

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
14C.045116	TCP-1

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

ROADWAY STANDARD DRAWINGS

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

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.03	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
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES (TYPE III)
1150.01	FLAGGERS
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.08	PAVEMENT MARKINGS - ARROW SYMBOLS
1250.01	PAVEMENT MARKER SPACING
1253.01	SNOWPLOWABLE RAISED PAVEMENT MARKERS
1261.01	GUARDRAIL & BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL & BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

INDEX OF SHEETS

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND, INDEX OF SHEETS AND TEMPORARY PAVEMENT MARKING SCHEDULE
TCP-2	PROJECT NOTES
TCP-3	PHASE I OVERVIEW AND PHASING
TCP-4	DETOUR DETAIL A
TCP-5	PHASE II OVERVIEW AND PHASING
TCP-6	DETOUR DETAIL B
TCP-7	PHASE III OVERVIEW AND PHASING
TCP-8	DETOUR DETAIL C
TCP-9	PHASE IV OVERVIEW AND PHASING
TCP-10	DETOUR DETAIL D
TCP-11	PHASE V OVERVIEW AND PHASING
TCP-12	DETOUR DETAIL E
TCP-13	TEMPORARY DETOUR SIGN
TCP-14	DETAIL DRAWING FOR WORK ZONE SIGNS
PM-1	FINAL PAVEMENT MARKING SCHEDULE

TEMP. PAVT. MARKING SCHEDULE

SYMBOL	DESCRIPTION	QUANTITY BREAKDOWN	PAY ITEM	TOTAL QUANTITY
PAVEMENT MARKING LINES				
PA	WHITE EDGELINE 2X	60180 LF	PAINT (4")	116849 LF
PD	2 FT. WHITE MINISKIP 2X	57 LF		
PE	WHITE SOLID LANE LINE 2X	92 LF		
PI	YELLOW DOUBLE CENTER LINE 2X	56520 LF		
TOTAL				
P4	WHITE STOPBAR 2X	348 LF	PAINT (24")	348 LF
TOTAL				
PAVEMENT MARKING SYMBOLS				
QA	LEFT TURN ARROW 2X	2 EA	PAINT	4 EA
QB	RIGHT TURN ARROW 2X	2 EA		
TOTAL				

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

LEGEND

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

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

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

02/07/2008 P:\Roadway\DDC\Div\4\Cummings-Rd\TrafficControl\Top\00X\CUMMINGS_Tc_top1.TITLE.dgn KO & Associates, P.C.

TIP PROJECT: 14C.045116

PLAN REVIEWED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT		APPROVED: <i>Michael J. Rzepka</i> DATE: 3-10-08	PLAN PREPARED FOR N.C.D.O.T. BY:
J. S. BOURNE, P.E. TRAFFIC CONTROL ENGINEER	M. McDIARMID, P.E. TRAFFIC CONTROL PROJECT ENGINEER	SEAL 	M. T. RZEPKA, P.E. PROJECT ENGINEER
C. HOWARD TRAFFIC CONTROL PROJ. DESIGN ENGINEER	TRAFFIC CONTROL DESIGN ENGINEER		G. E. PARKER DESIGN ENGINEER
TRAFFIC CONTROL DESIGN ENGINEER	TRAFFIC CONTROL DESIGN TECHNICIAN		B. L. MARIOTTE DESIGN TECHNICIAN

KO & ASSOCIATES, P.C.
Consulting Engineers
522 KINGDOM WAY, SUITE 100
RALEIGH, N.C. 27607

PROJECT NOTES



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.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- A) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED, OR AS DIRECTED BY THE ENGINEER.
- B) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- E) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS A DROP-OFF AS FOLLOWS:

 BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

 BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

 BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.
- F) DO NOT EXCEED A DIFFERENCE OF 2.0 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

- G) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

- H) 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.

 WHEN NO WORK IS BEING CONDUCTED FOR A PERIOD LONGER THAN ONE WEEK, REMOVE OR COVER ALL ADVANCE WORK ZONE WARNING SIGNS, AS DIRECTED BY THE ENGINEER, AT NO COST TO THE DEPARTMENT.
- I) STATE FORCES WILL BE RESPONSIBLE FOR PERMANENT SIGNING.
- J) PROVIDE DETOUR SIGNING.
- K) COVER OR REMOVE ALL DETOUR SIGNS WHEN A DETOUR IS NOT IN OPERATION.
- L) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

- M) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADIUS, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT.
- N) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

PAVEMENT MARKINGS AND MARKERS

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

ROAD NAME	MARKING	MARKER
SR 1171, CUMMINGS RD.	THERMOPLASTIC	SNOWPLOWABLE
- P) INSTALL TEMPORARY PAVEMENT MARKINGS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

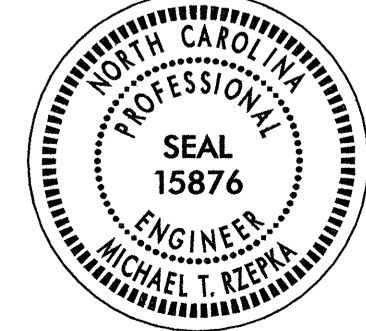

ROAD NAME	MARKING
SR 1171, CUMMINGS RD.	PAINT
- Q) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
- R) PLACE ONE APPLICATIONS OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. PLACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL APPLICATION AND EVERY SIX (6) MONTHS AS DIRECTED BY THE ENGINEER.

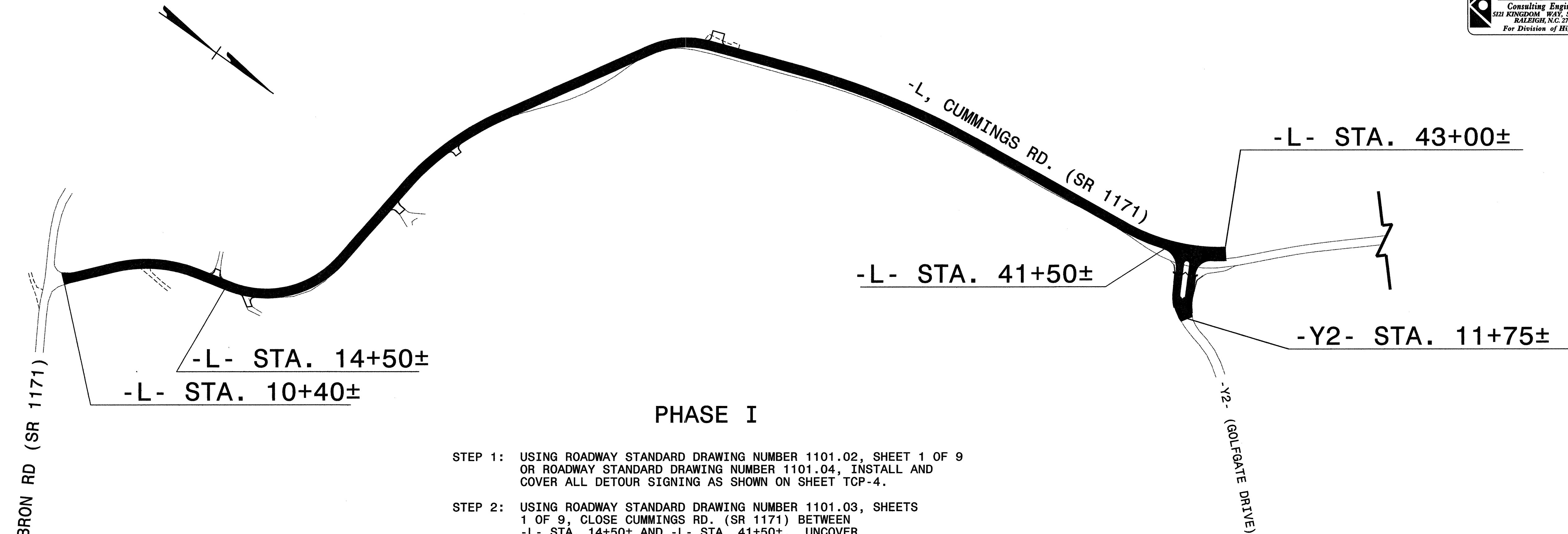
MISCELLANEOUS

- S) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAYS 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 1000 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

LOCAL NOTES

- 1) THE CONTRACTOR SHALL COORDINATE WITH RESIDENTS AND EMERGENCY AGENCIES TO PROVIDE ACCESS TO PROPERTIES LOCATED ALONG CLOSED SECTIONS OF -L- (SR 1171, CUMMINGS RD.)

APPROVED: <i>Michael T. Zieppa</i> DATE: 3-10-08		PROJECT NOTES		
SEAL 	SCALE: NONE		REVISIONS	
	DATE: 2-7-08		DWG. BY: B.L.M.	
	DESIGN BY: G.E.P.		REVIEWED BY: M.S.A.	



PHASE I

- STEP 1: USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9 OR ROADWAY STANDARD DRAWING NUMBER 1101.04, INSTALL AND COVER ALL DETOUR SIGNING AS SHOWN ON SHEET TCP-4.
- STEP 2: USING ROADWAY STANDARD DRAWING NUMBER 1101.03, SHEETS 1 OF 9, CLOSE CUMMINGS RD. (SR 1171) BETWEEN -L- STA. 14+50± AND -L- STA. 41+50±. UNCOVER DETOUR SIGNING. (SEE LOCAL NOTE 1)
- STEP 3: CONSTRUCT -L- FROM -L- STA. 10+40 TO -L- STA. 41+50±, UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE. USE ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9, WHEN WORKING BETWEEN -L- STA. 10+40± AND -L- STA. 14+50±.
- STEP 4: MAINTAIN TYPE III BARRICADES AT -L- STA. 41+50±.

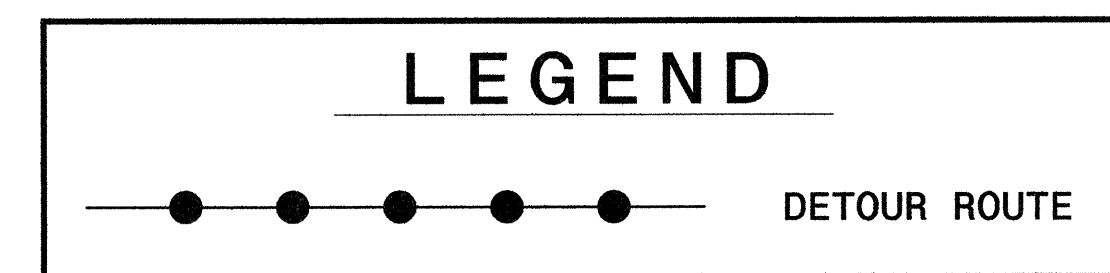
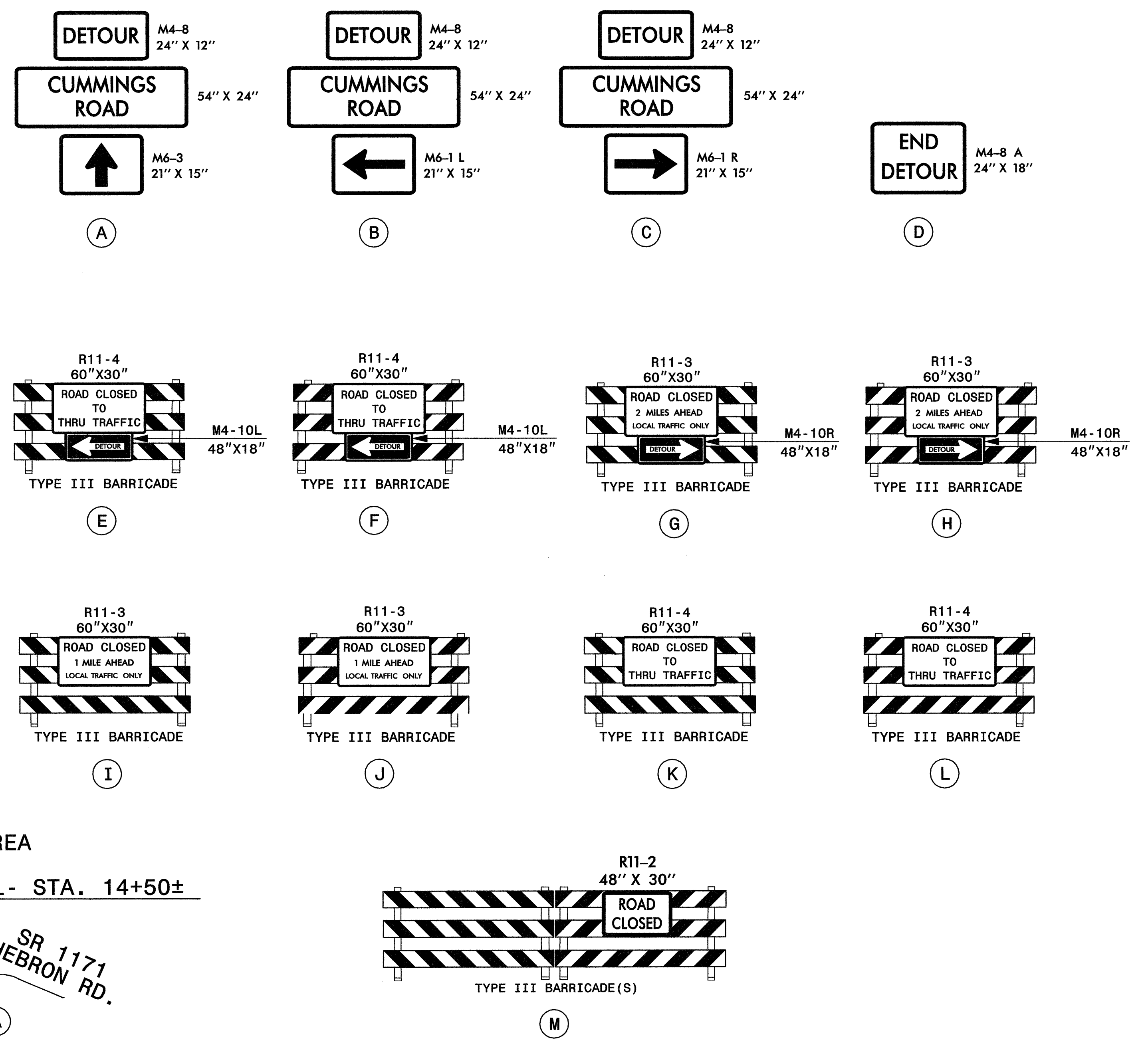
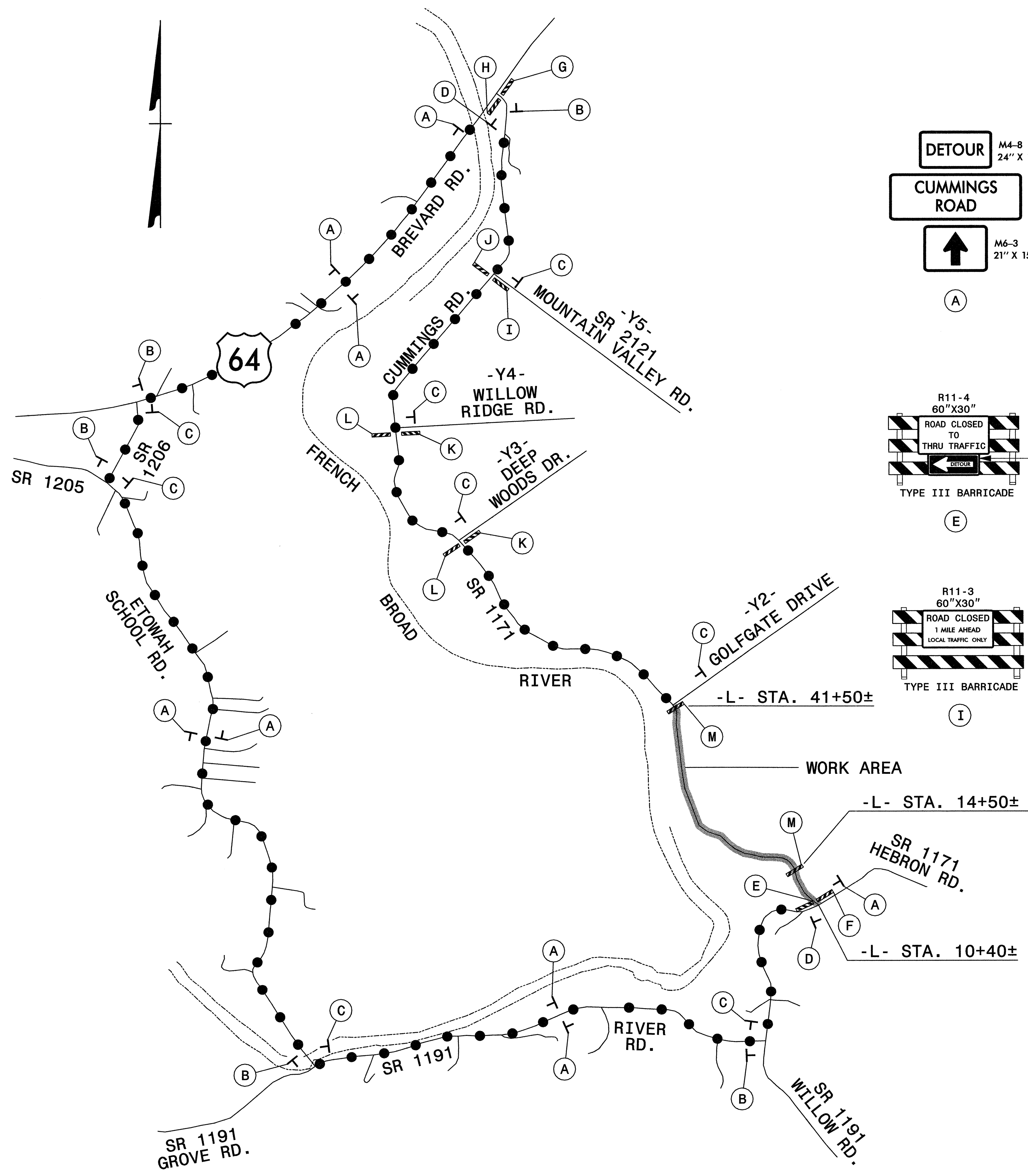
USING ROADWAY STANDARD DRAWING NUMBER 1101.03, SHEETS 1 OF 9, CLOSE -Y2- (GOLFGATE DRIVE) AT -Y2- STA. 11+75±.

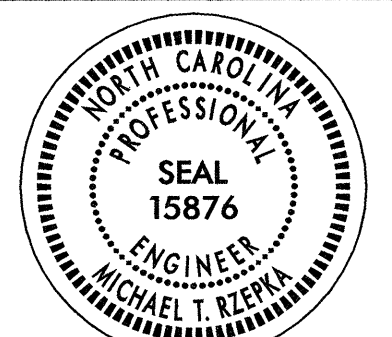
USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9 OR ROADWAY STANDARD DRAWING NUMBER 1101.04, MODIFY DETOUR SIGNING FOR SOUTHBOUND CUMMINGS RD. (SR 1171) TRAFFIC AS SHOWN ON SHEET TCP-6 AND PLACE TYPE III BARRICADES AND ROAD CLOSURE SIGNING TO CLOSE CUMMINGS RD. (SR 1171) AT -L- STA. 61+00±. (SEE ROADWAY STANDARD DRAWING NUMBER 1101.03, SHEET 1 OF 9 AND LOCAL NOTE 1)
- STEP 5: CONSTRUCT -L- BETWEEN -L- STA. 41+50± AND -L- STA. 43+00± AND -Y2- (GOLFGATE DRIVE), UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE.
- STEP 6: INSTALL INTERIM PAVEMENT MARKING LINES (PAINT) ON COMPLETED -L- LINE BETWEEN -L- STA. 10+40 AND -Y2- (GOLFGATE DRIVE) INTERSECTION. PLACE TYPE III WING BARRICADES AND ROAD CLOSURE SIGNING TO CLOSE CUMMINGS RD. (SR 1171) NORTHBOUND TRAFFIC AT -L- STA. 43+00±. (SEE ROADWAY STANDARD DRAWING NUMBER 1101.03, SHEET 1 OF 9 AND SHEET TCP-6)
- STEP 7: REMOVE TYPE III BARRICADES AT -L- STA. 14+50 AND -Y2- (GOLFGATE DRIVE) STA. 11+75±. RELOCATE TYPE III BARRICADES AT -L- STA. 41+50± TO -L- STA. 43+00±. REOPEN CUMMINGS RD (SR 1171) BETWEEN HEBRON RD. (SR 1171) AND -Y2- (GOLFGATE DRIVE) INTERSECTION. (SEE LOCAL NOTE 1)

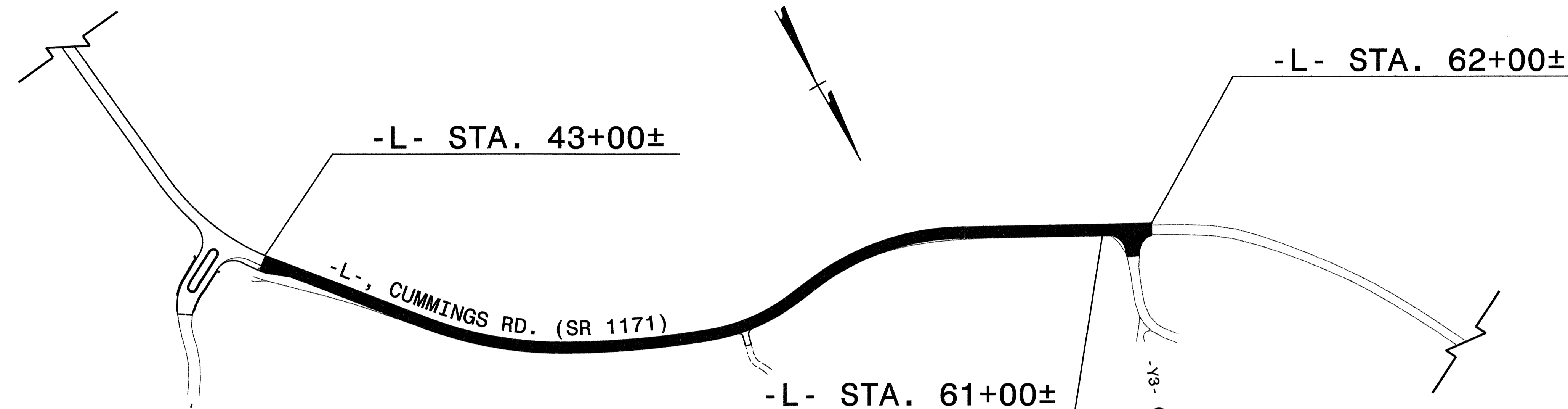
LEGEND

PROPOSED CONSTRUCTION

APPROVED: <i>Michael R. Zepher</i> DATE: 3-10-08		PHASE I OVERVIEW AND PHASING											
SCALE: NONE													
DATE: 2-7-08													
DWG. BY: B.L.M.		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">REVISIONS</th> <th style="width: 50%;"></th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>		REVISIONS									
REVISIONS													
DESIGN BY: G.E.P.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">REVIEWED BY: M.S.A.</td> <td style="width: 50%;"></td> </tr> </table>		REVIEWED BY: M.S.A.									
REVIEWED BY: M.S.A.													
SEAL		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>											



APPROVED: <i>Michael T. Rzepka</i> DATE: 3-10-08 SEAL 	CUMMINGS ROAD DETOUR DETAIL A		REVISIONS	
	SCALE: NONE			
	DATE: 2-7-08			
	DWG. BY: B.L.M.			
	DESIGN BY: G.E.P.			
REVIEWED BY: M.S.A.				



PHASE II

- STEP 1:** MAINTAINING TYPE III BARRICADES AT -L- STA. 43+00± AND -L- STA. 61+00±, CONSTRUCT -L- FROM -L- STA. 43+00± TO -L- STA. 61+00±, UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE. (SEE LOCAL NOTE 1)
- STEP 2:** INSTALL INTERIM PAVEMENT MARKING LINES (PAINT) ON COMPLETED -L- LINE BETWEEN -L- STA. 43+00± AND -L- STA. 61+00±.
- PLACE ROAD CLOSURE SIGNING (REFER TO ROADWAY STANDARD DRAWING NUMBER 1101.03, SHEET 1 OF 9) TO CLOSE CUMMINGS RD. AT -L- STA. 62+00±. (SEE SHEET TCP-8)
- STEP 3:** USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9 OR ROADWAY STANDARD DRAWING NUMBER 1101.04, MODIFY DETOUR SIGNING FOR SOUTHBOUND CUMMINGS RD. (SR 1171) TRAFFIC AS SHOWN ON SHEET TCP-8 AND PLACE TYPE III BARRICADES AND ROAD CLOSURE SIGNING TO CLOSE CUMMINGS RD. (SR 1171) AT -L- STA. 73+50±. (SEE ROADWAY STANDARD DRAWING NUMBER 1101.03, SHEET 1 OF 9 AND LOCAL NOTE 1)
- REMOVE TYPE III BARRICADE AT -L- STA. 43+00 AND RELOCATE TYPE III BARRICADE AT -L- STA. 61+00± TO -L- STA. 62+00±. REOPEN CUMMINGS RD. (SR 1171) BETWEEN -Y2- (GOLFGATE DRIVE) AND -Y3- (DEEP WOODS DR.).
- WORKING IN A CONTINUOUS MANNER, USING FLAGGER(S) TO MAINTAIN -Y3- (DEEP WOODS DR.) TRAFFIC (REFER TO ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9), PAVE/WEDGE EXISTING CUMMINGS RD. BETWEEN -L- STA. 61+00± AND -L- STA. 62+00± AND -Y3- (DEEP WOODS DR.) UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

LEGEND	
	PROPOSED CONSTRUCTION

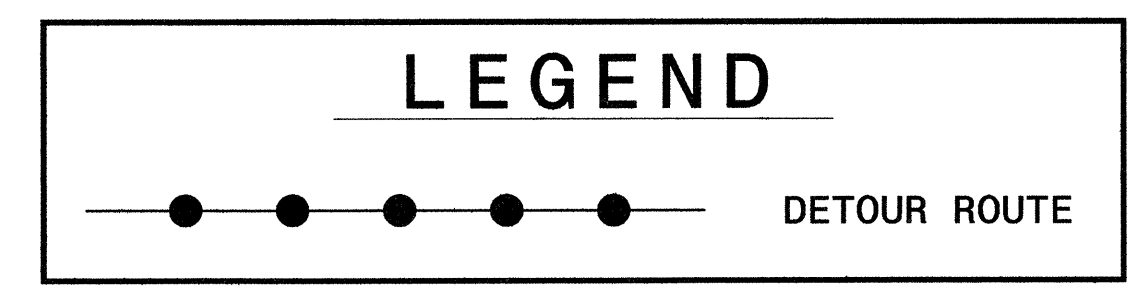
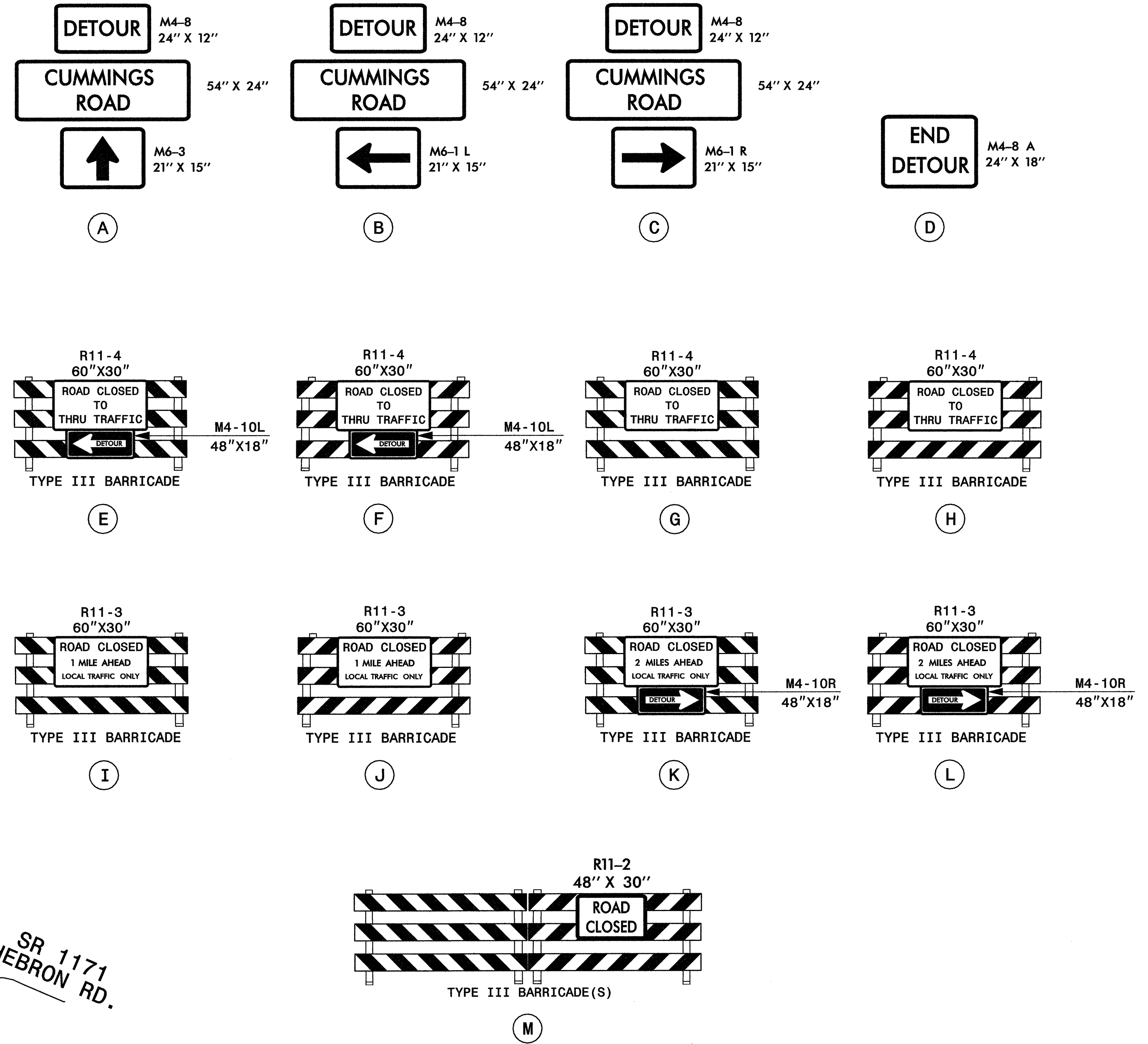
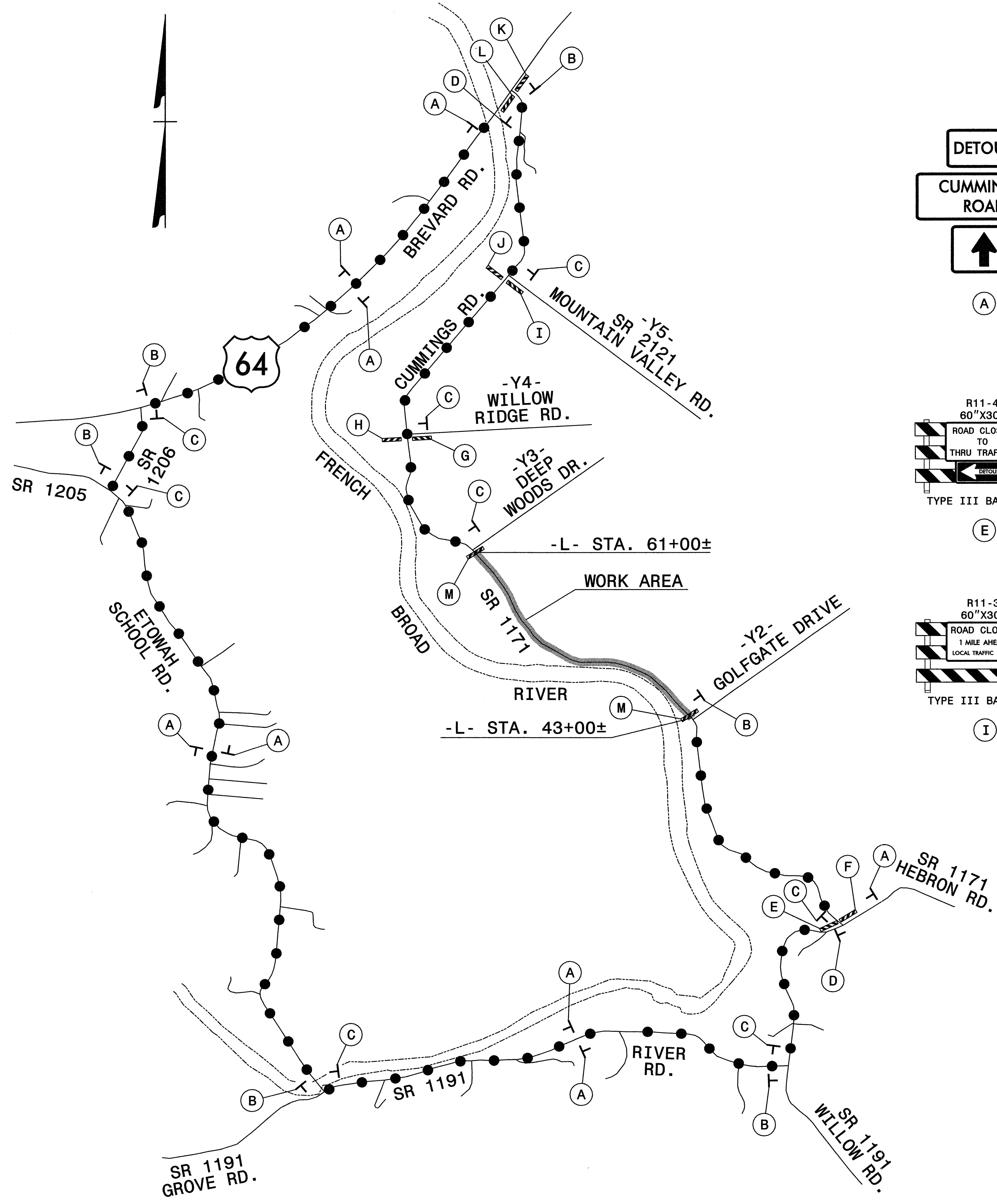
APPROVED: *Michael T. Rzewny* DATE: 3-10-08

SEAL

PHASE II OVERVIEW AND PHASING										
SCALE: NONE		<table border="1"> <tr> <th colspan="2">REVISIONS</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	REVISIONS							
REVISIONS										
DATE: 2-7-08										
DWG. BY: B.L.M.										
DESIGN BY: G.E.P.										
REVIEWED BY: M.S.A.	<table border="1"> <tr> <td>CADD FILE</td> </tr> </table>	CADD FILE								
CADD FILE										

02/07/2008
 R:\ProjectControl\Top\100\CUMMINGS_TC_top5.pn2ov.dgn
 KO & Associates, P.C.

Plans prepared by:
KO & ASSOCIATES, P.C.
 Consulting Engineers
 5221 KINGDOM WAY, SUITE 100
 RALEIGH, N.C. 27607
 For Division of Highways



APPROVED: *Michael T. Rzepka* DATE: 3-10-08

**CUMMINGS ROAD
 DETOUR DETAIL B**

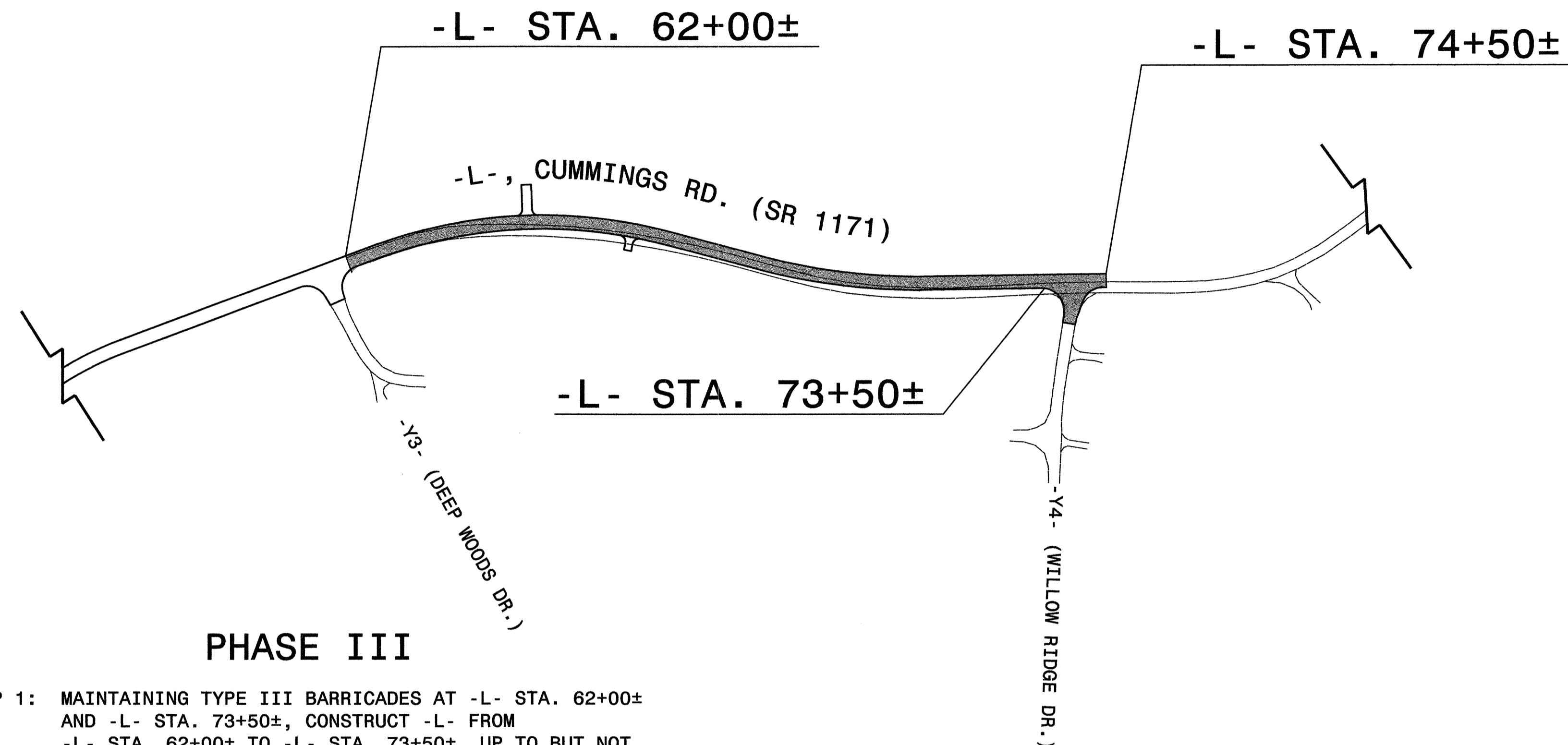
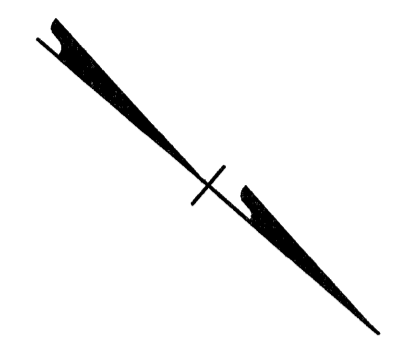
SCALE: NONE
 DATE: 2-7-08
 DWG. BY: B.L.M.
 DESIGN BY: G.E.P.
 REVIEWED BY: M.S.A.

SEAL

 MICHAEL T. RZEPKA
 ENGINEER
 15876

REVISIONS	

CADD FILE



PHASE III

STEP 1: MAINTAINING TYPE III BARRICADES AT -L- STA. 62+00± AND -L- STA. 73+50±, CONSTRUCT -L- FROM -L- STA. 62+00± TO -L- STA. 73+50±, UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE.

USING FLAGGER(S) TO MAINTAIN -Y4- (WILLOW RIDGE DR.) TRAFFIC (REFER TO ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9), BEGIN CONSTRUCTION OF THE LEFT SIDE WIDENING FROM -L- STA. 73+50± TO -L- STA. 74+50± UP TO THE EXISTING EDGE OF PAVEMENT ELEVATION.

STEP 2: INSTALL INTERIM PAVEMENT MARKING LINES (PAINT) ON COMPLETED -L- LINE BETWEEN -L- STA. 62+00± AND -L- STA. 73+50±.

PLACE ROAD CLOSURE SIGNING (REFER TO ROADWAY STANDARD DRAWING NUMBER 1101.03, SHEET 1 OF 9) TO CLOSE CUMMINGS RD. AT -L- STA. 74+50±. (SEE SHEET TCP-10)

STEP 3: USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9 OR ROADWAY STANDARD DRAWING NUMBER 1101.04, MODIFY DETOUR SIGNING FOR SOUTHBOUND CUMMINGS RD. (SR 1171) TRAFFIC AS SHOWN ON SHEET TCP-10 AND PLACE TYPE III BARRICADES AND ROAD CLOSURE SIGNING TO CLOSE CUMMINGS RD. (SR 1171) AT -L- STA. 104+00±. (SEE ROADWAY STANDARD DRAWING NUMBER 1101.03, SHEET 1 OF 9 AND LOCAL NOTE 1)

REMOVE TYPE III BARRICADE AT -L- STA. 62+00 AND RELOCATE TYPE III BARRICADE AT -L- STA. 73+50± TO -L- STA. 74+50±. REOPEN CUMMINGS RD. (SR 1171) BETWEEN -Y3- (DEEP WOODS DR.) AND -Y4- (WILLOW RIDGE DR.).

WORKING IN A CONTINUOUS MANNER, USING FLAGGER(S) TO MAINTAIN -Y4- (WILLOW RIDGE DR.) TRAFFIC (REFER TO ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9), COMPLETE CONSTRUCTION BETWEEN -L- STA. 73+50± AND -L- STA. 74+50± AND -Y4- (WILLOW RIDGE DR.) UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

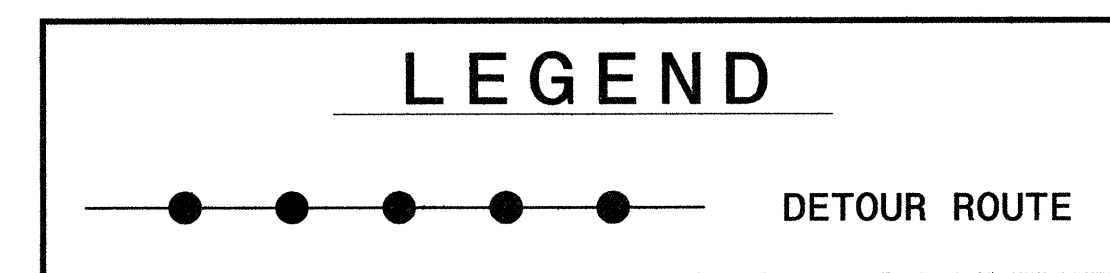
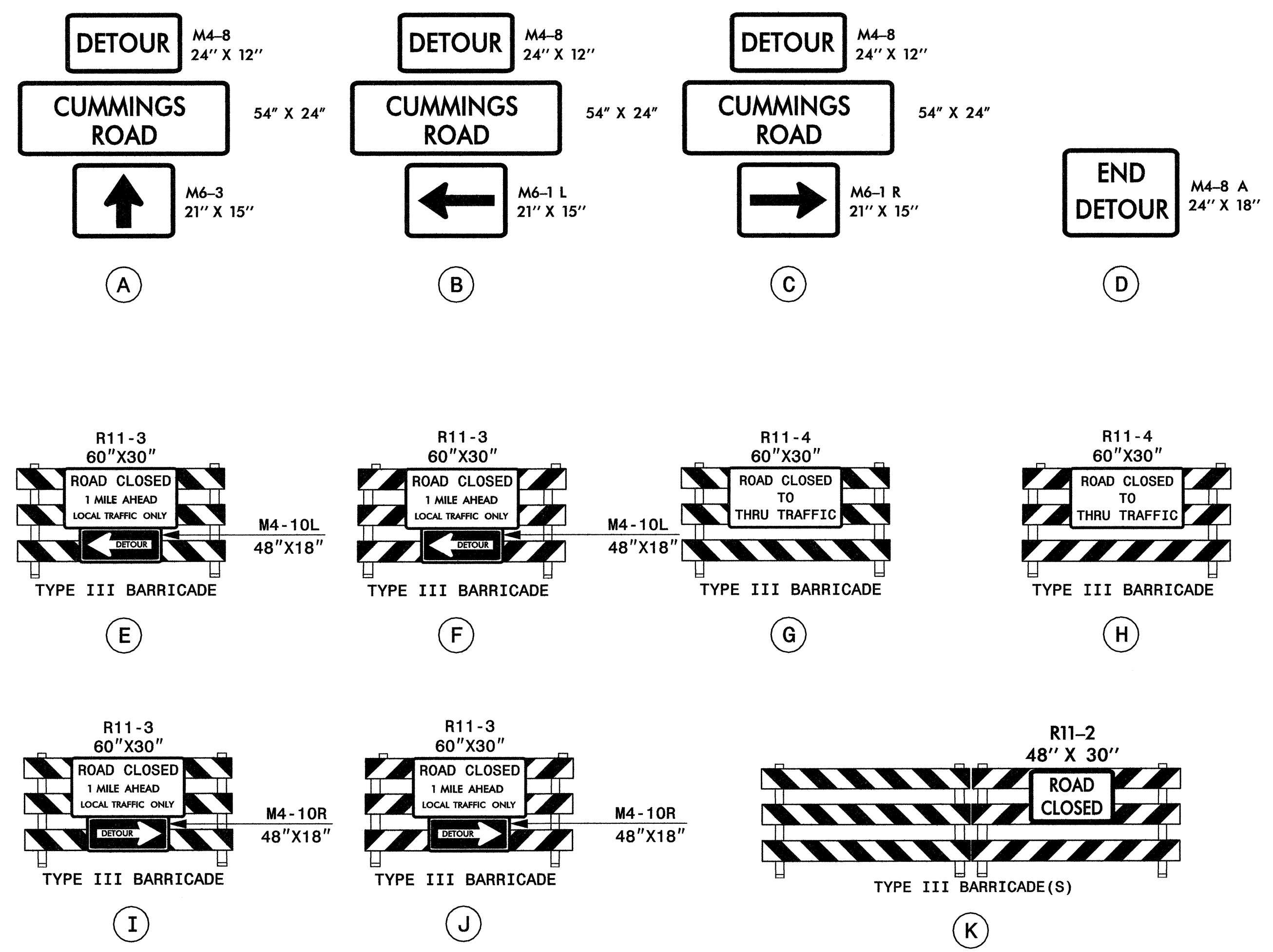
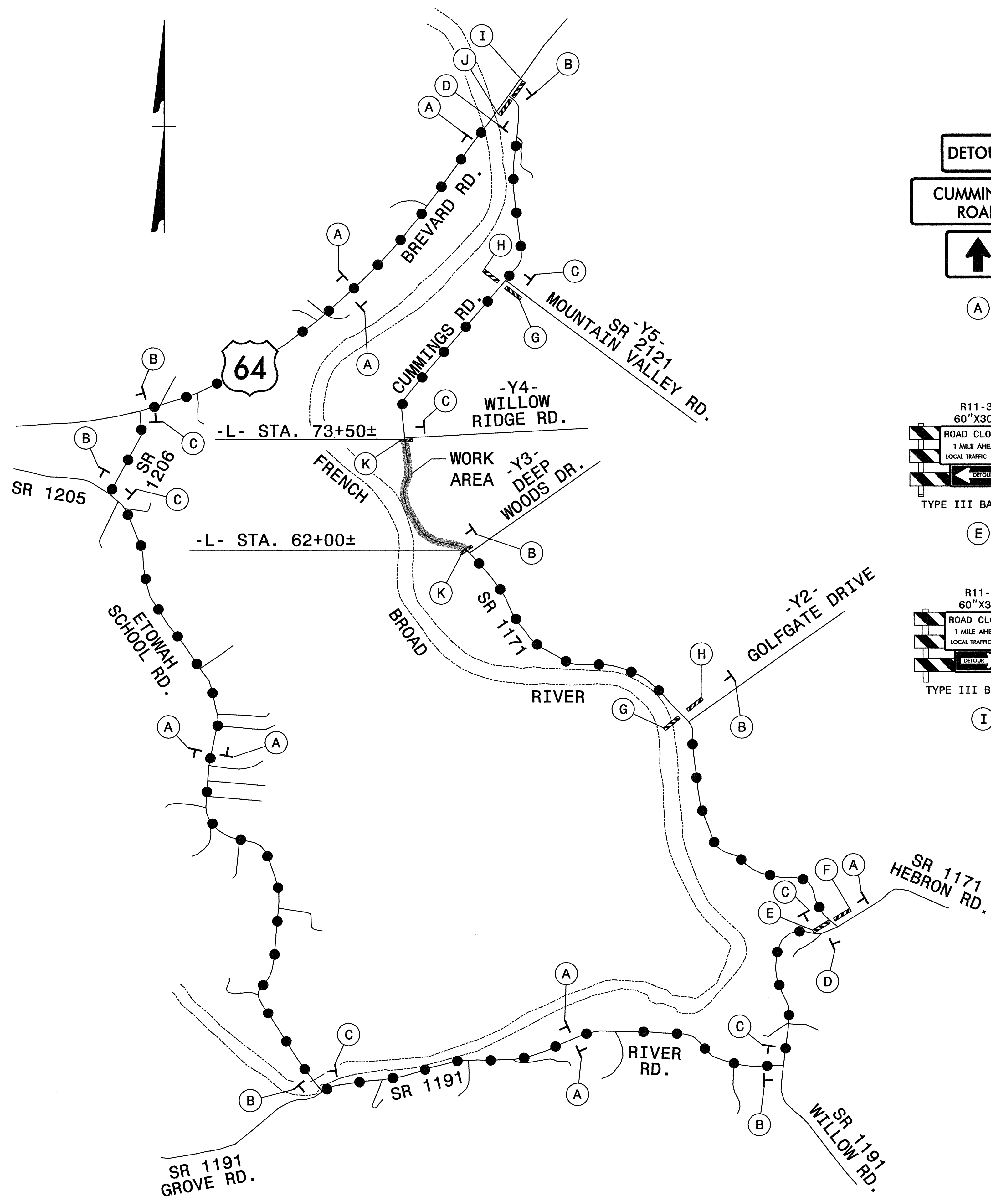
LEGEND	
	PROPOSED CONSTRUCTION

APPROVED: *Michael T. Rzepka* DATE: 3-10-08

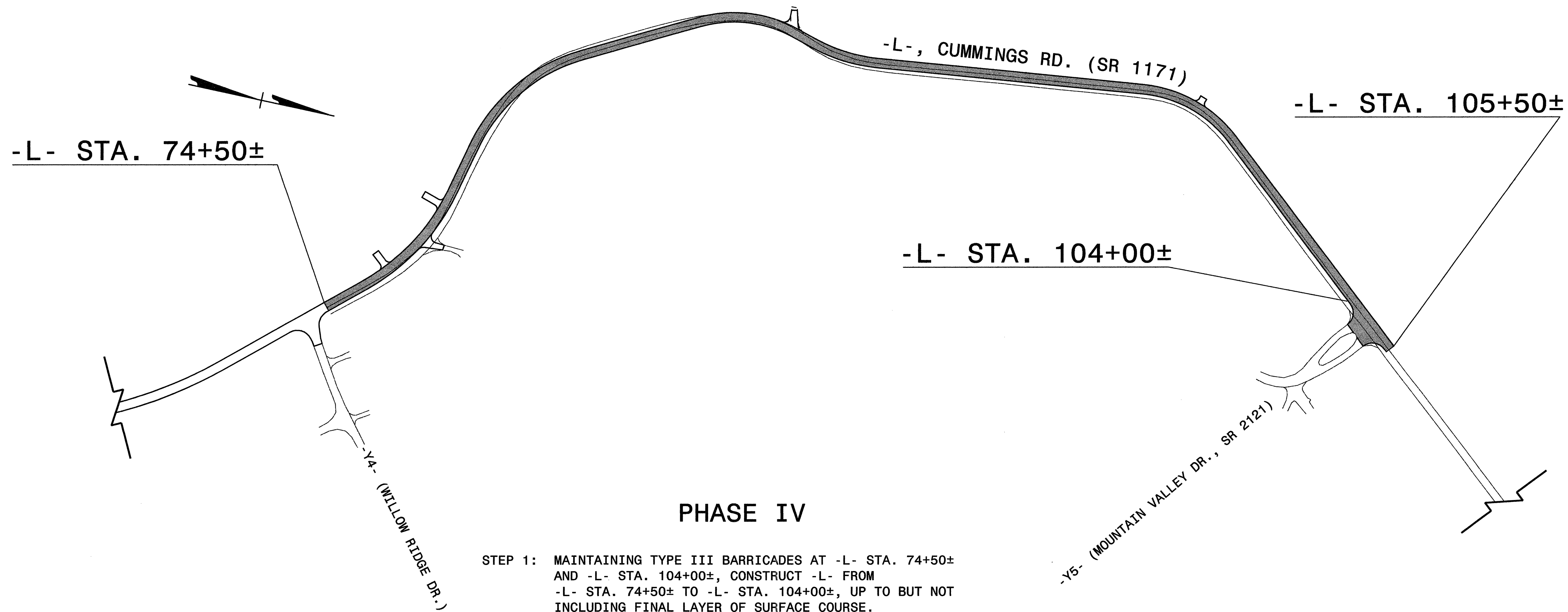
SEAL

PHASE III OVERVIEW AND PHASING		
SCALE: NONE		REVISIONS
DATE: 2-7-08		
DWG. BY: B.L.M.		
DESIGN BY: G.E.P.		
REVIEWED BY: M.S.A.		

02/07/2008
 R:\P\Projects\Control\Tcp\1001\CUMMINGS-TC-tcp7-ph3ov.dgn
 KO & ASSOCIATES, P.C.



APPROVED: <i>Michael T. Rzewny</i> DATE: 3-10-08		CUMMINGS ROAD DETOUR DETAIL C									
SEAL				SCALE: NONE							
		DATE: 2-7-08	<table border="1"> <tr><th colspan="2">REVISIONS</th></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	REVISIONS							
		REVISIONS									
DWG. BY: B.L.M.											
DESIGN BY: G.E.P.											
REVIEWED BY: M.S.A.											



PHASE IV

STEP 1: MAINTAINING TYPE III BARRICADES AT -L- STA. 74+50± AND -L- STA. 104+00±, CONSTRUCT -L- FROM -L- STA. 74+50± TO -L- STA. 104+00±, UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE.

STEP 2: INSTALL INTERIM PAVEMENT MARKING LINES (PAINT) ON COMPLETED -L- LINE BETWEEN -L- STA. 74+50± AND -L- STA. 104+00±.

PLACE ROAD CLOSURE SIGNING (REFER TO ROADWAY STANDARD DRAWING NUMBER 1101.03, SHEET 1 OF 9) TO CLOSE CUMMINGS RD. AT -L- STA. 105+50±. (SEE SHEET TCP-12)

STEP 3: USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9 OR ROADWAY STANDARD DRAWING NUMBER 1101.04, PLACE TYPE III BARRICADES AND ROAD CLOSURE SIGNING TO CLOSE CUMMINGS RD. (SR 1171) AT -L- STA. 138+85±. (SEE ROADWAY STANDARD DRAWING NUMBER 1101.03, SHEET 2 OF 9 AND LOCAL NOTE 1)

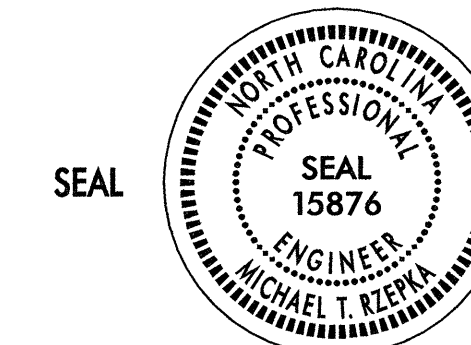
REMOVE TYPE III BARRICADE AT -L- STA. 74+50 AND RELOCATE TYPE III BARRICADE AT -L- STA. 104+00± TO -L- STA. 105+50±. REOPEN CUMMINGS RD. (SR 1171) BETWEEN -Y4- (WILLOW RIDGE DR.) AND -Y5- (MOUNTAIN VALLEY DR., SR 2121).

WORKING IN A CONTINUOUS MANNER, USING FLAGGER(S) TO MAINTAIN -Y5- (MOUNTAIN VALLEY DR., SR 2121) TRAFFIC (REFER TO ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9), CONSTRUCT BETWEEN -L- STA. 104+00± AND -L- STA. 105+50± AND -Y5- (MOUNTAIN VALLEY DR., SR 2121) UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

LEGEND

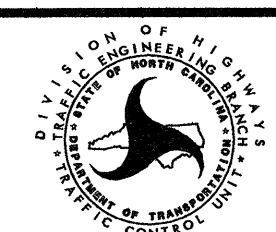
 PROPOSED CONSTRUCTION

APPROVED: *Michael T. Rzepka* DATE: 3-10-08



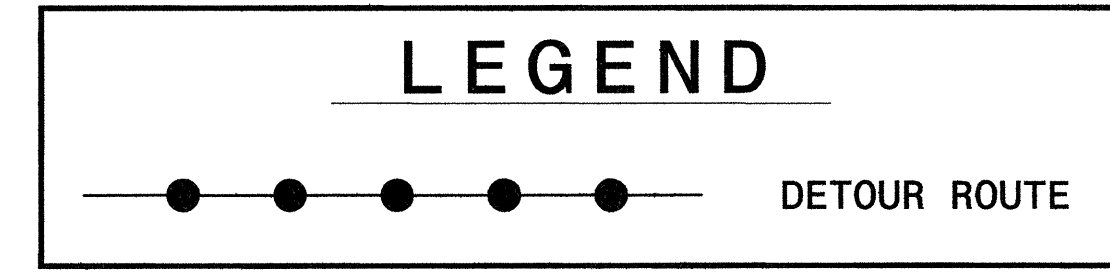
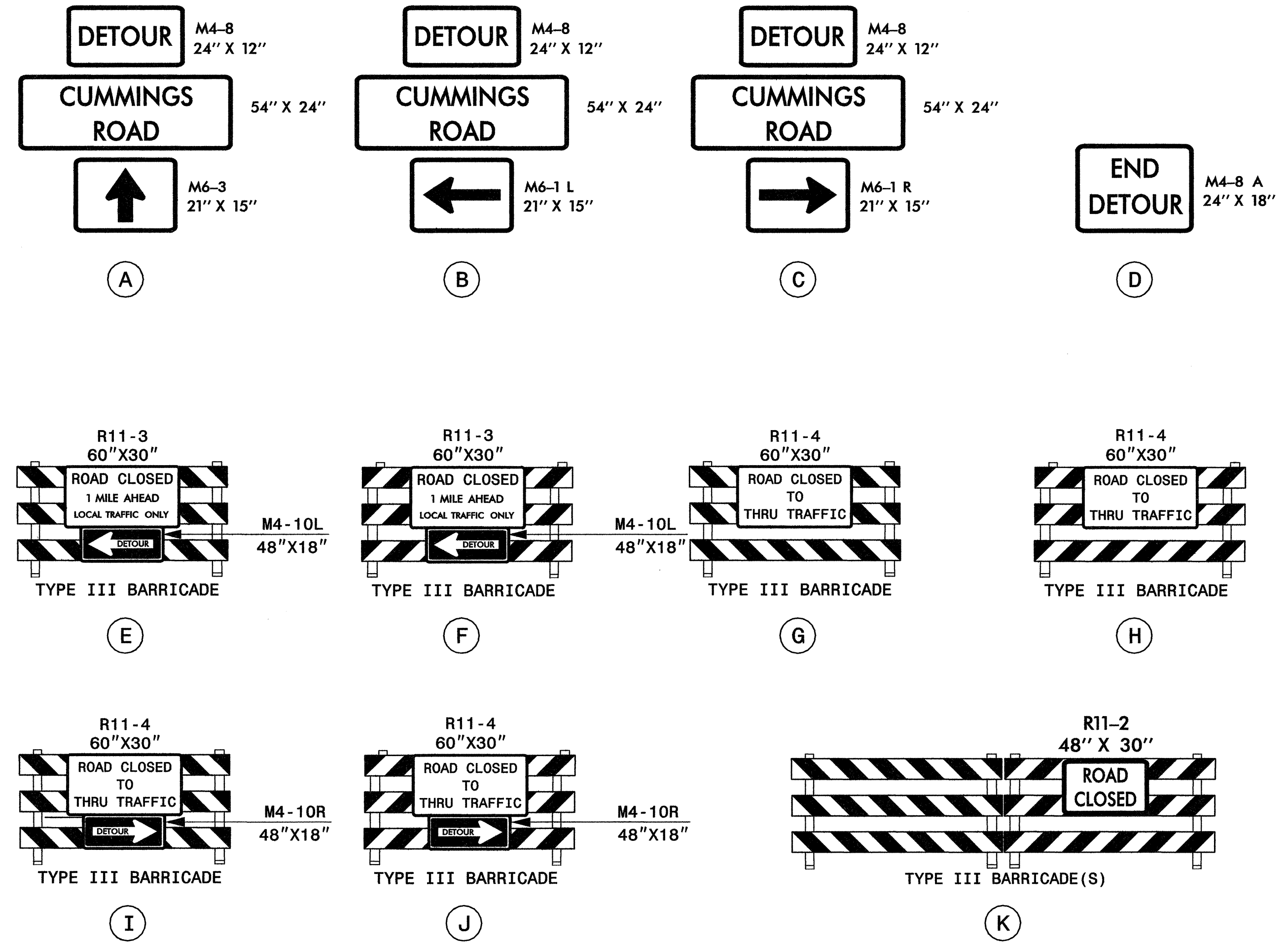
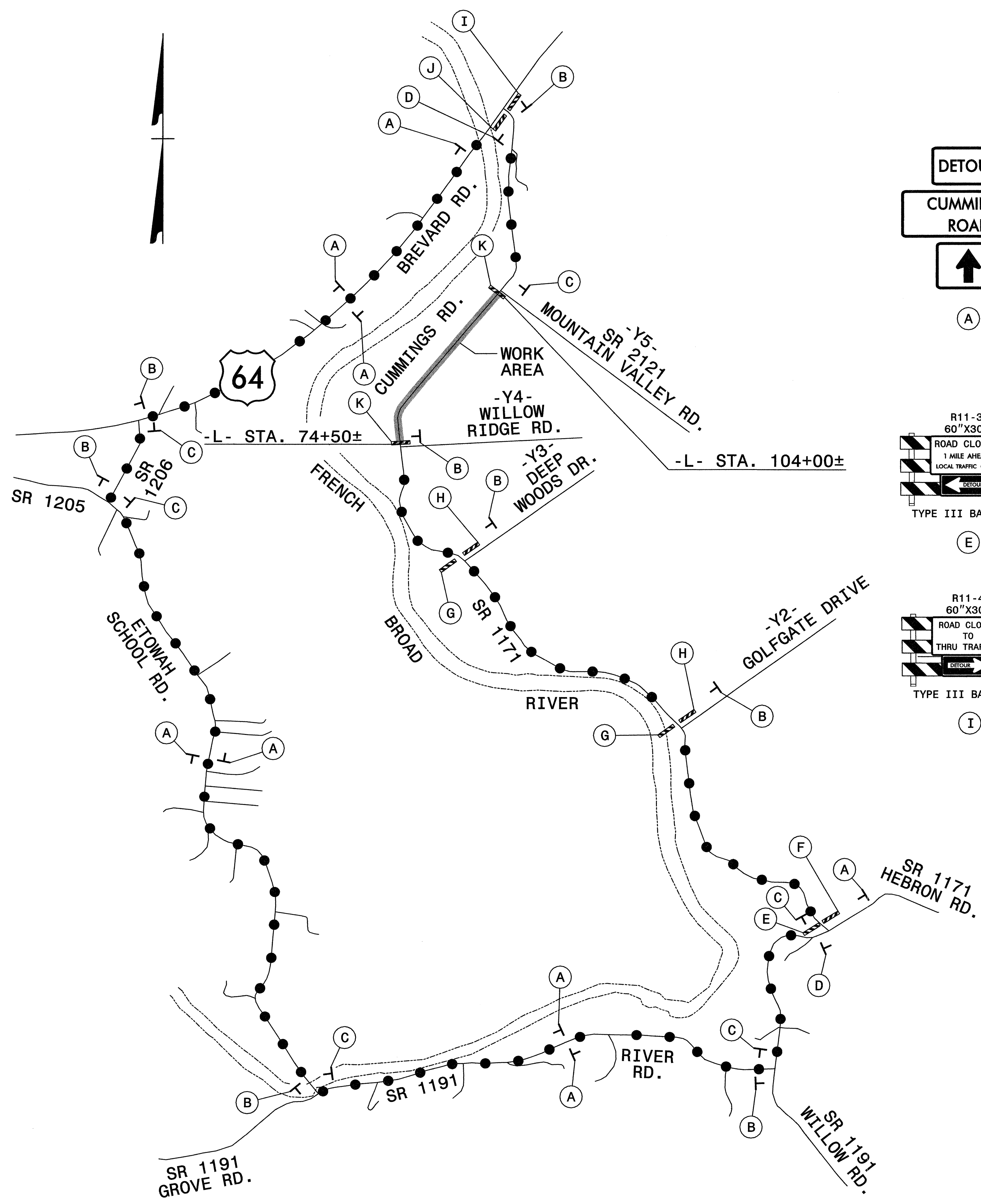
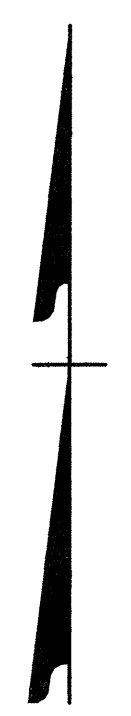
PHASE IV OVERVIEW AND PHASING

SCALE: NONE
 DATE: 2-7-08
 DWG. BY: B.L.M.
 DESIGN BY: G.E.P.
 REVIEWED BY: M.S.A.



REVISIONS	

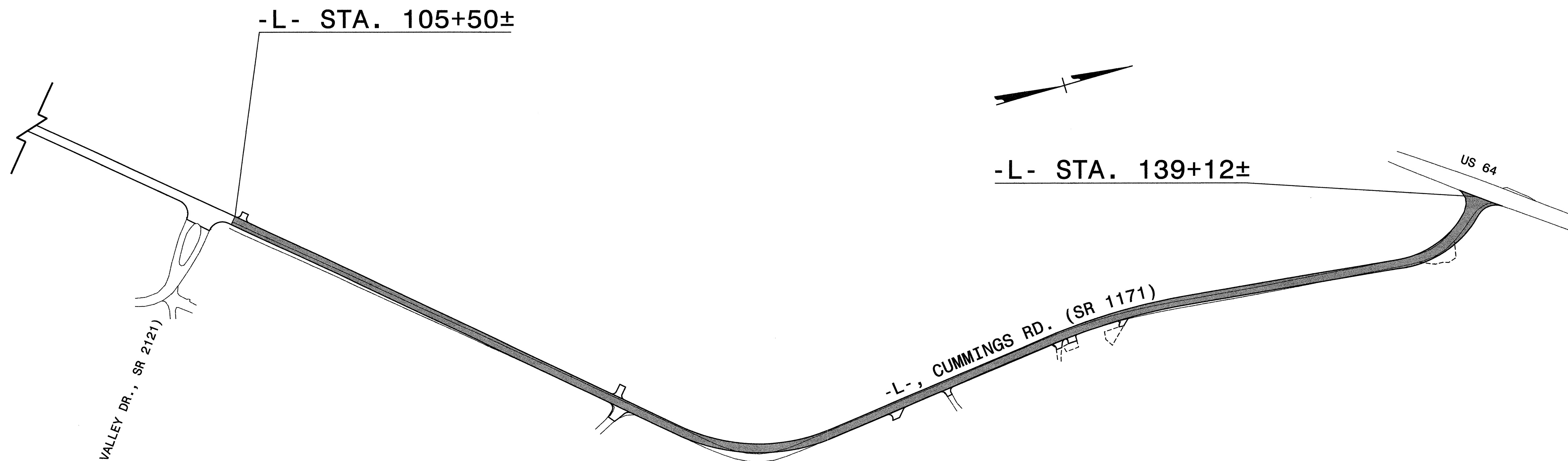
Plans prepared by:
KO & ASSOCIATES, P.C.
 Consulting Engineers
 5121 KINGDOM WAY, SUITE 100
 RALEIGH, N.C. 27607
 For Division of Highways



APPROVED: *Michael T. Rieppel* DATE: 3-10-08

**CUMMINGS ROAD
 DETOUR DETAIL D**

SCALE: NONE		REVISIONS
DATE: 2-7-08		
DWG. BY: B.L.M.		
DESIGN BY: G.E.P.		
REVIEWED BY: M.S.A.		



PHASE V

- STEP 1: MAINTAINING TYPE III BARRICADES AT -L- STA. 105+50± AND -L- STA. 139+12±, CONSTRUCT -L- FROM -L- STA. 105+50± TO -L- STA. 139+12±, UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE.
 - STEP 2: INSTALL INTERIM PAVEMENT MARKING LINES (PAINT) ON COMPLETED -L- LINE BETWEEN -L- STA. 105+50± AND -L- STA. 139+12±.
 - STEP 3: INSTALL ADVANCE WORK ZONE WARNING SIGNS ON HEBRON RD. (SR 1171), US 64, AND ALL INTERSECTING -Y- LINES. (SEE SHEET TCP-14)
 - STEP 4: USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9 OR ROADWAY STANDARD DRAWING NUMBER 1101.04, REMOVE ALL DETOUR SIGNING, ROAD CLOSURE SIGNING AND TYPE III BARRICADES FROM THE PROJECT. REOPEN CUMMINGS RD. (SR 1171) FROM HEBRON RD. (SR 1171) TO US 64.
 - STEP 5: USING ROADWAY STANDARD DRAWING NUMBER 1101.02, SHEET 1 OF 9, PLACE FINAL LAYER OF SURFACE COURSE, FINAL PAVEMENT MARKING AND MARKERS ON -L-, CUMMINGS RD. (SR 1171) AND ALL -Y- LINES.
- REMOVE LANE CLOSURES AT THE END OF EACH WORKDAY AND RESTORE TO EXISTING TRAFFIC PATTERN.

02/07/2008
 R:\Project\1007\1007\CUMMINGS_TC-1\cpil_ph5ov.dgn
 KO & ASSOCIATES, P.C.

LEGEND

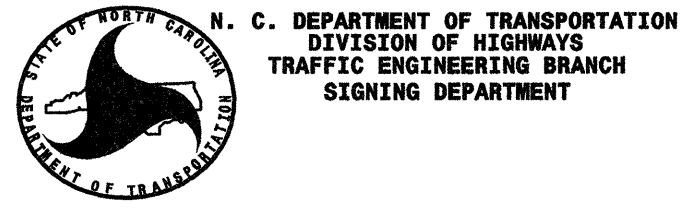
PROPOSED CONSTRUCTION

APPROVED: *Michael T. Rieppel* DATE: 3-10-08

SEAL

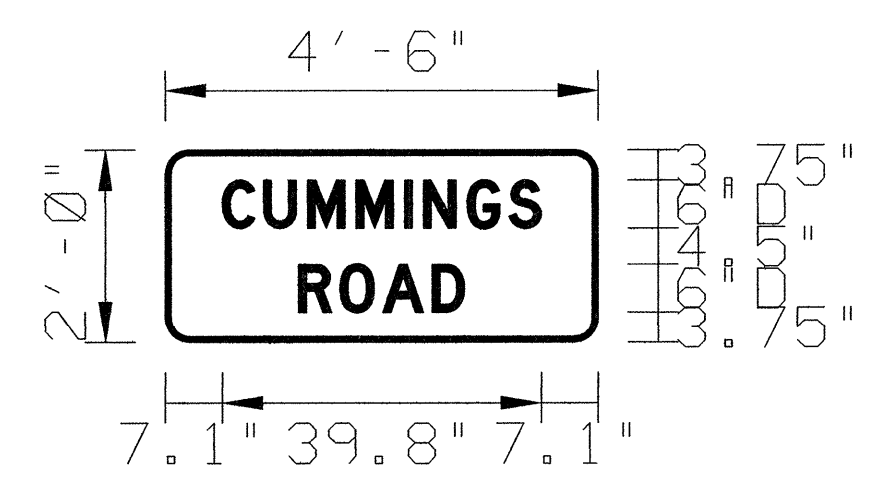
PHASE V OVERVIEW AND PHASING

SCALE: NONE		REVISIONS	
DATE: 2-7-08			
DWG. BY: B.L.M.			
DESIGN BY: G.E.P.			
REVIEWED BY: M.S.A.			



N. C. DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 TRAFFIC ENGINEERING BRANCH
 SIGNING DEPARTMENT

SIGN NUMBER: name	BACKG COLOR: Green	DESIGN BY: GEP	CHECKED BY: MSA	STD #: 149
TYPE: D	COPY COLOR: White	PROJECT ID: 14C.045116	DIV: 14	DATE: Jul 26, 2005
QUANTITY: ?				
SIGN WIDTH: 4'-6"				
HEIGHT: 2'-0"				
TOTAL AREA: 9.0 Sq.Ft.				
BORDER TYPE: FLUSH				
RECESS: 0"				
WIDTH: 0.75"				
RADII: 3"				
NO. Z BARS:	MAT'L: 0.125" (3.2 mm) ALUMINUM			
LENGTH:				
USE NOTES: 1 AND 4				
1. Legend and border shall be direct applied Type III reflective sheeting.				
2. Legend and border shall be direct applied non-reflective sheeting.				
3. Shields shall be Type III reflective sheeting on 0.032" (0.8mm) aluminum and demountable.				
4. Background shall be Type III reflective sheeting.				
5. Background shall be Type I reflective sheeting.				
6. Center arrow(s) vertically on sign.				
7. Bottom panel shall be yellow Type III sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is:				



BORDER
 R=3"
 TH=0.75"

LETTER POSITIONS

Letter spacings are to start of next letter

	C	U	M	M	I	N	G	S													Series/Size Text Length	
	7.1	5.2	5.5	6.1	6.1	2.4	5.5	5.2	4	7.1											D6 39.8	
		R	O	A	D																	D6 20.7
	16.6	5.2	5.4	6.1	4	16.7																

Spacing Factor is 1 unless specified otherwise

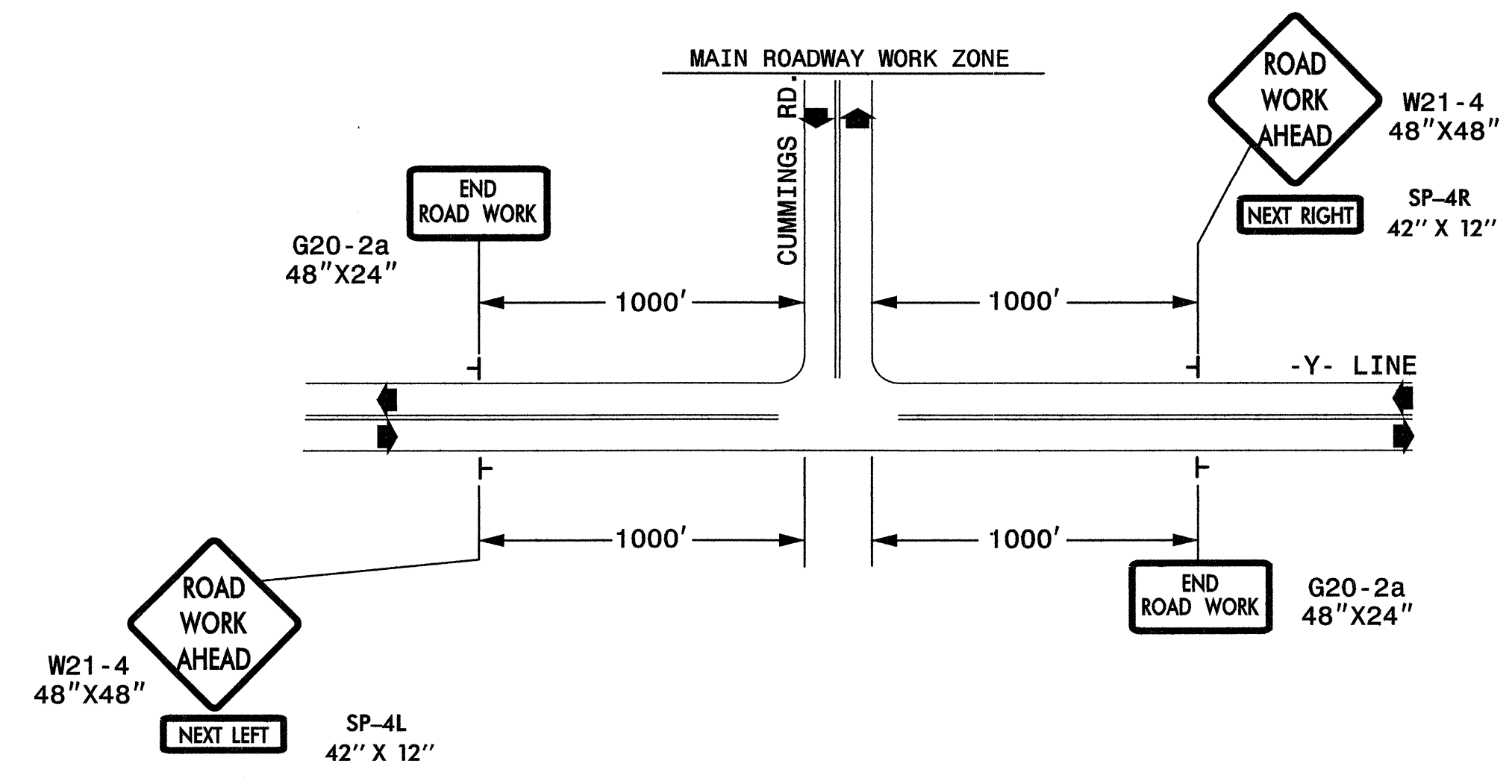
FILENAME: CUMMINGS_TC_tcpF_SIGN DESIGN

NORTH CAROLINA D.O.T. SIGN DETAIL

02/07/2008 R:\TrafficControl\Tcp\1002\CUMMINGS_TC_tcp13_SIGN.dgn KO & Associates, P.C.

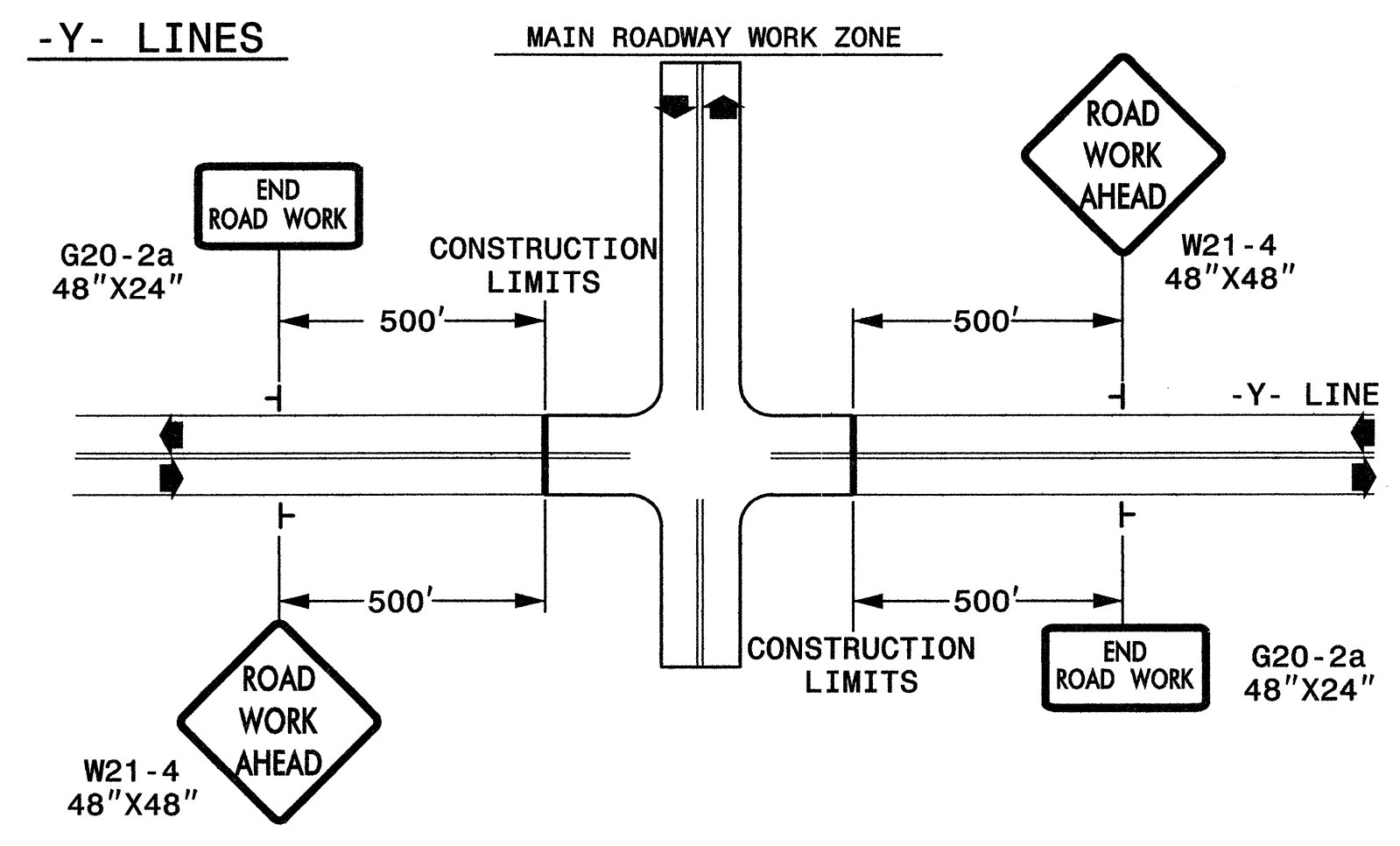
APPROVED: <i>M. S. A.</i> DATE: 3-10-08	TEMPORARY DETOUR SIGN		REVISIONS	
SEAL			SCALE: NONE	
	DATE: 2-7-08			
	DWG. BY: B.L.M.			
	DESIGN BY: G.E.P.			
	REVIEWED BY: M.S.A.			

ADVANCE WORK ZONE WARNING SIGNS ALONG HEBRON RD. (SR 1171) AND US 64



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

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



**DETAIL DRAWING FOR
 TWO-WAY UNDIVIDED
 WORK ZONE WARNING SIGNS**

GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.
- ** TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

LEGEND

┆ STATIONARY SIGN

◀ DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1

APPROVED: <i>Michael T. Rzewny</i> DATE: 3-10-08	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS	
	SCALE: NONE	
	DATE: 2-7-08	
	DWG. BY: B.L.M.	
	DESIGN BY: G.E.P.	
REVIEWED BY: M.S.A.	REVISIONS	

Plans prepared by:
KO & ASSOCIATES, P.C.
 Consulting Engineers
 512 KINGDOM WAY, SUITE 100
 RALEIGH, N.C. 27607
 For Division of Highways

02/07/2008
 R:\1171\FicCon\tr\14cp\1002\CUMMINGS_TC_top14_WZWS.dgn
 Ko & Associates, P.C.