TRAFFIC CONTROL PLAN

STATEWIDE RAILROAD CROSSING MAINTENANCE #1
SF 9015 000

TRAFFIC CONTROL PLANS FOR MAINTENANCE AT CROSSINGS:
DOT 850-920X
DOT 850-926N
DOT 850-938H
DOT 837-341H

Date:
May 4, 2026

Prepared for:
Hungerford Paving

Prepared by:
Israel Maynard, PE

Digitally signed by
Maynard, Israel
Date: 2026.05.04
16:29:55 -04'00'

Stantec

Table of Contents

1 General Information

1.1 Purpose

Stantec Consulting Services, Inc. has prepared these Traffic Control Plans for Hungerford Paving as site specific procedures for work zone traffic on the Statewide Railroad Crossing Maintenance #1 SF 9015 000 Project.

1.2 Locations and Scope

1.2.1 DOT 850-920X

Located near the intersection of Memorial Drive and Red Village Road in the Town of Lyndon. This location involves removal of existing concrete panels and installing hot-mix asphalt to grade. Speed limit for Memorial Drive and Red Village Drive are 35 mph in the project area. One way traffic shall be maintained at all times during construction requiring a phased approach. The project is adjacent to a signalized intersection and will require the signal to be set to flashing yellow while the each approach is flagger controlled per MTUCD Typical Application TA-10. Adjacent driveways will be temporarily altered for access management and flagger controlled as necessary.

1.2.2 DOT 850-920X

Located on Gordon Mills Way approximately 300’ West of Memorial Drive (U.S. Route 5) in St. Johnsbury, this location involves removal of existing concrete panels and installing hot-mix asphalt to grade. Gordon Mills Way is a dead-end road serving an industrial complex. Speed limit on Gordon Mills Way is unposted. Memorial Drive in the project area has a posted speed limit of 50 mph. One way traffic shall be maintained at all times during construction requiring a phased approach. The project will be completed in two phases with flagger control. Due to proximity of the Memorial Drive Intersection MUTCD flagger approach signing does not apply and has been modified with sideroad approach signing based on VAOT Standard T-10.

1.2.3 DOT 850-938H

Located near the intersection of Concord Avenue and Railroad Street in the Town of St. Johnsbury, this location involves removing existing asphalt, installing new rubber rail seals and repaving the crossing. Work in this crossing will be coordinated with VRS to raise the track height requiring a 1 day closure. During the closure Concord Avenue traffic will be detoured via Portland Street and Railroad Street per MUTCD TA-26.

1.2.4 DOT 837-341H

Located on West Second Street approximately 200’ West of U.S. Route 302 in Barre, this location involves removing the existing asphalt and repaving the crossing. Work in this crossing will be coordinated with VRS to replace a concrete panel requiring 1 day closure. West Second Street is a dead-end with no alternative access. Since there is no alternative access coordination with existing property owners and operating

railroad will be necessary to agree on a time for comlpeting the work. The workzone will be maintained in a state so that emergency vehicles can access if necessary.

2 Workzones

2.1 Advance Warning

Signage shall meet MUTCD requirements and be placed per MUTCD Typical Applications TA-10, TA-26 and VAOT Standard T-10 as shown herein.

2.2 Flaggers

Flaggers shall be used where shown during active construction with appropriate approach signage per MUTCD TA-10 and the plans herein.

Flagging personnel will have received all necessary training and shall be certified prior to performing work on this project. Flaggers shall use MUTCD-compliant high visibility apparel and sign paddles per VAOT Standard T-30. Flaggers will perform an “ALL STOP” for any emergency response vehicles leaving or entering the workzone.

2.3 Uniformed Traffic Officers (UTO)

UTO’s shall be the only personnel to control an intersection (a single Flagger cannot control an intersection), when UTO's control a signalized intersection, signals shall be set to red flash mode or turned off. A UTO shall not control a signalized intersection that is operating under signal controlled.

When construction proceeds through an intersection, provide Flaggers and all other necessary traffic control as required by the TMP to stop and release the traffic through the intersection. When an intersection is signalized, place the signal in red flash mode and provide law enforcement or other adequate traffic control measures to direct traffic through the intersection before beginning work in the intersection.

When multiple Flaggers are proposed to control traffic, unless directed otherwise by the engineer, approaching traffic on multi-lane approaches (including turn lanes) shall be merged in a single lane to ensure that each Flagger only controls a single lane of approaching traffic. The phasing plans shall show the location of Flaggers and show approach lane shifts and closures, when necessary to meet this requirement. Additionally, the traffic signal will be placed in red flash mode or turned off.

For these projects flaggers will control the approaches. UTOs will only be used in the event that flaggers are unavailable.

2.4 Pedestrian Escorts

Where existing pedestrian facilities are closed a dedicated pedestrian escort shall be utilized to guide pedestrian traffic safely through the work zone.

2.5 Portable Changeable Message Signs (PCMS)

Portable Changeable Message Signs shall be placed as shown on the plans in advance of and during roadway closures. Messages to be displayed are included in the plans.

2.6 Signage

Signage Shall meet the following criteria:

- Construction signs shall not be installed in ways that interfere or obstruct the view of existing traffic control devices, stopping distance, and corner sight distance.
- Existing signs that conflict with temporary traffic control will be covered.
- Sign covering shall be installed in a manner to prevent damaging the retro-reflectivity of the sign face and shall consist of plywood, painted flat black.
- Vegetation that interferes with the visibility of the signs will be removed and discarded.
- When guardrails are present, the face of the sign will be above the top of the rail.
- Portable signs will be mounted on aluminum stands that are MUTCD, AASHTO Manual for Assessing Safety Hardware (MASH), and as shown in Figure 6F-1. Height and Lateral Location of Signs – Typical Installations.
- All portable signs will be set on interstate style stands to prevent them from falling over. Portable signs and stands will not be used more than 3 consecutive days.

3 Key Personnel

James Hungerford, Project Manager, 802-782-6171
Seth Gilman, Project Superintendent, 802-393-2812
Kyle St. Amour, Foreman, 802-752-6255

4 References

- Manual on Uniform Traffic Control Devices for Streets and Highways 11th Edition (MUTCD)
- VAOT Control Plans for Statewide Railroad Crossing Maintenance #1 SF 9015 000
- VAOT Standard Drawings T-1,T-10, T-28, T-35, T-36

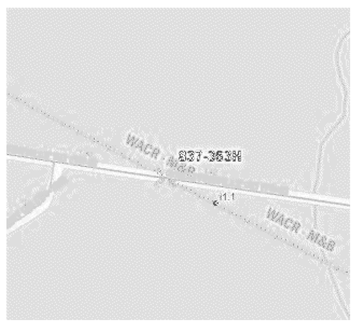
Appendix A – Location Map

DOT 850-920X
MEMORIAL DR
LYNDON, VERMONT

DOT 850-926N
GORDON MILLS WAY
SAINT JOHNSBURY, VERMONT

DOT 850-938H
CONCORD AVE
SAINT JOHNSBURY, VERMONT

DOT 837-341H
W SECOND ST
BARRE CITY, VERMONT



NOTES:

1. THE CONTRACTOR DESIGN, CONSTRUCTION AND FABRICATION SHALL CONFORM TO THE "AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION (AREMA) MANUAL FOR RAILWAY ENGINEERING, 2013", THE "STATE OF VERMONT AGENCY OF TRANSPORTATION (VTRANS) STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2011" AND ITS LATEST REVISION, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)2009 AND ITS LATEST REVISIONS.

2. BITUMINOUS CONCRETE PAVEMENT SHALL BE FLUSH WITH TOP OF THE RAIL.

3. DAMAGE TO ANY CROSS CULVERTS OR OTHER DRAINAGE FEATURES AS A RESULT OF CONTRACTOR OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

4. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT CONTINUOUS COORDINATION WITH VERMONT RAILWAY, THE RAILROAD OPERATOR, WILL BE REQUIRED THROUGHOUT CONSTRUCTION. VERMONT RAILWAY WILL PROVIDE THE CONTRACTOR WITH FLAGGERS FOR PROTECTION OF RAILWAY TRAFFIC WHILE WORK IS BEING PERFORMED ON THE RAILROAD RIGHT OF WAY (R.O.W.). THE CONTRACTOR SHALL NOT ENTER THE R.O.W. AT ANY TIME WITHOUT VERMONT RAILWAY AUTHORIZATION. ALL COSTS FOR RAILROAD FLAGGER PROTECTION AND RAILROAD COORDINATION SHALL BE INCLUDED UNDER ITEM 630.20 "FLAGGERS, RAILROAD". SEE THE RAILROAD SPECIAL PROVISION FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

5. CONSTRUCTION AND ACCESS SHALL BE WITHIN THE R.O.W. UNLESS OTHERWISE APPROVED BY THE PROPERTY OWNER(S)AND VTRANS ENVIRONMENT PERMITTING.THE CONTRACTOR SHALL COORDINATE DIRECTLY WITH THE PROPERTY OWNERS TO OBTAIN WRITTEN APPROVAL FOR LAND USE OUTSIDE THE R.O.W. THE CONTRACTOR SHALL SUBMIT COPIES OF WRITTEN PROPERTY AGREEMENTS TO THE ENGINEER.THE CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL PERMITTING REQUIRED FOR OUTSIDE THE R.O.W. LAND USE.

6. THE CONTRACTOR SHALL PREVENT CONSTRUCTION DEBRIS FROM ENTERING WATERWAYS, PUBLIC OR PRIVATE PROPERTY, OR TRAVELED WAYS DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH THE CLEAN UP OF DEBRIS OR CONTAMINATION RESULTING FROM WORK.

7. DIMENSIONS AND ELEVATIONS SHOWN ON THESE PLANS FOR ALL EXISTING COMPONENTS IMPACTED BY THE NEW WORK HAVE BEEN OBTAINED FROM FIELD SURVEYS. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SURVEY AND FIELD MEASUREMENTS TO ENSURE CONSISTENCY WITH THE PROPOSED MODIFICATIONS TO THE SITE. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT ITEMS.

8. THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN EXCAVATING NEAR AND BACKFILLING IN THE VICINITY OF THE EXISTING UTILITIES, AND SHALL USE HAND EXCAVATION WHERE APPROPRIATE. CONTRACTOR SHALL REPAIR ANY DAMAGE INCURRED DURING CONSTRUCTION TO EXISTING UTILITIES SCHEDULED TO REMAIN, AT NO COST TO THE OWNER. ALL EXISTING PIPING AND STRUCTURES EXPOSED DURING CONSTRUCTION SHALL BE ADEQUATELY SUPPORTED, BRACED, OR OTHERWISE PROTECTED DURING CONSTRUCTION ACTIVITIES. UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER, THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES IN SERVICE AT ALL TIMES. ALL UNDERGROUND UTILITIES SHALL BE RETAINED UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER. SEE THE UTILITY SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

9. THE CONTRACTOR SHALL HAND DIG IN AREAS REQUIRING EXCAVATION WHEN WORKING IN THE VICINITY OF THE UNDERGROUND FIBER OPTIC CABLE. IF CONTRACTOR ENCOUNTERS THE CABLE, IT WILL BE DOCUMENTED AND SUBMITTED TO THE STATE. WORK ASSOCIATED WITH DOCUMENTATION AND SUBMITTAL OF INFORMATION WILL BE CONCIDERED INCIDENTAL TO THE CONTRACT. ANY DAMAGE TO THE CABLE SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

