

# TC-1

County

## **WORK ZONE TRAFFIC CONTROL Project Special Provisions Table of Contents**

| <b>Special Provision</b>                                     | <b>Page</b> |
|--|-------------|
| Work Zone Traffic Control for Interstate/Freeway Resurfacing | TC-2        |

# TC-2

County

**REMOVE THIS TEXT AFTER READING: THIS PROVISION IS ONLY INTENDED LANE, RAMP, AND LOOP CLOSURES WHERE THE EXISTING TRAFFIC PATTERNS ARE RESTORED AT THE END OF EACH WORK PERIOD. LANE, RAMP, OR LOOP CLOSURES IN PLACE FOR MORE THAN ONE WORK PERIOD ARE BEYOND THE SCOPE OF THIS PROVISION.**

THE USE OF PORTABLE CONCRETE BARRIER IS ALSO BEYOND THE SCOPE PROVISION. TRANSPORTATION MANAGEMENT PLAN DEVELOPMENT IS REQUIRED IF ANY OF THESE CONDITIONS WILL EXIST.

**CONTRACTS USING THIS PROVISION WILL ONLY USE ROADWAY STANDARD DRAWINGS FOR TRAFFIC CONTROL AND WILL NOT HAVE TMP DETAILS.**

**IN ADDITION, IF THIS PROVISION IS USED, THEN YOUR CONTRACTS SHOULD NOT HAVE TRADITIONAL BID ITEMS (DRUMS, PCMS, FLASHING ARROW BOARDS, ETC).**

## **WORK ZONE TRAFFIC CONTROL FOR INTERSTATE/FREEWAY RESURFACING** (02/17/2020) (Rev. 8/3/2023)

### **General Requirements**

This Provision is intended for interstate / freeway resurfacing projects. In the event the day and time restrictions allow for daytime work activities, the Work Zone Presence Lighting and Sequential Flashing Lights are to be omitted during daylight hours. The Digital Speed Limit Signs and Connected Lane Closure Devices will be required at all times as described below.

Maintain traffic in accordance with Divisions 10, 11 and 12 of the *NCDOT Standard Specifications* and the following provisions:

Install Work Zone Advance Warning Signs in accordance with the attached drawing prior to beginning any other work.

When personnel and/or equipment are working on the shoulder adjacent to a divided facility and within 10 feet of an open travel lane, close the nearest open travel lane using Standard Drawing No. 1101.02 of the *NCDOT Roadway Standard Drawings*.

When personnel and/or equipment are working within a lane of travel of a divided facility, close the lane using Standard Drawing No. 1101.02 of the *NCDOT Roadway Standard Drawings* or as directed by the Engineer. Conduct the work so that all personnel and/or equipment remain within the closed travel lane. Perform work only when weather and visibility conditions allow safe operations as directed by the Engineer.

## 1. Time Restrictions for Lane Closure and Road Closure Activities

All lane closure and road closure activities shall be performed in compliance with the day and time restrictions listed and defined in this Contract.

Any activities performed outside of these requirements will be subject to the liquidated damages unless approved by the Engineer prior to beginning the activity.

The Contractor may place/pre-stage all required signs and traffic control devices necessary for lane closures prior to the closure time as approved by the Engineer. However, flashing arrow boards and changeable message signs shall not indicate lane closure information until 30 minutes or less prior to the installation of the lane closure. Allowable pre-staging times are 1 hour for a single lane closure and 2 hours for double and triple lane closures. The travel lane(s) are to be closed at the prescribed times defined in this Contract. When available, law enforcement should be onsite to shadow workers during pre-staging activities.

For removal, the lane(s) must be reopened in compliance with the times defined in this Contract. It is acceptable to remove the signs and traffic control devices from the shoulder/staging area after the lane(s) are reopened to traffic. All electronic lane closure messages and flashing arrow displays shall be off once lanes are opened. When available, law enforcement should remain on the project while workers remove and secure their signs and devices.

## 2. Work Zone Speed Limits and Digital Speed Limit Signs (DSLSS)

All speed limits are the sole authority of the NCDOT. An ordinance by the State Traffic Engineer is required for all speed limits in order to have a lawfully enforceable speed limit. No speed limit messages/signs shall be installed prior to receiving a signed ordinance.

The Regional Traffic Engineering Office and the Division Construction Engineer in coordination with the Work Zone Traffic Control Section will provide all work zone speed limit recommendations based on activities and conditions.

When lane closures are in effect, implement a Work Zone Variable Speed Limit Reduction as stated in the ordinance and in accordance with the attached provision and drawing.

Use Digital Speed Limit Signs (DSLSS) to display the work zone speed limit as shown in the attached special provision and drawing. The speed limit shall be continuously displayed on the digital speed limit signs.

# TC-4

County

The Contractor will be responsible for coordinating with the Engineer when the work zone speed limits are to be changed and will have to seek approval by the Engineer before the speed limit is changed.

When the variable speed limit reductions are in effect, cover or remove any existing speed limit signs located within the active work area that conflict with the variable speed limit reduction.

The speed limit shall be returned to the existing speed limit when the lane closure is removed and traffic is returned to the existing pattern.

### 3. Connected Lane Closure Devices

Furnish and install Connected Lane Closure Devices that transmit the location of the lane closure to navigational companies and the Statewide Transportation Operations Center (STOC).

### 4. Work Zone Presence Lighting and Sequential Flashing Warning Lights

Provide the following for nighttime work activities:

A. Furnish and install Work Zone Presence Lighting to supplement the Contractor's portable construction and equipment lighting for the purpose of alerting motorist to the existence of an active work zone and to encourage compliance with the reduced work zone speed limit. See attached special provision.

B. Furnish and install Sequential Flashing Warning Lights on drums used for merging tapers to assist motorist in determining which direction to merge and to decrease late lane merging. See **Section 1140 of the NCDOT Standard Specifications**.

### 5. Law Enforcement

Use two (2) off duty, uniformed law enforcement officers and official law enforcement vehicles, equipped with blue lights during lane closure operations and **one** additional law enforcement officer for **each** ramp/loop closure when both operations occur simultaneously.

Use law enforcement officers to assist in the shadowing of workers during the installation and during the removal of lane closures.

Law enforcement vehicles shall not be parked within the buffer space **or be used to block an active travel lane at any time, including installing or removing lane closure tapers**. When possible, position one law enforcement officer downstream of the other to conduct enforcement operations. When space is confined, conduct enforcement outside of the lane closure area.

# TC-5

County

## Temporary Traffic Control (TTC)

Refer to Standard Drawing No. 1101.02, 1101.11, 1110.01, 1110.02, 1115.01, 1130.01, 1135.01, 1165.01, and 1180.01 of the *NCDOT Roadway Standard Drawings* when closing a lane of travel in a stationary work zone for items such as milling, paving, diamond grinding concrete pavements, minor bridge operations, and approach slab rehabilitation.

Drums are recommended for all lane closure operations occurring at night. However, if skinny drums are used at night, they shall be placed every 80' in the tangent sections of lane closure operations. Skinny drums shall not be used for upstream or shifting tapers.

When covering any signs, use an opaque material that prevents reading of the sign at night by a driver using high beam headlights. Use material which does not damage the sign sheeting. Adhesives of any kind, including tape, shall not be applied to the sign face.

Refer to Roadway Standard Drawing No. 1101.02, Sheets 10 and 11, of the *NCDOT Roadway Standard Drawings* for diamond grinding, milling and/or paving of ramps unless otherwise approved to be closed by the Engineer. If approved, see attached drawing for typical placement of devices and signing for the detour route. All items shall be compensated for based on the unit bid price for the respective item.

Refer to Roadway Standard Drawing No. 1101.03, Sheet 7, of the *NCDOT Roadway Standard Drawings* for a closure of the interstate/freeway with traffic detoured via interchange ramps for items such as minor bridge and approach slab rehabilitation. Use flaggers or law enforcement to direct traffic at ramp terminals as directed by the Engineer.

Refer to Roadway Standard Drawing No. 1101.02, Sheet 15 or 16, of the *NCDOT Roadway Standard Drawings* for utilizing a moving operation for such items as pavement marking and marker placement. A minimum speed of 3 mph shall be maintained at all times with no stops that narrow or close a lane of travel. If the moving operation is progressing slower than 3 mph at any time, install a lane closure. All traffic control devices for this operation are considered incidental to the pay items for pavement markings and markers.

## Traffic Operations

### 1. Project Requirements

Failure to comply with the following requirements will result in a suspension of all other operations:

- A. Before working on ANY MAP, the Contractor shall submit a written construction sequence for traffic control and construction lighting for ALL MAPS to the Engineer at the first pre-construction meeting and the sequence must be approved before closing a lane of traffic.

