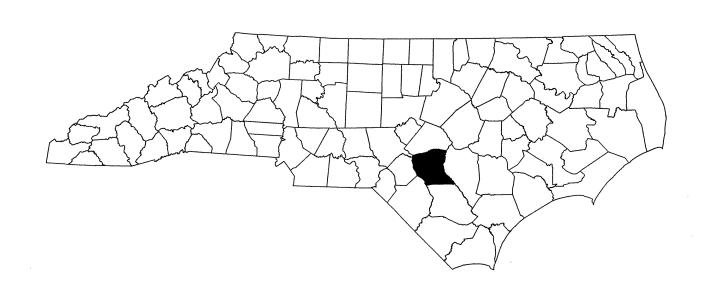
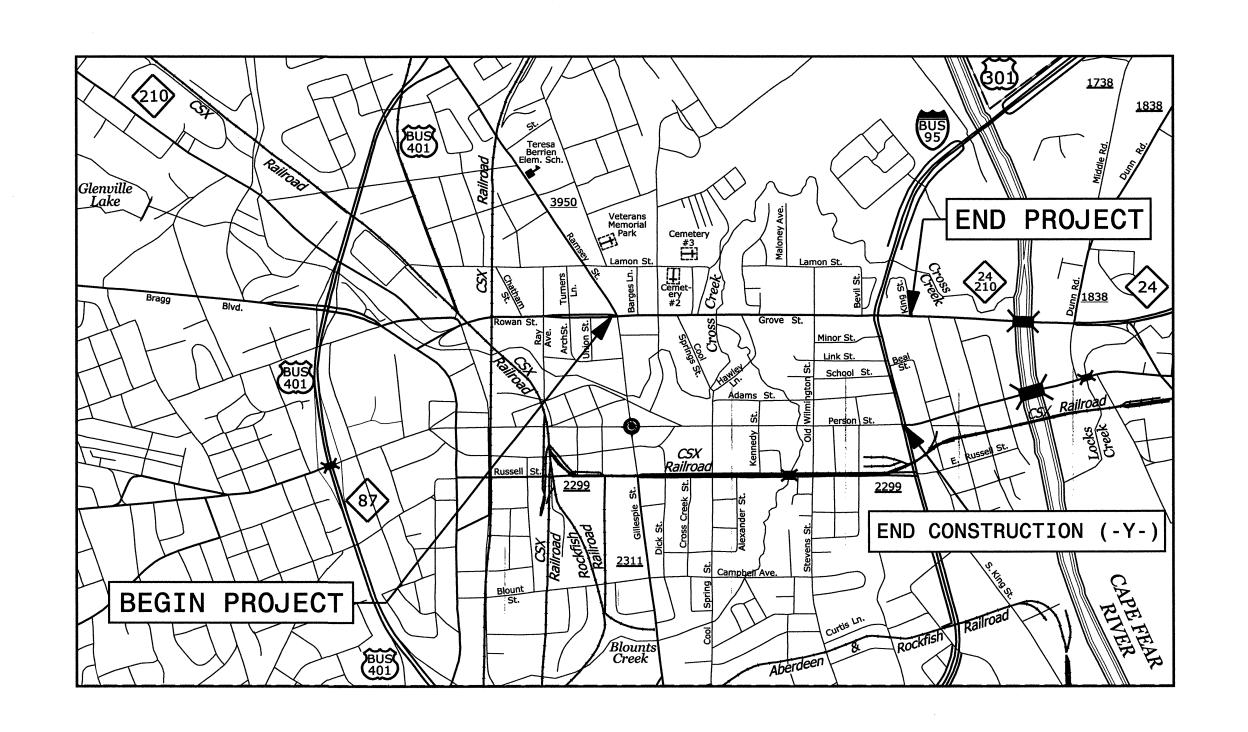
# TRANSPORTATION MANAGEMENT PLAN

# CUMBERLAND COUNTY



LOCATION: NC 24/210 (GROVE ST.) AND US 301/BUS 95 (EASTERN BLVD.)





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 J. S. KITE, P.E. TRAFFIC CONTROL PROJECT ENGINEER DON PARKER TRAFFIC CONTROL PROJECT DESIGN ENGINEER

TRAFFIC CONTROL DESIGN ENGINEER



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SD-01

SPECIAL SIGN DESIGNS

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

R. ERSKINE BROOKS, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER

APPROVED:\_ DATE:\_

## STD. NO.

### TITLE

1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
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1110.01	STATIONARY WORK ZONE SIGNS
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1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
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 MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)

PROJ. REFERENCE NO. SHEET NO. W-5335 TMP-1A 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.

TEMP. SHORING (LOCATION PURPOSES ONLY)

WORK AREA

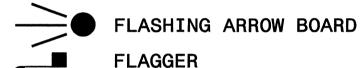
### TRAFFIC CONTROL DEVICES

///\\

BARRICADE (TYPE III)

DRUM SKINNY DRUM O TUBULAR MARKER

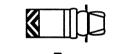
TEMPORARY CRASH CUSHION



**FLAGGER** 



LAW ENFORCEMENT



TRUCK MOUNTED ATTENUATOR (TMA)

CHANGEABLE MESSAGE SIGN

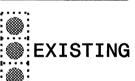
### TEMPORARY SIGNING

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

4" WHITE 2'-6'/SP MINI-SKIP (PAINT)

4" WHITE EDGE LINE (PAINT)

4" YELLOW EDGE LINE (PAINT)

4" WHITE 10' SKIP (PAINT)

4" WHITE 2'-13'/SP MINI-SKIP (PAINT)

4" WHITE LANE LINE (PAINT)

LEFT TURN ARROW (PAINT)

STRAIGHT ARROW (PAINT)

STRAIGHT\_RIGHT\_COMBO. (PAINT)



ROADWAY STANDARD DRAWINGS & LEGEND

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.

### TIME RESTRICTIONS

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

ROAD NAME
-----------

### DAY AND TIME RESTRICTIONS

- MONDAY-FRIDAY: 6:00A.M.-9:00P.M. 1. NC 24/210 (GROVE ST/-L-) (SINGLE INSIDE OR OUTSIDE LANE CLOSURE IN EITHER DIRECTION FOR ANY WORK ADJACENT TO OUTSIDE TRAVEL LANES AND FOR CONSTRUCTION OF MONOLITHIC ISLANDS AT SINGLE LEFT TURN LANES ONLY)
- 2. NC 24/210 (GROVE ST/-L-) NO RESTRICTIONS (SINGLE INSIDE THRU LANE CLOSURE IN EITHER DIRECTION, FOR 1'-6" C&G CONSTRUCTION ONLY)
- 3. NC 24/210 (GROVE ST/-L-) (CLOSE TWO LANES IN EITHER DIRECTION)
  - MONDAY-FRIDAY: 6:00A.M.-9:00P.M. SATURDAY-SUNDAY: 9:00A.M.-9:00P.M.

MONDAY-FRIDAY: 6:00A.M.-9:00P.M.

SATURDAY-SUNDAY: 9:00A.M.-9:00P.M.

MONDAY-FRIDAY: 6:00A.M.-9:00P.M.

- 4. BUS 95/US 301 (EASTERN BLVD/-Y-) (CLOSE TWO LANES IN SB DIRECTION)
- 5. ALL ROADS (ANY LANE CLOSURE FOR
  - SATURDAY-SUNDAY: 9:00A.M.-9:00P.M. FINAL PAVING OPERATIONS)
- B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL **EVENTS AS FOLLOWS:**

### ROAD NAME

NC 24/210 (GROVE ST/-L-) BUS 95/US 301 (EASTERN BLVD/-Y-) RAMSEY STREET **GREEN STREET** 

### HOLIDAY

- 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 6:00 A.M. DECEMBER 31ST TO 9:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN UNTIL 9:00 P.M. THE FOLLOWING TUESDAY.
- 3. FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 9:00 P.M. MONDAY.
- 4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 9:00 P.M. TUESDAY.
- 5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 9:00 P.M. THE DAY AFTER INDEPENDENCE

## PROJECT NOTES

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 9:00 P.M. THE TUESDAY AFTER INDEPENDENCE

- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 9:00 P.M. TUESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 9:00 P.M. MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 9:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- 9. FOR THE DOGWOOD FESTIVAL BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY OF THE DOGWOOD FESTIVAL WEEKEND AND 9:00 P.M. THE FOLLOWING SUNDAY OF THE DOGWOOD FESTIVAL WEEKEND.
- 10. FOR THE INTERNATIONAL FOLK FESTIVAL, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY OF THE INTERNATIONAL FOLK FESTIVAL WEEKEND AND 9:00 P.M. THE FOLLOWING SUNDAY OF THE INTERNATIONAL FOLK FESTIVAL WEEKEND.
- C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
NC 24/210 (GROVE ST/-L-)	MONDAY-SUNDAY:	15 MINUTES MAX

BUS 95/US 301 (EASTERN BLVD/-Y-) 5:30AM-10:00PM RAMSEY STREET GREEN STREET

15 MINUIES MAX. FOR TRAFFIC **OPERATIONS** 

D) 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 CLOSURE REQUIREMENTS

- E) 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.
- F) 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.
- 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.

- H) 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 REMAINS WITHIN THE CLOSED TRAVEL LANE.
- I) 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.

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- J) DO NOT INSTALL MORE THAN 1 MILE OF LANE CLOSURE ON NC 24/210 (GROVE ST/-L-), MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- K) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON NC 24/210 (GROVE ST/-L-).

### PAVEMENT EDGE DROP OFF REQUIREMENTS

L) 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.

M) 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' IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

### TRAFFIC PATTERN ALTERATIONS

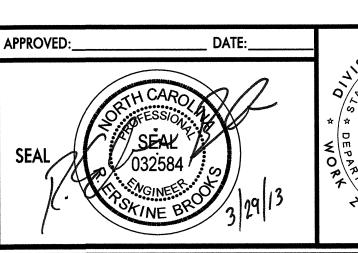
N) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

### SIGNING

- O) 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.
- P) PROVIDE SIGNING FOR THE ALTERNATE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.
- Q) REMOVE ALL SIGNS REQUIRED FOR THE ALTERNATE DETOUR ROUTE ONCE CONSTRUCTION IS COMPLETE.
- R) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- S) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 200' IN ADVANCE OF THE UNEVEN AREA. OR AS DIRECTED BY THE ENGINEER.

### TRAFFIC CONTROL DEVICES

- T) 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.
- U) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- V) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS) PERPENDICULAR TO THE EDGE OF THE TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.



