

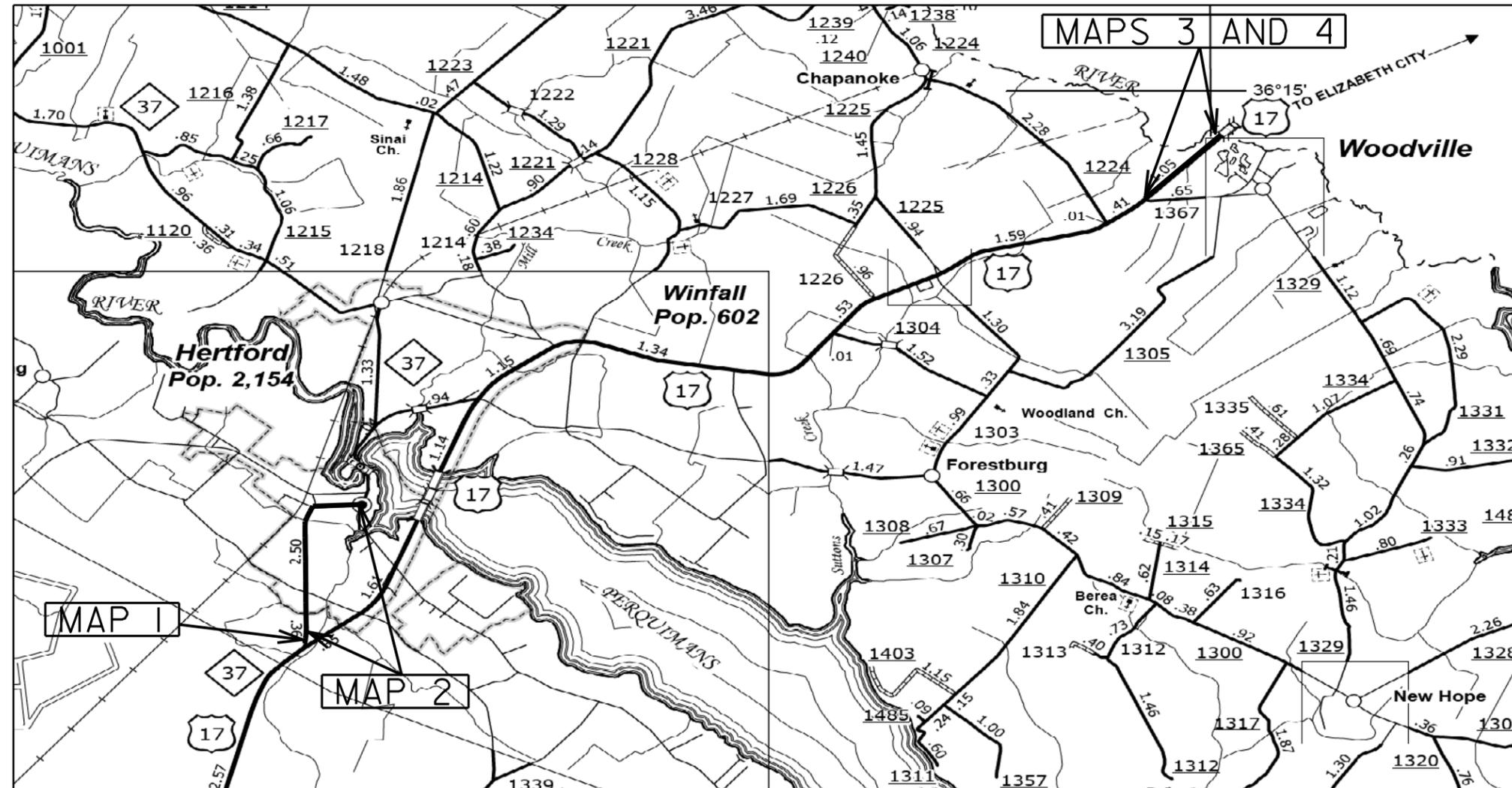
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	1CR.10721.9, ETC.	1	5
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
1CR.10721.9		MAP 1	
1CR.10721.9		MAP 2	
1CR.10721.10		MAP 3	
1CR.10721.11		MAP 4	

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**PERQUIMANS COUNTY**

LOCATION: MAP 1 US 17 BUS. FROM US 17 TO STA. 20+75  
 MAP 2 US 17 BUS. FROM STA. 20+75 TO HARVEY POINT RD. (SR 1336)  
 MAP 3 US 17 N FROM OLD US 17 RD. (SR 1367) TO PASQUOTANK CO. LINE  
 MAP 4 US 17 S FROM PASQUOTANK CO. LINE TO OLD US 17 RD. (SR 1367)

TYPE OF WORK: MILLING AND RESURFACING



CONTRACT: DA00235 WBS ELEMENT: ICR.10721.9, ETC.

**NOT TO SCALE**

PROJECT LENGTH

LENGTH OF ROADWAY PROJECT ICR.10721.9 MAP 1 = 0.39 MI.  
 LENGTH OF ROADWAY PROJECT ICR.10721.9 MAP 2 = 1.47 MI.  
 LENGTH OF ROADWAY PROJECT ICR.10721.11 MAP 3 = 1.08 MI.  
 LENGTH OF ROADWAY PROJECT ICR.10721.11 MAP 4 = 1.08 MI.

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**  
 113 Airport Dr., Edenton NC, 27932

2012 STANDARD SPECIFICATIONS

LETTING DATE:

W.B. HOBBS, P.E.  
 DIVISION PROJECT MANAGER

C.E. SLACHTA  
 DIVISION PROPOSALS ENGINEER

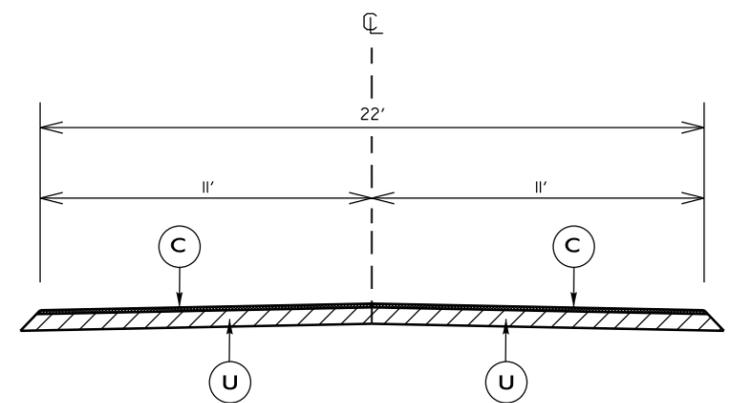
**DIVISION OF HIGHWAYS**  
**STATE OF NORTH CAROLINA**



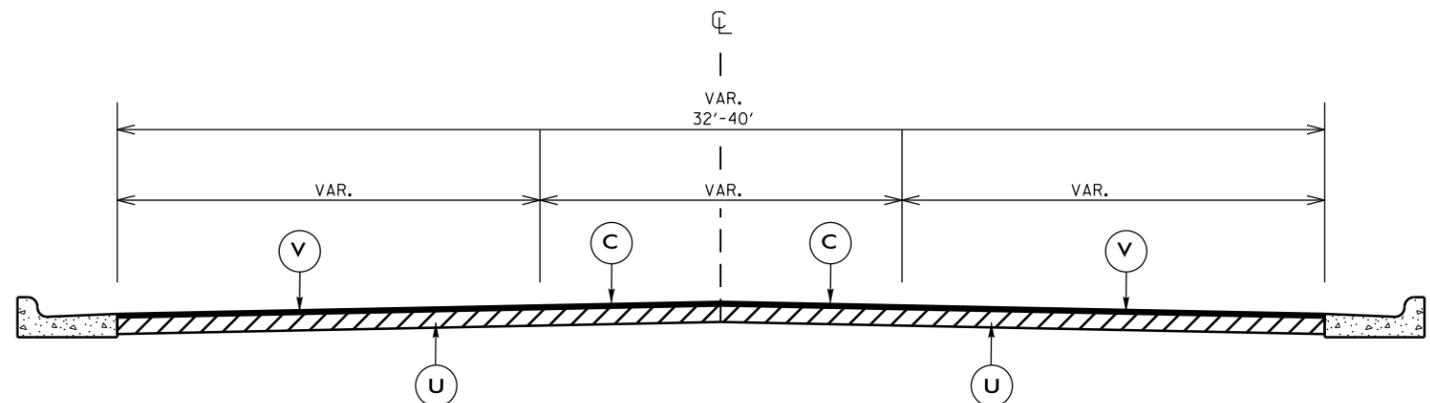
PAVEMENT SCHEDULE

C	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
U	EXISTING PAVEMENT.
V	MILLING BITUMINOUS PAVEMENT. 1½" DEPTH.

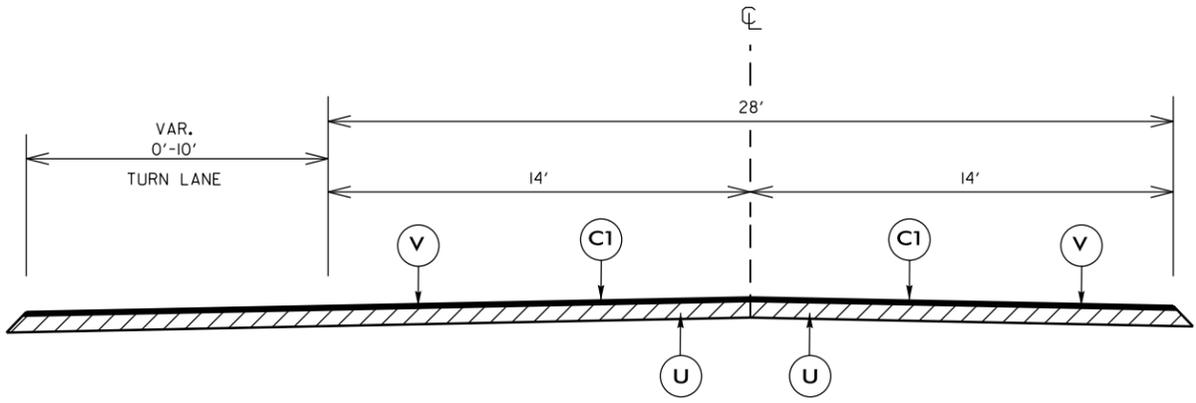
NOTES:  
 \*ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.  
 \*PERMANENT PAVEMENT MARKINGS TO BE PERFORMED BY OTHERS.  
 \*CONTRACTOR SHALL PERFORM TEMPORARY PAVEMENT MARKINGS AT MULTILANE FACILITIES.  
 \*SHOULDERS TO BE CONSTRUCTED BY OTHERS.



TYPICAL SECTION NO. 1  
 USE WITH MAP 1



TYPICAL SECTION NO. 2  
 USE WITH MAP 2



TYPICAL SECTION NO. 3  
 USE WITH MAPS 3 AND 4

24-FEB-2015 09:47  
 C:\Users\jbochner\Documents\CURRENT PROJECTS\FIVE YEAR RESURFACING\FY15-16\Per-quoms\DA00235.d01.psh2.dgn  
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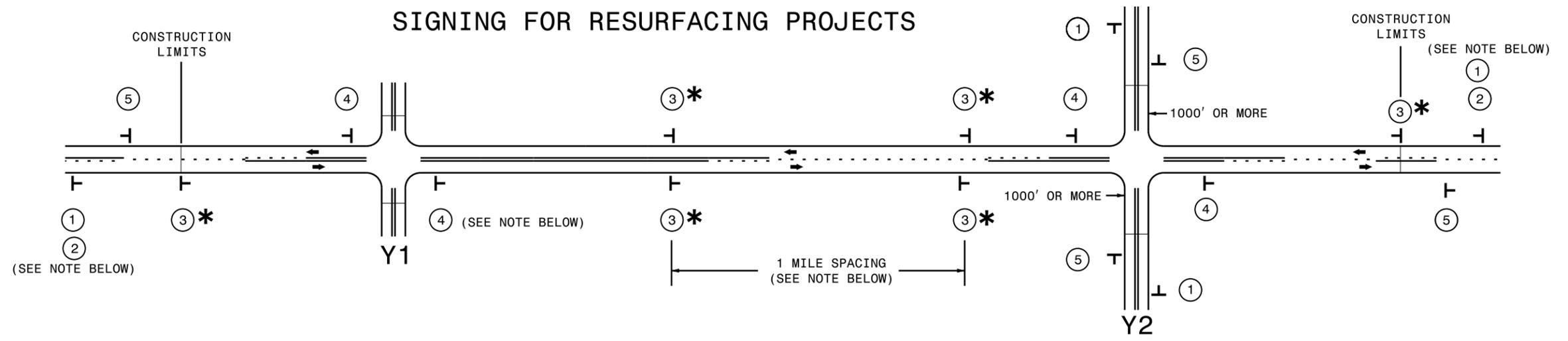
NTS

PROJECT NO.	SHEET
1CR.10721.9, ETC.	3

## SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	MOBILIZATION LS	1½" MILLING SY	INCIDENTAL MILLING SY	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, S9.5C TONS	ASPHALT BINDER FOR PLANT MIX TONS	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	TEMPORARY TRAFFIC CONTROL LS	4" WHITE PAINT LF	4" YELLOW PAINT LF	24" WHITE PAINT LF	PAINT MSG SCHOOL EA	PAINT LT ARROW EA	PAINT STR ARROW EA	INDUCTIVE LOOP SAWCUT LF	
1CR.10721.9	Perquimans	1	US 17 BUS. PERQ.	FROM US 17 TO STA. 20+75.00	1	2	2WU	NO	NO	0.39	22	1		200	472		28			1	4,150	4,150						
1CR.10721.9	Perquimans	2	US 17 BUS. PERQ.	FROM STA. 20+75.00 TO SR 1336	2	3	2WD	NO	NO	1.47	32-40	*	32,500		2,828		170	14	4	*	15,500	15,500	700	12	25			400
1CR.10721.10	Perquimans	3	US 17 NBL	FROM SR 1367 TO PASQ. CO. LINE	3	2	MD	NO	NO	1.08	28	*	17,741			1,950	115			*	7,126	5,700			2		4	
1CR.10721.11	Perquimans	4	US 17 SBL	FROM PASQ. CO. LINE TO SR 1367	3	2	MD	NO	NO	1.08	28	*	17,741			1,950	115			*	7,126	5,700			3		7	
<b>GRAND TOTAL</b>										<b>4.02</b>		<b>1</b>	<b>67,982</b>	<b>200</b>	<b>3,300</b>	<b>3,900</b>	<b>428</b>	<b>14</b>	<b>4</b>	<b>1</b>	<b>33,902</b>	<b>31,050</b>	<b>700</b>	<b>12</b>	<b>30</b>	<b>11</b>	<b>400</b>	

## SIGNING FOR RESURFACING PROJECTS



LEGEND	
T	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

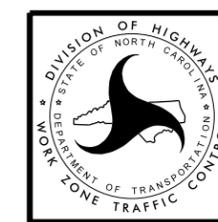
### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	MAINLINE (-L-) SIGNING	-Y- LINE SIGNING
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">①</div> <div style="margin-left: 10px;"> <p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> </div> </div>	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">②</div> <div style="margin-left: 10px;"> <p>#2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)</p> </div> </div>	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol>
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">③*</div> <div style="margin-left: 10px;"> <p>PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.</p> </div> </div>	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">④</div> <div style="margin-left: 10px;"> <p>THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</p> </div> </div>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">   <small>W20-1 48" X 48"</small> </div> <div style="text-align: center;">   <small>W20-7 A 48" X 48"</small> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">⑤</div> <div style="margin-left: 10px;"> <p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p> </div> </div>		

### \* SIGNING FOR ASPHALT SURFACE TREATMENTS (ONLY)

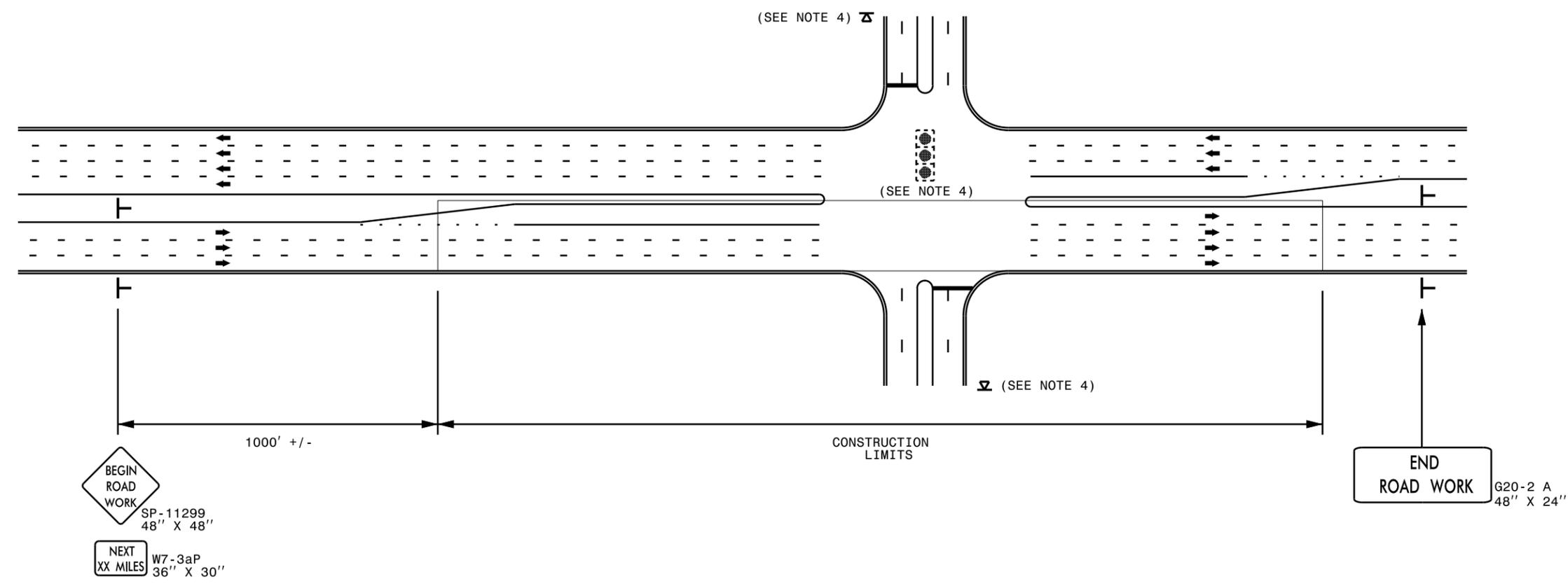
SUBSTITUTE LOW/SOFT SHOULDER SIGNS BY ALTERNATING THE FOLLOWING TWO SIGNS: STARTING WITH "UNMARKED PAVEMENT AHEAD" (SP 06026) FOLLOWED BY "LOOSE GRAVEL" (W8-7).



