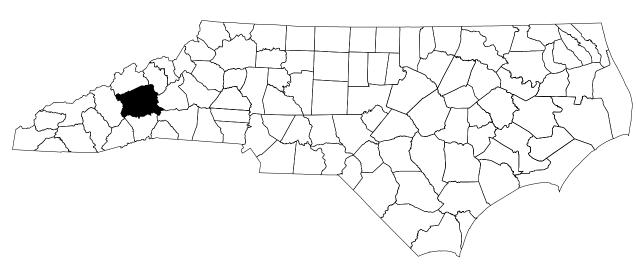
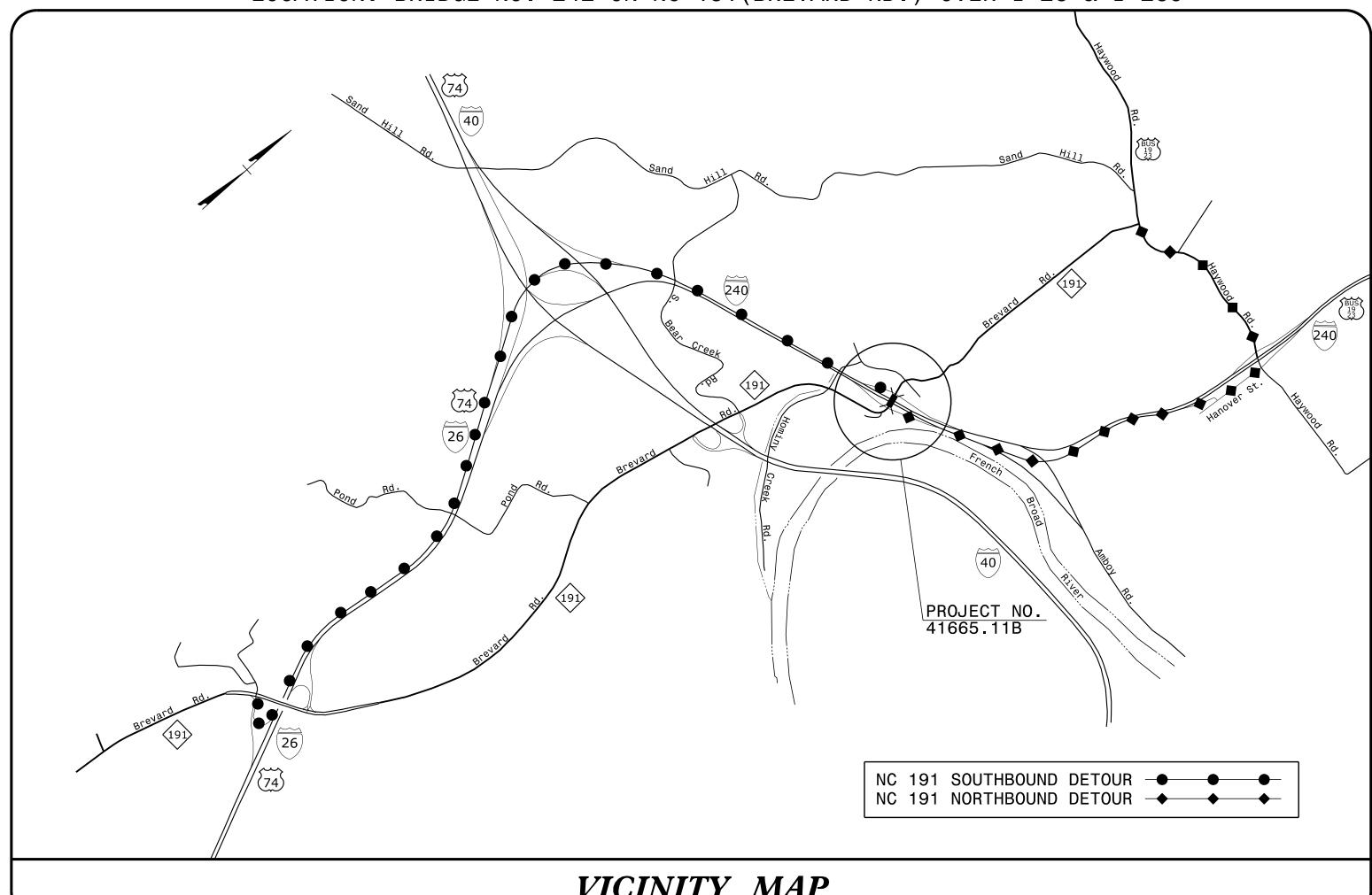
STATE OF NORTH CAROLINA

TRANSPORTATION MANAGEMENT PLAN

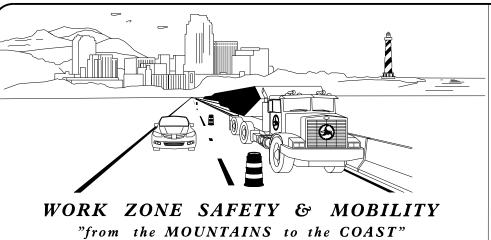
BUNCOMBE COUNTY



LOCATION: BRIDGE NO. 242 ON NC 191(BREVARD RD.) OVER I-26 & I-260



VICINITY MAP



PLANS PREPARED BY:

DON PARKER, PE TRAFFIC CONTROL PROJECT ENGINEER

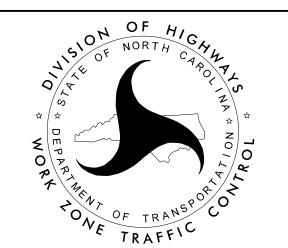
KARMEN DAIS, PE TRAFFIC CONTROL PROJECT
DESIGN ENGINEER

TRAFFIC CONTROL DESIGN ENGINEER

NCDOT CONTACTS:

DON PARKER, PE PROJECT ENGINEER

KARMEN DAIS, PE PROJECT DESIGN ENGINEER



INDEX OF SHEETS

OUEET NO	**************************************
SHEET NO.	<u>TITLE</u>
TMP-1	TITLE SHEET, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, AND TEMPORARY PAVEMENT MARKINGS
TMP-1B	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES)
TMP-1C	TRANSPORTATION OPERATIONS PLAN: (GENERAL NOTES CONTINUATION AND NARRATIVE)
TMP-2	NB NC 191 ADVANCE WARNING SIGNS / DEVICES (WEEKEND CLOSURE)
TMP-3	OFF-SITE DETOUR - NC 191 (BREVARD RD.) NORTHBOUND
TMP-4	OFF-SITE DETOUR - NC 191 (BREVARD RD.) SOUTHBOUND
TMP-5	BIKE DETOUR ROUTE (WEEKEND CLOSURE)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

APPROVED: Don A. Parker DATE: 10/28/2020

SEAL



ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" -N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 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
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
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
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMPS
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
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1205.14	PAVEMENT MARKINGS - ROUNDABOUTS
1205.15	PAVEMENT MARKINGS - SUPERSTREETS
1250.01	
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

PROJ. REFERENCE NO. TMP-1A 41665.13B

LEGEND

GENERAL

DIRECTION OF TRAFFIC FLOW DIRECTION OF PEDESTRIAN TRAFFIC FLOW ----- EXIST. PVMT. NORTH ARROW

PROPOSED PVMT. TEMP. SHORING (LOCATION PURPOSES ONLY)

WORK AREA

SIGNALS

EXISTING PROPOSED

PAVEMENT MARKINGS

——EXISTING LINES ——TEMPORARY **©**INES

TRAFFIC CONTROL DEVICES

BARRICADE (TYPE III)

DRUM SKINNY DRUM O TUBULAR MARKER

TEMPORARY CRASH CUSHION

FLASHING ARROW BOARD

FLAGGER

LAW ENFORCEMENT

TRUCK MOUNTED ATTENUATOR (TMA)

CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

O PORTABLE SIGN

── STATIONARY SIGN

STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

CRYSTAL/CRYSTAL

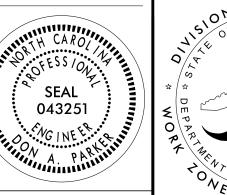
CRYSTAL/RED

◆ YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS

APPROVED Don A. Parker DATE: _____



ROADWAY STANDARD DRAWINGS & LEGEND

MANAGEMENT STRATEGIES

- FULL WEEKEND ROAD CLOSURE

- NIGHTLY LANE CLOSURE FLAGGING OPERATION

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 - REQUIRES INTERMEDIATE CONTRACT TIME PROJECT SPECIAL PROVISIONS

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

ROAD NAME

DAY AND TIME RESTRICTIONS

NC 191 I-240

MONDAY - FRIDAY 6:00 AM TO 7:00 PM

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL

ROAD NAME

EVENTS AS FOLLOWS:

NC 191 I-240

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

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 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 7:00 P.M. TUESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

PROJ. REFERENCE NO. SHEET NO. 41665.13B TMP-1B

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME DAY AND TIME RESTRICTIONS

NC 191 FROM MONDAY AT 6:00 AM THRU
I-240 FRIDAY AT 7:00 PM

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.
- 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 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.

TRAFFIC PATTERN ALTERATIONS

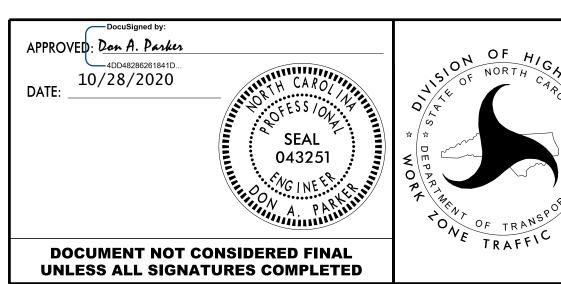
J) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

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

PROVIDE SIGNING REQUIRED FOR THE OFFSITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

- M) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN THE DETOUR IS NOT IN OPERATION.
- N) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERNATING ANY TRAFFIC PATTERN.



TRANSPORTATION OPERATIONS PLAN

MANAGEMENT STRATEGIES & GENERAL NOTES

PROJ. REFERENCE NO.	SHEET NO.
41665.13B	TMP-1C

GENERAL NOTES (CONT'D)

TRAFFIC CONTROL DEVICES

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

MISCELLANEOUS

S) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC AT THE NC 191 BRIDGE SIGNALIZED RAMPS DURING NIGHTLY LANE CLOSURES AND/OR WEEKEND ROAD CLOSURE AS DIRECTED BY THE ENGINEER.

TRAFFIC CONTROL NARRATIVE

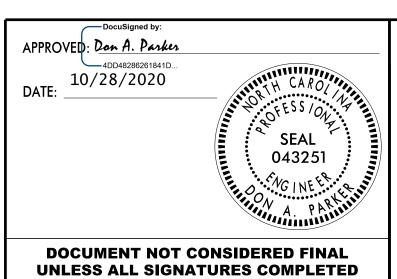
1. BEFORE WORKING ON THE PROJECT, THE CONTRACTOR SHALL SUBMIT A WRITTEN CONSTRUCTION SEQUENCE FOR TRAFFIC CONTROL TO THE ENGINEER AT THE FIRST PRE-CONSTRUCTION MEETING AND THE SEQUENCE MUST BE APPROVED BEFORE COMMENCING WORK.

THE ENGINEER WILL COORDINATE WITH THE BUNCOMBE COUNTY EMS (828) 250-6630, FIRE DEPARTMENT (828) 250-6620, AND THE (ART) ASHEVILLE REDEFINES TRANSIT AUTHORITY 30 DAYS PRIOR TO DISRUPTION OF THEIR SERVICES FOR ADDITIONAL TRAFFIC CONTROL GUIDANCE, AS NECESSARY.

THE CONTRACTOR IS TO COORDINATE WITH THE 41665.12A - BRIDGE 66 ON I-240 EAST (DM00299) CONTRACTOR AS DIRECTED BY THE ENGINEER TO ENSURE WEEKEND OPERATIONS AT BRIDGE 242 AND BRIDGE 66 DO NOT OCCUR THE SAME WEEKENDS. SEE PROJECT SPECIAL PROVISIONS.

- 2. BIKE DETOUR ROUTE TO BE ESTABLISHED PER TMP-5 PRIOR TO THE WEEKEND CLOSURE.
- 3. FOR BEAM REPLACEMENT WORK, OVER A SINGLE WEEKEND:
 - A) CLOSE NC 191 AND DETOUR TRAFFIC OFFSITE PER TMP-2, 3, & 4.
 - B) CLOSE BOTH DIRECTIONS OF I-240 UTILIZING OFF-RAMP TO ON-RAMP DETOUR IN ACCORDANCE WITH RSD 1101.03, SHEET 7. AT RAMP TERMINALS, PLACE SIGNALS IN FLASH MODE AND USE LAW ENFORCEMENT TO DIRECT TRAFFIC.
- 4. FOR OPERATIONS ON NC 191 PERFORMED OUTSIDE THE ALLOWABLE WEEKEND CLOSURE, USE A FLAGGING OPERATION IN ACCORDANCE WITH RSD 1101.02, SHEET 1. PLACE SIGNALS IN FLASH MODE AND USE LAW ENFORCEMENT TO DIRECT TRAFFIC UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

