

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
R-4408	TCP-1

**PLAN FOR PROPOSED
TRAFFIC CONTROL, MARKING & DELINEATION
BUNCOMBE COUNTY**

R-4408

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS"-
ROADWAY DESIGN UNIT-N.C. DEPARTMENT OF TRANSPORTATION-RALEIGH, N.C.,
DATED JANUARY 2002 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
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW PANELS
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

- A) ADAPT THE TRAFFIC CONTROL PLANS, WHEN DIRECTED BY THE ENGINEER, TO MEET FIELD CONDITIONS TO PROVIDE SAFE AND EFFICIENT TRAFFIC MOVEMENT. CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE, OR RESULT IN DUPLICATE, OR UNDESIRABLE OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES.

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

- B) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:
- | ROAD NAME | DAY AND TIME RESTRICTIONS |
|-------------|--|
| 1. US 19-23 | MONDAY THRU FRIDAY 6:30 A.M. TO 8:30 A.M.
MONDAY THRU FRIDAY 4:30 P.M. TO 6:30 P.M. |
- C) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:
- | ROAD NAME | HOLIDAY |
|-------------|---------|
| 1. US 19-23 | |
- FOR ANY EVENT THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
 - FOR NEW YEAR'S, BETWEEN THE HOURS OF 4:30 P.M. DECEMBER 31ST TO 8:30 A.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A SATURDAY OR A SUNDAY, THEN UNTIL 8:30 A.M. THE FOLLOWING TUESDAY.
 - FOR EASTER, BETWEEN THE HOURS OF 4:30 P.M. THURSDAY AND 8:30 A.M. MONDAY.
 - FOR MEMORIAL DAY, BETWEEN THE HOURS OF 4:30 P.M. FRIDAY TO 8:30 A.M. TUESDAY.
 - FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 4:30 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 8:30 A.M. THE DAY AFTER INDEPENDENCE DAY.
- IF INDEPENDENCE DAY IS ON A SATURDAY OR SUNDAY, THEN BETWEEN THE HOURS OF 4:30 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 8:30 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.

PHASING

- STEP 1: INSTALL GUARDRAIL IN ACCORDANCE WITH CONSTRUCTION PLANS USING TCP-2.
- NOTE: - FOR INTERCHANGES WITHIN THE WORK ZONE INSTALL PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS AND "END ROAD WORK" (G20-2A) SIGNS ON ENTRANCE/EXIT RAMPS AS SHOWN ON TCP-5, DETAILS "B" AND "C".
- MAY USE "MOVING OPERATION CARAVAN" (SEE SHEET TCP-4) FOR WATERING OPERATIONS ONLY.
- REMOVE ALL TEMPORARY TRAFFIC CONTROL LANE CLOSURE DEVICES AND RETURN TRAFFIC TO ITS EXISTING FOUR-LANE, TWO-WAY TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD.
- STEP 2: UPON COMPLETION OF THE PROJECT, REMOVE ALL TRAFFIC CONTROL DEVICES.

GENERAL NOTES

- FOR LABOR DAY, BETWEEN THE HOURS OF 4:30 P.M. FRIDAY TO 8:30 A.M. TUESDAY.
- FOR THANKSGIVING, BETWEEN THE HOURS OF 4:30 P.M. TUESDAY TO 8:30 A.M. MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 4:30 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:30 A.M. THE FOLLOWING MONDAY AFTER THE WEEK OF CHRISTMAS.

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 40 FT (12m) 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.
- WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT (3m) 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 PERFORM WORK INVOLVING HEAVY EQUIPMENT WITHIN 15 FT OF THE EDGE OF TRAVELWAY WHEN WORK IS BEING PERFORMED BEHIND A LANE CLOSURE ON THE OPPOSITE SIDE OF THE TRAVELWAY.
- DO NOT INSTALL MORE THAN 3 MILES OF LANE CLOSURE ON US 19-23, MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- DO NOT WORK SIMULTANEOUSLY, ON BOTH SIDES OF AN OPEN TRAVELWAY, WITHIN THE SAME LOCATION, ON A TWO-LANE, TWO-WAY ROAD.
- DO NOT INSTALL MORE THAN TWO SIMULTANEOUS LANE CLOSURES, IN ANY ONE DIRECTION, ON US 19-23.

- J) PROVIDE A MINIMUM OF 2 MILES BETWEEN LANE CLOSURES, MEASURED FROM THE END OF ONE CLOSURE TO THE FIRST SIGN OF THE NEXT LANE CLOSURE.

TRAFFIC CONTROL DEVICES

- K) WHEN USING ROADWAY STANDARD NO. 1101.02, DRUMS MAY BE USED IN LIEU OF CONES ON US 19-23.
- L) 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.
- M) PLACE SETS OF THREE DRUMS PERPENDICULAR TO THE EDGE OF THE TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC. THESE DRUMS SHALL BE IN ADDITION TO CHANNELIZING DEVICES.

MISCELLANEOUS

- K) DO NOT BEGIN WORK ON ANY SECTION OF GUARDRAIL UNTIL PREPARATIONS HAVE BEEN MADE TO COMPLETE THE INSTALLATION OF THE SECTION, AS A CONTINUOUS OPERATION.

INDEX OF SHEETS

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, INDEX OF SHEETS, GENERAL NOTES AND PHASING
TCP-2	WORK ZONE WARNING SIGNS FOR GUARDRAIL AND GUIDERAIL INSTALLATION
TCP-3	TEMPORARY LANE CLOSURES
TCP-4	MOVING OPERATION CARAVAN
TCP-5	WORK ZONE SIGNS
TCP-6	DRUM DETAIL

LEGEND

GENERAL

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

TRAFFIC CONTROL DEVICES

- CONE
- DRUM
- FLASHING ARROW PANEL (TYPE C)
- TYPE 'B' WARNING LIGHT
- STATIONARY SIGN
- PORTABLE SIGN
- WARNING FLAGS
- CRASH CUSHION
- CHANGEABLE MESSAGE SIGN
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
- POLICE
- FLAGGER

APPROVED: <i>M. McDiarmid</i> DATE: 11/22/04	PLAN PREPARED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT
SEAL 	J. S. BOURNE, PE TRAFFIC CONTROL ENGINEER
	M. MCDIARMID, PE TRAFFIC CONTROL PROJECT ENGINEER
	JASON GALLOWAY, PE TRAFFIC CONTROL PROJECT DESIGN ENGINEER
	WAYNE JACAS TRAFFIC CONTROL DESIGN ENGINEER

TIP PROJECT: