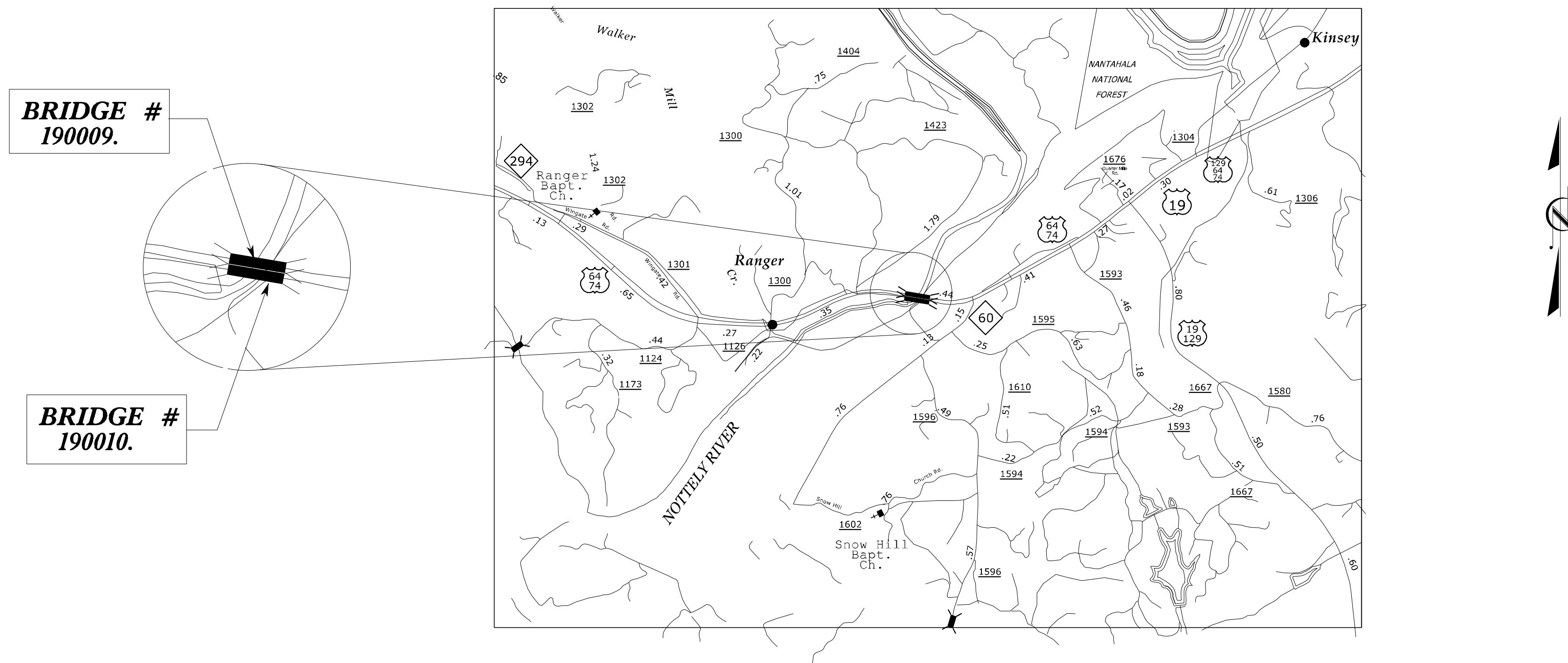
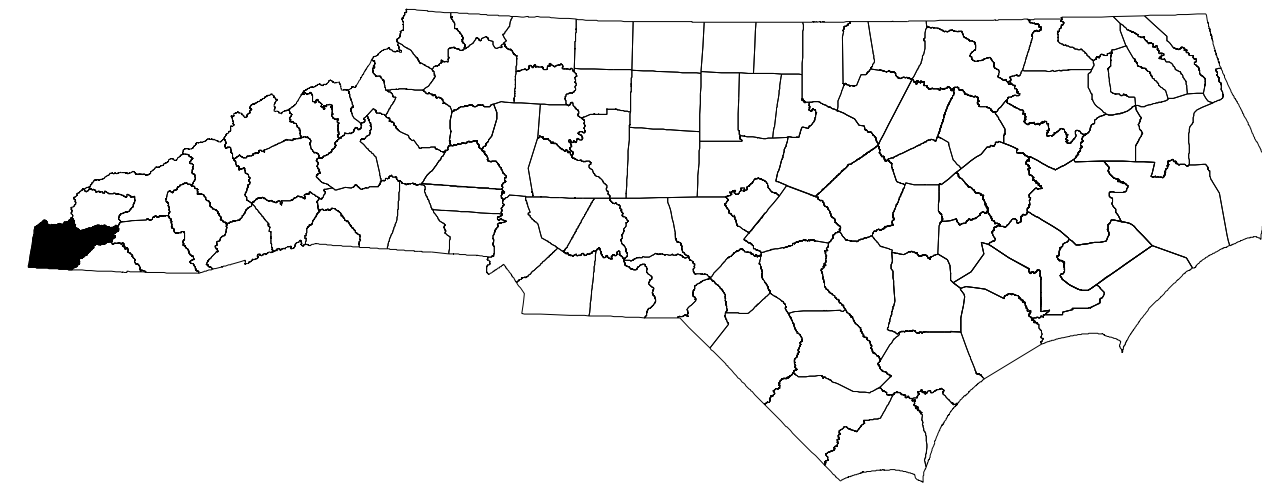


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**  
**CHEROKEE COUNTY**



**LOCATION: BRIDGE NO. 190009 ON US 64 & US 74 EBL OVER NOTTELEY RIVER AND GRAVEL RD.  
BRIDGE NO. 190010 ON US 64 & US 74 WBL OVER NOTTELEY RIVER AND GRAVEL RD.**

