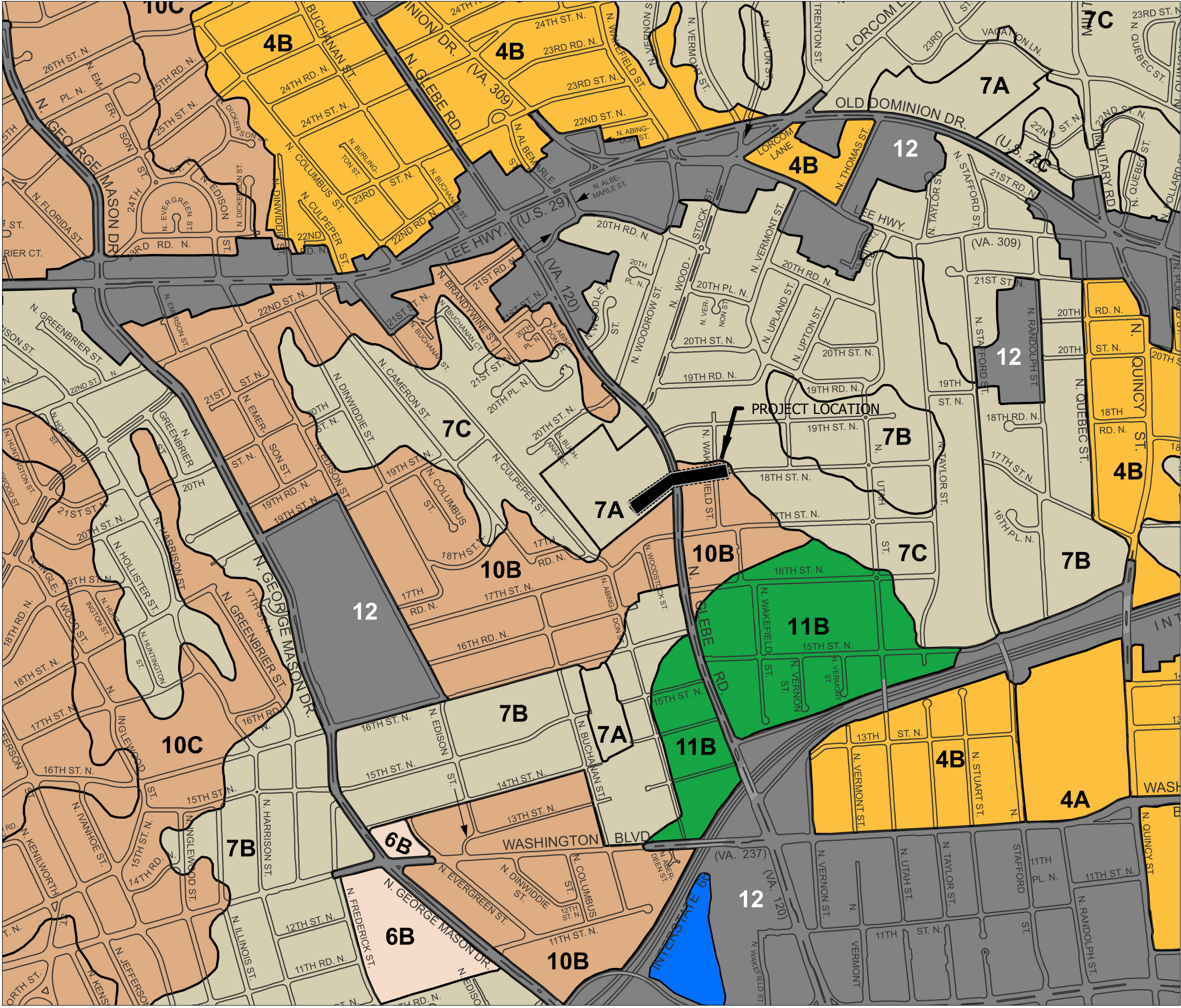


LUBBER RUN
WATERSHED AREA



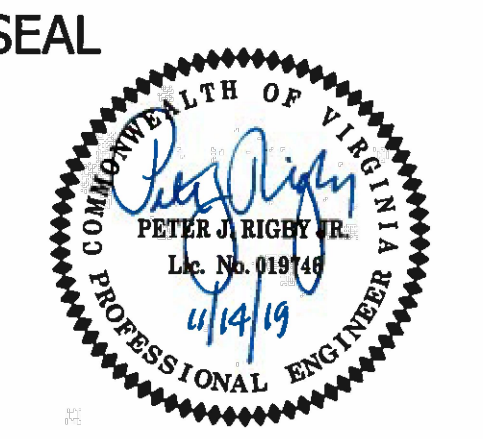
SOIL MAP
(N.T.S.)

- 4A URBAN LAND - GENTLY SLOPING
- 4B URBAN LAND - NEABISCO SOILS
- 6B URBAN LAND - GENTLY SLOPING
- 7A URBAN LAND - GENTLY SLOPING
- 7B URBAN LAND - GENTLY SLOPING
- 10B URBAN LAND - GENTLY SLOPING
- 10C URBAN LAND - MODERATELY SLOPING



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

COPYRIGHT © 2018 ARLINGTON COUNTY
VIRGINIA - ALL RIGHTS RESERVED



APPROVALS	DATE
<i>Matt B. H.</i>	11/15/2019
QUALITY CONTROL ENGINEER	
<i>Peter J. Rigby</i>	11/18/19
CONSTRUCTION MANAGEMENT SUPERVISOR	
<i>John Kock</i>	11/19/19
WATER, SEWER, STREETS BUREAU CHIEF	
<i>John Kock</i>	11/19/19
TRANSPORTATION DIRECTOR	
<i>John Kock</i>	Nov 19, 2019
PROJECT MANAGER	

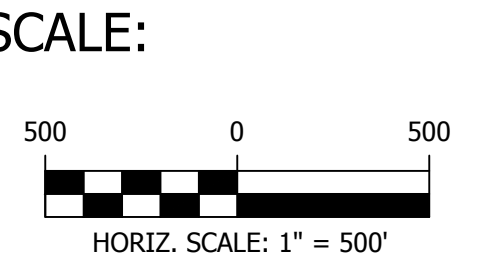
REVISIONS	DATE

18TH STREET NORTH

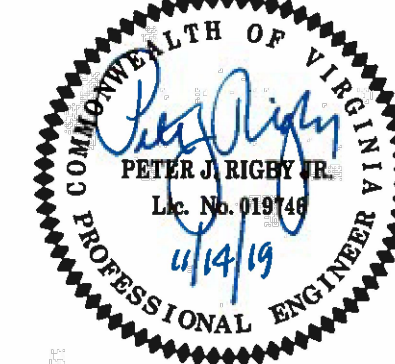
From 18th Street N. - N. Glebe Road
To N. Wakefield Street

DRAINAGE AREA AND SOIL MAP

DESIGNED: C. UYAMAM / L. DELACRUZ
DRAWN: C. UYAMAM / L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A
PLOTTED: NOVEMBER 25 2019



SEAL



APPROVALS DATE

QUALITY CONTROL ENGINEER
CONSTRUCTION MANAGEMENT SUPERVISOR
WATER, SEWER, STREETS BUREAU CHIEF
TRANSPORTATION DIRECTOR
PROJECT MANAGER

