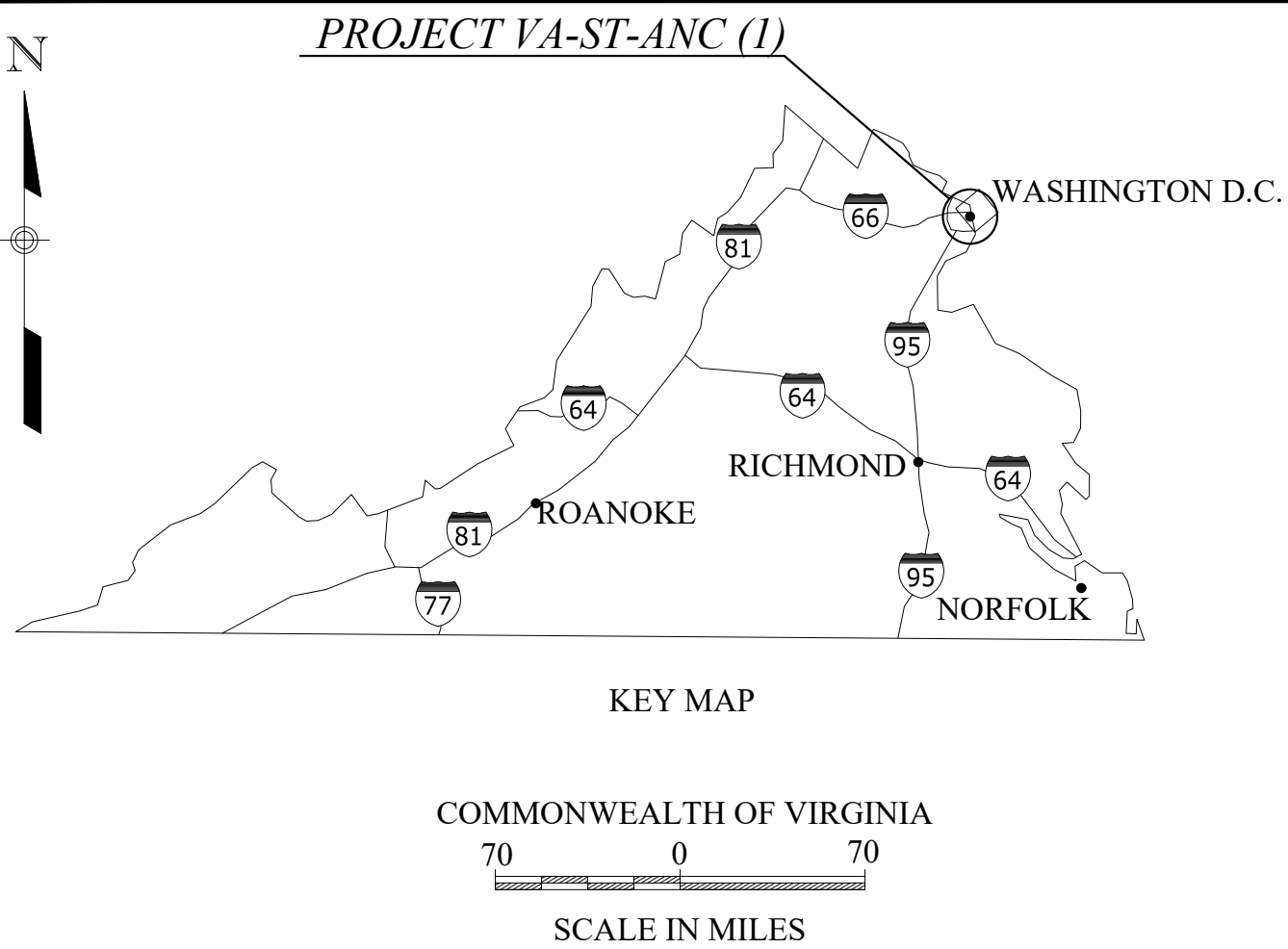


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COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
PROJECT VA-ST-ANC(1)
ARLINGTON MEMORIAL TRAIL PROJECT

FROM COLUMBIA PIKE
TO MEMORIAL AVE
ARLINGTON COUNTY, VA

ALTERNATIVE 1
CONCEPT PLANS
FEBRUARY 7, 2022

THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION.

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

DESCRIPTION OF PROJECT

CONSTRUCTION OF A TEN FOOT WIDE MULTI-USE TRAIL ALONG
ROUTE 27 (S. WASHINGTON BOULEVARD) AND ROUTE 110
(RICHMOND HIGHWAY). RELOCATION OF UTILITIES FROM
EXISTING LOCATIONS TO NEW ROAD ALIGNMENTS AND
CONSOLIDATED UTILITY CORRIDORS, AND RETAINING WALLS IN
VARIOUS LOCATIONS.

PROJECT LENGTH: 0.49 Miles (S. WASHINGTON BOULEVARD ROUTE 27)
0.63 Miles (RICHMOND HIGHWAY ROUTE 110)

DESIGN DESIGNATION:	ROUTE 27 WASHINGTON BOULEVARD	ROUTE 110
ADT (2019)	7,800	13,600
ADT (2040)	N/A	N/A
DHV	N/A	N/A
D	N/A	N/A
%Truck	1%	1%
V (MPH)	45	45
C/A	None	None
e(max)	2%	2%
Roadway Classification	Urban Other Principal Arterial	Urban Minor Arterial
DESIGN SPEED	45 MPH	45 MPH

SPECIFICATIONS:

VDOT, 2020 Road and Bridge Specifications.
Arlington County, 2020 Landscaping Specifications.
Arlington County, 2020 Pavement Marking Standards.
Arlington County, 2020 Streetlight Standards & Specifications.
Arlington County, 2020 Traffic Signal Standards & Specifications.

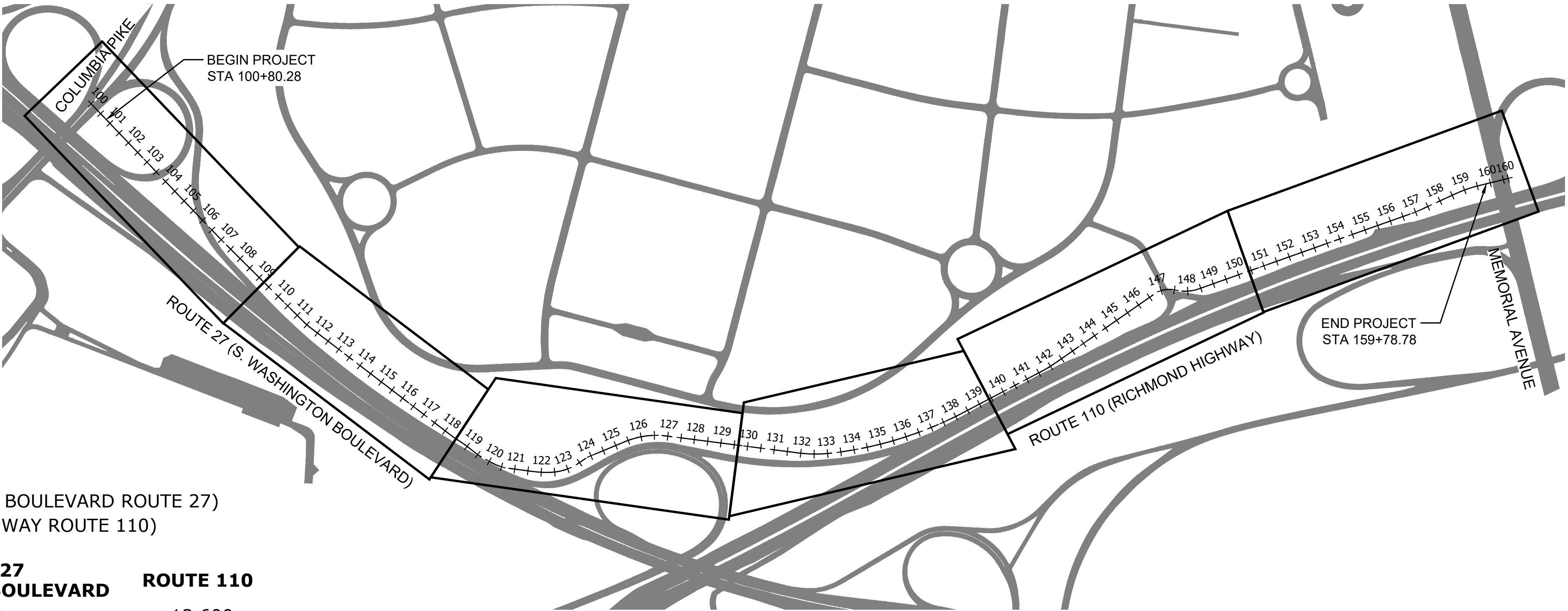
FOR INFORMATION RELATIVE TO ELECTRONIC FILES AND LAYERED PLANS, SEE THE GENERAL NOTES. DESIGN FEATURES
RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED
NECESSARY BY THE CONTRACTING OFFICER. THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE REVISED VDOT
2020 ROAD AND BRIDGE SPECIFICATIONS, 2020 ROAD AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE
MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE
ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

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	FHWA PROJECT #	VDOT PROJECT #	SHEET NO.	TOTAL SHEETS
VA	VA-ST-ANC(1)	UPC 116717	1	

FOR INDEX OF SHEETS SEE SHEET 1B

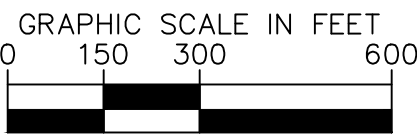
THIS PROJECT WAS DEVELOPED UTILIZING CIVIL3D 2020.



CONCEPT PLANS
PLANS PREPARED FOR



PLANS PREPARED BY



RECOMMENDED FOR APPROVAL	
DATE: 2/7/2022	ARLINGTON COUNTY
DATE: 2/7/2022	DEPT. OF ENVIRONMENTAL SERVICES
DATE: 2/7/2022	RECOMMENDED FOR APPROVAL
DATE: 2/7/2022	VDOT, STATE L&D ENGINEER
DATE: 2/7/2022	ARLINGTON NATIONAL CEMETERY
DATE: 2/7/2022	DIRECTOR OF ENGINEERS

Project Management Team	Lead Designer
BILL ESHBAUGH EDEN JEMAL THOMAS SHIFFLETT (RETIRED)	KIMLEY-HORN

U.S. Department of Transportation
Federal Highway
Administration
EASTERN FEDERAL LANDS HIGHWAY DIVISION
21400 RIDGETOP CIRCLE
STERLING, VIRGINIA 20166

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CONCEPT DESIGN
PLANS

NOT FOR
CONSTRUCTION

CONCEPT DESIGN
PLANS

NOT FOR
CONSTRUCTION

ARLINGTON MEMORIAL TRAIL PROJECT
ARLINGTON COUNTY, VIRGINIA

TITLE SHEET

DATE: FEBRUARY 7, 2022

SCALE: N/A

HOR.: N/A

VERT.: N/A

DESIGNED: MRP

DRAWN: AJS

CHECKED: EJD

MISS UTILITY TRANSMITTAL #:

SHEET
1

SHEET

- 1
- 1A
- 1B
- 1C
- 1E-1E(1)
- 1F-1F(2)
- 1G-1G(2)
- 2-2(2)
- 2A
- 2B
- 3-5
- 3A-5A

SHEET NAME

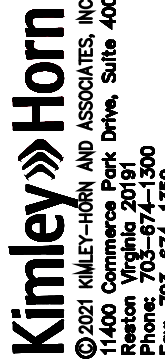
- TITLE SHEET
- SHEET INDEX MAP (NOT INCLUDED)
- INDEX OF SHEETS
- REVISION DATA SHEET (NOT INCLUDED)
- SURVEY ALIGNMENT DATA SHEET (NOT INCLUDED)
- EXISTING ROADWAY CONSTRUCTION ALIGNMENT DATA SHEET (NOT INCLUDED)
- PROPOSED ROADWAY CONSTRUCTION ALIGNMENT DATA SHEET (NOT INCLUDED)
- GENERAL NOTES
- TYPICAL SECTIONS
- DRAINAGE DESCRIPTIONS (NOT INCLUDED)
- TRAIL PLAN
- TRAIL PROFILES

ABBREVIATIONS

- | | |
|------|----------------------------------|
| FO | FIBER OPTIC |
| UGE | UNDERGROUND ELECTRIC |
| ROW | RIGHT-OF-WAY |
| L/A | LIMITED ACCESS CONTROL LIMIT |
| AFM | AIR FORCE MEMORIAL |
| AFDW | AIR FORCE DISTRICT OF WASHINGTON |
| TC | TOP OF CURB |
| BC | BACK OF CURB |
| S/W | SIDEWALK |
| ME | MATCH EXISTING |
| EP | EDGE OF PAVEMENT |
| R | RADIUS MEASURED TO FACE OF CURB |
| TBR | TO BE REMOVED |
| TBA | TO BE ABANDONED |



U.S. Department of Transportation
Federal Highway Administration
EASTERN FEDERAL LANDS HIGHWAY DIVISION
21406 RIDGETOP CIRCLE
STERLING, VIRGINIA 20166



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CONCEPT DESIGN
PLANS

NOT FOR
CONSTRUCTION

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ARLINGTON MEMORIAL TRAIL PROJECT
ARLINGTON COUNTY, VIRGINIA

INDEX OF SHEETS

DATE FEBRUARY 7, 2022
SCALE HOR. _____ N/A VERT. _____ N/A
DESIGNED: MRP
DRAWN: ATIS
CHECKED: EJD
MISS UTILITY TRANSMITTAL # _____

SHEET
1B

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Plotted By:Super, Thomas January 18, 2023 04:50:07pm K:\NVA_RDWY\110243021 ANC DAR CAD VNC DAR Trail\PlanSheets\GENERAL NOTES.dwg

GENERAL CONSTRUCTION NOTES

- ALL ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). BASIS FOR MAPPING IS FIELD SURVEYS AND AS-BUILT INFORMATION FROM OCTOBER 2014 THROUGH APRIL 2016, SUPPLEMENTED IN JANUARY 2020 BY RICE AND ASSOCIATES, INC. THE SITE SHOWN HEREIN IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983(VCS83) AS COMPUTED FROM A FIELD RUN BOUNDARY AND HORIZONTAL CONTROL SURVEY. THE SITE SHOWN HEREIN IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 AS COMPUTED FROM A FIELD RUN VERTICAL CONTROL SURVEY. BEARINGS REFERENCED HEREIN ARE REFERENCED TO NAD 1988 (93) DATUM. SURVEY INCLUDING BOUNDARY & SUE LEVEL B SURVEYS WAS COMPLETED AUGUST 2015 AND SUPPLEMENTED IN APRIL 2016. SUE LEVEL A DESIGNATION SURVEY (TEST HOLES & MH/HH INVESTIGATION) WAS CONDUCTED. SEE SHEETS 1H-1H(22) FOR LOCATION AND INFORMATION.
- ALL CONSTRUCTION WORK FOR THIS PROJECT SHALL CONFORM TO THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) 2020 ROAD AND BRIDGE SPECIFICATIONS, VDOT ROAD AND BRIDGE STANDARDS, ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES CONSTRUCTION STANDARDS AND SPECIFICATIONS, THE ARLINGTON COUNTY PARK DESIGN STANDARDS AND THE ARLINGTON COUNTY TRAFFIC SIGNAL AND STREETLIGHT SPECIFICATIONS. THE LATEST EDITIONS OF EACH RELEVANT MANUAL SHALL BE USED.
- ALL CONSTRUCTION AND WORK ACTIVITIES SHALL COMPLY WITH THE VIRGINIA WORK AREA PROTECTION MANUAL (VWAPM) AND ALL OTHER RELEVANT WORK SAFETY REQUIREMENTS, LATEST EDITIONS.
- THE CONTRACTOR SHALL CONTACT "MISS UTILITY" AT 811 FOR MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES (i.e. WATER, SEWER, GAS, TELEPHONE, ELECTRIC, AND CABLE TV) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION OR CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO IDENTIFY AND PROTECT ALL OTHER UTILITY LINES FOUND IN THE WORK SITE AREA BELONGING TO OTHER OWNERS THAT ARE NOT MEMBERS OF "MISS UTILITY". PRIVATE WATER AND/OR SEWER LATERALS WILL NOT BE MARKED BY MISS UTILITY OR THE COUNTY. THE CONTRACTOR WILL BE EXPECTED TO LOCATE AND PROTECT THESE SERVICES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL REFER TO THE SPECIFICATIONS FOR CONSTRUCTION STAKEOUT AND CUT SHEET REQUIREMENTS.
- THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM AS-BUILT SURVEYS AND AVAILABLE RECORDS AND SHALL BE CONSIDERED TO BE APPROXIMATE. WHEN CONSTRUCTION ACTIVITY IS IN PROXIMITY OF EXISTING UTILITIES, EXCAVATED TRENCH(ES) SHALL BE OPENED A SUFFICIENT DISTANCE AHEAD OF THE WORK OR TEST PITS SHALL BE MADE TO VERIFY THE EXACT LOCATION AND INVERTS OF THE UTILITY TO ALLOW FOR POSSIBLE CHANGES IN THE LINE OR GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING UTILITIES AND RELATED STRUCTURES. ALL EXISTING UTILITY SYSTEMS SHALL BE PROTECTED TO PREVENT DAMAGE DURING THE CONTRACTOR'S OPERATIONS. ANY SYSTEM DAMAGED SHALL BE PROMPTLY REPAIRED AT NO COST TO THE GOVERNMENT AND/OR UTILITY OWNER.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THE APPROVED PLANS.
- ALL EXISTING MANHOLE FRAMES, COVERS, VALVE BOXES, AND OTHER APPURTENANCES WITHIN THE SURFACES OF THE CYCLE TRACK, SHARED USE PATH, SIDEWALK OR ROADWAY SHALL BE ADJUSTED TO THE FINAL GRADE OR REPLACED, AS NECESSARY WITH AN ADA COMPLIANT, SLIP RESISTANT TOP.
- THE CONTRACTOR SHALL PROVIDE ADA COMPLIANT ACCESS THROUGH OR AROUND THE SITE AT ALL TIMES AND SHALL ENSURE THE SAFETY OF ALL PERSONS PASSING THROUGH OR ADJACENT TO THE SITE.
- EXISTING VEGETATION SURROUNDING THE CONSTRUCTION AREA SHALL REMAIN IN A NATURAL STATE. TREES NEAR THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH DETAILS AND NOTES AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS AND LANDSCAPE CONSERVATION PLANS.
- WHEN MATERIALS WHICH ARE UNSUITABLE FOR FOUNDATIONS, SUBGRADES, OR ROADWAY PURPOSES ARE ENCOUNTERED WITHIN THE LIMITS OF CONSTRUCTION OF THOSE ITEMS, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE SUCH MATERIAL BELOW THE GRADE SHOWN ON THE PLANS. THE AREAS SO EXCAVATED SHALL BE BACKFILLED WITH APPROVED SUITABLE SELECT FILL MATERIAL (MINIMUM CBR-5) AND COMPACTED ACCORDING TO THE PREVAILING APPLICABLE STANDARD.
- ALL FILL SHALL BE PLACED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. SUBGRADE SHALL BE PROOFROLLED WITH THE CONTRACTING OFFICER PRESENT AND ALL REQUIRED REPAIRS PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- ALL UNPAVED SURFACES SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM PAVED AREAS AND TOWARD DRAINAGE STRUCTURES.
- FOLLOWING COMPLETION, ALL DISTURBED AREAS SHALL BE PREPARED, SEEDED, AND MULCHED.
- DISTURBED AREAS WITHIN THE PROJECT LIMITS THAT WILL REMAIN INACTIVE FOR A PERIOD OF 14 CALENDAR DAYS OR LONGER SHALL BE TEMPORARILY STABILIZED WITH SEED AND STRAW, MULCH, OR OTHER APPROVED EQUAL GROUNDCOVER.
- CONTRACTOR TO MAINTAIN AND PROTECT EXISTING ARLINGTON NATIONAL CEMETERY BOUNDARY WALL FOR THE DURATION OF CONSTRUCTION. CONTRACTOR IS REQUIRED TO NOTIFY THE CONTRACTING OFFICER PRIOR TO BEGINNING ANY ACTIVITY THAT MAY IMPACT THE BOUNDARY WALL, AND MAY PROCEED WITH THAT ACTIVITY ONLY AFTER AUTHORIZATION FROM THE CONTRACTING OFFICER.
- THE CONTRACTOR IS REQUIRED TO NOTIFY THE CONTRACTING OFFICER THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION AND SPECIFICALLY REQUEST INSPECTION BEFORE BEGINNING ANY OF THE FOLLOWING ACTIVITIES:
 - INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES
 - CLEARING AND GRUBBING
 - EARTHWORK
 - BACKFILL OF ANY WET UTILITY SUCH AS STORM DRAINAGE PIPES, CULVERTS, INLETS, SANITARY SEWERS AND MANHOLES, WATERLINES AND FITTINGS
 - INSTALLATION OF ANY UNDERGROUND UTILITY, INCLUDING DUCT BANKS, MANHOLES, HANDHOLES, OR SIMILAR
 - PLACING SUB-BASE, BASE OR PAVING SURFACE
 - INSTALLATION OF ANY FORMS
 - PLACING OF ANY CONCRETE
 - BACKFILL OF ANY FOUNDATIONS OR WALLS
 - INSTALLATION OF LANDSCAPING
 - INSTALLATION OF STREET LIGHTING
 - STRIPING, SIGNAGE AND APPLICATION OF PAVEMENT MARKINGS
 - ALTERATIONS TO BUS STOPS, STRUCTURES AND SIGNAGE

STORMWATER AND ENVIRONMENTAL PROTECTION

- THE CONTRACTOR SHALL PROTECT EXISTING DRAINAGE FACILITIES (TO INCLUDE CURB AND GUTTER) AND WATERWAYS FROM ADVERSE IMPACTS PER VDOT ROAD & BRIDGE STANDARDS & SPECIFICATIONS.
- ANY WORK WITHIN A RESOURCE PROTECTION AREA (RPA) SHALL COMPLY WITH THE REQUIREMENTS OF THE ARLINGTON NATIONAL CEMETERY ANNUAL STANDARDS AND SPECIFICATIONS.

TREE PROTECTION

- THE CONTRACTOR SHALL CONFINE ALL ACTIVITIES AT THE SITE ASSOCIATED WITH CONSTRUCTION ACTIVITIES, TO INCLUDE STORAGE OF EQUIPMENT AND OR MATERIALS, ACCESS TO THE WORK, FORMWORK, ETC. TO WITHIN THE DESIGNATED LIMITS OF DISTURBANCE (LOD).
- NO TREES SHALL BE REMOVED OR OTHERWISE AFFECTED UNLESS CLEARLY MARKED ON THE APPROVED PLAN.
- TREES SHALL BE PROTECTED PER THE REQUIREMENTS OF SECTION 02100 - CLEARING AND GRUBBING

TRAFFIC CONTROL

- CONTRACTOR SHALL NOTIFY THE CONTRACTING OFFICER AT LEAST 3 WORKING DAYS PRIOR TO DISTURBING ANY EXISTING, OR INSTALLING ANY NEW, TRAFFIC SIGNS, SIGNALS, OR OTHER TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL PREMARK THE LAYOUT OF ANY PERMANENT TRAFFIC CONTROL STRIPING, INDICATING THE PROPOSED LOCATION AND TYPE OF MARKING TO BE INSTALLED. THE PREMARKING MAY CONSIST OF TYPE D TAPE, CHALK, OR LUMBER CRAYONS. THE CONTRACTOR SHALL ALLOW 3 WORKING DAYS FOR THE INSPECTION AND APPROVAL BY THE CONTRACTING OFFICER OF THE PREMARKINGS PRIOR TO PLACING THE PERMANENT MARKINGS.
- THE CONTRACTOR SHALL SUBMIT ANY REQUESTS FOR TEMPORARY "NO PARKING" RESTRICTIONS TO THE CONTRACTING OFFICER AT LEAST 5 WORKING DAYS PRIOR TO THE DESIRED ONSET OF RESTRICTIONS.
- THE CONTRACTOR SHALL PRESERVE ALL BUS STOPS, INCLUDING MAINTAINING ADEQUATE ACCESS THROUGH AND ADJACENT TO THE CONSTRUCTION AREA FOR BUSES AND PASSENGERS. THE CONTRACTOR SHALL NOT CLOSE, RELOCATE, OR OTHERWISE MODIFY A BUS STOP WITHOUT PRIOR REQUEST OF AND ACCEPTANCE BY OF THE CONTRACTING OFFICER. TYPICALLY ANY RELOCATION OR CLOSURE OF A BUS STOP WILL REQUIRE AT LEAST TWO (2) WEEKS ADVANCE NOTICE FOR COORDINATION WITH ARLINGTON COUNTY TRANSIT AND WITH WMATA AS NECESSARY.
- WHEN CONDITIONS WARRANT DUE TO TRAFFIC VOLUMES, PATTERNS, OR SPECIAL EVENTS, THE CONTRACTING OFFICER IN CONSULTATION WITH ARLINGTON COUNTY MAY SUSPEND OR OTHERWISE DIRECT THE CONTRACTOR'S ACTIVITIES TO PROTECT THE PUBLIC AND OR THE COUNTY'S TRANSPORTATION NETWORK.

WATER DISTRIBUTION, STORM, AND SANITARY SEWER SYSTEMS

- UNLESS OTHERWISE DIRECTED, THE CONTRACTOR IS EXPRESSLY PROHIBITED FROM OPERATING ANY WATER VALVES OR APPURTENANCES. CONTRACTOR SHALL SUBMIT ALL REQUESTS FOR VALVE OPERATIONS TO THE CONTRACTING OFFICER AND WATER, SEWER, STREETS BUREAU OF ARLINGTON COUNTY AT LEAST 3 WORKING DAYS IN ADVANCE OF THE REQUIRED OPERATION.
- IN THE EVENT OF A WATER OR SEWER EMERGENCY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ARLINGTON COUNTY'S WATER CONTROL CENTER AT 703-228-6555 AND THE CONTRACTING OFFICER.
- STORM SEWERS, WATER LINES, SANITARY SEWERS AND/OR APPURTENANCES TO BE ABANDONED SHALL BE EXCAVATED AND REMOVED, OR ABANDONED AS SHOWN AND DETAILED IN THE APPROVED PLANS AND PER ARLINGTON COUNTY STANDARDS AND SPECIFICATIONS.

WORK WITHIN VDOT AND ARLINGTON COUNTY RIGHT OF WAY

- THE CONTRACTOR SHALL HAVE AT LEAST ONE EMPLOYEE ON-SITE CERTIFIED BY VDOT IN BASIC WORK ZONE TRAFFIC CONTROL AND WILL BE RESPONSIBLE FOR THE PLACEMENT, MAINTENANCE AND REMOVAL OF WORK ZONE TRAFFIC CONTROL DEVICES WITHIN THE PROJECT LIMITS IN COMPLIANCE WITH THE PERMIT REQUIREMENTS AND CONDITIONS, THE APPROVED PLANS, SPECIFICATIONS, THE VIRGINIA WORK AREA PROTECTION MANUAL AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL HAVE AT LEAST ONE EMPLOYEE ON-SITE WHO HAS COMPLETED VDOT EROSION AND SEDIMENT CONTROL CONTRACTOR CERTIFICATION TRAINING AND WILL BE RESPONSIBLE FOR INSURING COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS DURING ALL LAND DISTURBANCE ACTIVITIES.

EROSION AND SEDIMENT CONTROL

- TEMPORARY SILT FENCE SHALL BE CONSTRUCTED FOR SHEET RUN OFF AS SHOWN ON PLAN OR AS DIRECTED BY THE CONTRACTING OFFICER.
- SILT FENCE SHALL BE INSPECTED AND CLEANED ON A WEEKLY BASIS, AND ON A DAILY BASIS IMMEDIATELY FOLLOWING ANY RAIN EVENT. ALL NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY.
- 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, THIRD EDITION (1992) AND VIRGINIA REGULATIONS 4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS.
- THE TEMPORARY EROSION AND SEDIMENT (E&S) CONTROL ITEMS SHOWN ON THE E&S CONTROL PLAN SHEETS ARE INTENDED TO PROVIDE A GENERAL PLAN FOR CONTROLLING EROSION AND SEDIMENT WITHIN THE PROJECT LIMITS. THE E&S CONTROL PLAN IS BASED ON FIELD CONDITIONS AT THE TIME OF PLAN DEVELOPMENT AND AN ASSUMED SEQUENCE OF CONSTRUCTION. THE CONTRACTOR, IN CONJUNCTION WITH THE CONTRACTING OFFICER AND/OR REGISTERED LAND DISTURBER (RLD) FOR THE SWPPP, SHALL ADJUST THE LOCATION, QUANTITY AND TYPE OF EROSION AND SEDIMENT CONTROL ITEMS REQUIRED BASED ON THE ACTUAL FIELD CONDITIONS ENCOUNTERED AT THE TIME OF CONSTRUCTION AND THE SELECTED SEQUENCE OF CONSTRUCTION.
- THE AREAS BEYOND THE PROJECT'S CONSTRUCTION AREA ARE TO BE PROTECTED FROM SEDIMENT. PERIMETER CONTROLS SUCH AS FILTER BARRIER, SILT FENCE, ETC. SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION OPERATIONS.
- SILT REMOVAL AND SEDIMENT CLEAN-OUT FROM EROSION AND SEDIMENT CONTROL ITEMS SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING:
 - TEMPORARY SEDIMENT BASINS AND SEDIMENT TRAPS - WHEN THE "WET" STORAGE VOLUME (PERMANENT POOL) HAS BEEN REDUCED BY 50%.
 - DEWATERING BASINS - WHEN THE EXCAVATED VOLUME HAS BEEN REDUCED BY 50%.
 - ALL OTHER EROSION AND SEDIMENT CONTROL ITEMS - WHEN THE CAPACITY, HEIGHT, OR DEPTH HAS BEEN REDUCED BY 50%.
- EXCEPT WHERE NOTED HEREON, TO THE BEST OF THE DESIGNER'S KNOWLEDGE, THE PROPOSED DEVELOPMENT OF THE SUBJECT PROPERTY CONFORMS TO ALL CURRENT APPLICABLE LAND DEVELOPMENT ORDINANCES, REGULATIONS, AND ADOPTED STANDARDS.
- LAND CONSERVATION NOTES - MEASURES TO CONTROL EROSION AND SEDIMENT SHALL BE PROVIDED PURSUANT TO AND IN COMPLIANCE WITH CURRENT STATE AND LOCAL REGULATIONS. HOWEVER, THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OR HIS AGENT OF ANY LEGAL RESPONSIBILITIES WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS DIRECTED BY THE CONTRACTING OFFICER DURING FIELD REVIEWS.
- EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- DURING DE-WATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- EROSION CONTROL MEASURES ARE TO BE REMOVED BY CONTRACTOR AFTER PERMANENT VEGETATION HAS BEEN ESTABLISHED AND AS DIRECTED BY THE CONTRACTING OFFICER.
- UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
 - NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
 - EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
 - EFFLUENT FROM DE-WATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
 - MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
 - RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH STANDARDS 3.31 AND 3.32.
 - ALL TRENCHING SHALL BE IN ACCORDANCE WITH APPLICABLE OSHA SAFETY STANDARDS.
- CONTRACTOR SHALL BE AWARE OF AND COORDINATE WITH ADJOINING OR NEARBY PROJECTS BY OTHERS. THEY MAY INCLUDE, BUT NOT LIMITED TO: ARLINGTON COUNTY'S COLUMBIA PIKE MULTIMODAL IMPROVEMENT PLAN, SEGMENT A; AIR FORCE DISTRICT OF WASHINGTON, AIR FORCE MEMORIAL SERVICE BUILDING REPLACEMENT PROJECT; 9 / 11 PENTAGON MEMORIAL FUND VISITORS EDUCATION CENTER; ARLINGTON NATIONAL CEMETERY SOUTHERN EXPANSION PROJECT; ARLINGTON NATIONAL CEMETERY DEFENSE ACCESS ROADS PROJECT; FHWA-EFLHD; US NATIONAL PARK SERVICE.



U.S. Department of Transportation
Federal Highway Administration
EASTERN FEDERAL LANDS HIGHWAY DIVISION
21406 RIDGETOP CIRCLE
STERLING, VIRGINIA 20166



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HERNDON, VIRGINIA 20151
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CONCEPT DESIGN PLANS

NOT FOR CONSTRUCTION

Seal

CONCEPT DESIGN PLANS

NOT FOR CONSTRUCTION

Seal

ARLINGTON MEMORIAL TRAIL PROJECT
ARLINGTON COUNTY, VIRGINIA

GENERAL NOTES

DATE
FEBRUARY 7, 2022

SCALE
HOR. _____ N/A
VERT. _____ N/A
DESIGNED: MRP
DRAWN: ATIS
CHECKED: EJD
MISS UTILITY TRANSMITTAL # _____

SHEET
2

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GENERAL NOTES

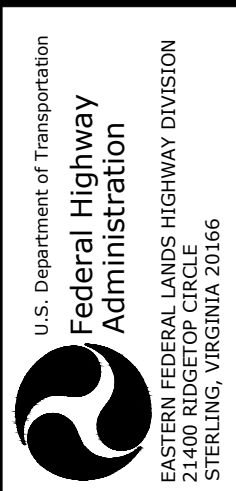
MINIMUM STANDARDS FOR A PROPERLY PREPARED ESC PLAN

- MS-1 PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE 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 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
- MS-2 DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES.
- MS-3 A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED.
- MS-4 SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- MS-5 STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
- MS-6 SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.
- A. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.
- B. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.
- MS-7 CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
- MS-8 CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- MS-9 WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- MS-10 ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
- MS-11 BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
- MS-12 WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NON-ERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NON-ERODIBLE COVER MATERIALS.
- MS-13 WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NON-ERODIBLE MATERIAL SHALL BE PROVIDED.
- MS-14 ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
- MS-15 THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
- MS-16 UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
- A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
- B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- C. EFFLUENT FROM DE-WATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
- D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
- E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THIS CHAPTER.
- F. APPLICABLE SAFETY REQUIREMENTS SHALL BE COMPLIED WITH.
- MS-17 PROVISION SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE AREA, WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PUBLIC OR PAVED ROADS
- MS-18 ALL TEMPORARY EROSION SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION AFTER THE PERMISSION OF THE CONTRACTING OFFICER.

- MS-19 PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA. STREAM RESTORATION AND RELOCATION PROJECTS THAT INCORPORATE NATURAL CHANNEL DESIGN CONCEPTS ARE NOT MAN-MADE CHANNELS AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS.
- A. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.
- B. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER:
1. THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS ONE HUNDRED TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION; OR
2. (a) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS.
- (b) ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A 10-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS; AND
- (c) PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A 10-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM.
- C. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:
1. IMPROVE THE CHANNELS TO A CONDITION WHERE A 10-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL, THE BED, OR THE BANKS; OR
2. IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE 10-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES;
3. DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A 10-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL; OR
4. PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE VESOP AUTHORITY TO PREVENT DOWNSTREAM EROSION.
- D. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.
- E. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT CONDITION OF THE SUBJECT PROJECT.
- F. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION, HE SHALL OBTAIN APPROVAL FROM THE VESOP OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.
- G. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATERS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.
- H. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE.
- I. INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY.
- J. IN APPLYING THESE STORMWATER MANAGEMENT CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE DEVELOPMENT, AS A WHOLE, SHALL BE CONSIDERED TO BE A SINGLE DEVELOPMENT PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS.
- K. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS OF THE STATE.
- L. ANY PLAN APPROVED PRIOR TO JULY 1, 2014, THAT PROVIDES FOR STORMWATER MANAGEMENT THAT ADDRESSES ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS SHALL SATISFY THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS IF THE PRACTICES ARE DESIGNED TO (i) DETAIN THE WATER QUALITY VOLUME AND TO RELEASE IT OVER 48 HOURS; (ii) DETAIN AND RELEASE OVER A 24-HOUR PERIOD THE EXPECTED RAINFALL RESULTING FROM THE ONE YEAR, 24-HOUR STORM; AND (iii) REDUCE THE ALLOWABLE PEAK FLOW RATE RESULTING FROM THE 1, 5, 2, AND 10-YEAR, 24-HOUR STORMS TO A LEVEL THAT IS LESS THAN OR EQUAL TO THE PEAK FLOW RATE FROM THE SITE ASSUMING IT WAS IN A GOOD FORESTED CONDITION, ACHIEVED THROUGH MULTIPLICATION OF THE FORESTED PEAK FLOW RATE BY A REDUCTION FACTOR THAT IS EQUAL TO THE RUNOFF VOLUME FROM THE SITE WHEN IT WAS IN A GOOD FORESTED CONDITION DIVIDED BY THE RUNOFF VOLUME FROM THE SITE IN ITS PROPOSED CONDITION, AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS AS DEFINED IN ANY REGULATIONS PROMULGATED PURSUANT TO § 62.1-44.15:54 OR 62.1-44.15:65 OF THE ACT.
- M. FOR PLANS APPROVED ON AND AFTER JULY 1, 2014, THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS OF § 62.1-44.15:52 A OF THE ACT AND THIS SUBSECTION SHALL BE SATISFIED BY COMPLIANCE WITH WATER QUANTITY REQUIREMENTS IN THE STORMWATER MANAGEMENT ACT (§ 62.1-44.15:24 ET SEQ. OF THE CODE OF VIRGINIA) AND ATTENDANT REGULATIONS, UNLESS SUCH LAND-DISTURBING ACTIVITIES ARE IN ACCORDANCE WITH 9VAC25-870-48 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATION OR ARE EXEMPT PURSUANT TO SUBDIVISION C 7 OF § 62.1-44.15:34 OF THE ACT.
- N. COMPLIANCE WITH THE WATER QUANTITY MINIMUM STANDARDS SET OUT IN 9VAC25-870-66 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) REGULATION SHALL BE DEEMED TO SATISFY THE REQUIREMENTS OF THIS SUBDIVISION 19.

UTILITIES

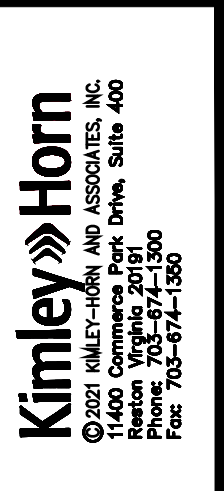
1. THIS PLAN DOES NOT GUARANTEE THE EXISTENCE, NONEXISTENCE, SIZE, TYPE, LOCATION, ALIGNMENT, OR DEPTH OF ANY UNDERGROUND UTILITIES OR OTHER FACILITIES. WHERE SURFACE FEATURES (MANHOLES, CATCH BASINS, VALVES, ETC.) ARE UNAVAILABLE OR INCONCLUSIVE, INFORMATION SHOWN MAY BE FROM UTILITY OWNER'S RECORDS AND/OR ELECTRONIC LINE TRACING, THE RELIABILITY OF WHICH IS UNCERTAIN. THE CONTRACTOR SHALL PERFORM TEST PITS OF OR OTHER REINVESTIGATIONS AS NECESSARY TO VERIFY LOCATION AND CLEARANCES.
2. STATE LAW MANDATES THE NOTIFICATION OF UTILITY OWNERS 48 HOURS IN ADVANCE OF EXCAVATION. FOR LOCATION OF UTILITIES CALL:
- | UTILITY OWNERS | TELEPHONE |
|----------------------------------|--|
| DOMINION ELECTRIC VIRGINIA (DEV) | 888-667-3000 |
| VERIZON COMMUNICATIONS | 888-826-2355 |
| COMCAST | 888-683-1000 |
| JONES FIBER | 540-891-5545 |
| WASHINGTON GAS | 703-750-1000 |
| ARLINGTON COUNTY: | |
| WATER | 703-228-3678 |
| SEWER/STORMWATER | 703-228-7612 |
| STREET LIGHTS | 703-228-0778 |
| COMMUNICATIONS FIBER | 703-228-3220 |
| WASHINGTON AQUEDUCT | 202-587-9376 / 202-764-0564 |
| 844 AIR FORCE | 703-614-1365 |
| VDOT | 703-259-2611 / 561-238-0155 / 571-437-6700 |
| EXPRESS LANE (VDOT) | 703-259-2362 / 571-419-6070 |
| CROWN CASTLE | 540-752-6691 x 2107 |
| MCI | 571-220-8978 / 703-963-3502 / 703-801-9532 |
| PENTAGON COMMUNICATIONS | 703-545-4438 |
| FIBERLIGHT, INCLUDING: | 240-965-3861 |
| CENTURYLINK | |
| QWEST | |
| LOOKING GLASS | |
| LEVEL 3 | |
| ZAYO | |
3. ADDITIONAL UTILITY CONTACT INFORMATION IS IN UTILITY REPORT PROVIDED TO CONTRACTOR.
4. CONTRACTOR SHALL CONFORM TO THE "OVERHEAD HIGH VOLTAGE ACT" (EFFECTIVE JULY 1, 2003) AND SHALL CONTACT THE NECESSARY AUTHORITIES PRIOR TO START OF CONSTRUCTION.
5. ARLINGTON COUNTY WATER SEWER STREETS BUREAU (AC-WSS) SHALL BE NOTIFIED WHEN ANY IMPROVEMENT PERTINENT TO THEIR UTILITY SYSTEMS IS BEING INSTALLED AND/OR IF ANY WORK WILL POSE A DIRECT IMPACT TO THEIR UTILITY SYSTEMS. THE CONTRACTOR IS REQUIRED TO NOTIFY AC-WSS AT LEAST 3 DAYS PRIOR TO START OF CONSTRUCTION AND A MINIMUM OF 24 HOURS NOTICE IS REQUIRED WHEN COMPACTION TESTS ARE TO BE MADE.
6. STABLE SUBGRADE SHALL COMPRISE SOLID, WELL DRAINED, UNDISTURBED EARTH CAPABLE OF SUPPORTING UTILITIES WITHOUT RESULTING IN ANY DAMAGING SETTLEMENT AS DETERMINED BY THE CONTRACTING OFFICER.
7. WHERE SUBGRADE DEEMED UNSUITABLE BY THE CONTRACTING OFFICER OR AS DEFINED BY THE APPROVED GEOTECHNICAL REPORT IS ENCOUNTERED, SUBGRADE SHALL BE MADE STABLE BY DRAINING, COMPACTING, TREATING, AND/OR REPLACING AS REQUIRED, TO THE SATISFACTION OF THE CONTRACTING OFFICER.
8. ALL CONCRETE SHALL BE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) CLASS "A4" FOR PRECAST STRUCTURES, AND VDOT CLASS "A3" FOR ALL OTHER USES, UNLESS OTHERWISE SPECIFIED.
9. ALL ASPHALT PAVEMENT COURSES SHALL BE IN CONFORMANCE WITH VDOT SPECIFICATIONS.
10. THE CONTRACTOR SHALL COORDINATE CLOSELY WITH THE UTILITY PROVIDERS TO ENSURE THE SUCCESSFUL INSTALLATION OF A COMPLETE AND FUNCTIONING SYSTEM THAT MEETS THE REQUIREMENTS OF THIS PROJECT AND THE PROMPT REMOVAL OF THE PREVIOUS SYSTEM, AS APPLICABLE.
11. THE UTILITY PROVIDERS WILL BE RESPONSIBLE FOR INSTALLING THE CABLES WITHIN THE DUCT BANK SYSTEM AND THE SERVICES FOR THE FOLLOWING UTILITY SYSTEMS:
- A. POWER (DEV ELECTRIC)
- B. COMMUNICATIONS (FIBER AND COPPER)
- C. CABLE TELEVISION (COMCAST)
12. ALL MANHOLES, HANDHOLKS, VALVES AND OTHER ITEMS WITHIN THE SURFACE OF THE CYCLE TRACK, SHARED USE PATH, SIDEWALK, OR ROADWAY SHALL BE FLUSH WITH THE SURFACE AND HAVE ADA-COMPLIANT, SLIP RESISTANT TOPS.



U.S. Department of Transportation

Federal Highway Administration

EASTERN FEDERAL LANDS HIGHWAY DIVISION
21406 RIDGETOP CIRCLE
STERLING, VIRGINIA 20166



Kimley-Horn and Associates, Inc.

20201 KIMLEY-HORN DRIVE, SUITE 400
HERNIMAN, VIRGINIA 20109
Phone: 703-271-1200
Fax: 703-271-1520

CONCEPT DESIGN PLANS

NOT FOR CONSTRUCTION

Seal

CONCEPT DESIGN PLANS

NOT FOR CONSTRUCTION

Seal

ARLINGTON MEMORIAL TRAIL PROJECT

ARLINGTON COUNTY, VIRGINIA

GENERAL NOTES

DATE
FEBRUARY 7, 2022

SCALE
HOR. _____
VERT. _____
DESIGNED: MRP
DRAWN: ATIS
CHECKED: EJD
MISS UTILITY TRANSMITTAL # _____

SHEET

2(1)

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc. K:\NVA_RDWY\110243021 ANC DAR\CAD\ANC DAR Trail\Plansheets\GENERAL NOTES.dwg Plotted By:Super, Thomas January 18, 2023 04:50:22pm

EROSION CONTROL NARRATIVE

PROJECT DESCRIPTION:
THIS PROJECT CONSTRUCTS A NEW TEN FOOT WIDE MULTI-USE TRAIL ALONG ROUTE 27 (S. WASHINGTON BOULEVARD) AND ROUTE 110 (RICHMOND HIGHWAY). THE TRAIL BEGINS AT THE INTERSECTION OF COLUMBIA PIKE AND WASHINGTON BOULEVARD AND ENDS AT THE INTERSECTION OF MEMORIAL AVENUE AND RICHMOND HIGHWAY. ALSO INCLUDED WITHIN THE PROJECT ARE UTILITY RELOCATIONS, CONSTRUCTION OF VARIOUS RETAINING WALLS AND GRADING ALONG THE PROPOSED TRAIL.

EXISTING CONDITIONS:
COLUMBIA PIKE IS A MULTI-LANE (4 LANE), CURB AND GUTTER ROAD WITH SIDEWALKS ON BOTH SIDES. WASHINGTON BOULEVARD INTERCHANGE IS A PARTIAL CLOVERLEAF. ROUTE 110 IS A MULT-LANE (5 LANE) ROAD. GENERALLY THE REALIGNMENT OF COLUMBIA PIKE AND ROUTE 27 INTERCHANGE MODIFICATION WILL IMPACT THE EXISTING TOPOGRAPHY DUE THE ROAD ALIGNMENT AND SITE MASS GRADING.

ADJACENT AREAS:
THE ARLINGTON MEMORIAL TRAIL IS BOUND ON THE WEST BY ARLINGTON NATIONAL CEMETERY, AND ON THE EAST BY ROUTE 27 AND ROUTE 110.

OFF-SITE AREAS:
THERE ARE NO OFF-SITE AREAS OR STOCKPILES ASSOCIATED WITH THIS PROJECT. OFFSITE AREAS DAMAGED BY THE CONTRACTOR OR ITS LACK OF EROSION CONTROLS SHALL BE REPAIRED AT NO COST TO THE GOVERNMENT, IN A TIMELY MANNER.

SOILS:
GEOTECHNICAL INVESTIGATIONS WITHIN THE ANCSE-DAR PROJECT AREA HAVE BEEN PROVIDED BY TERRACON CONSULTANTS, INC. AND THEIR REPORT DATED APRIL 2020 (FOR THE ROADWAY PORTIONS OF THE PROJECT) AND HANA ENGINEERS AND CONSULTANTS, LLC AND THEIR REPORT DATED NOVEMBER 2019.

CRITICAL AREAS:
CRITICAL AREAS WITHIN THE PROJECT AREA INCLUDE THE HIGHWAY EMBANKMENTS ALONG WASHINGTON BOULEVARD AND I-395. REFER TO THE TERRACON CONSULTANTS, INC. AND HANA ENGINEERS AND CONSULTANTS, LLC REPORTS QITED ABOVE. ANY TEMPORARY STOCKPILES SHALL BE STABILIZED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

EROSION AND SEDIMENT CONTROL MEASURES:
ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE AS SPECIFIED BY ARLINGTON NATIONAL CEMETERY, US NATIONAL PARK SERVICE, AND THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. THE FOLLOWING EROSION CONTROLS IN ADDITION TO OTHERS NEEDED FOR ADEQUATE EROSION AND SEDIMENT CONTROL SHALL BE USED DURING THIS PROJECT:

- STD. 3.05 SILT FENCE – SILT FENCE AND SUPER SILT FENCE SHALL BE USED IN ACCORDANCE WITH THIS STANDARD. SILT FENCE OR SUPER SILT FENCE SHALL BE USED DOWN GRADIENT FROM DISTURBED AREAS AS SHOWN ON THE PLANS AND AS NEEDED TO PREVENT THE TRANSPORTATION OF SEDIMENT BEYOND THE PROJECT LIMITS. IT SHALL BE INSTALLED PRIOR TO STARTING LAND DISTURBANCE AND SHALL BE REMOVED AFTER THE DISTURBED AREA HAS HAD TEMPORARY OR PERMANENT STABILIZATION ESTABLISHED. COORDINATE REMOVAL WITH THE CONTRACTING OFFICER.
- STD. 3.07 STORM DRAIN INLET PROTECTION – STORM DRAINAGE INLETS SHALL BE PROTECTED IN ACCORDANCE WITH THIS STANDARD. INLETS DOWN GRADIENT FROM LAND DISTURBING ACTIVITIES SHALL HAVE INLET PROTECTION INSTALLED PRIOR TO STARTING LAND DISTURBANCE. CARE SHALL BE TAKEN AS TO NOT INTERFERE WITH TRAFFIC ON OPEN PUBLIC ROADS WHEN SELECTING THE TYPE OF INLET PROTECTION TO BE USED. THE CONTRACTOR IS TO REMOVE SILT BUILDUP PROMPTLY SO THAT SILT IS NOT TRACKED ALONG THE ROAD. REMOVAL OF THE INLET PROTECTION SHALL OCCUR ONCE DISTURBED AREA UP GRADIENT OF THE INLET HAVE BEEN STABILIZED AND IN COORDINATION WITH THE CONTRACTING OFFICER.
- STD. 3.14 TEMPORARY SEDIMENT BASIN – THE TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED IN ACCORDANCE WITH THIS STANDARD. THE CONTRACTOR SHALL PROTECT THE AREA AROUND THE BASIN OUTLET STRUCTURE AND PREVENT DEBRIS FROM BLOCKING THE OPENING. SEDIMENT REMOVED FROM THE BASIN SHOULD BE USED AS FILL ON THE SITE IF IT MEETS APPLICABLE STANDARDS FOR ITS USE. THE TEMPORARY SEDIMENT BASINS AND OUTLET STRUCTURES SHALL BE REMOVED AFTER THEY ARE NO LONGER NEEDED AND IN COORDINATION WITH THE CONTRACTING OFFICER AND THE ARLINGTON NATIONAL CEMETERY SOUTHER EXPANSION PROJECT EROSION AND SEDIMENT CONTROL PLAN.
- STD. 3.18 OUTLET PROTECTION – PIPE OUTLETS SHALL BE PROTECTED IN ACCORDANCE WITH THIS STANDARD. CONTRACTOR SHALL ADJUST OUTLET PROTECTION SIZE AND MATERIAL TO PROVIDE ADEQUATE PROTECTION DURING CONSTRUCTION. OUTLET PROTECTION SHALL BE REMOVED AFTER IT IS NO LONGER NEEDED AND IN COORDINATION WITH THE CONTRACTING OFFICER.
- STD. 3.20 ROCK CHECK DAMS – ROCK CHECK DAMS SHALL BE APPLIED IN ACCORDANCE WITH THIS STANDARD. THE LOCATION AND SPACING OF THE CHECK DAMS SHOULD BE ADJUSTED AS NECESSARY BASED ON THE GRADING. THE CHECK DAMS SHALL BE REMOVED AND THE TEMPORARY DITCH FILLED IN AFTER THEY ARE NO LONGER NEEDED AND IN COORDINATION WITH THE CONTRACTING OFFICER.
- STD. 3.26 DEWATERING STRUCTURE – ALL DISCHARGES FROM DEWATERING OPERATIONS SHALL BE IN ACCORDANCE WITH THIS STANDARD. DEWATERING CONTROLS SHALL BE USED AT ALL DEWATERING DISCHARGES. THE CONTRACTOR IS TO NOTIFY THE CONTRACTING OFFICER PRIOR TO DISCHARGING DEWATERING EFFLUENT OF THE LOCATION AND TYPE OF FILTER OR CONTROL THAT IS TO BE USED AND FOR HOW LONG IT WILL BE USED.
- STD. 3.29 SURFACE ROUGHENING – SURFACE ROUGHENING SHALL BE IN ACCORDANCE WITH THIS STANDARD. THE CONTRACTOR SHALL ROUGHEN GRADED SURFACES PRIOR TO APPLYING SEEDING TO ENCOURAGE WATER INFILTRATION, SPEED THE ESTABLISHMENT OF VEGETATION, AND DECREASE RUNOFF VELOCITY.
- STD. 3.31 TEMPORARY SEEDING – TEMPORARY SEEDING SHALL BE APPLIED IN ACCORDANCE WITH THIS STANDARD. TEMPORARY STABILIZATION IS REQUIRED WHEN AN AREA IS NOT TO BE WORKED WITHIN A 14 DAY PERIOD. THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE IN ORDER TO ESTABLISH A SURFACE PROTECTION TO EROSION. TEMPORARY SEEDING SHALL BE CARED FOR AS NECESSARY IN ORDER TO GENERATE A DENSE, HEALTHY STAND OF VEGETATION THAT WILL RESIST EROSION.
- STD. 3.32 PERMANENT SEEDING – THE CONTRACTOR SHALL USE APPROPRIATE METHODS TO ESTABLISH PERMANENT STABILIZATION THAT ARE SIMILAR TO THE CONDITION THAT WAS PRESENT PRIOR TO STARTING LAND DISTURBANCE ACTIVITIES.
- STD. 3.33 SODDING – ALL SODDING SHALL BE IN ACCORDANCE WITH THIS STANDARD. SODDING MAY BE USED IN AREAS THAT REQUIRE PERMANENT SEEDING IN LOU OF PERMANENT SEEDING. SODDED AREAS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL THE SOD HAS BEEN ESTABLISHED AND HAD TWO MOWING CYCLES. THE CONTRACTOR SHALL COORDINATE THE RELEASE OF MAINTENANCE OF SODDED AREAS WITH THE CONTRACTING OFFICER.
- STD. 3.38 TREE PRESERVATION AND PROTECTION – TREE PROTECTION FENCING SHALL BE IN ACCORDANCE WITH THIS STANDARD. TREE PROTECTION SHALL BE USED ALONG THE LIMITS OF DISTURBANCE WHERE AN OFFSITE TREE OR LANDSCAPED AREA MAY HAVE A CRITICAL ROOT ZONE THAT EXTENDS INTO THE LIMITS OF THIS PROJECT. THE CONTRACTING OFFICER MAY REQUIRE ADDITIONAL TREE PRESERVATION AND PROTECTION BE INSTALLED PRIOR TO STARTING LAND DISTURBING ACTIVITIES. TREE PRESERVATION AND PROTECTION SHALL ONLY BE REMOVED WITH THE APPROVAL OF THE CONTRACTING OFFICER.

PERMANENT STABILIZATION:
ALL DISTURBED AREAS BY THIS PROJECT SHALL BE STABILIZED WITH PERMANENT GROUND COVER UTILIZING STD. 3.32 PERMANENT SEEDING OR STD. 3.33. SODDING. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF ALL DISTURBED AREAS UNTIL FINAL ACCEPTANCE BY CONTRACTING OFFICER. THIS SHALL INCLUDE CUTTING THE GRASS TO MAINTAIN THE SAME APPEARANCE AS THE UNDISTURBED PORTION OF THE PROPERTY.

STORMWATER RUNOFF CONSIDERATIONS:
THE STORM DRAINAGE SYSTEM PROPOSED AS PART OF THESE PLANS IS A PORTION OF THE OVERALL CEMETERY EXPANSION PROJECT (ANCSE). ROADS WITHIN THE PROJECT HAVE INLETS AND PIPES TO COLLECT AND CONVEY SURFACE WATERS TO AN ADEQUATE STORM DRAINAGE SYSTEM EAST OF WASHINGTON BOULEVARD. THIS PROJECT IS PART OF THE OVERALL ARLINGTON NATIONAL CEMETERY SOUTHERN EXPANSION PROJECT WHICH INCLUDES REDEVELOPMENT OF THE NAVY ANNEX PROPERTY AND OTHER FEDERAL OFFICE BUILDINGS AND THEIR ASSOCIATED PARKING FACILITIES. STORMWATER MANAGEMENT COMPUTATIONS ARE FULLY SHOWN WITH THE ANCSE PROJECT PLANS. CARE HAS BEEN BE TAKEN TO REDUCE THE AMOUNT OF PROPOSED IMPERVIOUS AREA WHERE FEASIBLE. BEST PRACTICES FOR STORMWATER MANAGEMENT AS REQUIRED WILL BE EMPLOYED..

CALCULATIONS:
DETAILED CALCULATIONS SHOWING PRE AND POST DEVELOPMENT DRAINAGE AREAS, INLET COMPUTATIONS, PIPE CAPACITIES AND FLOWS WILL BE INCLUDED IN FUTURE SUBMISSIONS.

GENERAL REQUIREMENTS

- THE CONTRACTOR SHALL MAINTAIN A CLEAN WORK SITE, FREE FROM TRASH AND DEBRIS.
- THE CONTRACTOR SHALL KEEP AND MAINTAIN A SET OF APPROVED PROJECT PLANS AND SPECIFICATIONS ON SITE AT ALL TIMES. CONTRACTOR SHALL KEEP AND MAINTAIN THE SWPPP ON SITE AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WITH MATCHING MATERIALS ANY PAVEMENT, PAVEMENT MARKINGS, ETC. THAT MUST BE CUT OR REMOVED, OR THAT ARE DAMAGED DURING CONSTRUCTION ON ROADS AND SIDEWALKS OPEN TO THE PUBLIC.
- THE CEMETERY WALL TRAIL IS TO BE MAINTAINED BY ARLINGTON COUNTY. ALL ROADWAY IMPROVEMENTS INCLUDED WITHIN THE PROJECT LIMITS ARE TO BE CONSTRUCTED TO A COMBINATION OF VDOT, ARLINGTON COUNTY, AASHTO, AND FHWA DESIGN CRITERIA, REQUIREMENTS, AND SPECIFICATIONS. REFER TO THE PROJECT SPECIFICATIONS, SPECIAL CONDITIONS, AND APPLICABLE BRIDGING DOCUMENTS FOR DETAILS.

COORDINATION

- CONSTRUCTION WILL TAKE PLACE ADJACENT TO ONGOING TRAFFIC OPERATIONS. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE CONTRACTING OFFICER.
- THE CONTRACTOR SHALL SUBMIT A SCHEDULE FOR CONSTRUCTION TO THE CONTRACTING OFFICE IN ACCORDANCE WITH PROJECT SPECIAL CONTRACTING REQUIREMENTS (SCR'S).
- PER THE CONTRACT DOCUMENTS, THE CONTRACTING OFFICER IS THE PERSON THAT CAN AUTHORIZE ANY CHANGE IN THE CONTRACT DOCUMENTS OR PLAN, INCLUDING WITHIN THE VDOT OR ARLINGTON COUNTY RIGHT-OF-WAY OR ARLINGTON NATIONAL CEMETERY PROPERTY. ANY COORDINATION WITH VDOT, ARLINGTON COUNTY, OR ARLINGTON NATIONAL CEMETERY SHALL INCLUDE THE CONTRACTING OFFICER.
- THE CONTRACTOR WILL ALSO BE REQUIRED TO CLOSELY COORDINATE WITH ADJACENT ONGOING AND PLANNED PROJECTS BEING CONSTRUCTED BY ARLINGTON NATIONAL CEMETERY, ARLINGTON COUNTY, VDOT, THE AIR FORCE DISTRICT OF WASHINGTON AND OTHERS (PENTAGON MEMORIAL FUND), INCLUDING BUT NOT LIMITED TO THE COLUMBIA PIKE MULTIMODAL IMPROVEMENT PROJECT AND THE CEMETERY MAINTENANCE FACILITY RELOCATION BY ARLINGTON NATIONAL CEMETERY.

ROADWAY LIGHTING

- THE CONTRACTOR SHALL INSTALL LIGHTING EQUIPMENT ITEMS (CONDUIT, JUNCTION BOXES, LIGHT POLES, AND LIGHT FIXTURES) IN ACCORDANCE WITH THESE PLANS, THE CONTRACT DOCUMENTS, THE TRAFFIC SIGNAL EQUIPMENT SPECIFICATIONS, STREET LIGHT SPECIFICATIONS AND ALL REFERENCE SPECIFICATIONS, INCLUDING THOSE LISTED IN THESE GENERAL NOTES (ESPECIALLY ARLINGTON COUNTY, VDOT AND DOMINION ENERGY VIRGINIA (DEV) STANDARDS AND SPECIFICATIONS).
- THE LOCATIONS OF LIGHTING AND ELECTRICAL EQUIPMENT ITEMS ARE SHOWN ON THE PLANS AS DIAGRAMMATIC ONLY. THE PLANS CONVEY THE SCOPE, GENERAL ARRANGEMENT, AND APPROXIMATE LOCATION OF EQUIPMENT ITEMS. THE FINAL LOCATIONS OF THE ITEMS MAY BE DETERMINED IN THE FIELD BY THE CONTRACTING OFFICER IN COORDINATION WITH THE LIGHT OWNER/MAINTAINER, THE CONTRACTOR AND DOMINION ENERGY VIRGINIA.
- THE CONTRACTOR SHALL NOT PROCEED WITH THE INSTALLATION OF ANY LIGHTING ITEMS WITHOUT APPROVAL OF THE FIELD LOCATIONS BY THE LIGHT OWNER/MAINTAINER. COORDINATE WITH THE CONTRACTING OFFICER ANY NECESSARY FIELD REVIEWS RELATED TO LOCATION APPROVAL BY THE LIGHT OWNER/MAINTAINER.
- ALL LIGHTING AND ELECTRICAL EQUIPMENT FURNISHED BY THE CONTRACTOR FOR THIS PROJECT SHALL BE NEW, UNLESS OTHERWISE APPROVED BY THE CONTRACTING OFFICER.
- THE CONTRACTOR SHALL INSTALL A METER PEDESTAL FOR ROADWAY LIGHTING SYSTEM, ALL LIGHT POLES, LIGHT FIXTURES, BASES, CONDUIT, JUNCTION BOXES, AND WIRING FROM THE METER PEDESTAL TO EACH LIGHT.
- DEV WILL INSTALL A TRANSFORMER, IF NEEDED, AND INSTALL CONDUCTOR CABLES FROM TRANSFORMER TO THE METER PEDESTAL INSTALLED BY THE CONTRACTOR. ARLINGTON COUNTY WILL PROVIDE THE LOAD LETTER FOR THE NEW METER TO DEV.
- SEPARATE METERS ARE REQUIRED FOR STREETLIGHTS AND TRAFFIC SIGNALS.
- REMOVAL OF EXISTING LIGHT POLES AND ASSOCIATED ELECTRICAL CONDUCTORS SHALL BE PERFORMED BY THE CONTRACTOR. EXISTING CONDUIT TO BE ABANDONED AND/OR REMOVED AS SHOWN ON PLANS.
- TEMPORARY STREET LIGHTING TO BE INSTALLED AND REMOVED BY CONTRACTOR AND/OR DEV.

MS4 NOTES

- ONLY THE FOLLOWING NON-STORMWATER DISCHARGES ARE AUTHORIZED BY THE ARLINGTON NATIONAL CEMETERY'S MS4 PERMIT, UNLESS THE STATE WATER CONTROL BOARD, THE VIRGINIA SOIL AND WATER CONSERVATION BOARD (BOARD), OR THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (VDEQ) DETERMINES THE DISCHARGE TO BE A SIGNIFICANT SOURCE OF POLLUTANTS TO SURFACE WATERS: WATER LINE FLUSHING; LANDSCAPE IRRIGATION; DIVERTED STREAM FLOWS; RISING GROUND WATERS; UNCONTAMINATED GROUND WATER INFILTRATION (AS DEFINED AT 40 CFR 35.2005(20)); UNCONTAMINATED PUMPED GROUND WATER; DISCHARGES FROM POTABLE WATER SOURCES; AIR CONDITIONING CONDENSATION; IRRIGATION WATER; SPRINGS; WATER FROM BUILDING SUMP PUMPS; FOOTING DRAINS; LAWN WATERING; FLOWS FROM RIPARIAN HABITATS AND WETLANDS; DISCHARGES OR FLOWS FROM FIRE FIGHTING; AND, OTHER ACTIVITIES GENERATING DISCHARGES IDENTIFIED BY THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY AS NOT REQUIRING VPDES AUTHORIZATION.
- APPROPRIATE CONTROLS MUST BE IMPLEMENTED TO PREVENT ANY NON-STORMWATER DISCHARGES NOT INCLUDED ON THE ABOVE LIST (E.G., CONCRETE WASH WATER, PAINT WASH WATER, VEHICLE WASH WATER, DETERGENCY WASH WATER, ETC.) FROM BEING DISCHARGED INTO ARLINGTON NATIONAL CEMETERY'S OR VDOT'S OR ARLINGTON COUNTY'S MS4 SYSTEM, WHICH INCLUDES THE CURB AND GUTTER SYSTEM, AS WELL AS CATCH BASINS AND OTHER STORM DRAIN INLETS, OR STORM WATER NETWORK.

COORDINATION WITH UTILITY PROVIDERS

- THE CONTRACTOR SHALL COORDINATE WITH REPRESENTATIVES OF THE UTILITY PROVIDERS (OWNERS) WHO WILL BE OPERATING PORTIONS OF THE UTILITY SYSTEMS SUPPORTING THE RELOCATION OF EXISTING UTILITIES (BOTH OVERHEAD AND UNDERGROUND) AND THE INSTALLATION OF NEW UNDERGROUND UTILITIES.

CLEARING AND GRUBBING/DEMOLITION

- THE CONTRACTOR SHALL PERFORM DEMOLITION ACTIVITIES AS NOTED AND SHOWN ON THESE PLANS AND AS DIRECTED BY THE CONTRACTING OFFICER.
- INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AND TREE PROTECTION PRIOR TO BEGINNING DEMOLITION WORK.
- DEMOLITION DETAILS AND NOTES ARE INTENDED TO DEPICT GENERAL DEMOLITION AND UTILITY WORK AND ARE NOT INTENDED TO IDENTIFY EACH ELEMENT OF DEMOLITION OR RELOCATION. CONTRACTOR SHALL COORDINATE WITH CONTRACTING OFFICER AND APPROPRIATE UTILITY COMPANIES PRIOR TO WORK.
- THE CONTRACTOR SHALL REMOVE OR ABANDON, AS SPECIFIED, EXISTING UTILITIES SUCH AS STORM DRAINAGE, SANITARY SEWER, WATER, GAS, ELECTRIC, AND TELEPHONE OR AS DIRECTED BY CONTRACTING OFFICER. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH EACH UTILITY COMPANY TO COORDINATE ABANDONMENT OR REMOVAL OF ALL UTILITIES AND FOR DETERMINING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES PRIOR TO COMMENCING WORK. ABANDONMENT OF UTILITIES THAT MAY INTERFERE WITH FUTURE CEMETERY OPERATIONS WILL NOT BE ALLOWED.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
- ALL MATERIALS REMOVED UNDER CLEARING WORK AND/OR UTILITY REMOVAL, SHALL BE LEGALLY DISPOSED OF.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID UNNECESSARY DAMAGE TO EXISTING ROAD SURFACES.
- ALL EXISTING ITEMS TO REMAIN WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO THE GOVERNMENT.

DRAINAGE

- THE LOCATIONS OF ALL DRAINAGE STRUCTURES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY, WITH THE EXCEPTION OF STRUCTURES SHOWING SPECIFIC STATIONS. THE HEIGHT (H") DIMENSIONS SHOWN ON THE PLANS FOR DROP INLETS, JUNCTION BOXES, AND MANHOLES ARE APPROXIMATE.
- TEMPORARY DRAINAGE DURING CONSTRUCTION WILL BE PROVIDED BY THE CONTRACTOR TO RELIEVE AREAS THAT MAY CAUSE DAMAGE TO ROADWAYS OR OTHER STRUCTURES, AS DIRECTED BY THE CONTRACTING OFFICER.
- IF PRECAST DRAINAGE STRUCTURES ARE USED, SHOP DRAWINGS MUST BE SUBMITTED ALONG WITH THE PROPER CERTIFICATION.
- ALL PROPOSED STORM DRAINAGE STRUCTURES SHALL UTILIZE INLET SHAPING WITH PAVED INVERTS, UNLESS OTHERWISE NOTED ON THE PLANS, FOR EACH STRUCTURE.
- ALL PIPE CULVERTS (WATER, SEWER, AND STORM SEWER), LOCATED WITHIN RIGHT-OF-WAY EXCAVATION AREAS THAT ARE SUBJECT TO TRAFFIC LOADS SHALL BE BACKFILLED WITH A SELECT OR GRANULAR MATERIAL AND PLACED IN SIX (6) INCH LAYERS AND COMPACTED TO 95 PERCENT THEORETICAL AASHTO DENSITY IN ACCORDANCE WITH SECTION 302.03 OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS.
- RIPRAP MUST BE PROVIDED AT ALL ENDWALLS AND FLARED END SECTIONS AS REQUIRED BY CONTRACTING OFFICER.
- THE CONTRACTOR SHALL MAINTAIN ALL DRAINAGE FACILITIES AND SYSTEMS WITHIN THE PROJECT LIMITS TO ENSURE THAT THEY FUNCTION PROPERLY DURING CONSTRUCTION.
- A WATERTIGHT CONNECTION SHALL BE MADE AT ALL PIPES ENTERING DRAINAGE STRUCTURES. IN ADDITION, WATERTIGHT CONNECTIONS SHALL BE MADE BETWEEN EACH SECTION OF PIPE.
- LENGTHS OF PIPE SHOWN ON THE DRAWINGS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- TOP OF STRUCTURES SHALL BE SET TO MATCH CURB AND GUTTER, SIDEWALK AND/OR DITCH CONSTRUCTION.
- VDOT STD. UD-2, UD-4, AND CD-2 SHALL BE USED AS DEPICTED ON PLANS. UNDERDRAIN PIPE SHALL CONNECT DIRECTLY TO DRAINAGE STRUCTURES.
- PER VDOT 2016 ROAD AND BRIDGE SPECIFICATIONS, "IN ADDITION TO THE VISUAL INSPECTION PERFORMED BY THE DEPARTMENT DURING THE INITIAL INSTALLATION OF STORM SEWER PIPES AND PIPE CULVERTS, A POST INSTALLATION VISUAL/VIDEO CAMERA INSPECTION SHALL BE CONDUCTED BY THE CONTRACTOR ON ALL STORM SEWER PIPES AND A SELECTED NUMBER OF PIPE CULVERTS IN ACCORDANCE WITH THIS SPECIFICATION AND VTM 123."

RESOURCE PROTECTION AREA (RPA) NARRATIVE

THERE ARE NO RPA LIMITS WITHIN OR ADJACENT TO THE LIMITS OF DISTURBANCE OF THIS PROJECT. NO IMPACTS TO THE RPA, ITS COMPONENTS OR DISTURBANCE WITHIN THE RPA ARE PROPOSED.



U.S. Department of Transportation

Federal Highway Administration

EASTERN FEDERAL LANDS HIGHWAY DIVISION

21406 RIDGETOP CIRCLE

STERLING, VIRGINIA 20166



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ARLINGTON MEMORIAL TRAIL PROJECT

ARLINGTON COUNTY, VIRGINIA

GENERAL NOTES

DATE: FEBRUARY 7, 2022

SCALE: N/A

HOR: N/A

VERT: N/A

DESIGNED: MRP

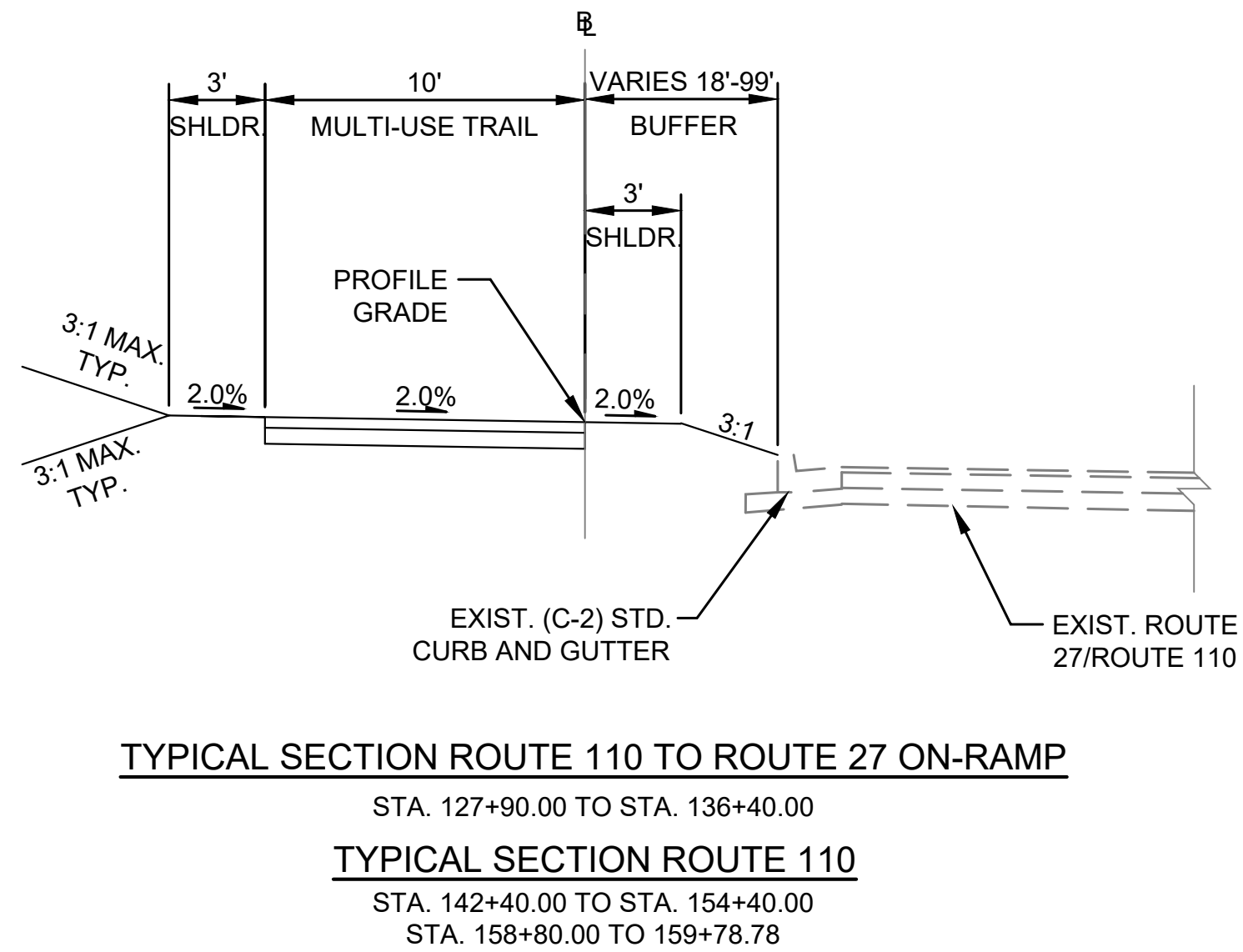
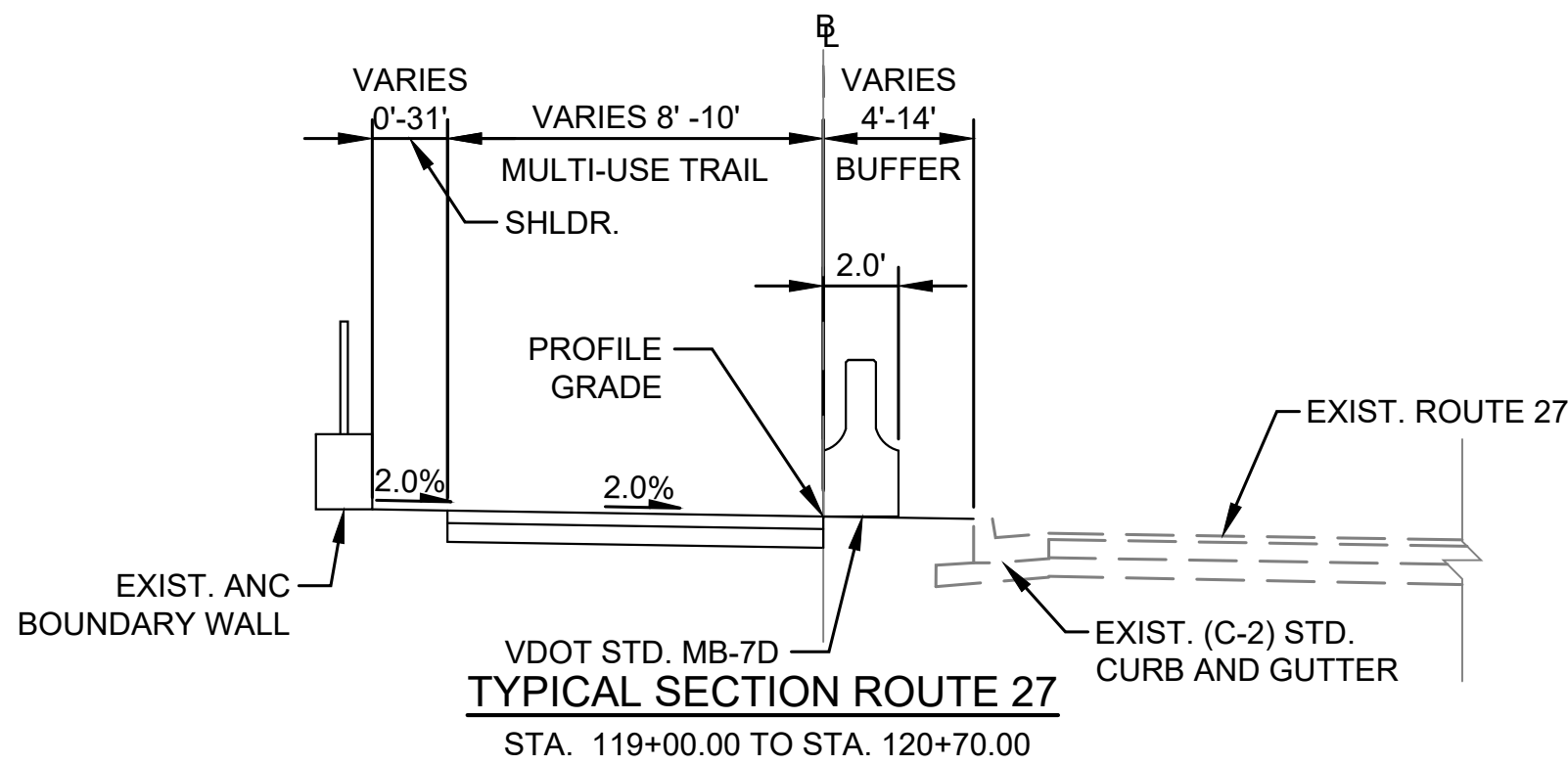
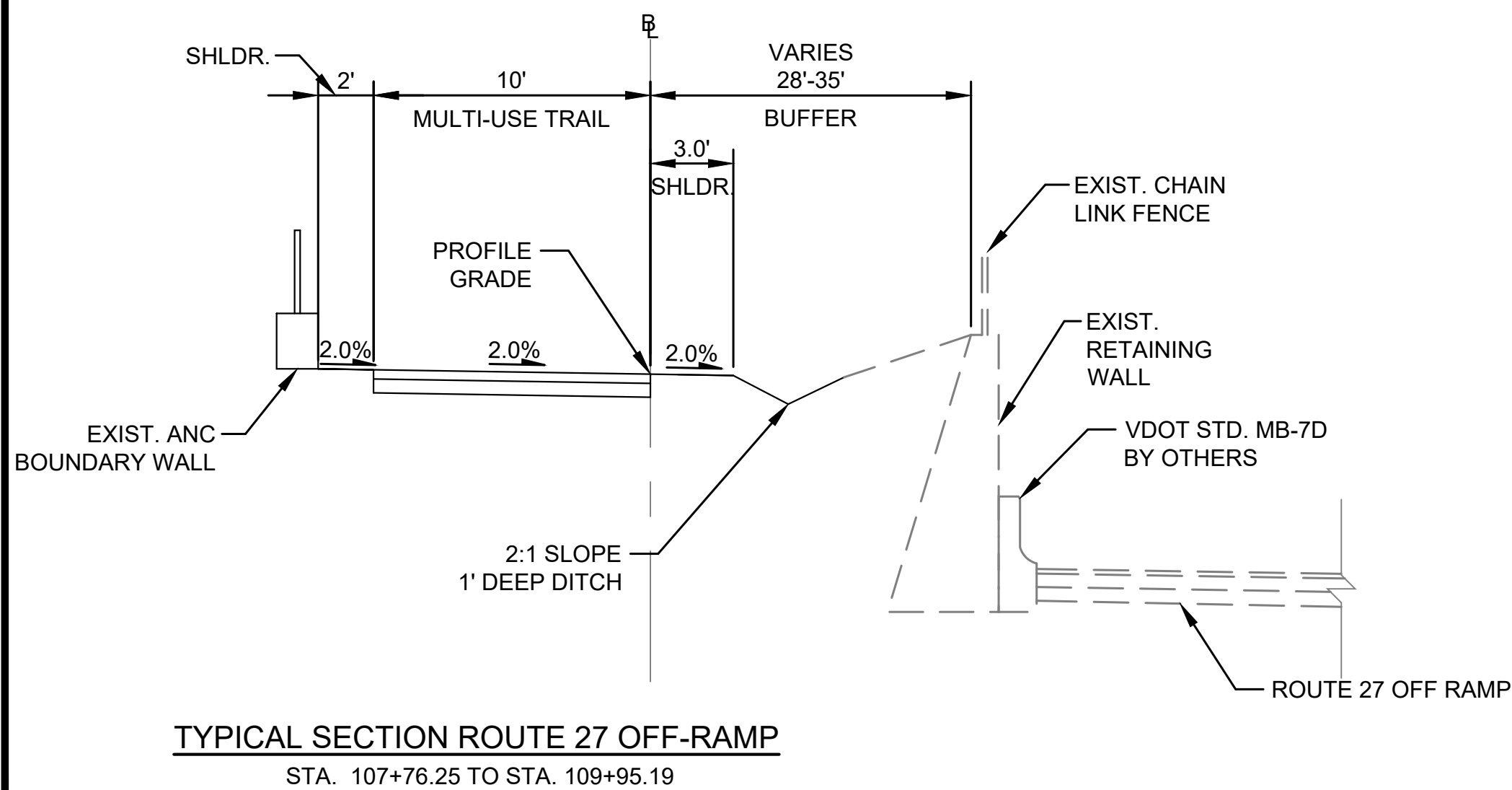
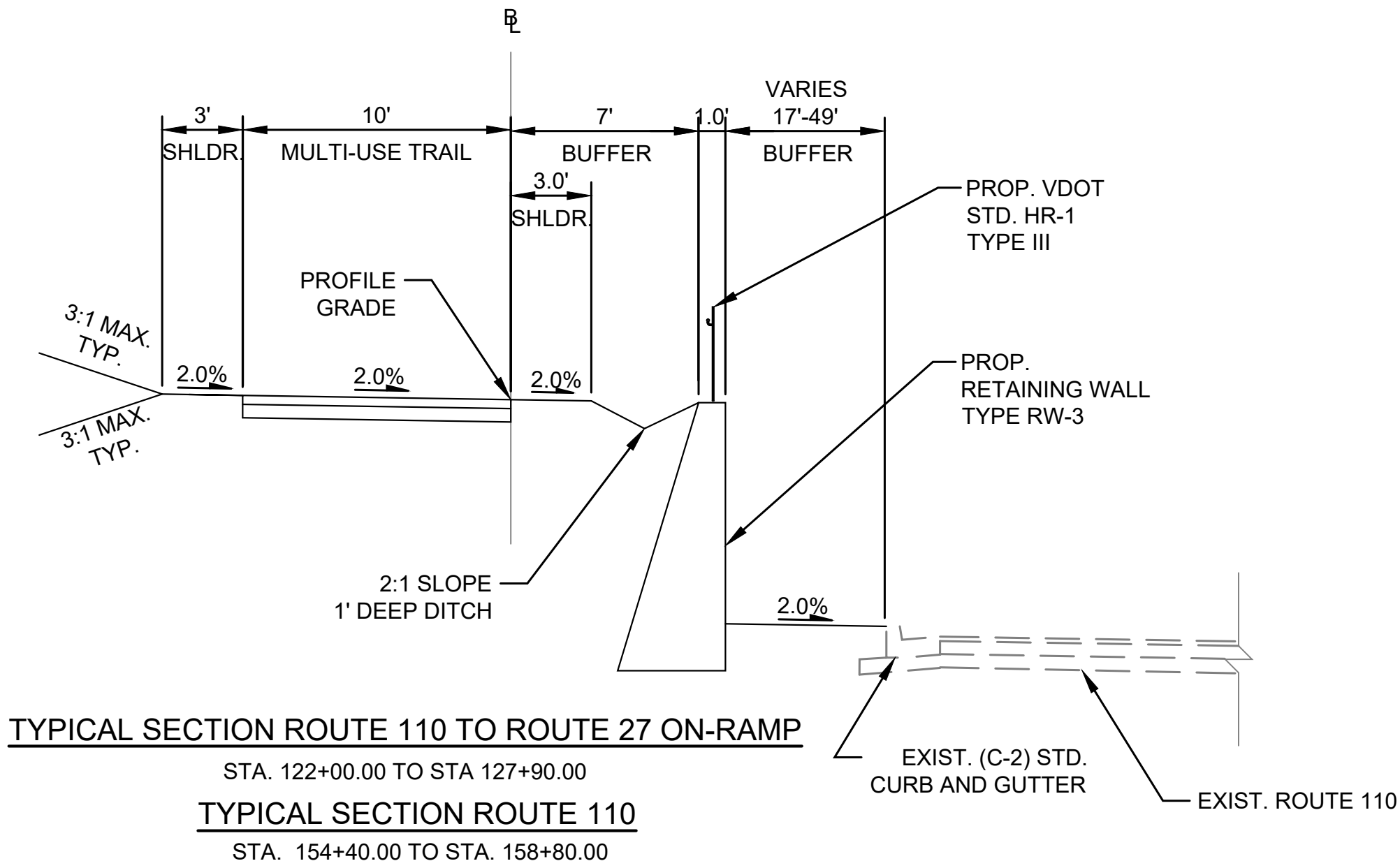
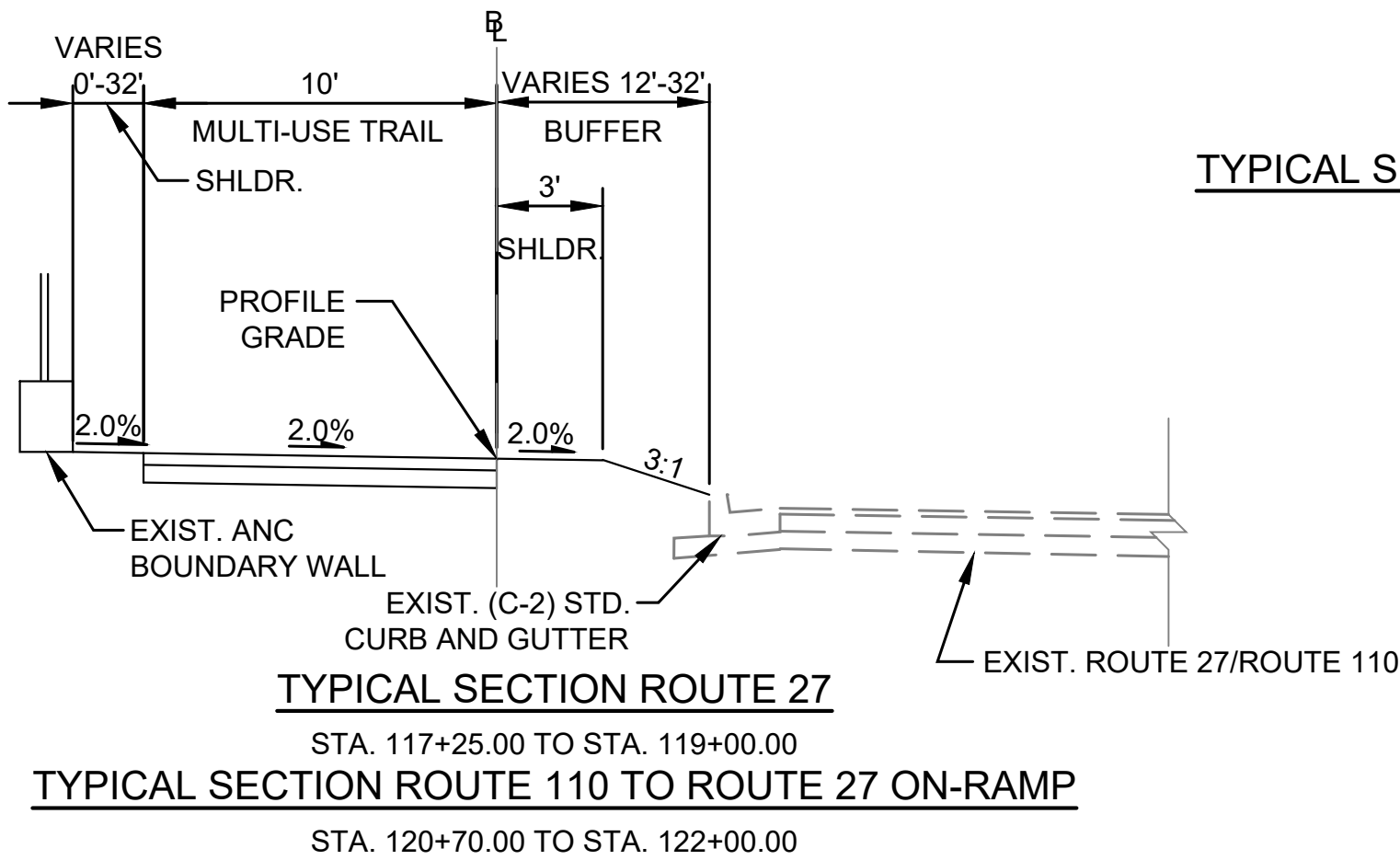
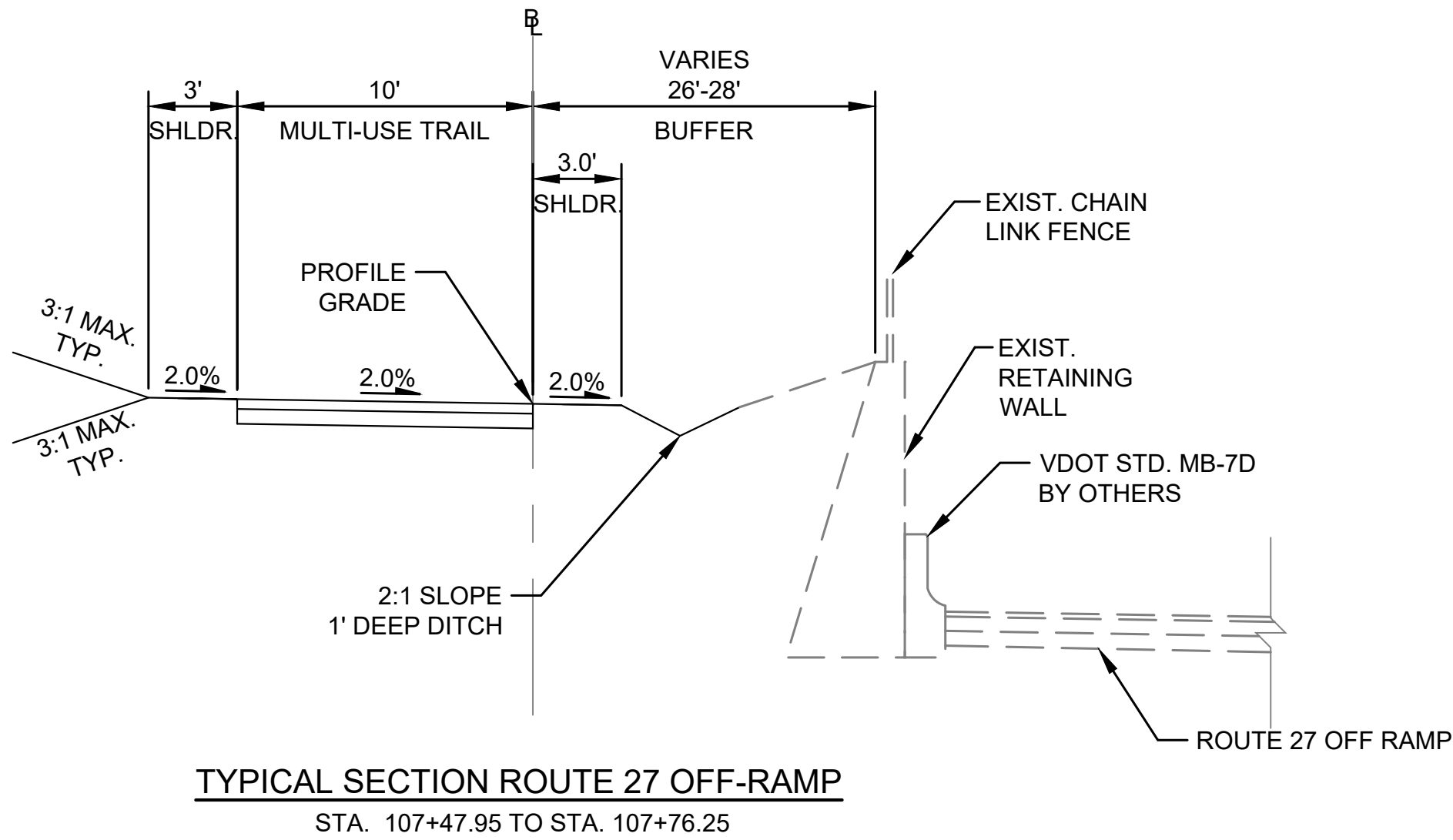
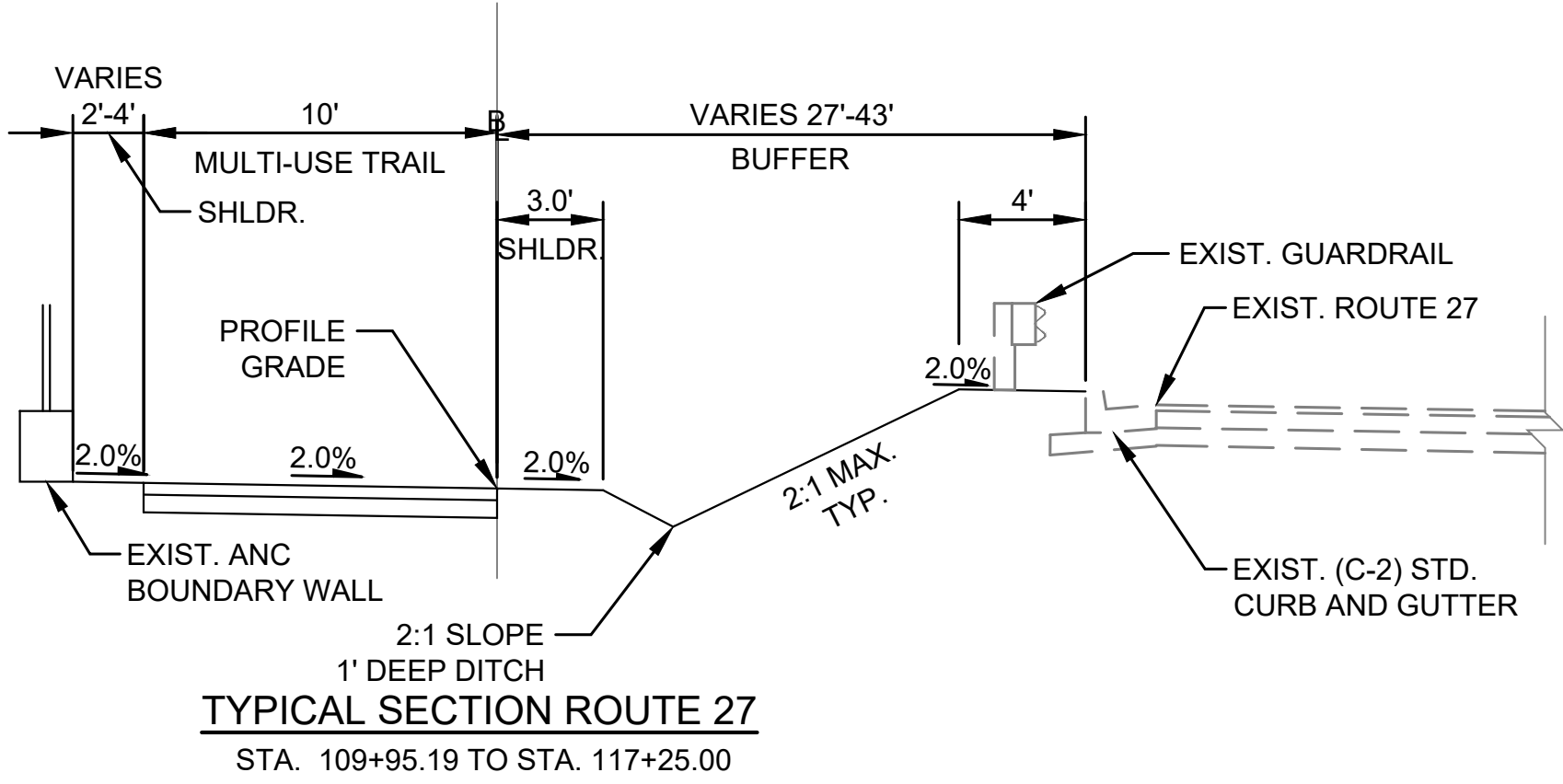
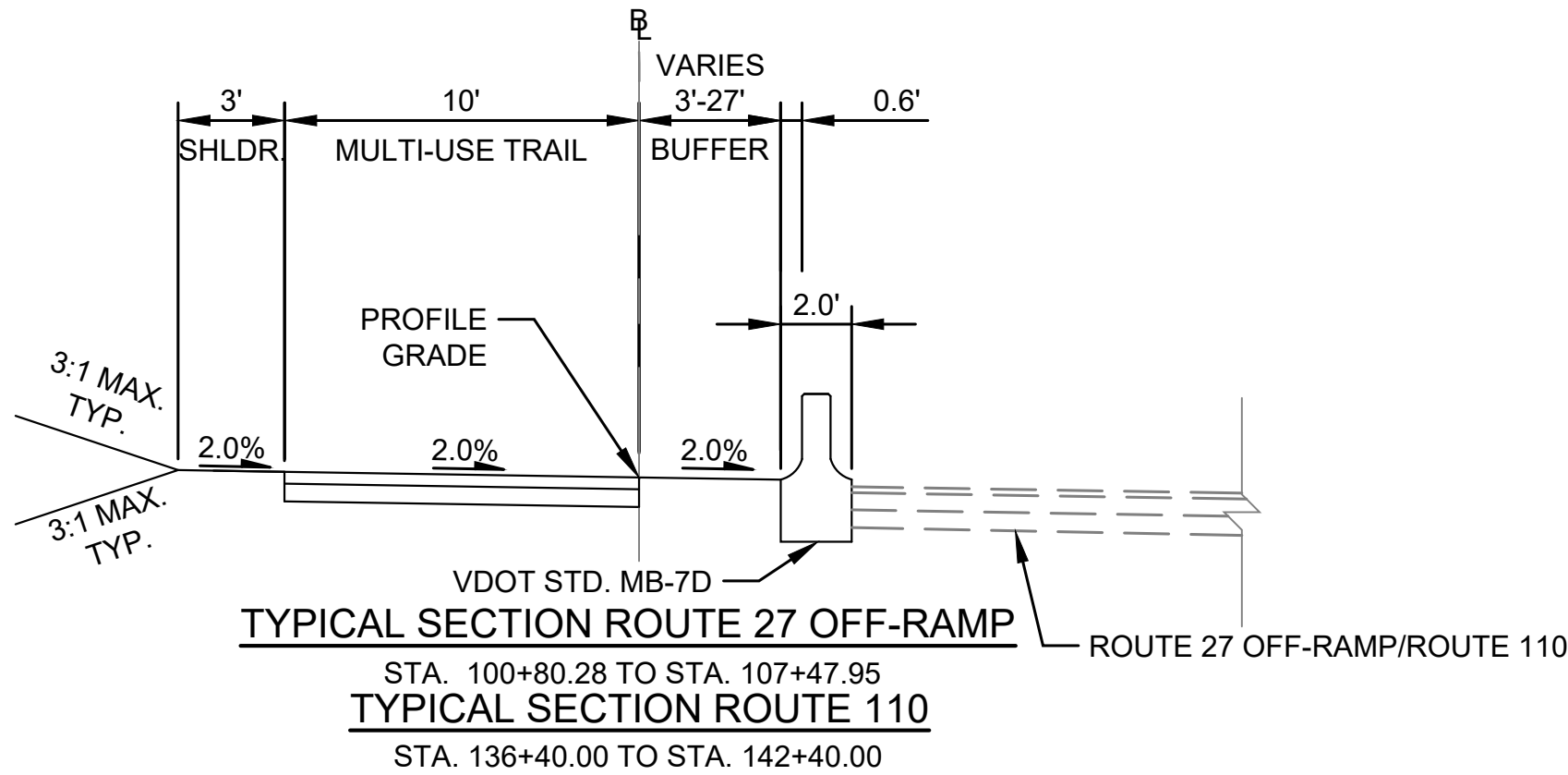
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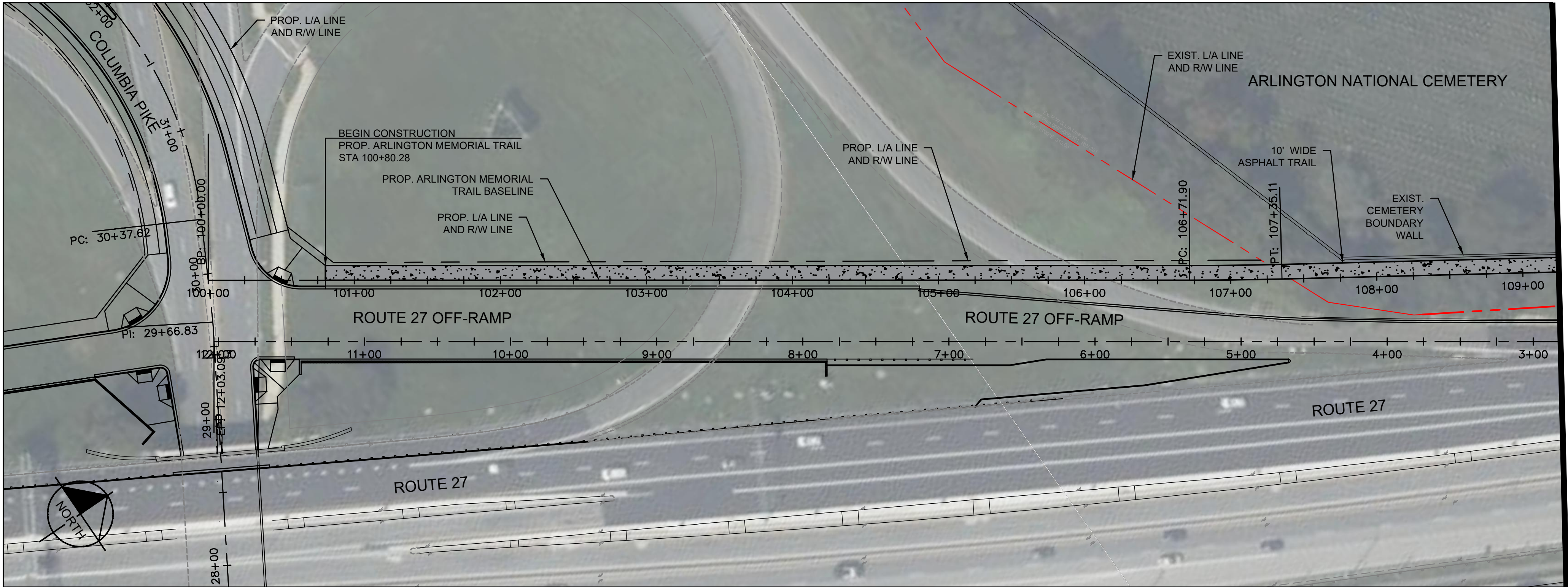
ARLINGTON MEMORIAL TRAIL PROJECT
ARLINGTON COUNTY, VIRGINIA

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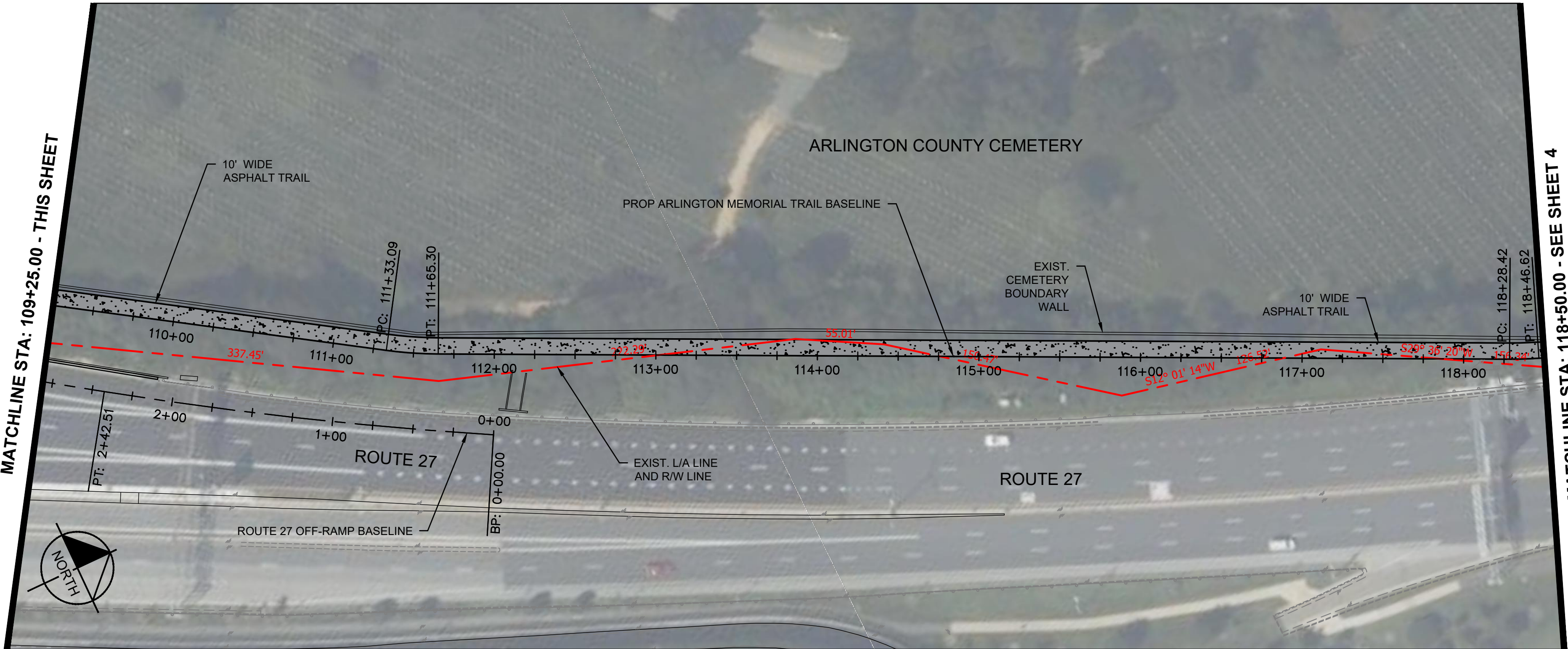
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SHEET
2A

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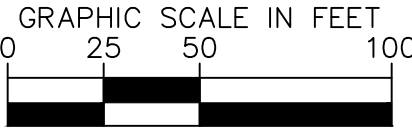
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MATCHLINE STA: 118+50.00 - SEE SHEET 4

LEGEND

- PROP. ASPHALT TRAIL
- EXISTING ROW
- PROP. RETAINING WALL
- PROP. MEDIAN BARRIER

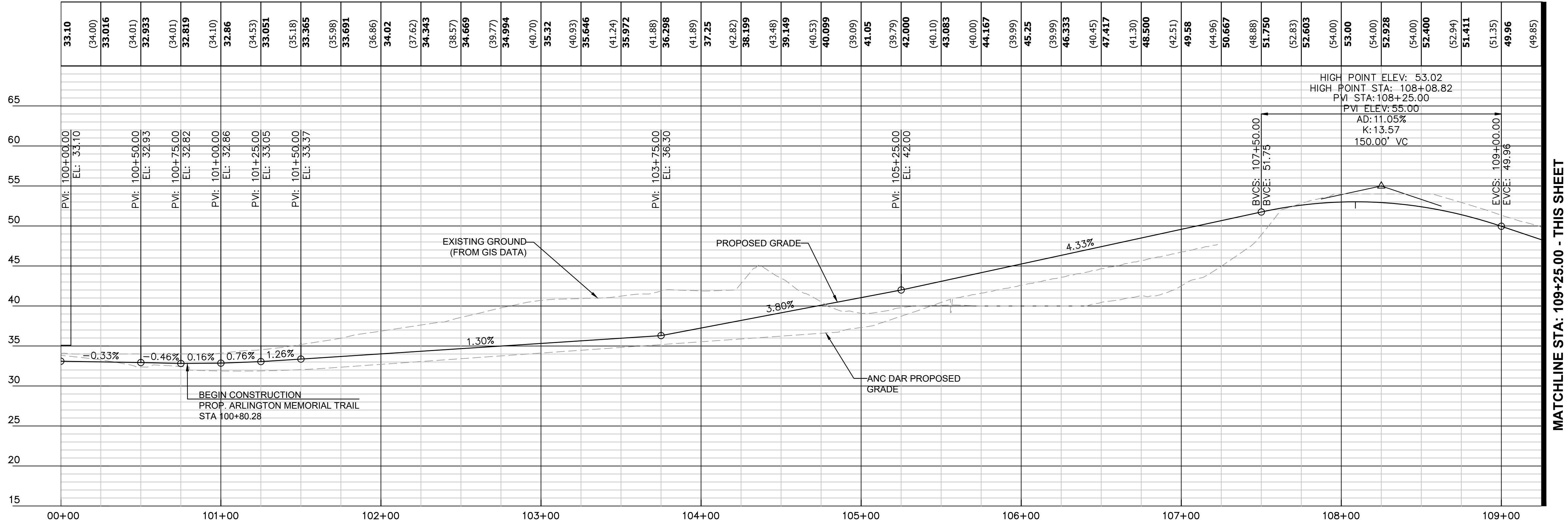
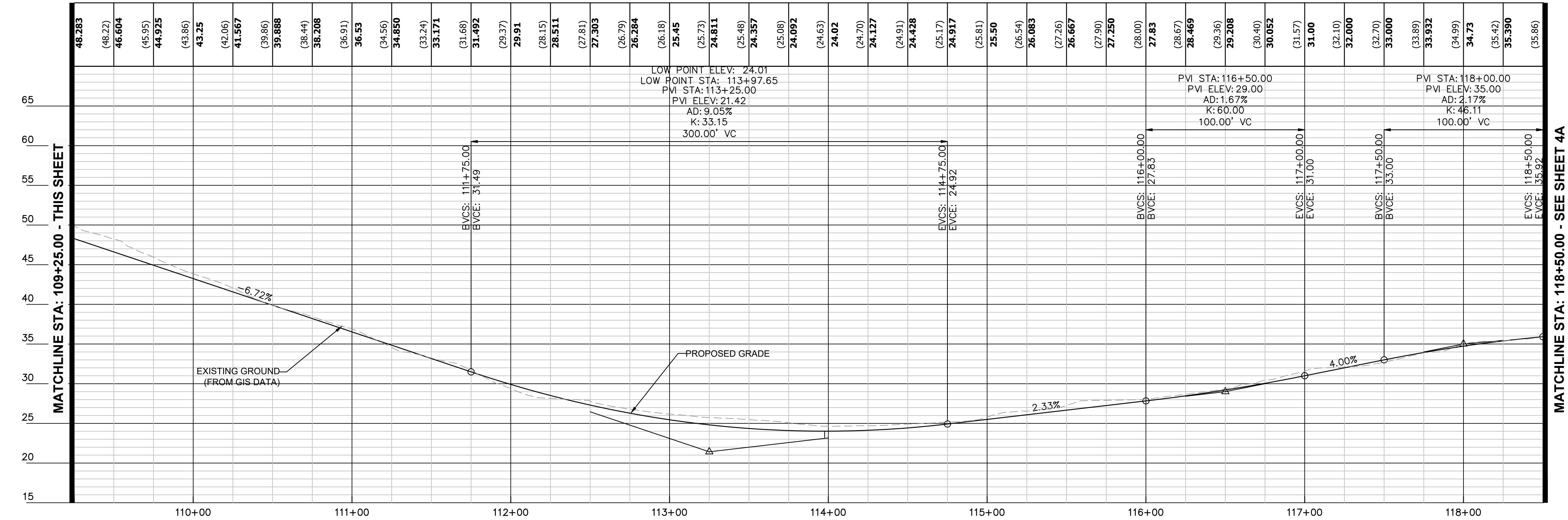


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ARLINGTON MEMORIAL TRAIL PROJECT ARLINGTON COUNTY, VIRGINIA	
TRAIL PLAN - ALTERNATIVE 1 STA. 100+00.00 TO STA. 118+50.00	
DATE FEBRUARY 7, 2022	SCALE 1" = 50'
HOR. VERT.	N/A
DESIGNED:	MRP
DRAWN:	ATS
CHECKED:	EJD
MISS UTILITY TRANSMITTAL #	
SHEET 3	

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DATE FEBRUARY 7, 2022	
SCALE HORIZ. 1" = 40' VERT. 1" = 8'	
DESIGNED: MRP	ATS
DRAWN: EJD	EJD
SHEET 3A	

PROFILE - ALTERNATIVE 1
STA. 100+00.00 TO STA. 118+50.00

ARLINGTON MEMORIAL TRAIL PROJECT
ARLINGTON COUNTY, VIRGINIA

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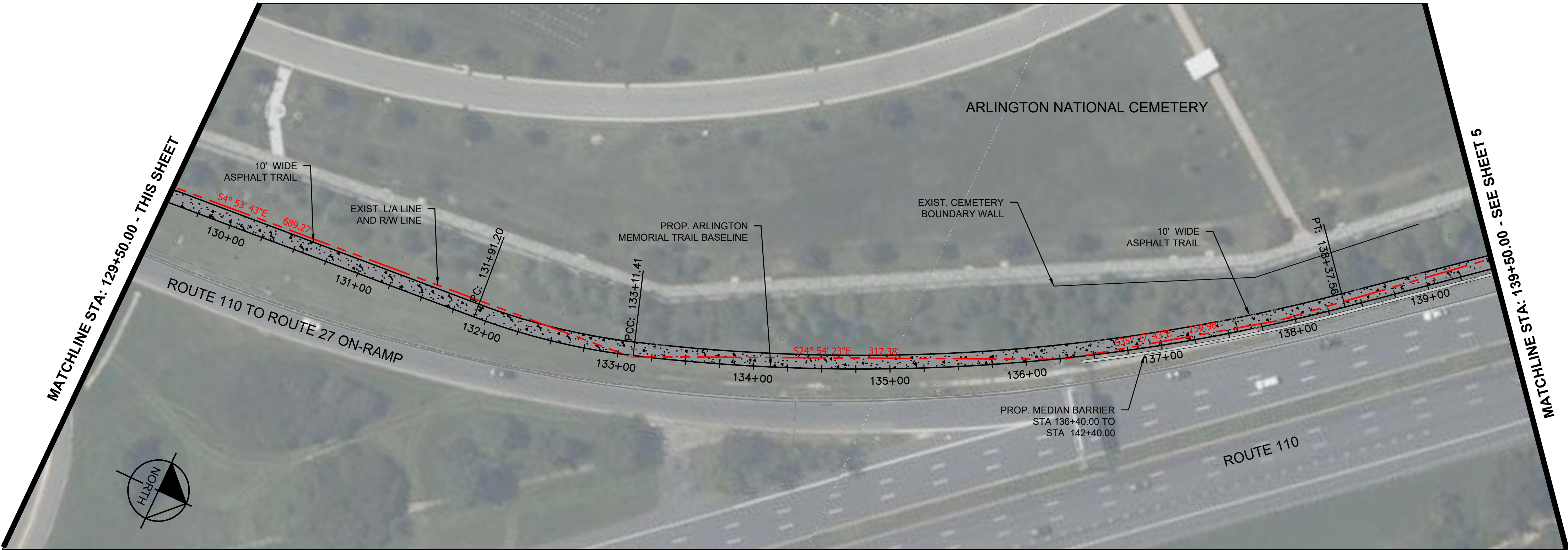
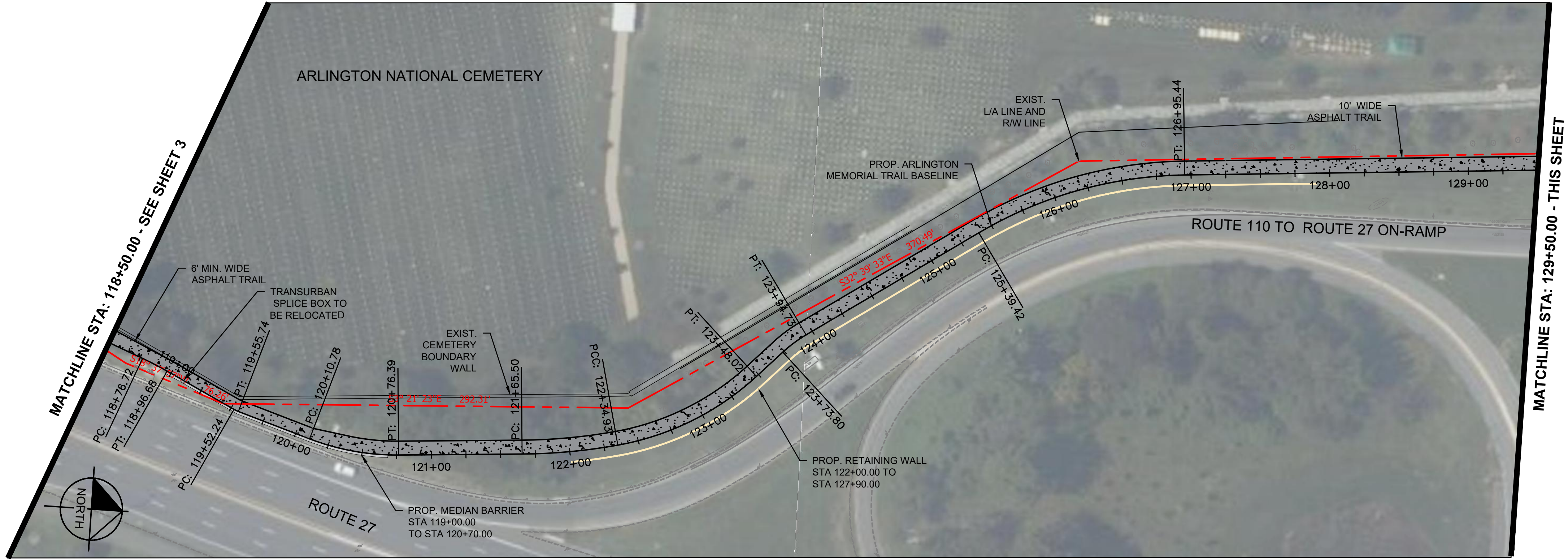
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U.S. Department of Transportation
Federal Highway
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EASTERN FEDERAL LANDS HIGHWAY DIVISION
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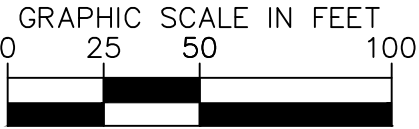
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LEGEND

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- EXISTING ROW
- PROP. RETAINING WALL
- PROP. MEDIAN BARRIER

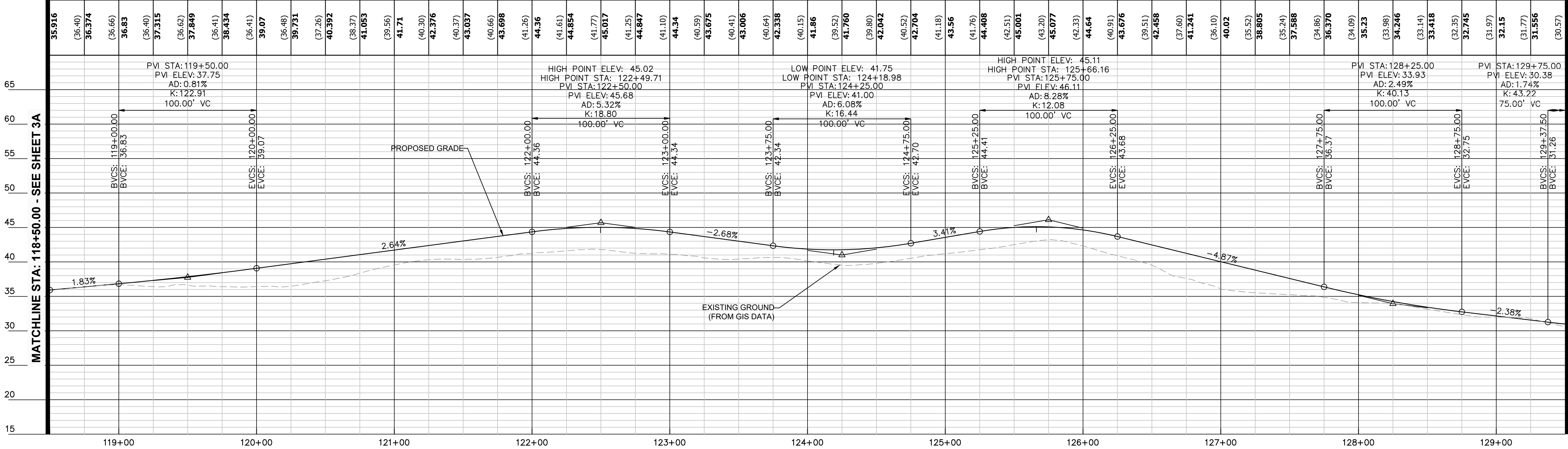
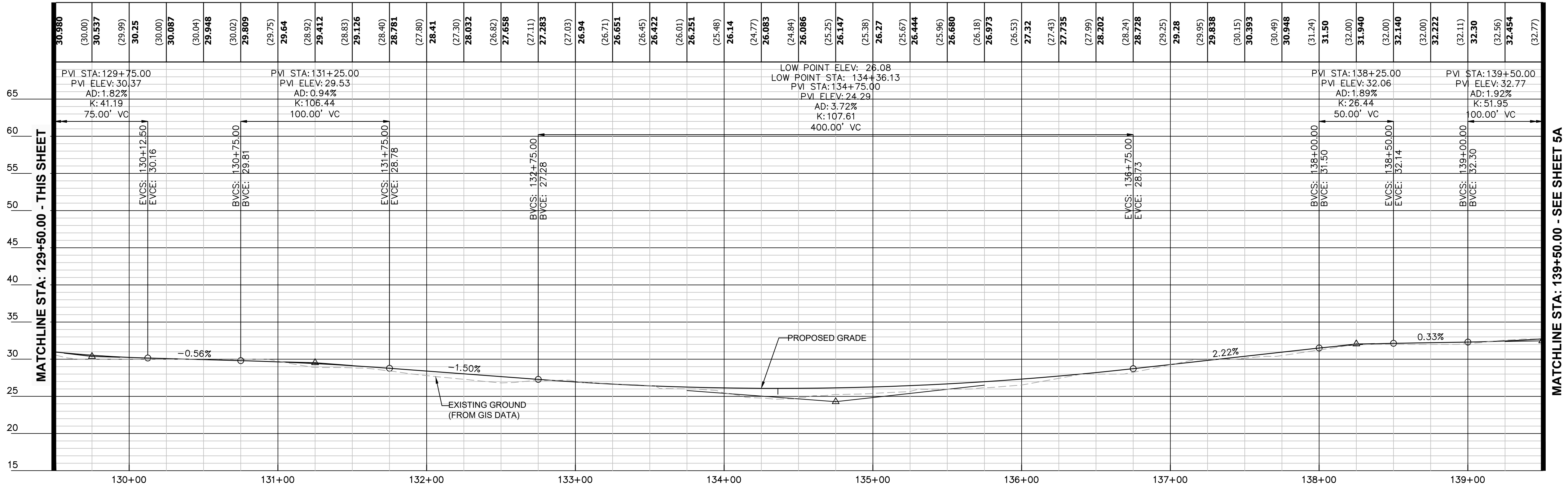


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ARLINGTON MEMORIAL TRAIL PROJECT ARLINGTON COUNTY, VIRGINIA		
TRAIL PLAN - ALTERNATIVE 1 STA. 118+50.00 TO STA. 139+50.00		
DATE FEBRUARY 7, 2022	SCALE 1" = 50'	VERT. N/A
HOR. N/A	DESIGNED: MRP	DRAWN: ATS
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SHEET 4		

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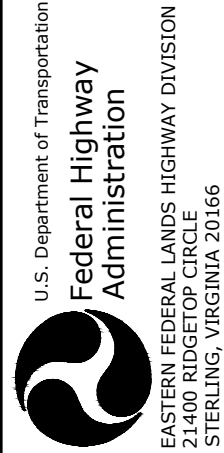
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	DESIGNED: MRP	DRAWN: ATS
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PROFILE - ALTERNATIVE 1
STA. 118+50.00 TO STA. 139+50.00

ARLINGTON MEMORIAL TRAIL PROJECT
ARLINGTON COUNTY, VIRGINIA

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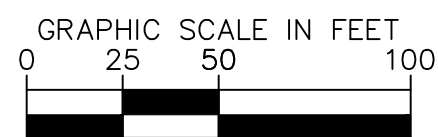
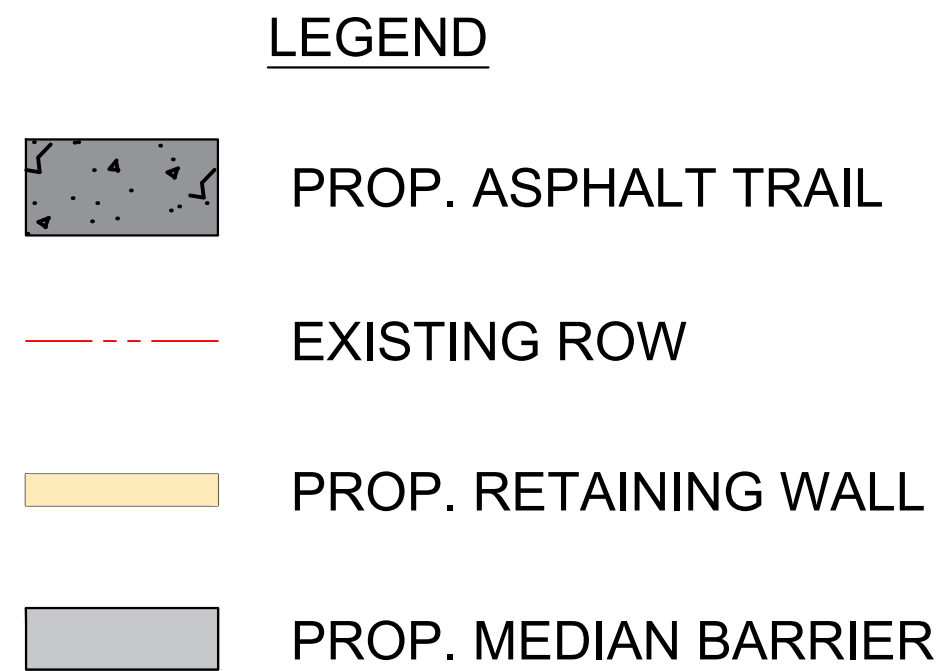
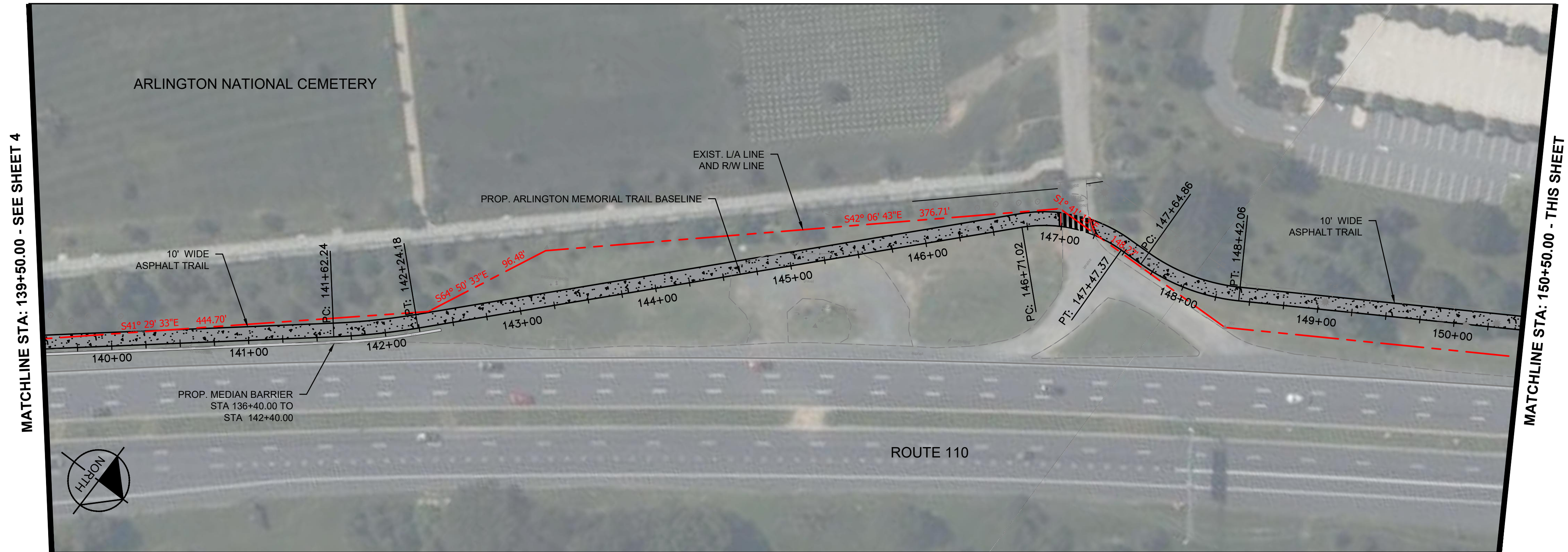
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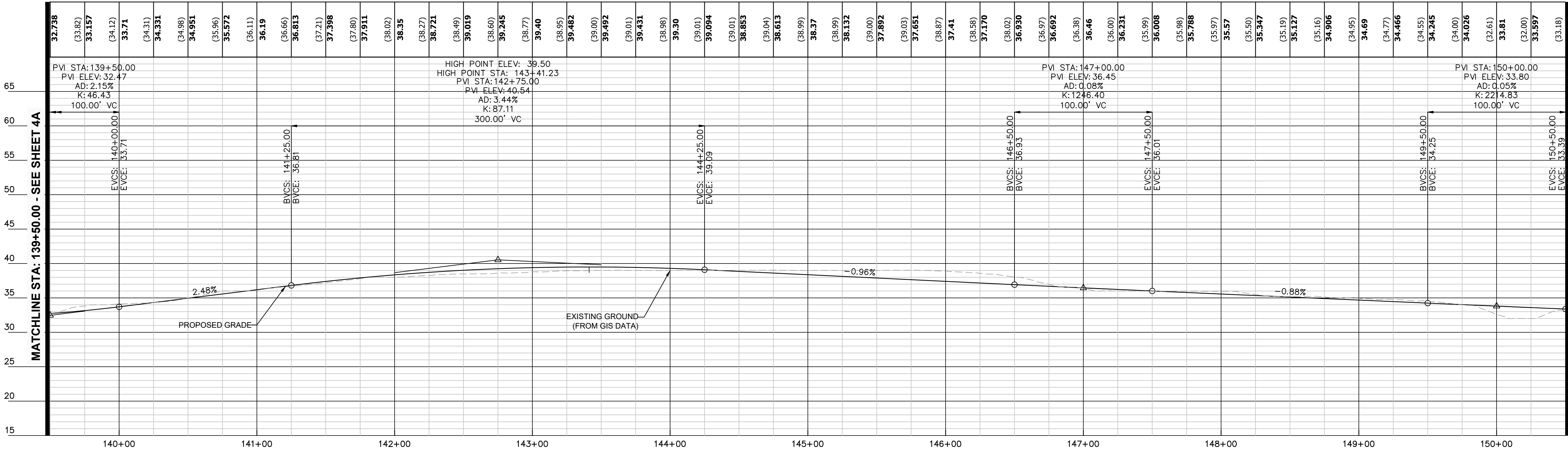
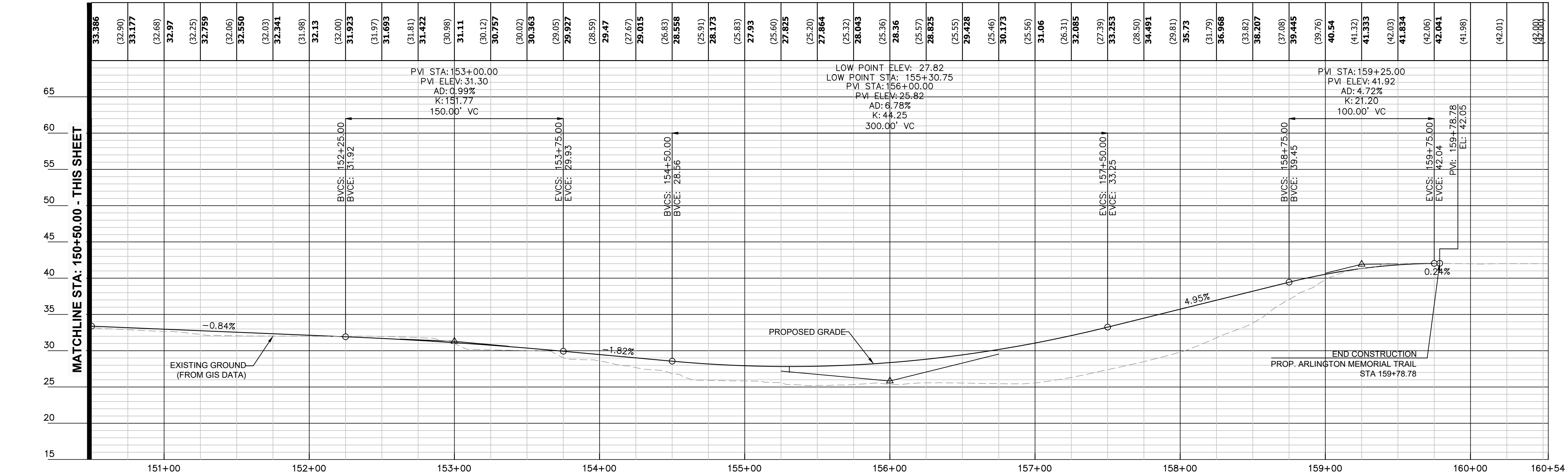
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STERLING, VIRGINIA 20166



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DATE
FEBRUARY 7, 2022

SCALE
HOR. 1" = 40'
VERT. 1" = 8'

DESIGNED: MRP
DRAWN: ATJ
CHECKED: EJD
MISS UTILITY TRANSMITTAL #

SHEET
5A

PROFILE - ALTERNATIVE 1
STA. 139+50.00 TO STA. 160+68.91

ARLINGTON MEMORIAL TRAIL PROJECT
ARLINGTON COUNTY, VIRGINIA

Seal
CONCEPT DESIGN
PLANS
NOT FOR
CONSTRUCTION

Seal
CONCEPT DESIGN
PLANS
NOT FOR
CONSTRUCTION

