

BARRIERS AND POSITIVE PROTECTION

- INSTALL TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.
- BARRIER SHALL BE PLACED ON A PAVED SURFACE. UNLESS PERMITTED OTHERWISE BY THE MANUFACTURER, THE PAVED SURFACE SHALL EXTEND A MINIMUM OF TWO FEET BEHIND ALL UNANCHORED BARRIER. CLEARANCE BEHIND ANCHORED BARRIER IS NOT REQUIRED.
- DO NOT PLACE BARRIER ON A SLOPE STEEPER THAN 6:1.
- ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE/RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS. TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.
- INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC.
- REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.
- INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.
- PROTECT THE APPROACH END OF TEMPORARY CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.
- DO NOT PLACE TEMPORARY BARRIER ALONG ANY SHIFTING TAPER, INCLUDING BUT NOT LIMITED TO, EXISTING, TEMPORARY AND / OR PROPOSED SHIFTING TAPERS.
- DO NOT PLACE TEMPORARY BARRIER IN GORE AREAS. TEMPORARILY CLOSE THE RAMP OR LOOP IF THE WORK CANNOT BE SAFELY PERFORMED WITHOUT PLACING TEMPORARY BARRIER IN THE GORE AREA.

TEMPORARY CLEAR ZONES

- AS A GENERAL GUIDELINE MAINTAIN A TEMPORARY WORK AREA CLEAR ZONE FOR THE DURATION OF THIS PROJECT ON ALL ROADWAYS AS FOLLOWS:

ROAD	CLEAR ZONE
I-95	40 FT.
ALL OTHER ROADS	20 FT.

DUE TO VARYING FIELD CONDITIONS THIS GUIDELINE MAY BE MODIFIED AS FOLLOWS AND/OR AS DIRECTED BY THE ENGINEER:

-WHEN LANE CLOSURES ARE NOT IN EFFECT AND WORK IS NOT BEHIND BARRIER OR GUARDRAIL THE FOLLOWING CLEAR ZONE REQUIREMENTS SHOULD BE MET:

-MOVE EQUIPMENT, MATERIALS, STOCKPILES AND OBSTACLES CREATED BY WORK OPERATIONS THAT WERE NOT EXISTING PRIOR TO WORK BEGINNING, TO A LOCATION OUTSIDE THE CLEAR ZONE.

-MOVE OBSTACLES SUCH AS STOCKPILES AND NON-ACTIVE EQUIPMENT AT LEAST 5' AWAY FROM THE BACK OF BARRIER. IN GENERAL, IF STORING MATERIALS OR EQUIPMENT BEHIND ANY TYPE OF BARRIER THE DEFLECTION OF THE BARRIER SHOULD BE ACCOUNTED FOR AND ITEMS SHOULD NOT BE STORED IN THAT AREA.

-EXCAVATIONS OR OTHER IMMOVABLE OBSTRUCTIONS SHALL BE SAFED UP USING METHODS SUCH AS BACK-FILLING, COVERS, DELINEATION, ETC. METHODS MUST BE ACCEPTABLE TO THE ENGINEER.

OVERSIZE VEHICLES

- ON ALL ROADWAYS WITHIN THE PROJECT LIMITS, PROVIDE SAFE ACCESS FOR WIDE-LOADS AND OVERSIZED PERMITTED VEHICLES THROUGH THE WORK ZONE. SAFE ACCESS SHALL ENTAIL, BUT IS NOT LIMITED TO, A SUFFICIENT PAVEMENT STRUCTURE, MAINTAINING THE EXISTING VERTICAL CLEARANCE OF OVERHEAD STRUCTURES, PROVIDING THE REQUIRED VERTICAL CLEARANCE ON PROPOSED OVERHEAD STRUCTURES AND PROVIDING THE MINIMUM HORIZONTAL CLEAR WIDTHS AS FOLLOWS:
- ROADWAY MINIMUM CLEAR WIDTH I-95, NC ROUTES, US ROUTES, AND ALL RAMPS AND LOOPS IS 20 FEET. ON ALL OTHER ROADWAYS 18 FEET.
- MAINTAIN THE EXISTING OVERHEIGHT VEHICLE DETECTION SYSTEM OPERATIONAL DURING THE PROJECT UNTIL DIRECTED BY THE ENGINEER TO REMOVE THE SYSTEM. REFER TO ITS PLANS.

TRAFFIC CONTROL DEVICES

- ALL TRAFFIC CONTROL DEVICES, INCLUDING PORTABLE CONCRETE BARRIER AND BRIDGE BARRIER RAILS, SHALL BE PLACED / LOCATED A MINIMUM TWO-FOOT OFFSET (SHY DISTANCE) FROM THE EDGE OF AN OPEN TRAVEL LANE, UNLESS ALLOWED OTHERWISE BY THE ENGINEER.
- ENSURE ALL NECESSARY TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, MARKINGS, ETC ARE IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
- INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 FT IN ADVANCE OF UNEVEN AREA, AS DIRECTED BY THE ENGINEER.
- DURING PAVEMENT MILLING OPERATIONS PROVIDE "ROUGH ROAD" SIGNS (W8-8) IN ADVANCE OF A MILLED PAVEMENT AREA.
- 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. SPACING OF CHANNELIZING DEVICES SHOWN IN THE PLANS MAY NOT BE TO SCALE. DUE TO HORIZONTAL/VERTICAL CURVATURE AND OTHER ITEMS THAT MAY OBSCURE THE CHANNELIZING DEVICES, IT IS THE CONTRACTORS RESPONSIBILITY TO ADJUST SPACING IN ORDER TO EFFECTIVELY ACCOMPLISH THE INTENDED CHANNELIZATION.
- USE HIGH VISIBILITY TRAFFIC CONTROL DEVICES ON THIS PROJECT.
- USE "SEQUENTIAL FLASHING WARNING LIGHTS" AND "WORK ZONE PRESENCE LIGHTING" DURING NIGHT LANE CLOSURES ON I-95
- INSTALL TEMPORARY "NO PARKING" SIGNS ON RAMPS OF THE TYPE AND AT LOCATIONS DETERMINED BY THE ENGINEER.

LAW ENFORCEMENT

- PROVIDE LAW ENFORCEMENT TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND OR INTERSECTIONS AS SHOWN IN PLANS OR AS DIRECTED BY THE ENGINEER. USE LAW ENFORCEMENT TO DIRECT TRAFFIC AT SIGNALIZED INTERSECTIONS. DO NOT USE FLAGGERS TO DIRECT TRAFFIC AT SIGNALIZED INTERSECTIONS.
- COORDINATE WITH THE LAW ENFORCEMENT AGENCY FOR THE USE OF LAW ENFORCEMENT OFFICERS.
- ALL LAW ENFORCEMENT LOCATIONS ARE TO BE PRE-APPROVED BY THE ENGINEER.
- REFER TO THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.

WORK ZONE ADVANCE WARNING SIGNS

- PRIOR TO STARTING CONSTRUCTION OPERATIONS, INSTALL WORK ZONE ADVANCE WARNING SIGNS ON PROJECT AS FOLLOWS:
 - I-95 PER SHEET TMP-2
 - ALL OTHER ROADWAYS PER ROADWAY STANDARD DRAWING 1101.01.
- COORDINATE ADVANCE WARNING SIGNS WITH THE CONTRACTOR OF ADJACENT PROJECT I-5986A/I-5877.

CHANGEABLE MESSAGE SIGNS

- PROVIDE CMS'S THAT HAVE THE FUNCTIONALITY TO BE OPERATED LOCALLY IN THE FIELD AND CONTROLLED REMOTELY FROM THE STOC. ALL CMS'S PROVIDED MUST BE FULLY NATIONAL TRANSPORTATION COMMUNICATIONS OR ITS PROTOCOL (NTCIP) COMPLIANT, ON THE NCDOT APPROVED PRODUCTS LIST, FULL MATRIX AND CAPABLE OF COMMUNICATING WITH THE EXISTING SOFTWARE UTILIZED BY THE STOC STAFF. NO VENDOR SPECIFIC OR THIRD-PARTY SOFTWARE WILL BE ALLOWED. DO NOT BEGIN ANY CONSTRUCTION THAT INVOLVES LANE CLOSURES ON ANY ROAD UNTIL ALL CMS'S AND ALL OTHER DEVICES ARE INSTALLED AND COMMUNICATING WITH THE STOC.
- FOR TRAFFIC CONTROL PURPOSES DURING CONSTRUCTION, PROVIDE AND OPERATE A MINIMUM OF ONE CMS PER DIRECTION ON I-95 THAT PROVIDES GENERAL INFORMATION ABOUT THE CONSTRUCTION ACTIVITIES WITHIN THE PROJECT LIMITS. PRIOR TO IMPLEMENTATION, COORDINATE ALL MESSAGES ON THESE CMS'S WITH THE RESIDENT ENGINEER, DIVISION 6 TRAFFIC ENGINEER, AND THE STOC. THESE CMS'S SHALL BE IN ADDITION TO ANY OTHER CMS'S REQUIRED BY THE NCDOT ROADWAY STANDARD DRAWINGS OR REQUIRED FOR INCIDENT MANAGEMENT USE.
- INSTALL, RELOCATE, AND MAINTAIN THE CMS'S AND STATIONARY SIGNS DURING CONSTRUCTION OF THE PROJECT. UPON COMPLETION OF THE PROJECT, OR AS DIRECTED BY THE ENGINEER, REMOVE AND / OR DISPOSE OF THE CMS'S AND STATIONARY SIGNS.
- COORDINATE ON A 24-HOUR BASIS WITH THE RESIDENT ENGINEER, DIVISION 6 TRAFFIC ENGINEER, AND THE STOC TO PROVIDE RELEVANT AND TIMELY TRAVEL INFORMATION THROUGHOUT THE WORK ZONE AND ALONG ALTERNATE ROUTES.
- IN ADDITION TO THE CMS'S REQUIRED ABOVE AND THE CMS'S REQUIRED FOR ITS, PROVIDE AND OPERATE A MINIMUM OF 12 CMS'S TO DISPLAY ALTERNATE ROUTE INFORMATION AHEAD OF THE PROJECT DETOUR POINTS FOR INCIDENTS ON I-95. THESE 12 CMS'S SHALL BE INSTALLED, OPERATED, AND MAINTAINED FROM THE INITIATION OF PROJECT CONSTRUCTION TO PROJECT COMPLETION. THE 12 CMS'S SHALL BE USED TO PROVIDE PROJECT INFORMATION APPROVED BY THE DIVISION MAINTENANCE ENGINEER, RESIDENT ENGINEER, DIVISION 6 TRAFFIC ENGINEER, AND STATEWIDE TRANSPORTATION OPERATIONS CENTER (STOC) INCLUDING BUT NOT LIMITED TO CONSTRUCTION ACTIVITIES AND INCIDENT MANAGEMENT INFORMATION. THE POSITIONING OF THESE INCIDENT MANAGEMENT CMS'S SHALL BE COORDINATED WITH, AND APPROVED BY, THE RESIDENT ENGINEER, DIVISION 6 TRAFFIC ENGINEER, AND THE STOC.

- ENSURE THAT ALTERNATE ROUTES FOR INCIDENT MANAGEMENT ARE SIGNED WITH EITHER EXISTING STATIONARY ALTERNATE ROUTE SIGNING OR PROVIDE TEMPORARY STATIONARY ALTERNATE ROUTE SIGNING TO GUIDE DETOURED MOTORISTS ALONG THE ALTERNATE ROUTE BACK TO THE ORIGINAL ROAD. PROVIDE A PLAN, FOR APPROVAL BY THE RESIDENT ENGINEER, DIVISION 6 TRAFFIC ENGINEER, AND STOC THAT SHOWS THE ALTERNATE ROUTES TO BE USED FOR INCIDENT MANAGEMENT, THE APPROXIMATE LOCATIONS OF CMS'S, ALONG WITH THEIR RESPECTIVE MESSAGES, AND EXISTING AND TEMPORARY STATIONARY ALTERNATE ROUTE SIGNING TO BE USED FOR INCIDENT MANAGEMENT. COORDINATE WITH THE RESIDENT ENGINEER, DIVISION 6 TRAFFIC ENGINEER, AND THE STOC WHEN ALTERNATE ROUTE INFORMATION NEEDS TO BE DISPLAYED. IN THE EVENT OF AN INCIDENT, THE STOC WILL TAKE REMOTE CONTROL OF THE APPLICABLE CMS'S TO PROVIDE INCIDENT MANAGEMENT INFORMATION TO MOTORISTS. UPON INCIDENT CLEARANCE AND RESUMPTION OF NORMAL TRAFFIC FLOW, THE STOC WILL ALLOW THE CONTRACTOR TO REGAIN CONTROL OF THE CMS'S.

MOTORIST PULL-OFF AREAS

- WHEN TEMPORARY BARRIER IS USED CONTINUOUSLY ON ONE OR BOTH SIDES OF A DIRECTION OF I-95 TRAVEL FOR A DISTANCE GREATER THAN TWO MILES, PROVIDE A PAVED MOTORIST PULL-OFF AREA ON THE RIGHT SIDE OF THE I-95 TRAVELWAY EVERY MILE, UNLESS THE OUTSIDE USEABLE PAVED WIDTH (CLEAR DISTANCE BETWEEN EDGE OF TRAVEL LANE AND FACE OF BARRIER) IS TEN FEET OR GREATER. ALL MOTORIST PULL-OFF AREAS SHALL BE A MINIMUM OF ONE THOUSAND FEET LONG AND FOURTEEN FEET WIDE, TEN FEET OF WHICH SHALL BE PAVEMENT. ALL MOTORIST PULL-OFF AREAS SHALL BE IDENTIFIED ON THE PROJECT WITH CHANGEABLE MESSAGE SIGNS AND / OR STATIONARY SIGNS PLACED IN ADVANCE OF THE MOTORIST PULL-OFF AREA, AS APPROVED BY THE DEPARTMENT PRIOR TO INCORPORATION. EXIT RAMPS WILL BE CONSIDERED AS AN MOTORIST PULL-OFF AREA. SPECIFIC LOCATIONS ARE NOT SHOWN IN THE PLANS SINCE THEIR LOCATION WILL DEPEND ON THE CONTRACTOR'S SCHEDULE AND WHICH AREAS ARE CHOSEN TO BE WORKED ON CONCURRENTLY.