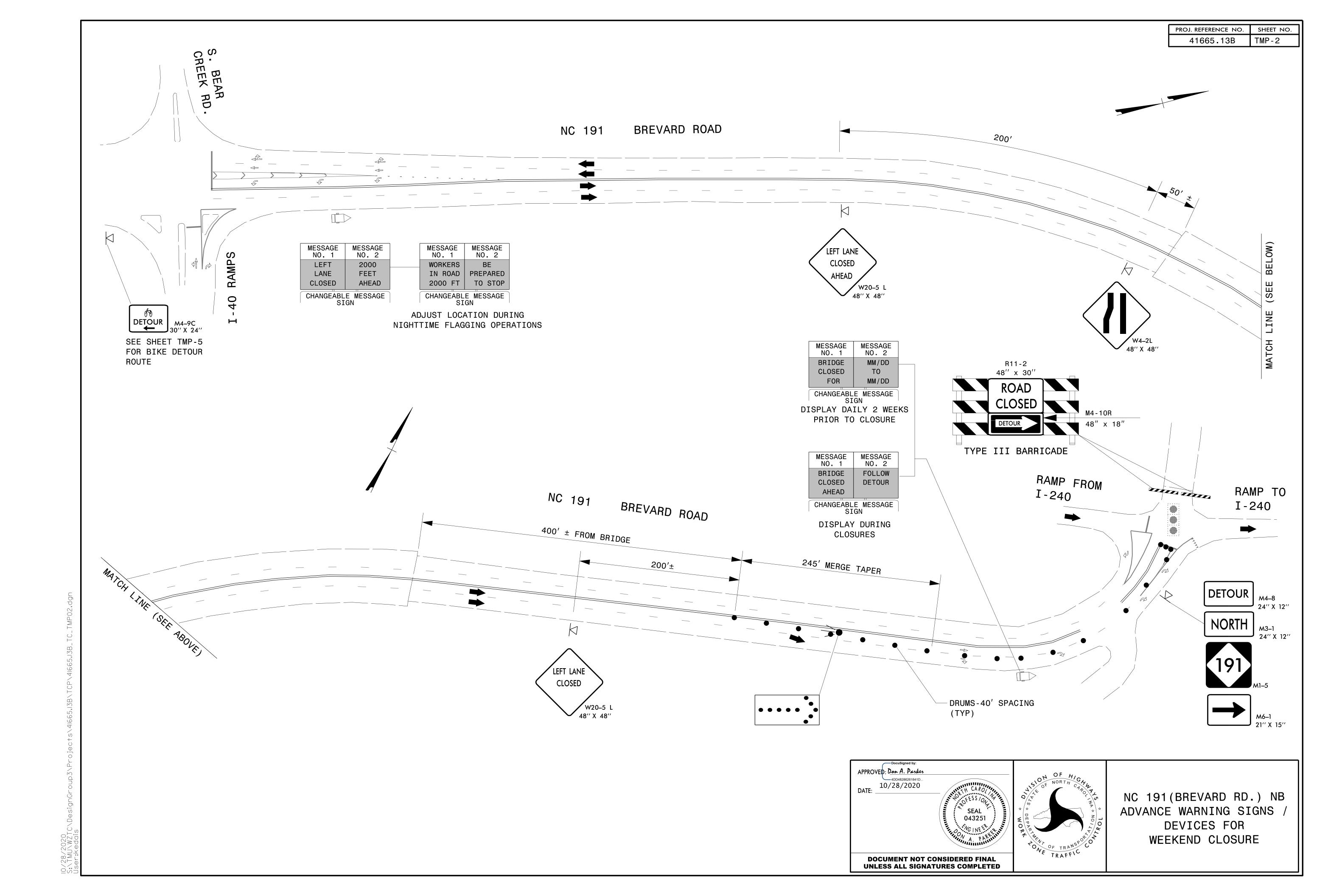
FOR OPERATIONS IMPACTING TRAFFIC ON I-240, INSTALL A LANE CLOSURE IN ACCORDANCE WITH RSD 1101.02, SHEET 4.

