

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

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

STATE PROJECT REFERENCE NO.	SHEET NO.
U-3110B	TCP-1

U-3110B

**ROADWAY STANDARD DRAWINGS**

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

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.03	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 PANELS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY-DRUM
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
1205.06	PAVEMENT MARKINGS - THRU LANE DROPS
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS & WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS (TEMPORARY & PERMANENT)

**INDEX OF SHEETS**

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND AND INDEX OF SHEETS
TCP-2	PROJECT NOTES
TCP-2A	PROJECT NOTES & TEMPORARY PAVEMENT MARKING SCHEDULE
TCP-3	PHASING
TCP-3A	PHASING CONTINUED
TCP-4	PHASE I OVERVIEW
TCP-4A	PHASE I OVERVIEW CUT SECTIONS
TCP-5	PHASE I DETAIL 1
TCP-5A	NC 100 DETOUR ROUTE FOR WEEKEND ICT
TCP-6	PHASE I DETAIL 2
TCP-7	PHASE I DETAIL 3
TCP-7A	OFFSITE DETOUR FOR HANGING BRIDGE GIRDERS OVER HAGGARD AVE. (-Y3-)
TCP-8	PHASE II OVERVIEW
TCP-9	PHASE II DETAIL 1
TCP-10	PHASE II DETAIL 2
TCP-11	PHASE II DETAIL 3
TCP-12	PHASE II DETAIL 4
TCP-13	PHASE II DETAIL 5
TCP-14	PHASE II DETAIL 6
TCP-15	PHASE II DETAIL 7
TCP-16	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS
SD-1	SERVICE RD. SIGN DESIGN
SD-2	RELOCATED INTERSECTION SIGN DESIGN, COOK RD. SIGN DESIGN, AND TEMPORARY SIGNAL SIGN DESIGN

**LEGEND**

- GENERAL**
- DIRECTION OF TRAFFIC FLOW
  - NORTH ARROW
  - PROPOSED PVMT. EXIST. PVMT.
  - WORK AREA
  - REMOVAL OF EXISTING PAVEMENT
- TRAFFIC CONTROL DEVICES**
- TYPE I BARRICADE
  - TYPE II BARRICADE
  - TYPE III BARRICADE
  - CONE
  - DRUM SKINNY DRUM
  - FLASHING ARROW PANEL (TYPE C)
  - STATIONARY SIGN
  - PORTABLE SIGN
  - STATIONARY OR PORTABLE SIGN
  - CRASH CUSHION
  - CHANGEABLE MESSAGE SIGN
  - TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
  - POLICE
  - FLAGGER
- PAVEMENT MARKINGS**
- CRYSTAL/CRYSTAL PAVEMENT MARKER
  - YELLOW/YELLOW PAVEMENT MARKER
  - CRYSTAL/RED PAVEMENT MARKER
  - PAVEMENT MARKING SYMBOLS

TIP PROJECT:

22-JUN-2010 10:34  
\\DOT\DFSROOT\PROJ\TIPProjects-U\U3110B\TrafficControl\TCP-U-3110B.tc.tcp-01.dgn  
insteelman AT WZTC237453

APPROVED: _____ DATE: _____	PLAN PREPARED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL SECTION
	S. BOURNE, P.E. _____ TRAFFIC CONTROL ENGINEER
	J. ISHAK, P.E. _____ TRAFFIC CONTROL PROJECT ENGINEER
	J. PORTANOVA, P.E. _____ TRAFFIC CONTROL PROJECT DESIGN ENGINEER
	M. STEELMAN _____ TRAFFIC CONTROL DESIGN ENGINEER

# 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 UNDESIRE 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 WHEN TRAFFIC IS IN A 2-LANE, 2-WAY PATTERN AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
ANY ROADS	MONDAY TO FRIDAY FROM 7:00 A.M. TO 9:00 A.M. AND FROM 4:00 P.M. TO 6:00 P.M.

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

- | ROAD NAME | HOLIDAY   |
|-----------|---|
| ANY ROADS |   |
|           | <ol style="list-style-type: none"> <li>1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.</li> <li>2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 7:00 A.M. DECEMBER 31st TO 6:00 P.M. JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 6:00 P.M. THE FOLLOWING TUESDAY.</li> <li>3. FOR EASTER, BETWEEN THE HOURS OF 7:00 A.M. THURSDAY AND 6:00 P.M. MONDAY.</li> <li>4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY TO 6:00 P.M. TUESDAY.</li> <li>5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE DAY AFTER INDEPENDENCE DAY.<br/><br/>IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.</li> <li>6. FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 A.M. FRIDAY AND 6:00 P.M. TUESDAY.</li> <li>7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 A.M. TUESDAY TO 6:00 P.M. MONDAY.</li> <li>8. FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 6:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.</li> <li>9. FOR HOME FOOTBALL GAMES, GRADUATION, AND PARENT'S DAY OCCURRING AT ELON UNIVERSITY BETWEEN 2 (TWO) HOURS BEFORE THE START AND 2 (TWO) HOURS AFTER THE END OF THE HOME FOOTBALL GAMES, GRADUATION, AND PARENT'S DAY, AS DIRECTED BY THE ENGINEER.</li> </ol> |

C) DO NOT CLOSE ROADS AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
HAGGARD AVE./ BURLINGTON ST.	MONDAY THROUGH SUNDAY 6:00 A.M. TO 10:00 P.M.

D) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
ANY ROADS	MONDAY THROUGH FRIDAY FROM 7:00 A.M. TO 9:00 A.M. AND FROM 4:00 P.M. TO 6:00 P.M.	FOR MORE THAN 20 MINUTES TO SHIFT TRAFFIC

E) 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

- F) 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.
- G) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- H) 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.
- I) 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.
- J) 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.
- K) DO NOT INSTALL MORE THAN TWO LANE CLOSURES, IN ANY ONE DIRECTION, ON COOK ROAD(SR 1311)/NC 100.
- L) PROVIDE A MINIMUM OF 0.5 MILE BETWEEN LANE CLOSURES, MEASURED FROM THE END OF ONE CLOSURE TO THE FIRST SIGN OF THE NEXT LANE CLOSURE.

### 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.
- 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) 100FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

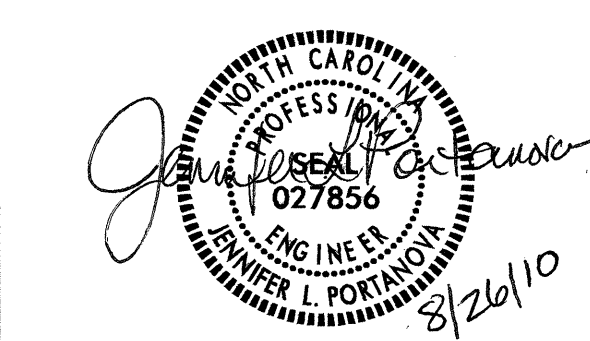
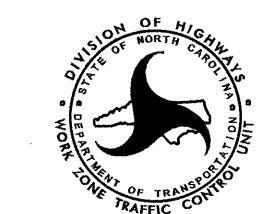
### TRAFFIC PATTERN ALTERATIONS

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

### SIGNING

- P) 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.
- Q) PROVIDE PERMANENT SIGNING.
- R) PROVIDE SIGNING AND DEVICES REQUIRED TO CLOSE THE ROAD ACCORDING TO THE ROADWAY STANDARD DRAWINGS AND TRAFFIC CONTROL PLANS.
- PROVIDE SIGNING REQUIRED FOR THE OFF-SITE DETOUR ROUTE AS SHOWN IN THE TRAFFIC CONTROL PLANS.

25-AUG-2010 16:17 \\D:\VDF\SR0010\PROJ\TIP\Projects-U\U3110B\TrafficControl\TCP\U-3110B-fc-tcp-02 and tcp-2a.dgn mstreind AT WZTC237455

APPROVED: _____ DATE: _____  	<h2 style="margin: 0;">PROJECT NOTES</h2> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">SCALE: NONE</td> <td style="width: 50%;"></td> </tr> <tr> <td>DATE: AUG 2010</td> <td></td> </tr> <tr> <td>DWG. BY: MHS</td> <td></td> </tr> <tr> <td>DESIGN BY: MHS</td> <td></td> </tr> <tr> <td>REVIEWED BY: JLP</td> <td></td> </tr> </table> <div style="text-align: right; margin-top: 10px;">  <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">REVISIONS</th> </tr> <tr> <td> </td> </tr> <tr> <td> </td> </tr> <tr> <td> </td> </tr> </table> </div>	SCALE: NONE		DATE: AUG 2010		DWG. BY: MHS		DESIGN BY: MHS		REVIEWED BY: JLP		REVISIONS			
SCALE: NONE															
DATE: AUG 2010															
DWG. BY: MHS															
DESIGN BY: MHS															
REVIEWED BY: JLP															
REVISIONS															

# GENERAL NOTES CONTINUED

PROJ. REFERENCE NO. U-3110B	SHEET NO. TCP-2A
--------------------------------	---------------------

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

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

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

**TRAFFIC BARRIER**

U) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRAFFIC CONTROL PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION, PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE/RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW, BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW, BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

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

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

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

**TRAFFIC CONTROL DEVICES**

W) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.

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 DRUMS PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT 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:

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	TEMPORARY RAISED
BRIDGE	COLD APPLIED PLASTIC	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 PROPOSED MONOLITHIC ISLANDS BEFORE INSTALLATION.

**TEMPORARY / FINAL SIGNALS**

EE) SHIFT AND REVISE ALL SIGNAL HEADS AS SHOWN ON THE SIGNAL PLANS.

**MISCELLANEOUS**

FF) COORDINATE WITH ENGINEER WHEN USING LAW ENFORCEMENT. LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS, AS DIRECTED BY THE ENGINEER.

GG) ALL WHEELCHAIR RAMP LOCATIONS SHALL BE DERIVED FROM STATIONING SHOWN ON PAVEMENT MARKING PLANS OR AS DIRECTED BY THE ENGINEER IN COORDINATION WITH THE SIGNING AND DELINEATION UNIT.

## LOCAL NOTES

- 1) WORK IN A CONTINUOUS MANNER, AND AS DIRECTED BY THE ENGINEER, TO COMPLETE THE UNDERCUT OPERATIONS ON -L- THAT IMPACT DRIVE 1, DRIVE 2, DRIVE 3, AND DRIVE 4. DO NOT CLOSE MORE THAN ONE DRIVE AT A TIME.
- 2) IN LIEU OF INSTALLING THE TEMPORARY GUIDE SIGNING SHOWN IN TRAFFIC CONTROL PLANS, THE EXISTING GUIDE SIGNING MAY BE RELOCATED AND/OR PROPOSED GUIDE SIGNING MAY BE INSTALLED, AS DIRECTED BY THE ENGINEER.
- 3) WORK IN A CONTINUOUS MANNER, AND AS DIRECTED BY THE ENGINEER, TO COMPLETE THE WORK ON -L- THAT IMPACTS DRIVE 5.

### TEMPORARY PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION
	TEMPORARY PAVEMENT MARKINGS
	PAINT (24")
P4	WHITE STOPBAR
	COLD APPLIED PLASTIC (4") Type4 - Removable Tape
CA	WHITE EDGELINE
CI	YELLOW DOUBLE CENTER
	PAINT (4")
PA	WHITE EDGELINE
PB	YELLOW EDGELINE
PC	10 FT. WHITE SKIP
PD	2 FT. WHITE MINISKIP
PE	WHITE SOLID LANE LINE
PF	10 FT. YELLOW SKIP
PH	YELLOW SOLID LANE LINE
PI	YELLOW DOUBLE CENTER
	PAINT (8")
PV	YELLOW DIAGONAL
	PAINT MARKING SYMBOLS
QA	LEFT TURN ARROW
QB	RIGHT TURN ARROW
QC	STRAIGHT ARROW
QD	COMBO. STRAIGHT/LEFT
QE	COMBO. STRAIGHT/RIGHT
	PAINT MARKING CHARACTERS
QI	CHARACTER

APPROVED: _____	DATE: _____	<b>PROJECT NOTES AND TEMPORARY PAVEMENT MARKING SCHEDULE</b>	
		SCALE: NONE	
		DATE: MAY 2010	REVISIONS
		DWG. BY: MHS	
		DESIGN BY: MHS	
		REVIEWED BY: JLP	

30-JUN-2010 13:20 \\\root\dfs\root\PROJ\NTP\Projects-U\310B\Traffic\TrafficControl\TCP\U-310B-TC-TCP-02 and tcp-2a.dgn msteilman AT WZTC237453

THE FOLLOWING NOTES APPLY AT ALL TIMES DURING CONSTRUCTION:

- 1) MAINTAIN ACCESS TO ALL DRIVEWAYS DURING CONSTRUCTION, UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER.
- 2) AT THE END OF EACH WORKDAY, RETURN TRAFFIC TO EXISTING TRAFFIC PATTERN ON ALL ROADS UNLESS OTHERWISE NOTED IN PLANS OR DIRECTED BY ENGINEER.
- 3) CONSTRUCT ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT PONDING WILL NOT OCCUR IN THE TRAVEL LANE. MAINTAIN POSITIVE DRAINAGE.
- 4) USE CONES OR SKINNY DRUMS ADJACENT TO CONCRETE CURB AND GUTTER AND/OR MONOLITHIC CONCRETE ISLANDS DURING CURING PERIOD, AS DIRECTED BY THE ENGINEER.

- C) REMOVE LEFT AND RIGHT SIDE EXISTING GUARDRAIL IN VICINTY OF PROPOSED 60" PIPE NEAR -L- STA. 80+75+/-.
- D) CONSTRUCT PROPOSED WIDENING AND OUTSIDE CURB AND GUTTER FROM -L- STA. 79+51+/- TO STA. 84+00+/- (LEFT) AND FROM -L- STA. 73+50+/- TO STA. 84+00+/- (RIGHT). INSTALL PROPOSED DRAINAGE PIPES AND BOXES IN THIS AREA AS DIRECTED BY THE ENGINEER. INSTALL PROPOSED GUARDRAIL ON LEFT AND RIGHT SIDES IN VICINITY OF PROPOSED 60" PIPE LOCATED NEAR -L- STA. 80+75+/-.
- E) REMOVE TEMPORARY DRAINAGE PORTABLE CONCRETE BARRIER PREVIOUSLY INSTALLED IN PHASE I, STEP 2B.
- F) COMPLETE WIDENING AND WEDGING FROM STA. 80+50+/- TO STA. 84+00+/- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS BACK IN EXISTING PATTERN ON WEDGED AREAS BY END OF EACH WORK DAY.

### PHASE I

STEP 1) INSTALL ADVANCE WORK ZONE WARNING SIGNS AS SHOWN ON SHEET TCP-16.

STEP 2) -USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9, AND AWAY FROM TRAFFIC, BEGIN THE FOLLOWING PROPOSED CONSTRUCTION UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. (SEE SHEETS TCP-4 AND TCP-4A):

- CLEARING AND GRUBBING AND DRAINAGE WORK.
- RIGHT SIDE WIDENING AND MULTI-USE PATH FROM (-L-) STA. 10+50+/- TO STA. 48+90+/-, INCLUDING TEMPORARY DRIVE NEAR STA. 45+00+/- (SEE SHEET TCP-4 AND TCP-4A AND LOCAL NOTE 1 AND 3 ON SHEET TCP-2A).
- (-L-) STA. 50+40+/- TO STA. 58+22+/-, INCLUDING PROPOSED STRUCTURE OVER RAILROAD AND PROPOSED END BENT #1 FOR STRUCTURE OVER HAGGARD AVE. (-Y3-).  
NOTE: INSTALL TEMPORARY DRAINAGE PORTABLE CONCRETE BARRIER (PCB) ALONG HAGGARD AVE. (-Y3-) FROM (-Y3-) STA. 16+68+/- TO STA. 20+68+/- PRIOR TO BEGINNING CONSTRUCTION OF PROPOSED END BENTS #1 FOR STRUCTURES OVER (-Y3-) HAGGARD AVE. (SEE SHEET TCP-4 AND TCP-4A). REMOVE TEMPORARY DRAINAGE PCB UPON COMPLETION OF PROPOSED END BENTS #1 AND SLOPE PROTECTION, AS DIRECTED BY THE ENGINEER.
- LEFT SIDE (-L-) WIDENING, INCLUDING PROPOSED CURB AND GUTTER FROM STA. 69+00+/- TO STA. 79+51+/- (SEE SHEET TCP-4).
- (-Y2-) FROM INTERSECTION WITH (-L-) TO STA. 14+08+/- (SEE SHEET TCP-4).
- PROPOSED TRAFFIC SIGNAL INSTALLATION AT INTERSECTION OF COOK RD. (-L-) AND WESTBROOK AVE. (-Y-). COVER SIGNAL HEADS UNTIL READY TO ACTIVATE. (SEE SHEET TCP-4 AND SIGNAL PLANS).
- USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9 AS NECESSARY, COMPLETE THE FOLLOWING CONSTRUCTION UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE:
  - INSTALL TEMPORARY TRAFFIC SIGNAL AT INTERSECTION OF HAGGARD AVE. (-Y3-) AND (-RAMP A-). COVER TEMPORARY SIGNAL HEADS UNTIL READY TO ACTIVATE. (SEE SHEET TCP-4, TCP-5, AND SIGNAL PLANS).
  - (-RAMP A-) FROM STA. 10+55+/- TO STA. 23+20+/- AND PLACE TEMPORARY PAINT PAVEMENT MARKINGS AND MARKERS AS MUCH AS POSSIBLE ON SAME. (SEE SHEET TCP-4, TCP-6, AND TCP-7).
  - WIDENING AND WEDGING OF HAGGARD AVE. (-Y3-) FROM STA. 20+73+/- TO 24+50+/- . PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS BACK IN EXISTING PATTERN ON WEDGED AREAS BY END OF EACH WORK DAY. USE DRUMS ON (-Y3-) TO CLOSE TURN LANES LEADING TO (-RAMP A-). (SEE SHEET TCP-4 AND TCP-4A).
  - INSTALL AND COVER TEMPORARY ROAD CLOSURE AND DETOUR SIGNING. (SEE SHEET TCP-5A AND ROADWAY STANDARD DRAWING 1101.03, SHEET 2 OF 9).
  - INSTALL AND COVER TEMPORARY SIGNING FOR UPCOMING TEMPORARY TRAFFIC PATTERN (DO NOT INSTALL SIGNS #7, #8, #9, #10, AND #11). (SEE SHEET TCP-6 AND TCP-7 AND LOCAL NOTE 2 ON SHEET TCP-2A).
  - THE FOLLOWING CONSTRUCTION IN ORDER: (SEE SHEET TCP-4 AND TCP-4A).
    - A) INSTALL 60" PIPE AT -L- STA. 80+75+/- BY TRENCHLESS EXCAVATION AS DIRECTED BY THE ENGINEER.
    - B) INSTALL TEMPORARY DRAINAGE PCB WITH TEMPORARY CRASH CUSHIONS ON LEFT AND RIGHT SIDE EXISTING PAVED SHOULDERS.
      - A) (LEFT) -L- STA. 78+90+/- TO STA. 83+30+/-.
      - B) (RIGHT) -L- STA. 78+07+/- TO STA. 82+27+/-.

WORK IN CONTINUOUS MANNER TO COMPLETE THE FOLLOWING WORK OF PHASE I, STEP 3 AND STEP 4, FROM FRIDAY AT 7:00 P.M. TO FOLLOWING MONDAY AT 6:00 A.M. SEE INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES.

STEP 3) UNCOVER OFFSITE DETOUR SIGNING AND ROAD CLOSURE SIGNING AND COVER ANY CONFLICTING EXISTING SIGNING AS DIRECTED BY ENGINEER. CLOSE NC 100 AT (-Y3-) HAGGARD AVE. AND (-Y4-) MANNING AVE. AND DETOUR TRAFFIC. (SEE SHEET TCP-5 AND TCP-5A). USE LAW ENFORCEMENT TO ASSIST WITH TRAFFIC AT DETOUR INTERSECTIONS. PERFORM THE FOLLOWING WORK:

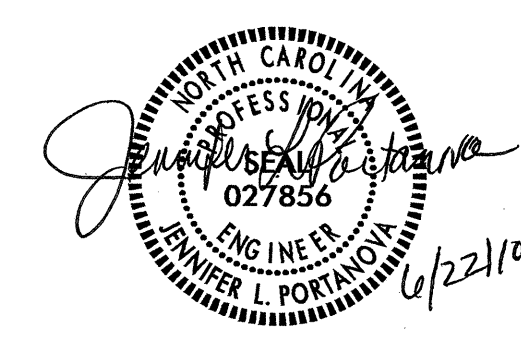

- AWAY FROM TRAFFIC, CONSTRUCT (-RAMP A-) TIE-IN WITH (-L-) UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (NOT INCLUDING CURB AND GUTTER). (SEE SHEET TCP-5).
  - AWAY FROM TRAFFIC, CONSTRUCT/WEDGE RIGHT SIDE -L- PROPOSED PAVEMENT (VAR. 24 FT. TO 36 FT.) FROM STA. 69+00+/- TO STA. 80+50+/- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. INSTALL PROPOSED DRAINAGE PIPES AND BOXES IN THIS AREA, AS DIRECTED BY THE ENGINEER. DO NOT INSTALL PROPOSED CURB AND GUTTER. INSTALL REMAINING RIGHT SIDE PROPOSED GUARDRAIL ALONG (-RAMP A-) AND (-L-) AS INDICATED ON SHEET TCP-5. PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS ON (-RAMP A-) AND (-L-) FOR TEMPORARY TRAFFIC PATTERN. (SEE SHEET TCP-6 AND 7).
  - USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9, PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS ON (-Y3-) HAGGARD AVE. TO WORK WITH TRAFFIC PATTERN SHOWN ON SHEET TCP-6. REMOVE ANY CONFLICTING EXISTING PAVEMENT MARKINGS.
  - USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9, REMOVE EXISTING TRAFFIC SIGNAL HEADS AT INTERSECTION OF HAGGARD AVE (-Y3-) AND NC 100 (-RAMP A-), AS DIRECTED BY THE ENGINEER.
  - PLACE TEMPORARY SIGNAL IN FLASH MODE AT INTERSECTION OF HAGGARD RD. (-Y3-) AND (-RAMP A-).
- STEP 4) PERFORM THE FOLLOWING WORK SIMULTANEOUSLY:
- UNCOVER TEMPORARY SIGNING INSTALLED PER SHEET TCP-6 AND 7.
  - COVER ANY CONFLICTING EXISTING SIGNING AS DIRECTED BY THE ENGINEER.
  - ACTIVATE TEMPORARY SIGNAL AT INTERSECTION OF HAGGARD AVE. (-Y3-) AND NC 100 (-RAMP A-).
  - COVER/REMOVE ALL DETOUR SIGNING AND ROAD CLOSURE DEVICES ON NORTHERN END OF PROJECT (SEE TCP-5A).
  - KEEP ROAD CLOSURE SIGNS AND DEVICES IN PLACE AT EXISTING INTERSECTION OF HAGGARD RD. (-Y3-) AND NC 100.
  - OPEN NC 100 (-L-), NC 100 (-RAMP A-), AND HAGGARD AVE. (-Y3-) TO THE TRAFFIC PATTERN SHOWN ON TCP-6 AND TCP-7.

STEP 5) -USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9, BEGIN THE FOLLOWING CONSTRUCTION:

- REMAINING OUTSIDE PROPOSED CURB AND GUTTER ALONG PROPOSED (-RAMP A-) AND (-L-) AS SHOWN ON SHEET TCP-7.
- INSTALL TEMPORARY DRAINAGE PCB ON LEFT SIDE OF (-Y3-) HAGGARD AVE. FROM STA. 17+61+/- TO STA. 22+98+/- . THEN, BEGIN CONSTRUCTION OF PROPOSED STRUCTURE OVER HAGGARD AVE. (-Y3-) (SEE TCP-7A AND ROAD CLOSURE CONTRACT TIME AND LIQUIDATED DAMAGES) AND APPROACHES FROM STA. 58+22+/- TO STA. 80+50+/- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE (SEE SHEET TCP-6 AND TCP-7). REMOVE ROAD CLOSURE SIGNING AND DEVICES AT INTERSECTION OF HAGGARD AVE. (-Y3-) AND NC 100, AS DIRECTED BY THE ENGINEER (SEE TCP-5A).  
NOTE: REMOVE TEMPORARY DRAINAGE PCB UPON COMPLETION OF PROPOSED END BENTS #2 AND SLOPE PROTECTION FOR STRUCTURES OVER HAGGARD AVE. (-Y3-), AS DIRECTED BY THE ENGINEER.

ICT

22-JUN-2010 10:35 \\DOT\DFSROOT\PROJ\TIP\Projects-U\U310B\TrafficControl\TCP-U-310B.tc.tcp-03 and tcp-03a.dgn msteelman AT WZTC237453

APPROVED: _____	DATE: _____	<h2 style="margin: 0;">PHASING</h2>					
		SCALE: NONE					
		DATE: MAY 2010		REVISIONS			
		DWG. BY: MHS					
		DESIGN BY: MHS					
		REVIEWED BY: JLP	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; height: 20px;"> </td> <td style="width: 50%; height: 20px;"> </td> </tr> <tr> <td style="width: 50%; height: 20px;"> </td> <td style="width: 50%; height: 20px;"> </td> </tr> </table>				

PROJ. REFERENCE NO.	SHEET NO.
U-3110B	TCP-3A

PHASE I, STEP 5 CONTINUED

-USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9, COMPLETE CONSTRUCTION OF PROPOSED RIGHT SIDE WIDENING FROM (-L-) STA. 44+00+/- TO STA. 48+90+/-, INCLUDING TEMPORARY DRIVE AT STA. 44+50+/-, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS ON TEMPORARY DRIVE AND PROPOSED -Y2- FOR TRAFFIC PATTERN SHOWN ON SHEET TCP-6.

-INSTALL AND COVER TEMPORARY SIGNING (SIGNS #7, #8, #9, #10, AND #11) FOR (-Y2-) AND TEMPORARY DRIVE AS SHOWN ON SHEET TCP-6.

STEP 6) USING TYPE III BARRICADES, CLOSE EXISTING SERVICE ROAD AND UNCOVER TEMPORARY SIGNING (SIGNS #7, #8, #9, #10, AND #11) AS SHOWN ON SHEET TCP-6. SWITCH EXISTING SERVICE ROAD TRAFFIC TO PROPOSED (-Y2-) AND TEMPORARY DRIVE. INSTALL PROPOSED GUARDRAIL TO PERMANENTLY CLOSE SERVICE ROAD (SEE SHEET TCP-6 AND ROADWAY PLANS). THEN, CONSTRUCT PROPOSED (-L-) FROM STA. 48+90+/- TO STA. 50+40+/- UP TO BUT NOT INCLUDING FINAL LAYER OF SURFACE COURSE.

STEP 7) -USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9, AND AWAY FROM TRAFFIC, COMPLETE WORK ON RIGHT SIDE OF (-L-) PREVIOUSLY BEGUN UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS ON RIGHT SIDE (-L-) FOR THE PHASE II TEMPORARY 2-LANE, 2-WAY PATTERN. (SEE SHEETS TCP-8 THROUGH TCP-12).

-COMPLETE PROPOSED TRAFFIC SIGNAL AT INTERSECTION OF COOK RD. (-L-) AND WESTBROOK AVE. (-Y-). COVER SIGNAL HEADS UNTIL READY TO ACTIVATE.

**PHASE II**

WORK TO COMPLETE THE WORK OF PHASE II, STEP 1, SIMULTANEOUSLY AND IN A CONTINUOUS MANNER AS DIRECTED BY THE ENGINEER TO SHIFT TRAFFIC TO THE PHASE II TRAFFIC PATTERN SHOWN ON TCP-8 THROUGH TCP-12.

STEP 1) -USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9, AND FLAGGERS/LAW ENFORCEMENT, PERFORM THE FOLLOWING WORK:

-CONSTRUCT TIE-INS AND INSTALL REMAINING TEMPORARY PAVEMENT MARKINGS AND MARKERS AND SWITCH COOK RD./NC 100 TRAFFIC AND ALL -Y- LINE ROADS/DRIVES/RAMPS TO RIGHT SIDE (-L-) IN A TEMPORARY 2-LANE, 2-WAY TRAFFIC PATTERN.

-INSTALL TEMPORARY SIGNING AND DEVICES AS SHOWN ON SHEET TCP-8 THROUGH TCP-12. (SEE LOCAL NOTE 2 ON SHEET TCP-2A).

-REMOVE ANY CONFLICTING SIGNING AS DIRECTED BY THE ENGINEER.

-UNCOVER AND ACTIVATE PROPOSED TRAFFIC SIGNAL AT INTERSECTION OF COOK RD. (-L-) AND WESTBROOK AVE. (-Y-) (SEE SIGNAL PLANS).

-USING SHEET TCP-8, CLOSE EXISTING COOK RD. AT NC 100. INSTALL TEMPORARY ROUTE SIGNING TO DIRECT COOK RD. TRAFFIC TO -RAMP A- AND (-L-). (SEE SHEET TCP-8 AND LOCAL NOTE 2 ON SHEET TCP-2A).

STEP 2) -USING ROADWAY STANDARD 1101.02, SHEET 1 OF 9, AS NECESSARY, BEGIN REMAINING PROPOSED (-L-) LEFT SIDE WEDGING AND WIDENING UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. (SEE SHEETS TCP-8 THROUGH TCP-12 AND LOCAL NOTE 1 ON SHEET TCP-2A).

-AWAY FROM TRAFFIC, COMPLETE PROPOSED (-Y1-) UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AS SHOWN ON SHEET TCP-8 AND TCP-11. PLACE TEMPORARY PAVEMENT MARKINGS AND MARKERS AS SHOWN ON SHEET TCP-13.

STEP 3) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9, AND TCP-13, PERFORM THE FOLLOWING WORK:

A) OPEN -Y1- TO TRAFFIC. RELOCATE ROAD CLOSURE BARRICADE. REMOVE EXISTING TRAFFIC SIGNAL AT INTERSECTION OF SR 1311 (COOK RD.) AND NC 100 (-Y3-), AS DIRECTED BY THE ENGINEER.

B) ADJUST PAVEMENT MARKINGS ON HAGGARD AVE. (-Y3-).

C) REMOVE EXISTING COOK RD. PAVEMENT (REFER TO ROADWAY PLANS).

D) CONSTRUCT PROPOSED CURB AND GUTTER ALONG HAGGARD AVE. (-Y3-).

STEP 4) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9, COMPLETE REMAINING PROPOSED (-L-) LEFT SIDE WEDGING AND WIDENING UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. (SEE SHEETS TCP-8 THROUGH 12).

NOTE: REMOVE TEMPORARY DRAINAGE PCB ALONG HAGGARD AVE. (-Y3-) UPON COMPLETION OF PROPOSED ENDBENTS AND SLOPE PROTECTION FOR STRUCTURES OVER HAGGARD AVE. (-Y3-), AS DIRECTED BY THE ENGINEER.

STEP 5) -USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9, AS NECESSARY, PLACE TEMPORARY PAVEMENT MARKINGS IN THE FINAL PATTERN ON PROPOSED SOUTHBOUND (-L-) AS MUCH AS POSSIBLE WITHOUT INTERFERING WITH EXISTING TRAFFIC. (SEE PAVEMENT MARKING PLANS AND SHEETS TCP-14 AND TCP-15).

WORK TO COMPLETE THE WORK OF PHASE II, STEP 6, IN A CONTINUOUS MANNER, AS DIRECTED BY THE ENGINEER.

STEP 6) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 OF 9, INSTALL REMAINING TEMPORARY PAVEMENT MARKINGS IN THE FINAL PATTERN ON PROPOSED SOUTHBOUND (-L-) AND ALL -Y- LINES/DRIVES AND SWITCH EXISTING SOUTHBOUND NC 100 TRAFFIC TO THE PROPOSED SOUTHBOUND (-L-) LANES IN THE FINAL PATTERN. NORTHBOUND (-L-) TRAFFIC REMAINS IN THE OUTSIDE NORTHBOUND LANE WITH DRUMS PLACED ON THE CENTERLINE. INSTALL TEMPORARY STATIONARY "INTERSECTION RELOCATED" SIGNS 250 FT. IN ADVANCE OF THE PROPOSED STOP SIGN FOR ALL (-Y-) LINES ON LEFT SIDE OF (-L-) [REMOVE "INTERSECTION RELOCATED" SIGNS TWO WEEKS AFTER INSTALLATION]. INSTALL PROPOSED SIGNING AS DIRECTED BY THE ENGINEER (SEE SHEETS TCP-14 AND TCP-15, FINAL PAVEMENT MARKING PLANS, AND SIGNING PLANS).

STEP 7) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 4 OF 9, AND FLAGGERS AS NECESSARY, CONSTRUCT REMAINING MEDIAN CURB AND GUTTER AND MONOLITHIC CONCRETE ISLANDS ALONG (-L-). (SEE SHEETS TCP-14 AND TCP-15).


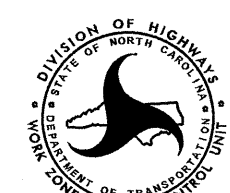
STEP 8) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 4 OF 9, AND FLAGGERS AS NECESSARY, INSTALL TEMPORARY PAVEMENT MARKINGS AND MARKERS FOR NORTHBOUND (-L-) IN THE FINAL PATTERN AND PLACE NORTHBOUND (-L-) TRAFFIC IN THE FINAL PATTERN. (SEE FINAL PAVEMENT MARKING PLANS).

**PHASE III**

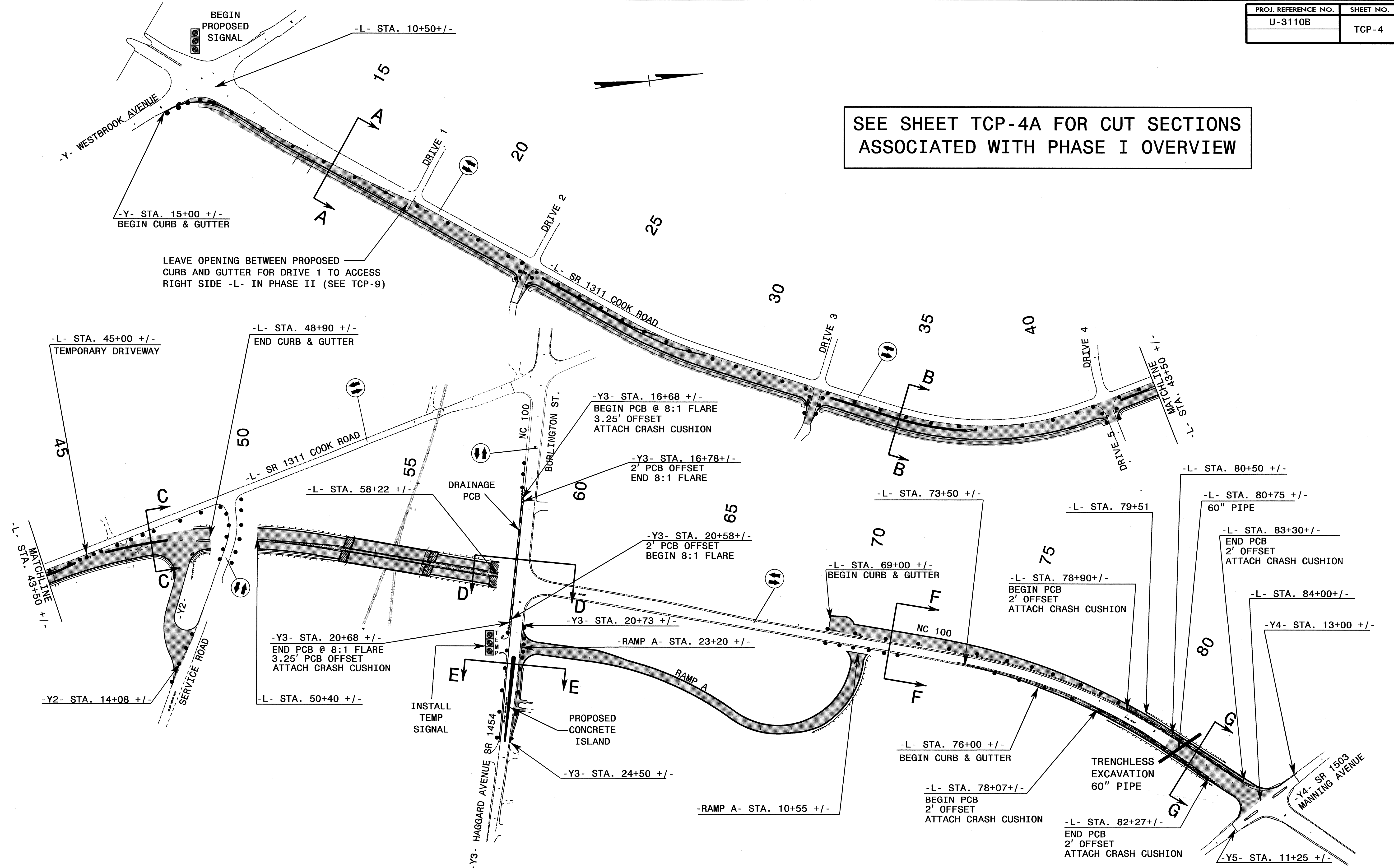
STEP 1) USING ROADWAY STANDARD DRAWING 1101.02, SHEET 1 AND 4 OF 9, PLACE THE FINAL LAYER OF SURFACE COURSE AND INSTALL THE FINAL PAVEMENT MARKINGS AND MARKERS ON ALL ROADS. (SEE FINAL PAVEMENT MARKING PLANS).

STEP 2) REMOVE ALL WORK ZONE TRAFFIC CONTROL DEVICES.

03 JUN 2010 13:46 PROJ:\TIPR\Projects\U3110B\Traffic\TrafficControl\TCP\U-3110b.tc.tcp-03 and tcp-03a.dgn

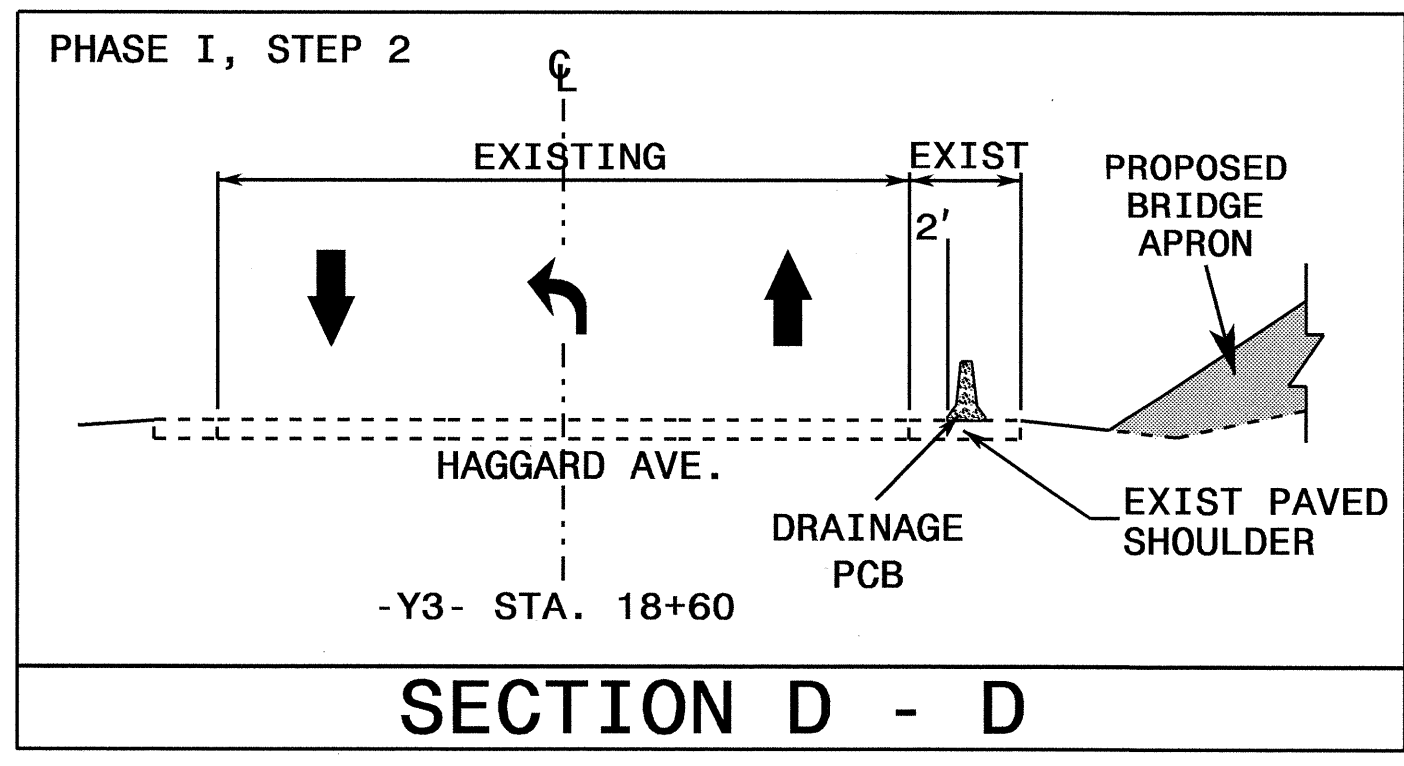
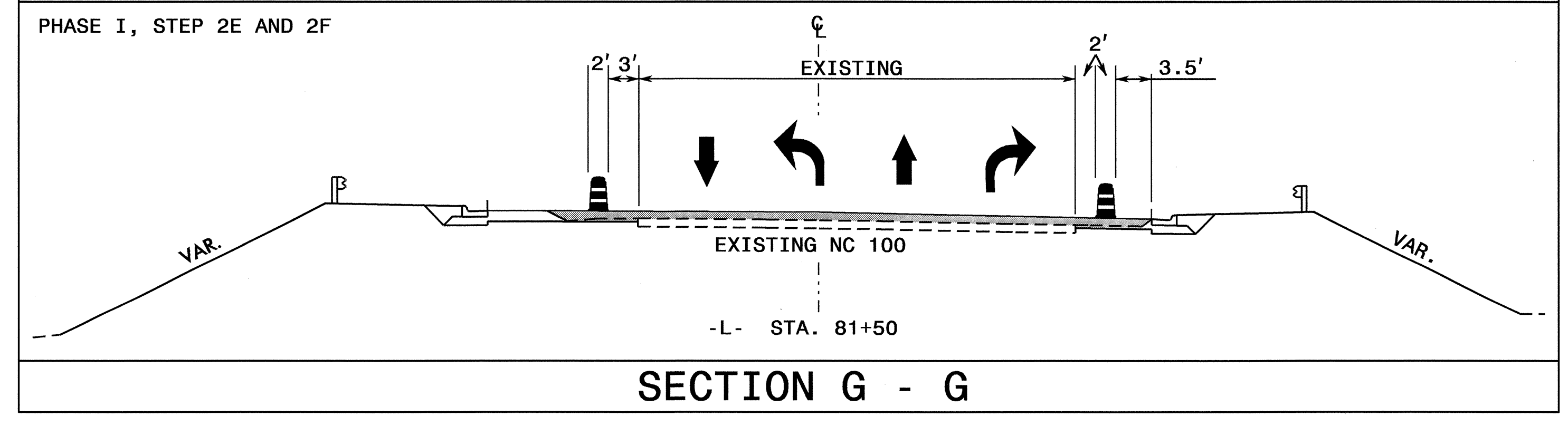
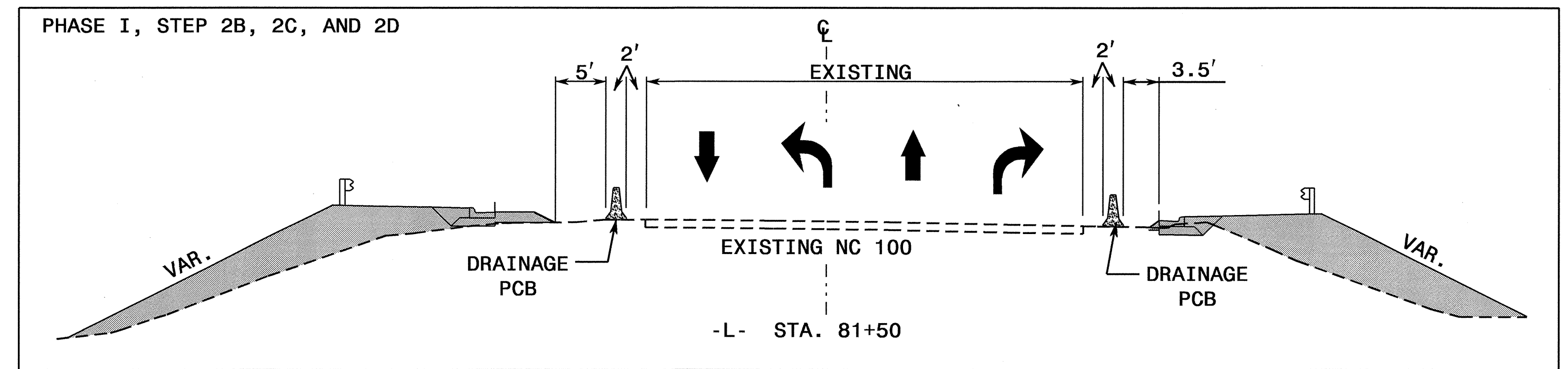
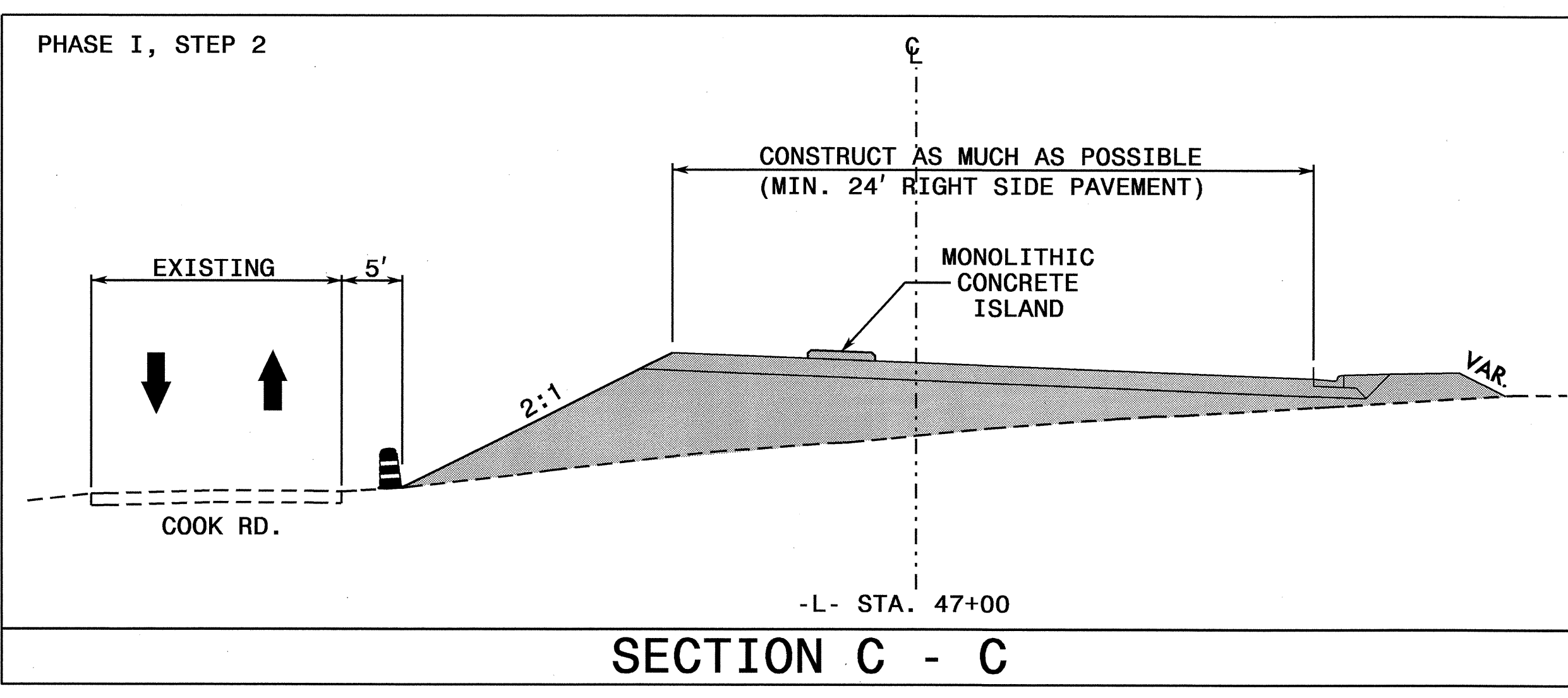
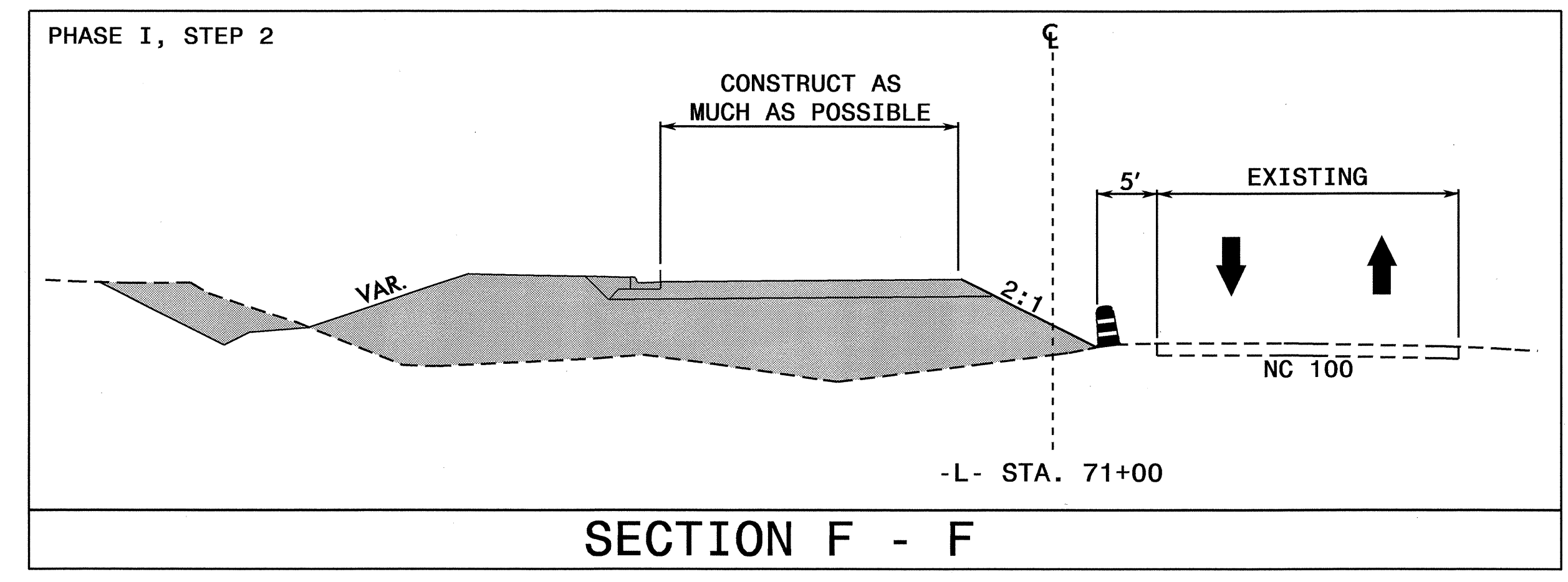
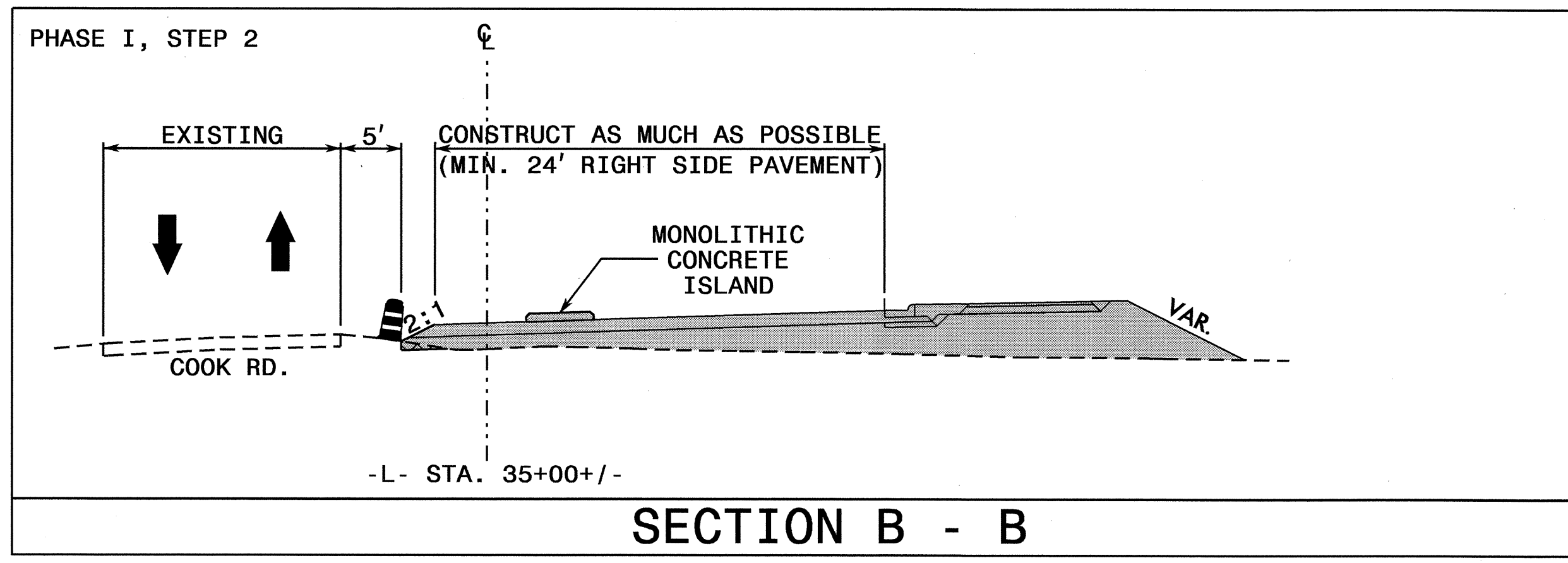
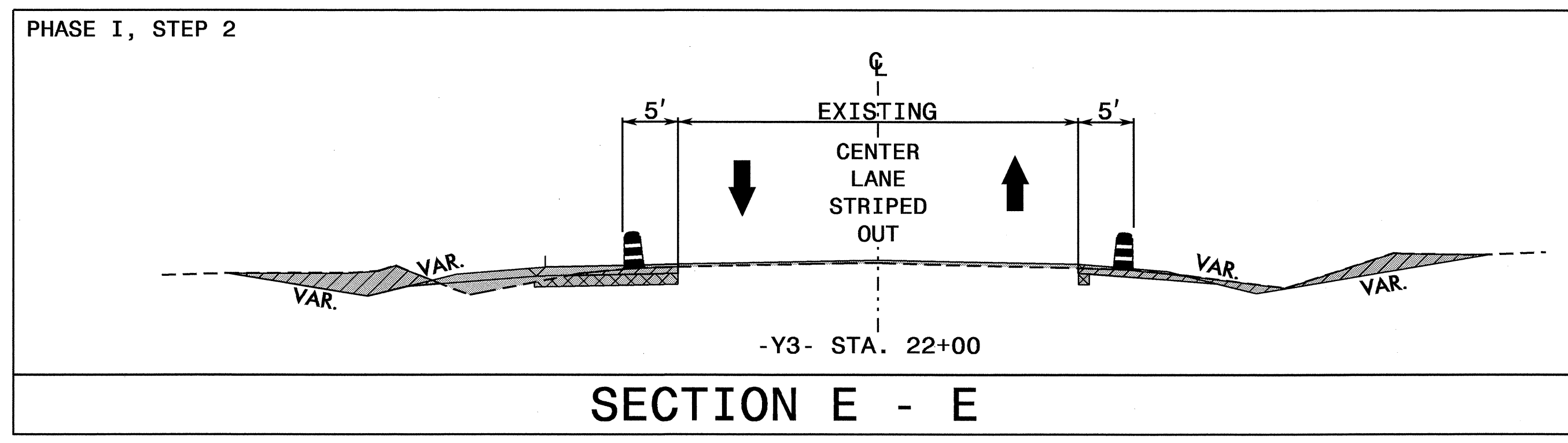
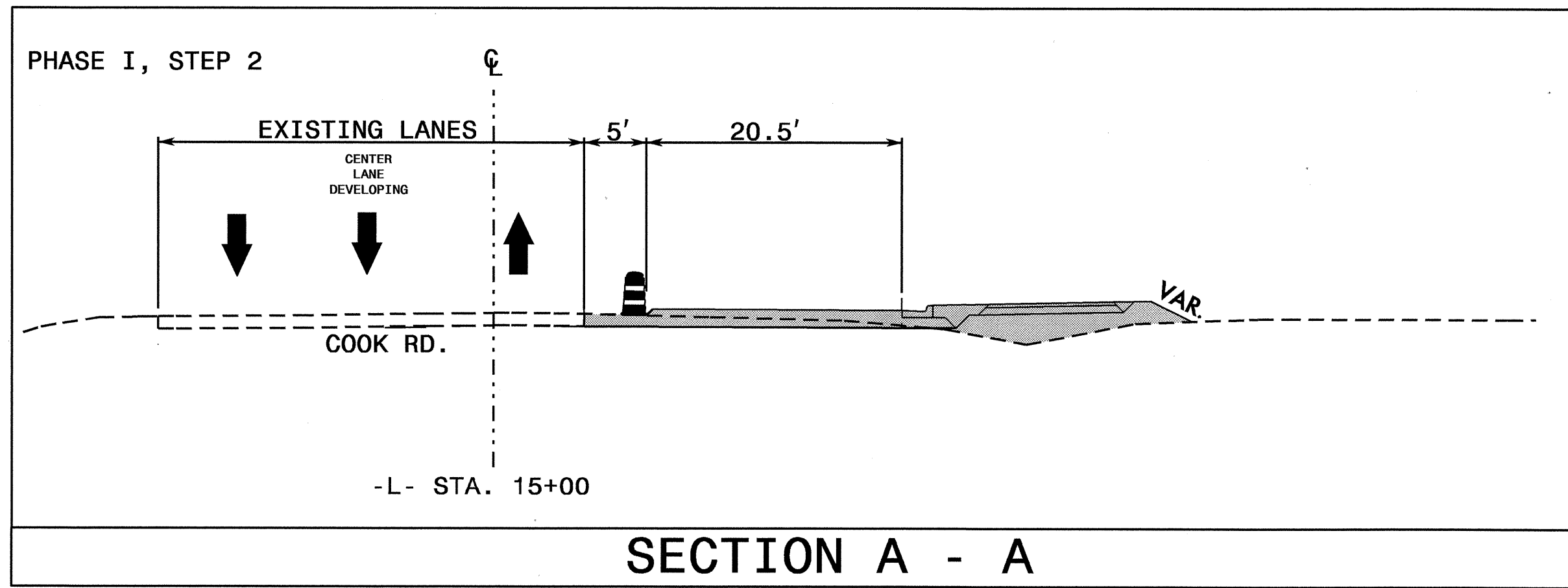
APPROVED: _____ DATE: _____	<b>PHASING</b>									
	SCALE: NONE									
	DATE: MAY 2010									
	DESIGN BY: MHS									
	REVIEWED BY: JLP									
	<table border="1"> <thead> <tr> <th colspan="2">REVISIONS</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS							
REVISIONS										

SEE SHEET TCP-4A FOR CUT SECTIONS ASSOCIATED WITH PHASE I OVERVIEW



03-JUN-2010 13:47  
 \\ADOT\DFSR00101\PROJECTS\U3110B\TrafficControl\TCP\U-3110B-fc-tcp-04.dgn  
 msteelman AT WZTC237453

APPROVED:	DATE:	<b>PHASE I OVERVIEW</b>	
SCALE:	NONE		REVISIONS
DATE:	MAY 2010		
DWG. BY:	MHS		
DESIGN BY:	MHS		
REVIEWED BY:	JLP		

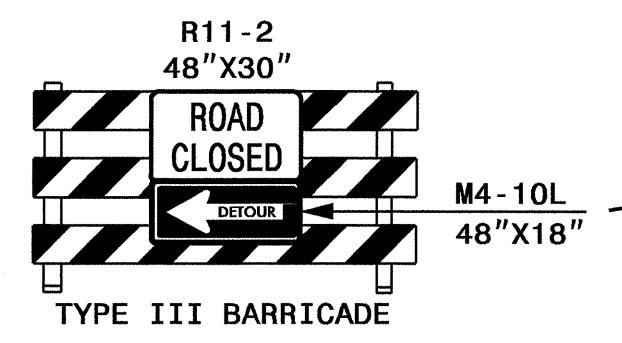
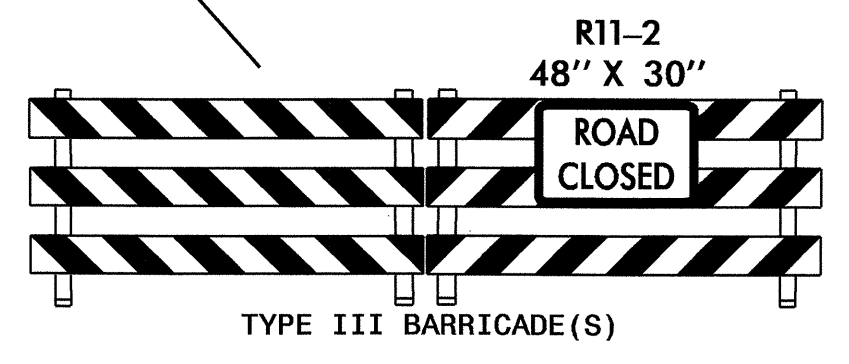
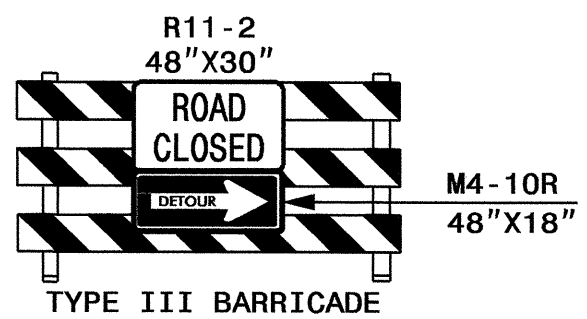
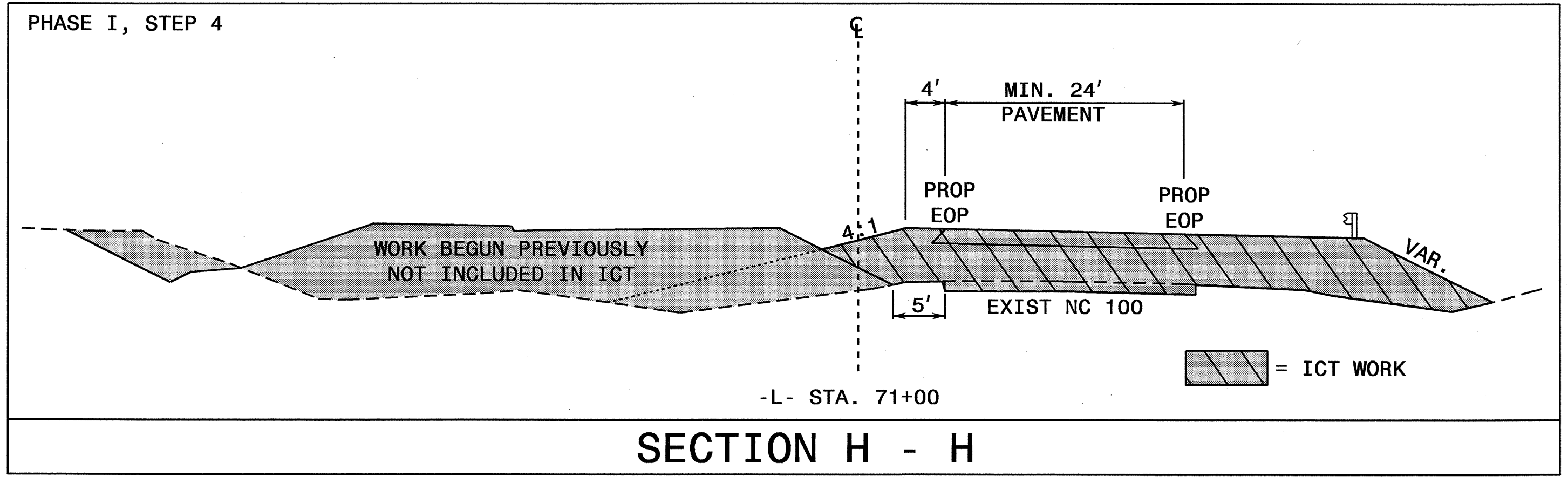
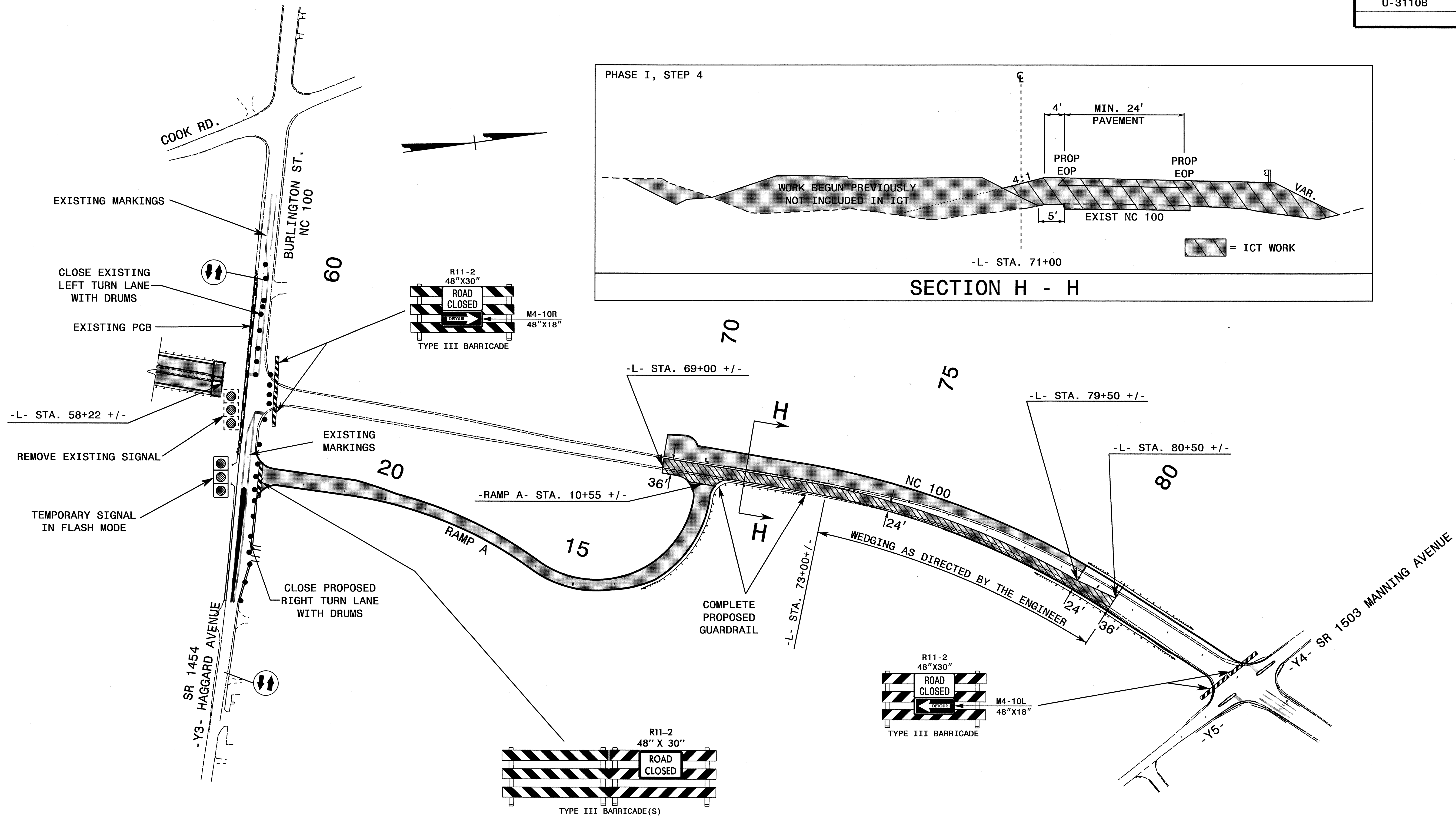


THESE CUT SECTIONS ARE ASSOCIATED WITH THE PHASE I OVERVIEW (TCP-4)

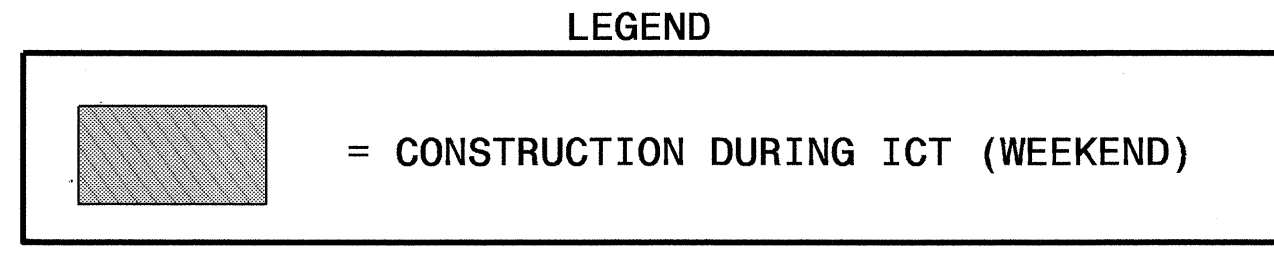
APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

PHASE I OVERVIEW CUT SECTIONS		REVISIONS
SCALE: NONE	DATE: MAY 2010	
DWG. BY: MHS	DESIGN BY: MHS	
REVIEWED BY: JLP		

03 JUN 2010 13:47 P:\PROJ\TIPPs\Projects-U\3110B\TrafficControl\TCP-U-3\Ob.-tc.-tcp-04A.dgn



SEE TCP-5A FOR ROAD CLOSURE SIGNING AND DETOUR SIGNING



APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

5/3/10

**PHASE I DETAIL 1**

SCALE: NONE

DATE: APR. 10

DWG. BY: MHS

DESIGN BY: MHS

REVIEWED BY: JLP

NO.	DESCRIPTION

CADD FILE

03-JUN-2010 13:48 PROJA\TIP-objects-UU310B\TrafficControl\TCP\U-310b\_tcp-05.dgn  
 \D:\UP\SR00\U-310B\TrafficControl\TCP\U-310b\_tcp-05.dgn  
 msteeman AT WZTC27453

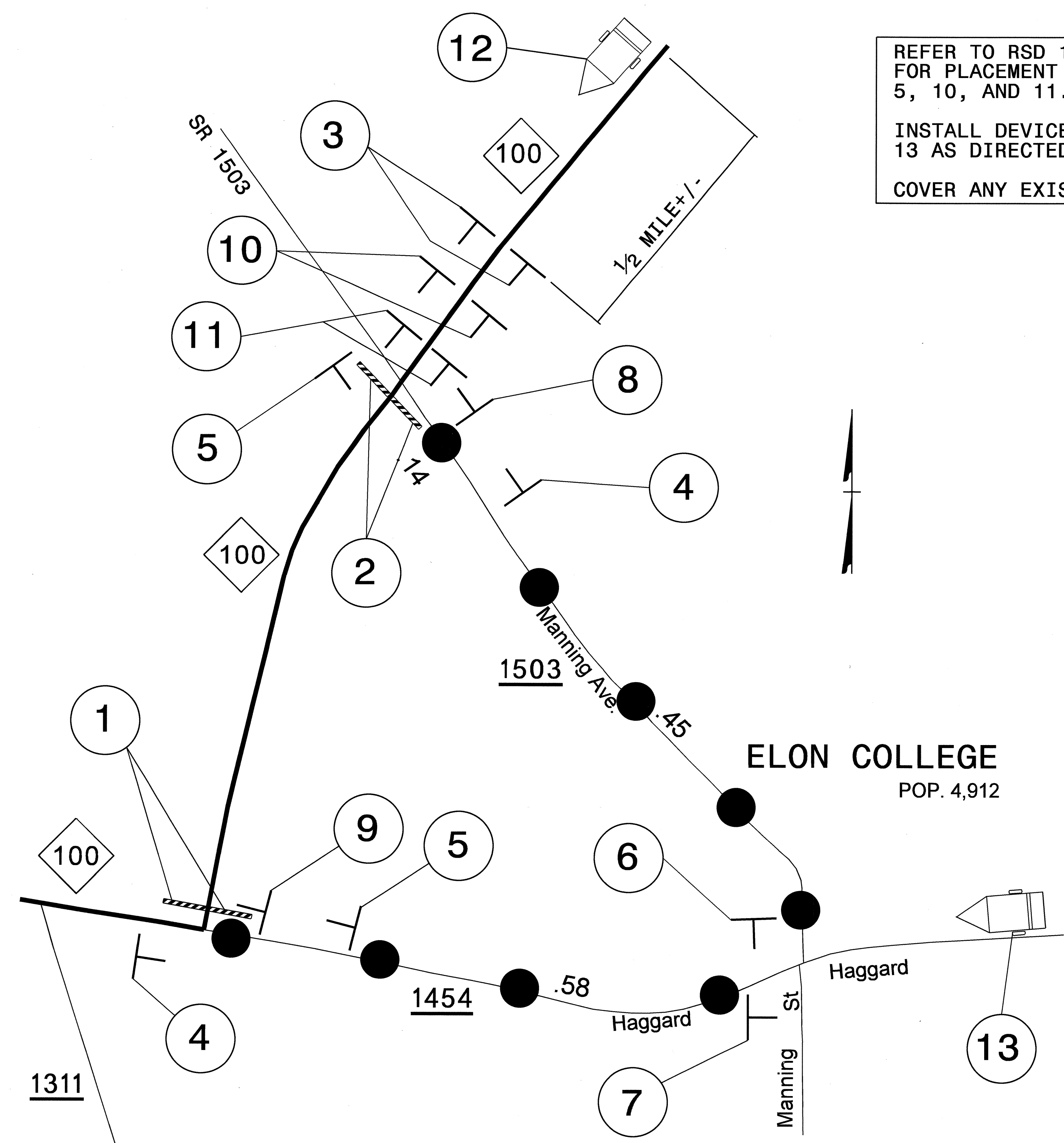


REFER TO RSD 1101.03 SHEET 2 OF 9,  
FOR PLACEMENT OF DEVICES 1 THROUGH  
5, 10, AND 11.

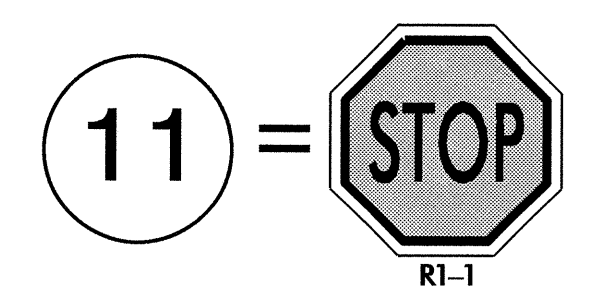
INSTALL DEVICES 6, 7, 8, 9, 12, AND  
13 AS DIRECTED BY THE ENGINEER.

COVER ANY EXISTING CONFLICTING SIGNS.

# NC 100 DETOUR ROUTE



- 1 = TYPE III BARRICADE
- 2 = TYPE III BARRICADE
- 3 = W20-3 48" X 48"
- 4 = W20-3 48" X 48"  
 SP-4L 42" X 12"
- 5 = W20-3 48" X 48"  
 SP-4R 42" X 12"
- 6 = M3-4 24" X 12"  
 MI-5  
 M4-8 24" X 12"  
 M6-1 21" X 15"
- 7 = M3-2 24" X 12"  
 MI-5  
 M4-8 24" X 12"  
 M6-1 L 21" X 15"
- 8 = M3-4 24" X 12"  
 MI-5  
 M4-8 A 24" X 18"
- 9 = M3-4 24" X 12"  
 MI-5  
 M4-8 A 24" X 18"
- 10 = W3-1A 48" X 48"



12 =

SUGGESTED MESSAGES	
MESSAGE NO. 1	MESSAGE NO. 2
NC 100 CLOSED AHEAD	FOLLOW DETOUR SIGNING

CHANGEABLE MESSAGE SIGN

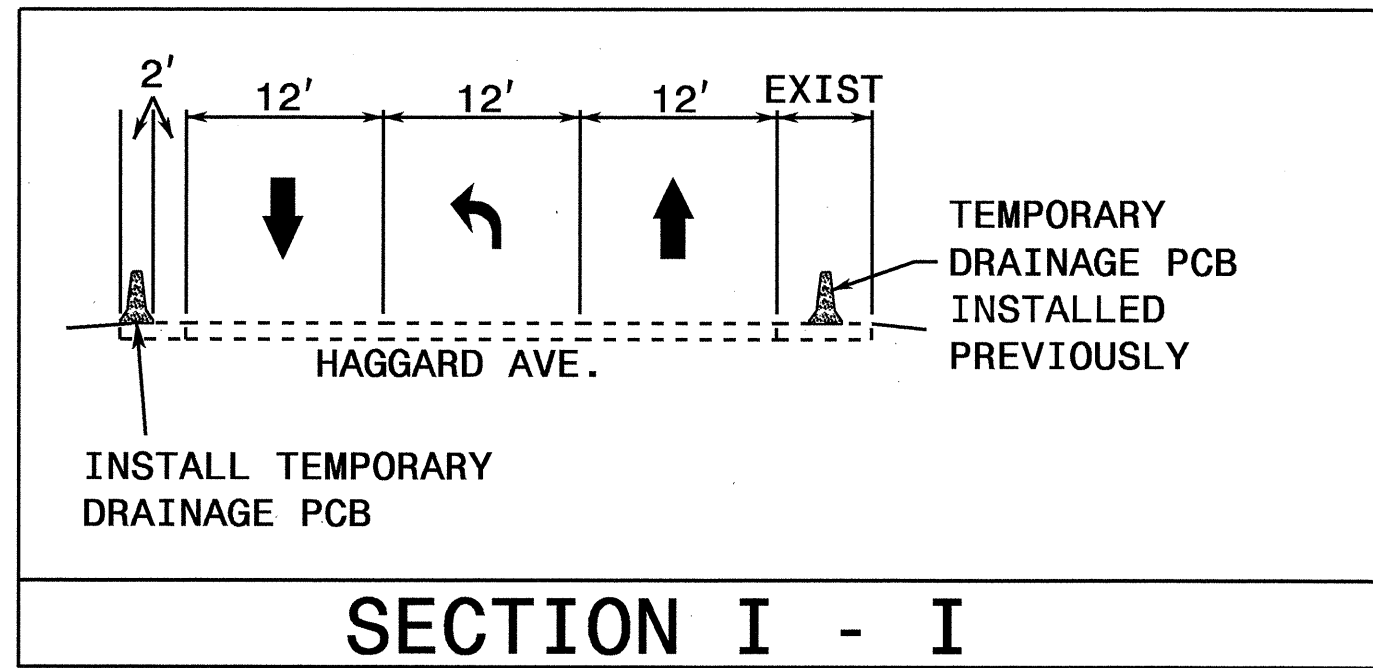
13 =

SUGGESTED MESSAGES	
MESSAGE NO. 1	MESSAGE NO. 2
NC 100 EAST TRAFFIC	RIGHT ON MANNING AVENUE

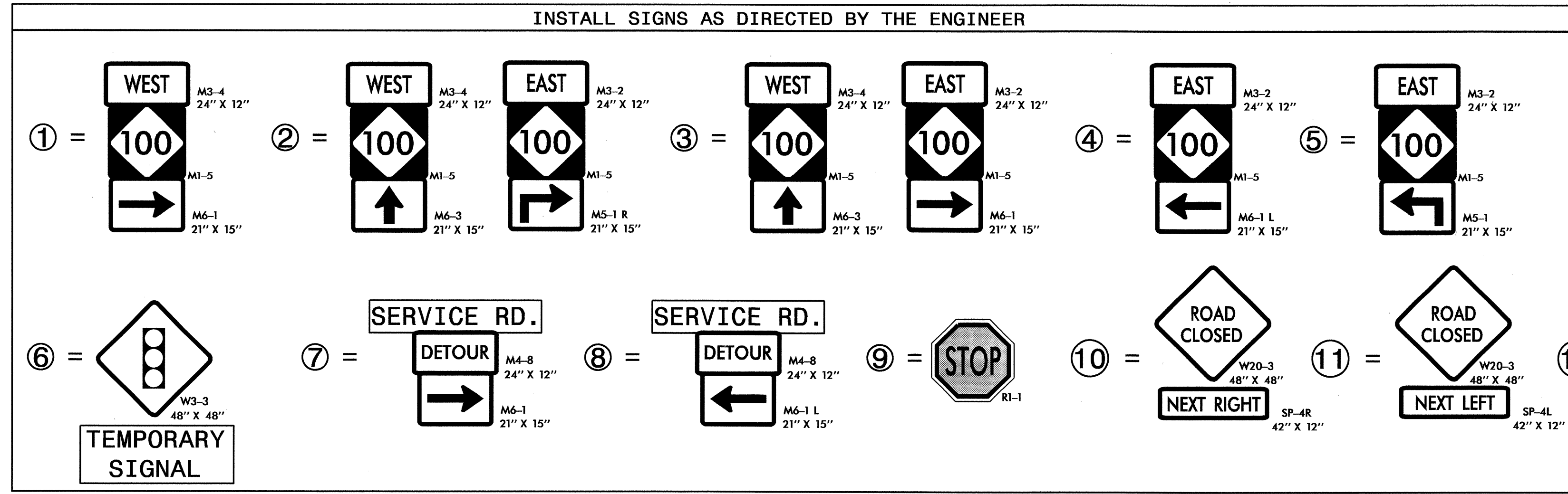
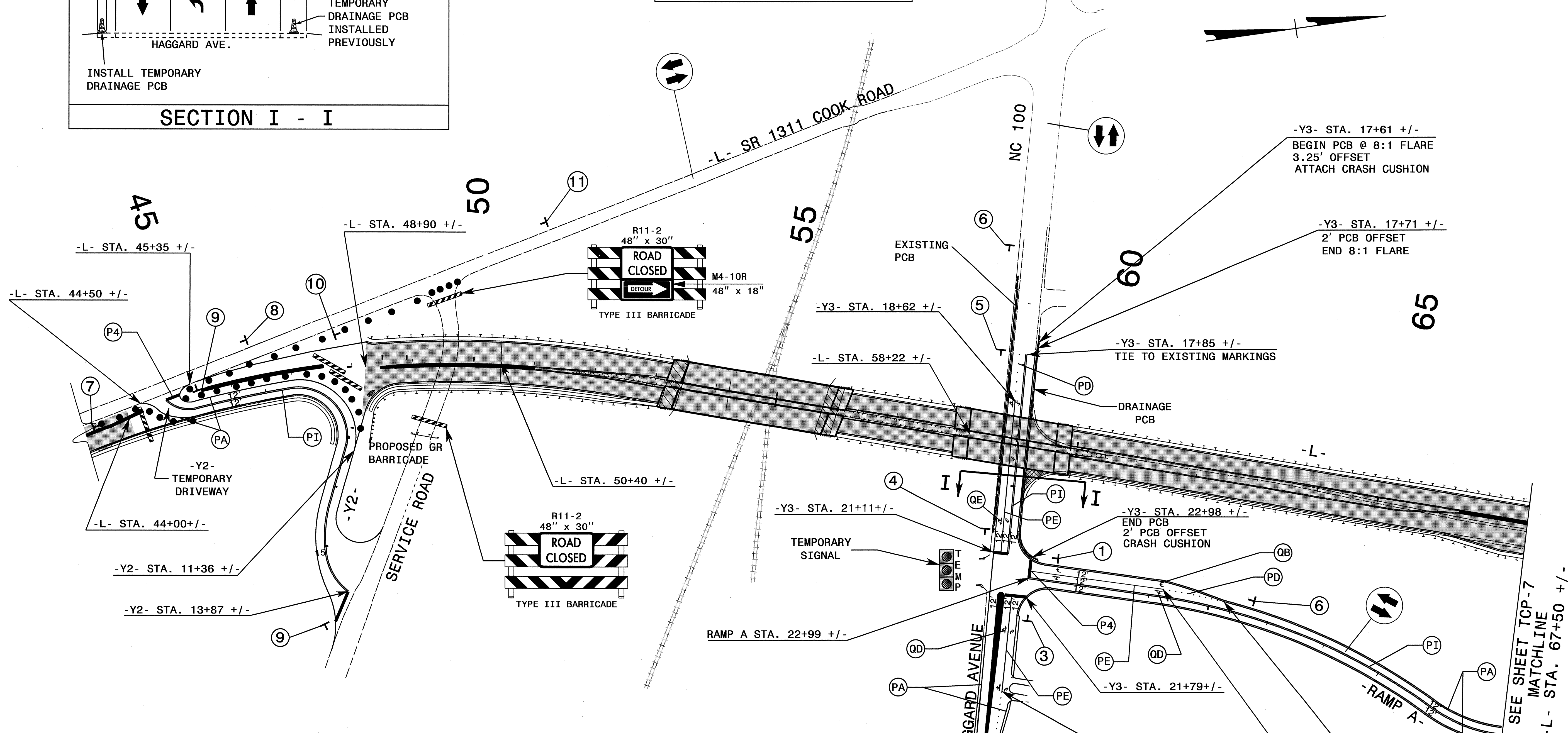
CHANGEABLE MESSAGE SIGN

APPROVED:  DATE: 5/3/10	NC 100 DETOUR ROUTE FOR WEEKEND ICT	
	SCALE: NONE	
	DATE: MAY 2010	
	DESIGN BY: MHS	
	REVIEWED BY: JLP	
		REVISIONS
		CADD FILE

03-JUN-2010 13:48 \\DOT\OFFSPROD\PROJECTS\U3100B\TrafficControl\TCP-U-3100B.tc.tcp-05A.dgn msteelman AT WZTC237453



INSTALL TEMPORARY MARKINGS ACCORDING TO ROADWAY STANDARD DRAWINGS UNLESS OTHERWISE INDICATED ON THIS SHEET.

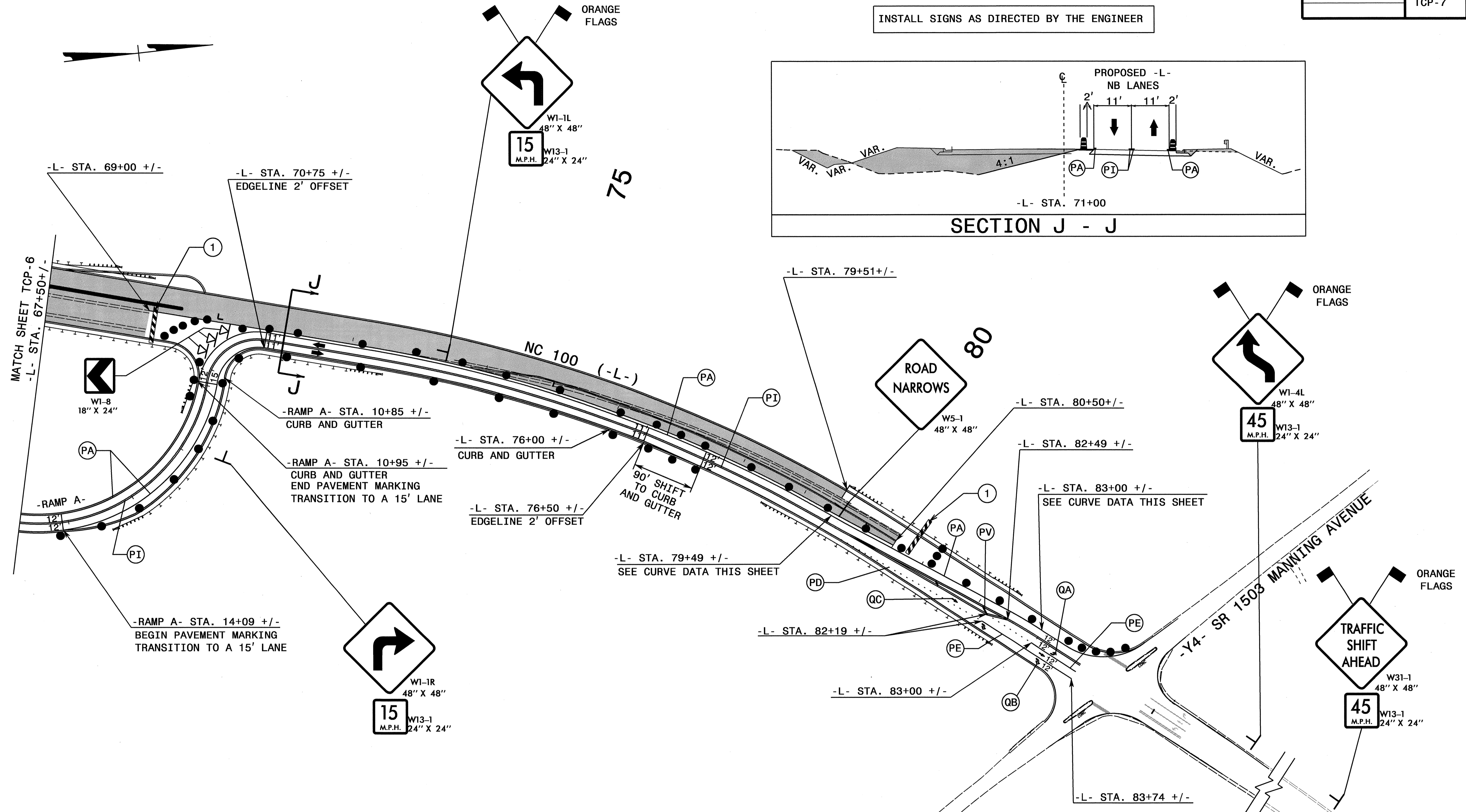
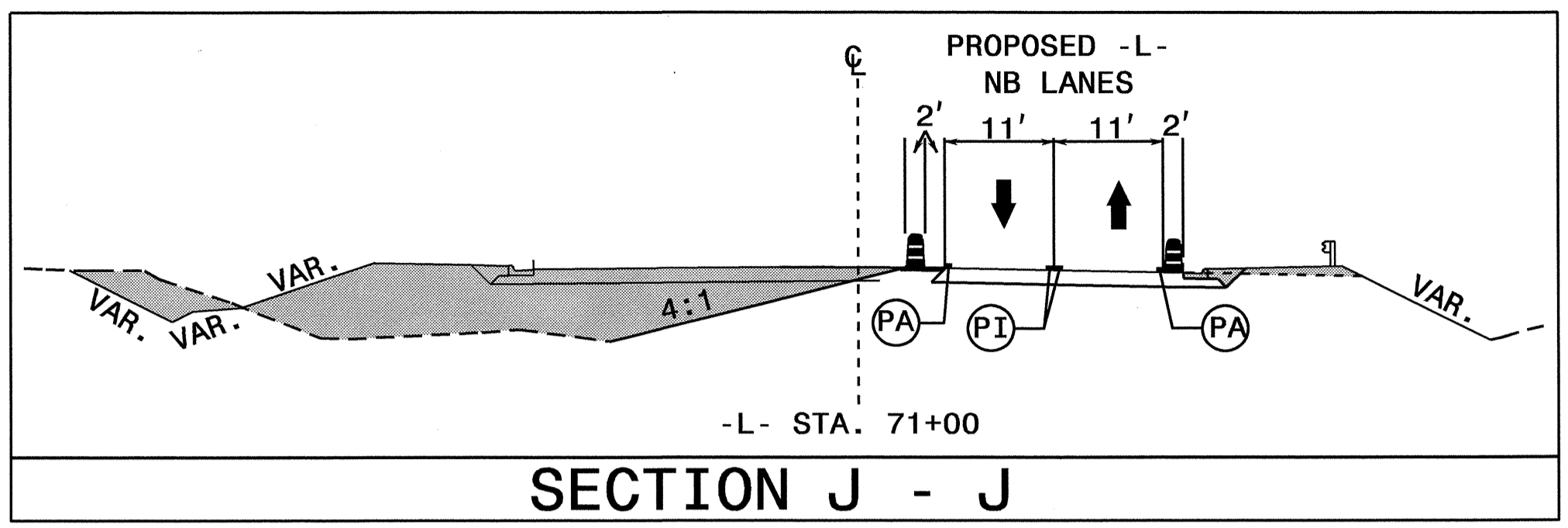


APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

<b>PHASE I DETAIL 2</b>	
SCALE: NONE	REVISIONS
DATE: MAY 2010	
DWG. BY: MHS	
DESIGN BY: MHS	
REVIEWED BY: JLP	

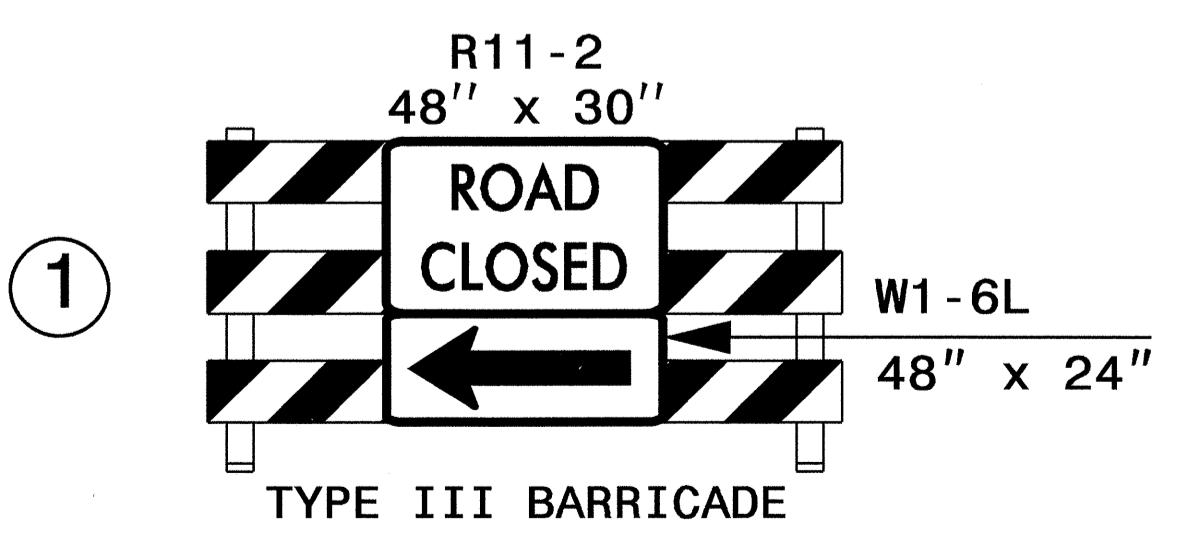
30-JUN-2010 15:21  
 \ADOIT\DF\SHOOTING\PROJECTS\TIPPS\Projects\UN3108\TrafficControl\TCP\U-3110B-TC-TCP-06.dgn  
 msteeleman AT MZ1237455

INSTALL SIGNS AS DIRECTED BY THE ENGINEER



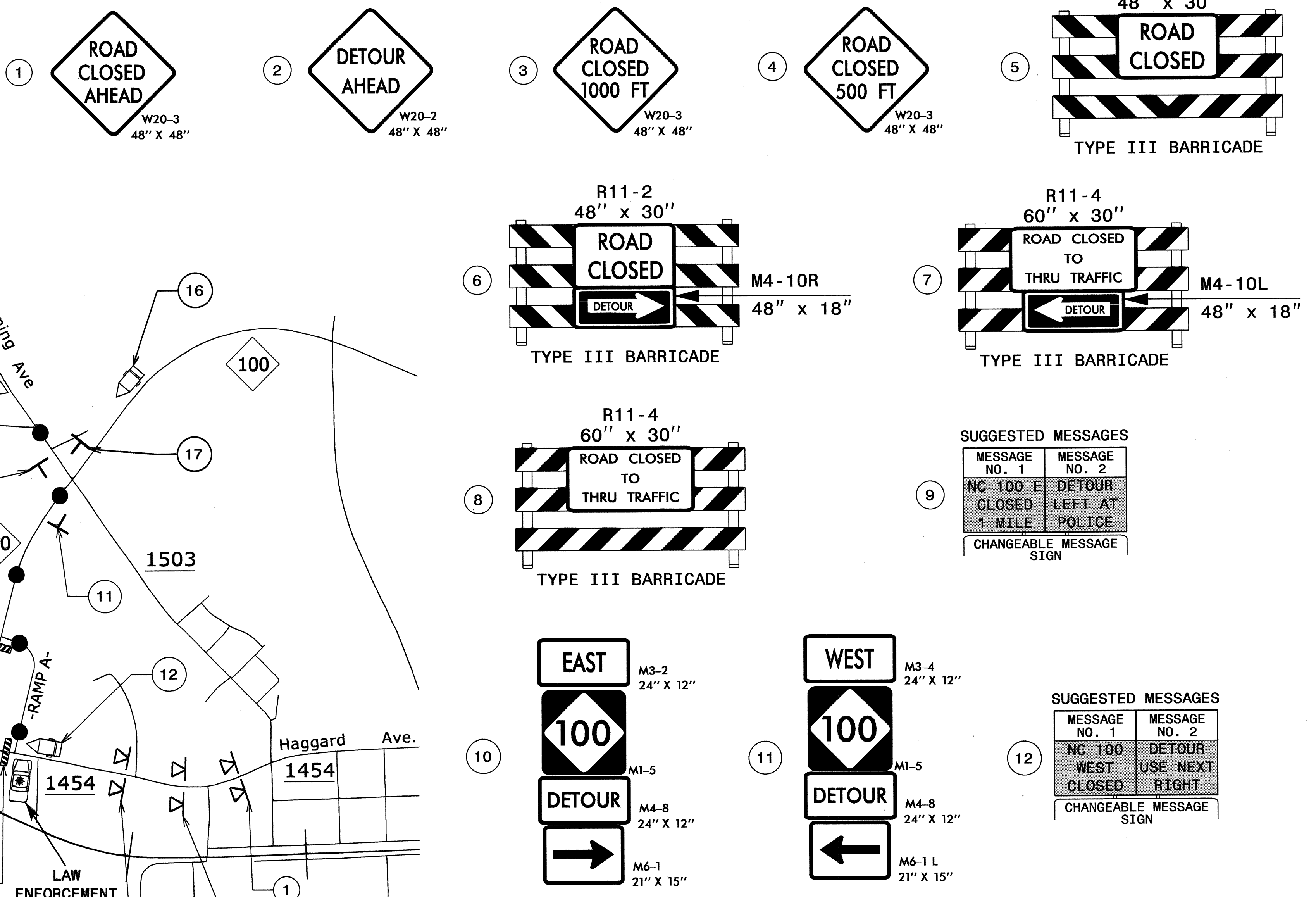
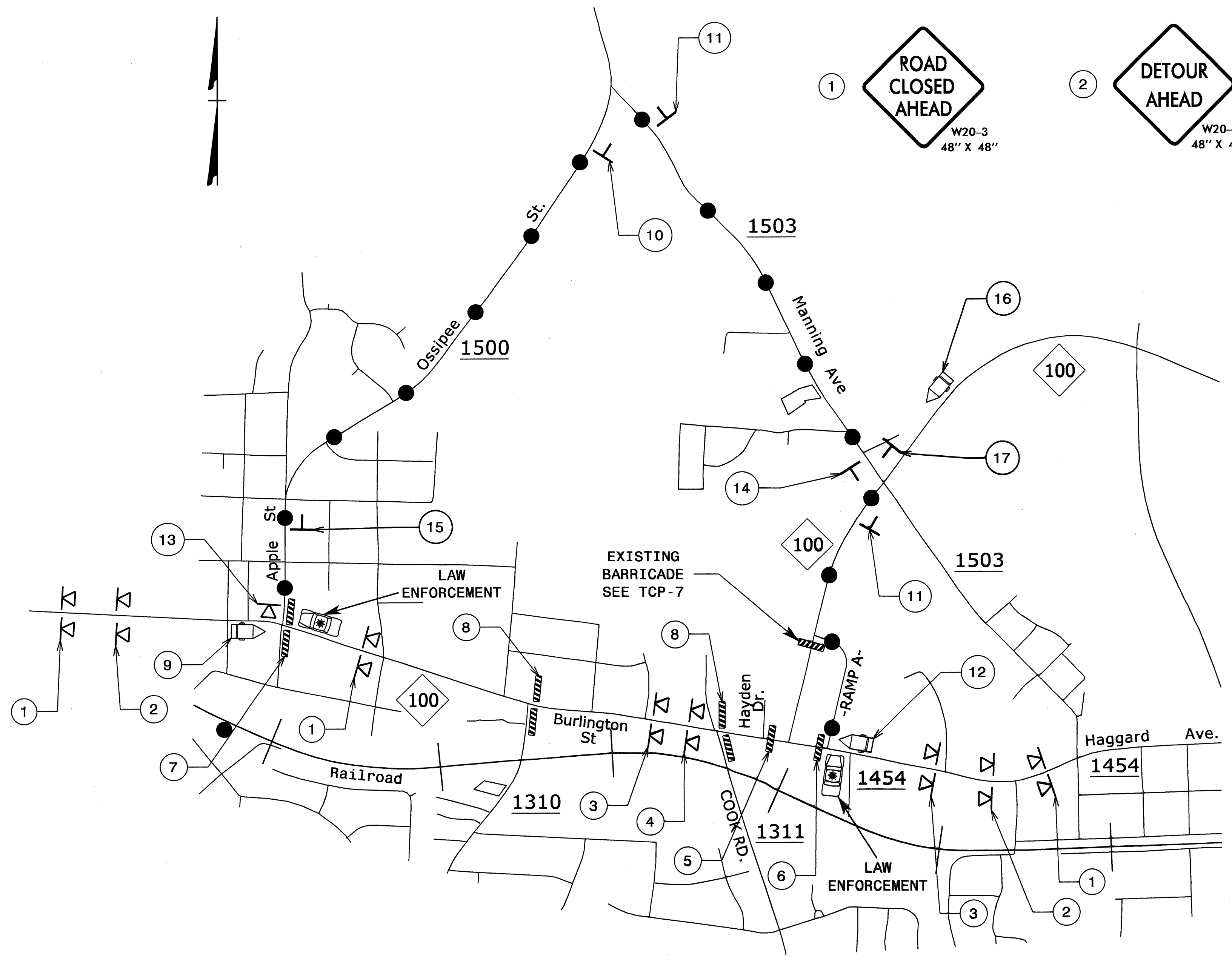
CURVE DATA FOR WB TRAFFIC SHIFT BETWEEN  
 -L- STA. 79+49.67 TO -L- STA. 83+00  
 (DATA REPRESENTS WB OUTSIDE EDGELINE)

PI Sta 79+71.81	PI Sta 82+69.56
$\Delta = 2' 21' 59.0''$ (LT)	$\Delta = 4' 54' 49.0''$ (RT)
$D = 8' 03' 30.5''$	$D = 8' 03' 30.5''$
$L = 29.37'$	$L = 60.97'$
$T = 14.68'$	$T = 30.51'$
$R = 711.00'$	$R = 711.00'$

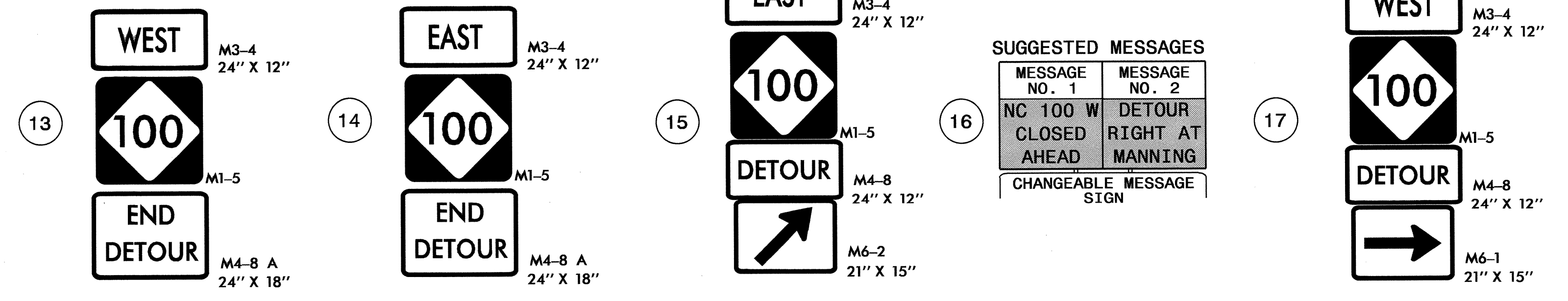


APPROVED: _____	DATE: _____	<b>PHASE I DETAIL 3</b>										
				SCALE: NONE								
		DATE: MAY 2010	<table border="1"> <tr> <th colspan="2">REVISIONS</th> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table>	REVISIONS								
		REVISIONS										
DWG. BY: MHS	REVIEWED BY: JLP	CADD FILE										

03 JUN 2010 13:50:00 P:\PROJECTS\U-3110B\TrafficControl\TCP-U-3110B-tc-tcp-07.dgn  
 mstestman AT WZTC237453

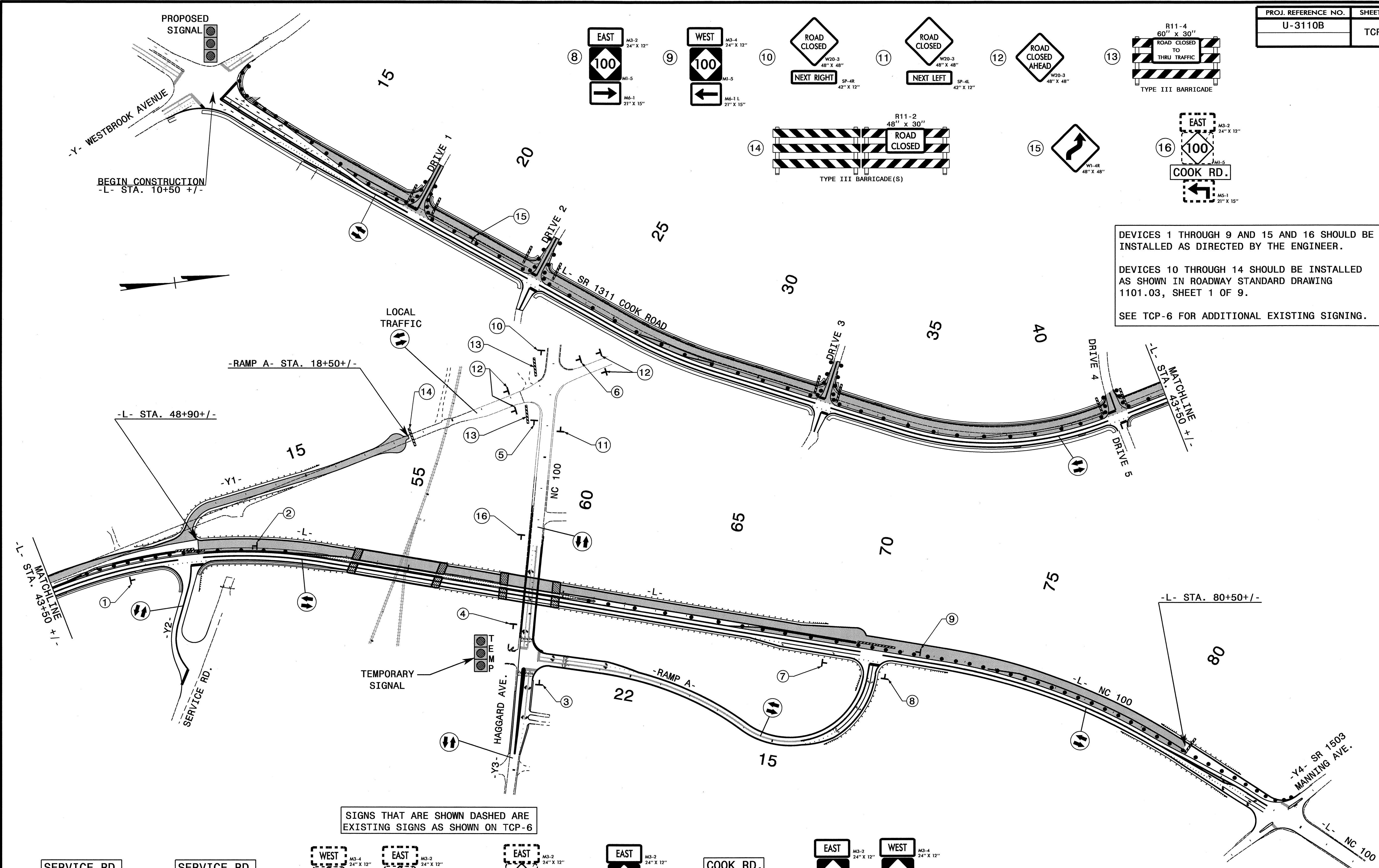


- NOTES:**
- DETOUR ROUTE FOR HANGING BRIDGE GIRDERS OVER HAGGARD AVE. = ● — ● — ● — ●
- USE OF LAW ENFORCEMENT WILL BE COORDINATED BY THE ENGINEER. PLACE TRAFFIC SIGNALS IN FLASH MODE AT INTERSECTIONS CONTROLLED BY LAW ENFORCEMENT, AS DIRECTED BY THE ENGINEER.
  - REFER TO ROADWAY STANDARD DRAWING 1101.03, SHEET 1 AND 2 OF 9, FOR ROAD CLOSURE.
  - PLACE TRAFFIC CONTROL DEVICES 9 THROUGH 17, AS DIRECTED BY THE ENGINEER.
  - COVER/REMOVE/TURN OFF ROAD CLOSURE AND DETOUR SIGNS WHEN ROAD CLOSURE NOT IN EFFECT.
  - USE DRUMS TO DIRECT WESTBOUND HAGGARD RD. TRAFFIC OUT OF THRU LANE INTO RIGHT TURN LANE APPROACHING -RAMP A-, AS DIRECTED BY THE ENGINEER.
  - USE DRUMS TO CLOSE RIGHT TURN LANE ON -RAMP A- AT HAGGARD AVE., AS DIRECTED BY THE ENGINEER.



APPROVED: _____ DATE: _____	<b>OFFSITE DETOUR FOR HANGING BRIDGE GIRDERS OVER HAGGARD AVE (-Y3-)</b>		REVISIONS	
			SCALE: NONE	
	DATE: JUNE 2010			
	DESIGN BY: MHS			
REVIEWED BY: JLP				

22-JUN-2010 10:36  
 \\DOT\DESIGN\Projects-U\3110B\TrafficControl\TCP-U-310b-tc-tcp-07A.dgn  
 msteelman

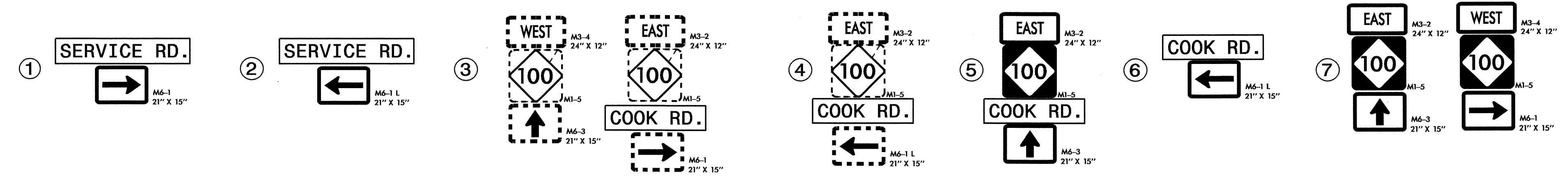


DEVICES 1 THROUGH 9 AND 15 AND 16 SHOULD BE INSTALLED AS DIRECTED BY THE ENGINEER.

DEVICES 10 THROUGH 14 SHOULD BE INSTALLED AS SHOWN IN ROADWAY STANDARD DRAWING 1101.03, SHEET 1 OF 9.

SEE TCP-6 FOR ADDITIONAL EXISTING SIGNING.

SIGNS THAT ARE SHOWN DASHED ARE EXISTING SIGNS AS SHOWN ON TCP-6



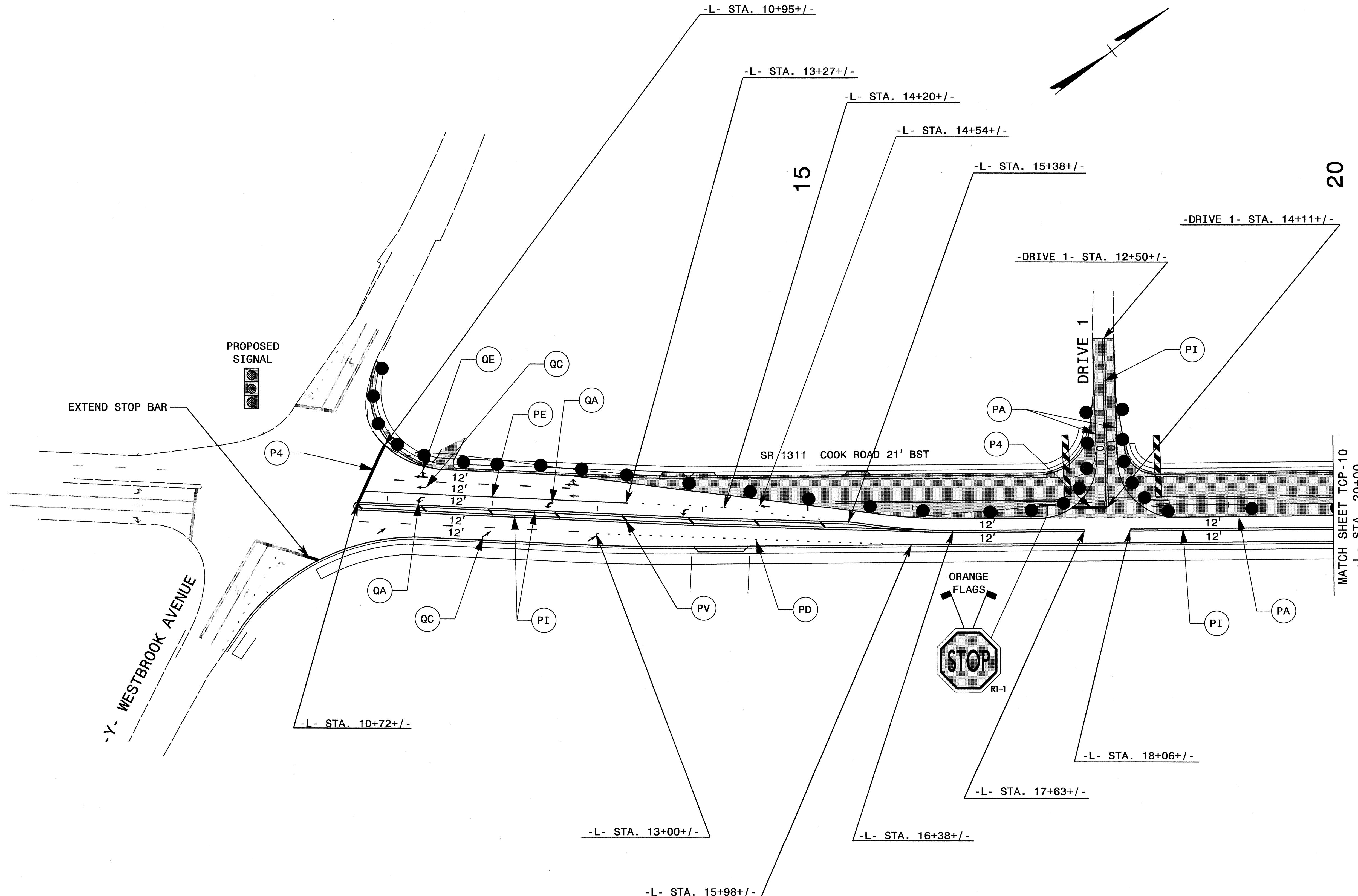
APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

*Professional Engineer Seal*

PROFESSIONAL ENGINEER  
 STATE OF NORTH CAROLINA  
 EXPIRES 12/31/10  
 027856  
 L. PORTANTO

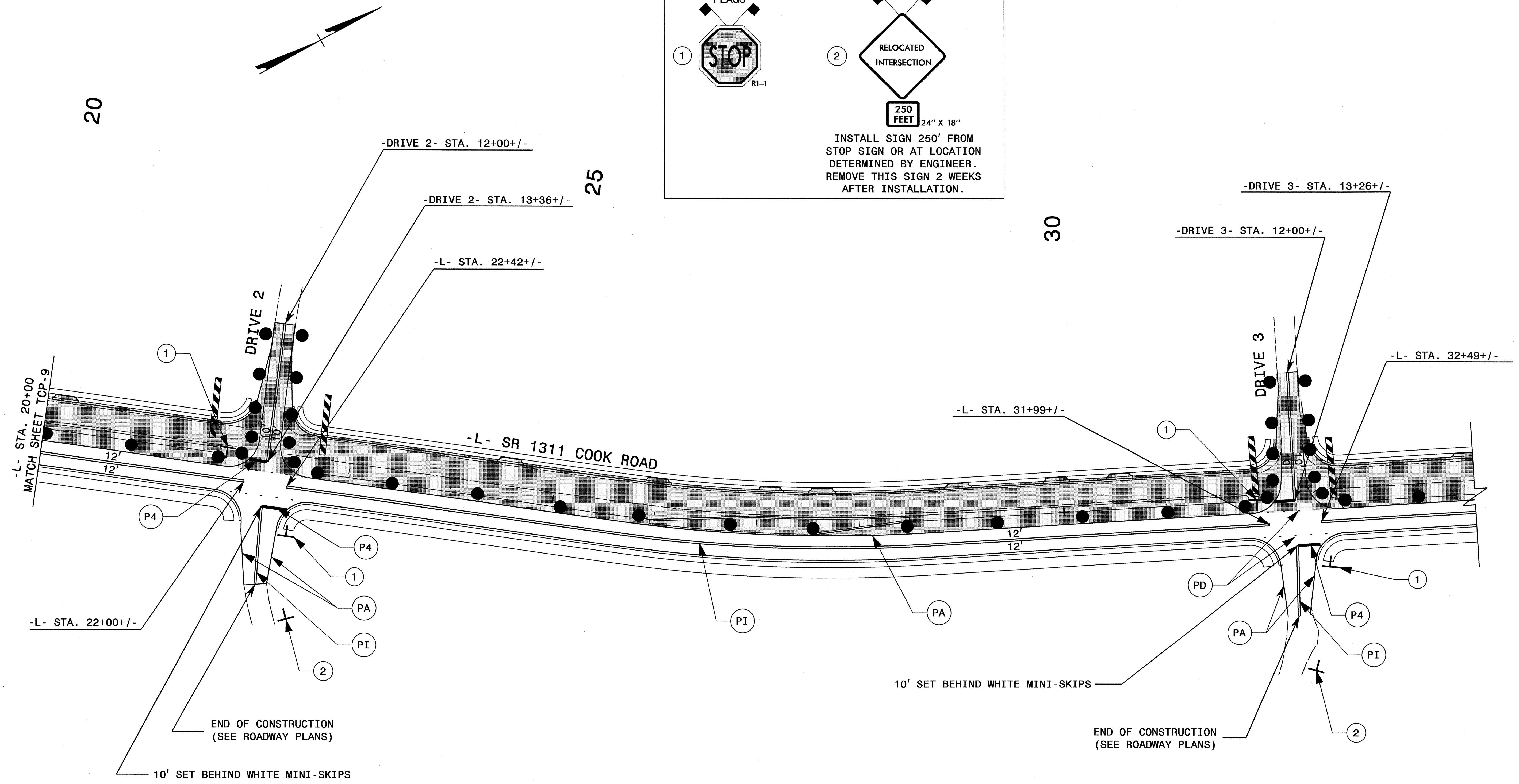
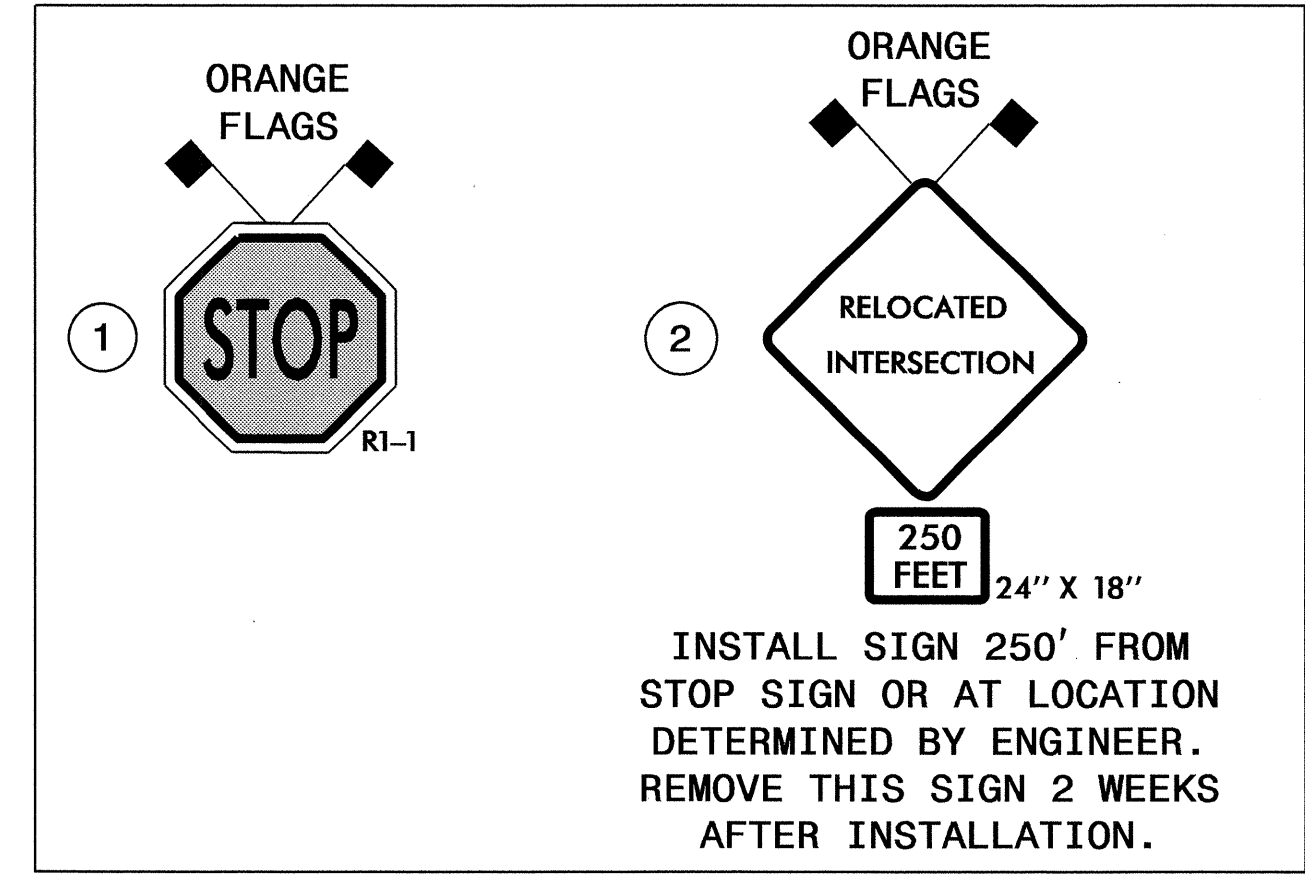
<b>PHASE II OVERVIEW</b>	
SCALE: NONE	REVISIONS
DATE: MAY 2010	
DESIGN BY: MHS	
REVIEWED BY: JLP	

30-JUN-2010 13:22  
 \\DOT\DFSROO\PROJ\TIP\Projects-U\U3110B\TrafficControl\TCP\U-3110B.tc.tcp-08.dgn  
 msfeelman AT WZTC237453



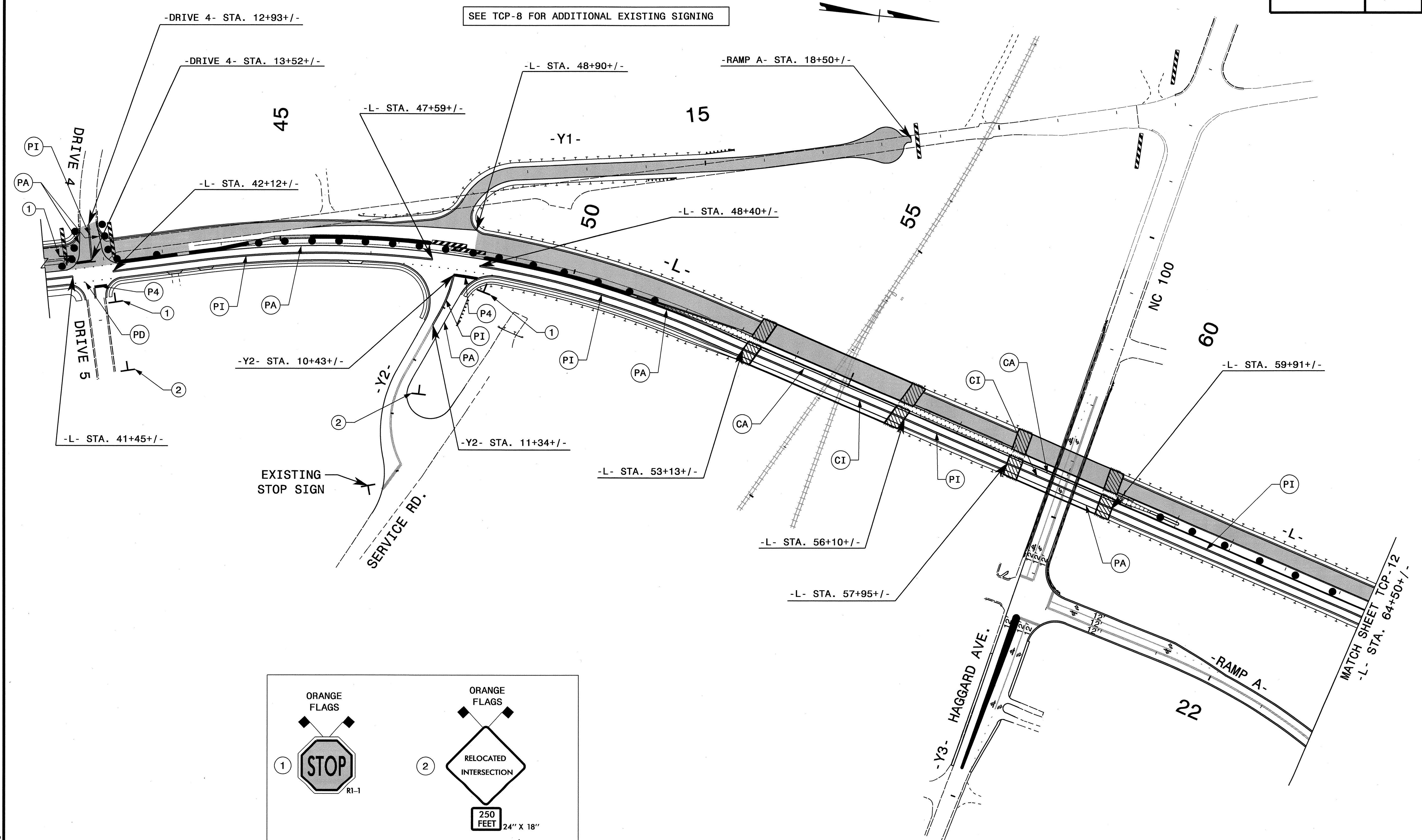
03 JUN 2010 13:51 \\PROJ\TIP\Projects-U\310B\TrafficControl\TCP\U-310B.tc-TCP-09.dgn  
 10:05:30 AM WZTC237453  
 mst@dmcc AT

APPROVED:	DATE:	<b>PHASE II DETAIL 1</b>					
SCALE:	NONE						
DATE:	MAY 2010						
DWG. BY:	MHS						
DESIGN BY:	MHS						
REVIEWED BY:	JLP	<table border="1"> <thead> <tr> <th>REVISIONS</th> </tr> </thead> <tbody> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </tbody> </table>		REVISIONS			
REVISIONS							



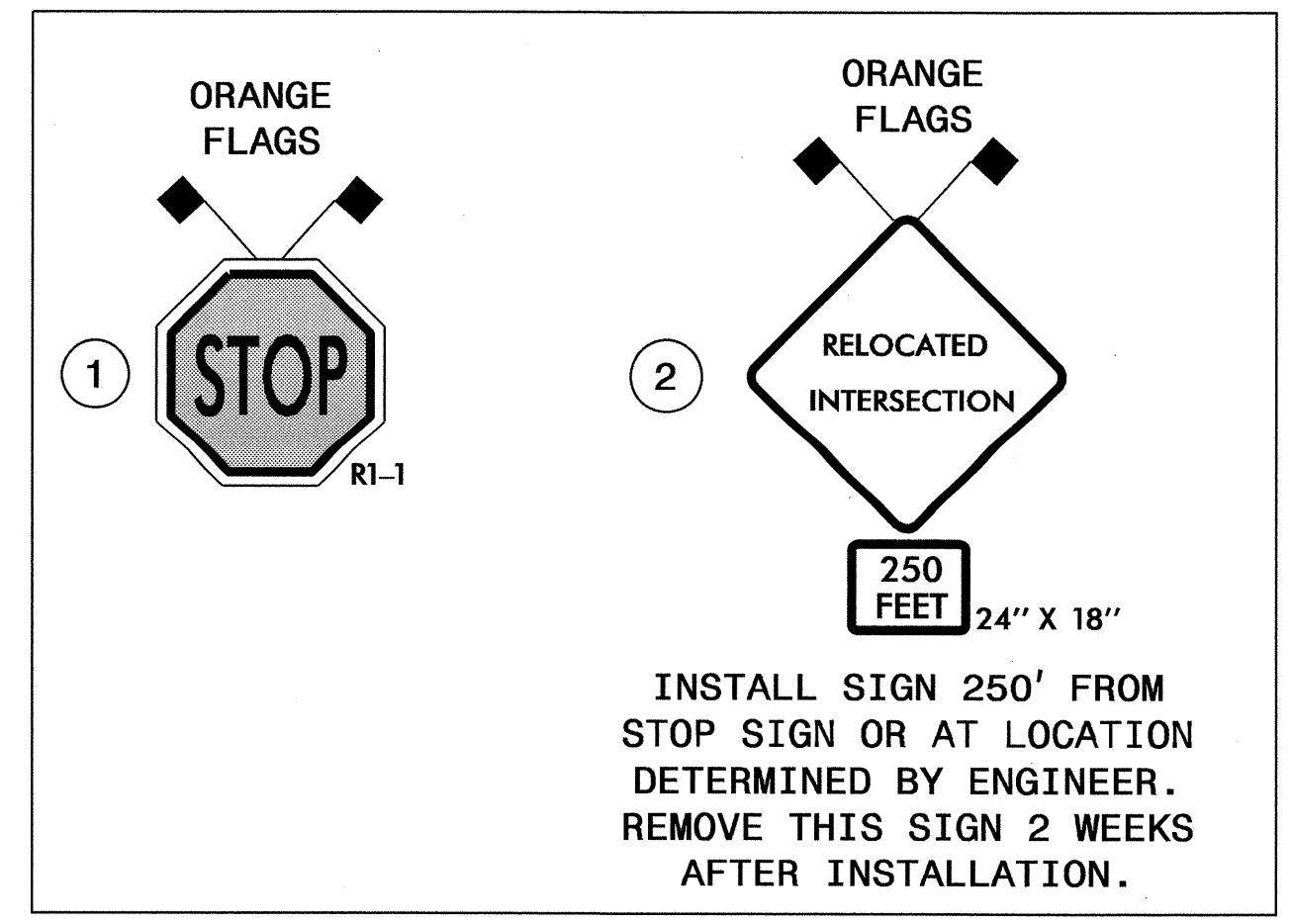
03 JUN 2010 13:51 \\PROJ\TIPR-objects-U\3110B\TrafficControl\TCP-U-3110b.tc.TCP-10.dgn  
 mstestman AT WZTC237453

APPROVED: _____ DATE: _____	<h2>PHASE II DETAIL 2</h2>		REVISIONS	
				SCALE: NONE
		DWG. BY: MHS		
		DESIGN BY: MHS		
		REVIEWED BY: JLP		



SEE TCP-8 FOR ADDITIONAL EXISTING SIGNING

EXISTING STOP SIGN



APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

*James L. Portanova*  
 JAMES L. PORTANOVA  
 PROFESSIONAL ENGINEER  
 027856  
 REGISTERED IN NORTH CAROLINA  
 6/30/10

PHASE II DETAIL 3

SCALE: NONE  
 DATE: MAY 2010  
 DWG. BY: MHS  
 DESIGN BY: MHS  
 REVIEWED BY: JLP

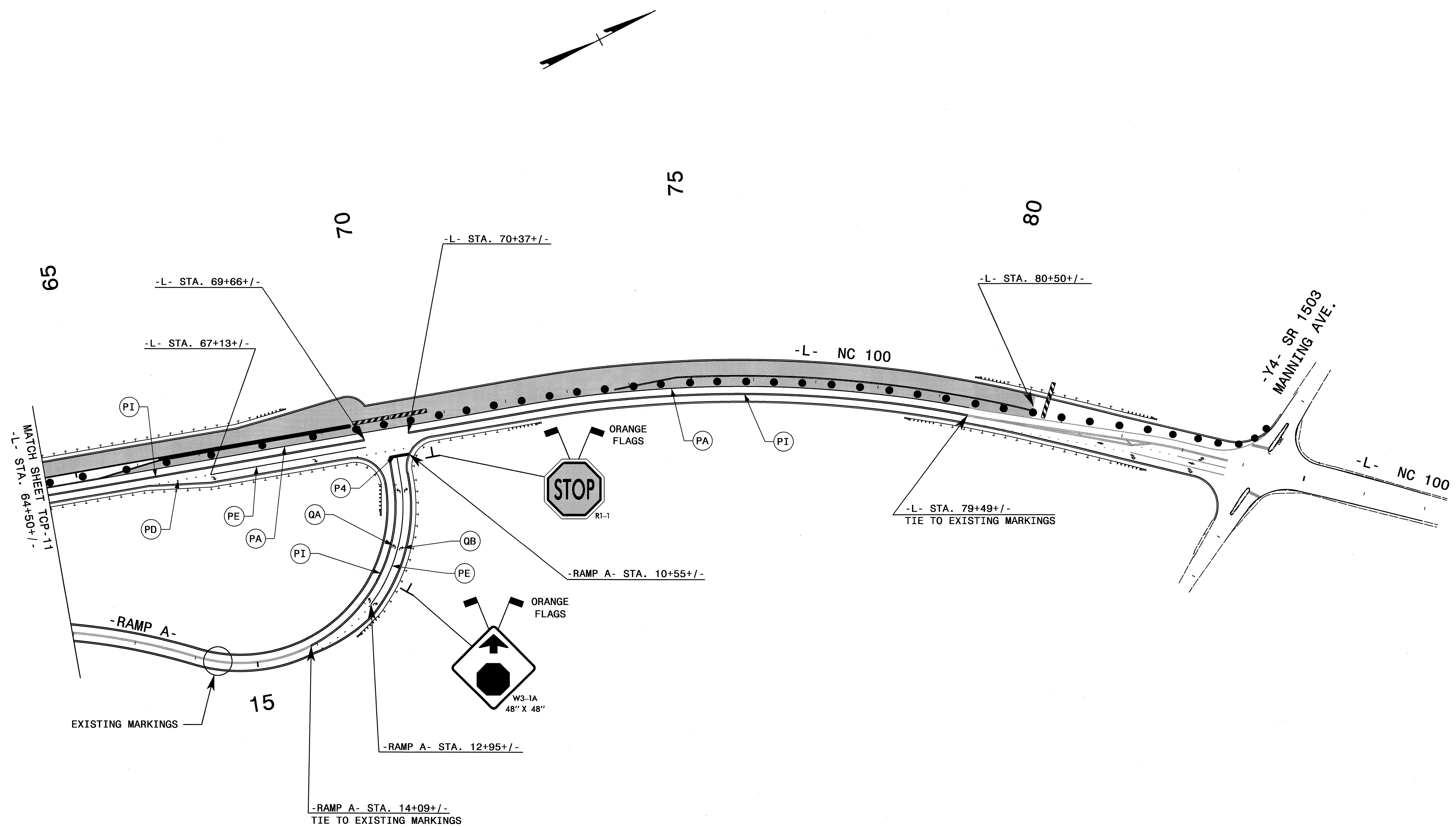


REVISIONS	

30-JUN-2010 13:23  
 \\ADOIT\DR\SR00101\PROJ\TIP\projects-U\U3108\TrafficControl\TCP\U-310b.tc-TCP-11.dgn  
 msteiman AT WZTC237453

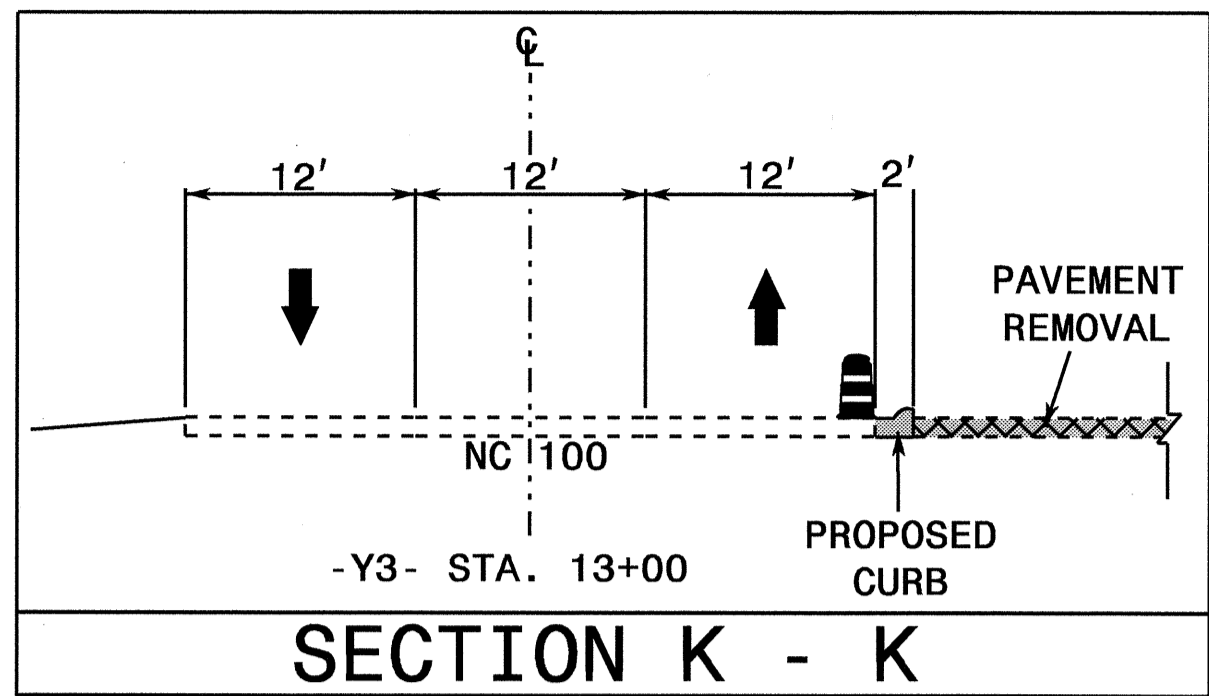


SEE TCP-8 FOR ADDITIONAL EXISTING SIGNING

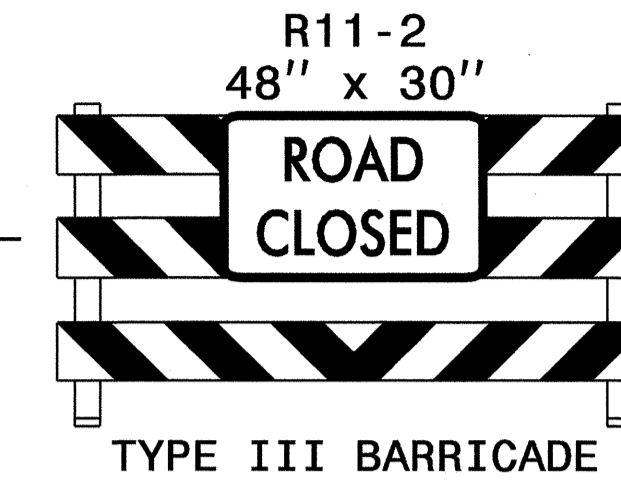


03 JUN 2010 13:52 C:\PROJ\A\TIP\Projects-U\U310B\TrafficControl\TCP\U-310B.tc-TCP-12.dgn  
 mst@delon AT WZTC237453

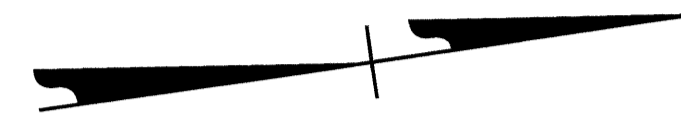
APPROVED:	DATE:	<b>PHASE II DETAIL 4</b>	
SCALE:	NONE		REVISIONS
DATE:	MAY 2010		
DWG. BY:	MHS		
DESIGN BY:	MHS		
REVIEWED BY:	JLP		



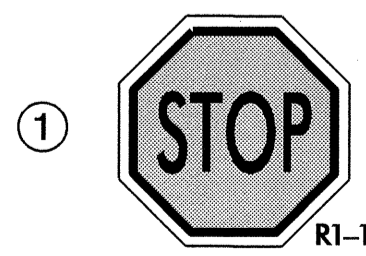
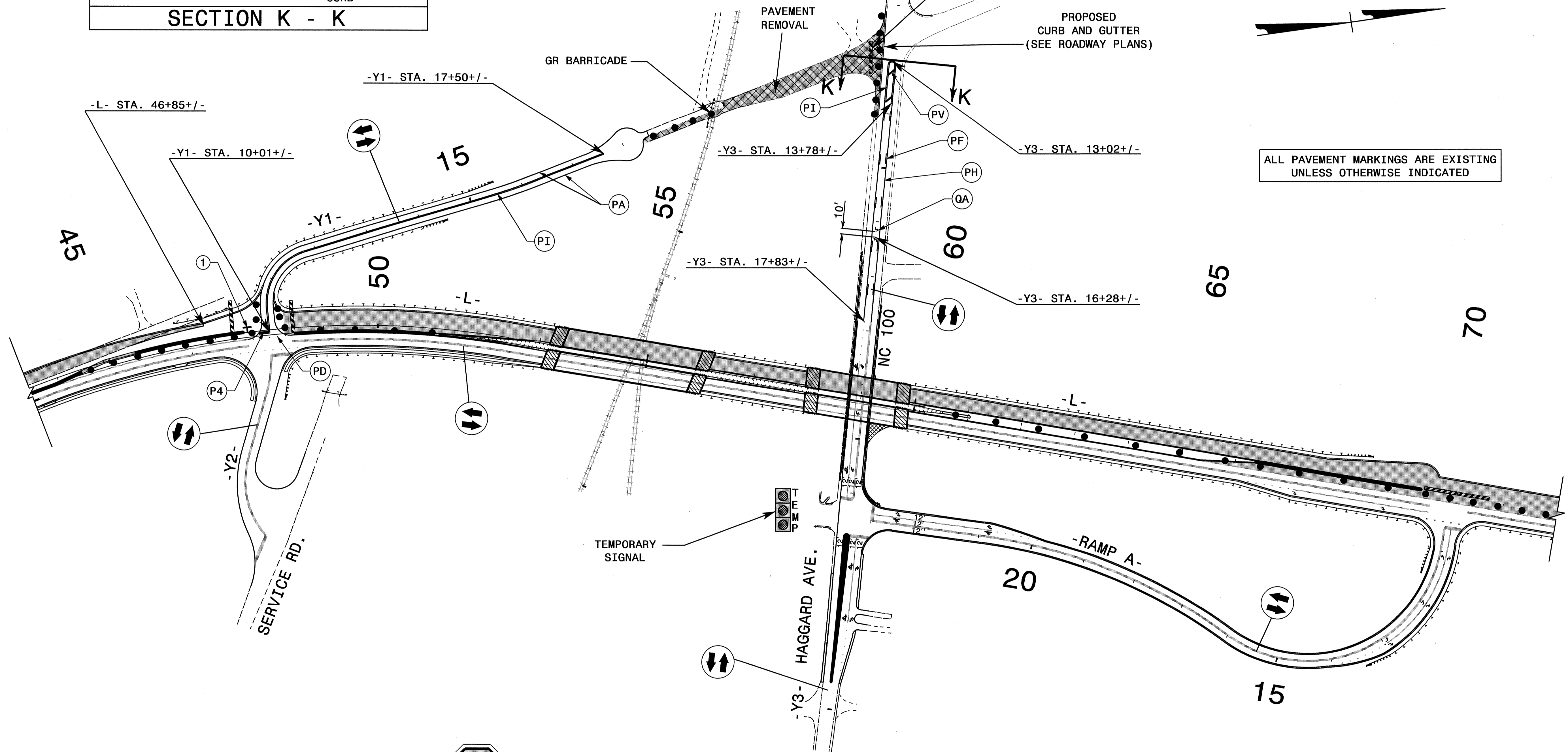
REMOVE 2 EXISTING THRU-RIGHT SYMBOLS ON EASTBOUND NC 100 APPROACHING THE COOK RD. INTERSECTION



PROPOSED CURB AND GUTTER (SEE ROADWAY PLANS)



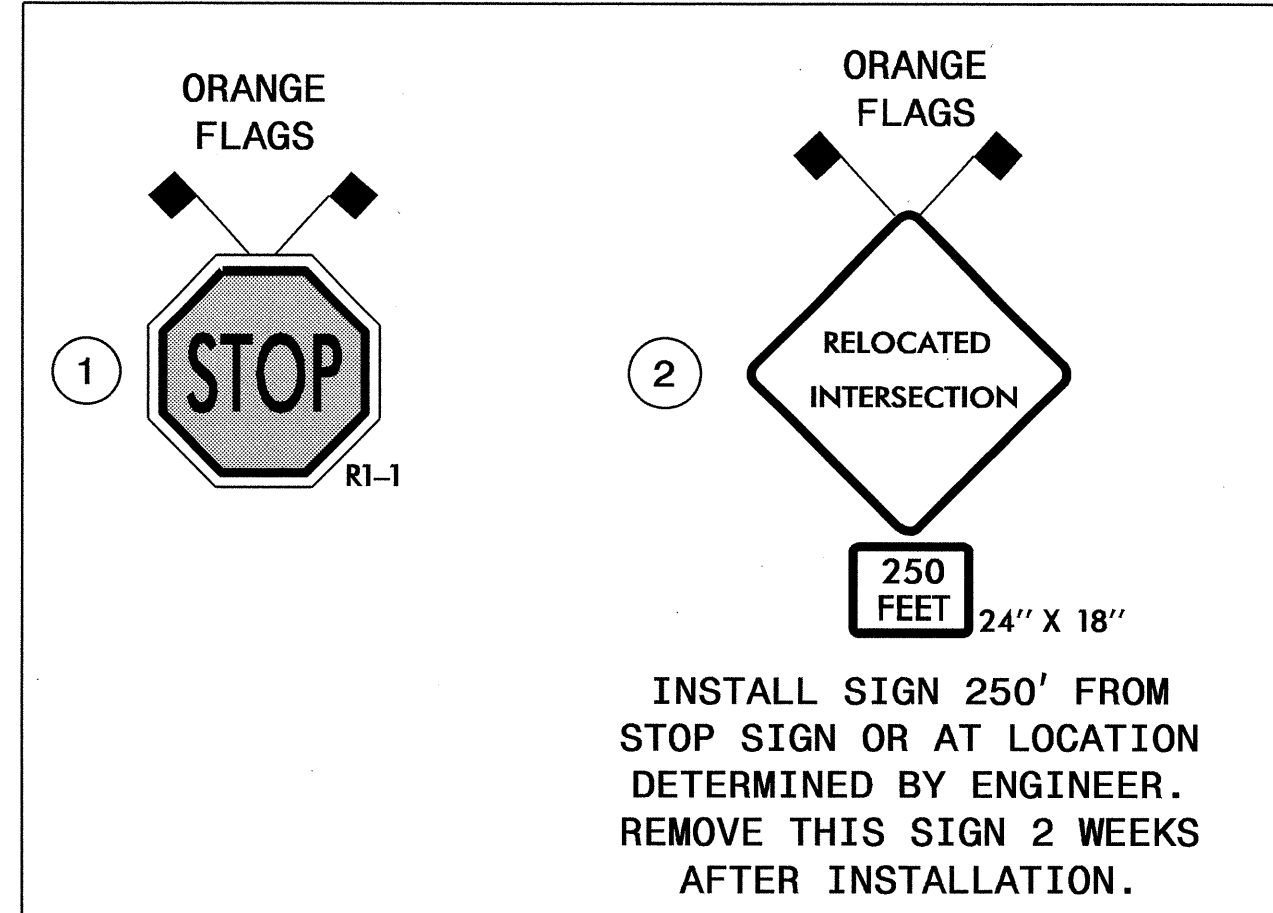
ALL PAVEMENT MARKINGS ARE EXISTING UNLESS OTHERWISE INDICATED



SEE TCP-8 AND TCP-11 FOR ADDITIONAL EXISTING SIGNING

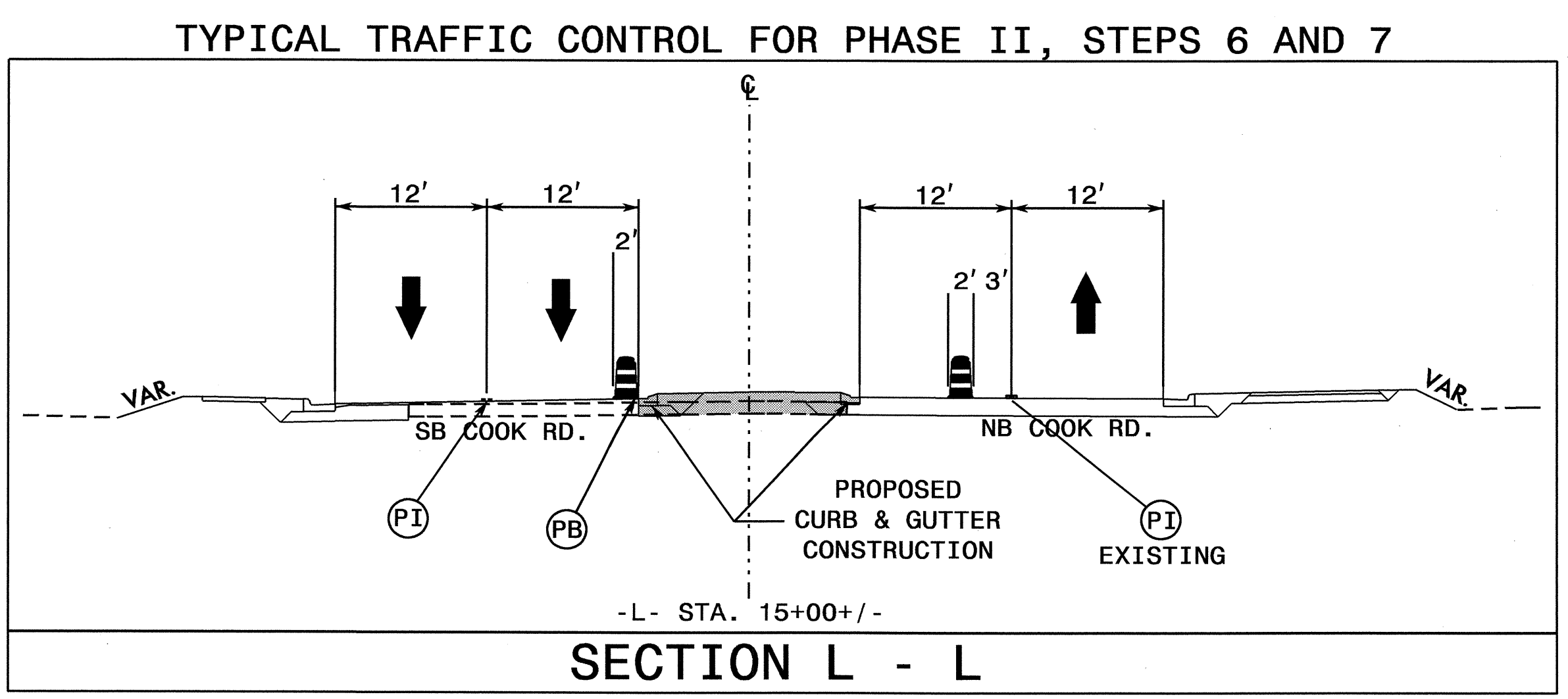
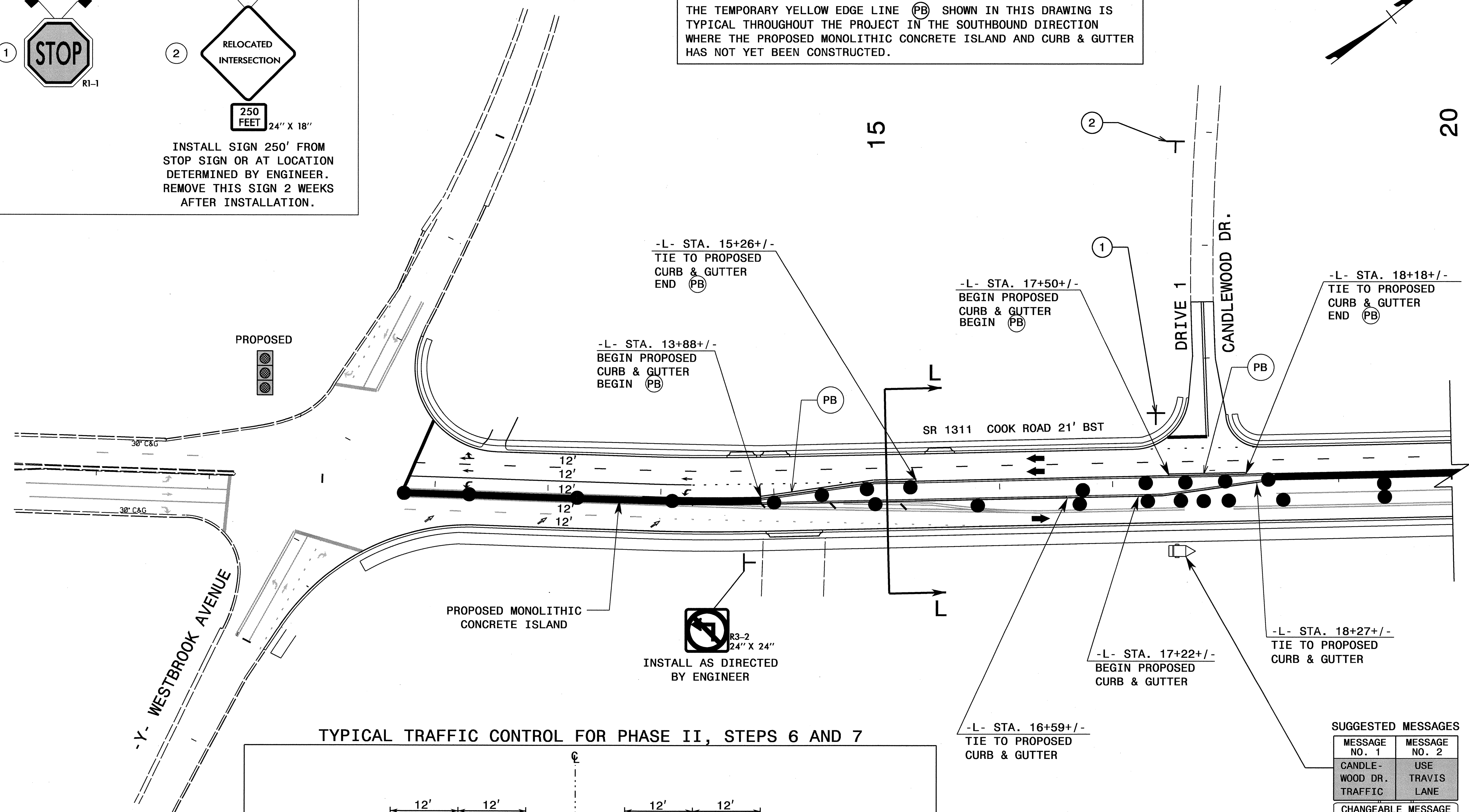
APPROVED:	DATE:	<b>PHASE II DETAIL 5</b>	
SCALE: NONE	DATE: MAY 2010		REVISIONS
DWG. BY: MHS	DESIGN BY: MHS		
REVIEWED BY: JLP			

TYPICAL FOR ALL DRIVES AND -Y-  
LINES ON LEFT SIDE OF -L-



SOUTHBOUND TRAFFIC IN FINAL PATTERN USING TEMPORARY PAINT PAVEMENT MARKINGS (SEE FINAL PAVEMENT MARKING PLANS FOR LINE STYLES AND STATIONING).  
NORTHBOUND TRAFFIC IN PROPOSED OUTSIDE LANE USING EXISTING PAVEMENT MARKINGS.

THE TEMPORARY YELLOW EDGE LINE (PB) SHOWN IN THIS DRAWING IS TYPICAL THROUGHOUT THE PROJECT IN THE SOUTHBOUND DIRECTION WHERE THE PROPOSED MONOLITHIC CONCRETE ISLAND AND CURB & GUTTER HAS NOT YET BEEN CONSTRUCTED.



SUGGESTED MESSAGES

MESSAGE NO. 1 CANDLE- WOOD DR. TRAFFIC	MESSAGE NO. 2 USE TRAVIS LANE
---	--

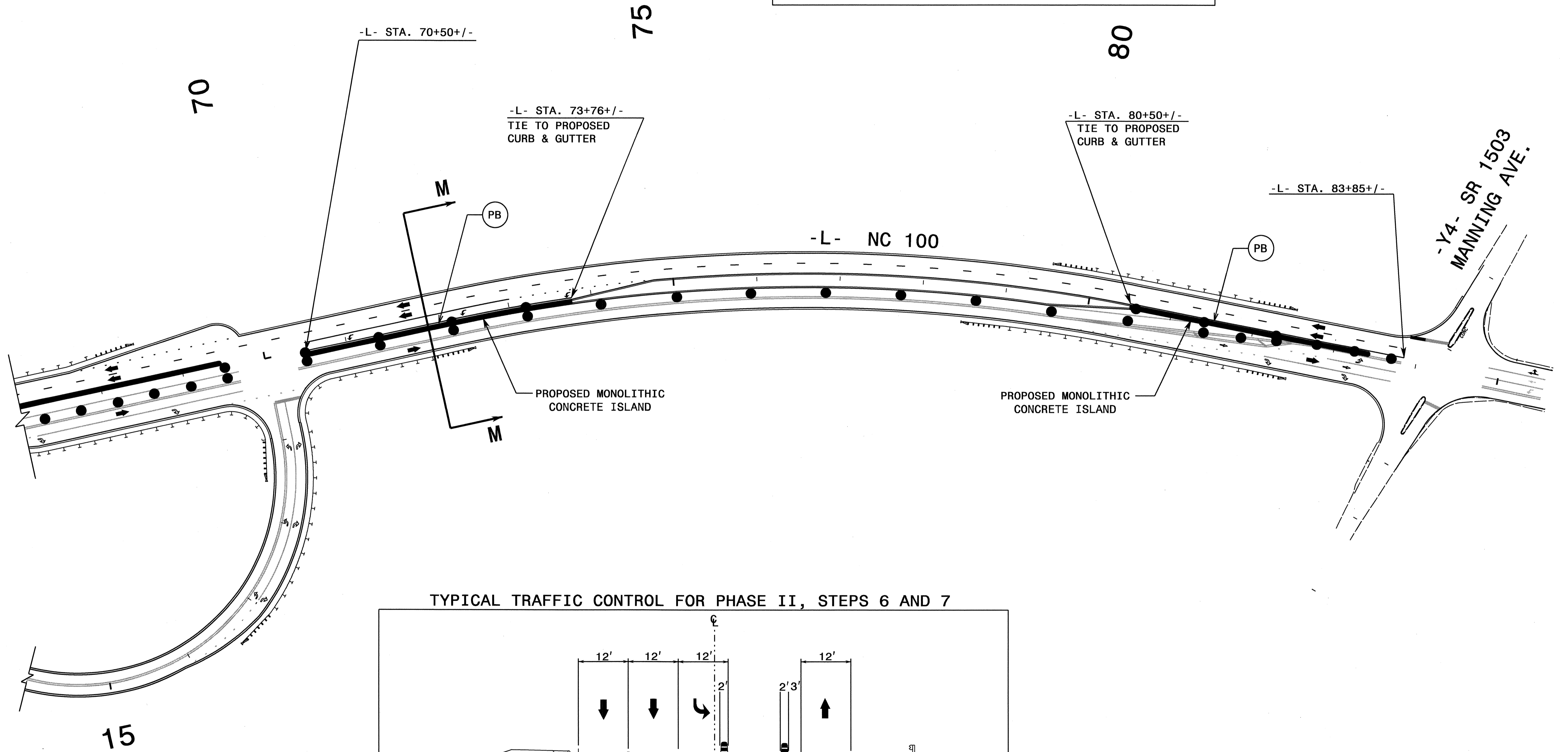
CHANGEABLE MESSAGE SIGN  
INSTALL AS DIRECTED BY ENGINEER.

APPROVED: _____ DATE: _____	<b>PHASE II DETAIL 6</b>	
SCALE: NONE	REVISIONS	
DATE: JUNE 2010		
DWG. BY: MHS		
DESIGN BY: MHS		
REVIEWED BY: JLP		

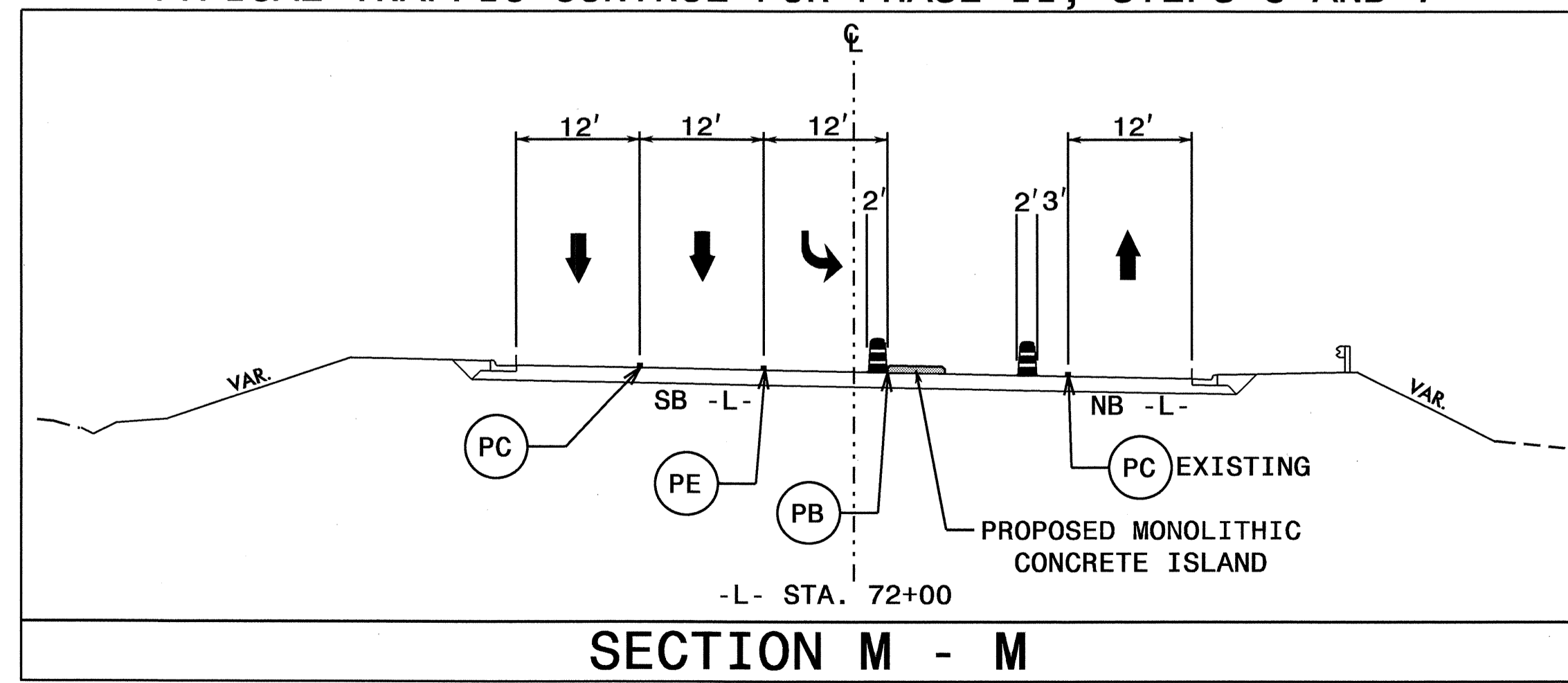
03 JUN 2010 13:53 P:\PROJ\TIPR-objects-U\U3110B\TrafficControl\TCP-U-3110B-TC-TCP-14.dgn  
 mstestman AT WZTC237453

SOUTHBOUND TRAFFIC IN FINAL PATTERN USING TEMPORARY PAINT PAVEMENT MARKINGS (SEE FINAL PAVEMENT MARKING PLANS FOR LINE STYLES AND STATIONING).  
 NORTHBOUND TRAFFIC IN PROPOSED OUTSIDE LANE USING EXISTING PAVEMENT MARKINGS.

THE TEMPORARY YELLOW EDGE LINE (PB) SHOWN IN THIS DRAWING IS TYPICAL THROUGHOUT THE PROJECT IN THE SOUTHBOUND DIRECTION WHERE THE PROPOSED MONOLITHIC CONCRETE ISLAND AND CURB & GUTTER HAS NOT YET BEEN CONSTRUCTED.



TYPICAL TRAFFIC CONTROL FOR PHASE II, STEPS 6 AND 7

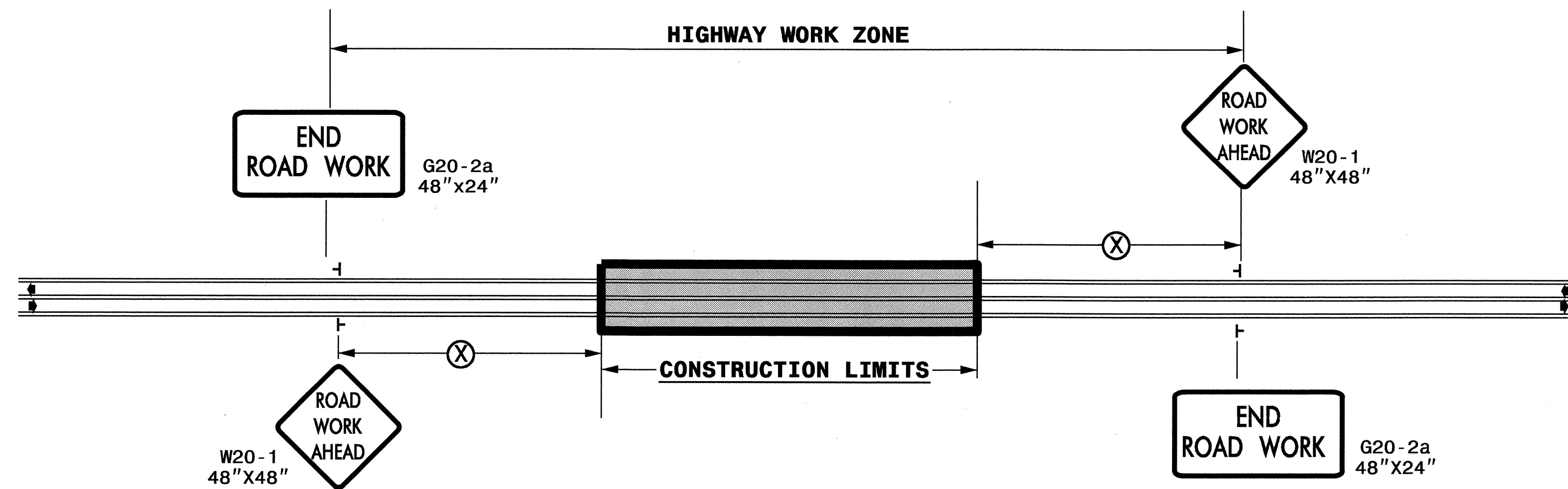


SECTION M - M

APPROVED: _____ DATE: _____	<b>PHASE II DETAIL 7</b>	
SCALE: NONE		REVISIONS
DATE: JUNE 2010		
DESIGN BY: MHS		
REVIEWED BY: JLP		

03-JUN-2010 13:54  
 \\DOT\DFS800\DOT\PROJ\TIP\Projects-UN\U310B\Traffic\TrafficControl\TCP\U-310B-TC-TCP-15.dgn  
 msreelmcn AT WZTC231453

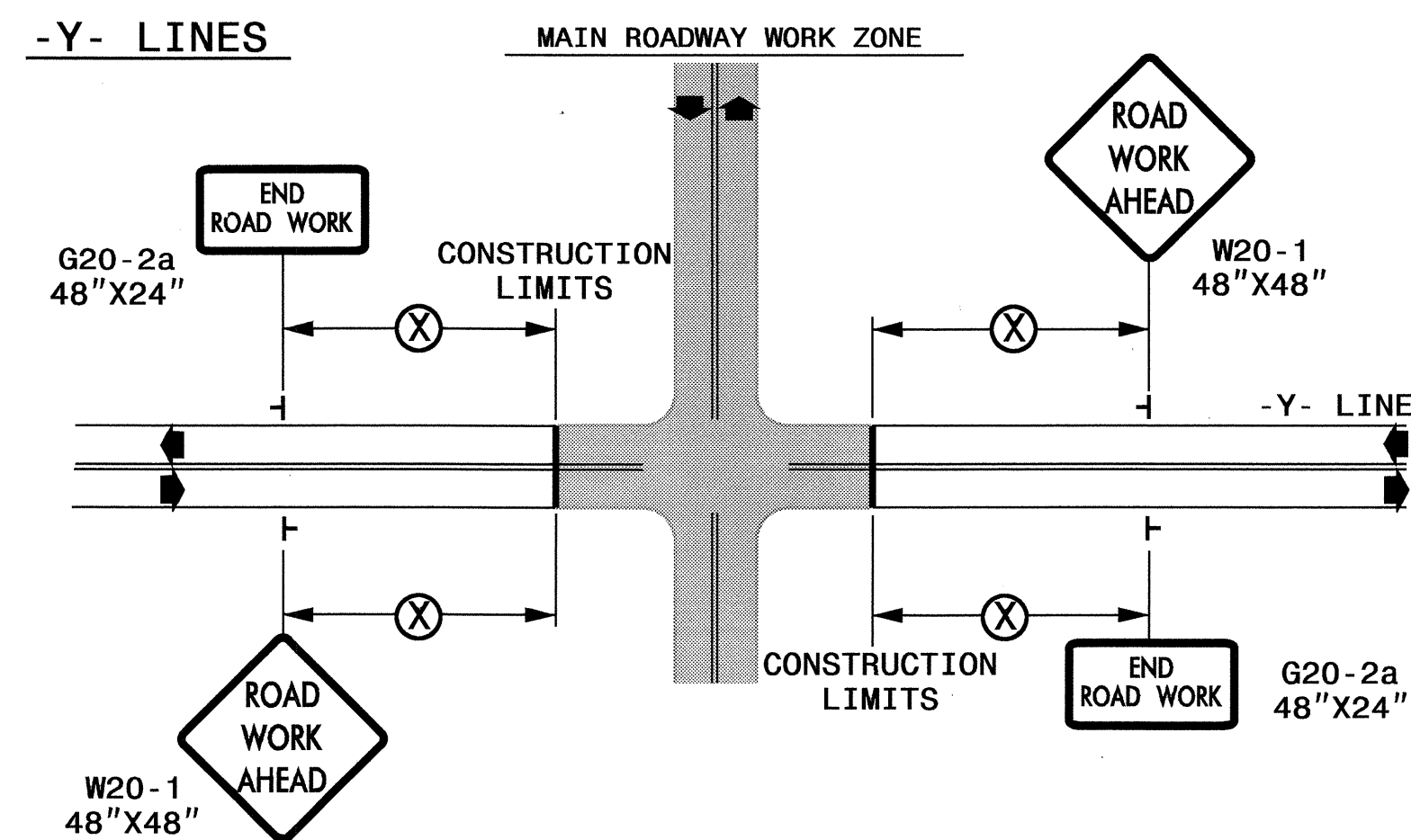
**TWO-WAY UNDIVIDED \*\* (L-LINES)**



POSTED SPEED LIMIT (M.P.H.)	RECOMMENDED MINIMUM SIGN SPACING
≤ 50	500'
≥ 55	1000'

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

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



**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

DETAIL DRAWING FOR  
TWO-WAY UNDIVIDED  
WORK ZONE WARNING SIGNS

SHEET 1 OF 1

APPROVED: _____ DATE: _____	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS	
	SCALE: NONE	REVISIONS
	DATE: MAY 2010	7-98 10/01
	DESIGN BY: MHS	10-98 03/04
	REVIEWED BY: JLP	01/01 11/04

03 JUN 2010 13:54 PROJ: A:\TIPR\Projects\U-3110B\TrafficControl\TCP\U-3110B.tc-tcp-16.dgn