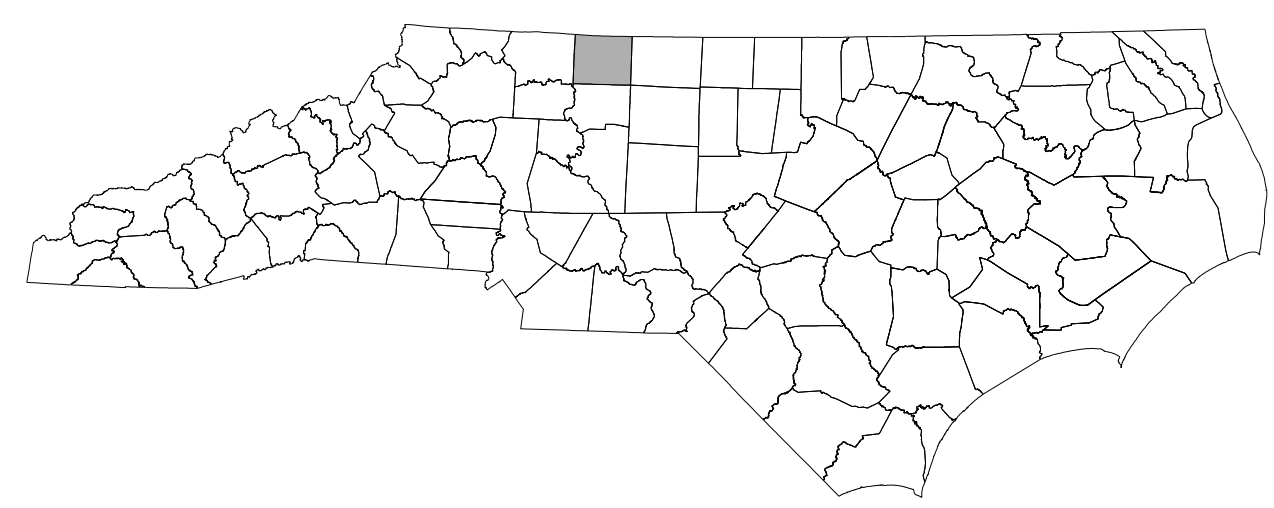


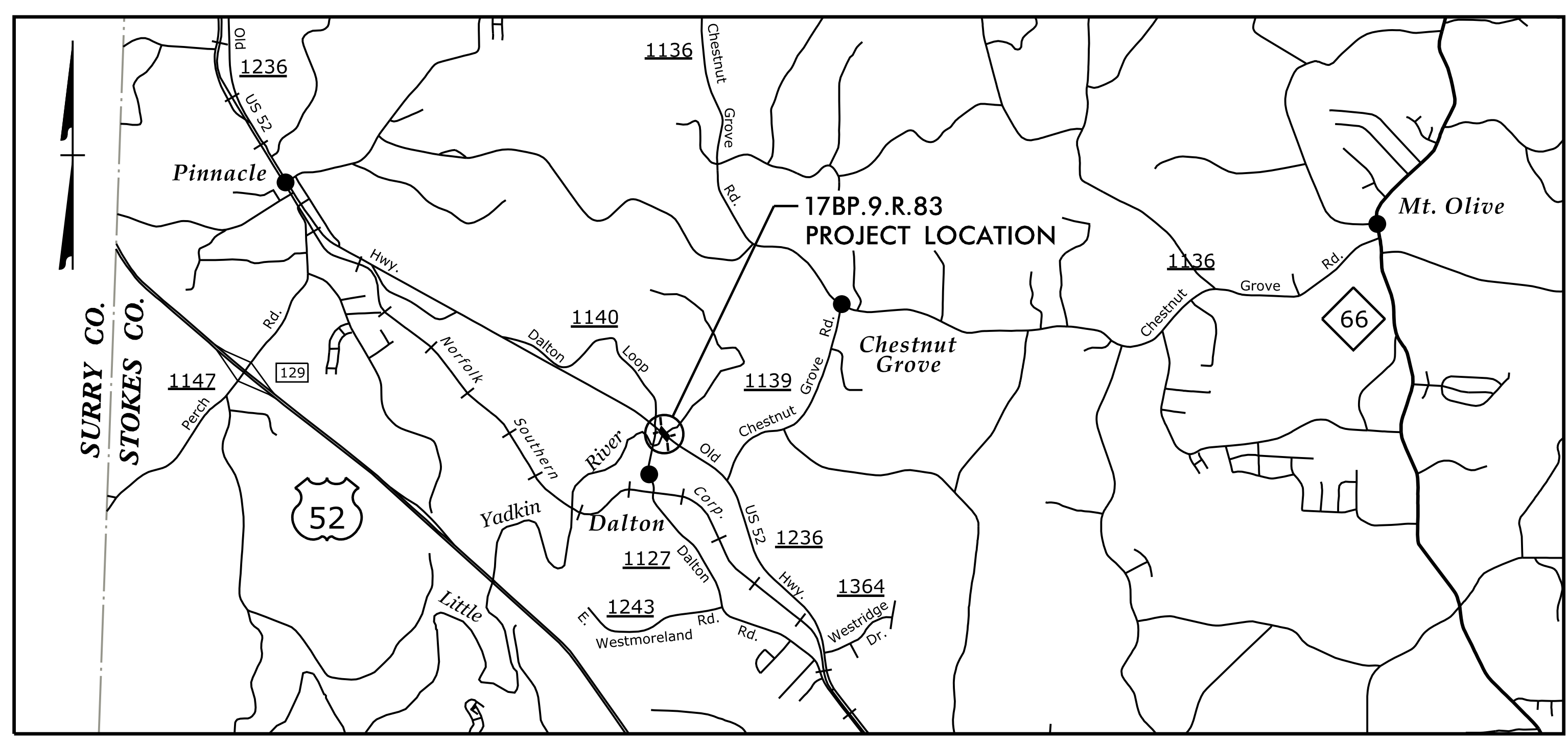
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

**STOKES COUNTY**



**LOCATION: BRIDGE NO. 286 OVER LITTLE YADKIN RIVER ON SR 1236 (NORTH OLD 52)**



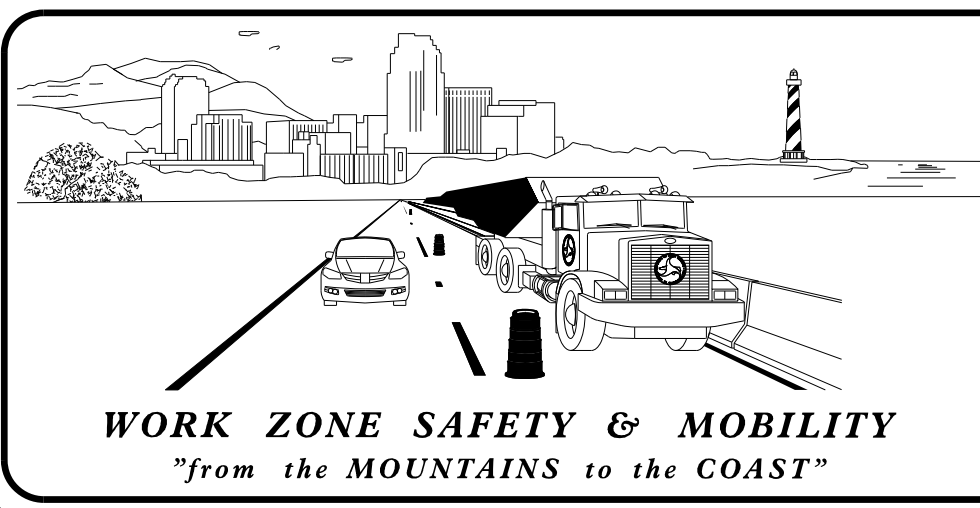
**INDEX OF SHEETS**

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: (MANAGEMENT STRATEGIES AND GENERAL NOTES)
TMP-2	TEMPORARY SHORING DATA
TMP-2A AND TMP-2B	OFFSITE DETOUR ROUTES
TMP-2C AND TMP-2D	SPECIAL SIGN DESIGN(S)
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4 AND TMP-5	PHASE 1, STEP 1 DETAILS
TMP-6 AND TMP-7	PHASE 1, STEP 2 DETAILS
TMP-8 AND TMP-9	PHASE 2, STEP 1 DETAILS

SHEET NO.  
TMP-1

**17BP.9.R.83**

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**PLANS PREPARED BY:**

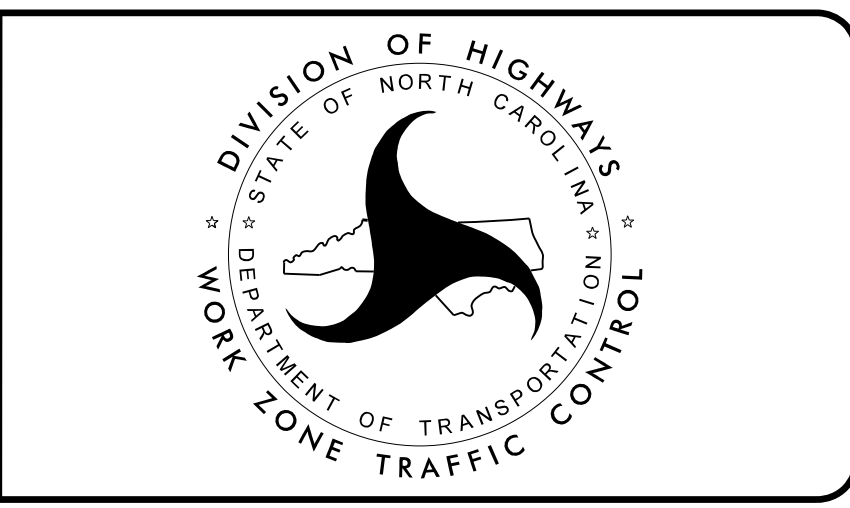
MIKE RZEPKA, PE  
TRAFFIC CONTROL PROJECT ENGINEER

CHRIS HARNDEN  
TRAFFIC CONTROL DESIGN ENGINEER

**NC DOT CONTACTS:**

JEREMY KEATON, PE, PLS  
PROJECT ENGINEER

PROJECT DESIGN ENGINEER



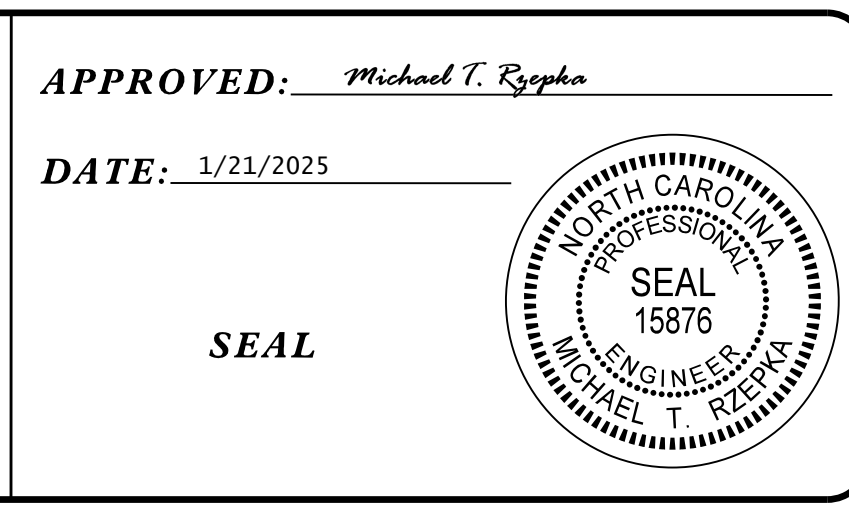
PLAN PREPARED BY:  
**HDR** HDR Engineering, Inc. of the Carolinas  
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601  
N.C.B.E.L.S. License Number: F-0116

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UNLESS ALL SIGNATURES COMPLETED**

APPROVED: *Michael T. Rzepka*

DATE: 1/21/2025

SEAL



**TIP PROJECT:**




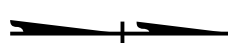

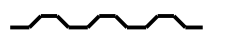

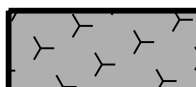



# ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 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
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGERS
1165.01	TRUCK MOUNTED ATTENUATOR
1180.01	SKINNY-DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.12	PAVEMENT MARKINGS - BRIDGES
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

# LEGEND

## GENERAL

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












## SIGNALS

-  EXISTING
-  PROPOSED
-  TEMPORARY




## 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

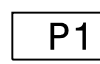
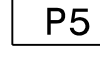
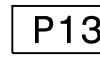
## PAVEMENT MARKERS

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

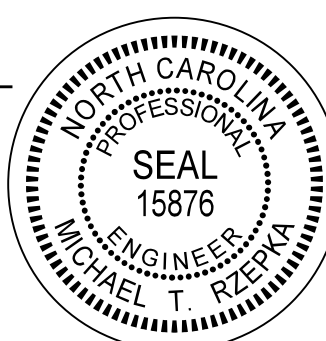
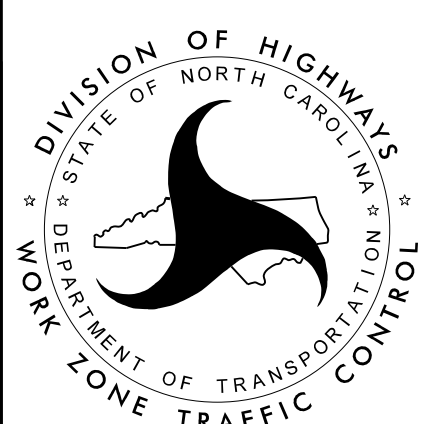
## PAVEMENT MARKING SYMBOLS

-  PAVEMENT MARKING SYMBOLS

## TEMPORARY PAVEMENT MARKING

-  P1 PAINT 4" WHITE EDGELINE
-  P5 PAINT 4" 2'-6'/SP. WHITE MINI-SKIP
-  P13 PAINT 4" YELLOW DOUBLE CENTER

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APPROVED: <i>Michael T. Rzepka</i> DATE: 7/31/2024 		<h2>ROADWAY STANDARD DRAWINGS &amp; LEGEND</h2>
<p><b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b></p>		

# 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.

## TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS: (UNLESS CLOSING W. DALTON RD. IN PHASE 2, STEP 1)

ROAD NAME	DAY AND TIME RESTRICTIONS
N. OLD US 52	MONDAY THRU FRIDAY
W. DALTON RD.	6:00 AM THRU 9:00 AM 4:00 PM THRU 7:00 PM

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

- | ROAD NAME |
|-----------|
| ALL ROADS |
- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
  - FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 AM DECEMBER 31st TO 7:00 PM JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 PM THE FOLLOWING TUESDAY.
  - FOR EASTER, BETWEEN THE HOURS OF 6:00 AM THURSDAY AND 7:00 PM MONDAY.
  - FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 AM FRIDAY TO 7:00 PM TUESDAY.
  - FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 AM THE DAY BEFORE INDEPENDENCE DAY AND 7:00 PM THE DAY AFTER INDEPENDENCE DAY.  
  
IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00 AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 PM THE TUESDAY AFTER INDEPENDENCE DAY.
  - FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 AM FRIDAY AND 7:00 PM TUESDAY.
  - FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 AM TUESDAY TO 7:00 PM MONDAY.
  - FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

## LANE AND SHOULDER CLOSURE REQUIREMENTS

- I) 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.
- J) 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.

K) 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.

L) 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.

M) 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

S) 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.

## TRAFFIC PATTERN ALTERATIONS

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

## SIGNING

V) 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.

W) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS TRAFFIC CONTROL PLANS.

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

X) 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.

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

Z) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) [LENGTH] IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

## TRAFFIC CONTROL DEVICES

CC) 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.

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

## PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
N. OLD US 52	PAINT	TEMPORARY RAISED

II) 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.

JJ) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

KK) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

## MISCELLANEOUS

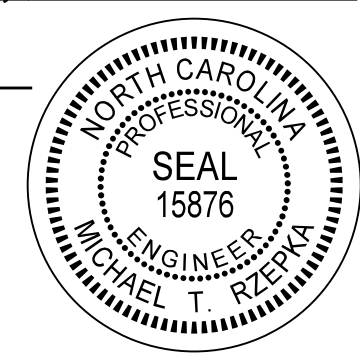

NN) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) [LENGTH] AND [LENGTH] RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.


# MANAGEMENT STRATEGIES

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

- RECOMMENDED STRATEGIES:
- TRAFFIC MANAGEMENT STRATEGIES:
- ONE-LANE, TWO WAY OPERATION (FLAGGING)
  - WORK HOUR RESTRICTIONS FOR PEAK TRAVEL
  - OFF-SITE DETOURS / USE OF ALTERNATIVE ROUTES

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APPROVED: <i>Michael T. Rzepka</i> DATE: 7/31/2024 SEAL 		TRANSPORTATION OPERATIONS PLAN
<p style="text-align: center;"><b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b></p>		

PROJ. REFERENCE NO.	SHEET NO.
17BP.9.R.83	TMP-2
 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	

# TEMPORARY SHORING DATA

## SHORING LOCATION NO. 1

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION -L- STA. 22+75±, 28.0' RT, TO STATION -L- STA. 23+25±, 28.0' RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT ( $\gamma$ ) = 120 PCF
- FRICTION ANGLE ( $\phi$ ) = 30 DEGREES
- COHESION (c) = 0 PSF
- GROUNDWATER ELEVATION = 831.5 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM STATION -L- STA. 22+75±, 28.0' RT, TO STATION -L- STA. 23+25±, 28.0' RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION -L- STA. 22+75±, 28.0' RT, TO STATION -L- STA. 23+25±, 28.0' RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

WHEN BACKFILL FOR APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM STATION -L- STA. 22+75±, 28.0' RT, TO STATION -L- STA. 23+25±, 28.0' RT. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

## SHORING LOCATION NO. 2

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING FROM STATION -L- STA. 24+75±, 26.5' RT, TO STATION -L- STA. 25+25±, 26.5' RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT ( $\gamma$ ) = 120 PCF
- FRICTION ANGLE ( $\phi$ ) = 30 DEGREES
- COHESION (c) = 0 PSF
- GROUNDWATER ELEVATION = 831.5 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM -L- STA. 24+75±, 26.5' RT, TO STATION -L- STA. 25+25±, 26.5' RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

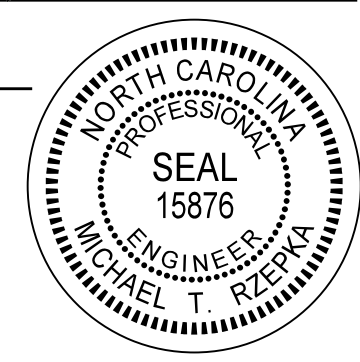

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM -L- STA. 24+75±, 26.5' RT, TO STATION -L- STA. 25+25±, 26.5' RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

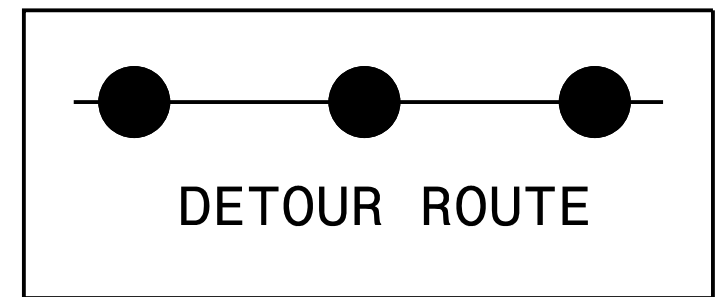
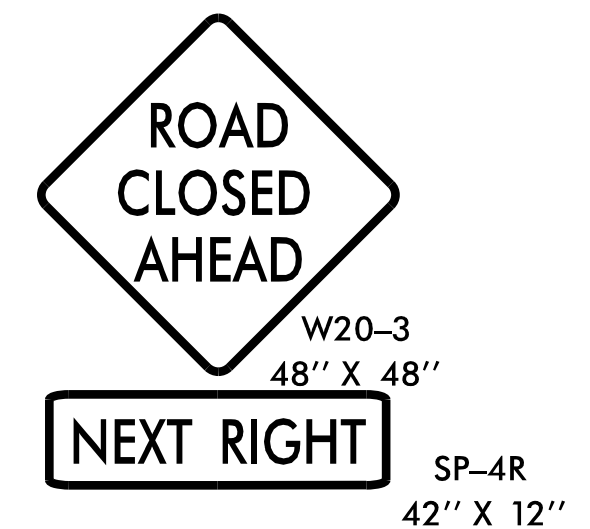
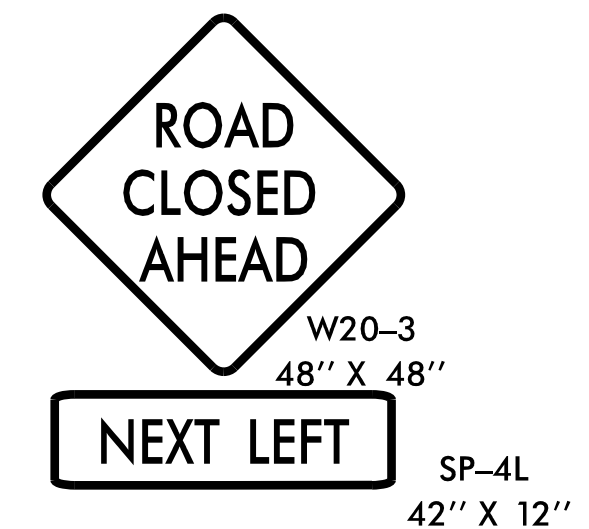
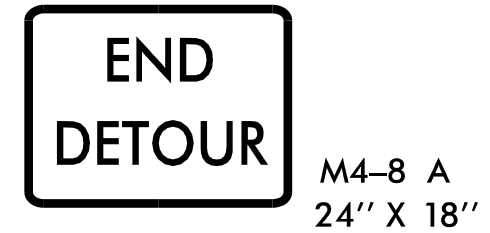
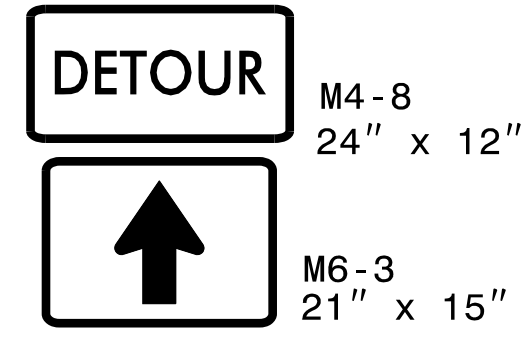
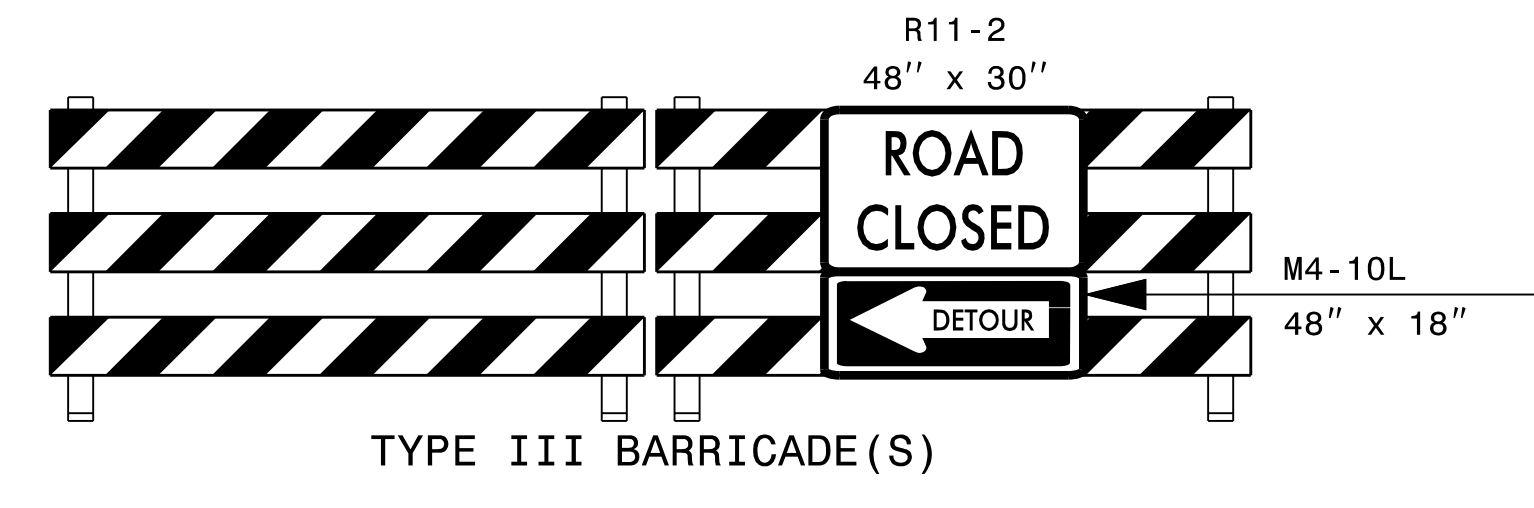
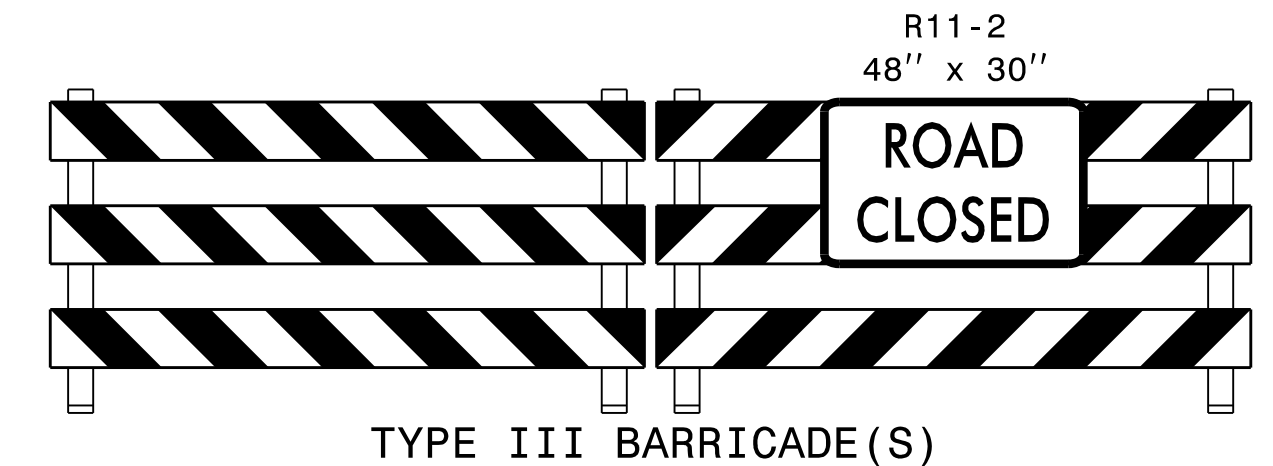
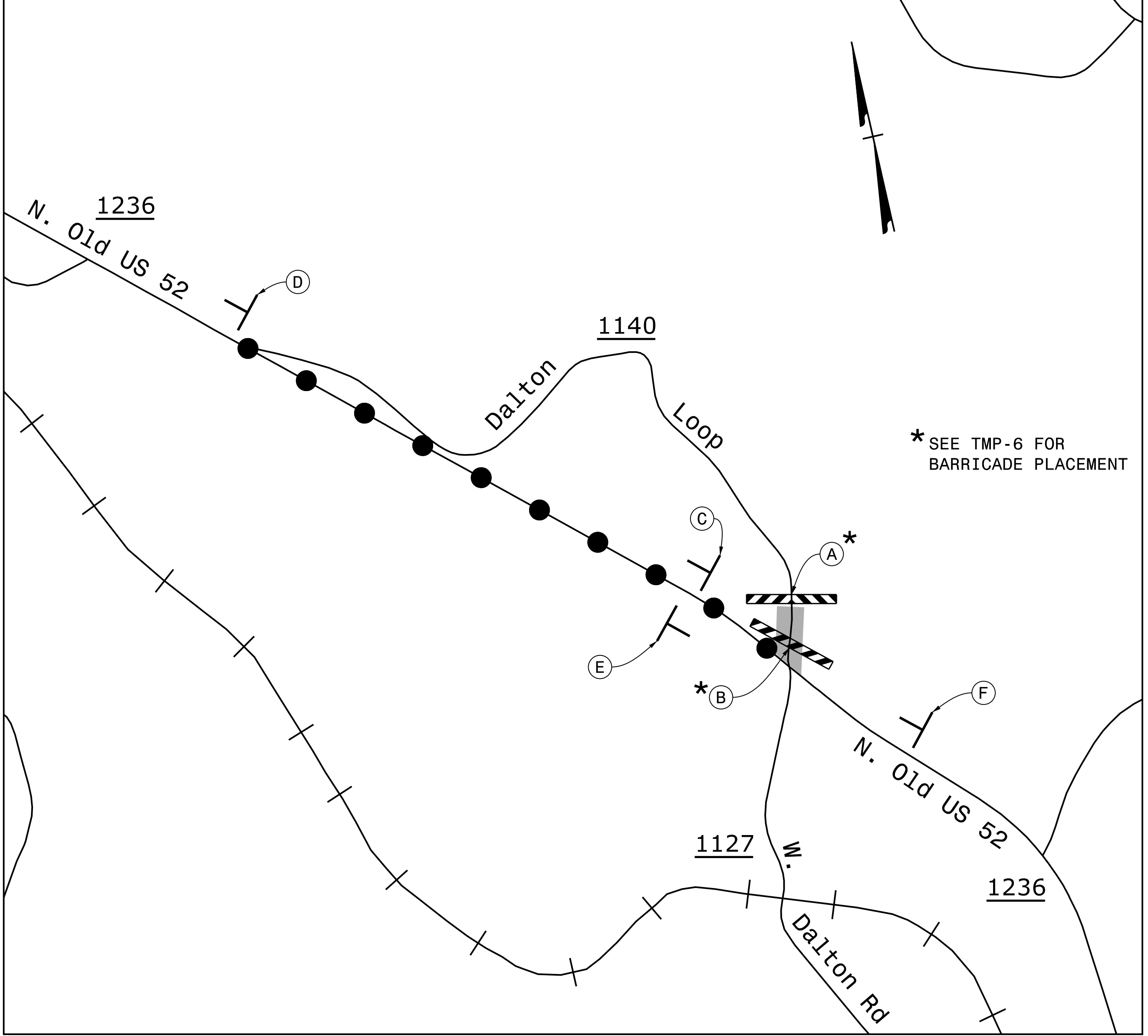
WHEN BACKFILL FOR APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING FROM -L- STA. 24+75±, 26.5' RT, TO STATION -L- STA. 25+25±, 26.5' RT. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

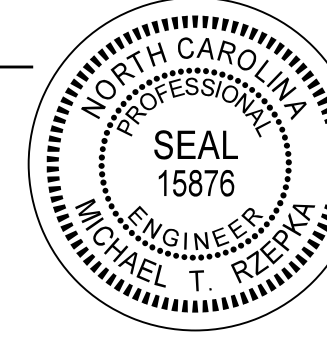
REVISIONS

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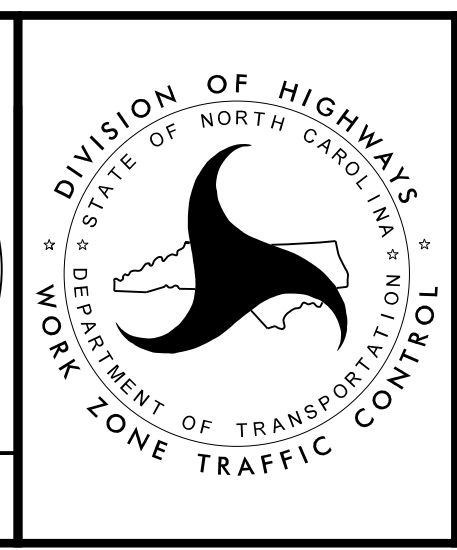
APPROVED: <i>Michael T. Rzepka</i> DATE: 7/31/2024 SEAL 		<b>TEMPORARY SHORING DATA</b>
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>		