**TYPE OF WORK: BRIDGE PRESERVATION - DECK REPAIR, LATEX MODIFIED CONCRETE (LMC) OVERLAY, FOAM JOINT SEALS FOR PRESERVATION, LINK SLAB FOR PRESERVATION, REPAIRS TO PRESTRESSED CONCRETE GIRDERS, PAINTING EXISTING WEATHERING STEEL BEAM ENDS, PAINTING EXISTING NON WEATHERING STEEL BEAMS, CLEANING AND PAINTING EXISTING BEARING WITH HRCSA, EPOXY COATING CONCRETE GIRDER ENDS, EPOXY COATING AND DEBRIS REMOVAL FROM TOP OF END BENT AND BENT CAPS, SUBSTRUCTURE REPAIR.**

**INDEX OF SHEETS**

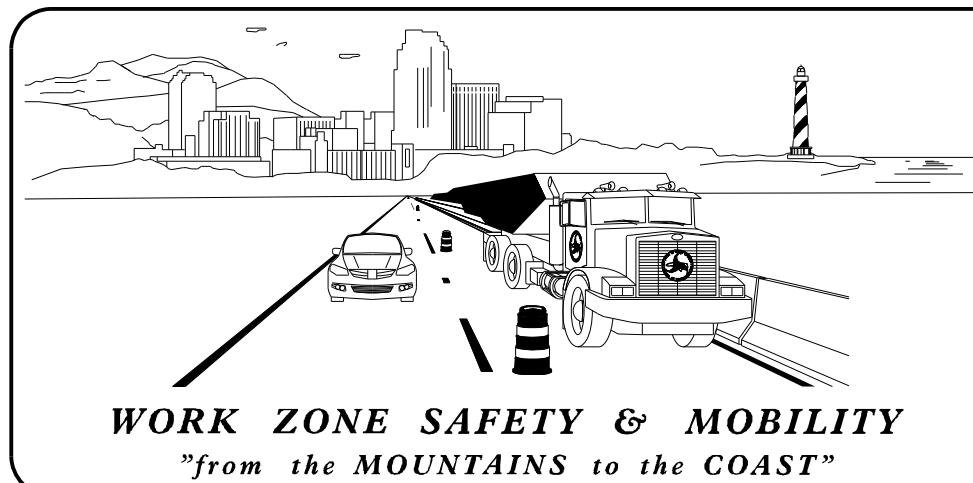
SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B	TRANSPORTATION OPERATIONS PLAN: GENERAL NOTES
TMP-1C	TRANSPORTATION OPERATIONS PLAN: PHASING
TMP-2	TYPICAL SECTIONS
TMP-3	PLAN VIEW - TRAFFIC SHIFT

SHEET NO.  
TMP-1

**15BPR.125.3**

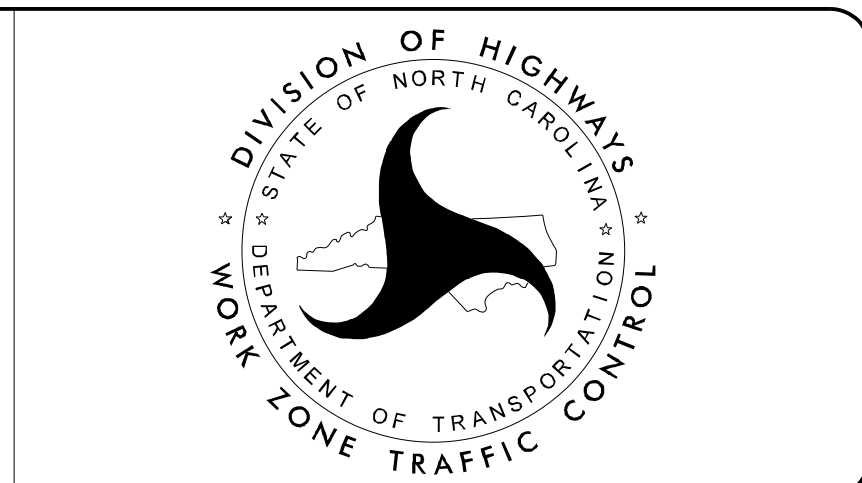
**TIP PROJECT:**

9/20/2023  
Y:\Special\15BPR\TrafficControl\15BPR.61.TC.TMP.L.dgn  
User:hdawandos



**PLANS PREPARED BY:**  
HABIB A. LAWANDOS

**NCDOT CONTACTS:**  
ZACHARY T. CLARK, P.E.  
PROJECT ENGINEER  
KARMEN E. DAIS, P.E.  
PROJECT DESIGN ENGINEER



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

**APPROVED:** *Zachary T. Clark*  
DATE: 10/03/2023

SEAL  
NORTH CAROLINA PROFESSIONAL SEAL 045090 ENGINEER ZACHARY T. CLARK

# 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:

<u>STD. NO.</u>	<u>TITLE</u>
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1165.01	TRUCK MOUNTED ATTENUATOR
1180.01	SKINNY - DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)

# 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

### SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY
- PORTABLE

### 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

COLD APPLIED PLASTIC TYPE IV - REMOVABLE TAPE  
C1- WHITE EDGELINE (4")

6/8/2023  
N:\Special\15BPR61\TrafficControl\TCP\15BPR.61.TC.TMP.1A.dgn  
User:kedals

APPROVED: DATE: 06/09/2023			<h2 style="margin: 0;">ROADWAY STANDARD DRAWINGS &amp; LEGEND</h2>
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			



## 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 UNDESIRABLE 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

NOTE: THESE RESTRICTIONS DO NOT APPLY DURING THE 15-DAY LANE CLOSURES PER THE PHASING.

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
US 64 / US 74	MONDAY THRU FRIDAY 7:00 A.M. - 9:00 A.M. 4:00 P.M. - 6:00 P.M.

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

ROAD NAME
US 64 / US 74

### HOLIDAY

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

- FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY AND 6:00 P.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- FOR LEAF SEASON, ALL WEEKENDS BETWEEN OCTOBER 12TH AND OCTOBER 31ST, BETWEEN THE HOURS OF 7:00 A.M. THE FRIDAY AND 6:00 P.M. THE FOLLOWING MONDAY.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS DURATION & OPERATION
US 64 / US 74	MONDAY THRU SUNDAY 6:00 A.M. - 7:00 P.M. 20 MINUTES FOR ANY TRAFFIC OPERATION REQUIRING TRAFFIC TO BE STOPPED

### LANE AND SHOULDER CLOSURE REQUIREMENTS

- 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.
- 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.
- 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 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.
- 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.
- DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON US 64 / US 74.

### PAVEMENT EDGE DROP OFF REQUIREMENTS

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

### TRAFFIC PATTERN ALTERATIONS

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

### SIGNING

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

### TRAFFIC BARRIER

- 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.

- 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

- 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.

### PAVEMENT MARKINGS AND MARKERS

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

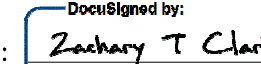
ROAD NAME	MARKING
US 64 / US 74	COLD APPLIED PLASTIC TYPE IV (REMOVABLE TAPE)

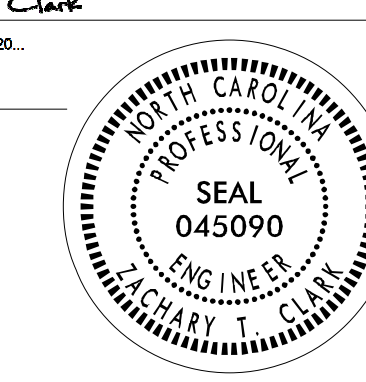
- TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

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

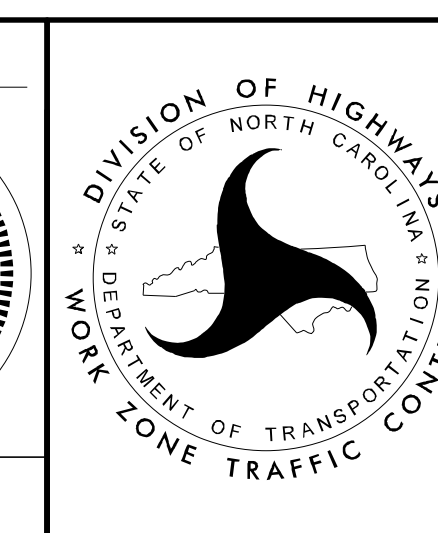
### MISCELLANEOUS

- COORDINATE WITH THE ENGINEER AND THE OVERSIZE/OVERWEIGHT PERMIT UNIT AT 919-814-3700 FOR WIDE-LOAD DETOUR ROUTES WHEN 16' CLEAR ROADWAY WIDTH IS NOT PROVIDED.

APPROVED:   
SC42A7F17FD420...  
 DATE: 10/03/2023



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UNLESS ALL SIGNATURES COMPLETED**



**TRANSPORTATION  
OPERATIONS PLAN:  
GENERAL NOTES**

## PHASING

### PHASE I

STEP 1:  
USING RSD 1101.01, SHEET 1 OF 3, INSTALL ADVANCE WORK ZONE WARNING SIGNS ON US 64 / US 74.

COMPLETE THE WORK REQUIRED OF PHASE I STEP 2A-2D WITHIN FIFTEEN (15) CONSECUTIVE CALENDAR DAYS FOR EACH LANE. SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES.

#### NOTES:

- THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR WHICH LANE / DIRECTION TO START CONSTRUCTION.
- THE CONTRACTOR SHALL NOT CLOSE MORE THAN ONE LANE AT A TIME IN EACH DIRECTION.
- THE CONTRACTOR MAY ELECT TO WORK ON ONE LANE IN EACH DIRECTION AT THE SAME TIME.

STEP 2:  
USING RSD 1101.02, SHEET 4 OF 14 (WITH STATIONARY SIGNS IN LIEU OF PORTABLE SIGNS) AND SHEETS TMP-2 & TMP-3, PERFORM BRIDGE WORK AS FOLLOWS:

- A- INSTALL ANCHORED PCB, CRASH CUSHION, AND TEMPORARY PAVEMENT MARKINGS AS SHOWN ON SHEETS TMP-2 & 3.  
NOTE: REMOVE ALL CONFLICTING PAVEMENT MARKING AS NECESSARY.
- B- COMPLETE DEMOLITION OF BRIDGE DECK AND CONSTRUCTION OF LINK SLABS IN THE CLOSED LANE ACCORDING TO THE CONSTRUCTION PLANS.
- C- COMPLETE SCARIFICATION, HYDRODEMOLITION, AND LMC OVERLAY IN THE CLOSED LANE ACCORDING TO THE CONSTRUCTION PLANS.
- D- PLACE TEMPORARY PAVEMENT MARKING, REMOVE CONFLICTING PAVEMENT MARKING, REMOVE OR RESET ANCHORED PCB, AND OPEN THIS LANE TO TRAFFIC.

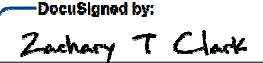
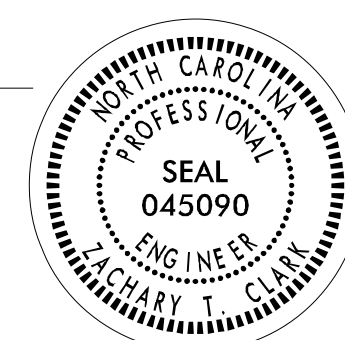
NOTE: REPEAT STEP 2A-2D FOR EACH LANE IN BOTH DIRECTIONS OF US 64 / US 74.

