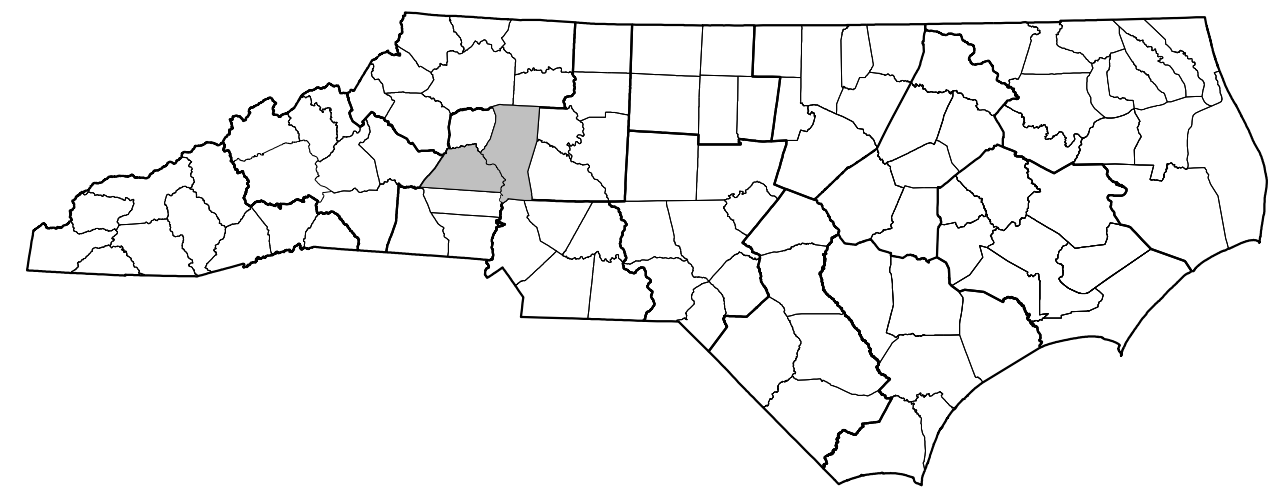
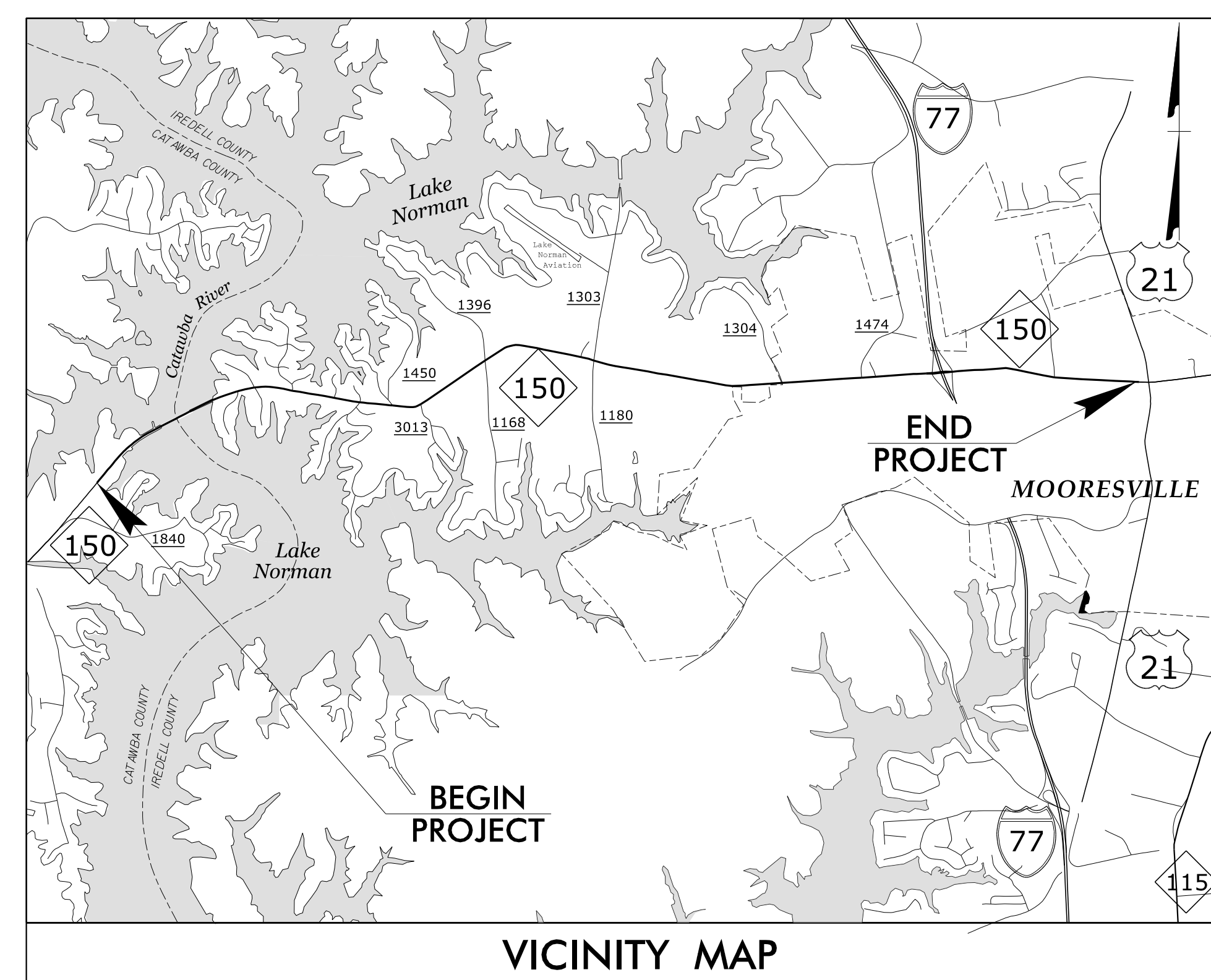


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN
CATAWBA & IREDELL COUNTIES
DIVISION 12



NC 150 FROM SR 1840 (GREENWOOD RD) IN CATAWBA COUNTY TO US 21 IN IREDELL COUNTY



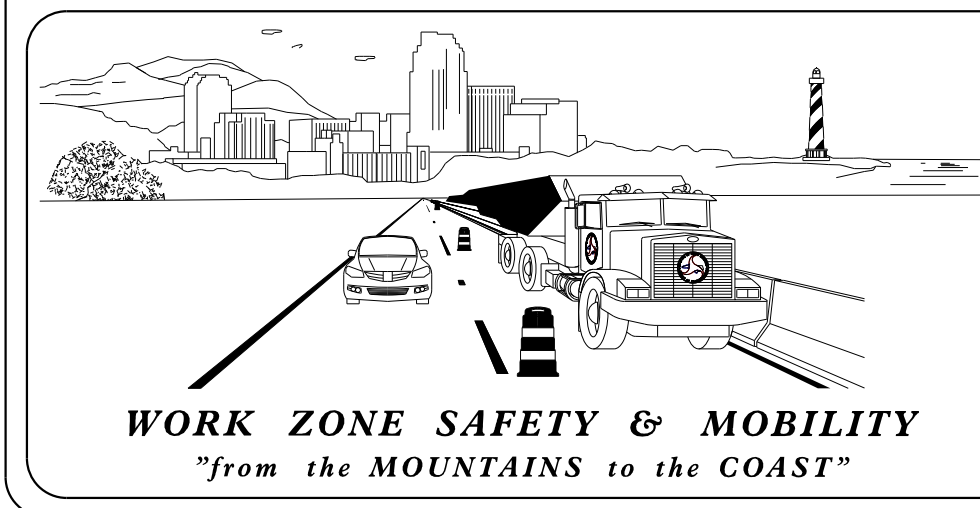
VICINITY MAP

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND
TMP-1B-1D	GENERAL NOTES AND TEMP PVMT MARKING SCHEDULE
TMP-2	PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
TMP-2A-2B	TEMPORARY SHORING NOTES
TMP-2C-2J	OFF SITE DETOUR ROUTES
TMP-2K-2M	SPECIAL SIGN DESIGNS
TMP-3-3B	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4-37	NC 150 -L- PHASE I - STEP 1
TMP-38-41	NC 150 -L- PHASE I - STEP 2
TMP-42-45	NC 150 -L- PHASE I - STEP 3
TMP-46-79	NC 150 -L- PHASE II - STEP 1
TMP-80-84	NC 150 -L- PHASE II - STEP 2
TMP-85-118	NC 150 -L- PHASE III - STEPS 1, 2, 3, AND 4

SHEET NO.
TMP-1

TIP PROJECT: R-2307B

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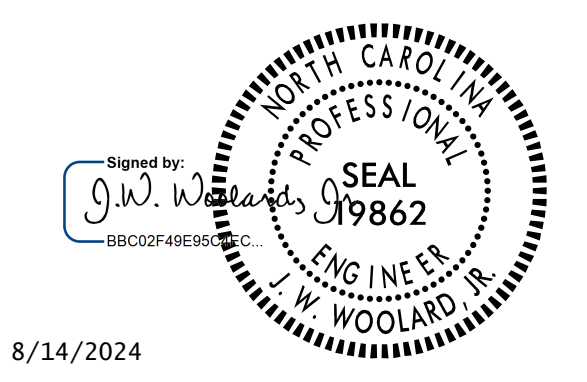
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GENERAL NOTES

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 UNDESIRE 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
-L- (NC 150)	MONDAY THRU SUNDAY 6:00 AM - 8:00 PM
-Y16- (PERTH ROAD)	
-Y17- (DOOLIE ROAD)	
-Y21- (ERVIN ROAD)	
-Y22- (MORRISON PLANTATION PARKWAY)	
-Y26- (BLUEFIELD / WILLIAMSON RD)	
-Y29- (REGENCY CENTER DR)	
-Y30- (ROLLING HILLS RD)	
-Y31- (I-77 AND ALL RAMPS)	
-Y39- & -Y40- (TALBERT RD)	


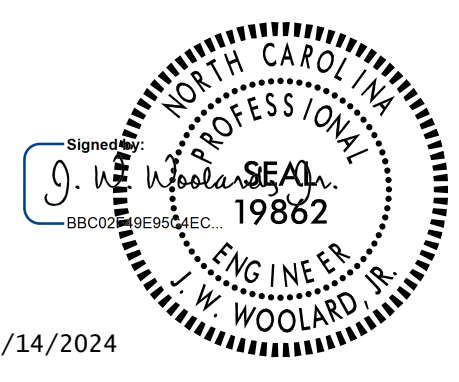
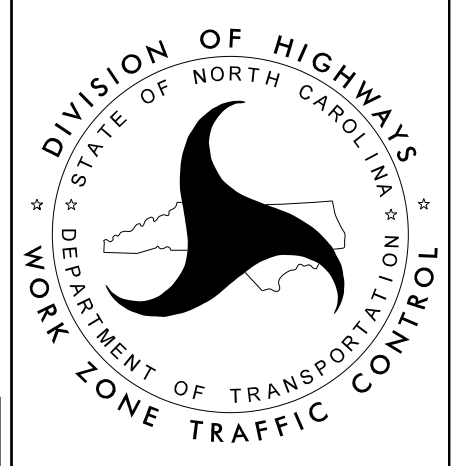
DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
-Y1- (MARINER POINT LN)	MONDAY THRU FRIDAY 6:00 AM TO 8:00 AM
-Y2- (PINNACLE LN)	MONDAY THRU FRIDAY 4:00 PM TO 6:00 PM
-Y3- (HIGH HILLS DR)	
-Y4- (PINNACLE SHORES DR)	
-Y5- (LONG COVE LN)	
-Y6- (INDIGO LN)	
-Y7- (PARADISE PENINSULA RD)	
-Y8- (HERMANCE LN)	
-Y9- (WADELLE RD)	
-Y10- (QUIET COVE RD)	
-Y11- (BOATERS DR)	
-Y12- (ROBINSON RD)	
-Y13- (MCCRARY RD)	
-Y14- (RIVER PARK RD)	
-Y15- (SR 3162)	
-Y18- (BYERS VILLAGE AVE)	
-Y19- (WATER OAKS DR)	
-Y20- (ANTIQUITY LN)	
-Y24- (LEISUREWOOD DR)	
-Y25- (TARGET ENTRANCE)	
-Y27- (SPIRITS DR)	
-Y28- (SPIRITS DR)	
-Y32- (CONSUMER SQ, DR)	
-Y33- (STRAIGHTAWAY DR)	
-Y34- (FESTIVAL SHOPPING CENTER)	
-Y35- (NORMAN STATION BLVD)	
-Y36- (CONSUMER SQ, ENTRANCE)	
-Y37- (PORTESTOWNE WAY)	
-Y38- (CORPORATE CENTER DR)	
-Y41- & -Y42- (MACLEOD DR)	
-Y43- (COMMONS DR)	

TEMPORARY PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
<u>PAINT PAVEMENT MARKING LINES (4")</u>		<u>COLD APPLIED PLASTIC (TYPE IV) PAVEMENT MARKING LINES (4")</u>	
(P5)	2 FT. - 6 FT./SP WHITE MINISKIP	(C1)	WHITE EDGELINE
(P14)	2 FT. - 6 FT./SP YELLOW MINISKIP	(C10)	YELLOW EDGELINE
(P1)	WHITE EDGELINE	(C3)	10 FT. WHITE SKIP
(P10)	YELLOW EDGELINE	(C4)	3 FT. - 9 FT./SP WHITE MINISKIP
(P3)	10 FT. WHITE SKIP	(C2)	WHITE SOLID LANE LINE
(P4)	3 FT. - 9 FT./SP WHITE MINISKIP	<u>COLD APPLIED PLASTIC (TYPE IV) PAVEMENT MARKING LINES (8")</u>	
(P2)	WHITE SOLID LANE LINE	(C44)	3FT.-9FT./SP WHITE MINISKIP
(P12)	10 FT. YELLOW SKIP	(C41)	WHITE DIAGONAL
(P11)	YELLOW SINGLE CENTER	(C43)	WHITE SOLID LANE LINE
(P13)	YELLOW DOUBLE CENTER	<u>COLD APPLIED PLASTIC (TYPE IV) PAVEMENT MARKING CHAR. AND SYMBOLS</u>	
<u>PAINT PAVEMENT MARKING LINES (6")</u>		(C70)	LEFT TURN ARROW
(P30)	YELLOW EDGELINE	(C72)	STRAIGHT ARROW
<u>PAINT PAVEMENT MARKING LINES (8")</u>		(C100)	ALPHANUMERIC CHAR.
(P44)	3FT.-9FT./SP WHITE MINISKIP	<u>THERMOPLASTIC PAVEMENT MARKING SYMBOLS</u>	
(P40)	WHITE GORELINE	(T104)	ROUTE SHIELD 6FT X 15FT
(P41)	WHITE DIAGONAL		
(P42)	YELLOW DIAGONAL		
(P46)	WHITE CROSSWALK LINE		
(P43)	WHITE SOLID LANE LINE		
<u>PAINT PAVEMENT MARKING LINES (24")</u>			
(P61)	WHITE STOPBAR		
<u>PAINT PAVEMENT MARKING CHAR. AND SYMBOLS</u>			
(P70)	LEFT TURN ARROW		
(P71)	RIGHT TURN ARROW		
(P72)	STRAIGHT ARROW		
(P73)	COMBO STRAIGHT/LEFT		
(P74)	COMBO STRAIGHT/RIGHT		
(P76)	COMBO LEFT/RIGHT/STRAIGHT		
(P100)	ALPHANUMERIC CHAR.		
(P103)	24" YIELD LINE TRIANGLE		
(P79)	MERGE ARROW		
(P77)	U-TURN ARROW		

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 <p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. 919.851.6866 Fax. 919.851.7024 www.stantec.com License No. F-0672</p>	 <p>8/14/2024</p> <p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>	 <p style="text-align: center;">GENERAL NOTES AND TEMPORARY PAVEMENT MARKING SCHEDULE</p>	
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GENERAL NOTES

TIME RESTRICTIONS (CONT'D)

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

ROAD NAME
ALL ROADS

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 8:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:00 P.M. THE FOLLOWING TUESDAY.
- 3) FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 8:00 P.M. MONDAY.
- 4) FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 8:00 P.M. TUESDAY.
- 5) FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 8:00 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 8:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
- 6) FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 8:00 P.M. TUESDAY.
- 7) FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 8:00 P.M. MONDAY.
- 8) FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- 9) FOR ANY RACES OR EVENTS AT CHARLOTTE MOTOR SPEEDWAY THAT CREATE UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- 10) FOR NORTH CAROLINA RACE WEEK BETWEEN THE HOURS OF 6:00 AM SATURDAY TO 8:00 PM THE FOLLOWING SUNDAY.
- 11) FOR ANY EVENTS AT LAKE NORMAN HIGH SCHOOL THAT CREATE UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.

C) DO NOT CLOSE ANY ROADWAY EXCEPT WHERE ALLOWED BY THE PLANS OR THE ENGINEER.

D) DO NOT CLOSE ROADS AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
-Y31- (I-77)	MONDAY THRU SUNDAY 5:00 AM-12 MIDNIGHT
-Y31RPA- -Y31RPB- -Y31RPC- -Y31RPD-	

E) DO NOT STOP TRAFFIC AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>	<u>DURATION AND OPERATION</u>
-L- (NC 150)	MONDAY THRU SUNDAY 6:00 AM - 8:00 PM	15 MINUTES FOR TRAFFIC SHIFTS, PAVEMENT TIE-INS, PAVEMENT MARKING TIE-INS, AND OVERHEAD SIGN ERECTION
-Y44- (US 21 RAMP)	MONDAY THRU SUNDAY 6:00 AM - 8:00 AM AND 4:00 PM - 6:00 PM	15 MINUTES FOR TRAFFIC SHIFTS, PAVEMENT TIE-INS, AND PAVEMENT MARKING TIE INS

F) DO NOT STOP TRAFFIC FOR BLASTING OPERATIONS AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>	<u>DURATION AND OPERATION</u>
-L- (NC 150) -Y8- (HERMANCE LN) -Y9- (WADDELL RD)	MONDAY THRU SUNDAY 3:00 PM TO 10:00 AM	20 MINUTES FOR BLASTING OPERATIONS

G) DO NOT CONDUCT SINGLE VEHICLE HAULING AS FOLLOWS; INGRESS AND EGRESS FROM RAMPS WILL NOT BE ALLOWED:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
-L- (NC 150)	MONDAY THRU SUNDAY 6:00 AM - 8:00 AM MONDAY THRU SUNDAY 4:00 PM - 6:00 PM

H) DO NOT CONDUCT MULTI-VEHICLE HAULING AS FOLLOWS; INGRESS AND EGRESS FROM RAMPS WILL NOT BE ALLOWED:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
-L- (NC 150)	MONDAY THRU SUNDAY 6:00 AM - 8:00 AM MONDAY THRU SUNDAY 4:00 PM - 6:00 PM

I) 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

J) 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.

K) 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.

L) 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.

M) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRANSPORTATION MANAGEMENT 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.

N) 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.

O) DO NOT INSTALL MORE THAN 0.5 MILES OF LANE CLOSURE ON -L- (NC 150) MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.

P) DO NOT INSTALL MORE THAN TWO (2) SIMULTANEOUS LANE CLOSURES IN ANY ONE DIRECTION ON -L- (NC 150).

Q) PROVIDE A MINIMUM OF 1 MILE BETWEEN LANE CLOSURES, MEASURED FROM THE END OF ONE CLOSURE TO THE FIRST SIGN OF THE NEXT LANE CLOSURE.

PAVEMENT EDGE DROP OFF REQUIREMENTS

R) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPEN TRAVEL LANE THAT HAS 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, AT NO EXPENSE TO THE DEPARTMENT.

S) 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.

TRAFFIC PATTERN ALTERATIONS

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

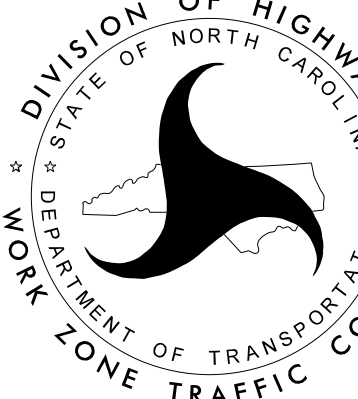
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DIVISION OF HIGHWAYS
DEPARTMENT OF TRANSPORTATION
STATE OF NORTH CAROLINA
WORK ZONE TRAFFIC CONTROL

GENERAL NOTES

GENERAL NOTES

SIGNING

- U) 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.
 - V) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRANSPORTATION MANAGEMENT PLANS.
- AND
- PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRANSPORTATION MANAGEMENT PLANS.
- W) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.
- AND
- COVER OR REMOVE ALL SIGNS REQUIRED FOR THE OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.
- X) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.
 - Y) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

- Z) 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.
- DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.
- 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.
- AA) PROTECT THE APPROACH END OF MOVABLE/PORTABLE 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.
- PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS:

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45-50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

TRAFFIC CONTROL DEVICES

- BB) 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.
- CC) PLACE TYPE III BARRICADES WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- DD) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS, CONES OR SKINNY DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON (500 FT) CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS


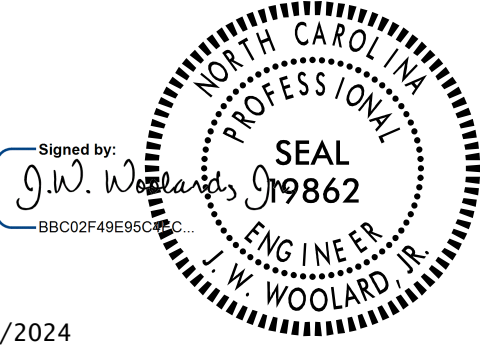
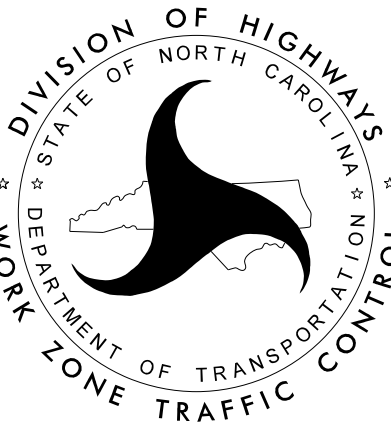
- EE) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:
- | ROAD NAME | MARKING | MARKER |
|-----------|------------------------------|------------------|
| ALL ROADS | PAINT | TEMPORARY RAISED |
| BRIDGES | COLD APPLIED PLASTIC TYPE IV | TEMPORARY RAISED |
- FF) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.
 - GG) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
 - HH) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
 - II) TRACE THE EXISTING AND/OR PROPOSED MONOLITHIC ISLAND LOCATIONS WITH THE PROPER COLOR PAVEMENT MARKING PRIOR TO REMOVAL AND/OR INSTALLATION. PLACE DRUMS, CONES, OR TUBULAR MARKERS TO DELINEATE ANY EXISTING AND/OR PROPOSED MONOLITHIC ISLANDS AFTER REMOVAL AND/OR BEFORE INSTALLATION.

MISCELLANEOUS

- JJ) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) (500 FT) AND (1000 FT) RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.
- KK) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.
- LL) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.).
- MM) MAINTAIN VEHICULAR ACCESS TO ALL DRIVEWAYS DURING THE LIFE OF THE CONTRACT, UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER. USE INCIDENTAL STONE WHEN NECESSARY.

- NN) ALL DIMENSIONS AND STATIONS IN THE TRANSPORTATION MANAGEMENT PLAN AND PHASING ARE APPROXIMATE (+/-); FIELD ADJUST AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
- OO) USE LAW ENFORCEMENT TO DIRECT TRAFFIC AND ENFORCE ROAD CLOSURES. LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE AND MAY BE REVISED AS THE OFFICER OR THE ENGINEER DEEM NECESSARY.
- PP) USE LAW ENFORCEMENT TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE AND MAY BE REVISED AS THE OFFICER OR THE ENGINEER DEEM NECESSARY.
- QQ) CHANGEABLE MESSAGE SIGN MESSAGES SHOWN ARE EXAMPLES. OTHER MESSAGES MAY BE USED AS CONDITIONS WARRANT. ALL MESSAGES AND LOCATIONS MUST BE APPROVED BY THE ENGINEER PRIOR TO INCORPORATING.
- RR) COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.
- SS) MAINTAIN EXISTING GUARDRAIL UNTIL PROPOSED FILL SLOPES ARE COMPLETED TO THE POINT THAT FIELD CONDITIONS NO LONGER MEET GUARDRAIL WARRANTS AS DIRECTED BY THE ENGINEER.
- TT) MAINTAIN ALL EXISTING SIGNING ON PROJECT (WARNING, REGULATORY AND GUIDE SIGNS). WHERE CONSTRUCTION AFFECTS THE LOCATION OF A SIGN, RELOCATE AS NECESSARY, OR INSTALL REPLACEMENT SUCH THAT THE FUNCTION OF THE SIGN IS MAINTAINED AT ALL TIMES. DURING RELOCATION OF STOP SIGNS PROVIDE FLAGGERS WITH "FLAGGER AHEAD" (W20-7a) AND "BE PREPARED TO STOP" (W3-4) SIGNS AS NECESSARY TO MAINTAIN INTERSECTION TRAFFIC.
- UU) DRAINAGE CONSTRUCTION SHOWN IN THE TRANSPORTATION MANAGEMENT PLAN IS A GENERAL REPRESENTATION OF WORK TO BE PERFORMED DURING A PARTICULAR PHASE OF CONSTRUCTION. REFER TO THE ROADWAY PLANS FOR DRAINAGE ITEMS. IN THE EVENT THERE IS A DISCREPANCY BETWEEN WHAT IS SHOWN IN THE TRANSPORTATION MANAGEMENT PLAN AND THE ROADWAY PLAN, THE ROADWAY PLAN SHALL GOVERN OVER THE TRANSPORTATION MANAGEMENT PLAN.
- VV) BLASTING OPERATIONS MAY NOT BE PERFORMED DURING THE TIME RESTRICTIONS LISTED IN GENERAL NOTE F ON TMP-1C. BLASTING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 220 OF THE 2024 STANDARD SPECIFICATIONS. USE RSD 1101.06 FOR EACH BLASTING OPERATION. NOTIFY THE ENGINEER TEN (10) BUSINESS DAYS PRIOR TO THE FIRST BLASTING OPERATION ON THE PROJECT. NOTIFY THE ENGINEER TWO (2) BUSINESS DAYS PRIOR TO SUBSEQUENT BLASTING OPERATIONS.

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 <p>Stantec Consulting Services Inc. 801 Jones Franklin Road Suite 300 Raleigh, NC 27606 Tel. 919.851.6866 Fax. 919.851.7024 www.stantec.com License No. F-0672</p>	<p>Signed by: <i>J.W. Williams</i> 8/27/2024</p>  <p>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</p>		<p>GENERAL NOTES</p>
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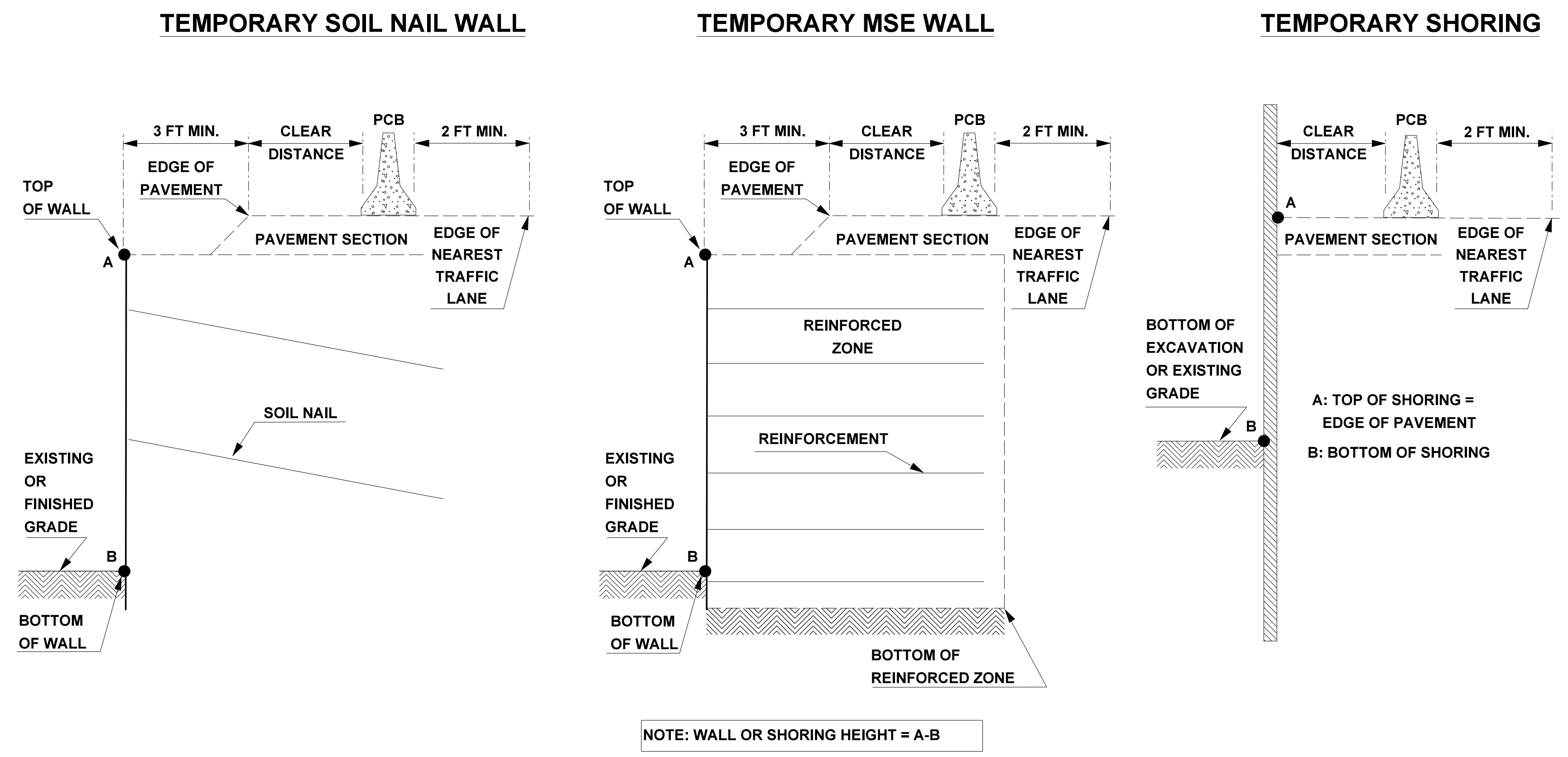


FIGURE A

NOTES

- 1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.
- 2- REFER TO THE "TEMPORARY SHORING" STANDARD PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).
- 3- PCB IS REQUIRED IF TEMPORARY SHORING/WALL IS LOCATED WITHIN THE CLEAR ZONE IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT FOR APPLICABLE PAVEMENT DESIGN).
- 4- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED OR ANCHORED PCB FROM THE TABLE SHOWN IN FIGURE B. CLEAR DISTANCE IS DEFINED AS SHOWN IN FIGURE A AND OFFSET IS DEFINED AS SHOWN IN FIGURE B.
- 5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET PCB NEXT TO AND UP AGAINST THE TRAFFIC SIDE OF THE TEMPORARY SHORING/WALLS EXCEPT FOR BARRIER ABOVE TEMPORARY WALLS. PCB WITH THE MINIMUM REQUIRED CLEAR DISTANCE IS REQUIRED ABOVE TEMPORARY WALLS.
- 6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.
- 7- SET PCB WITH A MINIMUM HORIZONTAL DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A UNLESS OTHERWISE SHOWN IN THE PLANS OR APPROVED BY THE ENGINEER.
- 8- FOR PCB ABOVE AND BEHIND TEMPORARY WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THIS MINIMUM REQUIRED DISTANCE IS NOT AVAILABLE, CONTACT THE ENGINEER.
- 9- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS.

MINIMUM REQUIRED CLEAR DISTANCE, inches

Barrier Type	Pavement Type	Offset * ft	Design Speed, mph					
			<30	31-40	41-50	51-60	61-70	71-80
Unanchored PCB	Asphalt	<8	24	26	29	32	36	40
		8-14	26	28	31	35	38	42
		14-20	27	29	34	36	39	43
		20-26	28	31	35	38	40	44
		26-32	29	32	36	39	42	45
		32-38	30	34	38	41	43	46
		38-44	31	34	41	43	45	48
	Concrete	44-50	31	35	41	43	46	49
		50-56	32	36	42	44	47	50
		>56	32	36	42	45	47	51
		<8	17	18	21	22	25	26
		8-14	19	20	23	25	26	29
		14-20	22	22	24	26	28	31
		20-26	23	24	26	27	30	34
Anchored PCB	Asphalt	All Offsets	24 for All Design Speeds					
		Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds				

* See Figure Below

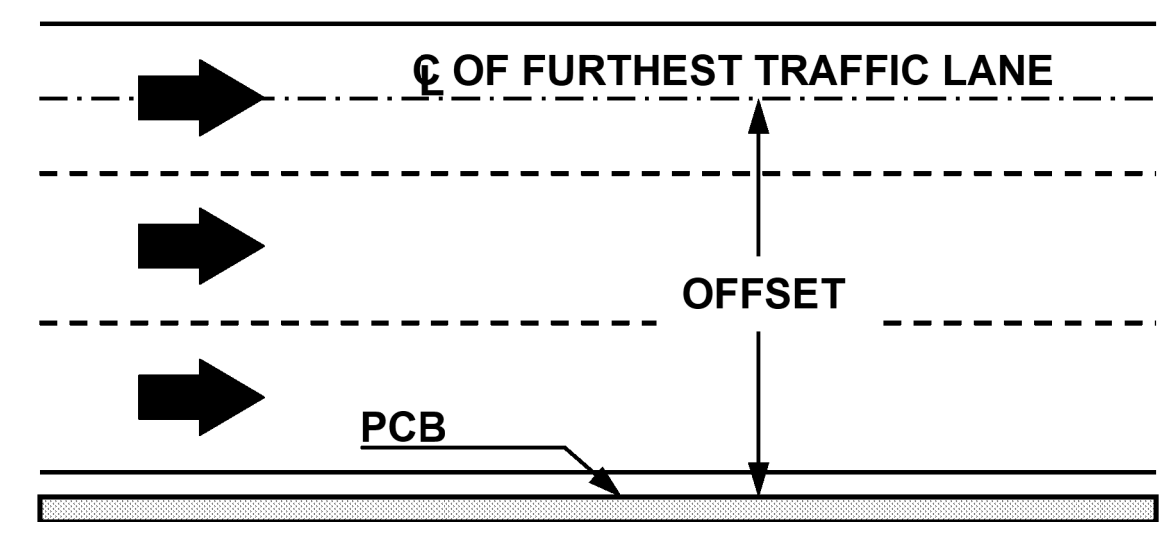
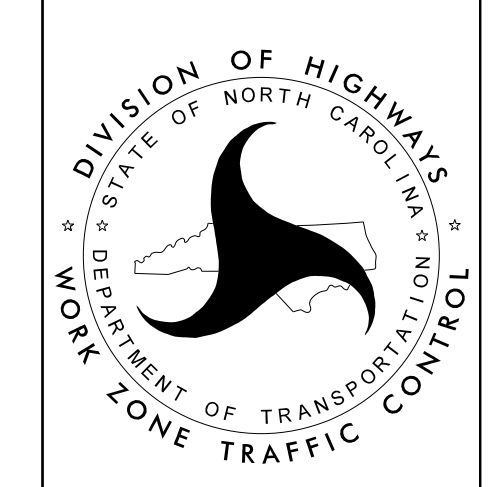


FIGURE B

DETAIL PROVIDED BY NCDOT



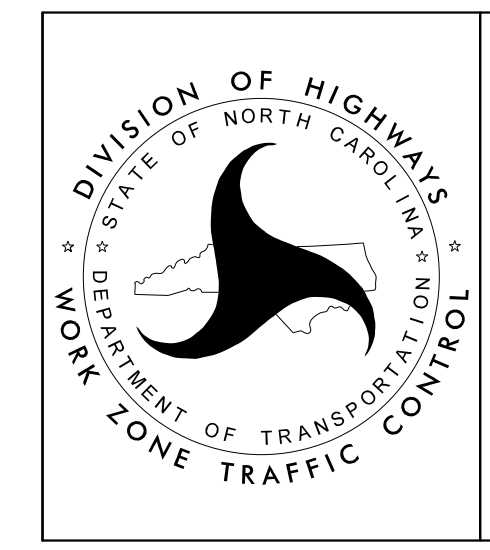
PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS

Project	Location/ Shoring Type	From Station	Type of Shoring	Offset Range	To Station	Offset Range	Length (feet)	Est. Average Shoring Height (feet)	Quantity (SF)	Max. Shoring Height (feet)
I-5717	#1 Structure	731+62.1+/- -L-	CUT	41.5' Right of -L-	732+32.5+/- -L-	41.5' Right of -L-	70.4	19.5	1372.8	22.5
		732+32.5+/- -L-	CUT	41.5' Right of -L-	732+39.9+/- -L-	38.0' Right of -L-	7.4	15.8	116.9	16.5
		732+39.9+/- -L-	CUT	38.0' Right of -L-	732+64.3+/- -L-	38.0' Right of -L-	24.4	9.0	219.6	15.0
	#1 Totals						102.2		1709.3	
I-5717	#2 Roadway	730+75+/- -L-	FILL	40.1' Right of -L-	731+62.1+/- -L-	42.5' Right of -L-	87.1	20.3	1768.1	22.5
		731+62.1+/- -L-	FILL	42.5' Right of -L-	732+32.5+/- -L-	42.5' Right of -L-	70.4	19.5	1372.8	22.5
		732+32.5+/- -L-	FILL	42.5' Right of -L-	732+39.9+/- -L-	39.0' Right of -L-	7.4	15.8	116.9	16.5
		732+39.9+/- -L-	FILL	39.0' Right of -L-	732+64.3+/- -L-	39.0' Right of -L-	24.4	13.2	322.1	15.0
#2 Totals						189.3		3579.9		
I-5717	#3 Structure	734+24+/- -L-	CUT	38.0' Right of -L-	734+55.8+/- -L-	38.0' Right of -L-	31.8	14.4	457.9	18.8
		734+55.8+/- -L-	CUT	38.0' Right of -L-	734+63.9+/- -L-	41.5' Right of -L-	8.1	19.8	160.4	20.8
		734+63.9+/- -L-	CUT	41.5' Right of -L-	735+45.8+/- -L-	41.5' Right of -L-	136.1	10.4	1415.4	20.8
	#3 Totals						176.0		2033.7	
I-5717	#4 Roadway	734+24+/- -L-	FILL	39.0' Right of -L-	734+55.8+/- -L-	39.0' Right of -L-	31.8	29.5	938.1	29.7
		734+55.8+/- -L-	FILL	39.0' Right of -L-	734+63.9+/- -L-	42.5' Right of -L-	8.1	29.7	240.6	30.2
		734+63.9+/- -L-	FILL	42.5' Right of -L-	734+82.8+/- -L-	42.5' Right of -L-	18.9	30.2	570.8	30.2
		734+82.8+/- -L-	FILL	42.5' Right of -L-	736+00+/- -L-	42.5' Right of -L-	117.2	15.1	1769.7	30.2
#4 Totals						176.0		3519.2		
I-5717	#5 Structure	31+78+/- -Y31-	CUT	17.0' Left of -Y31-	32+58+/- -Y31-	17.0' Left of -Y31-	80 ft	6.0 ft	480.0 SF	6.0 ft
I-5717	#6 Structure	31+78+/- -Y31-	CUT	17.0' Right of -Y31-	32+48+/- -Y31-	17.0' Right of -Y31-	70 ft	6.2 ft	434.0 SF	6.2 ft
R-2307B	#7 Roadway	700+00+/- -L-	FILL	6.5' Right of -L-	705+85+/- -L-	7' Right of -L-	585.0	3.8	2223.0	6.3
R-2307B	#8 Roadway	711+00+/- -L-	FILL	0.5' Left of -L-	712+19+/- -L-	6.5' Right of -L-	119.0	2.3	273.7	3.0
		712+19+/- -L-	FILL	6.5' Right of -L-	714+45+/- -L-	6.5' Right of -L-	226.0	2.7	610.2	3.6
#8 Totals							345.0		883.9	

Project	Location/ Shoring Type	From Station	Type of Shoring	Offset Range	To Station	Offset Range	Length (feet)	Est. Average Shoring Height (feet)	Quantity (SF)	Max. Shoring Height (feet)
I-5717	#9 Structure	731+39.8 +/- -L-	CUT	19.75' Left of -L-	732+14.3+/- -L-	19.75' Left of -L-	74.5	11.0	819.5	22.0
		732+14.3+/- -L-	CUT	19.75' Left of -L-	732+29.5+/- -L-	18.0' Left of -L-	15.2	13.4	203.7	16.5
		732+29.5+/- -L-	CUT	18.0' Left of -L-	732+47.4+/- -L-	18.0' Left of -L-	17.9	6.9	123.5	10.3
	#9 Totals						107.6		1146.7	
I-5717	#10 Roadway	730+85+/- -L-	FILL	20.75' Left of -L-	731+39.8 +/- -L-	20.75' Left of -L-	54.8	4.2	230.2	4.9
		731+39.8 +/- -L-	FILL	20.75' Left of -L-	732+14.3+/- -L-	20.75' Left of -L-	74.5	15.3	1139.9	27.1
		732+14.3+/- -L-	FILL	20.75' Left of -L-	732+29.5+/- -L-	19.0' Left of -L-	15.2	27.2	413.4	27.2
		732+29.5+/- -L-	FILL	19.0' Left of -L-	732+47.4+/- -L-	19.0' Left of -L-	17.9	27.4	490.5	27.7
#10 Totals						162.4		2273.9		
I-5717	#11 Structure	734+06.8+/- -L-	CUT	18.0' Left of -L-	734+39.65+/- -L-	18.0' Left of -L-	32.9	25.8	848.8	25.8
		734+39.65+/- -L-	CUT	18.0' Left of -L-	734+49.7+/- -L-	19.0' Left of -L-	10	23.3	233	25.8
		734+49.7+/- -L-	CUT	19.0' Left of -L-	734+72.8+/- -L-	19.0' Left of -L-	23.1	16.2	376.6	20.8
		734+72.8+/- -L-	CUT	19.0' Left of -L-	735+33.9+/- -L-	26.3' Left of -L-	61.1	3.1	191.8	11.6
#11 Totals						127.1		1650.2		
I-5717	#12 Roadway	734+06.8+/- -L-	FILL	19.0' Left of -L-	734+39.65+/- -L-	19.0' Left of -L-	32.9	29.6	973.8	29.6
		734+39.65+/- -L-	FILL	19.0' Left of -L-	734+49.7+/- -L-	20.0' Left of -L-	10	27.1	271	29.6
		734+49.7+/- -L-	FILL	20.0' Left of -L-	734+72.8+/- -L-	20.0' Left of -L-	23.1	18.9	435.4	13.1
		734+72.8+/- -L-	FILL	20' Left of -L-	735+33.9+/- -L-	27.3' Left of -L-	61.1	15.9 ft	410	30.5
	735+33.9+/- -L-	FILL	27.3' Left of -L-	736+00+/- -L-	34' Left of -L-	65.2	0.9	60	1	
#12 Totals						192.3		2150.2		
I-5717	#13 Structure	33+18+/- -Y31-	CUT	17.0' Left of -Y31-	34+02+/- -Y31-	17.0' Left of -Y31-	84 ft	5.8 ft	487.2 SF	5.8 ft
I-5717	#14 Structure	33+08+/- -Y31-	CUT	17.0' Right of -Y31-	34+02+/- -Y31-	17.0' Right of -Y31-	94 ft	6.0 ft	564.0 SF	6.0 ft
I-5717	#15 Structure	731+92.10+/- -L-	CUT	17.75' Left of -L-	732+12.10+/- -L-	17.75' Left of -L-	20 ft	22.0 ft	440.0 SF	22.0 ft
I-5717	#16 Structure	734+52.39+/- -L-	CUT	17.75' Left of -L-	734+72.39+/- -L-	17.75' Left of -L-	20 ft	25.0 ft	500.0 SF	25.0 ft
I-5717	#17 Structure	32+58+/- -Y31-	CUT	17.0' Left of -Y31-	33+18+/- -Y31-	17.0' Left of -Y31-	60 ft	5.9 ft	354.0 SF	5.9 SF
I-5717	#18 Structure	32+48+/- -Y31-	CUT	17.0' Right of -Y31-	33+08+/- -Y31-	17.0' Right of -Y31-	60 ft	6.2 ft	372.0 SF	6.2 ft

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THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH SEALED DOCUMENTS FROM THE GEOTECHNICAL ENGINEER. THE DOCUMENTS WERE SUBMITTED TO NCDOT PROJECT MANAGEMENT UNIT ON MARCH 29, 2021 AND JUNE 3, 2024 AND SEALED BY A PROFESSIONAL ENGINEER, (MICHAEL H. STEPHENS), LICENSE #028893.



TEMPORARY SHORING NOTES

SHORING LOCATION NO. 1,3,5,6,9,11,13,14,15,16,17, AND 18

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING LOCATIONS 1, 3, 5, 6, 9, 11, 13, 14, 15, 16, 17, AND 18 FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT, (γ) = 115 PCF
 FRICTION ANGLE, (ϕ) = 28 DEGREES
 COHESION, c = 0 PSF
 GROUNDWATER ELEVATION = 830 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING LOCATIONS 1, 3, 5, 6, 9, 11, 13, 14, 15, 16, 17, AND 18. THE INFORMATION PROVIDED FOR THE TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

IT MAY BE PREFERRED TO USE A TEMPORARY SOIL NAIL WALL FOR TEMPORARY SHORING LOCATIONS 1, 3, 5, 6, 9, 11, 13, 14, 15, 16, 17, AND 18. FOR TEMPORARY SOIL NAIL WALLS, SEE TEMPORARY SOIL NAIL WALLS PROVISION.

SHORING LOCATION NO. 2, 4, 7, 8, 10, AND 12

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DESIGN TEMPORARY SHORING LOCATIONS 2, 4, 7, 8, 10, AND 12 FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

UNIT WEIGHT, (γ) = 120 LB/CF
 FRICTION ANGLE, (ϕ) = 30 DEGREES
 COHESION, c = 0 LB/SF
 GROUNDWATER ELEVATION = 830 FT

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING LOCATIONS 2, 4, 7, 8, 10, AND 12. THE INFORMATION PROVIDED FOR THE TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING LOCATIONS 2, 4, 7, 8, 10, AND 12. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR RETAINING WALLS AND BRIDGE APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USER SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR RETAINING WALLS AND BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

NOTE

TEMPORARY SHORING LOCATIONS NO 1 THRU NO 6 ARE SHOWN ON TMP-30 THRU TMP-30B

TEMPORARY SHORING LOCATION NO 7 IS SHOWN ON TMP-68

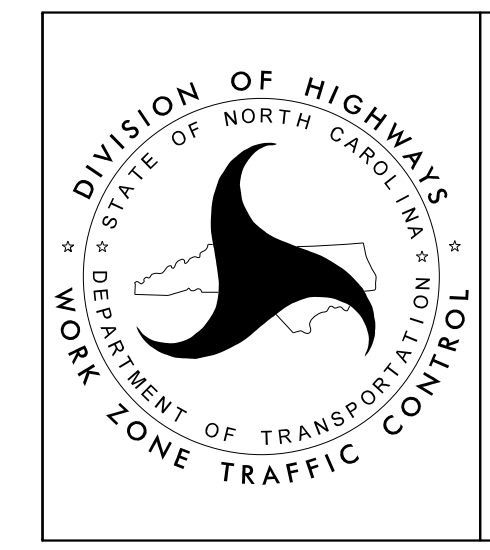
TEMPORARY SHORING LOCATION NO 8 IS SHOWN ON TMP-69

TEMPORARY SHORING LOCATIONS NO 9 THRU NO 14 ARE SHOWN ON TMP-72 THRU TMP-72B

TEMPORARY SHORING LOCATIONS NO 15 AND 16 ARE SHOWN ON TMP-72A

TEMPORARY SHORING LOCATIONS NO 17 AND 18 ARE SHOWN ON TMP-112 AND TMP-112A

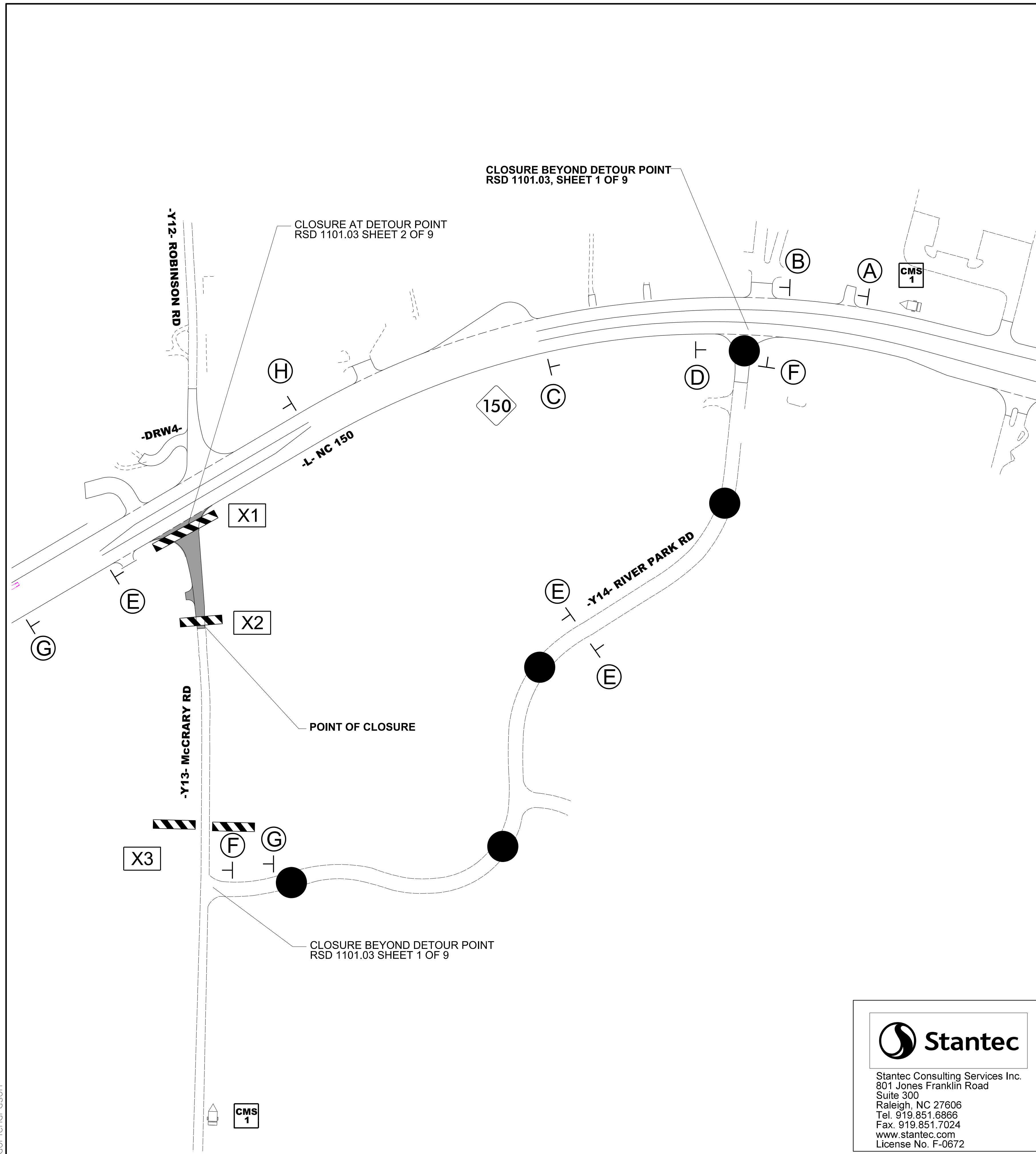
THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH SEALED DOCUMENTS FROM THE GEOTECHNICAL ENGINEER. THE DOCUMENTS WERE SUBMITTED TO NCDOT PROJECT MANAGEMENT UNIT ON (MARCH 30, 2021 AND JUNE 3, 2024) AND BOTH DOCUMENTS WERE SEALED BY A PROFESSIONAL ENGINEER, (MICHAEL H. STEPHENS), LICENSE #028893.



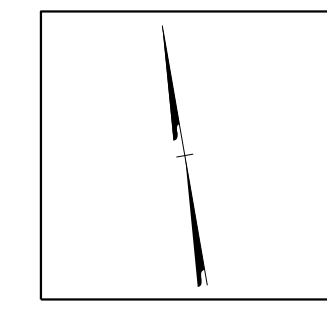
TEMPORARY SHORING NOTES

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PROJ. REFERENCE NO.	SHEET NO.
R-2307B	TMP-2C



A **McCRARY RD**
 DETOUR M4-8 24"x12"
 M5-1 21"x15"

B **McCRARY RD**
 DETOUR M4-8 24"x12"
 M6-1L 21"x15"

C **McCRARY RD**
 DETOUR M4-8 24"x12"
 M5-1R 21"x15"

D **McCRARY RD**
 DETOUR M4-8 24"x12"
 M6-1 21"x15"

E **McCRARY RD**
 DETOUR M4-8 24"x12"
 M6-3 21"x15"

F **McCRARY RD**
 END DETOUR M4-8a 24"x18"

G

ROAD CLOSED
 W20-3 48" x 48"
 NEXT RIGHT SP-4R 48"x12"

H

ROAD CLOSED
 W20-3 48" x 48"
 NEXT LEFT SP-4L 48"x12"

X3

R11-2 (48" x 30")
 ROAD CLOSED
 DETOUR
 M4-10R (48" x 18")
 TYPE III BARRICADE

X1

R11-2 (48" x 30")
 ROAD CLOSED
 DETOUR
 M4-10L (48" x 18")
 TYPE III BARRICADE

X2

R11-2 (48" x 30")
 ROAD CLOSED
 TYPE III BARRICADE

CMS 1

MESSAGE
 1 WEEK PRIOR TO ROAD CLOSING
 CHANGEABLE MESSAGE SIGN
 McCRARY CLOSING MM/DD

MESSAGE
 DURING ROAD CLOSURE
 CHANGEABLE MESSAGE SIGN
 McCRARY CLOSED AHEAD FOLLOW DETOUR

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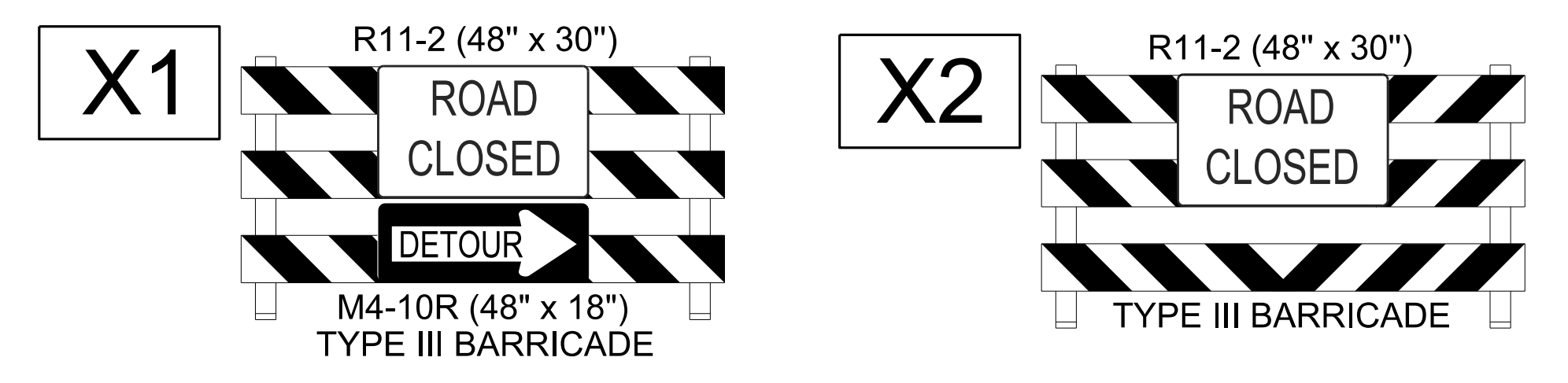
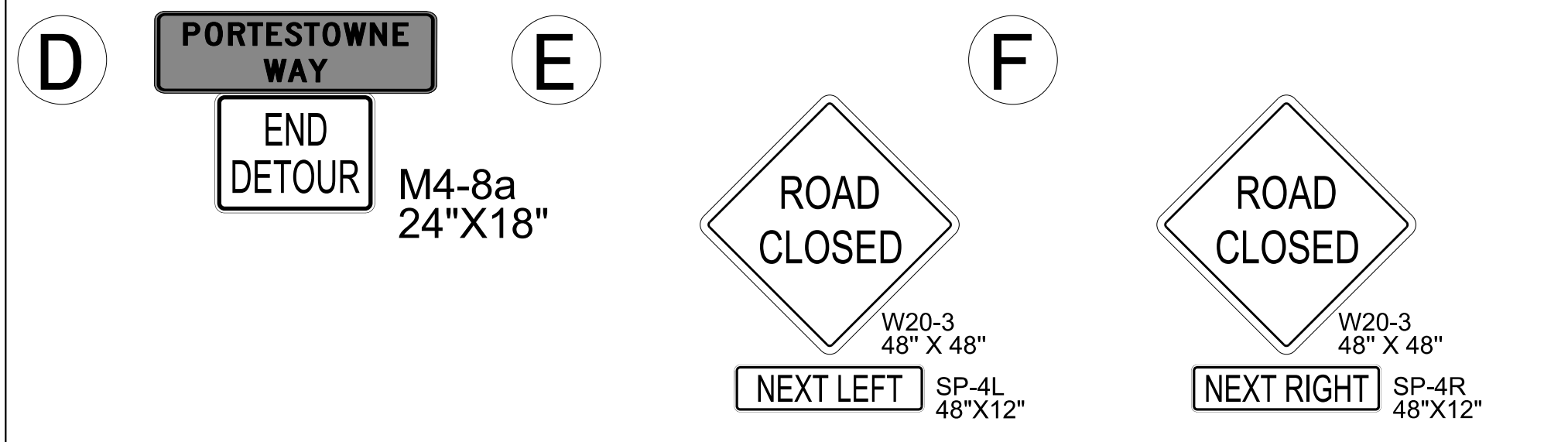
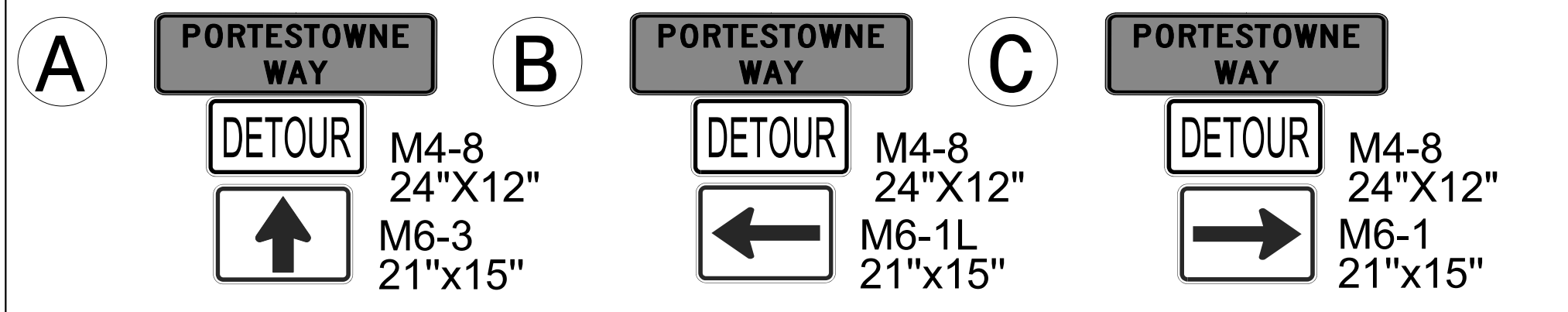
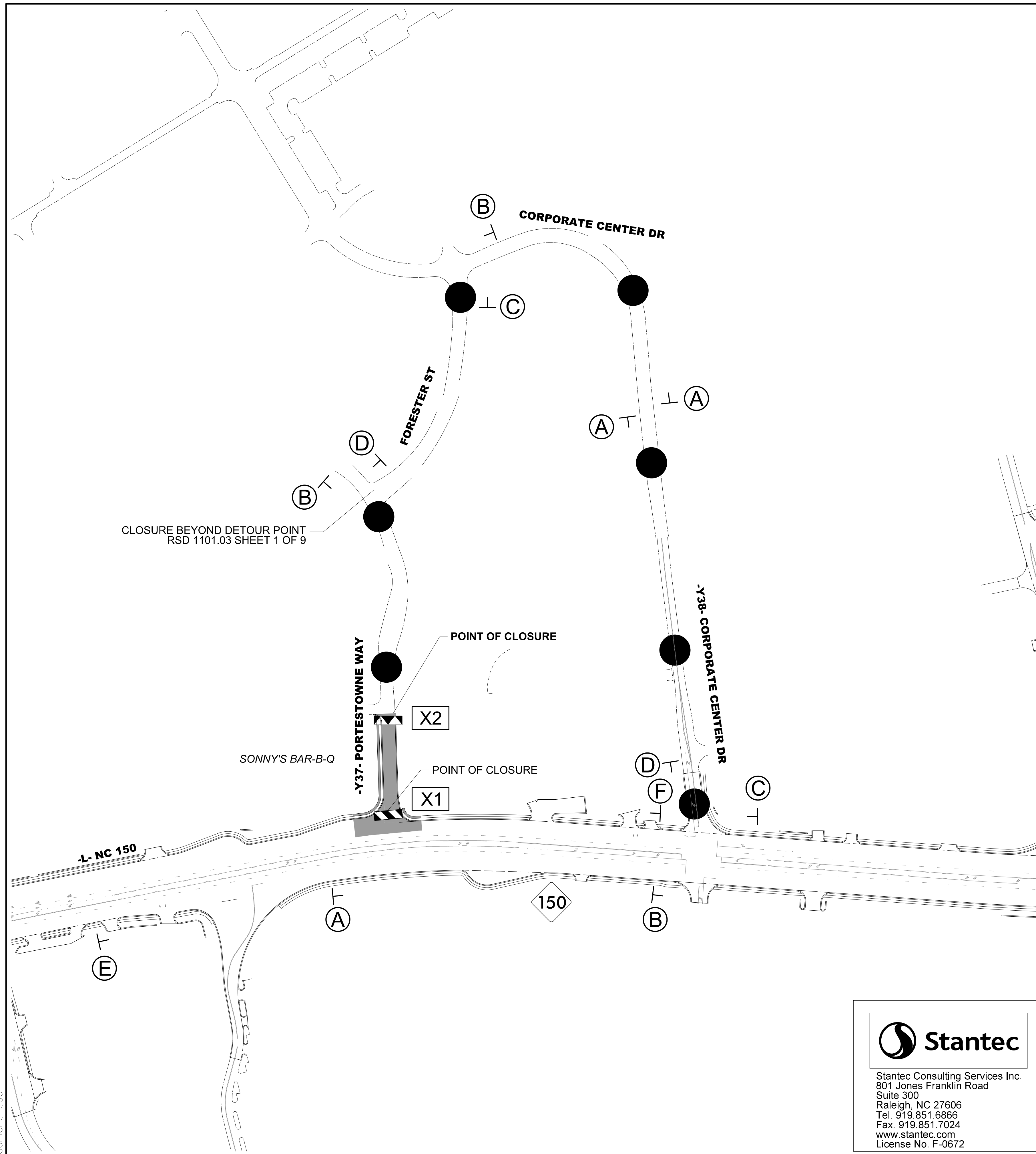
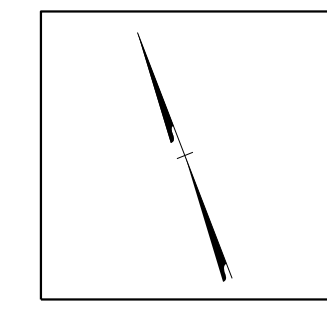
7/24/2024

Seal of J.W. Woolard, Professional Engineer, No. 99862, State of North Carolina.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

-Y13- McCRARY
 DETOUR ROUTE

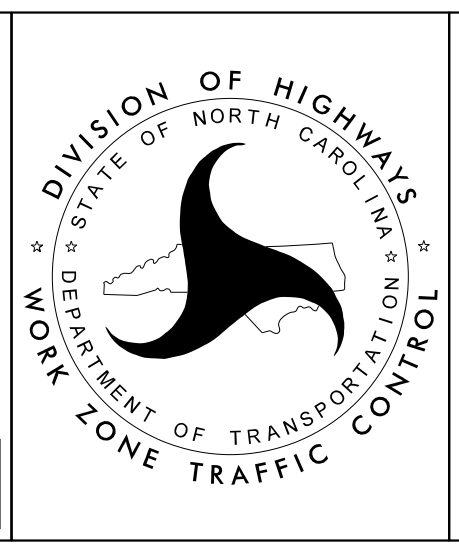


6/4/2024
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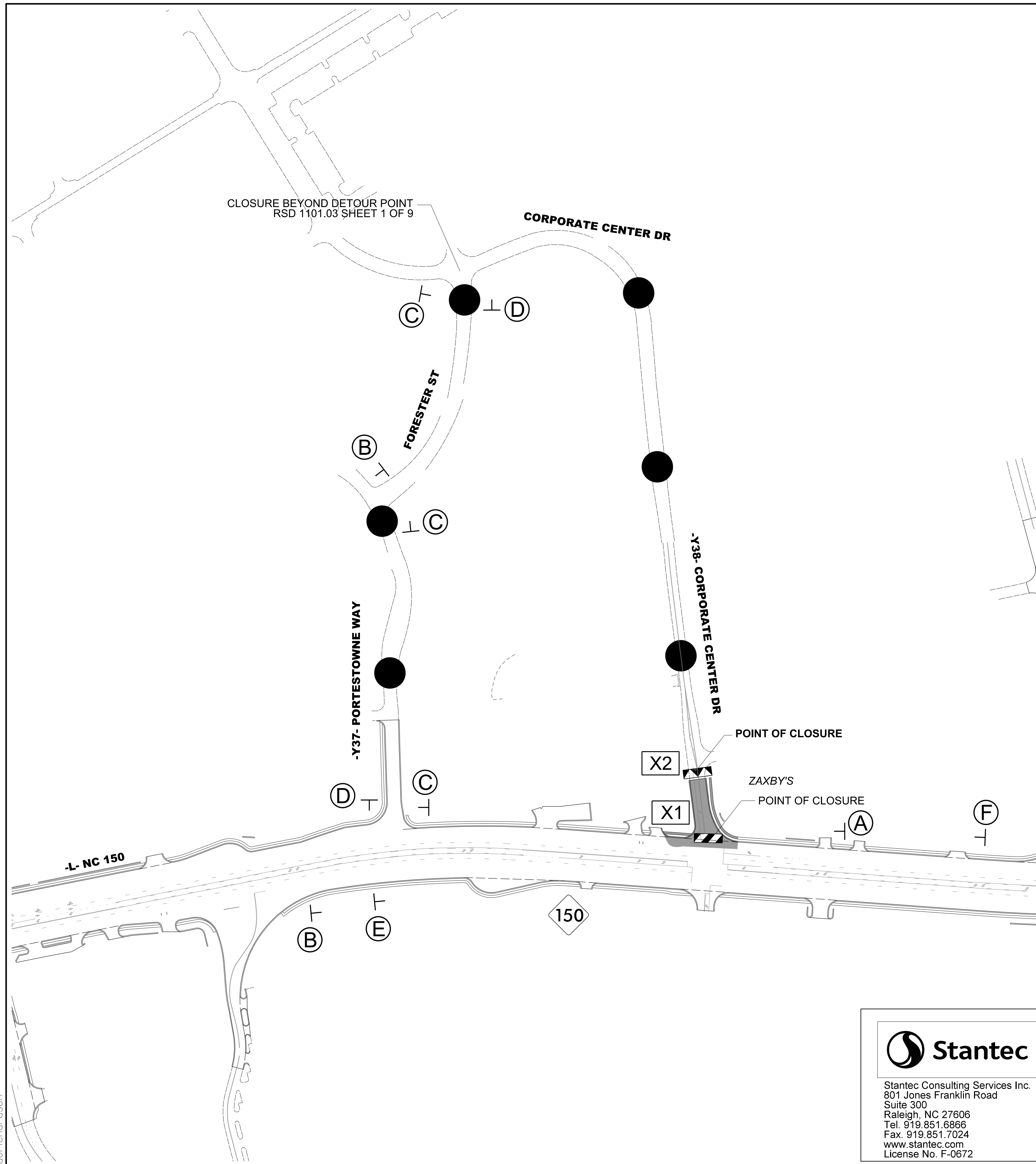
7/24/2024

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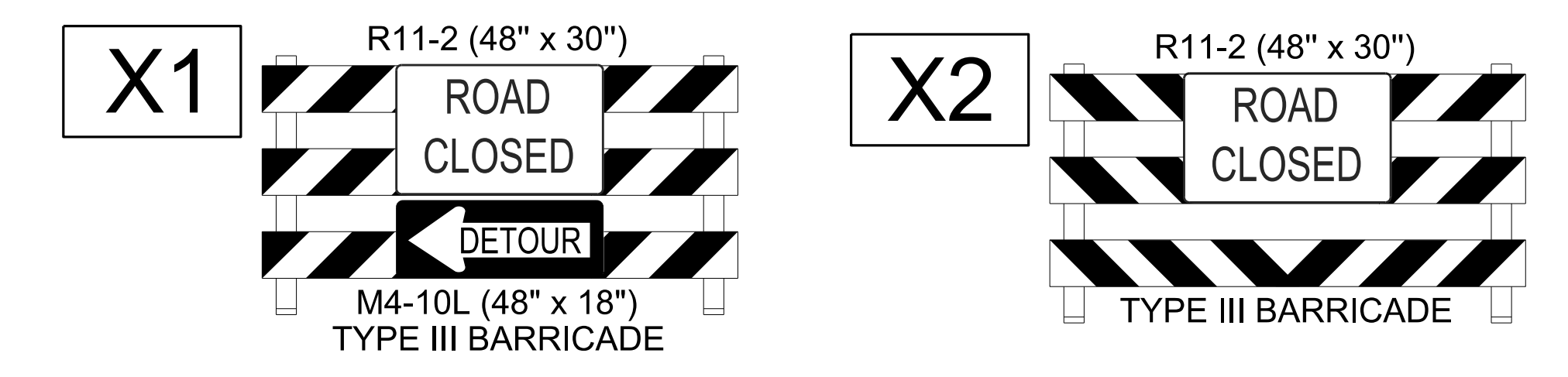
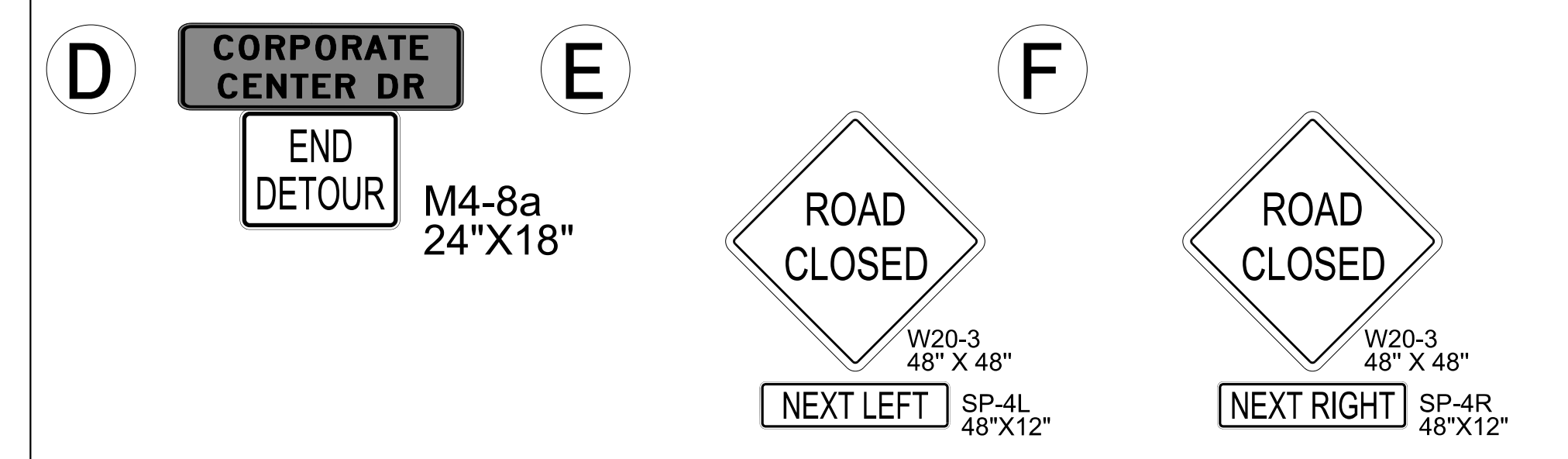
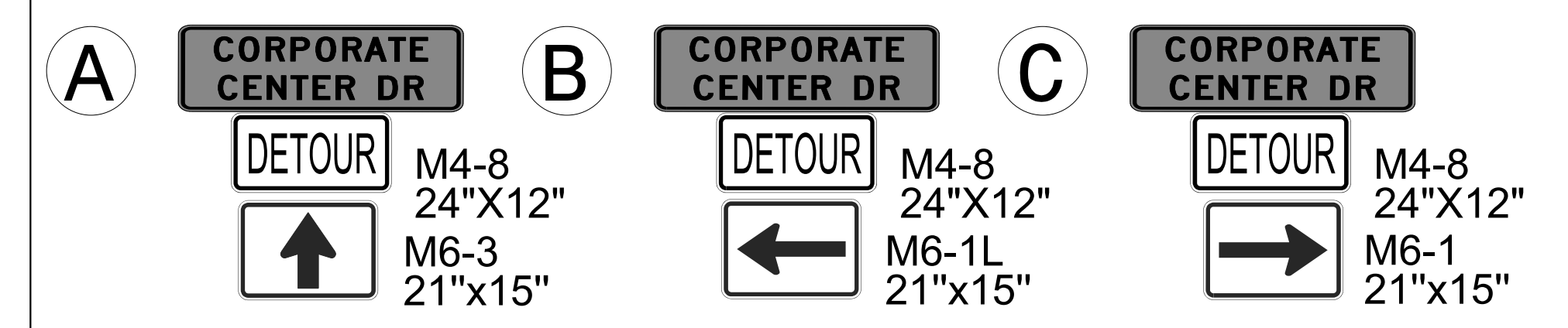


**-Y37- PORTESTOWNE WAY
 DETOUR ROUTE**

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dorichardson



PROJ. REFERENCE NO.	SHEET NO.
R-2307B	TMP-2E

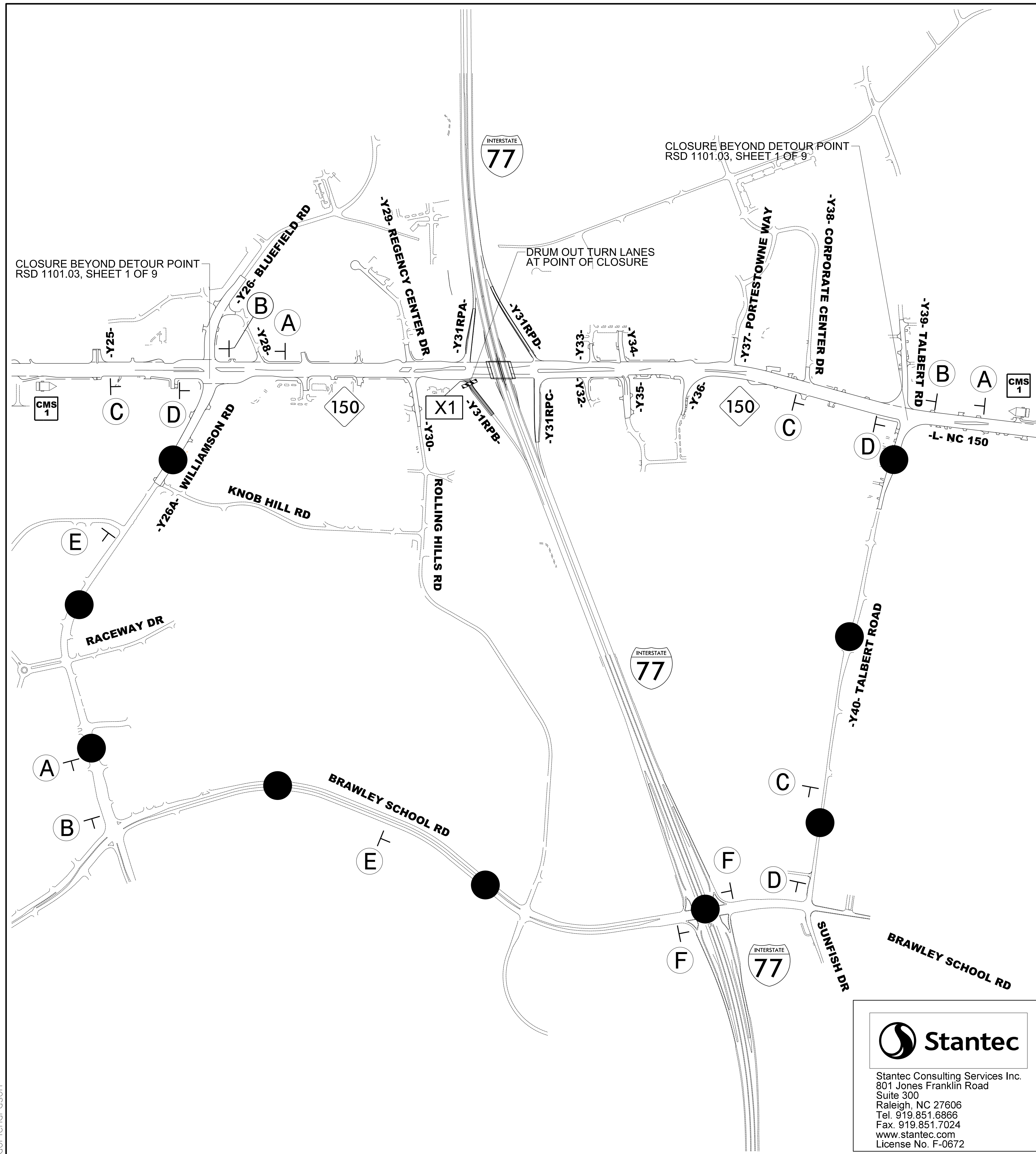
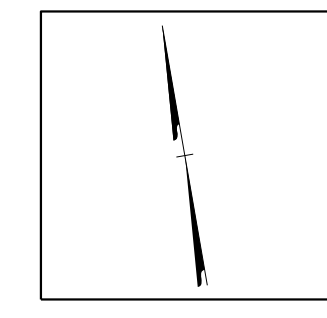


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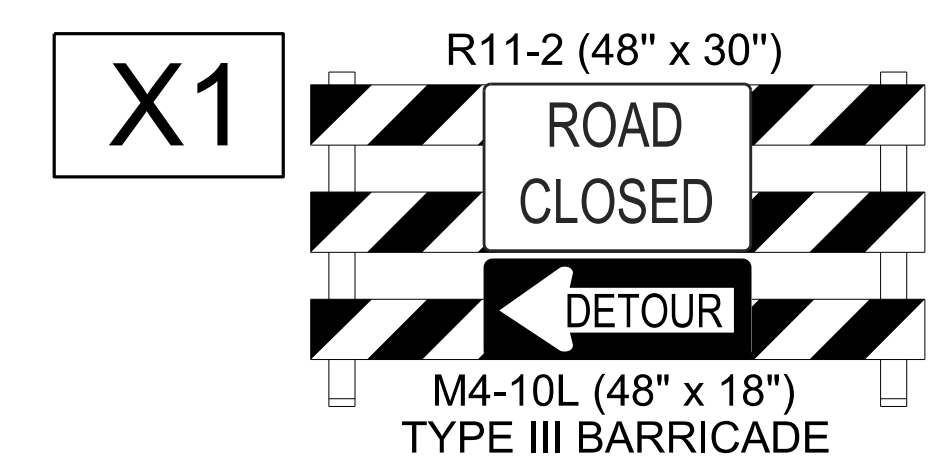
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UNLESS ALL SIGNATURES COMPLETED

-Y38- CORPORATE CENTER DR
DETOUR ROUTE



- | | | |
|---|--|--|
| <p>A DETOUR M4-8 24"x12"
SOUTH M3-3 24"x12"
INTERSTATE 77
← M5-1 21"x15"</p> | <p>B DETOUR M4-8 24"x12"
SOUTH M3-3 24"x12"
INTERSTATE 77
← M6-1L 21"x15"</p> | <p>C DETOUR M4-8 24"x12"
SOUTH M3-3 24"x12"
INTERSTATE 77
↶ M5-1R 21"x15"</p> |
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SOUTH M3-3 24"x12"
INTERSTATE 77
→ M6-1 21"x15"</p> | <p>E DETOUR M4-8 24"x12"
SOUTH M3-3 24"x12"
INTERSTATE 77
↑ M6-3 21"x15"</p> | <p>F END DETOUR M4-8a 24"x18"
SOUTH M3-3 24"x12"
INTERSTATE 77</p> |

NOTES:
ONLY ONE RAMP MAY BE CLOSED AT A TIME
SEE RSD 1101.03, SHEET 2 FOR STANDARD DEVICE PLACEMENT



CMS 1

MESSAGE
1 WEEK PRIOR TO ROAD CLOSING
CHANGEABLE MESSAGE SIGN
I-77 SB RAMP CLOSING MM/DD

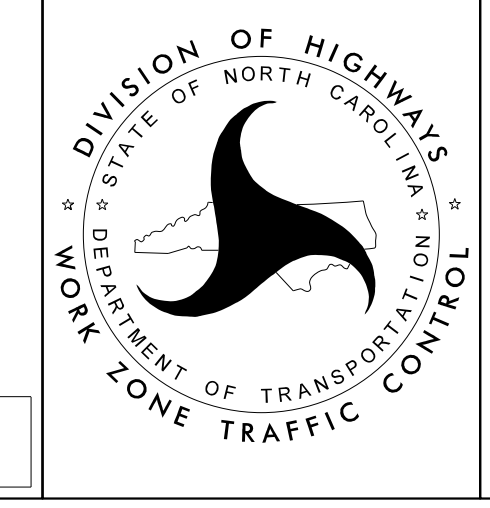
MESSAGE
DURING ROAD CLOSURE
CHANGEABLE MESSAGE SIGN
I-77 SB RAMP CLSD AHD FOLLOW DETOUR

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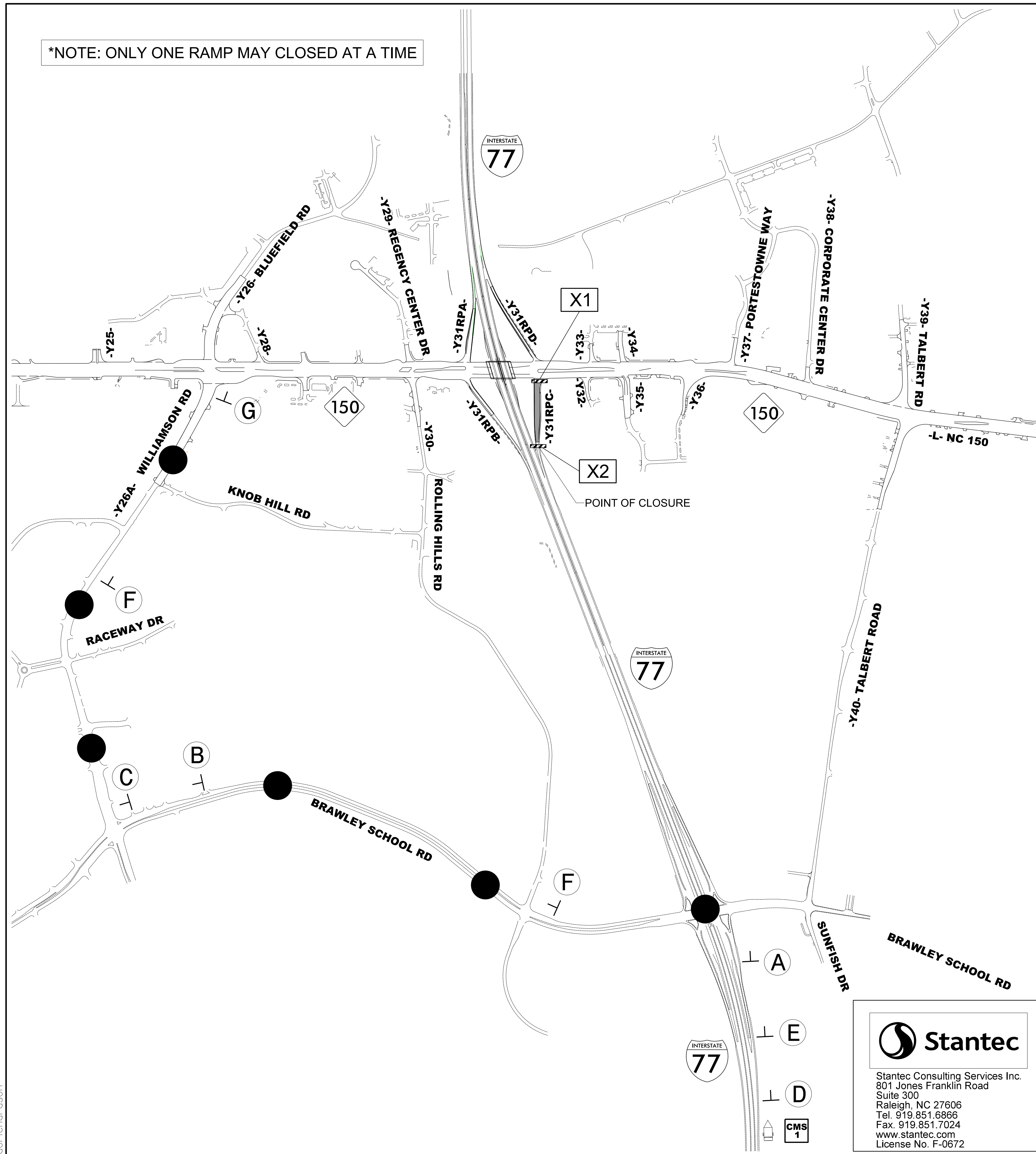
7/24/2024

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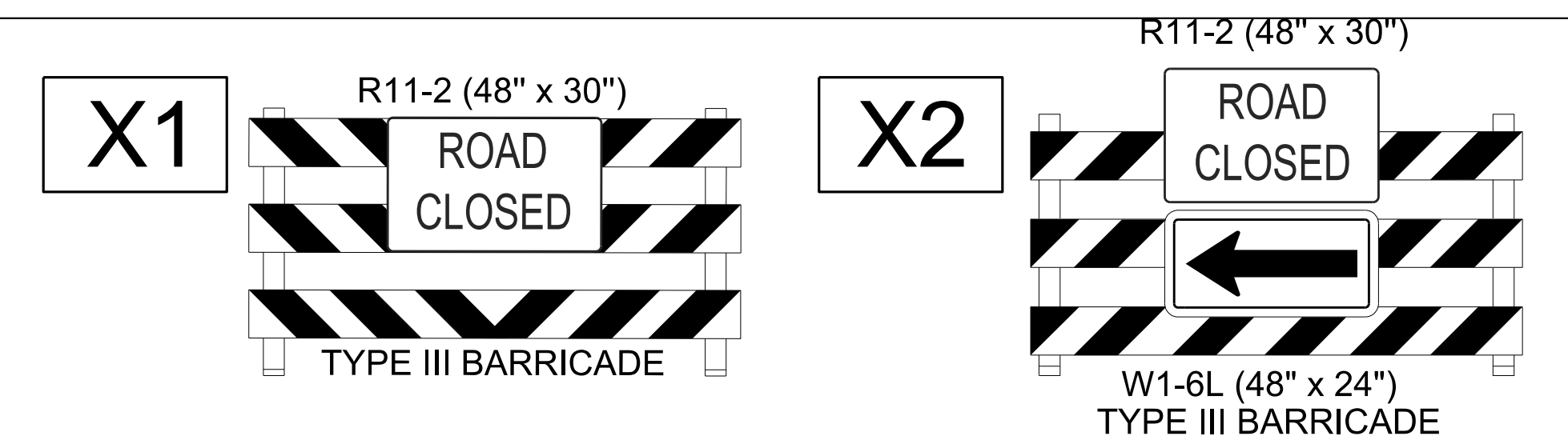


-Y31RPB-
DETOUR ROUTE

*NOTE: ONLY ONE RAMP MAY CLOSED AT A TIME



- A** DETOUR M4-8 24"x12"
 150 M1-5 24"x24"
 ← M6-1L 21"x15"
- B** DETOUR M4-8 24"x12"
 150 M1-5 24"x24"
 → M5-1R 21"x15"
- C** DETOUR M4-8 24"x12"
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- F** DETOUR M4-8 24"x12"
 150 M1-5 24"x24"
 ↑ M6-3 21"x15"
- G** END DETOUR M4-8a 24"x18"
 150 M1-5 24"x24"



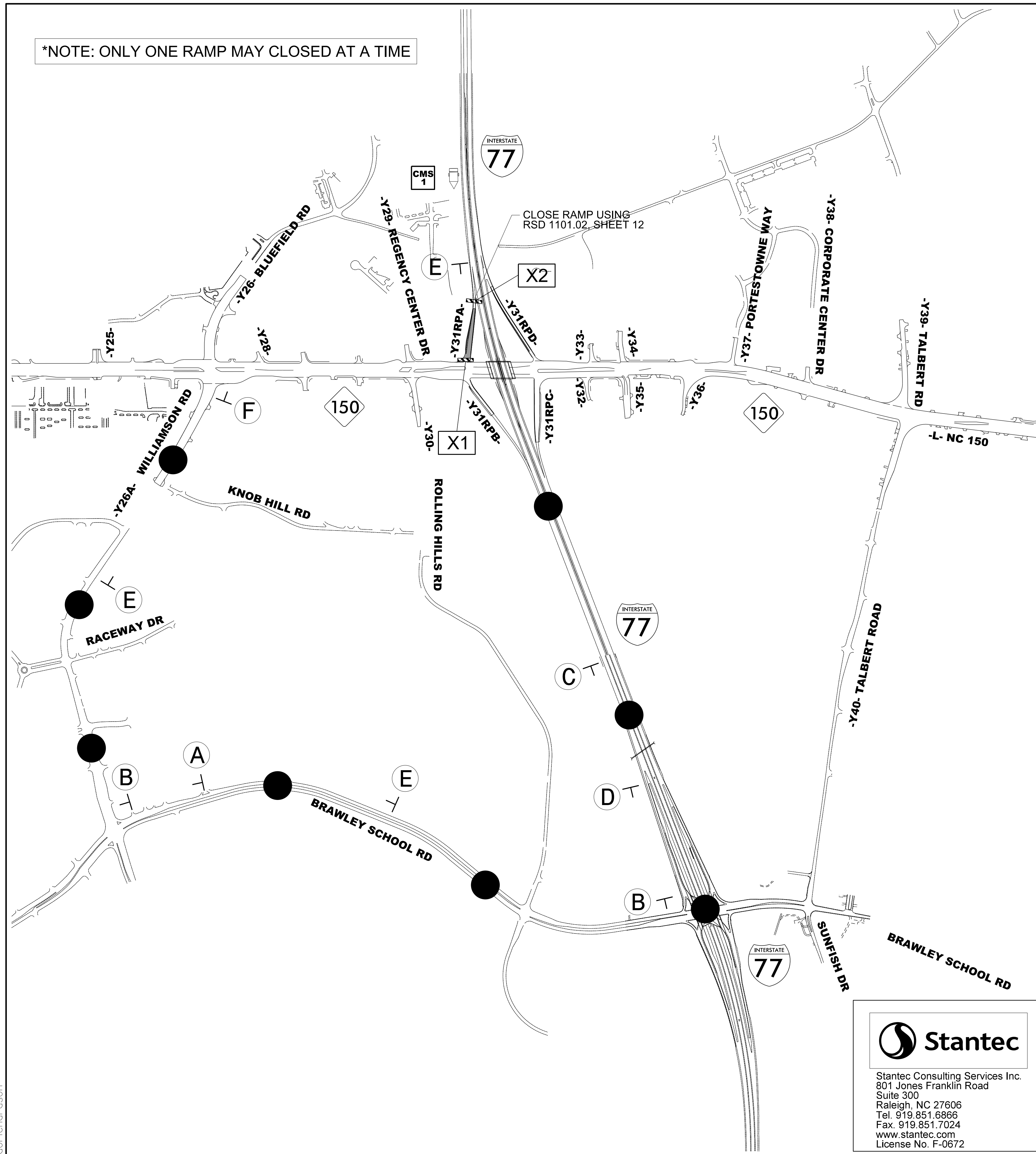
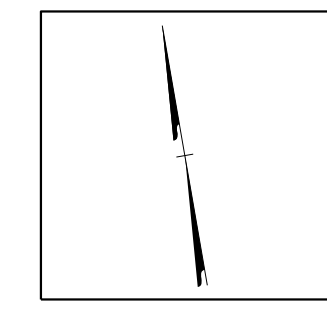
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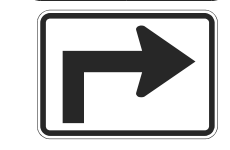

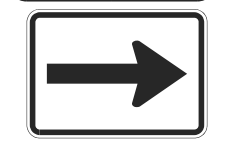







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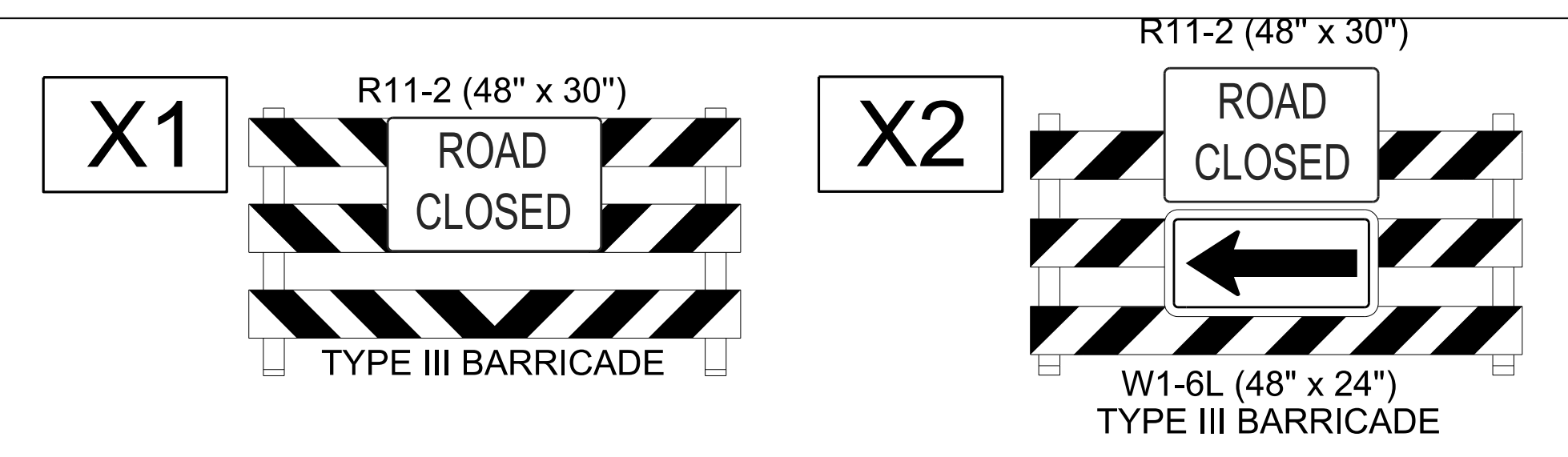
7/24/2024
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 UNLESS ALL SIGNATURES COMPLETED

-Y31RPC-
 DETOUR ROUTE

*NOTE: ONLY ONE RAMP MAY CLOSED AT A TIME



- | | | |
|--|---|---|
| <p>A DETOUR M4-8 24"x12"
  M1-5 24"x24"
  M5-1R 21"x15"</p> | <p>B DETOUR M4-8 24"x12"
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  M1-5 24"x24"</p> |




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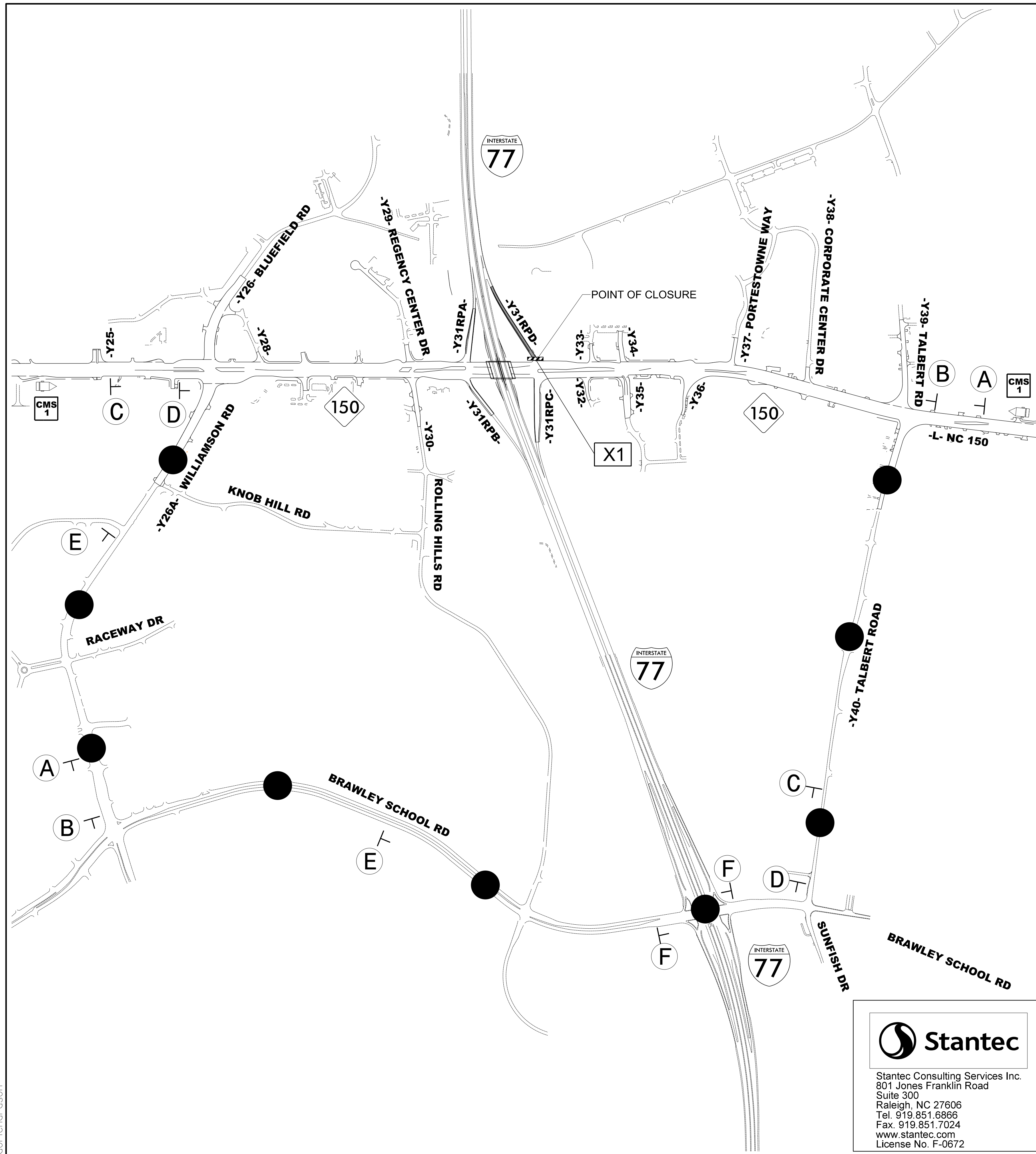
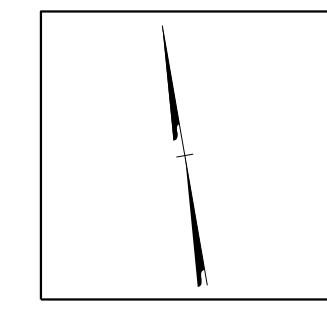
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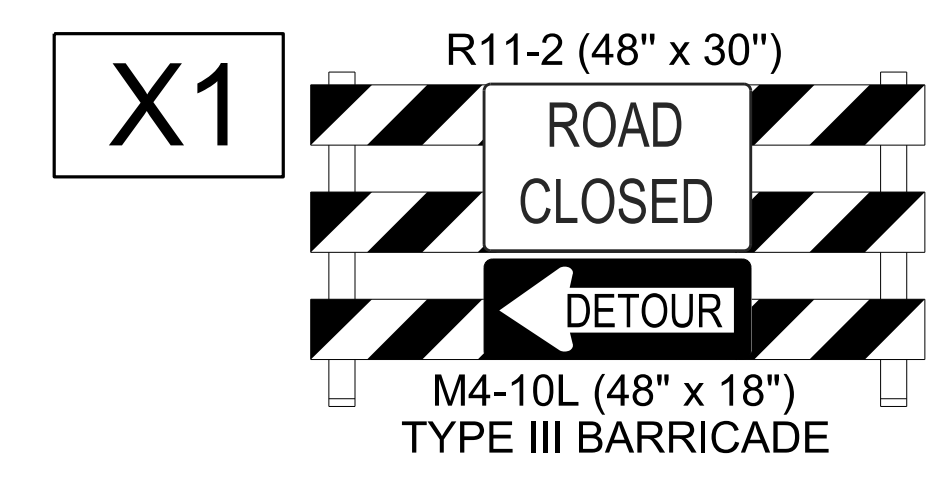

 DIVISION OF HIGHWAYS
 NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 WORK ZONE TRAFFIC CONTROL

-Y31RPA-
 DETOUR ROUTE



- | | | |
|---|--|--|
| <p>A DETOUR M4-8 24"x12"
NORTH M3-1 24"x12"
INTERSTATE 77
M5-1 21"x15"</p> | <p>B DETOUR M4-8 24"x12"
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NOTES:
ONLY ONE RAMP MAY CLOSED AT A TIME
SEE RSD 1101.03, SHEET 2 FOR STANDARD DEVICE PLACEMENT



CMS 1

MESSAGE
1 WEEK PRIOR TO ROAD CLOSING
CHANGEABLE MESSAGE SIGN
I-77 NB RAMP CLOSING MM/DD

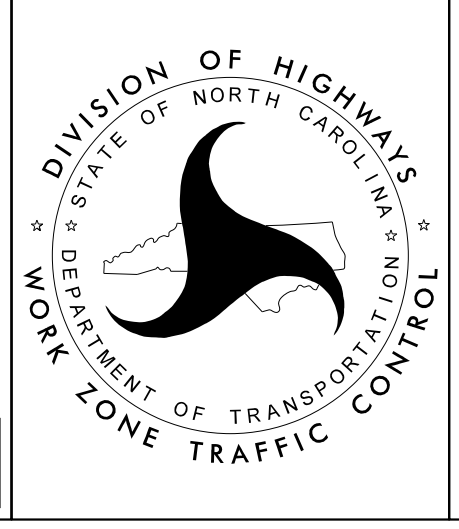
MESSAGE
DURING ROAD CLOSURE
CHANGEABLE MESSAGE SIGN
I-77 NB RAMP CLSD AHD FOLLOW DETOUR

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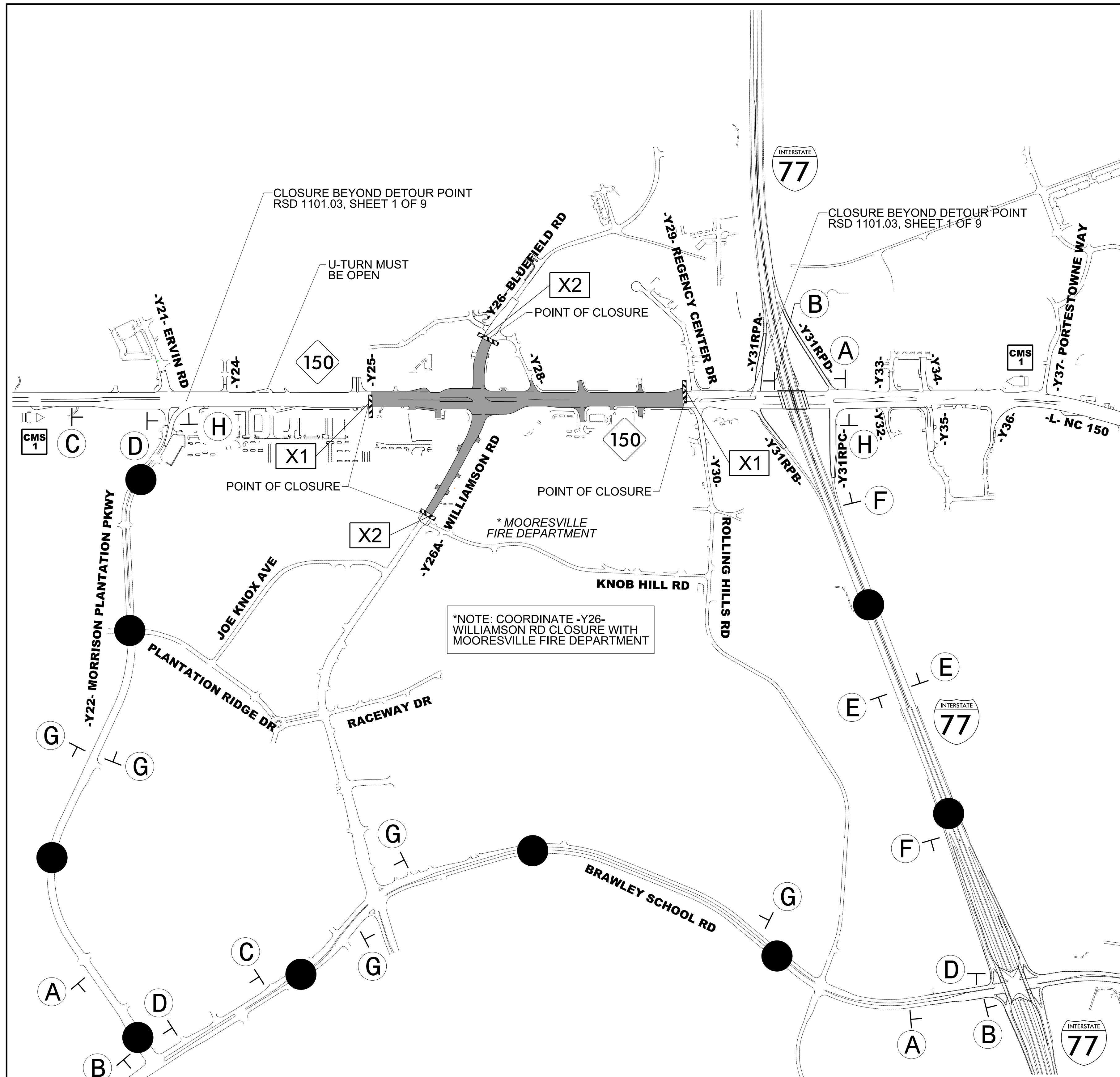
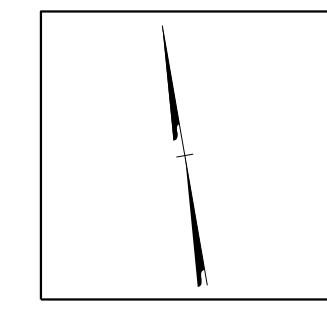
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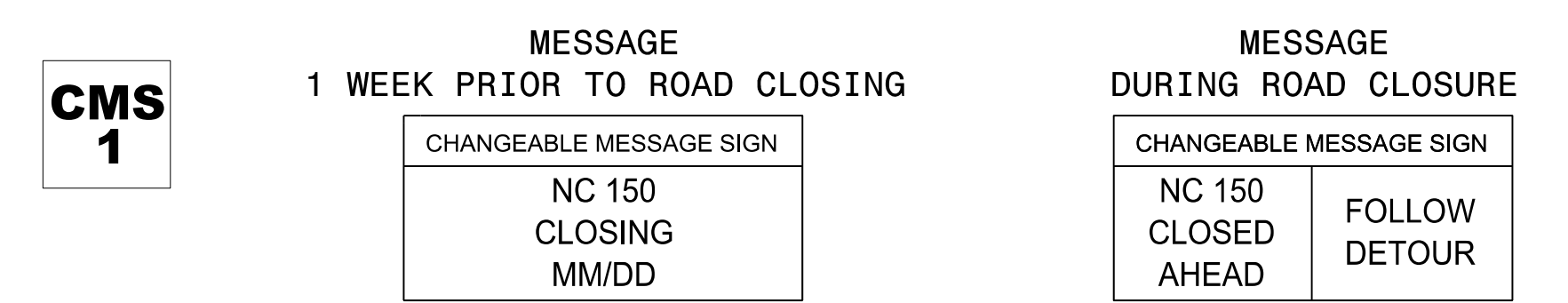
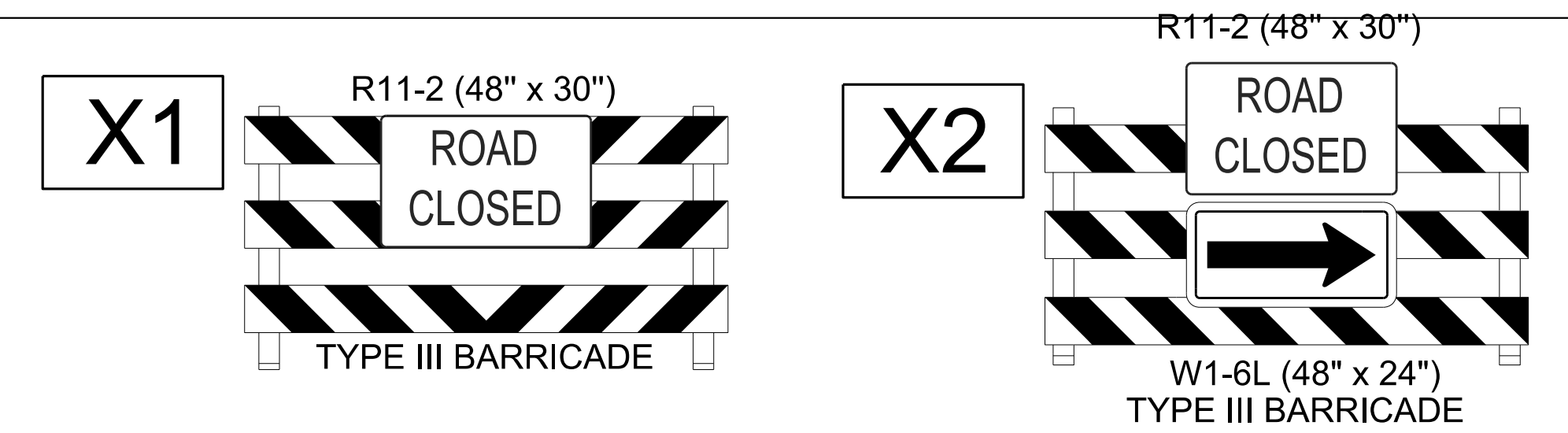
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**-Y31RPD-
DETOUR ROUTE**



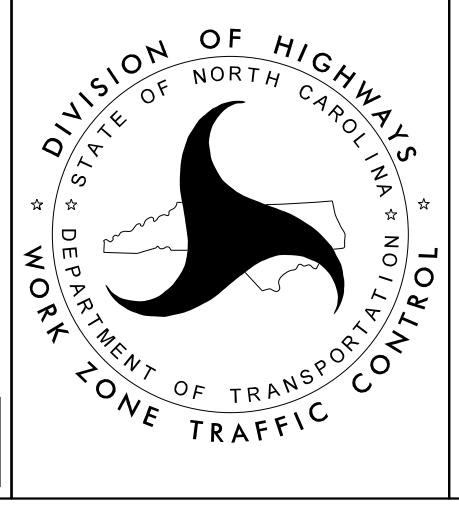
- A** DETOUR M4-8 24"x12"
150 M1-5 24"x24"
← M5-1 21"x15"
- B** DETOUR M4-8 24"x12"
150 M1-5 24"x24"
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- H** END DETOUR M4-8a 24"x18"
150 M1-5 24"x24"



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-L- NC 150 - CFI
DETOUR ROUTE

SIGN NUMBER: SD-3 TYPE: STATIONARY QUANTITY: SEE PLANS SIGN WIDTH: 42" HEIGHT: 18" TOTAL AREA: 5.3 Sq.Ft. BORDER TYPE: RECESSED RADII: 1.5" WIDTH: 0.63" RECESS: 0.38" NO. Z BARS: LENGTH:	BACKG COLOR: Fluorescent Orange COPY COLOR: Black <table border="1"> <thead> <tr> <th>SYMBOL</th> <th>X</th> <th>Y</th> <th>WID</th> <th>HT</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table> MAT'L: 0.080" (2.0MM) ALUMINUM	SYMBOL	X	Y	WID	HT																																																			DESIGN BY: RRH PROJECT ID: R-2307B & I-5717 CHECKED BY: J.Woolard DIV: 12 DATE: Aug 27, 2019
SYMBOL	X	Y	WID	HT																																																					

USE NOTES

- Legend and border shall be direct applied black non-reflective sheeting.
- Background shall be NC GRADE B Fluorescent Orange retroreflective sheeting.

Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

Letter Spacings											Series/Size	
C	O	R	P	O	R	A	T	E				Text Length
5.3	3.7	3.9	3.6	3.7	3.9	3.3	3.5	3.3	2.6	5.3		C 2000
												31.5
C	E	N	T	E	R		D	R				Series/Size
5.9	3.8	3.4	3.5	3.2	3.4	2.8	3.5	3.8	2.8	5.9		C 2000
												30.3

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TEMPORARY TRAFFIC CONTROL PHASING

PROJ. REFERENCE NO.	SHEET NO.
R-2307B	TMP-3

PHASE I

PRIOR TO BEGINNING ANY CONSTRUCTION, INSTALL WORK ZONE ADVANCE WARNING SIGNS ON -L- AND ALL -Y- LINES PER RSD 1101.01, SHEETS 2 AND 3.

STEP 1: (TMP-4 TO TMP-37)

NOTE: STEP 1A), STEP 1B), STEP 1C), AND STEP 1D) OR STEP 1E) MAY BE PERFORMED CONCURRENTLY. STEPS 1D) AND 1E) SHALL NOT BE PERFORMED AT THE SAME TIME.

A) USING TEMPORARY LANE CLOSURES (RSD 1101.02, SHEETS 1, 2, & 3) AS NEEDED, WITH TRAFFIC IN THE EXISTING PATTERN, PERFORM THE FOLLOWING:

° PLACE PCB ON THE SHOULDERS OF -Y31- (I-77) AS SHOWN ON TMP-30 AND TMP-31.

° BEGIN CONSTRUCTION OF -L- (LEFT SIDE) INCLUDING ANY TEMPORARY SIGNALS UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AS LISTED BELOW. WEDGE EXISTING PAVEMENT AS NEEDED TO MAINTAIN TRAFFIC.

* STA. 432+51 +/- (BEGIN PROJECT) TO STA. 586+55 +/- MINUS EXISTING TIE IN AREAS FOR -Y2- / -Y2DET- (SEE TMP-10,11), EXISTING DWG3 (SEE TMP-11), -Y8- / -Y8 DET- (SEE TMP-13, 14), AND -Y9- / -Y9DET- (SEE TMP-13, 14).

* STA. 593+10 +/- TO STA. 618+00 +/-
* STA. 618+50 +/- TO STA. 689+60 +/-
* STA. 741+50 +/- TO STA. 799+10 +/- (END PROJECT)

° BEGIN CONSTRUCTION OF -L- (RIGHT SIDE) INCLUDING ANY TEMPORARY SIGNALS UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AS LISTED BELOW. WEDGE EXISTING PAVEMENT AS NEEDED TO MAINTAIN TRAFFIC.

* STA. 578+35 +/- TO STA. 595+70 +/- (CONSTRUCT TEMPORARY PAVEMENT IN THE PROPOSED GRASS MEDIAN FROM -L- STA. 589+41 +/- TO STA. 601+90 +/-)
* STA. 618+50 +/- TO STA. 696+27 +/-
* STA. 715+68 +/- TO STA. 741+50 +/-
* -LDET1- FROM STA. 10+00 TO STA. 25+97.36 UP TO THE TEMPORARY GRADE AS SHOWN IN THE CONSTRUCTION PLANS.
* STA. 741+50 +/- TO STA. 799+10 +/- (END PROJECT)

° BEGIN CONSTRUCTION OF STAGE 1 OF THE PROPOSED STRUCTURE OVER I-77. INSTALL TEMPORARY SHORING NO. 1, 2, 3, 4, 5, AND 6 AS SHOWN ON TMP-30. (SEE TMP-2A & 2B)

NOTE:
DURING BRIDGE WORK AND GIRDER ERECTION OVER I-77, USE NIGHTLY CLOSURES OF I-77 AND DETOUR TRAFFIC USING RAMPS PER RSD 1101.03 SHEET 7 "ALL TRAFFIC EXIT CONDITION". USE LAW ENFORCEMENT AT THE -L- / I-77 INTERSECTIONS TO DIRECT TRAFFIC.

° BEGIN CONSTRUCTION OF THE FOLLOWING INCLUDING ANY TEMPORARY SIGNALS UNDER TRAFFIC UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE:

* -DRW1-, -DRW4-, -DRW6-, -DRW7-, -Y5-, -Y6-, -Y12-, -Y14-, -Y15-, -Y16-, -Y17- (LEFT SIDE), -Y18-, -Y19-, -Y20-, -DRW5-, -Y21- (RIGHT SIDE), -Y22-, -Y23- (RIGHT SIDE - TEMPORARY PAVEMENT), -Y24-, -Y25A-, -DRW9-, DRW11-, -Y30-, -Y32-, -Y33-, -Y34-, -Y35-, -Y36-, -Y39-, -Y40- (LEFT SIDE), -Y41-, -Y42- -Y43-, -Y44-, AND -Y45-.

° BEGIN CONSTRUCTION OF -TRAIL1- FROM STA. 13+00 TO STA. 29+19 AND -TRAIL2- FROM STA. 69+78± TO STA. 74+18±, STA. 77+37± TO STA. 89+00, AND STA. 91+00± TO STA. 97+59±.

PHASE I

B) USING TEMPORARY LANE CLOSURES (RSD 1101.02, SHEETS 1, 2, & 3) AS NEEDED, PERFORM THE FOLLOWING:

° CONSTRUCT -Y- (STA. 10+00± TO STA. 13+65±, -Y2DET-, -DRW3-, -Y8 DET-, AND -Y9DET-)
° LEFT SIDE TEMPORARY PAVEMENT OFF EXISTING -Y4- FROM STA. 14+68 +/- TO STA. 16+48 +/- IN PREPARATION FOR PHASE I, STEP 2 SHIFT. (SEE TMP-11)

° CONSTRUCT TEMPORARY PAVEMENT WIDENING OF EXISTING -L- (RIGHT SIDE) FROM STA. 696+95 +/- TO STA. 715+31 +/- IN PREPARATION FOR PHASE 2, STEP 1 TRAFFIC SHIFT IN PROPOSED CFI AREA. (SEE TMP-27 & 28)

° WEDGE THE -L- / -Y31RPA- / -Y31RPB- INTERSECTION FROM -L- STA. 725+50 +/- TO STA. 731+00 +/- UP ONE (1) FOOT. TIE WEDGING BACK DOWN TO EXISTING ON -L-, -Y31RPA-, AND -Y31RPB-. SEE TMP-29, 30.

° UNDER NIGHTLY RAMP CLOSURES, CONSTRUCT -Y31RPB- AND -Y31RPC- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AND PLACE TEMPORARY MARKINGS IN THE EXISTING PATTERN. REFER TO TMP-122 & TMP-123 FOR OFF-SITE DETOURS.

INTERMEDIATE CONTRACT TIME

C) COMPLETE PHASE I, STEPS 1C1 AND 1C2 BETWEEN 6:00PM FRIDAY AND 6:00AM THE FOLLOWING MONDAY. (SEE ICT FOR LIQUIDATED DAMAGES)

1C1) IMPLEMENT -Y13- OFF-SITE DETOUR (SEE TMP-2C), CLOSE -Y13-, AND CONSTRUCT PROPOSED -Y13- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. SEE TMP-16.

1C2) PLACE TEMPORARY MARKINGS IN EXISTING PATTERN, OPEN -Y13- TO TRAFFIC, AND REMOVE DETOUR.

NOTE: -Y37- AND -Y38- MAY NOT BE CLOSED AT THE SAME TIME.

INTERMEDIATE CONTRACT TIME

D) COMPLETE PHASE I, STEPS 1D1 AND 1D2 WITHIN A PERIOD OF SEVEN (7) CONSECUTIVE CALENDAR DAYS. (SEE ICT FOR LIQUIDATED DAMAGES)

1D1) IMPLEMENT -Y37- OFF-SITE DETOUR (SEE TMP-2D), CLOSE -Y37- AND CONSTRUCT PROPOSED -Y37- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. SEE TMP-32.

1D2) PLACE TEMPORARY MARKINGS IN THE EXISTING PATTERN, OPEN -Y37- TO TRAFFIC, AND REMOVE DETOUR.

INTERMEDIATE CONTRACT TIME

E) COMPLETE PHASE I, STEPS 1E1 AND 1E2 WITHIN A PERIOD OF SEVEN (7) CONSECUTIVE CALENDAR DAYS. (SEE ICT FOR LIQUIDATED DAMAGES)

1E1) IMPLEMENT -Y38- OFF-SITE DETOUR (SEE TMP-2E), CLOSE -Y38- AND CONSTRUCT PROPOSED -Y38- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. SEE TMP-33.

1E2) PLACE TEMPORARY MARKINGS IN THE EXISTING PATTERN, OPEN -Y38-, AND REMOVE DETOUR.

PHASE I

STEP 2: (TMP-38 TO TMP-41)

COMPLETE -Y2DET- TIE-INS, PLACE MARKINGS AS SHOWN ON TMP-38, SWITCH TRAFFIC TO -Y2DET-, AND CONSTRUCT -Y2- AWAY FROM TRAFFIC UP TO BUT NOT INCLUDING THE FINAL SURFACE LAYER AND -TRAIL2- FROM STA. 76+00± TO STA. 77+37±. CONSTRUCT -L- FROM STA. 498+94± TO STA. 500+35±.

PLACE TEMPORARY MARKINGS AS SHOWN ON TMP-39, SHIFT TRAFFIC TO LEFT SIDE OF EXISTING -Y4- / TEMP PVMT, AND CONSTRUCT -Y4- RIGHT SIDE UP TO BUT NOT INCLUDING THE FINAL SURFACE LAYER FROM STA. 14+50± TO STA. 16+45± AND -TRAIL2- FROM STA. 89+00± TO STA. 89+85±. CONSTRUCT -L- FROM STA. 511+00± TO STA. 512+55±. CONSTRUCT TEMPORARY PAVEMENT ON -L- FROM STA. 513+50 TO STA. 518+39 (TMP-39)

COMPLETE -Y8DET- & -Y9DET- TIE-INS, PLACE MARKINGS AS SHOWN ON TMP-41, AND SWITCH TRAFFIC TO -Y8DET- AND -Y9DET-. REMOVE EXISTING ROAD AND COMPLETE -Y8- AND -Y9- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AND -TRAIL2- AWAY FROM TRAFFIC AS SHOWN ON TMP-41. CONSTRUCT -L- FROM STA. 543+00 TO STA. 545+00.

STEP 3: (TMP-42 TO TMP-45)

USING FLAGGERS, LANE CLOSURES, AND RSD 1101.02 AS NEEDED, PERFORM THE FOLLOWING:

° COMPLETE -Y2- TIE-INS, PLACE TEMPORARY MARKINGS AS SHOWN ON TMP-42, SWITCH TRAFFIC TO -Y2-, CLOSE AND REMOVE -Y2DET-, COSTRUCT -L- FROM STA. 497+50± TO STA. 498+94± UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. CONSTRUCT -TRAIL2- FROM STA. 74+18± TO STA. 76+00±.

° PLACE TEMPORARY MARKINGS AS SHOWN ON TMP-43, SHIFT TRAFFIC TO NEWLY CONSTRUCTED RIGHT SIDE -Y4-, REMOVE TEMP PVMT, AND CONSTRUCT LEFT SIDE. COMPLETE REMAINING PORTION OF -Y4- AND -Y4A- UNDER TRAFFIC UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. USE INCIDENTAL STONE AS NEEDED TO MAINTAIN ACCESS ON -Y4- AND -Y4A- AT THE END OF EACH WORK PERIOD. CONSTRUCT -L- FROM STA. 512+75± TO STA. 513+50± AND -TRAIL2- FROM STA. 90+41± TO STA. 91+00±.

° SWITCH TRAFFIC TO NEWLY CONSTRUCTED -DRW3- AND CLOSE EXISTING DRIVEWAY. CONSTRUCT -L- FROM STA. 518+75± TO STA. 520+00±, -TRAIL2- FROM STA. 97+59± TO STA. 98+84±, AND RETAINING WALL WHERE EXISTING DRIVEWAY WAS LOCATED. (TMP-43)

° COMPLETE -Y8- / -Y9- TIE-INS, PLACE TEMPORARY MARKINGS AS SHOWN ON TMP-45, SWITCH TRAFFIC TO -Y8- / -Y9-, CLOSE AND REMOVE -Y8DET- AND -Y9DET-. COMPLETE PORTIONS OF -L- WHERE -Y8DET- / -Y9DET- WERE LOCATED UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

° COMPLETE CONSTRUCTION OF -TRAIL1- FROM STA. 13+00 TO THE END OF -TRAIL1- AND -TRAIL2- AND OPEN.

STEP 4: (NOT SHOWN)

USING FLAGGERS, LANE CLOSURES, AND RSD 1101.02 AS NEEDED, PERFORM THE FOLLOWING:

° COMPLETE CONSTRUCTION OF -L- LEFT SIDE FROM STA. 432+51 TO STA. 586+55 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

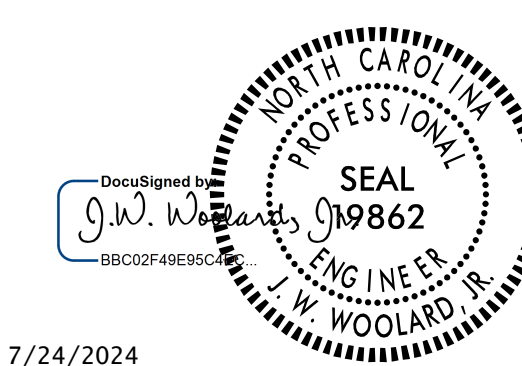
° COMPLETE CONSTRUCTION OF -DRW7-, -DRW6-, -DRW1-, -Y5-, -Y6-, -Y12-, -DRW4-, AND -Y15- UNDER TRAFFIC UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE

° COMPLETE ALL WORK STARTED IN PHASE I, STEP 1. COVER ALL TEMPORARY SIGNALS UNTIL NEEDED IN PHASE II.

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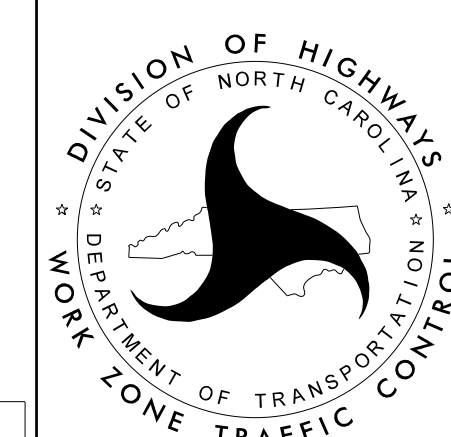


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TEMPORARY TRAFFIC CONTROL PHASING

PROJ. REFERENCE NO.	SHEET NO.
R-2307B	TMP-3A

PHASE II

USING TEMPORARY LANE CLOSURES AND RSD 1101.02 (SHEETS 1, 2, & 3) AS NEEDED, PERFORM THE FOLLOWING:

STEP 1: (TMP-46 TO TMP-79)

COMPLETE -Y- TIE-IN FROM STA. 13+65 TO STA. 15+80, PLACE THE FINAL LAYER OF SURFACE COURSE AND FINAL MARKINGS, AND SWITCH TRAFFIC TO -Y-. CLOSE AND REMOVE EXISTING PORTION OF GREENWOOD ROAD. (TMP-46)

USING LAW ENFORCEMENT AS NEEDED, COMPLETE -L- TIE-IN FROM STA. 432+51 TO 438+68, PLACE TEMPORARY MARKINGS IN THE PHASE II PATTERN ON -L- FROM STA. 432+51 TO 613+41 LEFT SIDE AS SHOWN ON TMP-47 THRU TMP-60, PLACE TEMPORARY MARKINGS IN THE PHASE II PATTERN AS SHOWN ON TMP-61, SWITCH TRAFFIC TO LEFT SIDE, SHIFT TRAFFIC FROM LEFT OUTSIDE PROPOSED AT STA. 616+00 BACK TO EXISTING LANES AT STA. 625+00, ACTIVATE ANY TEMPORARY SIGNALS, CONTINUE WIDENING ON BOTH SIDES OF -L- BEGUN IN PHASE 1 STEP 1 STA. 625+50 TO 689+60. AND BEGIN CONSTRUCTION OF THE FOLLOWING UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE:

°-L- RIGHT SIDE STA. 432+51 TO 618+00

°-Y1-, -Y3-, -DRW2-, -Y7-, -Y10-, -Y11-, AND -Y13-

CONSTRUCT -L- LEFT SIDE STA. 586+55 TO 593+10 UP TO BUT NOT INCLUDING THE FINAL SURFACE LAYER.

PLACE TEMPORARY MARKINGS IN THE PHASE II PATTERN AS SHOWN ON TMP-61 THRU TMP-62, SHIFT -Y17- TRAFFIC TO NEWLY CONSTRUCTED LEFT SIDE, ACTIVATE ANY TEMPORARY SIGNALS AND COMPLETE -Y17- RIGHT SIDE UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

PLACE TEMPORARY MARKINGS IN THE PHASE II PATTERN AS SHOWN ON TMP-67, SHIFT -Y21- TRAFFIC TO RIGHT SIDE, AND COMPLETE LEFT SIDE WHERE PROPOSED CURB & GUTTER CUTS INTO EXISTING EOT.

PLACE TEMPORARY MARKINGS, IN THE PHASE II PATTERN AS SHOWN ON TMP-67, SHIFT -Y23- TRAFFIC TO NEWLY CONSTRUCTED RIGHT SIDE/TEMP PVMT, ACTIVATE ANY TEMPORARY SIGNALS AND COMPLETE LEFT SIDE WHERE PROPOSED CURB & GUTTER CUTS INTO EXISTING EOT.

CLOSE THE EXISTING DRIVEWAY AT -L- STA. 689+25 AND CONSTRUCT -L- RIGHT SIDE STA. 686+12 TO 689+90 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. (TMP-67)

PLACE TEMPORARY MARKINGS, ACTIVATE ANY TEMPORARY SIGNALS AND SHIFT TRAFFIC FROM EXISTING LANES AT STA. 690+25 TO -L- RIGHT OUTSIDE TEMP PVMT FROM PHASE 1 STEP 1. SHIFT TRAFFIC BACK FROM RIGHT OUTSIDE TO EXISTING LANES BY STA. 722+30. SEE TMP-67 THRU TMP-71. CONSTRUCT -L- LEFT SIDE STA. 689+60 TO 725+00 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE USING WEDGING AND TEMPORARY SHORING NO. 07 AND 08 AS SHOWN ON TMP-67 TO TMP-71.

CONSTRUCT -Y25-, -Y26- WIDENING, -Y28-, -DRW8-, -DRW10-, AND -Y29- UNDER TRAFFIC UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

PLACE TEMPORARY MARKINGS ON -L- FROM STA. 723+42± TO STA. 744+17± AS SHOWN ON TMP-71 THRU TMP-74, ACTIVATE ANY TEMPORARY SIGNALS AND SHIFT TO THE TEMPORARY TRAFFIC PATTERN AS SHOWN ON TMP-71 TO TMP-74. REMOVE PORTION OF EXISTING BRIDGE AND CONSTRUCT -L- LEFT SIDE STA. 725+00 TO 741+50 AND I-77 BRIDGE PHASE 2. CONSTRUCT -DET1- STA. 10+00 TO STA. 25+97 UP TO THE TEMPORARY GRADE AS SHOWN IN THE CONSTRUCTION PLANS. INSTALL TEMP SHORING NO. 09, 10, 11, 12, 13, 14, 15, AND 16 AS SHOWN ON TMP-72, 72A. (SEE TMP-2A & 2B).

PHASE II

UNDER NIGHTLY RAMP CLOSURES, CONSTRUCT -Y31RPA- AND -Y31RPD- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AND PLACE TEMPORARY MARKINGS. REFER TO TMP-124 & 125 FOR OFF-SITE DETOURS.

NOTE:
DURING BRIDGE WORK AND GIRDER ERECTION OVER I-77, USE NIGHTLY CLOSURES OF I-77 AND DETOUR TRAFFIC USING RAMP PER RSD 1101.03 SHEET 7 OF 9 "ALL TRAFFIC EXIT CONDITION". USE LAW ENFORCEMENT AT THE -L- / I-77 RAMP INTERSECTIONS TO DIRECT TRAFFIC.

PLACE TEMPORARY MARKINGS IN THE PHASE II PATTERN AS SHOWN ON TMP-76 THRU TMP-77, ACTIVATE ANY TEMPORARY SIGNALS, SHIFT -Y40- TRAFFIC TO NEWLY CONSTRUCTED LEFT SIDE, AND COMPLETE RIGHT SIDE WHERE PROPOSED CURB & GUTTER CUTS INTO EXISTING EOT.

WITH TRAFFIC IN THE EXISTING PATTERN, COMPLETE WIDENING ON BOTH SIDES OF -L- BEGUN IN PHASE 1 STEP 1 STA. 741+50 TO END PROJ. LIMITS UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

CONSTRUCT -TRAIL1- FROM STA. 10+42.90 TO STA. 13+00.

STEP 2: (TMP-80 TO TMP-84)

UPON COMPLETION OF -L- LEFT SIDE STA. 689+60 TO 725+00 CONSTRUCTION AND ALL -Y- LINES IN THIS AREA, PLACE TEMPORARY MARKINGS IN THE PHASE II STEP 2 PATTERN, ACTIVATE ANY TEMPORARY SIGNALS AND SHIFT TRAFFIC FROM EXISTING LANES AT STA. 690+25 TO THE NEWLY CONSTRUCTED -L- LEFT SIDE AND BACK TO EXISTING LANES AT STA. 719+95.

CONSTRUCT -L- RIGHT SIDE STA. 691+50 TO 718+00 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

WITH TRAFFIC IN THE EXISTING PATTERN, CONSTRUCT -Y26A- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. SEE TMP-82, 83. COMPLETE CONSTRUCTION OF -Y26-. SEE TMP-82, 83.

CONTINUE I-77 BRIDGE PHASE 2 CONSTRUCTION.

STEP 3: (NOT SHOWN)

USING FLAGGERS, LANE CLOSURES, AND RSD 1101.02 AS NEEDED, PERFORM THE FOLLOWING:

°COMPLETE CONSTRUCTION OF -L- RIGHT SIDE FROM STA. 432+51 TO STA. 618+00 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

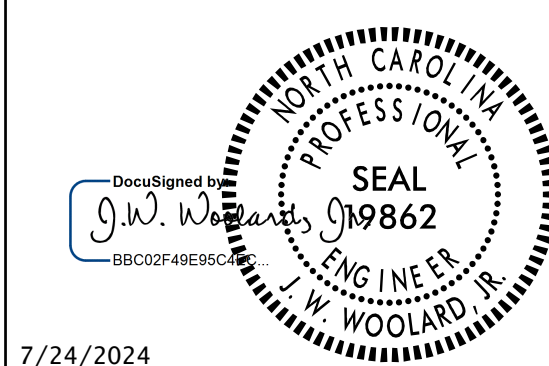
°COMPLETE CONSTRUCTION OF -L- BOTH SIDES FROM STA. 625+50 TO STA. 689+60 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

°COMPLETE CONSTRUCTION OF -Y1-, -Y3-, -DRW2-, -Y7-, -Y10-, -Y11-, -Y13-, -Y14-, -Y16-, -Y18-, -Y19-, -Y20-, -DRW5-, -Y22-, -Y23-, -Y24-, -Y29-, -Y30-, -Y32-, -Y33-, -Y34-, -Y35-, -Y36-, -Y39-, -Y45-, -Y41-, -Y42-, -Y43-, AND -Y44- UNDER TRAFFIC UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

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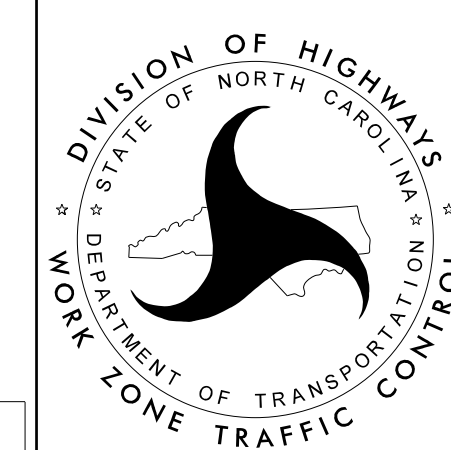


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PHASE III

TMP-85 TO TMP-118

USING TEMPORARY LANE CLOSURES AND RSD 1101.02, SHEETS 1 & 3) AS NEEDED, PERFORM THE FOLLOWING:

STEP 1:

UPON COMPLETION OF ALL -L- OUTSIDE WIDENING AND CONSTRUCTION, PLACE TEMPORARY MARKINGS IN THE PHASE III PATTERN, ACTIVATE TEMPORARY SIGNALS, AND SHIFT TRAFFIC TO THE OUTSIDE ALONG ENTIRE PROJECT LENGTH.

USING TEMPORARY LANE CLOSURES AND RSD 1101.02, BEGIN CONSTRUCTION OF ALL MEDIAN CURB & GUTTER, GRASS ISLANDS, AND MONOLITHIC ISLANDS ALONG THE LENGTH OF -L-. BEGIN CONSTRUCTION OF PROPOSED SIGNALS.

AS EACH MEDIAN TURN LANE/U-TURN AREA IS COMPLETED, PLACE TEMPORARY MARKINGS IN THE FINAL MARKING PATTERN AND OPEN TO TRAFFIC. (SEE PAVEMENT MARKING PLAN)

UPON COMPLETION OF I-77 BRIDGE PHASE 2, PLACE TEMPORARY MARKINGS AS SHOWN ON TMP-111 TO TMP-112, AND SWITCH -L- WB TRAFFIC TO NEWLY CONSTRUCTED LEFT OUTSIDE PORTION OF BRIDGE. MAINTAIN -L- EB TRAFFIC ON THE RIGHT OUTSIDE PORTION.

STEP 2:

INSTALL TEMPORARY SHORING NO. 17 AND NO. 18 ON -Y31- AS SHOWN ON TMP-112, REMOVE THE REMAINING EXISTING BRIDGE, AND COMPLETE I-77 BRIDGE PHASE 3 AND -L- STA. 730+50 TO BEGINNING OF WESTERN APPROACH SLAB UP TO THE ELEVATION OF TEMPORARY GRADE -LDET1- AND -LDET2-. CONSTRUCT -L- FROM THE END OF THE EASTERN APPROACH SLAB TO STA. 736+17 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. (SEE TMP-112)

NOTE:
DURING BRIDGE WORK AND GIRDER ERECTION OVER I-77, USE NIGHTLY CLOSURES OF I-77 AND DETOUR TRAFFIC USING RAMPS PER RSD 1101.03 SHEET 7 OF 9 "ALL TRAFFIC EXIT CONDITION". USE LAW ENFORCEMENT AT THE -L- / I-77 INTERSECTIONS TO DIRECT TRAFFIC.

STEP 3:

USING LANE CLOSURES AND RSD 1101.02, SHEET 3, AND NIGHTLY CLOSURES USING OFF-SITE DETOURS FOR -Y31RPA- AND -Y31RPB- AS NEEDED, WEDGE -L- FROM STA. 729+10 TO THE BEGINNING OF THE WESTERN APPROACH SLAB UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. INCLUDING THE FINAL LAYER OF SURFACE COURSE. PLACE TEMPORARY PAVEMENT MARKINGS AT THE END OF EACH WORK PERIOD NEEDED TO MAINTAIN TRAFFIC. (SEE TMP-112B)

COMPLETE ALL WORK STARTED IN PHASE III, STEP 1.

STEP 4:

UPON COMPLETION OF I-77 BRIDGE PHASE 3, PLACE TEMPORARY MARKINGS AS SHOWN ON TMP-112C, SHIFT TRAFFIC TO INSIDE PROPOSED LANES ON THE BRIDGE, AND COMPLETE ANY REMAINING OUTSIDE CURB & GUTTER AND SIDEWALK CONSTRUCTION.

CONSTRUCT OUTSIDE WIDENING ON NB & SB -Y31- (I-77) UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM STA. 30+13 TO STA. 36+50 AS SHOWN IN THE CONSTRUCTION PLANS.

PHASE III

TMP-85 TO TMP-118

STEP 5:

INTERMEDIATE CONTRACT TIME

COMPLETE PHASE III STEP 5A THROUGH STEP 5C FROM 8:00PM TO 6:00AM THE FOLLOWING DAY. SEE ICT FOR LIQUIDATED DAMAGES.

STEP 5A: IMPLEMENT -L- OFFSITE DETOUR (TMP-2J), CLOSE -L- / -Y26- / -Y26A- INTERSECTION, AND PLACE TRAFFIC ON OFF-SITE DETOUR.

STEP 5B: REMOVE CONFLICTING MARKINGS AND PLACE TEMPORARY MARKINGS IN FINAL MARKING PATTERN.

STEP 5C: ACTIVATE PROPOSED SIGNALS, RE-OPEN INTERSECTION TO NEW CFI PATTERN, AND REMOVE DETOUR.

STEP 6:

NOTE: CONTRACTOR MAY ONLY CLOSE ONE RAMP AT A TIME.

INTERMEDIATE CONTRACT TIME

COMPLETE PHASE I, STEPS 6A THRU 6B BETWEEN 9:00PM FRIDAY AND 6:00AM THE FOLLOWING MONDAY. (SEE ICT FOR LIQUIDATED DAMAGES)

STEP 6A: IMPLEMENT -Y31RPA- OFF-SITE DETOUR (TMP-2H), CLOSE -Y31RPA-, AND PLACE FINAL LAYER OF SURFACE COURSE AND FINAL MARKINGS.

STEP 6B: OPEN -Y31RPA- TO TRAFFIC AND REMOVE DETOUR.

INTERMEDIATE CONTRACT TIME

COMPLETE PHASE I, STEPS 6C THRU 6D BETWEEN 9:00PM FRIDAY AND 6:00AM THE FOLLOWING MONDAY. (SEE ICT FOR LIQUIDATED DAMAGES)

STEP 6C: IMPLEMENT -Y31RPD- OFF-SITE DETOUR (TMP-2I), CLOSE -Y31RPD-, AND PLACE FINAL LAYER OF SURFACE COURSE AND FINAL MARKINGS.

STEP 6D: OPEN -Y31RPD- TO TRAFFIC AND REMOVE DETOUR.

INTERMEDIATE CONTRACT TIME

COMPLETE PHASE I, STEPS 6E THRU 6F BETWEEN 9:00PM FRIDAY AND 6:00AM THE FOLLOWING MONDAY. (SEE ICT FOR LIQUIDATED DAMAGES)

STEP 6E: IMPLEMENT -Y31RPB- OFF-SITE DETOUR (TMP-2F), CLOSE -Y31RPB-, AND PLACE FINAL LAYER OF SURFACE COURSE AND FINAL MARKINGS.

STEP 6F: OPEN -Y31RPB- TO TRAFFIC AND REMOVE DETOUR.

INTERMEDIATE CONTRACT TIME

COMPLETE PHASE I, STEPS 6G THRU 6H BETWEEN 9:00PM FRIDAY AND 6:00AM THE FOLLOWING MONDAY. (SEE ICT FOR LIQUIDATED DAMAGES)

STEP 6G: IMPLEMENT -Y31RPC- OFF-SITE DETOUR (TMP-2G), CLOSE -Y31RPC-, AND PLACE FINAL LAYER OF SURFACE COURSE AND FINAL MARKINGS.

STEP 6H: OPEN -Y31RPC- TO TRAFFIC AND REMOVE DETOUR.

STEP 7:

USING LANE CLOSURES AND RSD 1101.02, PLACE THE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS ALONG ENTIRE PROJECT LENGTH. ACTIVATE ALL PROPOSED SIGNALS, REMOVE ALL TRAFFIC CONTROL DEVICES, AND OPEN PROJECT TO FINAL TRAFFIC PATTERN.

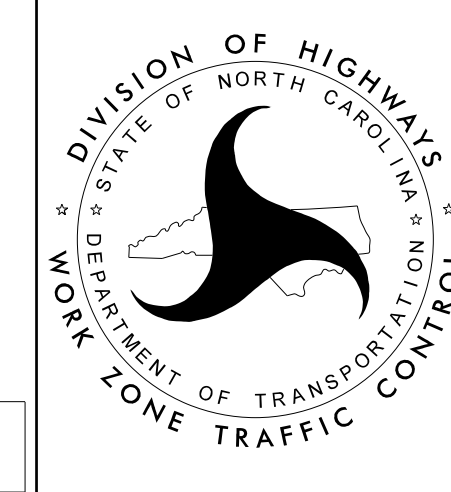
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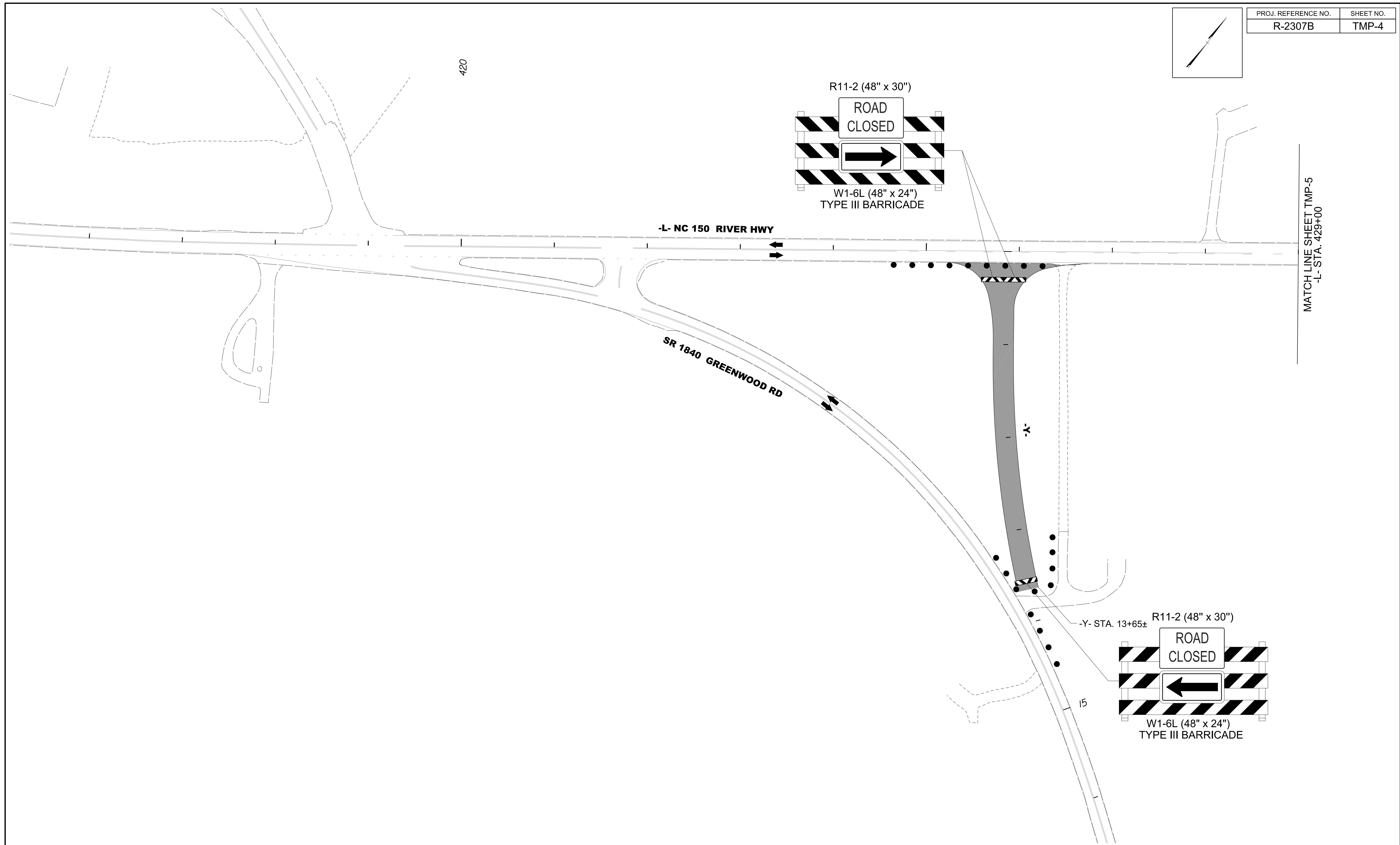
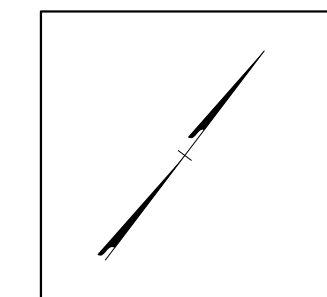
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Signed by:
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ENGINEER
V. W. WOOLARD, R.
8/26/2024

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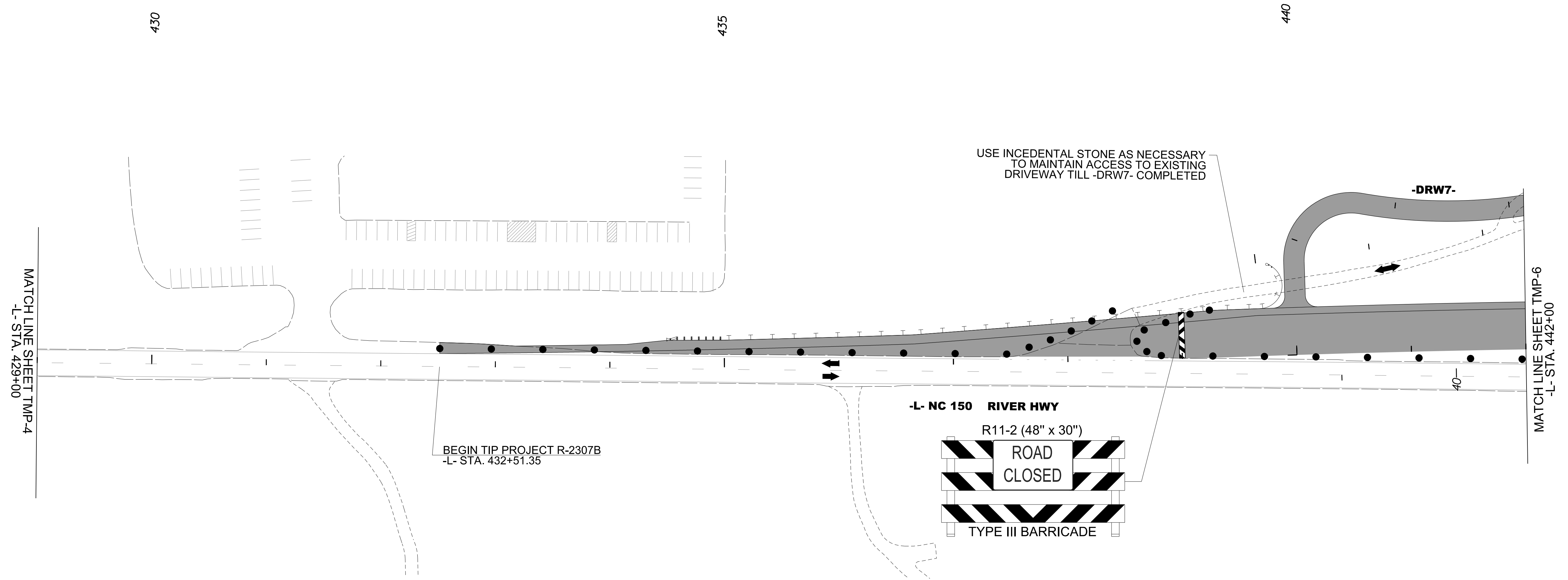
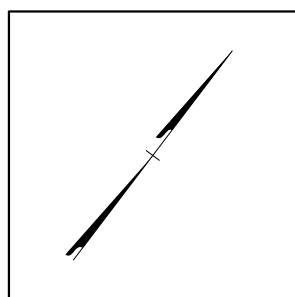
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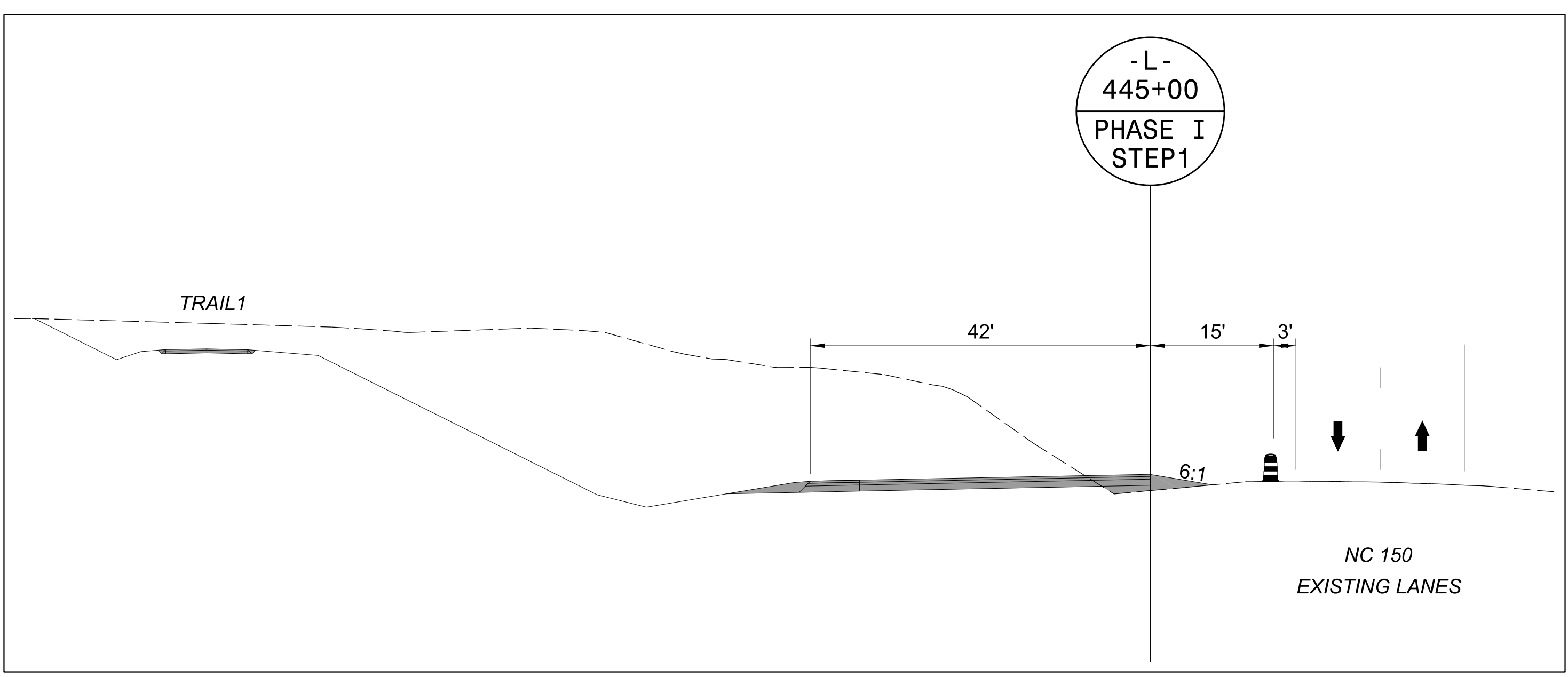
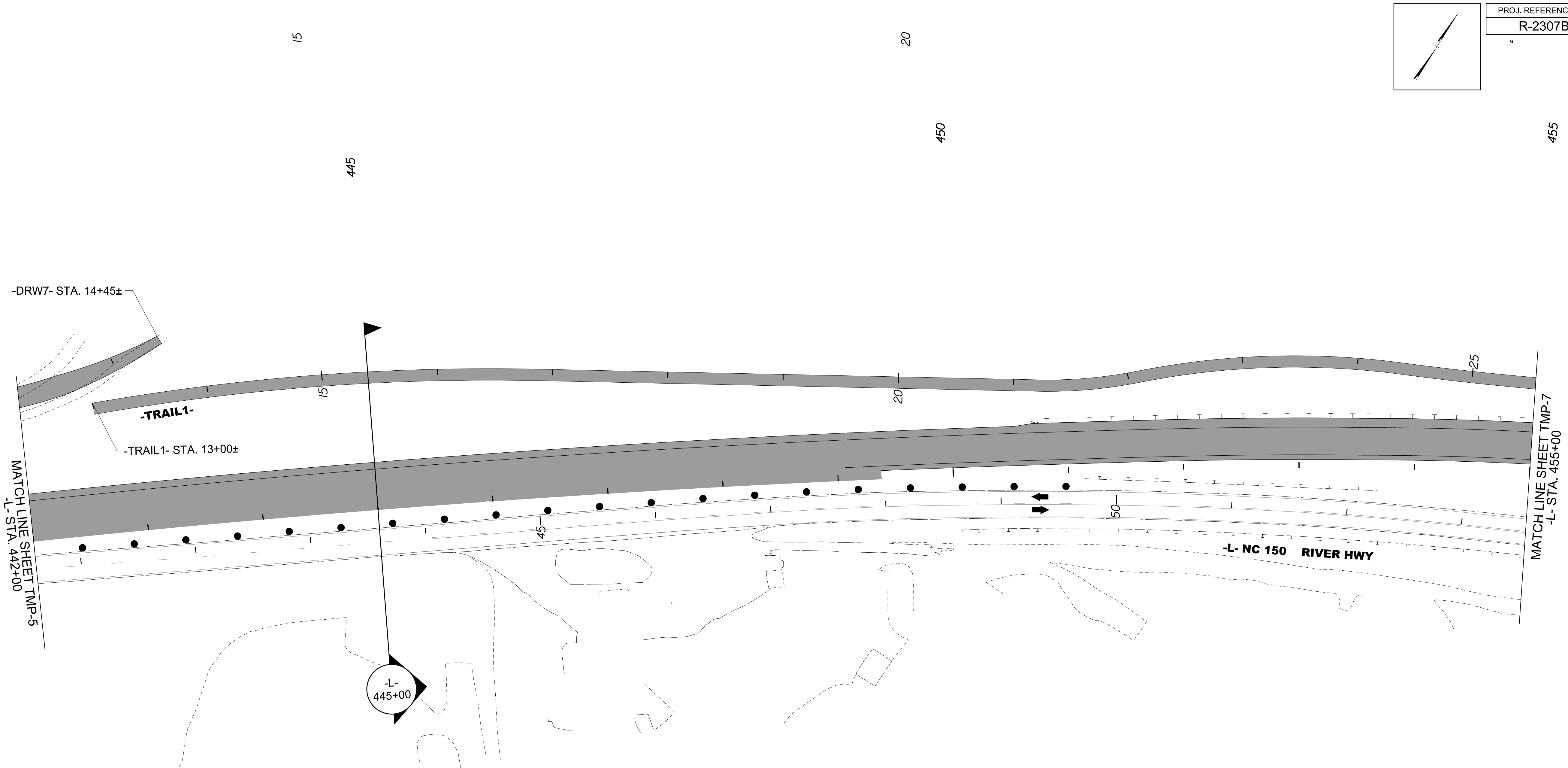
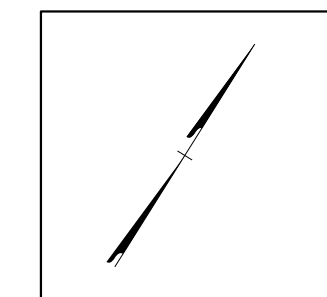
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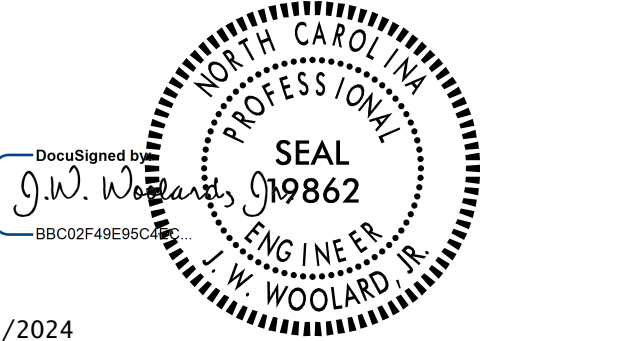
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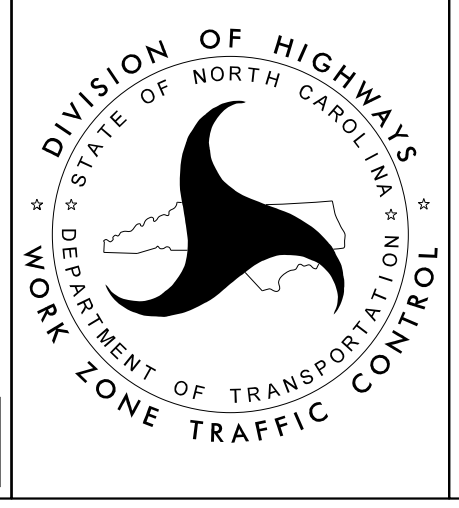
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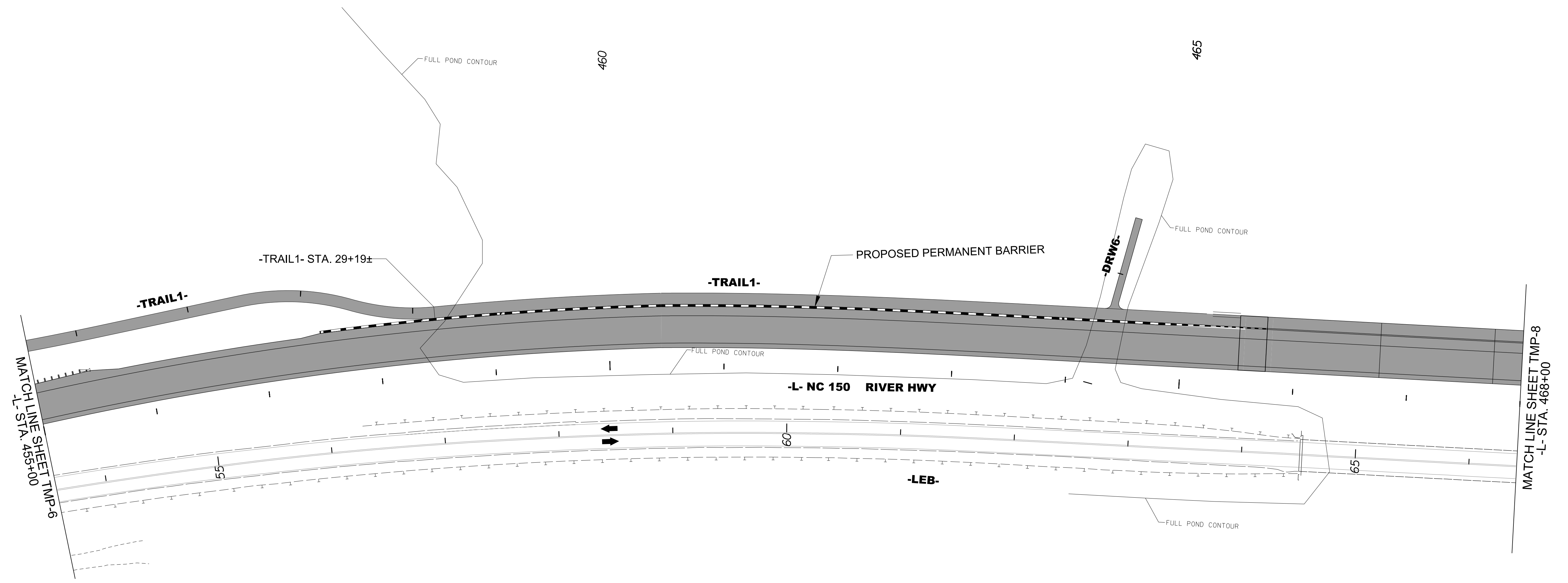
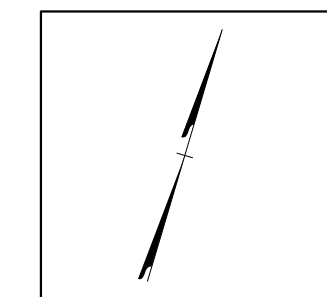

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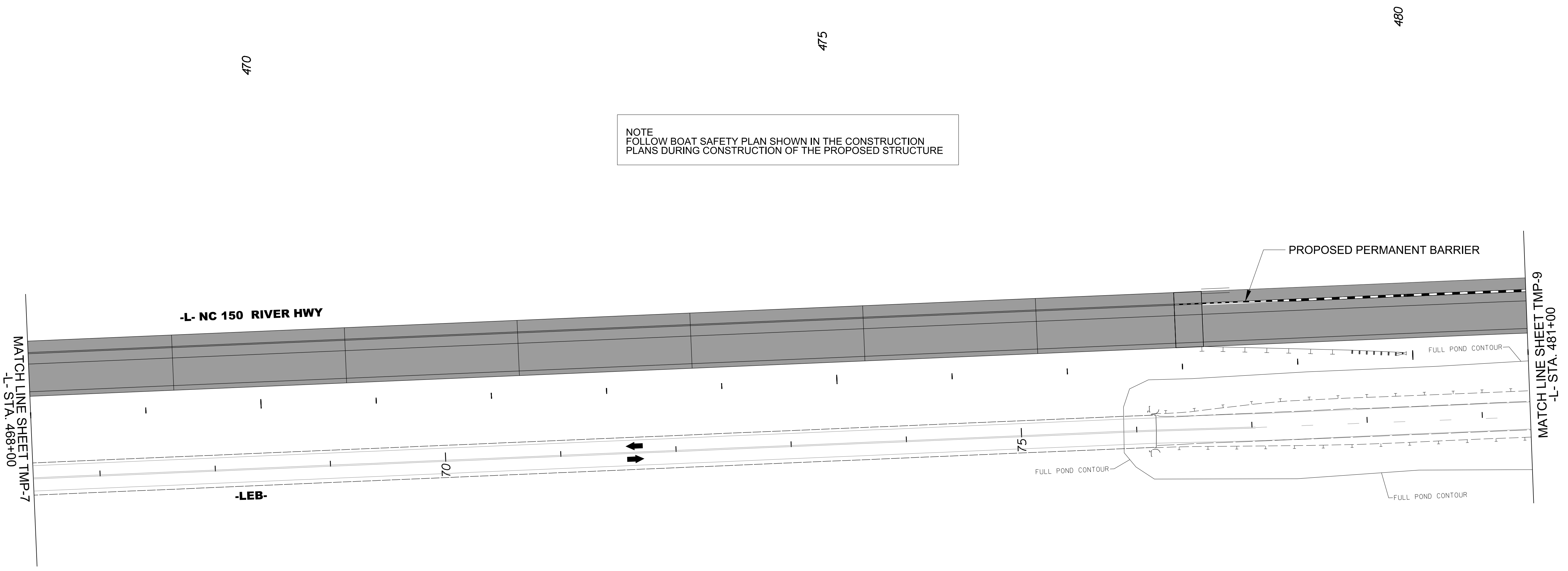
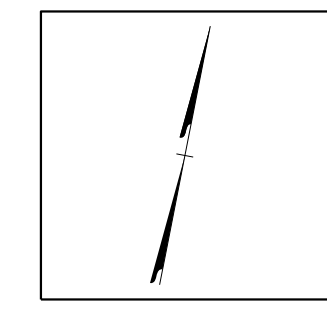
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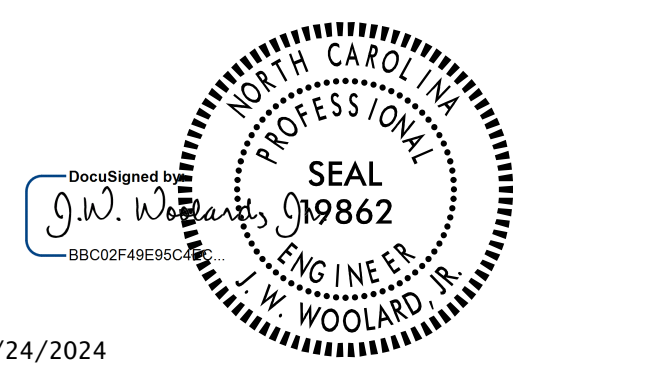
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R-2307B	TMP-8

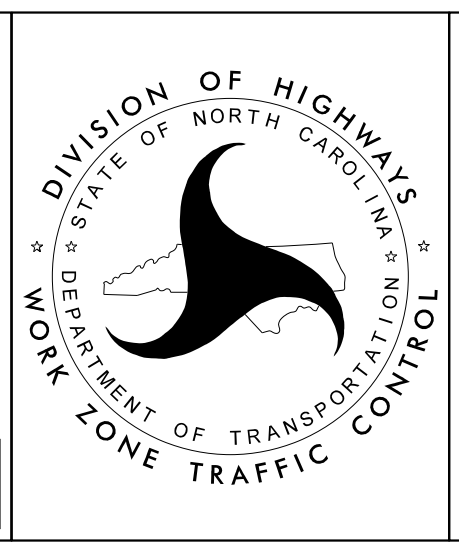


NOTE
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 PLANS DURING CONSTRUCTION OF THE PROPOSED STRUCTURE

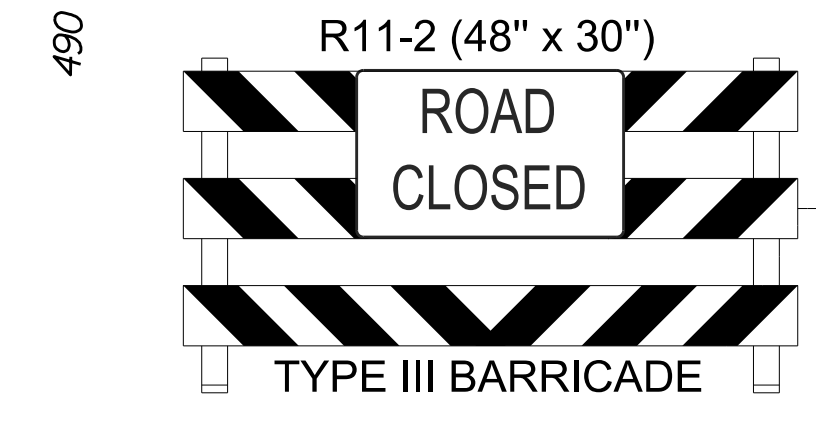
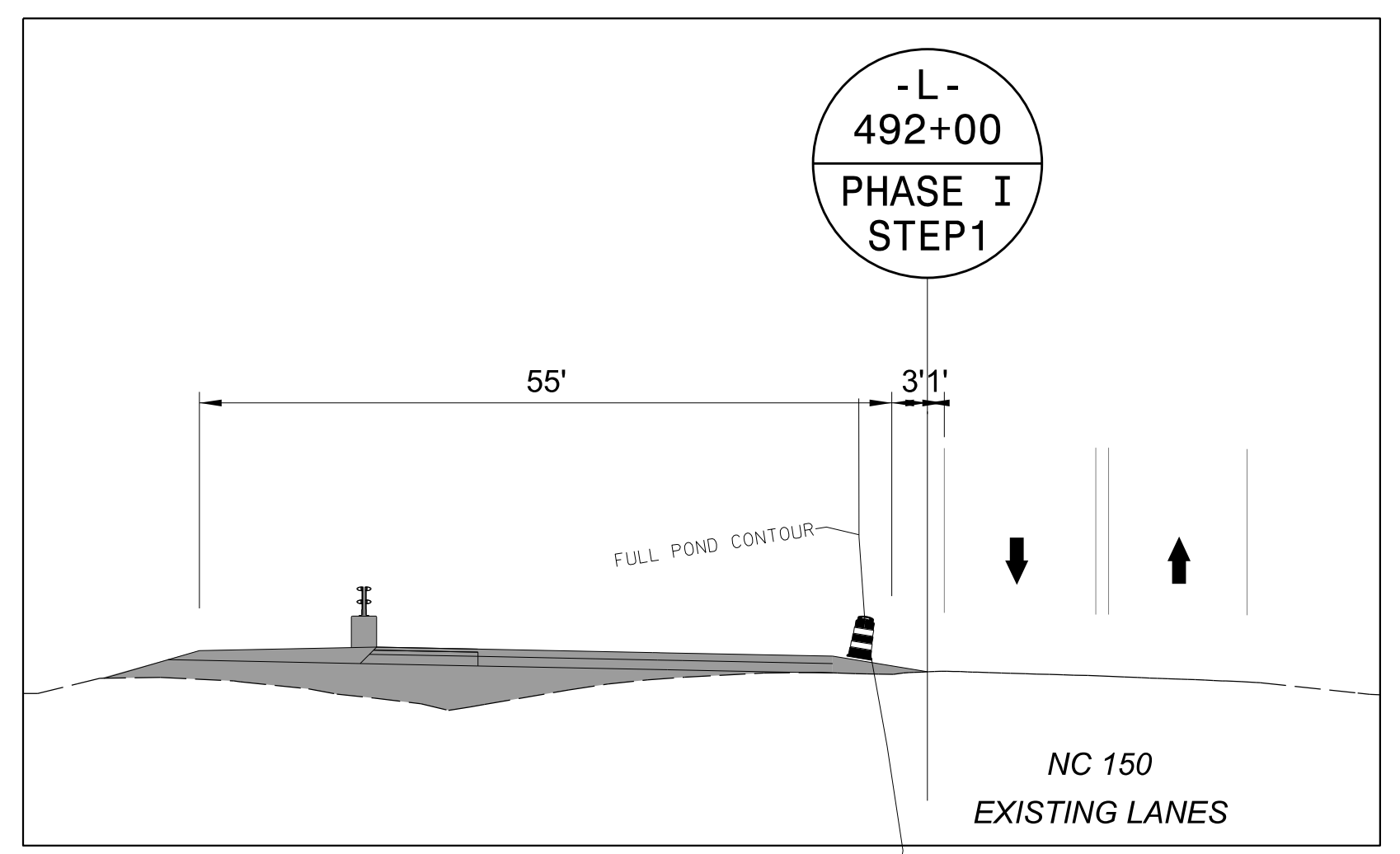
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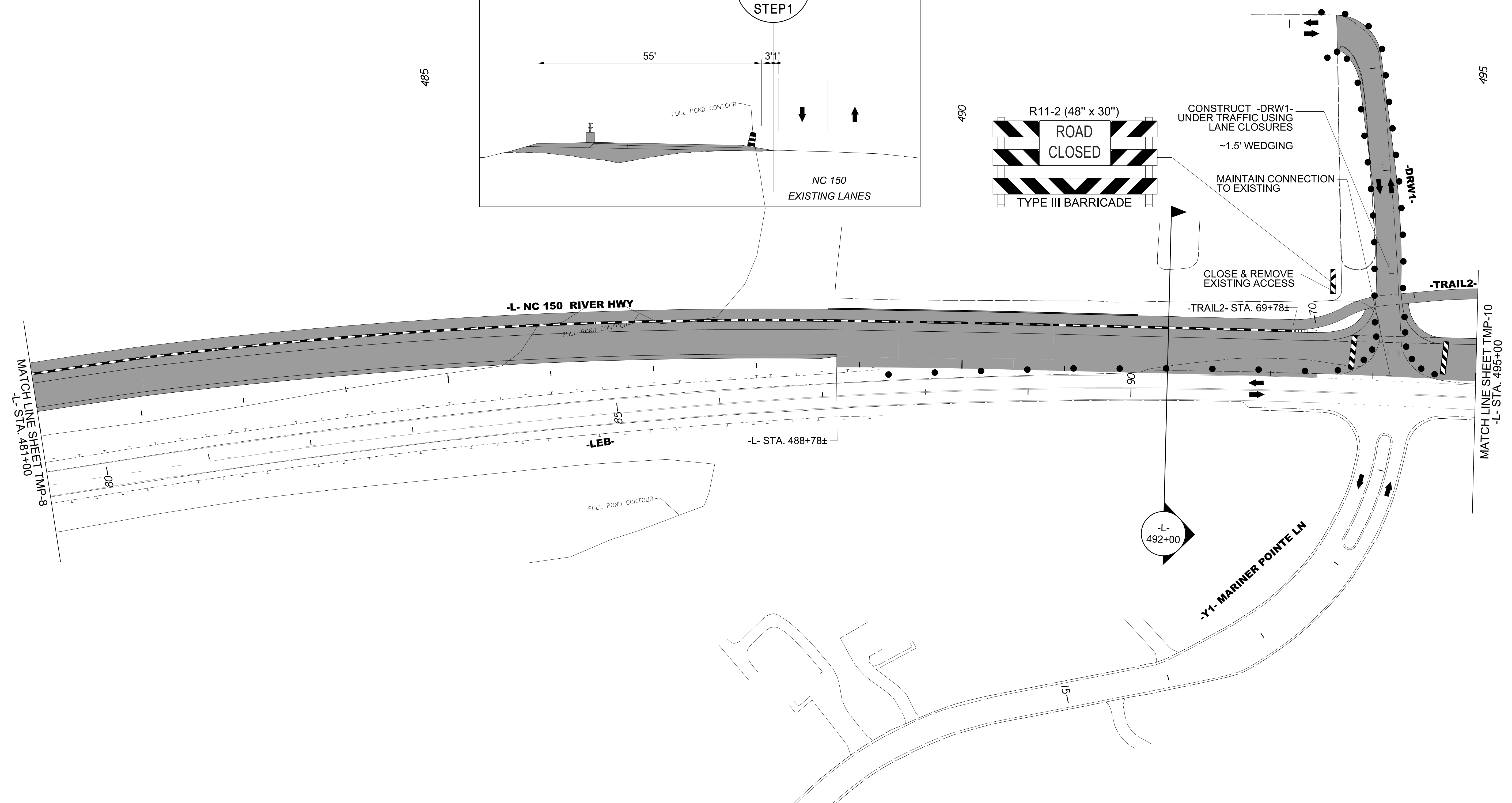
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**-L- NC 150
 PHASE I
 STEP 1**



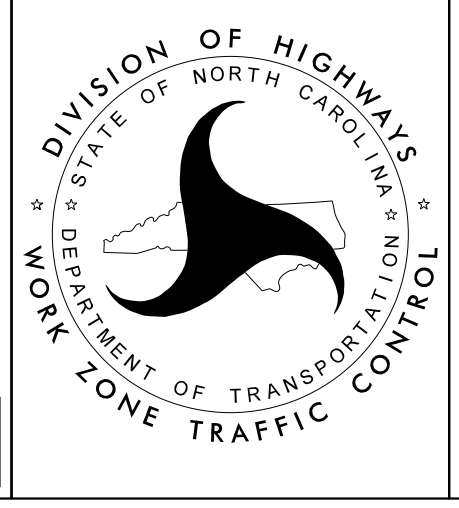
CONSTRUCT -DRW1- UNDER TRAFFIC USING LANE CLOSURES
 ~1.5' WEDGING
 MAINTAIN CONNECTION TO EXISTING
 CLOSE & REMOVE EXISTING ACCESS



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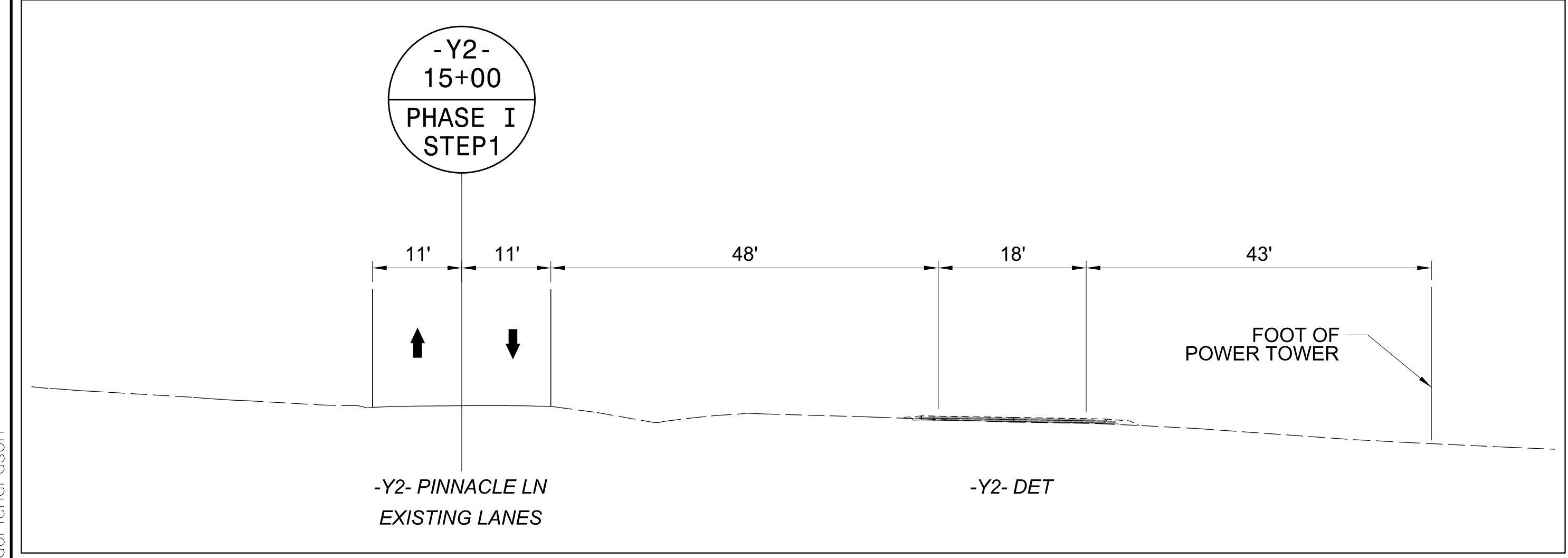
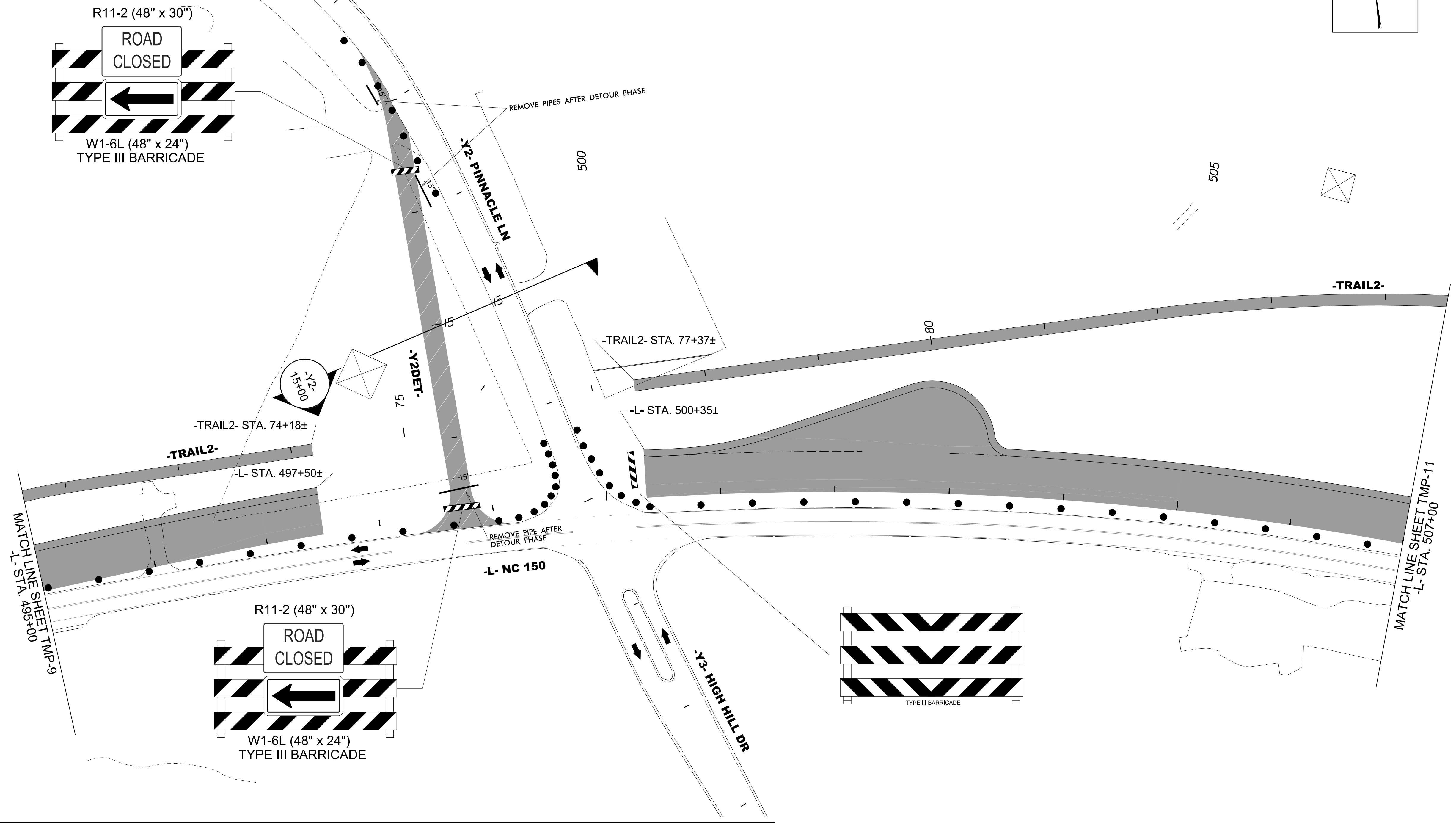
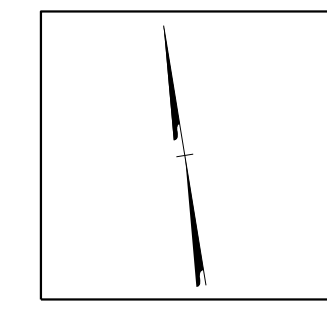
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**-L- NC 150
 PHASE I
 STEP 1**

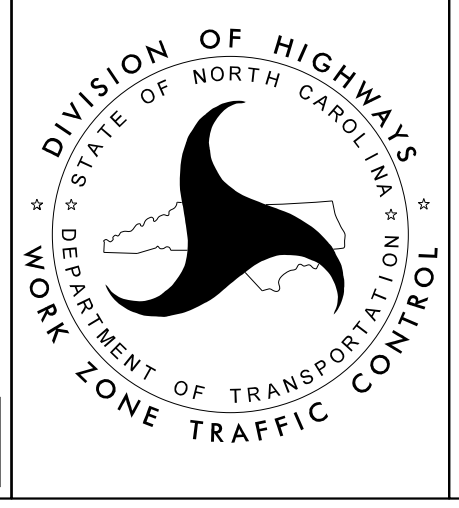


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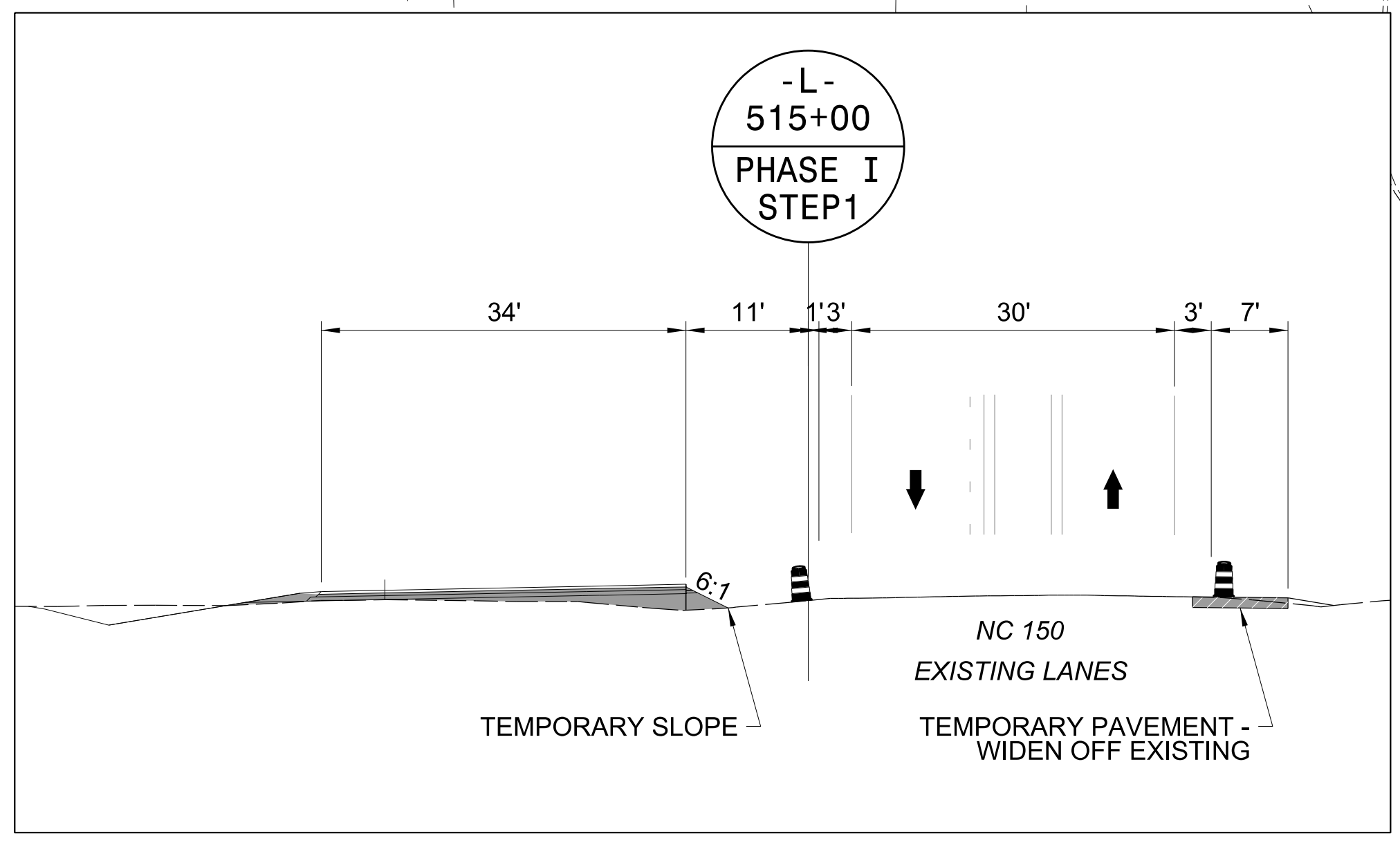
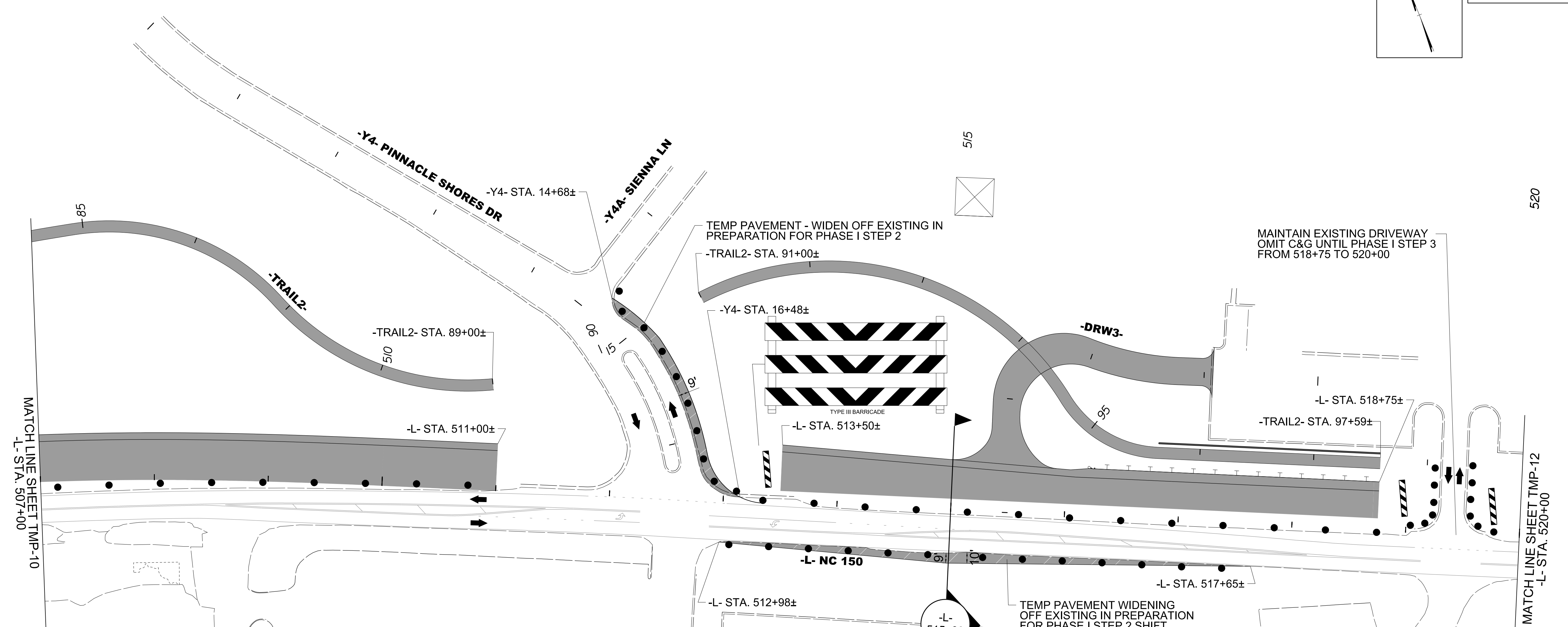
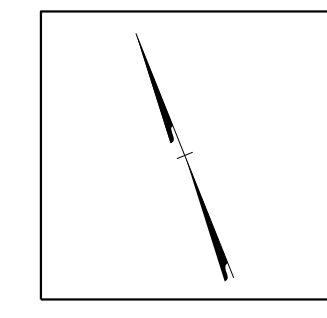
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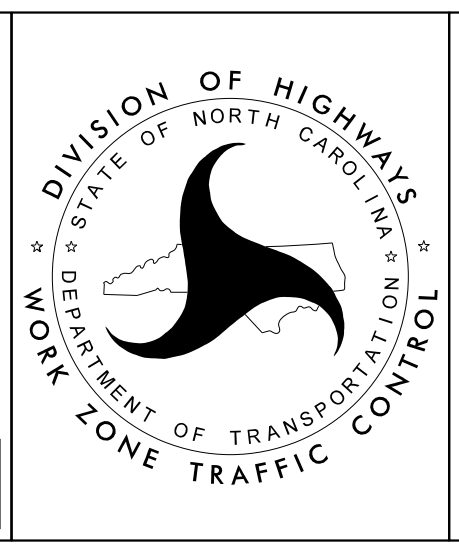


-L- NC 150
 PHASE I
 STEP 1



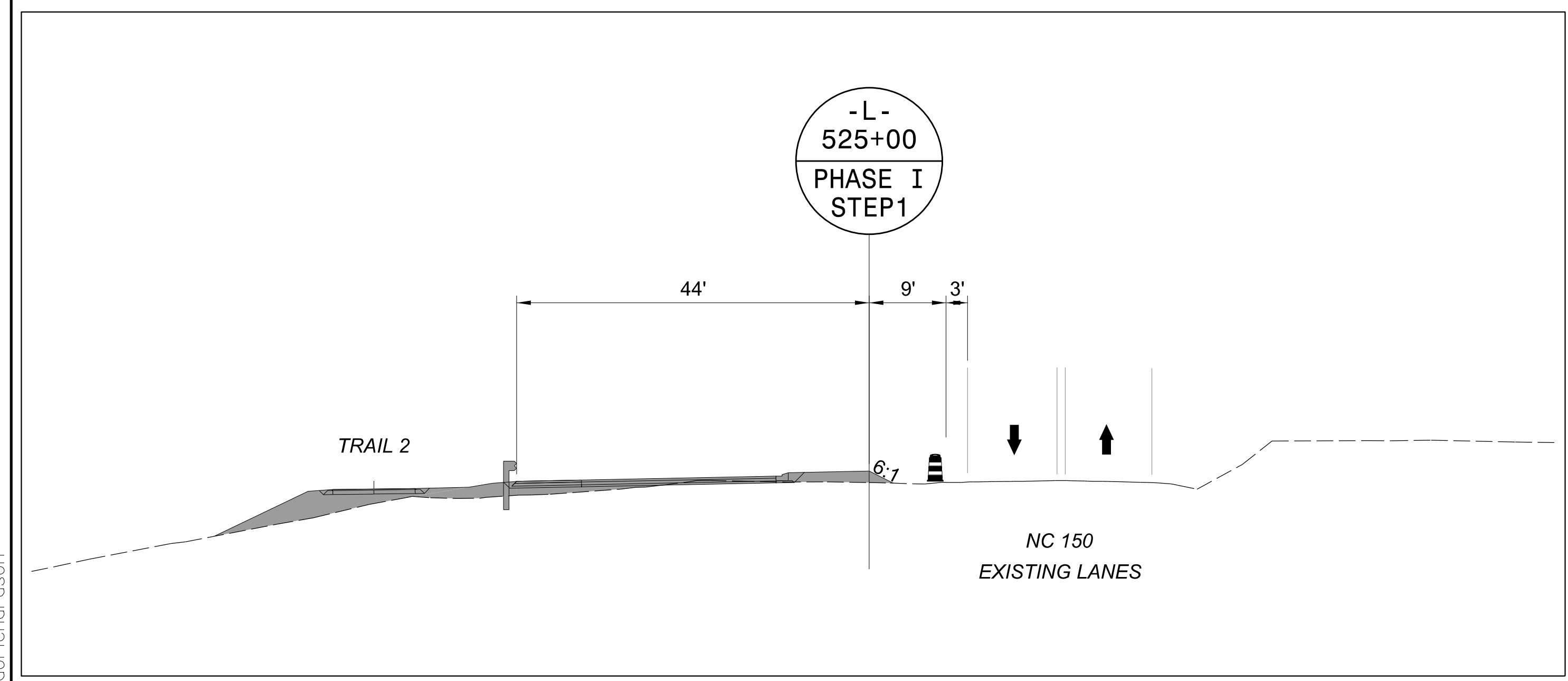
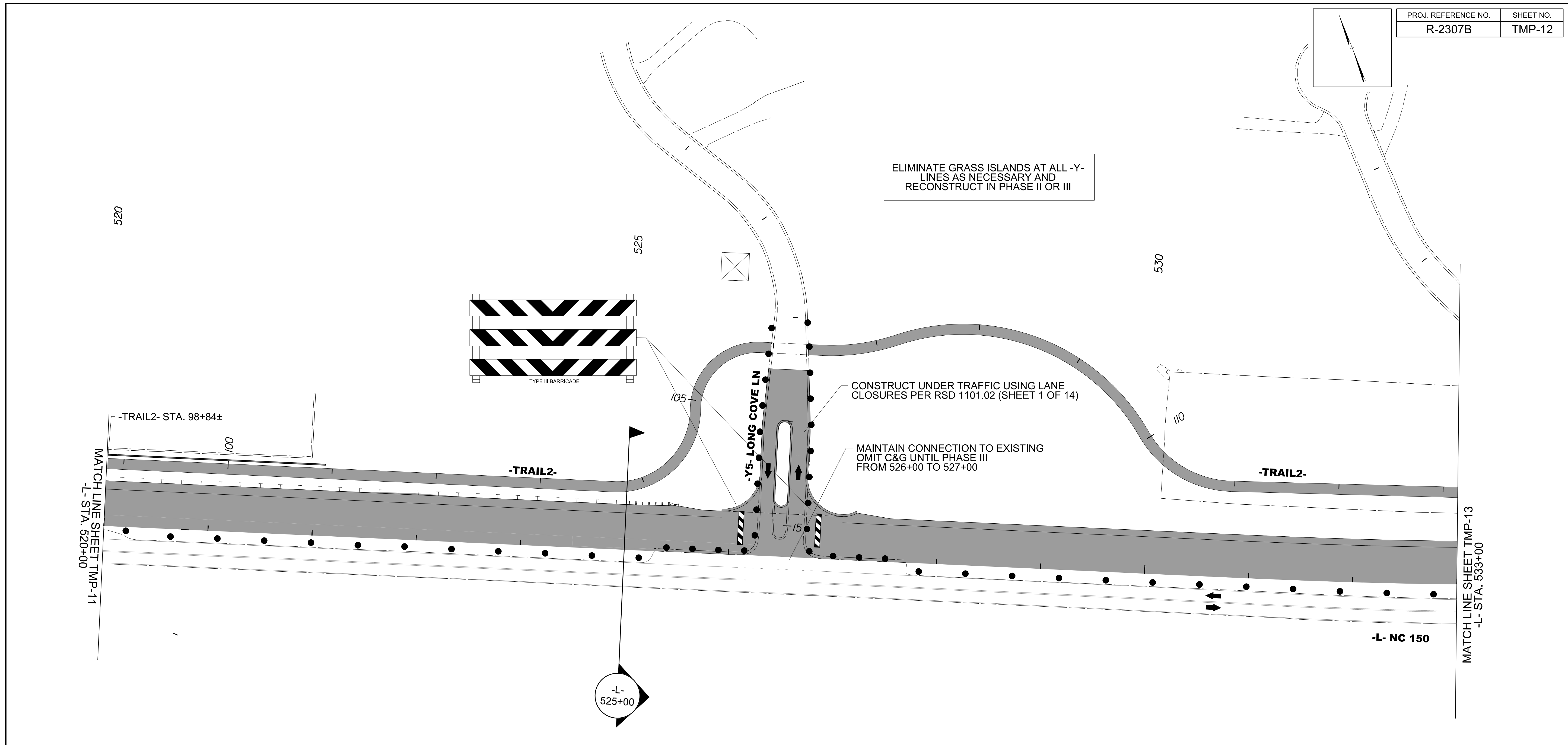
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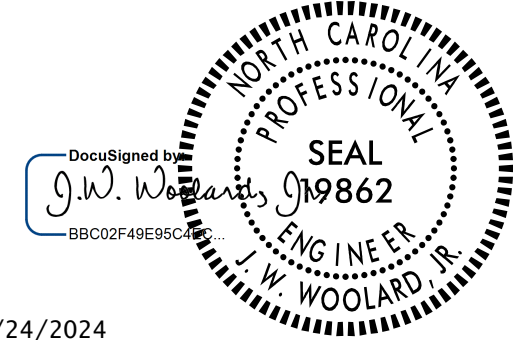
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 PHASE I
 STEP 1

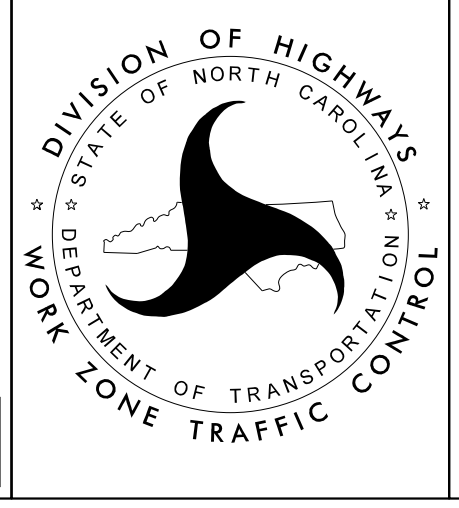
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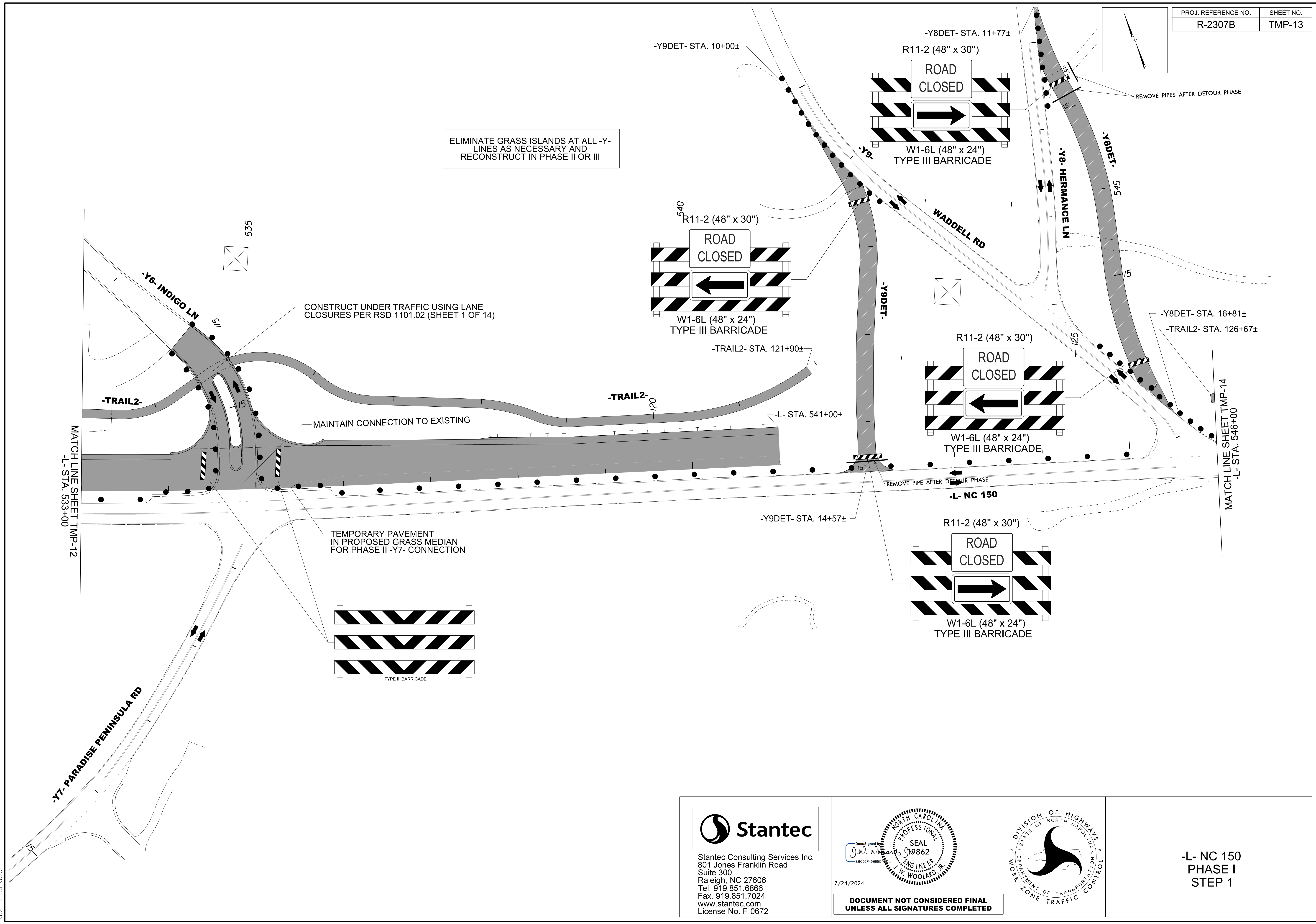
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ELIMINATE GRASS ISLANDS AT ALL -Y- LINES AS NECESSARY AND RECONSTRUCT IN PHASE II OR III

CONSTRUCT UNDER TRAFFIC USING LANE CLOSURES PER RSD 1101.02 (SHEET 1 OF 14)

TEMPORARY PAVEMENT IN PROPOSED GRASS MEDIAN FOR PHASE II -Y7- CONNECTION

MAINTAIN CONNECTION TO EXISTING

REMOVE PIPE AFTER DETOUR PHASE

REMOVE PIPES AFTER DETOUR PHASE

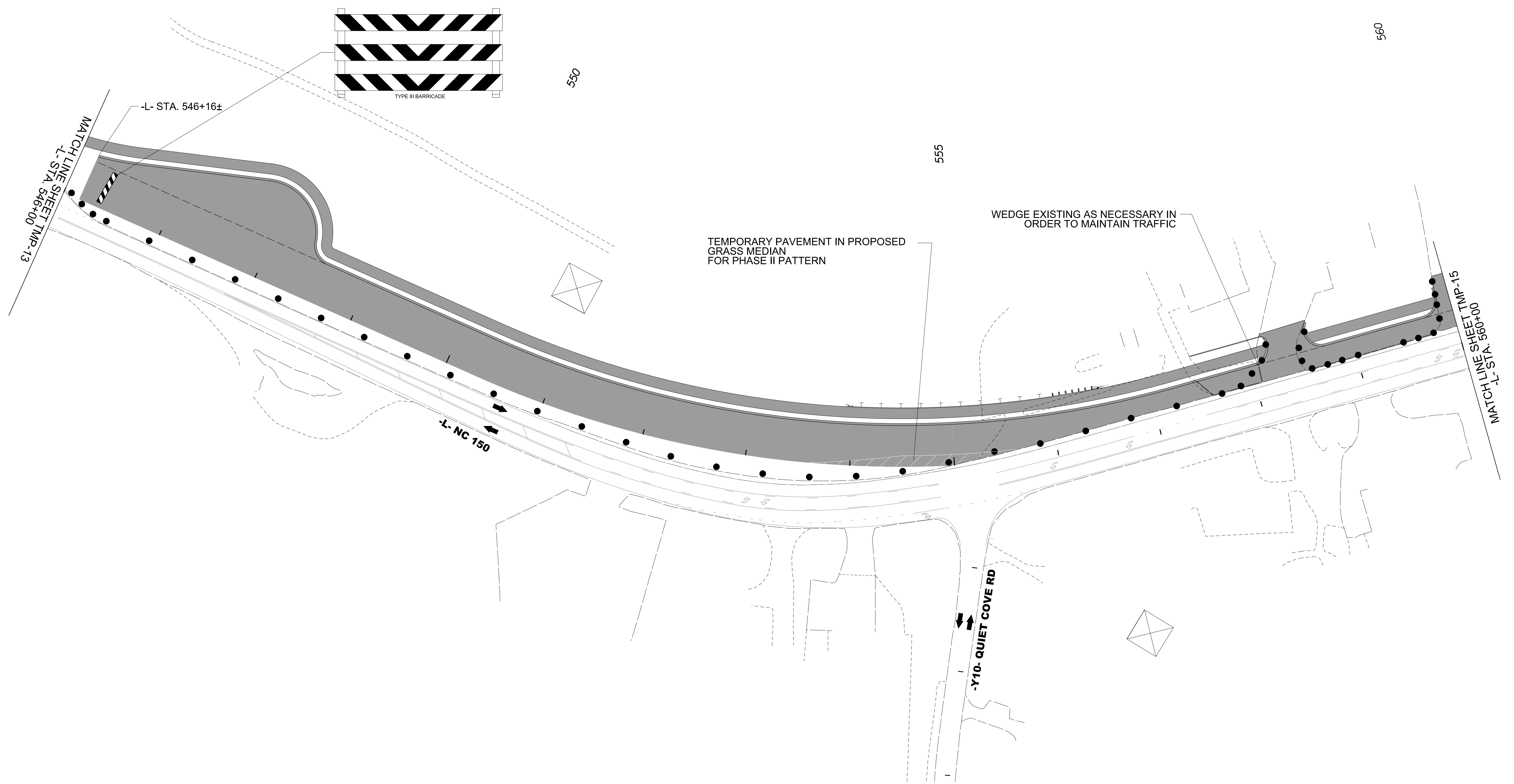
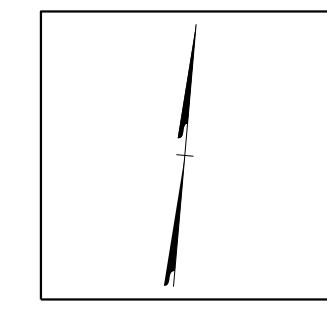
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-L- NC 150
 PHASE I
 STEP 1

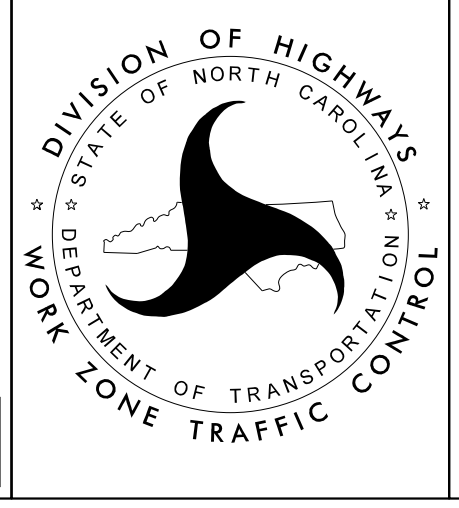


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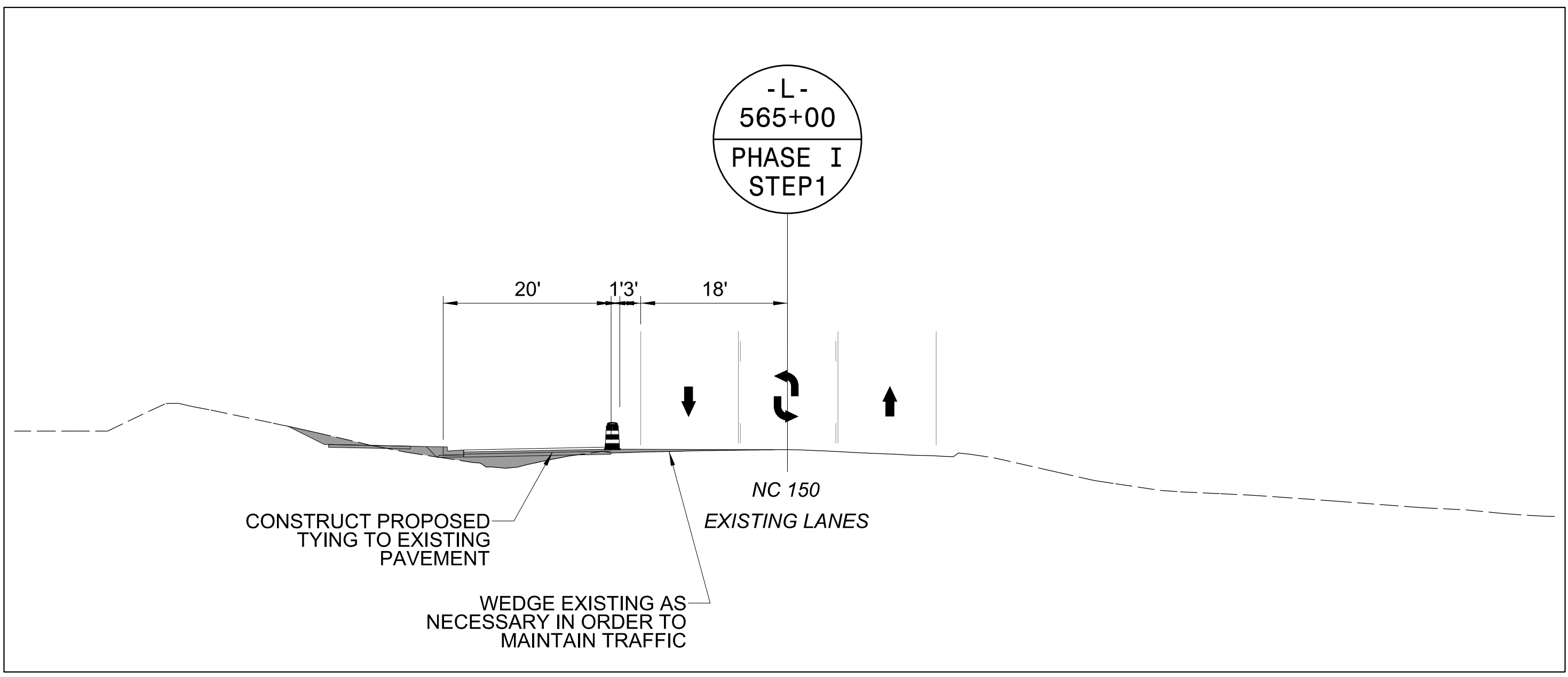
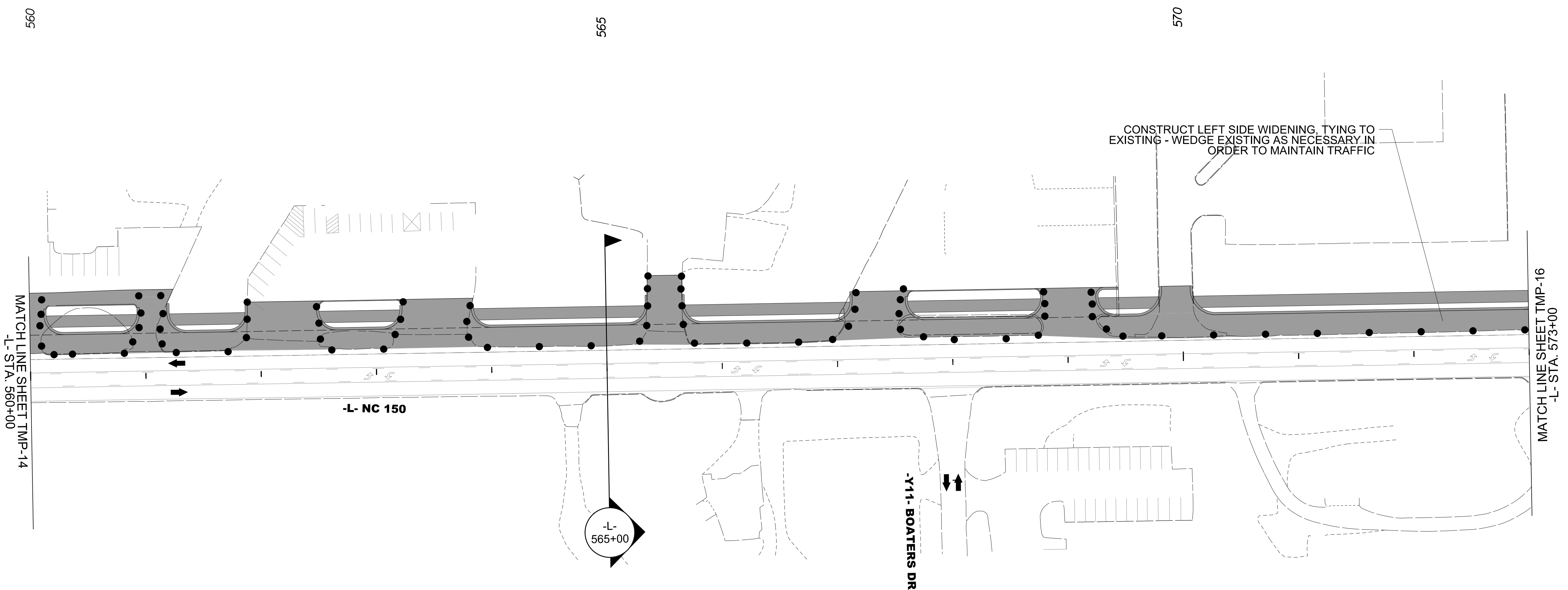
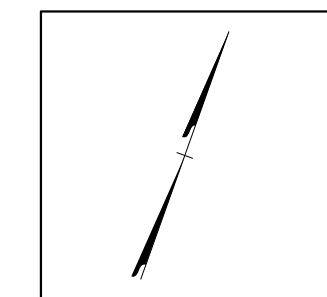
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**-L- NC 150
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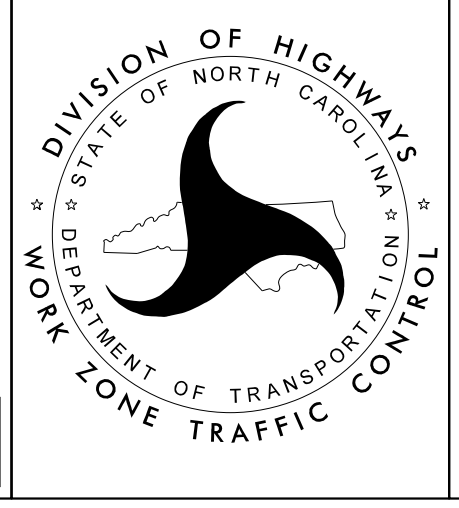
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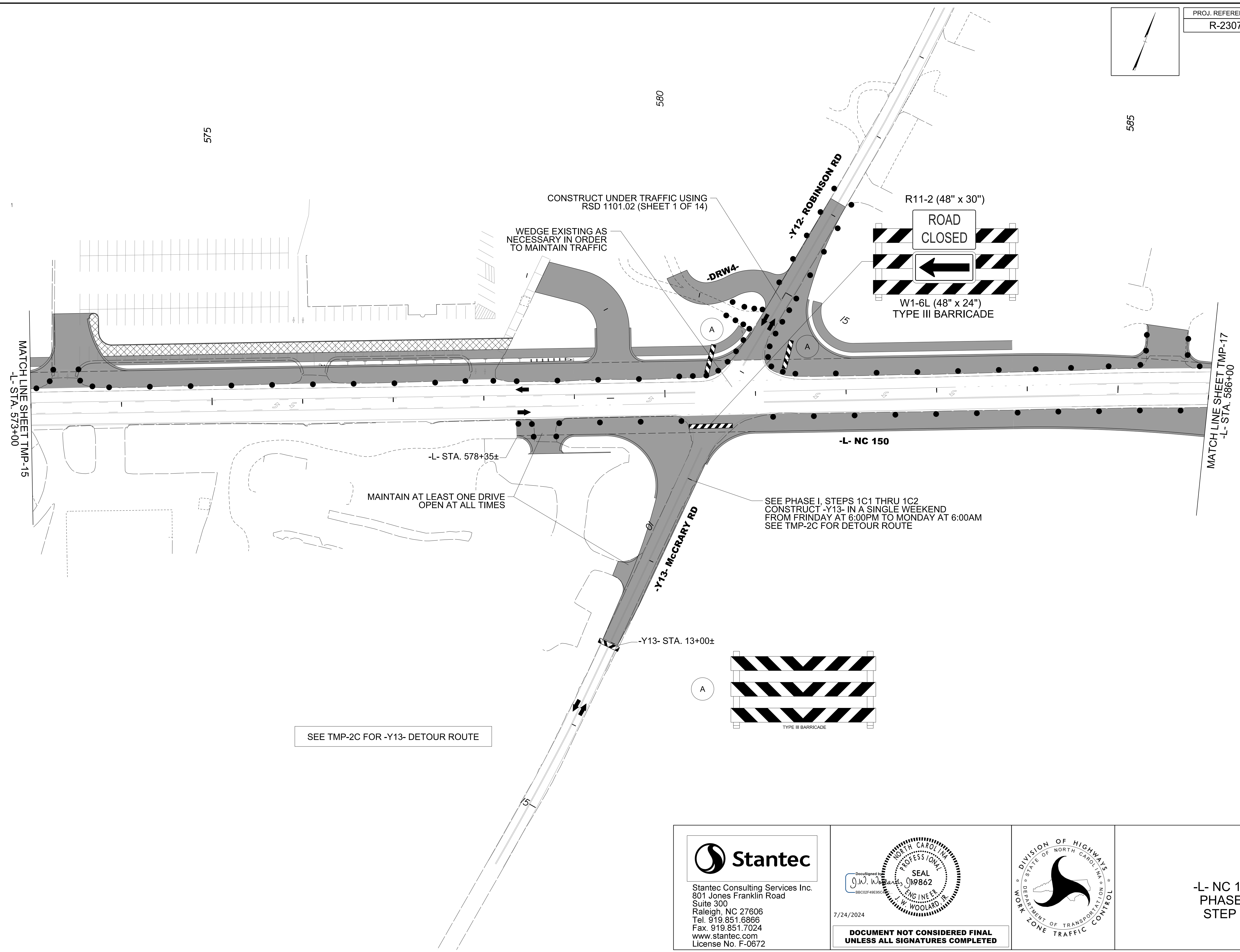
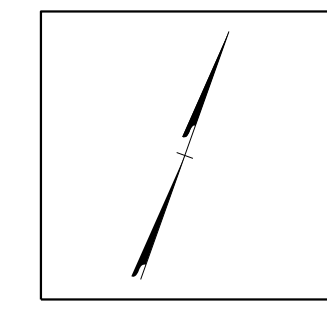
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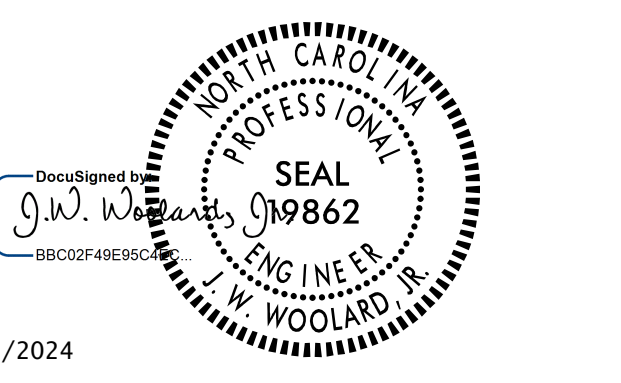
-L- NC 150
PHASE I
STEP 1

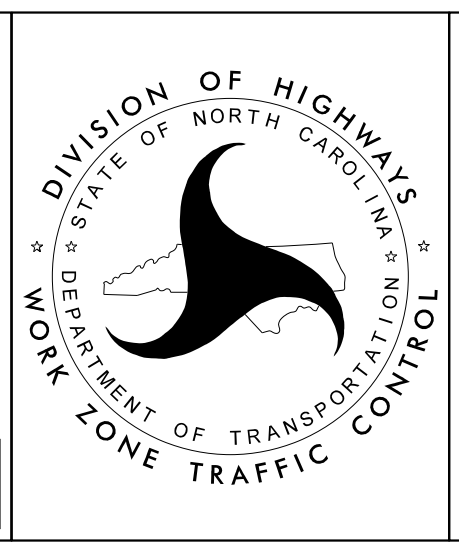


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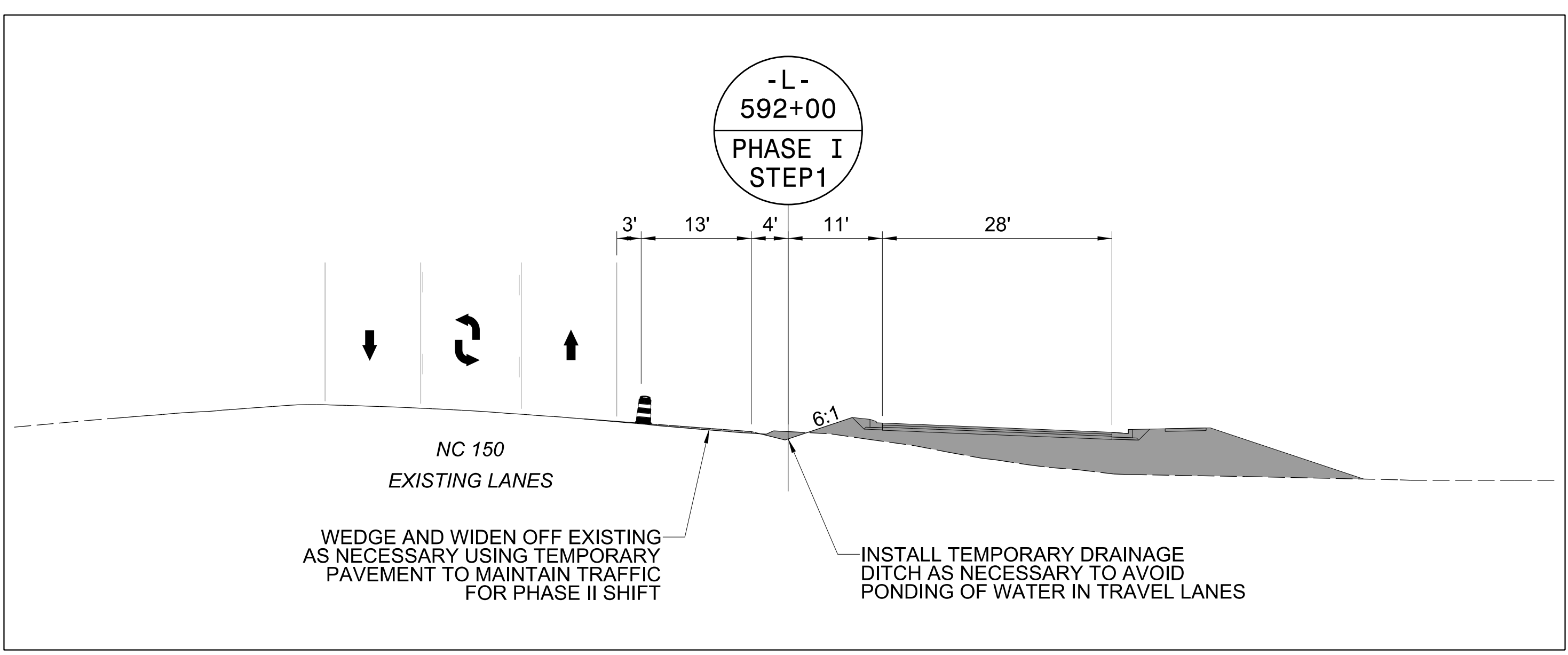
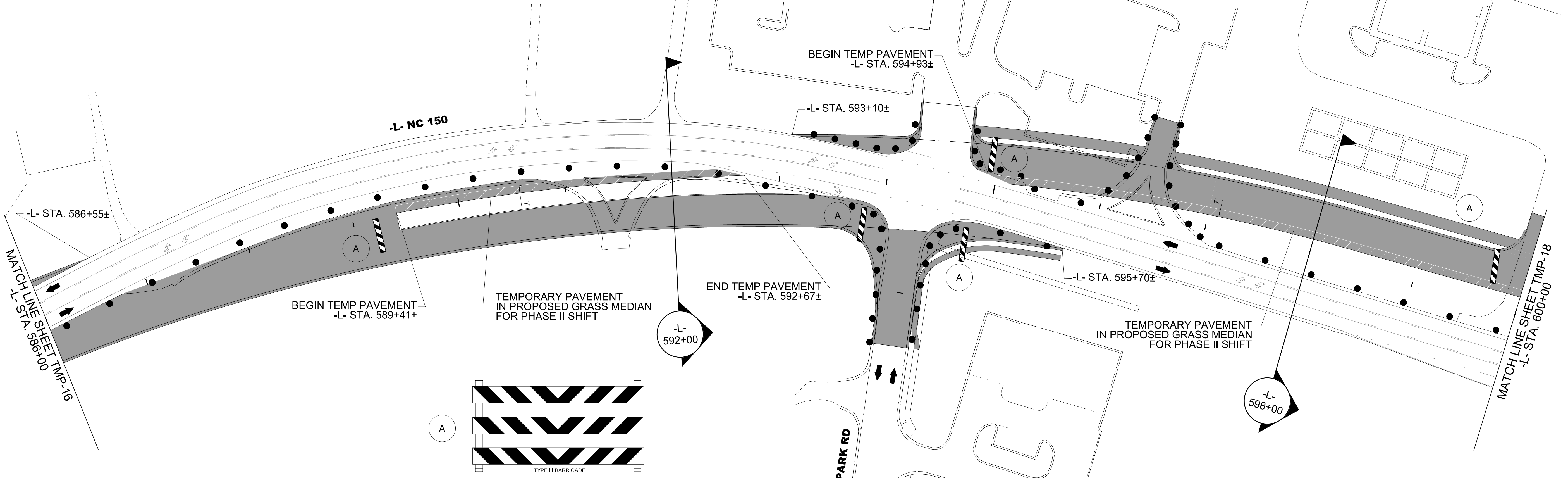
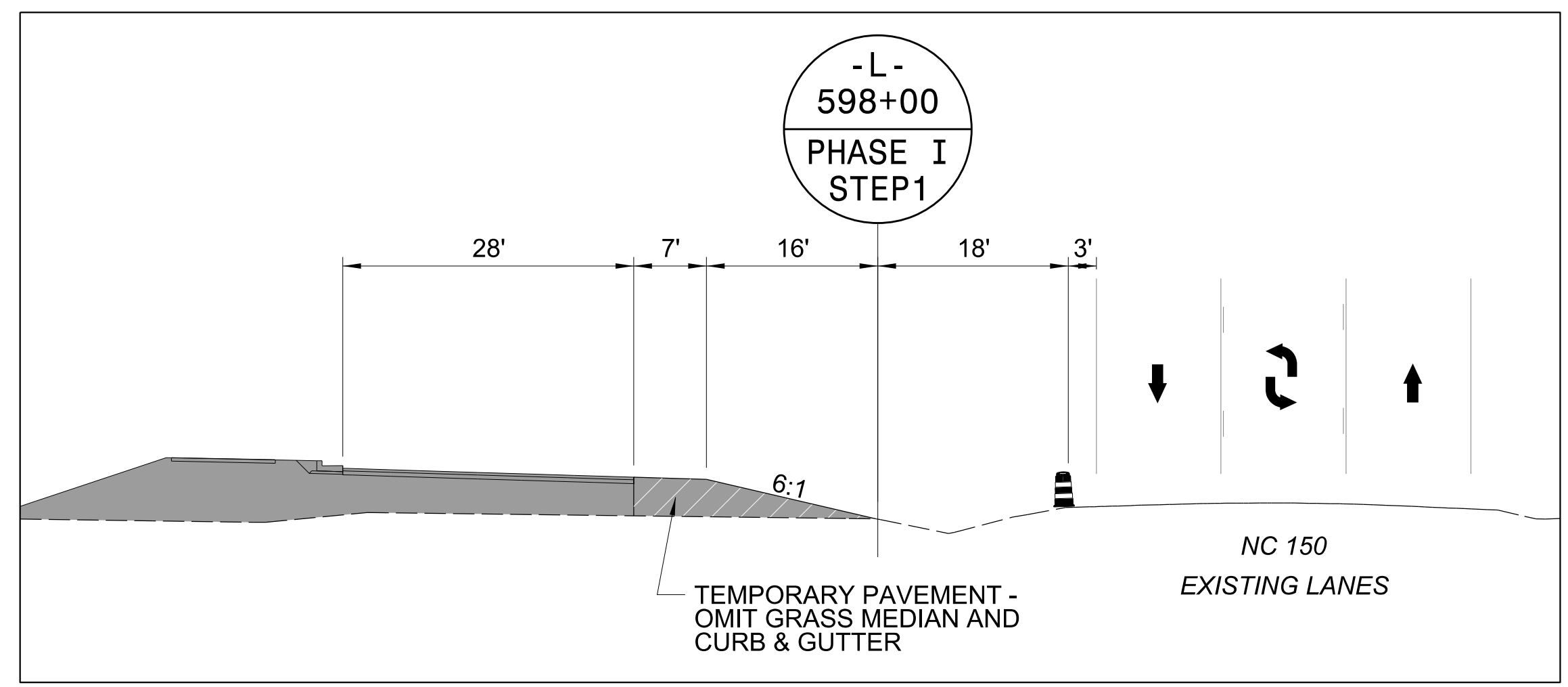
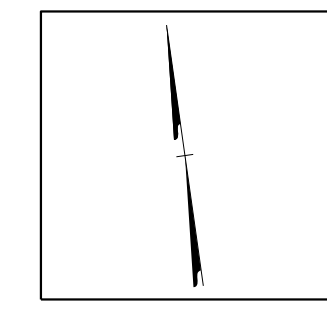
SEE TMP-2C FOR -Y13- DETOUR ROUTE


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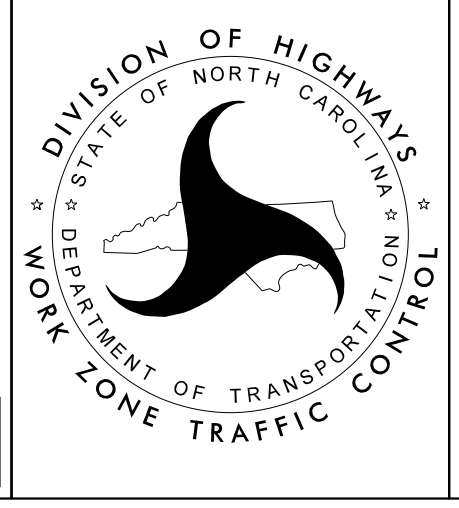
**-L- NC 150
 PHASE I
 STEP 1**



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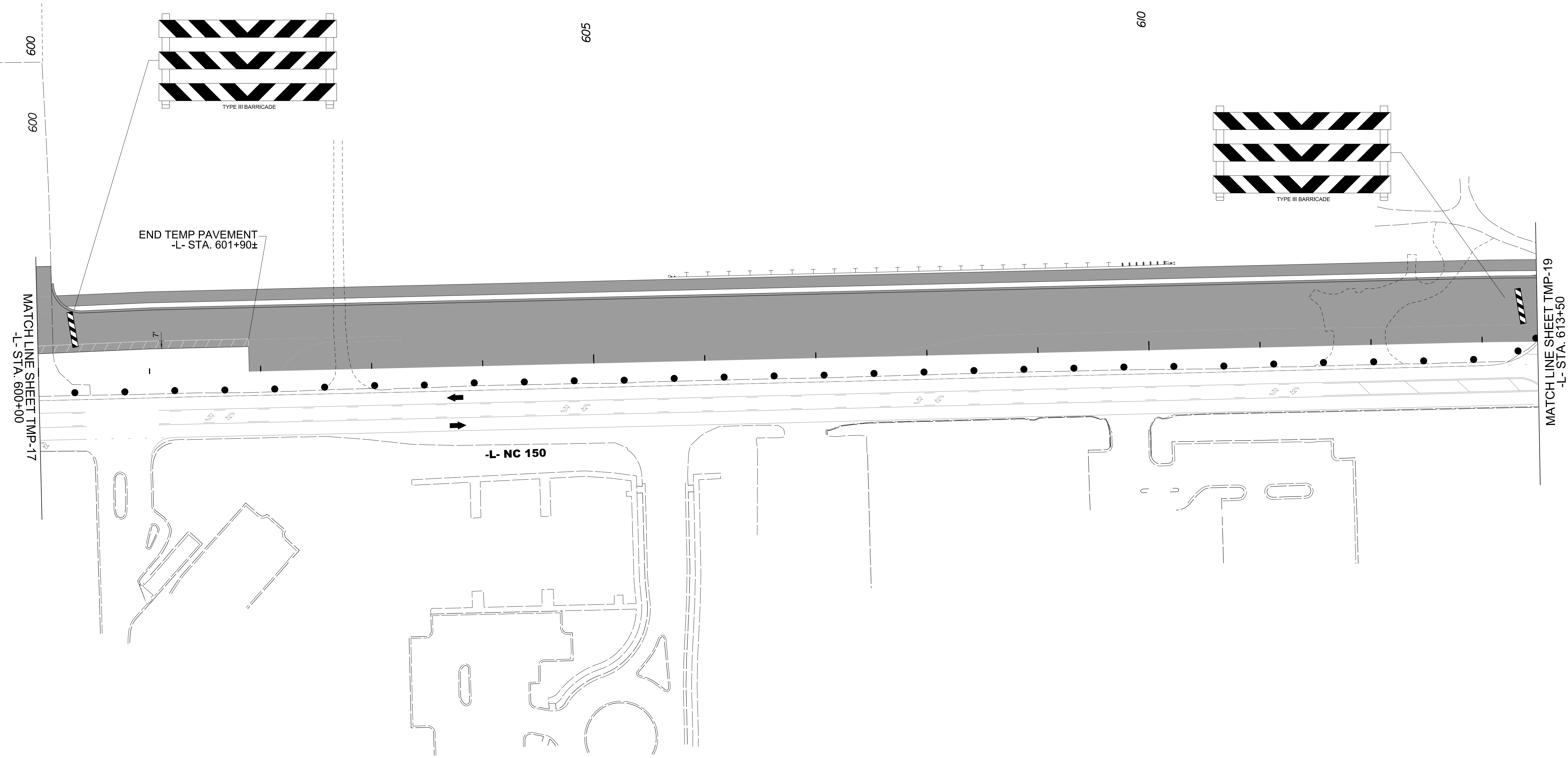
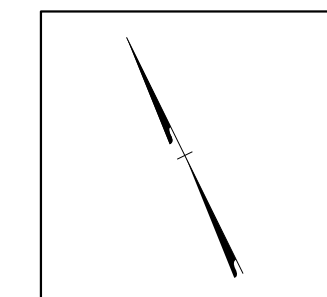
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-L- NC 150
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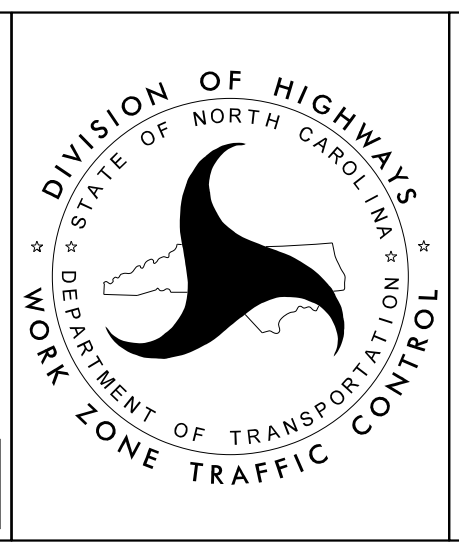
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R-2307B	TMP-18



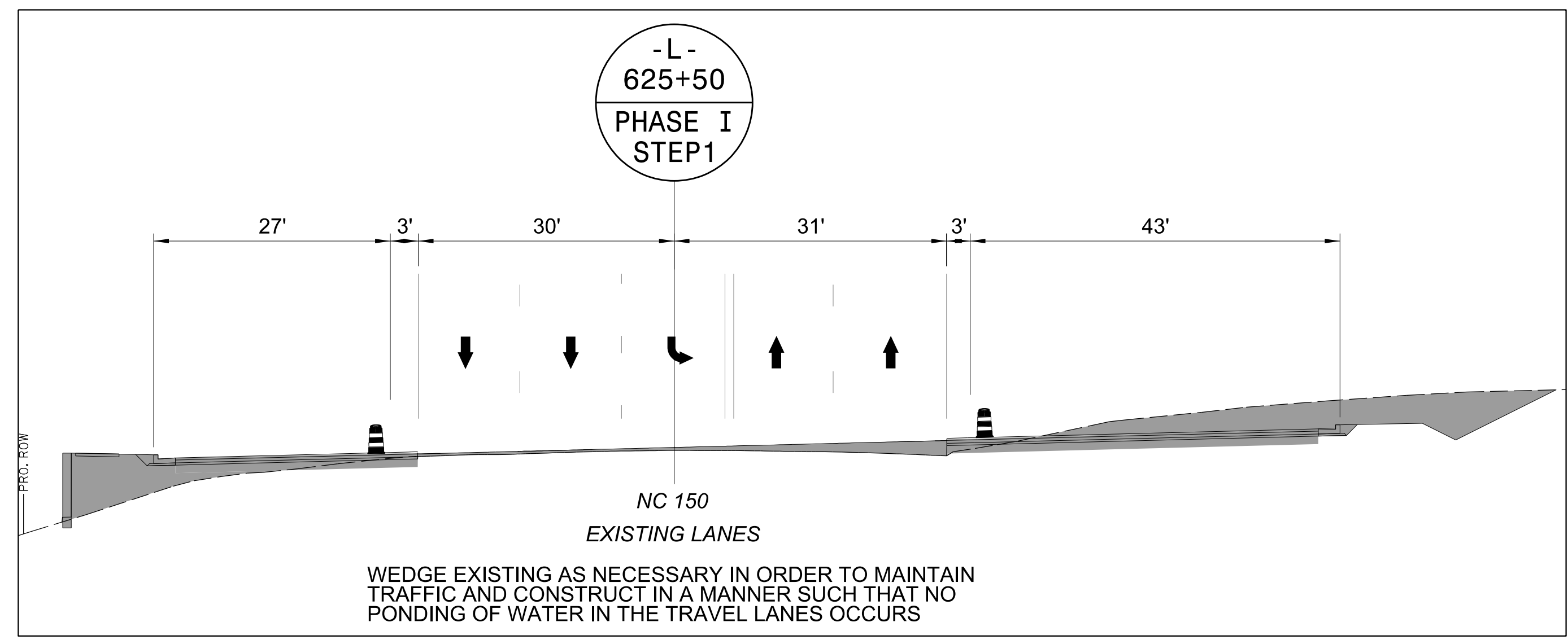
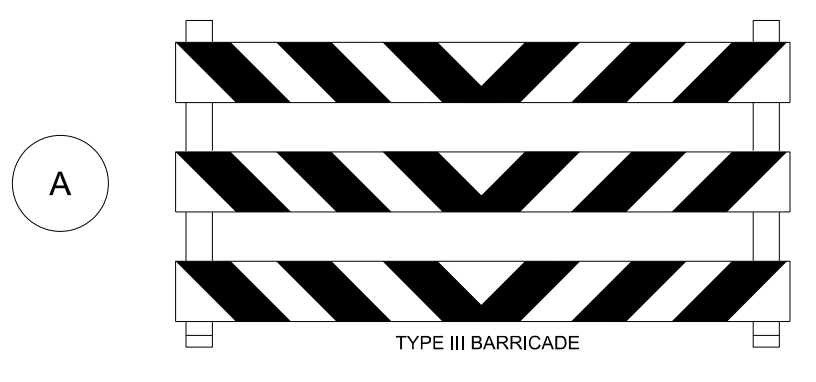
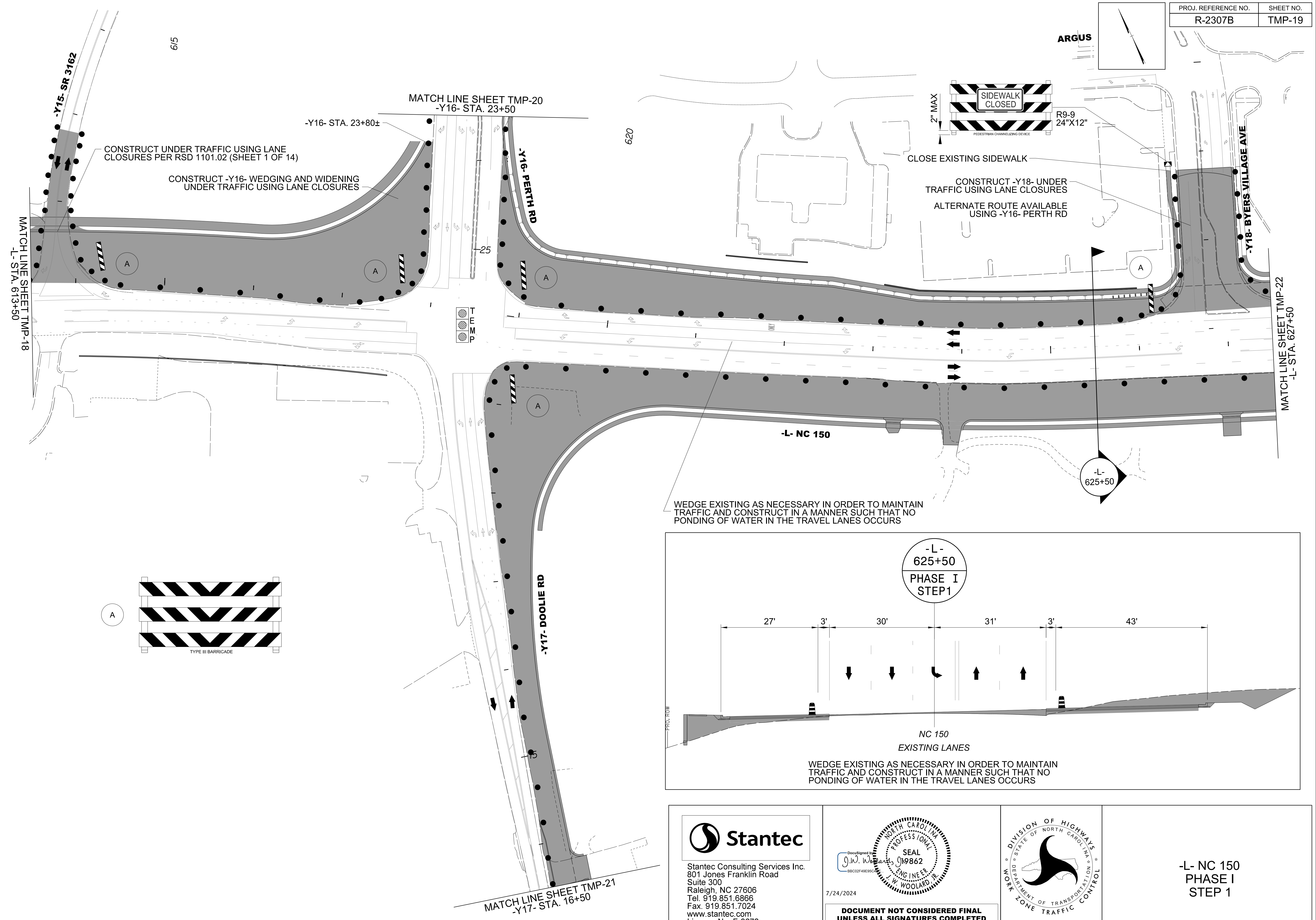
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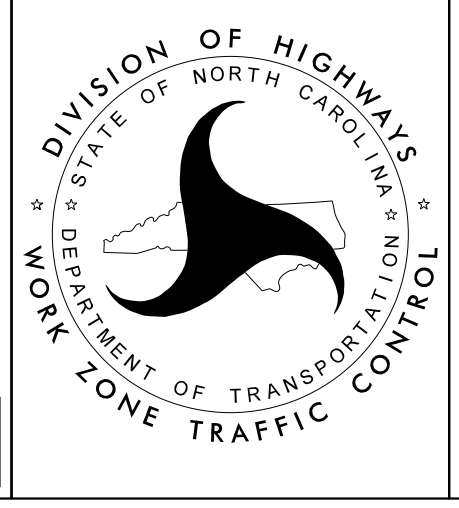
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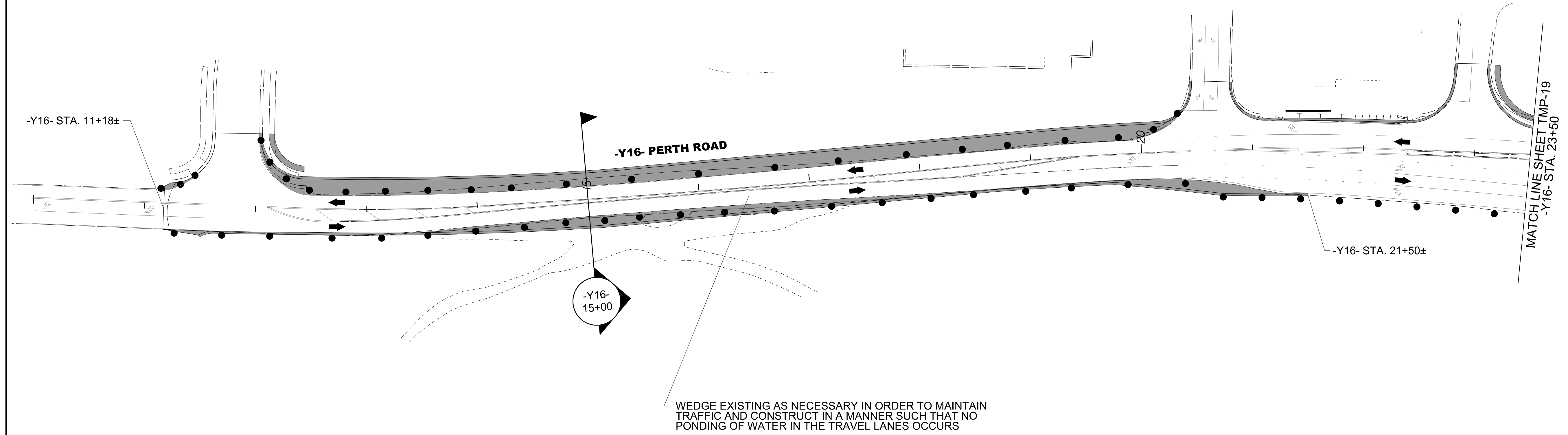
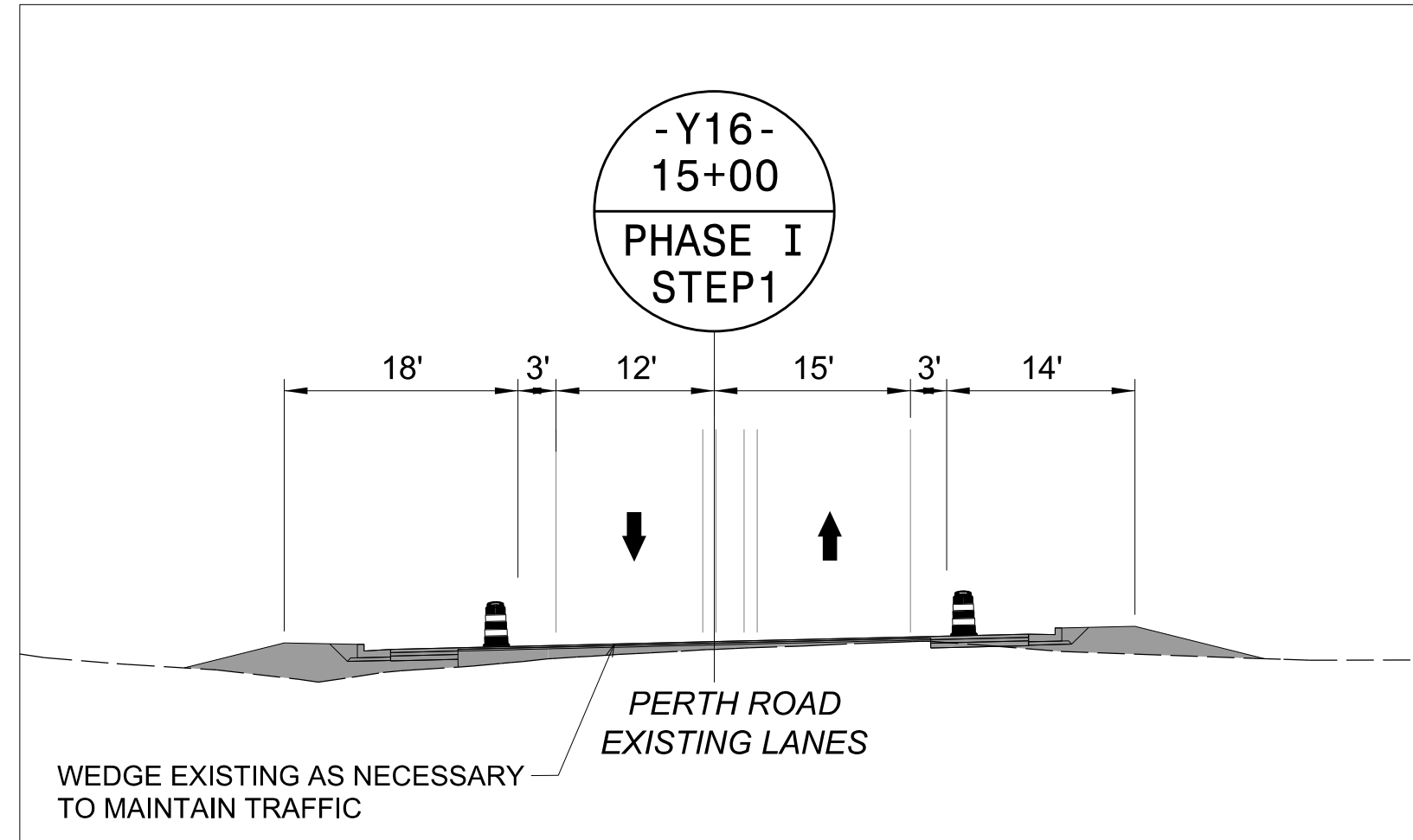
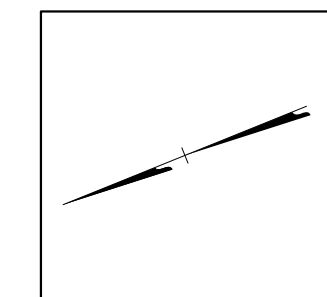
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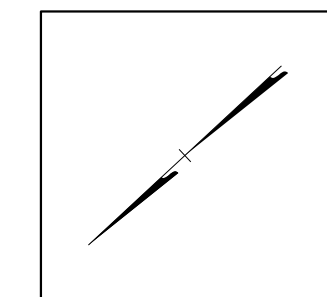


-L- NC 150
 PHASE I
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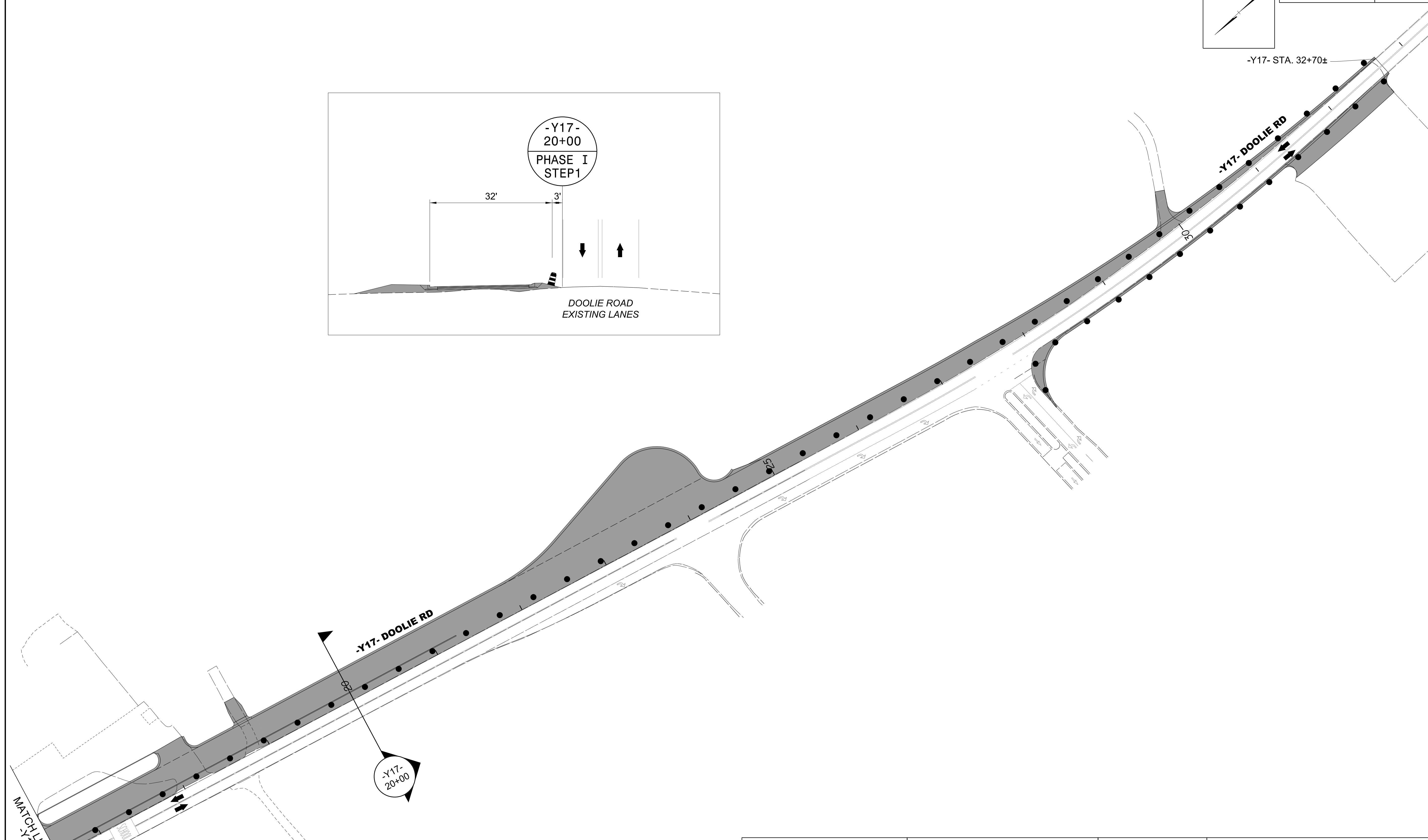
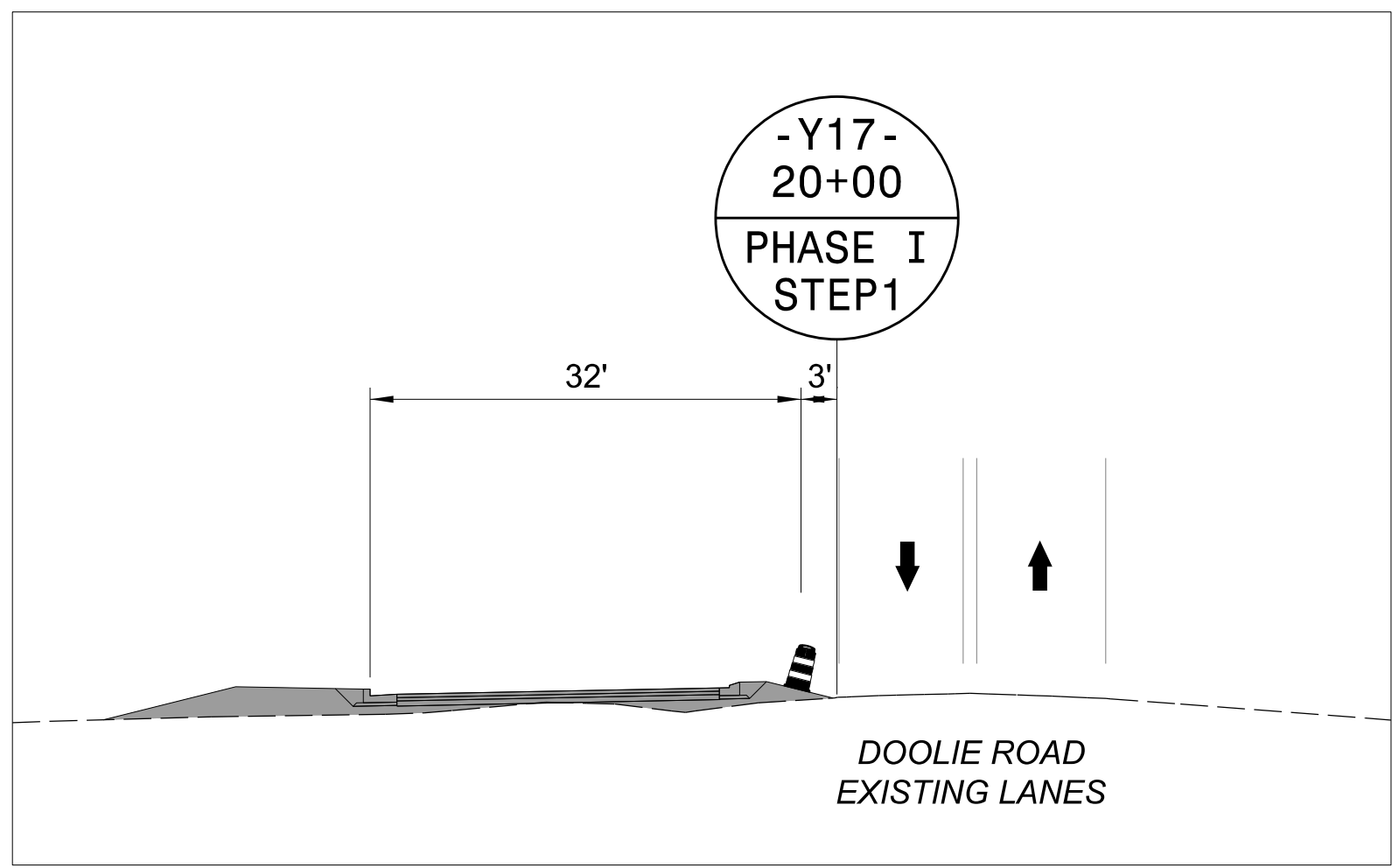


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-Y17- STA. 32+70±

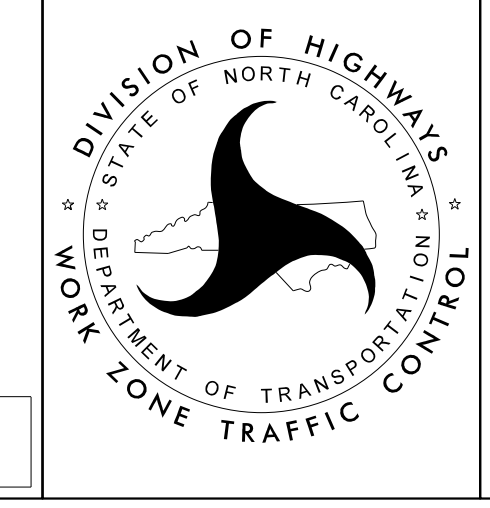


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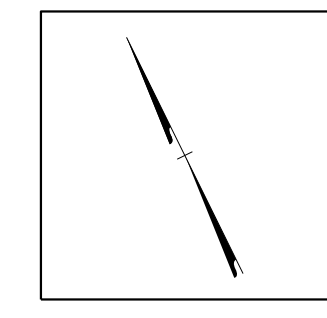
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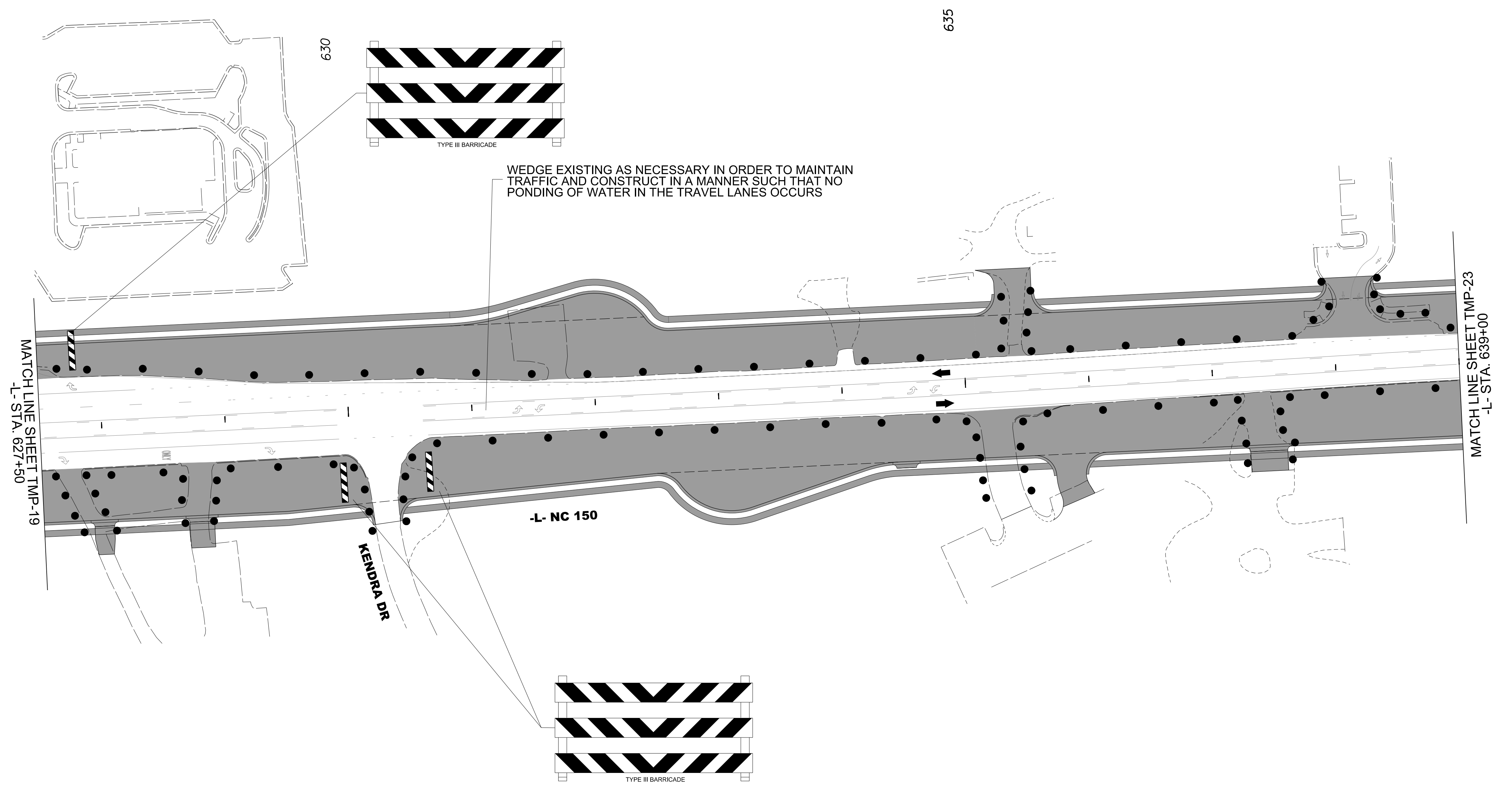


-Y17- DOOLIE RD
 PHASE I
 STEP 1

PROJ. REFERENCE NO.	SHEET NO.
R-2307B	TMP-22



2" MAX



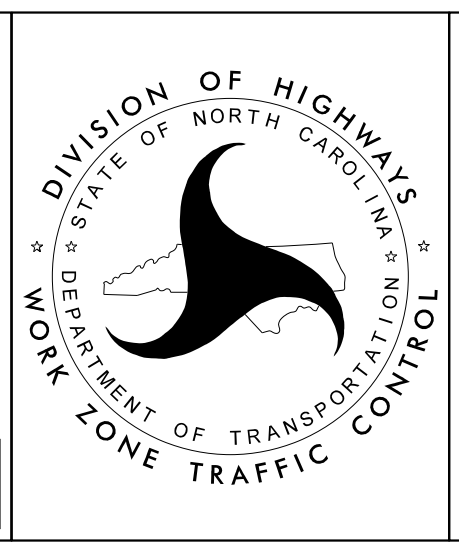
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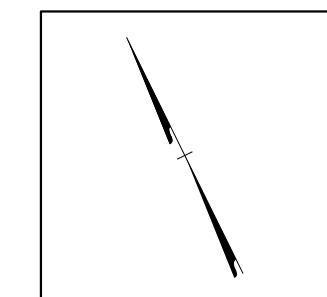
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**-L- NC 150
 PHASE I
 STEP 1**



CLOSE EXISTING SIDEWALK

-Y19- WATER OAK DR

645

650

ELIMINATE GRASS ISLANDS AT ALL -Y- LINES AS NECESSARY AND RECONSTRUCT IN PHASE II OR III

WEDGE EXISTING AS NECESSARY IN ORDER TO MAINTAIN TRAFFIC AND CONSTRUCT IN A MANNER SUCH THAT NO PONDING OF WATER IN THE TRAVEL LANES OCCURS

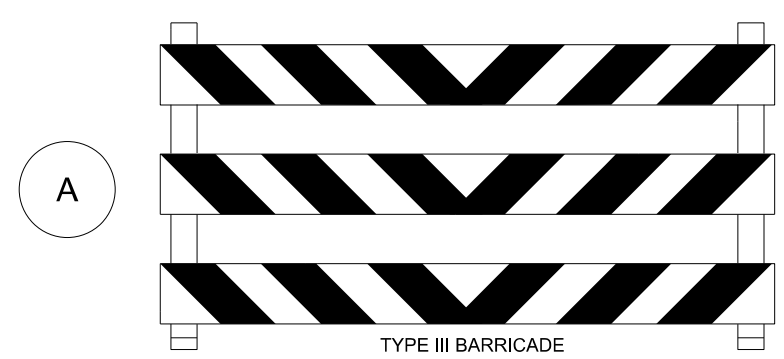
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-L- NC 150

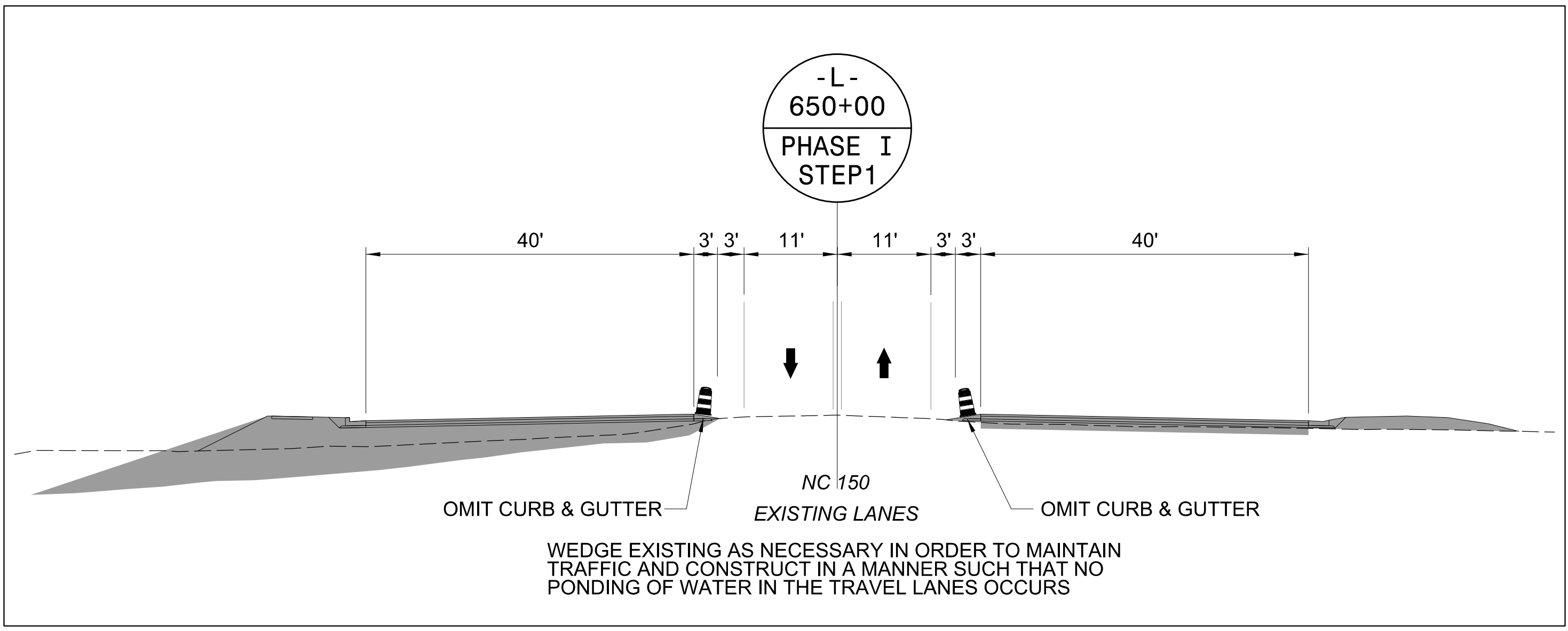
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-L- STA. 652+00

-L- 650+00

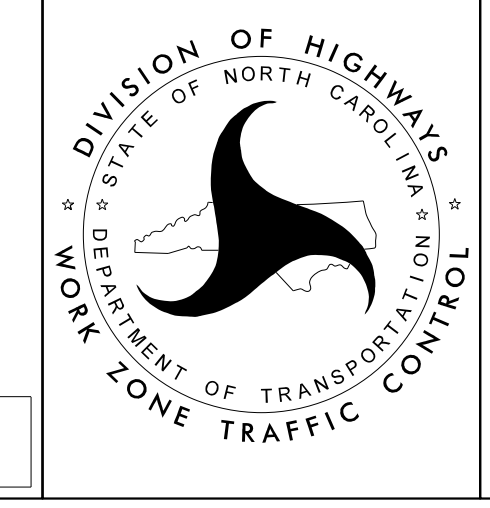


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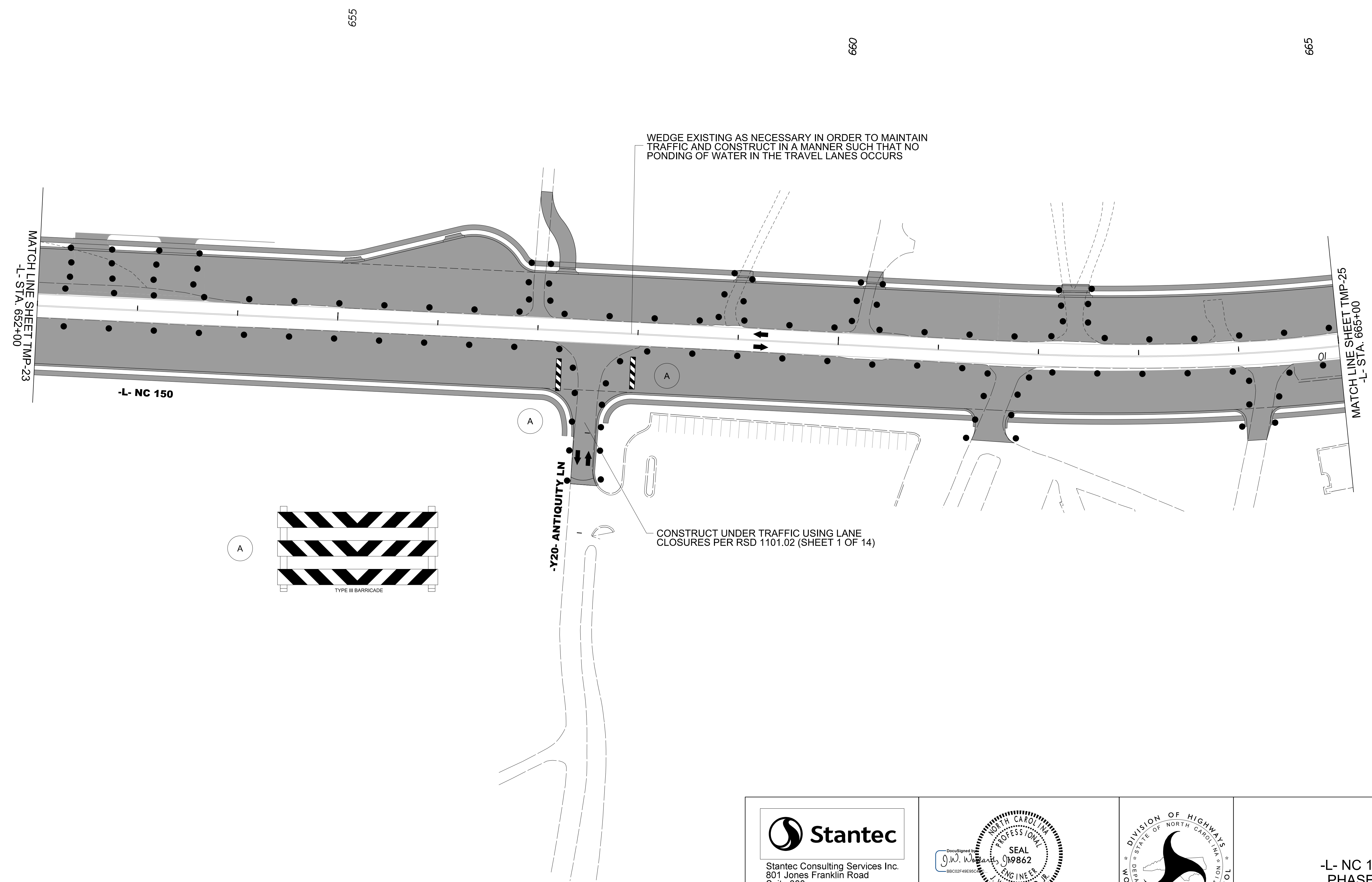
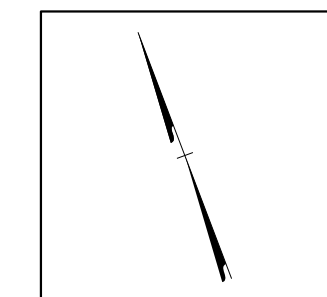


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 19862
 ENGINEER
 W. WOOLARD, R.
 7/24/2024



-L- NC 150
PHASE I
STEP 1

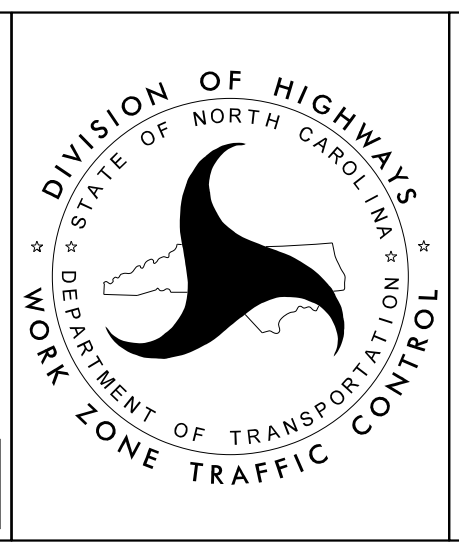


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