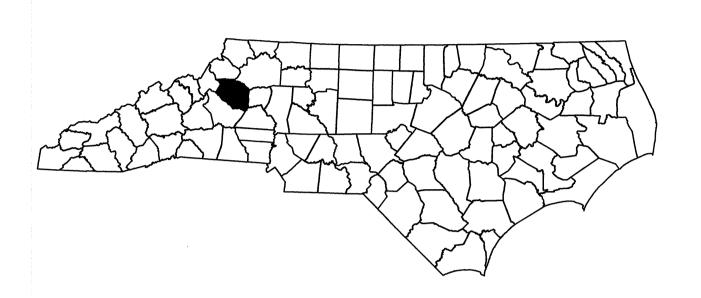
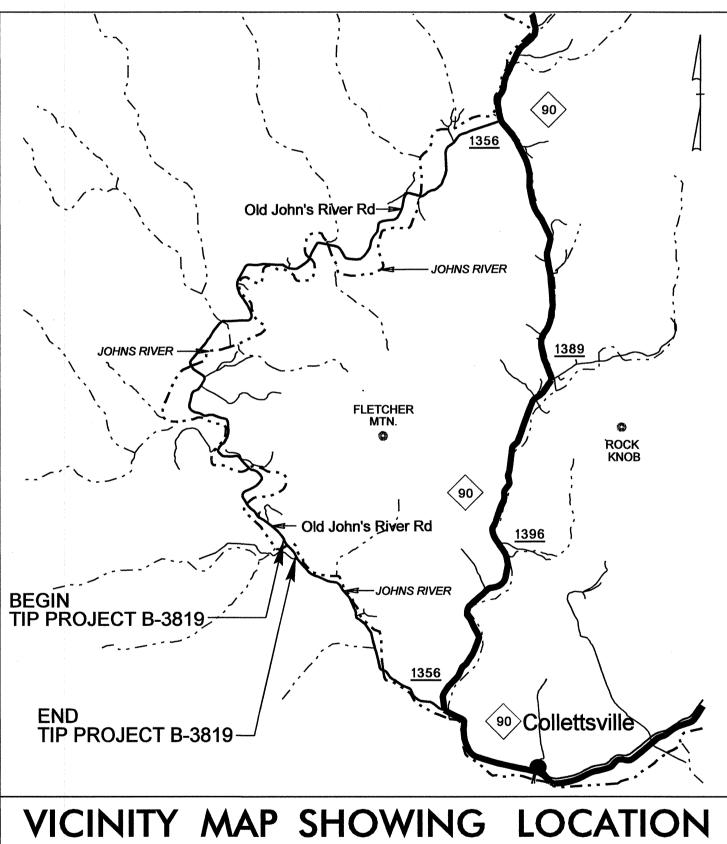
# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

# TRANSPORTATION MANAGEMENT PLAN

# CALDWELL COUNTY





OF PROJECT B-3819

BRIDGE NO. 184 OVER THE JOHNS RIVER ON SR 1356 (OLD JOHNS RIVER RD)

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

G. L. GETTIER, P.E. TRAFFIC CONTROL PROJECT ENGINEER

J. W. WOOLARD, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER

D. A. HAYES, E.I. TRAFFIC CONTROL DESIGN ENGINEER



## INDEX OF SHEETS

SHEET NO.

TITLE

TMP - 1

TMP-1B

TITLE SHEET, AND INDEX OF SHEETS

TMP-1A

LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS,

TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES AND LOCAL NOTES) AND TEMPORARY TRAFFIC CONTROL PHASING

APPROVED:

SEAL

DATE:

TEMPORARY TRAFFIC CONTROL PHASE I DETAIL

2

# 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
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
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
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS - (TEMPORARY & PERMANENT)
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS
1264.02	PLACEMENT OF OBJECT MARKERS

PROJ.	REFERENCE	NO.	SHEET	NO.	
В	-3819		TMP-	1A	

## **LEGEND**

#### **GENERAL**

DIRECTION OF TRAFFIC FLOW

----- EXIST. PVMT.

NORTH ARROW

PROPOSED PVMT.

