

# **Traffic Control Plans**

January 2018



# Maine Curnpike Authority 2360 Congress Street

Portland, Maine 04102

#### **MEMO:**

Date: January 24, 2018

Re: Maine Turnpike Authority Traffic Control Plans – December 2017

This set of MTA Traffic Control plans has been updated to include all changes and revisions made in 2017 and supersedes all previous versions. The notes below should be incorporated as part of the HNTB Plans dated December 22, 2017.

- 1. When personnel or equipment within a stationary work area will be actively working within four feet of a travel lane an adjacent lane closure, a lane shift or physical barrier will be used if practicable. Trucks/trailers shall be parked at least six feet from an open travel lane when being loaded or unloaded. When these activities are not practicable then they should be elevated to a supervisor and additional traffic control measure devices should be considered which may include truck mounted attenuators (TMAs) or state police. For all operations including setting up or taking down traffic control devices, TMAs should be used between workers and traffic.
- 2. Work Zones should not be set up in inclement weather unless there is a minimum of ½ mile visibility with improving conditions.
- 3. Work Zone Speed Limits
  - Work Zone Speed Limits shall be implemented whenever there is a lane closure with the exception of mobile lane closures.
  - Work Zone Speed Limits shall be 10 MPH lower than the normal posted speed limit. Reduced Speed Ahead signs are not required with a 10 MPH reduction. If a lower Work Zone Speed Limit is desired it should be requested through the MTA Engineering Department. If a lower Work Zone Speed Limit is approved, then it will require the use of bracketed Reduced Speed Ahead Signs. Note: For Details TP56A, TP57A and Appendix A the work zone speed shall be as shown in the details.
  - Work Zone Speed Limit Signs do not need to be bracketed. They may be placed directly after the taper within the lane closure, directly after the taper in the median mounted on a post, or prior to the taper depending upon the work activity. Work Zone Speed Limit Signs need to be mounted 5 feet above the pavement. If a work zone speed limit is used, a "End Work Zone Speed" sign is required
  - Any permanent speed limit signs that are within the lane closure setup (located within the Road Work ½ Mile sign) will need to be covered when the Work Zone Speed Limit is implemented.
- 4. Mobile Operations are defined as not occupying the same location for more than 15 minutes.





- 5. Variable Message Signs (VMS) may be utilized to provide advance warning to motorists of Highway Maintenance work if the VMS is within three miles of the work area. The use of the VMS will be secondary to the use of the VMS for higher priority messages. Highway Maintenance should call the Communications Center and inform of project and they will put up standard messages that are appropriate. In addition, Highway Maintenance may put out portable VMS that are at Highway Maintenance yards. VMS should be used as a supplement to and not as a substitute for conventional signs and pavement markings.
- 6. Tapers should be installed with adequate visibility for approaching vehicles. Spacing between signs can typically be increased one delineator or further if necessary to provide adequate visibility.
- 7. Work zone signs setup by MTA Highway Maintenance in advance of the work area that are installed less than 5 feet above the pavement shall be installed with dual flags.
- 8. In closed lanes three cones or barrels should be placed across the lane every 5 delineator posts (1/4 mile) in areas where there is no construction activity occurring.
- 9. All Stop, Yield, Speed Limit and green Exit signs shown in traffic control plans shall be 5' off the ground.
- 10. Whenever flaggers are required, use of illuminated flagger paddles are required.
- 11. When planned operations or shoulder grading leave a continuous 3 inches or less exposed vertical face at edge of new traveled way, channelization devices should be placed 2 feet outside the edge of pavement at intervals not exceeding 600 feet and, depending on type and location of the exposed vertical face, W8-9 Low Shoulder sign shall be placed at a maximum spacing of ½ mile. If exposed vertical face is greater than 3", shoulder material needs to be placed at a slope not exceeding 3 horizontals to 1 vertical in advance of putting traffic adjacent to the condition.
- 12. If Speed Limit Feedback Signs are used, they shall be placed within 1000' of the regulatory reduced speed sign. If using a feedback sign with a regulatory sign included, the sign/device can go where speed limit sign is shown on plans.
- 13. Use of State Police State Police Troop G are an invaluable but not unlimited resource to the Authority thus their use for traffic control in work zones must be weighed against their other duties. Maintenance Foreman can check with MTA Communications Center for status of onduty troopers at any time and use those troopers to assist with set up or take down of traffic control devices on the highway if they are available. In some cases, after consulting with MTA Director of Public Safety, Maintenance may request trooper details as part of weekly lane closure report each Thursday for a specific date and time. Any planned stoppage of traffic on the Turnpike requires the use of State Police. For setting up and taking down traffic control devices in New Hampshire, the use of New Hampshire State Police requires 2 days' notice and can be made through MTA Director of Public Safety.





- 14. Temporary Portable Rumble Strips may be utilized with lane closures. Use of temporary portable rumble strips may not be practicable in areas where the roadway has more than two travel lanes, where volume windows do not allow for breaks in traffic to set up and monitor and adjust, or during night time lane closures.
- 15. Lane closures shall be scheduled in accordance with the lane closure timetables maintained/issued by the Engineering Department. Planned lane closures need to be submitted to the approved e-mail distribution list by noon Thursday the week prior to the closure. Changes to planned lane closures and Emergency lane closure notification shall also be made to the approved e-mail distribution list.

Signed:_	the	fills	_ Date:	/ \	24.	1 8
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Peter Mills **Executive Director** 

Signed:	Edy A-Ment	Date:_	01/2	4/18
			/	/

Peter Merfeld, P.E.

Chief Operations Officer

Signed:

John Cannell, P.E.

Director of Highway Maintenance

Steve Tartre, P.E.

Director of Engineering & Building Maintenance

Signed: Date: 1-24-18

Ralph Norwood IV, P.E., PTOE

Project Manager





# Maine Cumpike Authority 2360 Congress Street Portland, Maine 04102

#### **MEMO:**

Date: December 10, 2018

Re: Maine Turnpike Authority Traffic Control Plans – January 2018

The following revisions to the Traffic Control Plans dated January 2018 shall be implemented when setting up work zone traffic control zones:

#### Placement of Arrow Board:

At locations where the shoulders widths do not allow the placement of the arrow board at the location shown the MOT plans so that the arrow board is completely within the closed area of the roadway then the location of the arrow board shall be adjusted within the taper area as needed keeping it as close as practicable to the beginning of the taper while keeping the arrow board completely located on the back side of cones/barrels within the closed area of the roadway.

#### **Placement of TMIA:**

For a Stationary work zone operation the shadow vehicle, with or without an impact attenuator, shall be 200 feet (5 skip lines) from the work area to allow for movement if the truck is struck. The shadow vehicle shall have parking brake set; the transmission placed in gear and have front wheel turned away from the work area. No other vehicles or equipment shall park in front of the shadow vehicle or within the buffer space behind the shadow vehicle.

For a mobile work zone operation, shadow vehicles, with or without an impact attenuator, shall be no closer than 250 feet (6 skip lines) from the work vehicle or other shadow vehicles. Maximum distance for each shadow vehicle used shall be determined by the supervisor depending on the operation and in accordance with the notes shown on DETAIL 35R and 35L and 51R and 51L.

#### **MOT Detail 4B**(Page 7):

During litter picking activities when a "leap frogging" operation is being utilized a W21-5 sign shall be easel mounted in advance of the work area in addition to being mounted on the truck.

Signed:

Data

Steve Tartre, P.E.

Director of Engineering & Building Maintenance





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TRAFFIC CONTROL PLANS

December 22, 2017

#### General Notes:

- 1. Plans are site specific and are for a particular application. Notes and details from one application shall not be used for another application.
- 2. "Optional" equipment should be used as detailed unless the optional equipment is not readily available.
- 3. Drums should be used on all non-emergency lane closures intended to remain in place, more than twelve hours.
- 4. All drums, cones, and channelizing devices used in non-daylight hours shall meet MUTCD Section 6F requirements for night time use.
- 5. a. All flagger stations in non-emergency lane closures set up, or intended to remain in place, during non-daylight hours shall be illuminated with at least 10 foot-candles of light. For reference 10 foot candles of illumination is approximately that of a very dark day. See note below.
- 5. b. All non-emergency work areas, with workers present, shall be properly illuminated during non-daylight hours. The minimum illumination shall be at least 5 foot-candles of light. Additional illumination (foot-candles) may be required, depending on the work activity, to complete the work. See note below. Note: Where practical the lighting will be cut off and arranged on stanchions at a height that will provide perimeter lighting for each piece of equipment and will not interfere with traffic, including commercial vehicles, approaching the work site from all directions.
- 6. When installing a lane closure, a Traffic Control Truck with an internal worker station designed for setting out drums or cones or a truck mounted cone basket shall be used unless one is not readily available. Both types of vehicles should be equipped with a truck mounted attenuator (TMA).

- 7. Plan sheets are not to scale.
- 8. All speed limit signs in construction / work zones shall be installed at five feet from bottom of speed plaque to edge of roadway elevation.
- 9. When a reduced speed zone sign package is used, the "End Work Zone Speed Limit" sign is mandatory and the "End Road Work" sign is optional.
- 10.All vehicles used to set up, maintain, work within or dismantle work zones and applicable sign packages shall display high intensity rotating, flashing, oscillating, or strobe lights.
- 11. MTA engineering shall be consulted prior to traffic control setup on local roads where the setup may create unsafe backups due to high traffic volumes.
- 12. Layout distances reported in feet, given within the details, are the minimum for that particular segment of the layout. The number of delineator post spaces reported for that same segment is an approximation of segment distance and may be longer than the minimum distance reported. The number of delineator post spaces is provided for ease in field layout.
- 13. Whenever light towers, man lifts, boom trucks, or similar extendable height equipment is used, days or nights, the operator shall inspect the setup location to make sure the equipment does not come in contact with overhead wires, bridge overpasses, overhead sign structures, toll canopies, overhanging trees, etc. during the extendable height equipment set up, relocation or transport.
- 14.All construction signs on the Maine Turnpike and Ramps shall meet the size criteria of Freeway in MUTCD, resulting in all diamond shaped advanced warning construction signs being 48" x 48".

#### Placement of TMIA:

For a Stationary work zone operation the shadow vehicle, with or without an impact attenuator, shall be 80 feet (2 skip lines) from the work area to allow for movement if the truck is struck. The shadow vehicle shall have parking brake set; the transmission placed in gear and have front wheel turned away from the work area. No other vehicles or equipment shall park in front of the shadow vehicle or within the buffer space behind the shadow vehicle.

For a mobile work zone operation, shadow vehicles, with or without an impact attenuator, shall be no closer than 120 feet (3 skip lines) from the work vehicle or other shadow vehicles. Maximum distance for each shadow vehicle used shall be determined by the supervisor depending on the operation and in accordance with the notes shown on DETAIL 35R and 35L and 51R and 51L.

# **Flagger Tips**

A "STOP/Slow paddle shall be the primary signaling device. It shall have an octagonal shape on a rigid handle. Flag use shall be limited to emergency situations



### **Properly Trained Flaggers**

- Give clear messages to drivers
- Allow distance for drivers to react
- Coordinate with other flaggers
- Use standard signaling methods

## **Properly Equipped Flaggers**

- Use approved stop/slow paddles
- Use approved safety apparel
- Use retroreflective equipment
- Use handheld radios, as needed
- Use ANSI Type III outer garment/s

### **Proper Flagging Stations**

- Good approach site distance
- Highly visible to traffic
- Stand alone away from machinery and other people
- Stand on right edge of pavement or shoulder, proceed to centerline only when first vehicle has stopped.
- At night, flagger station will be illuminated
- Have a good escape route

#### **Proper Advanced Warning Signs**

- Always use warning signs
- Allow reaction distance from signs
- Remove signs if no longer necessary or not flagging
- Use free hand in up-and-down motion to help slow traffic.

## Flagger Tips continued

#### **Escape Route**

A flagger must always be aware of their surroundings and have a good escape route. A flagger shall never be positioned directly beside or against construction equipment. When a flagger is required to direct traffic in an area where the escape route is partially blocked by a traversable obstruction such as a guardrail, the flagger must be physically capable of getting over the obstruction. Prior to commencing a project, the foreman / supervisor in charge must review the project, including guardrail areas, for safe flagging stations.

#### **Pedestrian and Bicyclist Considerations**

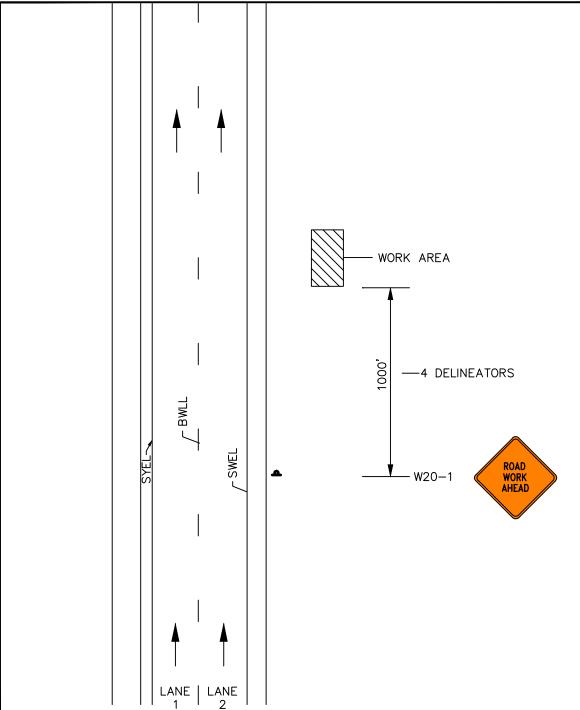
There are three threshold considerations in planning for pedestrian and bicyclist safety in temporary traffic control zones on highways and streets.

Pedestrians and bicyclists shall not be led into direct conflicts with work site vehicles, equipment or operations.

Pedestrians and bicyclists shall not be led into direct conflicts with mainline traffic moving through or around the work site.

Pedestrians and bicyclists shall be provided with a safe, convenient travel path that replicates as nearly as possible the most desirable characteristics of sidewalks or footpaths.

In accommodating the needs of pedestrians at work sites, it should be remembered that the range of pedestrians that can be expected is very wide, including the blind, the hearing impaired, and those with walking disabilities. All pedestrians and bicyclists need protection from potential injury and a smooth, clearly delineated travel path. Every effort shall be made to separate pedestrian and bicyclist movement from bot the work site activity and the adjacent traffic.



- 1. THE ROAD WORK AHEAD SIGN MAY BE OMITTED WHERE THE WORK SPACE IS BEHIND BARRIER OR 15 FEET OR MORE FROM THE EDGE OF ROADWAY.
- 2. FOR SHORT DURATION (<1 HOUR) ACTIVITIES, MOBILE OPERATIONS, OR OPERATIONS SUCH AS MOWING, THE ROAD WORK AHEAD SIGN MAY BE ELIMINATED IF THE WORK VEHICLE ACTIVATES THE HIGH INTENSITY ROTATING, FLASHING, OSCILLATING OR STROBE LIGHTS.
- 3. IF WORK VEHICLES ARE PARKED IN THE SHOULDER, THEN THE SHORT DURATION OR MOBILE OPERATION ON SHOULDER DETAIL (DETAIL 4B) SHALL BE FOLLOWED.

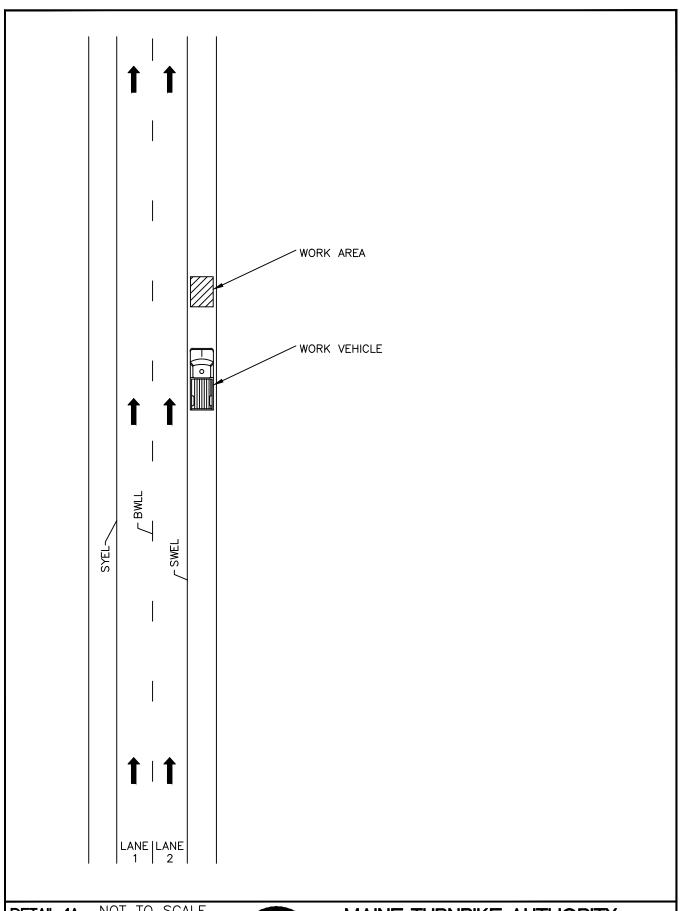
**DETAIL 1** 

NOT TO SCALE



#### MAINE TURNPIKE AUTHORITY TRAFFIC CONTROL DETAIL

WORK BEYOND THE SHOULDER SHORT TERM (UP TO 12 DAYLIGHT HOURS)



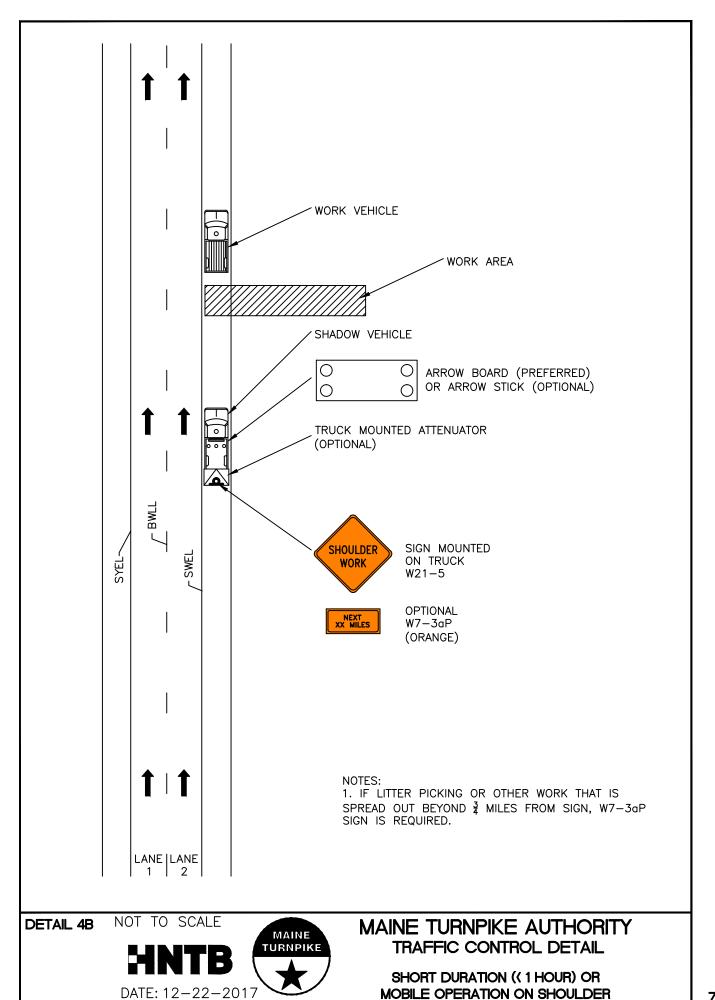
DETAIL 4A N

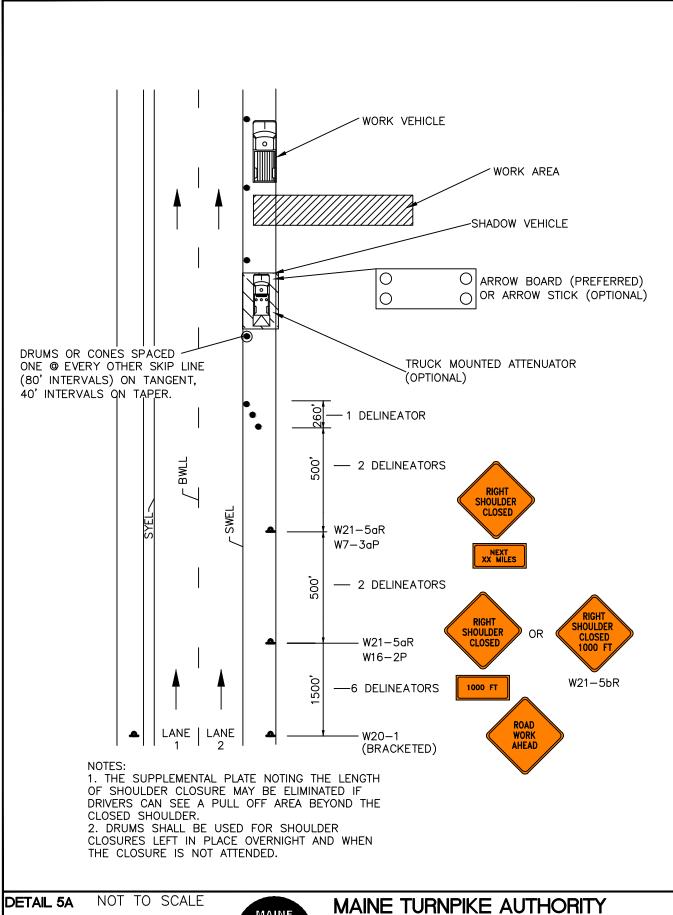
NOT TO SCALE



MAINE TURNPIKE AUTHORITY TRAFFIC CONTROL DETAIL

SINGLE VEHICLE ON SHOULDER SHORT DURATION ( <1 HOUR)





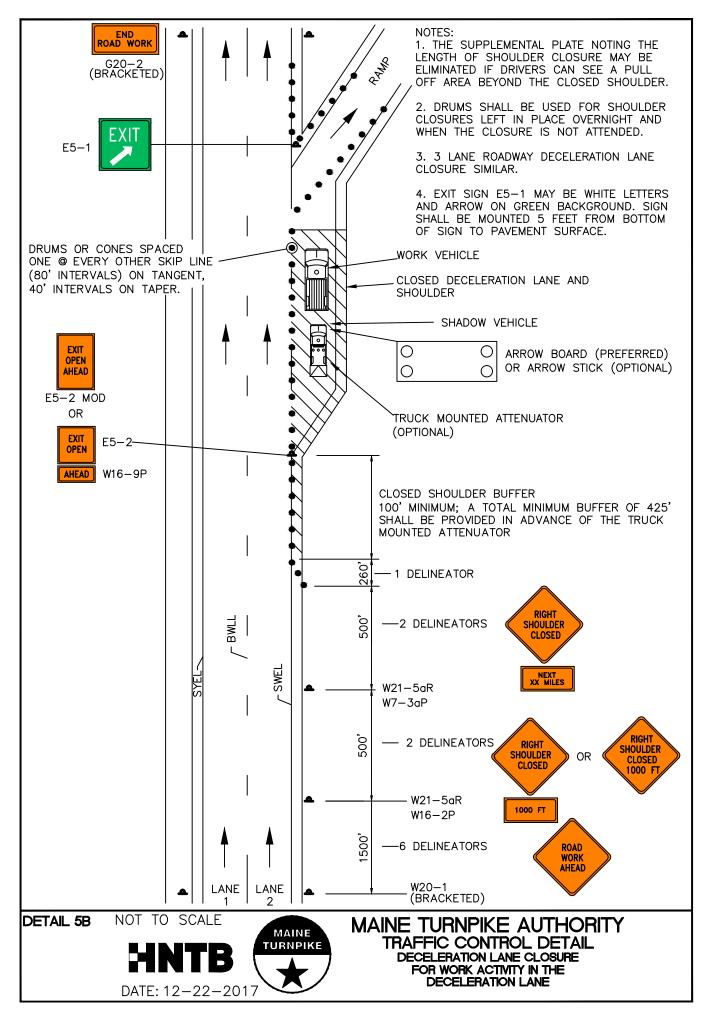
DETAIL 5A NOT TO SCALE

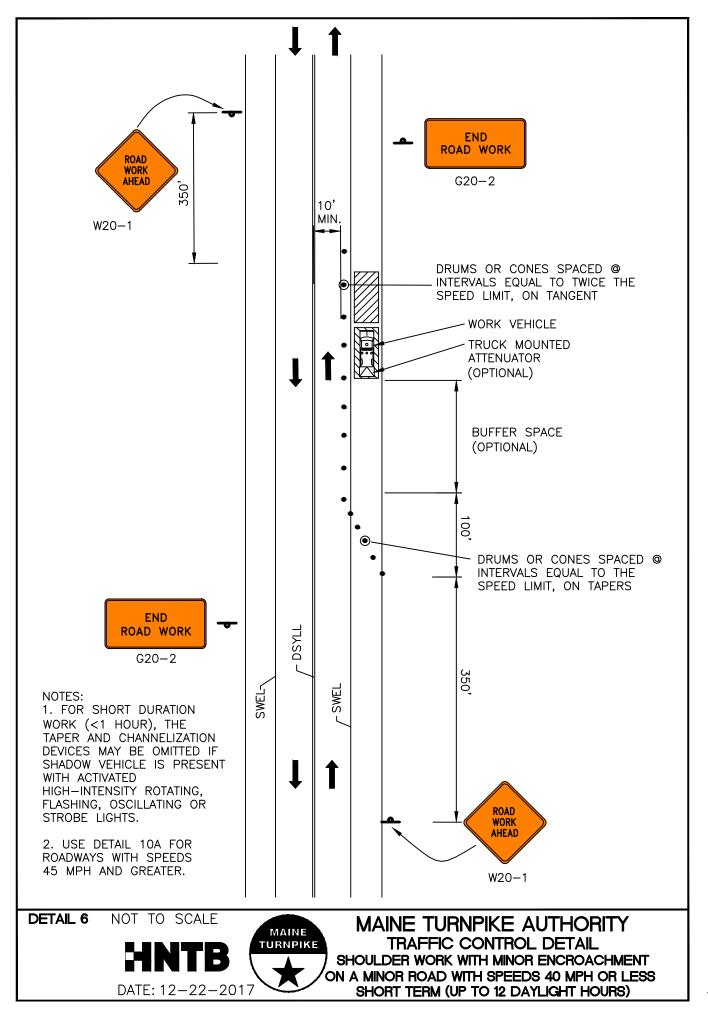
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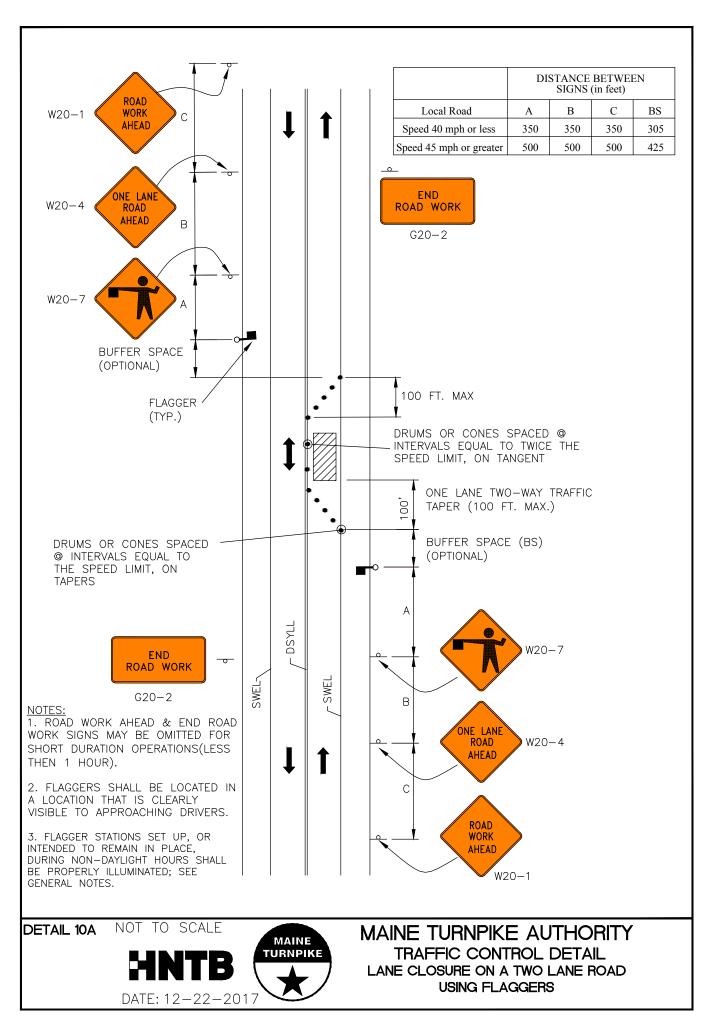
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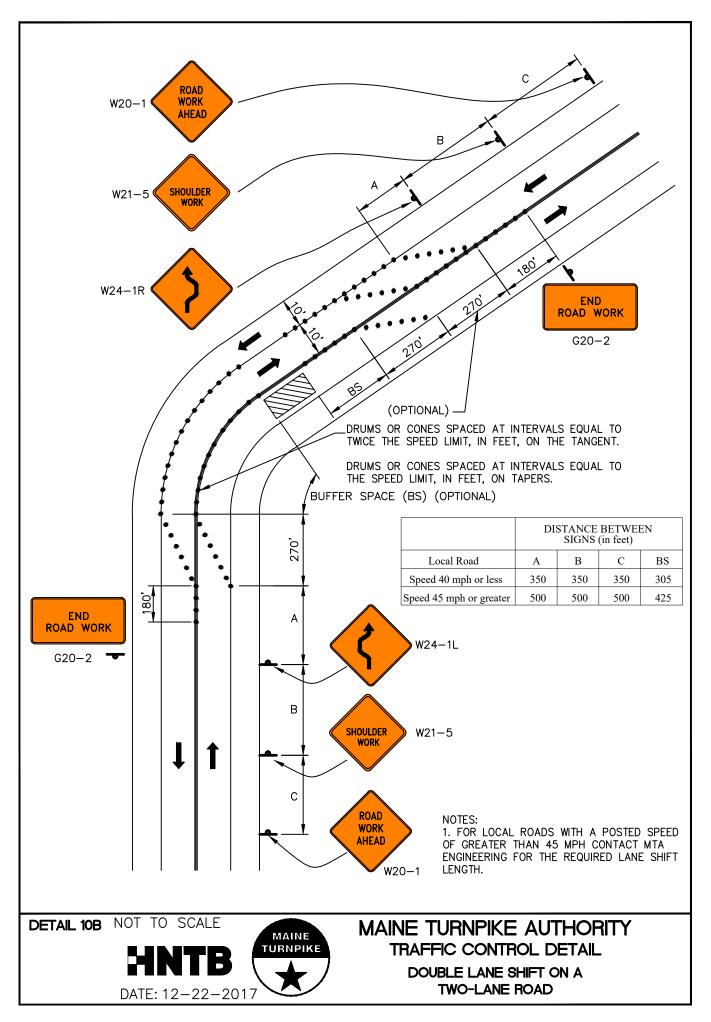
DATE: 12-22-2017

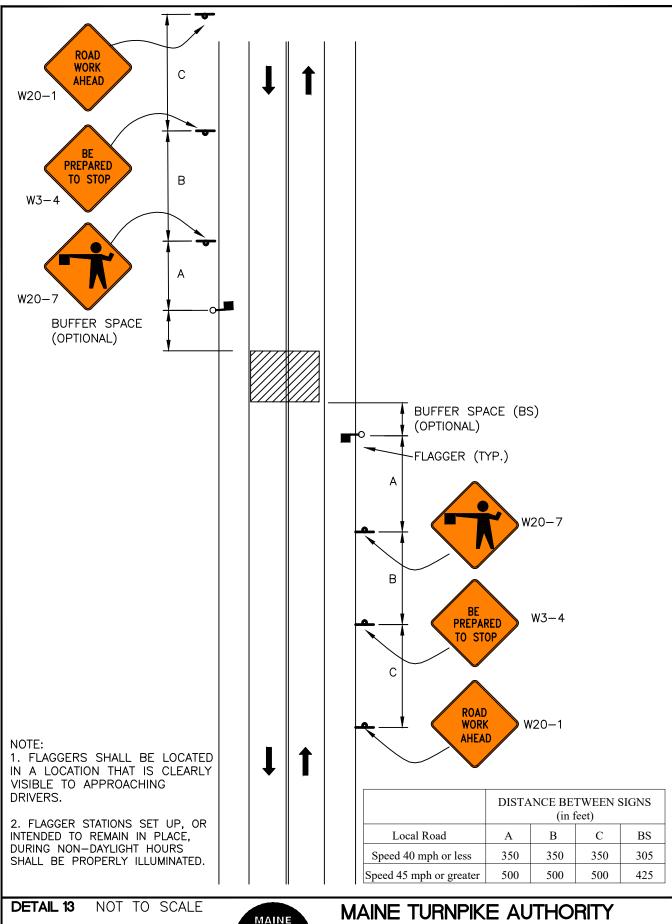
TRAFFIC CONTROL DETAIL
SHOULDER CLOSURE
FOR WORK ACTIVITY IN THE SHOULDER







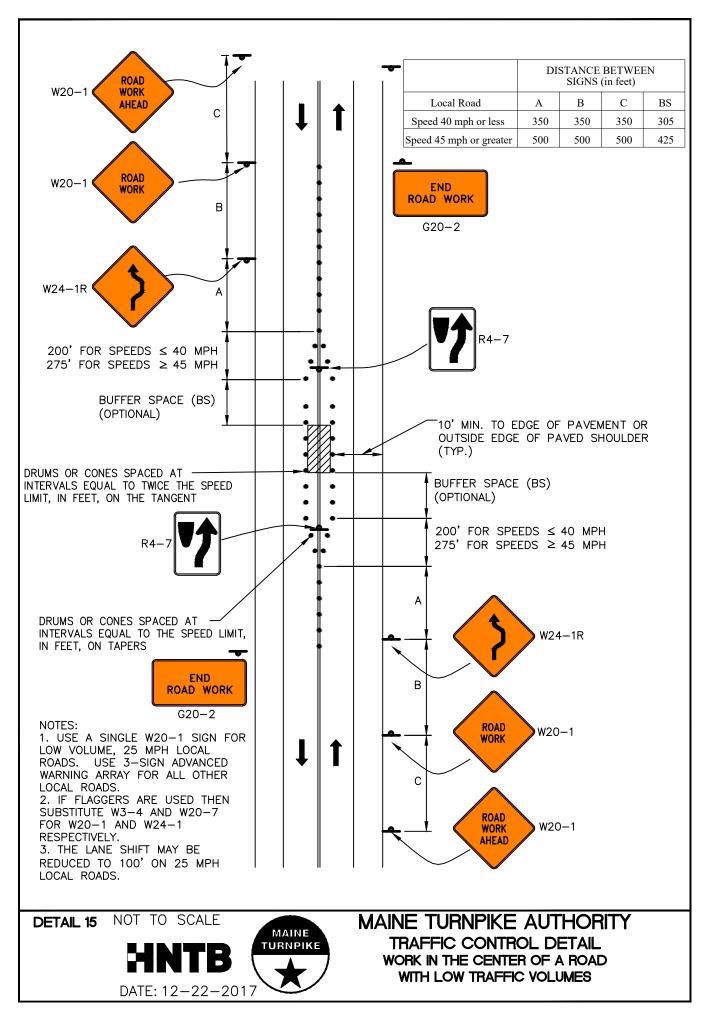


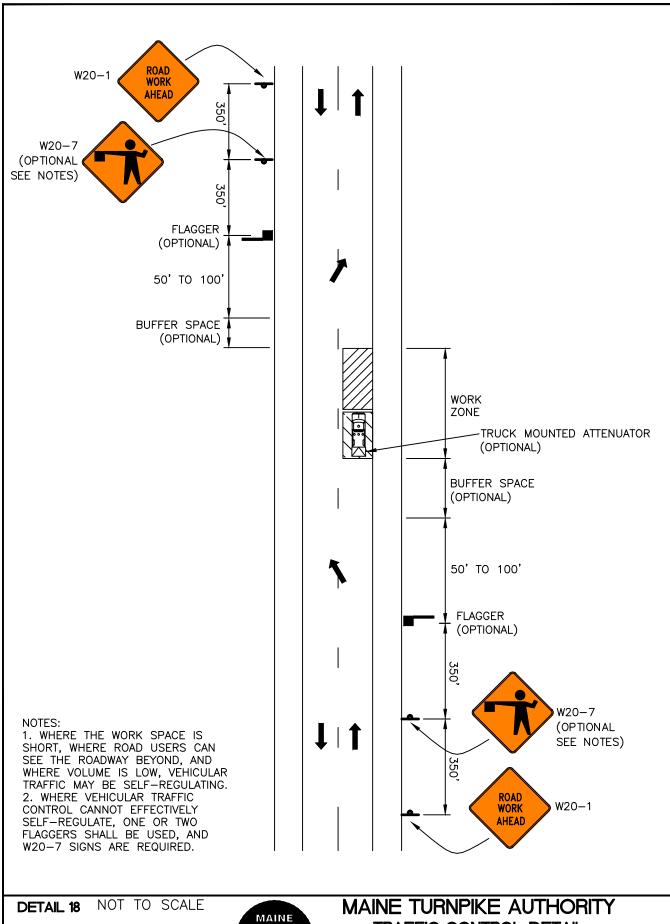




# TRAFFIC CONTROL DETAIL

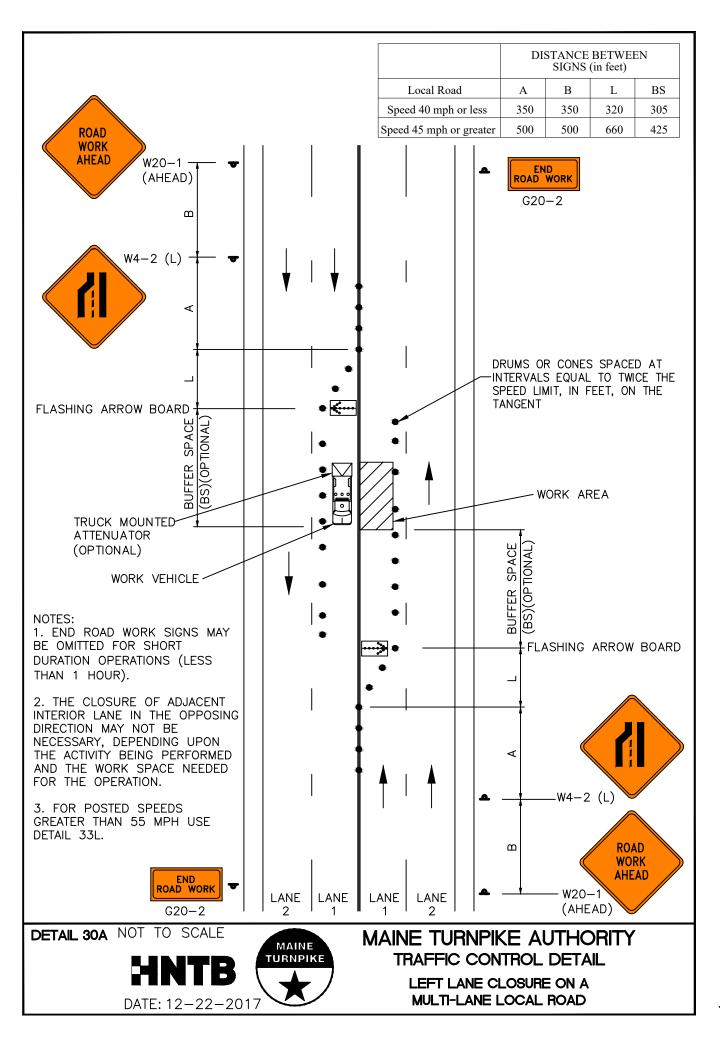
TEMPORARY ROAD CLOSURE FOR 20 MINUTES OR LESS





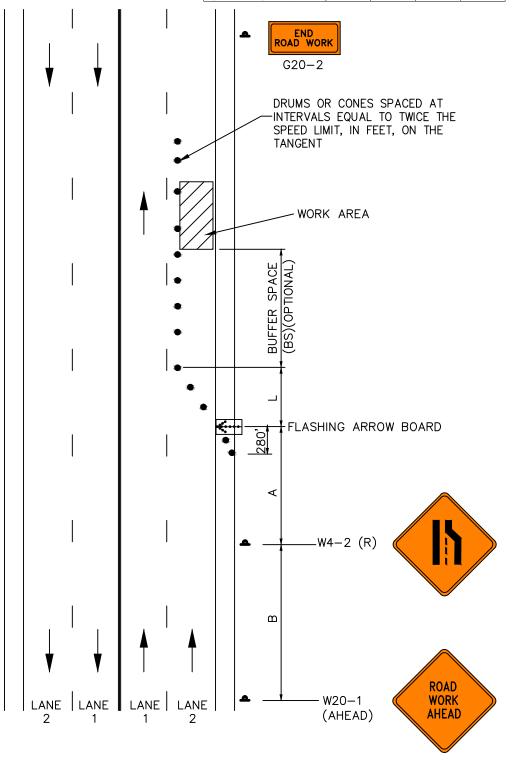


TRAFFIC CONTROL DETAIL
TRAVEL LANE CLOSURE ON
LOW VOLUME LOCAL ROAD
SHORT TERM/MOBILE (< 30 MINUTES)



1. THIS DETAIL MAY ALSO BE UTILIZED FOR LANE CLOSURES ON MULIT—LANE, LOW SPEED RAMPS.
2. END ROAD WORK SIGNS MAY BE OMITTED FOR SHORT DURATION OPERATIONS (LESS THAN 1 HOUR).

	DISTANCE BETWEEN SIGNS (in feet)			
Local Road	A	В	L	BS
Speed 40 mph or less	350	350	320	305
Speed 45 mph or greater	500	500	660	425

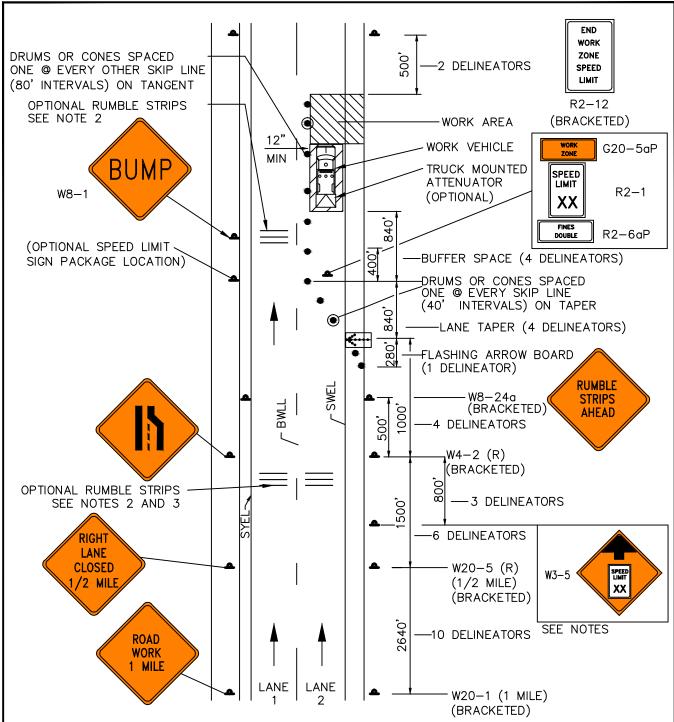


DETAIL 30B NOT TO SCALE



MAINE TURNPIKE AUTHORITY
TRAFFIC CONTROL DETAIL

RIGHT LANE CLOSURE ON A MULTI-LANE LOCAL ROAD



1. FOR LANE CLOSURE AND REDUCED SPEED ZONE NOTES SEE DETAILS 33R AND 33L.

MAINE

TURNPIKE

- 2. IF RUMBLE STRIPS ARE USED THEY SHALL BE PLACED IN ONE OF THE FOLLOWING CONFIGURATIONS:
  - \* ADJACENT TO THE WORK ZONE (1 UNIT)
  - \* UPSTREAM FROM THE TAPER FOR THE WORKZONE (2 UNITS)
  - \* BOTH ADJACENT TO THE WORK ZONE AND PRIOR TO THE TAPER (3 UNITS)

W8-1 SIGNS SHALL BE PLACED ADJACENT TO THE FIRST RUMBLE STRIP AT ANY LOCATION. ONLY ONE SET OF W8-24a SIGNS ARE REQUIRED FOR ANY OF THE ABOVE CONFIGURATIONS.

3. RUMBLE STRIPS MAY BE PLACED UPSTREAM OF THE TAPER BETWEEN THE W3-5 SIGNS AND THE W4-2 SIGNS. IF RUMBLE STRIPS ARE INSTALLED PRIOR TO TAPER, W8-1 SIGNS SHALL BE PLACED ADJACENT TO THE FIRST STRIP AND THE W8-24a SIGNS SHALL BE MOVED TO 400' AFTER THE W20-5 SIGNS.

**DETAIL 33** 

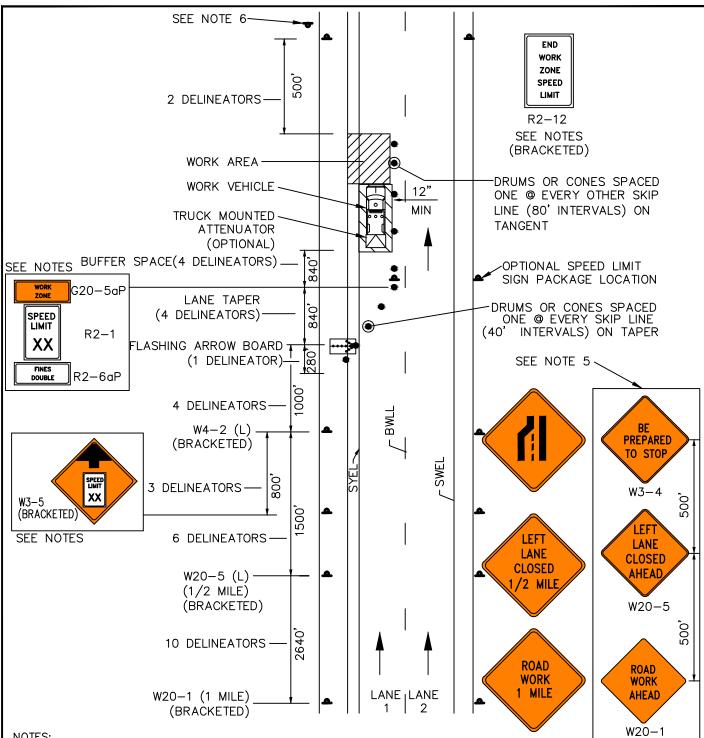
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DATE: 12-22-2017

#### MAINE TURNPIKE AUTHORITY TRAFFIC CONTROL DETAIL

LANE CLOSURE WITH TEMPORARY RUMBLE STRIPS



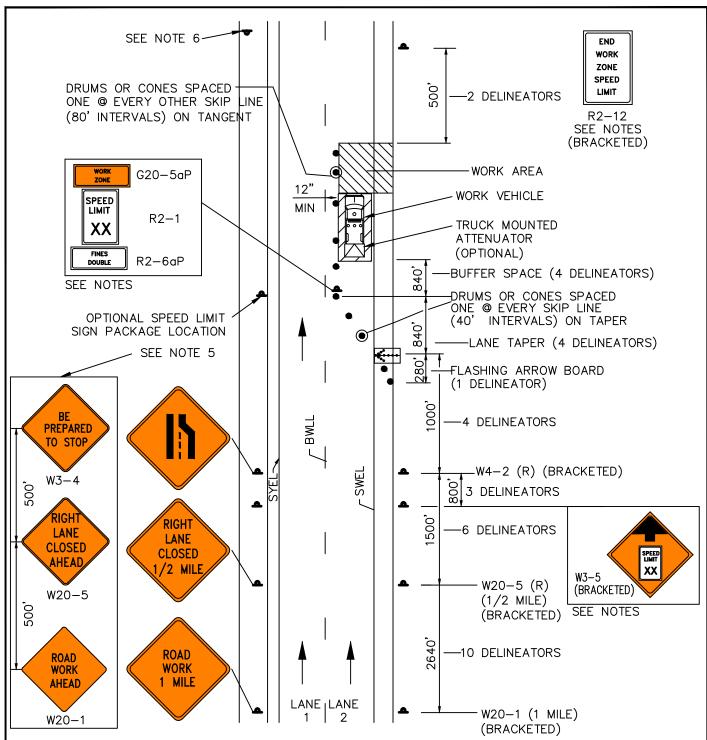
1. USE OF REGULATORY REDUCED SPEEDS SHALL BE USED WHEN WORKERS ARE PRESENT OR SITE CONDITIONS WARRANT. 10 MPH SPEED REDUCTION MANDATORY; IF REDUCTION GREATER THEN 10 MPH IS WARRANTED THEN REQUEST THROUGH MTA ENGINEERING. SPEED LIMIT SIGN IS ONLY NEEDED ON ONE SIDE OR THE OTHER. SPEED LIMIT SIGNS SHALL BE 5' OFF GROUND. SIGN W3-5 NOT NEEDED FOR 10 MPH REDUCTION.

- 2. OPTIONAL SPEED LIMIT SIGN PACKAGE MAY BE POST MOUNTED ON THE RIGHT SHOULDER. POST MOUNTED SIGNS SHALL BE COVERED WHEN NOT IN USE.
- 3. OPTIONAL THE WORK ZONE AND FINES DOUBLE SIGN MAY BE MOUNTED ON A SEPARATE EASEL OR POST.
- 4. OPTIONAL THE FINES DOUBLE SIGN MAY BE OMITTED.
- 5. WHEN ON-RAMP EXISTS WITHIN MAINLINE SIGN ARRAY, THIS 3-SIGN ARRAY SHALL BE SET UP ON THE RIGHT SHOULDER OF THE RAMP. THE LAST SIGN SHALL BE AT THE RAMP GORE.
- 6. USE "WORKERS IN MEDIAN" SIGN FOR THE OPPOSITE DIRECTION OF TRAVEL IF WORKERS WILL BE IN THE MEDIAN.



#### MAINE TURNPIKE AUTHORITY TRAFFIC CONTROL DETAIL

SINGLE MAINLINE LANE CLOSURE - LEFT

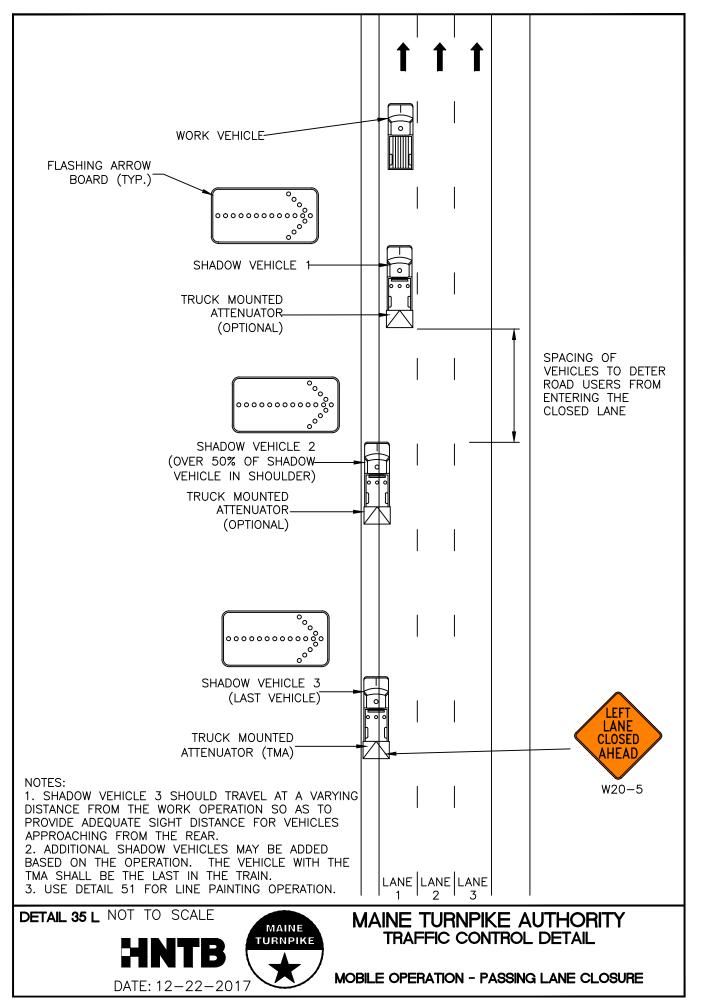


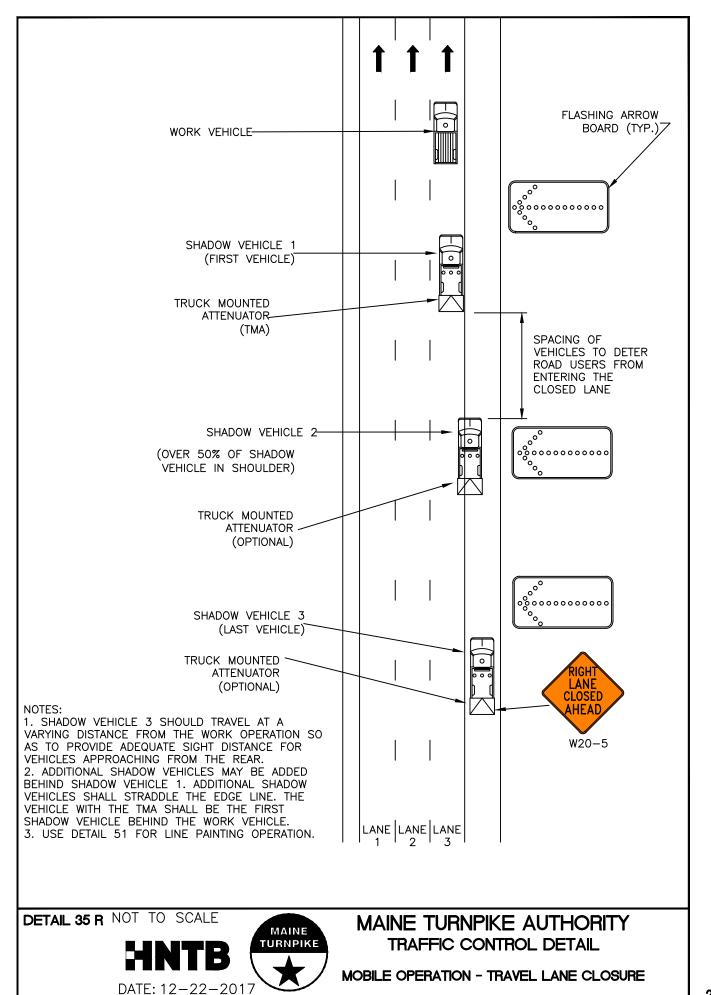
- 1. USE OF REGULATORY REDUCED SPEEDS SHALL BE USED WHEN WORKERS ARE PRESENT OR SITE CONDITIONS WARRANT. 10 MPH SPEED REDUCTION MANDATORY; IF REDUCTION GREATER THEN 10 MPH IS WARRANTED THEN REQUEST THROUGH MTA ENGINEERING. SPEED LIMIT SIGN IS ONLY NEEDED ON ONE SIDE OR THE OTHER. SPEED LIMIT SIGNS SHALL BE 5' OFF GROUND. SIGN W3-5 NOT NEEDED FOR 10 MPH REDUCTION.
- 2. OPTIONAL THE SPEED LIMIT SIGN PACKAGE MAY BE POST MOUNTED ON THE LEFT SHOULDER. POST MOUNTED SIGNS SHALL BE COVERED WHEN NOT IN USE.
- 3. OPTIONAL THE WORK ZONE AND FINES DOUBLE SIGN MAY BE MOUNTED ON A SEPARATE EASEL OR POST. 4. OPTIONAL THE FINES DOUBLE SIGN MAY BE OMITTED.
- 5. WHEN ON-RAMP EXISTS WITHIN MAINLINE SIGN ARRAY, THIS 3-SIGN ARRAY SHALL BE SET UP ON THE LEFT SHOULDER OF THE RAMP. THE LAST SIGN SHALL BE AT THE RAMP GORE.
- 6. USE "WORKERS IN MEDIAN" SIGN FOR THE OPPOSITE DIRECTION OF TRAVEL IF WORKERS WILL BE IN THE MEDIAN.

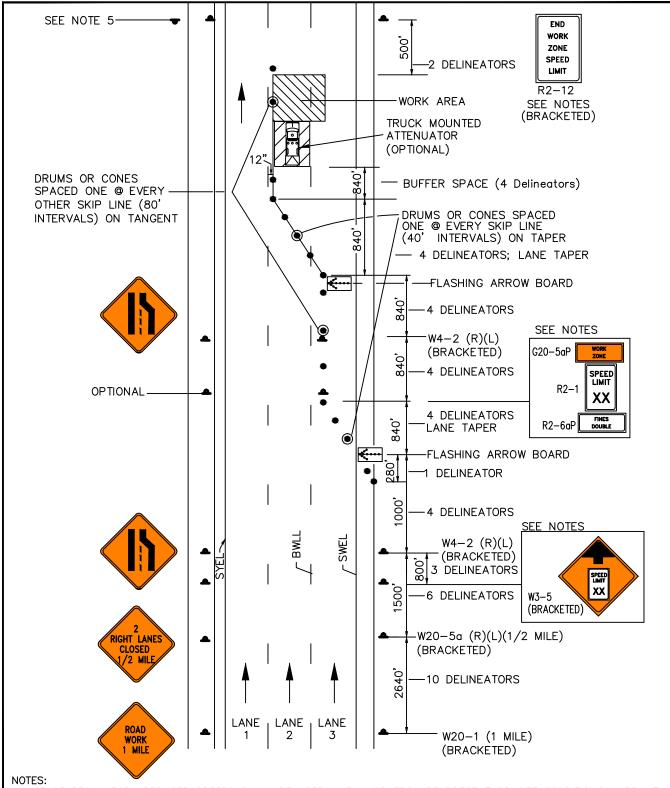


#### MAINE TURNPIKE AUTHORITY TRAFFIC CONTROL DETAIL

SINGLE MAINLINE LANE CLOSURE - RIGHT







1. USE OF REGULATORY REDUCED SPEEDS SHALL BE USED WHEN WORKERS ARE PRESENT OR SITE CONDITIONS WARRANT. 10 MPH SPEED REDUCTION MANDATORY; IF REDUCTION GREATER THEN 10 MPH IS WARRANTED THEN REQUEST THROUGH MTA ENGINEERING. SPEED LIMIT SIGN IS ONLY NEEDED ON ONE SIDE OR THE OTHER. SPEED LIMIT SIGNS SHALL BE 5'OFF GROUND. SIGN W3-5 NOT NEEDED FOR 10 MPH REDUCTION.

2. OPTIONAL — THE SPEED LIMIT SIGN PACKAGE MAY BE POST MOUNTED ON THE LEFT SHOULDER. POST MOUNTED SIGNS SHALL BE COVERED WHEN NOT IN USE.

3. OPTIONAL - THE WORK ZONE AND FINES DOUBLE SIGNS MAY BE MOUNTED ON A SEPARATE EASEL OR POST.

4. OPTIONAL - THE FINES DOUBLE SIGNS MAY BE OMITTED.

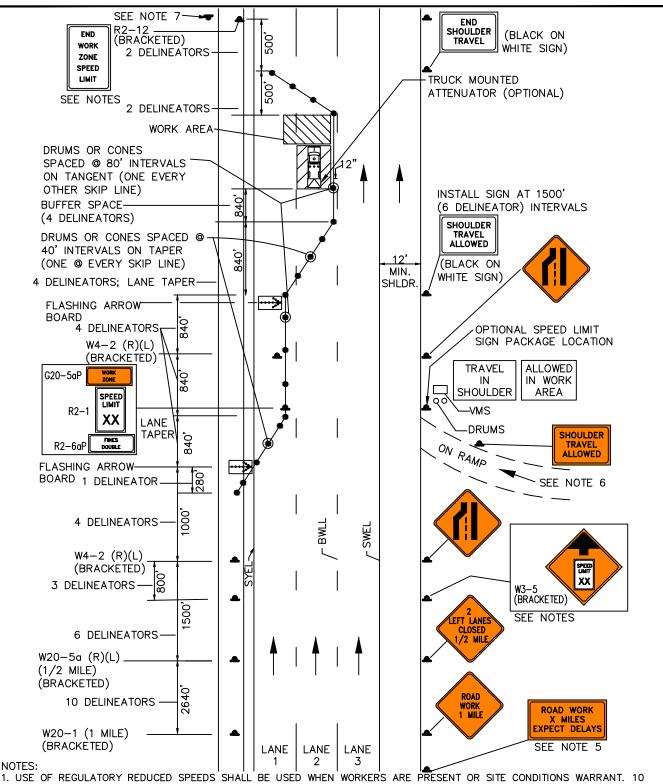
**DETAIL 37** 

5. USE "WORKERS IN MEDIAN" SIGN FOR THE OPPOSITE DIRECTION OF TRAVEL IF WORKERS WILL BE IN THE MEDIAN.



# MAINE TURNPIKE AUTHORITY TRAFFIC CONTROL DETAIL

DOUBLE MAINLINE LANE CLOSURE



MPH SPEED REDUCTION MANDATORY; IF REDUCTION GREATER THEN 10 MPH IS WARRANTED THEN REQUEST THROUGH MTA ENGINEERING. SPEED LIMIT SIGN IS ONLY NEEDED ON ONE SIDE OR THE OTHER. SPEED LIMIT SIGNS SHALL BE 5' OFF GROUND. SIGN W3-5 NOT NEEDED FOR 10 MPH REDUCTION.

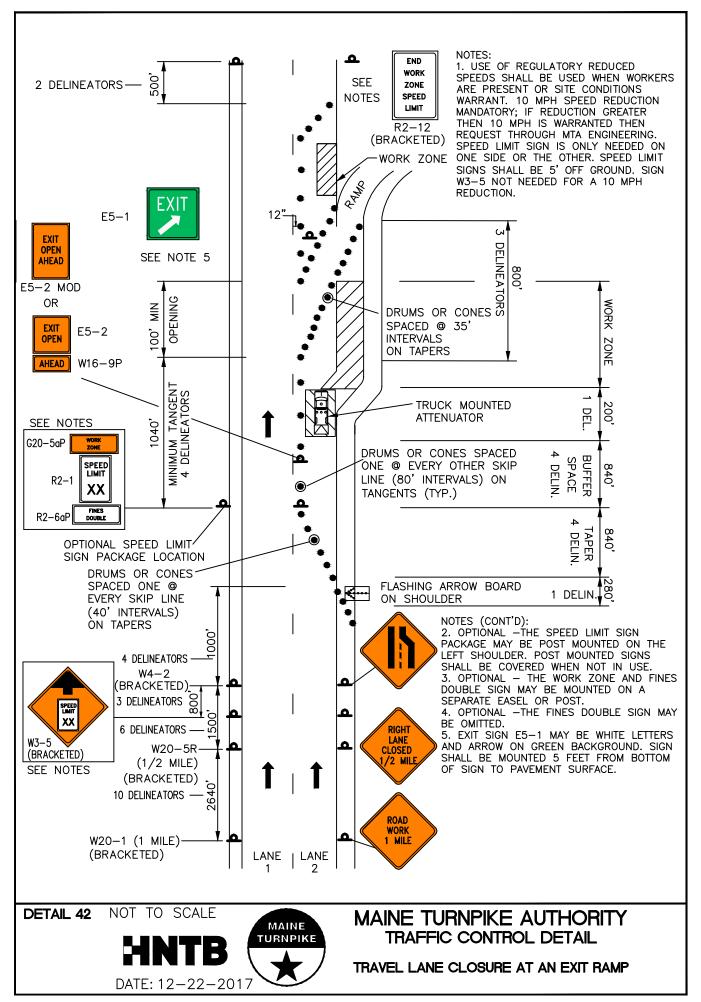
- 2. OPTIONAL THE SPEED LIMIT SIGN PACKAGE MAY BE POST MOUNTED ON THE RIGHT SHOULDER. POST MOUNTED SIGNS SHALL BE COVERED WHEN NOT IN USE.

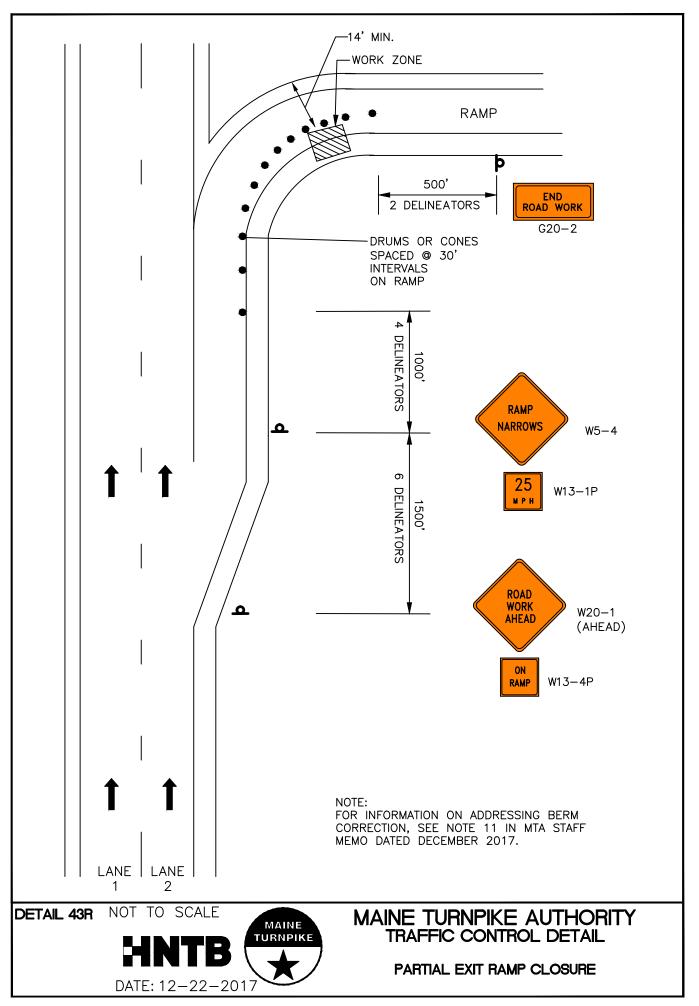
- 3. OPTIONAL THE WORK ZONE AND FINES DOUBLE SIGNS MAY BE MOUNTED ON A SEPARATE EASEL OR POST.
  4. OPTIONAL THE FINES DOUBLE SIGNS MAY BE OMITTED.
  5. INSTALL ROAD WORK X MILES (3 TO 5 MILES) PRIOR TO WORK AREA AND BEFORE NEAREST INTERCHANGE.
- 6. SEE DETAIL 60A AND 60B FOR GUIDANCE WHEN ENTERING RAMP IS WITHIN CLOSURE.

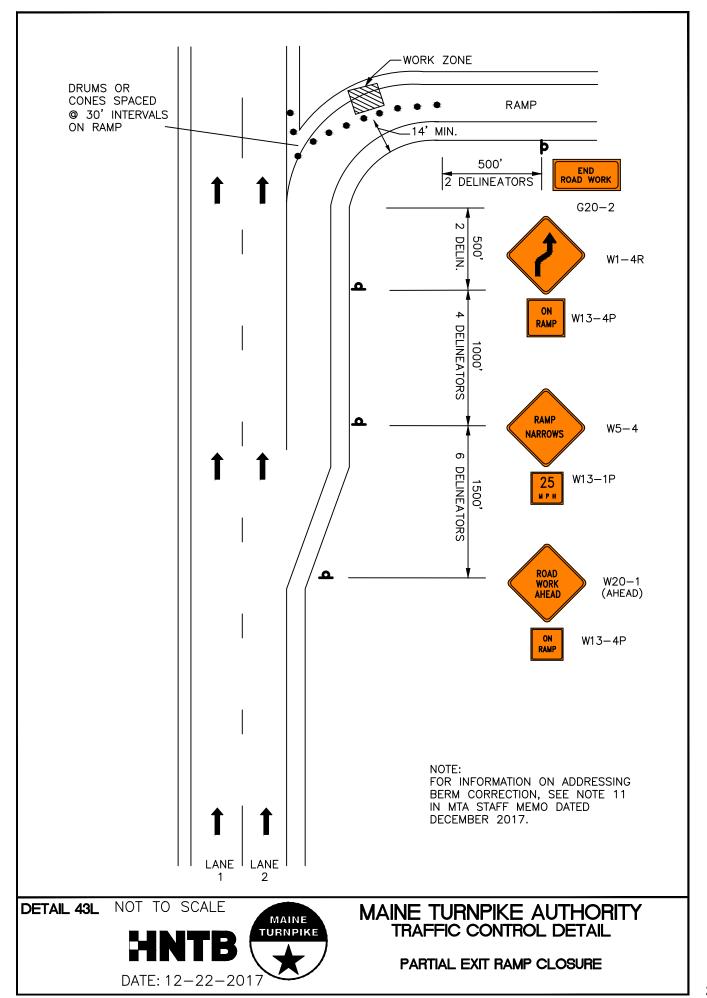
7. USE "WORKERS IN MEDIAN" SIGN FOR THE OPPOSITE DIRECTION OF TRAVEL IF WORKERS WILL BE IN THE MEDIAN

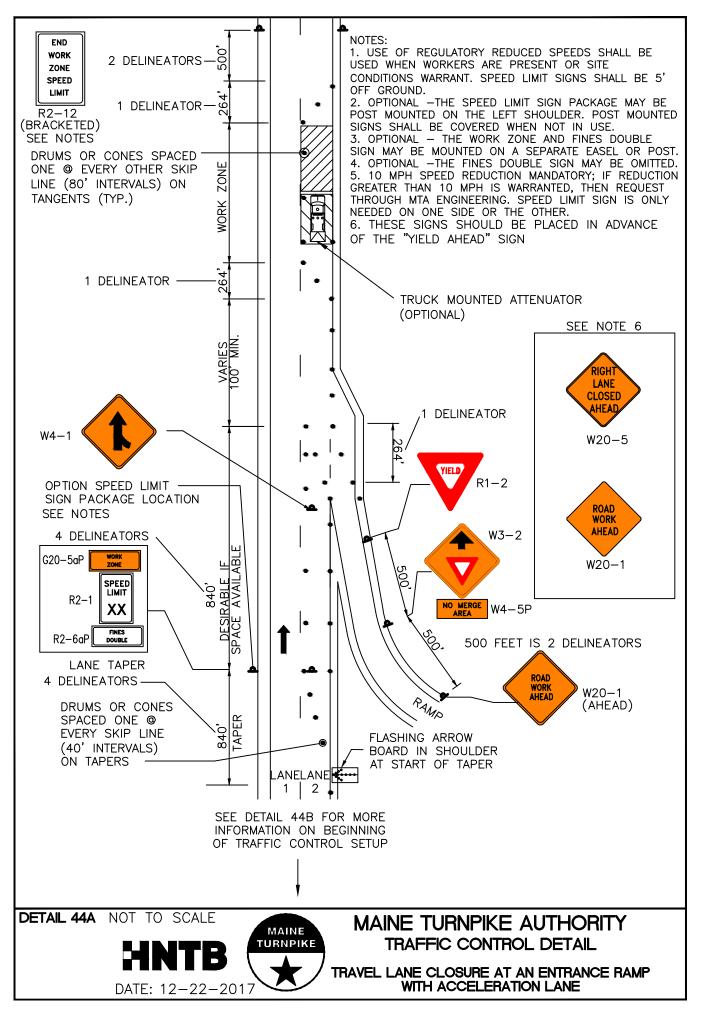


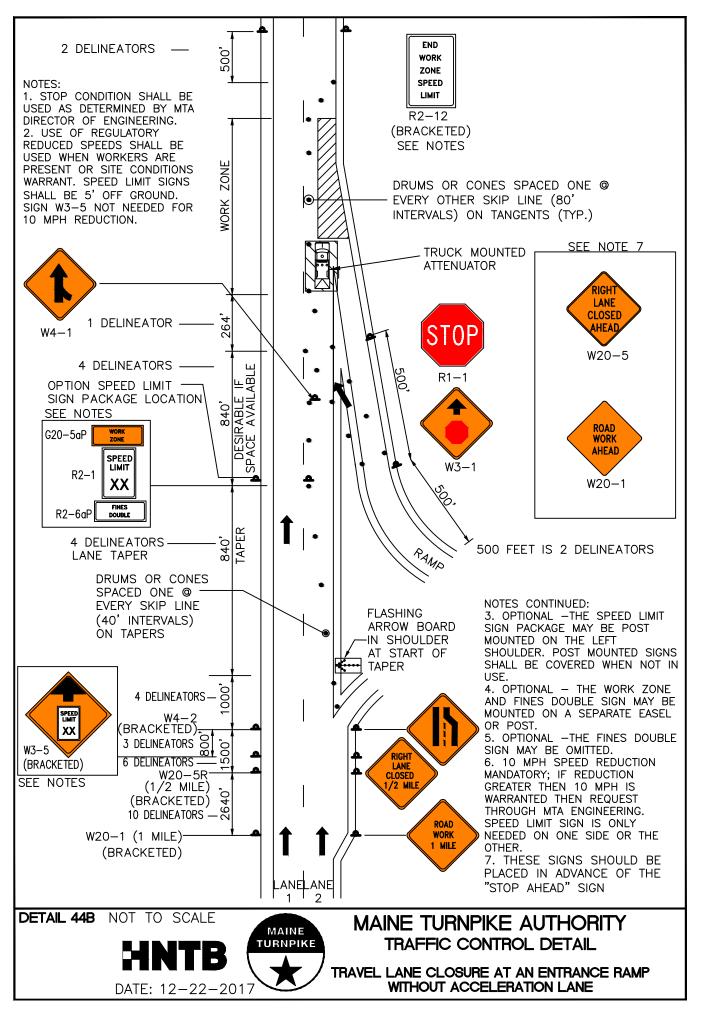
MAINE TURNPIKE AUTHORITY TRAFFIC CONTROL DETAIL DOUBLE MAINLINE LANE CLOSURE WITH TRAFFIC IN OUTSIDE 12' SHOULDER

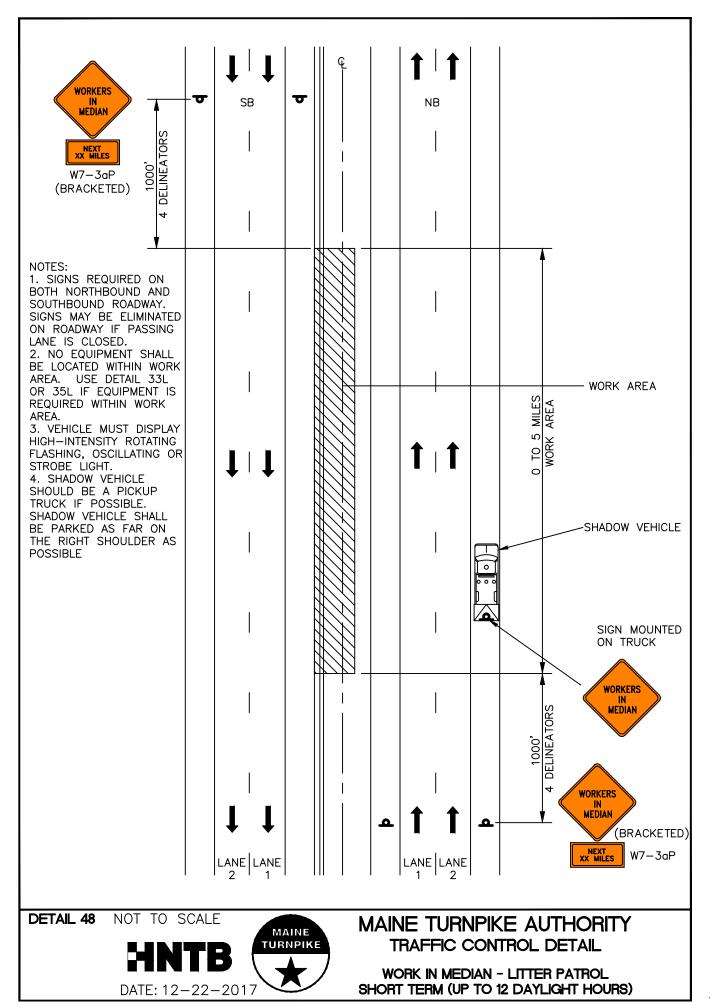


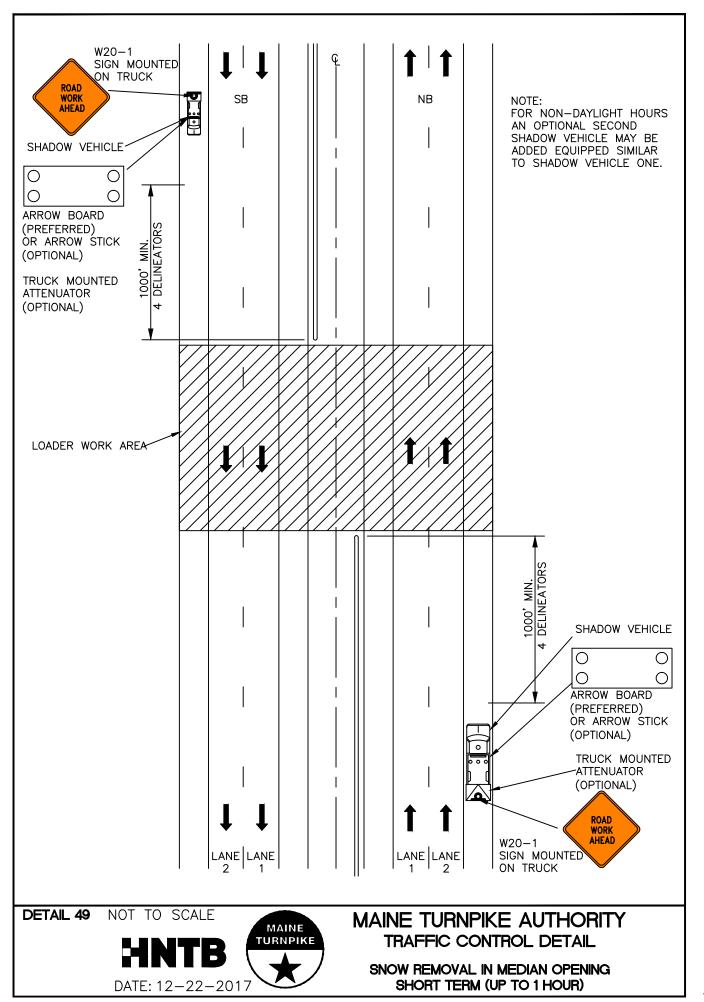


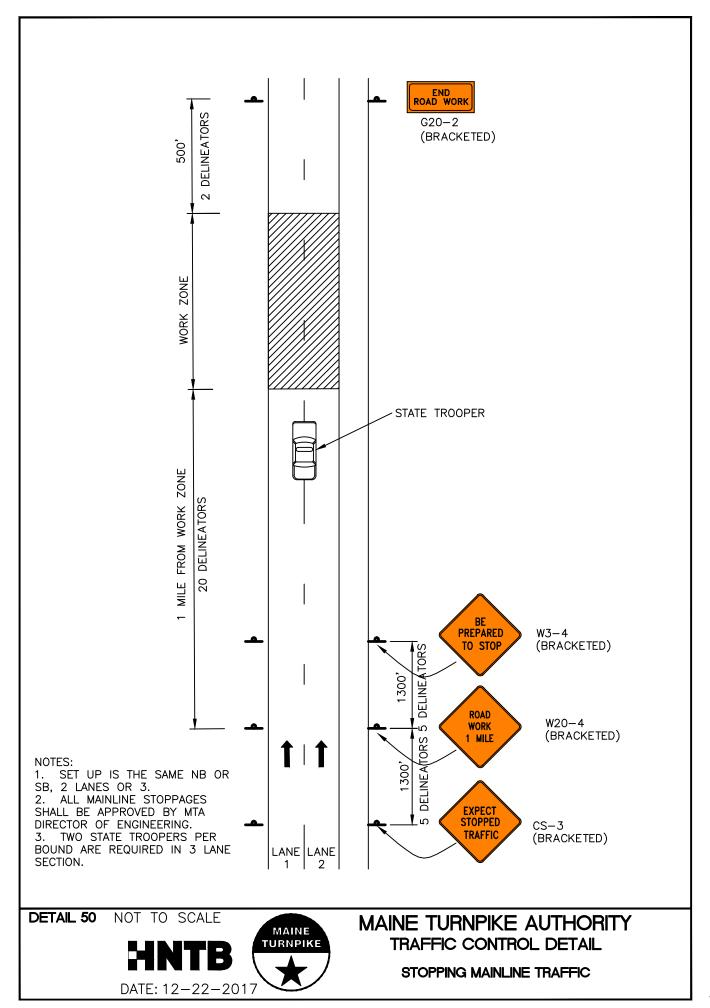


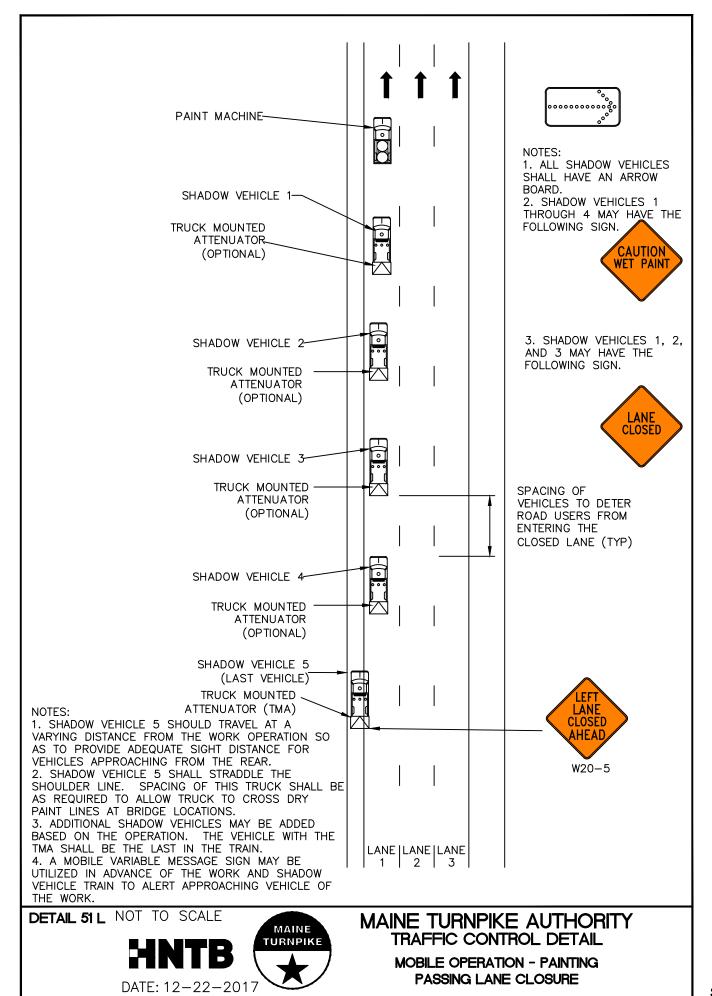


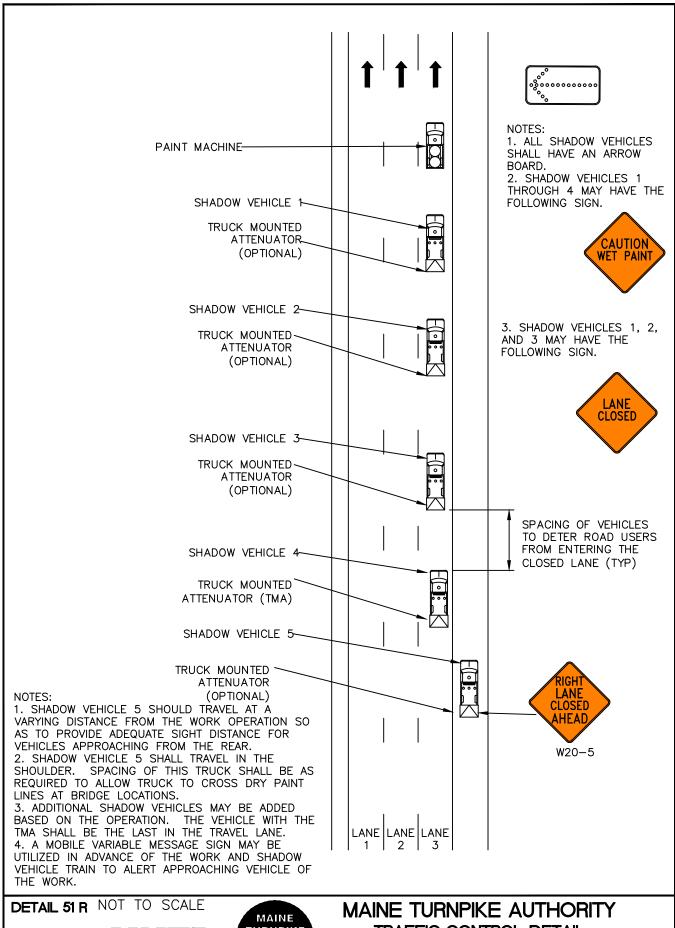






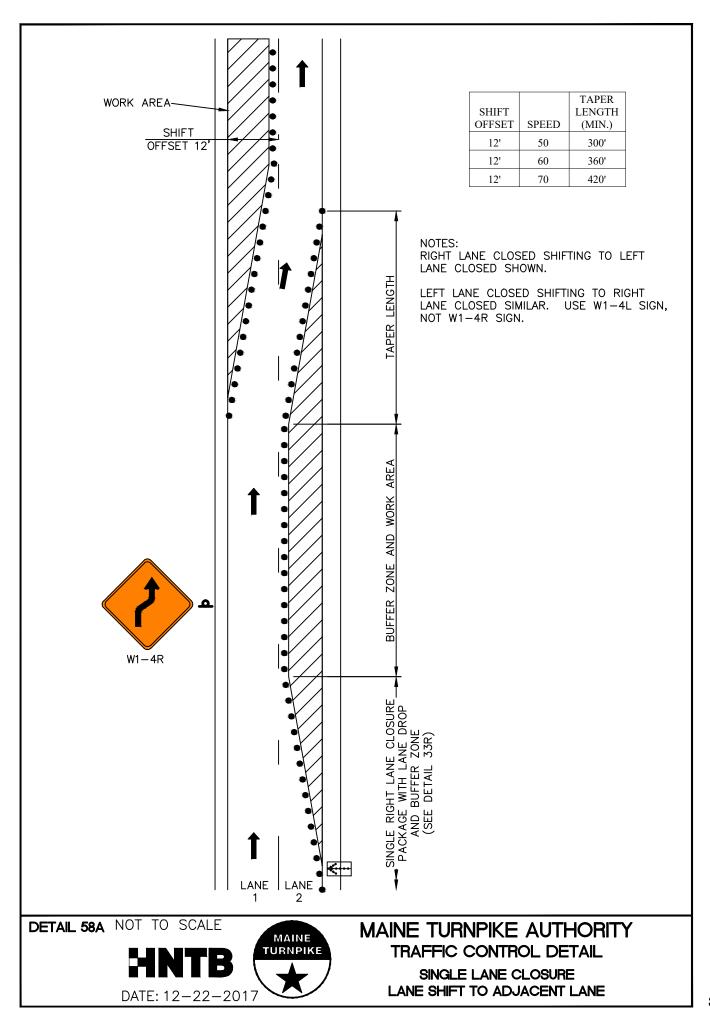


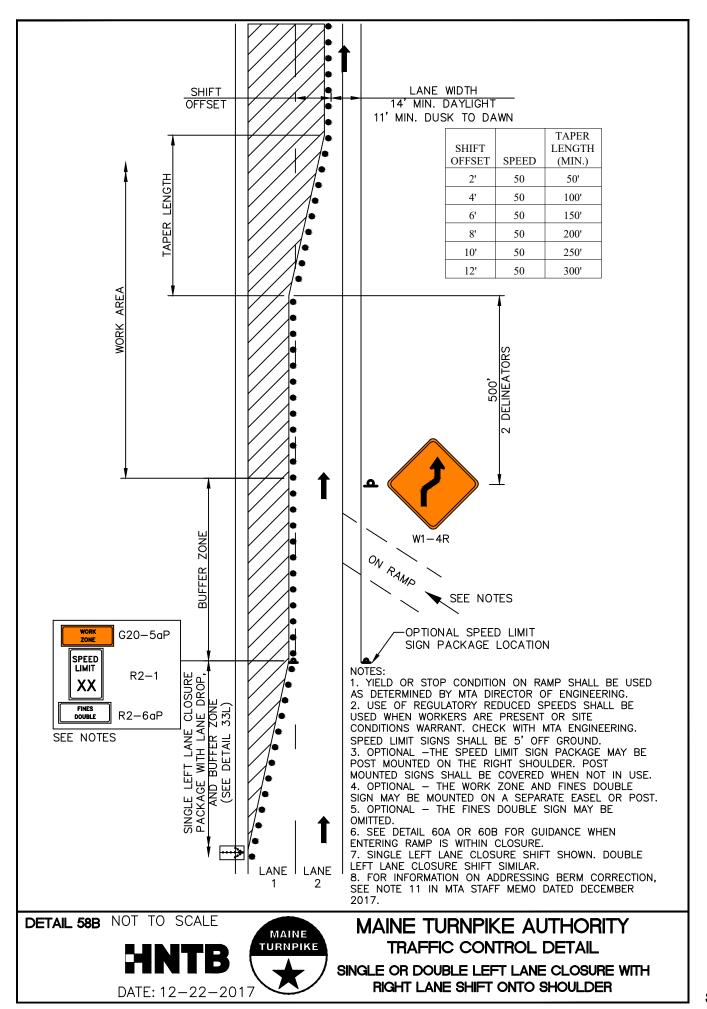


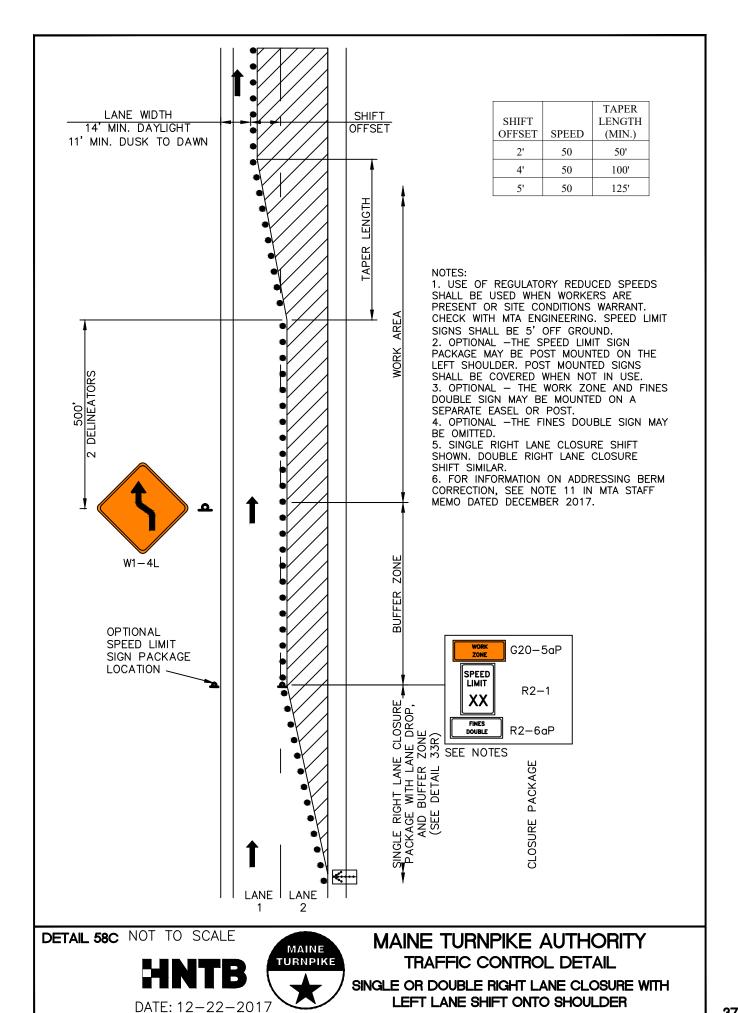


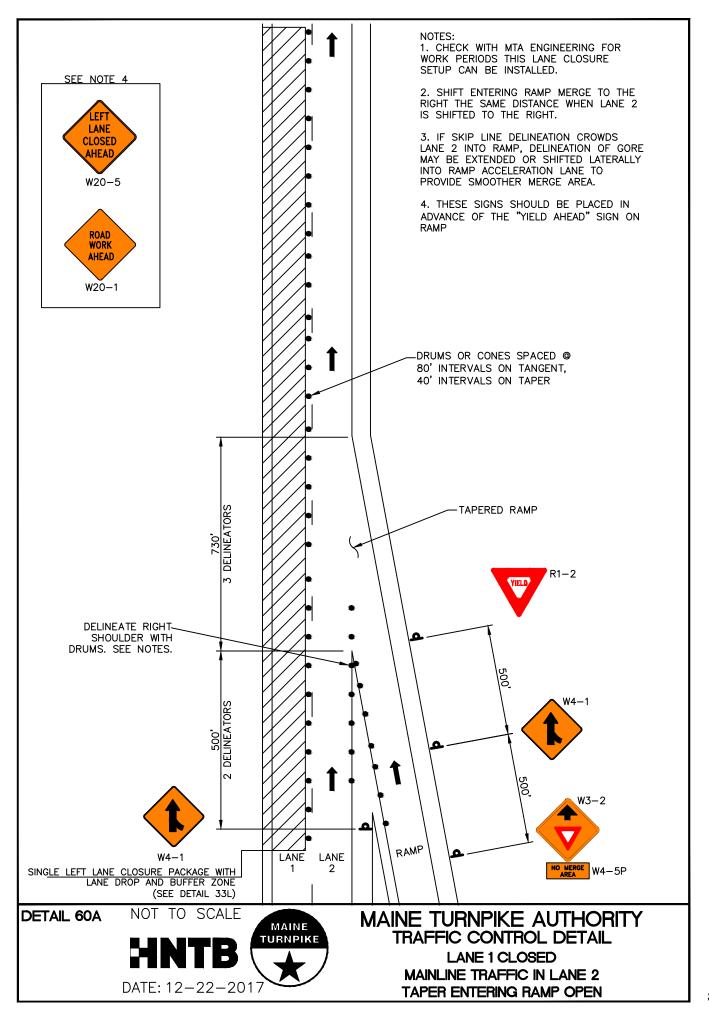


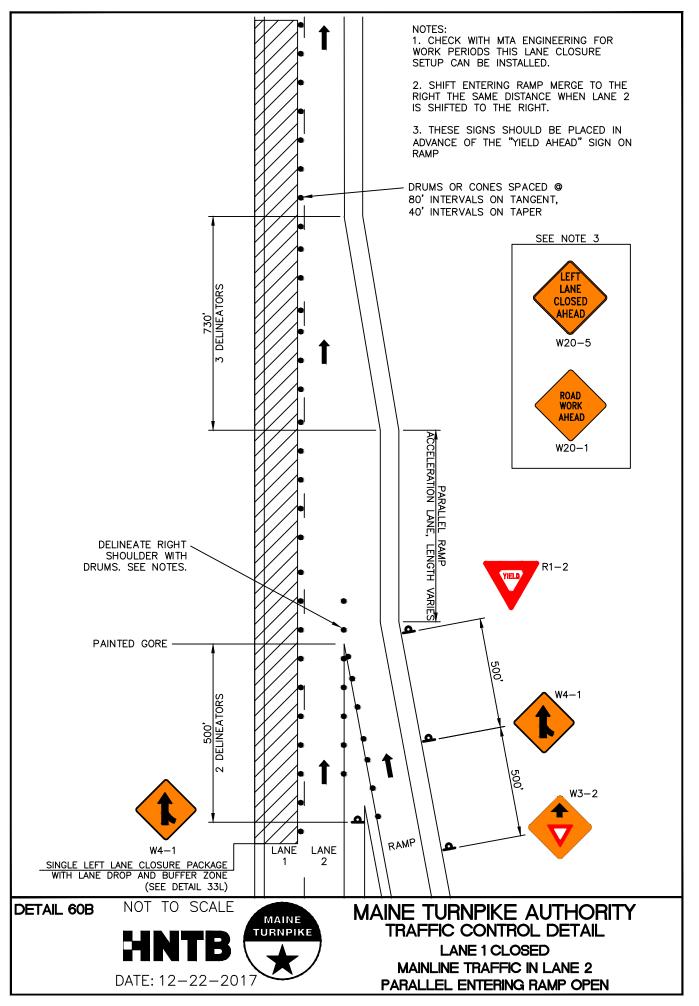
MAINE TURNPIKE AUTHORITY
TRAFFIC CONTROL DETAIL
MOBILE OPERATION - PAINTING
TRAVEL LANE CLOSURE

