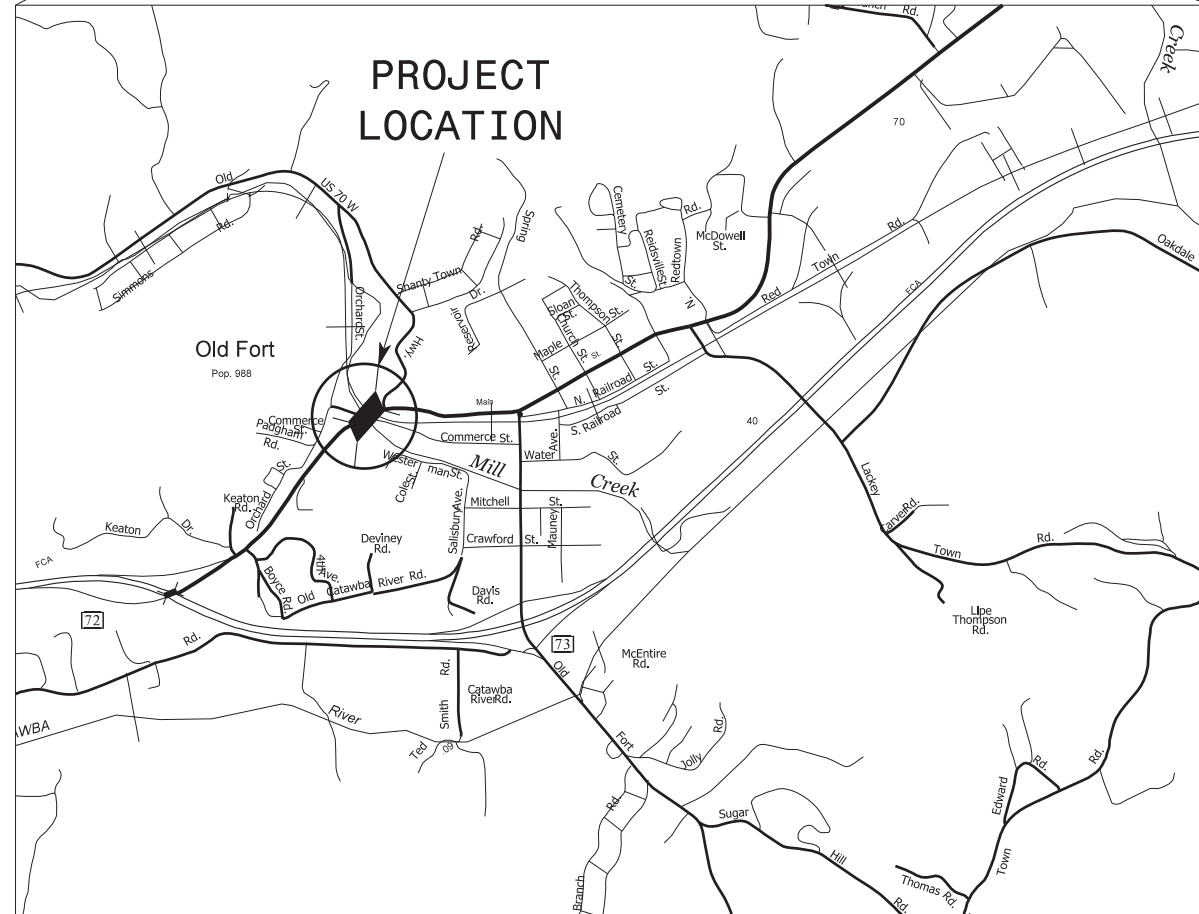


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

**MCDOWELL COUNTY**



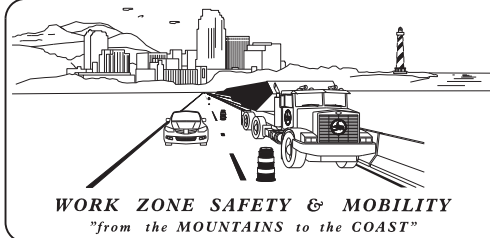
SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND MANAGEMENT STRATEGIES
TMP-1B	GENERAL NOTES AND CONSTRUCTION NARRATIVE
TMP-2	BRIDGE 32 OFFSITE DETOUR ROUTE AND SIGNING FOR LOCAL TRAFFIC
TMP-3	BRIDGE 32 OFFSITE DETOUR ROUTE AND SIGNING FOR TRUCK TRAFFIC

SHEET NO.  
TMP-1

**41665.14B**

**TIP PROJECT:**

3/13/2022  
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User:kedais



PLANS PREPARED BY:

KARMEN DAIS, PE

NCDOT CONTACTS:

ZACHARY CLARK, PE  
PROJECT ENGINEER

PROJECT DESIGN ENGINEER



DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

APPROVED: Zachary T. Clark  
DATE: 04/01/2022

SEAL



## ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMP
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1205.14	PAVEMENT MARKINGS - ROUNDABOUTS
1205.15	PAVEMENT MARKINGS - SUPERSTREETS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

## LEGEND

### GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)
- WORK AREA
- REMOVAL

### SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY
- PORTABLE

### PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

### TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM
- SKINNY DRUM
- TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

### TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

### PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

### PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

## MANAGEMENT STRATEGIES

THE FOLLOWING LISTED WORK ZONE STRATEGIES ARE RECOMMENDED FOR INCLUSION WITHIN THIS TRANSPORTATION MANAGEMENT PLAN (TMP).

RECOMMENDED STRATEGIES:

- TRAFFIC MANAGEMENT STRATEGIES:  
 OFF-SITE DETOURS / USE OF ALTERNATIVE ROUTES  
 TEMPORARY LANE CLOSURES

APPROVED: DATE: 04/01/2022			<h3>ROADWAY STANDARD DRAWINGS, LEGEND, AND MANAGEMENT STRATEGIES</h3>
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			

## GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

### LANE AND SHOULDER CLOSURE REQUIREMENTS

- A) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- B) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AND UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, 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.

### TRAFFIC PATTERN ALTERATIONS

- D) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

### SIGNING

- E) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- F) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

- G) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

- H) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

### TRAFFIC CONTROL DEVICES

- I) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

## GENERAL NOTES (CONT.)

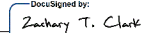
### PAVEMENT MARKINGS AND MARKERS


- J) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS IN THE EXISTING TRAFFIC PATTERN PRIOR TO OPENING THE ROAD TO TRAFFIC.
- K) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- L) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS PRIOR TO OPENING THE ROAD TO TRAFFIC.

## CONSTRUCTION NARRATIVE

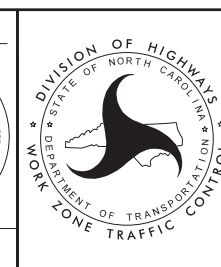
1. REFER TO TMP-2, TMP-3, AND RSD. 1101.03, SHEET 1 AND 2, AND CLOSE US 70 (MAIN ST) TO THROUGH TRAFFIC.
2. COMPLETE BRIDGE REHABILITATION PER STRUCTURE PLANS. USE RSD. 1101.02, SHEET 1, AND FLAGGERS, AS NECESSARY, FOR MAINTAINING TRAFFIC ON COMMERCE ST.
3. REOPEN US 70 (MAIN ST) IN THE ORIGINAL TRAFFIC PATTERN WITH TEMPORARY PAVEMENT MARKINGS.
4. REMOVE ALL DETOUR SIGNING AND BARRICADES.
5. USE RSD. 1101.02, SHEET 11, TO INSTALL FINAL PAVEMENT MARKINGS.

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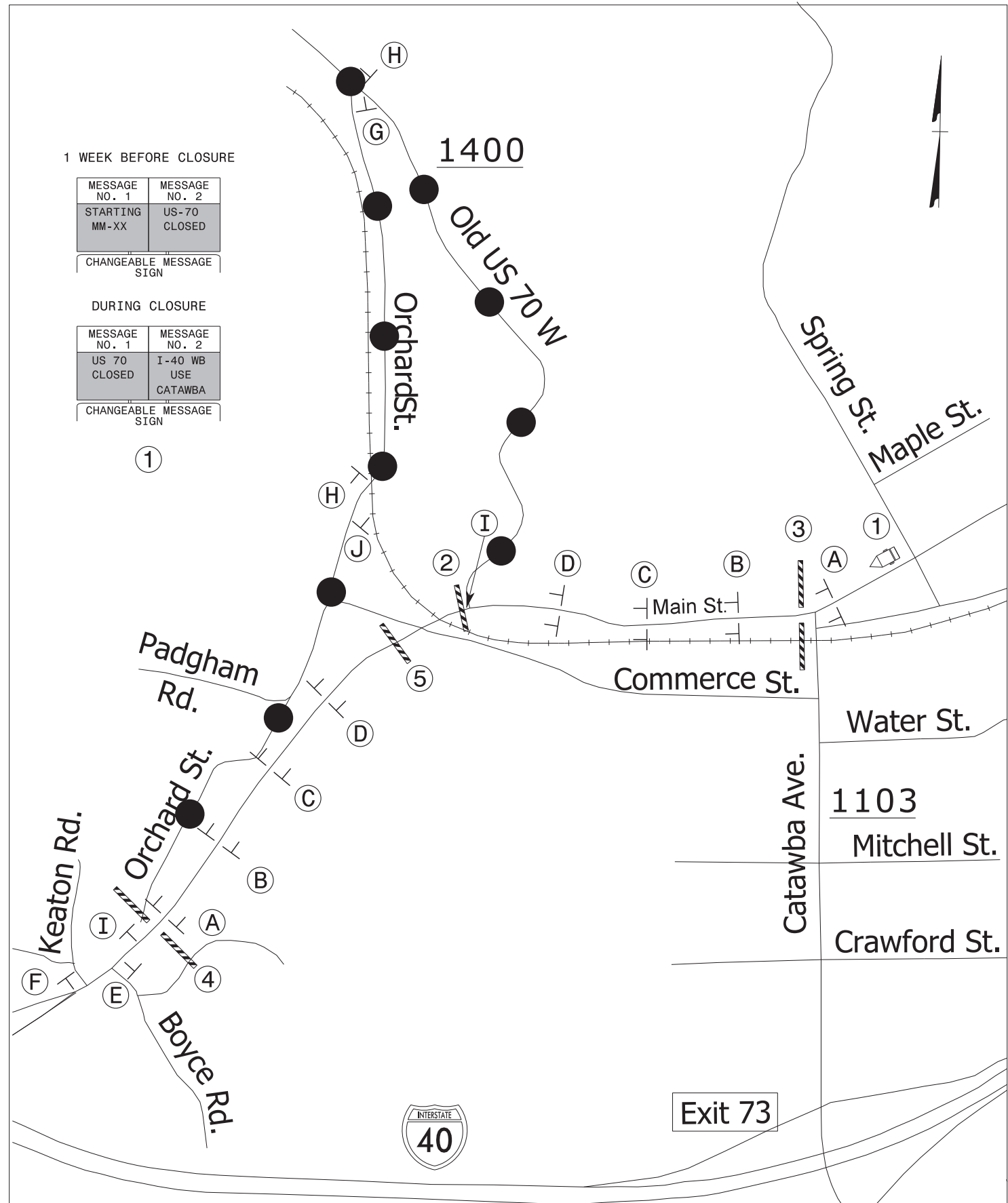
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DocSigned by: Zachary T. Clark  
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 DATE: 04/01/2022



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GENERAL NOTES  
AND CONSTRUCTION  
NARRATIVE



1 WEEK BEFORE CLOSURE

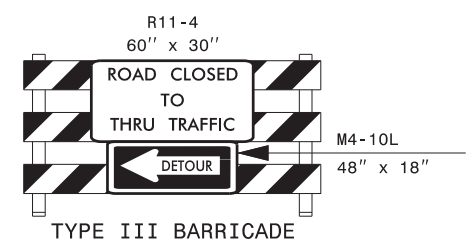
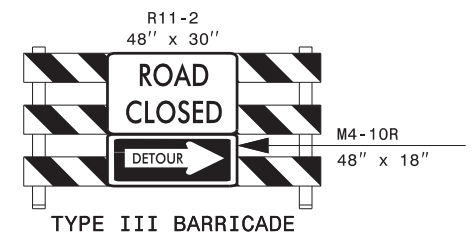
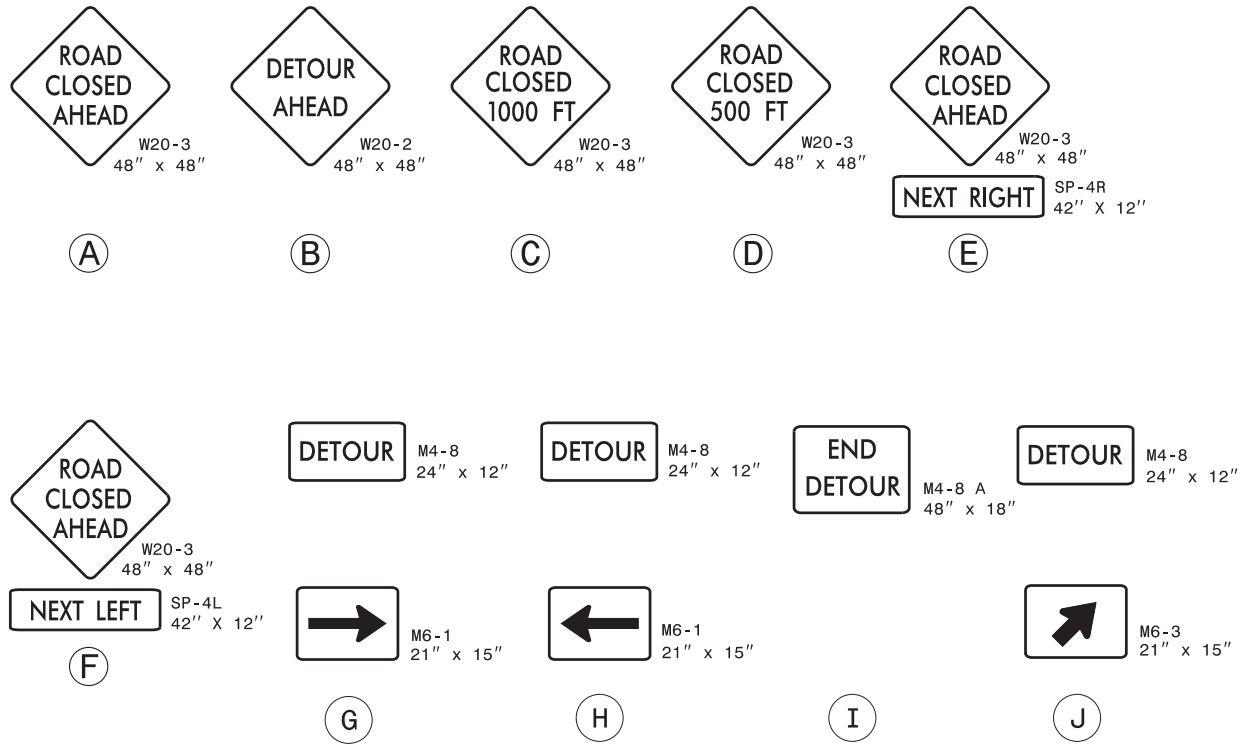
MESSAGE NO. 1	MESSAGE NO. 2
STARTING MM-XX	US-70 CLOSED

CHANGEABLE MESSAGE SIGN

DURING CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
US 70 CLOSED	I-40 WB USE CATAWBA

CHANGEABLE MESSAGE SIGN



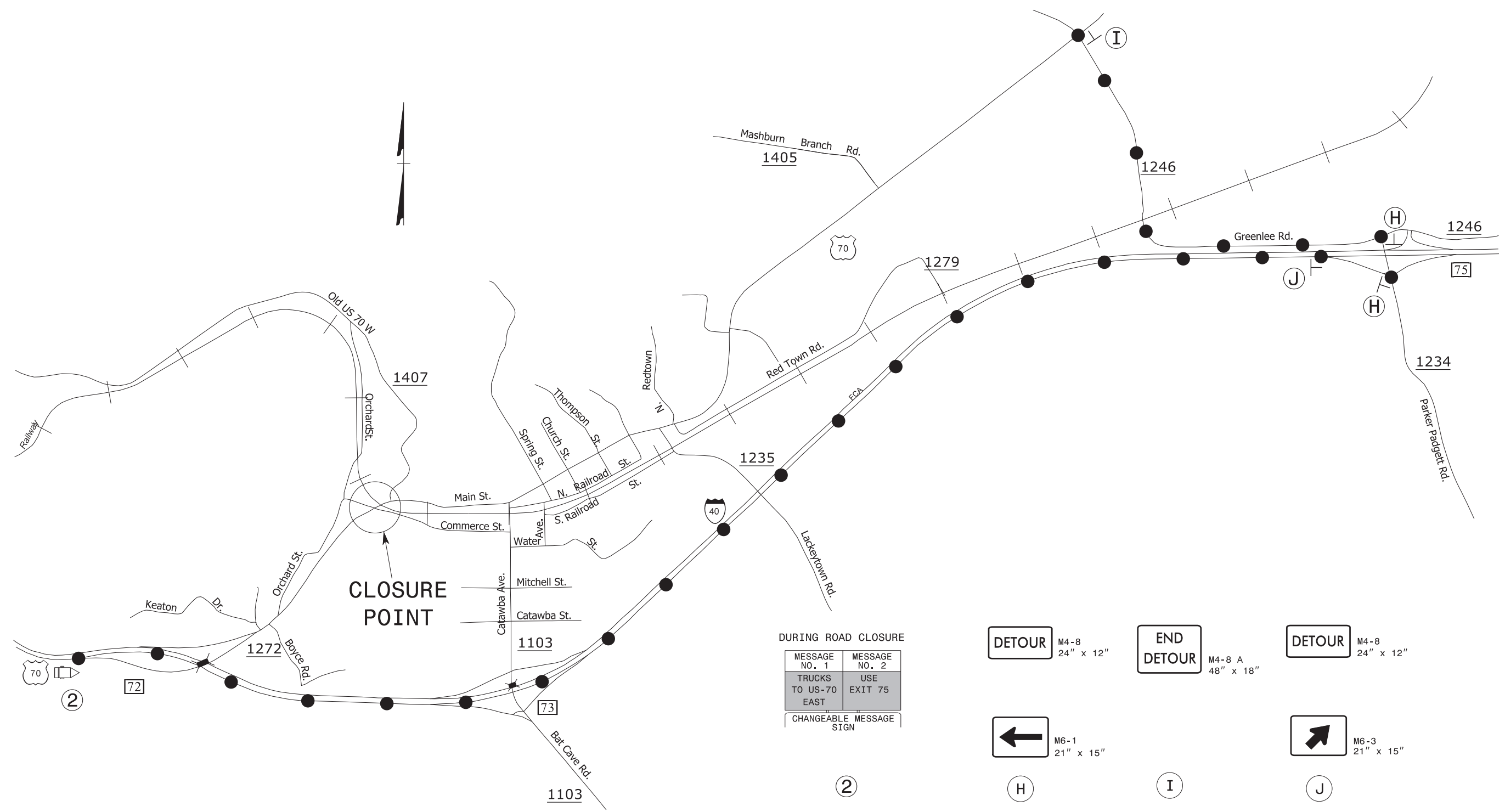
APPROVED: *Zachary T. Clark*  
SCH42AT17FD420  
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BRIDGE 32  
 OFFSITE DETOUR  
 FOR LOCAL TRAFFIC

4/1/2022  
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 User:kedais



**CLOSURE POINT**

DURING ROAD CLOSURE

MESSAGE NO. 1	MESSAGE NO. 2
TRUCKS TO US-70 EAST	USE EXIT 75

CHANGEABLE MESSAGE SIGN

<b>DETOUR</b> M4-8 24" x 12"	<b>END DETOUR</b> M4-8 A 48" x 18"	<b>DETOUR</b> M4-8 24" x 12"
M6-1 21" x 15"	M6-3 21" x 15"	
(H)	(I)	(J)

3/13/2022  
 S:\TMU\WZTC\DesignGroup3\Projects\41665\4B\41665\_14B\_32\_TC\_TMP\_3 Truck detour.dgn  
 User:kedais

APPROVED: DATE: 04/01/2022 		<p style="text-align: center;"><b>BRIDGE 32 OFFSITE DETOUR FOR TRUCK TRAFFIC</b></p>
<p><b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b></p>		