APPROVED: *Michael T. Rzepka*  
 DATE: 7/31/2024  
 SEAL



**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

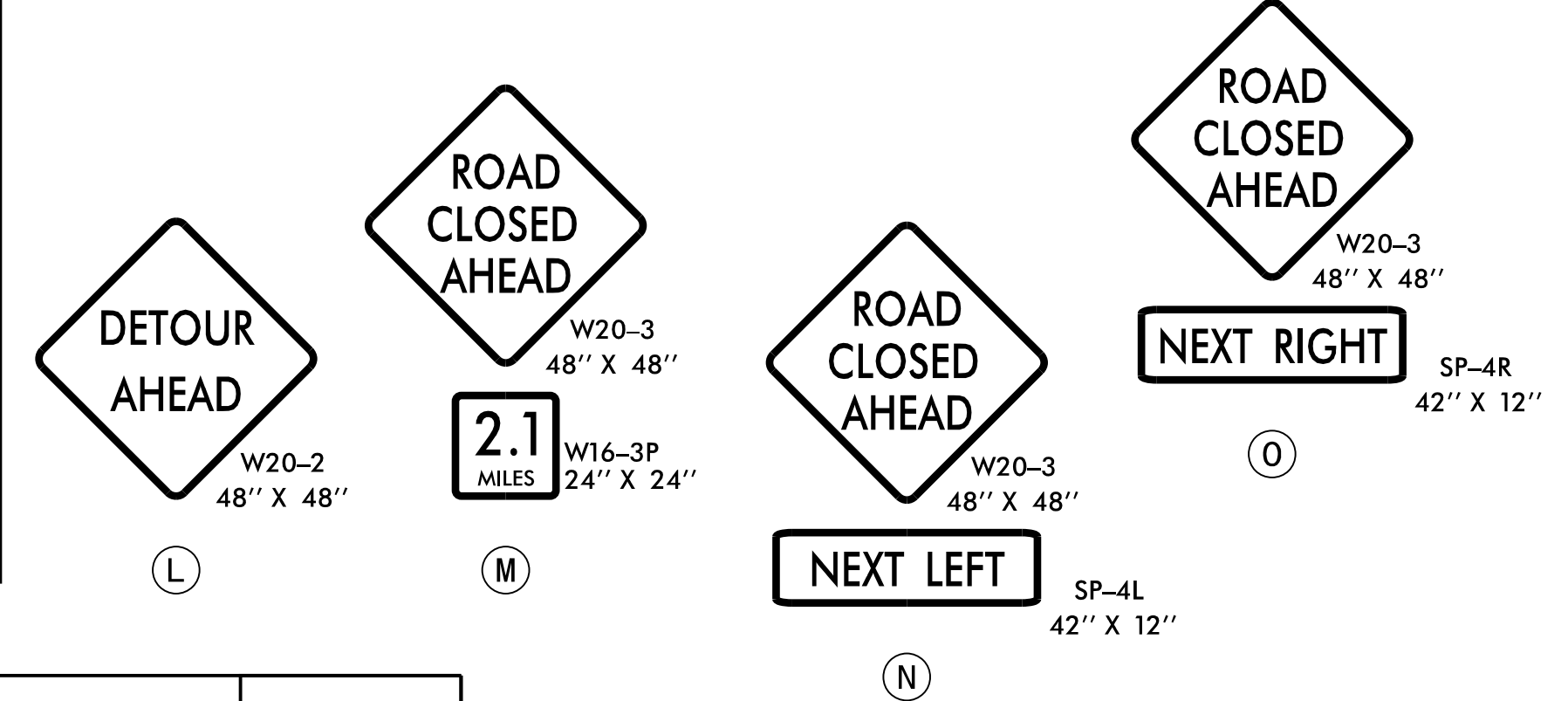
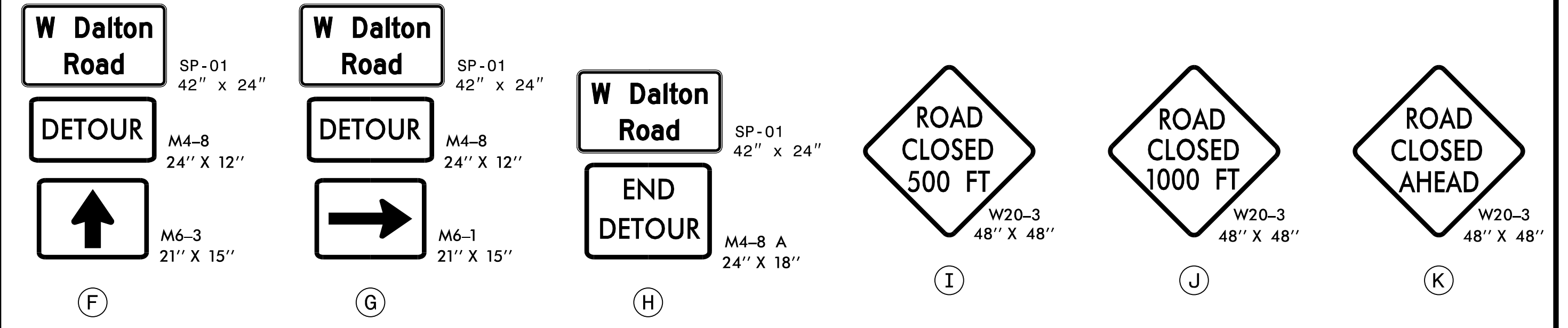
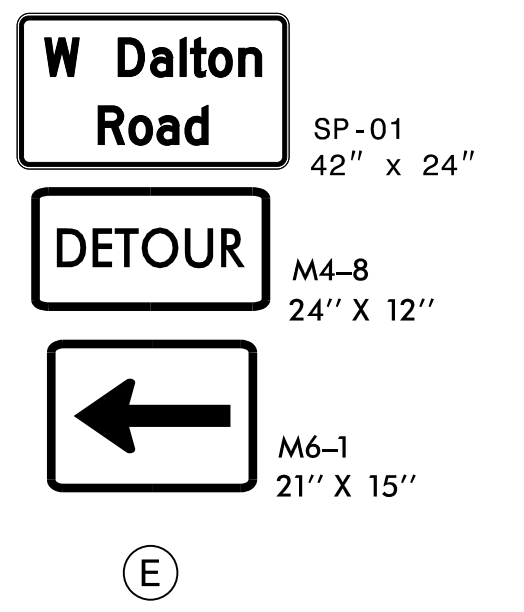
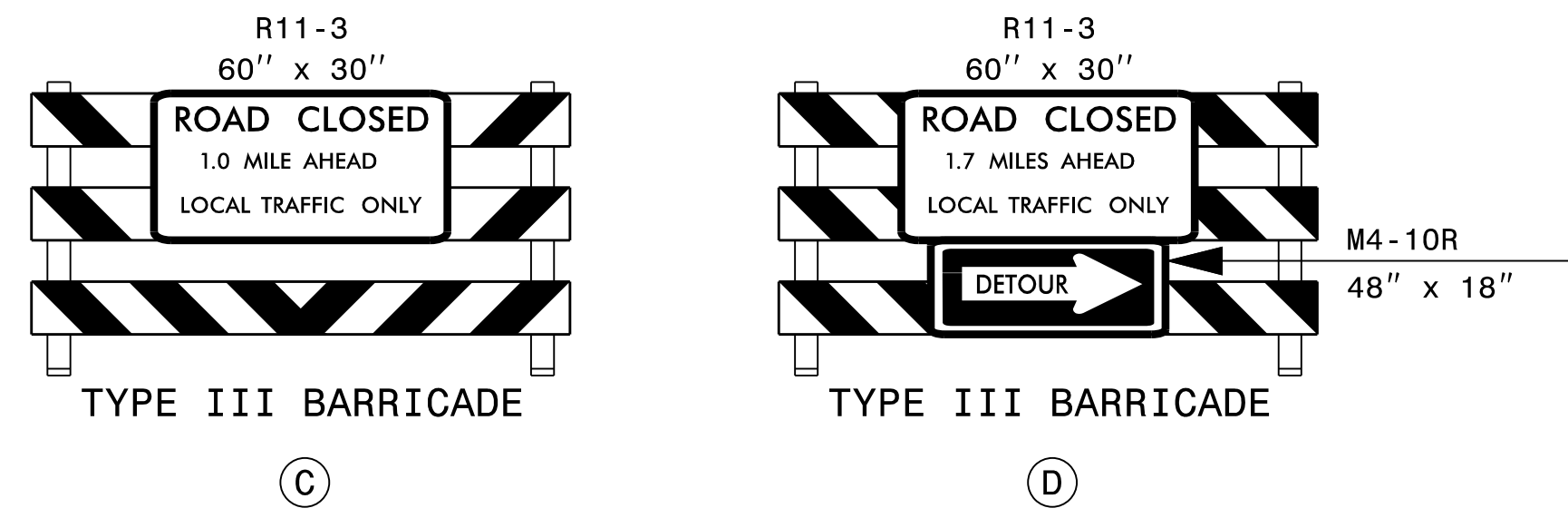
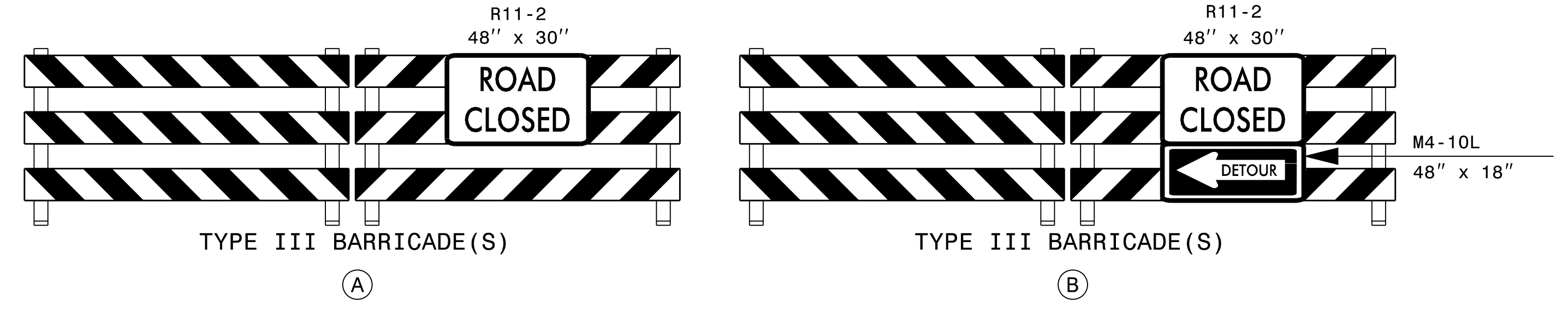
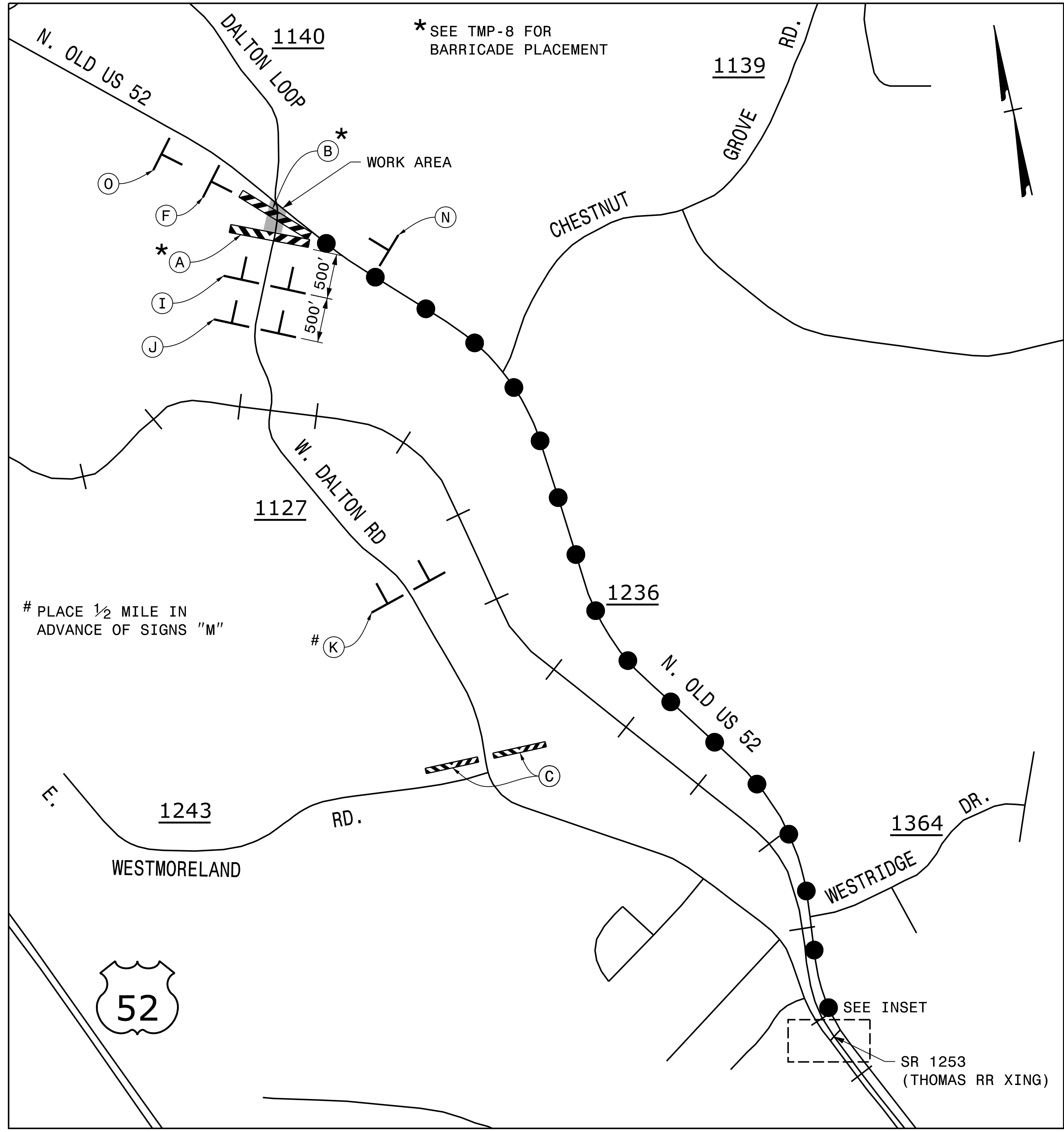


DALTON LOOP  
DETOUR ROUTE

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REVISIONS

PROJ. REFERENCE NO. 17BP.9.R.83	SHEET NO. TMP-2B
HDR Engineering, Inc. of the Carolinas 555 Fayetteville St., Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	



PRIOR TO CLOSURE		DURING CLOSURE	
MESSAGE NO. 1	MESSAGE NO. 2	MESSAGE NO. 1	MESSAGE NO. 2
SR 1127 WILL BE CLOSED	STARTING (DAY) (TIME)	SR 1127 CLOSED 2.5 MI	FOLLOW POSTED DETOUR
CHANGEABLE MESSAGE SIGN		CHANGEABLE MESSAGE SIGN	

- INSTALL CMS 7 DAYS PRIOR TO CLOSURE.
- EXACT LOCATION TO BE DETERMINED BY THE ENGINEER.
- MESSAGES AS PER STANDARDS, OR PER THE ENGINEER.

● ● ● = DETOUR ROUTE

NOTES: SEE TMP-2C FOR SP-02 SPECIAL SIGN DESIGN.  
SEE TMP-2D FOR SP-03 SPECIAL SIGN DESIGN.  
SEE RSD 1101.03, SHEET 1 OF 9, FOR ADDITIONAL NOTES.

APPROVED: *Michael T. Rzepka*

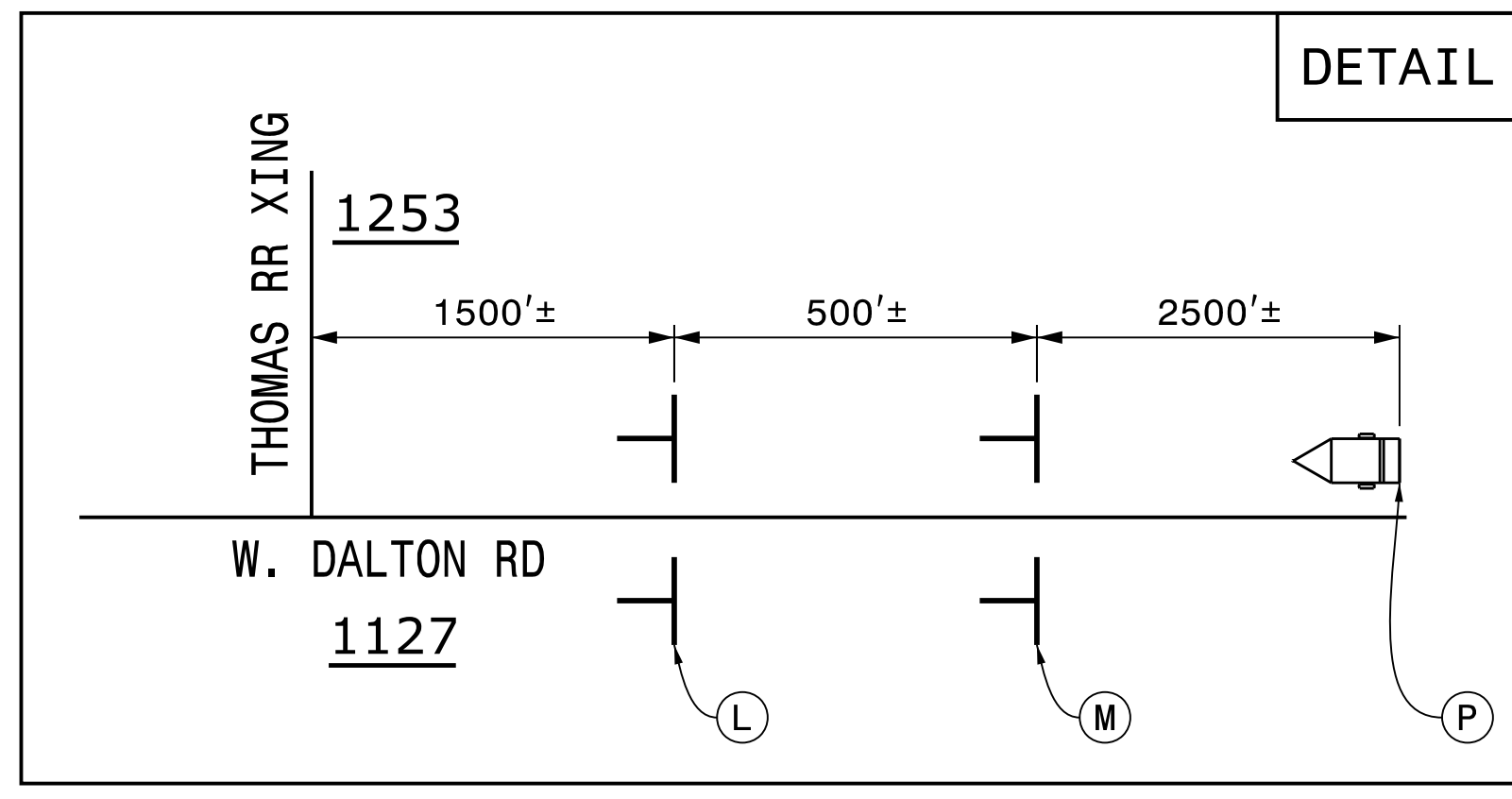
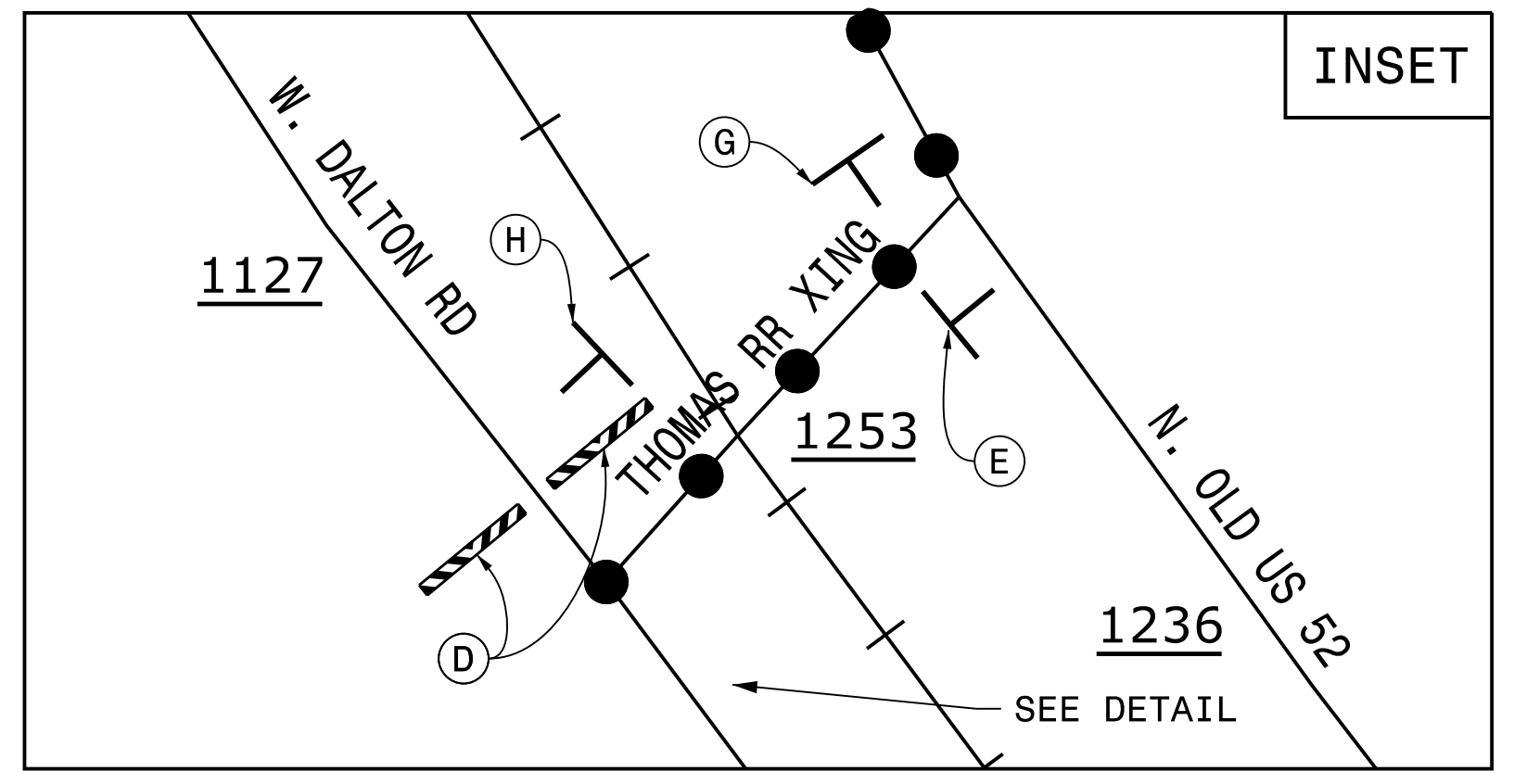
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SEAL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

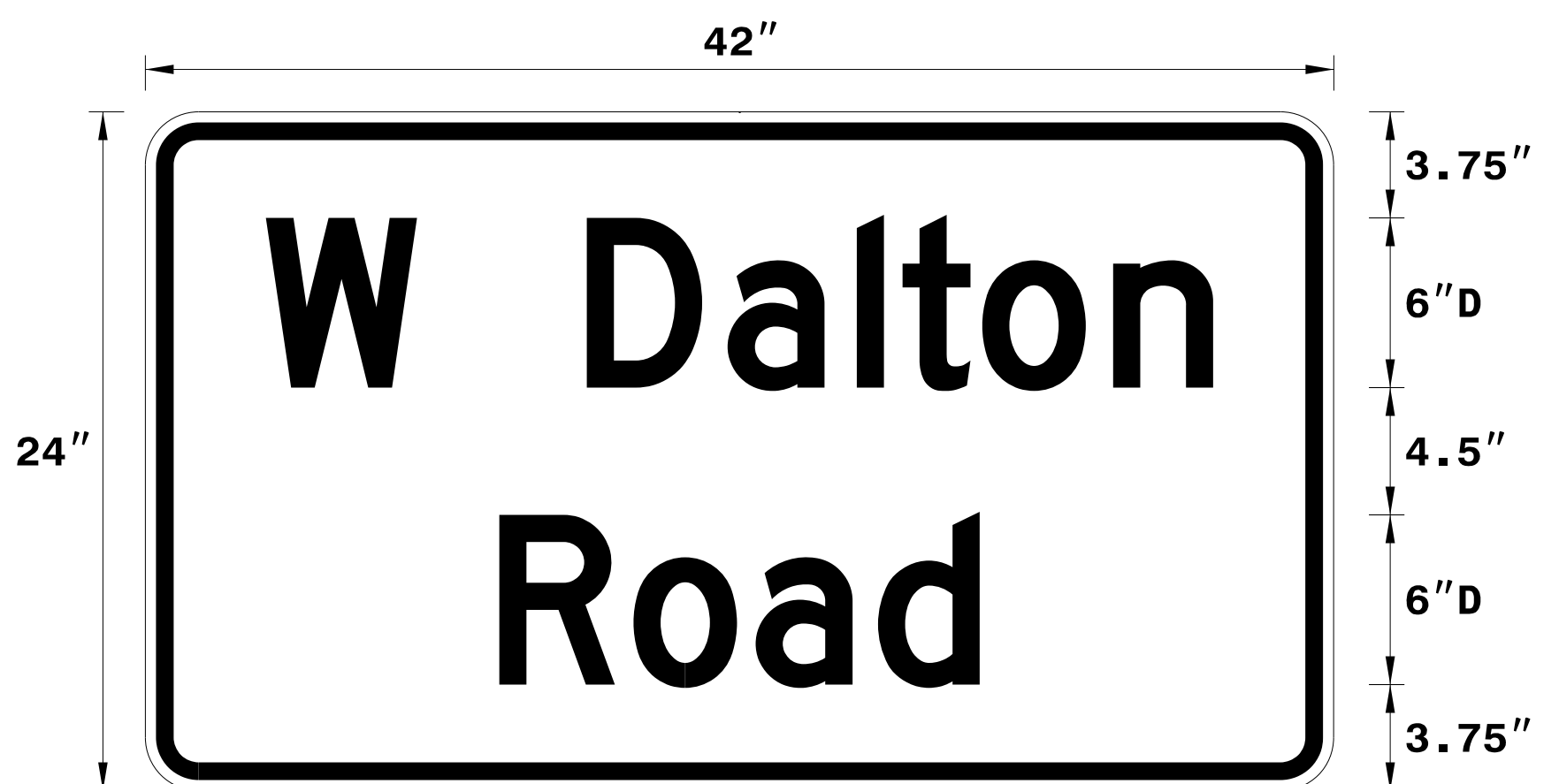
W. DALTON RD  
DETOUR ROUTE



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 DATE: 1/7/2025

REVISONS

SIGN NUMBER: SP-01 TYPE: STATIONARY QUANTITY: SEE PLANS SIGN WIDTH: 3'-6" HEIGHT: 2'-0" TOTAL AREA: 7.0 Sq.Ft. BORDER TYPE: RECESSED RECESS: 0.38" WIDTH: 0.63" RADII: 1.5" USE NOTES: 1,2 1. Legend and border shall be direct applied black non-reflective sheeting. 2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.	BACKG COLOR: Fluorescent Orange COPY COLOR: Black SYMBOL X Y WID HT MAT'L: 0.080" (2.0 mm) ALUMINUM	DESIGN BY: R DRAYTON PROJECT ID: 17BP.9.R.83 Bridge #286 CHECKED BY: R KING Jul 25, 2022 DIV: 9
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42" (Total Width)  
 24" (Total Height)  
 33.5" (Inner Width)  
 6" (Text Height)  
 4.25" (Border Thickness)

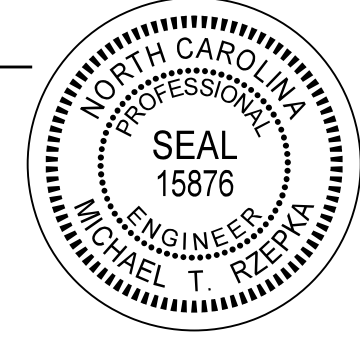

BORDER  
R=1.5"  
TH=0.63"  
IN=0.38"      Spacing Factor is 1 unless specified otherwise

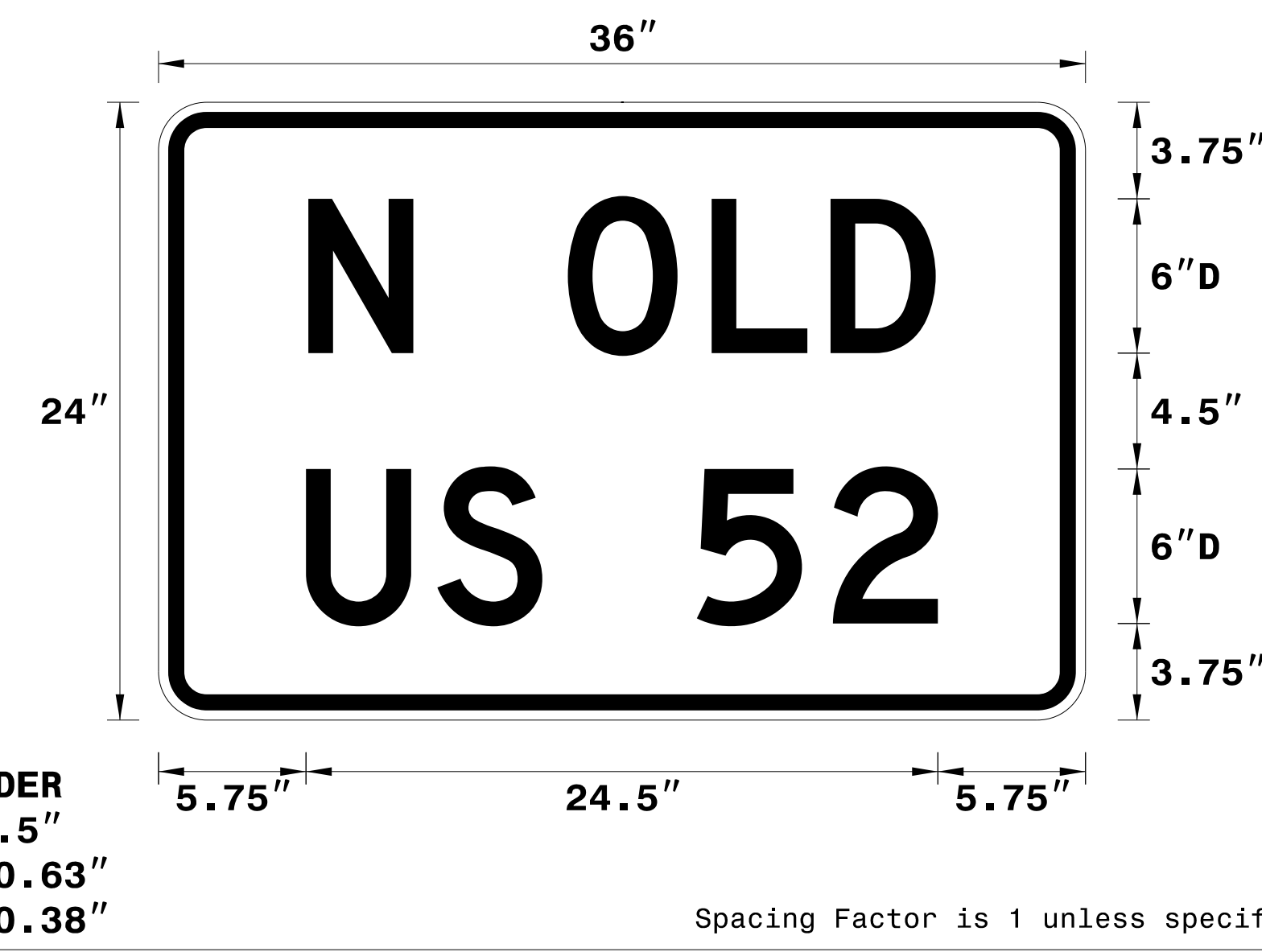
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	R	o	a	d																				D 2000
12.5	4.7	4.3	4.3	3.6	12.5																			17

FILENAME: 17BP.9.R.83\_Guidesign\_English      NORTH CAROLINA D.O.T. SIGN DETAIL

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REVISONS

APPROVED: <i>Michael T. Rzepka</i> DATE: 7/31/2024 SEAL			SPECIAL SIGN DESIGN W. DALTON RD
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

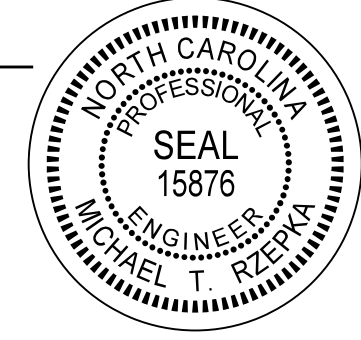

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SYMBOL	X	Y	WID	HT																																																																																														
USE NOTES: 1,2 1. Legend and border shall be direct applied black non-reflective sheeting. 2. Background shall be NC GRADE B fluorescent orange retroreflective sheeting.	 <p>BORDER R=1.5" TH=0.63" IN=0.38"</p> <p>Spacing Factor is 1 unless specified otherwise</p>																																																																																																	
LETTER POSITIONS Letter spacings are to start of next letter	<table border="1"> <thead> <tr> <th></th> <th>N</th> <th>O</th> <th>L</th> <th>D</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Series/Size Text Length</th> </tr> </thead> <tbody> <tr> <td></td> <td>5.8</td> <td>4.1</td> <td>6</td> <td>5.6</td> <td>4.6</td> <td>4.1</td> <td>5.8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>D 2000 24.4</td> </tr> <tr> <td></td> <td></td> <td>U</td> <td>S</td> <td></td> <td>5</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>D 2000 24.5</td> </tr> <tr> <td></td> <td>5.7</td> <td>5.1</td> <td>4.1</td> <td>6</td> <td>5.3</td> <td>4.1</td> <td>5.7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			N	O	L	D																			Series/Size Text Length		5.8	4.1	6	5.6	4.6	4.1	5.8																D 2000 24.4			U	S		5	2																	D 2000 24.5		5.7	5.1	4.1	6	5.3	4.1	5.7																
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FILENAME: 17BP.9.R.83\_Guidesign\_Englisch

NORTH CAROLINA D.O.T. SIGN DETAIL


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REVISIONS

APPROVED: <i>Michael T. Rzepka</i> DATE: 7/31/2024 SEAL 		SPECIAL SIGN DESIGN N. OLD US 52
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		



# PHASING

PROJ. REFERENCE NO.	SHEET NO.
17BP.9.R.83	TMP-3
 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	

**NOTES:**  
 BEFORE BEGINNING ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES. FIELD VERIFY LOCATIONS WITH THE RESIDENT ENGINEER PRIOR TO INSTALLATION.

MAINTAIN VEHICULAR ACCESS TO ALL RESIDENCES AND BUSINESSES DURING THE LIFE OF THE CONTRACT, UNLESS OTHERWISE NOTED IN THE PHASING PLANS OR DIRECTED BY THE RESIDENT ENGINEER.

COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT NO PONDING OF WATER WILL OCCUR WITHIN THE TRAVEL LANE.

WHEN USING LANE CLOSURES (RSD 1101.02), RETURN TRAFFIC TO EXISTING AND/OR TEMPORARY TRAFFIC PATTERN UPON ACTIVITIES COMPLETION, UNLESS OTHERWISE NOTED IN THE PHASING PLANS.

WHEN PHASING STATES TO USE LANE CLOSURES, REFER TO THE FOLLOWING FOR ALL EXISTING AND PROPOSED ROADS:

-ALL TWO-LANE/TWO-WAY FACILITIES SEE RSD 1101.02 SHEET 1 OF 14 COMPLETE PAVING UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE UNTIL STATED TO PLACE FINAL LAYER IN THE PHASING PLANS.

WHEN WEDGING OVER EXISTING PAVEMENT, WEDGE TO PROPOSED ELEVATION (LESS THE FINAL LAYER OF SURFACE COURSE), OR WEDGE AS NEEDED TO MAINTAIN TRAFFIC. MAINTAIN POSITIVE DRAINAGE AND MAINTAIN A MAXIMUM 0.04 ROLLOVER IN BOTH EXISTING AND/OR TEMPORARY TRAVEL LANES.

REPLACE MARKINGS AND RETURN TRAFFIC TO THE CURRENT TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

NOTE: PHASE 1, STEP 2 CONSTRUCTION MAY BE PERFORMED CONCURRENTLY WITH THE COMPLETION OF PHASE 1, STEP 1 WORK IN ORDER TO MINIMIZE CLOSURE TIME OF DALTON LOOP ACCESS.

## PHASE 1, STEP 1 (SEE TMP-4 AND TMP-5)

USING LANE CLOSURES, INSTALL TEMPORARY GUARDRAIL. BEHIND GUARDRAIL AND USING LANE CLOSURES, INSTALL TEMPORARY SHORING AND CONSTRUCT PROPOSED BRIDGE.

USING LANE CLOSURES, CONSTRUCT -L- (NORTH OLD US 52) ROADWAY AND TIES TO EXISTING NORTH OLD US 52, EXCEPT ACROSS EXISTING DALTON LOOP.

## PHASE 1, STEP 2 (SEE TMP-6 AND TMP-7)

PLACE DETOUR SIGNS FOR DALTON LOOP AND CLOSE ACCESS TO DALTON LOOP.

CONSTRUCT -Y- TIE TO DALTON LOOP AND REMAINING -L- ACROSS DALTON LOOP.

PLACE AND COVER DETOUR SIGNS FOR W. DALTON RD.

## PHASE 2, STEP 1 (SEE TMP-8 AND TMP-9)

UPON COMPLETION OF -L- (NORTH OLD US 52) STRUCTURE, PAVEMENT AND TIE-IN AND -Y- (DALTON LOOP), USE LANE CLOSURES TO INSTALL TEMPORARY MARKINGS AND MARKERS AND SHIFT TRAFFIC FROM EXISTING NORTH OLD US 52 TO PROPOSED -L- (TEMPORARY PATTERN) AND OPEN -Y- TO TRAFFIC (REMOVE DALTON LOOP DETOUR SIGNS).

UNCOVER DETOUR SIGNS AND CLOSE ACCESS TO W. DALTON RD.

CONSTRUCT -Y1- TIE TO W DALTON RD.

## PHASE 2, STEP 2 (NOT SHOWN)

USING LANE CLOSURES, INSTALL TEMPORARY PAVEMENT MARKINGS AND OPEN -Y1- (W DALTON RD).

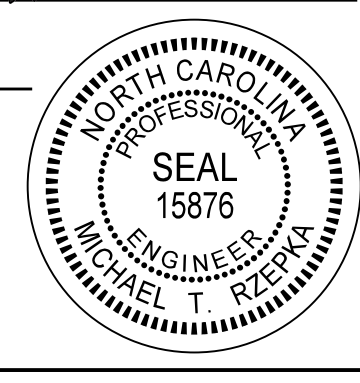

USING LANE CLOSURES, REMOVE PAVEMENT AND BRIDGE FROM EXISTING NORTH OLD US 52. COMPLETE FINAL SHOULDER CONSTRUCTION ON PROPOSED -L-.

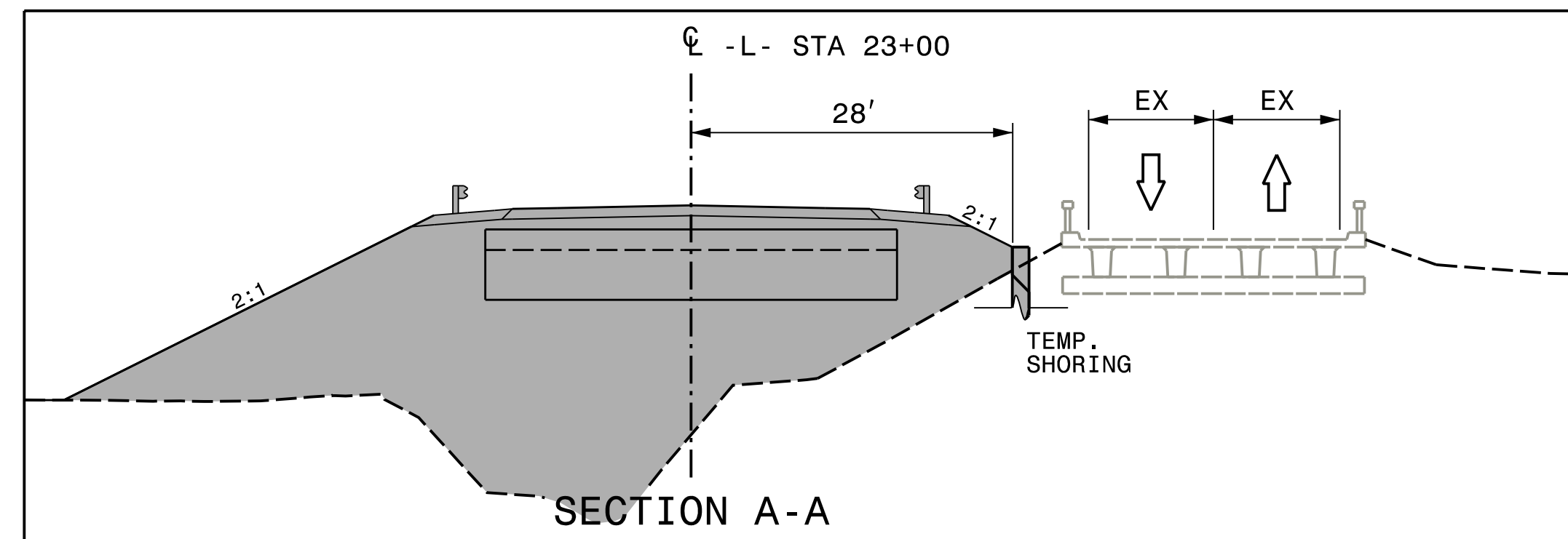
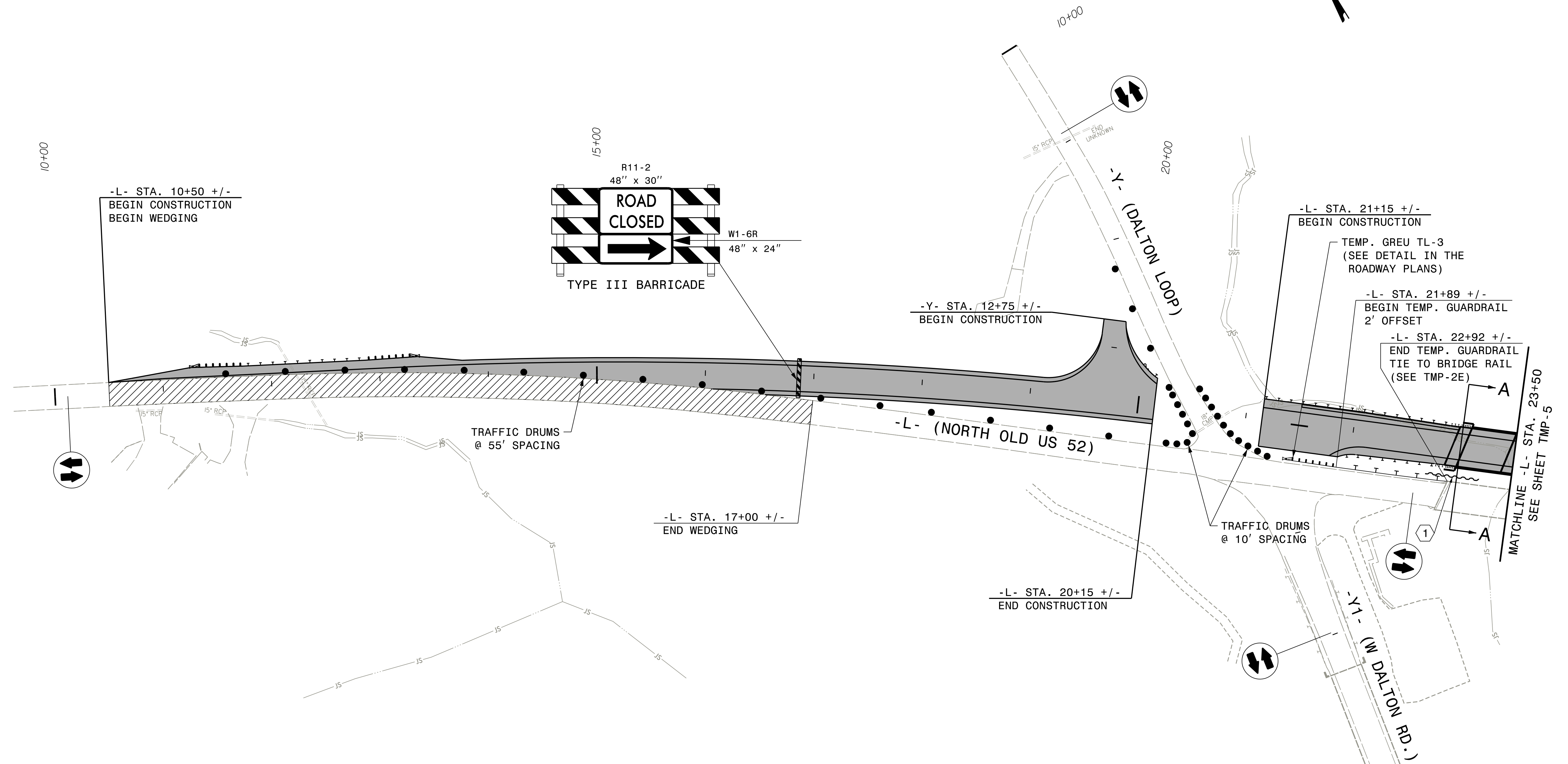
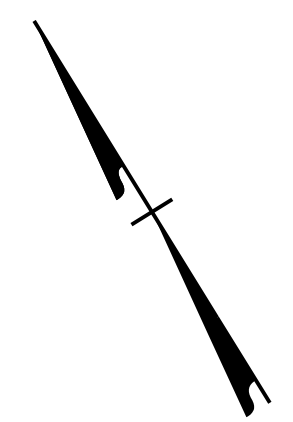
## PHASE 2, STEP 3 (NOT SHOWN)

USING LANE CLOSURES, PLACE FINAL LAYER OF SURFACE COURSE, PLACE FINAL PAVEMENT MARKINGS AND MARKERS AND SHIFT TRAFFIC TO FINAL PATTERN.

REVISIONS

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APPROVED: <i>Michael T. Rzepka</i> DATE: 7/31/2024 SEAL 		TEMPORARY TRAFFIC CONTROL PHASING
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>		



① TEMPORARY SHORING = 150 SF  
FROM -L- STA. 22+75±, 28.0' RT  
TO -L- STA. 23+25±, 28.0' RT

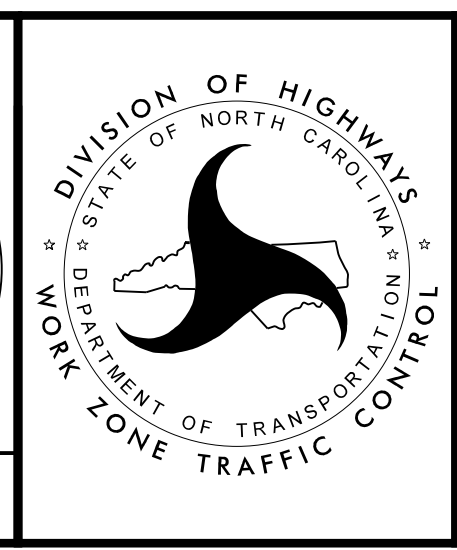
REVISIONS

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APPROVED: *Michael T. Rzepka*


DATE: 1/21/2025

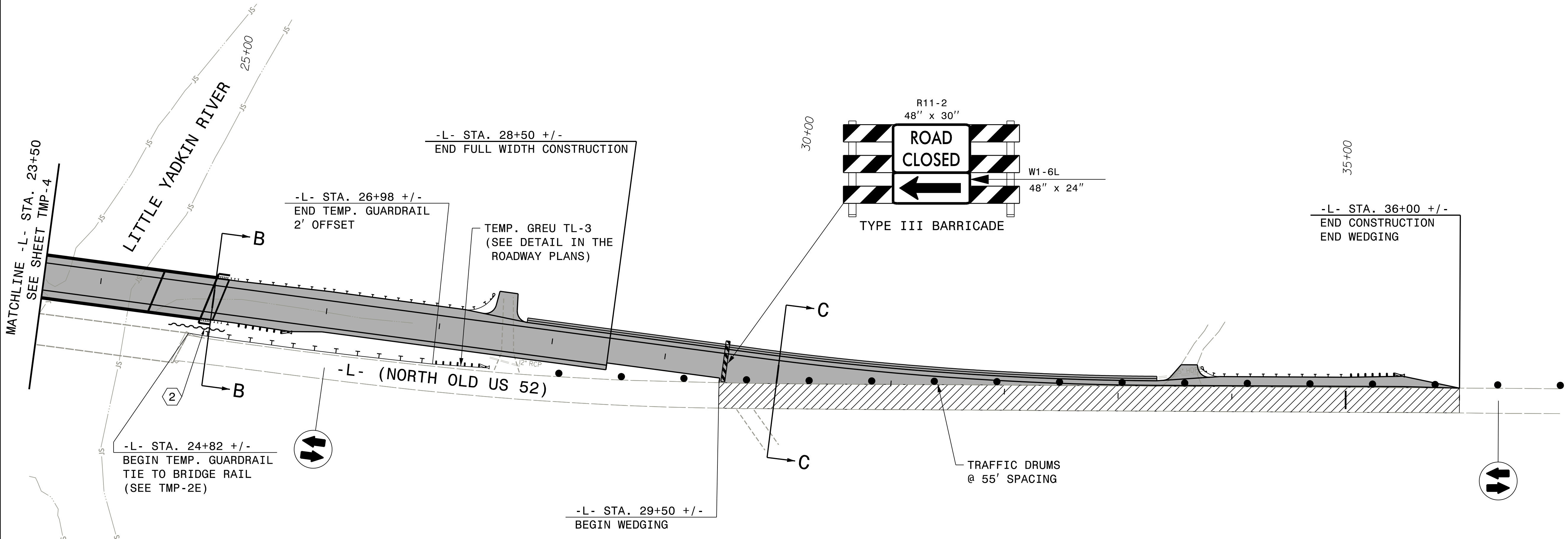
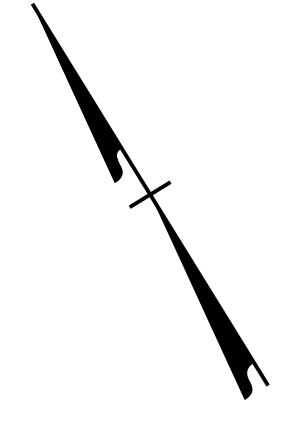
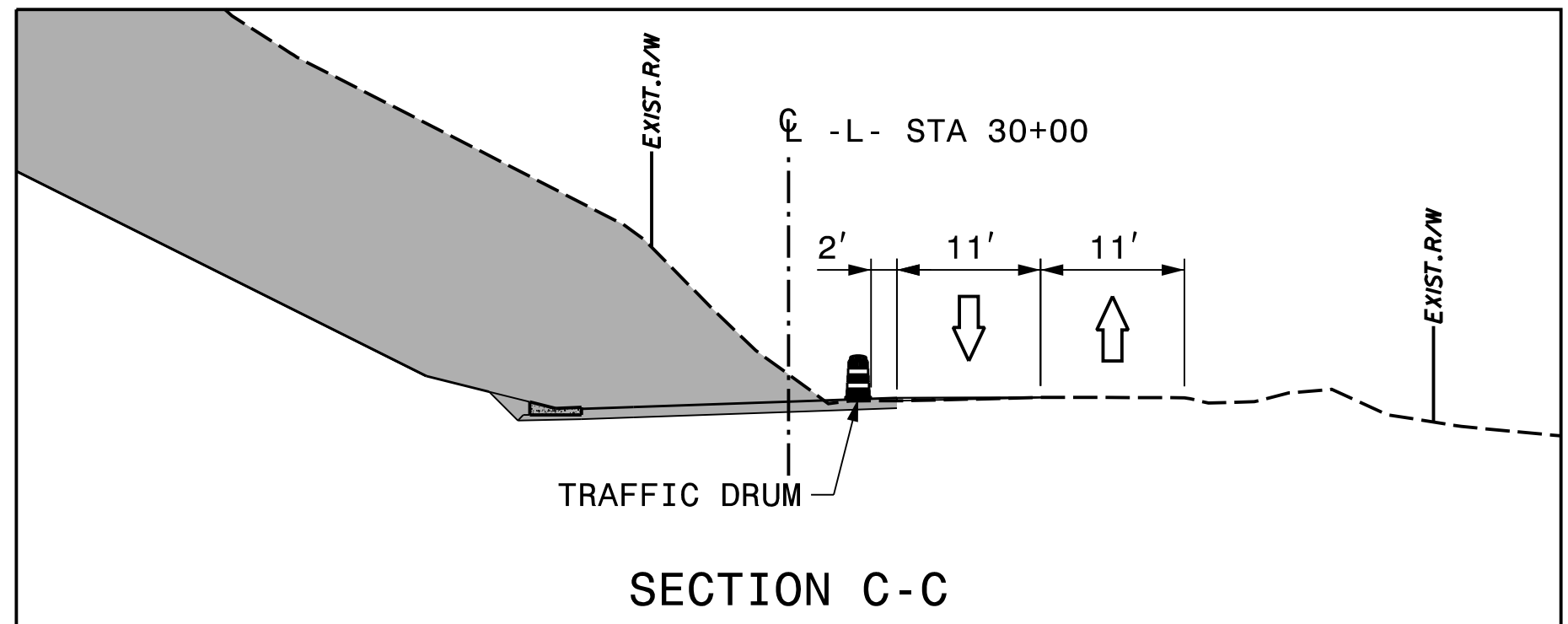
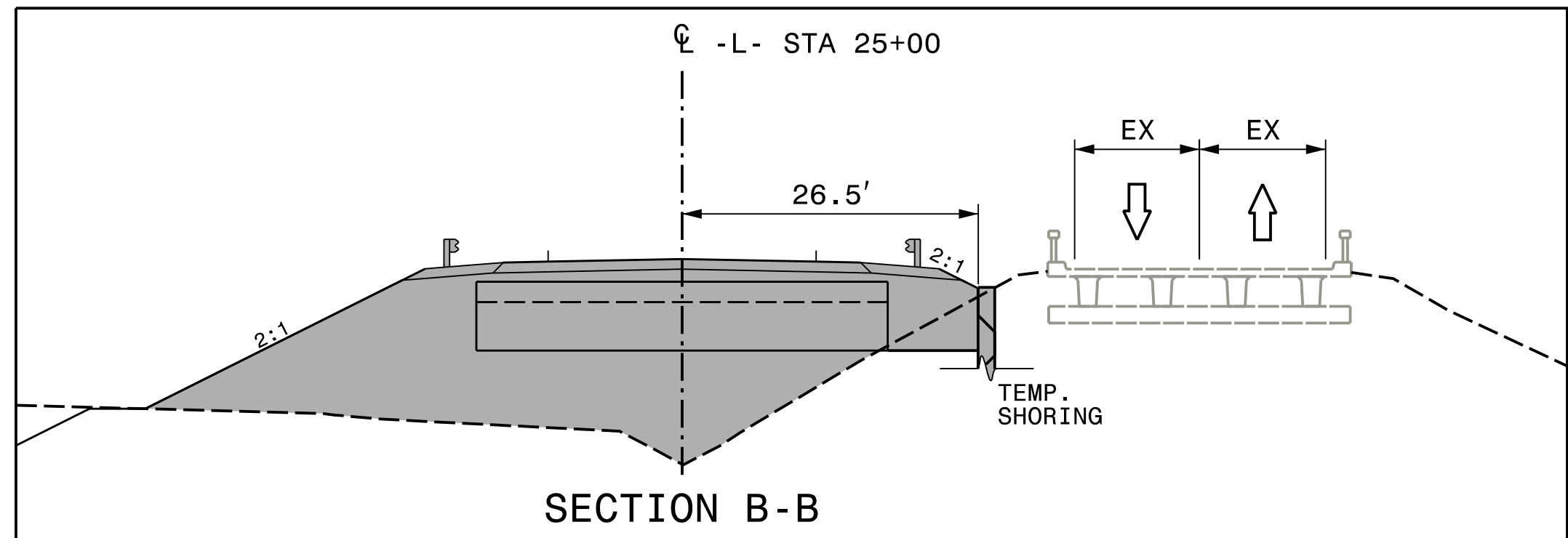
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**PHASE 1  
STEP 1**

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

PROJ. REFERENCE NO.	SHEET NO.
17BP.9.R.83	TMP-5
 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St., Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116	



2 TEMPORARY SHORING = 150 SF  
 FROM -L- STA. 24+75±, 26.5' RT  
 TO -L- STA. 25+25±, 26.5' RT

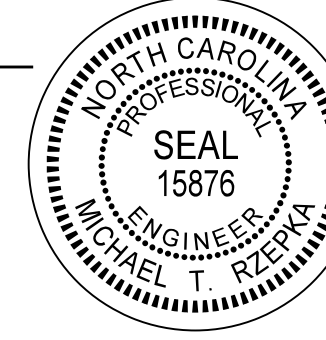
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REVISIONS

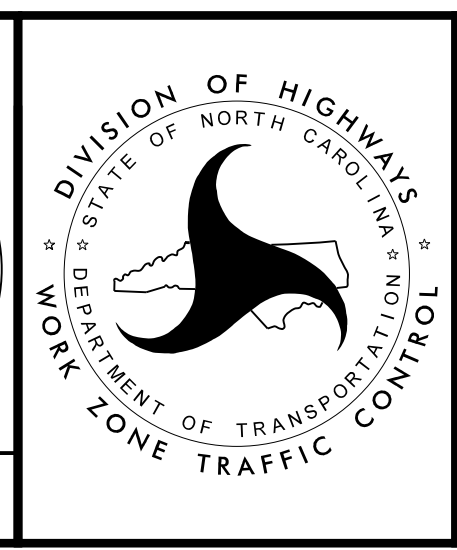
APPROVED: Michael T. Rzepka

DATE: 1/21/2025

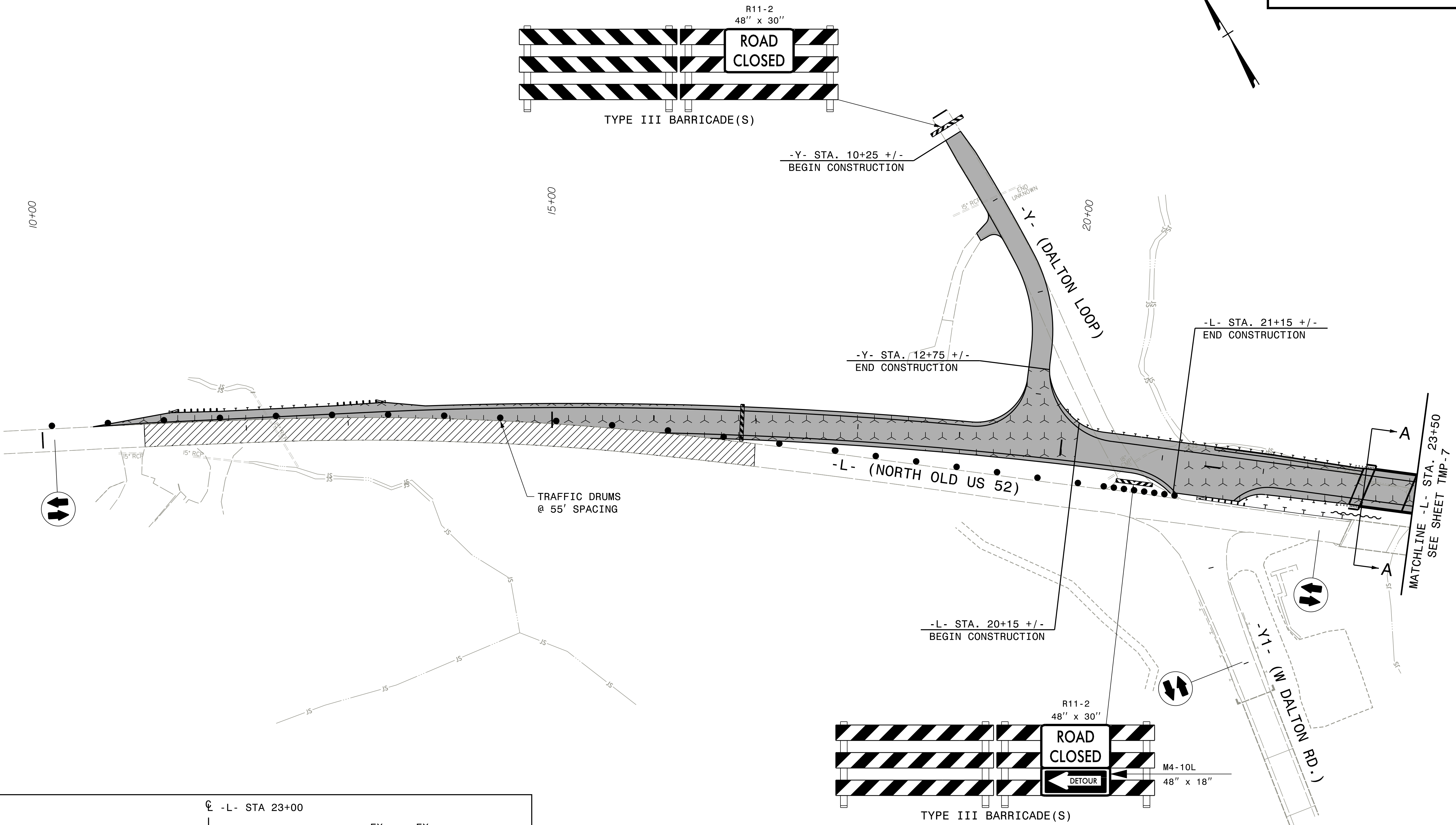
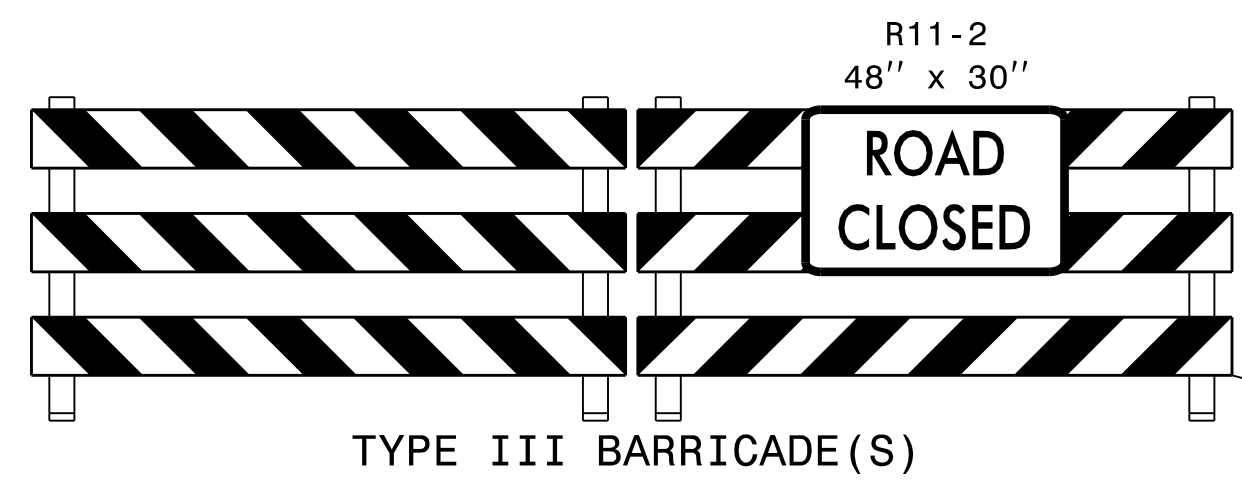
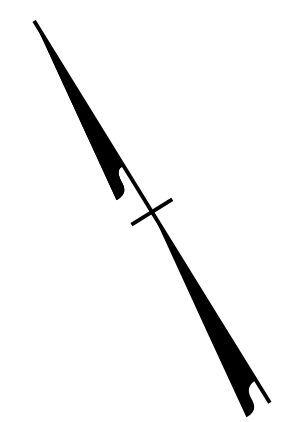
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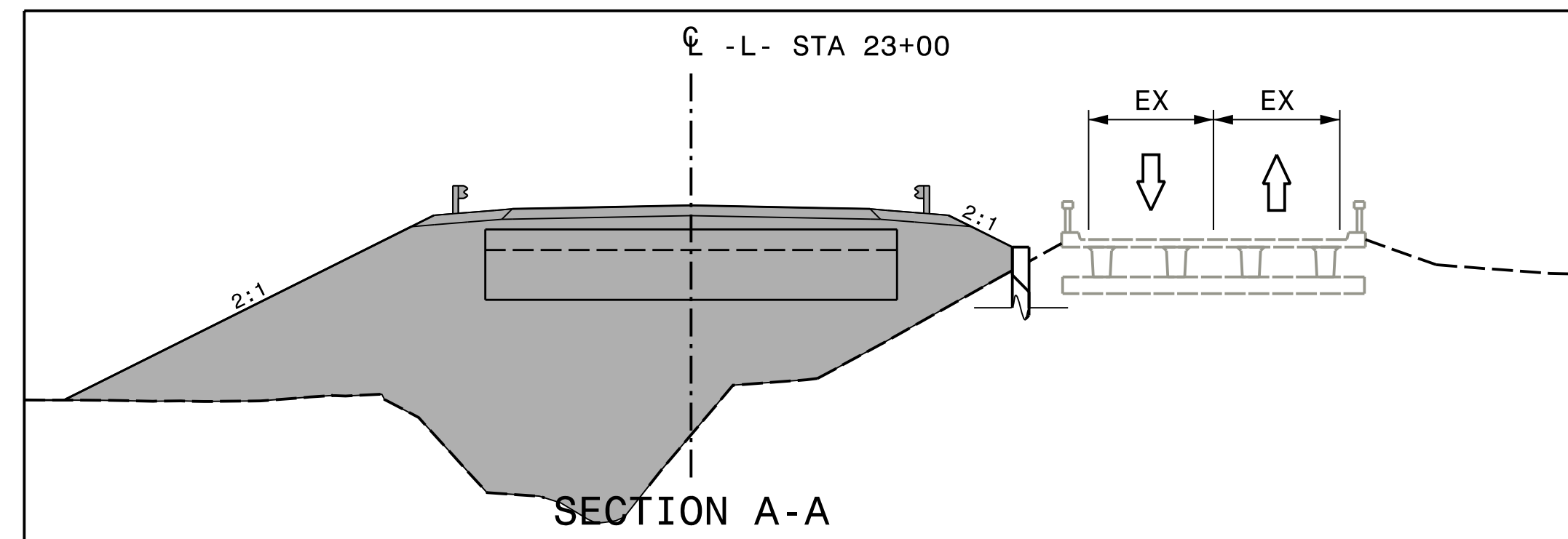
DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED



PHASE 1  
 STEP 1

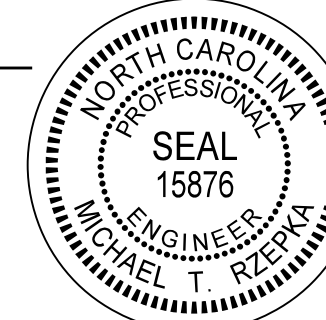


REVISIONS



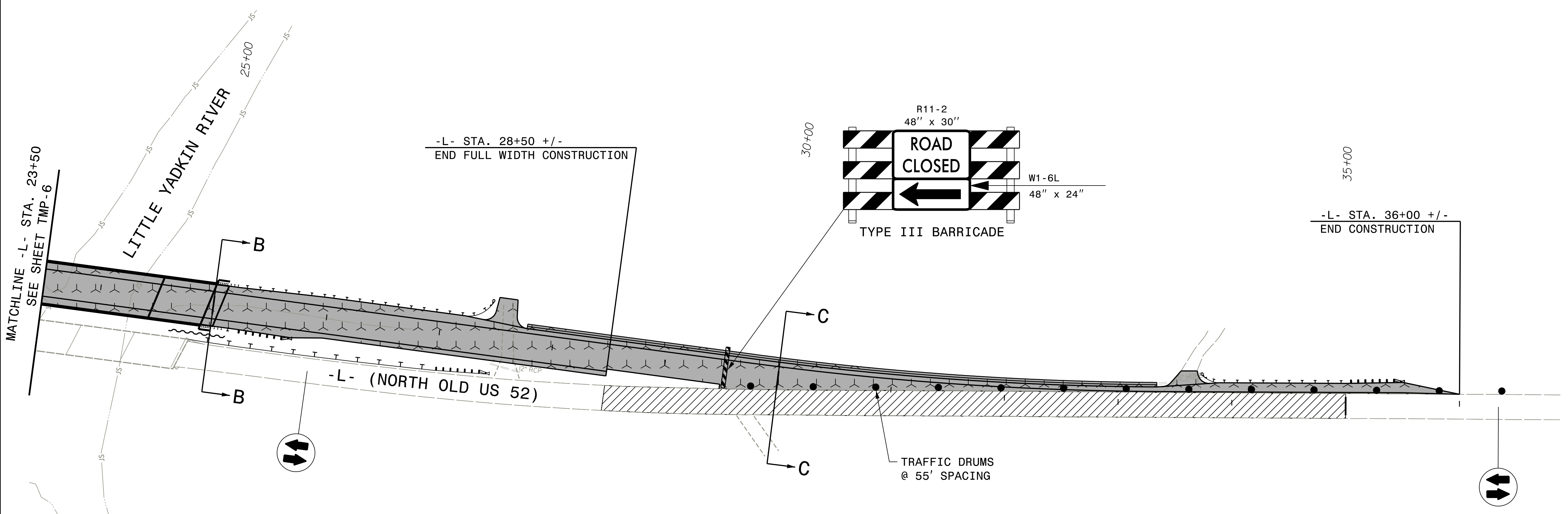
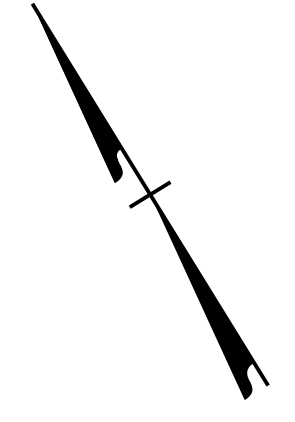
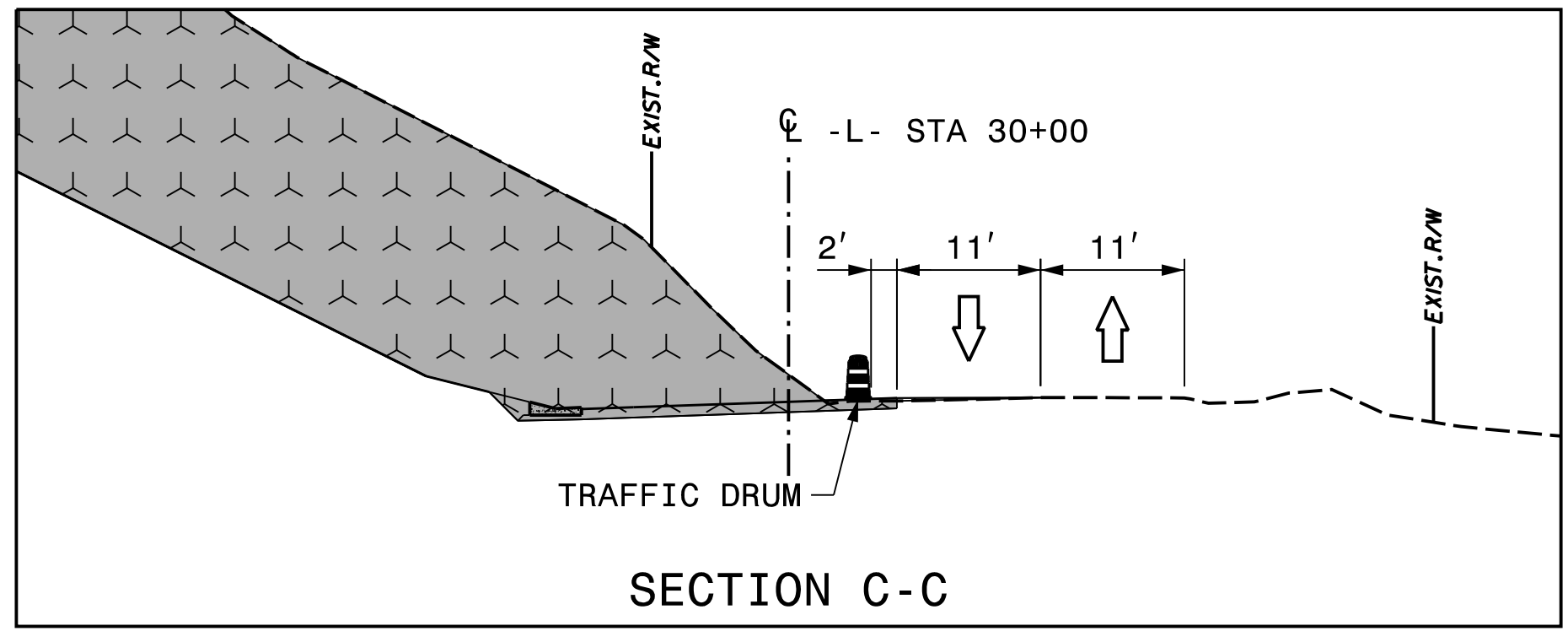
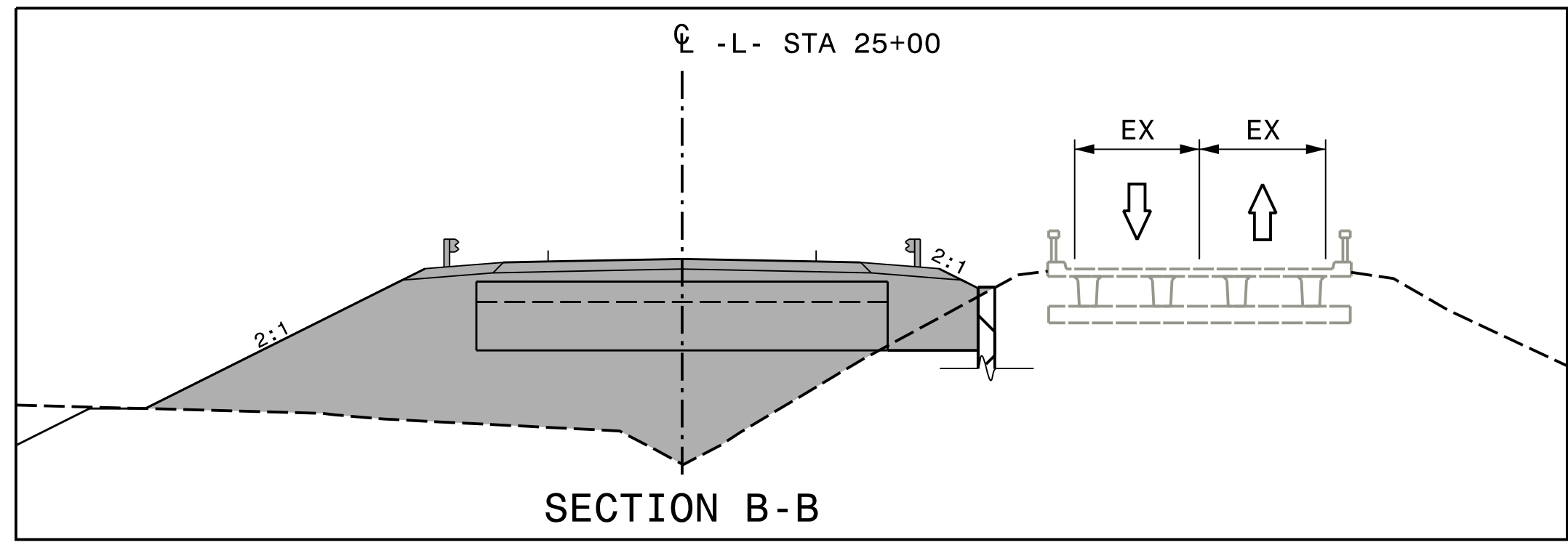
NOTES:  
 1. SEE TMP-2A FOR DALTON LOOP DETOUR ROUTE.

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 DATE: 7/31/2024  
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PHASE 1  
 STEP 2

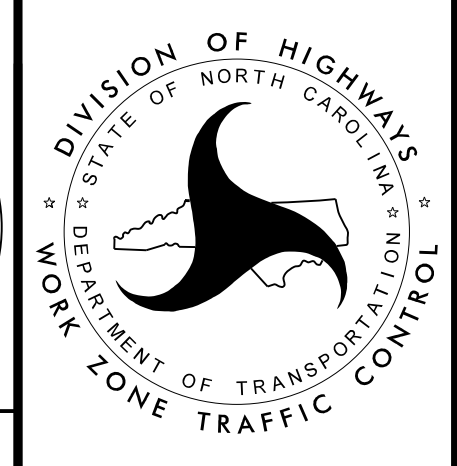
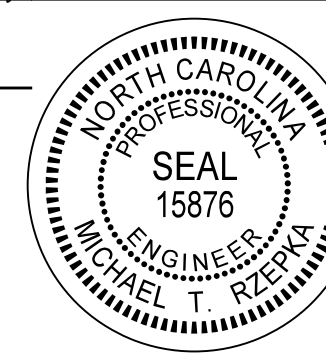
PLOT DRIVER: NCDOT\_pdr\_color\_eng\_50.pit  
 USER: CHARNDEN  
 DATE: 7/31/2024  
 TIME: 8:54:04 AM  
 FILE: p:\p\h\p\users\01\h\p\US\_East\_01\Documents\17BP.9.R.83\Traffic\TrafficControl\TCP\17BP.9.R.83\_TC\_TMP06.dgn



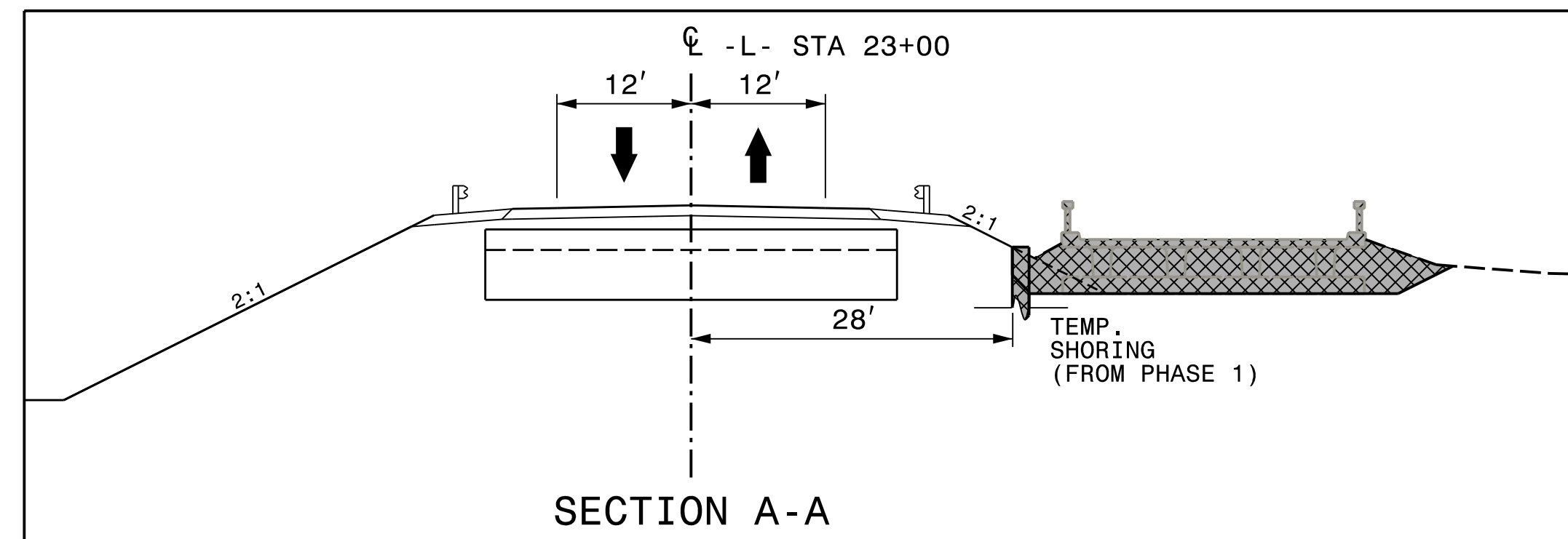
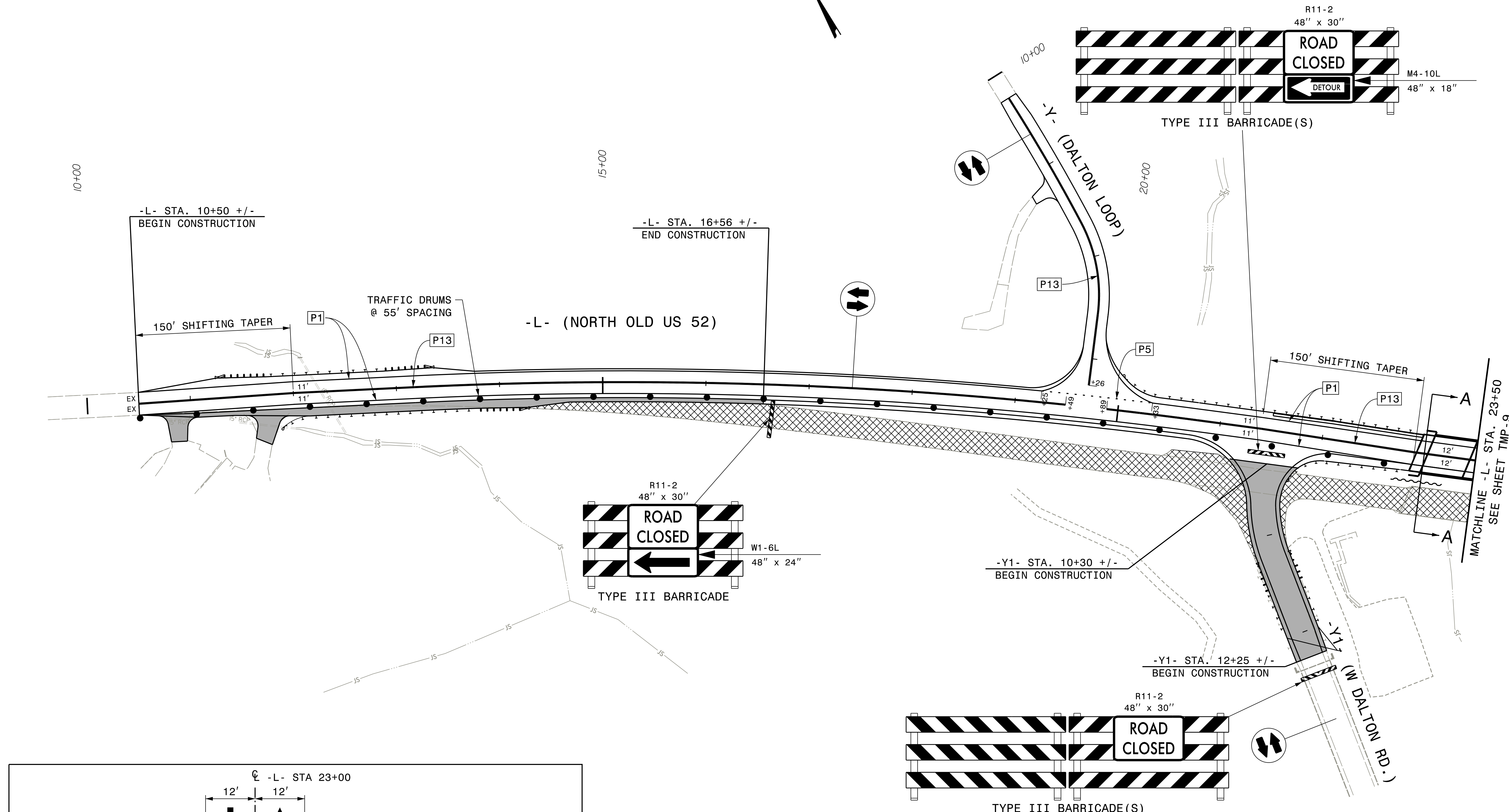
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PLOT DRIVER: NCDOT\_pdf\_color\_eng\_50.pit  
 USER: CHARNDEN  
 DATE: 7/31/2024  
 PENTABLE: NCDOT\_tcp.tbl  
 TIME: 8:54:24 AM  
 FILE: p:\p\h\p\users\charnden\us\_east\_01\documents\17BP.9.R.83\TrafficControl\TCP\17BP.9.R.83\_TC\_TMP07.dgn

