

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
B - 4113	TCP-1

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

B-4113

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
1101.03	TEMPORARY ROAD CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.12	PAVEMENT MARKINGS - BRIDGES
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, INDEX OF SHEETS, LEGEND, FINAL PAVEMENT MARKING SCHEDULE
TCP-2	PROJECT NOTES AND PHASING
TCP-3	DETOUR ROUTE
TCP-4	STREET SIGN DETAIL
TCP-5	TYPE III BARRICADES

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

TIP PROJECT:

FINAL PAVEMENT MARKING SCHEDULE		
SYMBOL	DESCRIPTION	PAY ITEM QUANTITY BREAKDOWN
PAVEMENT MARKINGS		
THERMOPLASTIC		
TA	WHITE EDGELINE	2850 LF
TI	DBL YEL CENTER LINE	2850 LF
PERMANENT RAISED MARKERS		
MA	YELLOW-YELLOW	18 EA

APPROVED:	PLAN PREPARED BY: N.C.D.O.T. TRAFFIC CONTROL, MARKING & DELINEATION UNIT
DATE: 1/23/06	
SEAL	<p> J. S. BOURNE, PE TRAFFIC CONTROL ENGINEER</p> <p>G. L. GETTIER, PE TRAFFIC CONTROL PROJECT ENGINEER</p> <p>J. W. WOOLARD, PE TRAFFIC CONTROL PROJECT DESIGN ENGINEER</p> <p>C. S. MOZINGO TRAFFIC CONTROL DESIGN ENGINEER / TECHNICIAN</p>

GENERAL NOTES

ADAPT THE TRAFFIC CONTROL PLANS, WHEN DIRECTED BY THE ENGINEER, TO MEET FIELD CONDITIONS TO PROVIDE SAFE AND EFFICIENT TRAFFIC MOVEMENT. CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE, OR RESULT IN DUPLICATE, OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES.

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.

SIGNING

- A) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 100 FT (31m) 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.

- B) PROVIDE PERMANENT SIGNING.
- C) PROVIDE DETOUR SIGNING WITHIN AND OFF THE PROJECT LIMITS.
- D) COVER OR REMOVE ALL DETOUR SIGNS WITHIN AND OFF THE PROJECT LIMITS WHEN A DETOUR IS NOT IN OPERATION.
- E) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

- F) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY. STAGGER OR OVERLAP BARRICADES TO ALLOW FOR INGRESS OR EGRESS.

PAVEMENT MARKINGS AND MARKERS

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

<u>ROAD NAME</u>	<u>MARKING</u>	<u>MARKER</u>
1) MOORES POND RD.	THERMOPLASTIC	PERMANENT RAISED

- H) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

PHASING NOTES

NOTE: MAKE SURE THAT TRAFFIC IS MAINTAINED FOR ALL DRIVEWAYS THROUGHOUT THE PROJECT FOR THE DURATION OF THE PROJECT.

STEP 1:

INSTALL WORK ZONE SIGNS & DETOUR SIGNING ON -L- (SR 1106) USING ROADWAY STANDARD DRAWING 1101.03. RE-ROUTE TRAFFIC ONTO OFF-SITE DETOUR (SEE TCP-3).

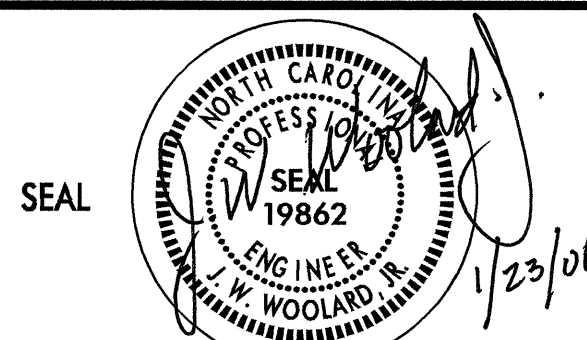
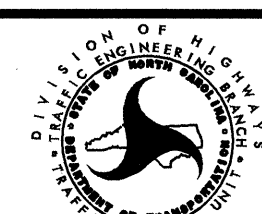
STEP 2:

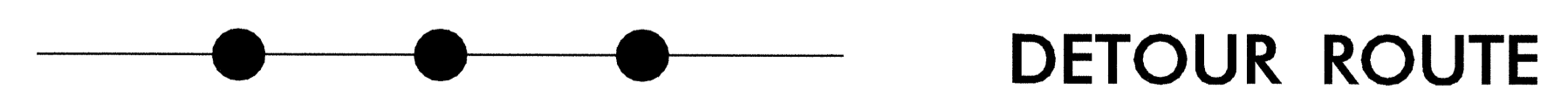
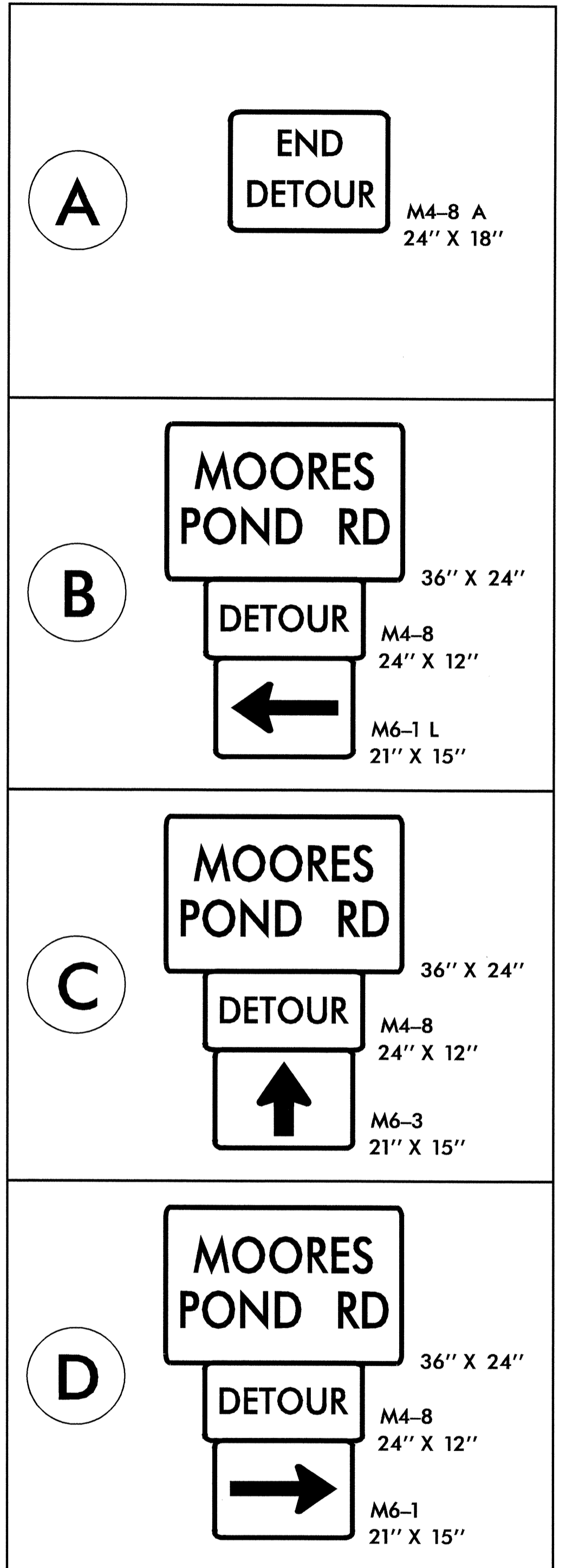
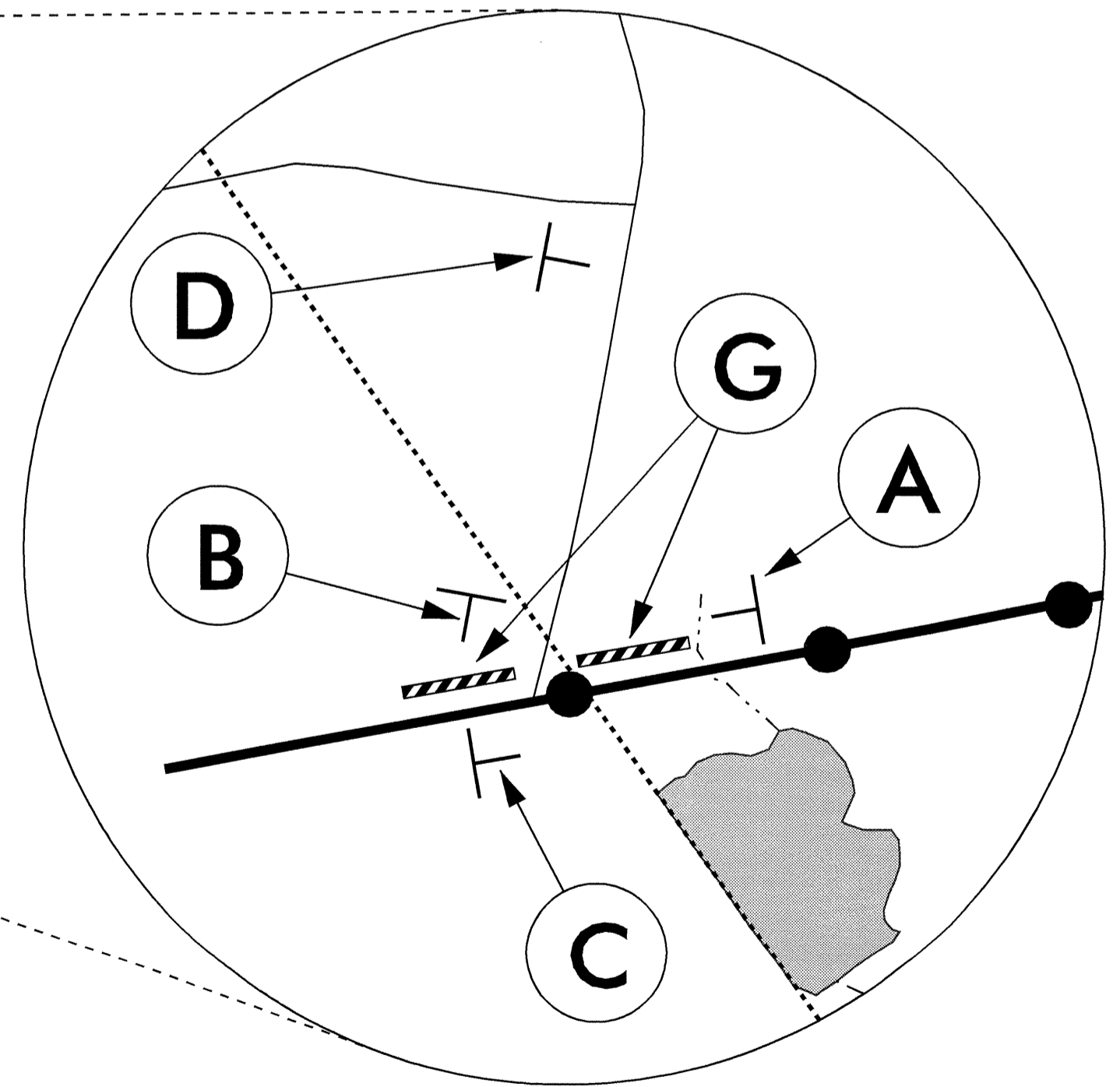
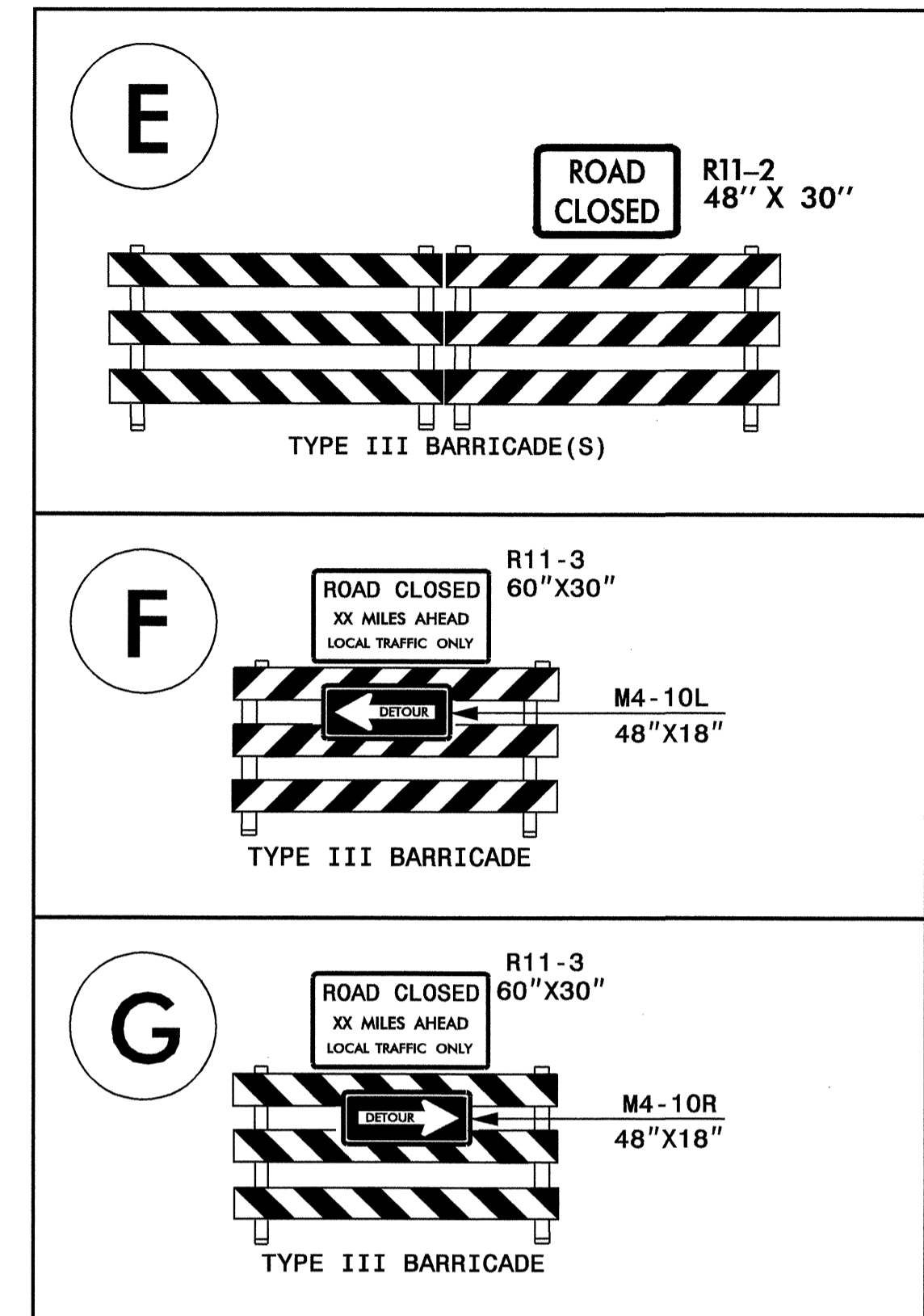
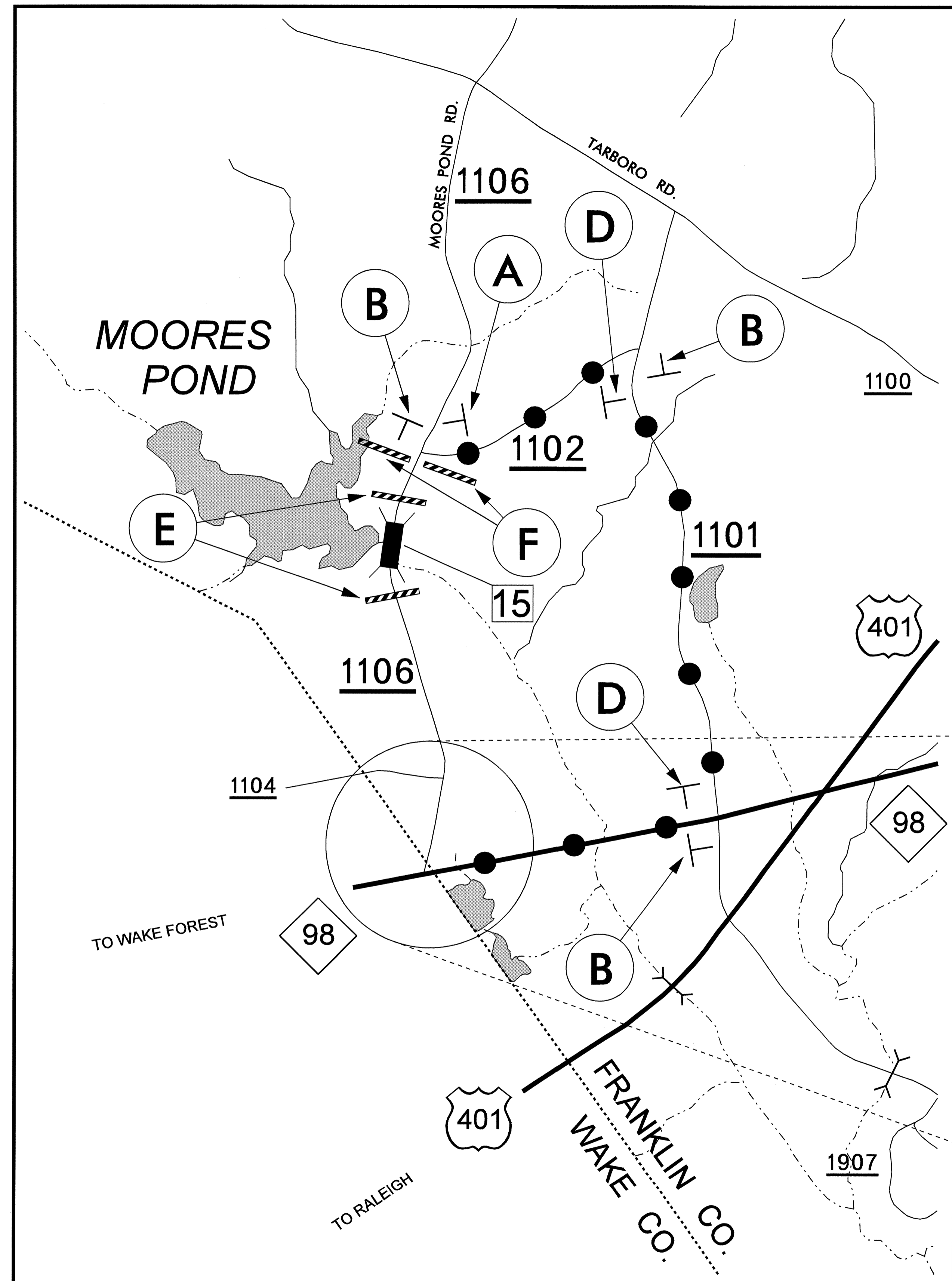
BUILD -L- STA 16+50+/- TO STA 30+18+/-, INCLUDING NEW STRUCTURE, UP THROUGH THE FINAL LAYER OF THE SURFACE COURSE AND INSTALL FINAL PAVEMENT MARKINGS & MARKERS. (THERMOPLASTIC & PERMANENT RAISED)

STEP 3:

RE-OPEN -L- TO TRAFFIC AND REMOVE DETOUR SIGNING.

23-JAN-2006 08:42
 \\ETS-COF503\B4133\Traffic\TrafficControl\top\b413.tc_top02_notes.dgn
 jwoolard AT WZTC224104

APPROVED: _____	DATE: _____	PROJECT NOTES	
	SCALE: NONE		REVISIONS
	DATE: 2005 JUNE 13		
	DWG. BY: CSM		
	DESIGN BY: CSM		
REVIEWED BY: JWW			CADD FILE



23-JAN-2006 08:44
 \\ETS-CGFS03\p4113\Traffic\Trafficcontrol\top\4113.tc_tcp03_detour.dgn
 jwoolard AT WZTC224104

APPROVED: _____ DATE: _____

SEAL

1/23/06

DETOUR ROUTE

SCALE: NONE		REVISIONS
DATE: 2005 MAY 3		
DWG. BY: CSM		
DESIGN BY: CSM		
REVIEWED BY: JMW		

CADD FILE

SIGN NUMR:
TYPE: D Ground
QUANTITY: 1

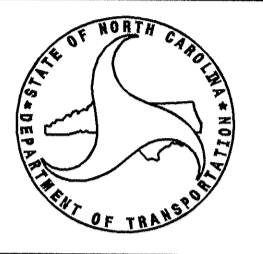
BACKG. COLOR: Orange
COPY COLOR: Black

DESIGN BY: DME
PROJECT ID: B-4113

CHK BY:
DIV: 5

STD #: name
DATE: Aug 25, 2004

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



SIGN WIDTH: 3'-6"
HEIGHT: 2'-0"
TOTAL AREA: 7.0 Sq.Ft.

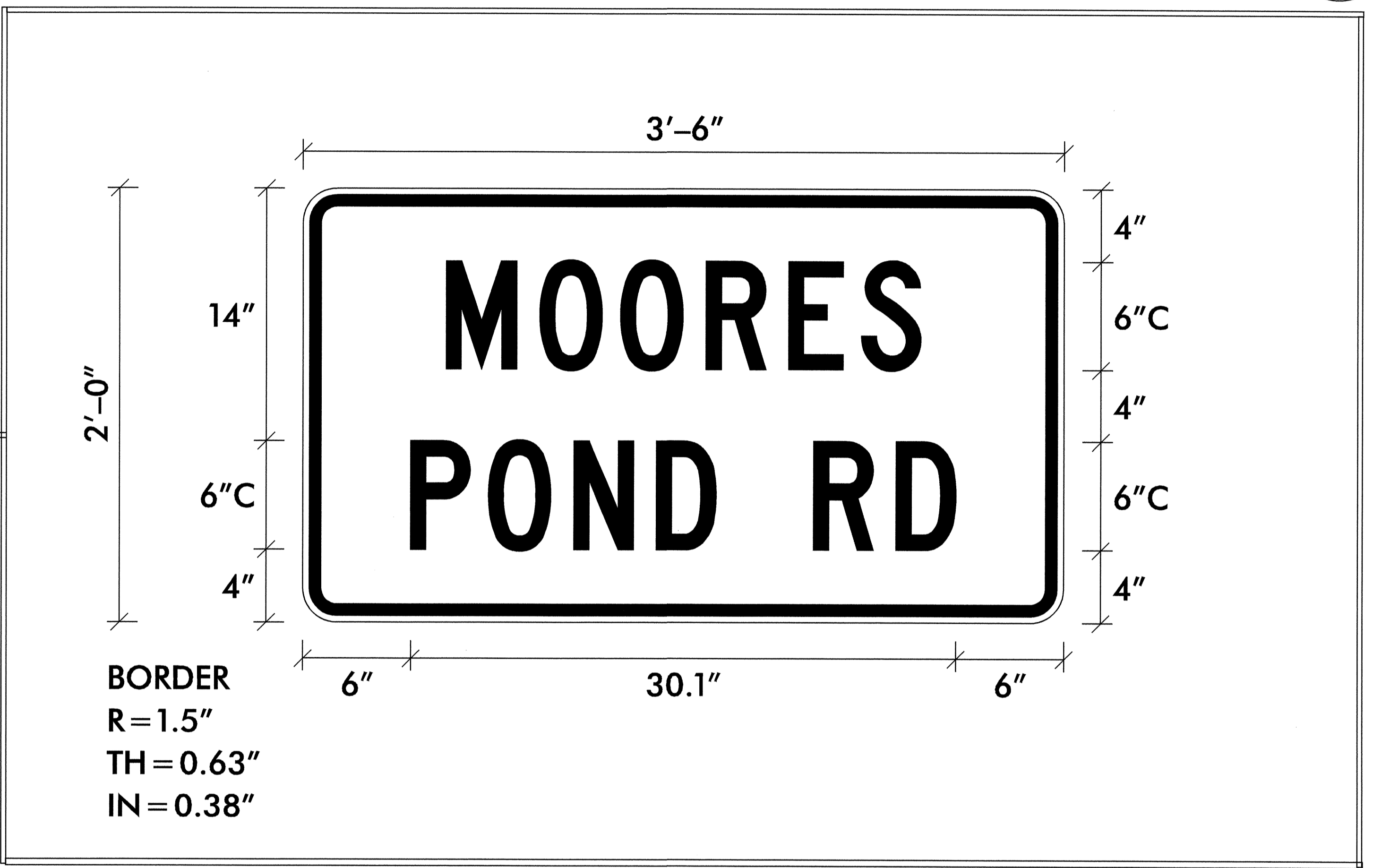
MAT'L: 0.080 in. ALUMINUM

BORDER TYPE: RECESSED
RECESS: 0.38"
WIDTH: 0.63"
RADII: 1.5"

NO. Z BARS:
LENGTH: in.

SYMBOL	X	Y	WID	HT

- NOTES:
- Legend and border shall be direct applied non-reflective sheeting.
 - Background shall be Type VII reflective sheeting.

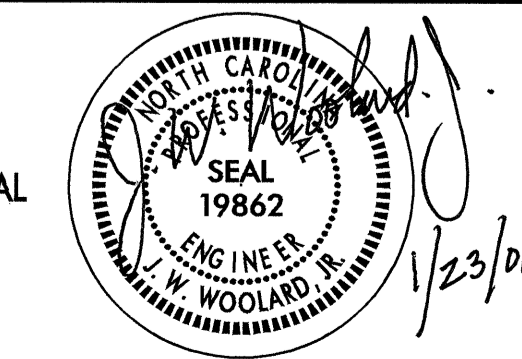


BORDER
R=1.5"
TH=0.63"
IN=0.38"

Letter spacings are to start of next letter

																				Series/Size
																				Text Length
	M	O	O	R	E	S														C6
	7.9	5.2	4.5	4.7	4.5	4	3.3	7.9												26.2
	P	O	N	D		R	D													C6
	6	4.3	4.7	4.5	3.3	5.4	4.5	3.3	6											30.1

Spacing Factor is 1 unless specified otherwise
FILENAME: GSENG

APPROVED: _____ DATE: _____	DETOUR SIGN DESIGN		REVISIONS							
			SCALE: NONE DATE: 2005 JUNE 14 DWG. BY: CSM DESIGN BY: CSM REVIEWED BY: JWW	<table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>						

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 jwoolard AT WZT22404

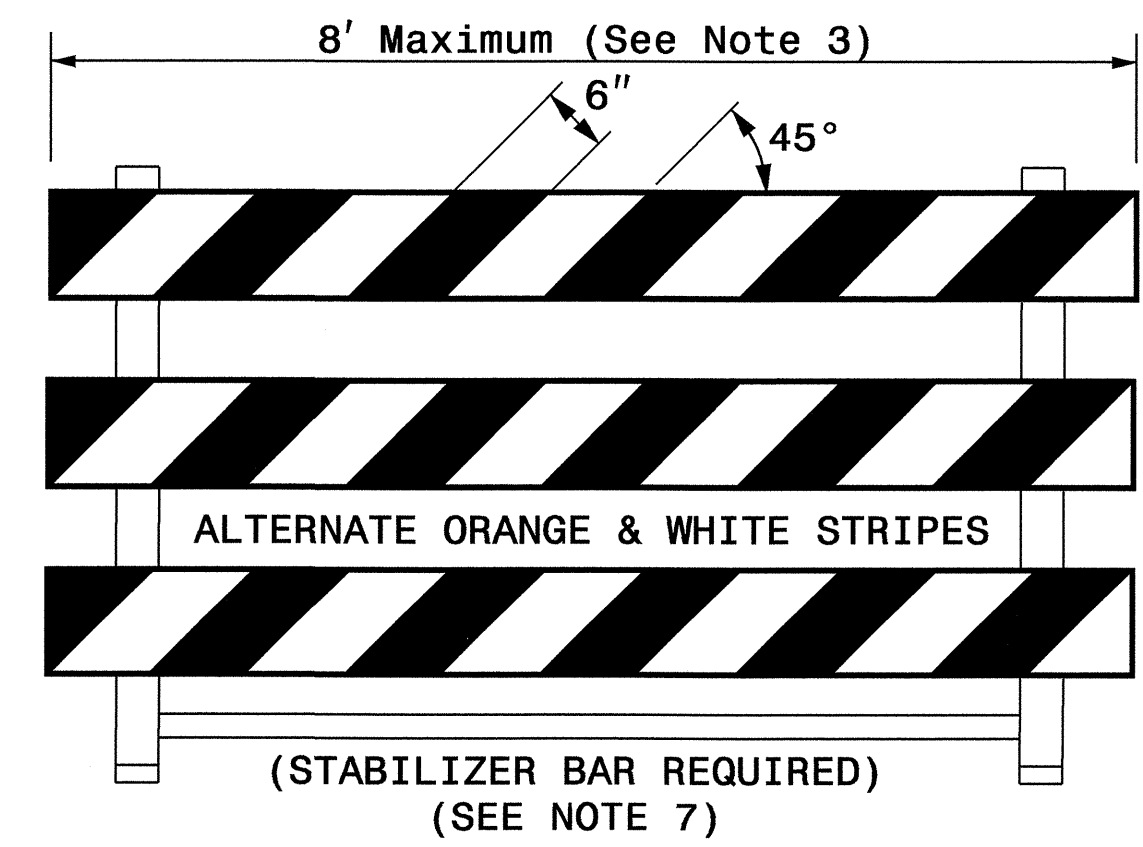
STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

1-05

ENGLISH STANDARD DRAWING FOR
BARRICADES
 TYPE-III

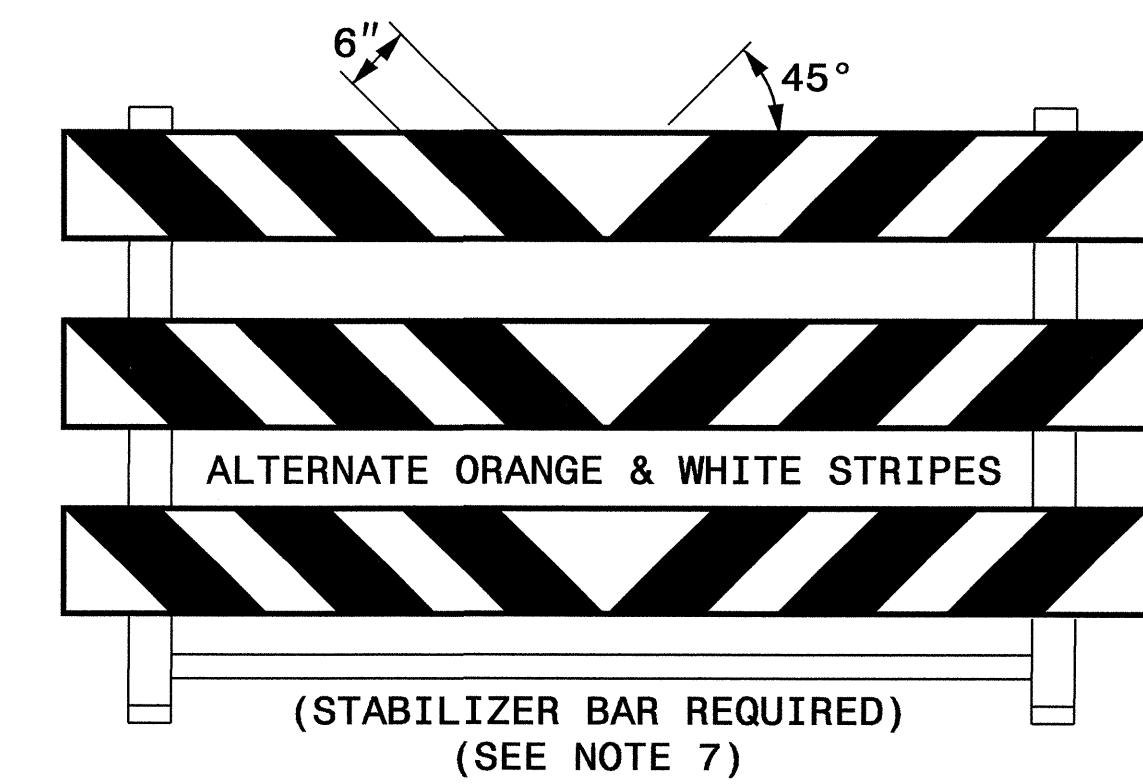
SHEET 1 OF 1
1145D01

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 08:45
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 WJW:ard AT WZTC224104

APPROVED: _____ DATE: _____	TYPE III BARRICADES	
SCALE: NONE		REVISIONS
DATE: _____		
DESIGN BY: _____		
REVIEWED BY: _____		