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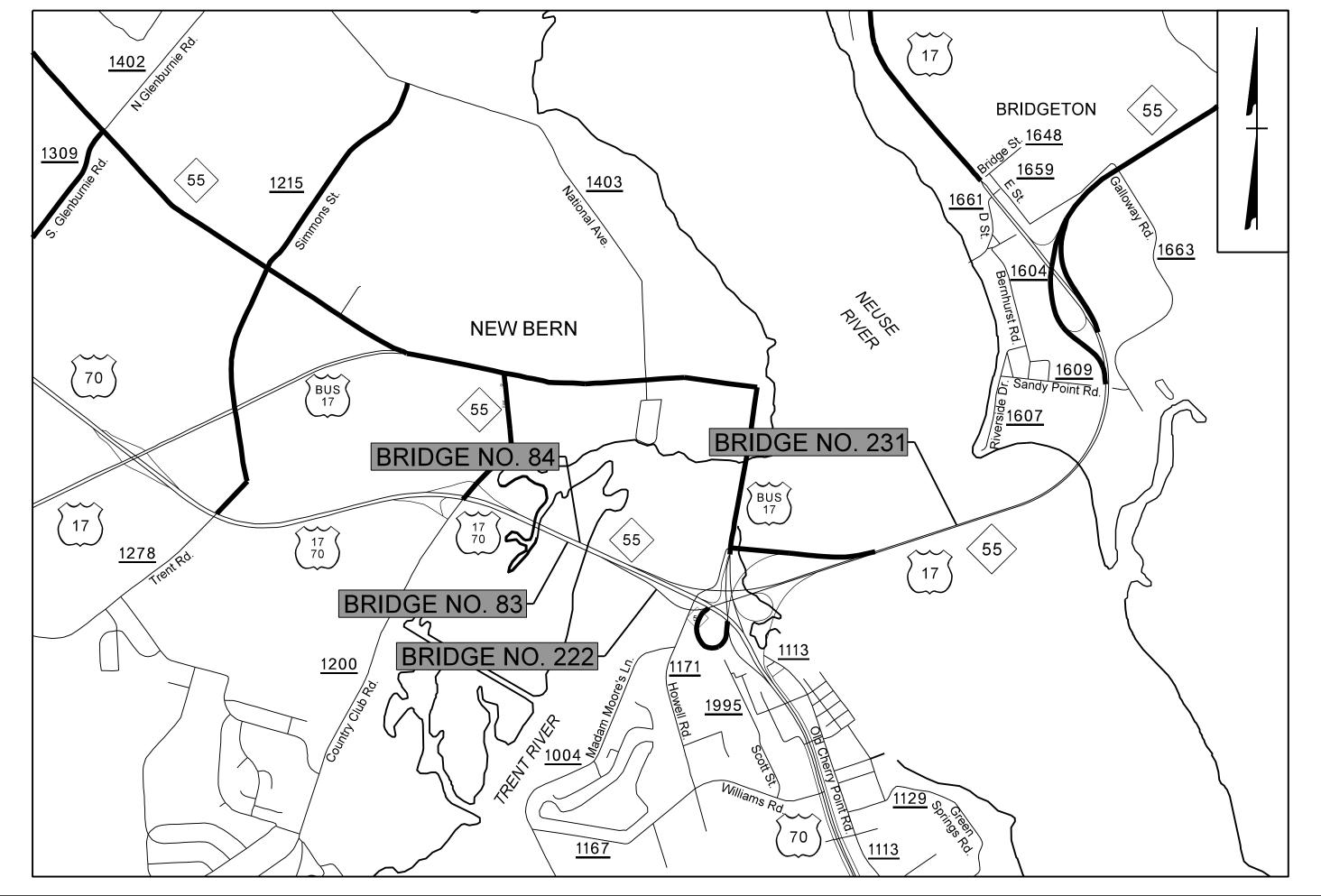
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CRAVEN COUNTY



LOCATION: CRAVEN CO. BRIDGE NOS. 83, 84 & 222 ON US 70 /US 17 /NC 55 OVER THE TRENT RIVER AND CRAVEN CO. BRIDGE NO. 231 ON US 17 /NC 55 OVER THE NEUSE RIVER



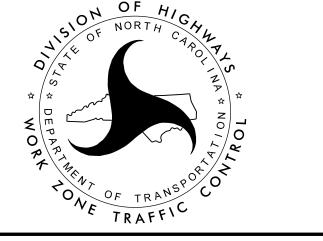
WORK ZONE SAFETY & MOBILITY "from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL 1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER STEVE KITE, P.E.

TRAFFIC CONTROL PROJECT ENGINEER DON PARKER TRAFFIC CONTROL PROJECT DESIGN ENGINEER

TRAFFIC CONTROL DESIGN ENGINEER



INDEX OF SHEETS

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PLAN PREPARED BY:



HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116

MICHELLE WARD, P.E. TRAFFIC CONTROL PROJECT ENGINEER AMY FAULKNER, P.E. TRAFFIC CONTROL DESIGN ENGINEER

CHRIS HARNDEN TRAFFIC CONTROL DESIGNER

> APPROVED: Midulle Ward DATE: 7/15/2015 SEAL

TMP-1

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN 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
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1101.01	WORK ZONE 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	
1115.01	FLASHING ARROW BOARDS	
1130.01	DRUMS	
1145.01	BARRICADES	
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1180.01	SKINNY - DRUM	
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS	
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS	
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMPS	
1205.06	PAVEMENT MARKINGS - LANE DROPS	
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES	
1205.12	PAVEMENT MARKINGS - BRIDGES	
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS	
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING	
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)	

PROJ. REFERENCE NO. SHEET NO. TMP-1A BP-5500FF

HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116

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)

DRUM SKINNY DRUM O TUBULAR MARKER

TEMPORARY CRASH CUSHION

FLASHING ARROW PANEL (TYPE C) FLAGGER

LAW ENFORCEMENT

TRUCK MOUNTED IMPACT ATTENUATOR (TMIA) CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

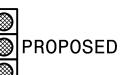
PORTABLE SIGN

STATIONARY SIGN

STATIONARY OR PORTABLE SIGN

SIGNALS





PAVEMENT MARKINGS

——EXISTING LINES ——TEMPORARY LINES

PAVEMENT MARKERS

CRYSTAL/CRYSTAL

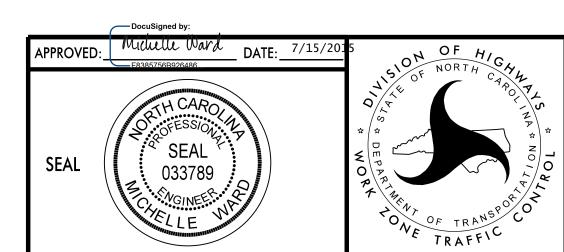
CRYSTAL/RED ◆ YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

- COLD APPLIED PLASTIC 4" WHITE EDGELINE
- COLD APPLIED PLASTIC 4" YELLOW EDGELINE
- COLD APPLIED PLASTIC 4" 10'-30'/SP. WHITE SKIP
- COLD APPLIED PLASTIC 4" 3'-9'/SP. WHITE MINI-SKIP
- COLD APPLIED PLASTIC 4" WHITE GORELINE
- COLD APPLIED PLASTIC MERGE ARROW



GENERAL NOTES

SHEET NO. PROJ. REFERENCE NO. BP-5500FF TMP-2

HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116

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. MODIFICATIONS 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 PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR AS DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

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

ROAD NAMES DAY & TIME RESTRICTIONS US 70, US 17 & NC 55, 12:00 P.M. (NOON) FRIDAY INCLUDING ALL RAMPS TO 10:00 P.M. SUNDAY

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

ROAD NAMES

US 70, US 17 & NC 55, INCLUDING ALL RAMPS

- 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 12:00 P.M. (NOON) DECEMBER 31ST TO 10:00 P.M. JANUARY 2ND. IF NEW YEARS DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 10:00 P.M. THE FOLLOWING TUESDAY.
- 3) FOR EASTER, BETWEEN THE HOURS OF 12:00 P.M. (NOON) THURSDAY AND 10:00 P.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 12:00 P.M. (NOON) FRIDAY AND 10:00 P.M. TUESDAY.
- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 12:00 P.M. (NOON) THE DAY BEFORE INDEPENDENCE DAY AND 10:00 P.M. THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN BETWEEN THE HOURS OF 12:00 P.M. (NOON) THE THURSDAY BEFORE INDEPENDENCE DAY AND 10:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- 6) FOR LABOR DAY, BETWEEN THE HOURS OF 12:00 P.M. (NOON) FRIDAY AND 10:00 P.M. TUESDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 12:00 P.M. (NOON) TUESDAY AND 10:00 P.M. MONDAY.
- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 12:00 P.M. (NOON) THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 10:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- C) 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

- D) 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.
- E) 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.
- F) 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.

G) 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.

- H) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT. ON BOTH SIDES OF AN OPEN TRAVELWAY RAMP OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH BARRIER OR GUARDRAIL.
- I) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON US 70 AND US 17.

PAVEMENT EDGE DROP OFF REQUIREMENTS

J) 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) 500 FT. IN ADVANCE AND A MINIMUM OF ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

K) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

- L) INSTALL ADVANCE WORK ZONE SIGNS WHEN WORK IS WITHIN 40 FT. FROM THE EDGE OF TRAVEL LANE AND NO MORE THAT THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN

TRAFFIC CONTROL DEVICES

- N) 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.
- O) 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

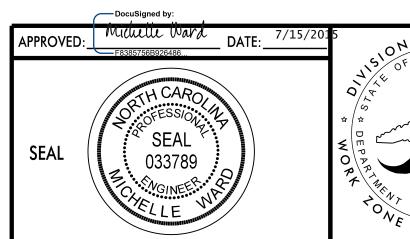
P) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS AS FOLLOWS:

ROAD NAME MARKING MARKER COLD APPLIED PLASTIC TYPE IV ALL ROADS NONE (REMOVABLE TAPE) - 4" (FOR TEMPORARY AND EXISTING TRAFFIC PATTERNS)

- Q) TIE PROPOSED MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- R) REMOVE/REPLACE ANY CONFLICTING OR DAMAGED PAVEMENT MARKINGS WITH COLD APPLIED PLASTIC TYPE IV (REMOVABLE TAPE) - 4" AND MARKERS BY THE END OF EACH WORK PERIOD.

MISCELLANEOUS

- S) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA, AS DIRECTED BY THE ENGINEER.
- T) COORDINATE WITH THE ENGINEER TO NOTIFY THE OVERSIZE/OVERWEIGHT PERMIT UNIT AT 919-733-7154 TWO WEEKS PRIOR TO TRAFFIC BEING PLACED IN ANY TEMPORARY TRAFFIC PATTERN IN EITHER DIRECTION, IF NECESSARY, AND WHEN TRAFFIC IS RESTORED TO THE EXISTING PATTERN.



TRANSPORTATION **OPERATIONS PLAN:** GENERAL NOTES

NOTES:

INSTALL ADVANCE WORK ZONE WARNING SIGNS AS SHOWN ON RSD 1101.01, SHEET 2 OF 3, AS NECESSARY, PRIOR TO BEGINNING WORK.

COVER EXISTING OVERHEAD SIGNS (SUCH AS "EXIT ONLY" PANELS) THAT CONFLICT WITH TEMPORARY TRAFFIC PATTERNS.

THE CONTRACTOR MAY BEGIN WORK ON ANY STAGE IN ANY ORDER.

