

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
B-3 6 5 5	TCP-1

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

B-3655

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
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR
1180.01	SKINNY - DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE 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, LEGEND AND INDEX OF SHEETS
TCP-2	PROJECT NOTES & PM SCHEDULE
TCP-3	PHASE I
TCP-4	PHASE II
TCP-5	PHASE III
TCP-6	WORK ZONE WARNING SIGNS

LEGEND

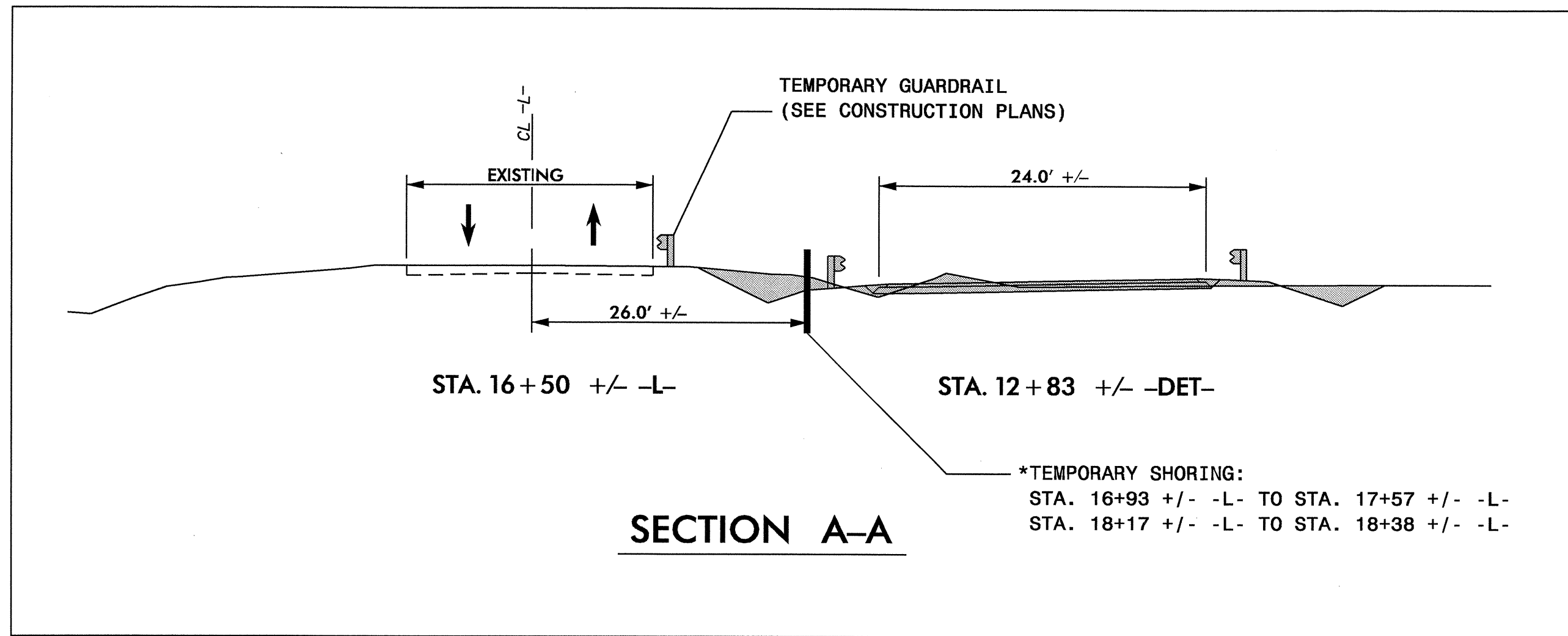
- GENERAL**
- DIRECTION OF TRAFFIC FLOW
 - NORTH ARROW
 - PROPOSED PVMT. EXIST. PVMT.
 - WORK AREA
 - REMOVAL OF EXISTING PAVEMENT
- TRAFFIC CONTROL DEVICES**
- TYPE I BARRICADE
 - TYPE II BARRICADE
 - TYPE III BARRICADE
 - CONE
 - DRUM SKINNY DRUM
 - FLASHING ARROW PANEL (TYPE C)
 - STATIONARY SIGN
 - 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

TIP PROJECT:

04-DEC-2008 08:31 \\dot\dfsroot\proj\proj\projects\b3655\trafficcontrol\tcp\b-3655_fc_tcp_1.dgn sngreen AT WZ1024133

APPROVED:	PLAN PREPARED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT
DATE: 12/1/08	
SEAL	J.S. BOURNE, P.E. TRAFFIC CONTROL ENGINEER
	G.L. GETTIER, P.E. TRAFFIC CONTROL PROJECT ENGINEER
	J.W. GILSTRAP TRAFFIC CONTROL PROJECT DESIGN ENGINEER
	S. GREEN TRAFFIC CONTROL DESIGN ENGINEER / TECHNICIAN

PHASE I



NOTES: RETURN TRAFFIC TO THE EXISTING PATTERN AT THE END OF EACH WORK DAY UNLESS OTHERWISE STATED IN THE PHASING OR DIRECTED BY THE ENGINEER.

COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.

- STEP 1: - CONTRACTOR SHALL INSTALL ALL ADVANCE WORK ZONE WARNING SIGNS. (SEE SHEET TCP-6).
- STEP 2: - USING ROADWAY STANDARD DRAWING No. 1101.02, SHEET 1 OF 9, INSTALL TEMPORARY GUARDRAIL ALONG RIGHT SIDE OF EXISTING (SEE CONSTRUCTION PLANS) AND INSTALL TEMPORARY SHORING.
- STEP 3: - CONSTRUCT AS MUCH AS POSSIBLE, AWAY FROM TRAFFIC, PROPOSED DETOUR (-DET-), BRIDGE AND APPROACHES FROM STATION 12+32 +/- -DET- TO STATION 15+83 +/- -DET- UP TO AND INCLUDING THE FINAL LAYER OF SURFACE COURSE. (SEE CONSTRUCTION PLANS).
- USING ROADWAY STANDARD DRAWING No. 1101.02, SHEET 1 OF 9, CONSTRUCT PROPOSED DETOUR (-DET-) FROM STATION 10+00 +/- -DET- TO STATION 12+32 +/- -DET- AND FROM STATION FROM STATION 15+83 +/- -DET- TO STATION 18+35 +/- -DET-, UP TO AND INCLUDING THE FINAL LAYER OF SURFACE COURSE. (SEE CONSTRUCTION PLANS).

***TEMPORARY SHORING:**

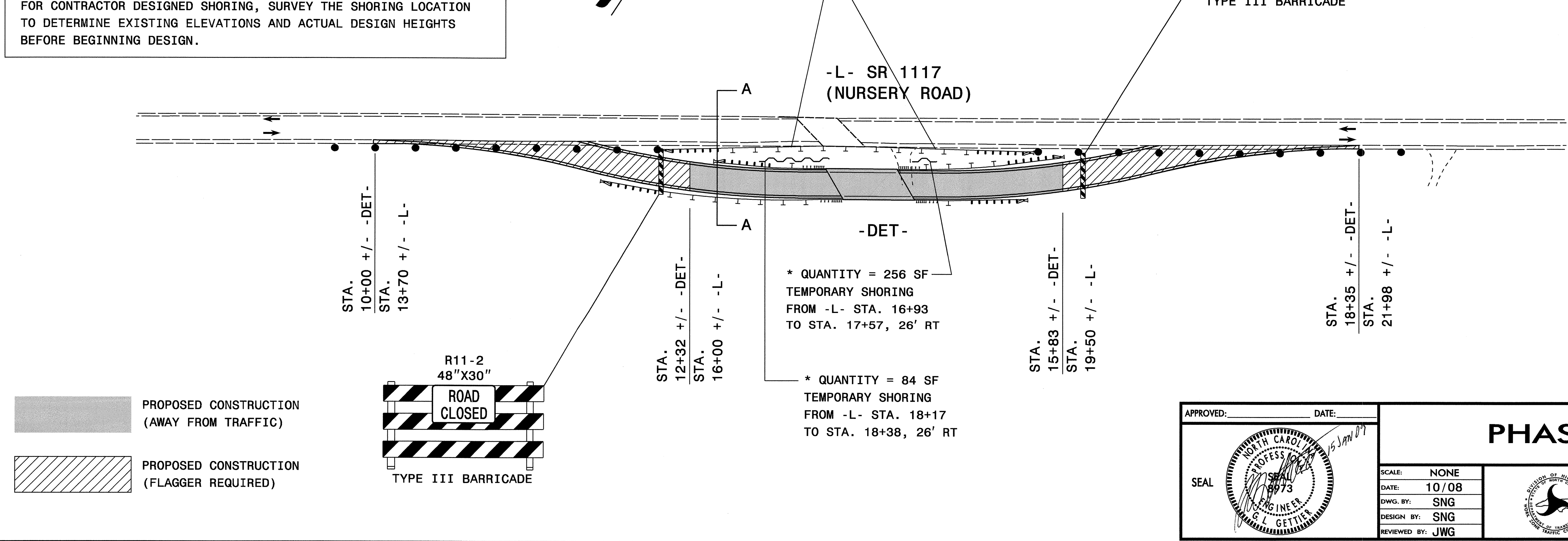
FOR TEMPORARY SHORING, SEE TEMPORARY SHORING PROJECT SPECIAL PROVISION.

DO NOT USE A TEMPORARY MSE WALL FROM STATION 16+93 +/- -L- TO STATION 17+13 -L-, 26 FT. RIGHT AND FROM STATION 18+17 +/- -L- TO STATION 18+38 -L-, 26 FT. RIGHT.

WHEN USING CONTRACTOR DESIGNED SHORING FROM STATION 16+93 -L- TO STATION 17+57 -L-, 26 FT. RIGHT AND FROM STATION 18+17 -L- TO STATION 18+38 -L-, 26 FT. RIGHT, DESIGN SHORING FOR THE FOLLOWING IN-SITU ASSUMED SOIL PARAMETERS:

UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma = 120$ PCF
 UNIT WEIGHT OF SOIL BELOW WATER TABLE, $\gamma' = 60$ PCF
 FRICTION ANGLE, $\phi = 30$ DEGREES
 COHESION, $c = 0$ PSF

FOR CONTRACTOR DESIGNED SHORING, SURVEY THE SHORING LOCATION TO DETERMINE EXISTING ELEVATIONS AND ACTUAL DESIGN HEIGHTS BEFORE BEGINNING DESIGN.



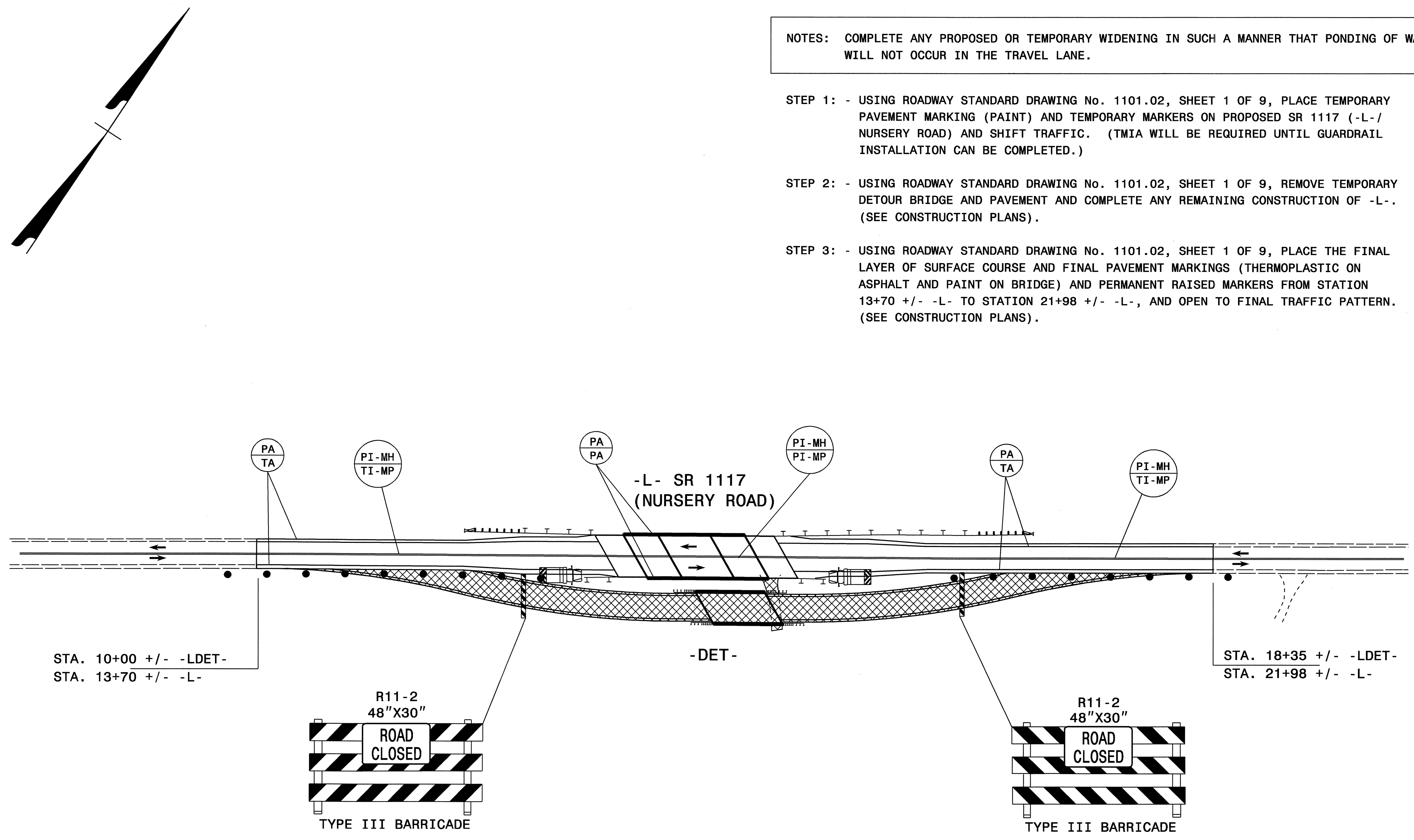
APPROVED: _____ DATE: _____	PHASE I							
			SCALE: NONE DATE: 10/08 DWG. BY: SNG DESIGN BY: SNG REVIEWED BY: JWG	REVISIONS <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>				

15-JAN-2009 14:57
 \\dot\dfsroot\proj\proj\projects-b\3655\trafficcontrol\top\b-3655-tc_tcp-3.dgn
 AT WZTC24733
 sngreen

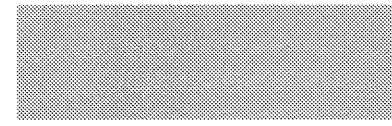
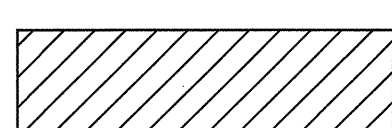
PHASE III

NOTES: COMPLETE ANY PROPOSED OR TEMPORARY WIDENING IN SUCH A MANNER THAT PONDING OF WATER WILL NOT OCCUR IN THE TRAVEL LANE.

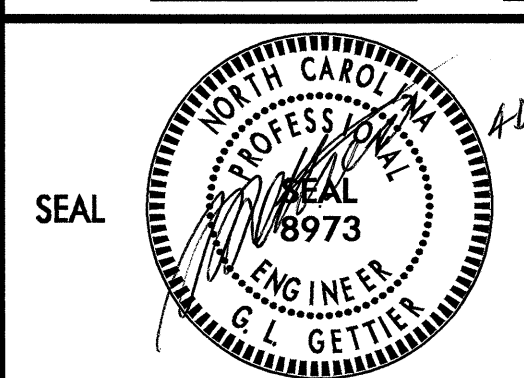

- STEP 1: - USING ROADWAY STANDARD DRAWING No. 1101.02, SHEET 1 OF 9, PLACE TEMPORARY PAVEMENT MARKING (PAINT) AND TEMPORARY MARKERS ON PROPOSED SR 1117 (-L- / NURSERY ROAD) AND SHIFT TRAFFIC. (TMIA WILL BE REQUIRED UNTIL GUARDRAIL INSTALLATION CAN BE COMPLETED.)
- STEP 2: - USING ROADWAY STANDARD DRAWING No. 1101.02, SHEET 1 OF 9, REMOVE TEMPORARY DETOUR BRIDGE AND PAVEMENT AND COMPLETE ANY REMAINING CONSTRUCTION OF -L-. (SEE CONSTRUCTION PLANS).
- STEP 3: - USING ROADWAY STANDARD DRAWING No. 1101.02, SHEET 1 OF 9, PLACE THE FINAL LAYER OF SURFACE COURSE AND FINAL PAVEMENT MARKINGS (THERMOPLASTIC ON ASPHALT AND PAINT ON BRIDGE) AND PERMANENT RAISED MARKERS FROM STATION 13+70 +/- -L- TO STATION 21+98 +/- -L-, AND OPEN TO FINAL TRAFFIC PATTERN. (SEE CONSTRUCTION PLANS).



 TEMPORARY PAVEMENT MARKING-MARKER
 PERMANENT PAVEMENT MARKING-MARKER

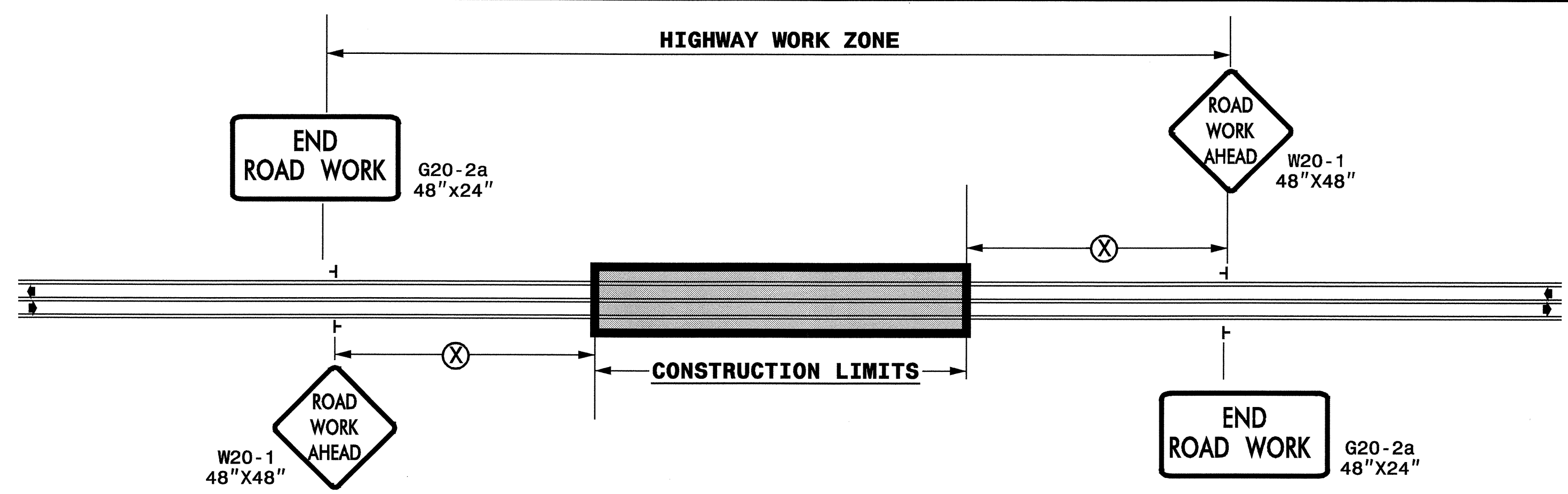
 PROPOSED CONSTRUCTION (AWAY FROM TRAFFIC)
 PROPOSED CONSTRUCTION (FLAGGER REQUIRED)

- NOTES:
- SEE SHEET TCP-2 FOR PAVEMENT MARKING SCHEDULE.
 - SEE ROADWAY STANDARD DRAWING 1250.01 & 1251.01 FOR PAVEMENT MARKERS AND SPACING.

APPROVED: _____ DATE: _____	PHASE III		REVISIONS	
			SCALE: NONE	
	DATE: 10/08			
	DWG. BY: SNG DESIGN BY: SNG REVIEWED BY: JWG			

04-DEC-2008 08:33
 \\gdr\dfs\sr\071\WZ12244733
 sng\ebn AT WZ12244733

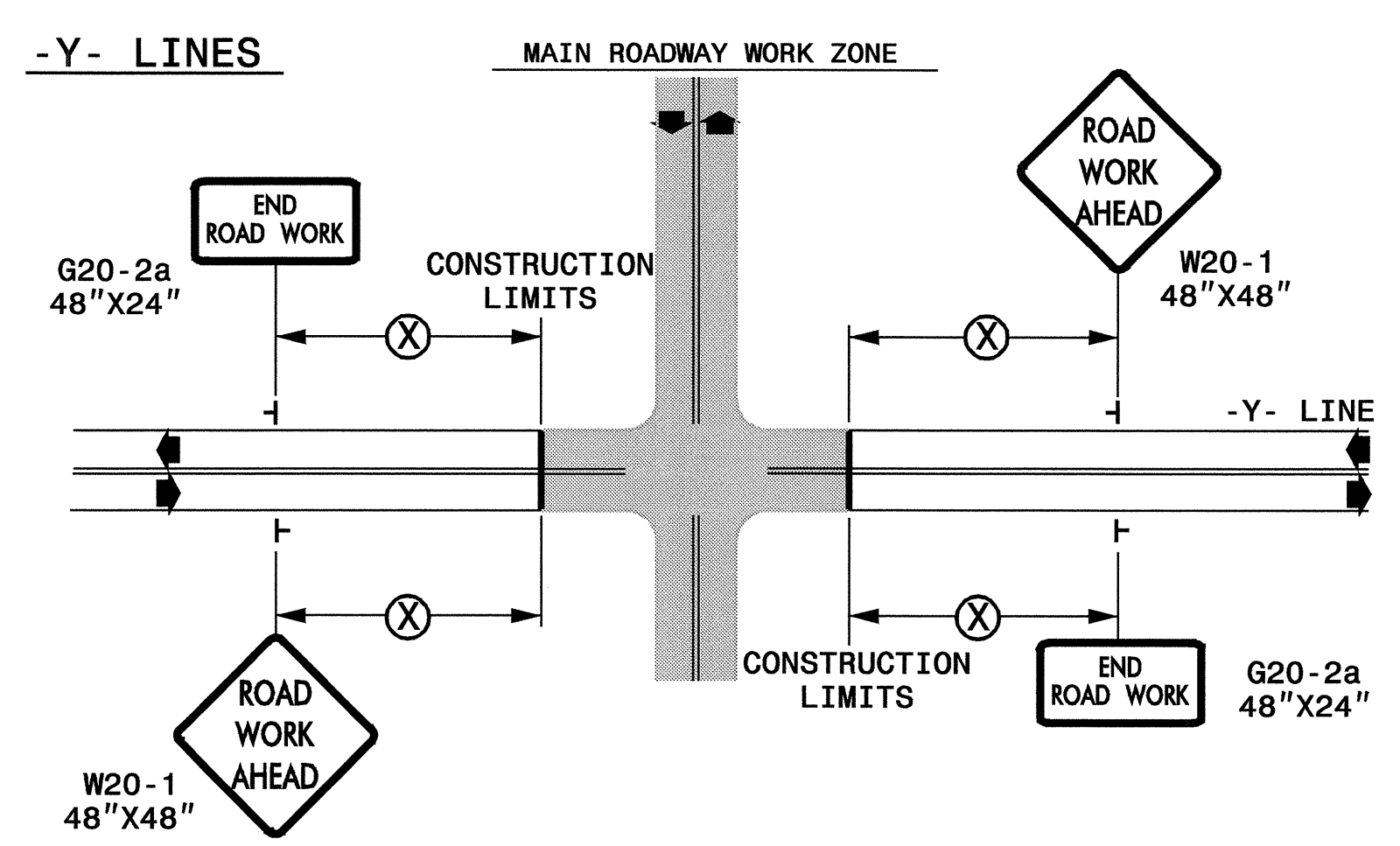
TWO-WAY UNDIVIDED ** (L-LINES)



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)



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: _____	DATE: _____	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS			
	SCALE: NONE				
	DATE: _____			REVISIONS	
	DWG. BY: _____			7-98	10/01
	DESIGN BY: _____			10-98	03/04
REVIEWED BY: _____	01/01	11/04	CADD FILE		

04-DEC-2008 08:33
 \\gdc\dfs\01\proj\traffic\trafficcontrol\tcp\b-3655_tcp-top-6.dgn
 sign.ech AT 12/24/08