APPROVED: *Michael T. Rzepka*  
 DATE: 7/31/2024  
 SEAL

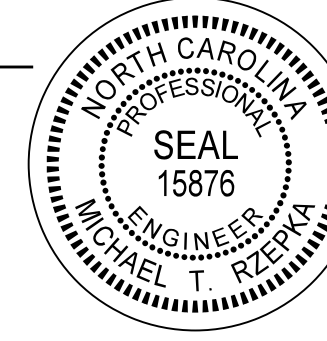


PHASE 1  
STEP 2



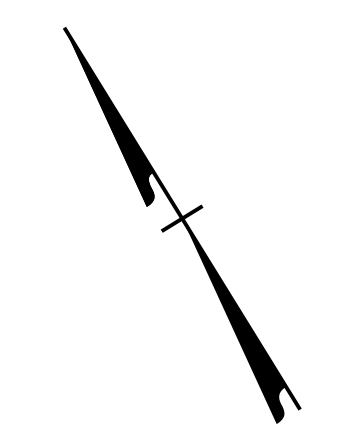
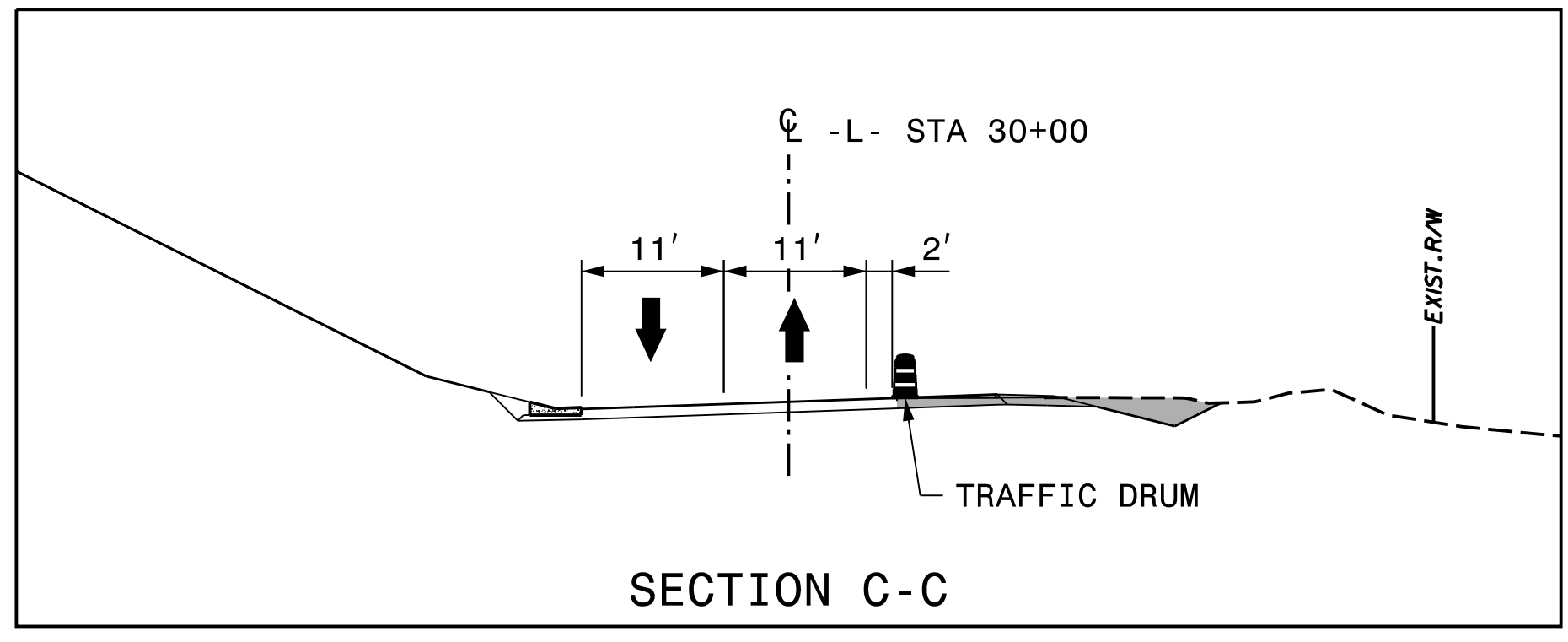
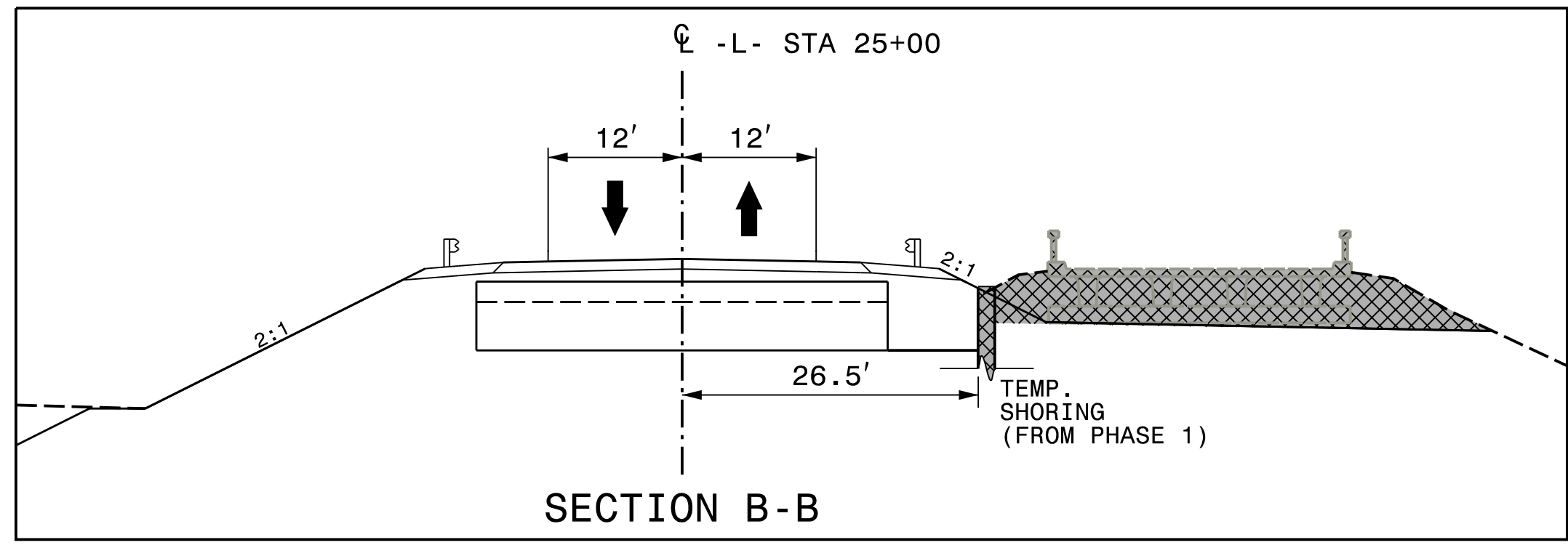
NOTES:  
1. SEE TMP-2B FOR W. DALTON RD DETOUR ROUTE.

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DATE: 7/31/2024  
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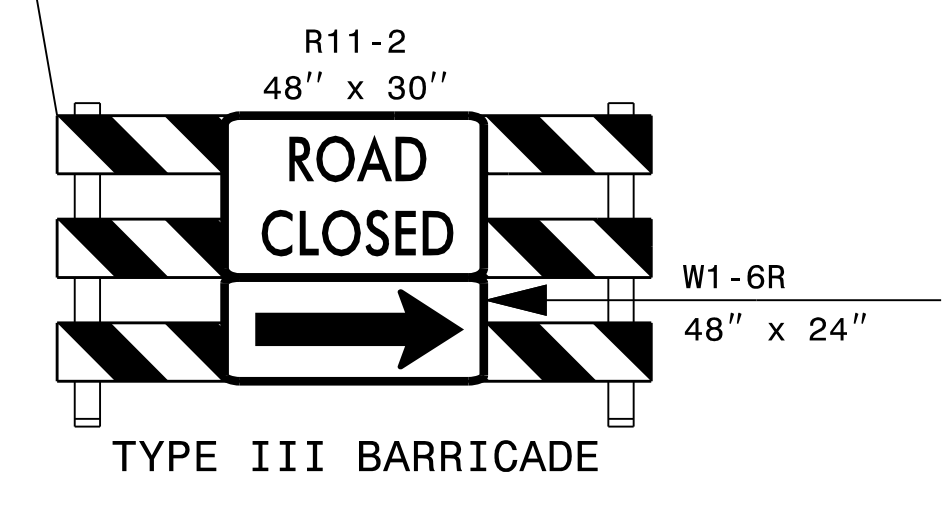
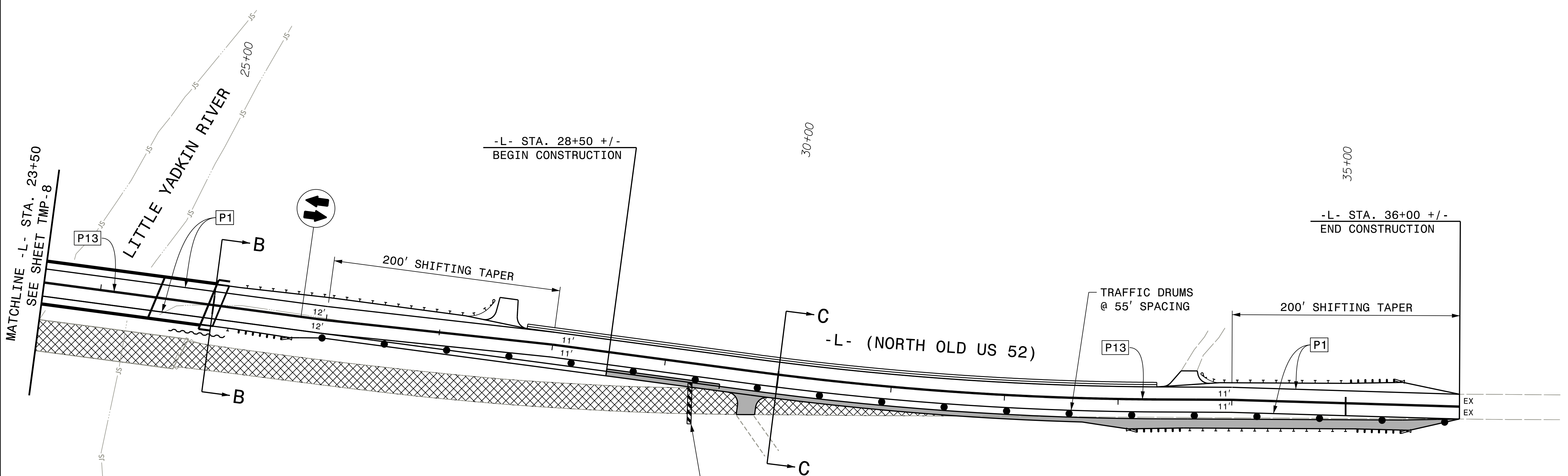



PHASE 2  
STEP 1

PLOT DRIVER: NCDOT\_pdf\_color\_eng\_50.pit  
 USER: CHARNDEN  
 FILE: p:\p\h\p\uses\01\HDR\_US\_East\_01\Documents\17BP.9.R.83\TrafficControl\TCP\17BP.9.R.83\_TC\_TMP08.dgn  
 PENTABLE: NCDOT\_tcp.tbl  
 DATE: 7/31/2024  
 TIME: 8:54:44 AM  
 REVISIONS

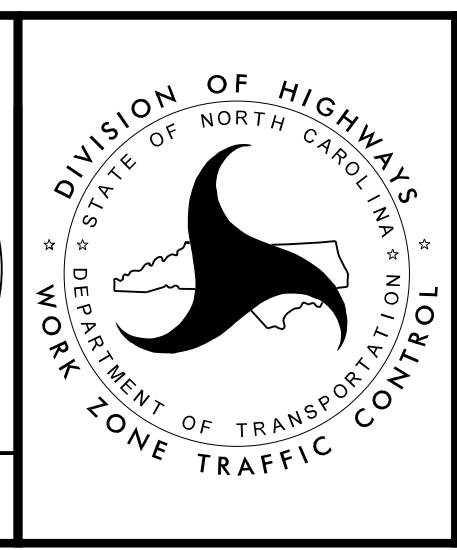
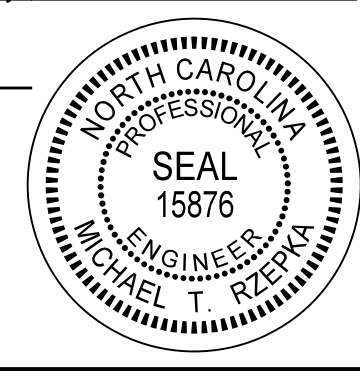


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PLOT DRIVER: NCDOT\_pdf\_color\_eng\_50.plt  
 USER: CHARNDEN  
 DATE: 7/31/2024  
 TIME: 8:55:00 AM  
 FILE: p:\pwhdr\users\charnden\us\_east\01\documents\17BP.9.R.83\TrafficControl\CP\17BP.9.R.83.TC\_TMP09.dgn

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 DATE: 7/31/2024  
 SEAL



PHASE 2  
STEP 1

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**