIDERED COMPLETE UNTIL THE CONTRACTOR CAN DEMONSTRATE THAT THE CAMERA IS FUNCTIONING PROPERLY AND COMMUNICATING WITH PSTOC OVER THE BROADBAND COMMUNICATION AND ATMS VIDEO MANAGEMENT SYSTEM.

   a. THE CONTRACTOR SHALL CONTACT LEARY TOMLIN (VDOT) LEARY.TOMLIN@VDOT.VIRGINIA.GOV FOR THE CURRENT CAMERA SPECIFICATIONS, EQUIPMENT DETAILS AND OPERATIONAL CAPABILITIES PRIOR TO PURCHASE OF THE CCTV EQUIPMENT.

   b. THE CONTRACTOR SHALL COORDINATE WITH LEARY TOMLIN (VDOT) LEARY.TOMLIN@VDOT.VIRGINIA.GOV REGARDING CAMERA CONFIGURATION DETAILS. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT CONFIGURATIONS.

3. TRANSIENT VOLTAGE SURGE SUPPRESSION DEVICES ARE TO BE INSTALLED TO PROVIDE PROTECTION FOR ALL EQUIPMENT. NO SEPARATE PAYMENT SHALL BE MADE FOR THE SURGE SUPPRESSION DEVICES.

4. THE CONTRACTOR SHALL FURNISH AND INSTALL A POE+ POWER INJECTOR TO POWER THE PROPOSED CCTV CAMERA.

5. THE CONTRACTOR SHALL INSTALL THE CCTV CAMERA ASSEMBLY AND MOUNT AS SHOWN ON THE INTERSECTION DIAGRAMS AND APPROVED BY THE ENGINEER.

6. ALL MOUNTING BRACKETS AND DEVICES SHALL BE INCLUDED IN THE COST OF THE CCTV CAMERA.

7. CATEGORY 6 SHIELDED OUTDOOR NETWORK CABLES (FIELD INSTALLED) SHALL BE TERMINATED TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) AND THE ELECTRONICS INDUSTRIES ALLIANCE (EIA) WIRING STANDARD T568B.

8. THE CONTRACTOR SHALL SUPPLY AND INSTALL IP CAMERAS AS SHOWN IN THE INTERSECTION DIAGRAMS AND OUTLINED THE CONTRACT DOCUMENTS.

9. THE CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE TO THE ENGINEER SO THEY CAN VIEW REAL TIME VIDEO FROM THE CAMERA DURING THE INSTALLATION FOR THE PURPOSE OF FINE TUNING THE EXACT MOUNTING LOCATION ON THE SIGNAL POLE OR MAST ARM WHILE ALL CONTRACTOR EQUIPMENT IS ON SITE. THE CONTRACTOR SHALL PROVIDE MINOR ADJUSTMENTS TO THE FINAL MOUNTING LOCATION ON THE SIGNAL POLE OR MAST ARM TO OPTIMIZE THE CAMERA VIEW AT NO ADDITIONAL COST TO THE PROJECT.

10. AFTER THE COMPLETION OF THE CAMERA CONFIGURATION AND INTEGRATION AND WITHIN 30 DAYS PRIOR TO VDOT'S FINAL ACCEPTANCE, THE CONTRACTOR SHALL PERFORM TESTING FOR ALL EQUIPMENT, ACCORDING TO THE FIELD TEST PROCEDURES PROVIDED BY VDOT. TESTING SHALL BE PERFORMED IN THE PRESENCE OF VDOT AT THE TIME OF TESTING.

11. UPON VDOT'S FINAL ACCEPTANCE, THE CONTRACTOR SHALL PROVIDE TO NRO OPERATIONS MAINTENANCE A COMPLETED CHANGE MANAGEMENT FORM THAT INCLUDES ALL THE METADATA INFORMATION FOR THE CAMERA WITH FINAL EQUIPMENT IP ADDRESS FOR EACH SPECIFIC SITE.

12. UPON VDOT'S FINAL ACCEPTANCE, THE CONTRACTOR SHALL TRANSFER AND PROVIDE TO NRO OPERATIONS MAINTENANCE THE MANUFACTURER WARRANTY CERTIFICATES OF ALL EQUIPMENT.

13. VDOT NRO COMMUNICATION GROUP CONTACT(S):

   A. NOVATFOCOMM@VDOT.VIRGINIA.GOV

14. NRO COMMUNICATION GROUP SHALL PROVIDE CONFIGURATION, TESTING AND SITE INSTALLATION FOR THE ABOVE SECURITY APPLIANCE.

NOTES FOR TEMPORARY SIGNALS:

A. GENERAL:

1. ALL PERMANENT SIGNAL NOTES APPLY TO TEMPORARY SIGNALS WITH THE EXCEPTION OF THE NOTES BELOW.

B. POLES AND FOUNDATIONS:

1. TEMPORARY WOOD POLE WIRING AND RIGGING SHALL BE IN ACCORDANCE WITH ST'D.WD-2.

C. TRAFFIC SIGNAL HEADS:

1. TEMPORARY SPAN WIRE SIGNAL HEADS SHALL BE INSTALLED IN ACCORDANCE WITH ST'D.SW-2. BALANCE ADJUSTERS ARE NOT REQUIRED. ALL SIGNAL HEADS INSTALLED ON A COMMON SPAN WIRE SHALL HAVE THE OPENING OF THE WEATHER HEAD FACING THE SAME DIRECTION FOR THE WIRE ENTRANCE.

2. CABLE RINGS SHALL BE OF THE SIZE TO PROPERLY FIT THE 1/2" TEMPORARY SPAN WIRE.

D. DETECTORS:

1. VIDEO DETECTION SHALL BE USED ONLY FOR TEMPORARY TRAFFIC SIGNAL OPERATIONS.

2. THE DETECTION ZONES FOR VIDEO DETECTION SHALL EXTEND 5' IN FRONT OF THE STOP LINES UNLESS OTHERWISE SPECIFIED.

E. SIGNS AND PAVEMENT MARKINGS:

1. TEMPORARY SPAN WIRE SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH ST'D.SMD-1.

F. TIMINGS

1. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF PLANNED MODIFICATIONS TO SIGNALIZED INTERSECTIONS BETWEEN 50 AND 70 DAYS PRIOR TO PLANNED MODIFICATION. TO ALLOW THE ENGINEER TO DEVELOP AND SUBMIT TIMING PACKAGE TO VDOT BETWEEN 30 AND 60 DAYS PRIOR TO MODIFICATION.

N.T.S.	PROJECT 0028-029-269	SHEET NO. 37(B)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
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SIGNALIZATION PLAN

Centreville Rd (Rte 28) & Upperridge Dr (Rte 8349) /Old Centreville Rd (Rte 898)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	37(1)

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ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Cable & Conduit Runs

- (A) 2-1" METAL CONDUITS
- (B) 3-1" METAL CONDUITS
- (C) 4-1" METAL CONDUITS
- (D) 1-3" CONDUIT; 3-14/2C(S) FOR DETECTORS
- (E) EXISTING CONDUIT; 3-14/2C(S) FOR DETECTORS
- (F) EXISTING CONDUIT; 5-14/2C(S) FOR DETECTORS
- (G) 1-3" CONDUIT; 5-14/2C(S) FOR DETECTORS
- (H) 1-3" CONDUIT; 3-14/7C FOR HEADS 1,5,6; 1-CABLE FOR CCTV; 1-#6 AWG EGC; 1-2" CONDUIT; 1-CABLE FOR PREEMPTION ✕; 1-#6 AWG EGC
- (I) 1-3" CONDUIT; 1-14/2C FOR PED PB; 1-14/7C FOR PED HEAD P4; 1-#6 AWG EGC
- (J) 1-3" CONDUIT; 1-14/2C FOR PED PB; 1-14/7C FOR PED HEAD P6; 1-14/7C FOR HEAD 4; 1-#6 AWG EGC
- (K) 1-4" BORED CONDUIT; 2-14/2C FOR PED PB'S; 2-14/7C FOR PED HEADS P4,P6; 1-14/7C FOR HEAD 4; 3-14/7C FOR HEADS 1,5,6; 1-CABLE FOR CCTV; 4-14/2C(S) FOR DETECTORS; 1-#6 AWG EGC; 1-2" CONDUIT; 1-CABLE FOR PREEMPTION ✕; 1-#6 AWG EGC
- (L) 1-3" BORED CONDUIT; 1-14/2C FOR PED PB; 1-14/7C FOR PED HEAD P6; 4-14/7C FOR HEADS 3,6,7,8; 1-#6 AWG EGC; 1-2" CONDUIT; 1-CABLE FOR PREEMPTION ✕; 1-#6 AWG EGC
- (M) 1-4" BORED CONDUIT; 3-14/2C FOR PED PB'S; 3-14/7C FOR PED HEADS P4,P6; 1-14/7C FOR HEAD 4; 3-14/7C FOR HEADS 1,5,6; 4-14/7C FOR HEADS 3,6,7,8; 1-CABLE FOR CCTV; 9-14/2C(S) FOR DETECTORS; 1-#6 AWG EGC; 1-2" CONDUIT; 2-CABLES FOR PREEMPTION ✕; 1-#6 AWG EGC
- (N) 1-3" CONDUIT; 1-14/2C FOR PED PB; 1-14/7C FOR PED HEAD P4; 1-14/7C FOR HEAD 2; 1-#6 AWG EGC
- (O) 1-3" CONDUIT; 1-14/2C FOR PED PB; 1-14/7C FOR PED HEAD P4; 1-14/7C FOR HEAD 2; 5-14/2C(S) FOR DETECTORS; 1-#6 AWG EGC
- (P) 1-3" CONDUIT; 1-14/2C FOR PED PB; 1-14/7C FOR PED HEAD P2; 1-#6 AWG EGC
- (R) 1-3" CONDUIT; 3-14/7C FOR HEADS 3,4,7; 1-#6 AWG EGC; 1-2" CONDUIT; 1-CABLE FOR PREEMPTION ✕; 1-#6 AWG EGC
- (S) 1-4" BORED CONDUIT; 2-14/2C FOR PED PB'S; 2-14/7C FOR PED HEADS P2,P4; 1-14/7C FOR HEAD 2; 3-14/7C FOR HEADS 3,4,7; 5-14/2C(S) FOR DETECTORS; 1-#6 AWG EGC; 1-2" CONDUIT; 1-CABLE FOR PREEMPTION ✕; 1-#6 AWG EGC
- (T) 1-3" CONDUIT; 1-14/7C FOR HEAD 8; 1-#6 AWG EGC
- (U) 1-3" CONDUIT; 1-14/7C FOR HEAD 8; 4-14/2C(S) FOR DETECTORS; 1-#6 AWG EGC
- (V) 1-3" CONDUIT; 3-14/7C FOR HEADS 1,2,5; 1-#6 AWG EGC; 1-2" CONDUIT; 1-CABLE FOR PREEMPTION ✕; 1-#6 AWG EGC
- (W) 1-4" CONDUIT; 6-14/2C FOR PED PB'S; 6-14/7C FOR PED HEADS P4,P6; 1-14/7C FOR HEAD 2; 3-14/7C FOR HEADS 3,4,7; 1-14/7C FOR HEAD 4; 3-14/7C FOR HEADS 1,5,6; 4-14/7C FOR HEADS 3,6,7,8; 3-14/7C FOR HEADS 1,2,5; 1-14/7C FOR HEAD 8; 1-#6 AWG EGC; 1-4" CONDUIT; 1-CABLE FOR CCTV; 14-14/2C(S) FOR DETECTORS; 1-#6 AWG EGC; 1-3" CONDUIT; 4-CABLES FOR PREEMPTION ✕; 1-#6 AWG EGC
- (X) 1-1" METAL CONDUIT; 1-#6 AWG EGC FOR COMMUNICATIONS
- (Y) 1-1 1/4" METAL CONDUIT; 3-#6 AWG FOR ELECTRICAL SERVICE
- (Z) 1-1" CONDUIT; 1-#6 AWG EGC FOR SYSTEM GROUNDING
- (AA) 1-2" CONDUIT (EMPTY) FOR ELECTRICAL SERVICE

EGC - ELECTRICAL GROUNDING CONDUCTOR
(S) - SHIELDED CABLE
✕ - FUTURE BY OTHERS

Street Name Signs

S-5 (8'-6" x 1'-6")
Centreville Rd
R-2.25" (TYP) 8" (TYP) CLEARVIEW 5-W

S-6 (13'-0" x 2'-6")
← Old Centreville Rd
Upperridge Dr →
R-3" (TYP) 8" (TYP) CLEARVIEW 5-W

S-7 (13'-0" x 2'-6")
← Upperridge Dr
Old Centreville Rd →
R-3" (TYP) 8" (TYP) CLEARVIEW 5-W

SIGNS ARE TO HAVE BLUE BACKGROUND WITH WHITE LEGEND AND BORDER.

Signals

ALL TRAFFIC SIGNAL HEAD SECTIONS SHALL BE 12" LED.

HEADS 2,4,6,8 — HEADS 1,3,5,7 — HEADS P2,P4,P6

ALL SIGNALS SHALL BE EQUIPPED WITH POLYCARBONATE RETROREFLECTIVE HIGH VISIBILITY BACK PLATES

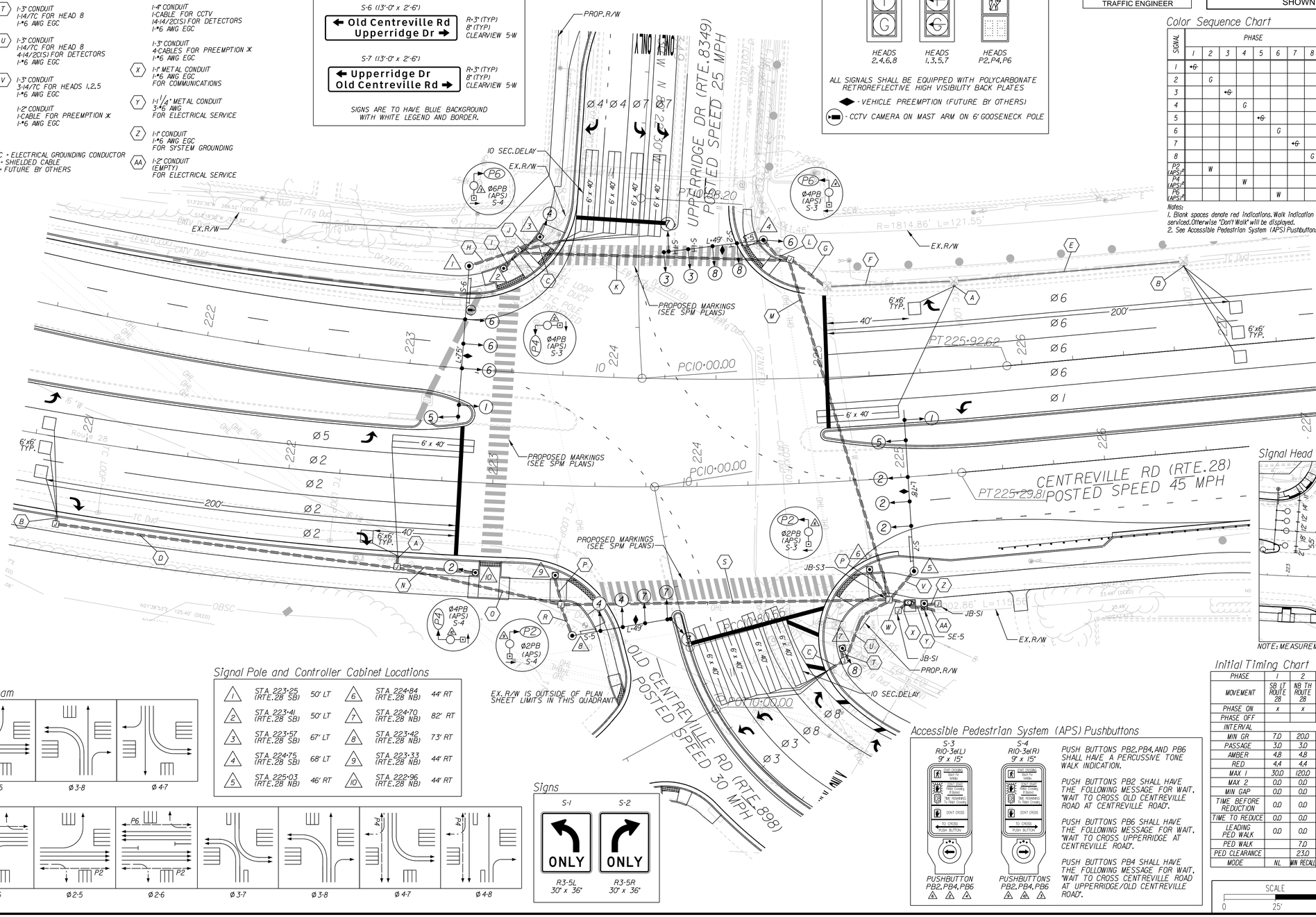
◆ - VEHICLE PREEMPTION (FUTURE BY OTHERS)

- CCTV CAMERA ON MAST ARM ON 6' GOOSENECK POLE

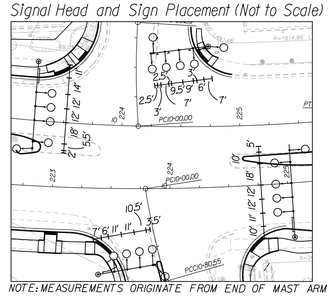
Color Sequence Chart

SIGNAL	PHASE 1	2	3	4	5	6	7	8	COMBINATION 1-5	1-6	2-5	2-6	3-7	3-8	4-7	4-8	FLASH
1	~~G~~								~~G~~	~~G~~							~~A~~
2		G									G	G					Y
3			~~G~~										~~G~~	~~G~~			~~A~~
4				G											G	G	R
5					~~G~~				~~G~~		~~G~~						~~A~~
6						G				G		G					Y
7							~~G~~						~~G~~		~~G~~		~~A~~
8								G						G		G	R
P2 (APS)	W										W	W					BLNK
P4 (APS)				W											W	W	BLNK
P6 (APS)						W				W		W					BLNK

Notes:
1. Blank spaces denote red indications. Walk indication displayed after pedestrian call serviced. Otherwise "Don't Walk" will be displayed.
2. See Accessible Pedestrian System (APS) Pushbuttons detail.



Signal Head and Sign Placement (Not to Scale)



NOTE: MEASUREMENTS ORIGINATE FROM END OF MAST ARM

Preemption Phasing Diagram

Phasing Diagram

Signal Pole and Controller Cabinet Locations

1	STA 223+25 (RTE.28 SB)	50' LT	6	STA 224+84 (RTE.28 NB)	44' RT
2	STA 223+41 (RTE.28 SB)	50' LT	7	STA 224+70 (RTE.28 NB)	82' RT
3	STA 223+57 (RTE.28 SB)	67' LT	8	STA 223+42 (RTE.28 NB)	73' RT
4	STA 224+75 (RTE.28 SB)	68' LT	9	STA 223+33 (RTE.28 NB)	44' RT
5	STA 225+03 (RTE.28 NB)	46' RT	10	STA 222+96 (RTE.28 NB)	44' RT

Signs

S-1: R3-5L 30" x 36" — ONLY

S-2: R3-5R 30" x 36" — ONLY

Accessible Pedestrian System (APS) Pushbuttons

S-3 R10-3e(L) 9" x 15" — PUSHBUTTON PB2, PB4, PB6

S-4 R10-3e(R) 9" x 15" — PUSHBUTTONS PB2, PB4, PB6

PUSH BUTTONS PB2, PB4, AND PB6 SHALL HAVE A PERCUSSIVE TONE WALK INDICATION.

PUSH BUTTONS PB2 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS OLD CENTREVILLE ROAD AT CENTREVILLE ROAD".

PUSH BUTTONS PB6 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS UPPERRIDGE AT CENTREVILLE ROAD".

PUSH BUTTONS PB4 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS CENTREVILLE ROAD AT UPPERRIDGE/OLD CENTREVILLE ROAD".