PAVEMENT 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 HAVE 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. THERE WILL BE NO DIRECT PAYMENT FOR BACKFILL AS THIS WORK WILL BE CONSIDERED INCIDENTAL TO OTHER ITEMS IN THE CONTRACT.
- 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 ONCE EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

LANE AND SHOULDER WIDTHS

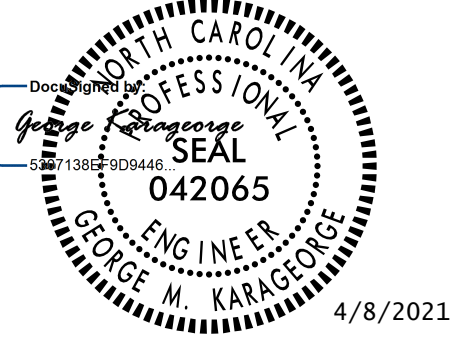

- UNLESS OTHERWISE SHOWN IN THE PLAN, WHEN LANE, ROAD AND / OR SHOULDER CLOSURES ARE NOT IN EFFECT, MAINTAIN THE EXISTING NUMBER OF TRAVEL LANES ON ALL ROADS. FOR EXISTING TRAVEL LANES THAT ARE 11-FOOT WIDE OR WIDER, MAINTAIN A MINIMUM OF 11-FOOT TRAVEL LANES AT ALL TIMES. FOR EXISTING TRAVEL LANES THAT ARE NARROWER THAN 11 FEET, MAINTAIN THE EXISTING TRAVEL LANE WIDTHS AT ALL TIMES.
- MAINTAIN A MINIMUM OF FOUR-FOOT WIDE INSIDE AND OUTSIDE PAVED SHOULDERS IN EACH DIRECTION OF I-95 UNLESS TEMPORARY BARRIER IS PLACED ON THE PAVED SHOULDER. UNDER STRUCTURES ONLY, MAINTAIN A MINIMUM TWO-FOOT WIDE PAVED SHOULDER ADJACENT TO I-95 THROUGH LANES AND A MINIMUM ONE-FOOT WIDE PAVED SHOULDER ADJACENT TO RAMPS.
- ON ALL OTHER ROADWAYS MAINTAIN EXISTING SHOULDER WIDTHS.
- LANE SHIFTS
 - UNLESS OTHERWISE SHOWN IN THE PLANS, STRAIGHT TAPER LANE SHIFTS ON I-95 SHOULD BE THE FULL "L" DISTANCE. ON OTHER ROADWAYS 1/2 "L" MAY BE USED.
 - ON I-95 WHERE LANES ARE SHIFTING MORE THAN 12' USE A SOLID LANE LINE BETWEEN LANES INSTEAD OF A SKIP LINE.
 - WHEN A LANE SHIFT LATERAL DISTANCE (W) IS GREATER THAN 12' USE REVERSE CURVE WARNING SIGNS IN ADVANCE OF THE SHIFT. FOR W<12' THESE SIGNS MAY BE OMITTED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - PRIOR TO SHIFTING TRAFFIC TO A NEW PATTERN ON I-95, INCLUDING ALL RAMPS AND LOOPS, REMOVE ALL CONFLICTING MARKERS AND SNOWPLOWABLE MARKER CASTINGS, PATHC ALL CASTING HOLES, AND CONCEAL ALL CONFLICTING MARKINGS.

TEMPORARY SHORING

- TEMPORARY SHORING SHOWN IN THE TRANSPORTATION MANAGEMENT PLAN ARE FOR LOCATION PURPOSES WHERE TEMPORARY SHORING AFFECTS TRAFFIC. LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED AND APPROVED BY THE ENGINEER.

DRAINAGE

- MAINTAIN DRAINAGE DURING CONSTRUCTION IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND THE PLANS.
- IN THE EVENT WHERE TRANSITIONING FROM EXISTING DRAINAGE TO THE PROPOSED DRAINAGE REQUIRES PHASING OF THE CONSTRUCTION PROVIDE TEMPORARY ACCOMMODATIONS TO MAINTAIN DRAINAGE AS SHOWN IN THE PLANS, OR AS DIRECTED BY THE ENGINEER.
- REFER TO ROADWAY PLANS FOR TEMPORARY DRAINAGE REQUIREMENTS.

PROJECT REFERENCE NO.	SHEET NO.
I-5878 / I-5883 / I-5986B	TMP - 1F
	
<p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	
	

GENERAL NOTES

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