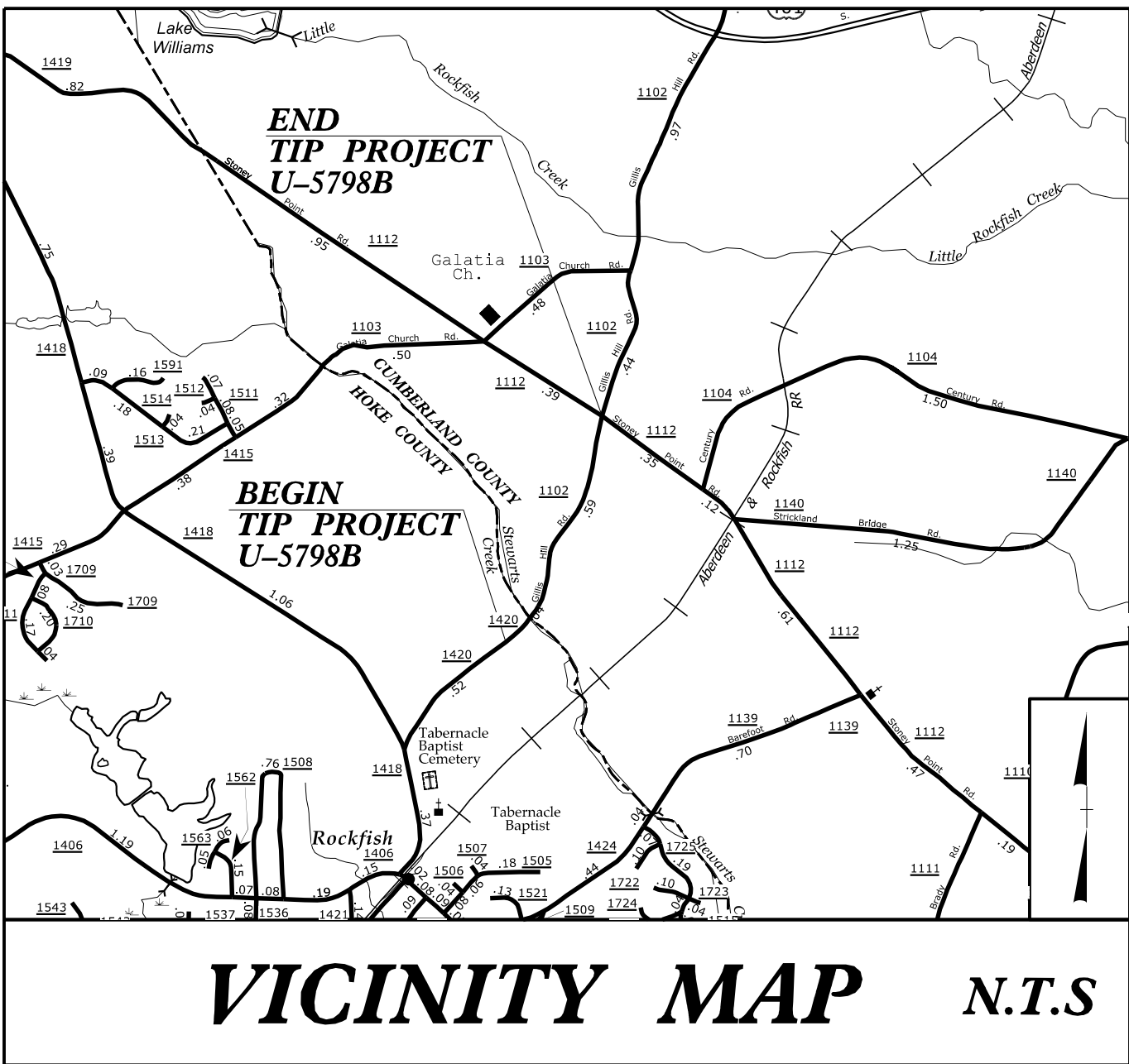
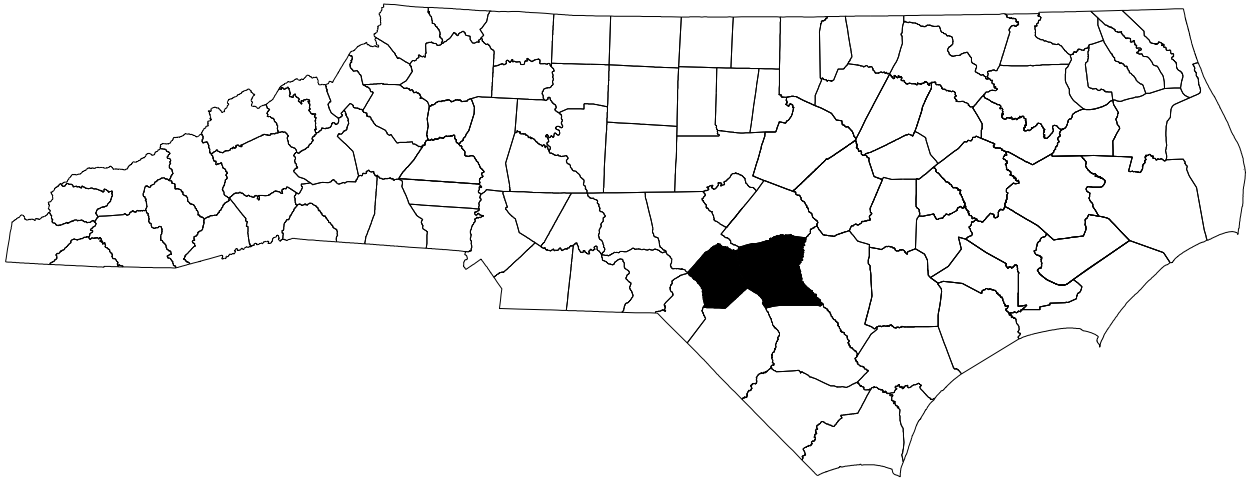


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

HOKE AND CUMBERLAND
COUNTIES

LOCATION: SR 1102 (GILLIS HILL ROAD) FROM SR 1418 (LINDAY ROAD) TO
NORTH OF SR 1112 (STONEY POINT ROAD). WIDEN TO MULTI-LANES.
TYPE OF WORK: PAVING, GRADING, DRAINAGE, CULVERT, WALLS, AND SIGNALS.



INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, MANAGEMENT STRATEGY, AND LEGEND
TMP-2	TRANSPORTATION OPERATIONS PLAN: (GENERAL NOTES)
TMP-2A	PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
TMP-2B	TEMPORARY SHORING NOTES
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4	TEMPORARY TRAFFIC CONTROL PHASE 1 DETAIL
TMP-5 THRU 10	TEMPORARY TRAFFIC CONTROL PHASE II STEP 1 DETAILS
TMP-11	TEMPORARY TRAFFIC CONTROL PHASE II STEP 2 DETAIL
TMP-12 THRU 16	TEMPORARY TRAFFIC CONTROL PHASE III STEP 1 DETAILS
TMP-17 THRU 20	TEMPORARY TRAFFIC CONTROL PHASE III STEP 2 DETAILS
TMP-21 THRU 22	TEMPORARY TRAFFIC CONTROL PHASE IV STEP 1 DETAILS
TMP-23	TEMPORARY TRAFFIC CONTROL PHASE IV STEP 2 DETAIL
TMP-24 THRU 28	TEMPORARY TRAFFIC CONTROL PHASE V DETAILS

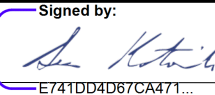
SHEET NO.

TMP-1

U-5798B

TIP PROJECT:

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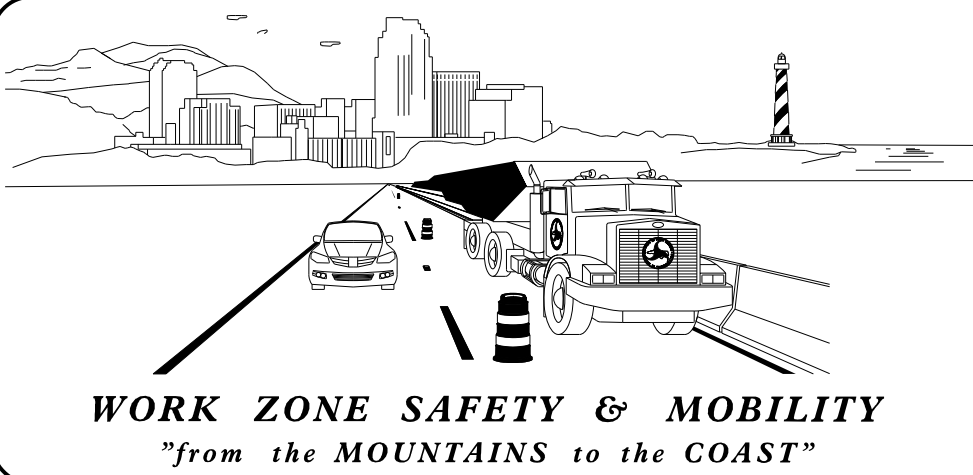
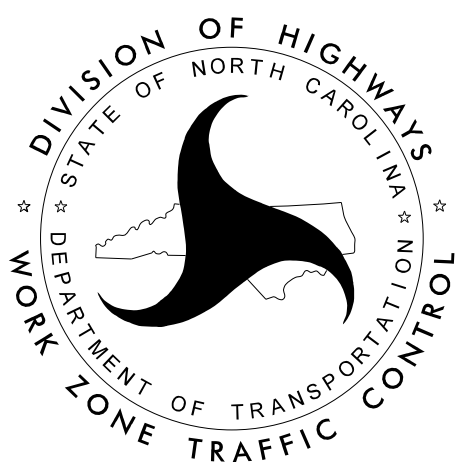
PLANS PREPARED BY:

SEAN KORTOVICH, P.E.
PROJECT ENGINEER

NIKI AVGERINOS, P.E.
PROJECT DESIGN ENGINEER

NCDOT CONTACTS:

ALLA LYUDMIRSKAYA
NCDOT PROJECT MANAGER



WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 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	DRUMS
1145.01	BARRICADES
1150.01	FLAGGERS
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
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 DELINEATION - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATION - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

MANAGEMENT STRATEGY

THE FOLLOWING LISTED WORK ZONE STRATEGIES ARE RECOMMENDED FOR INCLUSION WITHIN THIS TRANSPORTATION MANAGEMENT PLAN (TMP).

RECOMMENDED STRATEGIES:

TRAFFIC MANAGEMENT STRATEGIES:

- LANE SHIFTS OR CLOSURES
- SHOULDER CLOSURES
- ONE-LANE, TWO WAY OPERATION (FLAGGING)
- NIGHT WORK
- WORK HOUR RESTRICTIONS FOR PEAK

TRAVEL

- ON-SITE DETOURS
- CORRIDOR / NETWORK MANAGEMENT

STRATEGIES:

- SIGNAL TIMING / COORDINATION IMPROVEMENTS
- STREET / INTERSECTION IMPROVEMENTS

LEGEND

GENERAL

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

- WORK AREA
- CONTINUED CONSTRUCTION

- REMOVAL

- TEMPORARY PAVEMENT

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

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

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

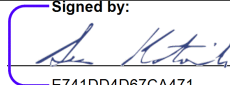
PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

TEMPORARY PAVEMENT MARKING

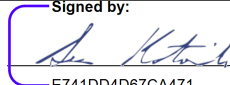
- P1 WHITE EDGELINE (PAINT, 4")
- P2 WHITE SOLID LANE LINE (PAINT, 4")
- P3 10FT. WHITE SKIP (PAINT, 4")
- P4 3FT.-9FT./SP WHITE MINISKIP (PAINT, 4")
- P5 2FT.-6FT./SP WHITE MINISKIP (PAINT, 4")
- P10 YELLOW EDGELINE (PAINT, 4")
- P13 DOUBLE YELLOW CENTERLINE (PAINT, 4")
- P14 2FT.-6FT./SP YELLOW MINISKIP (PAINT, 4")
- P42 YELLOW DIAGONAL (PAINT, 8")
- P61 WHITE STOPBAR (PAINT, 24")
- P70 LEFT TURN ARROW (PAINT)
- P71 RIGHT TURN ARROW (PAINT)
- P72 STRAIGHT ARROW (PAINT)
- P74 COMBO. RIGHT/STRAIGHT ARROW (PAINT)

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DATE: 6/11/2025

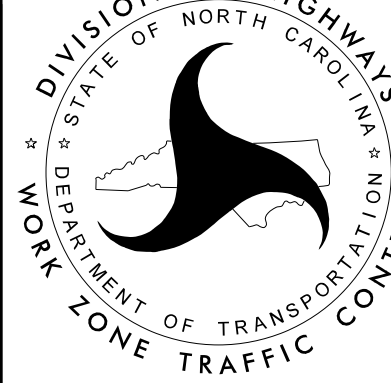
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Signed by: 
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SEAL
044511
ENGINEER
S. M. KORTVILICH
NORTH CAROLINA PROFESSIONAL ENGINEERS

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



ROADWAY STANDARD
DRAWINGS & LEGEND

4/9/2025
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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 UNDESIREED 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
GILLIS HILL RD	MONDAY THRU SUNDAY 6:00AM TO 8:00PM
STONEY POINT RD	MONDAY THRU SUNDAY 6:00AM TO 8:00PM
CELTIC DR	MONDAY THRU SUNDAY 6:00AM TO 8:00PM

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

ROAD NAME
GILLIS HILL RD
STONEY POINT RD
CELTIC DR

- FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
- FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00AM DECEMBER 31st TO 8:00PM JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 8:00PM THE FOLLOWING TUESDAY.
- FOR EASTER, BETWEEN THE HOURS OF 6:00AM THURSDAY AND 8:00PM MONDAY.
- FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00AM FRIDAY TO 8:00PM TUESDAY.
- FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00AM THE DAY BEFORE INDEPENDENCE DAY AND 8:00PM THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 8:00PM THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 6:00AM FRIDAY AND 8:00PM TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00AM TUESDAY TO 8:00PM MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:00PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- C) 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.
- D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 5 FT OF AN OPEN TRAVEL LANE ON AN UNDIVIDED FACILITY, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 10 FT OF AN OPEN TRAVEL LANE ON A DIVIDED FACILITY, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- F) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

- G) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.
- H) DO NOT INSTALL MORE THAN 500 FT OF LANE CLOSURE ON ALL ROADS MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- I) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON ALL ROADS.
- J) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- K) 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.
- L) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 350 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

- N) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- O) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
- PROVIDE SIGNING REQUIRED FOR THE ON-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

- P) COVER OR REMOVE ALL SIGNS AND DEVICES REQUIRED TO CLOSE THE ROAD WHEN ROAD CLOSURE IS NOT IN OPERATION.

COVER OR REMOVE ALL SIGNS REQUIRED FOR THE ON-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

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

- R) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 350 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

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

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

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE / RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRANSPORTATION MANAGEMENT PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

- T) 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	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT
55	25 FT
60 MPH or HIGHER	30 FT

TRAFFIC CONTROL DEVICES

- U) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.
- V) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.
- W) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES DRUMS PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

- X) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
GILLIS HILL RD	PAINT	TEMPORARY RAISED
STONEY POINT RD	PAINT	TEMPORARY RAISED
CELTIC DR	PAINT	TEMPORARY RAISED

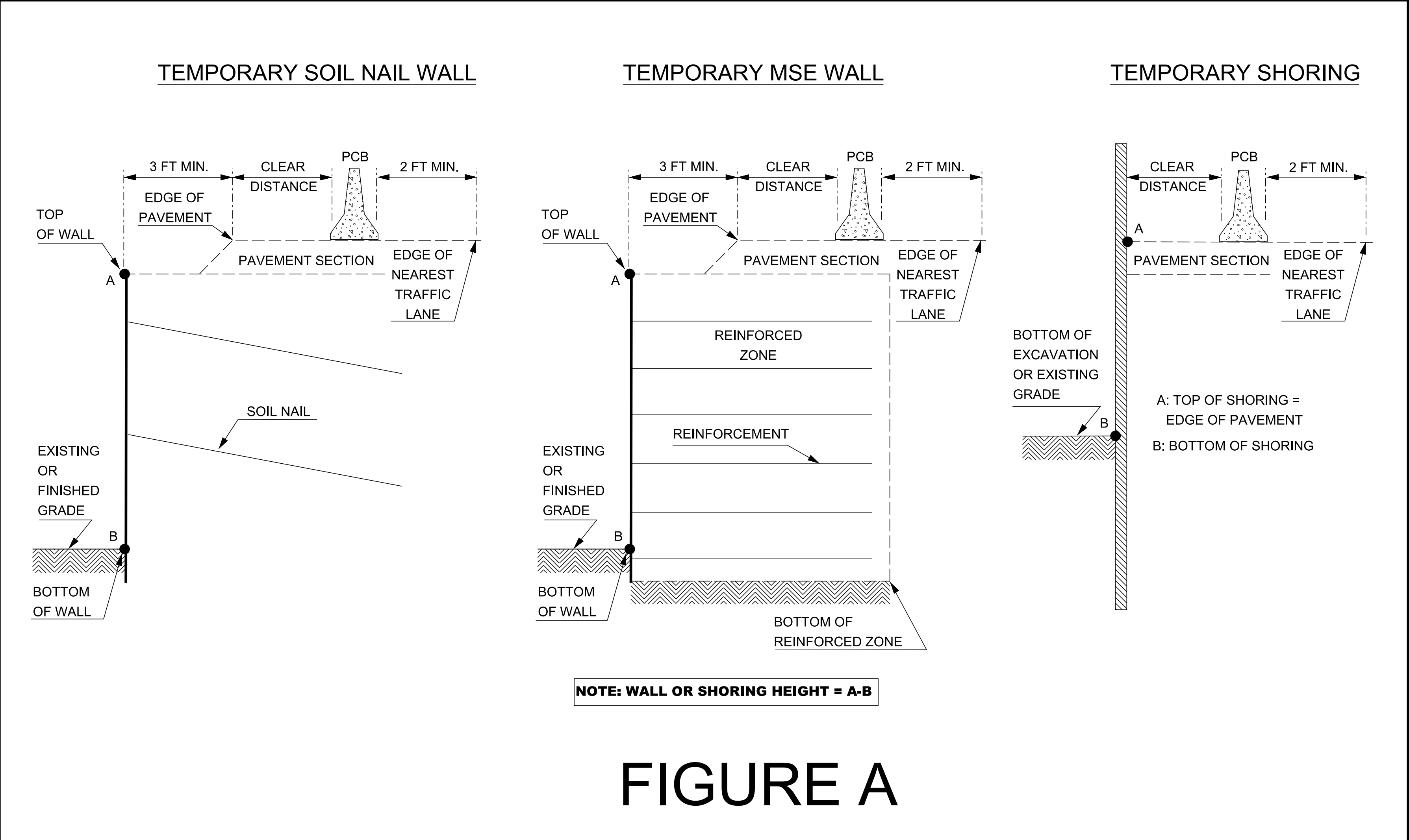
- Y) PLACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.
- Z) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- AA) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.
- BB) TRACE THE EXISTING AND PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO REMOVAL AND INSTALLATION. PLACE DRUMS TO DELINEATE ANY EXISTING AND PROPOSED MONOLITHIC ISLANDS AFTER REMOVAL AND BEFORE INSTALLATION

MISCELLANEOUS

- CC) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- DD) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 350 FT AND 700 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.
- EE) ALL CURB RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.
- FF) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.).



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- NOTES
- 1- REFER TO THE TRAFFIC CONTROL PLANS FOR TEMPORARY SHORING LOCATIONS AND NOTES.

2- REFER TO THE "TEMPORARY SHORING" STANDARD PROVISION FOR INFORMATION ABOUT TEMPORARY SHORING AND PORTABLE CONCRETE BARRIER (PCB).

3- PCB IS REQUIRED IF TEMPORARY SHORING/WALL IS LOCATED WITHIN THE CLEAR ZONE IN ACCORDANCE WITH THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT FOR APPLICABLE PAVEMENT DESIGN).

4- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED OR ANCHORED PCB FROM THE TABLE SHOWN IN FIGURE B. CLEAR DISTANCE IS DEFINED AS SHOWN IN FIGURE A AND OFFSET IS DEFINED AS SHOWN IN FIGURE B.

5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET PCB NEXT TO AND UP AGAINST THE TRAFFIC SIDE OF THE TEMPORARY SHORING/WALLS EXCEPT FOR BARRIER ABOVE TEMPORARY WALLS. PCB WITH THE MINIMUM REQUIRED CLEAR DISTANCE IS REQUIRED ABOVE TEMPORARY WALLS.

6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.

7- SET PCB WITH A MINIMUM HORIZONTAL DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A UNLESS OTHERWISE SHOWN IN THE PLANS OR APPROVED BY THE ENGINEER.

8- FOR PCB ABOVE AND BEHIND TEMPORARY WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THIS MINIMUM REQUIRED DISTANCE IS NOT AVAILABLE, CONTACT THE ENGINEER.

9- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS.

PROJ. REFERENCE NO.
U - 5798B

SHEET NO.
TMP - 2A

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
	Concrete	50-56	32	36	42	44	47	50
		>56	32	36	42	45	47	51
		<8	17	18	21	22	25	26
		8-14	19	20	23	25	26	29
		14-20	22	22	24	26	28	31
		20-26	23	24	26	27	30	34
		26-32	24	25	27	28	32	35
		32-38	24	26	27	30	33	36
Anchored PCB	Asphalt	All Offsets	24 for All Design Speeds					
		All Offsets	12 for All Design Speeds					

* See Figure Below

FIGURE B

FIGURE B

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

PORTABLE CONCRETE BARRIER
AT
TEMPORARY SHORING LOCATIONS

4/9/2025
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User:Avgerin

PROJ. REFERENCE NO.	SHEET NO.
U - 5798B	TMP - 2B

TEMPORARY SHORING NOTES

SHORING LOCATION NO. 1

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

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

DESIGN TEMPORARY SHORING FROM STATION -LB- 25+66±, 0.2 FT RT, TO STATION -LB- 25+92±, 12 FT LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- ABOVE ELEVATION 170 FT:
 - UNIT WEIGHT = 120 PCF
 - FRICTION ANGLE = 30 DEGREES
 - COHESION = 0 PSF
- BETWEEN ELEVATION 155 FT & 170 FT:
 - UNIT WEIGHT = 120 PCF
 - FRICTION ANGLE = 33 DEGREES
 - COHESION = 0 PSF
- BETWEEN ELEVATION 145 FT & 155 FT:
 - UNIT WEIGHT = 120 PCF
 - FRICTION ANGLE = 36 DEGREES
 - COHESION = 0 PSF
- BELOW ELEVATION 145 FT:
 - UNIT WEIGHT = 120 PCF
 - FRICTION ANGLE = 0 DEGREES
 - COHESION = 4000 PSF
 - GROUNDWATER ELEVATION = 173.8'±

DO NOT USE CANTILEVER, BRACED OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION -LB- 25+66±, 0.2 FT RT, TO STATION -LB- 25+92±, 12 FT LT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -LB- 25+66±, 0.2 FT RT, TO STATION -LB- 25+92±, 12 FT LT IF GROUND WATER BECOMES LOWER THAN THE BOTTOM OF TEMPORARY SHORING. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

SHORING LOCATION NO. 2

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

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

DESIGN TEMPORARY SHORING FROM STATION -LB- 25+01±, 10.5 FT LT, TO STATION -LB- 25+92±, 12 FT LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

- ABOVE ELEVATION 170 FT:
 - UNIT WEIGHT = 120 PCF
 - FRICTION ANGLE = 30 DEGREES
 - COHESION = 0 PSF
- BETWEEN ELEVATION 155 FT & 170 FT:
 - UNIT WEIGHT = 120 PCF
 - FRICTION ANGLE = 33 DEGREES
 - COHESION = 0 PSF
- BETWEEN ELEVATION 145 FT & 155 FT:
 - UNIT WEIGHT = 120 PCF
 - FRICTION ANGLE = 36 DEGREES
 - COHESION = 0 PSF
- BELOW ELEVATION 145 FT:
 - UNIT WEIGHT = 120 PCF
 - FRICTION ANGLE = 0 DEGREES
 - COHESION = 4000 PSF
 - GROUNDWATER ELEVATION = 173.8'±

DRIVEN PILING FOR TEMPORARY SHORING FROM STATION -LB- 25+01±, 10.5 FT LT, TO STATION -LB- 25+92±, 12 FT LT MAY NOT PENETRATE BELOW ELEVATION 145 FT DUE TO VERY DENSE OR HARD SOIL.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -LB- 25+01±, 10.5 FT LT, TO STATION -LB- 25+92±, 12 FT LT.

SHORING LOCATION NO. 3

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

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

DESIGN TEMPORARY SHORING FROM STATION -LB- 25+01±, 10.5 FT LT, TO STATION -LB- 25+26±, 0.7 FT RT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:

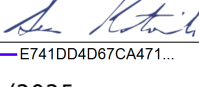
- ABOVE ELEVATION 170 FT:
 - UNIT WEIGHT = 120 PCF
 - FRICTION ANGLE = 30 DEGREES
 - COHESION = 0 PSF
- BETWEEN ELEVATION 155 FT & 170 FT:
 - UNIT WEIGHT = 120 PCF
 - FRICTION ANGLE = 33 DEGREES
 - COHESION = 0 PSF
- BETWEEN ELEVATION 145 FT & 155 FT:
 - UNIT WEIGHT = 120 PCF
 - FRICTION ANGLE = 36 DEGREES
 - COHESION = 0 PSF
- BELOW ELEVATION 145 FT:
 - UNIT WEIGHT = 120 PCF
 - FRICTION ANGLE = 0 DEGREES
 - COHESION = 4000 PSF
 - GROUNDWATER ELEVATION = 173.8'±


DO NOT USE CANTILEVER, BRACED OR ANCHORED SHORING FOR TEMPORARY SHORING FROM STATION -LB- 25+01±, 10.5 FT LT, TO STATION -LB- 25+26±, 0.7 FT RT.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -LB- 25+01±, 10.5 FT LT, TO STATION -LB- 25+26±, 0.7 FT RT IF GROUND WATER BECOMES LOWER THAN THE BOTTOM OF TEMPORARY SHORING. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY WALLS.




THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH A SEALED DOCUMENT FROM THE GEOTECHNICAL ENGINEERING UNIT. THE DOCUMENT WAS SUBMITTED TO THE WZTC SECTION ON JUNE 17, 2024 AND SEALED BY A PROFESSIONAL ENGINEER, THEIN TUN ZAN, LICENSE # 030943.

APPROVED: 
DATE: 6/11/2025



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



TEMPORARY SHORING NOTES

PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-3

PHASING NOTES

NOTES:

'RSD' REFERS TO NCDOT ROADWAY STANDARD DRAWINGS.

COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MATTER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.

ALL PROPOSED ASPHALT ROADWAY CONSTRUCTION IS UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE UNLESS OTHERWISE NOTED.

MAINTAIN EXISTING 35 MPH SPEED ADVISORY SIGNAGE ALONG -LB- (GILLIS HILL RD.) DURING CONSTRUCTION.

PHASE I STEP 1:

USING RSD 1101.01 (SHEETS 2 AND 3 OF 3) PLACE ALL ADVANCED WARNING SIGNS ALONG -LB- (GILLIS HILL RD.), -L- (GILLIS HILL RD.), -Y1- (CELTIC DR.), AND -Y2- (STONEY POINT RD.).

PHASE I STEP 2:

WITH TRAFFIC ALONG -LB- (GILLIS HILL RD.) AND -Y1- (CELTIC DR.) IN THE EXISTING PATTERN, USE RSD 1101.02 (SHEET 1 OF 19) AND TEMPORARY NIGHT-TIME LANE CLOSURES TO INSTALL THE TEMPORARY DRAINAGE PIPES ALONG LT OF -Y1- (CELTIC DR.). ONCE THE TEMPORARY DRAINAGE HAS BEEN INSTALLED, USE RSD 1101.02 (SHEET 1 OF 19) AND TEMPORARY NIGHT-TIME LANE CLOSURES TO CONSTRUCT TEMPORARY PAVEMENT ALONG -LB- (GILLIS HILL RD.) AND TEMPORARY -Y1- (CELTIC DR.) CONNECTION, -Y1_TEMP- (SEE ROADWAY SHEET 2B-1). SEE SHEET TMP-4.

-LB- STA. 22+19± RT TO -LB- STA. 24+14± RT -LB- STA. 28+23± RT TO -Y1- STA. 12+96± LT

PHASE II STEP 1:

SHIFT -Y1- (CELTIC DR.) TRAFFIC INTO A TEMPORARY PATTERN ALONG -Y1_TEMP-. USING RSD 1101.02 (SHEET 1 OF 19), TEMPORARY NIGHT-TIME LANE CLOSURES, AND WEDGING AT -LB- (GILLIS HILL RD.) TIE-IN TO -Y1- (CELTIC DR.), BEGIN PROPOSED PAVEMENT AND RT CURB AND GUTTER CONSTRUCTION ALONG -Y1- (CELTIC DR.). SEE SHEET TMP-6.

-Y1- STA. 10+00± TO -Y1- STA. 13+75± RT

WITH TRAFFIC ALONG -LB- (GILLIS HILL RD.) IN THE EXISTING PATTERN AND -Y1- (CELTIC DR.) TRAFFIC SHIFTED INTO A TEMPORARY PATTERN ALONG -Y1_TEMP-, USE RSD 1101.02 (SHEET 1 OF 19) AND TEMPORARY NIGHT-TIME LANE CLOSURES TO INSTALL ANCHORED PCB ALONG RT OF -LB- (GILLIS HILL RD.) AND BEGIN CONSTRUCTION OF THE PROPOSED WIDENING ALONG LT AND RT OF -LB- (GILLIS HILL RD.), INCLUDING WEDGING, TEMPORARY SHORING AND THE TEMPORARY PAVEMENT CONSTRUCTION ALONG LT OF -LB- (GILLIS HILL RD.). USING TEMPORARY SHORING, BEGIN CONSTRUCTION OF PROPOSED SOUTHERN BARREL AND CHANNEL IMPROVEMENTS OF THE CULVERT ALONG RT OF -LB- (GILLIS HILL RD.) BEHIND BARRIER (SEE EC-6/CONST. 5 PHASE 1). SEE SHEETS TMP-5 THRU TMP-8.

-LB- STA. 12+49± RT TO -LB- STA. 28+21± RT -LB- STA. 28+65± LT TO -LB- STA. 57+83± LT
-LB- STA. 26+67± LT TO -LB- STA. 28+65± LT (TEMPORARY PAVEMENT CONSTRUCTION)

WITH TRAFFIC IN THE EXISTING PATTERN ALONG -Y2- (STONEY POINT RD.), USE RSD 1101.02 (SHEET 1 OF 19), TEMPORARY NIGHT-TIME LANE CLOSURES, AND WEDGING TO CONSTRUCT THE PROPOSED WIDENING ALONG RT OF -Y2- (STONEY POINT RD.). SEE SHEETS TMP-8 THRU TMP-10.

-Y2- STA. 13+30± RT TO -Y2- STA. 24+72± RT -Y2- STA. 25+81± RT TO -Y2- STA. 41+00± RT

PHASE II STEP 2:

WITH TRAFFIC ALONG -LB- (GILLIS HILL RD.) IN THE EXISTING PATTERN AND -Y1- (CELTIC DR.) TRAFFIC SHIFTED INTO A TEMPORARY PATTERN ALONG -Y1_TEMP-, USE RSD 1101.02 (SHEET 1 OF 19) AND TEMPORARY NIGHT-TIME LANE CLOSURES TO COMPLETE CONSTRUCTION OF THE PROPOSED WIDENING ALONG LT AND RT OF -LB- (GILLIS HILL RD.) FROM PHASE II STEP 1, AND BEGIN CONSTRUCTION OF THE REMAINING 2 DOWNSTREAM BARRELS AND CHANNEL IMPROVEMENTS OF THE PROPOSED CULVERT ALONG RT OF -LB- (GILLIS HILL RD.) BEHIND BARRIER (SEE EC-6/CONST. 5 PHASE 2). SEE SHEET TMP-11.

PHASE III STEP 1:

SHIFT TRAFFIC INTO PROPOSED PATTERN ALONG COMPLETED PORTION OF PROPOSED -Y1- (CELTIC DR.). USING RSD 1101.02 (SHEET 1 OF 19) AND TEMPORARY NIGHT-TIME LANE CLOSURES, REMOVE THE TEMPORARY PAVEMENT FROM -Y1_TEMP- CONNECTION AND COMPLETE PROPOSED LT CURB AND GUTTER CONSTRUCTION ALONG -Y1- (CELTIC DR.). SEE SHEET TMP-12.

-Y1- STA. 10+20± LT TO -Y1- STA. 12+96± LT (-Y1_TEMP- PAVEMENT REMOVAL)
-Y1- STA. 10+77± LT TO -Y1- STA. 13+75± LT

INSTALL THE TEMPORARY SIGNAL AT THE INTERSECTION OF -LB-/-L- (GILLIS HILL RD.) AND -Y2- (STONEY POINT RD.) AND SHIFT -LB- (GILLIS HILL RD.) TRAFFIC INTO A TEMPORARY PATTERN TOWARDS LT OF -LB- (GILLIS HILL RD.). USING RSD 1101.02 (SHEET 1 OF 19) AND TEMPORARY NIGHT-TIME LANE CLOSURES, COMPLETE CONSTRUCTION OF THE PROPOSED WIDENING ALONG RT OF -LB- (GILLIS HILL RD.). SEE SHEETS TMP-12 THRU TMP-14.

-LB- STA. 27+90± RT TO -LB- STA. 56+38± RT

PHASE III STEP 1 CONTINUED:

WITH -Y2- (STONEY POINT RD.) TRAFFIC IN EXISTING PATTERN, USE RSD 1101.02 (SHEET 1 OF 19), TEMPORARY NIGHT-TIME LANE CLOSURES, AND WEDGING TO CONSTRUCT PROPOSED WIDENING ALONG LT OF -Y2- (STONEY POINT RD.) AND TIE-INS TO -L- (GILLIS HILL RD.). SEE SHEETS TMP-14 THRU TMP-16.

-Y2- STA. 13+30± LT TO -Y2- STA. 23+40± LT -Y2- STA. 23+40± LT TO -L- STA. 51+02± LT
-Y2- STA. 25+89± LT TO -L- STA. 50+70± RT -Y2- STA. 25+89± LT TO -Y2- STA. 41+00± LT

PHASE III STEP 2:

SHIFT -LB- (GILLIS HILL RD.) TRAFFIC INTO A TEMPORARY PATTERN TOWARDS RT OF -LB- (GILLIS HILL RD.). USING RSD 1101.02 (SHEET 1 OF 19) AND TEMPORARY NIGHT-TIME LANE CLOSURES, MILL DOWN THE EXISTING PAVEMENT ALONG -LB- (GILLIS HILL RD.) TO MAINTAIN POSITIVE DRAINAGE. SEE SHEETS TMP-17 THRU TMP-20.

NOTE: THE MILLING MUST BE PREFORMED IN A CONTINUOUS OPERATION.

-LB- STA. 28+00± TO -LB- STA. 30+50±

PHASE IV STEP 1:

WITH -LB- (GILLIS HILL RD.) TRAFFIC STILL SHIFTED IN THE TEMPORARY PATTERN TOWARDS RT OF -LB- (GILLIS HILL RD.), USE RSD 1101.02 (SHEET 1 OF 19), TEMPORARY NIGHT-TIME LANE CLOSURES, AND WEDGING TO BEGIN CONSTRUCTION OF PROPOSED LT -LB- (GILLIS HILL RD.), INCLUDING THE PROPOSED RETAINING WALL ALONG LT OF -LB- (GILLIS HILL RD.), AND RECONSTRUCT THE PAVEMENT IN THE MILLING AREA. COMPLETE CONSTRUCTION OF PROPOSED NORTHERN BARREL AND CHANNEL IMPROVEMENTS OF THE CULVERT ALONG LT OF -LB- (GILLIS HILL RD.) BEHIND BARRIER (SEE EC-6./CONST. 5 PHASE 3). SEE SHEETS TMP-21 & TMP-22.

-LB- STA. 12+50± LT TO -LB- STA. 28+65± LT

PHASE IV STEP 2:

WITH -LB- (GILLIS HILL RD.) TRAFFIC STILL SHIFTED IN THE TEMPORARY PATTERN TOWARDS RT OF -LB- (GILLIS HILL RD.), USE RSD 1101.02 (SHEET 1 OF 19) AND TEMPORARY NIGHT-TIME LANE CLOSURES TO COMPLETE CONSTRUCTION OF THE PROPOSED WIDENING ALONG LT OF -LB- (GILLIS HILL RD.) FROM PHASE IV STEP 1, INCLUDING THE TEMPORARY PAVEMENT REMOVAL ALONG LT OF -LB- (GILLIS HILL RD.), AND COMPLETE CONSTRUCTION OF THE REMAINING 2 NORTHERN BARRELS AND CHANNEL IMPROVEMENTS OF THE PROPOSED CULVERT ALONG LT OF -LB- (GILLIS HILL RD.) BEHIND BARRIER (SEE EC-6/CONST. 5 PHASE 4). SEE SHEET TMP-23.

-LB- STA. 26+67± LT TO -LB- STA. 28+65± LT (TEMPORARY PAVEMENT REMOVAL)

PHASE V:

WITH -LB- (GILLIS HILL RD.) TRAFFIC SHIFTED IN A TEMPORARY PATTERN TOWARDS THE OUTSIDE OF -LB- (GILLIS HILL RD.), USE RSD 1101.02 (SHEETS 1 AND 3 OF 19) AND TEMPORARY NIGHT-TIME LANE CLOSURES TO CONSTRUCT THE PROPOSED MEDIAN ALONG -LB- (GILLIS HILL RD.) AND MEDIAN TIE-IN ALONG -L- (GILLIS HILL RD.). SEE SHEETS TMP-24 THRU TMP-28.

-LB- STA. 16+91± TO -LB- STA. 27+41± -LB- STA. 28+38± TO -LB- STA. 57+21±
-L- STA. 50+63± TO -L- STA. 51+44±

PHASE VI:

USING RSD 1101.02 (SHEETS 1 AND 3 OF 19) AND TEMPORARY NIGHT-TIME LANE CLOSURES, PLACE THE FINAL LAYER OF SURFACE COURSE, FINAL MARKINGS AND MARKERS ON ALL ROADWAYS WITHIN THE PROJECT LIMITS. INSTALL PERMANENT SIGNAL PHASING AND PLACE ALL TRAFFIC IN THE FINAL PATTERN. REMOVE ALL TRAFFIC CONTROL DEVICES FROM THE PROJECT LIMITS.

4/9/2025
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DATE: 6/11/2025

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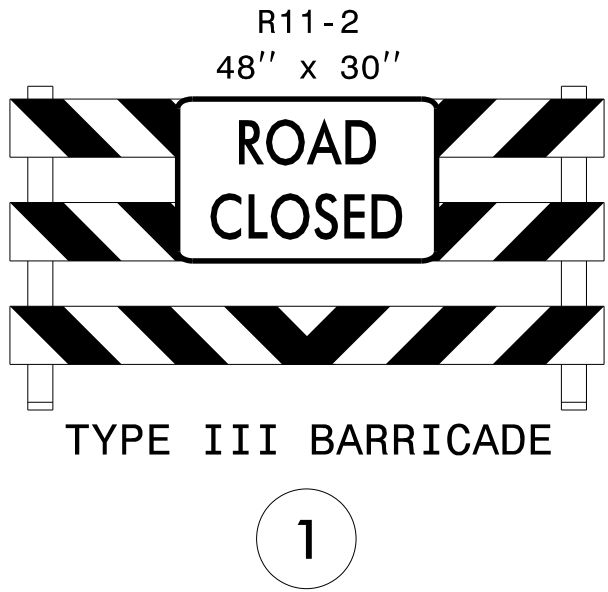
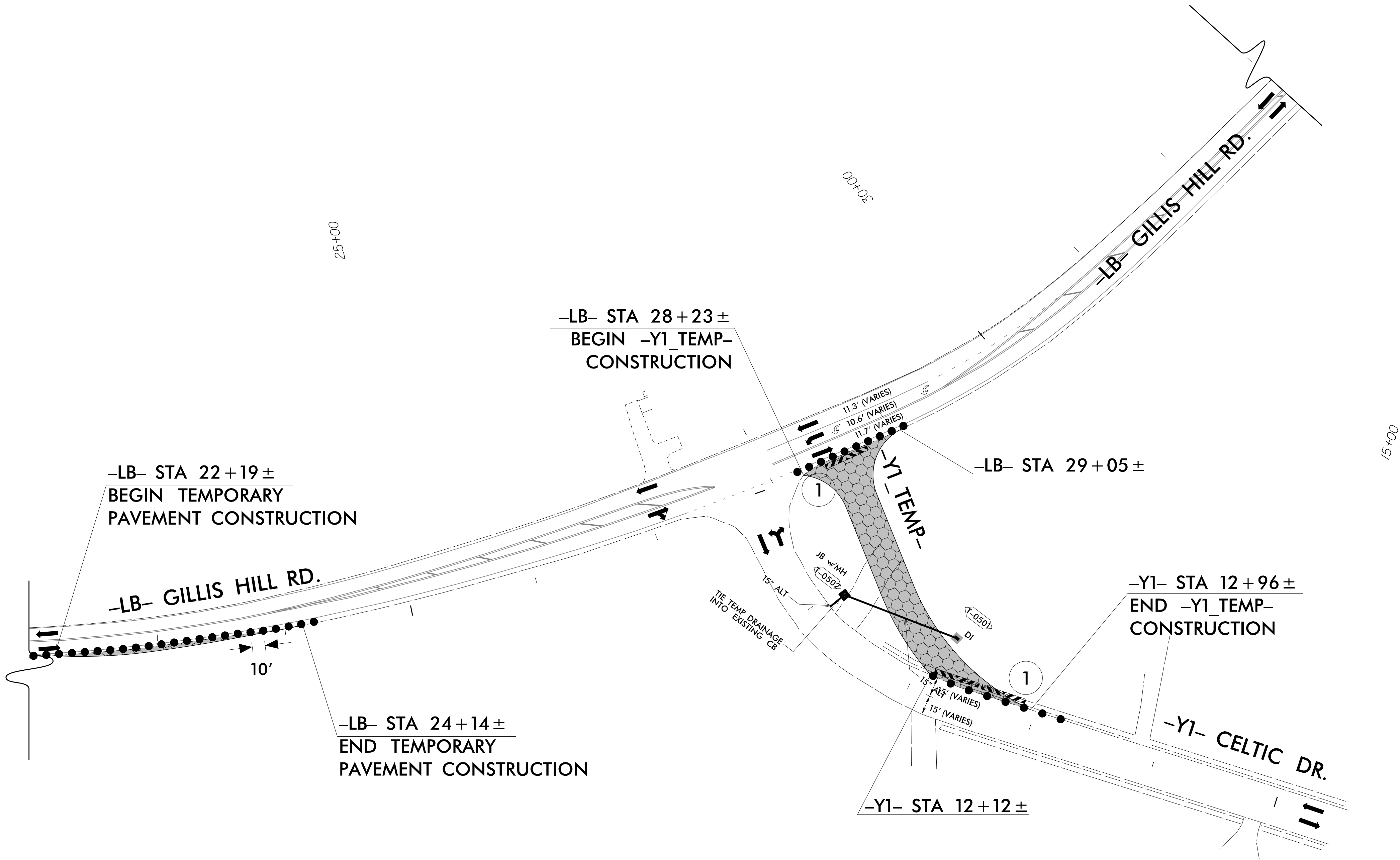
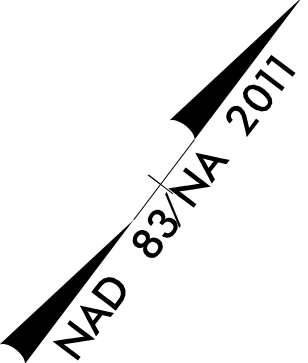
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UNLESS ALL SIGNATURES COMPLETED



TEMPORARY
TRAFFIC CONTROL
PHASING

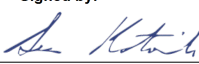



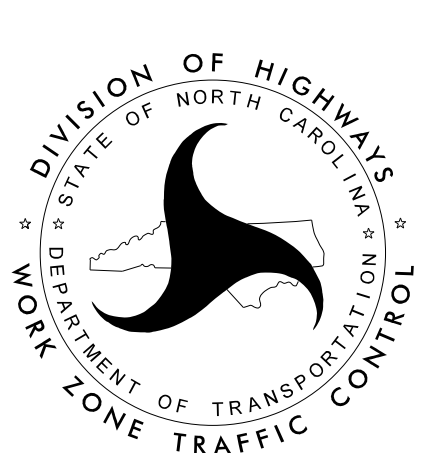
PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-4



SEE ROADWAY SHEET 2B-1
FOR -Y1_TEMP- ALIGNMENT



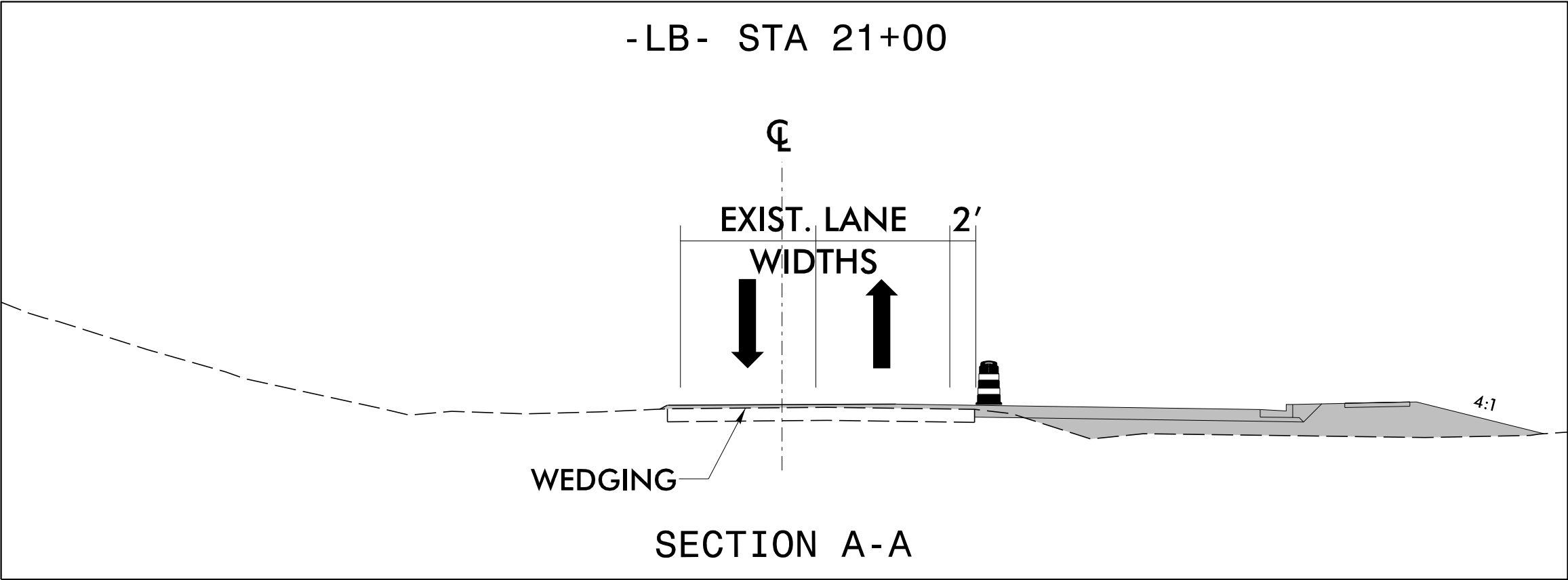
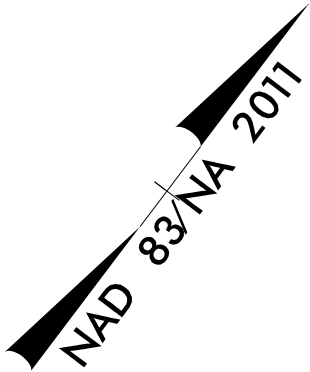
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DATE: 6/11/2025
SEAL

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PHASE I STEP 2
DETAILS



PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-5



10+00

15+00

20+00

-LB- STA 12 + 49 ±
BEGIN CONSTRUCTION

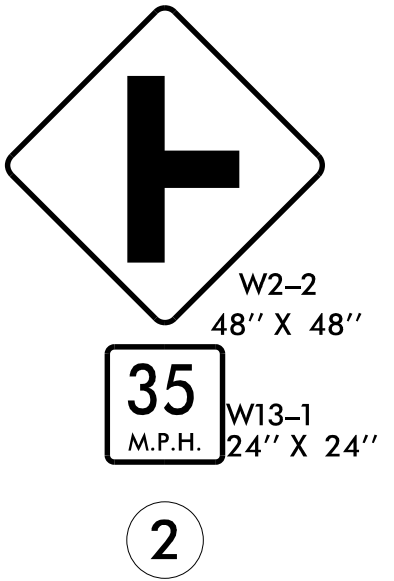
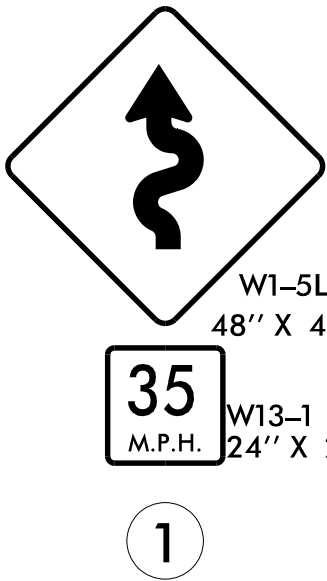
-LB- GILLIS HILL RD.

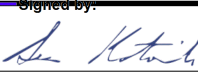
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MAINTAIN DRIVEWAY ACCESS

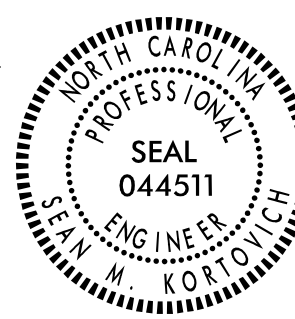
MATCHLINE SHEET TMP-6 -LB- STA. 22 + 00.00

NOTE: MAINTAIN EXISTING 35 MPH
SPEED ADVISORY SIGNAGE
DURING CONSTRUCTION



APPROVED: 
DATE: 6/11/2025

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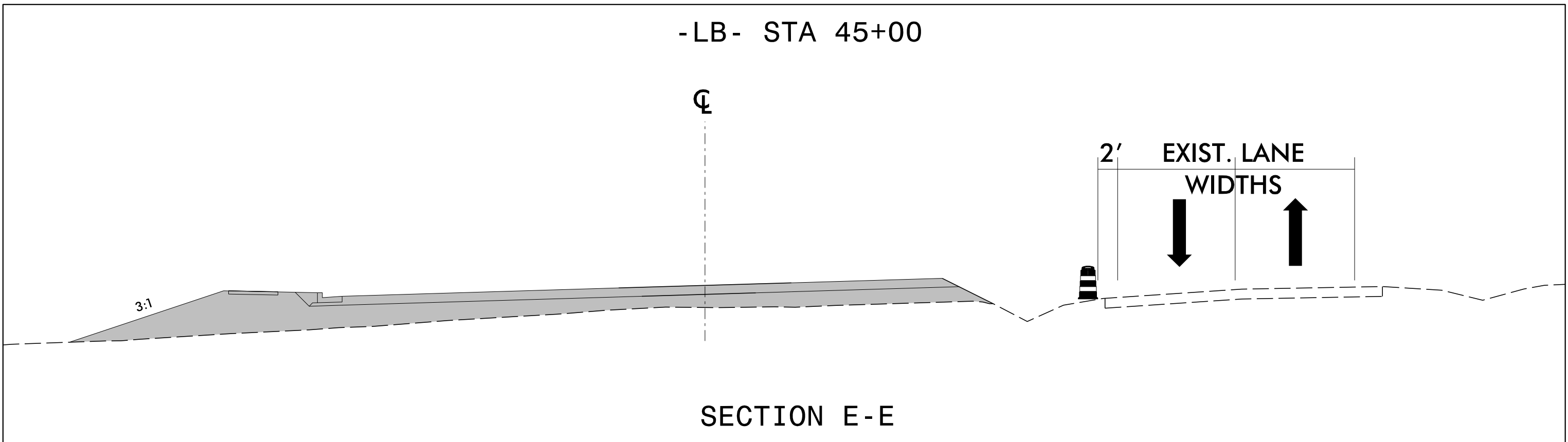
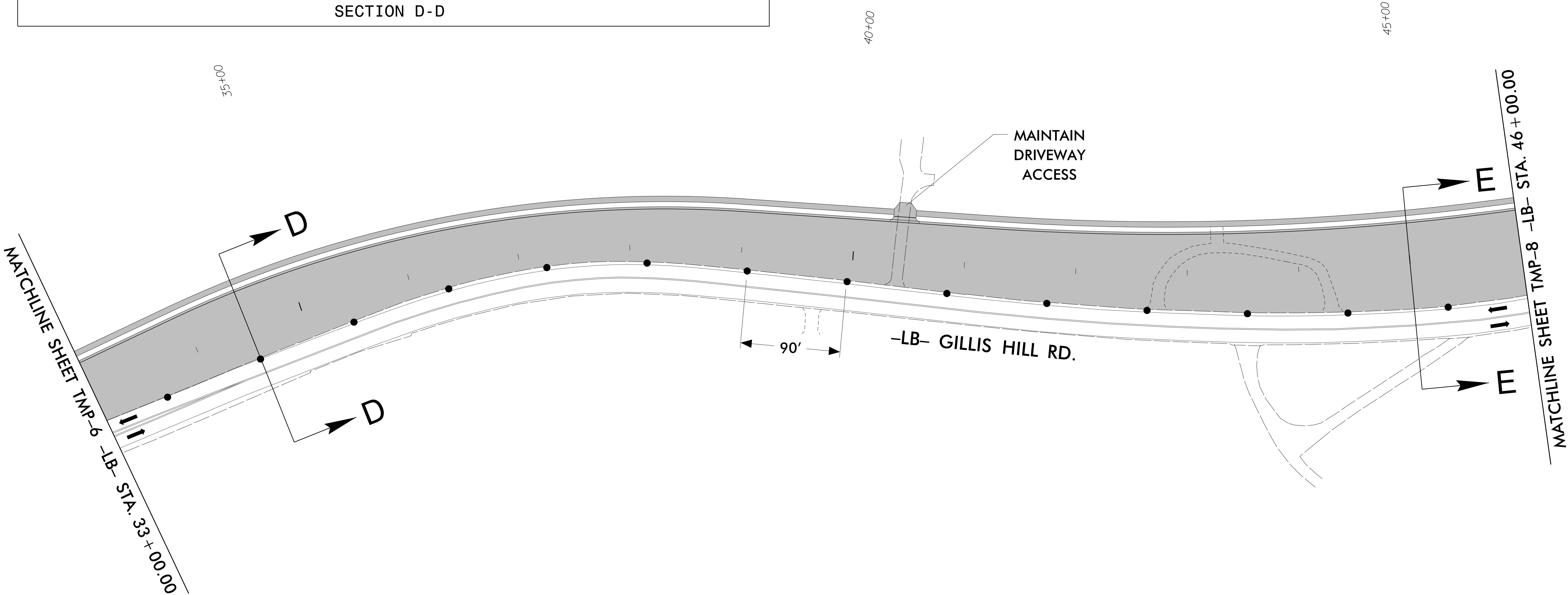
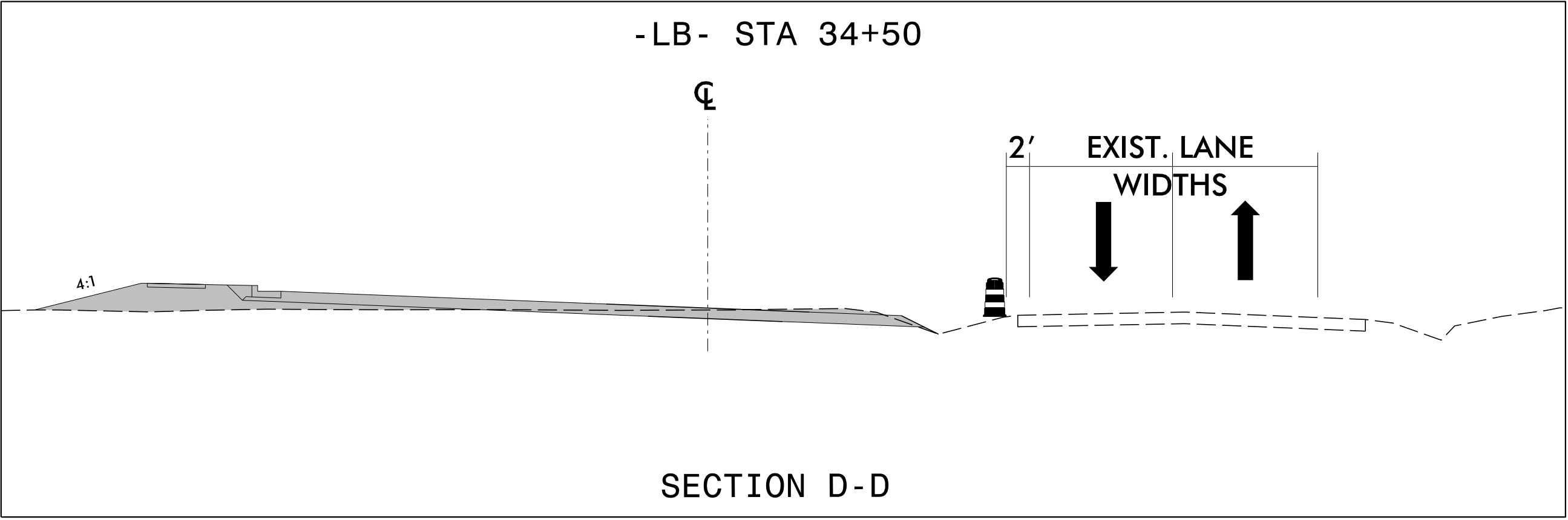
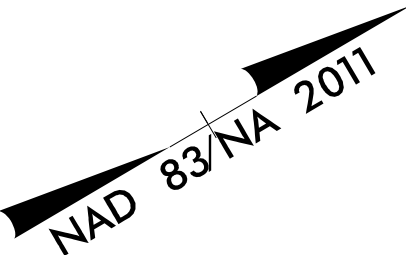
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DETAILS

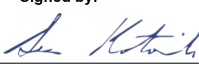







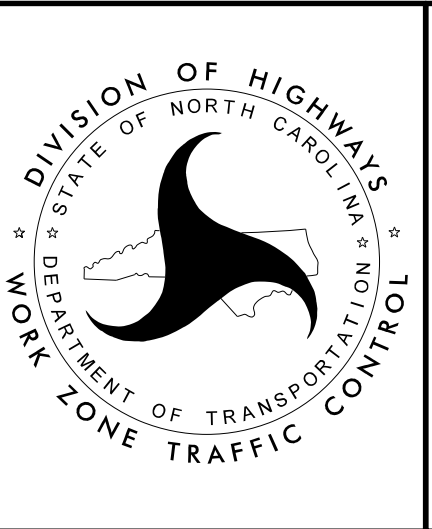
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U-5798B	TMP-7



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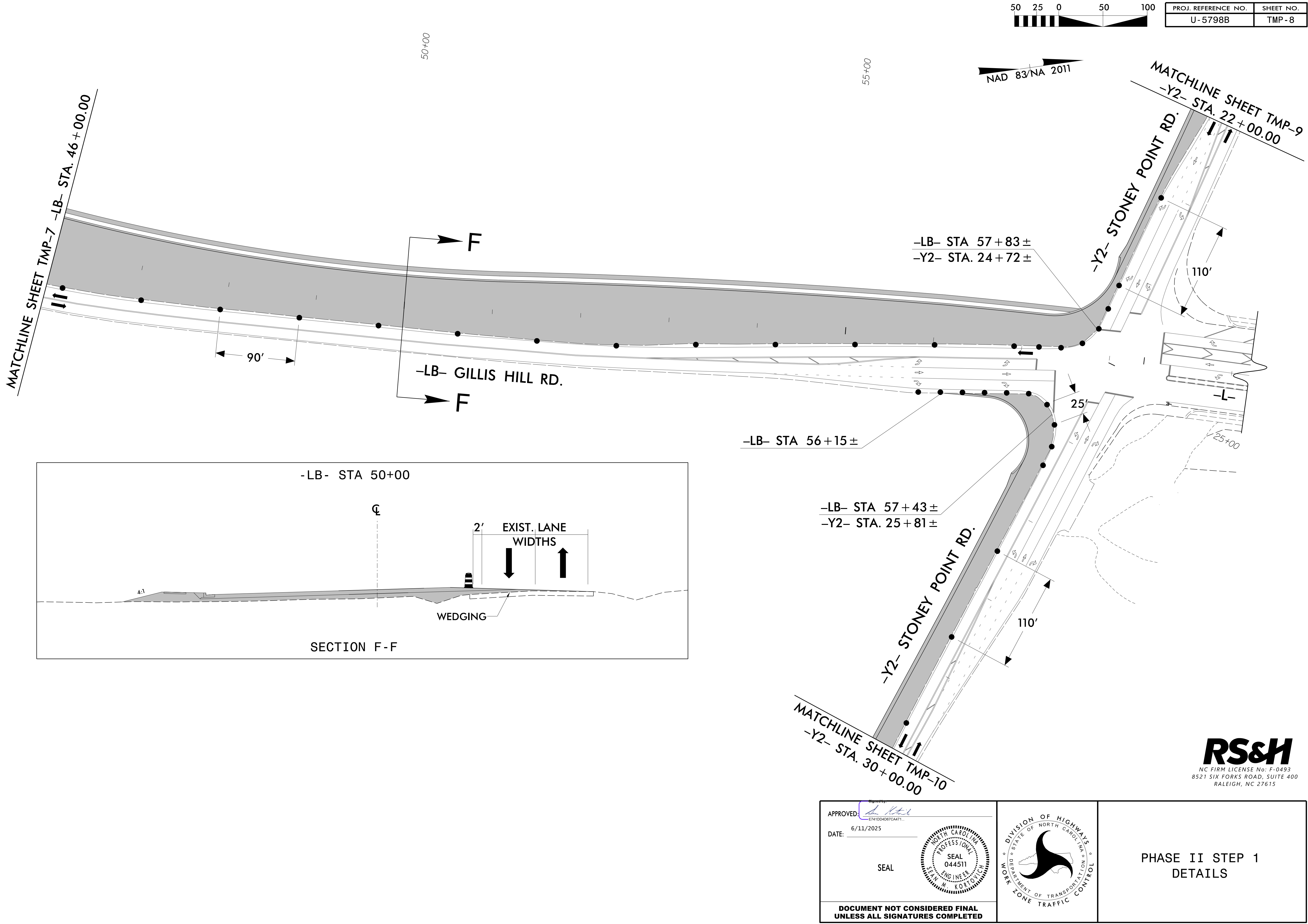
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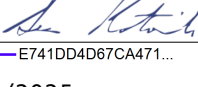
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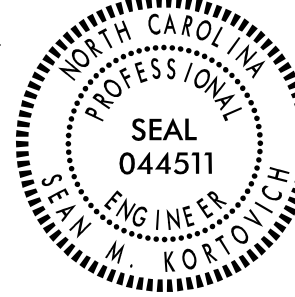
PHASE II STEP 1
DETAILS

4/9/2025
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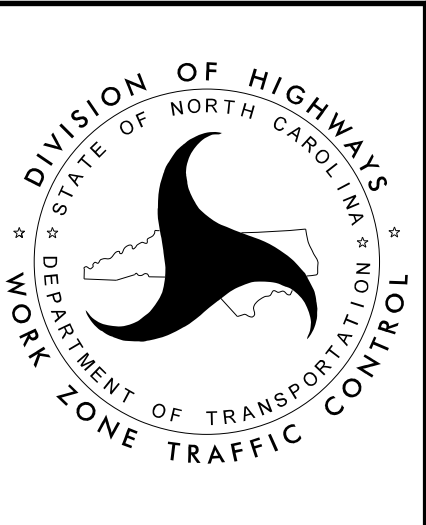


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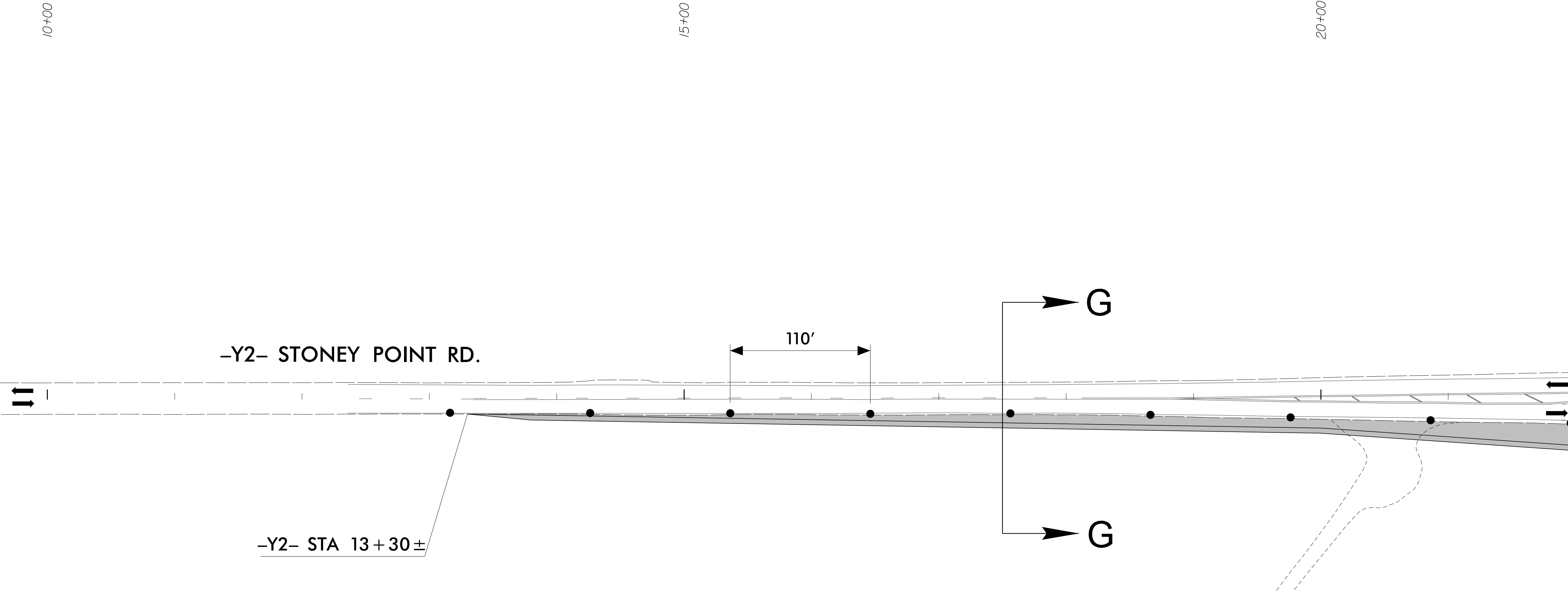
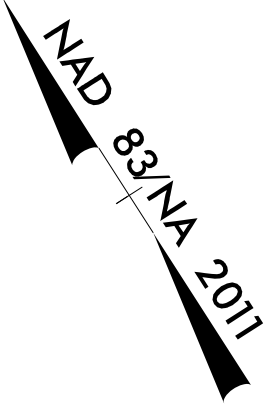


**PHASE II STEP 1
DETAILS**

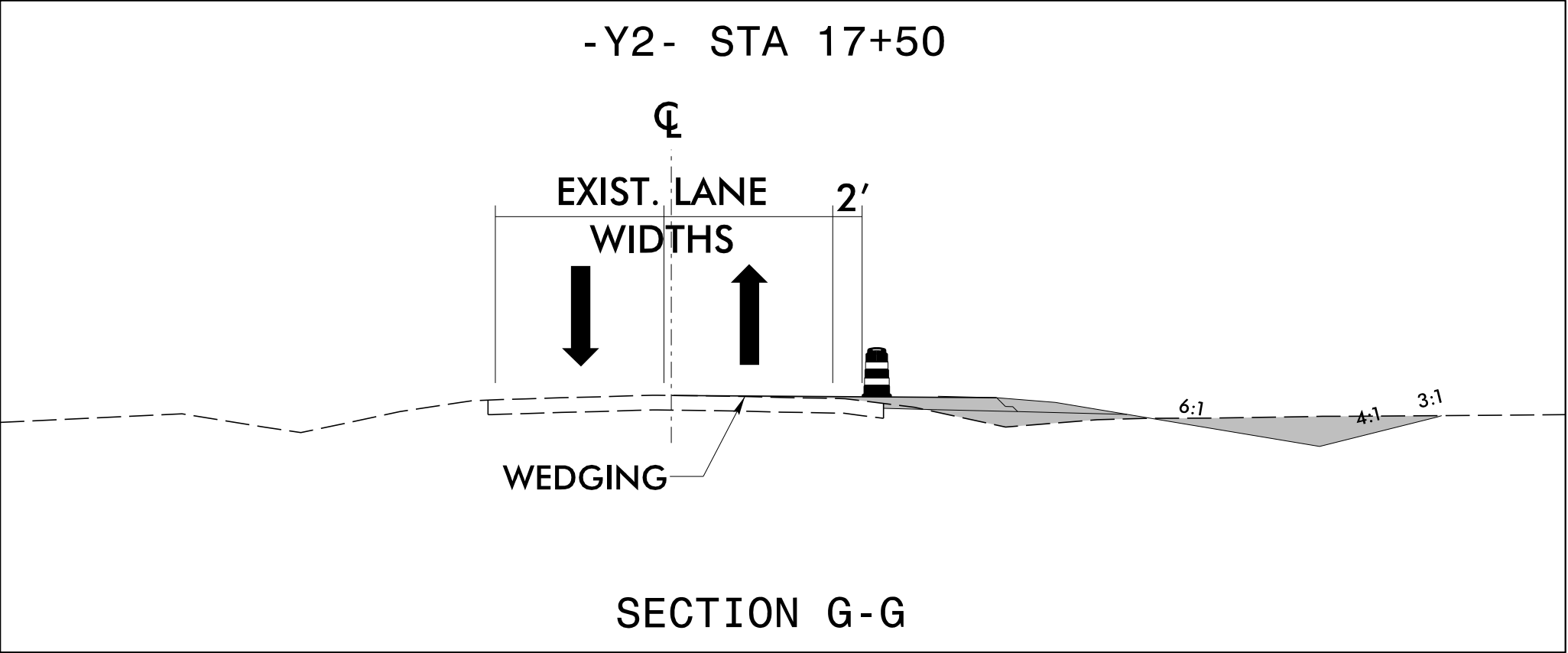
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RALEIGH, NC 27615



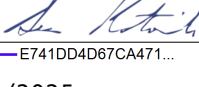
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U - 5798B	TMP - 9



MATCHLINE SHEET TMP-8 -Y2- STA. 22 + 00.00

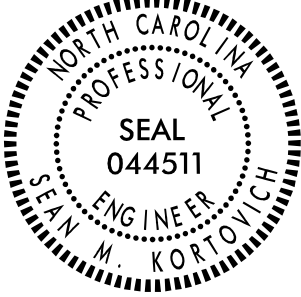


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RALEIGH, NC 27615

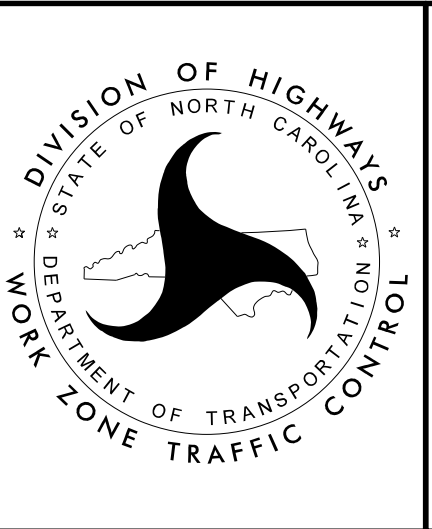
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UNLESS ALL SIGNATURES COMPLETED



PHASE II STEP 1
DETAILS

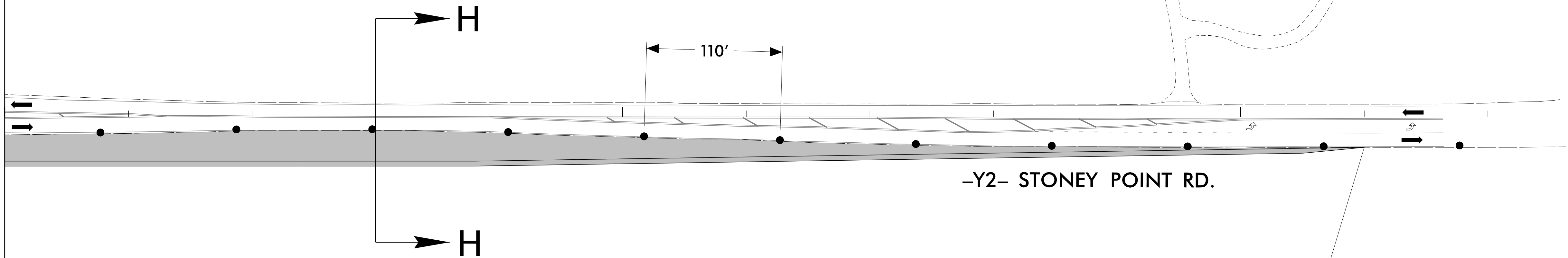
4/9/2025
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MATCHLINE SHEET TMP-8 -Y2- STA. 30 + 00.00

30+00

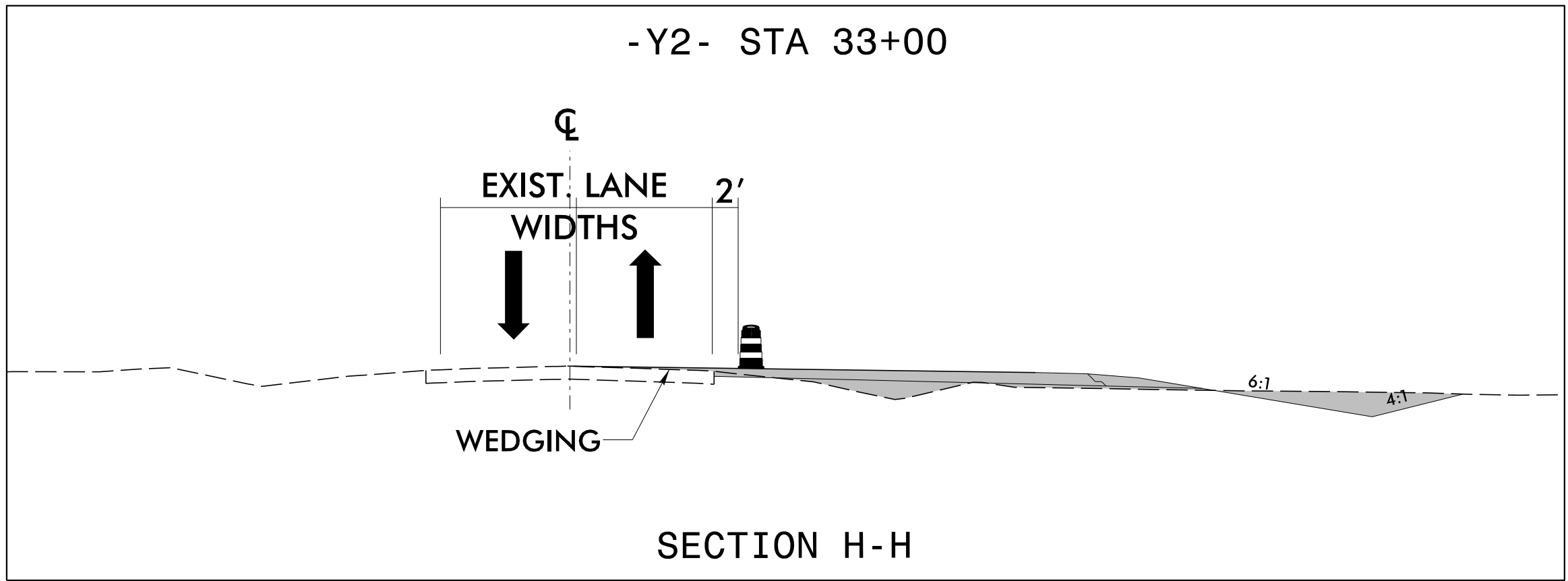
35+00

40+00



-Y2- STONEY POINT RD.

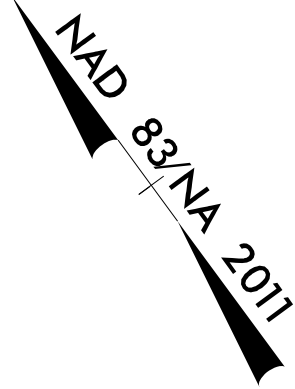
-Y2- STA 41 + 00±



-Y2- STA 33+00

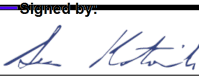
EXIST' LANE
WIDTHS
WEDGING

SECTION H-H

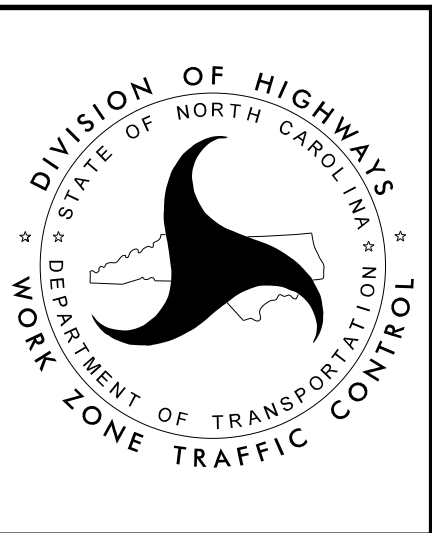


PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-10

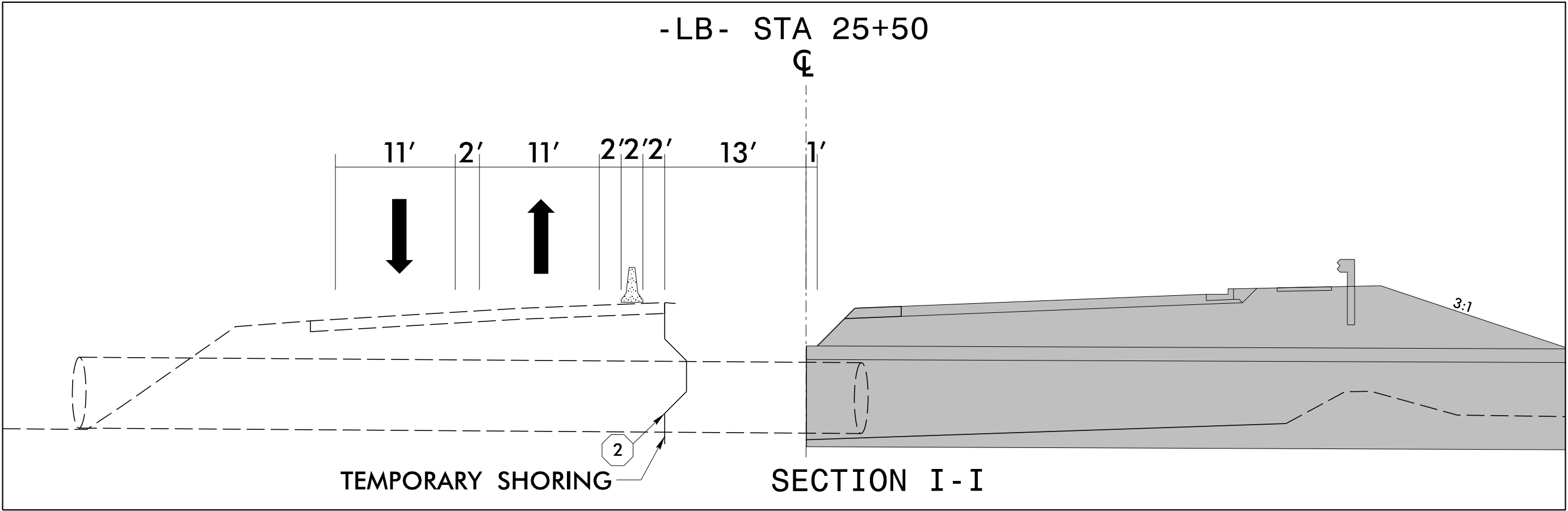
RS&H
NC FIRM LICENSE No: F-0493
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615

APPROVED: 
DATE: 6/11/2025
SEAL
NORTH CAROLINA
PROFESSIONAL
ENGINEER
SEAL
044511
M. KOTOVICH

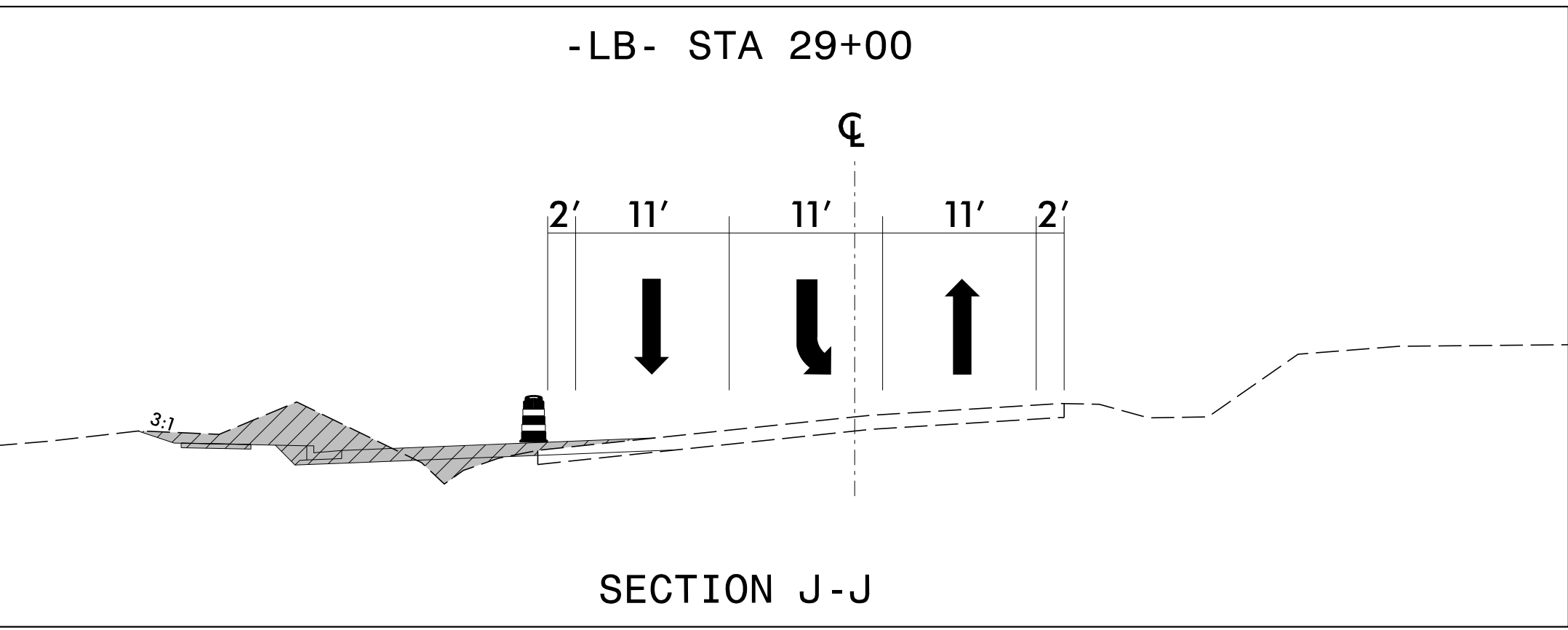
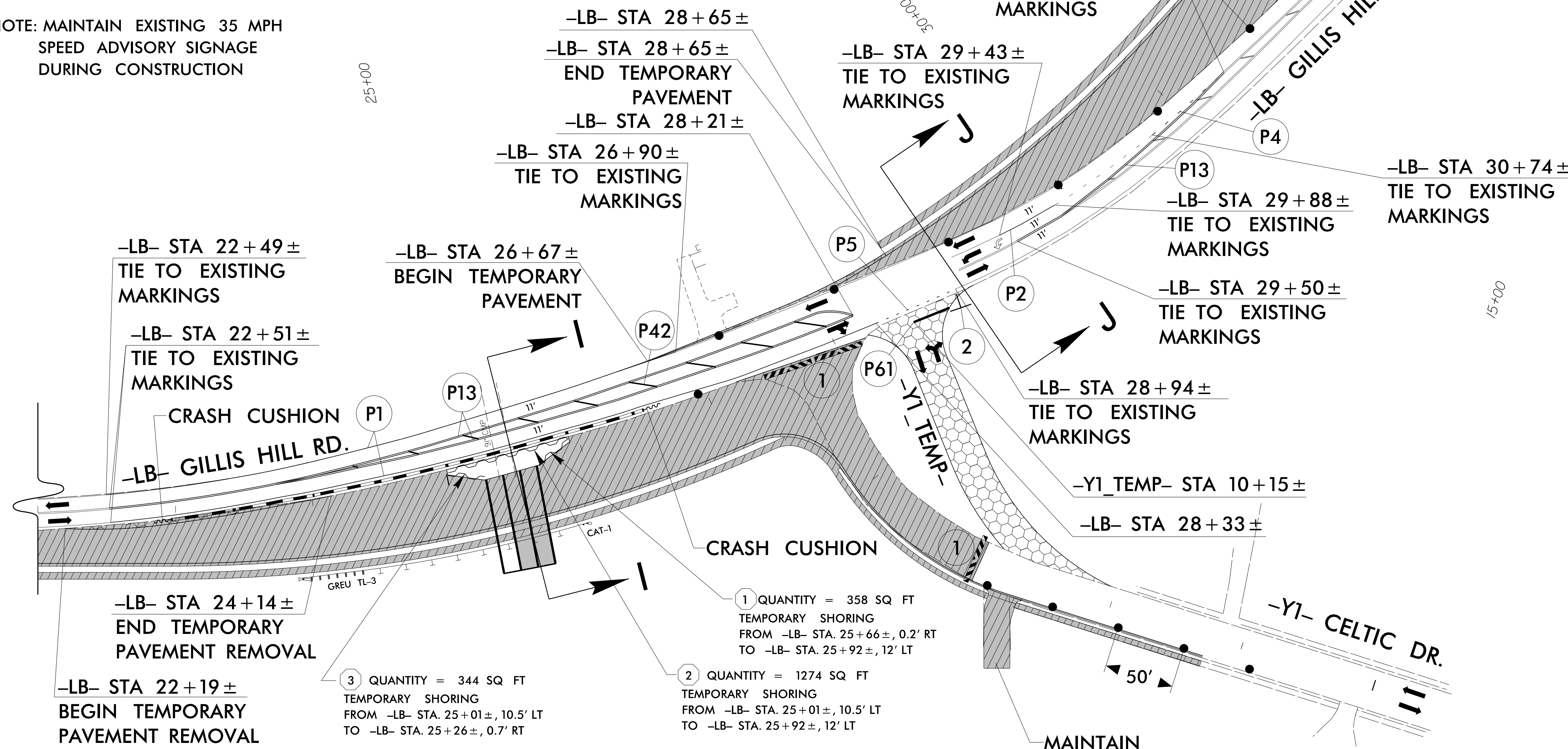
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UNLESS ALL SIGNATURES COMPLETED**



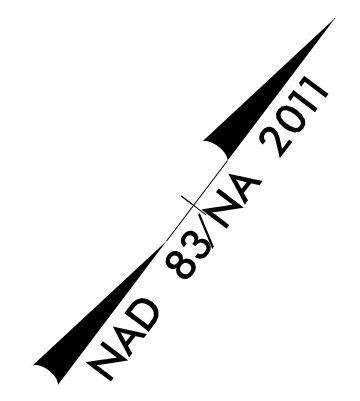
PHASE II STEP 1
DETAILS



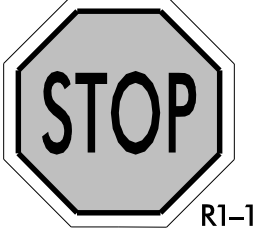
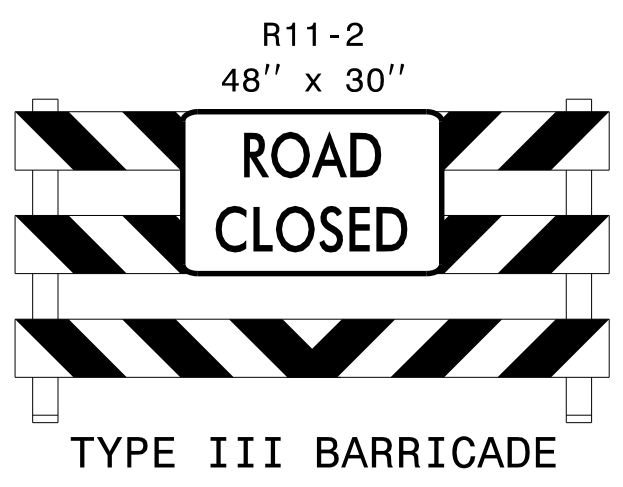
NOTE: MAINTAIN EXISTING 35 MPH
SPEED ADVISORY SIGNAGE
DURING CONSTRUCTION

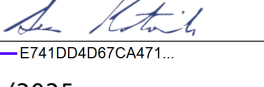


PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-11



NOTE: SEE EROSION CONTROL PLANS
(SHEET EC-6/CONST. 5) FOR CULVERT
CONSTRUCTION SEQUENCE



APPROVED: 
DATE: 6/11/2025
SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 044511
SEAN M. KOTTOVICH

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

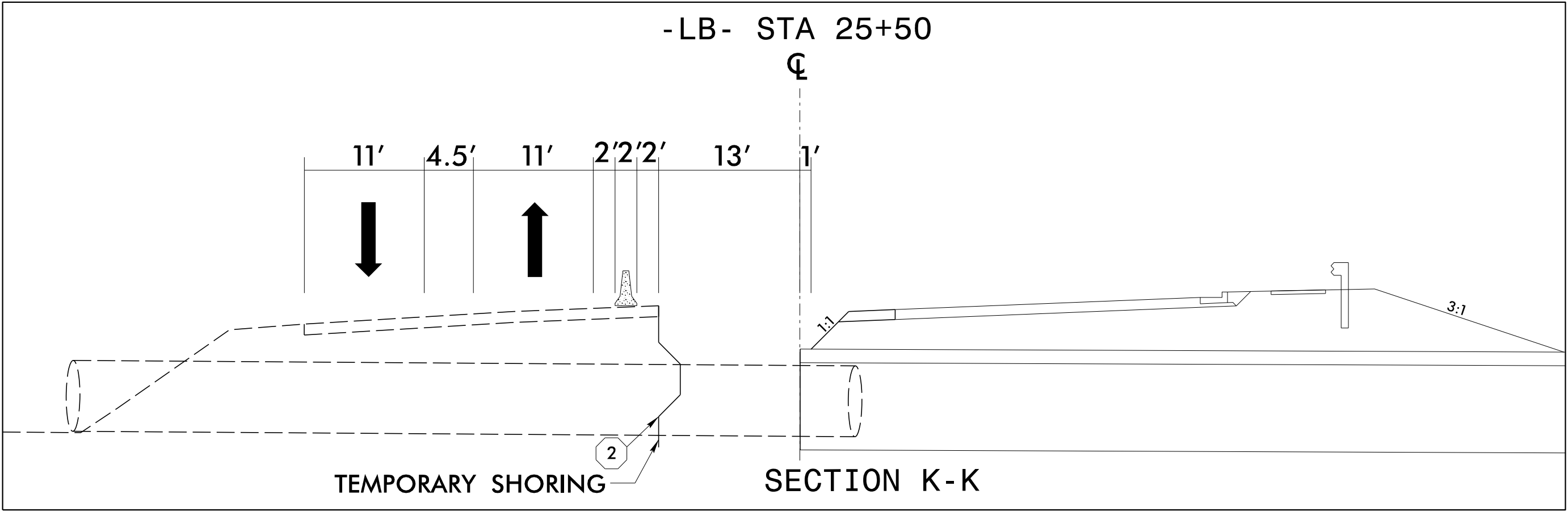


SEE ROADWAY SHEET 2B-1
FOR -Y1_TEMP- ALIGNMENT

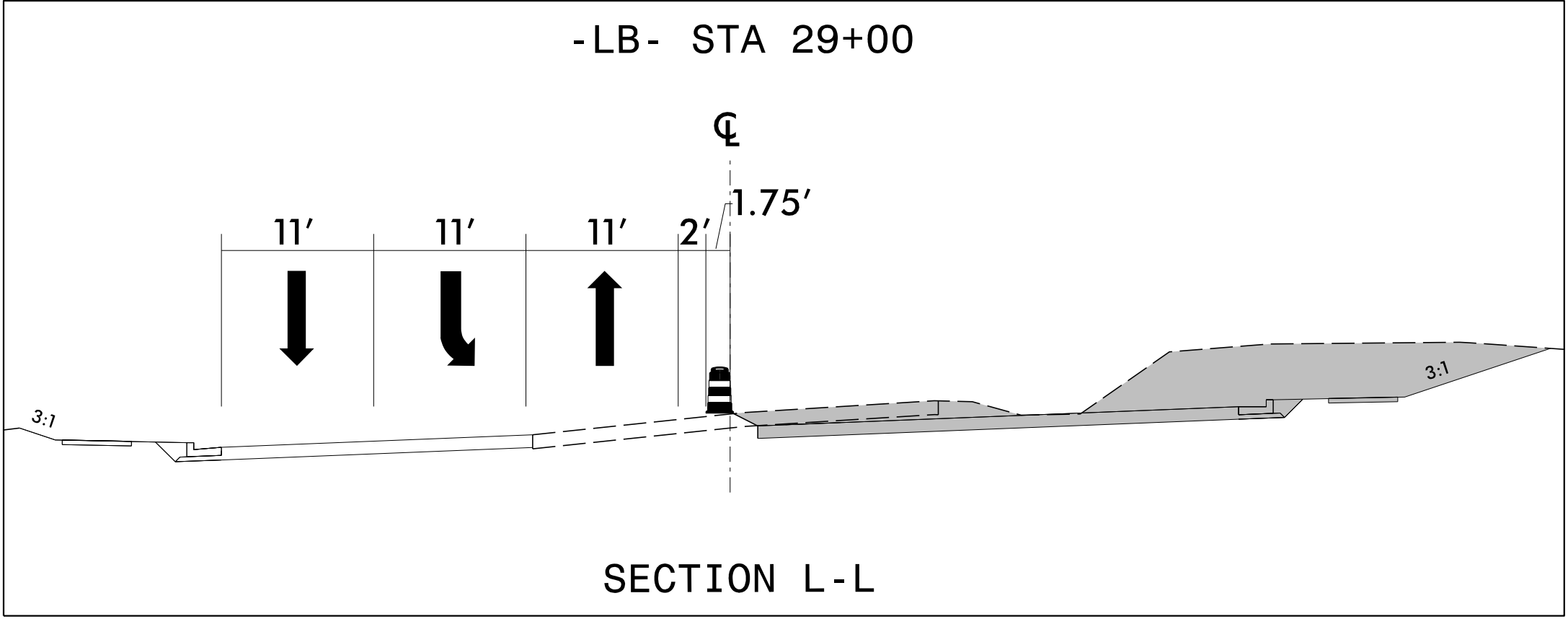
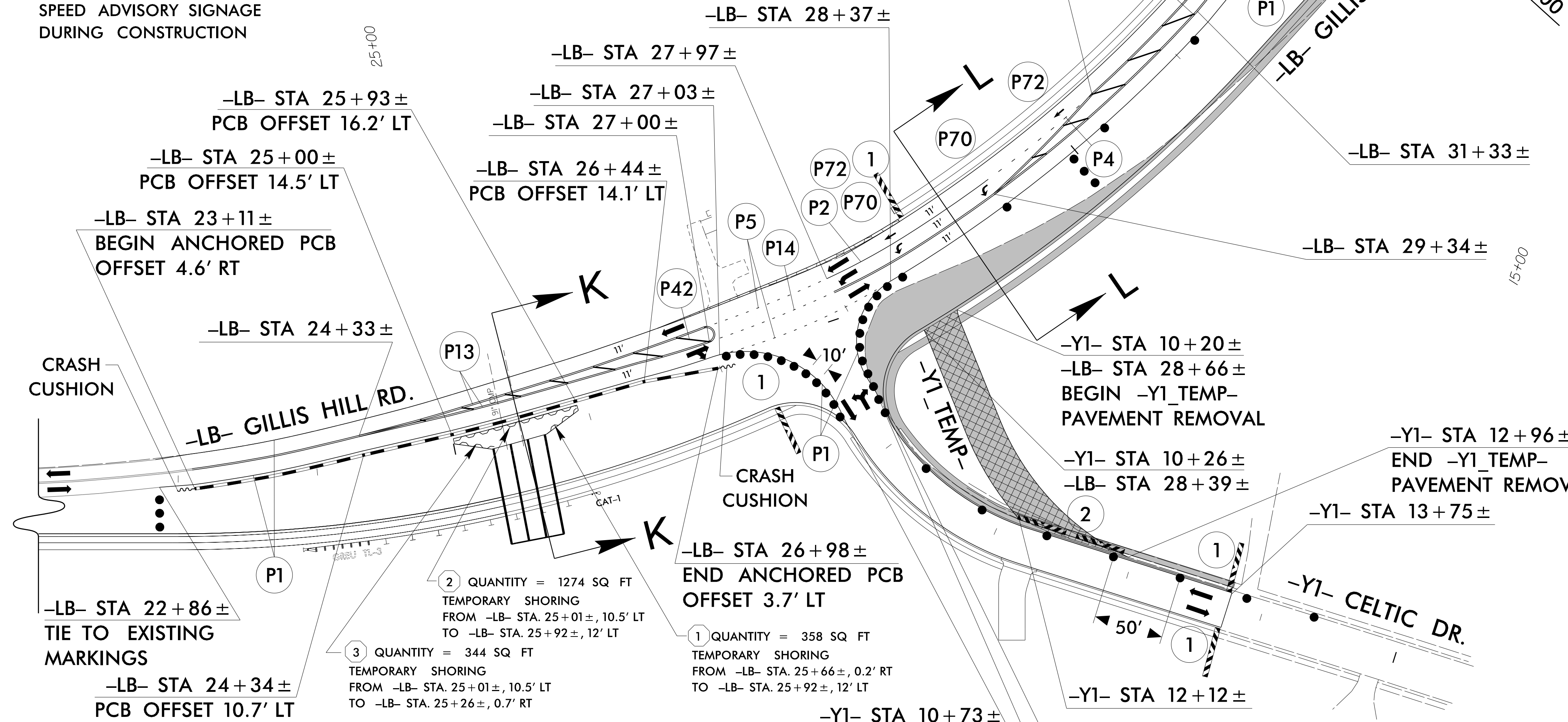


PHASE II STEP 2
DETAILS

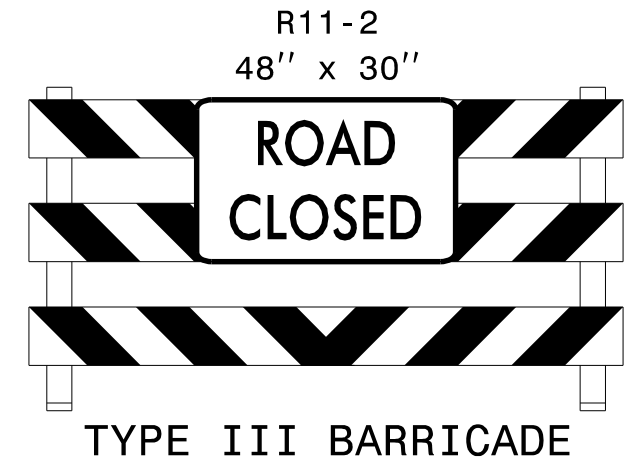
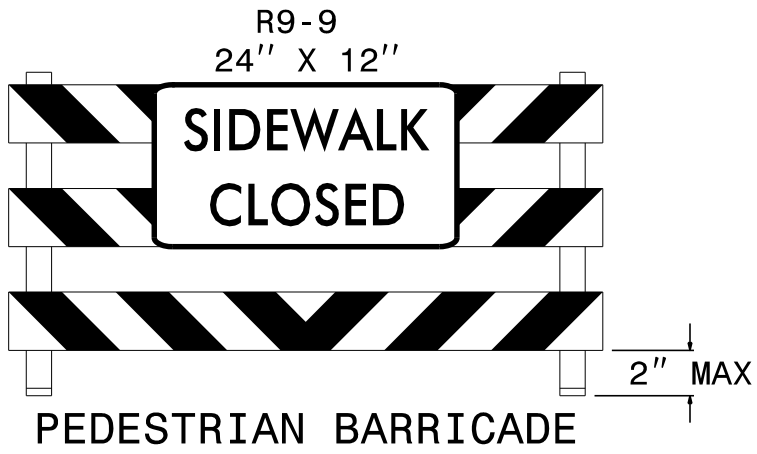
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User:AvgerinN



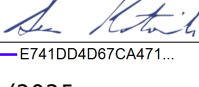
NOTE: MAINTAIN EXISTING 35 MPH
SPEED ADVISORY SIGNAGE
DURING CONSTRUCTION



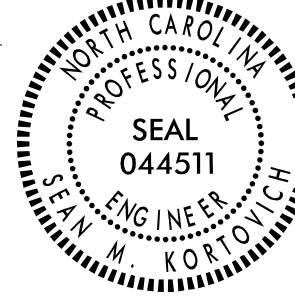
PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-12



