General Notes:

[illegible]

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, 2020 VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS, 2016 VDOT ROAD AND BRIDGE STANDARDS, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 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." IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE 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 SEQUENCE INSTALLATION OF NEW MAST ARM SIGNAL POLE TO MINIMIZE DOWNTIME. CONTRACTOR IS REQUIRED TO COORDINATE WITH POLICE TO OBTAIN TRAFFIC CONTROL ASSISTANCE DURING ANY SIGNAL OUTAGE.
17. EXISTING OR PROPOSED SIGNAL CONDUIT MAY NEED TO BE OFFSET TO ACCOMMODATE PROPOSED STORM PIPE INSTALLATION OR OTHER PROPOSED UTILITY INSTALLATIONS. REFER TO CONDUIT RELOCATION DETAIL ON SHEET D2.1 FOR INSTANCES WHERE SIGNAL CONDUIT NEEDS TO BE OFFSET.

Signal Notes:

[illegible]

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.
3. 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 ORNAMENTAL. SIGNAL LUMINAIRES SHALL BE LED.
6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING POLE FOUNDATION DESIGNS FOR ANY MAST ARM POLES. THE CONTRACTOR SHALL SUBMIT REQUIRED STRUCTURAL DRAWINGS AND CALCULATIONS FOR REVIEW PRIOR TO STARTING FORM WORK FOR THE FOUNDATIONS.

[illegible]

1. NEW CONTROLLER CABINETS SHALL INCLUDE BATTERY BACKUP PER ARLINGTON COUNTY REQUIREMENTS.
2. CONTROLLER SHALL BE INTELIGHT X-3 AND SHALL BE INSTALLED AND SET AS FOLLOWS:
   2.1 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.

[illegible]

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.
4. ALL SIGNAL HEADS SHALL BE INSTALLED WITH RETROREFLECTIVE BACKPLATES PER VDOT STANDARDS AND SPECIFICATIONS.

[illegible]

1. ALL NEW PEDESTRIAN PUSH BUTTON STATIONS SHALL CONFORM TO ARLINGTON COUNTY'S SPECIFICATIONS FOR ACCESSIBLE SIGNAL DESIGN AND SHALL USE POLARA VIBRO-TACTILE/AUDIO PUSH BUTTON ASSEMBLIES UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL PROVIDE EXTENDER BRACKETS IF NEEDED TO MAKE PUSHBUTTONS ACCESSIBLE BY WHEELCHAIR. THE PUSHBUTTON ASSEMBLY SHALL CONTAIN A MOUNTING BRACKET TO ALLOW THE R10-3E SIGN TO BE MOUNTED DIRECTLY TO THE PUSHBUTTON.
2. NEW OVERHEAD VIDEO DETECTION 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. EVP SHALL INCLUDE CONFIRMATION LIGHTS.

[illegible]

1. ALL JUNCTION BOXES SHALL HAVE THE WORDS "ARLINGTON COUNTY TRANSPORTATION" CAST IN THE LID. ALL JUNCTION BOXES SHALL BE INSTALLED PER STANDARDS 61-02, 61-03, AND 61-04.
2. 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.

[illegible]

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.

[illegible]

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. ANY REQUIRED RESTORATION RESULTING FROM THE REMOVAL OF EXISTING SIGNAL INFRASTRUCTURE SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMEDY AND SHALL BE INCIDENTAL TO THE WORK.

[illegible]

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 (TIITECH.COM PART # WMS1BF12RLCCxxxF, WHERE xxx = 3-DIGIT LENGTH IN FEET) 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.

[illegible]

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.

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

Kimley»Horn
Kimley-Horn and Associates, Inc.

11400 Commerce Park Drive, Suite 400
Reston Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal

COMMONWEALTH OF VIRGINIA
EDWARD J. DELIO
Lic. No. 0402054356
09/21/2022
PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: ATS
Drawn: PNH
Checked: EJD
Miss Utility Transmittal #:

Filename: 010073-D-TRAF-NOTES.dwg
Path: K:\NVA_RDWY\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment D\7.5.2 - 100% Design\PlanSheets
Plotted: September 21, 2022
Plotted by: Grant.Jacob

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TRAFFIC SIGNAL PLAN GENERAL NOTES
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

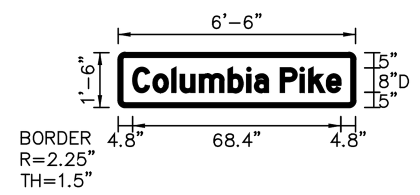
SCALE:	AS SHOWN	SHEET:	D17.1 of D17.8

ARLINGTON
VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

3/7/2023
APPROVAL DATE

SIGN DETAIL
1:50



SIGN NUMBER	Columbia
WIDTH x HGHT.	6'-6" x 1'-6"
BORDER WIDTH	1.5"
CORNER RADIUS	2.25"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

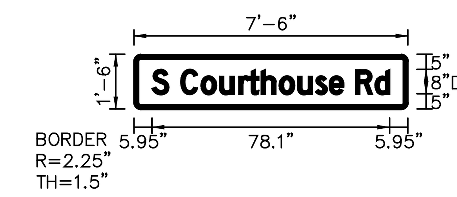
Panel Style: N/A
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

C	o	l	u	m	b	i	a		P	i	k	e	LENGTH	SERIES/SIZE
4.8	11.5	17.7	20.5	26.8	36.2	42.3	44.8	49.4	53.4	59.8	62.7	68.5	68.4	D 2000 8/6

SIGN DETAIL
1:50



SIGN NUMBER	Courthouse
WIDTH x HGHT.	7'-6" x 1'-6"
BORDER WIDTH	1.5"
CORNER RADIUS	2.25"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

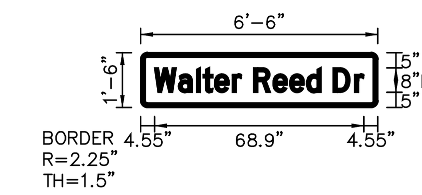
Panel Style: N/A
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

S		C	o	u	r	t	h	o	u	s	e		R	d	LENGTH	SERIES/SIZE
6	11.4	15.4	22.1	28.2	34.5	37.8	41.9	47.8	53.9	59.7	64.2	68.9	72.9	79.2	78.1	D 2000 8/6

SIGN DETAIL
1:50



SIGN NUMBER	Walter Reed
WIDTH x HGHT.	6'-6" x 1'-6"
BORDER WIDTH	1.5"
CORNER RADIUS	2.25"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

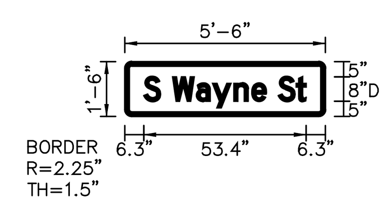
Panel Style: N/A
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

W	a	l	t	e	r		R	e	e	d		D	r	LENGTH	SERIES/SIZE
4.6	12.3	18.4	20.6	24.3	30.2	33.2	37.2	43.5	49	54.6	59.4	63.4	70.4	68.9	D 2000 8/6

SIGN DETAIL
1:50



Panel Style: VA Street Name Sign.ssi
M.U.T.C.D.: 2009 Edition

SIGN NUMBER	Wayne
WIDTH x HGHT.	5'-6" x 1'-6"
BORDER WIDTH	1.5"
CORNER RADIUS	2.25"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

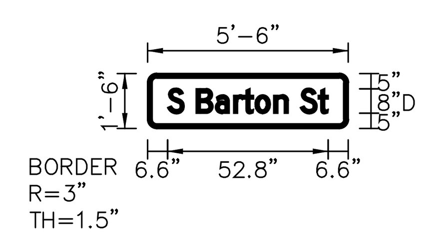
Panel Style: N/A
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

S		W	a	y	n	e		S	t	LENGTH	SERIES/SIZE
6.3	11.8	15.8	23.5	29	35.9	41.8	46.6	50.6	56.5	53.4	D 2000 8/6

SIGN DETAIL
1:50



SIGN NUMBER	Barton
WIDTH x HGHT.	5'-6" x 1'-6"
BORDER WIDTH	1.5"
CORNER RADIUS	2.25"
MOUNTING	Overhead
BACKGROUND	TYPE: Reflective
	COLOR: Green
LEGEND/BORDER	TYPE: Reflective
	COLOR: White/White

SYMBOL	ROT	X	Y	WID	HT

Panel Style: N/A
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

S		B	a	r	t	o	n		S	t	LENGTH	SERIES/SIZE
6.6	12	16	22.3	28.4	31.6	35.4	41.6	46.3	50.3	56.2	52.8	D 2000 8/6

ARLINGTON
VIRGINIA

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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Kimley»Horn
Kimley-Horn
and Associates, Inc.

11400 Commerce Park Drive, Suite 400
Reston Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal

COMMONWEALTH OF VIRGINIA
EDWARD J. DELIO
Lic. No. 0402054356
09/21/2022
PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: ATS
Drawn: PNH
Checked: EJD
Miss Utility Transmittal #:

Filename: 010073-D-TRAF-SIGN.dwg
Path: K:\NVA_RDWY\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment D\7.5.2 - 100% Design\PlanSheets
Plotted: September 21, 2022
Plotted by: Grant.Jacob

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TRAFFIC SIGNAL PLAN SIGN DETAILS
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE: AS SHOWN | SHEET: D17.2 of D17.8

ARLINGTON
VIRGINIA
DEPARTMENT OF
ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

3/7/2023
APPROVAL DATE

CONDUIT AND CABLE DESCRIPTIONS

1. **1-3" CONDUIT PVC**
   1-14/3C FOR PED PUSH BUTTON P82
   1-14/7C FOR PED SIGNAL HEAD P82
   1-#6 AWG (EGC)

2. **1-3" CONDUIT PVC**
   1-14/3C FOR PED PUSH BUTTON P21
   1-14/7C FOR PED SIGNAL HEAD P21
   2-14/7C FOR SIGNAL HEADS 21, 22, 51
   1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
   1-12/2C FOR LUMINAIRE
   1-#6 AWG (EGC)

   1-2" CONDUIT PVC
   1-PREEMPTION CABLE
   1-#6 AWG (EGC)

3. **1-4" CONDUIT (BORED) HDPE**
   2-14/3C FOR PED PUSH BUTTONS P21, P82
   2-14/7C FOR PED SIGNAL HEADS P21, P82
   2-14/7C FOR SIGNAL HEADS 21, 22, 51
   1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
   1-12/2C FOR LUMINAIRE
   1-#6 AWG (EGC)

   1-2" CONDUIT (BORED) HDPE
   1-PREEMPTION CABLE
   1-#6 AWG (EGC)

4. **1-3" CONDUIT PVC**
   1-14/3C FOR PED PUSHBUTTON P22
   1-14/7C FOR PED SIGNAL HEAD P22
   1-14/7C FOR SIGNAL HEADS 41, 42
   1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
   1-12/2C FOR LUMINAIRE
   1-#6 AWG (EGC)

   1-2" CONDUIT PVC
   1-PREEMPTION CABLE
   1-#6 AWG (EGC)

5. **1-3" CONDUIT PVC**
   1-14/3C FOR PED PUSH BUTTON P41
   1-14/7C FOR PED SIGNAL HEAD P41
   1-#6 AWG (EGC)

6. **1-4" CONDUIT (BORED) HDPE**
   4-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P82
   4-14/7C FOR PED SIGNAL HEADS P21, P22, P41, P82
   3-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 51
   2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
   2-12/2C FOR LUMINAIRES
   1-#6 AWG (EGC)

   1-2" CONDUIT (BORED) HDPE
   2-PREEMPTION CABLES
   1-#6 AWG (EGC)

7. **1-3" CONDUIT PVC**
   1-14/3C FOR PED PUSH BUTTON P81
   1-14/7C FOR PED SIGNAL HEAD P81
   1-#6 AWG (EGC)

8. **1-3" CONDUIT PVC**
   1-14/3C FOR PED PUSHBUTTON P62
   1-14/7C FOR PED SIGNAL HEAD P62
   1-14/7C FOR SIGNAL HEADS 81, 82
   1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
   1-12/2C FOR LUMINAIRE
   1-#6 AWG (EGC)

   1-2" CONDUIT PVC
   1-PREEMPTION CABLE
   1-#6 AWG (EGC)

9. **1-4" CONDUIT (BORED) HDPE**
   2-14/3C FOR PED PUSH BUTTONS P62, P81
   2-14/7C FOR PED SIGNAL HEADS P62, P81
   1-14/7C FOR SIGNAL HEADS 81, 82
   1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
   1-12/2C FOR LUMINAIRE
   1-#6 AWG (EGC)

   1-2" CONDUIT (BORED) HDPE
   1-PREEMPTION CABLE
   1-#6 AWG (EGC)

10. **1-3" CONDUIT PVC**
    1-14/3C FOR PED PUSH BUTTON P61
    1-14/7C FOR PED SIGNAL HEADS P61
    1-14/7C FOR SIGNAL HEADS 61, 62
    1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
    1-CCTV LEAD IN CABLE
    1-12/2C FOR LUMINAIRE
    1-#6 AWG (EGC)

    1-2" CONDUIT PVC
    1-PREEMPTION CABLE
    1-#6 AWG (EGC)

11. **1-3" CONDUIT PVC**
    1-14/3C FOR PED PUSH BUTTON P42
    1-14/7C FOR PED SIGNAL HEAD P42
    1-#6 AWG (EGC)

12. **3-3" CONDUITS PVC**
    8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
    8-14/7C FOR PED SIGNAL HEADS P21, P22, P41, P42, P61, P62, P81, P82
    5-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 51, 61, 62, 81, 82
    4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
    1-CCTV LEAD IN CABLE
    3-#6 AWG (EGC)

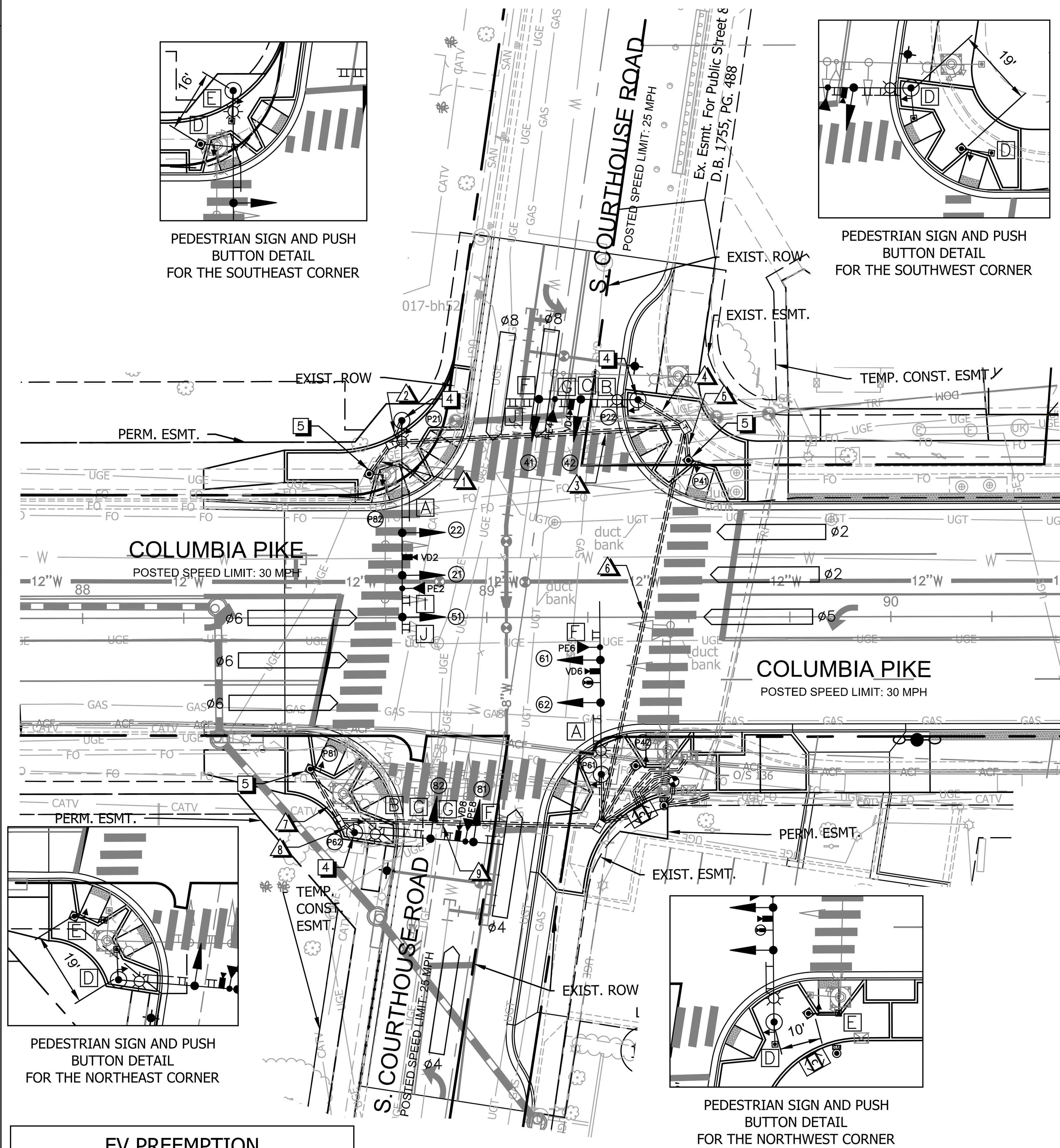
    1-3" CONDUIT PVC
    4-PREEMPTION CABLES
    1-#6 AWG (EGC)

13. **1-2" CONDUIT METAL**
    2-12/2C CABLES
    4-#6 AWG FOR ELECTRICAL SERVICE

14. **1-3" CONDUIT PVC**
    4-12/2C FOR LUMINAIRES
    1-#6 AWG (EGC)

15. **1-2" CONDUIT METAL FOR ELECTRICAL SERVICE**
    4-#6 AWG FOR ELECTRICAL SERVICE

LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CABLE/CONDUIT TO BE INSTALLED
EGC - ELECTRICAL GROUNDING CONDUCTOR
HDPE - HIGH DENSITY POLYETHYLENE CONDUIT



PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTHEAST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE SOUTHWEST CORNER

PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTHEAST CORNER

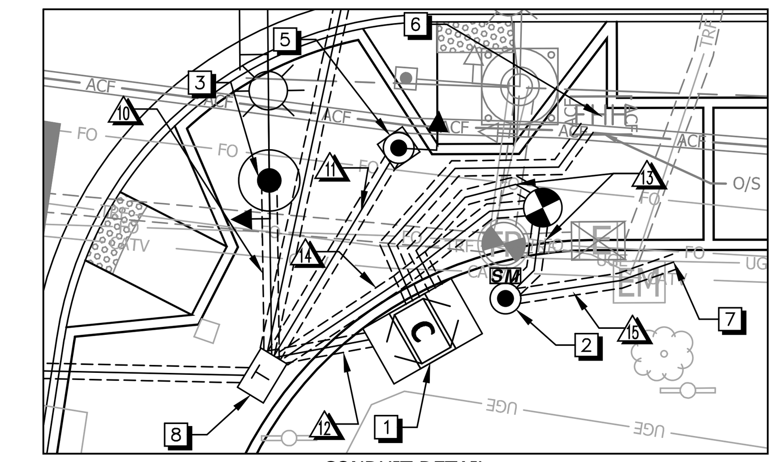
PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTHWEST CORNER

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED WIRING, CONDUIT, AND JUNCTION BOXES UNLESS OTHERWISE SPECIFIED. EXISTING CONTROLLER AND CABINET SHALL BE RETURNED TO ARLINGTON COUNTY.

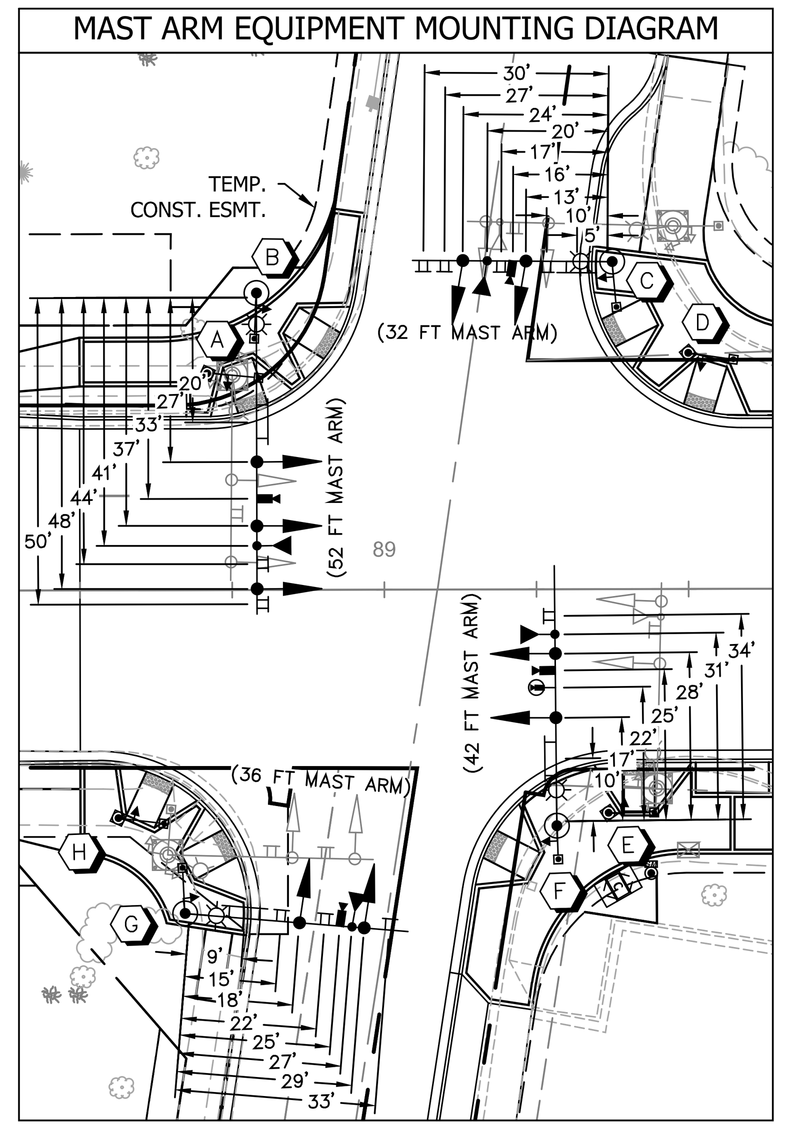
CONTRACTOR SHALL SEQUENCE INSTALLATION OF NEW MAST ARM SIGNAL POLES TO MINIMIZE DOWNTIME.

1. INSTALL SIGNAL CONTROLLER CABINET WITH UPS AND CONCRETE STOOPS.
2. INSTALL UNDERGROUND ELECTRIC SERVICE WITH PEDESTAL METERPAN.
3. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH TEAR DROP LUMINAIRE, VEHICULAR SIGNAL HEADS, PEDESTRIAN SIGNAL HEAD, SIGNS, POLE IDENTIFICATION STICKER, CCTV, AND POLARA PEDESTRIAN EQUIPMENT ATTACHED TO 12" POLARA EZ523 (OR EQUIVALENT) PUSH BUTTON MOUNTING EXTENDER PER COUNTY ST'D 68-01.
4. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH TEAR DROP LUMINAIRE, VEHICULAR SIGNAL HEADS, PEDESTRIAN SIGNAL HEAD, SIGNS, POLE IDENTIFICATION STICKER, AND POLARA PEDESTRIAN EQUIPMENT ATTACHED TO 12" POLARA EZ523 (OR EQUIVALENT) PUSH BUTTON MOUNTING EXTENDER PER COUNTY ST'D 68-01.
5. INSTALL NON-ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL, POLARA PEDESTRIAN EQUIPMENT, POLE IDENTIFICATION STICKER, AND SIGN.
6. SEE COMMUNICATION PLAN ON SHEET D17.4 FOR COMMUNICATION CONNECTION DETAILS.
7. CONNECT PROPOSED POWER AT EXISTING JUNCTION BOX. TO BE FINALIZED UPON COORDINATION WITH DEV.
8. INSTALL 61-04 **TYPE-4** JUNCTION BOX.



CONDUIT DETAIL
FOR THE NORTHWEST CORNER
1" = 10'

MAST ARM EQUIPMENT MOUNTING DIAGRAM



INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT		EB COLUMBIA PIKE		SB S. COURTHOUSE STREET	EB COLUMBIA PIKE LEFT	WB COLUMBIA PIKE		NB S. COURTHOUSE STREET
PHASE ON		X		X	X	X		X
PHASE OFF	X		X				X	
INTERVAL	PHASE TIMINGS							
MIN GR		5.0		5.0	5.0	5.0		5.0
PASSAGE		2.0		2.0	2.0	2.0		2.0
YELLOW		3.8		3.6	3.8	3.8		3.6
RED		2.2		2.8	2.2	2.2		2.8
MAX 1		60.0		25.0	20.0	60.0		25.0
MAX 2		-		-	-	-		-
MIN GAP		-		-	-	-		-
TIME BEFORE REDUCTION		-		-	-	-		-
TIME TO REDUCE		-		-	-	-		-
PED WALK		7.0		7.0	-	7.0		7.0
PED FLASH DON'T WALK		13.0		17.0	-	12.0		18.0
MODE		MAX RECALL		NON-LOCK	NON-LOCK	MAX RECALL		NON-LOCK

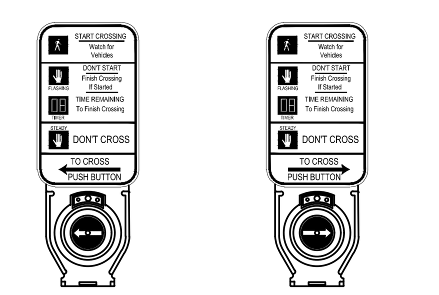
COLOR SEQUENCE CHART

PHASE	2	4	5	6	8	2+5	2+6	4+8	
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
21, 22	G					G	G		Y
41, 42		G						G	R
51			←G			←G	←FY		←FY
61, 62				G			G		Y
81, 82					G			G	R
P21, P22	W*					W*	W*		DARK
P41, P42		W*						W*	DARK
P61, P62				W*			W*		DARK
P81, P82					W*			W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.

*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON



P22, P41, P61, P62, P82
R10-3E(L)
9" X 15"
D

P21, P42, P81
R10-3E(R)
9" X 15"
E

NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22, P61, P62	"COURTHOUSE ROAD, WALK SIGN IS ON TO CROSS COURTHOUSE ROAD."

