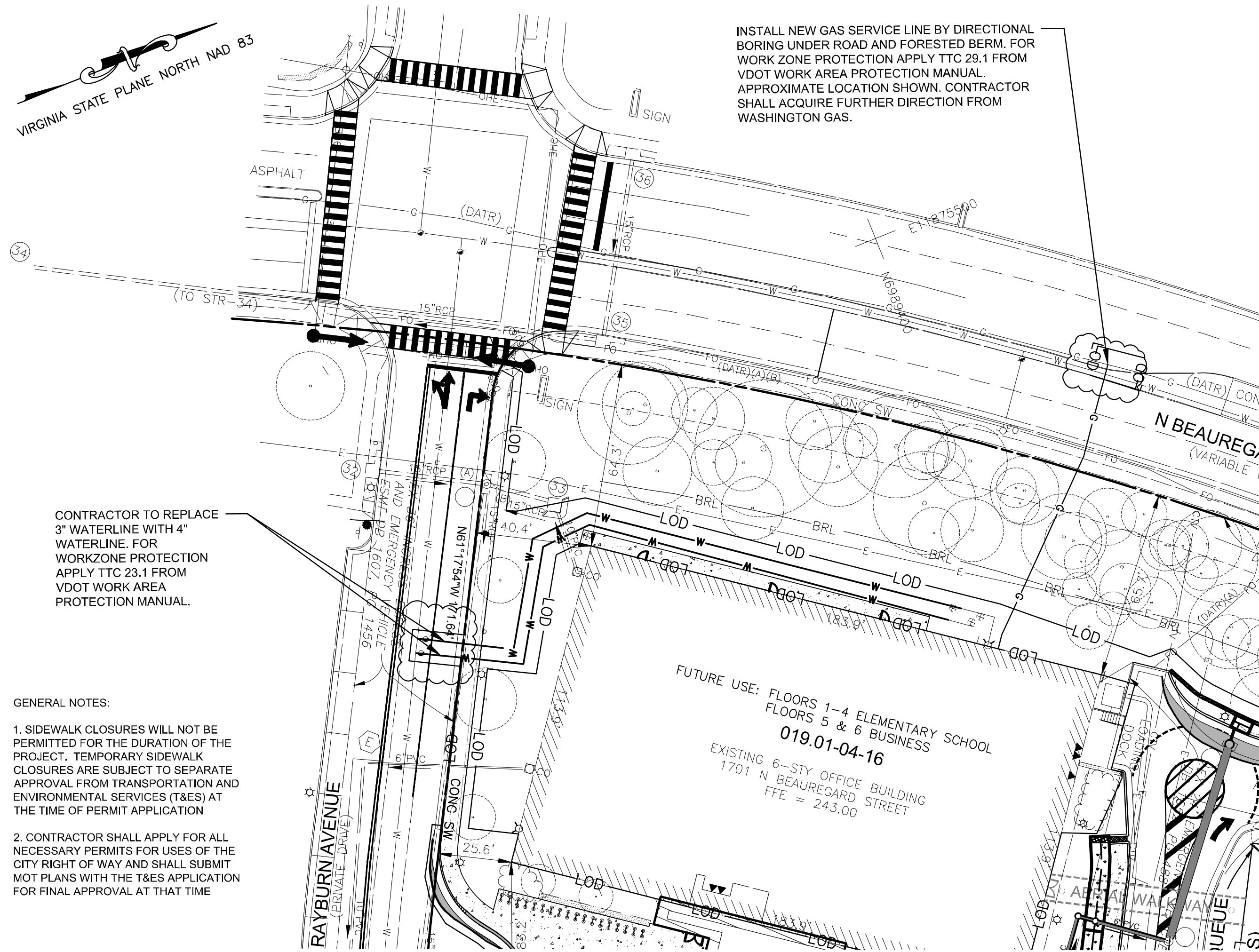


# Exhibit D - Maintenance of Traffic Plan



### Typical Traffic Control Turn Lane Closure Operation (Figure TTC-29.1)

#### NOTES

- Guidance:**
- Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, 500'-800' where the posted speed limit is greater than 45 mph.
- Standard:**
- On divided highways having a median wider than 8', right and left sign assemblies shall be required.
  - To prevent accidental intrusion into the work area, channelizing device spacing shall not exceed 20' on centers.
- Option:**
- This layout may be used for either right or left turn lane closures.
  - For a high volume of turning movements, additional traffic control devices, such as signs (graphic NO LEFT TURN (R3-2) or LEFT LANE MUST TURN LEFT (R3-7L)), channelizing devices and vehicles may be used.

#### Standard:

- Taper Length (L) shall be:

Speed Limit (mph)	9	10	11	12
≤25	95	105	115	125
30	135	150	165	180
35	165	205	225	245
40	240	270	295	320
45	405	450	495	540
50	450	500	550	600
55	495	550	605	660
60	540	600	660	720

Shoulder Taper = 1/2 L Minimum

- Buffer Space Length shall be:

Posted Speed Limit (mph)	Distance (Feet)
≤20	115 - 120
25	135 - 135
30	200 - 210
35	250 - 260
40	305 - 325
45	350 - 390
50	425 - 445
55	500 - 630
60	570 - 600
65	645 - 675
70	720 - 780

#### Guidance:

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

#### Support:

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

1: Revision 1 - 4/1/2015

### Typical Traffic Control Lane Closure on a Two-Lane Roadway Using Flaggers (Figure TTC-23.1)

#### NOTES

- Guidance:**
- 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.
  - 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.

