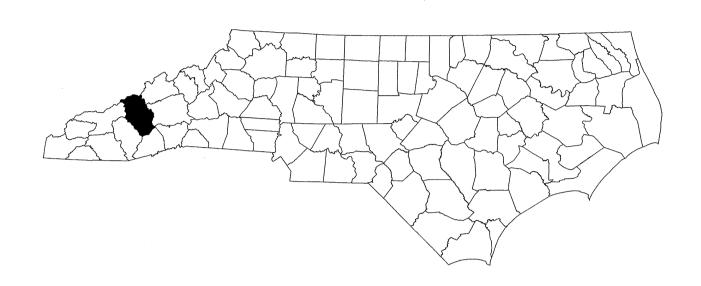
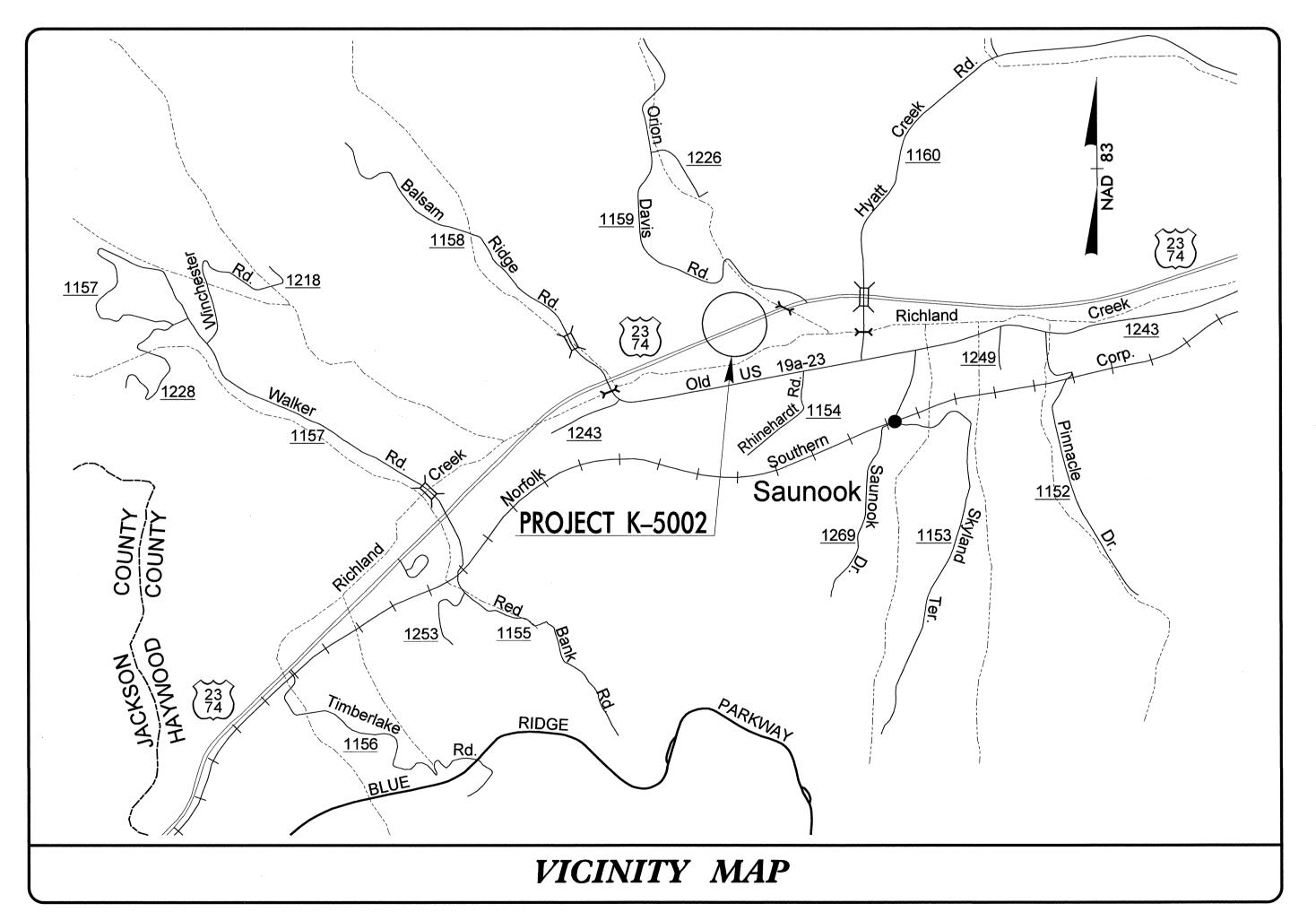
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

HAYWOOD COUNTY





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)

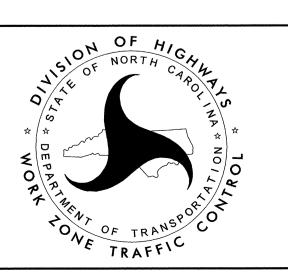
PHONE: (919) 773-2800 FAX: (919) 771-2745

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER

G. L. GETTIER, P.E. TRAFFIC CONTROL PROJECT ENGINEER

J. W. WOOLARD, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER

S. B. COATS TRAFFIC CONTROL DESIGN ENGINEER



INDEX OF SHEETS

SHEET NO.

TITLE

TMP - 1

TITLE SHEET, AND INDEX OF SHEETS

TMP-1A

TMP-1B

LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND TEMPORARY PAVEMENT MARKINGS

TRANSPORTATION OPERATIONS PLAN: (TRANSPORTATION

OPERATIONS AND GENERAL NOTES)

MP-2 PHASING AND DETAILS

K-5002

TMP-1

P PROJECT:

SEAL

SEAL

SEAL

19862

WOOLARD HELD WOOLAR

PROJ. REFERENCE NO. SHEET NO. K-5002 TMP-1A

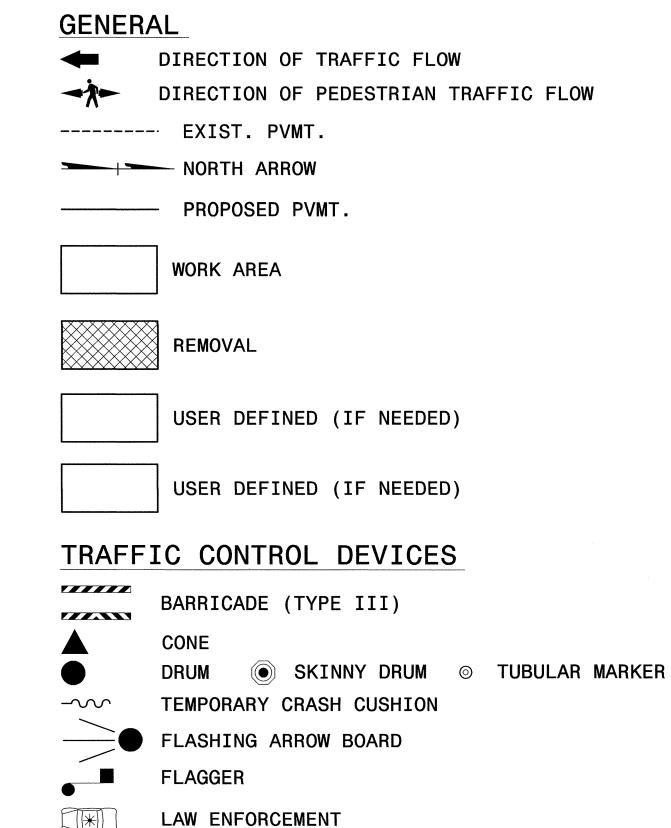
ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANAUARY 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
1130.01	DRUMS
1145.01	BARRICADES
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1180.01	SKINNY - DRUM

LEGEND

TEMPORARY PAVEMENT MARKINGS NONE



TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

SIGNALS

	EXISTING



TRUCK MOUNTED ATTENUATOR (TMA)

CHANGEABLE MESSAGE SIGN



PAVEMENT MARKINGS

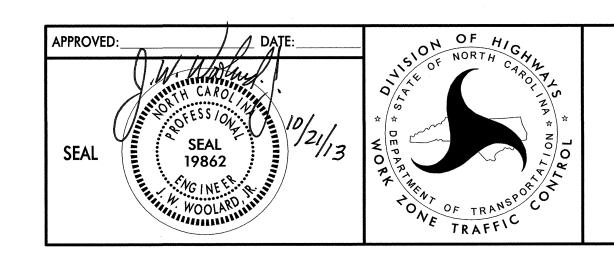
----EXISTING LINES
----TEMPORARY LINES

PAVEMENT MARKERS

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

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS



ROADWAY STANDARD DRAWINGS & LEGEND

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
US 74 WEST/
US 23 SOUTH

DAY AND TIME RESTRICTIONS
7:00 A.M. THRU 9:00 A.M. AND
4:00 P.M. THRU 6:00 P.M. M-F

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

ROAD NAME
US 74 WEST/
US 23 SOUTH

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 7:00 A.M. DECEMBER 31st TO 6:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 P.M. THE FOLLOWING TUESDAY.
- 3. FOR EASTER, BETWEEN THE HOURS OF 7:00 A.M. THURSDAY TO 6:00 P.M. MONDAY.
- 4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
- 5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- 9. FOR LEAF SEASON, THE ENTIRE MONTH OF OCTOBER AND 1ST WEEK IN NOVEMBER, BETWEEN 7:00 A.M. FRIDAY TO 6:00 P.M. MONDAY.
- C) 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

- D) 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.
- E) 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.

G) 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.

- H) DO NOT INSTALL MORE THAN 1/2 MILE OF LANE CLOSURE ON US 74 W/US 23 S MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- I) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

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.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- L) 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.
- M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

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

TRAFFIC CONTROL MISCELLANEOUS

P) CONTRACTOR MUST COMPLETE SB REST AREA AND OPEN TO TRAFFIC PRIOR TO CLOSING THE NB REST AREA FOR RENOVATIONS.

PROJ. REFERENCE NO.	SHEET NO.
K-5002	TMP-1B

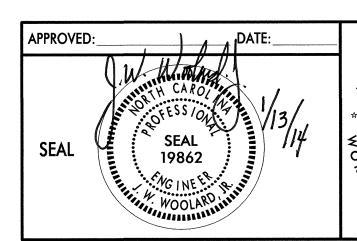
TRANSPORTATION OPERATIONS

CONSTRUCTION

CONSTRUCT REST AREA ON US 74 WEST/ US 23 SOUTH, INCLUDING NEW REST AREA BUILDING, PARKING AREAS, AND DRAINAGE AS SHOWN IN THE CONSTRUCTION PLANS. CONSTRUCT TURN LANE APPROACH TO REST AREA AS SHOWN IN THE CONSTRUCTION PLANS.

TMP DESIGN PARAMETERS

UTILIZE CHANGEABLE MESSAGE SIGNS, FLASHING ARROW BOARDS, TMA'S, BARRICADES, TEMPORARY SIGNAGE, AND TRAFFIC CONTROL DEVICES, TO CONSTRUCT REST AREA AND BUILDING (SEE SHEET TMP-2).





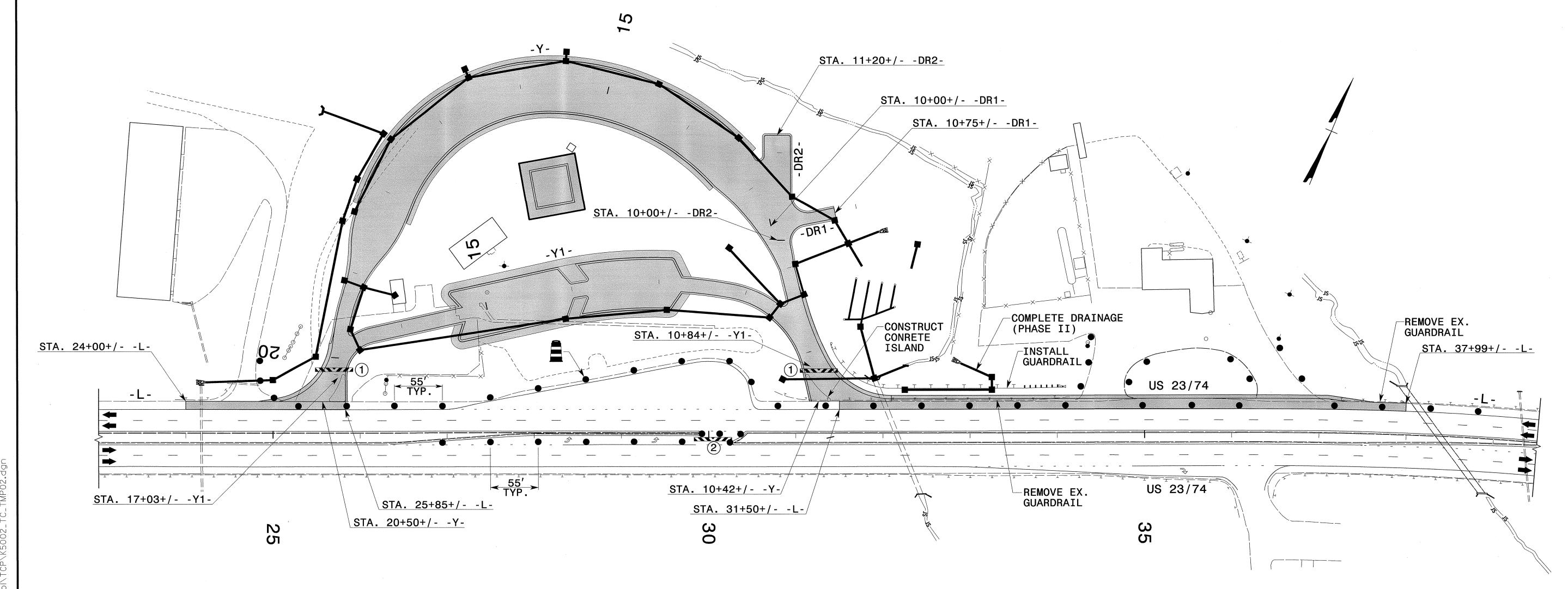
TRANSPORTATION
OPERATIONS
PLAN

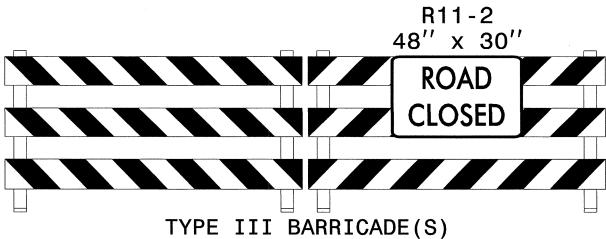
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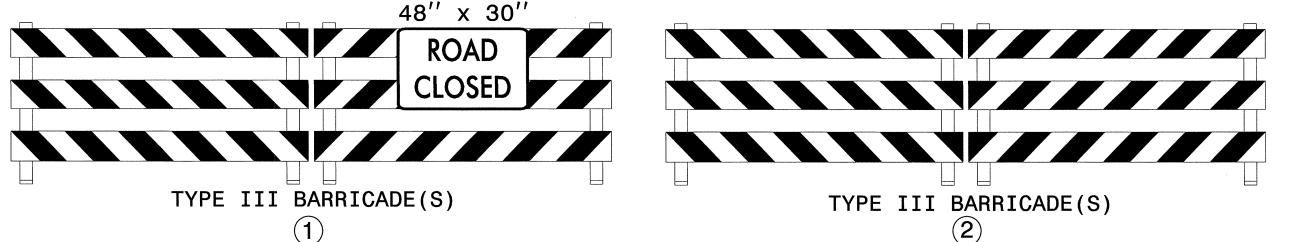
- STEP 1. INSTALL ALL ADVANCE WORK ZONE SIGNS ON US 74 WEST/ US 23 SOUTH, SEE RSD 1101.01 (SHEET 2 OF 3).
- STEP 2. USING RSD 1101.02 OR 1101.04 AS NEEDED, BEGIN CONSTRUCTION OF THE FORCE MAIN SEWER AND WATER LINES AS SHOWN IN THE CONSTRUCTION PLANS.
- STEP 3. USING RSD NO. 1101.04 (SHEET 1 OF 1), CONSTRUCT -Y- LINES AND -DR- LINES, UP TO BUT NOT INCLUDING THE FINAL LÁYER OF SURFACE COURSE, INCLUDING DRAINAGE. SIDEWALKS. AND REST AREA BUILDING AS FOLLOWS (SÉE CONSTRUCTION PLANS AND TMP-2):
 - STA. 10+42+/- -Y- TO STA. 20+50+/- -Y-
 - STA. 10+84+/- -Y1- TO STA. 17+03+/- -Y1-
 - STA. 10+00+/- -DR1- TO STA. 10+75+/- -DR1-
 - STA. 10+00+/- DR2- TO STA. 11+20+/- DR2-

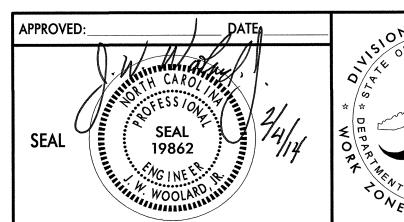
PHASE II

- STEP 1. USING RSD NO. 1101.02 (SHEET 3 OF 15), CONSTRUCT -L- LINE UP TO BUT NOT INCLUDING THE FINAL SURFACE COURSE AS FOLLOWS (SEE CONSTRUCTION PLANS AND TMP-2):
 - STA. 24+00+/- -L- TO STA. 25+85+/- -L-
 - STA. 31+50+/- -L- TO STA. 37+99+/- -L-
 - COMPLETE DRAINAGE, CONSTRUCT CONCRETE ISLANDS, INSTALL GUARDRAIL (SEE CONSTRUCTION PLANS AND TMP-2).
 - USING RSD 1101.02 OR 1101.04 AS NEEDED, COMPLETE CONSTRUCTION OF THE FORCE MAIN SEWER AND WATER LINES AS SHOWN IN THE CONSTRUCTION PLANS.
- STEP 2. USING RSD NO. 1101.02 (SHEET 3 OF 15), PAVE THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS:
 - STA. 24+00+/- -L- TO STA. 25+85+/- -L-
 - STA. 31+50+/- -L- TO STA. 37+99+/- -L-
 - STA. 10+42+/- -Y- TO STA. 20+50+/- -Y-
 - STA. 10+84+/- -Y1- TO STA. 17+03+/- -Y1-
 - STA. 10+00+/- -DR1- TO STA. 10+75+/- -DR1-
 - STA. 10+00+/- -DR2- TO STA. 11+20+/- -DR2-
 - USING RSD NO. 1101.02 (SHEET 3 OF 15), PLACE FINAL PAVEMENT MARKINGS (SEE FINAL PAVEMENT MARKING PLANS).
 - REMOVE ALL TRAFFIC CONTROL DEVICES AND ADVANCE WARNING SIGNS FROM US 74 WEST/ US 23 SOUTH (-L-).











PHASING AND DETAILS