Initial Timing Chart

PHASE	1	2	3	4	5	6	7	8
MOVEMENT	SB LT ROUTE 28	NB TH ROUTE 28	WB LT ROUTE 898	EB TH ROUTE 8349	NB LT ROUTE 28	SB TH ROUTE 28	EB LT ROUTE 8349	WB TH ROUTE 898
PHASE ON	x	x	x	x	x	x	x	x
PHASE OFF								
INTERVAL	PHASE TIMINGS							
MIN GR	7.0	20.0	7.0	10.0	7.0	20.0	7.0	10.0
PASSAGE	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
AMBER	4.8	4.8	4.3	4.3	4.8	4.8	4.8	4.8
RED	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
MAX 1	30.0	120.0	30.0	40.0	30.0	120.0	30.0	40.0
MAX 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MIN GAP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TIME BEFORE REDUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TIME TO REDUCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEADING PED WALK	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
PED WALK		7.0		7.0		7.0		
PED CLEARANCE		23.0		26.0		22.0		
MODE	NL	MIN RECALL	NL	NL	NL	MIN RECALL	NL	NL

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	37(1)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SIGNALIZATION PLAN

Centreville Rd (Rte 28) & Machen Rd (Rte 5401)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	37(2)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

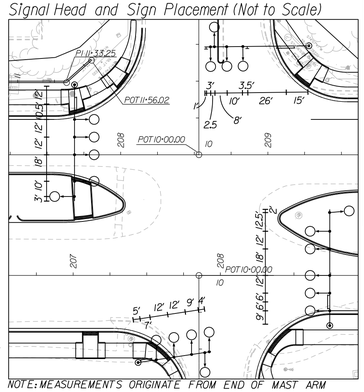
ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Cable & Conduit Runs

- (A) 2-1" METAL CONDUITS
- (B) 3-1" METAL CONDUITS
- (C) 4-1" METAL CONDUITS
- (D) 1-3" CONDUIT 3-14/2C(S) FOR DETECTORS
- (E) 1-3" CONDUIT 4-14/2C(S) FOR DETECTORS
- (F) 1-3" CONDUIT 5-14/2C(S) FOR DETECTORS
- (G) 1-3" CONDUIT 6-14/2C(S) FOR DETECTORS
- (H) 1-3" CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR PED HEAD P4 1-14/7C FOR HEAD 2 1-#6 AWG EGC
- (I) 1-3" CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR PED HEAD P2 1-#6 AWG EGC
- (J) 1-3" CONDUIT 3-14/7C FOR HEADS 3,4,7 1-#6 AWG EGC
  1-2" CONDUIT 1-CABLE FOR PREEMPTION ✕ 1-#6 AWG EGC
- (K) 1-4" BORED CONDUIT 2-14/2C FOR PED PB'S 2-14/7C FOR PED HEADS P2,P4 1-14/7C FOR HEAD 2 3-14/7C FOR HEADS 3,4,7 6-14/2C(S) FOR DETECTORS 1-#6 AWG EGC
  1-2" BORED CONDUIT 1-CABLE FOR PREEMPTION ✕ 1-#6 AWG EGC
- (L) 1-3" CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR PED HEAD P2 1-14/7C FOR HEAD 8 1-#6 AWG EGC
- (M) 1-3" CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR PED HEAD P2 1-14/7C FOR HEAD 8 3-14/2C(S) FOR DETECTORS ✕ 1-#6 AWG EGC
- (N) 1-3" CONDUIT 3-14/7C FOR HEADS 1,2,5 1-#6 AWG EGC
  1-2" CONDUIT 1-CABLE FOR PREEMPTION ✕ 1-#6 AWG EGC
- (O) 1-4" BORED CONDUIT 3-14/2C FOR PED PB'S 3-14/7C FOR PED HEADS P2,P4 1-14/7C FOR HEAD 2 3-14/7C FOR HEADS 3,4,7 1-14/7C FOR HEAD 8 3-14/7C FOR HEADS 1,2,5 9-14/2C(S) FOR DETECTORS 1-#6 AWG EGC
  1-2" BORED CONDUIT 2-CABLES FOR PREEMPTION ✕ 1-#6 AWG EGC
- (P) 1-3" CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR PED HEAD P4 1-#6 AWG EGC
- (R) 1-3" CONDUIT 3-14/7C FOR HEADS 1,5,6 1-#6 AWG EGC
  1-2" CONDUIT 1-CABLE FOR PREEMPTION ✕ 1-#6 AWG EGC
- (S) 1-3" CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR PED HEAD P6 1-14/7C FOR HEAD 4 1-#6 AWG EGC
- (T) 1-4" BORED CONDUIT 2-14/2C FOR PED PB'S 2-14/7C FOR PED HEADS P4,P6 3-14/7C FOR HEADS 1,5,6 1-14/7C FOR HEAD 4 4-14/2C(S) FOR DETECTORS 1-#6 AWG EGC
  1-2" BORED CONDUIT 1-CABLE FOR PREEMPTION ✕ 1-#6 AWG EGC
- (U) 1-3" CONDUIT 1-14/2C FOR PED PB 1-14/7C FOR PED HEAD P6 1-14/7C FOR HEAD 6 1-#6 AWG EGC
- (V) 1-3" CONDUIT 6-14/2C FOR PED PB'S 6-14/7C FOR PED HEADS P2,P4,P6 1-14/7C FOR HEAD 2 3-14/7C FOR HEADS 3,4,7 1-14/7C FOR HEAD 8 3-14/7C FOR HEADS 1,2,5 1-14/7C FOR HEAD 4 3-14/7C FOR HEADS 1,5,6 1-14/7C FOR HEAD 6 18-14/2C(S) FOR DETECTORS 1-#6 AWG EGC
  1-2" CONDUIT 3-CABLE FOR PREEMPTIONS ✕ 1-#6 AWG EGC
- (W) 1-3" CONDUIT 3-14/7C FOR HEADS 3,7,8 1-CABLE FOR CCTV 1-#6 AWG EGC
  1-2" CONDUIT 1-CABLE FOR PREEMPTION ✕ 1-#6 AWG EGC
- (X) 1-4" CONDUIT 6-14/2C FOR PED PB'S 6-14/7C FOR PED HEADS P2,P4,P6 1-14/7C FOR HEAD 2 3-14/7C FOR HEADS 3,4,7 1-14/7C FOR HEAD 8 3-14/7C FOR HEADS 1,2,5 1-14/7C FOR HEAD 4 3-14/7C FOR HEADS 1,5,6 1-14/7C FOR HEAD 6 3-14/7C FOR HEADS 3,7,8 1-#6 AWG EGC
  1-4" CONDUIT 1-CABLE FOR CCTV 18-14/2C(S) FOR DETECTORS 1-#6 AWG EGC
  1-3" CONDUIT 4-CABLES FOR PREEMPTION ✕ 1-#6 AWG EGC
- (Y) 1-1 1/4" METAL CONDUIT 3-#6 AWG EGC FOR ELECTRICAL SERVICE
- (Z) 1-1" CONDUIT 1-#6 AWG EGC FOR SYSTEM GROUNDING
- (AA) 1-1" METAL CONDUIT 1-#6 AWG EGC FOR COMMUNICATIONS
- (BB) 1-2" CONDUIT (EMPTY) FOR ELECTRICAL SERVICES

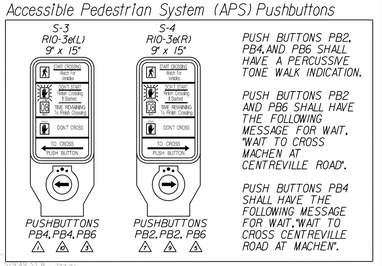
EGC - ELECTRICAL GROUNDING CONDUCTOR
(S) - SHIELDED CABLE
✕ - FUTURE BY OTHERS

Signal Head and Sign Placement (Not to Scale)



NOTE: MEASUREMENTS ORIGINATE FROM END OF MAST ARM

Accessible Pedestrian System (APS) Pushbuttons



PUSH BUTTONS PB2, PB4, AND PB6 SHALL HAVE A PERCUSSIVE TONE WALK INDICATION.

PUSH BUTTONS PB2 AND PB6 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS MACHEN AT CENTREVILLE ROAD".

PUSH BUTTONS PB4 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS CENTREVILLE ROAD AT MACHEN".

Initial Timing Chart

PHASE	1	2	3	4	5	6	7	8
MOVEMENT	SB LT ROUTE 28	NB TH ROUTE 28	WB LT ROUTE 5401	EB TH ROUTE 5401	NB LT ROUTE 28	SB TH ROUTE 28	EB LT ROUTE 5401	WB TH ROUTE 5401
PHASE ON	x	x	x	x	x	x	x	x
PHASE OFF								
INTERVAL	PHASE TIMINGS							
MIN GR	7.0	20.0	7.0	10.0	7.0	20.0	7.0	10.0
PASSAGE	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
AMBER	3.9	4.8	3.0	3.4	3.9	4.8	3.0	3.3
RED	4.6	1.2	5.0	3.4	4.8	1.0	5.4	2.7
MAX 1	30.0	120.0	30.0	40.0	30.0	120.0	30.0	40.0
MAX 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MIN GAP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TIME BEFORE REDUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TIME TO REDUCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEADING PED WALK	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0
PED WALK		7.0		9.0		8.0		
PED CLEARANCE		17.0		38.0		30.0		
MODE	NL	MIN RECALL	NL	NL	NL	MIN RECALL	NL	NL

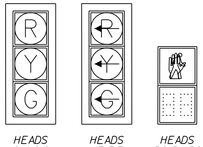
Pole Locations

1	STA 207+63 (RTE.28 SB)	32' LT	6	STA 208+74 (RTE.28 NB)	34' RT
2	STA 207+69 (RTE.28 SB)	48' LT	7	STA 208+44 (RTE.28 NB)	51' RT
3	STA 207+95 (RTE.28 SB)	46' LT	8	STA 207+44 (RTE.28 NB)	59' RT
4	STA 209+28 (RTE.28 SB)	74' LT	9	STA 207+44 (RTE.28 NB)	44' RT
5	STA 209+32 (RTE.28 SB)	50' LT	10	STA 207+19 (RTE.28 NB)	45' RT

Preemption Phasing Diagram

Signals

ALL TRAFFIC SIGNAL HEAD SECTIONS SHALL BE 12" LED.



ALL SIGNALS SHALL BE EQUIPPED WITH POLYCARBONATE RETROREFLECTIVE HIGH VISIBILITY BACK PLATES

◆ - VEHICLE PREEMPTION (FUTURE BY OTHERS)

(CCTV) - CCTV CAMERA ON MAST ARM ON 6' GOOSENECK POLE

Color Sequence Chart

SIGNAL	PHASE 1	2	3	4	5	6	7	8	COMBINATION 1-5	1-6	2-5	2-6	3-7	3-8	4-7	4-8	FLASH
1	~~G~~								~~G~~	~~G~~							~~A~~
2		G									G	G					Y
3			~~G~~										~~G~~	~~G~~			~~A~~
4				G											G	G	R
5					~~G~~				~~G~~		~~G~~						~~A~~
6						G				G		G					Y
7							~~G~~						~~G~~		~~G~~		~~A~~
8								G						G		G	R
P2 (APS)*		W									W	W					BLNK
P4 (APS)*				W											W	W	BLNK
P6 (APS)*						W				W		W					BLNK

Notes:
1. Blank spaces denote red indications. Walk indication displayed after pedestrian call serviced. Otherwise "Don't Walk" will be displayed.
2. See Accessible Pedestrian System (APS) Pushbuttons detail.

