

#### ORDER OF WORK

1. Carefully remove existing MCNC FOC slack and place in secure location, ensuring no damage to existing FOC
2. Place new 4" pea gravel base on top of old gravel. If no gravel exists, bring base to 6"
3. Bring in new 864 FOC and coil up slack. Tag 864 FOC and place coil at bottom of HH.
4. Re-dress existing MCNC slack and place on top of new 864 slack coil.

CONSTRUCTION NOTES:

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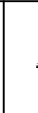
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MCNC

JOB TITLE:

JOB LOCATION:

DESIGNER:  
R.B.

DATE: 2/24/25



SCALE:

NTS

PLOT DATE:

4/11/24

SHEET NUMBER:

1

OF

220

FILE NAME:

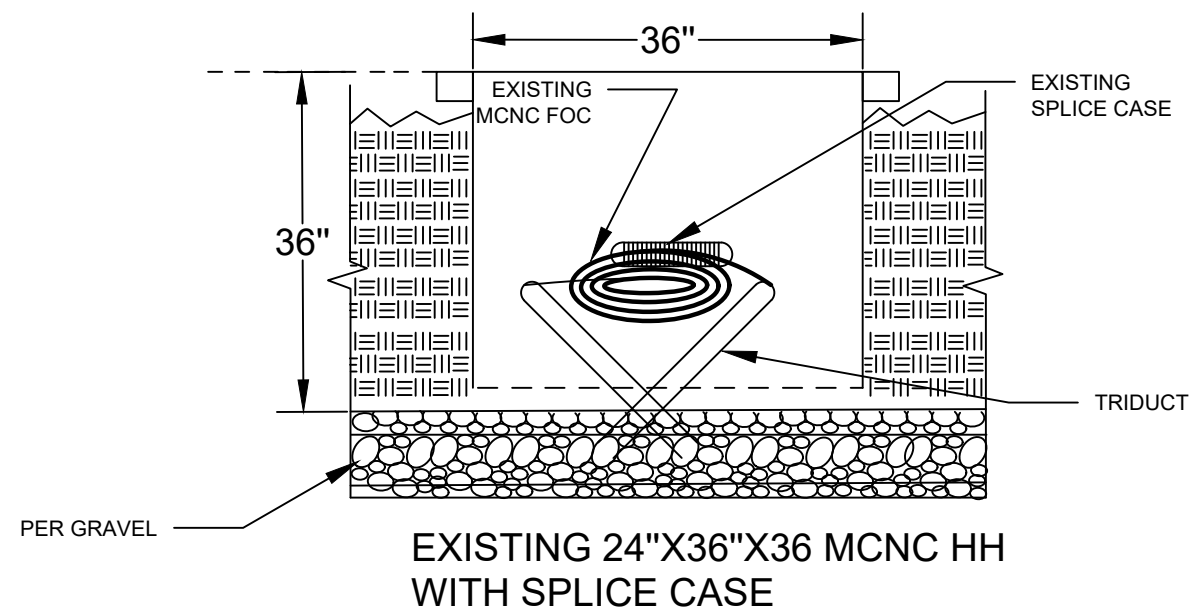
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CONSTRUCTION NOTES:

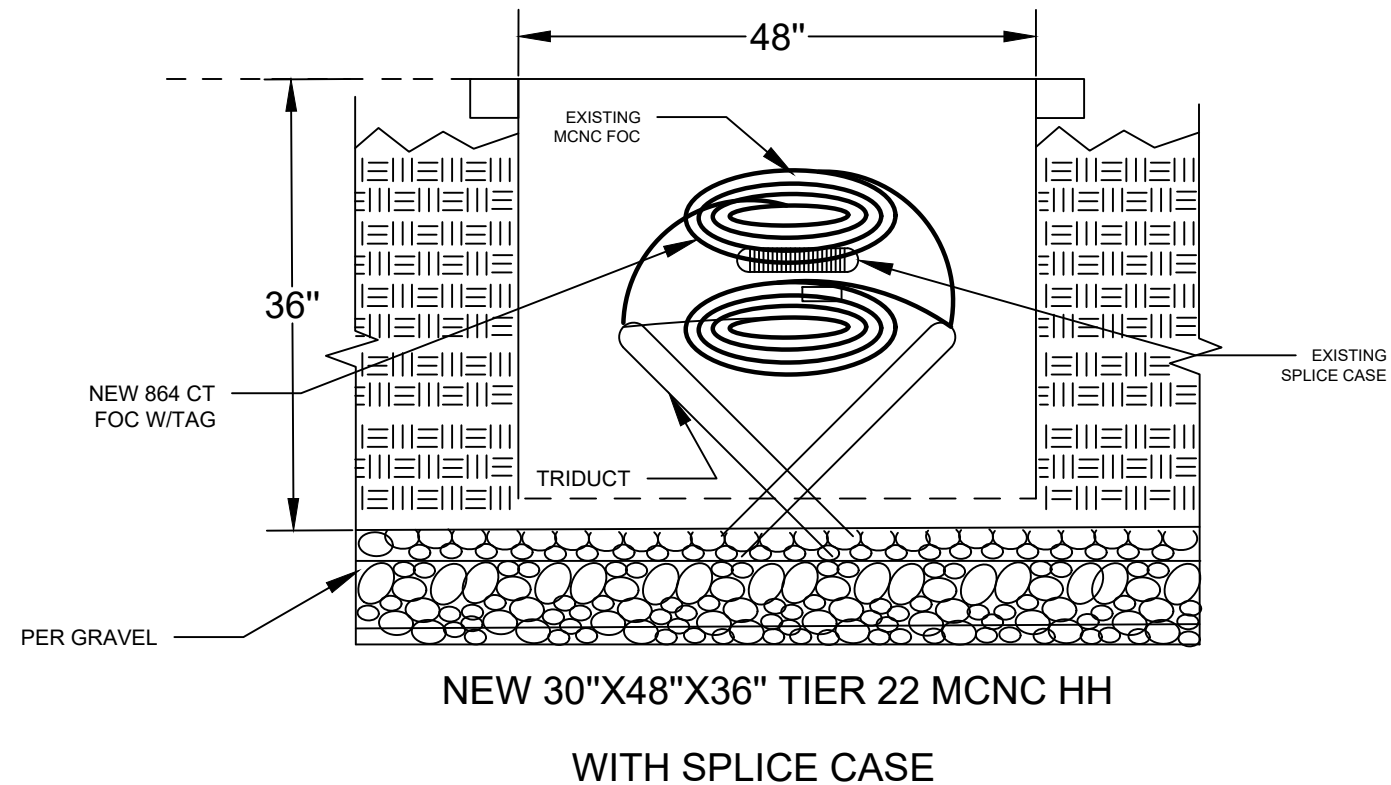
# ORDER OF WORK

1. Carefully remove existing 24x36x36 MCNC HH.
2. Excavate earth to fit new 30x48x36 tier 22 MCNC HH.
3. Place new pea gravel, ensuring 6" base.
4. Set new 30x48x36 tier MCNC HH in place.
5. Carefully remove existing MCNC FOC slack and place in secure location, ensuring no damage to existing FOC.
6. Bring in new 864 FOC and coil up slack. Tag 864 FOC and place coil at bottom of HH.
6. Re-dress existing MCNC slack and place on top of new 864 slack coil.

## BEFORE HH UPGRADE



## AFTER HH UPGRADE



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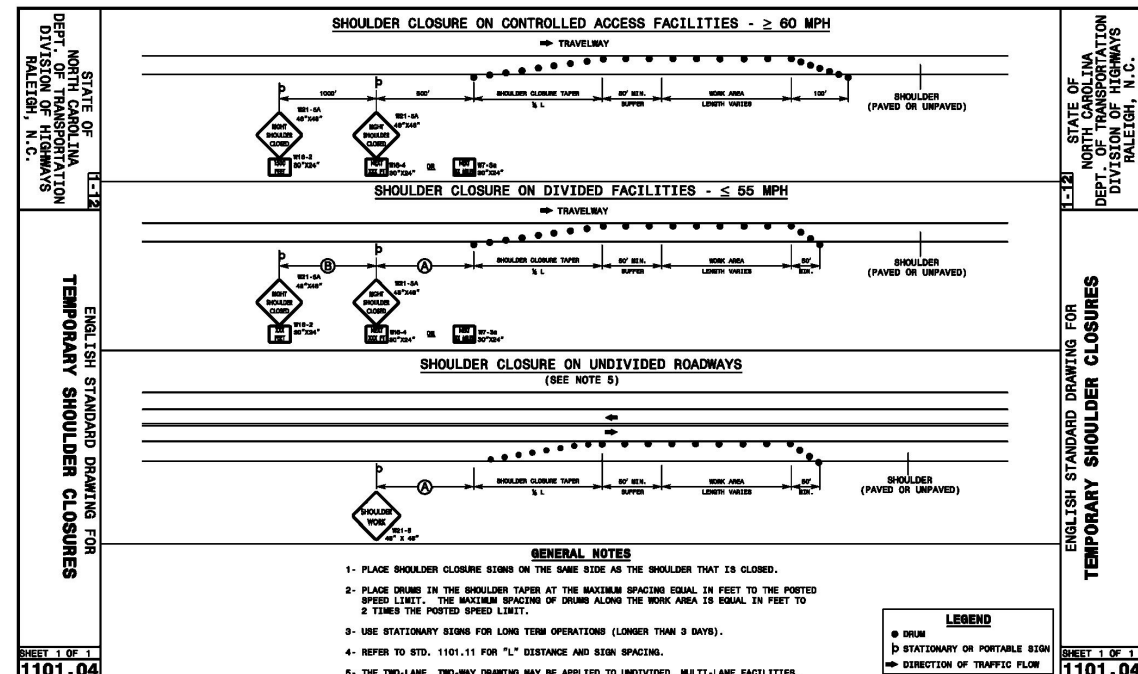
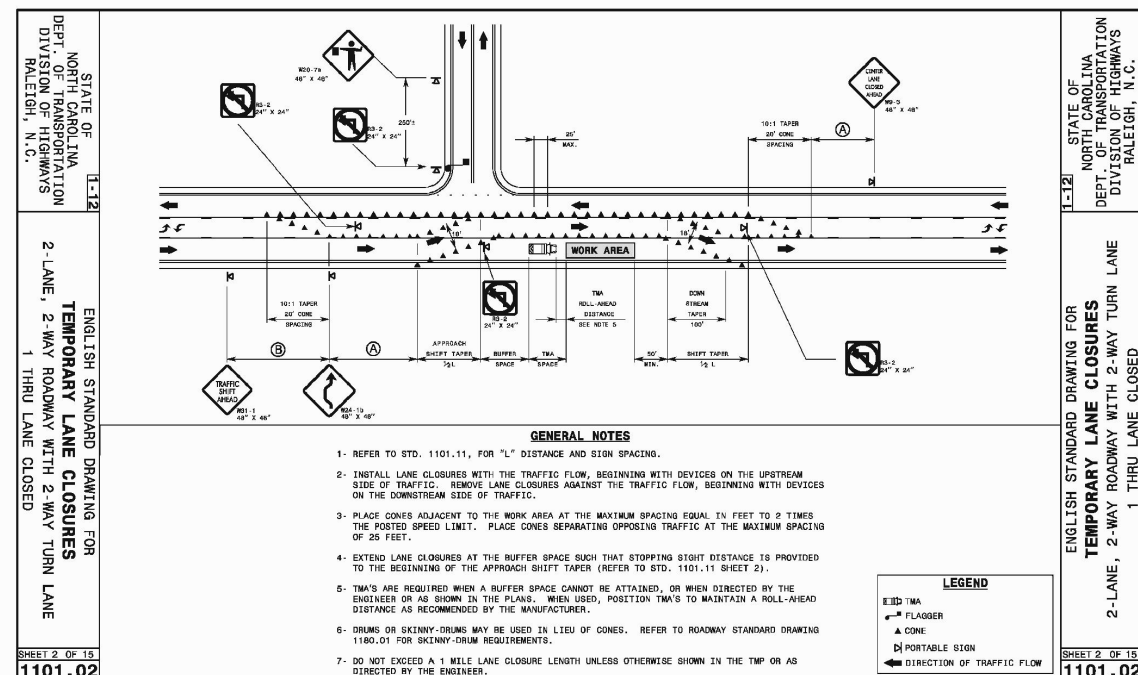
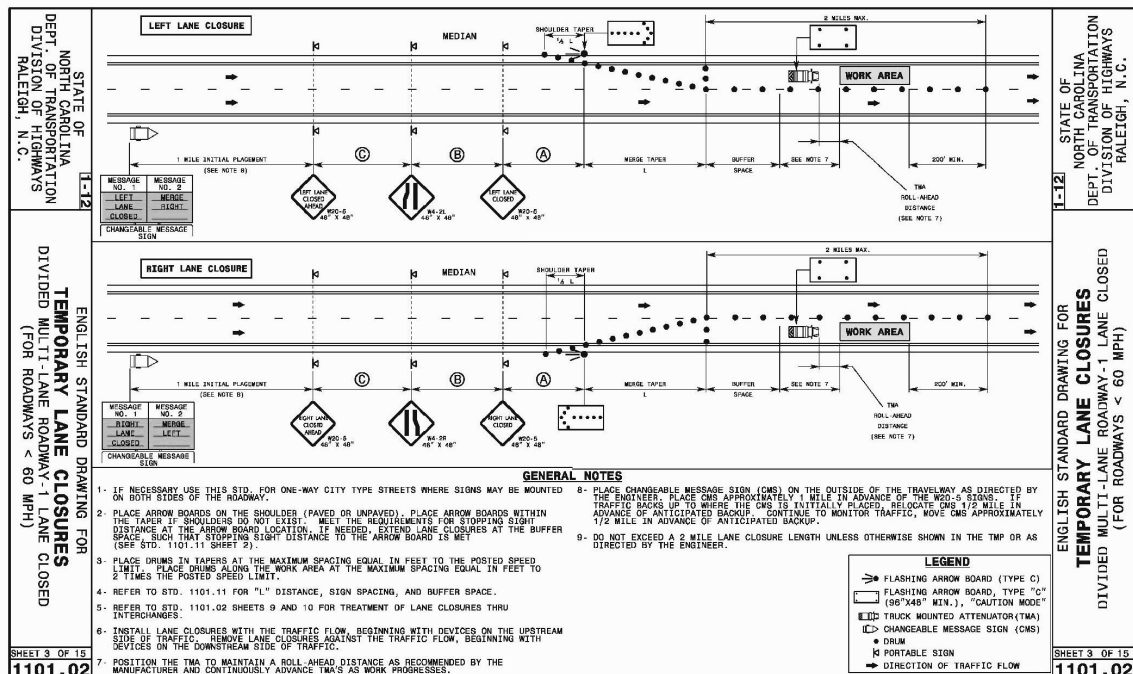
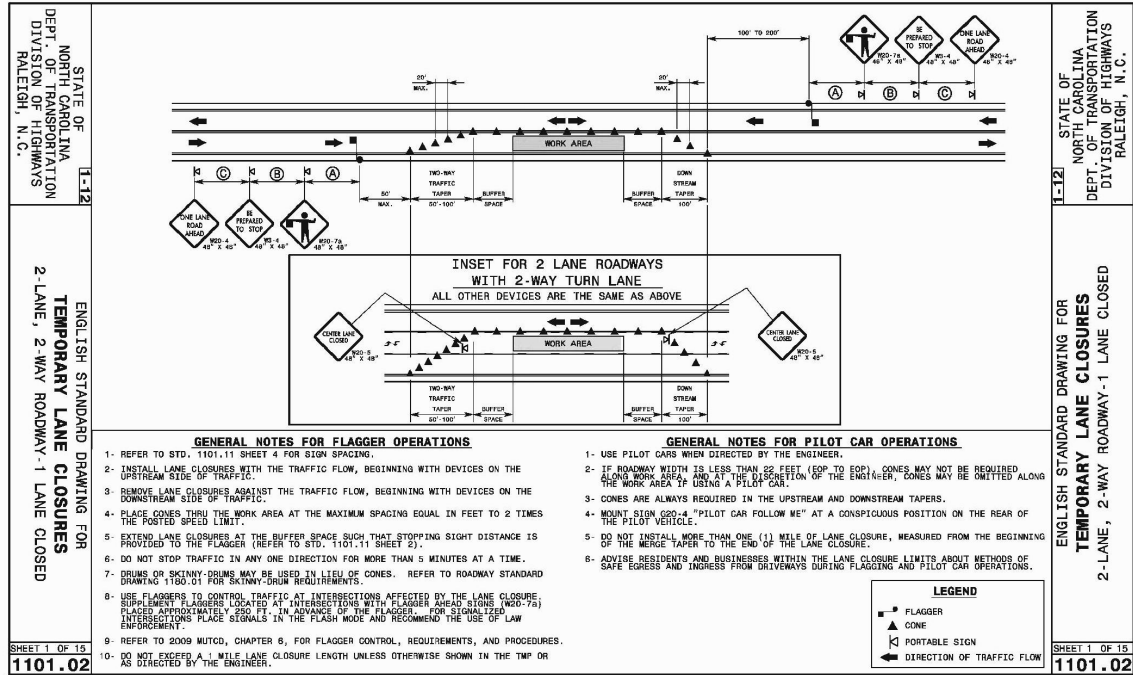
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OF

220

FILE NAME:

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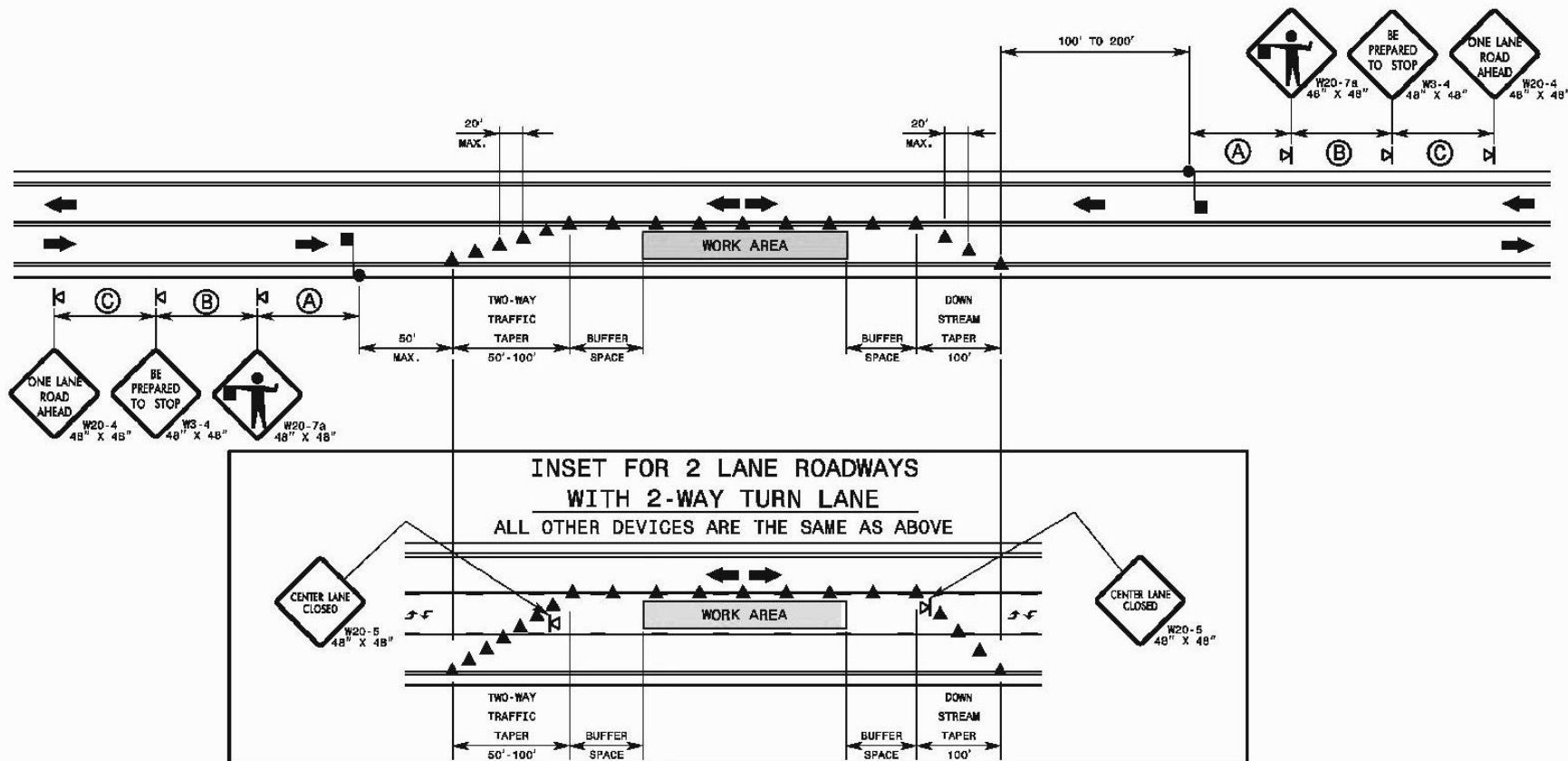


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1-12

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

SHEET 1 OF 15  
1101.02



#### GENERAL NOTES FOR FLAGGER OPERATIONS

- 1- REFER TO STD. 1101.11 SHEET 4 FOR SIGN SPACING.
- 2- INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC.
- 3- REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
- 4- PLACE CONES THRU THE WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- 5- EXTEND LANE CLOSURES AT THE BUFFER SPACE SUCH THAT STOPPING SIGHT DISTANCE IS PROVIDED TO THE FLAGGER (REFER TO STD. 1101.11 SHEET 2).
- 6- DO NOT STOP TRAFFIC IN ANY ONE DIRECTION FOR MORE THAN 5 MINUTES AT A TIME.
- 7- DRUMS OR SKINNY-DRUMS MAY BE USED IN LIEU OF CONES. REFER TO ROADWAY STANDARD DRAWING 1180.01 FOR SKINNY-DRUM REQUIREMENTS.
- 8- 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 RECOMMEND THE USE OF LAW ENFORCEMENT.
- 9- REFER TO 2009 MUTCD, CHAPTER 6, FOR FLAGGER CONTROL, REQUIREMENTS, AND PROCEDURES.
- 10- DO NOT EXCEED A 1 MILE LANE CLOSURE LENGTH UNLESS OTHERWISE SHOWN IN THE TMP OR AS DIRECTED BY THE ENGINEER.

#### GENERAL NOTES FOR PILOT CAR OPERATIONS

- 1- USE PILOT CARS WHEN DIRECTED BY THE ENGINEER.
- 2- 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.
- 3- CONES ARE ALWAYS REQUIRED IN THE UPSTREAM AND DOWNSTREAM TAPERS.
- 4- MOUNT SIGN G20-4 "PILOT CAR FOLLOW ME" AT A CONSPICUOUS POSITION ON THE REAR OF THE PILOT VEHICLE.
- 5- 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.
- 6- 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
- CONES
- PORTABLE SIGN
- DIRECTION OF TRAFFIC FLOW

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

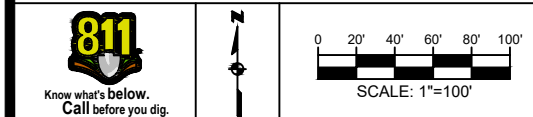
SHEET 1 OF 15  
1101.02

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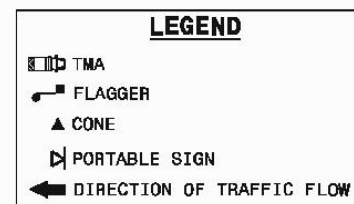
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SHEET NUMBER: 4 OF 220

FILE NAME: hh.dwg

SHEET 2 OF 15  
**1101.02**



SHEET 2 OF 15  
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FILE NAME: hh.dwg

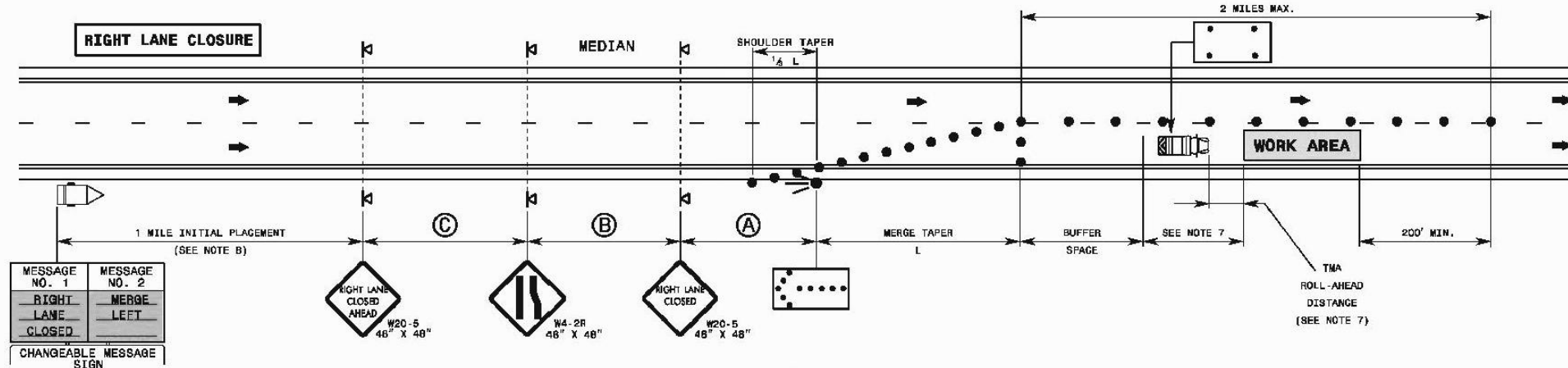
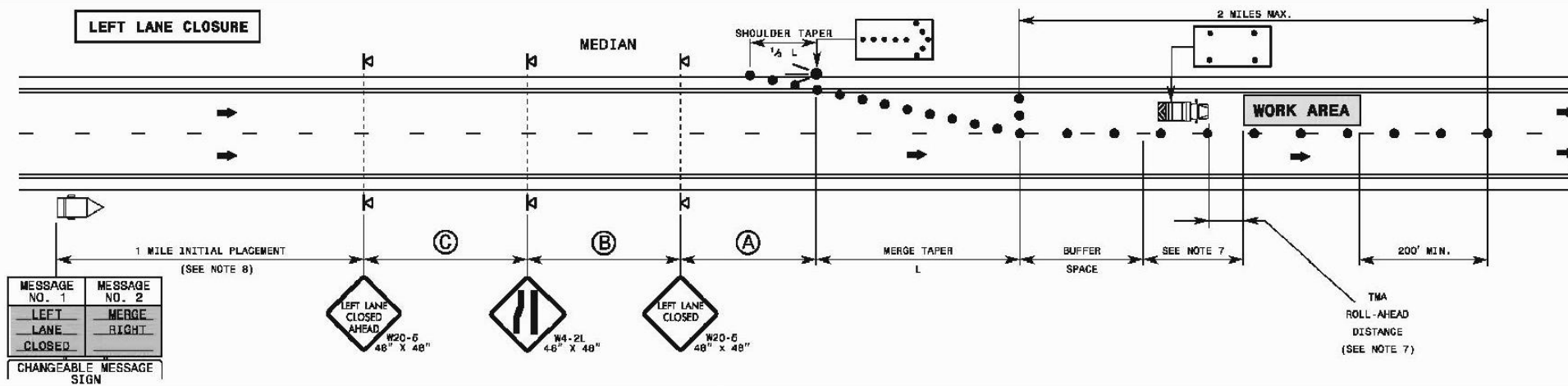


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ENGLISH STANDARD DRAWING FOR  
TEMPORARY LANE CLOSURES  
DIVIDED MULTI-LANE ROADWAY-1 LANE CLOSED  
(FOR ROADWAYS < 60 MPH)

SHEET 3 OF 15  
1101.02



**GENERAL NOTES**

- 1- IF NECESSARY USE THIS STD. FOR ONE-WAY CITY TYPE STREETS WHERE SIGNS MAY BE MOUNTED ON BOTH SIDES OF THE ROADWAY.
- 2- PLACE ARROW BOARDS ON THE SHOULDER (PAVED OR UNPAVED). PLACE ARROW BOARDS WITHIN THE TAPER IF SHOULDERS DO NOT EXIST. MEET THE REQUIREMENTS FOR STOPPING SIGHT DISTANCE AT THE ARROW BOARD LOCATION. IF NEEDED, EXTEND LANE CLOSURES AT THE BUFFER SPACE, SUCH THAT STOPPING SIGHT DISTANCE TO THE ARROW BOARD IS MET (SEE STD. 1101.11 SHEET 2).
- 3- PLACE DRUMS IN TAPERS AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. PLACE DRUMS ALONG THE WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- 4- REFER TO STD. 1101.11 FOR "L" DISTANCE, SIGN SPACING, AND BUFFER SPACE.
- 5- REFER TO STD. 1101.02 SHEETS 9 AND 10 FOR TREATMENT OF LANE CLOSURES THRU INTERCHANGES.
- 6- 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.
- 7- POSITION THE TMA TO MAINTAIN A ROLL-AHEAD DISTANCE AS RECOMMENDED BY THE MANUFACTURER AND CONTINUOUSLY ADVANCE TMA'S AS WORK PROGRESSES.
- 8- PLACE CHANGEABLE MESSAGE SIGN (CMS) ON THE OUTSIDE OF THE TRAVELWAY AS DIRECTED BY THE ENGINEER. PLACE CMS APPROXIMATELY 1 MILE IN ADVANCE OF THE W20-5 SIGNS. IF TRAFFIC BACKS UP TO WHERE THE CMS IS INITIALLY PLACED, RELOCATE CMS 1/2 MILE IN ADVANCE OF ANTICIPATED BACKUP. CONTINUE TO MONITOR TRAFFIC, MOVE CMS APPROXIMATELY 1/2 MILE IN ADVANCE OF ANTICIPATED BACKUP.
- 9- DO NOT EXCEED A 2 MILE LANE CLOSURE LENGTH UNLESS OTHERWISE SHOWN IN THE TMP OR AS DIRECTED BY THE ENGINEER.

**LEGEND**

- FLASHING ARROW BOARD (TYPE C)
- FLASHING ARROW BOARD, TYPE "C" (96"X48" MIN.), "CAUTION MODE"
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN (CMS)
- DRUM
- PORTABLE SIGN
- DIRECTION OF TRAFFIC FLOW

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TEMPORARY LANE CLOSURES  
DIVIDED MULTI-LANE ROADWAY-1 LANE CLOSED  
(FOR ROADWAYS < 60 MPH)

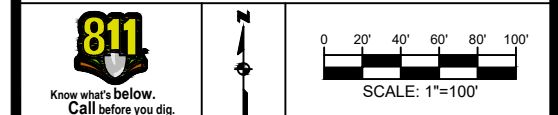
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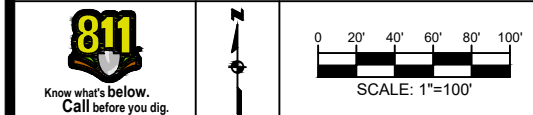
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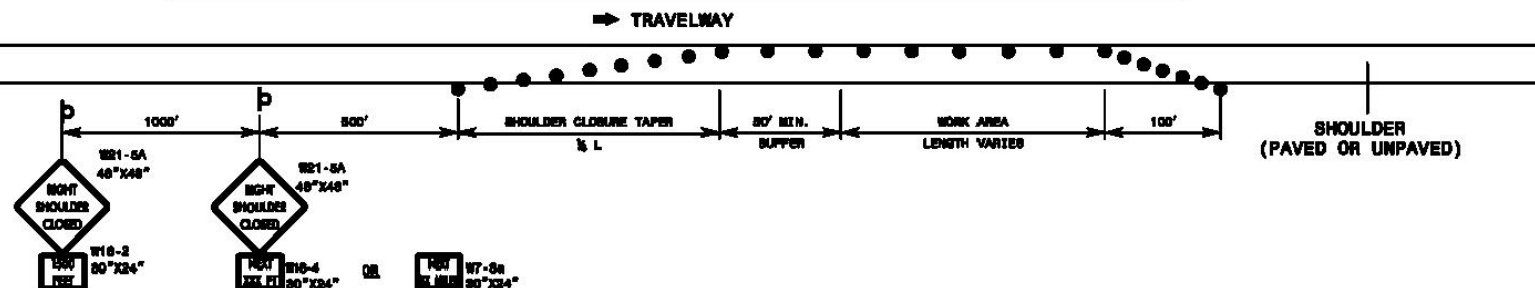
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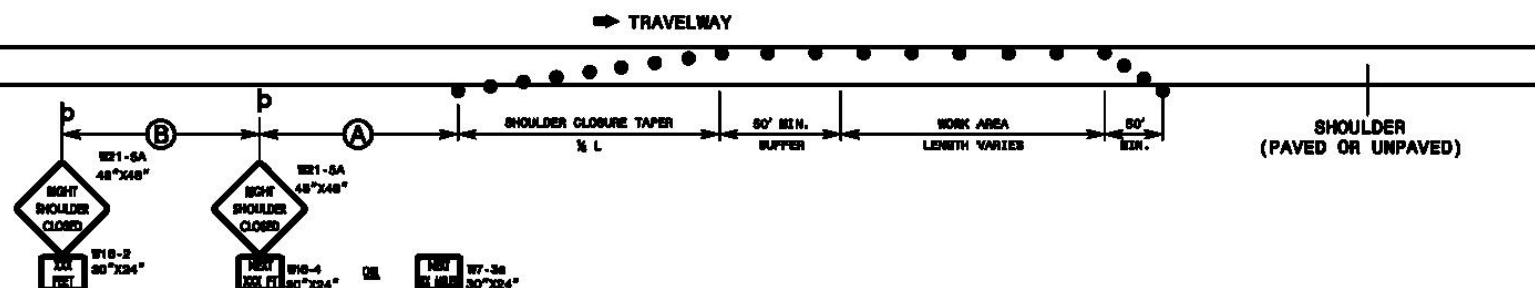
ENGLISH STANDARD DRAWING FOR  
TEMPORARY SHOULDER CLOSURES

SHEET 1 OF 1  
1101.04

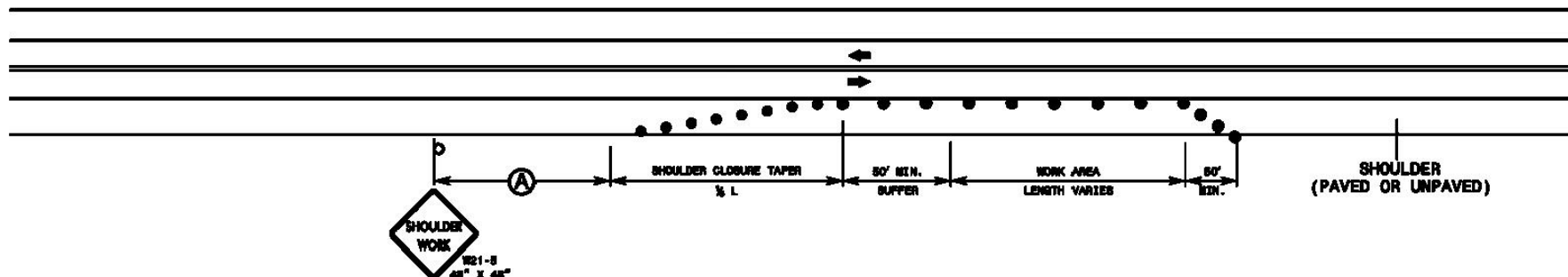
SHOULDER CLOSURE ON CONTROLLED ACCESS FACILITIES -  $\geq 60$  MPH



SHOULDER CLOSURE ON DIVIDED FACILITIES -  $\leq 55$  MPH



SHOULDER CLOSURE ON UNDIVIDED ROADWAYS  
(SEE NOTE 5)



GENERAL NOTES

- 1- PLACE SHOULDER CLOSURE SIGNS ON THE SAME SIDE AS THE SHOULDER THAT IS CLOSED.
- 2- PLACE DRUMS IN THE SHOULDER TAPER AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. THE MAXIMUM SPACING OF DRUMS ALONG THE WORK AREA IS EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- 3- USE STATIONARY SIGNS FOR LONG TERM OPERATIONS (LONGER THAN 3 DAYS).
- 4- REFER TO STD. 1101.11 FOR "L" DISTANCE AND SIGN SPACING.
- 5- THE TWO-LANE, TWO-WAY DRAWING MAY BE APPLIED TO UNDIVIDED, MULTI-LANE FACILITIES.

LEGEND

- DRUM
- ⌋ STATIONARY OR PORTABLE SIGN
- ➡ DIRECTION OF TRAFFIC FLOW

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ENGLISH STANDARD DRAWING FOR  
TEMPORARY SHOULDER CLOSURES

SHEET 1 OF 1  
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