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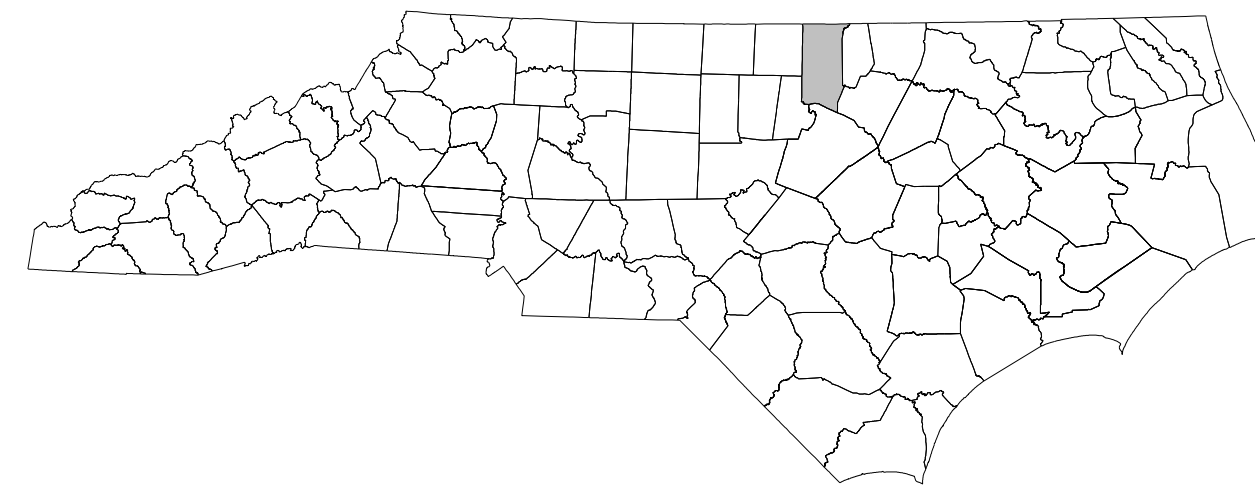
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STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

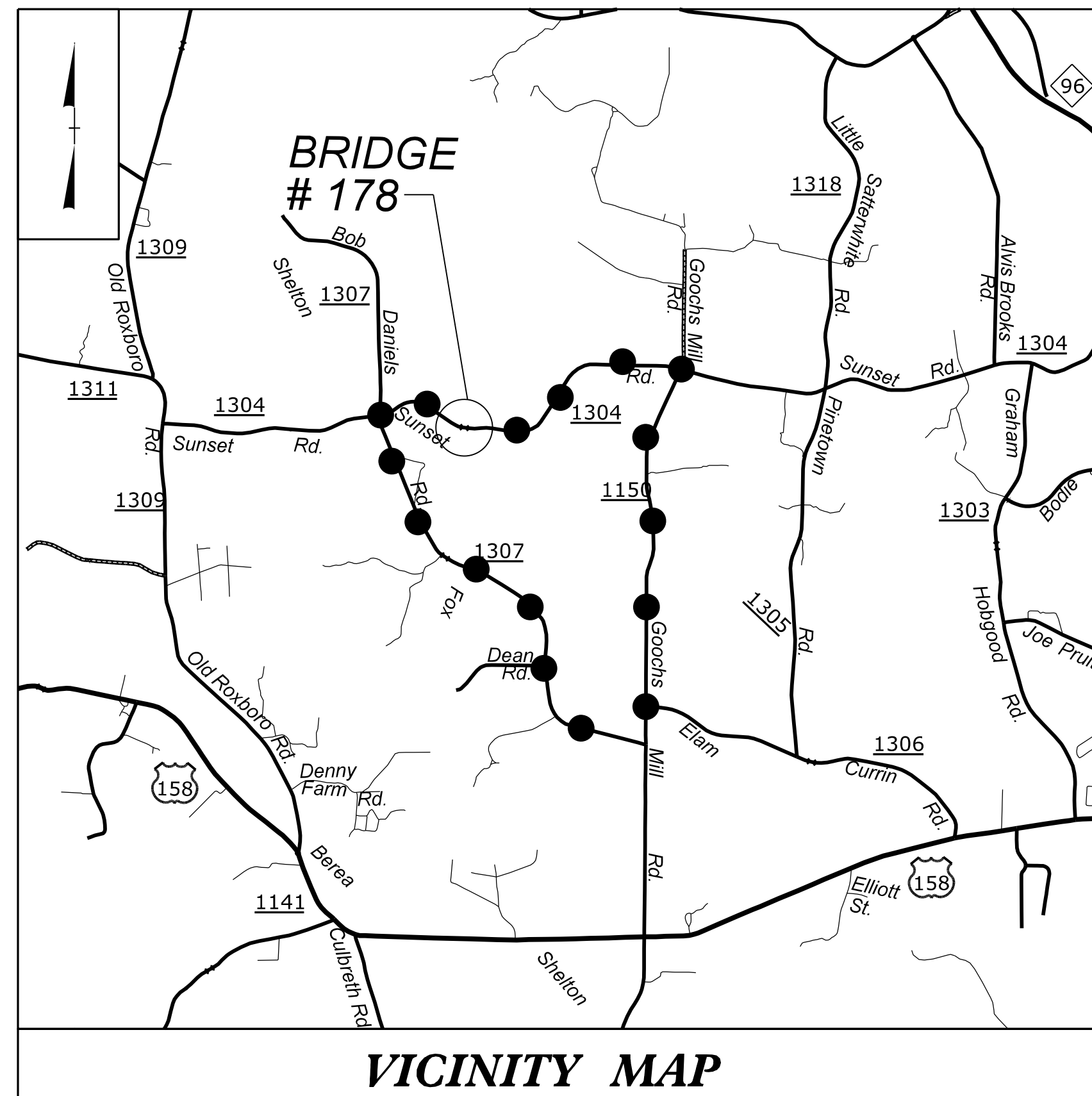
TRANSPORTATION MANAGEMENT PLAN

GRANVILLE COUNTY

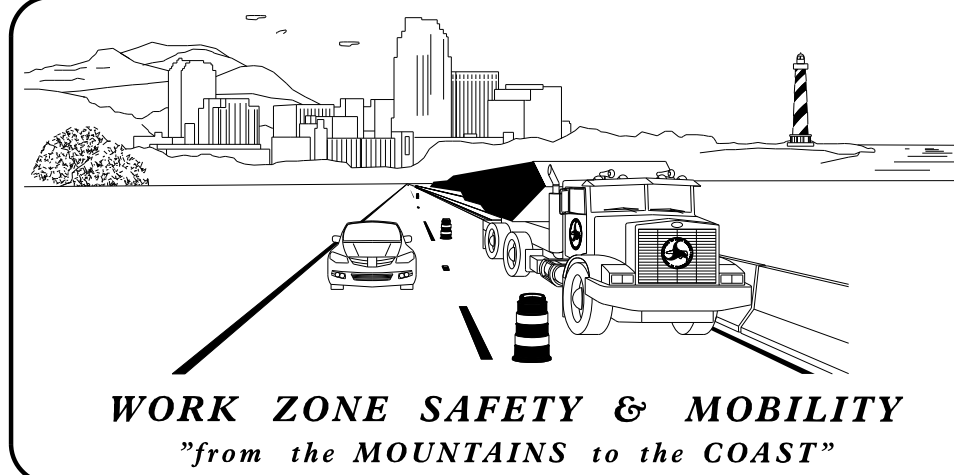
DIVISION 5



BRIDGE #178 – SR 1304 (SUNSET ROAD) OVER FOX CREEK

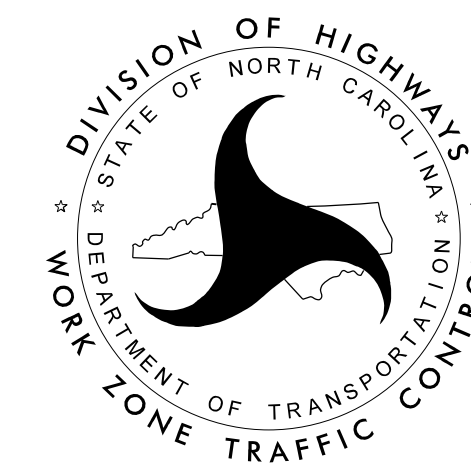


●●●●● DENOTES OFF-SITE DETOUR
TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE



N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

J. S. BOURNE, PE STATE TRAFFIC MANAGEMENT ENGINEER
D. W. BISSETTE, PE CENTRAL WORK ZONE TRAFFIC CONTROL ENGINEER
HELEN SHYU, PE TRAFFIC CONTROL PROJECT DESIGN ENGINEER



INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-1B	TRANSPORTATION OPERATIONS PLAN: TRAFFIC MANAGEMENT STRATEGY AND GENERAL NOTES
TMP-2	SPECIAL SIGN DESIGN - SUNSET ROAD
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4	SR 1304 (SUNSET ROAD) ROAD CLOSURE AND DETOUR ROUTE

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Raleigh, NC 27606 www.stantec.com
License No. F-0672

BETSY L. WATSON, PE PRINCIPAL
GEORGE M. KARAGEORGE, PE SENIOR TRANSPORTATION ENGINEER
ANDREW GOOD TRAFFIC TECHNICIAN

DocuSigned by:
George M. Karageorge
1/4/2016

12/15/2015
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ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE 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	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
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.
- PROPOSED PVMT.
- NORTH ARROW
- TEMP. SHORING (LOCATION PURPOSES ONLY)
- WORK AREA

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TRAFFIC CONTROL DEVICES

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

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS
- EXISTING PAVEMENT MARKING SYMBOLS (HOLLOW)
- PAVEMENT MARKING ALPHANUMERIC CHARACTERS

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PROJ. REFERENCE NO.	SHEET NO.
B-5157	TMP-1B

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 WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- C) 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 NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRANSPORTATION MANAGEMENT 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.
- E) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

TRAFFIC PATTERN ALTERATIONS

- F) NOTIFY GRANVILLE COUNTY SCHOOLS, EMERGENCY SERVICES, AND ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

- G) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRANSPORTATION MANAGEMENT PLANS.

AND

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRANSPORTATION MANAGEMENT PLANS.

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

AND

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

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

TRAFFIC CONTROL DEVICES

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

MISCELLANEOUS



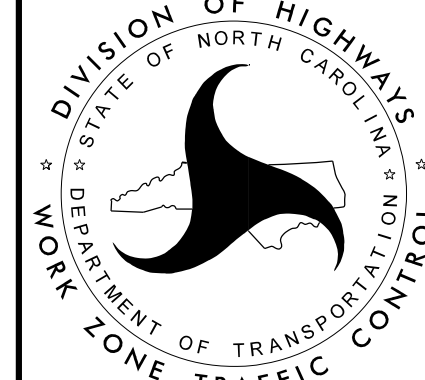
- K) MAINTAIN VEHICULAR ACCESS TO ALL DRIVEWAYS DURING THE LIFE OF THE CONTRACT, UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER. USE INCIDENTAL STONE WHEN NECESSARY.
- L) ALL DIMENSIONS AND STATIONS IN THE TRANSPORTATION MANAGEMENT PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- M) ENSURE THE OVERSIZE/OVERWEIGHT PERMIT UNIT (919) 733-4740 HAS BEEN ADVISED OF THE ONGOING TRAFFIC OPERATIONS THROUGH THE DIVISION OFFICE.

TRAFFIC MANAGEMENT STRATEGY

PROPOSED BRIDGE AND ROADWAY CONSTRUCTION WILL BE PERFORMED UNDER A ROAD CLOSURE, WITH TRAFFIC OPERATING ON AN OFF-SITE DETOUR (6.1 MILES)

ROADS USED FOR OFF-SITE DETOUR INCLUDE BOB DANIEL RD., AND GOOCHS MILL RD.

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 Stantec Consulting Services Inc. 801 Jones Franklin Road-Suite 300 Raleigh, NC 27606 Tel. (919) 851-6866 Fax. (919) 851-7024 www.stantec.com License No. F-0672			TRANSPORTATION OPERATIONS PLAN
			TRAFFIC MANAGEMENT STRATEGY GENERAL NOTES

SIGN NUMBER: SD-1 TYPE: STATIONARY QUANTITY: SEE PLANS SIGN WIDTH: 42" HEIGHT: 12" TOTAL AREA: 3.5 Sq.Ft. BORDER TYPE: RECESSED RADII: 1.5" WIDTH: 0.5" RECESS: 0.38" NO. Z BARS: LENGTH:	BACKG COLOR: Fluorescent Orange COPY COLOR: Black <table border="1"> <thead> <tr> <th>SYMBOL</th> <th>X</th> <th>Y</th> <th>WID</th> <th>HT</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> MAT'L: 0.080" (2.0MM) ALUMINUM	SYMBOL	X	Y	WID	HT																																									DESIGN BY: RRH PROJECT ID: B-5157 CHECKED BY: GMK DIV: 5 DATE: Dec 15, 2015
SYMBOL	X	Y	WID	HT																																											

USE NOTES

- Legend and border shall be direct applied black non-reflective sheeting.
- Background shall be NC GRADE B Fluorescent Orange retroreflective sheeting.

BORDER 5.05" 31.9" 5.05"
 R=1.5"
 TH=0.5"
 IN=0.38"

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter											Series/Size Text Length	
	S	U	N	S	E	T		R	D			C 2000
	5.1	3.6	3.9	3.7	3.7	3	2.5	5	3.7	2.8	5.1	31.9

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PROJ. REFERENCE NO.	SHEET NO.
B-5157	TMP-3

PHASE I (TMP - 4)

STEP 1:

USING ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9, AND TMP-4, PLACE TRAFFIC ON OFFSITE DETOUR ROUTE, AND CLOSE SR 1304 (SUNSET ROAD).

STEP 2:

WITH SR 1304 CLOSED TO TRAFFIC, PERFORM THE FOLLOWING:

- REMOVE EXISTING BRIDGE.
- CONSTRUCT PROPOSED BRIDGE.
- CONSTRUCT PROPOSED ROADWAY THROUGH THE FINAL SURFACE COURSE.
- PLACE FINAL PAVEMENT MARKINGS AND TIE TO EXISTING MARKINGS.

PHASE II

STEP 1:


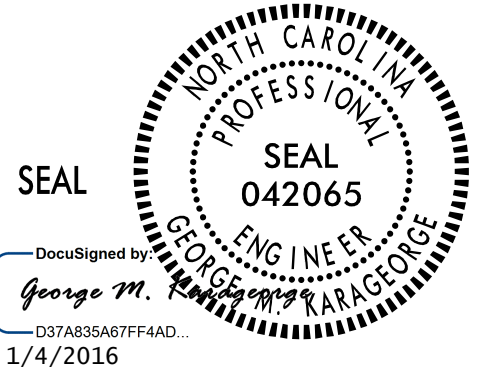

REMOVE ROAD CLOSURE DEVICES AND DETOUR SIGNS AND OPEN SR 1304 (SUNSET ROAD) TO TRAFFIC.

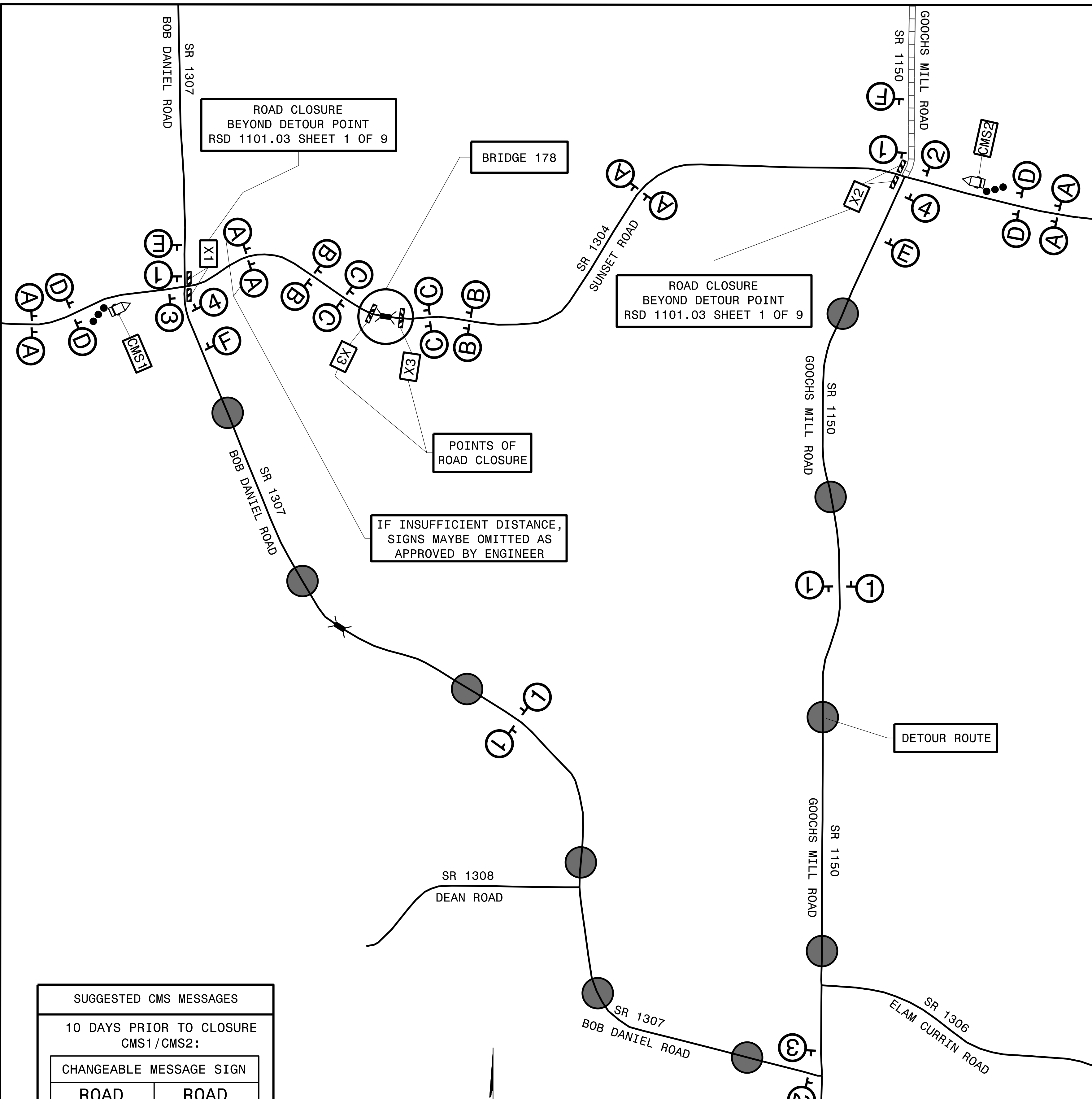
STEP 2:

USING TEMPORARY LANE CLOSURES PER ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 15, PERFORM ANY PUNCHLIST ITEMS AS REQUIRED BY THE ENGINEER.

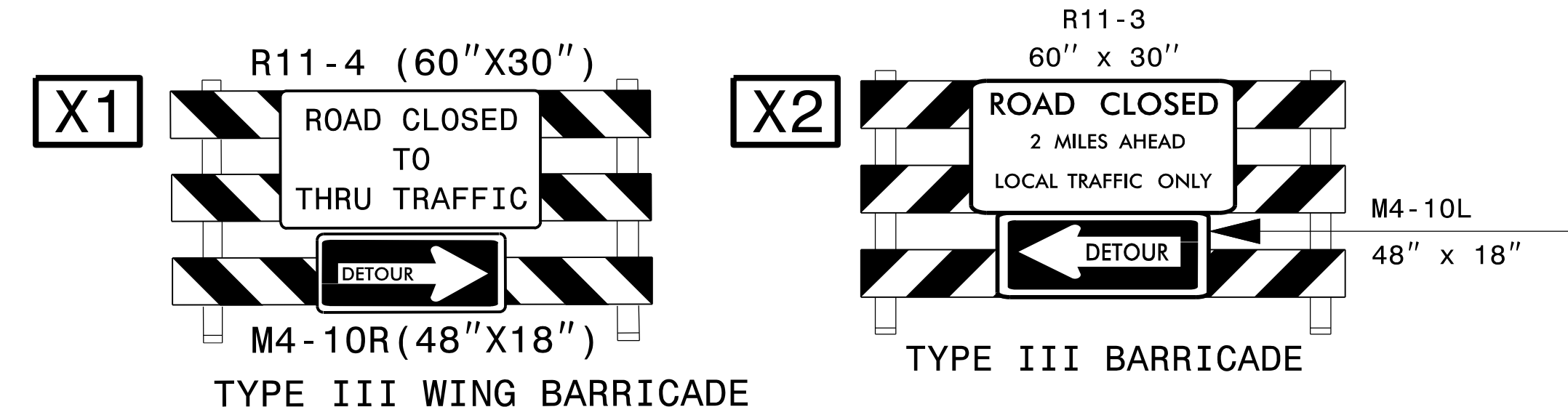
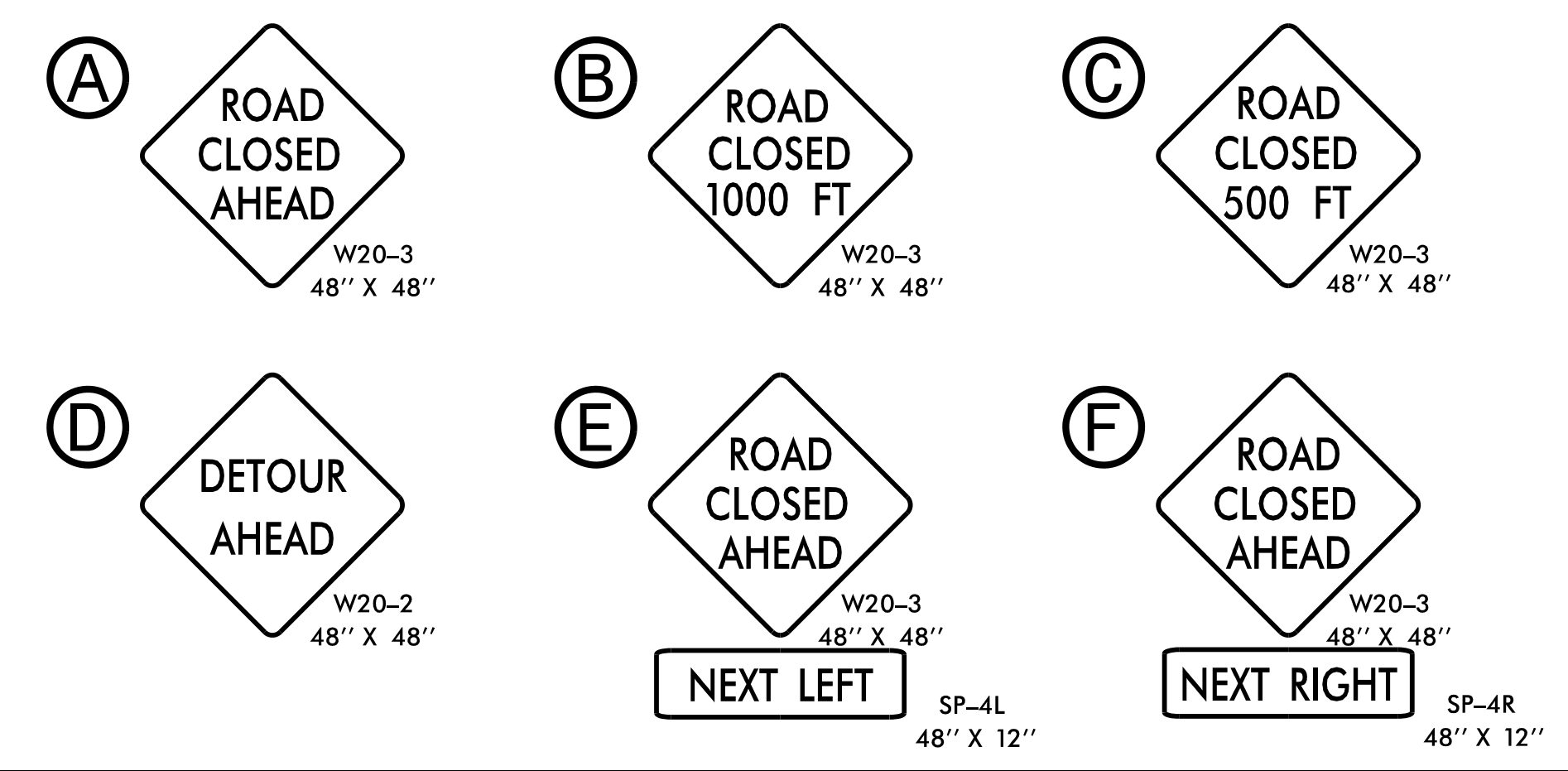
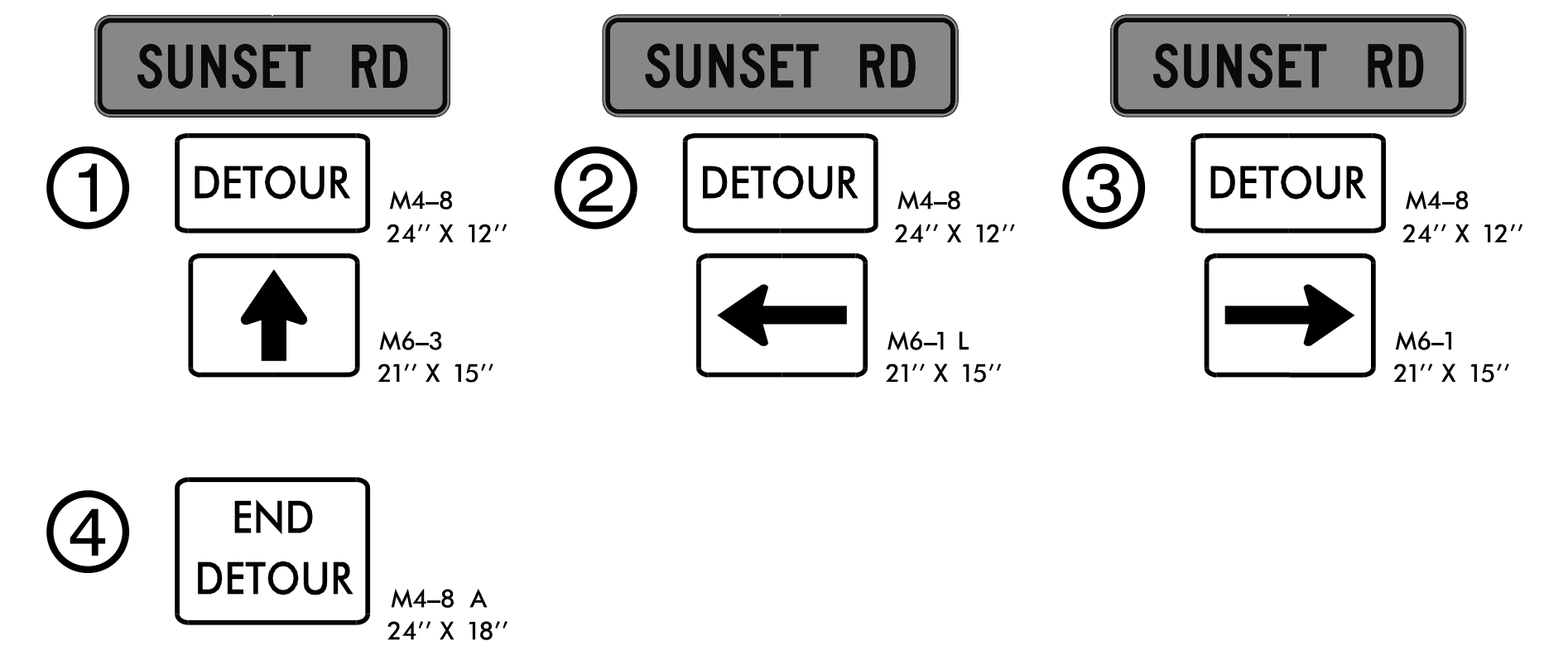
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SUGGESTED CMS MESSAGES	
10 DAYS PRIOR TO CLOSURE CMS1/CMS2:	
CHANGEABLE MESSAGE SIGN	
ROAD CLOSING DD/MM	ROAD CLOSING DD/MM
DURING CLOSURE CMS ARE NOT REQUIRED	



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NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 042065
George M. Karagone
2/17/2016

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

SR 1304 (SUNSET ROAD)
ROAD CLOSURE AND
DETOUR ROUTE