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# ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN 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
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES - TYPE III
1150.01	FLAGGING DEVICES
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1180.01	SKINNY - DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
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
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1253.01	RAISED PAVEMENT MARKERS - SNOWPLOWABLE
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
- WEDGING FOR MAINTENANCE OF TRAFFIC
- USER DEFINED (IF NEEDED)

## 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

## SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

## PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

## PAVEMENT MARKERS

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

## PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

## TEMPORARY PAVEMENT MARKING

SYMBOL	DESCRIPTION
P2	PAINT(24") WHITE STOPBAR
P8	PAINT(4") 2 FT. - 6 FT./SP WHITE MINISKIP
PA	WHITE EDGELINE
PI	YELLOW DOUBLE CENTER
P13	PAINT(8") 3 FT. - 9 FT./SP WHITE MINISKIP
PR	WHITE SOLID LANE LINE
QI	PAINTMARKING CHARACTERS ALPHANUMERIC CHARACTER
QB	PAINTMARKING SYMBOLS RIGHT TURN ARROW
QC	STRAIGHT ARROW

APPROVED:  DATE: 2/13/2015			<p>ROADWAY STANDARD DRAWINGS &amp; LEGEND</p>
SEAL			

## MANAGEMENT STRATEGIES

- BEARWOOD AVENUE TRAFFIC WILL BE MAINTAINED THROUGHOUT THE PROJECT USING LANE CLOSURES AND WEDGING WHERE NECESSARY
- A PORTION OF SUGAR CREEK ROAD, GREENSBORO STREET, RALEIGH STREET, N DAVIDSON STREET, REDWOOD AVENUE, AND DINGLEWOOD AVENUE WILL BE TEMPORARILY CLOSED TO FACILITATE CONSTRUCTION
- SUGAR CREEK ROAD TRAFFIC WILL BE DETOURED VIA EASTWAY DRIVE AND TRYON STREET. EASTBOUND PLAZA TRAFFIC HEADED TO TRYON STREET WILL BE DIRECTED TO TAKE MATHESON AVENUE RATHER THAN ADD TO THE CONGESTION ON EASTWAY DRIVE
- N DAVIDSON STREET TRAFFIC WILL BE DETOURED VIA NORWELL PL AND NORTHMORE STREET

## 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.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 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 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.
- 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.

### PAVEMENT EDGE DROP OFF REQUIREMENTS

- F) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:
  - BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.
  - BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.
  - BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.
- G) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) (FEET) IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

### TRAFFIC PATTERN ALTERATIONS

- H) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

### SIGNING

- I) INSTALL ADVANCE WORK ZONE WARNING SIGNS NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- J) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

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

- K) 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.

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

### TRAFFIC CONTROL DEVICES

- M) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- N) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- O) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

### PAVEMENT MARKINGS AND MARKERS

- P) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

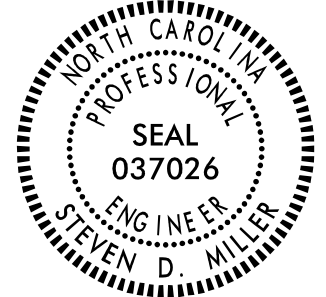
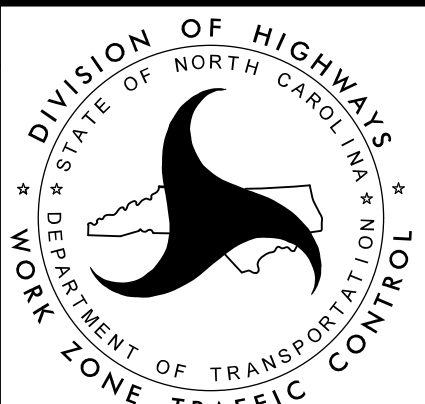
ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	NONE

- Q) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.
- R) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- S) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

### MISCELLANEOUS

- T) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- U) ALL WHEELCHAIR RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.
- V) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.).

2/4/2015 2:47:15 PM C:\transportation\TR11.036.00 (U-5008)\TrafficControl\TCP\U-5008 TMP-1B.dgn S.Miller

APPROVED: <u>Steve Miller</u> DATE: <u>2/13/2015</u>			<h1 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h1>
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TRANSPORTATION TRAFFIC SURVEYING ENVIRONMENTAL SITE CIVIL INSPECTIONS CONSTRUCTION

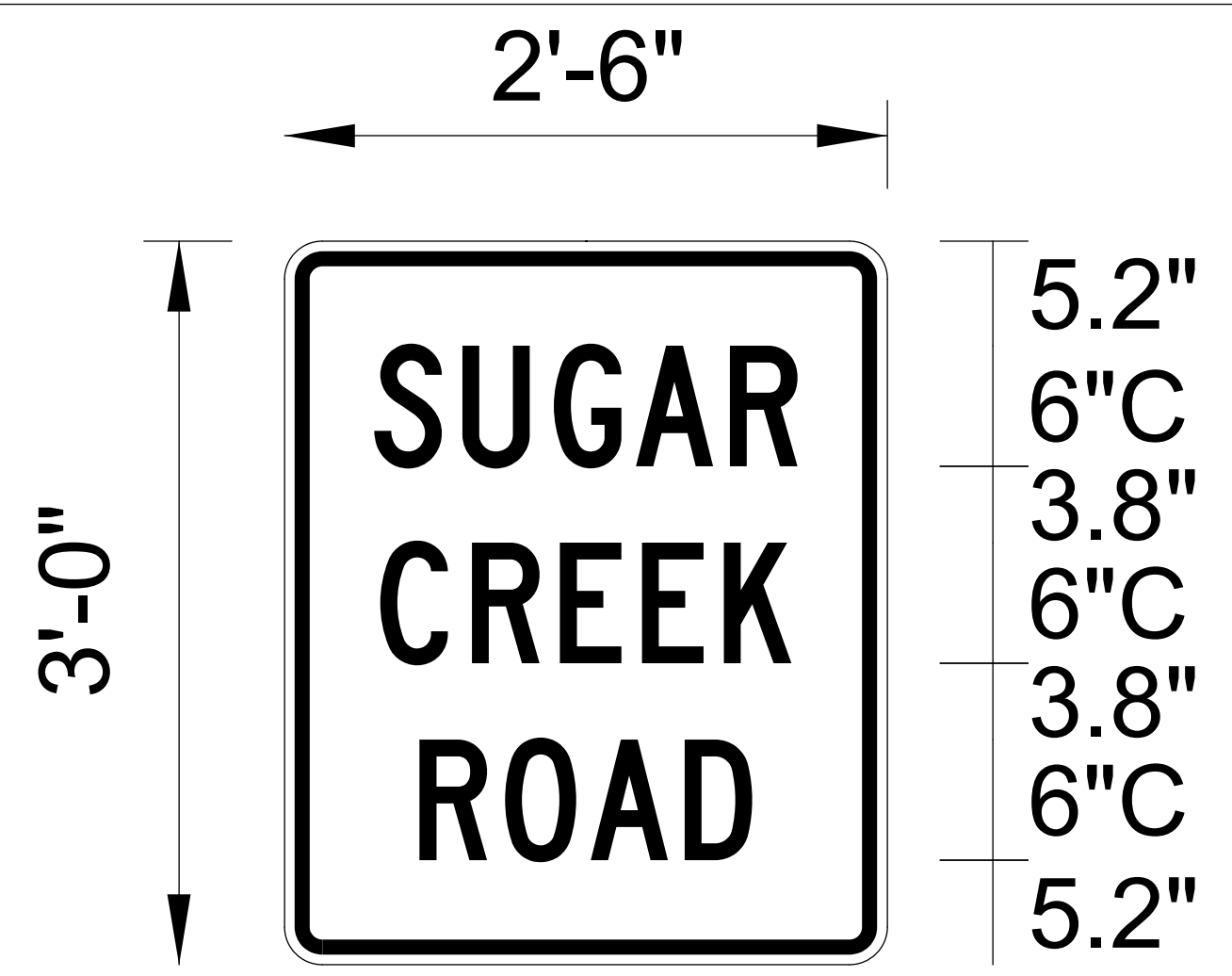
**SIGN NUMBER:** SP-1      **BACKG COLOR:** Fluorescent Orange  
**TYPE:** STATIONARY      **COPY COLOR:** Black  
**QUANTITY:** SEE PLANS

**SIGN WIDTH:** 30"  
**HEIGHT:** 36"  
**TOTAL AREA:** 7.5 Sq.Ft.

**BORDER TYPE:** RECESSED  
**RECESS:** 0.5"  
**WIDTH:** 0.63"  
**RADII:** 1.5"

**MAT'L:**      0.125" (3.2 mm) ALUMINUM  
                  0.079" COMPOSITE

**DESIGN BY:** R. DRAYTON      **CHECKED BY:** S. MILLER  
**PROJECT ID:** U-5008      **DIV:** 10      **DATE:** Feb 11, 2013



**BORDER** 4.45" 21.1" 4.45"  
R=1.5"  
TH=0.63"  
IN=0.5"

Spacing Factor is 1 unless specified otherwise

**USE NOTES**

- Legend and border shall be direct applied black non-reflective sheeting.
- Background shall be Type VII, VIII, or IX (prismatic) fluorescent orange retroreflective sheeting.

**LETTER POSITIONS**

Letter locations are panel edge to lower left corner																				Series/Size Text Length	
S	U	G	A	R																	C 2000 21.1
4.5	8.8	13.4	17.5	22.2																	C 2000 20.5
C	R	E	E	K																	C 2000 16.6
4.8	9.3	13.7	17.8	21.9																	
R	O	A	D																		
6.7	11	15.2	19.9																		

FILENAME: U-5008 SP-1

SEPI ENGINEERING & CONSTRUCTION SIGN DETAIL

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APPROVED: <u>Steve Miller</u> DATE: <u>2/13/2015</u> 		<b>SPECIAL SIGN DESIGN</b>
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TRANSPORTATION TRAFFIC SURVEYING ENVIRONMENTAL SITE CIVIL INSPECTIONS CONSTRUCTION

**SIGN NUMBER: SP-2**      **BACKG COLOR:Fluorescent Orange**  
**TYPE:STATIONARY**      **COPY COLOR:Black**  
**QUANTITY:SEE PLANS**

**SIGN WIDTH: 42"**  
**HEIGHT: 36"**  
**TOTAL AREA: 10.5 Sq.US Survey Feet(')**

**BORDER TYPE: RECESSED**  
**RECESS: 0.5"**  
**WIDTH: 0.75"**  
**RADII: 1.38"**  
**MAT'L: 0.125" (3.2 mm) ALUMINUM**  
**0.079" COMPOSITE**

**DESIGN BY: R. DRAYTON**      **CHECKED BY: S. MILLER**  
**PROJECT ID: U-5008**      **DIV: 10**      **DATE: Aug 27, 2014**



**USE NOTES:**

- Legend and border shall be direct applied black non-reflective sheeting.
- Background shall be Type VII, VIII, or IX (prismatic) fluorescent orange retroreflective sheeting.

Spacing Factor is 1 unless specified otherwise

**LETTER POSITIONS**

Letter spacings are to start of next letter													Series/Size
													Text Length
	N	O	R	T	H								C 2000
10.77	4.56	4.74	3.9	3.9	3.36	10.77							20.46
	D	A	V	I	D	S	O	N					C 2000
5.19	4.08	4.2	4.56	2.16	4.26	4.26	4.74	3.36	5.19				31.62
	S	T	R	E	E	T							C 2000
9.54	3.9	3.9	4.38	4.08	3.6	3.06	9.54						22.92

FILENAME: Detour Sign Designs

SEPI ENGINEERING & CONSTRUCTION SIGN DETAIL

2/4/2015 2:44:00 PM C:\Users\SMiller\Documents\TrafficControl\U-5008\TrafficControl\TCP\U-5008 TMP-2A.dgn

APPROVED: <u>Steve Miller</u> DATE: <u>2/13/2015</u> 		<p><b>SPECIAL SIGN DESIGN</b></p>
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TRANSPORTATION TRAFFIC SURVEYING ENVIRONMENTAL SITE CIVIL INSPECTIONS CONSTRUCTION

<b>SIGN NUMBER: SP-3</b> <b>TYPE: STATIONARY</b> <b>QUANTITY: SEE PLANS</b>  <b>SIGN WIDTH: 42"</b> <b>HEIGHT: 18"</b> <b>TOTAL AREA: 5.3 Sq.US Survey Feet(')</b>  <b>BORDER TYPE: RECESSED</b> <b>RECESS: 0.5"</b> <b>WIDTH: 0.75"</b> <b>RADII: 1.38"</b> <b>MAT'L: 0.125" (3.2 mm) ALUMINUM</b> <b>0.079" COMPOSITE</b>	<b>BACKG COLOR: Fluorescent Orange</b> <b>COPY COLOR: Black</b>	<b>DESIGN BY: R. DRAYTON</b> <b>PROJECT ID: U-5008</b>	<b>CHECKED BY: S. MILLER</b> <b>DIV: 10</b>	<b>DATE: Aug 27, 2014</b>
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Spacing Factor is 1 unless specified otherwise

**LETTER POSITIONS**

**Letter spacings are to start of next letter**

	T	R	Y	O	N		S	T															Series/Size Text Length
	4.29	3.9	3.9	4.56	4.74	3.36	6	3.9	3.06	4.29													<b>C 2000</b>
																							<b>33.42</b>

FILENAME: Detour Sign Designs SEPI ENGINEERING & CONSTRUCTION SIGN DETAIL

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APPROVED: <u>Steve Miller</u> DATE: <u>2/13/2015</u> 		<h2 style="margin: 0;">SPECIAL SIGN DESIGN</h2>
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DCN

0400DEL\_P30  
0001ADD\_P30

PROJ. REFERENCE NO.	SHEET NO.
U-5008	TMP-3

## PHASING

PHASE I

STEP 1: VERIFY EXISTING OFF-SITE DETOUR SIGNS ARE INSTALLED CORRECTLY. INSTALL ADDITIONAL OFF-SITE DETOUR SIGNS PER TMP-11, TMP-12, AND RSD 1101.03 SHEET 1 OF 9. REMOVE EXISTING SIGNS NOT NOTED TO REMAIN.

STEP 2: WITH SUGAR CREEK ROAD CLOSED BETWEEN RALEIGH STREET AND BEARWOOD AVENUE, BEGIN BRIDGE BENT 2 AND BENT 3 CONSTRUCTION.

COMPLETE INTERIOR BENTS 2 AND 3 INCLUDING SETTING OF GIRDERS BY THE DATE SHOWN IN THE ICT.  
(SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES)

STEP 3: USING RSD 1101.01 SHEETS 2 AND 3 OF 3, INSTALL ADVANCE WARNING SIGNS ON GREENSBORO ST, RALEIGH ST, NORTH DAVIDSON ST, NORTHMORE ST, REDWOOD AVE, AND DINGLEWOOD AVE.

STEP 4: BEGIN CONSTRUCTION AWAY FROM TRAFFIC AS SHOWN ON TMP-5 AND TMP-6 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

STEP 5: USING RSD 1101.02 SHEETS 1 AND 3 OF 15 AS NECESSARY, COMPLETE ROADWAY CONSTRUCTION FROM -Y7- STA 10+25± TO -Y7- STA 19+78± AND FROM -Y4- STA 10+52± TO -Y4- STA 14+20± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE TMP-5 AND TMP-6).

STEP 6: PLACE TEMPORARY PAVEMENT MARKINGS FROM -Y7- STA 10+43± TO -Y7- STA 19+68± AS SHOWN ON TMP-9.

PHASE II

STEP 1: OPEN -Y7- AND -Y4- TO TRAFFIC. USING RSD 1101.02 SHEETS 1 AND 3 OF 15 AS NECESSARY, PLACE TEMPORARY PAVEMENT MARKINGS ON -Y1- AND -L- AS SHOWN ON TMP-7. DETOUR N DAVIDSON ST TRAFFIC TO NORTHMORE ST AS SHOWN ON TMP-7. USING RSD 1101.03 SHEET 1 OF 9, CLOSE SUGAR CREEK RD BETWEEN NORTHMORE ST AND BEARWOOD AVE AND BETWEEN BEARWOOD AVE AND GREENSBORO ST PLACING DEVICES AS SHOWN ON TMP-7 AND TMP-9. SHIFT BEARWOOD AVENUE TRAFFIC TO -Y4- AS SHOWN ON TMP-7.

STEP 2: BEGIN CONSTRUCTION OF -L- FROM STA 10+00± TO 39+00± AND -Y- LINES AS SHOWN ON TMP-7 AND TMP-9. MAINTAIN ACCESS USING RSD 1101.02 SHEET 1 OF 15 AS NECESSARY.

STEP 3: USING RSD 1101.02 SHEET 1 OF 15, COMPLETE ROADWAY CONSTRUCTION OF -Y4-, -Y3REV-, AND -Y2- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. SEE TMP-7.

STEP 4: USING RSD 1101.02 SHEET 1 OF 15, PLACE TEMPORARY PAVEMENT MARKINGS ON -Y4-, -Y3REV-, AND -Y2- AS SHOWN ON TMP-8 AND OPEN TO TRAFFIC, RELOCATING DEVICES TO THE LOCATIONS SHOWN ON TMP-8.

STEP 5: BEGIN -Y1- CONSTRUCTION.

STEP 6: USING RSD 1101.02 SHEET 1 OF 15, COMPLETE -L-, -Y1-, -Y2-, -Y3REV-, -Y4-, -Y5-, -Y7-, AND -Y8- INCLUDING THE FINAL LAYER OF SURFACE COURSE. PLACE PAVEMENT MARKINGS ACCORDING TO THE PAVEMENT MARKING PLANS.

STEP 7: OPEN -L- AND -Y- LINES TO TRAFFIC.

STEP 8: REMOVE ALL WORK ZONE TRAFFIC CONTROL DEVICES ASSOCIATED WITH SUGAR CREEK ROAD CONSTRUCTION.

PHASE III

WORK IN AREAS 1, 2, AND 3 MAY TAKE PLACE CONCURRENTLY.

STEP 1: COMPLETE THE WORK REQUIRED IN AREA 1, AREA 2, AND AREA 3.

STEP 2: REMOVE ALL REMAINING WORK ZONE TRAFFIC CONTROL DEVICES ASSOCIATED WITH U-5008 IN ALL AREAS.

AREA 1 - E CRAIGHEAD RD AND N DAVIDSON ST

STEP 1: USING RSD 1101.03 SHEET 1 OF 9, CLOSE E CRAIGHEAD RD AND N DAVIDSON ST DETOURING TRAFFIC OFF SITE AS SHOWN ON TMP-10.

STEP 2: CONSTRUCT -Y3- AND -Y6- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

STEP 3: CONSTRUCT THE FINAL LAYER OF SURFACE COURSE AND PLACE PAVEMENT MARKINGS ACCORDING TO THE PAVEMENT MARKING PLANS.

STEP 4: OPEN -Y3- AND -Y6- TO FINAL PATTERN AND REMOVE ALL AREA 1 WORK ZONE TRAFFIC CONTROL DEVICES.

AREA 2 - TRYON ST AND EASTWAY DR

STEP 1: USING RSD 1101.01 SHEET 2 OF 3, INSTALL ADVANCE WARNING SIGNS ON TRYON ST AND EASTWAY DR.

STEP 2: USING RSD 1101.02 SHEETS 3 AND 7 OF 15, CONSTRUCT IMPROVEMENTS AT THE INTERSECTION OF TRYON ST AND EASTWAY DR AS SHOWN IN THE ROADWAY PLANS.

STEP 3: REMOVE ALL AREA 2 WORK ZONE TRAFFIC CONTROL DEVICES.



AREA 3 - THE PLAZA AND EASTWAY DR

STEP 1: USING RSD 1101.01 SHEET 2 OF 3, INSTALL ADVANCE WARNING SIGNS ON THE PLAZA AND EASTWAY DR.

STEP 2: USING RSD 1101.02 SHEETS 3 AND 7 OF 15, CONSTRUCT IMPROVEMENTS AT THE INTERSECTION OF THE PLAZA AND EASTWAY DRIVE AS SHOWN IN THE ROADWAY PLANS.

STEP 3: REMOVE ALL AREA 3 WORK ZONE TRAFFIC CONTROL DEVICES.

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APPROVED: <u>Steve Miller</u> DATE: <u>8/12/2015</u> 		PHASING
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## PHASING

PHASE I

STEP 1: VERIFY EXISTING OFF-SITE DETOUR SIGNS ARE INSTALLED CORRECTLY. INSTALL ADDITIONAL OFF-SITE DETOUR SIGNS PER TMP-11, TMP-12, AND RSD 1101.03 SHEET 1 OF 9. REMOVE EXISTING SIGNS NOT NOTED TO REMAIN.

STEP 2: WITH SUGAR CREEK ROAD CLOSED BETWEEN RALEIGH STREET AND BEARWOOD AVENUE, BEGIN BRIDGE BENT 2 AND BENT 3 CONSTRUCTION.

COMPLETE INTERIOR BENTS 2 AND 3 INCLUDING SETTING OF GIRDERS BY NOVEMBER 1ST, 2015.  
(SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES)

STEP 3: USING RSD 1101.01 SHEETS 2 AND 3 OF 3, INSTALL ADVANCE WARNING SIGNS ON GREENSBORO ST, RALEIGH ST, NORTH DAVIDSON ST, NORTHMORE ST, REDWOOD AVE, AND DINGLEWOOD AVE.

STEP 4: BEGIN CONSTRUCTION AWAY FROM TRAFFIC AS SHOWN ON TMP-5 AND TMP-6 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

STEP 5: USING RSD 1101.02 SHEETS 1 AND 3 OF 15 AS NECESSARY, COMPLETE ROADWAY CONSTRUCTION FROM -Y7- STA 10+25± TO -Y7- STA 19+78± AND FROM -Y4- STA 10+52± TO -Y4- STA 14+20± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE TMP-5 AND TMP-6).

STEP 6: PLACE TEMPORARY PAVEMENT MARKINGS FROM -Y7- STA 10+43± TO -Y7- STA 19+68± AS SHOWN ON TMP-9.

PHASE II

STEP 1: OPEN -Y7- AND -Y4- TO TRAFFIC. USING RSD 1101.02 SHEETS 1 AND 3 OF 15 AS NECESSARY, PLACE TEMPORARY PAVEMENT MARKINGS ON -Y1- AND -L- AS SHOWN ON TMP-7. DETOUR N DAVIDSON ST TRAFFIC TO NORTHMORE ST AS SHOWN ON TMP-7. USING RSD 1101.03 SHEET 1 OF 9, CLOSE SUGAR CREEK RD BETWEEN NORTHMORE ST AND BEARWOOD AVE AND BETWEEN BEARWOOD AVE AND GREENSBORO ST PLACING DEVICES AS SHOWN ON TMP-7 AND TMP-9. SHIFT BEARWOOD AVENUE TRAFFIC TO -Y4- AS SHOWN ON TMP-7.

STEP 2: BEGIN CONSTRUCTION OF -L- FROM STA 10+00± TO 39+00± AND -Y- LINES AS SHOWN ON TMP-7 AND TMP-9. MAINTAIN ACCESS USING RSD 1101.02 SHEET 1 OF 15 AS NECESSARY.

STEP 3: USING RSD 1101.02 SHEET 1 OF 15, COMPLETE ROADWAY CONSTRUCTION OF -Y4-, -Y3REV-, AND -Y2- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. SEE TMP-7.

STEP 4: USING RSD 1101.02 SHEET 1 OF 15, PLACE TEMPORARY PAVEMENT MARKINGS ON -Y4-, -Y3REV-, AND -Y2- AS SHOWN ON TMP-8 AND OPEN TO TRAFFIC, RELOCATING DEVICES TO THE LOCATIONS SHOWN ON TMP-8.

STEP 5: BEGIN -Y1- CONSTRUCTION.

STEP 6: USING RSD 1101.02 SHEET 1 OF 15, COMPLETE -L-, -Y1-, -Y2-, -Y3REV-, -Y4-, -Y5-, -Y7-, AND -Y8- INCLUDING THE FINAL LAYER OF SURFACE COURSE. PLACE PAVEMENT MARKINGS ACCORDING TO THE PAVEMENT MARKING PLANS.

STEP 7: OPEN -L- AND -Y- LINES TO TRAFFIC.

STEP 8: REMOVE ALL WORK ZONE TRAFFIC CONTROL DEVICES ASSOCIATED WITH SUGAR CREEK ROAD CONSTRUCTION.

PHASE III

WORK IN AREAS 1, 2, AND 3 MAY TAKE PLACE CONCURRENTLY.

STEP 1: COMPLETE THE WORK REQUIRED IN AREA 1, AREA 2, AND AREA 3.

STEP 2: REMOVE ALL REMAINING WORK ZONE TRAFFIC CONTROL DEVICES ASSOCIATED WITH U-5008 IN ALL AREAS.

AREA 1 - E CRAIGHEAD RD AND N DAVIDSON ST

STEP 1: USING RSD 1101.03 SHEET 1 OF 9, CLOSE E CRAIGHEAD RD AND N DAVIDSON ST DETOURING TRAFFIC OFF SITE AS SHOWN ON TMP-10.

STEP 2: CONSTRUCT -Y3- AND -Y6- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

STEP 3: CONSTRUCT THE FINAL LAYER OF SURFACE COURSE AND PLACE PAVEMENT MARKINGS ACCORDING TO THE PAVEMENT MARKING PLANS.

STEP 4: OPEN -Y3- AND -Y6- TO FINAL PATTERN AND REMOVE ALL AREA 1 WORK ZONE TRAFFIC CONTROL DEVICES.

AREA 2 - TRYON ST AND EASTWAY DR

STEP 1: USING RSD 1101.01 SHEET 2 OF 3, INSTALL ADVANCE WARNING SIGNS ON TRYON ST AND EASTWAY DR.

STEP 2: USING RSD 1101.02 SHEETS 3 AND 7 OF 15, CONSTRUCT IMPROVEMENTS AT THE INTERSECTION OF TRYON ST AND EASTWAY DR AS SHOWN IN THE ROADWAY PLANS.

STEP 3: REMOVE ALL AREA 2 WORK ZONE TRAFFIC CONTROL DEVICES.

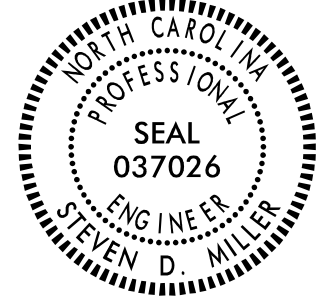
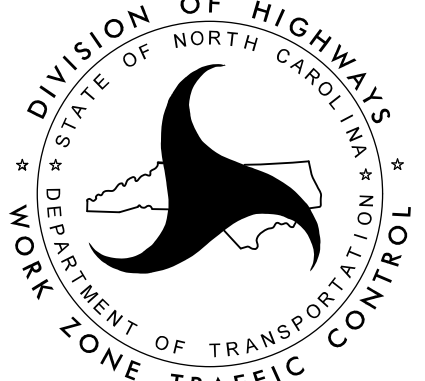
AREA 3 - THE PLAZA AND EASTWAY DR

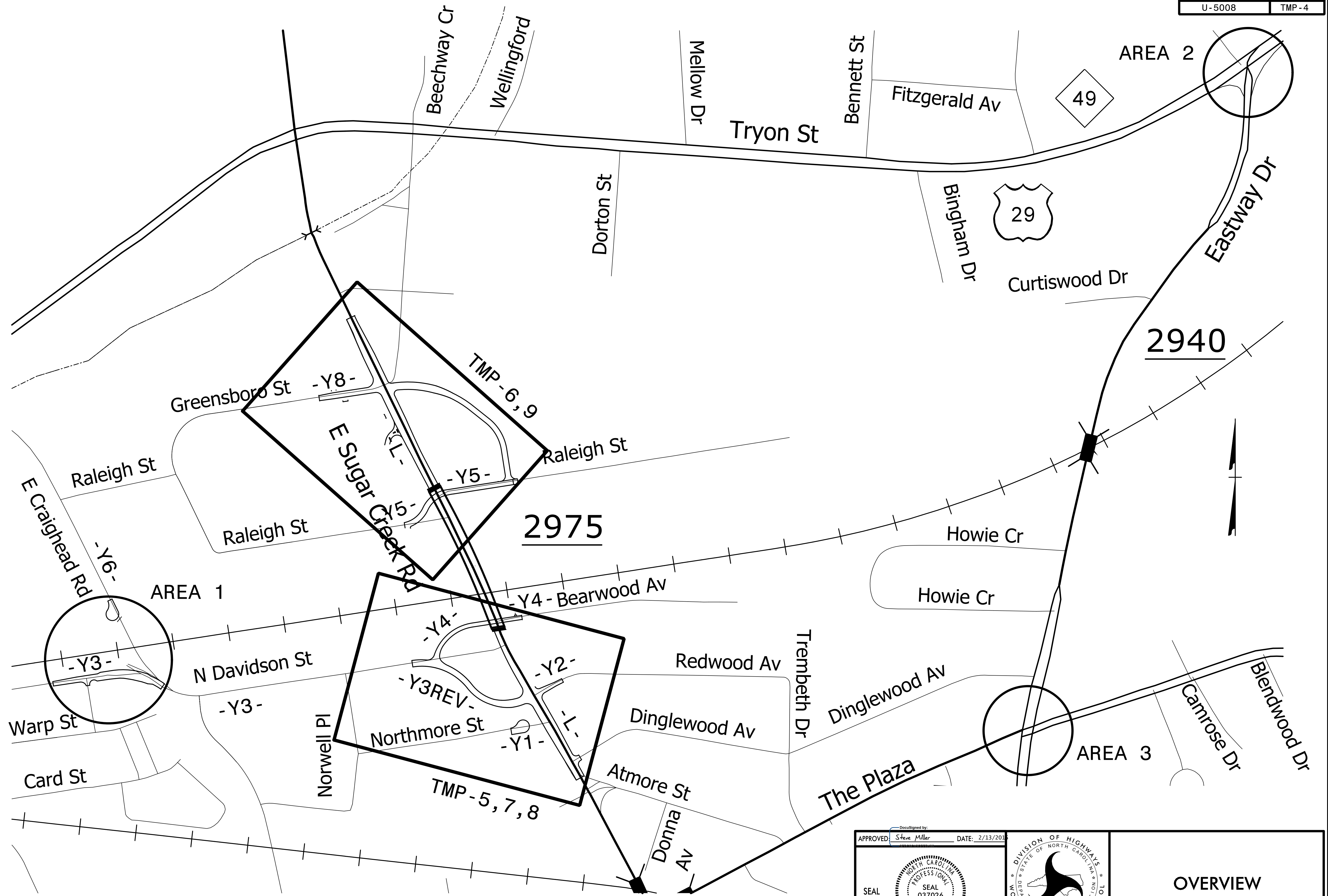
STEP 1: USING RSD 1101.01 SHEET 2 OF 3, INSTALL ADVANCE WARNING SIGNS ON THE PLAZA AND EASTWAY DR.

STEP 2: USING RSD 1101.02 SHEETS 3 AND 7 OF 15, CONSTRUCT IMPROVEMENTS AT THE INTERSECTION OF THE PLAZA AND EASTWAY DRIVE AS SHOWN IN THE ROADWAY PLANS.

STEP 3: REMOVE ALL AREA 3 WORK ZONE TRAFFIC CONTROL DEVICES.

2/23/2015 2:23:20 PM C:\Users\stiller\Documents\Transportation\TR11.036.00 (U-5008)\TrafficControl\TCP\U-5008 TMP-3.dgn

APPROVED: <u>Steve Miller</u> DATE: <u>3/2/2015</u>			<h1 style="margin: 0;">PHASING</h1>
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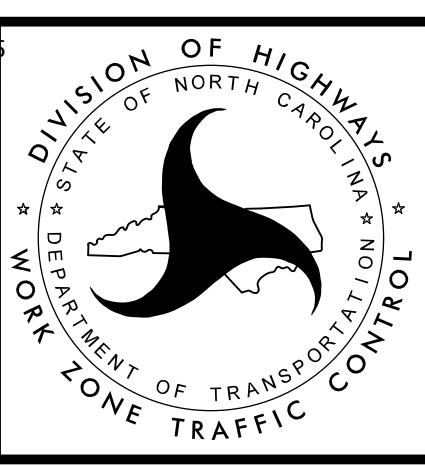


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APPROVED: Steve Miller DATE: 2/13/2015

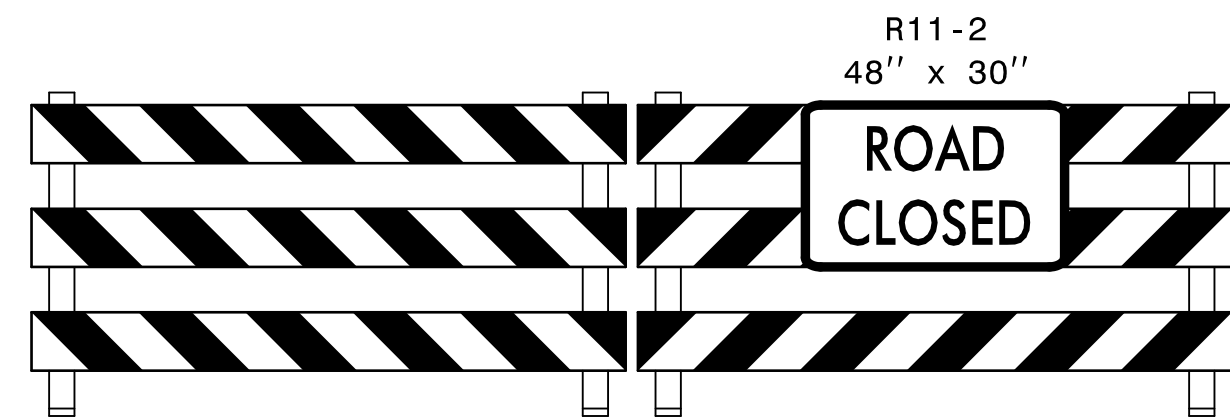
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Steve Miller

SEAL

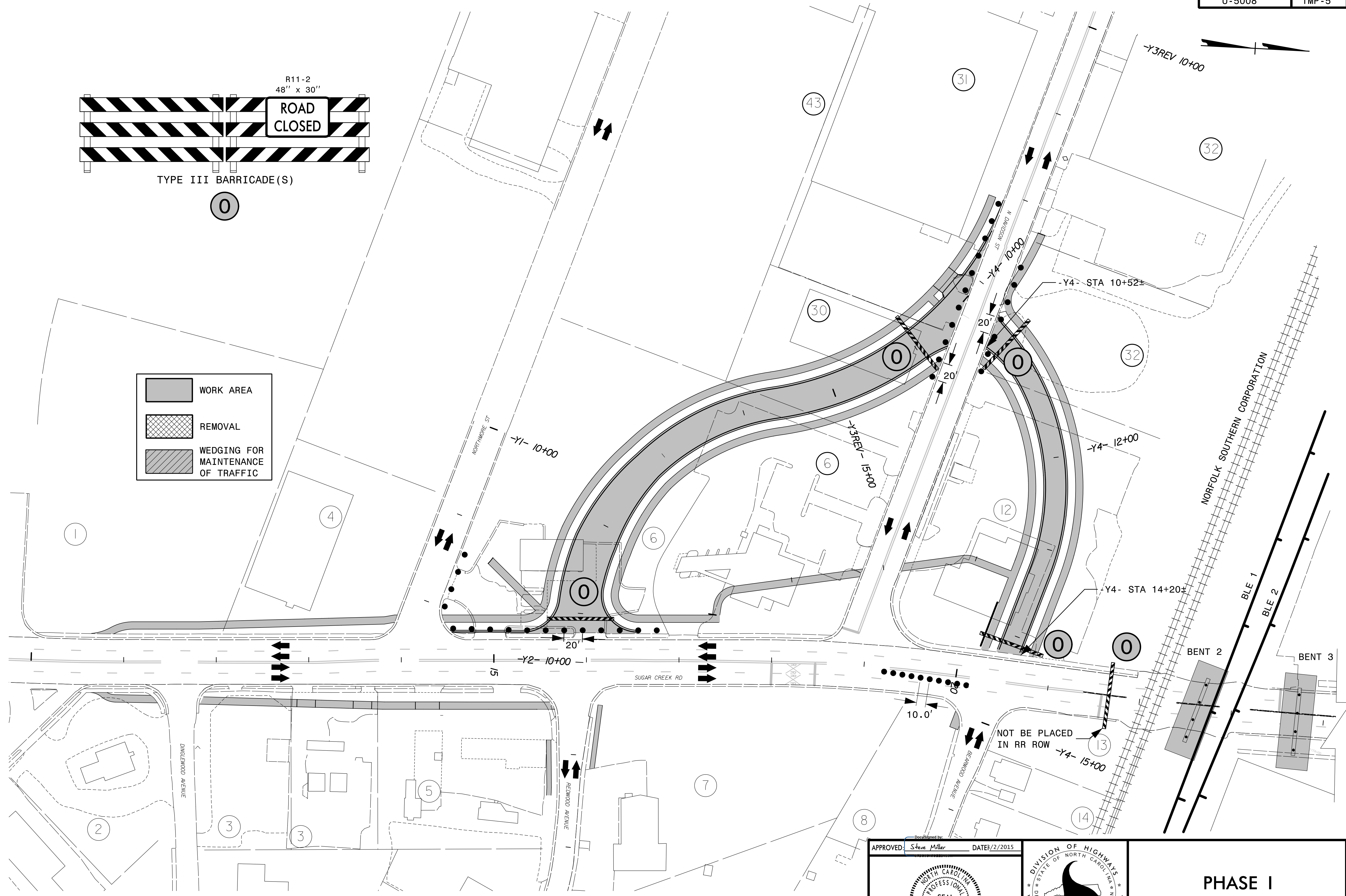
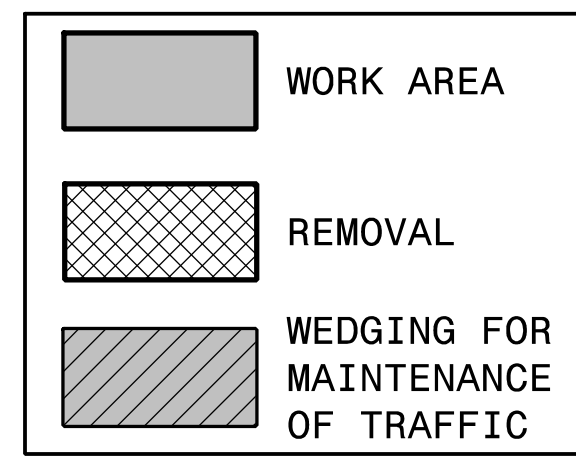


OVERVIEW

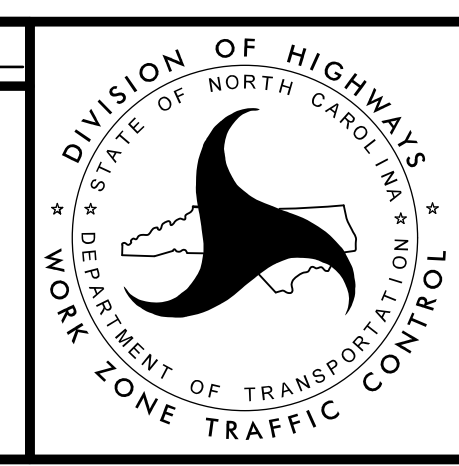
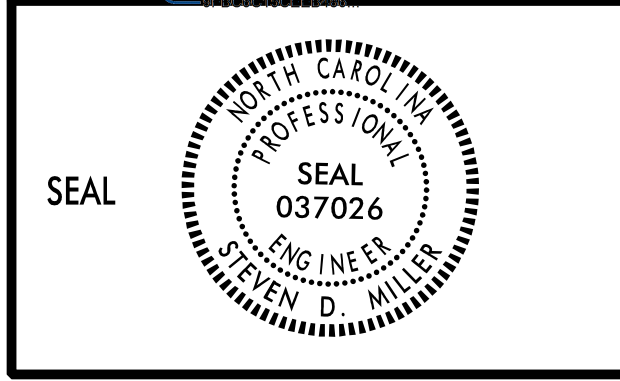




TYPE III BARRICADE(S)

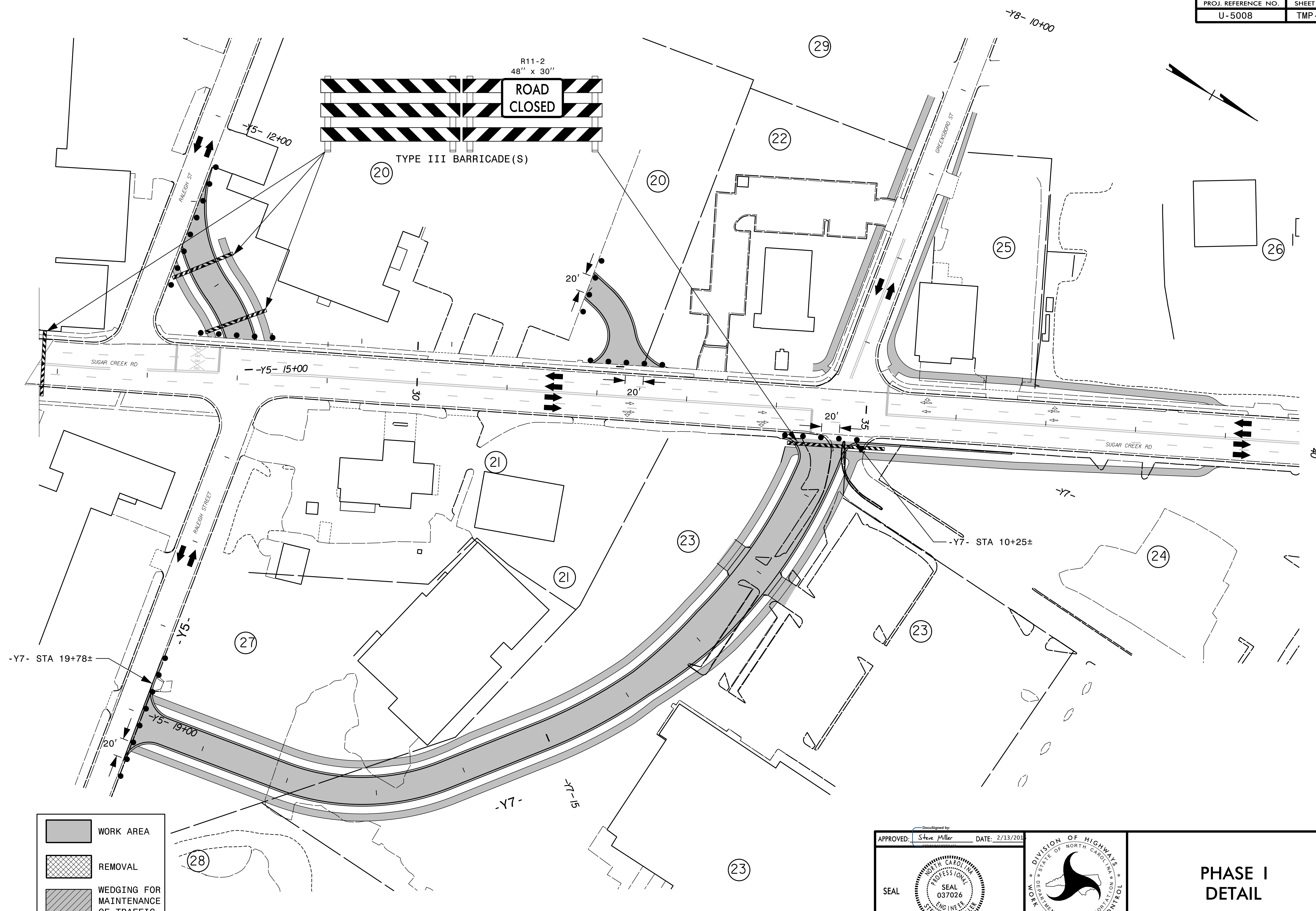


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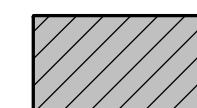


PHASE I  
DETAIL

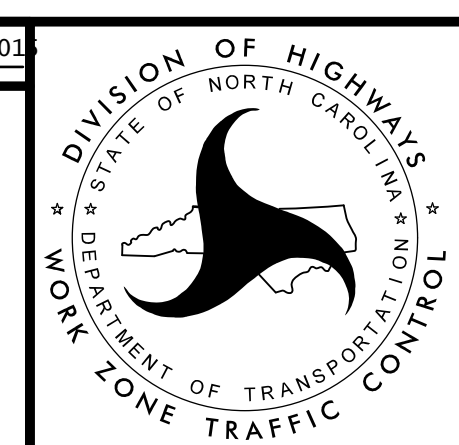
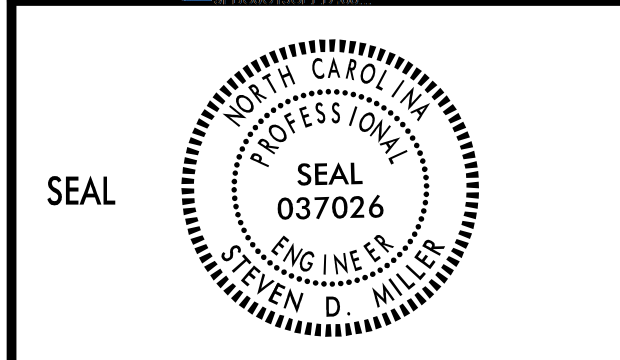




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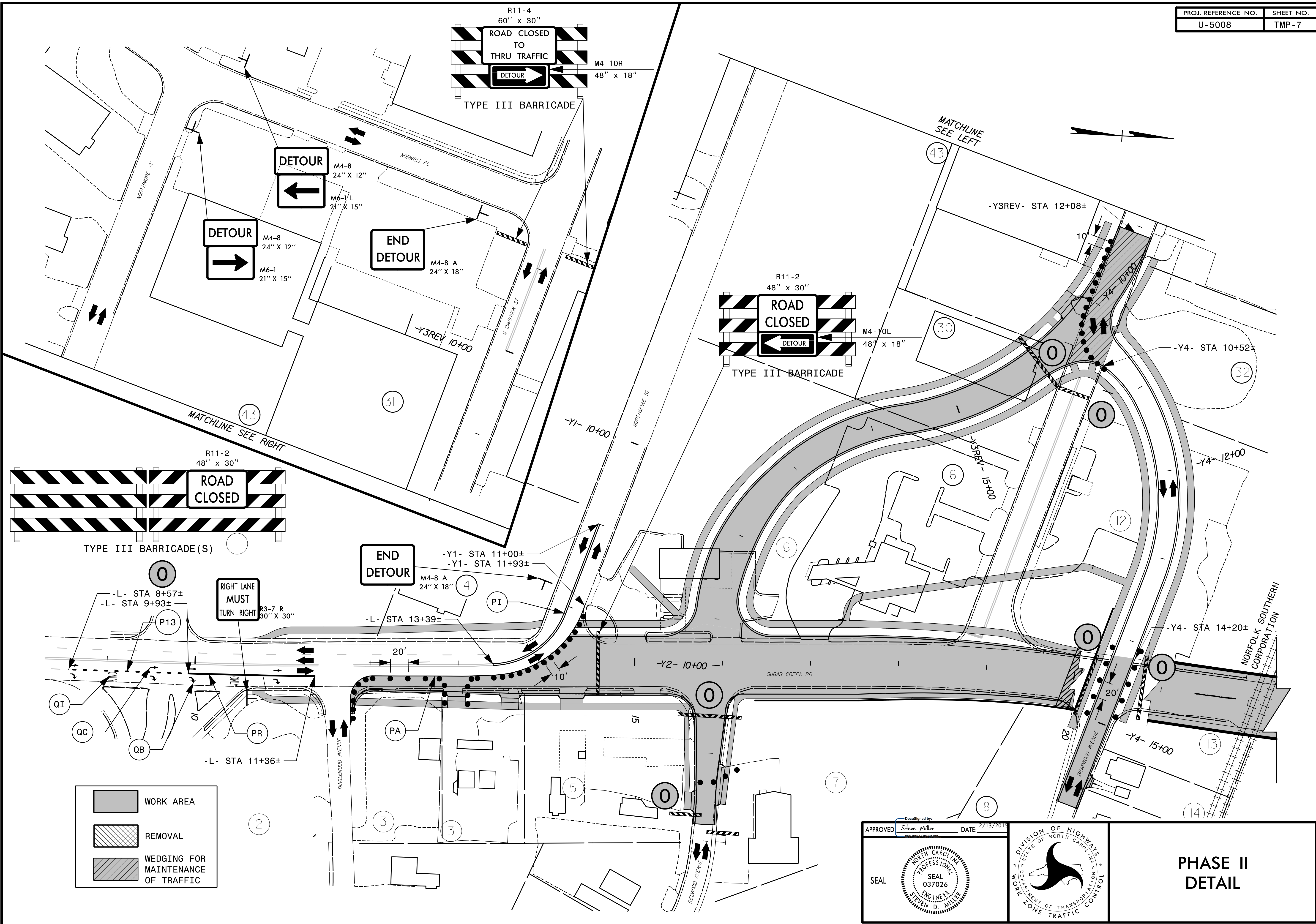
-  WORK AREA
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-  WEDGING FOR MAINTENANCE OF TRAFFIC

APPROVED: Steve Miller DATE: 2/13/2015



**PHASE I  
DETAIL**





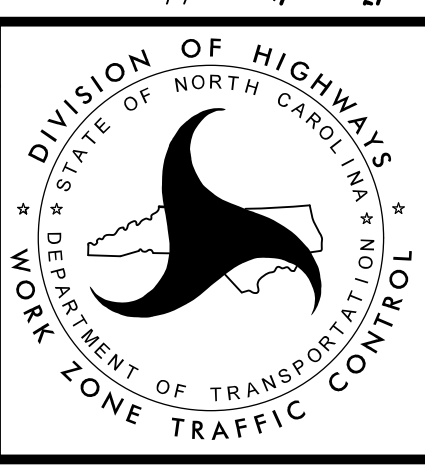
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APPROVED Steve Miller DATE: 2/13/2015

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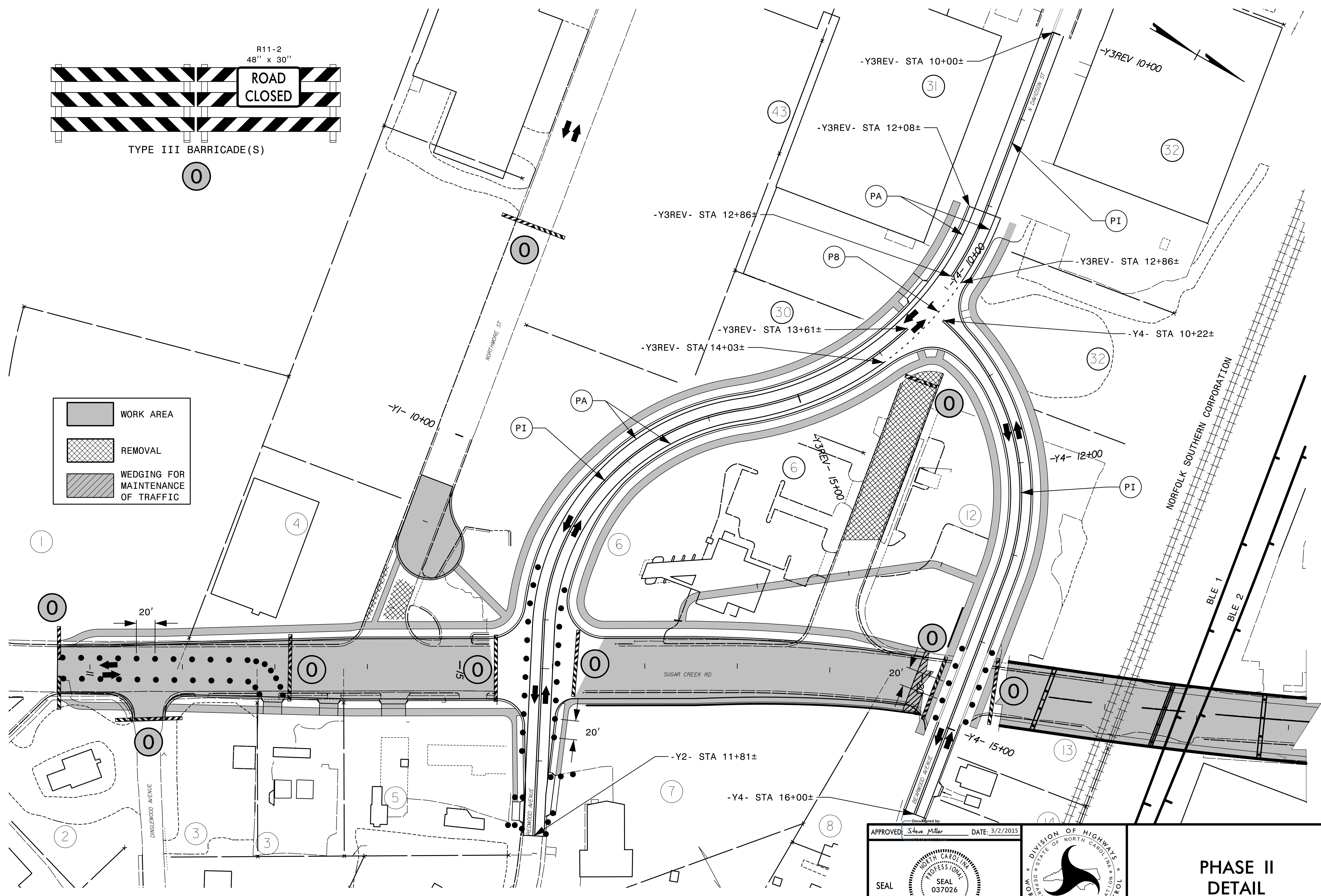
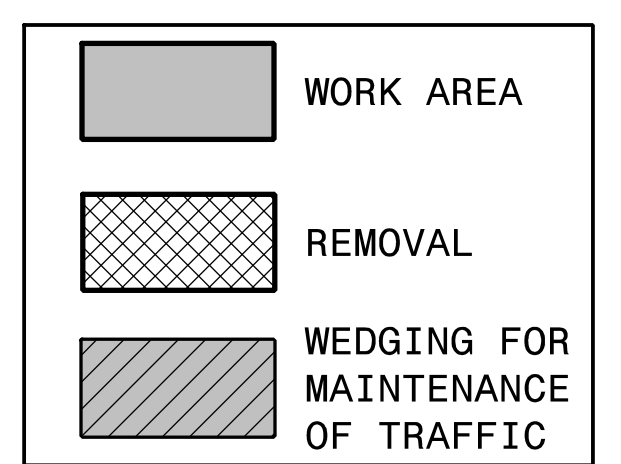
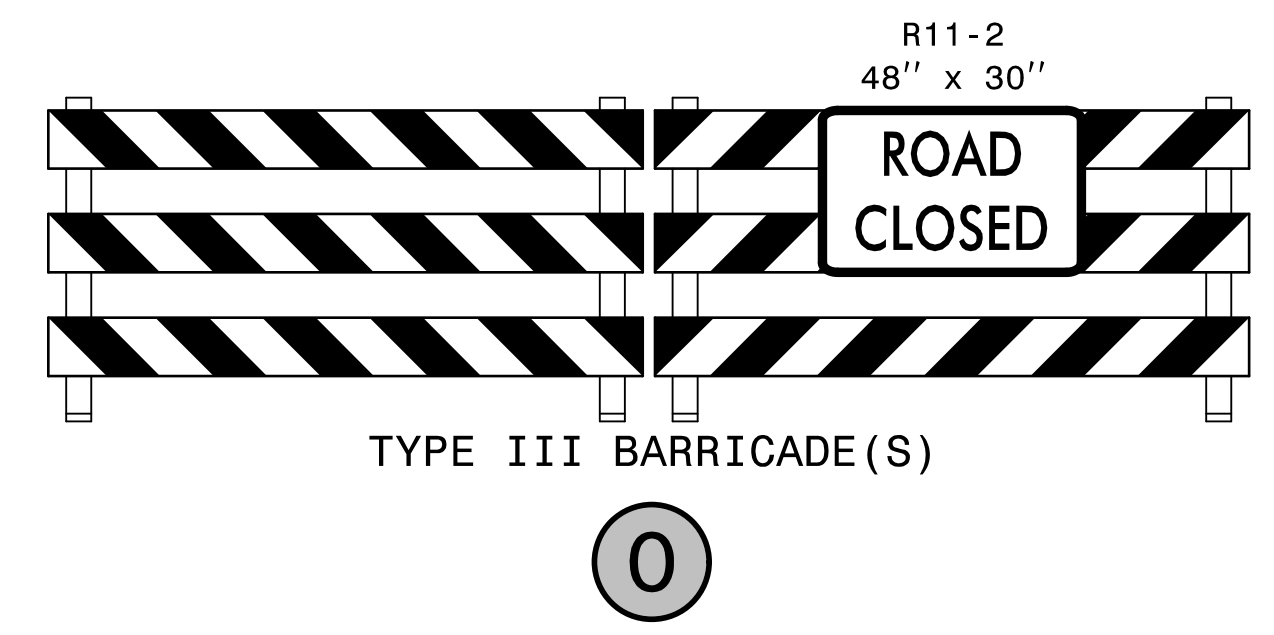
PROFESSIONAL SEAL 037026

ENGINEER SEVEN D. MILLER



**PHASE II DETAIL**





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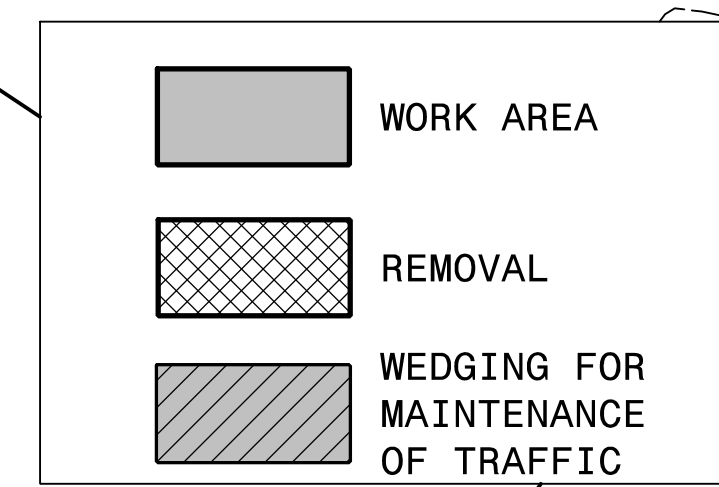
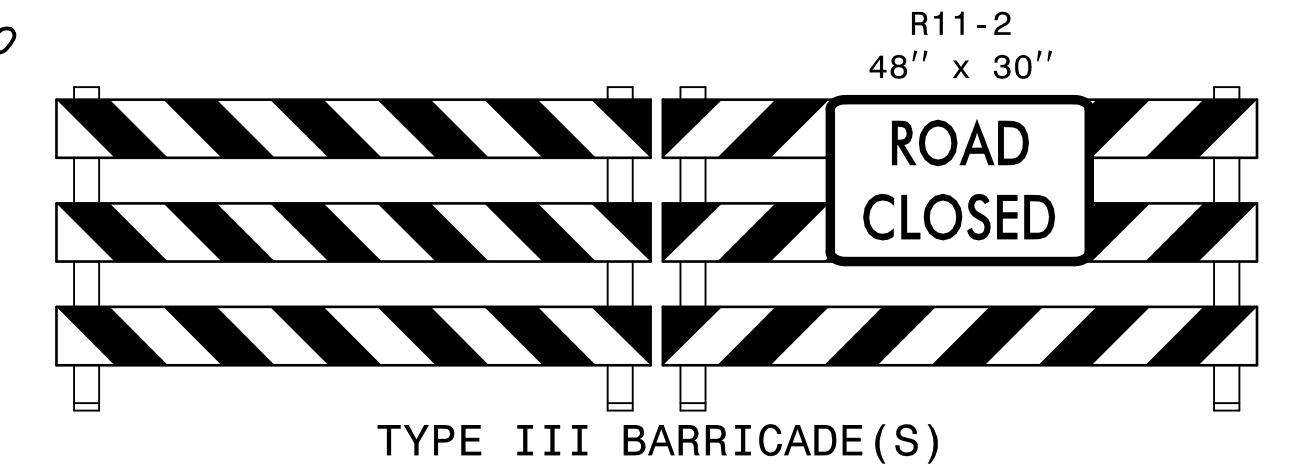
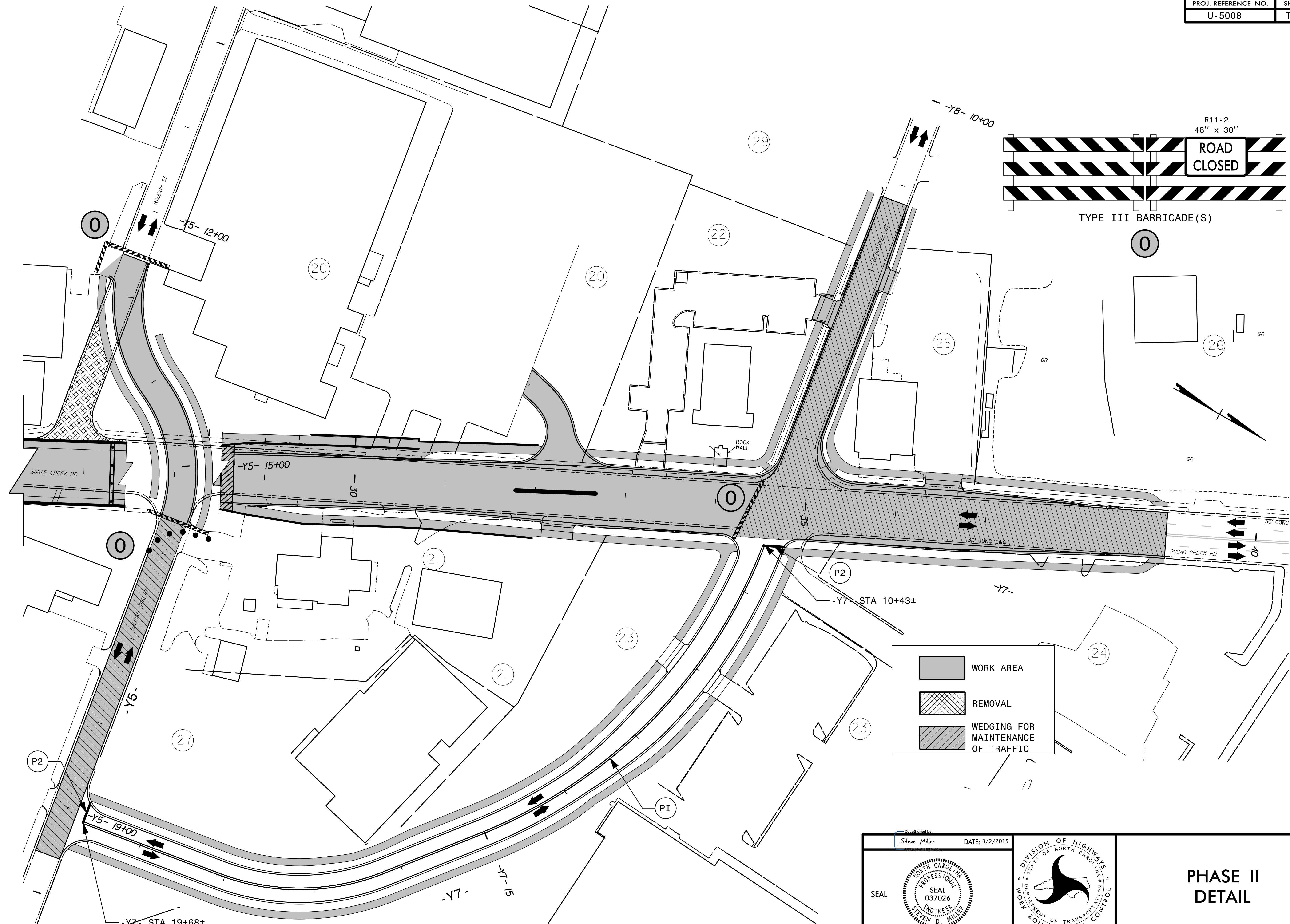
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DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
WORK ZONE TRAFFIC CONTROL

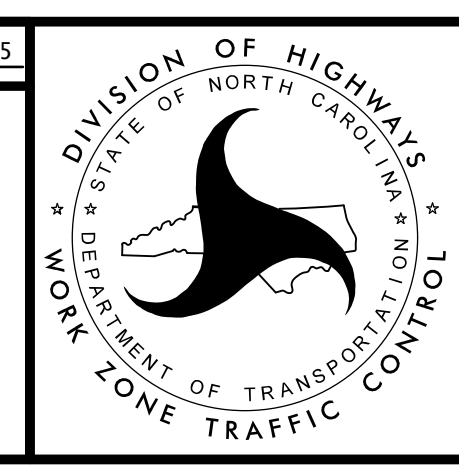
**PHASE II  
DETAIL  
STEP 4**





Designed by: Steve Miller DATE: 3/2/2015

SEAL

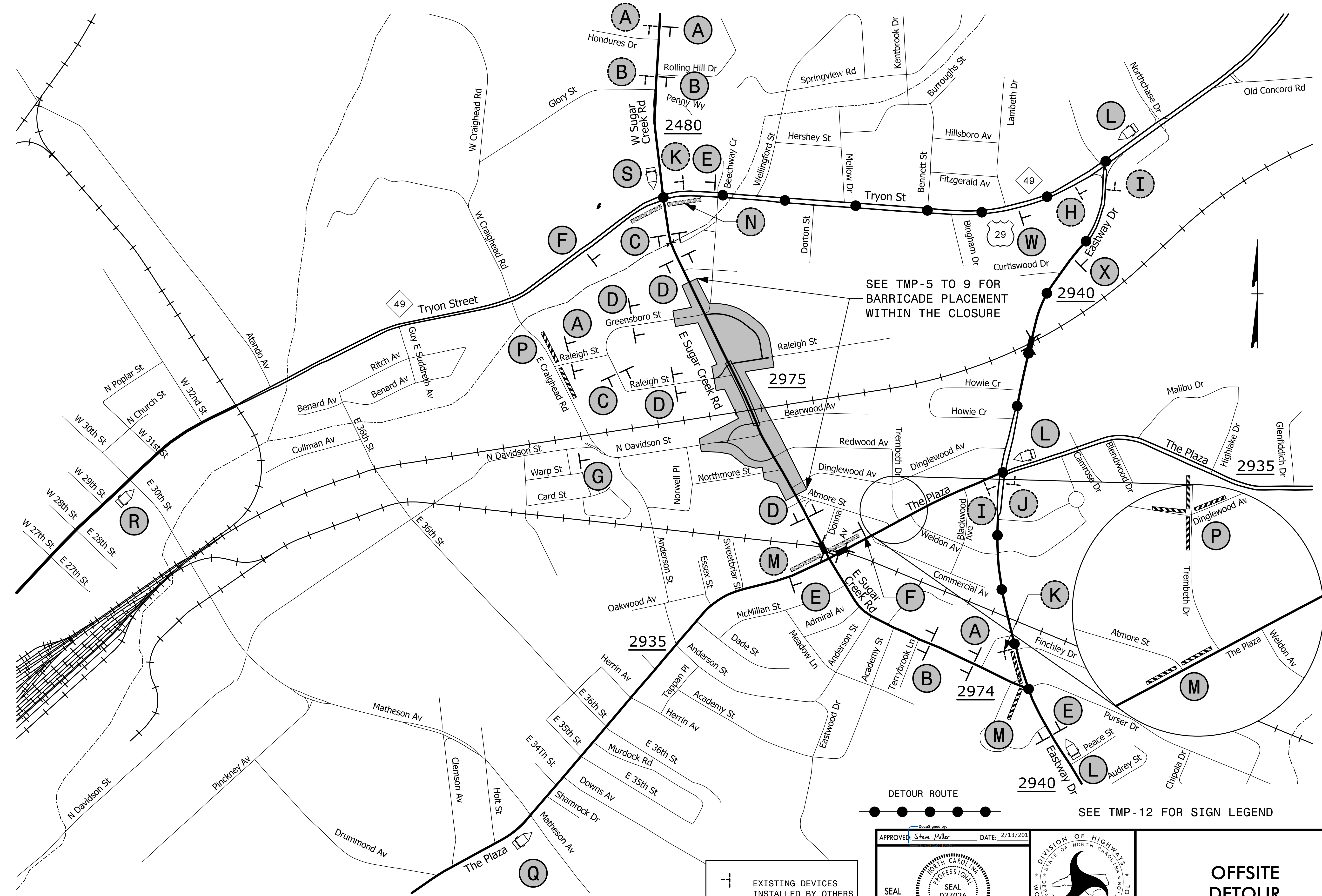


**PHASE II  
DETAIL**









SEE TMP-5 TO 9 FOR BARRICADE PLACEMENT WITHIN THE CLOSURE

DETOUR ROUTE

SEE TMP-12 FOR SIGN LEGEND

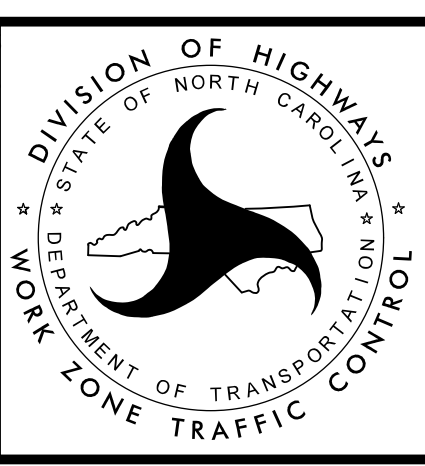
EXISTING DEVICES INSTALLED BY OTHERS TO REMAIN

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SEAL

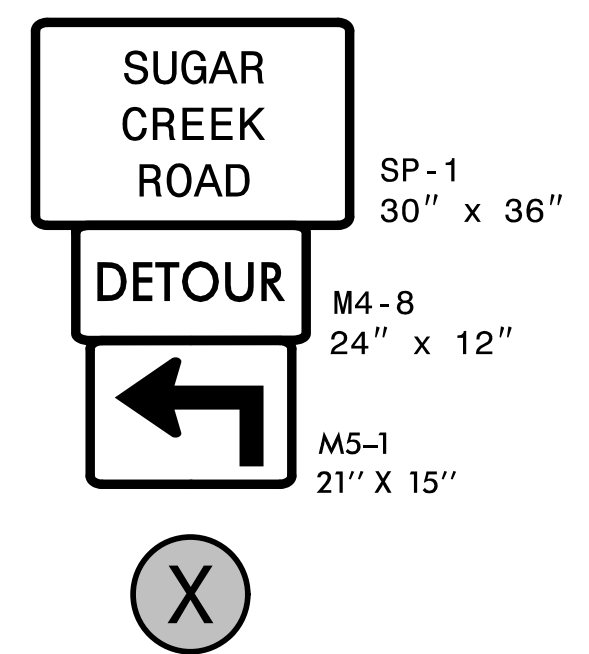
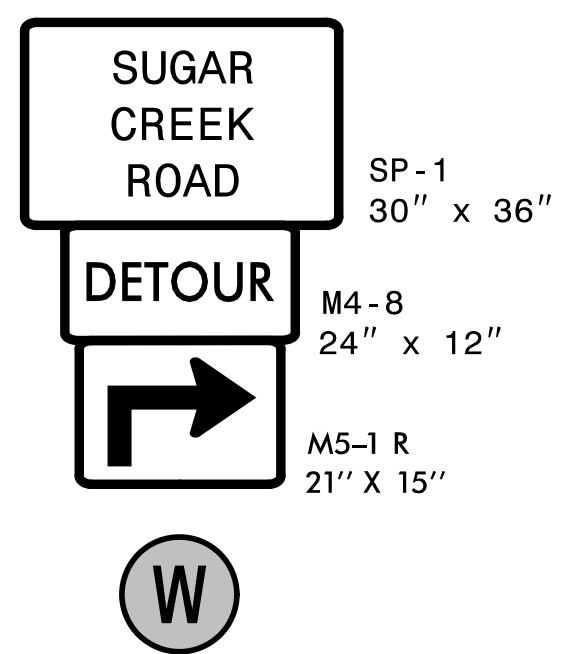
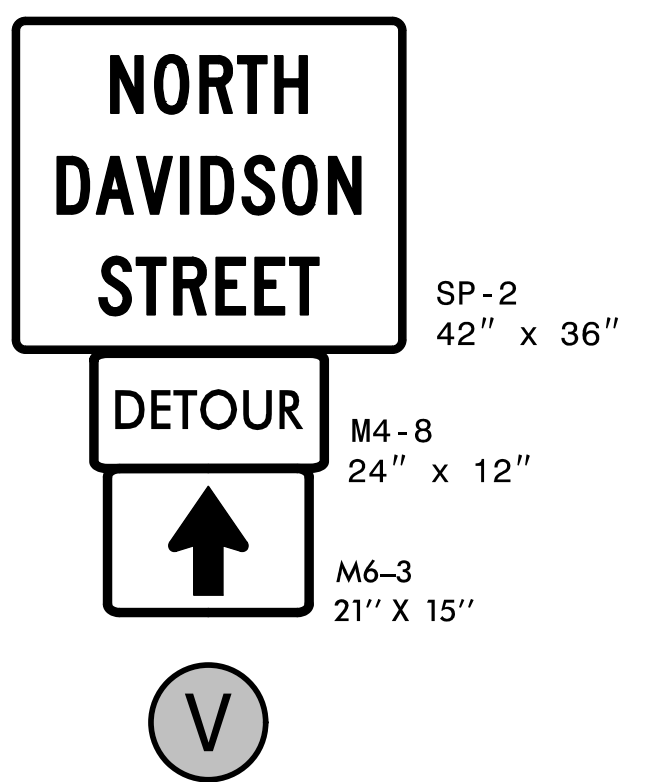
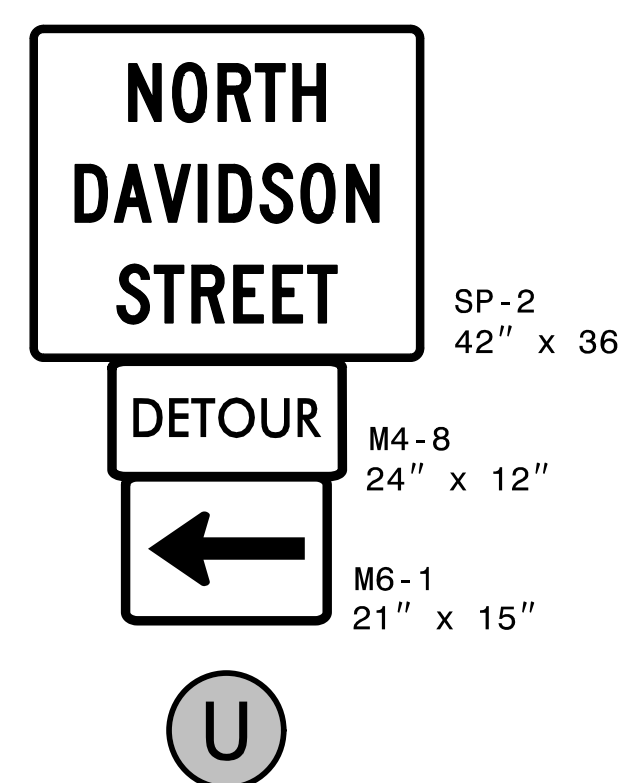
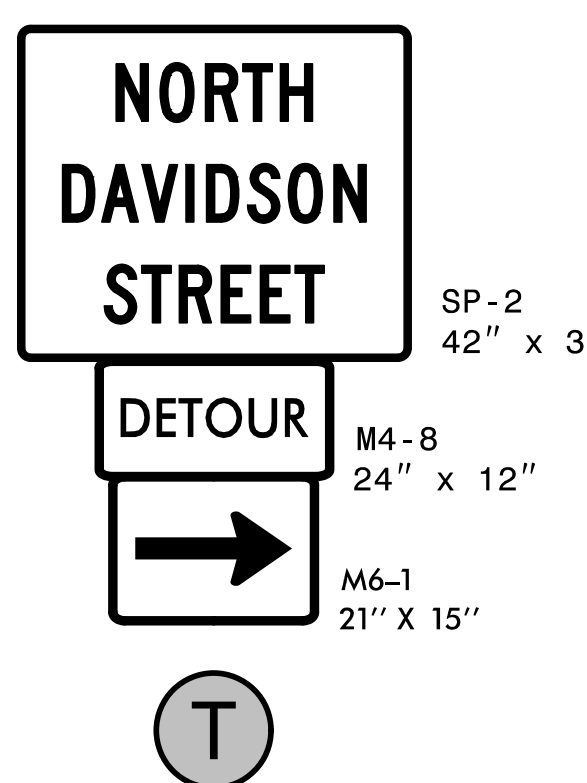
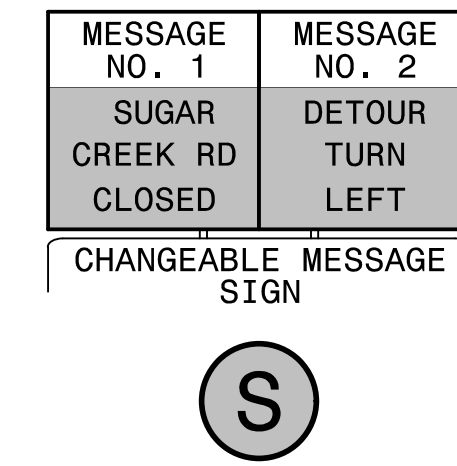
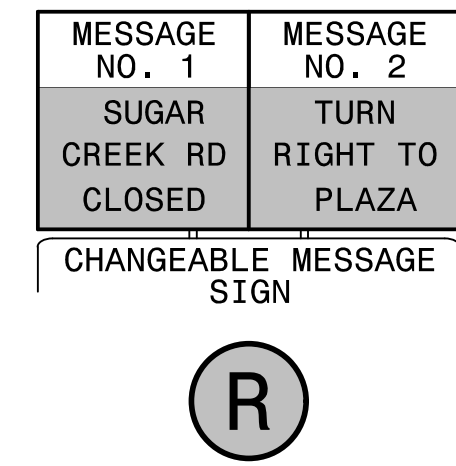
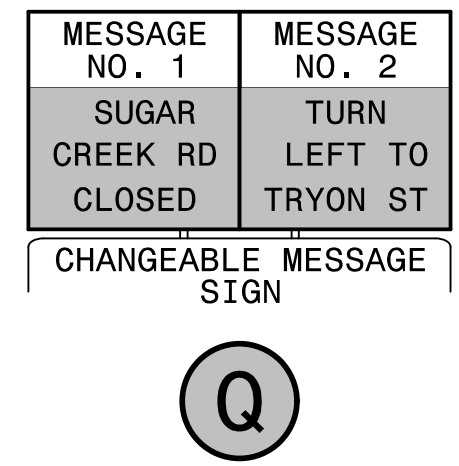
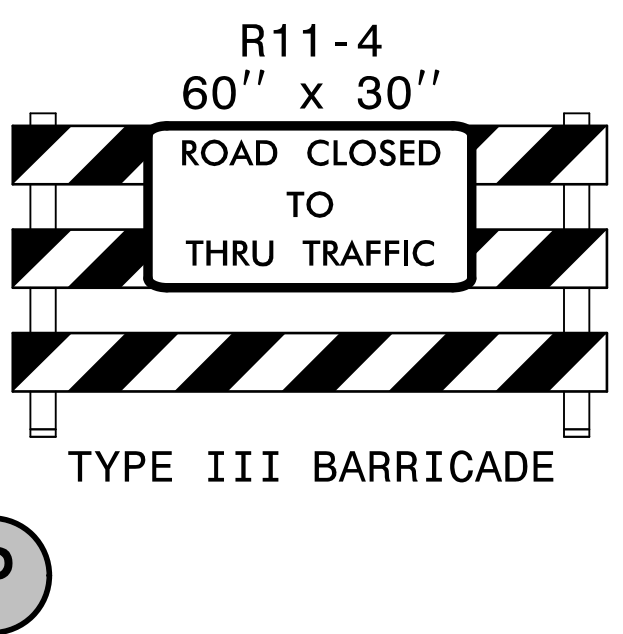
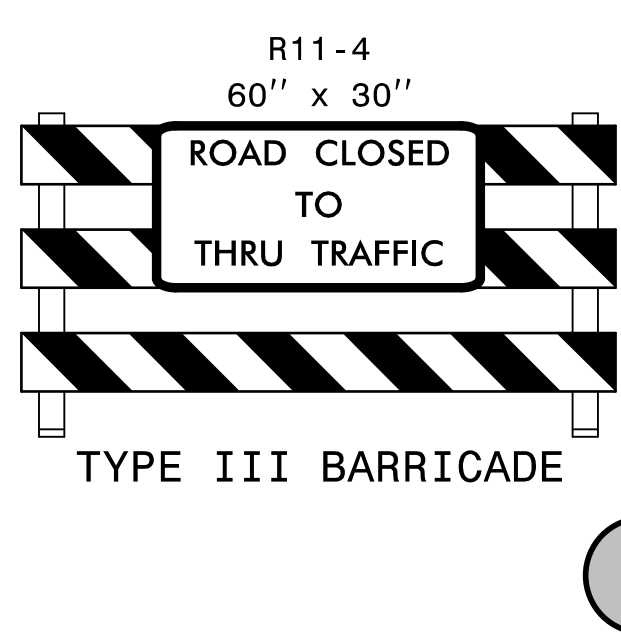
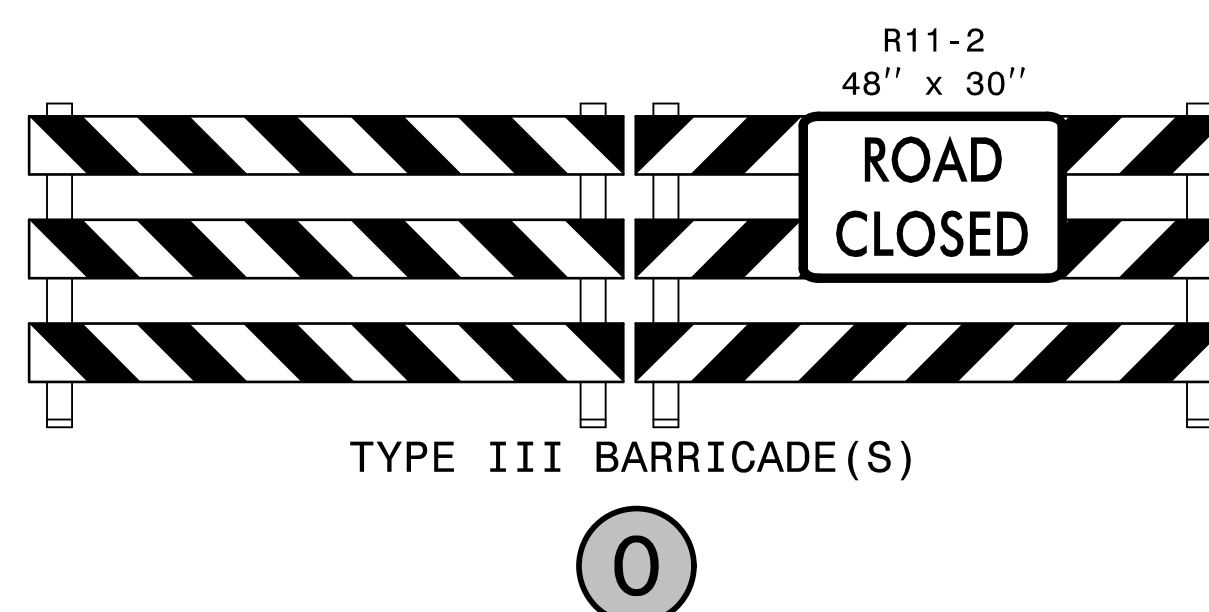
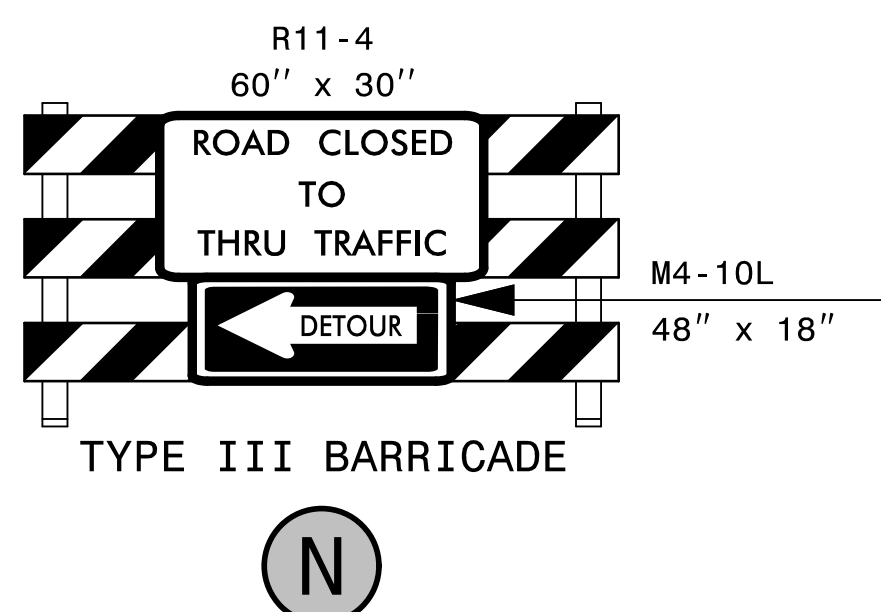
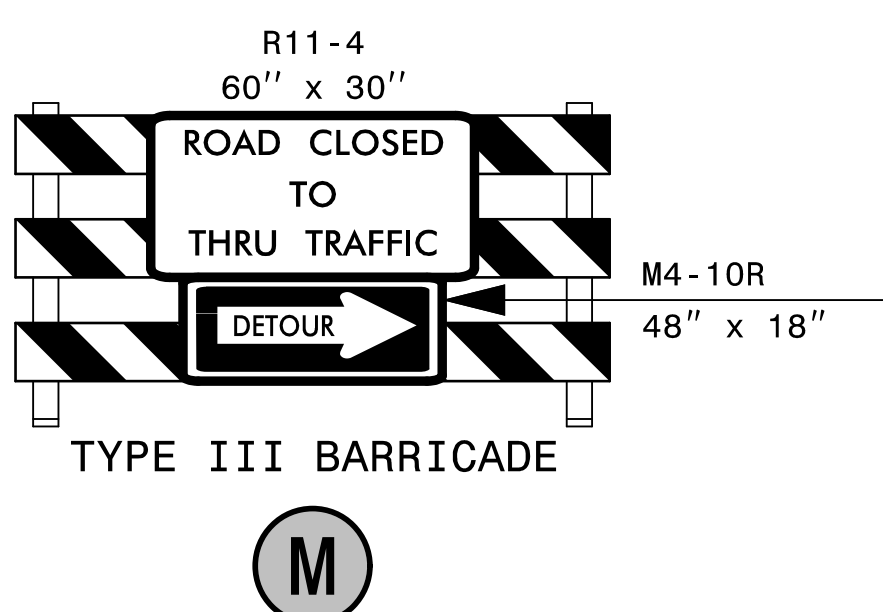
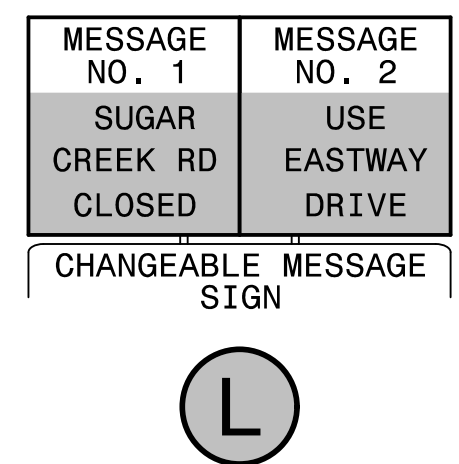
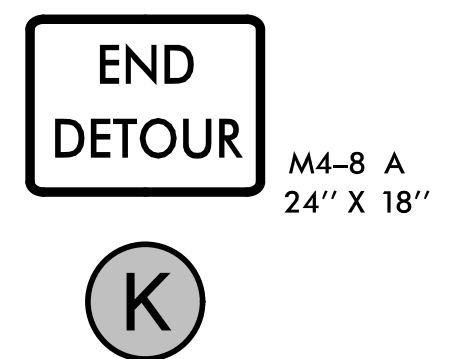
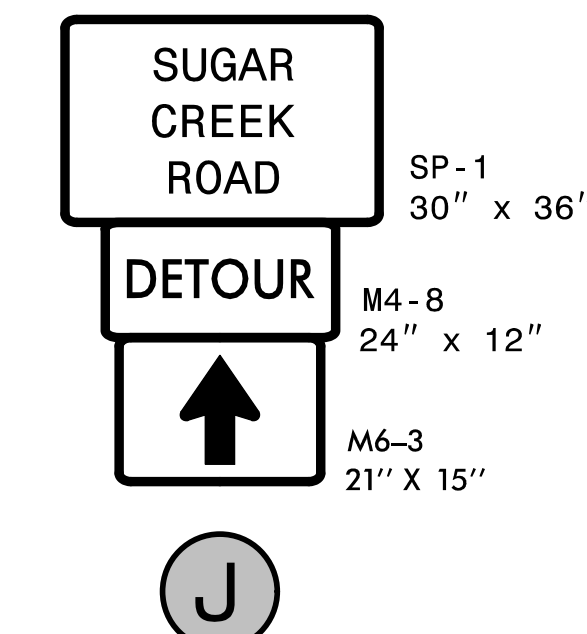
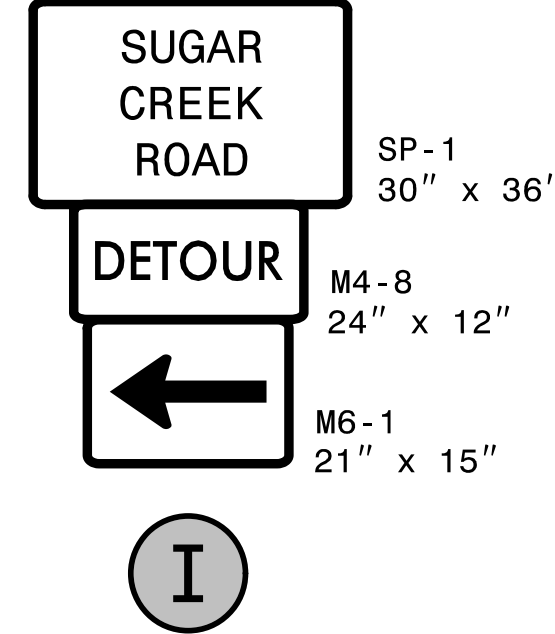
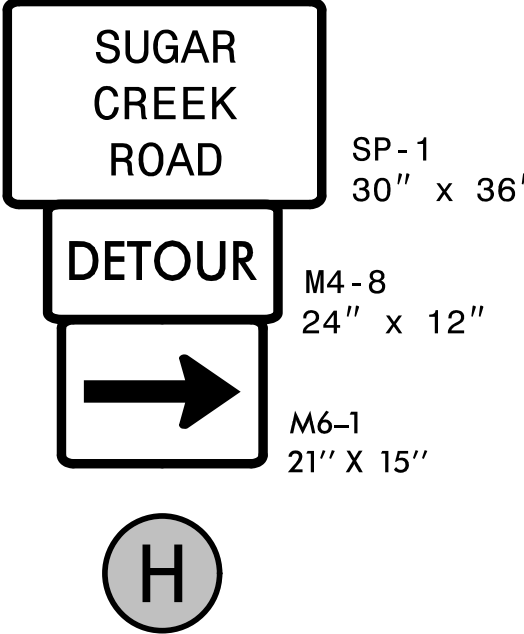
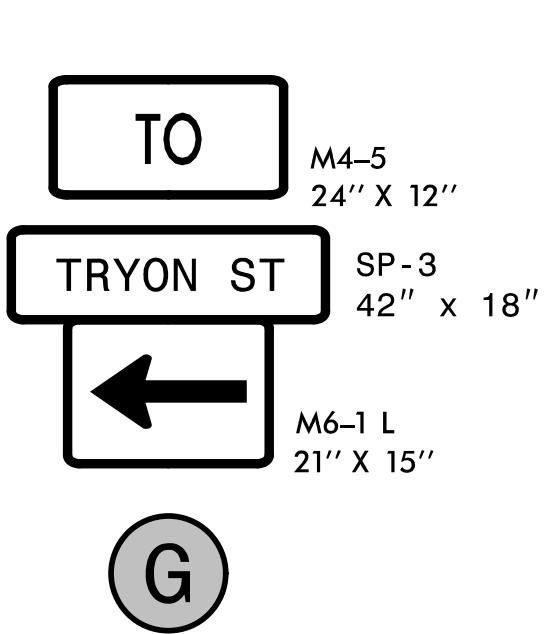
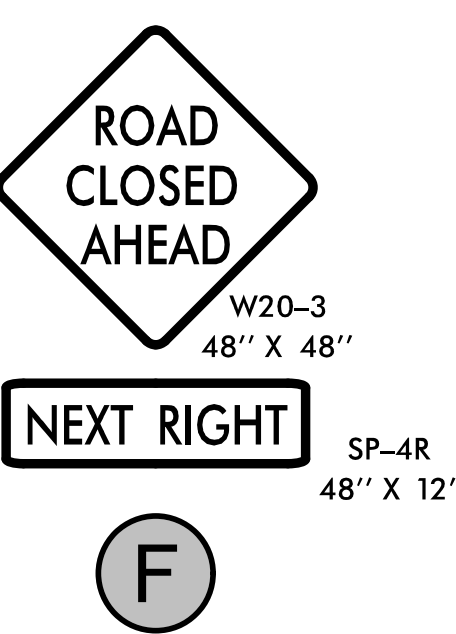
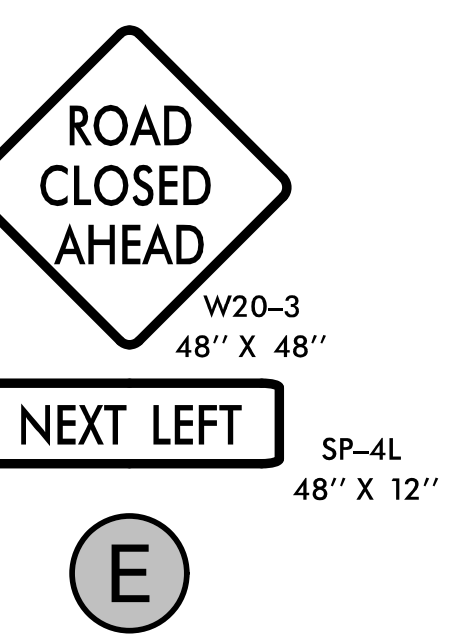
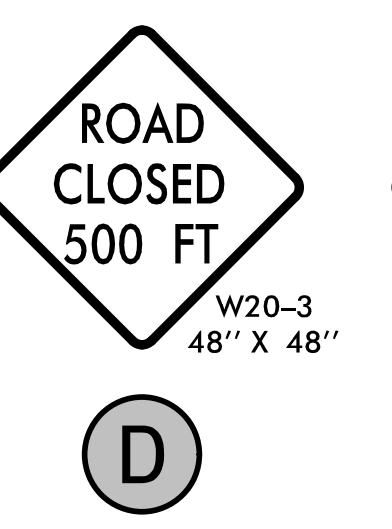
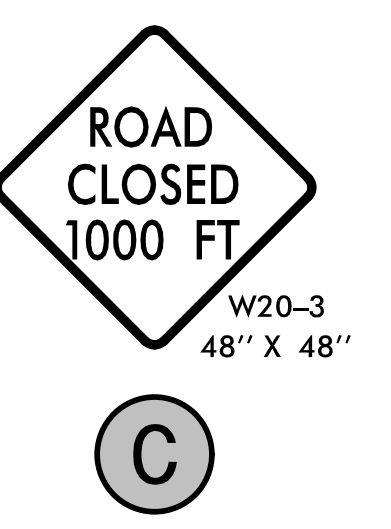
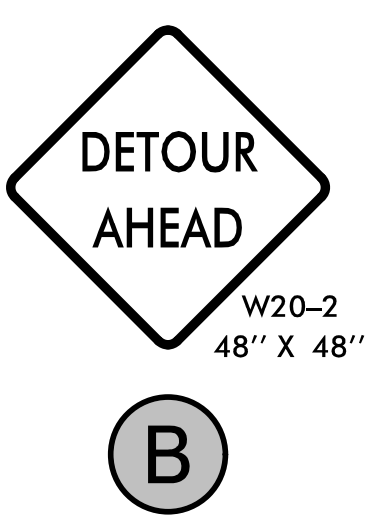
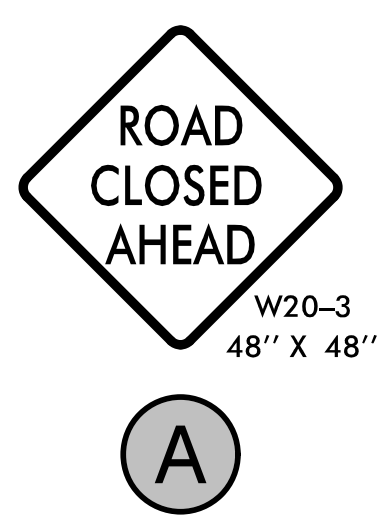
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ENGINEER SEVEN D. MILLER

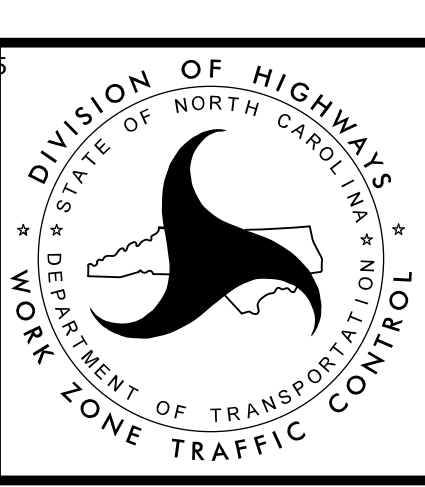


OFFSITE DETOUR





APPROVED: Steve Miller DATE: 2/13/2015  
SEAL: NORTH CAROLINA PROFESSIONAL SEAL 037026 ENGINEER STEVEN D. MILLER



SIGN LEGEND