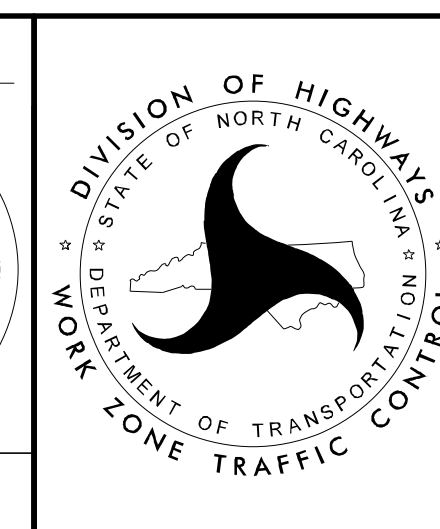
STEP 3:  
UPON COMPLETION OF PROPOSED CONSTRUCTION OF BOTH BRIDGES, REMOVE PCB, PLACE TEMPORARY PAVEMENT MARKING IN EXISTING PATTERN, AND OPEN TO TRAFFIC.

STEP 4:  
USING SHORT TERM LANE CLOSURE, RSD 1101.02, SHEET 4 OF 14, PLACE FINAL PAVEMENT MARKINGS AND MARKERS IN THE EXISTING TRAFFIC PATTERN AND OPEN TO TRAFFIC.

STEP 5:  
REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES.

10/2/2023  
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User:hdawandos

APPROVED:  <small>DocuSigned by: Zachary T. Clark 9C4DA7F17F8D420...</small>	
DATE: 10/03/2023	
<b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b>	



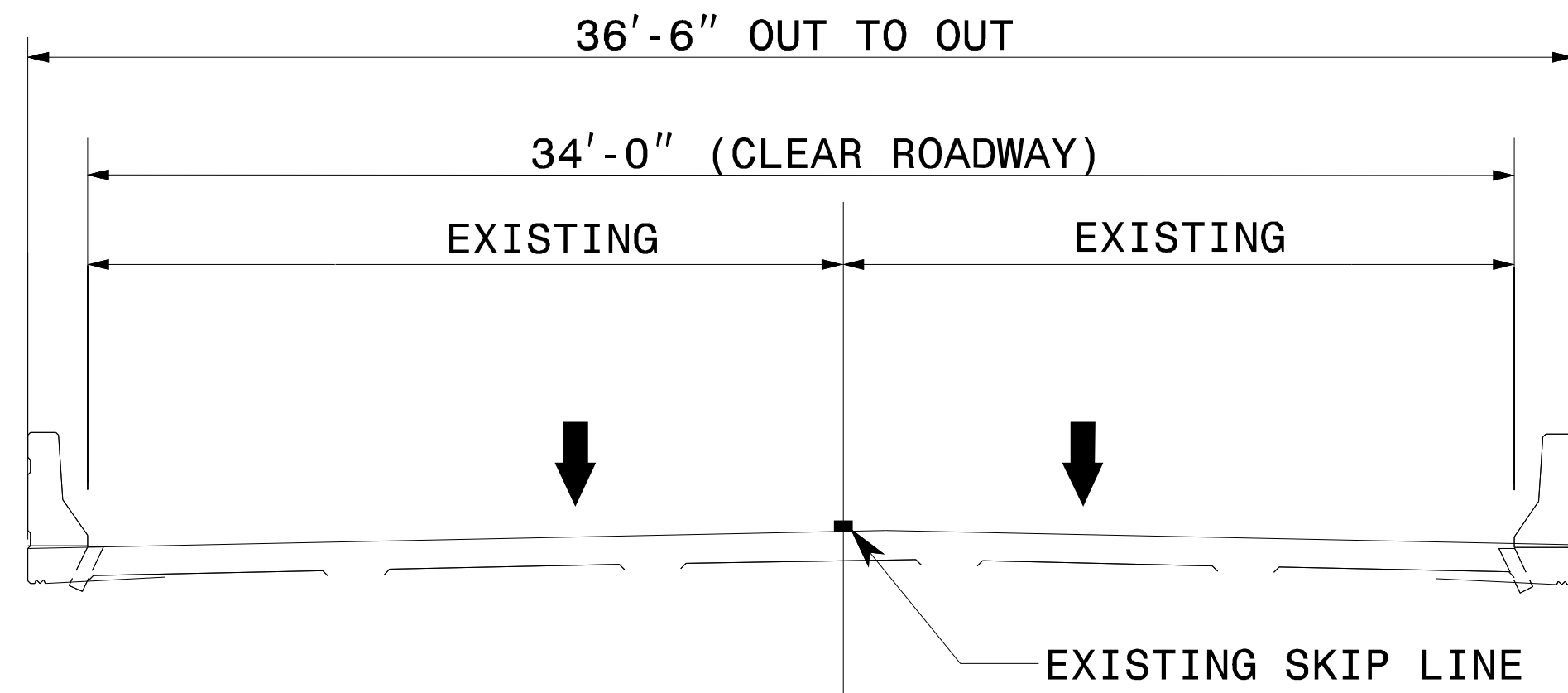
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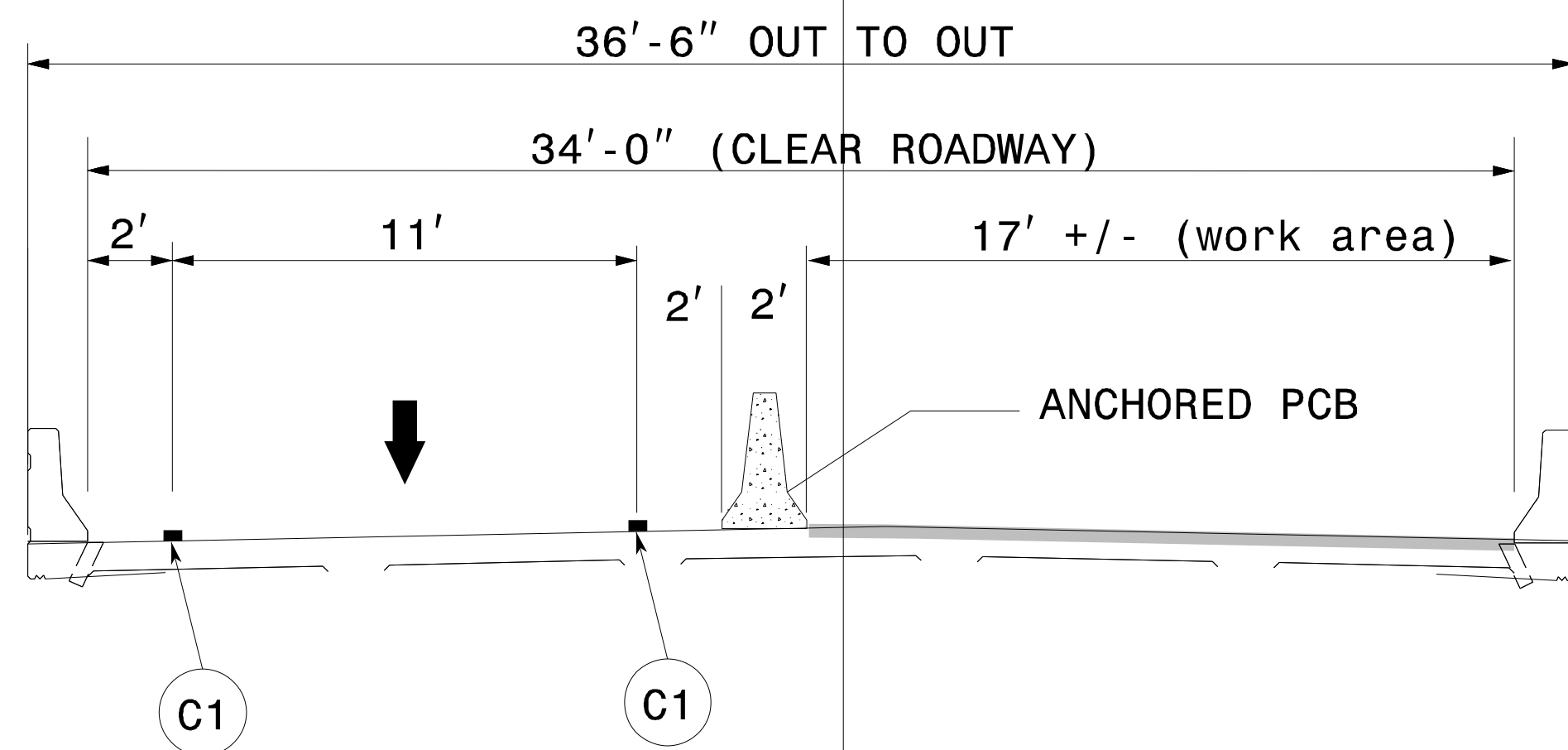
BRIDGE #: 190009  
US 64 / US 74 EB

THE DURATION OF ANY LANE CLOSURE IS  
FIFTEEN (15) CONS. CALENDAR DAYS ONLY

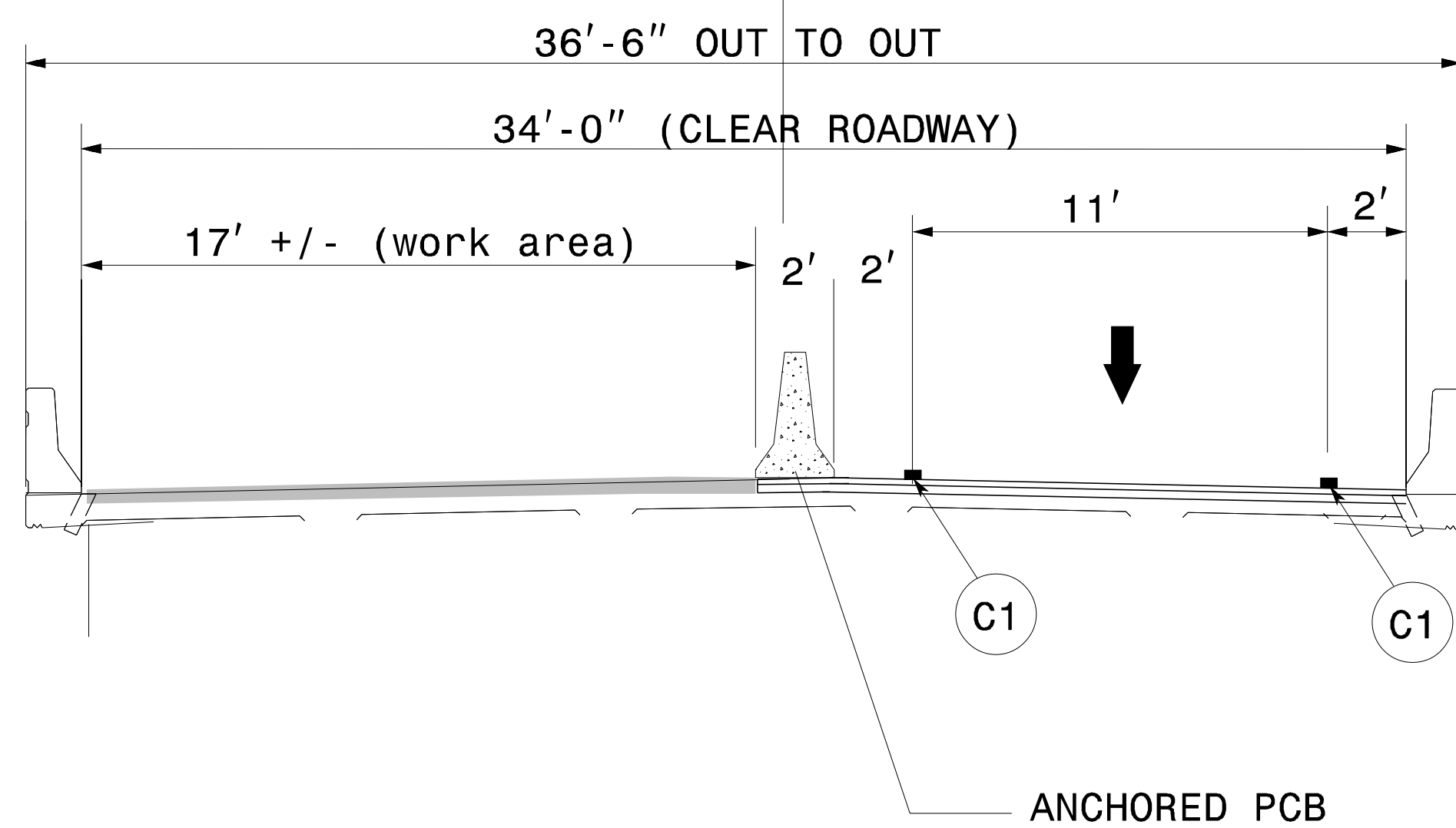
BRIDGE #: 190010  