**RESURFACING  
ADVANCE WARNING SIGNS  
FOR  
RURAL AND SUBURBAN  
2 LANE ROADWAYS**

29-JAN-2015 15:23  
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## URBAN / SUBURBAN WORKZONES



### NOTES:

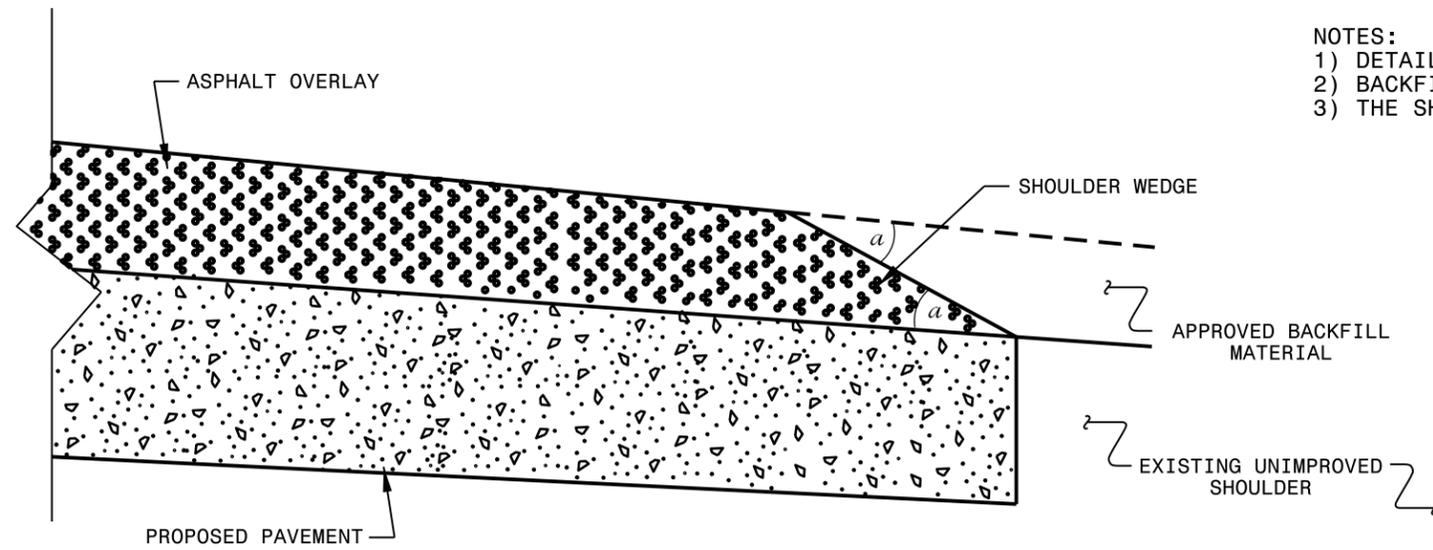
- 1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
- 3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
- 4) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.
- 5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
- 6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
- 7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 8) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND	
T	STATIONARY SIGN
➔	DIRECTION OF TRAFFIC FLOW

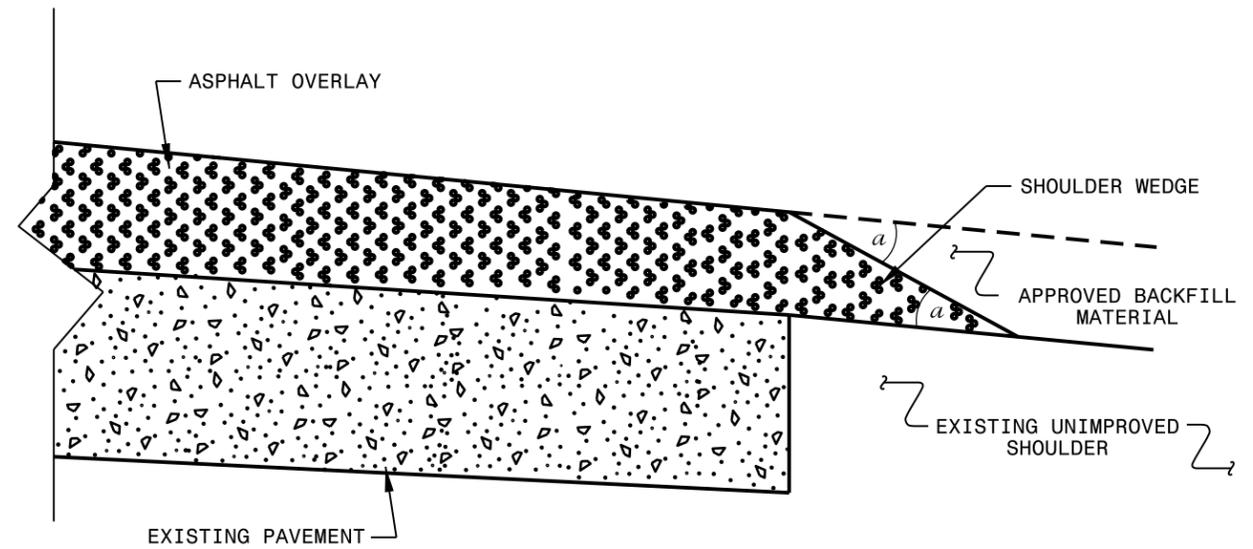
	<p><b>RESURFACING ADVANCE WARNING SIGNS FOR URBAN / SUBURBAN FACILITIES</b></p>
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23-JAN-2015 15:25  
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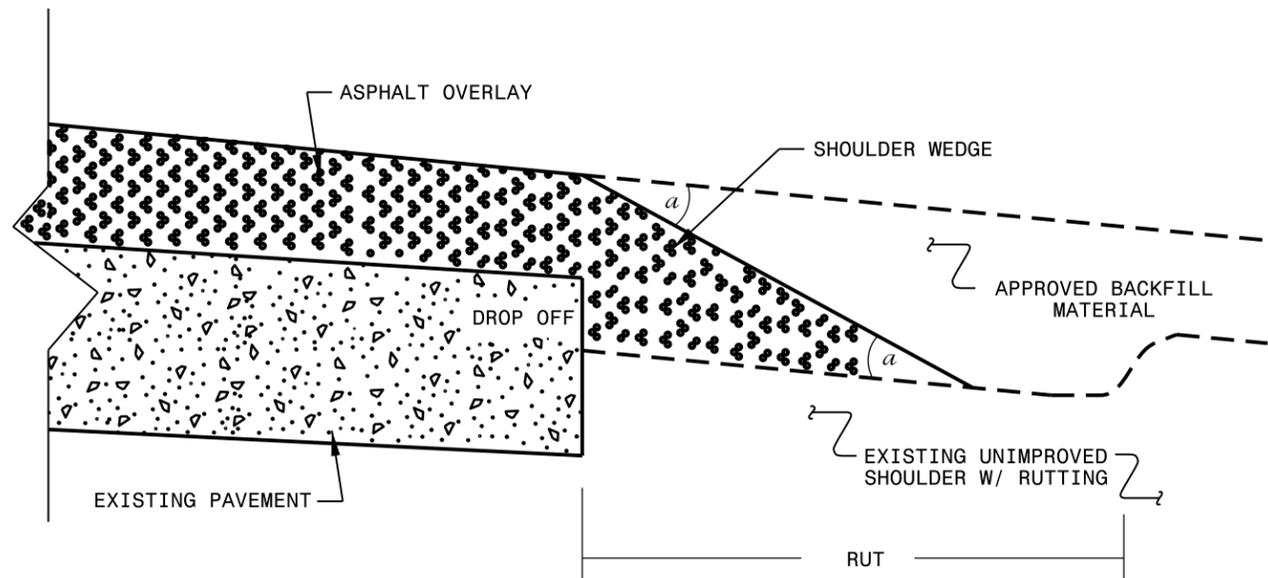
- NOTES:  
 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.  
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.  
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Projects w/ Widening or  
 with Existing Paved Shoulder having no dropoffs)



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Projects w/ NO Widening)



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Adjacent to  
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950	FAX 919-250-4119
<b>SHOULDER WEDGE DETAILS</b>	
ORIGINAL BY: T.SPELL	DATE: 7-19-11
MODIFIED BY:	DATE: 10/16/12
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn	