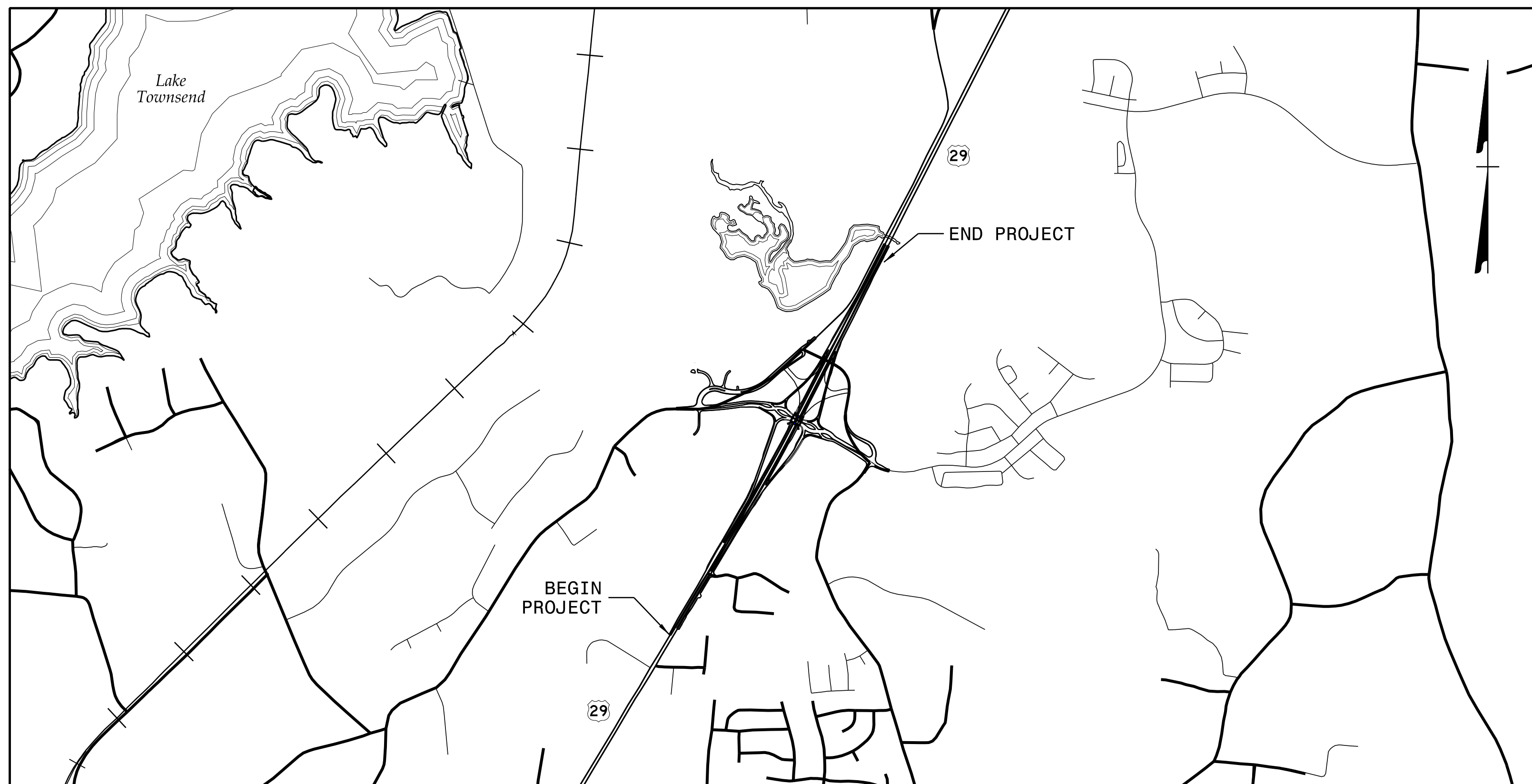
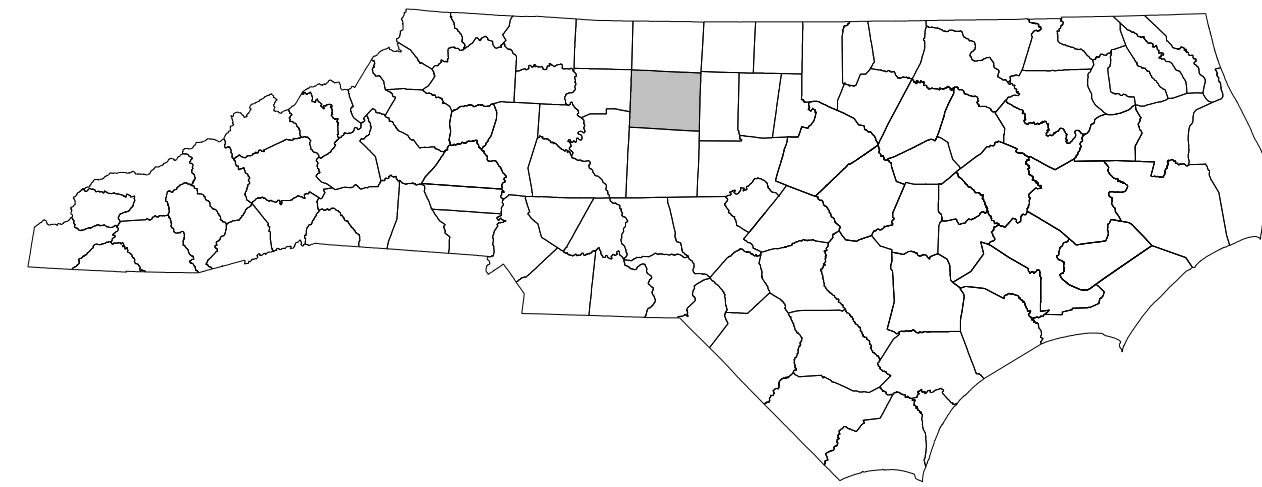


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**TRANSPORTATION MANAGEMENT PLAN**

**GUILFORD COUNTY**



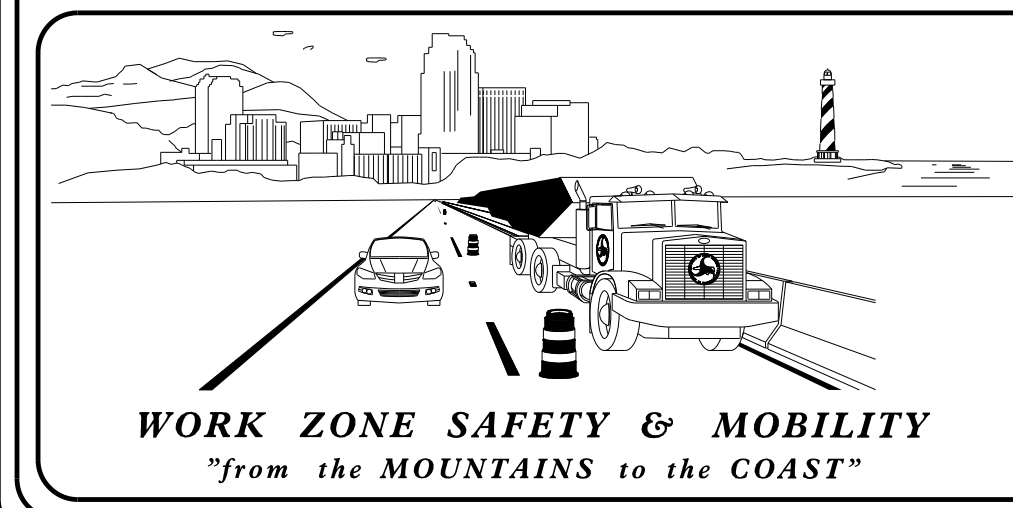
**INDEX OF SHEETS**

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TMP-1B THROUGH 1D	TRANSPORTATION OPERATIONS PLAN: (GENERAL AND LOCAL NOTES)
TMP-2	PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
TMP-2A	TEMPORARY SHORING INFORMATION
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SHEET NO.  
TMP-1

**R-4707**

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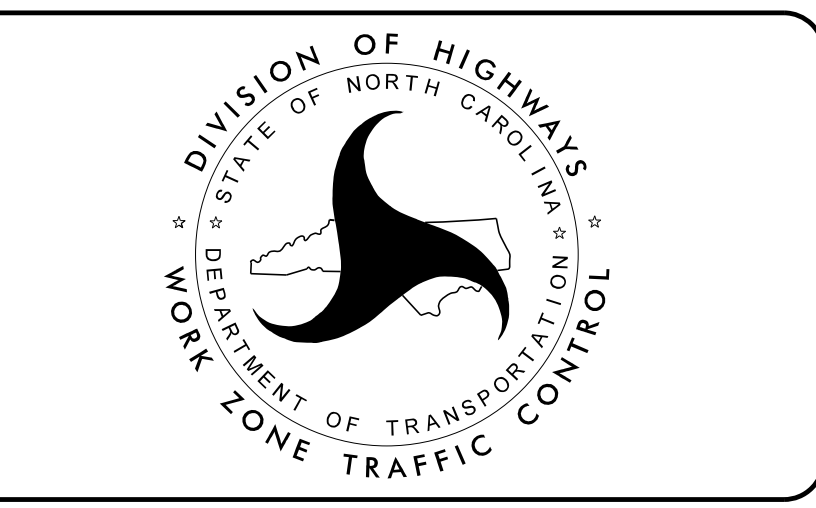
**C. B. HOLDEN, PE**  
PROJECT MANAGER

**K. W. BISBY, PE**  
SENIOR PROJECT ENGINEER

**NCDOT CONTACTS:**

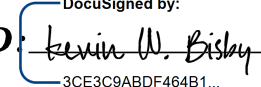
**K. C. THORNEWELL, PE**  
PROJECT ENGINEER

**M. STEELMAN**  
PROJECT DESIGN ENGINEER



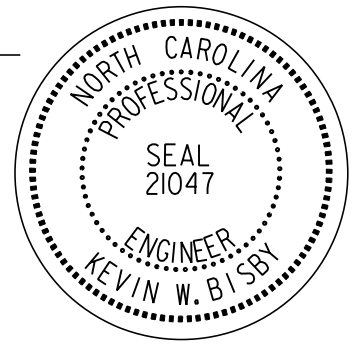
**RK K**  
P: (919) 878-9560  
8601 Six Forks Road, Forum 1, Suite 700  
Raleigh, North Carolina 27615-3960  
NC License No. F-0112

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**DATE:** 3/31/2020

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**TIP PROJECT:**

# 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 ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	POSITIVE PROTECTION
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE 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
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
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

# LEGEND

## GENERAL

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



## SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

## PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

## TRAFFIC CONTROL DEVICES

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

## TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

## PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

## TEMPORARY PAVEMENT MARKING SCHEDULE

PAINT				COLD APPLIED PLASTIC (TYPE 4)	
Symbol	Description	Symbol	Description	Symbol	Description
P2	WHITE STOPBAR (24")	PK	3 FT. - 9 FT./SP WHITE MINISKIP (6")	C8	2 FT. - 6 FT./SP WHITE MINISKIP (4")
P3	WHITE CROSSWALK LINE (24")	PL	WHITE SOLID LANE LINE (6")	C13	3 FT. - 9 FT./SP WHITE MINISKIP (8")
P6	WHITE EDGELINE (6")	PN	WHITE GORELINE (8")	CA	WHITE EDGELINE (4")
P7	YELLOW EDGELINE (6")	PO	WHITE DIAGONAL (8")	CB	YELLOW EDGELINE (4")
P8	2 FT. - 6 FT./SP WHITE MINISKIP (4")	PP	YELLOW DIAGONAL (8")	CC	10 FT. WHITE SKIP (4")
P9	2 FT. - 6 FT./SP YELLOW MINISKIP (4")	PR	WHITE SOLID LANE LINE (8")	CD	3 FT. - 9 FT./SP WHITE MINISKIP (4")
P11	2 FT. - 6 FT./SP WHITE MINISKIP (6")	PS	WHITE GORELINE (12")	DA	LEFT TURN ARROW
P12	2 FT. - 6 FT./SP YELLOW MINISKIP (6")	PU	WHITE DIAGONAL (12")	DI	ALPHANUMERIC CHAR.
P13	3 FT. - 9 FT./SP WHITE MINISKIP (8")	PT	WHITE SOLID LANE LINE (12")	<b>PAVEMENT MARKERS</b>	
P14	3 FT. - 9 FT./SP WHITE MINISKIP (12")	PV	YELLOW DIAGONAL (12")	Symbol	Description
PA	WHITE EDGELINE (4")	QA	LEFT TURN ARROW	MH	TEMPORARY RAISED MARKER (Yellow/Yellow)
PB	YELLOW EDGELINE (4")	QB	RIGHT TURN ARROW	MI	TEMPORARY RAISED MARKER (Crystal/Red)
PC	10 FT. WHITE SKIP (4")	QC	STRAIGHT ARROW		
PD	3 FT. - 9 FT./SP WHITE MINISKIP (4")	QD	COMBO. LEFT/STRAIGHT ARROW		
PE	WHITE SOLID LANE LINE (4")	QE	COMBO. RIGHT/STRAIGHT ARROW		
PF	10 FT. YELLOW SKIP (4")	QI	ALPHANUMERIC CHAR.		
PH	YELLOW SINGLE CENTER (4")	QN	24" YIELD LINE TRIANGLE		
PI	YELLOW DOUBLE CENTER (4")	QP	MERGE ARROW		
PJ	10 FT. WHITE SKIP (6")	QT	U-TURN ARROW		

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**RKK**  
 P: (919) 878-8560  
 8601 Six Forks Road, Forum 1, Suite 700  
 Raleigh, North Carolina 27615-3960  
 NC License No. F-0112  
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 SEAL

**KEVIN W. BISHOP**  
 PROFESSIONAL ENGINEER  
 NO. 21047  
 STATE OF NORTH CAROLINA

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

**ROADWAY STANDARD DRAWINGS & LEGEND**

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**RK&K**  
 P: (919) 878-8560  
 8601 Six Forks Road, Forum 1, Suite 700  
 Raleigh, North Carolina 27615-3960  
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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 UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

### TIME RESTRICTIONS

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

ROAD NAME	DAY AND TIME RESTRICTIONS
US 29 AND RAMPS	MONDAY THROUGH FRIDAY 6:00 AM TO 8:00 PM
	SATURDAY AND SUNDAY 10:00 AM TO 7:00 PM
REEDY FORK PKWY SR 2526 (SUMMIT AVE)	MONDAY THROUGH FRIDAY 6:00 AM TO 9:00 AM 4:00 PM TO 7:00 PM

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

#### ROAD NAME

US 29 AND RAMPS  
 REEDY FORK PKWY  
 SR 2526 (SUMMIT AVE)

#### HOLIDAY

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 AM DECEMBER 31<sup>st</sup> TO 7:00 PM JANUARY 2<sup>nd</sup>. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY, THEN UNTIL 7:00 PM THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 6:00 AM THURSDAY AND 7:00 PM MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 AM FRIDAY TO 7:00 PM TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 AM THE DAY BEFORE INDEPENDENCE DAY AND 7:00 PM THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY, THEN BETWEEN THE HOURS OF 6:00 AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 PM THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 AM FRIDAY TO 7:00 PM TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 AM TUESDAY AND 7:00 PM MONDAY.

8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

9. FOR THE WYNDHAM CHAMPIONSHIP IN GREENSBORO, BETWEEN THE HOURS OF 6:00 AM AND 8:00 PM STARTING THE WEDNESDAY OF THE WEEK OF THE TOURNAMENT UNTIL THE MONDAY AFTER THE TOURNAMENT.

C) DO NOT CLOSE ROADS AS FOLLOWS:

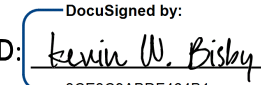
ROAD NAME	DAY AND TIME RESTRICTIONS
EXISTING US 29 SOUTHBOUND EXIT RAMP EXISTING US 29 NORTHBOUND ENTRANCE RAMP	6:00 AM MONDAY THROUGH 10:00 PM FRIDAY SATURDAY AND SUNDAY 6:00 AM TO 10:00 PM

D) DO NOT STOP TRAFFIC AS FOLLOWS:

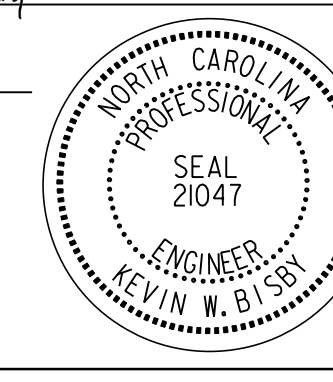
ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
US 29 REEDY FORK PKWY	MONDAY THROUGH SUNDAY 5:00 AM TO 12:00 (MIDNIGHT)	30 MINUTE MAXIMUM ROAD CLOSURE DURATION FOR BRIDGE DEMOLITION; GIRDER, OVERHANG AND FALSEWORK INSTALLATION OR REMOVAL; OVERHEAD SIGN ASSEMBLIES

E) EXCLUDING HAULING OPERATIONS THAT ARE CONDUCTED ENTIRELY BEHIND A TEMPORARY TRAFFIC BARRIER OR GUARDRAIL, MULTI-VEHICLE HAULING SHALL NOT BE ALLOWED INGRESS AND EGRESS FROM ANY OPEN TRAVEL LANE DURING THE FOLLOWING TIME RESTRICTIONS:

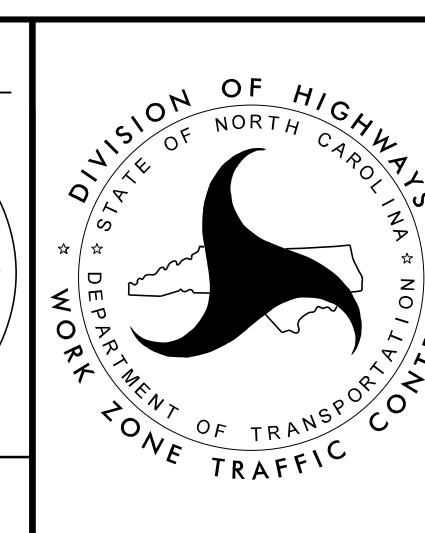
ROAD NAME	DAY AND TIME RESTRICTIONS
US 29 AND RAMPS	MONDAY THROUGH FRIDAY 6:00 AM TO 8:00 PM SATURDAY AND SUNDAY 10:00 AM TO 7:00 PM
REEDY FORK PKWY SR 2526 (SUMMIT AVE)	MONDAY THROUGH FRIDAY 6:00 AM TO 9:00 AM 4:00 PM TO 7:00 PM

APPROVED:   
 DATE: 3/31/2020

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**TRANSPORTATION  
OPERATIONS PLAN**

**GENERAL NOTES**

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**RK&K**  
 P: (919) 878-8560  
 8601 Six Forks Road, Forum 1, Suite 700  
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- F) DO NOT CONDUCT ANY HAULING OPERATION AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVEL WAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL, OR AS DIRECTED BY THE ENGINEER.
- G) HAUL VEHICLES SHALL NOT ENTER AND EXIT AND OPEN TRAVEL LANE AT SPEEDS MORE THAN 10 MPH BELOW THE POSTED SPEED LIMIT.

### LANE AND SHOULDER CLOSURE REQUIREMENTS

- H) 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.
- I) WHEN BARRIER IS SET ON THE ROADWAY SHOULDER, INSTALL SHOULDER CLOSURE SIGNS AND DEVICES IN ADVANCE OF THE BARRIER USING RDWY. STD. 1101.04.
- J) WHEN PERSONNEL OR EQUIPMENT ARE WORKING WITHIN 15 FT. OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING RDWY. STD. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL, OR A LANE CLOSURE IS USED.
- K) WHEN PERSONNEL 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 RDWY. STD. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT. OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING RDWY. STD. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

- L) WHEN PERSONNEL OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED 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 EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- M) DO NOT PERFORM WORK INVOLVING HEAVY EQUIPMENT WITHIN 15 FEET OF THE EDGE OF TRAVEL WAY WHEN WORK IS BEING PERFORMED BEHIND A LANE CLOSURE ON THE OPPOSITE SIDE OF THE TRAVEL WAY.
- N) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON US 29.

### PAVEMENT EDGE DROP-OFF REQUIREMENTS

- O) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:
  - BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.
  - BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.
  - BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER AT NO EXPENSE TO THE DEPARTMENT.
  - REFER TO THE CURRENT AASHTO *ROADSIDE DESIGN GUIDE* FOR PROPER TREATMENT OF ALL OTHER CONDITIONS.

- P) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. ERECT ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500' IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

### TRAFFIC PATTERN ALTERATIONS

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

### SIGNING

- R) ERECT 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.
- S) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
- T) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.
- U) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

### TRAFFIC BARRIER

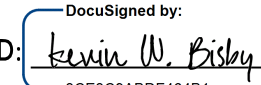

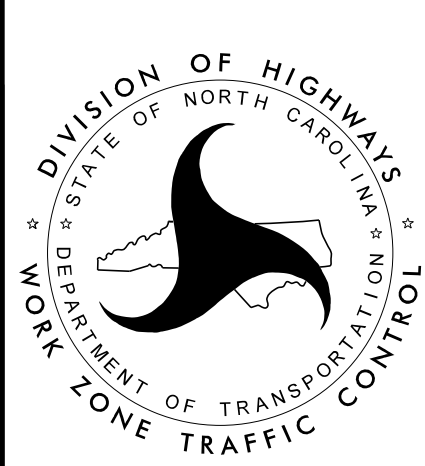
- V) SET TEMPORARY BARRIER ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS SET AT ANY LOCATION PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SET BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS SET 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.

SET 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.

SET 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 SET OR AFTER THE TEMPORARY BARRIER IS REMOVED.

APPROVED:  DATE: 3/31/2020  SEAL			<b>TRANSPORTATION OPERATIONS PLAN</b>  <b>GENERAL NOTES</b>
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**RK&K**  
 P: (919) 878-8560  
 8601 Six Forks Road, Forum 1, Suite 700  
 Raleigh, North Carolina 27615-3960  
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## GENERAL NOTES

### MISCELLANEOUS

W) 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: (SEE ALSO 1101.05)

POSTED SPEED LIMIT (mph)	MINIMUM OFFSET (ft.)
< 40	15
45 - 50	20
55	25
> 60	30

### TRAFFIC CONTROL DEVICES

X) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREA 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 TRAVEL WAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTION 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

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

### PAVEMENT MARKINGS AND MARKERS

Z) APPLY TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
US 29 REEDY FORK PKWY	PAINT	TEMPORARY RAISED
BRIDGES	COLD APPLIED PLASTIC (TYPE 4)	TEMPORARY RAISED
ALL OTHER ROADS	PAINT	NONE

AA) APPLY ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. APPLY A SECOND APPLICATION OF PAINT SIX MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

BB) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

CC) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

DD) TRACE THE MONOLITHIC ISLAND LOCATIONS WITH THE PROPER COLOR PAVEMENT MARKINGS PRIOR TO INSTALLATION. PLACE DRUMS TO DELINEATE ANY REMOVED MONOLITHIC ISLANDS.

EE) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND INTERSECTIONS AS DIRECTED BY THE ENGINEER.

FF) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON THE PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.

GG) 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 TRAVEL WAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.). (SEE SPECIAL PROVISIONS)

## LOCAL NOTES

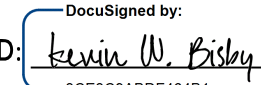
1) INFORM THE ENGINEER OF UPCOMING CONSTRUCTION ACTIVITIES IN ORDER TO ALLOW COORDINATION WITH THE GUILFORD COUNTY SCHOOL SYSTEM, GUILFORD COUNTY EMERGENCY SERVICES, GREENSBORO FIRE DEPARTMENT AND WITH PROCTER & GAMBLE AND MORRISSETTE.

2) TO ENSURE THAT PROJECT INFORMATION CAN BE DISTRIBUTED TO THE PUBLIC USING STANDARD METHODS, INCLUDING BUT NOT LIMITED TO NOTIFYING MEDIA OUTLETS, THE CONTRACTOR SHALL INFORM THE DEPARTMENT AT LEAST THIRTY (30) CALENDAR DAYS IN ADVANCE OF ANY CONSTRUCTION ACTIVITY THAT WILL SIGNIFICANTLY IMPACT THE PUBLIC. THESE ACTIVITIES SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE START OF CONSTRUCTION, MAJOR TRAFFIC SHIFTS, ROAD CLOSURES, RAMP CLOSURES, DETOURS, NIGHT WORK AND PROJECT COMPLETION.

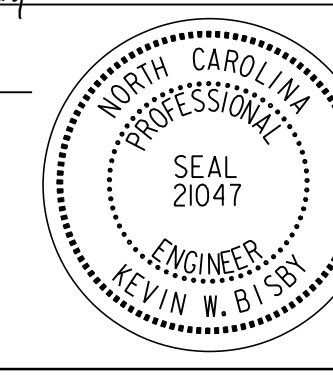
3) IN THE EVENT THAT TYPE "D", "E" OR "F" SIGNS CONFLICT WITH CONSTRUCTION OPERATIONS, RELOCATE THE SIGN IN A LOCATION, AND USING METHODS, APPROVED BY THE ENGINEER. LOCATE THE SIGN A MINIMUM OF 20' FROM THE NEAREST TRAVEL LANE ON FREEWAYS; AND A 6' MINIMUM CLEARANCE ON ALL OTHER ROADS UNLESS PROTECTED BY BARRIER OR GUARDRAIL. MINIMUM VERTICAL CLEARANCE IS 7' ABOVE THE EDGE OF THE NEAREST TRAVEL LANE.

4) IN THE EVENT THAT TYPE "A" OR "B" SIGNS CONFLICT WITH CONSTRUCTION OPERATIONS, RELOCATE THE SIGN IN A LOCATION, AND USING METHODS, APPROVED BY THE ENGINEER. LOCATE THE SIGN A MINIMUM OF 30' FROM THE NEAREST TRAVEL LANE UNLESS PROTECTED BY BARRIER OR GUARDRAIL. MINIMUM VERTICAL CLEARANCE IS 7' ABOVE THE EDGE OF THE NEAREST TRAVEL LANE.

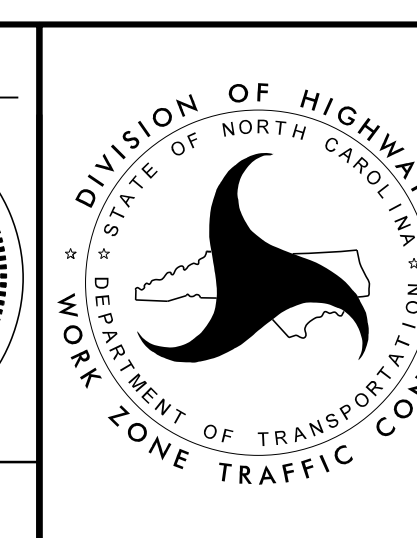
5) IN THE EVENT THAT AN OVERHEAD SIGN ASSEMBLY CONFLICTS WITH CONSTRUCTION OPERATIONS, GROUND MOUNT EXISTING OVERHEAD SIGN(S) IN A LOCATION, AND USING METHODS, APPROVED BY THE ENGINEER. LOCATE THE SIGN A MINIMUM OF 30' FROM THE NEAREST TRAVEL LANE UNLESS PROTECTED BY BARRIER OR GUARDRAIL. MINIMUM VERTICAL CLEARANCE IS 7' ABOVE THE EDGE OF THE NEAREST TRAVEL LANE.

APPROVED:   
 DATE: 3/31/2020

SEAL

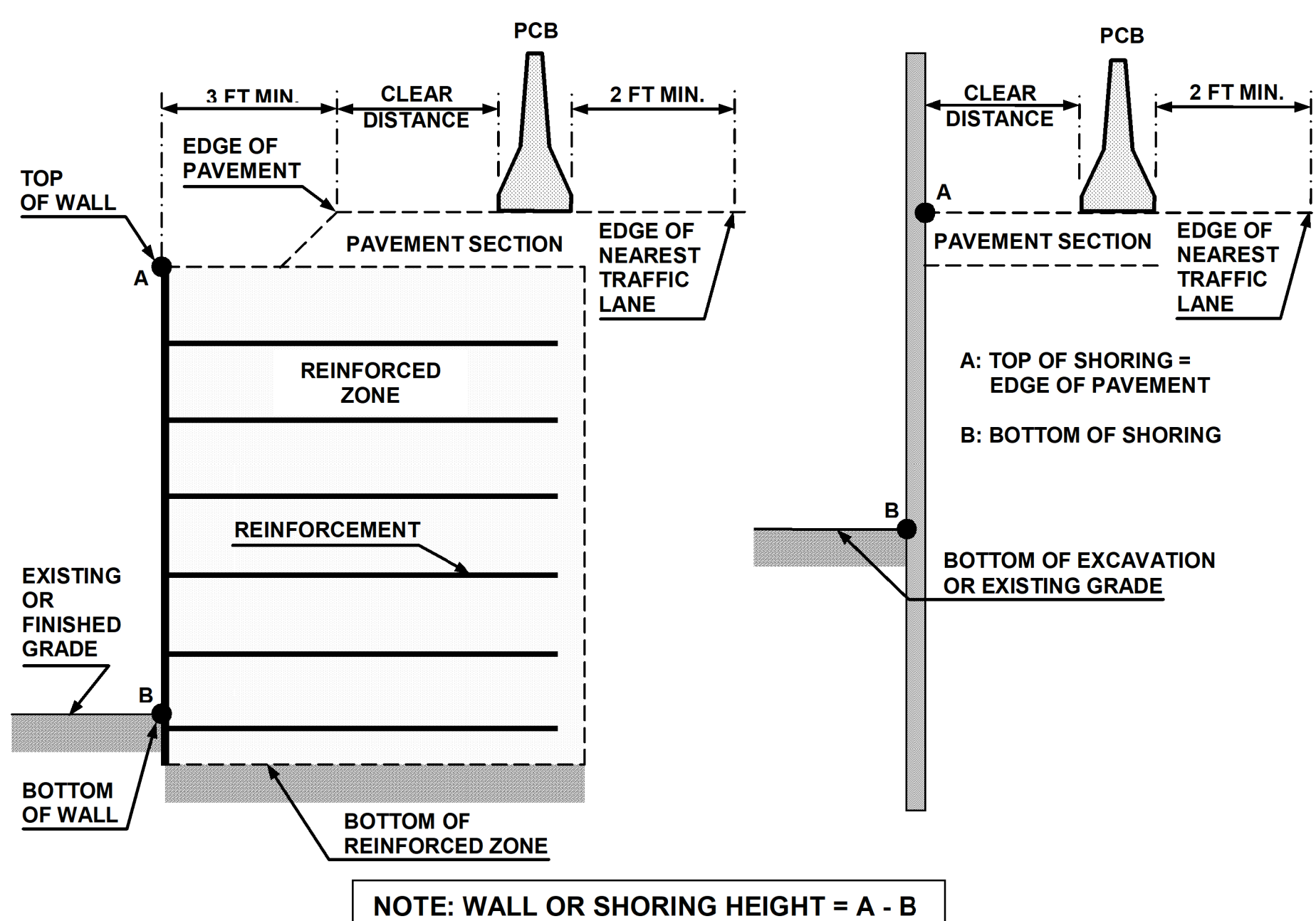


**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



**TRANSPORTATION  
OPERATIONS PLAN**

**GENERAL AND LOCAL NOTES**



**FIGURE A**

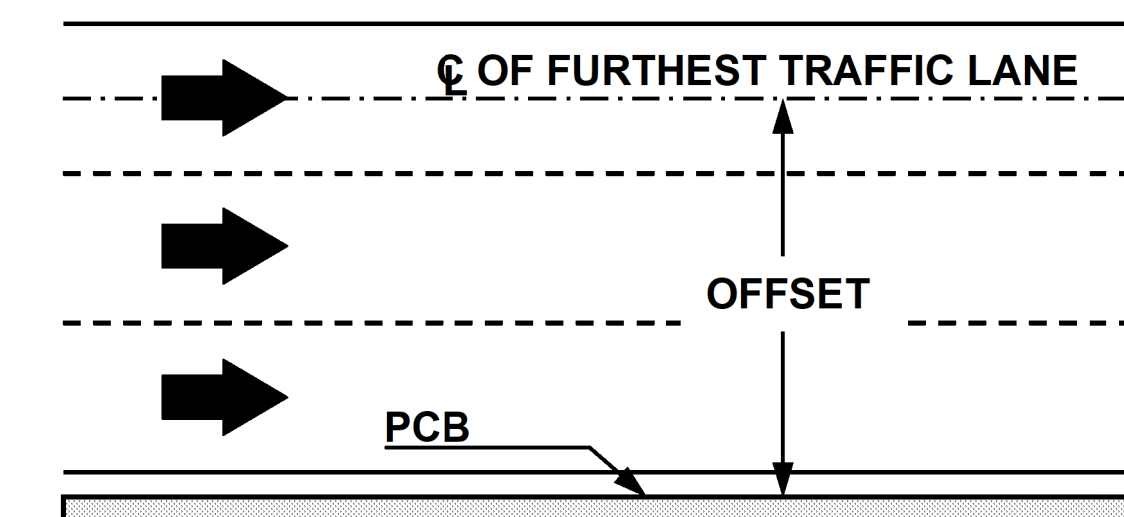
**NOTES**

- 1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.
- 2- REFER TO THE "TEMPORARY SHORING" PROJECT SPECIAL PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).
- 3- PCB IS REQUIRED IF TEMPORARY SHORING 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 UNIT 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 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- PCB REQUIREMENTS FOR TEMPORARY WALLS APPLY TO TEMPORARY MECHANICALLY STABILIZED EARTH (MSE) WALLS AND TEMPORARY SOIL NAIL WALLS.
- 8- 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 AND OR AS APPROVED BY THE ENGINEER.
- 9- 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 THESE MINIMUM REQUIRED DISTANCES ARE NOT AVAILABLE, CONTACT THE ENGINEER.
- 10- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS. BARRIER DEFLECTIONS AND RESULTING MINIMUM REQUIRED CLEAR DISTANCES MIGHT VARY SIGNIFICANTLY FOR LARGER HEAVIER VEHICLES, RUNS OF BARRIER LESS THAN 200 FT IN LENGTH AND WET OR DRY PAVEMENT.

**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
		44-50	31	35	41	43	46	49
		50-56	32	36	42	44	47	50
	>56	32	36	42	45	47	51	
	Concrete	<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
		26-32	24	25	27	28	32	35
		32-38	24	26	27	30	33	36
		38-44	25	26	28	30	34	37
		44-50	26	26	28	32	35	37
50-56		26	26	28	32	35	38	
>56	26	27	29	32	36	38		
Anchored PCB	Asphalt	All Offsets	24 for All Design Speeds					
Anchored PCB	Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds					

\* See Figure Below



**FIGURE B**

APPROVED: _____ DATE: _____ SEAL		<b>PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS</b>
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

3/31/2009  
 11:57 AM  
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PROJ. REFERENCE NO.	SHEET NO.
R - 4707	TMP - 2A

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**TEMPORARY SHORING NO. 1**

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

DESIGN TEMPORARY SHORING FROM -L- STA 60+24±, 10 FT. LT. TO -L- STA 61+70±, 10 FT. LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT OF SOIL ABOVE WATER TABLE,  $\gamma = 120$  PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE,  $\gamma' = 60$  PCF
- FRICTION ANGLE,  $\phi = 30$
- COHESION,  $c = 0$  PSF
- GROUNDWATER ELEVATION = N/A

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

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM -L- STA 60+24±, 10 FT. LT. TO -L- STA 61+70±, 10 FT. LT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM -L- STA 60+24±, 10 FT. LT. TO -L- STA 61+70±, 10 FT. LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

DRIVEN PILING FOR TEMPORARY SHORING FROM -L- STA 60+24±, 10 FT. LT. TO -L- STA 61+70±, 10 FT. LT. MAY NOT PENETRATE BELOW ELEVATION 690 DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS, OR WEATHERED OR HARD ROCK.

**TEMPORARY SHORING NO. 2**

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

DESIGN TEMPORARY SHORING FROM -L- STA 60+24±, 10 FT. RT. TO -L- STA 61+70±, 10 FT. RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- UNIT WEIGHT OF SOIL ABOVE WATER TABLE,  $\gamma = 120$  PCF
- UNIT WEIGHT OF SOIL BELOW WATER TABLE,  $\gamma' = 60$  PCF
- FRICTION ANGLE,  $\phi = 30$
- COHESION,  $c = 0$  PSF
- GROUNDWATER ELEVATION = N/A

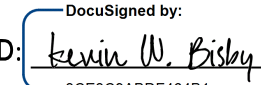
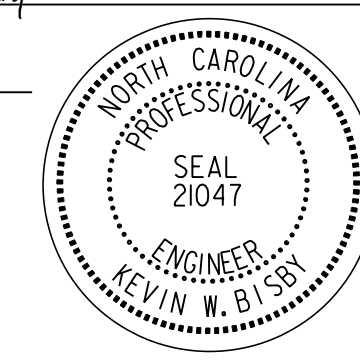
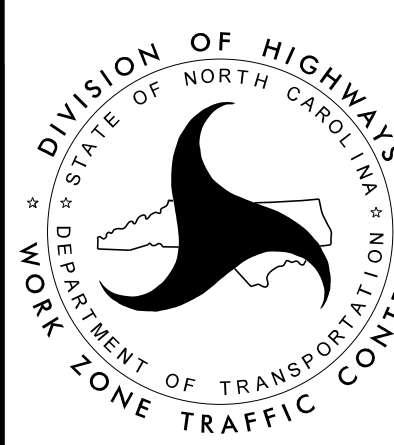
BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

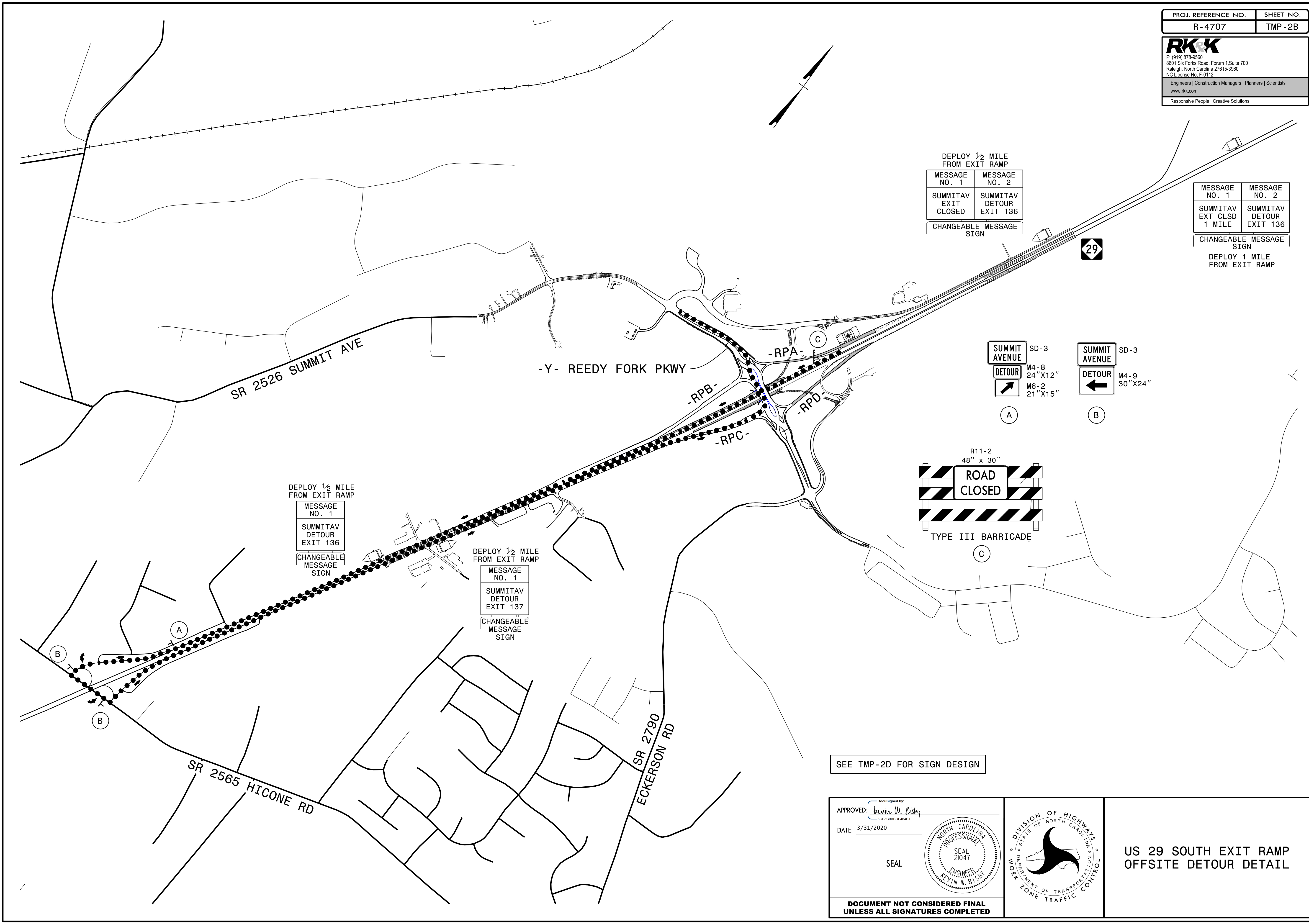
LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF TEMPORARY SHORING FROM -L- STA 60+24±, 10 FT. RT. TO -L- STA 61+70±, 10 FT. RT. THE INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM -L- STA 60+24±, 10 FT. RT. TO -L- STA 61+70±, 10 FT. RT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

DRIVEN PILING FOR TEMPORARY SHORING FROM -L- STA 60+24±, 10 FT. RT. TO -L- STA 61+70±, 10 FT. RT. MAY NOT PENETRATE BELOW ELEVATION 690 FT. DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS, OR WEATHERED OR HARD ROCK.

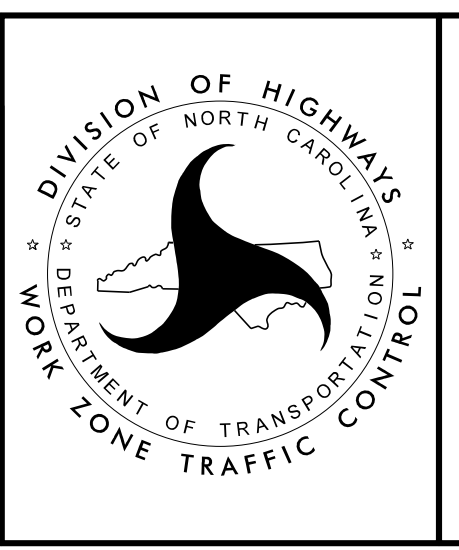
3/31/2020  
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gbrfaulst

<p>APPROVED:   <small>DocuSigned by: Kevin W. Bisby 3CE3C9A80F464B1...</small></p> <p>DATE: 3/31/2020</p> <p>SEAL</p> 		<p>TEMPORARY SHORING NOTES</p>
<p><b>DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED</b></p>		



SEE TMP-2D FOR SIGN DESIGN

APPROVED: *Kevin W. Bisby*  
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 SEAL  
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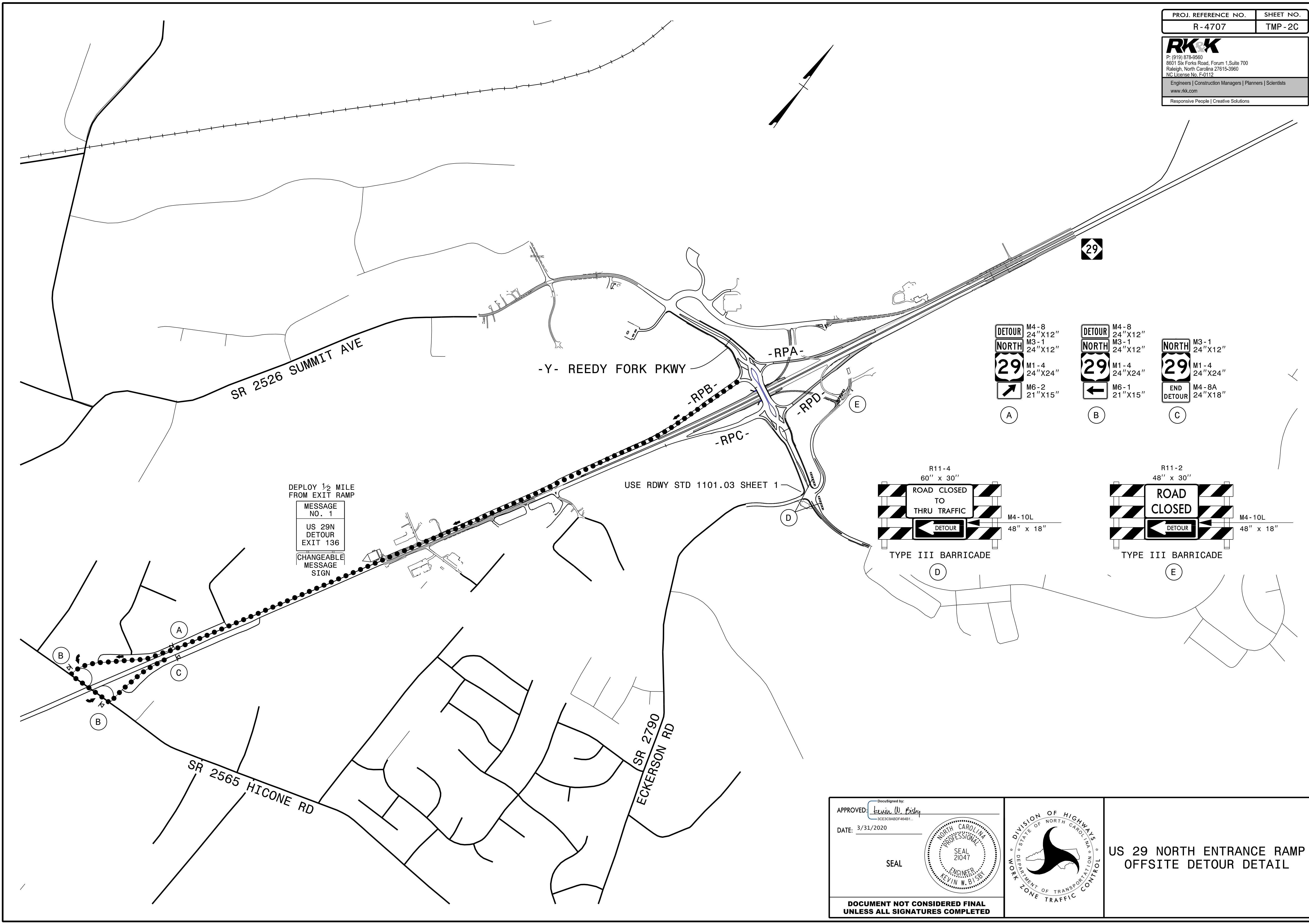


**US 29 SOUTH EXIT RAMP  
OFFSITE DETOUR DETAIL**



PROJ. REFERENCE NO. R-4707	SHEET NO. TMP-2C
-------------------------------	---------------------

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DEPLOY 1/2 MILE FROM EXIT RAMP  
 MESSAGE NO. 1  
 US 29N DETOUR EXIT 136  
 CHANGEABLE MESSAGE SIGN

USE RDWY STD 1101.03 SHEET 1

<p>DETOUR NORTH 29 M4-8 24"X12" M3-1 24"X12" M1-4 24"X24" M6-2 21"X15"</p> <p>(A)</p>	<p>DETOUR NORTH 29 M4-8 24"X12" M3-1 24"X12" M1-4 24"X24" M6-1 21"X15"</p> <p>(B)</p>	<p>DETOUR NORTH 29 M3-1 24"X12" M1-4 24"X24" M4-8A 24"X18"</p> <p>(C)</p>
---	---	---

R11-4 60" x 30"  
 ROAD CLOSED TO THRU TRAFFIC  
 M4-10L 48" x 18"  
 TYPE III BARRICADE (D)

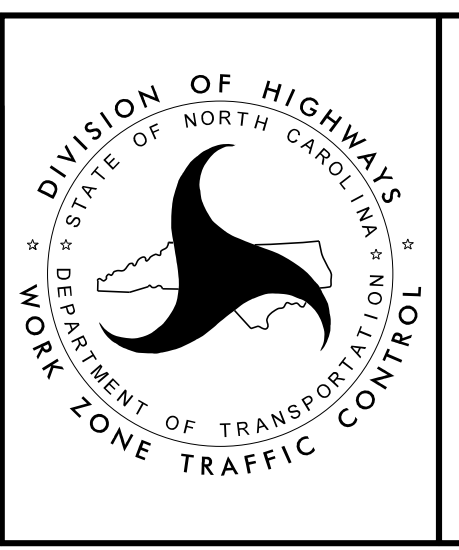
R11-2 48" x 30"  
 ROAD CLOSED  
 M4-10L 48" x 18"  
 TYPE III BARRICADE (E)

3/31/2020  
 R:\01\TMP\_PSH02C.dgn  
 gbrault

APPROVED: *Kevin W. Bisby*  
 DATE: 3/31/2020  
 SEAL

SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 21047  
 KEVIN W. BISBY

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US 29 NORTH ENTRANCE RAMP OFFSITE DETOUR DETAIL



**SIGN NUMBER:** SD-1  
**TYPE:** D  
**QUANTITY:** SEE PLAN  
**SIGN WIDTH:** 5'-6"  
**HEIGHT:** 1'-6"  
**TOTAL AREA:** 8.3 Sq.-Ft.  
**BORDER TYPE:** RECESSED  
**RECESS:** 0.38"  
**WIDTH:** 0.63"  
**RADII:** 1.5"  
**NO. Z BARS:**  
**LENGTH:**

**BACKG COLOR:** Fluorescent Orange  
**COPY COLOR:** Black

SYMBOL	X	Y	WID	HT
AR_Type D	3.2	5.2	5	7.5

**DESIGN BY:** K. Bisby  
**CHECKED BY:** B. Holden  
**PROJECT ID:** R-4707  
**LOCATION:** See Plan  
**FEB 11, 2020**  
**DIV:** 7

**USE NOTES:** 1, 2

- 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															Series/Size				
	P	R	O	C	T	E	R	&	G	A	M	B	L	E	Text Length				
	13.3	2.8	2.8	3.1	2.7	2.6	2.7	2.2	5	3.5	5	2.7	3.4	3.5	3	2.6	1.9	3.2	B 2000
																			49.5
	M	O	R	R	I	S	E	T	T	E									B 2000
	13.3	3.4	3.2	2.9	2.9	1.4	2.9	2.3	2.2	2.6	1.9	26.8							25.9

FILENAME: R4707\_TMP\_SIGN DESIGNS NORTH CAROLINA D.O.T. SIGN DETAIL

**SIGN NUMBER:** SD-2  
**TYPE:** D  
**QUANTITY:** SEE PLAN  
**SIGN WIDTH:** 5'-6"  
**HEIGHT:** 1'-6"  
**TOTAL AREA:** 8.3 Sq.-Ft.  
**BORDER TYPE:** RECESSED  
**RECESS:** 0.38"  
**WIDTH:** 0.63"  
**RADII:** 1.5"  
**NO. Z BARS:**  
**LENGTH:**

**BACKG COLOR:** Fluorescent Orange  
**COPY COLOR:** Black

SYMBOL	X	Y	WID	HT
AR_Type D	57.3	6	5	7.5

**DESIGN BY:** K. Bisby  
**CHECKED BY:** B. Holden  
**PROJECT ID:** R-4707  
**LOCATION:** See Plan  
**FEB 11, 2020**  
**DIV:** 7

**USE NOTES:** 1, 2

- 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															Series/Size				
	P	R	O	C	T	E	R	&	G	A	M	B	L	E	Text Length				
	2.8	2.9	2.8	3.1	2.7	2.6	2.7	2.2	5	3.5	5	2.7	3.4	3.6	3	2.6	1.9	13.7	B 2000
																			49.5
	M	O	R	R	I	S	E	T	T	E									B 2000
	2.8	3.4	3.2	2.9	2.9	1.4	2.9	2.3	2.2	2.6	1.9	37.3							26

FILENAME: R4707\_TMP\_SIGN DESIGNS NORTH CAROLINA D.O.T. SIGN DETAIL

**SIGN NUMBER:** SD-3  
**TYPE:** D  
**QUANTITY:** SEE PLAN  
**SIGN WIDTH:** 2'-6"  
**HEIGHT:** 1'-6"  
**TOTAL AREA:** 3.8 Sq.-Ft.  
**BORDER TYPE:** RECESSED  
**RECESS:** 0.38"  
**WIDTH:** 0.63"  
**RADII:** 1.5"  
**NO. Z BARS:**  
**LENGTH:**

**BACKG COLOR:** Fluorescent Orange  
**COPY COLOR:** Black

SYMBOL	X	Y	WID	HT
AR_Type D				

**DESIGN BY:** K. Bisby  
**CHECKED BY:** B. Holden  
**PROJECT ID:** R-4707  
**LOCATION:** See Plan  
**FEB 11, 2020**  
**DIV:** 7

**USE NOTES:** 1, 2

- 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										Series/Size
	S	U	M	M	I	T	A	V	E	Text Length
	4.8	3.7	3.9	4.4	4.4	1.4	2.6	4.8		C 2000
										20.3
	A	V	E	N	U	E				C 2000
	4.5	3.5	3.8	3.4	3.9	3.9	2.6	4.5		21.1

FILENAME: R4707\_TMP\_SIGN DESIGNS NORTH CAROLINA D.O.T. SIGN DETAIL

**SIGN NUMBER:** SD-4  
**TYPE:** D  
**QUANTITY:** SEE PLAN  
**SIGN WIDTH:** 4'-6"  
**HEIGHT:** 2'-0"  
**TOTAL AREA:** 9.0 Sq.-Ft.  
**BORDER TYPE:** RECESSED  
**RECESS:** 0.38"  
**WIDTH:** 0.63"  
**RADII:** 1.5"  
**NO. Z BARS:**  
**LENGTH:**

**BACKG COLOR:** Fluorescent Orange  
**COPY COLOR:** Black

SYMBOL	X	Y	WID	HT
AR_Type D	6.3	9.5	5	7.5

**DESIGN BY:** K. Bisby  
**CHECKED BY:** B. Holden  
**PROJECT ID:** R-4707  
**LOCATION:** See Plan  
**FEB 17, 2020**  
**DIV:** 7

**USE NOTES:** 1, 2

- 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										Series/Size
	S	u	m	m	i	t	A	v	e	Text Length
	19.8	4.9	4.7	7.1	7.1	1.6	2.4	6.3		D 2000
										27.8
	A	v	e	n	u	e				D 2000
	20.2	5.4	4.7	4.4	4.6	4.5	3.5	6.7		27.2

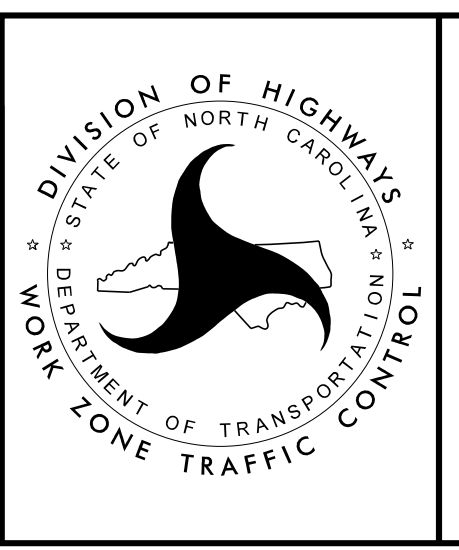
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3/31/2020 R4707\_TMP\_PSH02D.dgn gbfault

APPROVED: 3CE3C9A80F46481...  
DATE: 3/31/2020

SEAL

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**SIGN DESIGNS**

# TRAFFIC CONTROL PHASING

PROJ. REFERENCE NO. R - 4707	SHEET NO. TMP - 3
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## PHASE I

### STEP 1:

USING RDWY STD 1101.01, ERECT WORK ZONE ADVANCE WARNING SIGNS IN ACCORDANCE WITH RDWY STD 1101.01:

- -L- US 29 AND EXISTING RAMP
- -Y-/-Y1- SR 2526 SUMMIT AVE
- -Y-/-Y2- SR 4771 EXISTING REEDY FORK PKWY
- -Y5- SR 2790 ECKERSON RD

### STEP 2:

USING RDWY STD 1101.02, REPLACE EXISTING MEDIAN SHOULDER TO THE EDGE AND ELEVATION OF THE EXISTING PAVEMENT: (SEE TMP-5 AND 5A)

- -L- STA 55+00± TO STA 64+00± RT
- -L- STA 58+00± TO STA 67+00± LT

USING RDWY STD 1101.02 AND AWAY FROM TRAFFIC, **BEGIN** CONSTRUCTION AS FOLLOWS: (SEE TMP-4, 4A, 5, 6, 6A AND 7)

- -RPA- STA 25+49± TO STA 28+29±
- -SPA- STA 25+49± TO STA 29+89±
- -RPB- STA 32+00± TO STA 42+79±
- -SPB- STA 40+71± TO STA 45+74±
- -RPC- STA 17+00± TO STA 25+38±
- -SPC- STA 23+50± TO STA 28+24±
- -RPD- STA 23+63± TO STA 26+13±
- -SPD- STA 23+63± TO STA 27+69±
- -Y- STA 21+00± TO STA 40+00±
- -Y- STA 43+00± TO STA 51+00±
- -Y- STA 53+44± TO STA 58+80± LT
- -Y- STA 54+57± TO STA 58+80± RT
- -Y1- STA 10+18± TO STA 20+66±. LEAVE A GAP IN CONSTRUCTION BETWEEN -Y1- STA 14+77± AND STA 15+45± TO MAINTAIN DRIVEWAY ACCESS OR AS DIRECTED BY THE ENGINEER.
- -Y1- STA 23+95± TO STA 32+45±
- -Y2- STA 10+50± TO STA 20+45±
- -Y3A- STA 13+36± TO STA 17+59±
- -Y4- STA 10+19± TO STA 14+65±
- -Y5- STA 10+36± TO STA 12+10±
- -DR1- STA 10+15± TO STA 13+66± (CONSTRUCT TEMPORARY PAVEMENT FOR FUTURE ACCESS)

CONSTRUCT ROADWAYS EXCLUDING THE FINAL LAYER OF SURFACE COURSE.

### STEP 3:

USING RDWY STD 1101.02, REDUCE THE LANE WIDTH ON -L- US 29 TO 11'. SET PORTABLE CONCRETE BARRIER CONSTRUCT OF THE INTERIOR BENT OF THE -Y- REEDY FORK PKWY BRIDGE. (SEE TMP-5 THROUGH 5C).

### STEP 4:

USING RDWY STD 1101.02 AND BEHIND BARRIER, CONSTRUCT TEMPORARY PAVEMENT AND GUARDRAIL: (SEE TMP-5 THROUGH 5C)

- -L- STA 55+00± TO STA 64+00± RT
- -L- STA 58+00± TO STA 67+00± LT

## PHASE II

### STEP 1:

USING RDWY STD 1101.02, REMOVE THE EXISTING MEDIAN PAVED SHOULDERS AND CONSTRUCT TEMPORARY PAVEMENT ON -L- US 29 TO THE EDGE AND ELEVATION OF THE EXISTING PAVEMENT: (SEE TMP-8, 8A, 8C, 9, 9A, 10, 10C, 11 AND 11A)

- -L- STA 18+35± TO STA 31+65± LT
- -L- STA 32+46± TO STA 55+00± RT
- -L- STA 64+00± TO STA 92+25± RT
- -L- STA 35+79± TO STA 58+00± LT
- -L- STA 67+00± TO STA 92+25± LT

USING RDWY STD 1101.02, CONSTRUCT TEMPORARY GUARDRAIL IN THE MEDIAN OF US 29. (SEE TMP-9, 9A, 10, 10A, 10B, 10C, 11 AND 11A)

### STEP 2:

USING RDWY STD 1101.02, APPLY PAVEMENT MARKINGS, AND SHIFT TRAFFIC ONTO THE TEMPORARY PAVEMENT IN THE MEDIAN: (SEE TMP-8 THROUGH 11A)

- -L- STA 18+35± TO STA 92+25± LT
- -L- STA 29+35± TO STA 92+25± RT

USE COLD APPLIED PLASTIC (TYPE 4) PAVEMENT MARKINGS WHEN TRANSITIONING FROM A SHIFTED TRAFFIC PATTERN TO THE EXISTING TRAFFIC PATTERN AT THE END OF EACH DAY'S OPERATION. USE APPROPRIATE SHIFTING TAPERS PER RDWY STD 1101.11.

### STEP 3:

USING RDWY STD 1101.02, RECONSTRUCT THE EXISTING ACCELERATION/DECELERATION LANES AND OUTSIDE PAVED SHOULDERS TO THE EDGE AND ELEVATION OF THE EXISTING PAVEMENT: (SEE TMP-8A, 9, 9A, 10, 10C AND 11)

- -L- STA 33+00± TO STA 51+00± RT
- -L- STA 63+74± TO STA 69+73± RT
- -L- STA 63+33± TO STA 68+99± LT
- -L- STA 72+80± TO STA 83+50± RT
- -L- STA 72+46± TO STA 77+05± LT

### STEP 4:

USING RDWY STD 1101.02, PAVE US 29 EXCLUDING THE FINAL LAYER OF SURFACE COURSE: (SEE TMP-8, 8A, 8C, 9, 9B, 10, 10C, 11 AND 11A)

- -L- STA 20+00± TO STA 46+60± LT
- -L- STA 32+46± TO STA 51+00± RT
- -L- STA 72+46± TO STA 90+25± LT
- -L- STA 72+80± TO STA 90+25± RT

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# TRAFFIC CONTROL PHASING

PROJ. REFERENCE NO. R - 4707	SHEET NO. TMP -3A
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P: (919) 878-8560  
 8601 Six Forks Road, Forum 1, Suite 700  
 Raleigh, North Carolina 27615-3960  
 NC License No. F-0112  
 Engineers | Construction Managers | Planners | Scientists  
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**STEP 5:**

USING RDWY STD 1101.02, SET PORTABLE CONCRETE BARRIER. USING RDWY STD 1101.02 AND BEHIND THE BARRIER, **BEGIN** CONSTRUCTION OF THE OUTSIDE WIDENING, RAMPS, AND THE PROPOSED BRIDGE EXCLUDING THE FINAL LAYER OF SURFACE COURSE: (SEE TMP-8, 8A, 8C, 9, 9B, 10, 11 AND 11A)

- -L- STA 20+00± TO STA 46+60± LT
- -L- STA 32+46± TO STA 51+00± RT
- -L- STA 75+96± TO STA 90+25± RT (CONSTRUCT TO THE EDGE AND ELEVATION OF THE EXISTING PAVEMENT)
- -L- STA 77+05± TO STA 90+25± LT (CONSTRUCT TO THE EDGE AND ELEVATION OF THE EXISTING PAVEMENT)
- -L- STA 21+50± TO STA 32+46± RT (CONSTRUCT TO THE EDGE AND ELEVATION OF THE EXISTING PAVEMENT)
- -RPB- STA 10+00± TO STA 32+00±
- -RPC- STA 10+00± TO STA 17+00±
- -Y- STA 40+00± TO STA 43+00±; WHEN CONSTRUCTING THE PROPOSED BRIDGE, STOP TRAFFIC ON -L- US 29 USING RDWY STD 1101.03 SHEET 9.

**COMPLETE PHASE I CONSTRUCTION:**

- -Y- STA 21+00± TO STA 25+87±
- -Y- STA 53+44± TO STA 58+80± LT
- -Y- STA 54+57± TO STA 58+80± RT
- -Y1- STA 10+18± TO STA 16+77±
- -Y1- STA 23+95± TO STA 32+45±
- -Y2- STA 10+50± TO STA 20+45±
- -Y3A- STA 13+36± TO STA 17+59±
- -Y4- STA 10+19± TO STA 14+65±
- -Y5- STA 10+36± TO STA 12+10±
- -DR1- STA 10+15± TO STA 13+66±

**STEP 6:**

IN A CONTINUOUS OPERATION, USING RDWY STD 1101.02, PAVE EXCLUDING THE FINAL LAYER OF SURFACE COURSE, APPLY PAVEMENT MARKINGS, AND DIRECT TRAFFIC INTO THE PATTERN SHOWN FOR -Y-, -Y1-, -Y2-, -Y3A, -Y4-, -Y5-, AND -DR1-. (SEE TMP-12 THROUGH 14)

**STEP 7:**

USING RDWY STD 1101.02, CONSTRUCT TEMPORARY TRAFFIC SIGNALS: (SEE SIGNAL PLAN)

- -Y-/-Y1- INTERSECTION
- -Y1-/EXISTING REEDY FORK PKWY
- -Y1-/EXISTING US 29 SOUTHBOUND RAMPS

USING RDWY STD 1101.02, CONSTRUCT EXCLUDING THE FINAL LAYER OF SURFACE COURSE: (SEE TMP-12 AND 12A)

- -Y1- STA 10+95± TO STA 12+50 LT
- -Y1- STA 14+77± TO STA 15+45±

**STEP 8:**

IN A CONTINUOUS OPERATION USING RDWY STD 1101.02, PAVE EXCLUDING THE FINAL LAYER OF SURFACE COURSE -Y1- SR 2526 (SUMMIT AVE), APPLY PAVEMENT MARKINGS, ACTIVATE THE TEMPORARY SIGNALS, AND DIRECT TRAFFIC INTO THE PATTERN SHOWN. -Y- (REEDY FORK PKWY) EAST OF THE -Y-/-Y1- INTERSECTION SHALL NOT BE OPENED BETWEEN -Y1- AND -Y2-/-Y5-. USE TYPE III BARRICADES TO CLOSE THE ROADWAY TO TRAFFIC. (SEE TMP-15, 15A AND 15B)

USING RDWY STD 1101.02 AND AWAY FROM TRAFFIC, CONSTRUCT THE EAST END OF -Y- REEDY FORK PKWY EXCLUDING THE FINAL LAYER OF SURFACE COURSE FROM -Y- STA 51+00± TO STA 54+97±, AND -Y- STA 55+91± TO STA 58+80± MEDIAN. (SEE TMP-16)

USING RDWY STD 1101.02, REMOVE EXISTING PAVEMENT PER THE ROADWAY PLAN. (SEE TMP-15, 16 AND 17)

**COMPLETE PHASE I AND II CONSTRUCTION:**

- -L- STA 20+00± TO STA 46+60± LT
- -L- STA 32+46± TO STA 51+00± RT
- -RPA- STA 25+49± TO STA 28+29±
- -SPA- STA 25+49± TO STA 29+89±
- -RPB- STA 10+00± TO STA 42+79±
- -SPB- STA 40+71± TO STA 45+74±
- -RPC- STA 10+00± TO STA 25+38±
- -SPC- STA 23+50± TO STA 28+24±
- -RPD- STA 23+63± TO STA 26+13±
- -SPD- STA 23+63± TO STA 27+69±
- -Y- STA 25+87± TO STA 51+00± (ROADWAY AND BRIDGE)

**PHASE III**

**STEP 1:**

AWAY FROM TRAFFIC CONSTRUCT SIGNALS AT THE -Y- INTERSECTIONS WITH -RPA-/-RPB- AND -RPC-/-RPD-. (SEE SIGNAL PLAN)

USING RDWY STD 1101.02, REMOVE AND RESET PORTABLE CONCRETE BARRIER AS INDICATED ON TMP-19, 20 AND 21.

**STEP 2:**

IN A CONTINUOUS OPERATION USING RDWY STD 1101.02, PAVE EXCLUDING THE FINAL LAYER OF SURFACE COURSE -Y- REEDY FORK PKWY, APPLY PAVEMENT MARKINGS, ACTIVATE THE SIGNALS AND OPEN -Y- REEDY FORK PKWY, -RPB- AND -RPC- TO TRAFFIC INTO THE PATTERN SHOWN. THE TEMPORARY SIGNAL AT THE -Y-/-Y1- INTERSECTION SHALL BE REVISED. THE EXISTING US 29 SOUTHBOUND ENTRANCE RAMP, NORTHBOUND EXIT RAMP AND EXISTING REEDY FORK PKWY BRIDGE SHALL BE CLOSED. (SEE TMP-18 THROUGH 21BA AND 22)

USING RDWY STD 1101.02, RECONSTRUCT THE EXISTING ACCELERATION/DECELERATION LANES AND OUTSIDE PAVED SHOULDERS TO THE EDGE AND ELEVATION OF THE EXISTING PAVEMENT: (SEE TMP-20, 21 AND 21C)

- -L- STA 46+60± TO STA 63+33± LT
- -L- STA 51+00± TO STA 63+74± RT

**STEP 3:**

USING RDWY STD 1101.02, PAVE US 29 EXCLUDING THE FINAL LAYER OF SURFACE COURSE: (SEE TMP-20, 21 AND 21C)

- -L- STA 46+60± TO STA 64+28± LT
- -L- STA 51+00± TO STA 63+74± RT

PERMANENTLY CLOSE EXISTING REEDY FORK PKWY AND BEGIN REMOVAL OF EXISTING REEDY FORK PKWY ROADWAY. REMOVE THE EXISTING REEDY FORK PKWY BRIDGE OVER US 29. STOP TRAFFIC ON -L- US 29 USING RDWY STD 1101.03 SHEET 9. (SEE TMP-21)

USING RDWY STD 1101.02, REMOVE EXISTING SUMMIT RD PAVEMENT PER THE ROADWAY PLAN. (SEE TMP-18)

**STEP 4:**

USING RDWY STD 1101.02, SET PORTABLE CONCRETE BARRIER AND **BEGIN** OUTSIDE WIDENING CONSTRUCTION EXCLUDING THE FINAL LAYER OF SURFACE COURSE: (SEE TMP-23, 24, 24A AND 25)

- -L- STA 46+60± TO STA 64+28± LT
- -L- STA 51+00± TO STA 63+35± RT

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 P: (919) 878-8560  
 8601 Six Forks Road, Forum 1, Suite 700  
 Raleigh, North Carolina 27615-3960  
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BEHIND BARRIER, CONSTRUCT OUTSIDE WIDENING EXCLUDING THE FINAL LAYER OF SURFACE COURSE: (SEE TMP-23, 24, 24A AND 25)

- L- STA 72+46± TO STA 77+05± LT
- L- STA 72+80± TO STA 75+96± RT

WORK IN A CONTINUOUS MANNER TO COMPLETE THE FOLLOWING WORK OF PHASE 3, STEP 4 FOR -RPA- AND -RPD- CONSTRUCTION. SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.	
ROAD NAME	DAY AND TIME RESTRICTIONS
EXISTING US 29 SOUTHBOUND EXIT RAMP EXISTING US 29 NORTHBOUND ENTRANCE RAMP	6:00 AM MONDAY THROUGH 10:00 PM FRIDAY SATURDAY AND SUNDAY 6:00 AM THROUGH 10:00 PM
USING WEEKEND NIGHTTIME RAMP CLOSURES, CONSTRUCT -RPA- AND -RPD- EXCLUDING THE FINAL LAYER OF SURFACE COURSE. RAMP TRAFFIC SHALL BE MAINTAINED DURING PERIODS OF CONSTRUCTION INACTIVITY: (SEE TMP-2B, 2C, 2D, 23 AND 24 THROUGH 25)	
<ul style="list-style-type: none"> <li>-RPA- STA 11+96± TO STA 25+49±</li> <li>-RPD- STA 11+04± TO STA 23+63±</li> </ul>	
<b>DO NOT CLOSE BOTH RAMPS SIMULTANEOUSLY.</b>	

**COMPLETE PHASE II CONSTRUCTION:**

- L- STA 75+96± TO STA 90+25± RT
- L- STA 77+05± TO STA 90+25± LT

REMOVE PORTABLE CONCRETE BARRIER NORTH OF THE US 29 SOUTHBOUND EXIT RAMP AND NORTHBOUND ENTRANCE RAMP.

STEP 5:

WORK IN A CONTINUOUS MANNER TO COMPLETE THE FOLLOWING WORK OF PHASE 3, STEP 5 FOR -RPA- AND -RPD- CONSTRUCTION. SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.	
ROAD NAME	DAY AND TIME RESTRICTIONS
EXISTING US 29 SOUTHBOUND EXIT RAMP EXISTING US 29 NORTHBOUND ENTRANCE RAMP	6:00 AM MONDAY THROUGH 10:00 PM FRIDAY
USING WEEKEND RAMP CLOSURES, CLOSE EXISTING US 29 SOUTHBOUND EXIT RAMP AND NORTHBOUND ENTRANCE RAMP AND CONSTRUCT -RPA- AND -RPD- EXCLUDING THE FINAL LAYER OF SURFACE COURSE WHERE THE RAMPS INTERSECT. APPLY PAVEMENT MARKINGS, ERECT APPLICABLE SIGNING, REVISE SIGNAL AND OPEN TO TRAFFIC. <b>DO NOT CLOSE BOTH RAMPS SIMULTANEOUSLY.</b> REQUIRED DETOUR SIGNING IS THE SAME AS INDICATED FOR THE WEEKEND NIGHTLY RAMP CLOSURES AS DESCRIBED IN STEP 4. (SEE TMP-2B, 2C, 2D, 26, 26A, 26B AND 27)	

**COMPLETE STEP 4 CONSTRUCTION:**

- L- STA 46+60± TO STA 64+28± LT
- L- STA 51+00± TO STA 63+35± RT

REMOVE PORTABLE CONCRETE BARRIER NORTH OF -RPB- AND -RPC-.

STEP 6:

USING RDWY STD 1101.02, PAVE US 29 EXCLUDING THE FINAL LAYER OF SURFACE COURSE: (SEE TMP-26 AND 26C)

- L- STA 64+28± TO STA 72+46± LT
- L- STA 63+35± TO STA 72+80± RT

STEP 7:

USING RDWY STD 1101.02, SET PORTABLE CONCRETE BARRIER AND CONSTRUCT EXCLUDING THE FINAL LAYER OF SURFACE COURSE: (SEE TMP-26 AND 26C)

- L- STA 26+28± TO STA 72+46± LT
- L- 63+35± TO STA 72+80± RT

REMOVE EXISTING RAMP LANES AS INDICATED IN THE ROADWAY PLAN.

**COMPLETE PHASE II CONSTRUCTION:**

- L- STA 21+50± TO STA 32+46± RT

**PHASE IV**

STEP 1:

USING RDWY STA 1101.02, PAVE US 29 FROM STA 21+50± TO STA 32+46± EXCLUDING THE FINAL LAYER OF SURFACE COURSE, APPLY PAVEMENT MARKINGS AND SHIFT US 29 AS INDICATED. IN THE EVENT THE TRAFFIC SHIFT CAN NOT BE COMPLETED IN ONE DAY, USE COLD APPLIED PLASTIC (TYPE 4) PAVEMENT MARKINGS TO TRANSITION BETWEEN THE SHIFTED PATTERN AND THE CURRENT PATTERN. (SEE TMP-28, 28A, 29, 30, 30B AND 31)

STEP 2:

USING RDWY STD 1101.02, SET PORTABLE CONCRETE BARRIER ADJACENT TO THE -L- US 29 MEDIAN LANES. (SEE TMP-28, 29, 30, 30B AND 31)

STEP 3:

USING RDWY STD 1101.02 AND BEHIND BARRIER, **BEGIN** CONSTRUCTION OF -L- US 29 MEDIAN EXCLUDING THE FINAL LAYER OF SURFACE COURSE FROM -L- STA 18+35± TO STA 92+25±. (SEE TMP-28, 28A, 29, 30, 30B AND 31)

USING RDWY STD 1101.02, CONSTRUCT MEDIAN CURB AND GUTTER AND ROADWAY (RIGHT OF CENTERLINE) AND -Y1A- EXCLUDING THE FINAL LAYER OF SURFACE COURSE: (SEE TMP-30, 30A, 30B AND 32)

- Y1- STA 13+76± TO STA 16+50±
- Y1- STA 18+20± TO STA 34+50±
- Y1A-

USING RDWY STD 1101.02, CONSTRUCT REMAINING SIDEWALK, CURB AND GUTTER, AND MONOLITHIC ISLAND ADJACENT TO WB -Y- REEDY FORK PKWY. (SEE TMP-32)

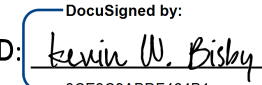

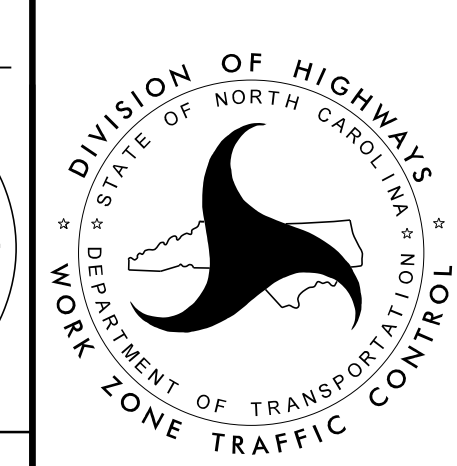
STEP 4:

USING RDWY STD 1101.02, APPLY PAVEMENT MARKINGS, REVISE SIGNAL, SHIFT EASTBOUND -Y1- SR 2526 (SUMMIT AVE) TRAFFIC INTO THE FINAL PATTERN. UPON COMPLETION, CONSTRUCT THE REMAINING MEDIAN SECTION OF -Y1- SR 2526 (SUMMIT AVE) EXCLUDING THE FINAL LAYER OF SURFACE COURSE. (SEE TMP-33 AND 34)

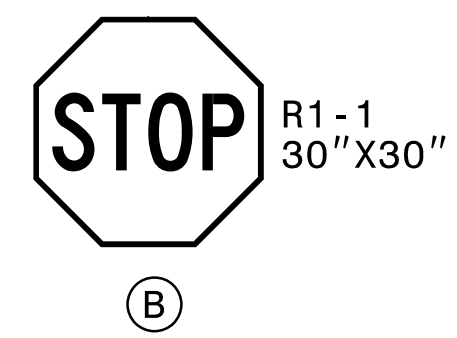
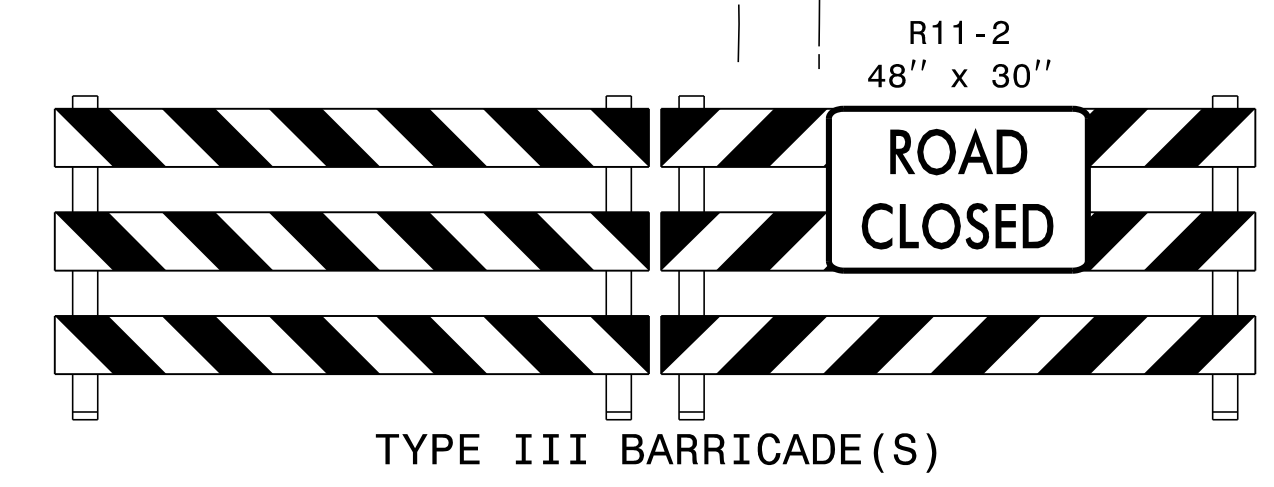
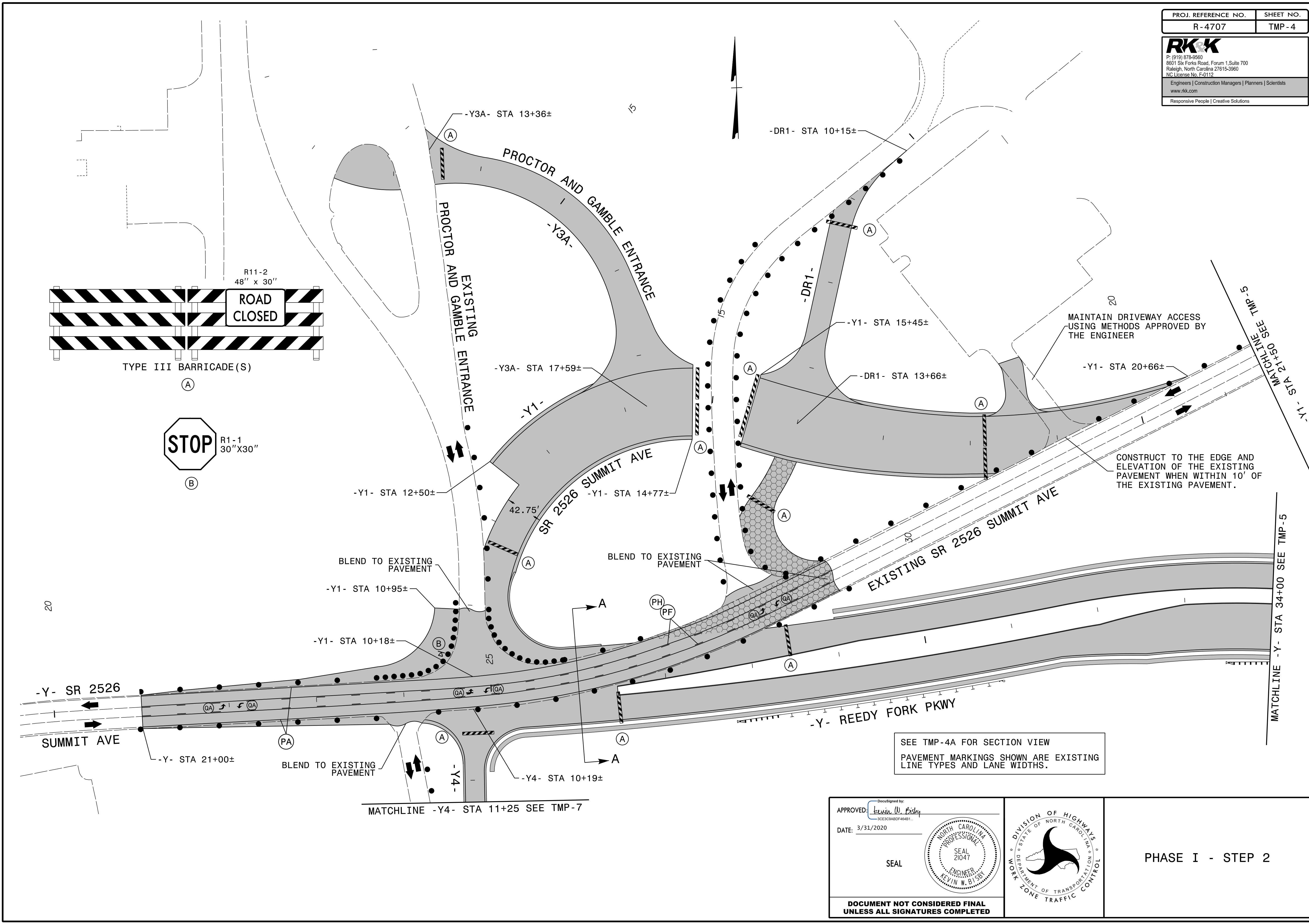
**COMPLETE** CONSTRUCTION OF -L- US 29 MEDIAN AS BEGUN IN PHASE IV - STEP 3. USING RDWY STD 1101.02, REMOVE PORTABLE CONCRETE BARRIER.

**PHASE V**

USING RDWY STD 1101.02, PAVE THE FINAL LAYER OF SURFACE COURSE, APPLY FINAL PAVEMENT MARKINGS, AND OPEN ALL TRAVEL LANES TO TRAFFIC IN THE PROPOSED PATTERN. (NOT ILLUSTRATED)

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**RK&K**  
 P: (919) 878-8560  
 8601 Six Forks Road, Forum 1, Suite 700  
 Raleigh, North Carolina 27615-3960  
 NC License No. F-0112  
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SEE TMP-4A FOR SECTION VIEW  
 PAVEMENT MARKINGS SHOWN ARE EXISTING  
 LINE TYPES AND LANE WIDTHS.

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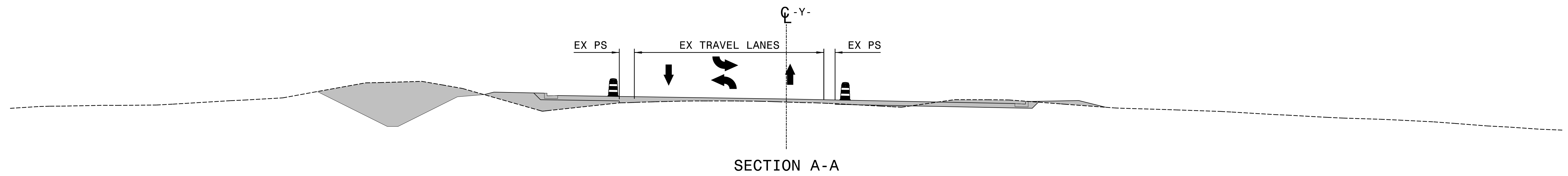
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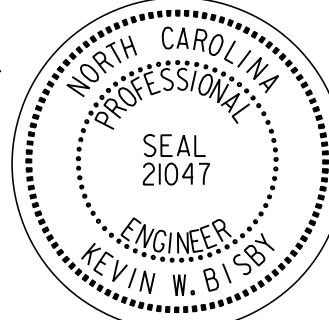

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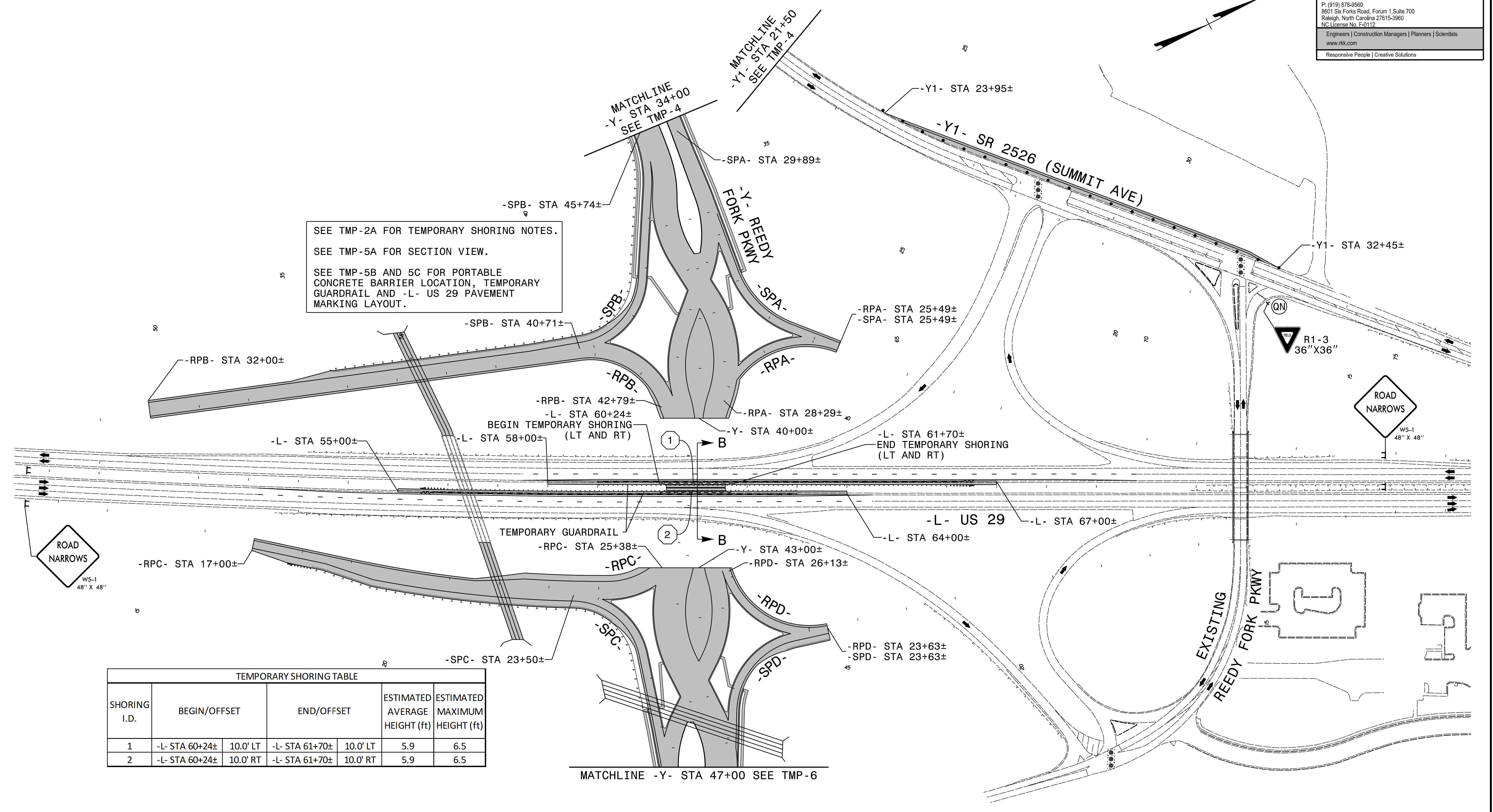
PHASE I - STEP 2

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 P: (919) 878-8560  
 8601 Six Forks Road, Forum 1, Suite 700  
 Raleigh, North Carolina 27615-3960  
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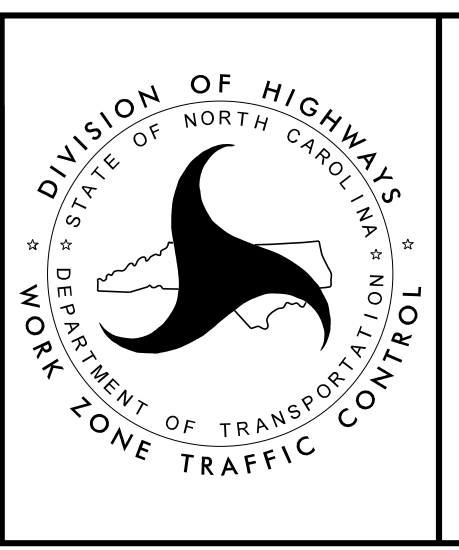
SEE TMP-2A FOR TEMPORARY SHORING NOTES.  
 SEE TMP-5A FOR SECTION VIEW.  
 SEE TMP-5B AND 5C FOR PORTABLE CONCRETE BARRIER LOCATION, TEMPORARY GUARDRAIL AND -L- US 29 PAVEMENT MARKING LAYOUT.

TEMPORARY SHORING TABLE						
SHORING I.D.	BEGIN/OFFSET		END/OFFSET		ESTIMATED AVERAGE HEIGHT (ft)	ESTIMATED MAXIMUM HEIGHT (ft)
	1	-L- STA 60+24±	10.0' LT	-L- STA 61+70±		
2	-L- STA 60+24±	10.0' RT	-L- STA 61+70±	10.0' RT	5.9	6.5

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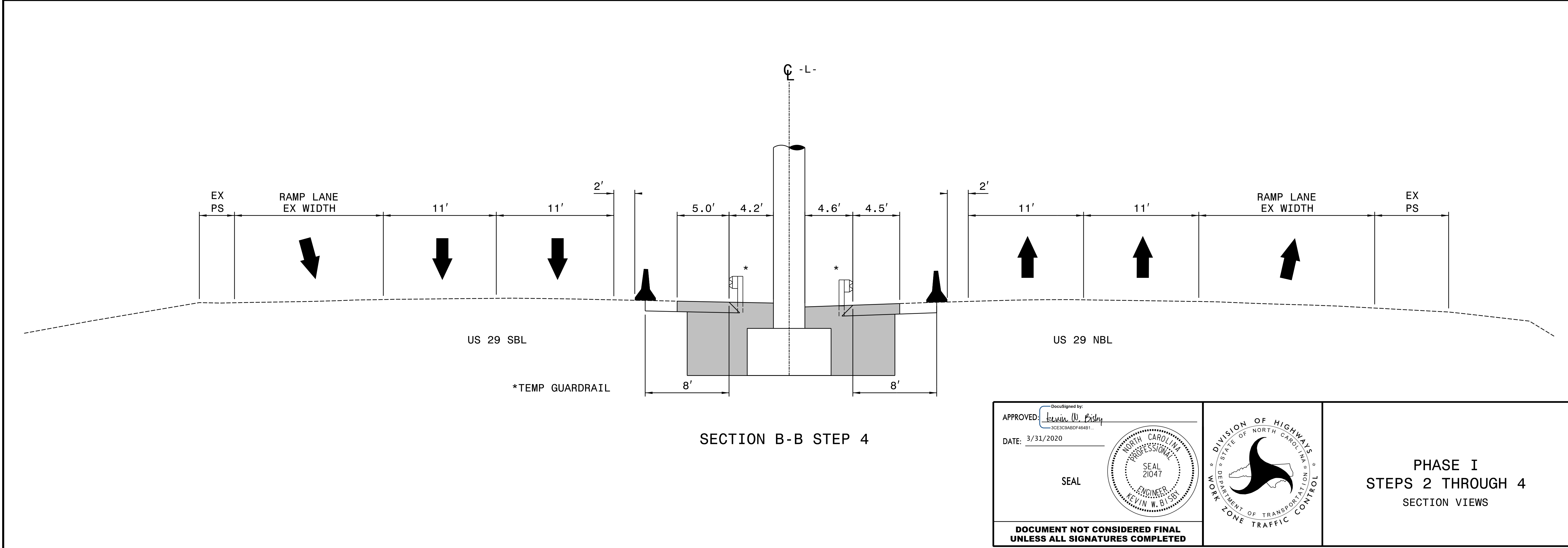
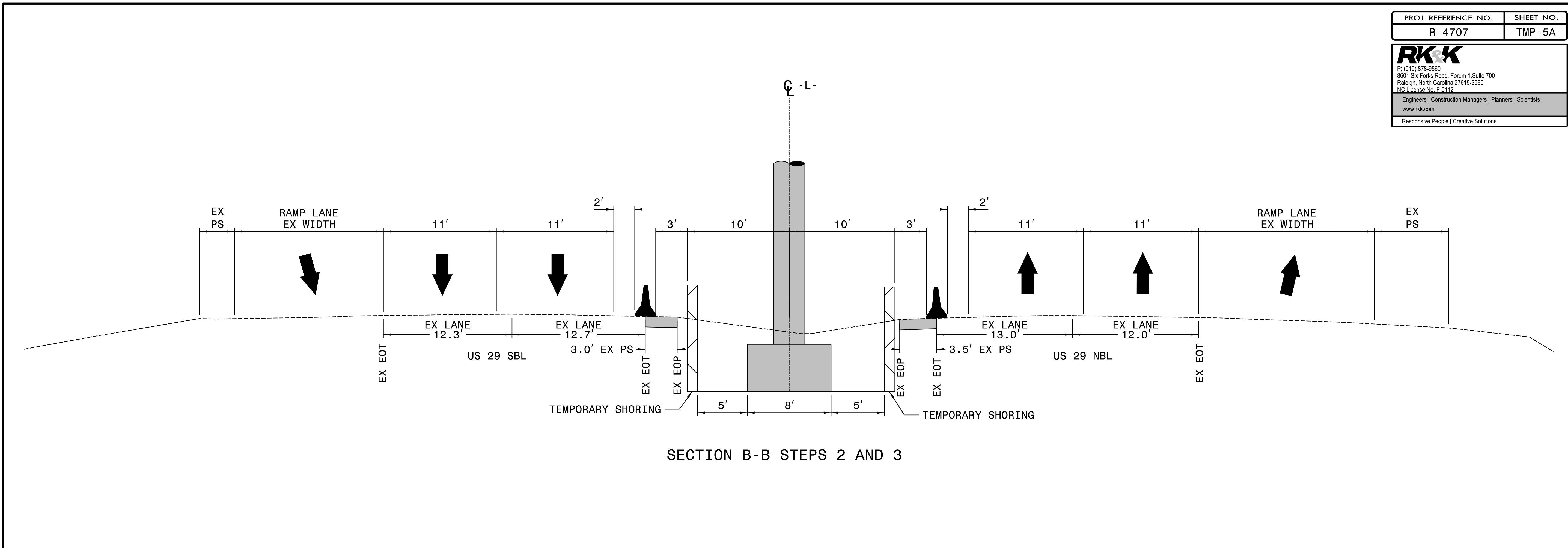
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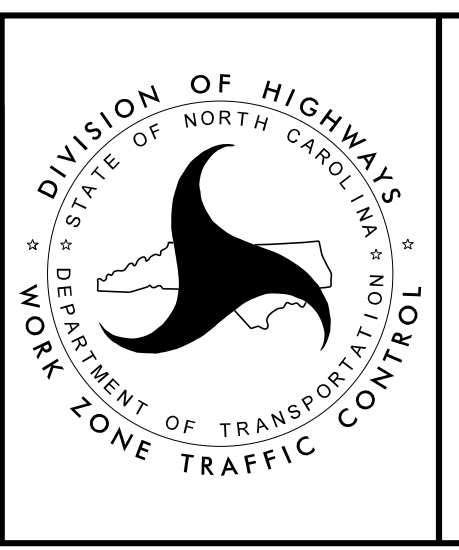
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PHASE I  
 STEPS 2 THROUGH 4



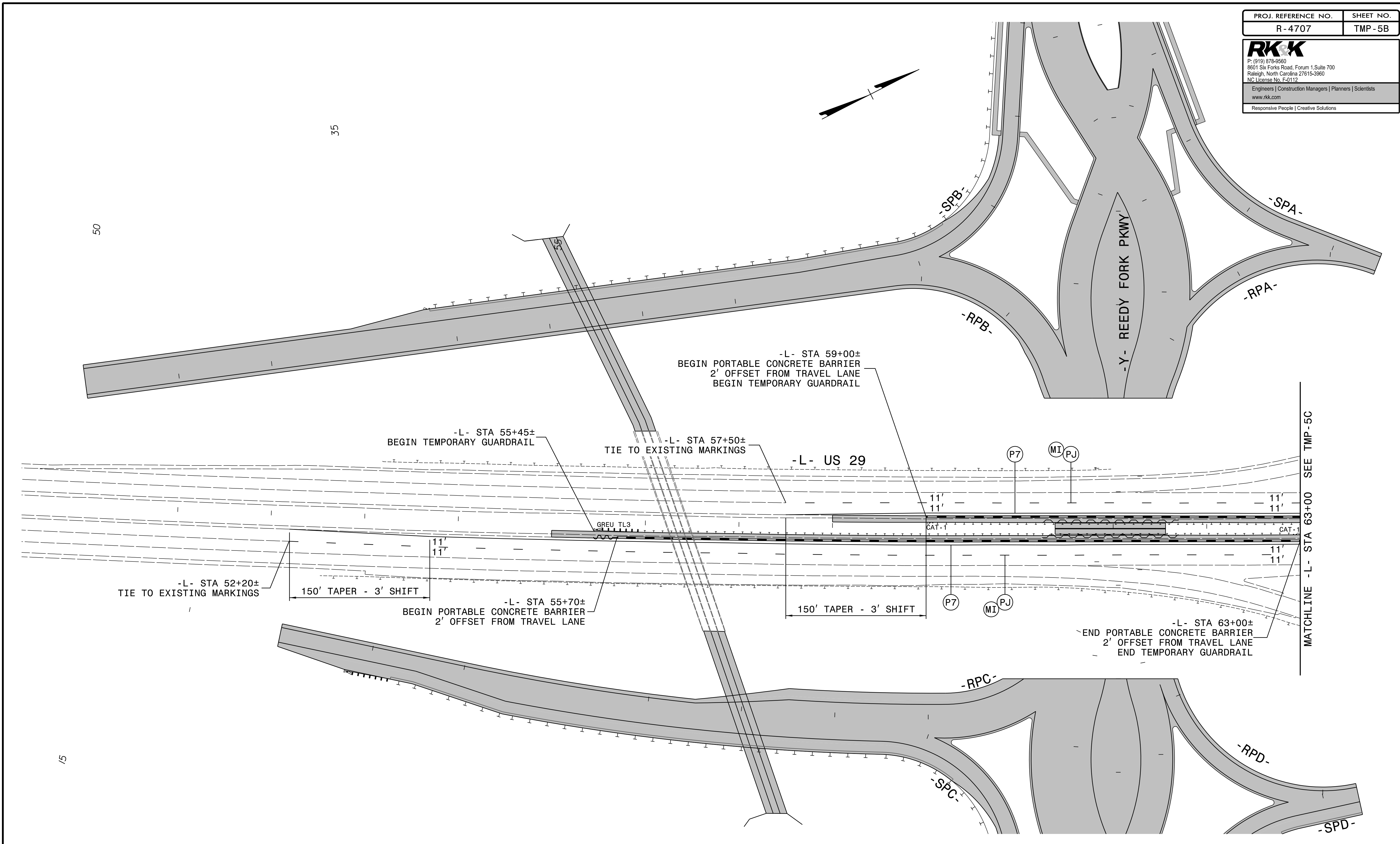


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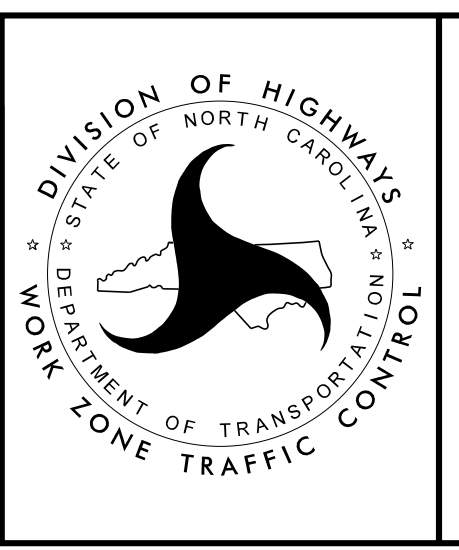


PHASE I  
 STEPS 2 THROUGH 4  
 SECTION VIEWS

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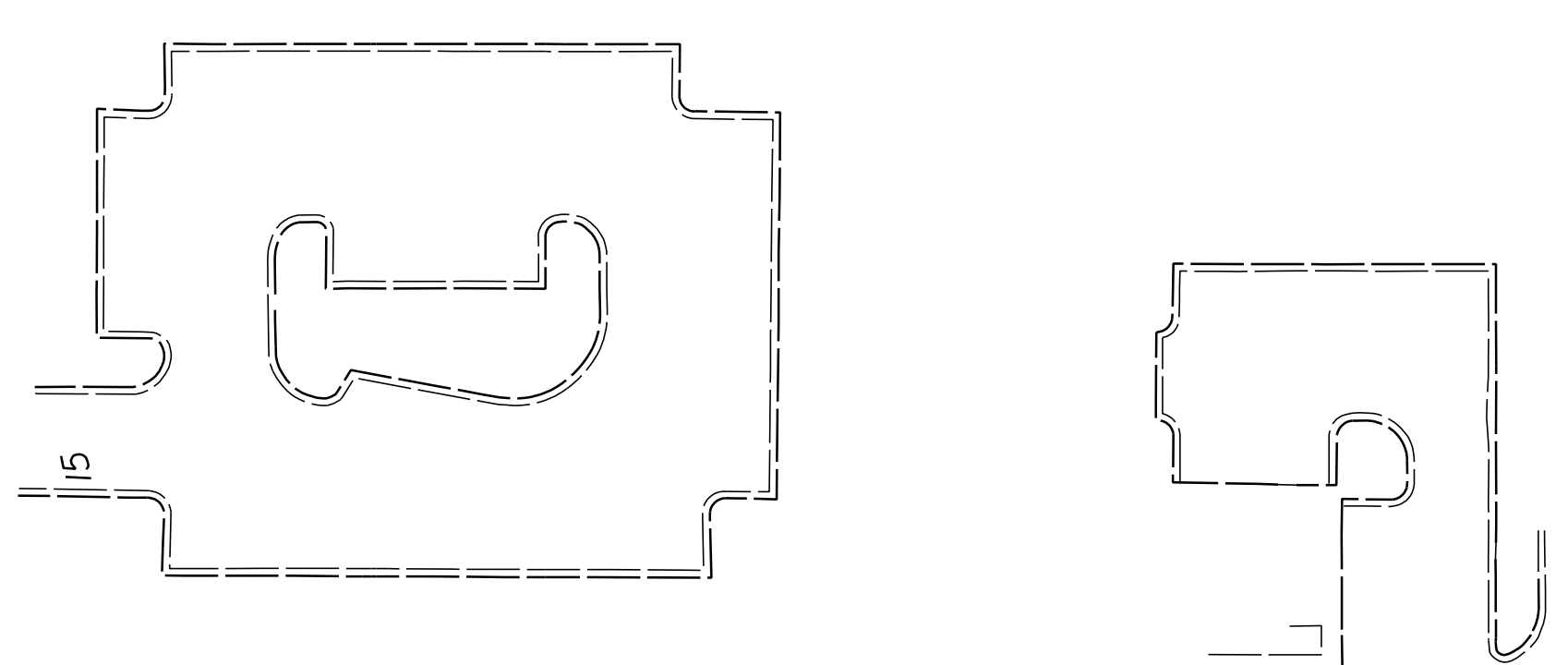
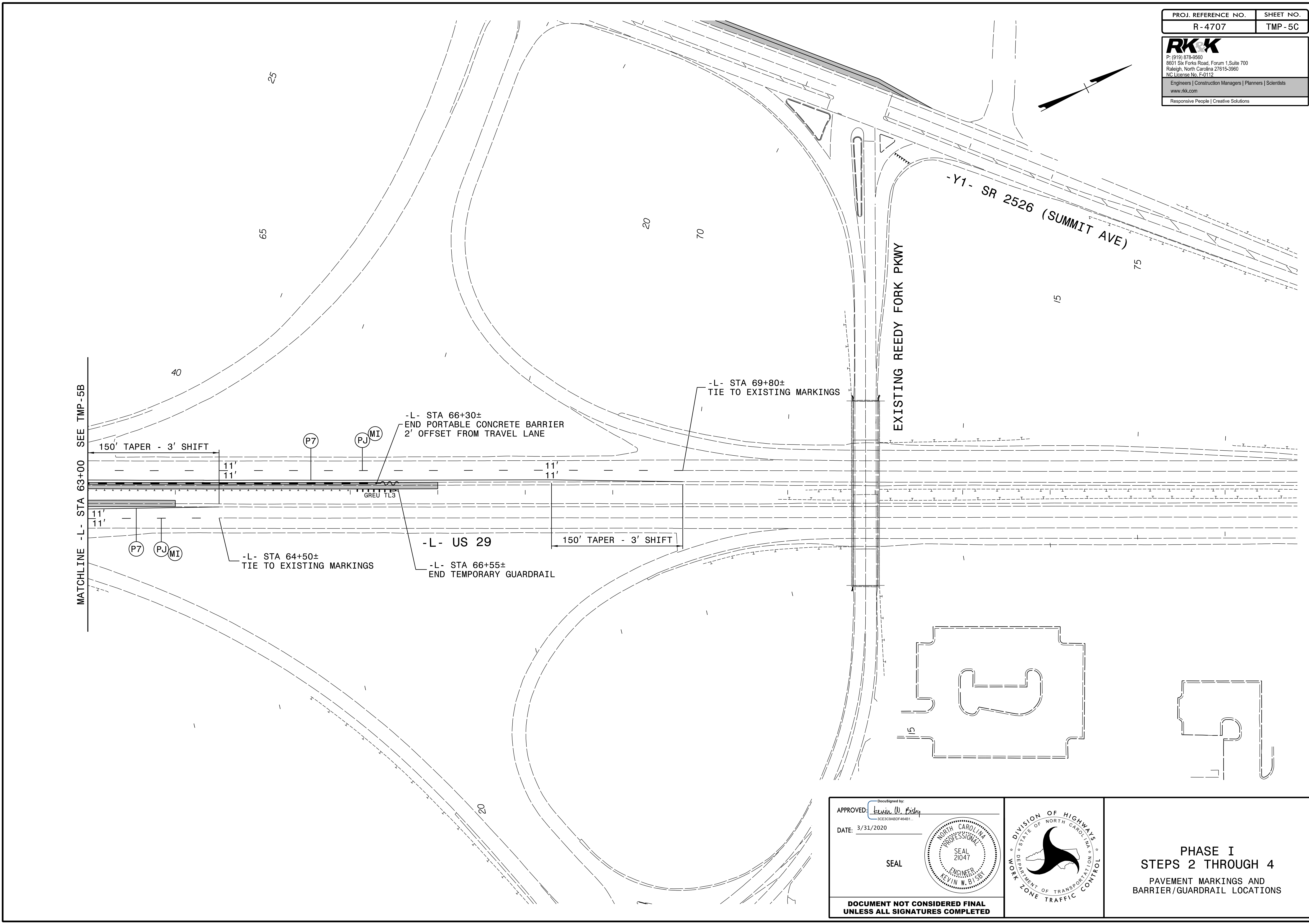
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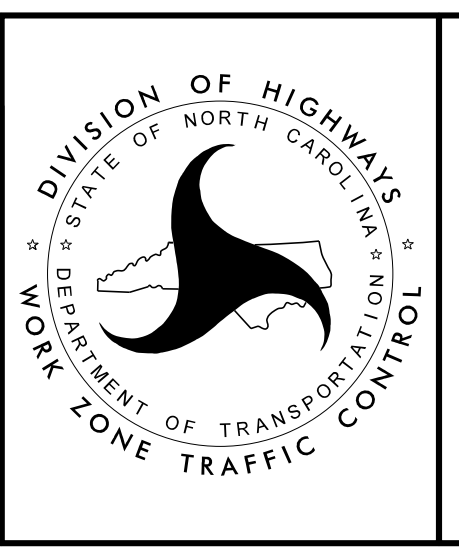
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 TRAFFIC CONTROL  
 PHASE I  
 STEPS 2 THROUGH 4  
 PAVEMENT MARKINGS AND  
 BARRIER/GUARDRAIL LOCATIONS

PROJ. REFERENCE NO.	SHEET NO.
R-4707	TMP-5C

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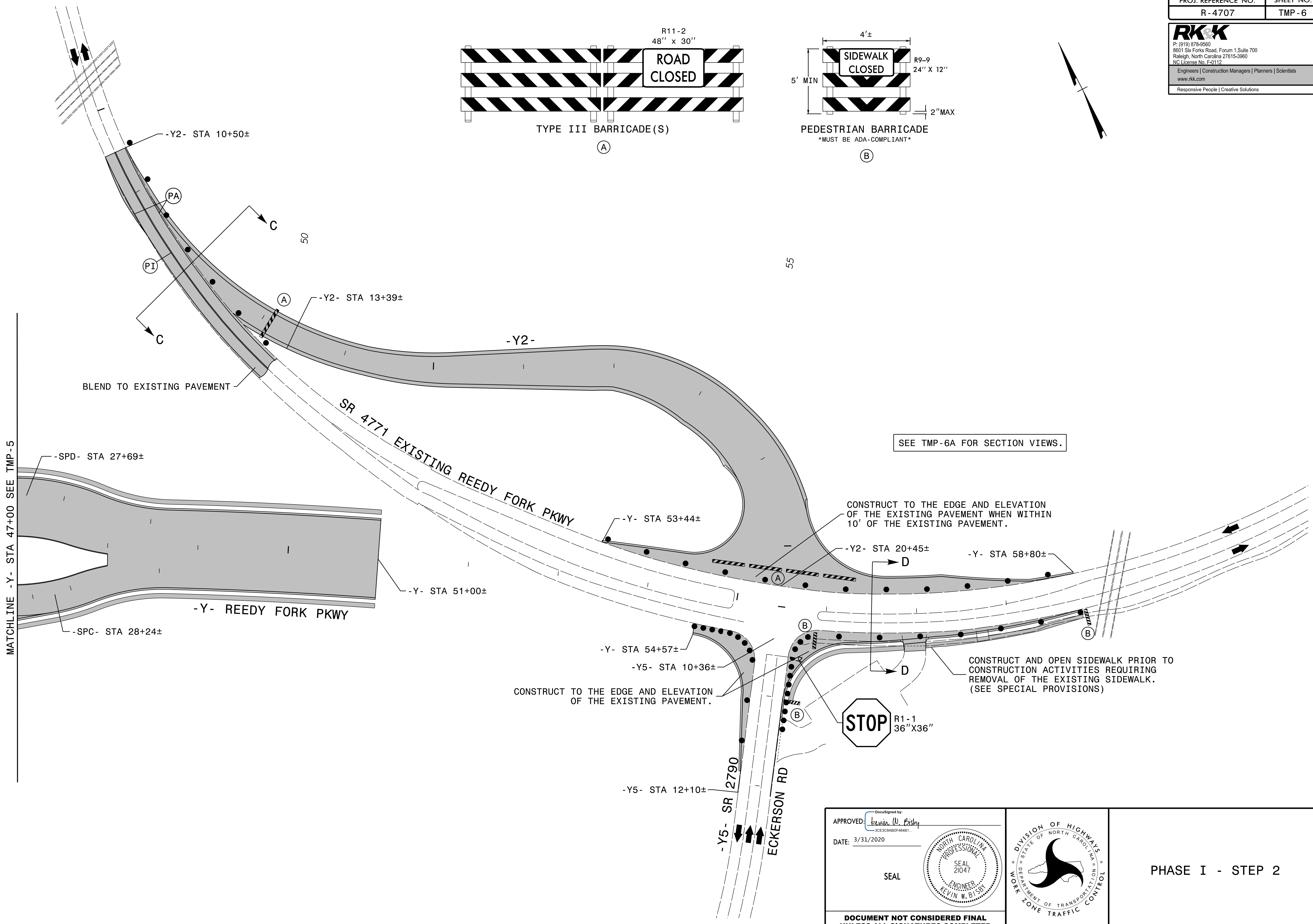
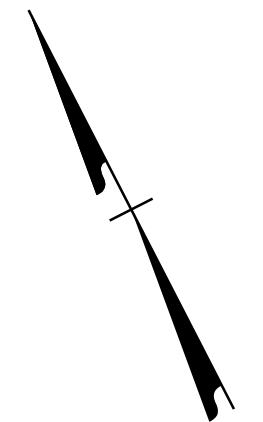
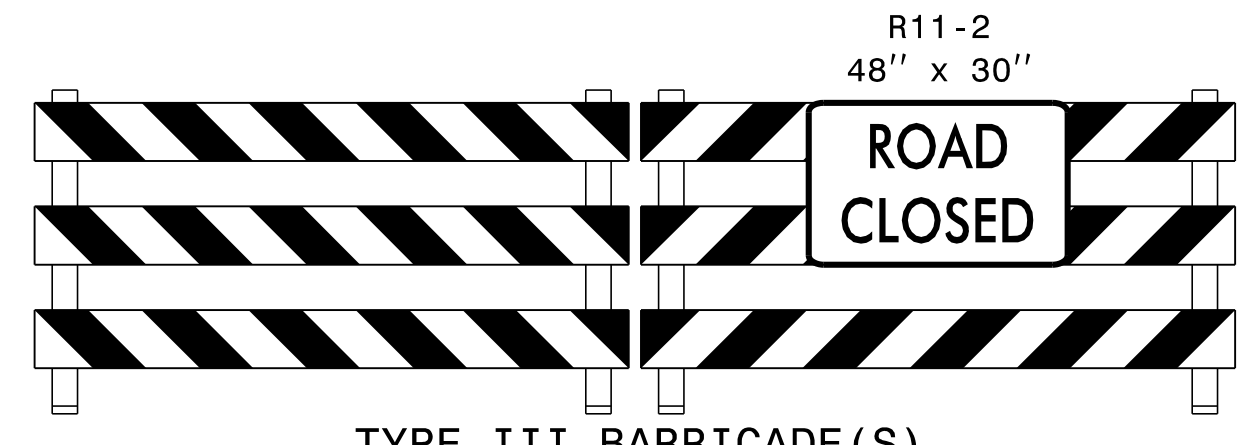
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DIVISION OF HIGHWAYS  
 DEPARTMENT OF TRANSPORTATION  
 TRAFFIC CONTROL

PHASE I  
 STEPS 2 THROUGH 4  
 PAVEMENT MARKINGS AND  
 BARRIER/GUARDRAIL LOCATIONS

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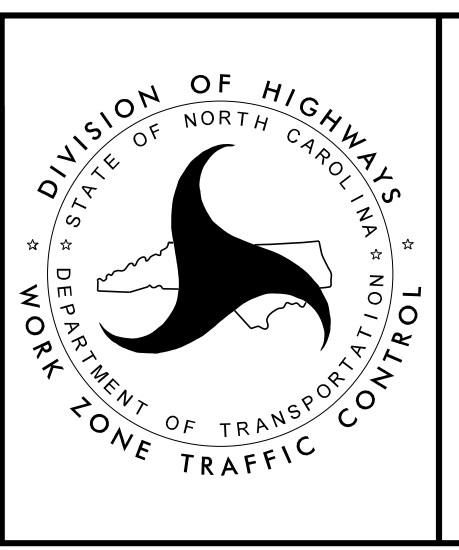


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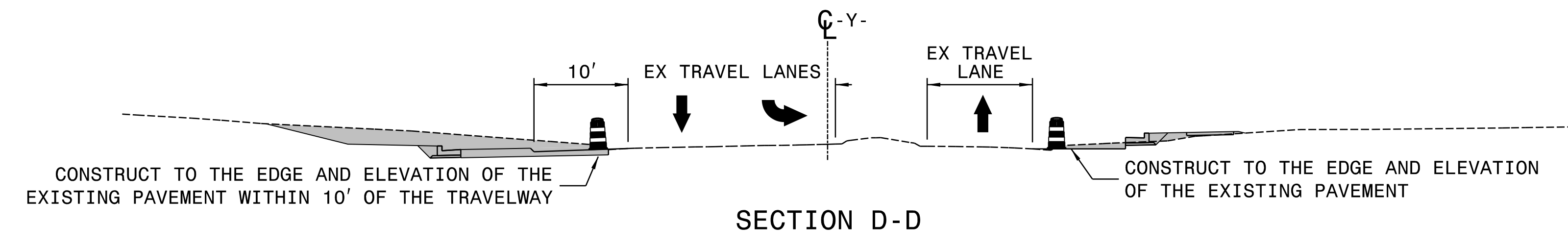
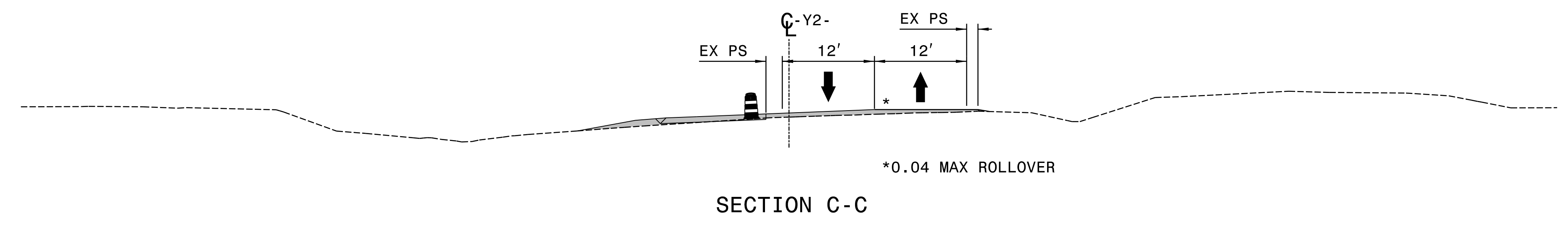


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 DEPARTMENT OF TRANSPORTATION  
 WORK ZONE TRAFFIC CONTROL

PHASE I - STEP 2

PROJ. REFERENCE NO.	SHEET NO.
R - 4707	TMP - 6A

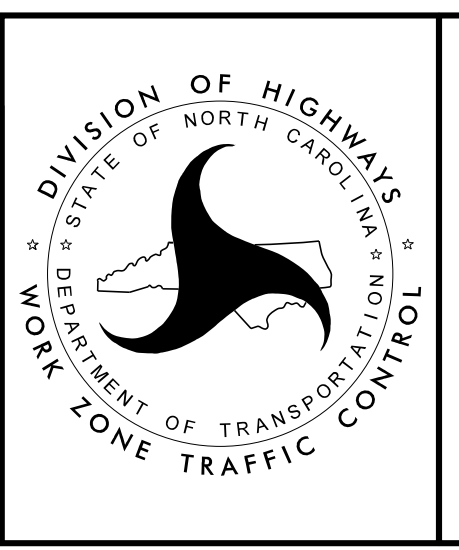
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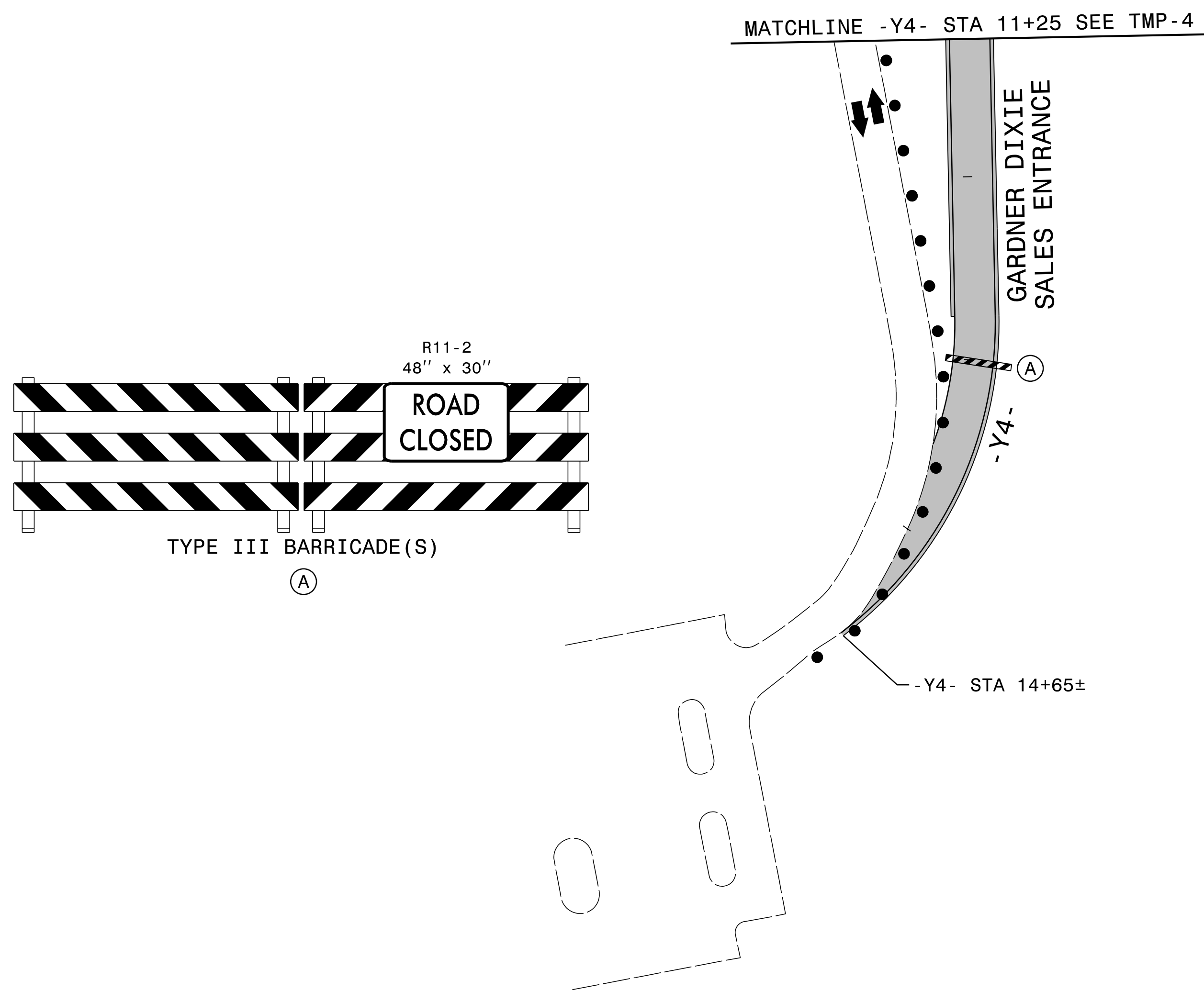
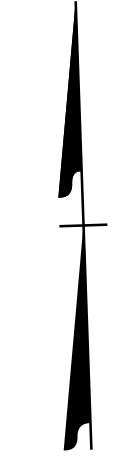


PHASE I - STEP 2  
 SECTION VIEWS

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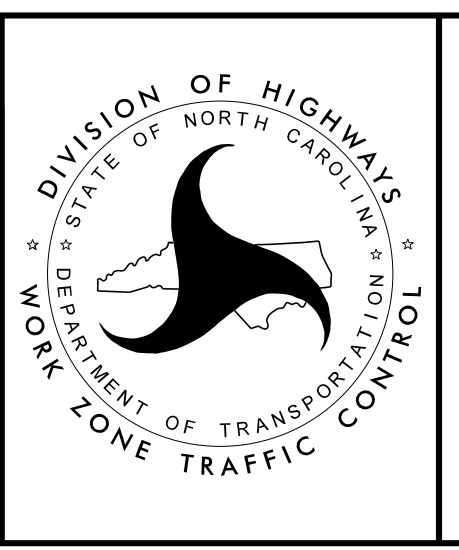
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R - 4707	TMP - 7

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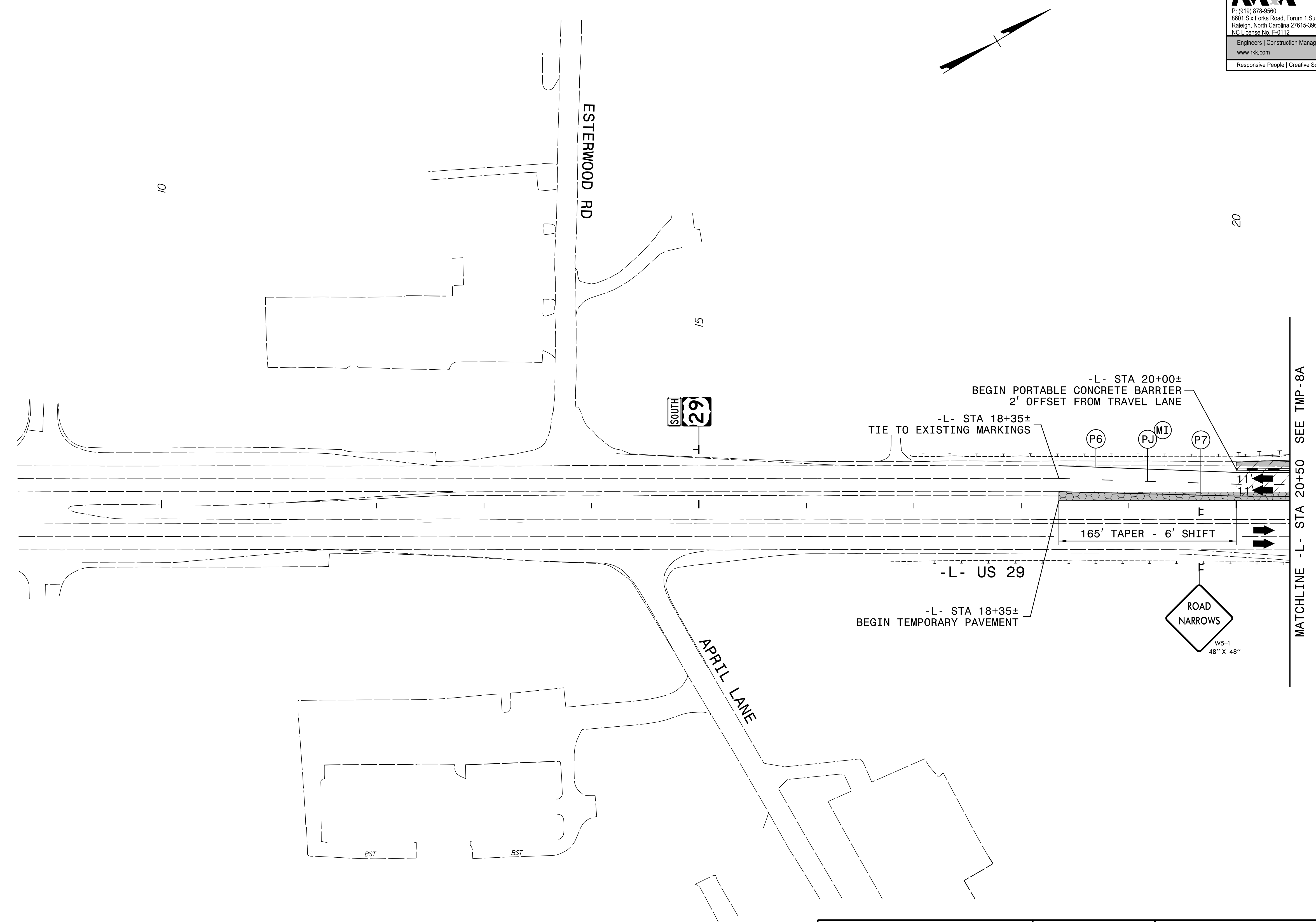


PHASE I - STEP 2

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PROJ. REFERENCE NO. R - 4707	SHEET NO. TMP - 8
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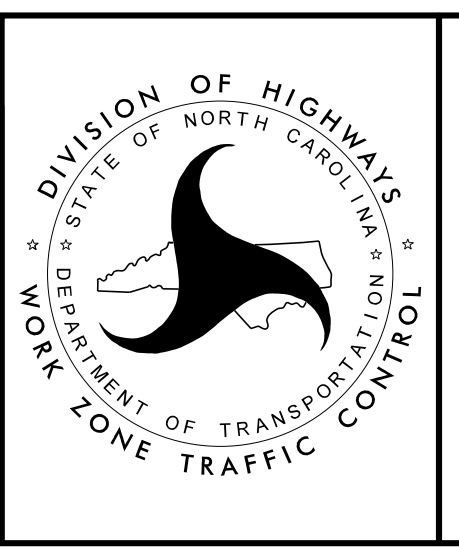
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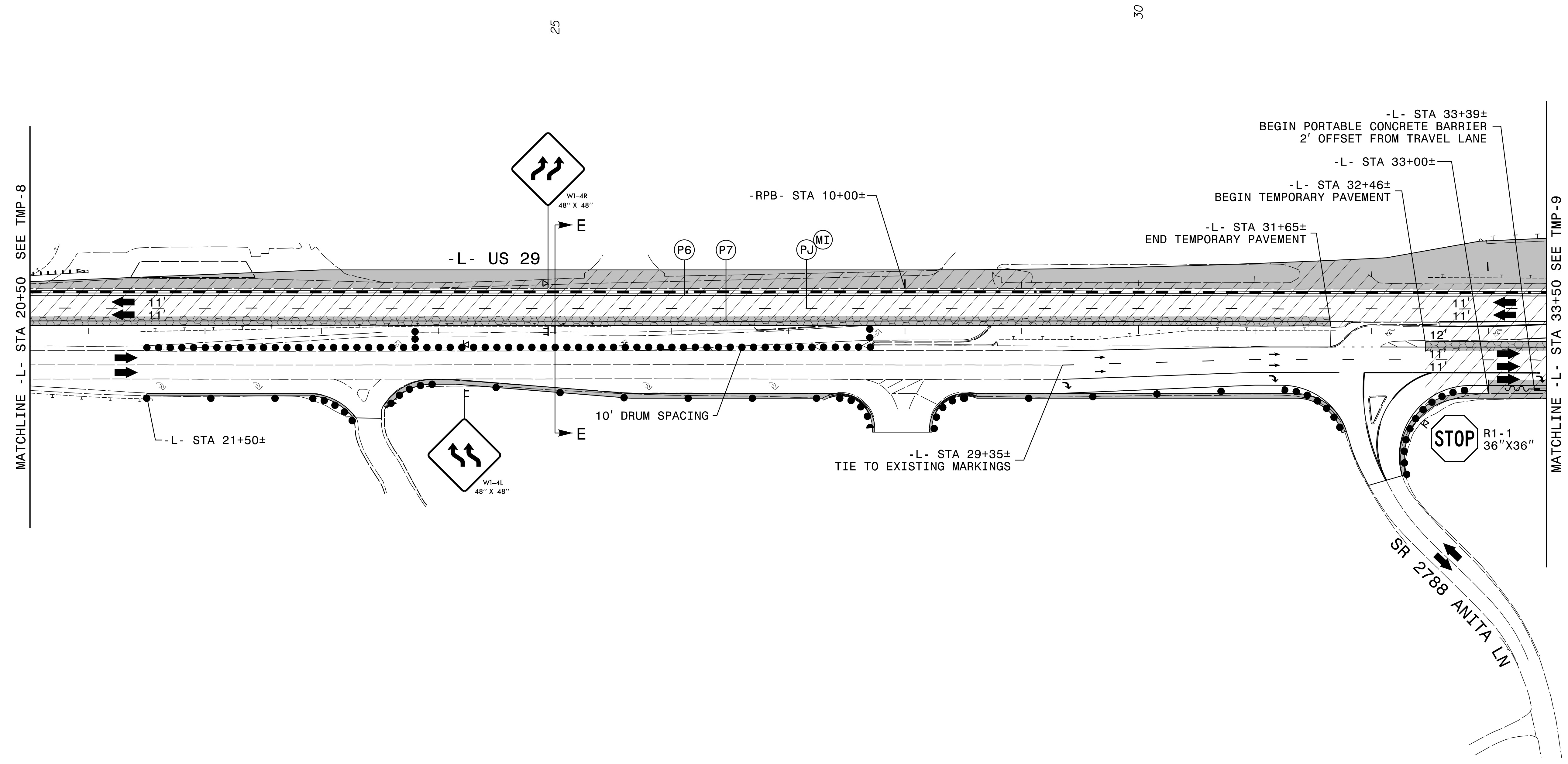
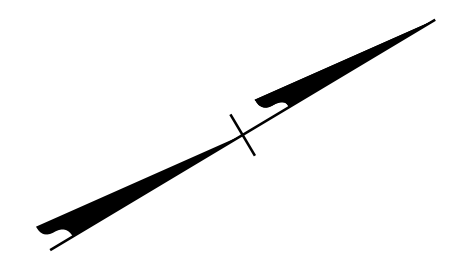


PHASE II  
 STEPS 1, 2, 4 AND 5

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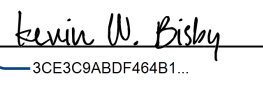
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R-4707	TMP-8A

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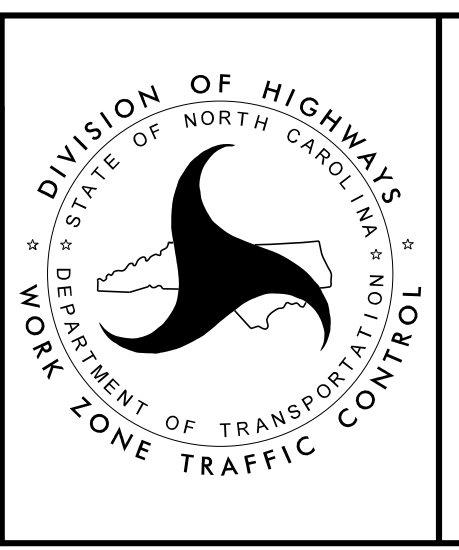


 WEDGING

SEE TMP-8B FOR ADDITIONAL PAVEMENT MARKING LAYOUT.  
 SEE TMP-8C FOR SECTION VIEW.

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PHASE II  
 STEPS 1 THROUGH 5

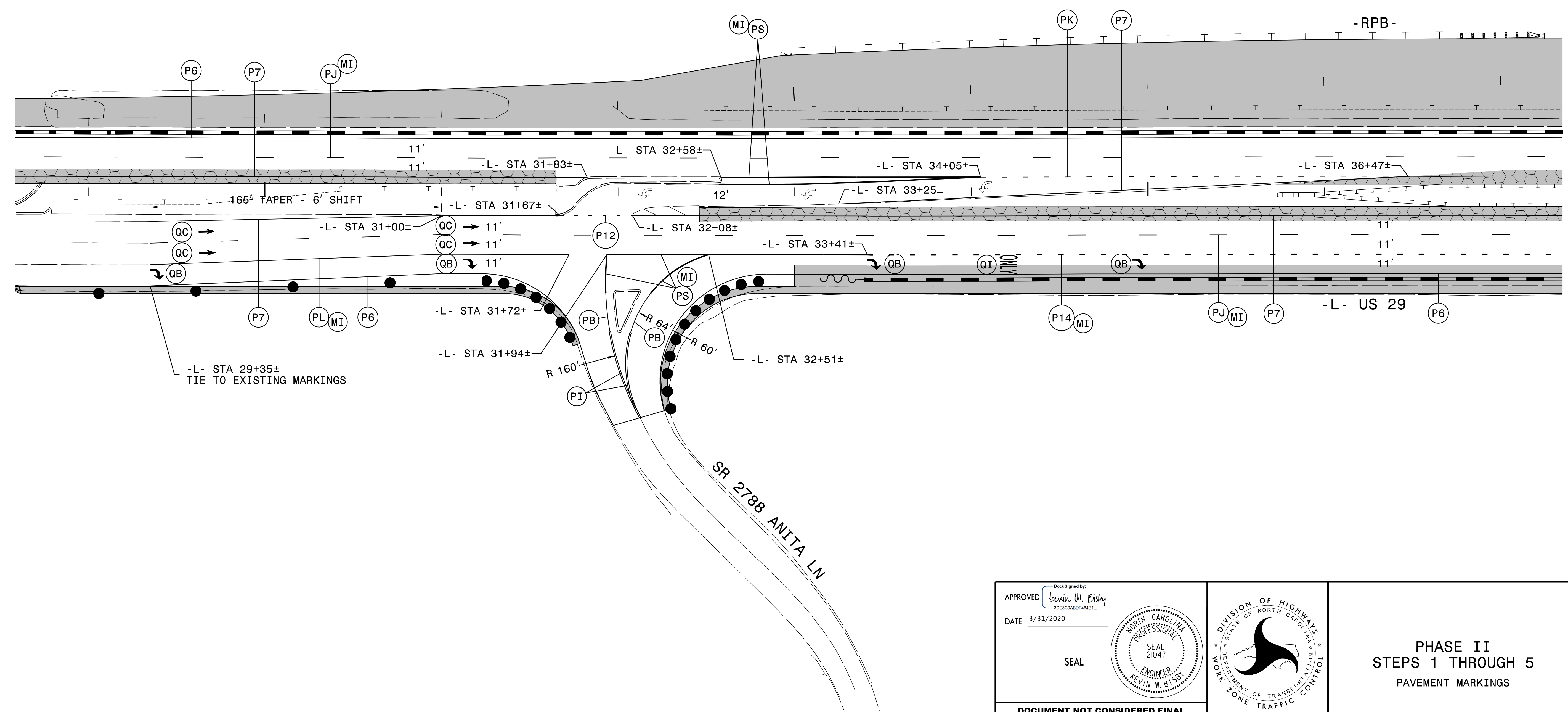
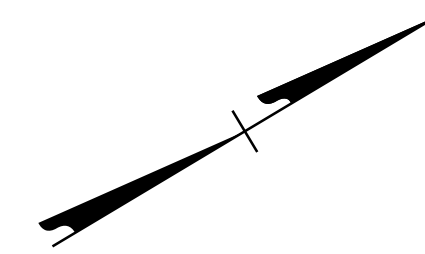
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R - 4707	TMP - 8B
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30

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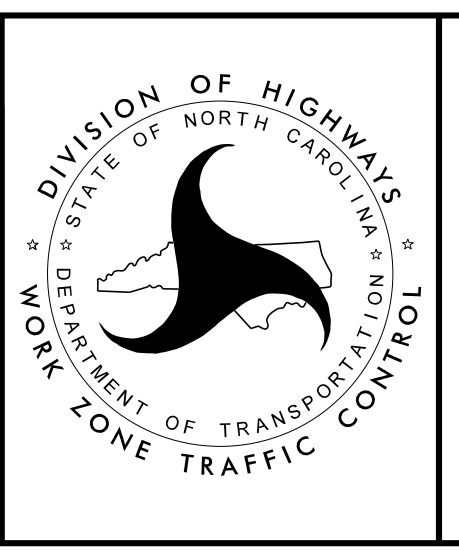


-L- STA 29+35±  
TIE TO EXISTING MARKINGS

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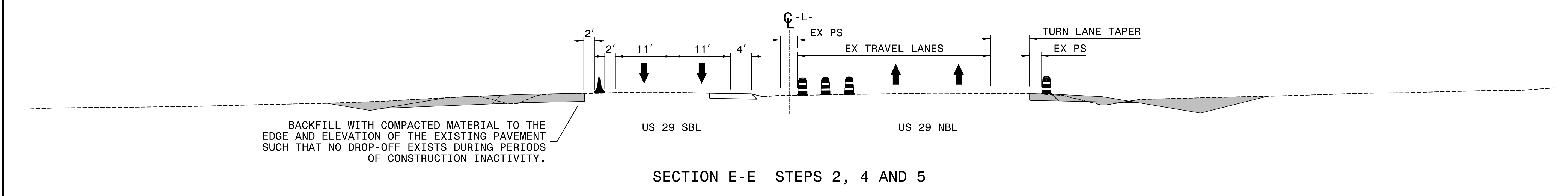
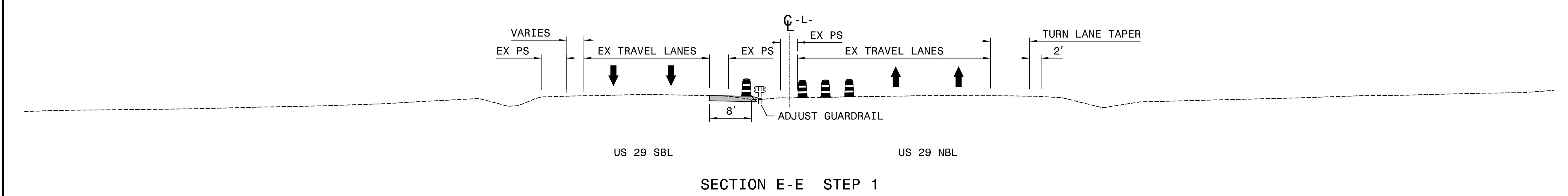


**PHASE II**  
**STEPS 1 THROUGH 5**  
 PAVEMENT MARKINGS

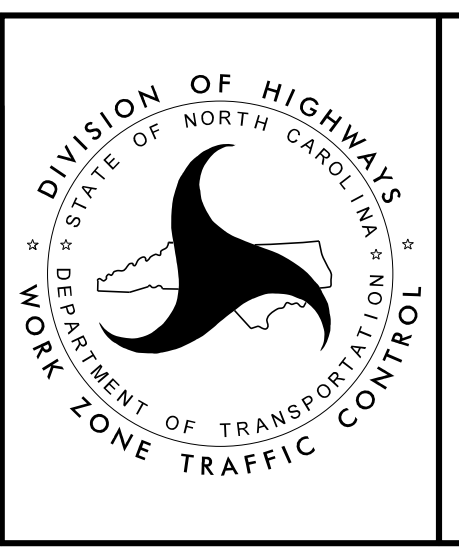
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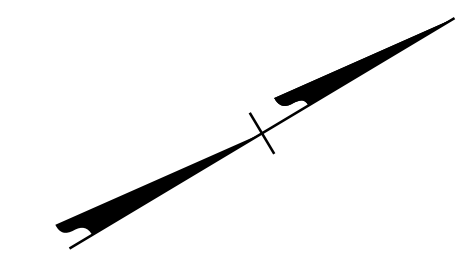


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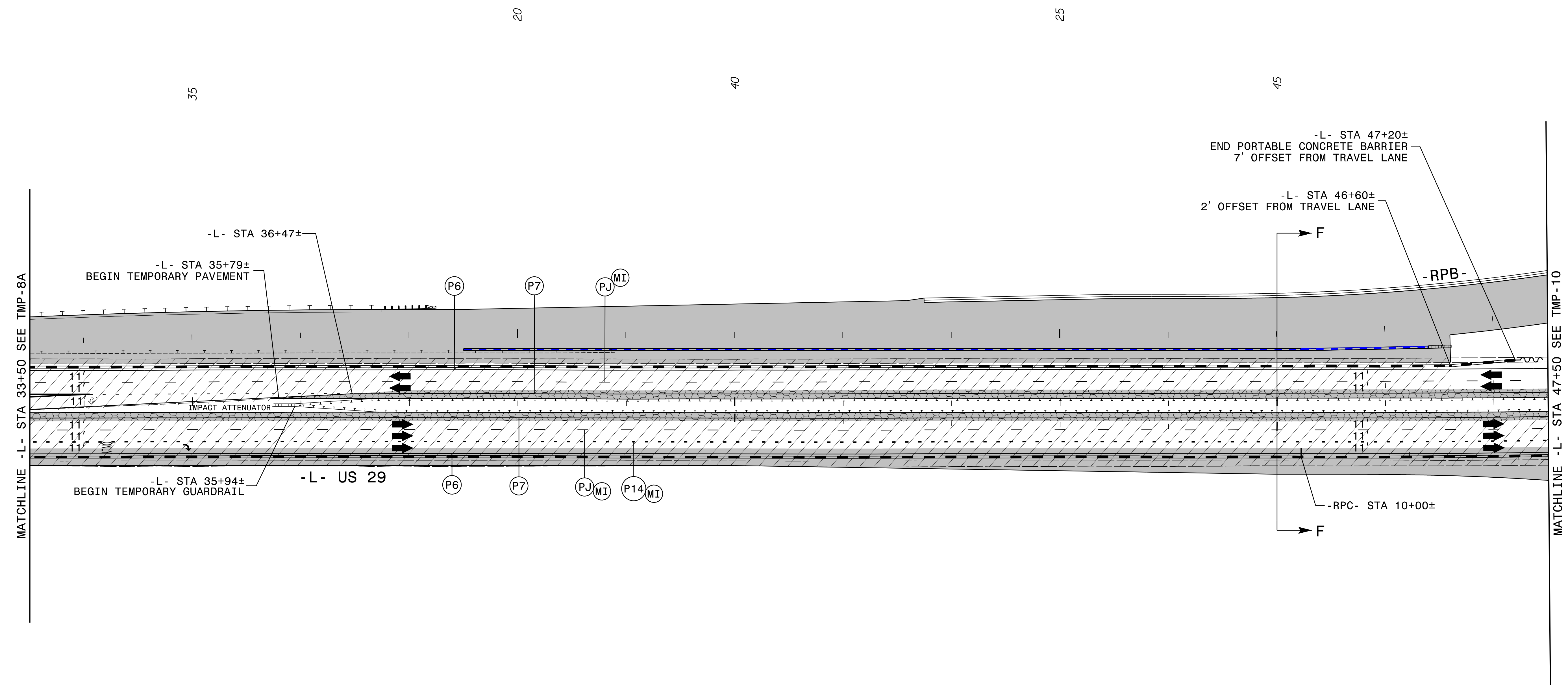


PHASE II  
 STEPS 1, 2, 4 AND 5  
 SECTION VIEWS

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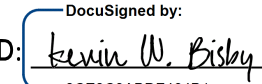


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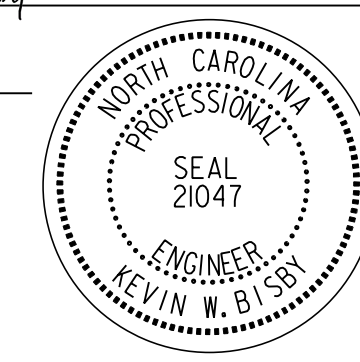
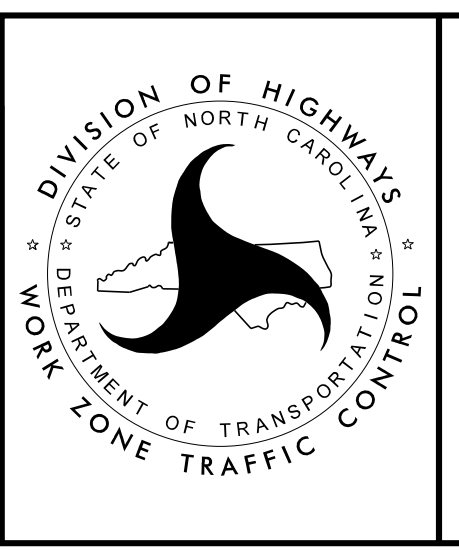


 WEDGING

SEE TMP-8B FOR ADDITIONAL PAVEMENT MARKING LAYOUT.  
 SEE TMP-9A AND 9B FOR SECTION VIEWS.

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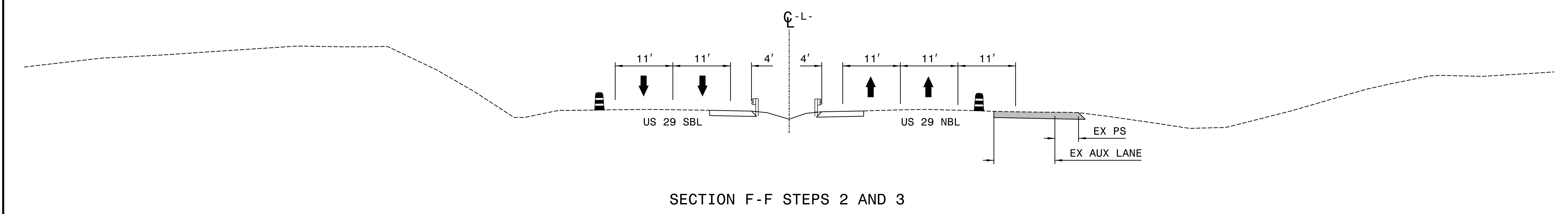
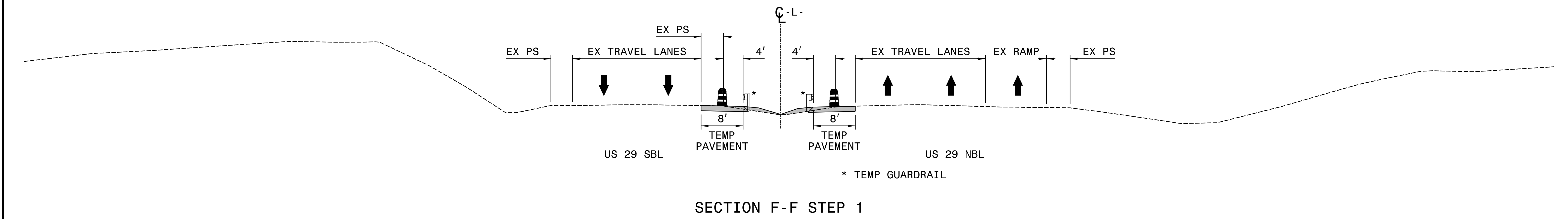



PHASE II  
 STEPS 1 THROUGH 5

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PROJ. REFERENCE NO. R - 4707	SHEET NO. TMP - 9A
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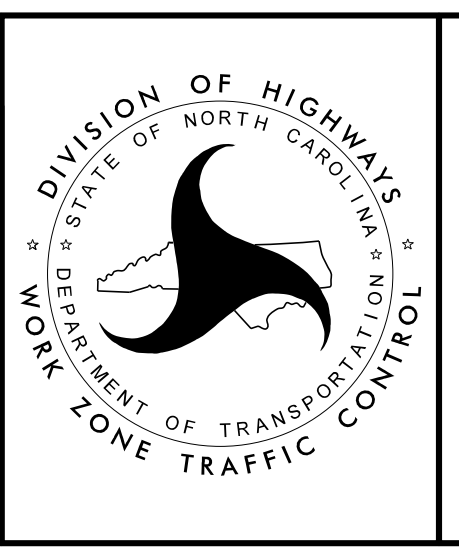


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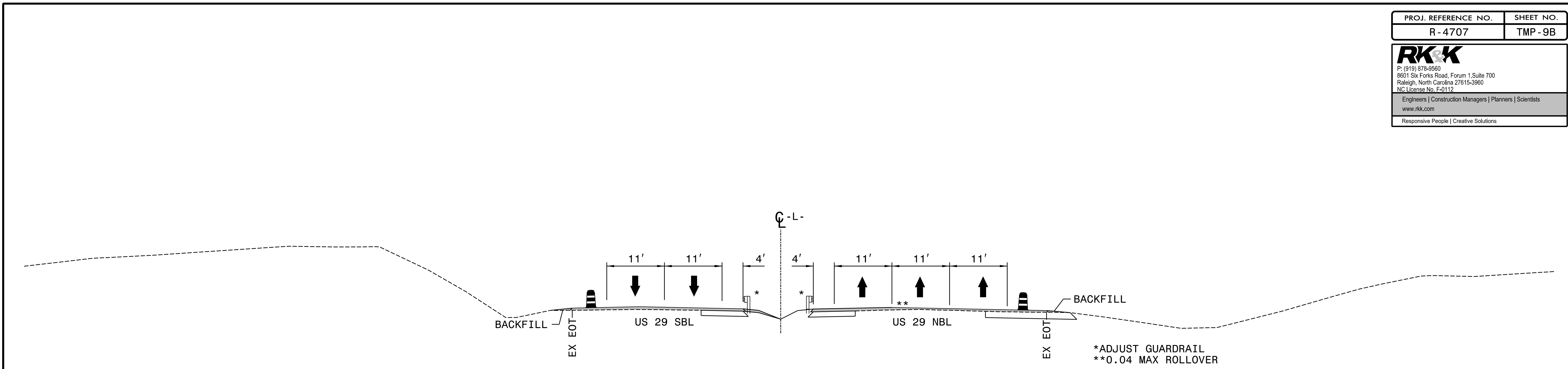
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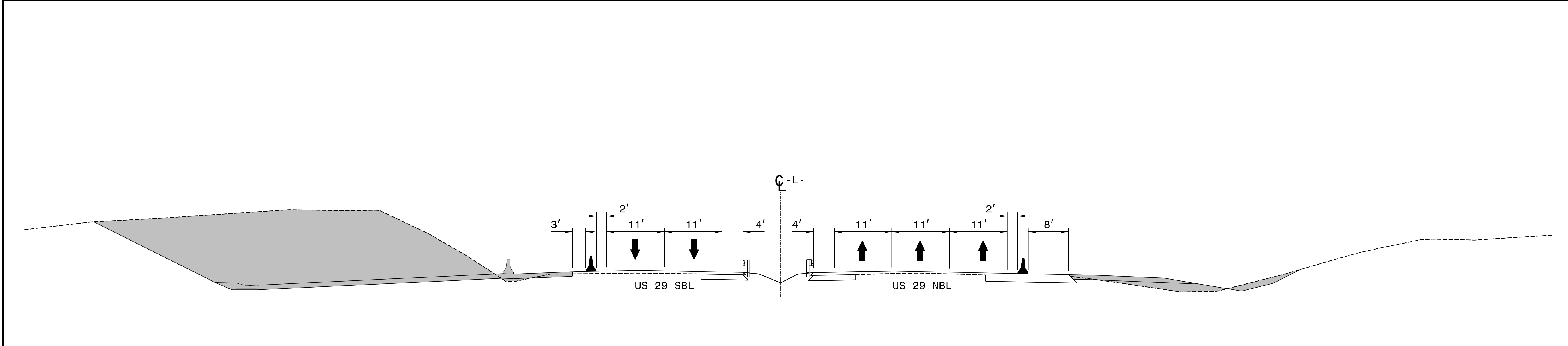
PHASE II  
 STEPS 1 THROUGH 3  
 SECTION VIEWS

PROJ. REFERENCE NO. R - 4707	SHEET NO. TMP - 9B
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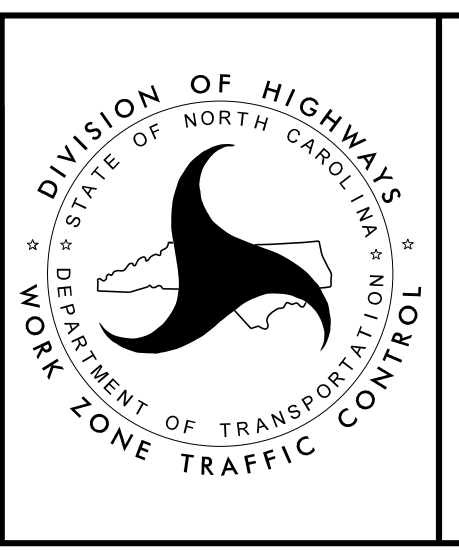


SECTION F-F STEP 4



SECTION F-F STEP 5

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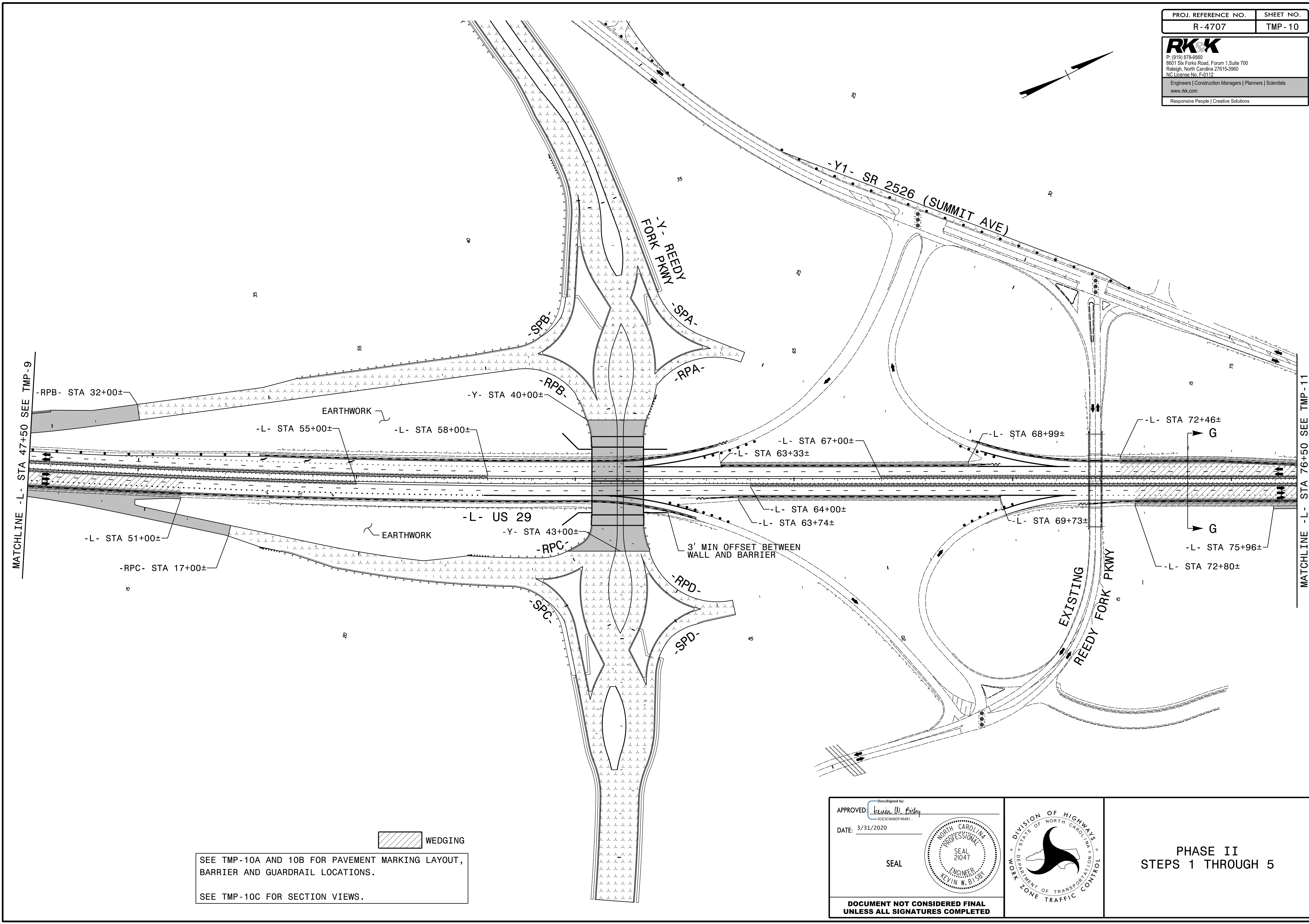
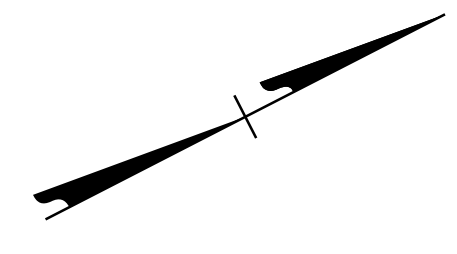


PHASE II  
 STEPS 4 AND 5  
 SECTION VIEWS

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PROJ. REFERENCE NO. R-4707	SHEET NO. TMP-10
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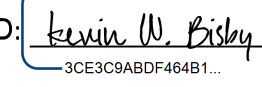


MATCHLINE -L- STA 47+50 SEE TMP-9

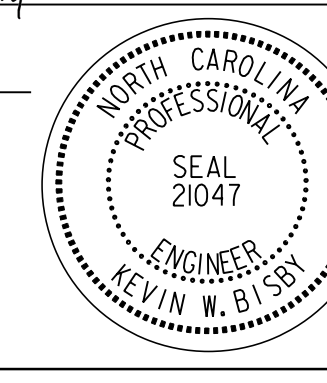
MATCHLINE -L- STA 76+50 SEE TMP-11

 WEDGING

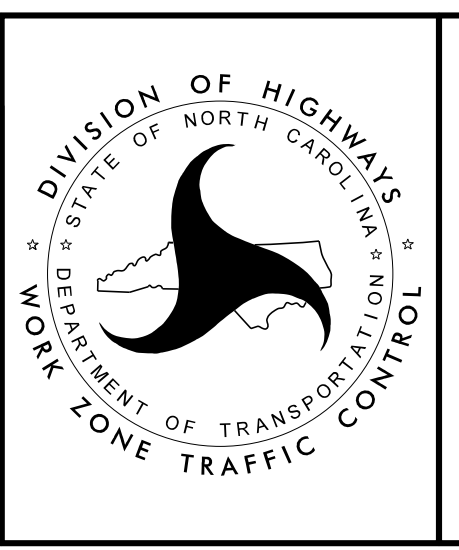
SEE TMP-10A AND 10B FOR PAVEMENT MARKING LAYOUT,  
 BARRIER AND GUARDRAIL LOCATIONS.  
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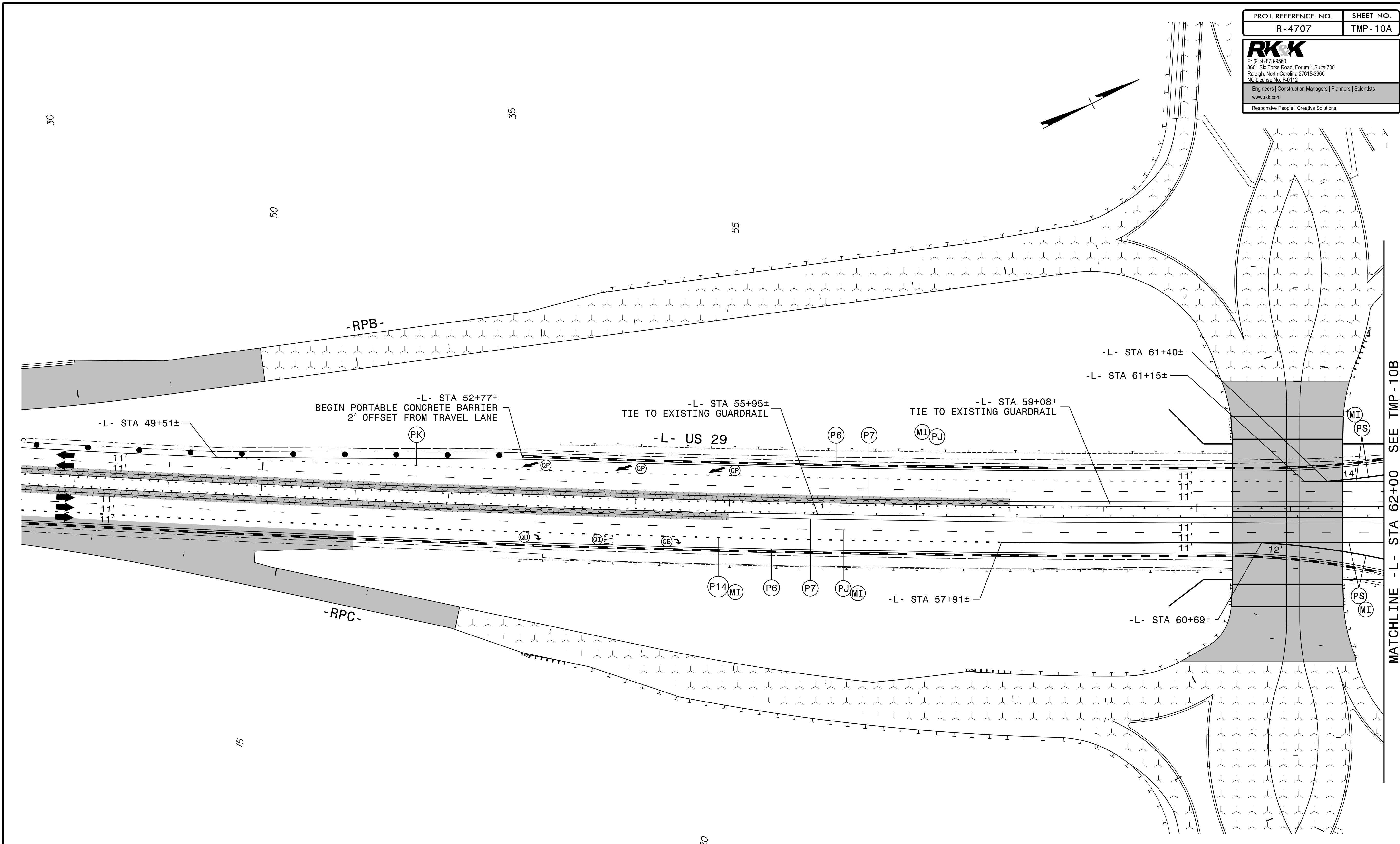


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PHASE II  
 STEPS 1 THROUGH 5

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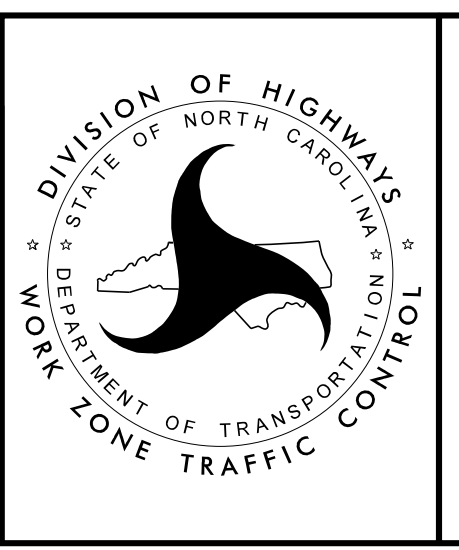


SOME TRAFFIC CONTROL DEVICES NOT SHOWN FOR CLARITY.

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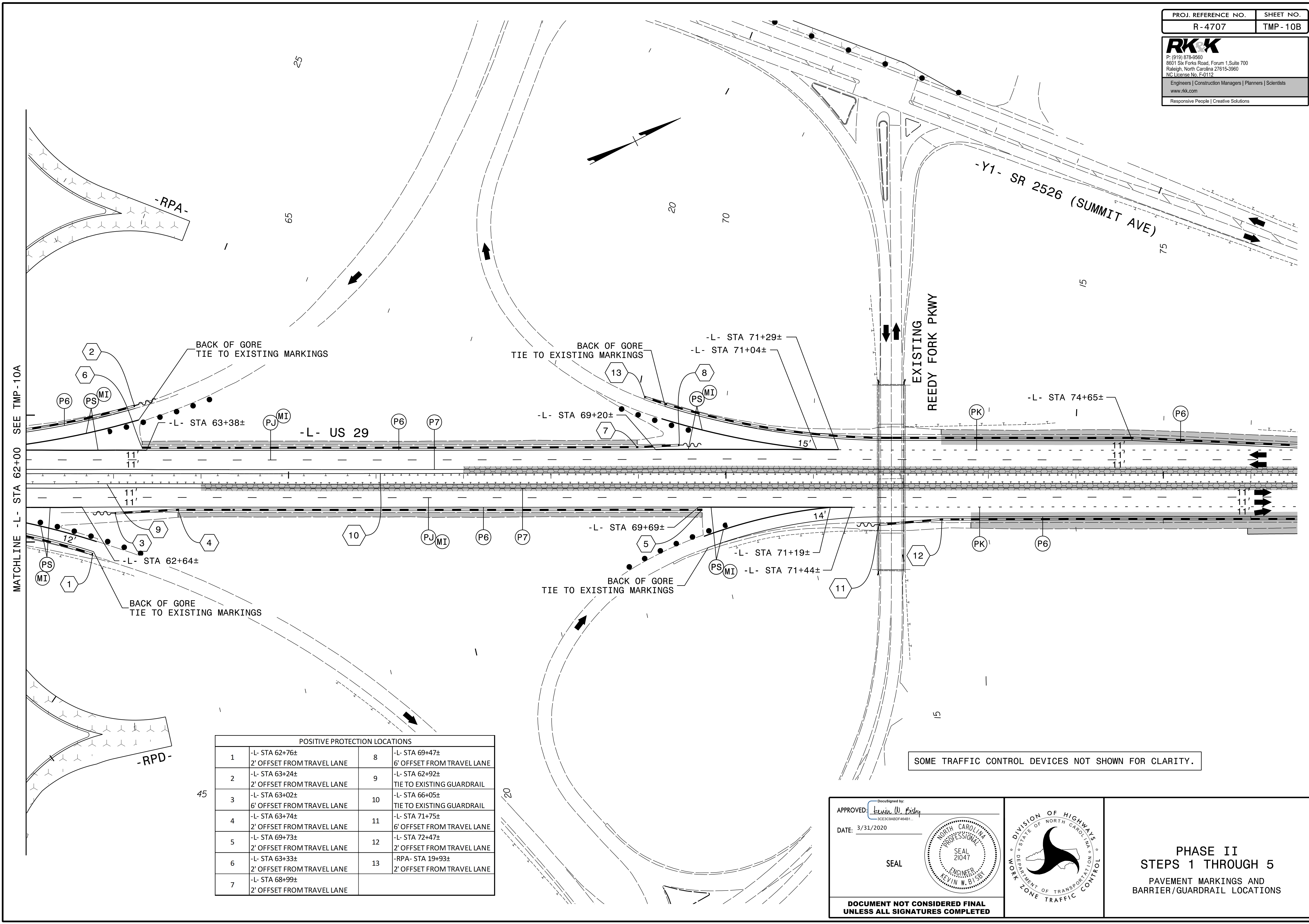
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**PHASE II**  
**STEPS 1 THROUGH 5**  
 PAVEMENT MARKINGS AND  
 BARRIER/GUARDRAIL LOCATIONS

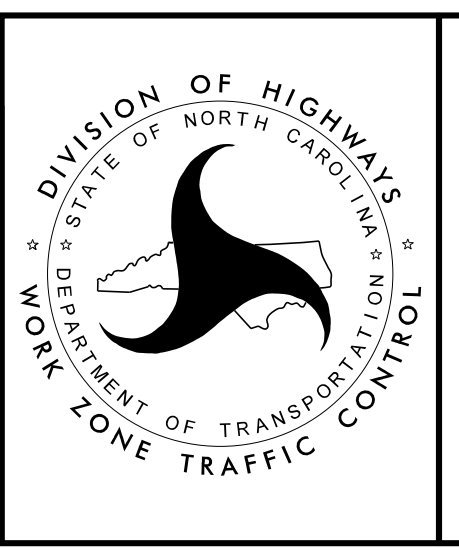
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POSITIVE PROTECTION LOCATIONS			
1	-L- STA 62+76± 2' OFFSET FROM TRAVEL LANE	8	-L- STA 69+47± 6' OFFSET FROM TRAVEL LANE
2	-L- STA 63+24± 2' OFFSET FROM TRAVEL LANE	9	-L- STA 62+92± TIE TO EXISTING GUARDRAIL
3	-L- STA 63+02± 6' OFFSET FROM TRAVEL LANE	10	-L- STA 66+05± TIE TO EXISTING GUARDRAIL
4	-L- STA 63+74± 2' OFFSET FROM TRAVEL LANE	11	-L- STA 71+75± 6' OFFSET FROM TRAVEL LANE
5	-L- STA 69+73± 2' OFFSET FROM TRAVEL LANE	12	-L- STA 72+47± 2' OFFSET FROM TRAVEL LANE
6	-L- STA 63+33± 2' OFFSET FROM TRAVEL LANE	13	-RPA- STA 19+93± 2' OFFSET FROM TRAVEL LANE
7	-L- STA 68+99± 2' OFFSET FROM TRAVEL LANE		

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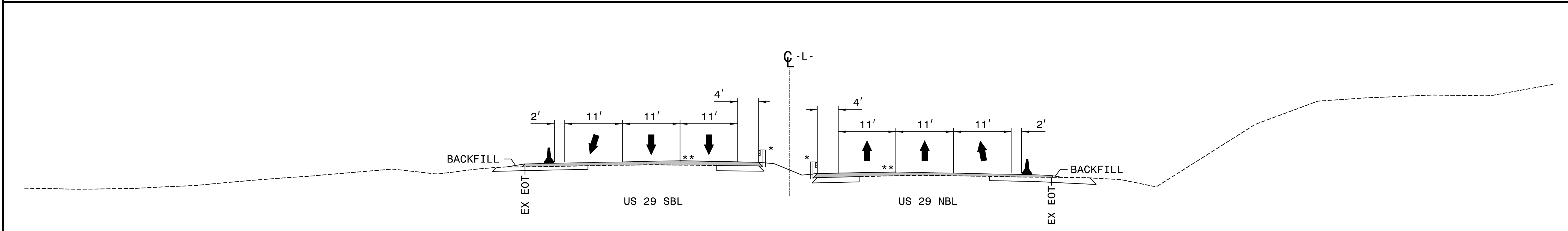
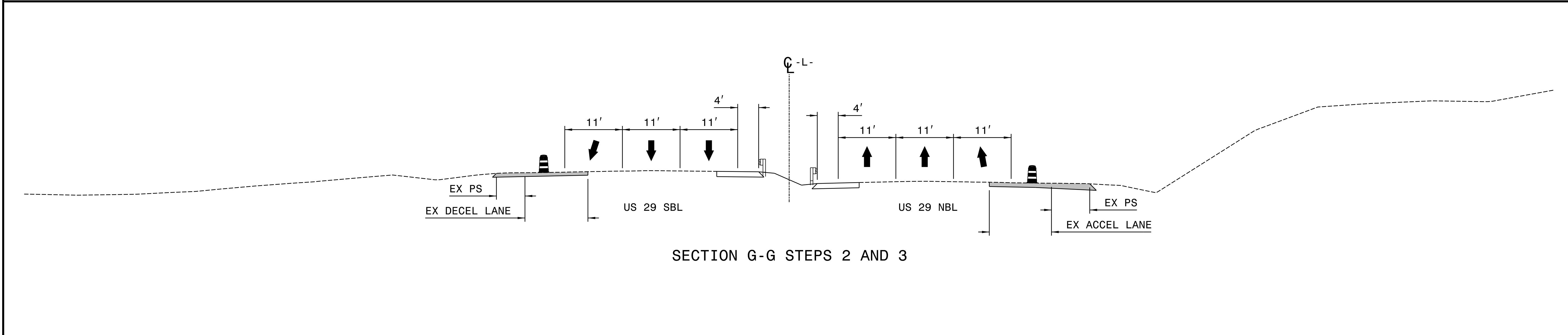
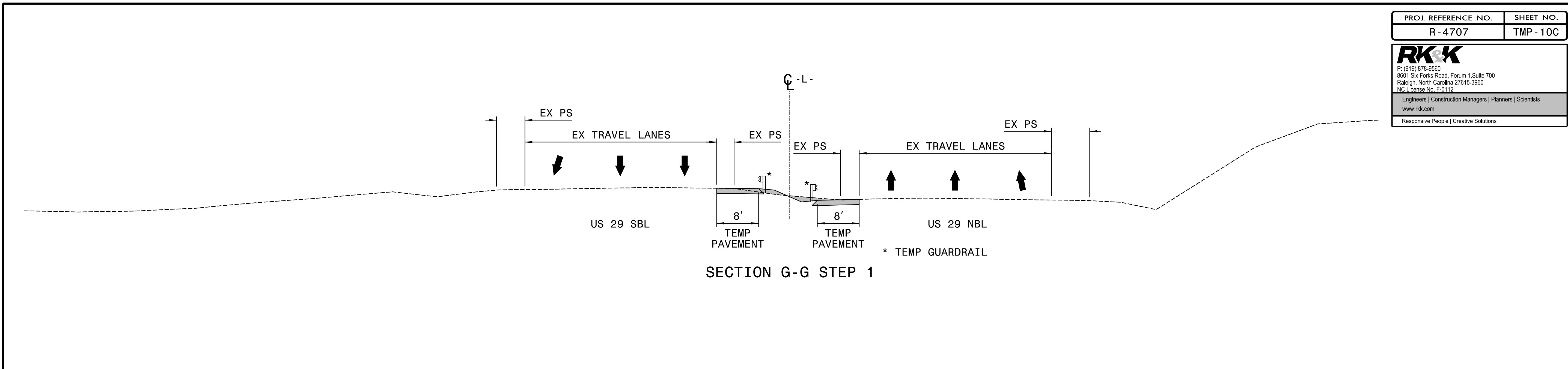
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**PHASE II**  
**STEPS 1 THROUGH 5**  
 PAVEMENT MARKINGS AND  
 BARRIER/GUARDRAIL LOCATIONS



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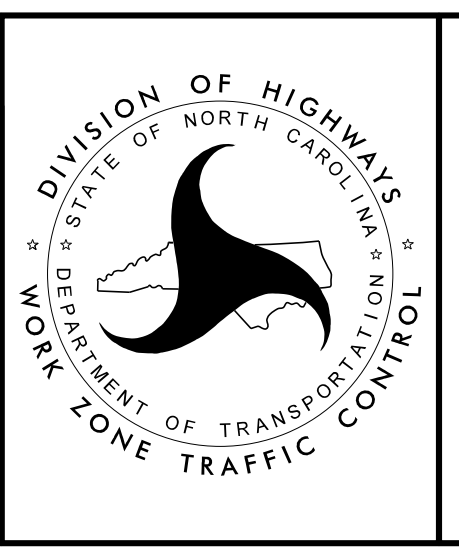


\*ADJUST GUARDRAIL  
 \*\*0.04 MAX ROLLOVER

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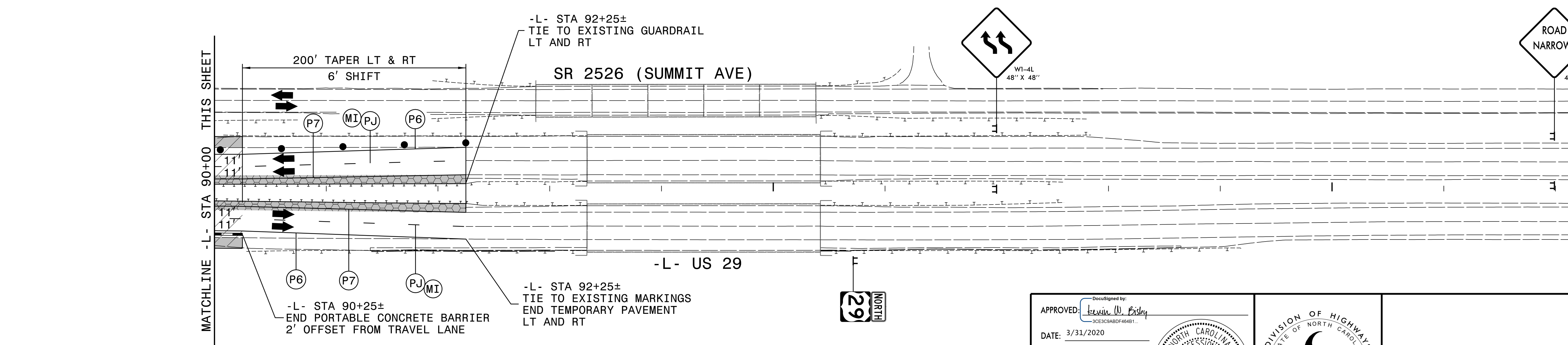
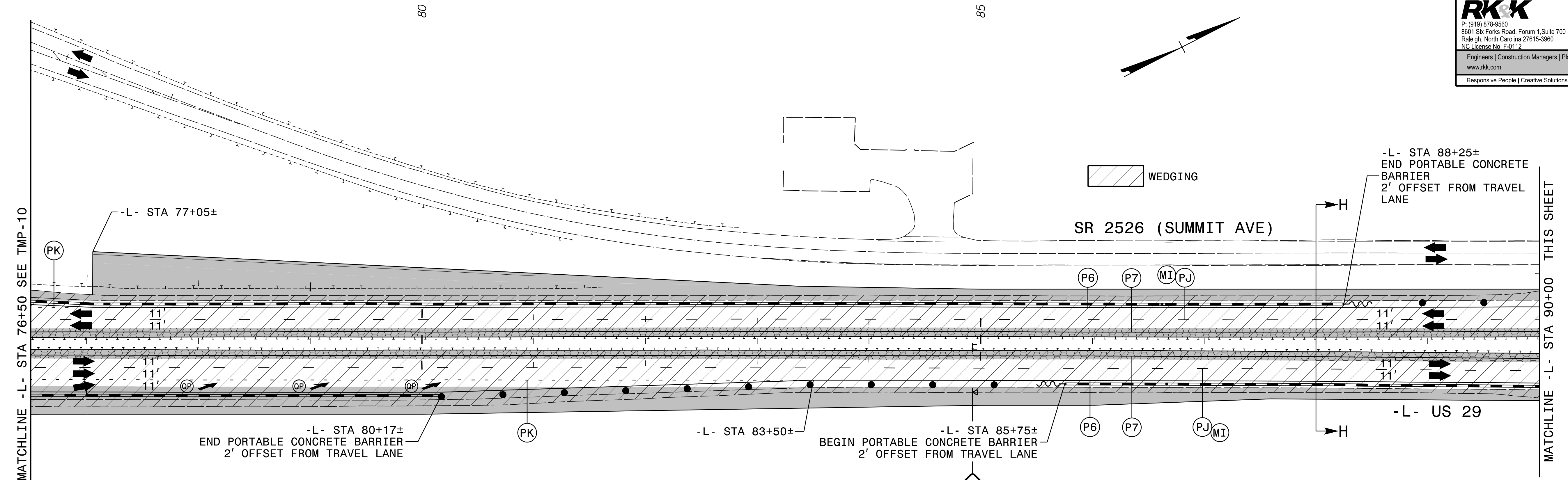
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 Kevin W. Bisby  
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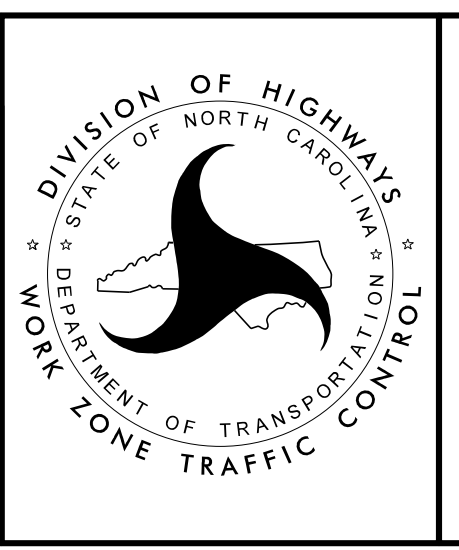


PHASE II  
 STEPS 1 THROUGH 4  
 SECTION VIEWS

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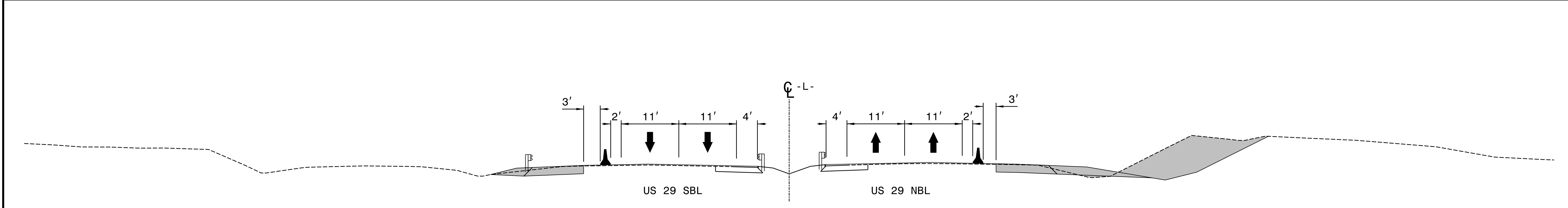
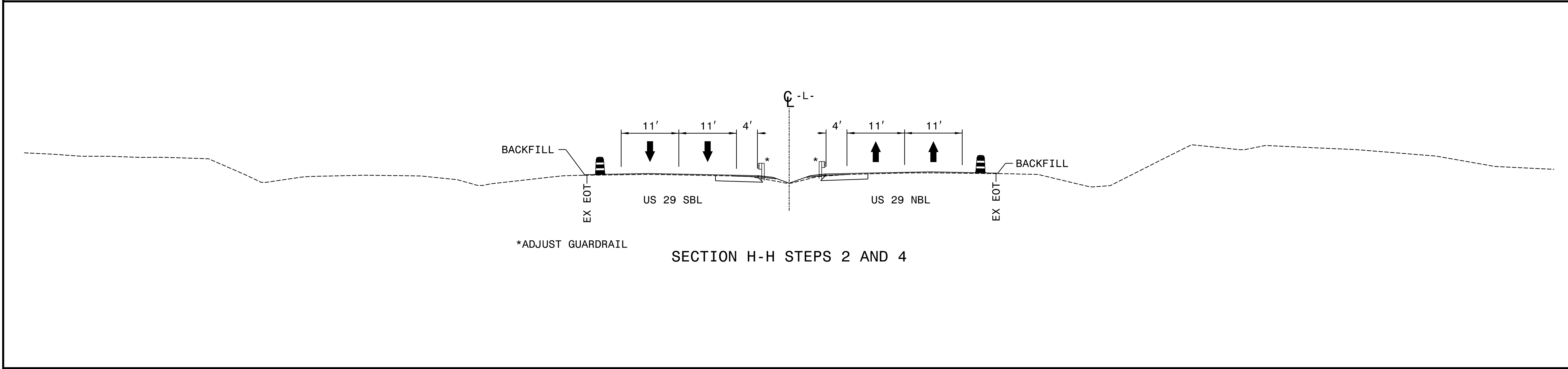
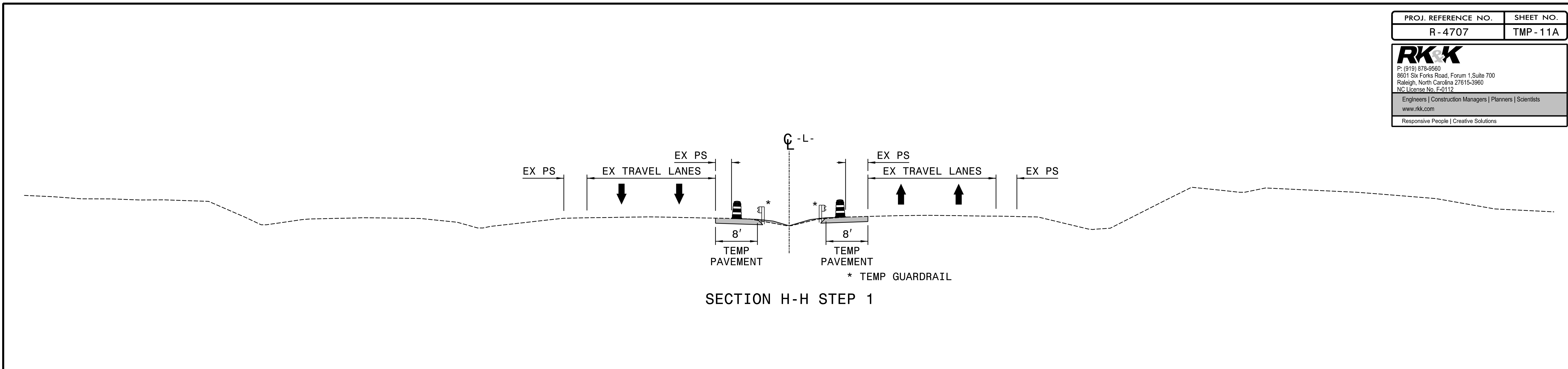
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PHASE II  
 STEPS 1 THROUGH 5

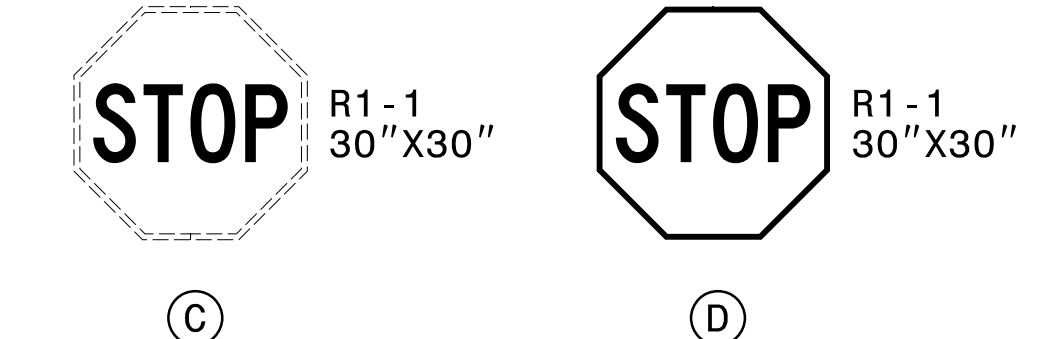
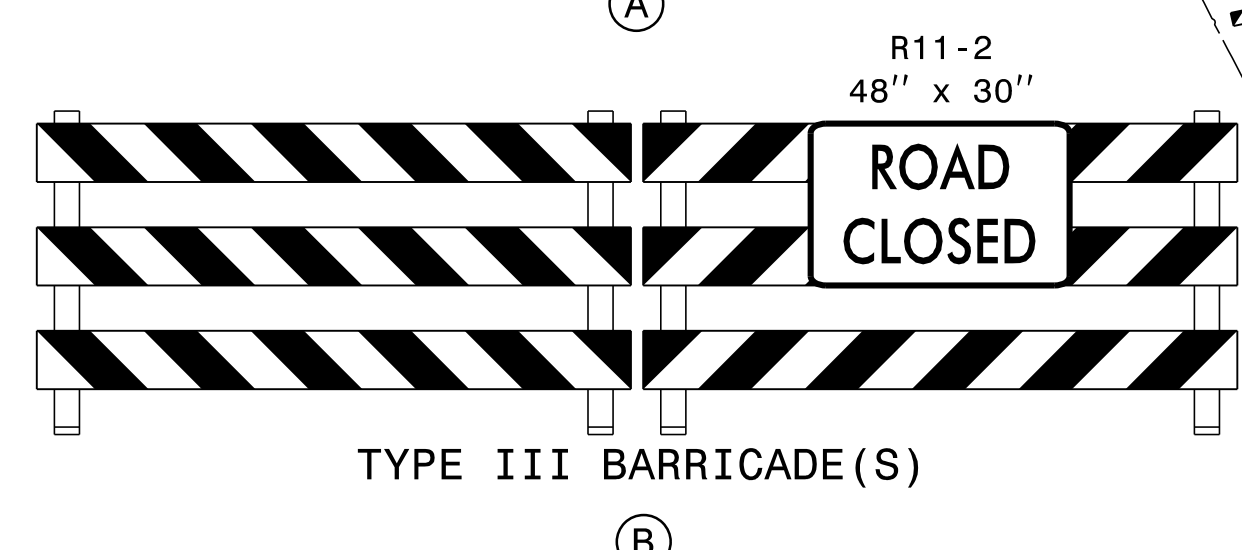
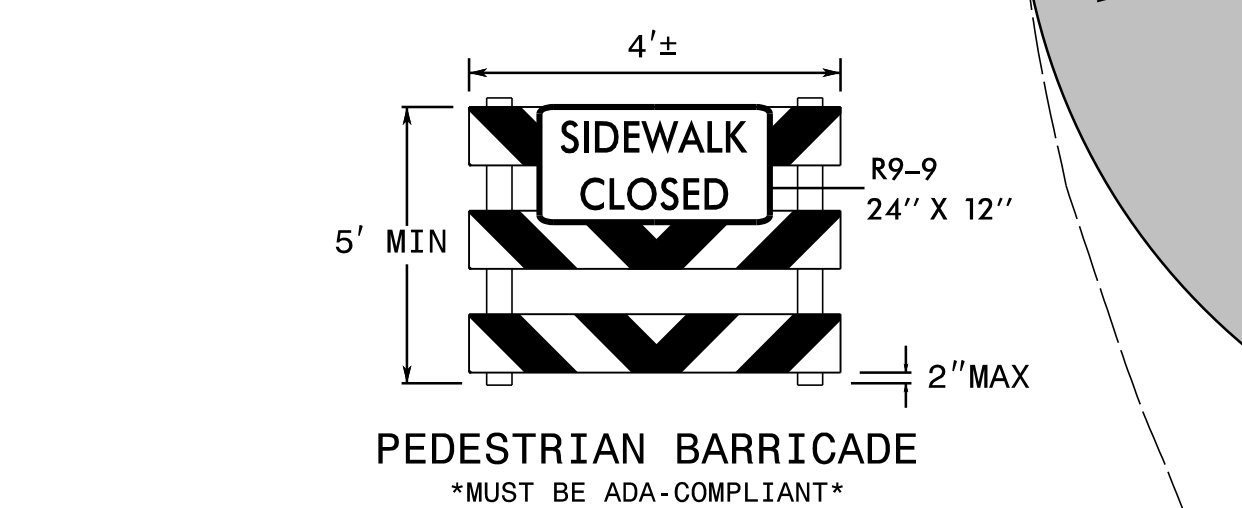
PROJ. REFERENCE NO.	SHEET NO.
R-4707	TMP-11A

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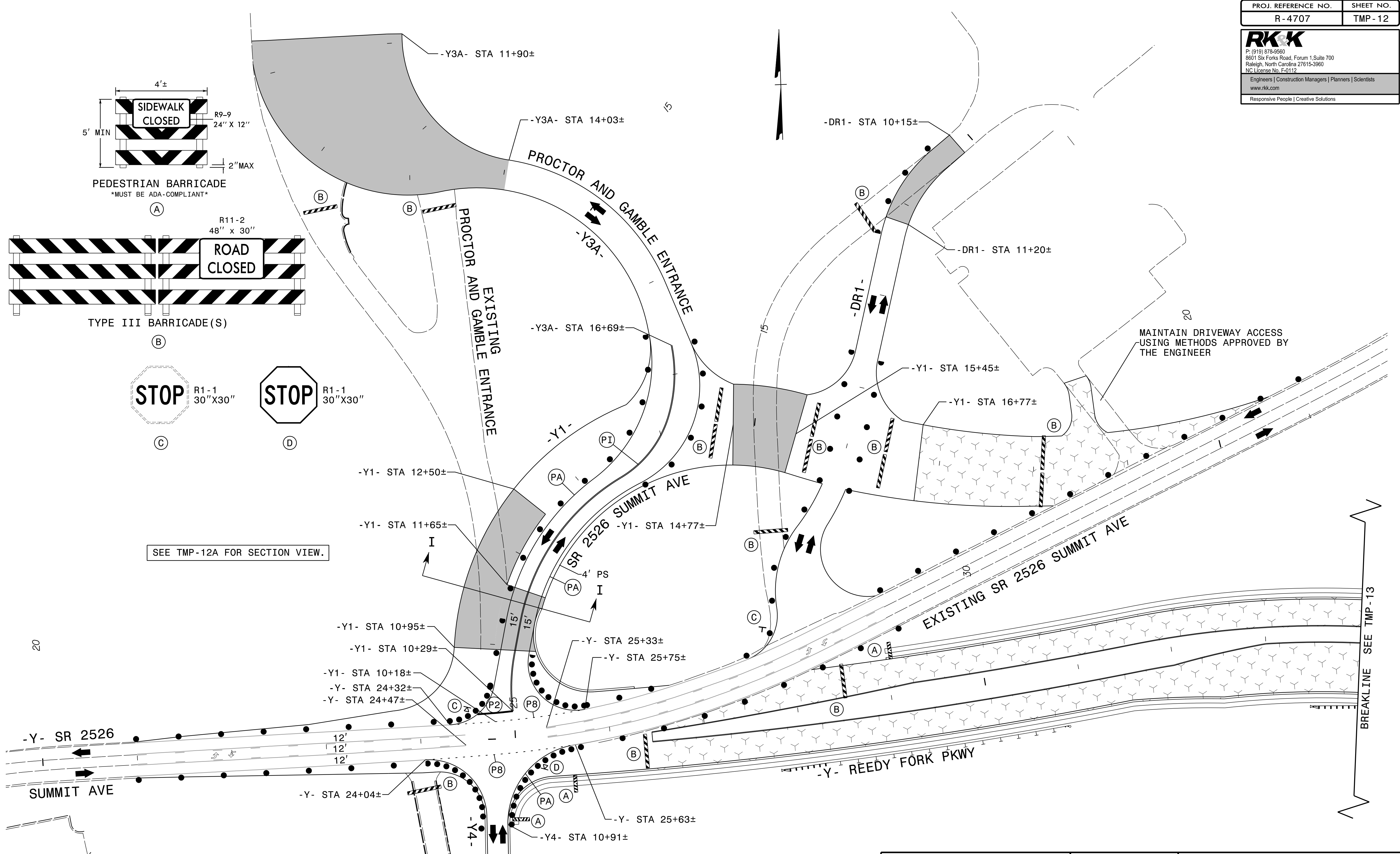


APPROVED: <i>Kevin W. Bisby</i> DATE: 3/31/2020 SEAL DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			PHASE II STEPS 1, 2, 4 AND 5 SECTION VIEWS
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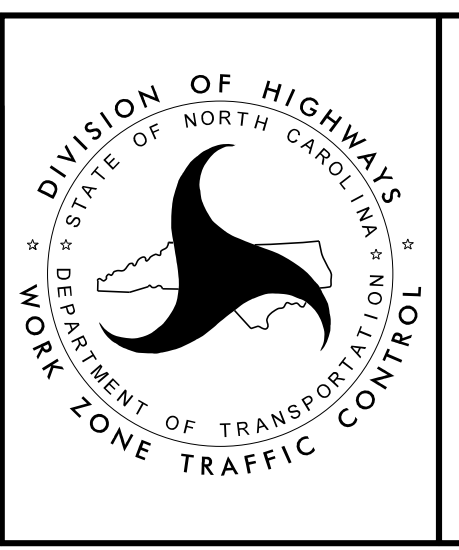
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SEE TMP-12A FOR SECTION VIEW.



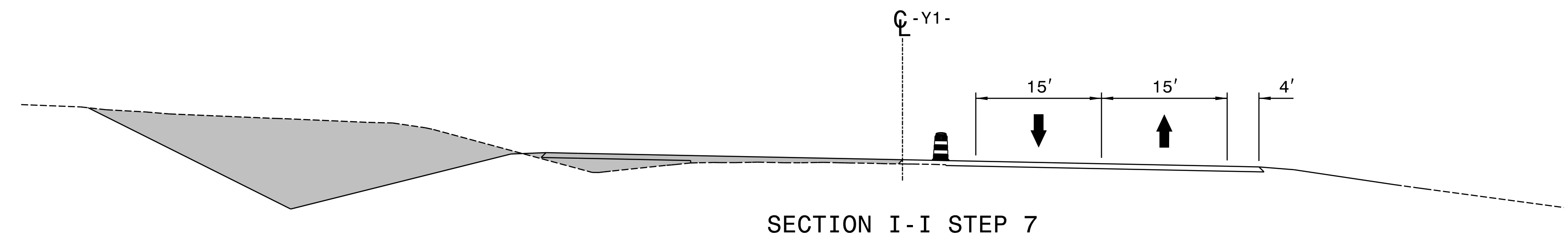
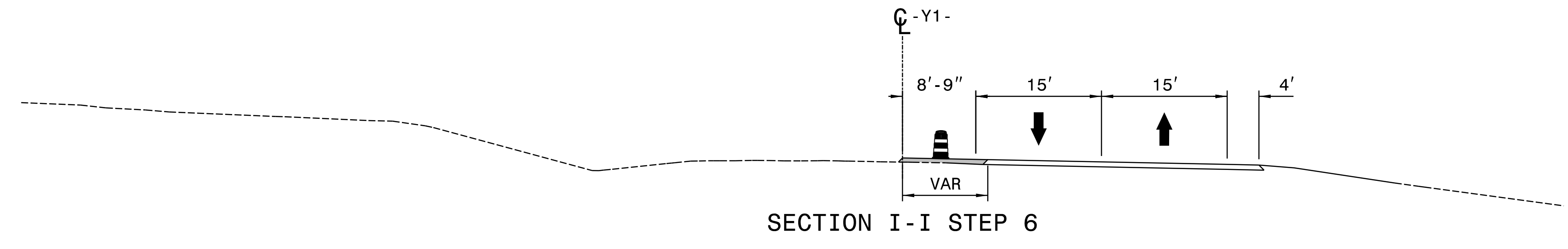
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 PHASE II  
 STEPS 6 AND 7

PROJ. REFERENCE NO.	SHEET NO.
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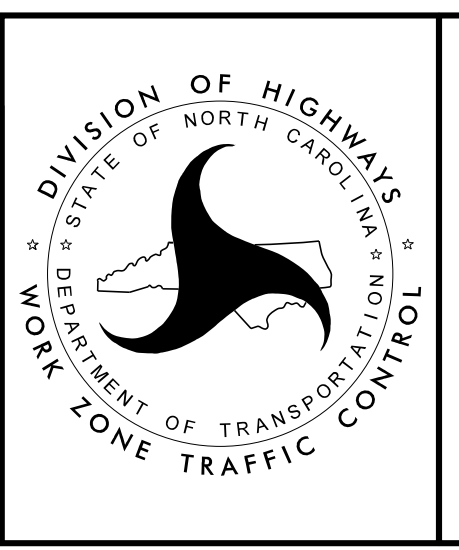


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DocuSigned by: Kevin W. Bisby  
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DATE: 3/31/2020

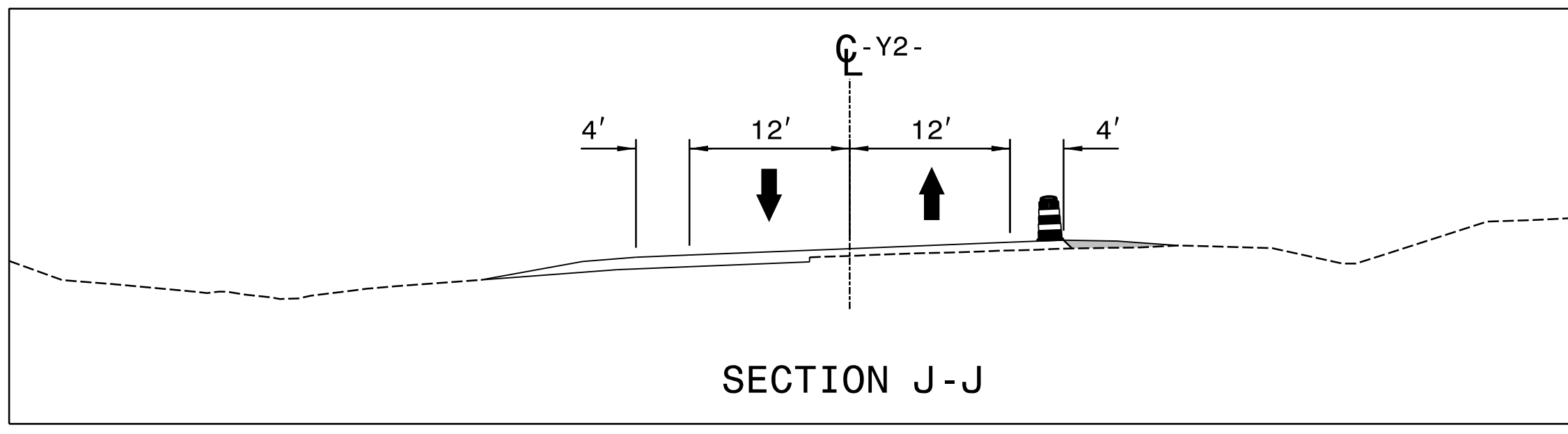
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**PHASE II  
STEPS 6 AND 7  
SECTION VIEWS**

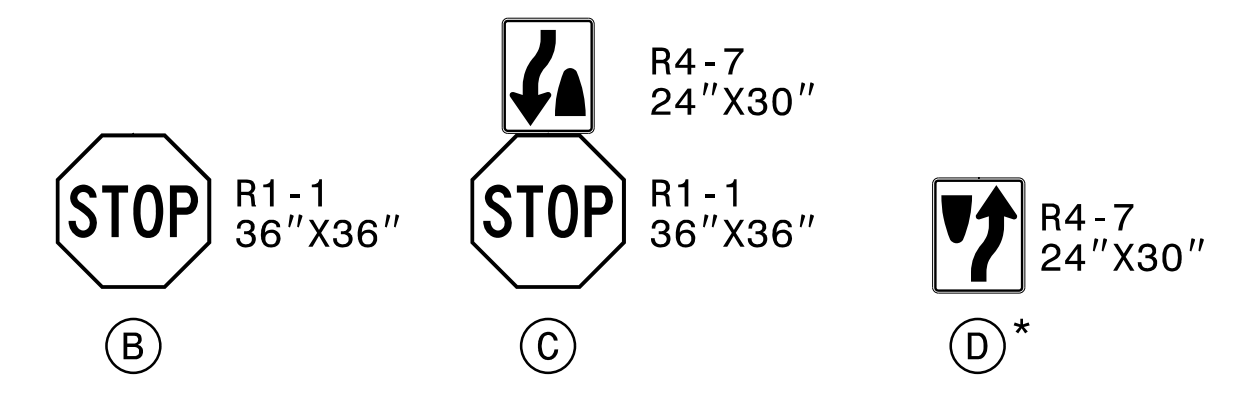
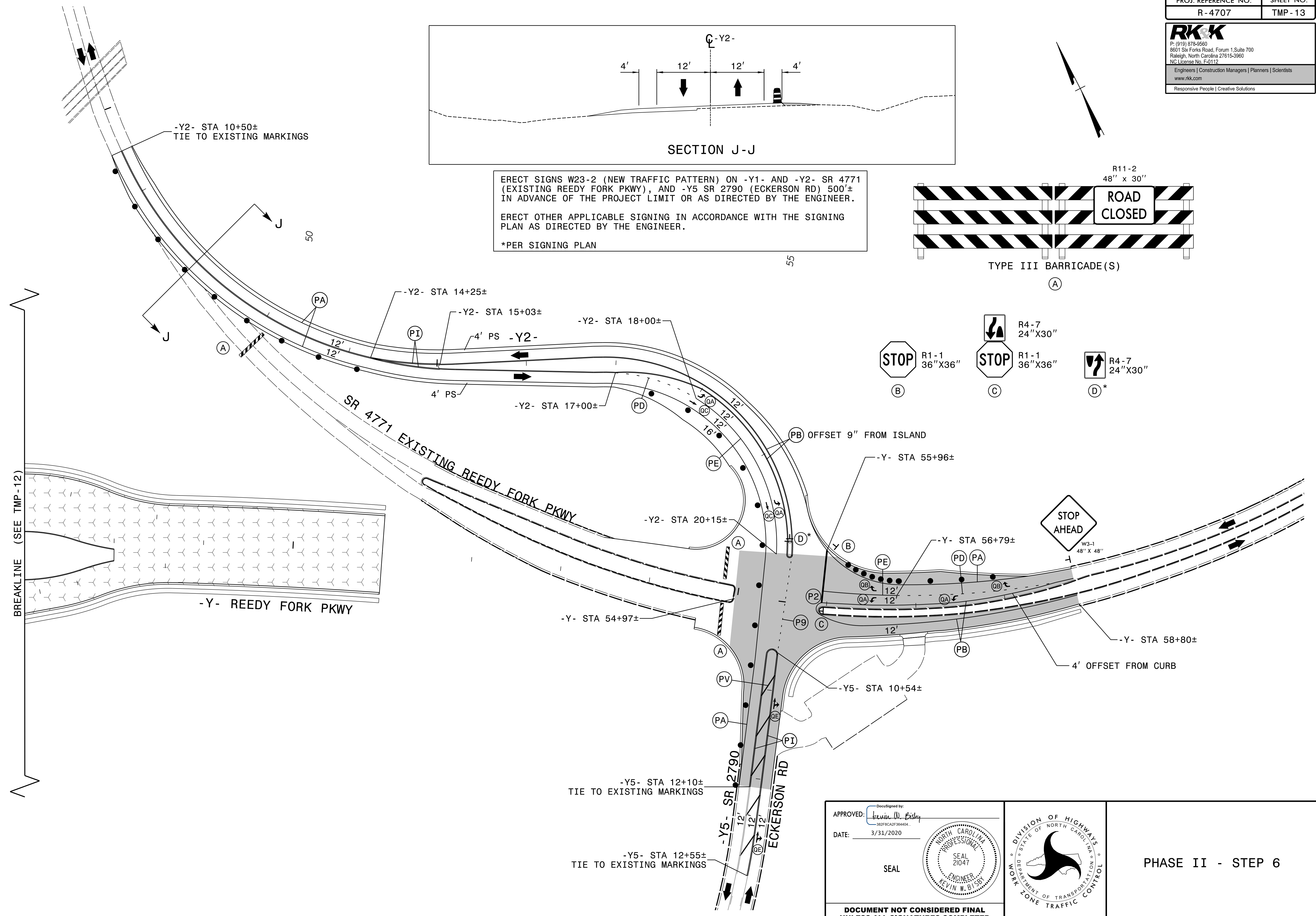
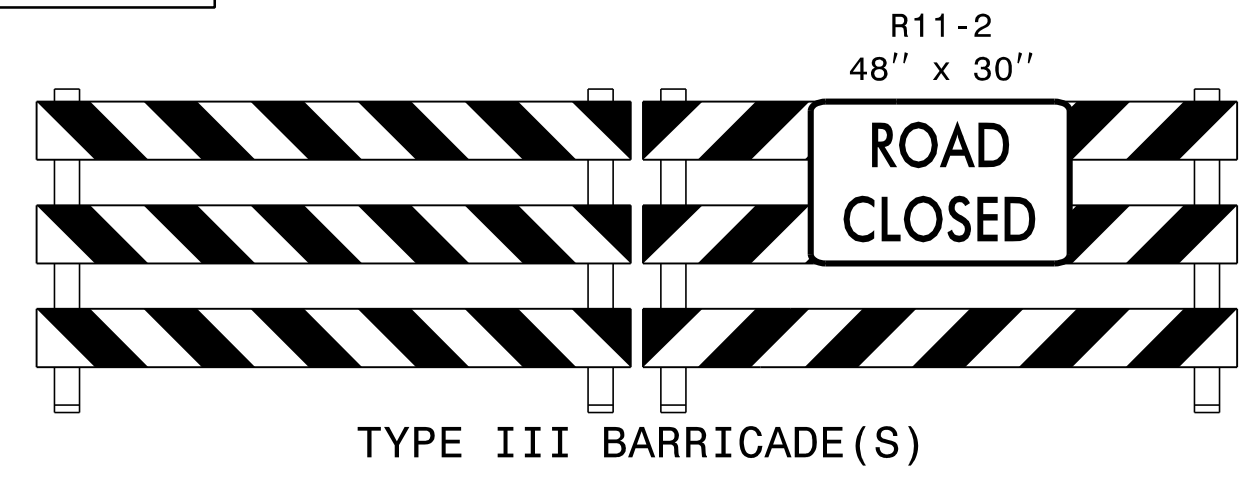
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ERECT SIGNS W23-2 (NEW TRAFFIC PATTERN) ON -Y1- AND -Y2- SR 4771 (EXISTING REEDY FORK PKWY), AND -Y5 SR 2790 (ECKERSON RD) 500'± IN ADVANCE OF THE PROJECT LIMIT OR AS DIRECTED BY THE ENGINEER.

ERECT OTHER APPLICABLE SIGNING IN ACCORDANCE WITH THE SIGNING PLAN AS DIRECTED BY THE ENGINEER.

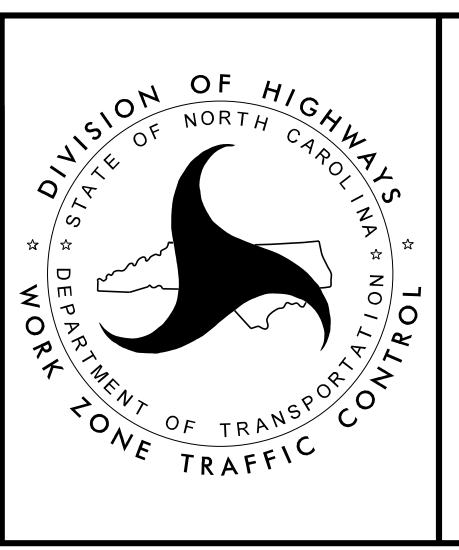
\*PER SIGNING PLAN



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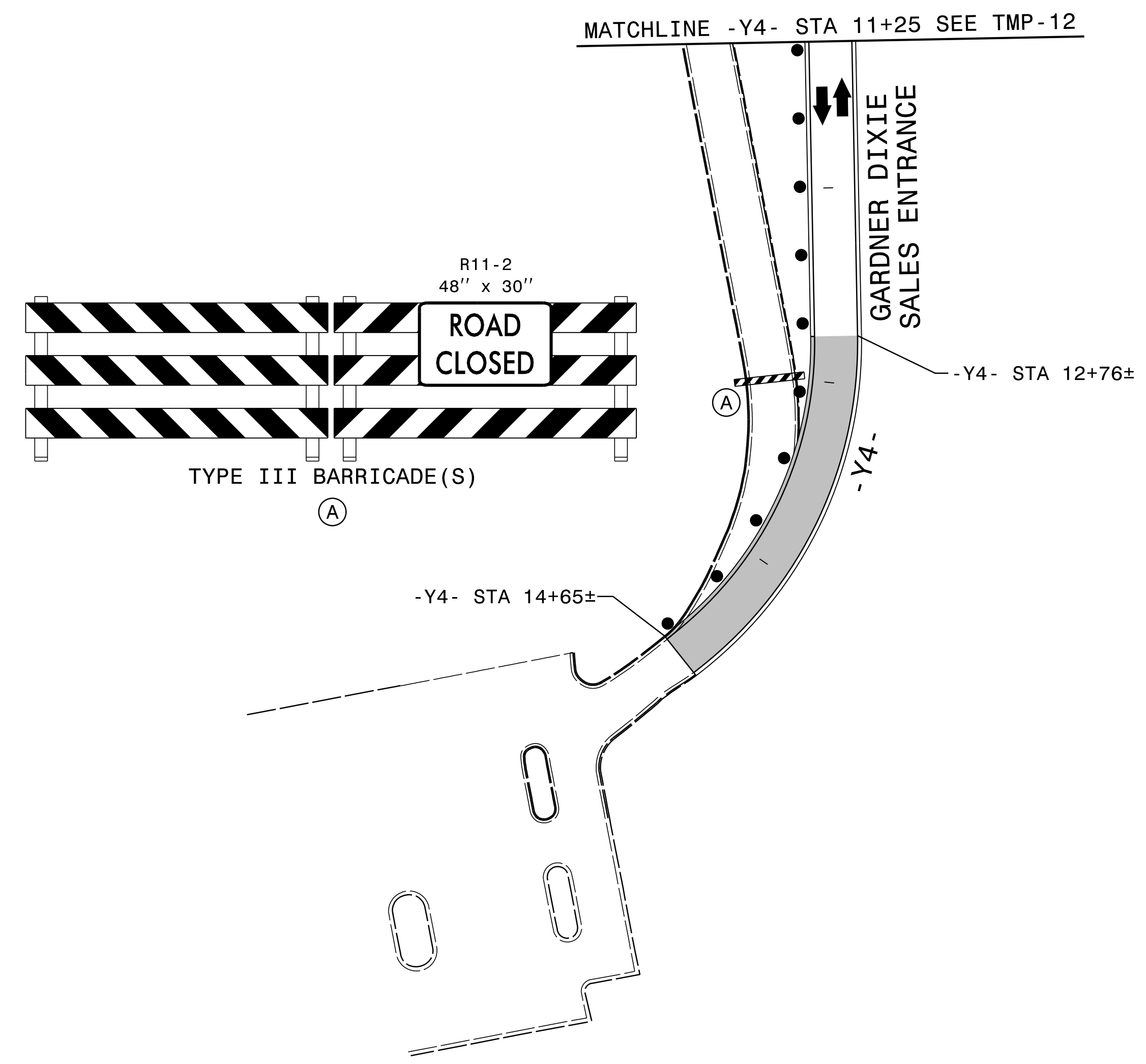


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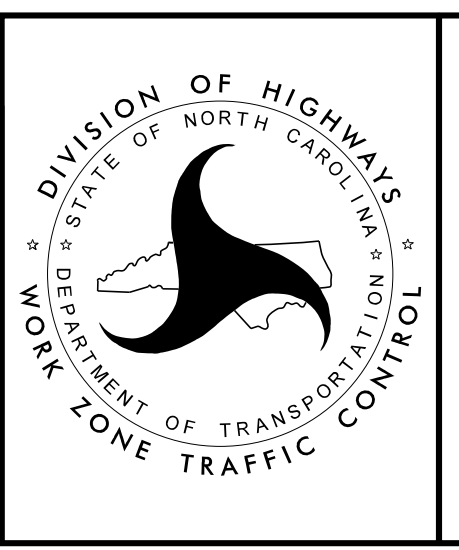
PHASE II - STEP 6

PROJ. REFERENCE NO.	SHEET NO.
R - 4707	TMP - 14

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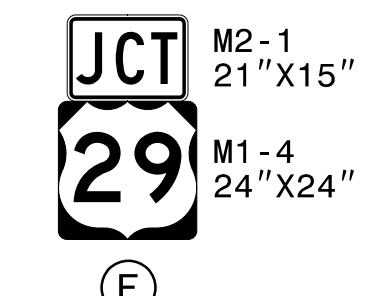
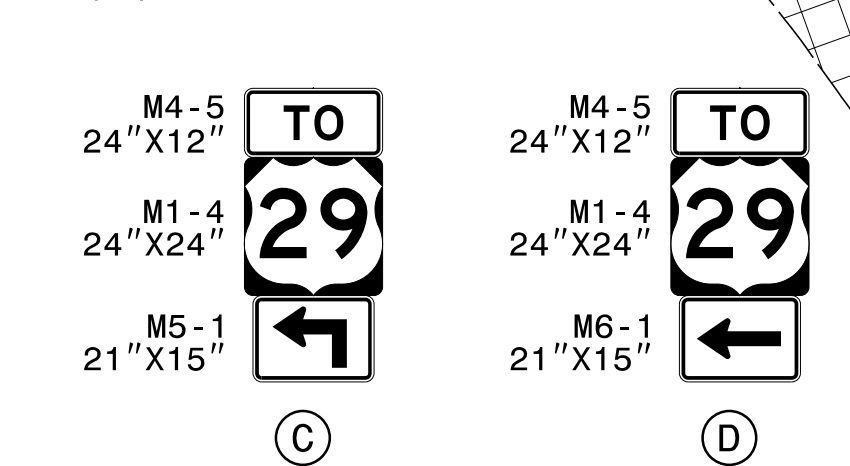
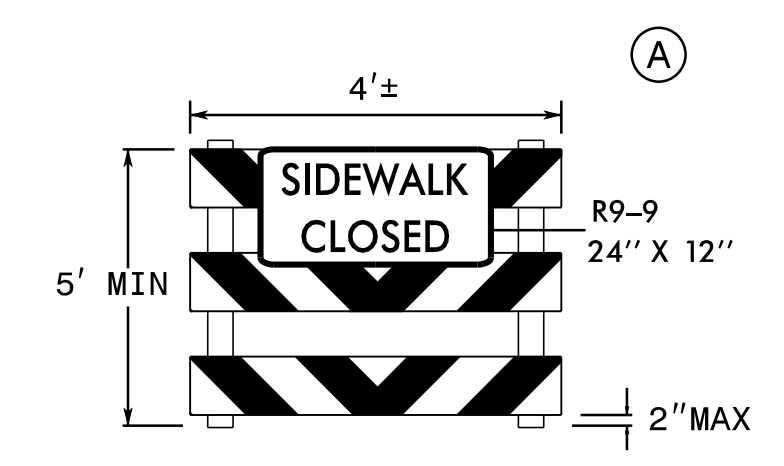
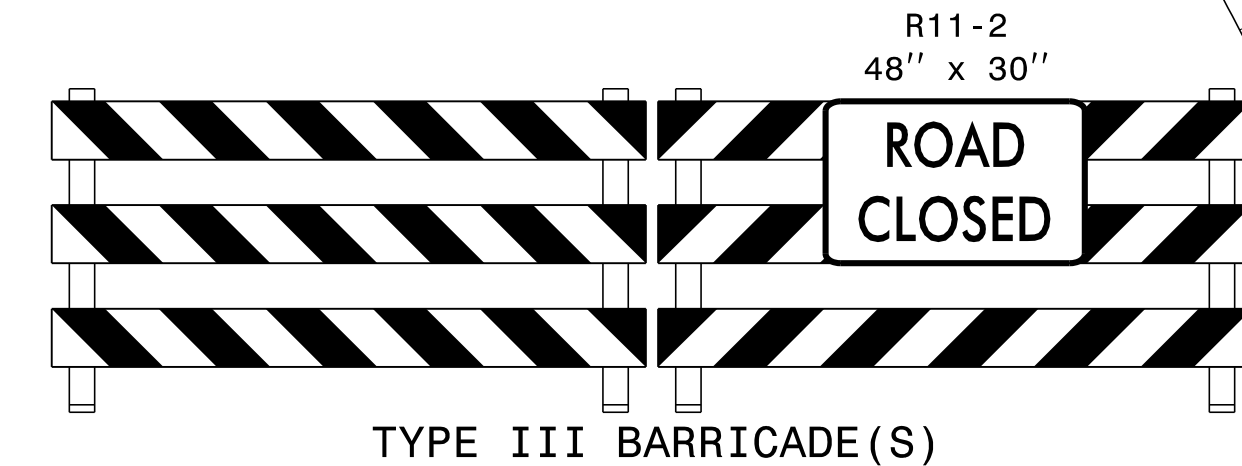
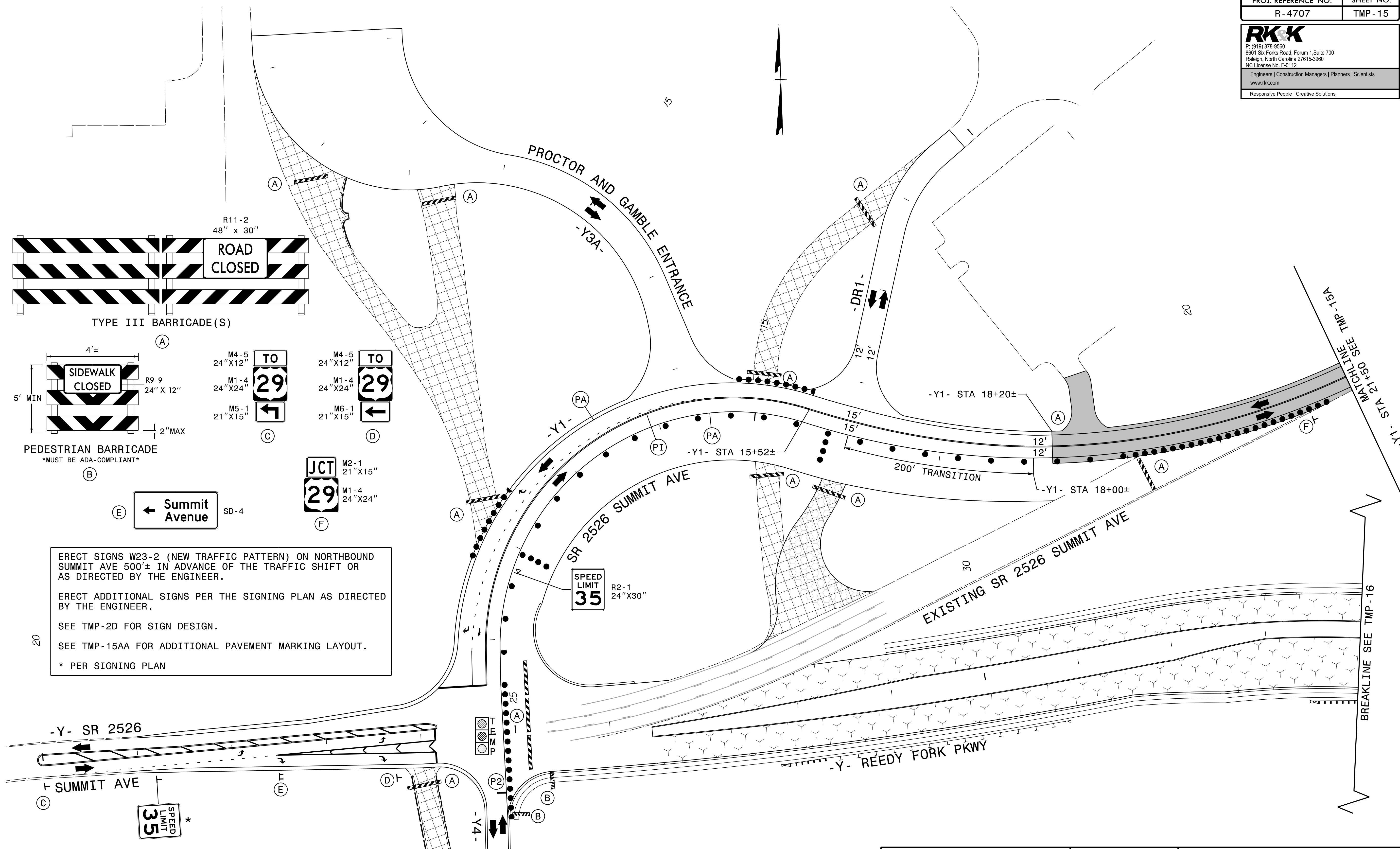


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PHASE II - STEP 6

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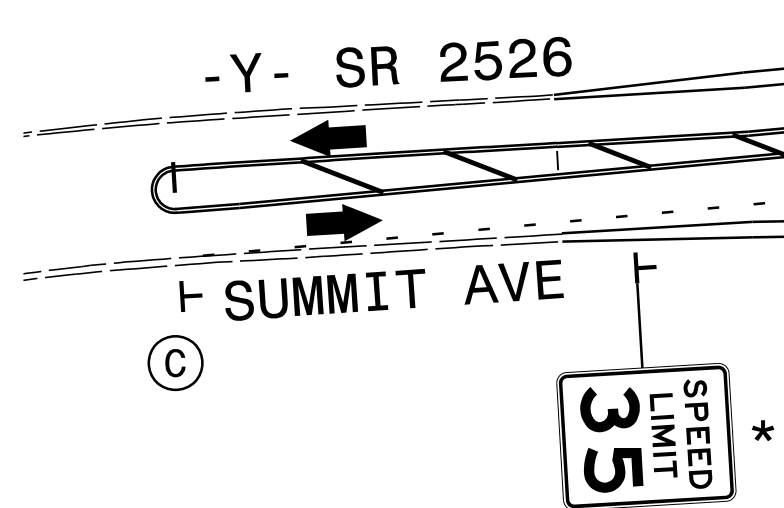
ERECT SIGNS W23-2 (NEW TRAFFIC PATTERN) ON NORTHBOUND SUMMIT AVE 500'± IN ADVANCE OF THE TRAFFIC SHIFT OR AS DIRECTED BY THE ENGINEER.

ERECT ADDITIONAL SIGNS PER THE SIGNING PLAN AS DIRECTED BY THE ENGINEER.

SEE TMP-2D FOR SIGN DESIGN.

SEE TMP-15AA FOR ADDITIONAL PAVEMENT MARKING LAYOUT.

\* PER SIGNING PLAN

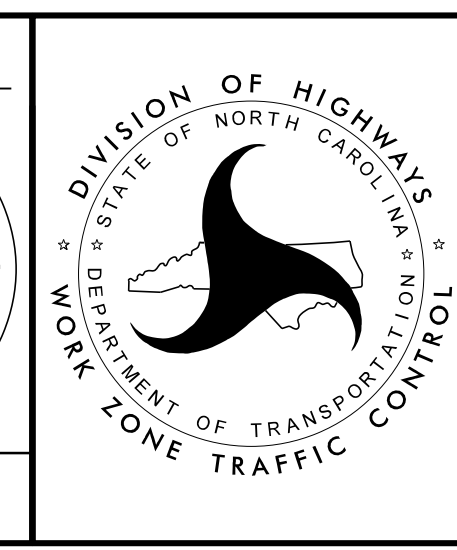


MATCHLINE -Y4- STA 11+25 SEE TMP-17

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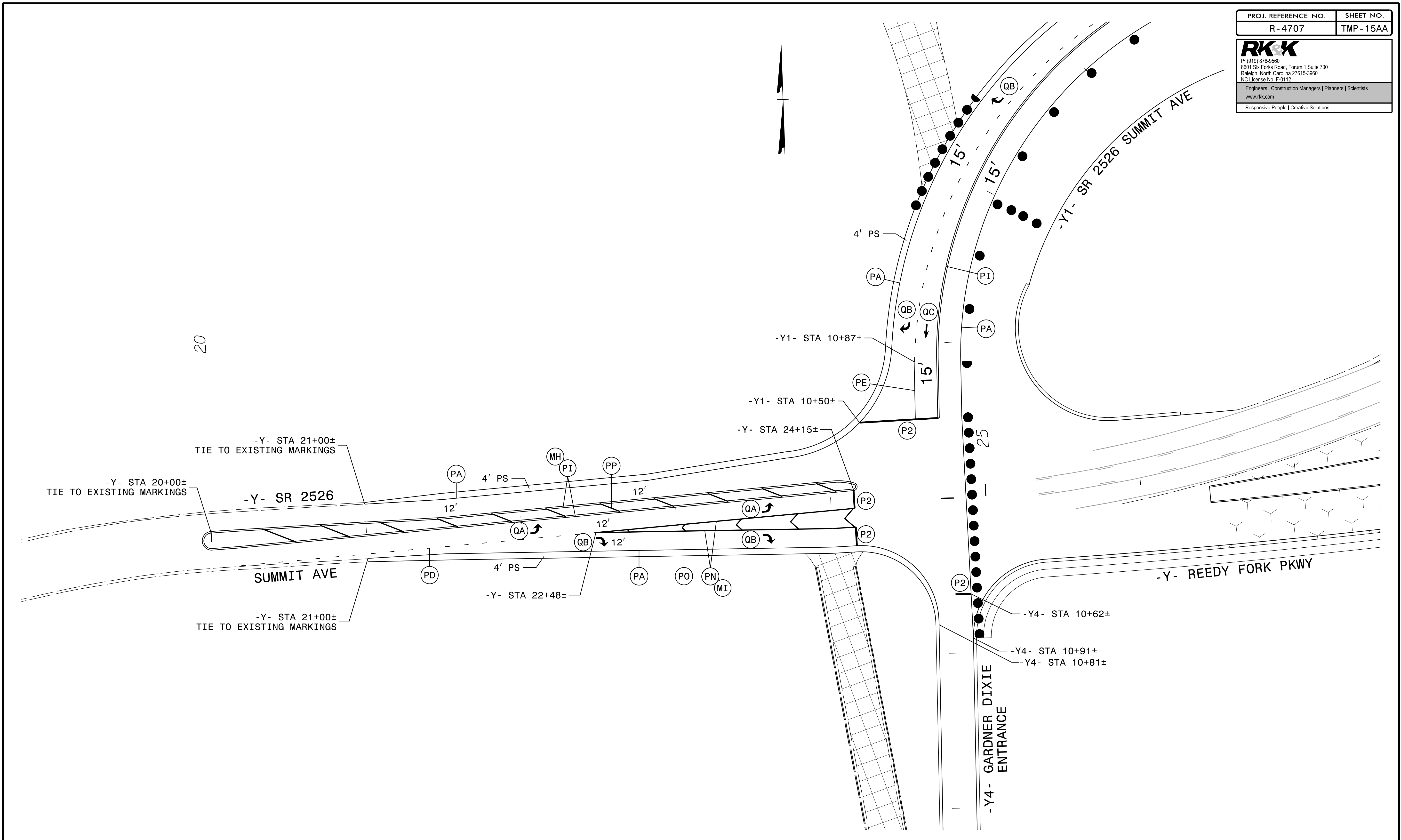
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PHASE II - STEP 8



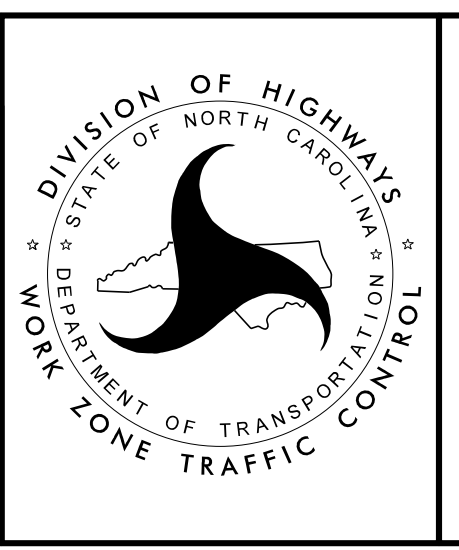
PROJ. REFERENCE NO.	SHEET NO.
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SOME TRAFFIC CONTROL DEVICES NOT SHOWN FOR CLARITY.

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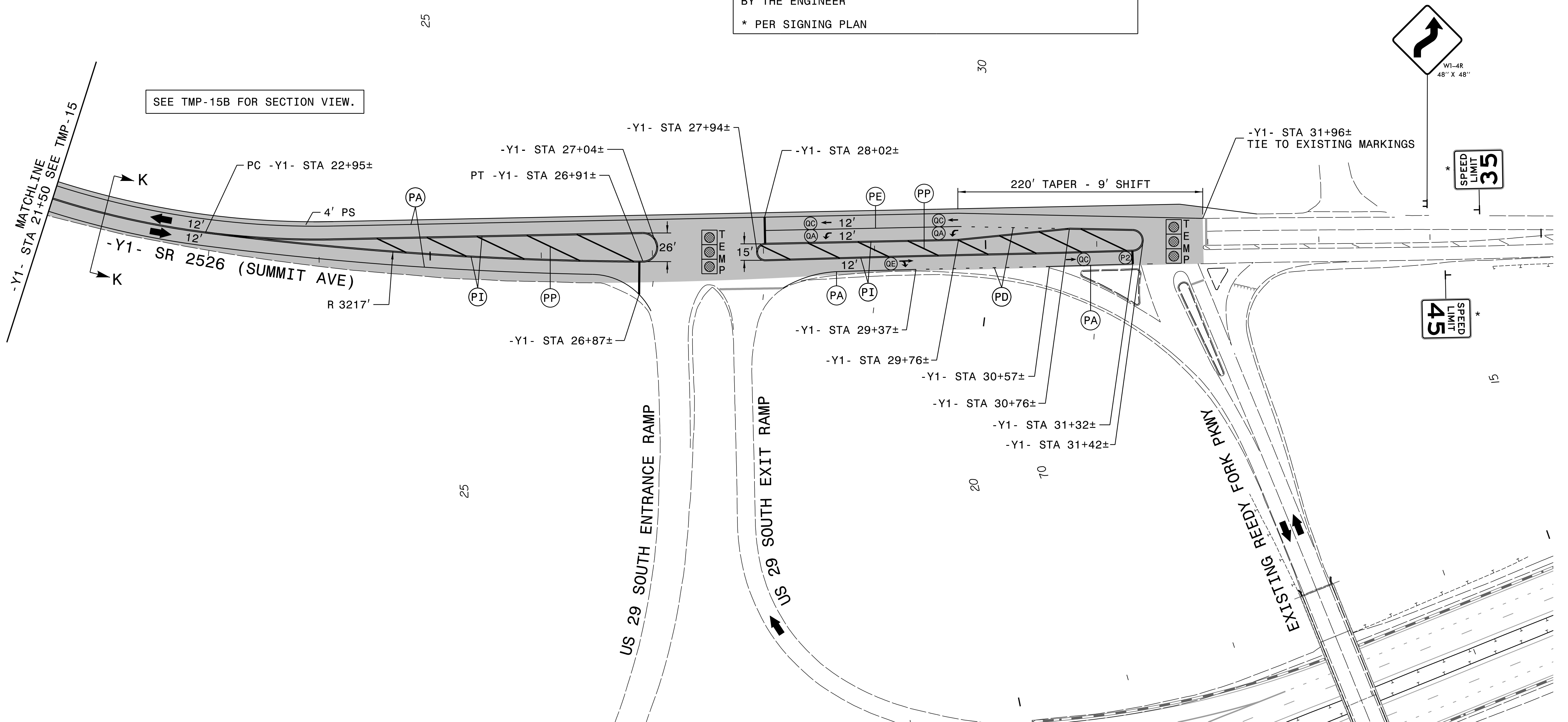
**PHASE II - STEP 8**  
 PAVEMENT MARKINGS

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ERECT SIGNS W23-2 (NEW TRAFFIC PATTERN) ON SUMMIT AVE AS DIRECTED BY THE ENGINEER.

ERECT ADDITIONAL SIGNS PER THE SIGNING PLAN AS DIRECTED BY THE ENGINEER

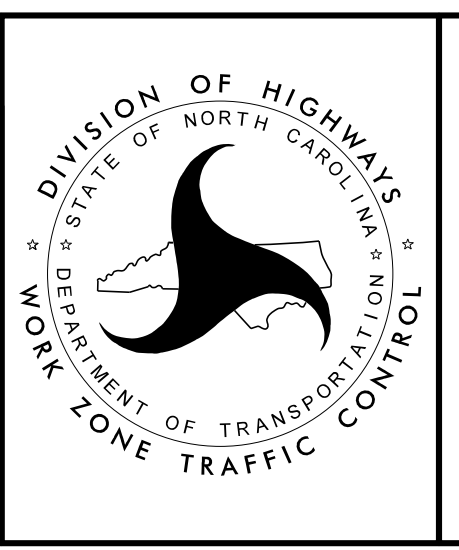
\* PER SIGNING PLAN



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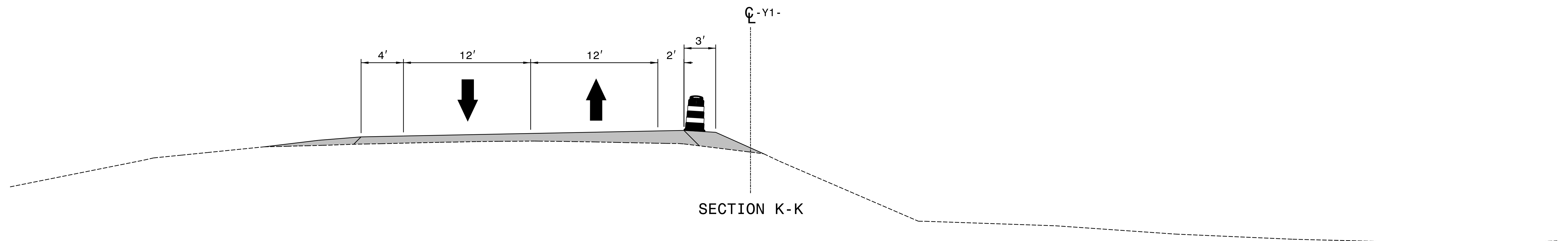


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PHASE II - STEP 8

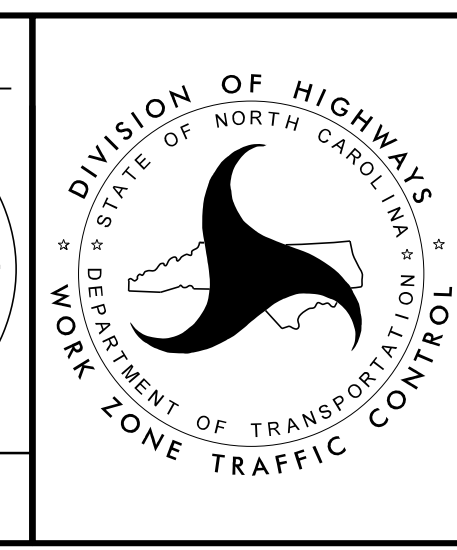
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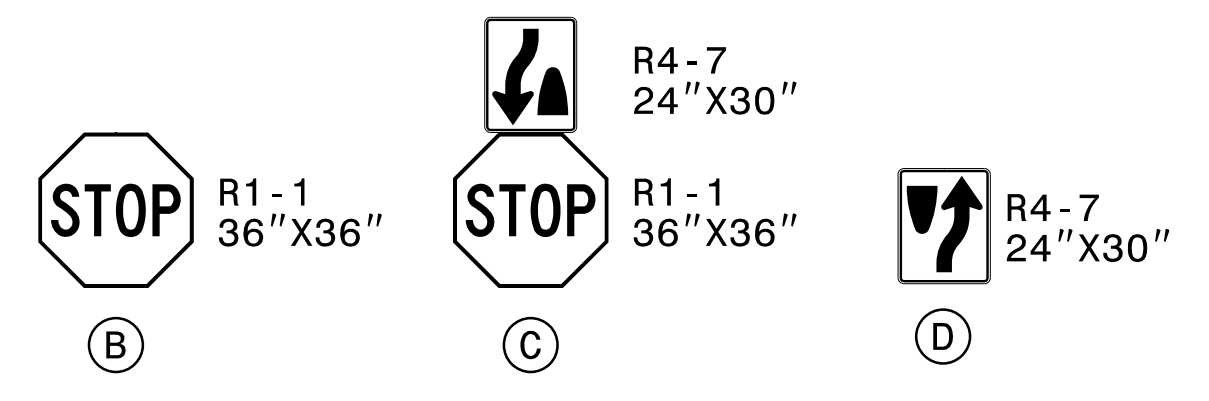
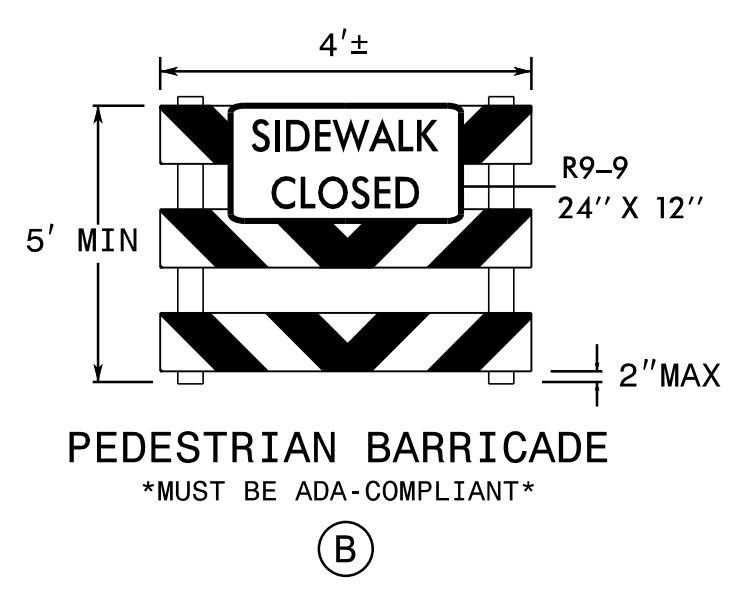
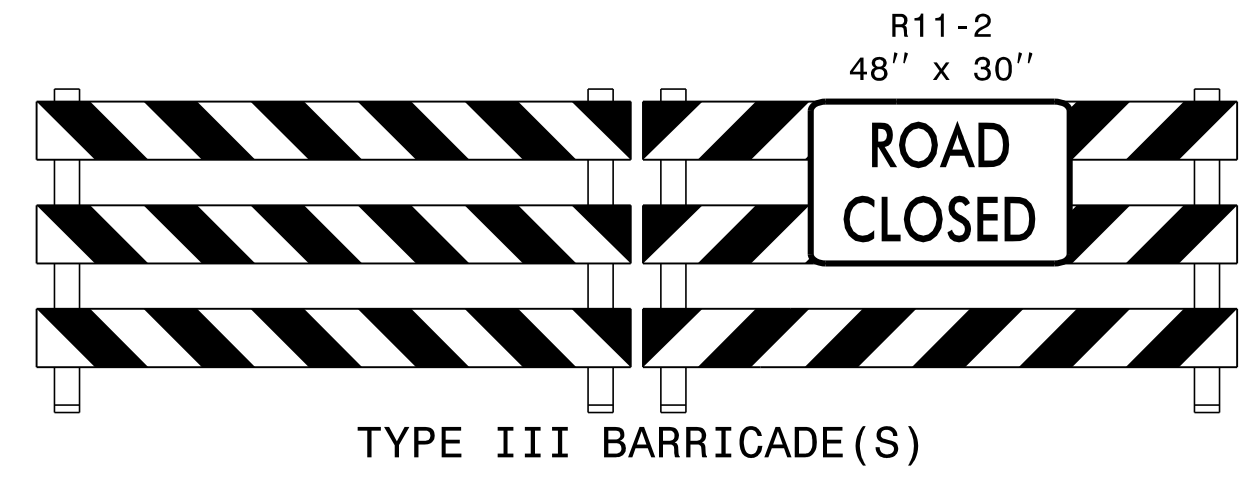
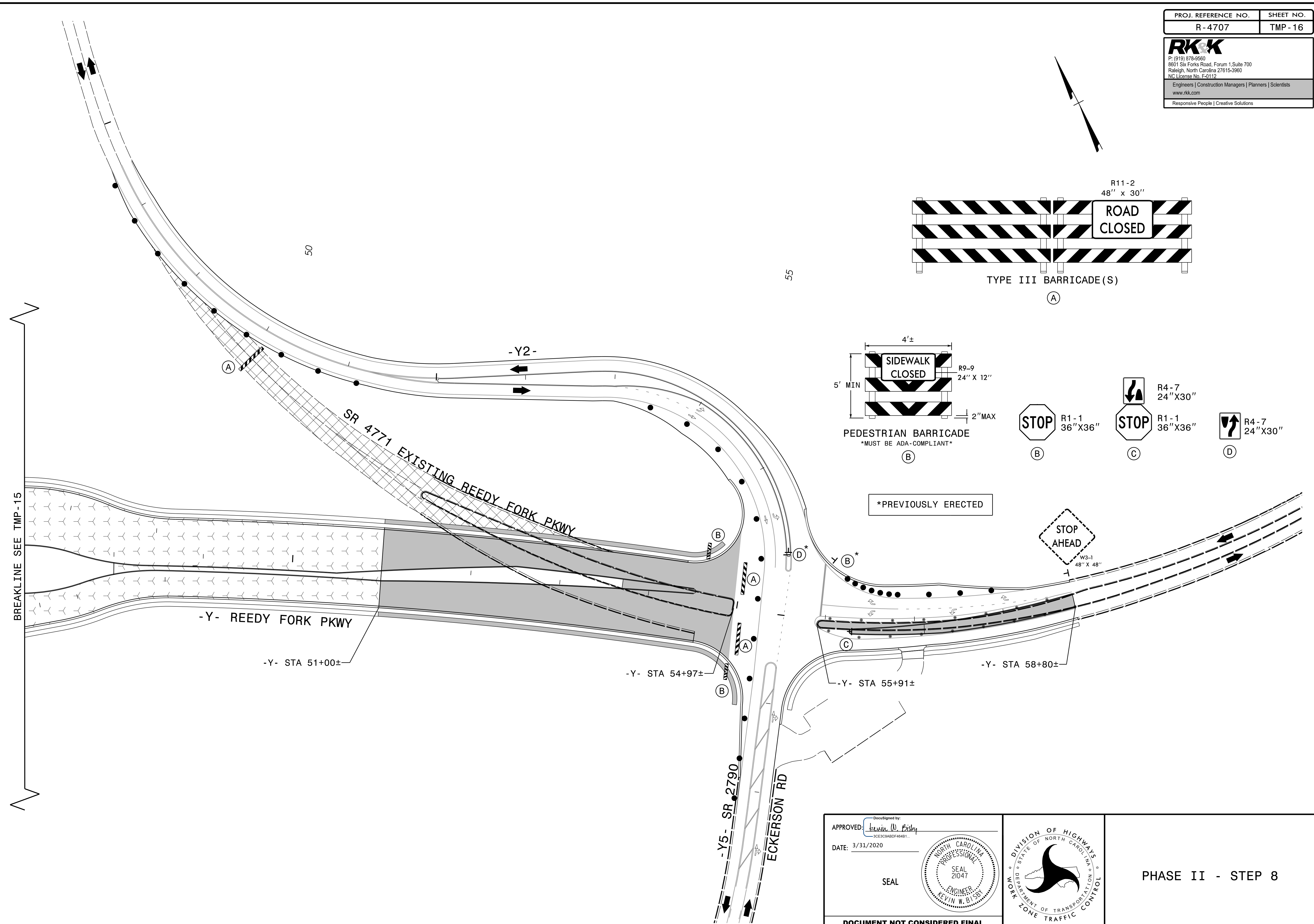
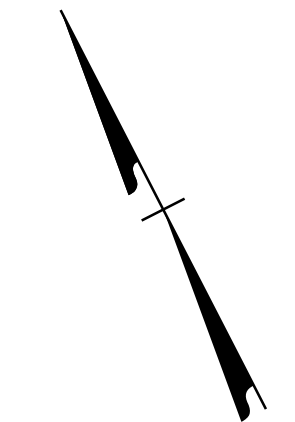
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PHASE II - STEP 8  
 SECTION VIEW

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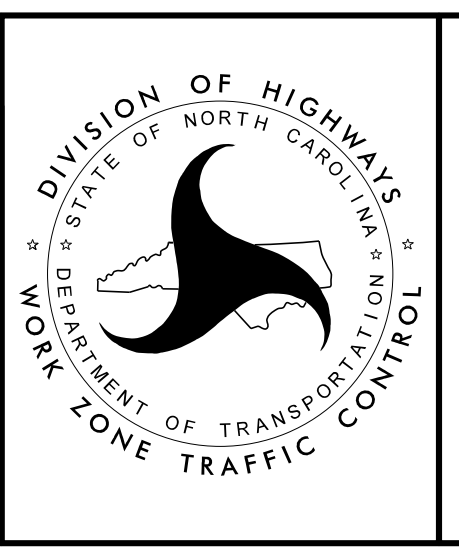


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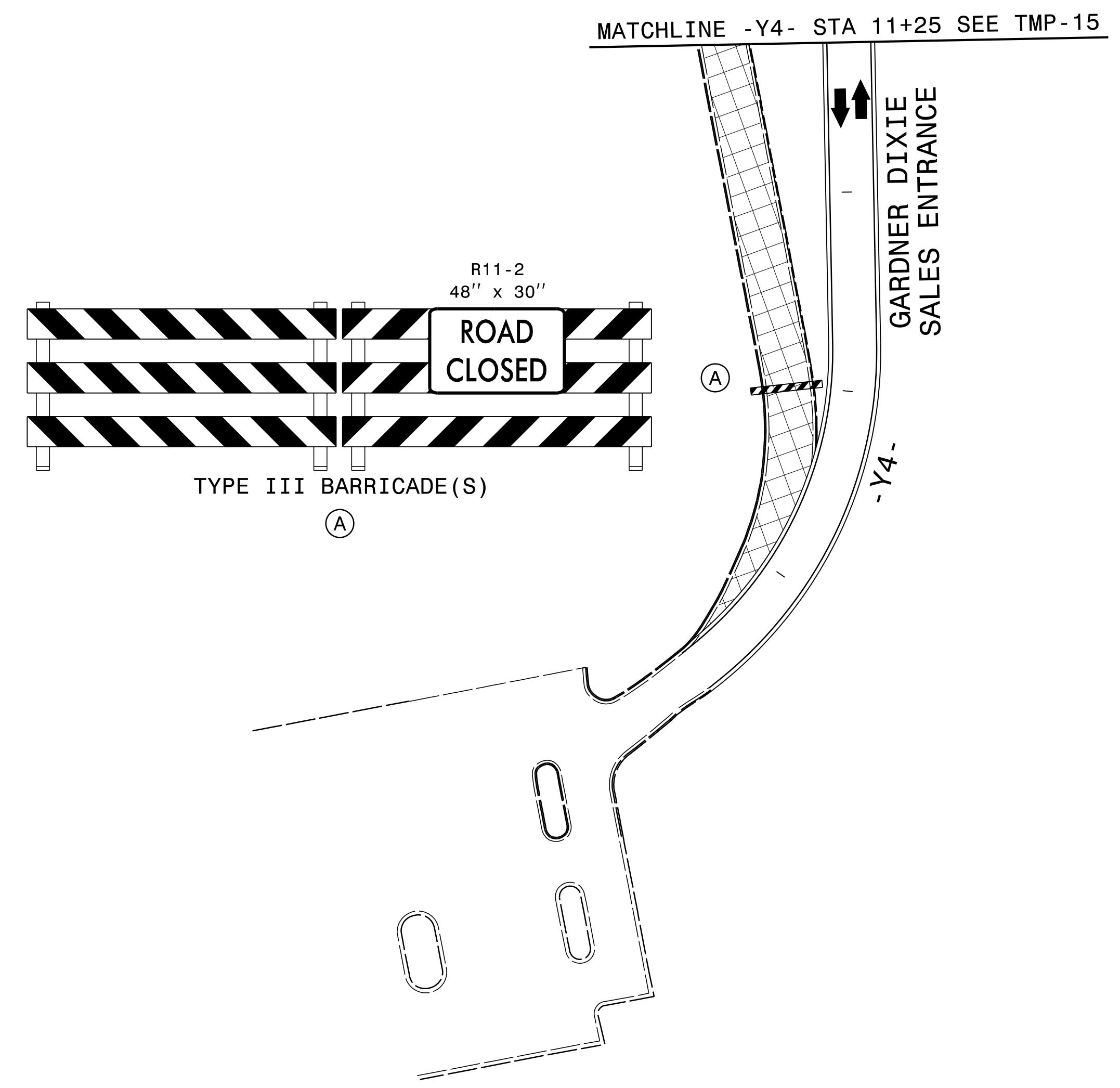


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PHASE II - STEP 8

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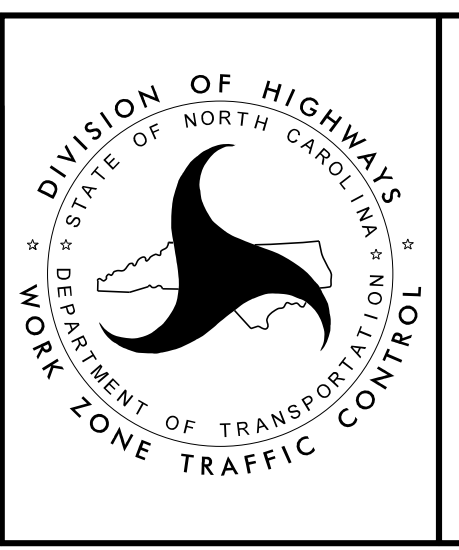
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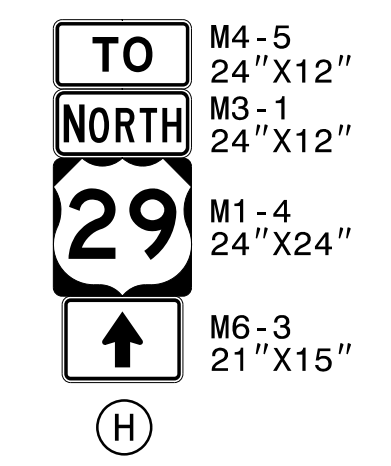
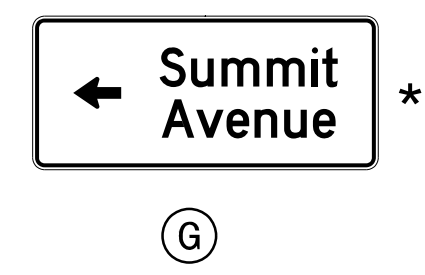
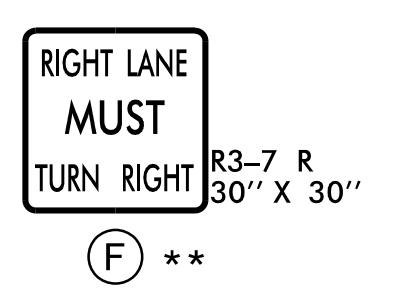
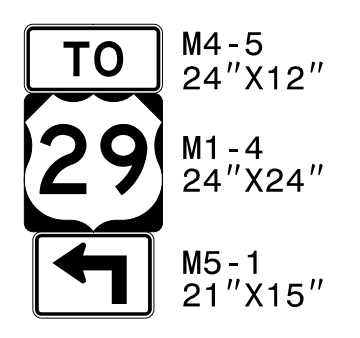
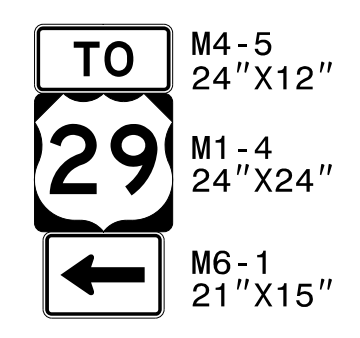
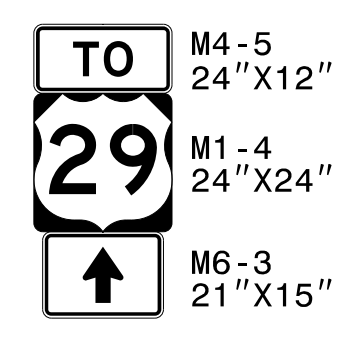
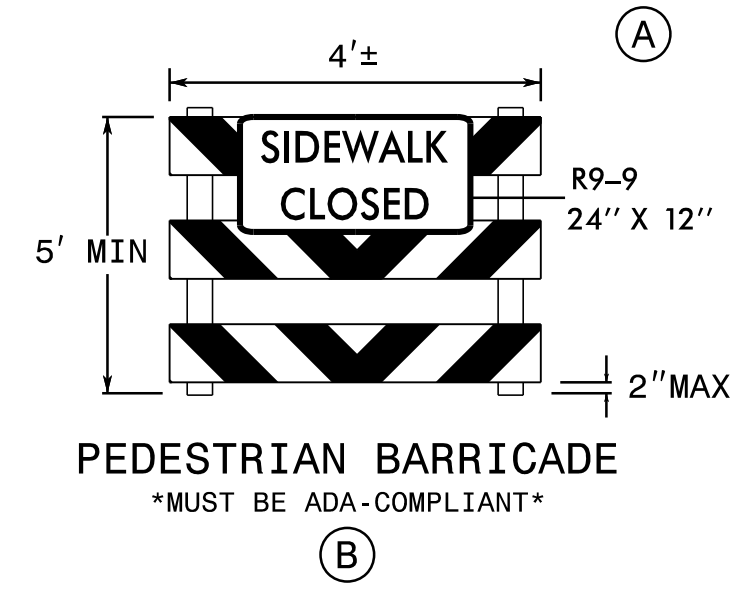
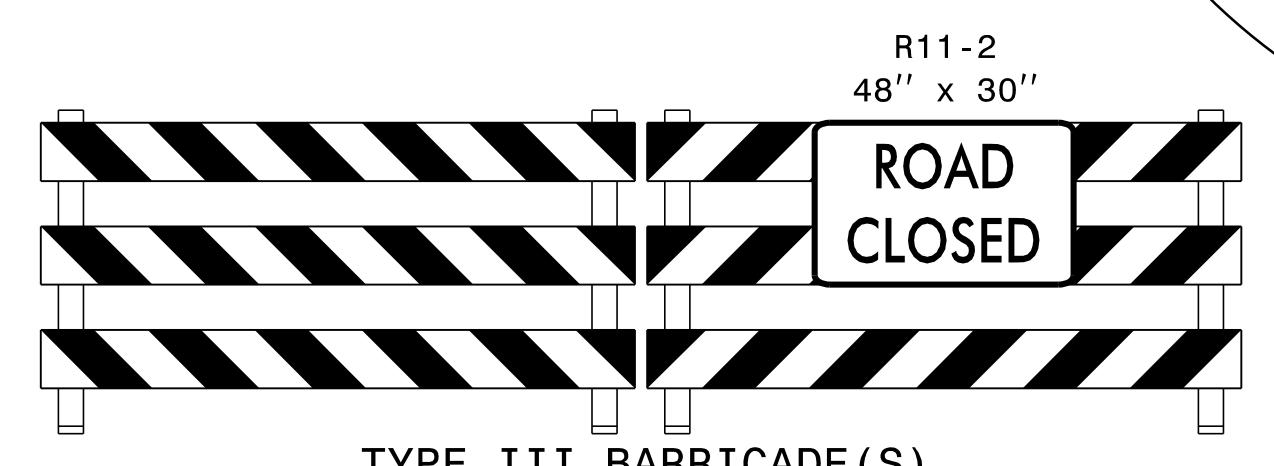
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PHASE II - STEP 8

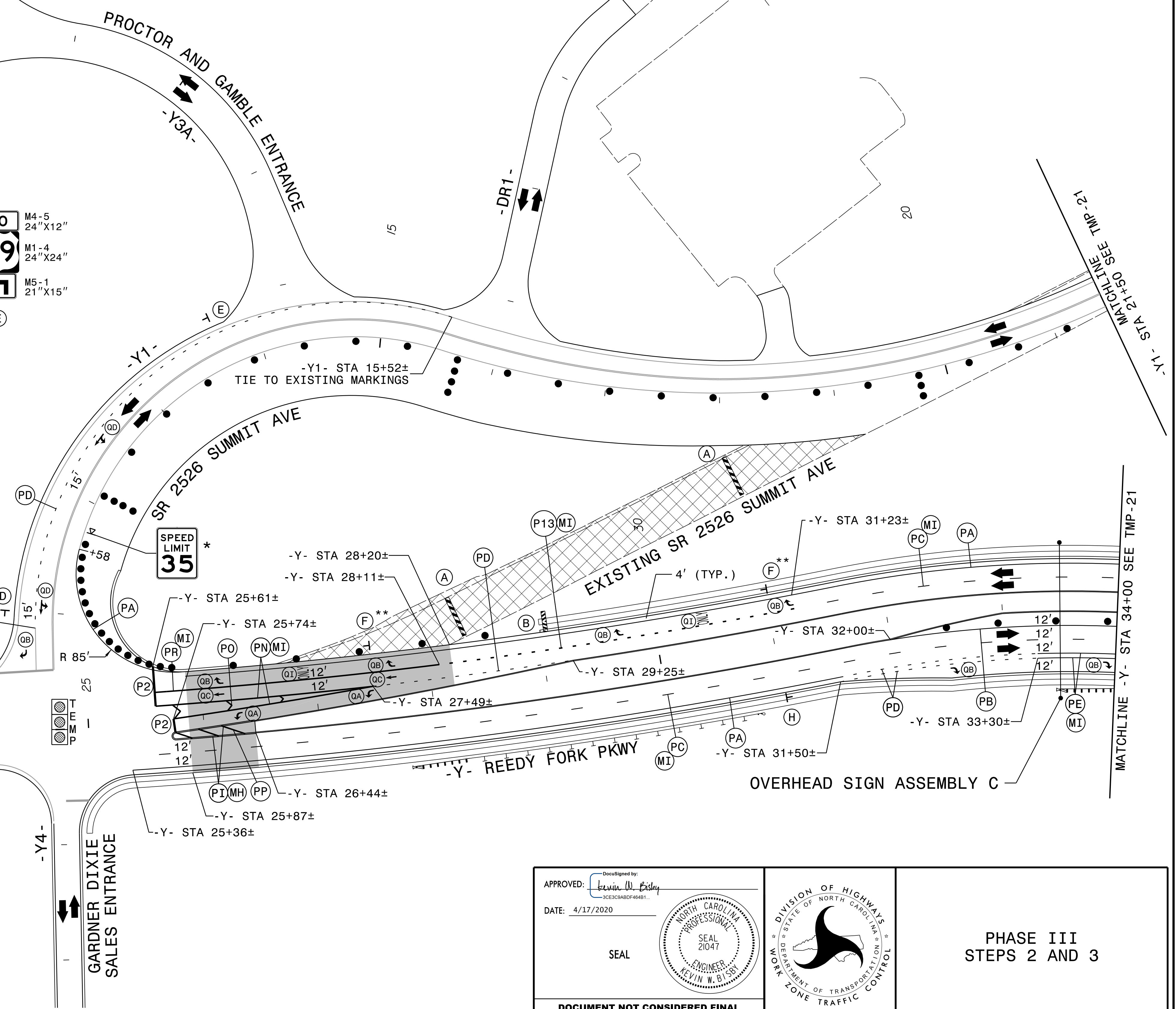
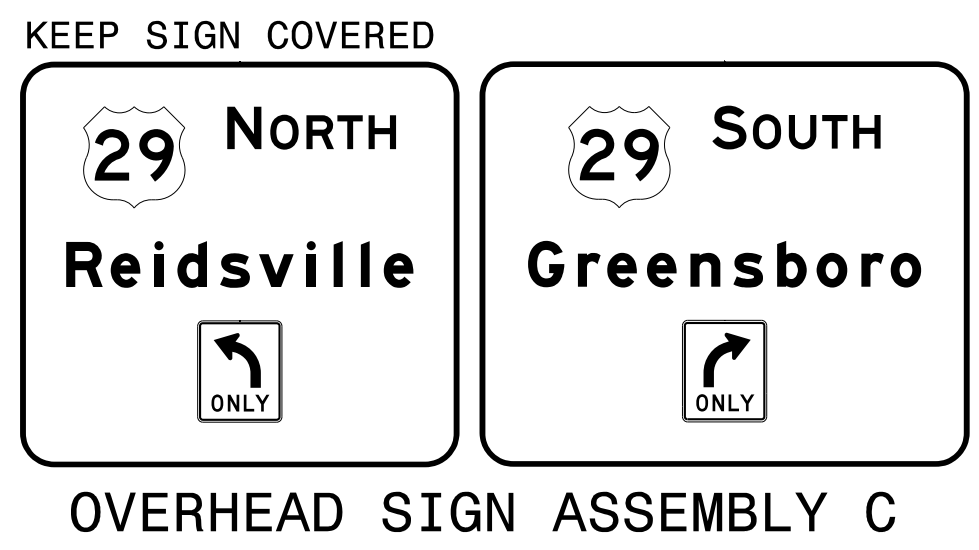
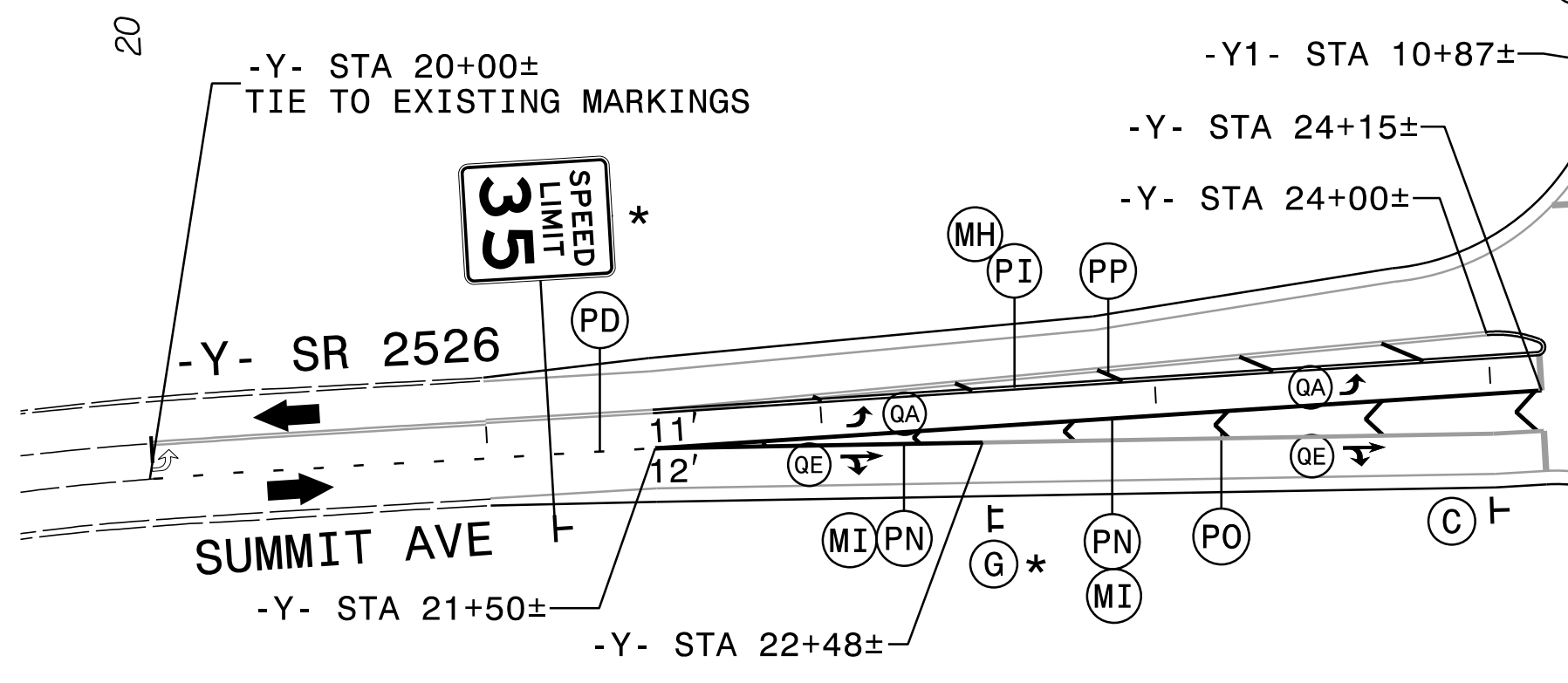
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ERECT ADDITIONAL SIGNS PER THE SIGNING PLAN AS DIRECTED BY THE ENGINEER. DO NOT ERECT BIKE LANE SIGNING.

\*SIGN PREVIOUSLY ERECTED

\*\*PER SIGNING PLAN

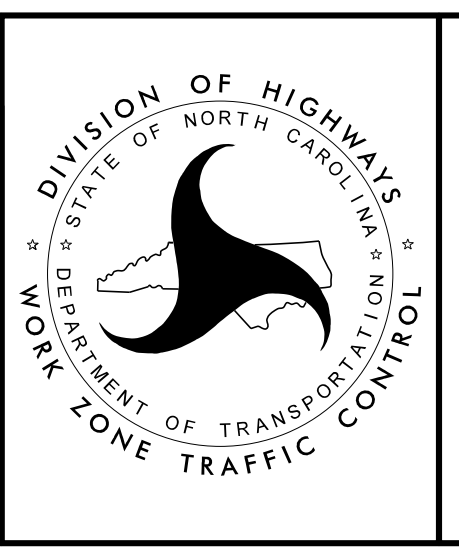


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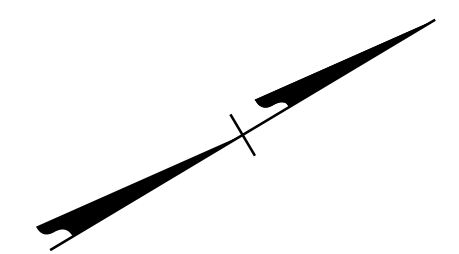


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PHASE III  
STEPS 2 AND 3

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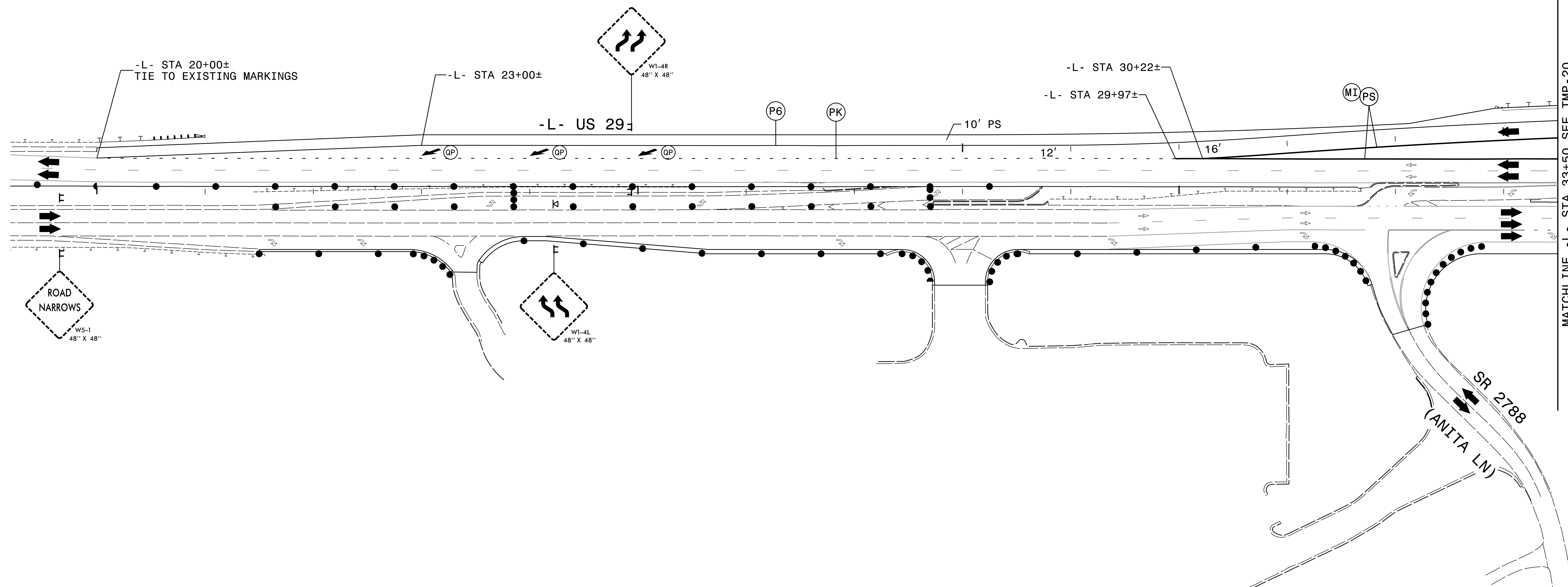
ERECT SIGNS W23-2 (NEW TRAFFIC PATTERN) ON -L- US 29 500'± IN ADVANCE OF THE PROJECT LIMIT OR AS DIRECTED BY THE ENGINEER. IN ADDITION, CHANGEABLE MESSAGE SIGNS INDICATING A NEW TRAFFIC PATTERN SHALL BE DEPLOYED AS DIRECTED BY THE ENGINEER.

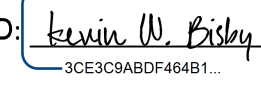
ERECT ADDITIONAL SIGNING IN ACCORDANCE WITH THE SIGNING PLAN AS DIRECTED BY THE ENGINEER.

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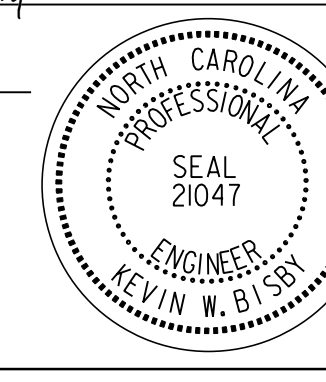

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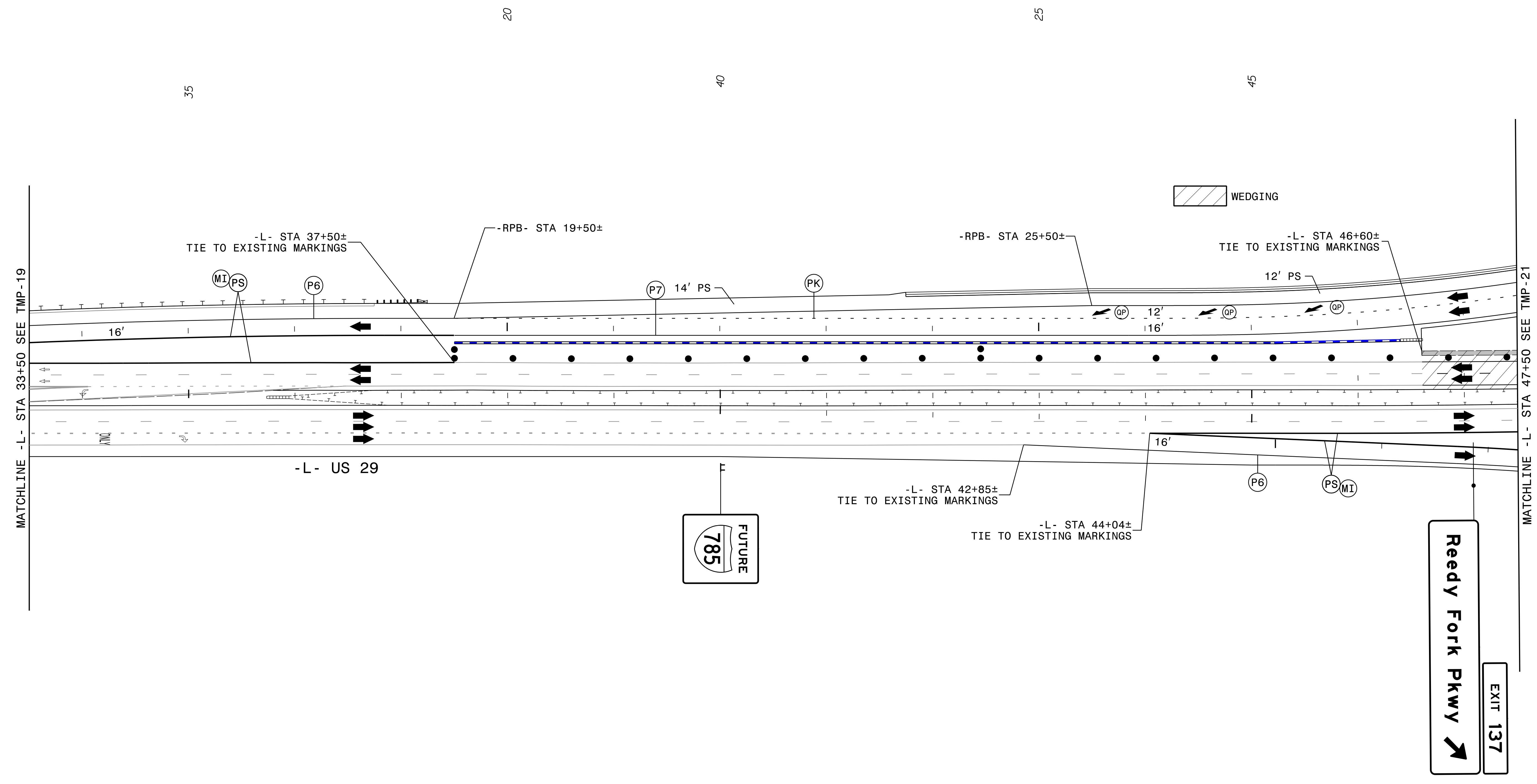
PHASE III  
 STEPS 1 AND 2

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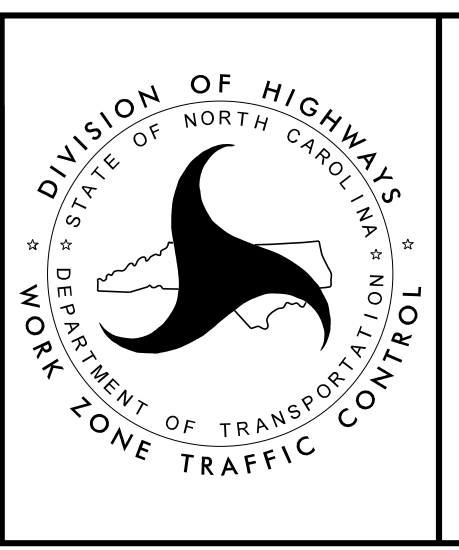
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R-4707	TMP-20

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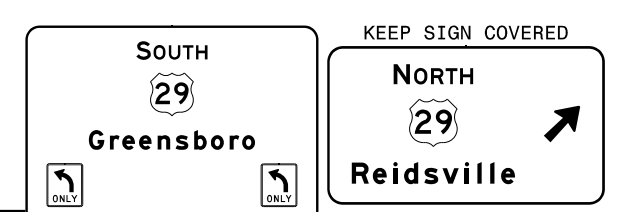
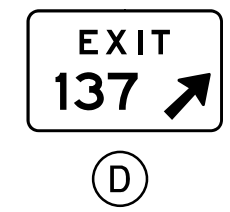
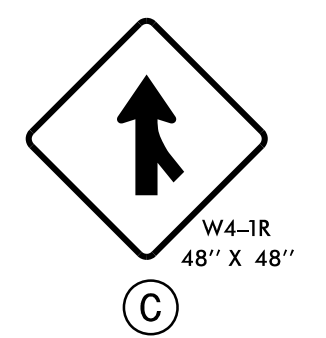
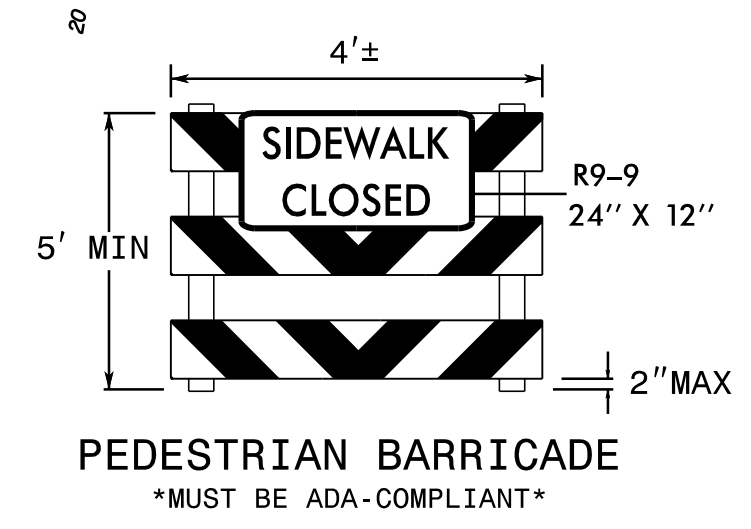
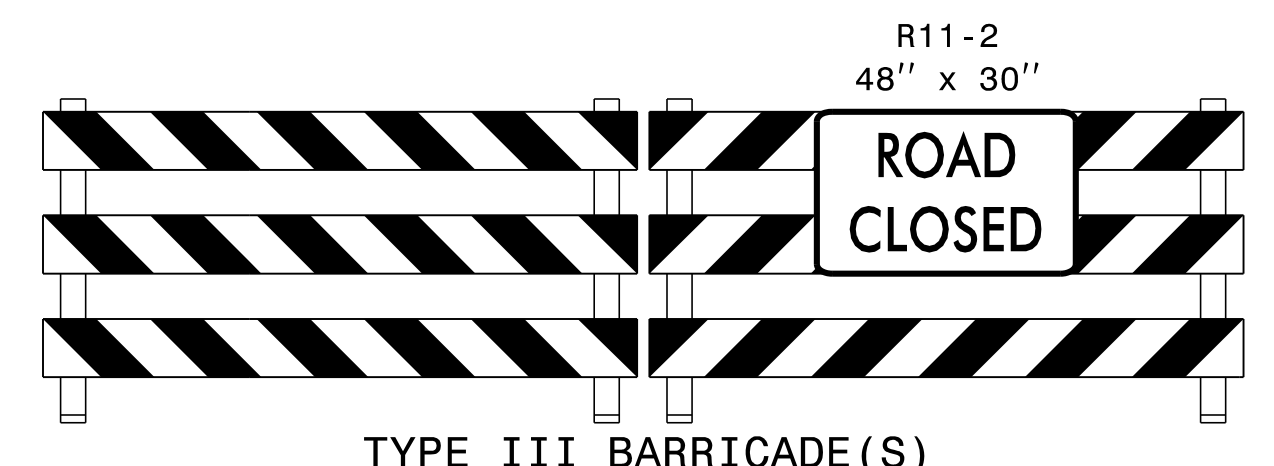
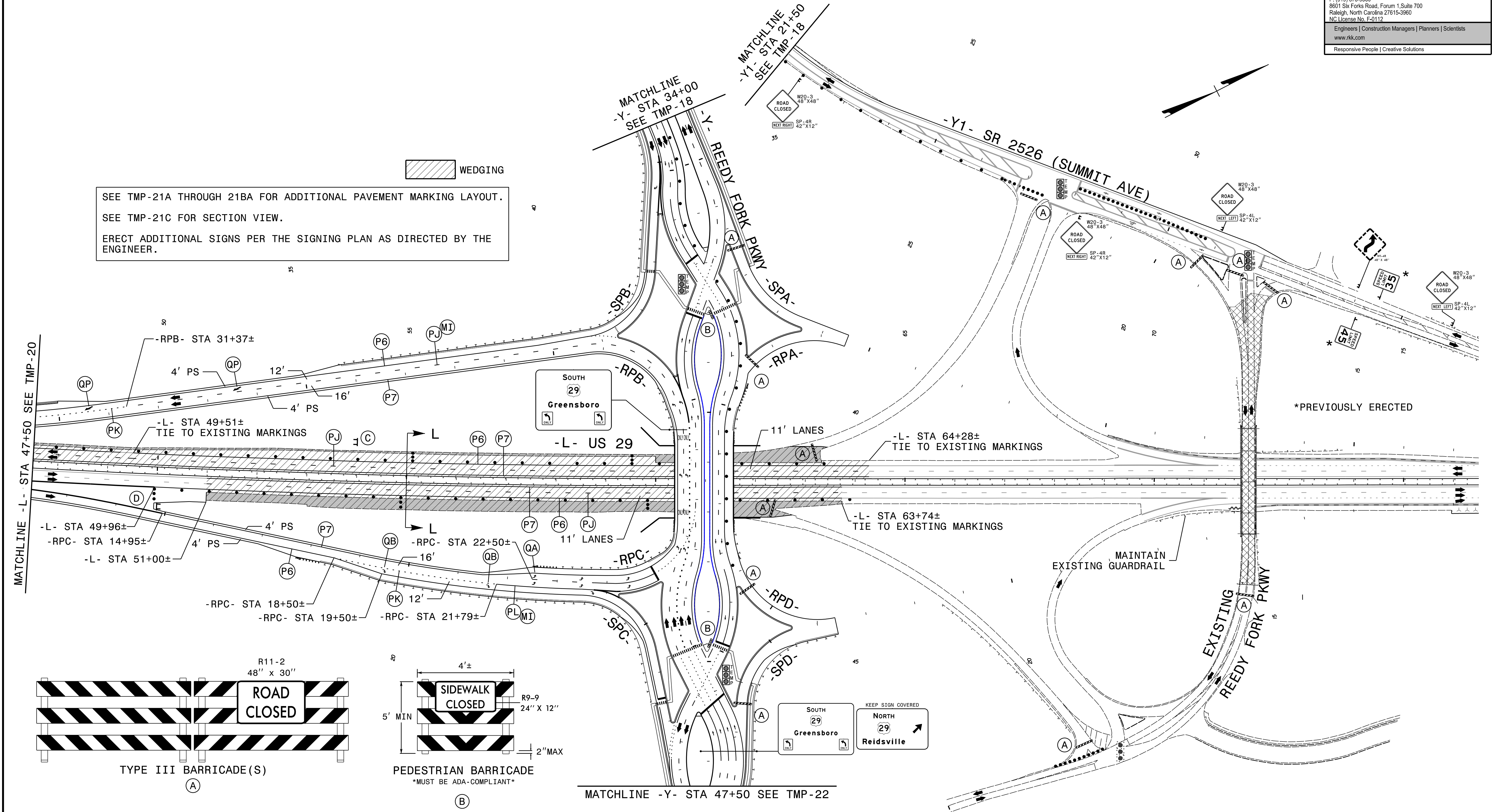
PHASE III  
 STEPS 1 THROUGH 3

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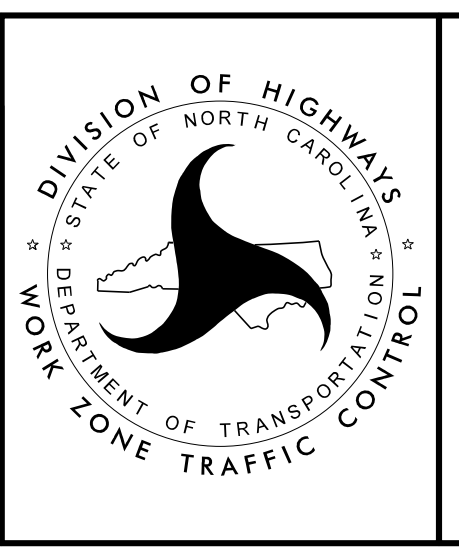


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SEE TMP-21A THROUGH 21BA FOR ADDITIONAL PAVEMENT MARKING LAYOUT.  
 SEE TMP-21C FOR SECTION VIEW.  
 ERECT ADDITIONAL SIGNS PER THE SIGNING PLAN AS DIRECTED BY THE ENGINEER.



APPROVED: *Kevin W. Bisby*  
 DATE: 3/31/2020  
 SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 SEAL 21047  
 KEVIN W. BISBY



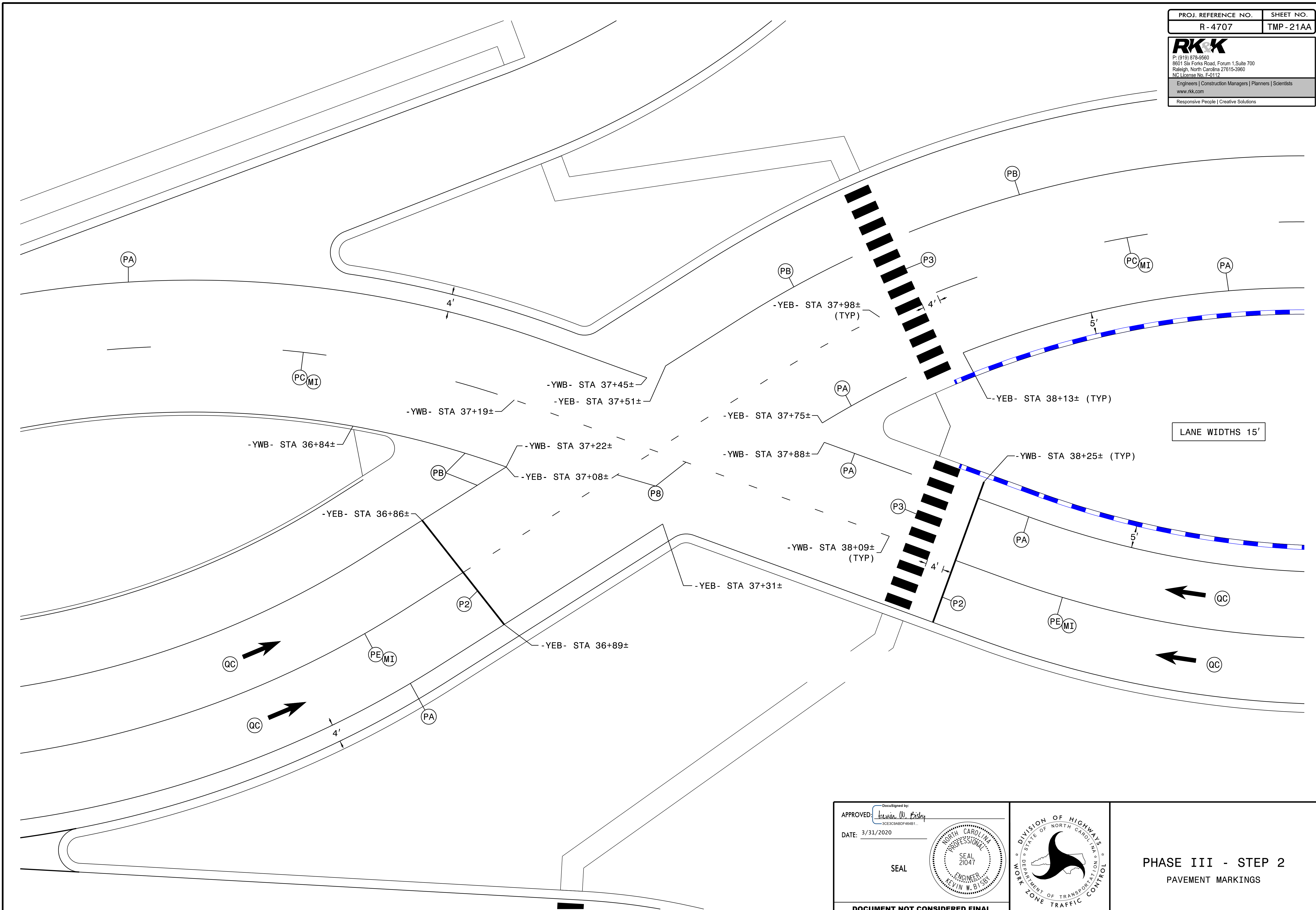
PHASE III  
 STEPS 1 THROUGH 3

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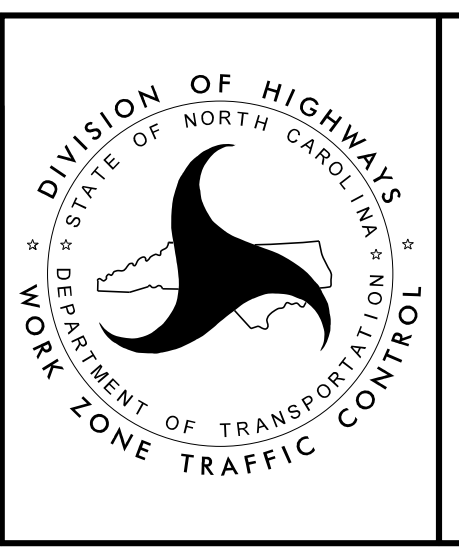


PROJ. REFERENCE NO.	SHEET NO.
R - 4707	TMP - 21AA

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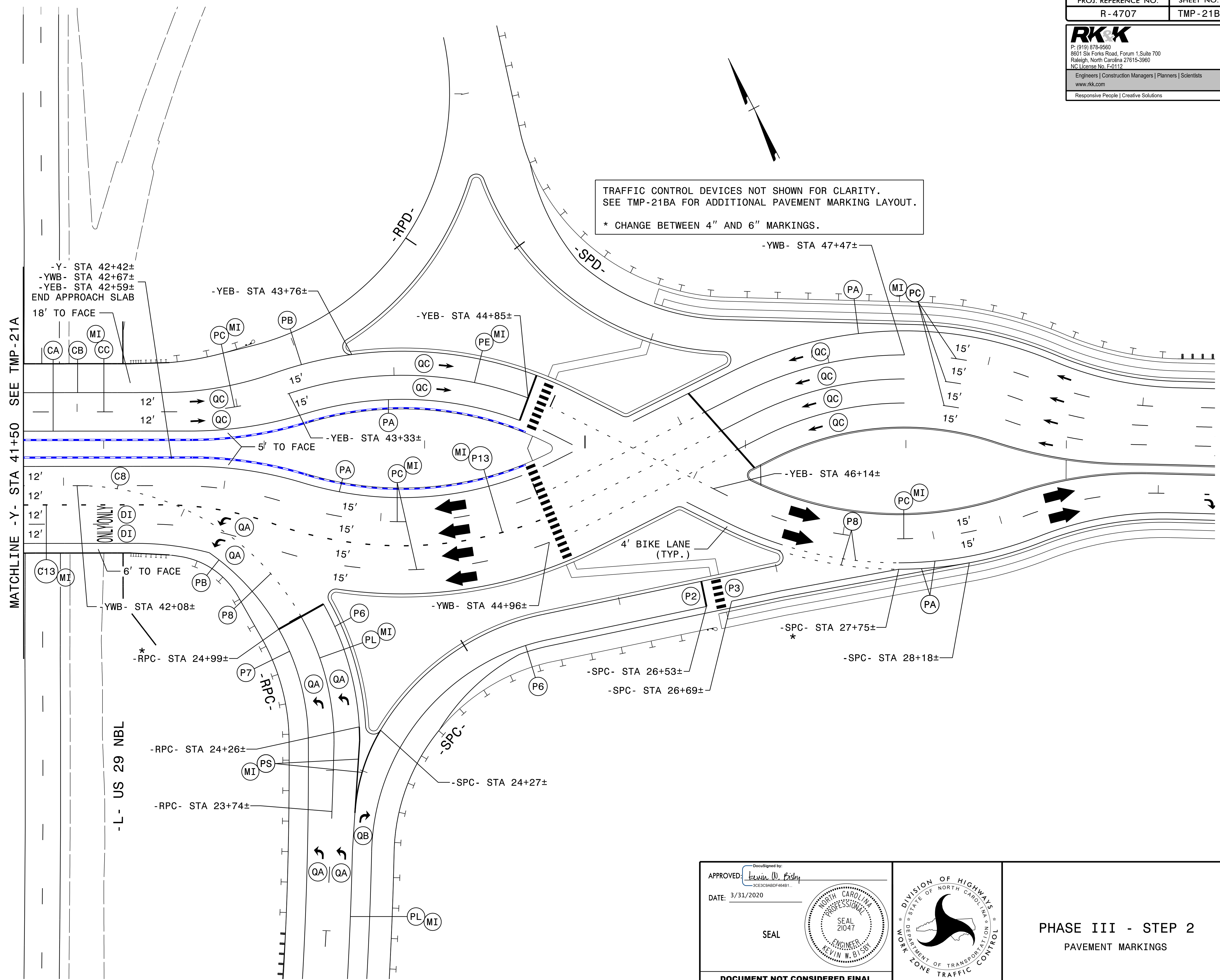


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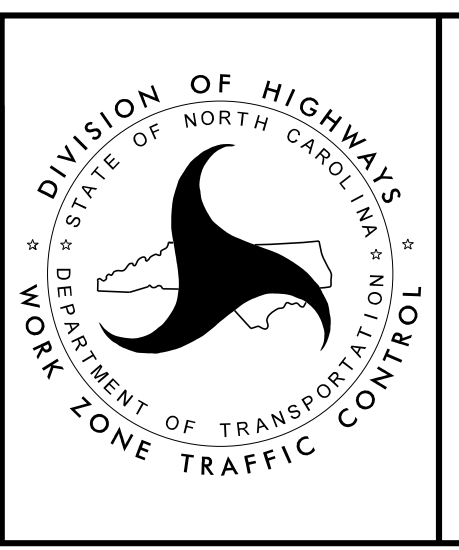
**PHASE III - STEP 2**  
 PAVEMENT MARKINGS

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TRAFFIC CONTROL DEVICES NOT SHOWN FOR CLARITY.  
 SEE TMP-21BA FOR ADDITIONAL PAVEMENT MARKING LAYOUT.  
 \* CHANGE BETWEEN 4" AND 6" MARKINGS.



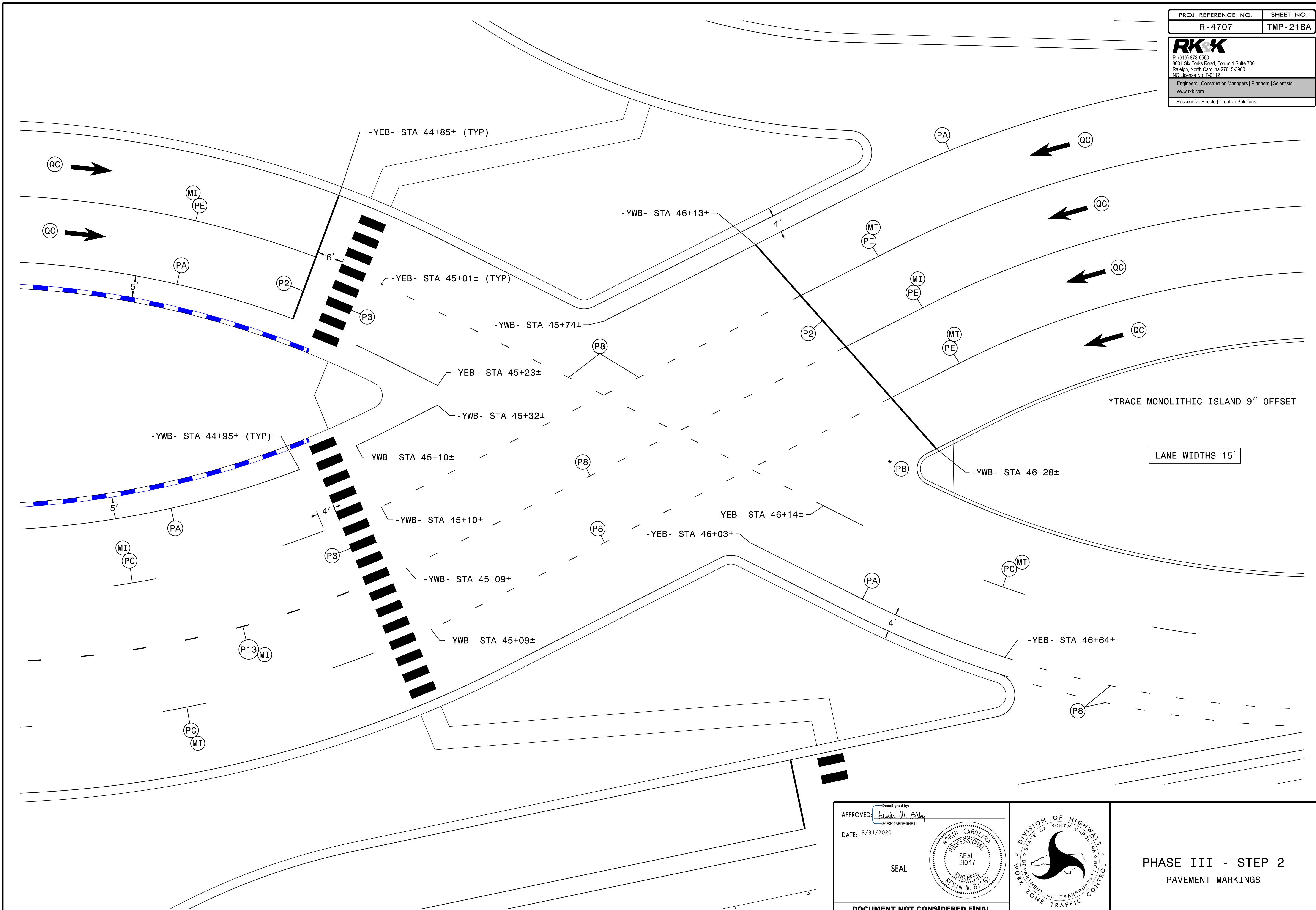
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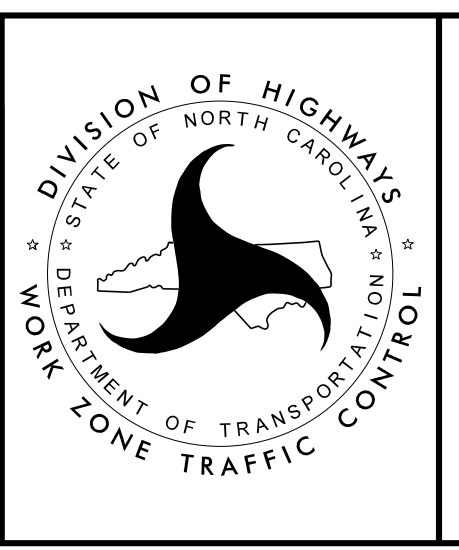
PHASE III - STEP 2  
 PAVEMENT MARKINGS

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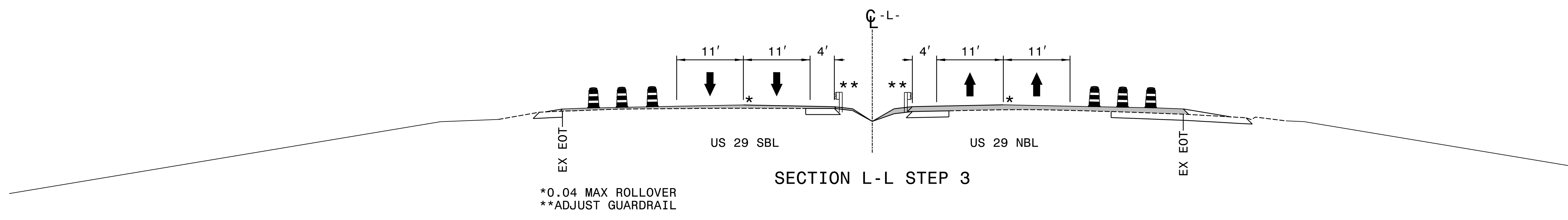
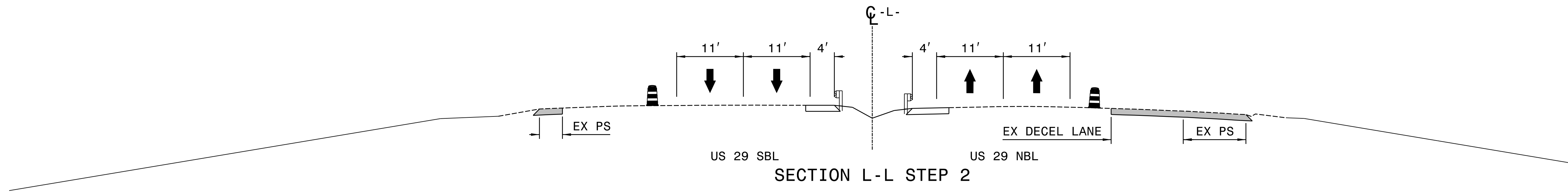


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**PHASE III - STEP 2**  
 PAVEMENT MARKINGS

PROJ. REFERENCE NO.	SHEET NO.
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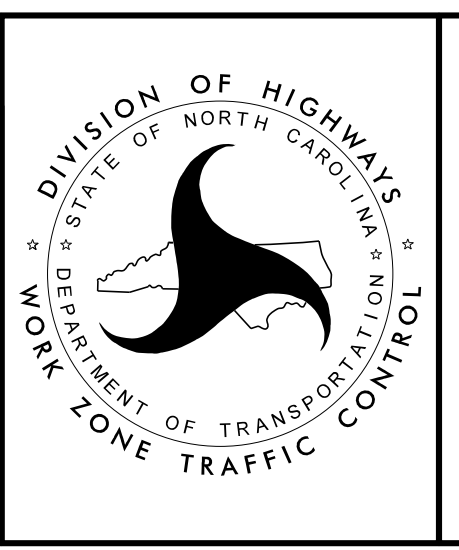


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 DATE: 3/31/2020

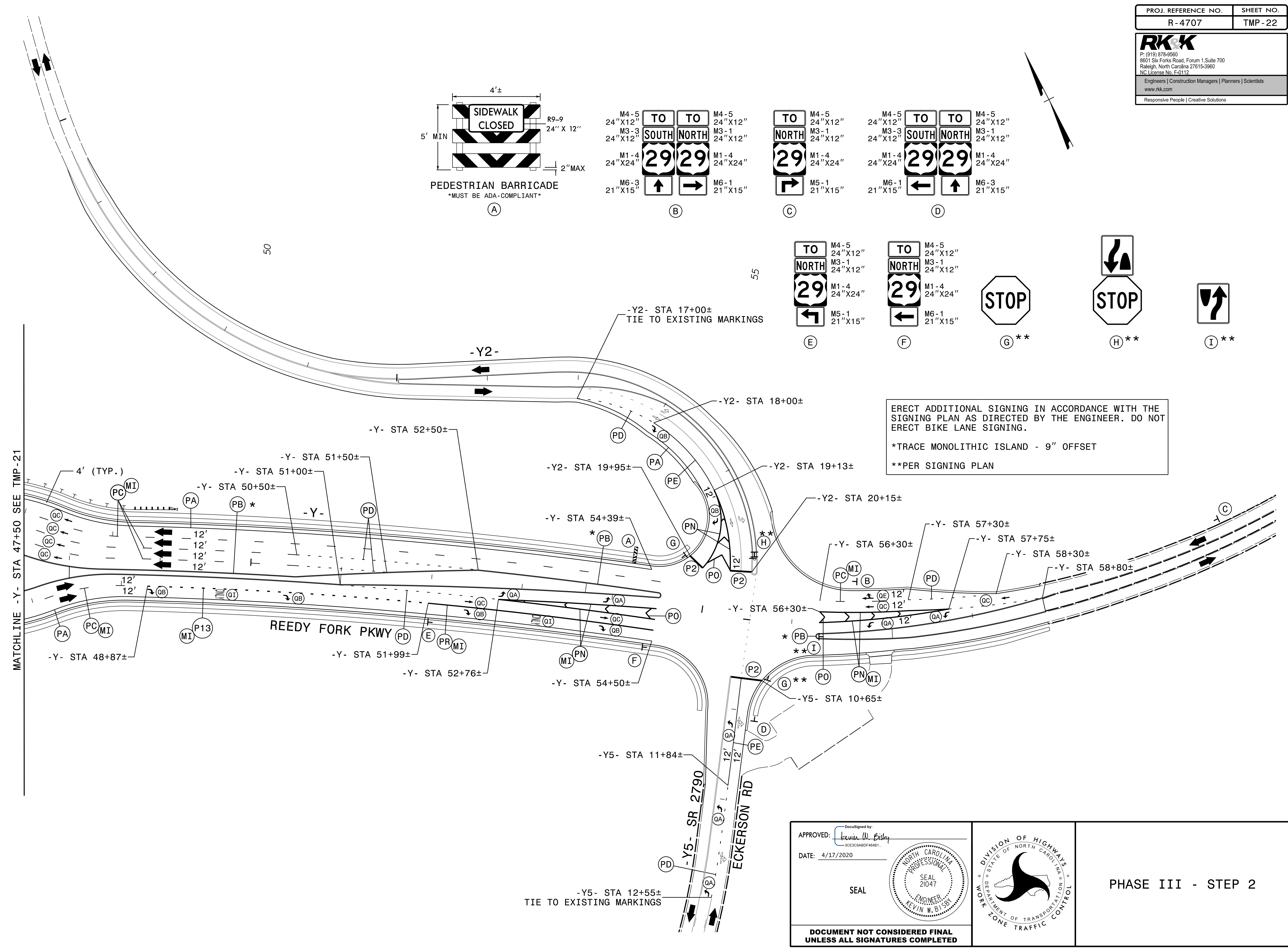
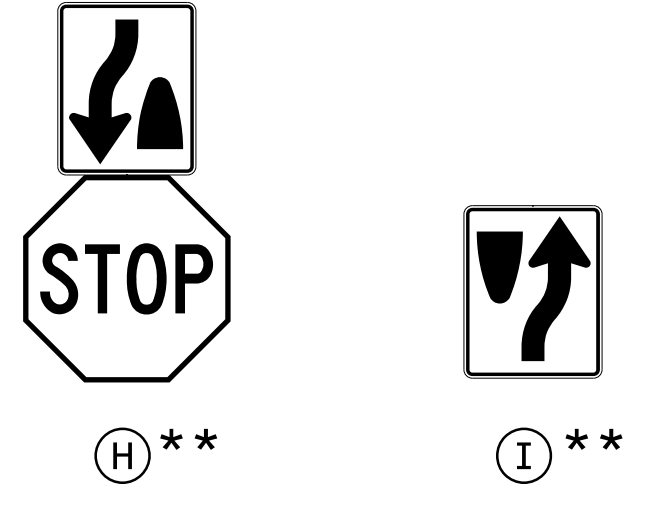
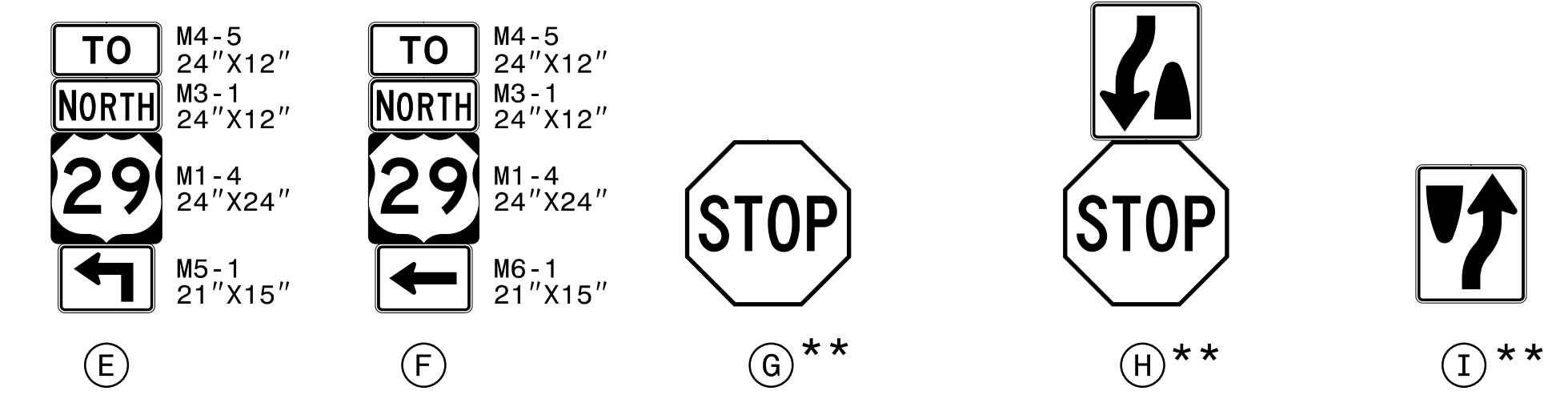
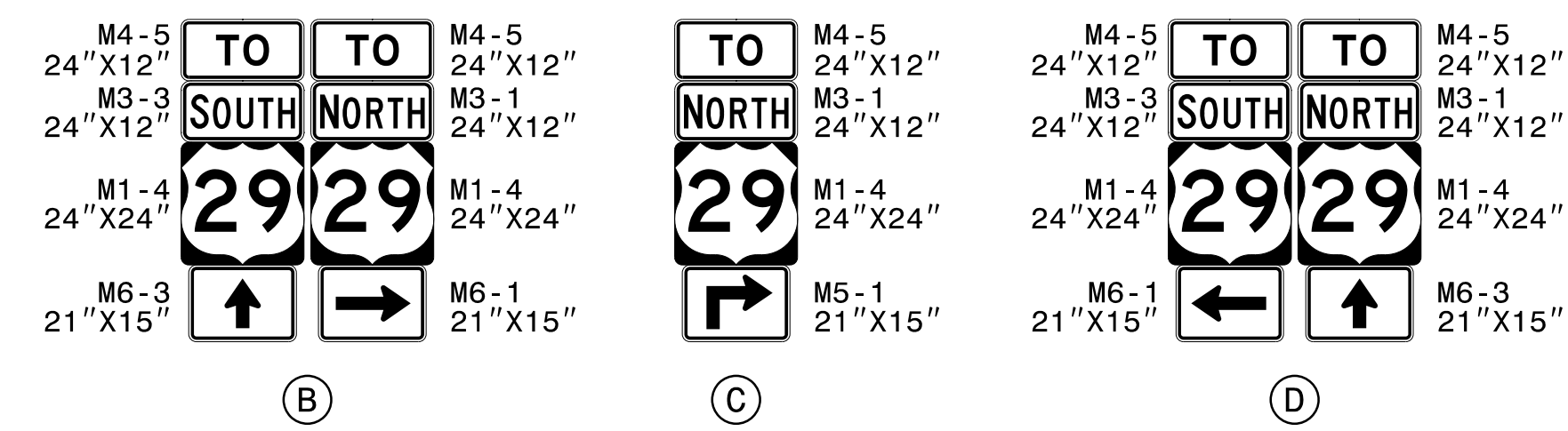
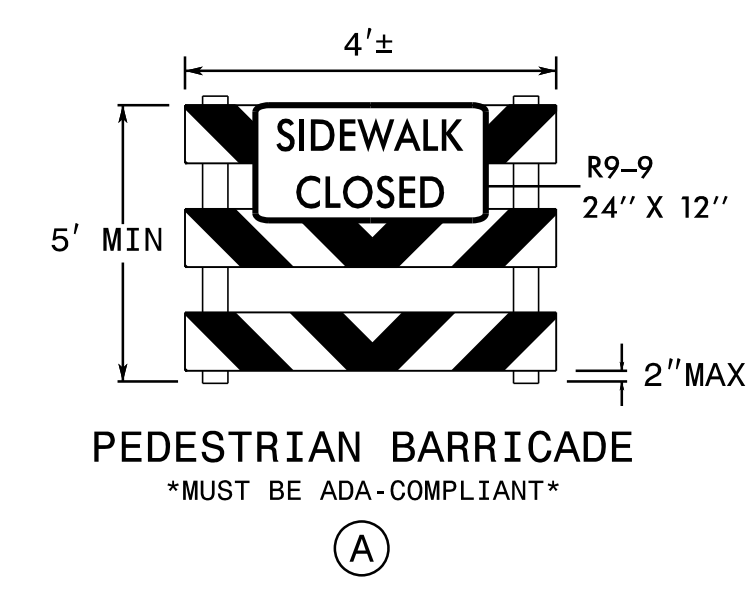
SEAL

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 KEVIN W. BISBY  
 SEAL 21047  
 NORTH CAROLINA

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PHASE III  
 STEPS 2 AND 3  
 SECTION VIEWS

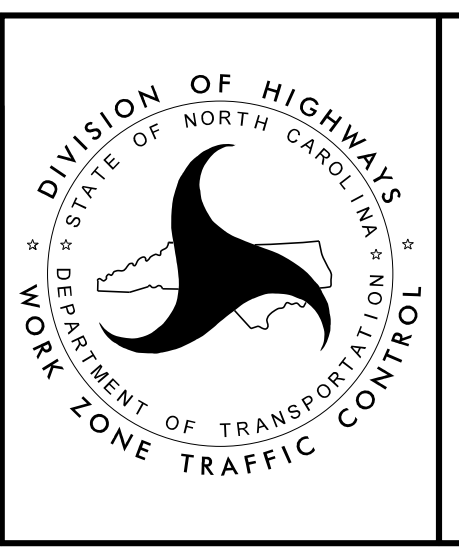


ERECT ADDITIONAL SIGNING IN ACCORDANCE WITH THE SIGNING PLAN AS DIRECTED BY THE ENGINEER. DO NOT ERECT BIKE LANE SIGNING.  
 \*TRACE MONOLITHIC ISLAND - 9" OFFSET  
 \*\*PER SIGNING PLAN

APPROVED: *Kevin W. Bissby*  
 DATE: 4/17/2020

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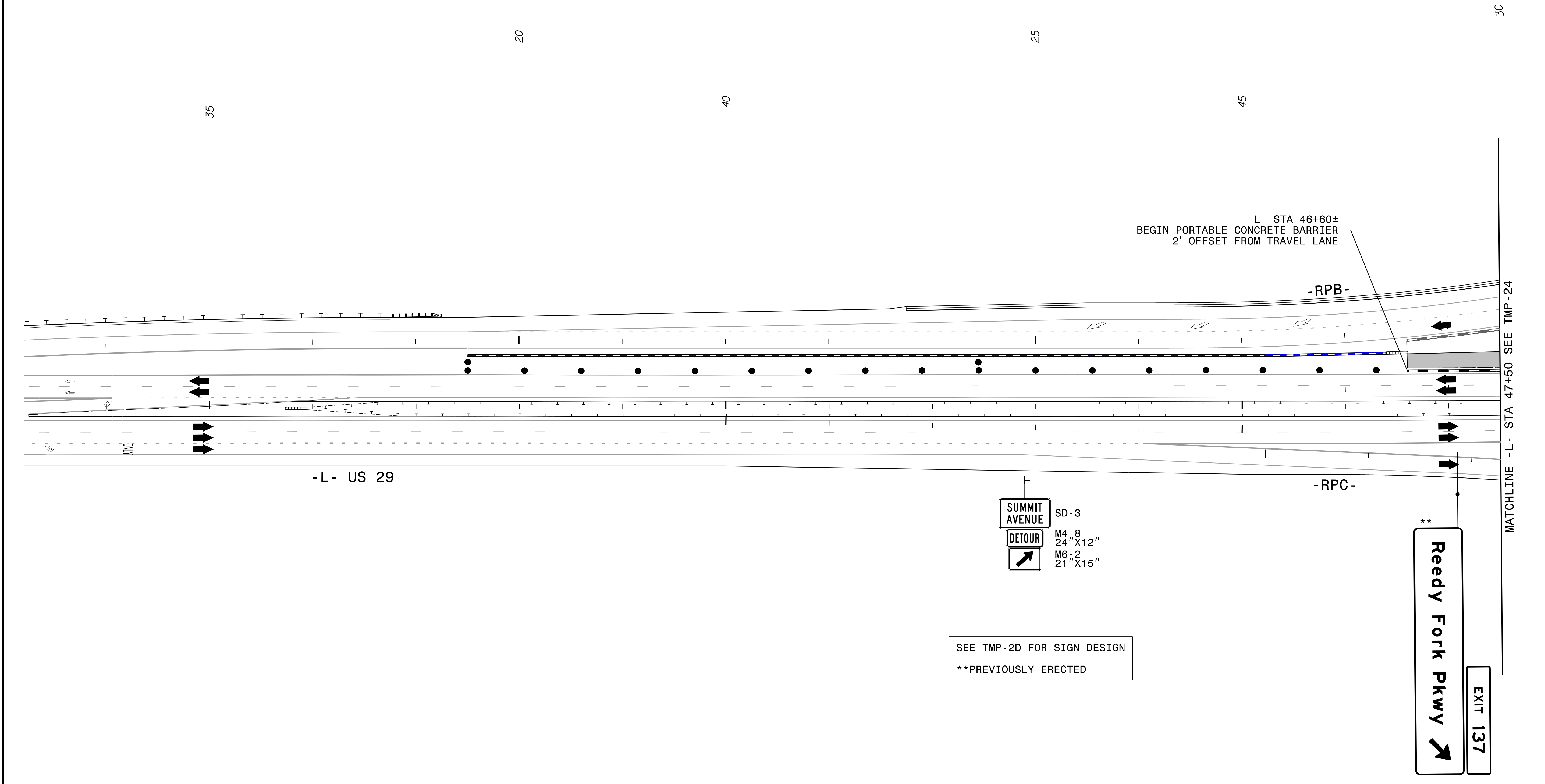


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PHASE III - STEP 2

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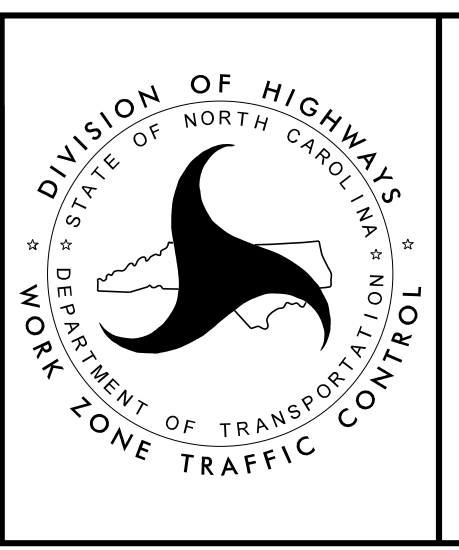


SEE TMP-2D FOR SIGN DESIGN  
 \*\*PREVIOUSLY ERECTED

APPROVED: *Kevin W. Bisby*  
 DATE: 3/31/2020

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 SEAL  
 21047  
 ENGINEER  
 KEVIN W. BISBY

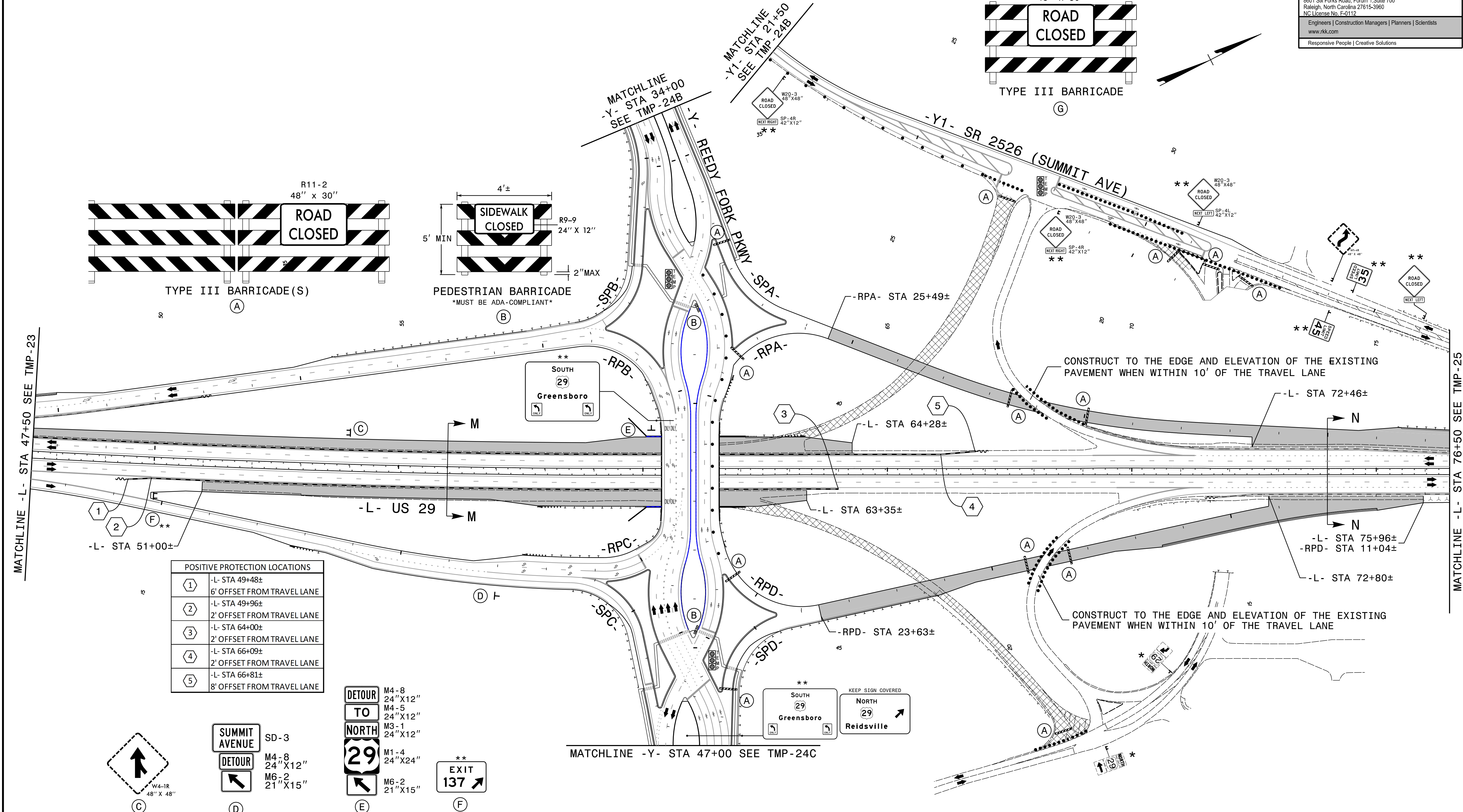
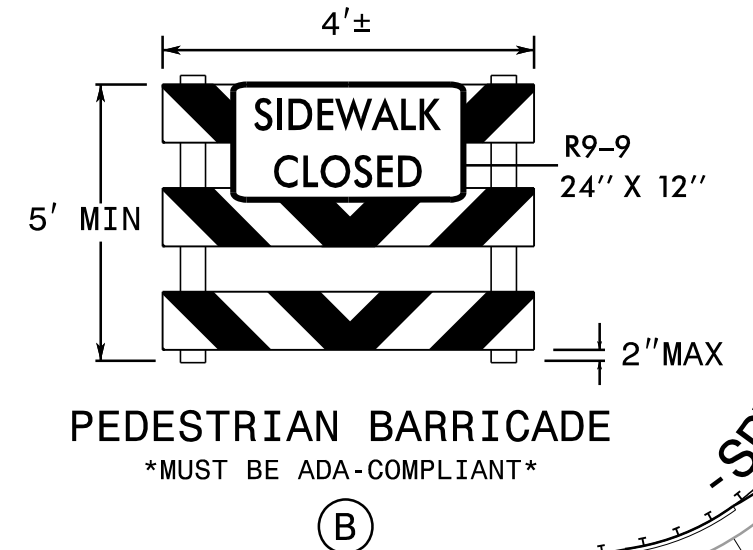
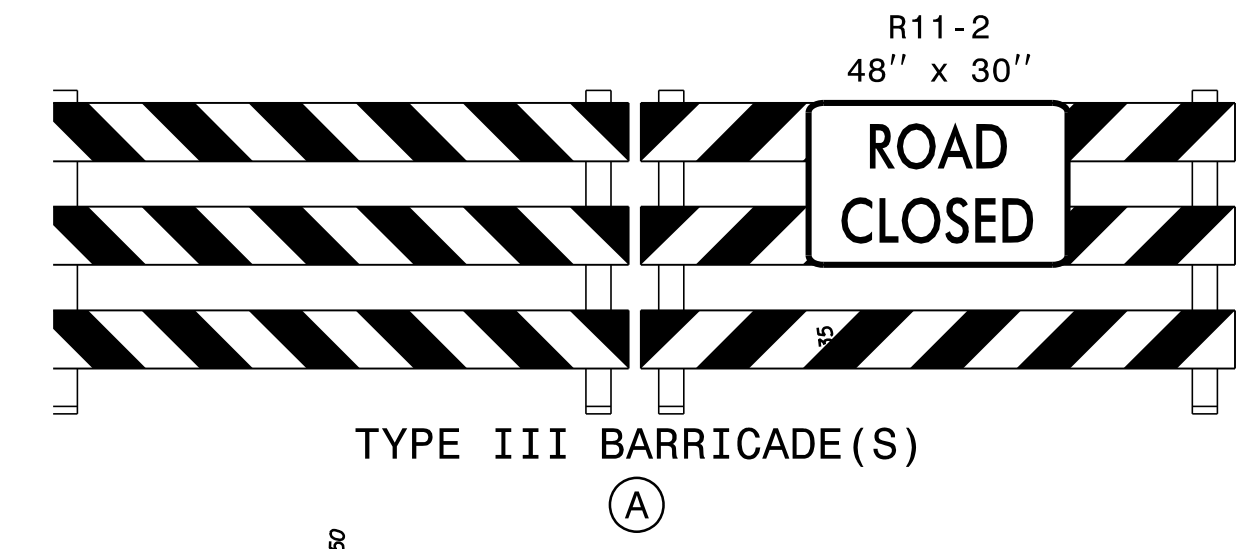
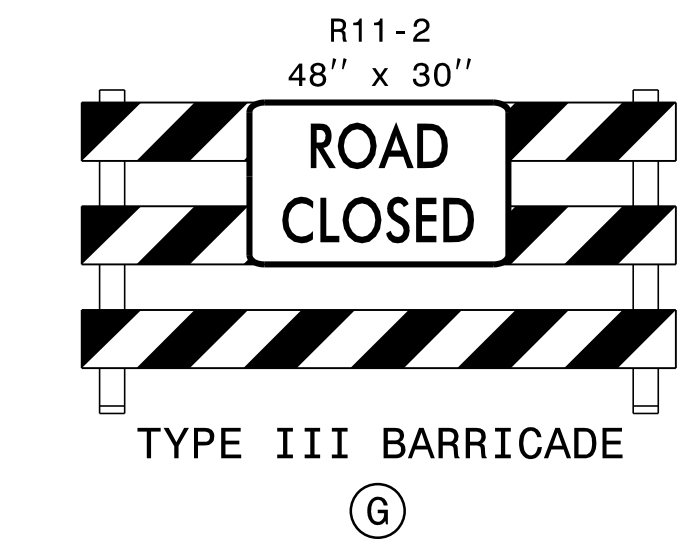


PHASE III - STEP 4

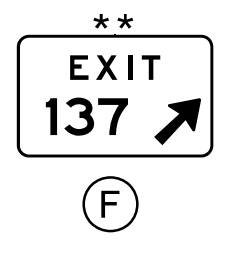
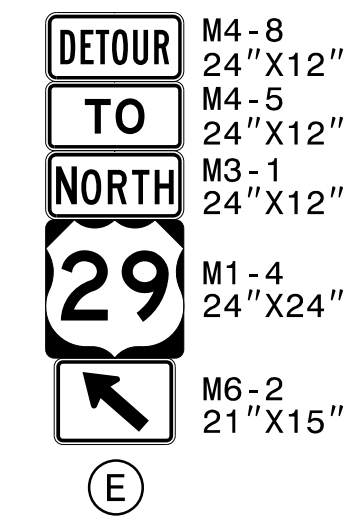
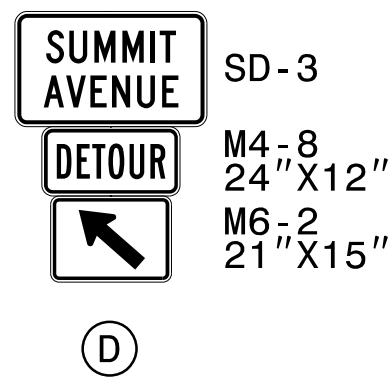
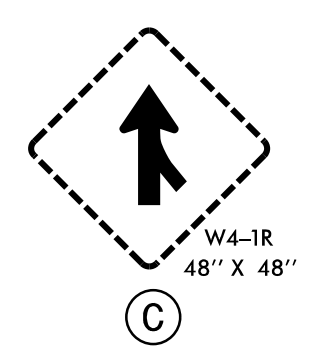
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POSITIVE PROTECTION LOCATIONS	
①	-L- STA 49+48± 6' OFFSET FROM TRAVEL LANE
②	-L- STA 49+96± 2' OFFSET FROM TRAVEL LANE
③	-L- STA 64+00± 2' OFFSET FROM TRAVEL LANE
④	-L- STA 66+09± 2' OFFSET FROM TRAVEL LANE
⑤	-L- STA 66+81± 8' OFFSET FROM TRAVEL LANE



SEE TMP-2B AND 2C FOR OFFSITE DETOUR DETAILS.  
 SEE TMP-2D FOR SIGN DESIGN.  
 SEE TMP-24A FOR SECTION VIEWS.  
 \*COVER WHEN DETOUR IS ACTIVE  
 \*\*PREVIOUSLY ERECTED

APPROVED: *Kevin W. Bisby*  
 DATE: 3/31/2020  
 SEAL  
 NORTH CAROLINA PROFESSIONAL ENGINEER  
 KEVIN W. BISBY  
 SEAL 21047

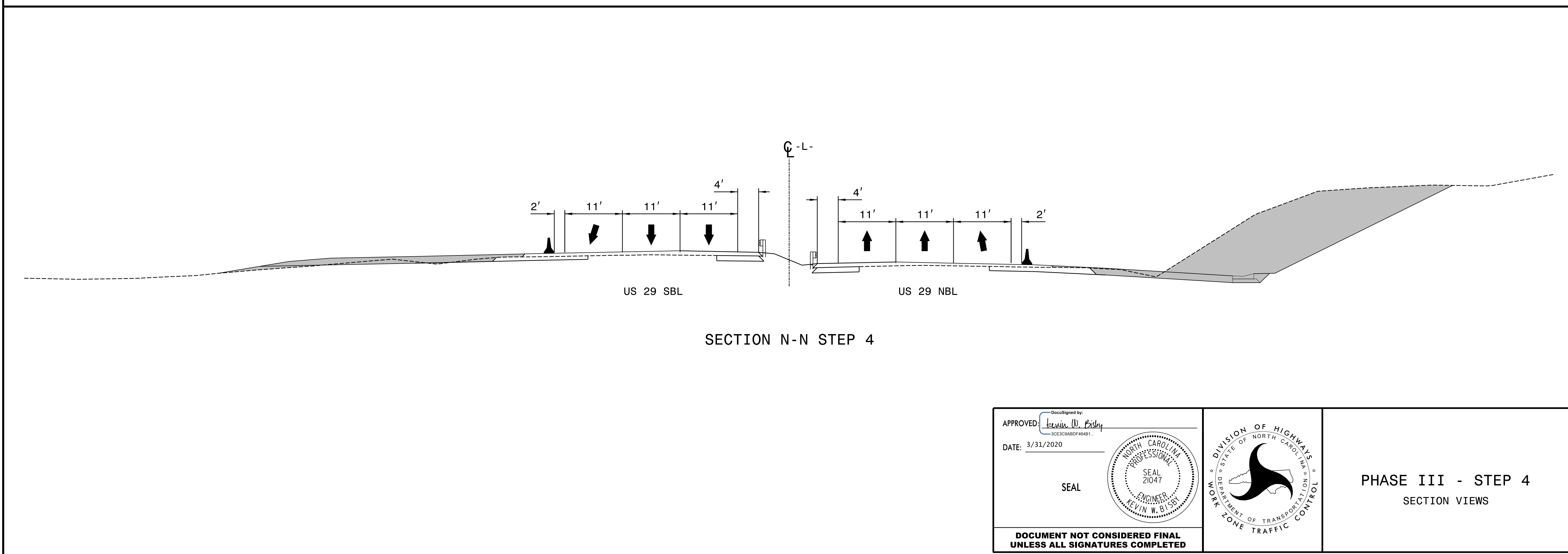
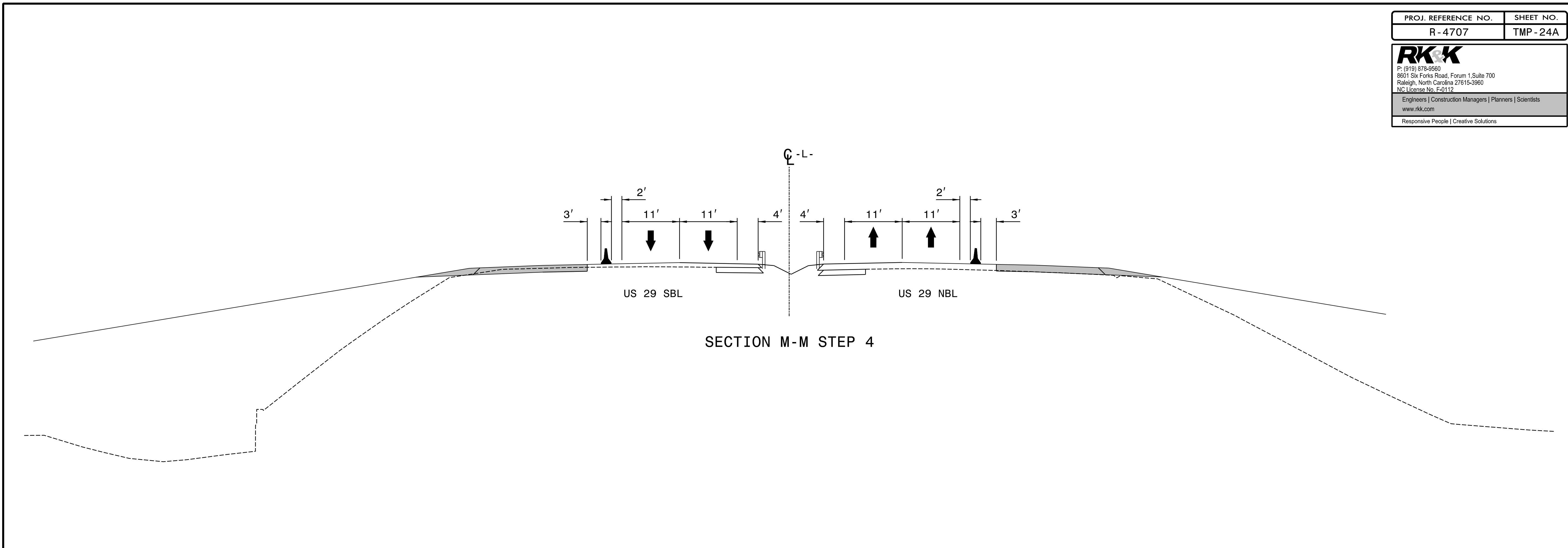
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PHASE III - STEP 4

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PROJ. REFERENCE NO.	SHEET NO.
R-4707	TMP-24A

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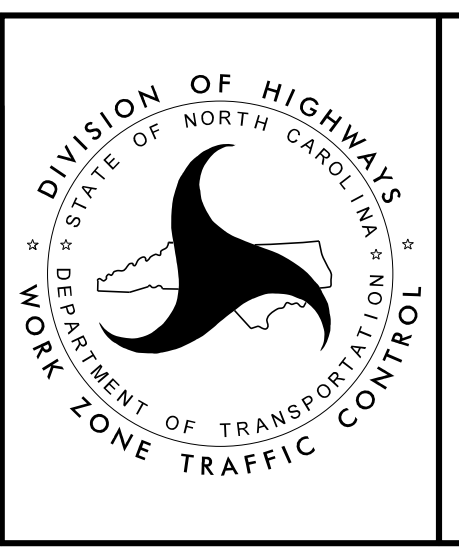


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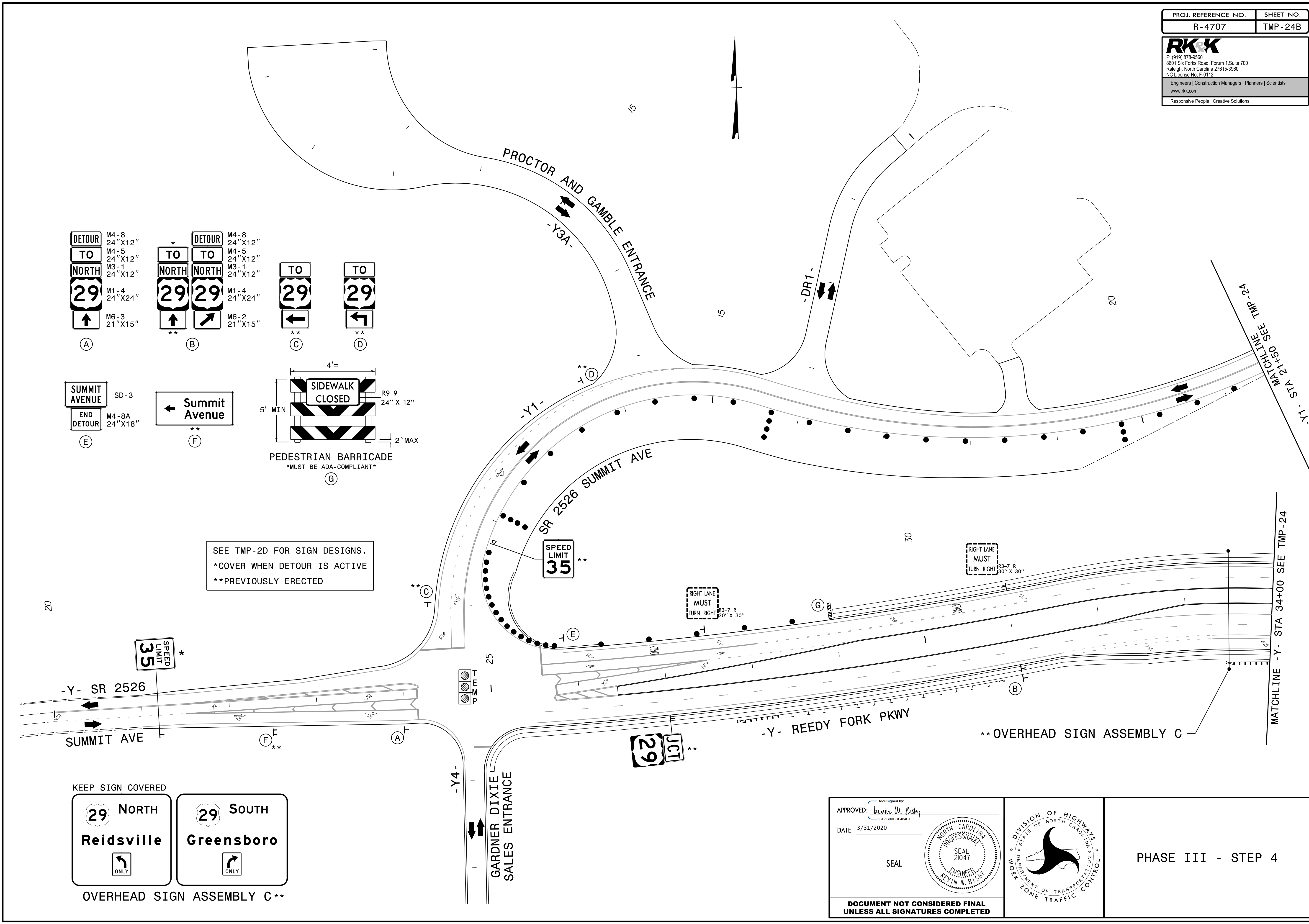
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PHASE III - STEP 4  
 SECTION VIEWS

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**Sign Legend:**

- (A)** DETOUR TO NORTH 29 (M4-8, M4-5, M3-1, M1-4, M6-3)
- (B)** DETOUR TO NORTH 29 (M4-8, M4-5, M3-1, M1-4, M6-2)
- (C)** TO 29 (M4-8, M4-5, M3-1, M1-4, M6-2)
- (D)** TO 29 (M4-8, M4-5, M3-1, M1-4, M6-2)
- (E)** SPEED LIMIT 35 (SD-3)
- (F)** SUMMIT AVENUE END DETOUR (M4-8A)
- (G)** PEDESTRIAN BARRICADE (R9-9)

**OVERHEAD SIGN ASSEMBLY C \*\***

KEEP SIGN COVERED

29 NORTH Reidsville ONLY	29 SOUTH Greensboro ONLY
--------------------------------	--------------------------------

APPROVED: *Kevin W. Bisby*  
 DATE: 3/31/2020

SEAL

SEAL

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 TRAFFIC CONTROL

PHASE III - STEP 4