Spacing may be increased to this distan

On roadways with payed shoulders having

shall be used to close the shoulder in

vehicular traffic to remain within the traveled

- SEE NOTE 7

SEE NOTE 2

	April 2015 Page 6H-53
Typical Traffic Control	
Lane Closure on a Two-Lane Roadway Using Flaggers	Lane Closure on a Two-Lane Roadway Using Flaggers
(Figure TTC-23.1)	(Figure TTC-23.1)
NOTES	`
Suidence:	
 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. Chenrally speaking, motorists should have a clear line of sight from the graphic flagger symbol sight to the flagger.	
Option:	G20-2 (V)
 Where Right-of-Way or geometric conditions prevent the use of 48" x 48" signs, 36" x 36" signs may be used. 	
Standard:	500 ±
4. Flagging stations shall be located for 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).	NOLLYIS REDDALF
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).	SEE NOTE 4
 Cone spacing shall be based on the posted speed and the values in Table 611-4 on Page 614-6. 	
 A shadow vehicle with at least one high intensity amber rotating, flatfiting and oscillating light shall be parked 86'-120' in advance of the first work crew. 	
Drien:	₹ 5 80 - 120°
 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. 	
Inidance:	SHADOW VEHICLE REQUIRED
 If the quaite of traffic reaches the BE PREPARED TO STOP (W3-4) sign than the signs and if was title parable temperary rankle structures, should be readjusted at greater distances. 	SEE NOTE 4
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 TV-56 for additional information on highway-rail crossings).	50'-100' FLAGGER STATION SEE NOTE 2
Handard:	AND SEE
11. At night, flagger stations shall be illuminated, except in emergencies (see Section 6E.08).	¥ 009 — W20-7
Option:	TANK AND SEE
 Cones may be eliminated when using a pilot vehicle operation or when the total roadway width is 20 feet or less. 	NOTE 1
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.	FORTABLE NOTE 1 W20-V28
approaching from both directions, may be used (see Chapter 6E). Standard:*	SEE NOTE 14 SEE NOTE 14
14. When approved for use, three portable temporary runtile (PTRS) Altips shall be installed across the control travel lane adjacent to the BC PREPARED TO STOP (West, wen., The portable	NOTE 1 W20-4
temporary rumple 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 ALIFAD (W26-V26) sign shall also be utilized.	NOTE 1 W20-1
Posted Speed 0.38 mph 36 - 55 mph PTRS Spacing (Center to Center) 75 5 5 ac 8 Foct	

TYPICAL APPLICATIONS OF TEMPORARY TRAFFIC CONTROL AS GIVEN IN THE VIRGINIA WORK AREA PROTECTION MANUAL

MAINTENANCE OF TRAFFIC NOTES

highways shall be 1000 feet

Shoulder Taper = 1/s L. Minimum

traffic control devices shall be placed as perded.

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

9. A truck-mounted attenuator (IMA) shall be used on Limited Access highways and multi-lane

10. When a side road intersects the highway within the temporary traffic control zone, additional

lways with posted speed limit equal to or greater than 45 mpt

- DURING CONSTRUCTION, CONTRACTOR SHALL LIMIT DISRUPTION TO RESIDENTIAL ACCESS DRIVEWAYS, COORDINATE CONSTRUCTION ACTIVITIES THAT MAY AFFECT DRIVEWAYS WITH THE PROPERTY OWNER, AND PROVIDE OWNER WITH ACCESS BY END OF WORK DAY OR SOONER AS
- ALL STANDARDS AND GUIDELINES OF THE VIRGINIA WORK AREA PROTECTION MANUAL (VWAPM) SHALL APPLY TO ANY TRAFFIC CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, ALL DEVICES, METHODS, AND DIMENSIONS.
- CONTRACTOR SHALL PROVIDE WARNING SIGNS, AND APPROVED PORTABLE SIGN STANDS AND INSURE AN UNRESTRICTED VIEW OF ADVANCE WARNING SIGN MESSAGES FOR SAFETY OF TRAFFIC AND IN ACCORDANCE WITH THE VWAPM.
- ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE APPROPRIATELY SIGNED REGARDLESS OF WHETHER A LANE OR SHOULDER CLOSURE IS
- DURING LANE CLOSURES, CONTRACTOR SHALL USE AT LEAST 2 FLAGMEN AT ALL TIMES AND IN ACCORDANCE WITH THE VWAPM. CONES MAY BE USED IN AREAS WHERE PERSONNEL WILL BE PRESENT TO INSURE THEIR PROPER ALIGNMENT; GROUP II DRUMS SHALL BE REQUIRED WHEN THE WORK ZONE IS UNMANNED. ALL CONES SHALL BE A MINIMUM OF 36" IN HEIGHT AND PLACED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE VWAPM.
- ALL TRAFFIC CONTROL EQUIPMENT AND OBJECTS SHALL MEET NCHRP 350 CRASH TESTING CRITERIA. THESE NOTES ARE PROVIDED AS GUIDELINES ONLY. THE CONTRACTOR SHALL PREPARE A SPECIFIC TRAFFIC CONTROL PLAN THAT MATCHES HIS PLANNED OPERATIONS AND PROJECT SEQUENCING.

COMMUNICATION NOTES

- THE CONTRACTOR SHALL ADVISE THE LOCAL VIRGINIA DEPARTMENT OF TRANSPORTATION OFFICE OF PLANNED LANE CLOSURES A MINIMUM OF 72 HOURS IN ADVANCE OF PLANNED LANE CLOSURE.
- THE CONTRACTOR SHOULD IMMEDIATELY NOTIFY 911 FOR ANY EMERGENCY. IF AN EMERGENCY IS TRAFFIC RELATED, THE LOCAL VIRGINIA DEPARTMENT OF TRANSPORTATION OFFICE, OR HIS DESIGNEE SHOULD BE NOTIFIED IMMEDIATELY AFTER CALLING 911.

GENERAL UTILITY NOTES

- 1. ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS AVAILABLE AT WWW.WESTERNVAWATER.ORG OR BY CONTACTING THE AUTHORITY AT 540-853-5700. THE PROJECT SHALL ALSO COMPLY WITH THE GOVERNING JURISDICTION'S STANDARDS AND OTHER AGENCY STANDARDS (E.G., VDOT, DEQ, DCR, VDH, ETC.) WHERE
- APPLICABLE. ALL CONNECTIONS TO EXISTING WATERLINES SHALL BE PERFORMED BY THE AUTHORITY. THE CONTRACTOR SHALL PROVIDE FULL STAINLESS STEEL TAPPING SLEEVE(S) AND VALVE(S). THE CONTRACTOR SHALL EXCAVATE TO THE EXISTING WATERLINE, SHORE THE TRENCH PER OSHA REQUIREMENTS, CLEAN THE EXISTING WATERLINE, AND INSTALL THE TAPPING SLEEVE AND VALVE PRIOR TO THE AUTHORITY PERFORMING THE TAP. THE CONTRACTOR SHALL NOTIFY THE AUTHORITY'S UTILITY LINE SERVICES DIVISION AT 540-853-2792 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO REQUIRING THE CONNECTION.
- PRIOR TO CONSTRUCTION IN THE RIGHT-OF-WAY, ALL APPLICABLE PERMIT(S) FROM THE GOVERNING JURISDICTION AND/OR AGENCY MUST BE OBTAINED AND A COPY KEPT ON THE PROJECT SITE.
- FOR PROJECTS REQUIRING TRAFFIC CONTROL NOTIFY THE BEDFORD VDOT RESIDENCY. AT 540-586-7910 AT LEAST TWO WEEKS IN ADVANCE OF REQUIRING TRAFFIC CONTROL. TRAFFIC CONTROL REQUIREMENTS SHALL BE DETERMINED ONCE THE VDOT LAND USE PERMIT HAS BEEN ISSUED. TRAFFIC CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE MOST RECENT MUTCD MANUAL AND THE VDOT WORK AREA PROTECTION MANUAL UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL NOTIFY THE AUTHORITY'S ENGINEERING COORDINATOR, MARK SINK, AT 540-537-3460 AT LEAST THREE (3) DAYS PRIOR TO CONSTRUCTION.
- A PRE-CONSTRUCTION CONFERENCE SHALL BE SCHEDULED AT LEAST ONE (1) DAY PRIOR TO ANY
- THE CONTRACTOR SHALL HAVE A VALID MISS UTILITY TICKET PRIOR TO EXCAVATION. CONTACT MISS UTILITY AT 1-800-552-7001.
