

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
B - 4 0 4 1	TCP-1

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

B - 4 0 4 1

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 JANUARY 2002 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.02	TEMPORARY LANE CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1135.01	CONES
1150.01	FLAGGERS
1160.01	TEMPORARY CRASH CUSHION
1170.01	PORTABLE CONCRETE BARRIER (NCHRP 230)
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS (TEMPORARY & PERMANENT)
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, AND INDEX OF SHEETS
TCP-2	GENERAL NOTES AND PHASING
TCP-3	PHASE I DETAILS
TCP-4	PHASE II DETAILS
TCP-5	DRUMS
TCP-6	TYPE III BARRICADES
TCP-7	SHOULDER CLOSURES
TCP-8	ADVANCE WORK ZONE WARNING SIGNS
PM-1	PAVEMENT MARKING PLAN

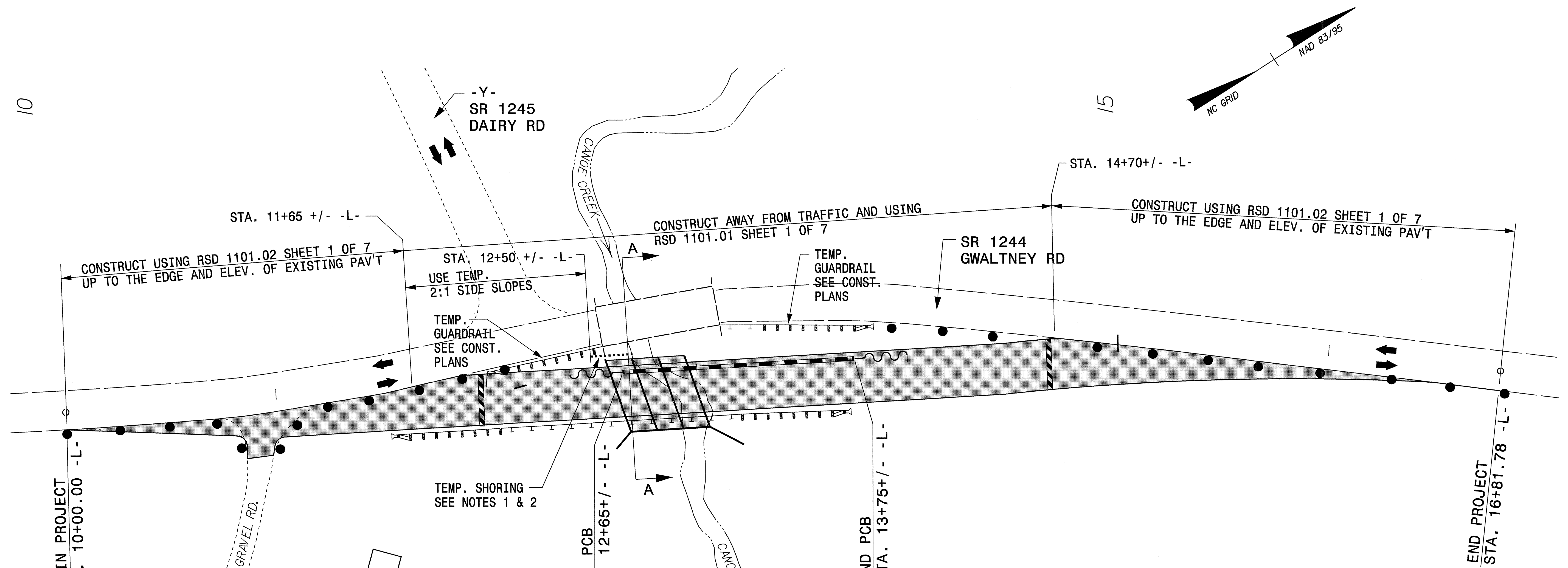
LEGEND

- 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
 - 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

TIP PROJECT:

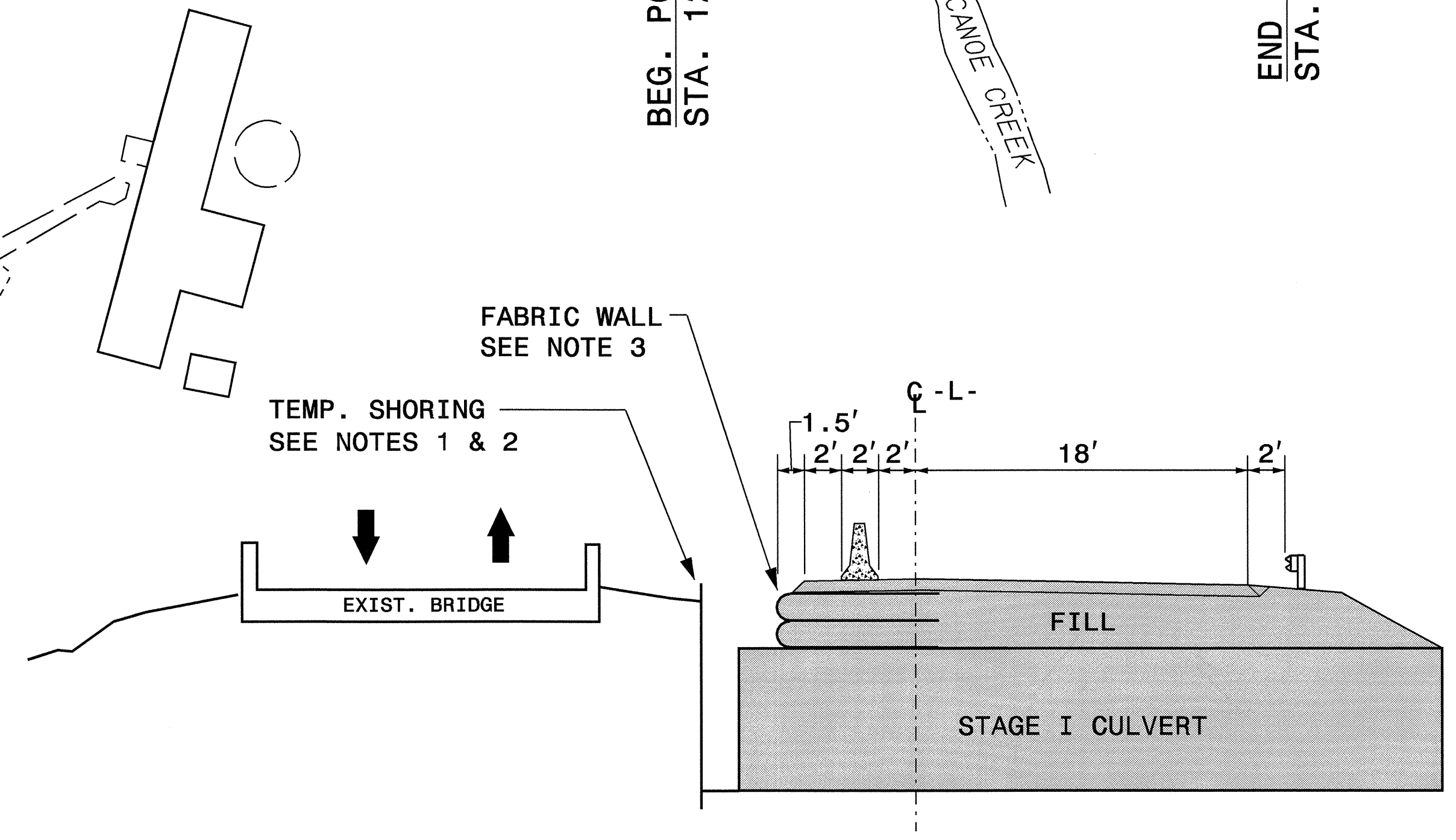
23-JAN-2006 07:48 K:\Roadway\TrafficControl\TrafficControl\TCP-1\TCP-1.dgn

APPROVED:	PLAN PREPARED BY: N.C.D.O.T. WORK ZONE TRAFFIC CONTROL UNIT
DATE: 23 Jan 06	
SEAL	J. S. BOURNE, PE TRAFFIC CONTROL ENGINEER
	G. L. GETTIER, PE TRAFFIC CONTROL PROJECT ENGINEER
	J. W. GILSTRAP TRAFFIC CONTROL PROJECT DESIGN ENGINEER
	K. P. BROADWELL TRAFFIC CONTROL DESIGN ENGINEER



NOTES

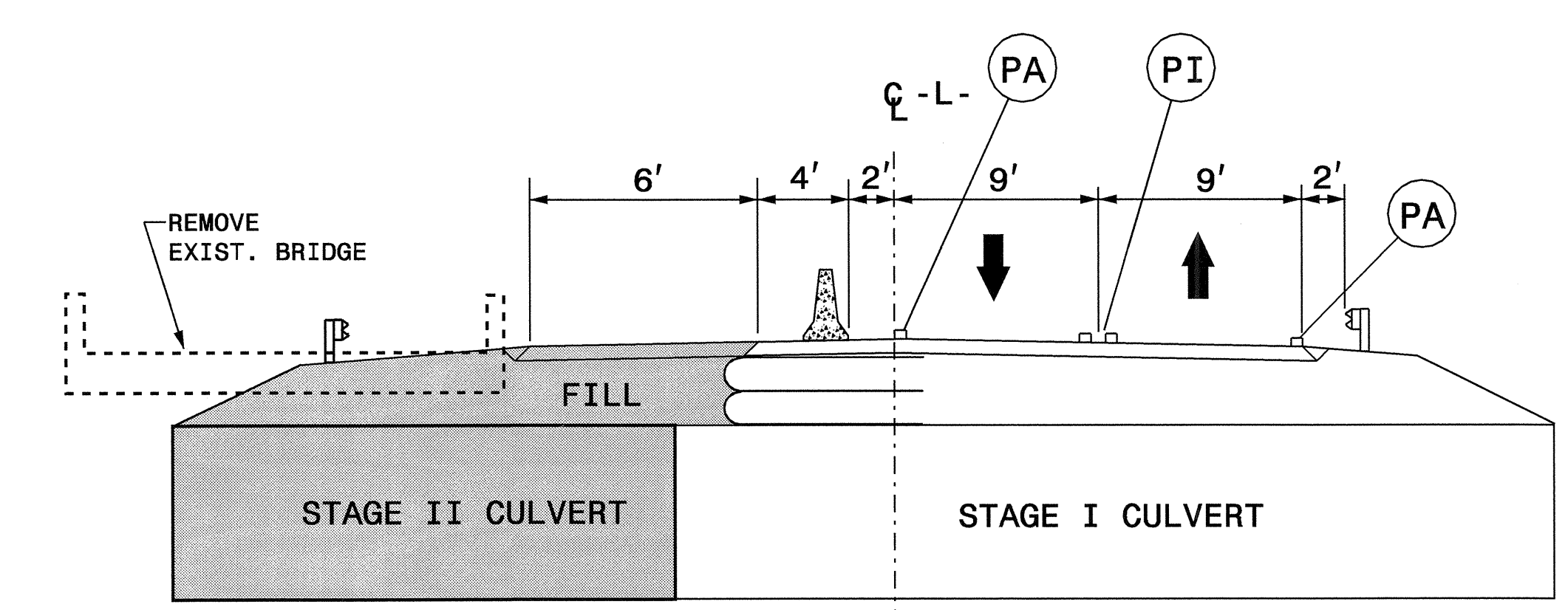
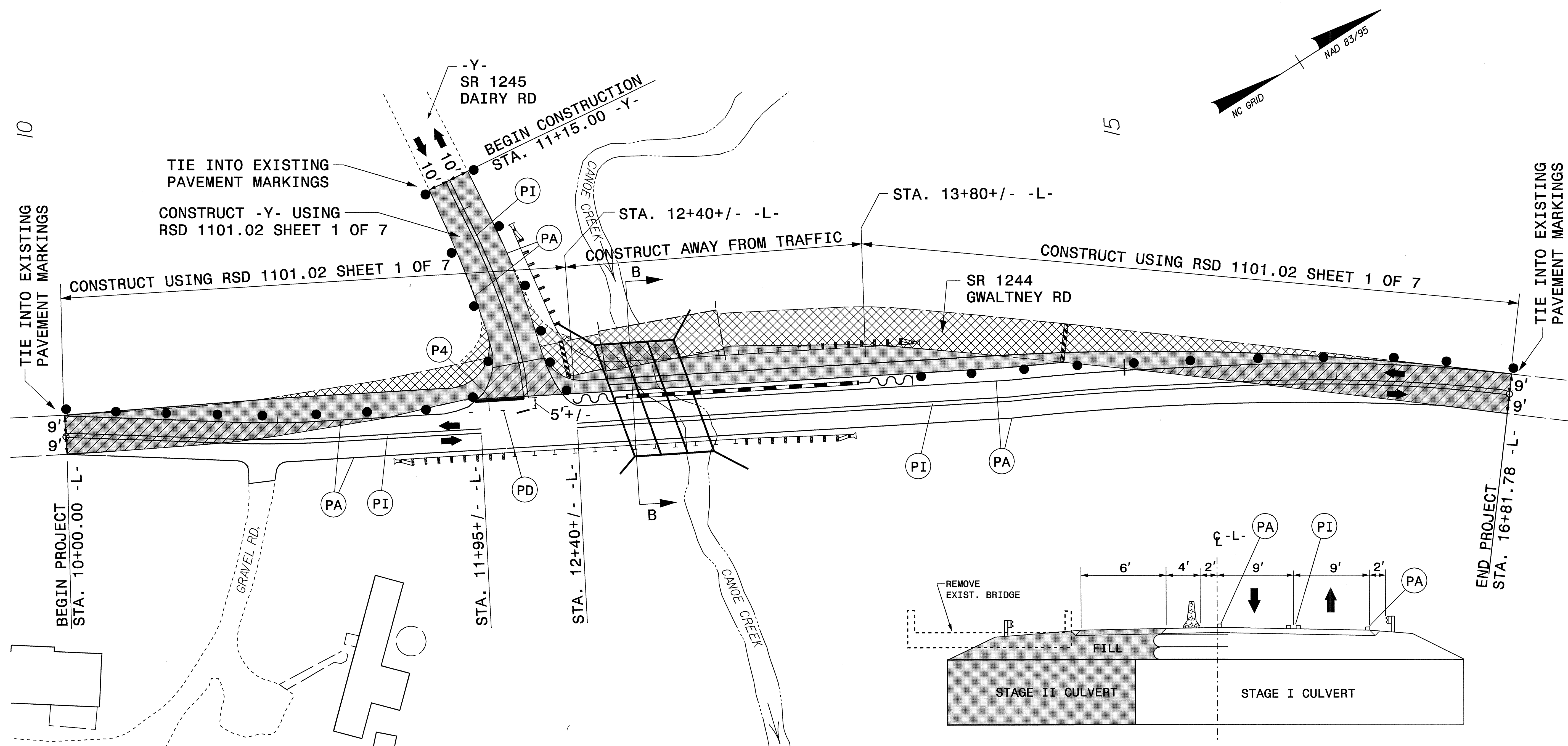
- TEMPORARY SHORING IS NOT BARRIER SUPPORTED AND IS REQUIRED FROM STA. 12+50+/- -L- TO STA. 12+70+/- -L-, 11.5' LEFT. DO NOT USE STANDARD SHORING DESIGN. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING SHORING DESIGN.
- FOR DESIGN OF TEMPORARY SHORING USE THE FOLLOWING SOIL PARAMETERS. UNIT WEIGHT OF SOIL ABOVE WATER TABLE, $\gamma = 120$ pcf
UNIT WEIGHT FO SOIL BELOW WATER TABLE, $\gamma' = 60$ pcf
FRICTION ANGLE, $\phi = 30^\circ$
COHESION, $c = 0$ psf
- A TEMPORARY FABRIC WALL WILL BE REQUIRED FROM STA. 12+55+/- -L- TO STA. 13+05+/- -L- TO MAINTAIN TRAFFIC AND CONSTRUCT THE STAGE II PART OF THE CULVERT. SEE ROADWAY PLANS FOR TEMPORARY FABRIC WALL.



SECTION "A-A"

APPROVED: <i>[Signature]</i> DATE: 23 Jan 06	PHASE I	
	SCALE: NONE	
	DATE: 1/06	
	DWG. BY: KPB	
	DESIGN BY: KPB	
REVIEWED BY: JWG	REVISIONS	

23-JAN-2006 07:47
 \\sers-cen503\p0148\traffic\trafficcontrol\top\b-4041\top_top-3.dgn
 kbr00dwell AT 12/12/2005



LEGEND
 - AREA TO BE COMPLETED IN ONE WORK PERIOD.

- NOTES:**
1. SEE SHEET PM-1 FOR PAVEMENT MARKING SCHEDULE.
 2. SEE RDWY. STD. DWG. 1250.01 AND 1251.01 FOR PAVEMENT MARKER SPACING AND RAISED PAVEMENT MARKERS.

APPROVED:	DATE: 23 Jun 06	PHASE II											
	SCALE: NONE												
	DATE: 1/06	<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: KP	DESIGN BY: KP												
REVIEWED BY: JWG	CADD FILE												

23-JAN-2006 07:48
 N:\15-cctf503\150400\150400\Traffic\TrafficControl\top\b-4041.tc_top-4.dgn
 KDOGMEI AT WZIC224240

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

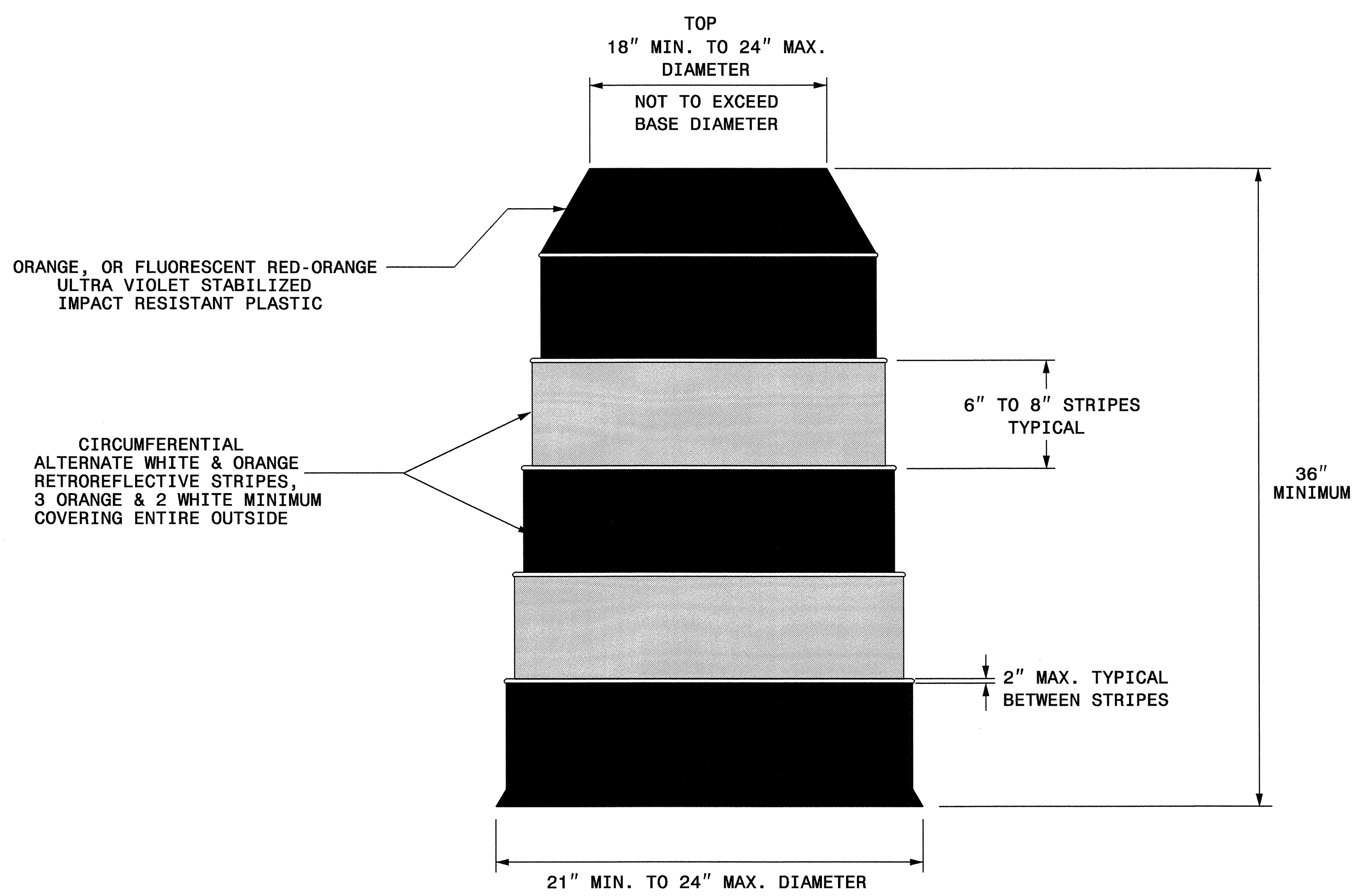
ENGLISH STANDARD DRAWING FOR
DRUMS

SHEET 1 OF 1
1130D01

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

ENGLISH STANDARD DRAWING FOR
DRUMS

SHEET 1 OF 1
1130D01



GENERAL NOTES

- BALLASTING SHALL BE ACHIEVED BY THE SAND BAG, TIRE-SIDEWALL BALLAST, OR PREFORMED WEIGHTED BASE BALLASTING METHODS. DO NOT PLACE BALLAST ON TOP OF THE DRUM, NOR AS TO PRESENT A HAZARD WHEN STRUCK.
- IF NECESSARY PLACE THE NAME OF THE AGENCY, CONTRACTOR, OR SUPPLIER ON NON-RETROREFLECTIVE DRUM SURFACES. SHOW THE LETTERS AND NUMBERS USING A NON-RETROREFLECTIVE COLOR AND NOT OVER 2" IN HEIGHT.

APPROVED:	DATE: 8/23/02	REPLACEMENT DETAIL FOR RSD 1130.01									
SEAL 	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: 8/02	DWG. BY: MMM										
DESIGN BY: MMM	REVIEWED BY: MMM										

23-JAN-2006 07:47
 c:\p1\scd\1503\w1222240
 hbr\p3d\01 AT W1222240

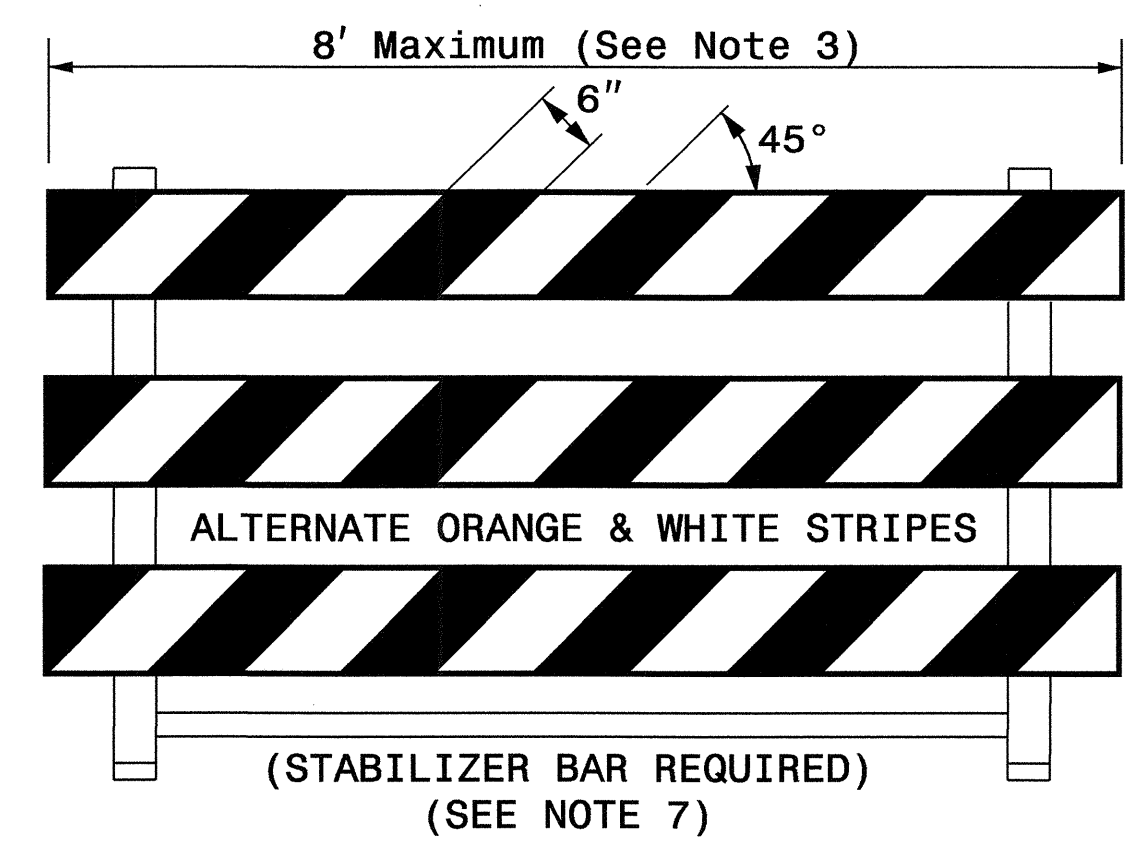
STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

1-05

ENGLISH STANDARD DRAWING FOR
BARRICADES
 TYPE-III

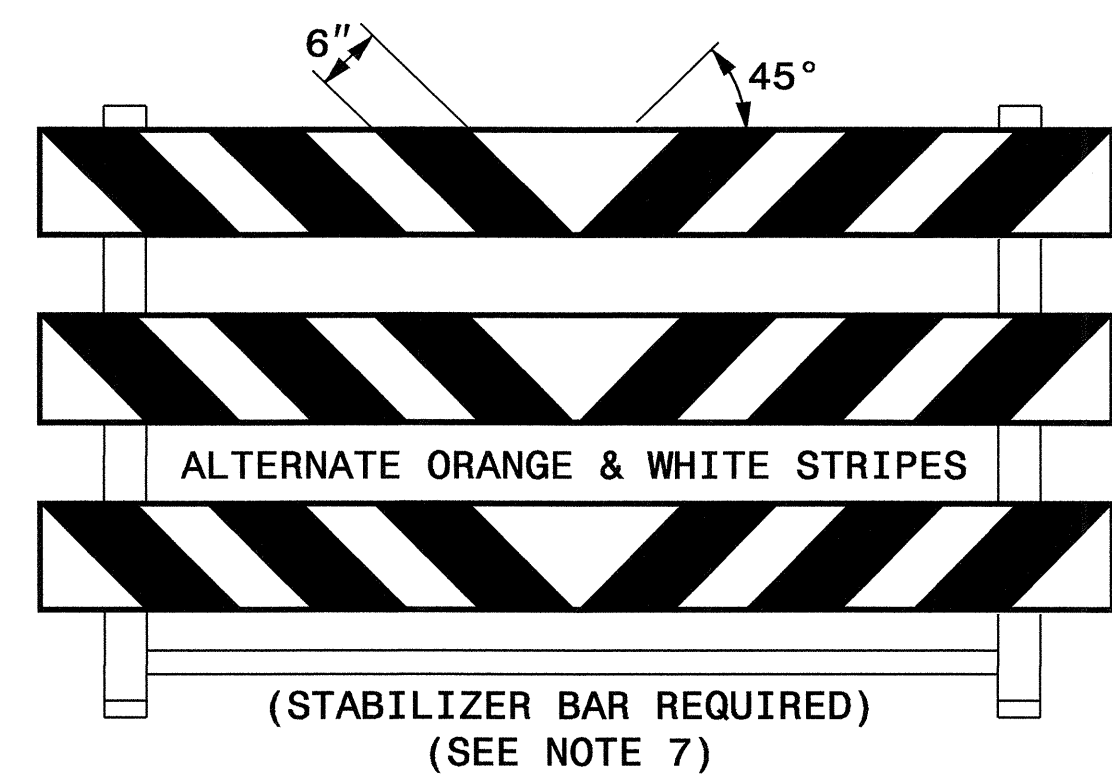
SHEET 1 OF 1
1145D01

TYPE III BARRICADE



TYPE III BARRICADE

END-OF-ROADWAY APPLICATIONS



GENERAL NOTES

- 1) HORIZONTAL RAILS FOR TYPE-III BARRICADES MAY BE HOLLOW/CORRUGATED EXTRUDED RIGID POLYOLEFIN, HIGH DENSITY POLYETHYLENE, OR OTHER NCDOT APPROVED RAILS. BARRICADE RAILS OF FRANGIBLE PLASTICS SUCH AS PVC MAY NOT BE USED. IF APPROVED PLASTIC TYPE RAILS ARE USED, THEY MUST BE FLAME TREATED BY THE MANUFACTURER SO THAT REFLECTIVE SHEETING MAY ADHERE PROPERLY.
- 2) BARRICADES AND BARRICADE RAILS ARE APPROVED AS A SINGLE UNIT.
- 3) BARRICADE SHALL BE LIMITED TO A MAXIMUM LENGTH OF 8 FT UNLESS NCHRP 350 CRASH TESTED AND NCDOT APPROVED.
- 4) ONLY NCDOT APPROVED COMPOSITE AND ROLL-UP SIGNS MAY BE MOUNTED ON THE BARRICADE.
- 5) SIGNS MOUNTED ON BARRICADES SHOULD NOT COVER MORE THAN 50 PERCENT OF THE TOP TWO RAILS OR 33 PERCENT OF THE TOTAL AREA OF THE THREE RAILS.
- 6) USE TYPE VII, VIII OR IX SHEETING ON BOTH SIDES OF THE RAILS.
- 7) BARRICADE MUST BE NCHRP 350 AND NCDOT APPROVED WITH STABILIZER BAR OR ADEQUATE LATERAL BRACING.
- 8) ASSEMBLY OF THE GENERIC BARRICADES MUST BE SELF CERTIFIED BY THE ASSEMBLER.
- 9) BARRICADES USED TO CLOSE A ROADWAY SHALL EXTEND ACROSS THE ENTIRE ROADWAY. WHERE LOCAL TRAFFIC MUST BE MAINTAINED, THEY MAY BE PLACED IN A STAGGERED PATTERN.
- 10) STRIPES ON WORK ZONE BARRICADE RAILS SHALL BE ALTERNATE ORANGE AND WHITE RETROREFLECTIVE STRIPES, SLOPED DOWNWARD TOWARDS THE SIDE WHICH TRAFFIC IS TO PASS OR TURN IN DETOURING. WHERE NO TURNS ARE INTENDED, THE STRIPES SHOULD SLOPE DOWNWARD TOWARD THE CENTER OF THE BARRICADE OR BARRICADES. USE RED AND WHITE STRIPES FOR PERMANENT BARRICADES.
- 11) SEE APPROVED PRODUCTS LIST FOR MANUFACTURERS OF APPROVED BARRICADES.
- 12) PLACE MANUFACTURER'S NAME AND FEDERAL HIGHWAY ADMINISTRATION'S NCHRP 350 APPROVAL LETTER NUMBER ON BARRICADE.
- 13) USE SANDBAGS PLACED ON THE LOWER PART OF THE FRAME FOR BALLASTING. DO NOT PLACE SANDBAGS ON TOP OF A STRIPED RAIL. DO NOT BALLAST BARRICADES BY HEAVY OBJECTS SUCH AS ROCKS, CHUNKS OF CONCRETE OR OTHER ITEMS THAT WOULD CAUSE DAMAGE IF THE BARRICADE IS STRUCK BY A VEHICLE.

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

1-05

ENGLISH STANDARD DRAWING FOR
BARRICADES
 TYPE-III

SHEET 1 OF 1
1145D01

23-JAN-2006 07:46
 K:\P15-oc\901\WZTC2242.dgn
 K:\DGSWELL\AT\WZTC2242.dgn

APPROVED: *[Signature]* DATE: 11/04

SEAL

REPLACEMENT DETAIL FOR
RSD 1145.01

SCALE: NONE		REVISIONS
DATE: 11/04		
DWG. BY: MMM		
DESIGN BY: MMM		
REVIEWED BY: MMM		

CADD FILE

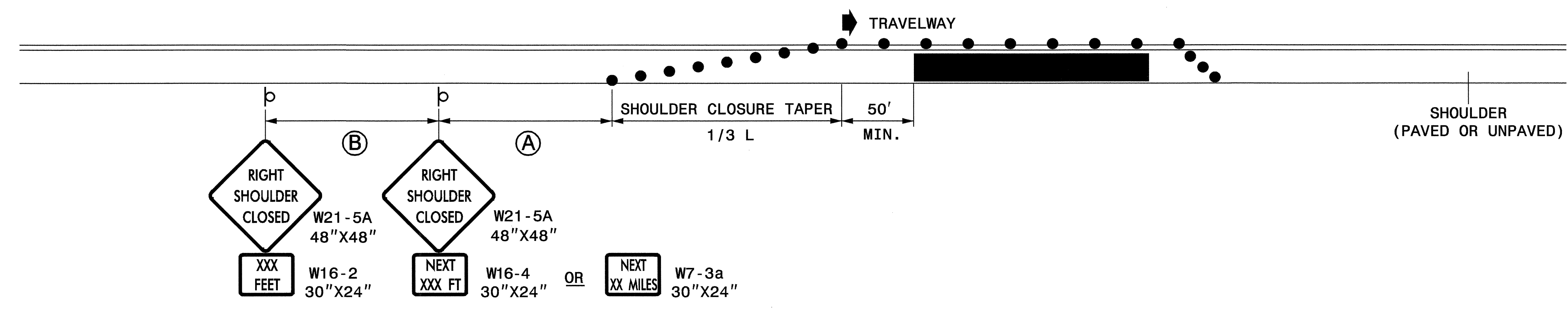
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-05

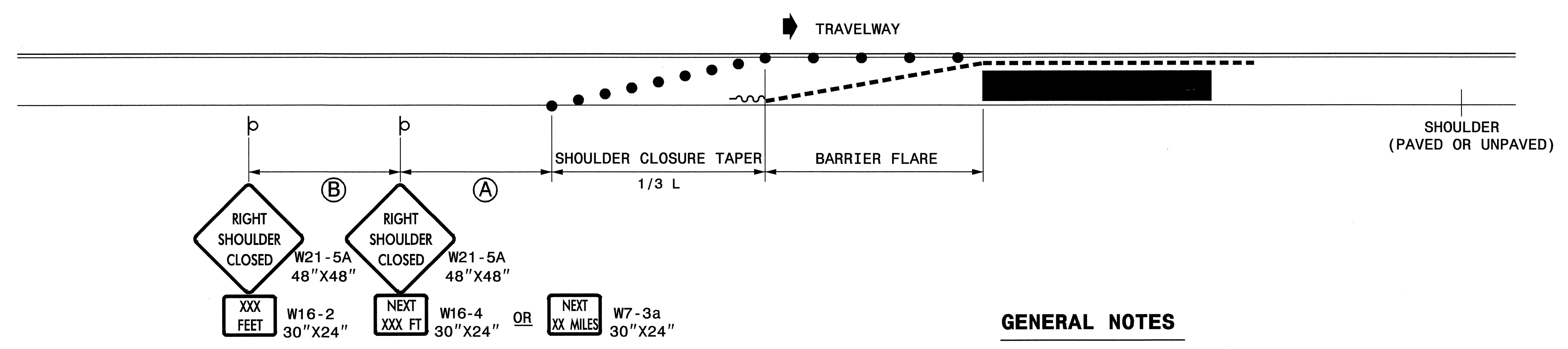
ENGLISH STANDARD DRAWING FOR
TEMPORARY SHOULDER CLOSURES

SHEET 1 OF 1
1101D04

SHOULDER CLOSURES UTILIZING DRUMS



SHOULDER CLOSURES UTILIZING TEMPORARY BARRIER



GENERAL NOTES

- PLACE SHOULDER CLOSURE SIGNS ON THE SAME SIDE AS THE SHOULDER THAT IS CLOSED.
- PLACE DRUMS IN THE SHOULDER TAPER AT THE MAXIMUM SPACING EQUAL IN FEET TO THE POSTED SPEED LIMIT. THE MAXIMUM SPACING OF DRUMS ALONG THE WORK AREA AND BARRIER FLARE IS EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- FLARE THE APPROACH END OF PORTABLE CONCRETE BARRIER BEYOND THE SHOULDER AND USE A CRASH CUSHION FOR PROTECTION IF THE EXPOSED END OF THE BARRIER IS WITHIN THE "CLEAR ZONE".
- USE STATIONARY SIGNS FOR LONG TERM OPERATIONS (LONGER THAN 3 DAYS).
- REFER TO STD. 1101.11 SHEETS 1, 3, & 4, FOR "L" DISTANCE, BARRIER FLARE RATES, AND SIGN SPACING.

LEGEND

- ~ TEMPORARY CRASH CUSHION
- - - PORTABLE CONCRETE BARRIER
- DRUM
- ⊔ STATIONARY OR PORTABLE SIGN
- ➔ DIRECTION OF TRAFFIC FLOW

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

1-05

ENGLISH STANDARD DRAWING FOR
TEMPORARY SHOULDER CLOSURES

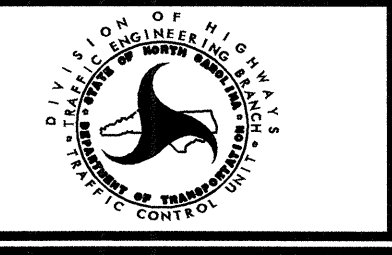
SHEET 1 OF 1
1101D04

APPROVED: *[Signature]* DATE: 23-Jan-04

SEAL

**REPLACEMENT DETAIL FOR
RSD 1101.04**

SCALE: NONE
DATE: 11/04
DWG. BY: MMM
DESIGN BY: MMM
REVIEWED BY: MMM



REVISIONS

23-JAN-2006 07:46
N:\GIS\oc1503\1101D04\tr\affico\tr\afficocontrol\top\shoulder_closures.dgn
KDR030201 AT 11/11/04 12:22:40