US 64 / US 74 WB



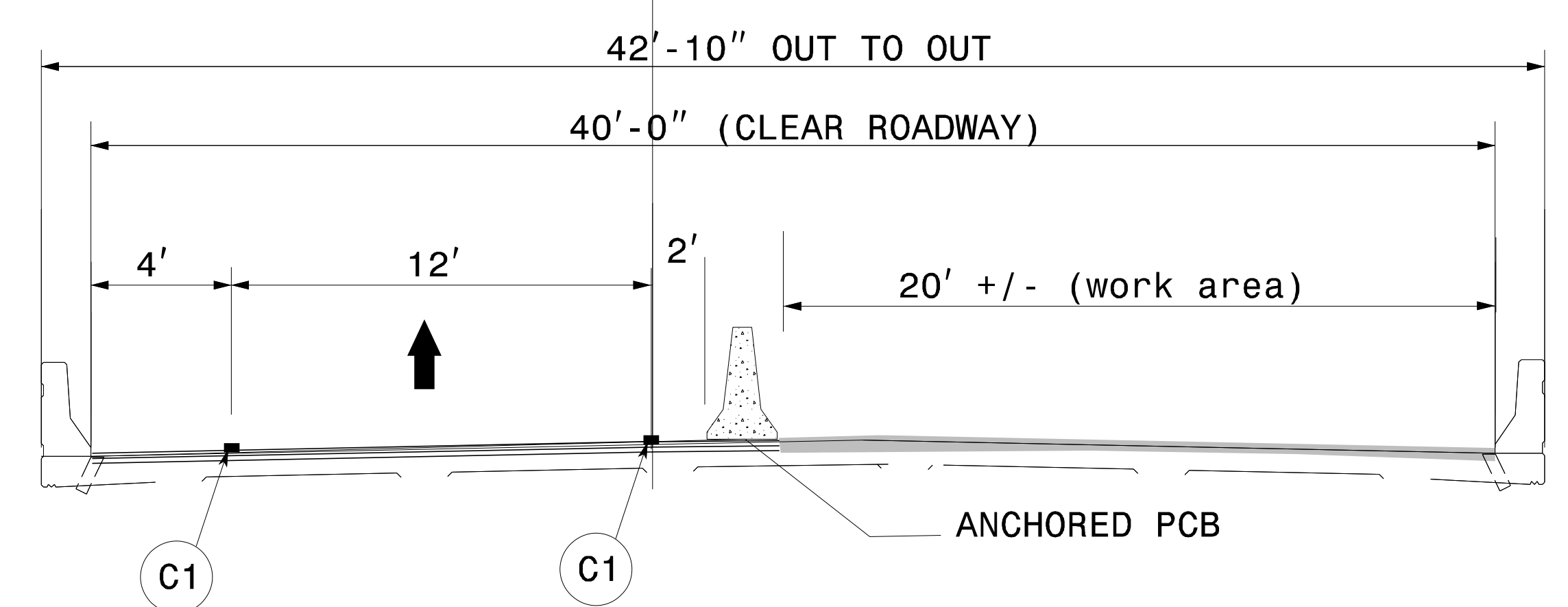
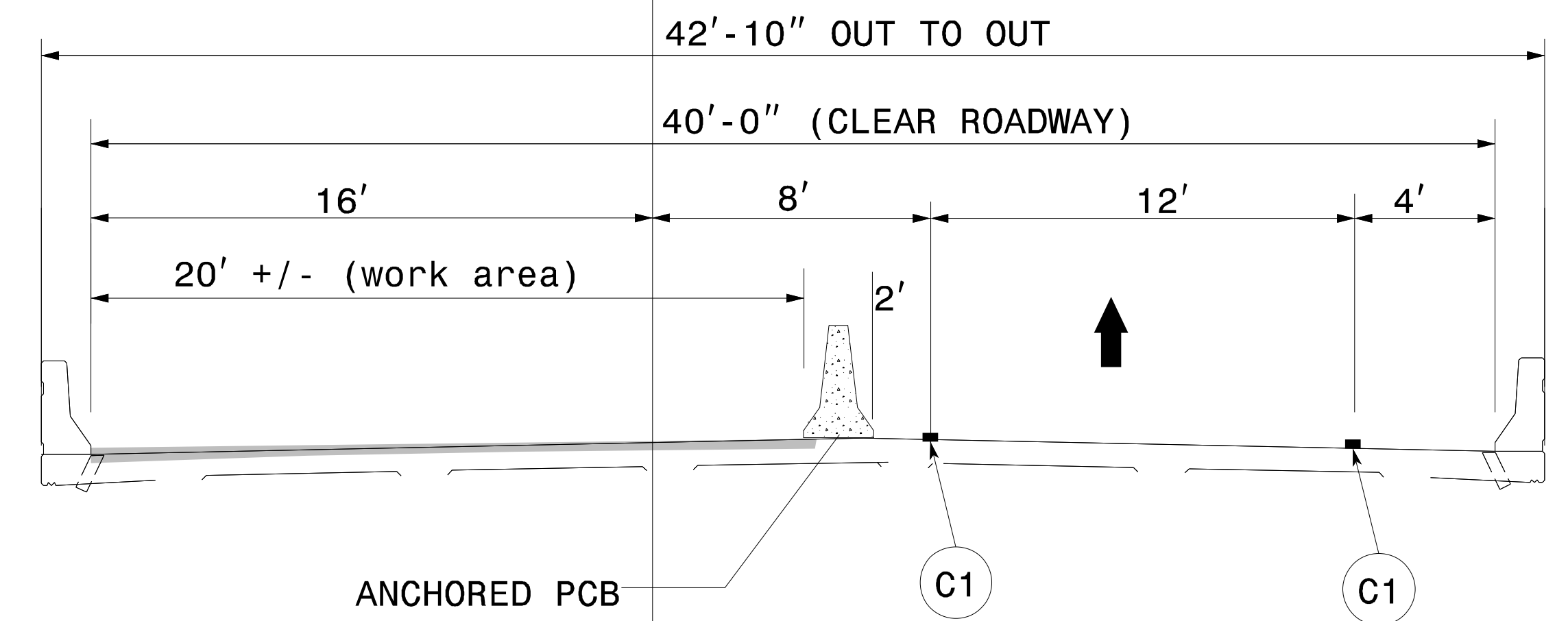
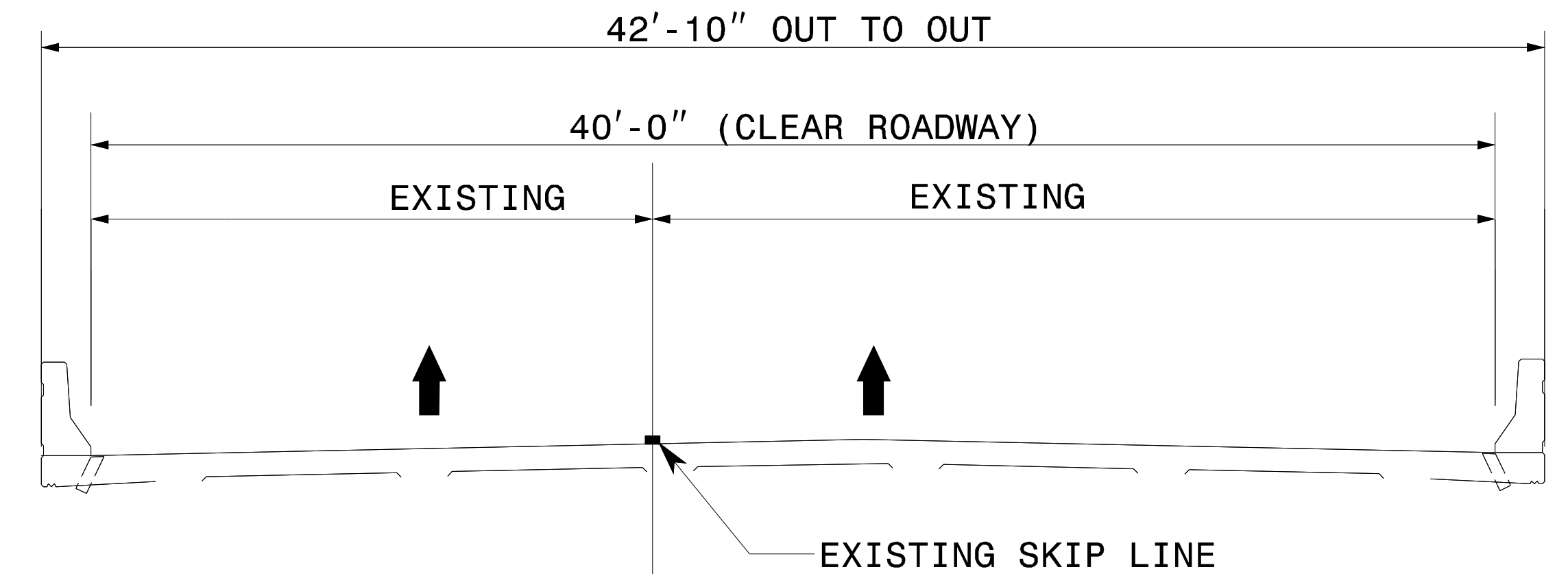
EXISTING