Street Name Signs

S-5 (13'-6" x 2'-0")
Centreville Rd
R-3" (TYP) 12" (TYP) CLEARVIEW 5-W

S-6 (10'-0" x 2'-0")
Machen Rd
R-3" (TYP) 12" (TYP) CLEARVIEW 5-W

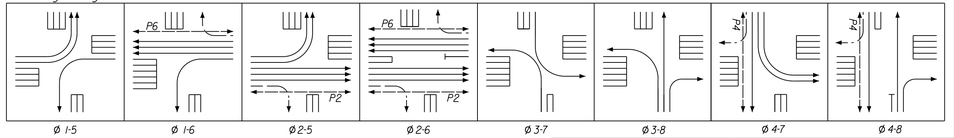
S-7 (8'-6" x 1'-6")
Centreville Rd
R-2.25" (TYP) 8" (TYP) CLEARVIEW 5-W

SIGNS ARE TO HAVE BLUE BACKGROUND WITH WHITE LEGEND AND BORDER.

Signs

S-1: ONLY — R3-5L 30" x 36"
S-2: ONLY — R3-5R 30" x 36"

Phasing Diagram



SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	37(2)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SIGNALIZATION PLAN

Centreville Rd (Rte 28) & New Braddock Rd (Rte 620)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	37(3)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Pole Locations

1	STA 195+73 (RTE.28 SB)	44' LT	7	STA 198+23 (RTE.28 NB)	48' RT
2	STA 195+93 (RTE.28 SB)	60' LT	8	STA 198+09 (RTE.28 NB)	51' RT
3	STA 197+76 (RTE.28 SB)	66' LT	9	STA 196+54 (RTE.28 NB)	74' RT
4	STA 198+29 (RTE.28 SB)	44' LT	10	STA 196+22 (RTE.28 NB)	45' RT
5	STA 197+90 (RTE.28 NB)	36' LT	11	STA 195+48 (RTE.28 NB)	44' RT
6	STA 198+20 (RTE.28 NB)	32' RT	12	STA 197+98 (RTE.28 NB)	88' RT

Signals

ALL TRAFFIC SIGNAL HEAD SECTIONS SHALL BE 12" LED.

HEADS 2,3,4,6 | HEADS 1,3B,4B,5 | HEADS 3A,4A | HEADS P2,P3,P4,P6

ALL SIGNALS SHALL BE EQUIPPED WITH POLYCARBONATE RETROREFLECTIVE HIGH VISIBILITY BACK PLATES

◆ - VEHICLE PREEMPTION (FUTURE BY OTHERS)

- CCTV CAMERA ON MAST ARM ON 6' GOOSENECK POLE

Color Sequence Chart

SIGNAL	PHASE 1	2	3	4	5	6	COMBINATION 1-5	1-6	2-5	2-6	FLASH
1	~~G~~						~~G~~	~~G~~			~~R~~
2		G							G	G	Y
3			G								R
3A			G				R ~~G~~	R ~~G~~			R
3B			~~G~~								~~R~~
4				G							R
4A				G ~~G~~			R ~~G~~		R ~~G~~		R
4B				~~G~~							~~R~~
5					~~G~~		~~G~~		~~G~~		~~R~~
6						G		G		G	Y
P2 (APS)[2]		W							W	W	BLNK
P3 (APS)[2]			W								BLNK
P6 (APS)[2]						W		W		W	BLNK

Notes:
1. Blank spaces denote red indications. Walk indication displayed after pedestrian call serviced. Otherwise "Don't Walk" will be displayed.
2. See Accessible Pedestrian System (APS) Pushbuttons detail.

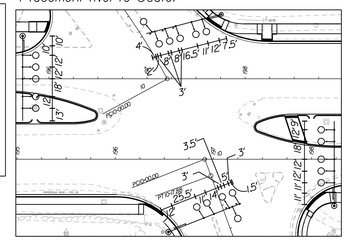
Street Name Signs

S-5 (13'-6" x 2'-0")
Centreville Rd — R-3" (TYP) 12" (TYP) CLEARVIEW 5-W

S-6 (13'-0" x 2'-0")
New Braddock Rd — R-3" (TYP) 10" (TYP) CLEARVIEW 5-W

SIGNS ARE TO HAVE BLUE BACKGROUND WITH WHITE LEGEND AND BORDER.

Signal Head and Sign Placement (Not to Scale)

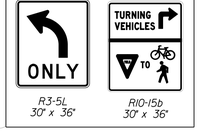


NOTE: MEASUREMENTS ORIGINATE FROM END OF MAST ARM

Signs

S-3: ONLY — R3-5L, 30" x 36"

S-4: TURNING VEHICLES TO — R10-15b, 30" x 36"

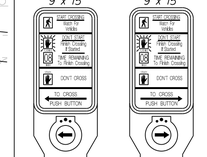


Initial Timing Chart

PHASE	1	2	3	4	5	6	7	8
MOVEMENT	SB LT ROUTE 28	NB TH ROUTE 28	WB LTR ROUTE 620	EB LTR ROUTE 620	NB LT ROUTE 28	SB TH ROUTE 28		
PHASE ON	x	x	x	x	x	x		
PHASE OFF							x	x
INTERVAL	PHASE TIMINGS							
MIN GR	7.0	20.0	10.0	10.0	7.0	20.0		
PASSAGE	3.0	3.0	3.0	3.0	3.0	3.0		
AMBER	4.0	4.9	5.2	4.5	4.0	4.9		
RED	5.3	1.5	8.9	7.0	5.7	2.3		
MAX 1	30.0	120.0	40.0	40.0	30.0	120.0		
MAX 2	0.0	0.0	0.0	0.0	0.0	0.0		
MIN GAP	0.0	0.0	0.0	0.0	0.0	0.0		
TIME BEFORE REDUCTION	0.0	0.0	0.0	0.0	0.0	0.0		
TIME TO REDUCE	0.0	0.0	0.0	0.0	0.0	0.0		
LEADING PED WALK	0.0	0.0	0.0	0.0	0.0	0.0		
PED WALK		10.0	10.0			10.0		
PED CLEARANCE		39.0	43.0			43.0		
MODE	NL	MIN RECALL	NL	NL	NL	MIN RECALL		

Accessible Pedestrian System (APS) Pushbuttons

S-1: R10-3e(L) 9" x 15" — S-2: R10-3e(R) 9" x 15"



PUSHBUTTON PB3, PB6 | PUSHBUTTONS PB2, PB2, PB3, PB6

PUSH BUTTONS PB2, PB3, AND PB6 SHALL HAVE A PERCUSSIVE TONE WALK INDICATION.

PUSH BUTTONS PB2 AND PB6 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS NEW BRADDOCK RD AT CENTREVILLE ROAD".

PUSH BUTTONS PB3 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS CENTREVILLE ROAD AT NEW BRADDOCK RD".

Cable & Conduit Runs

(A) 1-1" METAL CONDUIT

(B) 2-1" METAL CONDUITS

(C) 3-1" METAL CONDUITS

(D) 5-1" METAL CONDUITS

(E) 6-1" METAL CONDUITS

(F) 1-3" CONDUIT
3-14/2C(S) FOR DETECTORS

(G) 1-3" CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P6
1-14/7C FOR HEAD 4A
1-#6 AWG EGC

(H) 1-3" CONDUIT
2-14/7C FOR HEADS 1,6
1-#6 AWG EGC

1-2" CONDUIT
1-CABLE FOR PREEMPTION ✕
1-#6 AWG EGC

(I) 1-4" BORED CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P6
2-14/7C FOR HEADS 1,6
1-14/7C FOR HEAD 4A
5-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

1-2" BORED CONDUIT
1-CABLE FOR PREEMPTION ✕
1-#6 AWG EGC

(J) 1-3" CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P6
4-14/7C FOR HEADS 3,3A,3B,4B
1-#6 AWG EGC

1-2" CONDUIT
1-CABLE FOR PREEMPTION ✕
1-#6 AWG EGC

(K) 1-3" CONDUIT
2-14/2C FOR PED PB'S
2-14/7C FOR PED HEADS P6
2-14/7C FOR HEADS 1,6
1-14/7C FOR HEAD 4A
4-14/7C FOR HEADS 3,3A,3B,4B
5-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

1-2" CONDUIT
2-CABLES FOR PREEMPTION ✕
1-#6 AWG EGC

(L) 1-3" CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P3
1-14/7C FOR HEAD 6
1-#6 AWG EGC

(M) 1-4" BORED CONDUIT
3-14/2C FOR PED PB'S
3-14/7C FOR PED HEADS P3,P6
2-14/7C FOR HEADS 1,6
1-14/7C FOR HEAD 4A
4-14/7C FOR HEADS 3,3A,3B,4B
1-14/7C FOR HEAD 6
9-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

1-2" BORED CONDUIT
2-CABLES FOR PREEMPTION ✕
1-#6 AWG EGC

(N) 1-3" CONDUIT
1-14/7C FOR HEAD 1
1-#6 AWG EGC

(O) 1-4" BORED CONDUIT
3-14/2C FOR PED PB'S
3-14/7C FOR PED HEADS P3,P6
2-14/7C FOR HEADS 1,6
1-14/7C FOR HEAD 4A
4-14/7C FOR HEADS 3,3A,3B,4B
1-14/7C FOR HEAD 6
1-14/7C FOR HEAD 1
11-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

1-2" CONDUIT
2-CABLES FOR PREEMPTION ✕
1-#6 AWG EGC

(P) 1-3" CONDUIT
1-14/7C FOR HEAD 5
1-#6 AWG EGC

(R) 1-4" BORED CONDUIT
1-14/7C FOR HEAD 5
2-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

(S) 1-3" CONDUIT
1-14/7C FOR HEAD 5
6-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

(T) 1-3" CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P2
1-14/7C FOR HEAD 2
1-#6 AWG EGC

(U) 1-3" CONDUIT
4-14/7C FOR HEADS 3B,4,4A,4B
1-#6 AWG EGC

1-2" CONDUIT
1-CABLE FOR PREEMPTION ✕
1-#6 AWG EGC

(V) 1-4" BORED CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P2
1-14/7C FOR HEAD 5
1-14/7C FOR HEAD 2
4-14/7C FOR HEADS 3B,4,4A,4B
6-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

1-2" CONDUIT
1-CABLE FOR PREEMPTION ✕
1-#6 AWG EGC

(W) 1-3" CONDUIT
1-14/7C FOR HEAD 3A
1-#6 AWG EGC

(X) 1-3" CONDUIT
1-14/7C FOR HEAD 3A
6-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

(Y) 1-3" CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P2
1-#6 AWG EGC

(Z) 1-3" CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P3
1-#6 AWG EGC

(AA) 1-3" CONDUIT
1-14/7C FOR HEADS 2,5
1-CABLE FOR CCTV
1-#6 AWG EGC

1-2" CONDUIT
1-CABLE FOR PREEMPTION ✕
1-#6 AWG EGC

(BB) 1-4" CONDUIT
6-14/2C FOR PED PB'S
6-14/7C FOR PED HEADS P2,P3,P6
2-14/7C FOR HEADS 1,6
1-14/7C FOR HEAD 4A
4-14/7C FOR HEADS 3,3A,3B,4B
1-14/7C FOR HEAD 6
1-14/7C FOR HEAD 1
1-14/7C FOR HEAD 5
1-14/7C FOR HEAD 2
4-14/7C FOR HEADS 3B,4,4A,4B
1-14/7C FOR HEAD 3A
2-14/7C FOR HEADS 2,5
1-#6 AWG EGC

1-4" CONDUIT
1-CABLE FOR CCTV
23-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

1-3" CONDUIT
4-CABLES FOR PREEMPTION ✕
1-#6 AWG EGC

(CC) 1-1" METAL CONDUIT
1-#6 AWG EGC
FOR COMMUNICATIONS

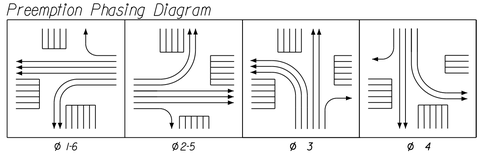
(DD) 1-1¼" METAL CONDUIT
3-#6 AWG EGC
FOR ELECTRICAL SERVICE

(EE) 1-1" CONDUIT
1-#6 AWG EGC
FOR SYSTEM GROUNDING

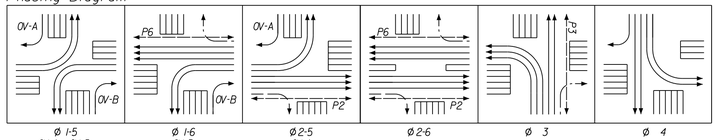
(FF) 1-2" CONDUIT
(EMPTY)
FOR ELECTRICAL SERVICES

EGC - ELECTRICAL GROUNDING CONDUCTOR
(S) - SHIELDED CABLE
✕ - FUTURE BY OTHERS

Preemption Phasing Diagram



Phasing Diagram



SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	37(3)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SIGNALIZATION PLAN

Centreville Rd (Rte 28) & Old Mill Rd (Rte 8591)/Green Trails Blvd (Rte 8024)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
	VA.	28	0028-029-269 P101 R201 C501	37(4)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Cable & Conduit Runs

- (A) 1-1" METAL CONDUIT
- (B) 2-1" METAL CONDUITS
- (C) 3-1" METAL CONDUITS
- (D) 1-3" CONDUIT
  3-14/2C(S) FOR DETECTORS
- (E) 1-3" CONDUIT
  4-14/2C(S) FOR DETECTORS
- (F) 1-3" CONDUIT
  1-14/2C FOR PED PB
  1-14/7C FOR PED HEAD P8
  1-#6 AWG EGC
- (G) 1-3" CONDUIT
  3-14/7C FOR HEADS 3,7,8
  1-#6 AWG EGC

  1-2" CONDUIT
  1-CABLE FOR PREEMPTION ✕
  1-#6 AWG EGC
- (H) 1-3" CONDUIT
  1-14/2C FOR PED PB
  1-14/7C FOR PED HEAD P6
  1-#6 AWG EGC
- (I) 1-3" CONDUIT
  2-14/7C FOR HEADS 1,6
  1-#6 AWG EGC

  1-2" CONDUIT
  1-CABLE FOR PREEMPTION ✕
  1-#6 AWG EGC
- (J) 1-3" CONDUIT
  1-14/2C FOR PED PB
  1-14/7C FOR PED HEAD P6
  1-14/7C FOR HEAD 4
  1-#6 AWG EGC
- (K) 1-4" BORED CONDUIT
  1-14/2C FOR PED PB
  1-14/7C FOR PED HEAD P6
  2-14/7C FOR HEADS 1,6
  1-14/7C FOR HEAD 4
  3-14/2C(S) FOR DETECTORS
  1-#6 AWG EGC

  1-2" BORED CONDUIT
  1-CABLE FOR PREEMPTION ✕
  1-#6 AWG EGC
- (L) 1-4" BORED CONDUIT
  3-14/2C FOR PED PB'S
  3-14/7C FOR PED HEADS P6,P8
  2-14/7C FOR HEADS 1,6
  1-14/7C FOR HEAD 4
  3-14/7C FOR HEADS 3,7,8
  7-14/2C(S) FOR DETECTORS
  1-#6 AWG EGC

  1-2" BORED CONDUIT
  2-CABLES FOR PREEMPTION ✕
  1-#6 AWG EGC
- (M) 1-4" BORED CONDUIT
  3-14/2C FOR PED PB'S
  3-14/7C FOR PED HEADS P6,P8
  2-14/7C FOR HEADS 1,6
  1-14/7C FOR HEAD 4
  3-14/7C FOR HEADS 3,7,8
  8-14/2C(S) FOR DETECTORS
  1-#6 AWG EGC

  1-2" BORED CONDUIT
  2-CABLES FOR PREEMPTION ✕
  1-#6 AWG EGC
- (N) 1-3" CONDUIT
  2-14/7C FOR HEADS 2,5
  1-CABLE FOR CCTV
  1-#6 AWG EGC

  1-2" CONDUIT
  1-CABLE FOR PREEMPTION ✕
  1-#6 AWG EGC
- (O) 1-3" CONDUIT
  1-14/2C FOR PED PB
  1-14/7C FOR PED HEAD P2
  1-14/7C FOR HEAD 8
  1-#6 AWG EGC
- (P) 1-3" CONDUIT
  5-14/2C(S) FOR DETECTORS
  1-#6 AWG EGC
- (R) 1-3" CONDUIT
  3-14/7C FOR HEADS 3,4,7
  1-#6 AWG EGC

  1-2" CONDUIT
  1-CABLE FOR PREEMPTION ✕
  1-#6 AWG EGC
- (S) 1-3" CONDUIT
  1-14/2C FOR PED PB
  1-14/7C FOR PED HEAD P2
  1-#6 AWG EGC
- (T) 1-4" BORED CONDUIT
  1-14/2C FOR PED PB
  1-14/7C FOR PED HEAD P2
  3-14/7C FOR HEADS 3,4,7
  5-14/2C(S) FOR DETECTORS
  1-#6 AWG EGC

  1-2" BORED CONDUIT
  1-CABLE FOR PREEMPTION ✕
  1-#6 AWG EGC
- (V) 1-3" CONDUIT
  5-14/2C FOR PED PB'S
  5-14/7C FOR PED HEADS P2,P4,P6
  2-14/7C FOR HEADS 1,6
  1-14/7C FOR HEAD 4
  3-14/7C FOR HEADS 3,7,8
  2-14/7C FOR HEADS 2,5
  1-14/7C FOR HEAD 8
  8-14/2C(S) FOR DETECTORS
  1-#6 AWG EGC

  1-2" CONDUIT
  3-CABLES FOR PREEMPTION ✕
  1-#6 AWG EGC
- (W) 1-4" CONDUIT
  6-14/2C FOR PED PB'S
  6-14/7C FOR PED HEADS P2,P4,P6
  2-14/7C FOR HEADS 1,6
  1-14/7C FOR HEAD 4
  3-14/7C FOR HEADS 3,7,8
  2-14/7C FOR HEADS 2,5
  1-14/7C FOR HEAD 8
  3-14/7C FOR HEADS 3,4,7
  1-#6 AWG EGC

  1-4" CONDUIT
  1-CABLE FOR CCTV
  16-14/2C(S) FOR DETECTORS
  1-#6 AWG EGC

  1-3" CONDUIT
  4-CABLES FOR PREEMPTION ✕
  1-#6 AWG EGC
- (X) 1-1 1/4" METAL CONDUIT
  3-#6 AWG
  FOR ELECTRICAL SERVICE
- (Y) 1-1" METAL CONDUIT
  1-#6 AWG EGC
  FOR COMMUNICATIONS
- (Z) 1-1" CONDUIT
  1-#6 AWG EGC
  FOR SYSTEM GROUNDING
- (AA) 1-2" CONDUIT
  (EMPTY)
  FOR ELECTRICAL SERVICE

