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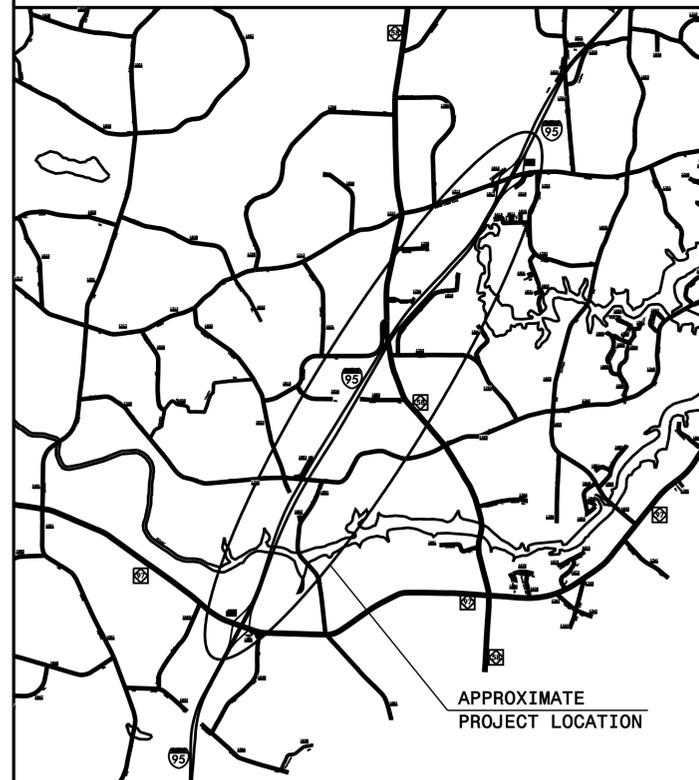
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

**NASH COUNTY**



**VICINITY MAP**



APPROXIMATE  
PROJECT LOCATION



**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  
STEVE KITE, P.E. TRAFFIC CONTROL PROJECT ENGINEER  
TRAFFIC CONTROL PROJECT DESIGN ENGINEER  
TRAFFIC CONTROL DESIGN ENGINEER



PLAN PREPARED IN THE OFFICE OF:  
**PROGRESSIVE**  
DESIGN GROUP, INC.  
ENGINEERS • CONSULTANTS  
PH: 704 573 3003

APPROVED: *Tommy Arvey*  
DATE: 9/22/2015  
SEAL  
NORTH CAROLINA PROFESSIONAL ENGINEER  
TIM AREY  
SEAL 025465

**INDEX OF SHEETS**

<u>SHEET NO.</u>	<u>TITLE</u>
TMP-1	TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-2	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES)
TMP-2A	OFF SITE DETOUR DETAIL
TMP-2B	WORK ZONE VARIABLE SPEED LIMIT DETAIL
TMP-3	CONSTRUCTION NARRATIVE AND TEMPORARY TRAFFIC CONTROL PHASING

SHEET NO.  
TMP-1

**I-5725 / I-5761**

**TIP PROJECT:**

# 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 WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
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
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1253.01	RAISED PAVEMENT MARKERS - (SNOWPLOWABLE)

# LEGEND

## GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)

- WORK AREA
- REMOVAL
- TEMPORARY PAVEMENT
- ON-GOING CONSTRUCTION

## PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

## TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

## TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

## PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

## PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

<p>PLAN PREPARED IN THE OFFICE OF:</p> <p><b>PROGRESSIVE</b> DESIGN GROUP, INC.</p> <p>ENGINEERS • CONSULTANTS PH 704 573 3003</p>	<p>APPROVED:  DATE: 9/22/2015</p> <p>SEAL</p> <p></p>	<p></p>	<p>ROADWAY STANDARD DRAWINGS &amp; LEGEND</p>
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**MANAGEMENT STRATEGIES**

THIS PROJECT CONSISTS OF TWO SEPERATE CONSTRUCTION OPERATIONS THAT WILL UTILIZE A COMBINATION OF LANE CLOSURES AND AN OFF SITE TO COMPLETE THE CONSTRUCTION OPERATIONS. THESE OPERATIONS AND CONSTRUCTION PROCEDURES ARE DESCRIBED IN THE NARRATIVE HEADING ON SHEET TMP-3.

**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

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

ROAD NAME	DAY AND TIME RESTRICTIONS
I-95	MONDAY-THURSDAY 7:00AM-8:00PM FRIDAY-SUNDAY 7:00AM-10:00PM

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

ROAD NAME
I-95

HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:30AM DECEMBER 31st TO 8:00PM JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:00PM THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 6:30AM THURSDAY AND 8:00PM MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:30AM FRIDAY TO 8:00PM TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:30AM THE DAY BEFORE INDEPENDENCE DAY AND 8:00PM THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:30AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 8:00PM THE TUESDAY AFTER INDEPENDENCE DAY.

- FOR LABOR DAY, BETWEEN THE HOURS OF 6:30AM FRIDAY AND 8:00PM TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:30AM TUESDAY TO 8:00PM MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 6:30AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:00PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
I-95	MONDAY-SUNDAY 6:00AM-11:00PM

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 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.

F) 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.

- 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.
- DO NOT INSTALL MORE THAN 1 MILE OF LANE CLOSURE ON I-95 MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON I-95.

PAVEMENT EDGE DROP OFF REQUIREMENTS

J) 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.

K) 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

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

SIGNING

M) 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.

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

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

O) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN THE ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

P) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

Q) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL DEVICES

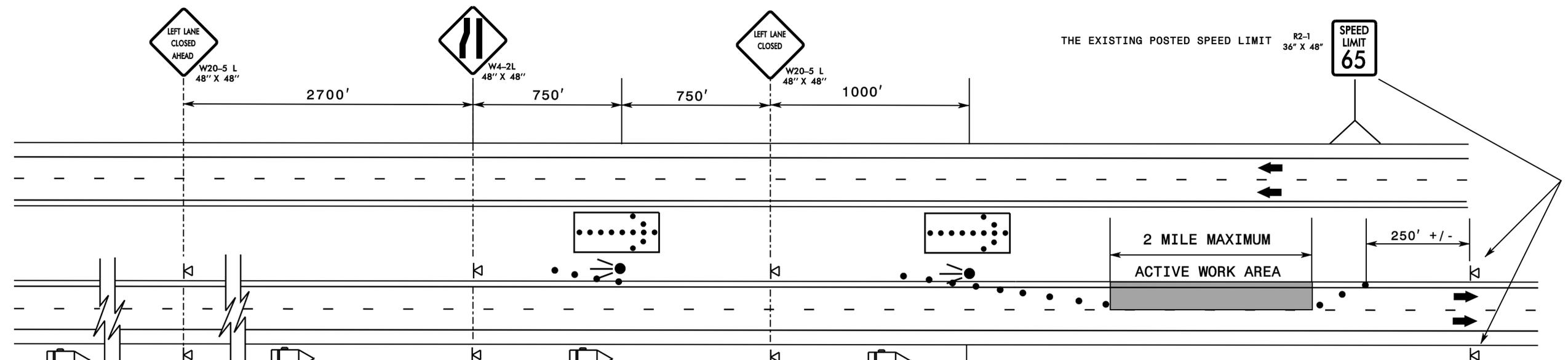
R) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

S) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

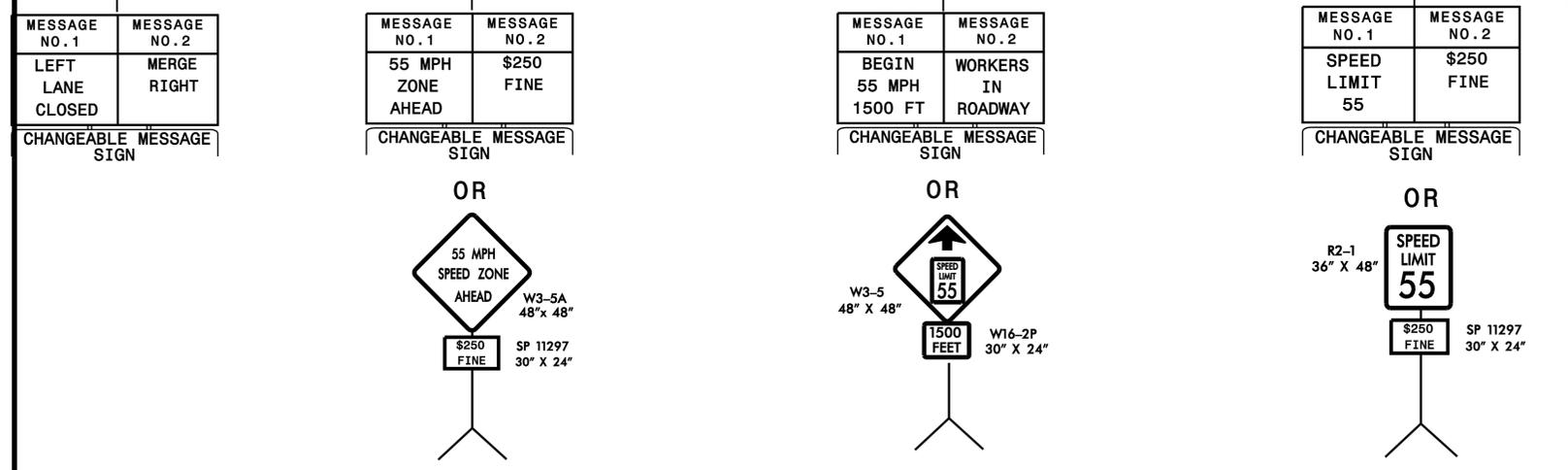
PAVEMENT MARKINGS AND MARKERS

T) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

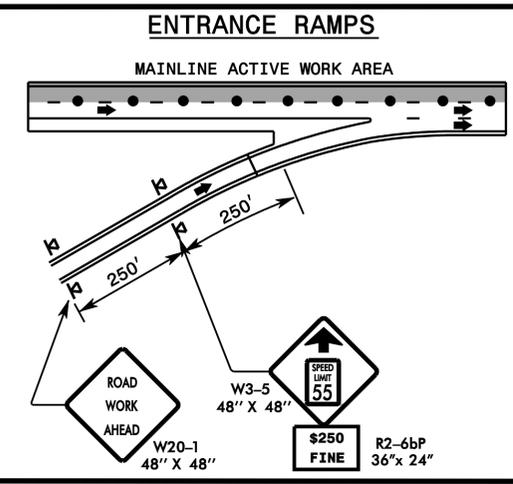
<p>PLAN PREPARED IN THE OFFICE OF: <b>PROGRESSIVE</b> DESIGN GROUP, INC. ENGINEERS • CONSULTANTS PH 704 573 3003</p>	<p>APPROVED: <i>[Signature]</i> DATE: 9/22/2015 SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 025465 TM ARE</p>	<p>DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL</p>	<p>TRANSPORTATION MANAGEMENT PLAN GENERAL NOTES</p>
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SIGN SPACINGS SHOWN ON THIS DETAIL MAY BE ADJUSTED AS NECESSARY (UP TO 300') IN ORDER TO AVOID CONFLICTS WITH EXISTING SIGNS ALREADY IN PLACE



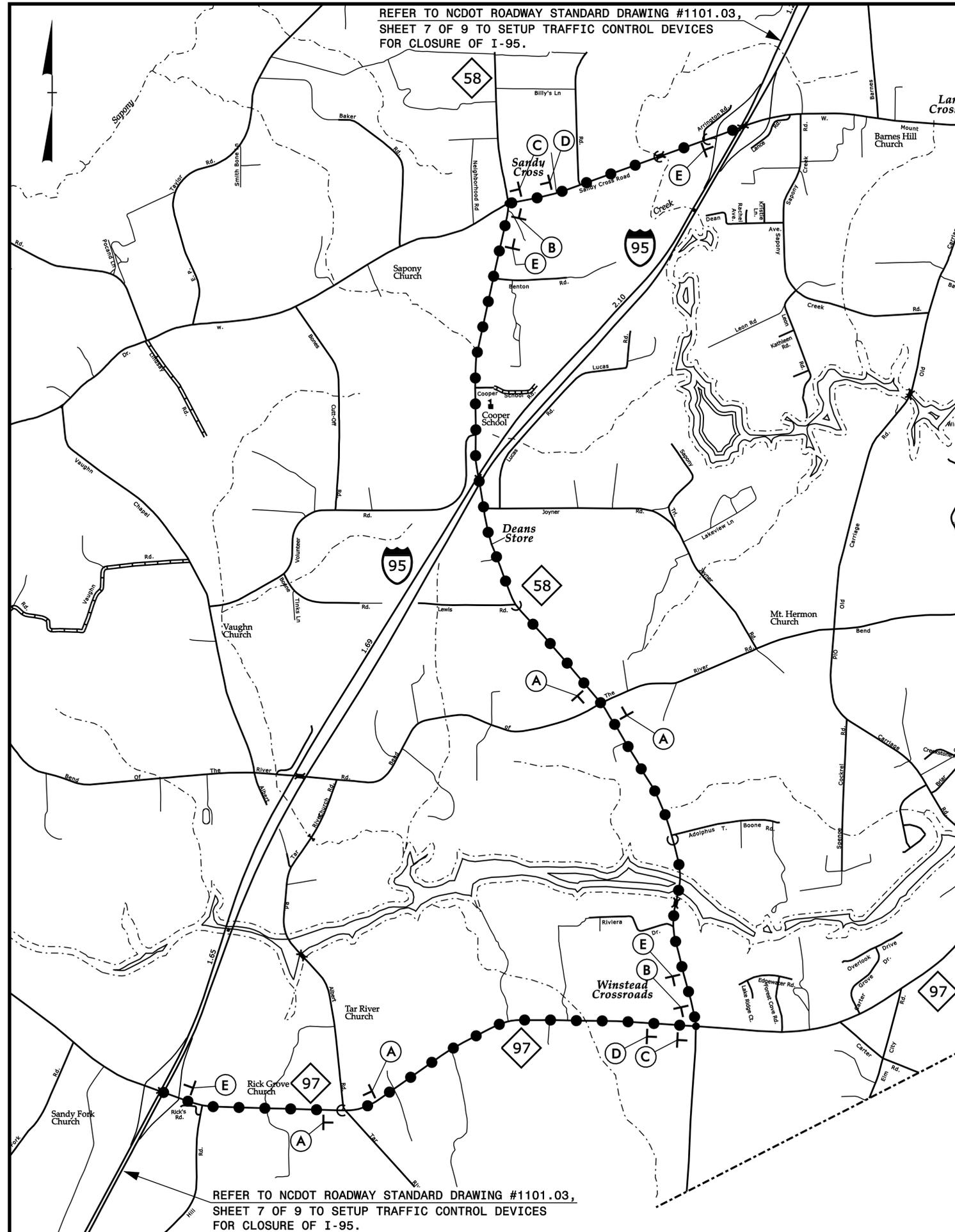
- ### GUIDELINES
- THIS DRAWING IS FOR USE ONLY AFTER AN ENGINEERING INVESTIGATION HAS BEEN PERFORMED BY THE REGIONAL TRAFFIC ENGINEER AND WORK ZONE TRAFFIC CONTROL SECTION. THE WORK ZONE "VARIABLE" SPEED LIMIT IS INTENDED FOR USE ON FREEWAYS WITH SPEED LIMITS 65 MPH OR GREATER. SEE WORK ZONE "VARIABLE" SPEED LIMIT GUIDELINES FOR CRITERIA.
  - THE STATE TRAFFIC ENGINEER HAS TO ORDINANCE THE SPEED LIMIT REDUCTION IN ORDER FOR THE REDUCTION AND/OR \$250 SPEEDING FINE TO BE VALID AND ENFORCEABLE. NO SPEED LIMIT MESSAGES/SIGNS SHALL BE INSTALLED PRIOR TO RECEIVING A SIGNED ORDINANCE. IN ADDITION, THE \$250 SPEEDING FINE ALSO REQUIRES A SEPARATE SIGNED ORDINANCE BY THE STATE TRAFFIC ENGINEER.
  - EACH DIRECTION OF THE PROJECT IS TO BE EVALUATED FOR THE WORK ZONE "VARIABLE" SPEED LIMIT REDUCTION. THIS DRAWING INTENTIONALLY HAS 1 DIRECTION SIGNED AS A REMINDER TO CAREFULLY CONSIDER WHETHER BOTH DIRECTIONS OF THE PROJECT NEED TO HAVE THE SPEED LIMIT REDUCED.
  - THE MAXIMUM LANE CLOSURE LENGTH IS 2 MILES UNLESS OTHERWISE SHOWN IN THE PLANS. IN ADDITION, FOR ACTIVE WORK AREAS THAT EXCEED 1 MILE IN LENGTH, AN EVALUATION IS TO BE MADE TO DETERMINE IF ADDITIONAL CMS'S/SIGNS ARE NEEDED TO SUPPLEMENT THE INITIAL ONES. PORTABLE MOUNTED W3-5 SIGNS WITH SPEEDING PENALTY SIGNS ARE TO BE PLACED ALONG ENTRANCE RAMP LOCATED WITHIN THE ACTIVE WORK AREA.
  - THE \$250 SPEEDING FINE PENALTY APPLIES FOR ALL PROJECTS THAT QUALIFY FOR A WORK ZONE "VARIABLE" SPEED LIMIT REDUCTION.
  - THIS APPLICATION IS FOR SHORT-TERM ACTIVITIES SUCH AS LANE CLOSURES AND ROAD CLOSURES. THE WORK ZONE "VARIABLE" SPEED LIMIT SHALL NOT BE IN OPERATION CONTINUOUSLY (24/7) FOR A PERIOD EXCEEDING 30 CALENDAR DAYS. THE WORK ZONE "VARIABLE" SPEED LIMIT MESSAGING/SIGNAGE SHALL BE REMOVED AT THE COMPLETION OF THE ACTIVITY. THE REGIONAL TRAFFIC ENGINEER WILL BE NOTIFIED BY THE RESIDENT ENGINEER TO RESCIND THE ORDINANCE.
  - WHEN WORK ZONE "VARIABLE" SPEED LIMIT REDUCTIONS ARE IN EFFECT, THE CONTRACTOR IS TO COVER ANY EXISTING SPEED LIMIT SIGNS LOCATED WITHIN THE ACTIVE WORK AREA THAT CONFLICT WITH THE WORK ZONE "VARIABLE" SPEED LIMIT REDUCTION.
  - PLACE CMS APPROXIMATELY 1 MILE IN ADVANCE OF THE W20-5 SIGNS. IF TRAFFIC BACKS UP TO WHERE THE CMS IS INITIALLY PLACED, RELOCATE CMS 1/2 MILE IN ADVANCE OF ANTICIPATED BACKUP. CONTINUE TO MONITOR TRAFFIC, MOVE CMS APPROXIMATELY 1/2 MILE IN ADVANCE OF ANTICIPATED BACKUP.



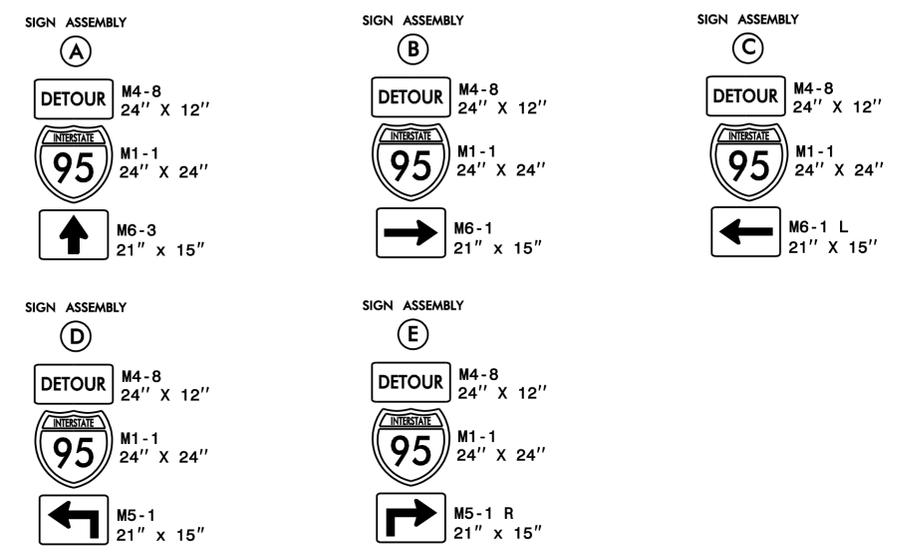
- ### NOTES
- THE WORK ZONE "VARIABLE" SPEED LIMIT WILL BE ESTABLISHED IN COLLABORATION BETWEEN THE REGIONAL TRAFFIC ENGINEER, THE DIVISION, AND THE WORK ZONE TRAFFIC CONTROL SECTION. THIS DRAWING SHOWS THE TYPICAL APPLICATION OF REDUCING THE SPEED LIMIT TO 55 MPH.
  - TYPICALLY THE WORK ZONE "VARIABLE" SPEED LIMIT APPLIES TO A SPECIFIC PORTION AND NOT THE ENTIRE PROJECT. THE WORK AREA AFFECTED BY THE SPEED REDUCTION SHOULD NOT EXCEED 2 MILES.
  - THE WORK ZONE "VARIABLE" SPEED LIMIT AND THE \$250 SPEEDING FINE IS TO BEGIN 500' IN ADVANCE OF THE FLASHING ARROW PANEL AT THE MERGE TAPER. THE EXISTING SPEED LIMIT SIGNS AND THE "END \$250 FINE" SIGNS ARE TO BE INSTALLED AT THE LOCATION WHERE THE EXISTING SPEED LIMIT IS TO RESUME.
  - THE NEED AND LOCATION OF ADDITIONAL POSTED WORK ZONE "VARIABLE" SPEED LIMIT SIGNS WITHIN THE LANE CLOSURE IS TO BE DETERMINED BY THE REGIONAL TRAFFIC ENGINEER.

PLAN PREPARED IN THE OFFICE OF: <b>PROGRESSIVE</b> DESIGN GROUP, INC. ENGINEERS • CONSULTANTS PH 704 573 3003	APPROVED: <i>[Signature]</i> DATE: 9/22/2015 SEAL 		<b>TRANSPORTATION</b> <b>MANAGEMENT PLAN</b> WORK ZONE "VARIABLE" SPEED LIMIT DETAIL
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REFER TO NCDOT ROADWAY STANDARD DRAWING #1101.03,  
SHEET 7 OF 9 TO SETUP TRAFFIC CONTROL DEVICES  
FOR CLOSURE OF I-95.



REFER TO NCDOT ROADWAY STANDARD DRAWING #1101.03,  
SHEET 7 OF 9 TO SETUP TRAFFIC CONTROL DEVICES  
FOR CLOSURE OF I-95.



NOTE:  
1. ALL DETOUR SIGN LOCATIONS ARE APPROXIMATE.  
FINAL PLACEMENT AS DIRECTED BY ENGINEER.

OFFSITE DETOUR ●●●●●●●●●●

**BRANTLEY RD  
OFFSITE DETOUR**

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# CONSTRUCTION NARRATIVE

THIS PROJECT HAS TWO SEPARATE CONSTRUCTION OPERATIONS. A DESCRIPTION OF EACH CONSTRUCTION OPERATION AND THE BASIC ACCOMPANYING TRAFFIC MANAGEMENT PROCEDURE TO ACCOMPLISH THE CONSTRUCTION IS DESCRIBED BELOW:

## SLAB REMOVAL AND REPLACEMENT

CONSTRUCTION DESCRIPTION: THIS OPERATION CONSISTS OF A TOTAL OF EIGHTEEN EXISTING SLABS THAT WILL BE REPLACED ALONG EXISTING SOUTHBOUND I-95 IN THE VICINITY OF MILE MARKER 132. TEN OF THE SLABS ARE LOCATED IN THE OUTSIDE LANE OF SOUTHBOUND I-95, FOUR OF THE SLABS ARE LOCATED IN THE INSIDE LANE OF SOUTHBOUND I-95 AND THE REMAINING FOUR SLABS ARE LOCATED IN THE PARALLEL PORTION OF THE RAMP ACCELERATION LANE FOR THE SANDY CROSS ROAD TO SOUTHBOUND I-95 ON RAMP. THESE SLABS WILL BE REMOVED AND REPLACED WITH A HIGH-EARLY CONCRETE.

TRAFFIC MANAGEMENT PROCEDURE: SOUTHBOUND I-95 WILL BE CLOSED AND PLACED ON THE OFF SITE DETOUR SHOWN IN THESE PLANS DURING THE SLAB REMOVAL AND REPLACEMENT PROCESS FOR THE SLABS LOCATED WITHIN THE SOUTHBOUND I-95 TRAVEL LANES. THESE SLABS WILL BE REMOVED AND REPLACED WITHIN THE 7 HOUR ROAD CLOSURE PERIOD ALLOWED BY THE INTERMEDIATE CONTRACT TIME IN THESE PLANS. THE FOLLOWING MORNING; SOUTHBOUND I-95 WILL BE OPENED UP INTO A ONE LANE PATTERN ALLOWING THE NEW SLAB IN THE CLOSED LANE TO FULLY CURE. NOTE THAT THE CONTINUOUS LANE CLOSURE RESTRICTION TIMES DESCRIBED WITHIN THE INTERMEDIATE CONTRACT TIME DO NOT ALLOW LANE CLOSURES ON I-95 DURING WEEKEND DAY LIGHT HOURS BEGINNING ON FRIDAY MORNING AT 7:00AM. THEREFORE, ALL SLAB REPLACEMENTS SHOULD BE COORIDATED WITHIN EACH WEEK SO THAT BOTH LANES OF SOUTHBOUND I-95 CAN BE OPENED UP TO TRAFFIC BY 7:00AM EACH FRIDAY MORNING. AN EXAMPLE CONSTRUCTION SEQUENCE IS AS FOLLOWS:

- CLOSE SOUTHBOUND I-95 ON SUNDAY NIGHT AT 11:00PM. COMPLETE SLAB REMOVAL AND REPLACEMENT ON X NUMBER OF SLAB(S) BEFORE 7:00AM MONDAY MORNING.
- REOPEN SOUTHBOUND I-95 TO ONE LANE BY 7:00AM MONDAY MORNING.
- CLOSE SOUTHBOUND I-95 ON MONDAY NIGHT AT 11:00PM. COMPLETE SLAB REMOVAL AND REPLACEMENT ON X NUMBER OF SLAB(S) BEFORE 6:00AM TUESDAY MORNING.
- REOPEN SOUTHBOUND I-95 TO ONE LANE BY 6:00AM TUESDAY MORNING.

THIS PROCESS CONTINUES THROUGHOUT THE WEEKDAYS HEADING INTO THE FRIDAY THROUGH SUNDAY DAY TIME LANE CLOSURE RESTRICTIONS. ALSO, PLEASE NOTE THAT ALL REMOVED SLABS SHALL BE REPLACED WITHIN THE SAME ROAD CLOSURE PERIOD PRIOR TO OPENING I-95 BACK UP TO TRAFFIC THE FOLLOWING MORNING. SLAB REMOVAL DROP OFFS WILL NOT BE ALLOWED ON I-95 WHEN I-95 IS OPENED TO TRAFFIC IN ANY LANE CONFIGURATION.

THE SLAB REMOVAL AND REPLACEMENT OPERATION FOR THE SLABS LOCATED IN THE PARALLEL PORTION OF THE RAMP ACCELERATION LANE FOR THE SANDY CROSS ROAD TO SOUTHBOUND I-95 ON RAMP SHALL BE ACCOMPLISHED WITH THE RAMP CLOSED TO TRAFFIC USING THE OFF SITE DETOUR SHOWN IN THESE PLANS AND SOUTHBOUND I-95 TRAFFIC PLACED IN THE MEDIAN LANE DURING THE LANE CLOSURE RESTRICTION TIMES SHOWN IN GENRAL NOTE A OF THESE PLANS. BOTH LANES OF I-95 SHALL BE REOPENED TO TRAFFIC BY 7:00AM THE FOLLOWING MORNING WITH THE ON RAMP REMAINING CLOSED. THIS PROCEDURE SHALL CONTINUE UNTIL THE REPLACED SLABS IN THE ACCELERATION LANE HAVE PROPERLY CURED.

## LATEX MODIFIED OVERLAY

CONSTRUCTION DESCRIPTION: THIS PROCEDURE WILL TAKE PLACE ON NORTHBOUND I-95 IN THE VICINITY OF MILE MARKER 137. THE AREA ENCOMPASSED IS A FULL WIDTH (25'+/-) SECTION OF NORTHBOUND I-95 APPROXIMATELY 75'+/- IN LENGTH. IN THIS SECTION, BOTH LANES OF I-95 WILL BE HYDRO MILLED TO A DEPTH OF 3" AND REPLACED WITH A HIGH-EARLY LATEX MODIFIED OVERLAY.

TRAFFIC MANAGEMENT PROCEDURE: NORTHBOUND I-95 WILL BE CLOSED AND PLACED ON THE OFF SITE DETOUR SHOWN IN THESE PLANS DURING THE MILLING AND REPLACEMENT OVERLAY PROCESS. ONE LANE SHOULD BE MILLED AND REPLACED WITHIN THE 7 HOUR ROAD CLOSURE PERIOD ALLOWED BY THE INTERMEDIATE CONTRACT TIME IN THESE PLANS. THE FOLLOWING MORNING; NORTHBOUND I-95 WILL BE OPENED UP INTO A ONE LANE PATTERN ALLOWING THE NEW OVERLAY IN THE CLOSED LANE TO FULLY CURE. NOTE THAT THE CONTINUOUS LANE CLOSURE RESTRICTION TIMES DESCRIBED WITHIN THE INTERMEDIATE CONTRACT TIME DO NOT ALLOW LANE CLOSURES ON I-95 DURING WEEKEND DAY LIGHT HOURS BEGINNING ON FRIDAY MORNING AT 7:00AM. THEREFORE, ALL MILLING AND REPLACEMENTS SHOULD BE COORIDATED WITHIN EACH WEEK SO THAT BOTH LANES OF SOUTHBOUND I-95 CAN BE OPENED UP TO TRAFFIC BY 7:00AM EACH FRIDAY MORNING. ALSO, PLEASE NOTE THAT ALL MILLED SECTIONS SHALL BE REPLACED WITHIN THE SAME ROAD CLOSURE PERIOD PRIOR TO OPENING I-95 BACK UP TO TRAFFIC THE FOLLOWING MORNING. LOCATIONS WITH MILLED DROP OFFS WILL NOT BE ALLOWED ON I-95 WHEN I-95 IS OPENED TO TRAFFIC IN ANY LANE CONFIGURATION.

# PHASING

## STEPS 1 THRU 4 ARE FOR THE SLAB REMOVAL AND REPLACEMENT OPERATION

STEP 1: INSTALL WORK ZONE ADVANCE WARNING SIGNS WITHIN THE PROJECT LIMITS AS SHOWN IN ROADWAY STANDARD DRAWING NO. 1101.01, SHEET 1 OF 3.

INSTALL AND COVER THE OFF SITE DETOUR SIGNING SHOWN ON SHEET TMP-2A.

NOTE: THE WORK REQUIRED OF STEPS 2 THRU 3 SHALL CONTINUE UNTIL ALL SLABS LOCATED WITHIN THE SOUTHBOUND I-95 TRAVEL LANES HAVE BEEN REPLACED.

INTERMEDIATE CONTRACT TIME: COMPLETE THE WORK DESCRIBED IN STEPS 2 THRU 3 BEGINNING AT 11:00 PM ON A SUNDAY, MONDAY, TUESDAY, OR WEDNESDAY NIGHT AND COMPLETING BY THE FOLLOWING MORNING AT 6:00AM.

STEP 2: UNCOVER THE OFF SITE DETOUR SIGNING FOR SOUTHBOUND I-95 SHOWN ON SHEET TMP-2A. USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 7 OF 9, EXIT ALL I-95 SOUTHBOUND TRAFFIC ONTO SANDY CROSS ROAD OFF RAMP.

COMPLETE THE SLAB REMOVAL AND REPLACEMENT PROCESS AS DESCRIBED WITHIN THE NARRATIVE SECTION ABOVE.

STEP 3: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 4 OF 15, INSTALL LANE CLOSURE DEVICES FOR SOUTHBOUND I-95, REMOVE THE ROAD CLOSURE DEVICES FOR I-95 INSTALLED IN STEP 2 ABOVE AND PLACE SOUTHBOUND I-95 TRAFFIC INTO A ONE LANE PATTERN. NOTE THAT SOUTHBOUND I-95 MUST REOPEN TO A TWO LANE PATTERN ON FRIDAY, SATURDAY AND SUNDAY MORNINGS AT 7:00AM.