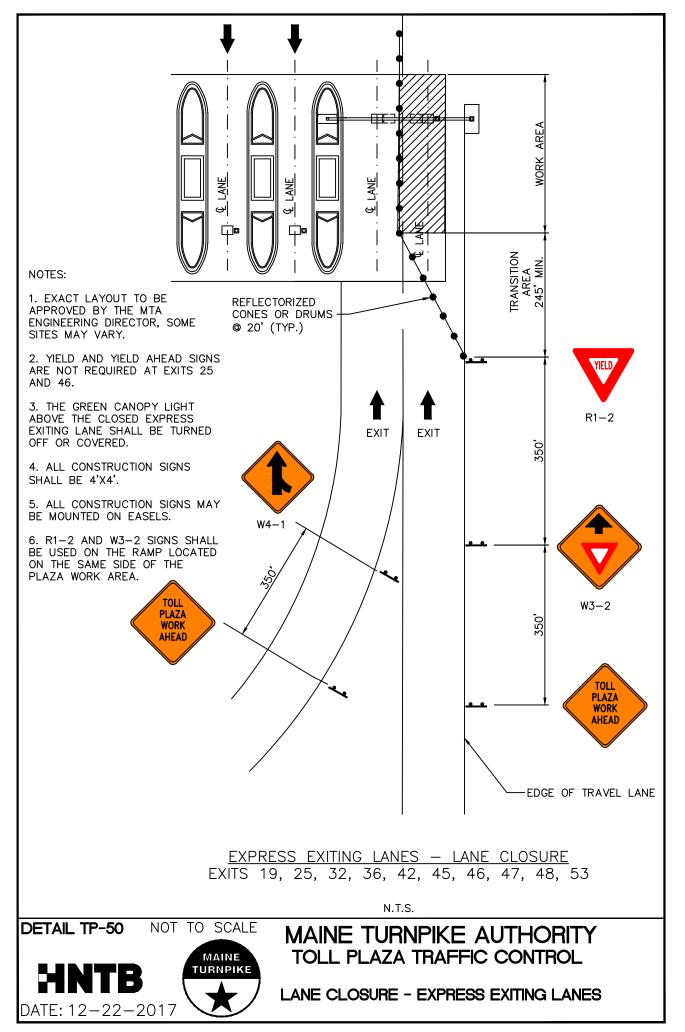


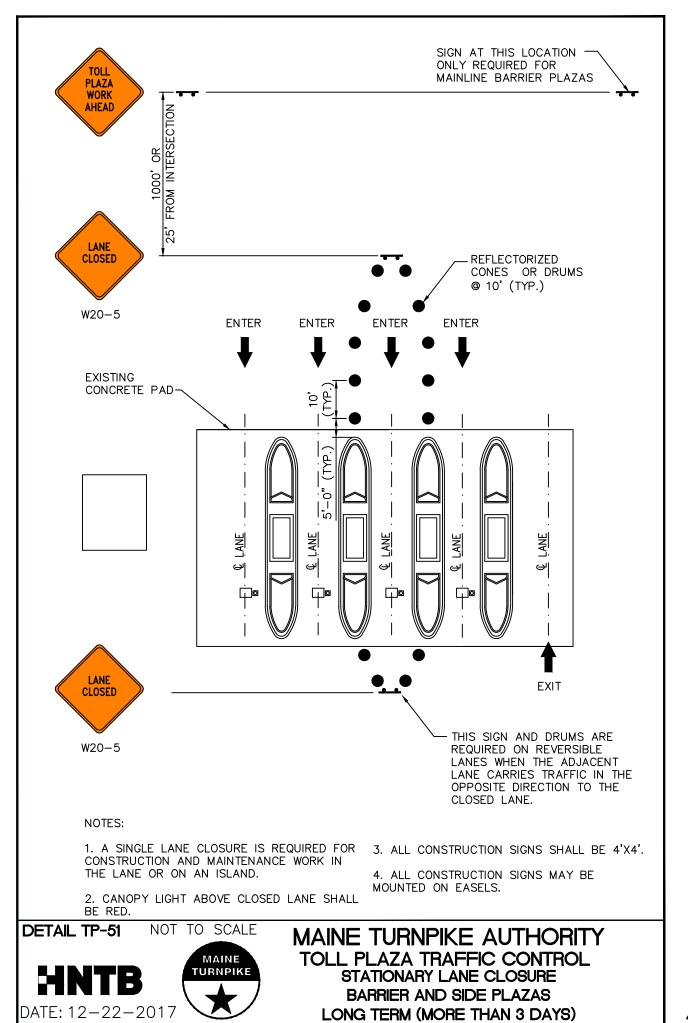


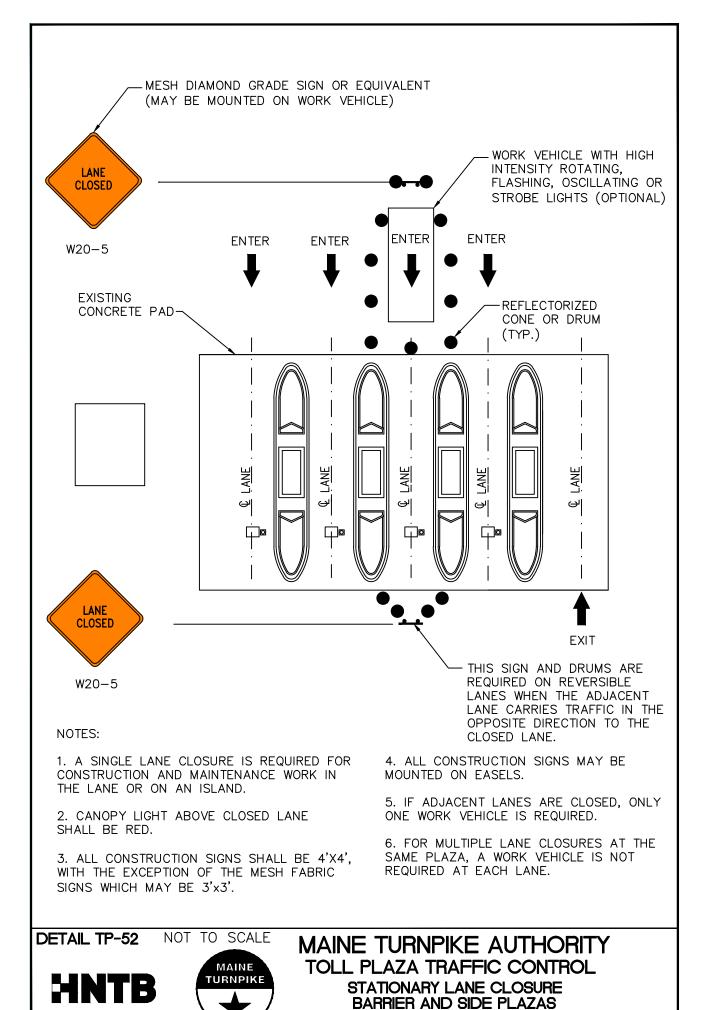






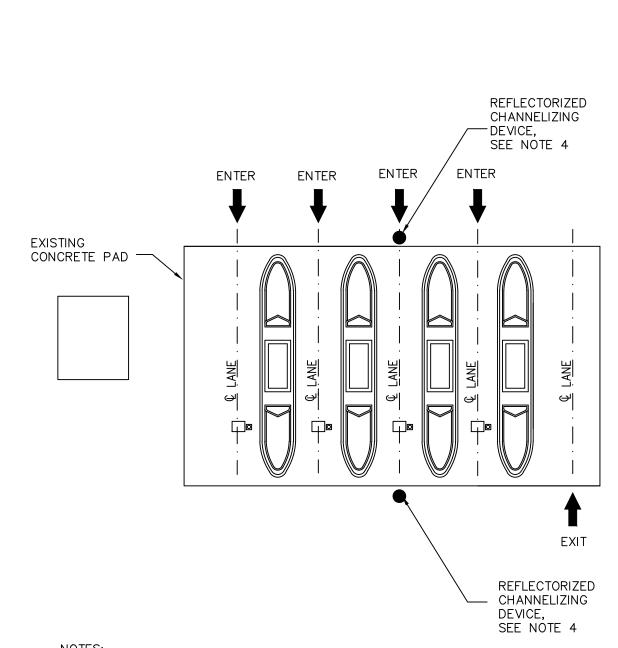






INTERMEDIATE TERM (UP TO 3 DAYS)

DATE: 12-22-2017



## NOTES:

- 1. A SINGLE LANE CLOSURE IS REQUIRED FOR CONSTRUCTION AND MAINTENANCE WORK IN THE LANE OR ON AN ISLAND.
- 2. CANOPY LIGHT ABOVE CLOSED LANE SHALL BE RED.
- 3. FOR OVERHEAD WORK, USE TP-51 OR TP-52.
- 4. REFLECTORIZED CHANNELIZING DEVICE SHALL BE CONES OR TUBULAR MARKER MEETING MUTCD SECTION 6F.64 OR 6F.65 FOR NIGHT TIME USE. ALL DEVICES SHALL BE IN GOOD CONDITION WITH NO DAMAGE TO ANY REFLECTORIZED SURFACE.

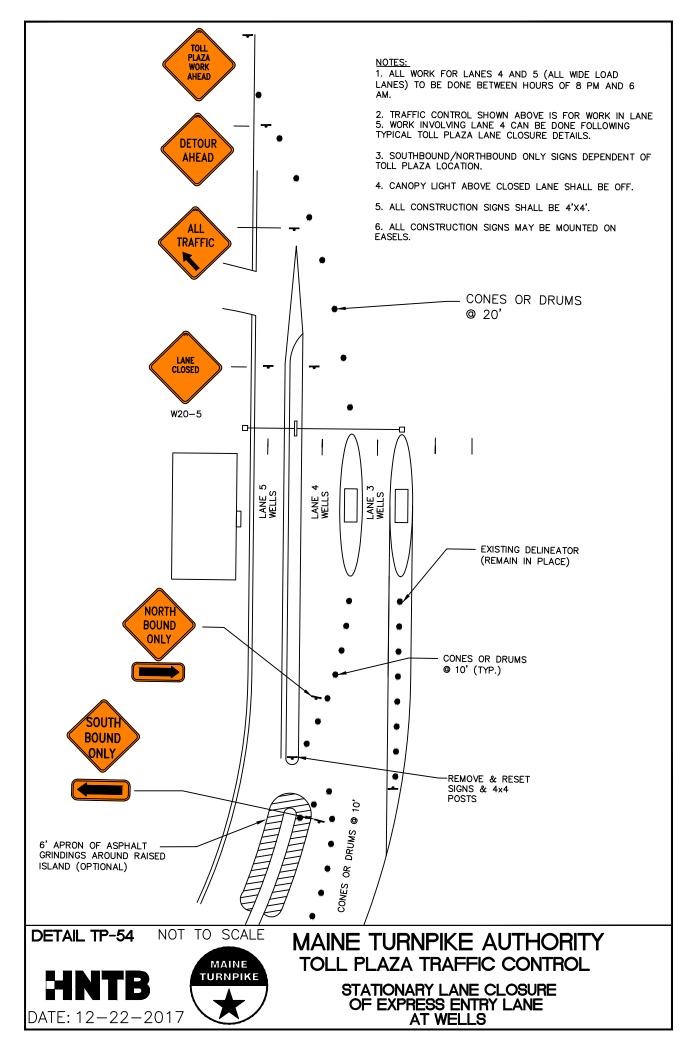
NOT TO SCALE **DETAIL TP-53** 

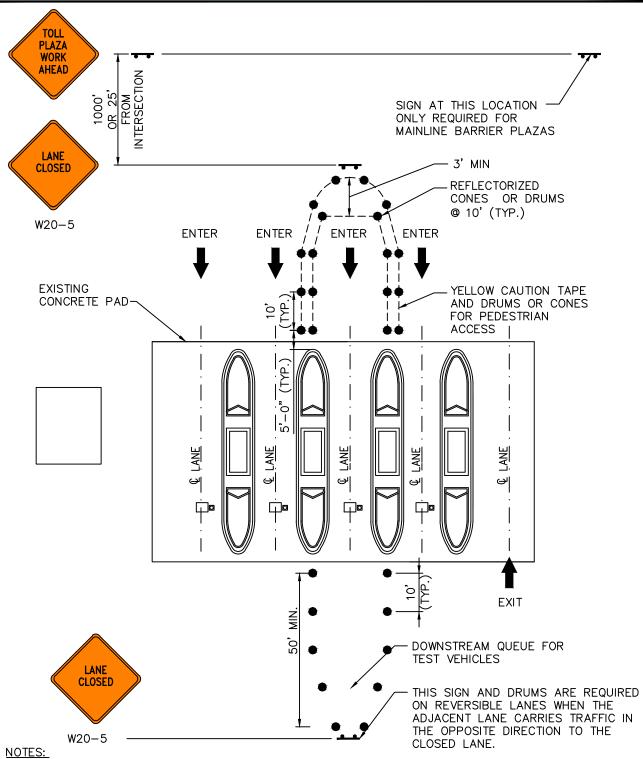


MAINE TURNPIKE

## MAINE TURNPIKE AUTHORITY TOLL PLAZA TRAFFIC CONTROL

CLOSURE BARRIER AND SIDE PLAZAS SHORT DURATION ((1 HOUR) STATIONARY LANE





- CANOPY LIGHT WILL REMAIN RED THROUGH COMMISSIONING TESTING.
- WHERE TUNNEL ACCESS IS NOT AVAILABLE, A CHANNELIZED PEDESTRIAN ACCESS WILL BE REQUIRED UPSTREAM OF THE TOLL PLAZA WHERE SITE CONDITIONS ALLOW. CONTACT MTA ENGINEERING FOR LANE SPECIFIC PEDESTRIAN ACCESS PLANS, IF NEEDED.
- 3. IF REQUIRED, A STANDARD LANE CLOSURE WILL BE INSTALLED FOR WORK IN EXITING EXPRESS LANE TYPES AS SHOWN IN DETAIL TP-50. FOR ENTERING EXPRESS LANES AT WELLS, TRAFFIC CONTROL(IF REQUIRED) IS SHOWN IN DETAIL TP-54.
- ALL CONSTRUCTION SIGNS SHALL BE 4'X4' AND MAY BE MOUNTED ON EASELS.

DETAIL TP-55

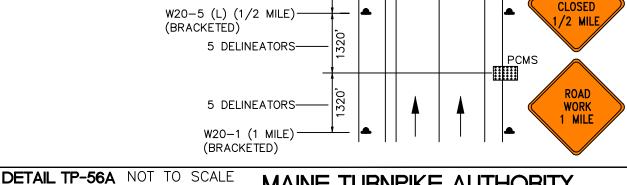


NOT TO SCALE

MAINE TURNPIKE AUTHORITY TOLL PLAZA TRAFFIC CONTROL

LANE COMMISIONING TESTING

## NOTES: 1. A SINGLE LANE CLOSURE IS REQUIRED FOR ALL CONSTRUCTION OR MAINTENANCE WORK IN THE ORT LANE. 2. USE OF REGULATORY REDUCED SPEEDS SHALL BE USED FOR THE ORT LANE CLOSURE. SPEED LIMIT SIGNS SHALL BE 5' OFF GROUND. 3. ALL CONSTRUCTION SIGNS SHALL BE 4X4 AND MAY BE EASEL OR POST MOUNTED. 4. OPTIONAL — THE SPEED LIMIT SIGN PACKAGE MAY BE POST MOUNTED ON THE RIGHT SHOULDER. POST MOUNTED SIGNS SHALL BE COVERED WHEN NOT IN USE. 5. OPTIONAL - THE WORK ZONE AND FINES DOUBLE SIGN MAY BE MOUNTED ON A SEPARATE EASEL OR POST. 6. OPTIONAL - THE FINES DOUBLE SIGN MAY BE OMITTED. 7. ALL NON-EMERGENCY ORT LANE CLOSURES MUST BE COORDINATED WITH MTA FARE COLLECTION AND MTA ENGINEERING ONE (1) WEEK IN ADVANCE OF THE CLOSURE. 8. PCMS SHALL FLASH-EZ-PASS **REDUCE SPEED** LANE CLOSED 9. FOR LONG TERM ORT LANE CLOSURES (EXCEEDING 24 HOURS) A PCMS BOARD SHALL BE SET UP 2 MILES FROM THE TOLL PLAZA WITH MESSAGE "EZPASS LANE CLOSED, MERGE RIGHT AHEAD" ORT LANE/TOLL PLAZA LANE SPLIT-OPTIONAL SPEED BUFFER ZONE (4 DELINEATORS) -840, LIMIT SIGN PACKAGE SEE NOTES LOCATION G20-5aP LANE TAPER DRUMS OR CONES SPEED LIMIT (4 DELINEATORS) SPACED ONE @ R2-1 EVERY SKIP LINE FLASHING ARROW BOARD T 50 (40' INTERVALS) 280 (1 DELINEATOR) ÒN TAPER R2-6aP 4 DELINEATORS W4-2 (L)(BRACKETED)-SWEL 3 DELINEATORS-50 W3 - 5(BRACKETED)



9

3 DELINEATORS

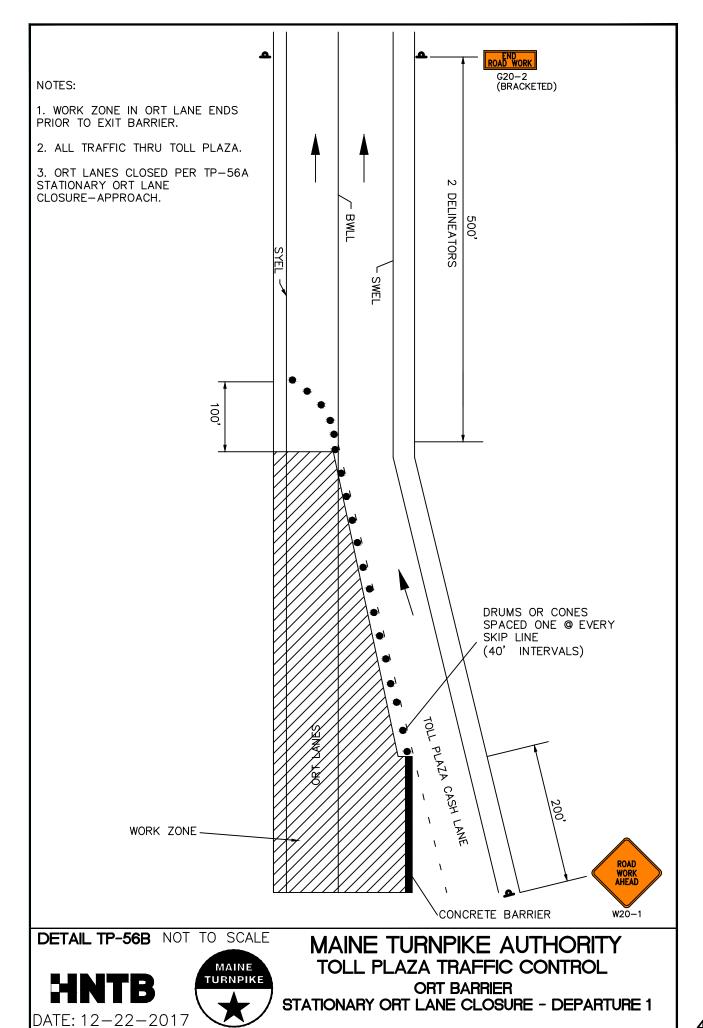
**HNTB** DATE: 12-22-2017

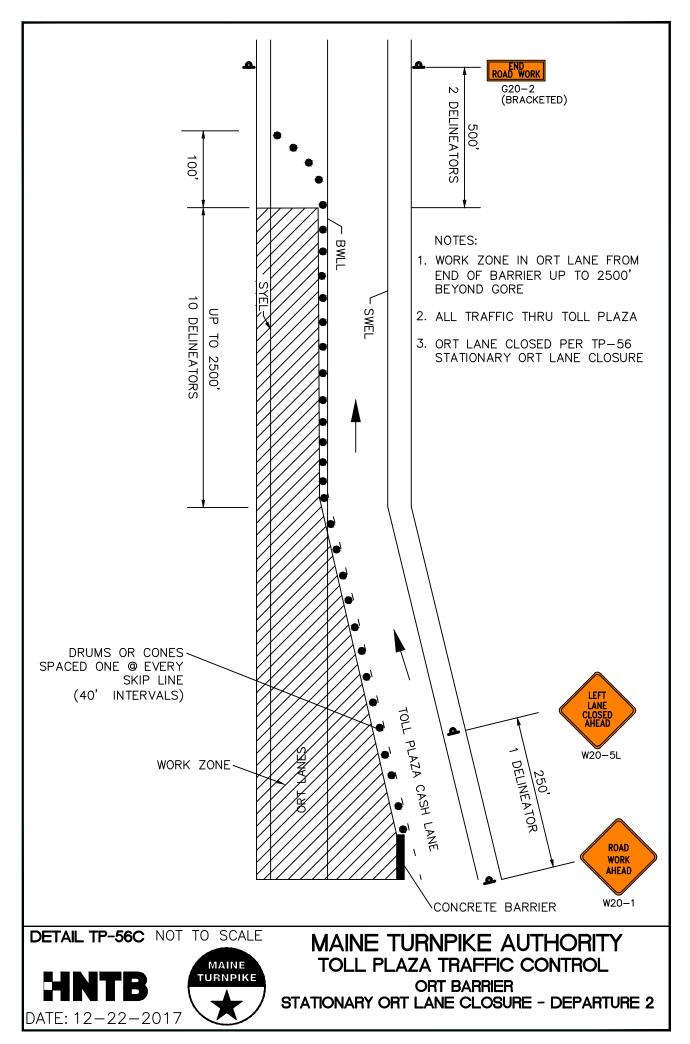
SEE NOTES

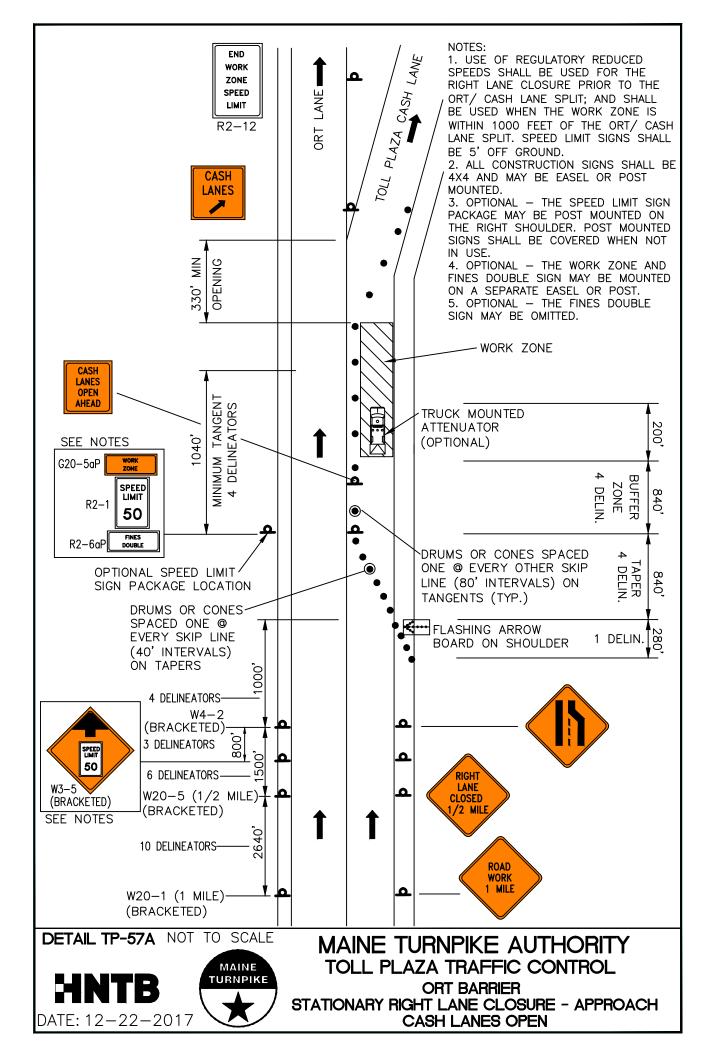
MAINE TURNPIKE

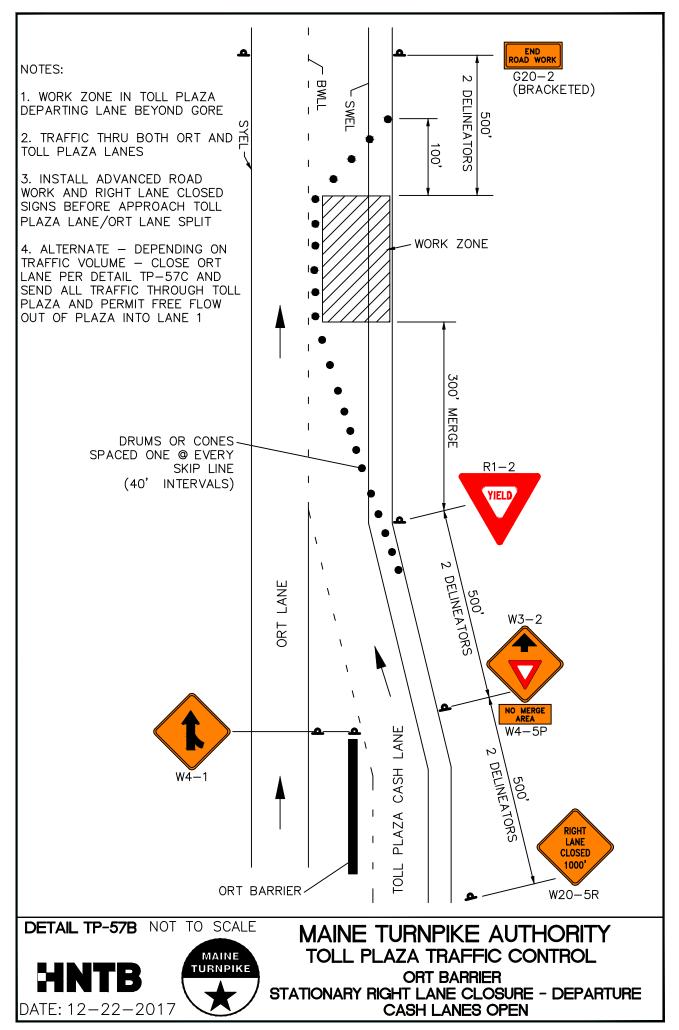
MAINE TURNPIKE AUTHORITY
TOLL PLAZA TRAFFIC CONTROL
ORT BARRIER
STATIONARY ORT LANE CLOSURE - APPROACH

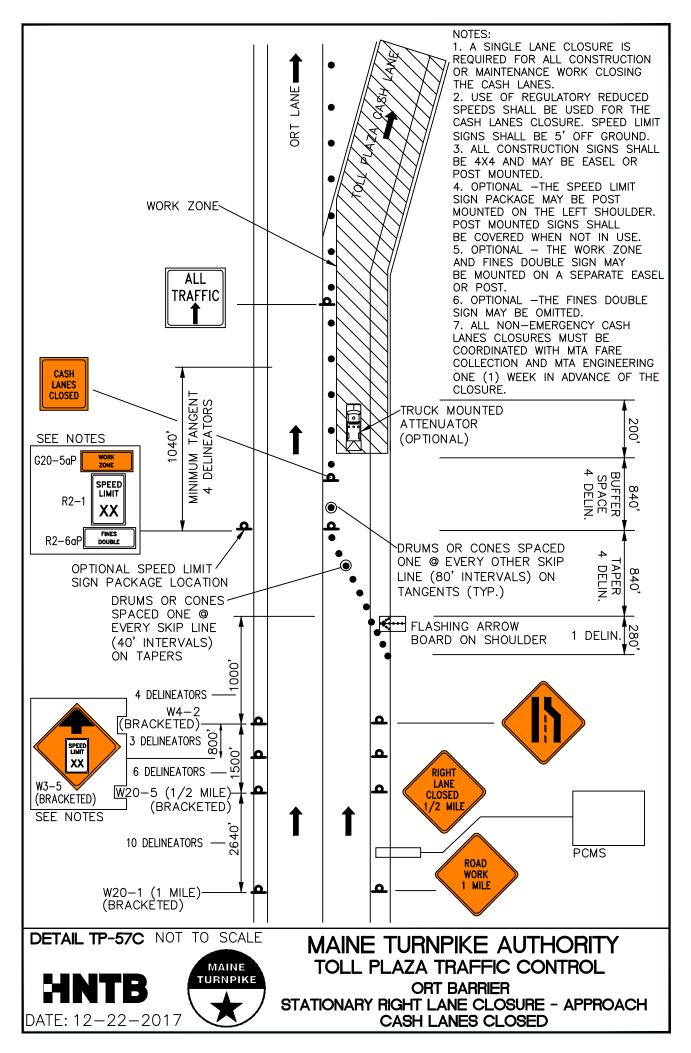
LEFT LANE

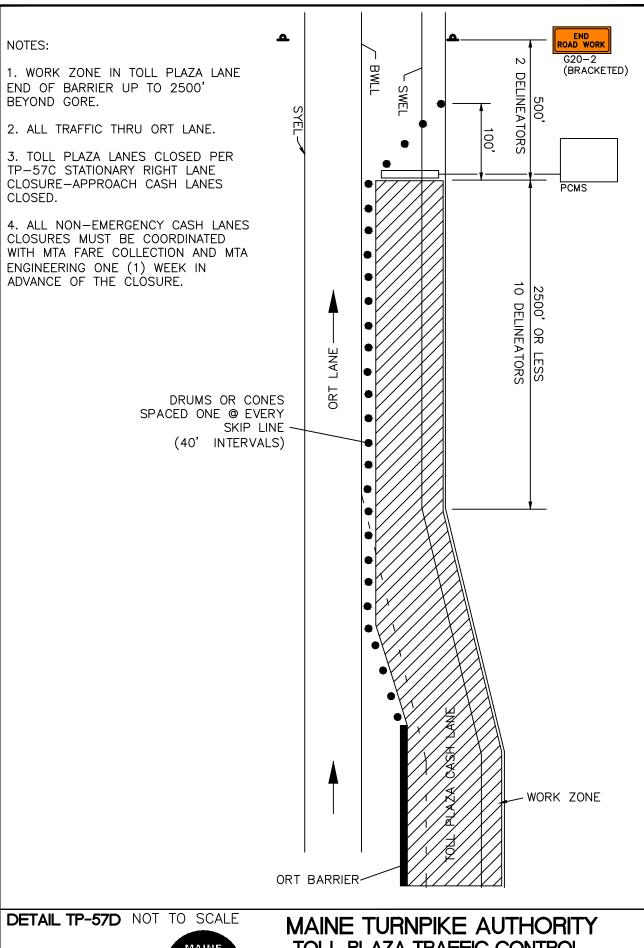












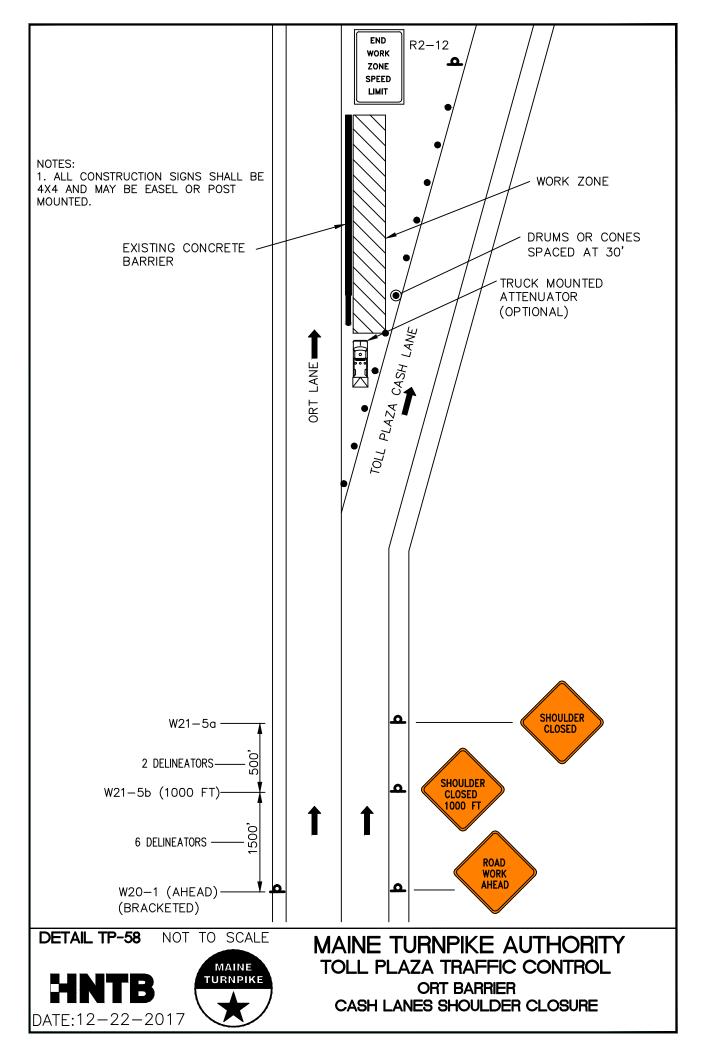
HNTB MAINE TURNPIKE

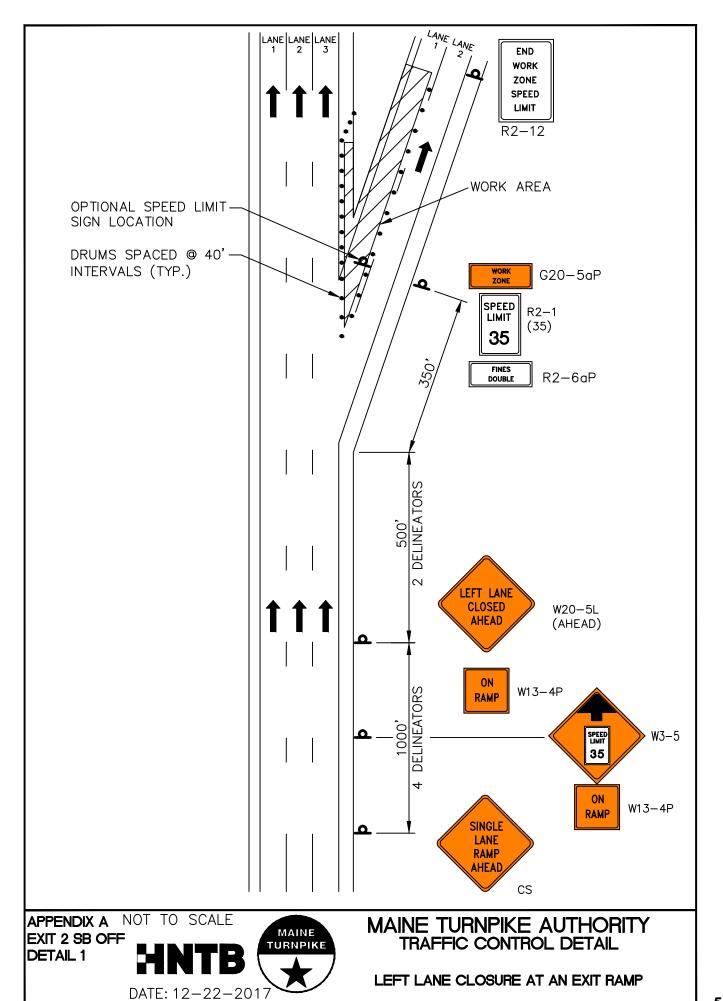
DATE: 12-22-2017

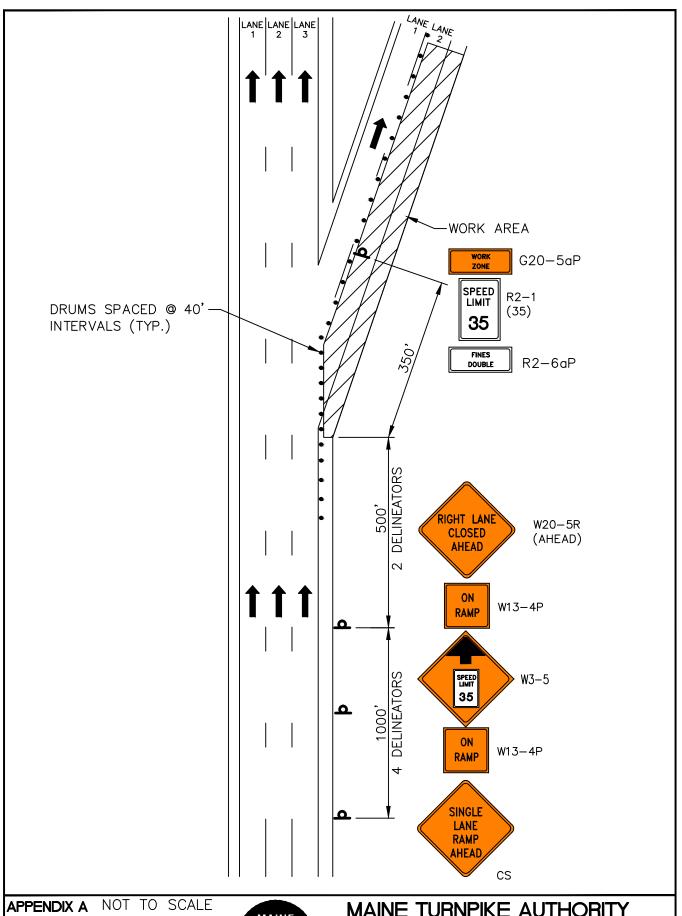
E S1

MAINE TURNPIKE AUTHORITY
TOLL PLAZA TRAFFIC CONTROL
ORT BARRIER
STATIONARY RIGHT LANE CLOSURE - DEPARTURE

CASH LANES CLOSED







EXIT 2 SB OFF
DETAIL 2

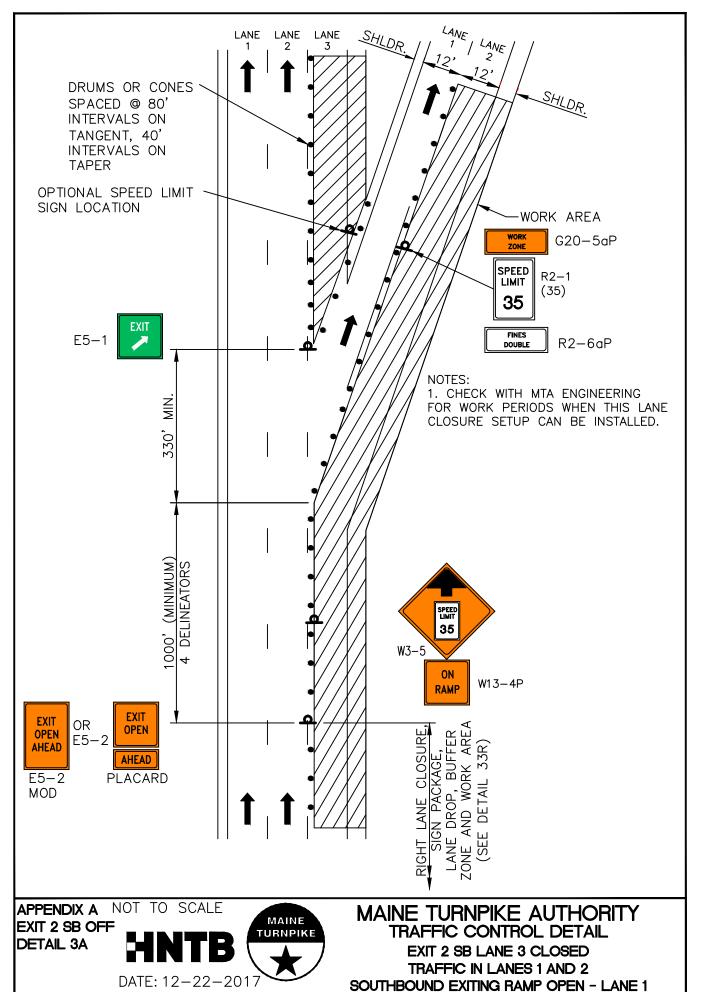
HNTB

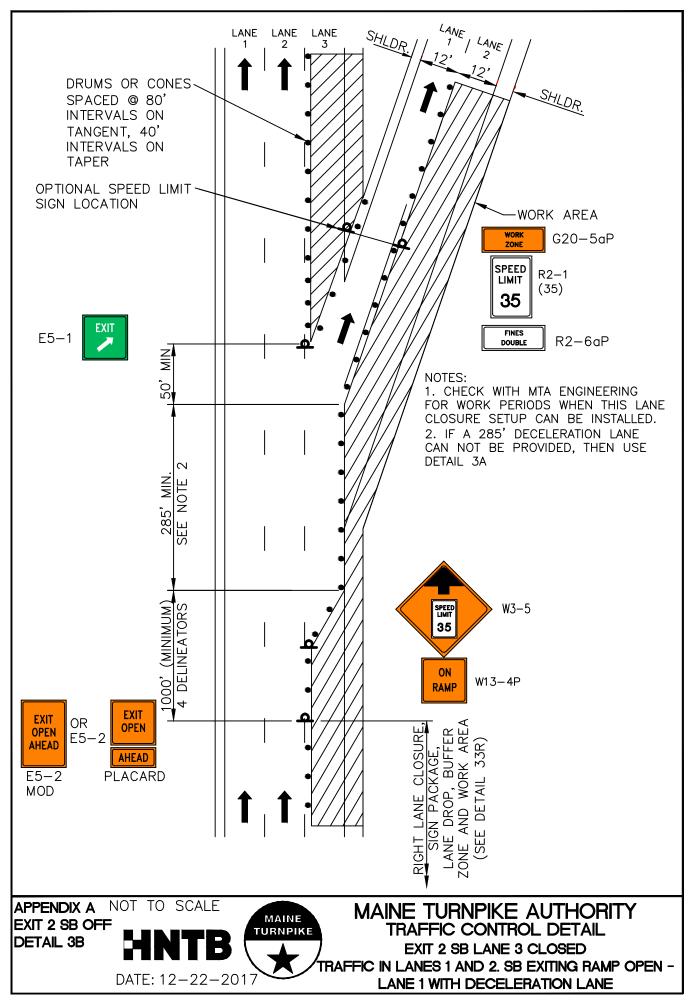
MAINE TURNPIKE

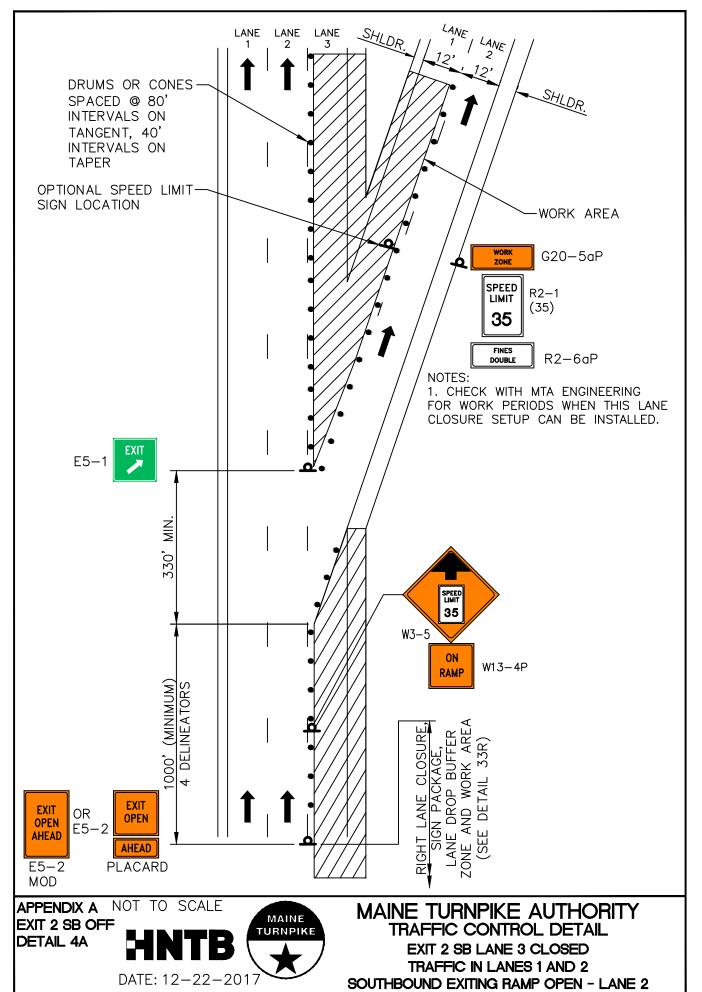
DATE: 12-22-2017

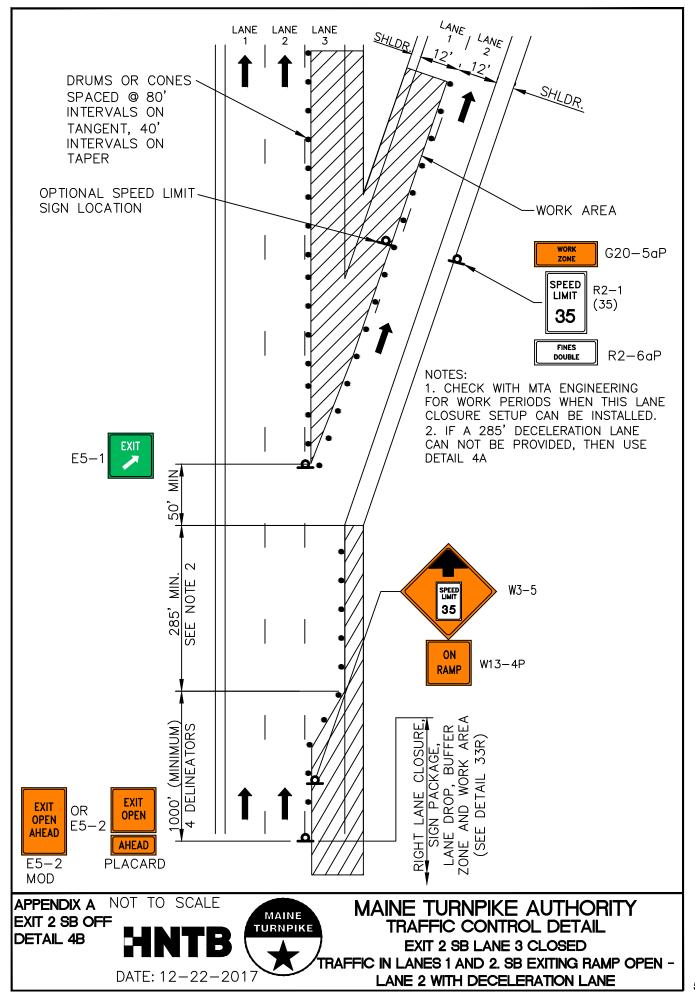
MAINE TURNPIKE AUTHORITY
TRAFFIC CONTROL DETAIL

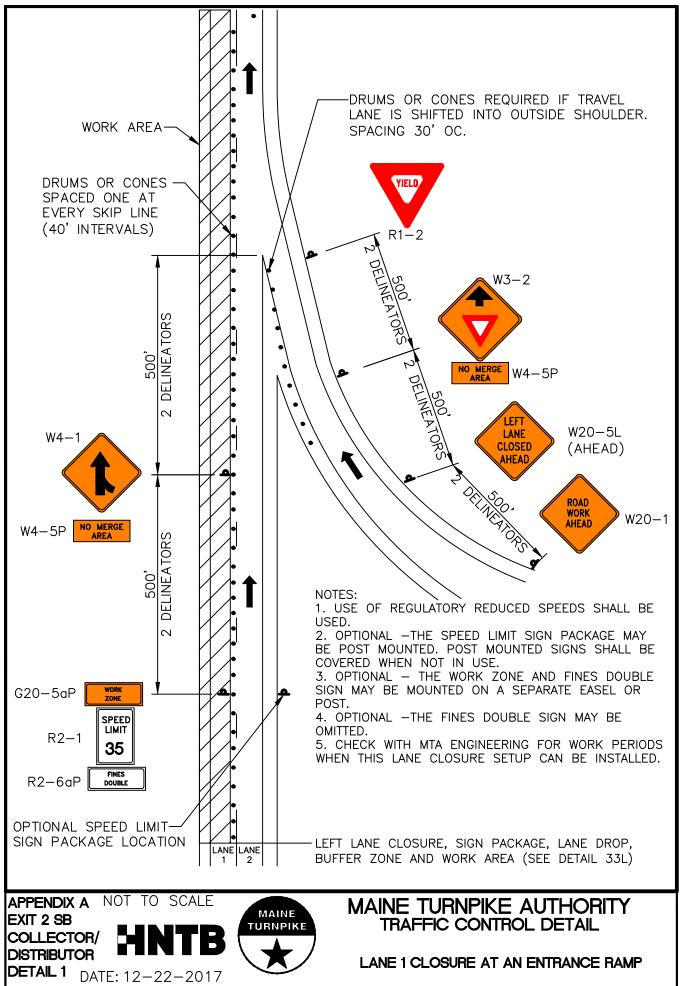
RIGHT LANE CLOSURE AT AN EXIT RAMP

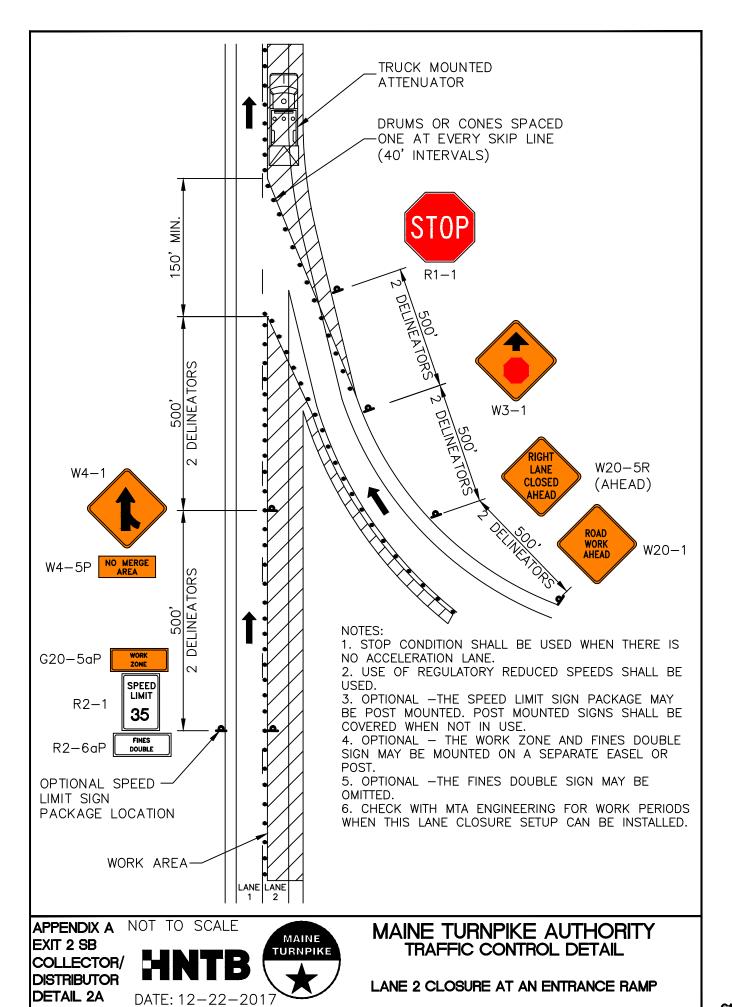


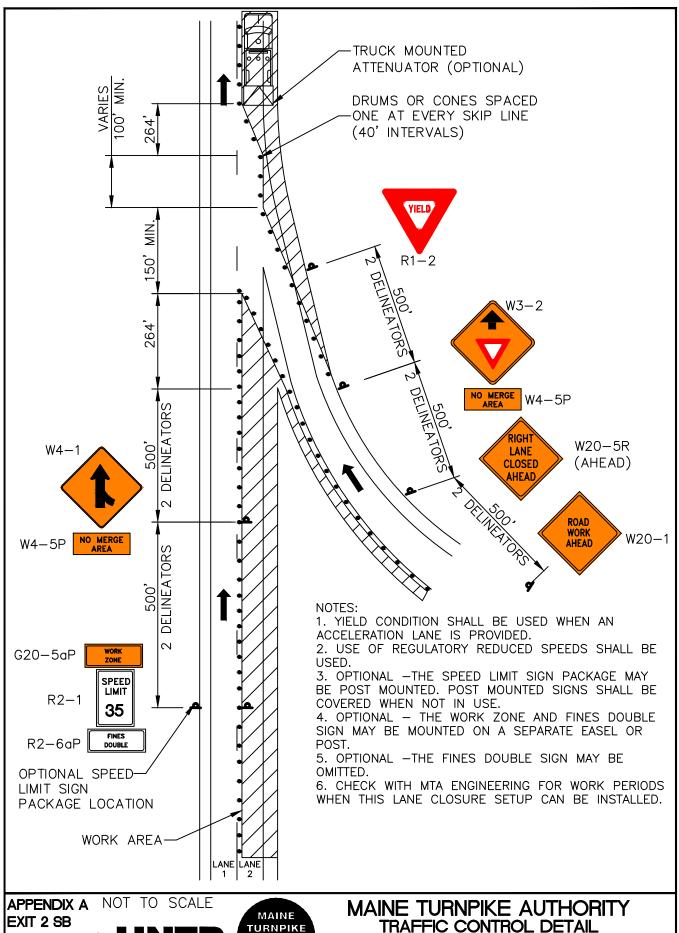










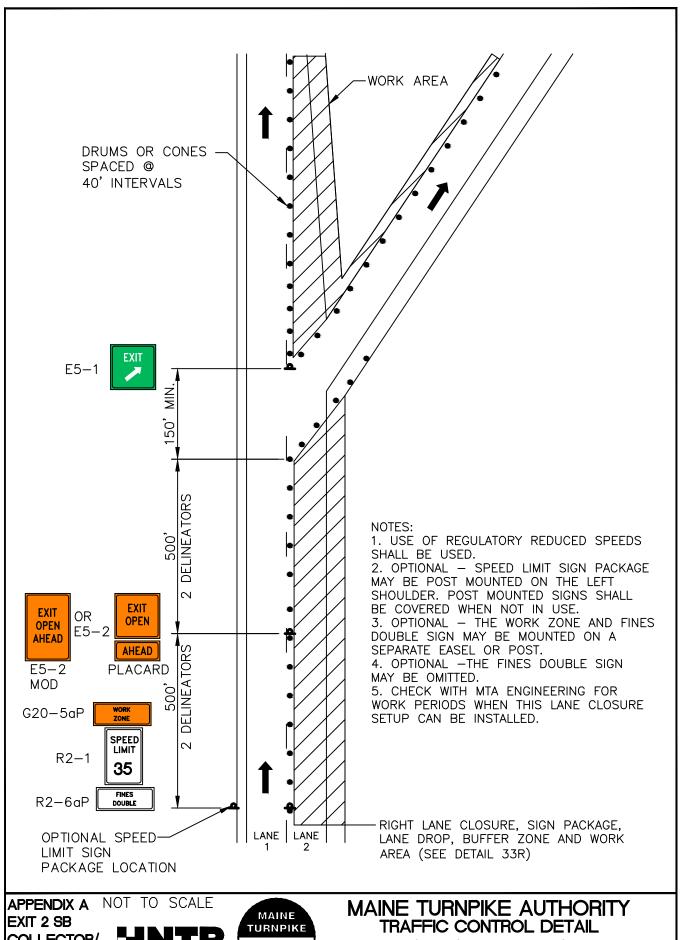


EXIT 2 SB COLLECTOR/ DISTRIBUTOR **DETAIL 2B** 

DATE: 12-22-2017

## TRAFFIC CONTROL DETAIL

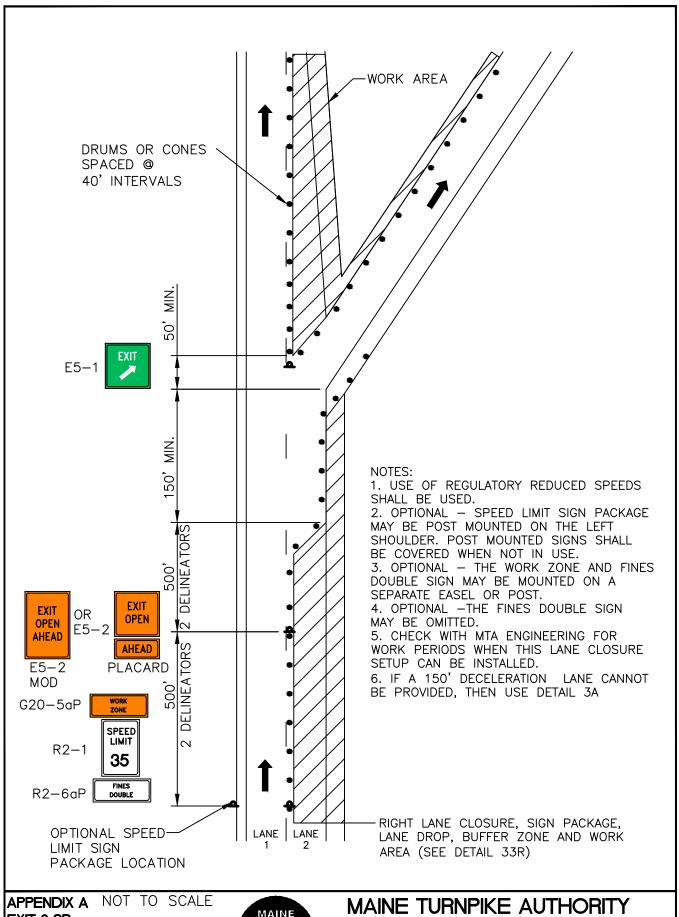
LANE 2 CLOSURE AT AN ENTRANCE RAMP WITH ACCELERATION LANE



COLLECTOR/ DISTRIBUTOR DETAIL 3A

DATE: 12-22-2017

WORK ZONE IN LANE 2 OF COLLECTOR/DISTRIBUTOR RAMP -EXIT RAMP TO ROUTE 236 OPEN

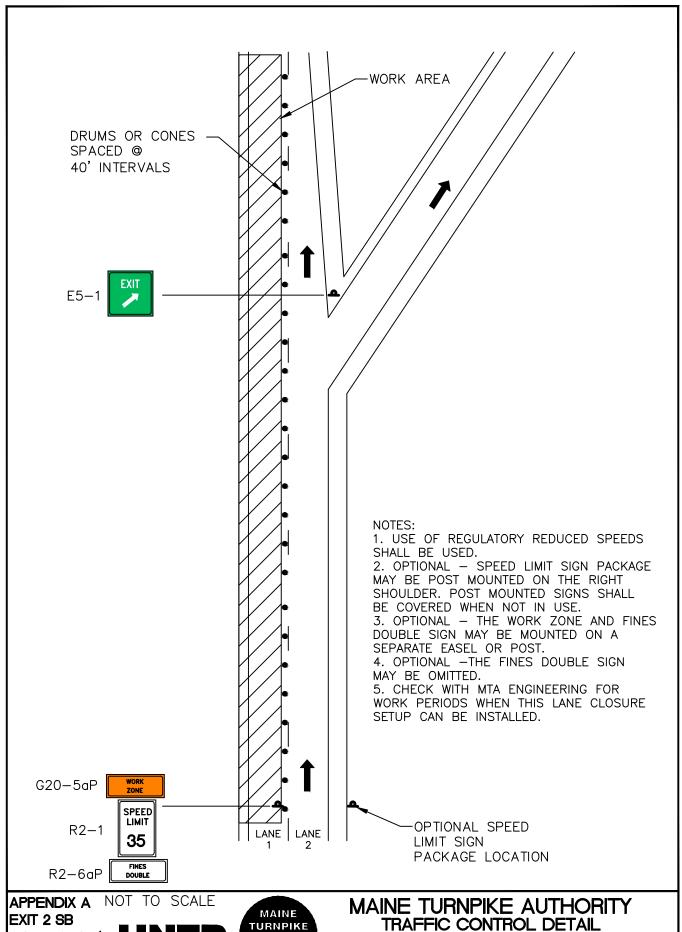


APPENDIX A
EXIT 2 SB
COLLECTOR/
DISTRIBUTOR
DETAIL 3B

HNTB (

**TURNPIKE** 

MAINE TURNPIKE AUTHORITY
TRAFFIC CONTROL DETAIL
WORK ZONE IN LANE 2 OF
COLLECTOR/DISTRIBUTOR RAMP - EXIT RAMP
TO ROUTE 236 OPEN WITH DECELERATION LANE



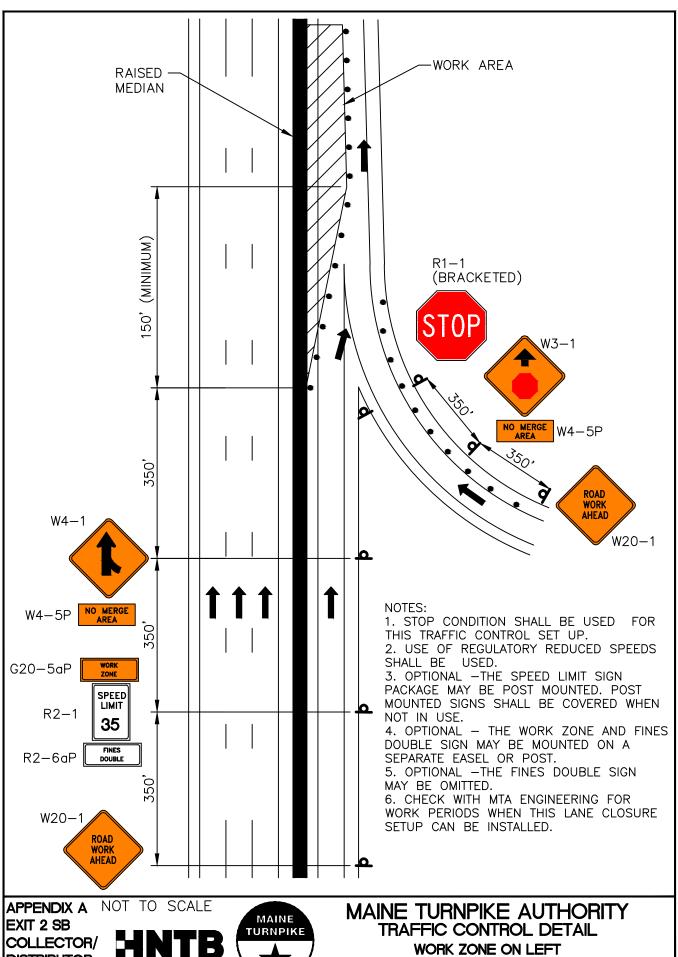
EXIT 2 SB
COLLECTOR/
DISTRIBUTOR
DETAIL 4

HNTB

MAINTURNE

DATE: 12-22-2017

MAINE TURNPIKE AUTHORITY
TRAFFIC CONTROL DETAIL
WORK ZONE IN LANE 1 OF
COLLECTOR/DISTRIBUTOR RAMP EXIT RAMP TO ROUTE 236 OPEN

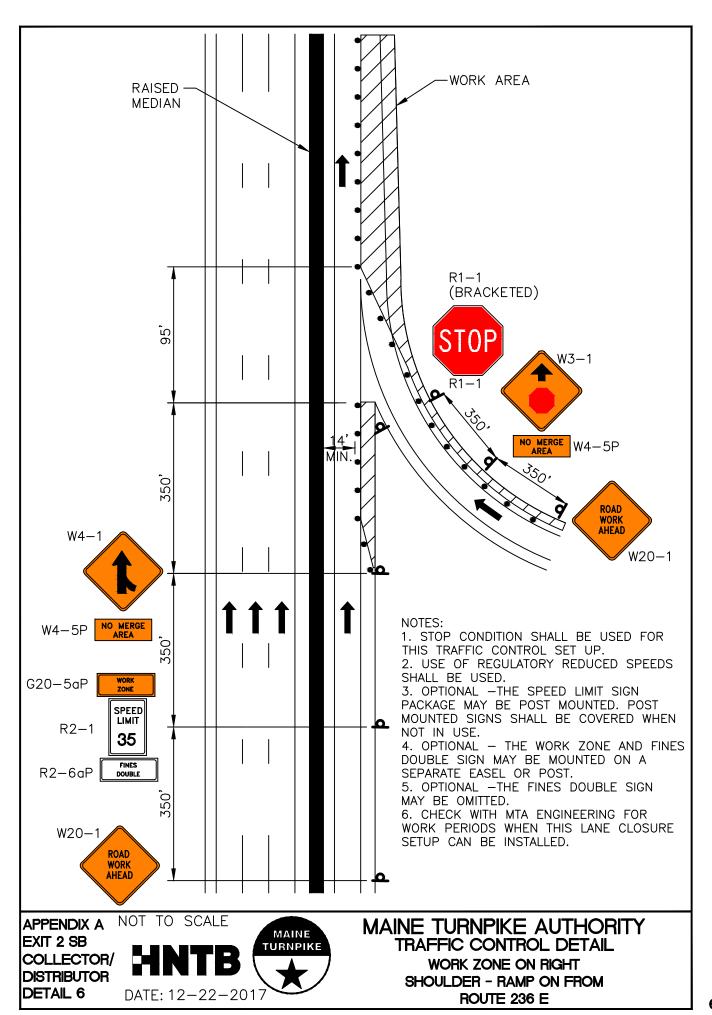


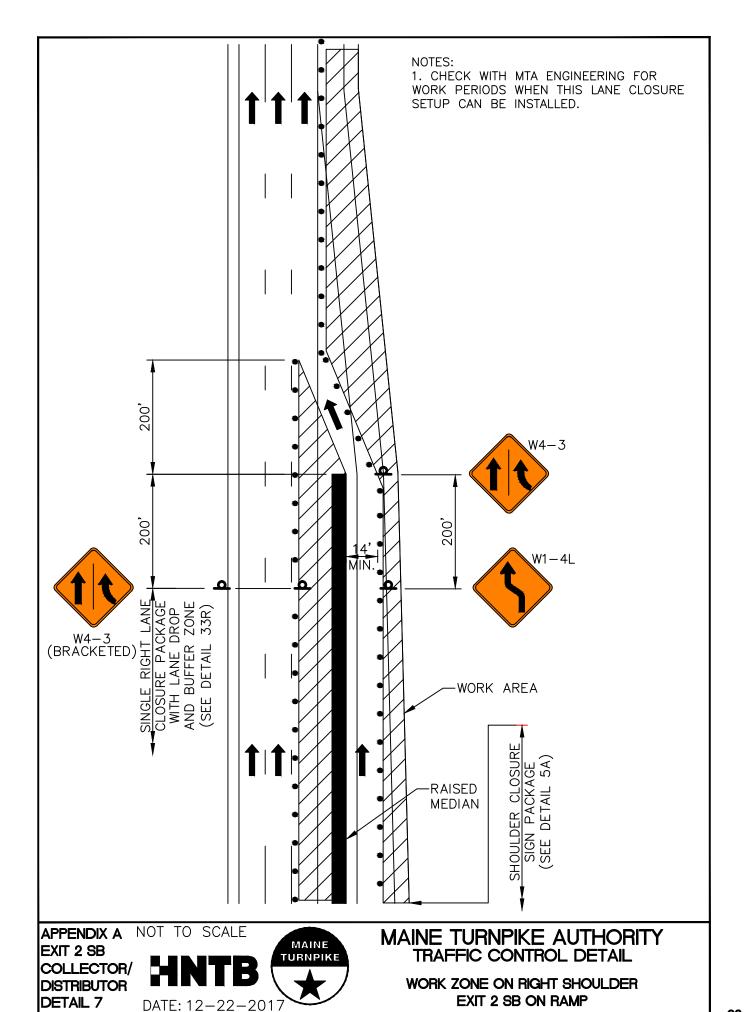
DISTRIBUTOR DETAIL 5

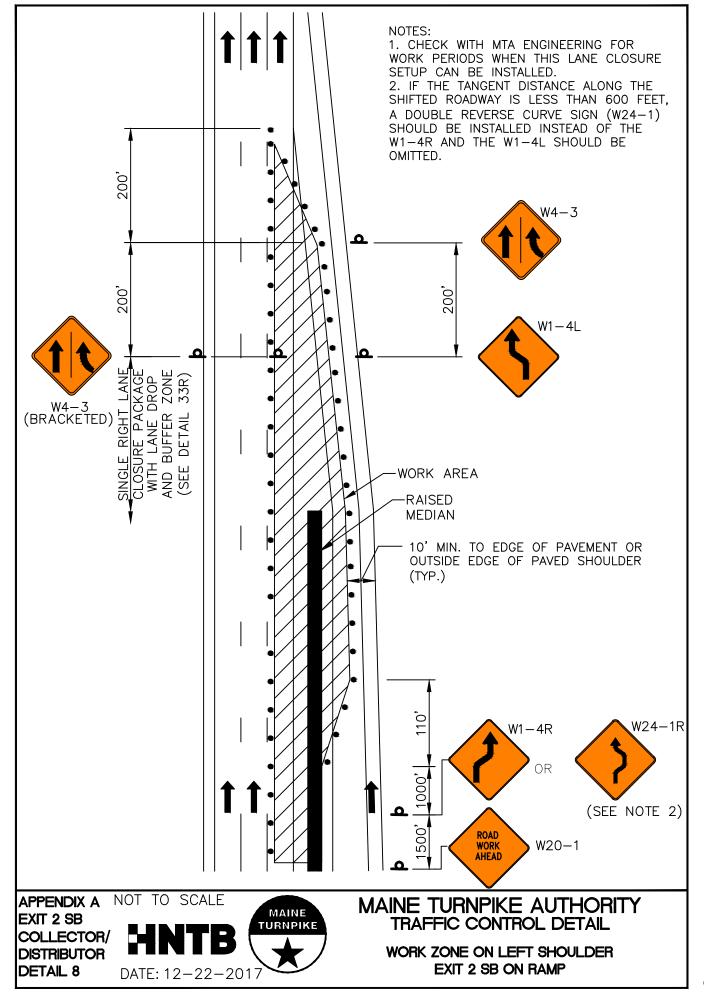
DATE: 12-22-2017

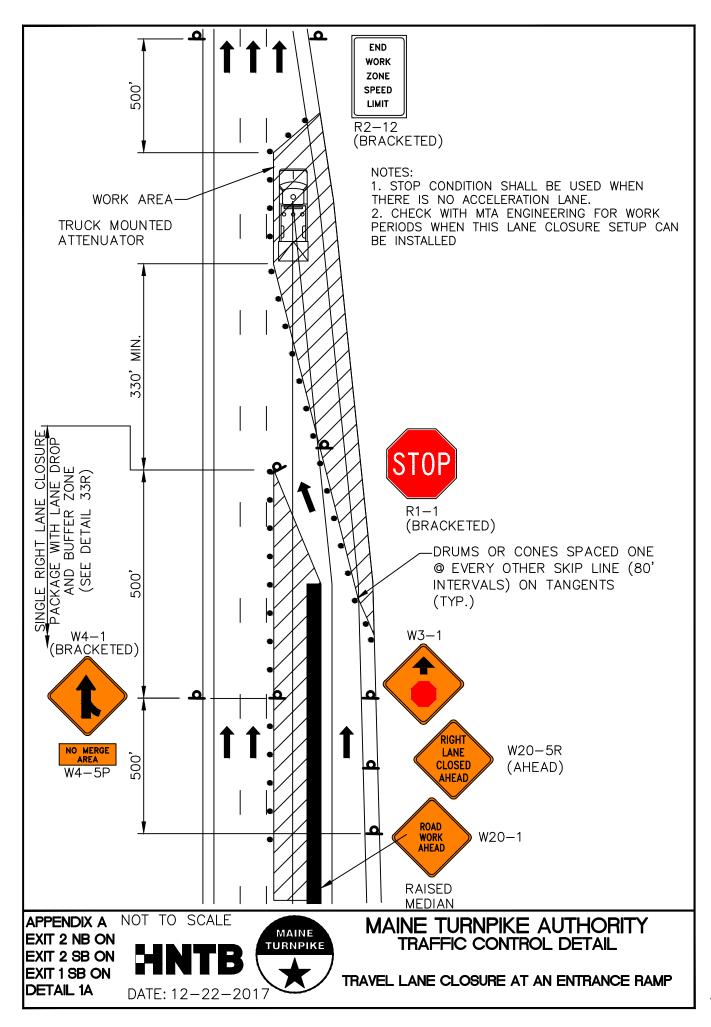
SHOULDER - RAMP ON FROM

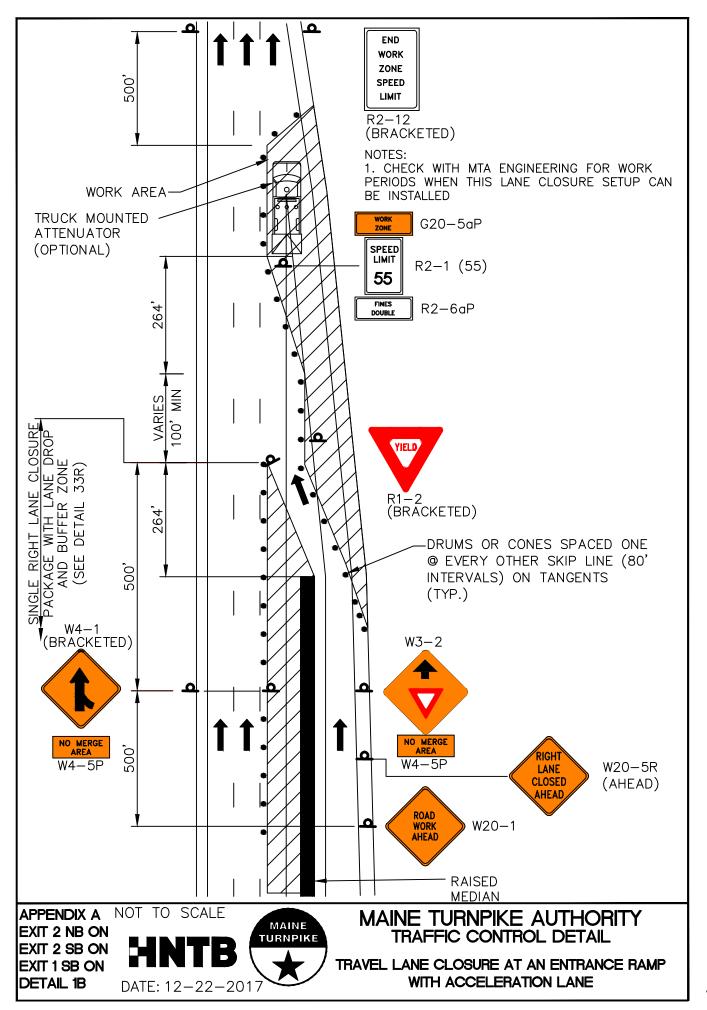
ROUTE 236 E

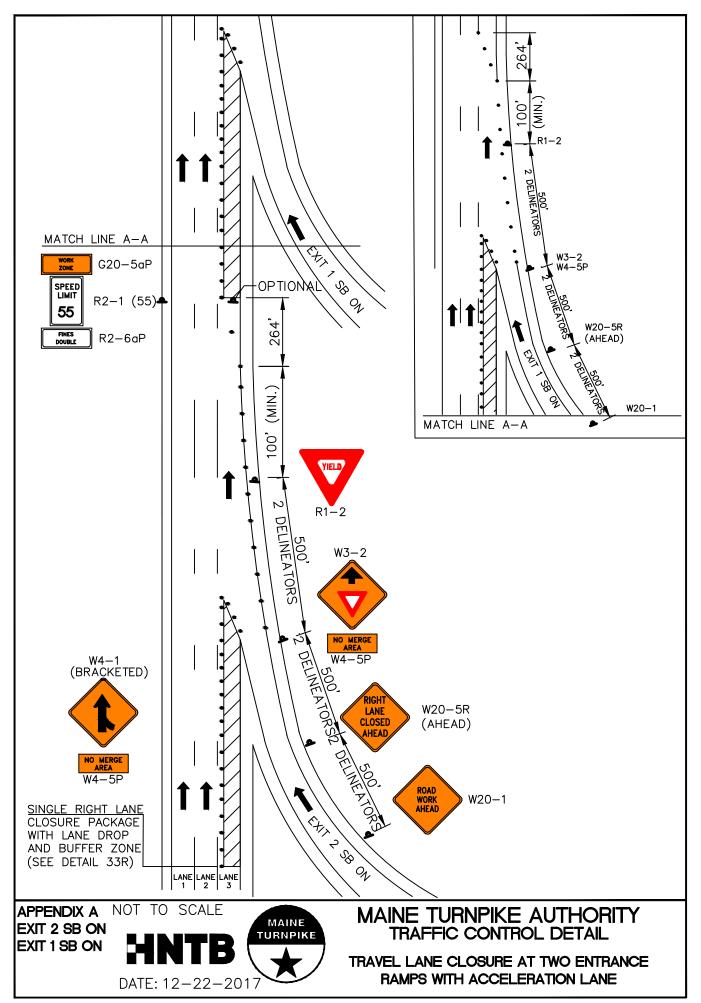


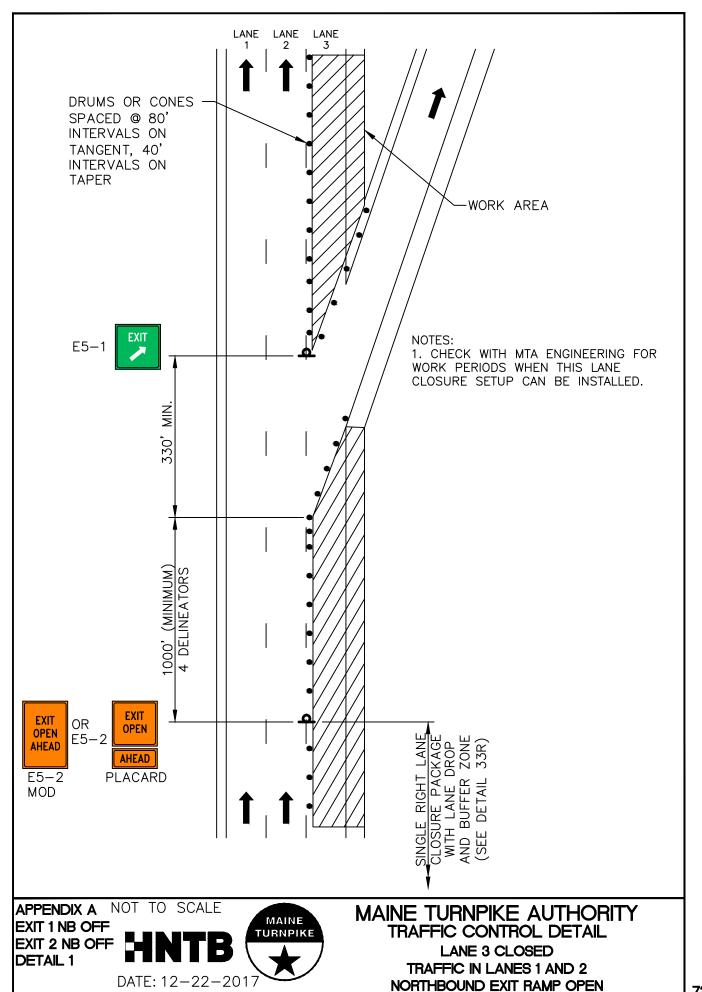


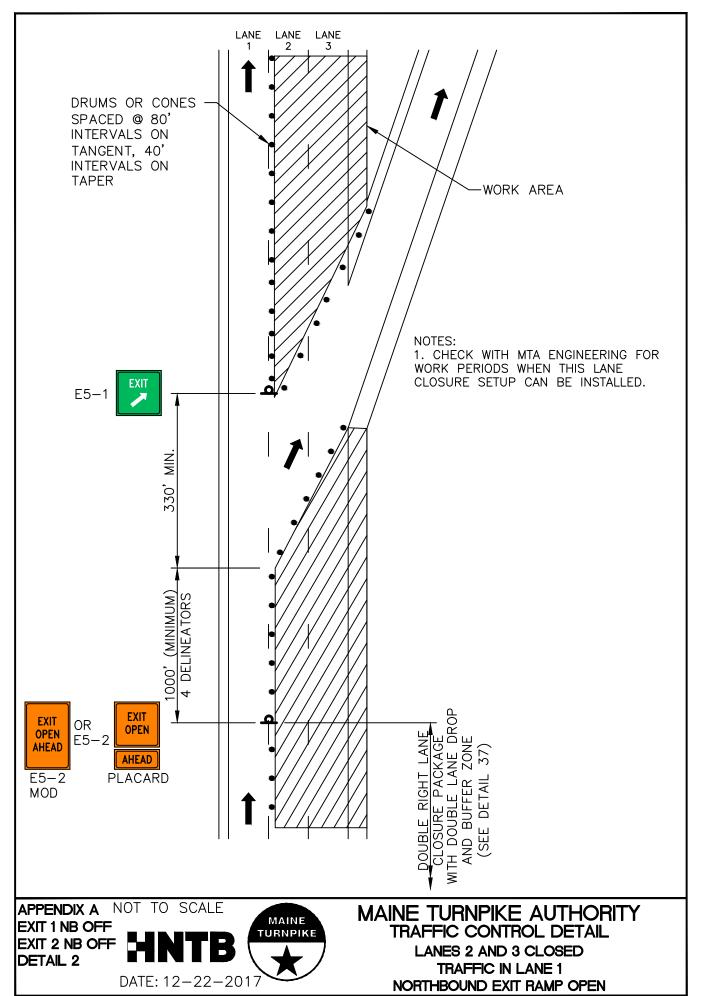


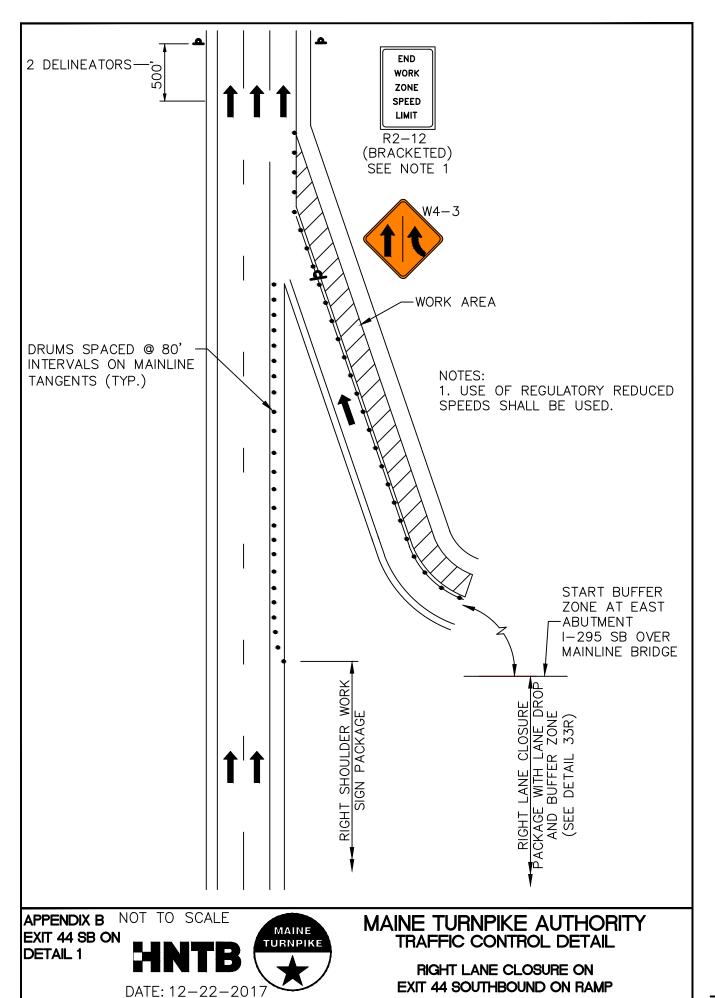


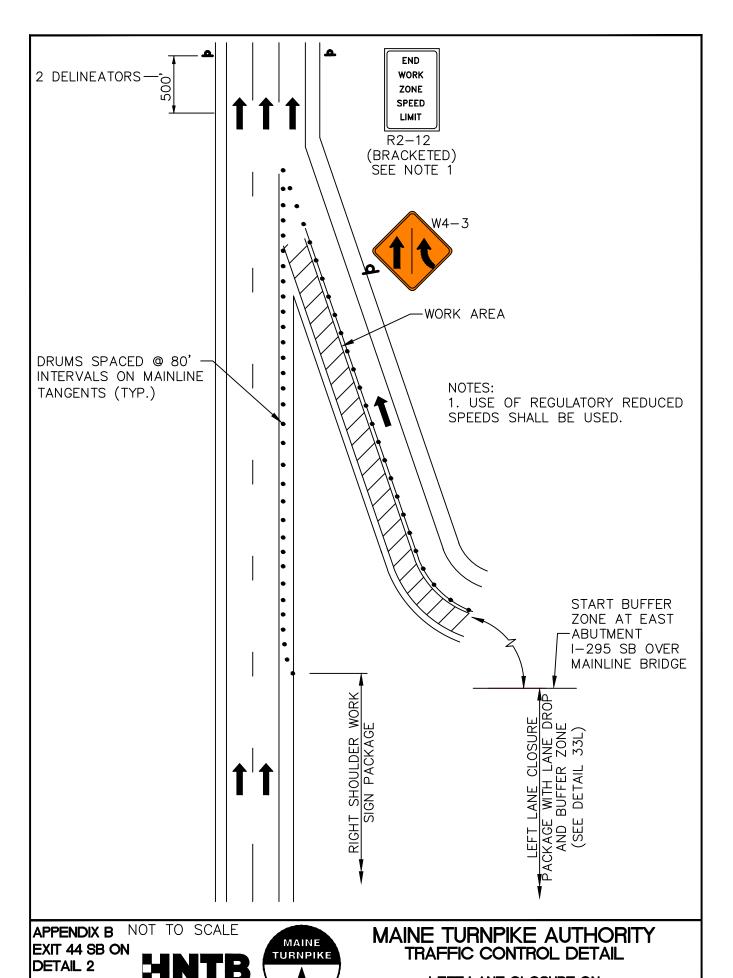






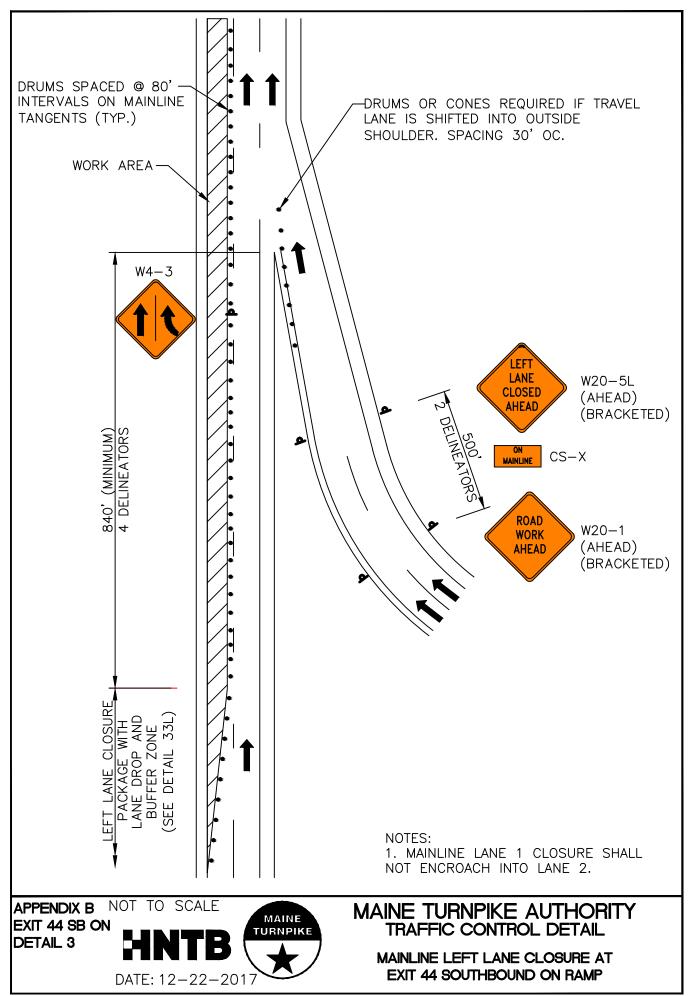


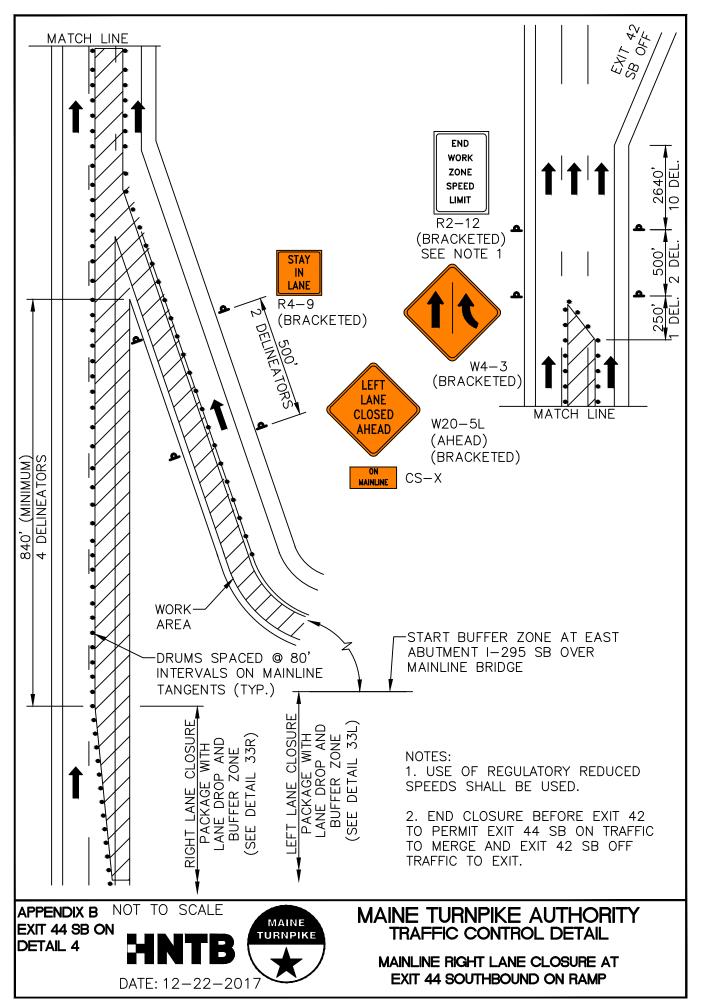


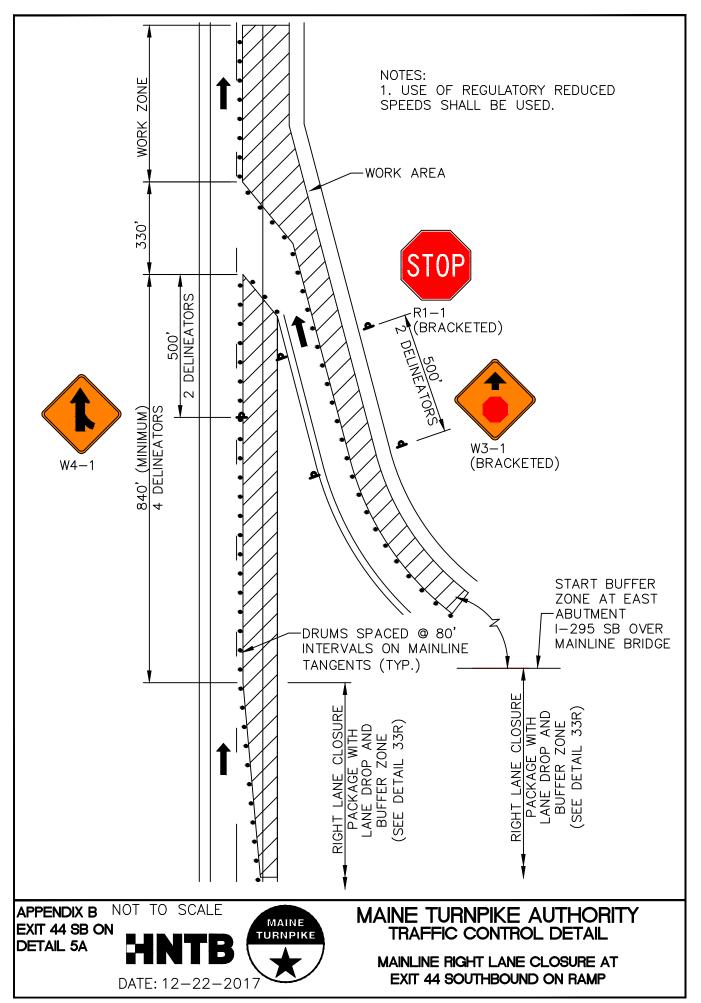


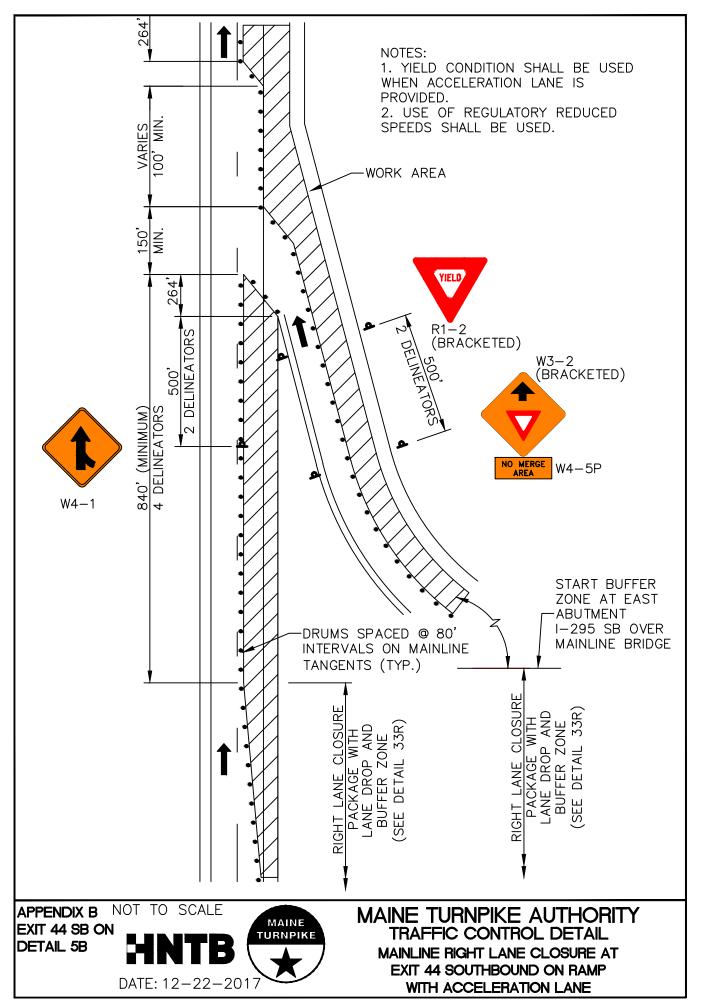
DATE: 12-22-2017

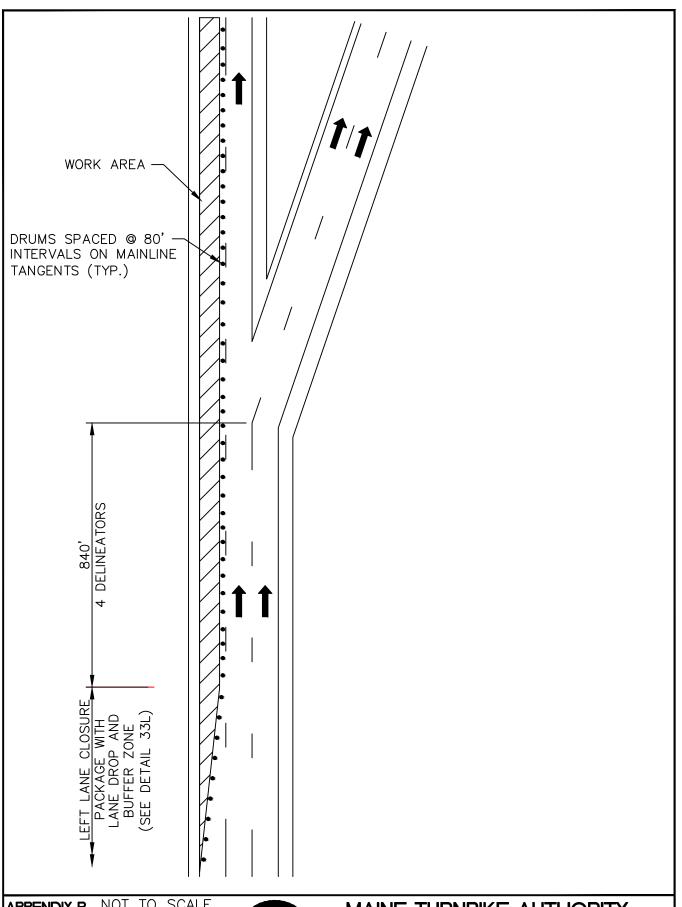
LEFT LANE CLOSURE ON EXIT 44 SOUTHBOUND ON RAMP











APPENDIX B NOT TO SCALE

EXIT 44 NB OFF
DETAIL 1

DATE: 12-22-2017

MAINE TURNPIKE AUTHORITY TRAFFIC CONTROL DETAIL

PASSING LANE CLOSURE AT AN EXIT RAMP