EGC = ELECTRICAL GROUNDING CONDUCTOR
(S) = SHIELDED CABLE
✕ = FUTURE BY OTHERS

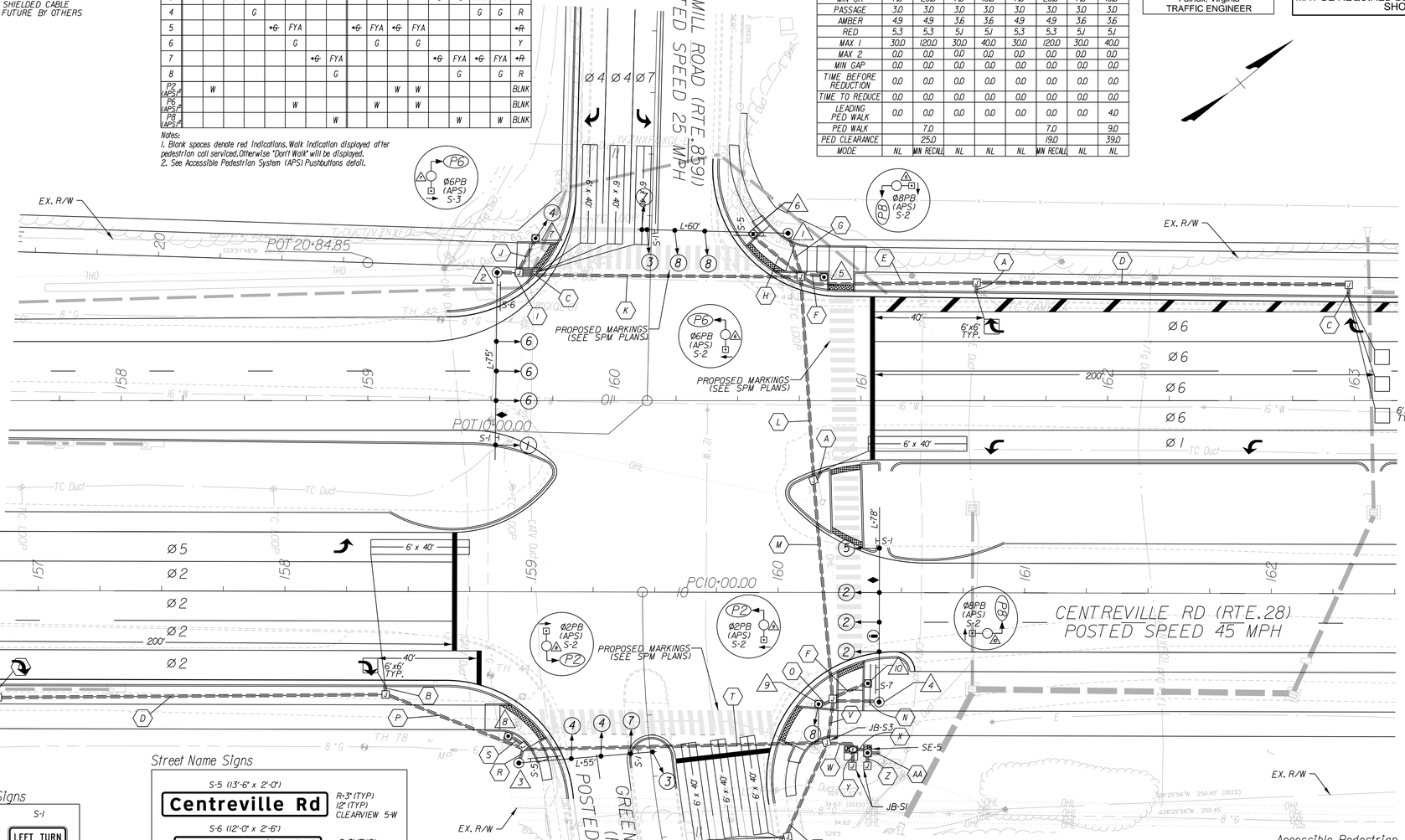
Color Sequence Chart

SIGNAL	PHASE 1	2	3	4	5	6	7	8	COMBINATION 1-5	1-6	2-5	2-6	3-7	3-8	4-7	4-8	FLASH
1	G	FYA							G	G	FYA	FYA					R
2		G									G	G					Y
3			G	FYA									G	G	FYA	FYA	R
4				G											G	G	R
5					G	FYA			G	FYA	G	FYA					R
6						G				G		G					Y
7							G	FYA					G	FYA	G	FYA	R
8								G						G		G	R
P2 (APS)*		W									W	W					BLNK
P6 (APS)*						W				W		W					BLNK
P8 (APS)*								W						W		W	BLNK

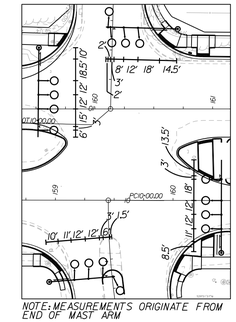
Notes:
1. Blank spaces denote red indications. Walk indication displayed after pedestrian call serviced. Otherwise "Don't Walk" will be displayed.
2. See Accessible Pedestrian System (APS) Pushbuttons detail.

Initial Timing Chart

PHASE	1	2	3	4	5	6	7	8
MOVEMENT	SB LT ROUTE 28	NB TH ROUTE 28	WB LT GREEN TRAILS	EB TH OLD MILL ROAD	NB LT ROUTE 28	SB TH ROUTE 28	EB LT OLD MILL ROAD	WB TH GREEN TRAILS
PHASE ON	x	x	x	x	x	x	x	x
PHASE OFF								
INTERVAL	PHASE TIMINGS							
MIN GR	7.0	20.0	7.0	10.0	7.0	20.0	7.0	10.0
PASSAGE	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
AMBER	4.9	4.9	3.6	3.6	4.9	4.9	3.6	3.6
RED	5.3	5.3	5.1	5.1	5.3	5.3	5.1	5.1
MAX 1	30.0	120.0	30.0	40.0	30.0	120.0	30.0	40.0
MAX 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MIN GAP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TIME BEFORE REDUCTION	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TIME TO REDUCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEADING PED WALK	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
PED WALK		7.0				7.0		9.0
PED CLEARANCE		25.0				19.0		39.0
MODE	NL	MIN RECALL	NL	NL	NL	MIN RECALL	NL	NL



Signal Head and Sign Placement (Not to Scale)



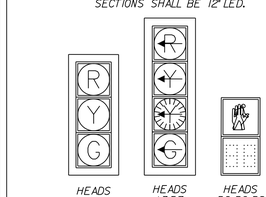
NOTE: MEASUREMENTS ORIGINATE FROM END OF MAST ARM

Pole Locations

1	STA 160+70 (RTE 28 SB)	68' LT
2	STA 159+52 (RTE 28 SB)	52' LT
3	STA 158+95 (RTE 28 NB)	69' RT
4	STA 160+41 (RTE 28 NB)	44' RT
5	STA 160+85 (RTE 28 SB)	50' LT
6	STA 160+56 (RTE 28 SB)	68' LT
7	STA 159+68 (RTE 28 SB)	66' LT
8	STA 159+91 (RTE 28 NB)	59' RT
9	STA 160+16 (RTE 28 NB)	45' RT
10	STA 160+36 (RTE 28 NB)	37' RT

Signals

ALL TRAFFIC SIGNAL HEAD SECTIONS SHALL BE 12" LED.



HEADS 2,4,6,8 — HEADS 1,3,5,7 — HEADS P2,P6,P8

ALL SIGNALS SHALL BE EQUIPPED WITH POLYCARBONATE RETROREFLECTIVE HIGH VISIBILITY BACK PLATES

◆ - VEHICLE PREEMPTION (FUTURE BY OTHERS)

- CCTV CAMERA ON MAST ARM ON 6' GOOSENECK POLE

Signs

S-1

LEFT TURN
YIELD
ON FLASHING
YELLOW
ARROW

R10-V1
36" x 42"

Street Name Signs

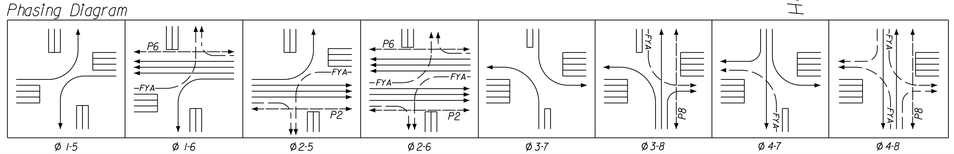
S-5 (13'-6" x 2'-0")
Centreville Rd
R-3" (TYP) 12" (TYP) CLEARVIEW 5-W

S-6 (12'-0" x 2'-6")
← Green Trails Blvd
Old Mill Rd →
R-3" (TYP) 8" (TYP) CLEARVIEW 5-W

S-7 (12'-0" x 2'-6")
← Old Mill Rd
Green Trails Blvd →
R-3" (TYP) 8" (TYP) CLEARVIEW 5-W

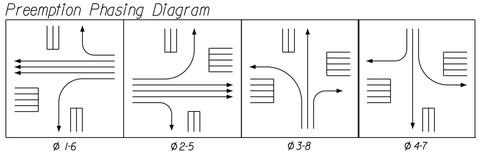
SIGNS ARE TO HAVE BLUE BACKGROUND WITH WHITE LEGEND AND BORDER.

Phasing Diagram



Ø 1-5 — Ø 1-6 — Ø 2-5 — Ø 2-6 — Ø 3-7 — Ø 3-8 — Ø 4-7 — Ø 4-8

Preemption Phasing Diagram



Ø 1-6 — Ø 2-5 — Ø 3-8 — Ø 4-7

Accessible Pedestrian System (APS) Pushbuttons

S-2
R10-3e(L)
9" x 15"

S-3
R10-3e(R)
9" x 15"

PUSHBUTTONS PB2, PB2, PB6, PB8, PB8

PUSHBUTTONS PB6

PUSH BUTTONS PB2, PB8, AND PB6 SHALL HAVE A PERCUSSIVE TONE WALK INDICATION.

PUSH BUTTONS PB2 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS GREEN TRAILS AT CENTREVILLE ROAD".

PUSH BUTTONS PB8 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS CENTREVILLE ROAD AT OLD MILL/GREEN TRAILS".

PUSH BUTTONS PB6 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS OLD MILL AT CENTREVILLE ROAD".

SCALE	PROJECT	SHEET NO.
0 25' 50'	0028-029-269	37(4)

PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

SIGNALIZATION PLAN

Centreville Rd (Rte 28) & Compton Rd (Rte 658)/Ordway Rd (Rte 616)

REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	37(5)

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
TRAFFIC ENGINEER

ADDITIONAL EASEMENTS FOR UTILITY RELOCATIONS MAY BE REQUIRED BEYOND THE PROPOSED RIGHT-OF-WAY SHOWN ON THESE PLANS

Cable & Conduit Runs

- (A) 1-1" METAL CONDUIT
- (B) 3-1" METAL CONDUITS
- (C) 4-1" METAL CONDUITS
- (D) 1-3" CONDUIT
3-14/2C(S) FOR DETECTORS
- (E) 1-3" CONDUIT
4-14/2C(S) FOR DETECTORS
- (F) 1-4" BORED CONDUIT
4-14/2C(S) FOR DETECTORS
- (G) 1-3" CONDUIT
5-14/2C(S) FOR DETECTORS
- (H) 1-3" CONDUIT
2-14/7C FOR HEADS 1,6
1-#6 AWG EGC

1-2" CONDUIT
1-CABLE FOR PREEMPTION ✕
1-#6 AWG EGC
- (I) 1-3" CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P4
1-#6 AWG EGC
- (J) 1-3" CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P4
2-14/7C FOR HEADS 1,6
1-#6 AWG EGC

1-2" CONDUIT
1-CABLE FOR PREEMPTION ✕
1-#6 AWG EGC
- (K) 1-3" CONDUIT
1-14/2C FOR PED PB
2-14/2C FOR PED PB'S
1-14/7C FOR PED HEADS P6
1-14/7C FOR HEAD 3A
1-#6 AWG EGC
- (L) 1-4" BORED CONDUIT
2-14/2C FOR PED PB'S
2-14/7C FOR PED HEADS P4,P6
2-14/7C FOR HEADS 1,6
1-14/7C FOR HEAD 3A
4-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