THE CONTRACTOR MAY NOT WORK ON BRIDGE NO. 83, 84 & 222 SIMULTANEOUSLY WITH BRIDGE 231.

IF EACH STAGE OF WORK IS NOT COMPLETE AT THE END OF ONE WORK PERIOD (MONDAY THRU FRIDAY AS ALLOWED IN THE LANE CLOSURE TIME RESTRICTIONS), REMOVE ALL TRAFFIC CONTROL DEVICES, COVER OR REMOVE ALL SIGNS FOR THÉ LANE CLOSURES, REMOVE MARKINGS FOR TEMPORARY TRAFFIC PATTERN, PLACE TEMPORARY MARKING (COLD APPLIED PLASTIC, TYPE IV - 4") IN THÉ EXISTING PATTERN AND RETURN TRAFFIC TO THE EXISTING PATTERN.

RECORD THE EXISTING MARKING PRIOR TO PLACING TEMPORARY MARKING IN ORDER TO RETURN TRAFFIC TO THE EXISTING PATTERN AT THE END OF THE WORK PERIOD OR END OF EACH STAGE OF CONSTRUCTION.

STAGING – **BRIDGE** NOs. 83, 84, & 222

WORK ON BRIDGE NOS. 83, 84 & 222 CONSISTS OF THE INSTALLATION OF EXPANSION JOINTS AND EPOXY OVERLAY (SEE STRUCTURE PLANS).

ROADWAY PREP WORK

USING RSD 1101.02, SHEETS 3, 9 AND 10 OF 15 (LANE CLOSURES), MILL AND REPAVE EXISTING SHOULDERS AT THE WEST END OF BRIDGE NOS. 83 AND 84 AS SHOWN ON SHEETS TMP-5. TMP-10 AND TMP-20.

STAGE 1 CONSTRUCTION

USING RSD 1101.03, SHEET 9 OF 9 (ROLLING ROAD BLOCK) ON US 70/US 17/NC 55 INSTALL STAGE 1 TEMPORARY MARKING, THEN CLOSE LANES AS SHOWN ON SHEETS TMP-4 THRU TMP-8 AND PLACE TRAFFIC IN THE TEMPORARY PATTERN.

STEP 2:
WITH TRAFFIC IN THE STAGE 1 TRAFFIC PATTERN, AS SHOWN ON SHEETS TMP-4 THRU TMP-8, COMPLETE BRIDGE WORK IN THE AREAS SHOWN

AFTER BRIDGE WORK IS COMPLETE (IN AREAS SHOWN ON SHEETS TMP-4 THRU TMP-8, USING RSD 1101.03, SHEET 9 OF 9 (ROLLING ROAD BLOCK) ON US 70/US 17/NC 55, REMOVE TEMPORARY MARKINGS, PLACE TEMPORARY MARKING (COLD APPLIED PLASTIC, TYPE IV - 4") IN THE EXISTING PATTERN AND OPEN TRAFFIC BACK UP TO THE EXISTING PATTERN.

STAGE 2 CONSTRUCTION

USING RSD 1101.03, SHEET 9 OF 9 (ROLLING ROAD BLOCK) ON US 70/US 17/NC 55 INSTALL STAGE 1 TÉMPORARY MARKING, THEN CLOSE LANES AS SHOWN ON SHEETS TMP-9 THRU TMP-13 AND PLACE TRAFFÍC IN THE TEMPORARY PATTERN.

STEP 2: WITH TRAFFIC IN THE STAGE 2 TRAFFIC PATTERN, AS SHOWN ON SHEETS TMP-9 THRU TMP-13, COMPLETE BRIDGE WORK IN THE AREAS SHOWN.

STEP 3:
AFTER BRIDGE WORK IS COMPLETE (IN AREAS SHOWN ON SHEETS TMP-9 THRU TMP-13, USING RSD 1101.03, SHEET 9 OF 9 (ROLLING ROAD BLOCK) ON US 70/US 17/NC 55, REMOVE TEMPORARY MARKINGS, PLACE TEMPORARY MARKING (COLD APPLIED PLASTIC, TYPE IV - 4") IN THE EXISTING PATTERN AND OPEN TRAFFIC BACK UP TO THE EXISTING PATTERN.

STAGE 3 CONSTRUCTION

STEP 1:
USING RSD 1101.03, SHEET 9 OF 9 (ROLLING ROAD BLOCK) ON US 70/US 17/NC 55
INSTALL STAGE 1 TEMPORARY MARKING, THEN CLOSE LANES AS SHOWN ON SHEETS TMP-14 THRU TMP-18 AND PLACE TRAFFIC IN THE TEMPORARY PATTERN.

WITH TRAFFIC IN THE STAGE 3 TRAFFIC PATTERN, AS SHOWN ON SHEETS TMP-14 THRU TMP-18, COMPLETE BRIDGE WORK IN THE AREAS SHOWN.

AFTER BRIDGE WORK IS COMPLETE (IN AREAS SHOWN ON SHEETS TMP-14 THRU TMP-18, USING RSD 1101.03, SHEET 9 OF 9 (ROLLING ROAD BLOCK) ON US 70/US 17/NC 55, REMOVE TEMPORARY MARKINGS, PLACE TEMPORARY MARKING (COLD APPLIED PLASTIC, TYPE IV - 4") IN THE EXISTING PATTERN AND OPEN TRAFFIC BACK UP TO THE EXISTING PATTERN.

PLACEMENT OF FINAL MARKING

STEP 1:
USING RSD 1101.02, SHEETS 3, 9 AND 10 OF 15 (LANE CLOSURES),
RSD 1101.02, SHEET 12 OF 15 (MOVING OPERATION) OR RSD 1101.03,
SHEET 9 OF 9 (ROLLING ROAD BLOCK), PLACE FINAL PAVEMENT MARKINGS AND MARKERS AS SHOWN IN THE FINAL PAVÉMENT MARKING PLAN, RE-INSTALL RUMBLE STRIPS IN AREAS WHERE SHOULDERS WERE REPAVED IN "ROADWAY PREP WORK" ACCORDING TO RSD 665.01, AND OPEN ALL LANES TO THE FINAL TRAFFIC PATTERN.

PLACEMENT OF FINAL MARKING IN THIS STEP INCLUDES BRIDGE NO. 231 AND ALL ADDITIONAL BRIDGES, AS SHOWN IN THE FINAL PAVEMENT MARKING PLAN.

STEP 2: REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES.

NOTES:

INSTALL ADVANCE WORK ZONE WARNING SIGNS AS SHOWN ON RSD 1101.01, SHEET 2 OF 3, AS NECESSARY, PRIOR TO BEGINNING WORK.

THE CONTRACTOR MAY BEGIN WORK ON ANY STAGE IN ANY ORDER.

THE CONTRACTOR MAY NOT WORK ON BRIDGE NO. 231 SIMULTANEOUSLY WITH ANY OTHER BRIDGE.

IF EACH STAGE OF WORK IS NOT COMPLETE AT THE END OF ONE WORK PERIOD (MONDAY THRU FRIDAY AS ALLOWED IN THE LANE CLOSURE TIME RESTRICTIONS). REMOVE ALL TRAFFIC CONTROL DEVICES, COVER OR REMOVE ALL SIGNS FOR THE LANE CLOSURES, AND RETURN TRAFFIC TO THE EXISTING PATTERN.

PROJ. REFERENCE NO. SHEET NO. BP-5500FF TMP-3

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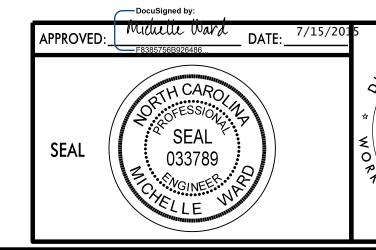
STAGING - BRIDGE NO. 231

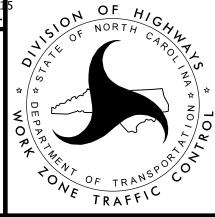
WORK ON BRIDGE NO. 231 CONSISTS OF REPLACING THE MODULAR JOINT AT BENT 51 (SEE STRUCTURE PLANS).

USING SHEET TMP-24 AND RSD 1101.02, SHEET 3 OF 15 (LANE CLOSURES) ON US 17/NC 55, COMPLETE STAGE 1 BRIDGE WORK.

USING SHEET TMP-24 AND RSD 1101.02, SHEET 3 OF 15 (LANE CLOSURES) ON US 17/NC 55, COMPLETE STAGE 2 BRIDGE WORK.

STEP 3: REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES.





TEMPORARY TRAFFIC CONTROL STAGING

PROJ. REFERENCE NO. SHEET NO. BP-5500FF TMP-4 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 COUNTRY 55 AD SHEET US 70/US 17/NC 55 - CLOSE LEFT LANE IN ADVANCE OF LOOP USING RSD 1101.02, SHEET 3 OF 15 SEE STAGE 1 BRIDGE 83, 84 & 222

PROJ. REFERENCE NO. SHEET NO. BP-5500FF TMP-5 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 BEGIN APPROACH SLAB RAMP TO BEGIN CONSTRUCTION NC 55 195' SHIFT COUNTRY CLUB RD BRIDGE NO. 84 — MILL AND REPAVE OUTSIDE SHOULDER TMP TMP 5' SHLD 5' SHLD 4' SHLD SHEET SHEE. TMA - POSITION TO SEE ACCOMMODATE ROLL-AHEAD US 70/US 17/NC 55 DISTANCE AS RECOMMENDED SEE BY THE MANUFACTURER 12' INE 4' SHLD Z MATCHL 5' SHLD 5' SHLD MATCHL] 195' SHIFT 10' MILL AND REPAVE OUTSIDE SHOULDER BEGIN APPROACH SLAB
BEGIN CONSTRUCTION BRIDGE NO. 83 — 4' 3' 3' 4' 11′ 11′ 18′ 11′ 11′ WORK AREA WORK AREA 12' EXISTING EXISTING EXISTING EXISTING SHOULDER SHOULDER TRAVEL LANE TRAVEL LANE SECTION A-A DocuSigned by: STAGE 1 BRIDGE 83, 84 & 222

BP-5500FF TMP-6 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 BRIDGE NO. 84 ── 5 TMP 11' SHLD 5' SHLD SHEET SHEET SEE SEE US 70/US 17/NC 55 INE MATCHL MATCHL 5' SHLD 5' SHLD (C7) BRIDGE NO. 83 — STAGE 1 BRIDGE 83, 84 & 222

PROJ. REFERENCE NO.

SHEET NO.

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TMP - 7 BP-5500FF HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 RAMP FROM US 17 & NC 55 BRIDGE NO. 84 — 510′+/-TMP TMP 19' SHLD 19' SHLD 11' SHLD 11' SHEET 13'+/-SHEET SEE SEE US 70 US 70/US 17/NC 55 INE INE 12' 12′ 12′ MATCHL] MATCHL (C7) 5' SHLD - BRIDGE NO. 83 (CK) 6' SHLD (C6) (CS) CJ 200′+/-320′+/-RAMP TO US 17 & NC 55 BRIDGE NO. 83 BRIDGE NO. 222 STAGE 1 BRIDGE 83, 84 & 222 SEAL

PROJ. REFERENCE NO.

SHEET NO.

J-50.pl†
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PROJ. REFERENCE NO. SHEET NO. BP-5500FF TMP-8 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 — CLOSE RIGHT LANE USING RSD 1101.02, SHEET 3 OF 15 RAMP FROM US 17 & NC 55 LOOP FROM US 70 BUS & US 17 BUS BRIDGE NO. 84 — 465′+/-4' SHLD 2' SHLD 4' SHLD SHEET TMA - POSITION TO 195' SHIFT ACCOMMODATE ROLL-AHEAD SEE US 70 DISTANCE AS RECOMMENDED CLOSE LEFT LANE IN ADVANCE OF LOOP — USING RSD 1101.02, SHEET 3 OF 15 410'+/- MERGE BY THE MANUFACTURER 7′¹ 12′ MATCHL] (C7) 195' SHIFT 10' BRIDGE NO. 83 — — BRIDGE NO. 222 END APPROACH SLABS
END CONSTRUCTION RAMP TO US 17 & NC 55 STAGE 1 BRIDGE 83, 84 & 222

PROJ. REFERENCE NO. SHEET NO. BP-5500FF TMP-9 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 COUNTRY 55 CLUB AD US 70/US 17/NC 55 - CLOSE RIGHT LANE IN ADVANCE OF LOOP USING RSD 1101.02, SHEET 3 OF 15 MATCHL MESSAGE NO. 1

US 70 E US 70 E

STAY IN STAY IN MESSAGE NO. 1

US 70

USE

LEFT LN

MESSAGE
NO. 2

BRIDGTON
TRAFFIC
RIGHT LN MESSAGE NO. 1 US 17 USE MESSAGE NO. 2 BRIDGTON TRAFFIC LEFT LN LEFT LN RIGHT LN RIGHT LN CHANGEABLE MESSAGE SIGN CHANGEABLE MESSAGE SIGN CHANGEABLE MESSAGE SIGN *PLACE CMS 1000' IN ADVANCE OF EXIT SIGN (E5-1) SHOWN ON TMP-10 *PLACE CMS 500' - 1000' IN ADVANCE OF LOOP *PLACE CMS 250' +/- FROM COUNTRY CLUB ROAD STAGE 2 BRIDGE 83, 84 & 222

PROJ. REFERENCE NO. SHEET NO. BP-5500FF TMP-10 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 ★ MILL AND REPAVE INSIDE SHOULDERS BEGIN APPROACH SLAB BEGIN CONSTRUCTION RAMP TO NC 55 1380'+/- CONSTRUCTION AREA ON WB BRIDGE COUNTRY CLUB RD BRIDGE NO. 84 — 470' SHIFT 10' 6 TMP TMP 6' SHLD 6' SHLD 4' SHLD SHEET i 11' 11′ 5′ႃ SHEE 11′ 4' SHLD *60' 2' SHLD 2' SHLD 420′ 150' SHIFTS US 70/US 17/NC 55 SE *****60′ 出 2' SHLD 2' SHLD 4' SHLD 4' SHLD S 11' 5′↓ 12′ INE 11' Z MATCHL 6' SHLD 6' SHLD (C6) MATCHL. 470' SHIFT 10' **EXIT** TMA - POSITION TO BRIDGE NO. 83 — ACCOMMODATE ROLL-AHEAD _____
DISTANCE AS RECOMMENDED BEGIN APPROACH SLAB BEGIN CONSTRUCTION BY THE MANUFACTURER 3' 2' 2' 3' 12′ 3′ 2′ 2' 3' THRU TRAFFIC EXIT TRAFFIC WORK AREA THRU TRAFFIC WORK AREA EXIT TRAFFIC (EX. CENTER (EX. CENTER TRAVEL LANE) TRAVEL LANE) SECTION A-A DocuSigned by: STAGE 2 BRIDGE 83, 84 & 222

BP-5500FF TMP - 11 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 END CONSTRUCTION 1380'+/- CONSTRUCTION AREA ON WB BRIDGE 455' SHIFT 885'+/- WEAVE AREA 0 200′ BRIDGE NO. 84 — TMP TMP 16' SHLD 6' SHLD 6' SHLD 10′ 11′ SHEET 12′ 12′ 12′ 11′ 2' SHLD 2' SHLD 18' SHLD TMA - POSITION TO ACCOMMODATE ROLL-AHEAD US 70/US 17/NC 55 SEE DISTANCE AS RECOMMENDED BY THE MANUFACTURER. S 2' SHLD 2' SHLD MATCHLINE MATCHLINE 6' SHLD 6' SHLD (C7) BRIDGE NO. 83 — STAGE 2 BRIDGE 83, 84 & 222

