# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO. B-4135 TCP-1

# PLAN FOR PROPOSED TRAFFIC CONTROL, MARKING & DELINEATION

# HALIFAX COUNTY

## 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 JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1135.01	CONES
1145.01	BARRICADES
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

## INDEX OF SHEETS

#### SHEET NO.

#### TITLE

TCP-1

LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS. LEGEND, INDEX OF SHEETS, AND FINAL PAVEMENT

MARKING SCHEDULE

TCP-2

GENERAL NOTES, PHASING, AND TEMPORARY PAVEMENT

MARKING SCHEDULE

TCP-3

DETOUR ROUTE AND BARRICADE PLACEMENT

SD-1

DETOUR SIGN DESIGN

## T TYPE I BARRICADE

NORTH ARROW

**WORK AREA** 

TRAFFIC CONTROL DEVICES

**LEGEND** 

◆ DIRECTION OF TRAFFIC FLOW

PROPOSED PVMT. ----- EXIST. PVMT.

TYPE III BARRICADE

CONE

**GENERAL** 

SKINNY DRUM

REMOVAL OF EXISTING PAVEMENT

FLASHING ARROW PANEL (TYPE C)

— STATIONARY SIGN

STATIONARY OR PORTABLE SIGN

→ CRASH CUSHION

CHANGEABLE MESSAGE SIGN

TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)

POLICE

- FLAGGER

### PAVEMENT MARKINGS

CRYSTAL/CRYSTAL PAVEMENT MARKER

YELLOW/YELLOW PAVEMENT MARKER

CRYSTAL/RED PAVEMENT MARKER

PAVEMENT MARKING SYMBOLS

## FINAL PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	PAVEMENT MARKINGS	PAY ITEM QUANTITY BREAKDOWN	TOTAL
PA	WHITE EDGE LINE (2X)	PAINT (4")	1400 FT	2800 FT
PI	YELLOW DOUBLE CENTER LINE (2X	) PAINT (4")	700 FT	2800 FT
		MARKERS		
MA	YELLOW & YELLOW	PERMANENT RAISED PAVEMENT MARKERS	10 EA	10 EA
	NOTE: FOR EACH PAINT PAVEMENT MARKI AND 3X IMPLIES THREE APPLICAT		NGLE APPLICATION, 2X IMPLIES TWO APP	LICATIONS,

APPROVED: DATE:

PLAN PREPARED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT

STUART BOURNE, P.E. TRAFFIC CONTROL ENGINEER

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ALLA LYUDMIRSKAYA TRAFFIC CONTROL DESIGN ENGINEER

### 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

- 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 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 INSTALL MORE THAN ONE LANE CLOSURE, IN ANY ONE DIRECTION, ON SR 1804 (SHIELDS COMMISSARY RD).

#### PAVEMENT EDGE DROP OFF REQUIREMENTS

BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPEN TRAVEL LANE THAT HAS A 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.

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 EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

#### TRAFFIC PATTERN ALTERATIONS

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

AND 3X IMPLIES THREE APPLICATIONS.

#### SIGNING

- G) PROVIDE PERMANENT SIGNING.
- PROVIDE DETOUR SIGNING WITHIN AND OFF THE PROJECT LIMITS
- COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN A DETOUR IS NOT IN OPERATION.
- ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

#### TRAFFIC CONTROL DEVICES

- K) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER 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.
- PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

#### PAVEMENT MARKINGS AND MARKERS

INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOW:

ROAD NAME MARKING MARKER SR 1804 (SHIELDS COMMISSARY RD) PAINT PERMANENT RAISED

- INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOW: ROAD NAME MARKING SR 1804 (SHIELDS COMMISSARY RD) PAINT TEMPORARY RAISED
- PLACE TWO APPLICATIONS OF PAINT PAVEMENT MARKINGS ON THE FINAL WEARING SURFACE. PLACE THE SECOND APPLICATION OF PAINT UPON SUFFICIENT DRYING TIME OF THE FIRST.
- P) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERN. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.
- Q) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

### **PHASING**

COMPLETE WORK REQUIRED IN STEPS 1, 2 AND 3 IN NINETY (90) CONSECUTIVE CALENDAR DAYS. SEE INTERMEDIATE CONTRACT TIME AND SPECIAL PROVISION.

#### STEP 1:

USING RSD 1101.03, SHEET 1 OF 9 AND 2 OF 9, SHEETS TCP-3 & SD-1, INSTALL DETOUR SIGNS, PLACE TYPE III BARRICADES TO CLOSE SR 1804(SHIELDS COMMISSARY RD.) TO TRAFFIC AND DETOUR TRAFFIC OFF-SITE ON PROPOSED DETOUR.

#### STEP 2:

AWAY FROM TRAFFIC, PERFORM THE FOLLOWING: SEE ROADWAY AND STRUCTURE PLANS.

- 1) COMPLETE ALL DRAINAGE WORK WITHIN THE PROJECT LIMITS. - REMOVE EXISTING STRUCTURE No.72 AND CONSTRUCT PROPOSED STRUCTURE FROM -L- STA.16+65+/- TO -L- STA.17+55+/-
- 2) CONSTRUCT PROPOSED ROADWAY UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE AND TIE IN TO EXISTING AT -L-STA.13+78+/- AND -L- STA.20+42+/-
- 3) PLACE TEMPORARY PAVEMENT MARKING (PAINT) & TEMPORARY PAVEMENT MARKERS (TEMPORARY RAISED) FROM -L- STA.13+78+/-TO -L- STA.20+42+/-.

#### STEP 3:

REMOVE ALL TRAFFIC CONTROL DEVICES AND DETOUR SIGNS. OPEN SR 1804 (SHIELDS COMMISSARY RD.) TO TWO-LANE, TWO-WAY TRAFFIC PATTERN.

#### STEP 4:

USING RSD 1101.02, SHEET 1 OF 9, PLACE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKING (PAINT) & FINAL PAVEMENT MARKERS (PERMANENT RAISED) FROM -L- STA.13+78+/- TO -L- STA.20+42+/-.

## TEMPORARY PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	PAVEMENT MARKINGS	PAY ITEM QUANTITY BREAKDOWN	TOTAL
PA	WHITE EDGE LINE (1X)	PAINT (4")	1400 FT	1400 FT
PI	YELLOW DOUBLE CENTER LINE (1X)	PAINT (4")	700 FT	1400 FT
		MARKERS		
MH	YELLOW & YELLOW	TEMPORARY RAISED PAVEMENT MARKERS	10 EA	10 EA

GENERAL NOTES, PHASING, AND TEMPORARY PAVEMENT MARKING SCHEDULE

DEC-07

**REVISIONS** 