1-2" BORED CONDUIT
1-CABLE FOR PREEMPTION ✕
1-#6 AWG EGC
- (M) 1-3" CONDUIT
1-14/7C FOR HEAD 4A
1-#6 AWG EGC
- (N) 1-4" BORED CONDUIT
1-14/7C FOR HEAD 4A
1-#6 AWG EGC
- (O) 1-3" CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P6
1-14/7C FOR HEAD 3
1-#6 AWG EGC
- (P) 1-4" BORED CONDUIT
3-14/2C FOR PED PB'S
3-14/7C FOR PED HEADS P4,P6
2-14/7C FOR HEADS 1,6
1-14/7C FOR HEAD 3A
1-14/7C FOR HEAD 3
1-14/7C FOR HEAD 4A
9-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

1-2" BORED CONDUIT
1-CABLE FOR PREEMPTION ✕
1-#6 AWG EGC
- (R) 1-3" CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P2
3-14/7C FOR HEADS 3,3A,4,4A
1-#6 AWG EGC

1-2" CONDUIT
2-CABLES FOR PREEMPTION ✕
1-#6 AWG EGC
- (S) 1-4" BORED CONDUIT
2-14/2C FOR PED PB'S
2-14/7C FOR PED HEADS P2,P4
3-14/7C FOR HEADS 3,3A,4,4A
5-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

1-2" BORED CONDUIT
2-CABLES FOR PREEMPTION ✕
1-#6 AWG EGC
- (T) 1-3" CONDUIT
5-14/2C FOR PED PB'S
5-14/7C FOR PED HEADS P2,P4,P6
2-14/7C FOR HEADS 1,6
1-14/7C FOR HEAD 3A
1-14/7C FOR HEAD 3
1-14/7C FOR HEAD 4A
3-14/7C FOR HEADS 3,3A,4,4A
14-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

1-2" CONDUIT
3-CABLES FOR PREEMPTION ✕
1-#6 AWG EGC
- (U) 1-3" CONDUIT
1-14/2C FOR PED PB
1-14/7C FOR PED HEAD P6
2-14/7C FOR HEADS 2,5
1-CABLE FOR CCTV
1-#6 AWG EGC

1-CABLE FOR PREEMPTION ✕
1-#6 AWG EGC
- (V) 1-4" CONDUIT
6-14/2C FOR PED PB'S
6-14/7C FOR PED HEADS P2,P4,P6
2-14/7C FOR HEADS 1,6
1-14/7C FOR HEAD 3A
1-14/7C FOR HEAD 3
1-14/7C FOR HEAD 4A
3-14/7C FOR HEADS 3,3A,4,4A
2-14/7C FOR HEADS 2,5
1-#6 AWG EGC

1-4" CONDUIT
1-CABLE FOR CCTV
14-14/2C(S) FOR DETECTORS
1-#6 AWG EGC

1-3" CONDUIT
4-CABLE FOR PREEMPTIONS ✕
1-#6 AWG EGC
- (W) 1-1" METAL CONDUIT
1-#6 AWG EGC
FOR COMMUNICATIONS
- (X) 1-1 1/4" METAL CONDUIT
3-#6 AWG EGC
FOR ELECTRICAL SERVICE
- (Y) 1-1" CONDUIT
1-#6 AWG EGC
FOR SYSTEM GROUNDING
- (Z) 1-2" CONDUIT
(EMPTY)
FOR ELECTRICAL SERVICES

EGC = ELECTRICAL GROUNDING CONDUCTOR
(S) = SHIELDED CABLE
✕ = FUTURE BY OTHERS

Pole Locations

1	STA 122+78 (RTE.28 SB)	27' LT	5	STA 124+35 (RTE.28 SB)	8' LT
2	STA 122+98 (RTE.28 SB)	8' LT	6	STA 123+49 (RTE.28 NB)	57' RT
3	STA 123+38 (RTE.28 SB)	25' LT	7	STA 122+76 (RTE.28 NB)	49' RT
4	STA 124+13 (RTE.28 SB)	41' LT	8	STA 122+67 (RTE.28 NB)	30' RT

Street Name Signs

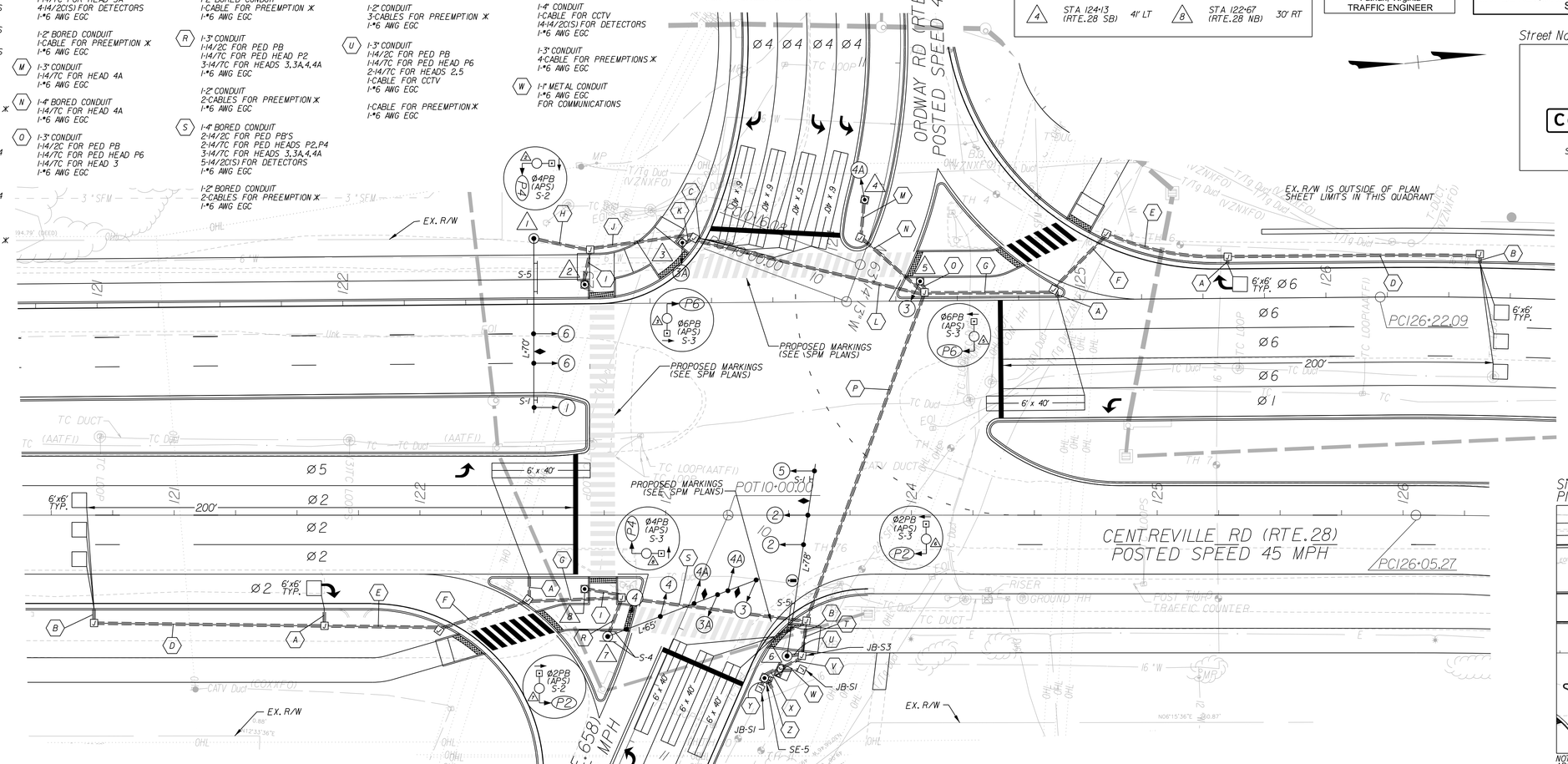
S-4 (7'-0" x 1'-6")
Centreville Rd — R=2.25" (TYP) 7" (TYP) CLEARVIEW 5-W-R

S-5 (11'-0" x 2'-0")
Compton Rd — R=3" (TYP) 12" (TYP) CLEARVIEW 5-W

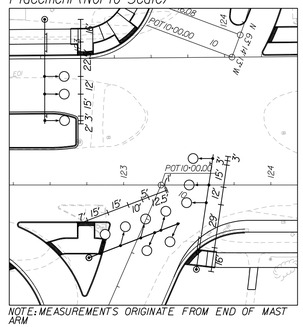
SIGNS ARE TO HAVE BLUE BACKGROUND WITH WHITE LEGEND AND BORDER.

Signs

S-1
LEFT TURN YIELD ON FLASHING YELLOW ARROW
R10-V1 36" x 42"



Signal Head and Sign Placement (Not to Scale)



NOTE: MEASUREMENTS ORIGINATE FROM END OF MAST ARM

Signals

ALL TRAFFIC SIGNAL HEAD SECTIONS SHALL BE 12" LED.

HEADS 2,3,4,6 — HEADS 4A — HEAD 3A — HEADS 1,5 — HEADS P2,P4,P6

ALL SIGNALS SHALL BE EQUIPPED WITH POLYCARBONATE RETROREFLECTIVE HIGH VISIBILITY BACK PLATES

◆ - VEHICLE PREEMPTION (FUTURE BY OTHERS)

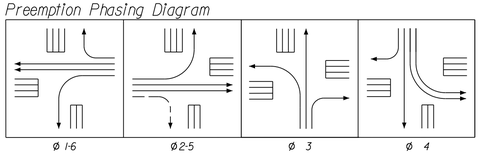
CCTV CAMERA ON MAST ARM ON 6' GOOSENECK POLE

Color Sequence Chart

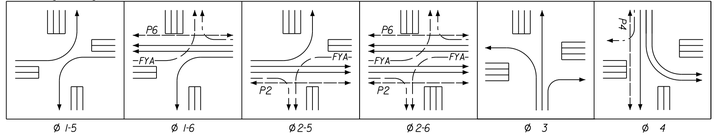
SIGNAL	PHASE 1	2	3	4	5	6	COMBINATION 1-5	1-6	2-5	2-6	FLASH
1	~~G~~	FYA					~~G~~	~~G~~	FYA	FYA	~~Y~~
2		G							G	G	Y
3			G								R
3A			~~G~~	~~G~~							R
4				G							R
4A				~~G~~							~~R~~
5					~~G~~	FYA	~~G~~	FYA	~~G~~	FYA	~~Y~~
6						G		G		G	Y
P2 (APS)[2]		W							W	W	BLINK
P4 (APS)[2]				W							BLINK
P6 (APS)[2]						W		W		W	BLINK

Notes:
1. Blank spaces denote red indications. Walk indication displayed after pedestrian call serviced. Otherwise "Don't Walk" will be displayed.
2. See Accessible Pedestrian System (APS) Pushbuttons detail.

