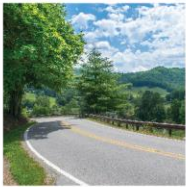




NORTH CAROLINA

Department of Transportation



Work Zone Safety and the MUTCG

Don Parker, PE

State Work Zone Engineer

2022 METTS

March 30, 2022

April 7, 2022

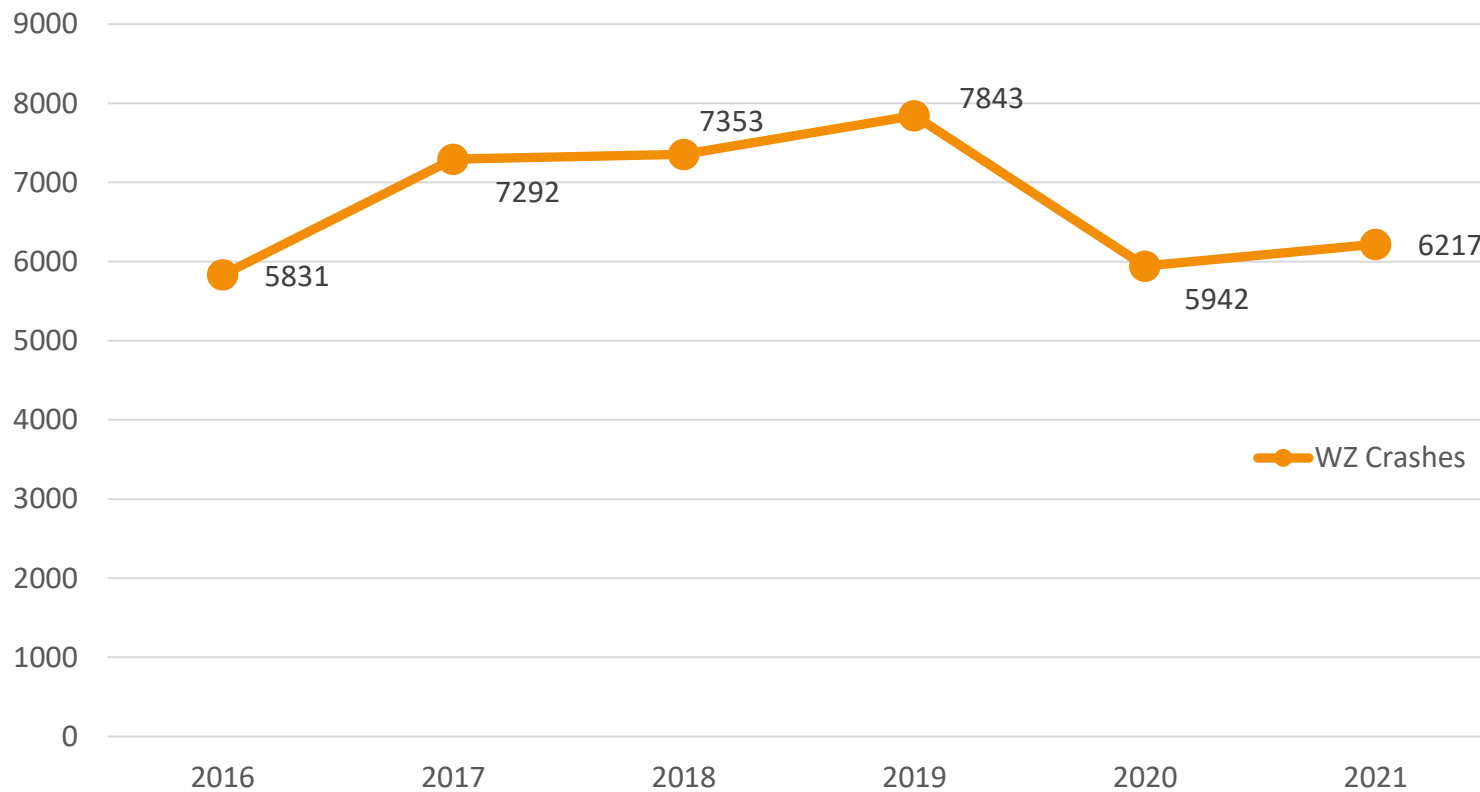
Today's Topics

- Work Zone Crash Data
- National WZ Safety Awareness Week
- Overview of Maintenance and Utility Traffic Control Guidelines (MUTCG)

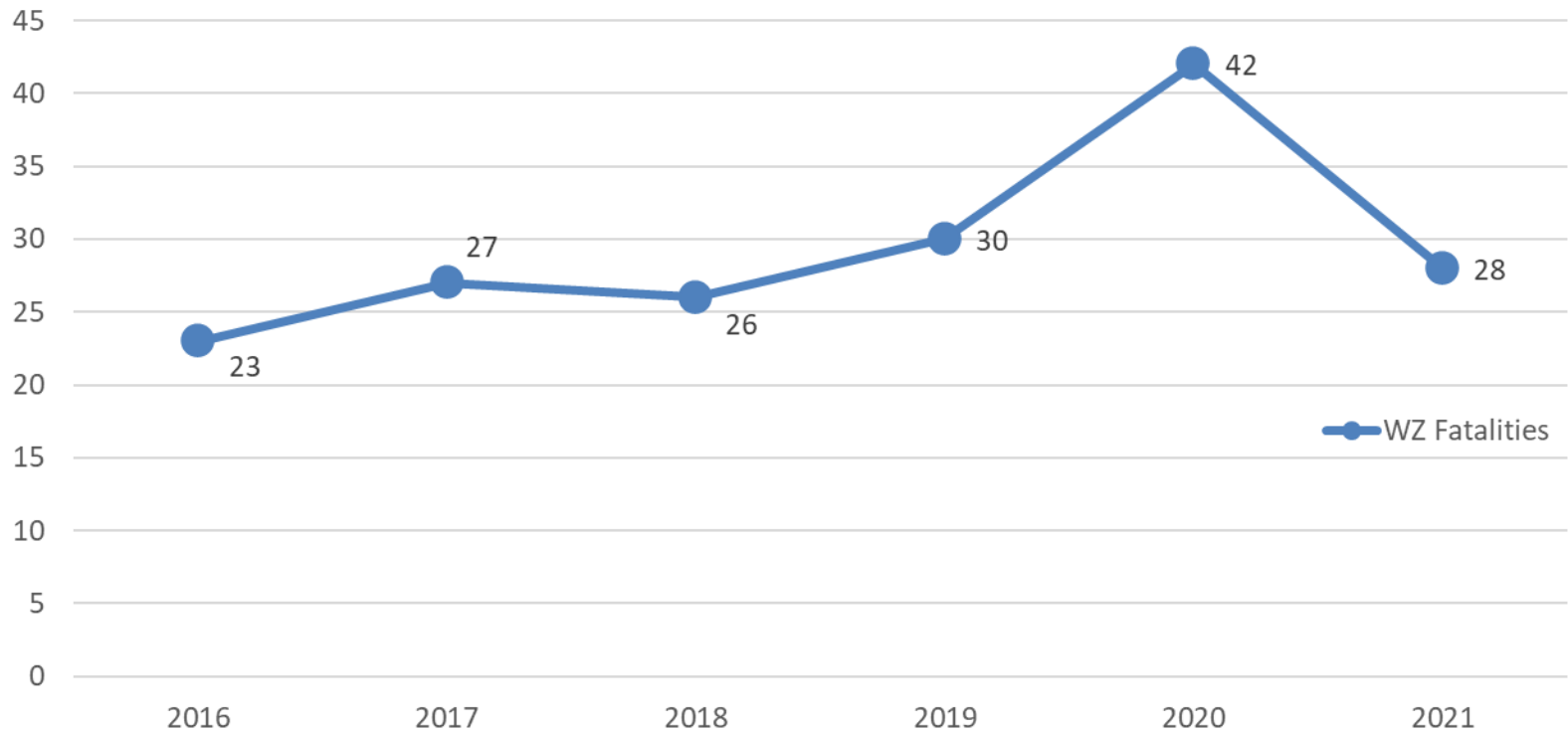
Work Zone Crash Data

- 2020 – 5,942 work zone crashes resulting in 43 fatalities
 - 40% higher than 2019 and 45% above than the 5-year average
- 2021 – 6,217 work zone crashes resulting in 28 fatalities
 - 32% lower than 2020 and 10% below the 5-year average
 - Data through 12/31/2021, however number aren't considered final until late spring to account for delayed fatalities and updated investigations

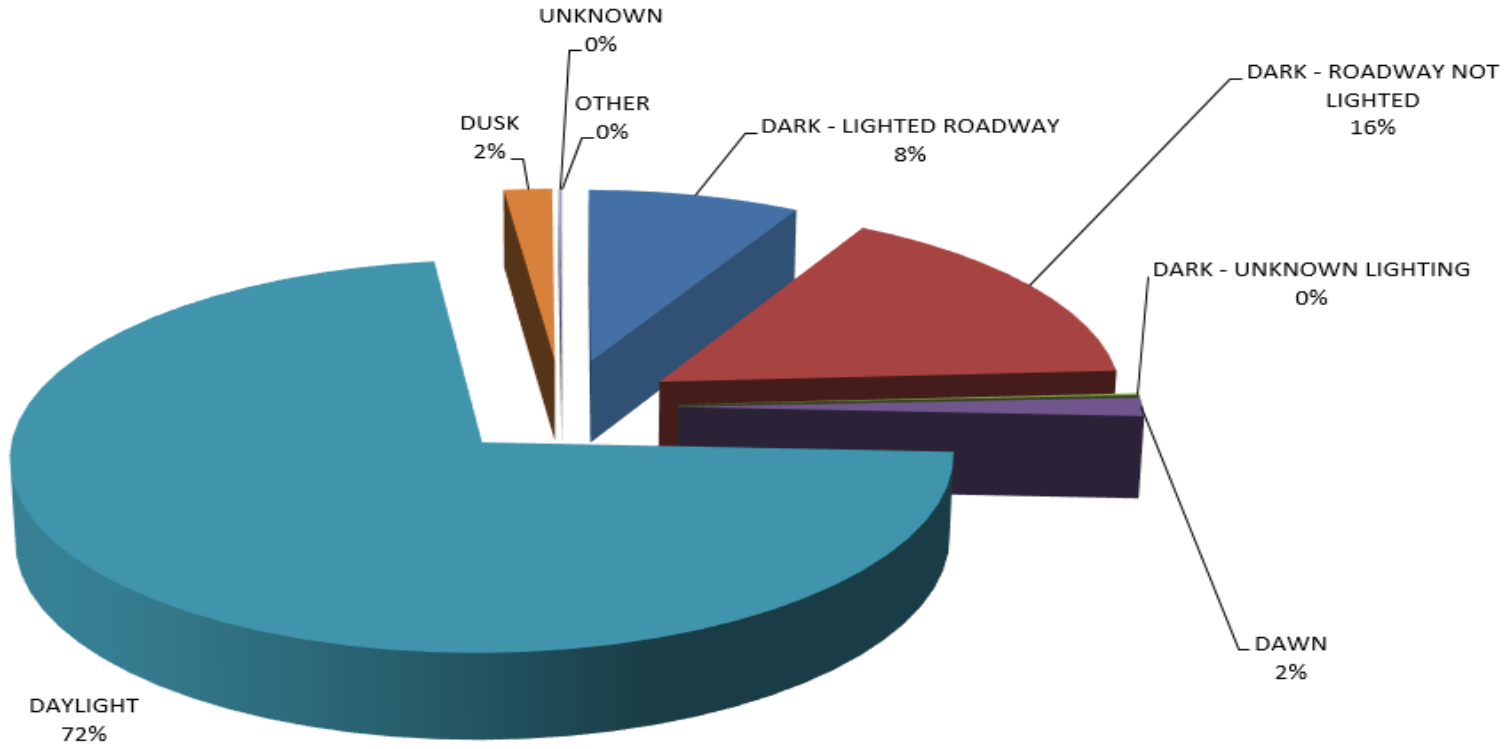
5 Year Trend of Work Zone Crashes



5 Year Trend for WZ Fatalities

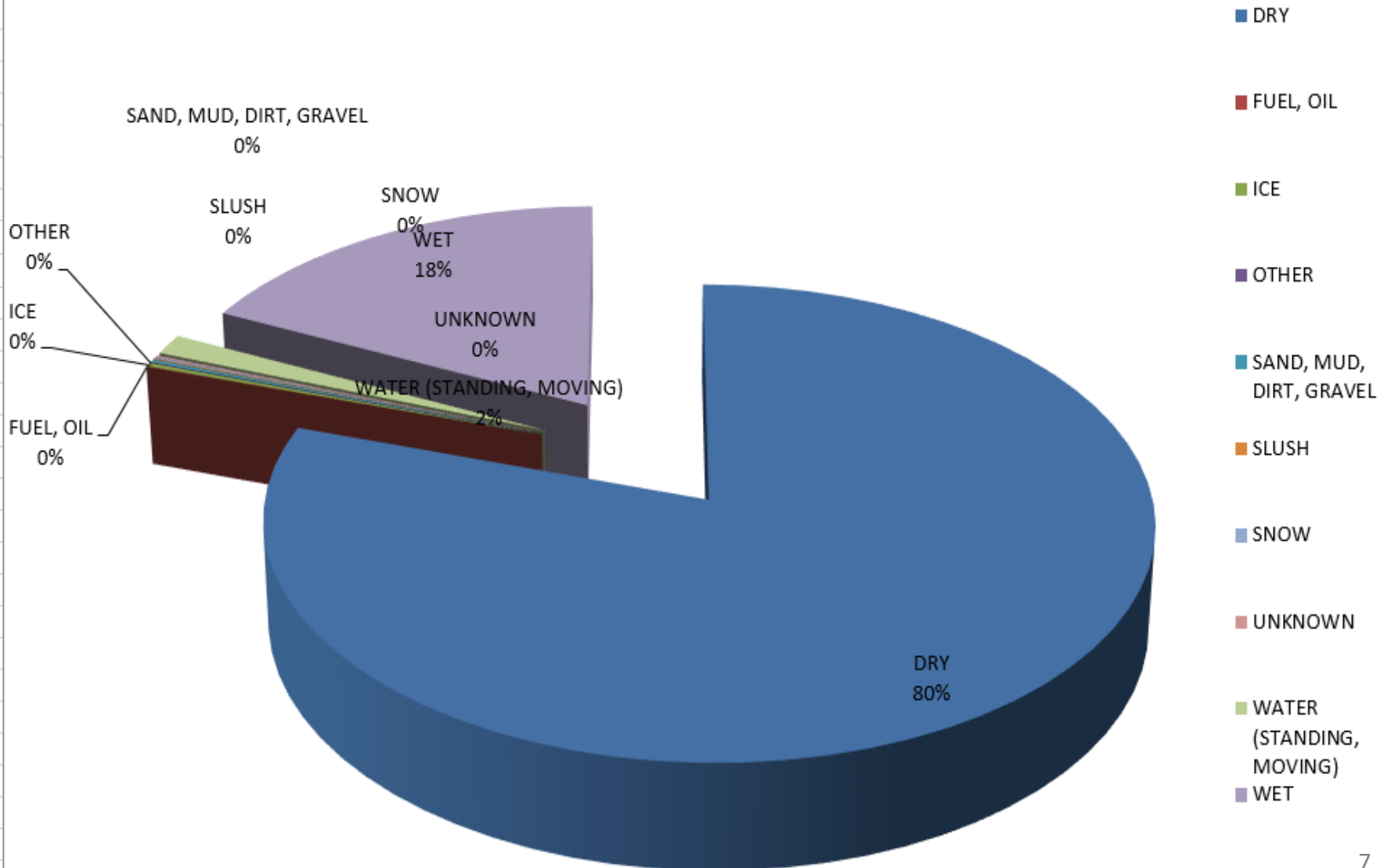


2020 WORK ZONE CRASH COUNT BY LIGHT CONDITION

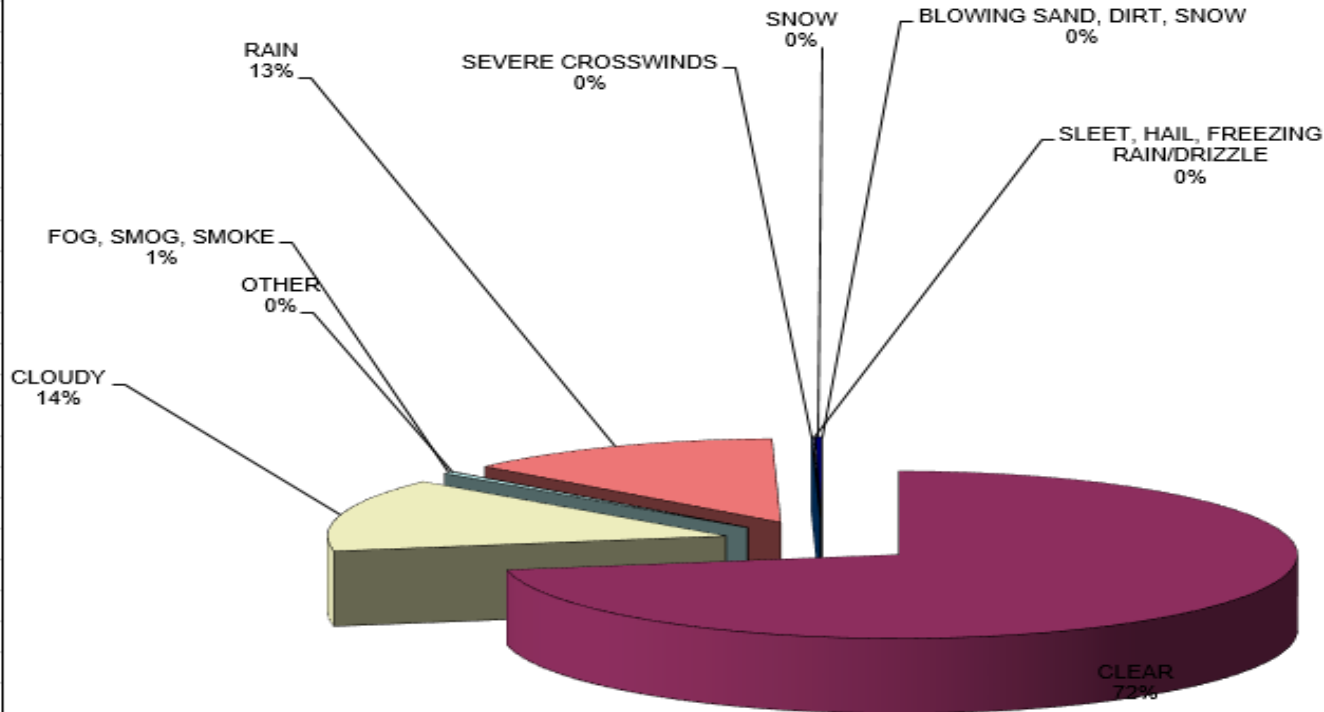


- DARK - LIGHTED ROADWAY
- DARK - ROADWAY NOT LIGHTED
- DARK - UNKNOWN LIGHTING
- DAWN
- DAYLIGHT
- DUSK
- UNKNOWN
- OTHER

YEAR 2020 WORK ZONE CRASH COUNT BY ROAD CONDITION



2020 WORK ZONE CRASH COUNT BY WEATHER CONDITION



Work Zone Crash Data

- Most work zone crashes occur on days when the weather is good, the sun is out, and the road is dry
- **If the motorist is comfortable, you shouldn't be!**

Construction worker killed Fri. after being struck by motorist

By Editor | March 31, 2020 | 0

A Hudson woman working at a construction site was killed last week when she was struck by a car, authorities said.

On Friday, March 27, 2020, at approximately 5:35 p.m., the NC State Highway Patrol responded to a fatal collision in Alexander County on Church Road near Fox Court, according to Master Trooper Jeffrey S. Swagger of the North Carolina State Highway Patrol.

As part of a lane closure due to water line installation, a traffic control flagger was standing in the roadway and displaying a stop sign. The work zone was marked with several signs. A 2014 Volkswagen Golf was traveling south and struck the flagger.

The flagger, Tabatha Dawn White, 44, of Hudson was pronounced dead at the scene. The car was driven by Marah Malynn Sipe, 23, of Taylorsville. Sipe has been charged with Misdemeanor Death By Vehicle and Reckless Driving.

The collision continues to be under investigation.

FLAGGER FOR ROAD CONSTRUCTION ALONG 421 KILLED IN HIT AND RUN

Written by Bill Fisher

[News](#)

Published: 29 July 2019



A man who was working as a flagger on road construction along Highway 421 was struck by an alleged drunk driver Friday and died from his injuries Saturday morning.

The Watauga Democrat reports Israel Alejandro Flores, age 21, reportedly left the scene but was later brought back and charged with felony hit and run and DWI, and then was charged with felony death by vehicle after the flagger, Brittian South, died from his injuries.

According to the report, South was holding a stop/yield sign and was wearing reflective gear.

South is from both Deep Gap and Mountain City. Flores has both a Winston Salem and a Boone address.

Flores was being held on a \$350,000 bond.

The incident occurred in the are of 421 and the 105 bypass.

South was flown to Johnson City Medical Center after the accident, and died around 8:30 Saturday morning.

UPDATE: Three construction workers on crew repairing guard rail on I-40 killed Thursday morning

DONNA SWICEGOOD Feb 27, 2020 Updated Feb 29, 2020



Metro Creative

DONNA SWICEGOOD

The investigation into a crash that killed three construction workers on Interstate 40 early today is still ongoing.

Master Trooper Jeffrey Swagger of the North Carolina Highway Patrol said the names of the three will be released once next-of-kin notifications have been completed.

He said the three workers were part of a crew that was repairing a guard rail on I-40 west near the 157-mile marker.

Swagger said there was a truck in the right lane, which was closed, and the three workers were in the road ahead of that truck. A second truck was in front of the three workers, he said.

NEWS

Construction worker dead, three others injured after being hit by drunk driver near Concord Mills Mall



National Work Zone Safety Awareness Week

April 11-15, 2022

2022 NATIONAL WORK ZONE AWARENESS WEEK

**WORK ZONES ARE A
SIGN TO SLOW DOWN**



The graphic shows a grey road with yellow dashed lines curving through a dark blue background. Four circular cutouts are placed along the road, each containing a white icon: a worker in an orange vest and hard hat, an orange diamond-shaped sign, an orange hexagonal sign with a black border, and a rectangular sign with an orange top half and a white bottom half.



Wear Orange Day April 13th

Show support for those killed in work zones as well as their families.

Post images to social media

#Orange4Safety

#GoOrangeDay



Welcome Center I-95 SB in Northampton County just south of the Virginia Line

April 5-7, 2022 Press Conference TBA



MUTCG – What is it?

MAINTENANCE / UTILITY TRAFFIC CONTROL GUIDELINES



North Carolina Department of Transportation
Work Zone Traffic Control Section

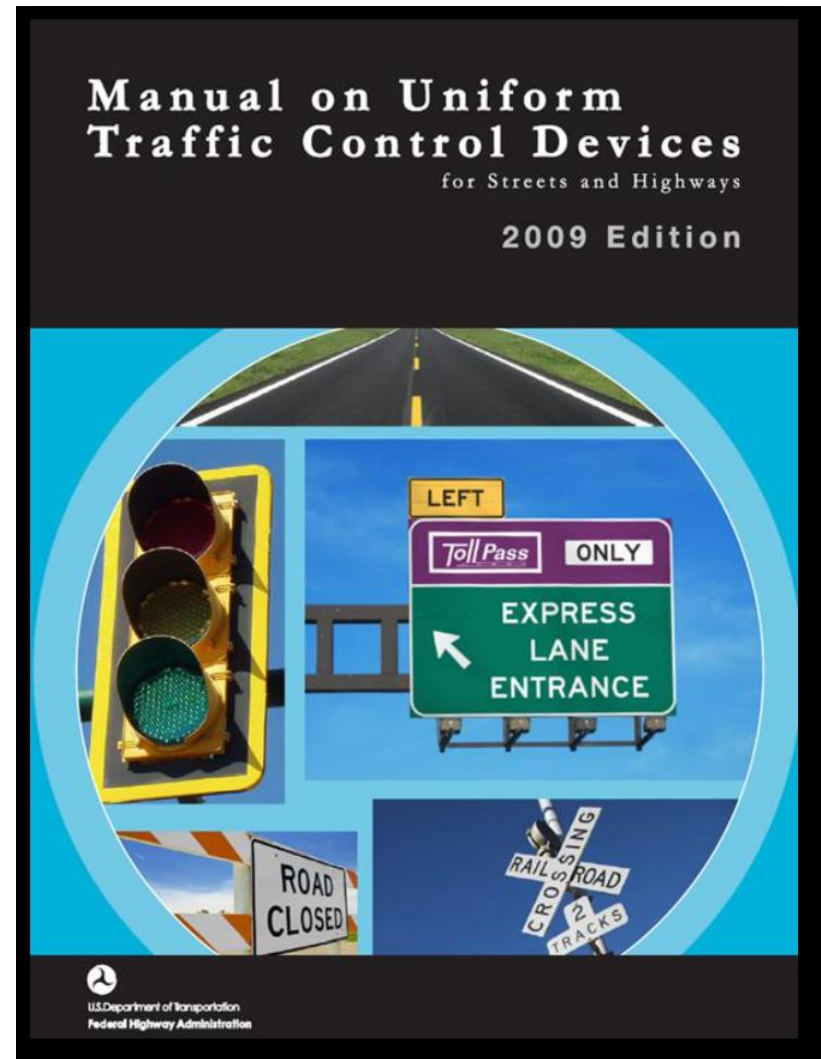
Created as part of the NCDOT Implementation of the FHWA Final
Rule on Safety & Mobility 23 CFR 630 Subparts J & K

- Basic Knowledge Document for working within Department R/W
- Predates current training requirements
- Does not replace RSDs or the MUTCD
- A resource that blends info from the both the RSDs and Part 6 of the MUTCD

MUTCG Blends the RSDs with MUTCD

MUTCD categorizes work zones by duration

- Long Term Stationary – More than 3 Days
- Intermediate Term Stationary – 1 to 3 Days
- Short Term Stationary – More than an Hour
- Mobile – a WZ that moves intermittently
- MUTCD includes 46 Typical Applications from which the RSDs are derived.
- RSDs do not cover every situation



MUTCG Blends the RSDs with the MUTCD

- The RSDs are best suited for TTC inside long term stationary work zones
- MUTCG is resource to help implement TTC that is not detailed in the RSDs or specifically described in the MUTCD
 - Short Term Stationary – More than an Hour
 - Mobile – a WZ that moves intermittently
 - When and how to deviate

08 A change interval shall be provided as the transition between the display of the flashing CIRCULAR YELLOW indication and the display of the steady CIRCULAR RED indication. During the change interval, the CIRCULAR YELLOW lens shall be steadily illuminated. The gate arm shall remain in the upright position during the display of the steadily illuminated CIRCULAR YELLOW change interval.

09 A change interval shall not be provided between the display of the steady CIRCULAR RED indication and the display of the flashing CIRCULAR YELLOW indication.

Guidance:

10 The steadily illuminated CIRCULAR YELLOW change interval should have a duration of at least 5 seconds, unless a different duration, within the range of durations recommended by Section 4D.26, is justified by engineering judgment.

Section 6E.07 Flagger Procedures

Support:

01 The use of paddles and flags by flaggers is illustrated in Figure 6E-3.

Standard:

02 Flaggers shall use a STOP/SLOW paddle, a flag, or an Automated Flagger Assistance Device (AFAD) to control road users approaching a TTC zone. The use of hand movements alone without a paddle, flag, or AFAD to control road users shall be prohibited except for law enforcement personnel or emergency responders at incident scenes as described in Section 6L.01.

03 The following methods of signaling with paddles shall be used:

- A. To stop road users, the flagger shall face road users and aim the STOP paddle face toward road users in a stationary position with the arm extended horizontally away from the body. The free arm shall be held with the palm of the hand above shoulder level toward approaching traffic.
- B. To direct stopped road users to proceed, the flagger shall face road users with the SLOW paddle face aimed toward road users in a stationary position with the arm extended horizontally away from the body. The flagger shall motion with the free hand for road users to proceed.
- C. To alert or slow traffic, the flagger shall face road users with the SLOW paddle face aimed toward road users in a stationary position with the arm extended horizontally away from the body.

Option:

04 To further alert or slow traffic, the flagger holding the SLOW paddle face toward road users may motion up and down with the free hand, palm down.

Standard:

05 The following methods of signaling with a flag shall be used:

- A. To stop road users, the flagger shall face road users and extend the flag staff horizontally across the road users' lane in a stationary position so that the full area of the flag is visibly hanging below the staff. The free arm shall be held with the palm of the hand above shoulder level toward approaching traffic.
- B. To direct stopped road users to proceed, the flagger shall face road users with the flag and arm lowered from the view of the road users, and shall motion with the free hand for road users to proceed. Flags shall not be used to signal road users to proceed.
- C. To alert or slow traffic, the flagger shall face road users and slowly wave the flag in a sweeping motion of the extended arm from shoulder level to straight down without raising the arm above a horizontal position. The flagger shall keep the free hand down.

Guidance:

06 The flagger should stand either on the shoulder adjacent to the road user being controlled or in the closed lane prior to stopping road users. A flagger should only stand in the lane being used by moving road users after road users have stopped. The flagger should be clearly visible to the first approaching road user at all times. The flagger also should be visible to other road users. The flagger should be stationed sufficiently in advance of the workers to warn them (for example, with audible warning devices such as horns or whistles) of approaching danger by out-of-control vehicles. The flagger should stand alone, away from other workers, work vehicles, or equipment.

Option:

07 At spot lane closures where adequate sight distance is available for the reasonably safe handling of traffic, the use of one flagger may be sufficient.

Flagging Example

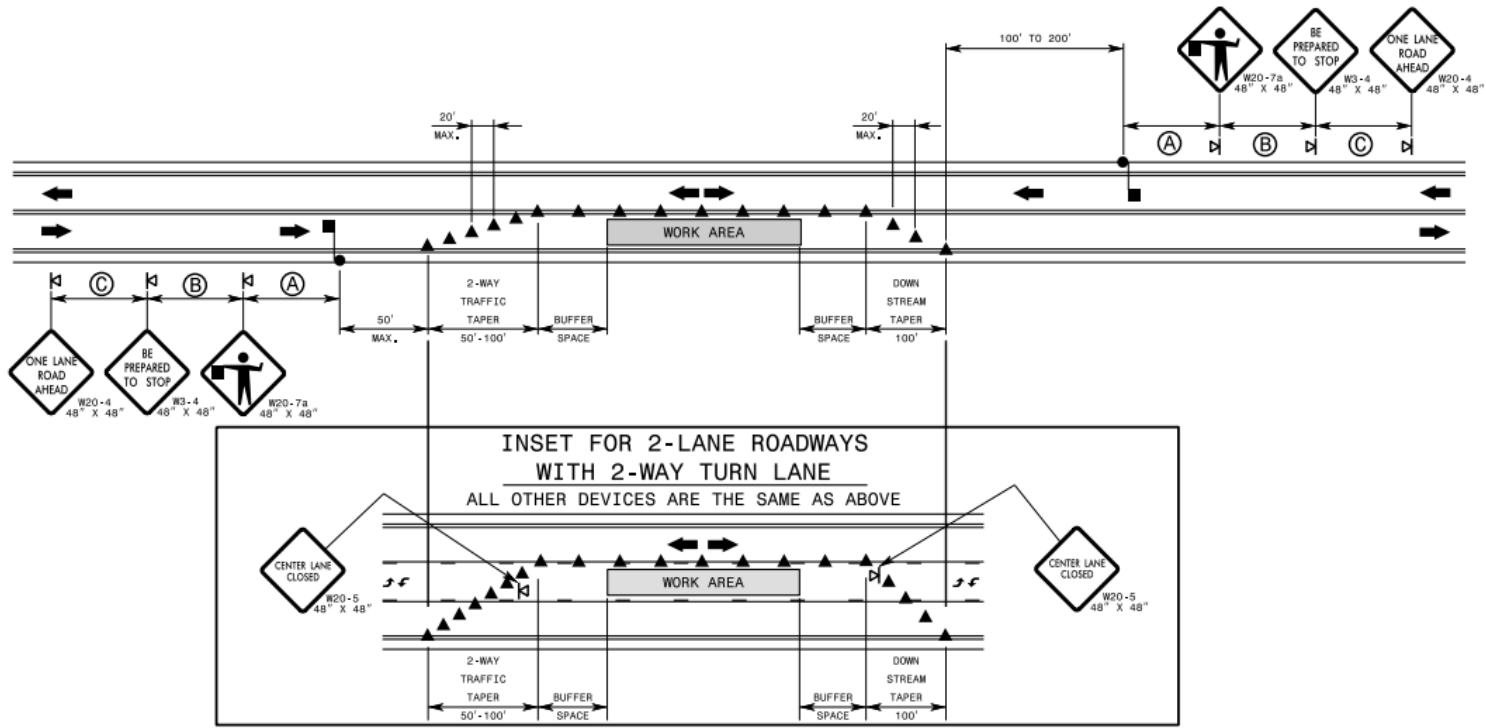
MUTCD allows for the use of a single flagger in certain situations.

RSD for Flagging

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
TEMPORARY LANE CLOSURES
2-LANE, 2-WAY ROADWAY-1 LANE CLOSED

SHEET 1 OF 14
1101.02



GENERAL NOTES FOR FLAGGING OPERATIONS

- REFER TO RSD. 1101.11, SHEETS 1 & 4, FOR "L" DISTANCE AND SIGN SPACING.
- INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC.
- REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
- PLACE CONES THRU THE WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- EXTEND LANE CLOSURES AT THE BUFFER SPACE SUCH THAT STOPPING SIGHT DISTANCE IS PROVIDED TO THE FLAGGER (REFER TO RSD. 1101.11, SHEET 2).
- DO NOT STOP TRAFFIC IN ANY ONE DIRECTION FOR MORE THAN 5 MINUTES AT A TIME.
- DRUMS OR SKINNY DRUMS MAY BE USED IN LIEU OF CONES. REFER TO RSD. 1180.01 FOR SKINNY DRUM REQUIREMENTS.
- USE FLAGGERS TO CONTROL TRAFFIC AT INTERSECTIONS AFFECTED BY THE LANE CLOSURE. SUPPLEMENT FLAGGERS LOCATED AT INTERSECTIONS WITH FLAGGER AHEAD SIGNS (W20-7a) PLACED APPROXIMATELY 250 FT. IN ADVANCE OF THE FLAGGER. FOR SIGNALIZED INTERSECTIONS PLACE SIGNALS IN THE FLASH MODE AND USE LAW ENFORCEMENT.
- REFER TO THE CURRENT MUTCD FOR FLAGGER CONTROL, REQUIREMENTS, AND PROCEDURES.
- DO NOT EXCEED A 1 MILE LANE CLOSURE LENGTH UNLESS OTHERWISE SHOWN IN THE TMP OR AS DIRECTED BY THE ENGINEER.

- IF VEHICLE QUEUES WILL REACH WITHIN 15' OF EITHER SIDE OF ACTIVE RAILROAD TRACKS, PROVIDE A UNIFORMED LAW ENFORCEMENT OFFICER OR FLAGGER TO PREVENT VEHICLES FROM STOPPING WITHIN THE GRADE CROSSING. PROVIDE OFFICER OR FLAGGER EVEN IF AUTOMATIC WARNING MEASURES ALREADY EXIST.

GENERAL NOTES FOR PILOT CAR OPERATIONS

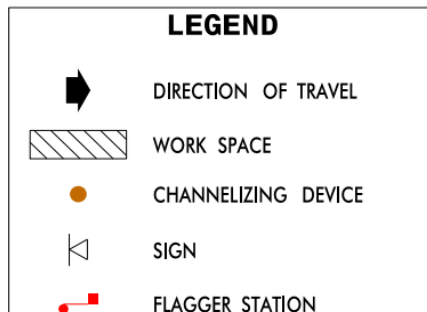
- USE PILOT CARS WHEN DIRECTED BY THE ENGINEER.
- IF ROADWAY WIDTH IS LESS THAN 22 FEET (EOP TO EOP), CONES MAY NOT BE REQUIRED ALONG WORK AREA, AND AT THE DISCRETION OF THE ENGINEER, CONES MAY BE OMITTED ALONG THE WORK AREA IF USING A PILOT CAR.
- CONES ARE ALWAYS REQUIRED IN THE UPSTREAM AND DOWNSTREAM TAPERS.
- MOUNT SIGN G20-4 "PILOT CAR FOLLOW ME" AT A CONSPICUOUS POSITION ON THE REAR OF THE PILOT VEHICLE.
- DO NOT INSTALL MORE THAN ONE (1) MILE OF LANE CLOSURE, MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- ADVISE RESIDENTS AND BUSINESSES WITHIN THE LANE CLOSURE LIMITS ABOUT METHODS OF SAFE EGRESS AND INGRESS FROM DRIVEWAYS DURING FLAGGING AND PILOT CAR OPERATIONS.

LEGEND

- FLAGGER
- CONE
- PORTABLE SIGN
- DIRECTION OF TRAFFIC FLOW

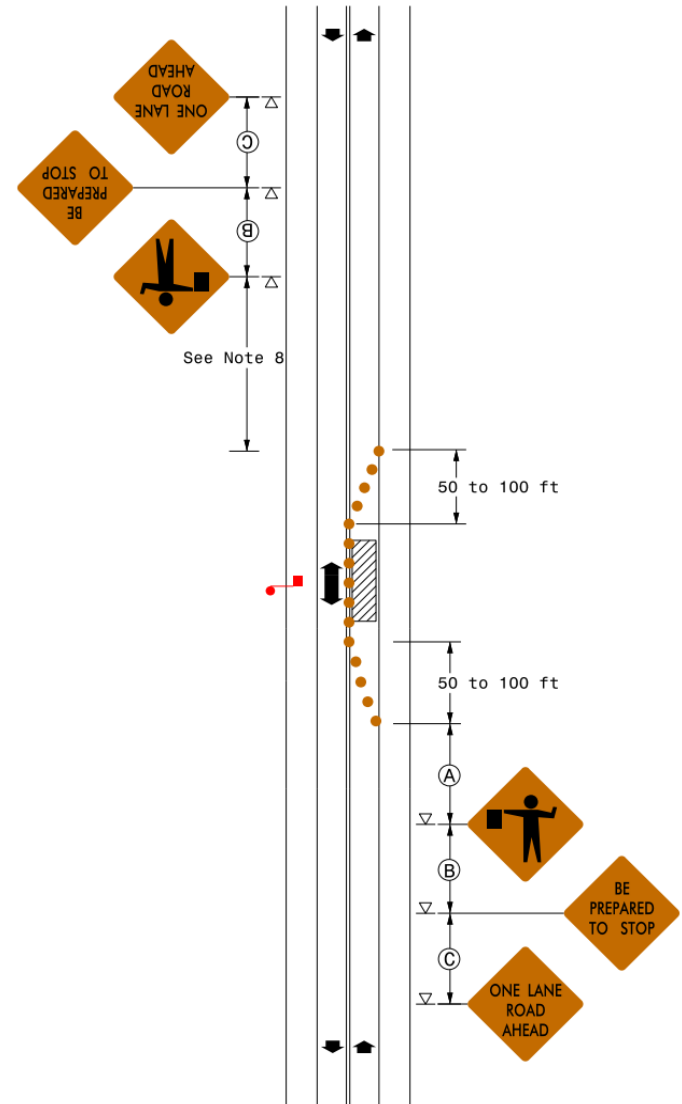
2.1.3 Notes for Lane Closure on a Two-Lane Road – Straight Road Using One Flagger 45 MPH or Less

1. For low-volume situations with short work zones on straight roadways where the Flagger is visible to road users approaching from both directions, a single Flagger, positioned to be visible to road users approaching from both directions may be used.
2. At night, Flagger stations shall be illuminated (truck lights are NOT approved for use). (See note 3 on page 10)
3. 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 Temporary Traffic Control zone should be extended so that the transition area precedes the grade crossing. Refer to page 15 for standard drawing.
4. When the 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.
5. 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.
6. Early coordination with the railroad company or light rail transit agency should occur before work starts.
7. Location of Flagger Station should allow adequate room for road users to return to their normal driving path.
8. If the queuing of vehicles across active rail tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the grade crossing to prevent vehicles from stopping within the grade crossing (considered as being 15 feet on either side of the closest and farthest rail), even if automatic warning devices are in place.
9. The "DO NOT STOP ON TRACKS" sign should be used on all approaches to a grade crossing within the limits of a TTC zone.



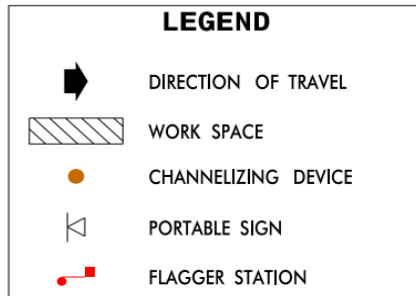
Lane Closure

on a Two-Lane Road - Straight Road Using One Flagger 45 Miles Per Hour or Less



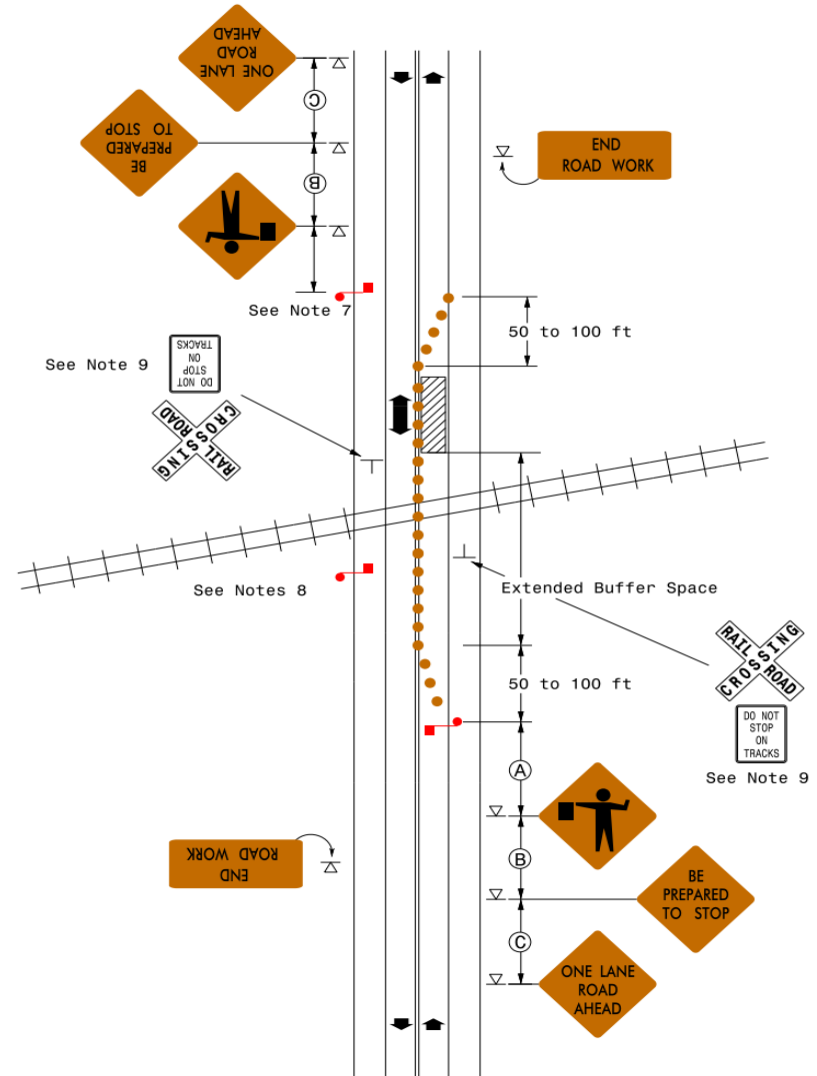
2.1.4 Notes for Lane Closure on a Two-Lane Road – In the Vicinity of a Railroad Grade Crossing

1. For low-volume situations with short work zones on straight roadways where the Flagger is visible to road users approaching from both directions, a single Flagger, positioned to be visible to road users approaching from both directions may be used.
2. At night, Flagger stations shall be illuminated (truck lights are NOT approved for use). (See note 3 on page 10)
3. 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 Temporary Traffic Control buffer space should be extended so that the transition area precedes the grade crossing. (Do not allow stopped traffic to back up over a crossing.)
4. When the 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.
5. 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.
6. Early coordination with the railroad company or light rail transit agency should occur before work starts.
7. Location of Flagger Station should allow adequate room for road users to return to their normal driving path.
8. If the queuing of vehicles across active rail tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the grade crossing to prevent vehicles from stopping within the grade crossing (considered as being 15 feet on either side of the closest and farthest rail), even if automatic warning devices are in place.
9. The “DO NOT STOP ON TRACKS” sign should be used on all approaches to a grade crossing within the limits of a TTC zone.

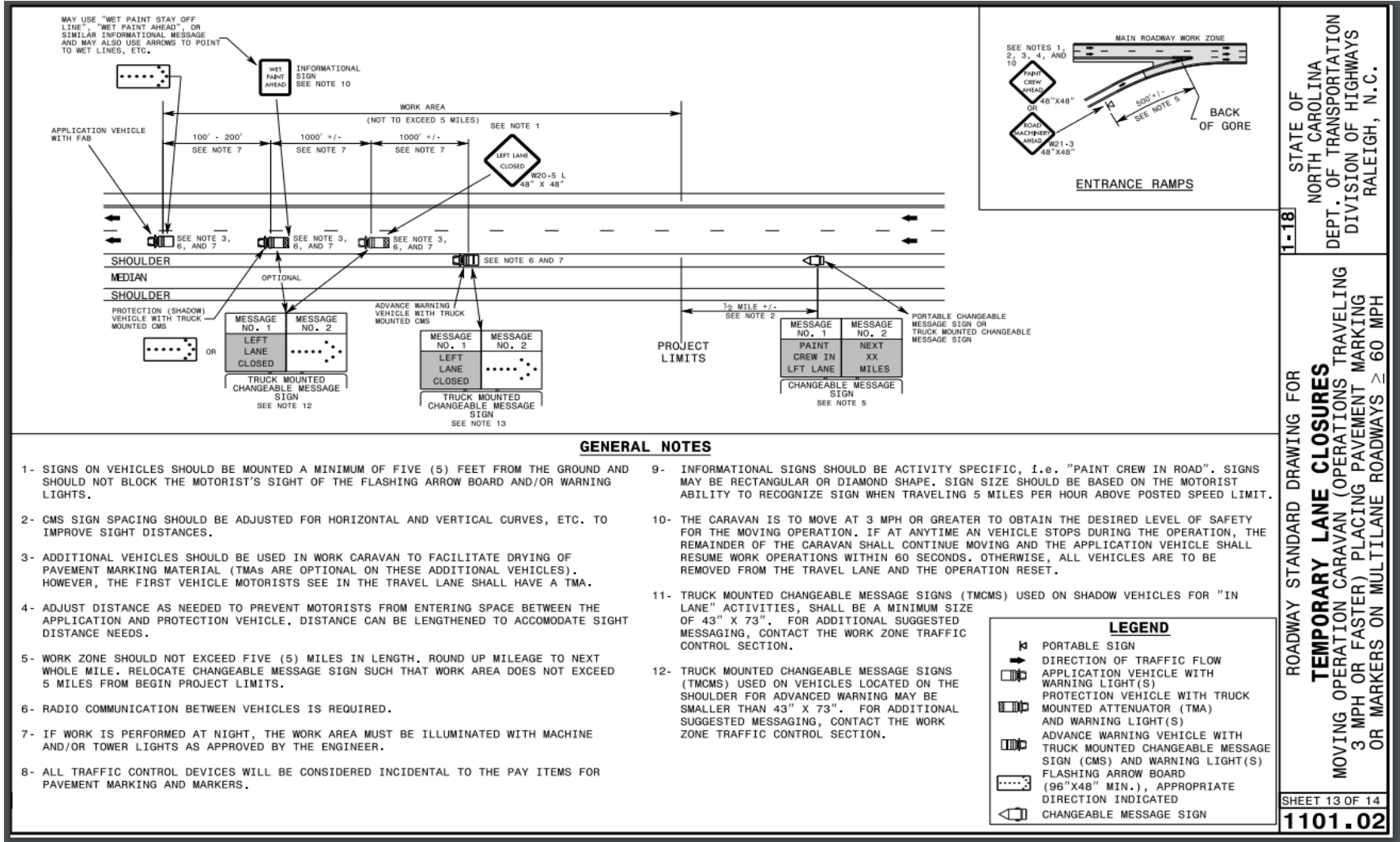


Lane Closure

on a Two-Lane Road in the Vicinity of a Railroad Grade Crossing



Mobile Operation Example



STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
TEMPORARY LANE CLOSURES
 MOVING OPERATION CARAVAN (OPERATIONS TRAVELING 3 MPH OR FASTER) PLACING PAVEMENT MARKING OR MARKERS ON MULTILANE ROADWAYS ≥ 60 MPH

1-18
 SHEET 13 OF 14
1101.02

Notes for Figure 6H-35—Typical Application 35

Mobile Operation on a Multi-Lane Road

Standard:

1. Arrow boards shall, as a minimum, be Type B, with a size of 60 x 30 inches.
2. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.
3. Shadow and work vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.
4. An arrow board shall be used when a freeway lane is closed. When more than one freeway lane is closed, a separate arrow board shall be used for each closed lane.

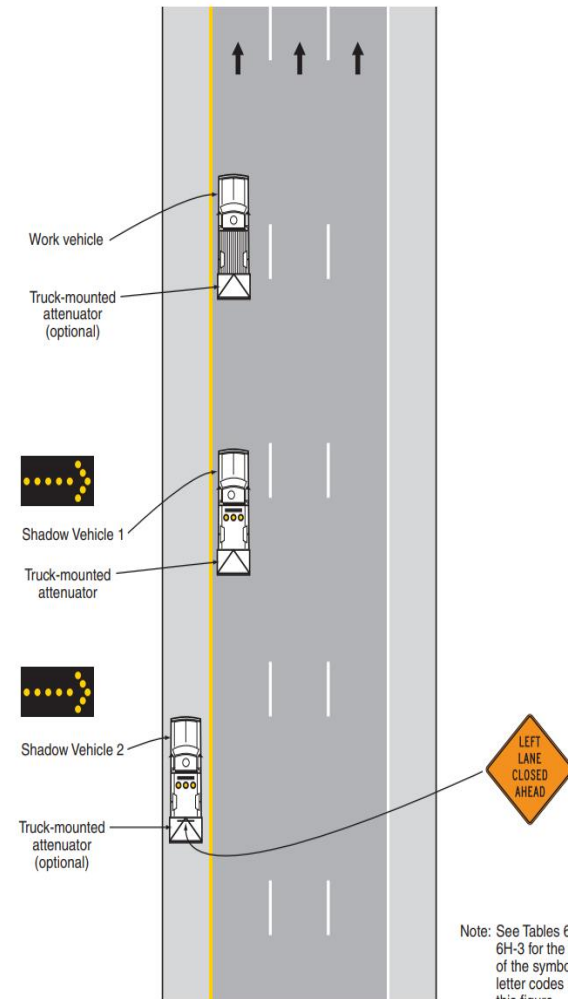
Guidance:

5. Vehicles used for these operations should be made highly visible with appropriate equipment, such as flags, signs, or arrow boards.
6. Shadow Vehicle 1 should be equipped with an arrow board and truck-mounted attenuator.
7. Shadow Vehicle 2 should be equipped with an arrow board. An appropriate lane closure sign should be placed on Shadow Vehicle 2 so as not to obscure the arrow board.
8. Shadow Vehicle 2 should travel at a varying distance from the work operation so as to provide adequate sight distance for vehicular traffic approaching from the rear.
9. The spacing between the work vehicles and the shadow vehicles, and between each shadow vehicle should be minimized to deter road users from driving in between.
10. Work should normally be accomplished during off-peak hours.
11. When the work vehicle occupies an interior lane (a lane other than the far right or far left) of a directional roadway having a right-hand shoulder 10 feet or more in width, Shadow Vehicle 2 should drive the right-hand shoulder with a sign indicating that work is taking place in the interior lane.

Option:

12. A truck-mounted attenuator may be used on Shadow Vehicle 2.
13. On high-speed roadways, a third shadow vehicle (not shown) may be used with Shadow Vehicle 1 in the closed lane, Shadow Vehicle 2 straddling the edge line, and Shadow Vehicle 3 on the shoulder.
14. Where adequate shoulder width is not available, Shadow Vehicle 3 may also straddle the edge line.

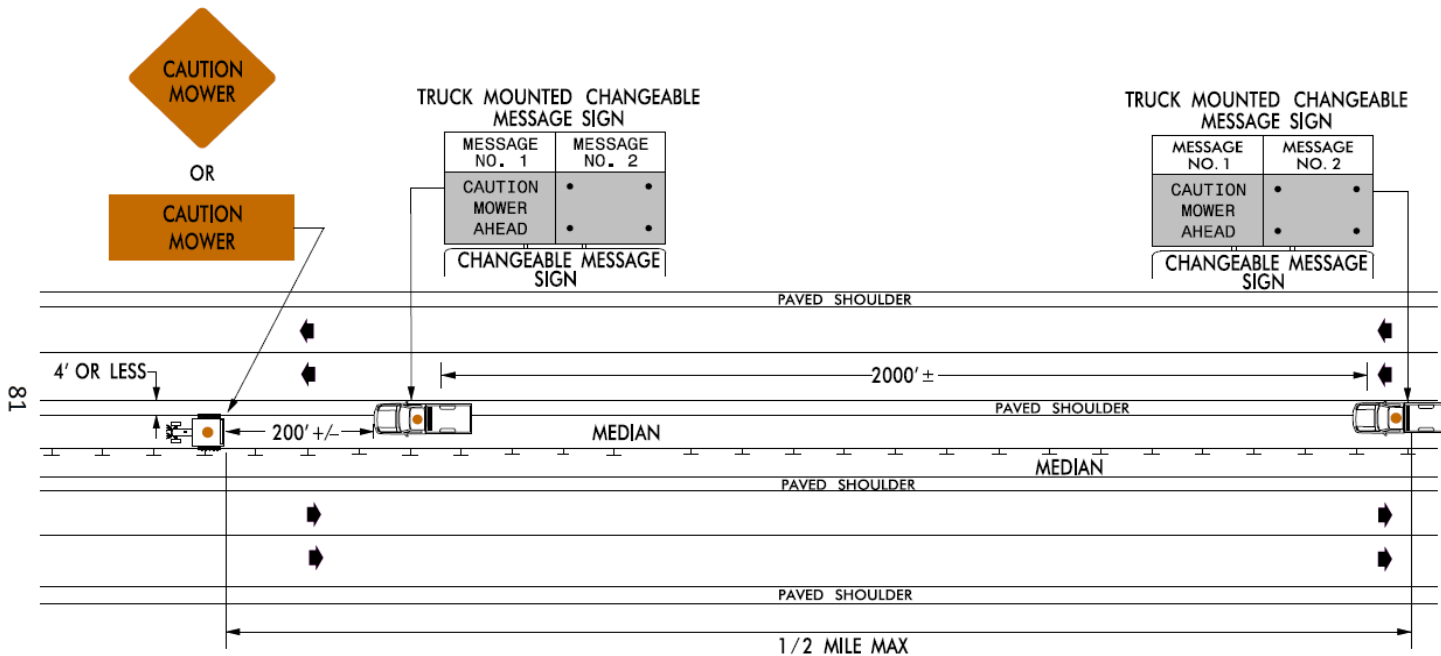
Figure 6H-35. Mobile Operation on a Multi-Lane Road (TA-35)



Typical Application 35

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Mobile Operation – Mowing (1)



Mobile Shoulder Closure

Mowing Operation

Multilane Divided Facilities

Location: Median With Tire of Mowing Vehicle

Four Feet or Less From Edgeline

Volume: Any Volume

Speed: 55 MPH and Below

81

Mobile Operation – Mowing (2)

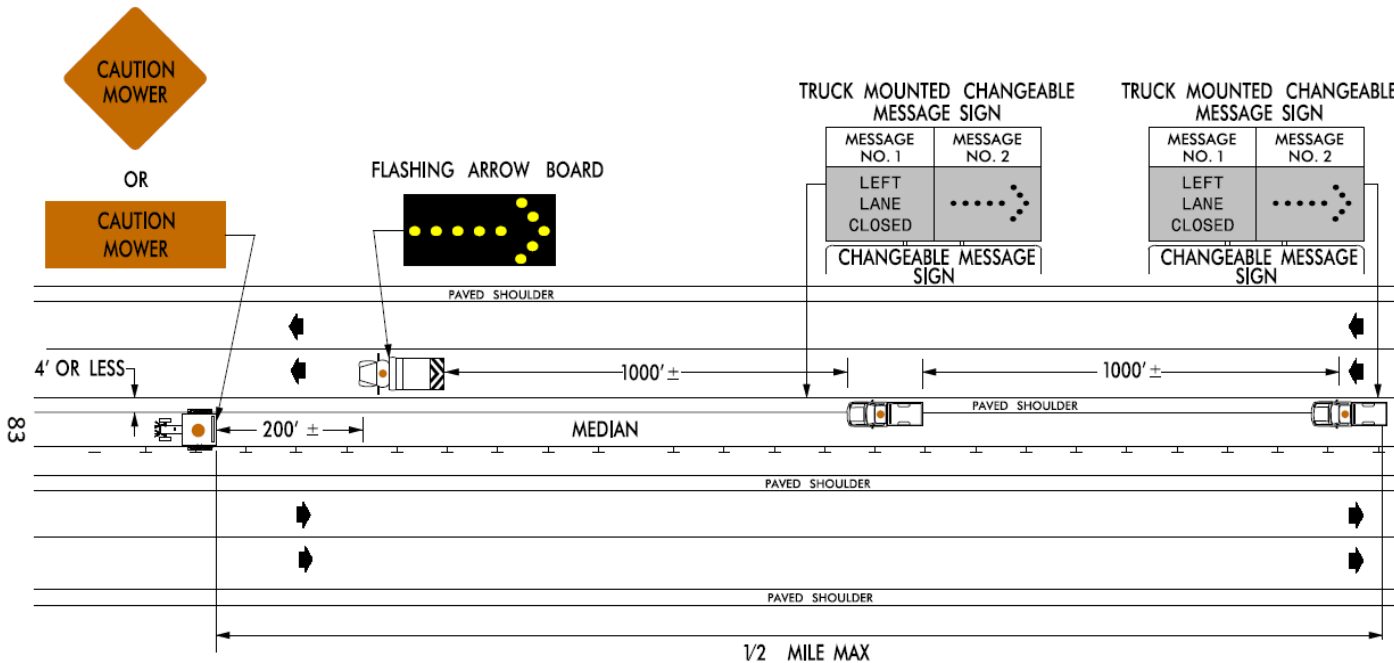
Mowing Operation

Multilane Divided Facilities
 Location: Median With Tire of Mowing Vehicle

Four Feet or Less From Edgeline

Volume: Any Volume

Speed: 60 MPH & Above

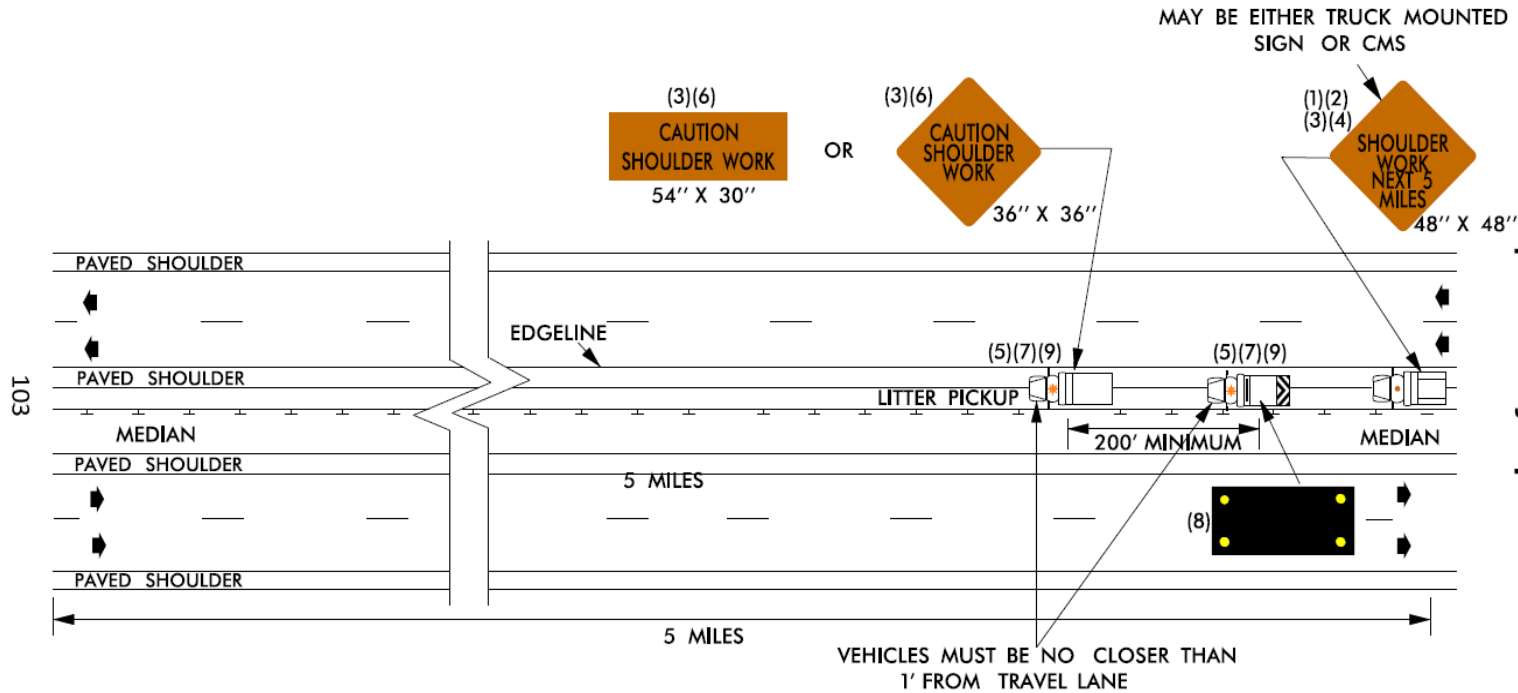


Narrow Shoulder – Mobile Lane Closure

Short Duration – Litter Pickup (1)

Litter Pickup Operation

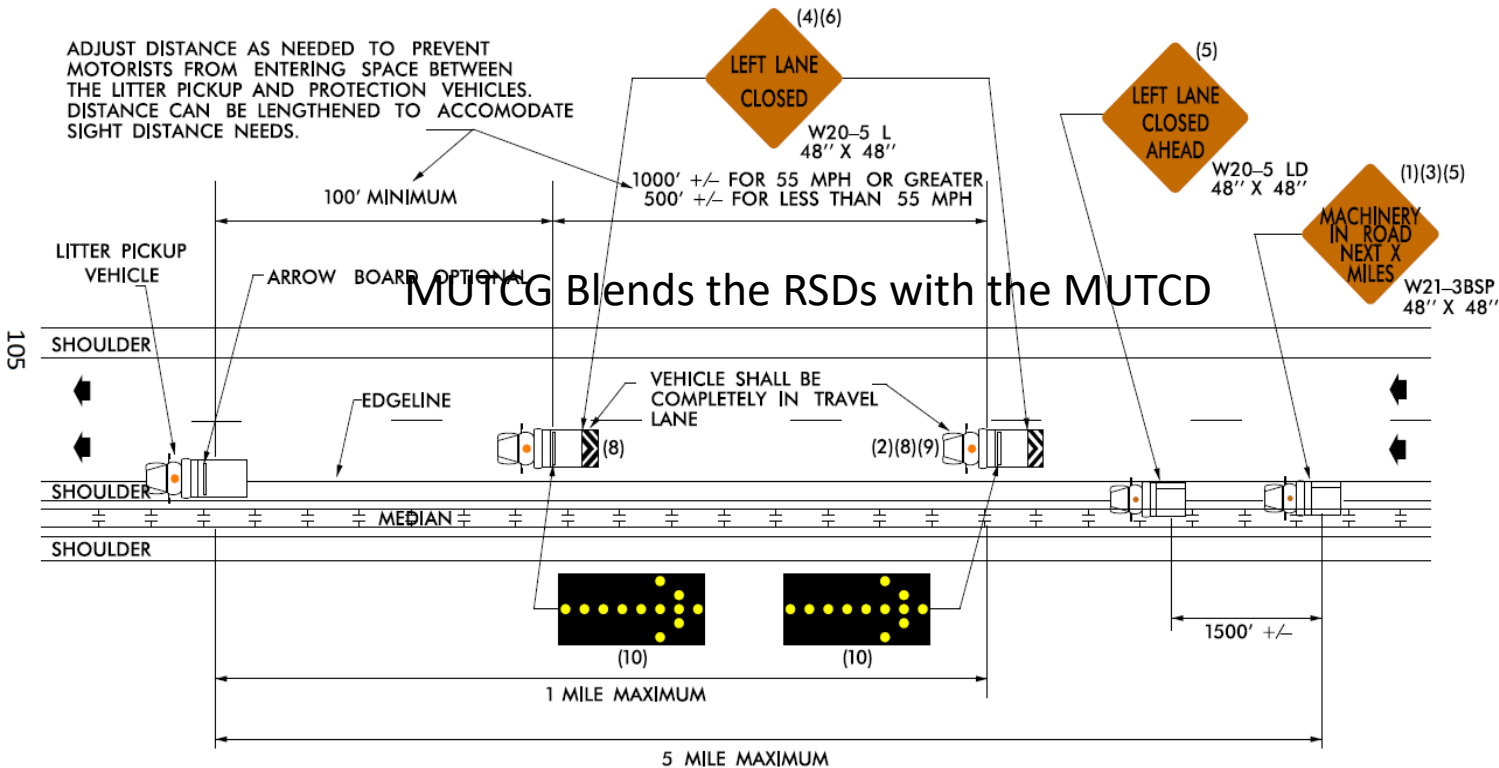
Interstate and Multi-lane Divided Facilities
Location: Tire of Litter Pickup & TMA No Closer Than 1 Foot From Edgeline (Median or Shoulder)
Volume: Any Volume
Speed: Any Speed



**Everything is entirely on the shoulder.
Short duration shoulder closure**

Short Duration – Litter Pickup (2)

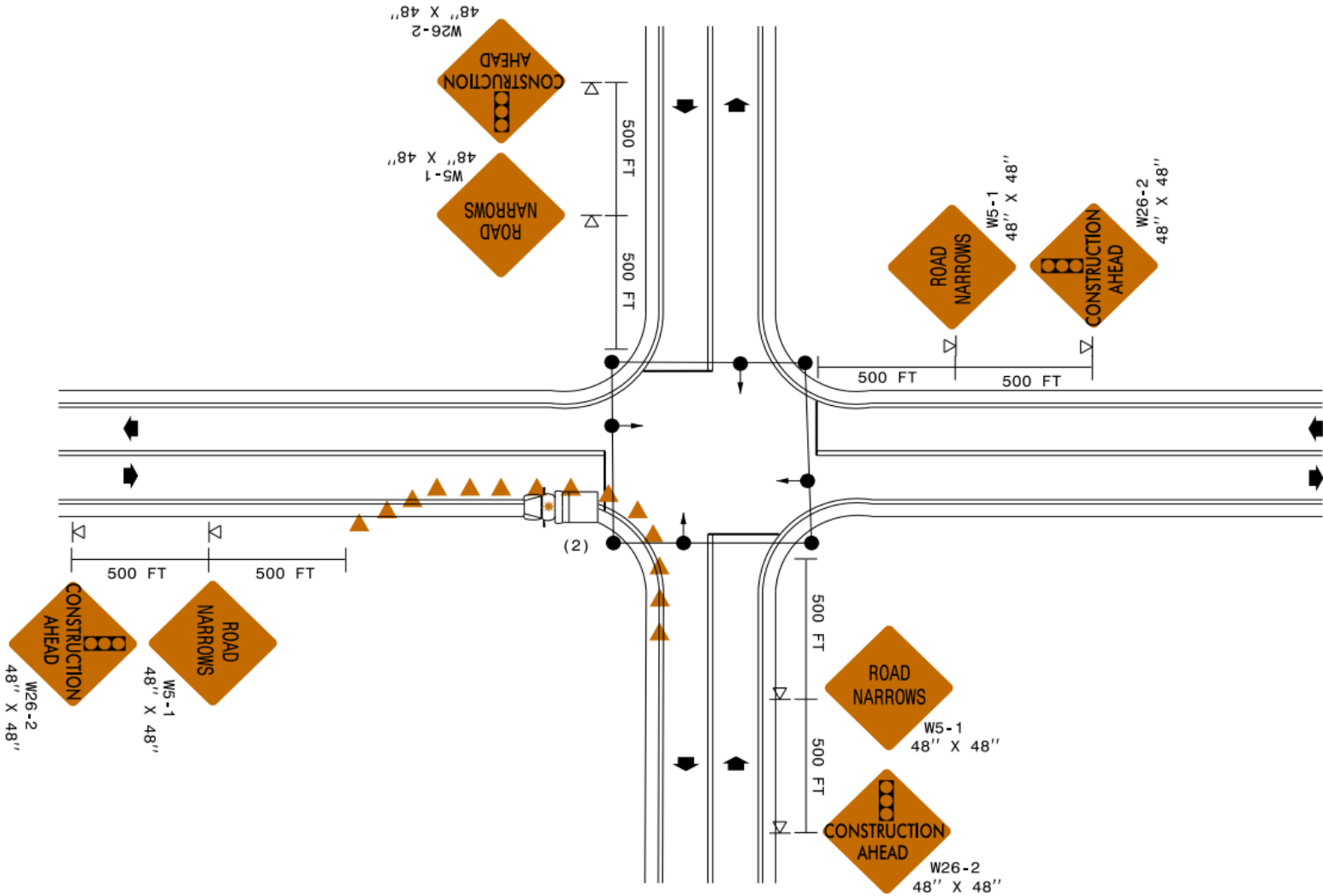
Narrow Shoulder, no straddling the edgeline with the TMA, entirely within the closed lane – Short Duration Lane Closure



Interstate and Multilane Divided Facilities in Areas With Shoulder Widths That Do Not Accommodate Vehicles Location: Litter Pickup Vehicle (Median or Shoulder) Volume: Any Volume Speed: Any Speed

Litter Pickup Operation

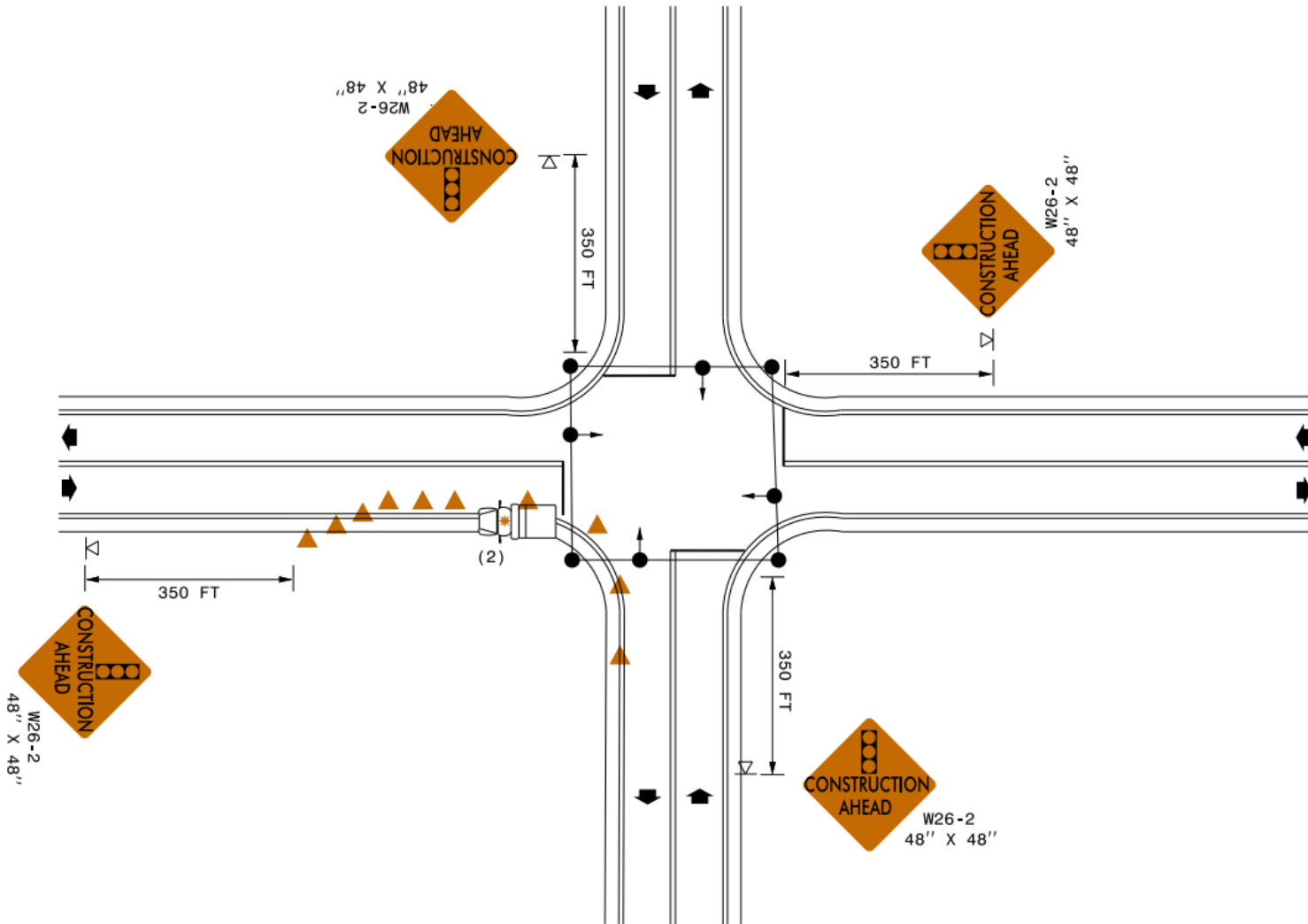
Short Duration – Signal Maintenance



Signal Maintenance / Repair

**Two-Lane, Two-Way Roadways
Speed: 45 MPH or Greater**

Short Duration – Signal Maintenance



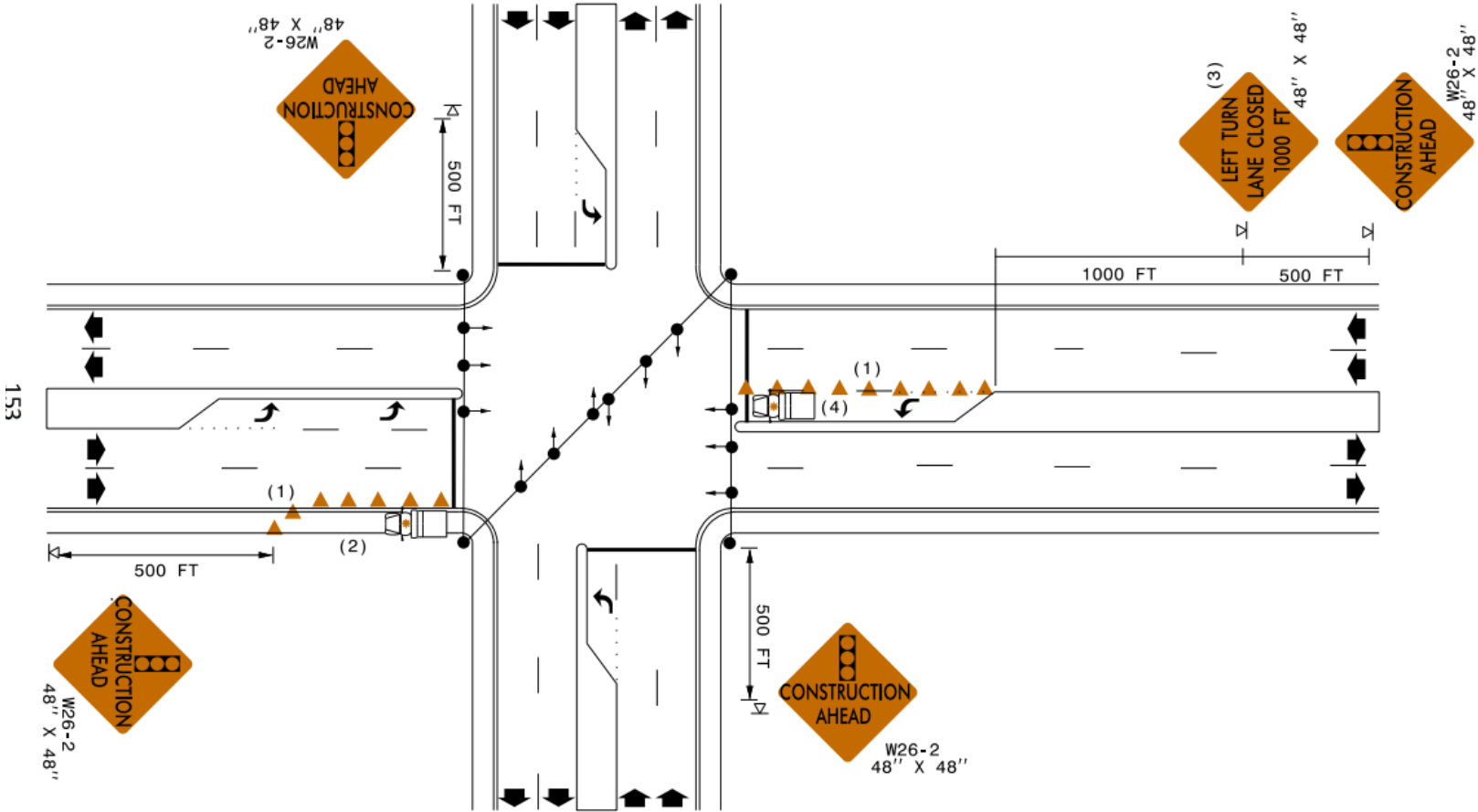
Signal Maintenance / Repair

Two-Lane, Two-Way Roadways
Speed: Less Than 45 MPH

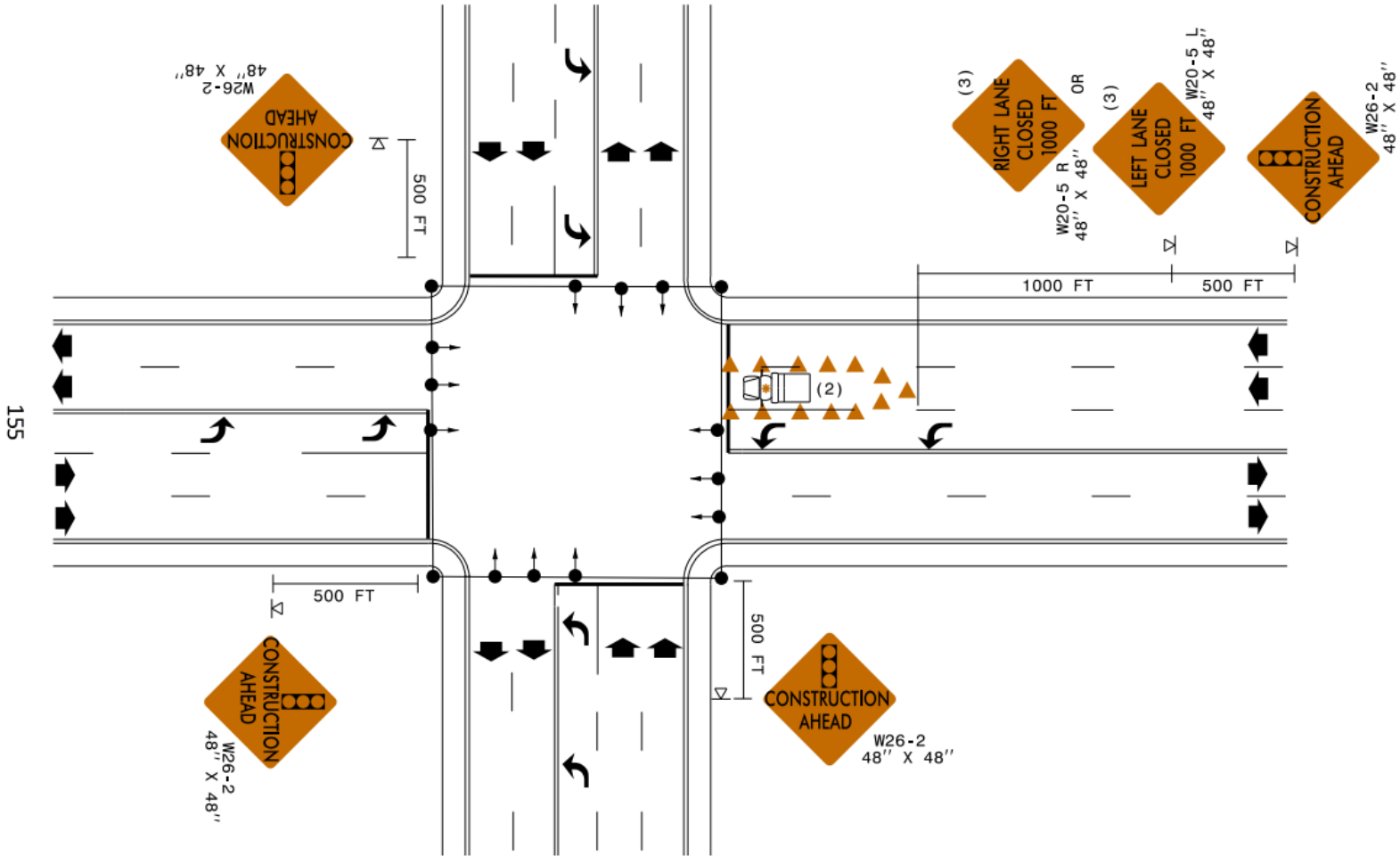
Short Duration – Signal Maintenance

Signal Maintenance / Repair

Speed: Greater Than 45 MPH with Signal in Flashing Mode
Multilane Divided Roadways



Short Duration – Signal Maintenance



Signal Maintenance / Repair

Speed: Greater Than 45 MPH with signal in Flashing Mode

MUTCG Blends the RSDs with the MUTCD

- Fills the gap between the MUTCD and what the MUTCD permits based on duration and what is shown in the RSDs.
- Includes details for

Mowing
Spraying
Shoulder
Sweeping
Litter Pick
Up

Pothole
Patching
Sign Support
Work

Signal Loop
Installation &
Repair
Metal Signal
Pole Inspections

MUTCG – What Else is In It

“Need to Know” info for all Work Zones

- Role of the TC Supervisor
- Vehicle Warning Lights
- Personal Protective Equipment (PPE)
- How to make sure you are seen by motorist

MUTCG – What Else is In It

Concise information on TC Devices, Merge Taper Lengths, & Stopping Sight Distance

Concise information on both the location of the work relative to traffic and the duration of the work zone

MUTCG - Summary

- It is a guidance document.
- It is not a standalone training program and does not replace supervisor, installer, or flagging training.
- It's not meant to replace the RSDs, Standard Specifications, or the MUTCD.
- User friendly guide for the safe and proper installation for temporary traffic control.

MUTCG – Where to find It

Connect NCDOT
BUSINESS PARTNER RESOURCES

Home Help Team Sites Site Map

Doing Business Bidding & Letting **Projects** Resources Local Governments

Search...

Planning Construction Research Roadway Design **Work Zone** Contracts Toolkit Bike & Pedestrian Project Management Value Management

Work Zone Traffic Control


Improve safety and driving conditions in road construction areas.


Home ▶ Connect NCDOT ▶ Projects ▶ Work Zone

About Work Zone Traffic Control

To improve safety and driving conditions in road construction areas, federal guidelines state that federally funded highway construction projects must have an approved traffic control plan that requires a contractor to provide safety for highway construction workers. The North Carolina Department of Transportation adopted these guidelines to ensure the safety for the construction workers and public at state-funded construction sites.

WZ Safety and Mobility Policy

[Work Zone Safety and Mobility Policy](#) 

[WZ Safety & Mobility Guidelines](#) 

[Division Activity Checklist](#) 

[FAQ from Divisions on Policy and Guidelines](#) 

[WZ Safety and Mobility Division Web Conference FAQs](#) 

[Significant Project Outline](#) 

Related Information

[National Transportation Product Evaluation Program \(NTPEP\)](#)
Evaluation of Arrowboards and Portable Changeable Message Signs

[Pedestrian Safety in Work Zones](#)
Accommodations of Pedestrians within Work Zones

[Work Zone Safety Training](#)
Work Zone Safety Qualification and Training Program

Manuals/Guidelines/Reports

[Manuals/Guidelines/Reports](#)

Links

MUTCG – Where to find It

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Home Help Team Sites Site Map

Doing Business Bidding & Letting **Projects** Resources Local Governments

Search...

Planning Construction Research Roadway Design **Work Zone** Contracts Toolkit Bike & Pedestrian Project Management Value Management

Manuals/Guidelines/Reports

↑ Connect NCDOT > Projects > Work Zone > Manuals/Guidelines/Reports

NCDOT Maintenance / Utility Traffic Control Guidelines

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Reports

[Interim Report of the Effectiveness of Digital Speed Limit Signs and Work Zone Presence Lighting on Speed Compliance](#)

[2019 WZ Safety & Mobility Process Review](#)

[Work Zone Safety Audits - Annual Report - Archive](#)

[2016 Work Zone Safety Audits - Bi-Annual Summary Report](#)

Questions? / Comments

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