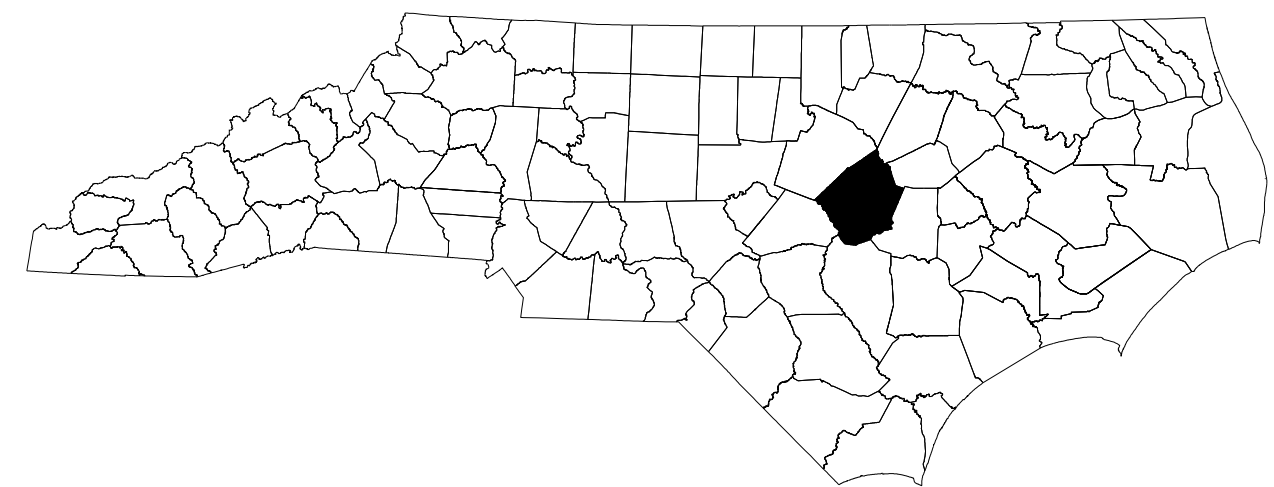


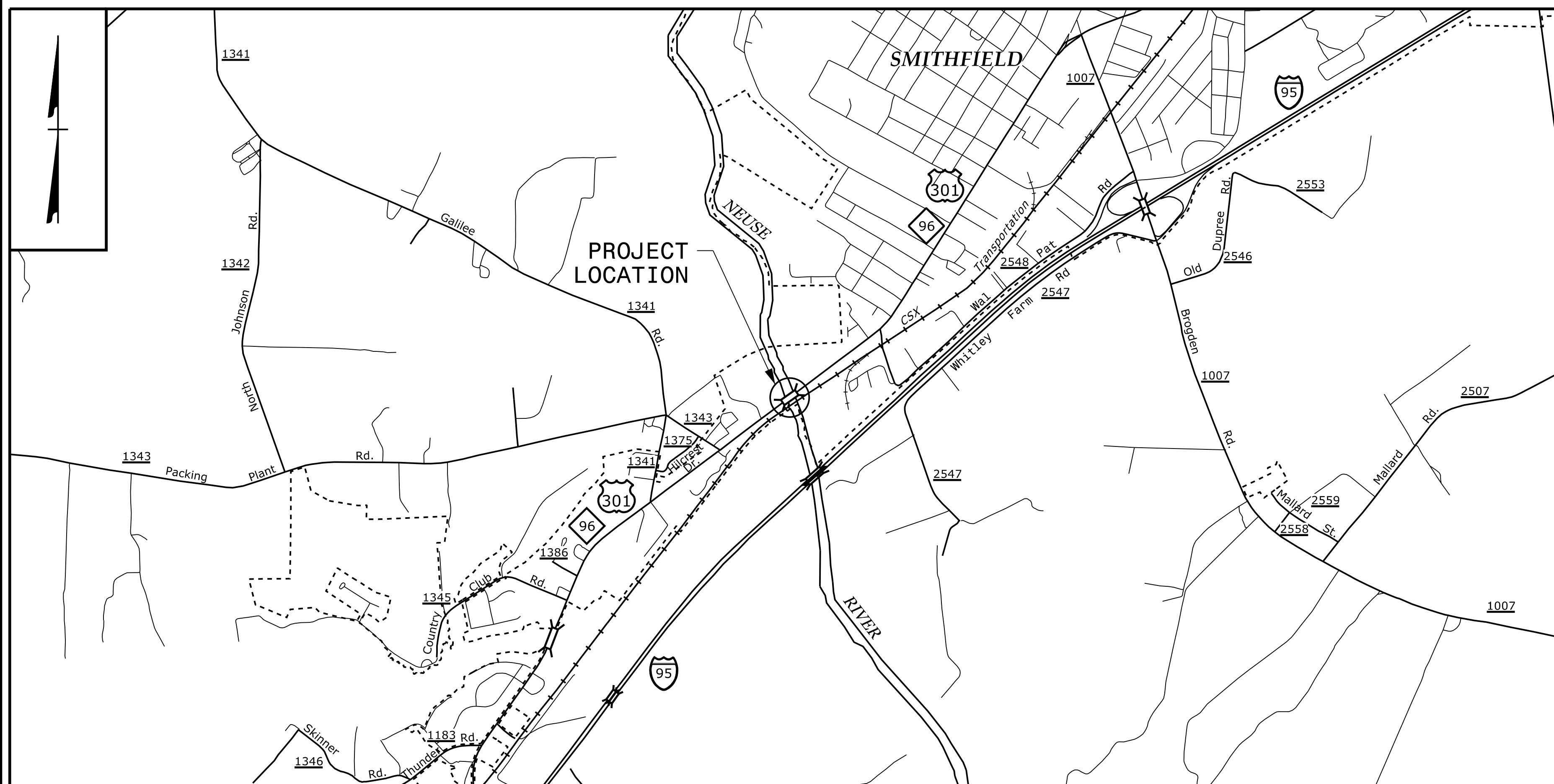
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

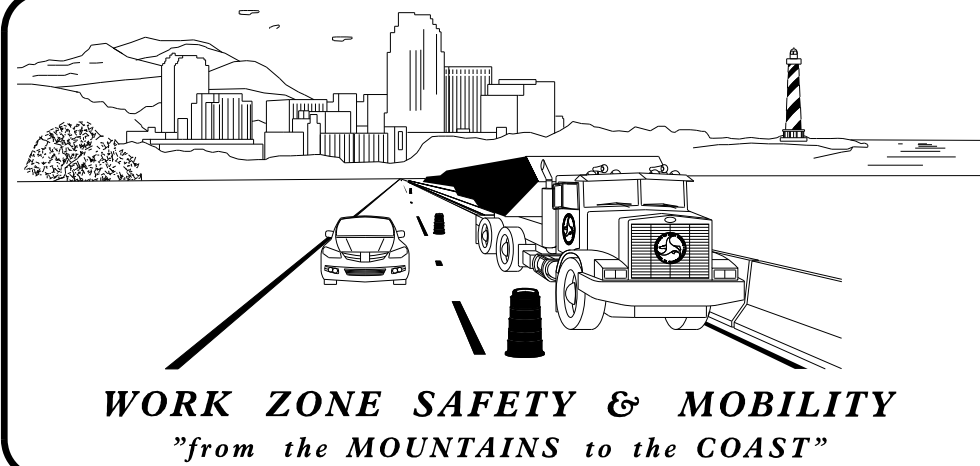
**JOHNSTON COUNTY**



**LOCATION: REPLACE BRIDGE No. 500070 ON US 301 OVER NEUSE RIVER**

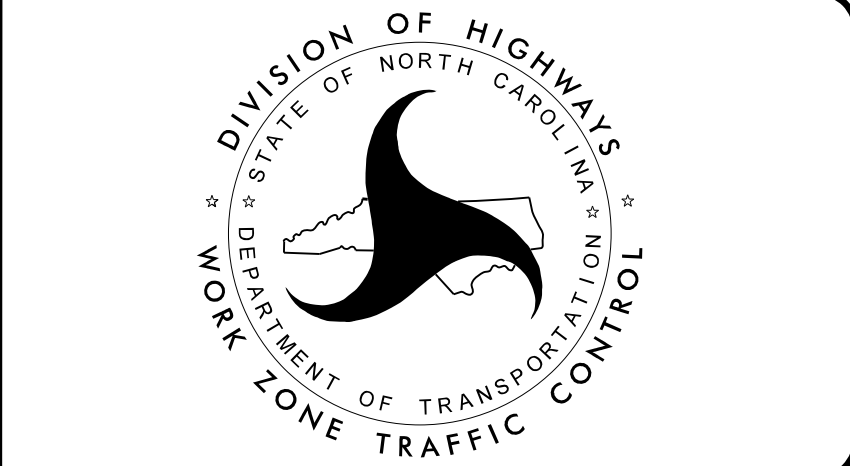


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**PLANS PREPARED BY:**  
  
ERSKINE BROOKS, P.E.  
TRAFFIC CONTROL PROJECT ENGINEER  
  
CHRIS HARMDEN  
TRAFFIC CONTROL DESIGN ENGINEER

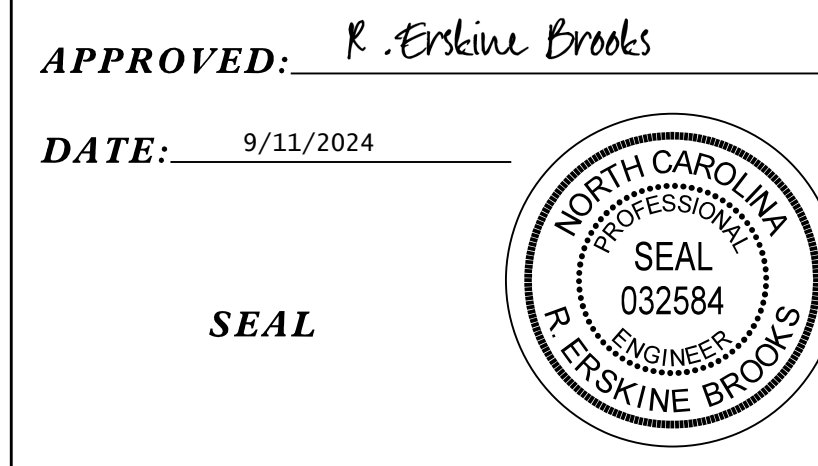
**NCDOT CONTACTS:**  
  
KARMEN MILLER, P.E.  
PROJECT ENGINEER  
  
ALLA LYUDMIRSKAYA  
PROJECT DESIGN ENGINEER



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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APPROVED: R. Erskine Brooks  
DATE: 9/11/2024  
  
SEAL



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 AND TMP-1C	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND LOCAL NOTES)
TMP-2	PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
TMP-2A	TEMPORARY SHORING DATA
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4 THRU TMP-5A	TEMPORARY TRAFFIC CONTROL PHASE 1 DETAILS
TMP-6 AND TMP-7	TEMPORARY TRAFFIC CONTROL PHASE 2 DETAILS
TMP-8 AND TMP-9	TEMPORARY TRAFFIC CONTROL PHASE 3 DETAILS

**BR-0086**

**TIP PROJECT:**




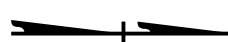


# ROADWAY STANDARD DRAWINGS


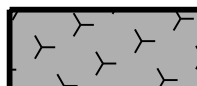



THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

<u>STD. NO.</u>	<u>TITLE</u>
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
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	FLAGGERS
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 MULTI-LANE ROADWAYS
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
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




## 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


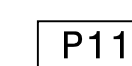
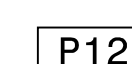

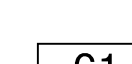
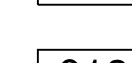
## PAVEMENT MARKERS

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

## PAVEMENT MARKING SYMBOLS


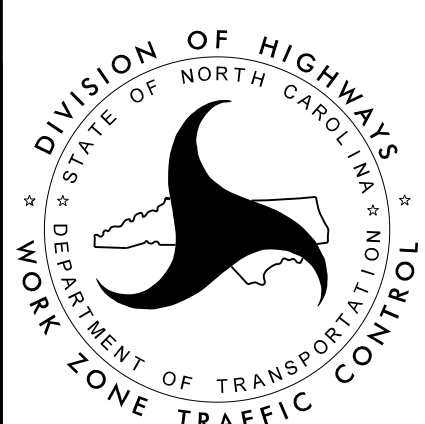
-  PAVEMENT MARKING SYMBOLS

## TEMPORARY PAVEMENT MARKING

-  P1 PAINT 4" WHITE EDGETLINE
-  P11 PAINT 4" YELLOW SINGLE CENTER
-  P12 PAINT 4" 10'-30'/SP. YELLOW SKIP
-  P13 PAINT 4" YELLOW DOUBLE CENTER
-  C1 COLD APPLIED PLASTIC 4" WHITE EDGETLINE
-  C13 COLD APPLIED PLASTIC 4" YELLOW DOUBLE CENTER

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APPROVED: <u>R. Erskine Brooks</u> DATE: 9/11/2024			<b>ROADWAY STANDARD DRAWINGS &amp; LEGEND</b>
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## MANAGEMENT STRATEGIES

THIS PROJECT WILL BE COMPLETED BY MAINTAINING TRAFFIC ON EXISTING US 301 WITH NARROWED TRAVEL LANES, TO CONSTRUCT A PORTION OF THE PROPOSED BRIDGE AND TEMPORARY PAVEMENT. US 301 TRAFFIC WILL THEN BE SHIFTED TO THE NEWLY CONSTRUCTED PORTION OF THE PROPOSED BRIDGE TO ALLOW REMOVAL OF THE EXISTING STRUCTURE AND THE CONSTRUCTION OF THE REMAINING PORTION OF THE PROPOSED BRIDGE AND THE FULL-DEPTH CONSTRUCTION OF -L- (US 301). THE FINAL STAGE WILL SHIFT US 301 TO A TEMPORARY PATTERN ON THE NEW STRUCTURE, ALLOWING FOR COMPLETION OF THE REMAINING BRIDGE AND ROADWAY WORK WHERE PREVIOUSLY INACCESSIBLE DUE TO TEMPORARY TRAFFIC PATTERNS.

MOST OF THE WORK WILL BE COMPLETED AWAY FROM TRAFFIC AND/OR BEHIND BARRIER. FLAGGERS WILL BE USED FOR OPERATIONS THAT REQUIRE LANE CLOSURES, SUCH AS MATERIAL DELIVERY, TIE-INS TO EXISTING ROADS, AND WEDGING UNDER TRAFFIC.

ACCESS WILL BE MAINTAINED TO ALL PARCELS.

## 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:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
-L- (US 301)	MON-FRI: 3:30 PM TO 6:30 PM

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

- | <u>ROAD NAME</u> |
|------------------|
| -L- (US 301)     |
1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
  2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 3:30 PM DECEMBER 31st TO 6:30 PM JANUARY 2nd. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:30 PM THE FOLLOWING TUESDAY.
  3. FOR EASTER, BETWEEN THE HOURS OF 3:30 PM THURSDAY AND 6:30 PM MONDAY.
  4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 3:30 PM FRIDAY TO 6:30 PM TUESDAY.
  5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 3:30 PM THE DAY BEFORE INDEPENDENCE DAY AND 6:30 PM THE DAY AFTER INDEPENDENCE DAY.  
  
IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 3:30 PM THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:30 PM THE TUESDAY AFTER INDEPENDENCE DAY.
  6. FOR LABOR DAY, BETWEEN THE HOURS OF 3:30 PM FRIDAY AND 6:30 PM TUESDAY.
  7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 3:30 PM TUESDAY TO 6:30 PM MONDAY.
  8. FOR CHRISTMAS, BETWEEN THE HOURS OF 3:30 PM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:30 PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
  9. FOR SATURDAYS AND SUNDAYS WHEN THE BRIGHTLEAF FLEA MARKET IS OPEN, BETWEEN THE HOURS OF 6:00 AM TO 7:00 PM.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>	<u>DURATION AND OPERATION</u>
-L- (US 301)	MONDAY - SUNDAY 6:00 AM TO 7:00 PM	30 MINUTES FOR GIRDER/MATERIAL DELIVERY

D) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

### 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.
- 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.
- N) DO NOT INSTALL MORE THAN ONE OF LANE CLOSURE IN ANY ONE DIRECTION ON -L- (US 301).

REVISIONS

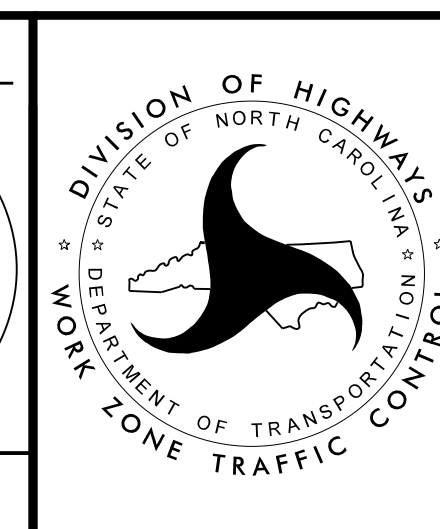
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APPROVED: R. Erskine Brooks  
DATE: 9/11/2024

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TRANSPORTATION  
OPERATIONS PLAN  
(SHEET 1 OF 2)

# GENERAL NOTES (CONT.)

## 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.

T) 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) 350 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

## 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.

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) 350 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

## TRAFFIC BARRIER

AA) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE / RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

BB) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS: (SEE ALSO 1101.05)

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

## 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.

EE) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

## PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
-L- (US 301)	PAINT (ON AHPALT AND EXISTING BRIDGE) COLD APPLIED PLASTIC TYPE IV (CONCRETE)	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


MM) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

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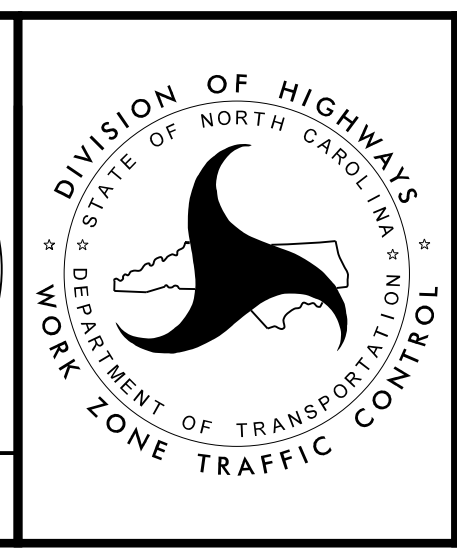
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DATE: 9/11/2024

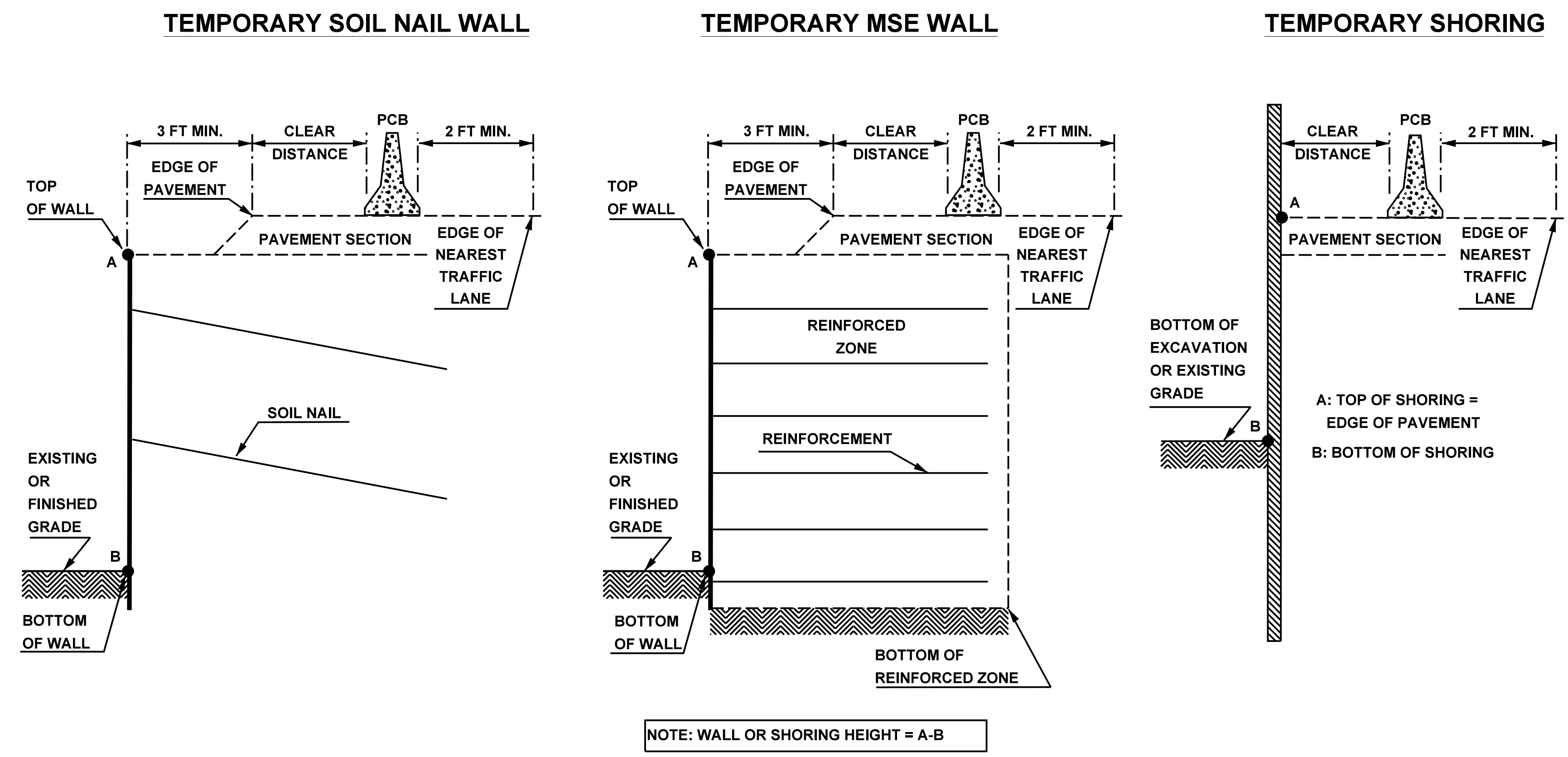
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TRANSPORTATION  
OPERATIONS PLAN  
(SHEET 2 OF 2)



**FIGURE A**

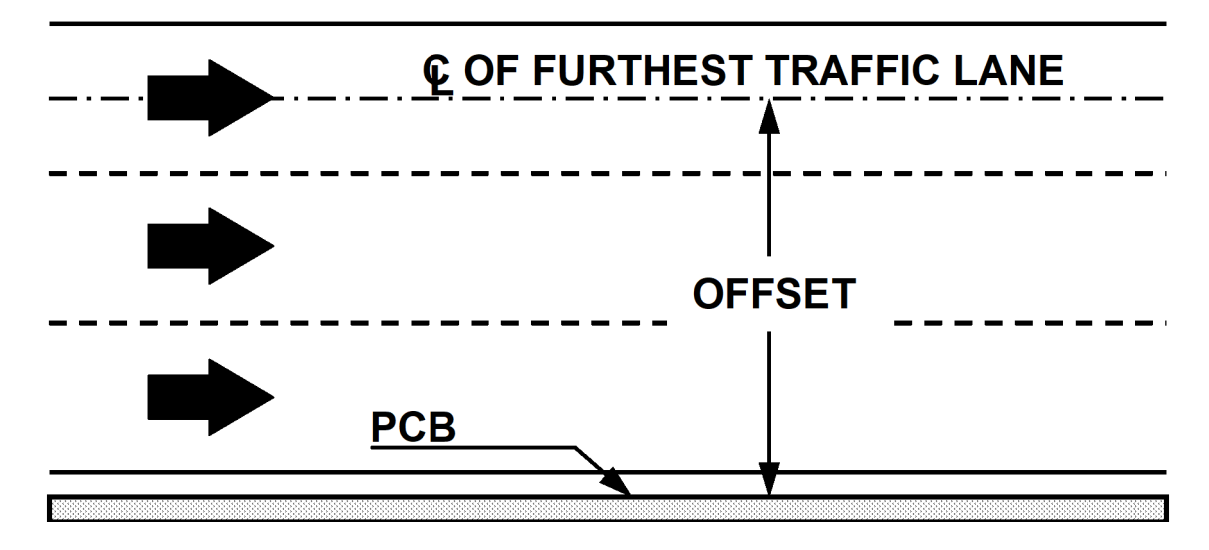
**NOTES**

- 1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.
- 2- REFER TO THE "TEMPORARY SHORING" STANDARD PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).
- 3- PCB IS REQUIRED IF TEMPORARY SHORING/WALL IS LOCATED WITHIN THE CLEAR ZONE IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT FOR APPLICABLE PAVEMENT DESIGN).
- 4- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED OR ANCHORED PCB FROM THE TABLE SHOWN IN FIGURE B. CLEAR DISTANCE IS DEFINED AS SHOWN IN FIGURE A AND OFFSET IS DEFINED AS SHOWN IN FIGURE B.
- 5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET PCB NEXT TO AND UP AGAINST THE TRAFFIC SIDE OF THE TEMPORARY SHORING/WALLS EXCEPT FOR BARRIER ABOVE TEMPORARY WALLS. PCB WITH THE MINIMUM REQUIRED CLEAR DISTANCE IS REQUIRED ABOVE TEMPORARY WALLS.
- 6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.
- 7- SET PCB WITH A MINIMUM HORIZONTAL DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A UNLESS OTHERWISE SHOWN IN THE PLANS OR APPROVED BY THE ENGINEER.
- 8- FOR PCB ABOVE AND BEHIND TEMPORARY WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THIS MINIMUM REQUIRED DISTANCE IS NOT AVAILABLE, CONTACT THE ENGINEER.
- 9- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS.

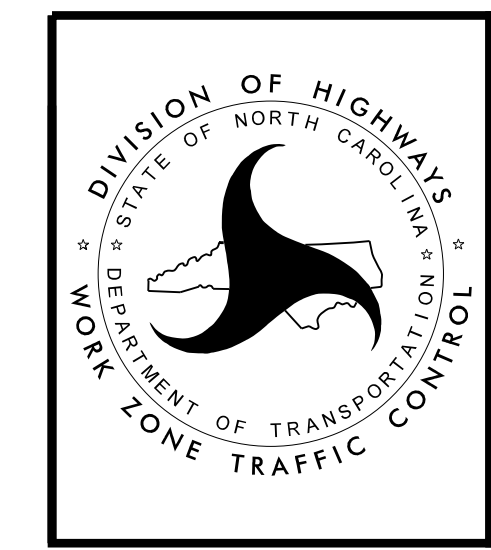
**MINIMUM REQUIRED CLEAR DISTANCE, inches**

Barrier Type	Pavement Type	Offset * ft	Design Speed, mph					
			<30	31-40	41-50	51-60	61-70	71-80
Unanchored PCB	Asphalt	<8	24	26	29	32	36	40
		8-14	26	28	31	35	38	42
		14-20	27	29	34	36	39	43
		20-26	28	31	35	38	40	44
		26-32	29	32	36	39	42	45
		32-38	30	34	38	41	43	46
		38-44	31	34	41	43	45	48
		44-50	31	35	41	43	46	49
		50-56	32	36	42	44	47	50
	>56	32	36	42	45	47	51	
	Concrete	<8	17	18	21	22	25	26
		8-14	19	20	23	25	26	29
		14-20	22	22	24	26	28	31
		20-26	23	24	26	27	30	34
		26-32	24	25	27	28	32	35
		32-38	24	26	27	30	33	36
		38-44	25	26	28	30	34	37
		44-50	26	26	28	32	35	37
50-56		26	26	28	32	35	38	
>56	26	27	29	32	36	38		
Anchored PCB	Asphalt	All Offsets	24 for All Design Speeds					
Anchored PCB	Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds					

\* See Figure Below



**FIGURE B**



PORTABLE CONCRETE BARRIER  
AT  
TEMPORARY SHORING LOCATIONS

PLOT DRIVER: NCDOT\_pdf\_color\_eng\_50.pit  
 USER: ERBROOKS  
 DATE: 9/10/2024  
 PENTABLE: NCDOT\_tcp.tbl  
 TIME: 11:44:47 AM  
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REVISIONS

# TEMPORARY SHORING DATA

PROJ. REFERENCE NO. BR - 0086	SHEET NO. TMP - 2A
----------------------------------	-----------------------

**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

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- 17+29±, 11.13' LT, TO STATION -L- 17+60±, 11.13' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

ABOVE ELEVATION 109 FT:  
UNIT WEIGHT ( $\gamma$ ) = 120 PCF  
FRICTION ANGLE ( $\phi$ ) = 30 DEGREES  
COHESION (c) = 0 PSF

BETWEEN ELEVATION 109 FT & 88 FT:  
UNIT WEIGHT ( $\gamma$ ) = 120 PCF  
FRICTION ANGLE ( $\phi$ ) = 0 DEGREES  
COHESION (c) = 1,000 PSF

BELOW ELEVATION 88 FT:  
UNIT WEIGHT ( $\gamma$ ) = 120 PCF  
FRICTION ANGLE ( $\phi$ ) = 35 DEGREES  
COHESION (c) = 0 PSF  
GROUNDWATER ELEVATION = 110.8'±

DO NOT USE CANTILEVER, BRACED OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION -L- 17+29±, 11.13' LT, TO STATION -L- 17+60±, 11.13' LT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 17+29±, 11.13' LT, TO STATION -L- 17+60±, 11.13' LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR BRIDGE 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.

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- 17+29±, 8.13 FT LT, TO STATION -L- 17+69±, 8.13 FT LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

ABOVE ELEVATION 109 FT:  
UNIT WEIGHT ( $\gamma$ ) = 120 PCF  
FRICTION ANGLE ( $\phi$ ) = 30 DEGREES  
COHESION (c) = 0 PSF

BETWEEN ELEVATION 109 FT & 88 FT:  
UNIT WEIGHT ( $\gamma$ ) = 120 PCF  
FRICTION ANGLE ( $\phi$ ) = 0 DEGREES  
COHESION (c) = 1,000 PSF

BELOW ELEVATION 88 FT:  
UNIT WEIGHT ( $\gamma$ ) = 120 PCF  
FRICTION ANGLE ( $\phi$ ) = 35 DEGREES  
COHESION (c) = 0 PSF  
GROUNDWATER ELEVATION = 110.8'±

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION -L- 17+29±, 8.13 FT LT, TO STATION -L- 17+69±, 8.13 FT LT MAY NOT PENETRATE BELOW ELEVATION 81.5 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BUOLDERS OR WEATHERED OR HARD ROCK.

DO NOT USE TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 17+29±, 8.13 FT LT, TO STATION -L- 17+69±, 8.13 FT LT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 17+29±, 8.13 FT LT, TO STATION -L- 17+69±, 8.13 FT LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

SHORING LOCATION NO. 3

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- 20+99±, 11.13' LT, TO STATION -L- 21+28±, 11.13' LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

ABOVE ELEVATION 98 FT:  
UNIT WEIGHT ( $\gamma$ ) = 120 PCF  
FRICTION ANGLE ( $\phi$ ) = 30 DEGREES  
COHESION (c) = 0 PSF

BELOW ELEVATION 88 FT:  
UNIT WEIGHT ( $\gamma$ ) = 120 PCF  
FRICTION ANGLE ( $\phi$ ) = 35 DEGREES  
COHESION (c) = 0 PSF  
GROUNDWATER ELEVATION = 116.6'±

DO NOT USE CANTILEVER, BRACED OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION -L- 20+99±, 11.13' LT, TO STATION -L- 21+28±, 11.13' LT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 20+99±, 11.13' LT, TO STATION -L- 21+28±, 11.13' LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR BRIDGE 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.

SHORING LOCATION NO. 4

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- 20+82±, 8.13 FT LT, TO STATION -L- 21+28±, 8.13 FT LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

ABOVE ELEVATION 98 FT:  
UNIT WEIGHT ( $\gamma$ ) = 120 PCF  
FRICTION ANGLE ( $\phi$ ) = 30 DEGREES  
COHESION (c) = 0 PSF

BELOW ELEVATION 88 FT:  
UNIT WEIGHT ( $\gamma$ ) = 120 PCF  
FRICTION ANGLE ( $\phi$ ) = 35 DEGREES  
COHESION (c) = 0 PSF  
GROUNDWATER ELEVATION = 116.6'±

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION -L- 20+82±, 8.13 FT LT, TO STATION -L- 21+28±, 8.13 FT LT MAY NOT PENETRATE BELOW ELEVATION 94 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BUOLDERS OR WEATHERED OR HARD ROCK.


DO NOT USE TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 20+82±, 8.13 FT LT, TO STATION -L- 21+28±, 8.13 FT LT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 20+82±, 8.13 FT LT, TO STATION -L- 21+28±, 8.13 FT LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEERING UNIT. THE DOCUMENT WAS SUBMITTED TO THE WZTC SECTION ON 01/31/2024 AND SEALED BY A PROFESSIONAL ENGINEER, THEIN TUN ZAN, LICENSE # 030943.

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TIME: 11:45:35 AM

REVISIONS



WORKING WITH THE STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
ZONE TRAFFIC CONTROL

## TEMPORARY SHORING DATA

# PHASING

PROJ. REFERENCE NO.	SHEET NO.
BR-0086	TMP-3
<span style="font-size: 8px; vertical-align: middle;">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</span>	

## PHASE 1 (SEE TMP-4 THRU TMP-5A)

### STEP 1

USING LANES CLOSURES AND FLAGGERS, COMPLETE THE FOLLOWING:

- A. WORKING IN A CONTINUOUS MANNER, PLACE TEMPORARY MARKINGS AND DEVICES, THEN SHIFT TRAFFIC TO THE TEMPORARY PATTERN.
- B. PLACE PCB FROM -L- STA. 12+00± TO STA. 26+50±.

### STEP 2

AWAY FROM TRAFFIC AND USING FLAGGERS AND LANE CLOSURES, AS NECESSARY, BEGIN CONSTRUCTION OF -L- FROM STA. 12+50± TO STA. 21+50± (LT).  
 - WORK INCLUDES -DRWY-\*, REMOVAL OF THE SB RAIL ON THE EXISTING BRIDGE, THE FIRST STAGE OF THE NEW BRIDGE OVER NEUSE RIVER (SEE SECTION C-C, SHEET TMP-5), TEMPORARY PAVEMENT, AND WEDGING OVER EXISTING US 301 AS NECESSARY. WHERE REQUIRED FOR CONSTRUCTION OF PERMANENT AND/OR TEMPORARY DRAINAGE, COVER DRAINAGE STRUCTURES WITH TEMPORARY STEEL PLATES TO ACCOMMODATE SUBSEQUENT TRAFFIC PATTERNS AND PHASES.  
 \* MAINTAIN ACCESS TO EXISTING PUMP STATION SITE AT ALL TIMES.

THE CONTRACTOR MAY CONDUCT WORK IN PHASE 1, STEP 3A CONCURRENTLY WITH PHASE 1, STEP 2 AND PHASE 1, STEP 3B.

THE CONTRACTOR SHALL COMPLETE THE WORK IN PHASE 1, STEP 3A PRIOR TO DECEMBER 1, 2025. (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES)

### STEP 3A

USING LANE CLOSURES AS NECESSARY, CONSTRUCT SEWER FORCE MAIN FROM STA. 0+00 TO STA. 3+00 (SEE UTILITY CONSTRUCTION PLANS - SHEET UC-4B), AS SHOWN ON SHEET TMP-4, INCLUDING GRADING TO MINIMUM COVER OVER THE SEWER PER UTILITY REQUIREMENTS.

THE CONTRACTOR MAY CONDUCT WORK IN PHASE 1, STEP 3B CONCURRENTLY WITH PHASE 1, STEP 2 AND PHASE 1, STEP 3A.

THE CONTRACTOR SHALL COMPLETE THE WORK IN PHASE 1, STEP 3B IN THIRTY (30) CONSECUTIVE CALENDAR DAYS. (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES)

### STEP 3B

USING LANE CLOSURES AS NECESSARY, COMPLETE THE FOLLOWING:

- A. CLOSE DRIVEWAY AT -L- STA. 25+25± (LT)
- B. CONSTRUCT -L- FROM STA. 21+50± TO STA. 26+00± (LT)
- C. RESET PCB AND CRASH CUSHIONS AS SHOWN ON SHEET TMP-5A.
- D. PLACE TEMPORARY MARKINGS AS SHOWN ON SHEET TMP-5A, THEN SHIFT TRAFFIC TO THE TEMPORARY PATTERN AND REOPEN THE DRIVEWAY AT -L- STA. 25+25±

### STEP 4

COMPLETE ALL REMAINING CONSTRUCTION BEGUN IN PHASE 1.

### STEP 5

AWAY FROM TRAFFIC, INSTALL ANCHORED PCB ALONG -L- FROM STA. 17+12± TO STA. 21+54± AS SHOWN ON TMP-6 AND TMP-7. THEN, AWAY FROM TRAFFIC AND USING FLAGGERS AND LANE CLOSURES, AS NECESSARY, PLACE TEMPORARY MARKINGS ON -L- AS SHOWN ON TMP-6 AND TMP-7, AND SHIFT TRAFFIC TO THE PHASE 2 PATTERN.

## PHASE 2 (SEE TMP-6 AND TMP-7)

### STEP 1

USING FLAGGERS AND LANE CLOSURES, AS NECESSARY, PLACE REMAINING PHASE 2 PCB, INSTALL CRASH CUSHIONS, AND PLACE ALL OTHER DEVICES.

### STEP 2

AWAY FROM TRAFFIC AND USING FLAGGERS AND LANE CLOSURES, AS NECESSARY, CONSTRUCT -L- FROM STA. 12+50± TO STA. 26+00± (RT), INCLUDING THE SECOND STAGE OF THE NEW BRIDGE OVER NEUSE RIVER (SEE SECTION C-C, SHEET TMP-7) AND WEDGING TO COMPLETE TIE-INS TO EXISTING.

### STEP 3

AWAY FROM TRAFFIC, AND USING FLAGGERS AND LANE CLOSURES, AS NECESSARY, COMPLETE THE FOLLOWING:

- A. REMOVE PHASE 2 PCB, AS NECESSARY, AND RESET CRASH CUSHIONS TO ALLOW FOR THE SHIFT TO THE PHASE 3 PATTERN.
- B. PLACE TEMPORARY MARKINGS ON -L- AS SHOWN ON TMP-8 AND TMP-9, AND SHIFT TRAFFIC TO THE PHASE 3 PATTERN.

## PHASE 3 (SEE TMP-8 AND TMP-9)

### STEP 1

USING FLAGGERS AND LANE CLOSURES, AS NECESSARY, PLACE PCB FROM -L- STA. 14+09± TO STA. 24+49±, INSTALL CRASH CUSHIONS, AND PLACE ALL OTHER DEVICES.

### STEP 2

AWAY FROM TRAFFIC, AND USING FLAGGERS AND LANE CLOSURES, AS NECESSARY, CONSTRUCT THE FOLLOWING:

- CONCRETE PARAPET
- REMOVAL OF ALL TEMPORARY PAVEMENT
- ALL REMAINING PROPOSED C&G, GUARDRAIL, AND SHOULDER WORK ALONG -L- (LT)

### STEP 3

WORKING IN A CONTINUOUS MANNER USING FLAGGERS AND LANE CLOSURES, REMOVE PCB AND PLACE TEMPORARY MARKINGS IN THE FINAL PATTERN ON -L-, THEN OPEN -L- AND SHIFT TRAFFIC TO THE FINAL PATTERN.

## PHASE 4

### STEP 1

USING FLAGGERS AND LANE CLOSURES, PLACE THE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS AND MARKERS, THEN OPEN ALL LANES TO THE FINAL PATTERN.

### STEP 2

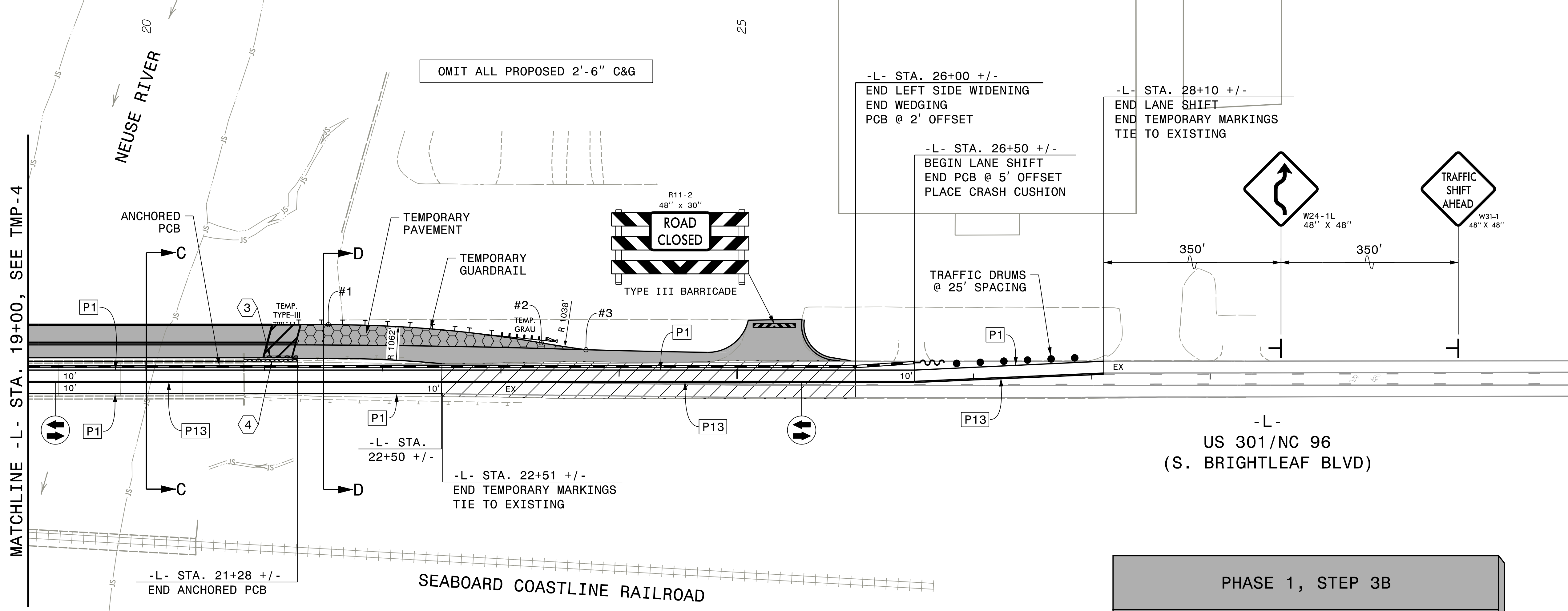
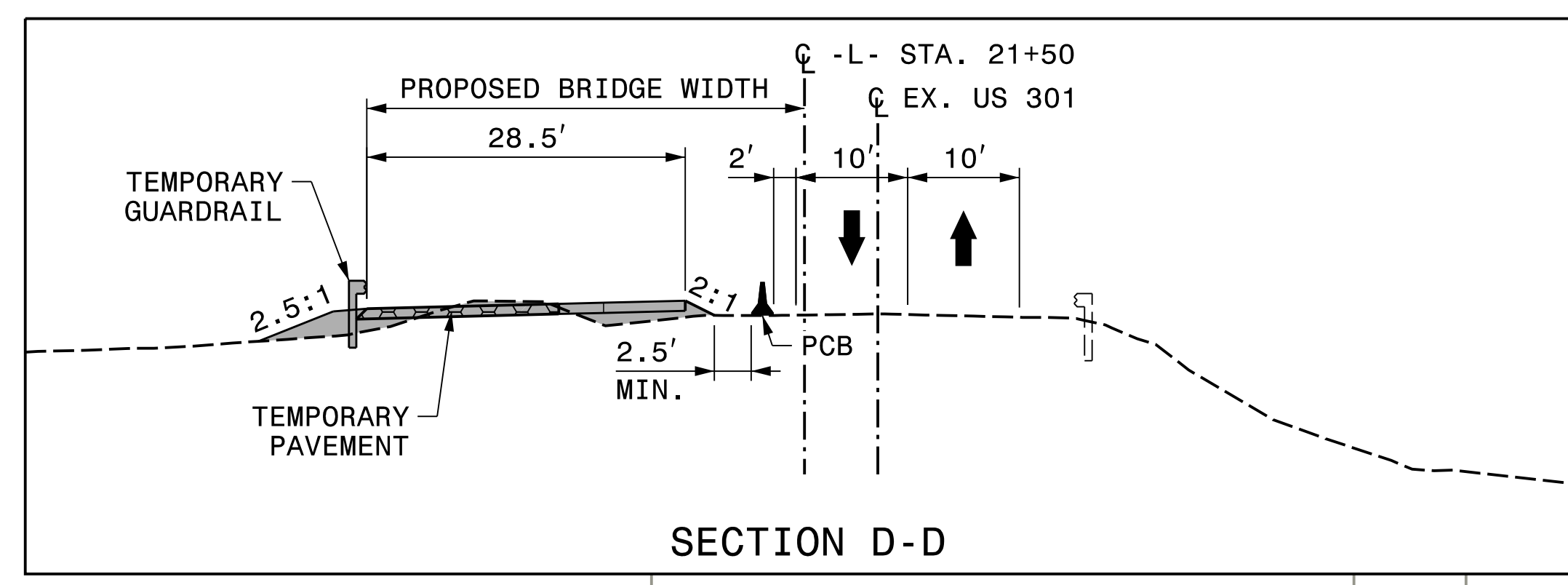
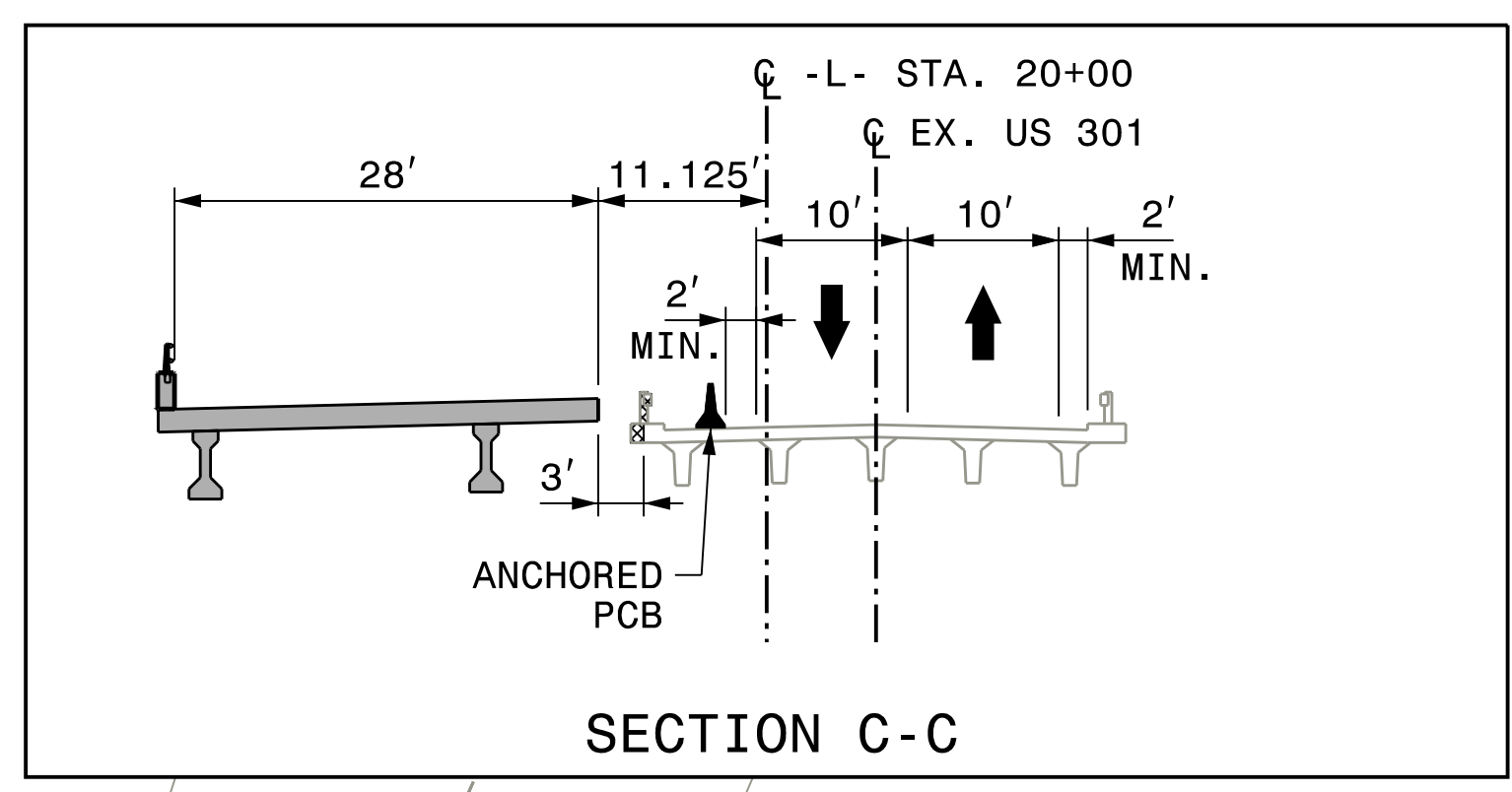
REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES.

REVISIONS  
 PLOT DRIVER: NCDOT\_pdf\_color\_eng\_50.plt  
 USER: ERBROOKS  
 PENTABLE: NCDOT\_tcp.tbl  
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APPROVED: <i>R. Erskine Brooks</i> DATE: 11/2/2024 SEAL			<h2 style="margin: 0;">TEMPORARY TRAFFIC CONTROL PHASING</h2>
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>			







**PHASE 1, STEP 3B**

UPON CLOSING THE DRIVEWAY AT -L- STA. 25+25, COMPLETE CONSTRUCTION FROM -L- STA. 21+50 TO STA. 26+00, THEN IMPLEMENT THE TEMPORARY TRAFFIC PATTERN ON -L-, AND REOPEN THE DRIVEWAY, AS SHOWN ON TMP-5A WITHIN 30 DAYS.

- ③ TEMPORARY SHORING = 175 SF  
FROM -L- STA. 20+98.98, 11.13' LT  
TO -L- STA. 21+27.97, 11.13' LT
- ④ TEMPORARY SHORING = 380 SF  
FROM -L- STA. 20+82.49, 8.13' LT  
TO -L- STA. 21+27.97, 8.13' LT

#1	-L- STA. 21+53.85, 39.21' LT
#2	-L- STA. 23+33.44, 26.70' LT
#3	-L- STA. 23+71.40, 22.00' LT

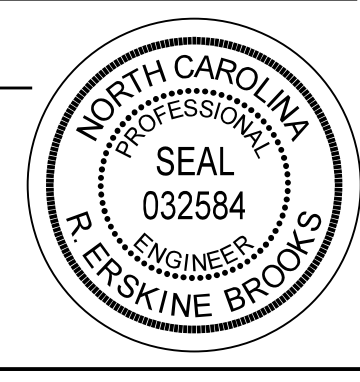
REVISIONS

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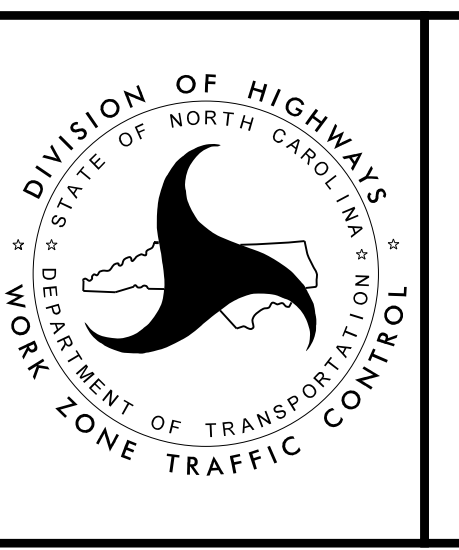
APPROVED: *R. Erskine Brooks*

DATE: 10/15/2024

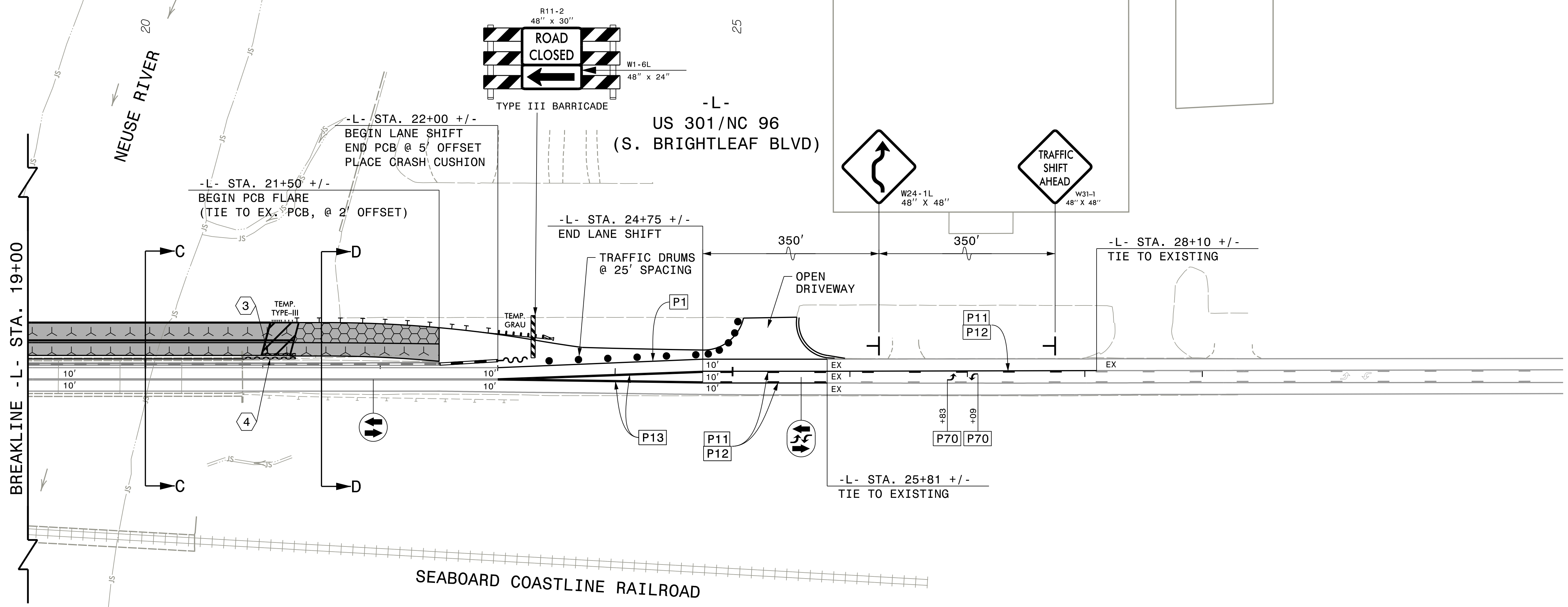
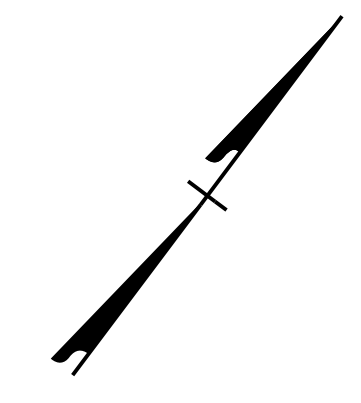
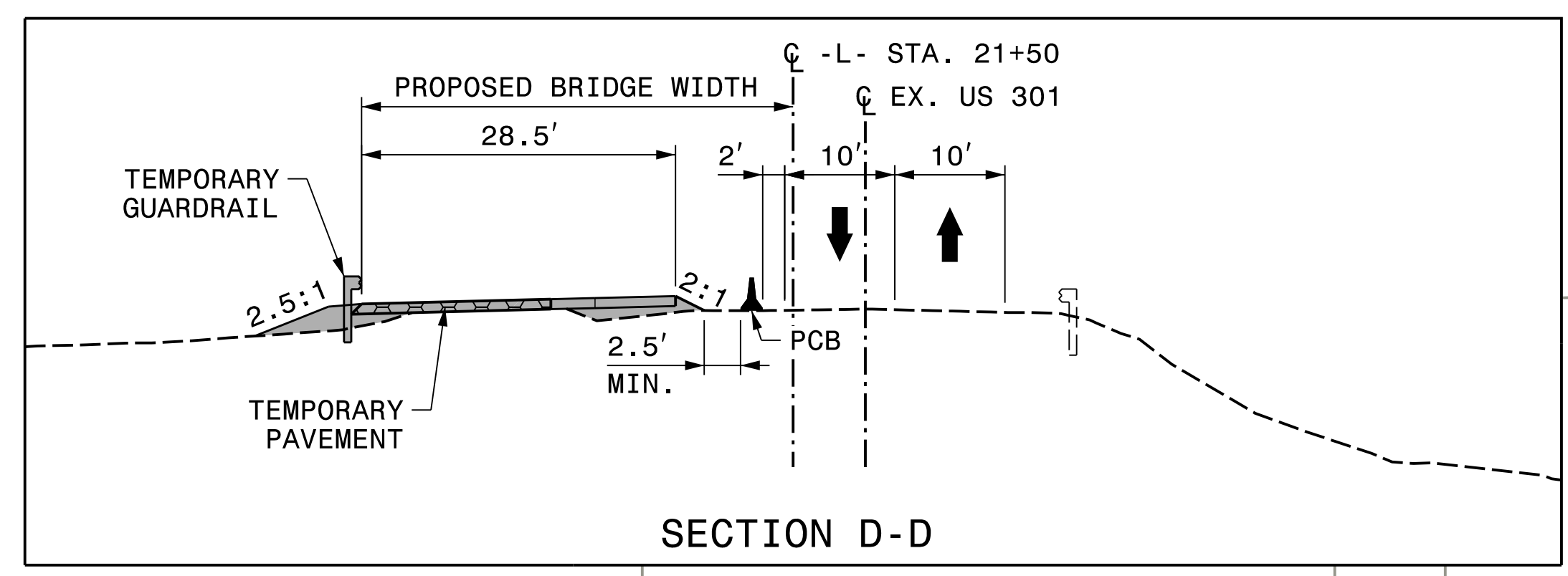
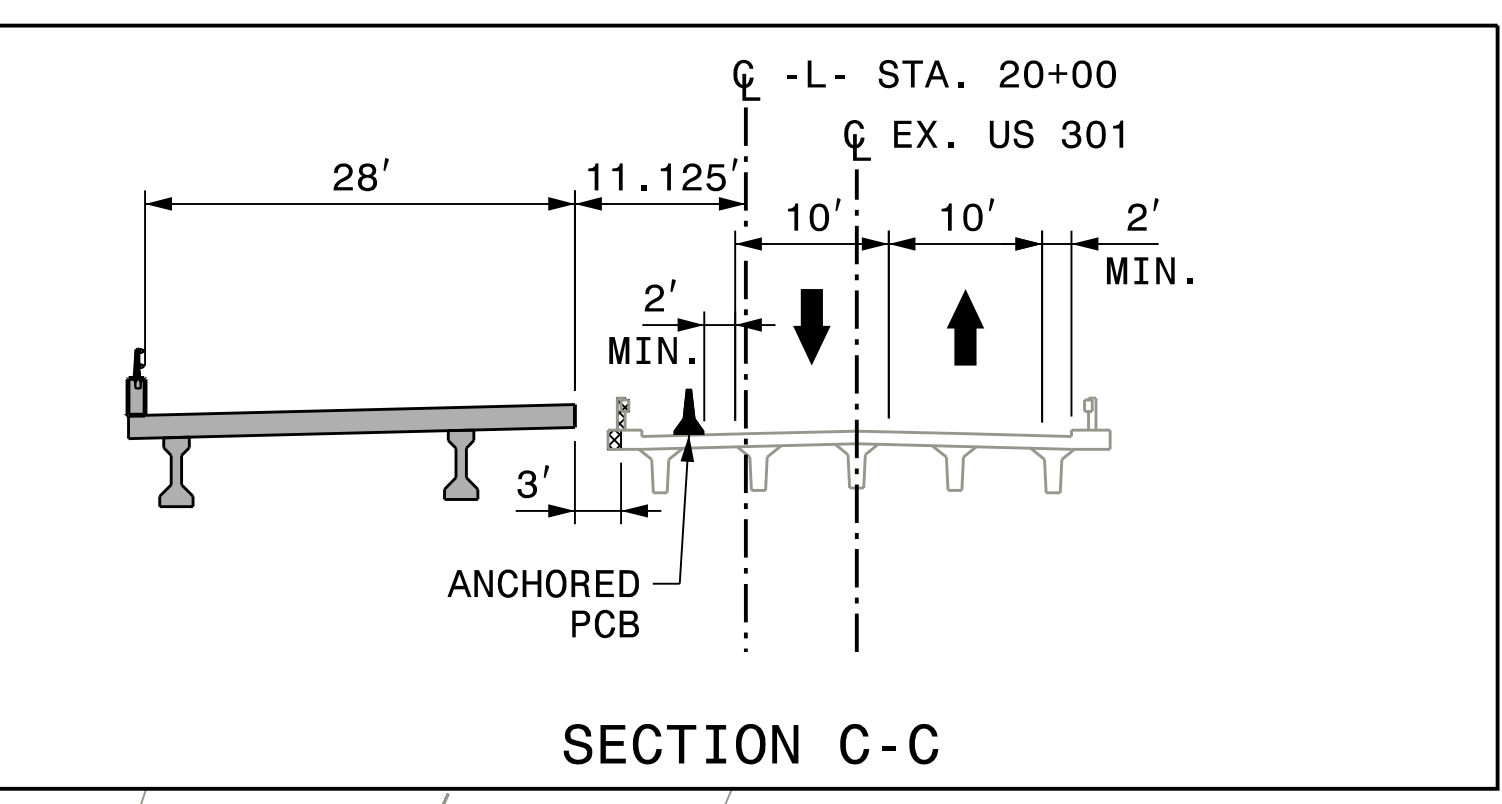
SEAL



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



**PHASE 1  
STEPS 1, 2 & 3**

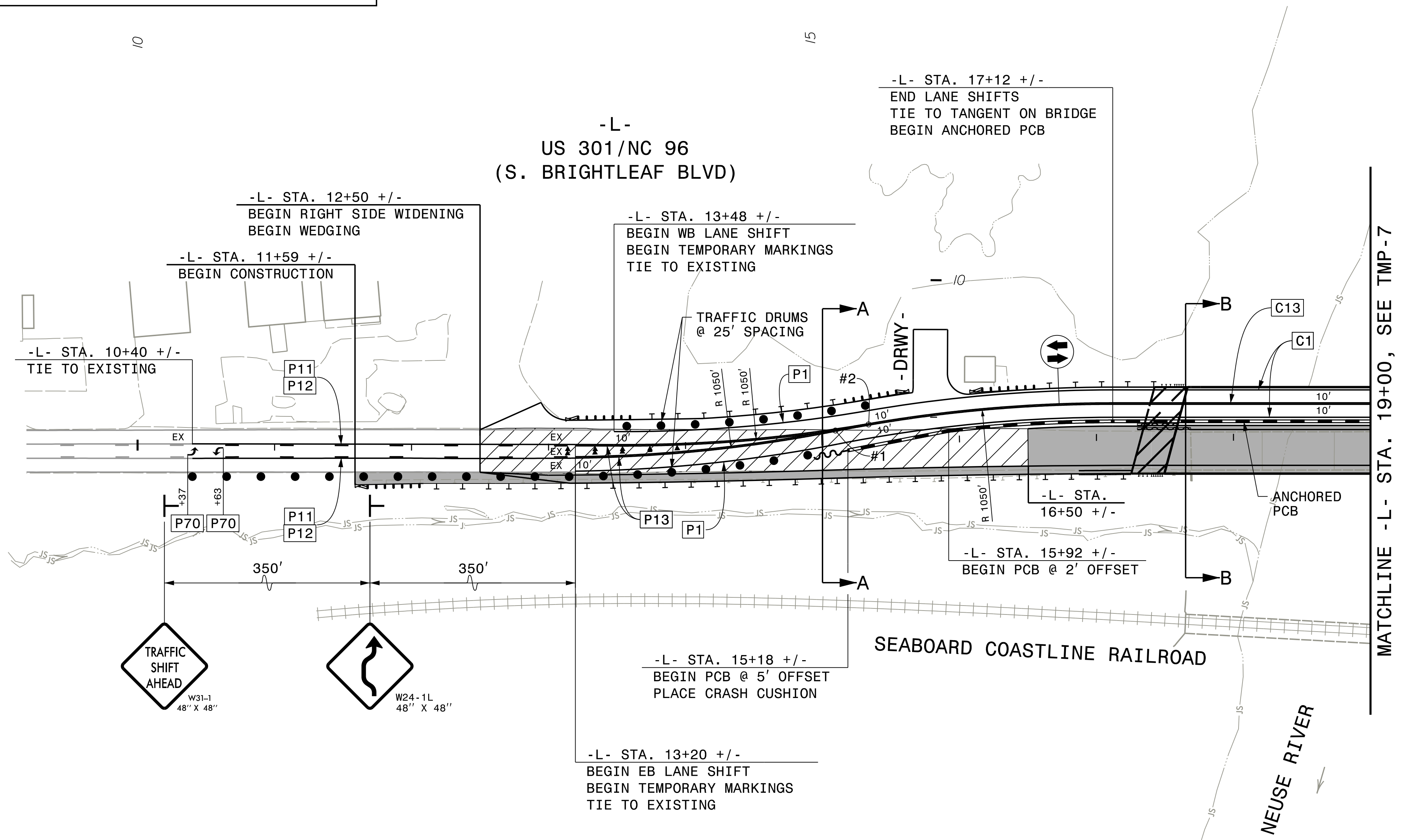
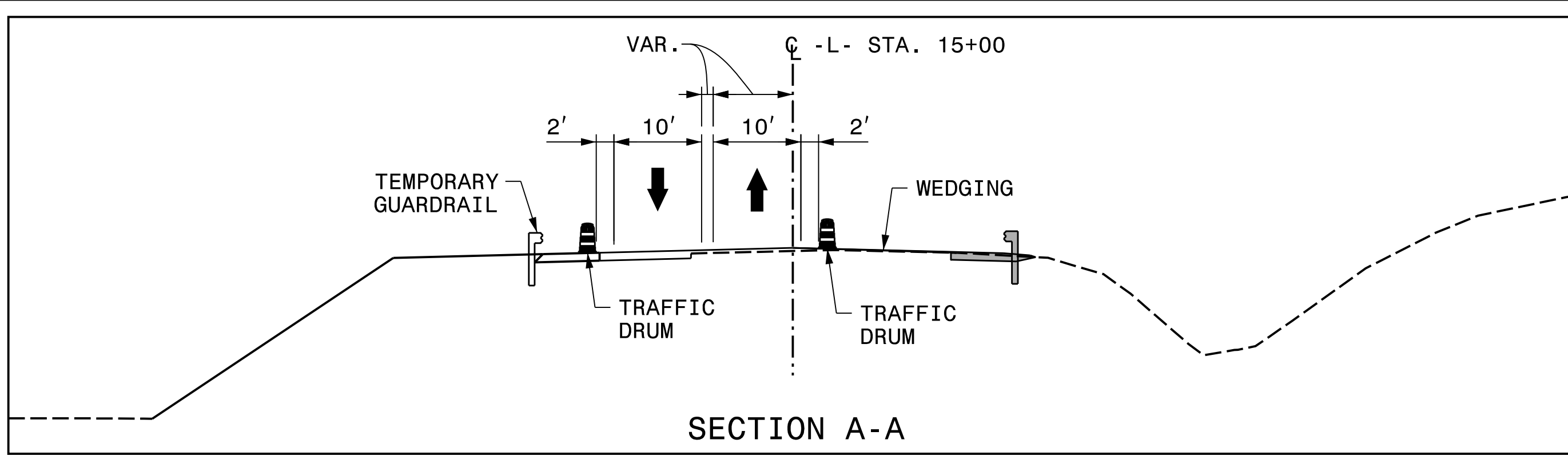


REVISIONS

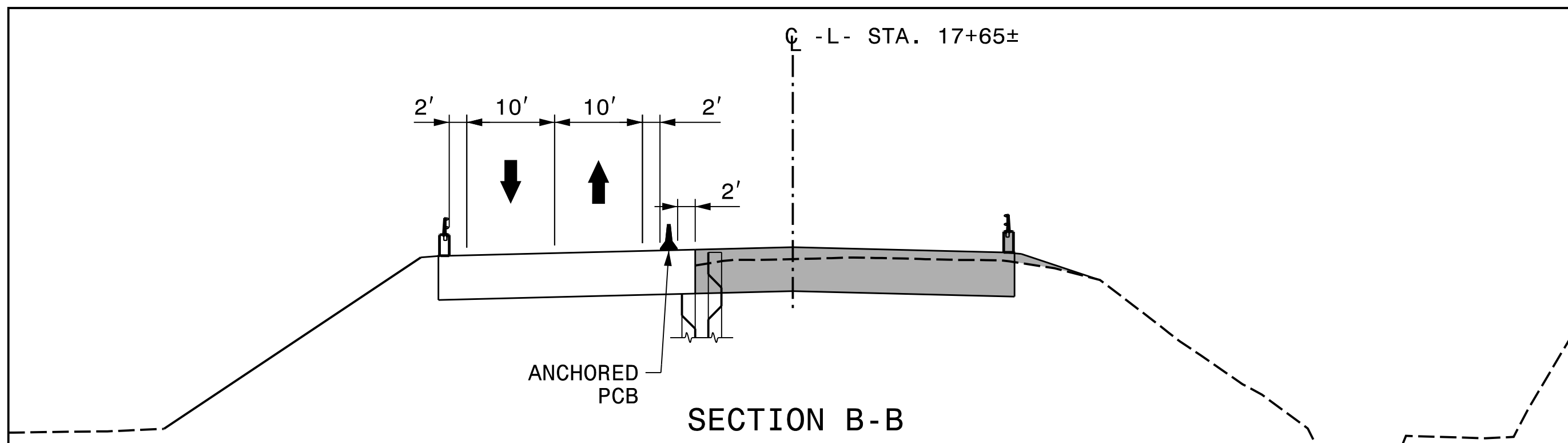
- ③ TEMPORARY SHORING = 175 SF  
FROM -L- STA. 20+98.98, 11.13' LT  
TO -L- STA. 21+27.97, 11.13' LT
- ④ TEMPORARY SHORING = 380 SF  
FROM -L- STA. 20+82.49, 8.13' LT  
TO -L- STA. 21+27.97, 8.13' LT

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APPROVED: <i>R. Erskine Brooks</i>		
DATE: 9/11/2024		
SEAL	<p><b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b></p>	
<p><b>PHASE 1 STEPS 4 &amp; 5</b></p>		




NOTE: USE COLD APPLIED PLASTIC MARKINGS ON CONCRETE STRUCTURE.

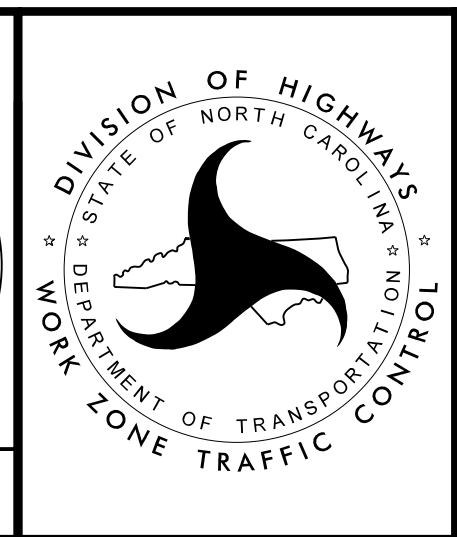


#1	-L- STA. 15+09.71, 10.77' LT
#2	-L- STA. 15+34.00, 14.56' LT

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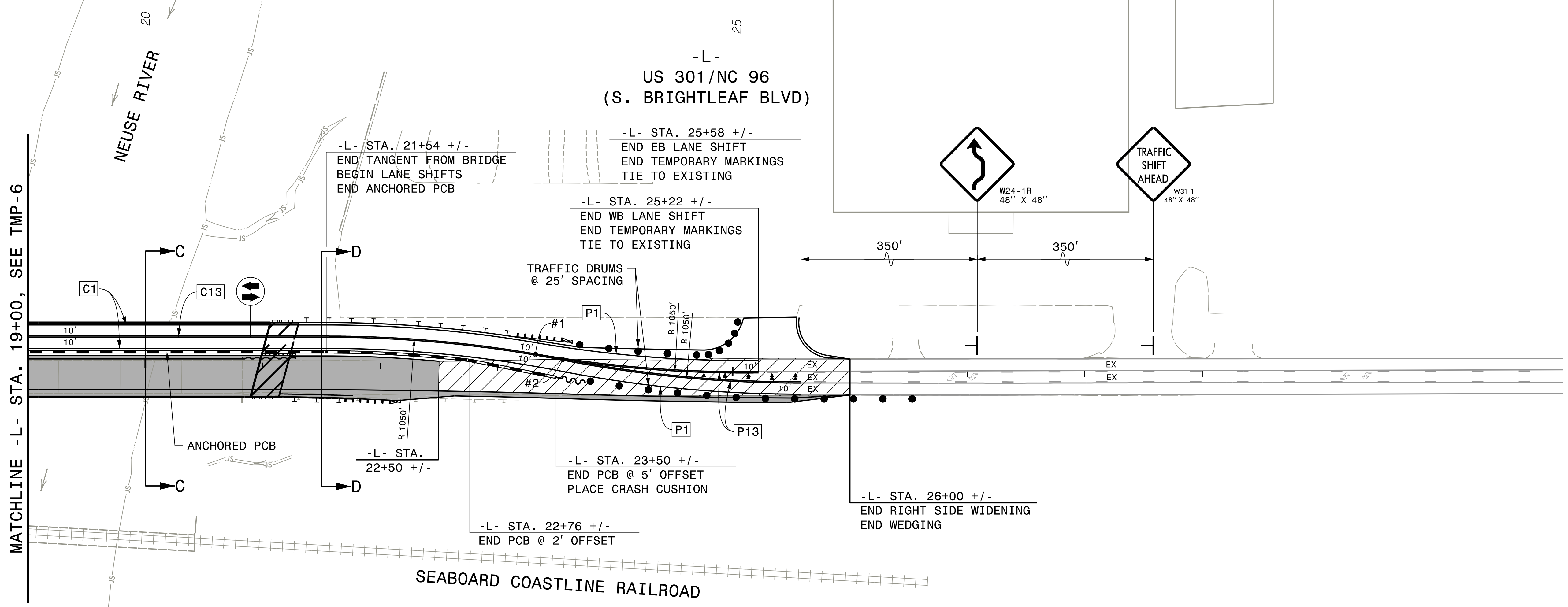
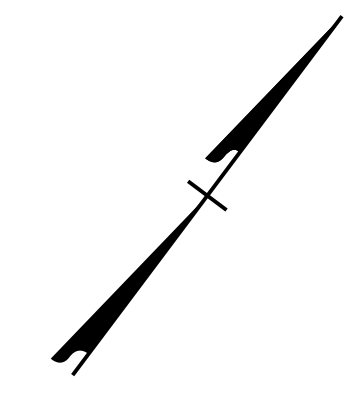
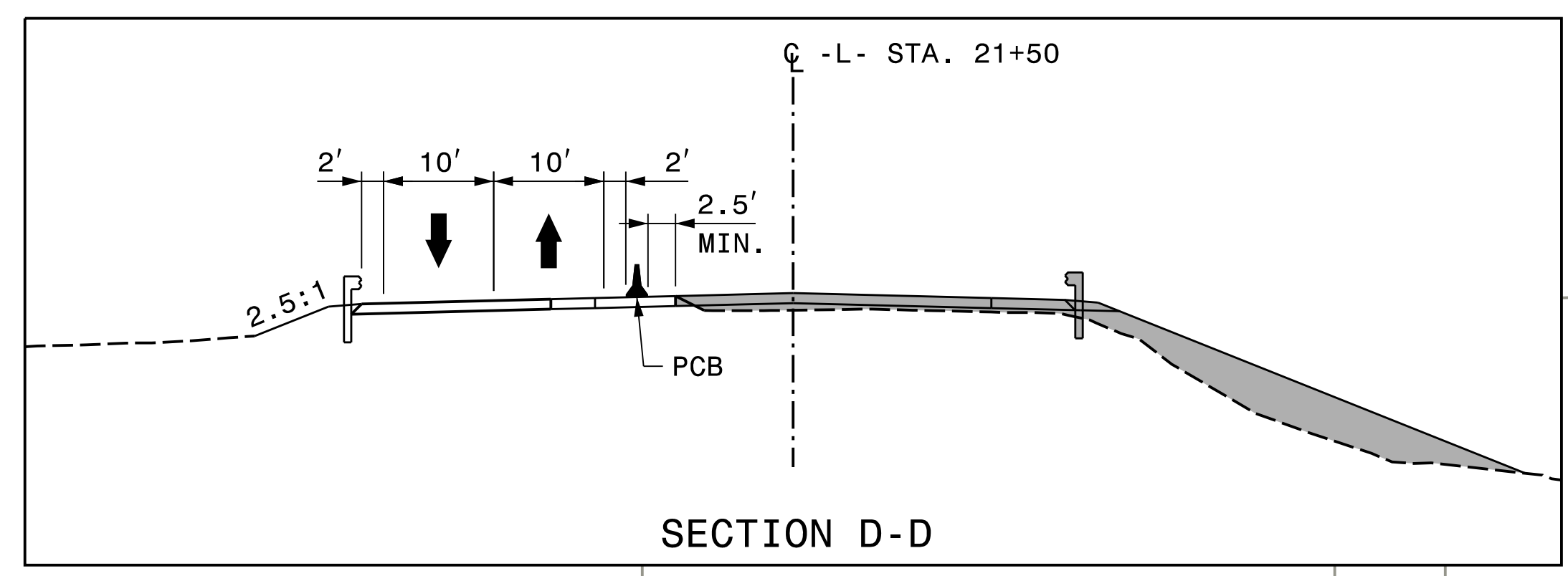
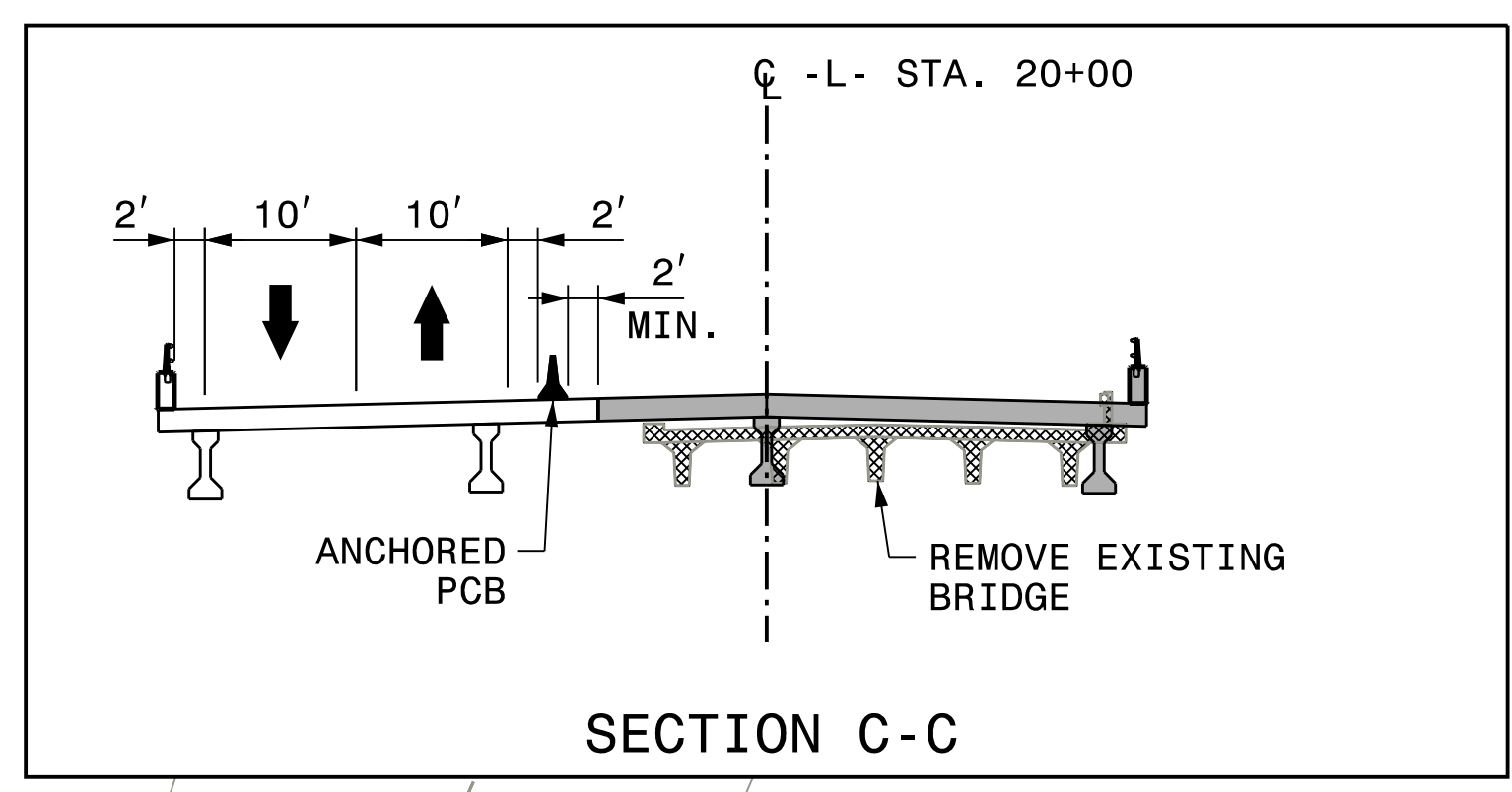
REVISIONS

APPROVED: *R. Erskine Brooks*  
 DATE: 10/15/2024  
 SEAL  
  
 DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED



PHASE 2

MATCHLINE -L- STA. 19+00, SEE TMP-7



#1	-L- STA. 23+31.73, 14.82' LT
#2	-L- STA. 23+55.21, 11.19' LT

NOTE: USE COLD APPLIED PLASTIC MARKINGS ON CONCRETE STRUCTURE.

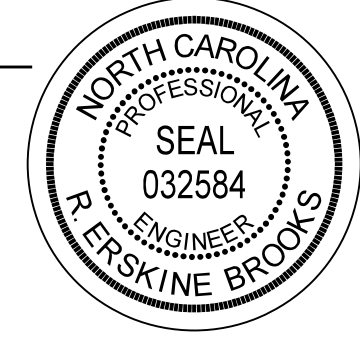
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REVISIONS

APPROVED: *R. Erskine Brooks*

DATE: 10/15/2024

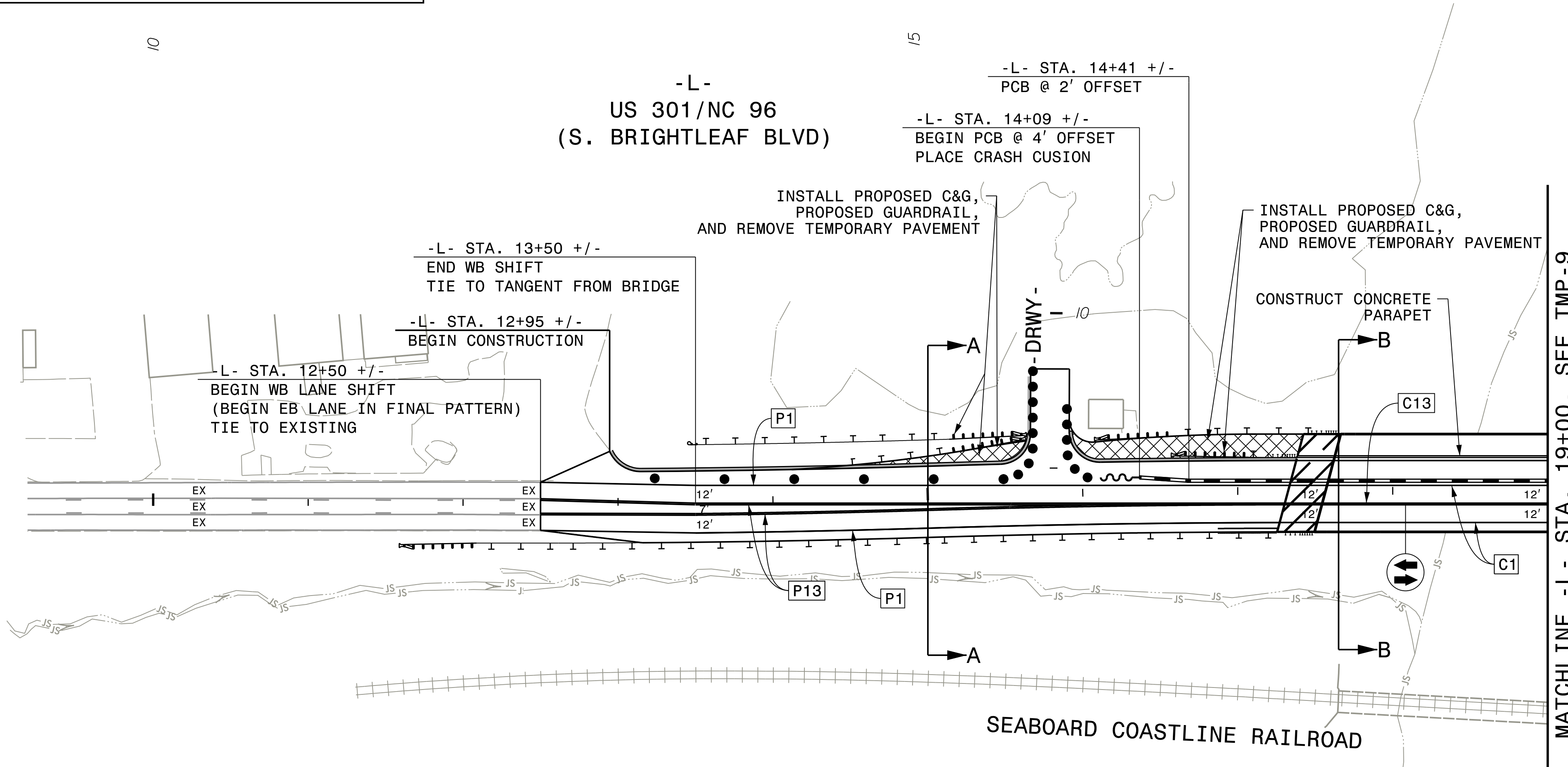
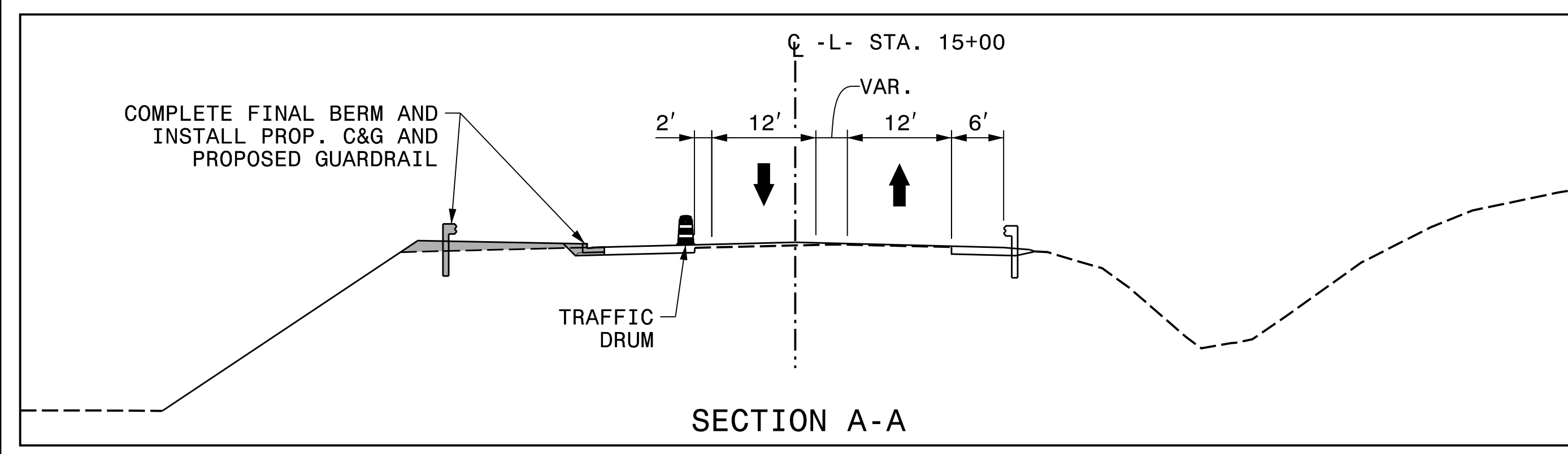
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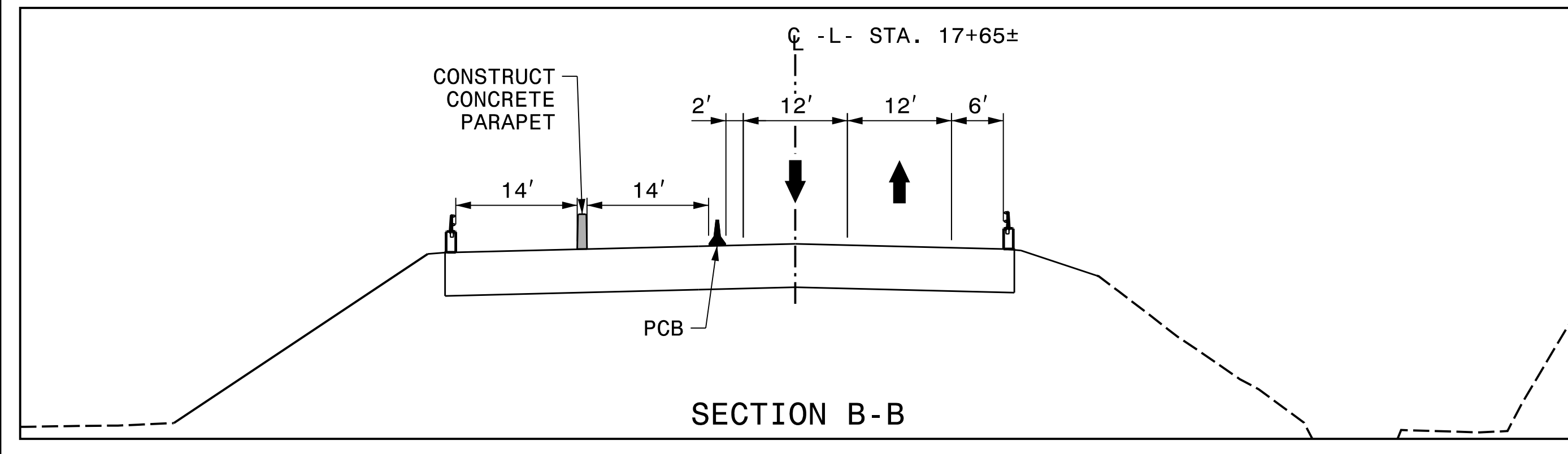
**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



PHASE 2



NOTE: USE COLD APPLIED PLASTIC MARKINGS ON CONCRETE STRUCTURE.




MATCHLINE -L- STA. 19+00, SEE TMP-9

PLOT DRIVER: NCDOT\_pdf\_color\_eng\_50.plt     PENTABLE: NCDOT\_tcp.tbl  
 USER: ERBROOKS     DATE: 11/2/2024     TIME: 7:10:13 AM  
 FILE: p:\p\h\p\seeds01\H\ERBROOKS\US\_East\01\Documents\3322\10004048\10366472\6.o.CAD\BIM\6.2.WIP\Traffic\TrafficControl\TCP\BR0086\_TC\_TMP08.dgn

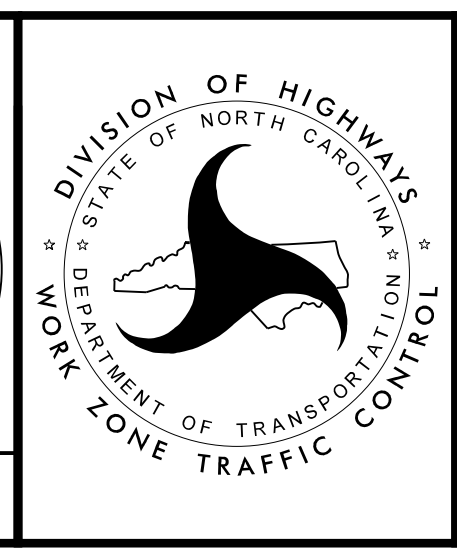
APPROVED: *R. Erskine Brooks*

DATE: 11/2/2024

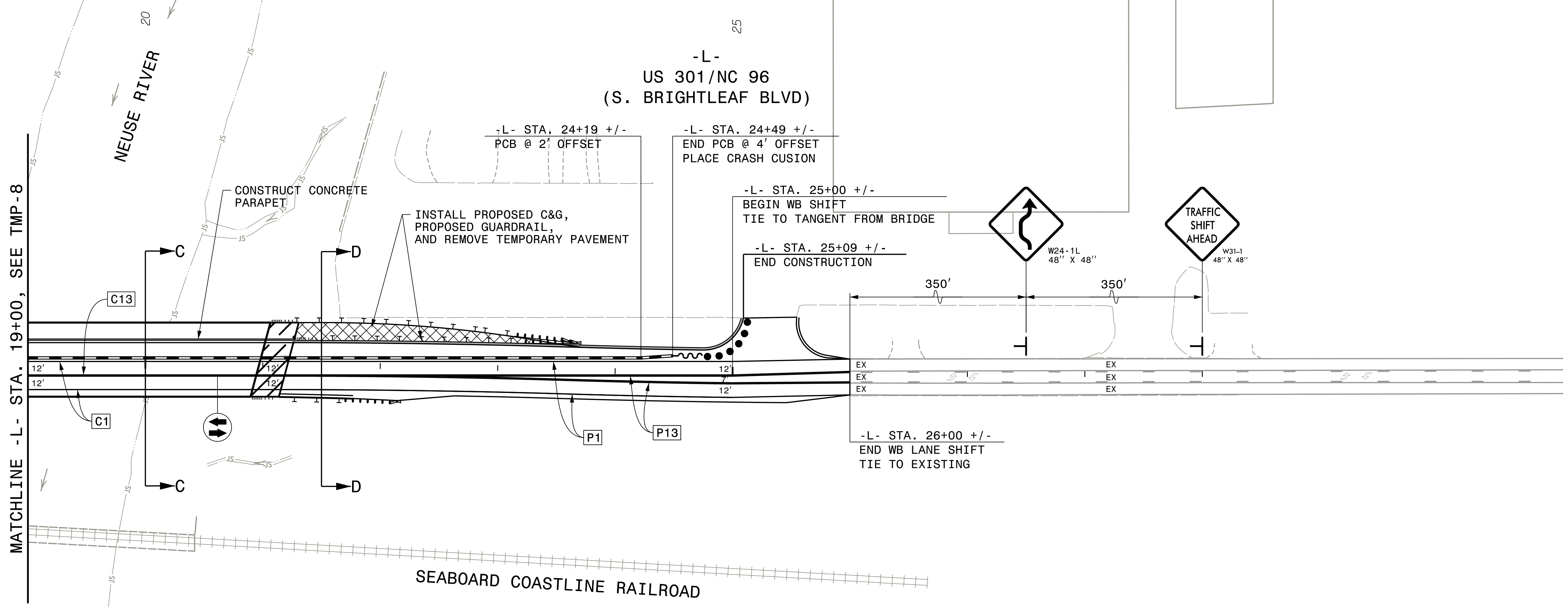
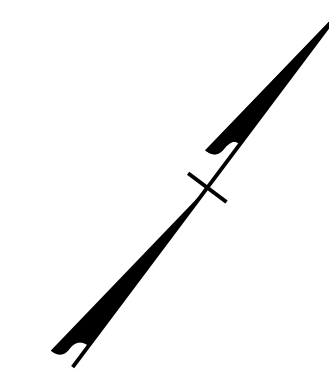
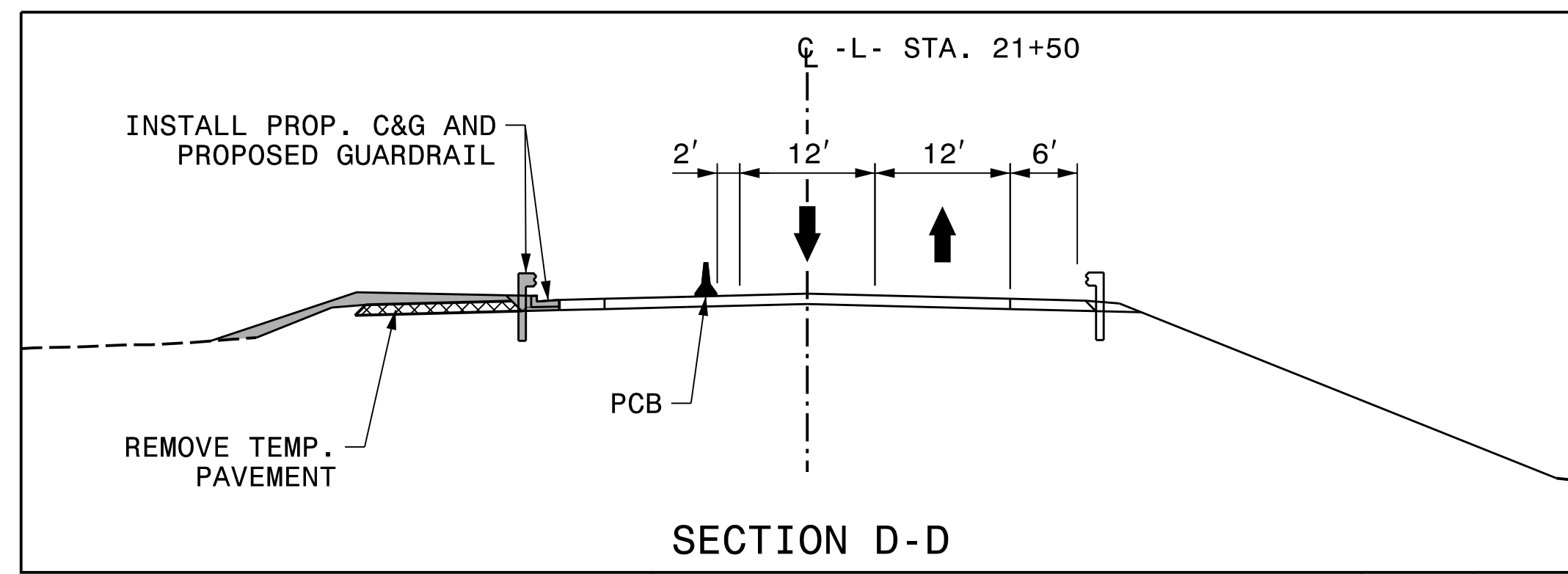
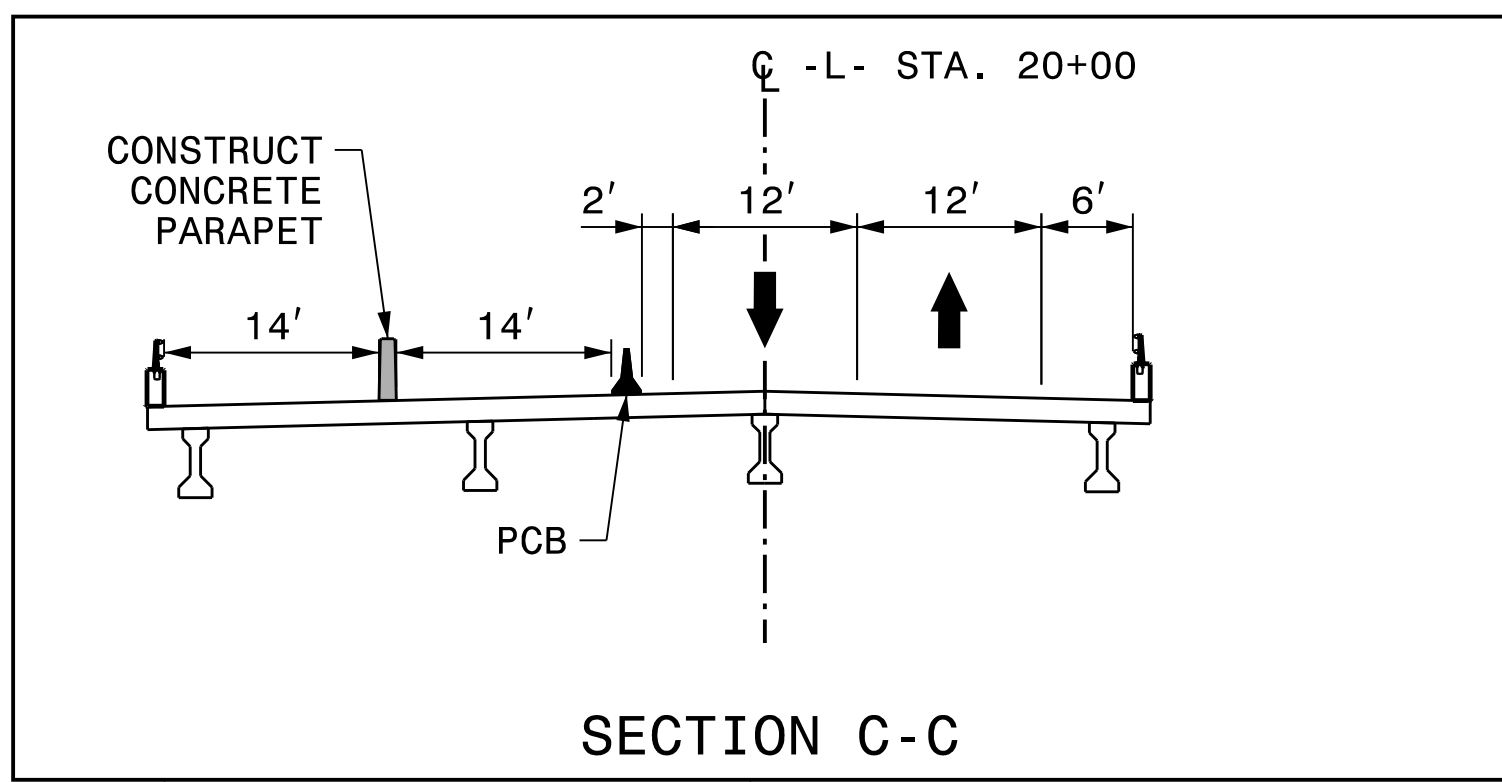
SEAL



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UNLESS ALL SIGNATURES COMPLETED**




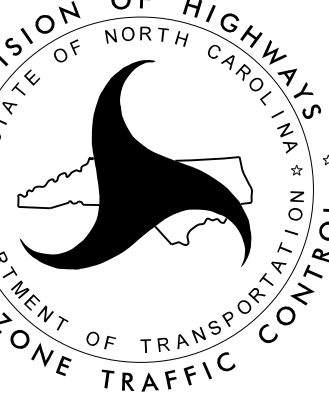
PHASE 3



REVISIONS

PLOT DRIVER: NCDOT\_pdf\_color\_eng\_50.pit PENTABLE: NCDOT\_tcp.tbl  
 USER: ERBROOKS DATE: 11/2/2024 TIME: 7:11:57 AM  
 FILE: p:\p\p\h\users\01\h\us\_east\_01\Documents\3322\10004048\10366472\6.o\_cad\_bim\6.2.WIP\Traffic\TrafficControl\TCP\BR0086\_TC\_TMP09.dgn

NOTE: USE COLD APPLIED PLASTIC MARKINGS ON CONCRETE STRUCTURE.

APPROVED: <i>R. Enskine Brooks</i> DATE: 11/2/2024 SEAL 		<p>PHASE 3</p>
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>		