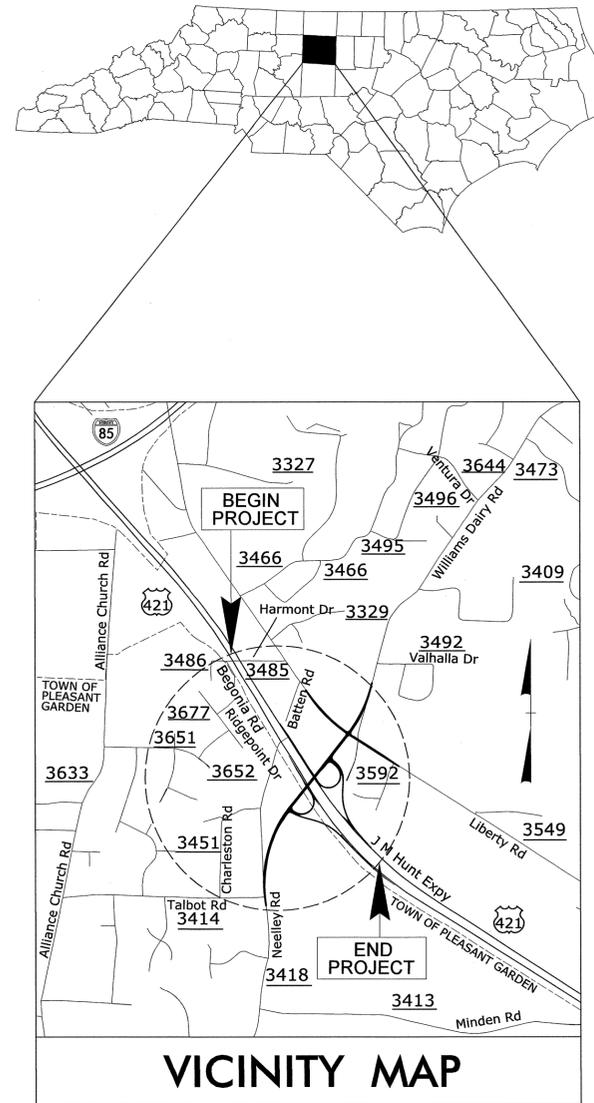


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

GUILFORD COUNTY



VICINITY MAP

SHEET NO.	TITLE
TMP-1	VICINITY MAP AND INDEX OF SHEETS
TMP-1A	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, MANAGEMENT STRATEGIES AND LEGEND
TMP-2 & TMP-2A	GENERAL NOTES
TMP-3 THRU TMP-3B	PHASING
TMP-4	PHASE I OVERVIEW
TMP-5 THRU TMP-9	PHASE I DETAILS
TMP-10 & TMP-10A	PHASE I CROSS-SECTION(S)
TMP-11 THRU TMP-12	PHASE I OFF-SITE DETOUR ROUTE: US-421
TMP-13	PHASE II OVERVIEW
TMP-14 THRU TMP-15	PHASE II DETAILS
TMP-16 THRU TMP-17	PHASE II OFF-SITE DETOUR ROUTE(S) & SPECIAL SIGN DESIGN(S): WILLIAM DAIRY ROAD
TMP-18 THRU TMP-19	PHASE II OFF-SITE DETOUR ROUTE(S) & SPECIAL SIGN DESIGN(S): NEELLEY ROAD
TMP-20	PHASE III OVERVIEW
TMP-21 THRU TMP-24	PHASE III DETAILS

SHEET NO.
TMP-1

R-2612B

TIP PROJECT:



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

J. S. BOURNE, P.E. STATE TRAFFIC MANAGEMENT ENGINEER
JOSEPH ISHAK, P.E. TRAFFIC CONTROL PROJECT ENGINEER
MICHAEL STEELMAN TRAFFIC CONTROL PROJECT DESIGN ENGINEER
DURWOOD KENNEDY, P.E. TRAFFIC CONTROL DESIGN ENGINEER



APPROVED: _____
DATE: _____

SEAL

2/28/2014 R:\TIP\Projects-R-2612B\Traffic\TrafficControl\TCP-IR-2612B-TC-TMP-01.dgn User:rdkennedy

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.	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
1101.06	WARNING SIGNS FOR BLASTING ZONES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	WORK VEHICLE LIGHTING SYSTEMS AND TMA DELINEATION
1170.01	POSITIVE PROTECTION
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE ROADWAYS
1205.03	PAVEMENT MARKINGS - EXITS AND ENTRANCE RAMP
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
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS
1205.11	PAVEMENT MARKINGS - RAILROAD CROSSINGS
1205.12	PAVEMENT MARKINGS - BRIDGES
1205.13	PAVEMENT MARKINGS - LANE REDUCTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS - TYPES
1264.02	OBJECT MARKERS - INSTALLATION

LEGEND

GENERAL

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

WORK AREA

REMOVAL

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TEMPORARY PAVEMENT MARKINGS

- PAINT - 4"
- WHITE EDGELINE
 - YELLOW EDGELINE
 - 10' WHITE SKIP

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

MANAGEMENT STRATEGIES

US-421 CONSTRUCTION SUMMARY:
PROPOSED US-421 WILL BE CONSTRUCTED USING A COMBINATION OF LANE CLOSURES, TEMPORARY PORTABLE CONCRETE BARRIER, TEMPORARY ROAD CLOSURE AND OFF-SITE DETOUR DURING WEEKENDS.

SR-3418 (NEELLEY RD.) CONSTRUCTION SUMMARY:
PROPOSED SR-3418 WILL BE CONSTRUCTED AWAY FROM TRAFFIC, AND USING LANE CLOSURES, UNTIL PHASE II. TIE-INS WILL BE COMPLETED USING ROAD CLOSURES AND OFF-SITE DETOURS. ONCE TRAFFIC IS OPENED TO THE PROPOSED FINAL ALIGNMENT, FLAGGING OPERATIONS WILL BE USED TO COMPLETE REMAINING WORK.

APPROVED: _____ DATE: _____ 		<h3 style="margin: 0;">ROADWAY STANDARD DRAWINGS, MANAGEMENT STRATEGIES & LEGEND</h3>
---------------------------------	--	---

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:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
US-421 NB, -YLPA- & -YRPA-	7:00 AM TO 9:00 AM, MONDAY THRU FRIDAY
US-421 SB, -YLPD- & -YRPD-	4:00 PM TO 6:00 PM, MONDAY THRU FRIDAY
SR-3329 (WILLIAMS DAIRY ROAD)	7:00 AM TO 9:00 AM, MONDAY THRU FRIDAY
SR-3418 (NEELLEY ROAD)	7:00 AM TO 9:00 AM, MONDAY THRU FRIDAY
SR-3549 (LIBERTY ROAD)	7:00 AM TO 9:00 AM, MONDAY THRU FRIDAY

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

ROAD NAME

ALL ROADS

HOLIDAY

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

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 PM THE TUESDAY AFTER INDEPENDENCE DAY.
- FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 AM FRIDAY AND 6:00 PM TUESDAY.
- FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 AM TUESDAY TO 6:00 PM MONDAY.
- FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
- FOR THE NCAA TOURNAMENT, OCCURING AT THE GREENSBORO COLISEUM COMPLEX, BETWEEN THE HOURS OF 7:00 AM THE DAY BEFORE THE START OF THE TOURNAMENT AND 6:00 PM THE FOLLOWING DAY AFTER THE END OF THE TOURNAMENT.
- FOR THE ACC TOURNAMENT, OCCURING AT THE GREENSBORO COLISEUM COMPLEX, BETWEEN THE HOURS OF 7:00 AM THE DAY BEFORE THE START OF THE TOURNAMENT AND 6:00 PM THE FOLLOWING DAY AFTER THE END OF THE TOURNAMENT.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>	<u>DURATION AND OPERATION</u>
US-421	6:00 AM TO MIDNIGHT, MONDAY THRU SUNDAY	TWENTY (20) MINUTE DURATION, OVERHEAD SIGN INSTALLATION

D) DO NOT CONDUCT SINGLE VEHICLE HAULING AS FOLLOWS; INGRESS AND EGRESS FOR RAMPS SHALL NOT BE ALLOWED:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
ALL ROADS	MONDAY THRU SUNDAY, 10:00 PM TO 6:00 AM

E) DO NOT CONDUCT MULTI-VEHICLE HAULING AS FOLLOWS; INGRESS AND EGRESS FOR RAMPS SHALL NOT BE ALLOWED:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
ALL ROADS	MONDAY THRU SUNDAY, 10:00 PM TO 6:00 AM

F) 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

- G) 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.
- H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FEET 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.
- I) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FEET 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 FEET 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.
- J) 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.
- K) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FEET ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.
- L) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

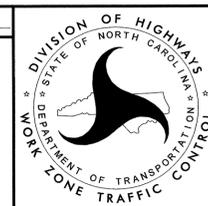
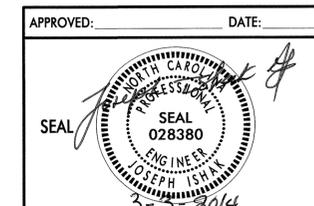
PAVEMENT EDGE DROP OFF REQUIREMENTS

M) 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.



GENERAL NOTES

GENERAL NOTES (CONTINUED)

- N) 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) IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

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

THE NCDOT RESIDENT ENGINEER WILL NOTIFY THE GUILFORD COUNTY SCHOOLS TRANSPORTATION DIRECTOR AT (336) 370-8920 AND THE DIRECTOR OF THE GUILFORD COUNTY EMERGENCY MANAGEMENT SERVICES (EMS) AT (336) 641-7565 OF THE BRIDGE REMOVAL THIRTY (30) CALENDAR DAYS PRIOR TO THE ROAD CLOSURES.

SIGNING

- P) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FEET FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

- Q) PROVIDE PERMANENT SIGNING.

- R) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRANSPORTATION MANAGEMENT PLANS.

PROVIDE SIGNING AND DEVICES REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRANSPORTATION MANAGEMENT PLANS.

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

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

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

TRAFFIC BARRIER

- U) 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.

- V) 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 RSD 1101.05)

<u>POSTED SPEED LIMIT</u>	<u>MINIMUM OFFSET</u>
40 OR LESS	15 FEET
45 - 50	20 FEET
55	25 FEET
60 MPH or HIGHER	30 FEET

THE NCDOT RESIDENT ENGINEER WILL NOTIFY THE OVERSIZE/OVERWEIGHT PERMITS OFFICE PRIOR TO THE INSTALLATION OF TEMPORARY BARRIER AT THE TRAFFIC SHIFTS ALONG US-421 SB (-L-) & US-421 NB (-L1-) SUCH THAT THE PERMITS OFFICE CAN ADVISE OVERSIZE/OVERWEIGHT VEHICLES OF A DETOUR ROUTE, IF NEEDED.

TRAFFIC CONTROL DEVICES

- W) 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 1130.01 (DRUM), 1135.01 (CONES) AND 1180.01 (SKINNY-DRUM) FOR ADDITIONAL REQUIREMENTS.

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

- Y) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FEET CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

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

<u>ROAD NAME</u>	<u>MARKING</u>	<u>MARKERS</u>
ALL ROADS	PAINT	TEMPORARY RAISED
BRIDGE	COLD APPLIED PLASTIC (TYPE IV)	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.

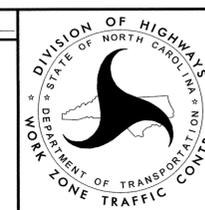
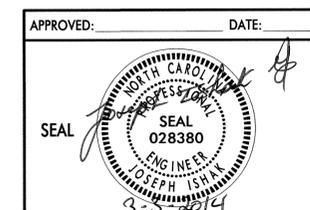
- DD) TRACE THE PROPOSED MONOLITHIC ISLAND LOCATIONS WITH PROPER COLOR PAVEMENT MARKINGS PRIOR TO INSTALLATION. PLACE DRUMS TO DELINEATE ANY MONOLITHIC ISLANDS BEFORE INSTALLATION.

MISCELLANEOUS

- EE) LAW ENFORCEMENT SHALL BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA WHILE DETOURING US-421 TRAFFIC ON WEEKENDS AND/OR AT INTERSECTIONS AS DIRECTED BY THE ENGINEER.

LOCAL NOTES

- 1) EXISTING PAVEMENT MARKINGS MAY BE REVISED FOR THE IMPLEMENTATION OF THE WORK ZONE ALONG -Y2- & -Y8- (NEELLEY ROAD), AS DIRECTED BY THE ENGINEER.



**GENERAL NOTES
(CONT.)**

PHASING

PHASE I

STEP 1: INSTALL WORK ZONE ADVANCE WARNING SIGNS IN ACCORDANCE WITH RSD 1101.01.

STEP 2: AWAY FROM TRAFFIC, BEGIN CLEARING AND GRUBBING OPERATIONS THROUGHOUT THE PROJECT LIMITS.

STEPS 3 & 3A MAY BE PERFORMED SIMULTANEOUSLY.

STEP 3: AWAY FROM TRAFFIC AND USING RSD 1101.02, SHEETS 1 & 3 OF 15, PERFORM THE FOLLOWING:

- MAY BEGIN CONSTRUCTION UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE IN THE FOLLOWING LOCATIONS. PLACE TEMPORARY PAVEMENT MARKINGS IN THE EXISTING / PROPOSED PATTERN, AS DIRECTED BY THE ENGINEER:

- -Y- FROM STA. 17+35+/- TO STA. 37+99+/- (REFER TO SHEETS TMP-6, TMP-8 & TMP-10)
- -Y- FROM STA. 41+14+/- TO STA. 65+40+/- (REFER TO SHEETS TMP-6, TMP-9 & TMP-10)
- NEELLEY ROAD (-Y2-) TO PROPOSED NEELLEY ROAD (-Y-) FROM STA. 10+00+/- TO STA. 11+50+/- (REFER TO SHEET TMP-9)
- TALBOT ROAD (-Y3-) TO PROPOSED NEELLEY ROAD (-Y-) FROM STA. 10+12+/- TO STA. 11+50+/- (REFER TO SHEETS TMP-4 & TMP-9)
- -Y-LPA- FROM STA. 10+00+/- TO STA. 20+98+/- (REFER TO SHEET TMP-4 & TMP-6)
- -Y-LPD- FROM STA. 10+00+/- TO STA. 19+00+/- (REFER TO SHEET TMP-4 & TMP-6)
- -Y-RPA- FROM STA. 10+00+/- TO STA. 26+64+/- (REFER TO SHEETS TMP-4, TMP-6 & TMP-7)
- -Y-RPD- FROM STA. 10+00+/- TO STA. 25+95+/- (REFER TO SHEETS TMP-4, TMP-6 & TMP-7)
- US-421 SB (-L-) FROM STA. 53+70+/- TO STA. 85+30+/- (OUTSIDE WIDENING; REFER TO SHEETS TMP-5 THRU TMP-7)
- US-421 NB (-L1-) FROM STA. 47+61+/- TO STA. 76+77+/- (OUTSIDE WIDENING; REFER TO SHEETS TMP-5 THRU TMP-7)
- MAY BEGIN INSTALLATION OF PROPOSED GUARDRAIL ALONG THE RAMPS (-YRPA- & -YRPD-) AND LOOPS (-Y-LPA- & -Y-LPD-).
- MAY BEGIN INSTALLATION OF PROPOSED GUARDRAIL ALONG EACH SIDE OF US-421 NB (-L1-) FROM STA. 73+31+/- TO STA. 75+63+/-, AS SHOWN ON SHEET TMP-7 AND ROADWAY PLANS.
- MAY BEGIN CONSTRUCTION OF THE PROPOSED -Y- BRIDGE END BENTS PER THE ROADWAY AND STRUCTURAL PLANS (REFER TO SHEET TMP-6).
- MAY BEGIN CONSTRUCTION OF THE PROPOSED CULVERTS PER THE ROADWAY AND STRUCTURAL PLANS (REFER TO SHEETS TMP-4 & TMP-6).
- MAY BEGIN WEDGING AND WIDENING ON LIBERTY ROAD (-Y1-) UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE FROM STA. 13+20+/- TO 35+00+/- (REFER TO SHEETS TMP-4, TMP-8 & TMP-10).
- MAY BEGIN CONSTRUCTION UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE TO CONNECT THE FOLLOWING ROADS. PLACE TEMPORARY PAVEMENT MARKINGS IN THE FINAL PATTERN (REFER TO FINAL PAVEMENT MARKING PLAN):
 - MALLARD LAKE DRIVE TO WOODCOCK DRIVE (-Y4-) FROM STA. 11+00+/- TO STA. 25+70+/- (REFER TO SHEETS TMP-4 & TMP-8).
 - HORIZON DRIVE TO RIDGEPOINT DRIVE (-Y9-) FROM STA. 11+00+/- TO STA. 16+00+/- (REFER TO SHEET TMP-4).
 - PHEASANT DRIVE (-Y5-) FROM STA. 10+00+/- TO STA. 19+61+/- (REFER TO SHEET TMP-4 AND ROADWAY PLANS).

PHASE I (CONT.)

STEP 3A: USING RSD 1101.02, SHEET 3 OF 15, SHEETS TMP-5 & TMP-6, INSTALL TEMPORARY PAINT PAVEMENT MARKINGS TO SHIFT TRAFFIC ALONG US-421 SB (-L-) & US-421 NB (-L1-) INTO TEMPORARY TRAFFIC PATTERN USING ELEVEN FOOT (11') LANES. REMOVE CONFLICTING PAVEMENT MARKINGS. PLACE DRUMS FOR DELINEATION ALONG SHIFT UNTIL PCB IS PLACED. USING SHEETS TMP-5, TMP-6 & TMP-10, CONSTRUCT A FOUR FOOT (4') WIDTH OF PERMANENT WIDENING TO THE EDGE AND ELEVATION OF THE EXISTING TRAVEL LANE ALONG MEDIAN (-L-) FROM STA. 56+41+/- TO STA. 61+35+/- AND ALONG MEDIAN (-L1-) FROM STA. 58+65+/- TO STA. 63+75+/-, PRIOR TO INSTALLATION OF PCB.

THEN, USING SHEETS TMP-5 THRU TMP-7 & TMP-10, INSTALL PORTABLE CONCRETE BARRIER WALL WITH CRASH CUSHIONS IN THE FOLLOWING LOCATIONS:

- ALONG INSIDE SHOULDER OF US-421 SB (-L-) FROM STA. 57+00+/- TO STA. 61+00+/-
- ALONG OUTSIDE SHOULDER OF US-421 SB (-L-) FROM STA. 56+00 TO STA. 81+00+/-
- ALONG INSIDE SHOULDER OF US-421 NB (-L1-) FROM STA. 59+00+/- TO STA. 63+10+/-

THEN, COMPLETE REMOVAL OF THE EXISTING GUARDRAIL FROM THE RIGHT SIDE OF US-421 SB (-L-) FROM STA. 57+15+/- TO STA. 79+50+/- (REFER TO SHEETS TMP-5 THRU TMP-7 & TMP-10).

STEP 4: BEHIND PORTABLE CONCRETE BARRIER WALL ON US-421, CONSTRUCT THE PROPOSED INTERIOR FOOTINGS AND BENTS PER THE ROADWAY AND STRUCTURAL PLANS. COMPLETE THE END BENT CONSTRUCTION (REFER TO SHEETS TMP-6 AND TMP-10). THE CONTRACTOR MAY INSTALL ROAD CLOSURE AND DETOUR SIGNS ASSOCIATED WITH GIRDER INSTALLATION, AS SHOWN ON SHEETS TMP-11 AND TMP-12. COVER SIGNS UNTIL READY TO CLOSE ROAD.

STEP 5: INSTALL THE GIRDERS OVER US-421.

WORK TO COMPLETE THE WORK OF PHASE I, STEP 5 FROM 9:00 P.M. FRIDAY TO 9:00 A.M. SATURDAY, FROM 9:00 P.M. SATURDAY TO 9:00 A.M. SUNDAY, AND FROM 9:00 P.M. SUNDAY TO 6:00 A.M. MONDAY IN ORDER TO INSTALL GIRDERS AND OVERHEAD PROTECTION OVER THE TRAVEL LANES OF US-421 (SPANS A & C) IN ONE (1) WEEKEND OF THE CONTRACTOR'S CHOICE. REFER TO INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.

- FOR SPANS A & C, INSTALL GIRDERS OVER US-421 (NORTHBOUND & SOUTHBOUND) AS FOLLOWS:
 - A. INSTALL / UNCOVER ROAD CLOSURE AND DETOUR SIGNS, AND PLACE TYPE III BARRICADES, DRUMS AND TRUCK-MOUNTED ATTENUATORS TO CLOSE US-421 AND DETOUR TRAFFIC OFF-SITE, AS SHOWN ON SHEETS TMP-11 AND TMP-12.
 - B. INSTALL SPAN A GIRDERS, SPAN C GIRDERS AND OVERHEAD PROTECTION OVER US-421 (NORTHBOUND AND SOUTHBOUND).
 - C. COVER ALL ROAD CLOSURE, LANE CLOSURE AND REGULATORY SIGNS ASSOCIATED WITH WEEKEND ICT. OTHER DETOUR SIGNING MAY BE COVERED, AS DIRECTED BY THE ENGINEER. OPEN US-421 TO THE ORIGINAL TRAFFIC PATTERN AT THE END OF EACH SHIFT.

- AWAY FROM TRAFFIC, INSTALL GIRDERS FOR SPAN B OVER THE MEDIAN OF US-421 AWAY FROM TRAFFIC.

STEP 6: AWAY FROM TRAFFIC AND USING RSD 1101.02, SHEETS 1 & 3 OF 15, PERFORM THE FOLLOWING:

- COMPLETE THE PROPOSED BRIDGE CONSTRUCTION PER THE ROADWAY AND STRUCTURAL PLANS (REFER TO SHEET TMP-6).
- COMPLETE CONSTRUCTION OF THE PROPOSED CULVERTS PER THE ROADWAY AND STRUCTURAL PLANS (REFER TO SHEET TMP-6).

ICT

APPROVED: _____ DATE: _____ 		<h2 style="margin: 0;">PHASING NOTES</h2>
--	---	---

PHASING (CONTINUED)

PHASE I (CONT.)

- COMPLETE CONSTRUCTION UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE, AS BEGUN IN PHASE I, STEP 3, IN THE FOLLOWING LOCATIONS. PLACE TEMPORARY PAVEMENT MARKINGS IN THE FINAL PATTERN, AS MUCH AS POSSIBLE (REFER TO FINAL PAVEMENT MARKING PLAN):
 - -Y- FROM STA. 17+35+/- TO STA. 65+40+/- (REFER TO SHEETS TMP-6, TMP-9 & TMP-10)
 - -YLPA- FROM STA. 10+00+/- TO STA. 20+98+/- (REFER TO SHEET TMP-6), KEEP LOOP CLOSED
 - -YLPD- FROM STA. 10+00+/- TO STA. 19+00+/- (REFER TO SHEET TMP-6), KEEP LOOP CLOSED
 - -YRPA- FROM STA. 10+00+/- TO STA. 26+64+/- (REFER TO SHEETS TMP-6 & TMP-7), KEEP RAMP CLOSED
 - -YRPD- FROM STA. 10+00+/- TO STA. 25+95+/- (REFER TO SHEETS TMP-6 & TMP-7), KEEP RAMP CLOSED
 - US-421 SB (-L-) FROM STA. 53+70+/- TO STA. 85+30+/- (OUTSIDE WIDENING; REFER TO SHEETS TMP-5 THRU TMP-7), MAINTAIN US-421 SB IN TEMPORARY SHIFTED PATTERN
 - US-421 NB (-L1-) FROM STA. 47+61+/- TO STA. 76+77+/- (OUTSIDE WIDENING; REFER TO SHEETS TMP-5 THRU TMP-7), MAINTAIN US-421 NB IN TEMPORARY SHIFTED PATTERN
 - HORIZON DRIVE TO RIDGEPOINT DRIVE (-Y9-) FROM STA. 11+00+/- TO STA. 16+00+/- (REFER TO SHEET TMP-4)
- COMPLETE THE INSTALLATION OF PROPOSED GUARDRAIL ALONG THE RAMPS (-YRPA- & -YRPD) AND LOOPS (-YLPA- & -YLPD-).
- COMPLETE THE CONNECTION OF MALLARD LAKE DRIVE TO WOODCOCK DRIVE (-Y4-) FROM STA. 11+00+/- TO STA. 25+70+/- UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE (REFER TO SHEETS TMP-4 AND TMP-8). USING RSD 1101.02, SHEET 3 OR 11 OF 15, PLACE TEMPORARY PAVEMENT MARKINGS IN THE FINAL PATTERN (REFER TO FINAL PAVEMENT MARKING PLAN). USING TYPE III BARRICADES WITH ROAD CLOSED (R11-2) SIGNS, CLOSE WOODCOCK DRIVE (-Y4-) AT LIBERTY ROAD (-Y1-). USING RSD 1101.02, SHEET 1 OF 15, CONSTRUCT THE TURN-OUT FROM STA. 11+00+/- TO STA. 12+00+/- . INSTALL PERMANENT END OF ROAD SIGNING / DEVICES. REMOVE EXISTING PAVEMENT (REFER TO SHEETS TMP-4 AND TMP-8, AND ROADWAY PLANS).
- COMPLETE CONSTRUCTION UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE ALONG PHEASANT DRIVE (-Y5-) (REFER TO SHEET TMP-4 AND ROADWAY PLANS). PLACE TEMPORARY PAVEMENT MARKINGS IN THE FINAL PATTERN (REFER TO FINAL PAVEMENT MARKING PLAN).
- COMPLETE THE INSTALLATION OF PROPOSED GUARDRAIL ALONG EACH SIDE OF US-421 NB (-L1-) FROM STA. 73+31+/- TO STA. 75+63+/-, AS SHOWN ON SHEET TMP-7 AND ROADWAY PLANS. BEHIND GUARDRAIL, MAY BEGIN INSTALLATION OF COLUMNS FOR PROPOSED OVERHEAD SIGN ASSEMBLY ALONG US-421 NB (-L1-) AT STA. 73+50+/- (REFER TO SIGNING PLANS).
- RESET EXISTING GUARDRAIL WITH PROPOSED ANCHOR UNITS, IF IT WAS REMOVED AS DESCRIBED ON SHEET TMP-6 (REFER TO ROADWAY PLANS).

STEP 7: AWAY FROM TRAFFIC AND USING RSD 1101.02, SHEETS 1, 3 & 9 OF 15, PERFORM THE FOLLOWING:

- BEHIND GUARDRAIL, INSTALL COLUMNS FOR PROPOSED OVERHEAD SIGN ASSEMBLY ALONG US-421 NB (-L1-) AT STA. 73+50+/-.
- USING RSD 1101.03, SHEET 9 OF 9, CONSTRUCT PROPOSED OVERHEAD SIGN ASSEMBLY ALONG US-421 NB (-L1-) AT STA. 73+50+/- FROM MIDNIGHT TO 6:00 A.M., MONDAY THRU SUNDAY (REFER TO SHEET TMP-7). TRAFFIC SHALL NOT BE HELD FOR MORE THAN TWENTY (20) MINUTES. REFER TO INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES. THE CONTRACTOR MAY BEGIN INSTALLATION OF THE PERMANENT SIGNING ASSOCIATED WITH THE NEELLEY ROAD (-Y-) INTERCHANGE. COVER SIGNS UNTIL READY TO OPEN TRAFFIC TO THE FINAL TRAFFIC PATTERN, OR AS DIRECTED BY THE ENGINEER (REFER TO SIGNING PLANS).
- INSTALL PROPOSED MEDIAN GUARDRAIL AND REMAINING PROPOSED MEDIAN WIDENING ALONG US-421 SB (-L-) AND US-421 NB (-L1-) PER THE ROADWAY PLANS (REFER TO SHEET TMP-10A). THEN REMOVE THE PORTABLE CONCRETE BARRIER WALL WITH CRASH CUSHIONS FROM THE FOLLOWING LOCATIONS:
 - ALONG INSIDE SHOULDER OF US-421 SB (-L-) FROM STA. 57+00+/- TO STA. 61+00+/-
 - ALONG OUTSIDE SHOULDER OF US-421 SB (-L-) FROM STA. 56+00+/- TO STA. 81+00+/-
 - ALONG INSIDE SHOULDER OF US-421 NB (-L1-) FROM STA. 59+00+/- TO STA. 63+10+/-

PHASE I (CONT.)

- AFTER PCB IS REMOVED, USING RSD 1101.02, SHEET 3 OR 12 OF 15, PLACE TEMPORARY PAVEMENT MARKINGS TO SHIFT TRAFFIC TO THE FINAL TRAFFIC PATTERN ALONG US-421 SB (-L-) & US-421 NB (-L1-) (REFER TO FINAL PAVEMENT MARKING PLAN). REMOVE CONFLICTING MARKINGS. THEN, USING RSD 1101.02, SHEET 3 OF 15, CONSTRUCT PROPOSED PAVEMENT UP TO BUT NOT INCLUDING THE FINAL LAYER WHERE PCB WAS PREVIOUSLY PLACED ON OUTSIDE SHOULDER OF US-421 SB (-L-) FROM STA. 56+00+/- TO STA. 81+00+/-.

WORK TO COMPLETE THE WORK OF PHASE I, STEP 7 FROM 9:00 P.M. FRIDAY TO 9:00 A.M. SATURDAY, FROM 9:00 P.M. SATURDAY TO 9:00 A.M. SUNDAY, AND FROM 9:00 P.M. SUNDAY TO 6:00 A.M. MONDAY IN ORDER TO REMOVE ALL OF THE OVERHEAD PROTECTION REQUIRED TO COMPLETE CONSTRUCTION OF THE SUPERSTRUCTURE OVER THE TRAVEL LANES OF US-421 (SPANS A & C) IN ONE (1) WEEKEND OF THE CONTRACTOR'S CHOICE. REFER TO INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.

ICT

- A. UNCOVER ROAD CLOSURE AND DETOUR SIGNS, AND PLACE TYPE III BARRICADES, DRUMS AND TRUCK-MOUNTED ATTENUATORS TO CLOSE US-421 AND DETOUR TRAFFIC OFF-SITE, AS SHOWN ON TMP-11 AND TMP-12.
 - B. REMOVE THE OVERHEAD PROTECTION REQUIRED TO COMPLETE CONSTRUCTION OF THE SUPERSTRUCTURE.
 - C. REMOVE / COVER ALL ROAD CLOSURE SIGNING / DEVICES AND DETOUR SIGNING. OPEN US-421 TO THE ORIGINAL TRAFFIC PATTERN AT THE END OF EACH SHIFT.
- USING SHEETS TMP-16 THRU TMP-19, INSTALL ROAD CLOSURE AND DETOUR SIGNS FOR CLOSURE OF WILLIAMS DAIRY ROAD (-Y-) AND NEELLEY ROAD (-Y2-) IN PHASE II. COVER SIGNS UNTIL READY TO CLOSE THE ROADS.
 - INSTALL AND COVER ALL PROPOSED GROUND MOUNTED SIGNS, AS DIRECTED BY THE ENGINEER.

17-MAR-2014 15:17 \\dot\dfs\root\NPR\Projects\R2612B\TrafficControl\TCP\R-2612B_TC_TMP-03.dgn drKennedy AT TE264741

APPROVED: _____ DATE: _____ 		<h2 style="margin: 0;">PHASING NOTES (CONTINUED)</h2>
--	---	---

PHASING (CONTINUED)

PHASE II

STEP 1: CONSTRUCT TIE-INS.

WORK TO COMPLETE THE WORK REQUIRED OF PHASE II, STEPS 1 AND 2, FROM 9:00 P.M. FRIDAY TO 6:00 A.M. MONDAY IN ORDER TO CONSTRUCT THE TIE-INS AT EACH END OF -Y-, AS WELL AS THE CONSTRUCTION OF -Y2- AND -Y3-, AND OPENING THE NEELLEY ROAD INTERCHANGE TO THE FINAL TRAFFIC PATTERN. REFER TO INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.

- CONSTRUCT TIE-INS OF -Y- AT WILLIAMS DAIRY ROAD AS FOLLOWS:
 - A. USING SHEETS TMP-14, TMP-16 AND TMP-17, UNCOVER ROAD CLOSURE AND DETOUR SIGNS INSTALLED IN PHASE I, STEP 7. PLACE TYPE III BARRICADES TO CLOSE WILLIAMS DAIRY ROAD AND DETOUR TRAFFIC OFF-SITE.
 - B. CONSTRUCT TIE-IN UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE, AS SHOWN ON TMP-14. USE FLAGGERS, AS NECESSARY, TO MAINTAIN LOCAL TRAFFIC.
 - C. PLACE TEMPORARY PAVEMENT MARKINGS IN THE FINAL PATTERN (REFER TO FINAL PAVEMENT MARKING PLAN).
- CONSTRUCT TIE-IN OF -Y-, -Y2- AND -Y3- AT NEELLEY ROAD AS FOLLOWS:
 - A. USING SHEETS TMP-15, TMP-18 AND TMP-19, UNCOVER ROAD CLOSURE AND DETOUR SIGNS INSTALLED IN PHASE I, STEP 7. PLACE TYPE III BARRICADES TO CLOSE NEELLEY ROAD AND DETOUR TRAFFIC OFF-SITE.
 - B. CONSTRUCT TIE-INS UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE, AS SHOWN ON TMP-15. USE FLAGGERS, AS NECESSARY, TO MAINTAIN LOCAL TRAFFIC.
 - C. PLACE TEMPORARY PAVEMENT MARKINGS IN THE FINAL PATTERN (REFER TO FINAL PAVEMENT MARKING PLAN).
- USING RSD 1101.03, SHEET 9 OF 9, INSTALL PROPOSED OVERHEAD SIGNING ASSOCIATED WITH THE NEELLEY ROAD (-Y-) INTERCHANGE AT STA. 73+50+/- (IF NOT PREVIOUSLY INSTALLED). REFER TO INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.
- USING RSD 1101.02, SHEETS 1 & 3 OF 15, AS NECESSARY, COMPLETE THE PLACEMENT OF TEMPORARY PAVEMENT MARKINGS IN THE FINAL TRAFFIC PATTERN ALONG US-421, PROPOSED RAMPS/LOOPS, AND -Y- TO ALLOW THE INTERCHANGE TO PROPERLY FUNCTION AS DESIGNED.

STEP 2: UNCOVER ALL PERMANENT SIGNING ASSOCIATED WITH THE NEELLEY ROAD (-Y-) INTERCHANGE. OPEN NEELLEY ROAD (-Y-) INTERCHANGE TO THE FINAL TRAFFIC PATTERN. REMOVE / COVER ALL ROAD CLOSURE SIGNING / DEVICES AND DETOUR SIGNING. WHILE OPENING THE NEELLEY ROAD (-Y-) INTERCHANGE, SIMULTANEOUSLY CLOSE THE CROSSINGS ALONG US-421 (-L- AND -L1-) LOCATED AT HARMONT DRIVE (-Y6- AND -Y7-) AND NEELLEY ROAD (-Y8-) USING TYPE III BARRICADES (REFER TO SHEETS TMP-21 AND TMP-22).

ICT

PHASE III

STEP 1: COMPLETE ANY REMAINING WORK ALREADY BEGUN.

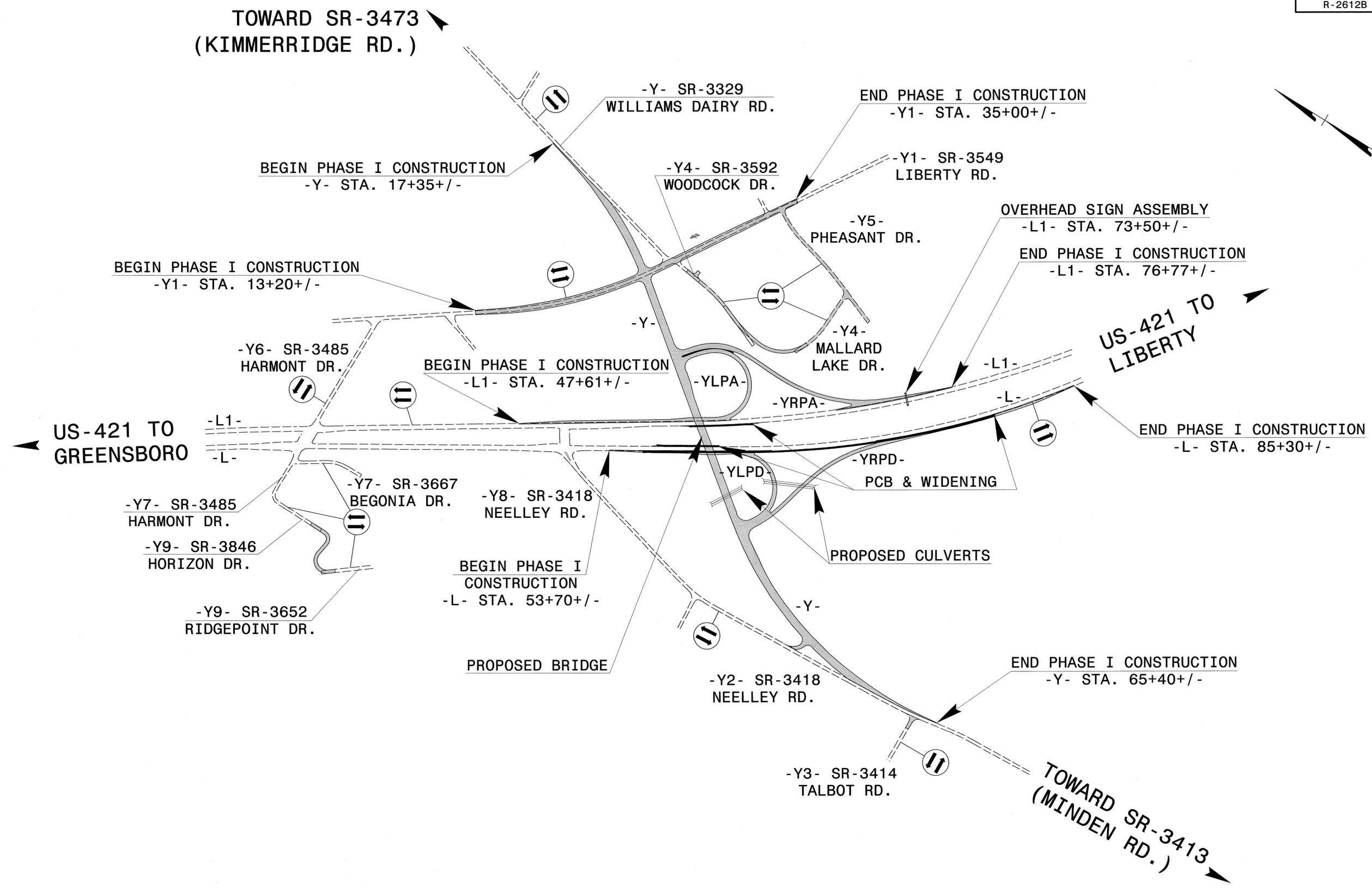
STEP 2: AWAY FROM TRAFFIC AND USING RSD 1101.02, SHEETS 1 & 3 OF 15, PERFORM THE FOLLOWING:

- REMOVE EXISTING PAVEMENT ALONG THE MEDIAN OF US-421 PER THE ROADWAY PLANS. (REFER TO SHEETS TMP-20, TMP-21 AND TMP-22).
- ALONG HARMONT DRIVE (-Y6-), CONSTRUCT THE TURN-OUT FROM STA. 11+95+/- TO 12+90+/- AND REMOVE EXISTING PAVEMENT PER THE ROADWAY PLANS (REFER TO SHEETS TMP-20 AND TMP-21). INSTALL PROPOSED ROAD CLOSURE DEVICES (REFER TO ROADWAY AND SIGNING PLANS).
- ALONG BEGONIA DRIVE (-Y7-), CONSTRUCT THE TURN-OUT FROM STA. 16+00+/- TO 16+92+/- . PERFORM GRADING / DRAINAGE AND PAVING OPERATIONS TO COMPLETE THE CONNECTION OF BEGONIA DRIVE TO HARMONT DRIVE (-Y7-) FROM STA. 11+00+/- TO 13+50+/-; REMOVE EXISTING PAVEMENT PER THE ROADWAY PLANS (REFER TO SHEETS TMP-20 AND TMP-21).
- ALONG NEELLEY ROAD (-Y8-), CONSTRUCT THE TURN-OUT FROM STA. 11+20+/- TO 12+15+/- AND REMOVE EXISTING PAVEMENT PER THE ROADWAY PLANS (REFER TO SHEETS TMP-20 AND TMP-22).
- COMPLETE THE WEDGING AND WIDENING OF LIBERTY ROAD (-Y1-) UP TO, BUT NOT INCLUDING, THE FINAL LAYER OF SURFACE COURSE, AS BEGUN IN PHASE I, STEP 3 (REFER TO SHEETS TMP-8 & TMP-20). PLACE TEMPORARY PAVEMENT MARKINGS IN THE FINAL TRAFFIC PATTERN.
- REMOVE EXISTING PAVEMENT ALONG WILLIAM DAIRY ROAD (-Y-) PER THE ROADWAY PLANS (REFER TO SHEET TMP-23).
- REMOVE EXISTING PAVEMENT ALONG NEELLEY ROAD (-Y2-) PER THE ROADWAY PLANS (REFER TO SHEET TMP-24).

STEP 3: USING RSD 1101.02, SHEETS 1, 3, 11 & 12 OF 15, INSTALL THE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS ON ALL ROADS (REFER TO PAVEMENT MARKING PLANS).

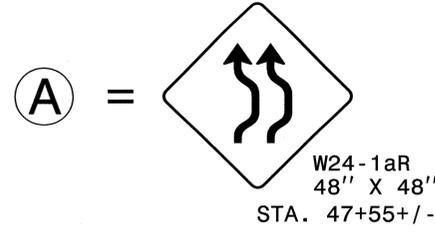
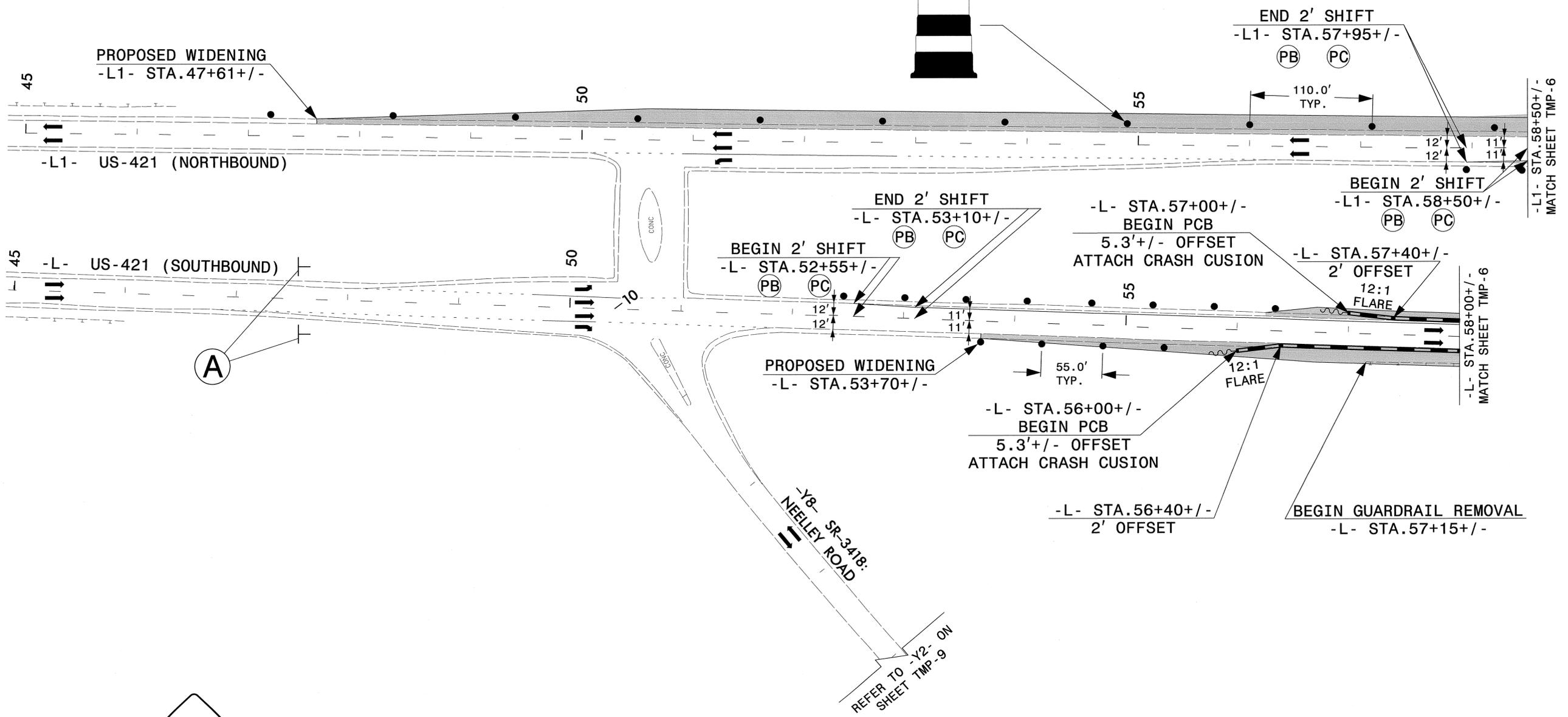
STEP 4: REMOVE ALL WORK ZONE TRAFFIC CONTROL SIGNING AND DEVICES.

APPROVED: _____ DATE: _____ 		<h2>PHASING NOTES (CONTINUED)</h2>
--	---	--



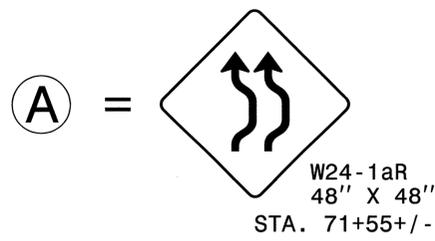
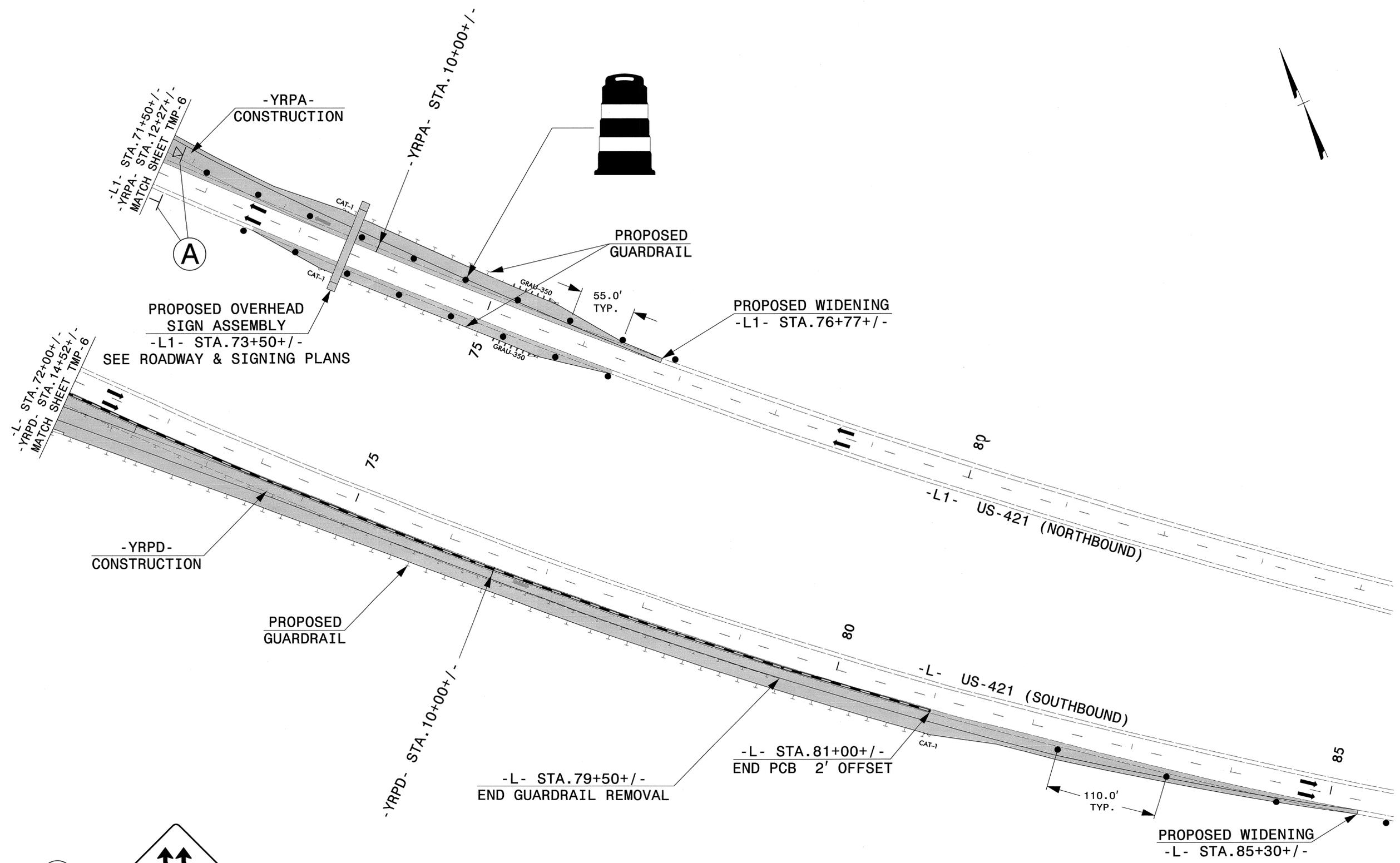
2/28/2014
 R:\Tj\Projects-R-2612B\TrafficControl\TCP\R-2612B_TC_TMP_04_Phase I Overview.dgn
 User: dr-kennedy

APPROVED: _____ DATE: _____		PHASE I OVERVIEW



2/28/2014
R:\jpp\Projects-R\2612B\Traffic\TrafficControl\TCP-R-2612B-TC-TMP-05.dgn
User:dr-kennedy

APPROVED: _____ DATE: _____		<h2>PHASE I DETAIL</h2>
		

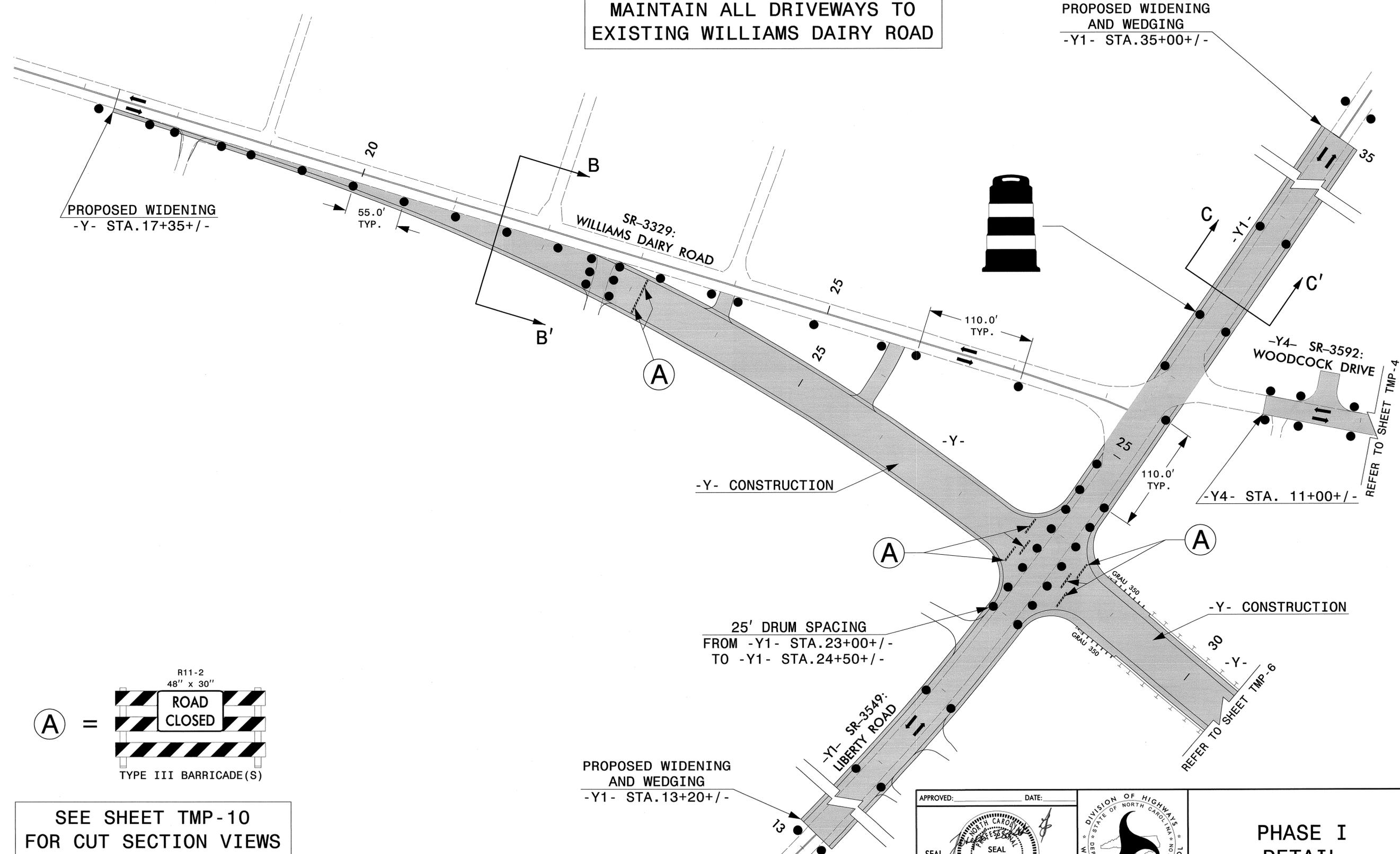


APPROVED:	DATE: 3-2-2014		PHASE I DETAIL

3/4/2014
 \\dot\dfsroot0\proj\TIP\Projects-R\2612B\TrafficControl\TCP\R-2612B_TC_TMP_07.dgn
 User: drkennedy

MAINTAIN ALL DRIVEWAYS TO EXISTING WILLIAMS DAIRY ROAD

PROPOSED WIDENING AND WEDGING
-Y1- STA. 35+00+/-

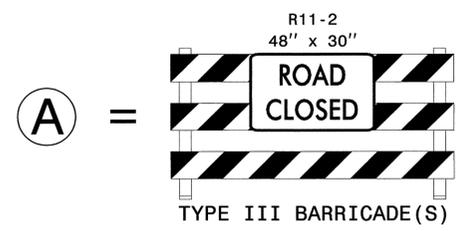


PROPOSED WIDENING
-Y- STA. 17+35+/-

-Y4- SR-3592:
WOODCOCK DRIVE
REFER TO SHEET TMP-4
-Y4- STA. 11+00+/-

25' DRUM SPACING
FROM -Y1- STA. 23+00+/-
TO -Y1- STA. 24+50+/-

PROPOSED WIDENING AND WEDGING
-Y1- STA. 13+20+/-



SEE SHEET TMP-10
FOR CUT SECTION VIEWS

APPROVED: _____ DATE: _____



SEAL
JOSEPH ISHIK
ENGINEER
028380
5-2-2014



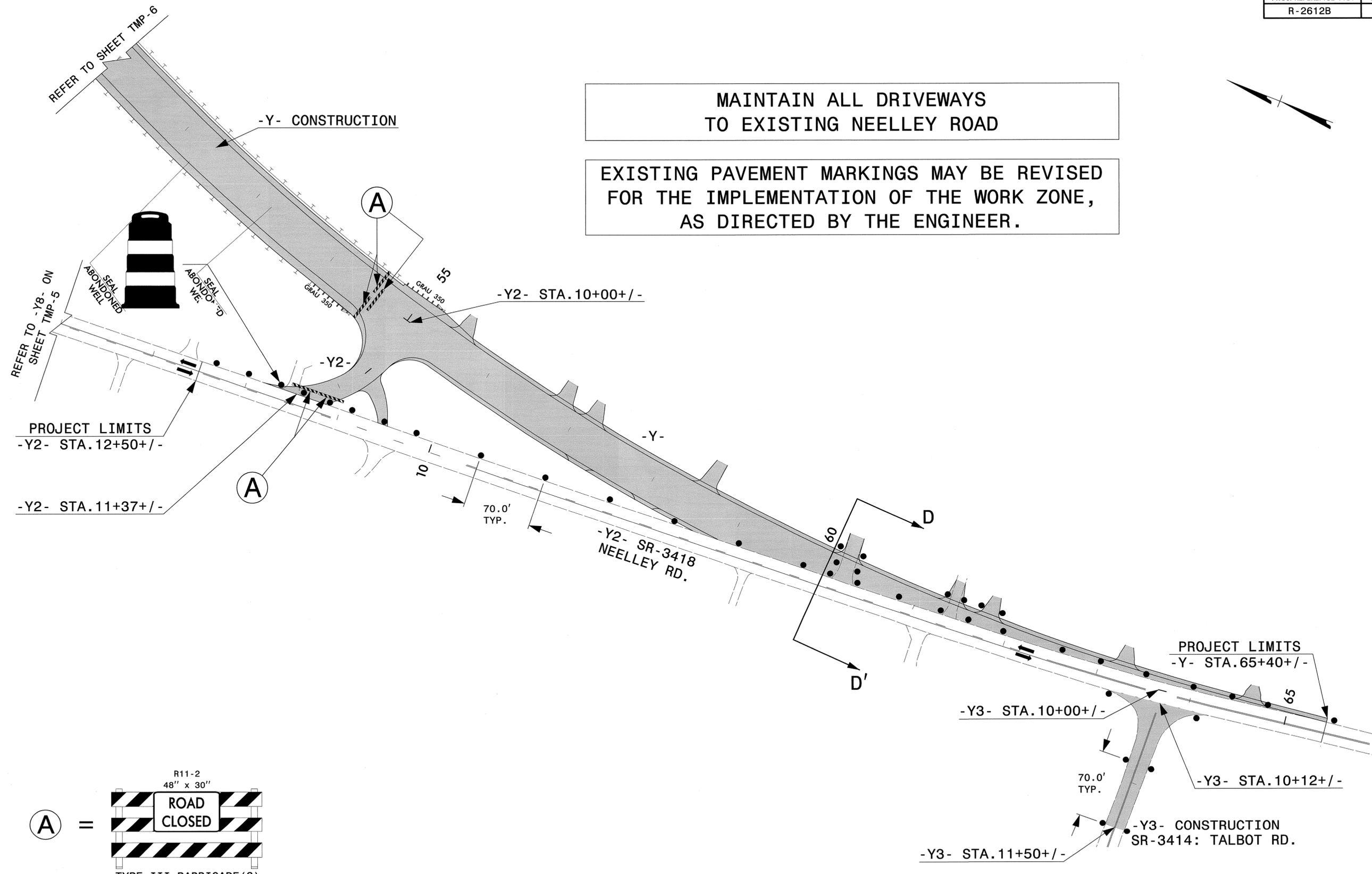
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
WORK ZONE TRAFFIC CONTROL

PHASE I
DETAIL

2/28/2014 R:\ip\Projects\R-2612B\TrafficControl\TCP\R-2612B_TC_TMP_08.dgn User:dfkennedy

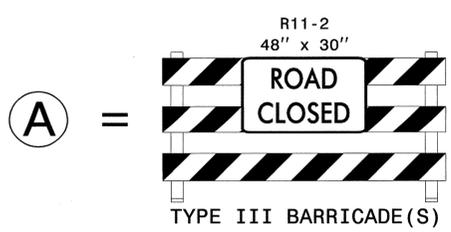
MAINTAIN ALL DRIVEWAYS
TO EXISTING NEELLEY ROAD

EXISTING PAVEMENT MARKINGS MAY BE REVISED
FOR THE IMPLEMENTATION OF THE WORK ZONE,
AS DIRECTED BY THE ENGINEER.



PROJECT LIMITS
-Y2- STA. 12+50+/-
-Y2- STA. 11+37+/-

PROJECT LIMITS
-Y- STA. 65+40+/-



SEE SHEET TMP-10
FOR CUT SECTION VIEW

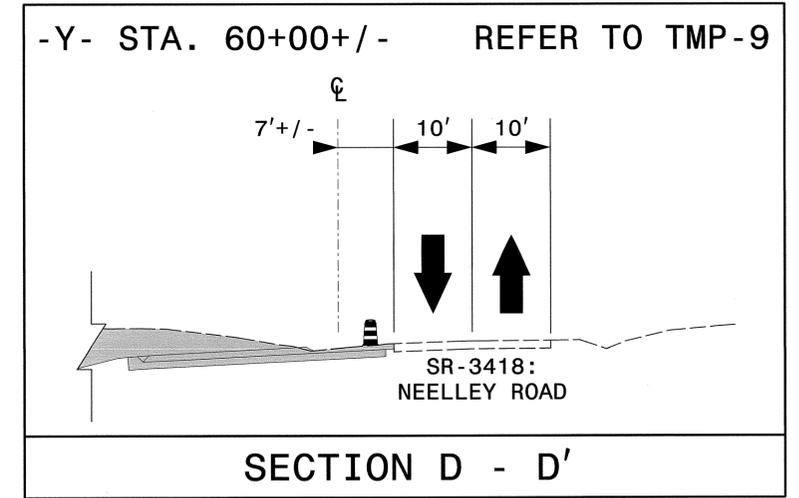
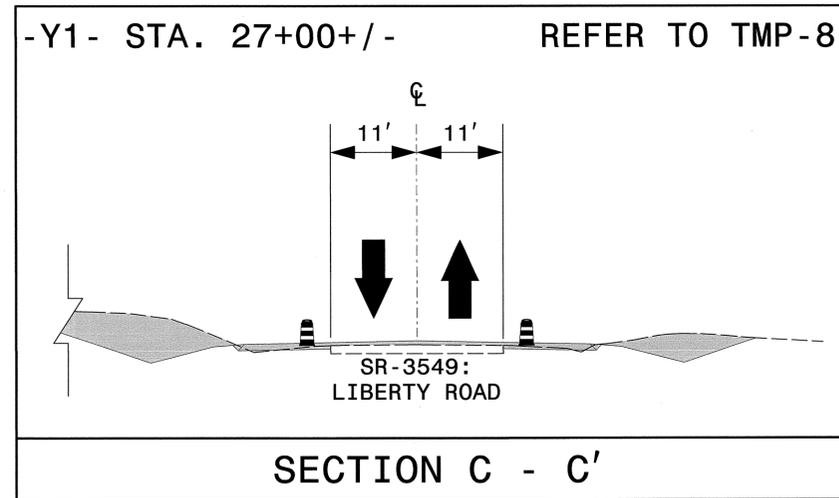
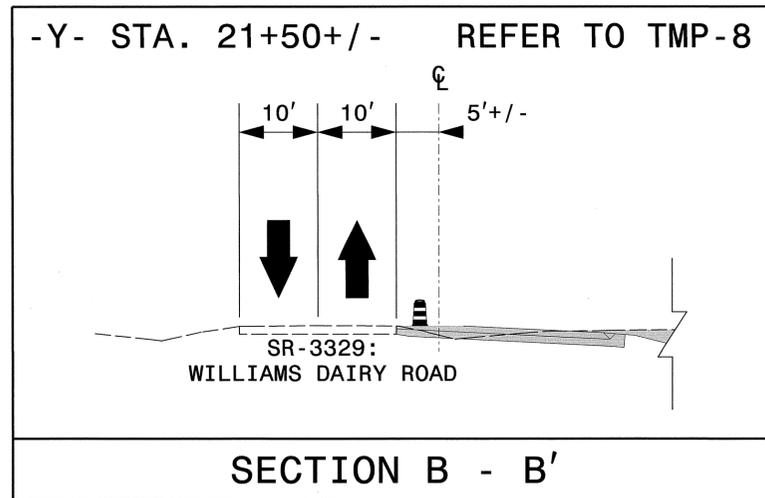
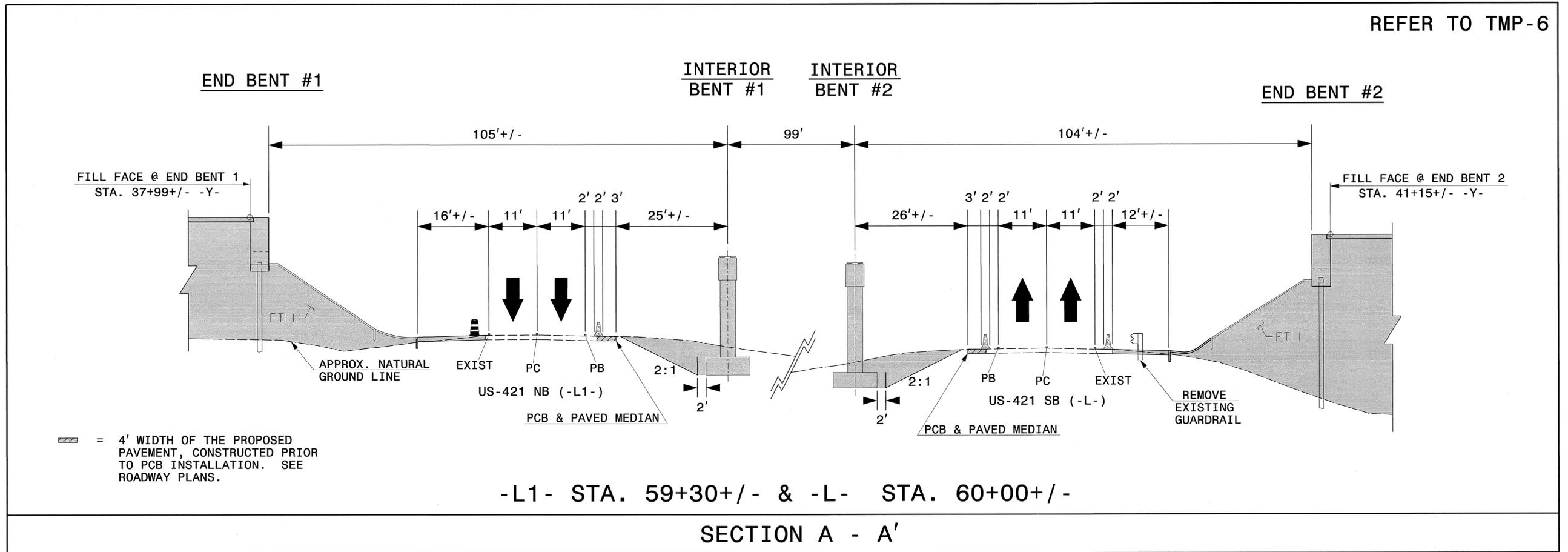
APPROVED: _____ DATE: _____
SEAL
NORTH CAROLINA
SEAL
028380
ENGINEER
JOSEPH ISHAK
5-2-2014



PHASE I
DETAIL

3/3/2014 R:\TIP\Projects\R-2612B\TrafficControl\TCP\R-2612B.TC.TMP_09.dgn User:drkennedy

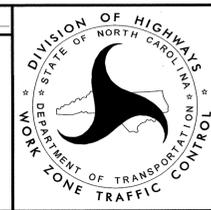
REFER TO TMP-6



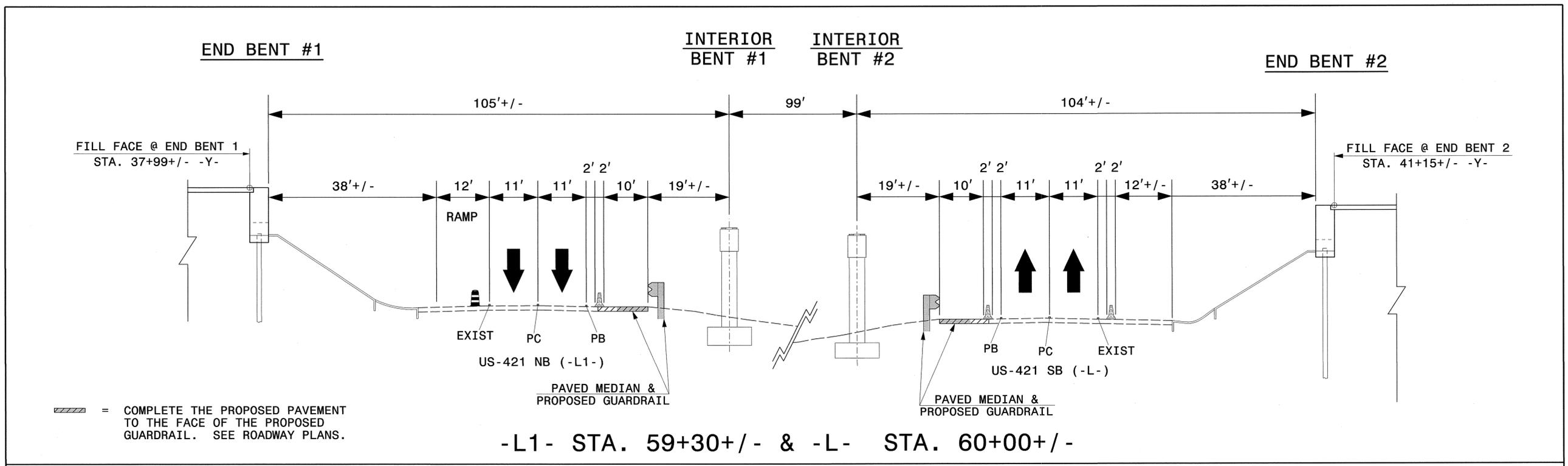
2/28/2014 R:\TIP\Projects-R-2612B\TrafficControl\TCP-R-2612B-TC-TMP-10_Phase I Cross-Section.dgn User:drkennedy

APPROVED: _____ DATE: _____

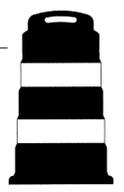
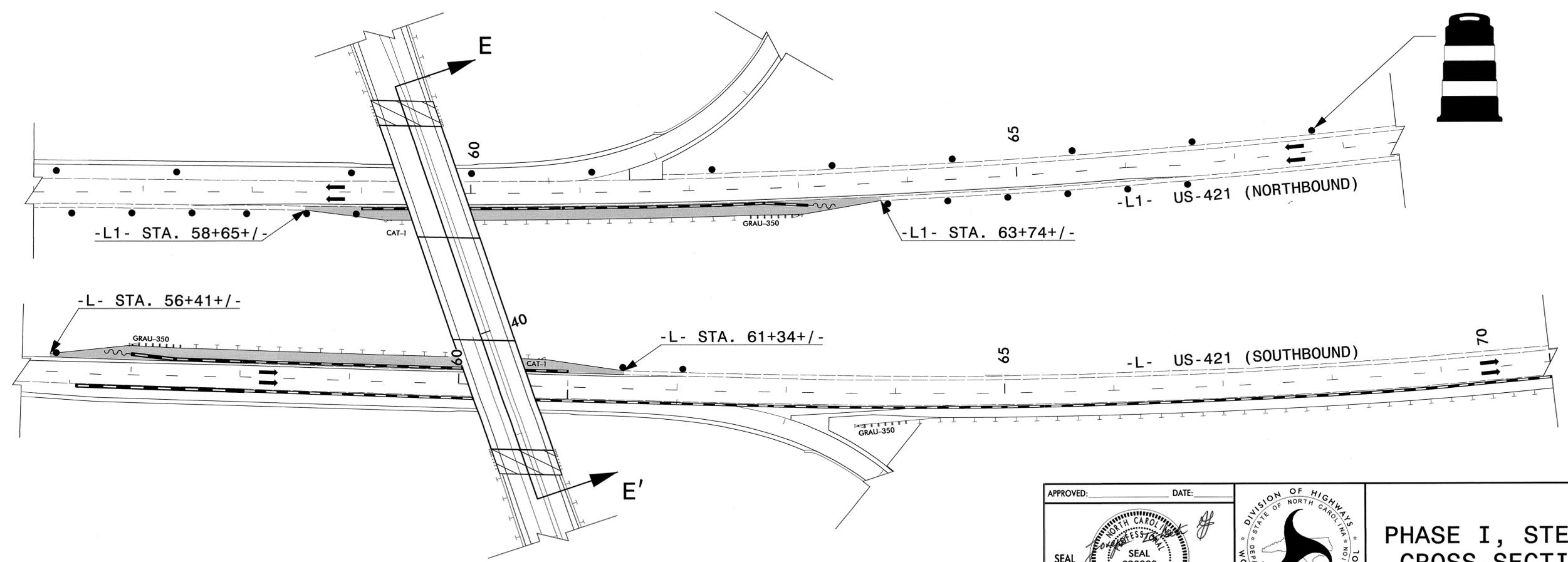
SEAL



**PHASE I
CROSS-SECTION(S)**



SECTION E - E'



3/2/2014
 R:\IT\Projects-R\2612B\TrafficControl\TCP\AR-2612B_TC_TMP_10A.dgn
 User:darKennedy

APPROVED: _____ DATE: _____

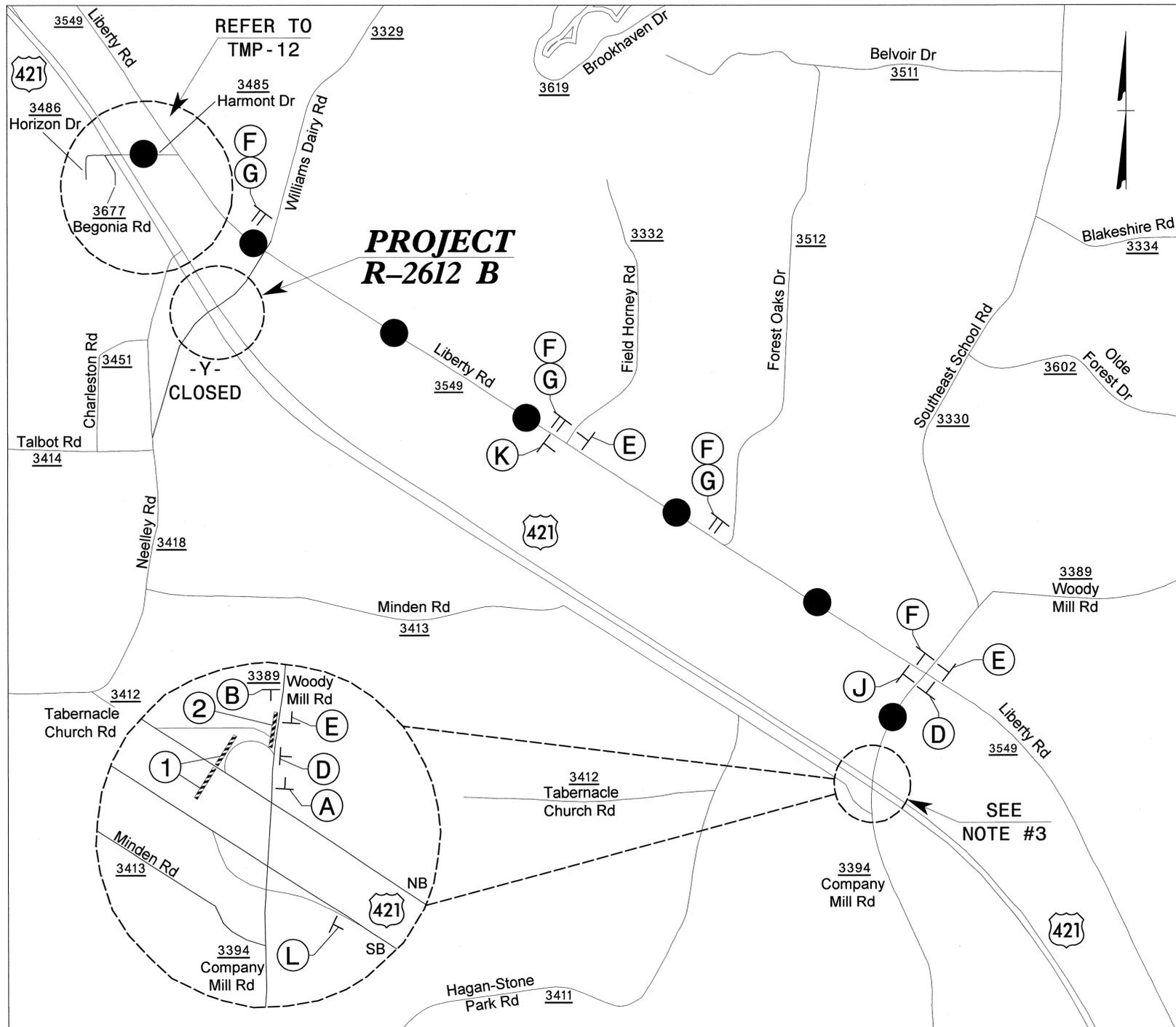
SEAL SEAL 028380 3-2-2014

ENGINEER JOSEPH ISHAK



**PHASE I, STEP 7
CROSS-SECTION**

VICINITY MAP: GUILFORD COUNTY



**PROJECT
R-2612 B**

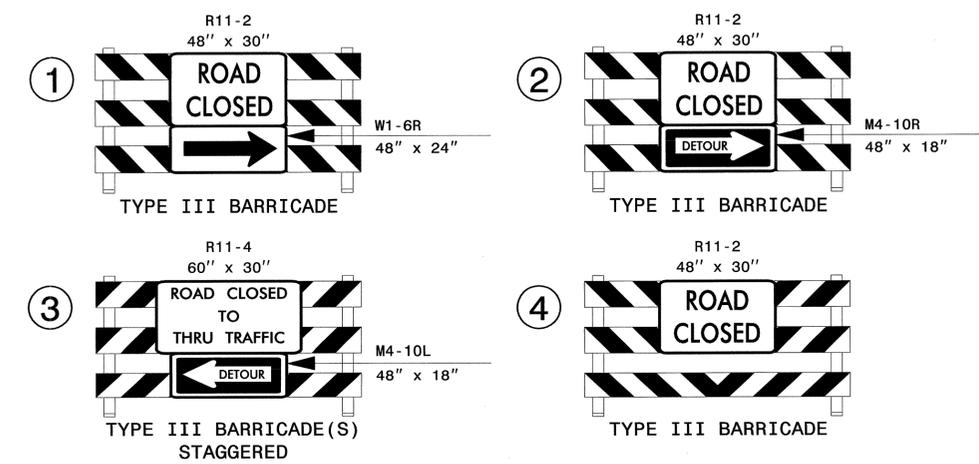
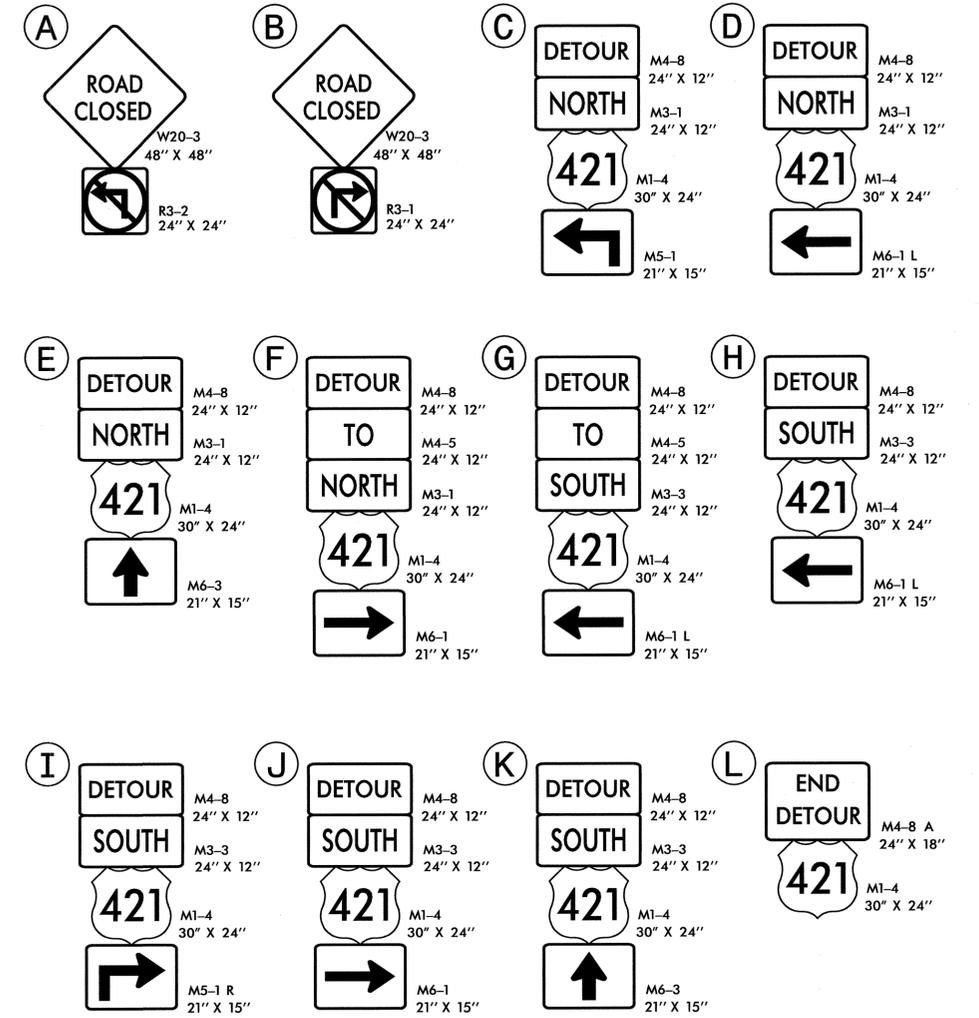
**-Y-
CLOSED**

**SEE
NOTE #3**

OFFSITE DETOUR ROUTE = ● — ● — ●

**OFFSITE DETOUR ROUTE:
FROM US-421 TO SR-3485 TO SR-3549
TO SR-3389 BACK TO US-421**

- NOTES:**
1. REFER TO RSD 1101.03, SHEET 7 OF 9, FOR ROAD CLOSURE SIGN DISTANCES AND APPLICABLE NOTES.
 2. DETOUR SIGN LOCATIONS ARE APPROX.; PLACE PER ENGINEER'S DIRECTION.
 3. USE RSD 1101.03, SHEET 7 OF 9, FOR ROAD CLOSURE OF US-421 NORTHBOUND AT WOODY MILL ROAD / COMPANY MILL ROAD EXIT.
 4. REFER TO SHEET TMP-12 FOR TREATMENT OF US-421 SB CLOSURE AT HARMONT DRIVE (-Y6- & -Y7).



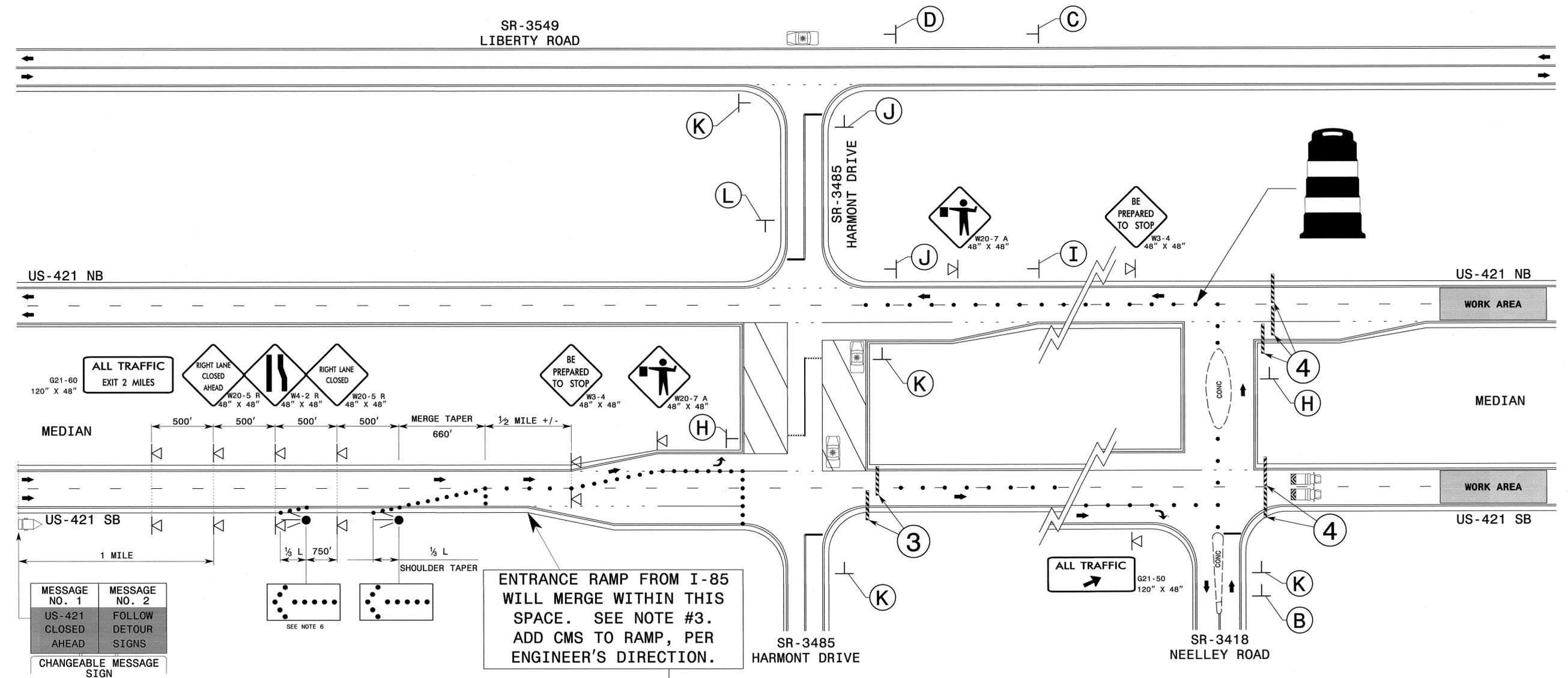
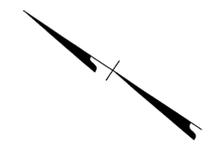
APPROVED: _____ DATE: _____



**PHASE I
OFF-SITE DETOUR ROUTE &
BARRICADE PLACEMENT FOR
-Y- GIRDER AND OVERHEAD
PROTECTION INSTALLATION
AND REMOVAL**

2/28/2014 R:\Tjpp\Projects-R\2612B\TrafficControl\TCP-VR-2612B-TC-TMP-11 and 12.dgn User:dfkennedy

DETOUR DETAIL



MESSAGE NO. 1	MESSAGE NO. 2
US-421 CLOSED AHEAD	FOLLOW DETOUR SIGNS
CHANGEABLE MESSAGE SIGN	

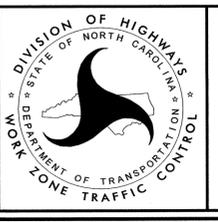
ENTRANCE RAMP FROM I-85 WILL MERGE WITHIN THIS SPACE. SEE NOTE #3. ADD CMS TO RAMP, PER ENGINEER'S DIRECTION.

MESSAGE NO. 1	MESSAGE NO. 2
US-421 CLOSED AHEAD	FOLLOW DETOUR SIGNS
CHANGEABLE MESSAGE SIGN	

USE LAW ENFORCEMENT TO DIRECT TRAFFIC THROUGH = INTERSECTION. LOCATIONS OF LAW ENFORCEMENT VEHICLES ARE JUST SUGGESTIONS.

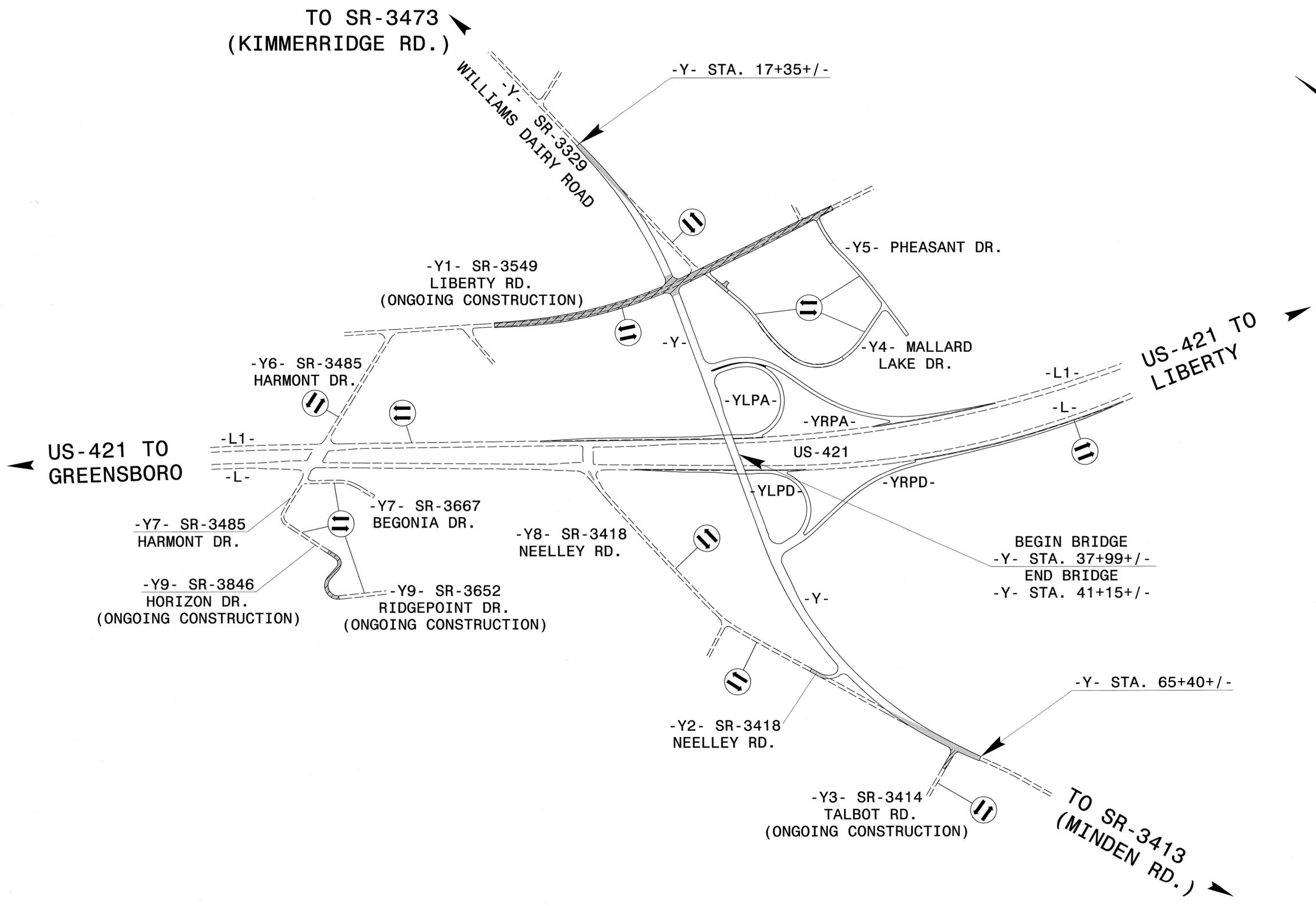
- NOTES:**
- DETOUR SIGN LOCATIONS ARE APPROX.; PLACE PER ENGINEER'S DIRECTION.
 - REFER TO RSD 1101.03, SHEET 7 OF 9, FOR ROAD CLOSURE SIGN DISTANCES AND APPLICABLE NOTES.
 - REFER TO RSD 1101.02, SHEET 9 OF 15, FOR LANE CLOSURE SIGN DISTANCES AND APPLICABLE NOTES FOR TRAFFIC ALONG THE ENTRANCE RAMP FROM I-85 TO US-421 SOUTHBOUND.
 - FOR BARRICADE AND SIGN NOTATION, REFER TO TMP-11.

APPROVED: _____ DATE: _____



**PHASE I
OFF-SITE DETOUR ROUTE &
BARRICADE PLACEMENT FOR
-Y- GIRDER AND OVERHEAD
PROTECTION INSTALLATION**

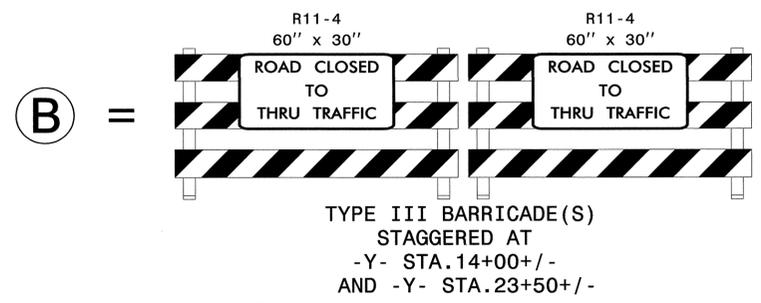
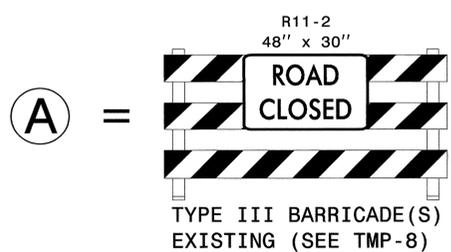
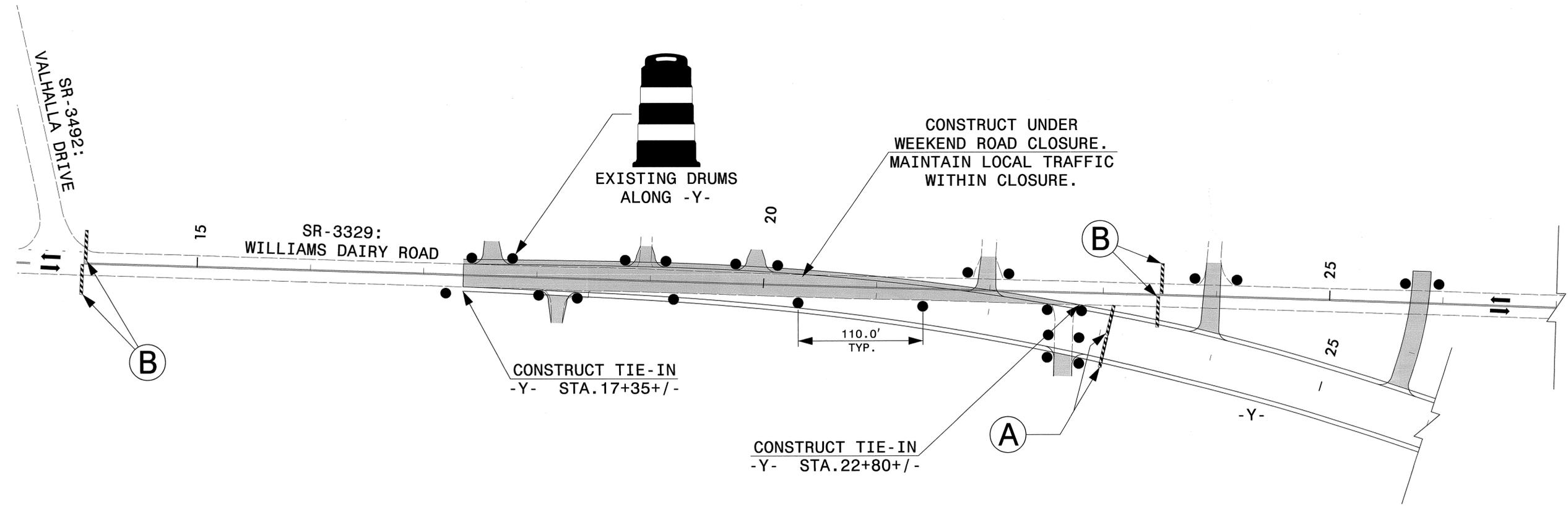
2/28/2014
 R:\TIP\Projects-R\2612B\TrafficControl\TCP\R-2612B_TC_TMP_11.dgn
 User:dr.kennedy



2/25/2014
 R:\TIP\Projects\R-2612B\Traffic\TrafficControl\TCP\R-2612B_TC_TMP_13_Phase II Overview.dgn
 User: dr.kennedy

APPROVED: _____ DATE: _____		<p style="text-align: center; font-weight: bold;">PHASE II OVERVIEW</p>

MAINTAIN ALL DRIVEWAYS TO EXISTING WILLIAMS DAIRY ROAD



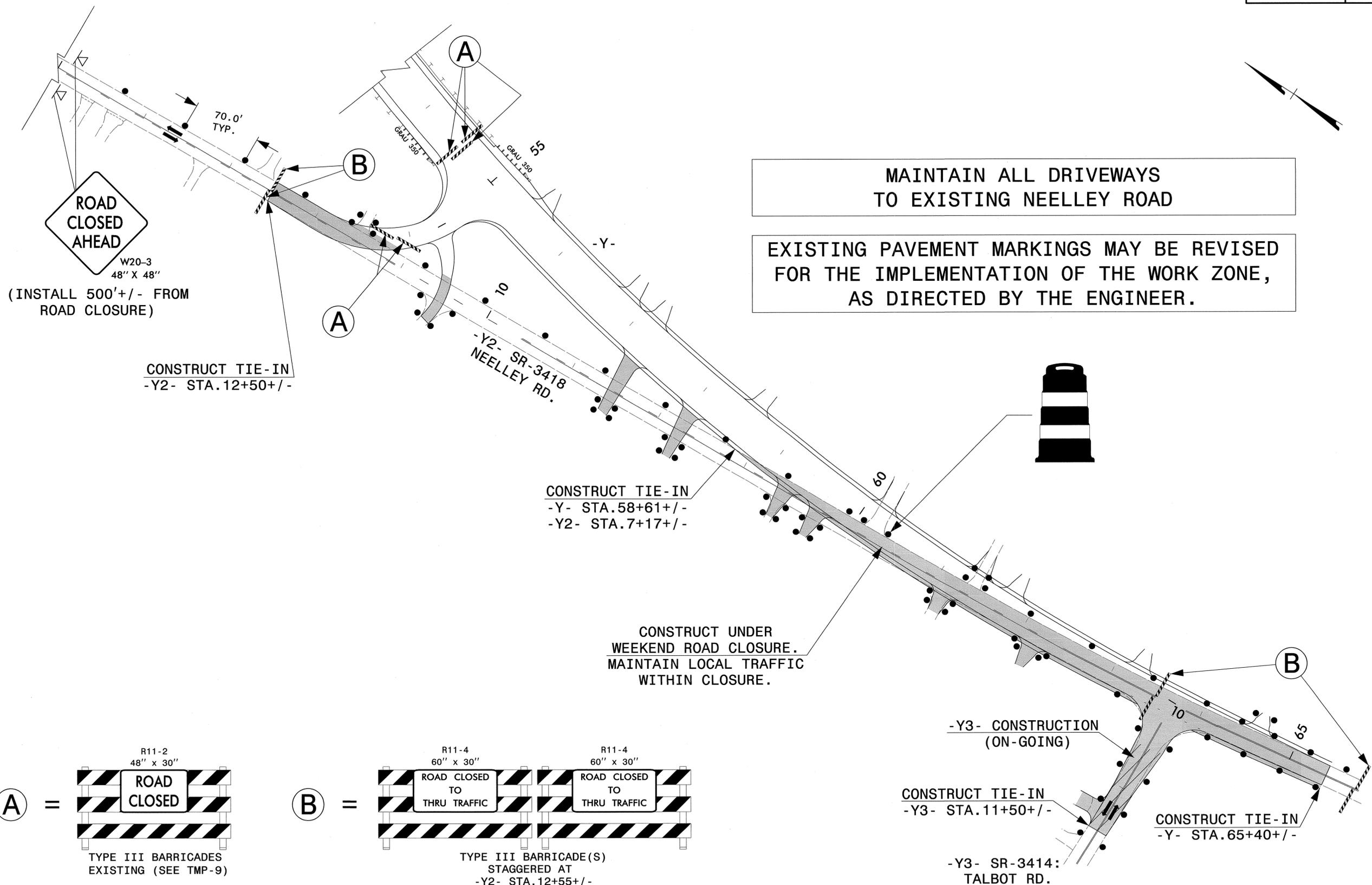
REFER TO SHEET TMP-16 FOR OFF-SITE DETOUR

APPROVED: DATE: 05-2-2014



PHASE II DETAIL

2/28/2014 R:\TIP\Projects\R2612B\TrafficControl\TCP\R-2612B_TC_TMP_14.dgn User: dr.kennedy



MAINTAIN ALL DRIVEWAYS
TO EXISTING NEELLEY ROAD

EXISTING PAVEMENT MARKINGS MAY BE REVISED
FOR THE IMPLEMENTATION OF THE WORK ZONE,
AS DIRECTED BY THE ENGINEER.

**ROAD
CLOSED
AHEAD**
W20-3
48" X 48"
(INSTALL 500'+/- FROM
ROAD CLOSURE)

CONSTRUCT TIE-IN
-Y2- STA.12+50+/-

CONSTRUCT TIE-IN
-Y- STA.58+61+/-
-Y2- STA.7+17+/-

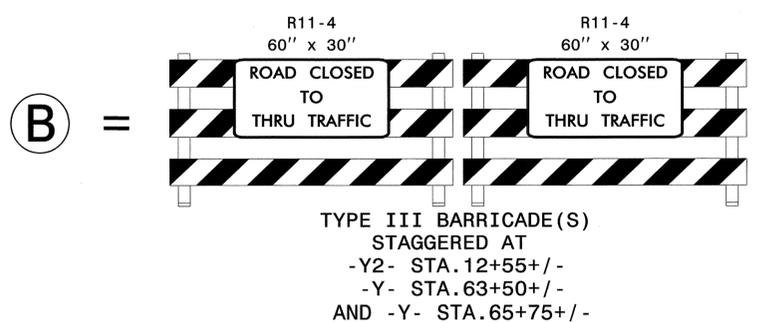
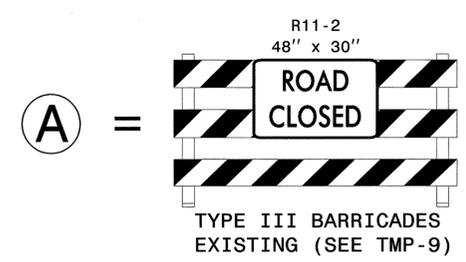
CONSTRUCT UNDER
WEEKEND ROAD CLOSURE.
MAINTAIN LOCAL TRAFFIC
WITHIN CLOSURE.

-Y3- CONSTRUCTION
(ON-GOING)

CONSTRUCT TIE-IN
-Y3- STA.11+50+/-

CONSTRUCT TIE-IN
-Y- STA.65+40+/-

-Y3- SR-3414:
TALBOT RD.



REFER TO SHEET TMP-18
FOR OFF-SITE DETOUR

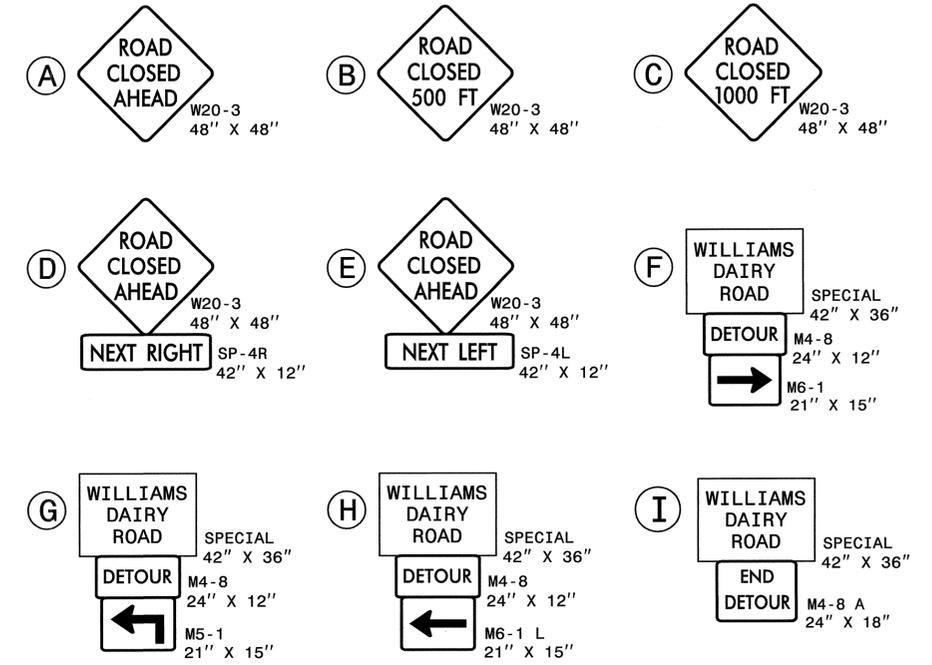
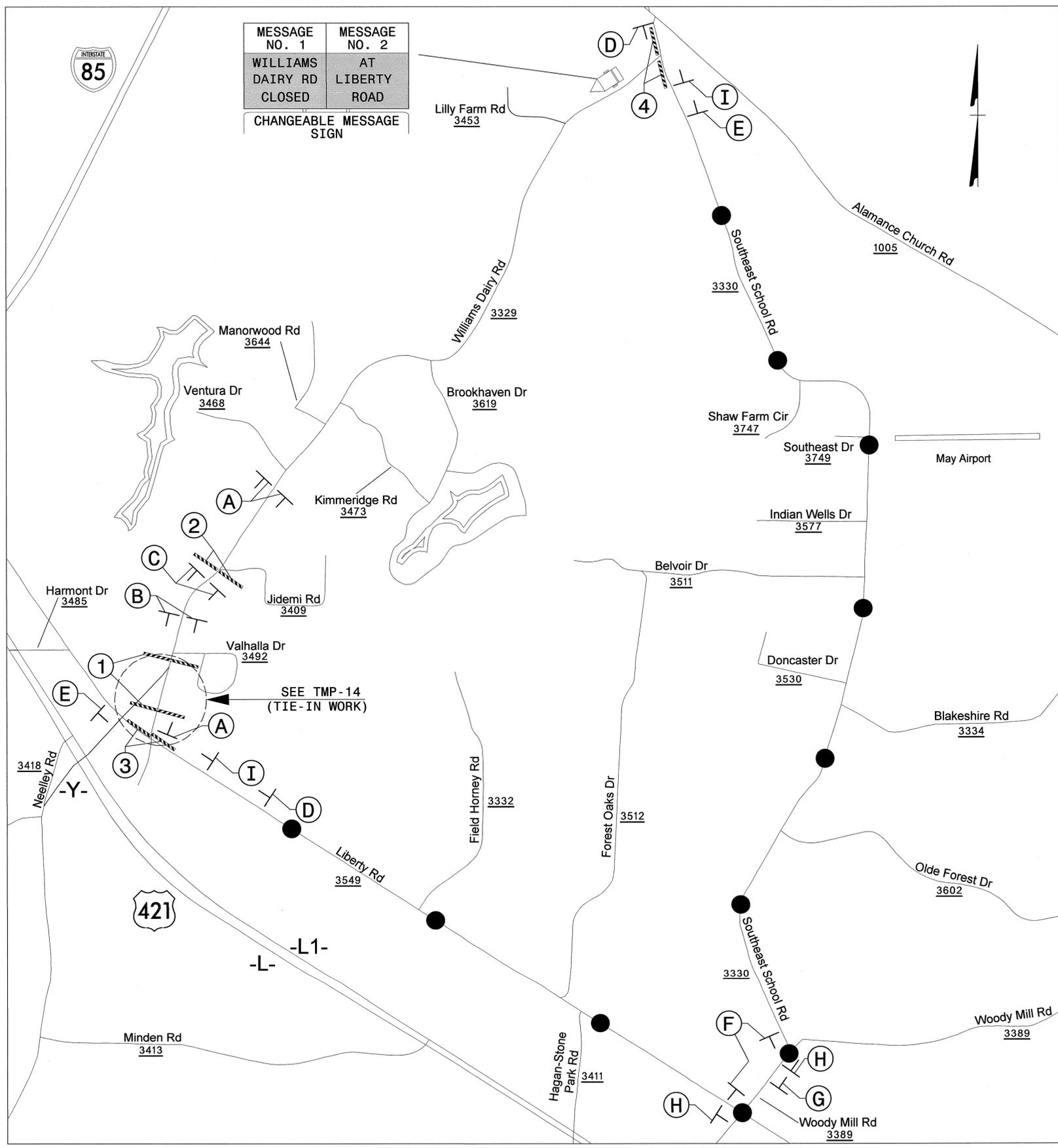
APPROVED: _____ DATE: _____

**PHASE II
DETAIL**

3/3/2014
 R:\TIP\Projects-R\2612B\TrafficControl\TCP-R-2612B-TC-TMP-15.dgn
 User:drkennedy

VICINITY MAP: GUILFORD COUNTY

MESSAGE NO. 1	MESSAGE NO. 2
WILLIAMS DAIRY RD CLOSED	AT LIBERTY ROAD
CHANGEABLE MESSAGE SIGN	

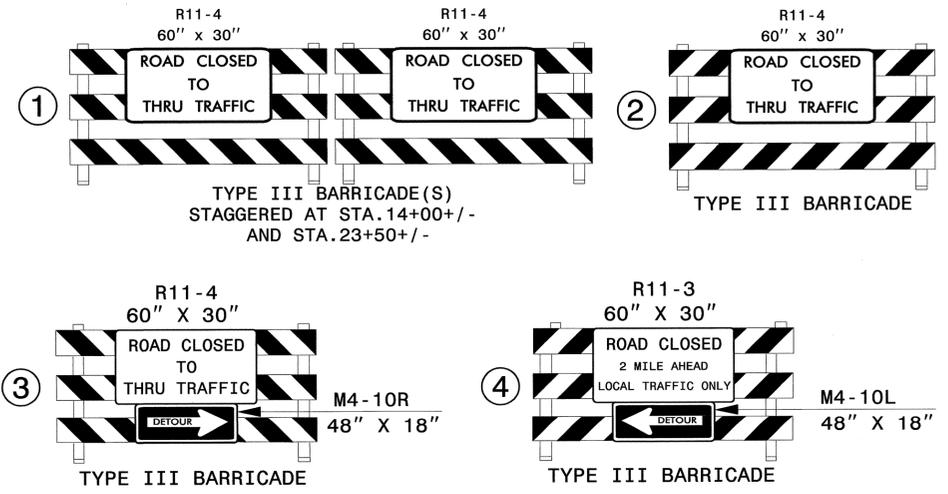


NOTES:

- REFER TO SHEET TMP-17 FOR SPECIAL SIGN DESIGN.
- REFER TO RSD 1101.03, SHEET 1 OF 9, FOR ROAD CLOSURE SIGN DISTANCES AND APPLICABLE NOTES.
- INSTALL DETOUR SIGNS AS DIRECTED BY THE ENGINEER.
- REFER TO SHEET TMP-14 FOR PLACEMENT OF BARRICADE UNITS ①.

OFF-SITE DETOUR ROUTE = ● — ● — ●

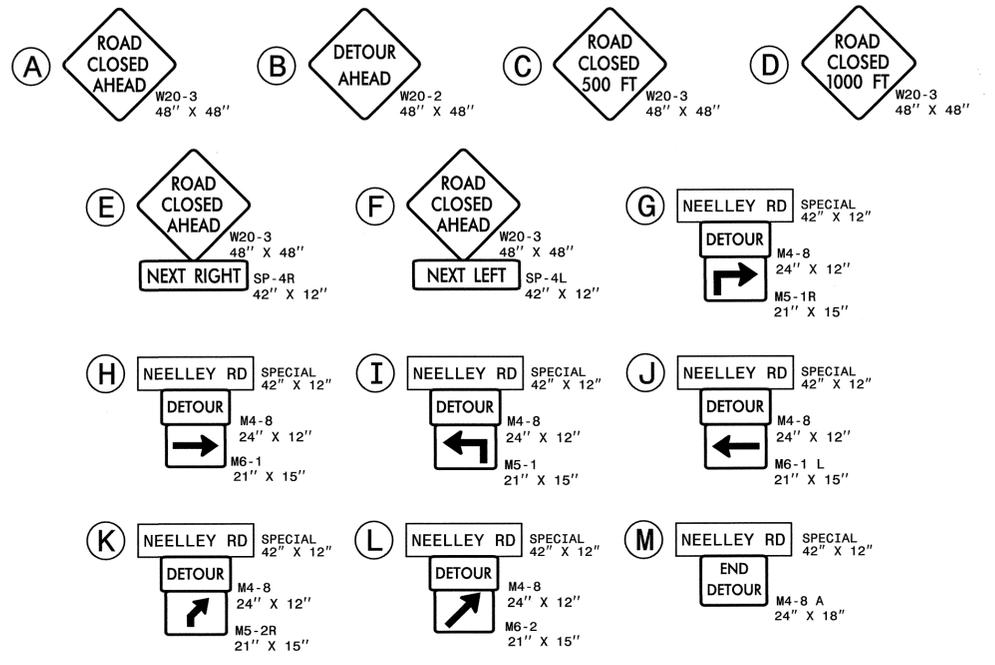
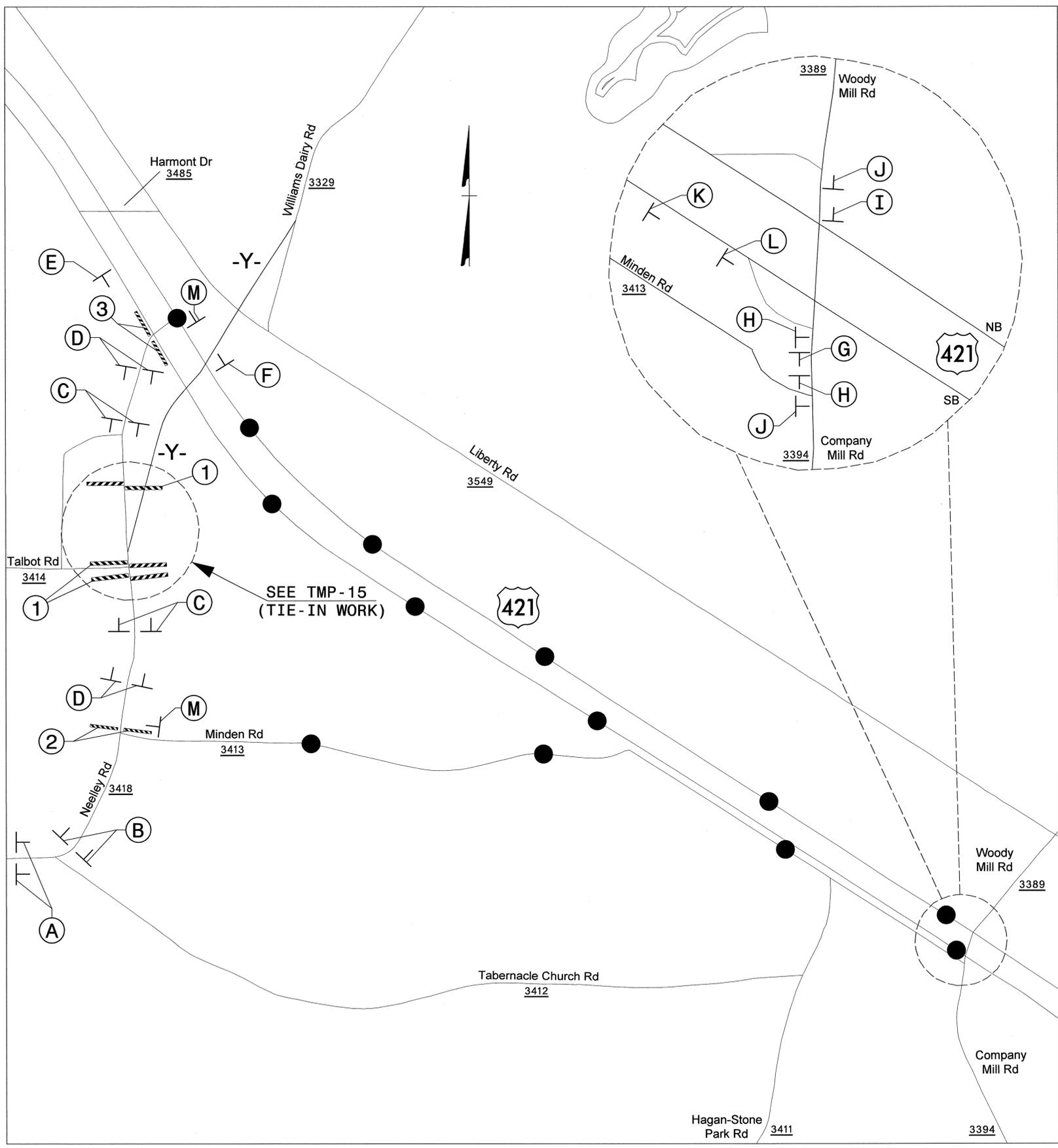
OFF-SITE DETOUR ROUTE:
FROM SR-3329 TO SR-3330 TO SR-3389 TO SR-3549
BACK TO SR-3329



APPROVED: _____ DATE: _____		<p>PHASE II OFF-SITE DETOUR WILLIAMS DAIRY RD</p>

2/28/2014
 R:\Projects-R\2612B\TrafficControl\TCP\R-2612B_TC_TMP-16_Williams Dairy Road.dgn
 User:drkennedy

VICINITY MAP: GUILFORD COUNTY

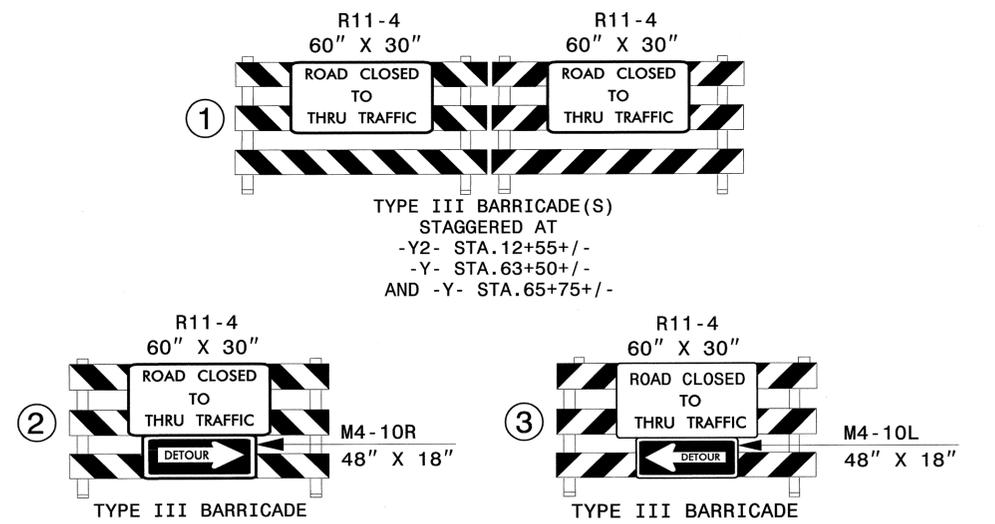


NOTES:

- REFER TO SHEET TMP-19 FOR SPECIAL SIGN DESIGN.
- REFER TO RSD 1101.03, SHEET 1 OF 9, FOR ROAD CLOSURE SIGN DISTANCES AND APPLICABLE NOTES.
- INSTALL DETOUR SIGNS AS DIRECTED BY THE ENGINEER.
- REFER TO SHEET TMP-15 FOR PLACEMENT OF BARRICADE UNITS ①.

OFF-SITE DETOUR ROUTE = ● — ● — ●

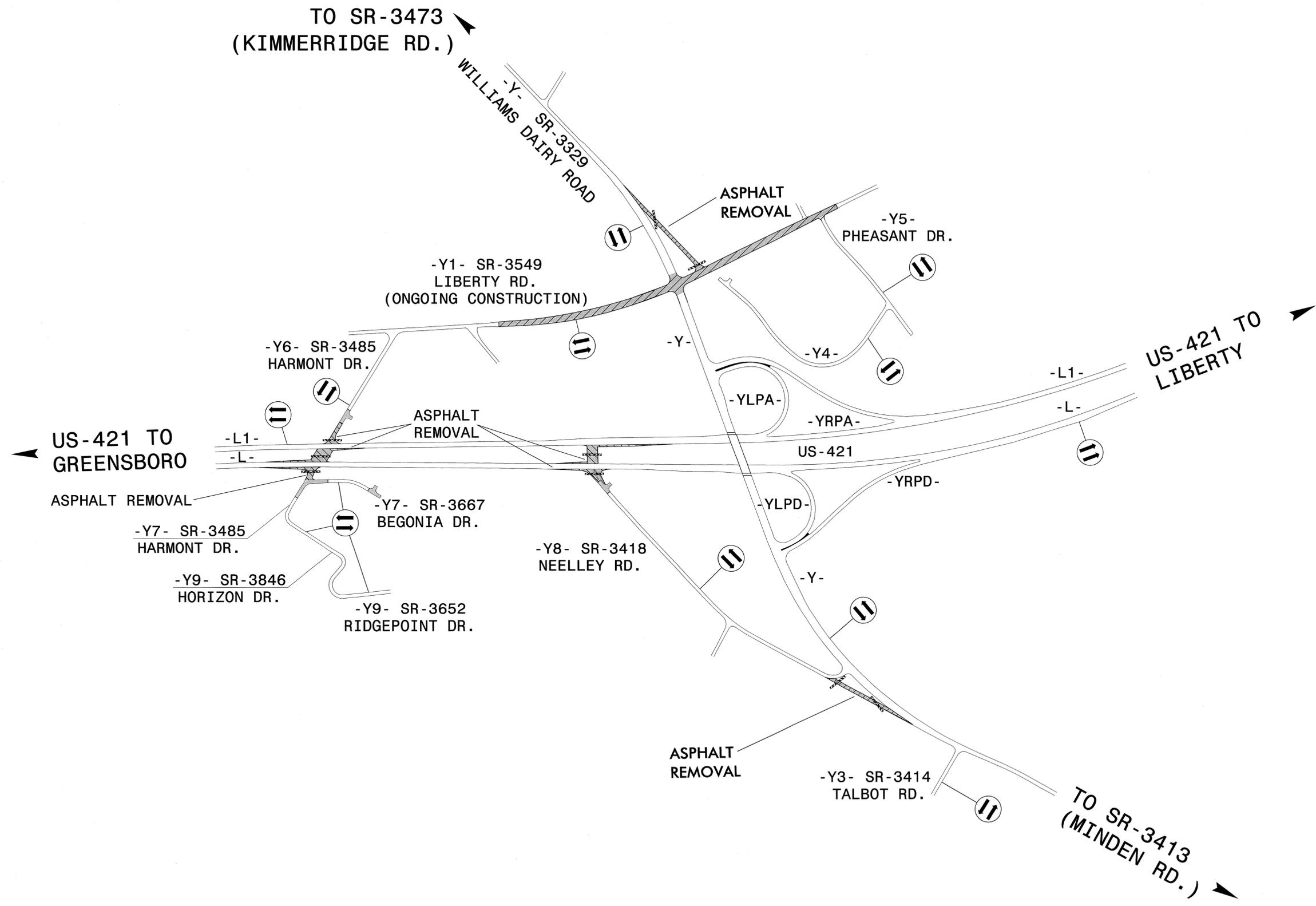
OFF-SITE DETOUR ROUTE:
FROM SR-3418 TO US-421 TO SR-3394 TO SR-3413
BACK TO SR-3418



APPROVED: _____ DATE: _____		<p>PHASE II OFF-SITE DETOUR NEELLEY RD</p>

3/2/2014
 R:\TIP\Projects-R\2612B\TrafficControl\TCR-2612B_TC_TMP-18_Neelley_Road.dgn
 User:rdkennedy

TO SR-3473
(KIMMERRIDGE RD.)



REFER TO FINAL PAVEMENT MARKING
PLANS FOR PAVEMENT MARKING
STATIONS AND LINE STYLES

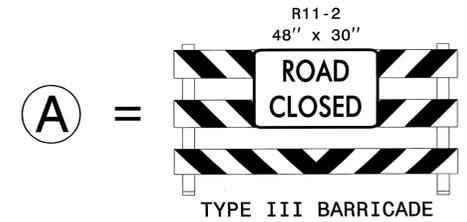
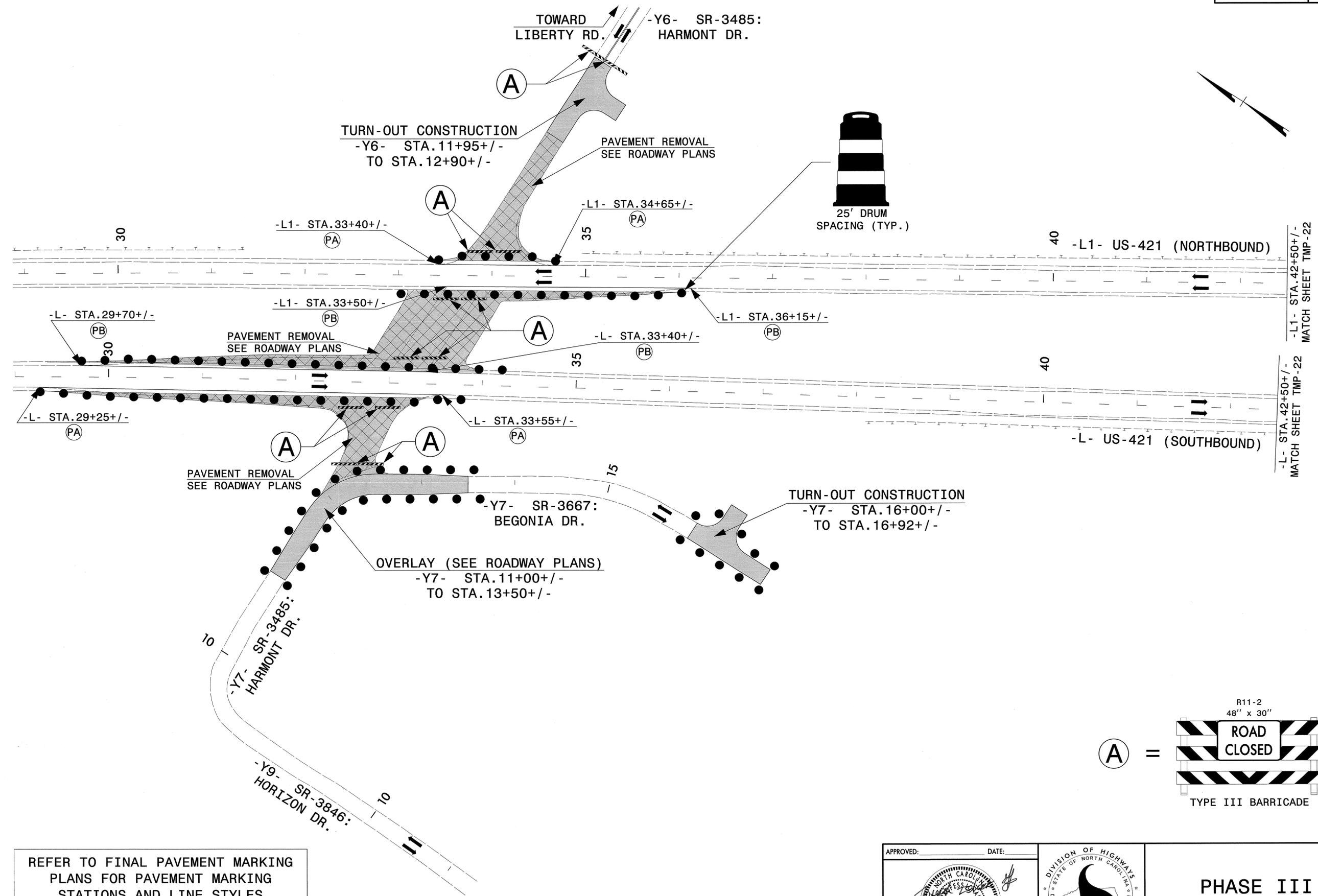
APPROVED: _____ DATE: _____

SEAL
STATE OF NORTH CAROLINA
ENGINEER
JOSEPH ISHAK
028380

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

PHASE III
OVERVIEW

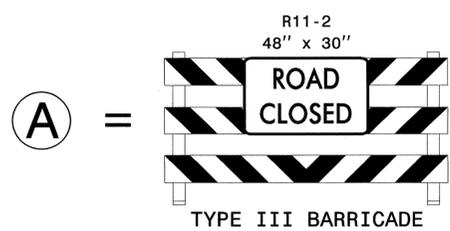
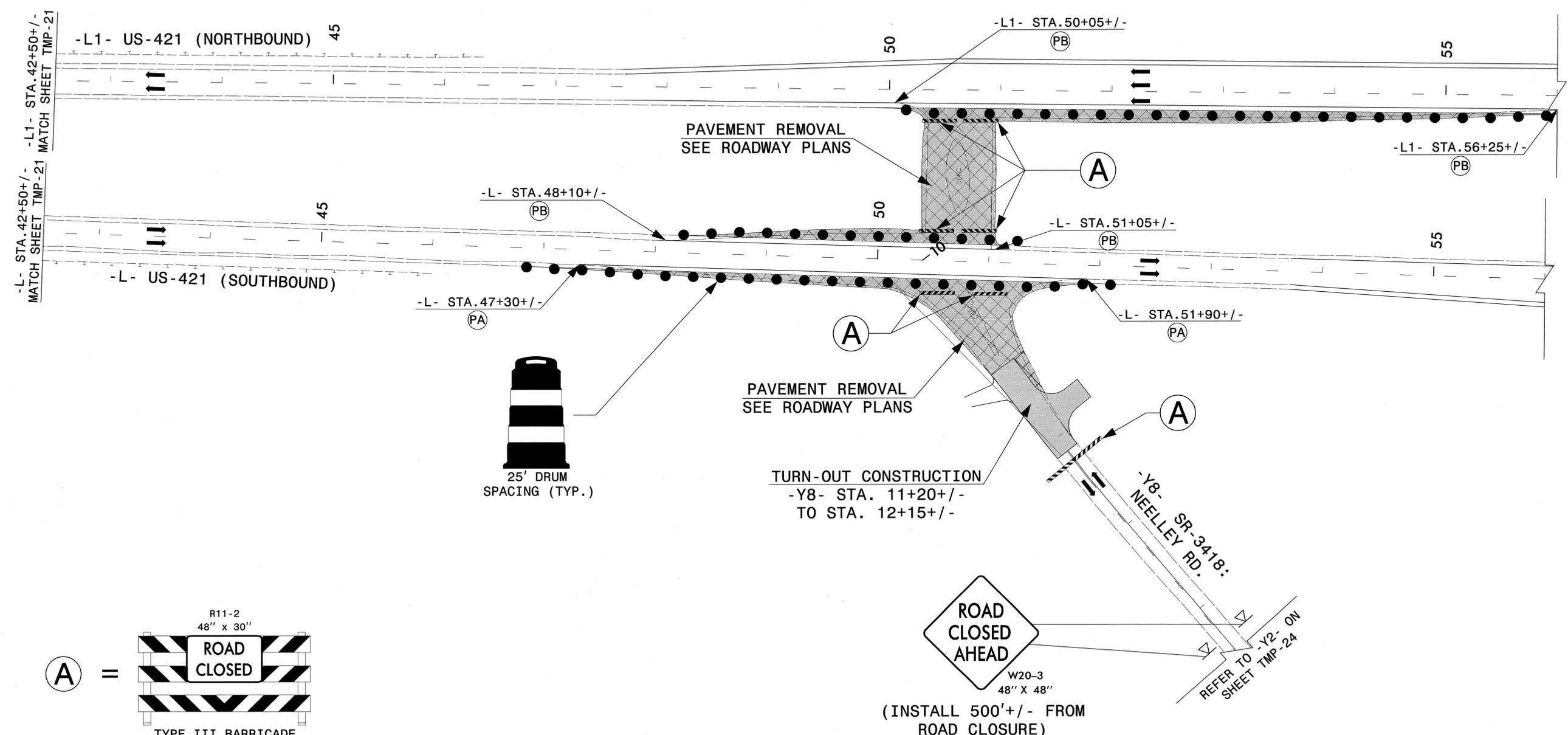
2/28/2014
R:\TIP\Projects\R-2612B\Traffic\TrafficControl\TCP\R-2612B_TC_TMP_20_Phase III Overview.dgn
User:drkennedy



REFER TO FINAL PAVEMENT MARKING PLANS FOR PAVEMENT MARKING STATIONS AND LINE STYLES

APPROVED:	DATE: _____		<p>PHASE III DETAIL</p>
<p>SEAL</p>			

2/28/2014
 R:\TIP\Projects\R2612B\TrafficControl\TCP\R-2612B_TC_TMP-21.dgn
 User: drkennedy



REFER TO FINAL PAVEMENT MARKING PLANS FOR PAVEMENT MARKING STATIONS AND LINE STYLES

ROAD CLOSED AHEAD
W20-3
48" X 48"
(INSTALL 500'+/- FROM ROAD CLOSURE)

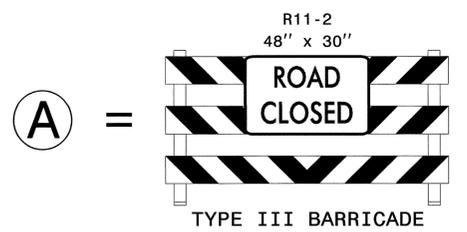
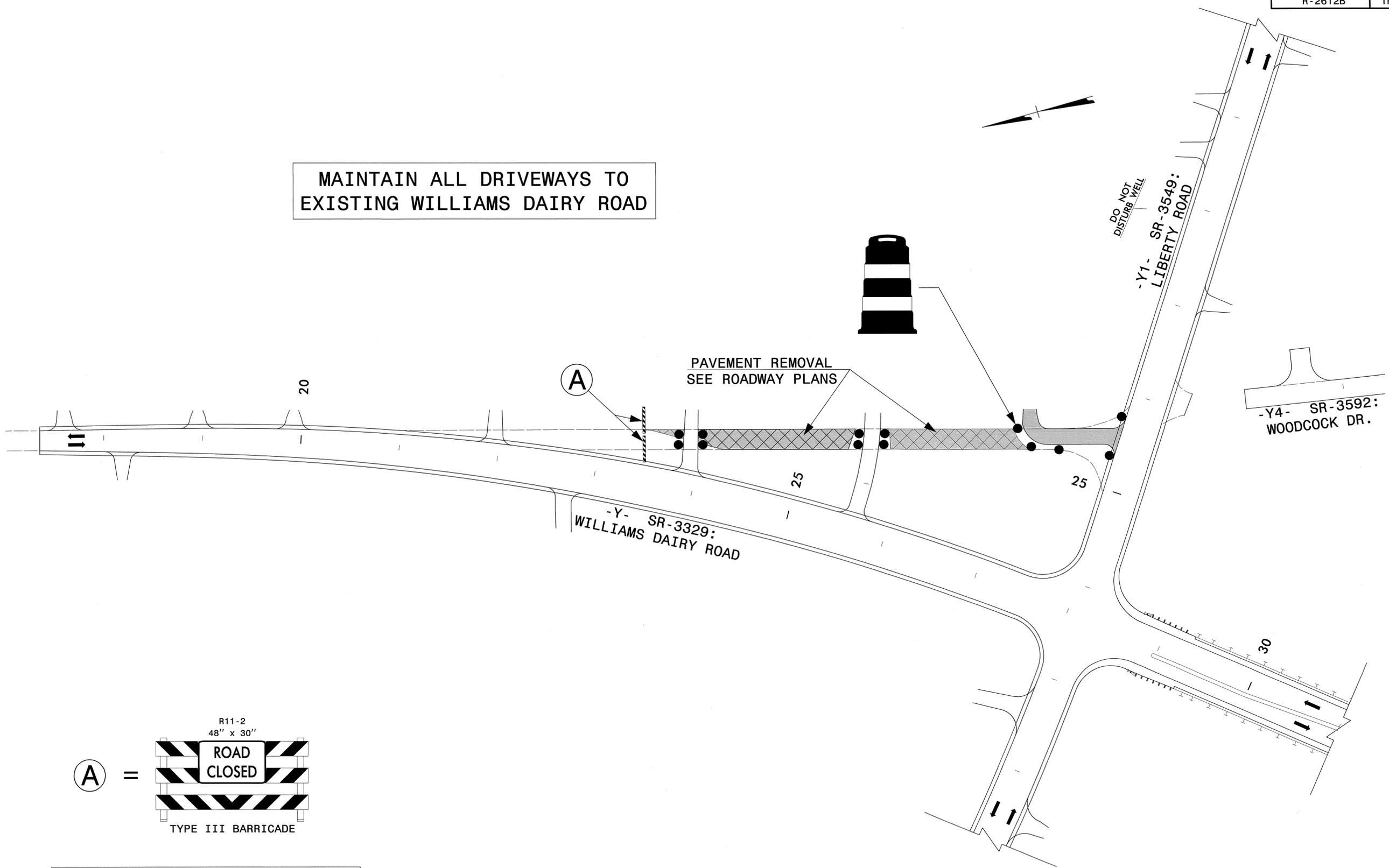
APPROVED: _____ DATE: _____
SEAL
PROFESSIONAL ENGINEER
JOSEPH ISHAK
3-5-2014

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

**PHASE III
DETAIL**

2/28/2014 R:\TIP\Projects-R\2612B\TrafficControl\TCP\R-2612B_TC_TMP-22.dgn User:drkennedy

MAINTAIN ALL DRIVEWAYS TO EXISTING WILLIAMS DAIRY ROAD

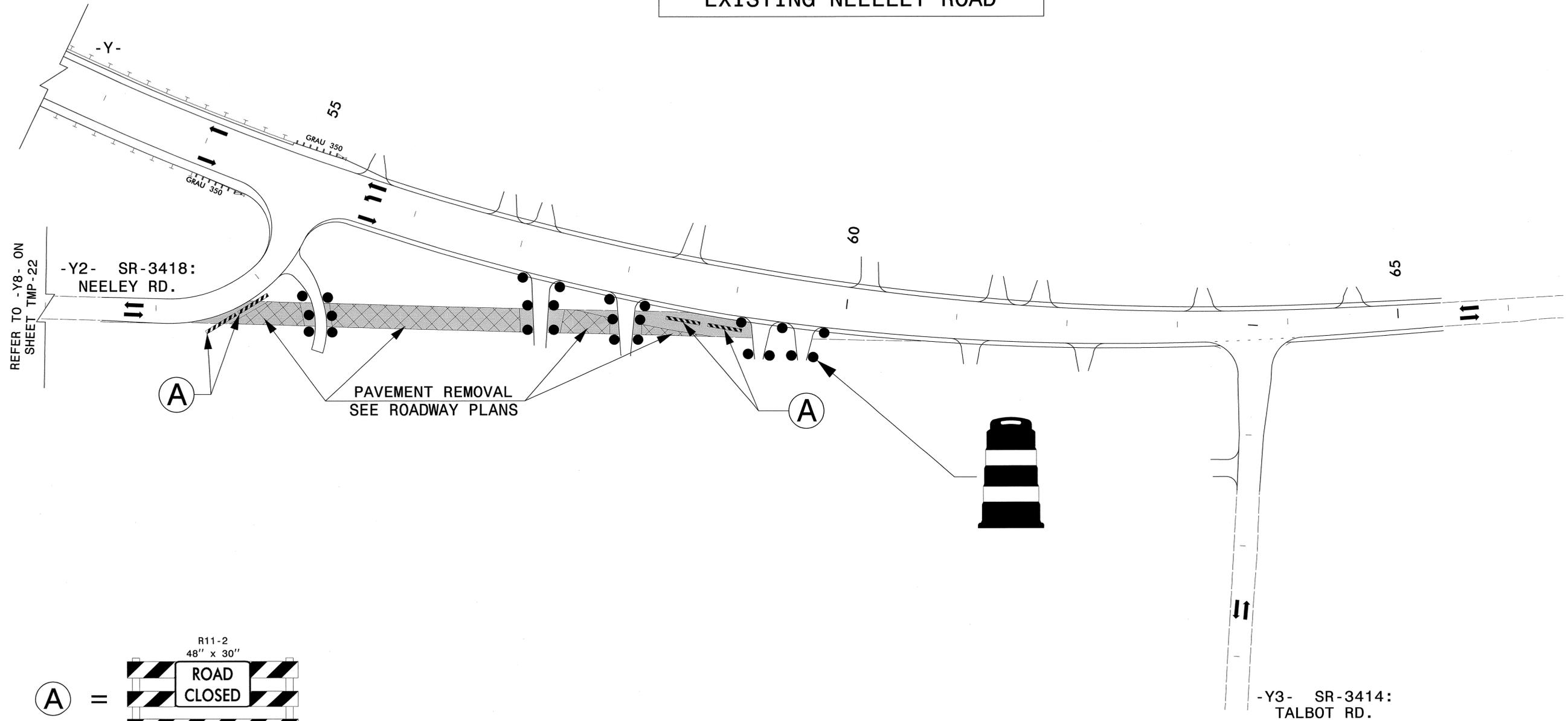


REFER TO FINAL PAVEMENT MARKING PLANS FOR PAVEMENT MARKING STATIONS AND LINE STYLES

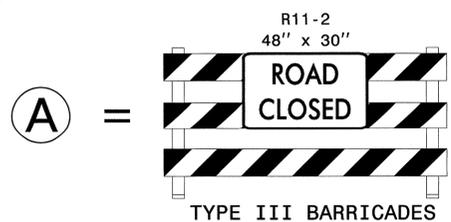
APPROVED: _____ DATE: _____		<p>PHASE III DETAIL</p>

2/28/2014
 R:\TipProjects\R2612B\TrafficControl\TCP\R-2612B_TC_TMP-23.dgn
 User:drkennedy

MAINTAIN ALL DRIVEWAYS TO EXISTING NEELEY ROAD



REFER TO -Y8- ON SHEET TMP-22



REFER TO FINAL PAVEMENT MARKING PLANS FOR PAVEMENT MARKING STATIONS AND LINE STYLES

APPROVED: _____ DATE: _____			<p>PHASE III DETAIL</p>

2/28/2014
 R:\TipProjects\R2612B\TrafficControl\TCP\R-2612B.TC.TMP-24.dgn
 User:drkennedy