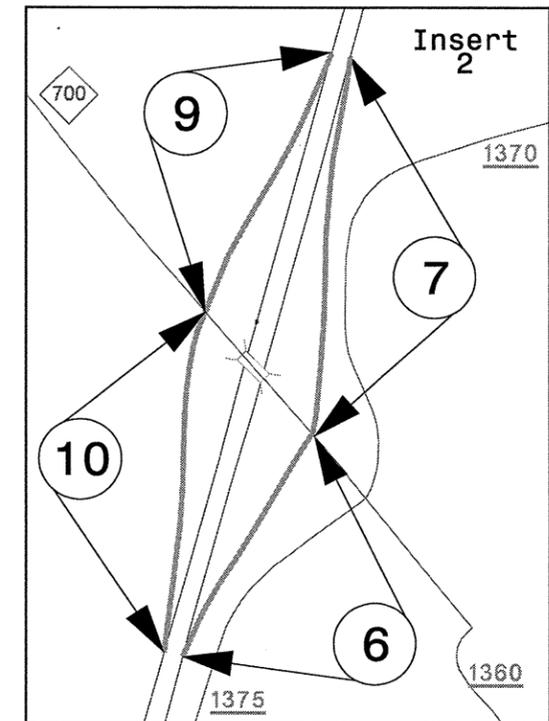
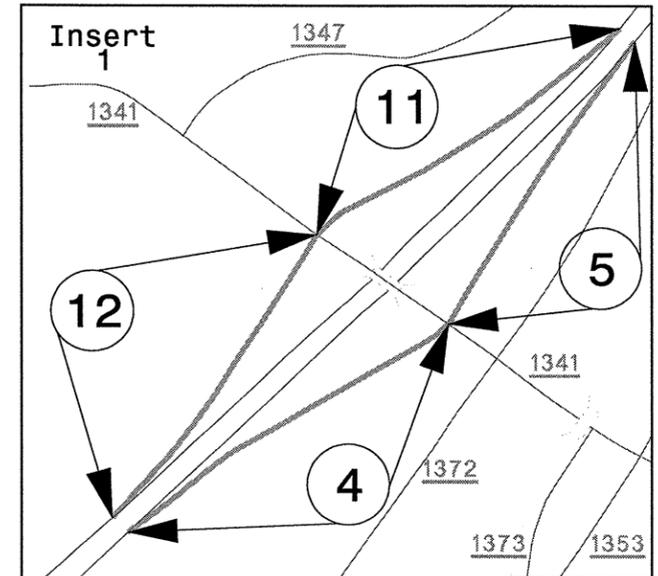
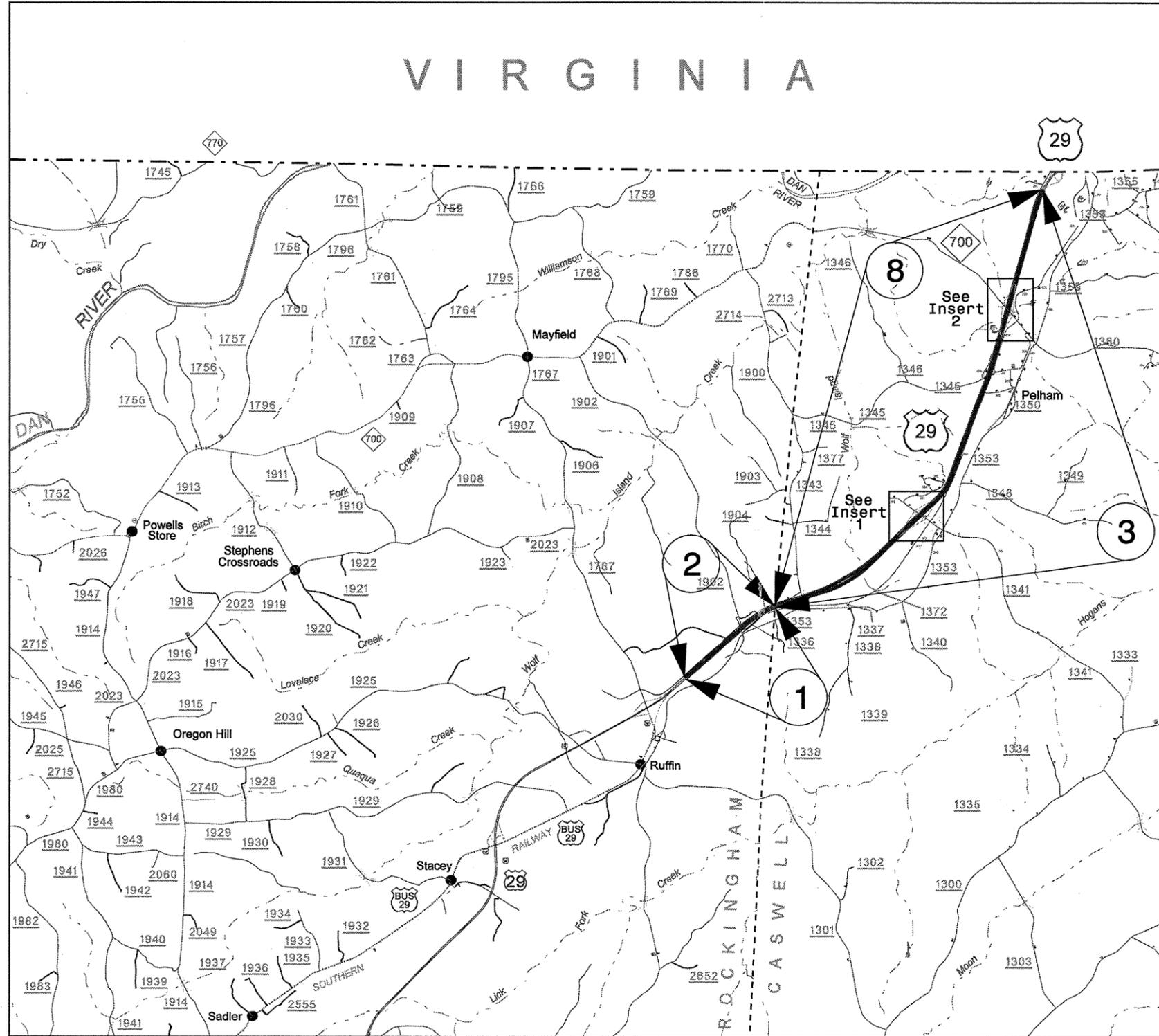
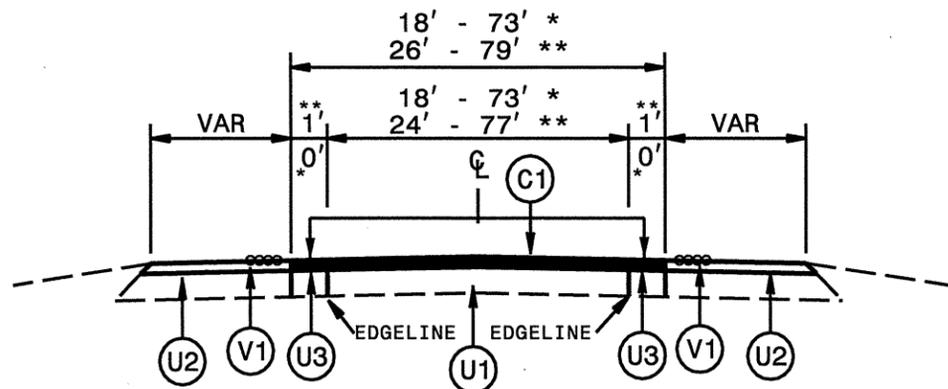