WORK AREA

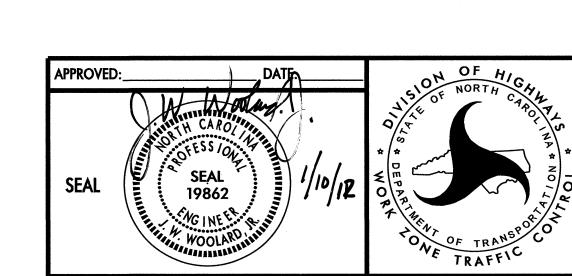


REMOVAL

### TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III)

DRUM



ROADWAY STANDARD DRAWINGS & LEGEND

OJ. REFERENCE NO.	SHEET NO.
B-3819	TMP-01B

#### **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.

#### 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 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.
- C) 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.
- D) 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.
- E) DO NOT INSTALL MORE THAN ONE LANE CLOSURE, IN ANY ONE DIRECTION, ON -L- (SR 1356).
- F) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

#### PAVEMENT EDGE DROP OFF REQUIREMENTS

G) 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.

H) 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) 200 FT IN ADVANCE OF THE UNEVEN AREA.

#### TRAFFIC PATTERN ALTERATIONS

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

#### SIGNING

- J) 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.
- K) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.

- K) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
- L) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- M) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 200 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

#### TRAFFIC CONTROL DEVICES

- N) 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, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.
- O) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED. OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- P) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES
  PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN
  UNOPENED LANES ARE CLOSED TO TRAFFIC.

#### **MISCELLANEOUS**

Q) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAYS TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION, AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 200 FT AND 200 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

#### MANAGEMENT STRATEGIES

TRAFFIC WILL BE MAINTAINED ON EXISTING DURING CONSTRUCTION OF BRIDGE AND APPROACHES.

