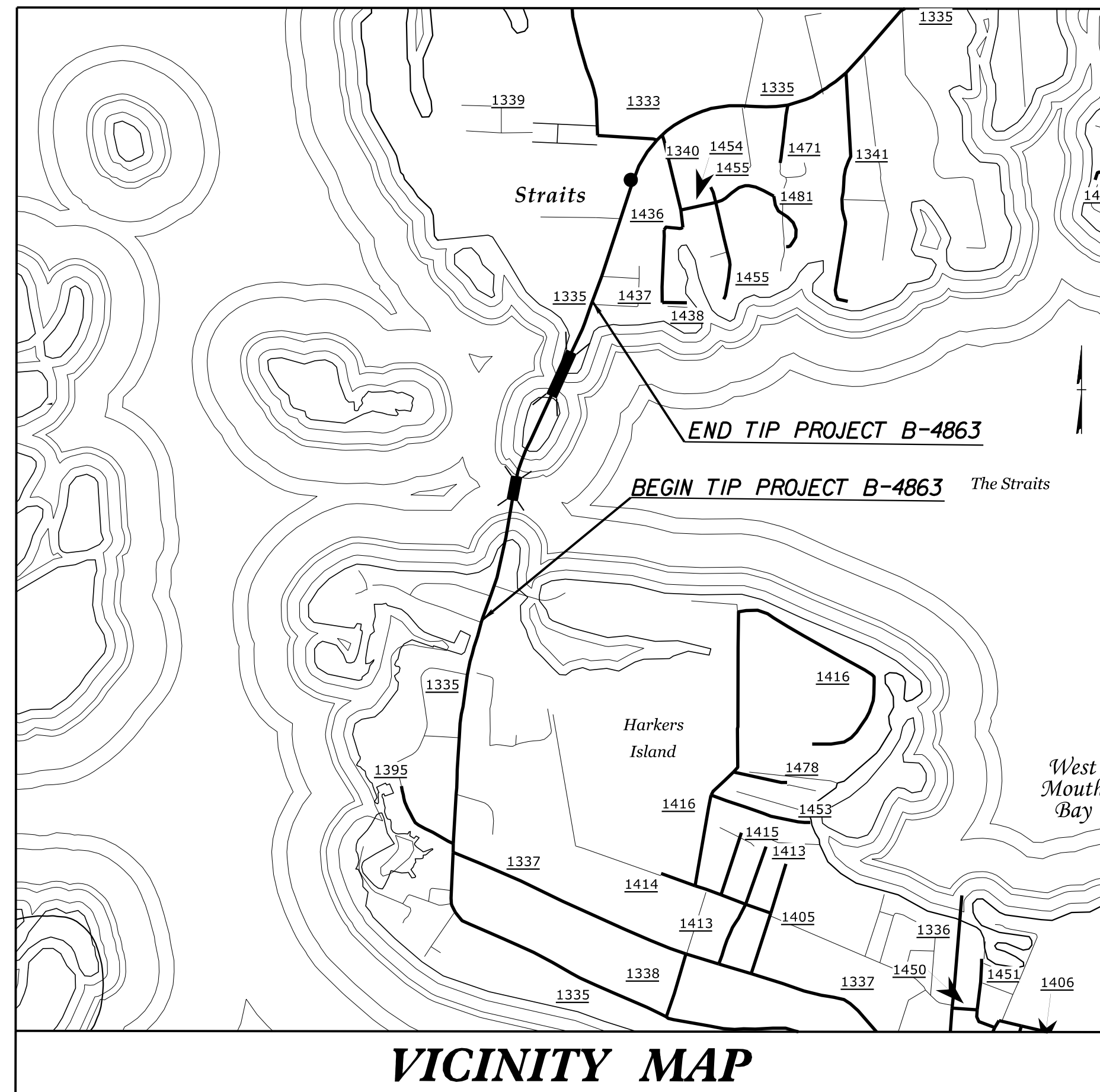
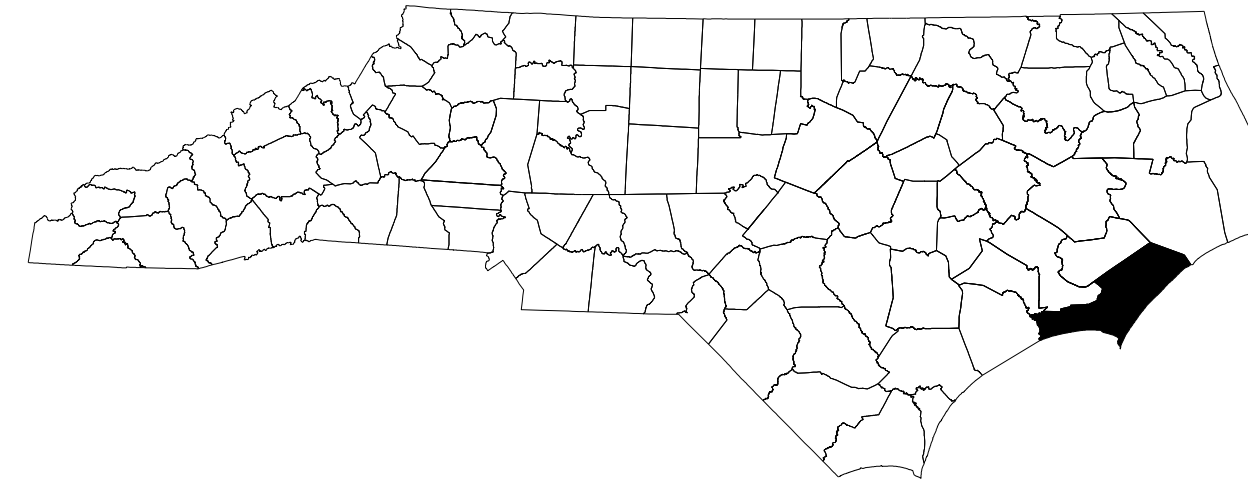


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

**CARTERET COUNTY**

**LOCATION: REPLACEMENT OF BRIDGE NOS. 73 AND 96  
CARRYING SR 1335 (HARKERS ISLAND RD)  
OVER THE STRAITS**



**VICINITY MAP**

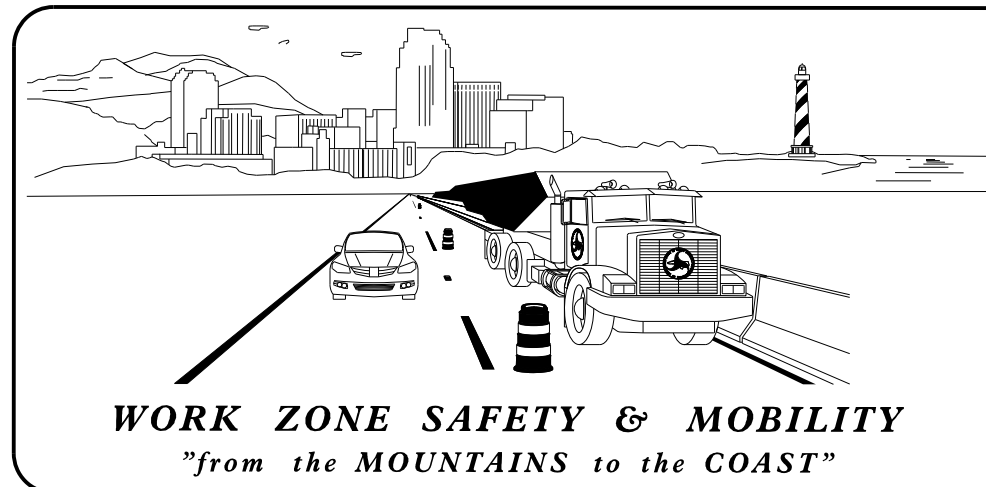
**INDEX OF SHEETS**

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 STRATEGY, AND GENERAL NOTES)
TMP-2	PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
TMP-2A	TEMPORARY SHORING NOTES
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4 THRU 5	TEMPORARY TRAFFIC CONTROL PHASE I DETAIL
TMP-6 THRU 7	TEMPORARY TRAFFIC CONTROL PHASE II DETAIL
TMP-8 THRU 9	TEMPORARY TRAFFIC CONTROL PHASE III DETAIL
TMP-10 THRU 11	TEMPORARY TRAFFIC CONTROL PHASE IV DETAIL

SHEET NO.  
TMP-1

**B-4863**

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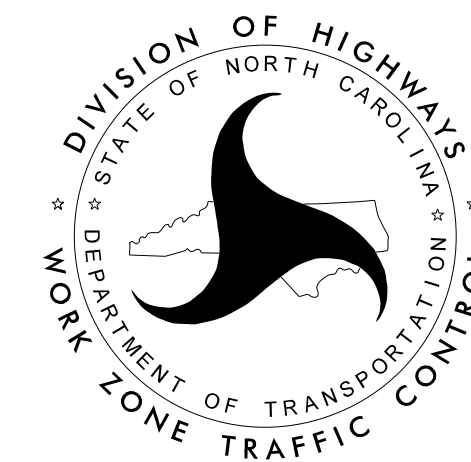
PLANS PREPARED BY:

**JENNIFER D. FARINO, PE**  
PROJECT ENGINEER

**CASSIE LEADBITTER, EI**  
PROJECT DESIGNER

NCDOT CONTACTS:

**HON YEUNG, PE**  
DIVISION BRIDGE  
PROGRAM MANAGER



**RS&H**  
NC FIRM LICENSE No: F-0493

APPROVED:

DATE: 4/8/2021

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 2018 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
1101.11	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	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
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
1801.01	STANDARD TEMPORARY SHORING

# 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
- 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

- PA WHITE EDGELINE (4" PAINT)
- PB YELLOW EDGELINE (4" PAINT)
- PI DOUBLE YELLOW CENTERLINE (4" PAINT)

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<p>APPROVED: </p> <p>DATE: 4/8/2021</p> <p></p>	<p></p>	<p>ROADWAY STANDARD DRAWINGS &amp; LEGEND</p>
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>		

## **MANAGEMENT STRATEGY**

THE PROPOSED ROADWAY AND STRUCTURE ALONG -L- (HARKERS ISLAND RD) WILL BEGIN CONSTRUCTION USING TEMPORARY PAVEMENT AND AN ON-SITE DETOUR.

CONSTRUCTION WILL CONTINUE WITH SOUTHBOUND TRAFFIC ON THE EXISTING STRUCTURE AND NORTHBOUND TRAFFIC ON THE PROPOSED STRUCTURE.

CONSTRUCTION WILL BE COMPLETED USING TEMPORARY PAVEMENT WITH TRAFFIC ON THE PROPOSED STRUCTURE.

## **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 UNDESIRE 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 DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:
- 1) FOR UNEXPECTED OCCURENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER
  - 2) FOR NEW YEAR'S DAY, BETWEEN THE HOURS OF 7:00 A.M. DECEMBER 31ST AND 7:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY, THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
  - 3) FOR EASTER, BETWEEN THE HOURS OF 7:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
  - 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
  - 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY.  
  
IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY, THEN BETWEEN THE HOURS OF 7:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
  - 6) FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY AND 7:00 P.M.
  - 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 A.M. AND 7:00 P.M. MONDAY.
  - 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS DAY.

### 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

- N) 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.

- O) 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) 100 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

### TRAFFIC PATTERN ALTERATIONS

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

### SIGNING

- Q) 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.
- R) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- S) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 100 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

- T) 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.

- U) 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.

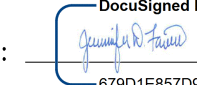
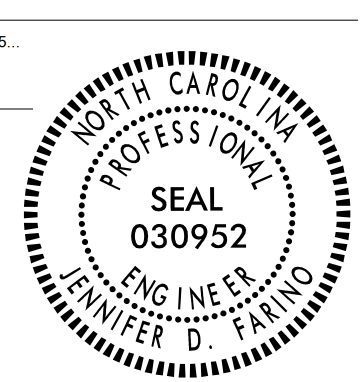

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS: (SEE ALSO 1101.05)

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

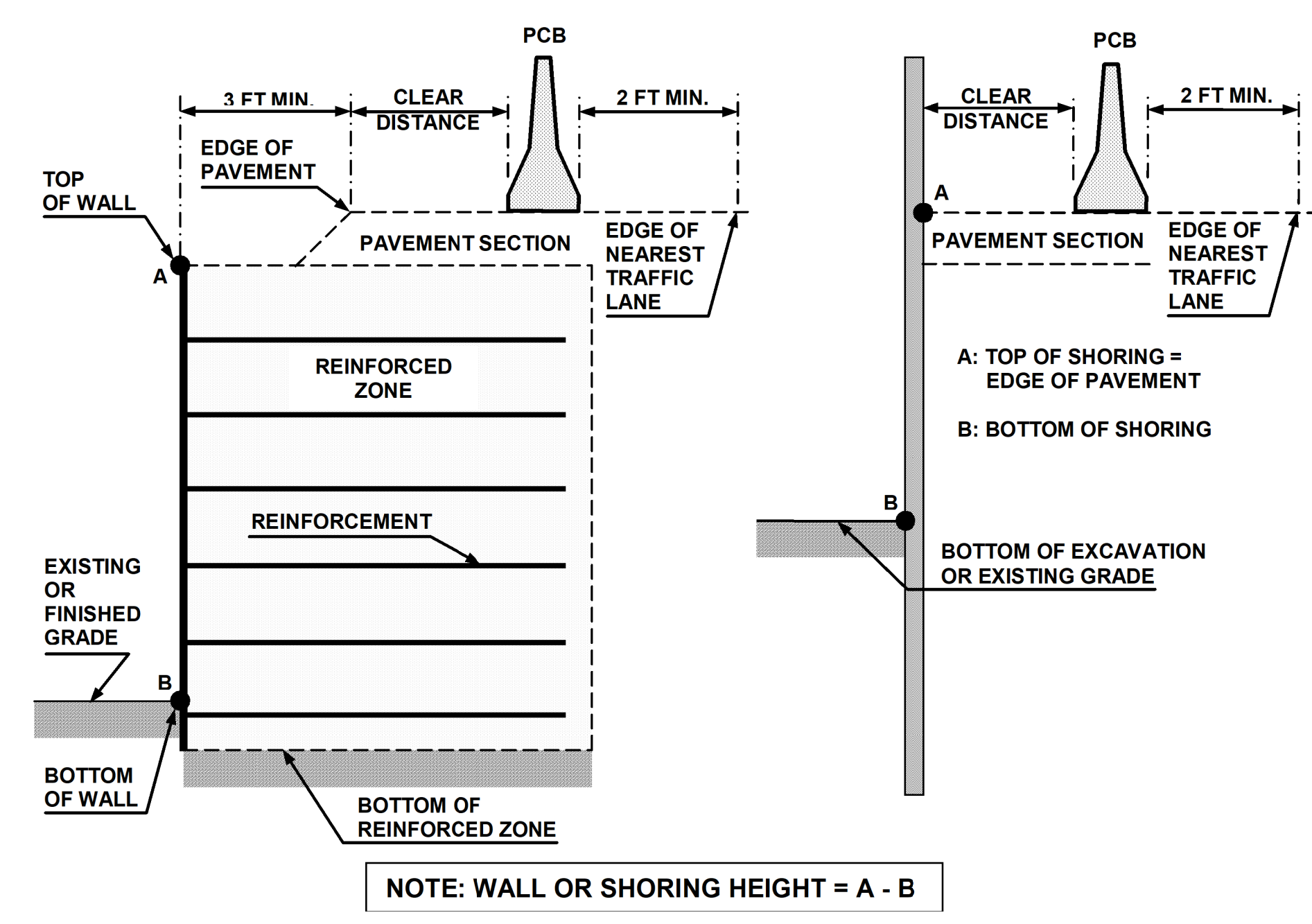
### TRAFFIC CONTROL DEVICES

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

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<p>APPROVED: </p> <p>DATE: 4/8/2021</p>			<h2 style="margin: 0;">TRANSPORTATION OPERATIONS PLAN</h2>
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**FIGURE A**

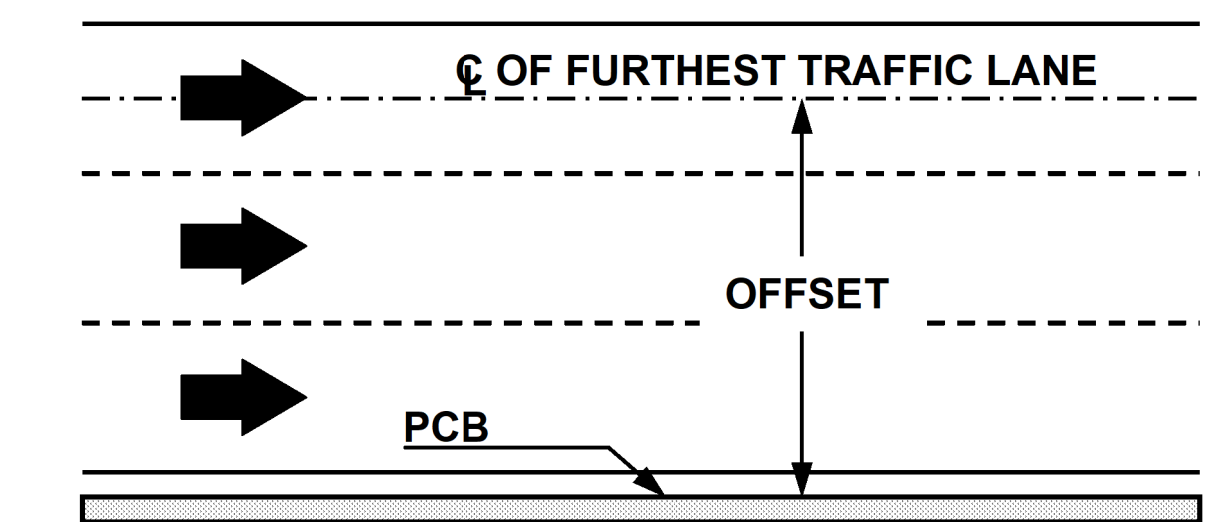
**NOTES**

- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.
- REFER TO THE "TEMPORARY SHORING" PROJECT SPECIAL PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).
- PCB IS REQUIRED IF TEMPORARY SHORING 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 UNIT FOR APPLICABLE PAVEMENT DESIGN).
- 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.
- 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 EXCEPT FOR BARRIER ABOVE TEMPORARY WALLS. PCB WITH THE MINIMUM REQUIRED CLEAR DISTANCE IS REQUIRED ABOVE TEMPORARY WALLS.
- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.
- PCB REQUIREMENTS FOR TEMPORARY WALLS APPLY TO TEMPORARY MECHANICALLY STABILIZED EARTH (MSE) WALLS AND TEMPORARY SOIL NAIL WALLS.
- 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 AND OR AS APPROVED BY THE ENGINEER.
- 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 THESE MINIMUM REQUIRED DISTANCES ARE NOT AVAILABLE, CONTACT THE ENGINEER.
- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS. BARRIER DEFLECTIONS AND RESULTING MINIMUM REQUIRED CLEAR DISTANCES MIGHT VARY SIGNIFICANTLY FOR LARGER HEAVIER VEHICLES, RUNS OF BARRIER LESS THAN 200 FT IN LENGTH AND WET OR DRY PAVEMENT.

**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**

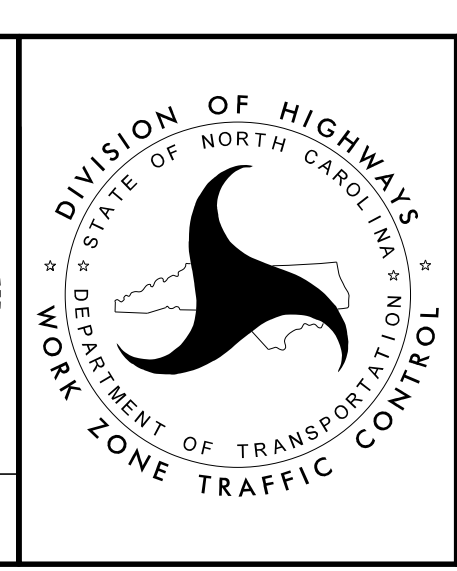


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DATE: 4/8/2021

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ENGINEER  
LEWIS D. FAYO

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**PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS**

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PROJ. REFERENCE NO.	SHEET NO.
B-4863	TMP-2A

## TEMPORARY SHORING NOTES

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 11+53±-DETOUR-, 18 FT RIGHT, TO STATION 12+85 -DETOUR-, 18 FT RIGHT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

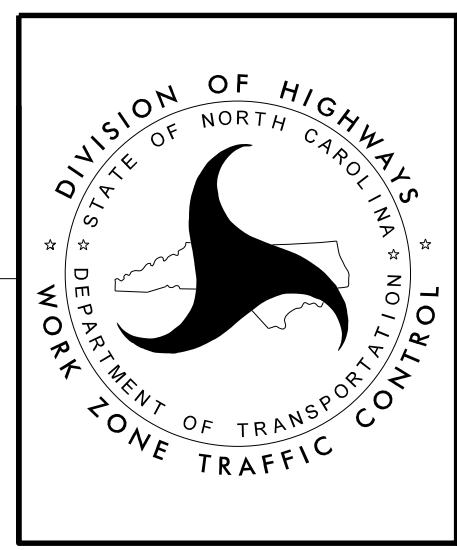
UNIT WEIGHT ( $\gamma$ ) = 120 PCF FRICTION ANGLE ( $\phi$ ) = 30 DEGREES  
COHESION ( $c$ ) = 0 PSF GROUNDWATER ELEVATION = 1.0 FT

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 11+53± -DETOUR-, 18 FT RIGHT, TO STATION 12+85 -DETOUR-, 18 FT RIGHT.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 11+53±-DETOUR-, 18 FT RIGHT, TO STATION 12+85 -DETOUR-, 18 FT RIGHT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

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TEMPORARY  
SHORING  
NOTES

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEER UNIT. THE DOCUMENT WAS SUBMITTED ON DECEMBER 19, 2018 AND SEALED BY A PROFESSIONAL ENGINEER, THEIN TUN ZAN, P.E., LICENSE NUMBER 030943.

PROJ. REFERENCE NO.	SHEET NO.
B-4863	TMP-3

## PHASING

NOTE : PAVEMENT CONSTRUCTION IS UP TO, BUT NOT INCLUDING, FINAL LAYER UNLESS OTHERWISE NOTED.

### PHASE I

STEP 1:  
USING RSD 1101.01 (SHEET 3 OF 3), PLACE ALL ADVANCED WARNING SIGNS.

STEP 2:  
USING RSD 1101.02 (SHEET 1 OF 14) WITH TRAFFIC IN THE EXISTING PATTERN, CONSTRUCT THE FOLLOWING TEMPORARY PAVEMENT AND ON-SITE DETOUR (SEE SHEETS TMP-4 AND TMP-5):

- L- STA 8+43± TO -L- STA 18+80± (LT)
- DETOUR- STA 10+03± TO -DETOUR- STA 16+68±

### PHASE II

STEP 1:  
USING RSD 1101.02 (SHEET 1 OF 14), INSTALL PCB, TEMPORARY SHORING, PLACE TEMPORARY PAVEMENT MARKINGS, AND SHIFT TRAFFIC ONTO TEMPORARY PAVEMENT AND -DETOUR-. (SEE SHEETS TMP-6 AND TMP-7).

USING RSD 1101.02 (SHEET 1 OF 14), AND BEHIND POSITIVE PROTECTION, CONSTRUCT THE FOLLOWING INCLUDING STRUCTURE (SEE SHEETS TMP-6 AND TMP-7):

- L- STA 8+00± TO -L- STA 13+85± (RT) (TEMPORARY PAVEMENT)
- L- STA 10+00± TO -L- STA 15+68± (RT) (WIDENING)
- L- STA 15+68± TO -L- STA 51+93±
- L- STA 51+93± TO -L- STA 55+05± (RT) (WIDENING)
- Y- STA 10+12± TO -Y- STA 11+60±

STEP 2:  
USING RSD 1101.02 (SHEET 1 OF 14), REMOVE PORTABLE CONCRETE BARRIER.

### PHASE III

USING RSD 1101.02 (SHEET 1 OF 14), PLACE TEMPORARY PAVEMENT MARKINGS, AND SHIFT NORTHBOUND TRAFFIC ONTO THE TEMPORARY PAVEMENT (RT) AND PROPOSED OUTSIDE LANE OF -L- (SEE SHEETS TMP-8 AND TMP-9).

USING RSD 1101.02 (SHEET 1 OF 14) AND WHILE MAINTAINING ACCESS TO -Y- (SPARKS RD) AND THE BOAT RAMP PARKING LOT, CONSTRUCT THE FOLLOWING (SEE SHEETS TMP-8 AND TMP-9):

- L- STA 10+00± TO -L- STA 15+68± (LT)
- L- STA 51+93± TO -L- STA 53+10± (LT)

### PHASE IV

USING RSD 1101.02 (SHEET 1 OF 14), PLACE TEMPORARY PAVEMENT MARKINGS, AND SHIFT SOUTHBOUND TRAFFIC ONTO THE PROPOSED ROADWAY AND STRUCTURE (SEE SHEETS TMP-10 AND TMP-11).

USING RSD 1101.02 (SHEET 1 OF 14), CONSTRUCT THE FOLLOWING, INCLUDING PERMEABLE PAVERS, (SEE SHEETS TMP-10 AND TMP-11):

- L- STA 10+00± TO -L- STA 13+92± (LT)
- L- STA 52+35 (LT) TO -L- STA 55+05 (LT)
- DRIVE- STA 10+26± TO -DRIVE- STA 11+40±
- PARK- STA 10+20± TO -PARK- STA 14+28±
- DRIVEWAY FOR BOAT RAMP PARKING LOT

USING RSD 1101.02 (SHEET 1 OF 14), REMOVE TEMPORARY WIDENING (LT). (SEE SHEET TMP-10).

### PHASE V

STEP 1:  
USING RSD 1101.02 (SHEET 1 OF 14), PLACE TEMPORARY PAVEMENT MARKINGS, AND SHIFT TRAFFIC TO FINAL TRAFFIC PATTERN (SEE PAVEMENT MARKING PLANS).

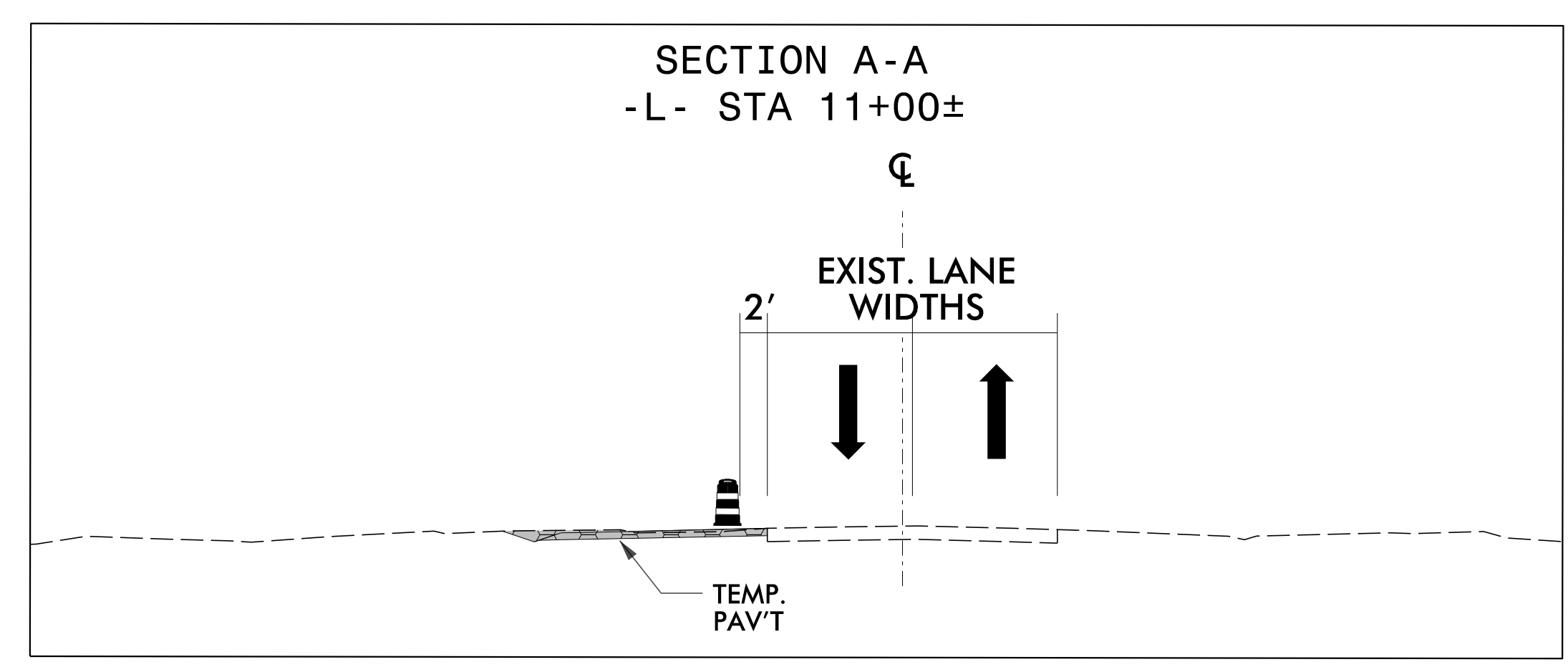
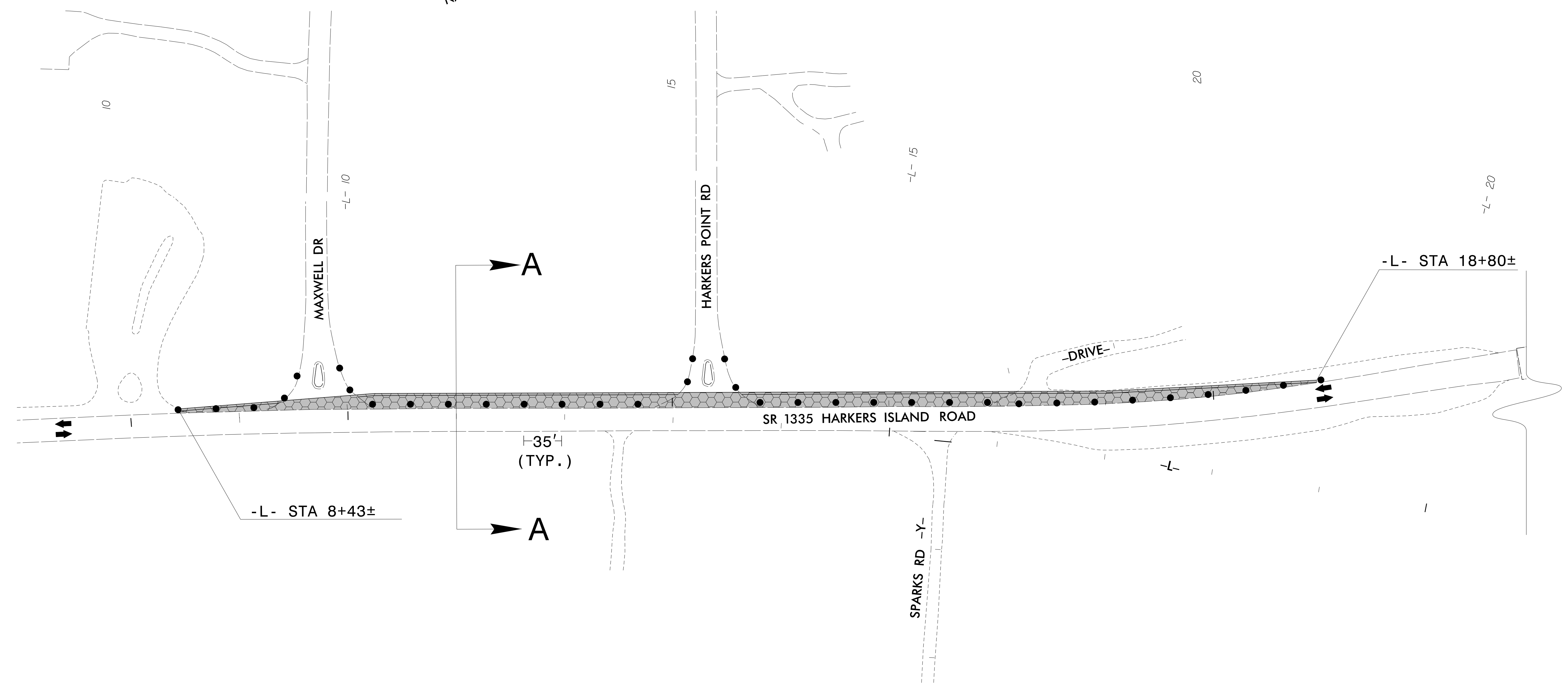
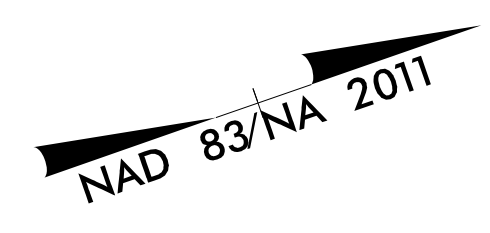
USING RSD 1101.02 (SHEET 1 OF 14), REMOVE TEMPORARY WIDENING (RT).

STEP 2:  
USING RSD 1101.02 (SHEET 1 OF 14), PLACE THE FINAL LAYER OF SURFACE COURSE ON -L-. PLACE FINAL PAVEMENT MARKINGS AND MARKERS ON -L- AND -PARK-, REMOVE ALL TRAFFIC CONTROL DEVICES AND OPEN ROADWAY TO FINAL TRAFFIC PATTERN (SEE PAVEMENT MARKING PLANS).

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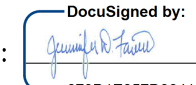


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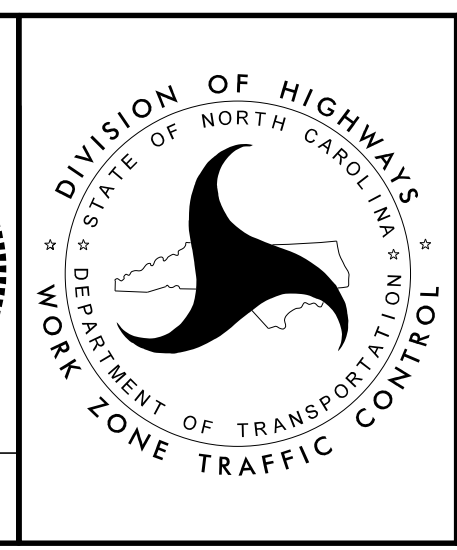


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Jennifer D. Fanning  
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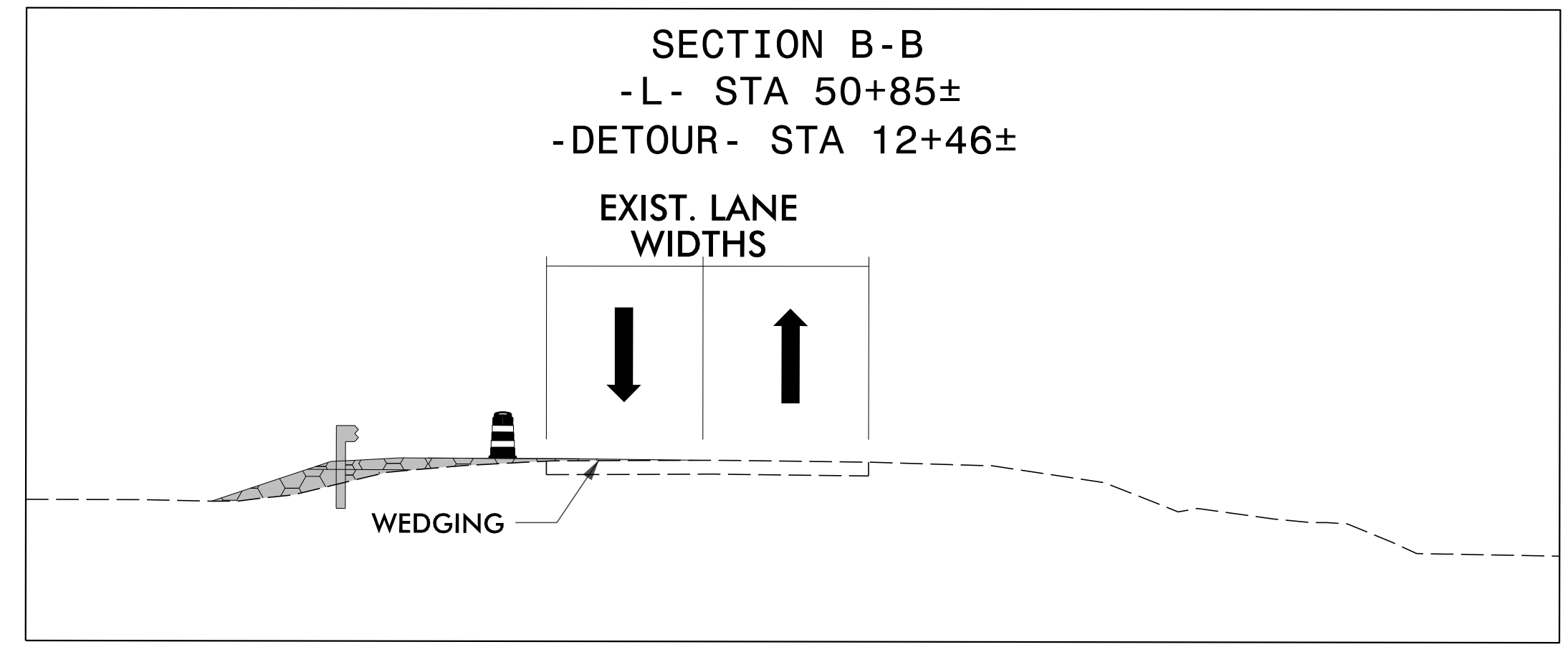
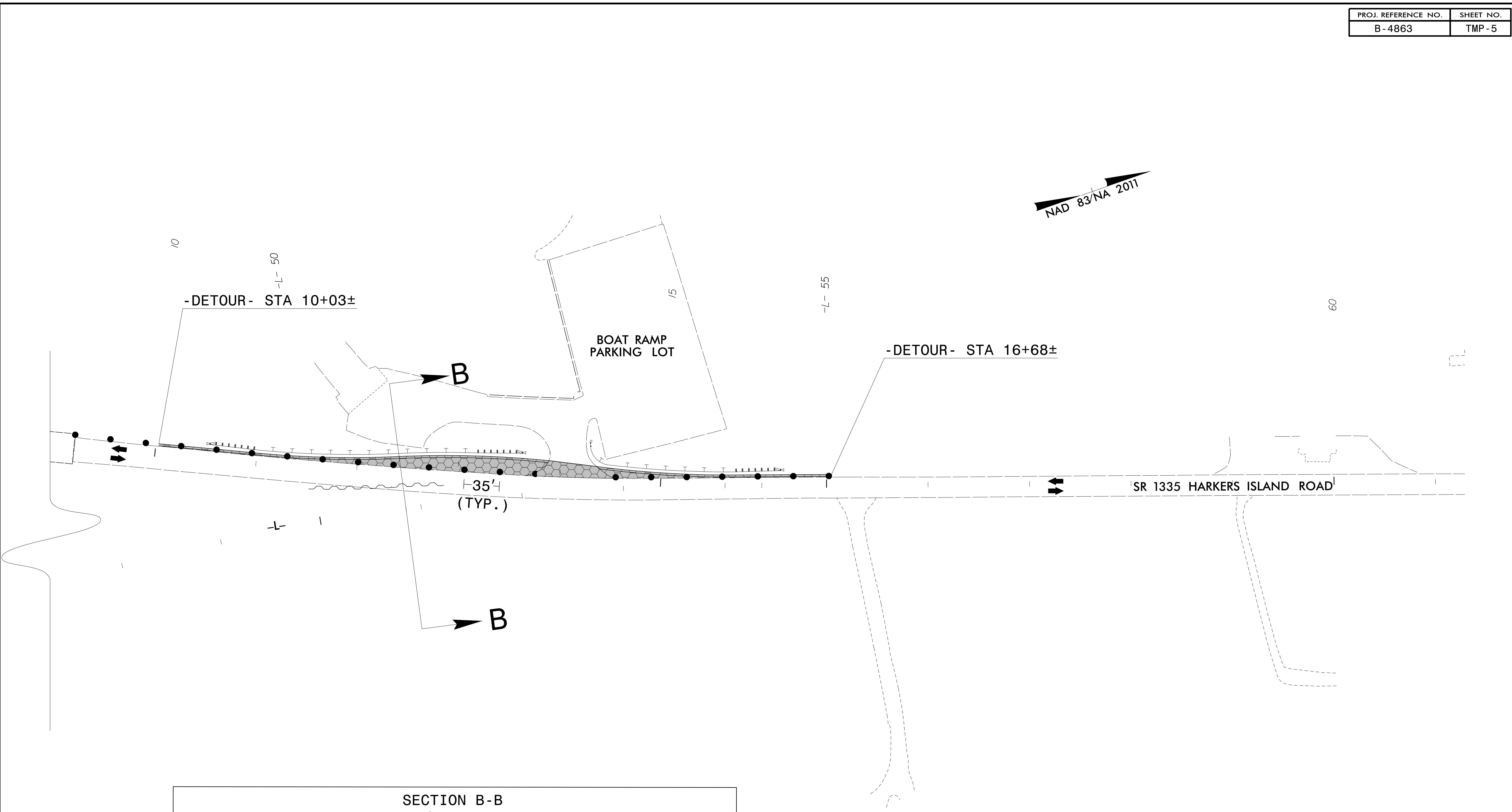
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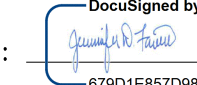


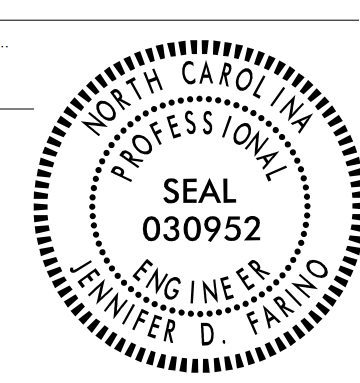
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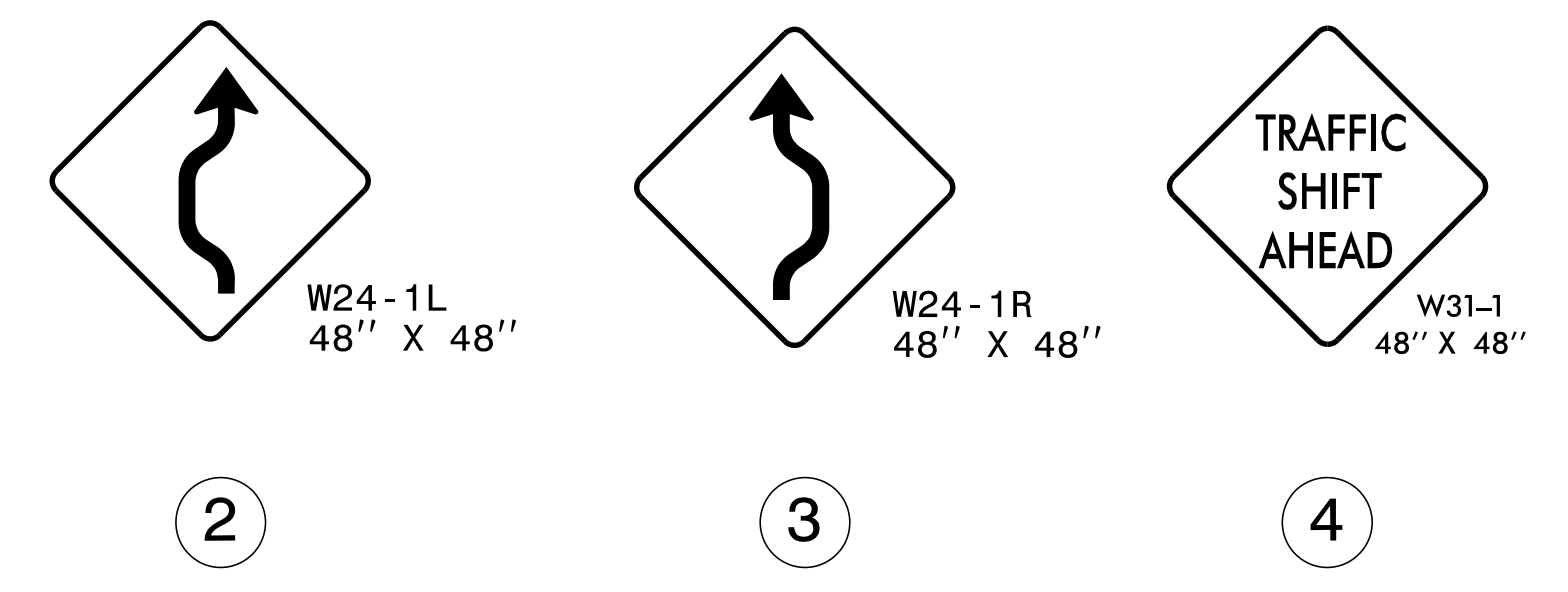
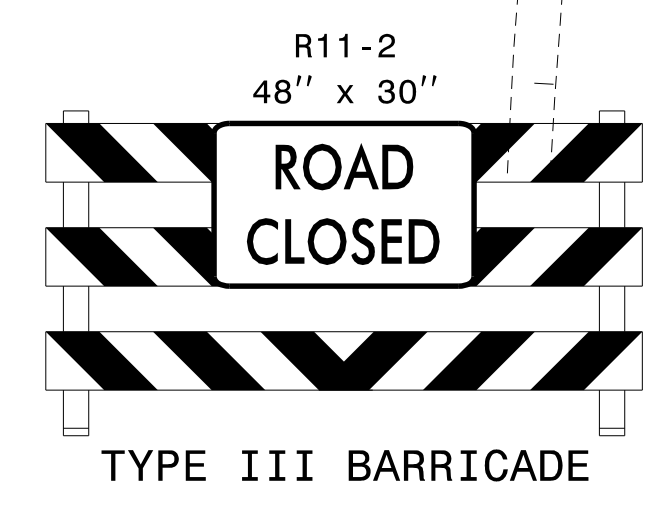
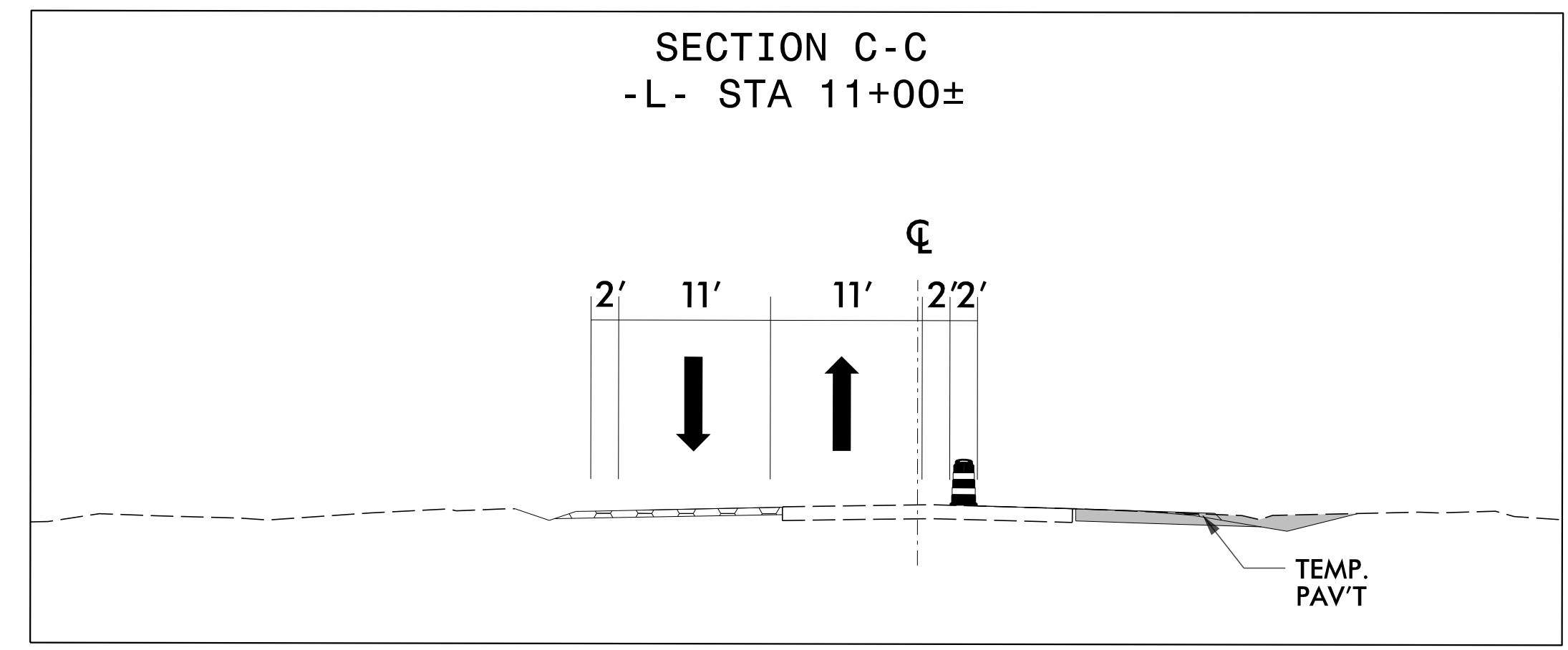
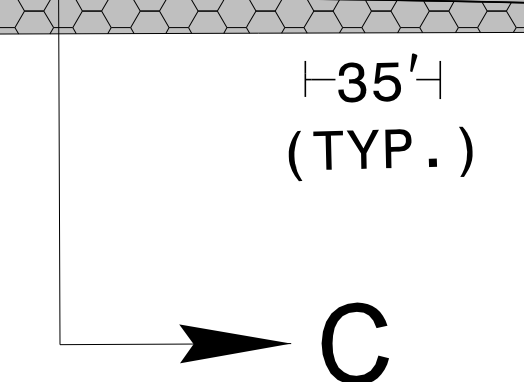
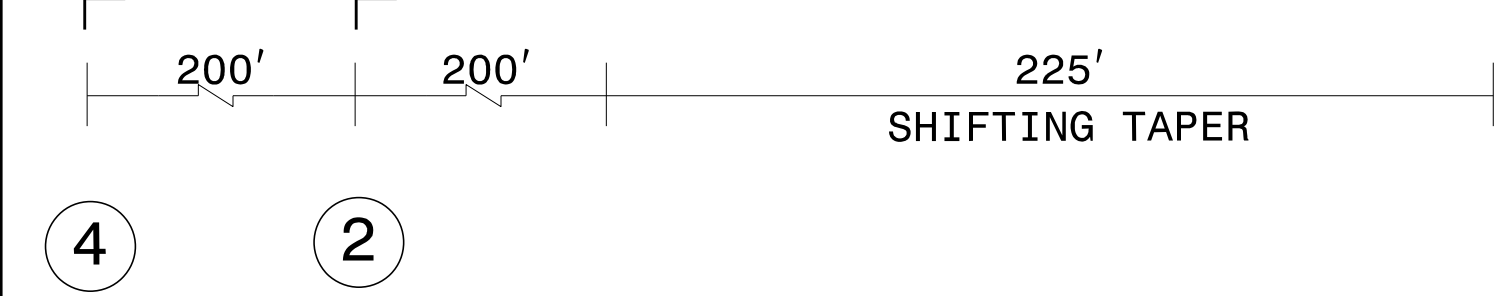
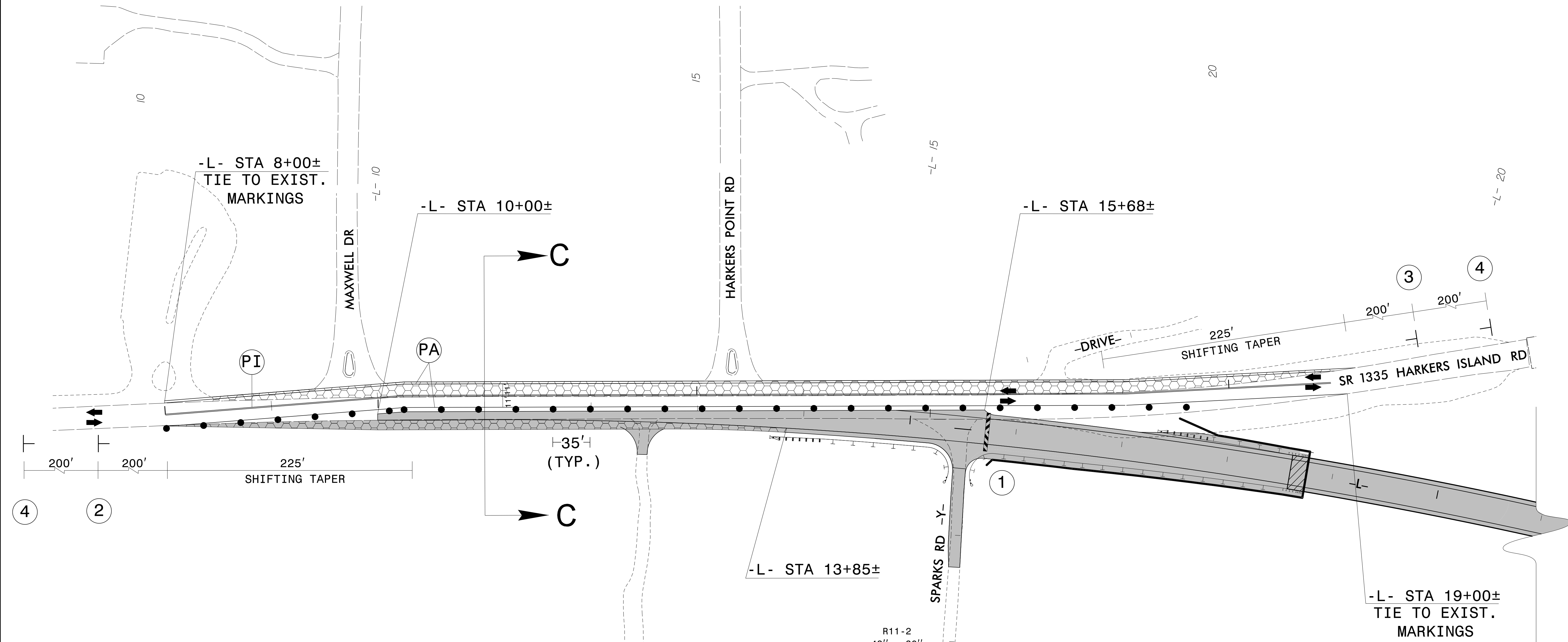
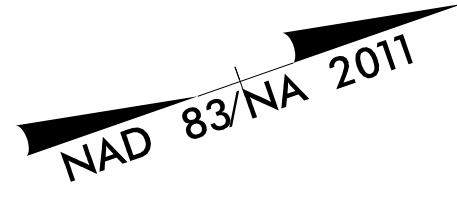


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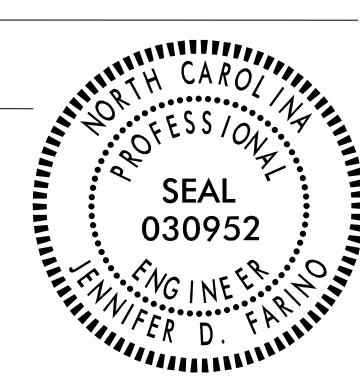





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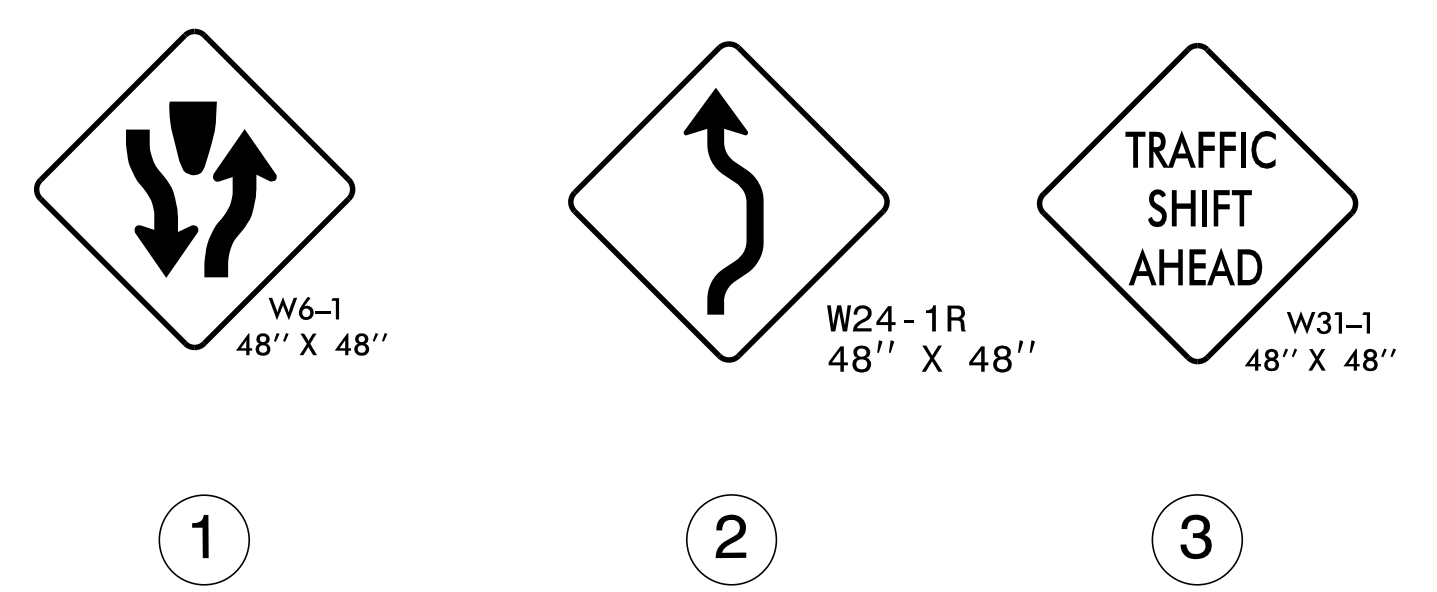
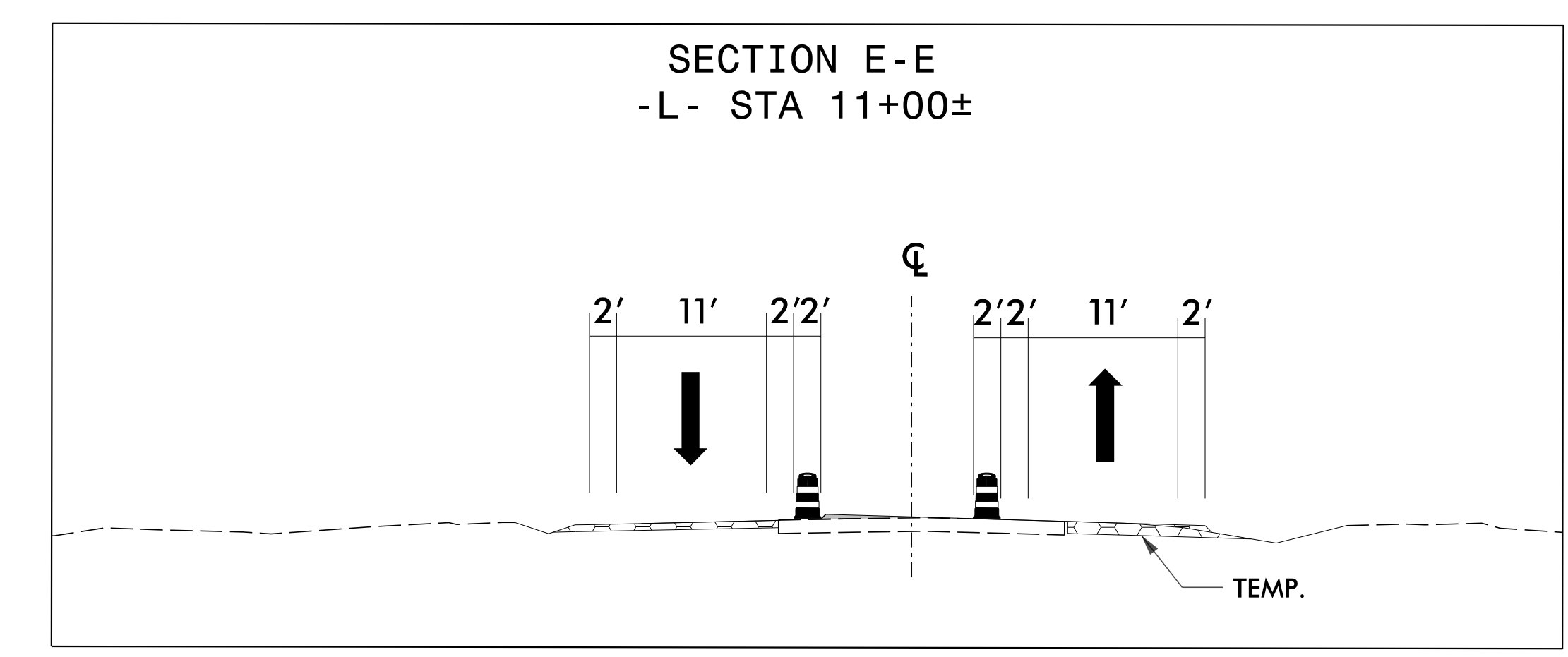
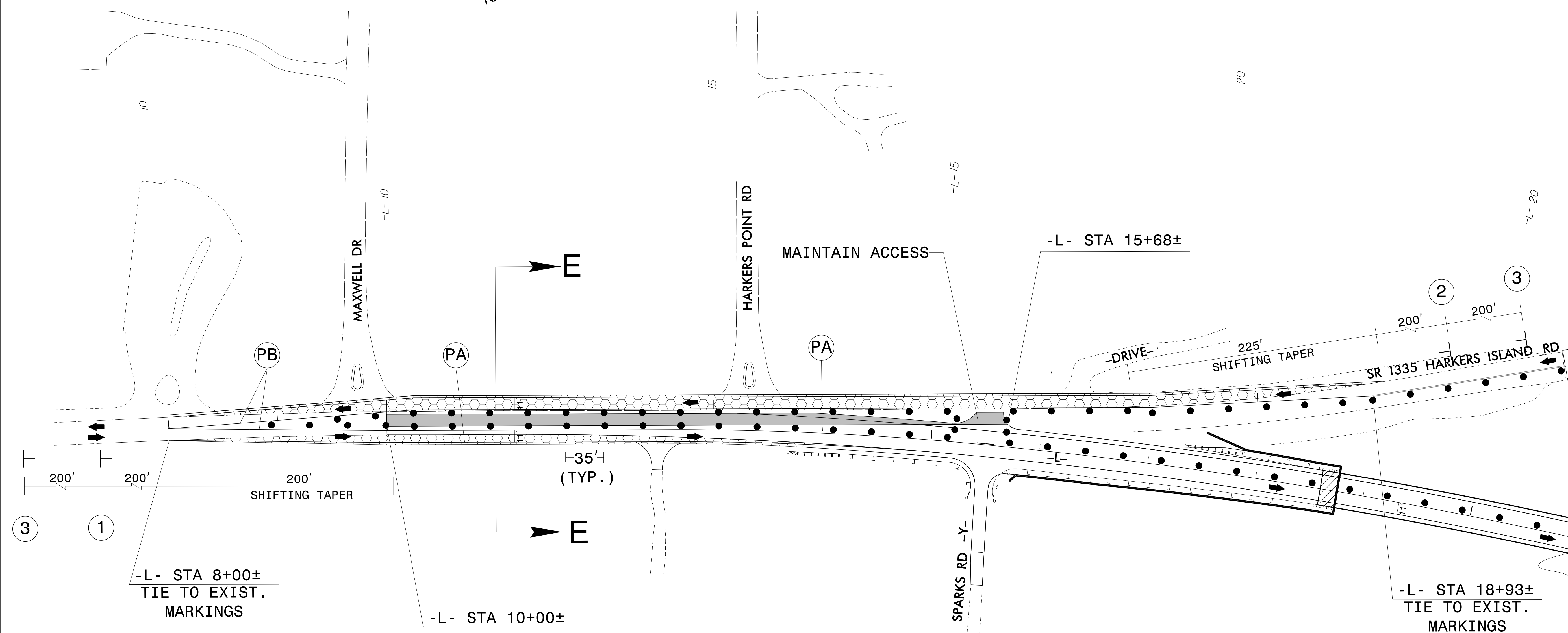
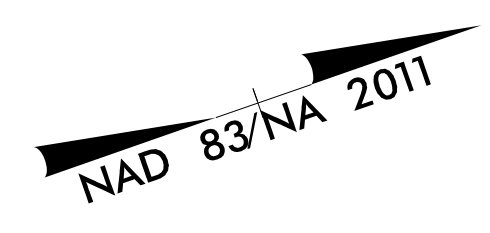



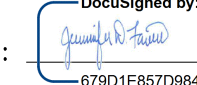
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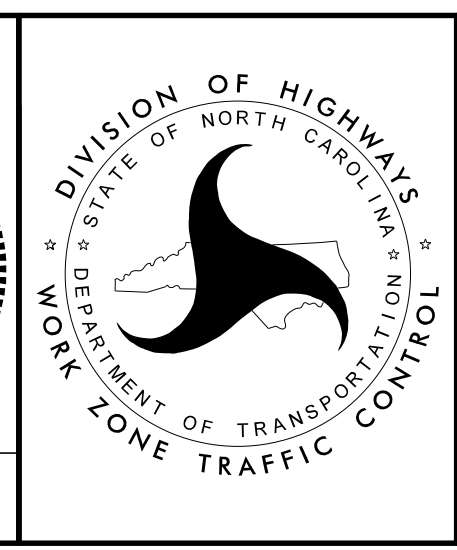




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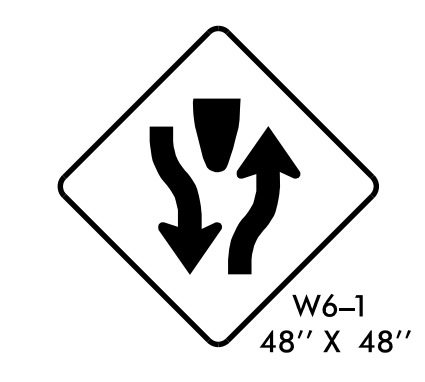
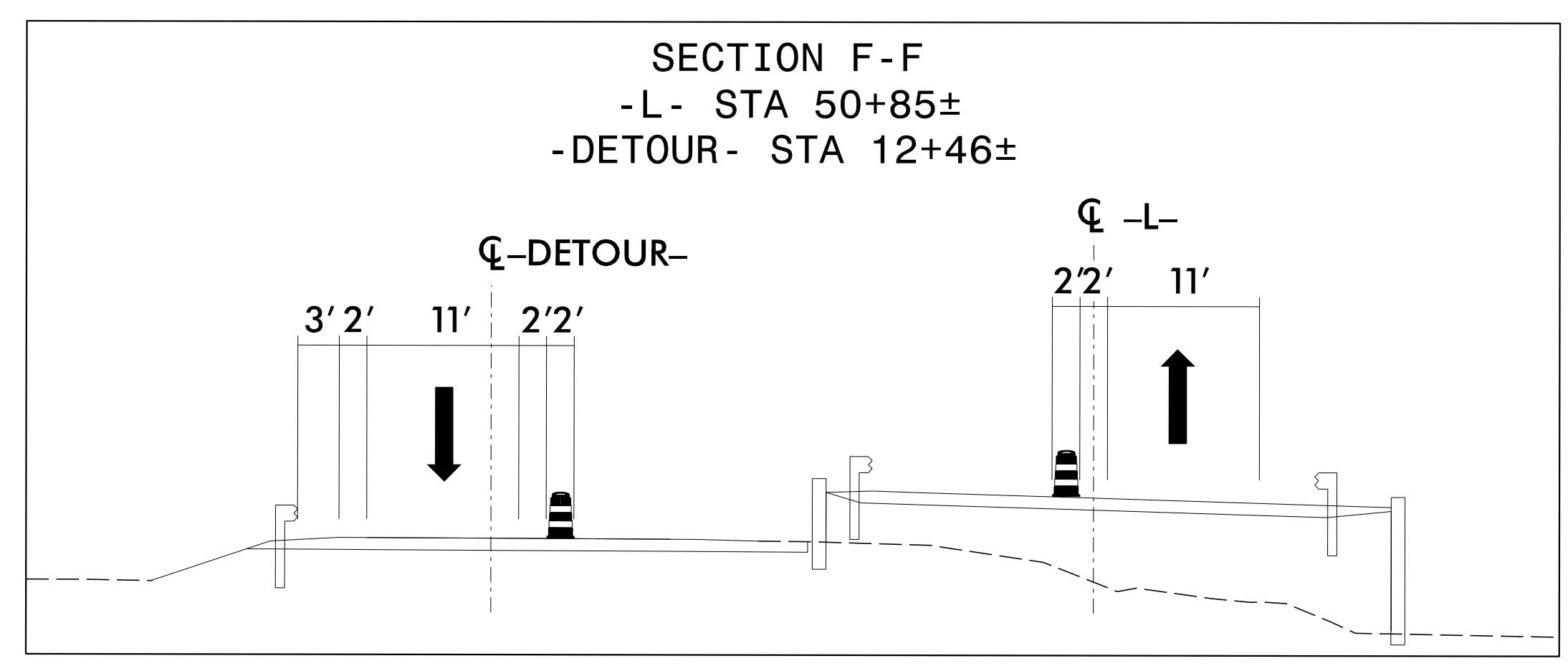
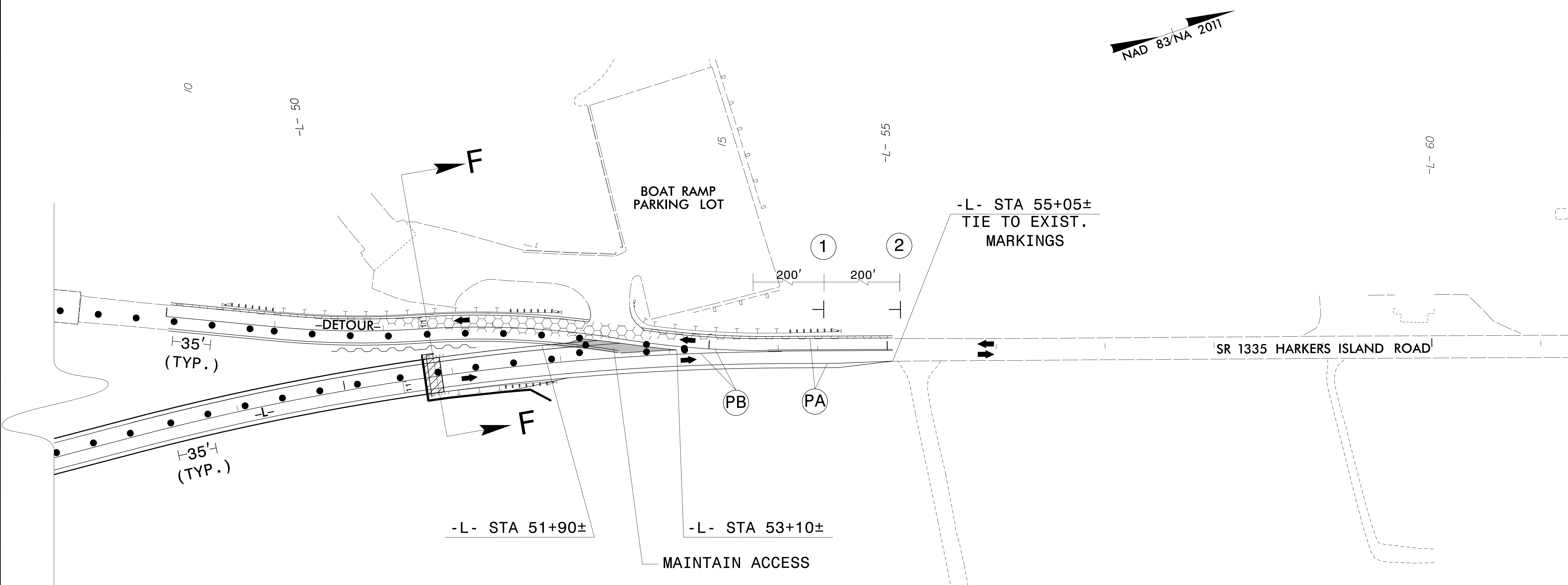
SEAL  
030952  
ENGINEER  
JENNIFER D. FANNING



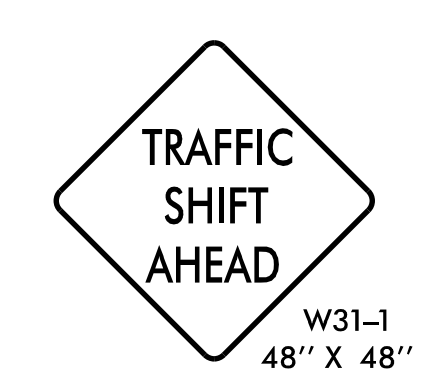
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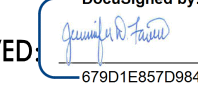
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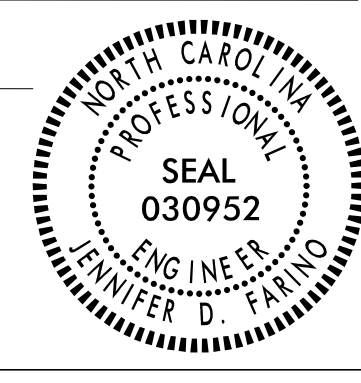
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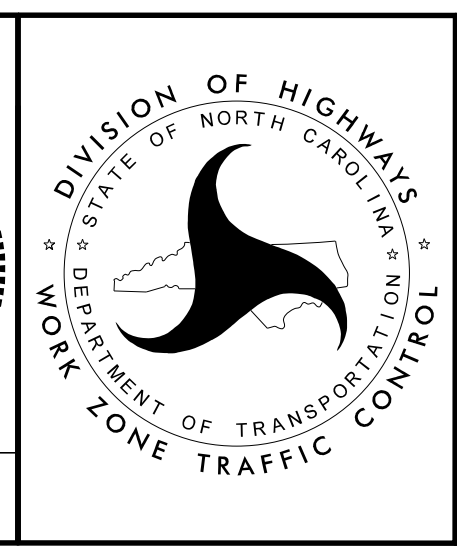


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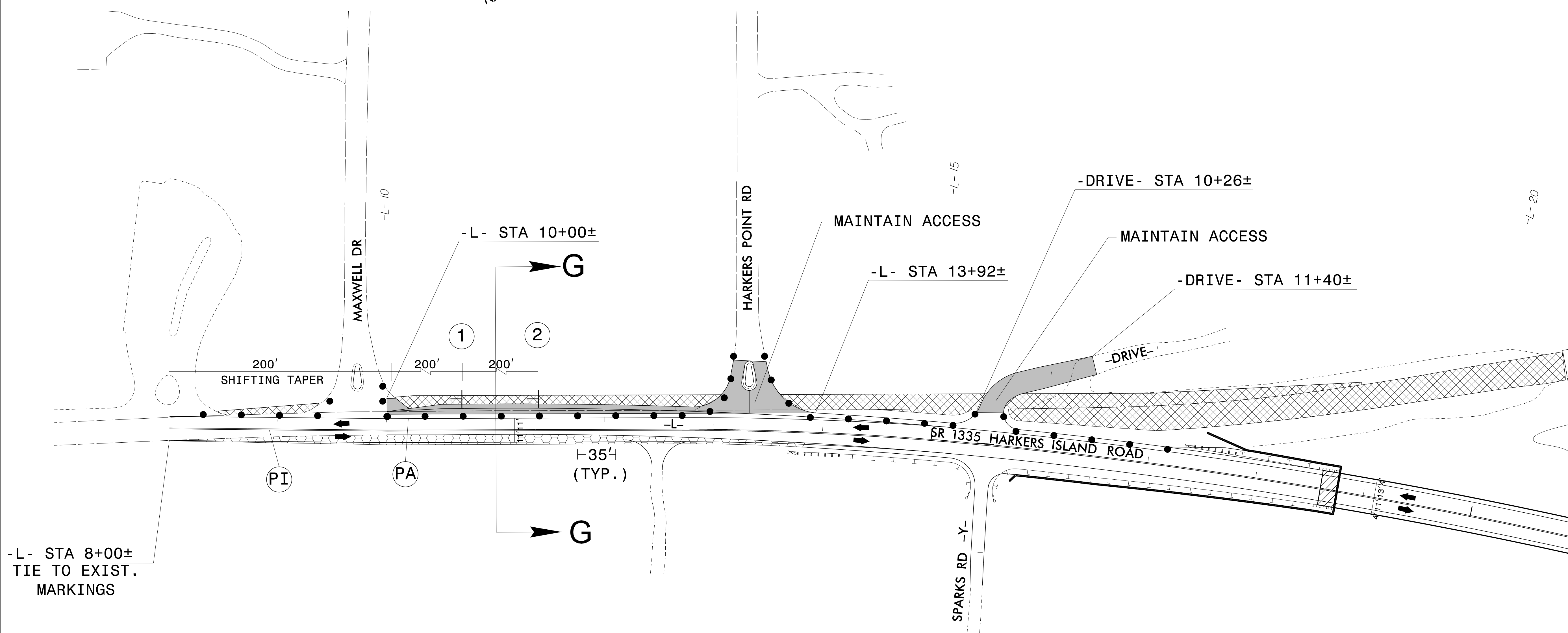
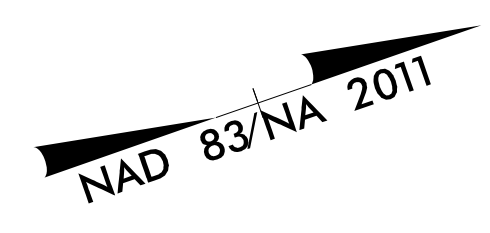
DATE: 4/8/2021

  
 JENNIFER D. FANNING  
 ENGINEER  
 030952  
 NORTH CAROLINA  
 PROFESSIONAL

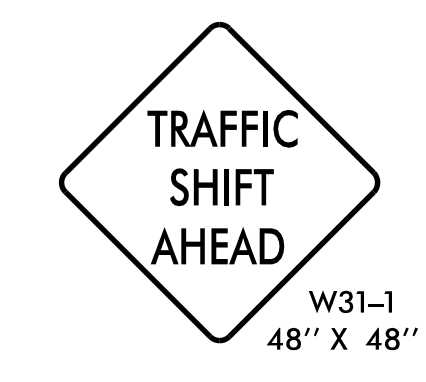
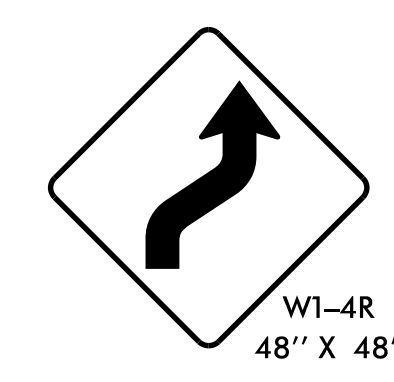
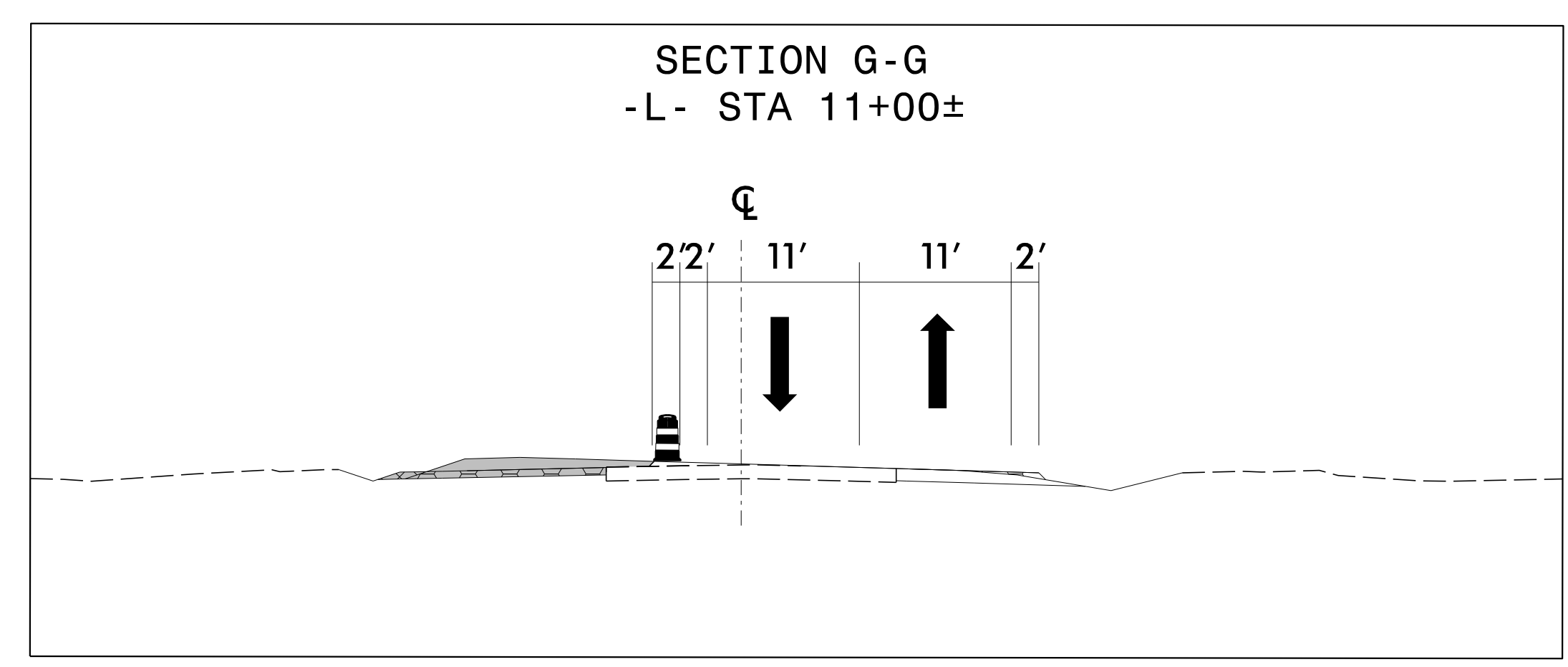
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**PHASE III DETAIL**



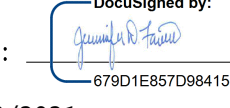
-L- STA 8+00±  
TIE TO EXIST.  
MARKINGS



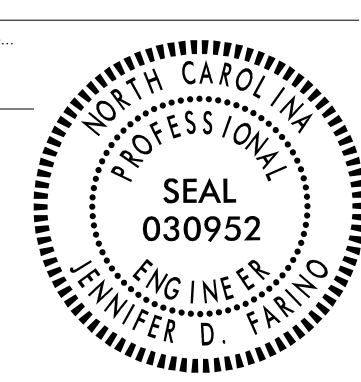
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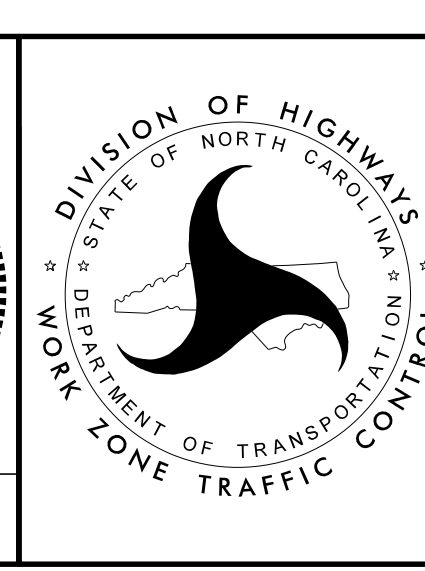


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DATE: 4/8/2021

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Jennifer D. Fanning  
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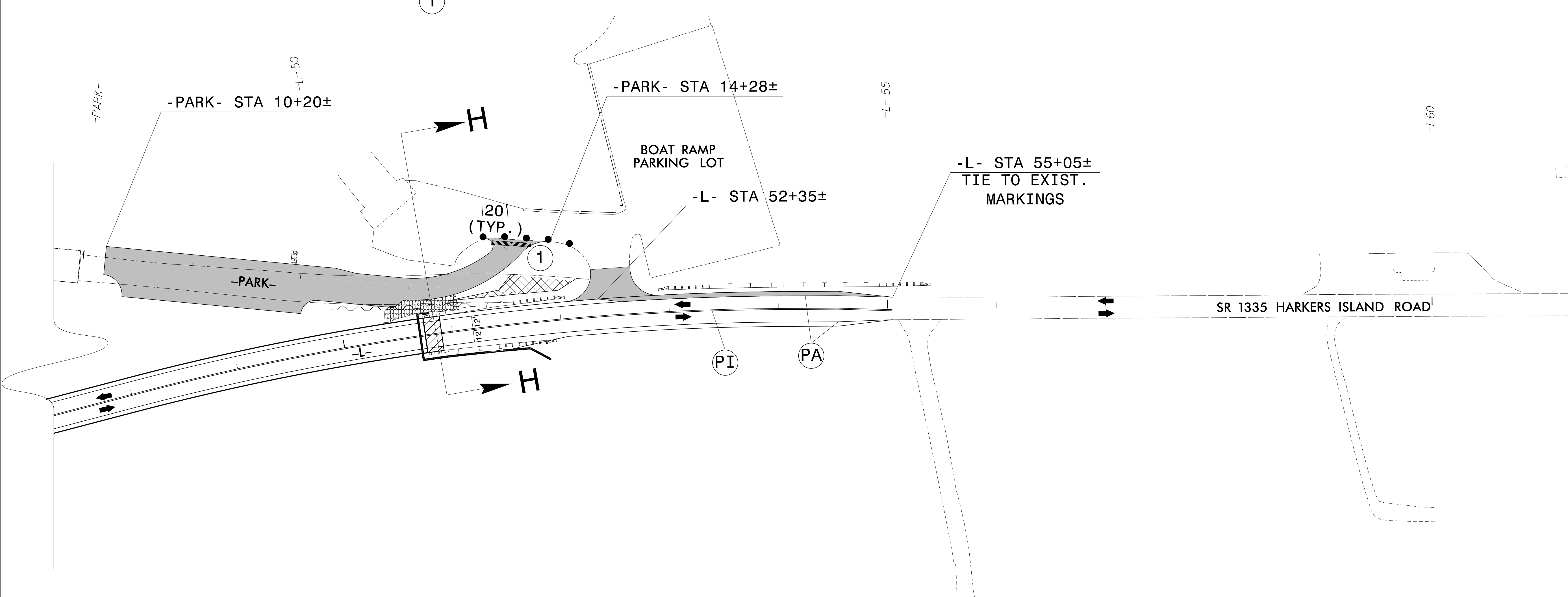
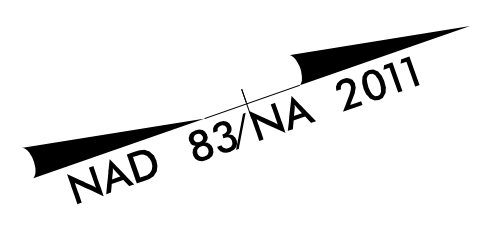
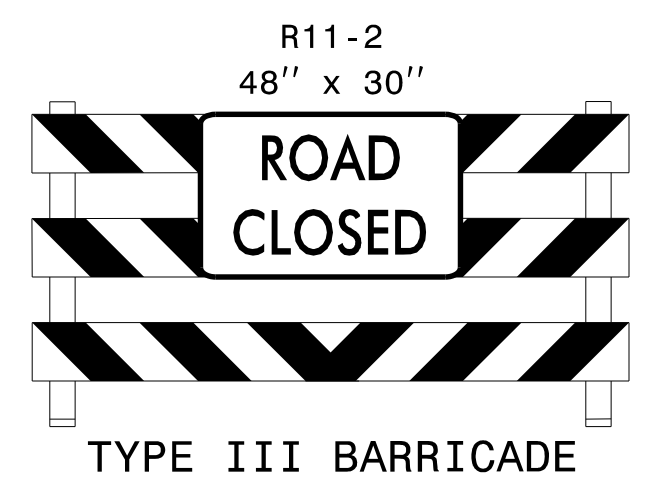


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PHASE IV DETAIL

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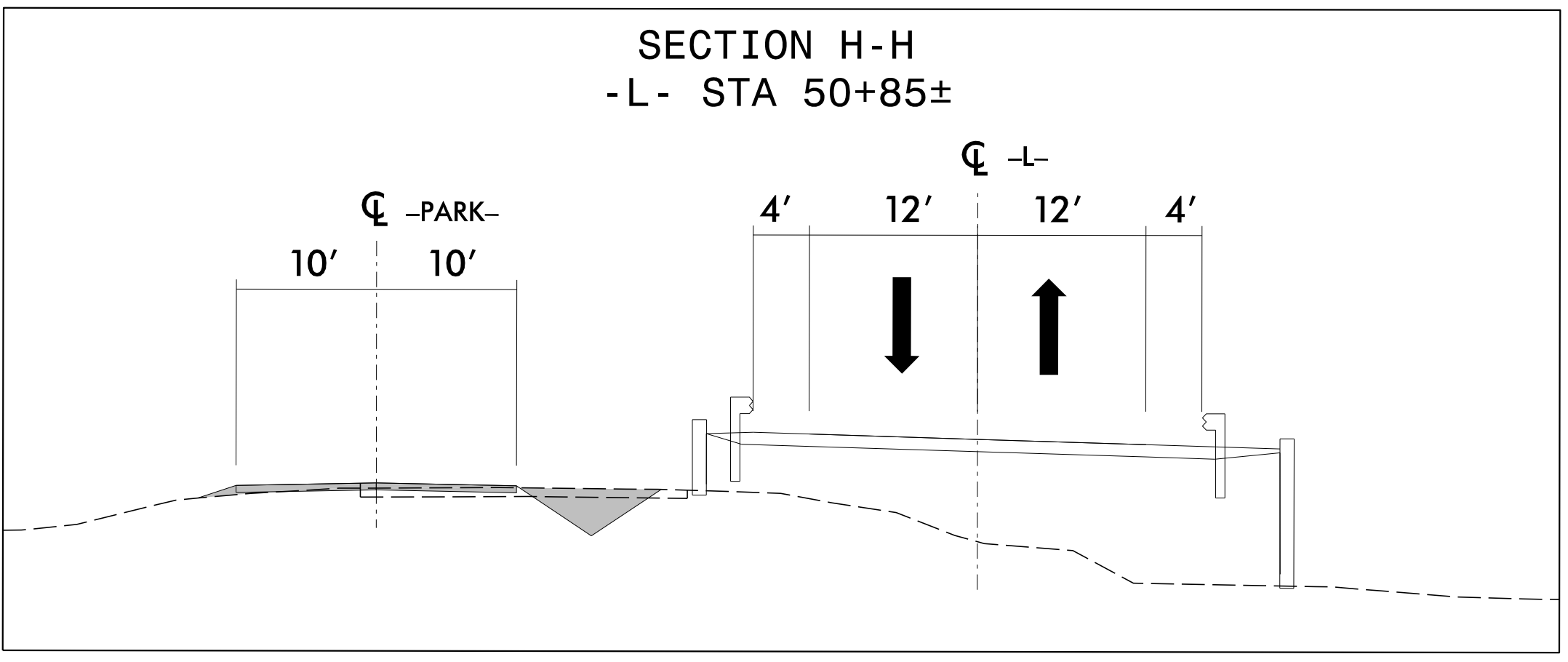
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1

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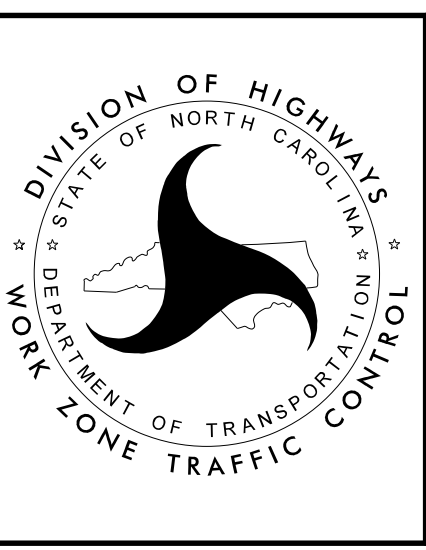


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DATE: 4/8/2021

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SEAL  
030952  
ENGINEER  
DENVER D. FARRINGHAM

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PHASE IV DETAIL