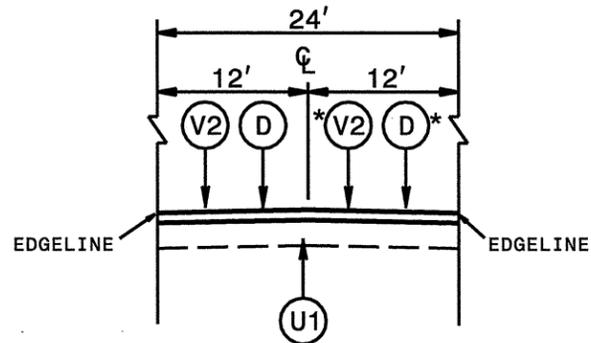
STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
N.C.	7CR.10171.15 & 7CR.10791.15	1	1



**CASWELL AND ROCKINGHAM  
COUNTIES**

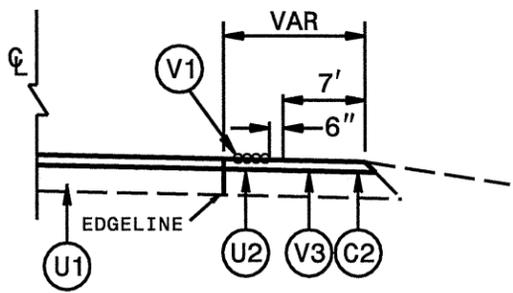


USED ON MAPS 4-7 & 9-12 \*  
USED ON MAPS 1-3 & 8 \*\*  
**TYPICAL SECTION NO. 1**

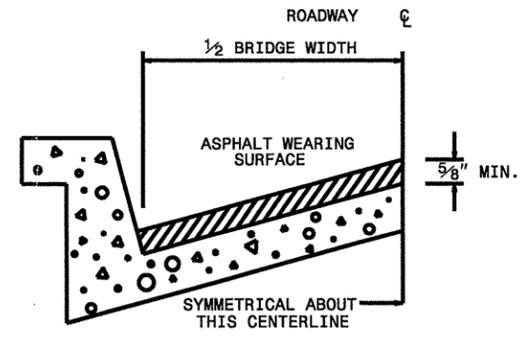


**MILLING TYPICAL SECTION NO. 1**

TO BE USED IN CONJUNCTION WITH TS. 1 ON MAPS 3 & 8 AND MILLING DETAIL 1  
\* 3" MILLING ON OUTSIDE OF ROADWAY ON MAP 8 ONLY  
NOTE: IF MILLING AND/OR PAVEMENT ENCOACHES THE EXISTING PAVED SHOULDER THE CONTRACTOR IS TO REMAIN 6" AWAY FROM THE EXISTING MILLED RUMBLE STRIPS.



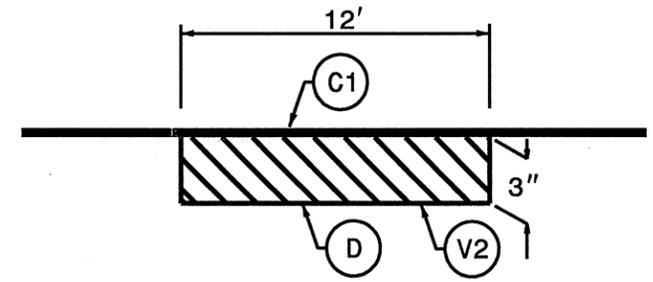
**MILLING TYPICAL SECTION NO. 2**  
TO BE USED IN CONJUNCTION WITH TS. 1 ON MAP 1 AND MILLING DETAIL 2



**BRIDGE HALF TYPICAL SECTION**  
FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN. THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. A THICKNESS OF NOT LESS THAN 5/8" SHALL BE PROVIDED. THE MAXIMUM THICKNESS SHALL PREFERABLY BE 1-1/2" UNLESS IT IS IMPRACTICAL TO PROVIDE A SMOOTH RIDING SURFACE OTHERWISE.

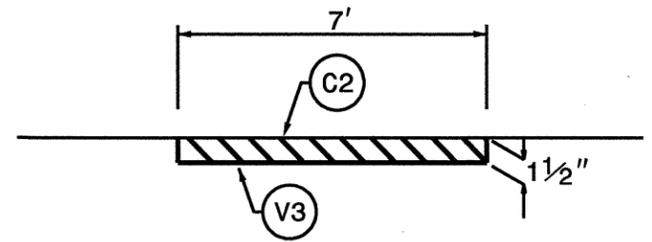
**NOTES**  
ALL UNPAVED S.R. ROUTES TO BE SURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT.  
ALL PAVED S.R. ROUTES TO BE RESURFACED TO END OF RADDII, OR AS DIRECTED BY THE ENGINEER. EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES. BRIDGES TO BE RESURFACED AT LOCATIONS AND DEPTH AS DIRECTED BY THE ENGINEER.

**MILLING DETAIL 1**



MILL EXISTING ASPHALT PAVEMENT 3" IN DEPTH, ON THE MAINLINE AT LOCATIONS AS DIRECTED BY THE ENGINEER.  
**NOTE:**  
TO BE USED IN CONJUNCTION WITH TS. NO. 1 ON MAPS 3, 8

**MILLING DETAIL 2**



MILL EXISTING ASPHALT PAVEMENT 1 1/2" IN DEPTH, IN SHOULDER LOCATIONS AS DIRECTED BY THE ENGINEER.  
**NOTE:**  
TO BE USED IN CONJUNCTION WITH TS. NO. 1 ON MAP 1

**PAVEMENT SCHEDULE**

C1	PROP. APPROX. 5/8" ULTRATHIN HOT MIX ASPHALT, TYPE B, AT AN AVERAGE RATE OF 70 LBS. PER SQ. YD.	V1	EXISTING MILLED RUMBLE STRIPS
C2	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	V2	3" MILLING FOR 12 FT AS DIRECTED BY THE ENGINEER.
D	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE, COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.	V3	1 1/2" MILLING FOR 7 FT AS DIRECTED BY THE ENGINEER.
U1	EXISTING PAVEMENT.	U2	EXISTING PAVED SHOULDER - DO NOT PAVE.
		U3	EXISTING PAVED SHOULDER - 1' SECTION TO BE PAVED STARTING AT THE EDGELINE. PAVEMENT AND/OR MILLING TO REMAIN 6" OFF EXISTING MILLED RUMBLE STRIPS.

\*\*\*\*\*  
SYSTEMS  
\*\*\*\*\*

PROJECT NO.	SHEET NO.	TOTAL NO.
7CR.10171.15 & 7CR.10791.15	3	

## SUMMARY OF QUANTITIES

PROJECT NO.	COUNTY	MAP NO.	ROUTE	DESCRIPTION	TYP	LENGTH MI	WIDTH FT	1½" MILLING SY	3" MILLING SY	INTERMEDIATE COURSE, I19.0B TONS	SURFACE COURSE, S9.5B TONS	PG 64-22 PLANT MIX TONS	PG 70-28 PLANT MIX TON	ULTRATHIN HOT MIX, TYPE B TON	APPLICATION OF ULTRATHIN BONDED WEARING COURSE SY					
7CR.10791.15	Rockingham	1	US 29 NORTH BOUND	FROM NOVA CHIP JOINT TO THE CASWELL COUNTY LINE	1	1.26	26	2,151			181	11	39	673	19,219					
		2	US 29 SOUTH BOUND	FROM THE CASWELL COUNTY LINE TO NOVA CHIP JOINT	1	0.82	26							25	438	12,508				
<b>TOTAL FOR PROJ NO. 7CR.10791.15</b>						<b>2.08</b>		<b>2,151</b>			<b>181</b>	<b>11</b>	<b>64</b>	<b>1,111</b>	<b>31,727</b>					
7CR.10171.15	Caswell	3	US 29 NORTH BOUND	FROM THE ROCKINGHAM COUNTY LINE TO JOINT NORTH OF NC 700	1	1.57	26							49	838	23,948				
					1	0.12	26-76.5									7	128	3,647		
					1	0.46	26										14	246	7,017	
					1	0.26	26-72.5											15	266	7,596
					1	1.61	26		5,121	875			41	50	860	24,558				
					1	0.11	26-76		800	137			6	7	115	3,291				
					1	0.49	26		1,080	185			9	13	262	7,474				
					1	0.21	50.5-72.5								15	265	7,577			
<b>TOTAL FOR MAP NO. 3</b>						<b>5.47</b>			<b>7,001</b>	<b>1,197</b>		<b>56</b>	<b>190</b>	<b>3,322</b>	<b>94,870</b>					
"	"	4	RAMP A	FROM US 29 NB TO SR 1341 (LAW ROAD)	1	0.18	18							4	67	1,901				
					1	0.05	18-38							2	29	821				
					1	0.01	38-73							1	12	326				
<b>TOTAL FOR MAP NO. 4</b>						<b>0.24</b>						<b>7</b>	<b>108</b>	<b>3,048</b>						
"	"	5	RAMP B	FROM SR 1341 (LAW ROAD) TO US 29 NB	1	0.22	18							5	82	2,323				
"	"	6	RAMP C	FROM US 29 NB TO NC 700	1	0.19	18							4	70	2,006				
					1	0.01	18-65							1	9	244				
<b>TOTAL FOR MAP NO. 6</b>						<b>0.20</b>						<b>5</b>	<b>79</b>	<b>2,250</b>						
"	"	7	RAMP D	FROM NC 700 TO US 29 NB	1	0.27	18							6	100	2,851				
"	"	8	US 29 SOUTH BOUND	FROM JOINT NORTH OF NC 700 TO ROCKINGHAM COUNTY LINE	1	0.73	26							31	540	11,135				
					1	0.13	26-79		1,340	229			11	8	141	4,042				
					1	0.46	26		1,056	181			9	14	246	7,017				
					1	0.04	54.5-61								3	47	1,356			
					1	0.20	26-54.5								10	165	4,787			
					1	1.66	26		5,233	895			42	51	886	25,321				
					1	0.11	26-73								7	112	3,227			
					1	0.48	26								15	256	7,322			
<b>TOTAL FOR MAP NO. 8</b>						<b>5.46</b>			<b>7,629</b>	<b>1,305</b>		<b>62</b>	<b>198</b>	<b>3,417</b>	<b>93,564</b>					
"	"	9	RAMP E	FROM US 29 SB TO NC 700	1	0.17	24 - 24.5							5	85	2,419				
"	"	10	RAMP F	FROM NC 700 TO US 29 SB	1	0.02	18-47							1	13	381				
					1	0.25	18							5	92	2,640				
<b>TOTAL FOR MAP NO. 10</b>						<b>0.27</b>						<b>6</b>	<b>105</b>	<b>3,021</b>						
"	"	11	RAMP G	FROM US 29 SB TO SR 1341 (LAW ROAD)	1	0.20	18							4	74	2,112				
					1	0.04	18-70							2	36	1,033				
<b>TOTAL FOR MAP NO. 11</b>						<b>0.24</b>						<b>6</b>	<b>110</b>	<b>3,145</b>						
"	"	12	RAMP H	FROM SR 1341 (LAW ROAD) TO US 29 SB	1	0.02	18-70							1	18	516				
					1	0.22	18							5	81	2,323				
<b>TOTAL FOR MAP NO. 12</b>						<b>0.24</b>						<b>6</b>	<b>99</b>	<b>2,839</b>						
<b>TOTAL FOR PROJ NO. 7CR.10171.15</b>						<b>12.78</b>			<b>14,630</b>	<b>2,502</b>		<b>118</b>	<b>434</b>	<b>7,507</b>	<b>210,330</b>					
<b>GRAND TOTAL</b>						<b>14.86</b>		<b>2,151</b>	<b>14,630</b>	<b>2,502</b>	<b>181</b>	<b>129</b>	<b>498</b>	<b>8,618</b>	<b>242,057</b>					