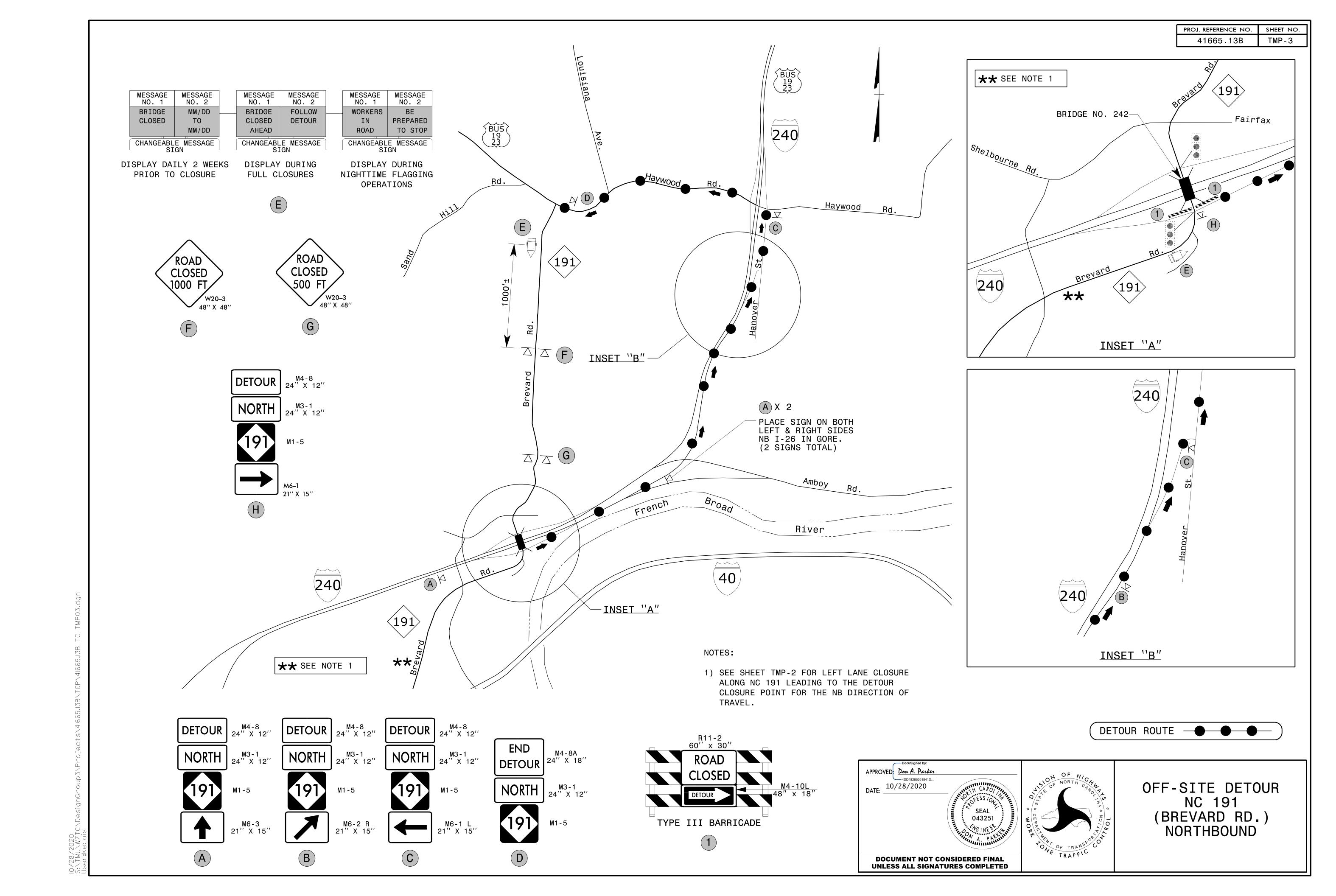


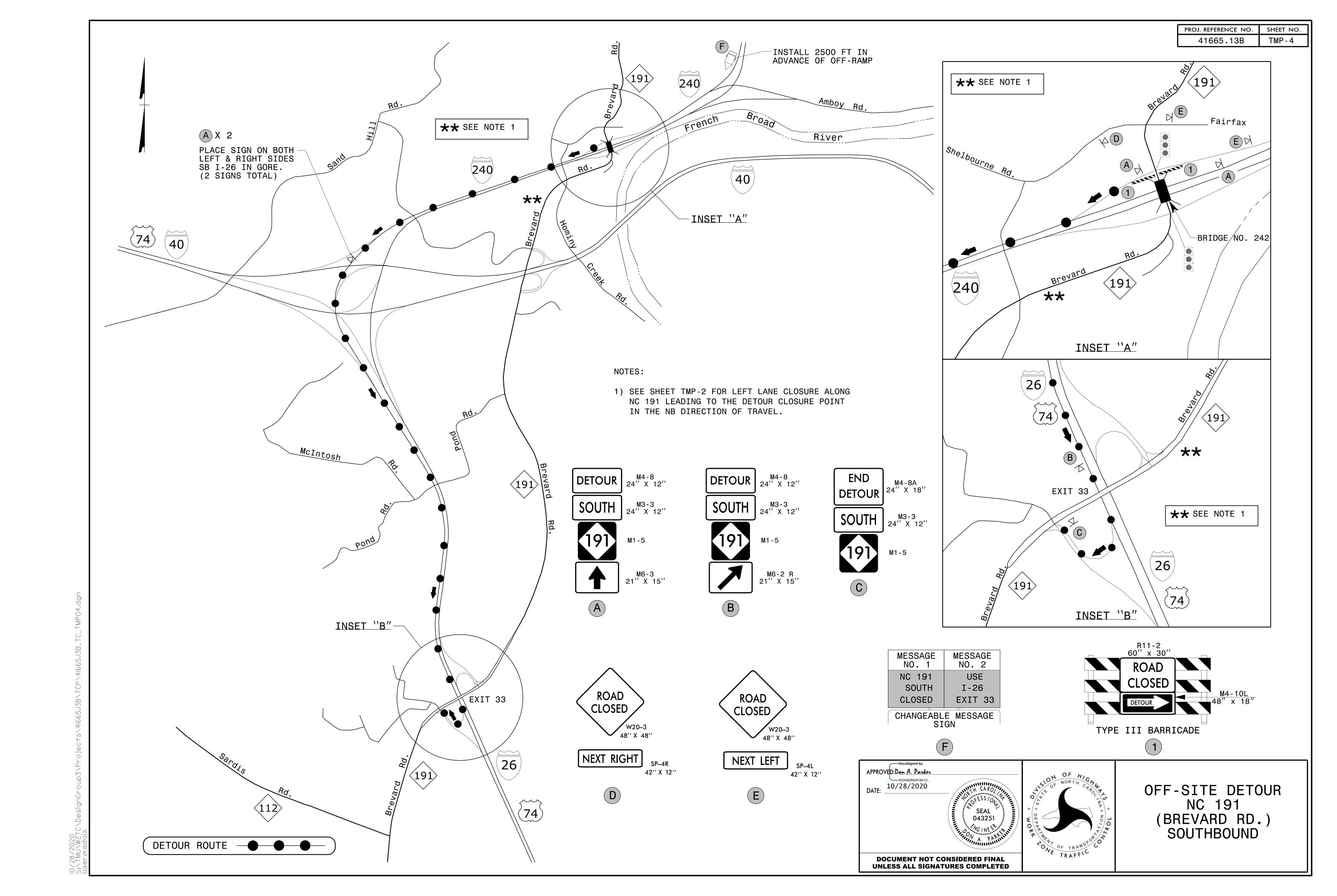


TRANSPORTATION
OPERATIONS
PLAN

GENERAL NOTES (CONT'D) & TRAFFIC CONTROL NARRATIVE







PROJ. REFERENCE NO. TMP-5 Amboy River 40 240 $\left(\mathsf{B}\right)$ BIKE ROUTE D11-1 30" X 24" DETOUR END DETOUR

M4-8 A
24" X 18" DETOUR M4–9C 30′′ X 24′′ $\left(\mathsf{C}\right)$ B $\left(\mathsf{A}\right)$ $\left[\mathbf{C} \right]$ APPROVED: Don A. Parker BICYLE DETOUR ROUTE FOR NC 191 (BREVARD RD.) DETOUR ROUTE — WEEKEND CLOSURE DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED