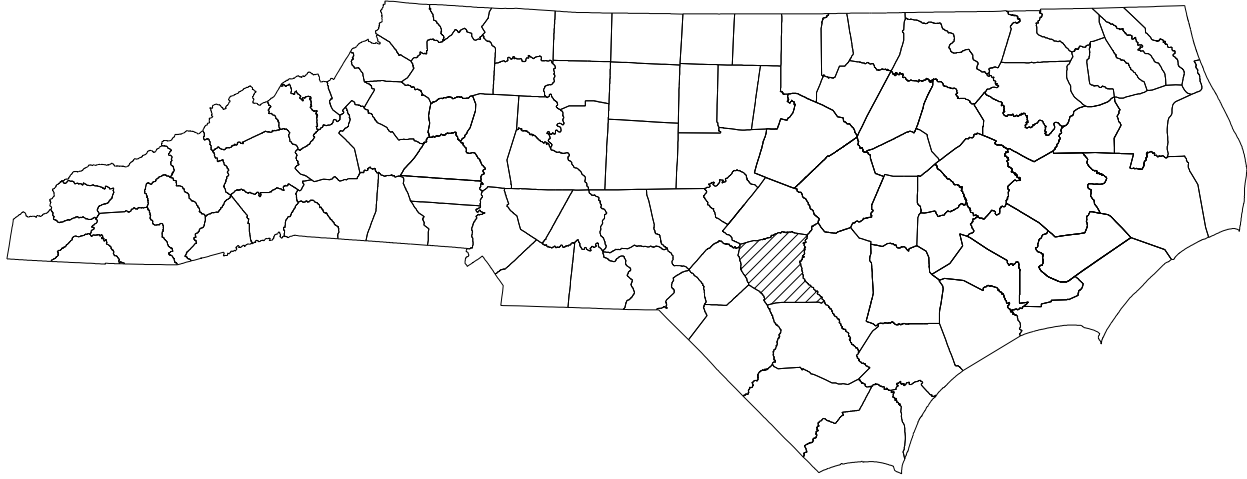
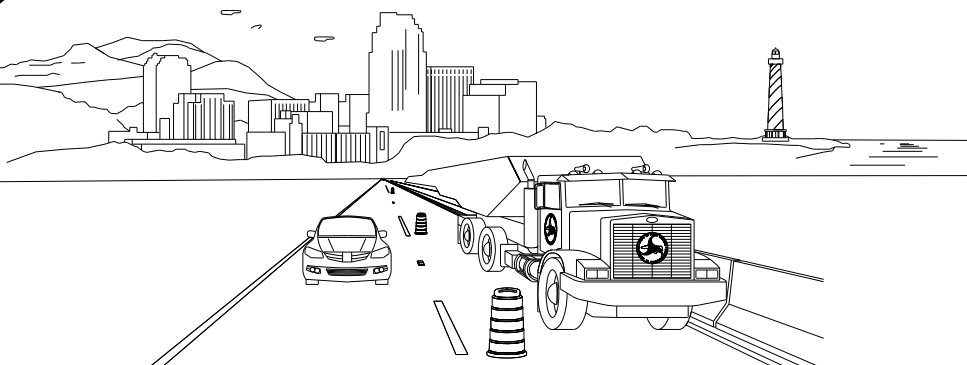


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

CUMBERLAND COUNTY





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

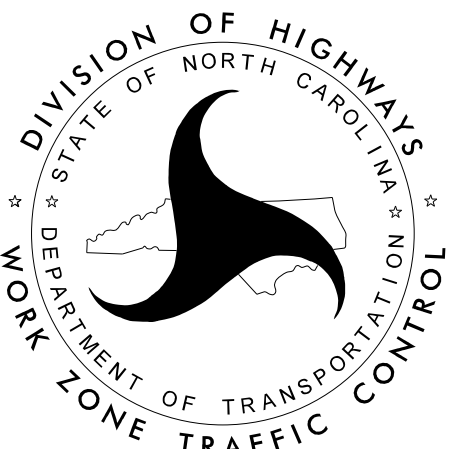
PLANS PREPARED BY:

A. MATTHEW THIGPEN, PE
PROJECT ENGINEER

NCDOT CONTACTS:

ZACHARY CLARK, PE
PROJECT ENGINEER

ALLA LYUDMIRSKAYA
PROJECT DESIGN ENGINEER



INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-1B THRU TMP-1C	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES AND GENERAL NOTES)
TMP-2	PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS
TMP-2A	TEMPORARY SHORING NOTES
TMP-3	TEMPORARY TRAFFIC CONTROL PHASING
TMP-4.01 THRU TMP-4.16	DETAIL SHEETS

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



3612 Griffice Mill Road, Raleigh, NC 27610
NC License No. P-1116

APPROVED: *Matthew Thigpen*

DATE: 10/3/2024

SEAL



TIP PROJECT: U-3422A

9/4/2024
pw:\pwwdr-useas0\HDR_US_East_o\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422_U-3422A\TrafficControl\TCP\U3422_Tc_TMP01a.dgn
User:Matt Thigpen

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:

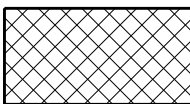
STD. NO.	TITLE
1101.01	WORK ZONE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGERS
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY - DRUMS
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE AND MULTILANE ROADWAYS
1205.04	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
1205.15	PAVEMENT MARKINGS - SUPERSTREETS
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

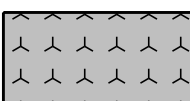
LEGEND

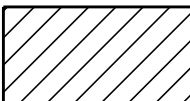
GENERAL

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

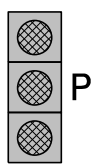
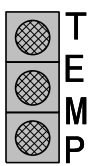
 WORK AREA

 REMOVAL

 ONGOING CONSTRUCTION

 WEDGING

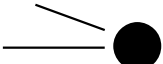
SIGNALS

-  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

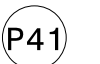
WHITE EDGELINE
-  P2

WHITE SOLID LANE LINE
-  P3

10' WHITE SKIP LINE
-  P4

3FT. - 9FT./SP WHITE MINISKIP
-  P5

2FT. - 6FT./SP WHITE MINISKIP
-  P10

YELLOW EDGELINE
-  P13

YELLOW DOUBLE CENTER
-  P41

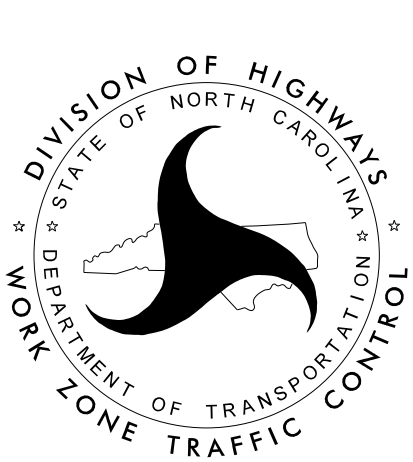
WHITE DIAGONAL
-  P42

YELLOW DIAGONAL
-  P61

WHITE STOPBAR
- PAINT (4")
- PAINT (4")
- PAINT (4")
- PAINT (4")
- PAINT (4")
- PAINT (4")
- PAINT (8")
- PAINT (8")
- PAINT (24")

APPROVED: *Matthew Thigpen*

DATE: 10/3/2024



ROADWAY STANDARD
DRAWINGS & LEGEND

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

9/5/2024
pw:\pwhdr\useas04\HDR_US_East_d\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422_T0JN6.0_CAD_BIM\6.2_Work_In_Progress\U-3422A\Traffic\TrafficControl\TCP\U3422_Tc_TMP02.dgn
User:Matt.Thigpen

MANAGEMENT STRATEGIES

PHASE 1, STEP 1: CAMDEN ROAD (-L-) WILL REMAIN IN THE EXISTING PATTERN AND PERMANENT PAVEMENT WILL BE CONSTRUCTED AWAY FROM TRAFFIC, AND UTILIZING LANE CLOSURES/NARROWING AS NEEDED.

PHASE 1, STEP 2: TRAFFIC WILL BE SHIFTED AND CROSS DRAIN CONSTRUCTION WILL BEGIN.

PHASE 1, STEP 3: TRAFFIC WILL BE SHIFTED AND ALL REMAINING CROSS DRAIN CONSTRUCTION WILL BE COMPLETED.

PHASE 2: SHIFT ALL TRAFFIC TO FINAL ALIGNMENT AND CLOSE INTERIOR LANES. COMPLETE ALL REMAINING CONSTRUCTION INCLUDING MEDIAN ISLANDS AND MEDIAN CURB & GUTTER.

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
CAMDEN ROAD (-L-)	MONDAY - FRIDAY 6:00 A.M. - 9:00 A.M. AND 4:00 P.M. - 7:00 P.M.

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

ROAD NAME
CAMDEN ROAD (-L-)
HOLIDAY
1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR’S, BETWEEN THE HOURS OF 6:00 A.M. DECEMBER 31st TO 7:00 P.M. JANUARY 2ND. IF NEW YEAR’S DAY IS ON A FRIDAY,SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 P.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 7:00 P.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE DAY AFTER INDEPENDENCE DAY. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY AND 7:00 P.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

C) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

D) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

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

WHEN PERSONNEL AND/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 ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRANSPORTATION MANAGEMENT PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

H) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

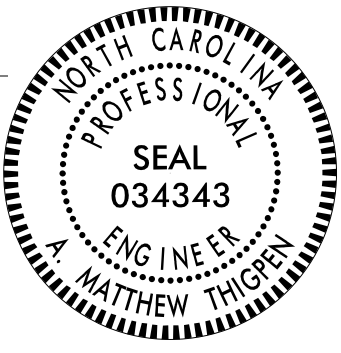
I) DO NOT INSTALL MORE THAN 1 MILE OF LANE CLOSURE ON CAMDEN ROAD MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.

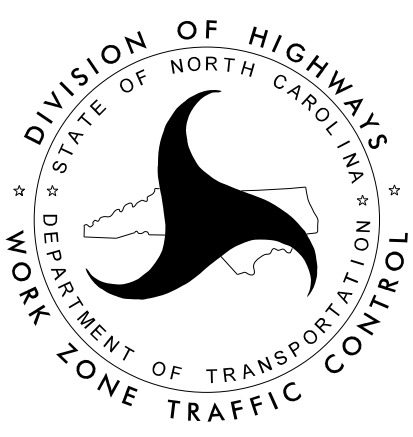
J) DO NOT INSTALL MORE THAN TWO SIMULTANEOUS LANE CLOSURE IN ANY ONE DIRECTION ON CAMDEN ROAD.

K) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING.

PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-1B



APPROVED: *Matthew Thigpen*
DATE: 10/3/2024

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



TRANSPORTATION OPERATIONS
PLAN: (MANAGEMENT STRATEGIES
AND GENERAL NOTES)

9/5/2024
pw:\pwhdr\users\HDr_US_East_d\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422_T0\N6.0_CAD_BM\6.2_Work_In_Progress\U-3422A\TrafficControl\TCP\U3422_Tc_TMP02.dgn
User:Matt_Thigpen

GENERAL NOTES

PAVEMENT EDGE DROP OFF REQUIREMENTS

L) 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.

M) 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.

TRAFFIC PATTERN ALTERATIONS

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

SIGNING

O) 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.

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

PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

Q) 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 OFF-SITE DETOUR WHEN THE DETOUR IS NOT IN OPERATION.

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

S) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 500 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

T) 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.

U) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A 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

V) 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.

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

X) 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

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

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	TEMPORARY RAISED

AA) 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.

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 EXISTING AND PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO REMOVAL AND INSTALLATION. PLACE CONES TO DELINEATE ANY EXISTING AND PROPOSED MONOLITHIC ISLANDS AFTER REMOVAL AND BEFORE INSTALLATION.

MISCELLANEOUS

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

FF) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 500 FT AND 1,000 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OR ROADWAY ALONG UNPAVED AREAS.

GG) PLACE DRUMS ALONG ALL DRIVEWAYS TO PREVENT TRAFFIC FROM ENTERING ACTIVE CONSTRUCTION AREAS.

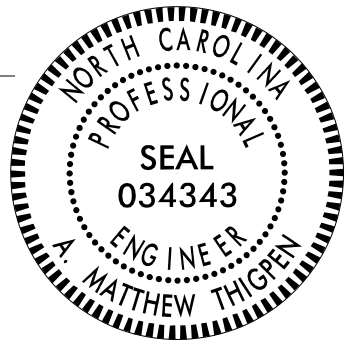
HH) CONTRACTOR SHALL MAINTAIN SIDEWALK ACCESS AT ALL TIMES AS STATED IN THE PHASING. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TEMPORARY SIDEWALKS (CONCRETE, ASPHALT, OR OTHER SUITABLE MATERIAL AS APPROVED BY THE ENGINEER) AT ALL LOCATIONS WHERE THE OPEN PEDESTRIAN TRAVELWAY HAS BEEN REMOVED FOR CONSTRUCTION OPERATIONS (UTILITIES, DRAINAGE, ETC.)

LOCAL NOTES

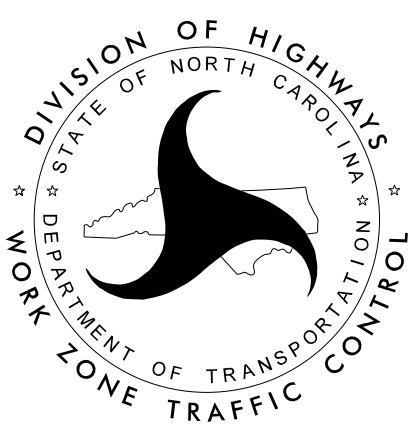
LN-1 PARTIALLY CONSTRUCT DRAINAGE BOX FOR PROPOSED D.I. OR C.B. TO AN INTERIM ELEVATION BELOW GRADE, COVER WITH TEMPORARY TRAFFIC BEARING COVER, BACKFILL AND PATCH PAVEMENT. BEFORE REOPENING TO TRAFFIC. INSTALL PORTABLE 48"X48" SIGNS "STEEL PLATE AHEAD" (W8-24) 500 FT IN ADVANCE OF A BEARING COVER PLATE. SWEEP THE ROAD OF ANY LOOSE GRAVEL STONE AT THE END OF EACH WORK PERIOD.

APPROVED: *Matthew Thigpen*

DATE: 10/3/2024



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



TRANSPORTATION OPERATIONS
PLAN: (MANAGEMENT STRATEGIES
AND GENERAL NOTES)

Docusign Envelope ID: C78E669A-7407-46F5-95E3-CBC689465841

9/5/2024
pw:\pwhdr\seas04\HDR_US_East_d\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422_TO\N6.0_CAD_BM\6.2_Work_In_Progress\U-3422A\TrafficControl\TCP\U3422_Tc_TMP02a.dgn
User:Matt Thigpen

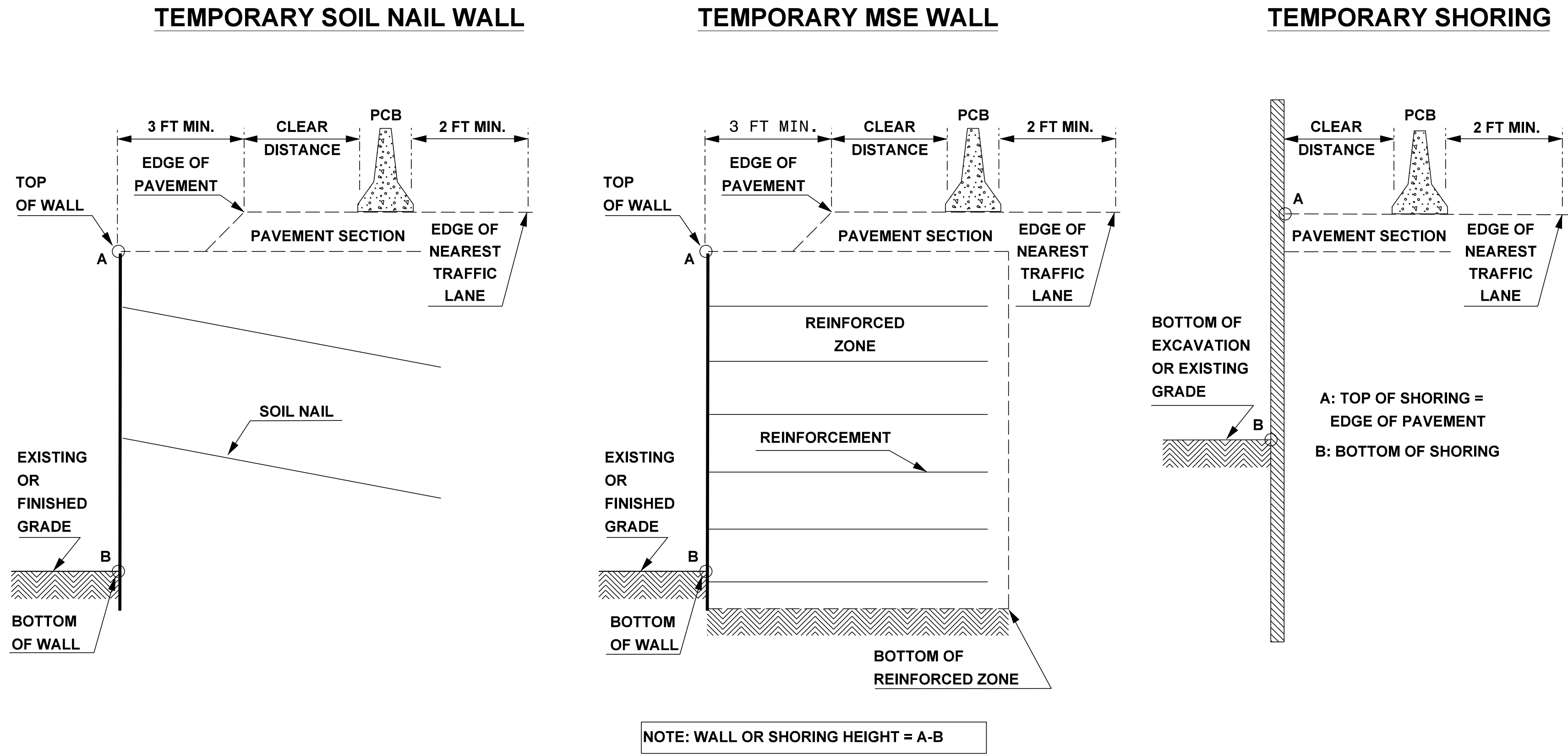


FIGURE A

NOTES

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

PROJ. REFERENCE NO.

U-3422A

SHEET NO.

TMP-2

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

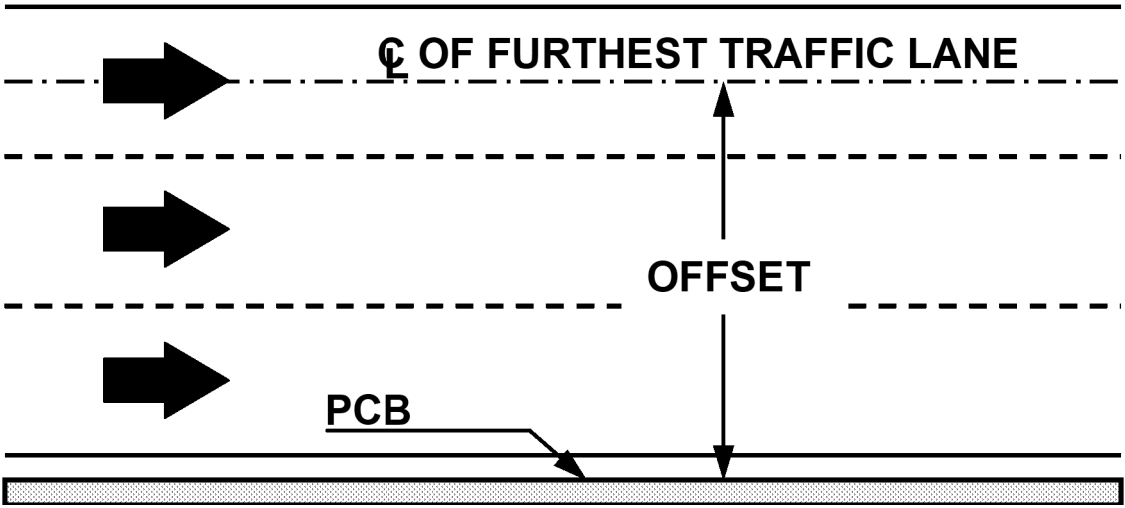


FIGURE B

APPROVED: *Matthew Thigpen*

DATE: 10/3/2024

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PORTABLE CONCRETE BARRIER
AT
TEMPORARY SHORING LOCATIONS

12/6/2024
pw:\\pwhdruseas04\\HDR_US_East_01\\Documents\\NCDOT\\2015_NCDOT_East_Reg_Div_Planning_Design\\LSA\\NCDOT-U-3422_TO\\N6.0_CAD_BM\\6.2_Work_In_Progress\\U-3422A\\Traffic\\TrafficControl\\TCP\\U3422_TC_TMP02B.dgn
User:Matt.Thigpen

PROJ. REFERENCE NO.	SHEET NO.
U - 3422A	TMP - 2A



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 -L- 77+45 ±, 11.9 FT LT, TO STATION -L- 77+75 ±, 11.9 FT LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:
UNIT WEIGHT (γ) = 120 PCF
FRICTION ANGLE (ϕ) = 30 DEGREES
COHESION (c) = 0 PSF
GROUNDWATER ELEVATION = 160' ±

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION -L- 77+45 ±, 11.9 FT LT, TO STATION -L- 77+75 ±, 11.9 FT LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 77+45 ±, 11.9 FT LT, TO STATION L- 77+75 ±, 11.9 FT LT.

Shoring Location No. 10

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 -L- 77+45 ±, 9.9 FT LT, TO STATION -L- 77+75 ±, 9.9 FT LT, FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:
UNIT WEIGHT (γ) = 120 PCF
FRICTION ANGLE (ϕ) = 30 DEGREES
COHESION (c) = 0 PSF
GROUNDWATER ELEVATION = 160'±

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION -L- 77+45 ±, 4.75' FT RT, TO STATION -L- 77+75 ±, 9.9 FT LT. SEE GEOTECHNICAL STANDARD DETAIL NO. 1801.02 FOR STANDARD TEMPORARY SHORING.

DO NOT USE *CANTILEVER*, *BRACED* and/or *ANCHORED* SHORING FOR TEMPORARY SHORING FROM STATION -L- 77+45 ±, 9.9 FT LT, TO STATION -L- 77+75 ±, 9.9 FT LT.

THE TEMPORARY SHORING NOTES SHOWN ON THIS SHEET WERE PROVIDED THROUGH SEALED DOCUMENTS FROM THE GEOTECHNICAL ENGINEERING UNIT. THE DOCUMENTS WERE SUBMITTED TO THE WZTC SECTION ON DECEMBER 05, 2024 AND SEALED BY PROFESSIONAL ENGINEER, JINYOUNG PARK, P.E., LICENSE # 32171

APPROVED:

DocuSigned by:
Matthew Thigpen
72022B5FD316433...

DATE: 12/6/2024

SEAL
034343
ENGINEER
MATTHEW THIGPEN

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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

TEMPORARY SHORING NOTES

PHASING

NOTES:
BEFORE BEGINNING ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES. FIELD VERIFY LOCATIONS WITH THE RESIDENT ENGINEER PRIOR TO INSTALLATION.

MAINTAIN VEHICULAR ACCESS TO ALL RESIDENCES AND BUSINESSES DURING THE LIFE OF THE CONTRACT, UNLESS OTHERWISE NOTED IN THE PHASING PLANS OR DIRECTED BY THE RESIDENT ENGINEER.

COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT NO PONDING OF WATER WILL OCCUR WITHIN THE TRAVEL LANE.

WHEN USING LANE CLOSURES (RSD 1101.02), RETURN TRAFFIC TO EXISTING AND/OR TEMPORARY TRAFFIC PATTERN UPON ACTIVITIES COMPLETION, UNLESS OTHERWISE NOTED IN THE PHASING PLANS.

WHEN PHASING STATES TO USE LANE CLOSURES, REFER TO THE FOLLOWING FOR ALL EXISTING AND PROPOSED ROADS:

-ALL TWO-LANE/TWO-WAY FACILITIES SEE RSD 1101.02 SHEET 1 OF 19. AUTOMATED FLAGGER ASSISTANCE DEVICES MAY BE USED, SEE PROJECT SPECIAL PROVISIONS.

-ALL 3-LANE OR 5-LANE ROADWAYS SEE RSD 1101.02 SHEET 2 OF 19

-ALL MULTI-LANE FACILITIES POSTED < 60 MPH SEE RSD 1101.02 SHEET 3 OF 19

-ALL MULTI-LANE FACILITIES POSTED > 60 MPH SEE RSD 1101.02 SHEET 4 OF 19

-ALL ENTRANCE AND EXIT RAMPS SEE RSD 1101.02 SHEETS 10 AND 11 OF 19

COMPLETE PAVING UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE UNTIL STATED TO PLACE FINAL LAYER IN THE PHASING PLANS.

WHEN WEDGING OVER EXISTING PAVEMENT, WEDGE TO PROPOSED ELEVATION (LESS THE FINAL LAYER OF SURFACE COURSE), OR WEDGE AS NEEDED TO MAINTAIN TRAFFIC. MAINTAIN POSITIVE DRAINAGE AND MAINTAIN A MAXIMUM 0.04 ROLLOVER IN BOTH EXISTING AND/OR TEMPORARY TRAVEL LANES.

REPLACE MARKINGS AND RETURN TRAFFIC TO THE CURRENT TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD UNLESS OTHERWISE NOTED IN THE PHASING OR DIRECTED BY THE ENGINEER.

FOR ALL SHOULDER CLOSURES, SEE RSD 1101.04. WHEN PORTABLE CONCRETE BARRIER (PCB) IS PRESENT ON SHOULDERS, PLACE SHOULDER CLOSURE SIGNS & DEVICES IN ADVANCE OF PCB.

PHASE 1

STEP 1: (SEE TMP-4.01 THRU TMP-4.07)

USING LANE CLOSURES AS NEEDED, WEDGE EXISTING PAVEMENT NECESSARY TO MAINTAIN POSITIVE DRAINAGE DURING WIDENING OPERATIONS AND CONSTRUCT 4' OF PAVEMENT WIDENING FROM -L- STA. 76+58 +/- TO STA. 78+54 +/- FOR PLACEMENT OF ANCHORED PCB. INSTALL ANCHORED PCB AS SHOWN ON TMP-4.05.

STEP 2: (SEE TMP-4.05)

BEHIND BARRIER AND AWAY FROM TRAFFIC, COMPLETE CONSTRUCTION OF STAGE 1 OF PROPOSED DRAINAGE PIPE AT THE FOLLOWING LOCATION:

- -L- STA. 77+60 +/-

NOTE: WEDGE AS NEEDED TO MAINTAIN SMOOTH TRANSITION FROM PROPOSED TO EXISTING.

STEP 3: (SEE TMP-4.01 THRU TMP-4.07)

AWAY FROM TRAFFIC AND USING LANE CLOSURES AS NEEDED, BEGIN CONSTRUCTION OF THE FOLLOWING:

- -L- STA. 29+59 +/- TO STA. 114+75 +/- (LEFT SIDE)
- -L- STA. 29+59 +/- TO STA. 114+75 +/- (RIGHT SIDE)

AWAY FROM TRAFFIC AND USING LANE CLOSURES AS NEEDED, COMPLETE CONSTRUCTION THE FOLLOWING:

- -L- STA. 74+24 +/- TO STA. 81+14 +/- (LEFT SIDE)
- TEMP. PAVEMENT FROM -L- STA. 76+04 +/- TO STA. 79+06 +/-

NOTE: TEMPORARY SIGNAL AT THE INTERSECTION OF -L- (CAMDEN ROAD) AND -Y1- (WALDOS BEACH ROAD) WILL BE REQUIRED FOR THE PHASE 1, STEP 3 TRAFFIC PATTERN.

STEP 4: (SEE TMP-4.08)

USING LANE CLOSURES AS NEEDED, PLACE TEMPORARY PAVEMENT MARKINGS FOR CROSSOVERS, SHIFT TRAFFIC, AND RESET ANCHORED PCB INSTALLED IN PHASE 1, STEP 1.

THE CONTRACTOR SHALL PERFORM PHASE 1, STEP 5 IN 7 CONSECUTIVE CALENDAR DAYS PER DRAINAGE CROSS PIPE LOCATION, SEE INTERMEDIATE CONTRACT TIMES AND LIQUIDATED DAMAGES.

STEP 5: (SEE TMP-4.08)

BEHIND BARRIER AND AWAY FROM TRAFFIC, COMPLETE CONSTRUCTION OF STAGE 2 OF PROPOSED DRAINAGE PIPES AT THE FOLLOWING LOCATION:

- -L- STA. 77+60 +/-

NOTE: WEDGE AS NEEDED TO MAINTAIN SMOOTH TRANSITION FROM PROPOSED TO EXISTING.

NOTE: ADJUST SIGNAL PATTERNS AS NEEDED WHERE TRAFFIC PATTERNS ARE AFFECTED BY CROSSOVER.

STEP 6: (SEE TMP-4.09)

AWAY FROM TRAFFIC AND USING LANE CLOSURES AS NEEDED, REMOVE TEMP. PAVEMENT FROM -L- STA. 76+04 +/- TO STA. 79+06 +/- AND BEGIN CONSTRUCTION OF THE FOLLOWING:

- -L- STA. 75+25 +/- TO STA. 79+85 +/- (LEFT SIDE)

STEP 7:

AWAY FROM TRAFFIC AND USING LANE CLOSURES, COMPLETE CONSTRUCTION BEGUN IN STEP 3 AND STEP 6.

PHASE 2

STEP 1: (SEE TMP-4.10 THRU TMP-4.16)

USING LANE CLOSURES, PLACE TEMPORARY MARKINGS AND MARKERS AND SHIFT TRAFFIC TO THE PHASE 2 TRAFFIC PATTERN

ONCE TRAFFIC HAS BEEN SHIFTED, AWAY FROM TRAFFIC AND USING LANE CLOSURES AS NEEDED, CONSTRUCT REMAINING MONOLITHIC ISLANDS, MEDIAN ISLANDS AND REMAINDER OF CURB AND GUTTER:

NOTE: TEMPORARY SIGNAL AT THE INTERSECTION OF -L- (CAMDEN ROAD) AND -Y1- (WALDOS BEACH ROAD) WILL BE REQUIRED FOR THE PHASE 2, STEP 1 TRAFFIC PATTERN.

STEP 2:

USING LANE CLOSURES, PLACE TEMPORARY MARKINGS AND MARKERS IN THE FINAL PATTERN ON ALL ROADS, REMOVE BARRICADES AND OPEN TO THE FINAL TRAFFIC PATTERN (SEE FINAL PAVEMENT MARKING PLAN).

STEP 3:

USING LANE CLOSURES, CONSTRUCT THE FINAL LAYER OF SURFACE COURSE, THEN PLACE THE FINAL MARKINGS AND MARKERS AND RE-OPEN TO THE FINAL TRAFFIC PATTERN. (SEE FINAL PAVEMENT MARKING PLAN)

STEP 4:

REMOVE ALL ADVANCE WARNING SIGNS AND ALL REMAINING TRAFFIC CONTROL DEVICES.

PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-3



APPROVED:

DocuSigned by:
Matthew Thigpen
7202B5FD315433

DATE: 10/7/2024

PROFESSIONAL SEAL
034343
ENGINEER
MATTHEW THIGPEN

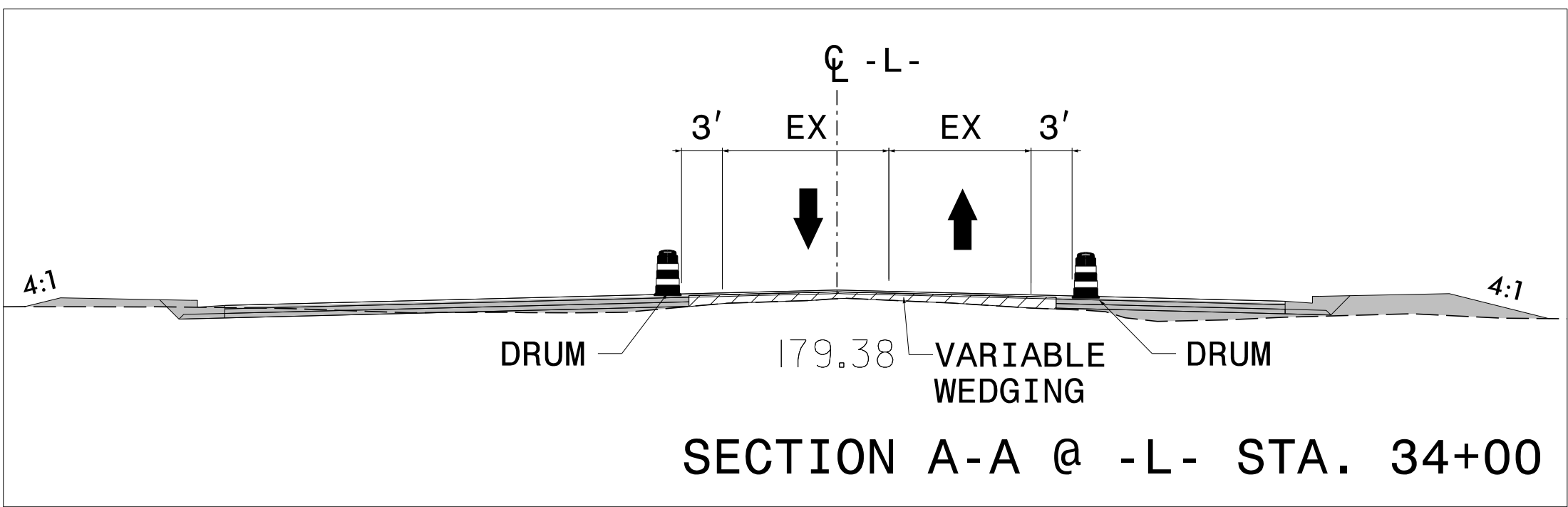
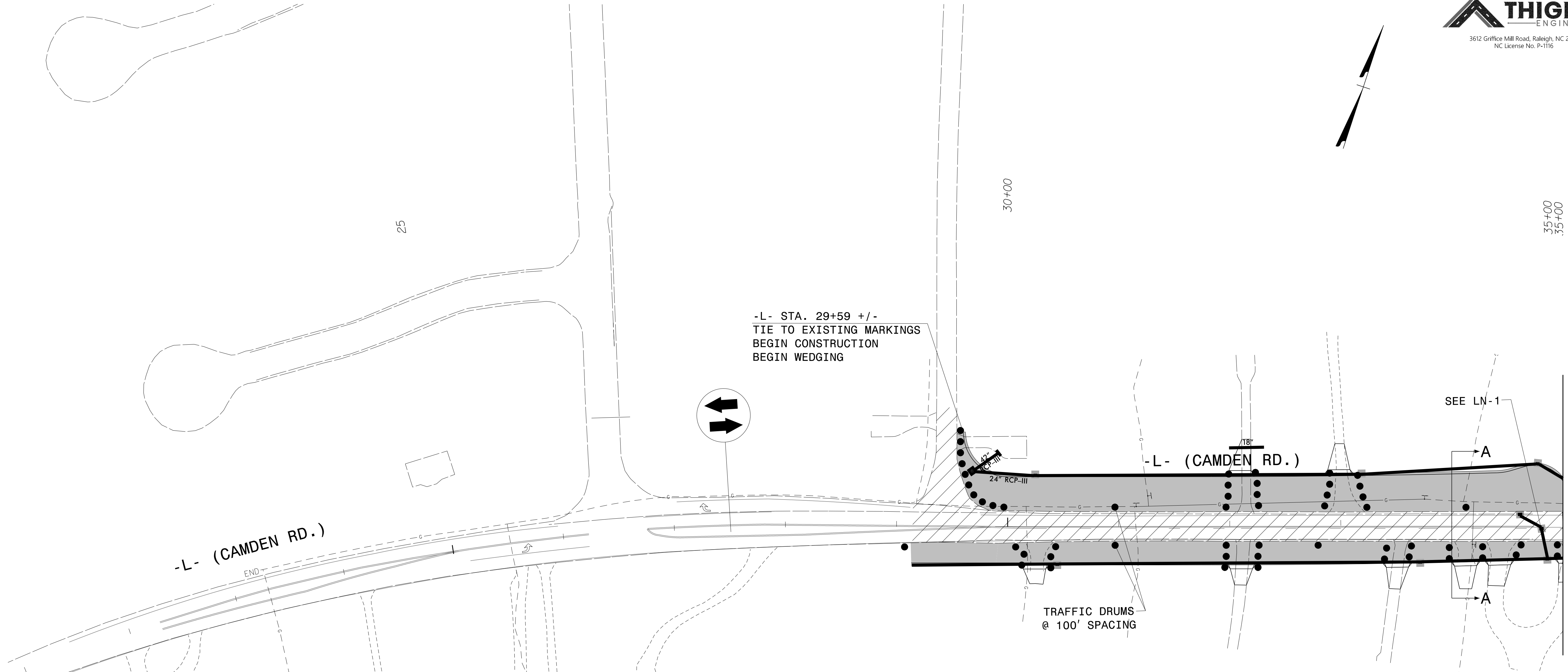
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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

TEMPORARY TRAFFIC
CONTROL PHASING

9/5/2024
pw:\pwhdr\useas04\HDR_US_East_01\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422_TO\N6.0_CAD_BIM\6.2_Work_In_Progress\U-3422A\Traffic\TrafficControl\TCP\U3422_TC_TMP04.dgn
User:Matt Thigpen

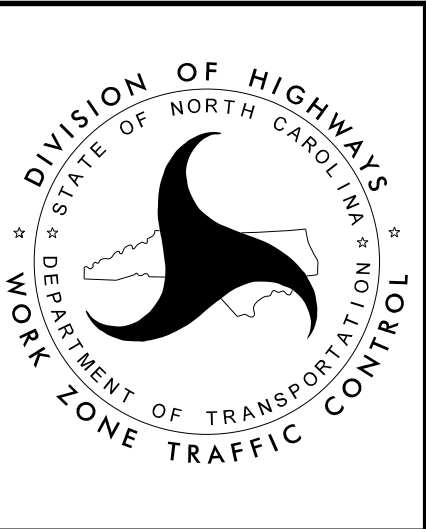
PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-4.01



APPROVED: *Matthew Thigpen*
DATE: 10/3/2024

SEAL
034343
ENGINEER
A. MATTHEW THIGPEN

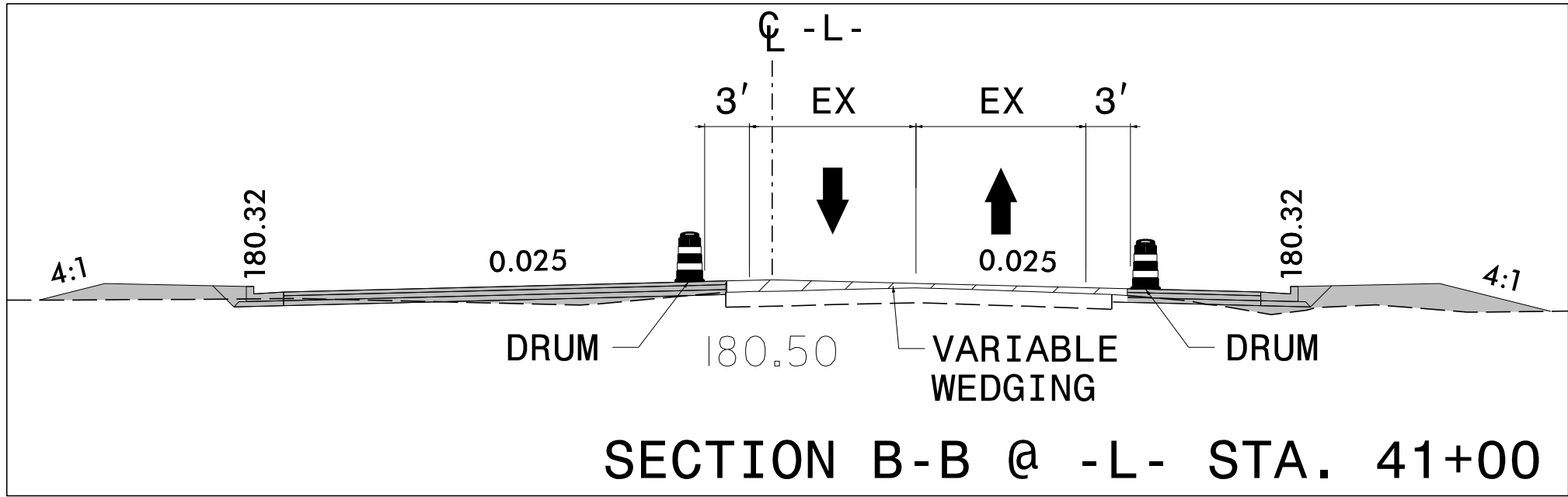
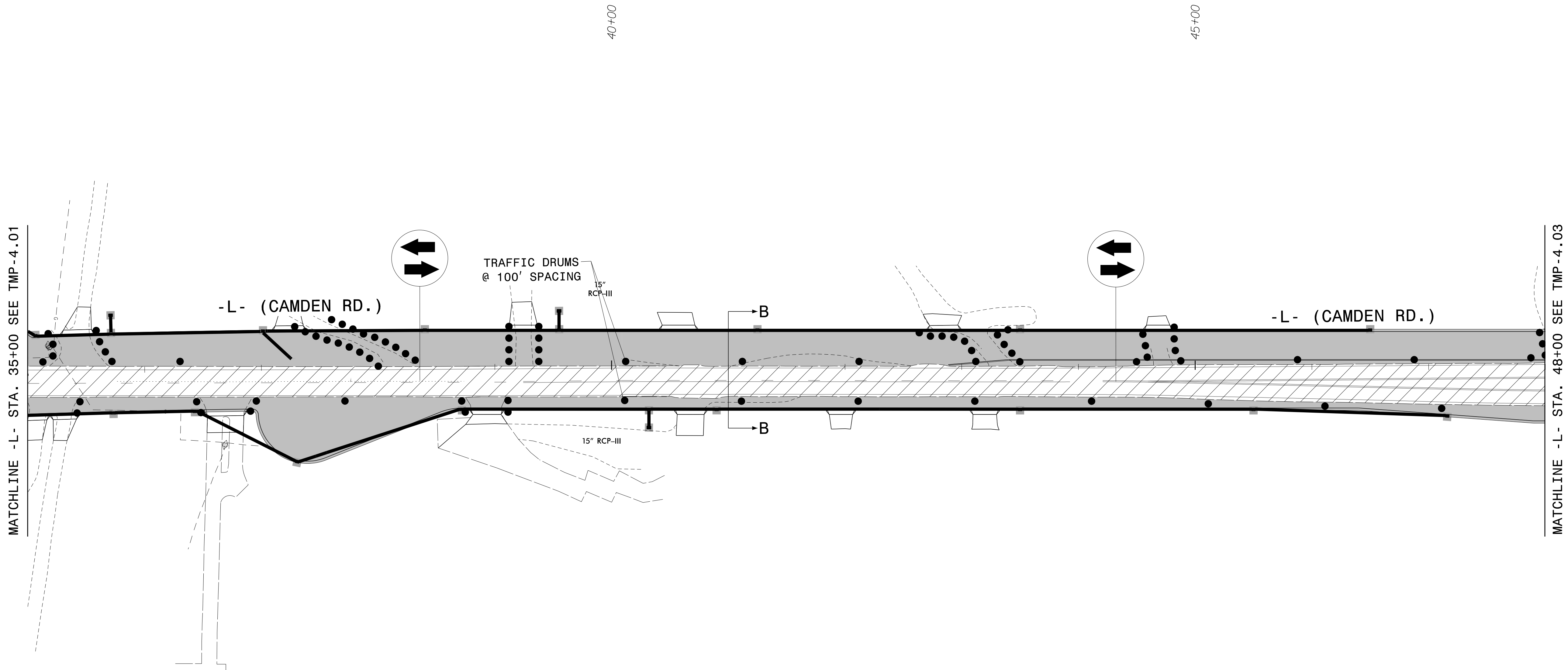
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



PHASE I, STEP 1 & 3

9/5/2024
pw:\pwhdruseas04\HDR_US_East_a\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422_TO_IN6.0_CAD_BM\6.2_Work_In_Progress\U-3422A\Traffic\TrafficControl\TCP\U3422_TC_TMP05.dgn
User:Matt Thigpen

PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-4.02

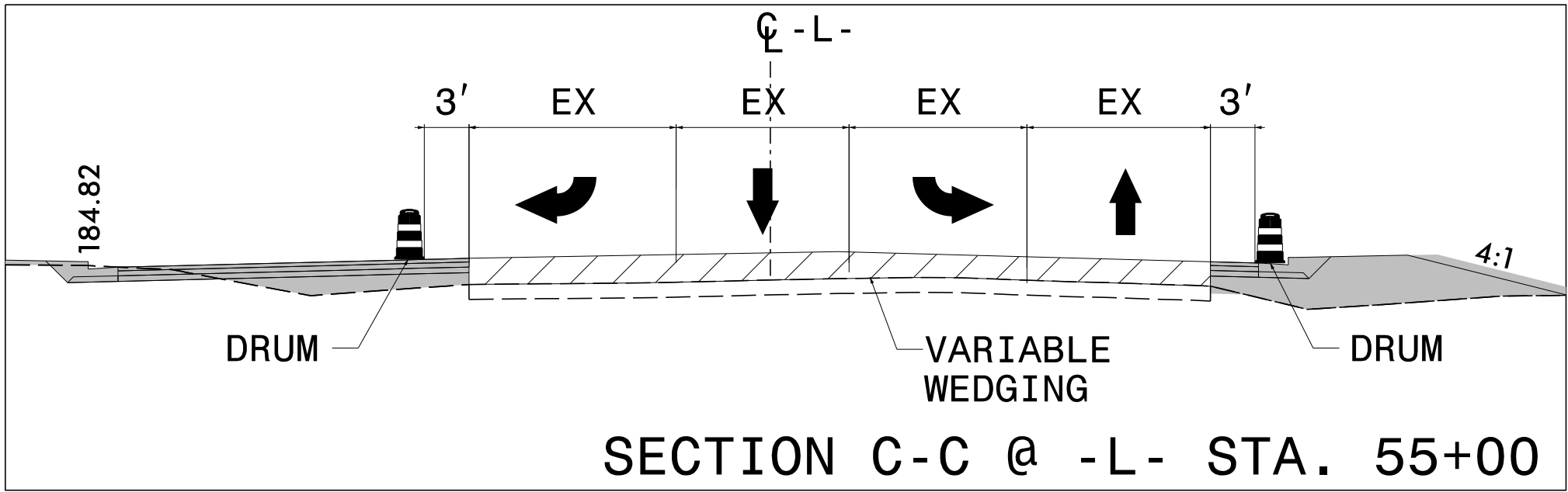
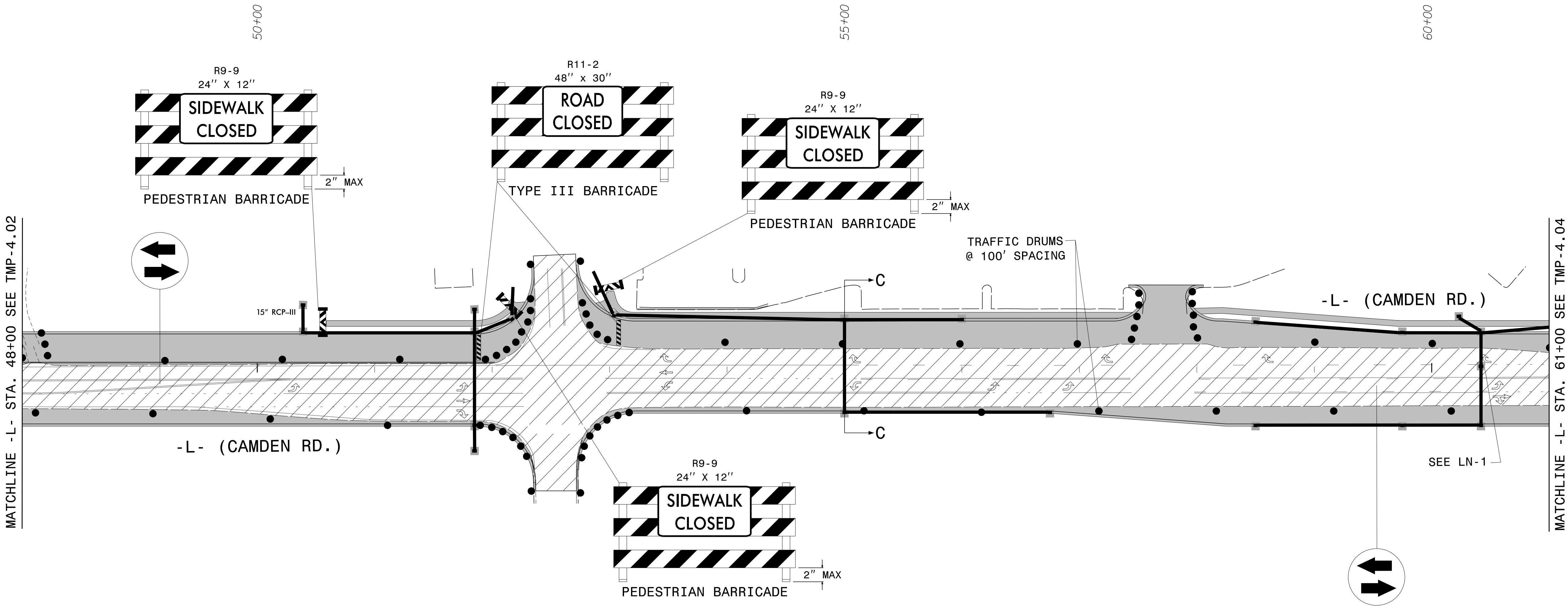


APPROVED: *Matthew Thigpen*
DATE: 10/3/2024

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PHASE I, STEP 1 & 3

PROJ. REFERENCE NO.	SHEET NO.
U - 3422A	TMP - 4 . 03

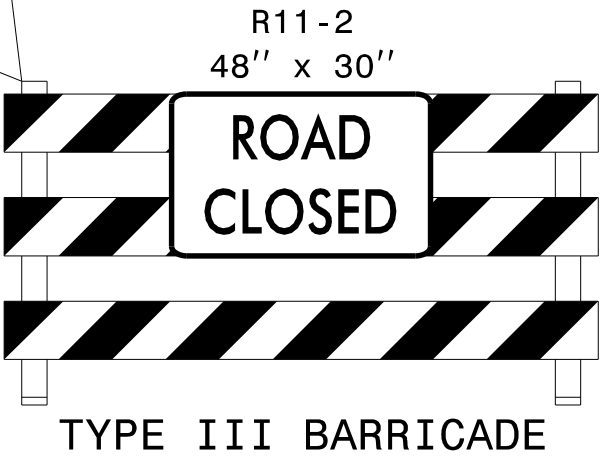
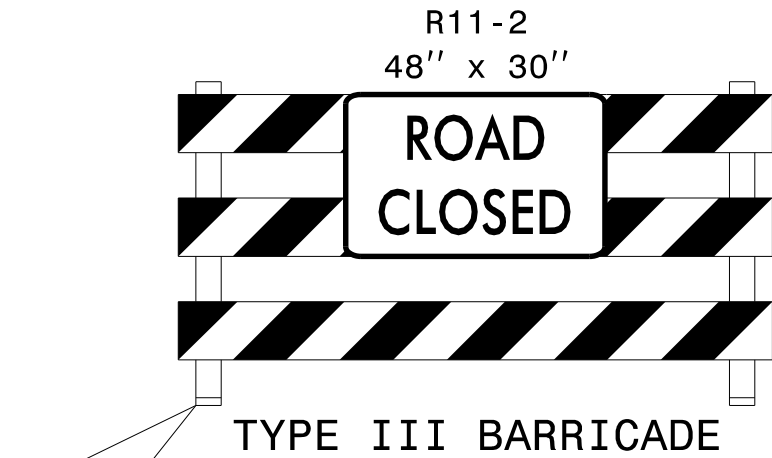
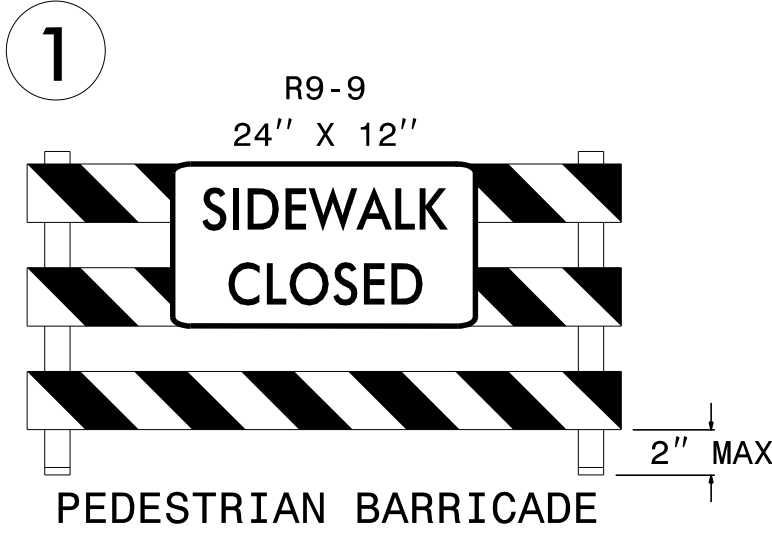
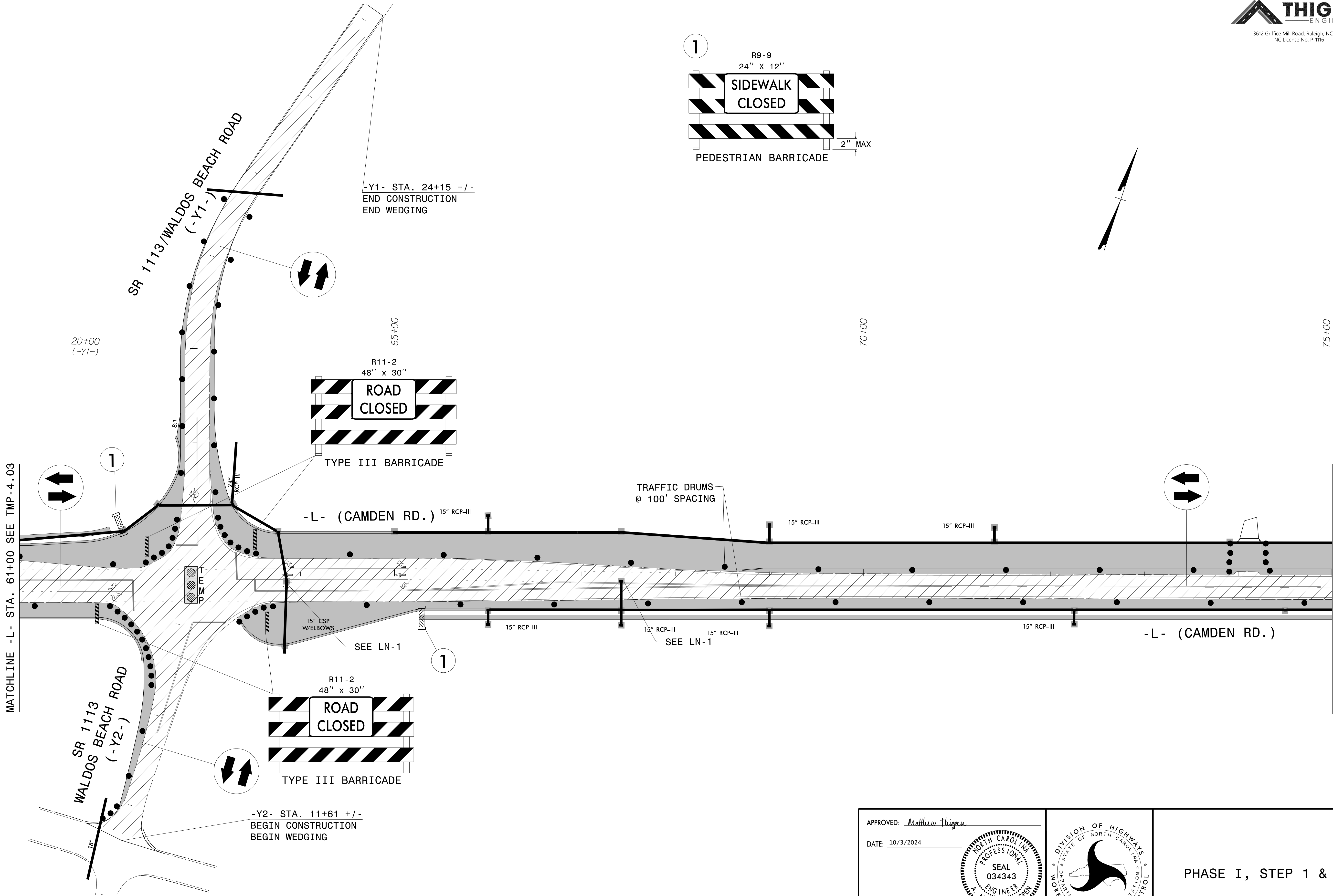


APPROVED: <i>Matthew Thigpen</i> DATE: 10/3/2024 		PHASE I, STEP 1 & 3
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

9/5/2024
pw:\pwwd\useas04\HDR_US_East_01\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design\U-3422A\TrafficControl\TCP\U3422_TC_TMP06.dgn
User:Matt Thigpen

9/5/2024
pw:\pwhdruseas01\HDR_US_East_01\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design\LSA\NCDOT-U-3422_TO\N6.0_CAD_BM\6.2_Work_In_Progress\U-3422A\Traffic\TrafficControl\TCP\U3422_TC_TMP07.dgn
User:Matt Thigpen

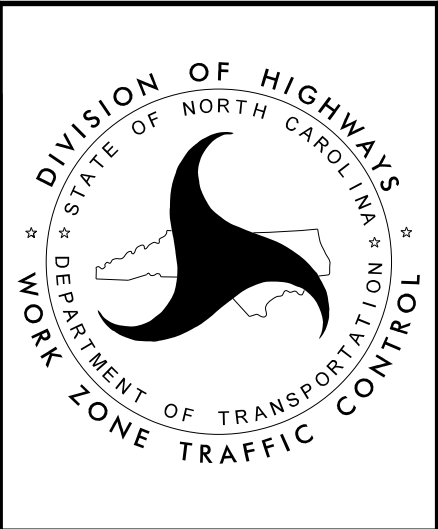
PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-4.04



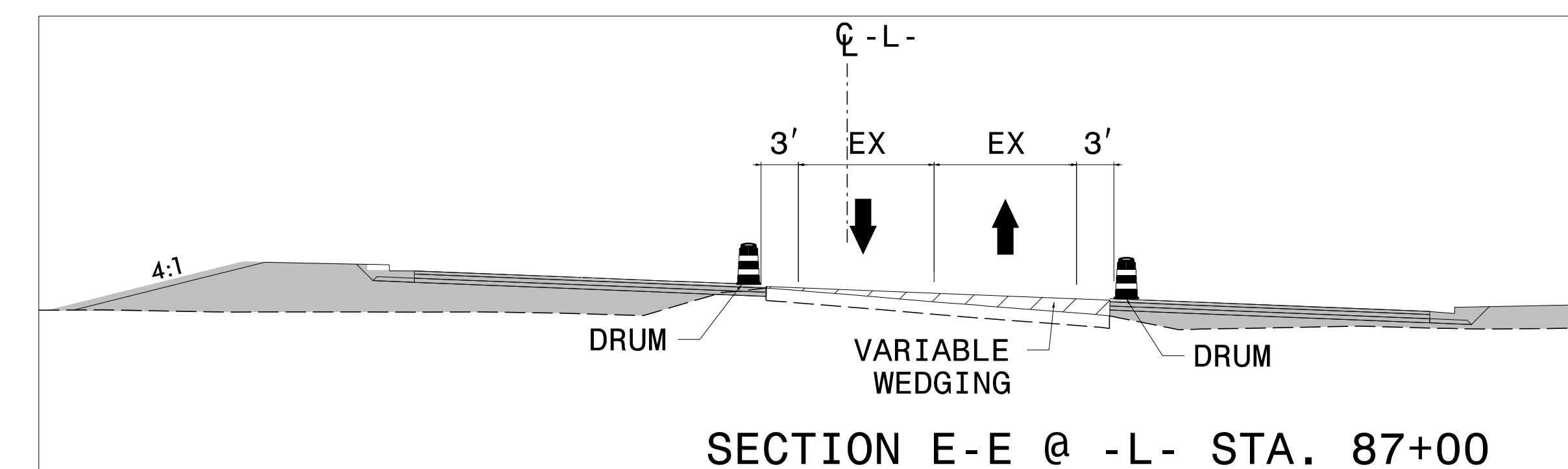
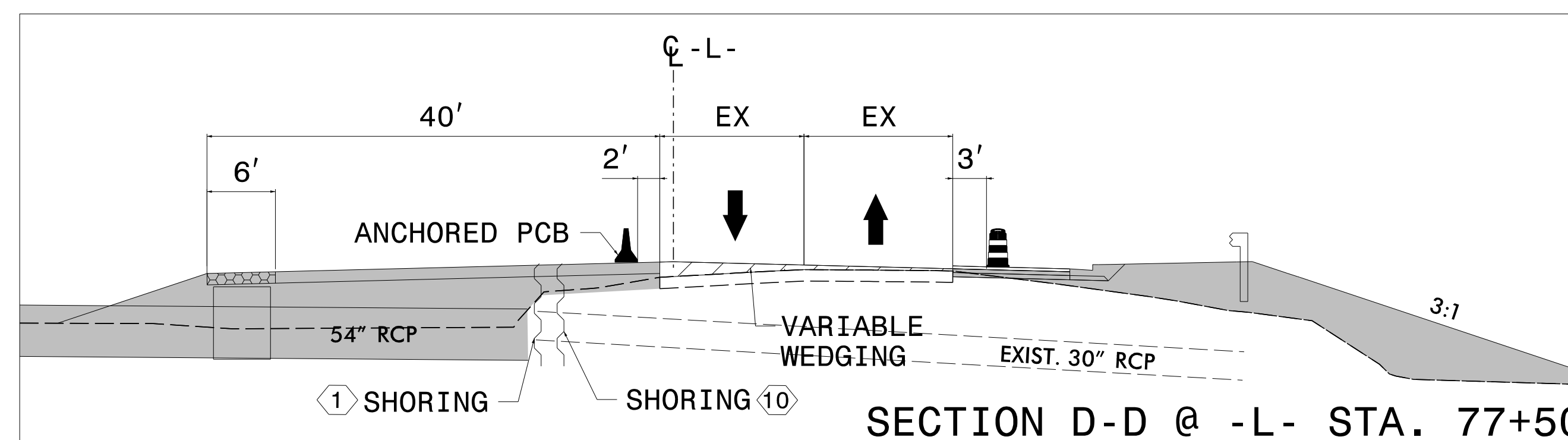
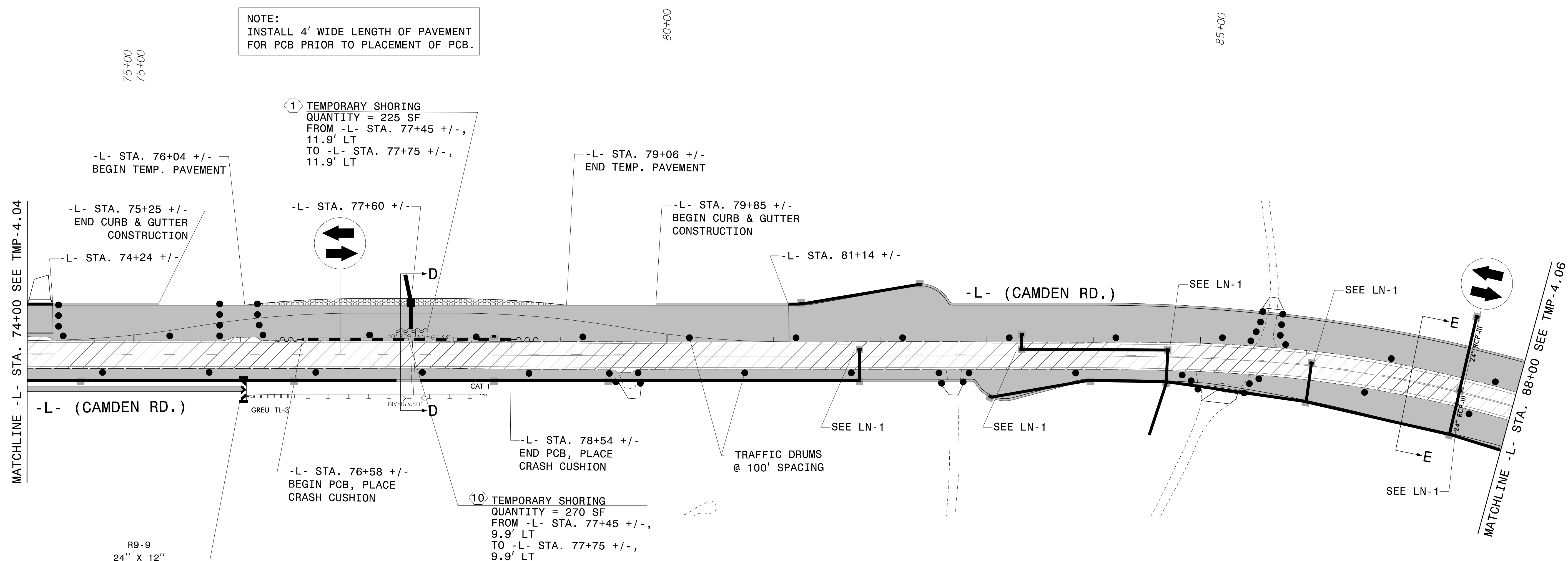
APPROVED: *Matthew Thigpen*

DATE: 10/3/2024

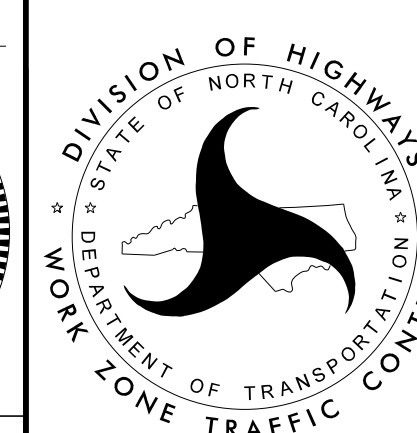
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



PHASE I, STEP 1 & 3



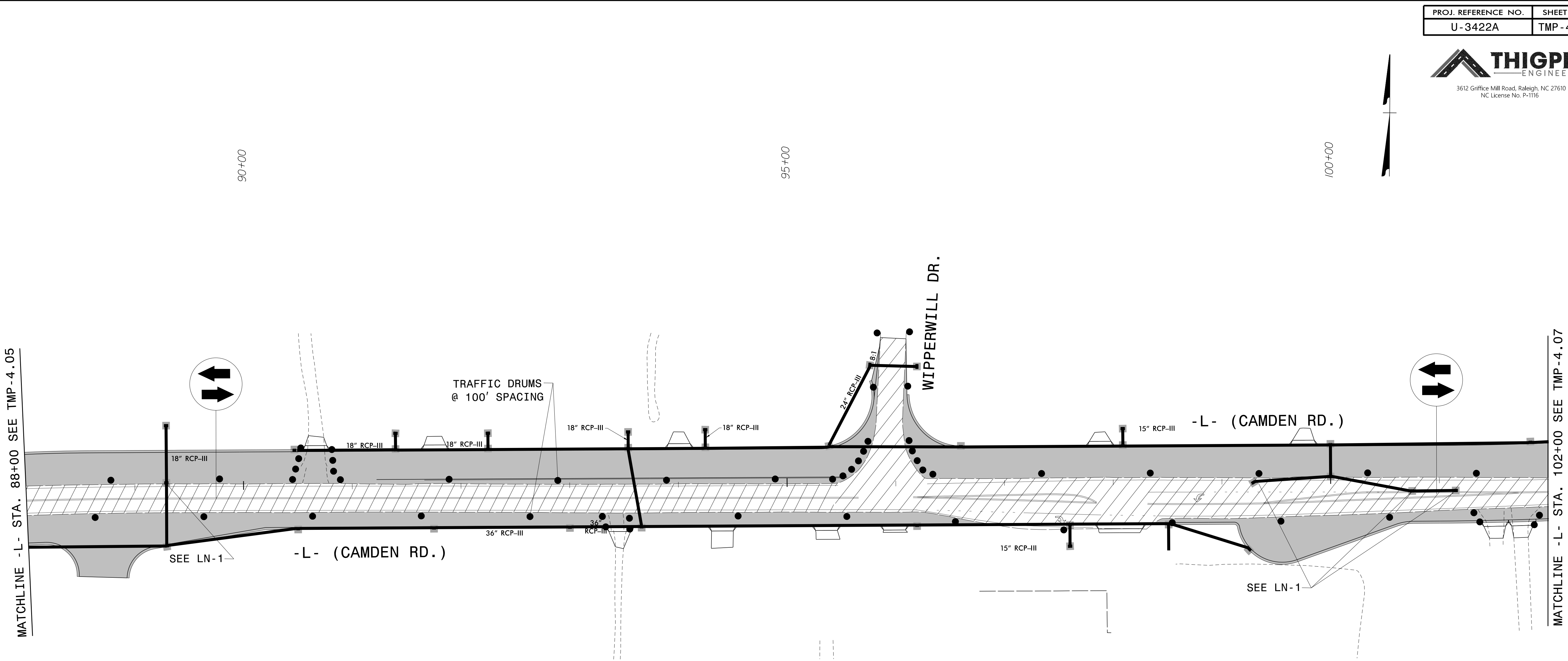
A circular professional engineer seal for the State of North Carolina. The outer ring contains the text "NORTH CAROLINA" at the top and "A. MATTHEW THIGPEN" at the bottom. The inner ring contains the text "PROFESSIONAL" at the top and "ENGINEER" at the bottom. In the center, the word "SEAL" is positioned above the license number "034343".



PHASE I, STEP 1 - 3

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

9/5/2024
pw:\pwwdruseas04\HDR_US_East_a\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422_TO\N6.0_CAD_BM\6.2_Work_In_Progress\U-3422A\Traffic\TrafficControl\TCP\U3422_TC_TMP09.dgn
User:Matt.Thigpen



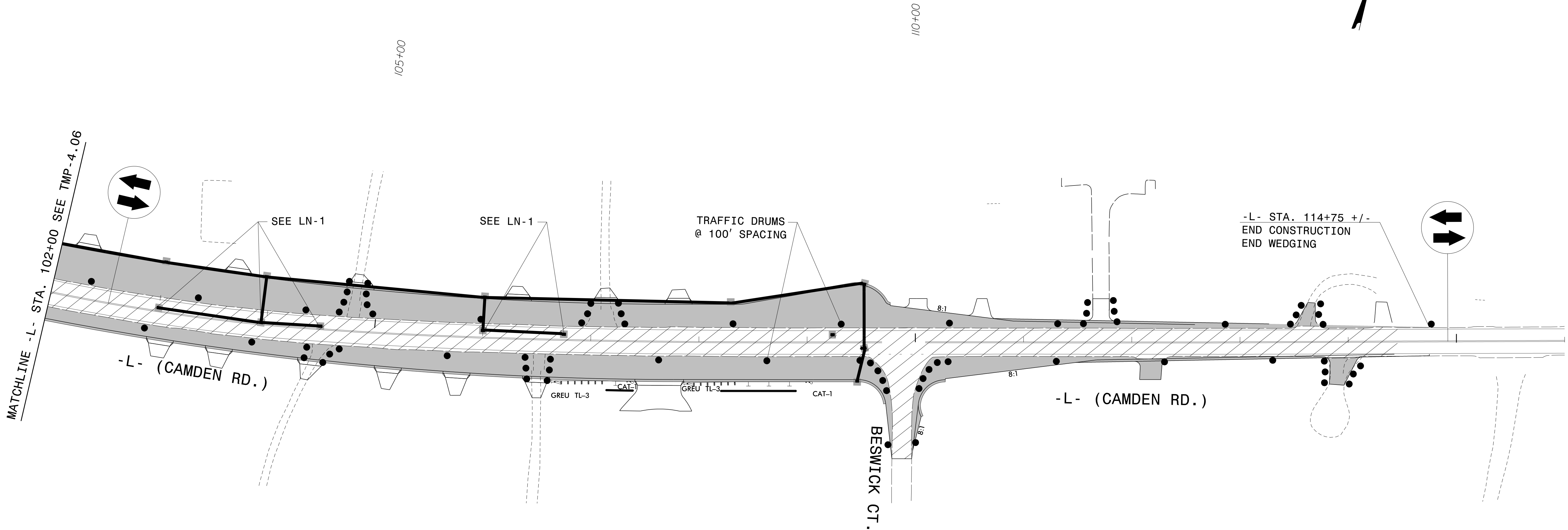
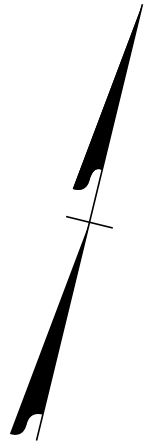
PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-4.06



APPROVED: <i>Matthew Thigpen</i> DATE: 10/3/2024 SEAL 034343 ENGINEER MATTHEW THIGPEN DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL	PHASE I, STEP 1 & 3
---	---	---------------------------------------

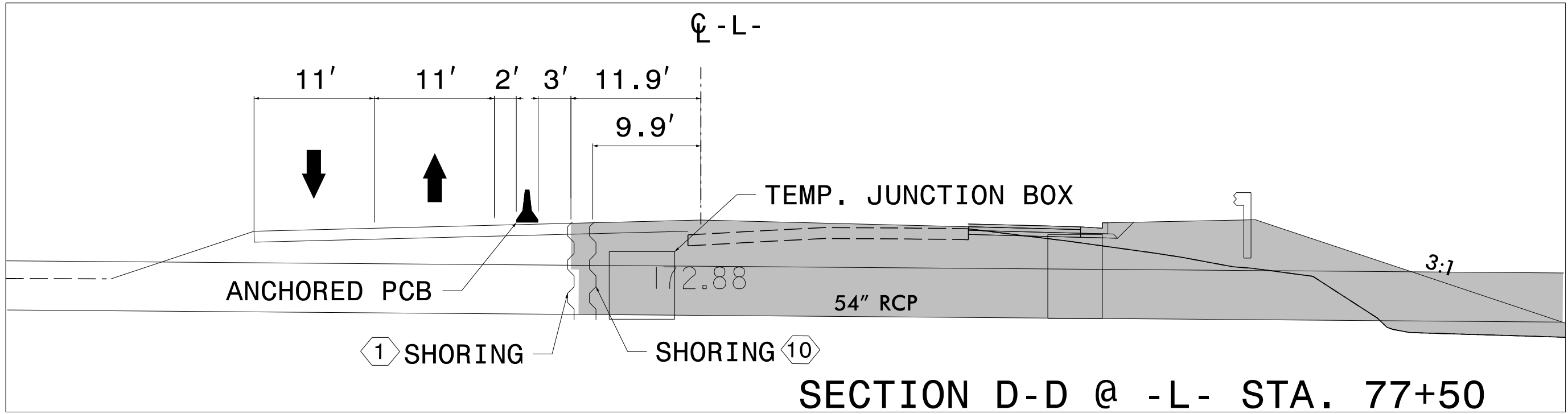
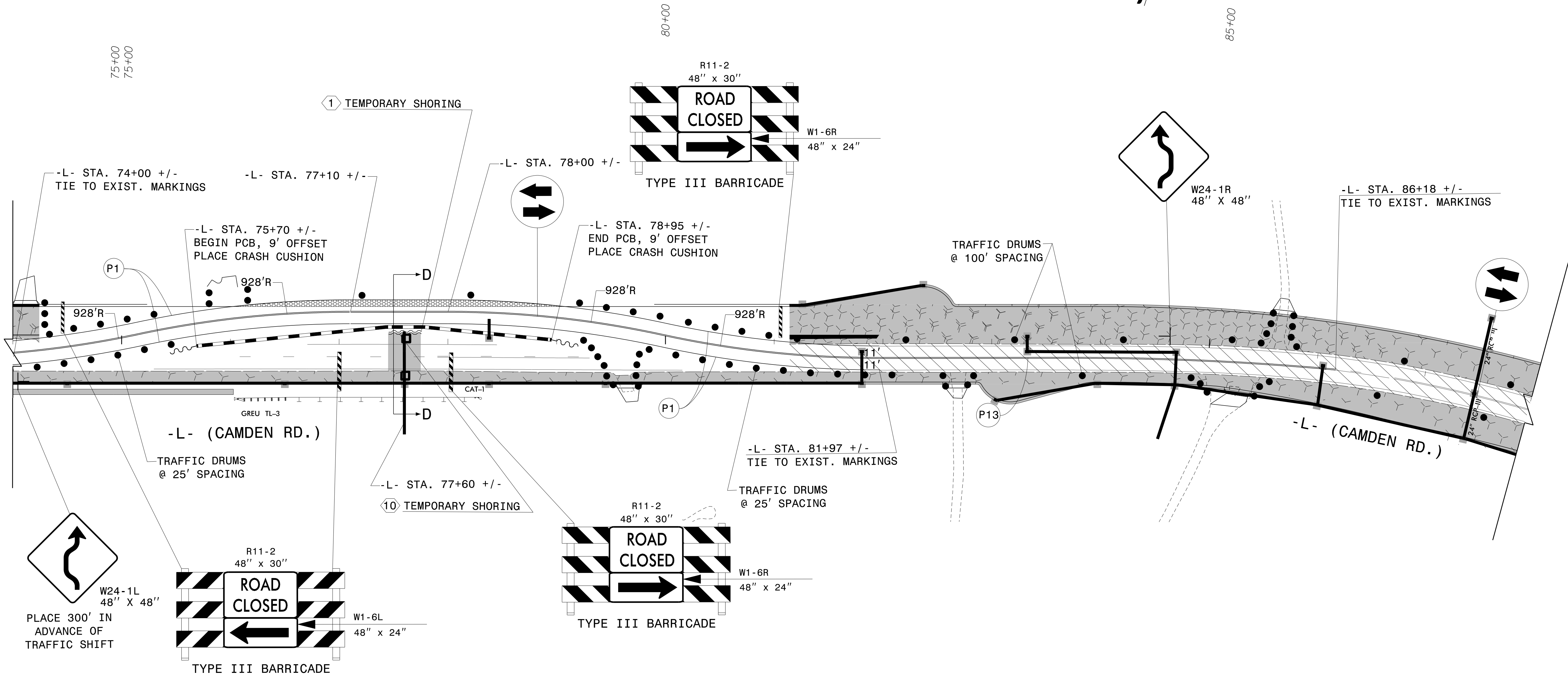
9/5/2024
pw:\pwhdruseas04\HDR_US_East_01\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422_TO\N6.0_CAD_BM\6.2_Work_In_Progress\U-3422A\Traffic\TrafficControl\TCP\U3422_TC_TMP10.dgn
User:Matt_Thigpen

PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-4.07



APPROVED: <i>Matthew Thigpen</i> DATE: 10/3/2024 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		PHASE I, STEP 1 & 3
--	---	--------------------------------

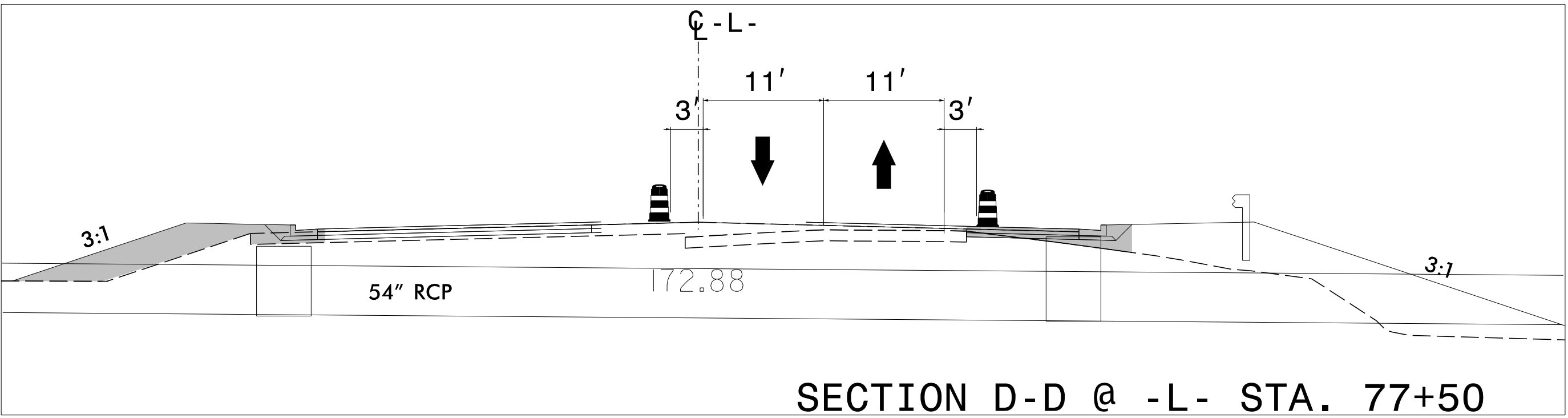
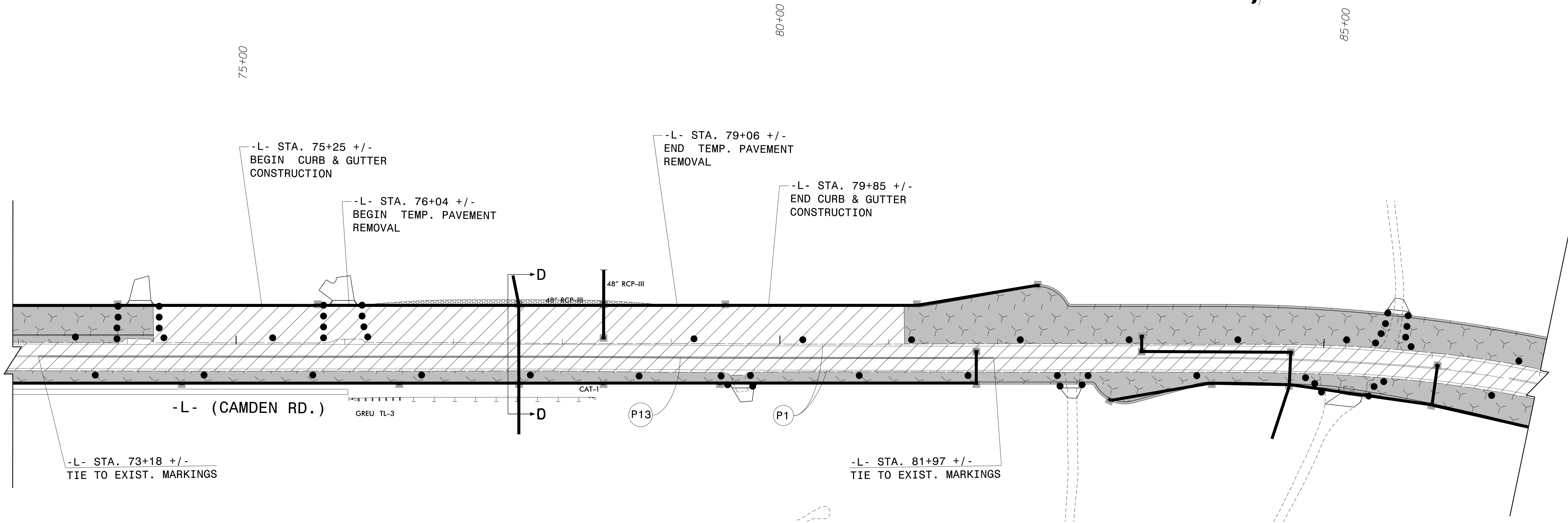
PROJ. REFERENCE NO.	SHEET NO.
U - 3422A	TMP - 4.08



APPROVED: <i>Matthew Thigpen</i> DATE: 10/3/2024		 PHASE I, STEP 4 & 5
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		

9/5/2024
pw:\pwr\useas01\HDR_US_East_d\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422A\Traffic\TrafficControl\TCP\U3422A_TC_TMP08b.dgn
User:Matt Thigpen

PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-4.09

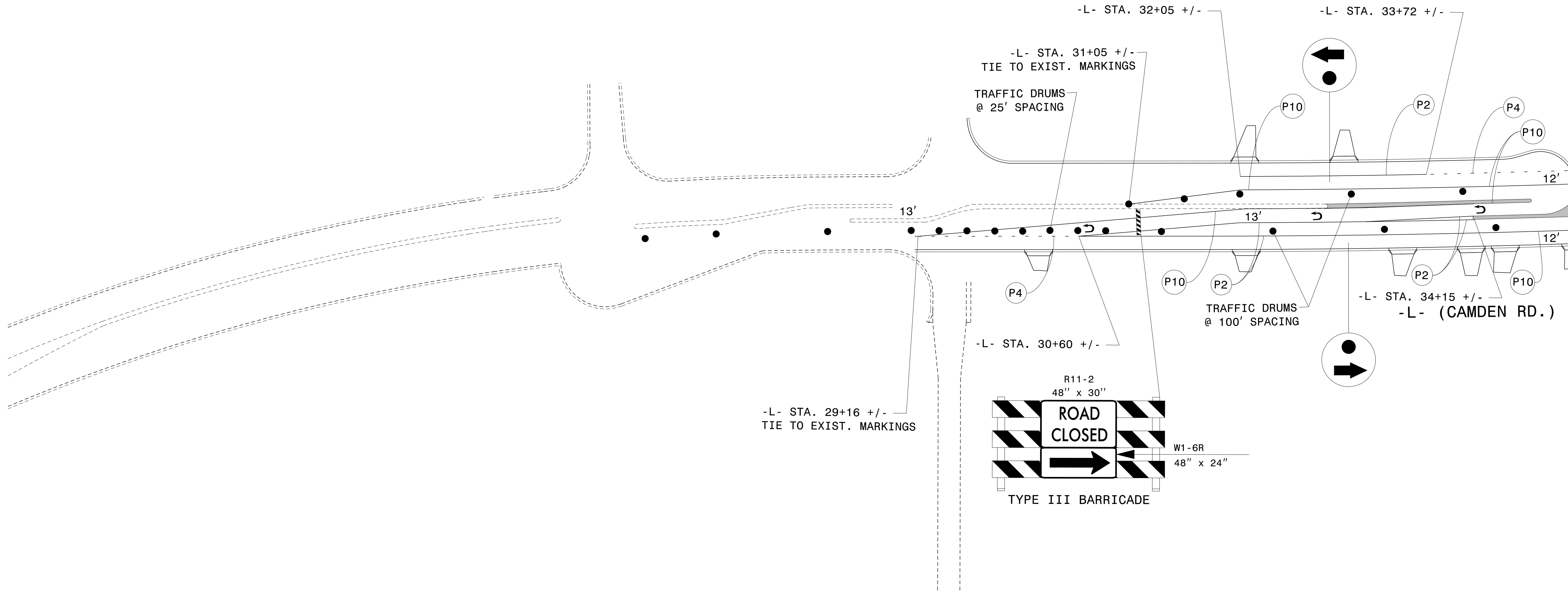
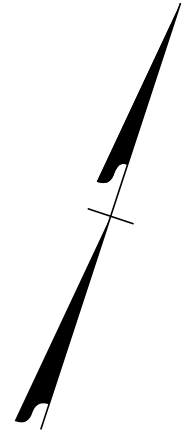


APPROVED: <i>Matthew Thigpen</i> DATE: 10/3/2024 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	 DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL	PHASE I, STEP 6
---	--	-----------------

9/26/2024
pw:\pwhdruseas04\HDR_US_East_01\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422_TO\N6.0_CAD_BM\6.2_Work_In_Progress\U-3422A\Traffic\TrafficControl\TCP\U3422_TC_TMP080c.dgn
User:Matt Thigpen

9/4/2024
pw:\pwhdruseas04\HDR_US_East_a\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design\LSA\NCDOT-U-3422_TO\N6.0_CAD_BM\6.2_Work_In_Progress\U-3422A\Traffic\TrafficControl\TCP\U3422_TC_TMP24.dgn
User:Matt Thigpen

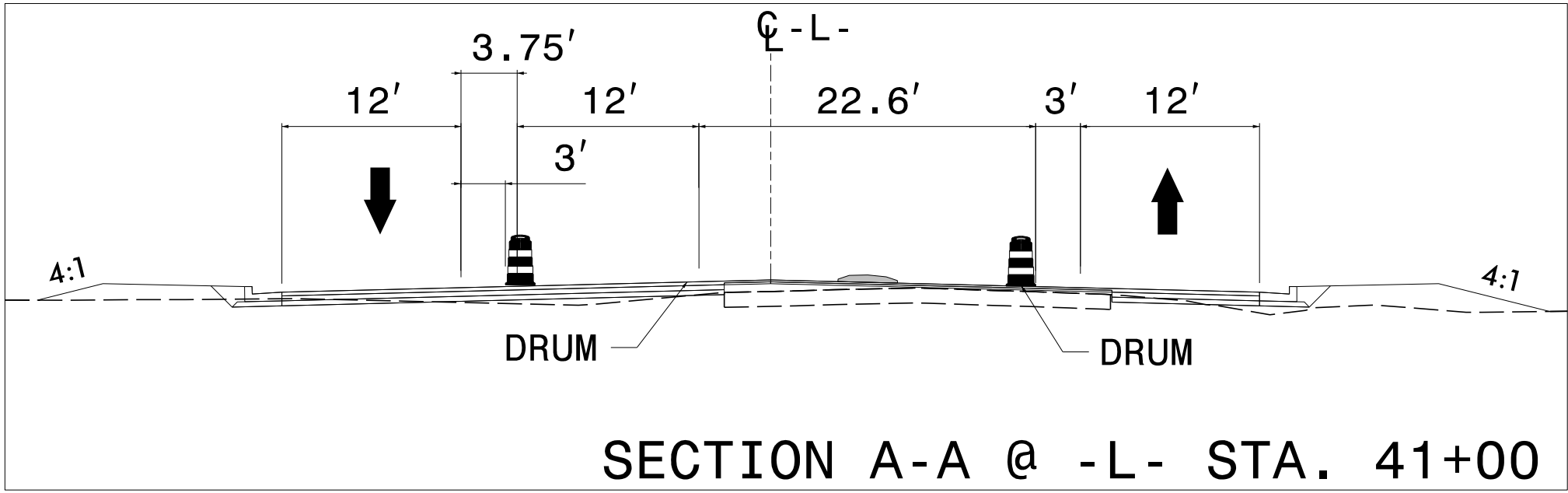
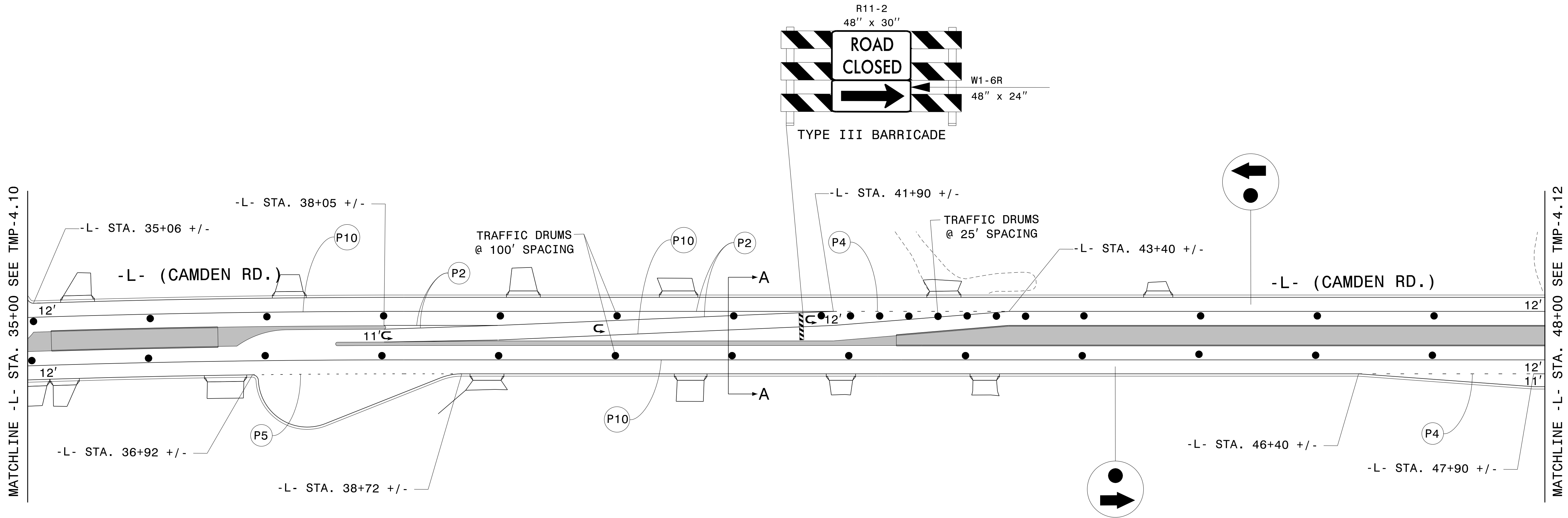
PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-4.10



APPROVED: <i>Matthew Thigpen</i> DATE: 10/3/2024 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		PHASE II
---	-------------	---------------------

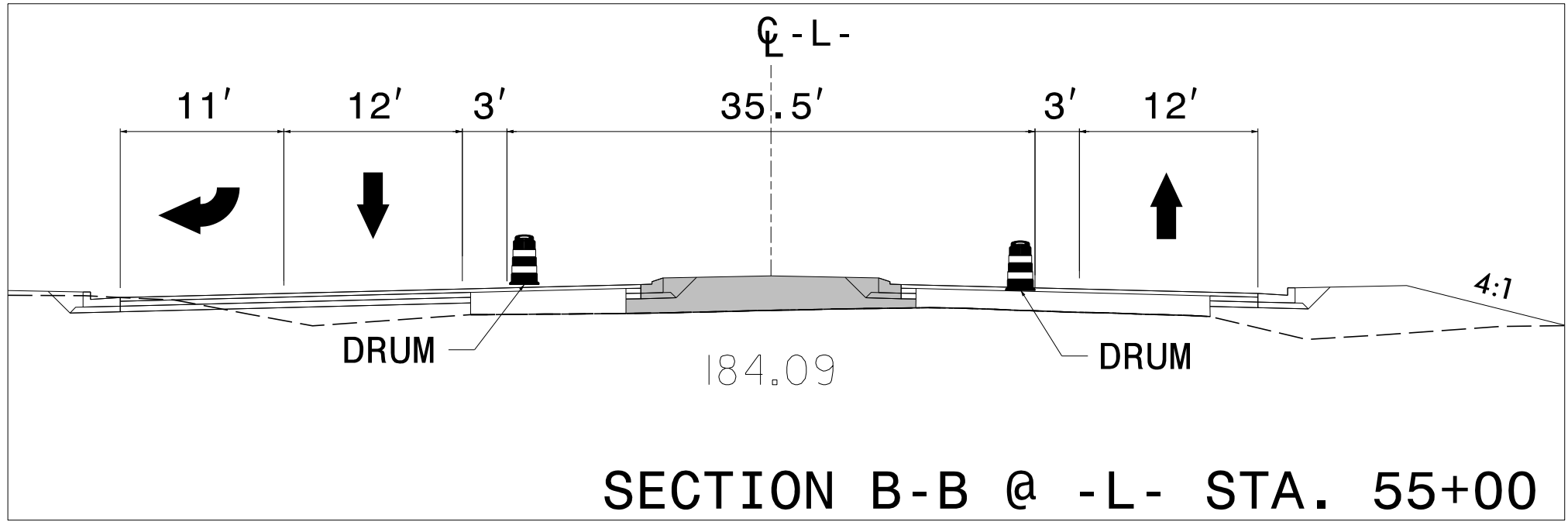
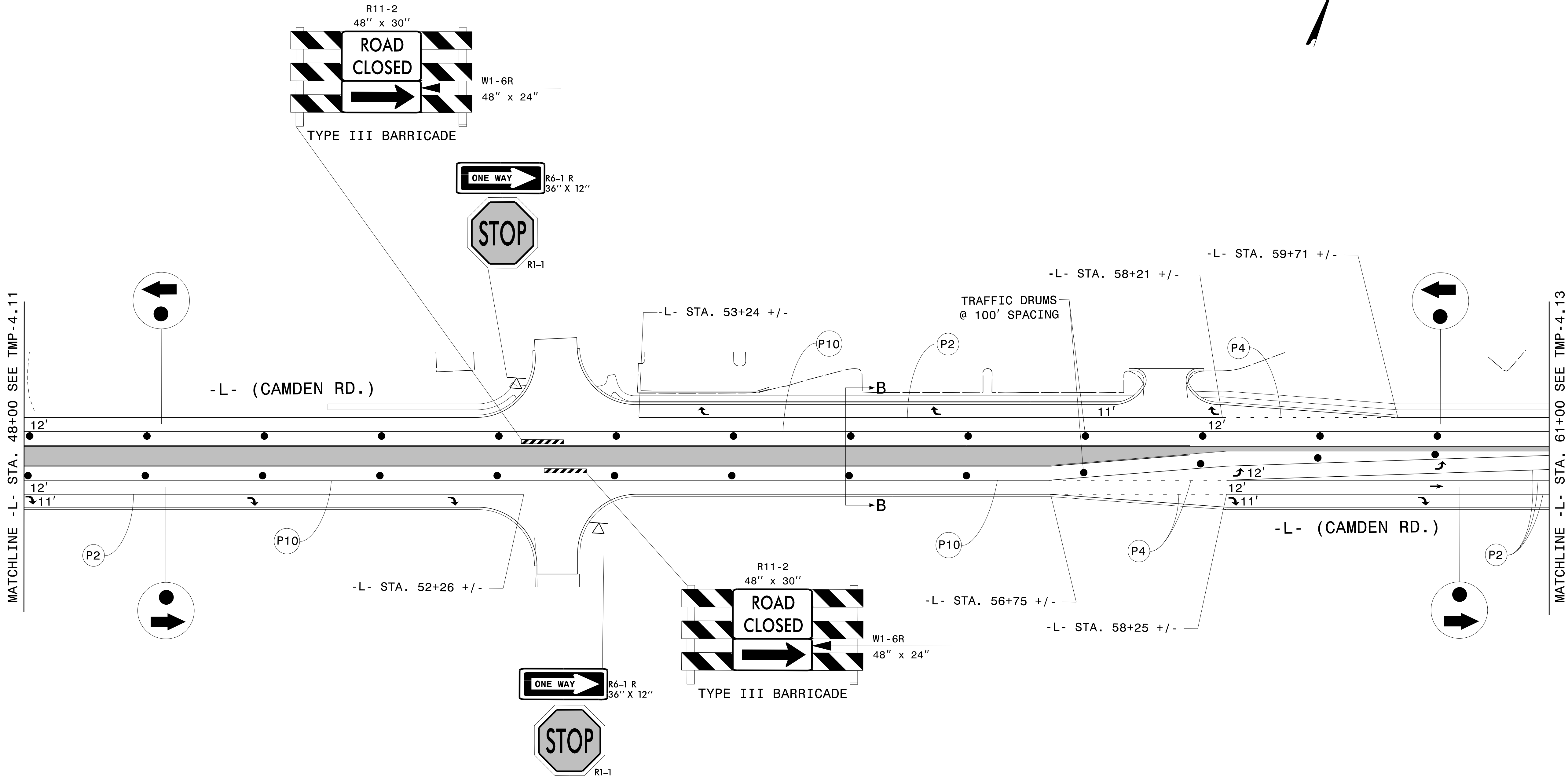
9/4/2024
pw:\pwhdruseas04\HDR_US_East_01\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422_TO\N6.0_CAD_BM\6.2_Work_In_Progress\U-3422A\Traffic\TrafficControl\TCP\U3422_TC_TMP25.dgn
User:Matt Thigpen

PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-4.11



APPROVED: <i>Matthew Thigpen</i> DATE: 10/3/2024 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	 DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL	PHASE II
---	--	----------

PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-4.12



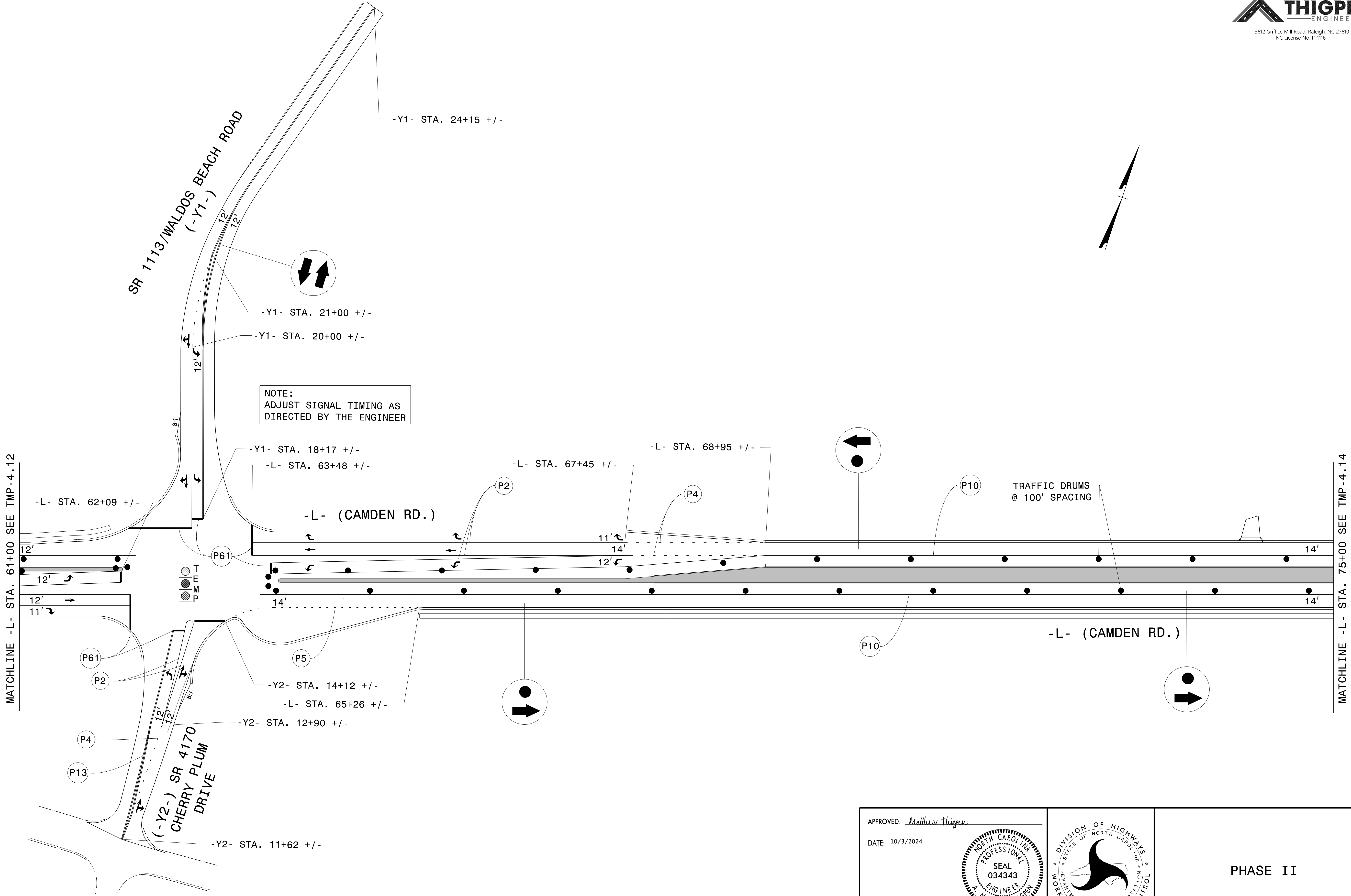
APPROVED: <i>Matthew Thigpen</i>			PHASE II
DATE: 10/3/2024			
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED			

9/4/2024
pw:\pwhdruseas04\HDR_US_East_a\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design\LSA\NCDOT-U-3422A\U-3422A\TrafficControl\TCP\U3422A_TC_TMP26.dgn
User:Matt Thigpen

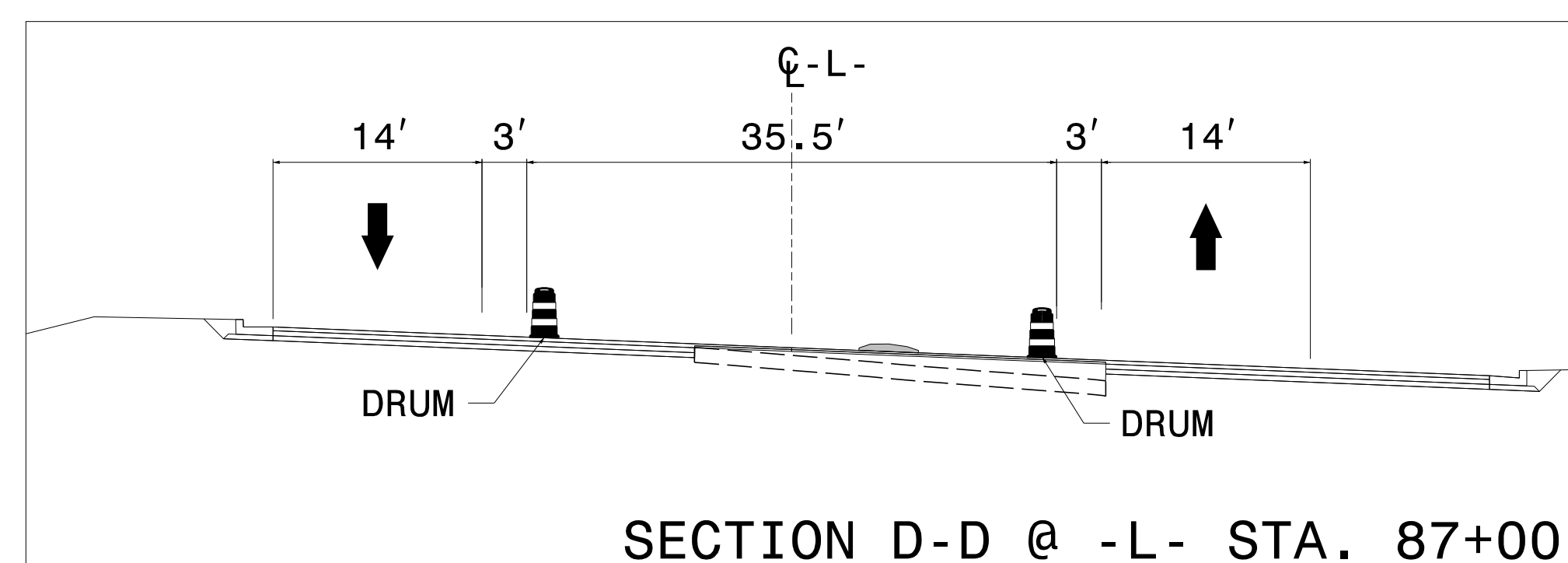
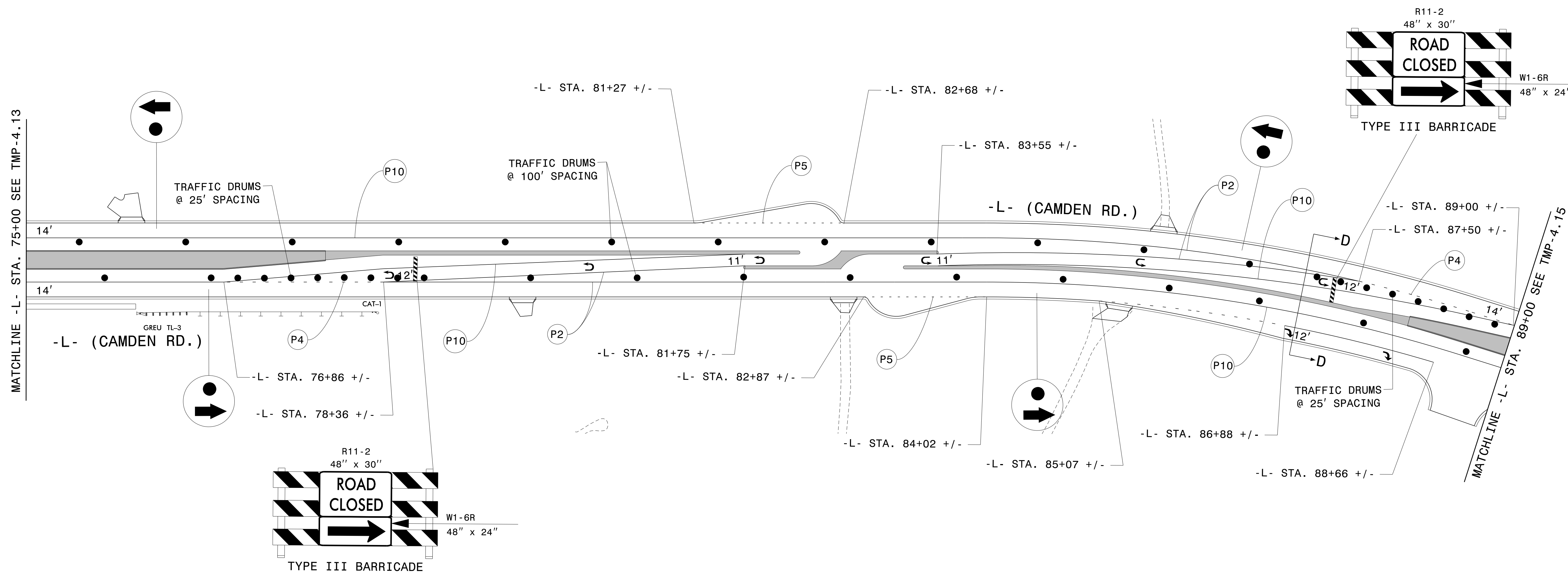
PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-4.13



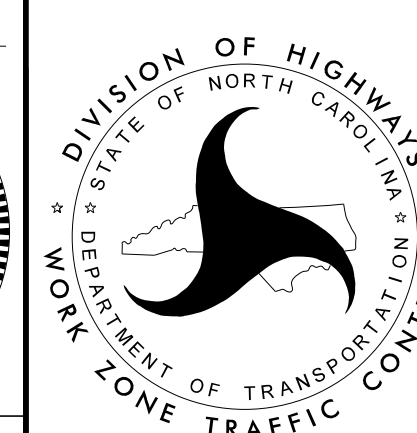
9/4/2024
pw:\pwhdruseas04\HDR_US_East_01\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422_TO\N6.0_CAD_BM\6.2_Work_In_Progress\U-3422A\Traffic\TrafficControl\TCP\U3422_TC_TMP27.dgn
User:Matt Thigpen



APPROVED: <i>Matthew Thigpen</i> DATE: 10/3/2024 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	 DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL	PHASE II
---	--	----------



A circular professional engineer seal for the State of North Carolina. The outer ring contains the text "NORTH CAROLINA" at the top and "A. MATTHEW THIGPEN" at the bottom. The inner circle contains the text "PROFESSIONAL" at the top, "SEAL" in the center, "034343" below the seal, and "ENGINEER" at the bottom. The seal is surrounded by a decorative border of small dots.

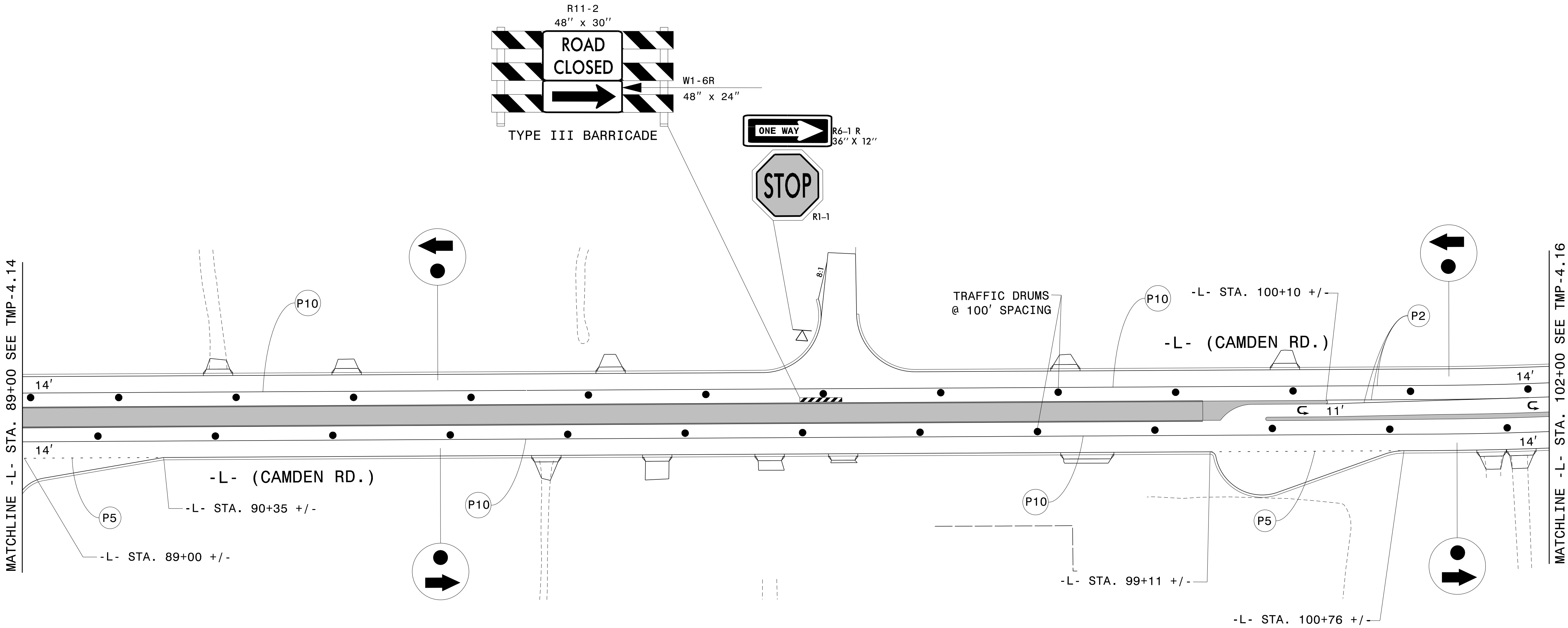
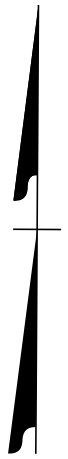


PHASE II

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

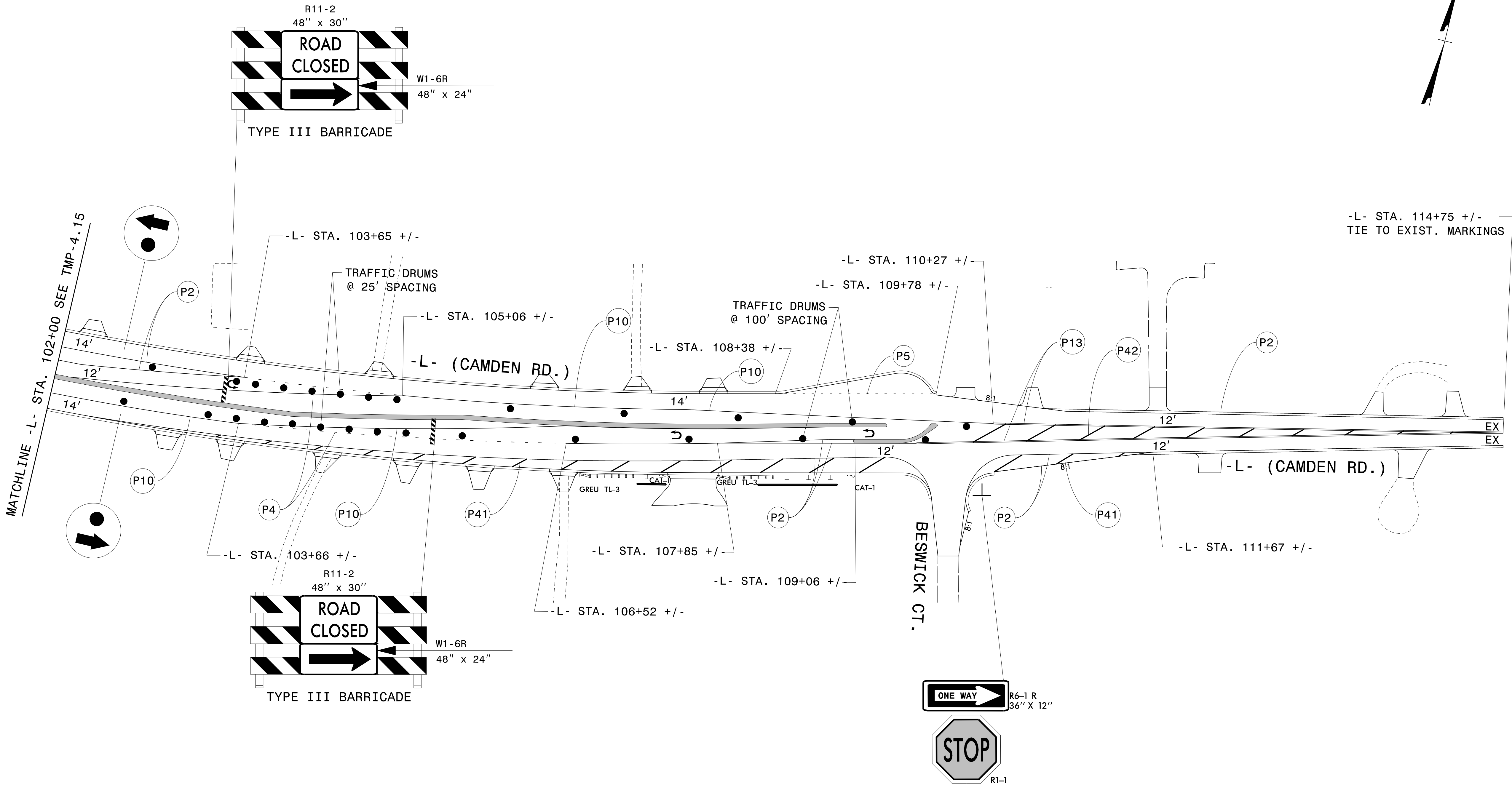
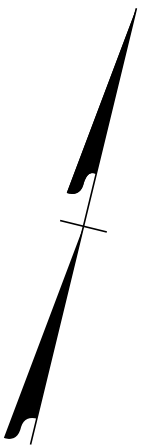
9/4/2024
pw:\pwhdruseas04\HDR_US_East_01\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design\LSA\NCDOT-U-3422_TO\N6.0_CAD_BM\6.2_Work_In_Progress\U-3422A\Traffic\TrafficControl\TCP\U3422_TC_TMP29.dgn
User:Matt Thigpen

PROJ. REFERENCE NO.	SHEET NO.
U - 3422A	TMP - 4.15



APPROVED: <i>Matthew Thigpen</i> DATE: 10/3/2024 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED		PHASE II
--	---------	-----------------

PROJ. REFERENCE NO.	SHEET NO.
U-3422A	TMP-4.16



9/4/2024
pw:\pwhdr\users\jhd\US_East_a\Documents\NCDOT\2015_NCDOT_East_Reg_Div_Planning_Design_LSA\NCDOT-U-3422_TO\N6.0_CAD_BM\6.2_Work_In_Progress\U-3422A\TrafficControl\TCP\U3422_TC_TMP30.dgn
User:Matt Thigpen

APPROVED: <i>Matthew Thigpen</i> DATE: 10/3/2024 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	 DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL	PHASE II
---	--	----------