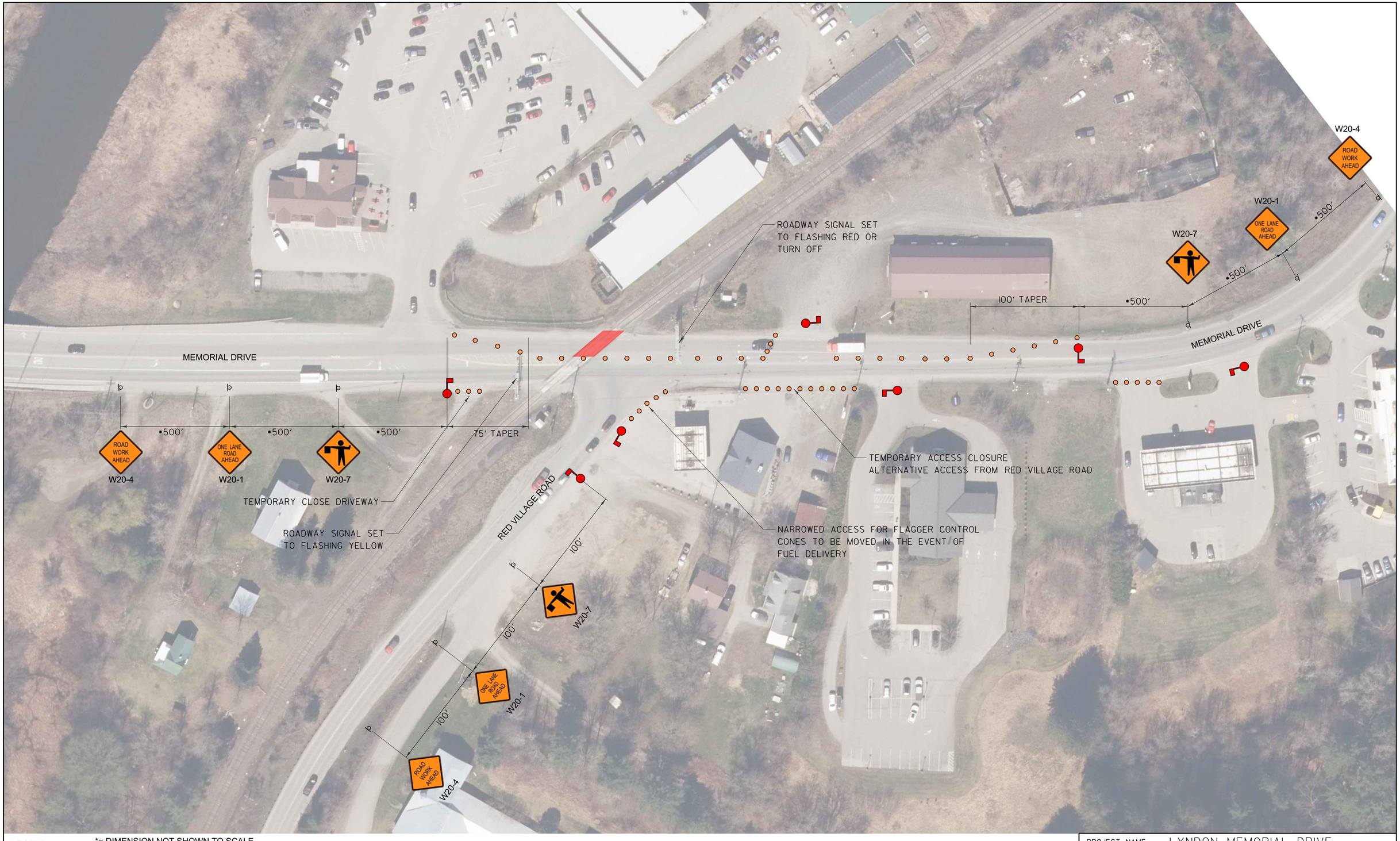
NOT TO SCALE

PROJECT NAME: STATEWIDE RR XING MAINTENANCE #1
PROJECT NUMBER: SF 9045 000

FILE NAME: MASTERnotes.dgn	PLOT DATE: 3/17/2026
PROJECT LEADER: P. BANNERMAN	DRAWN BY: P. BANNERMAN
DESIGNED BY: P. BANNERMAN	CHECKED BY:
PROJECT GENERAL NOTES SHEET	SHEET 1 OF 7

Appendix B - Plans

B.1 DOT 850-920X Memorial Drive



LEGEND

*= DIMENSION NOT SHOWN TO SCALE

- WORK AREA
- FLAGGER
- DELINEATION DEVICES (DRUM OR CONE)
- þ SIGN LOCATION (ON TEMPORARY STAND OR POST)

NOTES:

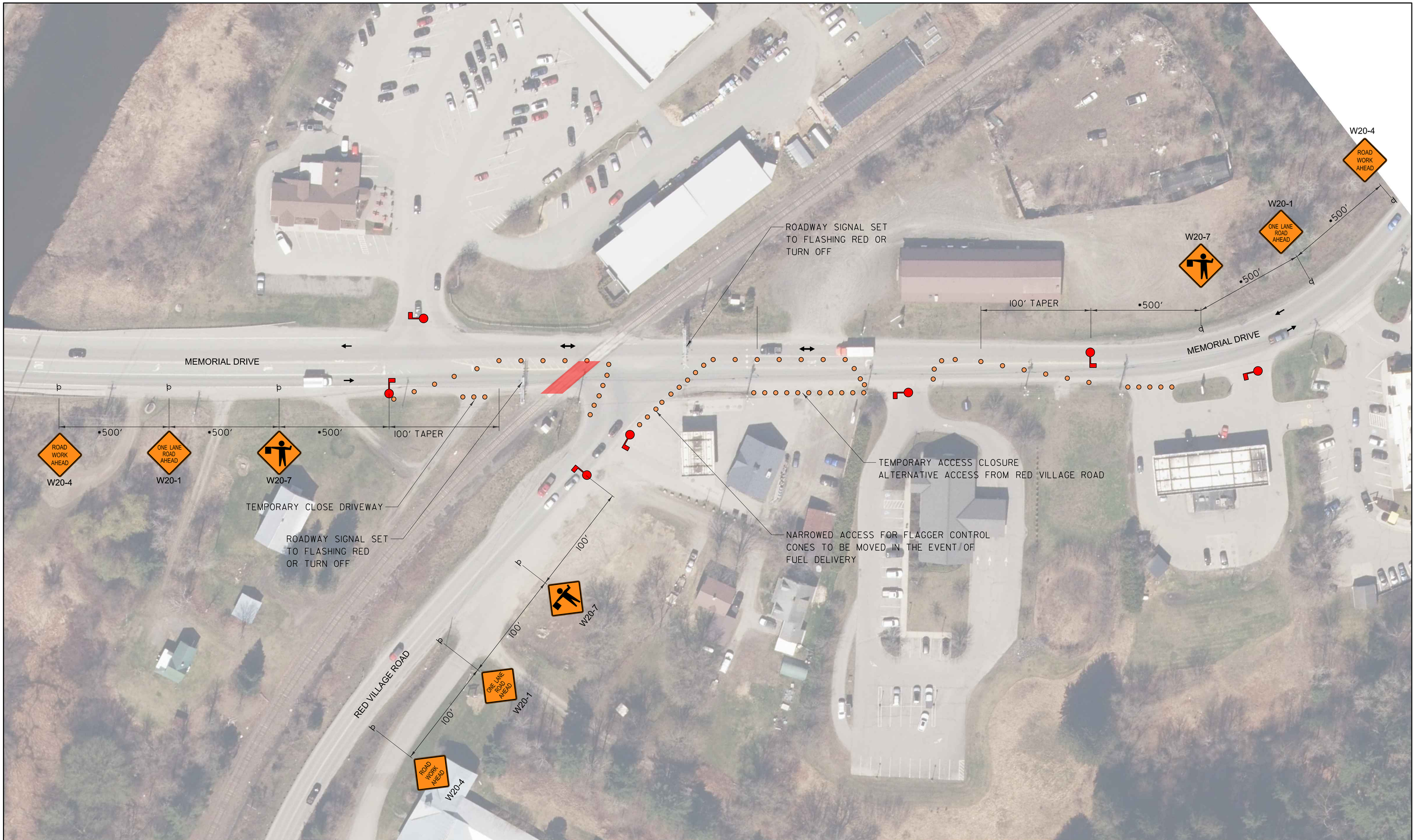
1. ONE-WAY TRAFFIC WILL BE MAINTAINED AT ALL TIMES.
2. RAILROAD FLAGGING WILL BE COORDINATED WITH THE OPERATING RAILROAD (VERMONT RAIL SYSTEMS)

Stantec

PROJECT NAME: LYNDON MEMORIAL DRIVE
PROJECT NUMBER: DOT 850-920X

FILE NAME: 850-920X.dgn
PROJECT LEADER: I. MAYNARD
DESIGNED BY: I. MAYNARD
TRAFFIC CONTROL PHASE I

PLOT DATE: 5/4/2026
DRAWN BY: P. ARMATA
CHECKED BY: D. YOULEN
SHEET 1 OF 2



LEGEND

*= DIMENSION NOT SHOWN TO SCALE

- WORK AREA
- FLAGGER
- DELINEATION DEVICES (DRUM OR CONE)
- þ SIGN LOCATION (ON TEMPORARY STAND OR POST)

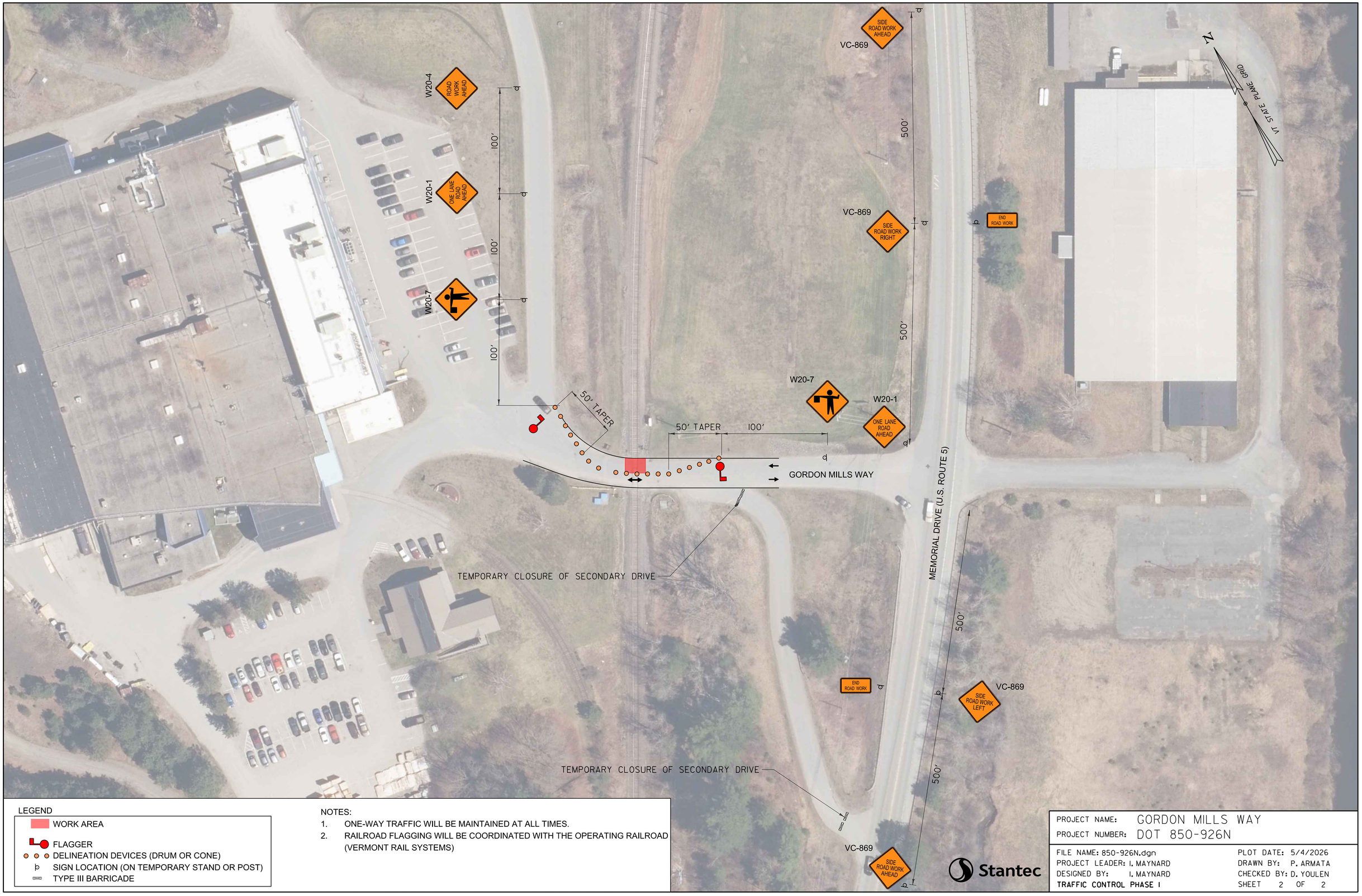
NOTES:

1. ONE-WAY TRAFFIC WILL BE MAINTAINED AT ALL TIMES.
2. RAILROAD FLAGGING WILL BE COORDINATED WITH THE OPERATING RAILROAD (VERMONT RAIL SYSTEMS)

Stantec

PROJECT NAME:	LYNDON MEMORIAL DRIVE
PROJECT NUMBER:	DOT 850-920X
FILE NAME: 850-920X.dgn	PLOT DATE: 5/4/2026
PROJECT LEADER: I. MAYNARD	DRAWN BY: P. ARMATA
DESIGNED BY: I. MAYNARD	CHECKED BY: D. YOULEN
TRAFFIC CONTROL PHASE 2	SHEET 2 OF 2

B.2 DOT 850-926N Gordon Mills Way



LEGEND

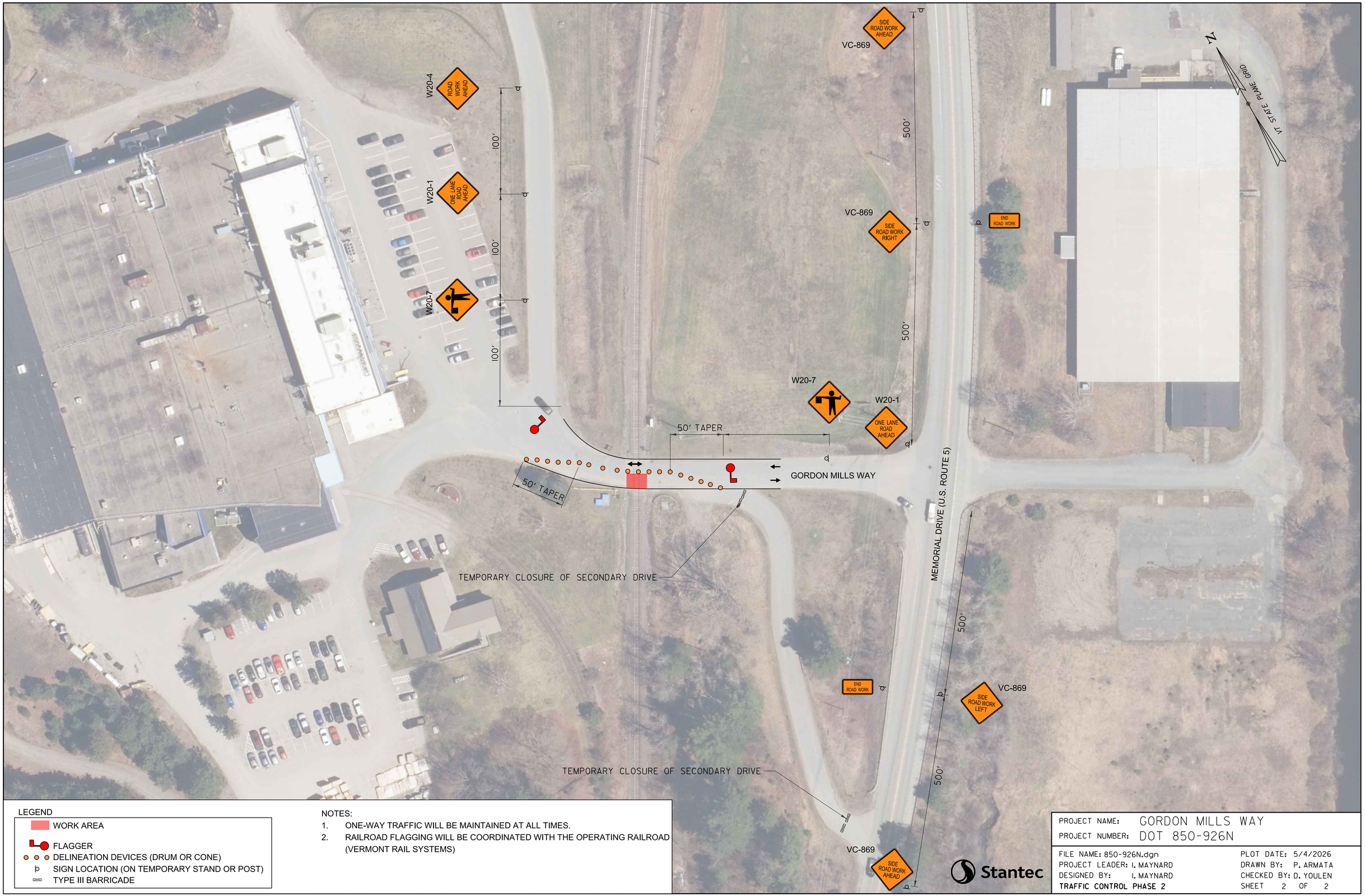
- WORK AREA
- FLAGGER
- DELINEATION DEVICES (DRUM OR CONE)
- SIGN LOCATION (ON TEMPORARY STAND OR POST)
- TYPE III BARRICADE

NOTES:

1. ONE-WAY TRAFFIC WILL BE MAINTAINED AT ALL TIMES.
2. RAILROAD FLAGGING WILL BE COORDINATED WITH THE OPERATING RAILROAD (VERMONT RAIL SYSTEMS)

Stantec

PROJECT NAME:	GORDON MILLS WAY
PROJECT NUMBER:	DOT 850-926N
FILE NAME: 850-926N.dgn	PLOT DATE: 5/4/2026
PROJECT LEADER: I. MAYNARD	DRAWN BY: P. ARMATA
DESIGNED BY: I. MAYNARD	CHECKED BY: D. YOULEN
TRAFFIC CONTROL PHASE I	SHEET 2 OF 2



LEGEND

- WORK AREA
- FLAGGER
- DELINEATION DEVICES (DRUM OR CONE)
- SIGN LOCATION (ON TEMPORARY STAND OR POST)
- TYPE III BARRICADE

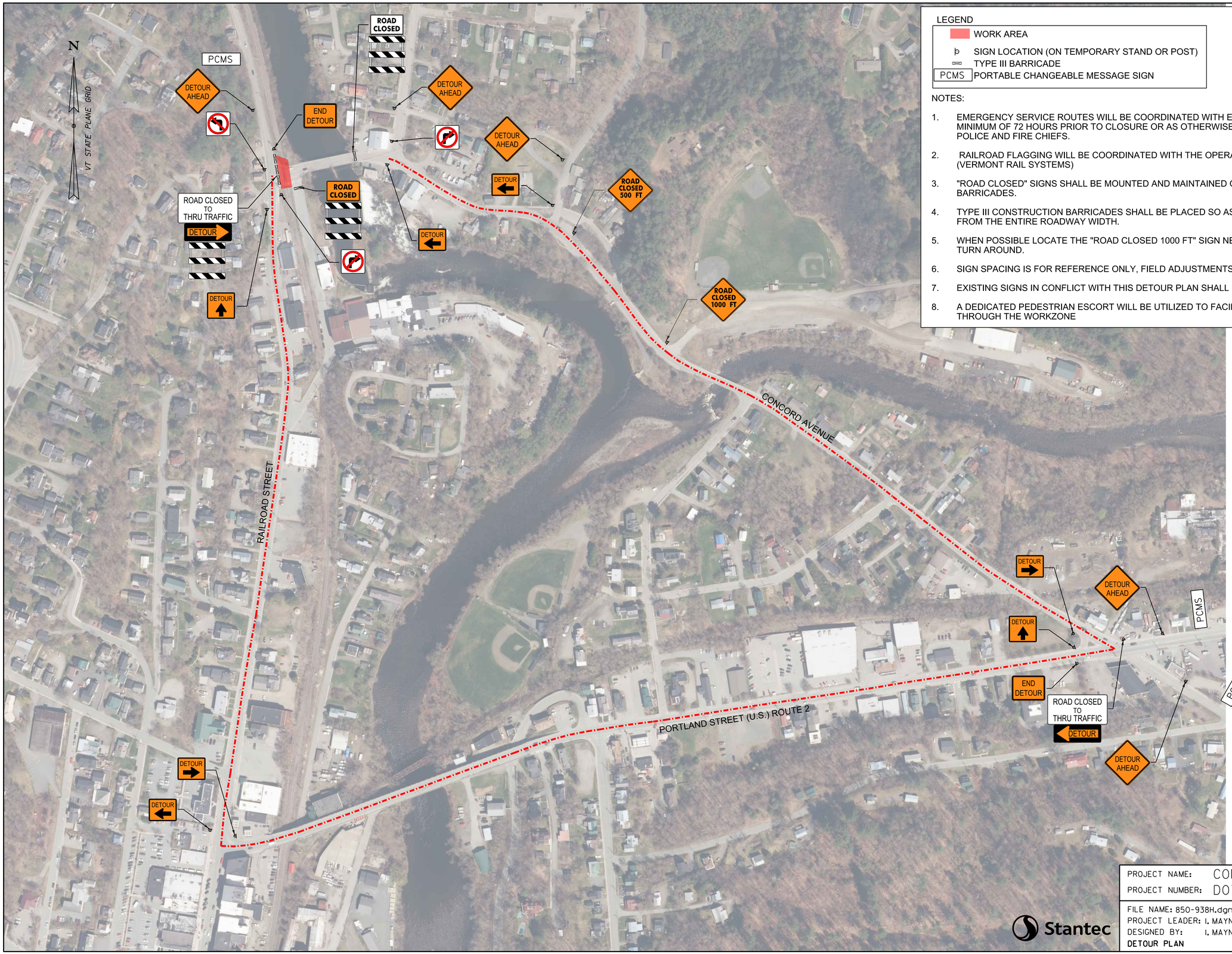
NOTES:

1. ONE-WAY TRAFFIC WILL BE MAINTAINED AT ALL TIMES.
2. RAILROAD FLAGGING WILL BE COORDINATED WITH THE OPERATING RAILROAD (VERMONT RAIL SYSTEMS)

Stantec

PROJECT NAME:	GORDON MILLS WAY
PROJECT NUMBER:	DOT 850-926N
FILE NAME: 850-926N.dgn	PLOT DATE: 5/4/2026
PROJECT LEADER: I. MAYNARD	DRAWN BY: P. ARMATA
DESIGNED BY: I. MAYNARD	CHECKED BY: D. YOULEN
TRAFFIC CONTROL PHASE 2	SHEET 2 OF 2

B.3 DOT 850-938H Concord Ave



LEGEND

- WORK AREA
- SIGN LOCATION (ON TEMPORARY STAND OR POST)
- TYPE III BARRICADE
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

NOTES:

1. EMERGENCY SERVICE ROUTES WILL BE COORDINATED WITH EMERGENCY SERVICE PROVIDERS A MINIMUM OF 72 HOURS PRIOR TO CLOSURE OR AS OTHERWISE DETERMINED BY ST. JOHNSBURY POLICE AND FIRE CHIEFS.
2. RAILROAD FLAGGING WILL BE COORDINATED WITH THE OPERATING RAILROAD (VERMONT RAIL SYSTEMS)
3. "ROAD CLOSED" SIGNS SHALL BE MOUNTED AND MAINTAINED ON RETROREFLECTIVE TYPE III BARRICADES.
4. TYPE III CONSTRUCTION BARRICADES SHALL BE PLACED SO AS TO PHYSICALLY EXCLUDE TRAFFIC FROM THE ENTIRE ROADWAY WIDTH.
5. WHEN POSSIBLE LOCATE THE "ROAD CLOSED 1000 FT" SIGN NEAR A LOCATION WHERE DRIVERS CAN TURN AROUND.
6. SIGN SPACING IS FOR REFERENCE ONLY, FIELD ADJUSTMENTS MAY BE REQUIRED.
7. EXISTING SIGNS IN CONFLICT WITH THIS DETOUR PLAN SHALL BE COVERED WHEN NECESSARY.
8. A DEDICATED PEDESTRIAN ESCORT WILL BE UTILIZED TO FACILITATE PEDESTRIAN MOVEMENT THROUGH THE WORKZONE

PCMS MESSAGES

DURING CLOSURE

CONCORD AVENUE CLOSED	LOCAL TRAFFIC ONLY

PRIOR TO CLOSURE

CONCORD AVENUE CLOSED	MM/DD THRU MM/DD

PROJECT NAME: CONCORD AVENUE ST. JOHNSBURY
PROJECT NUMBER: DOT 850-938H

FILE NAME: 850-938H.dgn
PROJECT LEADER: I. MAYNARD
DESIGNED BY: I. MAYNARD
DETOUR PLAN

PLOT DATE: 5/4/2026
DRAWN BY: P. ARMATA
CHECKED BY: D. YOULEN
SHEET 1 OF 1

Stantec

B.4 DOT 837-841H West Second Street

LEGEND

	WORK AREA
þ	SIGN LOCATION (ON TEMPORARY STAND OR POST)
	TYPE III BARRICADE
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN

NOTES:

1. COORDINATE EMERGENCY SERVICE ROUTES WILL BE COORDINATED WITH EMERGENCY SERVICE PROVIDERS A MINIMUM OF 72 HOURS PRIOR TO CLOSURE OR AS OTHERWISE DETERMINED BY BARRE POLICE AND FIRE CHIEFS.
2. RAILROAD FLAGGING WILL BE COORDINATED WITH THE OPERATING RAILROAD (VERMONT RAIL SYSTEMS)
3. "ROAD CLOSED" SIGNS SHALL BE MOUNTED AND MAINTAINED ON RETROREFLECTIVE TYPE III BARRICADES.
4. TYPE III CONSTRUCTION BARRICADES SHALL BE PLACED SO AS TO PHYSICALLY EXCLUDE TRAFFIC FROM THE ENTIRE ROADWAY WIDTH.
5. SIGN SPACING IS FOR REFERENCE ONLY, FIELD ADJUSTMENTS MAY BE REQUIRED.
6. A DEDICATED PEDESTRIAN ESCORT WILL BE UTILIZED TO FACILITATE PEDESTRIAN MOVEMENT THROUGH THE WORKZONE

PCMS MESSAGES

WEST 2ND STREET CLOSED	MM/DD THRU MM/DD

Stantec

PROJECT NAME: WEST 2ND STREET BARRE
PROJECT NUMBER: DOT 837-841H

FILE NAME: 837-841H.dgn
PROJECT LEADER: I. MAYNARD
DESIGNED BY: I. MAYNARD
CLOSURE PLAN

PLOT DATE: 5/4/2026
DRAWN BY: P. ARMATA
CHECKED BY: D. YOULEN
SHEET 1 OF 1

Appendix C MUTCD Reference Pages

Table 6B-1. Recommended Advance Warning Sign Minimum Spacing

Road Type	Distance between Signs**		
	A	B	C
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* Speed category to be determined by the highway agency or owner of site roadways open to public travel.

** The column headings A, B, and C are the dimensions shown in Figures 6P-1 through 6P-54 The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

Section 6B.06 Activity Area

Support:

01 The activity area is the section of the highway where the work activity takes place. It is comprised of the work space, the traffic space, and the buffer space.

02 The work space is that portion of the highway closed to road users and set aside for workers, equipment, and material, and a shadow vehicle if one is used upstream. Work spaces are usually delineated for road users by channelizing devices or, to exclude vehicles and pedestrians, by temporary barriers.

Option:

03 The work space may be stationary or may move as work progresses.

Guidance:

04 *Since there might be several work spaces (some even separated by several miles) within the project limits, each work space should be adequately signed to inform road users and reduce confusion.*

Support:

05 The traffic space is the portion of the highway in which road users are routed through the activity area.

06 The buffer space is a lateral and/or longitudinal area that separates road user flow from the work space or an unsafe area, and might provide some recovery space for an errant vehicle.

Guidance:

07 *Neither work activity nor storage of equipment, vehicles, or material should occur within a buffer space.*

Option:

08 Buffer spaces may be positioned either longitudinally or laterally with respect to the direction of road user flow. The activity area may contain one or more lateral or longitudinal buffer spaces.

09 A longitudinal buffer space may be placed in advance of a work space.

10 The longitudinal buffer space may also be used to separate opposing road user flows that use portions of the same traffic lane, as shown in Figure 6B-2.

11 If a longitudinal buffer space is used, the values shown in Table 6B-2 may be used to determine the length of the longitudinal buffer space.

Support:

12 Typically, the buffer space is formed as a traffic island and defined by channelizing devices.

13 When a shadow vehicle, arrow board, or changeable message sign is placed in a closed lane in advance of a work space, only the area upstream of the vehicle, arrow board, or changeable message sign constitutes the buffer space.

Option:

14 The lateral buffer space may be used to separate the traffic space from the work space, as shown in Figures 6B-1 and 6B-2, or such areas as excavations or pavement-edge drop-offs. A lateral buffer space also may be used between two travel lanes, especially those carrying opposing flows.

Guidance:

15 *The width of a lateral buffer space should be determined by engineering judgment.*

Option:

16 When work occurs on a high-volume, highly-congested facility, a vehicle storage or staging space may be provided for incident response and emergency vehicles (for example, tow trucks and fire apparatus) so that these vehicles can respond quickly to road user incidents.

Table 6B-2. Stopping Sight Distance as a Function of Speed

Speed*	Distance
20 mph	115 feet
25 mph	155 feet
30 mph	200 feet
35 mph	250 feet
40 mph	305 feet
45 mph	360 feet
50 mph	425 feet
55 mph	495 feet
60 mph	570 feet
65 mph	645 feet
70 mph	730 feet
75 mph	820 feet

* Posted speed, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed

Section 6B.07 Termination Area

Support:

01 The termination area is the section of the highway where road users are returned to their normal driving path. The termination area extends from the downstream end of the work area to the last TTC device such as END ROAD WORK signs, if posted.

Option:

02 An END ROAD WORK sign, a Speed Limit sign, or other signs may be used to inform road users that they can resume normal operations.

03 A longitudinal buffer space may be used between the work space and the beginning of the downstream taper.

Section 6B.08 Tapers

Option:

01 Tapers may be used in both the transition and termination areas. Whenever tapers are to be used in close proximity to an interchange ramp, crossroads, curves, or other influencing factors, the length of the tapers may be adjusted.

Support:

02 Tapers are created by using a series of channelizing devices and/or pavement markings to move traffic out of or into the normal path. Types of tapers are shown in Figure 6B-2.

03 Longer tapers are not necessarily better than shorter tapers (particularly in urban areas with characteristics such as short block lengths or driveways) because extended tapers tend to encourage sluggish operation and to encourage drivers to delay lane changes unnecessarily. The test concerning adequate lengths of tapers involves observation of driver performance after TTC plans are put into effect.

Table 6B-3. Taper Length Criteria for Temporary Traffic Control Zones

Type of Taper	Taper Length
Merging Taper	at least L
Shifting Taper	at least 0.5 L
Shoulder Taper	at least 0.33 L
One-Lane, Two-Way Traffic Taper	50 feet minimum, 100 feet maximum
Downstream Taper	50 feet minimum, 100 feet maximum

Note: Use Table 6B-4 to calculate L

Guidance:

04 *The appropriate taper length (L) should be determined using the criteria shown in Tables 6B-3 and 6B-4.*

Table 6B-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	L = WS

Where: L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

Support:

05 A merging taper requires the longest distance because drivers are required to merge into common road space.

Table 6P-1. Index to Typical Applications (Sheet 1 of 2)

Typical Application Description	Typical Application Number
Work Outside of the Shoulder (see Section 6N.05)	
Work Beyond the Shoulder	TA-1
Blasting Zone	TA-2
Work on the Shoulder (see Sections 6N.06 and 6N.07)	
Work on the Shoulders	TA-3
Short-Duration or Mobile Operation on a Shoulder	TA-4
Shoulder Closure on a Freeway	TA-5
Shoulder Work with Minor Encroachment	TA-6
Work within the Traveled Way of a Two-Lane Highway (see Section 6N.09)	
Road Closed with a Diversion	TA-7
Roads Closed with an Off-Site Detour	TA-8
Overlapping Routes with a Detour	TA-9
Lane Closure on a Two-Lane Road Using Flaggers	TA-10
Lane Closure on a Two-Lane Road with Low Traffic Volumes	TA-11
Lane Closure on a Two-Lane Road Using Traffic Control Signals	TA-12
Temporary Road Closure	TA-13
Haul Road Crossing	TA-14
Work in the Center of a Road with Low Traffic Volumes	TA-15
Surveying Along the Center Line of a Road with Low Traffic Volumes	TA-16
Mobile Operations on a Two-Lane Road	TA-17
Work within the Traveled Way of an Urban Street (see Section 6N.10)	
Lane Closure on a Minor Street	TA-18
Detour for One Travel Direction	TA-19
Detour for a Closed Street	TA-20
Work within the Traveled Way at an Intersection and on Sidewalks (see Section 6N.12)	
Lane Closure on the Near Side of an Intersection	TA-21
Right-Hand Lane Closure on the Far Side of an Intersection	TA-22
Left-Hand Lane Closure on the Far Side of an Intersection	TA-23
Half Road Closure on the Far Side of an Intersection	TA-24
Multiple Lane Closures at an Intersection	TA-25
Closure in the Center of an Intersection	TA-26
Closure at the Side of an Intersection	TA-27
Sidewalk Detour or Diversion	TA-28
Crosswalk Closures and Pedestrian Detours	TA-29
Work within the Traveled Way of a Multi-Lane, Non-Access Controlled Highway (see Section 6N.11)	
Interior Lane Closure on a Multi-Lane Street	TA-30
Lane Closure on a Street with Uneven Directional Volumes	TA-31
Half Road Closure on a Multi-Lane, High-Speed Highway	TA-32
Stationary Lane Closure on a Divided Highway	TA-33
Lane Closure with a Temporary Traffic Barrier	TA-34
Mobile Operation on a Multi-Lane Road	TA-35

Table 6P-1. Index to Typical Applications (Sheet 2 of 2)

Typical Application Description	Typical Application Number
Work within the Traveled Way of a Freeway or Expressway (see Section 6N.13)	
Lane Shift on a Freeway	TA-36
Double Lane Closure on a Freeway	TA-37
Interior Lane Closure on a Freeway	TA-38
Median Crossover on a Freeway	TA-39
Median Crossover for an Entrance Ramp	TA-40
Median Crossover for an Exit Ramp	TA-41
Work in the Vicinity of an Exit Ramp	TA-42
Partial Exit Ramp Closure	TA-43
Work in the Vicinity of an Entrance Ramp	TA-44
Temporary Reversible Lane Using Movable Barriers	TA-45
Work in the Vicinity of a Grade Crossing (see Section 6N.17)	
Work in the Vicinity of a Grade Crossing	TA-46
Work in the Vicinity of Bicycle Lanes and Shared Use Paths (see Section 6N.04)	
Bicycle Lane Closure without a Detour	TA-47
Bicycle Lane Closure with an On-Road Detour	TA-48
Shared-Use Path Closure with a Diversion	TA-49
On-Road Detour for a Shared-Use Path	TA-50
Paved Shoulder Closure with a Bicycle Diversion onto a Temporary Path	TA-51
Work in the Traveled Way of Roundabouts	
Short-Term or Short-Duration Work in a Circular Intersection	TA-52
Flagging Operation on a Single-Lane Circular Intersection	TA-53
Inside Lane Closure on a Multi-Lane Circular Intersection	TA-54

Table 6P-2. Meaning of Symbols on Typical Application Diagrams


Arrow board


Arrow board support or trailer (shown facing down)


Changeable message sign or support trailer


Channelizing device


Crash cushion


Direction of temporary traffic detour

Direction of travel

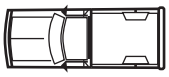

Flagger


High-level warning device (Flag tree)


Longitudinal channelizing device

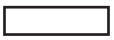

Luminaire


Pavement markings that should be removed for a long-term project


Shadow vehicle


Sign (shown facing left)


Surveyor


Temporary barrier

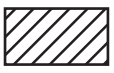

Temporary barrier with warning light

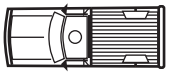

Traffic or pedestrian signal


Truck-mounted attenuator


Type 3 barricade


Warning light


Work space


Work vehicle

Notes for Figure 6P-10—Typical Application 10
Lane Closure on a Two-Lane Road Using Flaggers

Option:

1. Positive protection devices may be used per Section 6M.02.
2. For low-volume situations with short TTC 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 6D).
3. The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short-duration operations.
4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs. A BE PREPARED TO STOP sign may be added to the sign series.
5. Automated Flagger Assistance Devices (see Section 6L.02) may be used in situations where there is only one lane of approaching traffic in the direction to be controlled.

Guidance:

6. *The buffer space should be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped vehicles.*

Standard:

7. At night, flagger stations shall be illuminated, except in emergencies.

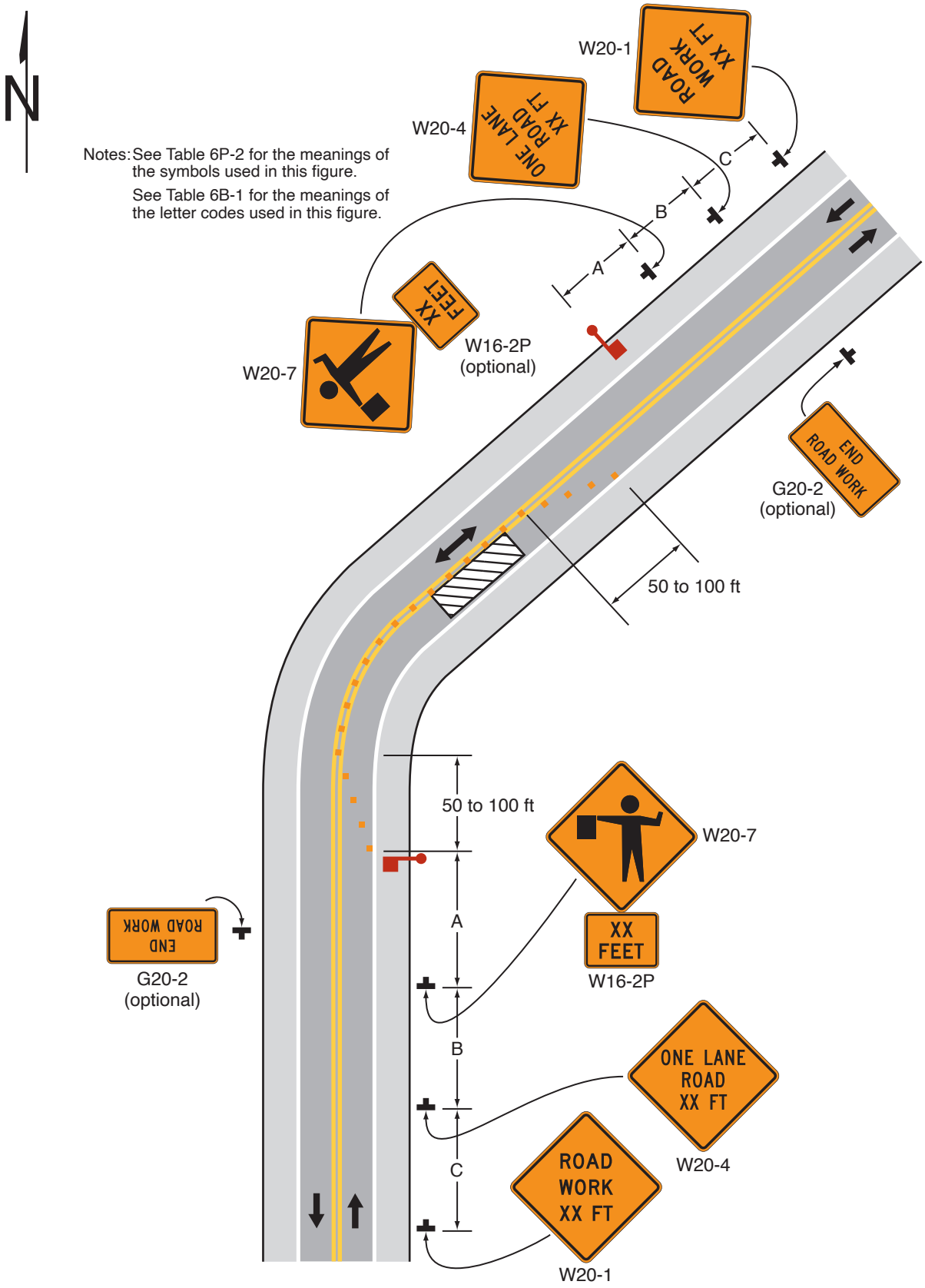
Guidance:

8. *When used, the BE PREPARED TO STOP sign should be located between the Flagger sign and the ONE LANE ROAD sign.*
9. *When a grade crossing exists within or upstream of the transition area and it is anticipated that queues resulting from the lane closure might extend through the grade crossing, the TTC zone should be extended so that the transition area precedes the grade crossing.*
10. *When a grade crossing equipped with active warning devices exists within the activity area, provisions should be made for keeping flaggers informed as to the activation status of these warning devices.*
11. *When a grade crossing exists within the activity area, drivers operating on the left-hand side of the normal center line should be provided with comparable warning devices as for drivers operating on the right-hand side of the normal center line.*
12. *Early coordination with the railroad company or transit agency should occur before work starts.*

Option:

13. A flagger or a uniformed law enforcement officer may be used at the grade crossing to minimize the probability that vehicles are stopped within 15 feet of the grade crossing, measured from both sides of the outside rails.

Figure 6P-10. Lane Closure on a Two-Lane Road Using Flaggers (TA-10)



Typical Application 10

Notes for Figure 6P-27—Typical Application 27
Closure at the Side of an Intersection

Guidance:

1. *The situation depicted can be simplified by closing one or more of the intersection approaches. If this cannot be done, and/or when capacity is a problem, through vehicular traffic should be directed to other roads or streets.*
2. *Depending on road user conditions, flagger(s) or uniformed law enforcement officer(s) should be used to direct road users within the intersection.*

Standard:

3. At night, flagger stations shall be illuminated, except in emergencies.

Option:

4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
5. For short-duration work operations, the channelizing devices may be eliminated if a vehicle displaying high-intensity rotating, flashing, oscillating, or strobe lights is positioned in the work space.
6. A BE PREPARED TO STOP sign may be added to the sign series.

Guidance:

7. *When used, the BE PREPARED TO STOP sign should be located before the Flagger symbol sign.*
8. *ONE LANE ROAD AHEAD signs should also be used to provide adequate advance warning.*

Support:

9. *Turns may be prohibited as required by vehicular traffic conditions, such as where the streets are so narrow that it might be physically impossible to make certain turns, especially for large vehicles.*

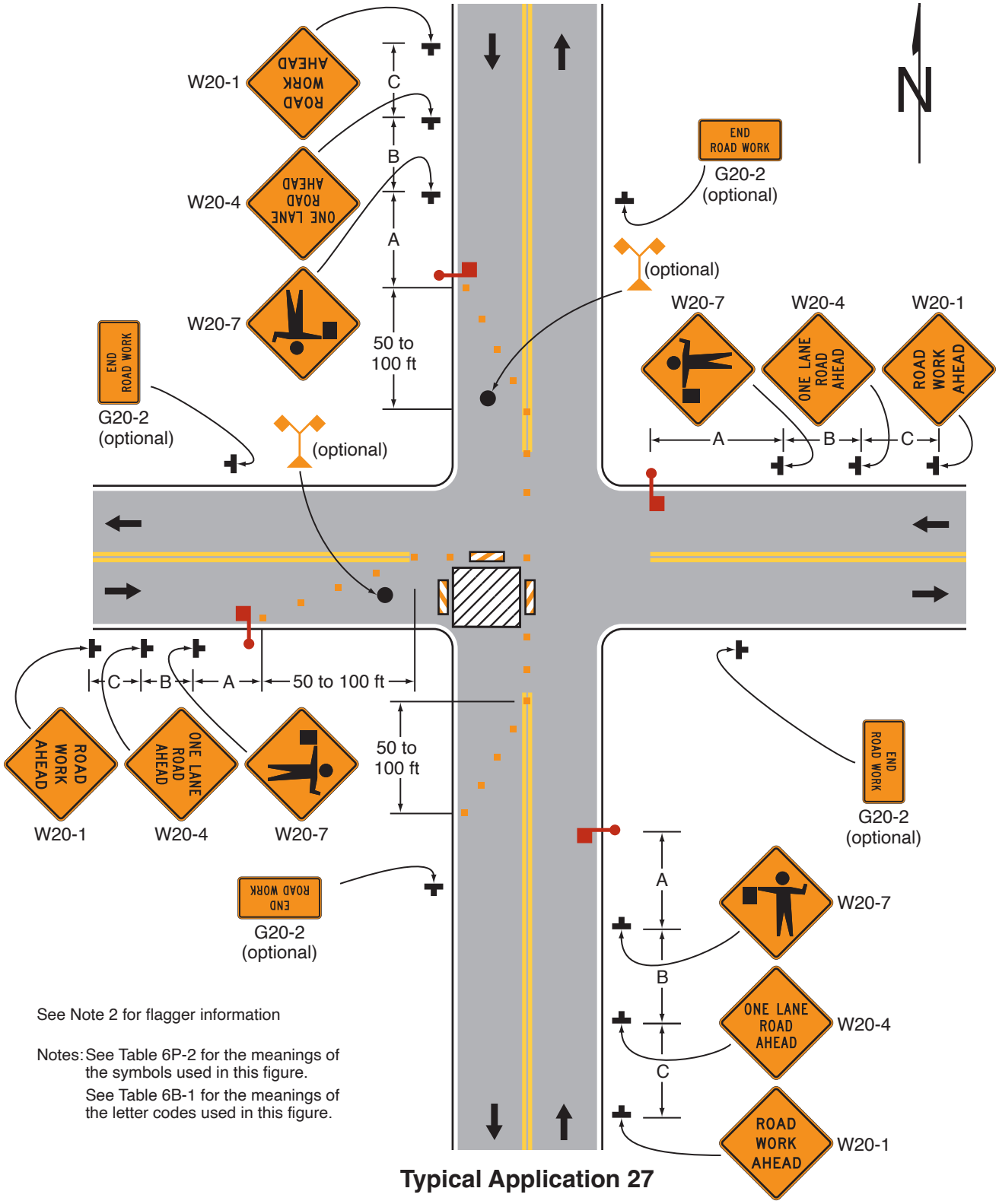
Option:

10. Positive protection devices may be used per Section 6M.02.
11. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

Standard:

12. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

Figure 6P-27. Closure at the Side of an Intersection (TA-27)



See Note 2 for flagger information

Notes: See Table 6P-2 for the meanings of the symbols used in this figure.

See Table 6B-1 for the meanings of the letter codes used in this figure.

Typical Application 27

Appendix D VAOT Standard Drawings

1. TRAFFIC CONTROL DEVICES NOT DETAILED IN THE VERMONT AGENCY OF TRANSPORTATION (VAOT) "STANDARD DRAWINGS" OR THE PROJECT PLANS SHALL BE IN ACCORDANCE WITH THE CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE "STANDARD HIGHWAY SIGNS" (SHS) PUBLICATION, AND THEIR LATEST REVISIONS, PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA).

2. CONSTRUCTION SIGNS SHALL BE ERECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES, DURING PERIODS OF INACTIVITY OR UPON COMPLETION OF THE WORK. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER.

3. DIAMOND SHAPED CONSTRUCTION SIGNS SHALL BE 48 INCH BY 48 INCH.

4. CONSTRUCTION SIGN COVERS SHALL CONSIST OF A PANEL, PAINTED FLAT BLACK, THE SAME SIZE AS THE SIGN IT COVERS. THE PANEL SHALL BE OF WOOD, PLYWOOD, HARDBOARD OR ANY MATERIAL SATISFACTORY TO THE ENGINEER. NO MATERIAL WILL BE APPROVED THAT WILL DETERIORATE BY EXPOSURE TO THE WEATHER DURING THE PROJECT. MOUNTING OF THE PANEL SHALL BE DONE IN SUCH A WAY AS NOT TO DAMAGE THE SIGN FACE MATERIAL.

5. SIGNS SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION SATISFACTORY TO THE ENGINEER. THEY SHALL BE KEPT PLUMB AND LEVEL, AND ALWAYS PRESENT A NEAT APPEARANCE. DAMAGED, DEFACED OR DIRTY SIGNS SHALL BE REPAIRED, CLEANED OR REPLACED AS ORDERED BY THE ENGINEER.

6. NO CROSS-BRACING OR BACK-BRACING TO KEEP POSTS PLUMB WILL BE ALLOWED. CONCRETE FOUNDATIONS, COLLARS OR SOIL BEARING PLATES ARE NOT PERMITTED.

7. CONSTRUCTION SIGNS INSTALLED ON POSTS SHALL BE SET SECURELY IN THE GROUND ON TWO POSTS. THE BOTTOM OF A SIGN SHALL BE AT LEAST FIVE FEET ABOVE THE EDGE OF PAVEMENT AND THE NEAREST EDGE OF A SIGN SHALL BE AT LEAST SIX FEET OUTSIDE THE SHOULDER POINT, FOUR FEET OUTSIDE GUARDRAIL, OR TWO FEET OUTSIDE CURBING OR SIDEWALK. THE INSTALLATION OF SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER. IN URBAN AREAS, THE BOTTOM OF THE SIGN SHALL BE AT LEAST SEVEN FEET ABOVE THE SIDEWALK OR EDGE OF PAVEMENT, WHICHEVER IS HIGHER.

8. PORTABLE SIGNS SHALL BE PLACED ON THE EDGE OF ROADWAY AND A MINIMUM OF ONE FOOT ABOVE THE TRAVELED WAY. ALL VEGETATION THAT INTERFERES WITH VISIBILITY OF THE SIGNS SHALL BE REMOVED. WHEN PLACED BEHIND GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.

9. SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.

10. ROLL UP CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE VI AND TYPE VII UNLESS OTHERWISE NOTED.

11. SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE VIII OR IX REQUIREMENTS UNLESS OTHERWISE NOTED.

12. WHERE CONSTRUCTION SIGN INSTALLATIONS ARE NOT PROTECTED BY GUARDRAIL OR OTHER APPROVED TRAFFIC BARRIERS, ALL SIGN STANDS AND POST INSTALLATIONS SHALL MEET THE AASHTO "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION. NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POSTS. WHEN ANCHORS ARE INSTALLED, STUBS SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND.

13. ROADWAY AND SHOULDER WIDTHS DEPICTED ON THE STANDARD DRAWINGS MAY VARY.

14. THESE STANDARD DRAWINGS ARE INTENDED TO SERVE AS VTRANS STANDARD OPERATING PROCEDURE. IT IS NOTED THAT COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL WORK ZONE MAY BE MODIFIED DUE TO FIELD CONDITIONS AT THE DISCRETION OF THE ENGINEER.

REV.	DATE	DESCRIPTION
0	AUG.6, 2012	ORIGINAL APPROVAL
1	APR.25, 2016	INSERTED NOTE 3, UPDATED STANDARD NAME
2	JUN. 24, 2025	NOTE UPDATES
OTHER STANDARDS REQUIRED: NONE		
APPROVALS ON FILE WITH VTRANS STANDARD DRAWING COMMITTEE		

TEMPORARY TRAFFIC CONTROL GENERAL NOTES

VTrans Working to Get You There
VERMONT AGENCY OF TRANSPORTATION

STANDARD
T-1

LEGEND

(A) ROAD WORK AHEAD — W20-1

(B) ROAD WORK 500 FT — W20-1

(C) SIDE ROAD WORK AHEAD — VC-869

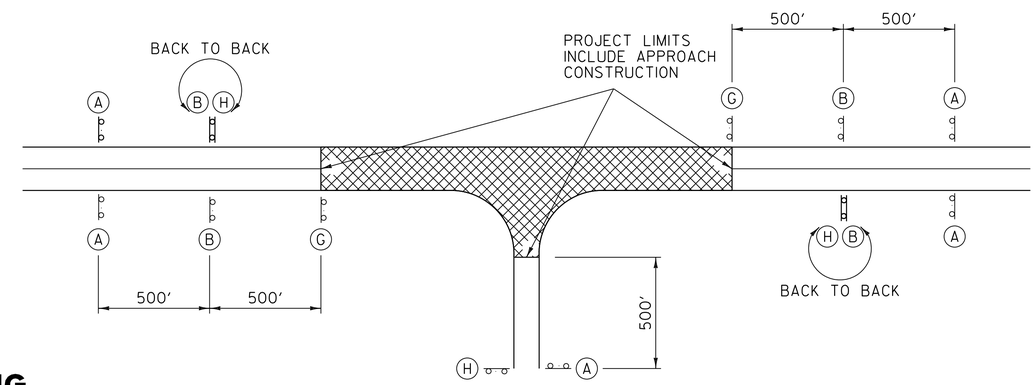
(D) SIDE ROAD WORK 500 FT — VC-869

(E) SIDE ROAD WORK LEFT — VC-869

(F) SIDE ROAD WORK RIGHT — VC-869

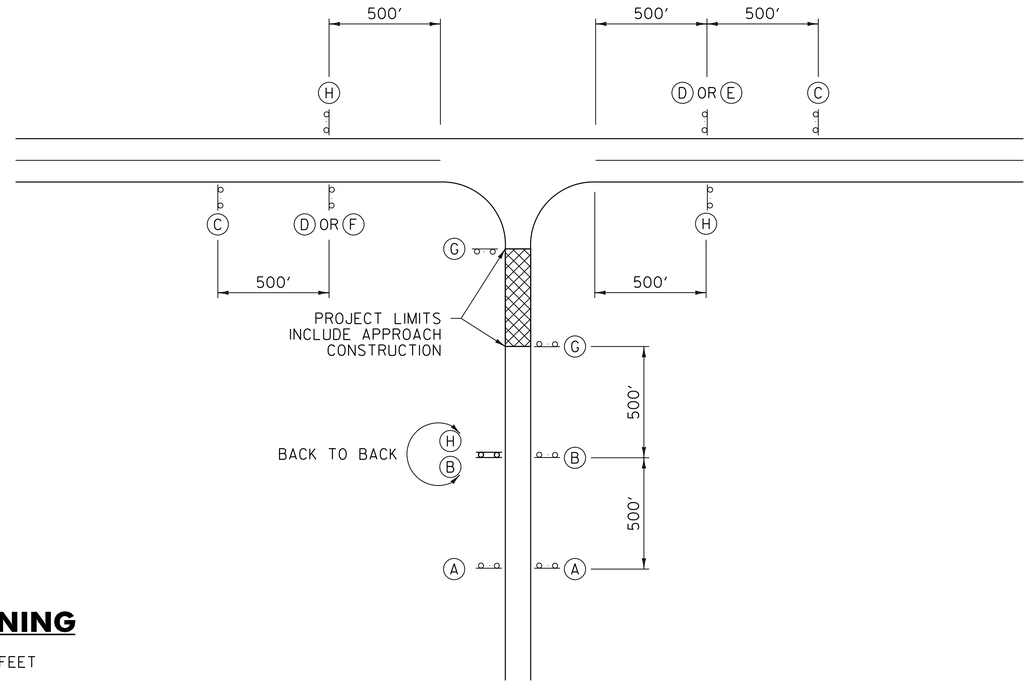
(G) ROAD WORK NEXT XX MILES — G20-1

(H) END ROAD WORK — G20-2



TYPICAL APPROACH SIGNING

FIELD CONDITIONS MAY DICTATE THE ACTUAL PLACEMENT.



SIDE ROAD APPROACH SIGNING

TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION. FIELD CONDITIONS MAY DICTATE THE ACTUAL PLACEMENT.

GENERAL NOTES:

1. SIGNS SHOWN ON THIS SHEET ARE INTENDED FOR USE IN PROVIDING ADVANCE WARNING AND INFORMATION ON CONSTRUCTION PROJECTS OVER WHICH TRAFFIC WILL BE MAINTAINED. WHEN ADDITIONAL APPROACH SIGNS OR OTHER TYPES OF ADVANCE SIGNING OR CONTROL ARE NECESSARY, THE PLANS AND/OR THE SPECIFICATIONS FOR THAT PROJECT WILL GIVE THE DETAILS OF THE SIGNS AND DEVICES REQUIRED. FOR ON-PROJECT CONSTRUCTION SIGNS, REFER TO APPROPRIATE STANDARD SHEETS.
2. THE ''ROAD WORK NEXT XX MILES'' SIGN (G20-1) SHALL BE INSTALLED IN ADVANCE OF TEMPORARY TRAFFIC CONTROL ZONES THAT ARE MORE THAN TWO MILES IN LENGTH OR AS DIRECTED BY THE ENGINEER. DISTANCES SHALL BE STATED TO THE NEAREST WHOLE MILE.
3. SIGNS SHALL BE LOCATED AS DETAILED ON THIS SHEET OR AS OTHERWISE SHOWN ON THE PLANS. THEY SHALL APPEAR AT EACH END OF THE HIGHWAY UNDER CONSTRUCTION AND ON ALL INTERSECTING PUBLIC HIGHWAYS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATIONS.

REV.	DATE	DESCRIPTION
0	AUG. 6, 2012	ORIGINAL APPROVAL
1	JUN. 24, 2025	BORDER UPDATE

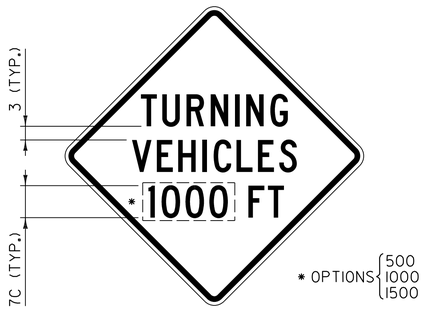
OTHER STANDARDS REQUIRED: T-1, T-28

APPROVALS ON FILE WITH VTRANS STANDARD DRAWING COMMITTEE

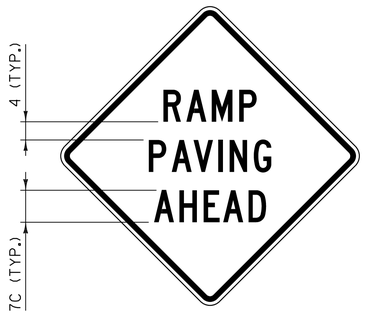
CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING

VTrans Working to Get You There — VERMONT AGENCY OF TRANSPORTATION

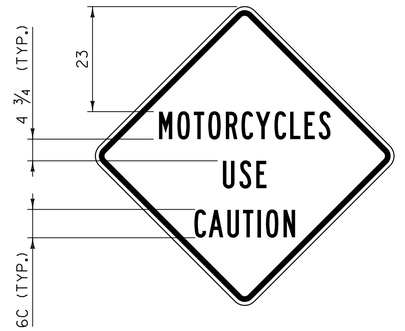
STANDARD T-10



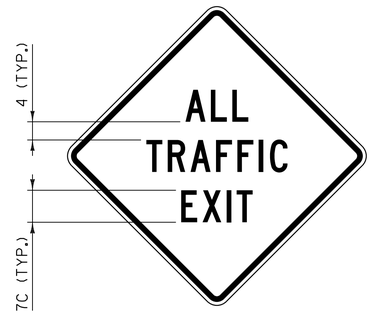
VC–001



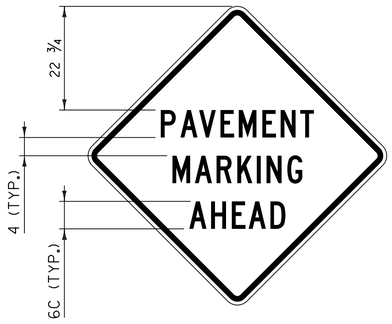
VC–003



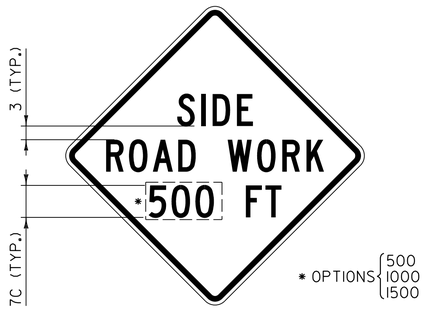
VC–004



VC–008



VC–813



VC–869

VC–874

GENERAL NOTES:

1. COLORS FOR SIGNS SHALL BE BLACK LEGEND AND BORDER ON FLUORESCENT ORANGE BACKGROUND.
2. CONSTRUCTION SIGNS SHALL BE 48 INCH BY 48 INCH. IF SOLID SUBSTRATE SIGNS ARE USED, SIGNS SHALL HAVE CORNERS ROUNDED TO A THREE INCH RADIUS.
3. SIGNS SHALL HAVE 1 1/4 INCH WIDE BORDERS THAT ARE INDENTED 3/4 INCH FROM THE EDGE OF THE SIGN.
4. SIGNS SHALL HAVE THE LEGEND CENTERED HORIZONTALLY AND VERTICALLY ON THE SIGN UNLESS OTHERWISE INDICATED.
5. ALL DIMENSIONS SHOWN IN INCHES.

REV.	DATE	DESCRIPTION
0	AUG. 6, 2012	ORIGINAL APPROVAL
1	JUN. 24, 2025	BORDER UPDATE

OTHER STANDARDS REQUIRED: T-1

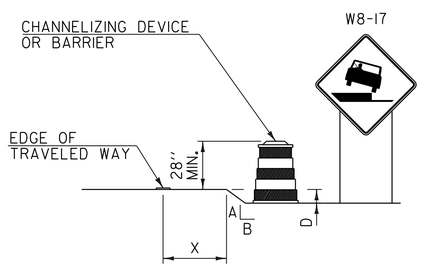
APPROVALS ON FILE WITH VTRANS STANDARD DRAWING COMMITTEE

CONSTRUCTION SIGN DETAILS

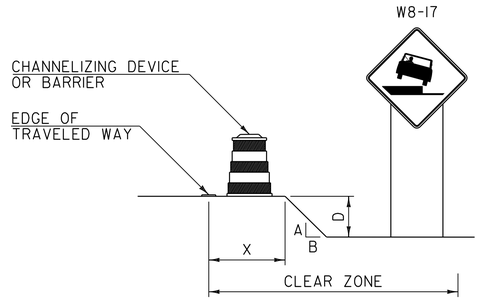
VTrans Working to Get You There
VERMONT AGENCY OF TRANSPORTATION

STANDARD
T-28

DROP-OFF ADJACENT TO TRAVELED WAY



TYPE 1

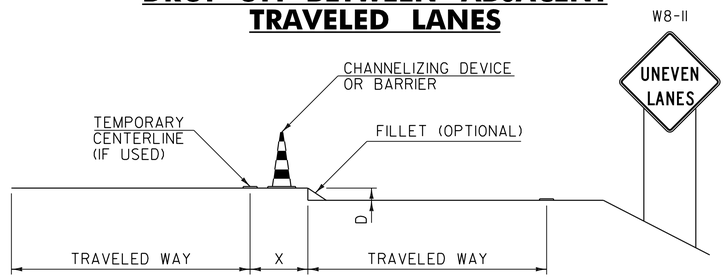


TYPE 2

NOTES:

1. CHANNELIZING DEVICES OR BARRIER SHOULD BE PLACED TO MAXIMIZE THE WIDTH OF THE TRAVELED WAY.
2. SEE CHART "A" FOR SPECIFIC REQUIREMENTS.
3. IF THE DROP-OFF REQUIRES CHANNELIZING DEVICES TO REMAIN IN PLACE OVERNIGHT, THEN "SHOULDER DROP-OFF SYMBOL" (W8-17) SIGNS SHOULD BE INSTALLED.

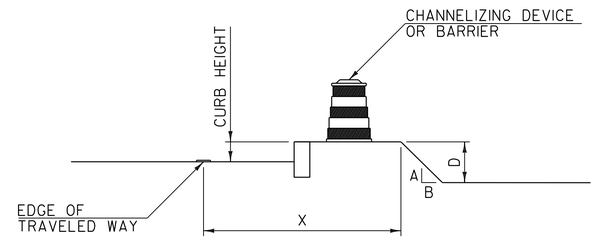
DROP-OFF BETWEEN ADJACENT TRAVELED LANES



NOTES:

1. WHENEVER A LONGITUDINAL DROP-OFF BETWEEN ADJACENT TRAVELED LANES IS TO BE LEFT OVERNIGHT, THEN "UNEVEN LANES" (W8-11) SIGNS AND CHANNELIZING DEVICES SHOULD BE INSTALLED.
2. IF REQUIRED, THE CHANNELIZING DEVICES USED SHOULD BE THOSE WHICH MAXIMIZE THE WIDTH OF THE TRAVELED LANE (I.E. CONES, VERTICAL PANELS OR TUBULAR MARKERS).
3. A BITUMINOUS CONCRETE FILLET WITH A 1.5:1 SLOPE MAY BE USED IN PLACE OF CHANNELIZING DEVICES, HOWEVER THE "UNEVEN LANES" (W8-11) SIGNS SHOULD STILL BE INSTALLED.
4. SEE CHART "A" FOR SPECIFIC REQUIREMENTS.

DROP-OFF BEYOND SHOULDER OR CURB



NOTES:

1. USE CHART "A" FOR VERTICAL CURBS UNDER SIX INCHES, MOUNTABLE CURBS OR ROADWAYS WITH A POSTED SPEED ABOVE 40 MPH.
2. USE CHART "B" FOR VERTICAL CURBS SIX INCHES OR GREATER.

CHART "A"
ALL SPEEDS WITH NO CURB OR MOUNTABLE CURB

X (FEET)	DROP (D) (INCHES)	A:B SLOPE	RECOMMENDED DEVICE
0 TO 4'	LESS THAN 2"	ANY	NONE
	2" TO 6"	1:1.5 OR FLATTER	NONE
		STEEPER THAN 1:1.5	CHANNELIZING DEVICE
	GREATER THAN 6"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER
4' TO 10'	LESS THAN 6"	ANY	NONE
	6" TO 12"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER
	GREATER THAN 12"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER
10' TO CZ	LESS THAN OR EQUAL TO 12"	ANY	NONE
	GREATER THAN 12"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER

NOTES:

1. THE MINIMUM CLEAR ZONE FOR FREEWAYS IS TO BE DETERMINED PER THE CURRENT AASHTO ROADSIDE DESIGN GUIDE. ALL OTHER HIGHWAYS WILL BE DETERMINED PER THE CURRENT "VERMONT STATE STANDARDS" BOOK.
2. CHANNELIZING DEVICES MAY BE USED INSTEAD OF BARRIER FOR SHORT TERM OPERATIONS.
3. ON BORDERLINE CONDITIONS, THE ENGINEER SHOULD DETERMINE WHICH TREATMENT IS ADEQUATE FOR THE EXISTING CONDITIONS.

CHART "B"
40 MPH OR LESS WITH VERTICAL CURB

X (FEET)	DROP (D) (INCHES)	DEVICE REQUIRED
0-10'	LESS THAN OR EQUAL TO 12"	NONE
0-10'	GREATER THAN 12"	CHANNELIZING DEVICE
GREATER THAN 10'	ANY	NONE

GENERAL NOTES:

1. THESE CONDITIONS AND TREATMENTS ARE ONLY PART OF THE TRAFFIC CONTROL SYSTEM AND SHOULD BE USED IN ADDITION TO THE PROPER WORK ZONE SIGNING.
2. THE FOLLOWING ARE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) COMPLIANT CHANNELIZING DEVICES:

   A. VERTICAL PANEL
   B. TYPE I OR TYPE II BARRICADE
   C. PLASTIC DRUM
   D. CONE - WHERE APPLICABLE
   E. TUBULAR MARKERS

   IF CHANNELIZING DEVICES ARE REQUIRED TO STAY IN PLACE DURING NIGHTTIME HOURS, THEY SHALL BE STABILIZED WHILE UNATTENDED IN ACCORDANCE WITH THE MUTCD.
3. WHERE BARRIER IS NECESSARY, THE BARRIER SHALL BE TAPERED BEYOND THE CLEAR ZONE. WHEN THE BARRIER CANNOT BE TAPERED BEYOND THE CLEAR ZONE, A MUTCD COMPLIANT END TREATMENT SHALL BE USED. BARRIER AND END TREATMENT SHALL MEET THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION.
4. CHANNELIZING DEVICE SPACING ALONG A LONGITUDINAL DROP-OFF (TANGENT) SHALL BE AS FOLLOWS:

   TANGENT - CHANNELIZING DEVICES SHALL BE SPACED "2S" ("S" IS EQUAL TO THE POSTED SPEED LIMIT IN FEET) APART.
5. "LOW SHOULDER" (W8-9) AND "SHOULDER DROP-OFF SYMBOL" (W8-17) SIGNS, WHEN USED, SHOULD BEGIN PRIOR TO THE DROP-OFF CONDITION AND SHOULD BE REPEATED EVERY 1500 FEET.

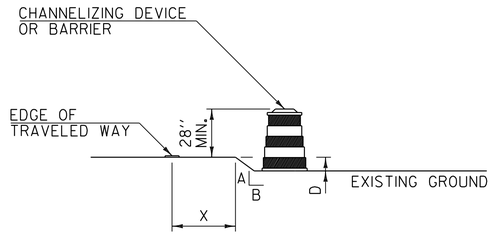
REV.	DATE	DESCRIPTION
0	AUG. 6, 2012	ORIGINAL APPROVAL
1	JUN. 24, 2025	REMOVED NCHRP REFERENCE
OTHER STANDARDS REQUIRED: T-1		
APPROVALS ON FILE WITH VTRANS STANDARD DRAWING COMMITTEE		

CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS

VTrans Working to Get You There — VERMONT AGENCY OF TRANSPORTATION

STANDARD
T-35

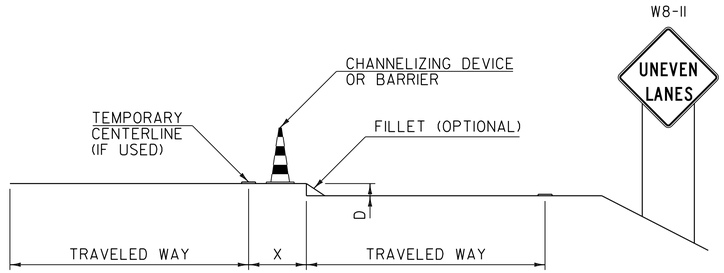
DROP-OFF ADJACENT TO TRAVELED WAY



NOTES:

1. CHANNELIZING DEVICES SHOULD BE PLACED TO MAXIMIZE THE WIDTH OF THE TRAVELED WAY.
2. SEE CHART "A" FOR SPECIFIC REQUIREMENTS.
3. IF THE DROP-OFF REQUIRES CHANNELIZING DEVICES TO REMAIN IN PLACE OVERNIGHT, THEN "LOW SHOULDER" (W8-9) OR "SHOULDER DROP-OFF SYMBOL" (W8-17) SIGNS SHOULD BE INSTALLED.

DROP-OFF BETWEEN ADJACENT TRAVELED LANES



NOTES:

1. WHENEVER A LONGITUDINAL DROP-OFF BETWEEN ADJACENT TRAVELED LANES IS TO BE LEFT OVERNIGHT, THEN "UNEVEN LANES" (W8-11) SIGNS AND CHANNELIZING DEVICES SHOULD BE INSTALLED.
2. IF REQUIRED, THE CHANNELIZING DEVICES USED SHALL BE THOSE WHICH MAXIMIZE THE WIDTH OF THE TRAVELED LANE (I.E. CONES, VERTICAL PANELS OR TUBULAR MARKERS).
3. A BITUMINOUS CONCRETE FILLET WITH A 1.5:1 SLOPE MAY BE USED IN PLACE OF CHANNELIZING DEVICES, HOWEVER THE "UNEVEN LANES" (W8-11) SIGNS SHOULD STILL BE INSTALLED.
4. SEE CHART "A" FOR SPECIFIC REQUIREMENTS.

CHART "A"
ALL SPEEDS WITH NO CURB

X (FEET)	DROP (D) (INCHES)	A:B SLOPE	DEVICE REQUIRED
0 TO 4'	LESS THAN 2"	ANY	NONE
	2" TO 6"	1:1.5 OR FLATTER	NONE
		STEEPER THAN 1:1.5	CHANNELIZING DEVICE
	GREATER THAN 6"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER
4' TO 10'	LESS THAN 6"	ANY	NONE
	6" TO 12"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER

NOTE:

1. ON BORDERLINE CONDITIONS, THE ENGINEER SHOULD DETERMINE WHICH TREATMENT IS ADEQUATE FOR THE EXISTING CONDITIONS.

GENERAL NOTES:

1. THESE CONDITIONS AND TREATMENTS ARE ONLY PART OF THE TRAFFIC CONTROL SYSTEM AND SHOULD BE USED IN ADDITION TO THE PROPER WORK ZONE SIGNING.
2. THE FOLLOWING ARE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) COMPLIANT CHANNELIZING DEVICES:

   A. VERTICAL PANEL
   B. TYPE I OR TYPE II BARRICADE
   C. PLASTIC DRUM
   D. CONE - WHERE APPLICABLE
   E. TUBULAR MARKERS

   IF CHANNELIZING DEVICES ARE REQUIRED TO STAY IN PLACE DURING NIGHTTIME HOURS, THEY SHALL BE STABILIZED WHILE UNATTENDED IN ACCORDANCE WITH THE MUTCD.
3. WHERE BARRIER IS NECESSARY, THE BARRIER SHALL BE TAPERED BEYOND THE CLEAR ZONE. WHEN THE BARRIER CANNOT BE TAPERED BEYOND THE CLEAR ZONE, A MUTCD COMPLIANT END TREATMENT SHALL BE USED. BARRIER AND END TREATMENT SHALL MEET OR THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION.
4. CHANNELIZING DEVICE SPACING ALONG A LONGITUDINAL DROP-OFF (TANGENT) SHALL BE AS FOLLOWS:

   TANGENT - CHANNELIZING DEVICES SHALL BE SPACED "2S" ("S" IS EQUAL TO THE POSTED SPEED LIMIT IN FEET) APART.
5. "LOW SHOULDER" (W8-9) AND "SHOULDER DROP-OFF SYMBOL" (W8-17) SIGNS, WHEN USED, SHOULD BEGIN PRIOR TO THE DROP-OFF CONDITION AND SHOULD BE REPEATED EVERY 1500 FEET.

REV.	DATE	DESCRIPTION
0	AUG. 6, 2012	ORIGINAL APPROVAL
1	JUN. 24, 2025	REMOVE NCHRP REFERENCE

OTHER STANDARDS REQUIRED: T-1

APPROVALS ON FILE WITH VTRANS STANDARD DRAWING COMMITTEE

CONSTRUCTION ZONE
LONGITUDINAL DROP-OFFS

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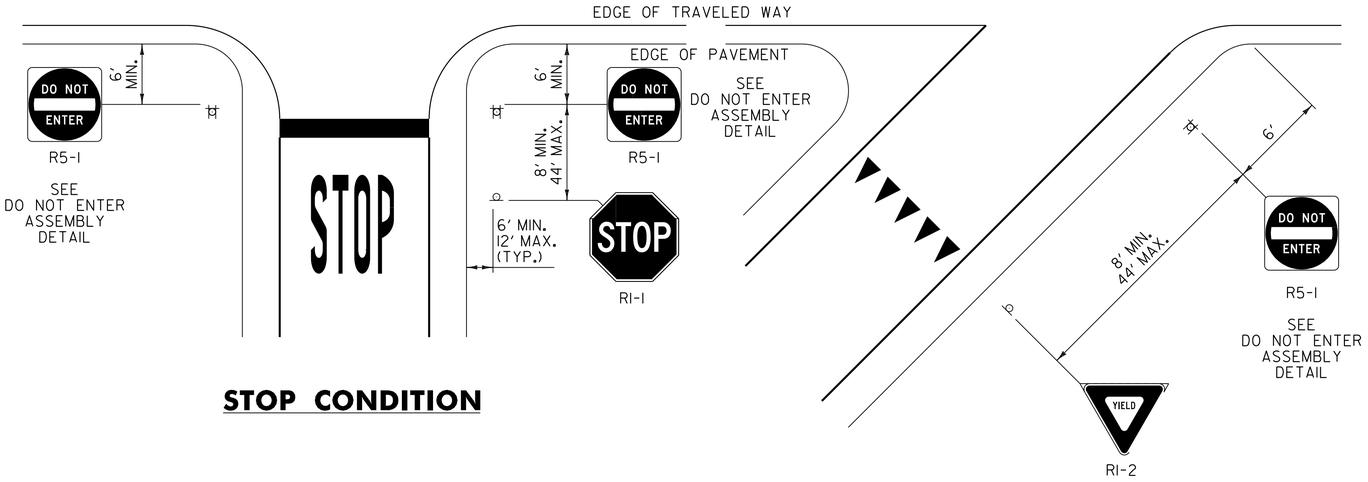
STANDARD
T - 36



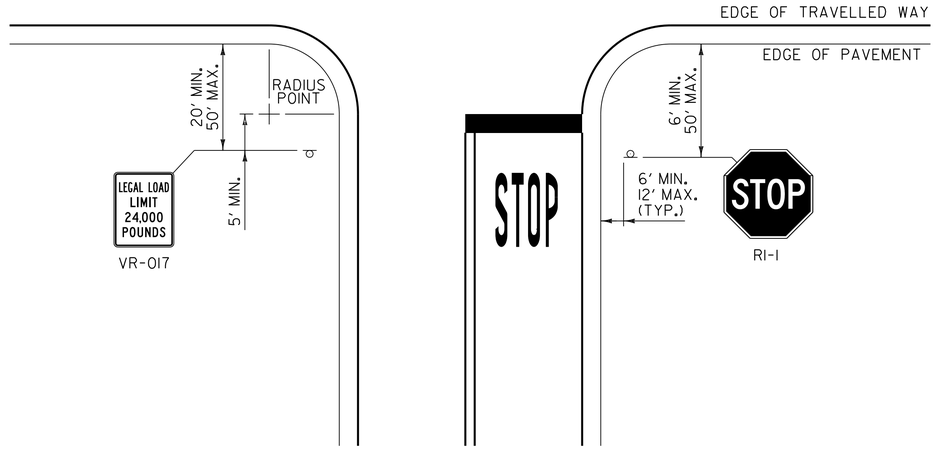
STOP CONDITION

YIELD CONDITION

EXIT RAMP SIGN LOCATION DETAILS

NOTES:

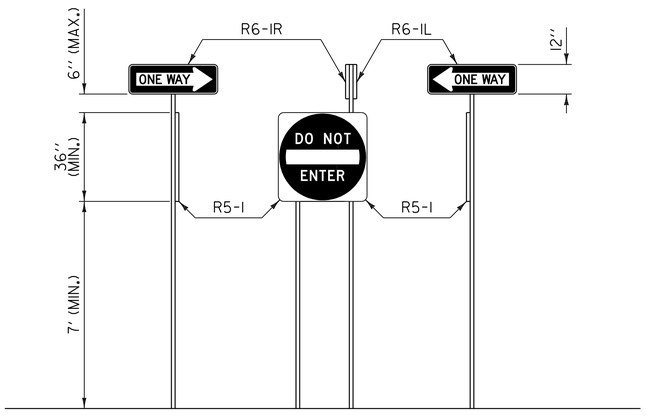
1. THE ''STOP'' (RI-1) SIGN SHOULD BE PLACED AS NEAR TO THE STOP BAR AS PRACTICAL. THE SIGN SHOULD BE PLACED TO MAXIMIZE VISIBILITY WITHIN THE RANGE OF OFFSETS SHOWN.
2. THE ''YIELD'' (RI-2) SIGN SHOULD BE PLACED AS NEAR TO THE YIELD MARKINGS AS PRACTICAL. THE SIGN SHOULD BE PLACED TO MAXIMIZE VISIBILITY WITHIN THE RANGE OF OFFSETS SHOWN.



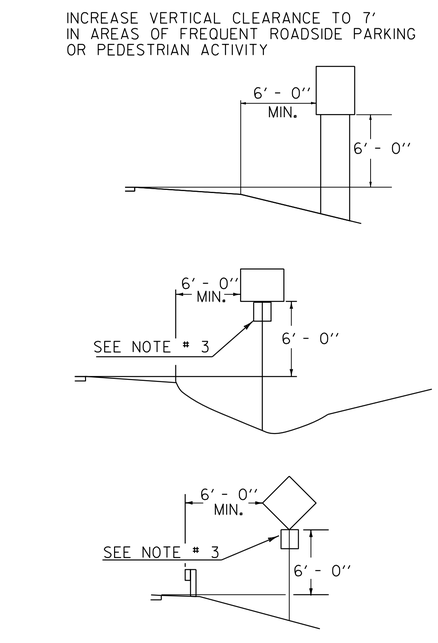
LEGAL LOAD LIMIT AND STOP SIGNS AT INTERSECTIONS WITH TOWN HIGHWAYS

NOTES:

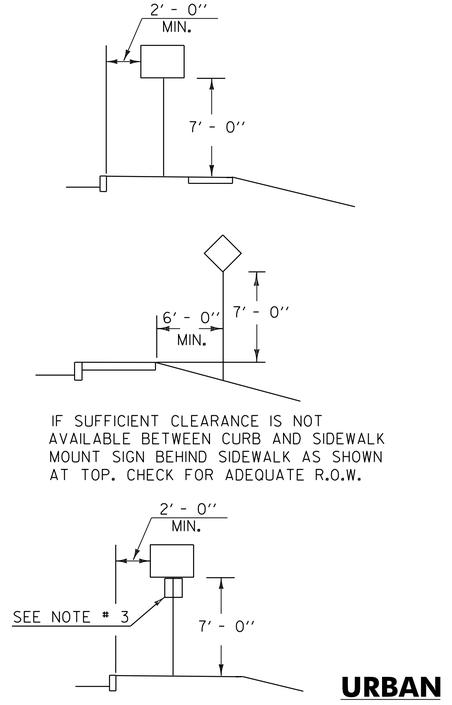
1. THE ''STOP'' (RI-1) SIGN SHOULD BE PLACED AS NEAR TO THE STOP BAR AS PRACTICAL. THE SIGN SHOULD BE PLACED TO MAXIMIZE VISIBILITY WITHIN THE RANGE OF OFFSETS SHOWN.



DO NOT ENTER ASSEMBLY



RURAL



URBAN

GENERAL NOTES:

1. WHEN INSTALLED, STREET NAME SIGNS SHOULD BE INSTALLED PERPENDICULAR TO APPROACHING MAINLINE TRAFFIC AND SHALL BE POSITIONED IN SUCH A WAY AS TO ENSURE THE BEST POSSIBLE VISIBILITY TO APPROACHING MAINLINE TRAFFIC FROM EACH DIRECTION. THE STREET NAME SIGN SHOULD BE INSTALLED INDEPENDENTLY ON EITHER CORNER OF THE INTERSECTION. THE STREET NAME SIGNS SHALL BE INSTALLED A MINIMUM OF SIX FEET FROM EDGE OF PAVEMENT ON THE MAINLINE ROUTE TO THE NEAREST EDGE OF SIGN.
2. STREET NAME SIGNS WITH A LENGTH EXCEEDING 42 INCHES SHALL BE INSTALLED ON TWO POSTS. NO MORE THAN TWO POSTS SHALL OCCUPY AN EIGHT FOOT TRAVEL PATH, UNLESS PROTECTED BY BARRIER.
3. IN BOTH RURAL AND URBAN LOCATIONS, IF A SECONDARY SIGN IS MOUNTED BELOW ANOTHER SIGN, THE MINIMUM CLEARANCE MAY BE REDUCED BY ONE FOOT.
4. IN RURAL AREAS WITH NO OR MINIMAL SHOULDER, THE LATERAL CLEARANCE TO THE EDGE OF A SIGN SHOULD BE A MINIMUM OF ONE FOOT FROM THE EDGE OF THE TRAVEL WAY.
5. SEE OTHER STANDARD DRAWINGS FOR MOUNTING CLEARANCE AND SPACING OF DESTINATION AND ROUTE MARKER ASSEMBLIES AND TOWN LINE SIGNS.
6. THE ''STOP'' (RI-1) SIGN SHALL NOT BE MOUNTED LESS THAN FIVE FEET IN HEIGHT TO THE BOTTOM OF THE SIGN.

REV.	DATE	DESCRIPTION
0	OCT. 26, 2015	ORIGINAL APPROVAL
1	JUN. 24, 2025	DETAIL AND NOTE UPDATES
OTHER STANDARDS REQUIRED: NONE		
APPROVALS ON FILE WITH VTRANS STANDARD DRAWING COMMITTEE		

STANDARD SIGN PLACEMENT

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STANDARD
T-56