#### **PHASING**

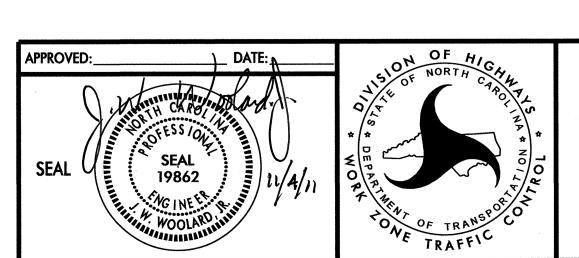
#### PHASE I

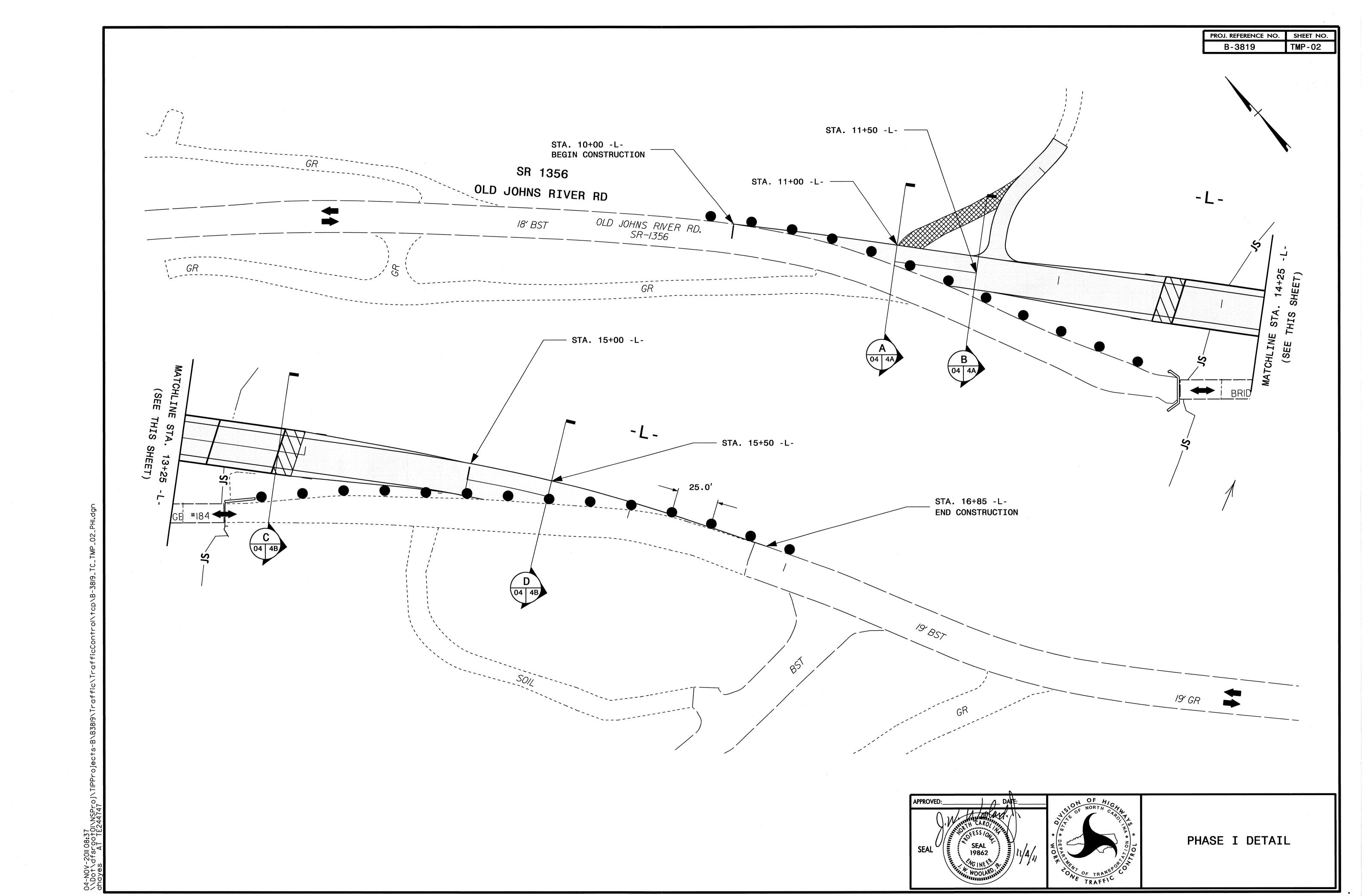
- STEP 1) USING ROADWAY STANDARD DRAWING (RSD) 1101.01 INSTALL ALL AWS SIGNS.
- STEP 2) USING ROADWAY STANDARD DRAWING 1101.02 CONSTRUCT AS MUCH OF -L- AS POSSIBLE UP TO THE EDGE AND ELEVATION OF EXISTING INCLUDING ANY TEMPORARY DRAINAGE THAT MAY BE NECESSARY AS FOLLOWS:
  - -L- LEFT FROM STA. 10+00 -L- TO STA. 11+00 -L- AND FROM STA. 15+50 -L- TO STA. 16+85 -L-
  - -L- RIGHT FROM STA. 11+00 -L- TO STA. 11+50 -L- AND FROM STA. 15+00 -L- TO STA. 15+50 -L-

AWAY FROM TRAFFIC, CONSTRUCT -L- FROM STA. 11+50 -L- TO STA. 15+50 -L-, INCLUDING STRUCTURE, UP TO BUT NOT INCLUDING THE FINAL LIFT OF SURFACE COURSE.

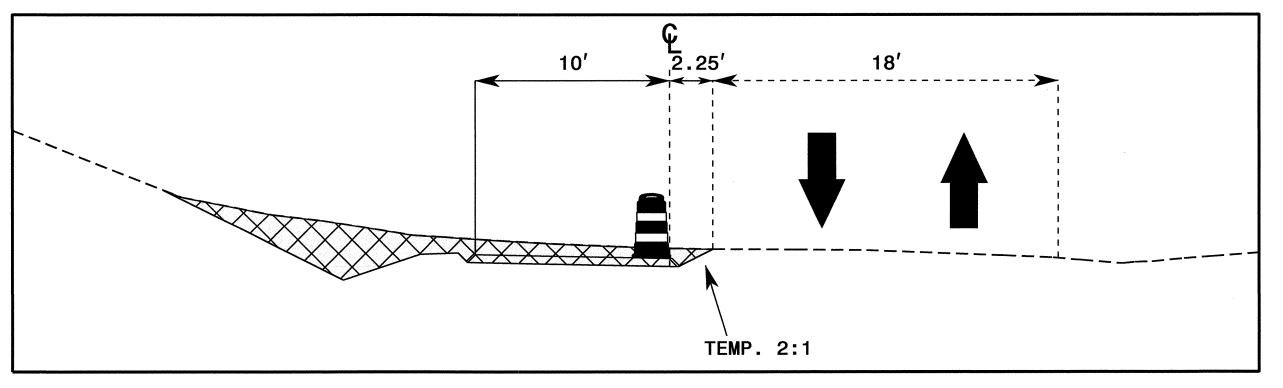
#### PHASE II

- STEP 1) USING RSD 1101.02 COMPLETE CONSTRUCTION OF -L- UP TO BUT NOT INCLUDING THE FINAL LIFT OF SURFACE COURSE, INCLUDING SHOULDER CONSTRUCTION AND REMOVAL OF ANY REMAINING TEMPORARY DRAINAGE, AT THE FOLLOWING LOCATIONS:
  - -L- LEFT FROM STA. 10+00 -L- TO STA. 11+00 -L- AND FROM STA. 15+50 -L- TO STA. 16+85 -L-
  - -L- RIGHT FROM STA. 11+00 -L- TO STA. 11+50 -L- AND FROM STA. 15+00 -L- TO STA. 15+50 -L-
- STEP 2) USING RSD 1101.02, INSTALL THE FINAL LIFT OF SURFACE COURSE, FINAL PAVEMENT MARKINGS, AND MARKERS. REMOVE ALL TRAFFIC CONTROL DEVICES AND SIGNING AND PLACE TRAFFIC IN THE FINAL PATTERN.

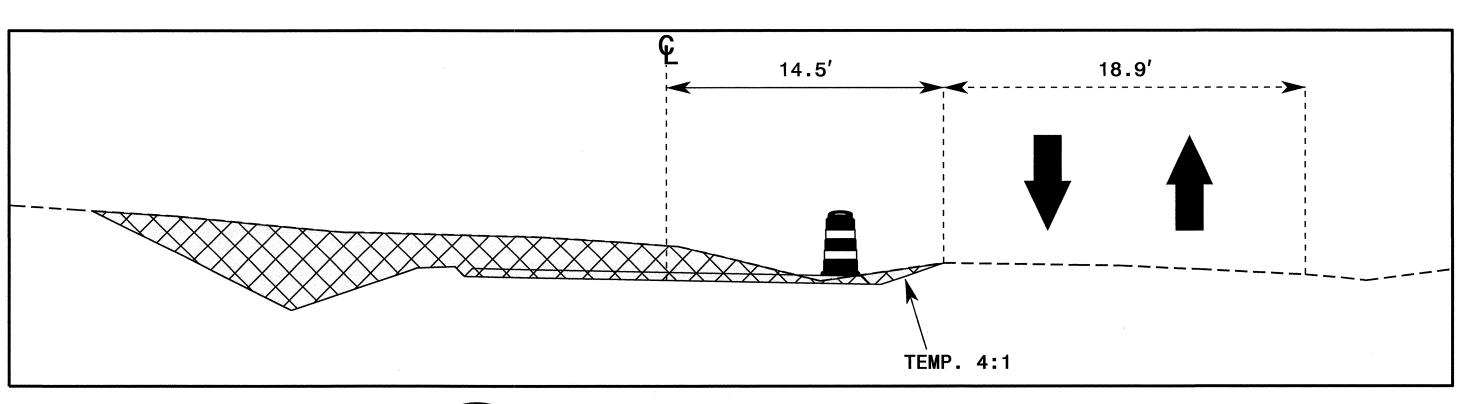




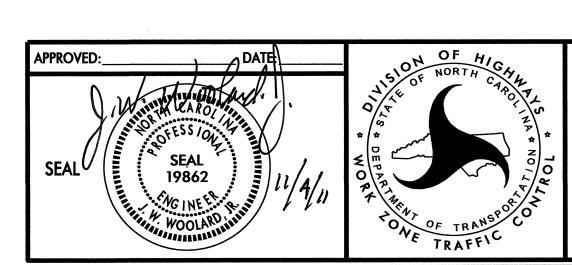
PROJ. REFERENCE NO. SHEET NO. B-3819 TMP-02A



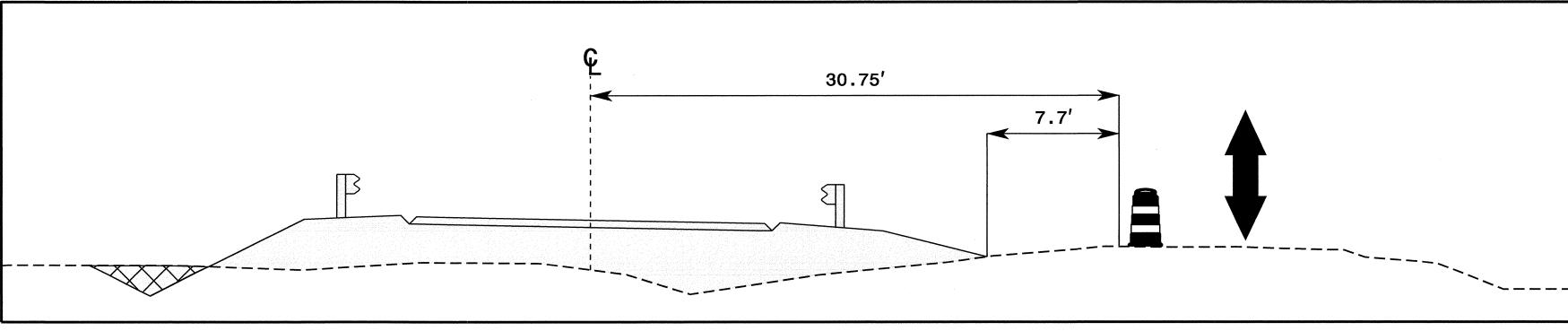
A CUT SECTION
04 4A STA. 11+00 -L-

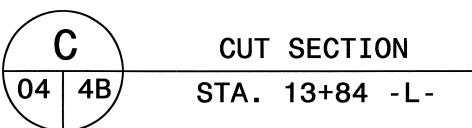


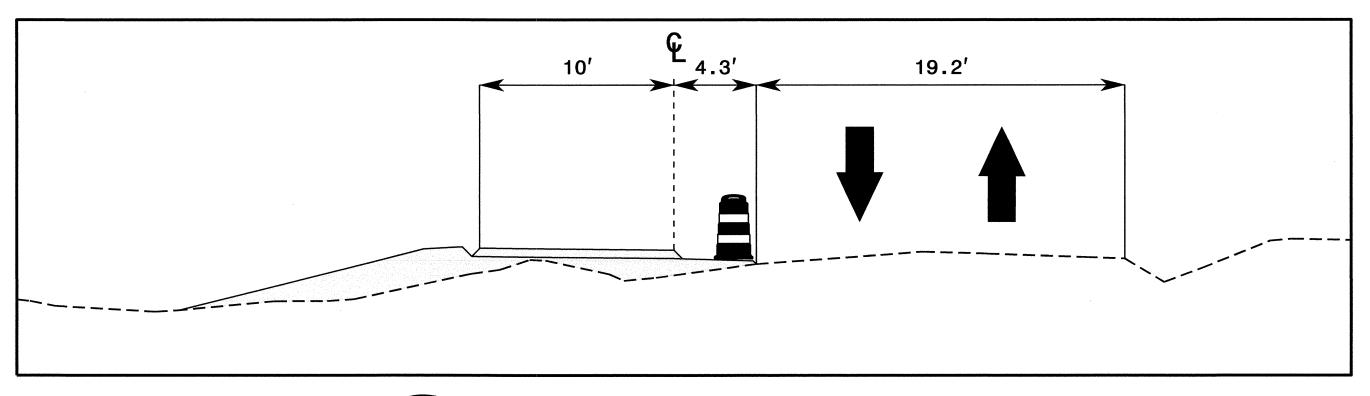
B CUT SECTION
04 4A STA. 11+50 -L-

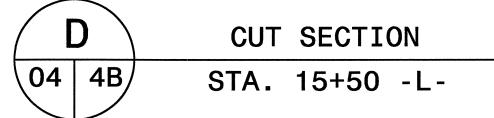


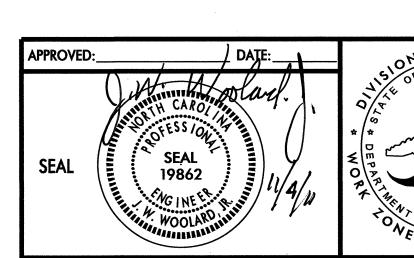
PROJ. REFERENCE NO. SHEET NO. B-3819 TMP-02B











PHASE I DETAIL