NOTE: THE WORK REQUIRED OF STEP 4 SHALL BE COMPLETED WITHIN ONE NIGHT TIME CONSTRUCTION PERIOD (MULTIPLE CONSECUTIVE NIGHTS ARE ALLOWED) BEGINNING ON ANY DAY AT 8:00PM AND COMPLETING BY 7:00AM THE FOLLOWING MORNING. DAY TIME LANE CLOSURES ON I-95 WILL NOT BE ALLOWED FOR THIS OPERATION. HOWEVER, FULL TIME CLOSURE OF THE SANDY CROSS ROAD TO SOUTHBOUND I-95 ON RAMP WILL BE ALLOWED UNTIL THE REPLACED SLABS ARE PROPERLY CURED TO HANDLE TRAFFIC.

STEP 4: CLOSE THE SANDY CROSS ROAD TO SOUTHBOUND I-95 ON RAMP USING THE I-95 OFF SITE DETOUR FOR SANDY CROSS ROAD AS SHOWN ON SHEET TMP-2A. USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 4 OF 15, PLACE SOUTHBOUND I-95 TRAFFIC INTO THE MEDIAN LANE. COMPLETE THE SLAB REMOVAL AND REPLACEMENT PROCESS ON THE SANDY CROSS ROAD TO SOUTHBOUND I-95 ON RAMP AS DESCRIBED WITHIN THE NARRATIVE SECTION. REMOVE THE SOUTHBOUND I-95 LANE CLOSURE DEVICES AND REOPEN SOUTHBOUND I-95 TO TWO LANES BEFORE 7:00AM THE FOLLOWING MORNING. KEEP THE SANDY CROSS ROAD TO SOUTHBOUND I-95 ON RAMP CLOSED TO TRAFFIC UNTIL THE REPLACED SLABS ARE PROPERLY CURED TO HANDLE TRAFFIC.

## STEPS 5 THRU 6 ARE FOR THE LATEX MODIFIED OVERLAY OPERATION

NOTE: THE WORK REQUIRED OF STEPS 5 THRU 6 SHALL CONTINUE UNTIL THE HYDRO MILLING AND REPLACEMENT OPERATION LOCATED WITHIN THE NORTHBOUND I-95 TRAVEL LANES HAS BEEN COMPLETED.

INTERMEDIATE CONTRACT TIME: COMPLETE THE WORK DESCRIBED IN STEPS 5 THRU 6 BEGINNING AT 11:00 PM ON A SUNDAY, MONDAY, TUESDAY, OR WEDNESDAY NIGHT AND COMPLETING BY THE FOLLOWING MORNING AT 6:00AM.

STEP 5: UNCOVER THE OFF SITE DETOUR SIGNING FOR NORTHBOUND I-95 SHOWN ON SHEET TMP-2A. USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 7 OF 9, EXIT ALL I-95 NORTHBOUND TRAFFIC ONTO THE NC 97 OFF RAMP.

COMPLETE THE HYDRO MILLING AND OVERLAY PROCESS AS DESCRIBED WITHIN THE NARRATIVE SECTION ABOVE.

STEP 6: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 4 OF 15, INSTALL LANE CLOSURE DEVICES FOR NORTHBOUND I-95, REMOVE THE ROAD CLOSURE DEVICES FOR NORTHBOUND I-95 INSTALLED IN STEP 5 ABOVE AND PLACE NORTHBOUND I-95 TRAFFIC INTO A ONE LANE PATTERN. NOTE THAT NORTHBOUND I-95 MUST REOPEN TO A TWO LANE PATTERN ON FRIDAY, SATURDAY AND SUNDAY MORNINGS AT 7:00AM.

STEP 7: USING ROADWAY STANDARD DRAWING NO. 1101.02, SHEET 4 OF 15, INSTALL POLYUREA PAVEMENT MARKINGS AND SNOWPLOWABLE MARKERS IN ALL AREAS WHERE THE SLAB REPLACEMENT AND LATEX MODIFIED OVERLAY WAS CONDUCTED.

STEP 8: REMOVE ALL TRAFFIC CONTROL DEVICES.

PLAN PREPARED IN THE OFFICE OF:  
**PROGRESSIVE**  
 DESIGN GROUP, INC.  
 ENGINEERS • CONSULTANTS  
 PH 704 573 3003

APPROVED: *John Uhey* DATE: 9/22/2015  
 SEAL

DIVISION OF HIGHWAYS  
 STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 WORK ZONE TRAFFIC CONTROL

TRANSPORTATION  
 MANAGEMENT PLAN  
 CONSTRUCTION NARRATIVE AND  
 TRAFFIC CONTROL PHASING