MANAGEMENT STRATEGIES

PHASE 1, STEP 1:

SOUTHBOUND -Y1- (US 321) TRAFFIC IS MAINTAINED IN THE EXISTING PATTERN WHILE MOST OF THE OUTSIDE C&G IN THE SOUTHBOUND DIRECTION IS CONSTRUCTED USING A MAXIMUM OF 3 SEPARATE WEEKEND LANE CLOSURES.

NORTHBOUND -Y1- (US 321) TRAFFIC IS PLACED IN A TEMPORARY PATTERN FROM SOUTH OF RANKIN LAKE RD TO THE END OF THE PROJECT AND C&G IS CONSTRUCTED IN THIS AREA USING NIGHTLY LANE CLOSURES, AS NEEDED.

TRAFFIC IS MAINTAINED IN THE EXISTING PATTERN DURING CONSTRUCTION OF -Y2- (MARIETTA ST) AND -Y3- (BULB AVE).

CONSTRUCTION OF THE TRAIL BEGINS, EXCEPT AT RANKIN LAKE RD AND -RPA-AND -RPD- CONSTRUCTION BEGINS WITHOUT INTERFERING WITH -L- (I-85) OR RANKIN LAKE RD TRAFFIC.

EXISTING DRAINAGE BOXES IN THE MEDIAN OF -L- (I-85) ARE RETROFITTED WITH NEW STEEL GRATES USING NIGHTLY LANE CLOSURES. PROPOSED MEDIAN DRAINAGE NEAR -RPD- IS INSTALLED DURING A WEEKEND OPERATION, USING A LANE CLOSURE ON -L- (I-85) AND CLOSING EXISTING LOOP C.

PHASE 1, STEP 2:

-Y2- (MARIETTA ST) IS SHIFTED TO THE NEW ALIGNMENT THEN THE REMAINDER OF -Y2- AND THE -Y3- (BULB AVE) TIE TO -Y2- (MARIETTA ST) IS CONSTRUCTED.

PHASE 1, STEP 3:

-Y2- (MARIETTA ST) AND -Y3- (BULB AVE) IS OPENED TO THEIR FINAL TRAFFIC PATTERN AND RANKIN LAKE RD ON THE EAST SIDE OF -Y1- (US 321) IS CLOSED.

THE PORTION OF -RPA-/-RPD- AND THE TRAIL, BEGUN IN PHASE 1, STEP 1 IS COMPLETED AND THE REMAINDER OF -RPA-/-RPD- AND THE TRAIL UNDER -RPD-IS CONSTRUCTED.

PHASE 1, STEP 4:

RUMBLE STRIPS ARE REMOVED IN THE MEDIAN ON -L- (I-85) NB AND SB, THEN TRAFFIC IS SHIFTED TOWARDS THE MEDIAN, WITH A BARRIER SEPARATOR, TO CONSTRUCT THE ACCELERATION AND DECELERATION LANES FOR -RPA- AND -RPD-. ONCE COMPLETE, BARRIER IS REMOVED, TRAFFIC IS SHIFTED BACK TO THE EXISTING LANES ON I-85 NB AND SB, -RPA- IS OPENED AND -RPD- REMAINS CLOSED. THIS WORK IS COMPLETED DURING A 30 DAY ICT.

PHASE 1. STEP 5:

IN ADDITION TO OPENING -RPA- (I-85 SB OFF-RAMP), NB -Y1- (US 321) IS PLACED IN A TEMPORARY PATTERN TO CONSTRUCT THE REMAINDER OF THE C&G IN THE NORTHBOUND DIRECTION, USING NIGHTLY LANE CLOSURES WHEN NEEDED.

CONSTRUCT C&G, PAVEMENT REMOVAL AND SHOULDER CONSTRUCTION ALONG EXISTING RAMP B AND LOOP B USING LANE CLOSURES/LANE NARROWING.

REMAINDER OF -RPD- AND THE TRAIL ARE COMPLETED IN STEP 5.

PHASE 1, STEP 6:

NB -Y1- (US 321) IS PLACED IN A TEMPORARY PATTERN WITH SB STILL IN THE EXISTING PATTERN. EXISTING ISLANDS ARE REMOVED AND PAVEMENT IS RECONSTRUCTED USING NIGHTLY LANE CLOSURES.

PHASE 1, STEP 7:

WITH NB -Y1- (US 321) IN THE TEMPORARY PATTERN FROM STEP 6 AND SB -Y1- (US 321) STILL IN THE EXISTING PATTERN, MILL 1.5" AS SHOWN ON THE ROADWAY PLANS AND CONSTRUCT THE PROPOSED MONOLITHIC ISLANDS (EXCEPT FOR LOCATIONS THAT INTERFERE WITH LEFT TURN MOVEMENTS) DURING A MAXIMUM OF 2 WEEKEND LANE CLOSURE OPERATIONS. AS SOON AS PROPOSED ISLANDS ON -Y1- (US 321) AT -RPD- ARE COMPLETE, OPEN -RPD-(ON-RAMP TO I-85 NB) IN THE PHASE 2 TRAFFIC PATTERN.

PHASE 2, STEP 1:

ALL ROADS ARE OPEN TO THE FINAL TRAFFIC PATTERN, EXCEPT LOOP B AND FROM SOUTH OF RANKIN LAKE RD TO EXISTING RAMP C ALONG SB -Y1- (US 321).

REMAINDER OF THE WORK ALONG THE SB SIDE OF -Y1- (US 321) AND THE REMAINDER OF THE MONOLITHIC ISLAND CONSTRUCTION ARE COMPLETED IN PHASE 2, USING A MAXIMUM OF 3 WEEKEND LANE CLOSURE OPERATIONS.

PHASE 2, STEPS 2 & 3:

CLOSE -LPB- FOR ONE WEEKEND TO MILL 3" AND OVERLAY, INCLUDING THE FINAL LAYER OF SURFACE COURSE AND FINAL MARKINGS AND MARKERS.

UTILIZE LANE CLOSURES ON -L- (I-85) NB AND SB TO MILL 1.5" AND PLACE THE FINAL LAYER OF SURFACE COURSE AND FINAL MARKINGS AND MARKERS, AS WELL AS RE-INSTALL THE RUMBLE STRIPS IN THE MEDIAN SHOULDER.

UTILIZE LANE CLOSURES FOR ALL OTHER ROADS TO PLACE THE FINAL LAYER OF SURFACE COURSE AND FINAL MARKINGS AND MARKERS.

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.

TIME RESTRICTIONS

ROAD NAME

-Y1- (US 321)

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

-L- (I-85) &	MONDAY - SUNDAY:

NOTE: TIME RESTRICTIONS NOTED ABOVE WILL BE SUSPENDED FOR THE ALLOWABLE WEEKEND LANE CLOSURES IN PHASE 1, STEP 1A; PHASE 1, STEP 1B; PHASE 1. STEP 7 AND PHASE 2. STEP 1.

DAY AND TIME RESTRICTIONS

6:00 A.M. TO 9:00 P.M.

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

ROAD NAME

-L- (I-85) & -Y1- (US 321)

<u>HOLIDAY</u>

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

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 9:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 9:00 P.M. FRIDAY AND 6:00 A.M. TUESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 9:00 P.M. TUESDAY TO 6:00 A.M. MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 9:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- 9. FOR ANY NASCAR RACE AT THE CHARLOTTE MOTOR SPEEDWAY, BETWEEN THE HOURS OF 6:00 A.M. THE WEDNESDAY BEFORE THE FIRST TRACK EVENT UNTIL 9:00 P.M. THE DAY AFTER THE LAST TRACK EVENT.

10. FOR ANY CAROLINA PANTHERS GAME PLAYED IN CHARLOTTE, FROM FIVE (5) HOURS BEFORE THE GAME TO FIVE (5) HOURS AFTER THE GAME.

PROJ. REFERENCE NO. SHEET NO. TMP-1B I-5000

HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116

C) DO NOT STOP TRAFFIC AS FOLLOWS:

DURATION DAY AND TIME **ROAD NAME RESTRICTIONS** AND OPERATION MONDAY - SUNDAY: -L- (I-85) & 30 MINUTES FOR OVERHEAD -Y1- (US 321) 5:00 A.M. - 12:00 A.M. SIGN INSTALLATION (MIDNIGHT) MONDAY - FRIDAY: -Y2- MARIETTA ST 20 MINUTES FOR BLASTING -Y3- BULB AVE 7:00 A.M. - 9:00 A.M. 4:00 P.M. - 7:00 P.M.

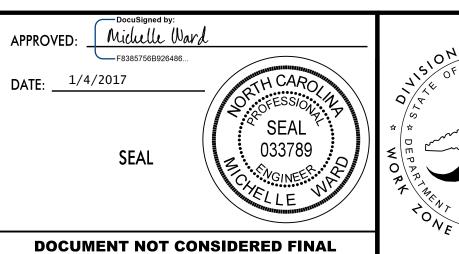
D) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER 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.
- G) 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 REMAIN 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.
- J) DO NOT INSTALL MORE THAN 1 MILE OF LANE CLOSURE ON -L- (I-85) AND -Y1- (US 321) 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 -L- (I-85) AND -Y1- (US 321).
- L) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.



UNLESS ALL SIGNATURES COMPLETED

TRANSPORTATION **OPERATIONS** PLAN