#### Option:

- Where Right-of-Way or geometric conditions prevent the use of 48" x 48" signs, 36" x 36" signs may be used.

#### Standard:

- 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).
- All flaggers shall be state certified and have their certification card in their possession when performing flagging duties (see Section 6E.01, Qualifications for Flaggers).
- Cone spacing shall be based on the posted speed and the values in Table 6H-4 on Page 6H-6.
- 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:

- A supplemental flagger 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:

- If the queue of traffic reaches the BE PREPARED TO STOP (W3-4) sign then the signs, and if used the portable temporary rumble strips (PTRS), should be readjusted at greater distances.
- 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-36 for additional information on highway-rail crossings).

#### Standard:

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

#### Option:

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

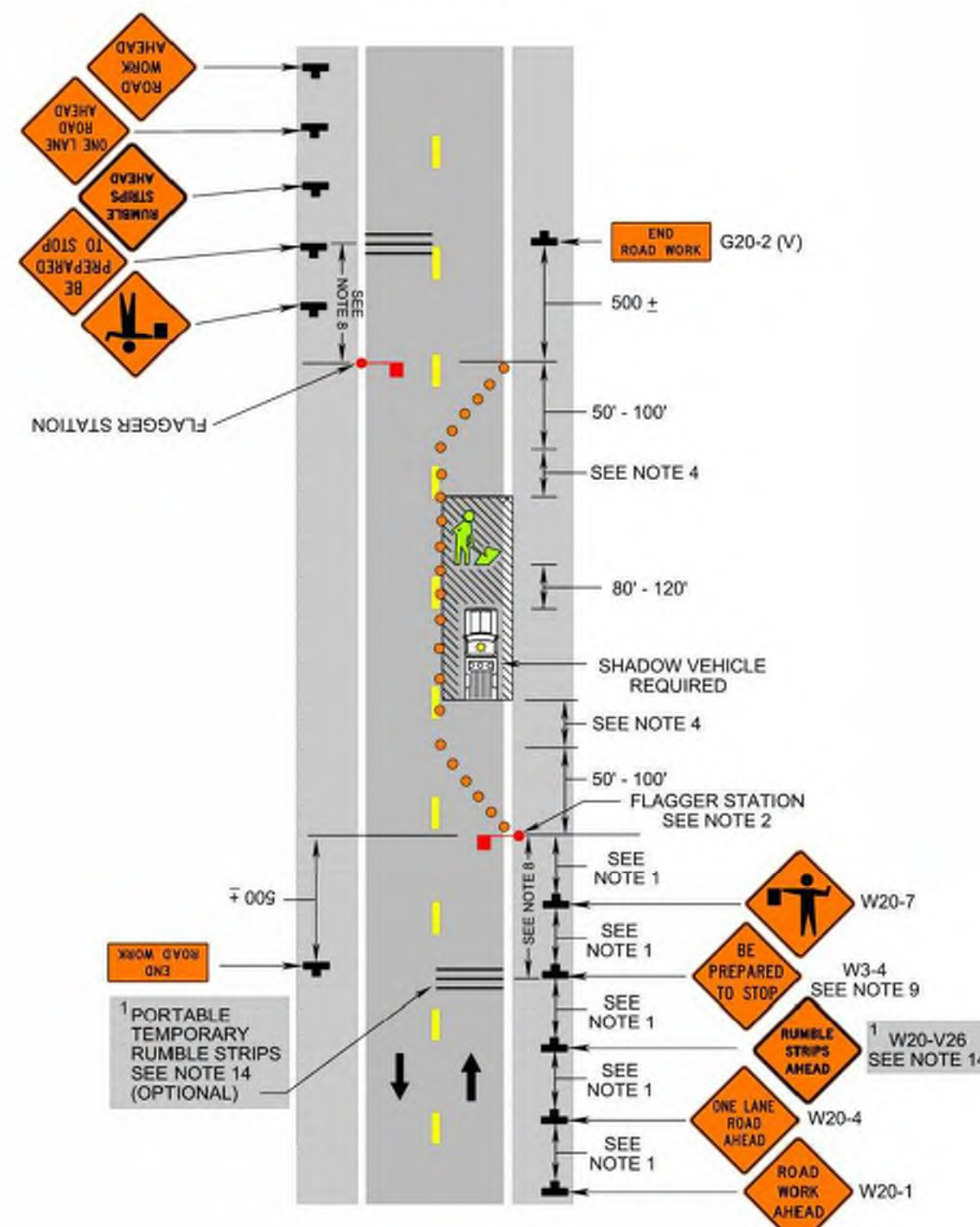
#### Standard:

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

Posted Speed	0 - 35 mph	36 - 55 mph
PTRS Spacing (Center to Center)	5 Feet	8 Feet

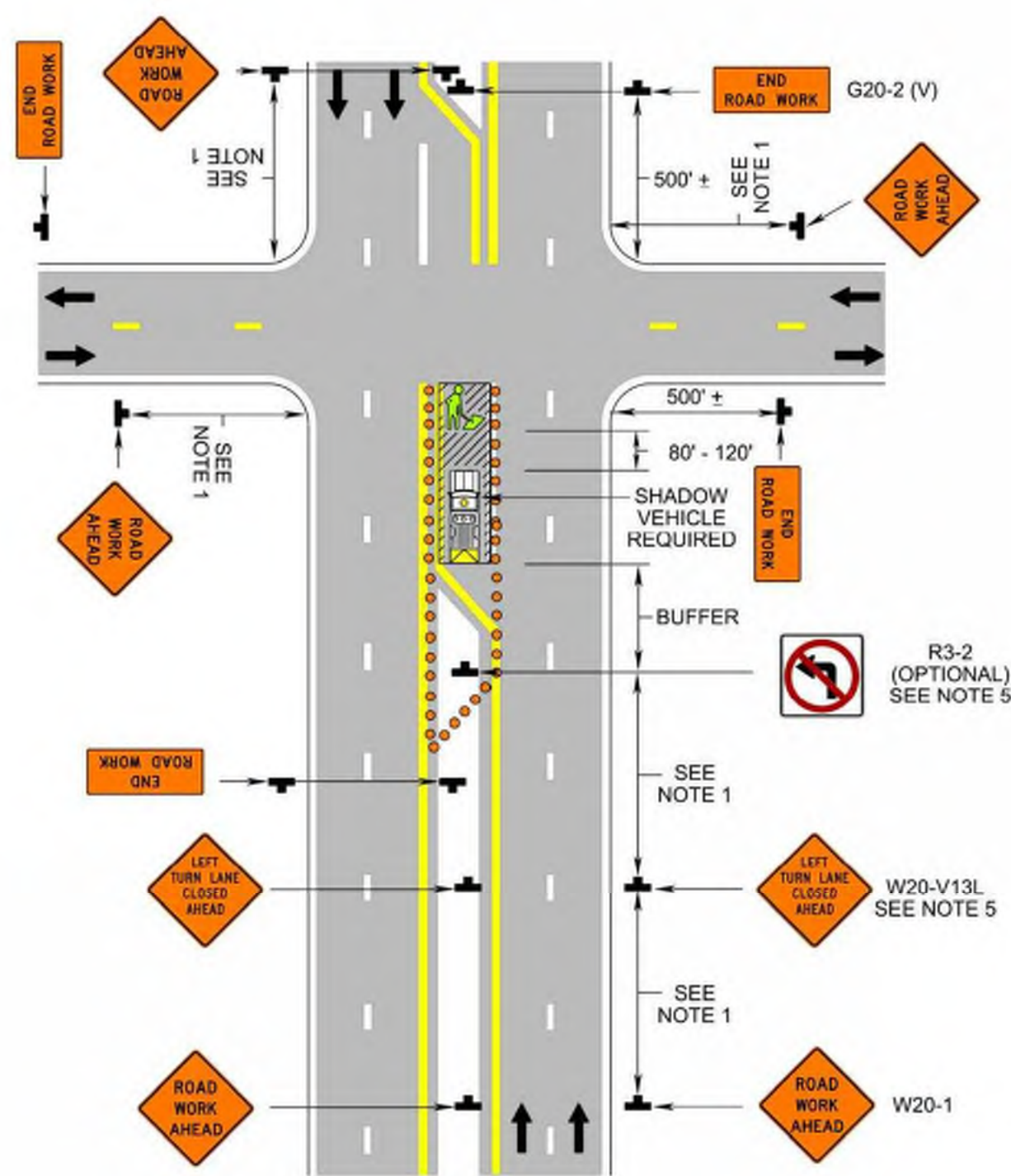
1: Revision 1 - 4/1/2015

### Lane Closure on a Two-Lane Roadway Using Flaggers (Figure TTC-23.1)



1: Revision 1 - 4/1/2015

### Turn Lane Closure Operation (Figure TTC-29.1)



FOR INFORMATION PURPOSES ONLY

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SCALE: \_\_\_\_\_ DATE: 9/29/17 DRAWN: WJP/JAC

SEAL: \_\_\_\_\_

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED

FINAL SITE PLAN

NEW WEST END ELEMENTARY SCHOOL  
 1701 N. BEAUGARD  
 CITY OF ALEXANDRIA, VIRGINIA

SHEET NAME: MAINTENANCE OF TRAFFIC PLAN

APPROVED SPECIAL USE PERMIT NO. DSUP 2016-0039

DEPARTMENT OF PLANNING & ZONING

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_  
 DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES  
 SITE PLAN No. \_\_\_\_\_

DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

CHAIRMAN, PLANNING COMMISSION \_\_\_\_\_ DATE \_\_\_\_\_

DATE RECORDED \_\_\_\_\_

INSTRUMENT NO. \_\_\_\_\_ DEED BOOK NO. \_\_\_\_\_ PAGE NO. \_\_\_\_\_