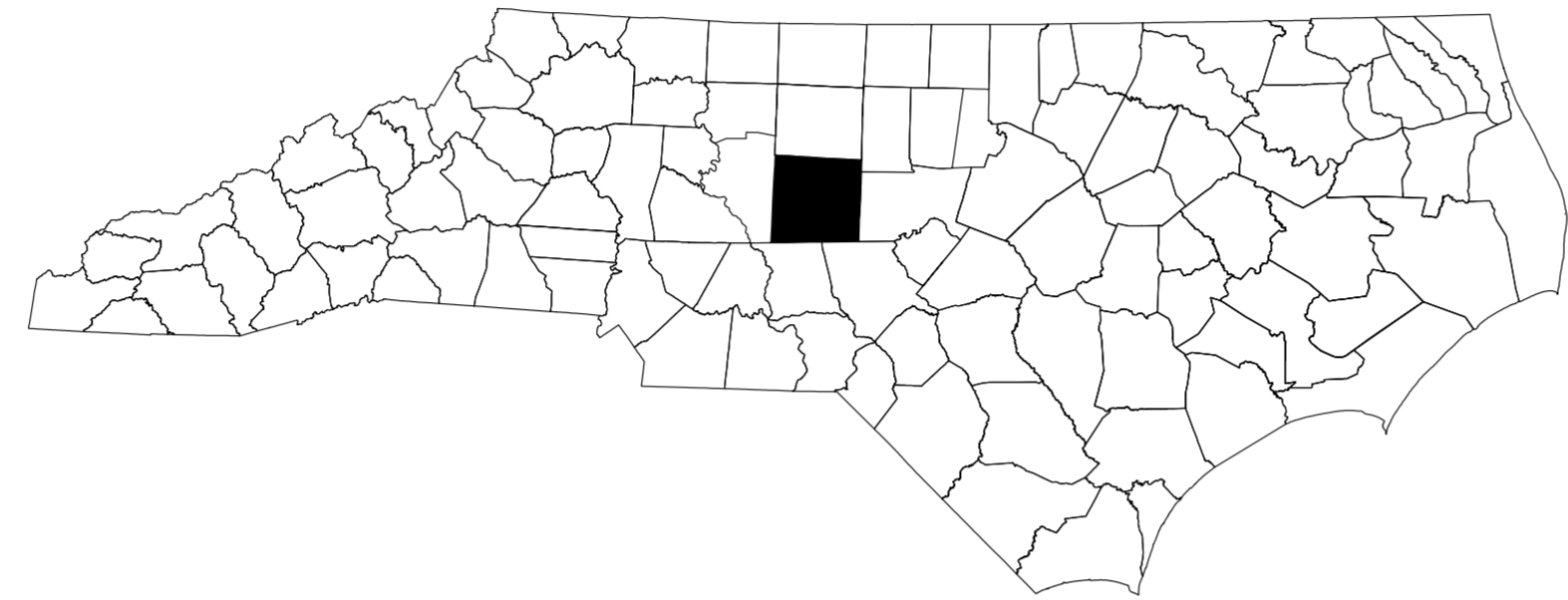


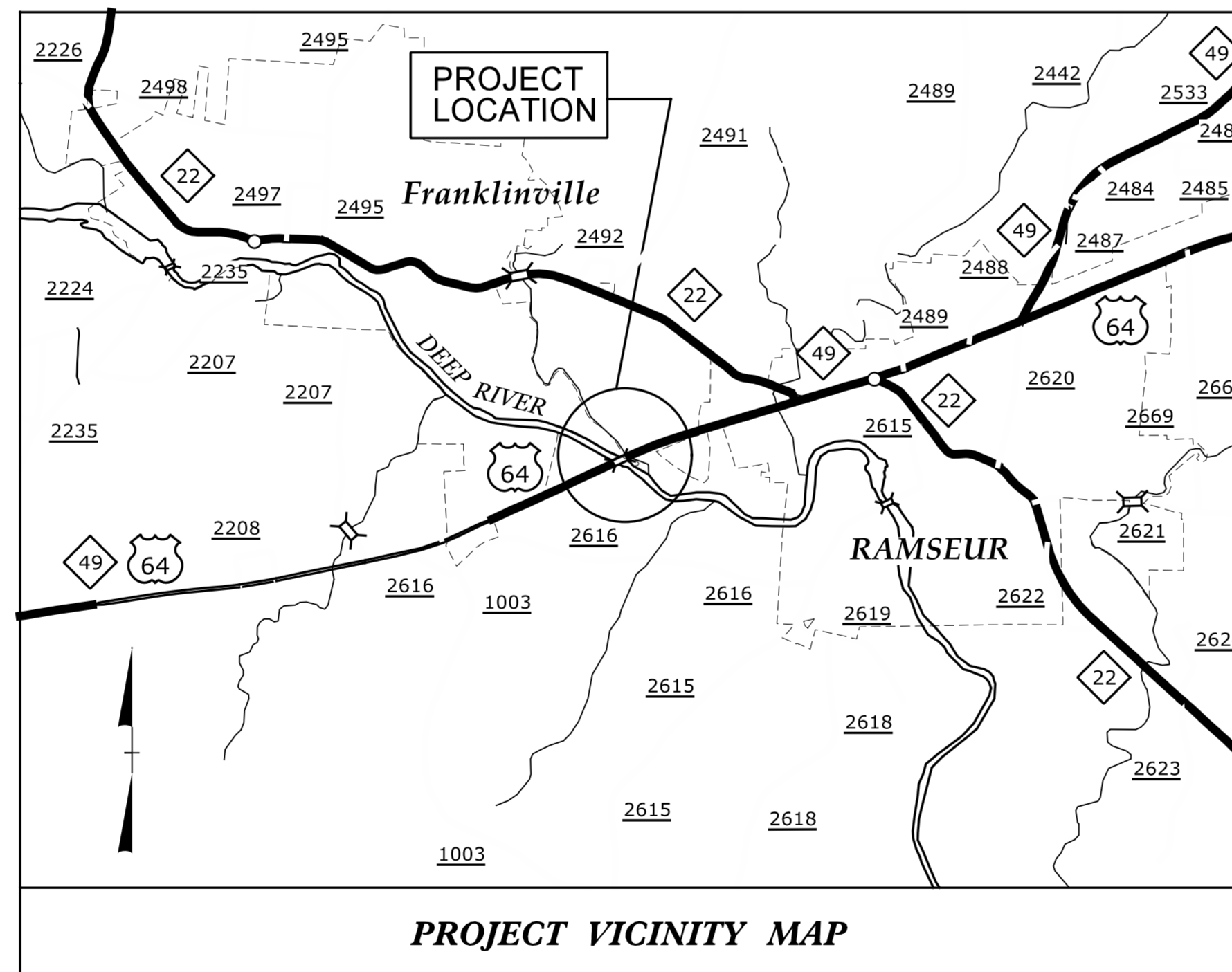
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

**RANDOLPH COUNTY
DIVISION 8**



**BRIDGE REHABILITATION
BRIDGE #191 – US 64 over Deep River (Ramseur)**

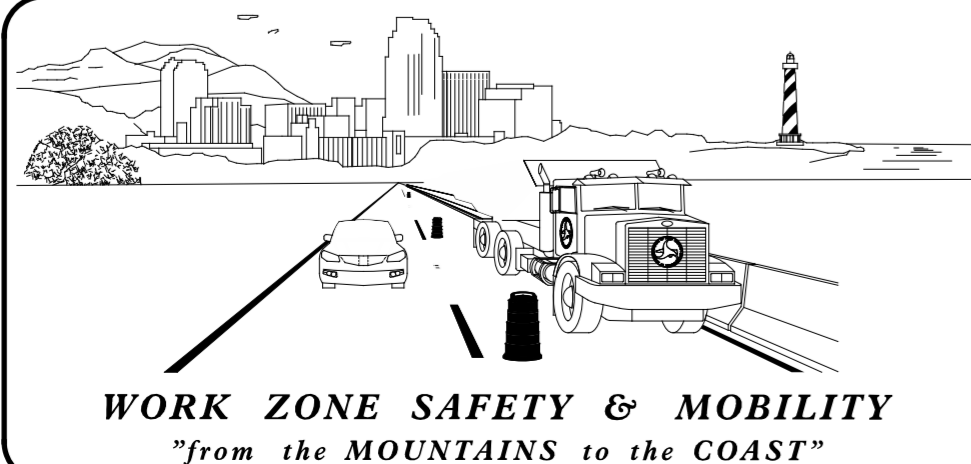


SHEET NO.	TITLE
TMP-1	INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-2	TRAFFIC MANAGEMENT STRATEGY, GENERAL NOTES AND PHASING
TMP-3	SHOULDER AND OUTSIDE LANE WORK AREA DETAILS
TMP-4	INSIDE LANE AND CENTER LANE WORK AREA DETAILS

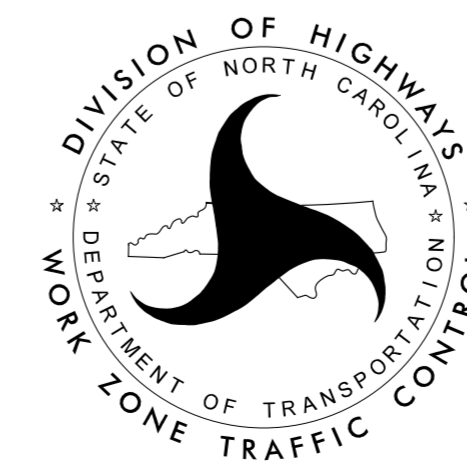
SHEET NO.
TMP-1

WBS 15BPR.3

9/28/2017
P:\LIBR\Projects\Div08\Rand\91\6.0_CAD_BIM\6.2_Work\In_Progress\TrafficControl\TCP\rand91_tmp_1.ttl.dgn
ICA Engineering



PLAN PREPARED FOR NCDOT – DIVISION 8



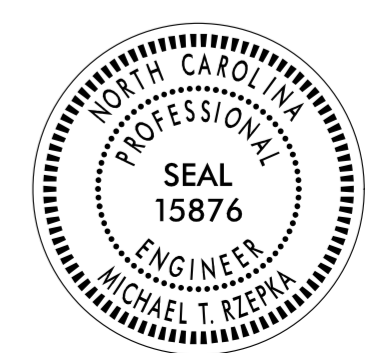
ICR | ICA

ICA Engineering, Inc.
5121 Kingdom Way,
Suite 100
Raleigh, NC 27607
NC License No: F-0258

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

APPROVED: Michael T. Reppin
DATE: 9/29/2017

SEAL



ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	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	DRUM
1135.01	CONES
1145.01	BARRICADES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- WORK AREA

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW PANEL (TYPE C)
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

PAVEMENT MARKERS

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

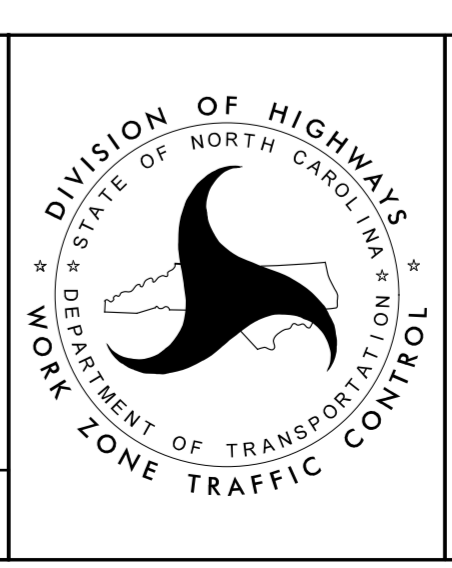
PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

APPROVED:
 DATE: 9/29/2017

SEAL

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



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

ROADWAY STANDARD DRAWINGS
AND LEGEND

9/28/2017
 P:\LIBR\Projects\Div08\Rand_191\6.0_CAD_BIM\6.2_Work\In_Progress\TrafficControl\TCP\rand191_tmp_1file_1a.dgn
 ICA Engineering

TRAFFIC MANAGEMENT STRATEGY

PROPOSED REPAIRS TO BRIDGE #191 WILL BE PERFORMED LANE CLOSURES. REFER TO THIS SHEET FOR PHASING.

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:

ROAD NAME

US 64

HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31st TO 6:00 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 6:00 A.M. THURSDAY AND 6:00 P.M. MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 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 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 6:00 P.M. TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- B) 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.
- C) 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.
- D) 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.

- E) 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.
- F) 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.
- G) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON US 64.

SIGNING

- H) 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.

TRAFFIC CONTROL DEVICES

- I) 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

- J) UPON COMPLETION OF ALL CONSTRUCTION OPERATIONS, INSTALL FINAL PAVEMENT MARKINGS AND PAVEMENT MARKERS IN ORIGINAL LOCATIONS AS FOLLOWS:

ROAD NAME	MARKING	MARKER
US 64	THERMOPLASTIC	PERMANENT RAISED

- K) INSTALL TEMPORARY PAVEMENT MARKINGS AS FOLLOWS UNTIL FINAL MARKINGS ARE PLACED:

ROAD NAME	MARKING	MARKER
US 64	PAINT	NONE

- L) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- M) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

MISCELLANEOUS

- N) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AS DIRECTED BY THE ENGINEER.
- O) MAINTAIN ACCESS TO RESIDENCES/BUSINESSES DURING CONSTRUCTION.

PHASING

USE LANE CLOSURES TO PERFORM BRIDGE WORK AS FOLLOWS:

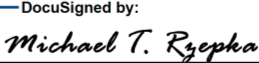
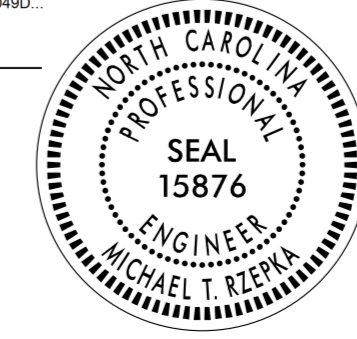
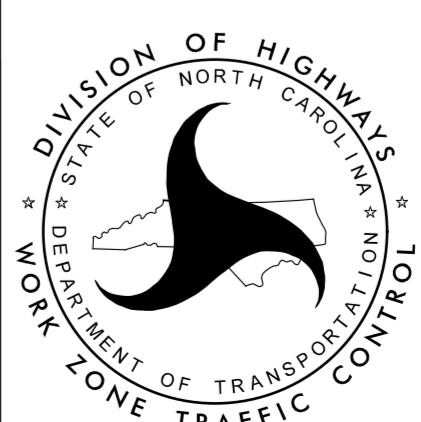
-FOR DECK WORK, USE ROADWAY STANDARD DRAWINGS 1101.02, SHEET 3 OF 15 FOR RIGHT-LANE CLOSURE AND ROADWAY STANDARD DRAWINGS 1101.02, SHEETS 3 AND 7 OF 15 FOR LEFT-LANE CLOSURE. REMOVE LANE CLOSURE AT END OF WORK PERIOD.

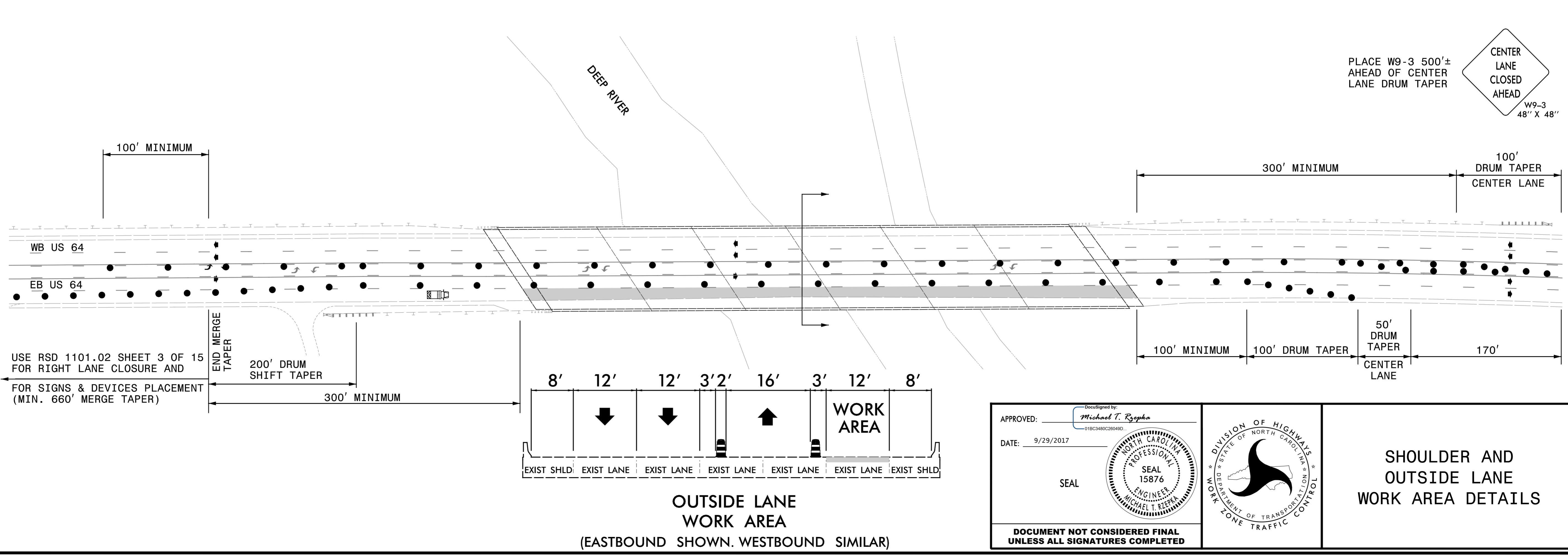
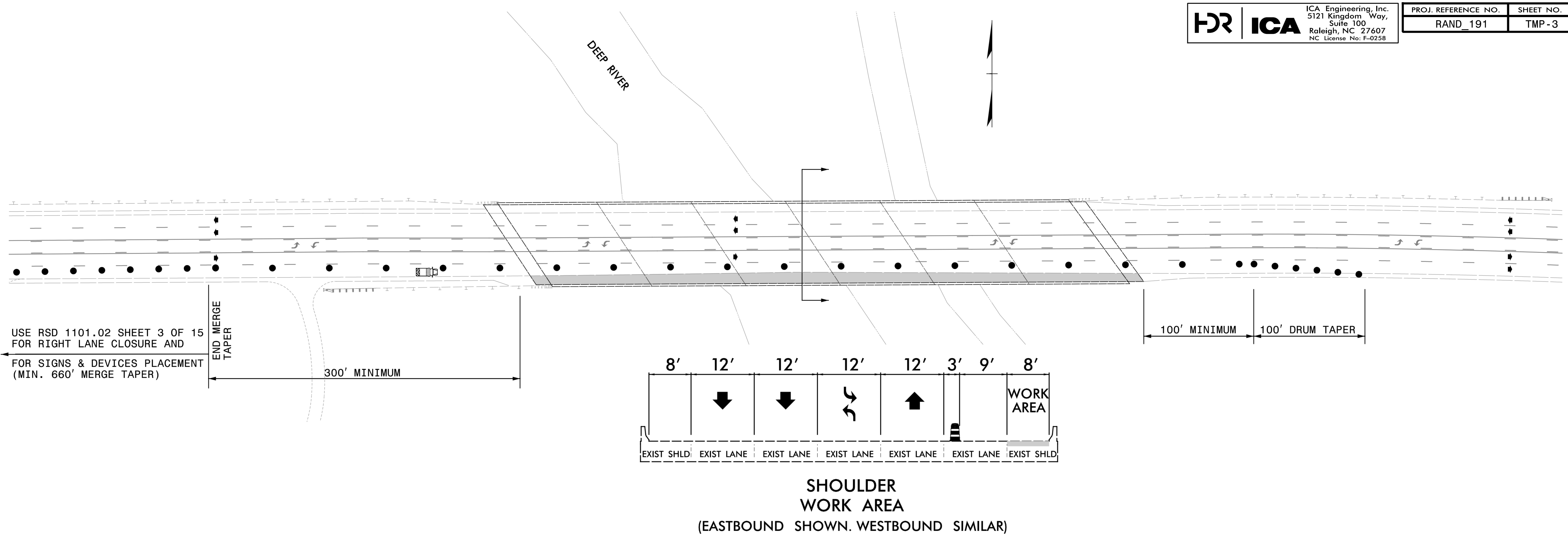
-FOR WORK UNDER THE BRIDGE DECK, USE ROADWAY STANDARD DRAWINGS 1101.02, SHEET 3 OF 15, OR ROADWAY STANDARD DRAWING 1101.04, AS NECESSARY. REMOVE LANE OR SHOULDER CLOSURE AT END OF WORK PERIOD.

SEE SHEETS TMP-3 & TMP-4 FOR LANE CLOSURE CONFIGURATIONS BASED ON WORK LOCATION (EASTBOUND LANE WORK SHOWN. LANE CLOSURES FOR WESTBOUND LANE WORK ARE SIMILAR).

REPLACE PAVEMENT MARKINGS OBLITERATED DURING DECK WORK WITH TEMPORARY PAVEMENT MARKINGS UNTIL FINAL MARKINGS ARE INSTALLED.

9/29/2017 P:\LIBR\Projects\110108\Rand_191\6.0_CAD_BIM\6.2_Work\In-Progress\Traffic\TrafficControl\TCP\rand191_tmp_top_2.dgn ICA Engineering

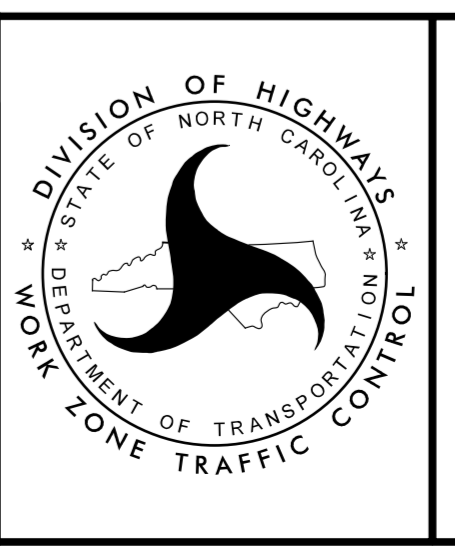
APPROVED:  DATE: 9/29/2017 SEAL 		TRAFFIC MANAGEMENT STRATEGY, GENERAL NOTES & PHASING
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		



APPROVED: *Michael T. Reepha*
 DATE: 9/29/2017

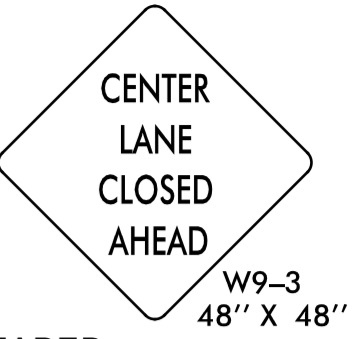
SEAL

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

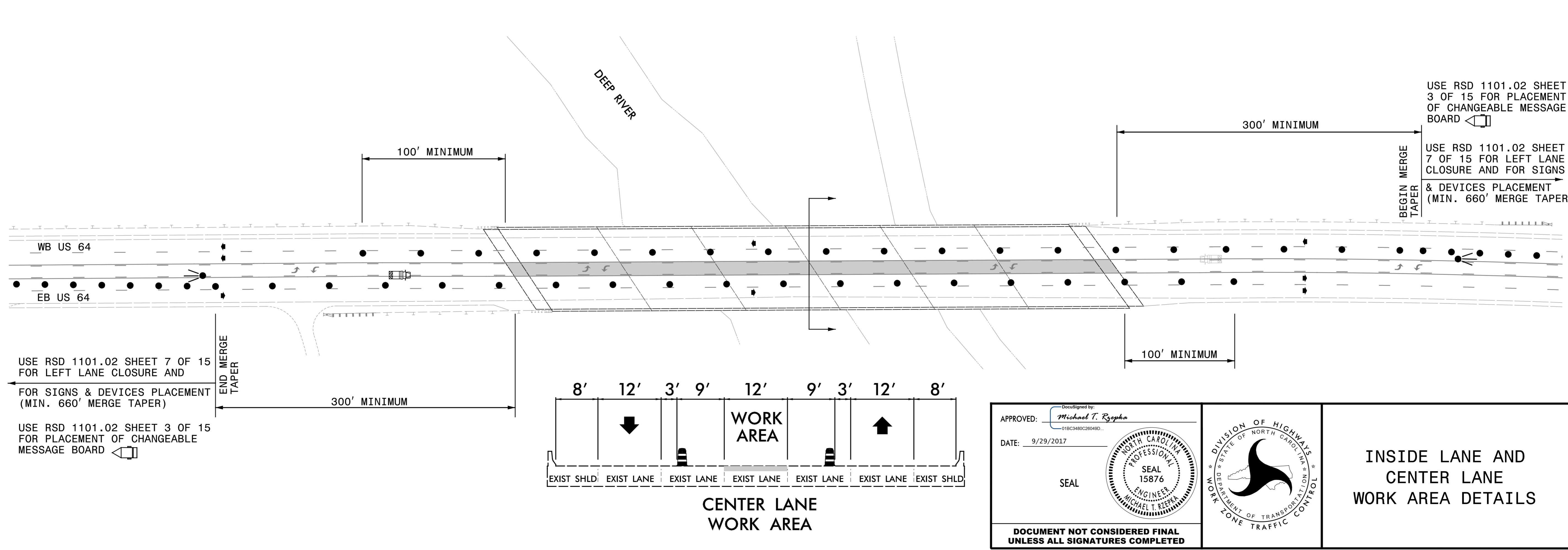
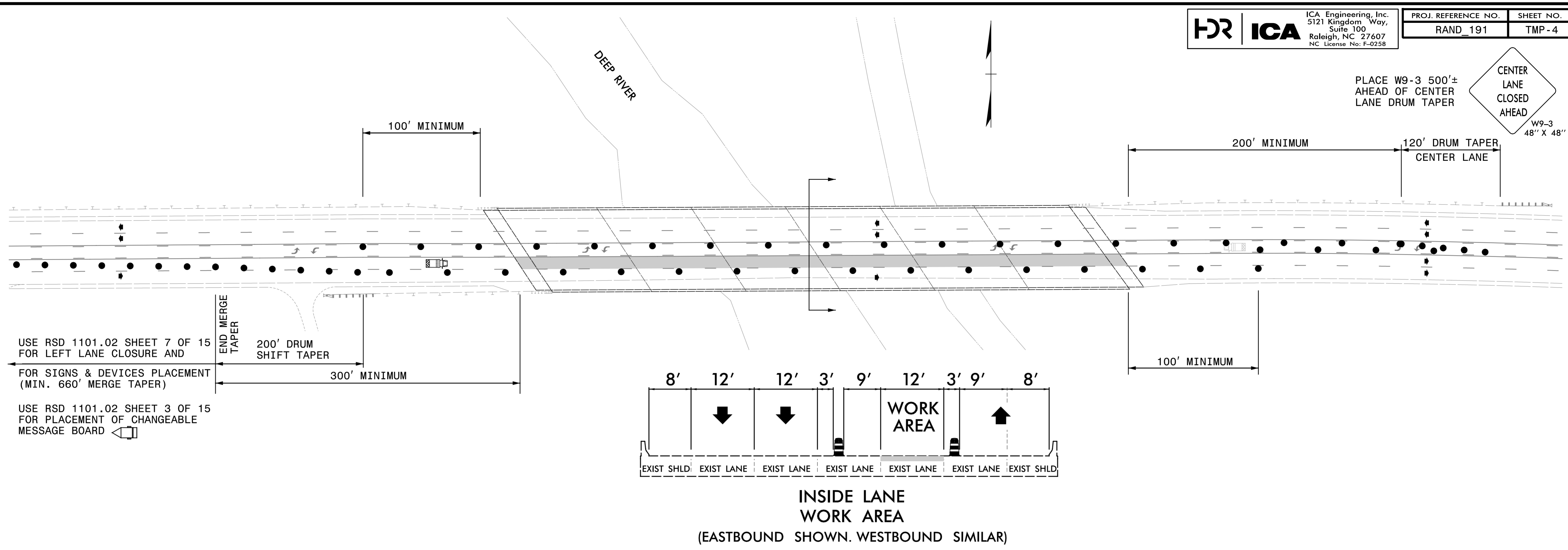


SHOULDER AND OUTSIDE LANE WORK AREA DETAILS

9/28/2017
 P:\LBR\Projects\Div08\Rand_191\6.0_CAD_BIM\6.2_Work_In_Progress\TrafficControl\TCP\rand191_tmp_dtl_3.dgn
 ICA Engineering



PLACE W9-3 500'±
AHEAD OF CENTER
LANE DRUM TAPER



USE RSD 1101.02 SHEET 7 OF 15
FOR LEFT LANE CLOSURE AND
FOR SIGNS & DEVICES PLACEMENT
(MIN. 660' MERGE TAPER)

USE RSD 1101.02 SHEET 3 OF 15
FOR PLACEMENT OF CHANGEABLE
MESSAGE BOARD

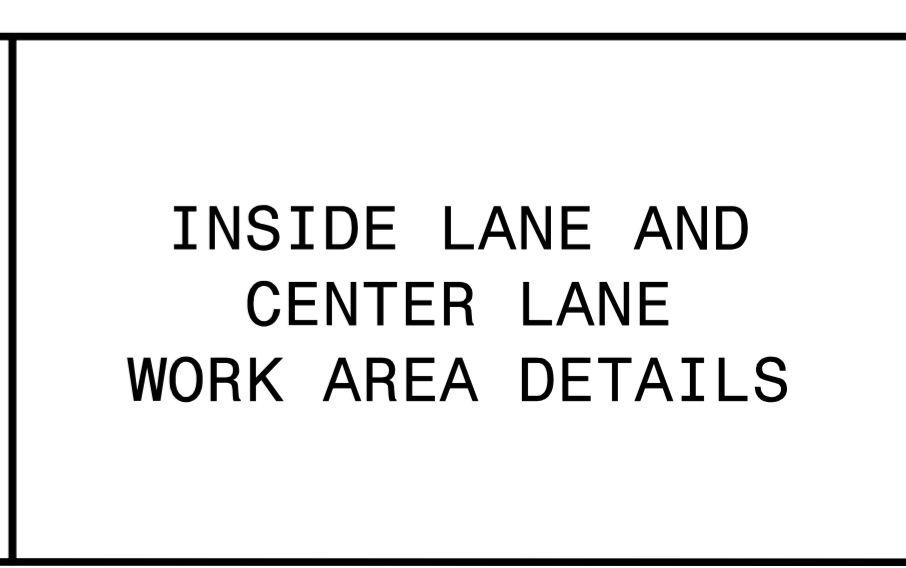
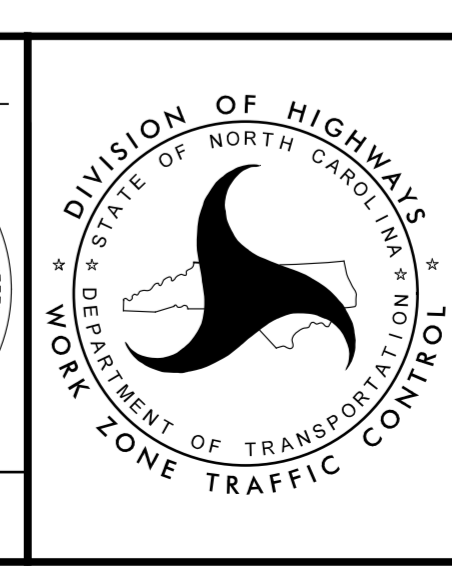
USE RSD 1101.02 SHEET
3 OF 15 FOR PLACEMENT
OF CHANGEABLE MESSAGE
BOARD

USE RSD 1101.02 SHEET
7 OF 15 FOR LEFT LANE
CLOSURE AND FOR SIGNS
& DEVICES PLACEMENT
(MIN. 660' MERGE TAPER)

APPROVED: *Michael T. Rzepka*
DATE: 9/29/2017

SEAL

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



9/28/2017
P:\LBR\Projects\Div08\Rand_191\6.0_CAD_BIM\6.2_Work\In_Progress\TrafficControl\TCP\rand191_tmp_dtl_4.dgn
ICA Engineering