ENGINEER DEPARTMENT OF **ENVIRONMENTAL SERVICES**

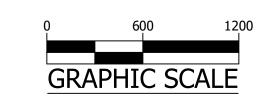
FACILITIES & ENGINEERING DIVISION ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629 FAX: 703.228.3606 WWW.ARLINGTONVA.US

OWNER DEPARTMENT OF ENVIRONMENTAL SERVICES

DIVISION OF TRANSPORTATION & DEVELOPMENT/ TRANSPORTATION PLANNING BUREAU 2100 CLARENDON BOULEVARD, SUITE 900, ARLINGTON, VA 22201 PHONE: 703.228.6570 FAX: 703.228.3606 WWW.ARLINGTONVA.US

CONTRACTOR TO BE DETERMINED LOCATION MAP





ARLINGTON

DEPARTMENT OF ENVIRONMENTAL SERVICES

APPROVALS

Dennis M. Leach RANSPORTATION DIRECTOR

REVISIONS

GENERAL NOTES:

GENERAL CONSTRUCTION NOTES

CONSTRUCTION DRAWINGS FOR:

PROJECT NUMBER: DC19

ALL CONSTRUCTION WORK FOR THIS PROJECT SHALL CONFORM TO THE ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES, CONSTRUCTION STANDARDS AND SPECIFICATIONS, AND WHERE APPLICABLE THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS, AND ROAD AND BRIDGE STANDARDS. THE LATEST EDITIONS OF EACH RELEVANT MANUAL SHALL BE USED.

N. PERSHING DR. & WASHINGTON BLVD.

N. PERSHING DR. @ WASHINGTON BLVD.

- ALL CONSTRUCTION AND WORK ACTIVITIES SHALL COMPLY WITH THE VIRGINIA WORK AREA PROTECTION MANUAL AND ALL OTHER RELEVANT WORK SAFETY REQUIREMENTS, LATEST EDITIONS.
- . THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT OFFICER OF ANY DISCREPANCIES

BETWEEN ACTUAL FIELD CONDITIONS AND THE APPROVED PLANS.

- 4. 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, SEWER AND GAS LATERALS WILL NOT BE MARKED BY MISS UTILITY OR THE COUNTY. THE CONTRACTOR SHALL LOCATE AND PROTECT THESE SERVICES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT THE WORK AND SHALL RETAIN A PROFESSIONAL LAND SURVEYOR LICENSED IN THE COMMONWEALTH OF VIRGINIA TO PROVIDE ALL NECESSARY CONSTRUCTION LAYOUTS AND ESTABLISH ALL CONTROL LINES, GRADES, AND ELEVATION DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A COPY OF ALL CUT SHEETS FOR REVIEW, PER THE SPECIFICATIONS. THE COST OF ALL NECESSARY SURVEYING SERVICES SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND, UNLESS OTHERWISE SPECIFIED, THE COST SHALL BE INCORPORATED INTO THE COSTS FOR RELEVANT ITEMS.
- THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM BEST AVAILABLE RECORDS AND SHALL BE CONSIDERED TO BE APPROXIMATE. WHEN CONSTRUCTION ACTIVITY REACHES IN PROXIMITY TO EXISTING UTILITIES, THE 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 AS DIRECTED BY OFFICER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING UTILITIES AND THE 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 OWNER.
- EXISTING MANHOLE FRAMES, COVERS, VALVE BOXES, AND OTHER APPURTENANCES SHALL BE ADJUSTED TO THE FINAL GRADE OR REPLACED, AS NECESSARY. UNLESS OTHERWISE SPECIFIED, THE COST FOR THIS SHALL BE CONSIDERED INCIDENTAL TO THE WORK, AND SHALL BE INCORPORATED INTO THE
- COSTS FOR RELEVANT ITEMS. THE CONTRACTOR SHALL PROVIDE ADA COMPLIANT ACCESS THROUGH OR AROUND THE SITE AT ALL
- 9. ALL SIDEWALK AND CURB AND GUTTER DEMOLITION SHALL BEGIN AND END AT THE CONSTRUCTION JOINT NEAREST TO THE DEPICTED DEMOLITION EXTENTS WITH A NEAT SAWCUT LINE TO FULL DEPTH OF PAVEMENT SECTION.

TIMES AND SHALL ENSURE THE SAFETY OF ALL THOSE PASSING THROUGH OR ADJACENT TO THE SITE.

STORMWATER AND ENVIRONMENTAL PROTECTION

10. 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).

TREE PROTECTION

11. TREES SHALL BE PROTECTED PER THE REQUIREMENTS OF ARLINGTON PARKS & RECREATION STANDARD.

TRAFFIC CONTROL

- 12. CONTRACTOR SHALL NOTIFY THE PROJECT OFFICER AT LEAST 3 WORKING DAYS PRIOR TO DISTURBING ANY EXISTING, OR INSTALLING ANY NEW, TRAFFIC SIGNS, SIGNALS, OR OTHER TRAFFIC CONTROL
- 13. 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 OF THE PREMARKINGS PRIOR TO PLACING THE
- 14. THE CONTRACTOR SHALL SUBMIT ANY REQUESTS FOR TEMPORARY "NO PARKING" RESTRICTIONS TO THE PROJECT OFFICER AT LEAST 5 BUSINESS DAYS PRIOR TO THE DESIRED ONSET OF RESTRICTIONS. PRIOR TO A REQUEST FOR THE REMOVAL OF ACCESS TO ANY ADA PARKING SPACE THE CONTRACTOR MUST HAVE MADE PROVISION FOR ALTERNATIVE ADA PARKING AS INDICATED ON THE APPROVED PLAN OR AS DIRECTED BY THE PROJECT OFFICER.
- 15. WHEN THE APPROVED PLAN CALLS FOR THE REMOVAL OF ANY PARKING METER THE CONTRACTOR MUST MAKE A REQUEST TO THE PROJECT OFFICER AT LEAST ONE WEEK IN ADVANCE OF THE DESIRED REMOVAL. THE PROJECT OFFICER WILL THEN COORDINATE THE PARKING METER REMOVAL WITH TRAFFIC ENGINEERING AND OPERATIONS.
- 16. THE CONTRACTOR SHALL PRESERVE ALL BUS STOPS, INCLUDING MAINTAINING ADEQUATE ACCESSIBILITY THROUGH AND ADJACENT TO THE CONSTRUCTION FOR BUSES AND THEIR PASSENGERS. THE CONTRACTOR SHALL NOT CLOSE, RELOCATE, OR OTHERWISE MODIFY A BUS STOP WITHOUT PRIOR REQUEST OF THE PROJECT OFFICER. ANY RELOCATION OR CLOSURE OF A BUS STOP SHALL REQUIRE AT LEAST FOUR WEEKS ADVANCE NOTICE FOR COORDINATION WITH THE COUNTY'S BUS STOP COORDINATOR - 703-228-3049.
- 17. WHEN CONDITIONS WARRANT DUE TO TRAFFIC VOLUMES, PATTERNS, OR SPECIAL EVENTS, THE 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

- 18. UNLESS OTHERWISE DIRECTED, CONTRACTORS ARE EXPRESSLY PROHIBITED FROM OPERATING ANY WATER VALVES OR APPURTENANCES. CONTRACTORS SHALL SUBMIT ALL REQUESTS FOR VALVE OPERATIONS TO THE PROJECT OFFICER AT LEAST 1 WEEK IN ADVANCE OF THE REQUIRED OPERATION.
- 19. IN THE EVENT OF A WATER OR SEWER EMERGENCY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COUNTY'S WATER CONTROL CENTER AT 703-228-6555 AND THE PROJECT OFFICER.
- 20. THE CONTRACTOR SHALL COORDINATE ALL UTILITY SHUTOFFS, DISCONNECTS, AND/OR ABANDONMENT WITH UTILITY OWNER AND PROJECT OFFICER AT LEAST 1 WEEK IN ADVANCE OF THE REQUIRED

FIRE DEPARTMENT NOTES:

- 21. ALL EXISTING FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MAINTAINED UNOBSTRUCTED AND ACCESSIBLE AT ALL TIMES IN ACCORDANCE WITH SECTIONS 508.5.4 AND 508.5.5 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE.
- 22. ACCESS TO BUILDINGS FOR FIREFIGHTING SHALL BE MAINTAINED AT ALL TIMES. EXISTING FIRE APPARATUS ACCESS ROADS (FIRE LANES) SHALL BE KEPT CLEAR OF OBSTRUCTIONS IN ACCORDANCE WITH SECTION 503.4 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE. ACCESS TO CONSTRUCTION SITES SHALL BE PROVIDED AND MAINTAINED IN ACCORDANCE WITH SECTION 1410 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE.
- 23. IN THE EVENT THAT EXISTING FIRE DEPARTMENT CONNECTIONS OR FIRE APPARATUS ACCESS ROADS (FIRE LANES) MUST BE OBSTRUCTED TO FACILITATE CONSTRUCTION ACTIVITIES, CONTACT THE ARLINGTON COUNTY FIRE DEPARTMENT FIRE PREVENTION OFFICE AT 703-228-4644 TO COORDINATE REVIEW AND APPROVAL OF TEMPORARY FIRE DEPARTMENT CONNECTIONS AND/OR FIRE APPARATUS ACCESS ROADS PRIOR TO CREATING THE OBSTRUCTION.

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SIGN AND MARKING PLAN

SIGHT DISTANCE EXHIBIT

SIGHT DISTANCE EXHIBIT

SIGHT DISTANCE EXHIBIT

MAINTENANCE OF TRAFFIC PLAN

MAINTENANCE OF TRAFFIC NOTES & DETAILS

MAINTENANCE OF TRAFFIC NOTES & DETAILS

COVER

C101.1

C121.1

C122.1

C122.2

C201.1

C201.2

C201.3

SWM # 20-0094 N PERSHING DRIVE: 8,500 VPD (2018) WASHINGTON BLVD.: 34,000 VPD (2018) 7TH STREET N. : 2,800 VPD (2018) STREET CLASSIFICATION N PERSHING DRIVE: MINOR ARTERIAL WASHINGTON BLVD: PRINCIPAL ARTERIAL 7TH STREET N. : NEIGHBORHOOD MINOR

POSTED SPEED

N PERSHING DRIVE : 25 MPH

WASHINGTON BLVD.: 30 MPH

7TH STREET N. : 25 MPH

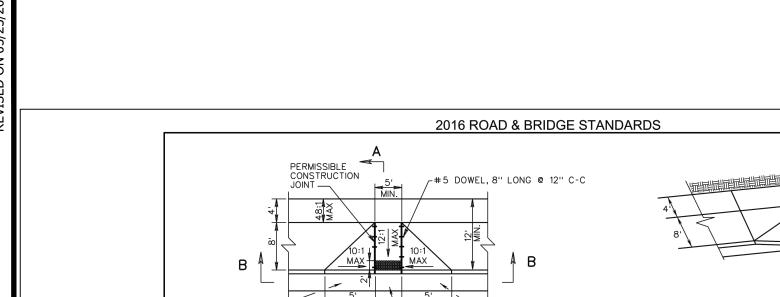
ON

DESIGNED: K. PATEL DRAWN: K. PATEL CHECKED: P. RIGBY

SCALE: AS NOTED

PLOTTED: AUGUST 18 2020

AUTO TURN (TURNING MOVEMENT) USED: 2011 AASHTO CITY BUS



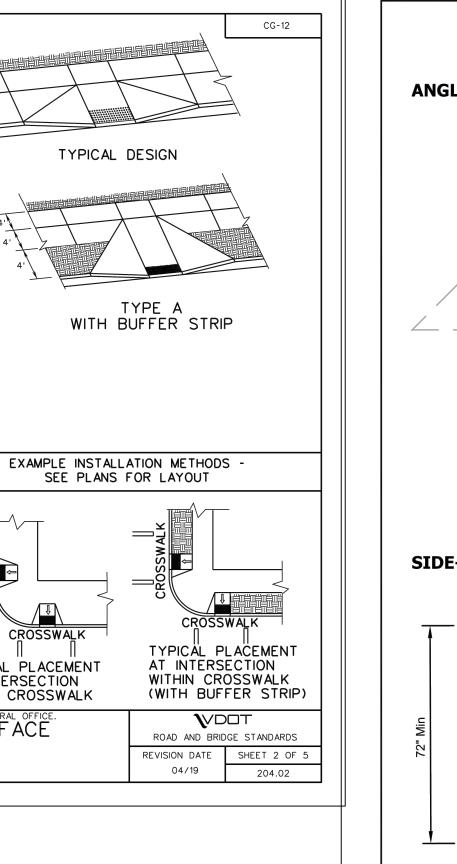
TYPICAL DESIGN GUTTER PAN MAXIMUM SLOPE 20:1 WITH BUFFER STRIP 2' MIN. SECTION A-A

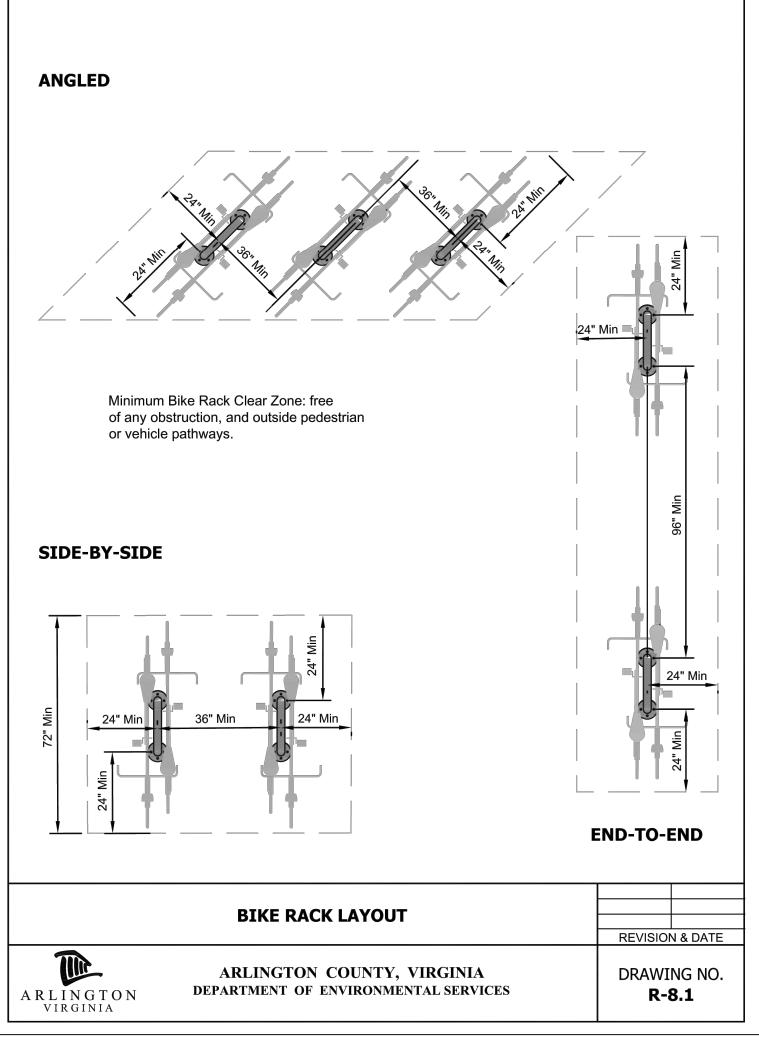
SECTION B-B

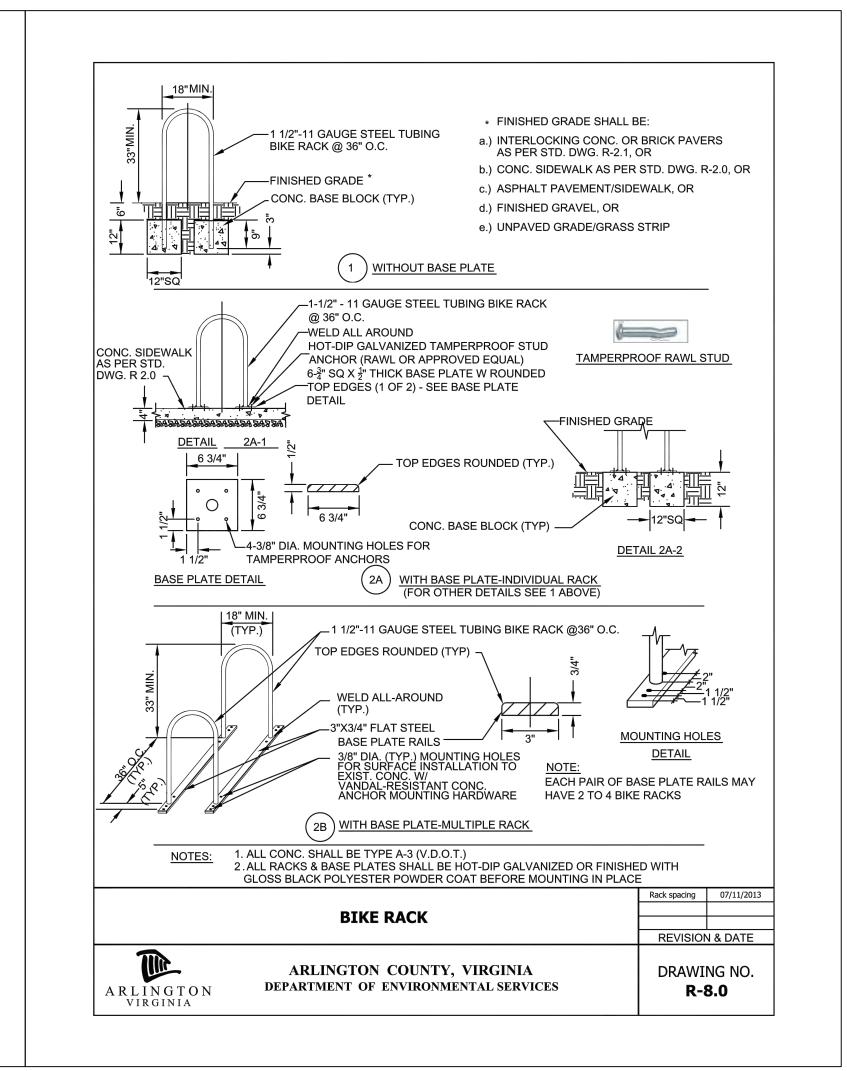
FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 5. THIS DESIGN TO BE USED FOR CONSTRUCTION THAT INCORPORATES WIDER SIDEWALK. LANDING (4'WIDE) REQUIRED AT TOP OF CURB RAMP. MINIMUM CURB RAMP LENGTH 8 FEET FOR NEW CONSTRUCTION. GUTTER PAN SHALL BE A MAXIMUM SLOPE OF 20:1 AT THE RAMP OPENING. DIAGONAL PLACEMENT IS NOT PERMITTED.

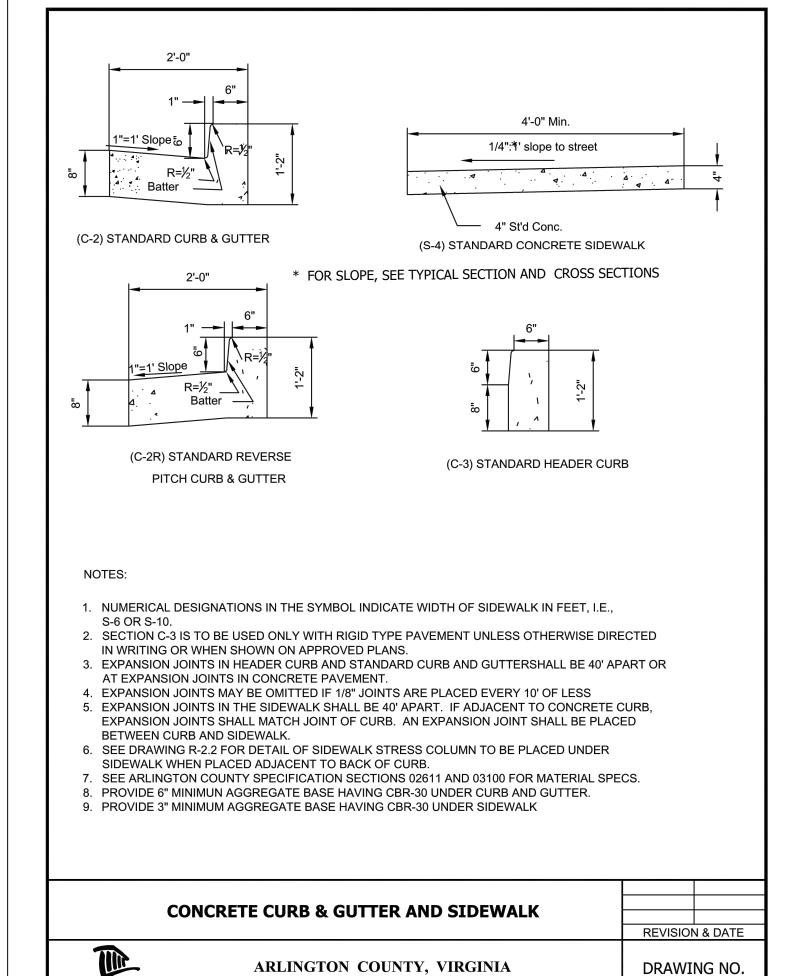
CROSSWALK TYPICAL PLACEMENT AT INTERSECTION WITHIN CROSSWALK

SPECIFICATION REFERENCE CG-12 DETECTABLE WARNING SURFACE TYPE A (PERPENDICULAR) APPLICATION VIRGINIA DEPARTMENT OF TRANSPORTATION 2016 ROAD & BRIDGE STANDARDS







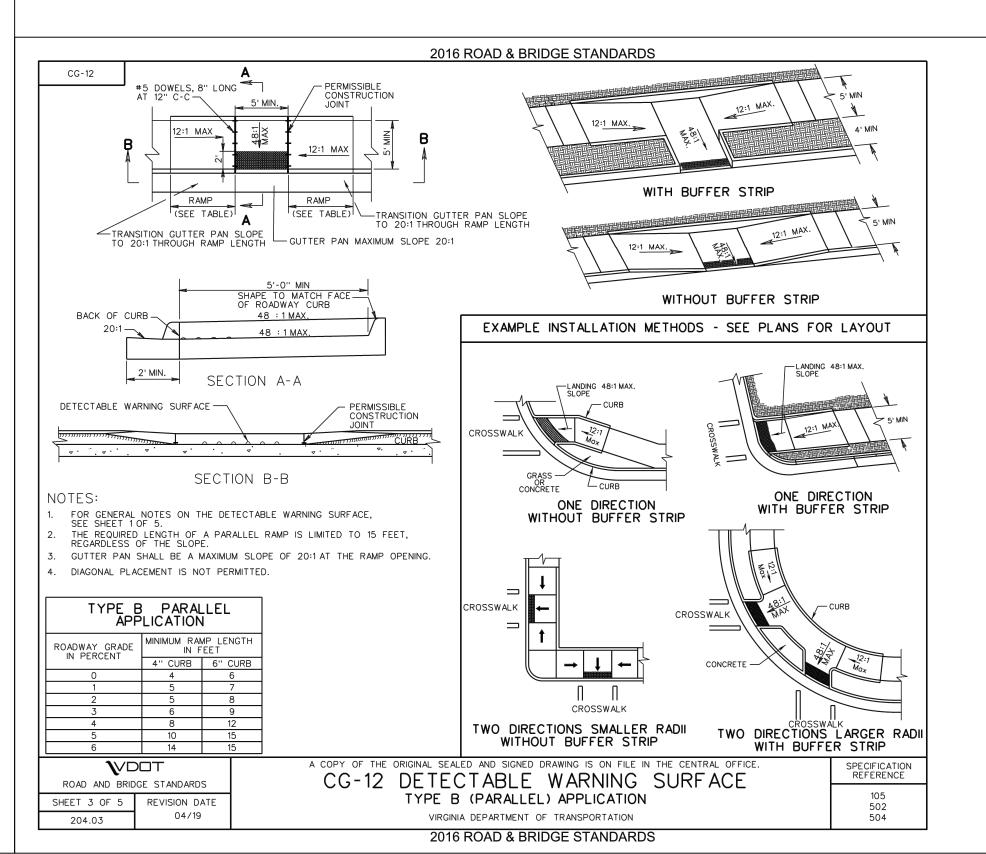


DEPARTMENT OF ENVIRONMENTAL SERVICES

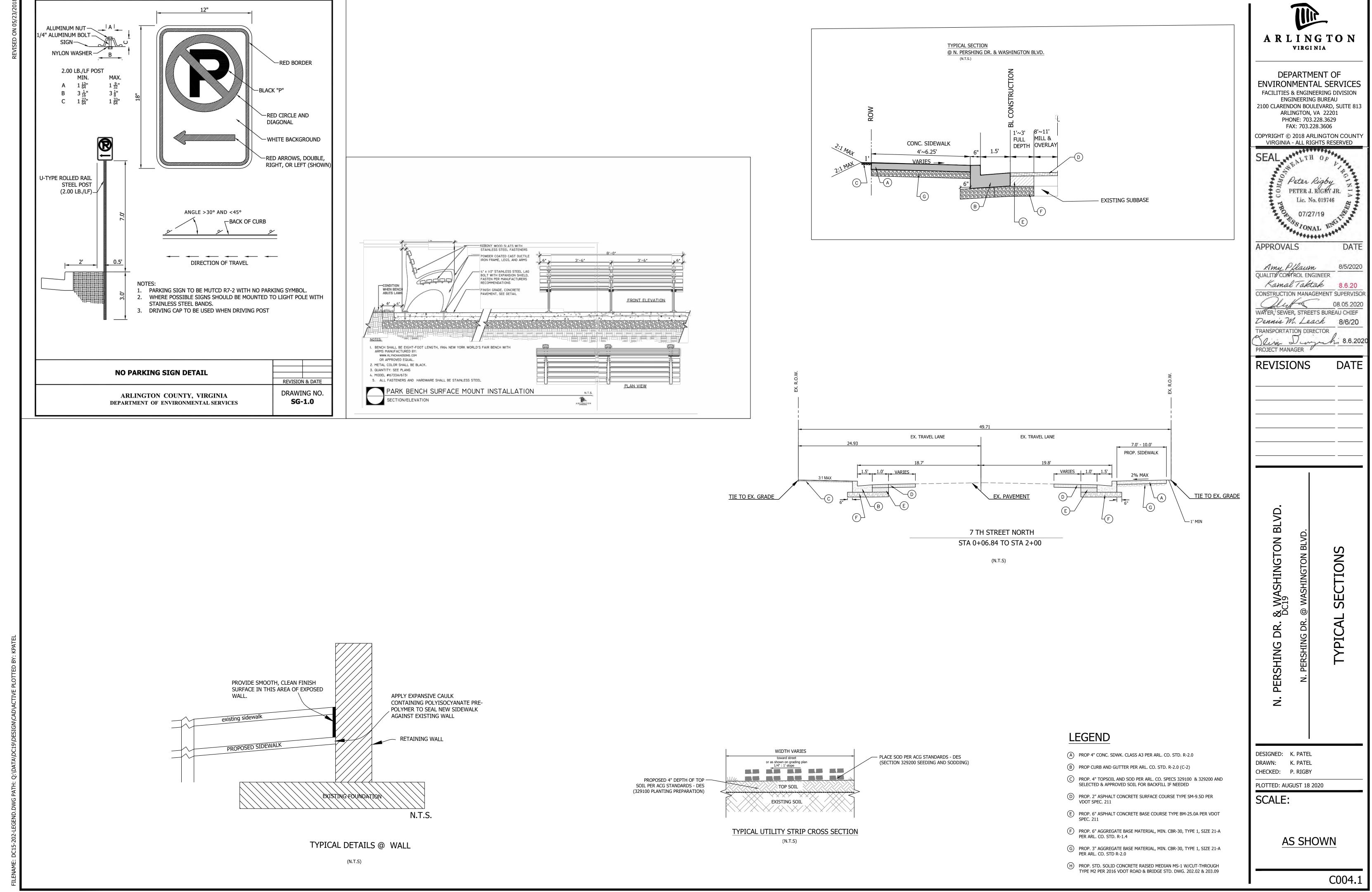
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ARLINGTON

VIRGINIA



ARLINGTON VIRGINIA DEPARTMENT OF **ENVIRONMENTAL SERVICES** FACILITIES & ENGINEERING DIVISION ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629 FAX: 703.228.3606 COPYRIGHT © 2018 ARLINGTON COUNT VIRGINIA - ALL RIGHTS RESERVED Lic. No. 019746 07/27/19 ONAL APPROVALS DATE Amy Pflaum QUALITY CONTROL ENGINEER Kamal Taktak CONSTRUCTION MANAGEMENT SUPERVISOR WATER, SEWER, STREETS BUREAU CHIEF Dennis M. Leach 8/6/20 TRANSPORTATION DIRECTOR Slige Dungahi 8.6.2021 PROJECT MANAGER **REVISIONS** NO. DR SHIN DESIGNED: K. PATEL DRAWN: K. PATEL CHECKED: P. RIGBY PLOTTED: AUGUST 18 2020 SCALE: AS SHOWN



LINETYPE LEGEND SYMBOL LEGEND

FEATURE BUILDING	<u>EXISTING</u>	PROPOSED	EXISTING EX CABLE PEDESTAL	С	PROPOSED PROP CABLE PEDESTAL	C
CENTERLINE / BASELINE			EX ELECTRIC BOX	E		
COMMUNICATIONS CABLE	COM	COM	EX FIRE HYDRANT		PROP FIRE HYDRANT	•
CONTOURS MAJOR; MINOR			EX GAS VALVE	•	PROP GAS VALVE	0
CRITICAL ROOT ZONE	——————————————————————————————————————	—— CRZ ———	EX GROUND LIGHT	•		
EASEMENT			EX GUY WIRES	>		
ELECTRIC (UNDERGROUND)			EX IRON PIPE OR PIN	•		
FENCE (MATERIAL NOTED)	xxxxx	xxxx	EX LIGHT POLE		PROP LIGHT POLE	
FIBER OPTIC	— FO — FO —	fo	EX MAILBOX			
GAS LINE	——————————————————————————————————————	——— GAS————	EX MONUMENT			
X" GAS LINE (SIZE INCLUDED IF AVAILABLE)			EX PARKING METER	Θ		
GUARDRAIL	. 0 0 0 0 0 0 0.	. <u>0 0 0 0 0 0</u> 0.	EX PAY STATION	PS	PROP PAY STATION	PS
HARDSCAPE FEATURE (MATERIAL NOTED)			EX SANITARY MANHOLE	0	PROP SANITARY MANHOLE	0
LIMITS OF DISTURBANCE	LOD LOD	— LOD — LOD —	EX STORM BASIN	0	PROP STORM CATCH BASIN (TO SCALE)	0
LIMITS OF WORK	LOW	— LOW — LOW —	EX STORM MANHOLE	0	PROP STORM MANHOLE	0
OVERHEAD WIRES			EX TELEPHONE PEDESTAL	T		
PAVEMENT MINI SKIP LINE			EX TRAFFIC CONTROL BOX			
PAVEMENT SKIP LINE			EX TRAFFIC SIGN	-•-	PROP TRAFFIC SIGN	•
PROPERTY LINE			EX TRASH CAN	*	PROP TRASH CAN	*
RIGHT-OF-WAY LINE			EX TRAVERSE	\triangle		
ROOT PRUNING	—— RP —— RP ——	RP	EX TREES, WOODED AREA	(1)	PROPOSED TREE REMOVAL	X
SANITARY SEWER			EX UTILITY MANHOLE TYPE INDICATED ELECTRIC, TELE, ETC	(
X" SANITARY SEWER (SIZE INCLUDED IF AVAILABLE)			EX UTILITY POLE	•	PROP UTILITY POLE	
SILT FENCE	xxxxxx	— x — x — x — x — x —	EX WATER MANHOLE	Θ	PROP WATER MANHOLE	•
STORM (SIZE NOTED)	STM STM		EX WATER METER	•	PROP WATER METER	•
STREAM		· · ·	EX WATER VALVE	\otimes	PROP WATER VALVE	•
STREET LIGHT CONDUIT	—— SL —— SL ——	SL	EX YARD INLET		PROP YARD INLET (TO SCALE)	
TELEPHONE (UNDERGROUND)	UGT	UGT	EX BENCHMARK		CONSTRUCTION NOTES (LEADER TO AREA AFFECTED)	<u></u>
TREE LINE			SOD		CURVE NUMBER (SEE CURVE TABLE)	C #)
TREE PROTECTION FENCE	—— TP —— TP ——	—— TP ——	SOD UNDERPLANTED WITH BULBS (SEE PLANTING SCHEDULE)	HHH HHHH	LINE NUMBER (SEE LINE TABLE)	(L#)
WALL	<i></i>				TEST HOLE	

X" WATER (SIZE INCLUDED IF AVAILABLE) NORTH ARROW

LABEL LEGEND

	<u>D (DLL</u>	LEGEND	
EXISTING		PROPOSED	
EXISTING SANITARY STRUCTURE NUMBER	(XXXX)	PROPOSED SANITARY SEWER STRUCTURE NUMBER	XXXX
EXISTING STORM SEWER STRUCTURE NUMBER	$\langle \overline{x} \overline{x} \overline{x} \rangle$	PROPOSED STORM SEWER STRUCTURE NUMBER	⟨ xxxx ⟩
	HATCH	<u>LEGEND</u>	
PROP MILL & OVERLAY			
PROP FULL DEPTH ASPHALT			
PROP CONCRETE			
REPLACE & MATCH EXISTING DRIVEW OR LEADWALK. SEE CONSTRUCTION			
DEMOLITION AREA			

ARLINGTON VIRGINIA
DEPARTMENT OF

DEPARTMENT OF
ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU
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TH OF

PETER J. RIGHY JR.
Lic. No. 019746

07/127/19

ONAL

APPROVALS

DATE

Amy Pflaum
QUALITY CONTROL ENGINEER

Kamal Taktak
8.6.20
CONSTRUCTION MANAGEMENT SUPERVISOR

OR 05.2020
WATER, SEWER, STREETS BUREAU CHIEF

Dennis M. Leach
8/6/20
TRANSPORTATION DIRECTOR

REVISIONS

DATE

N. PERSHING DR. & WASHINGTON BLVD DC19

N. PERSHING DR. @ WASHINGTON BLVD.

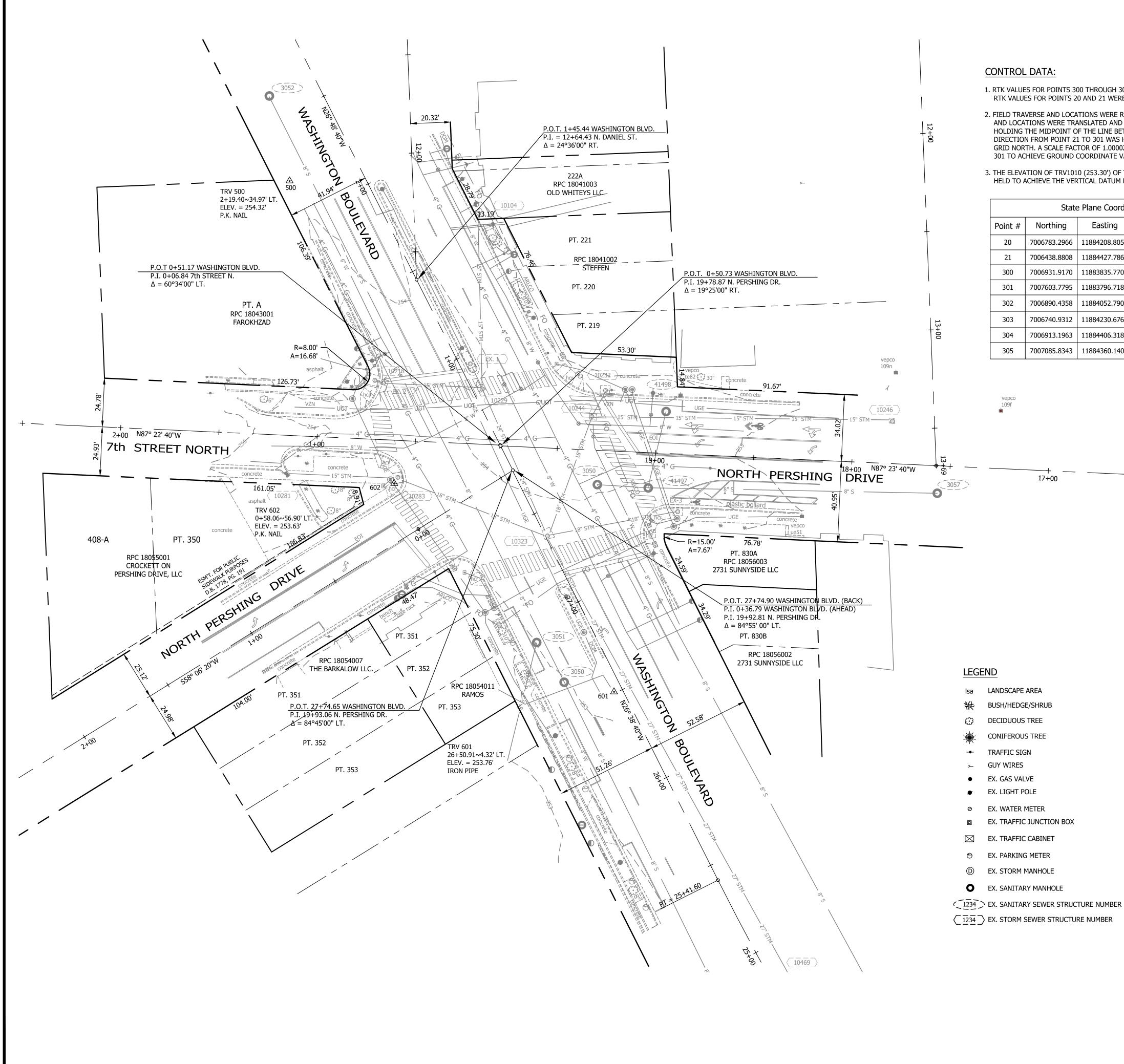
LEGEND

DESIGNED: K. PATEL
DRAWN: K. PATEL
CHECKED: P. RIGBY
PLOTTED: AUGUST 18 2020

SCALE:

N/

C006.1



- 1. RTK VALUES FOR POINTS 300 THROUGH 305 WERE OBTAINED AUGUST 28, 2018. RTK VALUES FOR POINTS 20 AND 21 WERE OBTAINED MARCH 7, 2018.
- 2. FIELD TRAVERSE AND LOCATIONS WERE RUN ON SEPTEMBER 17, 2018. TRAVERSE AND LOCATIONS WERE TRANSLATED AND ROTATED TO THE RTK CONTROL BY HOLDING THE MIDPOINT OF THE LINE BETWEEN POINTS 21 AND 301. THE DIRECTION FROM POINT 21 TO 301 WAS HELD TO DETERMINE VIRGINIA STATE GRID NORTH. A SCALE FACTOR OF 1.00002612 WAS APPLIED TO POINTS 21 AND 301 TO ACHIEVE GROUND COORDINATE VALUES.
- 3. THE ELEVATION OF TRV1010 (253.30') OF THE ORIGINAL DC15 TRAVERSE WAS HELD TO ACHIEVE THE VERTICAL DATUM FOR THIS PROJECT.

State Plane Coordinates (RTK)				
Point #	Northing	Northing Easting Elevation		Description
20	7006783.2966	11884208.8054	253.54	GPS100-MA11
21	7006438.8808	11884427.7868	246.44	GPS101-MA11
300	7006931.9170	11883835.7705	259.59	OLD-TRV9-N310
301	7007603.7795	11883796.7180	258.52	OLD-TRV11-N310
302	7006890.4358	11884052.7908	254.04	OLD-IPF126-N310
303	7006740.9312	11884230.6765	253.06	IPF
304	7006913.1963	11884406.3182	258.25	TRV1011-DC15
305	7007085.8343	11884360.1401	259.09	FLY1028-DC15

NOTES:

- 1. UNDERGROUND UTILITIES WERE DESIGNATED BY MID-ATLANTIC UTILITY LOCATING ON 11/10/2018 AND LOCATED BY ARLINGTON COUNTY SURVEYORS ON 11/14/2018.
- 2. DIAMETER OF WATER LINES & SANITARY SEWERS ARE SHOWN PER ARLINGTON COUNTY RECORDS.

		Project Cont	rol	
Point #	Northing	Easting	Elevation	Description
500	7007043.2304	11884044.0036	254.32	TRV 500 PKS
501	7007308.9525	11883903.7556	257.35	TRV 501 DHS
502	7007603.8741	11883796.9546	258.76	TRV 502=301 IPF
601	7006783.3708	11884208.9889	253.76	TRV 601=20 IPF
602	7006889.3430	11884097.2017	253.63	TRV 602 PKS
603	7006784.5241	11883931.0349	253.30	TRV 603=1010
611	7006438.9450	11884428.0399	246.67	TRV611=21 IPF

IITARY SEWER	STORM SEWER TABULATION
NIII ATTONI	

	TABULATION	#10104
	#3049	TOP = 254.78
	TOP = 251.87	15" RCP INV. OUT = 246.88 (10229)
	C/L INV. = 240.81	
		#10218
	#3050	TOP = 253.54
	TOP = 253.06	15" CMP INV. OUT = 249.19 (EX. 2)
	C/L INV. = 241.83	
	3,21	#10229
	#3051	TOP = 254.13
	TOP = 253.09	15" RCP INV. IN = 245.59 (EX. 1)
)	C/L INV. = 247.09	15" RCP INV. IN = 245.29 (EX. 2)
	STRUCTURE FULL OF	15" RCP INV. IN = 245.29 (10104)
	DEBRIS	24" RCP INV. OUT = 245.26 (10323)

#3052	#10232
TOP = 255.28	TOP = 254.66
C/L INV. = 244.55	18" RCP INV. OUT = 247.47 (1024
#3054	#10244
TOP = 250.19	TOP = 254.49
C/L INV. = 240.35	C/L INV. = 247.06
#3055	15" RCP INV. IN = N/A (10246)

TOP = 254.16

C/L INV. = NO ACCESS

C/L INV. = 243.65

#3057	#10246
TOP = 257.55	TOP = 256.45
C/L INV. = NO ACCESS	15" RCP INV. OUT = 253.53 (10244)
#41497	#10281
TOP = 253.87	TOP = 254.22
C/L INV. = 243.65	15" RCP INV. OUT = 250.83 (10283)

#41498 #10283 TOP = 254.44 TOP = 253.65 C/L INV. = 250.09 15" RCP INV. IN = 246.05 (102) 18" RCP INV. OUT = 245.60 (102)	# 12 13 G	
---	-----------	--

#10323
TOP = 253.75
C/L INV. = 244.25
18" RCP INV. $IN = N/A (10244)$
18" RCP INV. $IN = N/A (10283)$
24" RCP INV. $IN = N/A (10229)$
18" RCP INV. $IN = N/A$ (EX. 3)
27" RCP INV. OUT = N/A (10469)
#10469

18" RCP INV. IN = N/A (10232)

18" RCP INV. OUT = N/A (10323)

#10469	
TOP = 251.69	
27" RCP INV. IN = 241.69 (10323)	
,	
#EX. 1	

// L /(1 1
TOP = 254.14
15" RCP INV. OUT = 246.84 (10229)
#EX. 2
TOP = 253.02
15" CMP INV. IN = 249.09 (10218)

15" RCP INV. OUT = 247.04 (10229)

#EX. 3 TOP = 253.8618" RCP INV. OUT = 247.21 (10323)

GENERAL SURVEY NOTES:

- 1. THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF THE COUNTY SURVEY SECTION FROM AN ACTUAL GROUND SURVEY; THE IMAGE AND/OR ORIGINAL DATA WAS OBTAINED FROM 08/2018 TO 12/2018; AND THIS PLAT, MAP OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
- 2. HORIZONTAL DATUM: VIRGINIA COORDINATE SYSTEM 1983.
- 3. VERTICAL DATUM: NORTH AMERICA VERTICAL DATUM 1988.
- 4. CONTOUR INTERVAL: 1'
- 5. BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM EXISTING LAND RECORDS AND DOES NOT REPRESENT A FIELD RUN BOUNDARY SURVEY.



DEPARTMENT OF **ENVIRONMENTAL SERVICES** FACILITIES & ENGINEERING DIVISION

ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629

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PETER J. RIGBY JR.

SIONAL APPROVALS

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Dennis M. Leach 8/6/20

TRANSPORTATION DIRECTOR Oliver Dingachi 8.6.2020 PROJECT MANAGER

REVISIONS DATE

ON

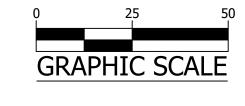
OND.

DESIGNED: K. PATEL DRAWN: K. PATEL

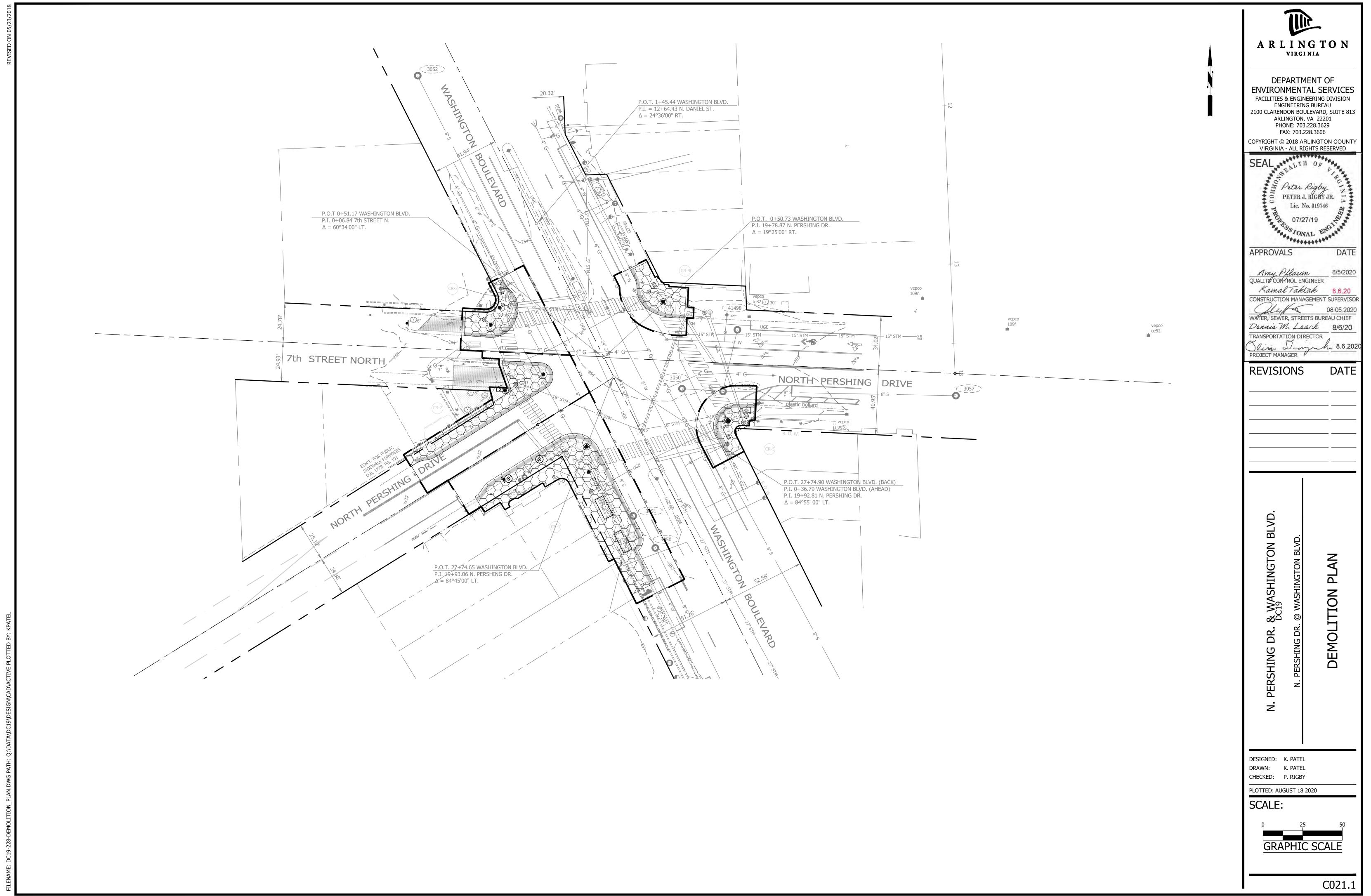
CHECKED: P. RIGBY

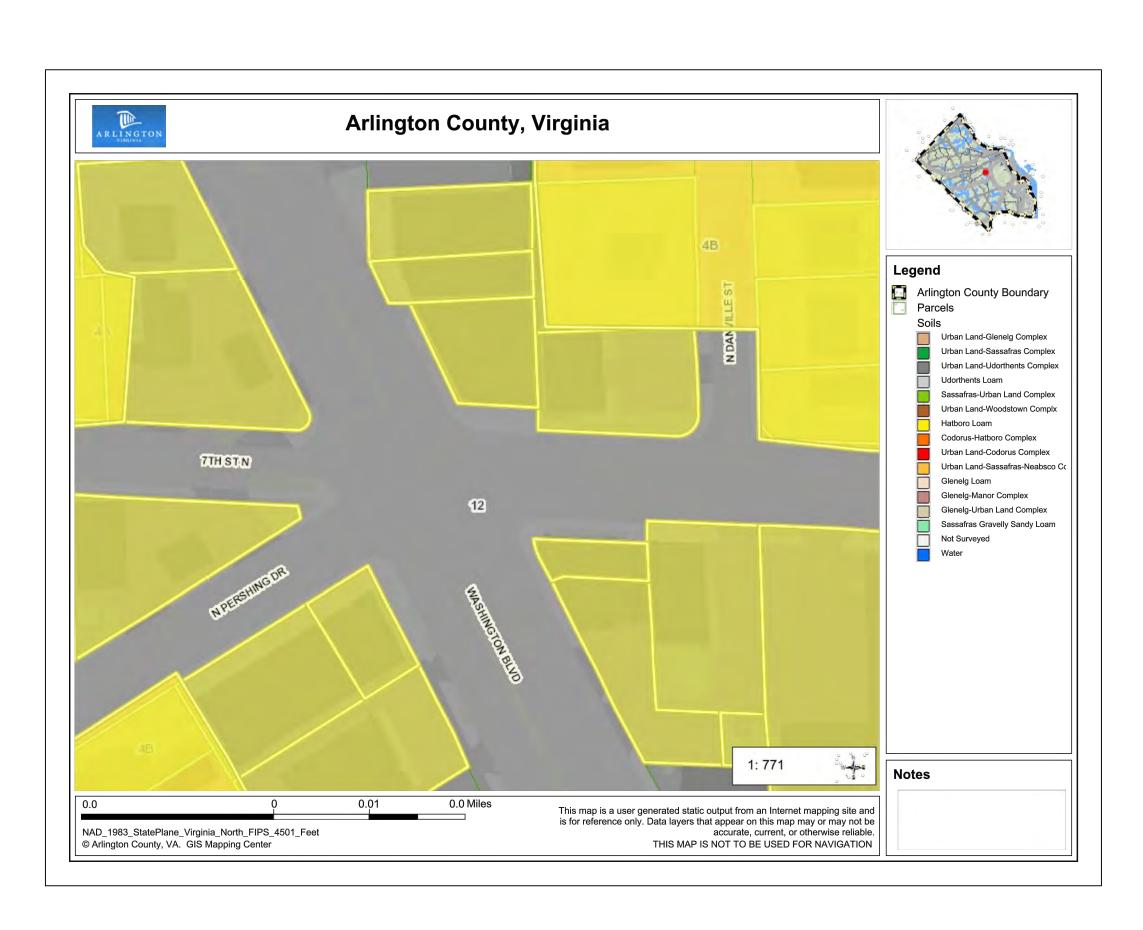
PLOTTED: AUGUST 18 2020

SCALE:



C011.3







LIMIT OF DISTURBED AREA = 7179 S.FT.

THIS SHEET IS FOR EROSION AND SEDIMENTATION CONTROL USE ONLY

EROSION & SEDIMENTATION CONTROL NOTES

i. Contractor to contact the Arlington Forester to schedule a pre-construction inspection of tree protection measures before any work near the critical root zones of trees. To schedule the pre-construction meeting call 703-228-1863.

ii. Contractor to protect trees per the plan according to the Arlington County DPR Design Standard Detail 02231.1

iii. Contractor to root prune trees per the plan according to the Arlington County DPR Design Standard Detail 02231.5, where called out on the plan.

iv. Contractor to call the urban forester at 703-228-1863, 72 hours before planting, to schedule inspection of the trees to be planted. Warranty for 1 year after planting shall be the contractor's responsibility. The urban forester and DPR is responsible for inspection.

v. Contractor to prepare tree planting strips for the replacement trees according to Arlington County DPR Design Standard Detail 02930.4a and 02930.4b.

vi. Contractor to prepare street tree planting pits according to the Arlington County DPR Design Standard Detail 02930.3a, 02930.3b, and 02930.11c

vii. Contractor to plant the trees according to Arlington County DPR Design Standard Detail 02930.1 (on flat land) or 02930.2 (on slopes)

EROSION AND SEDIMENT CONTROL LEGEND

TEMPORARY SILT SF 3.05 **FENCE** STORM DRAIN INLET ΙP 3.07 PROTECTION

TP 3.38 TREE PROTECTION

SO 3.33 SODDING

ROOT PRUNING

CRITICAL ROOT ZONE — CRZ —

— RP —

ARLINGTON

DEPARTMENT OF **ENVIRONMENTAL SERVICES** FACILITIES & ENGINEERING DIVISION

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APPROVALS

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REVISIONS DATE

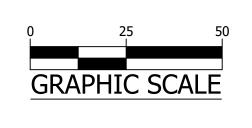
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& WASHINGTON DC19 SEDIMENT DR. ERSHING AND **EROSION**

DESIGNED: K. PATEL DRAWN: K. PATEL

CHECKED: P. RIGBY PLOTTED: AUGUST 18 2020

SCALE:



C031.1

IPROJECT DESCRIPTION:

RECONSTRUCT CURBS AND SIDEWALKS TO INSTALL ADA COMPLIANT CURB RAMPS AND SIDEWALK AREAS. WORK CAN INCLUDE CONSTRUCTION OF CURB EXTENSIONS (NUBS), RELOCATION OF EXISTING FEATURES SUCH AS FIRE HYDRANTS, SIGN POLES AND DRAINAGE INLETS. THIS PROJECT IS UNDER SPOUT RUN WATERSHED AREA. THE TOTAL DISTURBED ARE IS 4,973 SF AND THE TOTAL PROJECT AREA IS 25,186 SF (0.58 ACRES).

EXISTING SITE CONDITIONS:

FHE TOPOGRAPHY OF THE PROJECT HAVE SLOPE RANGING FROM 1% TO 7%. THERE ARE EXISTING DRAINAGE STRUCTURES SERVING THESE SITES IN THE FORM OF CURB INLETS. THE CURRENT LAND COVER IS MAINLY IMPERVIOUS.

ADJACENT PROPERTIES:

PRIVATE PROPERTIES ARE LOCATED ALONG THE ROADWAY

OFF-SITE AREAS:

THE EXTENT OF OFFSITE CONSTRUCTION IS LIMITED.

CRITICAL AREAS:

HERE ARE NO STEEP SLOPES OR CRITICAL AREAS LOCATED WITHIN THE LIMITS OF DISTURBANCE.

EROSION AND SEDIMENT CONTROL MEASURES:

HE EROSION AND SEDIMENT CONTROL MEASURES FOR THIS PROJECT AREA INCLUDE SAFETY FENCE AND INLET PROTECTION. INLET PROTECTION IS REQUIRED DUTSIDE THE PROJECT LIMITS WHEN/WHERE WATER FROM DISTURBED AREA FLOWS. (REVISE AS NEEDED)

IPERMANENT STABILIZATION:

ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH GRASS, MULCH OR SOD. SEE THE PROPOSED PLANS FOR ADDITIONAL

STORMWATER RUNOFF CONSIDERATIONS:

NO ADDITIONAL IMPERVIOUS AREA WILL BE ADDED TO THIS PROJECT

TOTAL LAND DISTURBANCE..... 7179 SF (0.1648 ACRES) PRE-IMPROVEMENT IMPERVIOUS AREA..... = 7083 SF (0.1626 ACRES) POST-IMPROVEMENT IMPERVIOUS AREA... = 7019 SF (0.1611 ACRES) DECREASED IMPERVIOUS AREA..... 64 SF (0.0015 ACRES)

SOILS INFORMATION:

THE FOLLOWING SOILS ARE FOUND ON SITE (SEE SOILS MAP ON SHEET C031.1)

SOIL#: SOIL NAME: URBAN LAND-UDORTHENTS VARIES

FLOODPLAIN AND RESOURCE PROTECTION AREA (RPA):

HERE ARE NO FLOODPLAIN OR RESOURCE PROTECTION AREAS LOCATED WITHIN THIS PROJECT SITE

EROSION & SEDIMENT CONTROL PROJECT PHASING

1. PHASE I:

- a. PRE-CONSTRUCTION MEETING WITH THE PROJECT OFFICER, CONTRACTOR, AND COUNTY INSPECTOR.
- b. INSTALL THE TEMPORARY CONSTRUCTION ENTRANCE (IF NEEDED) IN THE LOCATION SHOWN ON THE E&S PHASE I PLAN. MUD AND DEBRIS SHALL BE WASHED FROM ALL TRUCKS EXISTING THE SITE.
- c. INSTALL PERIMETER TREE DEMARCATION FENCING IN THE FORM OF TREE PROTECTION FENCE (TP) AS SHOWN ON E&S PHASE I PLAN.
- d. PERFORM INITIAL PERIMETER CLEARING TO INSTALL REMAINDER OF PERIMETER CONTROLS SUCH AS DIVERSION DIKE (DD), SILT FENCE (SF), AND SUPER SILT FENCE (SSF) AS PER THE PHASE I PLAN.
- e. SEED AND MULCH ALL EARTHEN CONTROLS.
- f. CONTACT ARLINGTON COUNTY PROJECT OFFICER FOR A PERIMETER INSPECTION PRIOR TO CLEARING THE REMAINDER OF THE SITE IN ORDER TO OBTAIN
- PHASE II GRADING PERMIT. g. CLEAR THE SITE TO THE LIMITS AS SHOWN ON THE CONSTRUCTION PLANS.

2. PHASE II:

- a. BEGIN UTILITY CONSTRUCTION, INSTALL ALL UTILITIES UNDERGROUND UTILITIES AND BEGIN SITE GRADING.
- b. INLET PROTECTION (IP) SHALL BE PROVIDED AT STORM DRAIN INLETS AS THEY ARE CONSTRUCTED.
- c. ONCE THE SITE IS BOUGHT TO NEAR FINAL GRADE, AND THE UTILITY CONSTRUCTION IS COMPLETE, COMMENCE CONSTRUCTION OF CURB & GUTTER, STREET, SIDEWALKS, AND OTHER IMPROVEMENTS
- d. The control measures may not be removed until all of the disturbed areas have been stabilized and only as approved and directed by THE INSPECTOR.
- RUNOFF SHALL BE TREATED WITH SILT FENCE AND INLET PROTECTION PRIOR TO ENTERING MAJOR STORM SEWER SYSTEMS.

IEROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND THE ARLINGTON COUNTY EROSION AND SEDIMENT CONTROL ORDINANCE. THE MINIMUM STANDARDS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE.

1. STRUCTURAL PRACTICES

- a. TEMPORARY CONSTRUCTION ENTRANCE VESCH 3.02
- a.a. A TEMPORARY CONSTRUCTION ENTRANCE WITH A WASH RACK SHALL BE INSTALLED AT THE EXISTING ACCESS POINT TO THE SITE. DURING MUDDY
- CONDITIONS, DRIVERS OF CONSTRUCTION VEHICLES WILL BE REQUIRED TO WASH THEIR WHEELS BEFORE RE-ENTERING THE LOCAL ROADWAYS. a.b. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REOUIRE PERIODIC WASHING OF THE MATS AND/OR REPLACEMENT OF WOOD CHIPS AS NECESSARY.
- a.c. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED
 - a.d. THE USE OF WATER TRUCKS TO REMOVE MATERIALS DROPPED, WASHED, OR TRACKED INTO ROADWAYS WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES.
- b. SILT FENCE VESCH 3.05
- b.a. SILT FENCE WILL BE INSTALLED WITH THE E&S PLAN TO FILTER RUNOFF FROM DISTURBED AREAS. RUNOFF SHALL NOT BE DIRECTED PARALLEL TO THE INSTALLATION OF SILT FENCE.
- b.b. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- b.c. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM UNDERCUTTING. b.d. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE, THE FABRIC SHALL
- BE REPLACED IMMEDIATELY. b.e. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF
- THE HEIGHT OF THE BARRIER. b.f. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE
- EXISTING GRADE, THEN PREPARED AND SEEDED. c. TEMPORARY DIVERSION DIKE - VESCH 3.09
- c.a. A SYSTEM OF TEMPORARY DIKES, TO DIRECT FLOW INTO PROPOSED & EXISTING STORM SEWER STRUCTURES WILL BE INSTALLED AS INDICATED IN
- EROSION & SEDIMENT CONTROL PLAN. c.b. THE STRUCTURES SHALL BE INSPECTED AFTER EACH RAIN EVENT AND REPAIRS SHALL BE MADE AS NECESSARY.
- d. STORM DRAIN INLET PROTECTION VESCH 3.07
- d.a. ALL EXISTING & PROPOSED STORM SEWER INLETS IN AND AROUND THE PROJECT LIMITS SHALL BE PROTECTED DURING CONSTRUCTION. SEDIMENT-LADEN WATER SHALL BE FILTERED BEFORE ENTERING THE STORM SEWER INLETS.
- d.b. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN EVENT AND REPAIRS SHALL BE MADE AS NECESSARY.
- d.c. Structures shall be removed and the area stabilized when the remaining drainage area has been properly stabilized.
- e. DEWATERING STRUCTURE VESCH 3.26

f. TREE PROTECTION - VESCH 3.38

- e.a. SEDIMENT LADEN OR TURBID WATER SHALL BE FILTERED, SETTLED OR SIMILARLY TREATED PRIOR TO DISCHARGE. e.b. THE FILTERING DEVICES MUST BE INSPECTED FREQUENTLY AND REPAIRED OR REPLACED ONCE THE SEDIMENT BUILD-UP PREVENTS THE STRUCTURE
- e.c. THE ACCUMULATED SEDIMENT WHICH IS REMOVED FROM A DEWATERING DEVICE MUST BE SPREAD ON-SITE AND STABILIZED OR DISPOSED OF AT AN
- APPROVED DISPOSAL SITE AS PER THE APPROVED PLAN.
- f.a. ALL TREES ARE TO BE PROTECTED UNLESS OTHERWISE DIRECTED BY THE COUNTY INSPECTOR AND URBAN FORESTER. THE COUNTY'S URBAN FORESTER (703-228-1863) SHALL INSPECT ALL TREE PROTECTION 72 HOURS PRIOR TO THE START OF CONSTRUCTION. IN SPITE OF PRECAUTIONS. SOME DAMAGE TO PROTECTED TREES MAY OCCUR. IN SUCH CASES, THE FOLLOWING MAINTENANCE GUIDELINES SHALL BE FOLLOWED:
- f.a.a. SOIL AERATION: IF THE SOIL HAS BECOME COMPACTED OVER THE ROOT ZONE OF ANY TREE. THE GROUND SHALL BE AERATED BY PUNCHING HOLES WITH AN IRON BAR. THE BAR SHALL BE DRIVEN 1-FOOT DEEP AND THEN MOVED BACK AND FORTH UNTIL THE SOIL IS LOOSENED. THIS PROCEDURE SHALL BE REPEATED EVERY 18 INCHES UNTIL ALL OF THE COMPACTED SOIL BENEATH THE CROWN OF THE TREE HAS BEEN LOOSENED.

- REPAIR OF DAMAGE:
- f.a.A.a. ANY DAMAGE TO THE CROWN, TRUNK, OR ROOT SYSTEM OF ANY TREE RETAINED ON THE SITE SHALL BE REPAIRED IMMEDIATELY.
- WHENEVER MAJOR ROOT OR BARK DAMAGE OCCURS, REMOVE SOME FOLIAGE TO REDUCE THE DEMAND FOR WATER AND NUTRIENTS.
- DAMAGED ROOTS SHALL IMMEDIATELY BE CUT OFF CLEANLY INSIDE THE EXPOSED OR DAMAGED AREA. CUT SURFACES SHALL BE PAINTED WITH APPROVED TREE PAINT, AND MOIST PEAT MOSS, BURLAP, OR TOPSOIL SHALL BE SPREAD OVER THE EXPOSED AREA.
- TO TREAT BARK DAMAGE, CAREFULLY CUT AWAY ALL LOOSENED BARK BACK INTO THE UNDAMAGED AREA, TAPER THE CUT AT THE TOP AND
- BOTTOM, AND PROVIDE DRAINAGE AT THE BASE OF THE WOUND. ALL TREE LIMBS DAMAGED DURING CONSTRUCTION OR REMOVED FOR ANY OTHER REASON SHALL BE CUT OFF ABOVE THE COLLAR AT THE
- PRECEDING BRANCH JUNCTION.
- CARE FOR SERIOUS INJURIES SHALL BE PRESCRIBED BY A FORESTER OR A TREE SPECIALIST f.b. FERTILIZATION: BROADLEAF TREES THAT HAVE BEEN STRESSED OR DAMAGED SHALL RECEIVE A HEAVY APPLICATION OF FERTILIZER TO AID THEIR
- RECOVERY f.b.a. TREES SHALL BE FERTILIZED IN THE LATE FALL (AFTER OCTOBER 1) OR THE EARLY SPRING (FROM THE TIME FROST IS OUT OF THE GROUND UNTIL MAY 1). FALL APPLICATIONS ARE PREFERRED, AS THE NUTRIENTS WILL BE MADE AVAILABLE OVER A LONGER PERIOD OF TIME.
- FERTILIZER SHALL BE APPLIED TO THE SOIL OVER THE FEEDER ROOTS. IN NO CASE SHALL IT BE APPLIED CLOSER THAN 3 FEET TO THE TRUNK. THE ROOT SYSTEM OF CONIFERS EXTENDS SOME DISTANCE BEYOND THE DRIP LINE. INCREASE THE AREA TO BE FERTILIZED BY ONE FOURTH
- FERTILIZER SHALL BE APPLIED USING APPROVED FERTILIZATION METHODS AND EQUIPMENT.
- FORMULATIONS AND APPLICATION RATES SHALL CONFORM TO THE GUIDELINES GIVEN IN TABLE 3.38-A OF VESCH.

2. VEGETATIVE PRACTICES

- a. TOPSOILING (STOCKPILE) VESCH 3.30
- a.a. TOPSOIL WILL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCKPILE LOCATIONS MAY HAVE TO BE LOCATED OFF-SITE AND ARE TO BE STABILIZED WITH TEMPORARY VEGETATION. PRIOR TO LAND-DISTURBING ACTIVITIES, THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY E&S PLAN (IF THE STOCKPILE IS LOCATED OFF-SITE). THIS SUPPLEMENTAL PLAN WOULD HAVE TO BE APPROVED BY THE PLAN APPROVING AUTHORITY BEFORE ANY OFF-SITE ACTIVITY COMMENCES.
- b. TEMPORARY SEEDING VESCH 3.31
- b.a. ALL DENUDED AREAS, WHICH WILL BE LEFT DORMANT FOR EXTENDED PERIODS OF TIME SHALL BE SEEDED WITH FAST GERMINATING TEMPORARY
- VEGETATION IMMEDIATELY FOLLOWING GRADING. SELECTION OF THE SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR IT IS APPLIED. b.b. SEE SHEET III-288 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) FOR ALLOWABLE PLANTING MATERIAL, SEEDING RATES, AND DATES. THE PLANTING REQUIREMENTS OF THE "SOUTH" SHALL BE FOLLOWED. LIMING SHALL BE BASED ON TABLE 3.31-A OF VESCH. FERTILIZERS SHALL BE APPLIED AS 600 LB/ACRE. THE FERTILIZER SHALL BE INCORPORATED INTO THE TOP 2-4" OF SOIL. SEED SHALL BE EVENLY APPLIED AND SMALL GRAINS SHALL BE PLANTED NO MORE THAN 1.5" DEEP. SEEDING MADE IN FALL FOR WINTER COVER AND DURING HOT SUMMER MONTHS SHALL
- c. EROSION CONTROL BLANKET AND MULCHING VESCH 3.36 AND 3.35
- c.a. EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDED TO PROTECT THE SLOPES FROM RILL AND GULLY EROSION AND TO ALLOW SEED TO GERMINATE PROPERLY. MULCH (STRAW OR FIBER) WILL BE USED ON RELATIVELY FLAT AREAS AND WILL BE APPLIED AS A SECOND STEP IN SEEDING OPERATION.
- d. DUST CONTROL VESCH 3.39
- d.a. DUST SHALL BE CONTROLLED USING A VARIETY OF METHODS SUCH AS VEGETATIVE COVER, MULCH, TILLAGE, IRRIGATION, SPRAY-ON ADHESIVES, STONE BARRIERS, AND CALCIUM CHLORIDE. THE IMPLEMENTATION OF THE DUST CONTROL METHODS SHALL BE INSTALLED PER SECTION 3.39 OF
- e. PERMANENT SEEDING VESCH 3.32
- e.a. SINCE THE SUBJECT SITE IS LOCATED WITHIN THE COASTAL PLAIN AREA OF VIRGINIA, SHEET III-304 OF THE VIRGINIA EROSION AND SEDIMENT
- CONTROL HANDBOOK SHALL BE FOLLOWED FOR FINAL SEEDING MATERIAL, SEEDING RATES, AND DATES OF APPLICATION. f. SODDING - VESCH 3.33

VESCH

f.a. SODDED AREAS SHALL BE BROUGHT TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLANS. SOIL TESTS SHALL BE MADE TO DETERMINE THE EXACT REQUIREMENTS FOR LIME AND FERTILIZER. PRIOR TO LAYING SOD, SOIL SURFACE SHALL BE CLEAR OF TRASH, DEBRIS AND LARGE OBJECTS. QUALITY OF SOD SHALL BE STATE CERTIFIED TO ENSURE GENETIC PURITY AND HIGH QUALITY. SOD SHALL NOT BE LAID ON FROZEN SOIL SURFACE, OR IN EXCESSIVELY WET OR DRY WEATHER. SOD SHALL BE DELIVERED AND INSTALLED WITHIN 36 HOURS, AND SHALL BE INSTALLED PER PAGE III-339

THE EROSION AND SEDIMENT CONTROL INSPECTOR SHALL HAVE THE AUTHORITY TO ADD OR DELETE EROSION AND SEDIMENT CONTROLS AS NEEDED IN THE FIELD. IN ADDITION, NO SEDIMENT TRAPS OR BASINS MAY BE REMOVED WITHOUT PRIOR APPROVAL OF THE INSPECTOR.

EROSION AND SEDIMENT CONTROL MANAGEMENT MEASURES

LANDSCAPE / TREE PRESERVATION NOTES

6. DURING CONSTRUCTION, ALL STORM SEWER INLETS WILL BE PROTECTED BY INLET PROTECTION

PRIOR TO ANY LAND DISTURBING ACTIVITY, THE CONTRACTOR SHALL CONTACT THE ARLINGTON COUNTY ARBORIST TO SCHEDULE AN INSPECTION. LAND CONSERVATION NOTES:

- 1. NO DISTURBED AREA WILL REMAIN DENUDED FOR MORE THAN 7 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR OR HIS
- 2. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING. FIRST AREAS TO BE CLEARED ARE TO BE THOSE REQUIRED FOR THE PERIMETER CONTROLS.
- 3. ALL STORM AND SANITARY SEWER LINES NOT IN STREETS ARE TO BE MULCHED AND SEEDED WITHIN 5 DAYS AFTER BACKFILL. NO MORE THAN 100 FEET ARE TO BE OPEN AT ANY ONE TIME.
- 4.ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES ARE TO BE COMPACTED, SEEDED AND MULCHED WITHIN 5 DAYS AFTER
- 5. ALL TEMPORARY EARTH BERMS, DIVERSIONS AND SEDIMENT CONTROL DAMS ARE TO BE MULCHED AND SEEDED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED. THE SAME APPLIES TO ALL SOIL STOCKPILES.
- 7. ANY DISTURBED AREA NOT COVERED BY NOTE 1 ABOVE AND NOT PAVED, SODDED OR BUILT UPON BY NOV. 1, OR DISTURBED AFTER THAT DATE,
- SHALL BE MULCHED IMMEDIATELY WITH HAY OR STRAW MULCH AT THE RATE OF 2 TONS/ACRE AND OVER-SEEDED BY APRIL 15.
- 8. AT THE COMPLETION OF ANY PROJECT CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENUDED AREAS SHALL BE STABILIZED.

EROSION & SEDIMENT CONTROL PROGRAM:

- 1. THE EROSION CONTROL PLAN IS INTENDED TO ESTABLISH ENTRANCES AND PERIMETER CONTROL MEASURES WHICH INCLUDES SILT FENCE (SF), INLET PROTECTION (IP), AND OTHER CONTROLS SPECIFIED ON THE PLANS.
- 2. WHERE CONSISTENT WITH JOB SAFETY REQUIREMENTS, ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES. NO MATERIAL SHALL BE PLACED IN STREAMBEDS. ANY STOCKPILED MATERIAL WHICH WILL REMAIN IN PLACE LONGER THAN 7 DAYS SHALL BE SEEDED AND MULCHED. WHEN SPOIL IS PLACED ON THE DOWNHILL SIDE OF TRENCH, IT SHALL BE BACKSLOPED TO DRAIN TOWARD THE TRENCH. WHEN NECESSARY TO DEWATER THE TRENCH, THE PUMP DISCHARGE HOSE SHALL OUTLET IN A STABILIZED AREA OR A SEDIMENT TRAPPING DEVICE.
- 3. ALL PRACTICES AND CONTROL DEVICES DESCRIBED HEREIN SHALL CONFORM TO THE CURRENT VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH). IN ADDITION, THE CONTRACTOR SHALL TAKE THE FOLLOWING STEPS TO MINIMIZE THE VOLUME OF SILT:
- a. CONTRACTOR SHALL EVALUATE THE SITE TO DETERMINE EXTENSIVE CUT AND FILL AREAS, AND SHALL WORK THOSE AREAS TO MINIMIZE THE USE OF HEAVY EQUIPMENT. CONTRACTOR SHALL BRING DISTURBED AREAS TO GRADE (ROUGH OR FINISHED) AND STABILIZE THOSE AREAS WITH TEMPORARY OR PERMANENT VEGETATION. THESE DISTURBED AREAS SHALL BE STABILIZED PRIOR TO BEGINNING WORK IN **ANOTHER AREA.**
- **b. FILL AREAS SHALL BE COMPACTED COMPLETELY PRIOR TO THE END OF EACH WORK DAY. FILL SLOPE SURFACES SHALL BE KEPT ROUGH TO** REDUCE SHEET EROSION OF THE SLOPES. CONTRACTOR SHALL RE-DIRECT CONCENTRATED RUNOFF, BY EARTH BERMS OR OTHER DEVICES, AROUND ACTIVELY DISTURBED AREAS TO STABILIZED OUTLETS.
- c. CUT SLOPES SHALL BE PROTECTED FROM CONCENTRATED FLOW BY BERMS (ABOVE THE SLOPE) AND DIRECTED AROUND THE DISTURBED AREA TO STABILIZED OUTLETS.
- 4. MEASURES TO CONTROL EROSION AND SILTATION SHALL BE PROVIDED PURSUANT TO AND IN COMPLIANCE WITH CURRENT STATE AND LOCAL REGULATIONS. THE INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND/OR THE APPROVAL OF THE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OR HIS AGENT OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA AND CHAPTER **57 OF THE ARLINGTON COUNTY CODE.**
- 5. ALL AREAS, ON OR OFF-SITE, THAT ARE DISTURBED BY THIS CONSTRUCTION AND WHICH ARE NOT PAVED OR BUILT UPON SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION. ACCEPTABLE STABILIZATION SHALL CONSIST OF PERMANENT GRASS SEED MIXTURE OR SOD THAT IS INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. ALL SLOPES 3:1 AND GREATER SHALL BE RECEIVE SOIL STABILIZATION IN ACCORDANCE WITH THE SPECIFICATIONS.
- 6. WHERE STREAM CROSSINGS ARE REQUIRED FOR EQUIPMENT, TEMPORARY CULVERTS SHALL BE PROVIDED.
- 7. FOR FURTHER REQUIREMENTS AND DETAILS OF TREE PRESERVATION, PLANTING, EROSION AND SEDIMENT CONTROL, SEE COUNTY CONSTRUCTION STANDARDS AND SPECIFICATIONS AND/OR THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

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 THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 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 THE SITE AT ALL TIMES.
- 5. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN THE 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 AND SEDIMENT 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 AND SEDIMENT CONTROL MEASURES NECESSARY TO

PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.

- 7. 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.
- 8. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- 9. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
- 10. ALL BIOFILTERS SHALL BE KEPT OFF-LINE UNTIL CONSTRUCTION IS COMPLETED AND ALL AREAS HAVE BEEN PROPERLY STABILIZED. THIS SHALL BE ACHIEVED BY USING INLET PROTECTION AT THE CURB CUTS AND STORMWATER CATCH BASINS LEADING DIRECTLY INTO THE
- 11. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.

PRE-STORM EROSION & SEDIMENTATION CHECKLIST:

PER GENERAL EROSION AND SEDIMENT CONTROL NOTE 6, THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ANY ADDITIONAL EROSION AND SEDIMENT CONTROL (ESC) MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE COUNTY. THESE SUPPLEMENTARY PRACTICES ARE IN ADDITION TO THOSE SHOWN IN AN EROSION AND SEDIMENT CONTROL PLAN. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MODIFIED AS NEEDED TO ENSURE ONLY CLEAR WATER IS DISCHARGED FROM THE SITE.

THE FOLLOWING ACTIONS SHALL BE TAKEN PRIOR TO STORM EVENTS WITH PREDICTED HEAVY AND/OR LARGE VOLUME RAINFALL TO PREVENT SEDIMENT DISCHARGES FROM A CONSTRUCTION SITE. A TYPICAL SUMMER THUNDERSTORM IS AN EXAMPLE OF A STORM EVENT WITH PREDICTED **HEAVY AND/OR LARGE VOLUME RAINFALL.**

1. PERIMETER CONTROLS

- a. SILT FENCE SHALL BE CHECKED FOR UNDERMINING, HOLES, OR DETERIORATION OF THE FABRIC. FENCING SHALL BE REPLACED IMMEDIATELY IF THE FABRIC IS DAMAGED OR WON. SILT FENCE MUST BE TRENCHED INTO THE GROUND PER STATE SPECIFICATIONS
- b. WOODEN STAKES OR STEEL POSTS SHALL BE PROPERLY SECURED UPRIGHT INTO THE GROUND. DAMAGED POSTS OR STAKES MUST BE
- c. SEDIMENT THAT HAS ACCUMULATED AGAINST THE SILT FENCE SHALL BE REMOVED. ACCUMULATED SEDIMENT MUST BE REMOVED WHEN THE LEVEL REACHES ONE-HALF THE HEIGHT OF THE FENCING.
- d. HAY BALES OR A STONE BERM SHALL BE PLACED ACROSS THE CONSTRUCTION ENTRANCE TO PREVENT SEDIMENT FROM LEAVING THE **CONSTRUCTION SITE.**

2. EXPOSED SLOPES AND SOIL

- a. EXPOSED SLOPES NOT AT THE FINAL STABILIZATION PHASE SHALL BE COVERED WITH TARPS, PLASTIC SHEETING, OR EROSION CONTROL MATTING. COVERING MATERIAL SHALL BE PROPERLY SECURED/ANCHORED.
- **b. CONTROLS SHALL BE INSTALLED TO PREVENT CONCENTRATED FLOW DOWN AN EXPOSED SLOPE. BERMS OR DIVERSION DIKES SHALL BE** INSTALLED AT THE TOP OF CUT/EXPOSED SLOPES TO DIRECT STORM FLOW AROUND THE DISTURBED AREA.
- c. EXPOSED SLOPES AT THE FINAL STABILIZATION PHASE SHALL BE STABILIZED USING SLOPE STABILIZATION PRACTICES SUCH AS SOIL STABILIZATION BLANKETS OR MATTING AS SPECIFIED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH STD & SPEC 3.36). BLANKETS OR MATS MUST BE PROPERLY SECURED AND ANCHORED TO THE SLOPE USING STAPLES, PINS, OR STAKES.
- d. SEEDED AREAS SHALL BE CHECKED AND RESEEDED AS NECESSARY TO COVER EXPOSED SOIL. RECENTLY SEEDED AREAS SHALL BE PROTECTED BY STRAW OR SOIL STABILIZATION BLANKETS TO PREVENT SEEDING FROM BEING WASHED AWAY.

3. STOCKPILES

SIGNIFICANT RAINFALL.

OTHER STABILIZATION MATTING. THE COVER MUST BE PROPERLY SECURED/ANCHORED DOWN TO PREVENT IT FROM BEING BLOWN OFF AND EXPOSING MATERIALS TO RAIN. CONTROLS SUCH AS HAY BALES OR BOOMS SHALL BE PLACED ALONG THE PERIMETER OF THE STOCKPILE (DOWNHILL SIDE).

a. INLET PROTECTION CONTROLS SHALL BE INSPECTED TO ENSURE THEY ARE FUNCTIONING PROPERLY AND FLOODING WILL NOT OCCUR.

CLOGGED OR DAMAGED CONTROLS MUST BE REPLACED IMMEDIATELY. ENSURE CONTROLS ALLOW FOR OVERFLOW/BYPASS OF STORMWATER RUNOFF DURING SIGNIFICANT STORM EVENTS. IN ADDITION TO THESE PRE-STORM ACTIONS, ALL EROSION AND SEDIMENT CONTROL (ESC) MEASURES MUST BE CHECKED DAILY AND AFTER EACH

POLLUTION PREVENTION PLAN NOTES (STORMWATER MANUAL - SECTION 2.4)

- 1. ONLY THE FOLLOWING NON-STORMWATER DISCHARGES ARE AUTHORIZED BY ARLINGTON COUNTY'S MS4 PERMIT, UNLESS THE STATE WATER CONTROL BOARD, THE VIRGINIA SOIL AND WATER CONSERVATION BOARD (BOARD), OR ARLINGTON COUNTY DETERMINES THE DISCHARGE TO BE A SIGNIFICANT SOURCE OF POLLUTANTS TO SURFACE WATERS:
- a. 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; FOUNDATION DRAINS; AIR CONDITIONING CONDENSATION; IRRIGATION WATER; SPRINGS; WATER FROM CRAWL SPACE PUMPS; FOOTING DRAINS; LAWN WATERING; INDIVIDUAL RESIDENTIAL CAR WASHING; FLOWS FROM RIPARIAN HABITATS AND WETLANDS: DECHLORINATED SWIMMING POOL DISCHARGES: DISCHARGES OR FLOWS FROM FIREFIGHTING: AND, OTHER ACTIVITIES GENERATING DISCHARGES IDENTIFIED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY AS NOT REQUIRING VPDES AUTHORIZATION.
- 2. 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, DETERGENT WASH WATER, ETC.) FROM BEING DISCHARGED INTO ARLINGTON COUNTY'S MS4 SYSTEM, WHICH INCLUDES THE CURB AND GUTTER SYSTEM, AS WELL AS CATCH BASINS AND OTHER STORM DRAIN INLETS, OR STREAM NETWORK.
- 3. PER CHAPTER 26 OF THE ARLINGTON COUNTY CODE, IT SHALL BE UNLAWFUL FOR ANY PERSON TO DISCHARGE DIRECTLY OR INDIRECTLY INTO THE STORM SEWER SYSTEM OR STATE WATERS, ANY SUBSTANCE LIKELY, IN THE OPINION OF THE COUNTY MANAGER, TO HAVE AN ADVERSE **EFFECT ON THE STORM SEWER SYSTEM OR STATE WATERS.**

UTILITY INSTALLATION:

- UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE
- 1. NO MORE THAN 100 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
- 2. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
- 3. EFFLUENT FROM DEWATERING 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.
- 4. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE
- 5. STABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.

END OF THE WORK DAY INCLUDING RE-SEEDING AND MULCHING OR RE-SODDING IF NECESSARY.

SHALL BE RESPONSIBLE FOR CLEANING THE AFFECTED AREAS TO THE SATISFACTION OF THE INSPECTOR.

- 6. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH. 9. ANY DISTURBED AREA NOT COVERED BY NOTE #1 ABOVE AND PAVED, SODDED OR BUILT UPON BY NOVEMBER 1ST, OR DISTURBED AFTER THAT
- DATE, SHALL BE MULCHED WITH HAY OR STRAW AT THE RATE OF 2 TONS PER ACRE AND OVER-SEEDED NO LATER THAN MAY 15TH. 10. AT THE COMPLETION OF THE CONSTRUCTION PROJECT AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENUDED AREAS SHALL BE STABILIZED. ARLINGTON COUNTY INSPECTOR TO APPROVE REMOVAL OF ALL TEMPORARY

SILTATION MEASURES.

- **MAINTENANCE PROGRAM:**
- THE FOLLOWING IS A PROGRAM OF MAINTENANCE FOR THE MECHANICAL CONTROLS SPECIFIED IN THIS NARRATIVE AND ON THE PLAN: 1. THE SITE SUPERINTENDENT OR HIS/HER REPRESENTATIVE SHALL MAKE A VISUAL INSPECTION OF ALL MECHANICAL CONTROLS AND NEWLY STABILIZED AREA (I.E. SEEDED AND MULCHED AND/OR SODDED AREAS) ON A DAILY BASIS; ESPECIALLY AFTER A HEAVY RAINFALL EVENT TO ENSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY DAMAGED CONTROLS SHALL BE REPAIRED PRIOR TO THE
- 2. ALL SEDIMENT TRAPPING DEVICES SHALL BE CLEARED OUT AT 50% TRAP CAPACITY AND THE SEDIMENT SHALL BE DISPOSED OF BY SPREADING ON THE SITE OR IF NOT SUITABLE FOR FILL, HAULING AWAY AND DEPOSITING AT AN ACCEPTABLE DUMP SITE.

3. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PREVENT MUD AND/OR OTHER DEBRIS FROM BEING ENTERED ONTO EXISTING SWM/BMP

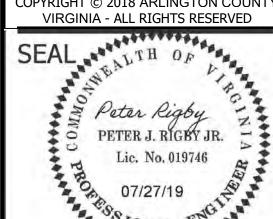
FACILITIES OR DOWNSTREAM WATER WAYS. SHOULD OFF-SITE AREAS BECOME POLLUTED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR

- 4. AT THE COMPLETION OF CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ANY REMAINING DENUDED AREAS SHALL BE STABILIZED. CERTAIN DEVICES MAY BE REMOVED PRIOR TO CONSTRUCTION COMPLETION BUT ONLY WITH THE APPROVAL OF THE COUNTY INSPECTOR.
- 5. AFTER CONSTRUCTION OPERATIONS HAVE ENDED, ALL DISTURBED AREAS SHALL BE STABILIZED. UPON APPROVAL OF THE COUNTY INSPECTOR, MECHANICAL SEDIMENT CONTROLS SHALL BE REMOVED AND THE GROUND PERMANENTLY STABILIZED WITH VEGETATION WITHIN 30 DAYS.

VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES **FACILITIES & ENGINEERING DIVISION** ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813

ARLINGTON, VA 22201 PHONE: 703.228.3629 FAX: 703.228.3606 COPYRIGHT © 2018 ARLINGTON COUNTY



SIONAL . ONAL **APPROVALS** DATE

QUALITY CONTROL ENGINEER Kamal Taktak CONSTRUCTION MANAGEMENT SUPERVISO WATER, SEWER, STREETS BUREAU CHIEF Dennis M. Leach a. STOCKPILED SOIL AND OTHER LOOSE MATERIALS THAT CAN BE WASHED AWAY SHALL BE COVERED WITH A TARP, PLASTIC SHEETING, OR TRANSPORTATION DIRECTOR Slive Dungachi 8.6.202

REVISIONS

PROJECT MANAGER

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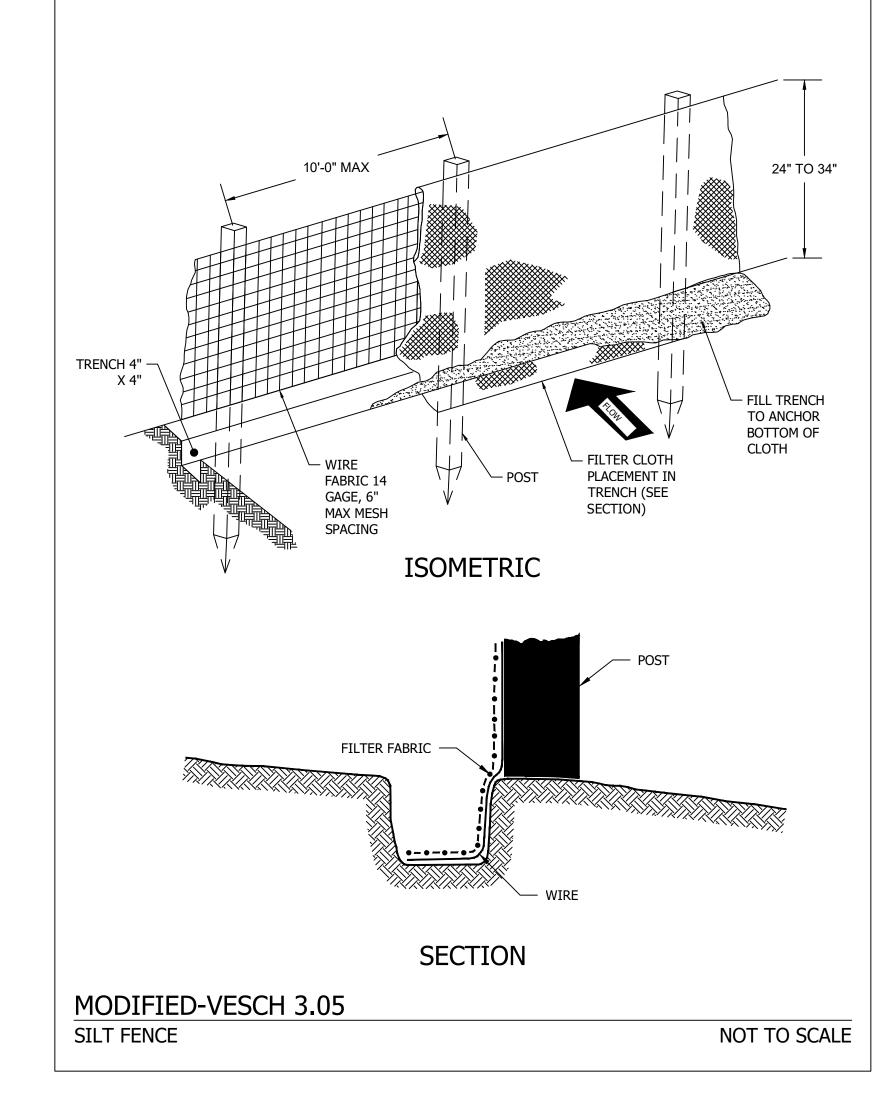
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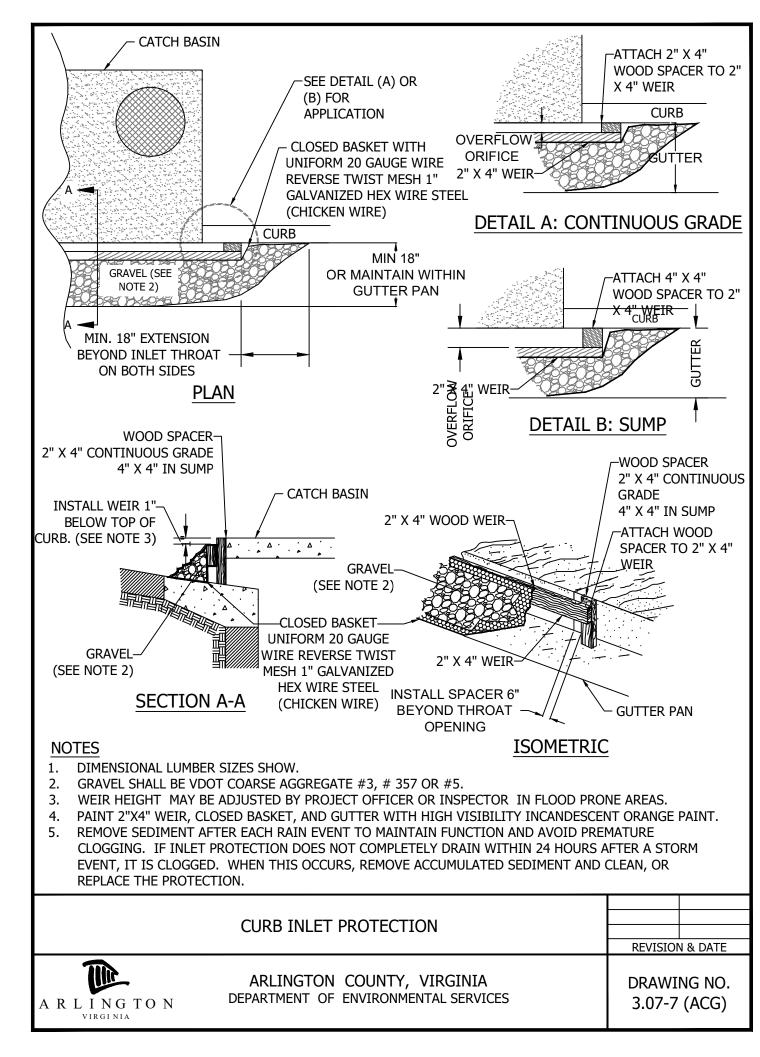
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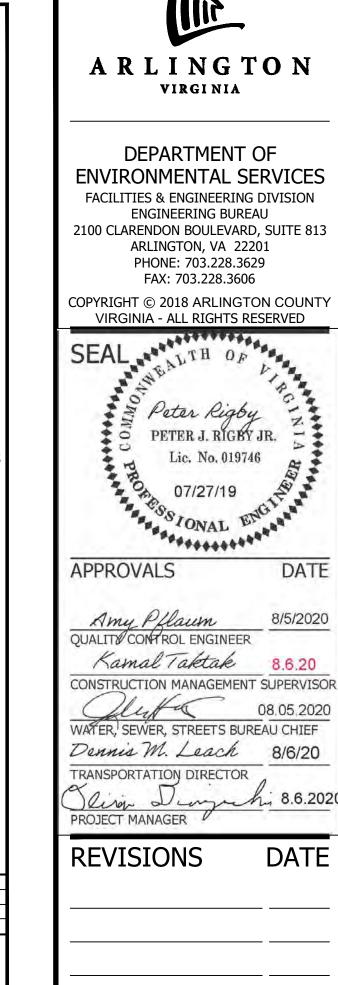
DESIGNED: K. PATEL DRAWN: K. PATEL CHECKED: P. RIGBY

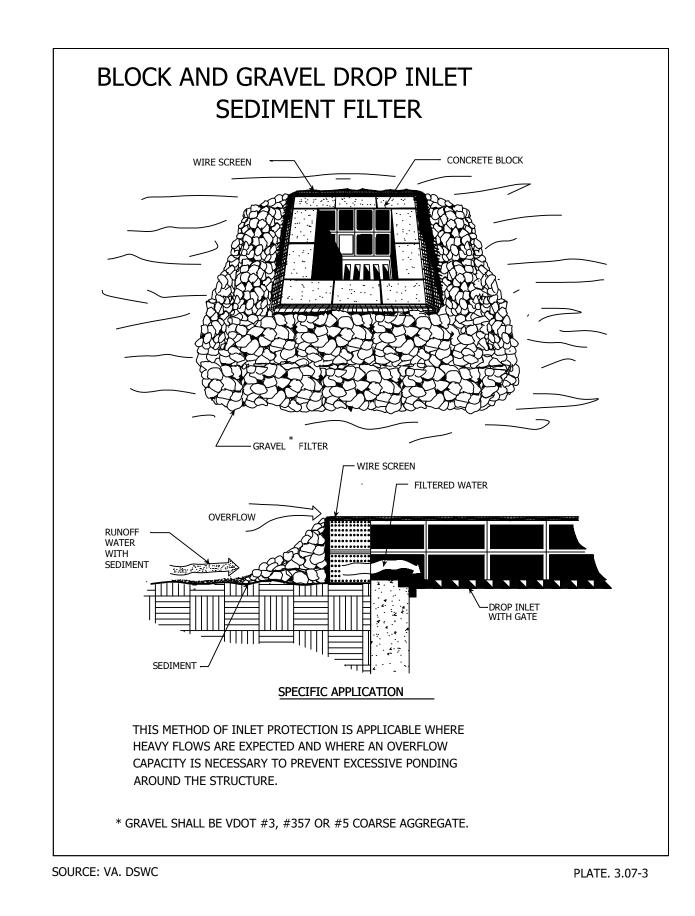
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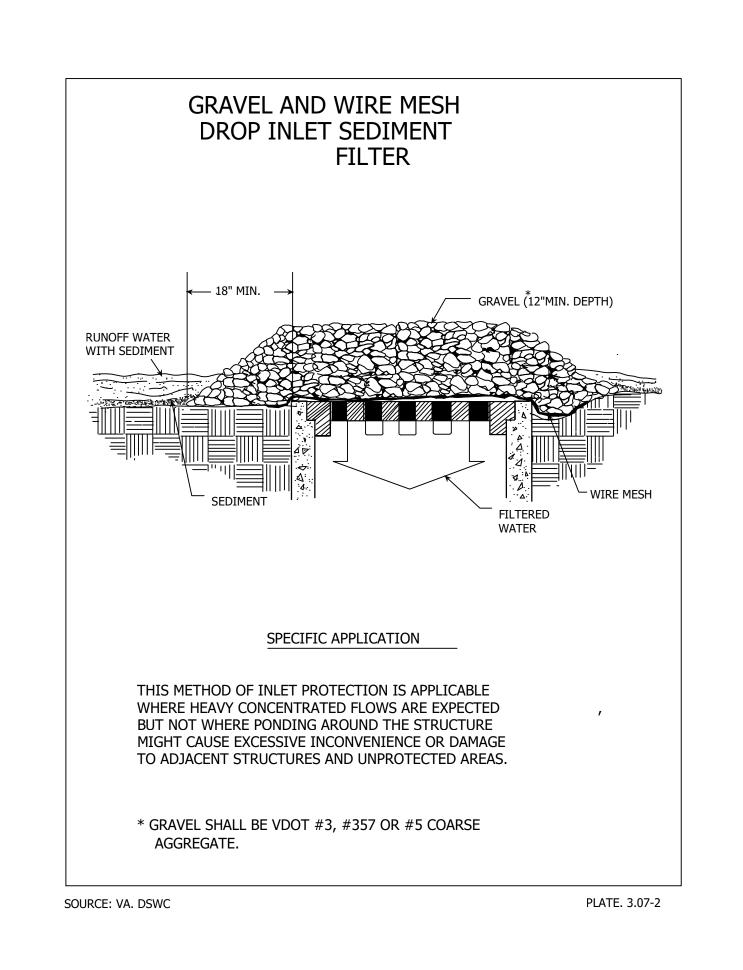
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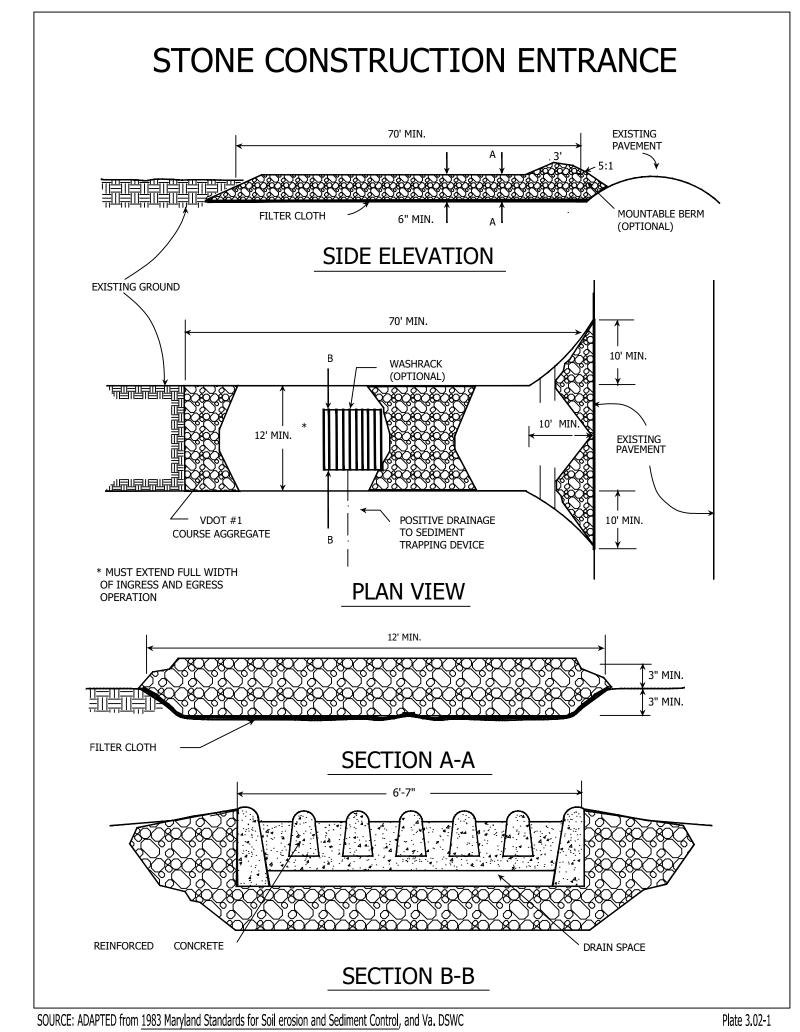


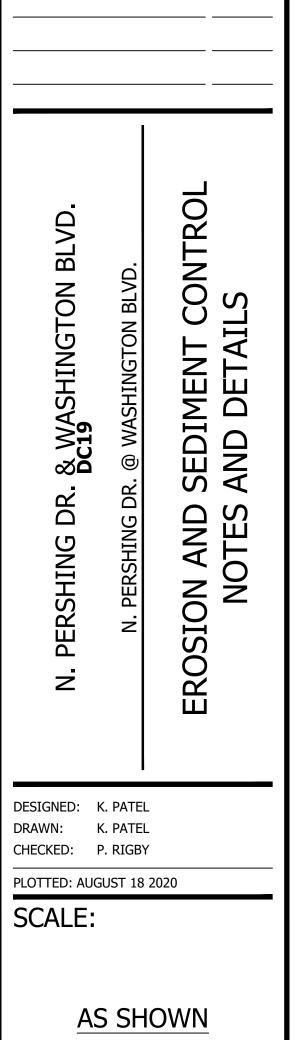












C032.2

TABLE 3.31-B (Revised June 2003) **TEMPORARY SEEDING SPECIFICATIONS QUICK REFERENCE FOR ALL REGIONS**

<u>SEED</u>								
APPLICATION DATES	SPECIES	APPLICATION RATES						
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (lolium multi- florum) & Cereal (Winter) Rye (Secale cereale)	50 -100 (lbs/acre)						
Feb. 16 - Apr. 30	Annual Ryegrass (lolium multi-florum)	60 - 100 (lbs/acre)						
May 1 - Aug. 31	German Millet	50 (lbs/acre)						

FERTILIZER & LIME

- Apply 10-10-10 fertilizer at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.) Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)
- 1 A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site. 2 - Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
- 3 When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

TABLE 3.32-D (Revised June 2003) PERMANENT SEEDING SPECIFICATIONS FOR PIEDMONT AREA

SEED ¹							
LAND USE	SPECIES	APPLICATION PER ACRE					
Minimum Care Lawn (Commercial or Residential)	Tall Fescue ¹ Perennial Ryegrass Kentucky Bluegrass ¹	95-100% 0-5% 0-5% TOTAL: 175-200 lbs					
High-Maintenance Lawn	Tall Fescue ¹	TOTAL: 200-250 lbs					
General Slope (3:1 or less)	Tall Fescue ¹ Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop ²	128 lbs 2 lbs <u>20 lbs</u> TOTAL: 150 lbs					
Low-Maintenance Slope (Steeper than 3:1)	Tall Fescue ¹ Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop ² Crownvetch ³	108 lbs. 2 lbs. 20 lbs. <u>20 lbs.</u> TOTAL: 150 lbs.					

- When selecting varieties of turfgrass, use the Virginia Crop Improvement Association (VCIA) recommended turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA. A current turfgrass variety list is available at the local County Extension office or through VCIA at 804-746-4884 or at http://sudan.cses.vt.edu/html/Turf/turf/publications/publications2.html 2 - Use seasonal nurse crop in accordance with seeding dates as stated below:

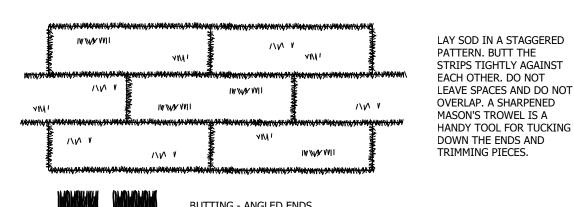
February 16th - April . Annual Rye May 1st - August 15th. Foxtail Millet Annual Rye August 16th - October

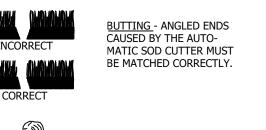
November - February 15th. Winter Rye 3 - Substitute Sericea lespedeza for Crownvetch east of Farmville, VA (May through September use hulled seed, all other periods, use unhulled Sericea). If Flatpea is used, increase rate to 30 lbs./acre. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30 -40

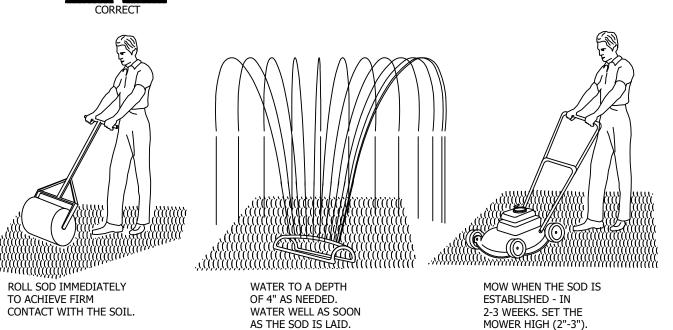
FERTILIZER & LIME

- Apply 10-20-10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,000 sq. ft.) Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)
- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site. - Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
- When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

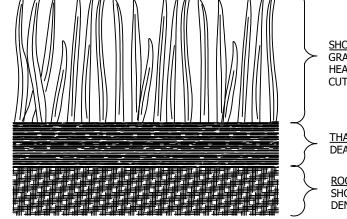
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APPEARANCE OF GOOD SOD



SHOOTS OR GRASS BLADES. GRASS SHOULD BE GREEN AND HEALTHY, MOWED AT A 2"-3" CUTTING HEIGHT.

THATCH - GRASS CLIPPINGS AND DEAD LEAVES, UP TO 1/2" THICK. <u>ROOT ZONE - SOIL AND ROOTS.</u> SHOULD BE 1/2"-3/4" THICK, WITH DENSE ROOT MAT FOR STRENGTH.

SOURCE: VA. DSWC PLATE: 3.33-1

GENERAL NOTES:

TO ACHIEVE FIRM

- i. Contractor to contact the Arlington Forester to schedule a pre-construction inspection of tree protection measures before any work near the critical root zones of trees. To schedule the pre-construction meeting call 703-228-1863.
- ii. Contractor to protect trees per the plan according to the Arlington County DPR Design Standard Detail 02231.1
- iii. Contractor to root prune trees per the plan according to the Arlington County DPR Design Standard Detail 02231.5, where called out on the plan.
- iv. Contractor to call the urban forester at 703-228-1863, 72 hours before planting, to schedule inspection of the trees to be planted. Warranty for 1 year after planting shall be the contractor's responsibility. The urban forester and DPR is responsible for inspection.
- v. Contractor to prepare tree planting strips for the replacement trees according to Arlington County DPR Design Standard Detail 02930.4a and 02930.4b.
- vi. Contractor to prepare street tree planting pits according to the Arlington County DPR Design Standard Detail 02930.3a, 02930.3b, and 02930.11c
- vii. Contractor to plant the trees according to Arlington County DPR Design Standard Detail 02930.1 (on flat land) or 02930.2 (on slopes)

ARLINGTON VIRGINIA

DEPARTMENT OF **ENVIRONMENTAL SERVICES** FACILITIES & ENGINEERING DIVISION ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629 FAX: 703.228.3606

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Lic. No. 019746 07/27/19 SSIONAL Y ONAL

APPROVALS DATE Amy Pflaum QUALITY CONTROL ENGINEER

Kamal Taktak CONSTRUCTION MANAGEMENT SUPERVISOR WATER, SEWER, STREETS BUREAU CHIEF Dennis M. Leach 8/6/20 TRANSPORTATION DIRECTOR

PROJECT MANAGER **REVISIONS**

SEDIMENT CONTRO AND DETAILS

& WASHINGTON **DC19**

DR.

PERSHING

EROSION AND S

DESIGNED: K. PATEL DRAWN: K. PATEL CHECKED: P. RIGBY

PLOTTED: AUGUST 18 2020

SCALE:

AS SHOWN

C032.3

Constants	
Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41

Area Check OK.

0.90

B Soils

C Soils

OK.

Post-Development Land Cover (acres)

Forest/Open Space (acres) -- undisturbed,

yards or other turf to be mowed/managed

Pj (unitless correction factor)

Impervious Cover (acres)

protected forest/open space or reforested land Managed Turf (acres) -- disturbed, graded for

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

Post-Development Requirement for Site Area

Linear Project TP Load Reduction Required (lb/yr): 0.0681

Nitrogen Loads (Informational Purposes Only)

TP Load Reduction Required (lb/yr)

0.1648

Totals

0.0000

0.0037

0.1611

0.1648

Land Cover Summary-Pre							
Pre-ReDevelopment	Listed	Adjusted ¹					
Forest/Open Space Cover (acres)	0.0000	0.0000					
Weighted Rv(forest)	0.0000	0.0000					
% Forest	0%	0%					
Managed Turf Cover (acres)	0.0022	0.0022					
Weighted Rv(turf)	0.2000	0.2000					
% Managed Turf	1%	1%					
Impervious Cover (acres)	0.1626	0.1626					
Rv(impervious)	0.9500	0.9500					
% Impervious	99%	99%					
Total Site Area (acres)	0.1648	0.1648					
Site Rv	0.9400	0.9400					

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0129	0.0129
Pre-ReDevelopment Treatment Volume (cubic feet)	562.3233	562.3233
Pre-ReDevelopment TP Load (Ib/yr)	0.3533	0.3533
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	2.1400	2.1400
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopmen	t area excluding	0.0676

Adjusted Land Cover Summary Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

development load limit, 0.41 lbs/acre/year).

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column I shows load reduction requriement for new impervious cover (based on new

Pre-ReDevelopment TN Load (lb/yr)

2.5275

Land Cover Summary	-Post (Final)	Land Cover Summ	nary-Post	Land Cover Summo	ary-Post
Post ReDev. & New		Post-ReDevelo	Post-Development New Impervious		
Forest/Open Space Cover (acres)	0.0000	Forest/Open Space Cover (acres)	0.0000		
Weighted Rv(forest)	0.0000	Weighted Rv(forest)	0.0000		
% Forest	0%	% Forest	0%		
Managed Turf Cover (acres)	0.0037	Managed Turf Cover (acres)	0.0037		
Weighted Rv (turf)	0.2000	Weighted Rv (turf)	0.2000		
% Managed Turf	2%	% Managed Turf	2%		
Impervious Cover (acres)	0.1611	ReDev. Impervious Cover (acres)	0.1611	New Impervious Cover (acres)	0.0000
Rv(impervious)	0.9500	Rv(impervious)	0.9500	Rv(impervious)	
% Impervious	98%	% Impervious	98%		
Final Site Area (acres)	0.1648	Total ReDev. Site Area (acres)	0.1648		
Final Post Dev Site Rv	0.9332	ReDev Site Rv	0.9332		
Final Post-Development Treatment Volume	558.2396	Post-ReDevelopment Treatment Volume	558.2396	Post-Development Treatment Volume (cubic	
(cubic feet)	338.2330	(cubic feet)	336.2330	feet)	
Final Post- Development TP Load (lb/yr)	0.3507	Post-ReDevelopment Load (TP) (lb/yr)*	0.3507	Post-Development TP Load (lb/yr)	į.
Final Post-Development TP Load per acre (lb/acre/yr)	2.1300	Post-ReDevelopment TP Load per acre (lb/acre/yr)	2.1300		
		Max. Reduction Required (Below Pre- ReDevelopment Load)	20%		
		TP Load Reduction Required for Redeveloped Area (lb/yr)	0.0681	TP Load Reduction Required for New Impervious Area (lb/yr)	0

Final Post-Development TN Load

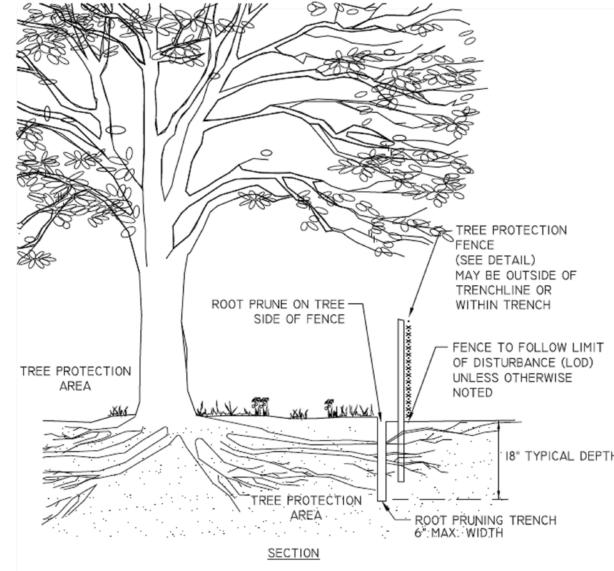
ost-ReDevelopment & New Impervious)

RUNOFF REDUCTION NOTES:

THE RUNOFF REDUCTION SPREADSHEET INFORMATION ON THIS PLAN IS FOR DATA TRACKING PURPOSES TO DOCUMENT THE AREA OF LAND DISTURBANCE AND TO CHARACTERIZE PRE- AND POST-DEVELOPMENT LAND USE CONDITIONS. IN ACCORDANCE WITH ARLINGTON COUNTY'S CHESAPEAKE BAY TOTAL MAXIMUM DAILY LOAD (TMDL) ACTION PLAN, APPROVED BY THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) ON SEPTEMBER 1, 2015, LINEAR DEVELOPMENT PROJECTS CONDUCTED BY THE COUNTY ARE ADMINISTERED AND TRACKED AS FOLLOWS CONSISTENT WITH 9VAC25-870-69.A.4, 9VAC25-870-76, AND 9VAC25-870-92:

- POLLUTANT LOAD CHANGES WILL BE COMPUTED AS DESCRIBED IN SECTION 3.A OF THE ACTION PLAN.
- RETROFIT OPPORTUNITIES WILL BE EVALUATED FOR EACH PROJECT, USING THE SCREENING AND SELECTION CRITERIA APPLIED AND DESCRIBED IN THE ADOPTED STORMWATER MASTER PLAN.
- RETROFIT PROJECTS THAT MEET THE SCREENING CRITERIA AND ARE DETERMINED BY ARLINGTON TO BE FEASIBLE AND COST-EFFECTIVE WILL BE IMPLEMENTED WITH SPECIFIC LINEAR DEVELOPMENT PROJECTS. POLLUTANT LOAD REDUCTIONS FROM RETROFIT PROJECTS WILL BE COMPUTED AS DESCRIBED IN SECTION 5 OF THE ACTION PLAN.
- IN CASES WHERE RETROFIT PROJECTS ARE NOT FEASIBLE AND COST-EFFECTIVE FOR A PARTICULAR LINEAR PROJECT, ANY POLLUTANT OF CONCERN (POC) LOAD INCREASES THAT MIGHT OCCUR FOR THAT PROJECT WILL BE ADDRESSED BY LARGER OVERALL POC LOAD REDUCTIONS IN PLACE OR ADDED THROUGH TMDL ACTION PLAN IMPLEMENTATION.

IN THE ABOVE MANNER ARLINGTON, AS THE MS4 OPERATOR AND THE CONSTRUCTION SITE OPERATOR FOR ITS LINEAR DEVELOPMENT PROJECTS, IMPLEMENTS LINEAR PROJECTS AND RETROFIT PROJECTS IN A MANNER THAT ACHIEVES THE MOST TMDL POC REDUCTION FOR THE LEAST COST, WHILE FULLY ACCOUNTING FOR LOAD CHANGES THAT OCCUR WITH LINEAR DEVELOPMENT PROJECT ACTIVITY CONSISTENT WITH THE DEQ CHESAPEAKE BAY TMDL SPECIAL CONDITION



I. ROOT PRUNING SHALL BE DONE WITH A TRENCHER OR VIBRATORY PLOW TO A DEPTH OF 18". ROOTS OVER 1.5" IN DIAMETER SHALL HAVE A CLEAN CUT MADE BY A CLEAN SAW ON THE SURFACE OF THE ROOT, WHICH IS STILL ATTACHED TO THE TREE. DO NOT BREAK OR CHOP DO NOT PAINT THE CUT ROOT END. IF EXCAVATION IS FOR INSTALLATION OF UNDERGROUND UTILITIES, LEAVE THE ROOT INTACT AND THREAD THE LINES UNDERNEATH

ARLINGTON

VIRGINIA

DEPARTMENT OF

ENVIRONMENTAL SERVICES

FACILITIES & ENGINEERING DIVISION

ENGINEERING BUREAU

2100 CLARENDON BOULEVARD, SUITE 813

ARLINGTON, VA 22201

PHONE: 703.228.3629

FAX: 703.228.3606

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Lic. No. 019746

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CONSTRUCTION MANAGEMENT SUPERVISO

WATER, SEWER, STREETS BUREAU CHIEF

SEDIMENT CONTRAND DETAILS

EROSION AND S

QUALITY CONTROL ENGINEER Kamal Taktak

Dennis M. Leach TRANSPORTATION DIRECTOR

PROJECT MANAGER

REVISIONS

ON

DR.

SHING

DESIGNED: K. PATEL

DRAWN: K. PATEL

APPROVALS

2. ROOT PRUNING SHALL TAKE PLACE PRIOR TO ANY CLEARING AND GRADING. EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING AND SHALL BE APPROVED BY ARLINGTON COUNTY URBAN FORESTER.

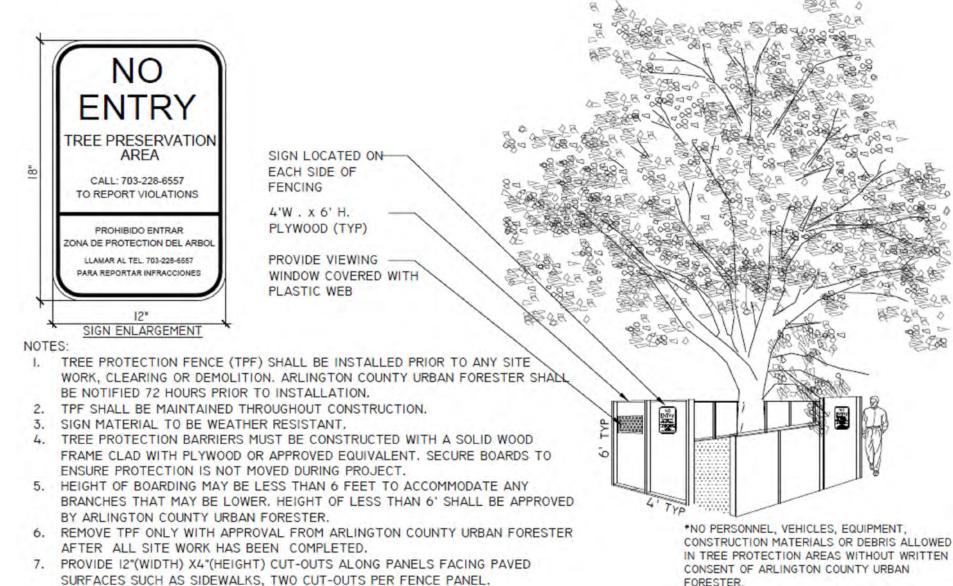
3. ROOT PRUNING SHALL BE CONDUCTED WITH THE SUPERVISION OF AN ISA CERTIFIED ARBORIST.

4. BACKFILL THE ROOT-PRUNING TRENCH WITH APPROVED LOOSE TOPSOIL MIX AND TOP WITH 3-4" BARK MULCH AND MARK LOCATION FOR FUTURE REFERENCE. SILT FENCE MAY BE INSTALLED IN TRENCH PRIOR TO BACKFILLING AS LONG AS THE TRENCH IS NOT OPEN FOR LONGER THAN 48 HOURS WITHOUT WATERING.

5. ROOT PRUNING WORK SHALL NOT BE DONE WHEN MORE THAN THE TOP I INCH OF SOIL IS FROZEN. ROOT PRUNING SHALL NOT BE UNDERTAKEN WHEN THE SOIL IS WET AND CONDITIONS ARE MUDDY.

6. THE ARLINGTON COUNTY URBAN FORESTER SHALL BE NOTIFIED 72 HOURS PRIOR TO TRENCHING AND WHEN ALL ROOT PRUNING AND TREE PROTECTION FENCE INSTALLATION IS COMPLETE.

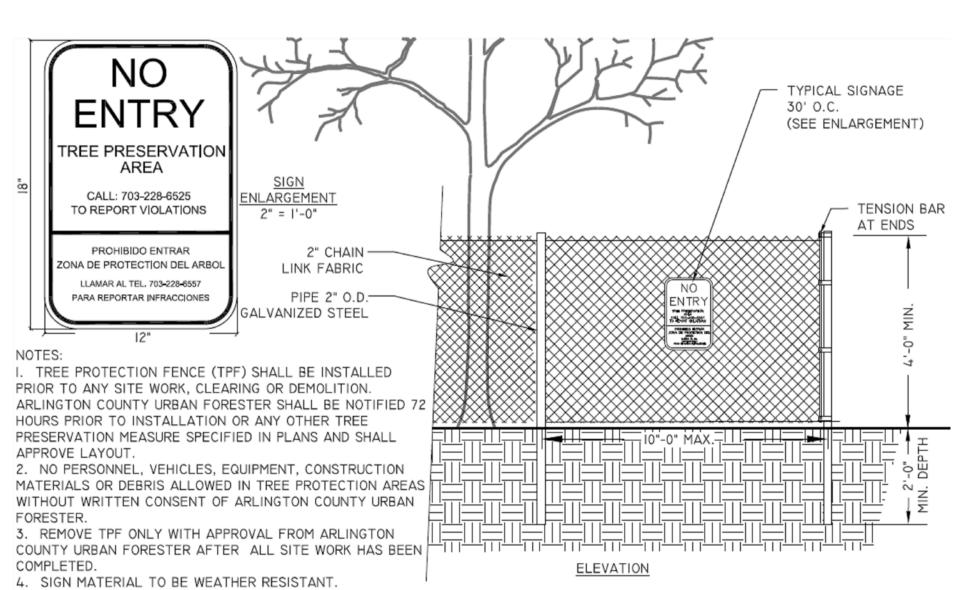




TREE PROTECTION BARRIERS FOR RESTRICTED SPACE AND TREE PITS 311300.14NS (2019)

GENERAL NOTES:

- Contractor to contact the Arlington County Urban Forester to schedule a pre-construction inspection of tree protection measures before any work near the critical root zones of trees. To schedule the pre-construction meeting call 703-228-6557.".
- Contractor to protect trees per the plan according to the Arlington County DPR Design Standard Detail 02231.1
- Contractor to root prune trees per the plan according to the Arlington County DPR Design Standard Detail 02231.5, where called out on the plan.
- iv. Contractor to call the Arlington County Urban Forester at 703-228-6557, 72 hours before planting, to schedule inspection of the trees to be planted. Warranty for 1 year after planting shall be the contractor's responsibility. The Urban Forester and DPR is responsible for
- v. Contractor to prepare tree planting strips for the replacement trees according to Arlington County DPR Design Standard Detail 02930.4a and 02930.4b.
- vi. Contractor to prepare street tree planting pits according to the Arlington County DPR Design Standard Detail 02930.3a, 02930.3b, and 02930.11c
- vii. Contractor to plant the trees according to Arlington County DPR Design Standard Detail 02930.1 (on flat land) or 02930.2 (on slopes)



4' CHAIN LINK TREE PROTECTION FENCE (RESIDENTIAL)

311300.2 (2016) (02231.2)

CHECKED: P. RIGBY PLOTTED: AUGUST 18 2020 SCALE:

1/2" = 1'-0"

AS SHOWN

C032.4

N. PERSHING DR. & WASHINGTON BLVD. DC19

STORMWATER POLLUTION PREVENTION PLAN

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) Arlington County Projects (Linear Development / Stormwater Retrofit)

For Construction Activities At:

N. Pershing Dr. & Washington Blvd. Arlington, VA 22205

Latitude: 38.880630 N (decimal degrees)

Longitude: -77.090533 W (decimal degrees)

Construction Activity Operator:

Department of Environmental Services- Arlington County 2100 Clarendon Blvd Suite 813 Arlington, Virginia, 22201 703-228-7537 ktaktak@arlingtonva.us Kamal Taktak 703-228-7527

SWPPP Preparation Date:

03/03/2020

CERTIFICATION

"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Operator Name: Peter Rigby

Title: Design Team Supervisor, Department of Environmental Service

Date: __03/03/2020

Arlington County SWPPP 12/2016

STORMWATER POLLUTION PREVENTION PLAN

5.0 Potential Sources of Pollution & Pollution Prevention Practices

				Polluta	ants							
Pollutant-Generating Activity	Likely Present at your Project Site?	Sediment	Nutrients	Heavy Metals	pH (acids and bases)	Pesticides & Herbicides	Oil & Grease	Bacteria & Viruses	Trash, Debris, Solids	Other Toxic Chemicals	Pollution Prevention Practice	Responsible Party
Clearing, grading, excavating, and un-stabilized areas	⊠ Yes □ No	X	Х						X		(1)	
Paving and saw cutting operations	⊠ Yes □ No	х					X		х		(2)	
Concrete operations, washout, and cement waste	⊠ Yes □ No			х	х				Х		(3)	
Washing / cleaning	⊠ Yes □ No	x	Х	Х	х		х		х	х	(4)	
Dewatering operations	⊠ Yes □ No	х	Х						х		(5)	Construction Activity
Material / chemical use and storage	☐ Yes ⊠ No	х	Х	х	х	х	Х		х	х	(6)	Operator (See Cover Page of this SWPPP)
Equipment and vehicle maintenance	☐ Yes ⊠ No				Х		Х		Х	х	(7)	
Waste management / disposal	☐ Yes ⊠ No								Х	х	(8)	
Sanitary waste	☐ Yes ⊠ No		Х		х			Х			(9)	
Nutrient management	⊠ Yes □ No	Х	Х						х	х	(10)	

Arlington County SWPPP 11/2016

STORMWATER POLLUTION PREVENTION PLAN

1.0 SWPPP Documents Located Onsite & Available for Review

SWPPP Document Type	Located Onsite & Available for Review?
Registration Statement	☐ Yes ☐ NA
Notice of Coverage Letter	☐ Yes ☐ NA
Construction General Permit	☐ Yes ☐ NA
Pollution Prevention Plan	☐ Yes ☐ NA
Erosion & Sediment Control Plan	⊠ Yes □ NA
Stormwater Management Plan	⊠ Yes □ NA
LDA Permit	⊠ Yes □ NA

Required documents must be kept at a centralized location on the project site (i.e. in a mail box or other container)

2.0 Authorized Non-Stormwater Discharges

Type of Authorized Non-Stormwater Discharges Likely Present at Your Project Site? Uncontaminated excavation dewatering ✓ Yes✓ Yes✓ Yes Landscape irrigation Others [describe]

3.0 Pollution Prevention Awareness

Employees will be given a "walk through" of the site identifying areas of possible pollution and will be shown Erosion and Sediment Controls and Pollution Prevention Practices (identified in Sections 4.0 and 5.0 of this SWPPP) that are applicable to their assigned job duties. A refresher meeting and "walk through" will be conducted on an as needed

4.0 Erosion & Sediment Controls

Select all that apply	Erosion & Sediment Control	Estimated Installation Date	Estimated Removal Date	Responsible Party
	Construction Entrance (Std. & Spec. 3.02)			
\boxtimes	Silt Fence (Std. & Spec. 3.05)			
	Culvert Inlet Protection (Std. & Spec. 3.08)			
	Outlet Protection (Std. & Spec. 3.18)		NA	
	Temporary Seeding (Std. & Spec. 3.31)	As required	NA	Construction Activity Operator (See Cover
	Permanent Seeding (Std. & Spec. 3.32)	NA		Page)
	Sodding (Std. & Spec. 3.33)		NA	
	Mulching (Std. & Spec. 3.35)		NA	
	Safety Fence (Std. & Spec 3.01)			
\boxtimes	Storm Drain Inlet Protection			

Arlington County SWPPP 12/2016

STORMWATER POLLUTION PREVENTION PLAN

7.0 Spill Prevention & Response

Most spills can be cleaned up using a spill kit. Absorbent/oil dry, sealable containers, plastic bags, and shovels/brooms are suggested minimum spill response items that should be available at the project site.

1st Priority: Protect all people

2nd Priority: Protect equipment and property 3rd Priority: Protect the environment

- 1. Check for hazards (flammable material, noxious fumes, cause of spill) if flammable liquid, turn off engines and nearby electrical equipment. If serious hazards are present leave the area and call 911. LARGE SPILLS
- ARE LIKELY TO PRESENT A HAZARD. 2. Ensure the spill area is safe to enter and that it does not pose an immediate threat to health or safety of any
- Stop the spill source. 4. Call co-workers and supervisor for assistance and to make them aware of the spill and potential dangers.
- 5. If possible, stop spill from spreading and/or entering storm drains (use absorbent or other materials as necessarv).
- 6. If spilled material has entered a storm drain; contact Arlington County Fire Department and project manager. 7. Clean up spilled material according to manufacturer specifications, for liquid spills use absorbent materials

804-674-2400

and do not flush area with water. 8. Properly dispose of cleanup materials and used absorbent material according to manufacturer specifications.

Emergency Contacts:

Arlington County Fire & Police 703-558-2222 DES Water, Sewer, Streets 24-Hour Emergency 703-228-6555 Washington Gas Emergency 703-750-1400 Nights, Holidays & Weekends

VA Dept. of Emergency Management 24 Hour Reporting Service

Spill kit on site: Yes No Location(s) of spill kit:

Arlington County SWPPP 12/2016

STORMWATER POLLUTION PREVENTION PLAN

(Std. & Spec 3.08 and/or Arlington County Std. & Spec from approved ESC plan)		
Dewatering (Std. & Spec 3.26 and/or Arlington County Std. & Spec from approved ESC plan)		
Turbidity Curtain (Std. & Spec 3.27 and/or Arlington County Std. & Spec from approved ESC plan)		
Tree Protection (Arlington County Std. & Spec from approved ESC plan)		
Stream Crossing / Cofferdams (Std. & Spec 3.25 or on plan)		
Pump Around System (detail on approved plan)		
Rip Rap (Std. & Spec. 3-19)		
Other(s) [describe]		

material shall be properly secured/anchored.

<u>Pre-Storm Erosion and Sediment Control Checklist</u>
The following actions shall be taken <u>prior to storm events with predicted heavy and/or large volume rainfall</u> to prevent sediment discharges from a construction site. A typical summer thunderstorm is an example of a storm event with predicted heavy and/or large volume rainfall.

- Perimeter controls (silt fence, hay bales, stone berms) used to prevent sediment from leaving the site shall be checked for undermining, holes, or deterioration and repaired/replaced if needed.
- ☐ Sediment that has accumulated against perimeter controls shall be removed if the depth exceeds more than 1/2 of
- Exposed soil or slopes shall be covered with straw, tarps, plastic sheeting, or erosion control matting. Covering
- ☐ Stockpiled soil and other loose materials that can be washed away shall be covered with a tarp, plastic sheeting, or other stabilization matting. The cover must be properly secured / anchored down to prevent it from being blown off and exposing materials to rain. Controls such as hay bales or booms should be placed along the perimeter of the stock pile (downhill side). Stockpiled materials should not obstruct flow along the curb line.
- ☐ Inlet protection controls shall be inspected to ensure they are installed per approved ESC plan, are functioning properly, and maintained as needed.

Arlington County SWPPP 12/2016

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DEPARTMENT OF **ENVIRONMENTAL SERVICES** FACILITIES & ENGINEERING DIVISION ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629

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PETER J. RIGBY JR. Lic. No. 019746 07/27/19 07/27/19 10NAL ENG DATE

APPROVALS

Amy Pflaum QUALITY CONTROL ENGINEER Kamal Taktak 8.6.20 CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF Dennis M. Leach 8/6/20 TRANSPORTATION DIRECTOR

PROJECT MANAGER **REVISIONS**

PREVI NO. ON OLLUTION

DR. SHING ORMW,

DESIGNED: K. PATEL DRAWN: K. PATEL CHECKED: P. RIGBY

PLOTTED: AUGUST 18 2020

SCALE:

C035.

Department of Environmental Services ARLINGTON LDA Permit SWPPP Minimum Acceptance Criteria (MAC) Checklist February 2018

Instructions: Complete this required Front Counter Minimum Acceptance Criteria (MAC) Checklist to ensure the intake of your plan upon submission at 1st submission. If applicable, also complete all attached MAC Checklists for requirements pertaining to the individual review of plan elements.

Project Name: N PERSHING DRIVE Date: 03/03/2020 Address: N PERSHING DR. @ WASHINGTON BLVD.

Ge	neral Items	YES	NO	N/A	SHEE
1	Completion of this Front Counter MAC Checklist and all applicable Plan Review MAC Checklists.	х			
2	Submit and sign the MAC Checklist with the civil engineering plan for first submittal only.	X			
3	Include a Cover Sheet with the following information	X			
а	Name of project	Х			C000
b	Include the address, if known at the time of submission.	Х			C000
С	Vicinity Map indicating the North arrow; label all streets	Х			C000
d	Name, address, phone number and email of Contractor				
е	Name, address, phone number and email of Owner	Х			C000
f	Name, address, phone number and email of Engineer	Х			C00
g	Table of Contents/ Sheet Index	Х			C00
5	Include an Existing Conditions Plan Sheet, Demolition Plan Sheet and Site Plan Sheet	X			
	Include an Existing Conditions Plan Sheet, Demolition Plan Sheet and Site Plan Sheet Include the following within the Plan, on applicable Plan Sheets	X			
6	Include the following within the Plan, on applicable Plan Sheets	X			AL
6 a	Include the following within the Plan, on applicable Plan Sheets Graphic Scale on ALL plan sheets	X			
6 a	Include the following within the Plan, on applicable Plan Sheets Graphic Scale on ALL plan sheets North Arrow on ALL plan sheets	X	X		
6 a b	Include the following within the Plan, on applicable Plan Sheets Graphic Scale on ALL plan sheets North Arrow on ALL plan sheets Current Field Survey Topography (certified)	X	X		
6 a b c	Include the following within the Plan, on applicable Plan Sheets Graphic Scale on ALL plan sheets North Arrow on ALL plan sheets Current Field Survey Topography (certified) Site Areas (Post Dedication and Post Vacation)	X	 '`		AL CO1:
6 a b c d e	Include the following within the Plan, on applicable Plan Sheets Graphic Scale on ALL plan sheets North Arrow on ALL plan sheets Current Field Survey Topography (certified) Site Areas (Post Dedication and Post Vacation) Total site area of property in sq ft and acres	X X X X	 '`		C01:

Eros	sion and Sediment Control Plan	YES	NO	N/A	SHEET
1	Include the Following on Erosion and Sediment Control Plan Sheets				
а	E&S Control Plan and Site Plans	Х			C031.1
b	E&S Control Narrative	Х			C032.1
С	E&S Control practices detail drawing (dewatering device, etc)		Х		
d	E&S Control Plan Legend	Х			C031.1
е	Virginia Erosion and Sediment Control Handbook (VESCH) specification numbers	Х			C031.1

1 of 3

X C035.2

|X |

YES NO N/A SHE

X C032.4

X C000.:

X X

C031.1

C032.4

f Blank Responsible Land Disturber Letter

a Determination of the critical root zone

b Tree protection fencing

or invasive species presence g Tree canopy coverage calculation

h RPA delineation, if applicable

Stormwater Management Plan

a Runoff Reduction Spreadsheet

g Waterproofing Note, if applicable

proposed RPA mitigation

Pollution Prevention Plan

present

for each stormwater facility proposed

e Drainage area boundary and runoff flow arrows f Water Quantity Energy Balance Worksheet

2 General E&S Control Notes and General Land Conservation Notes

3 Landscape Conservation Plan with the following clearly indicated

1 Include the following on Stormwater Management Plan Sheets

d Stormwater Management Facility and Site Data Spreadsheet

l Blank Stormwater Facility Maintenance and Monitoring Agreement

m SWM# on the coversheet, once assigned after 1st review

1 Include the following on the Pollution Prevention Plan

a Standard notes from Stormwater Manual Section 2.4

Template (Appendix B) of the Stormwater Manual

d Critical Root zone mitigation, such as root pruning, padding, or other root protection methods

Tree inventory of all trees larger than 3 inches DBH, either on site or with a critical root zone encroaching the limit of disturbance. This list will contain information on species, size, health,

whether the tree is protected or not, and other issues, such as location in the RPA, disease concerns,

i For 4.1 site plans and public projects, a calculation of the tree replacement value of removed trees

b Design details and reference of stormwater facilities listed in the Runoff Reduction Spreadsheet

h Meet requirement for sheetflow and statement of no adverse impact to adjacent properties

i Indicate sump pump discharge location, tie into the public storm sewer system when possible.

Indicate Floodplain boundary and floodplain study OR certification on plan that no floodplain is

Authorized Non-Stormwater Discharge (Section 2.0), Potential Sources of Pollution & Pollution Prevention Practices (Section 5.0), and Spill Prevention & Response (Section 7.0) from SWPPP

Indicate Resource Protection Area (RPA) boundary on plan OR include certified note on plan that no

RPA is present. If RPA is present, include Completed Water Quality Impact Assessment (WQIA) form with required elements. Include Completed Exception Request Form on plan (if required), and

Facility detail, maintenance schedule, material specifications and construction inspection checklist

e Note requiring county arborist inspection before any land disturbance activity

Registration Statement for project with land disturbance equal to or greater than 1 acre

I certify that the above is true and accurate to the best of my knowledge.

Signature

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ARLINGTON

VIRGINIA

DEPARTMENT OF

ENVIRONMENTAL SERVICES

FACILITIES & ENGINEERING DIVISION ENGINEERING BUREAU

2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201

APPROVALS DATE

Amy Pflaum QUALITY CONTROL ENGINEER Kamal Taktak CONSTRUCTION MANAGEMENT SUPERVISOR WATER, SEWER, STREETS BUREAU CHIEF

Dennis W. Leach 8/6/20 TRANSPORTATION DIRECTOR PROJECT MANAGER

REVISIONS

STORMWATER POLLUTION PREVENTION PLAN

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) Arlington County Projects
(Linear Development / Stormwater Retrofit)

3 of 3

For Construction Activities At:

DC19 N. Pershing Dr. & Washington Blvd Arimgton VA 22205

Latitude: 38:880630 N (decimal degrees) Longitude: -77 090533 W (decimal degrees)

Construction Activity Operator:

Department of Environmental Services-Arlington County 2100 Clarendon Blvd Suite 813 Arlington Virginia 22201 703-228-7537 ktaktak@arlingtonva.us Kamal Taktak 703-228-7527

SWPPP Preparation Date:

03/03/2020

CERTIFICATION

"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator Name Peter Rigby

Title Design Team Supervisor, Department of Environmental Service

Arlington County SWPPP 12/2016

BLVD. & WASHINGTON **DC19** DR. PERSHING

PREVENTION

POLLUTION PLAN

STORMWA

DESIGNED: K. PATEL DRAWN: K. PATEL CHECKED: P. RIGBY

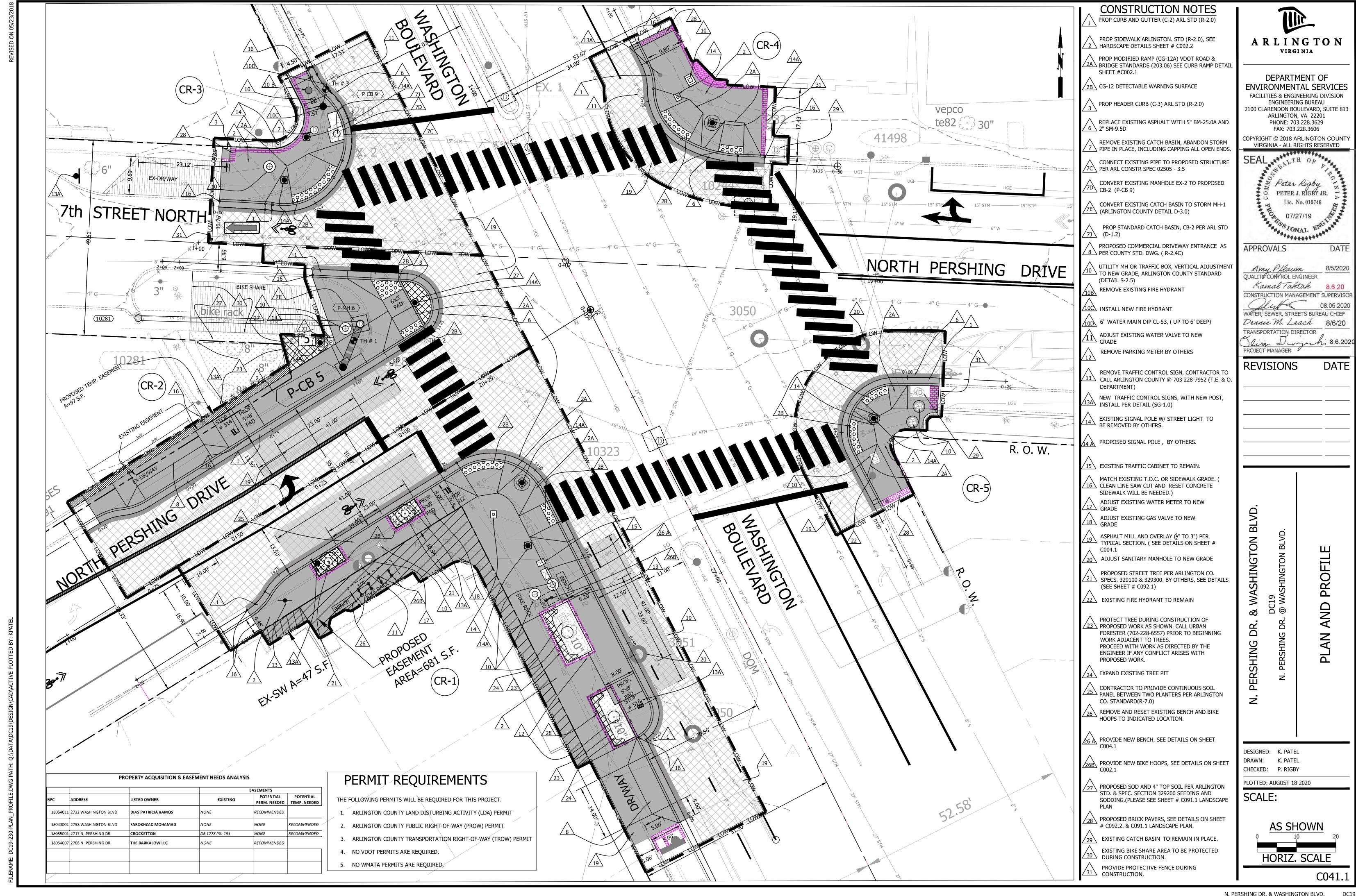
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2 of 3



N. PERSHING DR. & WASHINGTON BLVD. DC19

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FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU
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ARLINGTON, VA 22201
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SEAL

Peter Rigby

PETER J. RIGBY JR.

Lic. No. 019746

07/27/19

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APPROVALS

DAT

Amy P flaum
QUALITY CONTROL ENGINEER

8/5/202

CONSTRUCTION MANAGEMENT SUPERVISOR

OB. 05.2020

WATER, SEWER, STREETS BUREAU CHIEF

Dennis W. Leach 8/6/20

TRANSPORTATION DIRECTOR

Click Dingshi 8.6.2020

PROJECT MANAGER

REVISIONS DATE

R. & WASHINGTON BLVD.

DC19

DR. @ WASHINGTON BLVD.

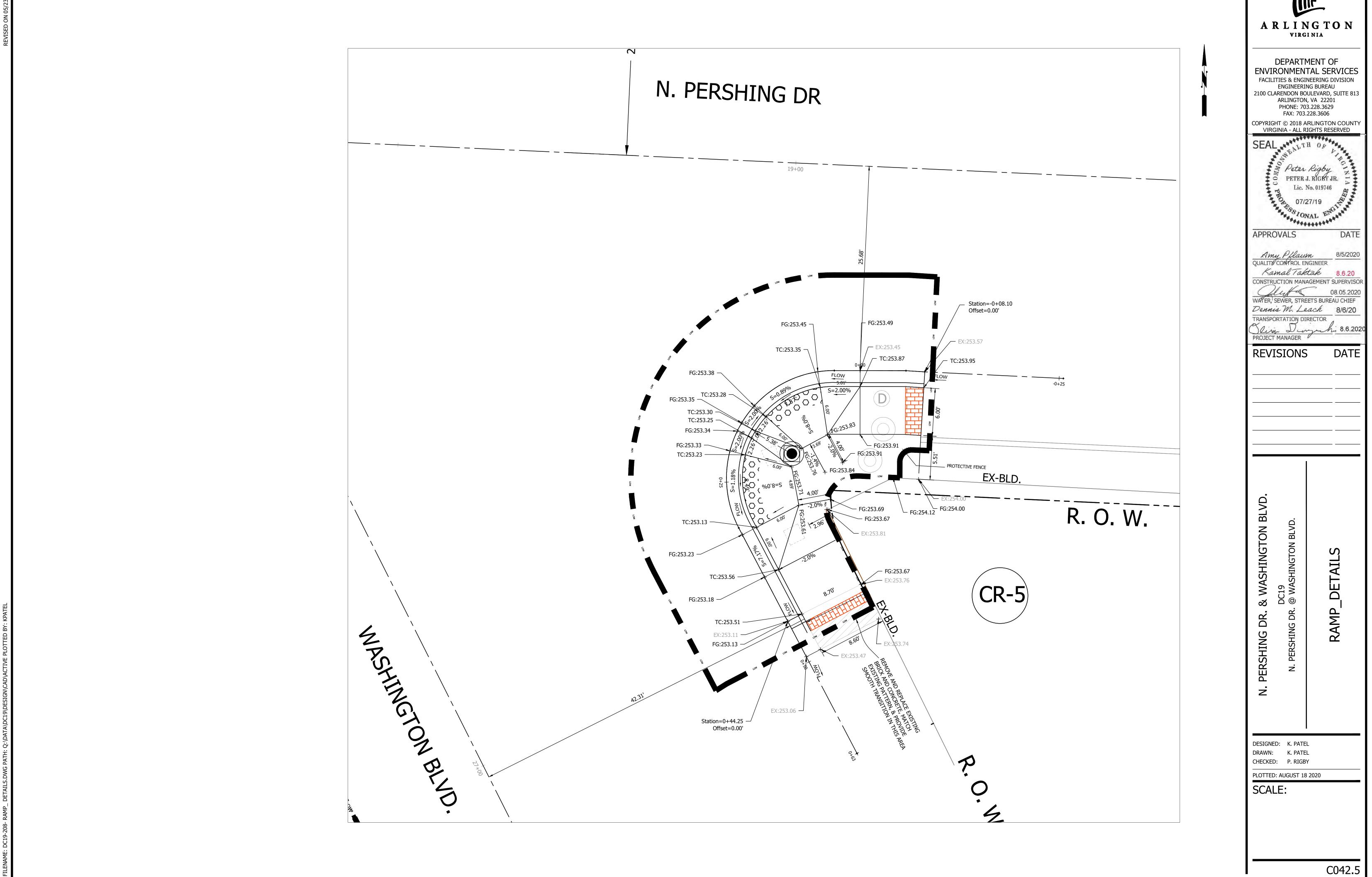
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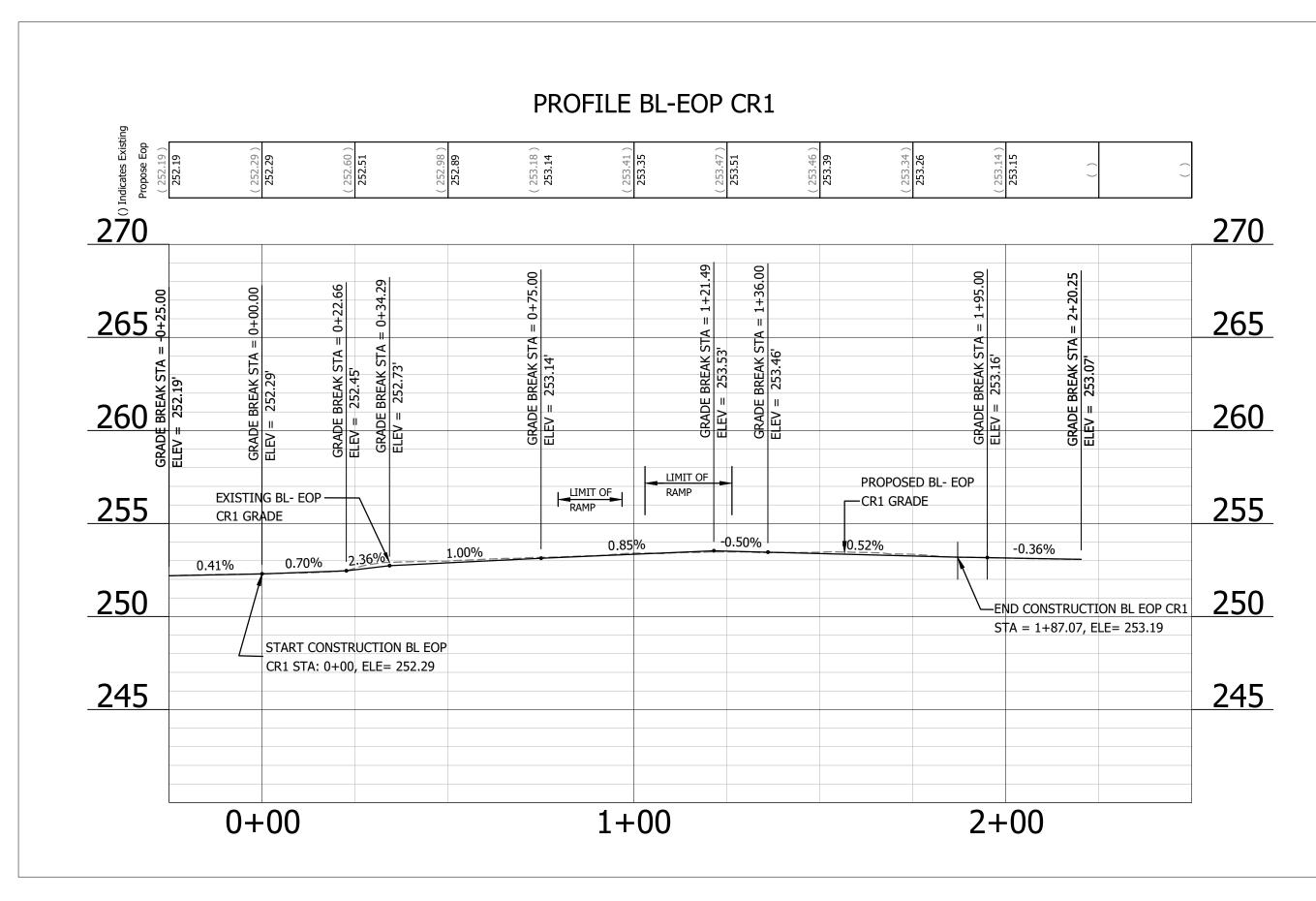
DESIGNED: K. PATEL
DRAWN: K. PATEL
CHECKED: P. RIGBY

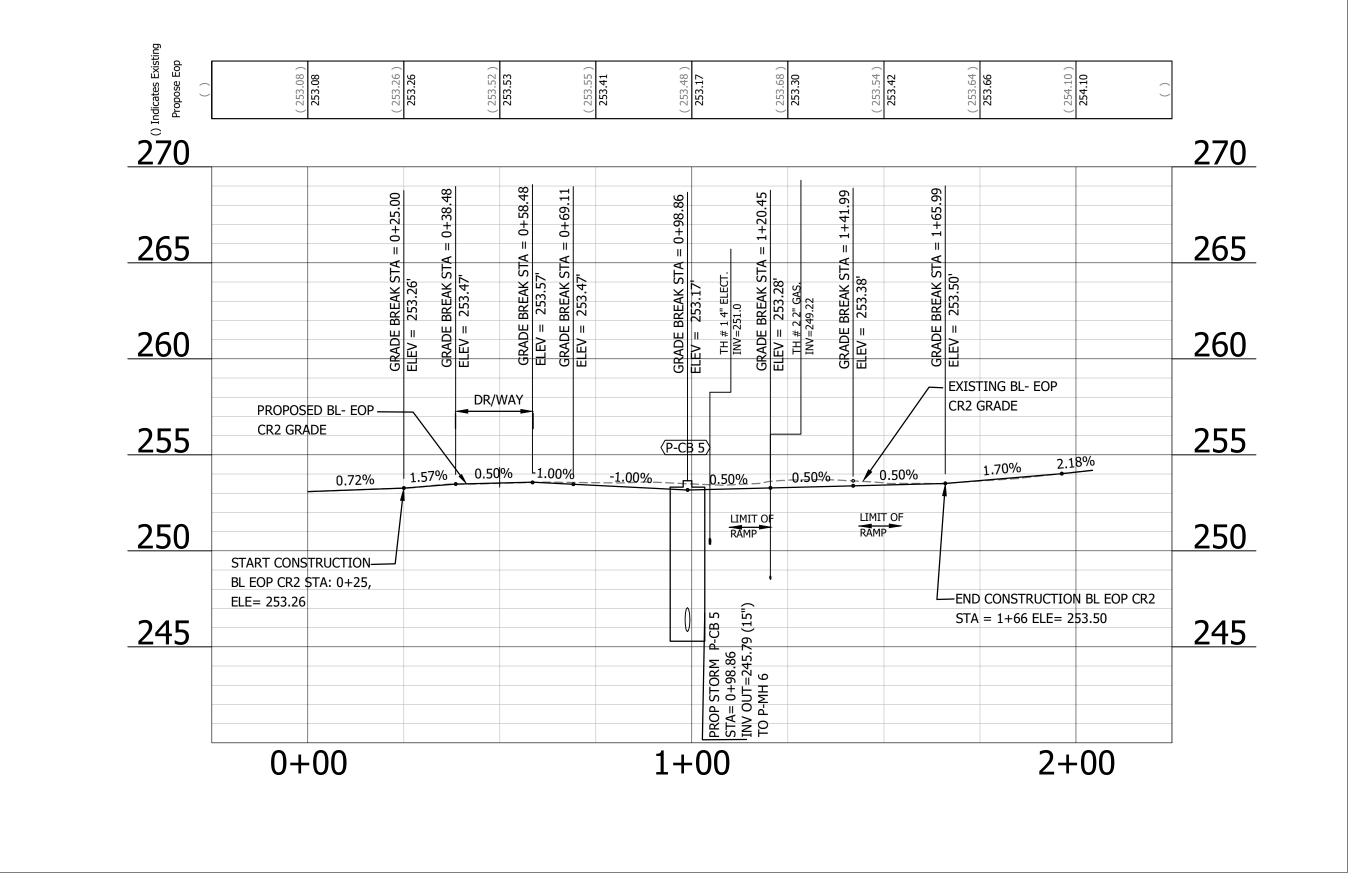
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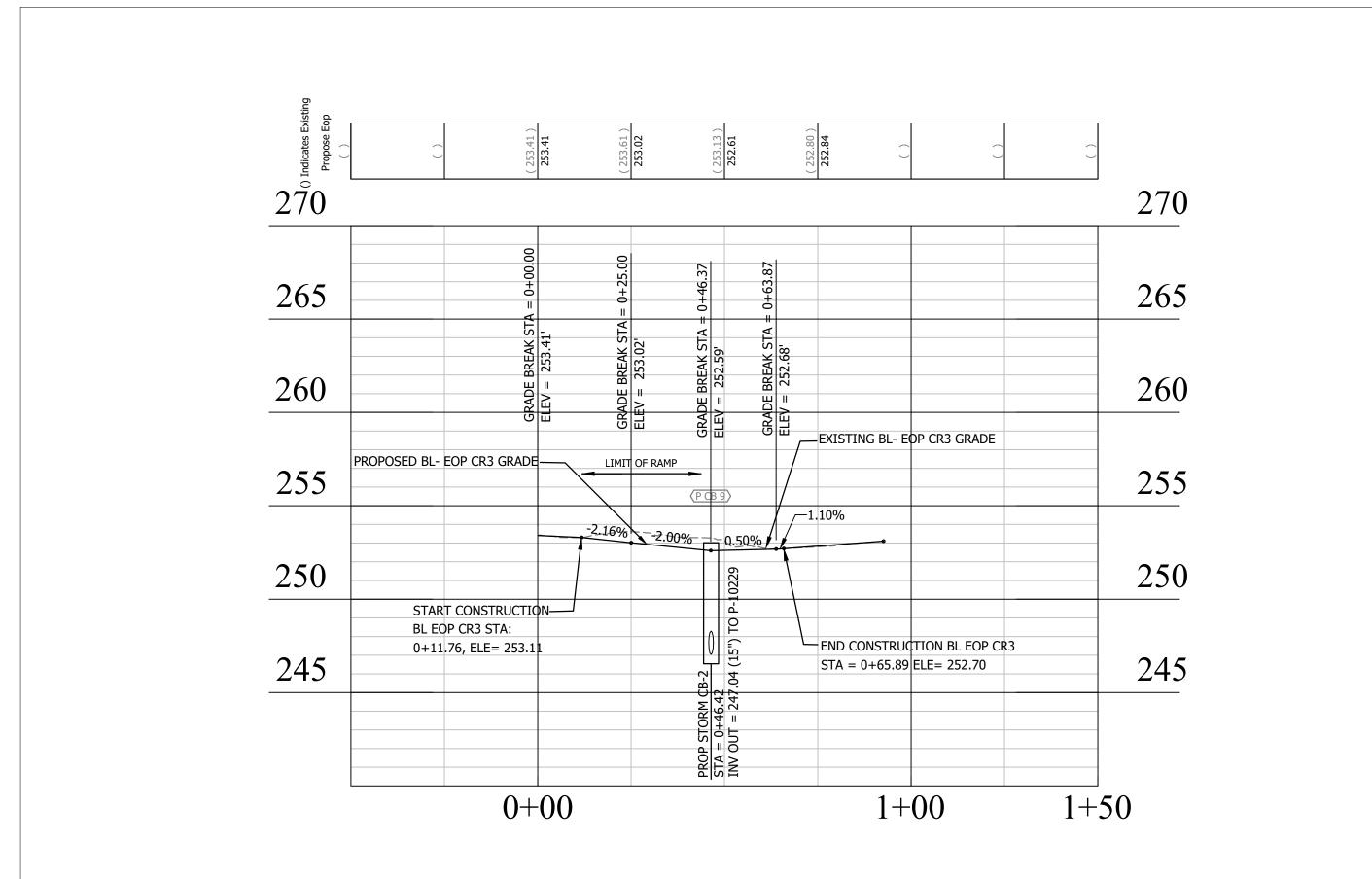


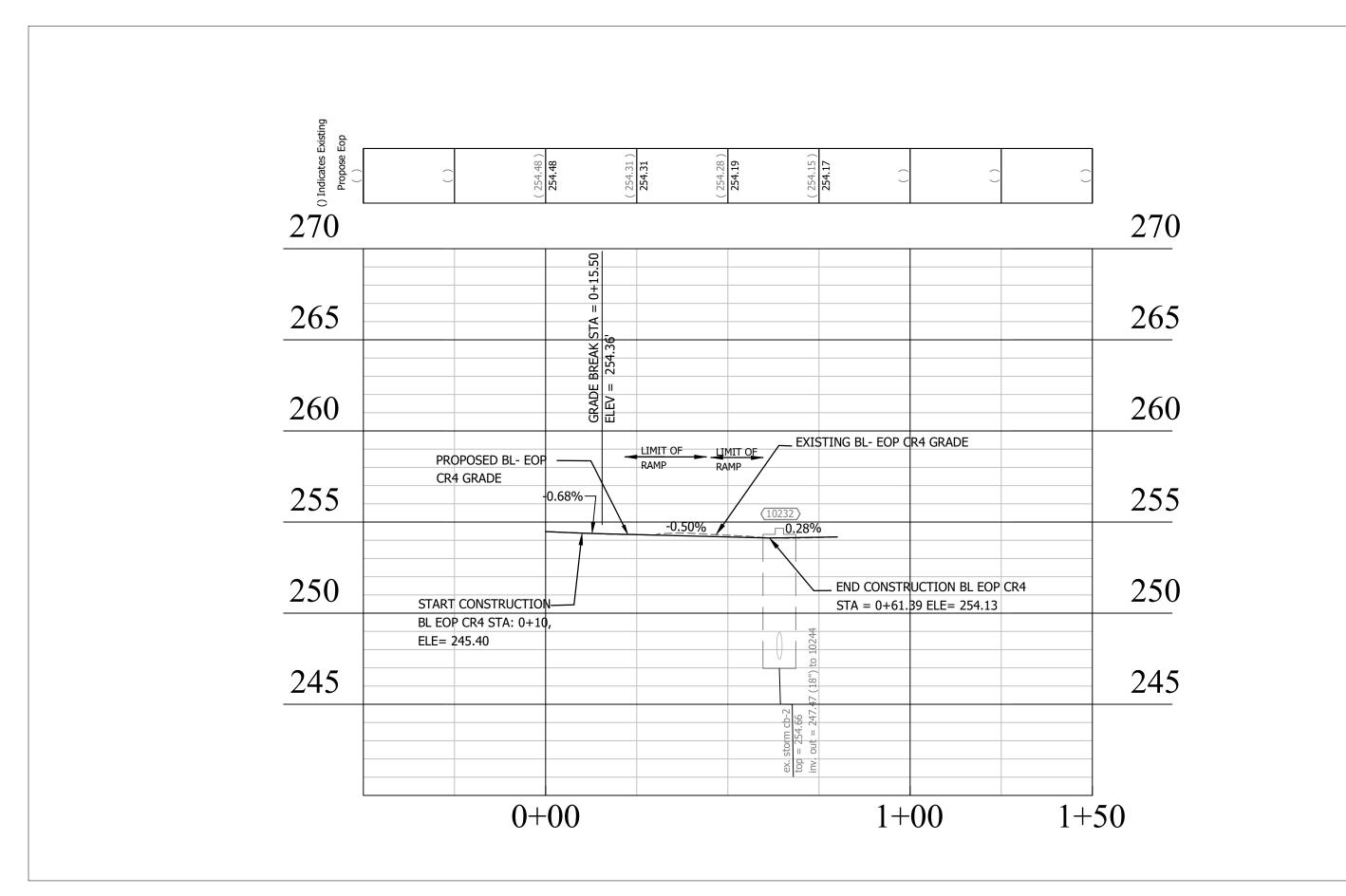


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VER. SCALE: 1" = 5'





BL EOP CR-4 PROFILE

N. PERSHING DR. & WASHINGTON BLVD.

HOR. SCALE: 1" = 25'

VER. SCALE: 1" = 5'

BL EOP CR-3 PROFILE

N.PERSHING DR. & WASHINGTON BLVD.

HOR. SCALE: 1" = 25'

VER. SCALE: 1" = 5'

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DEPARTMENT OF ENVIRONMENTAL SERVICES FACILITIES & ENGINEERING DIVISION

ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813

ARLINGTON, VA 22201 PHONE: 703.228.3629

FAX: 703.228.3606

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F Peter Rigby

07/27/19 07/27/19 07/27/19

PETER J. RIGBY JR.

Lic. No. 019746

DATE

DATE

PROFILES

RETURN

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SEAL THE

APPROVALS

Amy Pflaum QUALITY CONTROL ENGINEER

Kamal Taktak

REVISIONS

& WASHINGTON DC19

DR.

PERSHING

DESIGNED: K. PATEL
DRAWN: K. PATEL
CHECKED: P. RIGBY

PLOTTED: AUGUST 19 2020

SCALE:

CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF

Dennis M. Leach 8/6/20

TRANSPORTATION DIRECTOR

Oliver Dingachi 8.6.2020

PROJECT MANAGER

VIRGINIA DEPARTMENT OF FAX: 703.228.3606 PORTONAL D APPROVALS Amy Pflaum QUALITY CONTROL ENGINEER O8.05.2020
WATER, SEWER, STREETS BUREAU CHIEF
Dennis M. Leach 8/6/20 TRANSPORTATION DIRECTOR

Clicy Dingshi 8.6.2020

PROJECT MANAGER **REVISIONS** 270 & WASHINGTON E 265 265 260 260 EXISTING BL- EOP CR5 GRADE DR. PROPOSED BL- EOP ----CR5 GRADE 255 255 PERSHING 250 250 START CONSTRUCTION END CONSTRUCTION BL EOP CR 5 BL EOP CR5 STA: STA = 0+45 ELE= 253.10 -0+08.1, ELE= 253.57 245 245 DESIGNED: K. PATEL DRAWN: K. PATEL 0+00 CHECKED: P. RIGBY PLOTTED: AUGUST 19 2020 SCALE: BL EOP CR-5 PROFILE N. PERSHING DR. & WASHINGTON BLVD. HOR. SCALE: 1" = 25'
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Kamal Taktak 8.6.20 CONSTRUCTION MANAGEMENT SUPERVISOR

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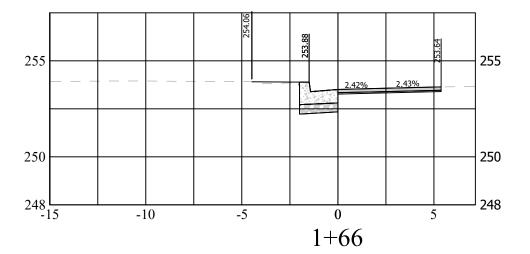
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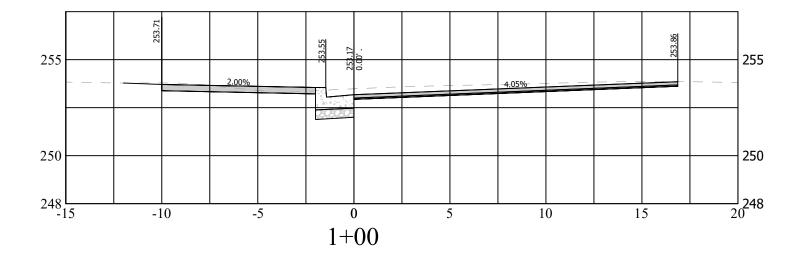
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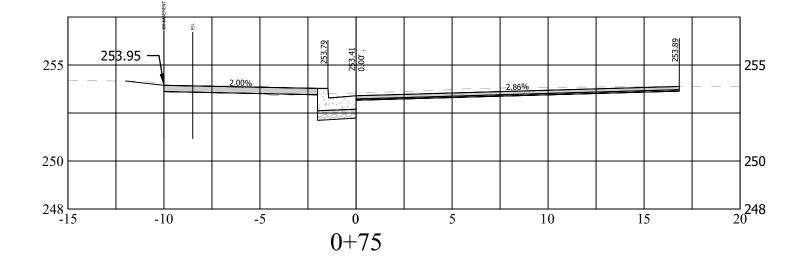
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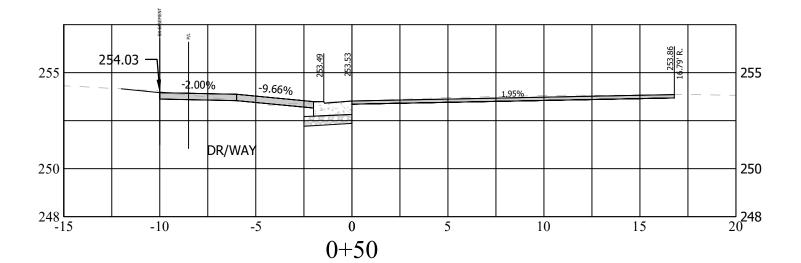
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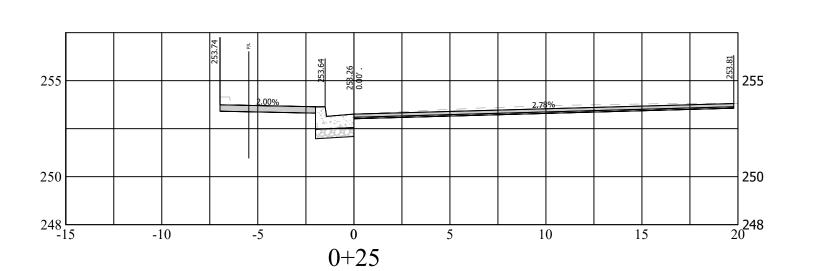
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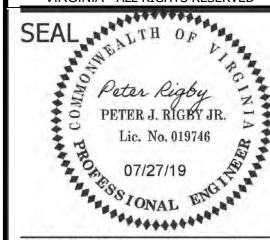






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APPROVALS

Amy Pflaum 8/5/2020
QUALITY CONTROL ENGINEER

Kamal Taktak 8.6.20
CONSTRUCTION MANAGEMENT SUPERVISOR

CONSTRUCTION MANAGEMENT SUPERVISOR

OR. 05.2020

WATER, SEWER, STREETS BUREAU CHIEF

Dennis M. Leach 8/6/20

TRANSPORTATION DIRECTOR

TRANSPORTATION DIRECTOR

Clin Dunch; 8.6.2020

PROJECT MANAGER

REVISIONS DATE

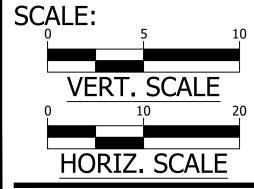
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C. @ WASHINGTON BLVD.

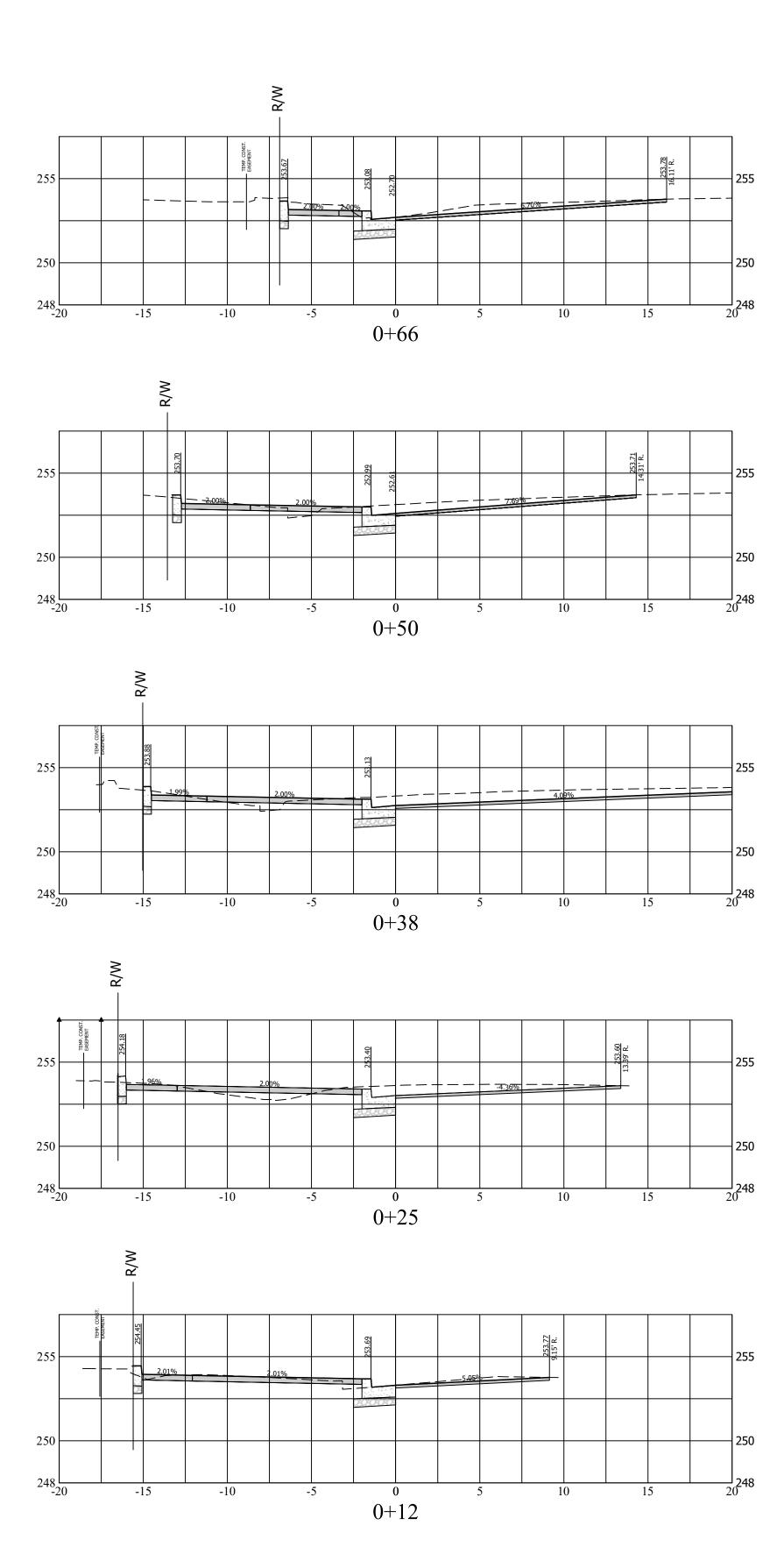
N. PERSHING

DESIGNED: K. PATEL
DRAWN: K. PATEL
CHECKED: P. RIGBY

PLOTTED: AUGUST 19 2020



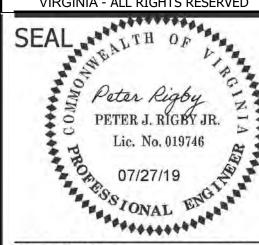
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Dennis W. Leach 8/6/20

TRANSPORTATION DIRECTOR

Clin Dunch; 8.6.2020

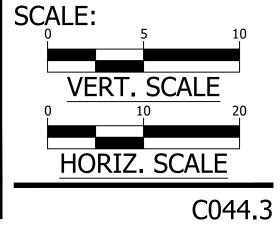
PROJECT MANAGER

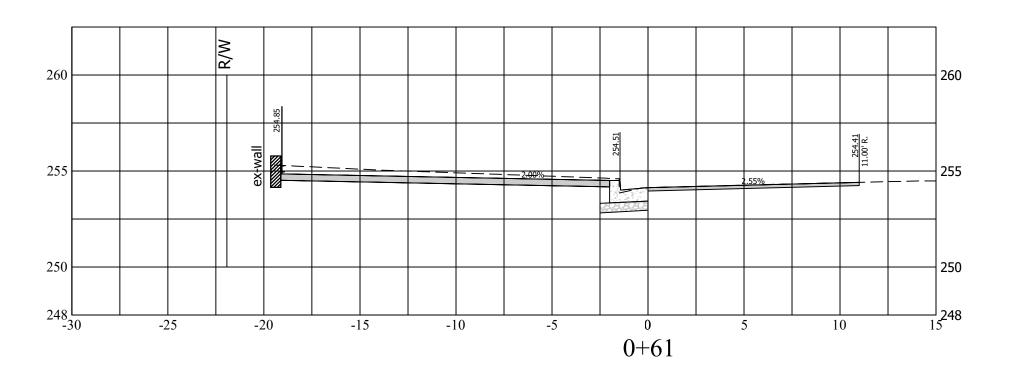
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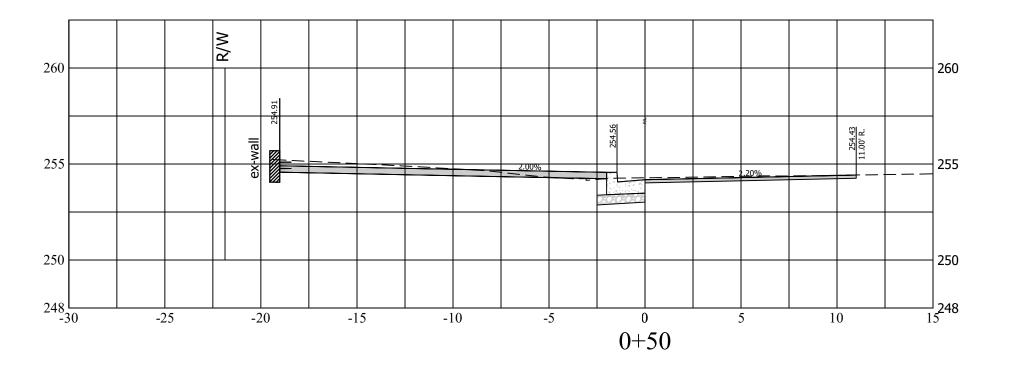
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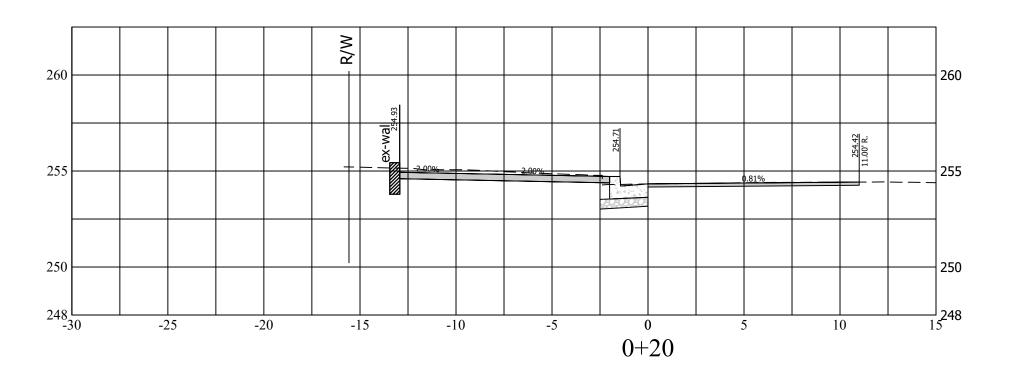
DESIGNED: K. PATEL
DRAWN: K. PATEL
CHECKED: P. RIGBY

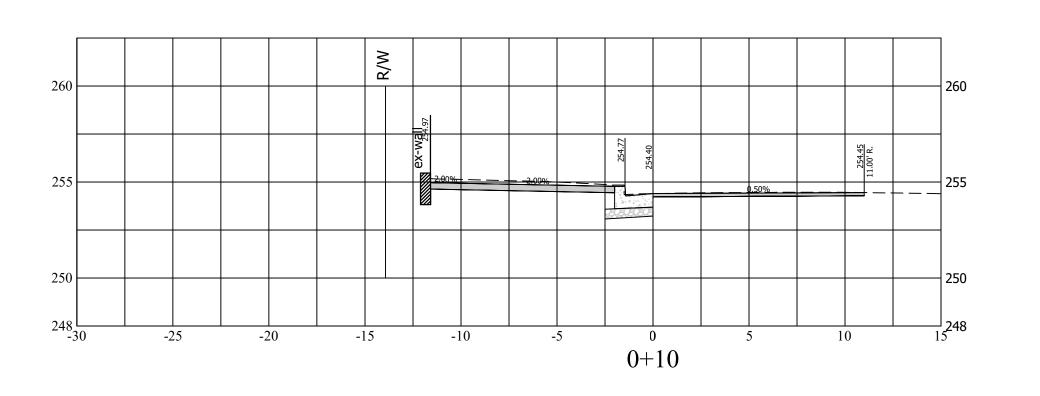
PLOTTED: AUGUST 19 2020







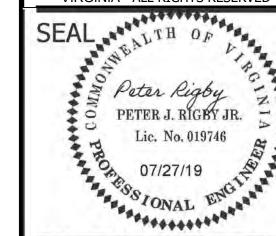






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Dennis M. Leach 8/6/20

TRANSPORTATION DIRECTOR

Clin Dunch; 8.6.2020

PROJECT MANAGER

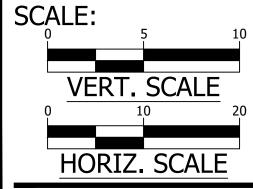
REVISIONS

DATE

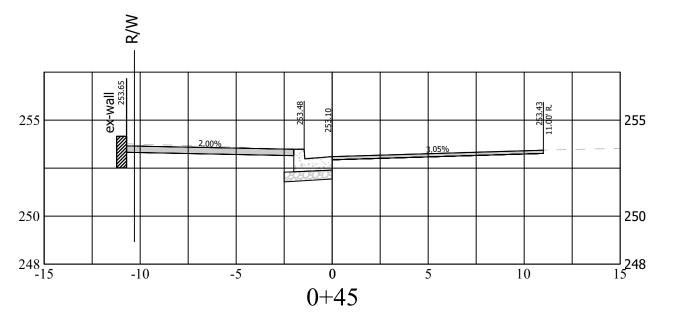
& WASHINGTON DC19

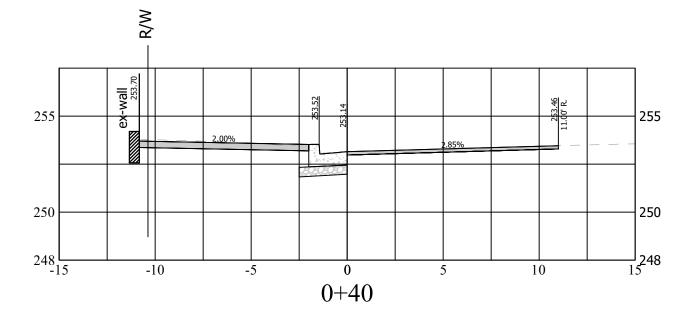
DESIGNED: K. PATEL DRAWN: K. PATEL CHECKED: P. RIGBY

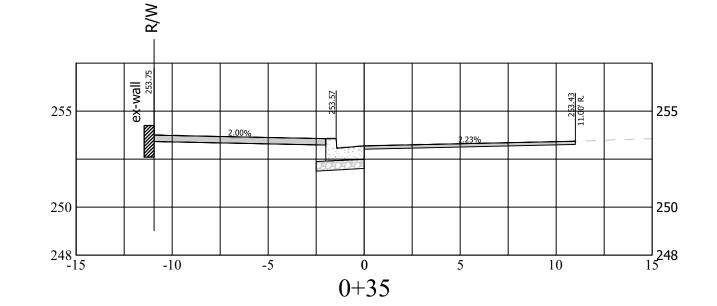
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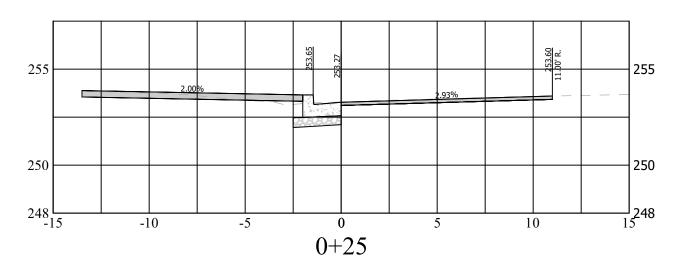


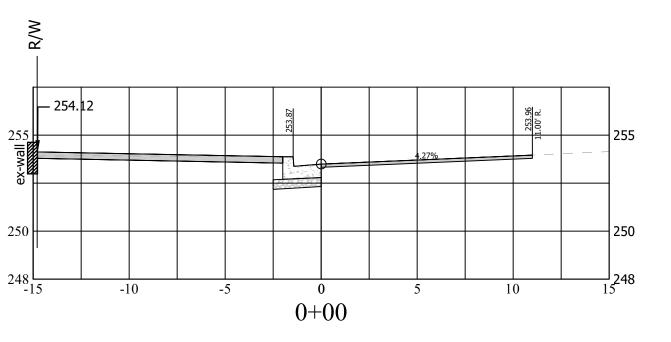
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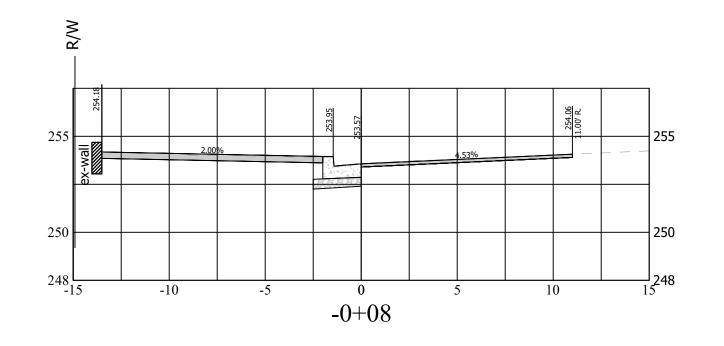








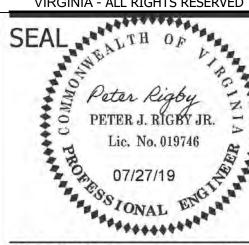




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APPROVALS

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WATER, SEWER, STREETS BUREAU CHIEF Dennis M. Leach 8/6/20

TRANSPORTATION DIRECTOR

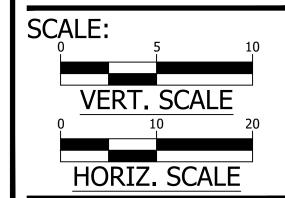
Clin Dunch; 8.6.2020

PROJECT MANAGER

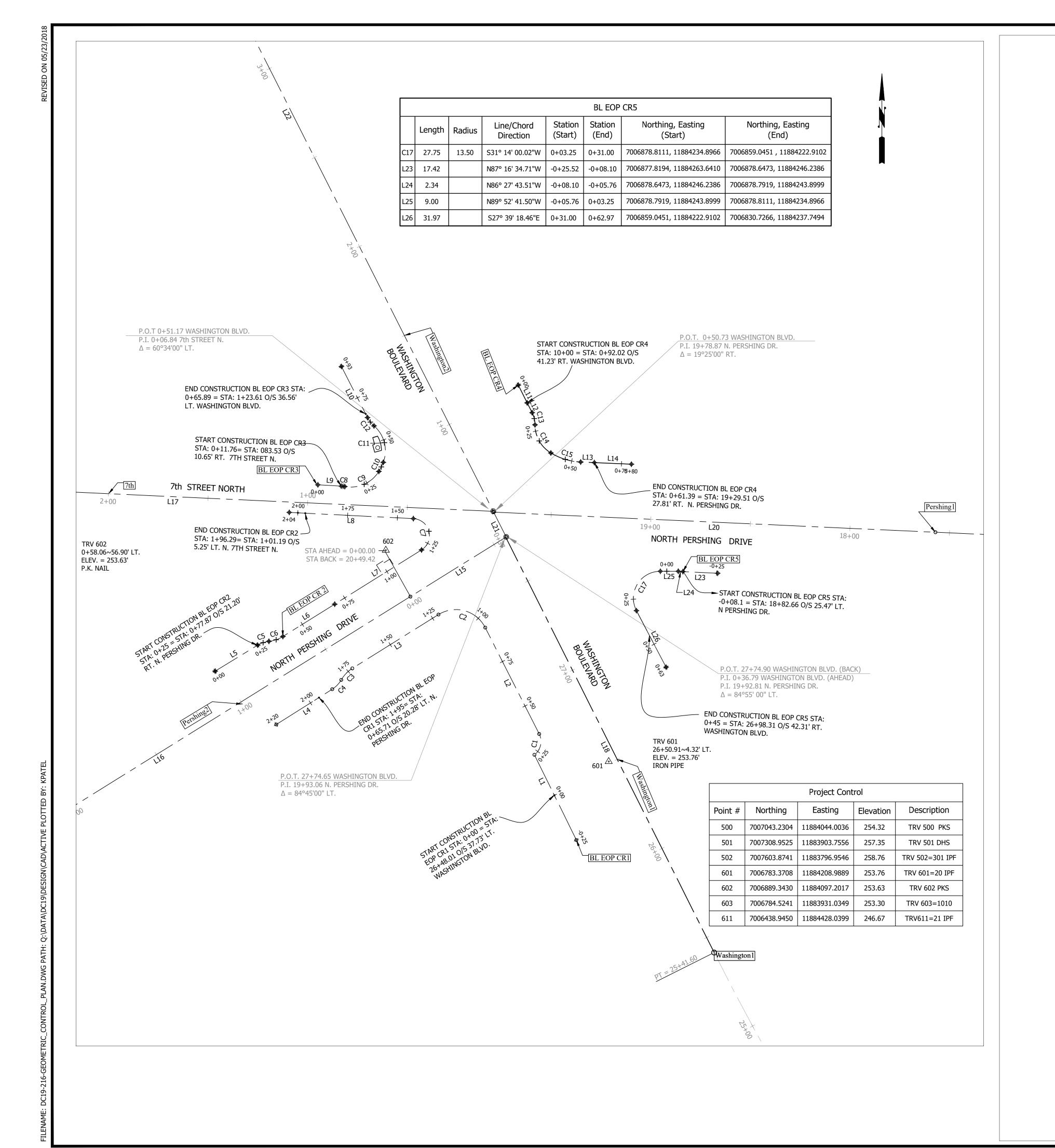
REVISIONS

DESIGNED: K. PATEL

DRAWN: K. PATEL CHECKED: P. RIGBY PLOTTED: AUGUST 19 2020



C044.5



					BL EOP	CR1	
	Length	Radius	Line/Chord Direction	Station (Start)	Station (End)	Northing, Easting (Start)	Northing, Easting (End)
C1	11.63	8.37	N12° 56' 16.51"E	0+22.66	0+34.29	7006786.7702, 11884171.7346	7006797.2172 , 11884174.1345
C2	27.38	16.50	N74° 26' 32.73"W	0+94.11	1+21.49	7006850.5652, 11884147.0719	7006857.0953 , 11884123.6165
C3	8.08	16.50	S43° 59' 24.32"W	1+72.44	1+80.52	7006830.1068, 11884080.4037	7006824.3537 , 11884074.8499
C4	6.55	13.50	S43° 52' 30.23"W	1+80.52	1+87.07	7006824.3537, 11884074.8499	7006819.6755 , 11884070.3519
L1	47.66		N26° 12' 41.02"W	-0+25.00	0+22.66	7006744.0148, 11884192.7834	7006786.7702, 11884171.7346
L2	59.82		N26° 53' 52.89"W	0+34.29	0+94.11	7006797.2172, 11884174.1345	7006850.5652, 11884147.0719
L3	50.95		S58° 00' 47.42"W	1+21.49	1+72.44	7006857.0953, 11884123.6165	7006830.1068, 11884080.4037
L4	33.18		S57° 46' 59.25"W	1+87.07	2+20.25	7006819.6755, 11884070.3519	7006801.9858, 11884042.2795

					BL EOP	CR 2	
	Length	Radius	Line/Chord Direction	Station (Start)	Station (End)	Northing, Easting (Start)	Northing, Easting (End)
C5	6.00	13.50	N71° 15' 35.25"E	0+25.00	0+31.00	7006841.7620, 11884032.9358	7006843.6736 , 11884038.5704
C6	7.48	16.50	N71° 00' 07.10"E	0+31.00	0+38.48	7006843.6736, 11884038.5704	7006846.0882 , 11884045.5835
C7	21.55	8.50	N14° 36' 22.54"W	1+20.45	1+41.99	7006889.5075, 11884115.1046	7006905.2070 , 11884111.0133
L5	25.00		N58° 31' 43.71"E	0+00.00	0+25.00	7006828.7103, 11884011.6132	7006841.7620, 11884032.9358
L6	30.63		N58° 00' 47.42"E	0+38.48	0+69.11	7006846.0882, 11884045.5835	7006862.3128, 11884071.5616
L7	51.34		N58° 00' 47.42"E	0+69.11	1+20.45	7006862.3128, 11884071.5616	7006889.5075, 11884115.1046
L8	62.30		N87° 07' 51.35"W	1+41.99	2+04.30	7006905.2070, 11884111.0133	7006908.3256, 11884048.7873

			BL EOP CR3										
	Length	Radius	Line/Chord Direction	Station (Start)	Station (End)	Northing, Easting (Start)	Northing, Easting (End)						
C8	1.75	13.50	S83° 07' 03.79"E	0+11.76	0+13.51	7006921.5087, 11884074.8873	7006921.2995 , 11884076.6206						
С9	19.88	16.50	N66° 03' 53.31"E	0+13.51	0+33.39	7006921.2995, 11884076.6206	7006928.8875 , 11884093.7155						
C10	5.07	26.50	N26° 03' 27.32"E	0+33.39	0+38.46	7006928.8875, 11884093.7155	7006933.4363 , 11884095.9397						
C11	20.09	16.50	N14° 18' 19.07"W	0+38.46	0+58.55	7006933.4363, 11884095.9397	7006951.7228 , 11884091.2768						
C12	5.31	13.50	N37° 54' 55.97"W	0+58.55	0+63.87	7006951.7228, 11884091.2768	7006955.8858 , 11884088.0341						
L9	11.76		S86° 48' 44.99"E	0+00.00	0+11.76	7006922.1627, 11884063.1444	7006921.5087, 11884074.8873						
L10	28.75		N27° 01' 35.05"W	0+63.87	0+92.61	7006955.8858, 11884088.0341	7006981.4926, 11884074.9719						

					BL EOF	P CR4	
	Length	Radius	Line/Chord Direction	Station (Start)	Station (End)	Northing, Easting (Start)	Northing, Easting (End)
C13	6.29	13.50	S13° 18' 05.93"E	0+15.50	0+21.79	7006958.3267, 11884170.5922	7006952.2586 , 11884172.0268
C14	16.95	16.50	S29° 22' 33.27"E	0+21.79	0+38.74	7006952.2586, 11884172.0268	7006938.1301 , 11884179.9800
C15	15.80	31.50	S73° 10' 25.45"E	0+38.74	0+54.54	7006938.1301, 11884179.9800	7006933.6038 , 11884194.9470
L11	10.00		S26° 39' 14.69"E	0+00.00	0+10.00	7006972.1796, 11884163.6389	7006963.2423, 11884168.1249
L12	5.50		S26° 39' 14.69"E	0+10.00	0+15.50	7006963.2423, 11884168.1249	7006958.3267, 11884170.5922
L13	6.85		S87° 32' 40.66"E	0+54.54	0+61.39	7006933.6038, 11884194.9470	7006933.3105, 11884201.7868
L14	18.61		S87° 32' 40.66"E	0+61.39	0+80.00	7006933.3105, 11884201.7868	7006932.5133, 11884220.3797

					7th		
	Length	Radius	Line/Chord Direction	Station (Start)	Station (End)	Northing, Easting (Start)	Northing, Easting (End)
_17	321.26		N87° 22' 39.93"W	0+06.84	3+28.10	7006908.8610, 11884151.0893	7006923.5588, 11883830.1684

	Pershing1 Length Radius Line/Chord Direction Station (Start) (End) Northing, Easting (Start) (End) Pershing1 Northing, Easting (Start) (End)												
	Length	Radius	•	l		J. J.	J. J						
L19	157.08		N87° 23' 39.93"W	16+00.00	17+57.08	7006891.2449, 11884529.7633	7006898.3858, 11884372.8457						
L20	221.79		N87° 23' 39.93"W	17+57.08	19+78.87	7006898.3858, 11884372.8457	7006908.4683, 11884151.2878						

					Pershi	ng2	
	Length	Radius	Line/Chord Direction	Station (Start)	Station (End)	Northing, Easting (Start)	Northing, Easting (End)
L15	56.61		S58° 06' 20.07"W	19+92.81	0+00.00	7006896.0269, 11884157.5754	7006866.1167, 11884109.5123
L16	300.00		S58° 06' 20.07"W	0+00.00	3+00.00	7006866.1167, 11884109.5123	7006707.6099, 11883854.8053

					Washin	gton1					
	Length	Radius	Northing, Easting (End)								
C16	238.17	1300.91	N31° 53' 21.31"W	23+03.43	25+41.60	7006485.6617, 11884387.5148	7006687.6021 , 11884261.8705				
L18	233.04		N26° 38' 39.93"W	25+41.60	27+74.64	7006687.6021, 11884261.8705	7006895.8948, 11884157.3632				
					Washing	ton2					
	Length	Radius	Line/Chord Direction	Northing, Easting (Start)	Northing, Easting (End)						
L21	13.94		N26° 48' 39.93"W 0+36.79 0+50.73 7006896.0269, 11884157.5754 7006908.4683, 11884151.28								
L22	449.27		N26° 48' 39.93"W	0+50.73	5+00.00	7006908.4683, 11884151.2878 7007309.4411, 11883948.6					



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SEAL

Peter Rigby

Peter J. Rigby JR.

Lic. No. 019746

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Kamal Taktak

CONSTRUCTION MANAGEMENT SUPERVISOR

OB. 05.2020

WATER, SEWER, STREETS BUREAU CHIEF

Dennis W. Leach

TRANSPORTATION DIRECTOR

OLIVE Dennis M. 8.6.2020

PROJECT MANAGER

REVISIONS DATE

ASHINGTON BLVD.
ASHINGTON BLVD.

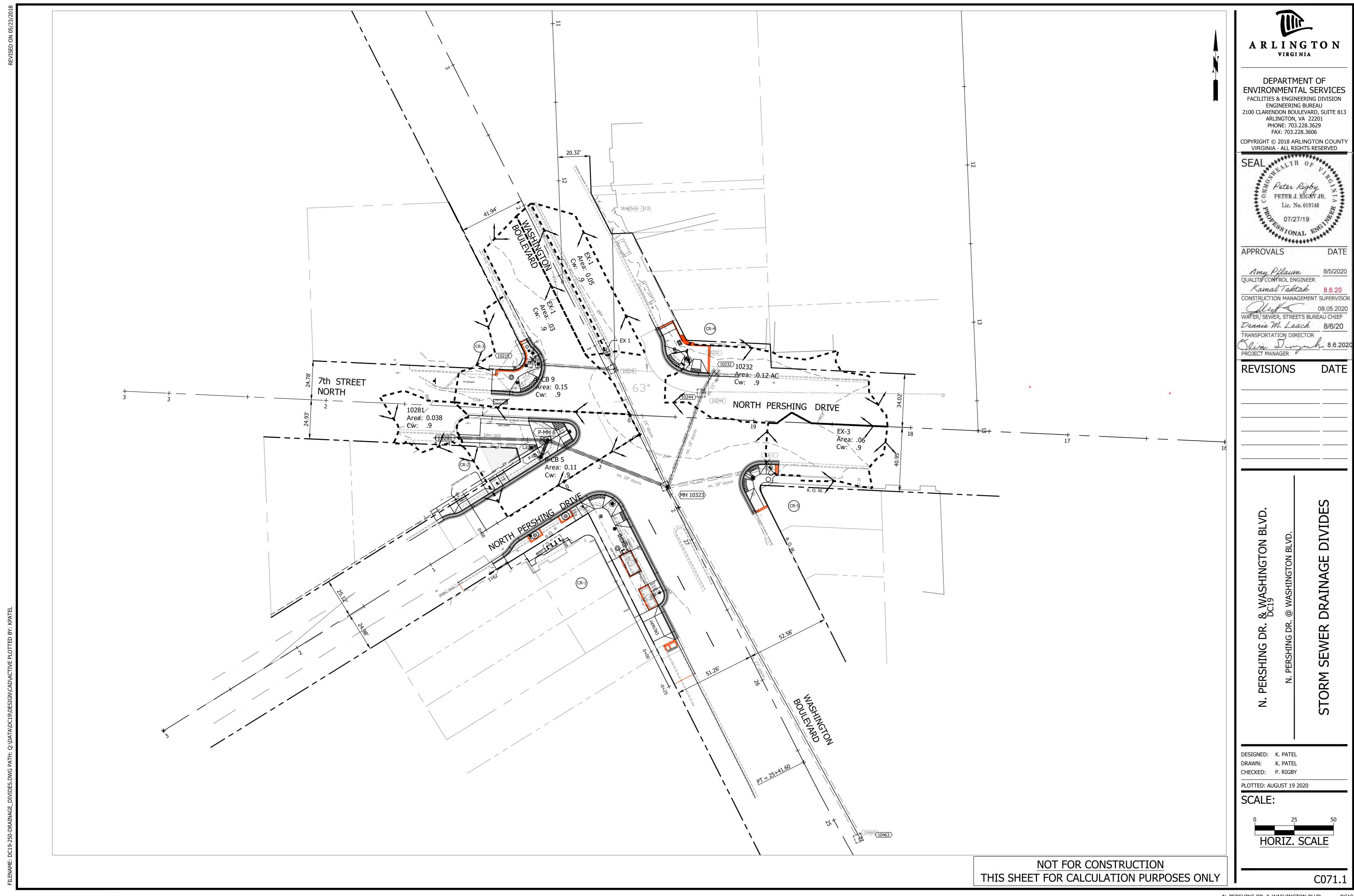
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DC19
N. PERSHING DR. @ WASHINGTON

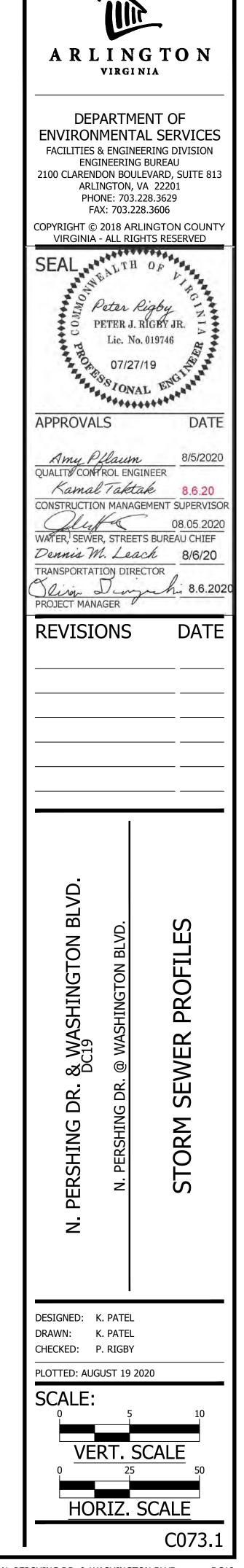
DESIGNED: K. PATEL
DRAWN: K. PATEL
CHECKED: P. RIGBY
PLOTTED: AUGUST 19 2020

SCALE:

GRAPHIC SCALE

C045.1





											ST	ORI	M SE	WE	RI	NLE	ET C	OM	PU	TA	TIO	NS											
Project:	DC 15 S	TORM								14.4	1			IMPRO	VEME	VT CO	NDITION	IS														7	
	INLET								Q	Q	Q	S	Sx	T	W	W/T	Sw	Sw/Sx	Eo	а	S'w	Se	Lt	P	L/Lt	d	E	h	Q	d/H	Qb	T	
NUMBER	TYPE	LENGTH	STATION (FROM N. KENMORE ST.)	DRAINAGE AREA	C	C×A	C×A W	INTENSITY	INCR	CARRY OVER	TOTAL	GUTTER	CROSS SLOPE	SPREAD	GUTTER PAN	WIDTH/SPREAD	G P. SLOPE		GUTTER FLOW RATIO	Total Depression		Equivalent cross slope	Req. for 100%	PERIMETEROFGRATE		Depth of flow	Inlet Effeciency	Actual height of curb opening	INT		CARRY OVER	SPREAD AT SAG	REMARKS
P-CB 9	DI-3B	6.0	3+86	0.15	0.90	0.14	0.14	4.00	0.54	0.00	0.54	0.0100	0.0200	4.33	1.50	0.35	0.0833	4.17	0.84	2.64	0.15	0.14	4.65		1.29		1.00		0.54		0.00		
EX 1	DI-3C	8	0+0	0.05	0.90	0.05	0.05	6.79	0.31	0.00	0.31	0.01	0.02	4.69	1.5		0.01	0.50						11.60		0.07		0.46		0.16		3.62	
				0.03	0.90	0.03	0.03	6.79	0.18	0.00	0.18			3.94					1	11													
P-CB 5	DI-3B	6.0	0+0	0.11	0.90	0.10	0.10	4.00	0.40	0.00	0.40	0.0100	0.0200	3.52	1.50	0.43	0.0833	4.17	0.91	2.64	0.15	0.15	3.91		1.54		1.00		0.40		0.00		
EX-3	DI-3B	5.0		0.06	0.90	0.05	0.05	4.00	0.22	15-71-21	0.22	0.0200	0.0200	1.43	1.50	1.05	0.0833	4.17	1.00	2.64	0.15	0.17	3.55		1.41	1	1.00		0.22		0.00		
10232	DI-3B	5.0		0.12	0.90	0.11	0.11	4.00	0.43		0.43	0.0200	0.0200	2.86	1.50	0.52	0.0833	4.17	0.96	2.64	0.15	0.16	4.86		1.03		1.00		0.43		0.00		

STORM SEWER DESIGN COMPUTATIONS

Project: D	OC15 STORM	M COMP					1	MPROVE	MENT CC	NDITION	S						
From	То	Drainage	С	Сх	Α	Inlet	Rain	Runoff	Invert	Elev.	Length	Slope	Dia.	Capacity	VEL.	Flow	Remarks
Point	Point	Area	Factor	Increment	Cumm.	Time Min.	Fall In/Hr	Q C.F.S.	Upper End	Lower End	FT.	%	IN.	Q C.F.S.	F.P.S.	Time MIN.	
P-CB 9	10229	0.15	0.9	0.14	0.14	5.00	6.79	0.92	247.04	245.29	49.0	3.57%	15	12.24	5.86	0.14	
EX 1	10229	0.34	0.9	0.31	0.31	5.00	6.79	2.08	246.84	245.59	14.1	8.88%	15	19.30	10.27	0.02	
10229	10323			0.00	0.44	5.00	6.79	2.99	245.26	244.25	81.8	1.23%	24	25.20	5.39	0.25	
P-CB 5	P-MH 6	0.11	0.9	0.10	0.10	5.00	6.79	0.67	245.79	245.60	11.8	1.60%	15	8.21	4.03	0.05	
P-MH 6	10323			0.00	0.13	5.00	6.79	0.90	245.60	244.25	81.7	1.65%	18	13.54	4.35	0.31	
10323	10469			0.00	0.63	5.00	6.79	4.27	244.25	241.69	255.4	1.00%	27	31.09	5.48	0.78	
10281	P-MH 6	0.04	0.9	0.03	0.03	5.00	6.79	0.23	250.83	245.60	56.4	9.27%	15	19.72	5.42	0.17	
EX-3	10323	0.06	0.9	0.05	0.05	5.00	6.79	0.37	247.22	244.25	64.7	4.59%	18	22.58	4.75	0.23	
10232	10244	0.12	0.9	0.11	0.11	5.00	6.79	0.73	247.47	247.06	15.0	2.73%	18	17.41	4.88	0.05	
10244	10323			0.00	0.11	5.00	6.79	0.73	247.06	244.26	66.0	4.24%	18	21.69	5.69	0.19	

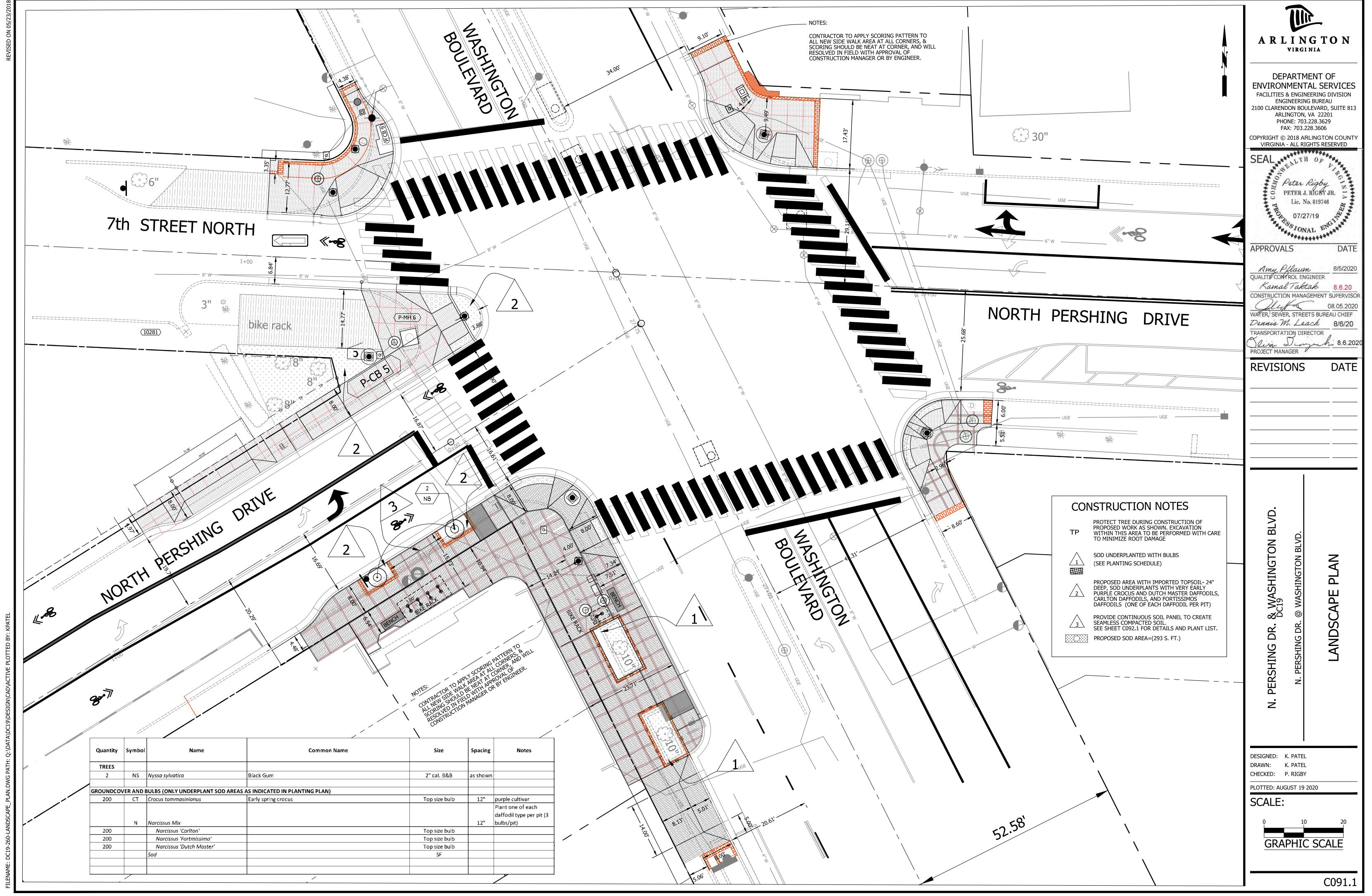
HYDRAULIC GRADE LINE COMPUTATIONS

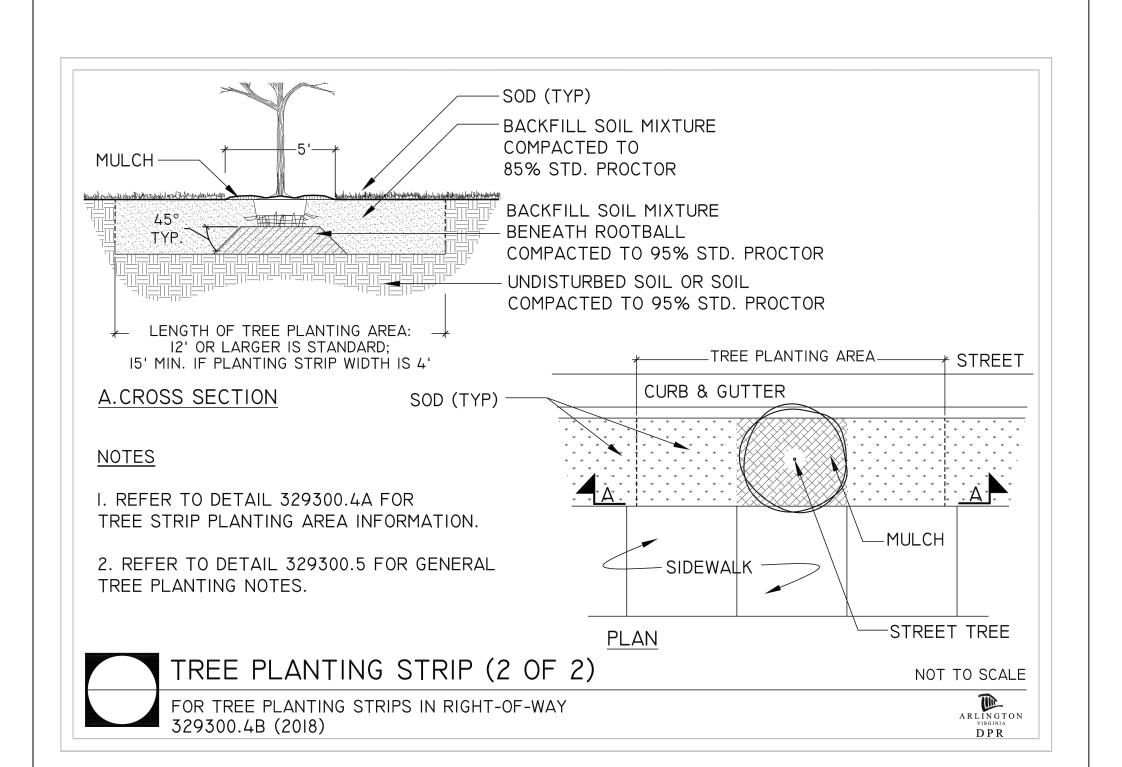
Project:	DC 15 STOR	2M								IMPROVE	EMENT C	ONDITIO	NS									
INLET	UPSTREAM	Outlet Water	Do	Qo	Lo	Sfo	Hf				JU	NCTION L	.OSS					1.3	0.5	FINAL	Inlet Water	RIM
STATION (1)	INLET	Surface Elev. (2)	in (3)	cfs (4)	ft (5)	% (6)	ft (7)	Vo (8)	Ho (9)	Qi (10)	Vi (11)	QiVi (12)	2 Vi /2g	Hi (13)	Angle (14)	Hd (15)	Ht (16)	Ht (17)	Ht (18)	H (19)	Surface Elev. (20)	ELEV. (21)
10469			11.7	11.7	11.7	13.7		T()			11.				10.7	10 /	11. /	10. /	1 /	Elevation	243.50	
10323		243.50	27.00	4.27	255.39	0.02	0.05	5.48	0.12		7			0.16		0.11	0.39	0.00	0.19	0.24	243.74	253.65
	10229		24.00							2.99	5.39	16.15	0.45	0.16	5.00	0.02						
	P-MH 6	1	18.00							0.90	4.35	3.94	0.29	0.10	40.00	0.11						
P-MH 6		245.85	18.00	0.90	81.70	0.01	0.01	4.35	0.07					0.16		0.18	0.41	0.00	0.21	0.21	246.06	253.65
	P-CB 5	1 - 1 - 1	15.00							0.67	4.03	2.71	0.25	0.09	90.00	0.18						
	10281		15.00	Ti Ta						0.23	5.42	1.26	0.46	0.16	20.00	0.07			12			
P-CB 5		246.60	15.00	0.67	11.84	0.01	0.00	4.03	0.06					0.00		0.00	0.06	0.08	0.04	0.04	246.64	253.65
	0									0.67	0.00	0.00	0.00		0.00			1 1 1 1 1 1	10.00			
10281		246.60	15.00	0.23	56.42	0.00	0.00	5.42	0.11	1 1 1 1 1 1				0.00		0.00	0.11	0.15	0.07	0.07	246.67	254.22
	0									0.23	0.00	0.00	0.00		0.00							
10229		245.85	24.00	2.99	81.81	0.02	0.01	5.39	0.11					0.57		0.30	0.99	0.00	0.49	0.51	246.36	254.13
	P-CB 9	1	15.00							0.92	5.86	5.37	0.53	0.19	63.00	0.30	1.72	1 1 1				
	EX 1		15.00				1			2.08	10.27	21.35	1.64	0.57	0.00	0.00						
P-CB 9		246.59	15.00	0.92	48.99	0.02	0.01	5.86	0.13					0.00		0.00	0.13	0.17	0.09	0.10	246.69	253.02
	0									0.92	0.00	0.00	0.00		0.00							
EX 1		246.59	15.00	2.08	14.08	0.10	0.01	10.27	0.41					0.00		0.00	0.41	0.53	0.27	0.28	246.87	254.14
	0			1 2 2					14-	2.08	0.00	0.00	0.00	leon.	0.00							
10323		243.50	27.00	4.27	255.39	0.02	0.05	5.48	0.12		11.0			0.16		0.00	0.27	0.00	0.14	0.19	243.69	253.65
	10229		24.00							2.99	5.39	16.15	0.45	0.16		0.00						
	P-MH 6		18.00							0.90	4.35	3.94	0.29	0.10		0.00						
	EX-3		18.00							0.37	4.75	1.74	0.35	0.12		0.00						
EX-3		245.85	18.00	0.37	64.65	0.00	0.00	4.75	0.09					0.00		0.00	0.09	0.11	0.06	0.06	245.91	253.86
	0		122.11	1 1 1 1						0.37	0.00	0.00	0.00		0.00	10.7						
10244		245.85	18.00	0.73	66.00	0.00	0.00	5.69	0.13	1 1				0.13		0.00	0.26	0.33	0.17	0.17	246.02	254.49
	10232		18.00							0.73	4.88	3.58	0.37		0.00							
10232		248.26	18.00	0.73	15.00	0.00	0.00	4.88	0.09					0.00		0.00	0.09	0.12	0.06	0.06	248.32	254.66
	0		L							0.73	0.00	0.00	0.00		0.00		1					

ENVIRON FACILITIES ENG 2100 CLARENE ARLI PHO	VIRGIN ARTME MENTA & ENGINEE INEERING	NT OF L SERVIC ERING DIVISION BUREAU EVARD, SUITE A 22201 28.3629
COPYRIGHT © VIRGINIA SEAL	2018 ARLI - ALL RIGH - ALL RIGH Deter R	INGTON COU ITS RESERVED
Amy P QUALITY CONS Kamak CONSTRUCTION	Haum ROL ENGIN Takta ON MANAGE R, STREETS A. Lead TION DIRECT DAGER	8/5/2 NEER & 8.6. MENT SUPER 08.05. S BUREAU CH

SCALE:

C075.1





TREE PLANTING NOTES

CONTRACTOR TO CALL THE URBAN FORESTER AT 703-228-6557, 72 HOURS BEFORE PLANTING, TO SCHEDULE INSPECTION OF THE TREES TO BE PLANTED. WARRANTY FOR 1 YEAR AFTER PLANTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE URBAN FORESTER AND DPR IS RESPONSIBLE FOR INSPECTION.

CONTRACTOR TO PREPARE TREE PLANTING STRIPS FOR THE REPLACEMENT TREES

ACCORDING TO ARLINGTON COUNTY DPR DESIGN STANDARD DETAIL 3293000.4A, 329300.4B.

1.1. ALL PLANTS TO HAVE TREE TAGS FOR INSPECTION PRIOR TO INSTALLATION

1.2. ALL PLANTS TO BE INSTALLED PER CONTRACT SPECIFICATIONS1.3. THE CONTRACTOR IS RESPONSIBLE FOR CALLING MS. UTILITY PRIOR TO THE

SCHEDULED DATE FOR PLANT INSTALLATION.

1. CONTRACTOR TO PREPARE STREET TREE PLANTING PITS ACCORDING TO THE ARLINGTON COUNTY DPR DESIGN STANDARD DETAIL 329300.3A, 329300.3B AND 329300.11C

2. CONTRACTOR TO PLANT THE TREES ACCORDING TO ARLINGTON COUNTY DPR DESIGN STANDARD DETAIL 329300.1 (ON FLAT LAND) OR 329300.2 (ON SLOPES)

ARLINGTON VIRGINIA

ENVIRONMENTAL SERVICES

FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU

2100 CLARENDON BOULEVARD, SUITE 813
ARLINGTON, VA 22201
PHONE: 703.228.3629
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DEPARTMENT OF

PHONE: 703.228.3629
FAX: 703.228.3606

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Peter Rigby
Peter J. RIGBY JR.
Lic. No. 019746
On 07/27/19
PETER J. RIGBY JR.

On 07/27/19

APPROVALS DATE

Amy Pflaum 8/5/2020
QUALITY CONTROL ENGINEER

Kamal Taktak 8.6.20

CONSTRUCTION MANAGEMENT SUPERVISOR

O8.05.2020
WATER, SEWER, STREETS BUREAU CHIEF

Dennis M. Leach 8/6/20
TRANSPORTATION DIRECTOR
Oliver Durch; 8.6.2020

PROJECT MANAGER

REVISIONS DAT

LANDSCAPING NOTES AND LEGEND

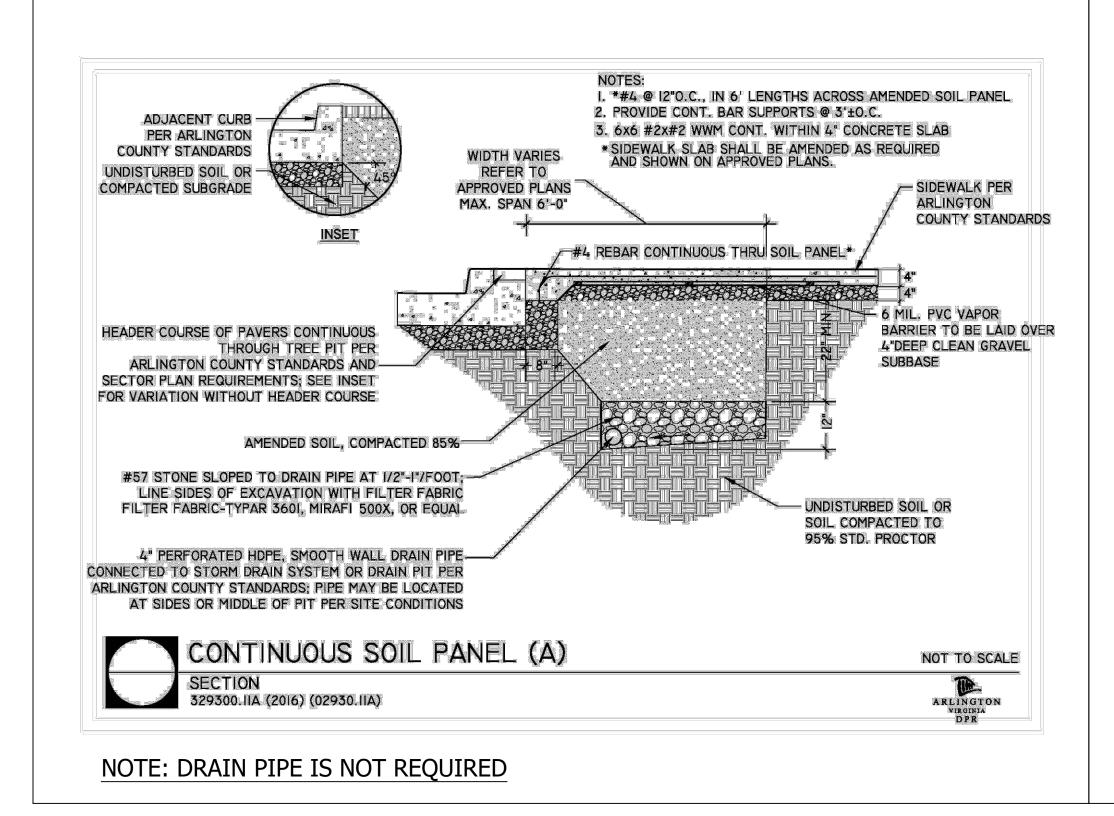
- 1. TREE PLANTING BY OTHERS. TREES SHALL BE INSTALLED AFTER HARDSCAPE CONSTRUCTION IS COMPLETED, IN THE NEXT PLANTING SEASON.
- 2. CONTRACTOR TO COORDINATE SPECIES WITH THE COUNTY LANDSCAPE ARCHITECT AND COUNTY URBAN FORESTER.
- 3. TREES TO HAVE TREE TAGS FOR INSPECTION PRIOR TO INSTALLATION. CONTRACTOR TO CALL THE COUNTY URBAN FORESTER AT 703-228-1863, 72 HOURS BEFORE PLANTING TO SCHEDULE INSPECTION OF THE TREES TO BE PLANTED.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR CALLING MISS UTILITY PRIOR TO THE SCHEDULED DATE FOR PLANT INSTALLATION.
- 5. TREES TO BE INSTALLED PER CONTRACT SPECIFICATIONS.
- 6. FOLLOW ADMINISTRATIVE REGULATION 4.3: TREE PLANTING ON PUBLIC PROPERTY FOR ALL TREE PLANTINGS.
- 7. CONTRACTOR TO PLANT THE TREES ACCORDING TO ARLINGTON COUNTY DPR DESIGN STANDARD DETAIL 329300.1 (ON FLAT LAND) OR 329300.2 (ON SLOPES).
- 8. BRANCHES ON PROPOSED TREES WHICH ARE LESS THAN 4' ABOVE GRADE SHALL BE TRIMMED TO MAINTAIN SIGHT DISTANCE.
- 9. WARRANTY FOR 1 YEAR AFTER PLANTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE COUNTY URBAN FORESTER AND DPR IS RESPONSIBLE FOR INSPECTION. THE COUNTY URBAN FORESTER WILL COORDINATE WITH DPR STAFF ON SCHEDULING INSPECTIONS 2 YEARS AFTER PLANTING TO ASSUME RESPONSIBILITY.
- 10. WATERING FOR 2 YEARS AFTER PLANTING IS TO BE INCLUDED FOR NEWLY-PLANTED TREES. DPR WILL TAKE RESPONSIBILITY OF OTHER MAINTENANCE, AND AFTER 2 YEARS, WATER AS NEEDED.

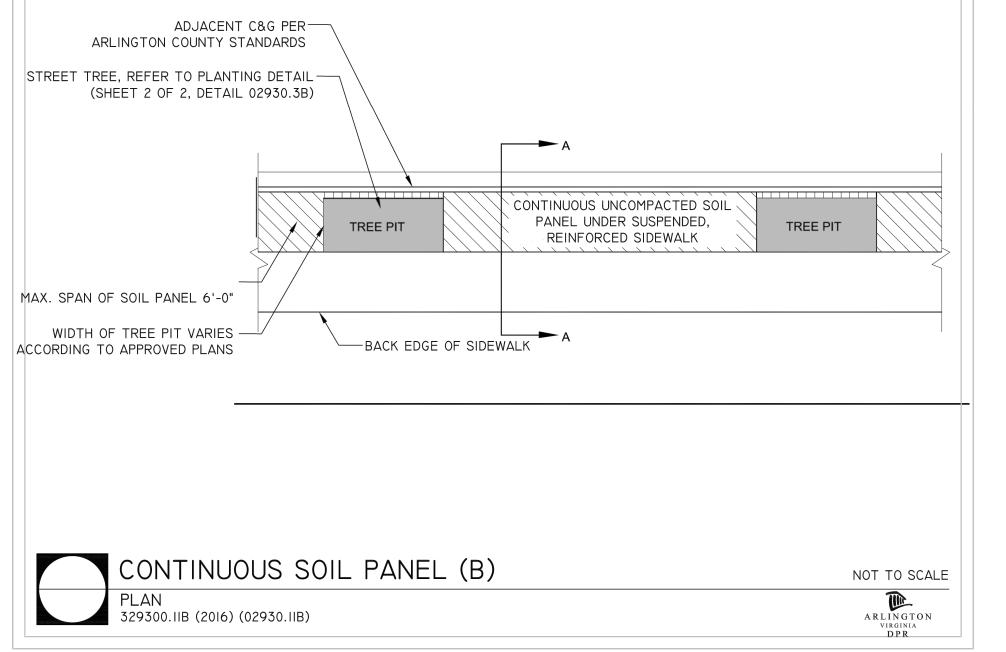
PROPOSED TOPSOIL AND SEED

1. AREAS OF PROPOSED TOPSOIL AND SEED ARE SHOWN ON THE TYPICAL ROADWAY SECTIONS ON SHEET C032.1.

EXISTING TREES

1. FOR THOSE EXISTING TREES TO BE PROTECTED OR REMOVED, SEE E&S PLAN ON SHEETS C032.1.





N. PERSHING DR. & WASHINGTON BLVD.

DESIGNED: K. DC19
DESIGNED: K. PATEL
CHECKED: B. RIGBY

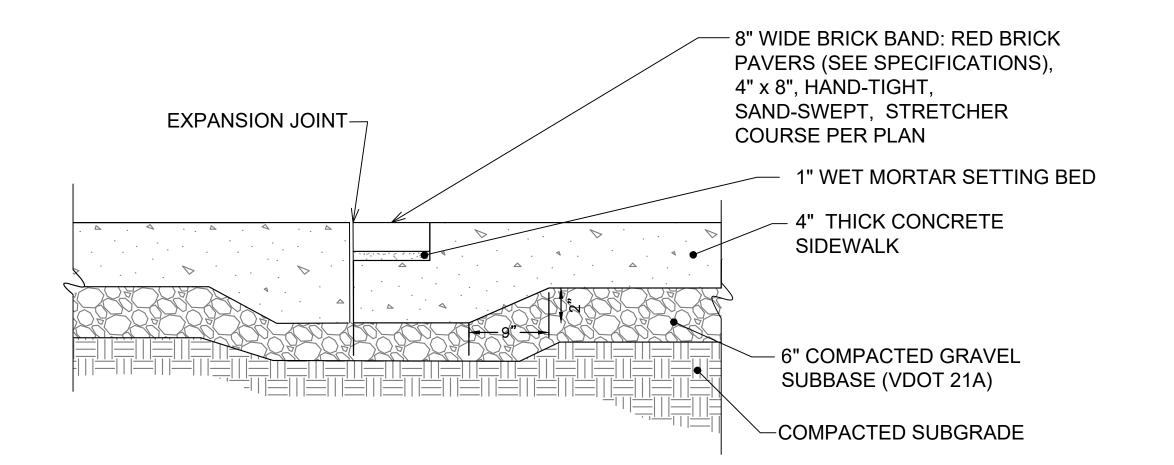
N. PERSHING DR. @ WASHINGTON BLVD.

LANDSCAPE NOTES AND DETAILS

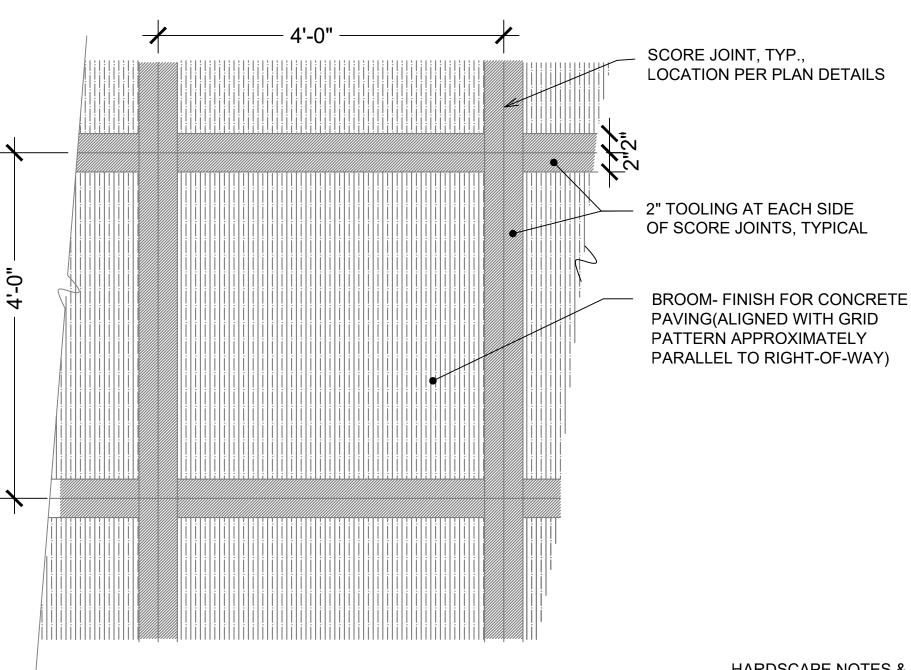
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BRICK BAND @ EDGE OF CONCRETE SIDEWALK: TYPICAL SECTION N.T.S.



BRICK BAND @ MIDDLE OF CONCRETE SIDEWALK: TYPICAL SECTION N.T.S.



TYPICAL TOOLING DETAIL FOR CONCRETE SCORE JOINT N.T.S.

HARDSCAPE NOTES & SPECIFICATIONS:

- EXPANSION JOINTS SHALL BE INSTALLED IN SIDEWALK A MINIMUM OF 30' O.C.. LOCATION OF EXPANSION JOINTS SHALL BE ADJUSTED WHERE POSSIBLE TO ALIGN WITH BRICK BAND, OR CHANGE IN MATERIALS. EXPANSION JOINTS SHALL BE PROVIDED AT PERIMETER OF PROPOSED AND EXISTING PRESERVED STRUCTURES.
- BRICK PAVERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-216. PAVER BRICKS SHALL BE 4"X8"X25", CHAMFERED EDGE. BRICK SHALL BE BELDAM BRICK COMPANY REGIMENTAL RED PAVER A 04-11, OR EQUAL APPROVED BY OWNERS REPRESENTATIVE. SUPPLIER: POTOMAC VALLEY BRICK www.pvbrick.com 410-682-6700

ARLINGTON
VIRGINIA

DEPARTMENT OF **ENVIRONMENTAL SERVICES** FACILITIES & ENGINEERING DIVISION ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629 FAX: 703.228.3606

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DATE

APPROVALS

Kamal Taktak

Dennis M. Leach 8/6/20 TRANSPORTATION DIRECTOR

Oliver Dungachi 8.6.2020

PROJECT MANAGER

REVISIONS

& WASHINGTON DC19 DR.

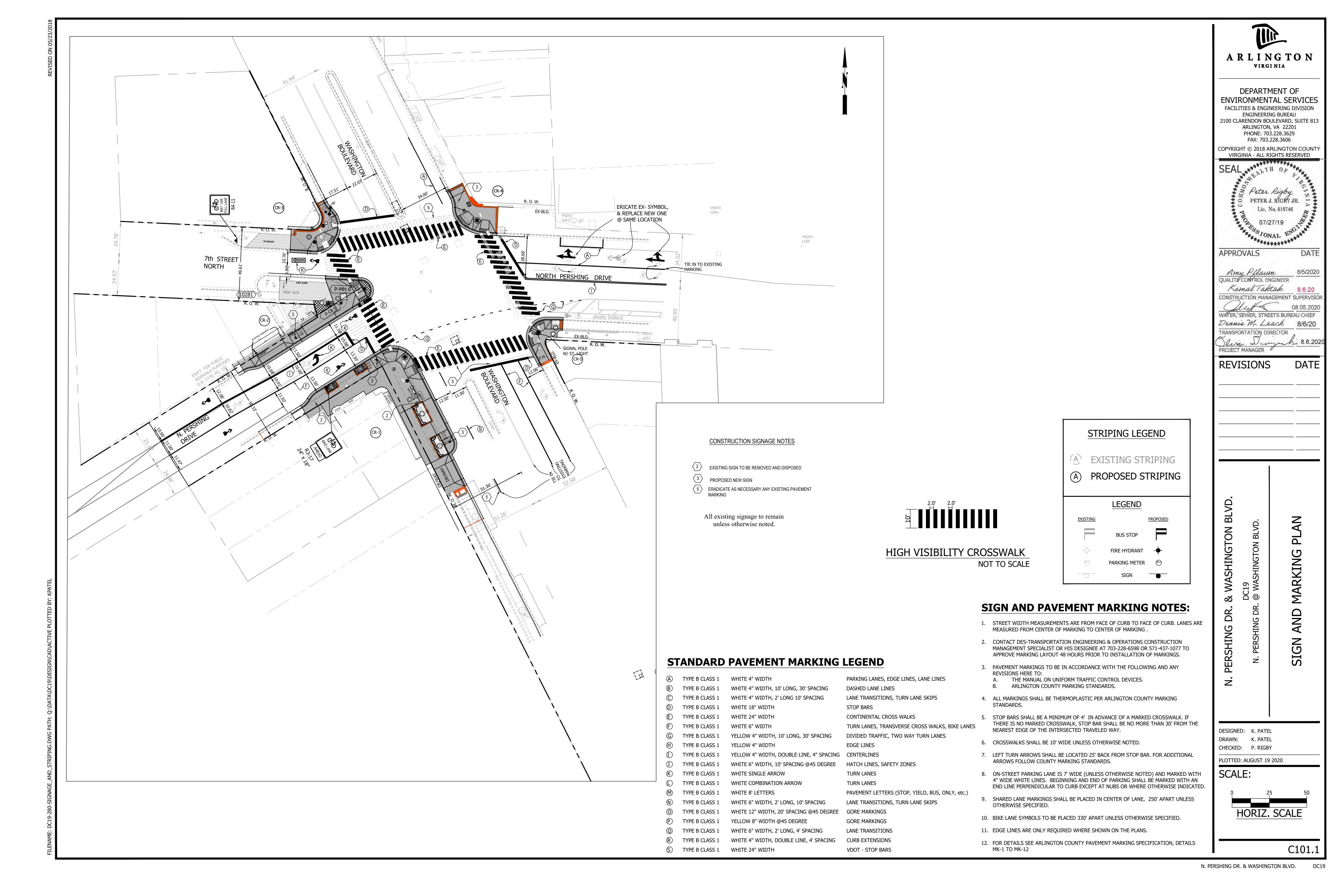
DESIGNED: K. PATEL DRAWN: K. PATEL CHECKED: P. RIGBY

PLOTTED: AUGUST 19 2020

SCALE:

AS SHOWN

C092.2





MAINTENANCE OF TRANSPORTATION PLAN

		ZONE TABLE	
ZONE#	TTC#	COMMENTS	DURATION
ZONE A	TTC-23.2 TTC-36.2 TTC-16.2	LANE CLOSURE ON A TWO-LANE ROADWAY USING FLAGGERS CROSSWALK CLOSURE AND PEDESTRIAN DETOUR OPERATIONS OUTSIDE LANE CLOSURE OPERATION ON A FOUR LANE ROADWAY	1 WEEK - 1 MONTH
ZONE B	TTC-28.2 TTC-36.2 TTC-16.2	LANE CLOSURE OPERATION IN AN INTERSECTION CROSSWALK CLOSURE AND PEDESTRIAN DETOUR OPERATIONS OUTSIDE LANE CLOSURE OPERATION ON A FOUR LANE ROADWAY	1 WEEK - 1 MONTH
ZONE C	TTC-23.2 TTC-36.2	LANE CLOSURE ON A TWO-LANE ROADWAY USING FLAGGERS CROSSWALK CLOSURE AND PEDESTRIAN DETOUR OPERATIONS	1 WEEK - 1 MONTH
ZONE D	TTC-23.2 TTC-36.2	LANE CLOSURE ON A TWO-LANE ROADWAY USING FLAGGERS CROSSWALK CLOSURE AND PEDESTRIAN DETOUR OPERATIONS	LESS THAN ONE WEEK
ZONE E	TTC-26.2 TTC - 5.2 TTC-16.2	LANE CLOSURE OPERATION- NEAR SIDE OF AN INTERSECTION SHOULDER OPERATION WITH MINOR ENCROACHMENTS OUTSIDE LANE CLOSURE OPERATION ON A FOUR LANE ROADWAY	1 WEEK - 1 MONTH
NOTE: THE DIE	ATIONIC CHOMAIN	I MEDE DEVELOPED EOD DI ANNING AND ESTIMATION DI IDDOSES ONI V. THE DI IE	DATIONS IN

NOTE: THE DURATIONS SHOWN WERE DEVELOPED FOR PLANNING AND ESTIMATION PURPOSES ONLY. THE DURATIONS IN NO WAY ALTER THE CONTRACT TIME FOR COMPLETION, OR INFRINGES ON THE CONTRACTORS MEANS AND METHODS. THE CONTRACTOR'S SUBMITTED SCHEDULE SUPERSEDES THE ESTIMATED DURATIONS SHOWN.

NOTES:

- 1. THE FOLLOWING ZONES CAN NOT BE BUILT AT THE SAME TIME:
- 1: B, AND E
- 2: A, AND E
- 2. ZONE A, B, C, AND D SHOULD BE FURNISHED WITH (R9-11) SIGN TO ADDRESS THE SIDEWALK CLOSING.
- 3. WARNING SIGN SPACING: 100'
- CHANNELIZATION DEVICES SPACING FOR TRANSITION AREAS = 20'
- 4. TEMPORARY SIGNS AND BARRICADES SHOULD NOT BE PLACED WHERE THEY WILL OBSTRUCT PEDESTRIAN PASSAGE, EXCEPT WHEN SIGN IS INTENDED TO CLOSE THE SIDEWALK SECTION.

CONSTRUCTION NOTES

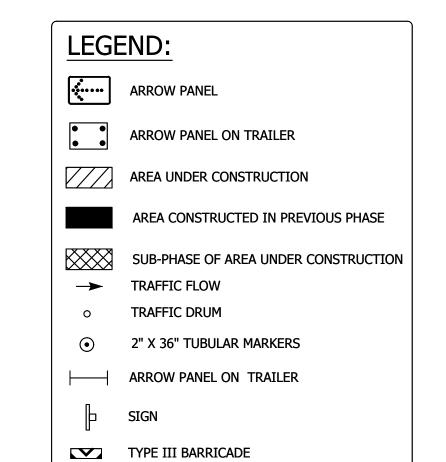
- 1. FOR ALL ARTERIAL STREETS, PORTABLE VARIABLE MESSAGE SIGNS WITH CLOSURE INFORMATION MUST BE INSTALLED AHEAD OF THE PROJECT SITE AT EACH VEHICULAR APPROACH 3 WEEKS PRIOR TO STREET CLOSURE IN LOCATIONS DIRECTED BY THE PROJECT OFFICER.
- CONTRACTOR SHALL REMOVE EXISTING PAVEMENT MARKINGS IN CONFLICT WITH TEMPORARY PAVEMENT MARKINGS.
- CONTACT TRANSPORTATION ENGINEERING OPERATIONS AT 703-228-6598 OR 571-437-1077 AND THE PROJECT OFFICER TO APPROVE MARKING LAYOUT 48 HOURS PRIOR TO INSTALLATION OF MARKINGS.
- 4. ONE LANE CLOSURE IN EACH DIRECTION OF TRAFFIC WILL BE PERMITTED FOR FINAL PAVEMENT OVERLAY.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN THE FLOW OF TRAFFIC ON ANY INTERSECTION WITHIN THE WORK AREA.
- THE CONTRACTOR SHALL NOTIFY ARLINGTON COUNTY PUBLIC SCHOOLS TWO WEEKS PRIOR TO STARTING CONSTRUCTION.
- THE CONTRACTOR SHALL SUBMIT ANY REQUESTS FOR TEMPORARY "NO PARKING" RESTRICTIONS TO THE PROJECT OFFICER AT LEAST 3 WORKING DAYS PRIOR TO THE DESIRED ONSET OF RESTRICTIONS. PRIOR TO A REQUEST FOR THE REMOVAL OF ACCESS TO ANY ADA PARKING SPACE THE CONTRACTOR MUST HAVE MADE PROVISION FOR ALTERNATIVE ADA PARKING AS INDICATED ON THE APPROVED PLAN OR AS DIRECTED BY THE PROJECT OFFICER
- WHEN THE APPROVED PLAN CALLS FOR THE REMOVAL OF ANY PARKING METER THE CONTRACTOR MUST MAKE A REQUEST TO THE PROJECT OFFICER AT LEAST ONE WEEK IN ADVANCE OF THE DESIRED REMOVAL. THE PROJECT OFFICER WILL THEN COORDINATE THE PARKING METER REMOVAL WITH TRAFFIC ENGINEERING AND OPERATIONS.

MOT NOTES:

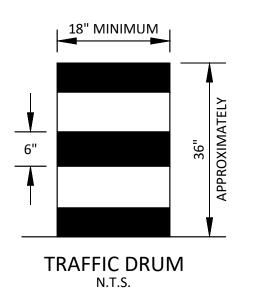
- PARKING SHALL BE RESTRICTED BY THE COUNTY AS PART OF THE RIGHT OF WAY PERMIT. CONTACT DES-PERMITTING SECTION, 703-228-4798, AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF WORK.
- 2. ALL TEMPORARY BUS TRAVEL LANES MUST BE MINIMUM 11' WIDE.
- THE CONTRACTOR SHALL MAINTAIN ADA ACCESSIBLE PARKING SPACES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT DES - PERMITING, 703-228-4798, TO COORDINATE RELOCATION OF EXISTING ADA ACCESSIBLE PARKING SPACES OR TO INSTALL TEMPORARY SIGNAGE OUT OF AND ADJACENT TO THE WORK ZONE AS CONSTRUCTION PROGRESSES. MULTIPLE RELOCATIONS MAY BE NECESSARY DURING EACH

PEDESTRIAN NOTE:

PEDESTRIANS SHALL BE APPROPRIATELY DIRECTED WITH ADVANCED WARNING SIGNS PLACED AT INTERSECTIONS, TO CROSS TO THE OPPOSITE SIDE OF THE ROADWAY IN ORDER TO PREVENT CONFLICT WITH MIDBLOCK WORK SITES.



→ FLAGGER





DEPARTMENT OF **ENVIRONMENTAL SERVICES** FACILITIES & ENGINEERING DIVISION ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629 FAX: 703.228.3606 COPYRIGHT © 2018 ARLINGTON COUNTY VIRGINIA - ALL RIGHTS RESERVED Lic. No. 019746 ONAL APPROVALS DATE Amy Pflaum QUALITY CONTROL ENGINEER Kamal Taktak CONSTRUCTION MANAGEMENT SUPERVISOR WATER, SEWER, STREETS BUREAU CHIEF Dennis M. Leach 8/6/20 TRANSPORTATION DIRECTOR Slige Dingahi 8.6.2020 PROJECT MANAGER **REVISIONS** .A <u>5005</u> ,∃ <u>5</u>00<u>5</u> phases affecting location for a DESIGNED: K. PATEL

GRAPHIC SCALE

DRAWN: K. PATEL

CHECKED: P. RIGBY

SCALE:

PLOTTED: AUGUST 19 2020

C121.

(Figure TTC-36.2) PAVEMENT MARKING SEE NOTE 10 AVEMENT MARKING FOR MID-BLOCK CROSSWALK IDEWALK CLOSED AHEAD R9-11L CROSS HERE TYPE 3 BARRICADE 1: Revision 1 - 4/1/20152: Revision 2 - 7/1/2018

Crosswalk Closure and Pedestrian Detour Operation

Page 6H-81

September 2019 Page 6H-65 **Lane Closure Operation in an Intersection** (Figure TTC-28.2) S STON GNA G20-2 (V) SEE BOTTOM RIGHT FOR SIGN LAYOUT STATION SEE NOTE 3 SEE TABLE 6H-3 SEE NOTE 5 SEE TABLE 6H-3 FLAGGER STATION SEE NOTE 3 SEE NOTE 5 OSTED/STATUTORY SPEED LIM 2: Revision 2 – 9/1/2019

11. At night, flagger stations shall be illuminated, except in emergencies (see Section 6E.08).

- 12. Cones may be eliminated when using a pilot vehicle operation or when the total roadway width is 20 feet
- 13. For low-volume situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger, positioned to be visible to road users approaching from both directions, may be used (see Chapter 6E).

Standard:

14. When used², three portable temporary rumble (PTRS) strips shall be installed across the entire travel lane adjacent to the BE PREPARED TO STOP (W3-4) sign. The portable temporary rumble strips shall be monitored and adjusted as necessary during the work shift to ensure proper placement on the roadway. When the PTRS are installed, the RUMBLE STRIPS AHEAD (W20-V26) sign shall also be utilized.

1: Revision 1 – 4/1/2015 2: Revision 2 – 9/1/2019 Page 6H-80

September 2019

September 2019 **Typical Traffic Control**

Crosswalk Closure and Pedestrian Detour Operation (Figure TTC-36.2)

NOTES

Standard:

- 1. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.
- 2. Curb parking shall be prohibited for at least 50 feet in advance of the midblock crosswalk.

Guidance:

- 3. Audible information devices should be considered where midblock closings and changed crosswalk areas
- cause inadequate communication to be provided to pedestrians who have visual disabilities. 4. Pedestrian traffic signal displays controlling closed crosswalks should be covered or deactivated.
- 5. Temporary markings should be considered for operations exceeding three days in duration.

Option:

- 6. Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS (W5-1) signs, may be used to control vehicular traffic.
- 7. For nighttime closures, Type A Flashing warning lights may be used on barricades supporting signs and closing sidewalks.

Standard:

- 8. In order to maintain the systematic use of the fluorescent yellow-green background for school warning signs in a jurisdiction, the fluorescent yellow-green background for school warning signs shall be used in TTC zones.2
- 9. All sidewalk closures shall be closed with Type 3 Barricades. The SIDEWALK CLOSED (R9-9) sign and the SIDEWALK CROSS HERE (R9-11) sign shall be installed above the Type 3 Barricade. The KEEP RIGHT sign can cover the top rail of the Type 3 Barricade.²

10. Refer to Sections 3B-16 through 3B-18 of the 2009 MUTCD and the Virginia Supplement to the MUTCD¹ for crosswalk¹ lines, yield lines and other related TTC devices that may be used to control vehicular traffic at midblock crosswalks.

Standard:2

1: Revision 1 - 4/1/2015

2: Revision 2 – 9/1/2019

11. The YIELD HERE TO PEDESTRIANS (R1-5) sign shall be placed at the Yield Line.

12. Fluorescent yellow-green PEDESTRIAN TRAFFIC (W11-2) symbol sign, AHEAD (W16-9p) plaque and ARROW (W16-7p) plaque shall be used to identify the work zone crosswalk.

Page 6H-64

- Guidance: 1. The control of traffic through the intersection in order of preference should be:
 - a. Obtain the services of law enforcement personnel.
 - b. Detour the effective routes to other roads and streets as approved and directed by the District² Traffic

Typical Traffic Control

Lane Closure Operation in an Intersection

(Figure TTC-28.2)

NOTES

September 2019

- c. Place a state certified flagger on each leg of the intersection controlling a single lane of traffic. Appropriate signing as shown should be used for law enforcement and flagging operations. For detour signs see Figure TTC-34.
- 2. Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, 500'-800' where the posted speed limit is greater than 45 mph.
- 3. To maintain efficient traffic flow in a flagging operation on a two-lane roadway the maximum time motorist should be stopped at a flagger station is 8 minutes for high volume roadways (average daily traffic of 500 or more vehicles per day) to a maximum of 12 minutes for low volume roadways (less than 500 vehicles per day). For additional information see Section 6E.07.2

Standard:

- 4. Channelizing device spacing shall be on 20' centers or less.
- 5. PTRS shall be used as noted in Section 6F.99.

Guidance:

6. If room permits, a shadow vehicle with at least one rotating amber light or high intensity amber flashing or oscilllating¹ light should be parked 80'-120' in advance of the first work crew.

Standard:

7. For emergency situations (any non-planned operation) of 30 minutes or less duration, two rotating amber lights or high intensity amber flashing or oscillating¹ lights mounted on the vehicle and visible for 360° shall be required in addition to the channelizing devices shown around the vehicle. Also, vehicle hazard warning signals shall be used.

Guidance:

8. If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure TTC-36.

Support:

9. Turns can be prohibited as required by vehicular traffic conditions. Unless the streets are wide, it might be physically impossible to make certain turns, especially for large vehicles.

1: Revision 1 – 4/1/2015 2: Revision 2 – 9/1/2019 ARLINGTON VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES **FACILITIES & ENGINEERING DIVISION** ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629 FAX: 703.228.3606 COPYRIGHT © 2018 ARLINGTON COUNT

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APPROVALS DATE Amy Pflaum QUALITY CONTROL ENGINEER

Kamal Taktak CONSTRUCTION MANAGEMENT SUPERVISO WATER, SEWER, STREETS BUREAU CHIEF Dennis M. Leach TRANSPORTATION DIRECTOR Thing Dungahi 8.6.202

PROJECT MANAGER

REVISIONS

 ∞ BLVD,

9 & WASHINGTON DC19 OF TRAF DR. **PERSHING**

MAINTENANCE

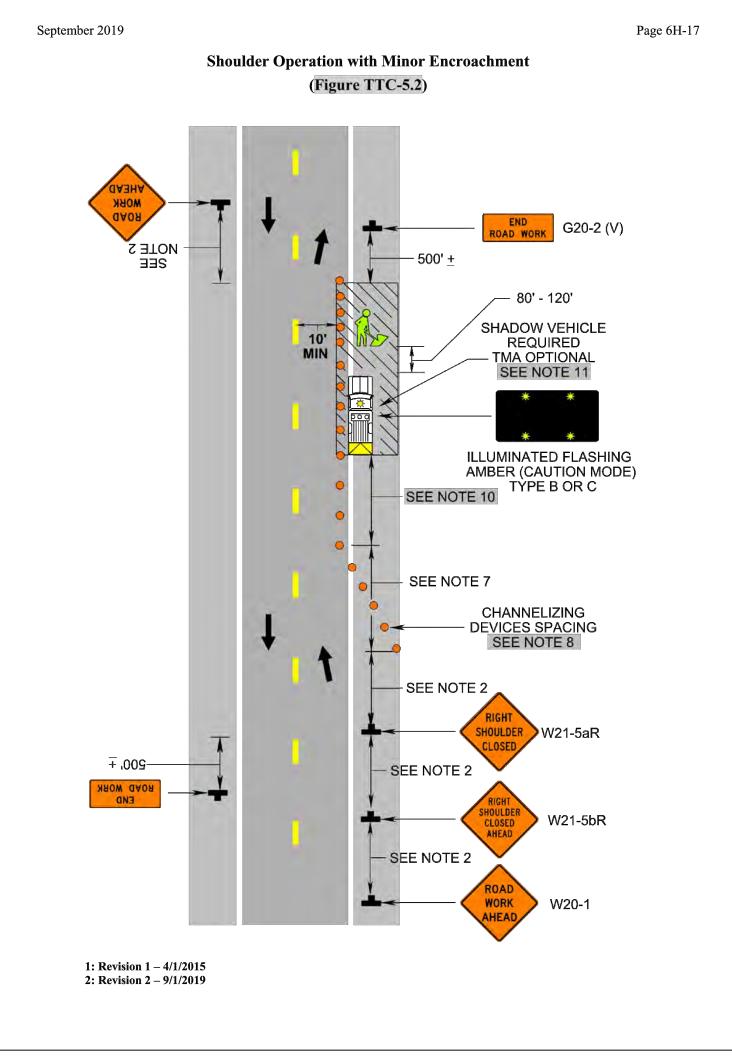
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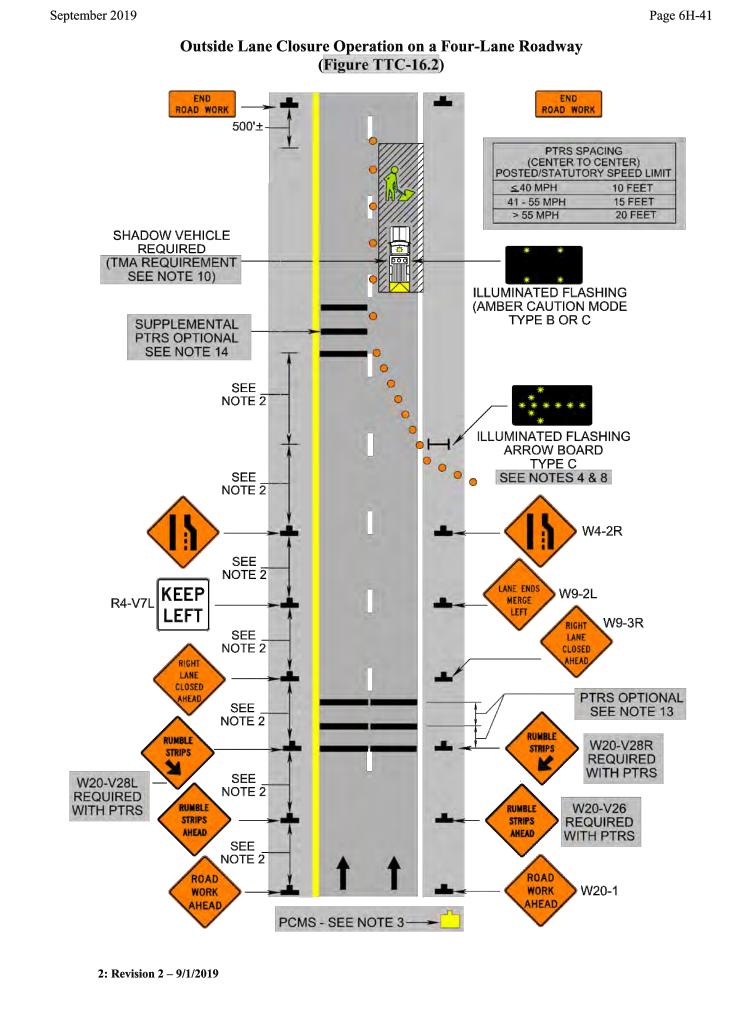
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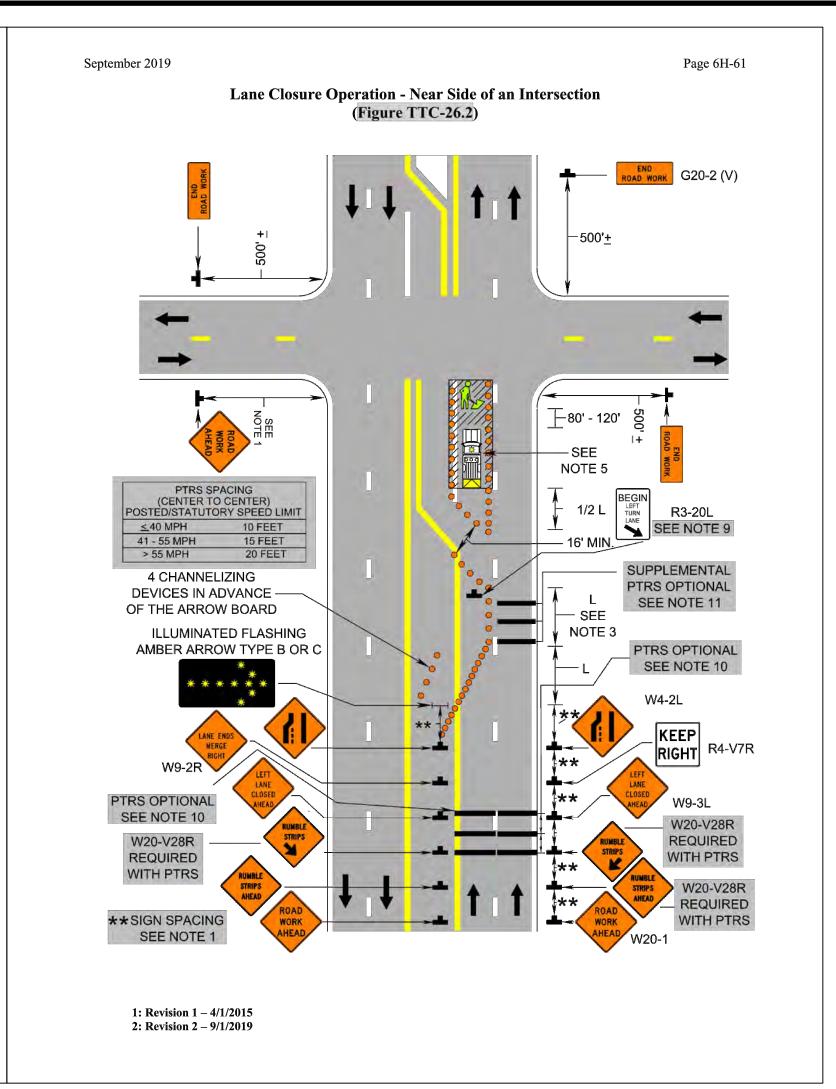
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C122.1







Page 6H-16 September 2019 **Typical Traffic Control** Shoulder Operation with Minor Encroachment (Figure TTC-5.2) **NOTES**

1. For required sign assemblies for multi-lane roadways see Note 1, TTC-4.1

- 2. Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.
- 3. When work takes up part of a lane on a high volume roadway; vehicular traffic volumes, vehicle mix, speed and capacity should be analyzed to determine whether the affected lane should be closed. Unless the lane encroachment analysis permits a remaining lane width of 10 feet, the lane should be closed. If the closure operation is on a Limited Access highway, the minimum lane width is 11 feet.

Option:

- 4. The ROAD WORK AHEAD (W20-1) sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.
- 5. A shadow vehicle with either an arrow board operating in the caution mode, or at least one highintensity amber rotating, flashing, or oscillating light shall be parked 80' - 120' in advance of the
- 6. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or oscillating lights.

7. Taper length (L) and channelizing device spacing shall be at the following:

					Taper	Len	gth L					
Speed	L	ane Wic	dth (Fee	t)			Speed	L	ane Wid	th (Feet	t)	
Limit (mph)	9	10	11	12	Remarks		Limit (mph)	9	10	11	12	Remarks
25	95	105	115	125	L=S ² W/60		50	450	500	550	600	L=SW
30	135	150	165	180	L=S2W/60		55	495	550	605	660	L= SW
35	185	205	225	245	L=S ² W/60		60	540	600	660	720	L=SW
40	240	270	295	320	L=S2W/60		65	585	650	715	780	L=SW
45	405	450	495	540	L=SW		70	630	700	770	840	L=SW
Limited Access highways shall use a 1000' merging taper regardless of the posted speed, a 750' shifting taper for posted speeds < 65 mph and a 1000' shifting taper for posted speeds > 65 mph. ²												
	taper to	r poste	ı speea:		•				ostea s	peeas 2	go mp	n
					Shoulder Tape	er = 1	∕₃ L Minim	um				

8. Channelizing device spacing shall be at the following:

			Channelizing D	evice Spa	acing				
Location		l Limit ph)	Location	Speed (mp		Location Spacing		d Limit ph)	
Spacing	0 -35	36 +	Spacing	0 -35	36 +		0 -35	36 +	
Transition 20' 40' Travelway 40' 80' *Construction Access 80' 120'									
*Construction access spacing may be increased to this distance, but shall not exceed one access per ¼ mile.									

- 9. On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.²
- 10. The buffer space length The buffer space length shall be as shown in Table 6H-3 on Page 6H-5 for the posted speed limit.
- 11. A truck-mounted attenuator (TMA) shall be used on Limited Access highways and multi-lane
- roadways with posted speed limit equal to or greater than 45 mph. 12. When a side road intersects the highway within the temporary traffic control zone, additional traffic
- control devices shall be placed as needed.

1: Revision 1 – 4/1/2015 2: Revision 2 – 9/1/2019 Page 6H-40 September 2019

Typical Traffic Control Outside Lane Closure Operation on a Four-Lane Roadway (Figure TTC-16.2)

NOTES

Standard: 1. On divided highways having a median wider than 8', right and left sign assemblies shall be

- 2. Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.
- 3. When closing a lane, a PCMS should be used in advance of the first warning sign if all of the left side
- signs cannot be installed.² 4. Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the transition, based on the posted speed limit and at least equal to or
- greater than the values in Table 6H-3. For Limited Access highways a minimum of 1000' is desired. 5. All vehicles, equipment, workers, and their activities should be restricted to one side of the pavement.

Standard: 6. Taper length (L) and channelizing device spacing shall be at the following:

					Taper	Len	gth L					
Speed	L	ane Wic	dth (Fee	t)			Speed	La	ane Wid	lth (Feet	t)	
Limit (mph)	9	10	11	12	Remarks		Limit (mph)	9	10	11	12	Remarks
25	95	105	115	125	L=S2W/60		50	450	500	550	600	L=SW
30	135	150	165	180	L=S2W/60		55	495	550	605	660	L= SW
35	185	205	225	245	L=S2W/60		60	540	600	660	720	L=SW
40	240	270	295	320	L=S2W/60		65	585	650	715	780	L=SW
45	405 450 495 540 L=SW 70 630 700 770 840 L=SW											
Limited Access highways shall use a 1000' merging taper regardless of the posted speed.												
	Shifting Tapers see Table 6H-2. ² Shoulder Taper = ½ L Minimum											

7. Channelizing device spacing shall be at the following:

	-	0		8						
Channelizing Device Spacing										
Location Spacing	Speed Limit (mph)		Location Spacing	Speed L (mph)	.imit	Location Spacing	Speed Limit (mph)			
Spacing	0 -35	36 +	Spacing	0 -35	36 +		0 -35	36 +		
Transition	20'	40'	Travelway	40'	80'	* Construction Access	80'	120'		

- *Construction access spacing may be increased to this distance, but shall not exceed one access per ¼ mile. 8. An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane (see Figure TTC-18).
- 9. The buffer space length shall be shown in Table 6H-3 on Page 6H-5 for the posted speed limit. 10. A shadow vehicle with either a Type B or C arrow board operating in the caution mode, or at least one high intensity amber rotating, flashing, or oscillating light shall be parked 80'-120' in advance of the first work crew. When the posted speed limit is 45 mph or greater, a truck-
- mounted attenuator shall be used. 11. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or oscillating lights but can be used to supplement the amber rotating, flashing,
- 12. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.

13. PTRS and their supporting signs may be used, see Sections 6F.99 and 6G.25. Long-term transverse rumble strips may be used in long-term situations, see Section 6F.99 and TTC-20.2 14. The supplemental PTRS may be eliminated.²

1: Revision 1 – 4/1/2015 2: Revision 2 – 9/1/2019 Page 6H-60 September 2019 **Typical Traffic Control**

> Lane Closure Operation – Near Side of an Intersection (Figure TTC-26.2)

Guidance:

1. Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, 500'-800' where the posted speed limit is greater than 45 mph. Standard:

NOTES

2. On divided highways having a median wider than 8', right and left sign assemblies shall be required.

Taper l	Taper length (L) shall be at the following:											
					Taper	Len	gth L					
Speed	L	ane Wic	th (Fee	t)			Speed	Li	ane Wid	th (Fee	t)	
Limit (mph)	9	10	11	12	Remarks		Limit (mph)	9	10	11	12	Remarks
25	95	105	115	125	L=S2W/60		50	450	500	550	600	L=SW
30	135	150	165	180	L=S2W/60		55	495	550	605	660	L= SW
35	185	205	225	245	L=S2W/60		60	540	600	660	720	L=SW
40	240	270	295	320	L=S2W/60		65	585	650	715	780	L=SW
45	405	450	495	540	L=SW		70	630	700	770	840	L=SW
	Shifting Tapers - full lane width shifts on Limited Access Highways shall use a 750' shifting taper for posted speeds less than 65 mph and a 1000' shifting taper for posted speeds equal to or greater than 65											
					d be used.2							
	Shoulder Taper = 1/3 L Minimum											

4. Channelizing device spacing shall be at the following: Channelizing Device Spacing Speed Limit Location Location Spacing Spacing 0 -35 36 + 40' 80' *Construction Access 80' 120' 20' 40' Travelway

Guidance:

5. If room permits, a shadow vehicle with at least one rotating, oscillating, or amber strobe light should be parked 80'-120' in advance of the first work crew.

*Construction access spacing may be increased to this distance, but shall not exceed one access per $\frac{1}{4}$ mile.

Standard:

- 6. If the posted speed limit is 45 mph or greater, the shadow vehicle shall have a truck-mounted
- 7. For emergency situations (any non-planned operation) of 30 minutes or less duration, two rotating amber lights or two high intensity amber flashing or oscillating¹ lights mounted on the vehicle and visible for 360° shall be required in addition to the channelizing devices shown around the vehicle. Also, vehicle hazard warning signals shall be used.

Guidance:

8. If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure TTC-36.

9. If the left turn lane is closed a NO LEFT TURN (Symbol) (R3-2) shall be used.

Option:² 10. PTRS may be used as shown in Figure TTC-17 and in accordances with Section 6F-99.²

11. The supplemental PTRS may be eliminated.²

1: Revision 1 – 4/1/2015 2: Revision 2 – 9/1/2019 ARLINGTON VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES **FACILITIES & ENGINEERING DIVISION ENGINEERING BUREAU** 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629 FAX: 703.228.3606 COPYRIGHT © 2018 ARLINGTON COUNT

VIRGINIA - ALL RIGHTS RESERVED PETER J. RIGBY JR. Lic. No. 019746 07/27/19 SIONAL ONAL APPROVALS DATE

Amy Pflaum QUALITY CONTROL ENGINEER Kamal Taktak CONSTRUCTION MANAGEMENT SUPERVISOR WATER, SEWER, STREETS BUREAU CHIEF Dennis M. Leach 8/6/20 TRANSPORTATION DIRECTOR Slige Dungahi 8.6.2020 PROJECT MANAGER

REVISIONS

Ø 9 & WASHINGTON DC19 P T MAINTENANCE

DESIGNED: K. PATEL DRAWN: K. PATEL CHECKED: P. RIGBY

DR.

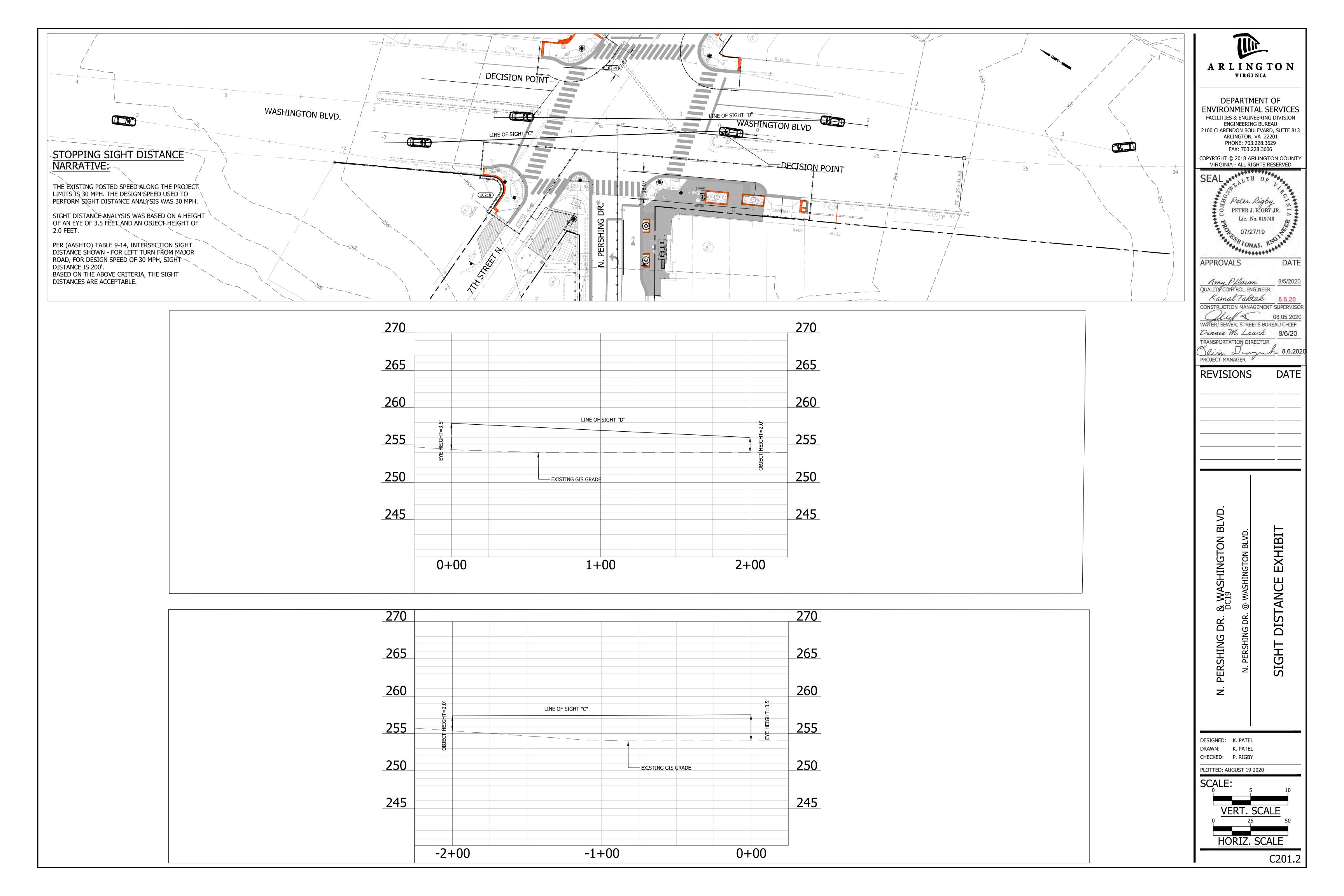
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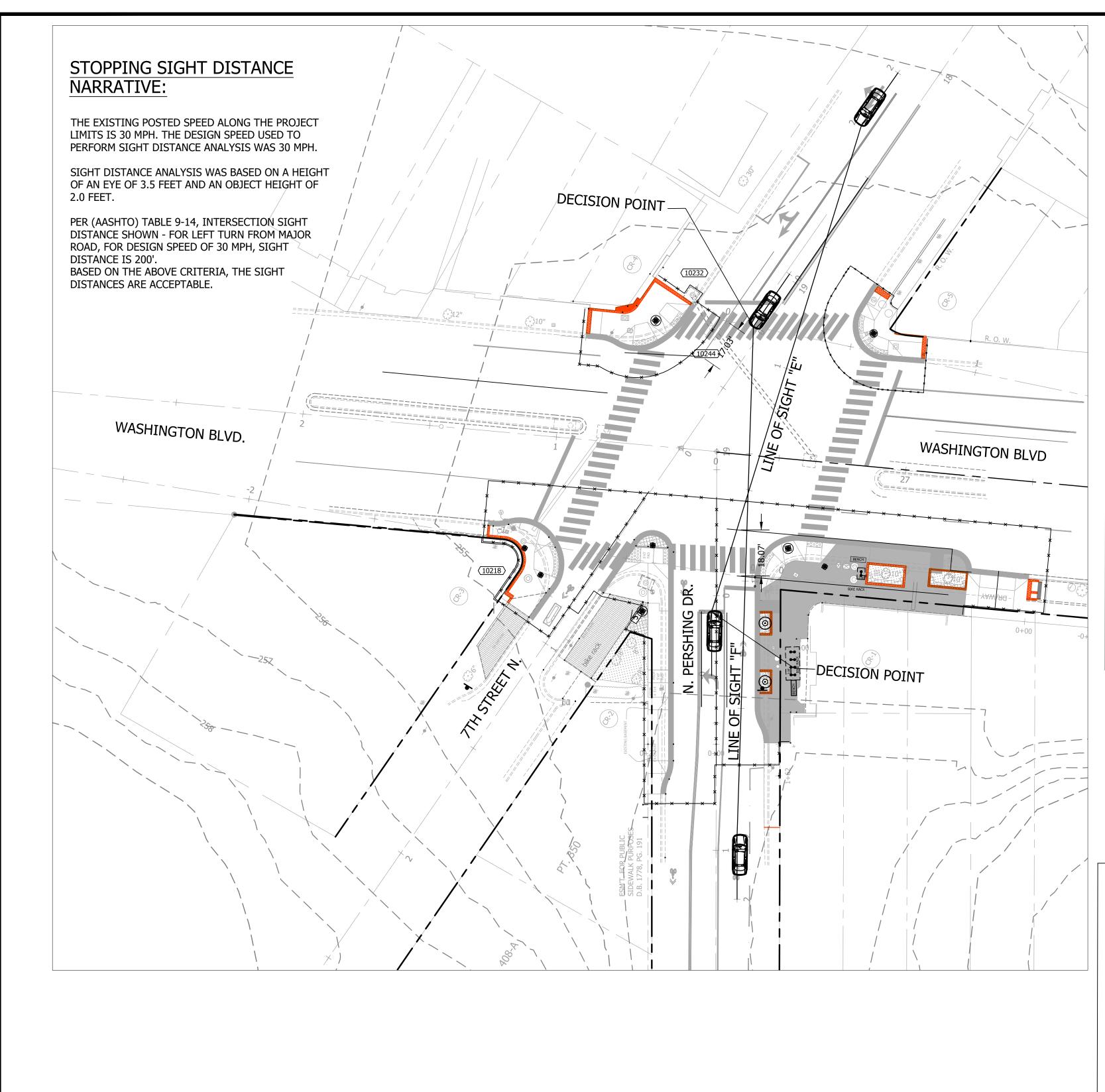
PLOTTED: AUGUST 19 2020

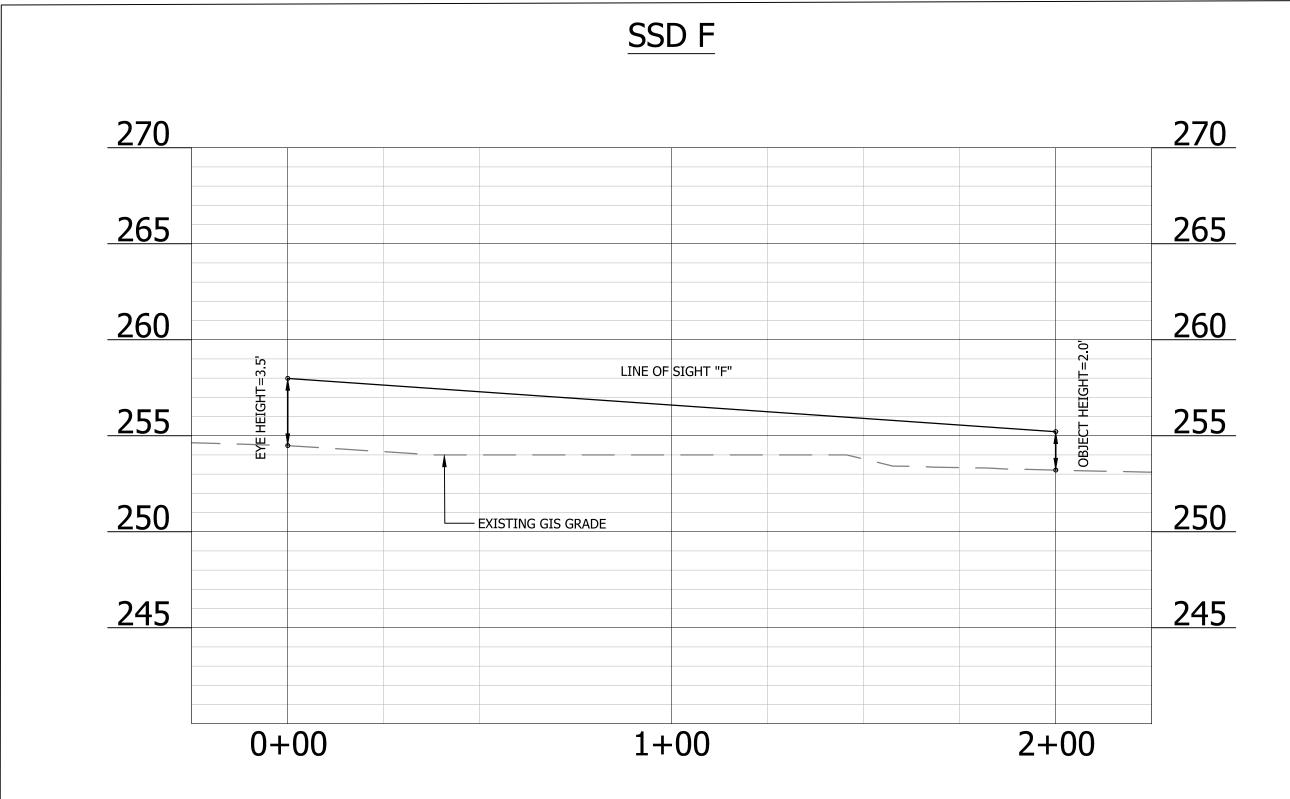
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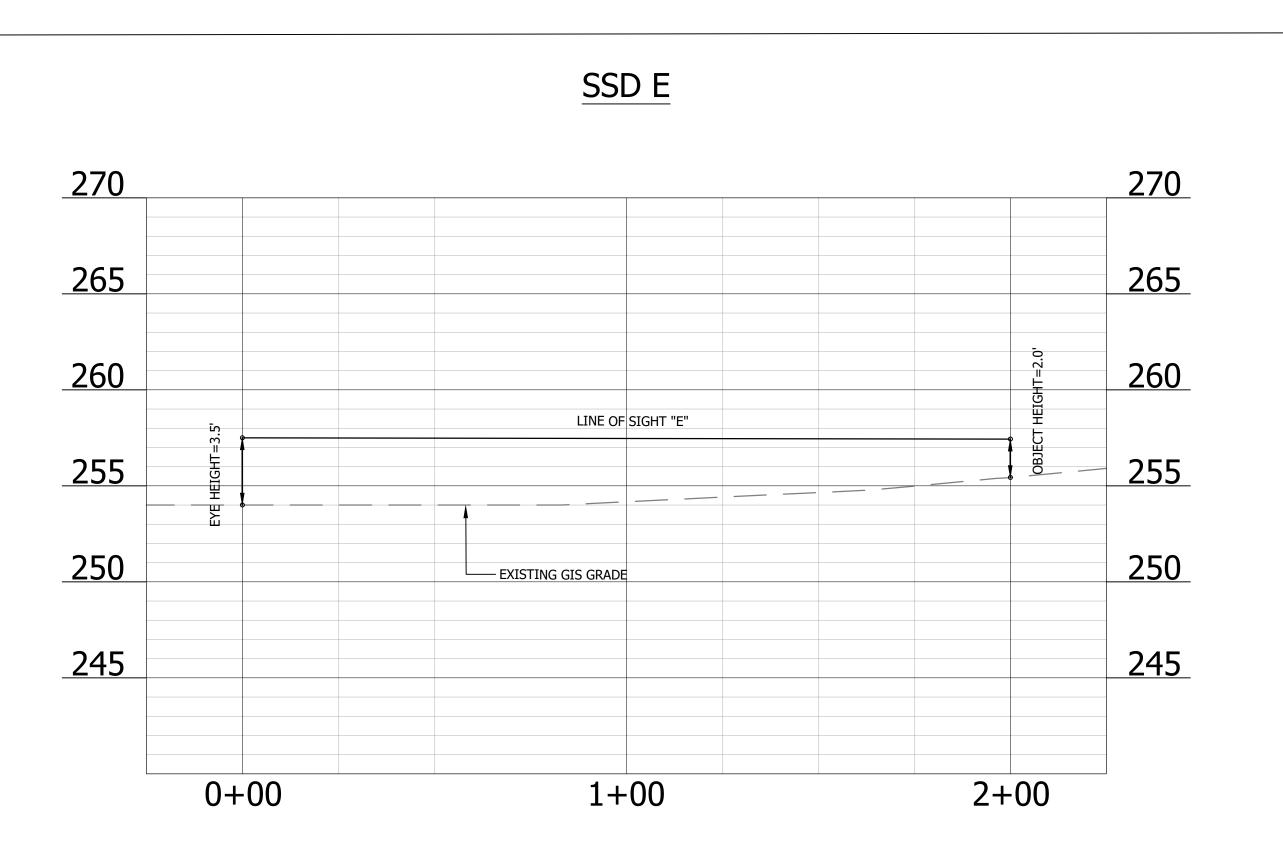
AS SHOWN

C122.2











DEPARTMENT OF **ENVIRONMENTAL SERVICES** FACILITIES & ENGINEERING DIVISION ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629 FAX: 703.228.3606

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3 Peter Rigby PETER J. RIGBY JR. Lic. No. 019746 07/27/19 SSIONAL ENG

APPROVALS DATE Amy Pflaum QUALITY CONTROL ENGINEER Kamal Taktak

CONSTRUCTION MANAGEMENT SUPERVISOR WATER, SEWER, STREETS BUREAU CHIEF Dennis M. Leach 8/6/20 TRANSPORTATION DIRECTOR

Cling Dingshi 8.6.2020

PROJECT MANAGER

REVISIONS

SIGHT DISTANCE EXHIBIT & WASHINGTON E DR. PERSHING

DESIGNED: K. PATEL DRAWN: K. PATEL CHECKED: P. RIGBY

PLOTTED: AUGUST 19 2020 SCALE:

VERT. SCALE HORIZ. SCALE C201.3

General Signal Notes

- 1. ALL WORK FOR TRAFFIC SIGNALS, TRAFFIC SIGNS, AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE LATEST EDITION OF THE ARLINGTON COUNTY TRAFFIC SIGNAL & STREETLIGHT SPECIFICATIONS, 2016 VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS, 2016 VDOT ROAD AND BRIDGE STANDARDS, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2019 VIRGINIA WORK AREA PRODUCTION MANUAL, AND SPECIAL PROVISIONS IN EFFECT AT THE TIME OF ADVERTISEMENT.
- 2. FIVE WORKING DAYS PRIOR TO COMMENCING SIGNAL INSTALLATION/MODIFICATION WORK AT ANY LOCATION IN ARLINGTON COUNTY, VIRGINIA, SIGNAL CONTRACTORS MUST NOTIFY THE COUNTY ENGINEER IN WRITING WITH THE NAME, DAYTIME PHONE NUMBER, AND EMERGENCY PHONE NUMBERS OF THE CONTRACTOR. THIS NOTIFICATION IS TO INCLUDE LOCATION, ROUTE NUMBERS, TYPE, AND DETAILS OF CONSTRUCTION AND SCHEDULE OF WORK.
- 3. THE TRAFFIC SIGNAL CONSTRUCTION SHALL NOT BEGIN WITHOUT PRIOR NOTIFICATION AND APPROVAL FROM ARLINGTON COUNTY.
- 4. THE COUNTY ENGINEER, PRIOR TO CONSTRUCTION, SHALL VERIFY POLE(S) AND CONTROLLER CABINET LOCATIONS.
- 5. ALL CATALOG CUTS, POLE CALCULATIONS, FOUNDATION DESIGNS, SHOP DRAWINGS, ETC., SHALL BE SUBMITTED TO, AND APPROVED BY, ARLINGTON COUNTY PRIOR TO CONSTRUCTION.
- 6. OPERATION OF THE SIGNALIZED INTERSECTION IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE TRAFFIC SIGNAL IS ACCEPTED BY ARLINGTON COUNTY.
- 7. ANY NOTES NOT MENTIONED IN THE NOTES SECTION OF THIS SIGNAL PLAN WILL REVERT TO THE ARLINGTON COUNTY STANDARDS.
- 8. CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL COMMUNICATION THROUGHOUT THE PROJECT.
- 9. ALL NEW CONTROLLER CABINETS MUST BE FURNISHED WITH A BACKUP POWER BATTERY.

- 10. 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 UTILITY LATERALS ARE NOT LOCATED. CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITY LATERALS AND IS RESPONSIBLE FOR ANY DAMAGE TO PRIVATE UTILITY LATERALS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE COUNTY PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WITH MATCHING MATERIALS ANY PAVEMENT, PAVEMENT MARKINGS, CURB AND GUTTER, SIDEWALK, ETC. THAT ARE DAMAGED DURING CONSTRUCTION.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE SIGNING, DELINEATION, PAVEMENT MARKINGS AND ANY OTHER TRAFFIC CONTROL DEVICES NECESSARY TO PERFORM THE WORK IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL IMMEDIATELY REMOVE ALL TEMPORARY DEVICES.
- 13. THE CONTRACTOR SHALL SUBMIT "AS-BUILT" DRAWINGS TO ARLINGTON COUNTY UPON JOB COMPLETION AND FINAL INSPECTION .
- 14. EXISTING CONTROLLER AND CABINETS SPECIFIED TO BE REMOVED SHALL BE RETURNED TO ARLINGTON COUNTY.
- 15. CCTV LOCATIONS AND QUANTITIES ARE FOR PLANNING PURPOSES ONLY. THE FINAL LOCATIONS SHALL BE FIELD LOCATED.
- 16. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES ON ADJUSTMENT OF OVERHEAD CABLES TO INSTALL MAST ARM SIGNAL POLES.

Signal Notes

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. MAST ARM POLES SHALL BE DESIGNED TO THE PROPER HEIGHT TO ACCOMMODATE A STREET LIGHT LUMINAIRE AND INSTALLED IN ACCORDANCE WITH ARLINGTON COUNTY TRAFFIC SIGNAL & STREETLIGHT SPECIFICATIONS.
- MAST ARM POLE FOUNDATIONS SHALL BE INSTALLED IN ACCORDANCE WITH ARLINGTON COUNTY STANDARDS AND SPECIFICATIONS. ALL POLES SHALL HAVE A 6-BOLT PATTERN.
- 4. AT THE COUNTY'S REQUEST, THE CONTRACTOR SHALL DIG TEST PITS TO VERIFY THAT SIGNAL POLE FOUNDATIONS WILL NOT CONFLICT WITH UNDERGROUND UTILITIES AND THAT FOUNDATIONS WILL FIT WITHIN THE EXISTING RIGHT-OF-WAY.
- 5. SIGNAL POLES AND MAST ARMS SHALL BE NON-ORNAMENTAL. COBRA LIGHTING SHALL BE LED.
- . COBRA LIGHTING SHALL BE LED TYPE
- RFL-145W64LED4K-T-R2M-UNIV-DMG-PH8-RCD7-[USA-003]-BK. DECORATIVE POST-TOP LIGHTING SHALL BE HADCO DECORATIVE POST-TOP LUMINAIRE WITH RELUME LED KIT (UAZ XRE LED 57.69W).

B. CONTROLLER AND FOUNDATION

- 1. NEW CONTROLLER CABINETS SHALL BE TS2, P TYPE WITH BATTERY BACKUP PER ARLINGTON COUNTY REQUIREMENTS.
- CONTROLLER SHALL BE INTELIGHT X-3 AND SHALL BE INSTALLED AND SET AS FOLLOWS:
 TO REST IN PHASE 2 & 6 GREEN INTERVAL
 - 2.2 TO START/RESTART IN PHASE 2 & 6 YELLOW CHANGE INTERVAL
- 3. THE CONTROLLER CABINET AND FOUNDATION SHALL BE INSTALLED IN ACCORDANCE WITH ARLINGTON COUNTY TRAFFIC SIGNAL & STREETLIGHT SPECIFICATIONS 66-01. 66-02, AND 70-01.
- 4. THE COUNTY WILL PROVIDE SIGNAL TIMINGS TO THE CONTRACTOR FOR THE CONTROLLER WHEN THE INTERSECTION IS TOTALLY PREPARED FOR OPERATION. THE CONTRACTOR SHALL NOTIFY THE COUNTY IN WRITING 10 DAYS IN ADVANCE OF REQUIRING FINAL TIMINGS.

C. TRAFFIC SIGNAL HEADS

- 1. ALL NEW VEHICULAR SIGNAL SECTIONS SHALL BE 12 INCHES IN DIAMETER CAST ALUMINUM WITH LED DISPLAYS.
- 2. PEDESTRIAN SIGNAL HEAD SECTIONS SHALL BE CAST ALUMINUM WITH LED DISPLAYS (COUNTDOWN).
- 3. ALL SIGNAL HEADS SHALL BE YELLOW IN COLOR.

D. DETECTORS

- 1. ALL NEW PEDESTRIAN PUSH BUTTON STATIONS SHALL CONFORM TO ARLINGTON COUNTY'S SPECIFICATIONS FOR ACCESSIBLE SIGNAL DESIGN AND SHALL USE POLARA NAVIGATOR VIBRO-TACTILE/AUDIO PUSH BUTTON ASSEMBLIES UNLESS OTHERWISE SPECIFIED.
- 2. NEW OVERHEAD VIDEO DETECTION SHALL BE FLIR CAMERAS AND SHALL BE INSTALLED IN ACCORDANCE WITH COUNTY REQUIREMENTS.
- 3. EMERGENCY VEHICLE PRE-EMPTION (EVP) EQUIPMENT (GTT MODEL M711 OR M721), OR APPROVED SUBSTITUTE, SHALL BE INSTALLED COMPLETE WITH DISCRIMINATOR CARDS, WIRING, ETC. IN ACCORDANCE WITH ARLINGTON COUNTY STANDARDS.
- 4. EVP TO BE MOUNTED ON VEHICLE HEAD MOUNTING BRACKET OR AS APPROVED BY THE ENGINEER IN THE FIELD.

E. CONDUIT, CONDUCTORS, AND ELECTRICAL

- 1. ALL JUNCTION BOXES SHALL HAVE THE WORDS "ARLINGTON COUNTY TRANSPORTATION" CAST IN THE LID. ALL JUNCTION BOXES SHALL BE INSTALLED PER STANDARDS 61-01, 61-02, 61-03, AND 61-04.
- METER PEDESTAL SHALL BE INSTALLED PER COUNTY STANDARDS. UNDERGROUND SERVICE SHALL BE OBTAINED FROM THE NEAREST UTILITY POLE OR SERVICE POINT. CONTRACTOR IS RESPONSIBLE FOR OBTAINING APPROVAL AND COORDINATING WITH POWER SERVICE COMPANY FOR CONNECTION.
- 3. CONDUIT SYSTEM SHALL BE ADDED TO CONNECT EXISTING COMMUNICATION CABLE PLANT TO THE NEW CONTROLLER CABINET LOCATION AS DIRECTED BY THE COUNTY ENGINEER.
- 4. ALL CONDUIT ENTERING INTO JUNCTION BOXES SHALL NOT EXTEND OVER 3" MAXIMUM NOR 2" MINIMUM INSIDE THE JUNCTION BOXES, AND SHALL BE FITTED WITH BELL ENDS OR BUSHING.
- 5. ALL JUNCTION BOXES SHALL HAVE A GROUND ROD INSTALLED. ALL JUNCTION BOXES SHALL BE PROPERLY CONNECTED TO THE INTERSECTION GROUNDING SYSTEM. METAL LIDS SHALL BE BONDED TO THE GROUNDING SYSTEM.
- 6. CONTRACTOR IS TO VERIFY DEPTHS OF UTILITIES AT PROPOSED CONDUIT CROSSINGS PRIOR TO EXCAVATING CONDUIT TRENCHES OR BORING.
- 7. ALL CONDUITS BENEATH ROADWAYS SHALL BE DIRECTIONAL DRILLED UNLESS DIRECTED OTHERWISE BY THE COUNTY CONSTRUCTION MANAGER. WHERE DIRECTED ON THE PLANS OR BY THE CONSTRUCTION MANAGER, THE CONTRACTOR SHALL INSTALL SPARE CONDUITS WITH PULL TAPE AND TRACER WIRE FOR ROAD CROSSINGS.
- 8. ALL EXISTING CONDUIT AND CABLES ARE BASED ON RECORD DRAWINGS OR WERE ESTIMATED. CONTRACTOR SHALL VERIFY CONDUIT FILL CAPACITY IN EXISTING CONDUITS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY ARLINGTON COUNTY IF CONDUIT CAPACITY IS NOT AVAILABLE IN EXISTING CONDUIT FOR NEW CABLES.
- 9. NEW CCTV CAMERAS SHALL BE INSTALLED IN ACCORDANCE WITH ARLINGTON COUNTY REQUIREMENTS. CONTRACTOR SHALL CONFIRM MOUNTING LOCATION OF CCTV CAMERA WITH COUNTY PRIOR TO INSTALLATION.
- 10. CONTRACTOR TO VERIFY THE CONDUIT AND % FILL. IF THERE IS NOT ENOUGH CAPACITY IN CONDUIT, THEN THE CONTRACTOR SHALL INSTALL NEW CONDUIT.
- 11. ALL PROPOSED CONDUIT SHALL HAVE #6 AWG (EGC) & TRACER WIRE FOR GROUNDING SYSTEM.
- 12. REMOVE ALL EXISTING UNUSED RISERS, JUNCTION BOXES, AND CABLES.

F. SIGNS

- 1. ALL MAST ARM SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH ARLINGTON COUNTY STANDARDS. SIGNS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS DIRECTED OTHERWISE.
- 2. STREET NAME SIGNS SHALL HAVE A WHITE LEGEND ON GREEN BACKGROUND. CONTRACTOR SHALL SUBMIT SIGN DETAILS TO COUNTY TO REVIEW. THE DIMENSIONS PROVIDED ON PLANS ARE ESTIMATED.

G. DEMOLITION/SALVAGE

- 1. ALL EXISTING SIGNAL EQUIPMENT IS TO BE REMOVED & RETURNED TO ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES LOCATED AT 4300 29TH ST S., ARLINGTON, VA 22206.
- 2. ALL EXISTING SIGNAL POLE FOUNDATIONS SHALL BE DEMOLISHED IN ACCORDANCE WITH ARLINGTON COUNTY SPECIFICATIONS.

H. COMMUNICATIONS

- 1. EXISTING COUNTY FIBER JUNCTION BOXES AND CONDUITS CONTAIN LIVE FIBER OPTIC CABLES. THE CONTRACTOR SHALL NOT CUT OR DAMAGE THE COUNTY'S EXISTING FIBER CABLES.
- 2. ALL FIBER OPTIC CABLE INSTALLATION, REMOVAL, SPLICING, AND TESTING SHALL BE PERFORMED BY THE COUNTY AT THE CONTRACTOR'S EXPENSE. CONTRACTOR MAY CONTRACT DIRECTLY WITH THE COUNTY'S FIBER CONTRACTORS. UPON REQUEST 703-228-7726, THE COUNTY WILL PROVIDE THE CONTACT INFORMATION FOR CURRENT QUALIFIED COUNTY FIBER CONTRACTORS.
- 3. CONTACT ARLINGTON COUNTY DTS FOR FIBER OPTIC CABLE REMOVAL OR INSTALLATION AT LEAST 10 BUSINESS DAYS IN ADVANCE.
- 4. CONTRACTOR SHALL FURNISH FIBER PATCH PANEL FOR INSTALLATION BY THE COUNTY. FIBER PIGTAIL SHALL BE APPROPRIATE LENGTH TO ALLOW FOR 50 FEET OF SLACK IN EACH INTERMEDIATE JUNCTION BOX. CONTRACTOR SHALL SUBMIT A SHOP DRAWING OF THE PATCH PANEL (INDICATING THE TAIL LENGTH) FOR COUNTY REVIEW PRIOR TO ORDERING.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF PROPOSED JUNCTION BOXES AND CONDUITS INCLUDING ALL APPURTENANCES SUCH AS GROUND RODS, TRACER WIRE, PULL TAPE, ETC.
- 6. ALL NEW CONDUITS SHALL HAVE PULL TAPE INSTALLED BETWEEN JUNCTION BOXES AND TRACER WIRE INSTALLED WITHIN OR BESIDE AT LEAST ONE OF THE CONDUITS. TRACER WIRE SHALL BE CONNECTED TO THE GROUND RODS INSTALLED IN THE ADJACENT JUNCTION BOXES.
- 7. DO NOT SPLICE TRACER WIRE.

I. INSPECTIONS

- 1. THE CONTRACTOR SHALL CONTACT THE COUNTY CONSTRUCTION MANAGER FOR INSPECTIONS THROUGHOUT CONSTRUCTION AS REQUIRED BY THE CONSTRUCTION MANAGER.
- 2. THE COUNTY SHALL VERIFY POLE LOCATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY MR. SHAHID MOHIUDDIN, 703-228-7555 TO SCHEDULE INSPECTION PRIOR TO EXCAVATION, AND AGAIN PRIOR TO POURING CONCRETE. STAKEOUT IS THE RESPONSIBILITY OF THE CONTRACTOR UNLESS DIRECTED OTHERWISE.
- 3. THE CONTRACTOR SHALL CONTACT THE COUNTY CONSTRUCTION MANAGER WITHIN 7
 BUSINESS DAYS OF SIGNAL ACTIVATION. ALL POWER AND COMMUNICATIONS SHALL BE IN
 OPERATION AT THE TIME OF ACTIVATION UNLESS APPROVED BY THE COUNTY
 CONSTRUCTION MANAGER.



DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Engineering and Operations Bureau 2100 Clarendon Boulevard, Suite 900 Arlington, VA 22201 Phone: 703.228.3344 Fax: 703.228.3719

SEAL



APPROVALS	DATE
In falle	08/13/20
TRAFFIC SIGNAL ENGINEER older	08/13/20

TE&O BUREAU CHIEF

Dennis M. Leach

TRANSPORTATION DIRECTOR

08/13/20

DATE

REVISONS

Signal Design
ignal Notes
Blvd. Signal Upgrades

Traffic Signs

Designed: AS
Drawn: LL
Checked: GG
Miss Utility Transmittal #:

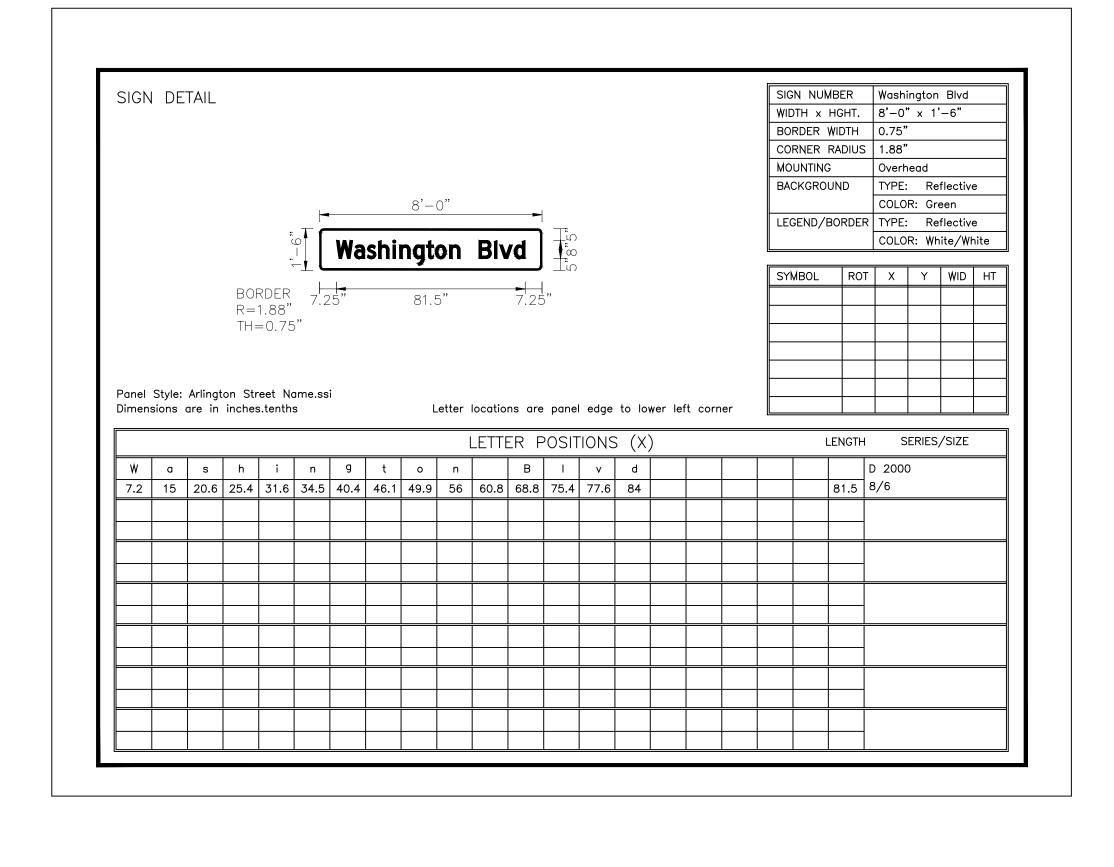
Plotted: August 04, 2020 Plotted by: Lawrence.Laynburd

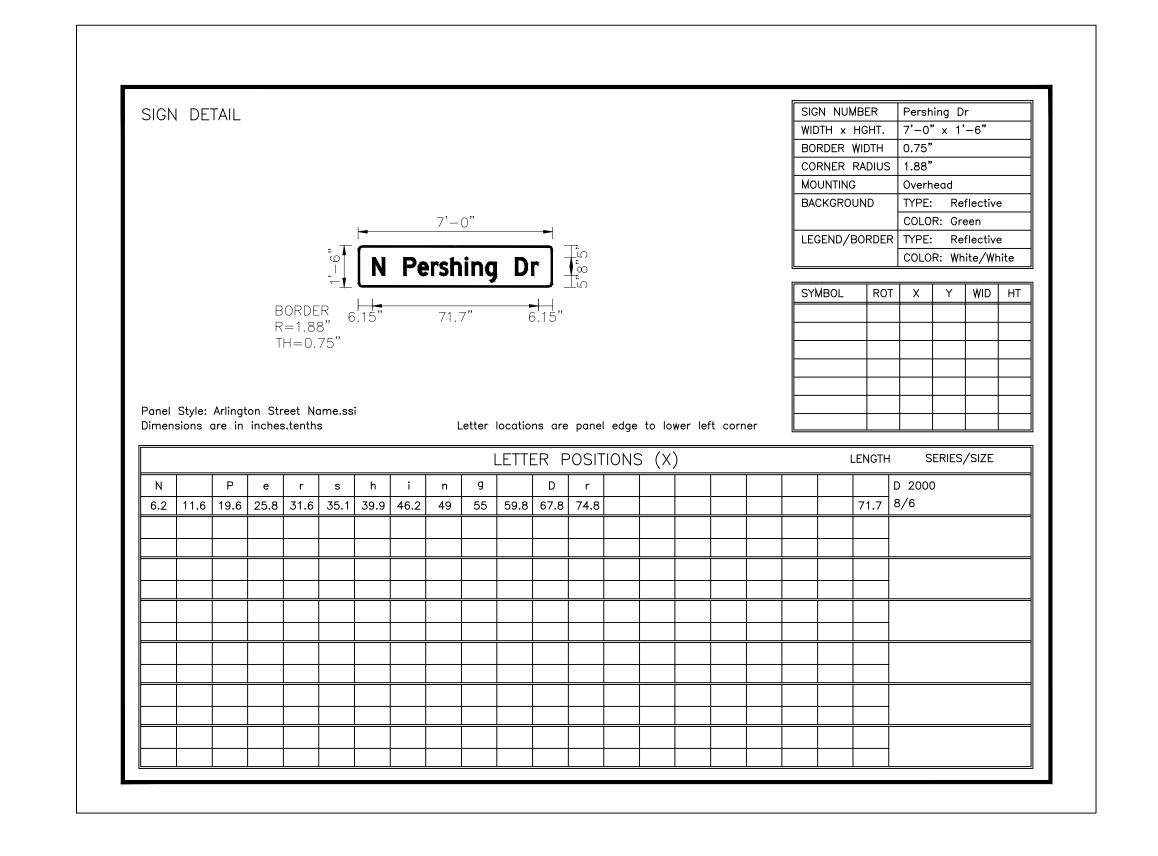
Scale:

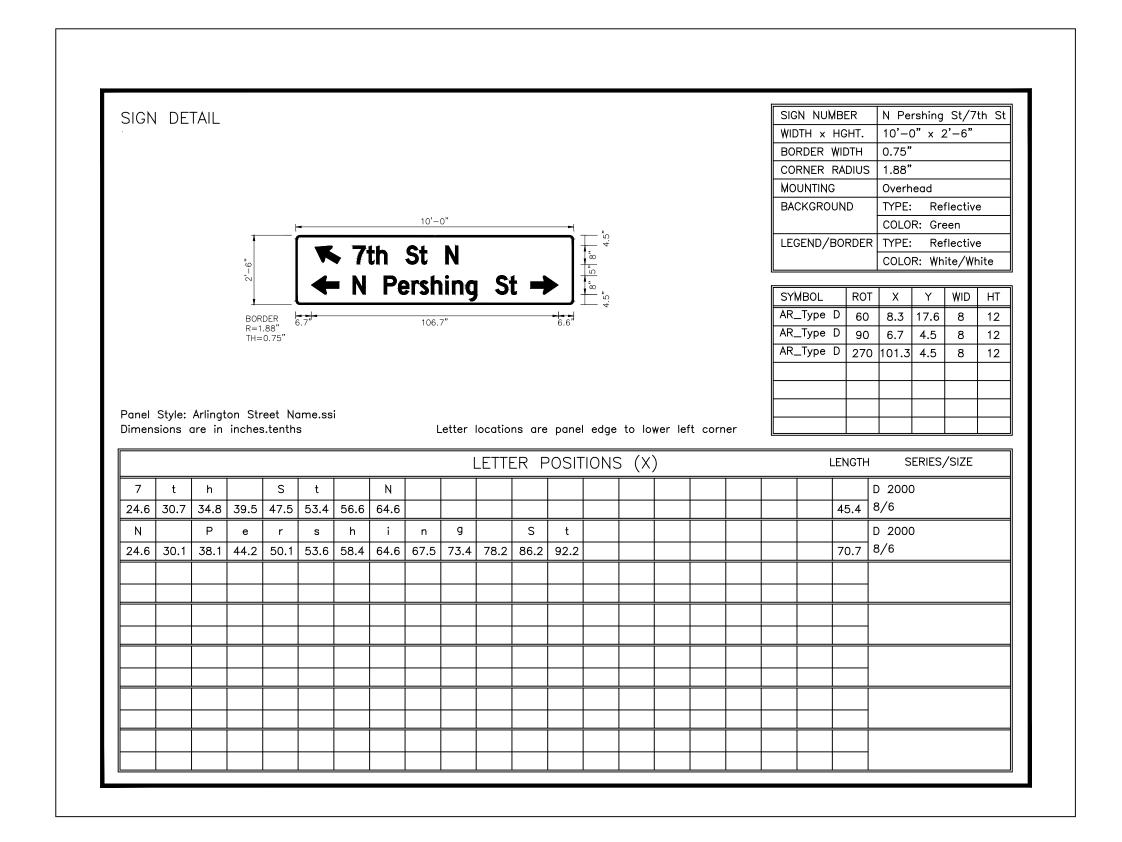
HOR. N/A VERT. N/A

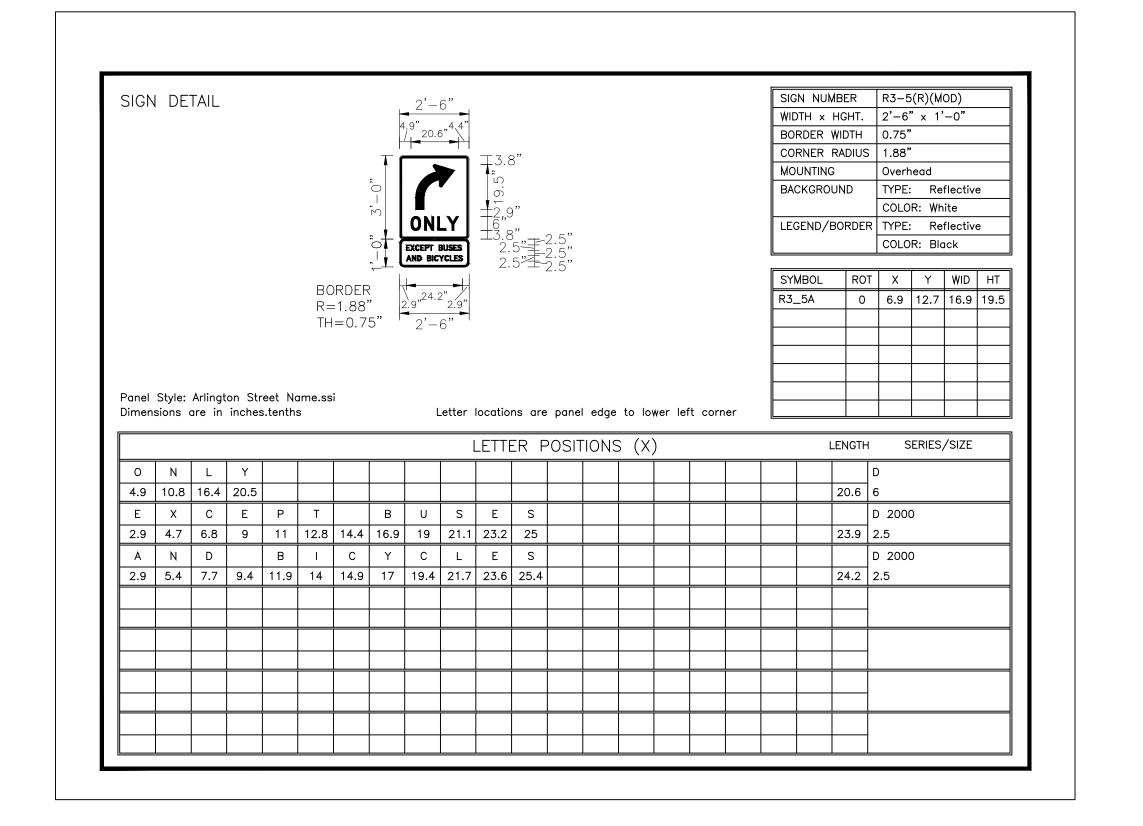
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Traffic Signal Design (TR08)

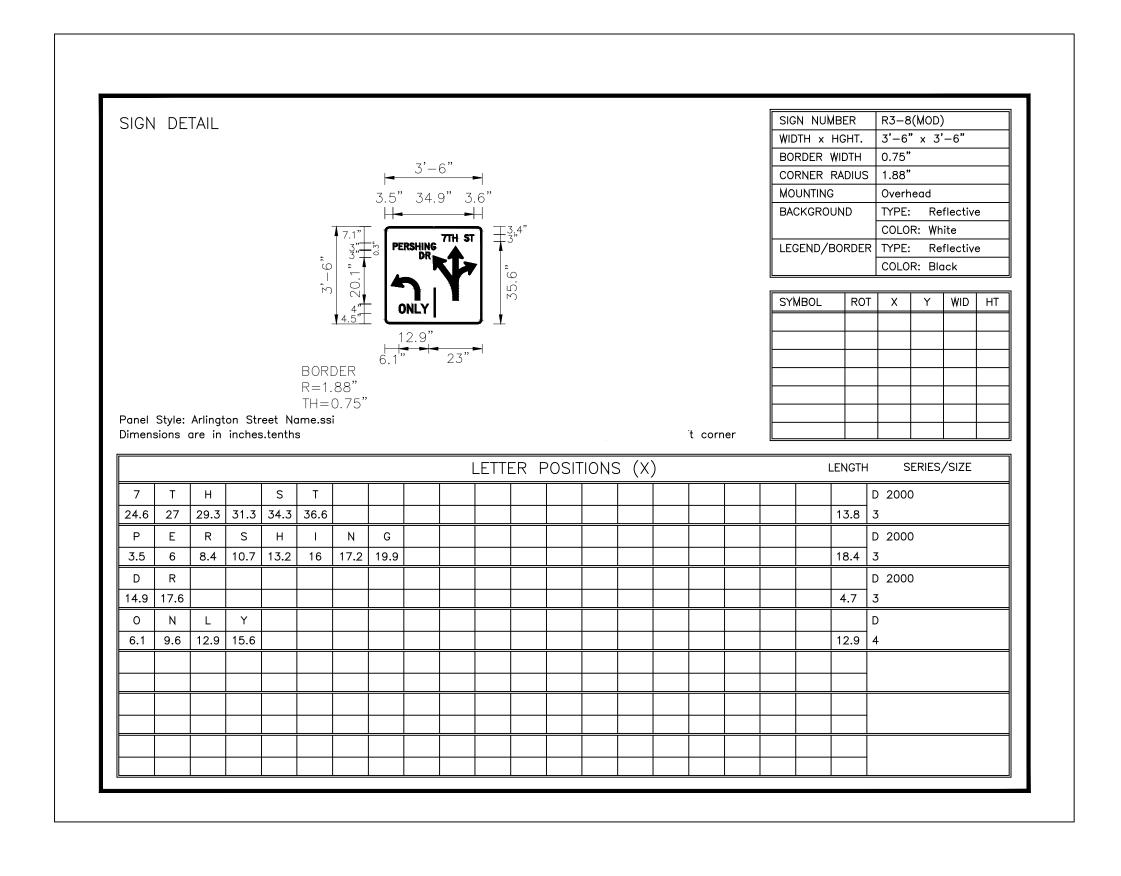


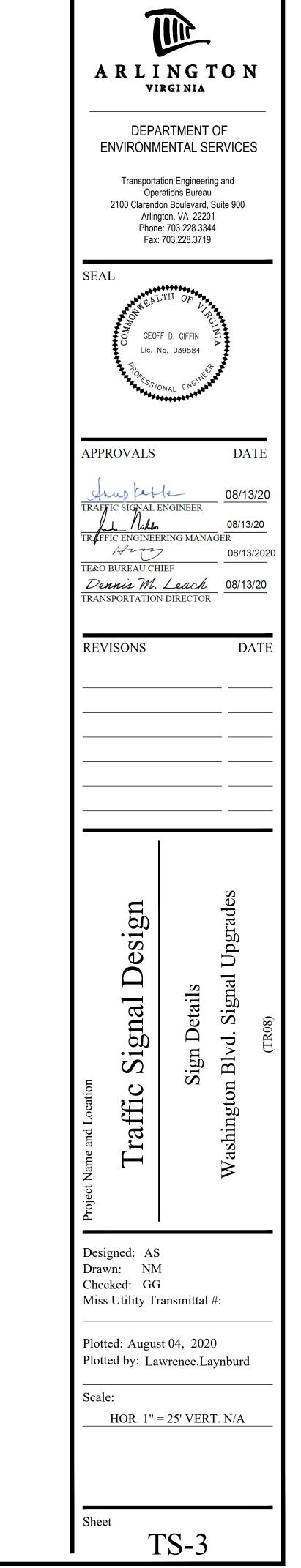


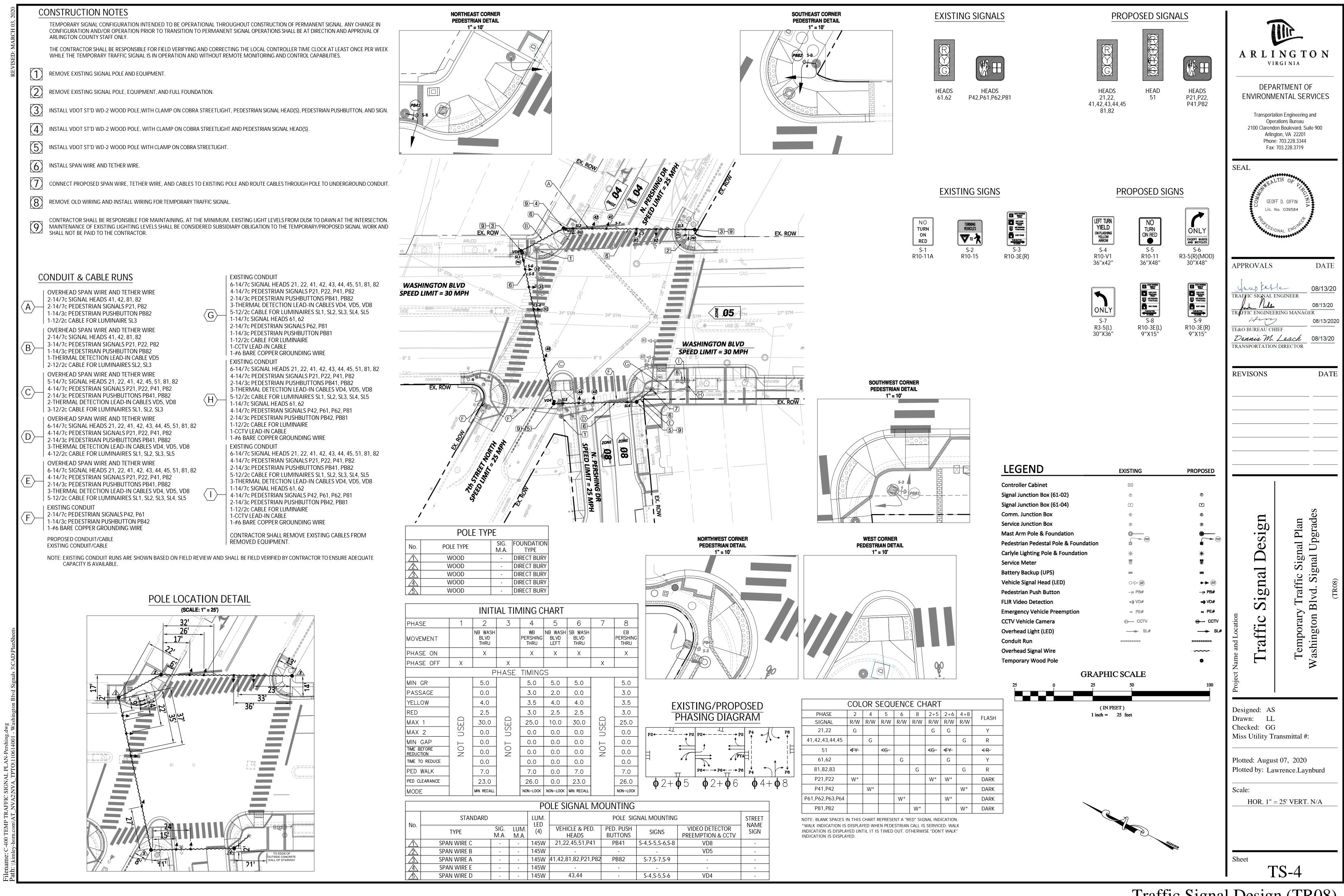


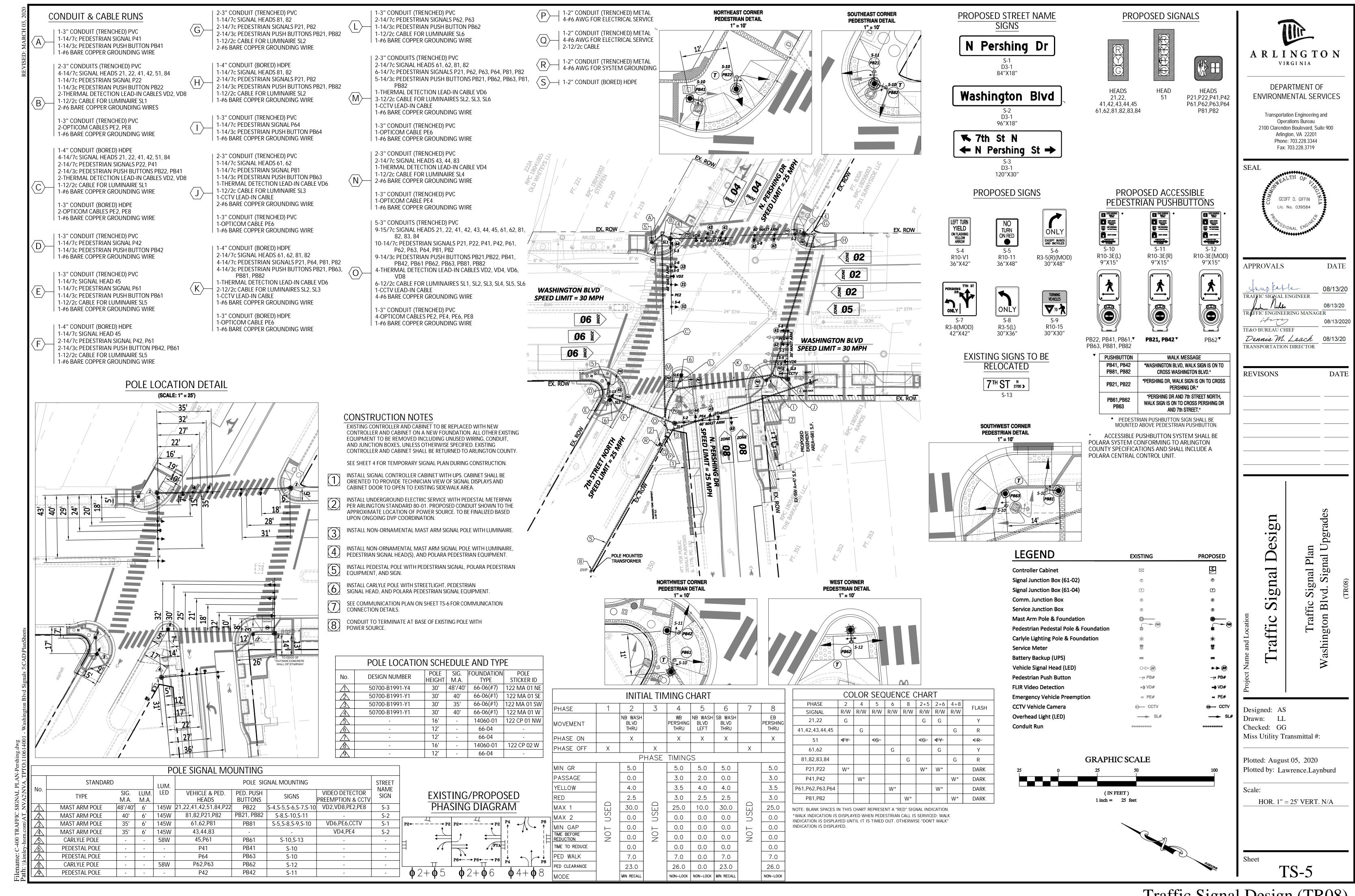


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	25' VERT N/A
Miss Utility Transmittal #: Plotted: August 04, 2020 Plotted by: Lawrence.Laynburd Scale:	L. LICI.IVA
Miss Utility Transmittal #: Plotted: August 04, 2020 Plotted by: Lawrence.Laynburd	
Designed: AS Drawn: NM Checked: GG	





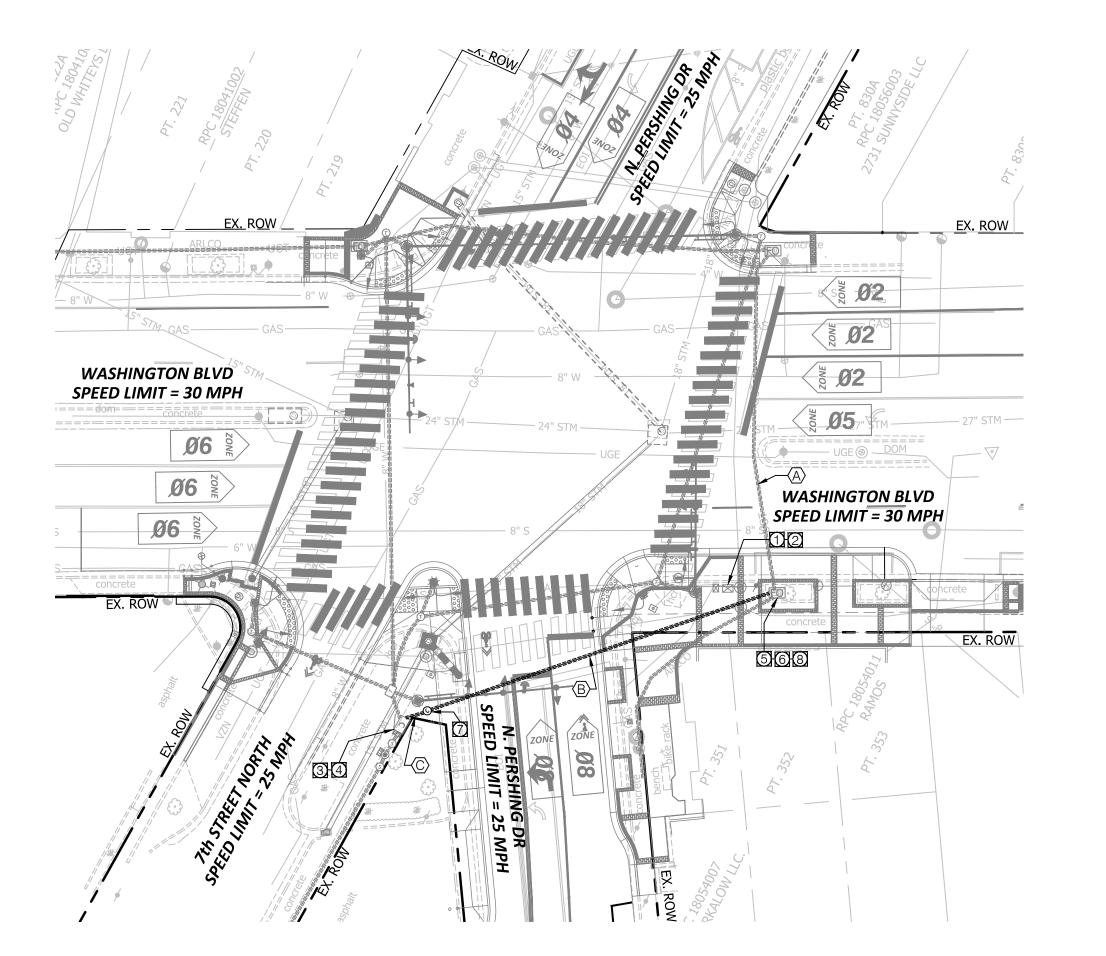




- 1. CONTRACTOR SHALL SUBMIT SPLICE ENCLOSURES FOR ENGINEER APPROVAL.
- CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CUTTING OR DISCONNECTING ANY FIBER CABLE. CONTRACTOR SHALL NOT PROCEED WITH FIBER CUTTING UNLESS ENGINEER IS ON-SITE.
- CONTRACTOR SHALL RE-SPLICE ALL FIBERS TO LIKE COLORED FIBERS AND SHALL MATCH LIKE COLORED BUFFER TUBES WITH LIKE COLORED BUFFER TUBES.
- 4. CONTRACTOR SHALL PERFORM BI-DIRECTIONAL OTDR TESTING ON ALL OF THE 144 FIBER OPTIC CABLES AND THE 12 FIBER CABLE FROM THEIR TERMINATION POINTS. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO GAIN ACCESS TO THE NEAREST FIBER TERMINATION POINTS FOR THE ITS AND DTS 144 FIBER OPTIC CABLES TO PERFORM TESTING.
- 5. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH BI-DIRECTIONAL OTDR TEST RESULTS IN PDF FORMAT FOR APPROVAL. NO WORK SHALL BE ACCEPTED IF THE FOLLOWING REQUIREMENTS ARE NOT MET: - EACH FUSION SPLICE LOSS DOES NOT EXCEED 0.05 DB, BI-DIRECTIONALLY AVERAGED
 - CABLE ATTENUATION MAY NOT EXCEED 0.30 DB/KM AT 1550 NM AND 0.40 DB/KM AT 1310 NM.

IF ANY OF THE ABOVE CONDITIONS ARE NOT MET, THEN TAKE APPROVED CORRECTIVE ACTION, INCLUDING REMAKING SPLICES OR REPLACING COMPLETE SEGMENTS OF FIBER OPTIC CABLE, AS REQUIRED. CORRECTIVE ACTION WILL BE AT NO ADDITIONAL COST TO THE COUNTY.

- 6. THE CONTRACTOR SHALL NOT CUT OR DAMAGE EXISTING FIBER OPTIC CABLES OR FIBER OPTIC SPLICE ENCLOSURES. WHEN HANDLING THE EXISTING FIBER OPTIC CABLES, THE CONTRACTOR SHALL PROTECT THE CABLES FROM EXCEEDING THE MINIMUM BEND RADIUS OF 14 INCHES.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIR AND COSTS ASSOCIATED WITH DAMAGED FIBER OPTIC CABLES OR SPLICE ENCLOSURES DUE TO CONSTRUCTION ACTIVITIES.
- 8. ALL CABLING AND SPLICE ENCLOSURES IN JUNCTION BOXES SHALL BE NEATLY ARRANGED.



CONSTRUCTION NOTES

- CONTRACTOR SHALL REMOVE ALL COMMUNICATION EQUIPMENT TO INCLUDE: 12 FIBER PATCH PANEL AND FIBER CABLE, CONTRACTOR SHALL REMOVE ALL COMMUNICATION EQUIPMENT TO INCLUDE: 12 FIBER PATCH PANEL AND FIBER CABLE, ETHERNET SWITCH AND JUMPER CABLES FROM EXISTING CONTROLLER CABINET. 12 FIBER PATCH PANEL AND FIBER CABLE TO BE DISCARDED. ETHERNET SWITCH AND JUMPER CABLES SHALL BE RELOCATED TO PROPOSED CONTROLLER CABINET.
- EXISTING CONTROLLER LOCATION
- PROPOSED CONTROLLER LOCATION
- CONTRACTOR SHALL INSTALL RELOCATED ETHERNET SWITCH AND JUMPER CABLES IN PROPOSED CONTROLLER CABINET.

 CONTRACTOR SHALL ALSO INSTALL NEW PRE-TERMINATED 12 FIBER PATCH PANEL WITH SUFFICIENT LENGTH OF SPUR FIBER CONTRACTOR SHALL INSTALL RELOCATED ETHERNET SWITCH AND JUMPER CABLES IN PROPOSED CONTROLLER CABINET. CABLE TO REACH EXISTING SPLICE ENCLOSURE AT LOCATION A. PRE-TERMINATED PATCH PANEL TO BE INSTALLED VERTICALLY IN CONTROLLER CABINET. INSTALL SPUR FIBER CABLE IN PROPOSED CONDUIT.
- WITHIN EXISTING FIBER SPLICE ENCLOSURE, DISCONNECT EXISTING SPUR FIBER CABLE. INSTALL NEW SPUR FIBER CABLE FROM PROPOSED CONTROLLER CABINET TO EXISTING SPLICE ENCLOSURE, AND CONNECT TO THE SAME FIBERS CONNECTED TO ORIGINAL SPUR FIBER CABLE. CONTRACTOR SHALL PROVIDE 50' OF COILED SPUR FIBER CABLE IN JUNCTION BOX.
- RE-ENTER EXISTING JUNCTION BOX WITH NEW CONDUIT.
- INSTALL JUNCTION BOX (61-02) WITH COUNTY APPROVED LABELING ON JUNCTION BOX LID
- B LOCATION A

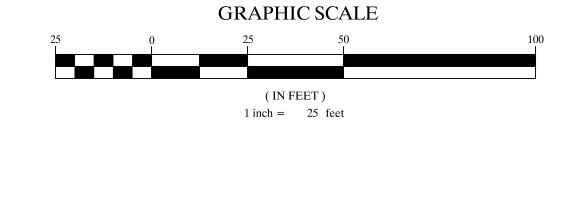
CONDUIT & CABLE

| 4-2" CONDUIT (EXISTING) 2-144 FIBER CABLES (EXISTING)

| 1-2" CONDUIT (BORED) HDPE (NEW) 1-12 FIBER CABLE (NEW)

| 1-2" CONDUIT PVC (NEW) 1-12 FIBER CABLE (NEW)

LEGEND	EXISTING	PROPOSED
Controller Cabinet		
Signal Junction Box (61-02)	Ō	Ø
Signal Junction Box (61-04)	T	T
Comm. Junction Box (61-02)	©	Ø
Comm. Junction Box (61-04)	FO	FO
Conduit Run		========





DEPARTMENT OF **ENVIRONMENTAL SERVICES**

Transportation Engineering and Operations Bureau 2100 Clarendon Boulevard, Suite 900 Arlington, VA 22201 Phone: 703.228.3344 Fax: 703.228.3719

SEAL



APPROVALS	DATE
TRAFFIC SIGNAL ENGINEER	08/13/20
_ lade_ Nichbo	08/13/20
TRAFFIC ENGINEERING MANAG	ER
Hory	08/13/2020
TE&O BUREAU CHIEF	
Dennis M. Leach	08/13/20
TRANSPORTATION DIRECTOR	
	TRAFFIC SIGNAL ENGINEER Likko TRAFFIC ENGINEERING MANAG TE&O BUREAU CHIEF Dennis M. Leach

REVISONS	DATE

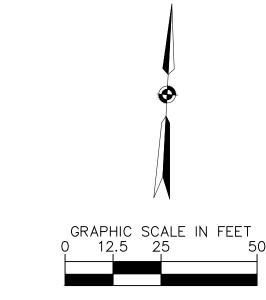
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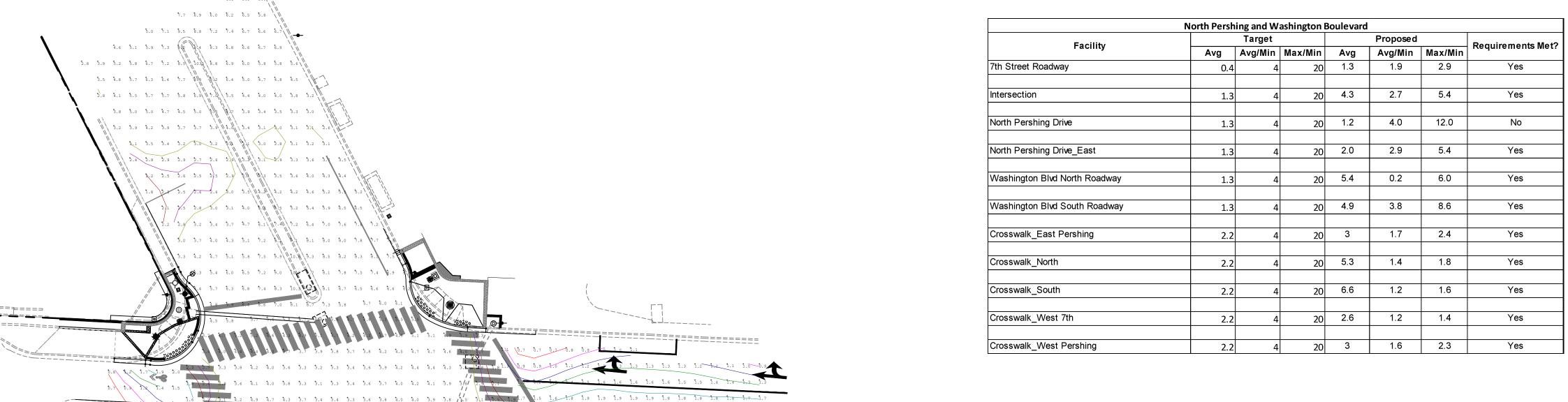
Designed: AS							
Drawn: LL							
Checked: GG							
Miss Utility Transmittal #:							
Plotted: August 04, 2020							

HOR. 1'' = 25' VERT. N/A

TS-6

Sheet





PHOTOMETRIC LEGEND

VALUE (FC)	COLOR	VALUE (FC)	COLOR	
0.2		1.2		
0.3		1.4		
0.4		1.8		
0.6		2.2		
0.8		2.6		
1.0		3.0		