Preemption Phasing Diagram



Phasing Diagram



Accessible Pedestrian System (APS) Pushbuttons

S-2 R10-3e(L) 9" x 15"
S-3 R10-3e(R) 9" x 15"

PUSHBUTTON PB2, PB4
PUSHBUTTONS PB2, PB4, PB6, PB6

PUSH BUTTONS PB2, PB4, AND PB6 SHALL HAVE A PERCUSSIVE TONE WALK INDICATION.

PUSH BUTTONS PB2 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS COMPTON AT CENTREVILLE ROAD".

PUSH BUTTONS PB6 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS ORDWAY AT CENTREVILLE ROAD".

PUSH BUTTONS PB4 SHALL HAVE THE FOLLOWING MESSAGE FOR WAIT, "WAIT TO CROSS CENTREVILLE ROAD AT COMPTON/ORDWAY".

Initial Timing Chart

PHASE	1	2	3	4	5	6
MOVEMENT	SB LT ROUTE 28	NB TH ROUTE 28	WB LTR ROUTE 616	EB LTR ROUTE 658	NB LT ROUTE 28	SB TH ROUTE 28
PHASE ON	x	x	x	x	x	x
PHASE OFF						
INTERVAL	PHASE TIMINGS					
MIN GR	7.0	20.0	10.0	10.0	10.0	20.0
PASSAGE	3.0	3.0	3.0	3.0	3.0	3.0
AMBER	5.4	5.4	3.6	4.0	5.4	5.4
RED	4.9	4.9	4.2	3.1	4.9	4.9
MAX 1	30.0	120.0	40.0	40.0	30.0	120.0
MAX 2	0.0	0.0	0.0	0.0	0.0	0.0
MIN GAP	0.0	0.0	0.0	0.0	0.0	0.0
TIME BEFORE REDUCTION	0.0	0.0	0.0	0.0	0.0	0.0
TIME TO REDUCE	0.0	0.0	0.0	0.0	0.0	0.0
LEADING PED WALK	0.0	0.0	0.0	0.0	0.0	0.0
PED WALK		7.0		8.0		7.0
PED CLEARANCE		12.0		28.0		22.0
MODE	NL	MIN RECALL	NL	NL	NL	MIN RECALL

SCALE 0 25' 50'

PROJECT	SHEET NO.
0028-029-269	37(5)

10/12/2020
11:28:45 AM

d108720-41.dgn
Plotted By: cjennings

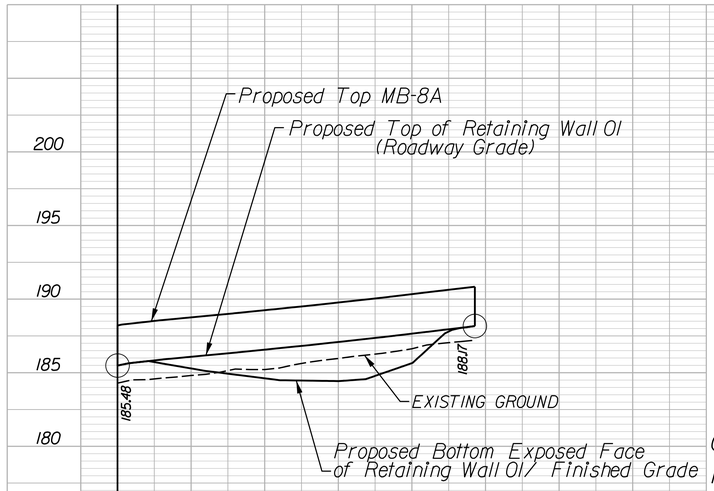
PROJECT DESIGN MANAGER: Mr. Erik Dull, PE (Dewberry) - (703) 208-1757
SURVEYED BY: Quantum Spatial - (703) 471-4510, 06/20
DESIGNED BY: Dewberry Engineers Inc. - (703) 208-1757
SUBSURFACE UTILITY BY: SAM, LLC - (703) 361-6005, 07/20

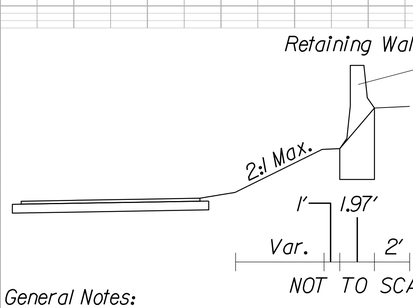
Retaining Wall 01

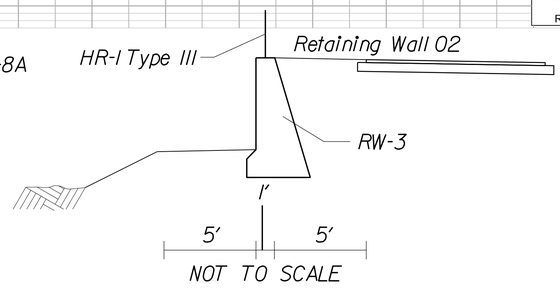
REVISED	STATE	STATE ROUTE	STATE PROJECT	SHEET NO.
-	VA.	28	0028-029-269 P101 R201 C501	41

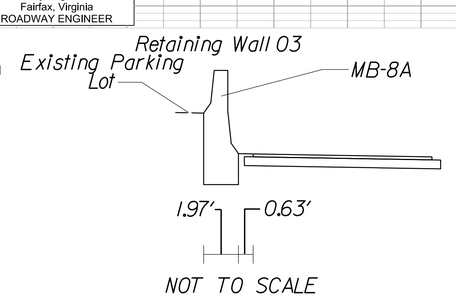
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

Dewberry Engineers Inc.
Fairfax, Virginia
ROADWAY ENGINEER



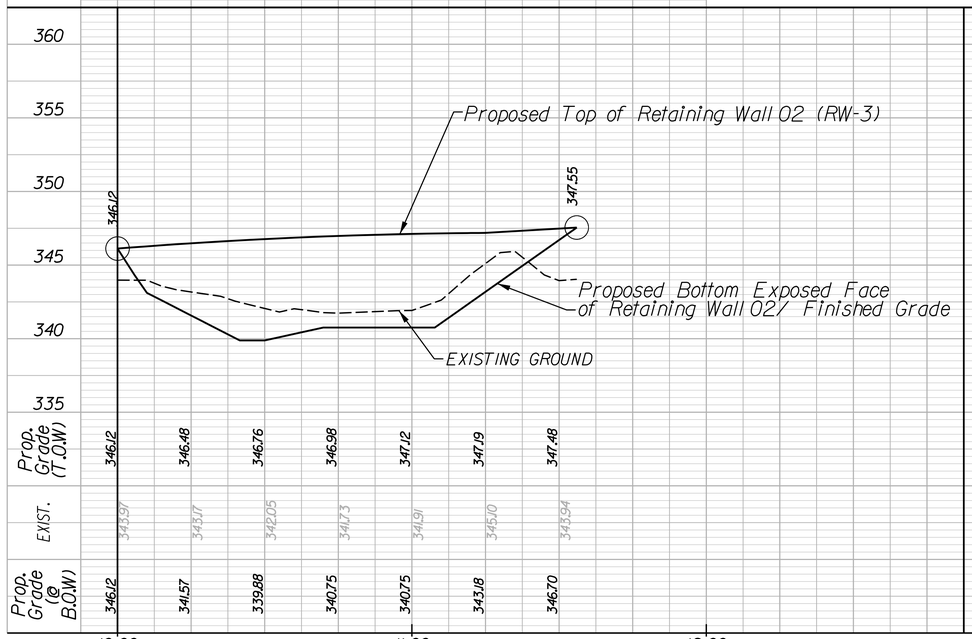




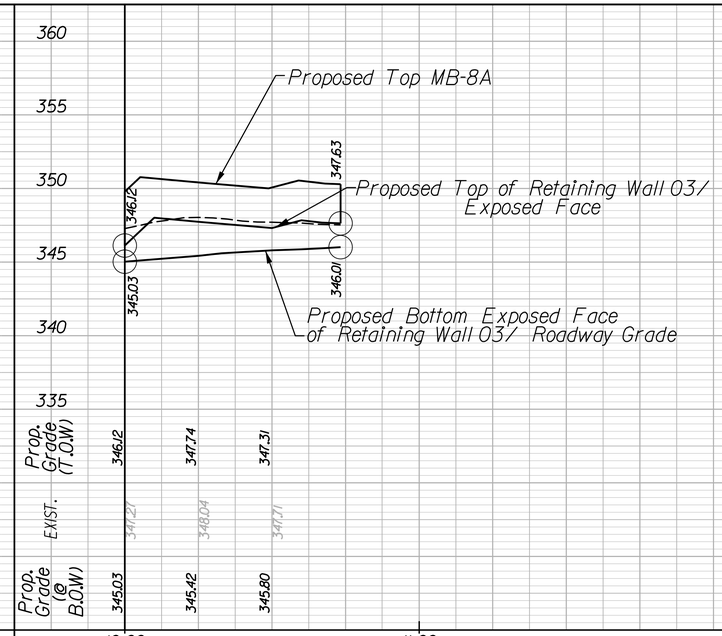


General Notes:

1. RW-3 type wall shall be constructed per VDOT Standard Details and Specifications of Section 401.02 in the VDOT Road and Bridge Standards.
2. All retaining wall dimensions are measured from the retaining wall baselines as shown on the retaining wall profile sheets and roadway plan sheets.
3. See the approved Geotechnical Engineering Report for geotechnical requirements and insitu soil conditions related to the shown retaining walls.
4. Retaining wall designs shall meet all VDOT specifications.
5. The selected wall supplier shall submit detailed design and shop drawings for approval of any wall that is not denoted as a RW-3 standard wall or other standard VDOT specified retaining wall. Drainage details, such as perforated pipe underdrain and/or drainage blanket, shall be included based upon field conditions and design of proposed walls. All panel types and other related elements shall be detailed on shop drawings.
6. Connections between coping or traffic barriers shall be designed to accomodate all relavent loadings, lateral or otherwise, fence shall by the wall fabricator and detailed on the shop drawings.
7. MB-8A shall be constructed per VDOT Standard Details and Specifications of Section 502.07/502.08 in the VDOT Road and Bridge Standards.



Retaining Wall 02



Retaining Wall 03

HORIZ. 0 25' 50' / VERT. 0 5' 10'	PROJECT	SHEET NO.
	0028-029-269	41