PHASE III STEP 1
DETAILS

APPROVED: 
DATE: 6/11/2025

SEAL



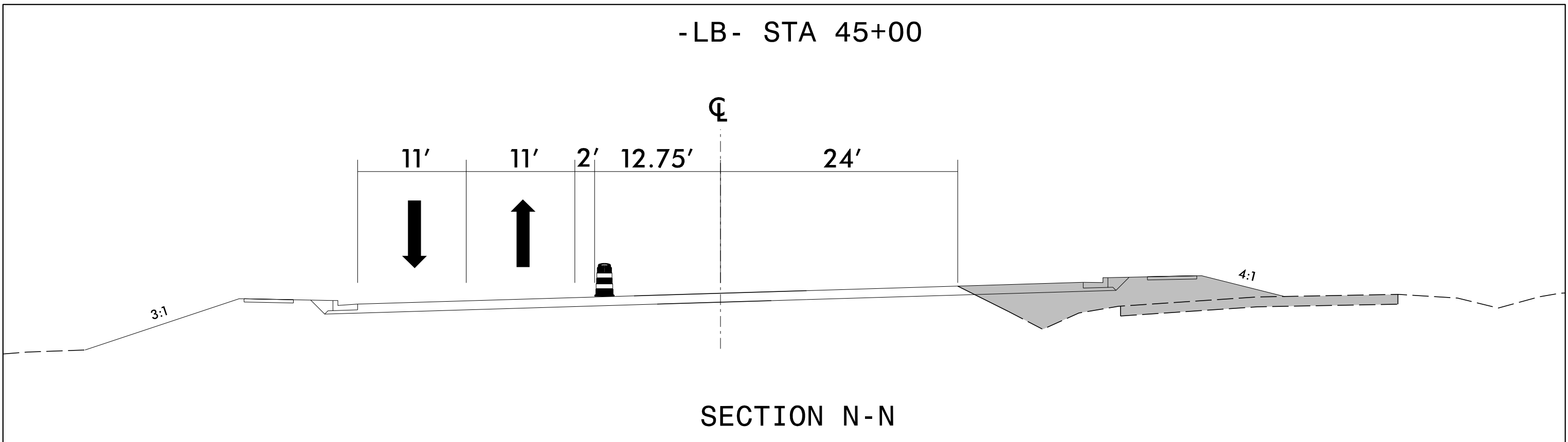
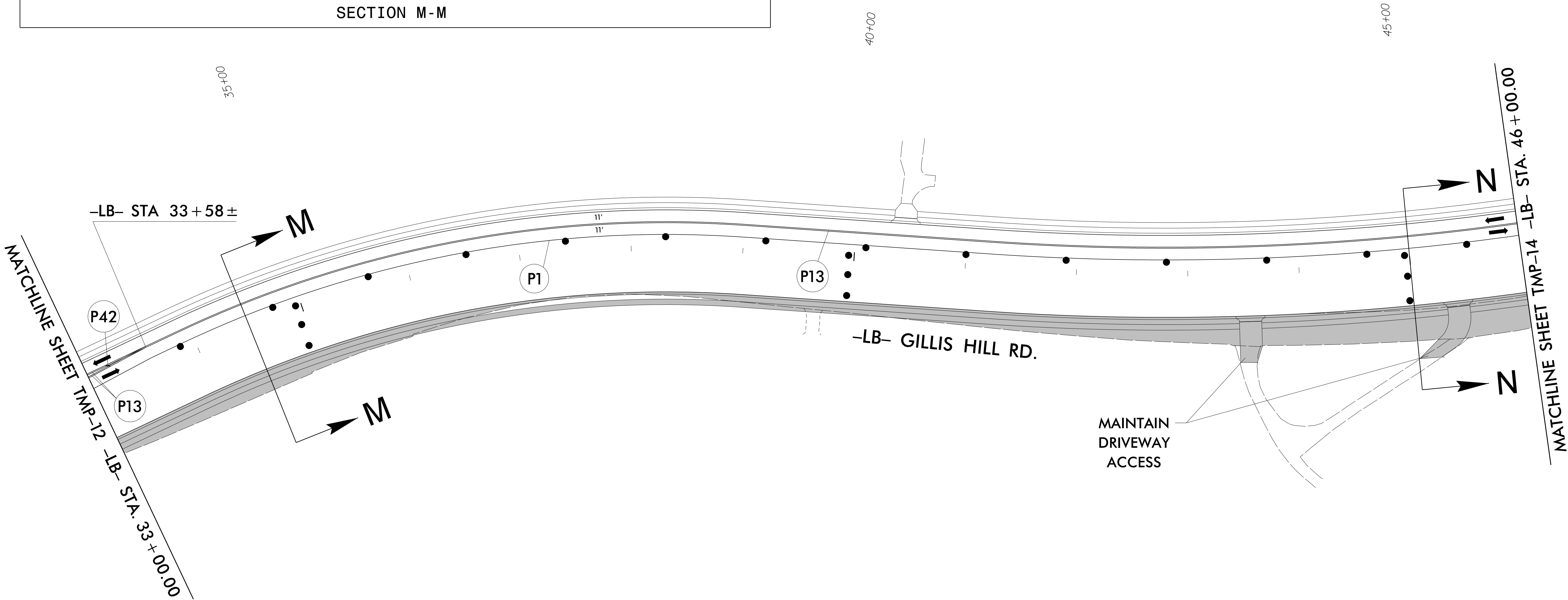
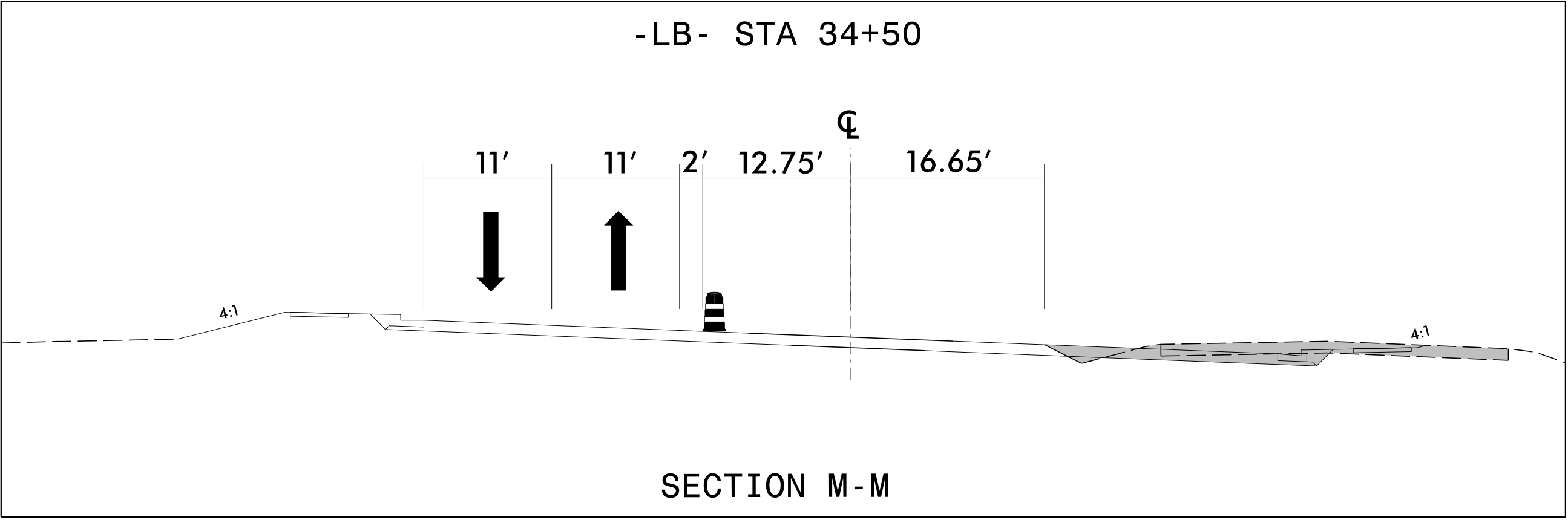
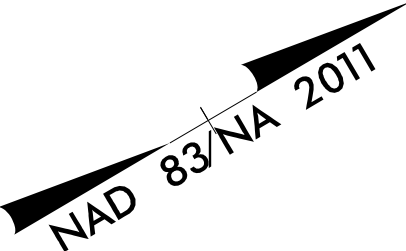
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

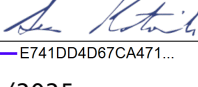


RS&H
NC FIRM LICENSE No: F-0493
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615

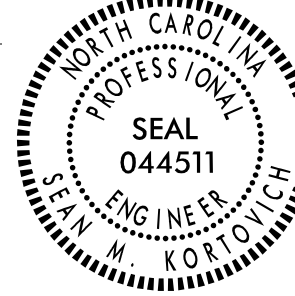


PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-13

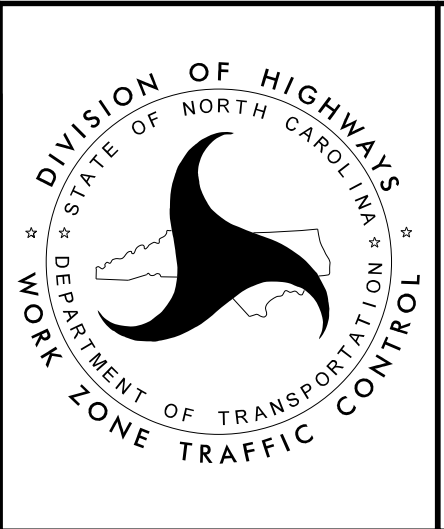


APPROVED: 
DATE: 6/11/2025

SEAL



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

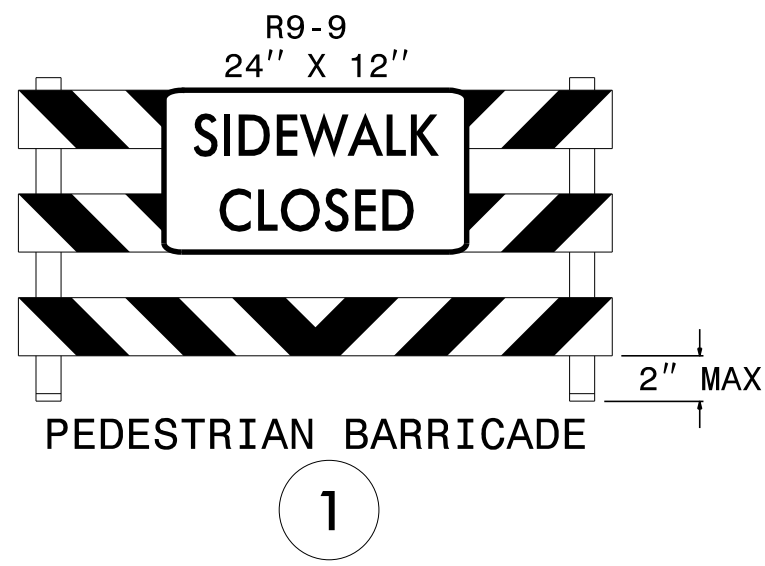
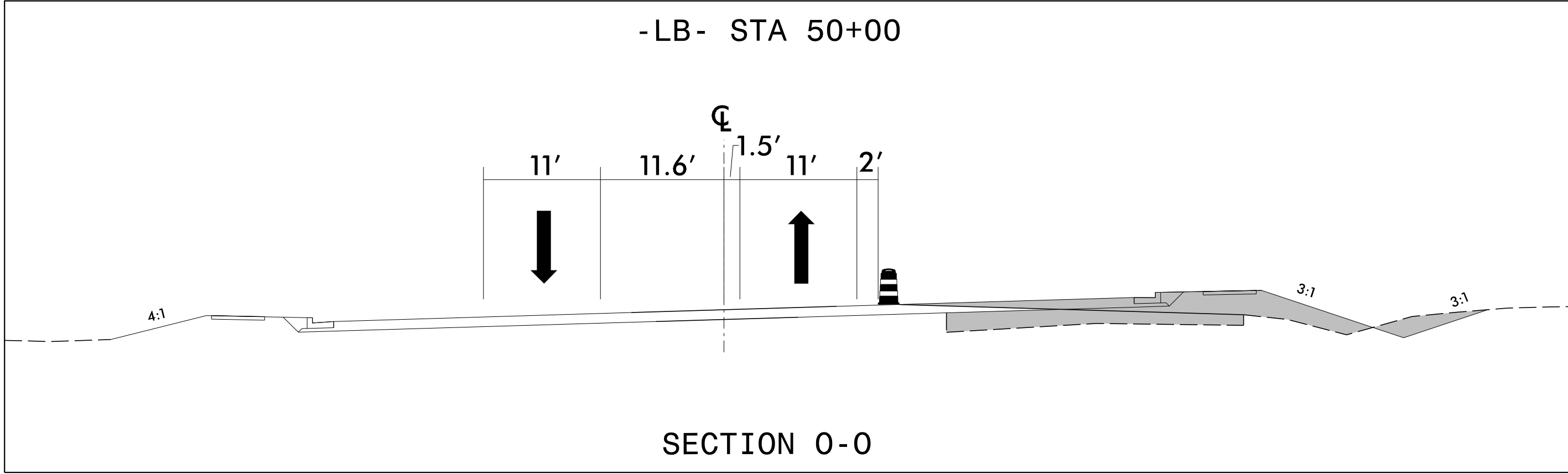
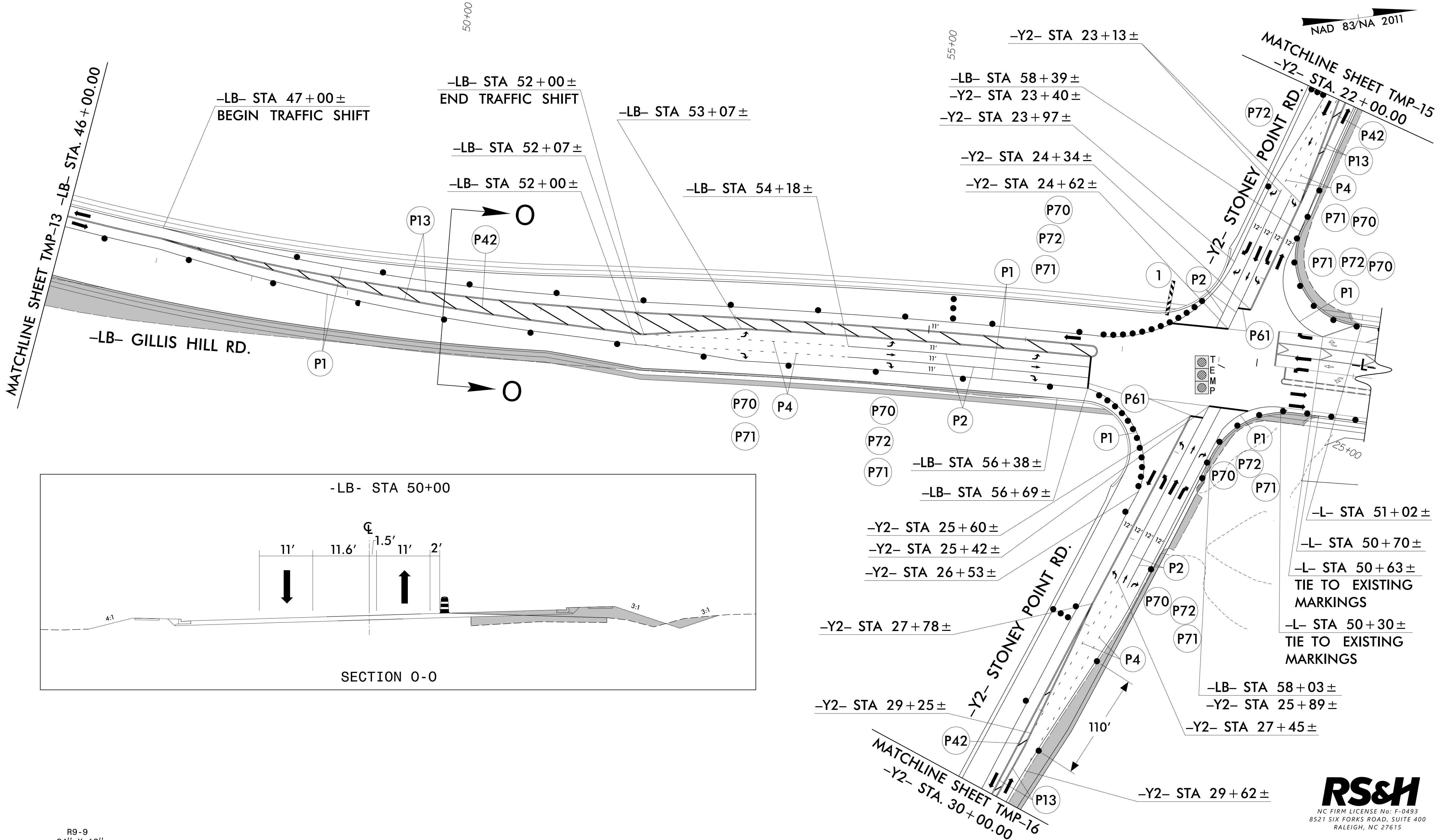


PHASE III STEP 1
DETAILS



PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-14

NAD 83/NA 2011

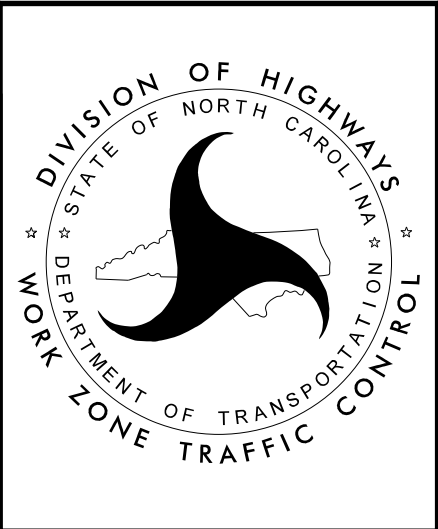


APPROVED:

DATE: 6/11/2025

SEAL

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



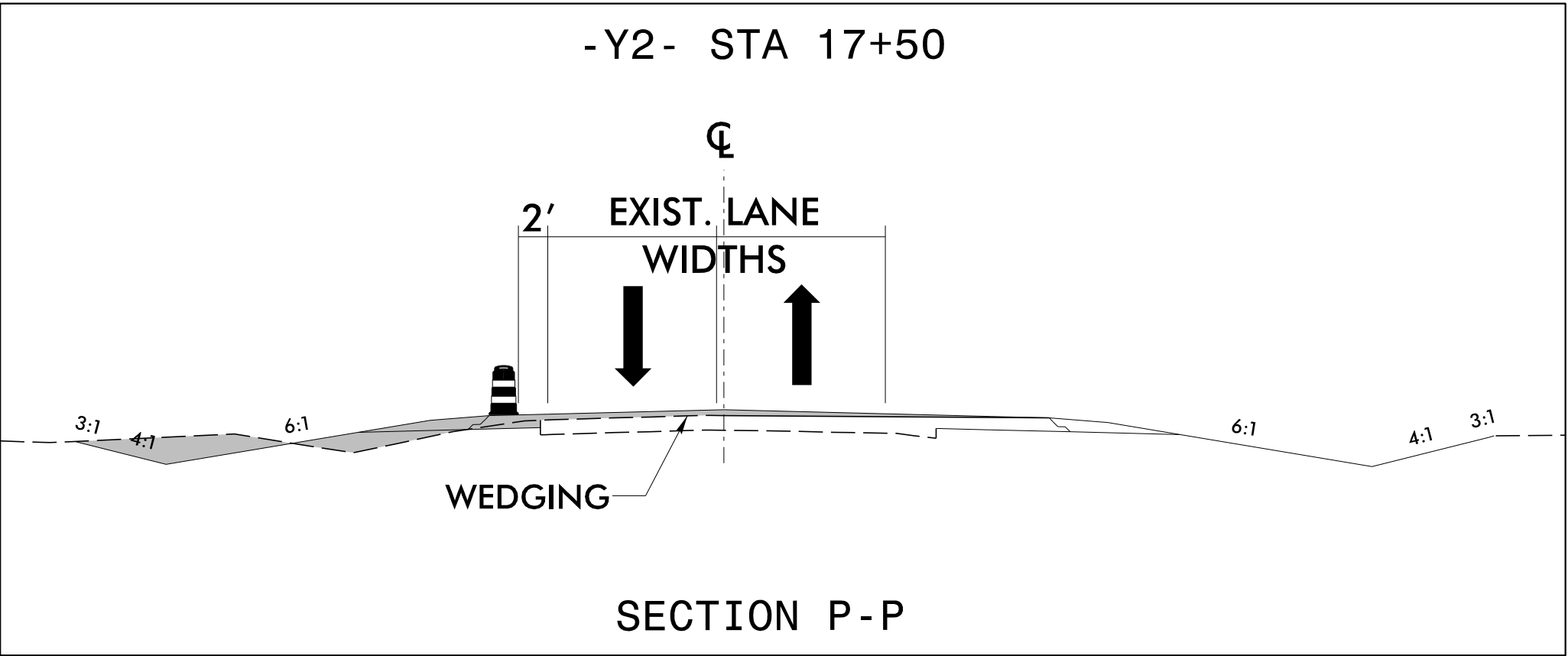
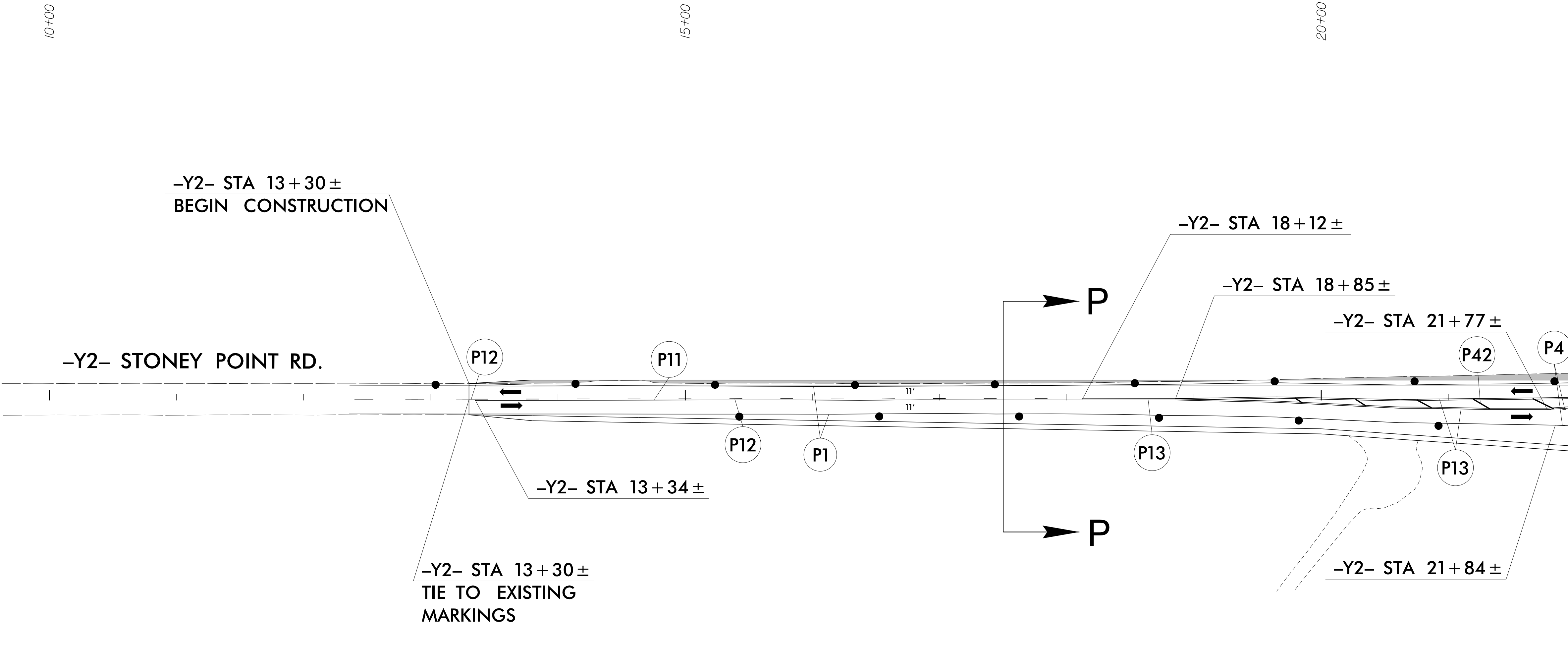
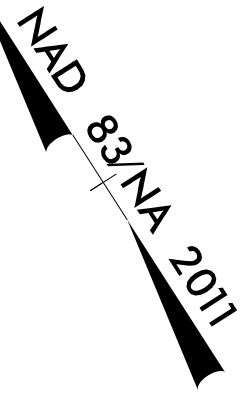
PHASE III STEP 1
DETAILS

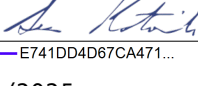
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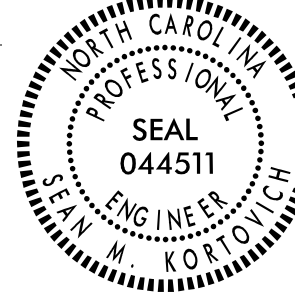
RS&H
NC FIRM LICENSE No: F-0493
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615



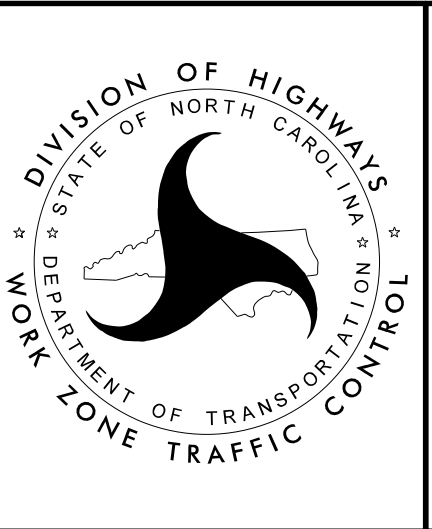
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U - 5798B	TMP - 15



APPROVED: 
DATE: 6/11/2025

SEAL


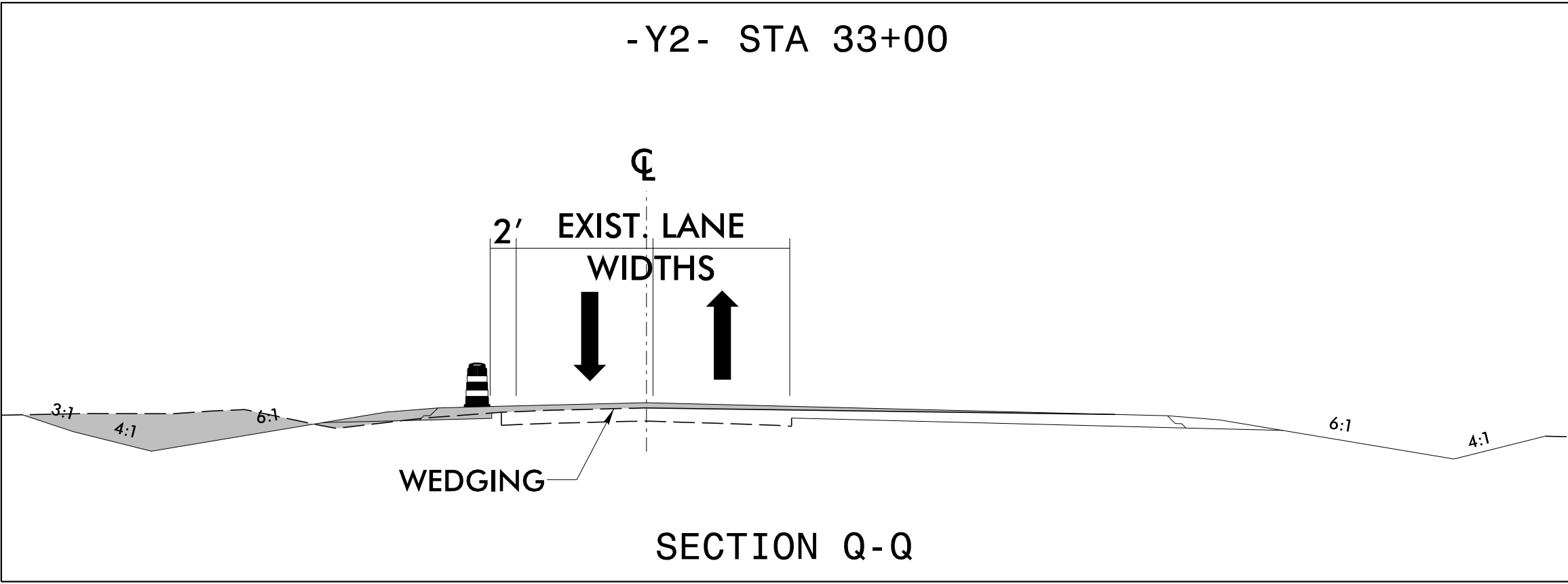
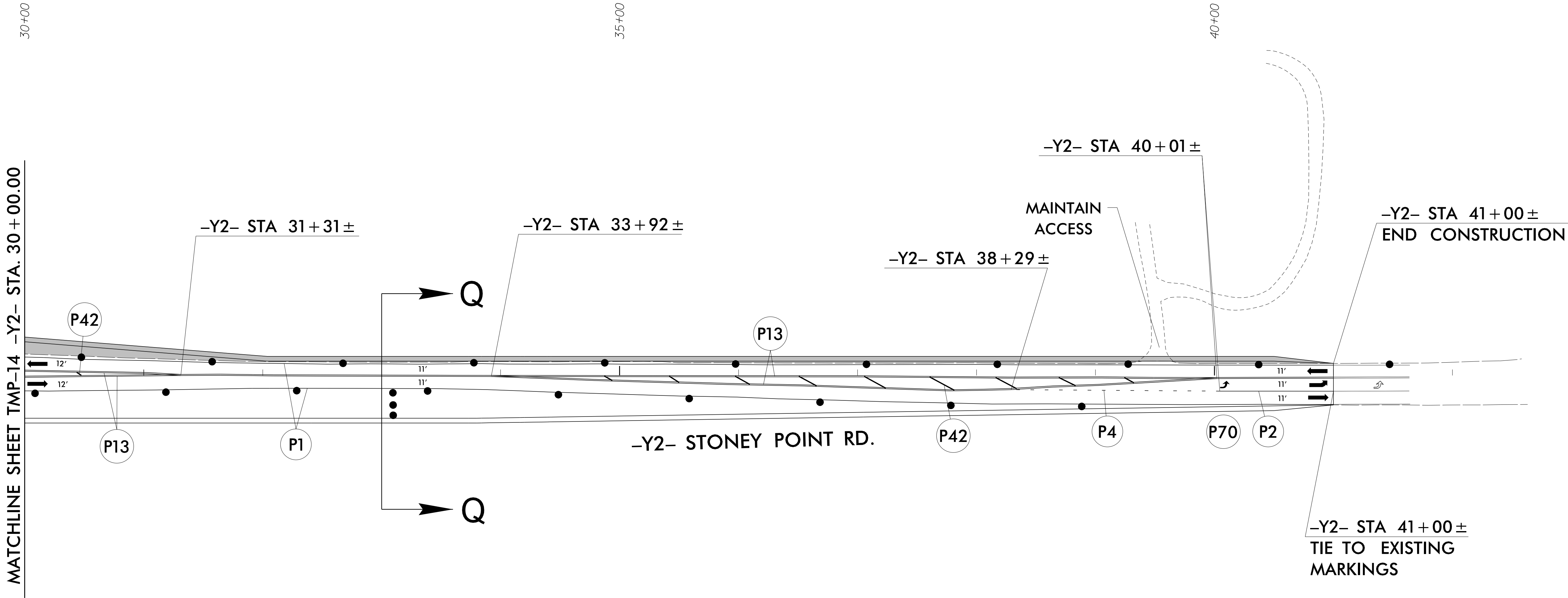
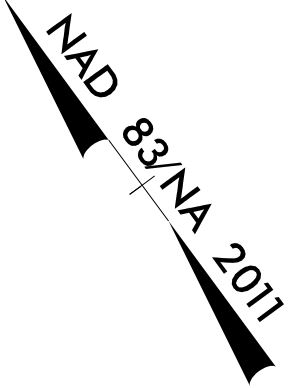
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED




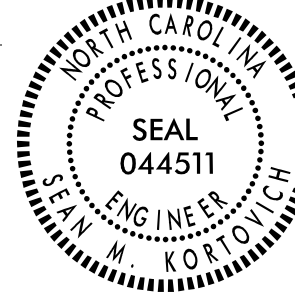
PHASE III STEP 1
DETAIL



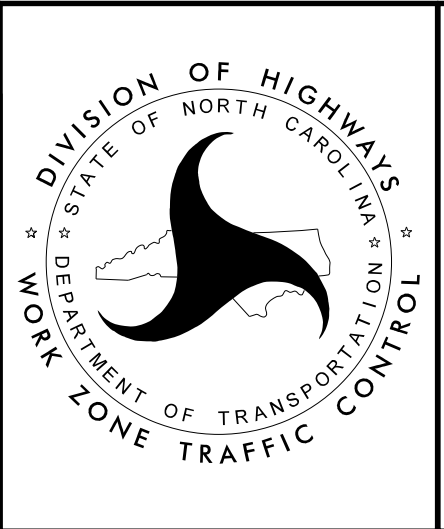
PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-16



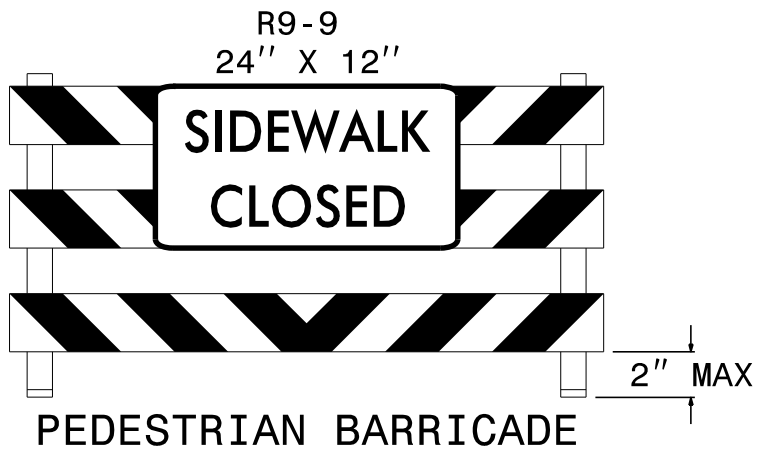
APPROVED: 
DATE: 6/11/2025

SEAL


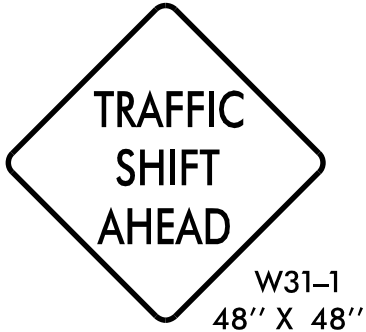
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



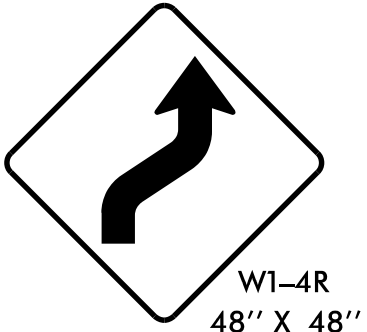
PHASE III STEP 1
DETAILS



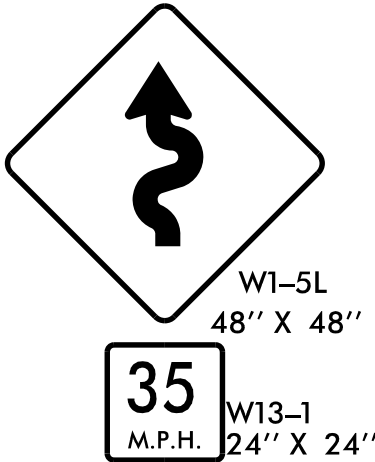
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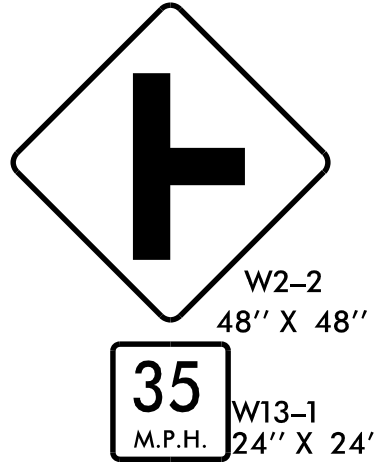
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3



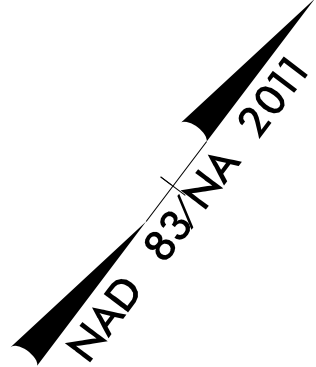
4



5



PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-17



10+00

15+00

20+00

-LB- STA 12+50±
BEGIN CONSTRUCTION
BEGIN TRAFFIC SHIFT
TIE TO EXISTING
PAVEMENT MARKINGS

MAINTAIN
DRIVEWAY
ACCESS

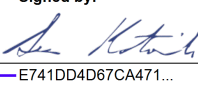
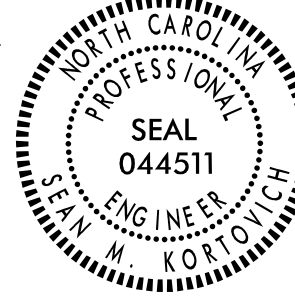
-LB- GILLIS HILL RD.

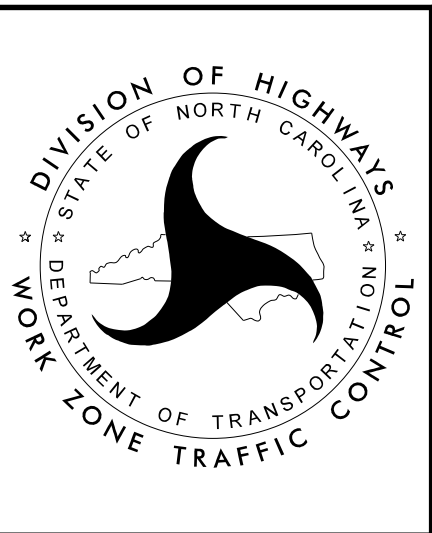
-LB- STA 18+41±
END TRAFFIC SHIFT

MATCHLINE SHEET TMP-18 -LB- STA. 22+00.00

*NOTE: MAINTAIN EXISTING 35 MPH
SPEED ADVISORY SIGNAGE
DURING CONSTRUCTION

RS&H
NC FIRM LICENSE No: F-0493
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615

APPROVED: 
DATE: 6/11/2025
SEAL

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

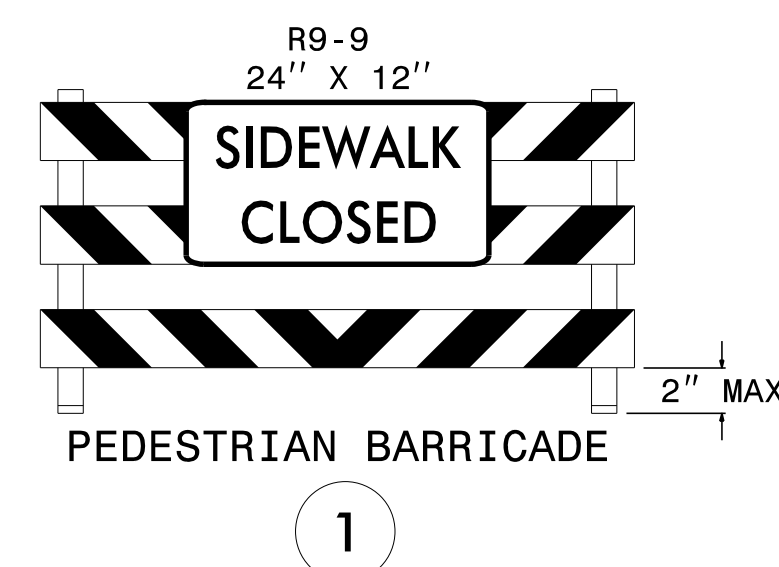



PHASE III STEP 2
DETAIL



PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-18

NOTE: MILLING MUST BE PREFORMED
IN A CONTINUOUS OPERATION



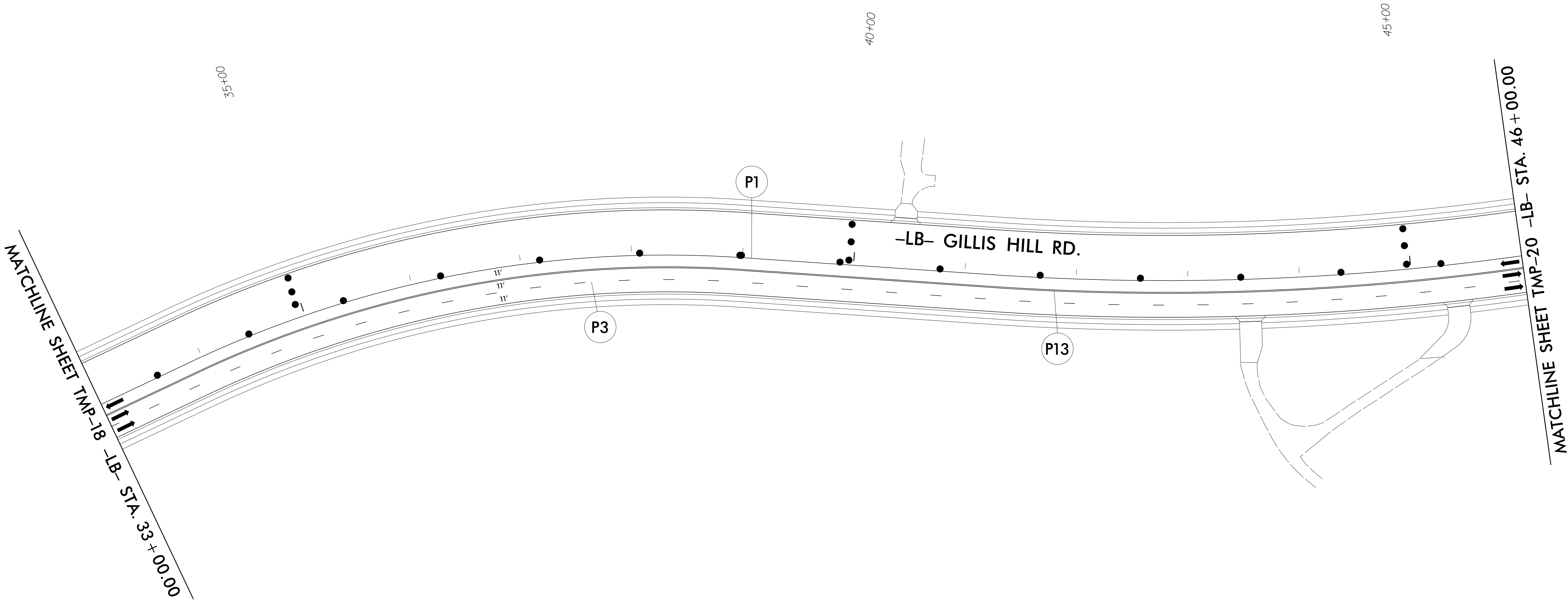
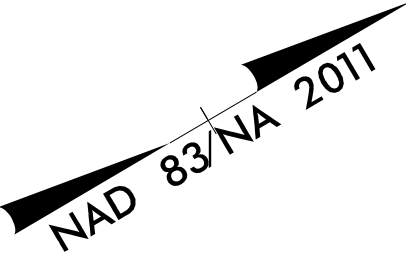
Signature: *John K. H. L.*
 APPROVED: _____
 E#H10D67D471...
 DATE: 6/11/2025 _____
 SEAL

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



PHASE III STEP 2
DETAIL

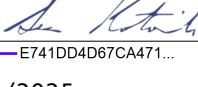


PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-19



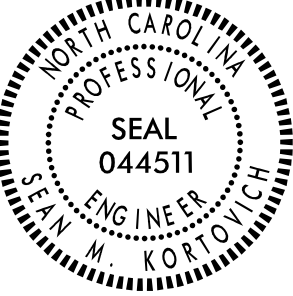
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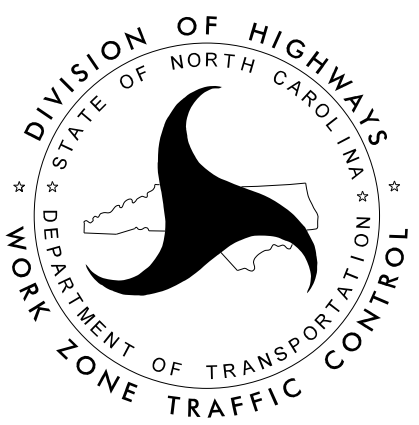
APPROVED: 
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DATE: 6/11/2025

SEAL

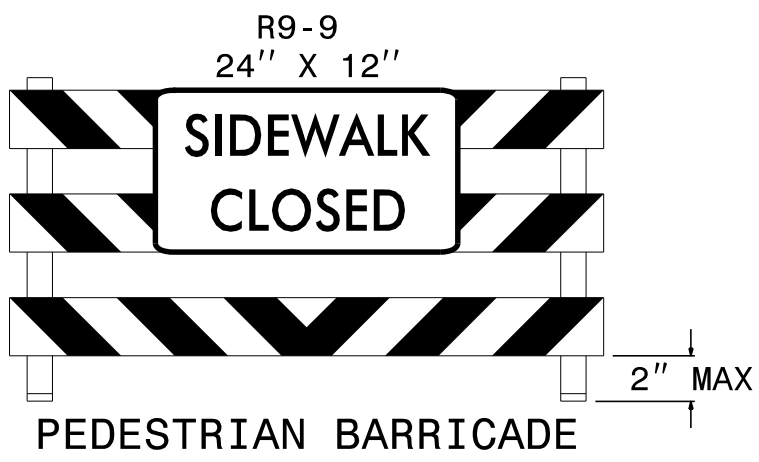


DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

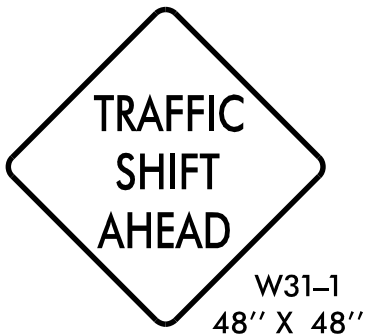


PHASE III STEP 2
DETAIL

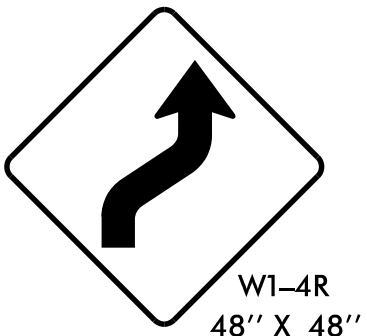




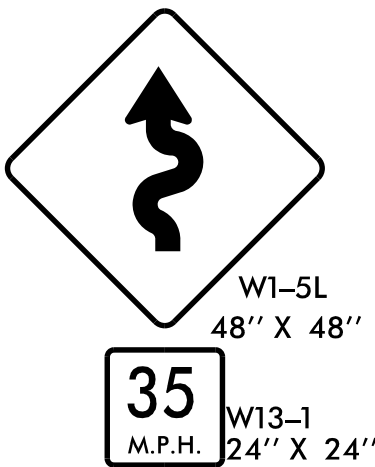
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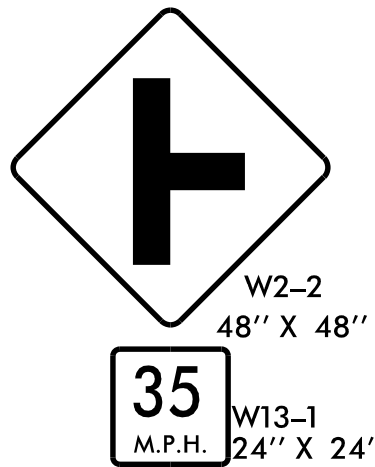
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3



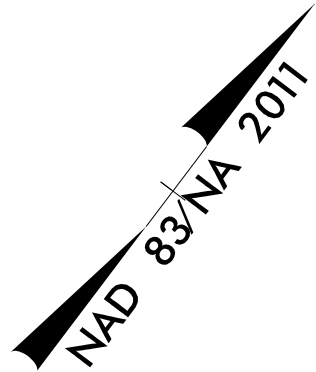
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5



PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-21

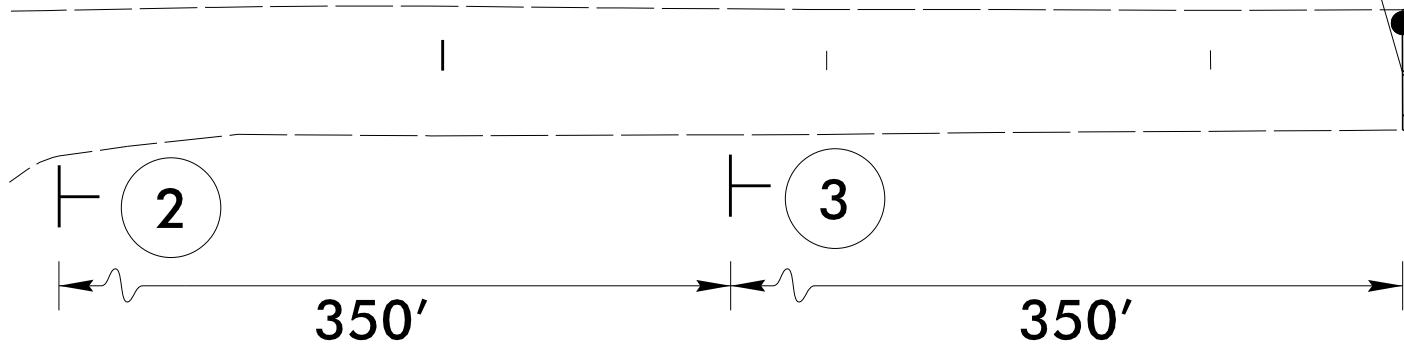


10+00

15+00

20+00

-LB- STA 12+50±
BEGIN CONSTRUCTION
BEGIN TRAFFIC SHIFT
TIE TO EXISTING
PAVEMENT MARKINGS



P1

1

CAT-1

AT-1

-LB- GILLIS HILL RD.

11'

11'

P4

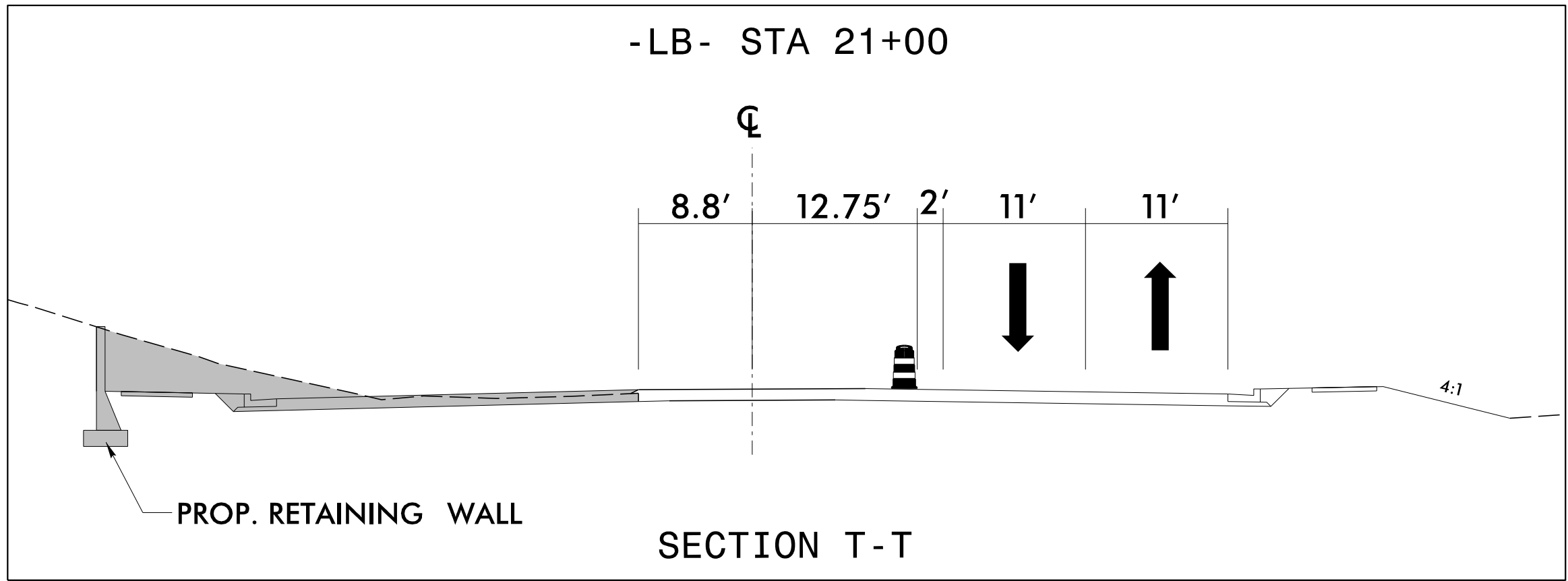
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P13

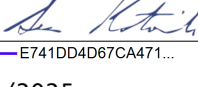
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-LB- STA 18+41±
END TRAFFIC SHIFT


10+00 15+00 20+00
MATCHLINE SHEET TMP-22 -LB- STA. 22+00.00



*NOTE: MAINTAIN EXISTING 35 MPH
SPEED ADVISORY SIGNAGE
DURING CONSTRUCTION

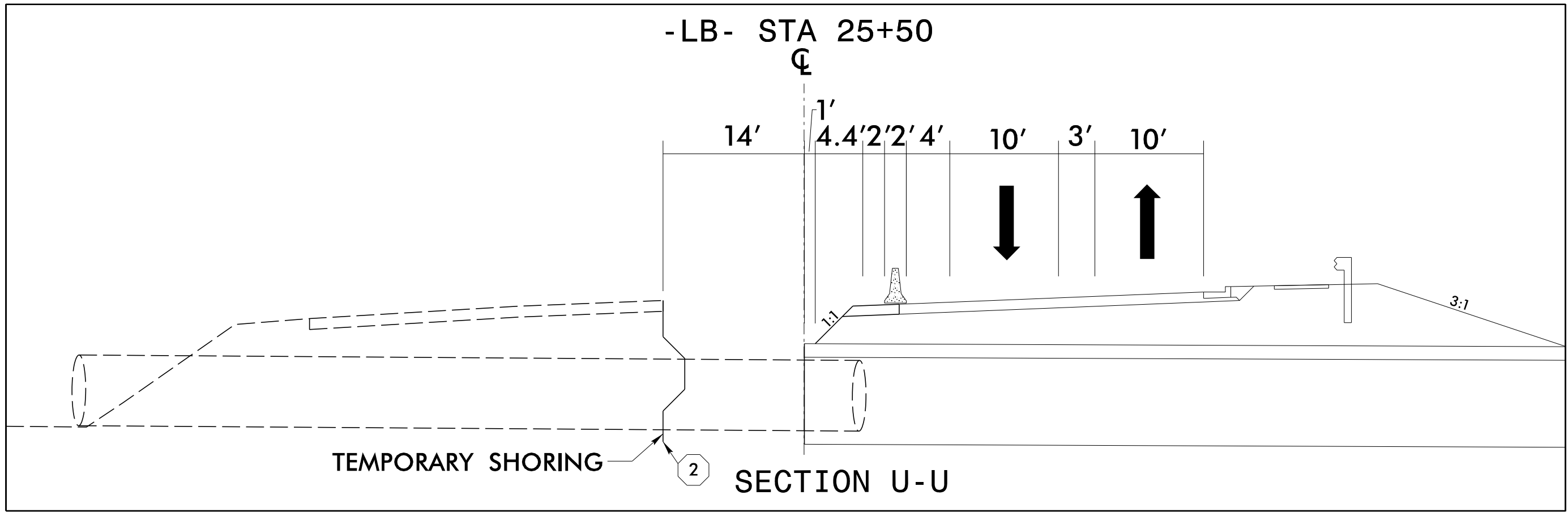
APPROVED: 
DATE: 6/11/2025
SEAL
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



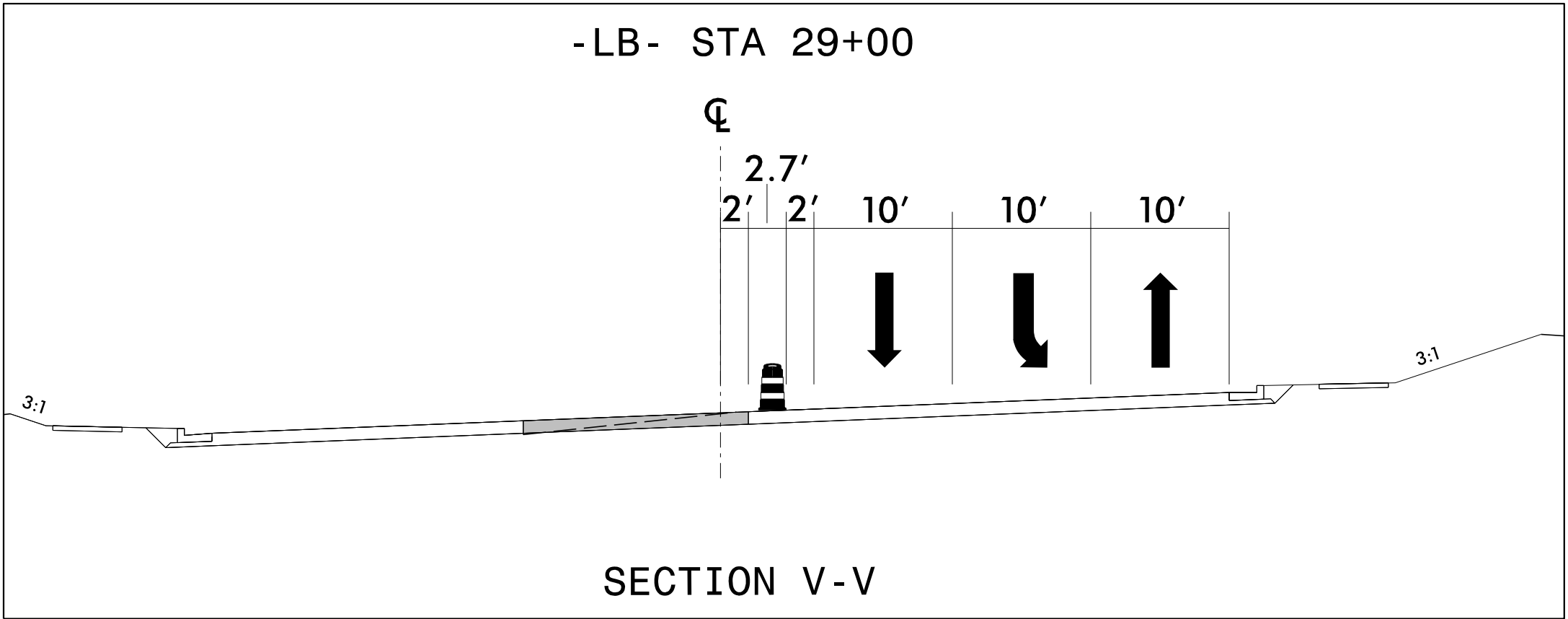
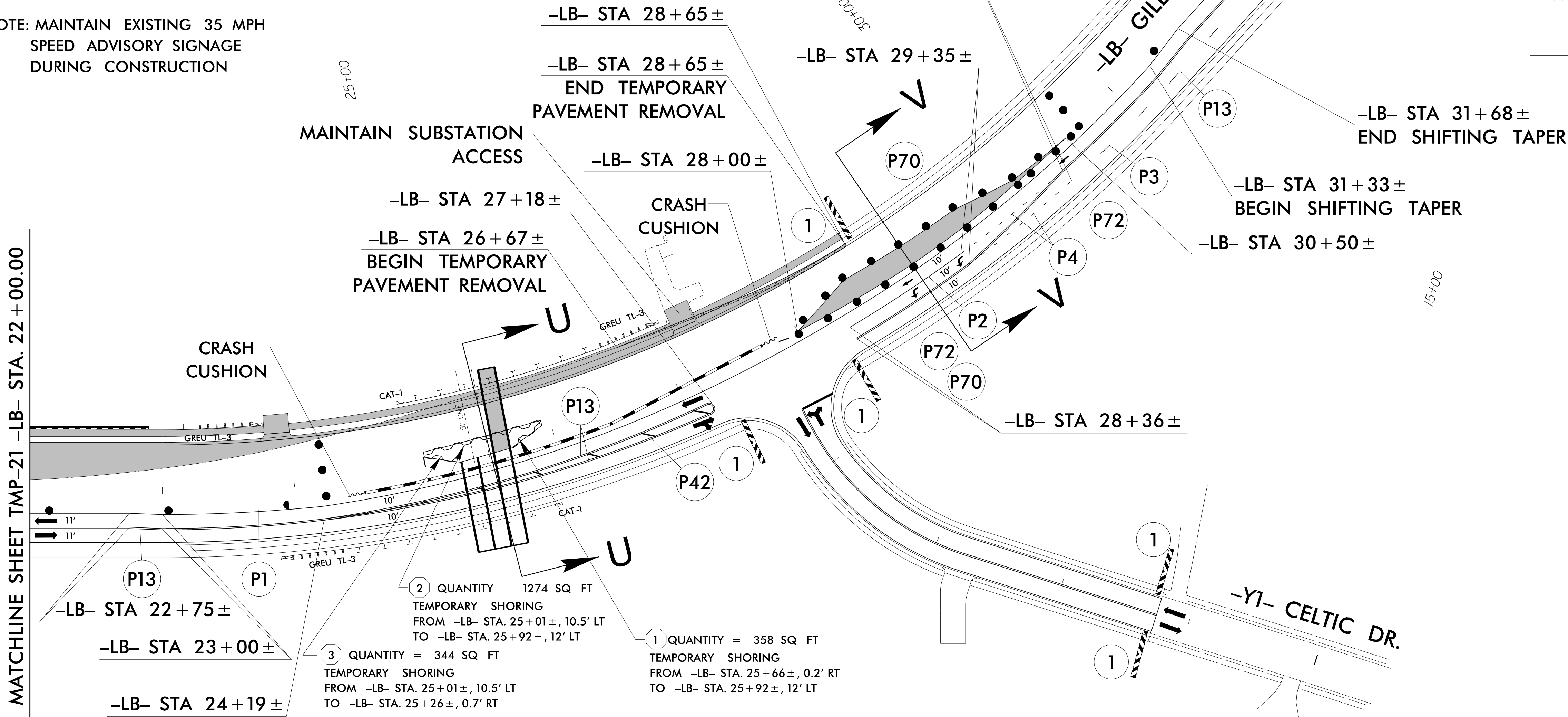
	PHASE IV STEP 1 DETAIL
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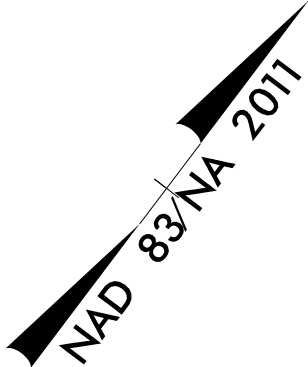
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User:AvgerinN



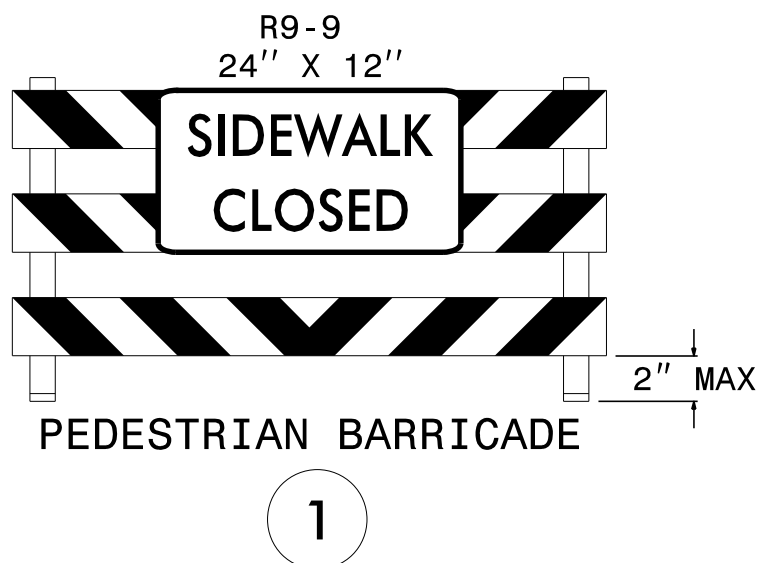
NOTE: MAINTAIN EXISTING 35 MPH
SPEED ADVISORY SIGNAGE
DURING CONSTRUCTION

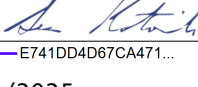
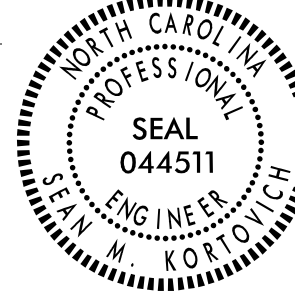


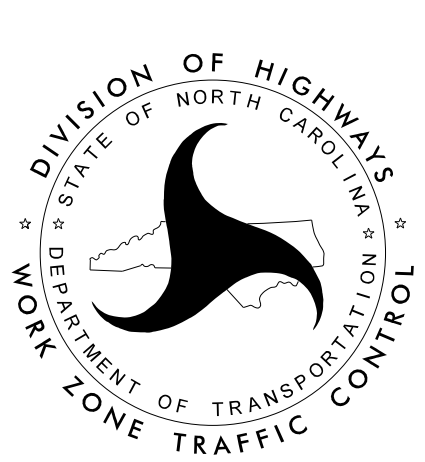
PROJ. REFERENCE NO.	SHEET NO.
U-5798B	TMP-22



NOTE: SEE EROSION CONTROL PLANS
(SHEET EC-6/CONST. 5) FOR CULVERT
CONSTRUCTION SEQUENCE

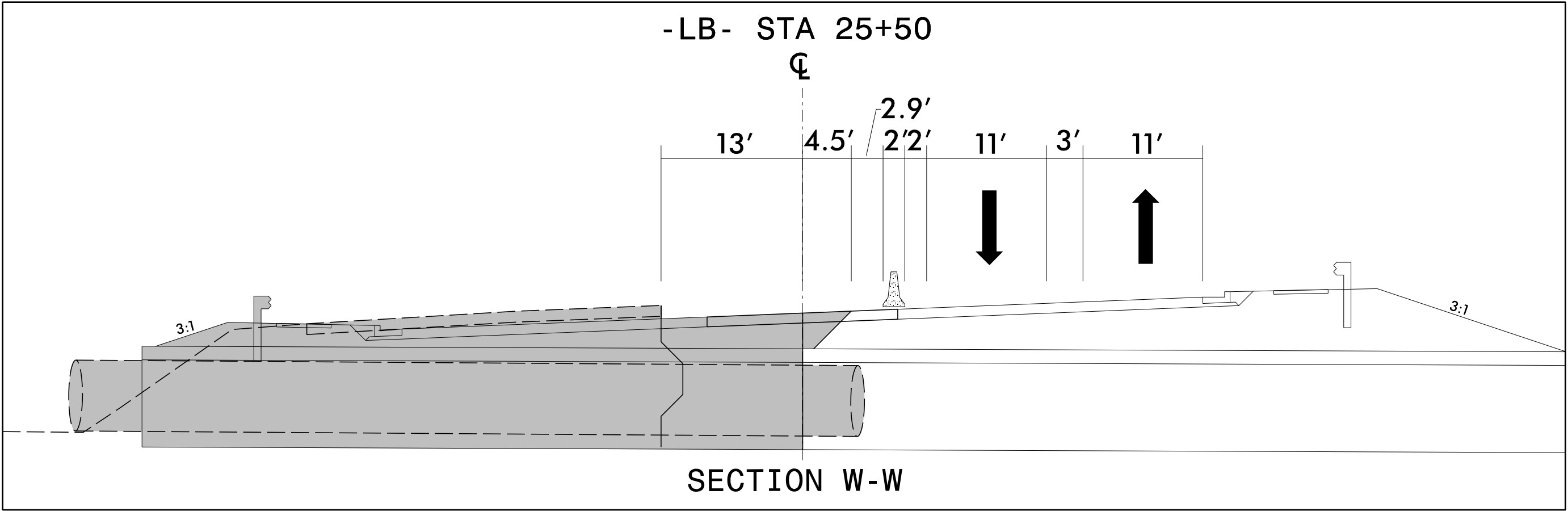


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DATE: 6/11/2025
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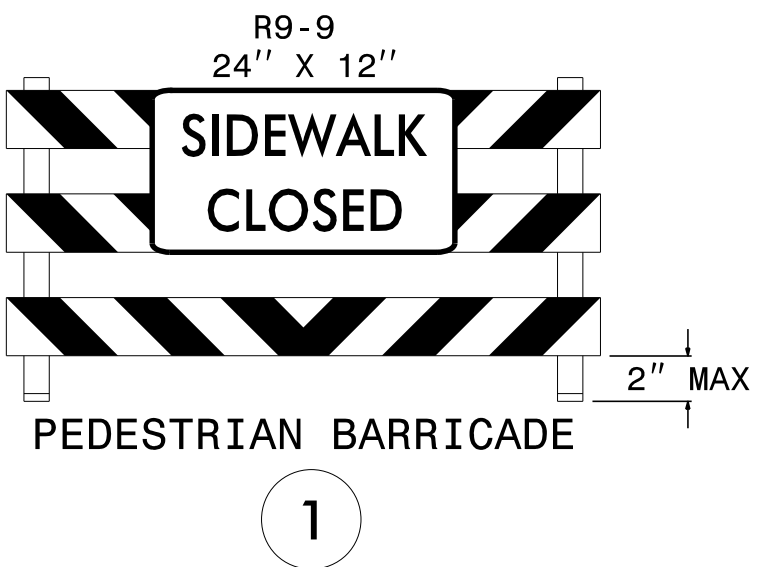
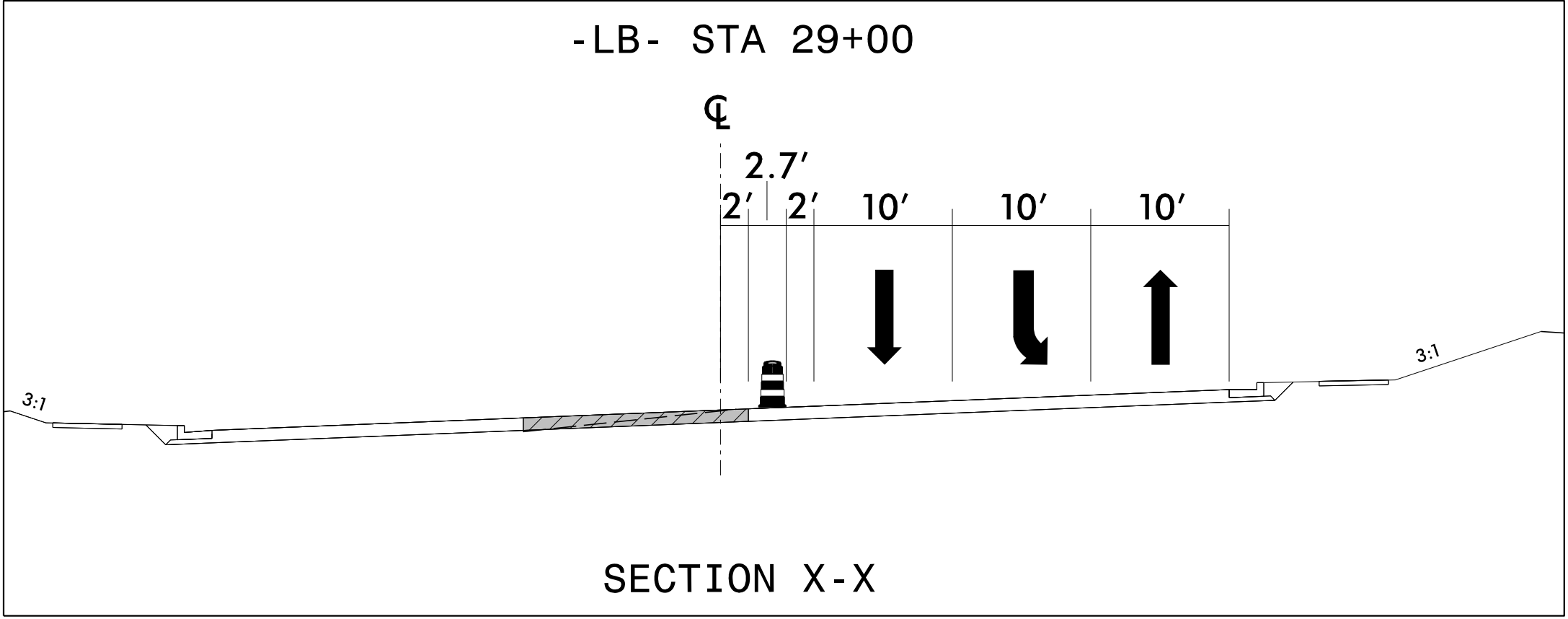
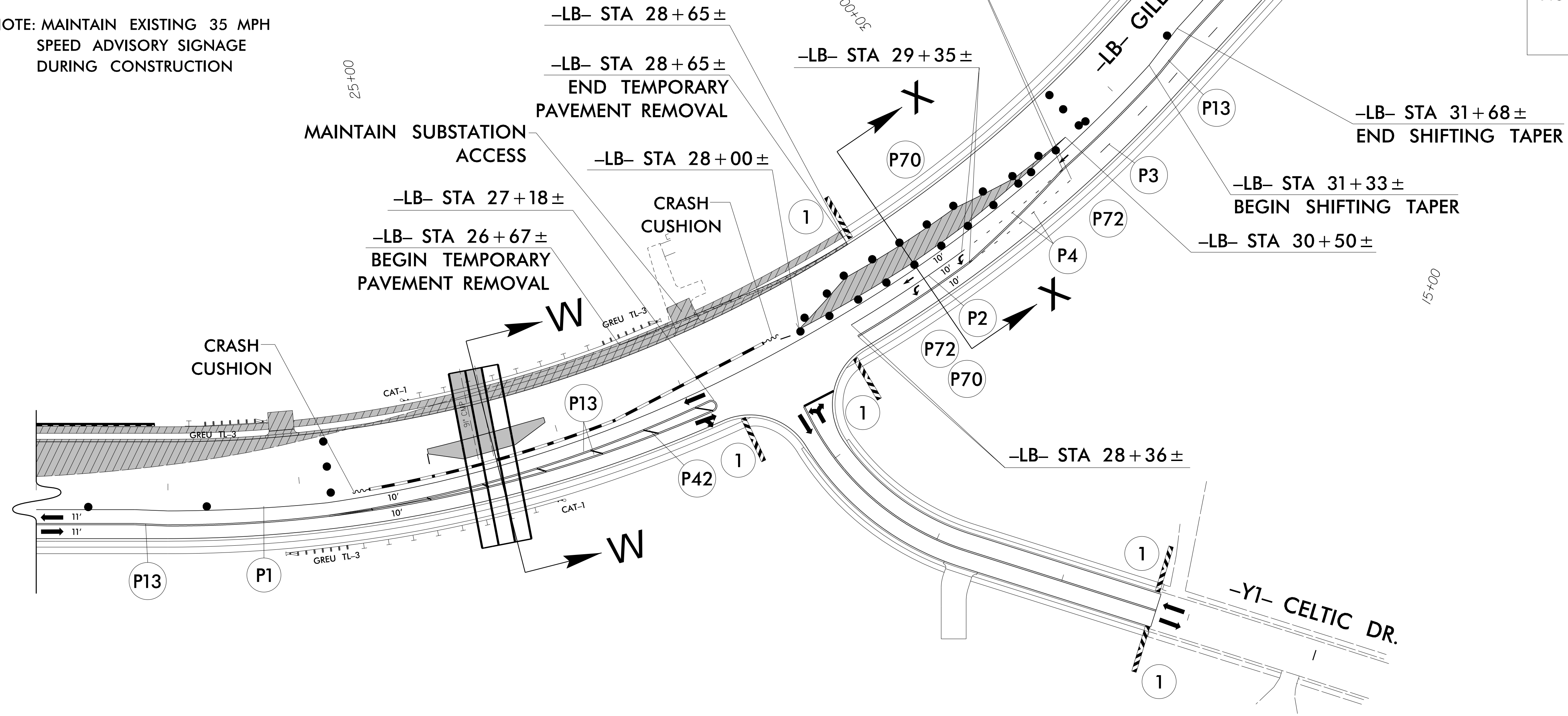


PHASE IV STEP 1
DETAIL

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NOTE: MAINTAIN EXISTING 35 MPH
SPEED ADVISORY SIGNAGE
DURING CONSTRUCTION



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PHASE IV STEP 2
DETAIL

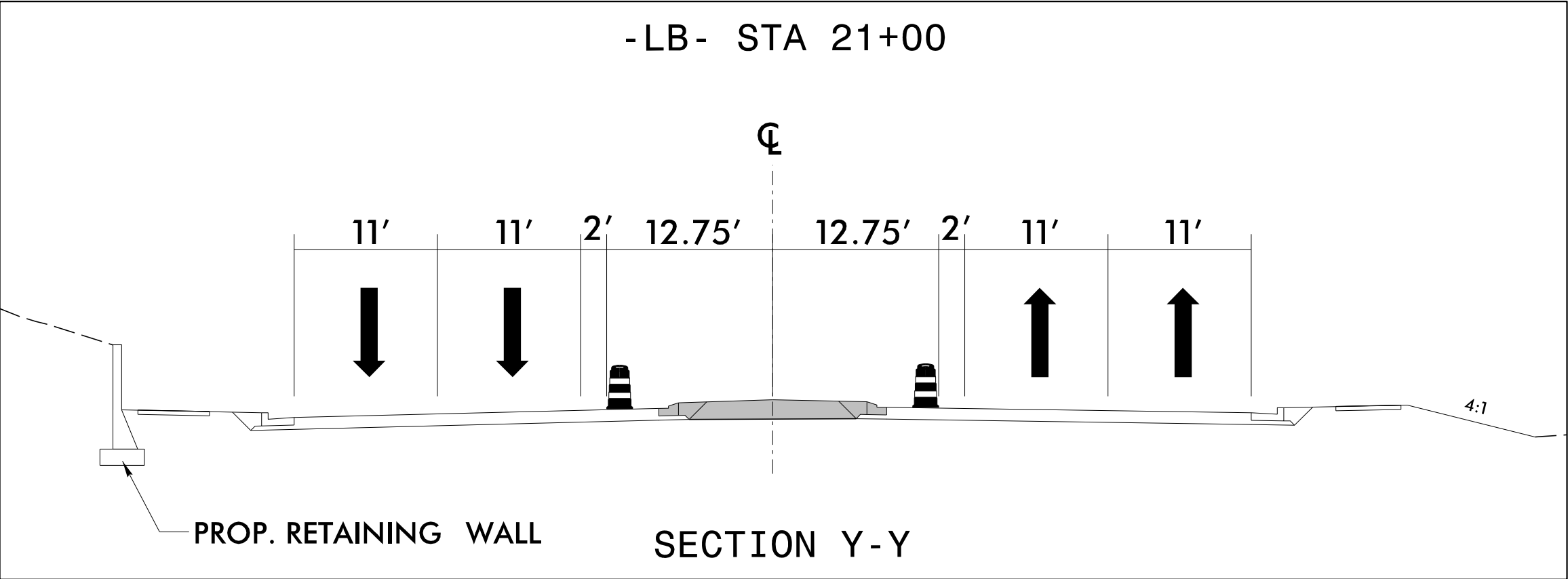
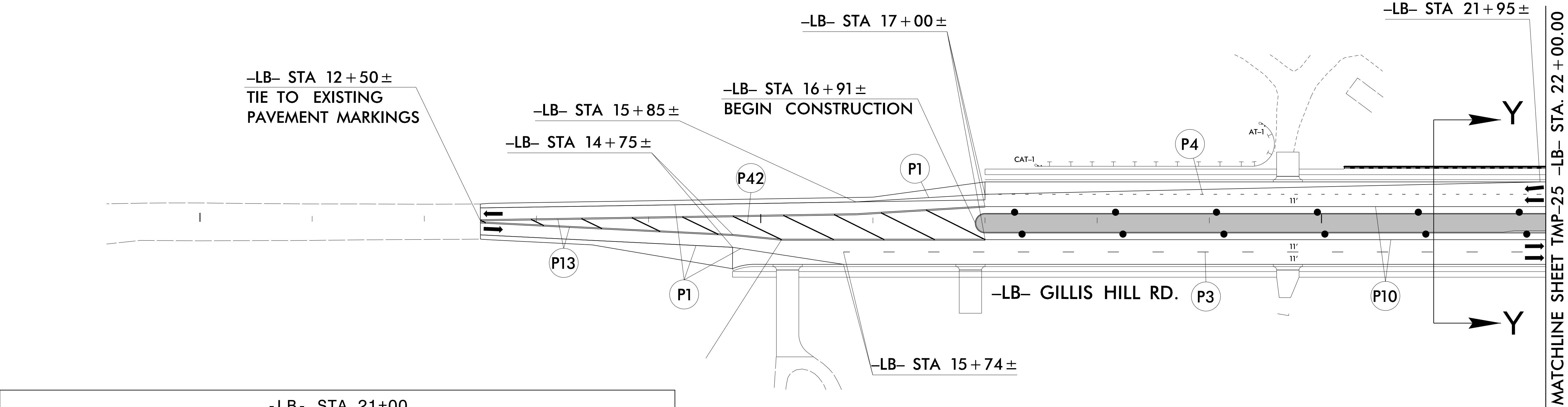
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RALEIGH, NC 27615

4/9/2025
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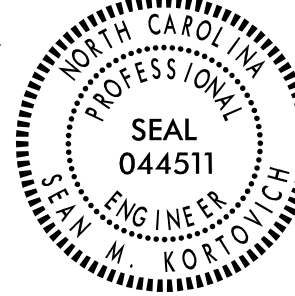


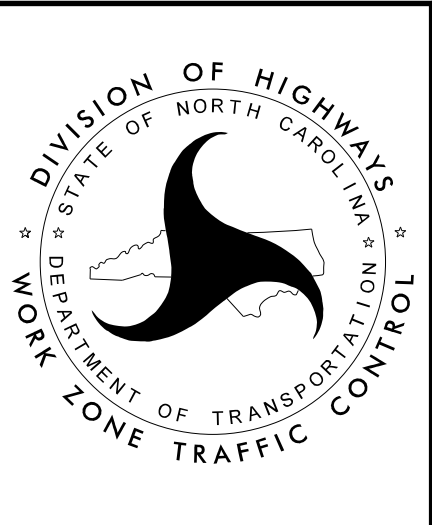
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U-5798B	TMP-24

NAD 83/NA 2011

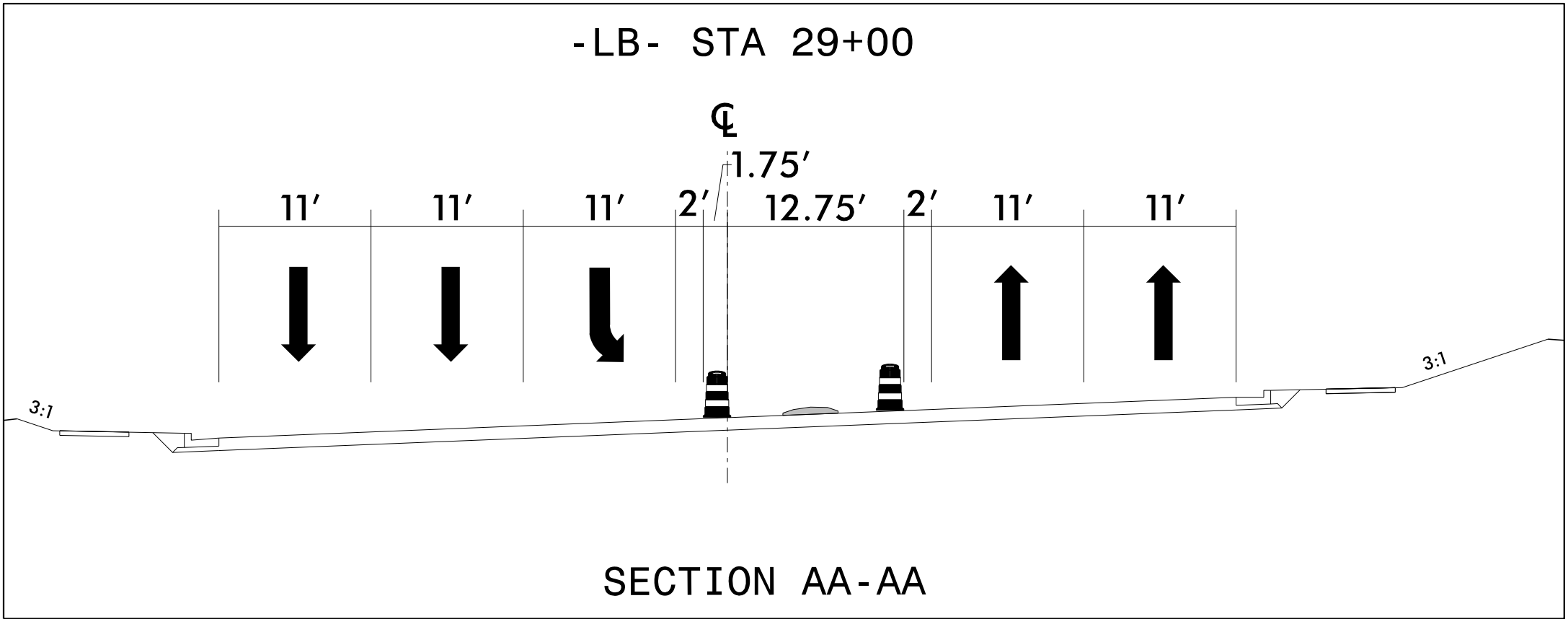
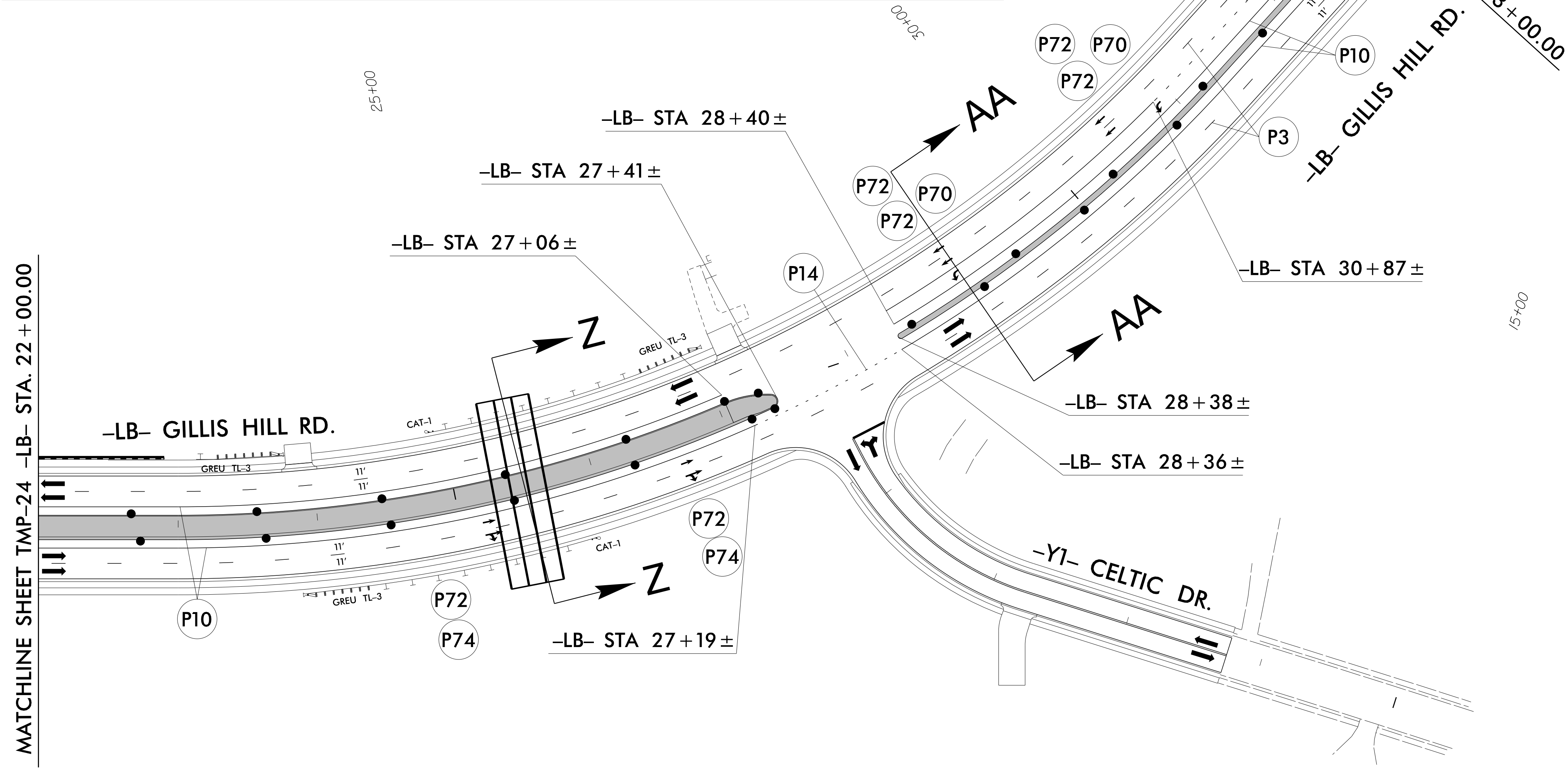
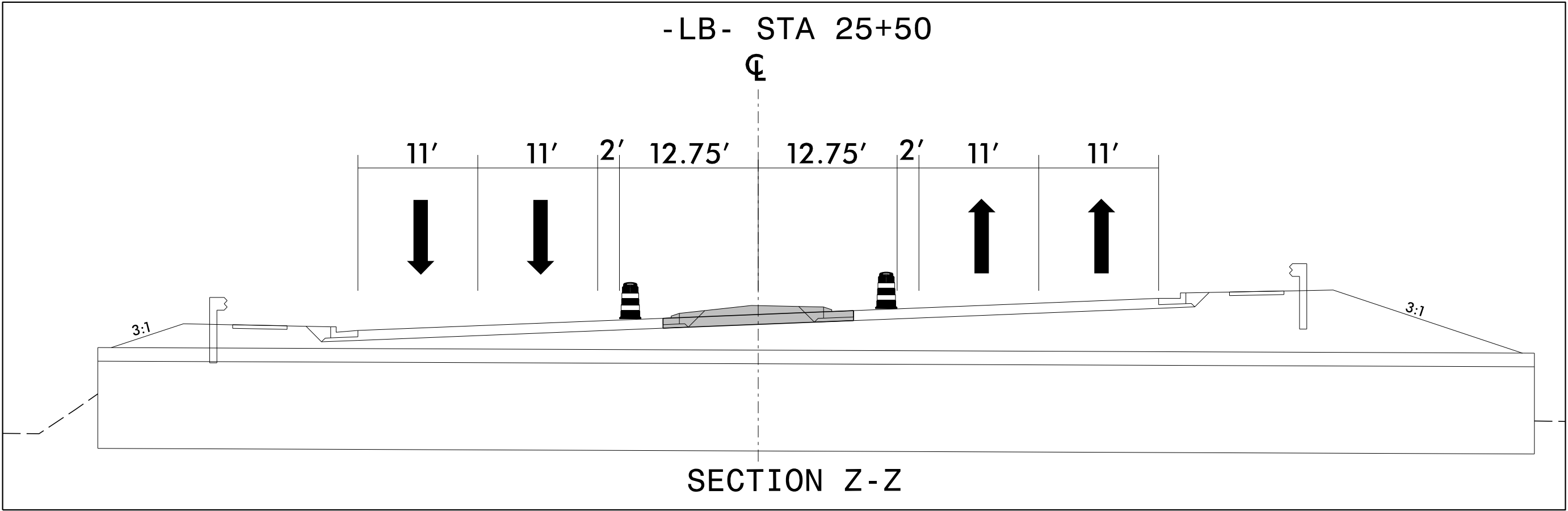


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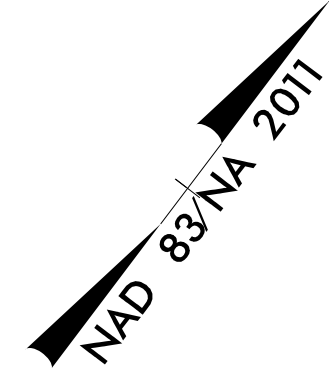
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PHASE V
DETAIL




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U-5798B	TMP-25



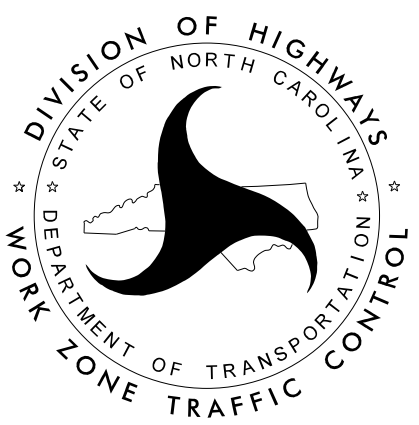
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NC FIRM LICENSE No: F-0493
8521 SIX FORKS ROAD, SUITE 400
RALEIGH, NC 27615

APPROVED: 
DATE: 6/11/2025

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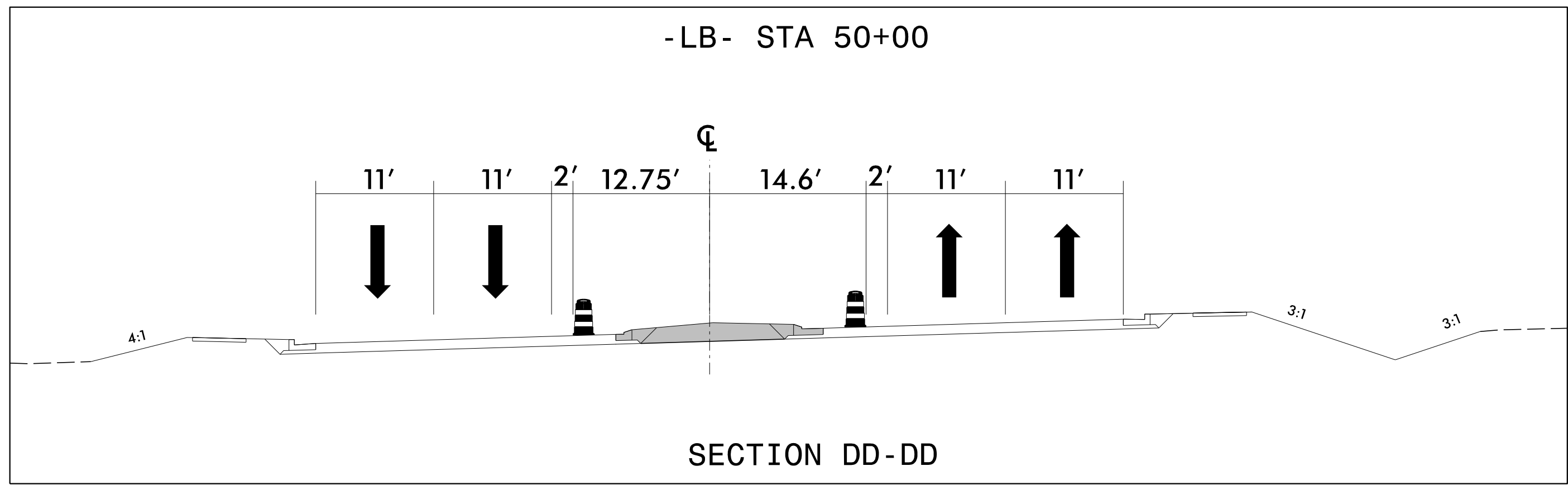
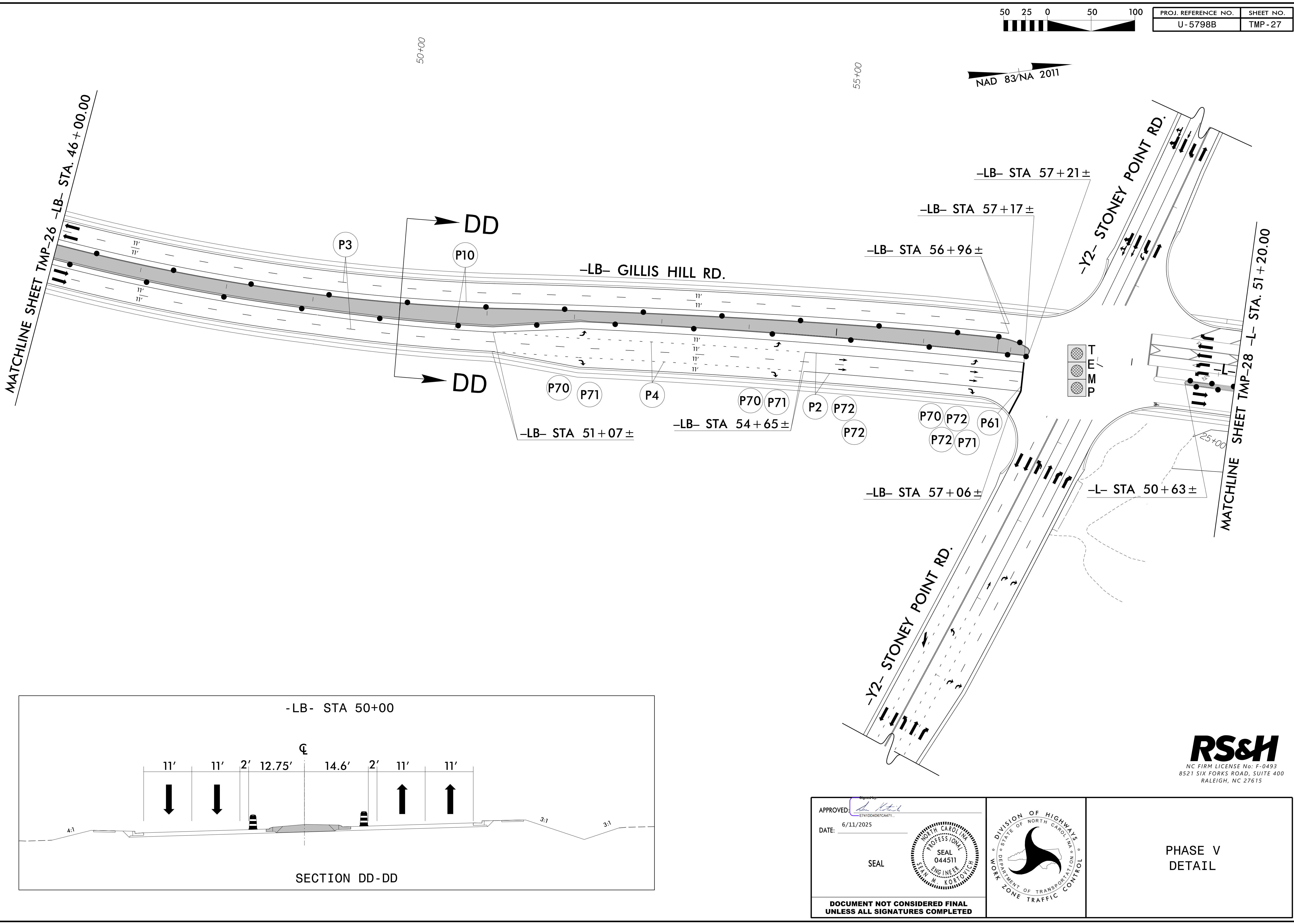
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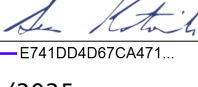
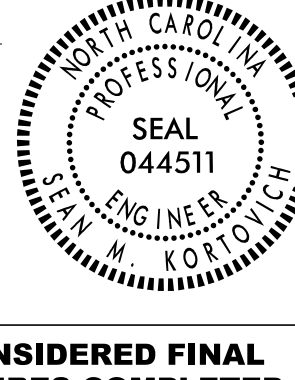
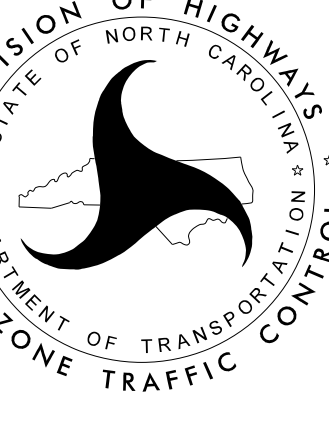


PHASE V
DETAIL



4/9/2025
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U-5798B	TMP-28



MATCHLINE SHEET TMP-27 -L- STA. 51 + 20.00

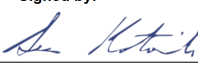
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END CONSTRUCTION

-L- GILLIS HILL RD.

55+00

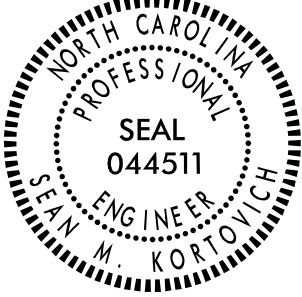
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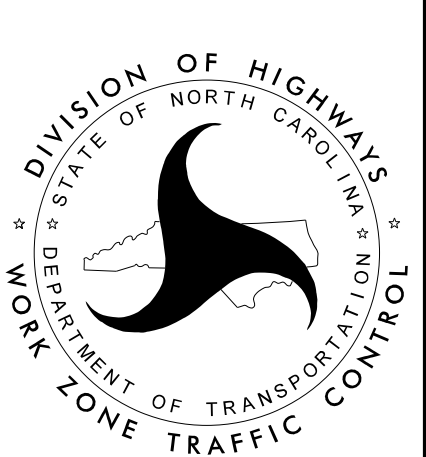
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PHASE V
DETAILS