

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
B-4092	TCP-1

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

B-4092

**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
1101.04	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	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGERS
1162.01	TRUCK MOUNTED IMPACT ATTENUATOR
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - DIVIDED AND UNDIVIDED ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION

**INDEX OF SHEETS**

SHEET NO.	TITLE
TCP-1	LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, INDEX OF SHEETS, LEGEND, PAVEMENT MARKING SCHEDULE
TCP-2	TRAFFIC CONTROL PROJECT NOTES AND PHASING
TCP-3	PHASE 1
TCP-4	PHASE 2
TCP-5	ADVANCE WARNING SIGNS

**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

**PAVEMENT MARKING SCHEDULE**

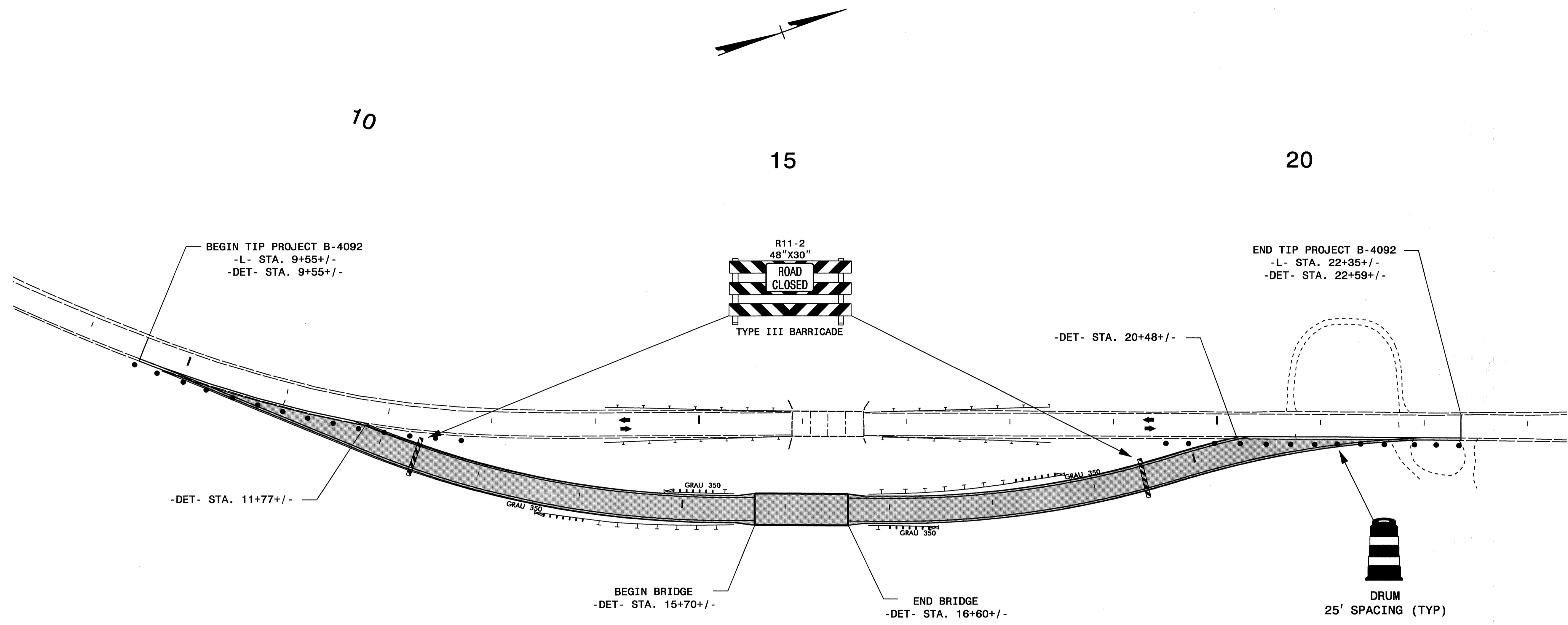
SYMBOL	DESCRIPTION	PAY ITEM QUANTITY	TOTAL
<b>FINAL</b>			
<b>PAVEMENT MARKINGS PAINT (4")</b>			
PA	WHITE EDGELINE (2X)	5160 LF	
PI	YELLOW DOUBLE CENTER (2X)	5160 LF	
		TOTAL	10320 LF
<b>MARKERS PERMANENT RAISED PAVEMENT MARKERS</b>			
MA	YELLOW & YELLOW	16 EA	
		TOTAL	16 EA
<b>TEMPORARY</b>			
<b>PAVEMENT MARKINGS PAINT (4")</b>			
PA	WHITE EDGELINE (2X)	10372 LF	
PI	YELLOW DOUBLE CENTER (2X)	10372 LF	
		TOTAL	20744 LF
<b>MARKERS TEMPORARY RAISED PAVEMENT MARKERS</b>			
MK	YELLOW	16 EA	
		TOTAL	16 EA

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

APPROVED: <i>Jessica Kuse</i> DATE: 3/27/08	PLAN PREPARED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT
SEAL 	J. S. BOURNE, P.E. TRAFFIC CONTROL ENGINEER
	J. S. KITE, P.E. TRAFFIC CONTROL PROJECT ENGINEER
	J. D. KUSE, P.E. TRAFFIC CONTROL PROJECT DESIGN ENGINEER
	W. S. ARMSTRONG TRAFFIC CONTROL DESIGN ENGINEER / TECHNICIAN

TIP PROJECT:





**PHASE 1**

**STEP 1:** INSTALL ADVANCE WARNING SIGNS ON SR 1108 (LAKEWOOD DR) AS SHOWN ON SHEET TCP-5. (SEE LOCAL NOTE 1)

**STEP 2:**

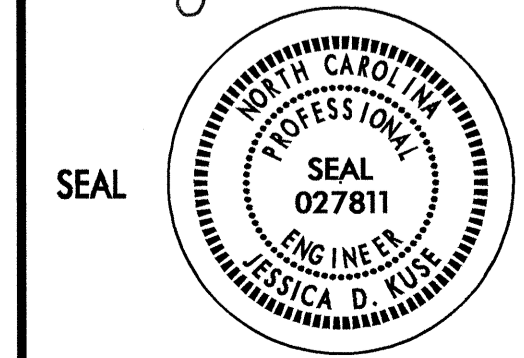
- INSTALL DRUMS AND BARRICADES AS SHOWN ON SHEET TCP-3
- USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 9 AS NEEDED, CONSTRUCT: (SEE LOCAL NOTES 2 AND 3)
- THE DETOUR UP TO THE EDGE AND ELEVATION FROM -DET- STA. 9+55+/- TO -DET- STA. 11+77+/- AND FROM -DET- STA. 20+48+/- TO -DET- STA. 22+59+/-
- THE DETOUR UP TO BUT NOT INCLUDING THE FINAL LAYER FROM -DET- STA. 11+77+/- TO -DET- STA. 20+48+/- INCLUDING THE TEMPORARY STRUCTURE OVER ROCKFISH CREEK

**STEP 3:** USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 9 AS NEEDED, COMPLETE THE FOLLOWING:

- THE DETOUR TIE-INS FROM -DET- STA. 9+55+/- TO -DET- STA. 11+77+/- AND FROM -DET- STA. 20+48+/- TO -DET- STA. 22+59+/-
- INSTALL THE FINAL SURFACE COURSE FROM -DET- STA. 9+55+/- TO -DET- STA. 22+59+/-
- INSTALL TEMPORARY PAVEMENT MARKING AND TEMPORARY RAISED PAVEMENT MARKERS FROM -DET- STA. 9+55+/- TO -DET STA. 22+59+/-

**STEP 4:** USING FLAGGERS AND ROADWAY STANDARD DRAWING 1101.03 SHEET 3 OF 9, SHIFT TRAFFIC TO -DET- AND CLOSE THE EXISTING ROAD WITH DRUMS AND BARRICADES AS SHOWN ON TCP-4.

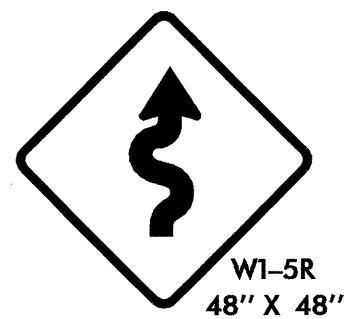
APPROVED: *Jessica Kuse* DATE: 3/27/08



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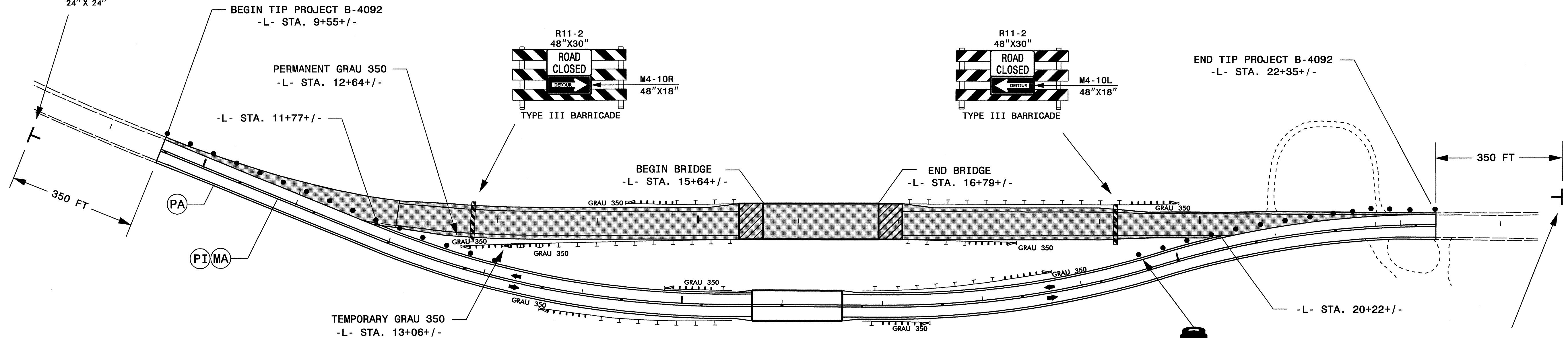
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M.P.H.

W13-1  
24 inch x 24 inch

10

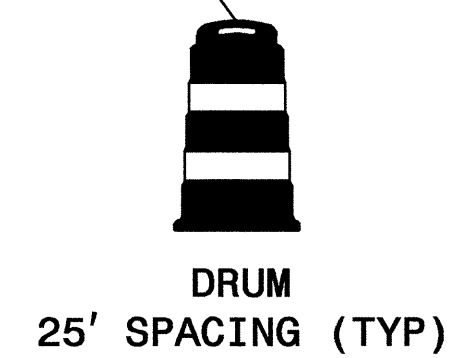
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### PHASE 2

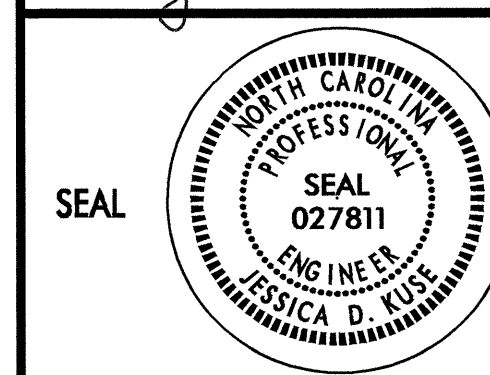
- STEP 1:** - AWAY FROM TRAFFIC AND USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 9 AS NEEDED, CONSTRUCT: (SEE LOCAL NOTE 2)
- THE PROPOSED ROADWAY UP TO BUT NOT INCLUDING THE FINAL SURFACE LAYER FROM -L- STA. 11+77+/- TO -L- STA. 20+22+/-
  - THE PROPOSED ROADWAY UP TO THE EDGE AND ELEVATION FROM -L- STA. 9+55+/- TO -L- STA. 11+77+/- AND FROM -L- STA. 20+22+/- TO -L- STA. 22+35+/-
  - THE PROPOSED STRUCTURE OVER LITTLE ROCKFISH CREEK.
- AWAY FROM TRAFFIC, INSTALL THE TEMPORARY GUARDRAIL ANCHOR AND GUARDRAIL FROM -L- STA. 13+06+/- TO -L- STA. 15+40+/- (RIGHT SIDE)
- INSTALL THE REMAINING GUARDRAIL AND GUARDRAIL ANCHOR AS FOLLOWS:
- FROM -L- STA. 14+27+/- TO -L- STA. 15+40+/- (LEFT SIDE)
  - FROM -L- STA. 17+03+/- TO -L- STA. 18+07+/- (RIGHT SIDE)
  - FROM -L- STA. 17+03+/- TO -L- STA. 19+79+/- (LEFT SIDE)
- STEP 2:** USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 9 AS NEEDED, COMPLETE THE FOLLOWING:
- THE TIE-INS UP TO BUT NOT INCLUDING THE FINAL SURFACE LAYER FROM -L- STA. 9+55+/- TO -L- STA. 11+77+/- AND FROM -L- STA. 20+22+/- TO -L- STA. 22+35+/-
  - PLACE TEMPORARY PAVEMENT MARKING FROM -L- STA. 9+55+/- TO -L- STA. 22+35+/- IN THE FINAL PATTERN
  - SHIFT TRAFFIC TO -L- AND CLOSE -DET- WITH DRUMS AND BARRICADES AS SHOWN ON TCP-3.
  - REMOVE THE DETOUR AND TEMPORARY STRUCTURE.
- STEP 3:** USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 9 AS NEEDED, COMPLETE THE FOLLOWING:
- INSTALL THE FINAL SURFACE COURSE FROM -L- STA. 9+55+/- TO -L- STA. 22+35+/-
  - INSTALL FINAL PAVEMENT MARKING AND PERMANENT RAISED MARKERS FROM -L- STA. 9+55+/- TO -L- STA. 22+35+/- (SEE LOCAL NOTE 4)
  - REMOVE THE TEMPORARY GUARDRAIL AT -L- STA. 13+06+/- AND EXTEND THE PROPOSED GUARDRAIL TO -L- STA. 12+64+/-
- STEP 4:** REMOVE ALL TRAFFIC CONTROL DEVICES AND SIGNAGE.



35  
M.P.H.

W13-1  
24 inch x 24 inch

APPROVED: *Jessica Kuse* DATE: 2/21/08



### PHASE 2

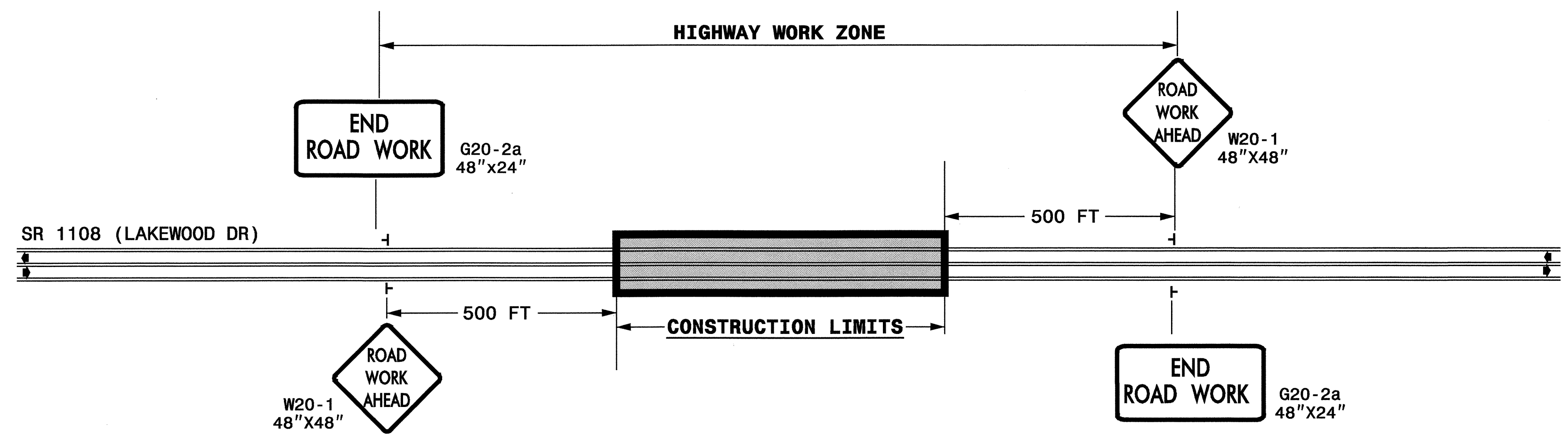
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DESIGN BY: WSA  
REVIEWED BY: JDK



#### REVISIONS

NO.	DESCRIPTION

**TWO-WAY UNDIVIDED \*\* (L-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.

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APPROVED: <i>Jessica Kuse</i> DATE: <i>3/27/08</i>		<b>ADVANCE WARNING SIGNS</b>	
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DWG. BY: WSA			
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