

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO. R-3622AA SHEET NO. TCP-1

**PLAN FOR PROPOSED
TRAFFIC CONTROL, MARKING & DELINEATION
CHEROKEE COUNTY**

R-3622AA

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS"- PROJECT SERVICES UNIT-N.C. DEPARTMENT OF TRANSPORTATION-RALEIGH, N.C., DATED JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS (TEMPORARY & PERMANENT)
1253.01	SNOWPLOWABLE RAISED PAVEMENT MARKERS
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS
1264.02	PLACEMENT OF OBJECT MARKERS

INDEX OF SHEETS

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TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND AND INDEX OF SHEETS
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TCP-3	TRAFFIC CONTROL PHASING
TCP-4	PHASE I DETAIL DRAWING
TCP-5 THRU 7	PHASE II DETAIL DRAWINGS
TCP-8 THRU 13	PHASE III DETAIL DRAWINGS
TCP-14	WORK ZONE ADVANCE WARNING SIGN DETAIL
TCP-15	TEMPORARY SHORING DATA
PM-1 THRU 3	FINAL PAVEMENT MARKING DETAILS

PAVEMENT MARKING SCHEDULE

SYMB	DESCRIPTION	PAY ITEM QUANTITY	TOTAL
FINAL PAVEMENT MARKINGS			
PA	WHITE EDGELINE (2X) PAINT(4")	9840 LF	
PI	YELLOW DOUBLE CENTER (2X)	9840 LF	
			TOTAL 19680 LF
MARKERS			
SNOWPLOWABLE RAISED PAVEMENT MARKERS			
MA	YELLOW & YELLOW	31 EA	
			TOTAL 31 EA
TEMPORARY PAVEMENT MARKINGS			
P4	WHITE STOPBAR (2X) PAINT(24")	66 LF	
			TOTAL 66 LF
COLD APPLIED PLASTIC (4") Type 4- Removable Tape			
CA	WHITE EDGELINE	512 LF	
			TOTAL 512 LF
PAINT(4")			
PA	WHITE EDGELINE (2X)	16128 LF	
PI	YELLOW DOUBLE CENTER (2X)	2540 LF	
			TOTAL 18668 LF
MARKERS			
TEMPORARY RAISED PAVEMENT MARKERS			
MH	YELLOW & YELLOW	8 EA	
			TOTAL 8 EA

NOTE: FOR EACH PAINT PAVEMENT MARKING ITEM, 1X IMPLIES A SINGLE APPLICATION, 2X IMPLIES TWO APPLICATIONS, AND 3X IMPLIES THREE APPLICATIONS.

LEGEND

- GENERAL**
- DIRECTION OF TRAFFIC FLOW
 - NORTH ARROW
 - PROPOSED PVMT. EXIST. PVMT.
 - WORK AREA
 - REMOVAL OF EXISTING PAVEMENT

- TRAFFIC CONTROL DEVICES**
- TYPE I BARRICADE
 - TYPE II BARRICADE
 - TYPE III BARRICADE
 - CONE
 - DRUM SKINNY DRUM
 - FLASHING ARROW PANEL (TYPE C)
 - STATIONARY SIGN
 - PORTABLE SIGN
 - STATIONARY OR PORTABLE SIGN
 - CRASH CUSHION
 - CHANGEABLE MESSAGE SIGN
 - TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
 - POLICE
 - FLAGGER

- PAVEMENT MARKINGS**
- CRYSTAL/CRYSTAL PAVEMENT MARKER
 - YELLOW/YELLOW PAVEMENT MARKER
 - CRYSTAL/RED PAVEMENT MARKER
 - PAVEMENT MARKING SYMBOLS

APPROVED: _____ DATE: _____	PLAN PREPARED FOR: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT
SEAL 	J. S. Bourne, PE TRAFFIC CONTROL ENGINEER
	M. M. McDiarmid, PE TRAFFIC CONTROL PROJECT ENGINEER
	C. Lanford, PE TRAFFIC CONTROL PROJECT DESIGN ENGINEER
	S. B. Coats TRAFFIC CONTROL DESIGN ENGINEER / TECHNICIAN

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TIP PROJECT:

PROJECT NOTES

GENERAL NOTES

PROJ. REFERENCE NO. R-3622AA	SHEET NO. TCP-2
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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.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- A) 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.
- B) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN 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.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- D) 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.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- E) 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.
- F) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 ft IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.
- G) 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.
- H) STATE FORCES WILL BE RESPONSIBLE FOR PERMANENT SIGNING.
- I) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC BARRIER

- J) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRAFFIC CONTROL 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 TRAFFIC CONTROL 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 TRAFFIC CONTROL 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.

- K) 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 IMPACT ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS:

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

TRAFFIC CONTROL DEVICES

- L) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.
- M) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PAVEMENT MARKINGS AND MARKERS

- N) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
NC 294	PAINT	RAISED SNOWPLOWABLE

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

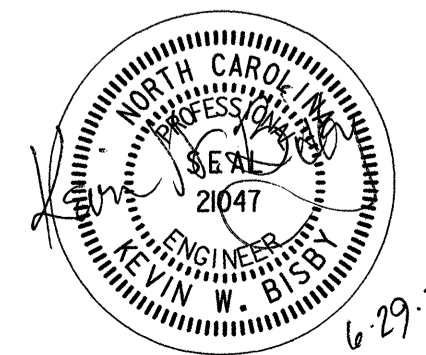
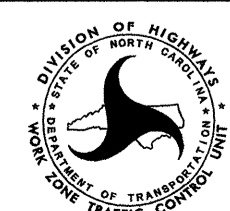
ROAD NAME	MARKING	MARKER
NC 294 STRUCTURE	PAINT REMOVABLE TAPE	TEMPORARY RAISED TEMPORARY RAISED

- P) PLACE TWO APPLICATIONS OF PAINT PAVEMENT MARKINGS ON THE FINAL WEARING SURFACE. PLACE THE SECOND APPLICATION OF PAINT UPON SUFFICIENT DRYING TIME OF THE FIRST.
- Q) 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.
- R) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- S) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

TEMPORARY / FINAL SIGNALS

- T) NOTIFY THE ENGINEER TWO (2) MONTHS BEFORE A TRAFFIC SIGNAL INSTALLATION IS REQUIRED.

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PHASE I

STEP 1:
ERECT ADVANCE WORK ZONE WARNING SIGNS ON NC 294 IN ACCORDANCE WITH DETAIL DRAWINGS FOR WORK ZONE SIGNS. (SEE TCP-14)

STEP 2:
USING RDWY STD 1101.02 SHEET 1, CONSTRUCT TEMPORARY PAVEMENT AND PLACE PORTABLE CONCRETE BARRIER ADJACENT TO THE WESTBOUND LANE OF NC 294 IN THE VICINITY OF THE PROPOSED STRUCTURE AND CULVERT EXTENSION. (SEE TCP-4)

STEP 3:
BEGIN CONSTRUCTION OF PROPOSED BRIDGE AND CULVERT EXTENSION. (SEE TCP-4)

PHASE II

STEP 1:
PLACE SIGNS AND TRAFFIC CONTROL DEVICES AS SHOWN AND DIRECT TRAFFIC INTO A ONE LANE, TWO WAY PATTERN ON THE EXISTING EASTBOUND LANE OF NC 294. INSTALL AND ACTIVE THE TEMPORARY SIGNAL. (SEE TCP-5 THROUGH 7)

STEP 2:
COMPLETE CONSTRUCTION OF THE PROPOSED BRIDGE AND CULVERT EXTENSION AS BEGUN IN PHASE I.

USING RDWY STD 1101.02 SHEET 1, CONSTRUCT LEFT SIDE WIDENING UP TO THE EDGE AND ELEVATION OF THE EXISTING PAVEMENT AS FOLLOWS: (SEE TCP-5 AND 7)

- L- STA 42+90 TO STA 49+00
- L- STA 63+87 TO STA 65+44

CONSTRUCT EXCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS: (SEE TCP-5 THROUGH 7)

- L- STA 49+00 TO STA 51+50 (MIN. 17' FROM PROPOSED LEFT EDGE OF PAVEMENT)
- L- STA 51+50 TO STA 53+87
- L- STA 55+95 TO STA 63+87
- Y3-
- Y4-

PHASE III

NOTE: STEP 1 SHALL BE COMPLETED IN A CONTINUOUS OPERATION. IN ORDER TO ENSURE THAT THE TRAFFIC SHIFT CAN BE COMPLETED WITHIN ONE WORK DAY, THE CONTRACTOR MAY WEDGE THE EXISTING PAVEMENT PRIOR TO THE ACTUAL TRAFFIC SHIFT.

STEP 1:
USING FLAGGERS AND FLAGGER AHEAD SYMBOL SIGNS (ALTERNATING LANE CLOSURES) AS DIRECTED BY THE ENGINEER WEDGE PAVEMENT EXCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS: (SEE TCP-8 AND 10)

- L- STA 42+90 TO STA 47+50
- L- STA 47+50 TO STA 49+00 (MINIMUM 17' WIDTH)
- L- STA 63+86 TO STA 65+44

PLACE SIGNS, TRAFFIC CONTROL DEVICES, AND PAVEMENT MARKINGS AS SHOWN, AND DIRECT TRAFFIC INTO A ONE LANE, TWO WAY PATTERN ON THE WESTBOUND LANE OF PROPOSED NC 294. INSTALL AND ACTIVE THE TEMPORARY SIGNAL. (SEE TCP-8 THROUGH 10)

STEP 2:
USING FLAGGERS AND FLAGGER AHEAD SYMBOL SIGNS AS DIRECTED BY THE ENGINEER CONSTRUCT EXCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS: (SEE TCP-11 AND 13)

- L- STA 42+90 TO STA 51+50 (RIGHT SIDE)
- L- STA 65+44 TO STA 67+19

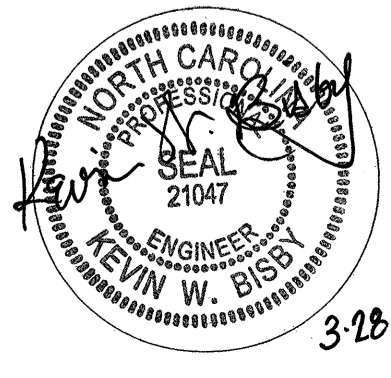
REMOVE EXISTING PAVEMENT AS REQUIRED.

COMPLETE SHOULDER WORK ON THE RIGHT SIDE OF THE PROPOSED ROADWAY.

STEP 3:
REMOVE PORTABLE CONCRETE BARRIER FROM THE PROJECT AND REPLACE WITH DRUMS AT 45' SPACING.

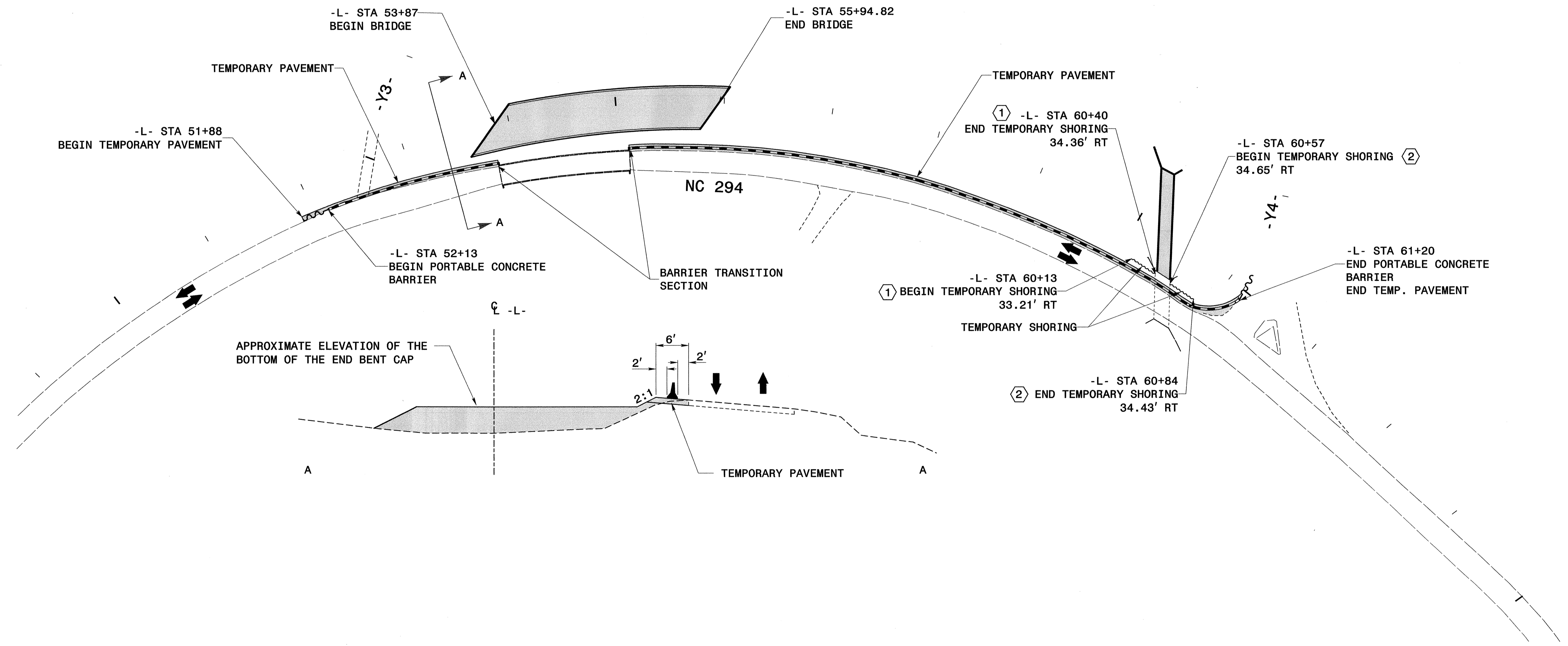
STEP 4:
USING FLAGGERS AND FLAGGER AHEAD SYMBOL SIGNS AS DIRECTED BY THE ENGINEER, PLACE THE FINAL LAYER OF SURFACE COURSE, FINAL PAVEMENT MARKINGS, REMOVE ALL TRAFFIC CONTROL DEVICES, AND OPEN THE PROPOSED ROADWAY TO TWO WAY TRAFFIC.

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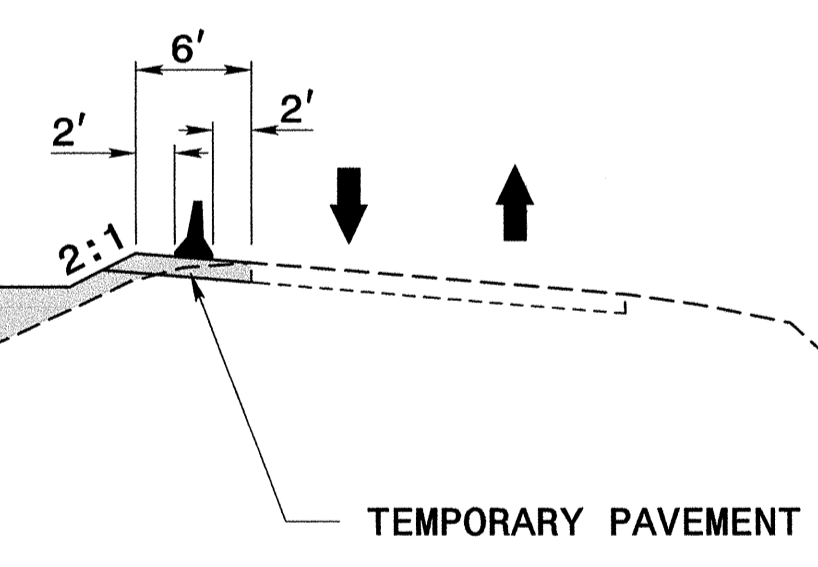
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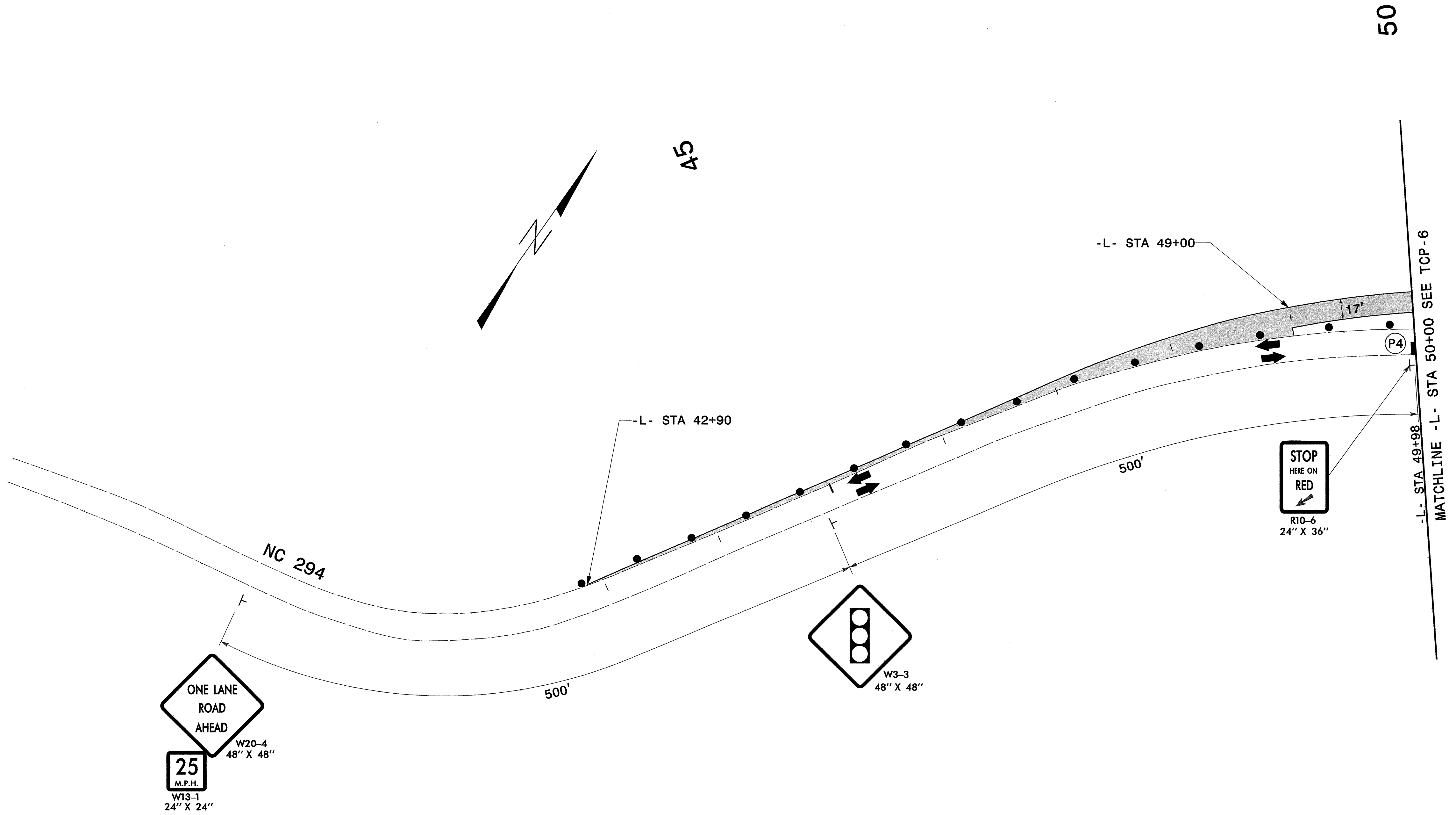


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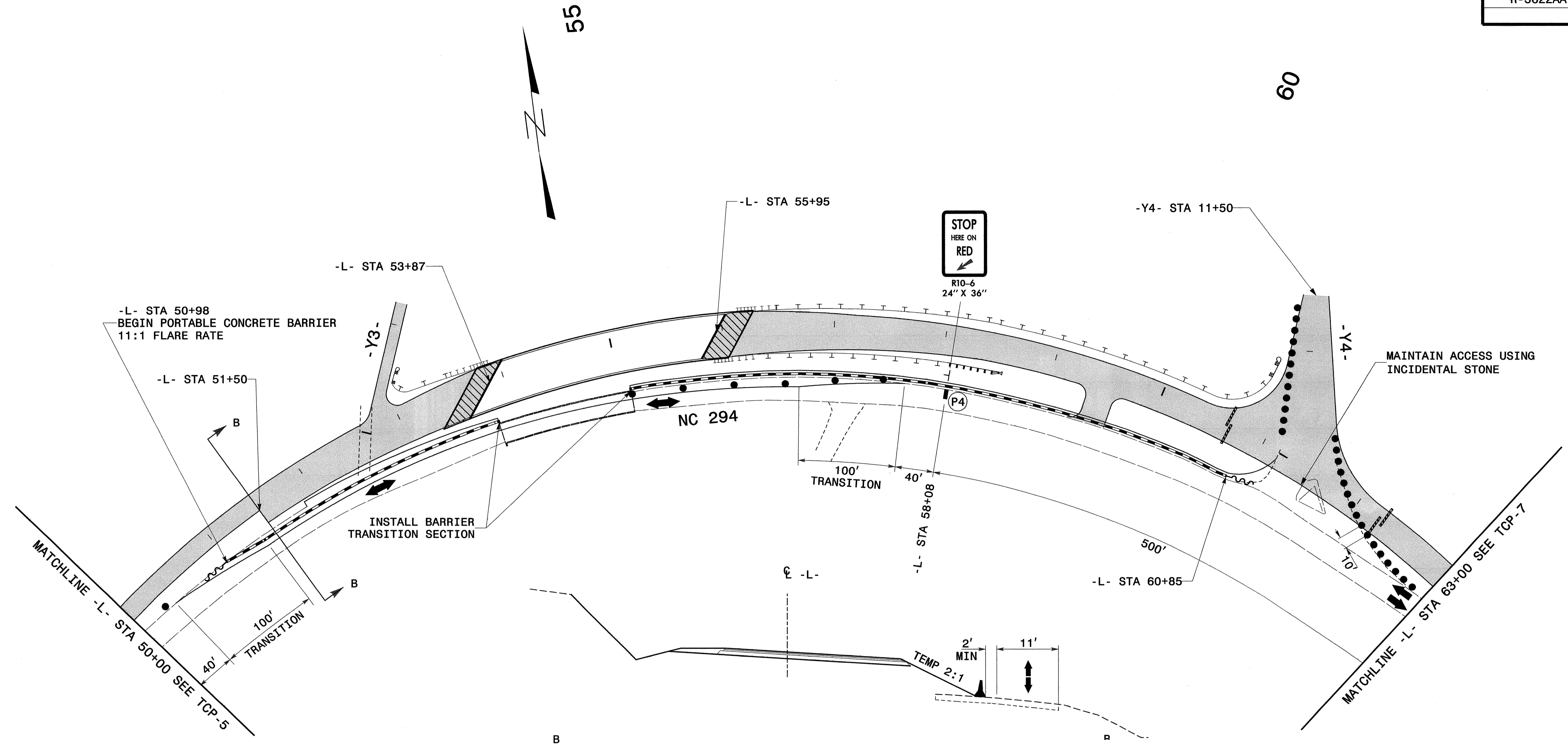
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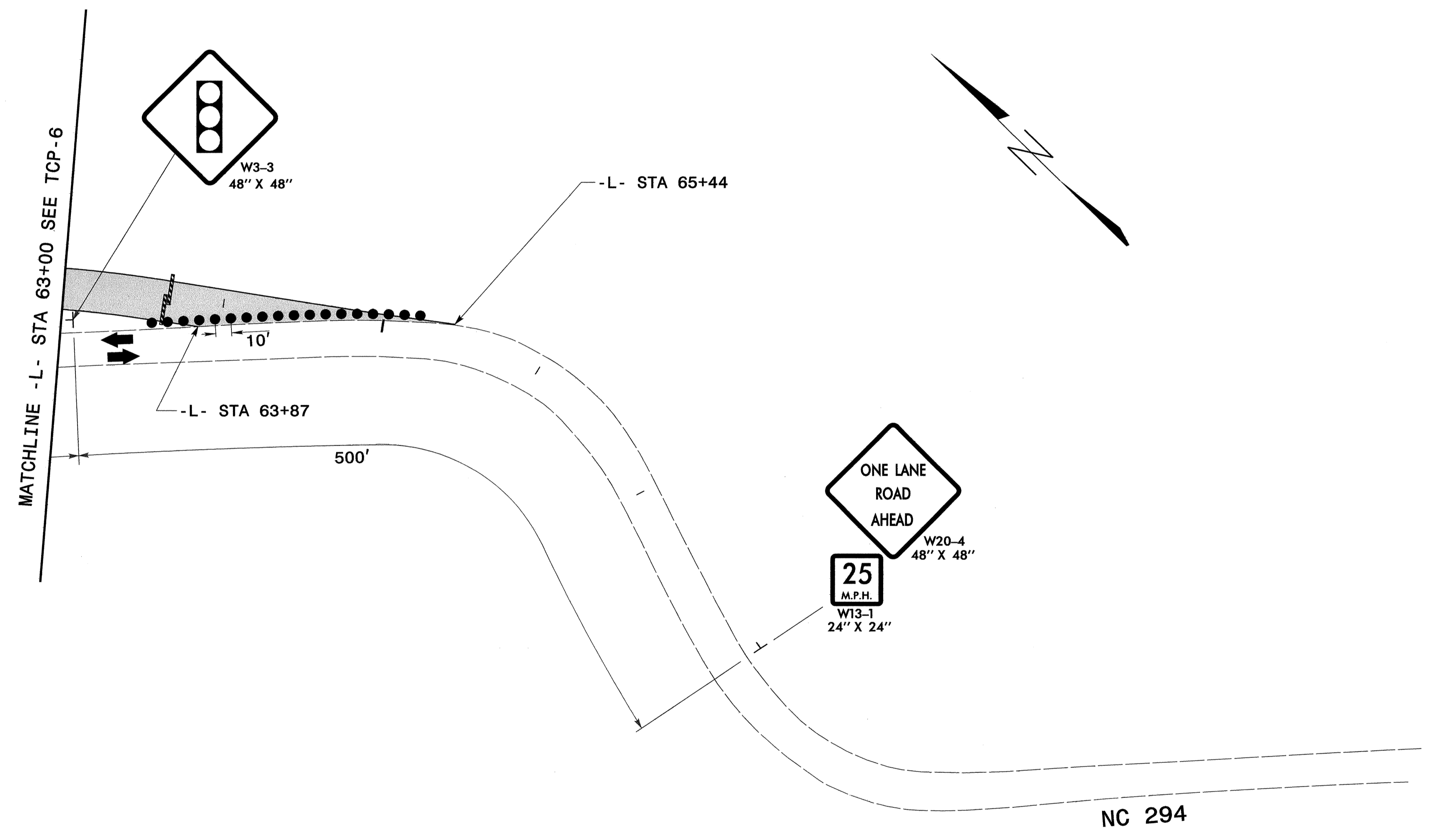
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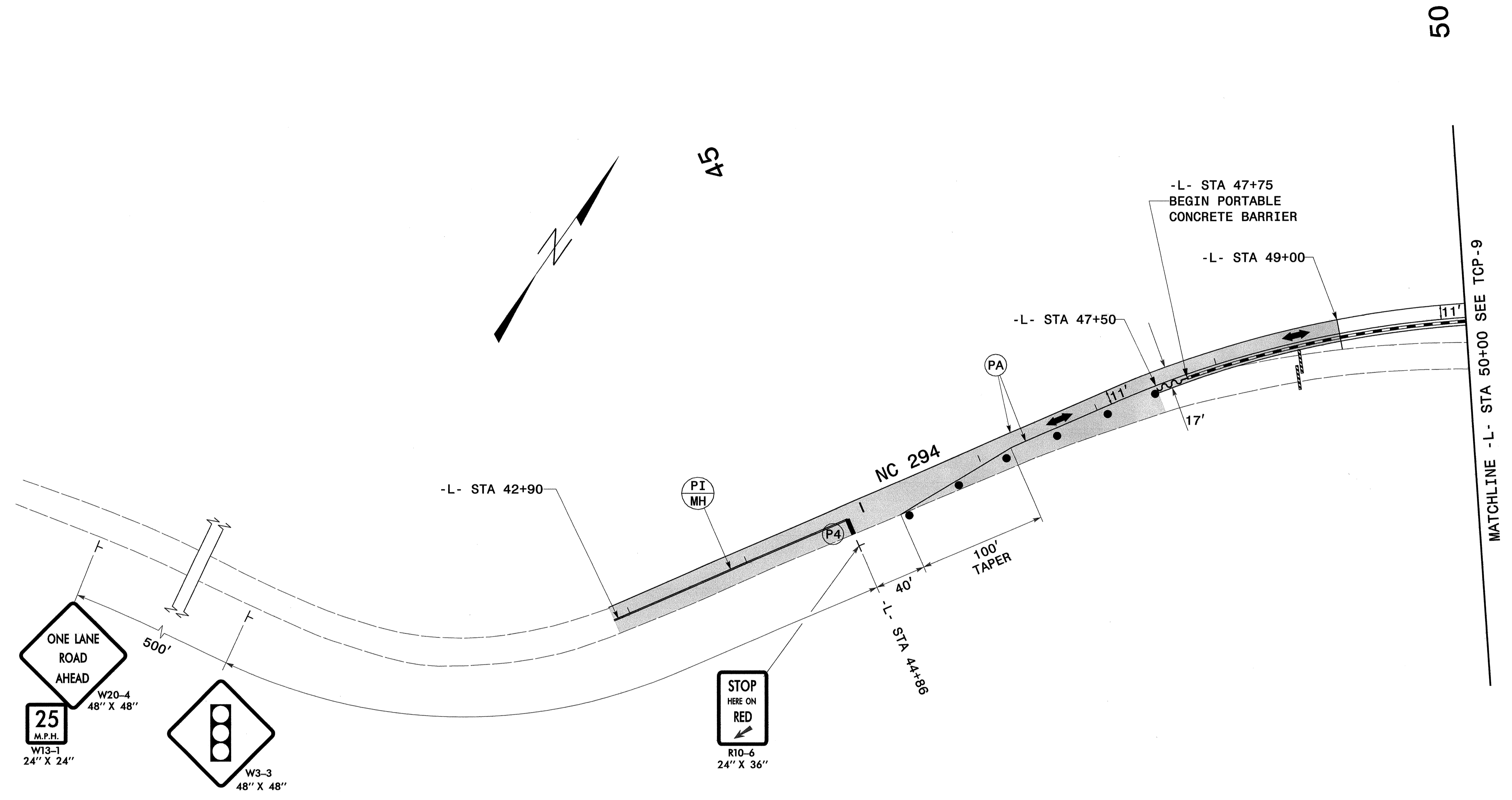
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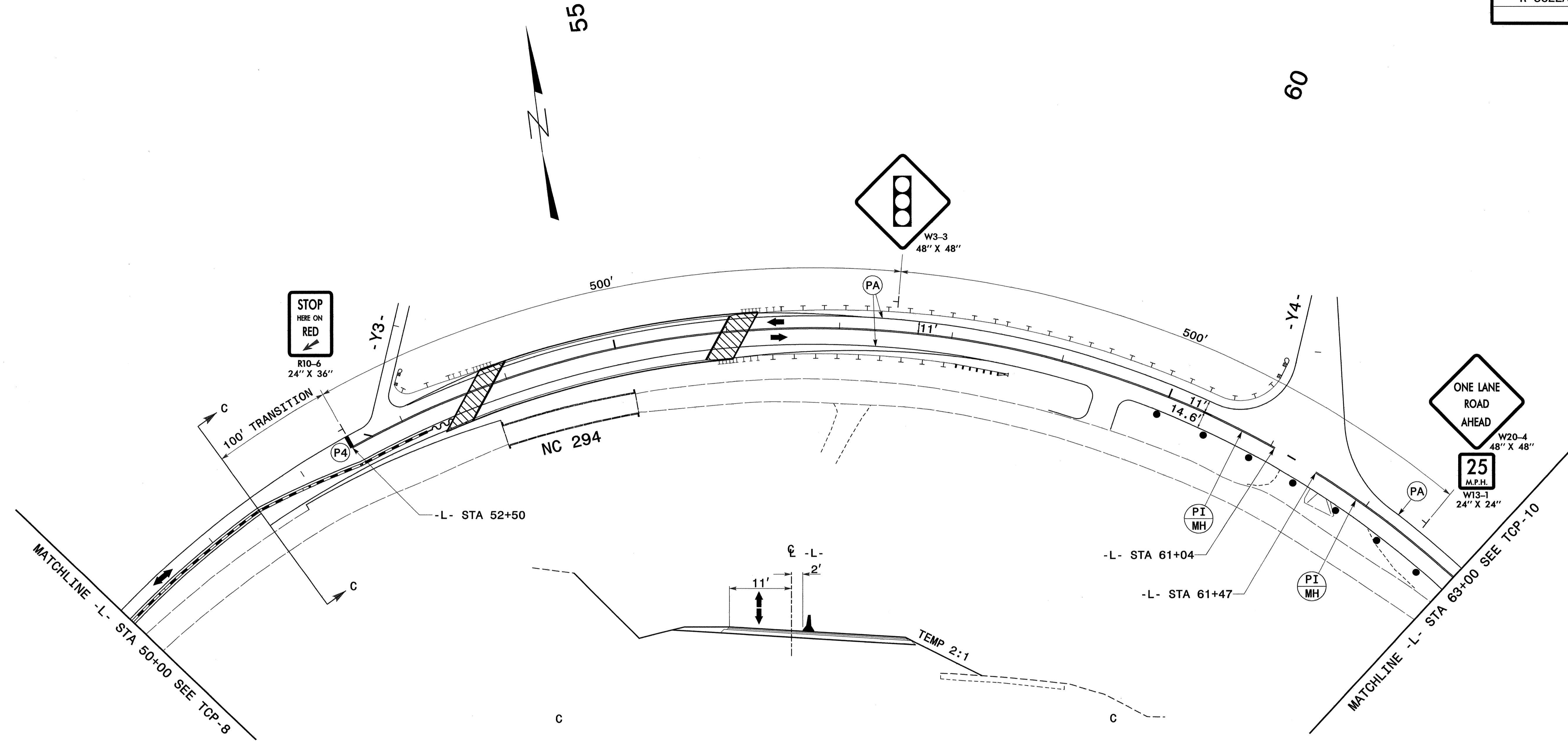
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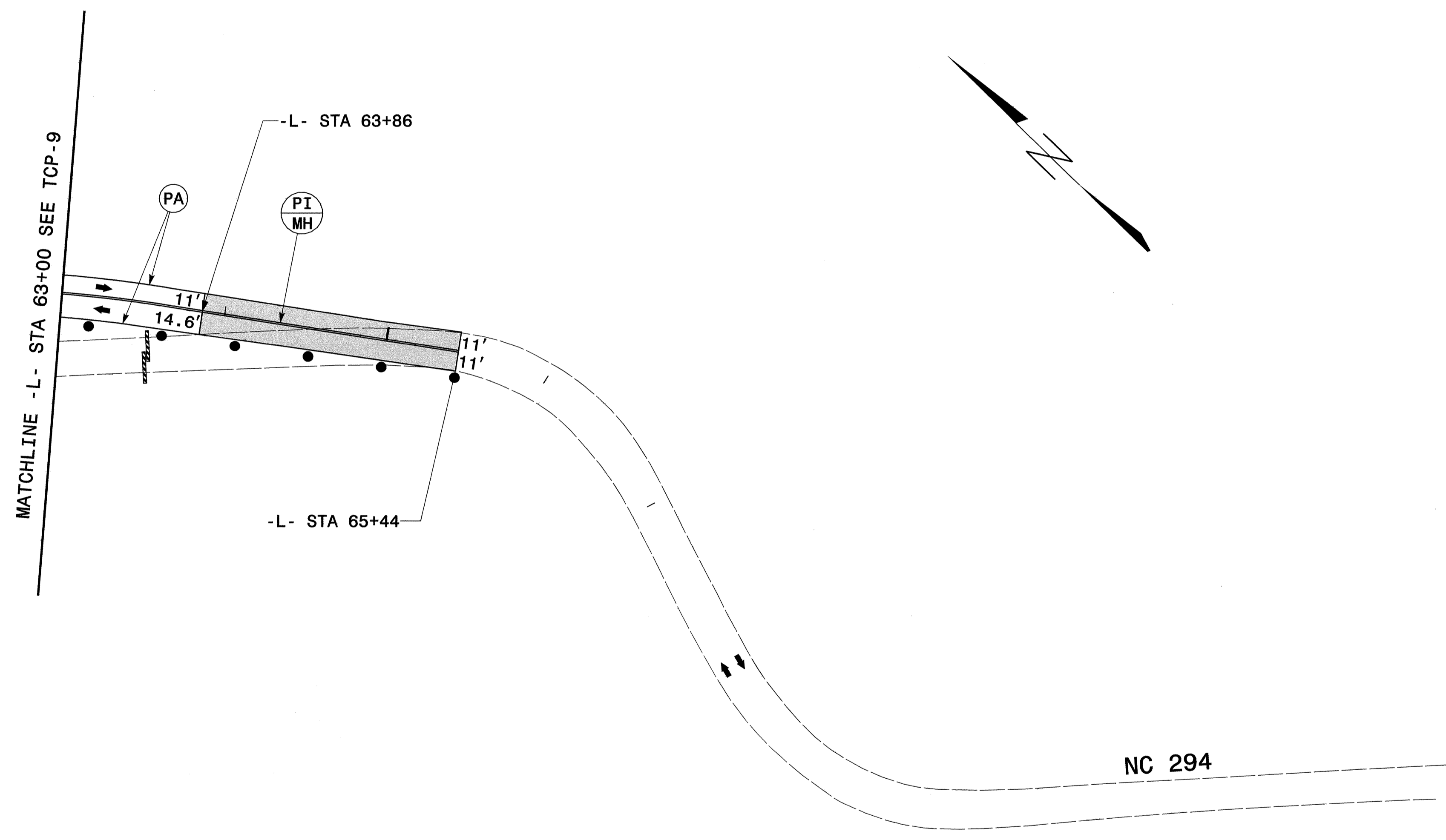
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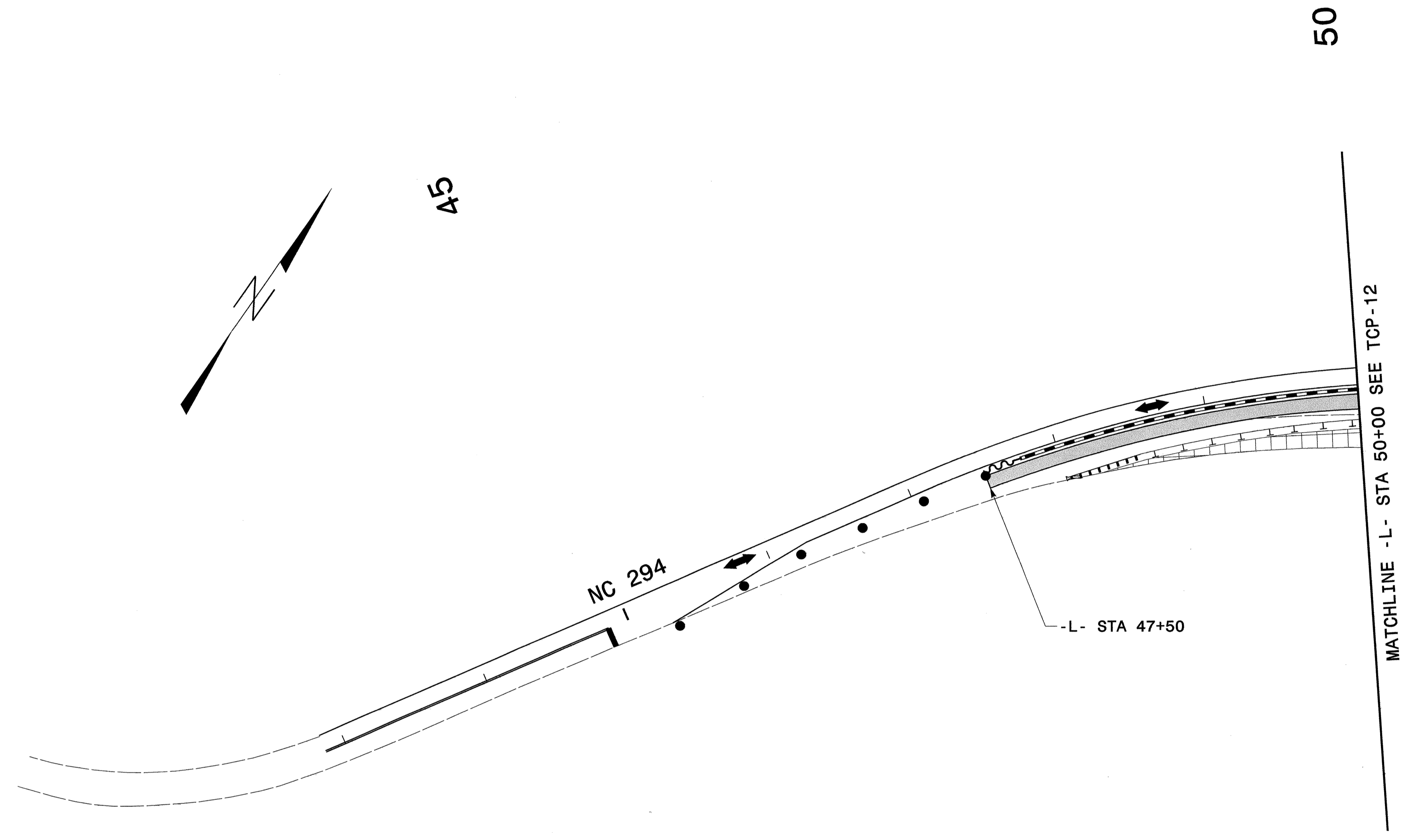
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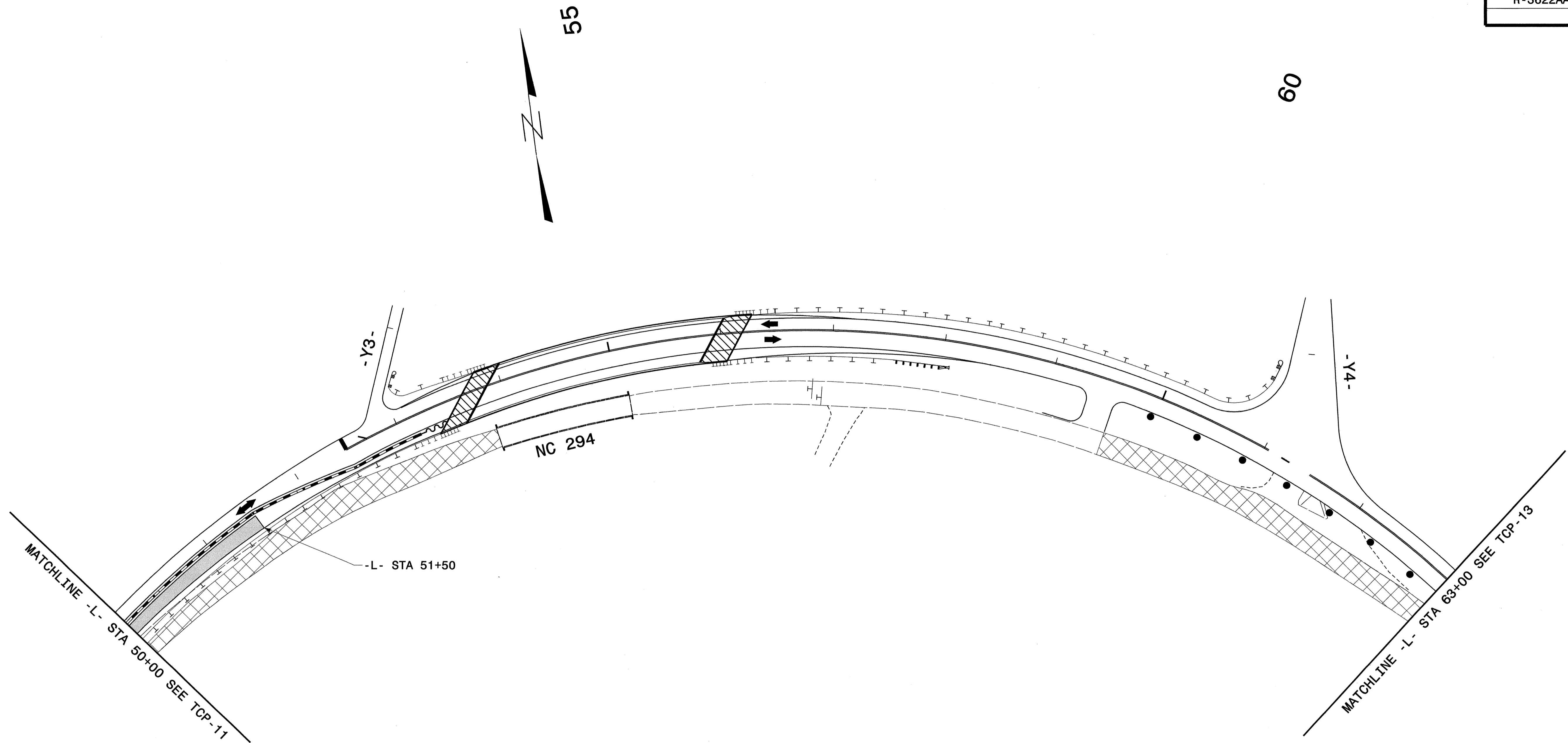
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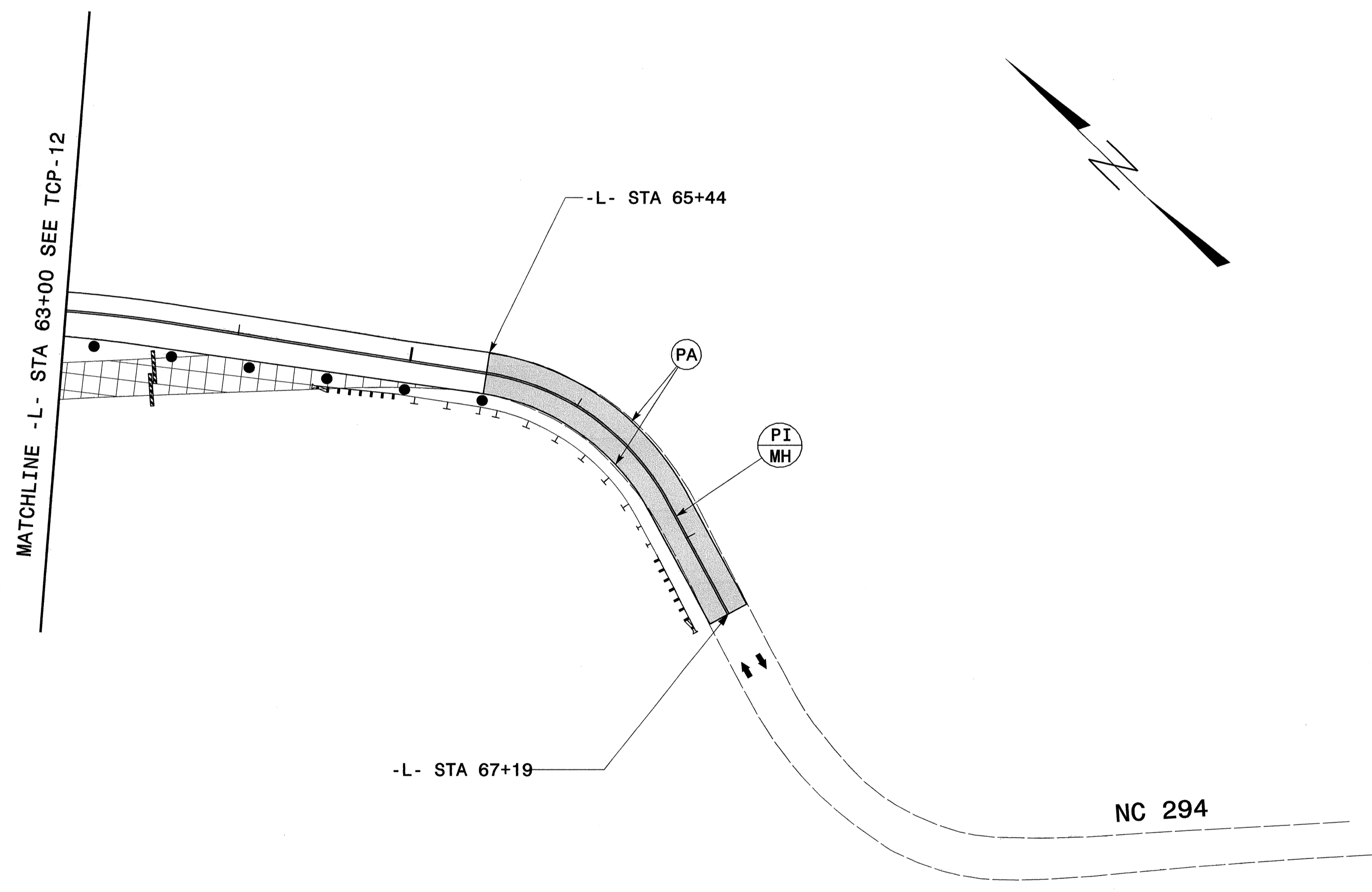


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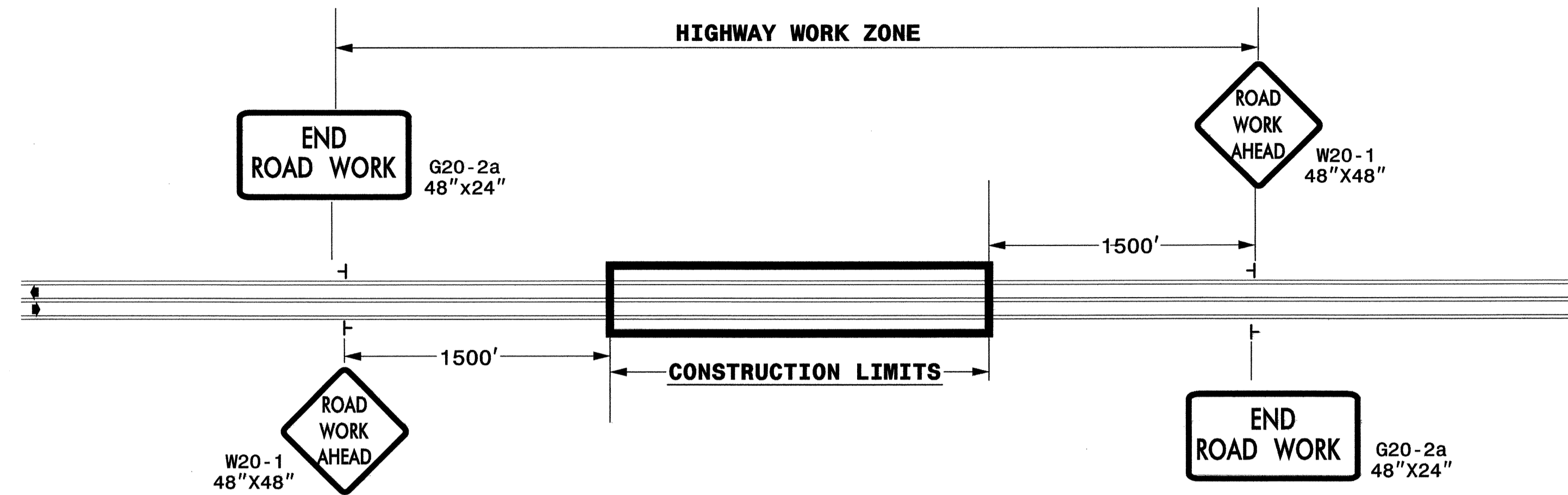
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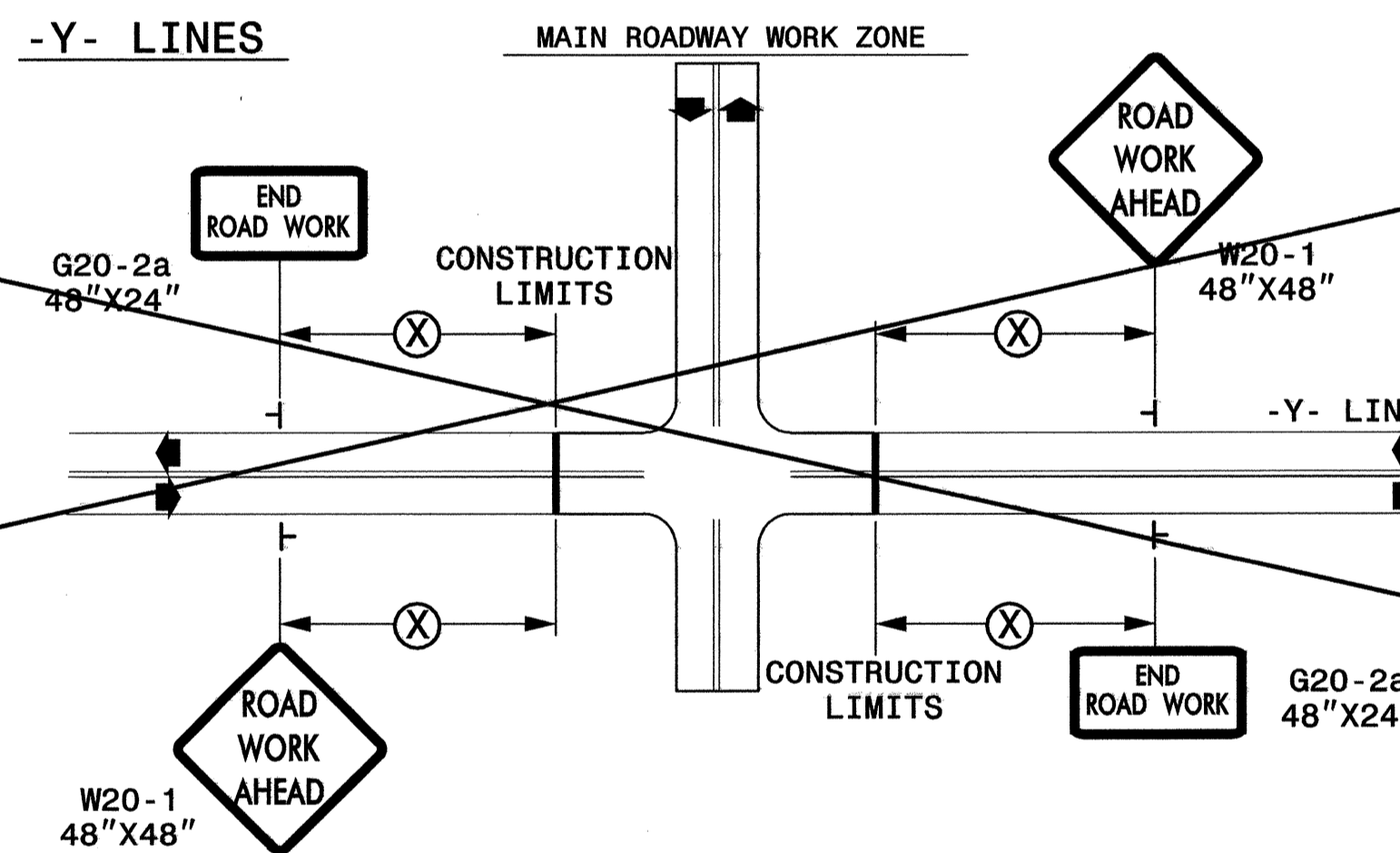
	PHASE III DETAIL DRAWING								
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TWO-WAY UNDIVIDED (L-LINES)



STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)



DETAIL DRAWING FOR
TWO-WAY UNDIVIDED
WORK ZONE WARNING SIGNS

GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.

LEGEND

┆ STATIONARY SIGN

◀ DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1

\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$USERNAME\$\$\$\$\$



421 Fayetteville Street
Suite 1303
Raleigh, North Carolina 27601
phone: (919) 755-0583
fax: (919) 832-8798

	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS									
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REVISIONS										
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01/01	11/04									

TEMPORARY SHORING DATA

Temporary Shoring No. 1

FOR TEMPORARY SHORING, SEE TEMPORARY SHORING SPECIAL PROVISION.

FOR CONTRACTOR DESIGNED SHORING, SURVEY THE SHORING LOCATION TO DETERMINE EXISTING ELEVATIONS AND ACTUAL DESIGN HEIGHTS BEFORE BEGINNING DESIGN.

WHEN USING CONTRACTOR DESIGNED SHORING FROM STATION 60+13.00± -L-, 34.36 FT. RIGHT OF -L-, TO STATION 60+40.00± -L-, 33.21 FT. RIGHT OF -L-, USE THE FOLLOWING SOIL PARAMETERS:

UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma = 120$ PCF
 UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma = 60$ PCF
 FRICTION ANGLE, $\phi = 30$ DEGREES
 COHESION, $c = 0$ PSF

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION 60+13.00± -L-, 34.36 FT. RIGHT OF -L-, TO STATION 60+40.00± -L-, 33.21 FT. RIGHT OF -L-. THE INFORMATION PROVIDED FOR DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

FOR PORTABLE CONCRETE BARRIERS ABOVE AND BEHIND TEMPORARY SHORING, USE AN NCDOT PORTABLE CONCRETE BARRIER (UNANCHORED OR ANCHORED) OR AN OREGON TALL F-SHAPE CONCRETE BARRIER IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS.

Temporary Shoring No. 2

FOR TEMPORARY SHORING, SEE TEMPORARY SHORING SPECIAL PROVISION.

FOR CONTRACTOR DESIGNED SHORING, SURVEY THE SHORING LOCATION TO DETERMINE EXISTING ELEVATIONS AND ACTUAL DESIGN HEIGHTS BEFORE BEGINNING DESIGN.

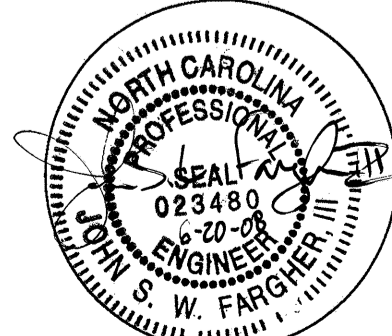
WHEN USING CONTRACTOR DESIGNED SHORING FROM STATION 60+57.00± -L-, 34.65 FT. RIGHT OF -L-, TO STATION 60+84.00± -L-, 34.43 FT. RIGHT OF -L-, USE THE FOLLOWING SOIL PARAMETERS:

UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma = 120$ PCF
 UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma = 60$ PCF
 FRICTION ANGLE, $\phi = 30$ DEGREES
 COHESION, $c = 0$ PSF

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION 60+57.00± -L-, 34.65 FT. RIGHT OF -L-, TO STATION 60+84.00± -L-, 34.43 FT. RIGHT OF -L-. THE INFORMATION PROVIDED FOR DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

FOR PORTABLE CONCRETE BARRIERS ABOVE AND BEHIND TEMPORARY SHORING, USE AN NCDOT PORTABLE CONCRETE BARRIER (UNANCHORED OR ANCHORED) OR AN OREGON TALL F-SHAPE CONCRETE BARRIER IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS.

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	TEMPORARY SHORING DATA	
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