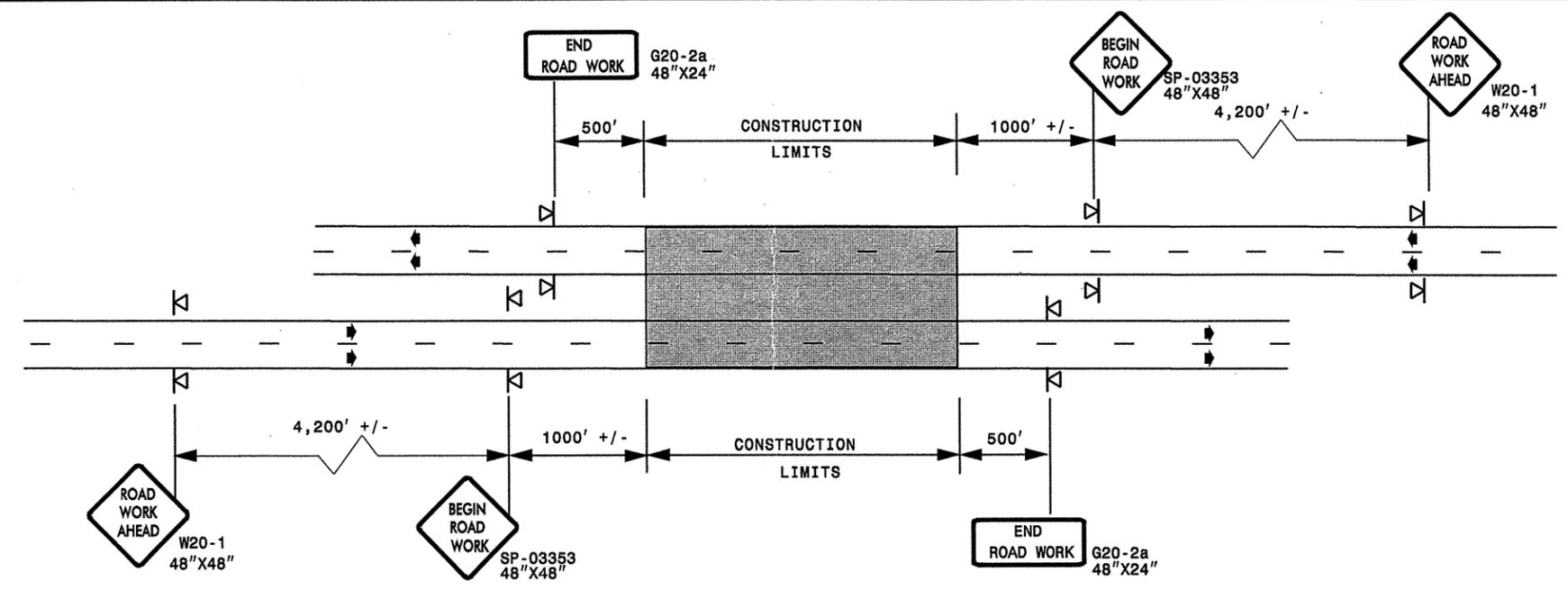
PROJECT NO.	SHEET NO.	TOTAL NO.
7CR.10171.15 & 7CR.10791.15	4	

## THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	4" X 90 M WHITE THERMO LF	4" X 90 M YELLOW THERMO LF	4" X 120 M WHITE THERMO LF	8" X 90 M WHITE THERMO LF	24" X 120 M WHITE THERMO LF	4" WHITE PAINT LF	THERMO STR ARROW 90 M EA	THERMO MERGE LEFT ARROW 90 M EA	SNOW PLOWABLE MARKERS (CRYSTAL/RED) EA
7CR.10791.15	Rockingham	1	US 29 NORTH BOUND	FROM NOVA CHIP JOINT TO THE CASWELL COUNTY LINE	6,645	6,645	1,660						21
		2	US 29 SOUTH BOUND	FROM THE CASWELL COUNTY LINE TO NOVA CHIP JOINT	4,352	4,352	1,090						
<b>TOTAL FOR PROJ NO. 7CR.10791.15</b>					<b>10,997</b>	<b>10,997</b>	<b>2,750</b>						<b>75</b>
					<b>21,994</b>								
7CR.10171.15	Caswell	3	US 29 NORTH BOUND	FROM THE ROCKINGHAM COUNTY LINE TO JOINT NORTH OF NC 700	29,820	29,254	7,320	2,332		2,000			366
"	"	4	RAMP A	FROM US 29 NB TO SR 1341 (LAW ROAD)	1,250	1,250					1		
"	"	5	RAMP B	FROM SR 1341 (LAW ROAD) TO US 29 NB	1,145	1,145							
"	"	6	RAMP C	FROM US 29 NB TO NC 700	1,055	1,055		164	48		1		
"	"	7	RAMP D	FROM NC 700 TO US 29 NB	1,410	1,410							
"	"	8	US 29 SOUTH BOUND	FROM JOINT NORTH OF NC 700 TO ROCKINGHAM COUNTY LINE	29,041	28,715	7,542	2,518		2,000		3	360
"	"	9	RAMP E	FROM US 29 SB TO NC 700	910	910							
"	"	10	RAMP F	FROM NC 700 TO US 29 SB	1,380	1,380							
"	"	11	RAMP G	FROM US 29 SB TO SR 1341 (LAW ROAD)	1,250	1,250							
"	"	12	RAMP H	FROM SR 1341 (LAW ROAD) TO US 29 SB	1,260	1,260							
<b>TOTAL FOR PROJ NO. 7CR.10171.15</b>					<b>68,521</b>	<b>67,629</b>	<b>14,862</b>	<b>5,014</b>	<b>48</b>	<b>4,000</b>	<b>2</b>	<b>3</b>	<b>726</b>
					<b>136,150</b>								
<b>GRAND TOTAL</b>					<b>79,518</b>	<b>78,626</b>	<b>17,612</b>	<b>5,014</b>	<b>48</b>	<b>4,000</b>	<b>2</b>	<b>3</b>	<b>801</b>
					<b>158,144</b>								

**ADVANCE WORK ZONE WARNING SIGNING FOR FREEWAYS (4 LANES OR GREATER)**

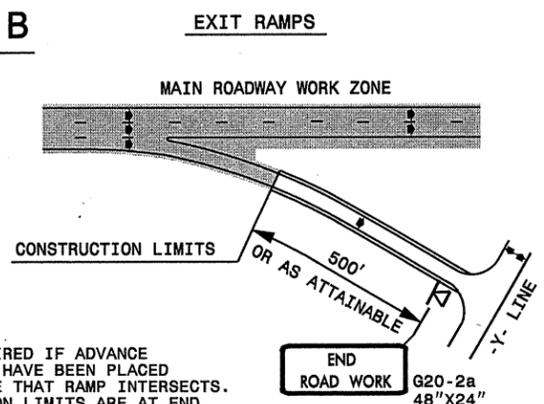
**DETAIL A**



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

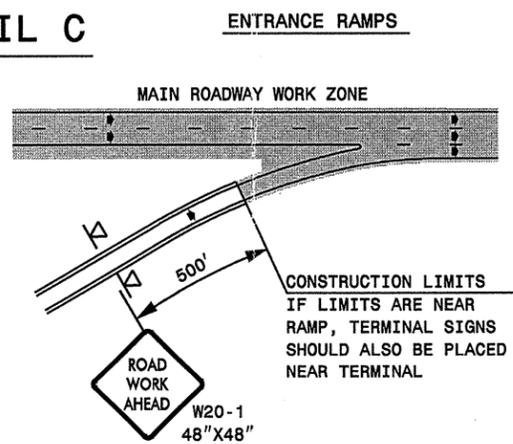
**ROADWAYS INTERSECTING ALONG FREEWAY WORK ZONE (Y-LINES)**

**DETAIL B**

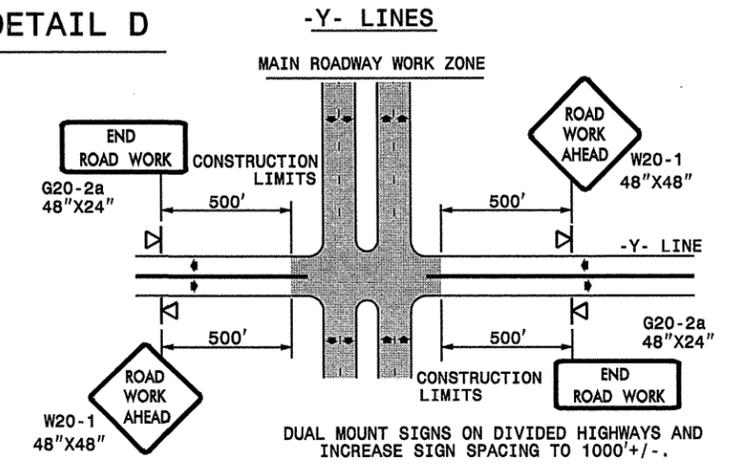


NOTE:  
SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

**DETAIL C**



**DETAIL D**



**DETAIL DRAWING  
FOR FREEWAYS  
WORK ZONE WARNING SIGNS  
(SHORT-DURATION LANE CLOSURES)**

**GENERAL NOTES**

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCE WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE PORTABLE WORK ZONE SIGNS ONLY WITH PORTABLE WORK ZONE SIGN STANDS SPECIFICALLY DESIGNED FOR ONE ANOTHER. PORTABLE WORK ZONE SIGNS MAY BE ROLL UP OR APPROVED COMPOSITE.
- PROVIDE PORTABLE WORK ZONE SIGN STANDS, PORTABLE SIGNS AND SIGN SHEETING WHICH ARE LISTED ON THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCT LIST OR ACCEPTED AS TRAFFIC QUALIFIED BY THE TRAFFIC CONTROL UNIT.
- \*\* TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

**LEGEND**

- ◀ PORTABLE SIGN
- ➔ DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1

APPROVED: _____ DATE: _____	<b>DETAIL DRAWING FOR FREEWAYS WORK ZONE WARNING SIGNS</b>								
SEAL	SCALE: NONE								
	DATE: _____								
	DESIGN BY: _____								
	REVIEWED BY: _____								
	<table border="1"> <thead> <tr> <th colspan="2">REVISIONS</th> </tr> </thead> <tbody> <tr> <td>7-98</td> <td>10/01</td> </tr> <tr> <td>10-98</td> <td>03/04</td> </tr> <tr> <td>01/01</td> <td>11/04</td> </tr> </tbody> </table>	REVISIONS		7-98	10/01	10-98	03/04	01/01	11/04
REVISIONS									
7-98	10/01								
10-98	03/04								
01/01	11/04								

26-OCT-2007 16:21 \\DOT\DFSR001\GROUPS-WZTCCC\design\group4\resur\fac\sign\2007\div07\c201944\_7cr107915etc\_caswrock\_us29\c201944\_7cr107915etc\_freeway4lanesgreat\_july2006.dgn AT WZTCCC237502 pseymore