EV PREEMPTION

FUNCTION	EVP-1	EVP-3
INTERVAL 1 - DWELL GREEN	120	120
INTERVAL 1 - DWELL YELLOW	0.0*	0.0*
INTERVAL 1 - DWELL RED	0.0*	0.0*
INTERVAL 1 - EXIT GREEN	1.0	1.0
INTERVAL 5 - YELLOW	0.0	0.0
INTERVAL 5 - RED	0.0	0.0
DELAY TIME	1.0	1.0
PED CLEAR BEFORE PRE	0.0	0.0
YELLOW CLEAR BEFORE PRE	0.0*	0.0*
RED CLEAR BEFORE PRE	0.0*	0.0*
DWELL MIN	7.0	8.0
ENABLE BACKUP PROTECTION	Y	Y
PED CLEAR THROUGH YELLOW	Y	Y
EXIT PHASE/TYPE	IN STEP	2 + 6

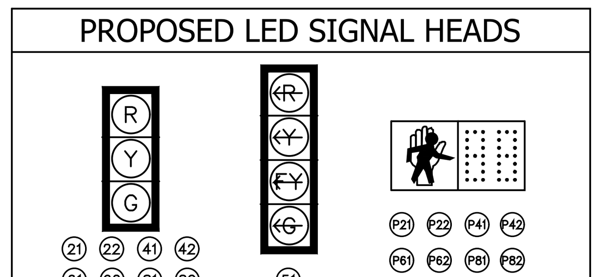
*TIME DEFAULTS TO TIME USED FOR PHASE DURING NORMAL OPERATION

PROPOSED SIGNS

Sign	Code	Size	Label
S Courthouse Rd	D3-1*	90" X 18"	A
Columbia Pike	D3-1*	78" X 18"	B
NO TURN ON RED	R10-11	24" X 30"	C
ONLY	R3-5L	30" X 36"	F
	R3-6R	30" X 36"	G
LEFT TURN YIELD ON FLASHING YELLOW ARROW	R10-V1	30" X 36"	I
TURNING VEHICLES TO	R10-15L	30" X 30"	J

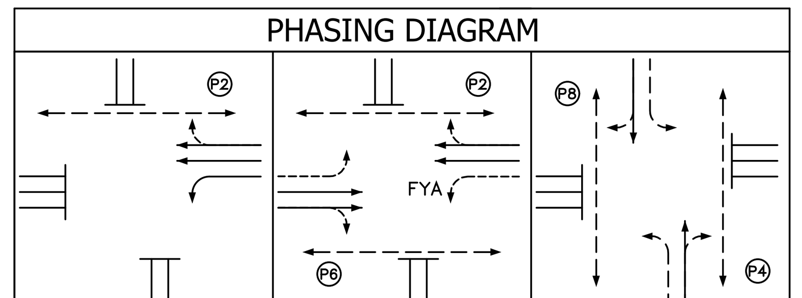
*NOTE: SEE SHEET D17.2 FOR DETAILED STREET NAME SIGN LAYOUT

PROPOSED LED SIGNAL HEADS



ALL SIGNALS SHALL BE LED AND SHALL BE INSTALLED WITH HIGH VISIBILITY SIGNAL BACKPLATES

PHASING DIAGRAM



ø2+ø5 ø2+ø6 ø4 +ø8

GRAPHIC SCALE IN FEET
0 12.5 25 50

LEGEND

EXISTING		PROPOSED	
	RIGHT OF WAY		PERMANENT EASEMENT
	EASEMENT		TEMPORARY CONSTRUCTION EASEMENT
	TRAFFIC SIGNAL CABINET		TRAFFIC SIGNAL CABINET
	EXTRA LARGE JUNCTION BOX		24"X36" JUNCTION BOX (61-04, TYPE-3)
	LARGE JUNCTION BOX		LARGE JUNCTION BOX (61-02)
	SMALL JUNCTION BOX		SMALL JUNCTION BOX (14040-01)
	TRAFFIC SIGNAL HEAD		TRAFFIC SIGNAL HEAD
	PEDESTRIAN SIGNAL HEAD		PEDESTRIAN SIGNAL HEAD
	SIGNAL PHASING		SIGNAL PHASING
	TRAFFIC SIGNAL LUMINAIRE		TRAFFIC SIGNAL LUMINAIRE
	SIGNAL POLE AND MAST ARM		SIGNAL POLE AND MAST ARM
	PEDESTAL POLE		PEDESTAL POLE
	PEDESTRIAN PUSH BUTTON		PEDESTRIAN PUSH BUTTON
	PREEMPTION DEVICE		PREEMPTION DEVICE
	VIDEO DETECTION CAMERA		VIDEO DETECTION CAMERA
	VIDEO DETECTION ZONE		VIDEO DETECTION ZONE
	CLOSED CIRCUIT TELEVISION VIDEO		CLOSED CIRCUIT TELEVISION VIDEO
	SIGN		SIGN
	POWER SERVICE PEDESTAL		POWER SERVICE PEDESTAL
	CONDUIT		CONDUIT
	CONDUIT WITH PROPOSED CABLE		16 FT CARLYLE STREET LIGHT POLE

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD: TYPE	SIG. M.A. ORIENT.	SIG. M.A.	LUM. M.A. ORIENT.	LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING: VEHICLE & PED. HEADS	PED. PUSH BUTTONS	SIGNS	VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	028-PP-01-SE	88+70.96	35.57' LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	D	-	-
B	028-MA-01-SE	88+79.08	48.77' LT	MAST ARM POLE 30'	180°	52'	180°	6' (STANDARD)	130W	21, 22, 51, P21	P21	E, I, J	VD2, PE2	A
C	028-MA-01-SW	89+37.50	53.80' LT	MAST ARM POLE 30'	180°	32'	180°	6' (STANDARD)	130W	41, 42, P22	P22	C, D, F, G, J	VD4, PE4	B
D	028-PP-01-SW	89+49.96	38.78' LT	PEDESTAL POLE 12'	-	-	-	-	-	P41	P41	D	-	-
E	028-PP-01-NW	89+36.75	36.76' RT	PEDESTAL POLE 12'	-	-	-	-	-	P42	P42	E	-	-
F	028-MA-01-NW	89+28.24	38.88' RT	MAST ARM POLE 30'	180°	42'	180°	6' (STANDARD)	130W	61, 62, P61	P61	D, F	VD6, PE6, CCTV	A
G	028-MA-01-NE	88+67.13	53.15' RT	MAST ARM POLE 30'	180°	36'	180°	6' (STANDARD)	130W	81, 82, P62	P62	C, D, G, F	VD8, PE8	B
H	028-PP-01-NE	88+56.22	37.44' RT	PEDESTAL POLE 12'	-	-	-	-	-	P81	P81	E	-	-

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

ARLINGTON VIRGINIA
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Fax: 703.228.3606

Kimley»Horn
Kimley-Horn and Associates, Inc.

11400 Commerce Park Drive, Suite 400
Reston Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal
COMMONWEALTH OF VIRGINIA
EDWARD J. DELIO
Lic. No. 0402054356
09/21/2022
PROFESSIONAL ENGINEER

Approvals | Date

Design Team Engineer Supervisor
Construction Management Supervisor
Water, Sewer, Streets Bureau Chief
Transportation Director
Project Manager

Revisions | Date

Designed: ATS
Drawn: PNH
Checked: EJD
Miss Utility Transmittal #:

Filename: 010073-D-TRAF-COURTHOUSE.dwg
Path: K:\NVA_RDWY\110010073 - Columbia Pike Multimodal\Production\Task 7.3 Final Design of Columbia Pike Segments\Segment D\7.5.2 - 100% Design\PlanSheets
Plotted: September 21, 2022
Plotted by: Grant.Jacob

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TRAFFIC SIGNAL PLAN - S. COURTHOUSE RD (TS #028)
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE: HOR. 1" = 25' VERT. N/A | SHEET: D17.3 of D17.8

ARLINGTON VIRGINIA | DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
3/7/2023
APPROVAL DATE

GENERAL NOTES

1. CONTRACTOR SHALL SUBMIT SPLICE ENCLOSURES FOR COUNTY DTS ENGINEER APPROVAL.
2. FIBER RELOCATION, REPAIR, AND ADJUSTMENT MUST BE PERFORMED BY THE COUNTY'S FIBER CONTRACTOR. CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH COUNTY DTS FIBER TEAM AT (703) 228-7726 AND COUNTY DES/TE&O PRIOR TO ANY FIBER RELOCATION. CONTRACTOR SHALL NOTIFY COUNTY DTS ENGINEER TWO WEEKS PRIOR TO CUTTING OR DISCONNECTING ANY FIBER CABLE. NO CUTS SHALL BE MADE WITHOUT DTS APPROVAL. CONTRACTOR SHALL NOT PROCEED WITH FIBER CUTTING UNLESS COUNTY DTS ENGINEER IS ON-SITE.
3. 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 ME:
   - 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.

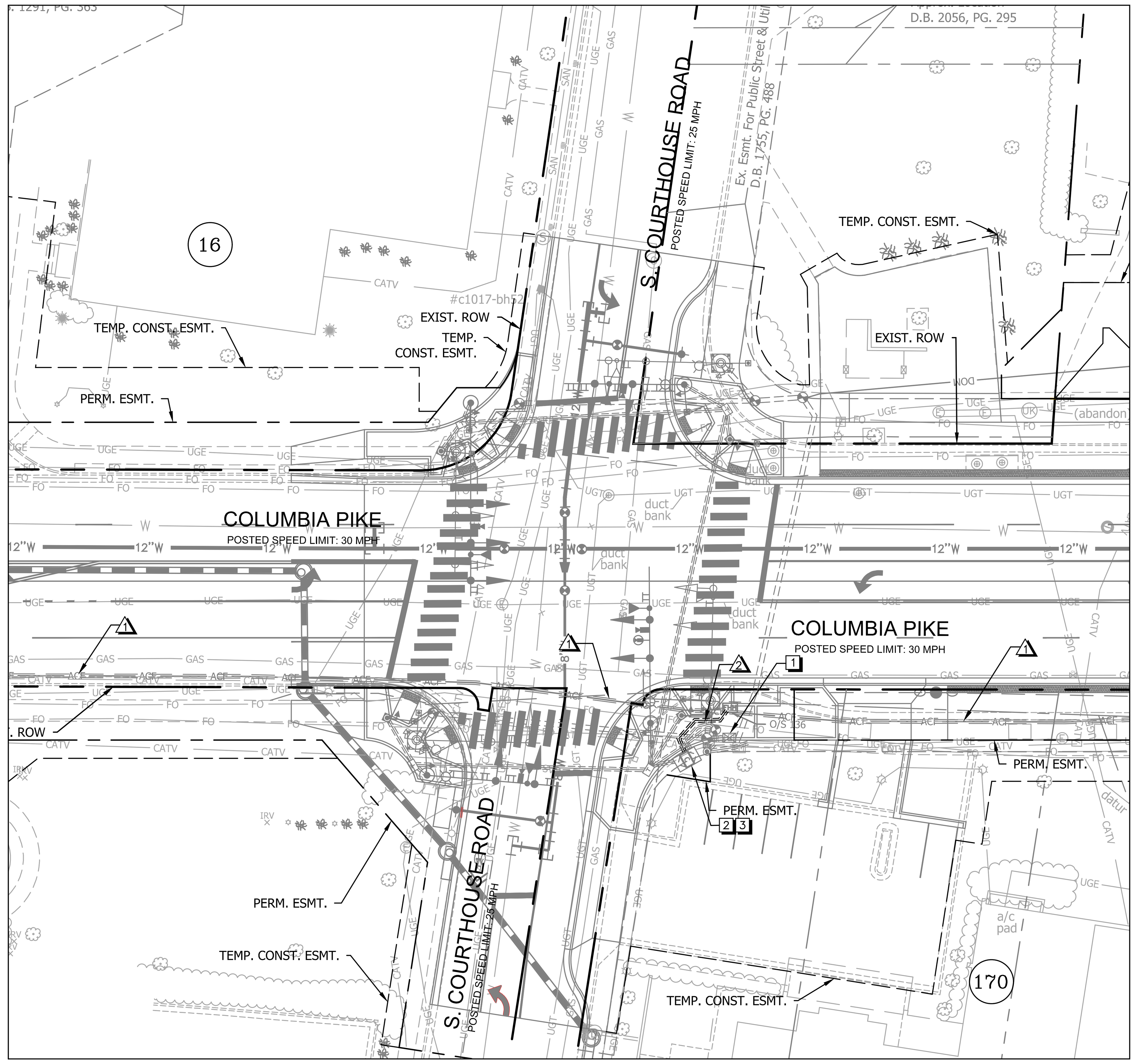
   IF ANY OF THE ABOVE CONDITIONS ARE NOT MET, THEN TAKE APPROVED CORRECTIVE ACTION, INCLUDING REMAKING SPLICES OR REPLACING COMPLETE SEGMENTS OF FIBER OPTIC CABLE, AS REQUIRED. CORRECTIVE ACTION WILL BE AT NO ADDITIONAL COST TO THE COUNTY.
6. THE CONTRACTOR SHALL NOT CUT OR DAMAGE EXISTING FIBER OPTIC 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.
9. IF FACTORY TERMINATED PATCH PANEL IS DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE AT NO COST TO THE COUNTY.

CONDUIT AND CABLE DESCRIPTIONS

1 — 4-2" CONDUIT (EXISTING)
2-144 FIBER CABLES (EXISTING)

2 — **2-2" CONDUITS PVC**
1-12 FIBER CABLE (EXISTING, RELOCATED)

LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CABLE/CONDUIT TO BE INSTALLED



CONSTRUCTION NOTES

1. EXISTING CONTROLLER LOCATION
2. PROPOSED CONTROLLER LOCATION
3. RELOCATE EXISTING ETHERNET SWITCH, PRE-TERMINATED FIBER PATCH PANEL AND JUMPER CABLES FROM EXISTING CONTROLLER CABINET AND INSTALL EQUIPMENT IN PROPOSED CONTROLLER CABINET. CONTRACTOR TO VERIFY THAT EXISTING PRE-TERMINATED PATCH PANEL HAS ADEQUATE TAIL TO REACH FROM PROPOSED LOCATION AND MAINTAIN 25 FT WORKING COIL IN SPLICING HANDHOLE. IF THE LENGTH IS NOT SUFFICIENT, CONTRACTOR SHALL ORDER A NEW FIBER PATCH PANEL.

LEGEND

PROPOSED COMM. CONDUIT
PROPOSED SIGNAL CONDUIT
EXISTING CONDUIT

GRAPHIC SCALE IN FEET
0 12.5 25 50

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Design Team Engineer Supervisor	
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Filename: 010073-D-COMM-COURTHOUSE.dwg
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Plotted: September 21, 2022
Plotted by: Grant.Jacob

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

COMM PLAN - S. COURTHOUSE RD (TS #028)
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE:	HOR. 1" = 25' VERT. N/A	SHEET:	D17.4 of D17.8

ARLINGTON VIRGINIA | DEPARTMENT OF ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

3/7/2023
APPROVAL DATE

CONDUIT AND CABLE DESCRIPTIONS

1
- 1-3" CONDUIT PVC
- 2-14/2C FOR PED PUSHBUTTON P22, P41
- 2-14/7C FOR PED SIGNAL HEAD P22, P41
- 1-#6 AWG (EGC)

2
- 1-3" CONDUIT PVC
- 2-14/3C FOR PED PUSH BUTTONS P21, P82
- 2-14/7C FOR PED SIGNAL HEADS P21, P82
- 2-14/7C FOR SIGNAL HEADS 21, 22, 41, 42
- 2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
- 1-CCTV LEAD IN CABLE
- 1-12/2C FOR LUMINAIRE
- 1-#6 AWG (EGC)

- 1-2" CONDUIT PVC
- 2-PREEMPTION CABLES
- 1-#6 AWG (EGC)

3
- 1-4" CONDUIT (BORED) HDPE
- 4-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P82
- 4-14/7C FOR PED SIGNAL HEADS P21, P22, P41, P82
- 2-14/7C FOR SIGNAL HEADS 21, 22, 41, 42
- 2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
- 1-CCTV LEAD IN CABLE
- 1-12/2C FOR LUMINAIRE
- 1-#6 AWG (EGC)

- 1-2" CONDUIT (BORED) HDPE
- 2-PREEMPTION CABLES
- 1-#6 AWG (EGC)

4
- 1-3" CONDUIT PVC
- 1-14/3C FOR PED PUSH BUTTON P42
- 2-14/7C FOR PED SIGNAL HEADS P42, P61
- 1-#6 AWG (EGC)

5
- 1-3" CONDUIT PVC
- 1-14/3C FOR PED PUSH BUTTON P61
- 1-14/7C FOR SIGNAL HEADS 61, 62
- 1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
- 1-12/2C FOR LUMINAIRE
- 1-#6 AWG (EGC)

- 1-2" CONDUIT PVC
- 1-PREEMPTION CABLE
- 1-#6 AWG (EGC)

6
- 1-4" CONDUIT (BORED) HDPE
- 2-14/3C FOR PED PUSHBUTTONS P42, P61
- 2-14/7C FOR PED SIGNAL HEADS P42, P61
- 1-14/7C FOR SIGNAL HEADS 61, 62
- 1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
- 1-12/2C FOR LUMINAIRE
- 1-#6 AWG (EGC)

- 1-2" CONDUIT (BORED) HDPE
- 1-PREEMPTION CABLE
- 1-#6 AWG (EGC)

7
- 1-3" CONDUIT PVC
- 1-14/3C FOR PED PUSHBUTTON P62
- 1-14/7C FOR SIGNAL HEADS 81, 82
- 1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
- 1-12/2C FOR LUMINAIRE
- 1-#6 AWG (EGC)

8
- 1-3" CONDUIT PVC
- 1-14/3C FOR PED PUSHBUTTON P81
- 2-14/7C FOR PED SIGNAL HEADS P62, P81
- 1-#6 AWG (EGC)

9
- 3-3" CONDUIT PVC
- 8-14/3C FOR PED PUSHBUTTON P21, P22, P41, P42, P61, P62, P81, P82
- 8-14/7C FOR PED SIGNAL HEAD P21, P22, P41, P42, P61, P62, P81, P82
- 4-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62, 81, 82
- 4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
- 1-CCTV LEAD IN CABLE
- 3-#6 AWG (EGC)

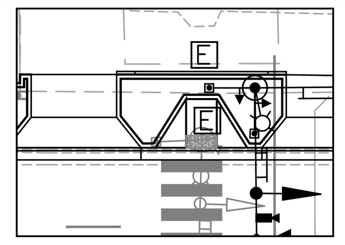
- 1-3" CONDUIT PVC
- 3-PREEMPTION CABLES
- 1-#6 AWG (EGC)

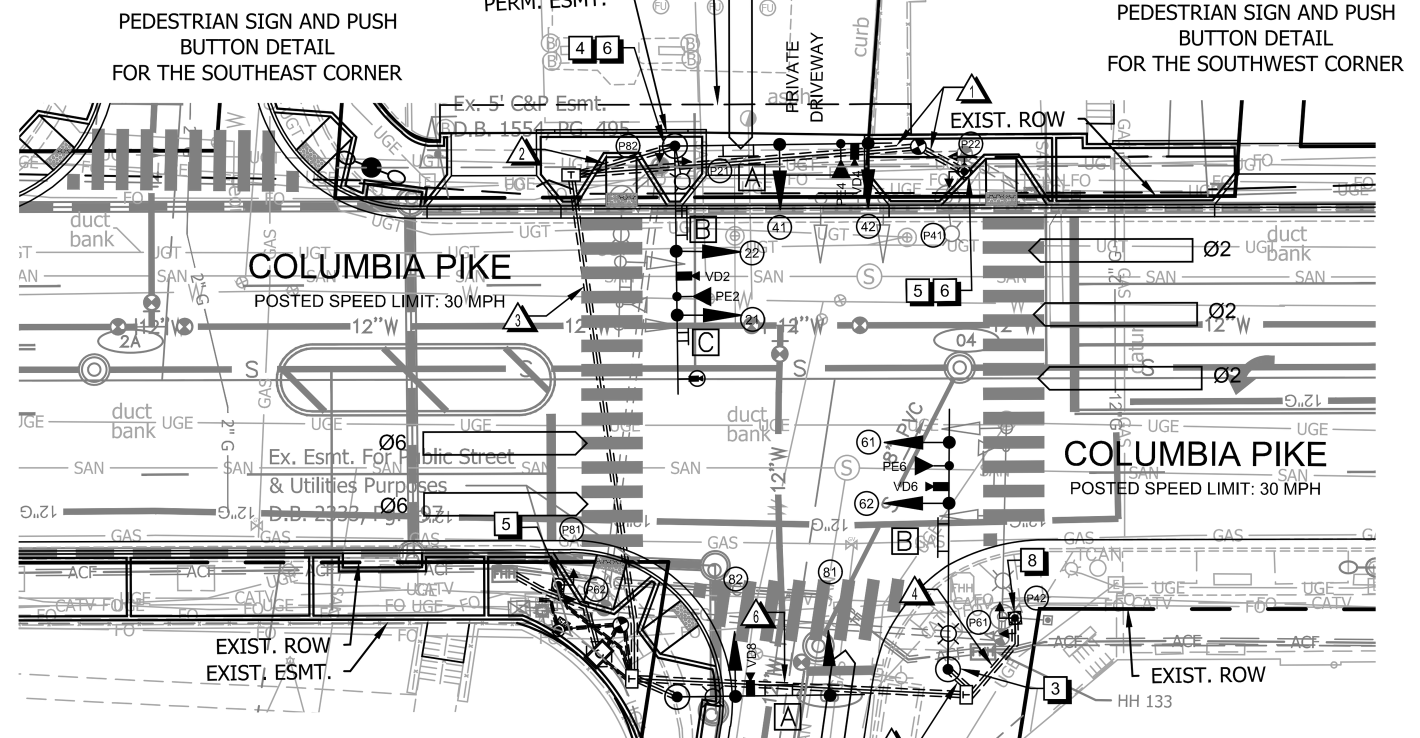
10
- 1-3" CONDUIT PVC
- 3-12/2C FOR LUMINAIRES
- 1-#6 AWG (EGC)

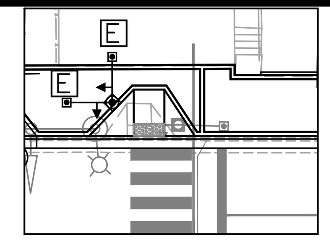
11
- 1-2" CONDUIT METAL FOR ELECTRICAL SERVICE
- 4-#6 AWG FOR ELECTRICAL SERVICE

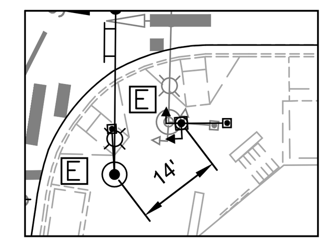
12
- 1-2" CONDUIT METAL
- 4-#6 AWG FOR ELECTRICAL SERVICE
- 2-12/2C CABLES

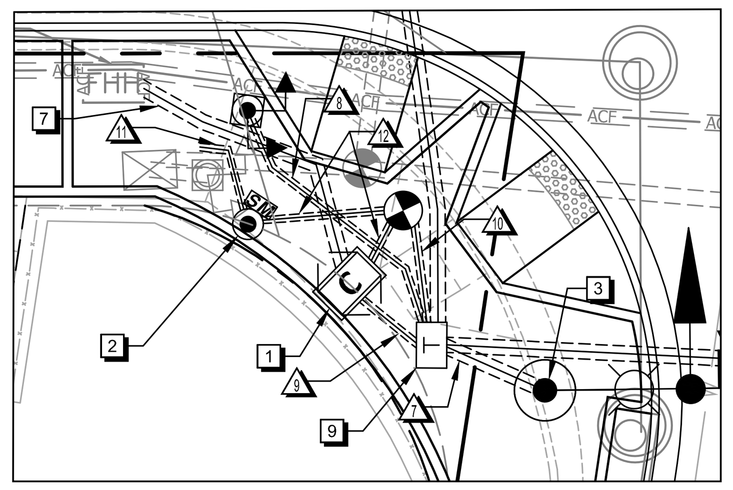
LEGEND: PROPOSED CABLE/CONDUIT TO BE INSTALLED
EGC - ELECTRICAL GROUNDING CONDUCTOR
HDPE - HIGH DENSITY POLYETHYLENE CONDUIT
PVC - POLYVINYL CHLORIDE CONDUIT



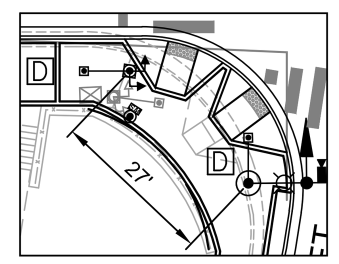








CONDUIT DETAIL
FOR THE NORTHEAST CORNER
SCALE: 1"=10'



PEDESTRIAN SIGN AND PUSH BUTTON DETAIL FOR THE NORTHEAST CORNER

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED WIRING, CONDUIT, AND JUNCTION BOXES UNLESS OTHERWISE SPECIFIED.

CONTRACTOR SHALL SEQUENCE INSTALLATION OF NEW MAST ARM SIGNAL POLES TO MINIMIZE DOWN TIME.

1. INSTALL SIGNAL CONTROLLER CABINET WITH UPS. CONCRETE STOOP TO BE OMITTED, BUT FOUNDATION SHALL BE INSTALLED 2" MIN ABOVE FINISHED GRADE PER ST'D. 66-01.
2. INSTALL UNDERGROUND ELECTRIC SERVICE WITH PEDESTAL METERPAN. PROPOSED CONDUIT SHOWN TO THE APPROXIMATE LOCATION OF POWER SOURCE. TO BE FINALIZED BASED UPON COORDINATION WITH DEV.
3. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH TEAR DROP LUMINAIRE, VEHICULAR SIGNAL HEADS, PEDESTRIAN SIGNAL HEAD, SIGNS, POLE IDENTIFICATION STICKER, AND POLARA PEDESTRIAN EQUIPMENT ATTACHED TO 12" POLARA EZ523 (OR EQUIVALENT) PUSH BUTTON MOUNTING EXTENDER PER COUNTY ST'D. 68-01.
4. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH TEAR DROP LUMINAIRE, VEHICULAR SIGNAL HEADS, PEDESTRIAN SIGNAL HEAD, SIGNS, POLE IDENTIFICATION STICKER, CCTV, AND POLARA PEDESTRIAN EQUIPMENT ATTACHED TO 12" POLARA EZ523 (OR EQUIVALENT) PUSH BUTTON MOUNTING EXTENDER PER COUNTY ST'D. 68-01.
5. INSTALL NON-ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL, POLARA PEDESTRIAN EQUIPMENT, POLE IDENTIFICATION STICKER, AND SIGN.
6. ACCESSIBLE PEDESTRIAN SIGNAL DEVICES TO BE INSTALLED ON THE SAME POLE. AUDIBLE TONE LOCATOR CANNOT BE USED FOR THESE DEVICES FOR THE WALK PHASE. AUDIBLE WALK MESSAGES SHALL BE PROGRAMMED AS NOTED IN THE PEDESTRIAN SIGNAL WALK MESSAGE LEGEND.
7. SEE COMMUNICATION PLAN ON SHEET D17.5.1 FOR COMMUNICATION CONNECTION DETAILS.
8. REMOVE EXISTING SIGNAL POLE AND FOUNDATION AND INSTALL NON-ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL HEAD, POLARA PEDESTRIAN EQUIPMENT, POLE IDENTIFICATION STICKER, AND SIGN.
9. INSTALL 61-04 **TYPE-4** JUNCTION BOX.

INITIAL TIMING CHART

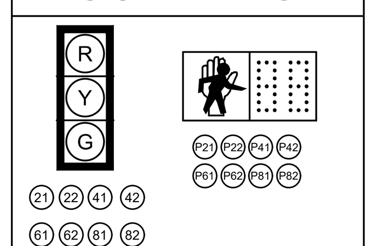
PHASE	1	2	3	4	5	6	7	8
MOVEMENT		EB COLUMBIA PIKE		SB S. WAYNE STREET		WB COLUMBIA PIKE		NB PRIVATE DRIVEWAY
PHASE ON		X		X		X		X
PHASE OFF	X		X		X		X	
INTERVAL	PHASE TIMINGS							
MIN GR		5.0		7.0		5.0		7.0
PASSAGE		0.0		2.0		0.0		2.0
YELLOW		4.2		3.8		4.2		3.8
RED		2.0		1.8		2.0		1.8
MAX 1		60.0		25.0		60.0		25.0
MAX 2		-		-		-		-
MIN GAP		-		-		-		-
TIME BEFORE REDUCTION		-		-		-		-
TIME TO REDUCE		-		-		-		-
PED WALK		7.0		7.0		7.0		-
PED FLASH DON'T WALK		8.0		16.0		11.0		17.0
MODE		MAX RECALL		NON-LOCK		MAX RECALL		NON-LOCK

EV PREEMPTION

FUNCTION	EVP-1	EVP-3
INTERVAL 1 - DWELL GREEN	120	120
INTERVAL 1 - DWELL YELLOW	0.0*	0.0*
INTERVAL 1 - DWELL RED	0.0*	0.0*
INTERVAL 1 - EXIT GREEN	1.0	1.0
INTERVAL 5 - YELLOW	0.0	0.0
INTERVAL 5 - RED	0.0	0.0
DELAY TIME	1.0	1.0
PED CLEAR BEFORE PRE	0.0	0.0
YELLOW CLEAR BEFORE PRE	0.0*	0.0*
RED CLEAR BEFORE PRE	0.0*	0.0*
DWELL MIN	8.0	7.0
ENABLE BACKUP PROTECTION	Y	Y
PED CLEAR THROUGH YELLOW	Y	Y
EXIT PHASE/TYPE	IN STEP	2 + 6

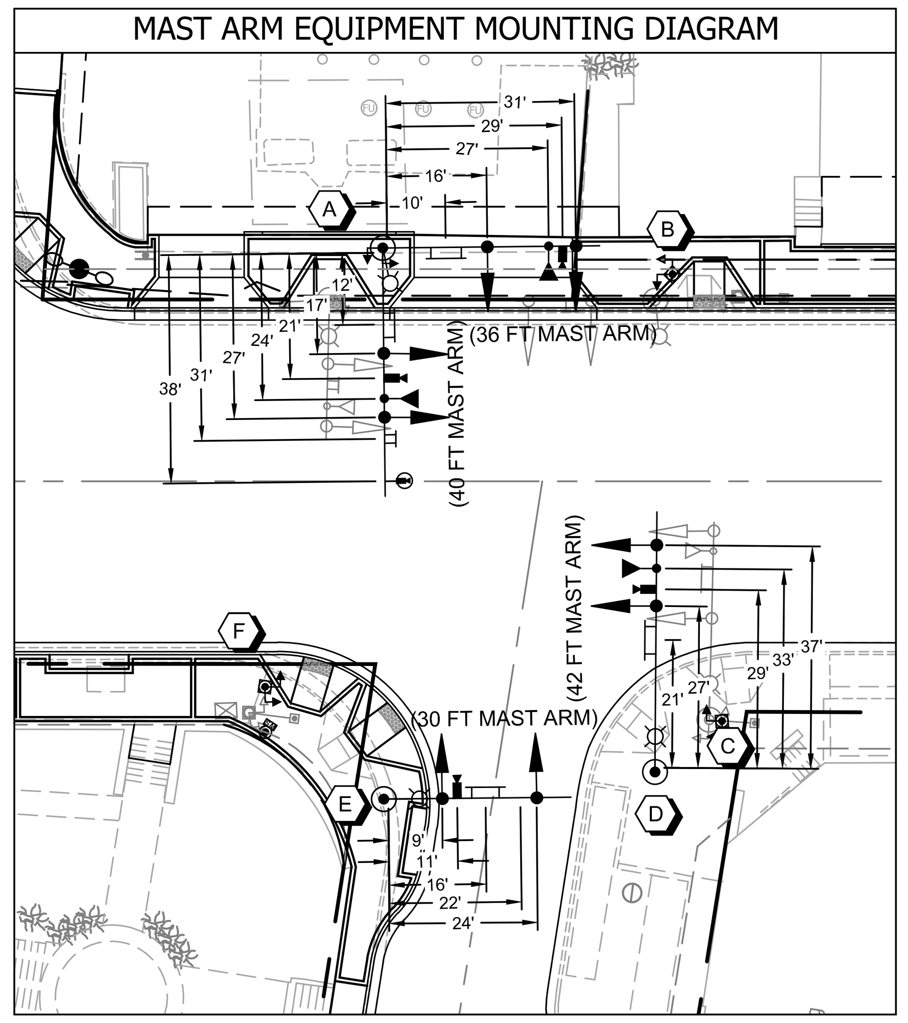
*TIME DEFAULTS TO TIME USED FOR PHASE DURING NORMAL OPERATION

PROPOSED LED SIGNAL HEADS



ALL SIGNALS SHALL BE LED AND SHALL BE INSTALLED WITH HIGH VISIBILITY SIGNAL BACKPLATES

MAST ARM EQUIPMENT MOUNTING DIAGRAM



PROPOSED SIGNS

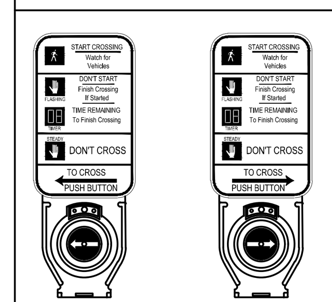
Columbia Pike
D3-1
78" X 18"
A

S Wayne St
D3-1
66" X 18"
B

ONLY
R3-5L
30" X 36"
C

*NOTE: SEE SHEET D17.2 FOR DETAILED STREET NAME SIGN LAYOUT

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON



P62, P81
R10-3E(L)
9" X 15"
D

P21, P22, P41, P42, P61, P82
R10-3E(R)
9" X 15"
E

NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22	"PRIVATE DRIVEWAY, WALK SIGN IS ON TO CROSS PRIVATE DRIVEWAY."
P61, P62	"WAYNE STREET, WALK SIGN IS ON TO CROSS WAYNE STREET."

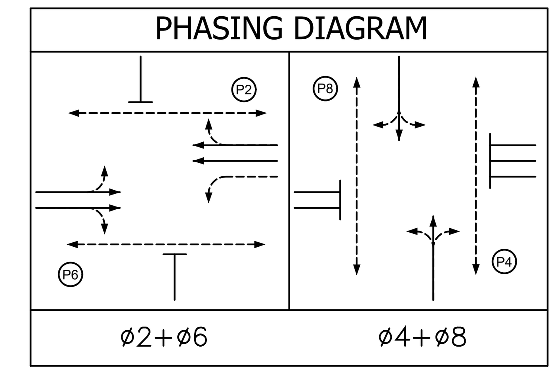
COLOR SEQUENCE CHART

PHASE	2	4	6	8	2+6	4+8	
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
21, 22	G				G		Y
41, 42		G				G	R
61, 62			G		G		Y
81, 82				G		G	R
P21, P22	W*				W*		DARK
P41, P42		W*				W*	DARK
P61, P62			W*		W*		DARK
P81, P82				W*		W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.

*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

PHASING DIAGRAM



GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

LEGEND

EXISTING		PROPOSED
RIGHT OF WAY		PERMANENT EASEMENT
EASEMENT		TEMPORARY CONSTRUCTION EASEMENT
TRAFFIC SIGNAL CABINET		TRAFFIC SIGNAL CABINET
EXTRA LARGE JUNCTION BOX		24"X36" JUNCTION BOX (61-04, TYPE-3)
LARGE JUNCTION BOX		LARGE JUNCTION BOX (61-02)
SMALL JUNCTION BOX		SMALL JUNCTION BOX (14040-01)
TRAFFIC SIGNAL HEAD		TRAFFIC SIGNAL HEAD
PEDESTRIAN SIGNAL HEAD		PEDESTRIAN SIGNAL HEAD
SIGNAL PHASING		SIGNAL PHASING
TRAFFIC SIGNAL LUMINAIRE		TRAFFIC SIGNAL LUMINAIRE
SIGNAL POLE AND MAST ARM		SIGNAL POLE AND MAST ARM
PEDESTAL POLE		PEDESTAL POLE
PEDESTRIAN PUSH BUTTON		PEDESTRIAN PUSH BUTTON
PREEMPTION DEVICE		PREEMPTION DEVICE
VIDEO DETECTION CAMERA		VIDEO DETECTION CAMERA
VIDEO DETECTION ZONE		VIDEO DETECTION ZONE
CLOSED CIRCUIT TELEVISION VIDEO		CLOSED CIRCUIT TELEVISION VIDEO
SIGN		SIGN
POWER SERVICE PEDESTAL		POWER SERVICE PEDESTAL
CONDUIT		CONDUIT
CONDUIT WITH PROPOSED CABLE		16 FT CARLYLE STREET LIGHT POLE

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD: TYPE	SIG. M.A. ORIENT.	SIG. M.A.	LUM. M.A. ORIENT.	LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING: VEHICLE & PED. HEADS	PED. PUSH BUTTONS	SIGNS	VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	230-MA-01-SE	94+43.34	38.31' LT	DUAL MAST ARM POLE 30'	90°,180°	36',40'	180°	6' (STANDARD)	130W	21,22,41,42,P21,P82	P21, P82	E(x2), C	VD2,PE2,VD4, PE4, CCTV	A, B
B	230-PP-01-SW	94+90.92	33.97' LT	PEDESTAL POLE 12'	-	-	-	-	-	P22, P41	P22, P41	E(x2)	-	-
C	230-PP-01-NW	94+99.05	39.40' RT	PEDESTAL POLE 12'	-	-	-	-	-	P42, P61	P42	E	-	-
D	230-MA-01-NW	94+88.03	47.81' RT	MAST ARM POLE 30'	180°	42'	180°	6' (STANDARD)	130W	61, 62	P61	E	VD6, PE6	B
E	230-MA-01-NE	94+43.53	52.22' RT	MAST ARM POLE 30'	180°	30'	180°	6' (STANDARD)	130W	81, 82	P62	D	VD8	A
F	230-PP-01-NE	94+24.04	33.77' RT	PEDESTAL POLE 12'	-	-	-	-	-	P62, P81	P81	D	-	-

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

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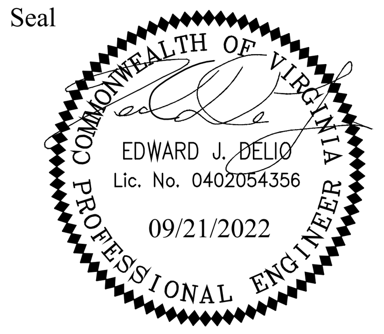
Fax: 703.228.3606

Kimley»Horn
Kimley-Horn and Associates, Inc.

11400 Commerce Park Drive, Suite 400
Reston Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal



Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: ATS
Drawn: PNH
Checked: EJD
Miss Utility Transmittal #:

Filename: 010073-D-TRAF-WAYNE.dwg
Path: K:\NVA_RDWY\110010073 - Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segment\Segment D 7.5.2 - 100% Design Plan\Sheets
Plotted: September 21, 2022
Plotted by: Grant.Jacob

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TRAFFIC SIGNAL PLAN - S. WAYNE ST. (TS #230)
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE: AS SHOWN
SHEET: D17.5 of D17.8

ARLINGTON
VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
3/7/2023
APPROVAL DATE

GENERAL NOTES

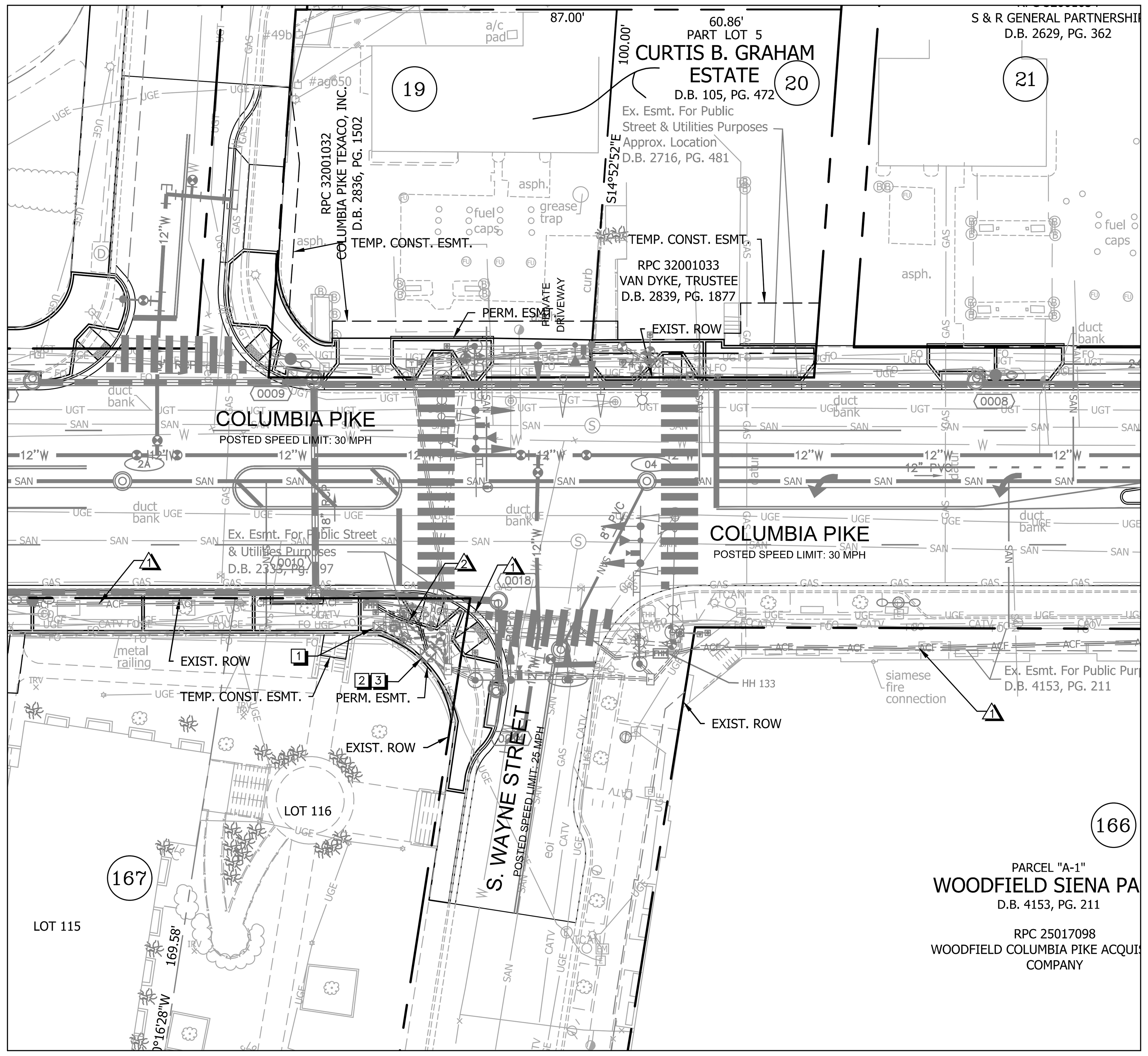
1. CONTRACTOR SHALL SUBMIT SPLICE ENCLOSURES FOR COUNTY DTS ENGINEER APPROVAL.
2. FIBER RELOCATION, REPAIR, AND ADJUSTMENT MUST BE PERFORMED BY THE COUNTY'S FIBER CONTRACTOR. CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH COUNTY DTS FIBER TEAM AT (703) 228-7726 AND COUNTY DES/TE&O PRIOR TO ANY FIBER RELOCATION. CONTRACTOR SHALL NOTIFY COUNTY DTS ENGINEER TWO WEEKS PRIOR TO CUTTING OR DISCONNECTING ANY FIBER CABLE. NO CUTS SHALL BE MADE WITHOUT DTS APPROVAL. CONTRACTOR SHALL NOT PROCEED WITH FIBER CUTTING UNLESS COUNTY DTS ENGINEER IS ON-SITE.
3. 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 ME:
   - 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.
9. IF FACTORY TERMINATED PATCH PANEL IS DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE AT NO COST TO THE COUNTY.

CONDUIT AND CABLE DESCRIPTIONS

1. 4-2" CONDUIT (EXISTING)
   2-144 FIBER CABLES (EXISTING)
2. **2-2" CONDUITS PVC**
   1-12 FIBER CABLE (EXISTING, RELOCATED)

LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CABLE/CONDUIT TO BE INSTALLED



CONSTRUCTION NOTES

1. EXISTING CONTROLLER LOCATION
2. PROPOSED CONTROLLER LOCATION
3. RELOCATE EXISTING ETHERNET SWITCH, PRE-TERMINATED FIBER PATCH PANEL AND JUMPER CABLES FROM EXISTING CONTROLLER CABINET AND INSTALL EQUIPMENT IN PROPOSED CONTROLLER CABINET. CONTRACTOR TO VERIFY THAT EXISTING PRE-TERMINATED PATCH PANEL HAS ADEQUATE TAIL TO REACH FROM PROPOSED LOCATION AND MAINTAIN 25 FT WORKING COIL IN SPLICING HANDHOLE. IF THE LENGTH IS NOT SUFFICIENT, CONTRACTOR SHALL ORDER A NEW FIBER PATCH PANEL.

LEGEND

PROPOSED COMM. CONDUIT
PROPOSED SIGNAL CONDUIT
EXISTING CONDUIT

GRAPHIC SCALE IN FEET
0 12.5 25 50

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Seal
COMMONWEALTH OF VIRGINIA
EDWARD J. DELIO
Lic. No. 0402054356
09/21/2022
PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: ATS
Drawn: PNH
Checked: EJD
Miss Utility Transmittal #:

Filename: 010073-D-COMM-WAYNE.dwg
Path: K:\NVA_RDWY\110010073 - Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segment\Segment D 7.5.2 - 100% Design\PlanSheets
Plotted: September 21, 2022
Plotted by: Grant.Jacob

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

COMM PLAN - S. WAYNE ST (TS #230)
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE:	HOR. 1" = 25' VERT. N/A	SHEET:	D17.5.1 of D17.8

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
3/7/2023
APPROVAL DATE

CONDUIT AND CABLE DESCRIPTIONS

1 **1-3" CONDUIT PVC**
1-14/7C FOR SIGNAL HEADS 81, 82
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

2 **1-4" CONDUIT (BORED) HDPE**
2-14/3C FOR PED PUSH BUTTONS P62, P81
2-14/7C FOR PED SIGNAL HEADS P62, P81
1-14/7C FOR SIGNAL HEADS 81, 82
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

3 **1-3" CONDUIT PVC**
1-14/3C FOR PED PUSHBUTTON P61
1-14/7C FOR PED SIGNAL HEAD P61
1-#6 AWG (EGC)

4 **1-3" CONDUIT PVC**
1-14/3C FOR PED PUSH BUTTON P42
1-14/7C FOR PED SIGNAL HEAD P42
1-14/7C FOR SIGNAL HEADS 61, 62
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

5 **1-4" CONDUIT (BORED) HDPE**
4-14/3C FOR PED PUSH BUTTONS P42, P61, P62, P81
4-14/7C FOR PED SIGNAL HEADS P42, P61, P62, P81
2-14/7C FOR SIGNAL HEADS 61, 62, 81, 82
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
2-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
2-PREEMPTION CABLES
1-#6 AWG (EGC)

6 **1-3" CONDUIT PVC**
1-14/3C FOR PED PUSH BUTTON P82
1-14/7C FOR PED SIGNAL HEAD P82
1-14/7C FOR SIGNAL HEADS 21, 22
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

7 **1-3" CONDUIT PVC**
1-14/3C FOR PED PUSHBUTTON P21
1-14/7C FOR PED SIGNAL HEAD P21
1-#6 AWG (EGC)

8 **1-4" CONDUIT (BORED) HDPE**
2-14/3C FOR PED PUSH BUTTONS P21, P82
2-14/7C FOR PED SIGNAL HEADS P21, P82
1-14/7C FOR SIGNAL HEADS 21, 22
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT (BORED) HDPE
1-PREEMPTION CABLE
1-#6 AWG (EGC)

9 **1-3" CONDUIT PVC**
1-14/3C FOR PED PUSHBUTTON P22
1-14/7C FOR PED SIGNAL HEAD P22
1-#6 AWG (EGC)

10 **1-3" CONDUIT PVC**
1-14/3C FOR PED PUSH BUTTON P41
1-14/7C FOR PED SIGNAL HEADS P41
1-14/7C FOR SIGNAL HEADS 41, 42
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION
1-12/2C FOR LUMINAIRE
1-#6 AWG (EGC)

1-2" CONDUIT PVC
1-PREEMPTION CABLE
1-#6 AWG (EGC)

11 **3-3" CONDUITS PVC**
8-14/3C FOR PED PUSH BUTTONS P21, P22, P41, P42, P61, P62, P81, P82
8-14/7C FOR PED SIGNAL HEADS P21, P22, P41, P42, P61, P62, P81, P82
4-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, 61, 62, 81, 82
4-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION
1-CCTV LEAD IN CABLE
1-#6 AWG (EGC)

1-3" CONDUIT PVC
4-PREEMPTION CABLES
1-#6 AWG (EGC)

12 **1-3" CONDUIT PVC**
4-12/2C FOR LUMINAIRES
1-#6 AWG (EGC)

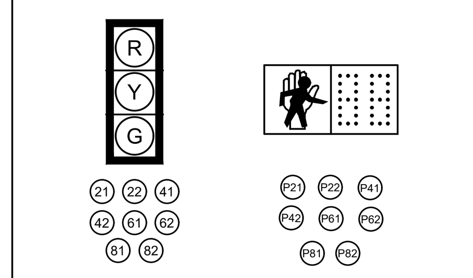
13 **1-2" CONDUIT METAL**
2-12/2C CABLES
4-#6 AWG FOR ELECTRICAL SERVICE

14 **1-2" CONDUIT METAL FOR ELECTRICAL SERVICE**
4-#6 AWG FOR ELECTRICAL SERVICE

15 **1-3" CONDUIT PVC**
2-14/3C FOR PED PUSH BUTTONS P62, P81
2-14/7C FOR PED SIGNAL HEADS P62, P81
1-#6 AWG (EGC)

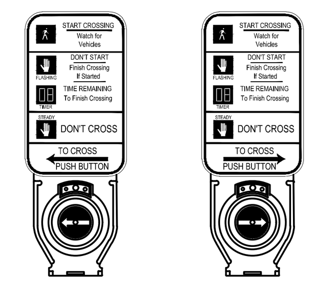
LEGEND:
EXISTING CABLE TO BE REMOVED
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CABLE/CONDUIT TO BE INSTALLED
EGC - ELECTRICAL GROUNDING CONDUCTOR
HDPE - HIGH DENSITY POLYETHYLENE CONDUIT

PROPOSED LED SIGNAL HEADS



ALL SIGNALS SHALL BE LED AND SHALL BE INSTALLED WITH HIGH VISIBILITY SIGNAL BACKPLATES

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON



P21, P22, P42, P61, P81 — R10–3(L) 9" X 15" F

P41, P62, P82 — R10–3(R) 9" X 15" G

NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

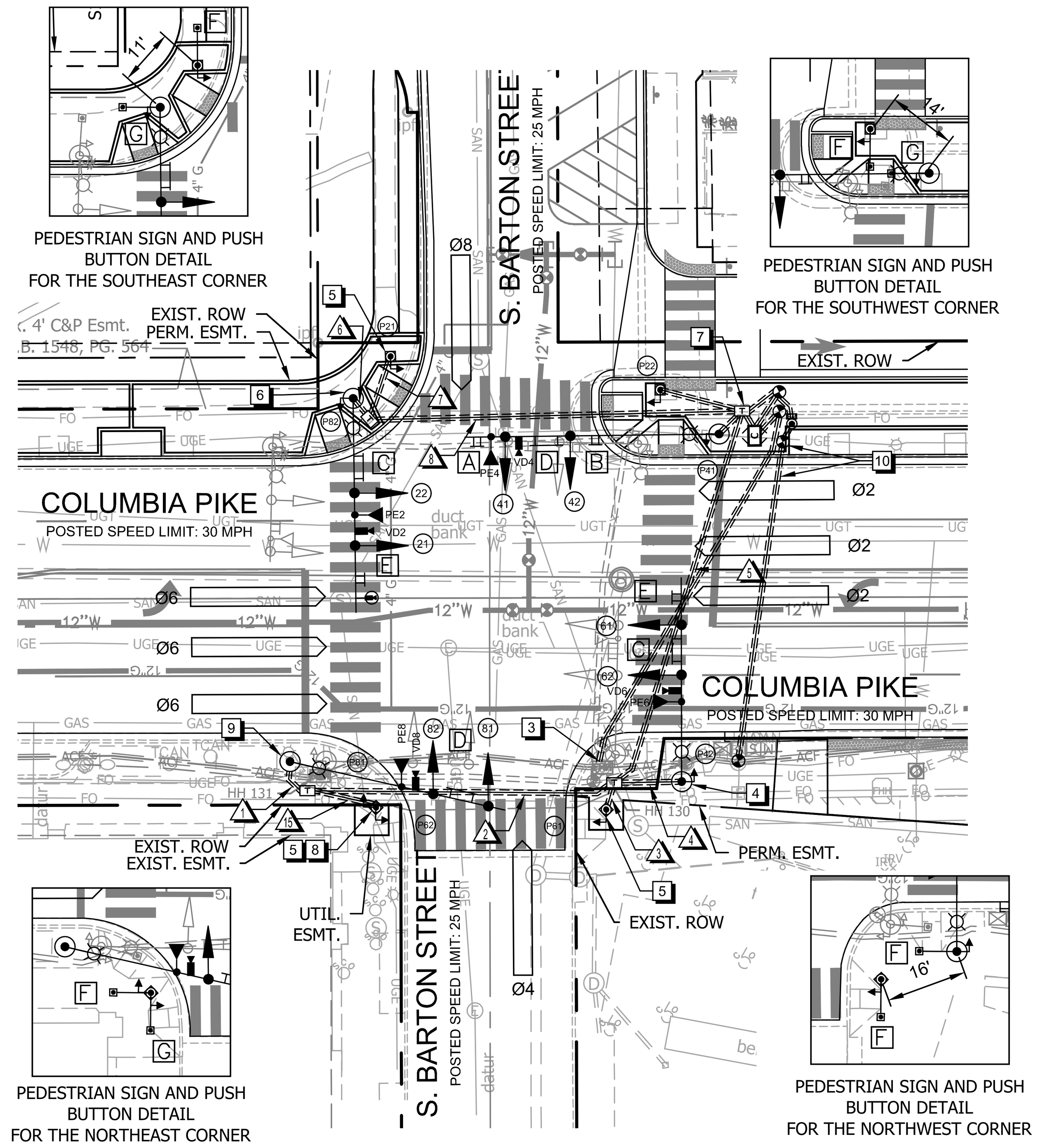
PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22, P61, P62	"BARTON STREET, WALK SIGN IS ON TO CROSS BARTON STREET."

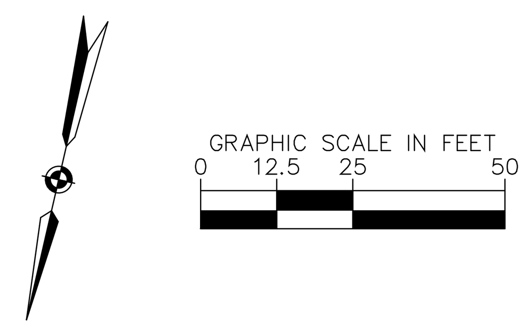
COLOR SEQUENCE CHART

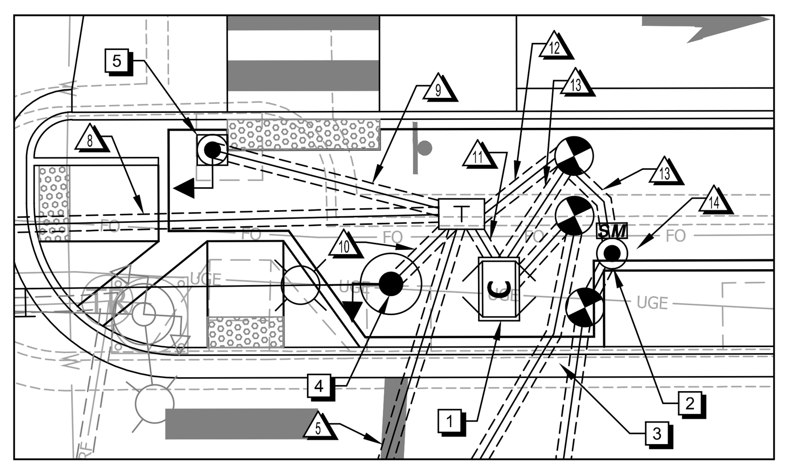
PHASE	2	4	6	8	2+6	4+8	
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
21, 22	G				G		Y
41, 42		G				G	R
61, 62			G		G		Y
81, 82				G		G	R
P21, P22	W*				W*		DARK
P41, P42		W*				W*	DARK
P61, P62			W*		W*		DARK
P81, P82				W*		W*	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.

*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

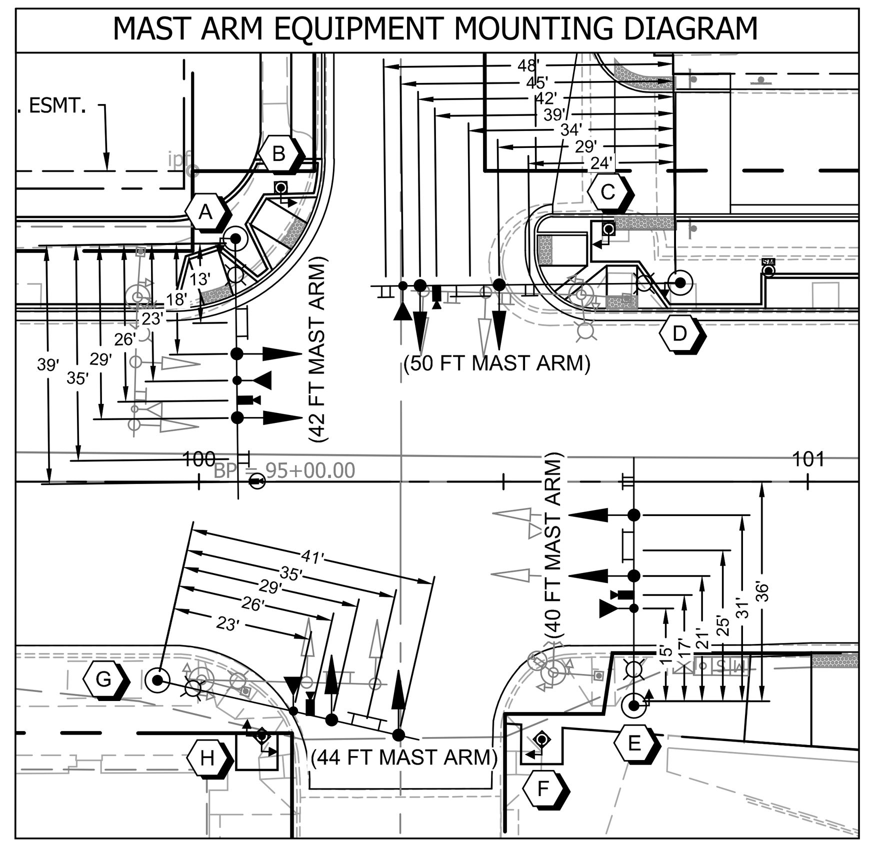






CONDUIT DETAIL
FOR THE SOUTHWEST CORNER
SCALE: 1"=10'

MAST ARM EQUIPMENT MOUNTING DIAGRAM



EV PREEMPTION

FUNCTION	EVP-1	EVP-3
INTERVAL 1 - DWELL GREEN	120	120
INTERVAL 1 - DWELL YELLOW	0.0*	0.0*
INTERVAL 1 - DWELL RED	0.0*	0.0*
INTERVAL 1 - EXIT GREEN	1.0	1.0
INTERVAL 5 - YELLOW	0.0	0.0
INTERVAL 5 - RED 0.0	0.0	0.0
DELAY TIME	1.0	1.0
PED CLEAR BEFORE PRE	0.0	0.0
YELLOW CLEAR BEFORE PRE	0.0*	0.0*
RED CLEAR BEFORE PRE	0.0*	0.0*
DWELL MIN	7.0	7.0
ENABLE BACKUP PROTECTION	Y	Y
PED CLEAR THROUGH YELLOW	Y	Y
EXIT PHASE/TYPE	IN STEP	2 + 6

*TIME DEFAULTS TO TIME USED FOR PHASE DURING NORMAL OPERATION

CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED WIRING, CONDUIT, AND JUNCTION BOXES UNLESS OTHERWISE SPECIFIED. EXISTING CONTROLLER AND CABINET SHALL BE RETURNED TO ARLINGTON COUNTY.

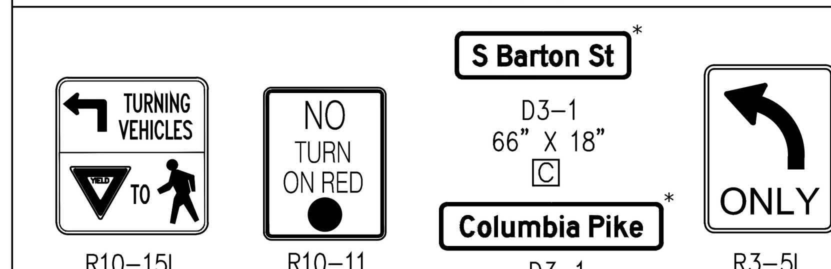
CONTRACTOR SHALL SEQUENCE THE INSTALLATION OF NEW MAST ARM SIGNAL POLES TO MINIMIZE DOWN TIME.

1. INSTALL SIGNAL CONTROLLER CABINET WITH UPS. CONCRETE STOOP TO BE OMITTED, BUT FOUNDATION SHALL BE INSTALLED 2" MIN ABOVE FINISHED GRADE PER ST'D 66-01.
2. INSTALL UNDERGROUND ELECTRIC SERVICE WITH PEDESTAL METERPAN. LOCATION OF POWER SOURCE TO BE FINALIZED UPON COORDINATION WITH DEV.
3. SEE COMMUNICATION PLAN ON SHEET D17.6.1 FOR COMMUNICATION CONNECTION DETAILS.
4. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH TEAR DROP LUMINAIRE, VEHICULAR SIGNAL HEADS, PEDESTRIAN SIGNAL HEAD(S), SIGNS, POLE IDENTIFICATION STICKER, AND POLARA PEDESTRIAN EQUIPMENT ATTACHED TO 12" POLARA EZ523 (OR EQUIVALENT) PUSH BUTTON FRAME EXTENDER PER COUNTY ST'D 68-01.
5. INSTALL NON-ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL, POLARA PEDESTRIAN EQUIPMENT, POLE IDENTIFICATION STICKER, AND SIGN.
6. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH TEAR DROP LUMINAIRE, VEHICULAR SIGNAL HEADS, PEDESTRIAN SIGNAL HEAD, SIGNS, CCTV, POLE IDENTIFICATION STICKER, AND POLARA PEDESTRIAN EQUIPMENT ATTACHED TO 12" POLARA EZ523 (OR EQUIVALENT) PUSH BUTTON FRAME EXTENDER PER COUNTY ST'D 68-01.
7. INSTALL 61-04 **TYPE 4** JUNCTION BOX.
8. ACCESSIBLE PEDESTRIAN SIGNAL DEVICES TO BE INSTALLED ON THE SAME POLE. AUDIBLE TONE LOCATOR CANNOT BE USED FOR THESE DEVICES FOR THE WALK PHASE. AUDIBLE WALK MESSAGES SHALL BE PROGRAMMED AS NOTED IN THE PEDESTRIAN SIGNAL WALK MESSAGE LEGEND.
9. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH TEAR DROP LUMINAIRE, VEHICULAR SIGNAL HEADS, SIGNS, AND POLE IDENTIFICATION STICKER PER COUNTY ST'D 68-01.
10. LOCATION OF POWER SOURCE TO BE FINALIZED UPON COORDINATION WITH DEV.

INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT		EB COLUMBIA PIKE		SB S. BARTON STREET		WB COLUMBIA PIKE		NB S. BARTON STREET
PHASE ON		X		X		X		X
PHASE OFF	X		X		X		X	
INTERVAL	PHASE TIMINGS							
MIN GR		5.0		10.0		5.0		10.0
PASSAGE		2.0		2.0		2.0		2.0
YELLOW		3.7		3.6		3.7		3.6
RED		1.9		2.0		1.9		2.0
MAX 1		60.0		25.0		60.0		25.0
MAX 2		-		-		-		-
MIN GAP		-		-		-		-
TIME BEFORE REDUCTION		-		-		-		-
TIME TO REDUCE		-		-		-		-
PED WALK		7.0		7.0		7.0		7.0
PED FLASH DON'T WALK		11.0		16.0		10.0		18.0
MODE		MAX RECALL		NON-LOCK		MAX RECALL		NON-LOCK

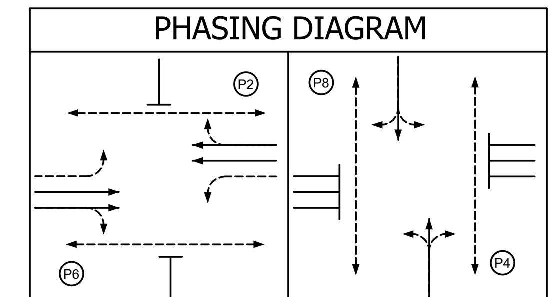
PROPOSED SIGNS



R10–15L 30" X 30" A
R10–11 24" X 30" B
D3–1 66" X 18" C
D3–1 78" X 18" D
R3–5L 30" X 36" E

*NOTE: SEE SHEET D17.2 FOR DETAILED STREET NAME SIGN LAYOUT

PHASING DIAGRAM



LEGEND

EXISTING	PROPOSED
RIGHT OF WAY	PERMANENT EASEMENT
EASEMENT	TEMPORARY CONSTRUCTION EASEMENT
TRAFFIC SIGNAL CABINET	TRAFFIC SIGNAL CABINET
EXTRA LARGE JUNCTION BOX	24"X36" JUNCTION BOX (61–04, TYPE–3)
LARGE JUNCTION BOX	LARGE JUNCTION BOX (61–02)
SMALL JUNCTION BOX	SMALL JUNCTION BOX (14040–01)
TRAFFIC SIGNAL HEAD	TRAFFIC SIGNAL HEAD
PEDESTRIAN SIGNAL HEAD	PEDESTRIAN SIGNAL HEAD
SIGNAL PHASING	SIGNAL PHASING
TRAFFIC SIGNAL LUMINAIRE	TRAFFIC SIGNAL LUMINAIRE
SIGNAL POLE AND MAST ARM	SIGNAL POLE AND MAST ARM
PEDESTAL POLE	PEDESTAL POLE
PEDESTRIAN PUSH BUTTON	PEDESTRIAN PUSH BUTTON
PREEMPTION DEVICE	PREEMPTION DEVICE
VIDEO DETECTION CAMERA	VIDEO DETECTION CAMERA
VIDEO DETECTION ZONE	VIDEO DETECTION ZONE
CLOSED CIRCUIT TELEVISION VIDEO	CLOSED CIRCUIT TELEVISION VIDEO
SIGN	SIGN
POWER SERVICE PEDESTAL	POWER SERVICE PEDESTAL
CONDUIT	CONDUIT
CONDUIT WITH PROPOSED CABLE	16 FT CARLYLE STREET LIGHT POLE

POLE SCHEDULE

No.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD: TYPE	SIG. M.A. ORIENT.	SIG. M.A.	LUM. M.A. ORIENT.	LUM. M.A. (TYPE)	LUM. LED (4)	POLE SIGNAL MOUNTING: VEHICLE & PED. HEADS	PED. PUSH BUTTONS	SIGNS	VIDEO DETECTOR PREEMPTION & CCTV	STREET NAME SIGN
A	027-MA-01-SE	100+05.97	39.93' LT	MAST ARM POLE 30'	180°	42'	180°	6' (STANDARD)	130W	21, 22, P82	P82	E, G	VD2, PE2, CCTV	C
B	027-PP-01-SE	100+13.43	48.28' LT	PEDESTAL POLE 12'	-	-	-	-	-	P21	P21	F	-	-
C	027-PP-01-SW	100+67.31	41.50' LT	PEDESTAL POLE 12'	-	-	-	-	-	P22	P22	F	-	-
D	027-MA-01-SW	100+79.03	32.65' LT	MAST ARM POLE 30'	180°	50'	180°	6' (STANDARD)	130W	41, 42, P41	P41	A, B, G	VD4, PE4	D
E	027-MA-01-NW	100+71.43	36.79' RT	MAST ARM POLE 30'	180°	40'	180°	6' (STANDARD)	130W	61, 62, P42	P42	E, F	VD6, PE6	C
F	027-PP-01-NW	100+56.32	42.34' RT	PEDESTAL POLE 12'	-	-	-	-	-	P61	P61	F	-	-
G	027-MA-01-NE	99+93.18	32.64' RT	MAST ARM POLE 30'	180°	44'	180°	6' (STANDARD)	130W	81, 82	-	-	VD8, PE8	D
H	027-PP-01-NE	100+10.32	41.82' RT	PEDESTAL POLE 12'	-	-	-	-	-	P62, P81	P62, P81	F, G	-	-

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
Facilities & Engineering Division
Engineering Bureau
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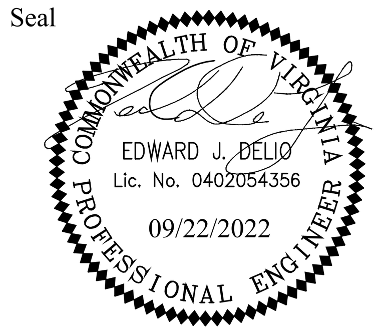
Arlington, VA 22201
Phone: 703.228.3629
Fax: 703.228.3606

Kimley-Horn
and Associates, Inc.

11400 Commerce Park Drive, Suite 400
Reston Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal



Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: ATS
Drawn: PNH
Checked: EJD
Miss Utility Transmittal #:

Filename: 010073-D-TRAF-BARTON.dwg
Path: K:\NVA_RDWY\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment D\7.5.2 - 100% Design\PlanSheets
Plotted: September 22, 2022
Plotted by: andy.smith

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TRAFFIC SIGNAL PLAN - S. BARTON ST. (TS #027)
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE: AS SHOWN | SHEET: D17.6 of D17.8

ARLINGTON VIRGINIA | DEPARTMENT OF ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

3/7/2023
APPROVAL DATE

GENERAL NOTES

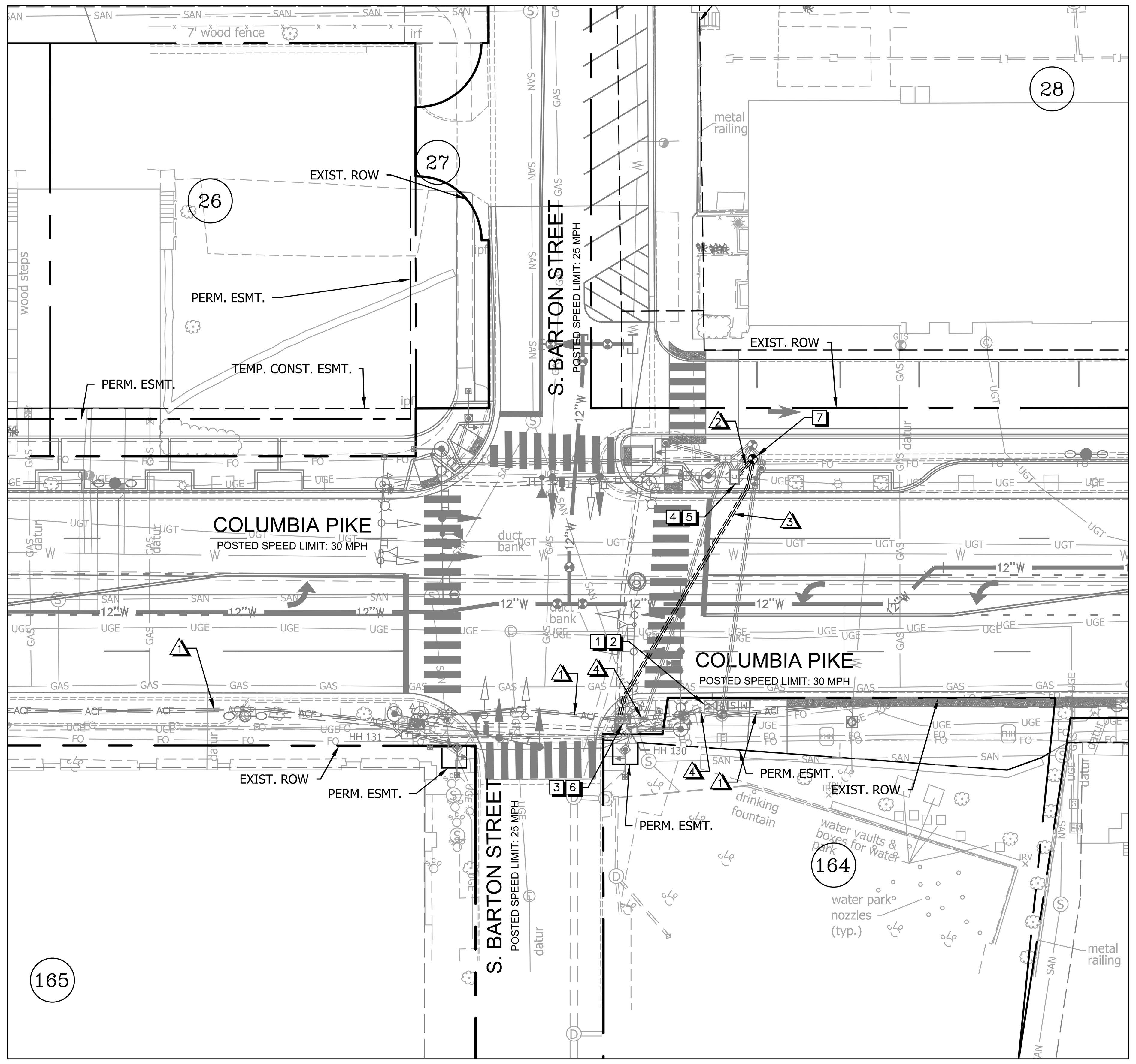
1. CONTRACTOR SHALL SUBMIT SPLICE ENCLOSURES FOR COUNTY DTS ENGINEER APPROVAL.
2. FIBER RELOCATION, REPAIR, AND ADJUSTMENT MUST BE PERFORMED BY THE COUNTY'S FIBER CONTRACTOR. CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH COUNTY DTS FIBER TEAM AT (703) 228-7726 AND COUNTY DES/TE&O PRIOR TO ANY FIBER RELOCATION. CONTRACTOR SHALL NOTIFY COUNTY DTS ENGINEER TWO WEEKS PRIOR TO CUTTING OR DISCONNECTING ANY FIBER CABLE. NO CUTS SHALL BE MADE WITHOUT DTS APPROVAL. CONTRACTOR SHALL NOT PROCEED WITH FIBER CUTTING UNLESS COUNTY DTS ENGINEER IS ON-SITE.
3. 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.
9. IF FACTORY TERMINATED PATCH PANEL IS DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE AT NO COST TO THE COUNTY.

CONDUIT AND CABLE DESCRIPTIONS

1. 4-2" CONDUIT (EXISTING)
   2-144 FIBER CABLES (EXISTING)
2. **2-2" CONDUITS PVC**
   1-12 FIBER CABLE
3. **2-2" CONDUITS (BORED) HDPE**
   1-12 FIBER CABLE
4. 1-2" CONDUIT (EXISTING)
   1-12 FIBER CABLE (TO BE REMOVED)

LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CABLE/CONDUIT TO BE INSTALLED



CONSTRUCTION NOTES

1. EXISTING CONTROLLER LOCATION.
2. CONTRACTOR SHALL REMOVE ALL COMMUNICATION EQUIPMENT TO INCLUDE: 12 FIBER PATCH PANEL AND FIBER CABLE, ETHERNET SWITCH AND JUMPER CABLES FORM 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.
3. 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. INSTALL SPUR FIBER CABLE IN PROPOSED CONDUIT.
4. PROPOSED CONTROLLER LOCATION.
5. CONTRACTOR SHALL INSTALL RELOCATED ETHERNET SWITCH AND JUMPER CABLES IN PROPOSED CONTROLLER CABINET. CONTRACTOR SHALL ALSO INSTALL PRE-TERMINATED 12 FIBER PATCH PANEL WITH ADEQUATE LENGTH OF SPUR FIBER CABLE TO REACH EXISTING SPLICE ENCLOSURE AT LOCATION (A), SEE NOTE 6. PRE-TERMINATED PATCH PANEL TO BE INSTALLED VERTICALLY IN CONTROLLER CABINET. INSTALL SPUR FIBER CABLE IN PROPOSED CONDUIT.
6. LOCATION (A).
7. COIL 50' OF SPUR FIBER CABLE IN JUNCTION BOX.

LEGEND

	PROPOSED COMM. JUNCTION BOX (61–02)
	PROPOSED COMM. CONDUIT
	PROPOSED SIGNAL CONDUIT
	EXISTING CONDUIT

GRAPHIC SCALE IN FEET
0 12.5 25 50

ARLINGTON
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Seal
COMMONWEALTH OF VIRGINIA
EDWARD J. DELIO
Lic. No. 0402054356
09/22/2022
PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: ATS
Drawn: PNH
Checked: EJD
Miss Utility Transmittal #:

Filename: 010073-D-COMM-BARTON.dwg
Path: K:\NVA_RDWY\110010073 - Columbia Pike Multimodal\Production\Tasks\7.5 Final Design of Columbia Pike Segment\Segment D 7.5.2 - 100% Design\Planfiles
Plotted: September 22, 2022
Plotted by: andy.smith

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

COMM PLAN - S. BARTON ST (TS #028)
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE:	HOR. 1" = 25' VERT. N/A	SHEET:	D17.6.1 of D17.8

ARLINGTON
VIRGINIA
DEPARTMENT OF
ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
3/7/2023
APPROVAL DATE

CONDUIT AND CABLE DESCRIPTIONS

1. 1-3" □□□D□□T □□□
2-14/7 □ □□□ S□□□□□H□□DS 11, 61, 62
1-□□□D □□ □□□□□ □□□ TH□M□□ □□H□□□□D□T□□T□□□
1-12/2 □ □□□ □□M□□□□□□
1-□6 □□ □ □□□□□
1-2" □□□D□□T □□□
1-□□□□M□T□□□ □□□□□
1-□6 □□ □ □□□□□

2. 1-3" □□□D□□T □□□
1-14/7 □ □□□ □□D S□□□□□H□□D □42
1-14/3 □ □□□ □□D □□SH □□TT□□ □42
1-□6 □□ □ □□□□□

3. 1-3" □□□D□□T □□□
1-14/7 □ □□□ □□D S□□□□□H□□D □61
1-14/3 □ □□□ □□D □□SH □□TT□□ □61
1-□6 □□ □ □□□□□

4. 1-4" □□□D□□T □□□□□D□HD□□
2-14/7 □ □□□ S□□□□□H□□DS 11, 61, 62
2-14/7 □ □□□ □□D S□□□□□H□□DS □42, □61
2-14/3 □ □□□ □□D □□SH □□TT□□ □42, □61
1-□□□D □□ □□□□□ □□□ TH□M□□ □□H□□□□D□T□□T□□□
1-12/2 □ □□□ □□M□□□□□□
1-□6 □□ □ □□□□□
1-2" □□□D□□T □□□□□D□HD□□
1-□□□□M□T□□□ □□□□□
1-□6 □□ □ □□□□□

5. 1-3" □□□D□□T □□□
3-14/7 □ □□□ S□□□□□H□□DS 31, 81, 82
1-□□□D □□ □□□□□ □□□ TH□M□□ □□H□□□□D□T□□T□□□
1-12/2 □ □□□ □□M□□□□□□
1-□6 □□ □ □□□□□
1-2" □□□D□□T □□□
1-□□□□M□T□□□ □□□□□
1-□6 □□ □ □□□□□

6. 1-3" □□□D□□T □□□
1-14/3 □ □□□ □□D □□SH □□TT□□ □62
1-□6 □□ □ □□□□□

7. 1-3" □□□D□□T □□□
2-14/7 □ □□□ □□D S□□□□□H□□DS □62, □81
1-14/3 □ □□□ □□D □□SH □□TT□□ □81
1-□6 □□ □ □□□□□

8. 1-4" □□□D□□T □□□□□D□HD□□
5-14/7 □ □□□ S□□□□□H□□DS 11, 31, 61, 62, 81, 82
4-14/7 □ □□□ □□D S□□□□□H□□DS □42, □61, □62, □81
4-14/3 □ □□□ □□D □□SH □□TT□□ □42, □61, □62, □81
2-□□□D □□ □□□□□ □□□ TH□M□□ □□H□□□□D□T□□T□□□
2-12/2 □ □□□ □□M□□□□□□S
1-□6 □□ □ □□□□□
1-2" □□□D□□T □□□□□D□HD□□
2-□□□□M□T□□□ □□□□□
1-□6 □□ □ □□□□□

9. 1-3" □□□D□□T □□□
1-14/7 □ □□□ S□□□□□H□□DS 21, 22
1-□□□D □□ □□□□□ □□□ TH□M□□ □□H□□□□D□T□□T□□□
1-12/2 □ □□□ □□M□□□□□□
1-□□T□ □□□D □□ □□□□□
1-□6 □□ □ □□□□□
1-2" □□□D□□T □□□
1-□□□□M□T□□□ □□□□□
1-□6 □□ □ □□□□□

10. 1-3" □□□D□□T □□□
1-14/7 □ □□□ □□D S□□□□□H□□DS □82
1-14/3 □ □□□ □□D □□SH □□TT□□ □82
1-□6 □□ □ □□□□□

11. 1-3" □□□D□□T □□□
1-14/7 □ □□□ □□D S□□□□□H□□DS □21
1-14/3 □ □□□ □□D □□SH □□TT□□ □21
1-□6 □□ □ □□□□□

12. 2-3" □□□D□□T □□□
6-14/7 □ □□□ S□□□□□H□□DS 11, 21, 22, 31, 61, 62, 81, 82
6-14/7 □ □□□ □□D S□□□□□H□□DS □21, □42, □61, □62, □81, □82
6-14/3 □ □□□ □□D □□SH □□TT□□ □21, □42, □61, □62, □81, □82
3-□□□D □□ □□□□□ □□□ TH□M□□□□H□□□□ D□T□□T□□□
3-12/2 □ □□□ □□M□□□□□□S
1-□□T□ □□□D □□ □□□□□
2-□6 □□ □ □□□□□
1-2" □□□D□□T □□□
3-□□□□M□T□□□ □□□□□
1-□6 □□ □ □□□□□

13. 1-3" □□□D□□T □□□
1-14/7 □ □□□ □□D S□□□□□H□□DS □41
1-14/3 □ □□□ □□D □□SH □□TT□□ □41
1-□6 □□ □ □□□□□

14. 1-3" □□□D□□T □□□
1-14/7 □ □□□ □□D S□□□□□H□□DS □22
1-14/3 □ □□□ □□D □□SH □□TT□□ □22
1-□6 □□ □ □□□□□

15. 1-3" □□□D□□T □□□
1-14/7 □ □□□ S□□□□□H□□DS 41, 42
1-□□□D □□ □□□□□ □□□ TH□M□□□□H□□□□ D□T□□T□□□
1-12/2 □ □□□ □□M□□□□□□
1-□6 □□ □ □□□□□
1-2" □□□D□□T □□□
1-□□□□M□T□□□ □□□□□
1-□6 □□ □ □□□□□

16. 1-4" □□□D□□T □□□□□D□HD□□
1-14/7 □ □□□ S□□□□□H□□DS 41, 42
2-14/7 □ □□□ □□D S□□□□□H□□DS □22, □41
2-14/3 □ □□□ □□D □□SH □□TT□□ □22, □41
1-□□□D □□ □□□□□ □□□ TH□M□□□□H□□□□ D□T□□T□□□
1-12/2 □ □□□ □□M□□□□□□
1-□6 □□ □ □□□□□
1-2" □□□D□□T □□□□□D□HD□□
1-□□□□M□T□□□ □□□□□
1-□6 □□ □ □□□□□

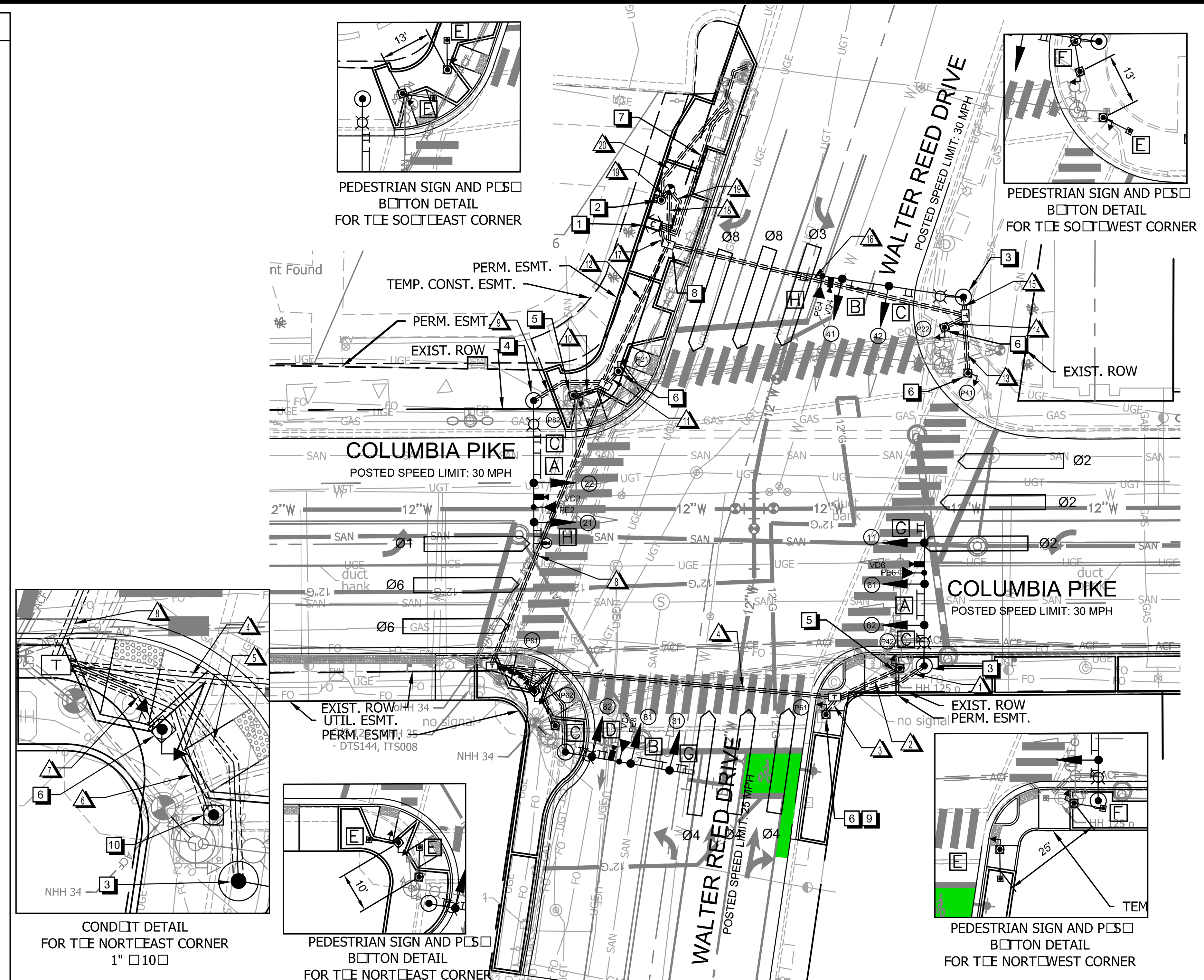
17. 3-3" □□□D□□T □□□
7-14/7 □ □□□ S□□□□□H□□DS 11, 21, 22, 31, 41, 42, 61, 62, 81, 82
8-14/7 □ □□□ □□D S□□□□□H□□DS □21, □22, □41, □42, □61, □62, □81, □82
8-14/3 □ □□□ □□D □□SH □□TT□□ □21, □22, □41, □42, □61, □62, □81, □82
4-□□□D □□ □□□□□S □□□ TH□M□□□□H□□□□ D□T□□T□□□
1-□□T□ □□□D □□ □□□□□
3-□6 □□ □ □□□□□
1-3" □□□D□□T □□□
4-□□□□M□T□□□ □□□□□S
1-□6 □□ □ □□□□□

18. 1-3" □□□D□□T □□□
4-12/2 □ □□□ □□M□□□□□□S
1-□6 □□ □ □□□□□

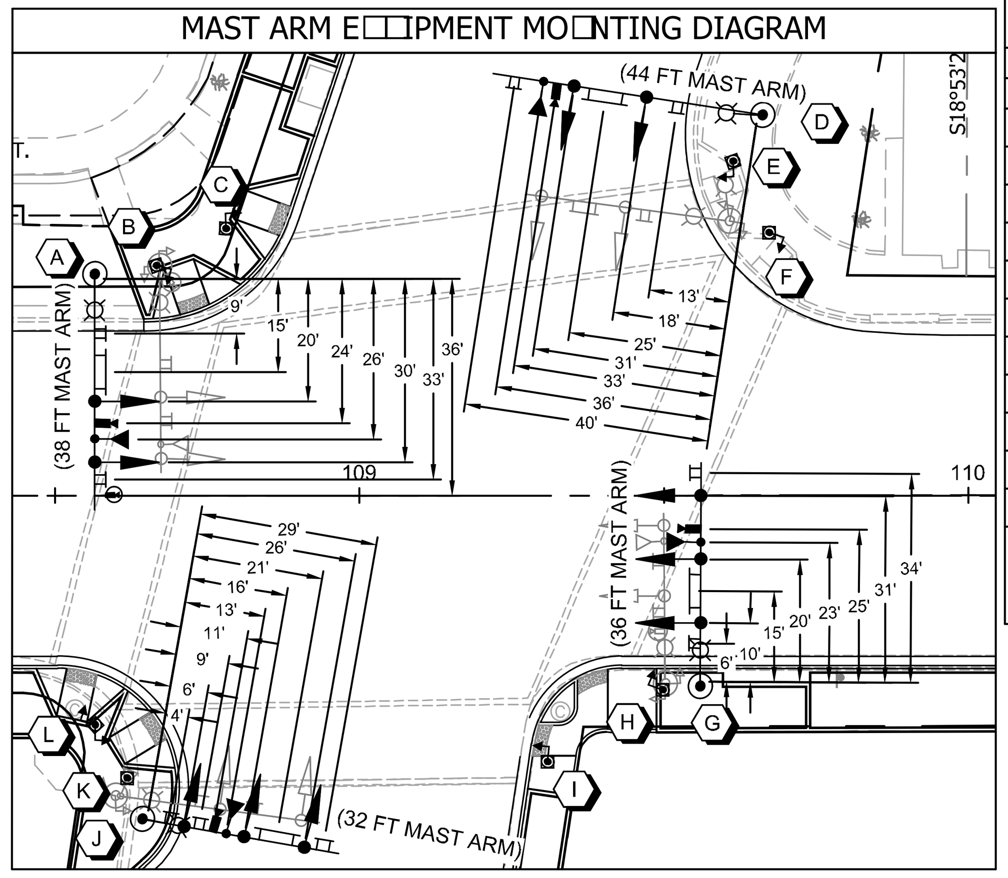
19. 1-2" □□□D□□T M□T□□
2-12/2 □ □□□□□S
4-□6 □□ □ □□□ □□□□T □□□□□S□□□□□□

20. 1-2" □□□D□□T M□T□□□□□ □□□□T□□□□□ S□□□□□□
4-□6 □□ □ □□□ □□□□T □□□□□S□□□□□□

LEGEND:
EXISTING CABLE TO BE REMOVED
EXISTING CABLE/CONDUIT TO REMAIN
□□□□□S□D □□□□□□□□D□□T T□ □□□ST□□□D □□□ □□□□T□□□□□□□□□□□D□□□ □□□D□□T□□ HD□□□H□□H D□□S□T□□□□□TH□□□□□ □□□D□□T



MAST ARM EQUIPMENT MOUNTING DIAGRAM



LEGEND

EXISTING		PROPOSED	
	RIGHT OF WAY		PERMANENT EASEMENT
	EASEMENT		TEMPORARY CONSTRUCTION EASEMENT
	TRAFFIC SIGNAL CABINET		TRAFFIC SIGNAL CABINET
	EXTRA LARGE JUNCTION BOX		24"X36" JUNCTION BOX (61-04, TYPE-3)
	LARGE JUNCTION BOX		LARGE JUNCTION BOX (61-02)
	SMALL JUNCTION BOX		SMALL JUNCTION BOX (14040-01)
	TRAFFIC SIGNAL HEAD		TRAFFIC SIGNAL HEAD
	PEDESTRIAN SIGNAL HEAD		PEDESTRIAN SIGNAL HEAD
	SIGNAL PHASING		SIGNAL PHASING
	TRAFFIC SIGNAL LUMINAIRE		TRAFFIC SIGNAL LUMINAIRE
	SIGNAL POLE AND MAST ARM		SIGNAL POLE AND MAST ARM
	PEDESTAL POLE		PEDESTAL POLE
	PEDESTRIAN PUSH BUTTON		PEDESTRIAN PUSH BUTTON
	PREEMPTION DEVICE		PREEMPTION DEVICE
	VIDEO DETECTION CAMERA		VIDEO DETECTION CAMERA
	VIDEO DETECTION ZONE		VIDEO DETECTION ZONE
	CLOSED CIRCUIT TELEVISION VIDEO		CLOSED CIRCUIT TELEVISION VIDEO
	SIGN		SIGN
	POWER SERVICE PEDESTAL		POWER SERVICE PEDESTAL
	CONDUIT		CONDUIT
	CONDUIT WITH PROPOSED CABLE		16 FT CARLYLE STREET LIGHT POLE

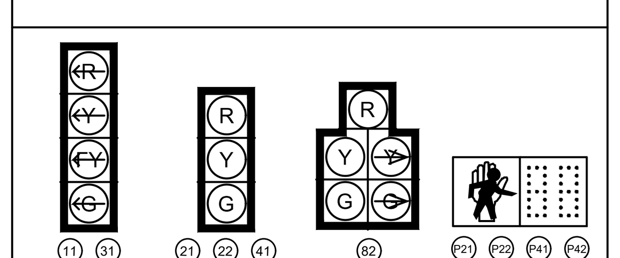
COLOR SEQUENCE CHART

PHASE	1	2	3	4	6	8	1+6	2+6	3+8	4+8	
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	FLASH
11	←G						←G	←FY			←R
21, 22		G						G			Y
31			←G						←G	←FY	←R
41, 42				G						G	R
61, 62					G		G	G			Y
81						G			G	G	R
82	→G					G	→G		G	G	R
P21, P22		WK						WK			DARK
P41, P42				WK						WK	DARK
P61, P62					WK		WK	WK			DARK
P81, P82						WK			WK	WK	DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.

□WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED. WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

PROPOSED LED SIGNAL HEADS

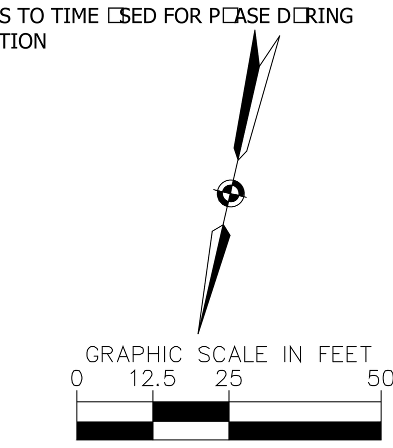


ALL SIGNALS SHALL BE LED AND SHALL BE INSTALLED WITH HIGH VISIBILITY SIGNAL BACKPLATES

EV PREEMPTION

FUNCTION	EVP□1	EVP□3
INTERVAL 1 □DWELL GREEN	120	120
INTERVAL 1 □DWELL YELLOW	0.0□	0.0□
INTERVAL 1 □DWELL RED	0.0□	0.0□
INTERVAL 1 □EXIT GREEN	1.0	1.0
INTERVAL □□YELLOW	0.0	0.0
INTERVAL □□RED	0.0	0.0
DELAY TIME	1.0	1.0
PED CLEAR BEFORE PRE	0.0	0.0
YELLOW CLEAR BEFORE PRE	0.0□	0.0□
RED CLEAR BEFORE PRE	0.0□	0.0□
DWELL MIN	8.0	7.0
ENABLE BACKUP PROTECTION	□	□
PED CLEAR THROUGH YELLOW	□	□
EXIT PHASE/TYPE	IN STEP	2 + 6

□TIME DEFAULTS TO TIME USED FOR PHASE DURING NORMAL OPERATION

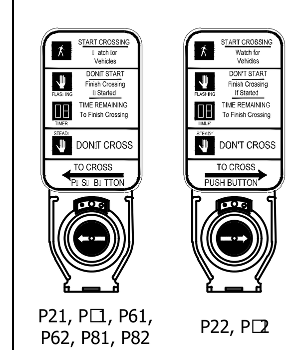


CONSTRUCTION NOTES

EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED WIRING, CONDUIT, AND JUNCTION BOXES UNLESS OTHERWISE SPECIFIED. EXISTING CONTROLLER AND CABINET SHALL BE RETURNED TO ARLINGTON COUNTY. CONTRACTOR SHALL SEQUENCE INSTALLATION OF NEW MAST ARM SIGNAL POLES TO MINIMIZE DOWNTIME.

1. INSTALL SIGNAL CONTROLLER CABINET. CONCRETE STOOP TO BE OMITTED, BUT FOUNDATION SHALL BE INSTALLED 2" MIN ABOVE FINISHED GRADE PER STD□ 66□01.
2. INSTALL UNDERGROUND ELECTRIC SERVICE WITH PEDESTAL METERPAN. LOCATION OF POWER SOURCE TO BE FINALIZED UPON COORDINATION WITH DEV.
3. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH TEAR DROP LUMINAIRE, VEHICULAR SIGNAL HEADS, SIGNS, AND POLE IDENTIFICATION STICKER.
4. INSTALL ORNAMENTAL MAST ARM SIGNAL POLE, POWDER COATED BLACK, WITH TEAR DROP LUMINAIRE, VEHICULAR SIGNAL HEADS, SIGNS, CCTV, AND POLE IDENTIFICATION STICKER.
5. REMOVE EXISTING SIGNAL POLE AND FOUNDATION AND INSTALL NON□ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL HEAD, POLARA PEDESTRIAN EQUIPMENT, POLE IDENTIFICATION STICKER, AND SIGN.
6. INSTALL NON□ORNAMENTAL PEDESTAL POLE, POWDER COATED BLACK, WITH PEDESTRIAN SIGNAL HEAD, POLARA PEDESTRIAN EQUIPMENT, POLE IDENTIFICATION STICKER, AND SIGN.
7. SEE COMMUNICATION PLAN ON SHEET D17.8 FOR COMMUNICATION CONNECTION DETAILS.
8. INSTALL 61□0□T□□□4 JUNCTION BOX.
9. CONTRACTOR TO ENSURE MINIMUM □□PEDESTRIAN PATH AROUND POLE BASE, AND MINIMUM 1.□□BETWEEN FACE OF ROADWAY CURB AND POLE FACE. FOUNDATION SHALL BE FLUSH WITH FINISHED GRADE.
10. INSTALL PEDESTRIAN BOLLARD POLE WITH ACCESSIBLE PEDESTRIAN PUSHBUTTON, POLE IDENTIFICATION STICKER, AND SIGN PER STD□ 68□03.

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTON



P21, P41, P61, P62, P81, P82 — R10-3E(L) 9" X 15" [E]

P22, P42 — R10-3E(R) 9" X 15" [F]

NOTE: ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATIONS AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

PUSHBUTTON	WALK MESSAGE
P41, P42, P81, P82	"COLUMBIA PIKE, WALK SIGN IS ON TO CROSS COLUMBIA PIKE."
P21, P22, P61, P62	"WALTER REED DRIVE, WALK SIGN IS ON TO CROSS WALTER REED DRIVE."

INITIAL TIMING CHART

PHASE	1	2	3	4	5	6	7	8
MOVEMENT	WB LEFT COLUMBIA PIKE	EB COLUMBIA PIKE	NB LEFT WALTER REED DRIVE	SB WALTER REED DRIVE		WB COLUMBIA PIKE		NB WALTER REED DRIVE
PHASE ON	□	□	□	□		□		□
PHASE OFF					□		□	
INTERVAL	PHASE TIMINGS							
MIN GR	□.0	□.0	□.0	□.0		□.0		□.0
PASSAGE	2.0	0.0	2.0	□.0		0.0		2.0
YELLOW	3.9	3.9	3.7	3.7		3.9		3.7
RED	2.9	2.9	2.3	2.3		2.9		2.3
MAX1	10.0	60.0	10.0	20.0		60.0		20.0
MAX2	□	□	□	□		□		□
MIN GAP	□	□	□	□		□		□
TIME BEFORE REDUCTION	□	□	□	□		□		□
TIME TO REDUCE	□	□	□	□		□		□
PED WALK	□	7.0	□	7.0		7.0		7.0
PED FLASH DON'T WALK	□	20.0	□	20.0		18.0		18.0
MODE	NON□ LOC□	MAX RECALL	NON□ LOC□	NON□ LOC□		MAX RECALL		NON□ LOC□

PROPOSED SIGNS

Walter Reed Dr — □ D3-1 66" X 18" [A]

Columbia Pike — □ D3-1 78" X 18" [B]

NO TURN ON RED — R10-11 24" X 30" [C]

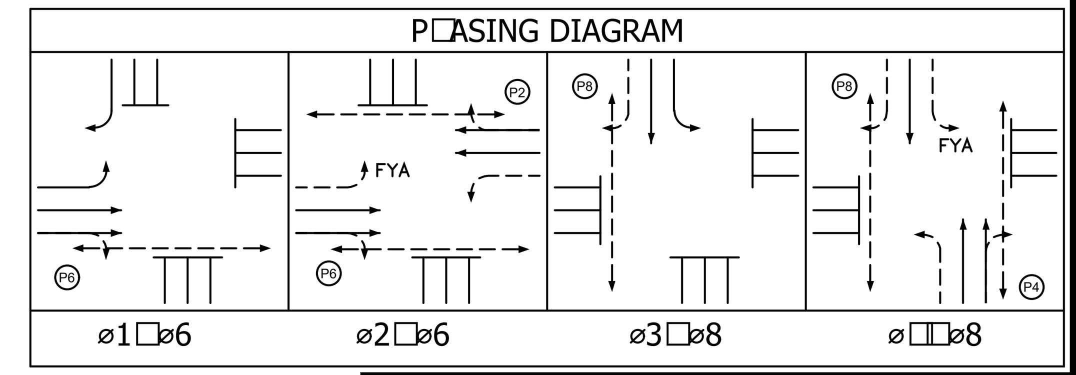
ONLY — R3-5R 30" X 36" [D]

LEFT TURN YIELD ON FLASHING YELLOW ARROW — R10-V1 36" X 42" [G]

ONLY — R3-5L 30" X 36" [H]

□NOTE: SEE SHEET D17.2 FOR DETAILED STREET NAME SIGN LAYOUT

PHASING DIAGRAM



POLE SCHEDULE

NO.	POLE IDENTIFICATION	STATION	OFFSET	STANDARD					LUM. LED (4)	POLE SIGNAL MOUNTING				STREET NAME SIGN
				TYPE	SIG. M.A. ORIENT.	SIG. M.A.	LUM. M.A. ORIENT.	LUM. M.A. (TYPE)		VEHICLE & PED. HEADS	PED. PUSH BUTTONS	SIGNS	VIDEO DETECTOR PREEMPTION & CCTV	
A	026-MA-01-SE	108□□6.□□	36.□1□LT	MAST ARM POLE 30'	180°	38'	180°	6' (STANDARD)	130W	21, 22	-	C, H	VD2, PE2, CCTV	A
B	026-PP-01-SE	108□66.62	37.82□LT	PEDESTAL POLE 12'	-	-	-	-	-	P82	P82	E	-	-
C	026-PP-02-SE	108□78.0□	□3.90□LT	PEDESTAL POLE 12'	-	-	-	-	-	P21	P21	E	-	-
D	026-MA-01-SW	109□66.17	62.□9□LT	MAST ARM POLE 30'	90°	44'	180°	6' (STANDARD)	130W	41, 42	-	C, H	VD4, PE4	B
E	026-PP-01-SW	109□61.3□	□□9□□LT	PEDESTAL POLE 12'	-	-	-	-	-	P22	P22	F	-	-
F	026-PP-02-SW	109□67.30	□3.2□□LT	PEDESTAL POLE 12'	-	-	-	-	-	P41	P41	E	-	-
G	026-MA-01-NW	109□□□.9□	31.□1□RT	MAST ARM POLE 30'	180°	36'	180°	6' (STANDARD)	130W	11, 61, 62	-	C, G	VD6, PE6	A
H	026-PP-01-NW	109□□9.82	32.01□RT	PEDESTAL POLE 12'	-	-	-	-	-	-	P42	F	-	-
I	026-PP-02-NW	109□30.90	□3.83□RT	PEDESTAL POLE 12'	-	-	-	-	-	P42, P61	P61	E	-	-
J	026-MA-01-NE	108□6□.31	□3.2□□RT	MAST ARM POLE 30'	180°	32'	180°	6' (STANDARD)	130W	31, 81, 82	-	C, D, G	VD8, PE8	B
K	026-BP-01-NE	108□61.80	□6.□2□RT	BOLLARD POLE 6'	-	-	-	-	-	-	P62	E	-	-
L	026-PP-01-NE	108□□6.□6	37.76□RT	PEDESTAL POLE 12'	-	-	-	-	-	P62, P81	P81	E	-	-

NOTE: ALL POLES LISTED ABOVE SHALL BE LABELED WITH A POLE IDENTIFICATION STICKER IN ACCORDANCE WITH THE APPROPRIATE POLE ID.

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

Kimley»Horn
Kimley-Horn and Associates, Inc.

11400 Commerce Park Drive, Suite 400
Reston, Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal

COMMONWEALTH OF VIRGINIA
EDWARD J. DELIO
Lic. No. 0402054356
10/20/2022
PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: ATS
Drawn: PNH
Checked: EJD
Miss Utility Transmittal #:

Filename: 010073-D-TRAF-WALTERREED.dwg
Path: K:\NVA_RDWY\110010073 Columbia Pike Multimodal\Production\Task 7.3 Final Design of Columbia Pike Segment\Segment D\7.3.2 - 100% Design Plan\Sheets
Plotted: October 20, 2022
Plotted by: Miguel.Tyshing

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TRAFFIC SIGNAL PLAN - S. WALTER REED DR. (TS #026)
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE: AS SHOWN
SHEET: D17.7 of D17.8

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
3/7/2023
APPROVAL DATE

GENERAL NOTES

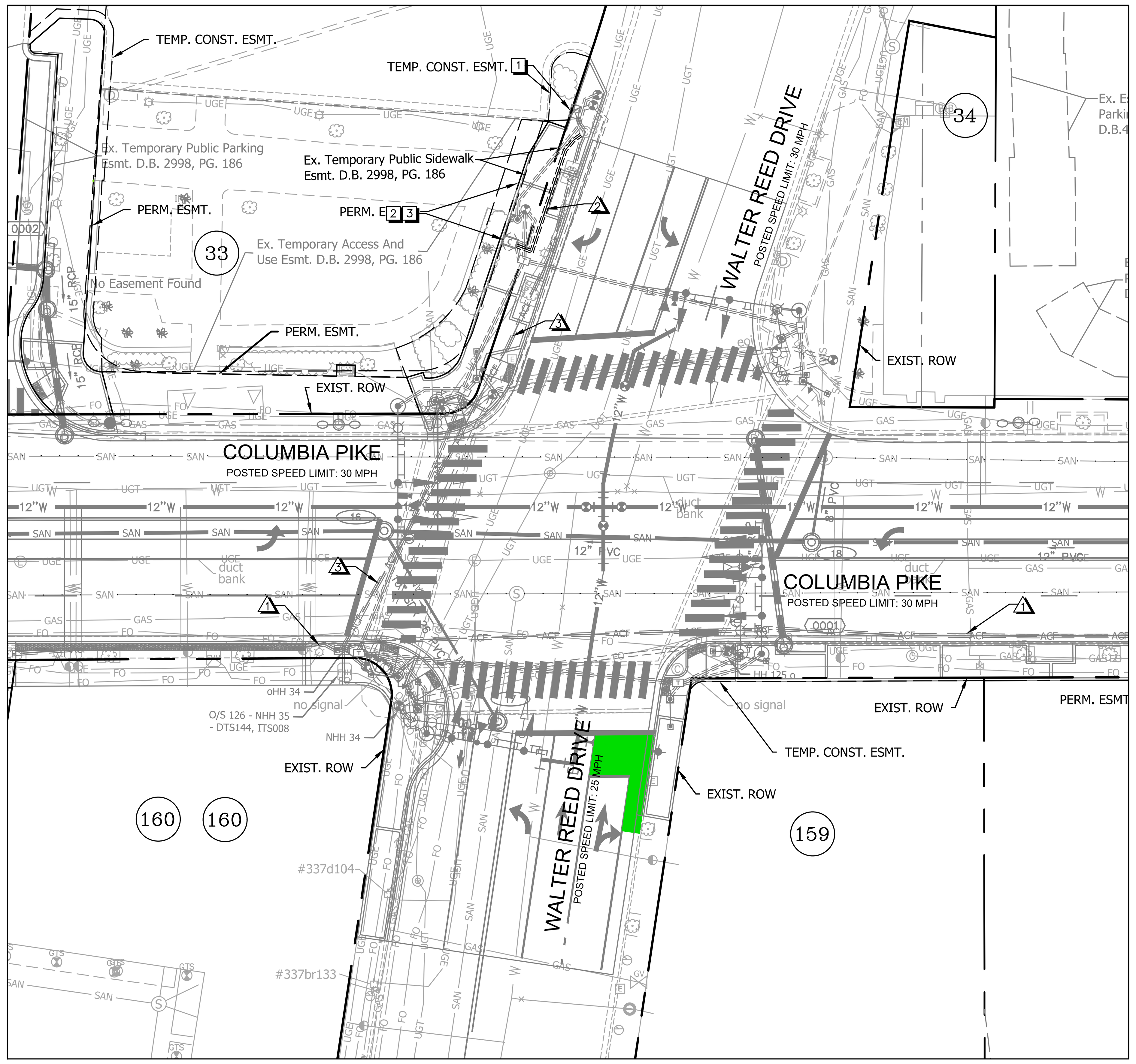
1. CONTRACTOR SHALL SUBMIT SPLICE ENCLOSURES FOR COUNTY DTS ENGINEER APPROVAL.
2. FIBER RELOCATION, REPAIR, AND ADJUSTMENT MUST BE PERFORMED BY THE COUNTY'S FIBER CONTRACTOR. CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH COUNTY DTS FIBER TEAM AT (703) 228-7726 AND COUNTY DES/TE&O PRIOR TO ANY FIBER RELOCATION. CONTRACTOR SHALL NOTIFY COUNTY DTS ENGINEER TWO WEEKS PRIOR TO CUTTING OR DISCONNECTING ANY FIBER CABLE. NO CUTS SHALL BE MADE WITHOUT DTS APPROVAL. CONTRACTOR SHALL NOT PROCEED WITH FIBER CUTTING UNLESS COUNTY DTS ENGINEER IS ON-SITE.
3. 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 ME:
   - 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.
9. IF FACTORY TERMINATED PATCH PANEL IS DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE AT NO COST TO THE COUNTY.

CONDUIT AND CABLE DESCRIPTIONS

1. 4-2" CONDUIT (EXISTING)
   2-144 FIBER CABLES (EXISTING)
2. **2-2" CONDUITS PVC**
   1-12 FIBER CABLE (EXISTING, RELOCATED)
3. 1-2" CONDUIT (EXISTING)
   1-12 FIBER CABLE (EXISTING)

LEGEND: *EXISTING CABLE TO BE REMOVED*
EXISTING CABLE/CONDUIT TO REMAIN
PROPOSED CABLE/CONDUIT TO BE INSTALLED

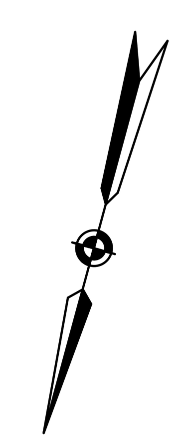


CONSTRUCTION NOTES

1. EXISTING CONTROLLER LOCATION
2. PROPOSED CONTROLLER LOCATION
3. RELOCATE EXISTING ETHERNET SWITCH, PRE-TERMINATED FIBER PATCH PANEL AND JUMPER CABLES FROM EXISTING CONTROLLER CABINET AND INSTALL EQUIPMENT IN PROPOSED CONTROLLER CABINET. CONTRACTOR TO VERIFY THAT EXISTING PRE-TERMINATED PATCH PANEL HAS ADEQUATE TAIL TO REACH FROM PROPOSED LOCATION AND MAINTAIN 25 FT WORKING COIL IN SPLICING HANDHOLE. IF THE LENGTH IS NOT SUFFICIENT, CONTRACTOR SHALL ORDER A NEW FIBER PATCH PANEL.

LEGEND

PROPOSED COMM. CONDUIT
PROPOSED SIGNAL CONDUIT
EXISTING CONDUIT



GRAPHIC SCALE IN FEET
0 12.5 25 50

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

Facilities & Engineering Division
Engineering Bureau
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201
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Kimley»Horn
Kimley-Horn
and Associates, Inc.

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Reston Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal

COMMONWEALTH OF VIRGINIA
EDWARD J. DELIO
Lic. No. 0402054356
09/21/2022
PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: ATS
Drawn: PNH
Checked: EJD
Miss Utility Transmittal #:

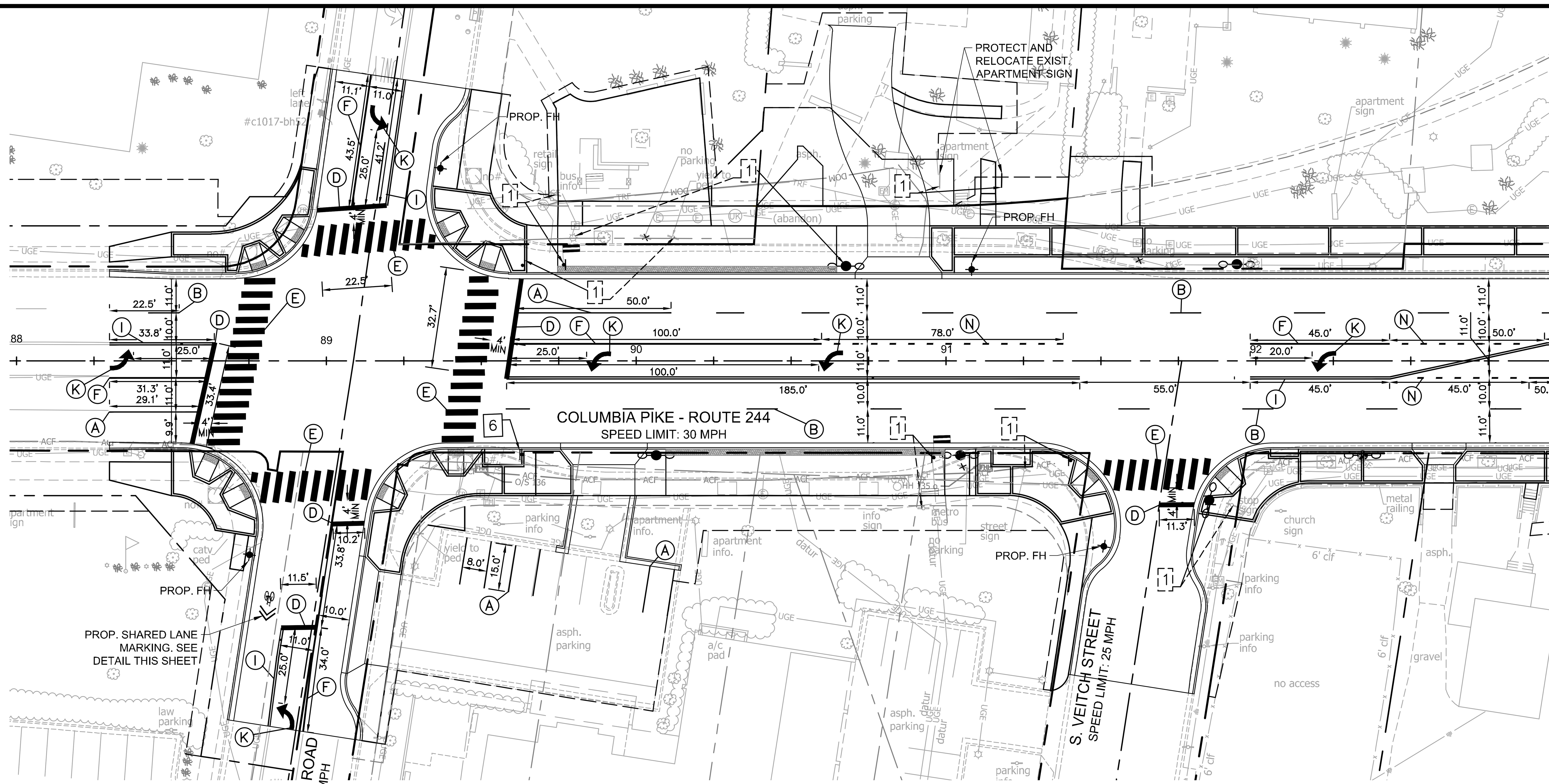
Filename: 010073-D-COMM-WALTERREED.dwg
Path: K:\NVA_RDWY\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment D\7.5.2 - 100% Design\PlanSheets
Plotted: September 21, 2022
Plotted by: Grant.Jacob

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

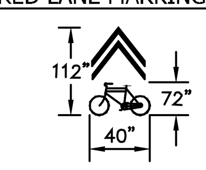
COMM PLAN - S. WALTER REED DR (TS #028)
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE: HOR. 1" = 25' VERT. N/A | SHEET: D17.8 of D17.8

ARLINGTON VIRGINIA | DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
3/7/2023
APPROVAL DATE



SHARED LANE MARKING DETAIL



PER MUTCD, CHAPTER 9C
FIGURE 9C-9

SIGN LEGEND

- EXISTING SIGN TO REMAIN OR TO BE RELOCATED
- EXISTING SIGN TO BE REMOVED
- PROPOSED SIGN PANEL

SIGN LABELS

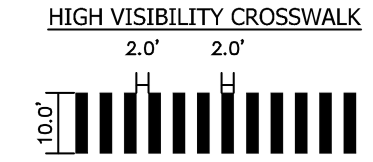
PROPOSED SIGN: 3 — NEW LOCATION

EXISTING SIGN TO BE RELOCATED: 3 — NEW LOCATION; EXISTING LOCATION

SYMBOLS

EXIST.		PROP.
	BUS STOP	
	FIRE HYDRANT	

HIGH VISIBILITY CROSSWALK



GRAPHIC SCALE IN FEET

0 12.5 25 50

(HORIZONTAL SCALE)

SIGNING AND PAVEMENT MARKING NOTES:

1. STREET WIDTH MEASUREMENTS ARE FROM FACE OF CURB TO FACE OF CURB. LANES ARE MEASURED FROM CENTER OF MARKING TO CENTER OF MARKING.
2. CONTACT DENNIS HOWELL OR HIS DESIGNEE AT 703-228-6598 OR (571) 437-1077 TO APPROVE MARKING LAYOUT 48 HRS. PRIOR TO INSTALLATION OF MARKINGS.
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   B.) ARLINGTON COUNTY MARKING STANDARDS.
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8. ON-STREET PARKING LANE IS 7' WIDE (UNLESS OTHERWISE NOTED) AND MARKED WITH 4" WIDE WHITE LINES. BEGINNING AND END OF PARKING SHALL BE MARKED WITH AN END LINE PERPENDICULAR TO CURB EXCEPT AT NUBS OR WHERE OTHERWISE INDICATED.
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11. REMOVE EXISTING "NO PARKING" SIGNS UNLESS NOTED OTHERWISE. ALL PROPOSED "NO PARKING" SIGNS SHALL BE INSTALLED AT 45 DEGREE ANGLE TO THE BACK OF THE CURB.
12. EDGE LINES ARE REQUIRED ONLY WHERE SHOWN ON THE PLANS.
13. PAVEMENT LINE MARKINGS SHALL ALIGN PROPERLY WITH EXISTING MARKINGS AT THE LIMITS OF THE PROJECT.

SIGN NUMBER	1	2	3	4	5	6	7	8
SIGN	EXISTING SIGN (VARIES—SEE CALLOUT)				STOP	SPEED LIMIT 30		
MUTCD NO.	-	W11-2 W16-7PL	W11-2 W16-7PR	R4-7	R1-1	R2-1	R3-1	R3-2
DIM.	-	36" x 36" 24" x 12"	36" x 36" 24" x 12"	24" x 30"	36" x 36"	30" x 36"	36" x 36"	36" x 36"

SIGN NUMBER	9	10	11	12	13	14	15	16	17
SIGN	DO NOT ENTER	ONE WAY	2 HR PARKING 9AM - 5PM WEEKDAYS	2 HR PARKING 9AM - 5PM WEEKDAYS	2 HR PARKING 9AM - 5PM WEEKDAYS		BACK-IN PARKING ONLY	NO PARKING ANY TIME	NO PARKING ANY TIME
MUTCD NO.	R5-1	R6-1R	R7-108	R7-108R	R7-108L	W11-2	R7-MOD	R7-1L	R7-1R
DIM.	30" x 30"	54" x 18"	12" x 18"	12" x 18"	12" x 18"	36" x 36"	12" x 18"	12" x 18"	12" x 18"

PAVEMENT MARKING TYPE	DESCRIPTION
(A) TYPE B CLASS 1: WHITE 4" WIDTH	PARKING LANES, EDGE LINES, LANE LINES
(B) TYPE B CLASS 1: WHITE 4" WIDTH, 10' LONG, 30' SPACING	DASHED LANE LINES
(C) TYPE B CLASS 1: YELLOW 4" WIDTH, DOUBLE LINE, 2' LONG, 4' SPACING	CENTERLINES
(D) TYPE B CLASS 1: WHITE 18" WIDTH	STOP BARS
(E) TYPE B CLASS 1: WHITE 24" WIDTH	CONTINENTAL CROSSWALKS
(F) TYPE B CLASS 1: WHITE 6" WIDTH	TURN LANES, TRANSVERSE CROSSWALKS, BIKE LANES
(G) TYPE B CLASS 1: YELLOW 4" WIDTH, 10' LONG, 30' SPACING	DIVIDED TRAFFIC, TWO WAY TURN LANES
(H) TYPE B CLASS 1: YELLOW 4" WIDTH	EDGE LINES
(I) TYPE B CLASS 1: YELLOW 4" WIDTH, DOUBLE LINE, 4" SPACING	CENTERLINES
(J) TYPE B CLASS 1: WHITE 6" WIDTH, 10' SPACING @45 DEGREE	HATCH LINES, SAFETY ZONES
(K) TYPE B CLASS 1: WHITE SINGLE ARROW	TURN LANES
(L) TYPE B CLASS 1: WHITE COMBINATION ARROW	TURN LANES
(M) TYPE B CLASS 1: WHITE 8' LETTERS	PAVEMENT LETTERS (STOP, YIELD, BUS, ONLY, etc.)
(N) TYPE B CLASS 1: WHITE 6" WIDTH, 2' LONG, 4' SPACING	LANE TRANSITIONS, TURN LANE SKIPS
(O) TYPE B CLASS 1: WHITE 12" WIDTH, 20' SPACING @45 DEGREE	GORE MARKINGS
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Seal

COMMONWEALTH OF VIRGINIA
EDWARD J. DELIO
Lic. No. 0402054356
09/23/2022
PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: TEC
Drawn: MAT
Checked: EJD
Miss Utility Transmittal #:

Filename: 010073-D-SM.dwg
Path:
Plotted: September 23, 2022
Plotted by: Miguel.Tyshing

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

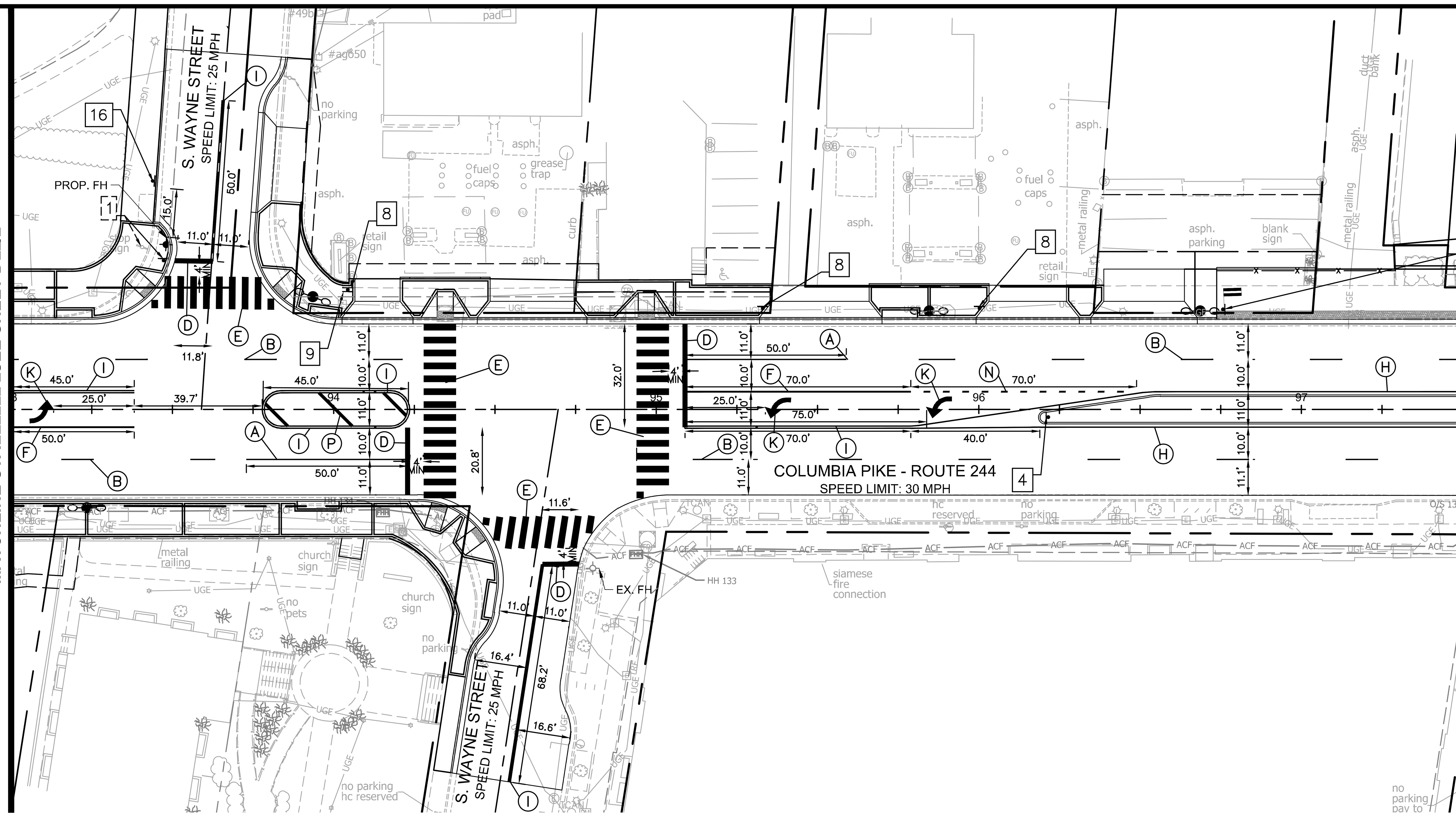
SIGNING AND PAVEMENT MARKING PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D
STA. 88□00 TO STA. 93□00

SCALE:	HOR. 1" □25□VERT. N/A	SHEET:	D18.1 of D18.5

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

3/7/2023
APPROVAL DATE



GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

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SIGN LEGEND

- EXISTING SIGN TO REMAIN OR TO BE RELOCATED
- EXISTING SIGN TO BE REMOVED
- PROPOSED SIGN PANEL

HIGH VISIBILITY CROSSWALK

2.0' 2.0'
10.0'

SIGN LABELS

PROPOSED SIGN: 3 — NEW LOCATION

EXISTING SIGN TO BE RELOCATED: 3 — NEW LOCATION; EXISTING LOCATION

SYMBOLS

EXIST.		PROP.
	BUS STOP	
	FIRE HYDRANT	

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Revisions	Date

Designed: TEC
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Miss Utility Transmittal #:

Filename: 010073-D-SM.dwg
Path: K:\NVA_RDWY\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment D\7.5.2 - 100% Design\PlanSheets
Plotted: September 23, 2022
Plotted by: Miguel.Tyshing

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

SIGNING AND PAVEMENT MARKING PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D
STA. 93□00 TO STA. 97□50

SCALE:	HOR. 1" □25□VERT. N/A	SHEET:	D18.2 of D18.5

ARLINGTON VIRGINIA | DEPARTMENT OF ENVIRONMENTAL SERVICES
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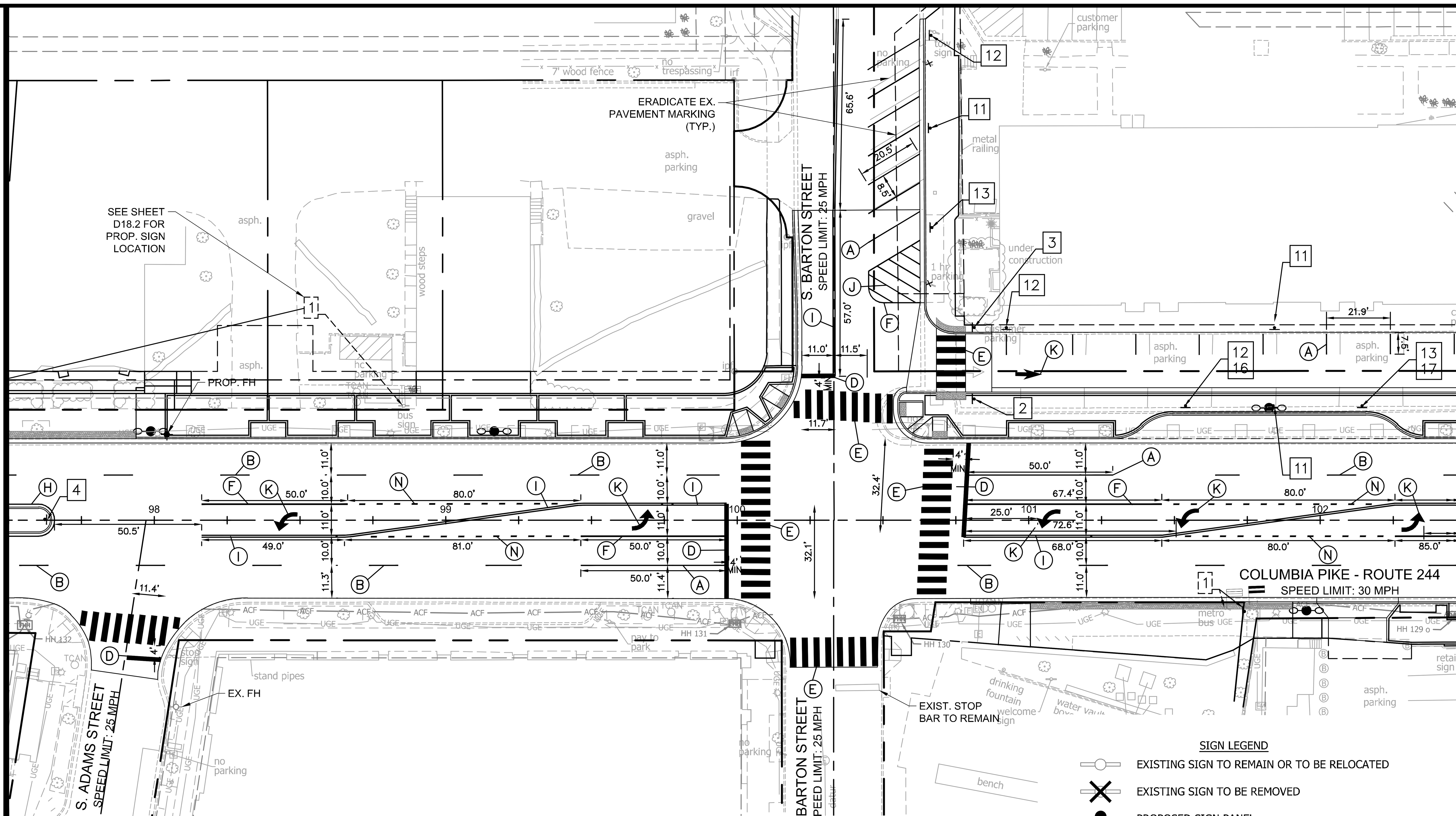

GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

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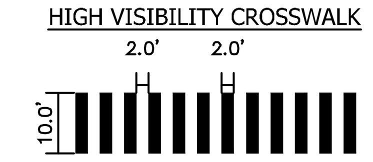
SIGN LEGEND

EXISTING SIGN TO REMAIN OR TO BE RELOCATED
EXISTING SIGN TO BE REMOVED
PROPOSED SIGN PANEL

HIGH VISIBILITY CROSSWALK



SIGN LABELS

PROPOSED SIGN: 3 NEW LOCATION
EXISTING SIGN TO BE RELOCATED: 3 NEW LOCATION, EXISTING LOCATION

SYMBOLS

EXIST. / PROP.
BUS STOP
FIRE HYDRANT

PAVEMENT MARKING TYPE — DESCRIPTION

- (A) TYPE B CLASS 1: WHITE 4" WIDTH....PARKING LANES, EDGE LINES, LANE LINES
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- (K) TYPE B CLASS 1: WHITE SINGLE ARROW....TURN LANES
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- (N) TYPE B CLASS 1: WHITE 6" WIDTH, 2' LONG, 4' SPACING....LANE TRANSITIONS, TURN LANE SKIPS
- (O) TYPE B CLASS 1: WHITE 12" WIDTH, 20' SPACING @45 DEGREE....GORE MARKINGS
- (P) TYPE B CLASS 1: YELLOW 12" WIDTH, 20' SPACING @45 DEGREE....GORE MARKINGS

SIGN NUMBER	1	2	3	4	5	6	7	8
SIGN	EXISTING SIGN (VARIES– SEE CALLOUT)				STOP	SPEED LIMIT 30		
MUTCD NO.	-	W11-2 W16-7PL	W11-2 W16-7PR	R4-7	R1-1	R2-1	R3-1	R3-2
DIM.	-	36" x 36" 24" x 12"	36" x 36" 24" x 12"	24" x 30"	36" x 36"	30" x 36"	36" x 36"	36" x 36"

SIGN NUMBER	9	10	11	12	13	14	15	16	17
SIGN	DO NOT ENTER	ONE WAY	2 HR PARKING 9AM - 5PM WEEKDAYS	2 HR PARKING 9AM - 5PM WEEKDAYS	2 HR PARKING 9AM - 5PM WEEKDAYS		BACK-IN PARKING ONLY	NO PARKING ANY TIME	NO PARKING ANY TIME
MUTCD NO.	R5-1	R6-1R	R7-108	R7-108R	R7-108L	W11-2	R7-MOD	R7-1L	R7-1R
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Seal
COMMONWEALTH OF VIRGINIA
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09/23/2022
PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: TEC
Drawn: MAT
Checked: EJD
Miss Utility Transmittal #:

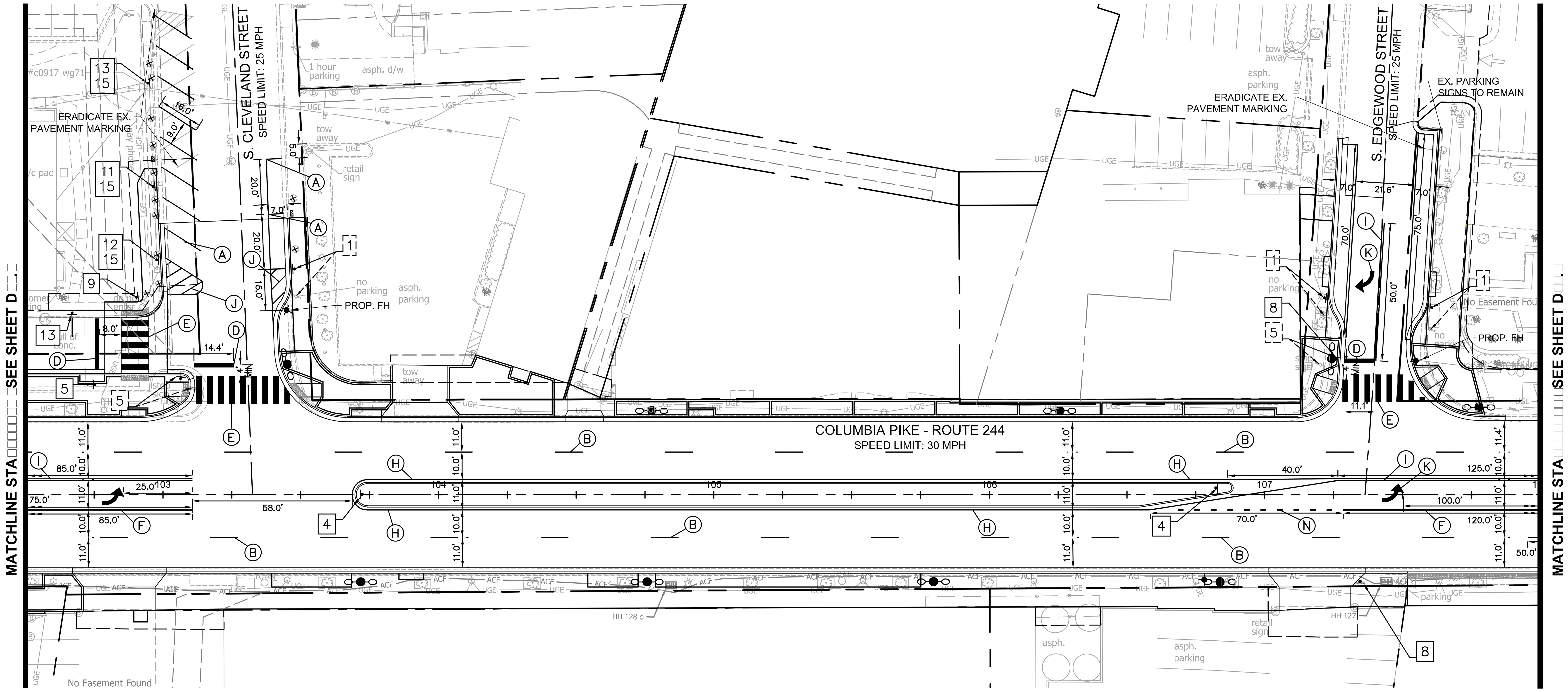
Filename: 010073-D-SM.dwg
Path: K:\NVA_RDWY\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment D\7.5.2 – 100% Design\Plan\Sheets
Plotted: September 23, 2022
Plotted by: Miguel.Tyshing

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

SIGNING AND PAVEMENT MARKING PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D
STA. 97+50 TO STA. 102+50

SCALE: HOR. 1" = 25' VERT. N/A
SHEET: D18.3 of D18.5

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
3/7/2023
APPROVAL DATE



GRAPHIC SCALE IN FEET
0 12.5 25 50
(HORIZONTAL SCALE)

SIGNING AND PAVEMENT MARKING NOTES:

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12. EDGE LINES ARE REQUIRED ONLY WHERE SHOWN ON THE PLANS.
13. PAVEMENT LINE MARKINGS SHALL ALIGN PROPERLY WITH EXISTING MARKINGS AT THE LIMITS OF THE PROJECT.

PARKING METER LEGEND

- EXISTING SINGLE-SPACE METER TO BE RELOCATED
- EXISTING SINGLE-SPACE METER TO BE REMOVED
- PROPOSED MULTI-SPACE PAY STATION

SIGN LEGEND

- EXISTING SIGN TO REMAIN OR TO BE RELOCATED
- EXISTING SIGN TO BE REMOVED
- PROPOSED SIGN PANEL

HIGH VISIBILITY CROSSWALK

2.0' 2.0' 10.0'

SIGN LABELS

PROPOSED SIGN: 3 — NEW LOCATION

EXISTING SIGN TO BE RELOCATED: 3 — NEW LOCATION, EXISTING LOCATION

SYMBOLS

	EXIST.	PROP.
BUS STOP		
FIRE HYDRANT		

PAVEMENT MARKING TYPE		DESCRIPTION
A	TYPE B CLASS 1: WHITE 4" WIDTH	PARKING LANES, EDGE LINES, LANE LINES
B	TYPE B CLASS 1: WHITE 4" WIDTH, 10' LONG, 30' SPACING	DASHED LANE LINES
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D	TYPE B CLASS 1: WHITE 18" WIDTH	STOP BARS
E	TYPE B CLASS 1: WHITE 24" WIDTH	CONTINENTAL CROSSWALKS
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Seal

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09/23/2022
PROFESSIONAL ENGINEER

Approvals	Date
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Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

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Drawn: EJD
Checked: MAT
Miss Utility Transmittal #:

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Plotted: September 23, 2022
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SIGNING AND PAVEMENT MARKING PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D
STA. 102+50 TO STA. 108+00

SCALE: HOR. 1" = 25' VERT. N/A | SHEET: D18.4 of D18.5

ARLINGTON VIRGINIA
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LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
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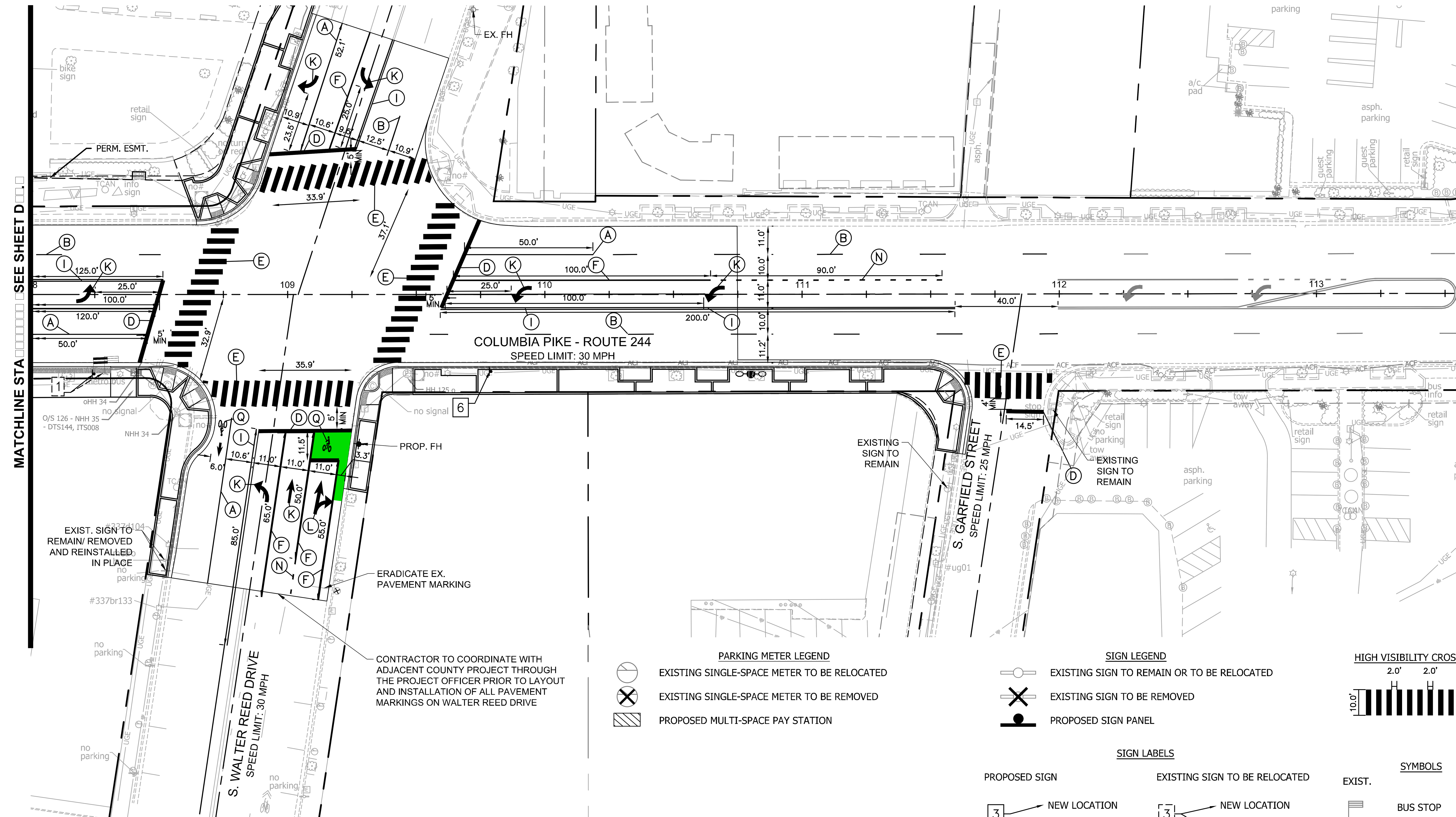

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HIGH VISIBILITY CROSSWALK

2.0' 2.0'

10.0'

SIGN LABELS

PROPOSED SIGN: 3 NEW LOCATION

EXISTING SIGN TO BE RELOCATED: 3 NEW LOCATION / EXISTING LOCATION

SYMBOLS

EXIST.		PROP.
	BUS STOP	
	FIRE HYDRANT	

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Q	TYPE B CLASS 1: WHITE PAVEMENT MARKING SYMBOL	BIKE LANE SYMBOL, BIKE SHARROW SYMBOL

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Miss Utility Transmittal #:

Filename: 010073-D-SM.dwg
Path: K:\NVA_RDWY\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment D\7.5.2 - 100% Design\PlanSheets
Plotted: September 23, 2022
Plotted by: Miguel.Tyshing

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COLUMBIA PIKE - ROUTE 244
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SEGMENT D
STA. 108□00 TO STA. 113□00

SCALE: HOR. 1" □25□VERT. N/A | SHEET: D18.5 of D18.5

ARLINGTON VIRGINIA
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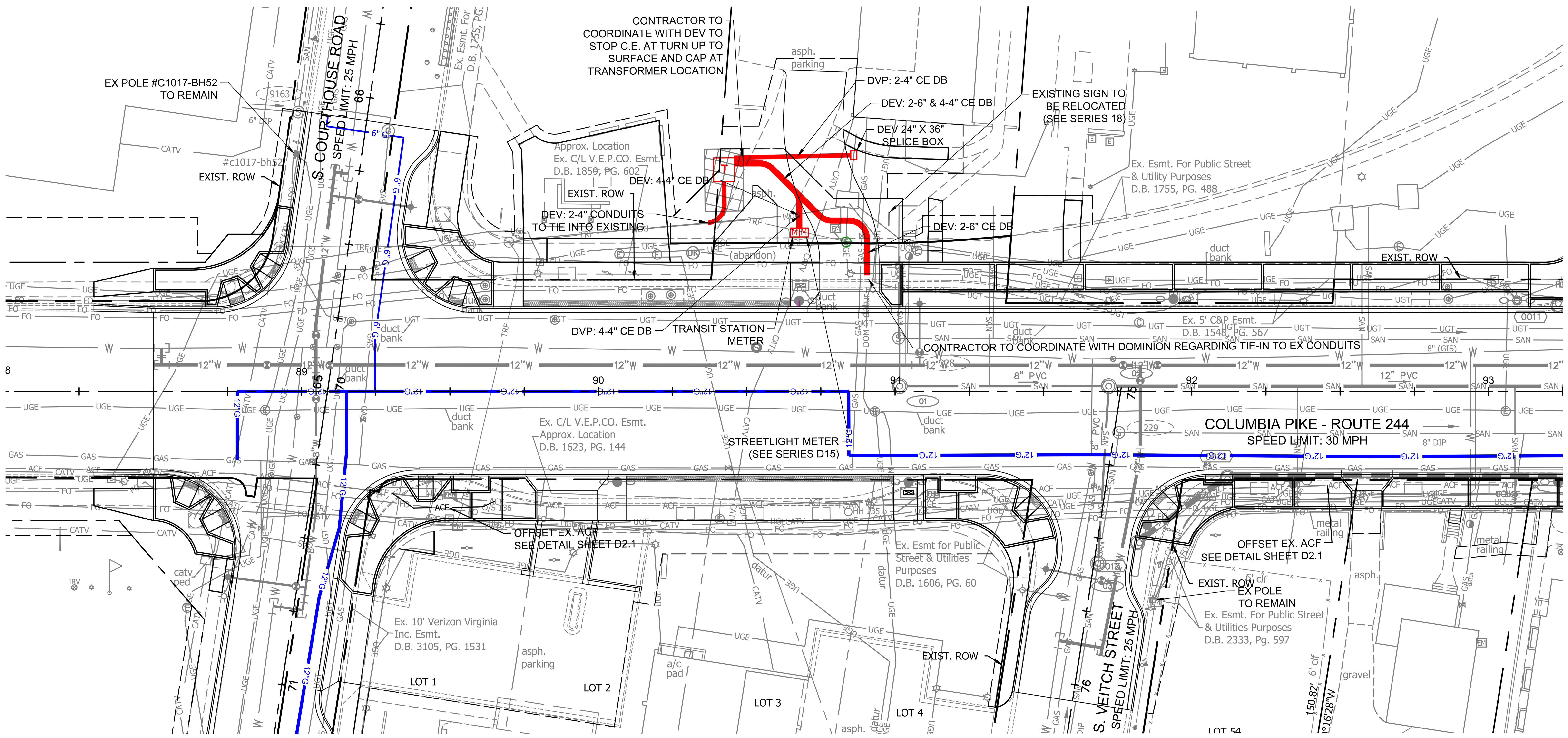

GRAPHIC SCALE IN FEET

0 12.5 25 50

(HORIZONTAL SCALE)

LEGEND

UGE UGE	PROP. DOMINION ENERGY VIRGINIA DUCT BANK
X" G	PROP. GAS LINE AS DONE BY WGL
T	PROP. DOMINION ENERGY VIRGINIA PAD-MOUNTED TRANSFORMER
M	PROP. METER BASE
SB	PROP. DOMINION ENERGY VIRGINIA 78"X48"X30" SPLICE BOX
	PROP. CLEAR ZONE FOR TRANSFORMER AND HANDHOLE ACCESS
UGE UGE	EXIST. UNDERGROUND ELECTRIC LINE
UGT UGT	EXIST. UNDERGROUND TELECOMMUNICATION LINE
FO FO	EXIST. UNDERGROUND FIBER OPTIC LINE
ACF	EXIST. UNDERGROUND ARLINGTON COUNTY FIBER OPTIC LINE
CATV	EXIST. UNDERGROUND CABLE LINE
GAS GAS	EXIST. GAS LINE
W	EXIST. WATER LINE
SAN SAN	EXIST. SANITARY SEWER LINE

NOTES

1. MAINTAIN A MINIMUM 5' SEPARATION BETWEEN EXISTING POLES AND PROPOSED DUCTBANK AT ALL LOCATIONS.
2. FACILITIES ARE LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY UNLESS NOTED OTHERWISE.
3. USE EXTREME CAUTION WHEN EXCAVATING UNDER AND NEAR OVERHEAD UTILITY WIRES.
4. APPROVAL OF THIS CONCEPTUAL DRY UTILITY PLAN SHALL ALLOW FOR THE ISSUANCE OF RIGHT-OF-WAY PERMITS FOR INSTALLATION OF CONDUITS, MANHOLES, HANDHOLES, ETC., WHICH WILL BE CONSTRUCTED FOR THE UTILITY COMPANY'S USE. RIGHT-OF-WAY PERMIT FOR INSTALLATION OF DEV FACILITY SUCH AS POLES, CABLES, ELECTRICAL DEVICES (TRANSFORMERS AND SWITCH BOXES) SHALL NOT BE ISSUED BEFORE APPROVAL OF THE FINAL DRY UTILITY PLAN.
5. THESE CONDUITS WERE PREPARED ON DATA COMPILED BY CIVIL ENGINEER OF RECORD. UNFORESEEN CIRCUMSTANCES MAY ARISE DURING THE CONSTRUCTION OF THIS DUCT BANK THAT MAY ALTER THE PLACEMENT OF PROPOSED CONDUIT/EQUIPMENT. FURTHERMORE, ANY UNKNOWN/KNOWN UTILITY LINES MAY BE ENCOUNTERED DURING THE CONSTRUCTION OF THIS DUCT BANK THAT ALSO MAY AFFECT THE PLACEMENT OF CONDUIT/EQUIPMENT. PLEASE CONSULT WITH THE APPROPRIATE DESIGN TEAM FOR ANY SITUATION ENCOUNTERED, IF NEEDED, TO DETERMINE, A VIABLE RESOLUTION AND PROPER COURSE OF ACTION.
6. WASHINGTON GAS PROPOSED LINES ARE SHOWN FOR REFERENCE ONLY AND ARE TO BE INSTALLED BY OTHERS.
7. PROTECT PROPOSED TRANSFORMER AND SPLICE BOX FROM DRIVEWAY TRAFFIC AT ALL TIMES.
8. CONTRACTOR TO STAKE PROPOSED DRIVEWAY BEFORE INSTALLATION OF DUCTBANKS AND CONDUITS

ARLINGTON COUNTY NOTES:

1. SEE STREET LIGHTNING SHEETS FOR ALL ARLINGTON COUNTY FIBER RELOCATION LOCATIONS.
2. ALL ARLINGTON COUNTY FIBER AND HH RELOCATION TO BE PERFORMED BY APPROVED COUNTY CONTRACTOR, N TO N FIBER (703-331-3884).

Dominion Energy

July 11, 2018

Mr. Abe Bibizadeh
Arlington County
2100 Clarendon Blvd., suite 800
Arlington, VA 22201

Re: Columbia Pike Multimodal Street Improvements
South Courthouse Road to South Garfield Street (Segment D)
Arlington, VA DEV project number: 10023001

Dear Mr. Bibizadeh,

Dominion Energy (DEV) has completed the plan review of preliminary layout for Columbia Pike project; *South Courthouse Road (Segment D)*. These plans for the above location reflect the installation of the DEV facilities. The referenced layout reviewed is dated May 18, 2018.

This conduit layout is approved as a conceptual plan with the understanding that plans are subject to change. DEV reserves the right to adjust the plan as needed to meet the operational integrity of its electric distribution system.

Sincerely,

David Ojumu
Dominion Energy
Electric T&D Project Manager II

Dominion Commitment/Conceptual Design Acceptance Letter

June 22, 2022

Mr. Daniel Commerford
2100 Clarendon Blvd., Suite 800
Arlington, VA 22201

Re: Columbia Pike Multimodal Street Improvements
South Courthouse Road to South Garfield Street
(Segment D)
Arlington, VA

Dear Mr. Commerford:
Arlington County has developed a conceptual dry utility plan (attached) for the referenced project in conjunction with the site civil engineering plan. This dry utility plan dated June 20, 2022 considers the installation of a new underground utility system to accommodate the removal of the existing overhead utility wires and, utility poles that are adjacent to the site and/or permanent service to the buildings.

Dominion Energy of Virginia Power (DEV) has completed a conceptual review of the plans and profiles as shown on sheets D21.1-D21.3 and accepts the preliminary design of Columbia Pike Multimodal Street Improvements at S. Courthouse Road to South Garfield Street (Segment D) for the installation of conduit and manholes. DEV acknowledges that based on the current existing and projected load information provided, the current and existing capacity on DEV's systems, DEV's current design standards, and other information provided at the time of the DEV's conceptual review, *Arlington County's* dry utility plan meets the DEV requirements and commits to utilizing the underground infrastructures for installation of the DEV cable and other necessary facilities to underground the existing overhead utilities and/or provide permanent service to the buildings, if the underground infrastructure and installation meets DEV's requirements. DEV will endeavor to complete their final engineering design plan in a manner that will not result in additional trenching, conduit or any underground type work beyond what is shown on this county accepted dry utility conceptual plan. Should there be a change in any of the following; DEV reserves the right to adjust its design accordingly to assure the operational integrity of its system:

- Conceptual plans submitted
- Existing and planned loads on DEV's system
- DEV's standards of design
- Any other unforeseen changes

Any changes DEV must make to the conceptual dry utility plan will need to be coordinated with the Developer. The Developer will be responsible for submitting to the County a revision to the approved site civil plan. The County approval must be obtained before any Right-of-Way permits may be issued.

Should you have any questions regarding this plan, feel free to contact *me* at *703-228-3664*.

Sincerely,

Jerry Kuo

Dominion Energy of Virginia agrees with terms as stated in this letter and accepts this conceptual dry utility plan with the understanding that the plans are subject to change. DEV reserves the right to adjust the plan as needed to meet the operational integrity of its electric distribution system.

Designated Dominion Supervisor: Denise Stevens
(Print Full Name)

Signature: ______ , Date: 6/27/22
Designated Dominion Supervisor

DEV Project Number: 10553093

Last Updated: May 18, 2011.

ARLINGTON
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rda
Rinker Design Associates, P.C.
11100 Endeavor Court, Suite 200, Manassas VA, 20109
www.rdacivil.com
Telephone: (703) 368-7373

Seal Date

COMMONWEALTH OF VIRGINIA
SHARON D. DUSZA
Lic. No. 033455
PROFESSIONAL ENGINEER
9/20/22

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: RDA
Drawn: CJC
Checked: SSD
Miss Utility Transmittal #:

Filename: 010073-D-PUTIL.dwg
Path: M:\work\16094\16094-002 Columbia Pike all Phases\Siteplan\Segment D
Plotted: September 22, 2022
Plotted by: sdusza

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

D21.1 DRY UTILITY PLAN
COLUMBIA PIKE - ROUTE 244
MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE: HOR. 1" = 25' VERT. N/A
SHEET: ---- of D21.3

ARLINGTON
VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

3/7/2023
APPROVAL DATE

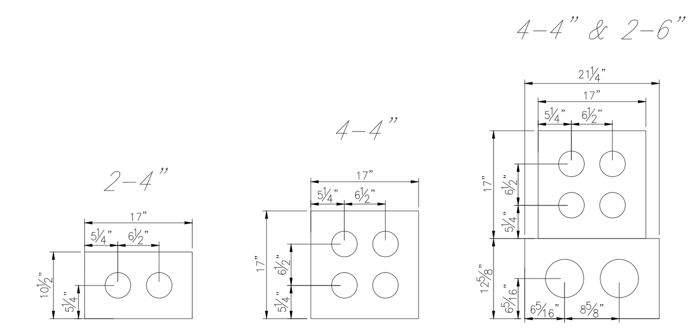
LEGEND

- Prop. Storm Catch Basin
- Ex. Storm Catch Basin
- Prop. Storm Grate
- Ex. Storm Grate
- Prop. Storm MH
- Ex. Storm MH
- Prop. Sanitary MH
- Ex. Sanitary MH
- Prop. Cobra Head Light
- Prop. Carlyle Light
- Prop. Light Pole (BY Others)
- Ex. Light Pole
- Prop. Utility Pole
- Ex. Utility Pole
- Ex. Utility MH (Type Indicated Elec. Tele. etc)
- Ex. Traffic Control Box
- Prop. Water MH
- Ex. Water MH
- Prop. Water Valve
- Ex. Water Valve
- Prop. Water FH
- Ex. Water FH
- Prop. Water Meter
- Ex. Water Meter
- P.K. Nail Found
- P.K. Nail Set
- Rebar Rod Found
- Rebar Rod Set
- Iron Pipe
- Monument (GPS)
- Monument
- To Be Removed (TBR)
- Traffic Sign
- Guy Wires
- Prop. Gas Valve
- Ex. Gas Valve
- Prop. Handicap Ramp
- Ex. Handicap Ramp
- M Metro Station
- Benchmark
- Deciduous Tree
- Coniferous Tree
- Shrub
- Wooded Area
- Bridge
- North Arrow
- Telephone Ped.
- Electric Box
- Cable Ped.
- Gas Marker
- 1 Construction Notes (Leader to area affected)
- C1 Curve Number (See Curve Table)
- L1 Line Number (See Line Table)
- 1234 Ex. Sanitary Sewer Structure Number (Number obtained from WSE)
- 1234 Ex. Storm Sewer Structure Number (Number obtained from WSE)
- 1234 Prop. Sanitary Sewer Structure Number (Number obtained from WSE)
- 1234 Prop. Storm Sewer Structure Number (Number obtained from WSE)
- Parking Meter
- Mailbox
- Ground Light
- Traverse
- Bus Sign

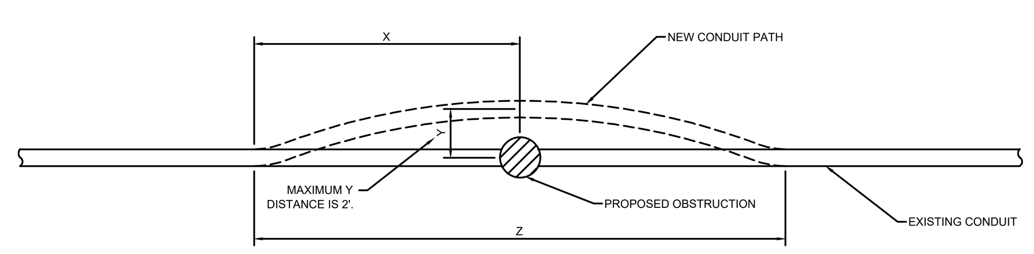
Abbreviations

DEV	DOMINION VIRGINIA POWER
TBR	TO BE REMOVED
CE	CONCRETE ENCASED
DB	DUCTBANK
TH	TEST HOLE/PIT
ESMT	EASEMENT
LP	LIGHT POLE

DOMINION ENERGY OF VIRGINIA DUCTBANKS



FIBER OPTIC RELOCATION



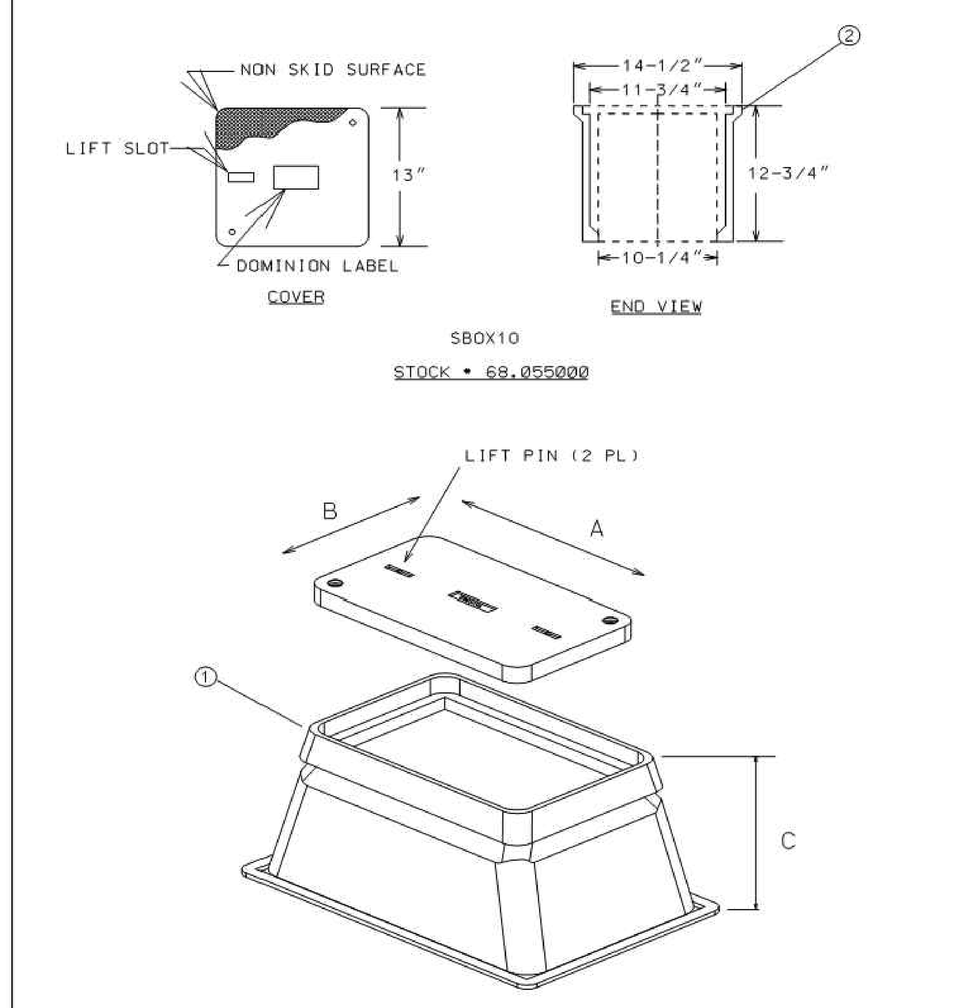
CONDUIT OFFSET TABLE		
Y	X	Z
0'-0.5'	5'	10'
1'	10'	20'
1.5'	15'	30'
2'	20'	40'

NOTE : SEE LIGHTING PLAN FOR FIBER OPTIC RELOCATIONS

CONSTRUCTION NOTES :

1. CONTRACTOR TO NOTIFY ARLINGTON COUNTY'S FIBER ENGINEER AT (703) 228-7726 WHENEVER WORK IS BEING DONE WITHIN 2' OF ANY ARLINGTON COUNTY FIBER LINE OR HANDHOLE.
2. DO NOT BEND OR KINK CONDUIT WHEN MOVING.
3. DO NOT APPLY HEAT, I.E. BLOW TORCH TO FACILITATE MOVING CONDUIT.
4. CONTRACTOR SHALL EXCAVATE A MINIMUM OF X' IN EACH DIRECTION FROM OBSTRUCTION.
5. CONTRACTOR SHALL EXCAVATE THE EXISTING CONDUIT USING A MANUAL AND/OR HAND DIGGING METHOD SO AS TO NOT DAMAGE THE EXISTING CONDUIT.
6. MAXIMUM CONDUIT OFFSET IS 2'.
7. WHEN RELOCATION OF COUNTY FIBER SYSTEM EXCEEDS A 2' OFFSET AND/OR IF SPLICING IS REQUIRED, THEN ONE(1) OF THE COUNTY'S PRE-APPROVED SPLICING CONTRACTORS SHALL BE USED.
   - 7.a. CALL (703) 228-7726 TO OBTAIN A LIST OF CURRENTLY APPROVED CONTRACTORS.
   - 7.b. COST FOR ADJUSTING, RELOCATING AND/OR SPLICING SHALL BE PART OF COST FOR UTILITY BEING INSTALLED (WHICH CAUSES THE CONFLICT).
8. CONDUIT EXCAVATION AND MANIPULATION SHALL ONLY BE PERFORMED IN THE PRESENCE OF A COUNTY FIBER ENGINEER,(703) 228-7726.
9. NO MECHANICAL ASSISTANCE SHALL BE USED TO REPOSITION THE FIBER CONDUIT.
10. RING CUTS AND INSTALLATION OF COUPLERS AND SLIT DUCT SHALL BE PERFORMED ONLY BY THE COUNTY'S FIBER OPTIC MAINTENANCE CONTRACTOR.
11. NEW EMPTY FACILITIES MAY BE CONSTRUCTED BY OTHER CONTRACTORS WITH INSPECTIONS BY COUNTY FIBER CONTRACTORS OR ENGINEERS. RELOCATION OF THE FIBER OPTIC CABLE AND RESPLICING MAY ONLY BE PERFORMED BY THE COUNTY'S ON-CALL FIBER CONTRACTOR(S).

DOMINION ENERGY
POLYMER CONCRETE SPLICING BOX — VMD100



CU	STOCK#	A	B	C
SBOX24	42086295	24"	13"	18"
SBOX	68.059600	36"	24"	18"

DRAWN BY	DEVERICK J.	APPROVED	TPT	REVISED		DATE	11-05-08	DRAWING FILE NAME: VMD10021.dgn

ARLINGTON VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES

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Fax: 703.228.3606

rda
Rinker Design Associates, P.C.
11100 Endeavor Court, Suite 200, Manassas VA, 20109
www.rdacivil.com
Telephone: (703) 368-7373

Seal | Date

COMMONWEALTH OF VIRGINIA
SHARON D. DUSZA
Lic. No. 033455
9/20/22
PROFESSIONAL ENGINEER

Approvals | Date

Design Team Engineer Supervisor

Construction Management Supervisor

Water, Sewer, Streets Bureau Chief

Transportation Director

Project Manager

Revisions | Date

Designed: RDA
Drawn: CJC
Checked: SDD
Miss Utility Transmittal #:

Filename: 010073-D-Dry Utility Details.dwg
Path: M:\work\16094\16094-002 Columbia Pike all Phases\Simplan\Segment D
Plotted: September 20, 2022
Plotted by: hkaraman

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

DRY UTILITY DETAILS
COLUMBIA PIKE - ROUTE 244
MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

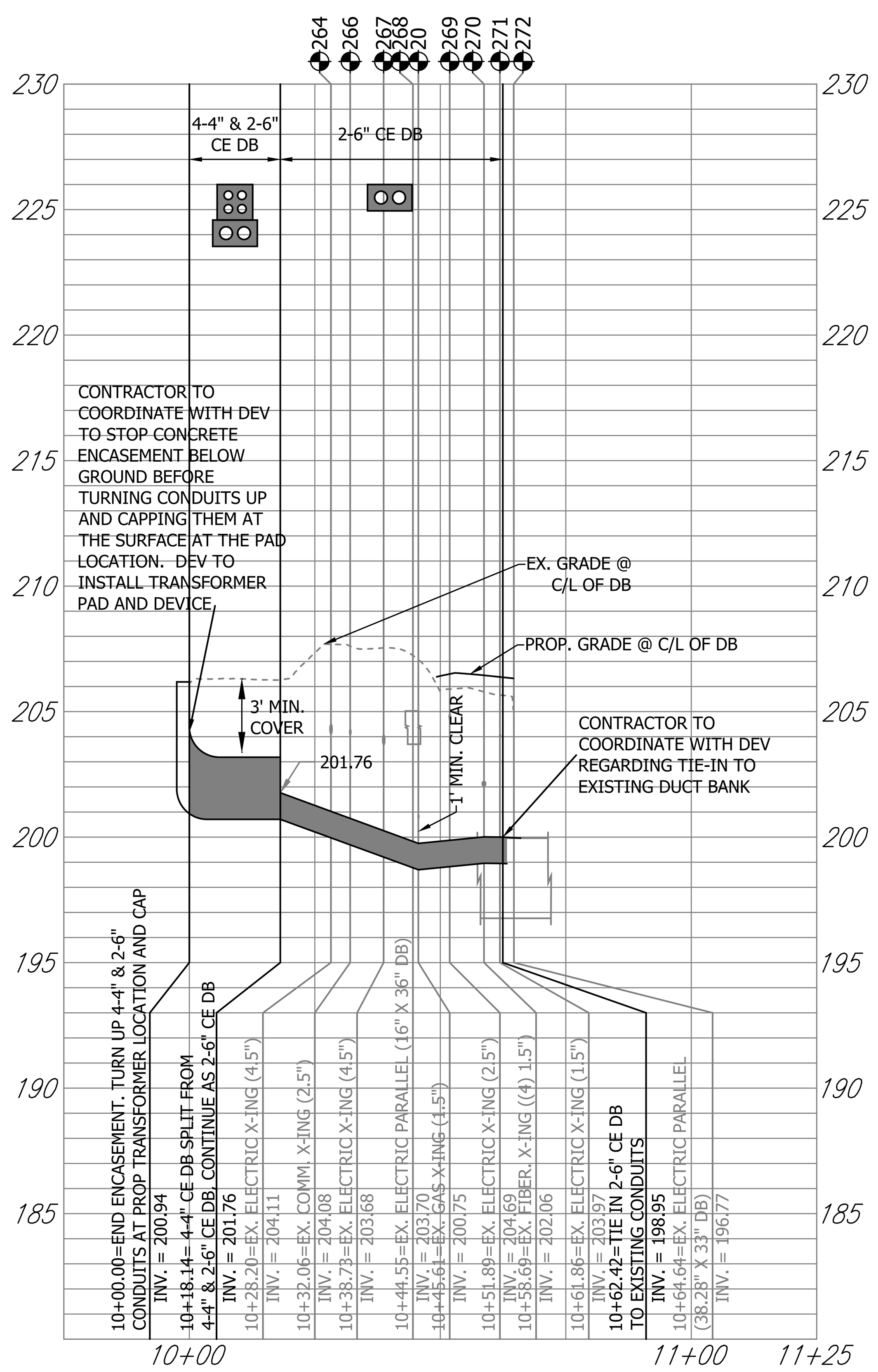
SCALE:	HOR. N/A VERT. N/A	SHEET:	D21.2 of D21.3

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

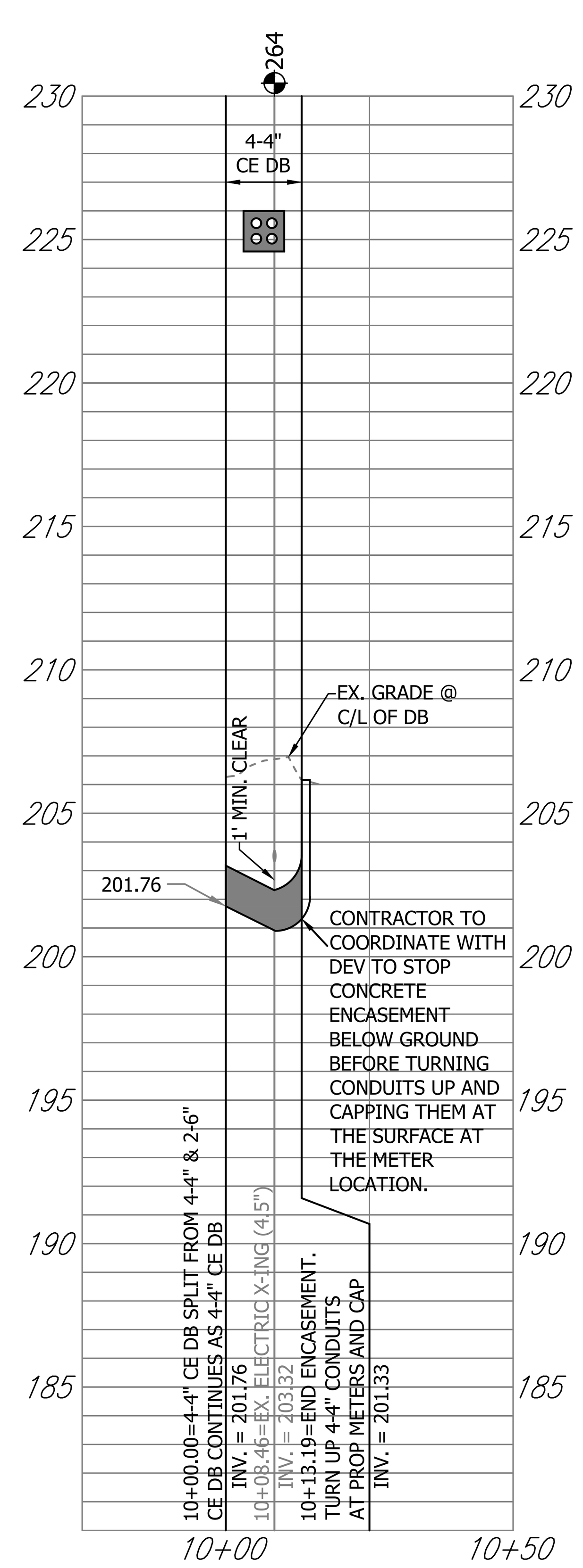
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

3/7/2023
APPROVAL DATE

DEV 1



DEV 1.1



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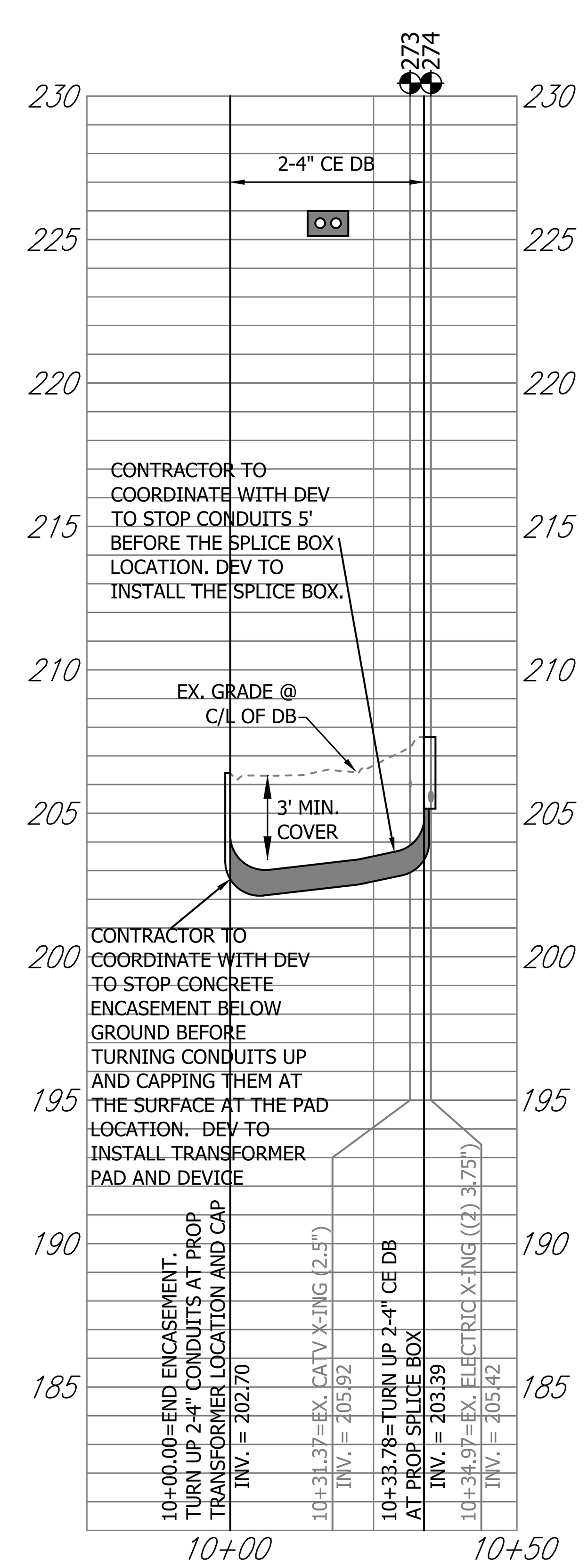
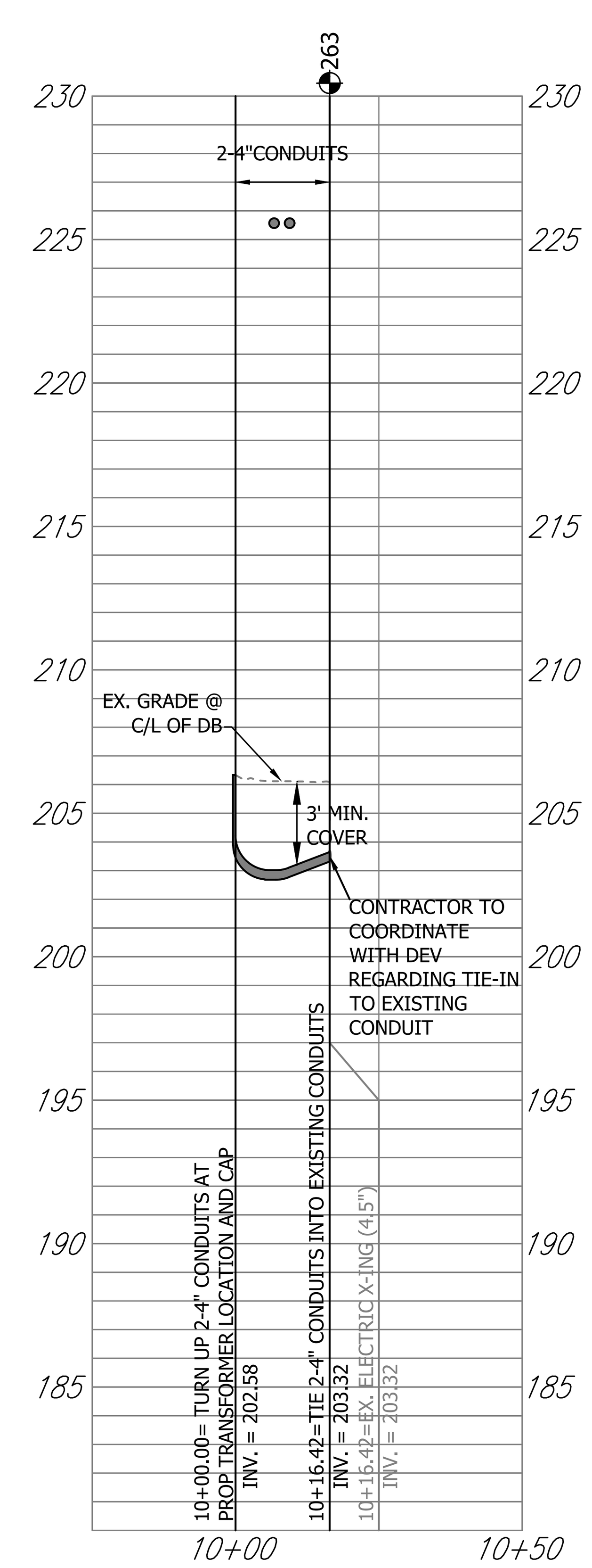


DEV 3



NOTES

1. MAINTAIN A MINIMUM 5' SEPARATION BETWEEN EXISTING POLES AND PROPOSED DUCTBANK AT ALL LOCATIONS.
2. FACILITIES ARE LOCATED WITHIN THE PUBLIC RIGHT-OF-WAY UNLESS NOTED OTHERWISE.
3. USE EXTREME CAUTION WHEN EXCAVATING UNDER AND NEAR OVERHEAD UTILITY WIRES.
4. APPROVAL OF THIS CONCEPTUAL DRY UTILITY PLAN SHALL ALLOW FOR THE ISSUANCE OF RIGHT-OF-WAY PERMITS FOR INSTALLATION OF CONDUITS, MANHOLES, HANDHOLES, ETC., WHICH WILL BE CONSTRUCTED FOR THE UTILITY COMPANY'S USE. RIGHT-OF-WAY PERMIT FOR INSTALLATION OF DEV FACILITY SUCH AS POLES, CABLES, ELECTRICAL DEVICES (TRANSFORMERS AND SWITCH BOXES) SHALL NOT BE ISSUED BEFORE APPROVAL OF THE FINAL DRY UTILITY PLAN.
5. THESE CONDUITS WERE PREPARED ON DATA COMPILED BY CIVIL ENGINEER OF RECORD. UNFORESEEN CIRCUMSTANCES MAY ARISE DURING THE CONSTRUCTION OF THIS DUCT BANK THAT MAY ALTER THE PLACEMENT OF PROPOSED CONDUIT/EQUIPMENT. FURTHERMORE, ANY UNKNOWN/KNOWN UTILITY LINES MAY BE ENCOUNTERED DURING THE CONSTRUCTION OF THIS DUCT BANK THAT ALSO MAY AFFECT THE PLACEMENT OF CONDUIT/EQUIPMENT. PLEASE CONSULT WITH THE APPROPRIATE DESIGN TEAM FOR ANY SITUATION ENCOUNTERED, IF NEEDED, TO DETERMINE, A VIABLE RESOLUTION AND PROPER COURSE OF ACTION.
6. WASHINGTON GAS PROPOSED LINES ARE SHOWN FOR REFERENCE ONLY AND ARE TO BE INSTALLED BY OTHERS.
7. PROTECT PROPOSED TRANSFORMER AND SPLICE BOX FROM DRIVEWAY TRAFFIC AT ALL TIMES.
8. CONTRACTOR TO STAKE PROPOSED DRIVEWAY BEFORE INSTALLATION OF DUCTBANKS AND CONDUITS

ARLINGTON COUNTY NOTES:

1. SEE STREET LIGHTNING SHEETS FOR ALL ARLINGTON COUNTY FIBER RELOCATION LOCATIONS.
2. ALL ARLINGTON COUNTY FIBER AND HH RELOCATION TO BE PERFORMED BY APPROVED COUNTY CONTRACTOR, N TO N FIBER (703-331-3884).

Dominion Commitment/Conceptual Design Acceptance Letter

June 22, 2022

Mr. Daniel Commerford
2100 Clarendon Blvd., Suite 800
Arlington, VA 22201

Re: Columbia Pike Multimodal Street Improvements
South Courthouse Road to South Garfield Street
(Segment D)
Arlington, VA

Dear Mr. Commerford:
Arlington County has developed a conceptual dry utility plan (attached) for the referenced project in conjunction with the site civil engineering plan. This dry utility plan dated June 20, 2022 considers the installation of a new underground utility system to accommodate the removal of the existing overhead utility wires and, utility poles that are adjacent to the site and/or permanent service to the buildings.

Dominion Energy of Virginia Power (DEV) has completed a conceptual review of the plans and profiles as shown on sheets D21.1-D21.3 and accepts the preliminary design of Columbia Pike Multimodal Street Improvements at S. Courthouse Road to South Garfield Street (Segment D) for the installation of conduit and manholes. DEV acknowledges that based on the current existing and projected load information provided, the current and existing capacity on DEV's systems, DEV's current design standards, and other information provided at the time of the DEV's conceptual review, *Arlington County's* dry utility plan meets the DEV requirements and commits to utilizing the underground infrastructures for installation of the DEV cable and other necessary facilities to underground the existing overhead utilities and/or provide permanent service to the buildings, if the underground infrastructure and installation meets DEV's requirements. DEV will endeavor to complete their final engineering design plan in a manner that will not result in additional trenching, conduit or any underground type work beyond what is shown on this county accepted dry utility conceptual plan. Should there be a change in any of the following; DEV reserves the right to adjust its design accordingly to assure the operational integrity of its system:

- Conceptual plans submitted
- Existing and planned loads on DEV's system
- DEV's standards of design
- Any other unforeseen changes

Any changes DEV must make to the conceptual dry utility plan will need to be coordinated with the Developer. The Developer will be responsible for submitting to the County a revision to the approved site civil plan. The County approval must be obtained before any Right-of-Way permits may be issued.

Should you have any questions regarding this plan, feel free to contact *me* at *703-228-3664.*

Sincerely,

Jerry Kuo

Dominion Energy of Virginia agrees with terms as stated in this letter and accepts this conceptual dry utility plan with the understanding that the plans are subject to change. DEV reserves the right to adjust the plan as needed to meet the operational integrity of its electric distribution system.

Designated Dominion Supervisor: Denise Stevens
(Print Full Name)

Signature: [signature], Date: 6/27/22
Designated Dominion Supervisor

DEV Project Number: 10553093

Last Updated: May 18, 2011.

GRAPHIC SCALE
25 12.5 0 25
(HORIZONTAL FEET)
5 2.5 0 5
(VERTICAL FEET)

ARLINGTON
VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES

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rda
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www.rdacivil.com
Telephone: (703) 368-7373

Seal Date

COMMONWEALTH OF VIRGINIA
SHARON D. DUSZA
Lic. No. 033455
9/20/22
PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: RDA
Drawn: CJC
Checked: SSD
Miss Utility Transmittal #:

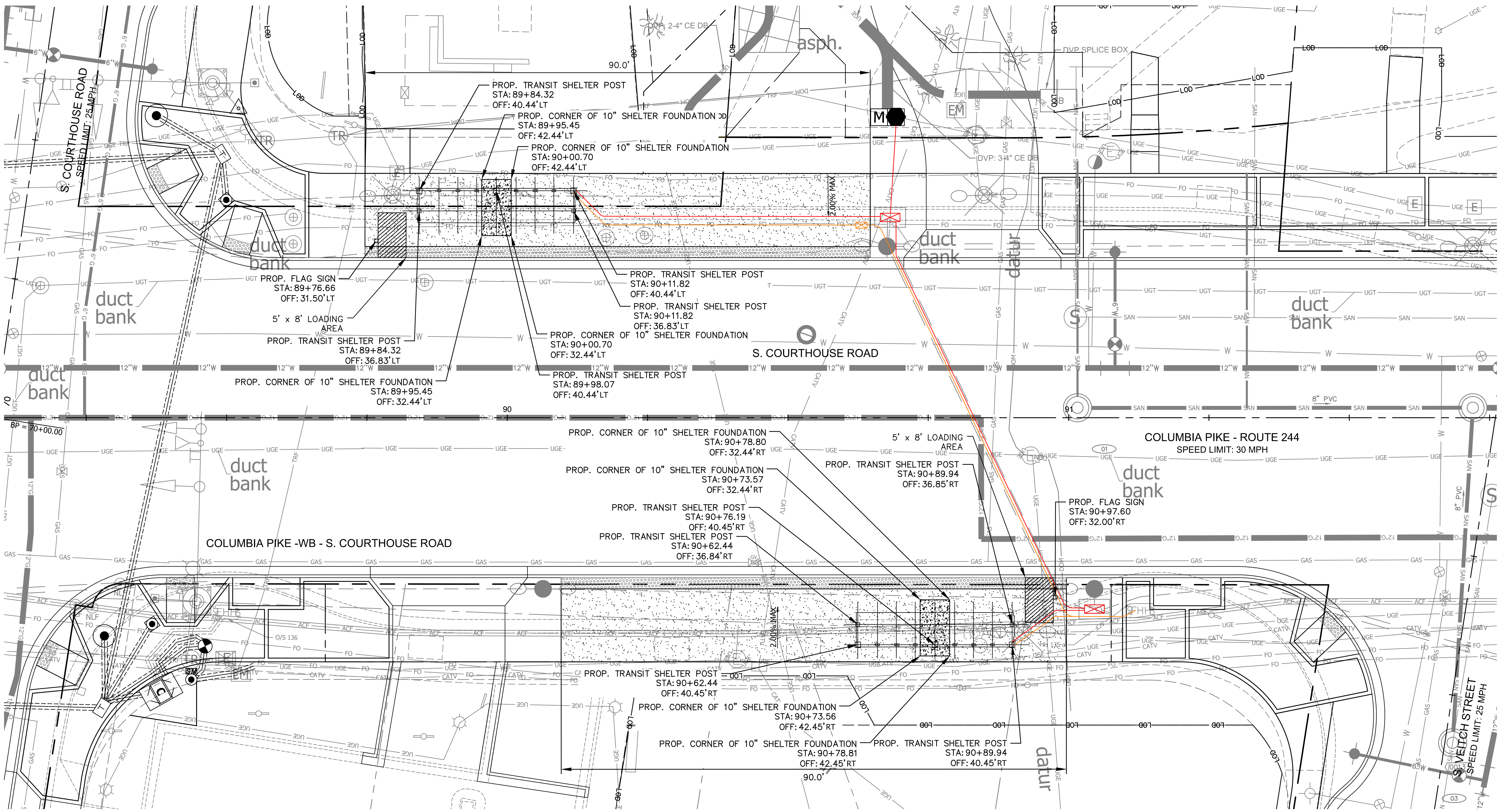
Filename: 010073-D-DEV-PROFILES.dwg
Path:
Plotted: September 20, 2022
Plotted by: hkaraman

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

DEV PROFILES
COLUMBIA PIKE - ROUTE 244
MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE: HOR. 1" = 25' VERT. 1" = 5'   SHEET: D21.3 of D21.3

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
3/7/2023
APPROVAL DATE



NOTES:

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LEGEND:

- PROP 2" ELEC. CONDUIT
- PROP 2" COMM. CONDUIT
- PROP ELEC. JUNCTION BOX
- PROP COMM. JUNCTION BOX
- ELECTRIC METER (M)
- PROP TRANSIT SHELTER FOUNDATION/PLATFORM

GRAPHIC SCALE IN FEET
0 5 10 20

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

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11400 Commerce Park Drive, Suite 400
Reston Virginia 20191
Phone: 703-674-1300
Fax: 703-674-1350

Seal
COMMONWEALTH OF VIRGINIA
EDWARD J. DELIO
Lic. No. 0402054356
09/22/2022
PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: MAT
Drawn: MAT
Checked: EJD
Miss Utility Transmittal #:

Filename: D Bus Shelter Foundation Plan Sheet
Path: K:\NVA_RDWY\110003073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segment\Segment D 7.5.3 - Final Design\PlanSheets\Bus Shelter Foundation Plan Sheets
Plotted: September 22, 2022
Plotted by: andy.smith

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TRANSIT SHELTER FOUNDATION PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

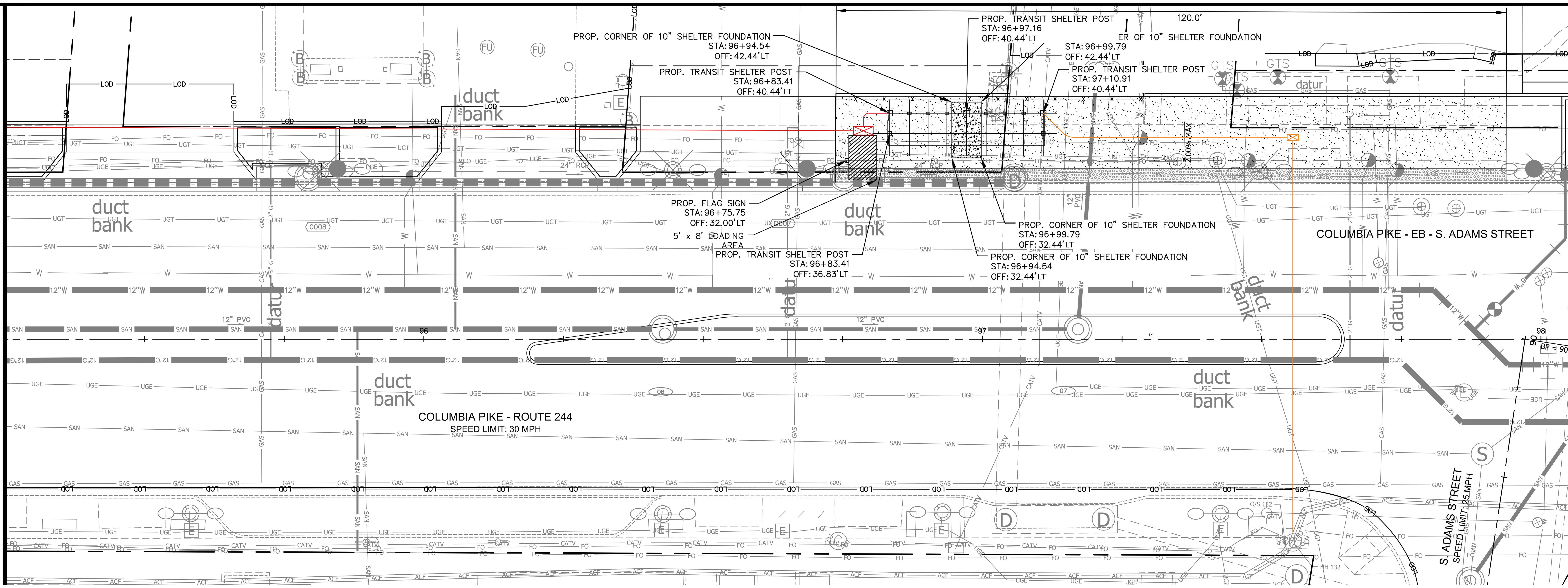
SCALE: HOR. 1" = 10'
SHEET: D22.1 of D22.4

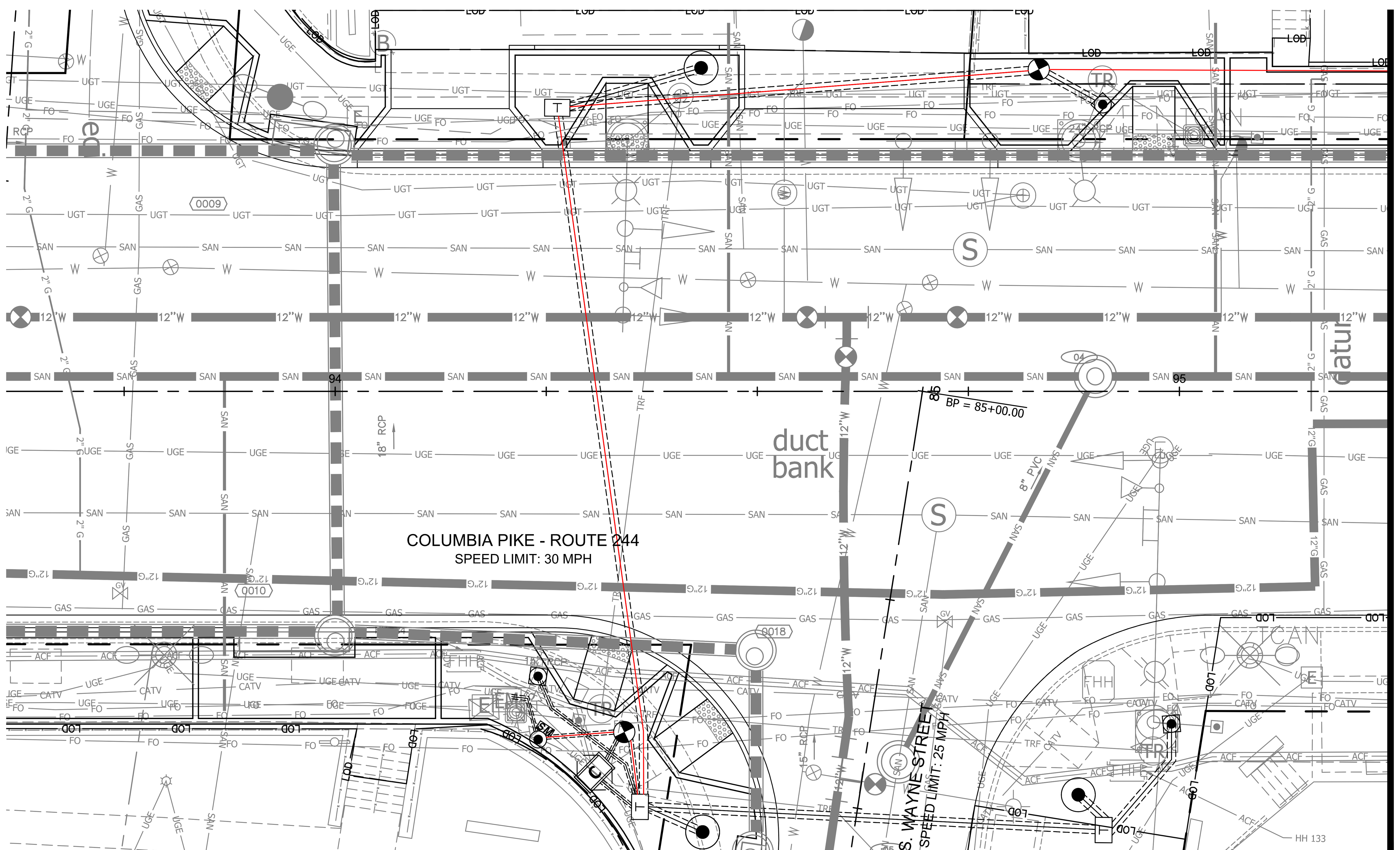
ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES

3/7/2023
APPROVAL DATE

MATCHLINE STA. 95+25





MATCHLINE STA. 95+25

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GRAPHIC SCALE IN FEET
0 5 10 20

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PROFESSIONAL ENGINEER

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Revisions	Date

Designed: MAT
Drawn: MAT
Checked: EJD
Miss Utility Transmittal #:

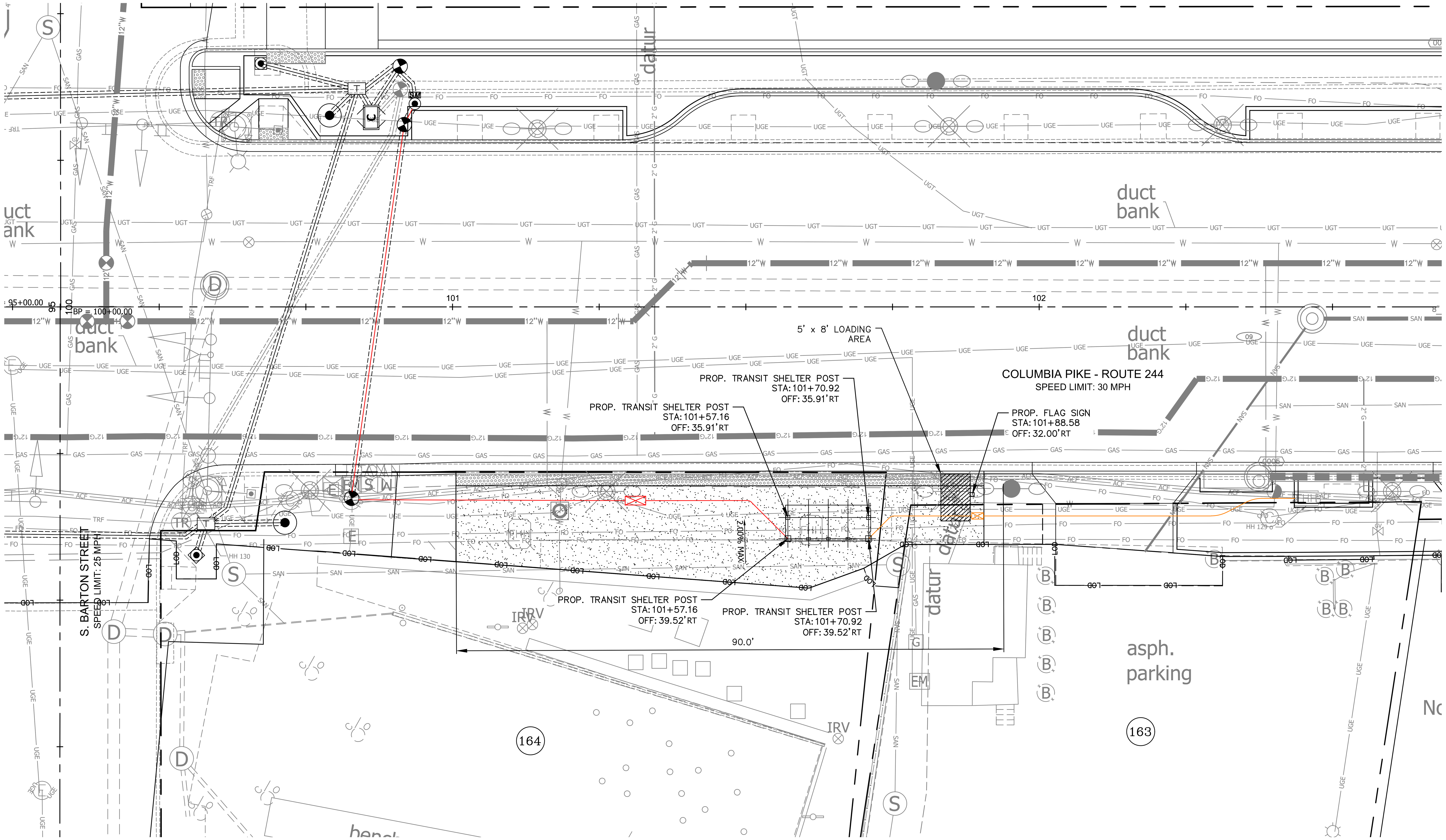
Filename: D Bus Shelter Foundation Plan Shee
Path: K:\NVA_KDWY\110003073 Columbia Pike Multimodal\Production Task 7.5 Final Design of Columbia Pike Segment\Segment D\7.5.3 - Final Design\PlanSheets\Bus Shelter Foundation Plan Sheets
Plotted: September 22, 2022
Plotted by: andy.smith

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TRANSIT SHELTER FOUNDATION PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE:	HOR. 1" = 10'	SHEET:	D22.2 of D22.4

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
3/7/2023
APPROVAL DATE



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GRAPHIC SCALE IN FEET
0 5 10 20

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Seal

COMMONWEALTH OF VIRGINIA
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PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
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Revisions	Date

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Drawn: MAT
Checked: EJD
Miss Utility Transmittal #:

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Plotted: September 22, 2022
Plotted by: Ted.DeLio

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TRANSIT SHELTER FOUNDATION PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE:	HOR. 1" = 10'	SHEET:	D22.3 of D22.4

ARLINGTON VIRGINIA
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BUREAU CHIEF, DES - DEVELOPMENT SERVICES
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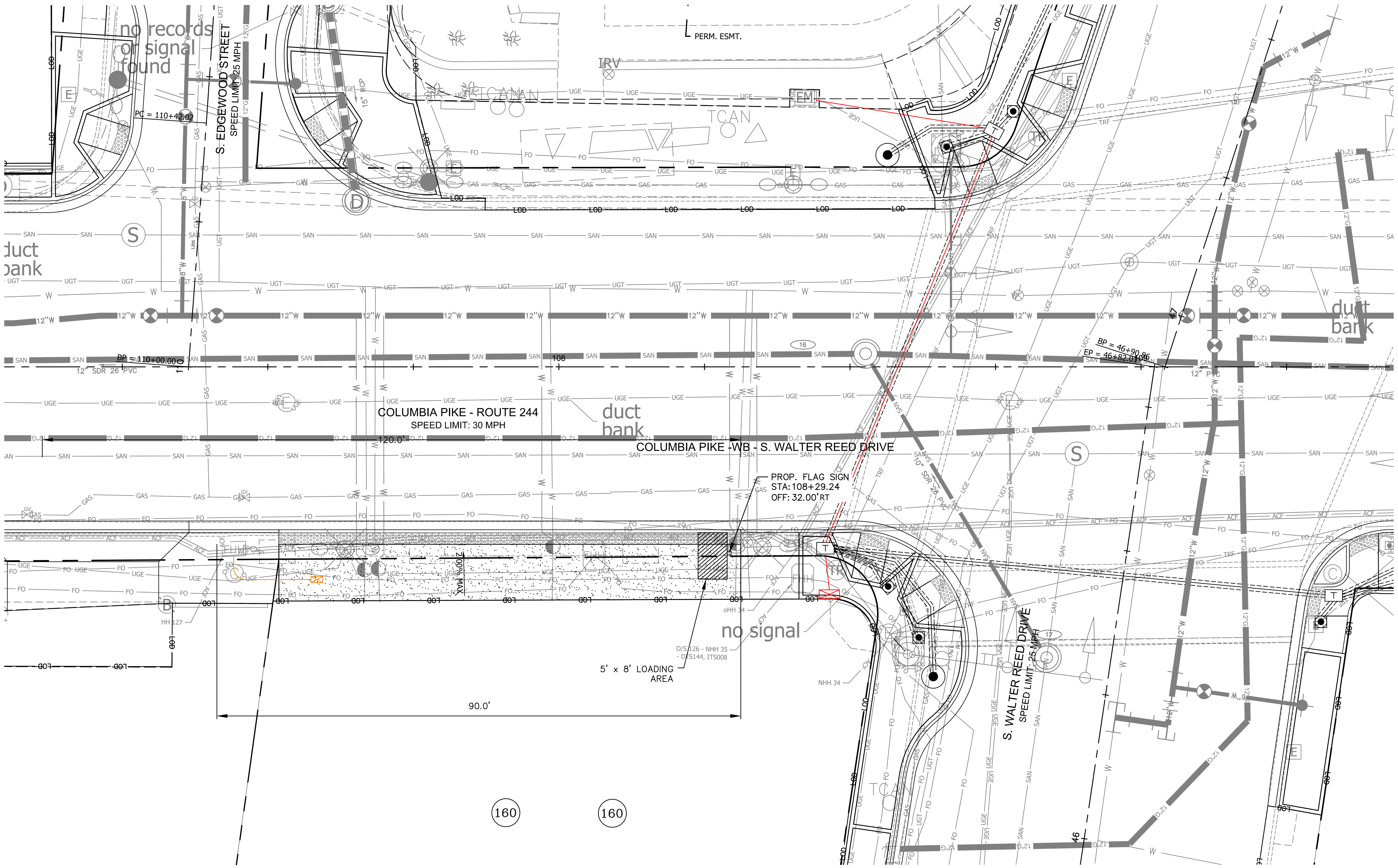

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GRAPHIC SCALE IN FEET
0 5 10 20

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09/22/2022
PROFESSIONAL ENGINEER

Approvals	Date
Design Team Engineer Supervisor	
Construction Management Supervisor	
Water, Sewer, Streets Bureau Chief	
Transportation Director	
Project Manager	

Revisions	Date

Designed: MAT
Drawn: MAT
Checked: EJD
Miss Utility Transmittal #:

Filename: D Bus Shelter Foundation Plan Sheets.dwg
Path: K:\NVA_RDWY\110010073 Columbia Pike Multimodal\Production\Task 7.5 Final Design of Columbia Pike Segments\Segment D\7.5.3 - Final Design\PlanSheets\Bus Shelter Foundation Plan Sheets
Plotted: September 22, 2022
Plotted by: andy.smith

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

TRANSIT SHELTER FOUNDATION PLAN
COLUMBIA PIKE - ROUTE 244
COLUMBIA PIKE - MULTIMODAL STREET IMPROVEMENTS
SEGMENT D

SCALE:	HOR. 1" = 10'	SHEET:	D22.4 of D22.4

ARLINGTON VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES
LUIS ARAYA
BUREAU CHIEF, DES - DEVELOPMENT SERVICES
3/7/2023
APPROVAL DATE