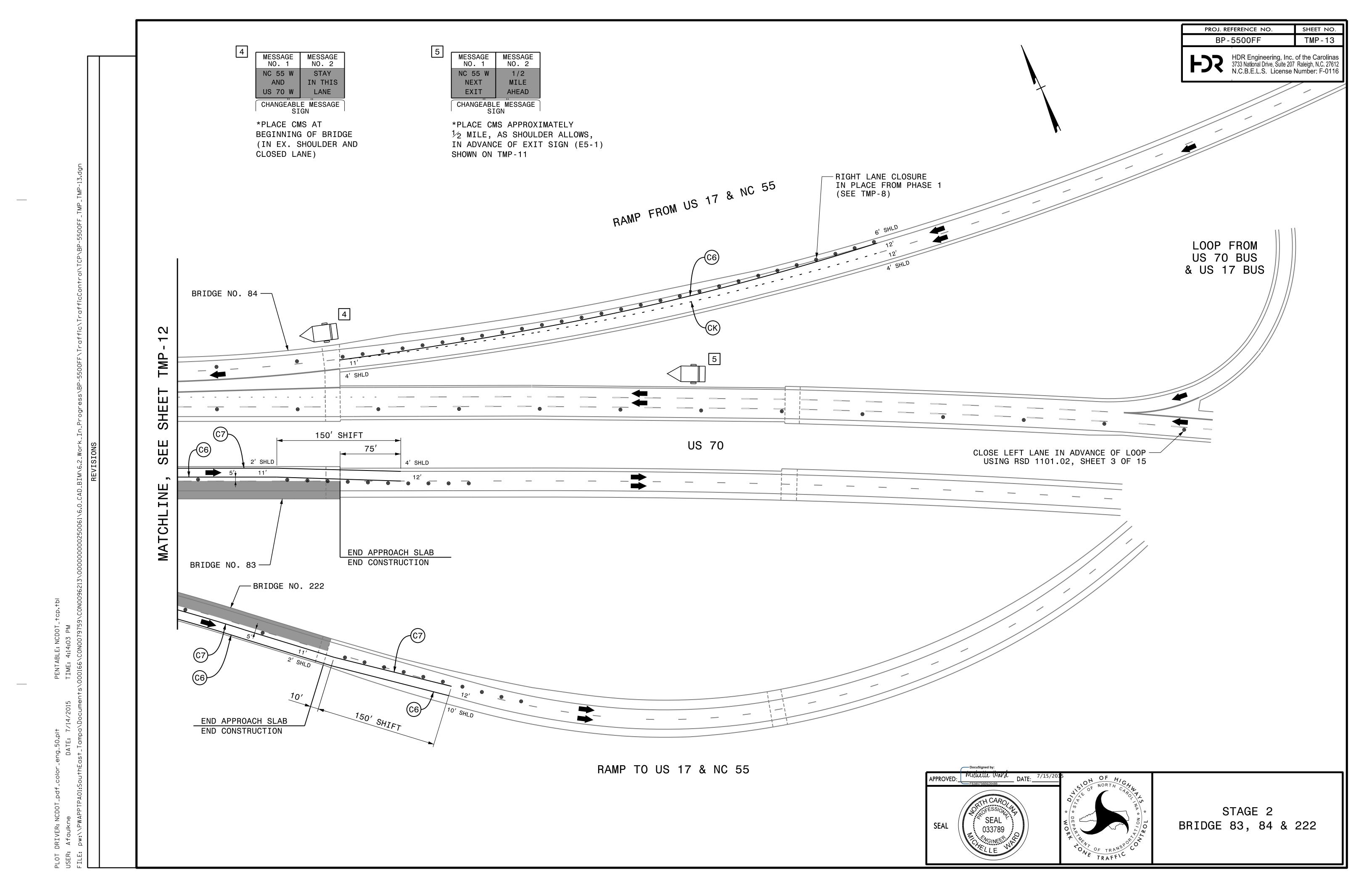
PROJ. REFERENCE NO.

SHEET NO.

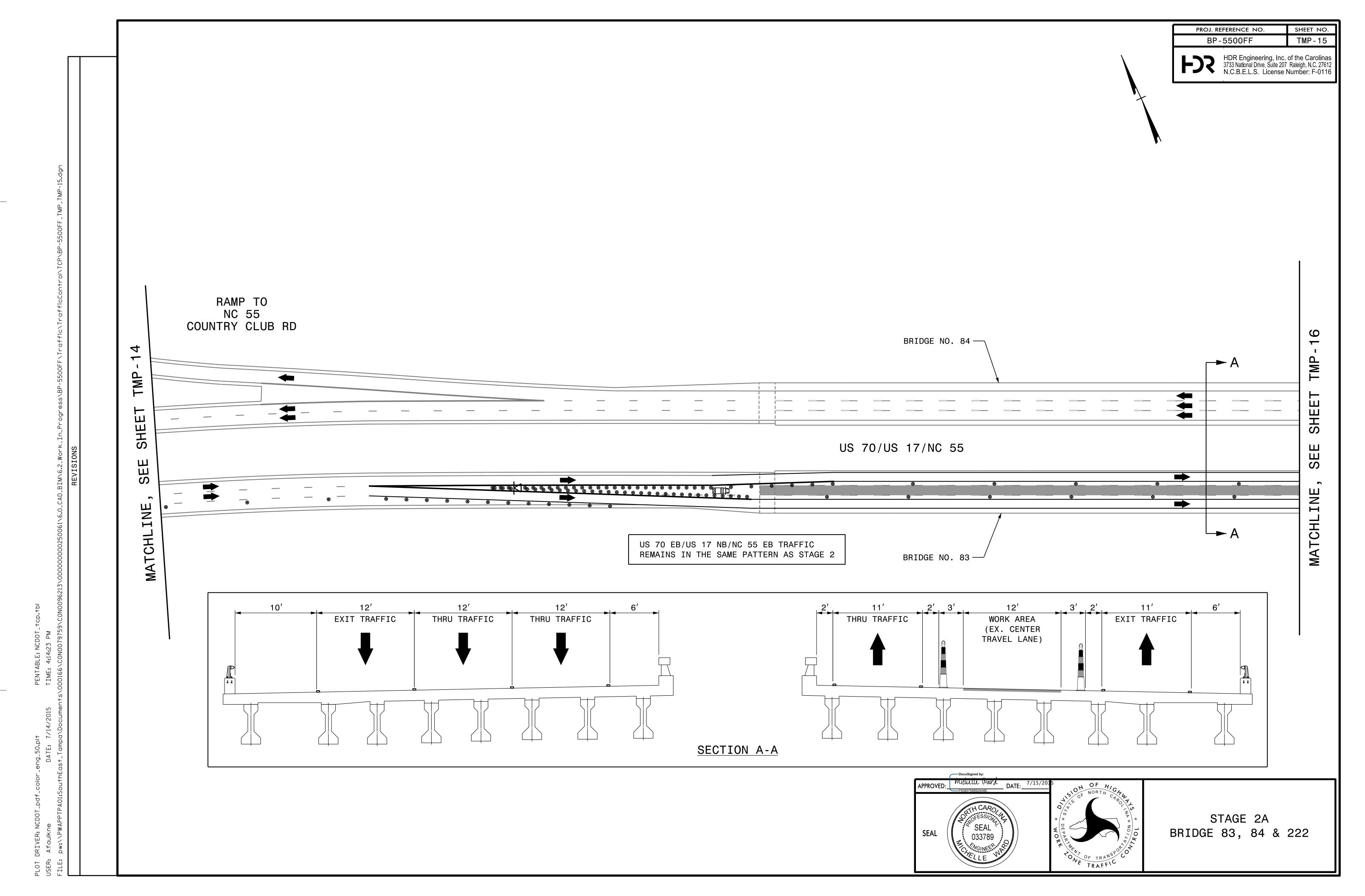
BP-5500FF TMP-12 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 VARIES 10' 12′ 11′ THRU TRAFFIC EXIT TRAFFIC THRU TRAFFIC EXIT TRAFFIC WORK AREA (EX. RAMP LANE) (EX. THRU LANE) SECTION B-B 885'+/- WEAVE AREA RAMP FROM US 17 & NC 55 BRIDGE NO. 84 — _ TMP TMP SHEET SHEE SEE US 70 US 70/US 17/NC 55 SE 2' SHLD 2' SHLD INE MATCHLINE MATCHL 2' SHLD BRIDGE NO. 83 (C7) BRIDGE NO. 83 BRIDGE NO. 222 RAMP TO US 17 & NC 55 STAGE 2 BRIDGE 83, 84 & 222 SEAL

PROJ. REFERENCE NO.

SHEET NO.



SHEET NO. PROJ. REFERENCE NO. BP-5500FF TMP-14 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 COUNTRY 55 AD US 70/US 17/NC 55 MATCHL US 70 EB/US 17 NB/NC 55 EB TRAFFIC REMAINS IN THE SAME PATTERN AS STAGE 2 STAGE 2A BRIDGE 83, 84 & 222

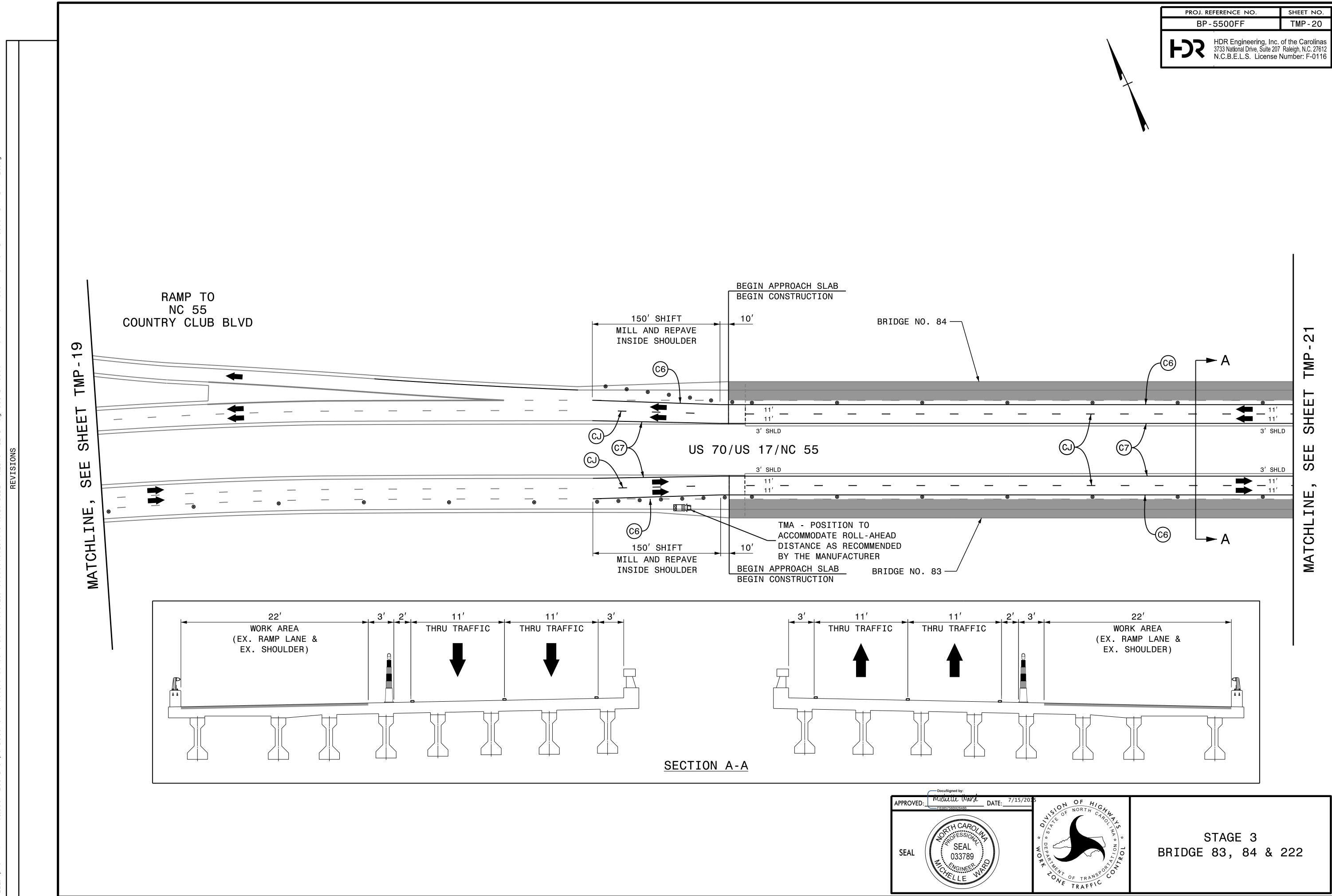


PROJ. REFERENCE NO. SHEET NO. BP-5500FF TMP-16 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 BEGIN CONSTRUCTION (TIE TO STAGE 2 CONSTRUCTION) 250' SHIFT 450′ BRIDGE NO. 84 — TMP TMP 10' SHLD 11′ SHEE-SHE 6' SHLD 140' SHIFT US 70/US 17/NC 55 SEE MATCHLINE MATCHLINE US 70 EB/US 17 NB/NC 55 EB TRAFFIC REMAINS IN THE SAME PATTERN AS STAGE 2 BRIDGE NO. 83 — 3' 2' 2′ 3′ 12′ 24′ THRU TRAFFIC THRU TRAFFIC RAMP TRAFFIC EXIT TRAFFIC WORK AREA WORK AREA (EX. CENTER (EX. CENTER TRAVEL LANE & EX. RAMP LANE) TRAVEL LANE) SECTION B-B STAGE 2A BRIDGE 83, 84 & 222

PROJ. REFERENCE NO. SHEET NO. BP-5500FF TMP-17 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 RAMP FROM US 17 & NC 55 BRIDGE NO. 84 — 2' SHLD TMP TMP 2' SHLD SHEET SHEET 11' 2' SHLD 2' SHLD SEE US 70/US 17/NC 55 US 70 S MATCHLINE MATCHLINE BRIDGE NO. 83 US 70 EB/US 17 NB/NC 55 EB TRAFFIC REMAINS IN THE SAME PATTERN AS STAGE 2 BRIDGE NO. 83 BRIDGE NO. 222 RAMP TO US 17 & NC 55 11'
EXIT TRAFFIC 3′ 2′ 16′ WORK AREA (EX. SHOULDER & TRAVEL LANE) SECTION C-C STAGE 2A BRIDGE 83, 84 & 222 SEAL

PROJ. REFERENCE NO. SHEET NO. BP-5500FF TMP-18 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 CLOSE LEFT LANE USING — RSD 1101.02, SHEET 3 OF 15 RAMP FROM US 17 & NC 55 LOOP FROM TMA - POSITION TO US 70 BUS ACCOMMODATE ROLL-AHEAD END APPROACH SLAB END CONSTRUCTION DISTANCE AS RECOMMENDED & US 17 BUS BY THE MANUFACTURER. 350' SHIFT BRIDGE NO. 84 2' SHLD TMP 300' MERGE SHEE 12′ 12′ 5['] 11' 75′ 4' SHLD 4' SHLD 2' SHLD 4' SHLD 6' SHLD 100′ 150' SHIFT SEE US 70 CLOSE RIGHT LANE IN ADVANCE OF LOOP - USING RSD 1101.02, SHEET 3 OF 15 MATCHLINE BRIDGE NO. 83 — — BRIDGE NO. 222 US 70 EB/US 17 NB/NC 55 EB TRAFFIC REMAINS IN THE SAME PATTERN AS STAGE 2 RAMP TO US 17 & NC 55 STAGE 2A BRIDGE 83, 84 & 222

SHEET NO. PROJ. REFERENCE NO. BP-5500FF TMP-19 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 COUNTRY 55 AD US 70/US 17/NC 55 MATCHL US 70 EB/US 17 NB/NC 55 EB TRAFFIC REMAINS IN THE SAME PATTERN AS STAGE 2 STAGE 3 BRIDGE 83, 84 & 222



PROJ. REFERENCE NO. SHEET NO. BP-5500FF TMP-21 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 300' MERGE TAPER BRIDGE NO. 84 ── 210′ 20 22 TMP TMP SHEET SHEE 3' SHLD 3' SHLD US 70/US 17/NC 55 SEE SEE 3' SHLD 3' SHLD MATCHLINE MATCHLINE BRIDGE NO. 83 — STAGE 3 BRIDGE 83, 84 & 222

PROJ. REFERENCE NO. SHEET NO. BP-5500FF TMP-22 HDR Engineering, Inc. of the Carolinas 3733 National Drive, Suite 207 Raleigh, N.C. 27612 N.C.B.E.L.S. License Number: F-0116 RAMP FROM US 17 & NC 55 BRIDGE NO. 84 — 518' SHIFT 300' MERGE TAPER 600' ACCEL. LANE 23 TMP TMP SHEET SHEE 11′ 3' SHLD 6' SHLD 3' SHLD (C7) 150' SHIFT 448′ US 70/US 17/ SEE US 70 150' SHIFT NC 55 S 3' SHLD 6' SHLD 3' SHLD 12' 12' INE MATCHLINE MATCHL (CK) C -BRIDGE NO. 83 245′ EXIT TAPER C7 BRIDGE NO. 83 BRIDGE NO. 222 RAMP TO US 17 & NC 55 18′ WORK AREA (EX. TRAVEL LANE & EX. SHOULDER) EXIT TRAFFIC SECTION B-B STAGE 3 BRIDGE 83, 84 & 222 SEAL

US 17 NB

15'-2³/₈"

(STAGE 1 CONSTRUCTION)

SKINNY DRUM

TYPICAL SECTION - STAGE 1

US 17 SB

15′-2³⁄8″

(STAGE 1 CONSTRUCTION)

5'-0"

13'-3"

SKINNY DRUM —

US 17 NB

18'-3"
(STAGE 2 CONSTRUCTION)

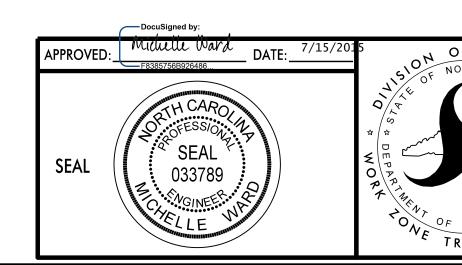
12'-1038"

12'-1038"

(STAGE 2 CONSTRUCTION)

SKINNY DRUM

TYPICAL SECTION - STAGE 2



BRIDGE NO. 231 STAGING TYPICALS