LEFT LANE LMC WORK



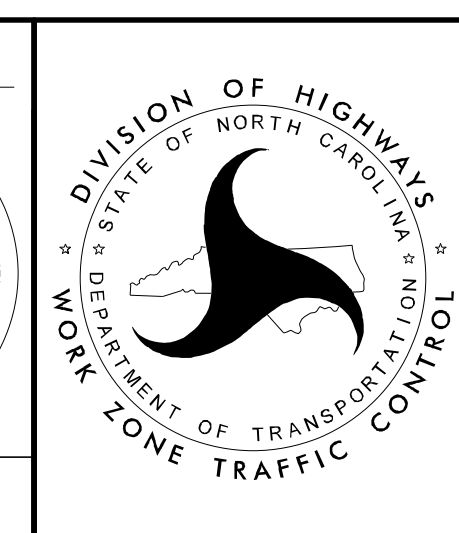
RIGHT LANE LMC WORK



APPROVED: *Zachary T. Clark*  
DATE: 10/03/2023

SEAL  
045090  
ENGINEER  
ZACHARY T. CLARK

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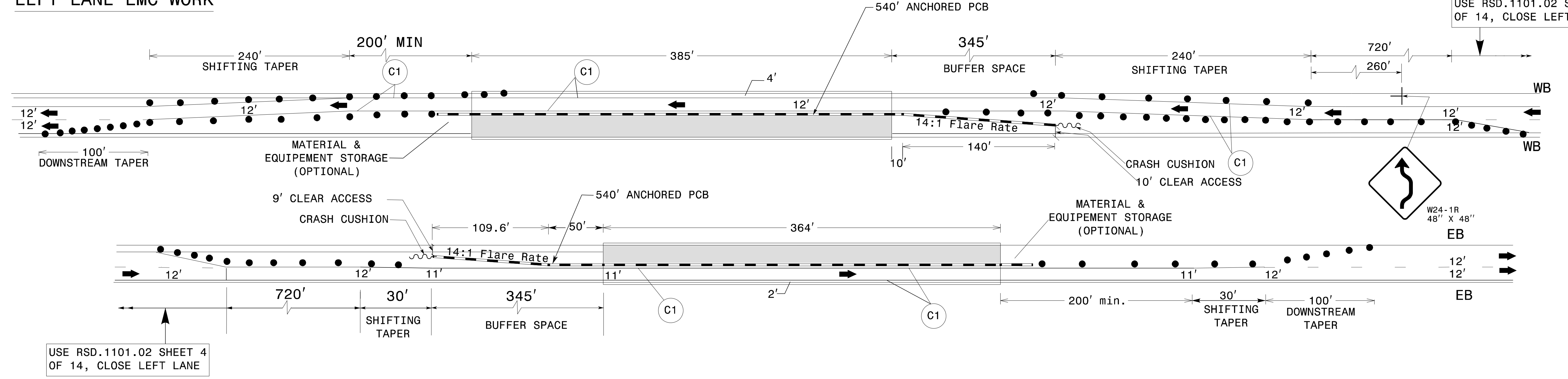


TYPICAL SECTIONS

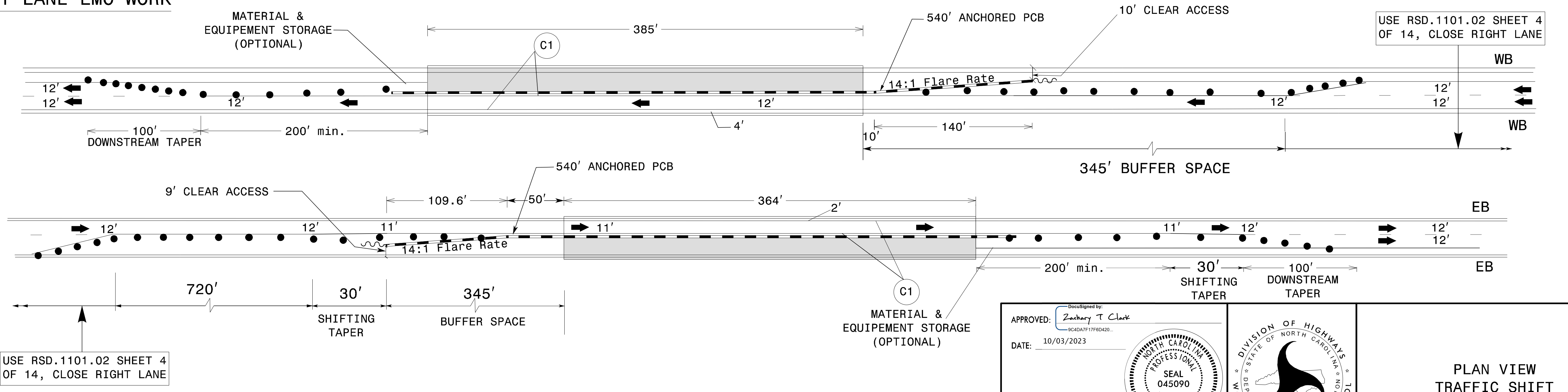
**EXISTING**



**LEFT LANE LMC WORK**



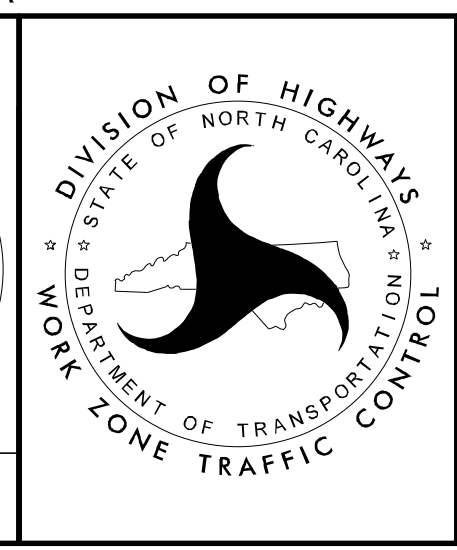
**RIGHT LANE LMC WORK**



APPROVED: *Zachary T. Clark*  
 DATE: 10/03/2023

Professional Engineer Seal:  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 045090  
 ZACHARY T. CLARK

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



**PLAN VIEW TRAFFIC SHIFT**

10/3/2023  
 Y:\Special\15BPR\N\TrafficControl\TCP\15BPR.61.TC.TMP\_3.dgn  
 User:hdalwandos