- B. The standard active work area is 2 miles. This is defined as the distance of Resurfacing Operations taking place in a single work period. The maximum allowed lane closure distance is 5 miles, however, approval by the Engineer is required before closing more than 2 miles of Interstate to ensure the Contractor has the equipment and labor force to actively pursue the work.
- C. Notify the Engineer 15 consecutive calendar days before resurfacing a bridge or its approaches. Patch and make repairs to bridge surface and its approaches before resurfacing occurs. Coordinate all operations on the bridge and its approaches with the Engineer.
- D. Notify the Engineer 48 hours before resurfacing the areas of existing pavement that require patching. Patch these areas before resurfacing occurs. Allow full depth asphalt patching to cool to the point of supporting traffic without displacement or rutting before reopening closed lane. Coordinate the resurfacing operations of the patched areas with the Engineer.
- E. Notify the Engineer 48 hours before milling or resurfacing will interfere with the existing Signal Loops. Loops may need to be placed in milled surface before resurfacing occurs. Coordinate all signal loop operations with the Engineer.
- F. Obtain written approval of the Engineer before working in more than one location or setting up additional lane closures.
- G. The Contractor on this and any adjacent projects, or subcontractors working within this project shall coordinate lane closure location, type, and direction with the Engineer to best maintain lane continuity through the limits of this and adjacent projects.
- H. Operate equipment and conduct operations in the same direction as the flow of traffic. Maintain vehicular access in accordance with Article 1101-05 of the *NCDOT Standard Specifications*.
- I. Provide appropriate construction lighting in accordance with Section 1413 of the *NCDOT Standard Specifications*.
- J. Contractor shall diamond grind, mill, and pave lanes in an order such that water shall not accumulate.

## 2. Paving Lift Requirements and Time Limitations

**Failure to comply with the following requirements will result in a suspension of all other operations until all lanes of traffic are brought to the same station and elevation:**

Paving Overlays and Lifts up to 3”

# TC-7

County

- A. For surface course paving lifts of 2” or less, the Contractor shall conduct his paving operations such that the following conditions are met.

Once paving begins in any lane, the Contractor will be permitted to pave as far as the work operations allow (up to 5 miles) for the initial paving period. In the next days’ paving operation, not to exceed 72 hours **later**, bring the adjacent lane to the same station and elevation. At the end of the work period, any uneven lane conditions shall be signed with an “UNEVEN PAVEMENT/NEXT XX MILES” on the portable changeable message signs and portable “UNEVEN PAVEMENT” signs (dual mounted) 1,000’ in advance of the uneven pavement and every ½ miles thereafter along the uneven portion of roadway. Once mitigated, all portable “UNEVEN PAVEMENT” signs shall be removed.

For Open Graded Surface Mixes, “UNEVEN PAVEMENT” signs are not required.

- B. For 3” surface course mixes, place in two paving lifts of 1 ½” each unless directed otherwise by the Engineer. Conditions for uneven travel lanes same as described above.

## Paving Lifts Greater than 3”

For all other paving lifts greater than 3”, bring all newly resurfaced lanes to the same station and elevation by the end of each work period unless the Contractor utilizes the notched wedge paving methods as described below:

- A. Any paving lift greater than 3” shall be mitigated by having an approved wedge apparatus on the paver that shapes the edge 1” vertically and the remaining at a maximum slope steepness of 2:1. The maximum paving lift allowed to use this method is 3”.
- B. At the end of the work period, the Contractor shall place portable “UNEVEN PAVEMENT” signs in advance of the uneven pavement and spaced every ½ mile along the section of uneven pavement. Once mitigated, all portable “UNEVEN PAVEMENT” signs shall be removed.
- C. In the next day’s paving operation and not to exceed 72 hours **later**, the Contractor shall bring up the adjacent lane to the same station and elevation before any further paving takes place on the project.

## Milling Operations (Does Not Apply to Fine Milling)

Conduct milling operations so that any milled pavement is paved back by the end of each work period.

A milled/grooved surface shall not be re-opened to traffic except in cases where inclement weather or mechanical failure prevents the paving back of the lane by the end of the work period.

If milled areas are not paved back within the same work period due to inclement weather or mechanical failure, the Contractor is to furnish and install portable signs to warn drivers of the conditions. The signs include “Grooved Pavement” (W8-15) w/ Motorcycle Plaque mounted below, and “Uneven Lanes” (W8-11). These are to be dual indicated where lateral clearance can be obtained within the median areas. Install the “Grooved Pavement” (W8-15) w/ Motorcycle Plaque 1500’ in advance of the milled area. Install the “Uneven Lanes” (W8-11) 500’ in advance of the milled area. Alternate these signs every ½ mile. Once mitigated, all portable signs are to be removed.

Slope the pavement at the beginning and ending of the daily milling operation as directed by the Engineer. Sweep and remove all milled material from the roadway as soon as the daily milling operation is completed. Remove any existing pavement adjacent to the milled area that has been damaged and replace with patch material as directed by the Engineer.

### Fine Milling / Microsurfacing Operations (Depths less than 1”)

For fine milling operations less than 1”, paving is not required in the same work period. The paving of the fine milled area is to be conducted within the next work period and not to exceed 72 hours later. No advance warning signs are needed for the conditions. However, pavement markings are required by the end of each work period.

### **3. Temporary Pavement Markings**

Review and record the existing pavement markings and markers before obliteration. Re-establish the new pavement markings and markers using the record of existing markings in conjunction with the *NCDOT Roadway Standard Drawings* unless otherwise directed by the Engineer. Submit the record of the existing pavement markings seven calendar days before the obliteration of any pavement markings.

Obliterated pavement markings shall be replaced by the end of each work period. Interim paint may be used to comply with time limitations if final pavement markings cannot be placed except for milled surfaces or diamond ground surfaces. Final markings shall be placed within 30 days in accordance with Section 1205-4 and Section 1205-5. For milled surfaces, temporary pavement markings shall be used in accordance with Section 1205-8(C). There will be no direct payment for interim paint. Temporary paint will be paid for at the contract unit price.

For concrete surfaces that have been diamond ground as a surface treatment, 4” temporary paint shall be used in accordance with Section 1205-8(C). Upon completion of all diamond grinding operations, 4” line removal shall be used to remove 100% of the 4” temporary paint on the final concrete surface by grinding method only. Use an acceptable method to grind ridges smooth only where pavement markings will be installed prior to placing final pavement marking material. This

method shall also be used in the area of the black contrast for surface preparation. Payment for line removal will be made in accordance with Section 1205-10.

For project winterization, install temporary paint markings in accordance with Section 1205-8(C) of the *NCDOT Standard Specifications*. Use 4" lane, edge, and center lines and 8" gore lines. Compensation for this work shall be made in accordance with Section 1205-10 except that no payment will be made if paving is completed more than 30 days before the written notification by the Department that winterization is required.

## **4. Work Zone Signing**

### **A. Description**

Install advance/general warning work zone signs according to the attached drawings prior to beginning work.

For paving overlays of 3" or greater that create a drop-off adjacent to the median shoulder, install "LOW/SOFT SHOULDER" (SP 13107) signs on the median shoulder. Place initially at the construction limits, and then space 1 mile thereafter. No signing required for the outside shoulder.

Install and maintain signing in accordance with the Divisions 11 and 12 of the *NCDOT Standard Specifications*.

### **B. Installation**

All stationary Work Zone Advance/General Warning signs require notification to existing Utility owners per Article 105-8 of the *Standard Specifications* and within 3 to 12 full working days prior to installation.

Install all Work Zone Advance/General Warning signs before beginning work on a particular map. If signs are installed more than seven (7) calendar days prior to the beginning of work on a particular map, cover the signs until the work begins. Install each Work Zone Advance/General Warning sign separately and not on the same post or stand with any other sign except where an advisory speed plate or directional arrow is used.

All sign locations to be verified by the Engineer prior to installation. Once the signs have been installed and accepted, any sign relocations requested by the Department will be compensated in accordance with Article 104-7. Any additional signs other than the ones required in this provision or attached drawings will be compensated in accordance with Article 104-7.

# TC-10

County

If there is a period of construction inactivity longer than 14 calendar days, remove or cover Work Zone Advance/General Warning signs. Uncover Work Zone Advance/General Warning signs no more than 7 calendar days before work resumes.

All other operations may be suspended upon failure to comply with the above requirements. Such suspended operations would not be resumed until the above requirements are fulfilled.

## C. Sign Removal

Once Maps on the project are substantially completed, it is acceptable to remove the stationary work zone signs on those Maps in lieu of waiting until all of the Maps are completed on the project. A Map is substantially complete when the resurfacing operations are completed and the shoulders are brought up to the same elevation as the proposed pavement and when temporary pavement markings (paint) are installed along the centerline and edge lines as well as the ramps and loops. The final pavement markings (thermoplastic or polyurea) and/or markers do not have to be installed for the Map to be considered substantially complete. Final pavement markings and markers are installed with portable signing and changeable message signs according to Roadway Standard Drawing 1101.02, Sheet 16. Any remaining punch list items requiring traffic control are to be completed using portable work zone signing with compensation covered in the contract unit price for the required traffic control items.

**Stationary Work Zone Sign removal is a condition of final project acceptance.**

## D. Lane Closure Work Zone Signs

Install any required lane closure signing needed during the life of the project in accordance with the Standard Drawing No. 1101.02, 1101.11, and 1110.02 of the *NCDOT Roadway Standard Drawings*.

## Measurement and Payment

The lane closure distance is measured from the end of the merge taper where traffic is completely in the remaining open lane(s) to the last channelizing device closing the lane. For multiple lane closures, the lane closure distance is measured from the end of the last merge taper to the last channelizing device closing the lane.

*Work Zone Signs (Stationary)* will be measured and paid as the actual number of square feet satisfactorily installed at each location and accepted by the Engineer.

# TC-11

County

*Single Lane Closure* will be measured and paid as the actual number of single stationary lane closures satisfactorily installed for required operations as shown in Roadway Standard Drawing 1101.02, sheets 4, 5, 6, 10, & 11. All labor, traffic control devices, and signing for *Single Lane Closure*, up to 5 miles, as shown in these Roadway Standard Drawings are paid under this item.

*Double Lane Closure* will be measured and paid as the actual number of double stationary lane closures satisfactorily installed for paving and all other required operations as shown in Roadway Standard Drawing 1101.02, sheet 8, 10, & 11. All labor, traffic control devices, and signing for *Double Lane Closure*, as shown in these Roadway Standard Drawings are paid under this item. In the event, separate double lane closures are necessary in the same direction as the work operation and the closures are at least 2 miles apart, the Contractor will be paid for each double lane closure.

*Triple Lane Closure* will be measured and paid as the actual number of triple stationary lane closures satisfactorily installed for paving and all other required operations as shown in Roadway Standard Drawing 1101.02, Sheet 9, 10, & 11. All labor, traffic control devices, and signing for *Triple Lane Closure* as defined above are paid under this item. In the event, separate triple lane closures are necessary in the same direction as the work operation and the closures are at least 2 miles apart, the Contractor will be paid for each triple lane closure.

*Ramp/Loop Traffic Control* will be measured and paid as the actual number of traffic control set ups satisfactorily installed at each ramp and loop as shown in Roadway Standard Drawing 1101.02, sheets 10 and 11, for paving and all other required operations. This includes set ups on multiple lane ramps and loops. All labor, traffic control devices, and signing for *Ramp/Loop Traffic Control* as shown in these Roadway Standard Drawings are paid under this item.

*Ramp/Loop Closure* will be measured and paid as the actual number of total ramp/loop closures and detours satisfactorily installed for ramp/loop paving and all other required operations, as shown on Roadway Standard Drawing 1101.02, Sheets 13 & 14, and the Short Term Closure and Detour of Interstate/Freeway Ramps detail drawing. All labor, traffic control devices and signing required for re-routing traffic as shown on the Roadway Standard Drawings and Short Term Closure and Detour of Interstate/Freeway Ramps detail drawing are paid under this item. In the event two separate ramps are closed at the same time, they will be measured individually and paid on a per each basis.

*Paint Pavement Marking Lines, Paint Pavement Marking Symbols, and Removal of Pavement Marking Lines* will be measured and paid in accordance with Section 1205-10.

*Law Enforcement* will be measured and paid as the actual number of hours each law enforcement officer provides during the life of the project as approved by the Engineer.

# TC-12

County

*Sequential Flashing Warning Lights* will be measured and paid as the maximum number of sequential flashing warning lights satisfactorily installed and properly functioning at any one time during the life of the project.

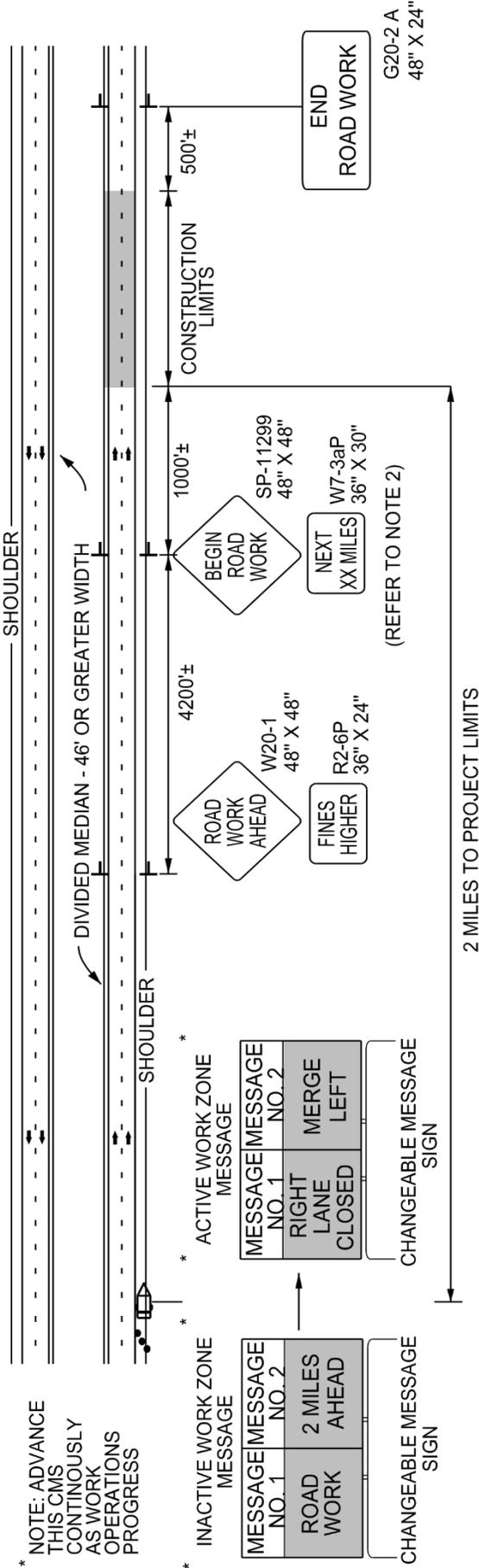
Digital Speed Limit Signs, Connected Lane Closures, , and Work Zone Presence Lighting are paid separately in accordance with their respective special provisions.

Payment will be made under:

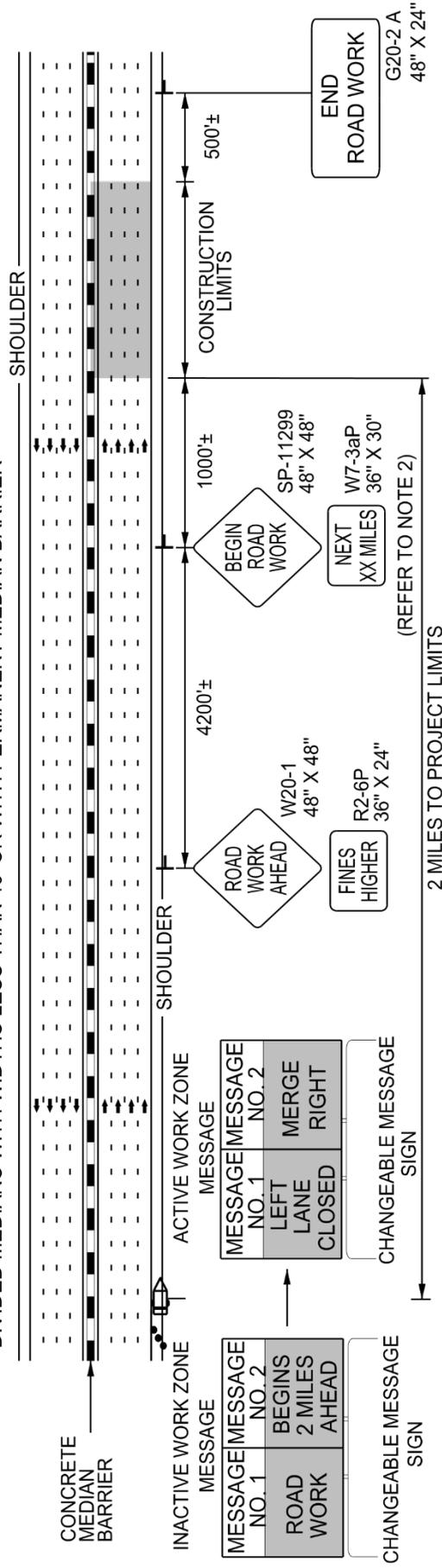
| <b>Pay Item</b>                          | <b>Pay Unit</b> |
|--|-----------------|
| Work Zone Signs (Stationary)             | SF              |
| Single Lane Closure                      | EA              |
| Double Lane Closure                      | EA              |
| Triple Lane Closure                      | EA              |
| Ramp/Loop Traffic Control                | EA              |
| Ramp/Loop Closures                       | EA              |
| Paint Pavement Marking Lines ( __”)      | LF              |
| Paint Pavement Marking Symbols           | EA              |
| Removal of Pavement Marking Lines ( __”) | LF              |
| Law EnforcementHRSequential              | EA              |
| Flashing                                 |                 |
| Warning                                  |                 |
| Lights                                   |                 |
|  | EA              |

STATIONARY ADVANCE WARNING SIGNS FOR INTERSTATE / FREEWAY RESURFACING PROJECTS

DIVIDED MEDIANS WITH WIDTHS 46' OR GREATER



DIVIDED MEDIANS WITH WIDTHS LESS THAN 46' OR WITH PERMANENT MEDIAN BARRIER



- NOTES
1. THIS DRAWING IS TO BE USED IN CONJUNCTION WITH THE WORK ZONE VARIABLE SPEED LIMIT USING DIGITAL SPEED LIMIT SIGNS FOR INTERSTATE/FREEWAY RESURFACING PROJECTS DETAIL.
  2. FOR SIGN W7-3aP, ROUND TO THE NEAREST MILE.
  3. FOR ENTRANCE AND EXIT RAMP, REFER TO RSD 1101.01, SHEET 1, DETAIL B & C.
  4. FOR ADDITIONAL NOTES, REFER TO RSD 1101.01, SHEET 1.

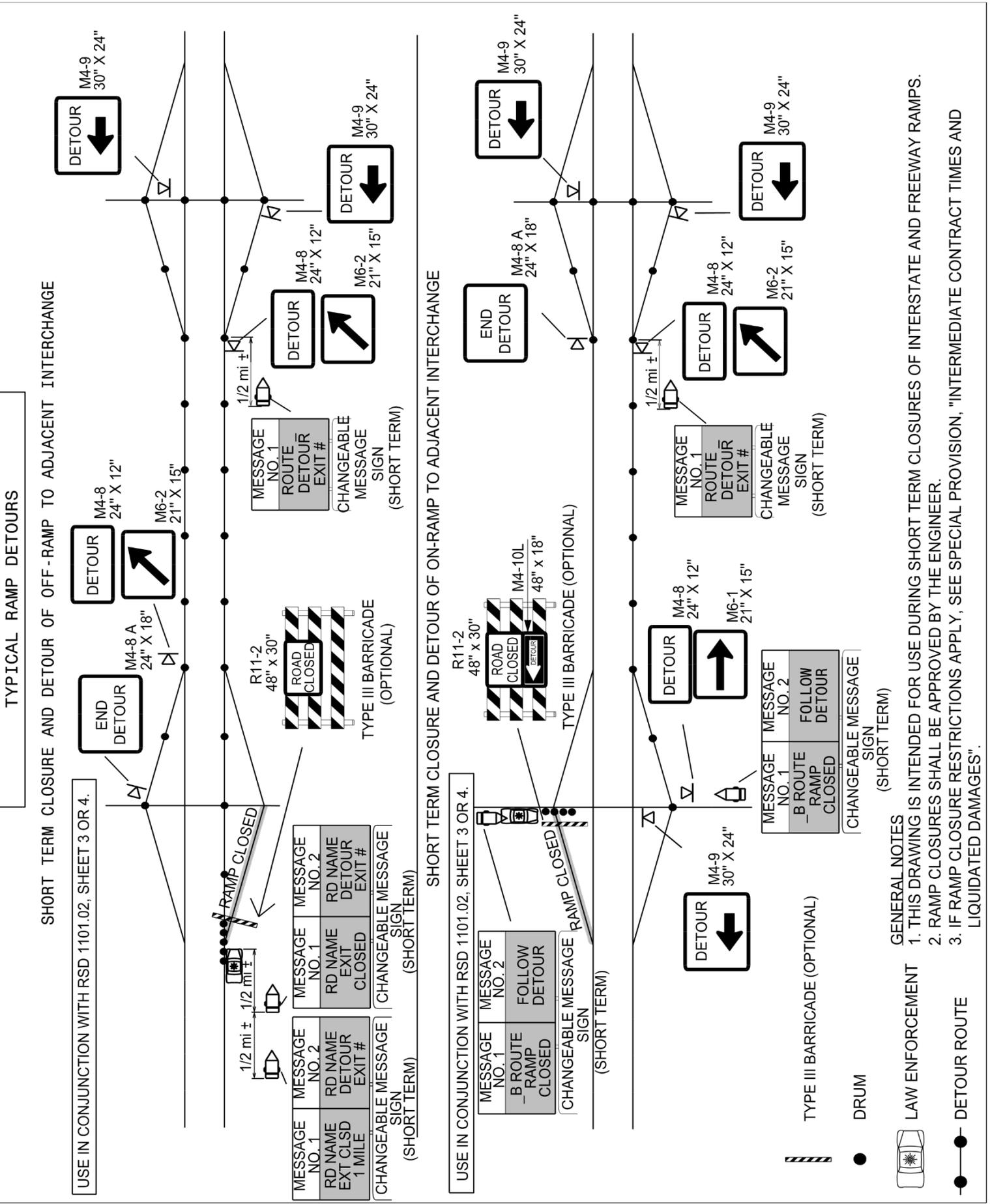
LEGEND

▲ DIRECTION OF TRAFFIC FLOW

● TRAFFIC DRUM

◁ CHANGEABLE MESSAGE SIGN (CMS)

⊥ STATIONARY SIGN



TYPICAL RAMP DETOURS

SHORT TERM CLOSURE AND DETOUR OF OFF-RAMP TO ADJACENT INTERCHANGE

USE IN CONJUNCTION WITH RSD 1101.02, SHEET 3 OR 4.

SHORT TERM CLOSURE AND DETOUR OF ON-RAMP TO ADJACENT INTERCHANGE

USE IN CONJUNCTION WITH RSD 1101.02, SHEET 3 OR 4.

- GENERAL NOTES**
1. THIS DRAWING IS INTENDED FOR USE DURING SHORT TERM CLOSURES OF INTERSTATE AND FREEWAY RAMPS.
  2. RAMP CLOSURES SHALL BE APPROVED BY THE ENGINEER.
  3. IF RAMP CLOSURE RESTRICTIONS APPLY, SEE SPECIAL PROVISION, "INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES".
- LAW ENFORCEMENT**
- DETOUR ROUTE

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| MESSAGE NO. 1                        | MESSAGE NO. 2                        |
| RD NAME<br>EXT CLSD<br>1 MILE        | RD NAME<br>DETOUR<br>EXIT #          |
| CHANGEABLE MESSAGE SIGN (SHORT TERM) | CHANGEABLE MESSAGE SIGN (SHORT TERM) |

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| MESSAGE NO. 1                        | MESSAGE NO. 2                        |
| RD NAME<br>DETOUR<br>EXIT #          | RD NAME<br>DETOUR<br>EXIT #          |
| CHANGEABLE MESSAGE SIGN (SHORT TERM) | CHANGEABLE MESSAGE SIGN (SHORT TERM) |

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| MESSAGE NO. 1                        | MESSAGE NO. 2                        |
| B ROUTE<br>RAMP<br>CLOSED            | FOLLOW<br>DETOUR                     |
| CHANGEABLE MESSAGE SIGN (SHORT TERM) | CHANGEABLE MESSAGE SIGN (SHORT TERM) |

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| MESSAGE NO. 1                        | MESSAGE NO. 2                        |
| RD NAME<br>DETOUR<br>EXIT #          | RD NAME<br>DETOUR<br>EXIT #          |
| CHANGEABLE MESSAGE SIGN (SHORT TERM) | CHANGEABLE MESSAGE SIGN (SHORT TERM) |

