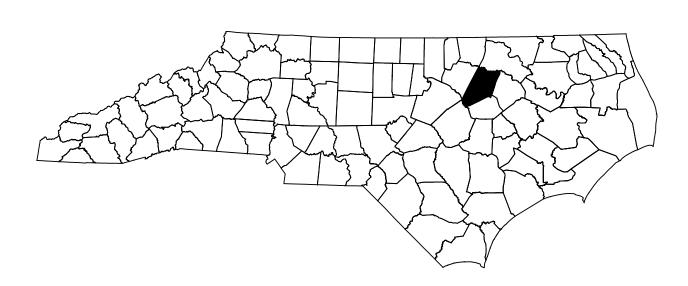
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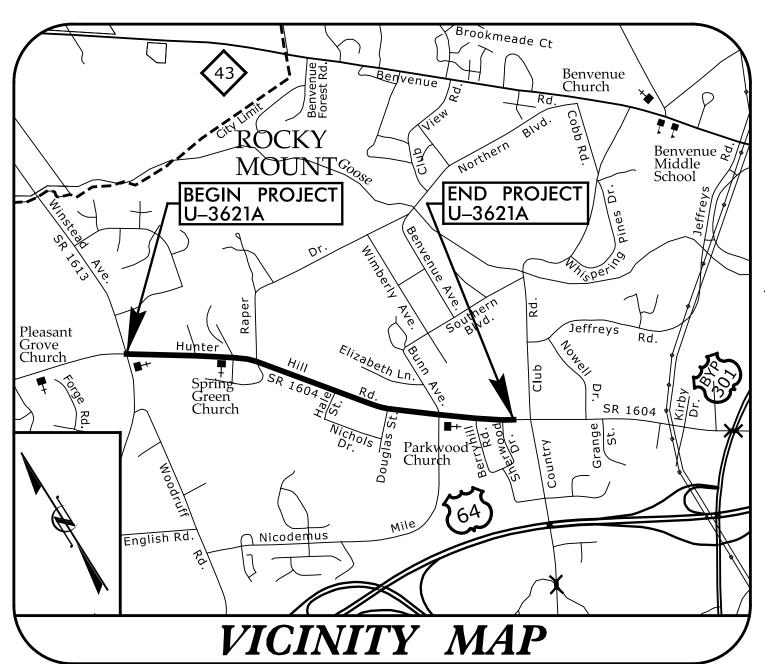
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TRANSPORTATION MANAGEMENT PLAN

NASH COUNTY





LOCATION: ROCKY MOUNT - SR 1604 (HUNTER HILL ROAD) FROM SR 1613 (NORTH WINSTEAD AVE) TO SR 1616 (COUNTRY CLUB ROAD)

⚠ TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND SIGNALS

INDEX OF SHEETS

SHEET NO. <u>TITLE</u> TITLE SHEET, VICINITY MAP, AND INDEX OF SHEETS TMP - 1 LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, TMP-1A LEGEND, AND TEMPORARY PAVEMENT MARKING SCHEDULE TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT TMP-1B STRATEGIES AND GENERAL NOTES) PHASING TMP-2 PHASE I DETAIL PHASE II DETAIL PHASE III DETAIL TMP-13-17

ALTERNATE ROUTES DURING CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL



"from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL 1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561 750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

STATE TRAFFIC MANAGEMENT ENGINEER

TRAFFIC CONTROL DESIGN ENGINEER

J. S. KITE, P.E. TRAFFIC CONTROL PROJECT ENGINEER

S. B. JENNINGS

M. V. SPRINGER, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER







UNLESS ALL SIGNATURES COMPLETED

SHEET NO.

TMP-1

36.

PROJ. REFERENCE NO. SHEET NO. TMP-1A U-3621A

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" -PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	<u>TITLE</u>
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES - TYPE III
1150.01	FLAGGING DEVICES
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1180.01	SKINNY - DRUM
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
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

LEGEND

TRAFFIC CONTROL DEVICES **GENERAL** DIRECTION OF TRAFFIC FLOW BARRICADE (TYPE III) DIRECTION OF PEDESTRIAN TRAFFIC FLOW ---- EXIST. PVMT. DRUM SKINNY DRUM O TUBULAR MARKER NORTH ARROW TEMPORARY CRASH CUSHION FLASHING ARROW BOARD PROPOSED PVMT. FLAGGER TEMP. SHORING (LOCATION PURPOSES ONLY) LAW ENFORCEMENT WORK AREA TRUCK MOUNTED ATTENUATOR (TMA) CHANGEABLE MESSAGE SIGN REMOVAL TEMPORARY SIGNING PORTABLE SIGN WEDGING STATIONARY SIGN STATIONARY OR PORTABLE SIGN USER DEFINED (IF NEEDED) PAVEMENT MARKERS SIGNALS CRYSTAL/CRYSTAL PROPOSED E TEMPORARY CRYSTAL/RED Ä∰¦EXISTING ◆ YELLOW/YELLOW PAVEMENT MARKINGS PAVEMENT MARKING SYMBOLS ----EXISTING LINES PAVEMENT MARKING SYMBOLS TEMPORARY LINES

TEMPORARY PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION			
P8 PA PB PD PE PI	PAINT(4") 2 FT 6 FT./SP WHITE MINISKIE WHITE EDGELINE YELLOW EDGELINE 3 FT 9 FT./SP WHITE MINISKIE WHITE SOLID LANE LINE YELLOW DOUBLE CENTER			
PN PP	PAINT (8") WHITE GORELINE YELLOW DIAGONAL			
P2	PAINT(24") WHITE STOPBAR			
QA QB QC QD QD	PAINT MARKING SYMBOLS LEFT TURN ARROW RIGHT TURN ARROW STRAIGHT ARROW COMBO.STRAIGHT/LEFT ARROW COMBO. LEFT/STRAIGT/RIGHT ARROW	W		
1025 Wade Avenue Raleigh, NC 27605 Tel:919-789-9977 Fax:919-789-9591	APPROVED: Steve Miller 9FBC6C15CEEB486 DATE: 4/3/2017 SEAL 037026 SEAL 037026	WORTH CAROLINA * TO WORTH	ROADWAY DRAWINGS	STANDARD & LEGEND
ENGINEERING & Fax:919-789-9591 CONSTRUCTION License: C-2197	DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	TRAFFIC		

MANAGEMENT STRATEGIES

- LOCAL ACCESS TO ALL RESIDENCES AND BUSINESSES WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION
- PROVIDE ONE MONTH NOTICE TO THE ENGINEER, NASH COUNTY EMERGENCY SERVICES, AND NASH COUNTY SCHOOL OFFICIALS PRIOR TO ROAD CLOSURE

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
SR 1604 (HUNTER HILL RD.)

DAY AND TIME RESTRICTIONS MONDAY-FRIDAY 6:00 A.M.-9:00 A.M.

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

ROAD NAME SR 1604 (HUNTER HILL RD.)

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 9:00 A.M. THE FOLLOWING TUESDAY.
- 3. FOR EASTER, BETWEEN THE HOURS OF 6:00 A.M. THURSDAY AND 9:00 A.M. MONDAY.
- 4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 9:00 A.M. TUESDAY.
- 5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 9:00 A.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 9:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY AND 9:00 A.M. TUESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 9:00 A.M. MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 9:00 A.M. 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 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.

- 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.

PAVEMENT EDGE DROP OFF REQUIREMENTS

H) 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.

I) 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 FEET IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

J) NOTIFY THE ENGINEER ONE MONTH PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

- K) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FRM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- L) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

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

TRAFFIC CONTROL DEVICES

N) 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.

SHEET NO.

TMP-1B

PROJ. REFERENCE NO.

U-3621A

O) 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

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

ROAD NAME MARKING MARKER
SR 1604 (HUNTER HILL RD) PAINT TEMPORARY RAISED

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

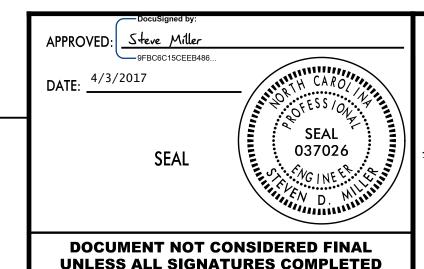
MISCELLANEOUS

- U) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.
- V) 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 FEET AND 700 FEET RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

LOCAL NOTE

1. CONTACT THE REGIONAL TRAFFIC ENGINEER (RTE) THIRTY (30) DAYS PRIOR TO THE BEGINNING OF PHASE II TO ENACT A TOWING AND NO PARKING ORDINANCE ALONG HUNTER HILL ROAD FROM RAPER ROAD TO DOUGLAS STREET. WHEN PHASE II IS COMPLETE, CONTACT THE REGIONAL TRAFFIC ENGINEER TO RESCIND THE ORDINANCE.

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PROJ. REFERENCE NO.	SHEET NO.		
U-3621A	TMP-2		

PHASING

PHASE I

- STEP 1: USING ROADWAY STANDARD DRAWING (RSD) 1101.01 SHEETS 2 AND 3 OF 3, INSTALL ADVANCE WORK ZONE WARNING SIGNS ON -L- SR 1604 (HUNTER HILL ROAD) AND ALL -Y- LINES.
- STEP 2: USING RSD 1101.02 SHEETS 1 AND 3 OF 15 AND RSD 1101.04 SHEET 1 OF 1 AS NECESSARY, BEGIN CONSTRUCTION OF THE PROPOSED ROADWAY AND DRAINAGE AS SHOWN ON TMP-3 THROUGH TMP-7 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. ENSURE RUNOFF DRAINS AND PONDING IS PREVENTED.

COMPLETE THE WORK OF PHASE I, STEP 2A IN 7 DAYS.

(SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.)

- 2A: TO CONSTRUCT -Y4-, USE RSD 1101.03 SHEET 1 OF 9 TO CLOSE SR 1618 (RAPER RD) AND DETOUR TRAFFIC AS SHOWN ON TMP-4A
- STEP 3: USING RSD 1101.02 SHEET 1 OF 15 PERFORM THE FOLLOWING IN A CONTINUOUS MANNER:
 - -USING WEDGING AS NECESSARY, CONSTRUCT TIE INS FROM THE EXISTING PATTERN TO THE PHASE II PATTERN SHOWN ON TMP-8 THROUGH TMP-12.
 - -PLACE TEMPORARY PAVEMENT MARKINGS AS SHOWN ON TMP-8 THROUGH TMP-12.
 - -SHIFT TRAFFIC TO THE PHASE II PATTERN.

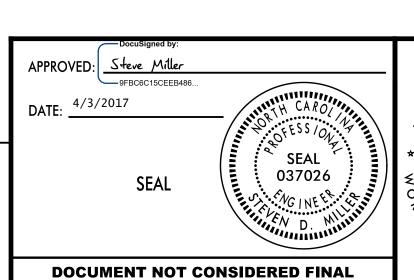
PHASE II

- STEP 1: USING RSD 1101.02 SHEET 1 OF 15 CONTINUE CONSTRUCTION OF THE PROPOSED ROADWAY UP TO BUT NOT INLCUDING THE FINAL LAYER OF SURFACE COURSE SHOWN ON TMP-8 THROUGH TMP-12. ENSURE RUNOFF DRAINS AND PONDING IS PREVENTED.
- STEP 2: USING RSD 1101.02 SHEET 1 OF 15, SHIFT THE LOCAL DRIVEWAY TRAFFIC IN THE PATTERN SHOWN ON TMP-9-11 IN THE INSETS AND CONSTRUCT THE PROPOSED ROADWAY UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. ENSURE RUNOFF DRAINS AND PONDING IS PREVENTED.
- STEP 3: USING RSD 1101.02 SHEET 1 AND 3 OF 15, SHIFT TRAFFIC TO THE FINAL PATTERN SHOWN ON TMP-13 THROUGH TMP-17. PLACE TEMPORARY PAVEMENT MARKINGS IN THE SAME LOCATION AS THE FINAL PAVEMENT MARKINGS.

PHASE III

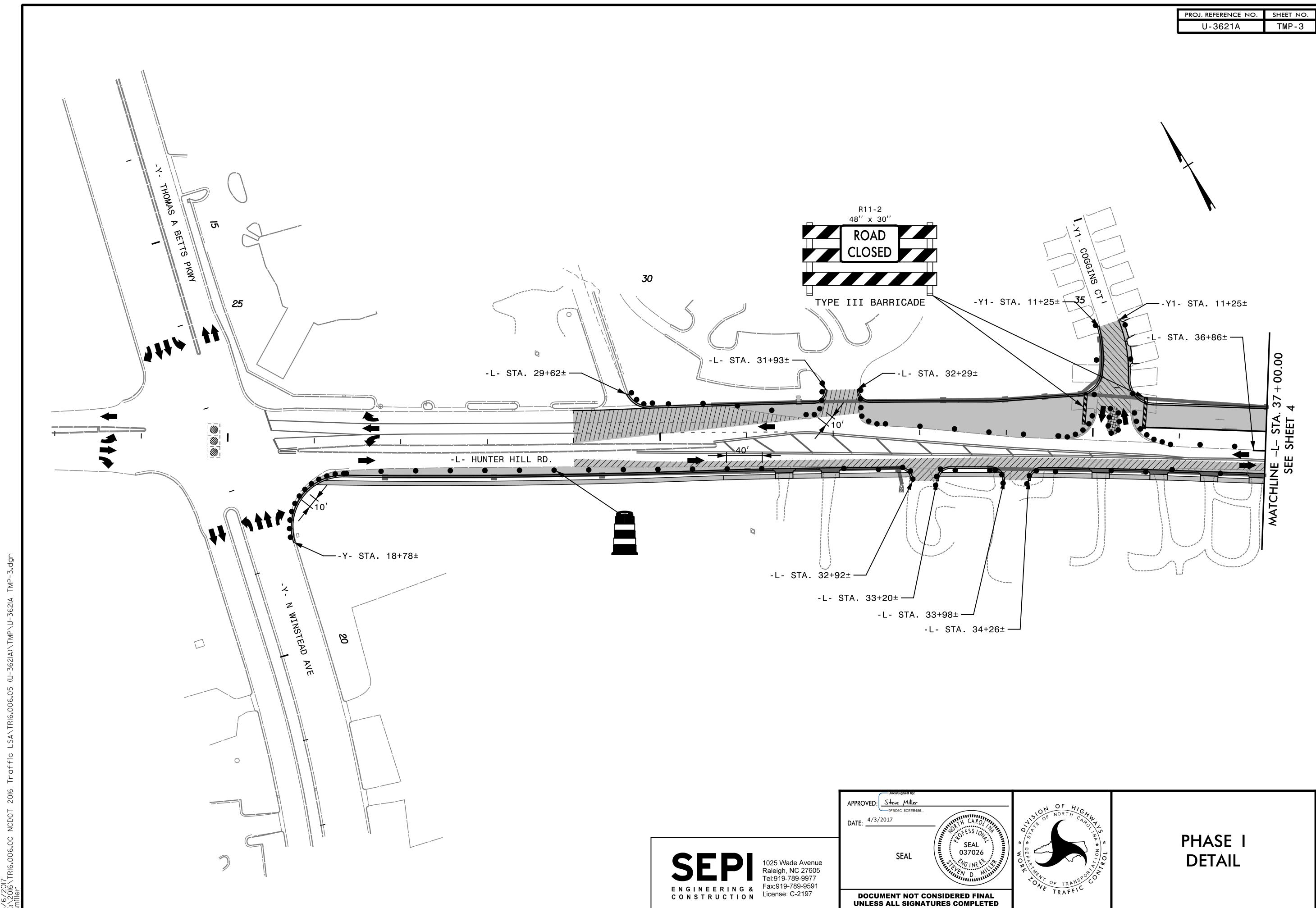
- STEP 1: USING RSD 1101.02 SHEET 1 AND 3 OF 15 COMPLETE CONSTRUCTION OF THE MONOLITHIC CONCRETE ISLANDS AND MEDIAN SHOWN ON TMP-13 THROUGH TMP-17.
- STEP 2: USING RSD 1101.02 SHEET 1 AND 3 OF 15 PLACE THE FINAL LAYER OF SURFACE COURSE AND THE FINAL PAVEMENT MARKINGS ACCORDING TO THE PAVEMENT MARKING PLANS.
- STEP 3: REMOVE ALL WORK ZONE TRAFFIC CONTROL DEVICES.

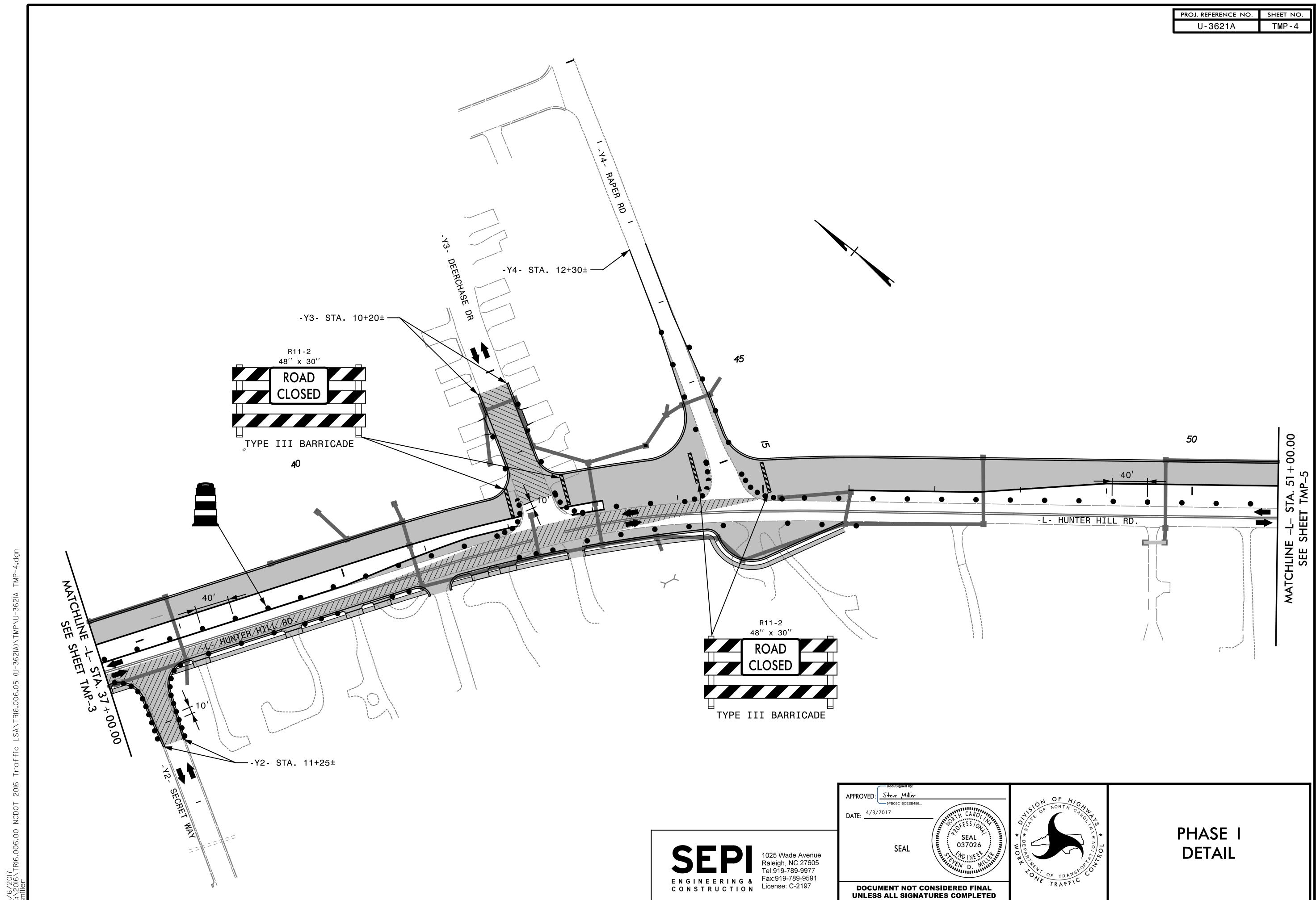
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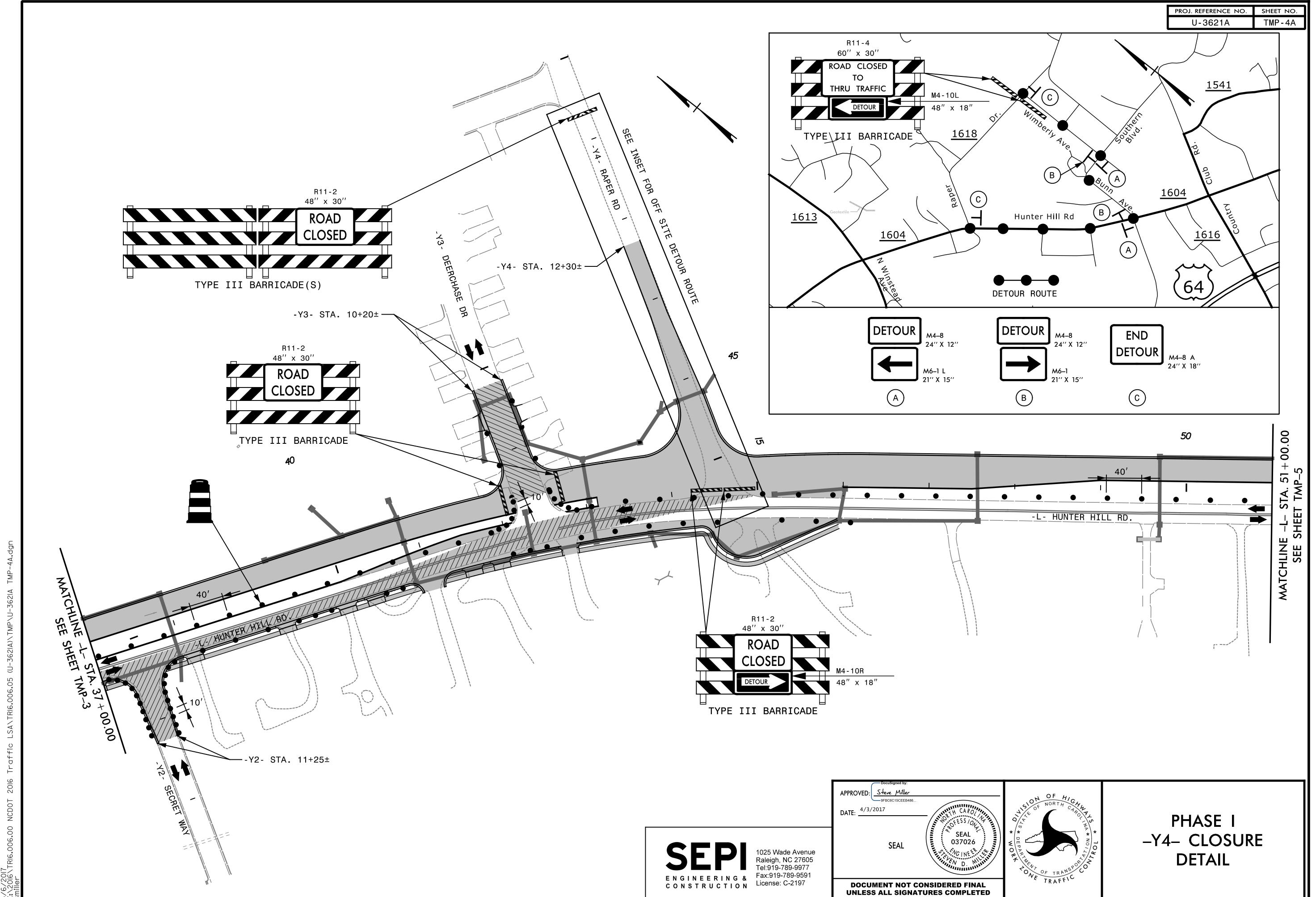


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PHASING



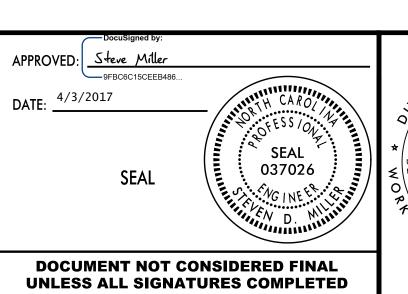




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CONSTRUCTION

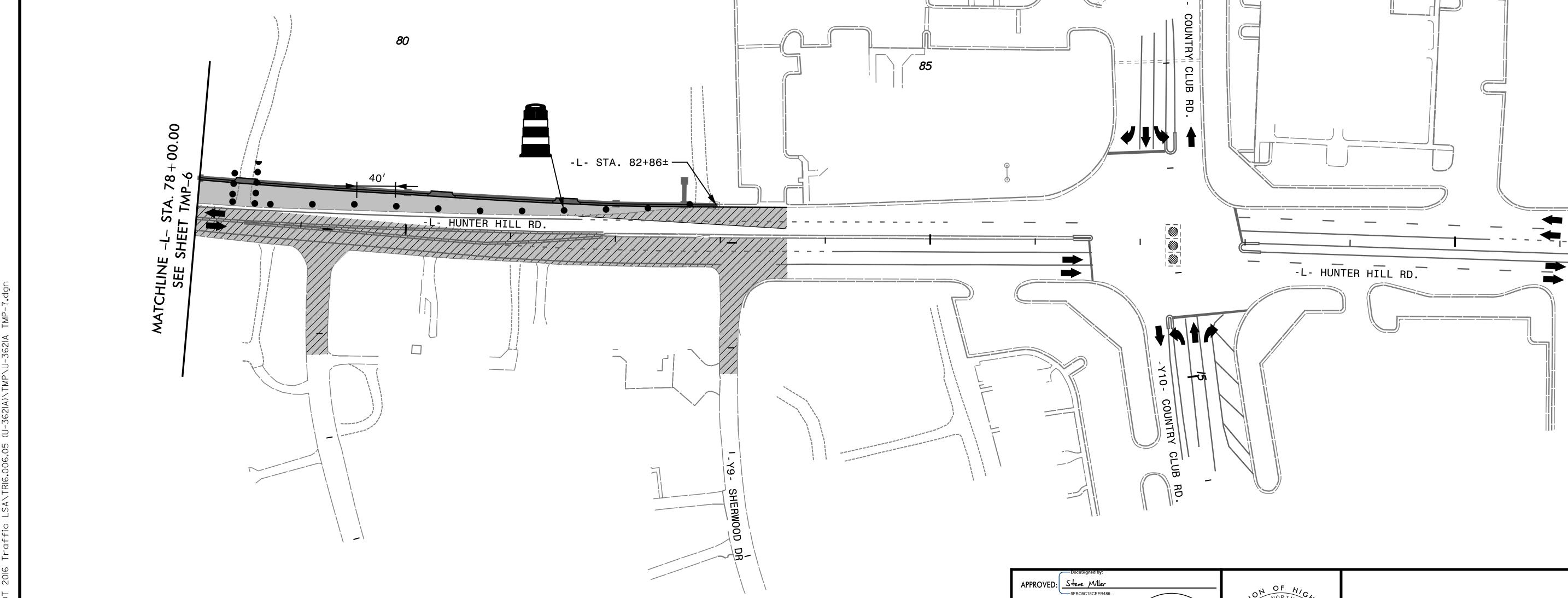
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PHASE I DETAIL

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PROJ. REFERENCE NO. SHEET NO. U-3621A TMP-6 -Y7- STA. 11+00± — TYPE III BARRICADE -L- STA. 73+89± A-A EXISTING APPROVED: Steve Miller
9FBC6C15CEEB486... DATE: 4/3/2017 PHASE I SEAL **DETAIL** 1025 Wade Avenue Raleigh, NC 27605 Tel:919-789-9977 Fax:919-789-9591 License: C-2197 UNDERCUT DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



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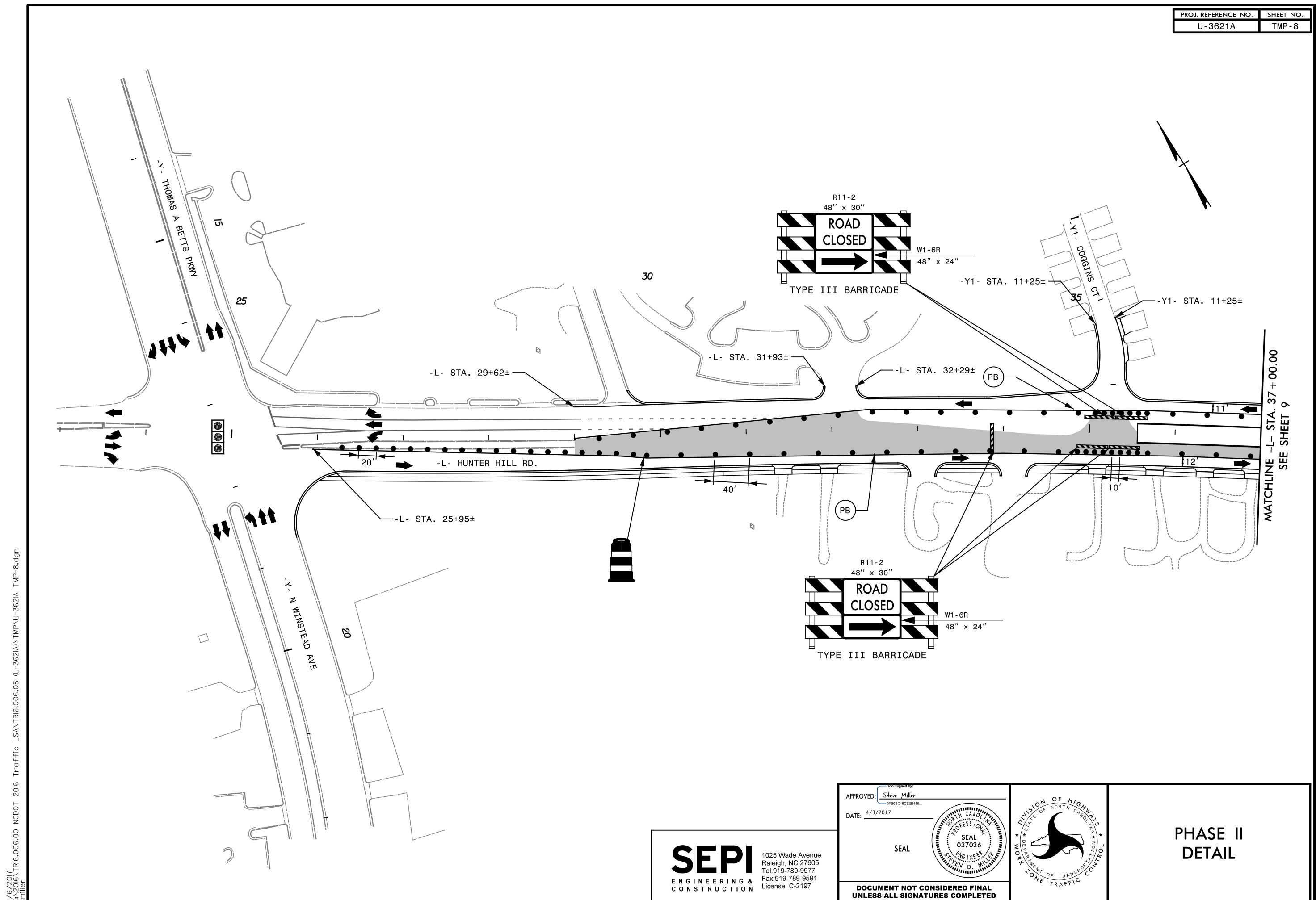
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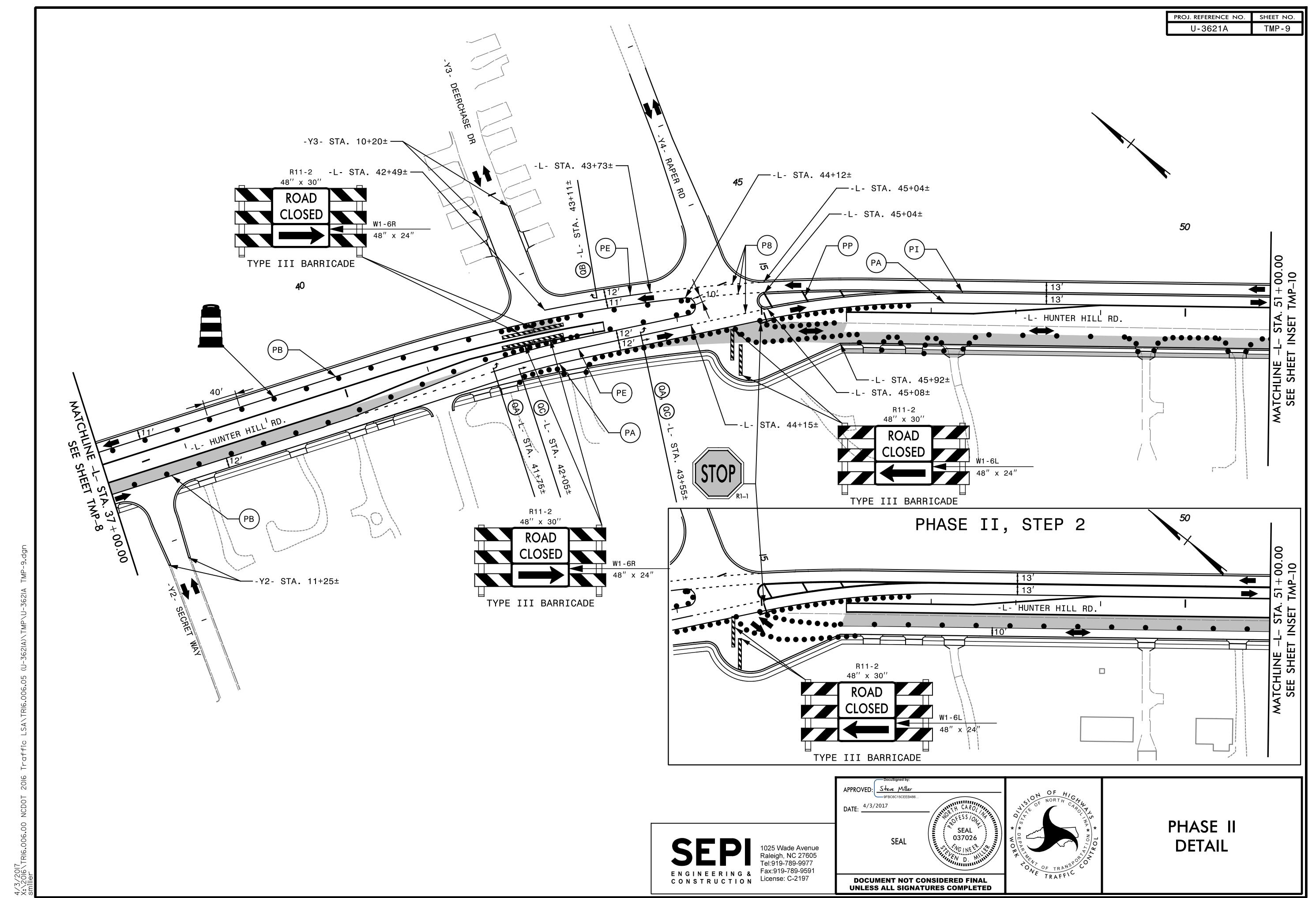
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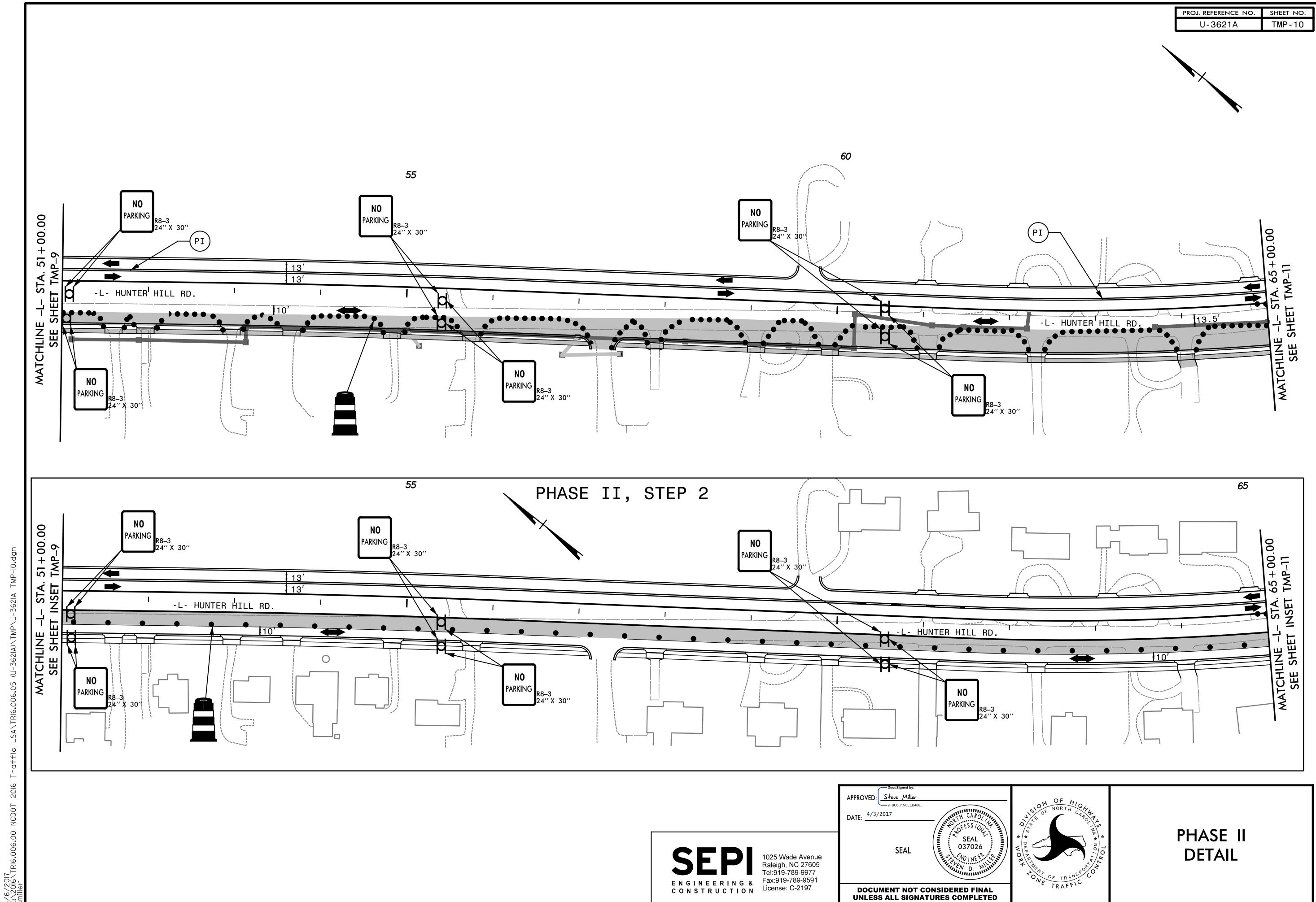
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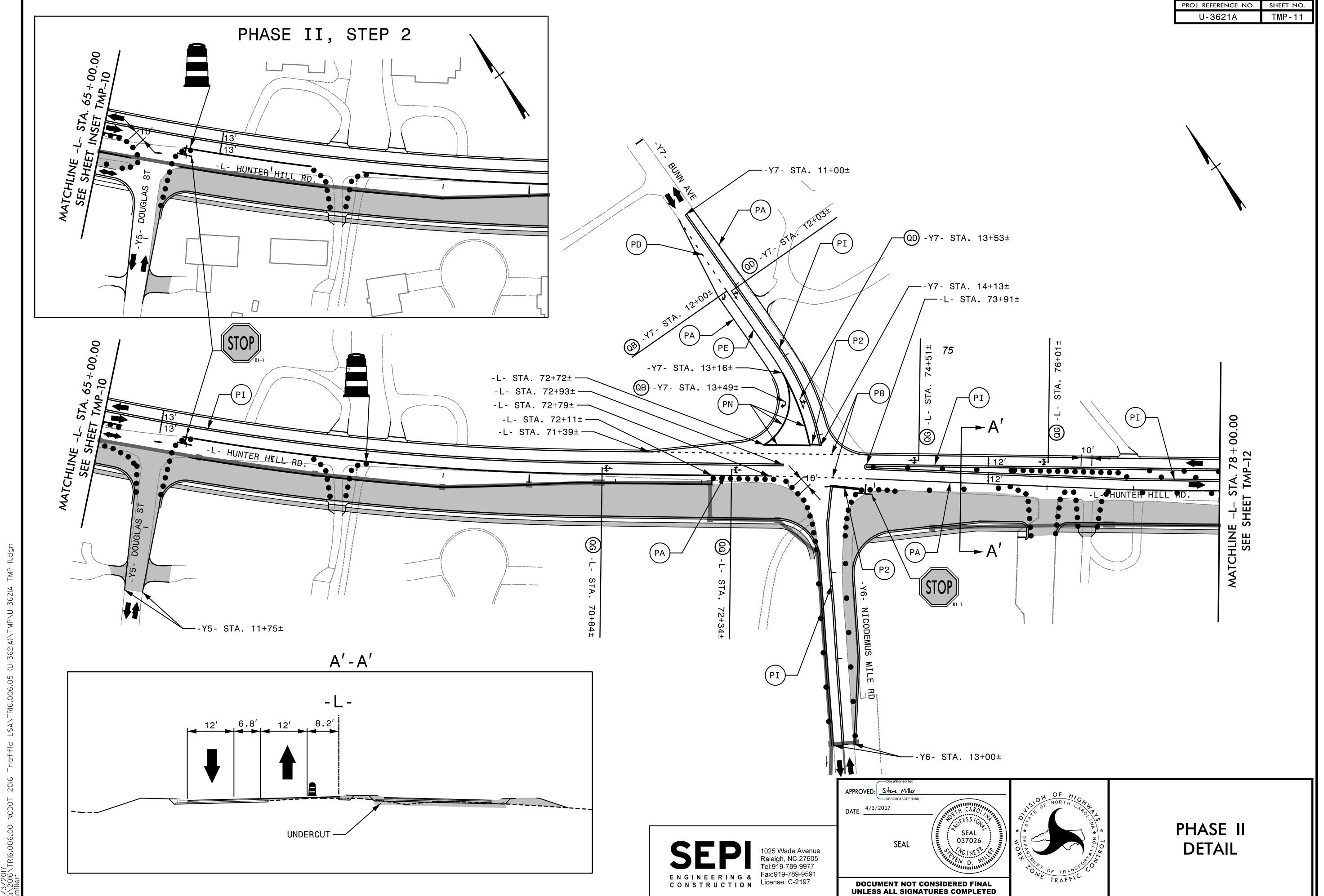
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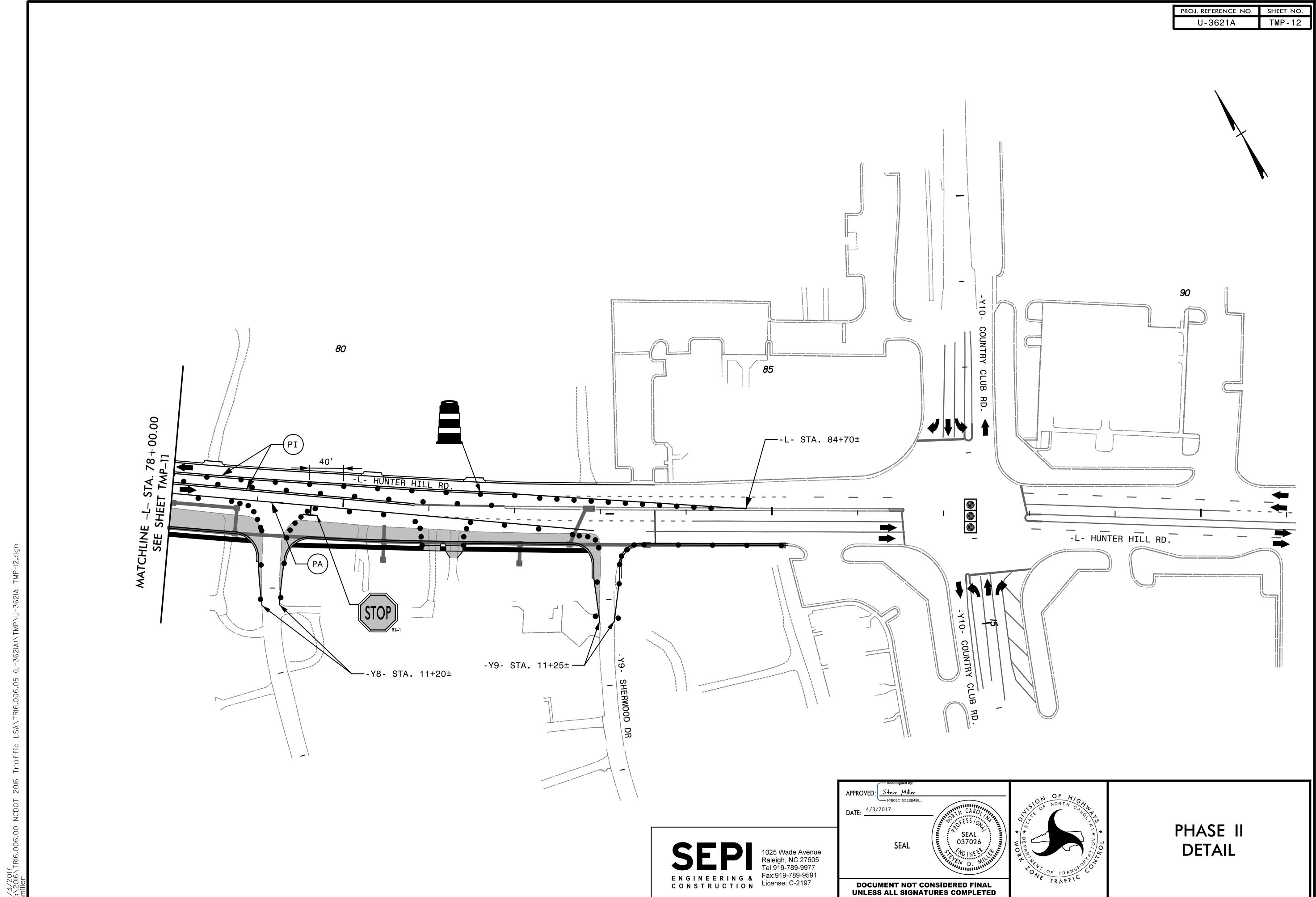
PHASE I **DETAIL**

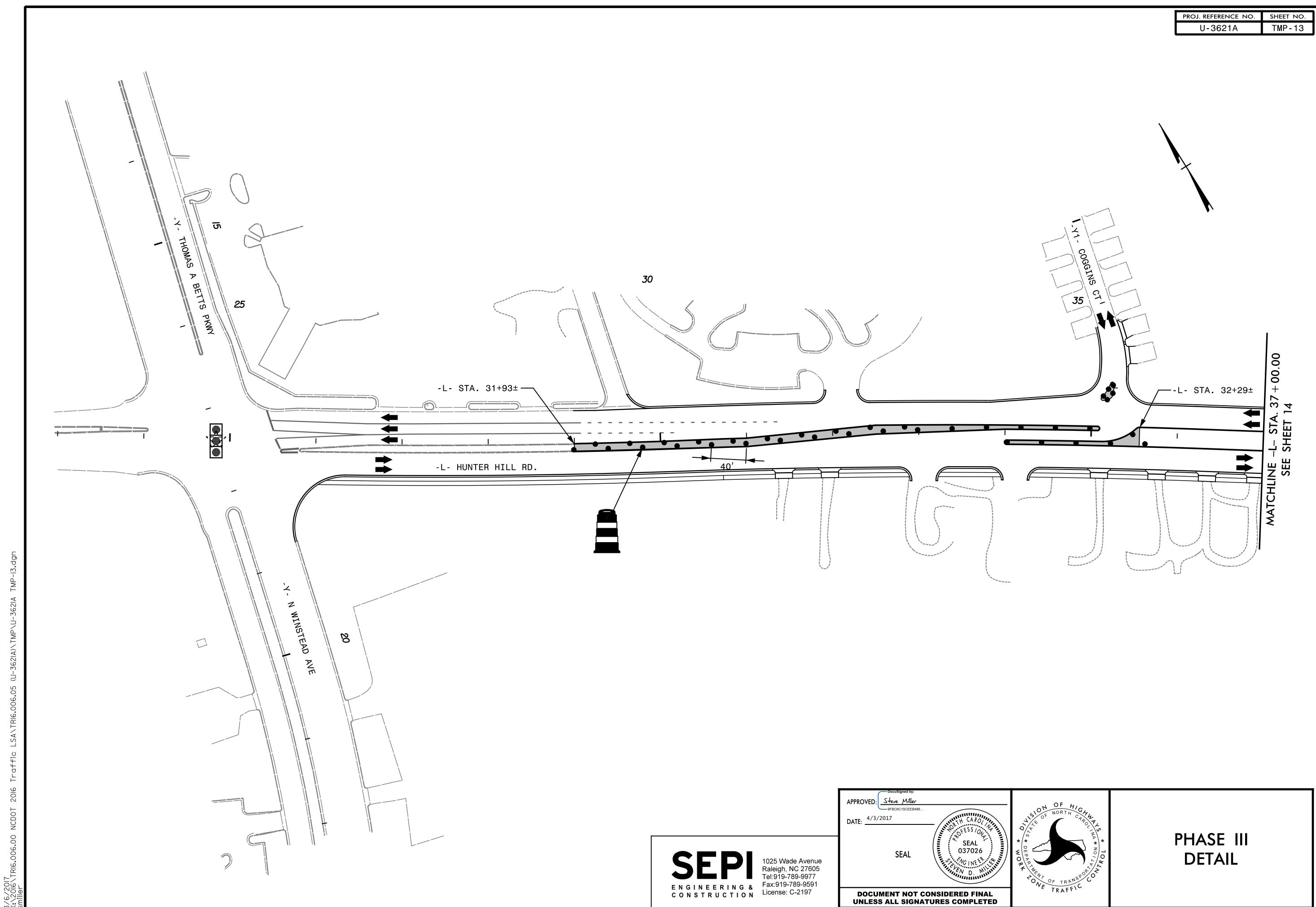


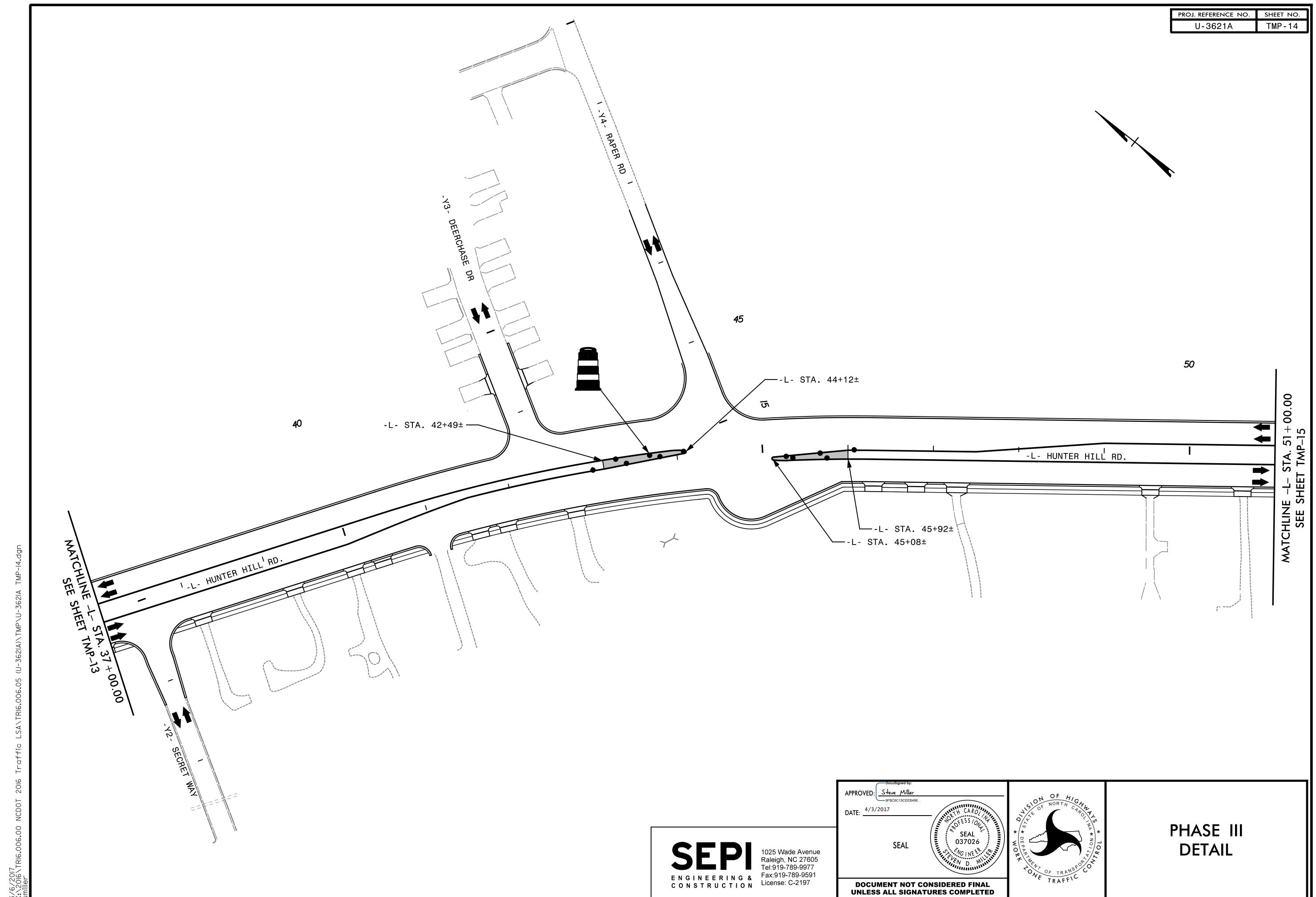


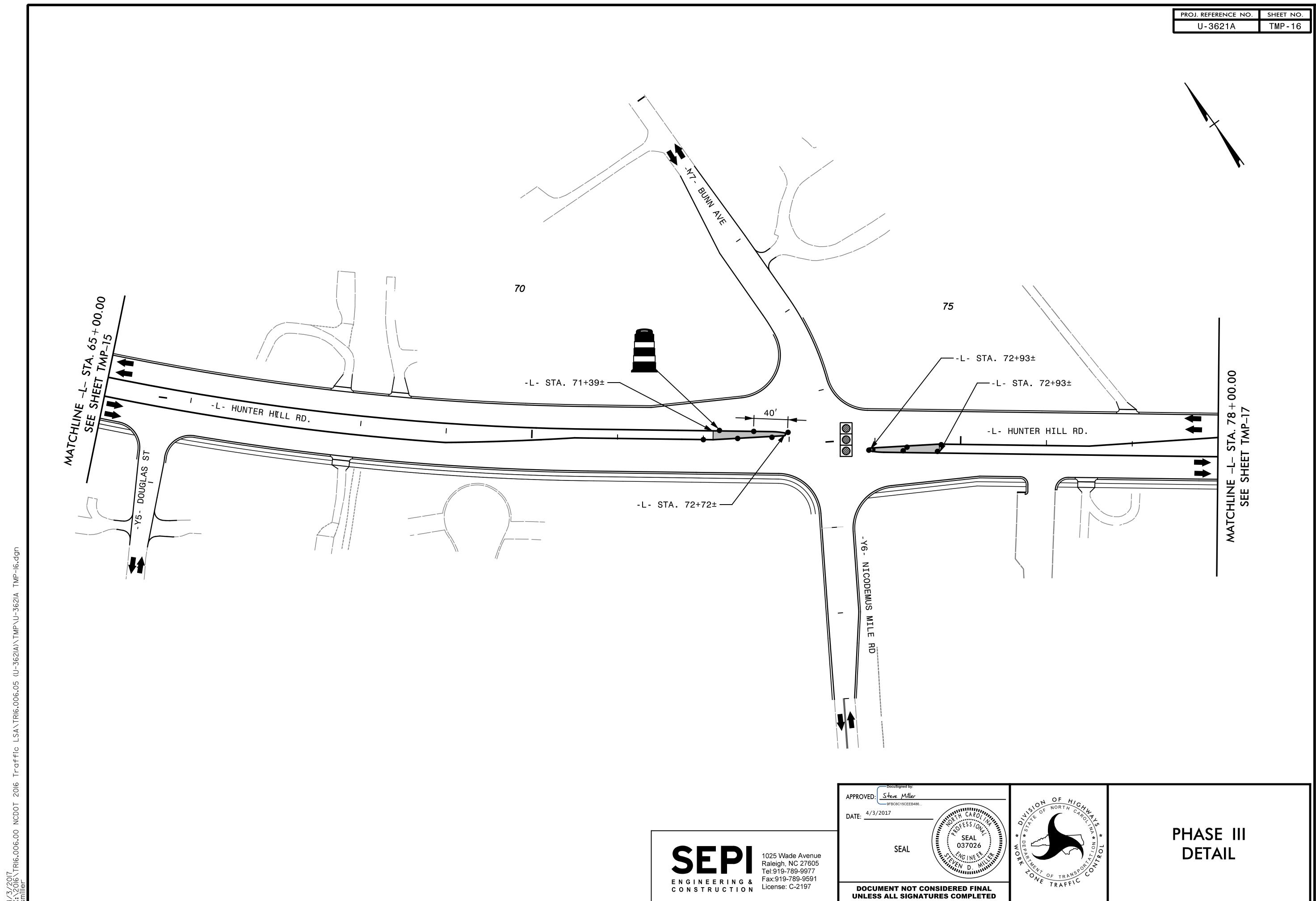












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