REVISIONS DATE

REVISIONS DATE

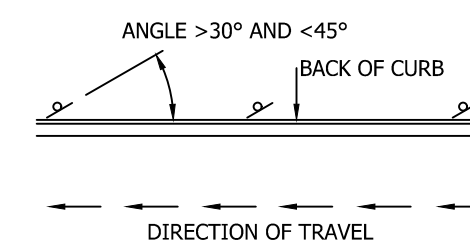
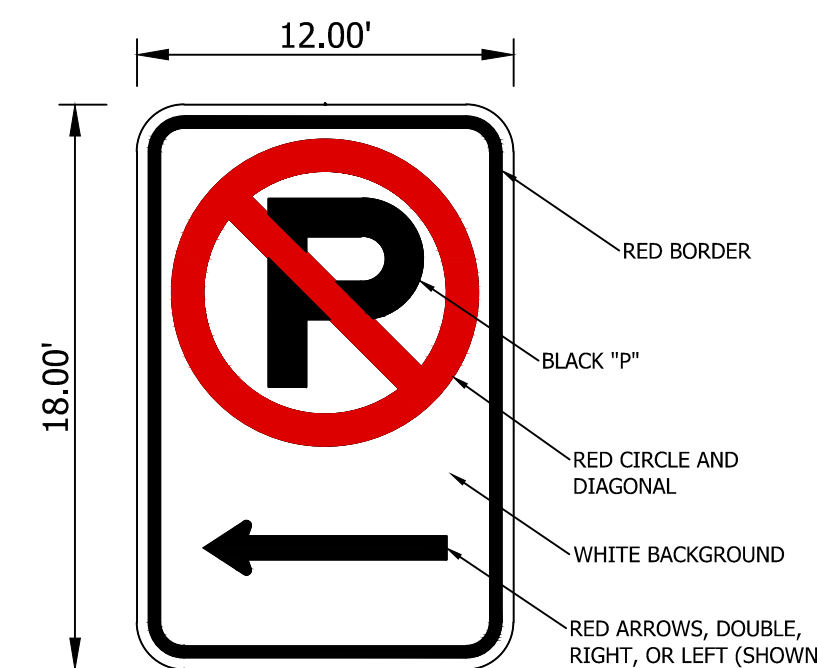
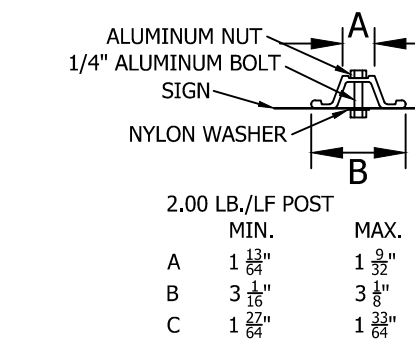
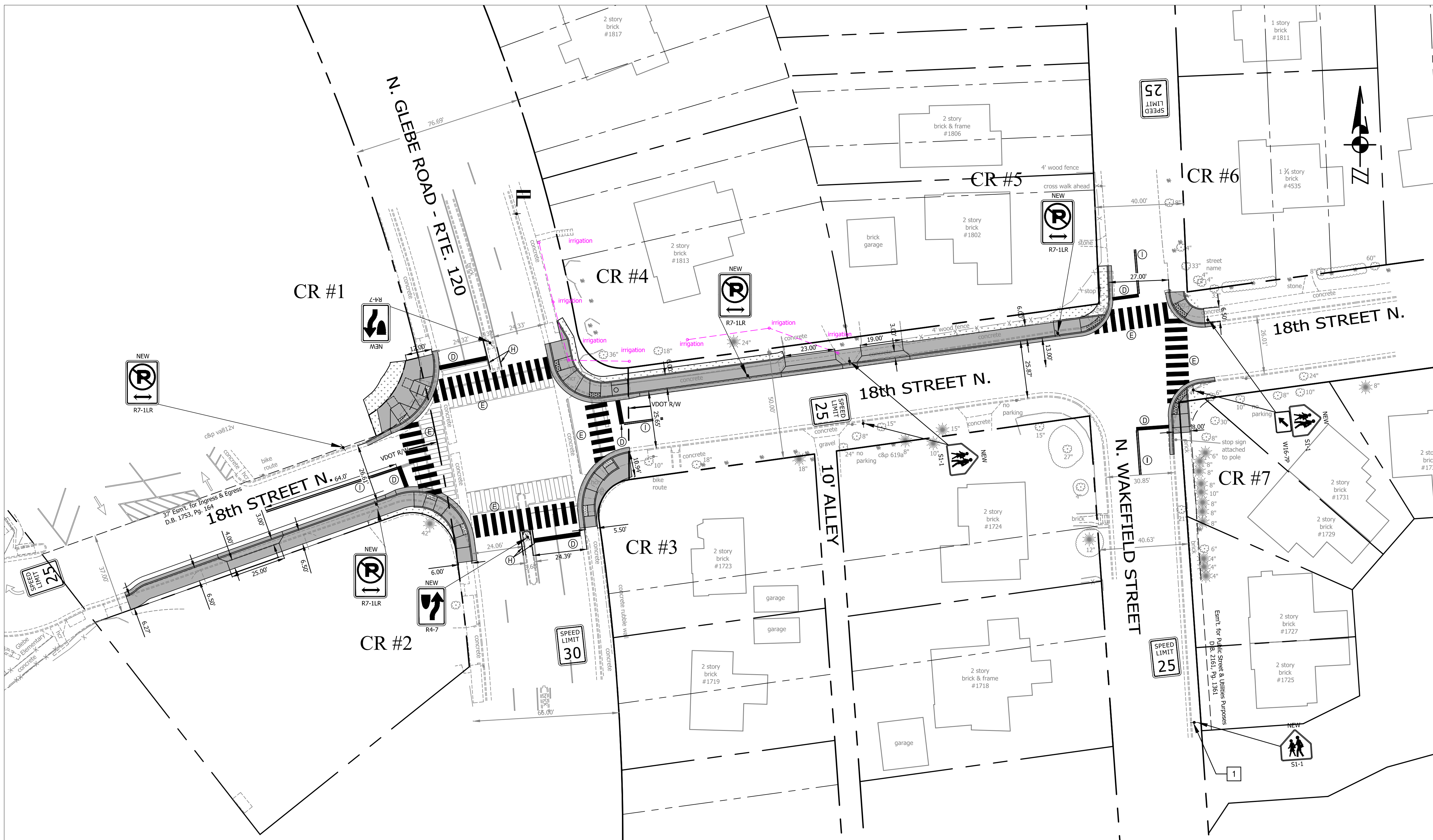
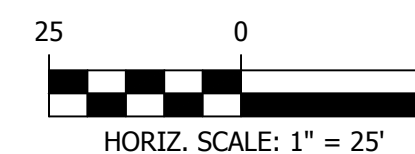
18TH STREET NORTH
From 18th Street N. - N. Glebe Road
To N. Wakefield Street

SIGNING & PAVEMENT MARKING PLAN

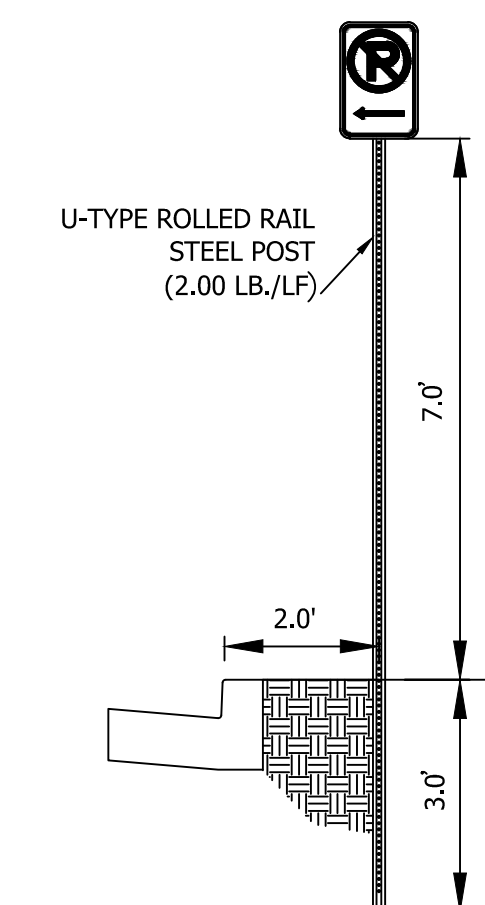
DESIGNED: C. UYAMAM / L. DELACRUZ
DRAWN: C. UYAMAM / L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: NOVEMBER 25 2019

SCALE:



- NOTES:
1. PARKING SIGN TO BE MUTCD R7-2 WITH NO PARKING SYMBOL.
 2. WHERE POSSIBLE SIGNS SHOULD BE MOUNTED TO LIGHT POLE WITH STAINLESS STEEL BANDS.
 3. DRIVING CAP TO BE USED WHEN DRIVING POST



CONSTRUCTION NOTES:

- 1 SIGN ON STREETLIGHT

STANDARD PAVEMENT MARKING LEGEND:

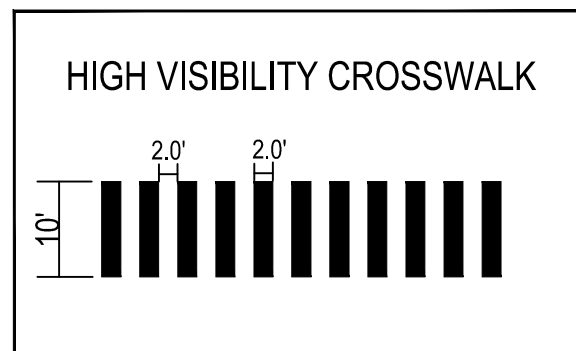
- (A) TYPE B CLASS 1.....WHITE 4" WIDTH
(B) TYPE B CLASS 1.....WHITE 4" WIDTH, 10' LONG, 30' SPACING
(C) TYPE B CLASS 1.....WHITE 4" WIDTH, 2' LONG, 10' SPACING
(D) TYPE B CLASS 1.....WHITE 18" WIDTH
(E) TYPE B CLASS 1.....WHITE 24" WIDTH
(F) TYPE B CLASS 1.....WHITE 6" WIDTH
(G) TYPE B CLASS 1.....YELLOW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

PROPOSED SIGNS

NAME	TYPE	SIZE	NUMBER
NO PARKING SIGN	R7 - 1LR	24"X12"	4
KEEP RIGHT SYMBOL	R4-7	18"X24"	2
SCHOOL SIGN	S1 - 1	30"X30"	5
DOWNWARD DIAGONAL ARROW	W16-7P	24"X12"	2

LEGEND

- EXISTING PROPOSED
- BUS STOP SIGN FIRE HYDRANT PARKING METER STRIPING



SIGN 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 MARKINGS LAYOUT 48 HRS. PRIOR TO INSTALLATION OF MARKINGS.
3. PAVEMENT MARKINGS ARE TO BE IN ACCORDANCE WITH THE FOLLOWING AND ANY REVISIONS HERETO:
A) THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
B) ARLINGTON COUNTY MARKING STANDARDS.
4. ALL MARKINGS SHALL BE THERMOPLASTIC PER ARLINGTON COUNTY MARKINGS STANDARDS.
5. STOP BARS SHALL BE A MINIMUM OF 4' IN ADVANCE OF A MARKED CROSSWALK. IF THERE IS NO MARKED CROSSWALK, STOP BAR SHALL BE NO MORE THAN 30' FROM THE NEAREST EDGE OF THE INTERSECTED TRAVEL WAY.
6. CROSSWALKS SHALL BE 10' WIDE UNLESS OTHERWISE NOTED.
7. LEFT TURN ARROWS SHALL BE LOCATED 25' BACK FROM STOP BAR, FOR ADDITIONAL ARROWS FOLLOW COUNTY MARKING STANDARDS.
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.
9. SHARROWS SHALL BE PLACED IN CENTER OF LANE, 250' APART UNLESS OTHERWISE SPECIFIED.
10. BIKE LANE SYMBOLS TO BE PLACED 330' APART UNLESS OTHERWISE SPECIFIED.

DATE: JULY 13, 2015 TO AUGUST 3, 2015

DESIGNED BY: CATALINO UYAMAM
SUBSURFACE UTILITY BY: ARLINGTON COUNTY GOV., DES

DATE: JULY 13, 2015 TO AUGUST 3, 2015

PROJECT MANAGER: GABRIELA VEGA
SURVEYED BY: ARLINGTON COUNTY GOV., DES

TRANSPORTATION MANAGEMENT PLAN (TMP) (TYPE A - CATEGORY I & II)

GENERAL TMP NOTES:

- PROJECT IS A "TYPE A" TMP PROJECT. THIS PROJECT SUPPORTS FOR THE IMPROVEMENT OF N. GLEBE ROAD TO PROMOTE SAFETY FOR THE USER OF THE INTERSECTION. THE DESIGN FOR THE 18TH STREET N. SIDEWALK IMPROVEMENT PROJECT INCLUDES CHANGES AT INTERSECTION OF N. GLEBE ROAD AND 18TH STREET N. THE PROPOSED WORK AT THIS INTERSECTION INCLUDES INSTALLING NEW CURB AND GUTTER, SIDEWALK, ADA, CURB RAMPS, PAVEMENT MARKINGS AND UPGRADING EXISTING SIGNALS
- THIS PROJECT INCLUDES WIDENING OF SIDEWALK ALONG 18TH STREET N. THE PROPOSED WORK WILL REQUIRE CLOSING OF 1 TRAVEL LANE TO TRAFFIC DURING WORKING HOURS.
- FOR C&G, SIDEWALK, AND PAVEMENT WORK (ONE-LANE CLOSURE), THE WORKING HOURS ALONG VDOT RIGHT-OF-WAY AREA ARE AS FOLLOWS:

LANE CLOSURES (URBAN OTHER PRINCIPAL ARTERIAL)			
MON. TO THU.	FRIDAY	SATURDAY	SUNDAY
9:30 AM TO 3:30 PM	9:30 AM TO 2:00 PM	*Not allowed	*Not allowed
*Not allowed	*Not allowed	*Not allowed	*Not allowed
- THE WORKING HOURS WITHIN ARLINGTON COUNTY RIGHT-OF-WAY ARE AS FOLLOWS:

LANE CLOSURES (MINOR ARTERIAL)		
MON. TO FRI.	SATURDAY	SUNDAY
9:00 AM TO 4:00 PM	*Not allowed	*Not allowed
*Not allowed	*Not allowed	*Not allowed
- BEFORE AND AFTER WORKING HOURS, ALL TRAVEL LANES SHALL BE OPENED TO THE MOTORISTS.
- NO LANE CLOSURES WILL BE ALLOWED FROM NOON ON THE DAY BEFORE A HOLIDAY UNTIL NOON ON THE WORKDAY FOLLOWING THE HOLIDAY. HOLIDAYS INCLUDE ALL STATE AND FEDERAL HOLIDAYS.
- MAINTENANCE OF TRAFFIC (MOT) PLAN WHICH INCLUDE THE SEQUENCE OF CONSTRUCTION (SOC) WAS REVIEWED AND APPROVED BY THE ARLINGTON COUNTY TRANSPORTATION ENGINEERING AND OPERATION (TE&O) BUREAU. THE MOT PLAN CONTAINED TYPES OF SIGNAGES AND BARRICADES USED, AND RECOMMENDED PHASES AND SEQUENCES OF CONSTRUCTION. FOR TMP, MOT & SOC, SEE PLAN SHEET 27 OF 29 TO 28 OF 29.

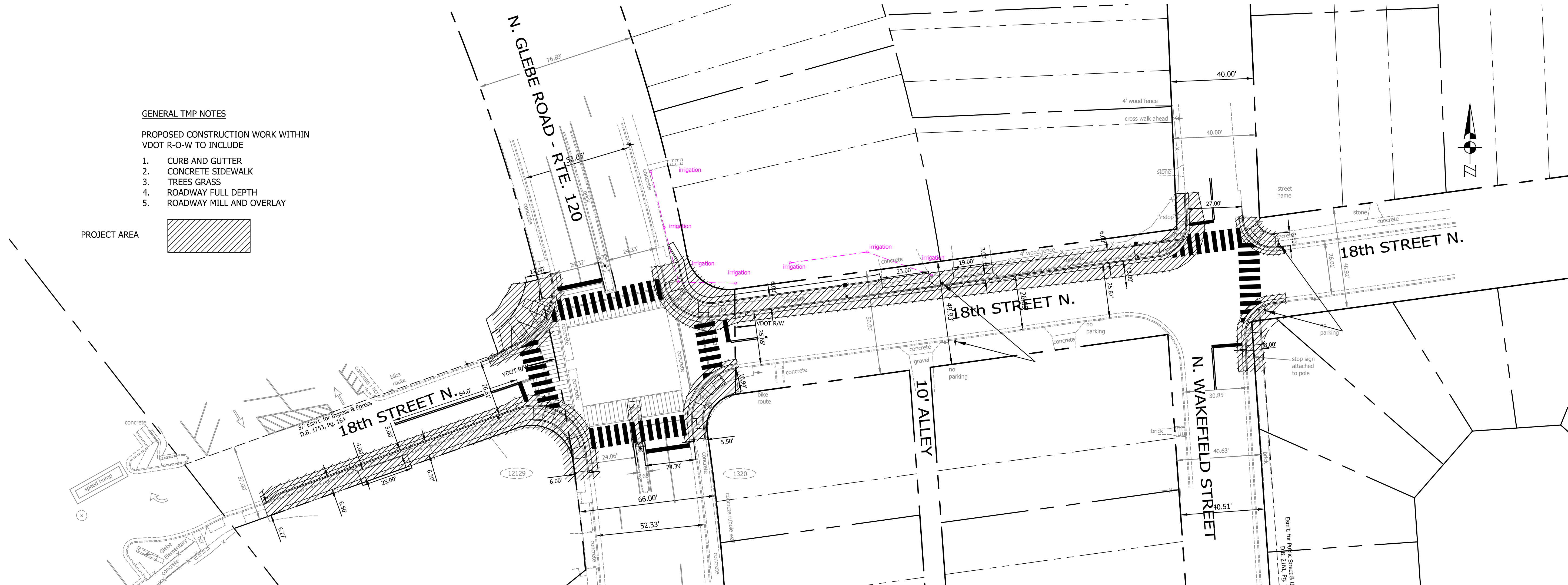
- NO DRIVEWAY ENTRANCES ARE BEING AFFECTED BY THE PROPOSED WORK ALONG VDOT R-O-W.
- THE CONTRACTOR SHALL NOT CLOSE, RELOCATE, OR OTHERWISE MODIFY A BUS STOP WITHOUT PRIOR REQUEST OF THE PROJECT OFFICER. ANY RELOCATION OR CLOSURE OF A BUS STOP SHALL BE COORDINATED WITH THE ARLINGTON COUNTY'S BUS STOP COORDINATOR (PHONE #703-228-3049) AT LEAST FOUR WEEKS IN ADVANCE OF CONSTRUCTION COMMENCEMENT. ALL TEMPORARY AND FINAL BUS TRAVEL LANES MUST BE MINIMUM 11' WIDE.
- THE CONTRACTOR SHALL RETAIN PEDESTRIAN ACCESS TO THE BUS STOPS LOCATED WITHIN THE CONSTRUCTION ZONE FOR THE DURATION OF THE PROJECT.
- THE CONTRACTOR SHALL:
 - DESIGNATE A PERSON ASSIGNED TO THE PROJECT WHO WILL HAVE THE PRIMARY RESPONSIBILITY, WITH SUFFICIENT AUTHORITY, FOR IMPLEMENTING THE TMP/MOT/SOC AND OTHER SAFETY AND MOBILITY ASPECTS OF THE PERMIT WORK. THIS PERSON SHALL COORDINATE WITH THE ARLINGTON COUNTY CONSTRUCTION MANAGER FOR THE DURATION OF THE PROJECT.
 - ENSURE THAT PERSONNEL ASSIGNED TO THE PROJECT ARE TRAINED IN TRAFFIC CONTROL TO A LEVEL COMMENSURATE WITH THEIR RESPONSIBILITIES IN ACCORDANCE WITH VDOT'S WORK ZONE TRAFFIC CONTROL TRAINING GUIDELINES.
 - PERFORM REVIEWS OF THE CONSTRUCTION AREA TO ENSURE COMPLIANCE WITH CONTRACT DOCUMENTS AT REGULARLY SCHEDULED INTERVALS AT THE DIRECTION OF THE ENGINEER. CONTRACTORS SHALL MAINTAIN AN APPROVED COPY OF THE TEMPORARY TRAFFIC CONTROL PLAN AT THE WORK SITE AT ALL TIMES.
- THIS TMP/MOT/SOC PLAN IS INTENDED AS A GUIDE. IT IS NOT TO ENUMERATE EVERY DETAIL WHICH MUST BE CONSIDERED IN THE CONSTRUCTION OF EACH PHASE, BUT ONLY TO SHOW THE GENERAL HANDLING OF EXISTING TRAFFIC. IF THE CONTRACTOR IS TO DEViate FROM THE APPROVED TMP, A NEW OR REVISED TMP MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.
- ALL AREAS EXCAVATED BELOW THE EXISTING PAVEMENT SURFACE AND WITHIN THE CLEAR ZONE AT THE CONCLUSION OF EACH WORKDAY, SHALL BE BACKFILLED UP TO EXISTING PAVEMENT OR NEWLY CONSTRUCTED PAVEMENT SURFACE FOR THE SAFETY AND PROTECTION OF VEHICULAR TRAFFIC.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FOR THE DURATION OF THE PROJECT.

- CONTRACTOR SHALL ADD ANY ADDITIONAL TEMPORARY MEASURES NECESSARY TO FACILITATE PROPER, POSITIVE DRAINAGE FOR THE DURATION OF CONSTRUCTION.
- EACH PHASE OF CONSTRUCTION SHALL BE COMPLETED PRIOR TO THE START OF THE NEXT PHASE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - PUBLIC COMMUNICATION PLAN
THE CONTRACTOR SHALL BE RESPONSIBLE FOR:
 - NOTIFYING THE VDOT PROJECT MANAGER/RESIDENCY ADMINISTRATOR OF SCHEDULED WORK PLANS AT LEAST 48 HOURS PRIOR TO BEGINNING EACH PHASE OF THE MAINTENANCE OF TRAFFIC OPERATIONS.
 - NOTIFYING THE VDOT PROJECT MANAGER/RESIDENCY ADMINISTRATOR, REGIONAL OPERATION MANAGER AND THE PUBLIC AFFAIRS STAFF OF ANY UNSCHEDULED TRAFFIC DELAYS THAT MAY OCCUR.
 - INSTALLING VARIABLE MESSAGE SIGNBOARDS (VMS) WITH PROJECT START DATE INFORMATION APPROXIMATELY 500' BEFORE AND AFTER THE PROJECT SITE LIMIT THREE (3) WEEKS IN ADVANCE PRIOR TO START OF ANY ROADWORK AND LANE CLOSURE.
 - TRANSPORTATION OPERATION PLANS
THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND PROVIDING THE FOLLOWING:
 - NOTIFYING THE VDOT REGIONAL TRANSPORTATION OPERATIONS CENTER (TOC) 48 HOURS IN ADVANCE IN ORDER TO PLACE LANE CLOSURE INFORMATION ON THE 511 SYSTEM AND VA-TRAFFIC.
 - HAVING THE LIST OF LOCAL EMERGENCY RESPONSE AGENCIES AVAILABLE AT THE WORK SITE AT ALL TIMES.
 - IMMEDIATELY REPORTING ANY TRAFFIC INCIDENTS THAT MAY OCCUR IN THE WORK ZONE.
 - NOTIFY THE PROJECT'S CONSTRUCTION MANAGER AND CORRESPONDING ENGINEER OF

- ANY INCIDENTS AND EXPECTED TRAFFIC DELAYS.
- E. WITHIN 24 HOURS OF ANY INCIDENTS WITHIN THE CONSTRUCTION WORK ZONE, A REVIEW OF THE TRAFFIC CONTROLS SHALL BE IMPLEMENTED AND NECESSARY ADJUSTMENTS MADE TO REDUCE THE FREQUENCY AND SEVERITY OF ANY FUTURE ACCIDENTS.
- F. EMERGENCY CONTACTS DURING THE DURATION OF THE PROJECTS ARE THE FOLLOWING:
- KAMAL TAKTAK - CONSTRUCTION MANAGEMENT SUPERVISOR - 703-228-7527
 - GABRIELA VEGA - TE&O PROJECT MANAGEMENT COORDINATOR - 703-228-3938
 - PETE RIGBY - ENGINEERING DESIGN TEAM SUPERVISOR - 703-228-3604
 - DES R-O-W PERMITTING SECTION - 703-228-4798
 - ARLINGTON COUNTY TRANSIT BUREAU - 703-228-3049
 - WATER, SEWER AND STREET OPERATION - 703-228-6555
 - ARLINGTON COUNTY POLICE - 703 -558-2222
 - EMERGENCY CALL - 911
 - VDOT PROJECT CONSTRUCTION INSPECTOR - TBD



PROJECT SITE SCALE: 1" = 25'

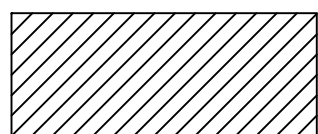


GENERAL TMP NOTES

PROPOSED CONSTRUCTION WORK WITHIN VDOT R-O-W TO INCLUDE

- CURB AND GUTTER
- CONCRETE SIDEWALK
- TREES GRASS
- ROADWAY FULL DEPTH
- ROADWAY MILL AND OVERLAY

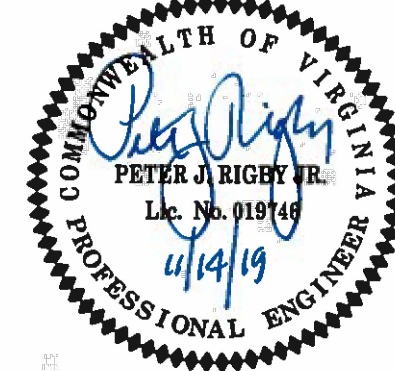
PROJECT AREA



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

COPYRIGHT © 2018 ARLINGTON COUNTY
VIRGINIA - ALL RIGHTS RESERVED

SEAL



APPROVALS DATE

11/15/2019
QUALITY CONTROL ENGINEER
11/18/19
CONSTRUCTION MANAGEMENT SUPERVISOR
11/19/19
WATER, SEWER/STREETS BUREAU CHIEF
11/19/19
TRANSPORTATION DIRECTOR
11/19/19
PROJECT MANAGER

REVISIONS DATE

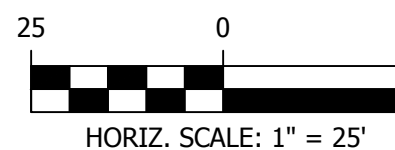
REVISIONS DATE

18TH STREET NORTH
From 18th Street N. - N. Glebe Road
To N. Wakefield Street

MOT - (TMP PLAN) I

DESIGNED: C. UYAMAM / L. DELACRUZ
DRAWN: C. UYAMAM / L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A
PLOTTED: NOVEMBER 25 2019

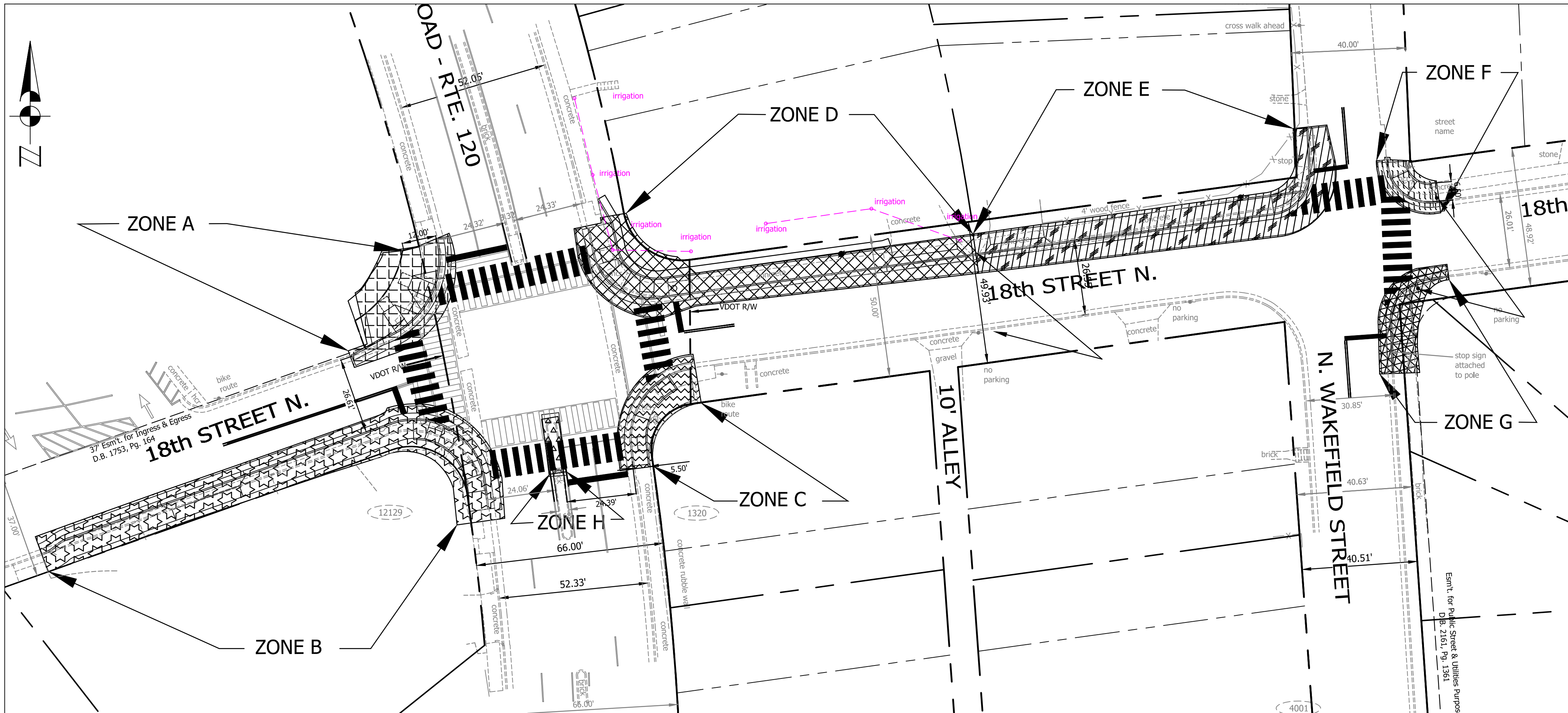
SCALE:



SHEET

27 OF 29

18TH STREET NORTH



CONSTRUCTION NOTES

- TRAFFIC CONTROL DEVICES AND SAFETY MEASURES SHALL COMPLY WITH THE VIRGINIA WORK AREA PROTECTION MANUAL VDOT'S GUIDELINES FOR TEMPORARY TRAFFIC CONTROL, FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, ARLINGTON COUNTY STANDARDS, THE TRAFFIC CONTROL PLANS INCLUDED IN CONSTRUCTION DRAWINGS, AND/OR AS DIRECTED BY THE PROJECT OFFICER.
- THE CONTRACTOR SHALL SUBMIT A DETAILED SCHEDULE WHICH INDICATES START AND FINISH DATES FOR EACH SEGMENT OF THE WORK. THE SCHEDULE SHALL INDICATE THE DURATION OF ALL ONE LANE OR SHOULDER CLOSURES. THE CONTRACTOR SHALL NOTIFY THE PROJECT OFFICER A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF PROCEEDING TO THE NEXT WORK SEGMENT.
- THE CONTRACTOR SHALL NOTIFY THE PROJECT OFFICER OF PARKING RESTRICTION NEEDS A MINIMUM OF 3 BUSINESS DAYS PRIOR TO COMMENCEMENT OF WORK OF EACH SEGMENT. COUNTY PROJECT OFFICER SHALL RESTRICT PARKING BY CONTACTING DES - PERMITTING SECTION, 703 228 47
- DURING CONSTRUCTIONS, THE CONTRACTOR SHALL EITHER MAINTAIN APPROPRIATE SIGHT DISTANCE TO ALL TRAFFIC SIGNS OR PROVIDE TEMPORARY SIGNAGE OR FLAGGERS TO GUIDE TRAFFIC THROUGH WORK ZONES.
- THE CONTRACTOR SHALL MINIMIZE THE DURATION OF ANY BLOCKAGE TO PRIVATE ENTRANCES AND DRIVEWAYS. THE CONTRACTOR SHALL SUBMIT A SCHEDULE OF DRIVEWAY CLOSURE FOR APPROVAL BY THE PROJECT OFFICER. THE PROJECT OFFICER SHALL BE NOTIFIED A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF SUCH ACTIVITIES. THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE TEMPORARY CLOSURE OR ACCESS TO THE PROPERTY. THE CONTRACTOR SHALL MAKE ALL PRIVATE ENTRANCES AND DRIVEWAYS ACCESSIBLE AT THE CONCLUSION OF EACH WORK DAY.
- ANY EXCAVATIONS WHICH ARE SPECIFICALLY BY THE PROJECT OFFICER TO REMAINS OPEN PAST NORMAL WORKING HOURS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PROTECTED IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL AND AS APPROVED BY THE PROJECT OFFICER.
- PEDESTRIAN TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, INCLUDING ACCESS TO THE BUS STOP SHELTERS, UNLESS OTHERWISE APPROVED IN THE PLANS.
- PEDESTRIAN TRAFFIC SHALL BE SEPARATED FROM WORK ZONES WITH APPROPRIATE MEASURES IN ACCORDANCE WITH MUTCD.
- ADEQUATE PROVISIONS FOR PERSONS WITH DISABILITIES SHALL BE PROVIDED AT ALL TIMES PER ADA REQUIREMENTS.
- WHEN NECESSARY PEDESTRIANS SHALL BE APPROPRIATELY DIRECTED WITH ADVANCE WARNINGS SIGNS PLACED AT INTERSECTIONS, TO CROSS THE OPPOSITE SIDE OF THE ROADWAY IN ORDER TO PREVENT CONFLICT WITH MIDDLEBLOCK WORK SITES.
- PEDESTRIANS SHALL NOT BE LED INTO CONFLICT WITH WORK SITE EQUIPMENT, OPERATIONS AND/OR VEHICLES MOVING THROUGH OR AROUND THE WORK SITES.
- ALL EXISTING FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MAINTAINED UNOBSTRUCTED AND ACCESSIBLE AT ALL TIMES IN ACCORDANCE WITH SECTIONS 508.5.4 AND 508.5.5 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE.
- ACCESS TO BUILDINGS FOR FIREFIGHTING SHALL BE MAINTAINED AT ALL TIMES. EXISTING FIRE APPARATUS ACCESS ROADS (FIRE LANES) SHALL BE KEPT CLEAR OF OBSTRUCTIONS IN ACCORDANCE WITH SECTION 503.4 OF THE ARLINGTON FIRE PREVENTION CODE. ACCESS TO CONSTRUCTION SITES SHALL BE PROVIDED AND MAINTAINED IN ACCORDANCE WITH SECTION 1410 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE.
- IN THE EVENT THAT EXISTING FIRE DEPARTMENT CONNECTIONS OR FIRE APPARATUS ACCESS ROADS (FIRE LANES) MUST BE OBSTRUCTED TO FACILITATE CONSTRUCTION ACTIVITIES, CONTACT THE FIRED DEPARTMENT FIRE PREVENTION OFFICE AT 703-228-4644 TO COORDINATE REVIEW AND APPROVAL OF TEMPORARY FIRE DEPARTMENT CONNECTIONS AND/OR FIRE APPARATUS ACCESS ROADS PRIOR TO CREATING THE OBSTRUCTION.
- THE CONTRACTOR SHALL PRESERVE ALL BUS STOPS, INCLUDING MAINTAINING ADEQUATE ACCESSIBILITY THROUGH AND ADJACENT TO THE CONSTRUCTION FOR BUSES AND THEIR PASSENGERS. THE CONTRACTOR SHALL NOT CLOSE, RELOCATE, OR OTHERWISE MODIFY A BUS STOP WITHOUT PRIOR REQUEST OF THE PROJECT OFFICER. ANY RELOCATION OR CLOSURE OF A BUS STOP SHALL BE COORDINATED WITH THE ARLINGTON COUNTY'S BUS STOP COORDINATOR (PHONE #703-228-3049) AT LEAST FOUR WEEKS IN ADVANCE OF CONSTRUCTION COMMENCEMENT. ALL TEMPORARY AND FINAL BUS TRAVEL LANES MUST BE MINIMUM 11' WIDE.
- WORK HOURS ARE RESTRICTED TO 9:00 AM TO 4:00 PM.
- CONTRACTOR SHALL COVER ANY EXISTING SIGNS WHICH ARE NOT APPLICABLE OR ARE IN CONFLICT WITH THIS MOT PLAN.
- CONTRACTOR SHALL ERADICATE AND RE-STRIPE AS NECESSARY ANY EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH OR DO NOT ALIGN WITH THE TEMPORARY PAVEMENT MARKINGS OR NEW TRAFFIC PATTERNS.
- CONTRACTOR SHALL ERADICATE ALL TEMPORARY PAVEMENT MARKING, INCLUDING TEMPORARY MARKED CROSSWALKS ONCE THE WORK AREA(S) ASSOCIATED WITH THE MARKINGS HAS BEEN COMPLETED.
- POLICE ASSISTANCE WILL BE USED FOR WORK WITHIN THE SIGNALIZED INTERSECTION.

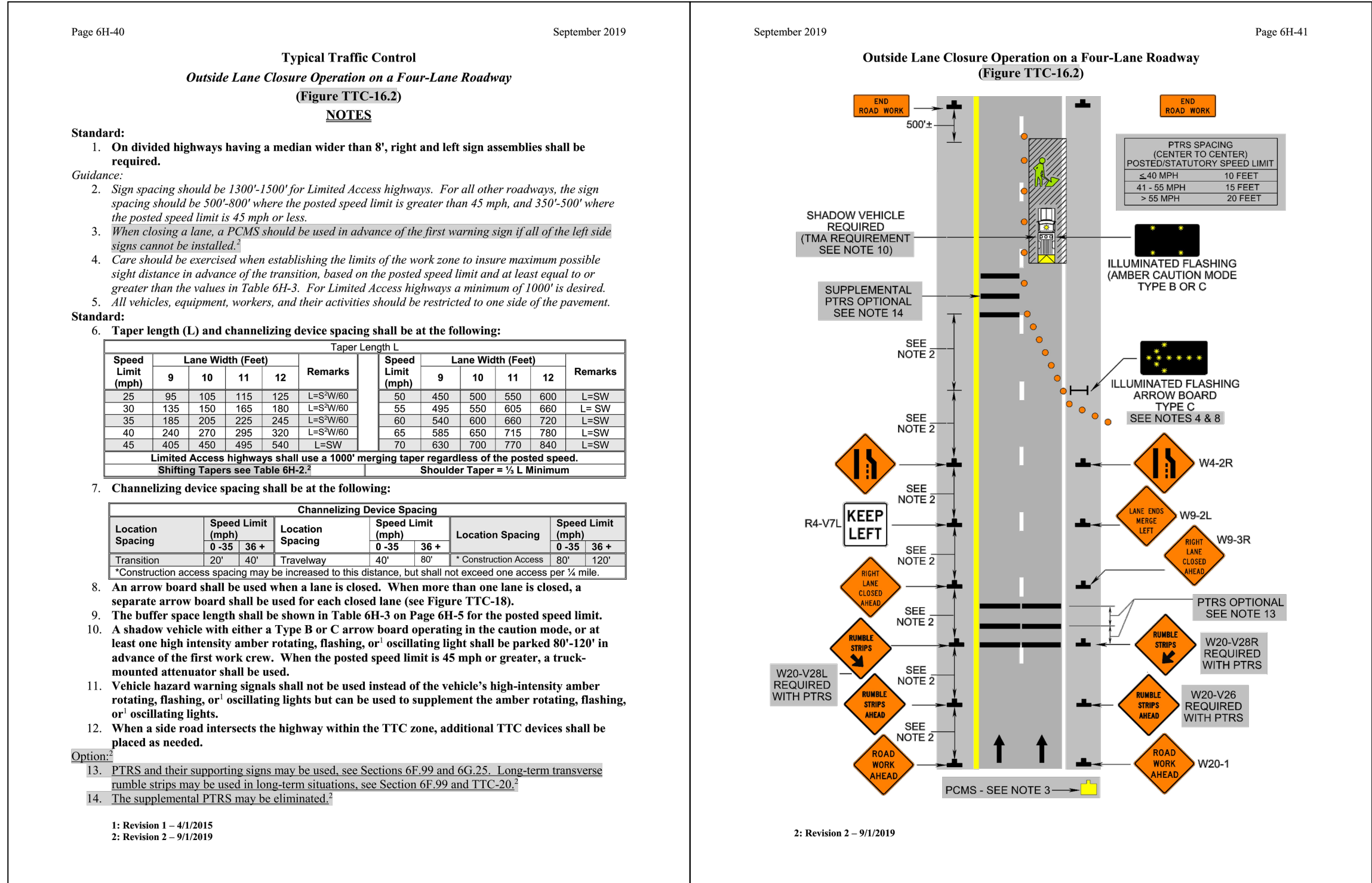
WORK HOURS:

WORK HOURS SHALL BE MONDAY TO FRIDAY AS FOLLOWS:

VDOT R-O-W MONDAY TO THURSDAY FROM 9:30 AM TO 3:30 PM, FRIDAY FROM 9:30 AM TO 2:00 PM
ARLINGTON COUNTY R-O-W MONDAY TO FRIDAY FROM 9:00 AM TO 4:00 PM

MOT ZONES#	TTC#	COMMENTS	DURATION
ZONE A	TTC-16.2 TTC-30.2 TTC-36.2	WARNING SIGN SPACING: 100' DRUM SPACING : 20'	1 MONTH - 3 MONTHS
ZONE B	TTC-16.2 TTC-30.2 TTC-36.2	WARNING SIGN SPACING: 100' DRUM SPACING : 20'	1 MONTH - 3 MONTHS
ZONE C	TTC-16.2 TTC-30.2 TTC-36.2	WARNING SIGN SPACING: 100' DRUM SPACING : 20'	1 MONTH - 3 MONTHS
ZONE D	TTC-16.2 TTC-30.2 TTC-36.2	WARNING SIGN SPACING: 100' DRUM SPACING : 20'	1 MONTH - 3 MONTHS
ZONE E	TTC-23.2 TTC-67.1 TTC-36.2	WARNING SIGN SPACING: 100' DRUM SPACING : 20'	1 MONTH - 3 MONTHS
ZONE F	TTC-23.2 TTC-67.1 TTC-36.2	WARNING SIGN SPACING: 100' DRUM SPACING : 20'	1 MONTH - 3 MONTHS
ZONE G	TTC-23.2 TTC-67.1 TTC-36.2	WARNING SIGN SPACING: 100' DRUM SPACING : 20'	1 MONTH - 3 MONTHS
ZONE H	TTC-16.2 TTC-30.2 TTC-36.2 TTC-42.2	WARNING SIGN SPACING: 100' DRUM SPACING : 20'	1 MONTH - 3 MONTHS

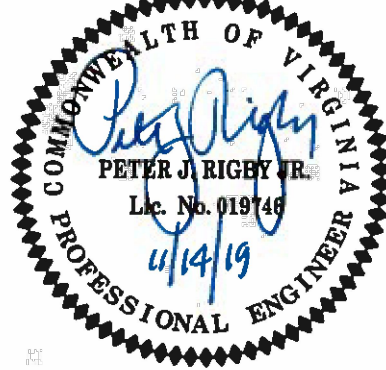
NOTE: THE DURATIONS SHOWN WERE DEVELOPED FOR PLANNING AND ESTIMATION PURPOSES ONLY. THE DURATIONS IN NO WAY ALTER THE CONTRACT TIME FOR COMPLETION, OR INFRINGES ON THE CONTRACTOR MEANS AND METHODS. THE CONTRACTOR'S SUBMITTED SCHEDULE SUPERSEDES THE ESTIMATED DURATIONS SHOWN.



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

COPYRIGHT © 2018 ARLINGTON COUNTY
VIRGINIA - ALL RIGHTS RESERVED

SEAL



APPROVALS DATE

QUALITY CONTROL ENGINEER
CONSTRUCTION MANAGEMENT SUPERVISOR
WATER, SEWER/STREETS BUREAU CHIEF
TRANSPORTATION DIRECTOR
PROJECT MANAGER

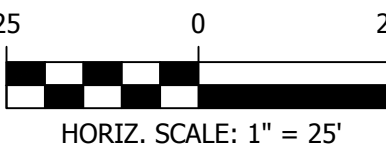
REVISIONS DATE

18TH STREET NORTH
From 18th Street N. - N. Glebe Road
To N. Wakefield Street

MOT PLAN II

DESIGNED: C. UYAMAY / L. DELACRUZ
DRAWN: C. UYAMAY / L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A
PLOTTED: NOVEMBER 25 2019

SCALE:



SHEET

28 OF 29

18TH STREET NORTH

DATE: JULY 13, 2015 TO AUGUST 3, 2015

DESIGNED BY: CATALINO UYAMAY
SUBSURFACE UTILITY BY: ARLINGTON COUNTY GOV., DES

DATE: JULY 13, 2015 TO AUGUST 3, 2015

PROJECT MANAGER: GABRIELA VEGA
SURVEYED BY: ARLINGTON COUNTY GOV., DES

Page 611-54September 2019

Typical Traffic Control

Lane Closure on a Two-Lane Roadway Using Flaggers

(Figure TTC-23.3)

NOTES

Guidance:

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

2. Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the flagger station and transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. Generally speaking, motorists should have a clear line of sight from the graphic flagger symbol sign to the flagger.

3. To maintain efficient traffic flow in a flagging operation on a two-lane roadway, the maximum time motorists should be stopped at a flagger station is 8 minutes for high volume roadways (average daily traffic of 500 or more vehicles per day) to a maximum of 12 minutes for low volume roadways (less than 500 vehicles per day). For additional information see Section 6E.07.

Standard:

4. Portable Temporary Rumble Strips (PTRS) shall be used as noted in Section 6F.99.

5. Flagging stations shall be located far enough in advance of the work space to permit approaching traffic to reduce speed and/or stop before passing the work space and allow sufficient distance for departing traffic in the left lane to return to the right lane before reaching opposing traffic (see Table 6H-3 on Page 6H-5).

6. All flaggers shall be state certified and have their certification card in their possession when performing flagging duties (see Section 6I.01, Qualifications for Flaggers).

7. Cone spacing shall be based on the posted speed and the values in Table 6H-4 on Page 6H-6.

8. A shadow vehicle with at least one high intensity amber rotating, flashing, or oscillating light shall be parked 80'-120' in advance of the first work crew.

Option:

8. A SLOW (W21-V10) sign may be required in this area to give advance warning of the operation ahead by slowing approaching traffic prior to reaching the flagger station or queued traffic.

Guidance:

9. If the queue of traffic reaches the BE PREPARED TO STOP (W3-4) sign then the signs, and if used the PTRS, should be readjusted at greater distances.

10. When a highway-rail crossing exists within or upstream of the transition area and it is anticipated that queues resulting from the lane closure might extend through the highway-rail grade crossing, the temporary traffic control zone should be extended so that the transition area precedes the highway-rail crossing (see Figure TTC-56 for additional information on highway-rail crossings).

Standard:

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

Option:

12. Cones may be eliminated when using a pilot vehicle operation or when the total roadway width is 20 feet or less.

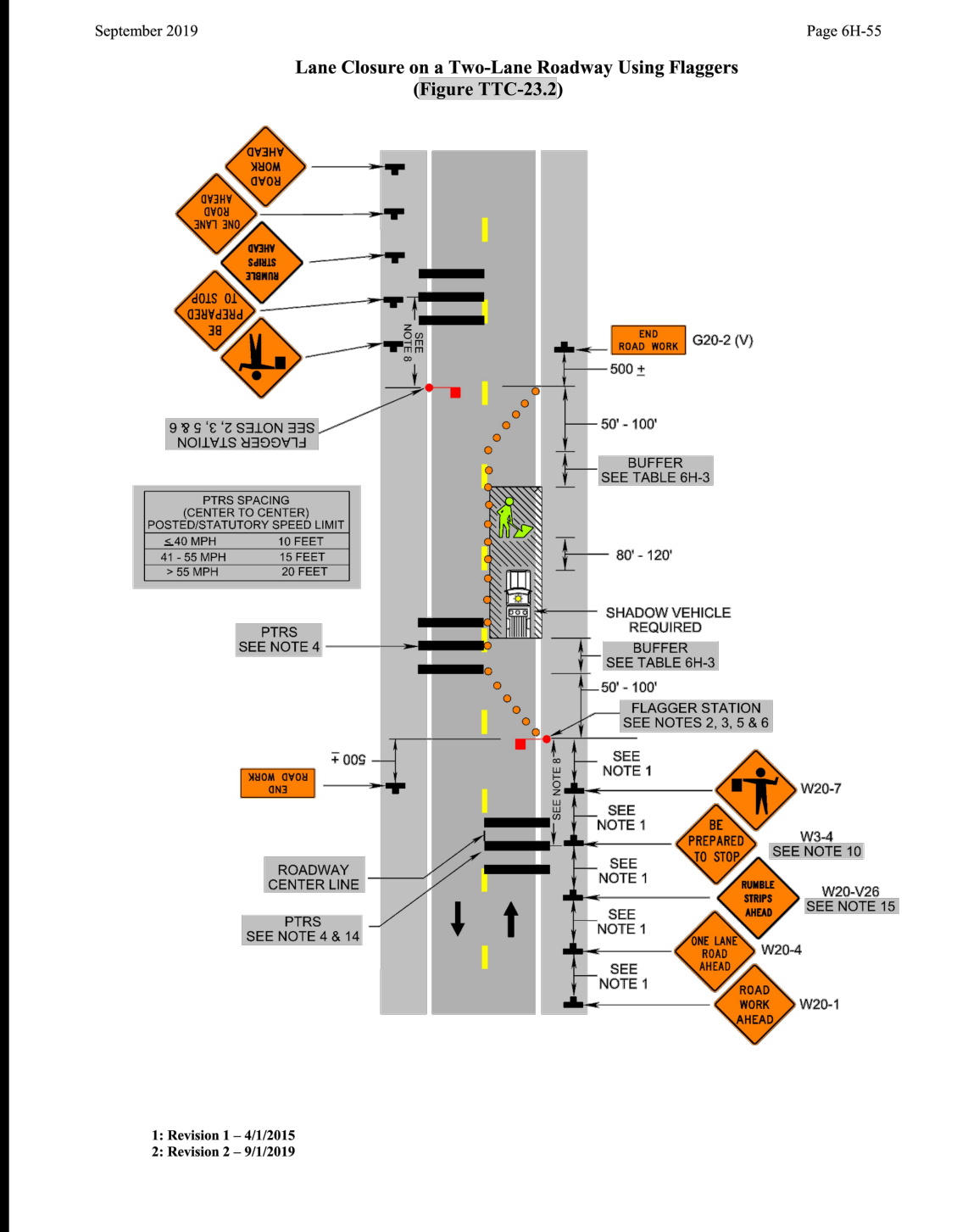
13. For low-volume situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger, positioned to be visible to road users approaching from both directions, may be used (see Chapter 6I).

Standard:

14. When used, three portable temporary rumble (PTRS) strips shall be installed across the entire travel lane adjacent to the BE PREPARED TO STOP (W3-4) sign. The portable temporary rumble strips shall be monitored and adjusted as necessary during the work shift to ensure proper placement on the roadway. When the PTRS are installed, the RUMBLE STRIPS AHEAD (W20-V36) sign shall also be utilized.

1: Revision 1 - 4/1/2015

2: Revision 2 - 9/1/2019



Page 611-68September 2019

Typical Traffic Control

Flagging Operation at a Signalized Intersection

(Figure TTC-30.3)

NOTES

Guidance:

1. The control of traffic through the intersection in order of preference should be:

a. Obtain the services of law enforcement personnel with the approved signaling as shown.

b. Divert the effective routes to other roads and streets as approved and directed by the District Traffic Engineer.

c. Place a state certified flagger on each leg of the intersection with the approved signaling as shown.

2. Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, 500'-800' where the posted speed limit is greater than 45 mph. For urban streets sign spacing distance should be 225'-275' where the posted speed limit is 30 to 35 mph, and 100'-200' where the posted speed is 25 mph or less.

3. To maintain efficient traffic flow in a flagging operation on a two-lane roadway the maximum time motorists should be stopped at a flagger station is 8 minutes for high volume roadways (average daily traffic of 500 or more vehicles per day) to a maximum of 12 minutes for low volume roadways (less than 500 vehicles per day). For additional information see Section 6E.07.

4. When law enforcement officers or flaggers are used to control movement at the signalized intersection, portable temporary rumble strips and signaling as shown should be used when the expected operation will last longer than 4 hours.

Standard:

5. For flagging operations, a stationary lane closure shall be installed in advance of the signalized intersection for all approaches with two or more lanes for through traffic.

6. For flagging operations, all turn lanes at the intersection shall be closed.

7. Electrical power supply to signals shall be turned off while flaggers are controlling traffic through the intersection.

8. To prevent accidental intrusion into the flagger station, cone spacing shall not exceed 10' on centers from the graphic flagger sign to the flagger station. Cones shall be installed in the closed lane, perpendicular to traffic, prior to the flagging station.

9. A lead flagger shall be assigned to control all flagger operations. One flagger shall be stationed to control each approach of the intersection. Flaggers shall alternate right-of-way to traffic such that traffic moves through the intersection one approach at a time.

10. Flagger stations shall be illuminated during planned night time work operations with a minimum of horizontal luminance of 5-foot candles (50 lux) (see Section 6E.08).

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

Option:

12. PTRS may be incorporated into the advanced warning area of lane closures on multi-lane roadways, see Section 6E.07 and TTC-46.

13. RIGHT TURN LANE CLOSED AHEAD (W20-V13R) and/or LEFT TURN LANE CLOSED AHEAD (W20-V13L) signs may be used when closing the turn lanes.

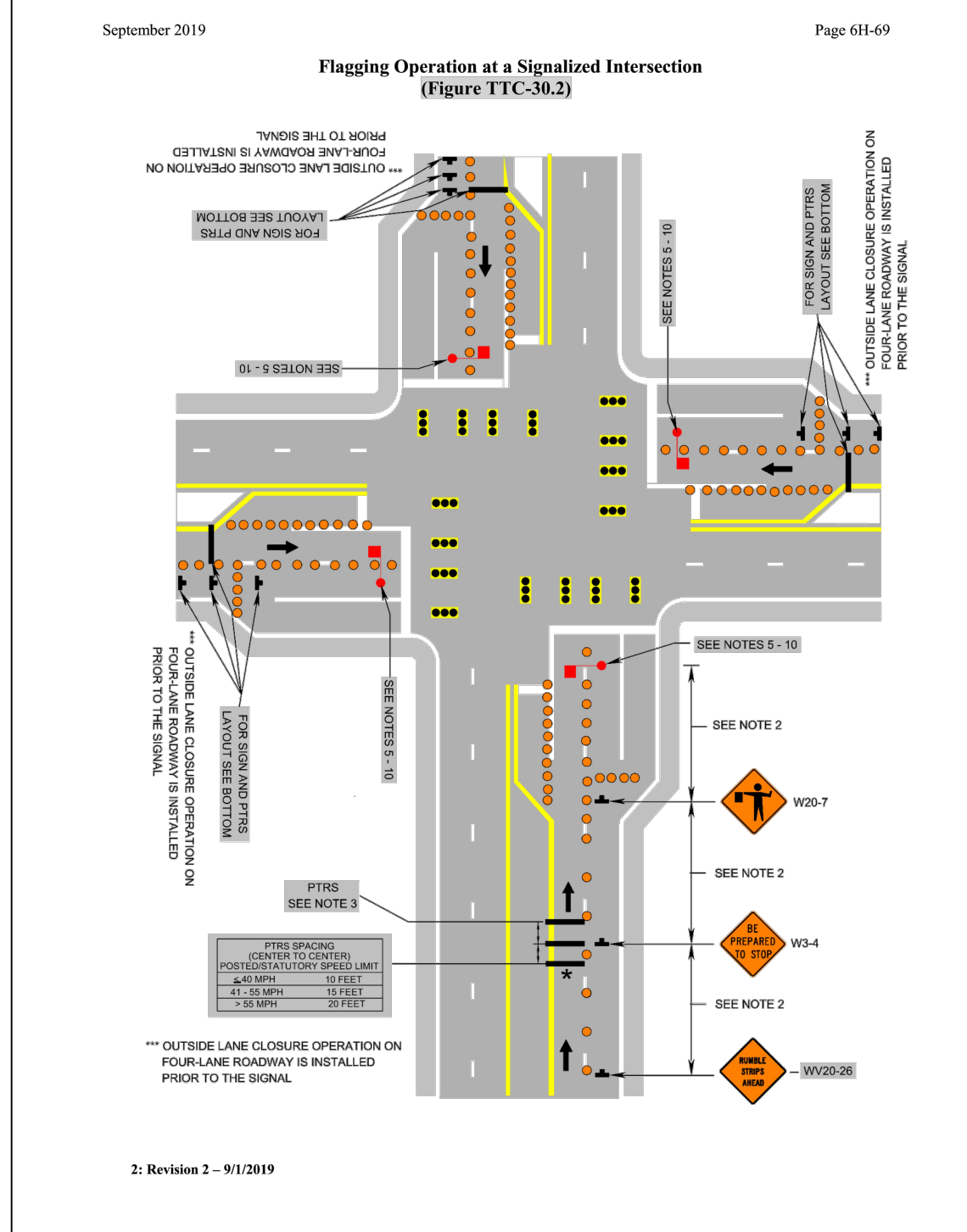
14. For a high volume of turning movements, additional traffic control devices, such as signs (graphic NO LEFT TURN (R3-2), NO RIGHT TURN (R3-1), RIGHT TURN LANE CLOSED AHEAD (W20-V13R) and/or LEFT TURN LANE CLOSED AHEAD (W20-V13L)), cones and vehicles may be used.

15. Traffic signals may be on the flash mode when traffic through the intersection when controlled by a law enforcement officer.

16. Travel and turn lanes may remain open if a law enforcement officer is controlling traffic through the intersection.

1: Revision 1 - 4/1/2015

2: Revision 2 - 9/1/2019



Page 611-80September 2019

Typical Traffic Control

Crosswalk Closure and Pedestrian Detour Operation

(Figure TTC-36.2)

NOTES

Standard:

1. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.

2. Car-parking shall be prohibited for at least 50 feet in advance of the midblock crosswalk.

Guidance:

3. Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.

4. Pedestrian traffic signal displays controlling closed crosswalks should be covered or deactivated.

5. Temporary markings should be considered for operations exceeding three days in duration.

Option:

6. Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS (W3-1) signs, may be used to control vehicular traffic.

7. For nighttime closures, Type A Flashing warning lights may be used on barricades supporting signs and closing sidewalks.

Standard:

8. In order to maintain the systematic use of the fluorescent yellow-green background for school warning signs in a jurisdiction, the fluorescent yellow-green background for school warning signs shall be used in TTC zones.

9. All sidewalk closures shall be closed with Type 3 Barricades. The SIDEWALK CLOSED (R9-9) sign and the SIDEWALK CROSS HERE (R9-11) sign shall be installed above the Type 3 Barricade. The KEEP RIGHT sign can cover the top rail of the Type 3 Barricade.

Support:

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

Standard:

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

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

1: Revision 1 - 4/1/2015

2: Revision 2 - 9/1/2019

September 2019Page 6H-81

Crosswalk Closure and Pedestrian Detour Operation

(Figure TTC-36.2)

1: Revision 1 - 4/1/2015

2: Revision 2 - 9/1/2019

Page 611-92September 2019

Typical Traffic Control

Interior Lane Closure Operation on a Multi-Lane Roadway

(Figure TTC-42.2)

NOTES

Guidance:

1. Sign spacing distance should be 1300'-1500' for Limited Access highways, and on all other roadways 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.

2. Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. For Limited Access highways a minimum of 1000' is desired.

Standard:

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

4. Taper length (L) shall be at the following:

Speed Limit (mph)		Lane Width (Feet)		Remarks	
9	10	11	12	9	10
25	35	105	115	125	L=SW
30	35	150	165	180	L=SW
35	40	210	225	245	L=SW
40	40	270	285	320	L=SW
45	45	405	420	450	L=SW

5. Channelizing device spacing shall be at the following:

Location Spacing		Speed Limit (mph)		Location Spacing		Speed Limit (mph)	
0-35	36+	0-35	36+	0-35	36+	0-35	36+
Transition	20'	40'	Travelway	40'	60'	Construction Access	80'

6. On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.

7. The buffer space length shall be as shown in Table 6H-3 on Page 6H-5 for the posted speed limit.

8. A shadow vehicle with either a Type B or C arrow board operating in the caution mode, or at least one high intensity amber rotating, oscillating, or flashing light shall be parked 80'-120' in advance of the first work crew. When the posted speed limit is 45 mph or greater, a truck-mounted attenuator shall be used.

9. For long-term work zones existing conflicting pavement markings and markers shall be removed and temporary pavement markings and markers shall be installed per Figure TTC-46.

Option:

10. For short-term stationary work (less than 3 days duration), lanes may be delineated by channelizing devices or removable pavement markings instead of temporary pavement markings.

11. PTRS may be used on undivided roadways, see section 6E.99 for proper spacing of PTRS and Figures TTC-12.2

Guidance:

12. When channelizing devices have the potential of leading vehicular traffic out of the intended traffic space, the channelizing devices should be extended a distance with 4 additional channelizing devices' beyond the downstream end of the transition area as depicted.

13. For locations with a high volume of left turning movements, the graphic NO LEFT TURN (R3-2) signs should be used.

1: Revision 1 - 4/1/2015

2: Revision 2 - 9/1/2019

September 2019Page 6H-93

Interior Lane Closure Operation on a Multi-Lane Roadway

(Figure TTC-42.2)

1: Revision 1 - 4/1/2015

2: Revision 2 - 9/1/2019

Page 6H-142July 2019

Typical Traffic Control

Lane Closure Operation through a Unsignalized Intersection

(Figure TTC-67.1)

NOTES

Guidance:

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

2. To maintain efficient traffic flow in a flagging operation on a two-lane roadway, the maximum time motorists should be stopped at a flagger station is 8 minutes for high volume roadways (average daily traffic of 500 or more vehicles per day) to a maximum of 12 minutes for low volume roadways (less than 500 vehicles per day). For additional information see Section 6E.07.

Standard:

3. PTRS shall be used as per Section 6E.99.

4. Channelizing device spacing shall be on 20' centers or less 100 feet in advance of the intersection.

Guidance:

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

6. If the posted speed limit is 45 mph or greater, the shadow vehicle should have a truck-mounted attenuator.

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

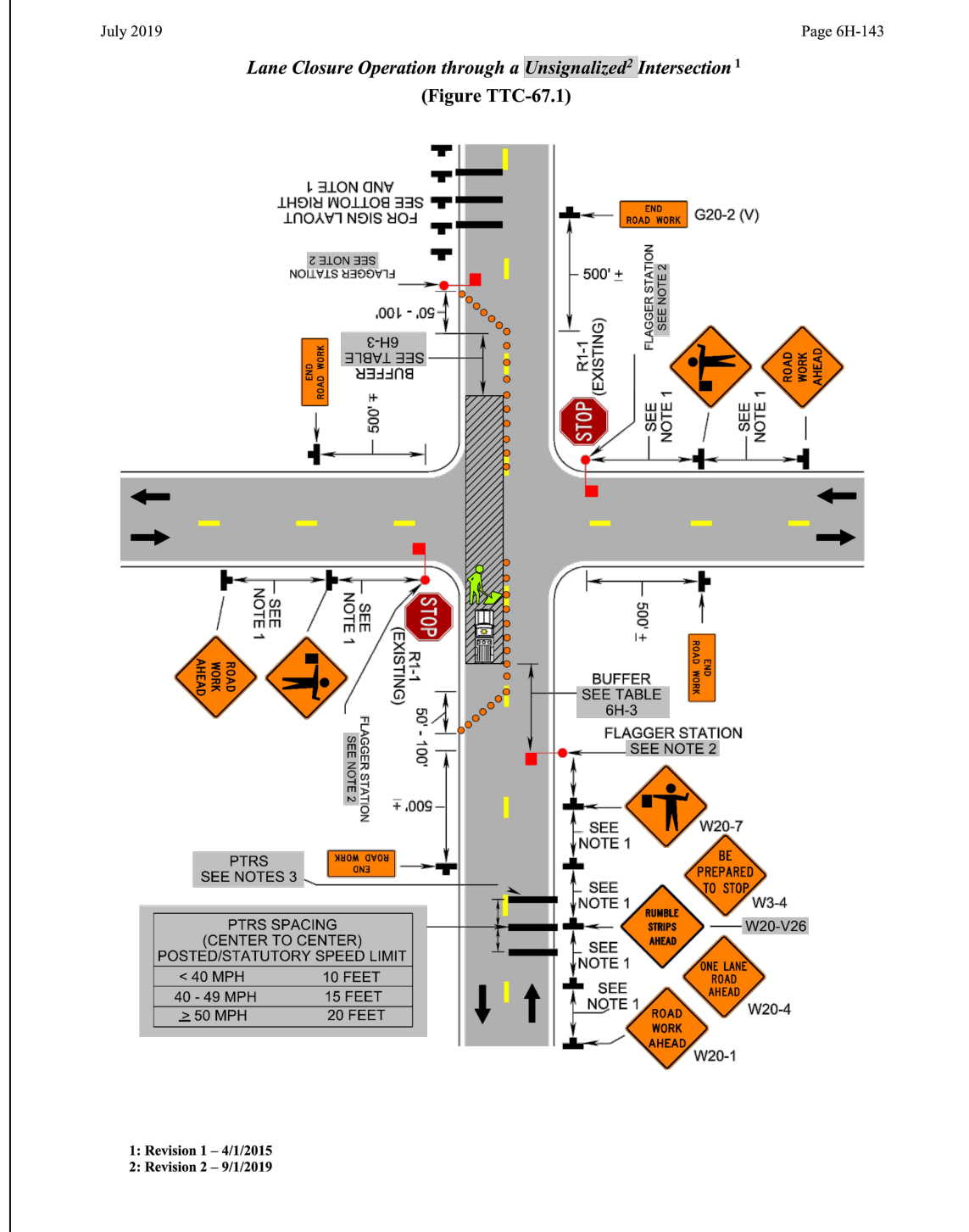
Option:

8. At the stop condition intersecting roadway, additional flagger sign may be used (BE PREPARED TO STOP (W3-4)) between the ROAD WORK AHEAD and the flagger station in the proper sequence, as directed by the District Traffic Engineer.

9. PTRS may be used on the intersecting roadway to enhance the work zone at the approaching intersection.

1: Revision 1 - 4/1/2015

2: Revision 2 - 9/1/2019



ARLINGTON VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU
2100 CLARENDON BOULEVARD, SUITE 813
ARLINGTON, VA 22201
PHONE: 703.228.3629
FAX: 703.228.3666

COPYRIGHT © 2018 ARLINGTON COUNTY VIRGINIA - ALL RIGHTS RESERVED

SEAL

APPROVALS

DATE

QUALITY CONTROL ENGINEER

CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF

TRANSPORTATION DIRECTOR

PROJECT MANAGER

REVISIONS	DATE

18TH STREET NORTH

From 18th Street N. - N. Glebe Road
To N. Wakefield Street

MOT PLAN III

DESIGNED: C. UYAMAY / L. DELACRUZ
DRAWN: C. UYAMAY / L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: NOVEMBER 25 2019

SCALE:

NTS

SHEET 29 OF 29

18TH STREET NORTH