- ALL EXISTING UTILITIES MAY NOT BE SHOWN OR MAY NOT BE SHOWN IN THEIR EXACT LOCATION. CONTRACTOR SHALL LOCATE ALL UTILITIES AND DETERMINE ALL INVERTS PRIOR TO CONSTRUCTION TO ALLOW FOR ADJUSTMENTS DUE TO CONFLICTS WITH OTHER UTILITIES. THE CONTRACTOR SHALL COMPLY WITH THE VIRGINIA STATE WATER WORKS REGULATIONS, SECTION 12VAC5-590-1150, AND THE VIRGINIA STATE SEWAGE COLLECTION AND TREATMENT REGULATIONS WHERE LINES CROSS.
- AN APPROVED SET OF PLANS AND PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT. PRIOR TO COMMENCING WORK, THE CONTRACTOR'S CERTIFIED RESPONSIBLE LAND DISTURBER SHALL OBTAIN
- AN EROSION AND SEDIMENT CONTROL PERMIT FOR THE PROJECT FROM THE LOCAL GOVERNING JURISDICTION AND DEQ (IF REQUIRED). ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND SHALL BE INSTALLED
- 12. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING ALL VEHICLES AND EQUIPMENT PRIOR TO ENTERING PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE STREETS ARE KEPT IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES.
- 13. FIELD CHANGES SHALL BE APPROVED BY THE AUTHORITY'S ENGINEERING DIVISION PRIOR TO SUCH CONSTRUCTION
- THE CONTRACTOR SHALL MAKE PROVISIONS TO PROVIDE ACCESS TO ALL PROPERTIES DURING CONSTRUCTION AND SHALL MAINTAIN SAFE ACCESSIBILITY TO FIRE HYDRANTS AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING ALL MANHOLES AFTER PAVING. MANHOLE RIMS SHALL BE INSTALLED TO GRADE AND FLUSH WITH THE FINAL PAVEMENT.
- UNREPAIRED ROADWAYS OPENED TO TRAFFIC SHALL HAVE, AT A MINIMUM, COMPACTED AGGREGATE MATERIAL VDOT 21A OR 21B FLUSH WITH THE ADJACENT ROADWAY SURFACE AND SHALL BE INSPECTED AND REPAIRED ON A DAILY BASIS. SOME AREAS WILL REQUIRE A TEMPORARY PATCH UNTIL FINAL PAVING CAN BE
- 17. THE CONTRACTOR SHALL NOT EXCAVATE MORE TRENCH LENGTH THAN CAN BE RESTORED WITHIN THE SAME WORK DAY. ALL TRENCHES SHALL BE BACKFILLED OR PLATED AT THE END OF EACH WORK DAY OR WHEN THE CONTRACTOR IS NOT ON SITE.
- 18. THE CONTRACTOR SHALL SUPPLY THE AUTHORITY WITH CORRECT AS-BUILT PLANS BEFORE SUBSTANTIAL
- COMPLETION WILL BE GRANTED. 19. THE REPLACEMENT PAVEMENT SECTION SHALL BE AS SET FORTH IN ACCORDANCE WITH VDOT STANDARDS.

WATERLINE NOTES

- 1. INSTALL WATERLINE AND APPURTENANCES IN ACCORDANCE WITH THE DETAILS SHOWN ON THESE DRAWINGS AND ALL OTHER AUTHORITY REGULATIONS.
- A TYPICAL MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED WATERLINES UNLESS OTHERWISE INDICATED ON PLANS.
- WATER MAINS SHALL BE A MINIMUM CLASS 350 DUCTILE IRON PER AWWA C151, UNLESS OTHERWISE
- ALL WATERLINES SHALL BE INSTALLED ACCORDING TO THE PROFILES INCLUDED WITH THESE PLANS AND WITHOUT ANY ADDITIONAL HIGH POINTS OTHER THE THOSE INDICATED ON PROFILES. SHOULD THE CONTRACTOR CONSTRUCT WATERLINE WITH HIGH POINTS NOT SHOWN ON PROFILES, THE CONTRACTOR SHALL INSTALL ADDITIONAL AIR RELEASE VALVES AT SUCH HIGH POINTS AND IN-LINE BLOW-OFFS AT ADJACENT
- LOW POINTS WITH NO ADDITIONAL COST TO THE AUTHORITY. ALL SERVICE LATERALS CROSSING ROADWAYS SHOULD BE BORED ACROSS TO A POINT PAST OPPOSITE EDGE
- OF PAVEMENT WITH MINIMAL ADDITIONAL DAMAGE TO ROAD SURFACE. (NONE PROPOSED) THE TOPS OF ALL VALVE BOXES, VALVE VAULTS, AND ACCESS MANHOLES SHALL BE INSTALLED TO GRADE
- AND FLUSH WITH PAVED SURFACES. ALL WATERLINES SHALL BE PROPERLY RESTRAINED WITH THRUST BLOCKS OR JOINT RESTRAINTS AS SHOWN
- ON AUTHORITY'S DETAILS.
- WHERE WATERLINE MUST CROSS UNDER STORM DRAINS, PIPES SHALL HAVE A MINIMUM OF 18" OF SEPARATION, OR THE STORM PIPE SHALL BE SUPPORTED IN ACCORDANCE WITH THE AUTHORITY'S STANDARDS.
- ALL WATERLINES AND SERVICE LATERALS SHALL BE PRESSURE TESTED, AFTER BACKFILLING, TO A HYDROSTATIC PRESSURE OF NOT LESS THAN 100psi ABOVE THE DESIGN WATER PRESSURE FOR THE SYSTEM OR 200psi, WHICHEVER IS GREATER. TESTING PROCEDURE AND ALLOWABLE LEAKAGE SHALL BE ACCORDING TO AUTHORITY STANDARDS.

SITE AND ZONING TABULATIONS

CURRENT ZONING: LOTS SURROUNDING THE WATERLINE EXTENSION ARE ZONED EITHER: B2-GENERAL BUSINESS, A1-AGRICULTURAL, R1-RESIDENTIAL SUBURBAN SUBDIVISION, RPD-RESIDENTIAL PLAN UNIT DEVELOPMENT OR RC1-RESIDENTIAL COMBINED SUBDIVISION.

PROPOSED USE: WATERLINE EXTENSION TO CONNECT TO EXISTING WATERLINE THAT IS GOING FROM PRIVATE TO PUBLIC.

SITE ACREAGE: LOT SIZE VARIES.

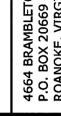
PROPOSED NUMBER OF LOTS: NO CHANGE IN NUMBER OF LOTS.

GENERAL NOTES

- OWNER/DEVELOPER: WESTERN VIRGINIA WATER AUTHORITY (ATTN: JEFF ROGERS)
 - 601 SOUTH JEFFERSON STREET, SUITE 300 ROANOKE, VA 24011 (540) 855-4679
- NO PORTION OF THIS PROJECT IS LOCATED WITHIN THE LIMITS OF A 100 YEAR FLOOD BOUNDARY AS DESIGNATED BY FEMA. THIS OPINION IS BASED ON AN INSPECTION OF THE FLOOD INSURANCE RATE MAP #51067C0235D, DATED JANUARY 6, 2010.
- THE PROPERTY LINES AND RIGHT OF WAY SHOWN ARE THE RESULT OF REPRODUCING RECORDED SUBDIVISION PLATS FOR THE LOTS INVOLVED AND JUSTIFYING THESE WITH PROPERTY CORNERS AS LOCATED BY FIELD SURVEY PERFORMED BY LUMSDEN ASSOCIATES, P.C. IN 2019 & 2020.
- TOPOGRAPHIC DATA IS BASED ON A FIELD SURVEY PERFORMED BY LUMSDEN ASSOCIATES, P.C. IN 2019 & 2020 AND SUPPLEMENTED BY FRANKLIN COUNTY GIS MAPPING. THE LOCATION OF THE NEAR SIDE CURB, OR EDGE OF PAVEMENT, AND PROFILE ELEVATIONS ARE TAKEN DIRECTLY FROM THE FIELD SURVEY. A TITLE REPORT WAS NOT FURNISHED FOR THESE PROPERTIES.
- THE PROPERTIES SHOWN ON THESE PLANS ARE ACCESSED BY PUBLIC ROADS. AN APPROVED SET OF PLANS SHALL BE KEPT ON SITE AT ALL TIMES.

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July 22, 2020

NONE OMMISSION NO: 19-284

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