PROJECT NOTES

DATE:

## PROJECT NOTES

### PROJ. REFERENCE NO. SHEET NO. W-5335 TMP-1C 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

PAVEMENT MARKINGS AND MARKERS

W) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME

MARKING

PAINT

MARKER

ALL ROADS

TEMPORARY RAISED

- X) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.
- Y) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- Z) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
- AA) TRACE THE EXISTING AND/OR PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO REMOVAL AND/OR INSTALLATION. PLACE DRUMS, CONES, OR TUBULAR MARKERS TO DELINEATE ANY EXISTING AND/OR PROPOSED MONOLITHIC ISLANDS AFTER REMOVAL AND/OR BEFORE INSTALLATION.

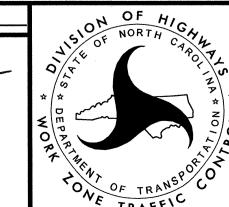
MISCELLANEOUS

- BB) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS, AS DIRECTED BY THE ENGINEER.
- CC) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.
- DD) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.).

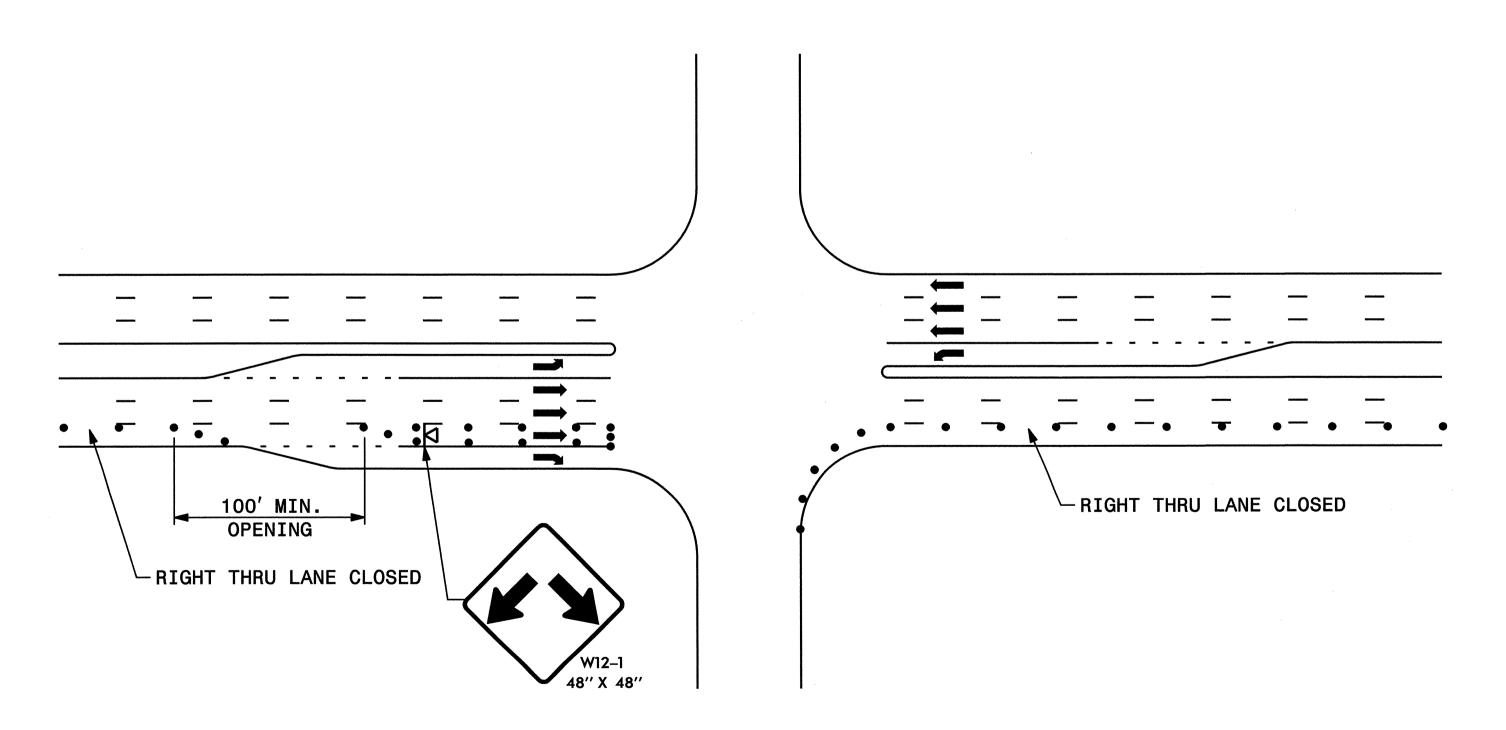
1.	FOR WORK ON -L- (NC 24) - ANY WORK REQUIRING THE REMOVAL OF EXISTING
	C&G AND/OR EXISTING ASPHALT, AND PROPOSED DRAINAGE CONSTRUCTION SHALL
	NOT BE COMPLETED DURING THE NIGHT LANE CLOSURE OPERATION. PROPOSED
	DRAINAGE CONSTRUCTION AND CONSTRUCTION REQUIRING REMOVAL OF EXISTING
	C&G AND/OR EXISTING ASPHALT SHALL BE COMPLETED DURING THE WEEKEND ICT.

LOCAL NOTES

2. FOR WORK ON -L- (NC 24) - DURING THE WEEKEND ICT, COMPLETE (AT A MINIMUM) PROPOSED C&G, EXISTING ASPHALT REPLACEMENT, AND PROPOSED DRAINAGE (IF REQUIRED). ALL OTHER WORK ADJACENT TO THE OUTSIDE TRAVEL LANE MAY BE COMPLETED DURING THE WEEKEND ICT OR DURING NIGHT LANE CLOSURE OPERATIONS.



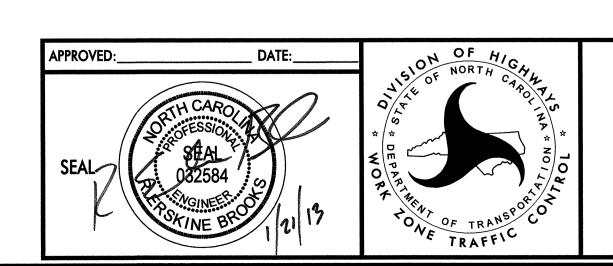
# TYPICAL FOR LEFT TURN LANE OPENING DURING THRU LANE CLOSURES (APPLIES TO DOUBLE OR SINGLE LANE CLOSURES)



TYPICAL FOR RIGHT TURN LANE OPENING

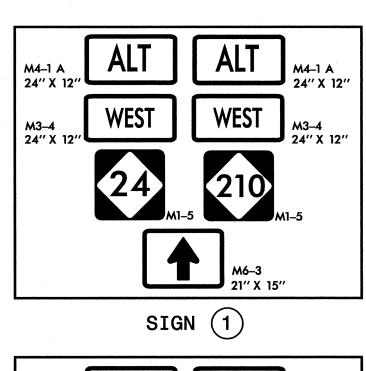
DURING THRU LANE CLOSURES

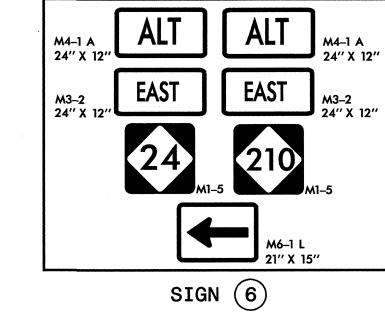
(APPLIES TO DOUBLE OR SINGLE LANE CLOSURES)

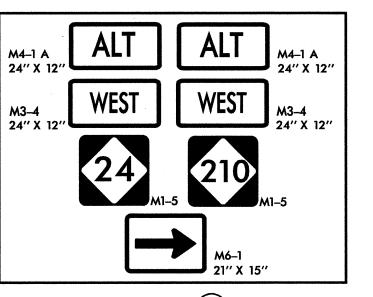


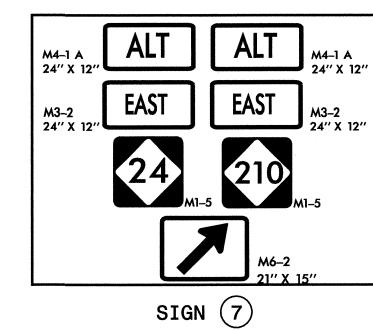
DETAIL 1 LEFT/RIGHT TURN LANE DETAIL

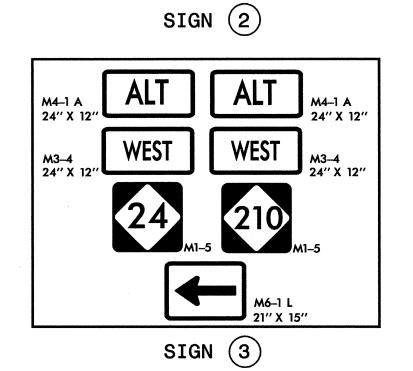
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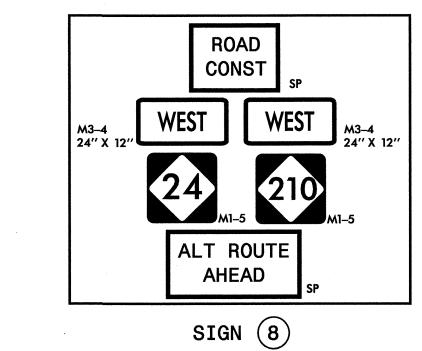


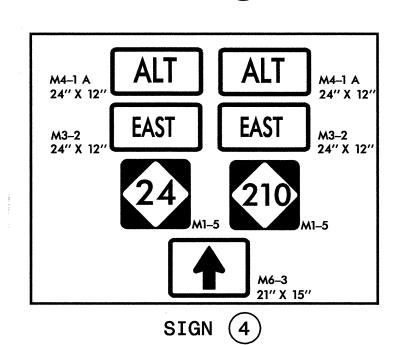


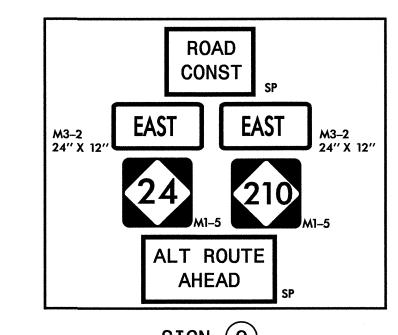


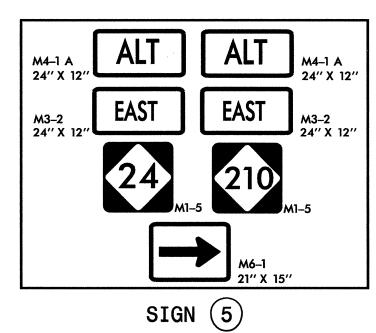


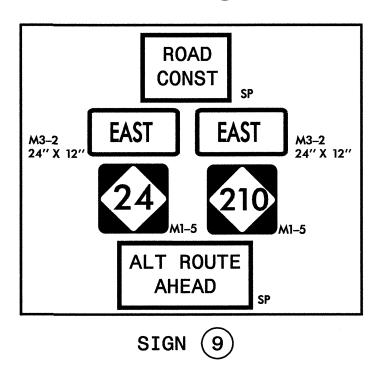


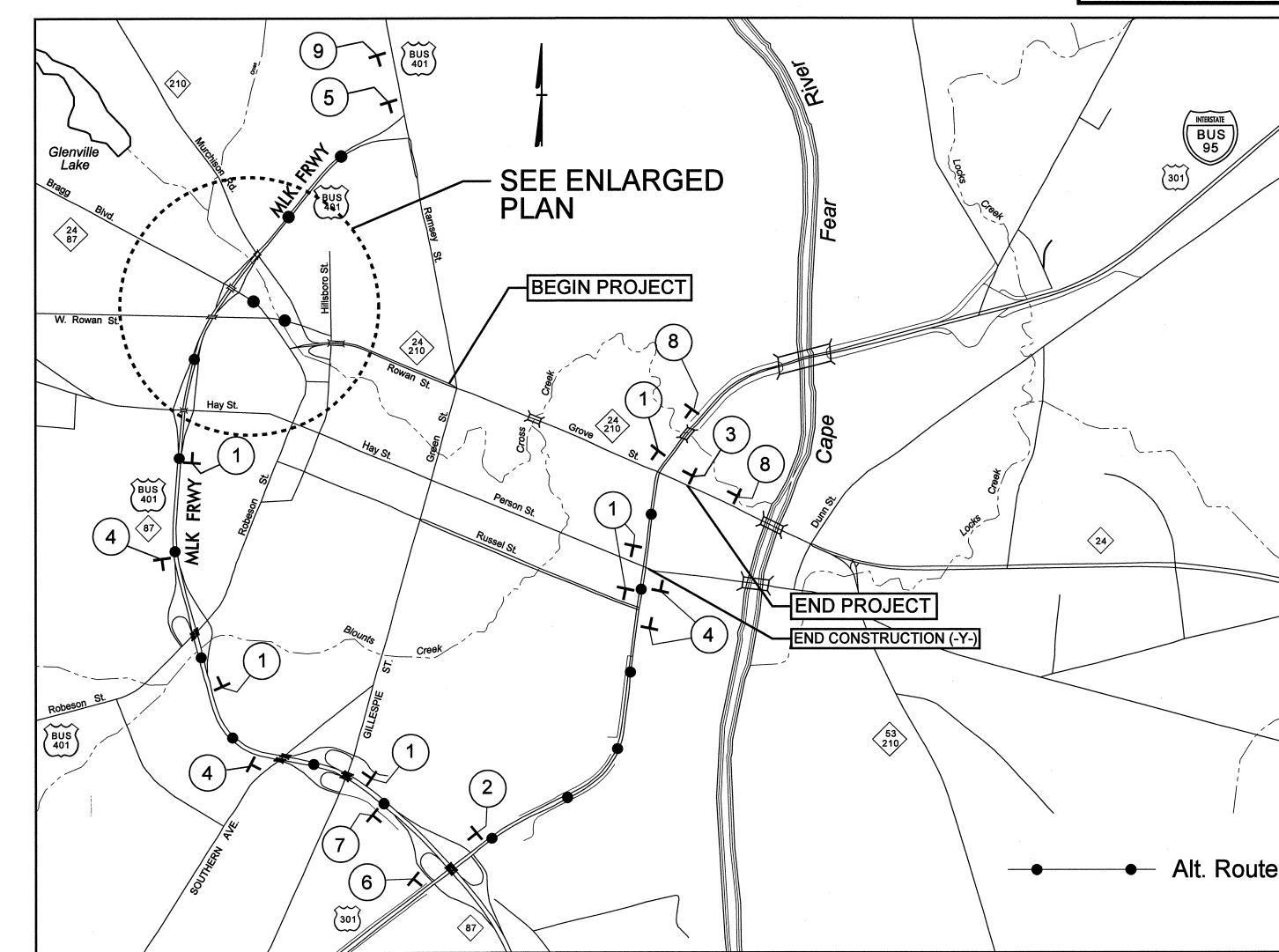




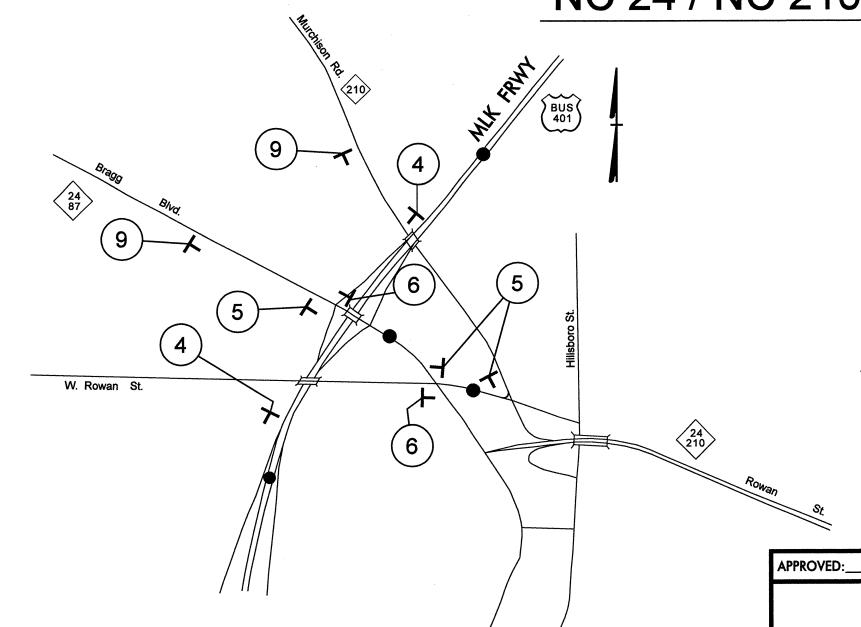








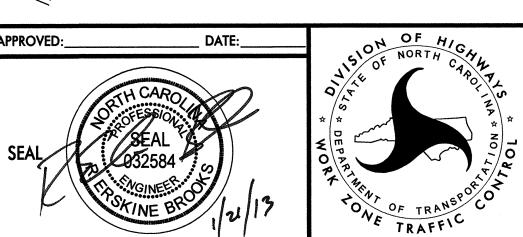




**ENLARGED PLAN** 

1. ALTERNATE ROUTE IS SAME AS SHOWN FOR B-4090 PROJECT (SHEET TMP-12); REPLACE SIGNING ONCE THE B-4090 PROJECT IS COMPLETE AND SIGNING HAS BEEN REMOVED, AS DIRECTED BY THE ENGINEER.

- 2. CHANGEABLE MESSAGE SIGNS MAY BE ADDED AS DIRECTED BY ENGINEER.
- THE "ALT" SIGN (M4-1 A) SHALL BE BLACK ON FLUORESCENT ORANGE.
- SEE SHEET SD-01 FOR SPECIAL SIGN DESIGNS.



DETAIL 2 NC 24 / NC 210 ALTERNATE ROUTE

# PHASING

PROJ. REFERENCE NO. SHEET NO W-5335 TMP-3 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

### NOTES:

INSTALL WORK ZONE ADVANCE WARNING SIGNS USING RSD 1101.01, SHEETS 3 OF 3 PRIOR TO BEGINNING ANY WORK. (SEE GENERAL NOTE "O" ON SHEET TMP-1B)

INSTALL NC 24 / NC 210 ALTERNATE ROUTE SIGNING AS SHOWN ON SHEET TMP-2A ONCE THE ALTERNATE ROUTE SIGNING UNDER PROJECT B-4090 HAS BEEN REMOVED.

REPLACE MARKINGS AND RETURN TRAFFIC TO THE CURRENT TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

MAINTAIN VEHICULAR ACCESS TO ALL RESIDENCES AND BUSINESSES DURING THE LIFE OF THE CONTRACT UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

COMPLETE ANY PROPOSED WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.

PAVE PROPOSED CONSTRUCTION, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE, IN ALL PHASES, UNTIL STATED TO COMPLETE FINAL PAVING OPERATIONS IN PHASE 3.

WORK WITHIN AREA 1 MUST BE COMPLETED PRIOR TO BEGINNING WORK WITHIN AREA 2 EXCLUDING MONOLITHIC ISLAND CONSTRUCTION, FINAL PAVING OPERATIONS, AND AS OTHERWISE DIRECTED IN THE PROJECT PHASING. (SEE SHEET TMP-4 FOR AREAS)

AREA 1: -L- STA. 42+20 +/- TO STA. 58+77 +/- AND -Y-

### PHASE 1

### STEP 1:

USING RSD 1101.02, SHEETS 1-3 AND 8 OF 15, AND LAW ENFORCEMENT AS NECESSARY, BEGIN INSTALLATION OF SIGNAL #06-0029 AT THE -Y-/PERSON STREET INTERSECTION AND SIGNAL #06-0314 AT -L-/B STREET INTERSECTION AND ADJUST SIGNAL HEADS AS DIRECTED BY THE ENGINEER.

USING LANE CLOSURES AS SHOWN ON SHEETS TMP-5 THRU TMP-7, AS NECESSARY, MAY BEGIN CONSTRUCTION ALONG -L- (SEE LOCAL NOTE 1) AND -Y- ADJACENT TO THE OUTSIDE TRAVEL LANES.

### STEP 2:

USING LANE CLOSURES AS SHOWN ON SHEETS TMP-5 AND TMP-7, COMPLETE CONSTRUCTION ADJACENT TO THE OUTSIDE TRAVEL LANES AT THE -Y- / PERSON STREET INTERSECTION.

COMPLETE THE WORK REQUIRED ON -L- (NC 24) IN AREA 1, PHASE 1, STEP 3 USING WEEKEND LANE CLOSURES FROM 9:00 PM FRIDAY TO 6:00 AM MONDAY.

REPEAT STEP 3 FOR ALL CONSTRUCTION ADJACENT TO THE OUTSIDE TRAVEL LANES UNTIL ALL WORK IS COMPLETE.

## STEP 3:

USING LANE CLOSURES AS SHOWN ON SHEETS TMP-5 THRU TMP-7, AS NECESSARY, CONSTRUCT THE FOLLOWING, ADJACENT TO THE OUTSIDE TRAVEL LANES (SEE LOCAL NOTE 2):

-L- STA. 42+20 +/- TO STA. 58+77 +/-

RETURN TRAFFIC TO THE EXISTING PATTERN AT THE END OF THE WORK PERIOD.

### STEP 4:

USING LANE CLOSURES AS SHOWN ON SHEET TMP-6, AS NECESSARY, CONSTRUCT DRAINAGE SYSTEM (STRUCTURES NO. 17-20 AND ASSOCIATED PIPES) ON -Y-.

NOTE: DRAINAGE INSTALLATION IN STEP 4 MAY BE COMPLETED BEFORE, AFTER, OR DURING CONSTRUCTION ADJACENT TO TRAVEL LANES, AS SHOWN ON SHEETS TMP-5 AND TMP-6 IN AREA 1, PHASE 1, STEPS 2 OR 3.

### PHASE 2

COMPLETE THE WORK REQUIRED IN AREA 1, PHASE 2, STEP 1 WITHIN 21 CALENDAR DAYS. (SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.)

### STEP 1:

USING LANE CLOSURES AS SHOWN ON SHEET TMP-8, AS NECESSARY, COMPLETE 1'-6" MEDIAN ISLAND CONSTRUCTION ON -Y- (US 301) FROM STA. 27+93 +/- TO STA. 36+14 +/-, INCLUDING ANY ASSOCIATED EXCAVATION, ASPHALT PAVING, BACKFILLING, AND INSTALLATION OF FINAL SIGNING ALONG -Y- (US 301) AS DIRECTED BY THE ENGINEER. ONCE CONSTRUCTION IS COMPLETE, REMOVE EXISTING LANE CLOSURE DEVICES AND REOPEN TO EXISTING PATTERN AT THE END OF THE 21 DAY PERIOD.

NOTE: PROTECT THE EXPOSED ENDS OF THE ISLAND BY MEANS OF TEMPORARY CURB TRANSITIONS, TCP DEVICES, AND/OR AS DIRECTED BY THE ENGINEER, UNTIL INSTALLATION AND COMPLETION OF THE MONOLITHIC ISLANDS IN AREA 1, PHASE 2, STEP 4.

### STEP 2:

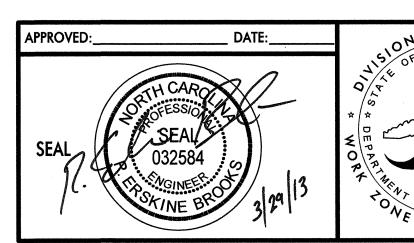
USING DOUBLE LANE CLOSURE AS SHOWN ON SHEET TMP-9, CONDUCT MEDIAN ISLAND WORK ON -L- (NC 24) FROM STA. 53+30 +/- TO STA. 57+60 +/-. (SEE TIME RESTRICTIONS FOR CLOSING TWO LANES IN EITHER DIRECTION).

COMPLETE THE MONOLITHIC ISLAND CONSTRUCTION LISTED BELOW IN AREA 1, PHASE 2, STEP 3 SIMULTANEOUSLY WITH THE MONOLITHIC ISLAND CONSTRUCTION IN AREA 2, PHASE 2, STEP 3. UPON COMPLETION OF AREA 1, PHASE 2, STEP 3, MOVE DIRECTLY TO AREAS 1 AND 2, PHASE 3, STEP 1.

### STEP 3:

COMPLETE ALL MONOLITHIC CONCRETE ISLANDS ON -Y- FROM STA. 22+40 +/- TO STA. 38+55 +/- (AS SHOWN ON SHEET TMP-8). CLOSE THE THROUGH LANE AND LEFT TURN LANE AT EACH LOCATION AND CONSTRUCT MONOLITHIC ISLAND AT THE LEFT TURN LANE.

UPON COMPLETION OF THE MONOLITHIC ISLAND FROM -Y- STA. 36+14 +/- TO STA. 38+55 +/-, AND SUFFICIENT CURING OF THE CONCRETE, PLACE SKINNY DRUMS ON TOP OF THE MONOLITHIC ISLAND AND REOPEN THE LEFT TURN LANE BY THE FOLLOWING MORNING, OR AS DIRECTED BY THE ENGINEER. THE -Y- NB INSIDE THRU LANE CLOSURE SHALL BE MAINTAINED UNTIL DIRECTED BY THE ENGINEER.



AREA 2: -L- STA. 10+00 +/- TO STA. 42+20 +/-

### PHASE 1

USING RSD 1101.02, SHEETS 1-3 AND 8 OF 15, AND LAW ENFORCEMENT AS NECESSARY, BEGIN INSTALLATION OF SIGNAL #06-0040 AT THE -L-/RAMSEY STREET INTERSECTION AND SIGNAL #06-0218 AT -L-/ANN STREET INTERSECTION AND ADJUST SIGNAL HEADS, AS DIRECTED BY THE ENGINEER.

USING LANE CLOSURES AS SHOWN ON SHEETS TMP-5 THRU TMP-7, AS NECESSARY, MAY BEGIN CONSTRUCTION ALONG -L- ADJACENT TO THE OUTSIDE TRAVEL LANES (SEE LOCAL NOTE 1) .

COMPLETE THE WORK REQUIRED ON -L- (NC 24) IN AREA 2, PHASE 1, STEP 2 USING WEEKEND LANE CLOSURES FROM 9:00 PM FRIDAY TO 6:00 AM MONDAY.

REPEAT STEP 2 FOR ALL CONSTRUCTION ADJACENT TO THE OUTSIDE TRAVEL LANES UNTIL ALL WORK IS COMPLETE.

### STEP 2:

USING LANE CLOSURES AS SHOWN ON SHEETS TMP-10 AND TMP-11, AS NECESSARY, CONSTRUCT THE FOLLOWING, ADJACENT TO THE OUTSIDE TRAVEL LANE (SEE LOCAL NOTE 2):

-L- STA 10+00 +/- TO STA. 42+20 +/-

RETURN TRAFFIC TO THE EXISTING PATTERN AT THE END OF THE WORK PERIOD.

### PHASE 2

### STEP 1:

USING RSD 1101.02, SHEET 3 OF 15, AS NECESSARY, PLACE TEMPORARY MARKINGS ALONG -L- FROM STA. 8+40 +/- TO STA. 10+40 +/- AND FROM STA. 54+85 +/- TO STA. 56+85 +/- AND CLOSE LANES AS SHOWN ON SHEET TMP-12.

### STEP 2:

USING LANE CLOSURES AS SHOWN ON SHEET TMP-12, AS NECESSARY, COMPLETE 1'-6" MEDIAN ISLAND CONSTRUCTION, INCLUDING ANY ASSOCIATED EXCAVATION, ASPHALT PAVING. AND BACKFILLING IN THE FOLLOWING LOCATIONS:

- -L- STA. 21+09 +/- TO STA. 25+52 +/-
- -L- STA. 29+51 +/- TO STA. 40+29 +/-
- -L- STA. 45+96 +/- TO STA. 48+24 +/-

NOTE: PROTECT THE EXPOSED ENDS OF THE ISLANDS BY MEANS OF TEMPORARY CURB TRANSITIONS, TCP DEVICES, AND/OR AS DIRECTED BY THE ENGINEER, UNTIL INSTALLATION AND COMPLETION OF THE MONOLITHIC ISLANDS IN AREA 2, PHASE 2, STEP 4.

INSTALL FINAL SIGNING AS DIRECTED BY THE ENGINEER.

COMPLETE THE MONOLITHIC ISLAND CONSTRUCTION LISTED BELOW IN AREA 2. PHASE 2, STEP 3 SIMULTANEOUSLY WITH THE MONOLITHIC ISLAND CONSTRUCTION IN AREA 1, PHASE 2, STEP 3. UPON COMPLETION OF AREA 2, PHASE 2, STEP 3, MOVE DIRECTLY TO AREAS 1 AND 2, PHASE 3, STEP 1.

### STEP 3:

COMPLETE ALL MONOLITHIC CONCRETE ISLANDS ON -L- FROM STA. 12+81 +/- TO STA. 51+46 +/- (AS SHOWN ON SHEET TMP-12). CLOSE THE LEFT TURN LANE AT EACH LOCATION AND CONSTRUCT MONOLITHIC ISLAND AT THE LEFT TURN LANE.

UPON COMPLETION OF EACH MONOLITHIC ISLAND LOCATION AND SUFFICIENT CURING OF THE CONCRETE, PLACE SKINNY DRUMS ON TOP OF THE MONOLITHIC ISLAND AND REOPEN THE LEFT TURN LANE BY THE FOLLOWING MORNING, OR AS DIRECTED BY THE ENGINEER. THE INSIDE THRU LANE CLOSURE SHALL BE MAINTAINED UNTIL DIRECTED BY THE ENGINEER.

### AREAS 1 & 2: -L- AND -Y-

(FOR PHASE 1 AND 2, SEE ABOVE FOR SEPARATE PHASING OF EACH AREA.)

### PHASE 3

USING SINGLE AND/OR DOUBLE LANE CLOSURES AS SHOWN ON SHEETS TMP-13 THRU TMP-16, AND RSD 1101.02, SHEETS 1 & 3 OF 15, AS NECESSARY, COMPLETE FINAL PAVING OPERATIONS AND PLACE TEMPORARY MARKINGS IN THE FINAL PATTERN. AS SHOWN IN THE FINAL PAVEMENT MARKING PLAN AND ACTIVATE ALL FINAL SIGNALS.

### STEP 2:

FOLLOWING COMPLETION OF ALL FINAL PAVING, INSTALL FINAL PAVEMENT MARKINGS AND MARKERS USING SINGLE AND/OR DOUBLE INSIDE AND OUTSIDE LANE CLOSURES AS WERE USED DURING PAVING OPERATIONS AND OPEN ALL LANES TO TRAFFIC.

### STEP 3:

REMOVE ALL REMAINING TRAFFIC CONTROL DEVICES, INCLUDING SIGNING FOR ALTERNATE DETOUR ROUTE.



PHASING





