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SR 2483

WILKESBORO
POP. 3,188

YADKIN

RIVER

421
BYP

Buck

Shadey Grove
Church

Mt. Carmel
Ch.

North Wilkesboro
Satellite

Oakwood

Moravian

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1174

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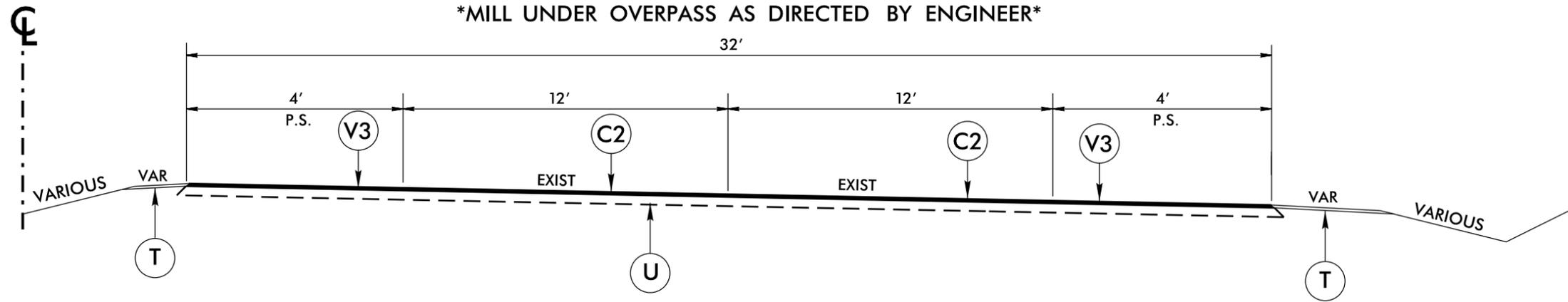
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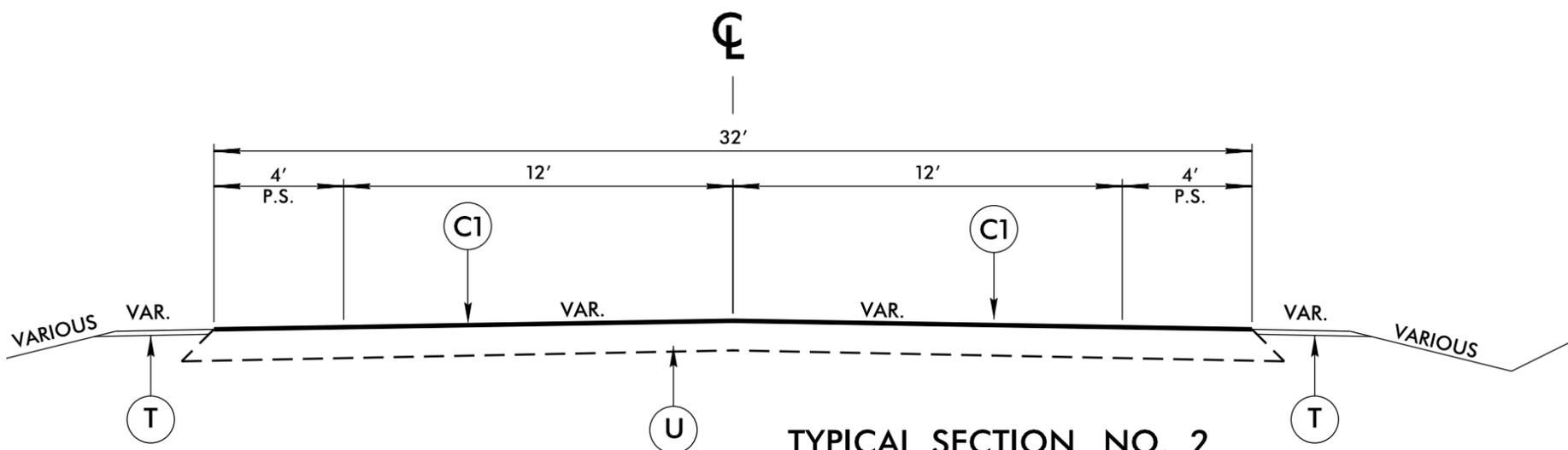
MILL AT LOCATIONS AS DIRECTED BY ENGINEER
 MILL UNDER OVERPASS AS DIRECTED BY ENGINEER



TYPICAL SECTION NO. 1

- MAP 1 – US 421 NBL FROM MP 282 TO SR 2461 *INCLUDE ON/OFF RAMPS AT EXIT 282*
- MAP 2 – US 421 NBL FROM SR 2461 TO ECL WILKESBORO
- MAP 3 – US 421 NBL FROM ECL WILKESBORO TO 285' N OF MP 286 *INCLUDE ON/OFF RAMPS AT EXITS 285&286*
- MAP 4 – US 421 SBL FROM 285' N OF MP 286 TO ECL WILKESBORO *INCLUDE ON/OFF RAMPS AT EXITS 285&286*
- MAP 5 – US 421 SBL FROM ECL WILKESBORO TO SR 2461
- MAP 6 – US 421 SBL FROM SR 2461 TO MP 282 *INCLUDE ON/OFF RAMPS AT EXIT 282*

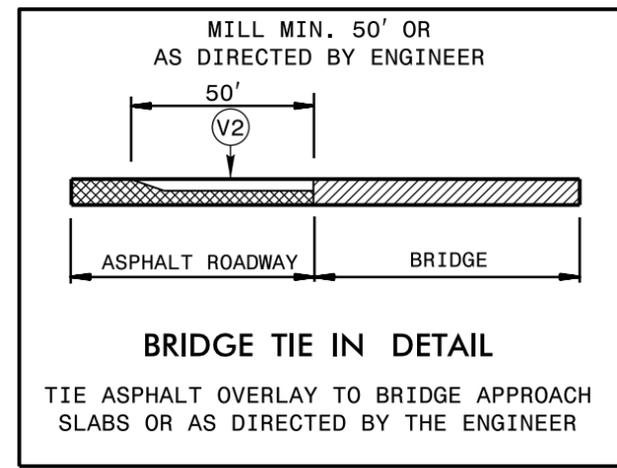
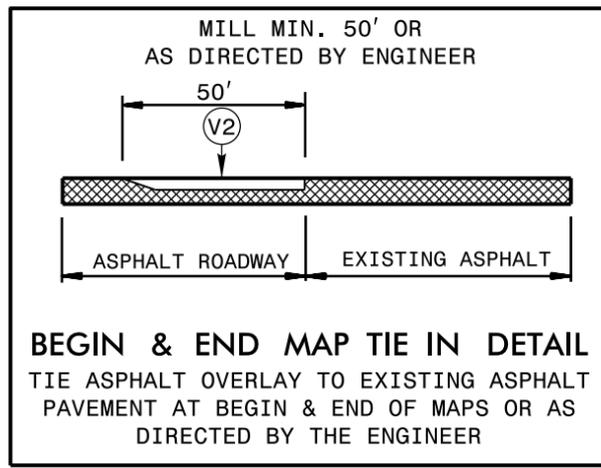
NOTES: Map 1 – Mill Full Width 0"-3" at On-Ramp from NC 115 to End of Conc. Island.
 Map 1 – Mill Full Width 0"-3" at Loop from NC 115 to End of C&G.
 Map 6 – Mill Full Width 0"-3" at On-Ramp from NC 115 to End of Conc. Island.
 Map 6 – Mill Full Width 0"-3" at Loop from NC 115 to End of Conc. Island.



TYPICAL SECTION NO. 2

MAP 2 – NC 16 FROM SR 2486 TO NC 18

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
U	EXISTING PAVEMENT
T	SHOULDER RECONSTRUCTION
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 0" - 3"
V2	INCIDENTAL MILLING
V3	MILLED RUMBLE STRIPS (ASPHALT CEMENT)



WILKES COUNTY
PRIMARY RESURFACING

DIVISION II

REVISIONS	INT.	DATE

SCALE: N/A DATE: 6/2015

PREPARED BY: J. L. LAWS
 REVIEWED BY: _____
 REVIEWED BY: _____

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN



PROJECT NO.	SHEET NO.	TOTAL NO.
2016CPT.11.08.10971.1		

SUMMARY OF QUANTITIES

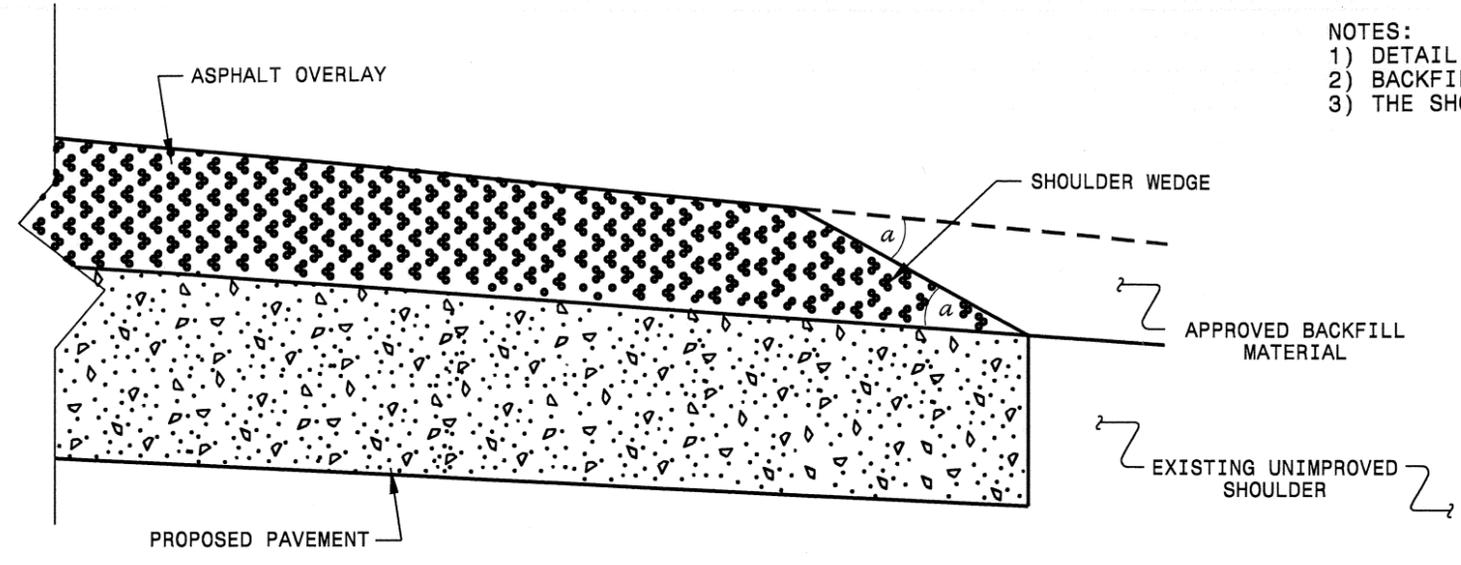
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH M	WIDTH FT	BORROW EXCAVATION CY	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SM	0" TO 3" MILLING SY	INCIDENTAL MILLING SY	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, S9.5C TONS	ASPHALT BINDER FOR PLANT MIX TONS	MILLED RUMBLE STRIPS (ASPHALT CEMENT CONCRETE) LF	ADI. OF CATCH BASIN EA	ADI. OF MANHOLES EA	SEED & MULCHING AC	PAVED TRENCHING (1,2") LF	UNPAVED TRENCHING (1,2") LF	JUNCTION BOX (STANDARD SIZE) EA	INDUCTIVE LOOP SAWCUT LF	LEAD-IN CABLE (14-2) LF
2016CPT.11.08.10971.1	Wilkes	1	US 421 NBL	FROM MP 282 TO SR 2461	1	2	MD	NO	NO	1.76	32	352	75	3.52	3,700	1,600	3,649	215	18,600	2	1	1.71						
2016CPT.11.08.10971.1	Wilkes	2	US 421 NBL	FROM SR 2461 TO ECL WILKESBORO	1	2	MD	NO	NO	1.07	32	214	50	2.14		1,500	2,162	128	11,299			1.04						
2016CPT.11.08.10971.1	Wilkes	3	US 421 NBL	ECL WILKESBORO TO 285' N OF MP 286	1	2	MD	NO	NO	1.23	32	246	50	2.46		1,900	3,306	195	12,989			1.19						
2016CPT.11.08.10971.1	Wilkes	4	US 421 SBL	FROM 285' N OF MP 286 TO ECL WILKESBORO	1	2	MD	NO	NO	1.23	32	246	50	2.46		1,900	3,289	194	12,989				25.00	50.00	1.00	170.00	50.00	
2016CPT.11.08.10971.1	Wilkes	5	US 421 SBL	ECL WILKESBORO TO SR 2461	1	2	MD	NO	NO	1.11	32	222	50	2.22		1,030	2,207	130	11,722			1.08						
2016CPT.11.08.10971.1	Wilkes	6	US 421 SBL	FROM SR 2461 TO MP 282	1	2	MD	NO	NO	1.76	32	352	75	3.52	4,250	1,500	3,834	226	18,586			1.71						
2016CPT.11.08.10971.1	Wilkes	7	NC 16	FROM SR 2486 TO NC 18	2	2	2WU	NO	NO	1.76	32	352	75	3.52		465	3,089		185			1.71						
TOTAL FOR PROJ NO. 2016CPT.11.08.10971.1										9.92		1,984	425	19.84	7,950	9,895	3,089	18,447	1,273	86,185	2	1	8.44	25.00	50.00	1.00	170.00	50.00
GRAND TOTAL										9.92		1,984	425	19.84	7,950	9,895	3,089	18,447	1,273	86,185	2	1	8.44	25.00	50.00	1.00	170.00	50.00

PROJECT NO.	SHEET NO.	TOTAL NO.
2016CPT.11.08.10971.1		

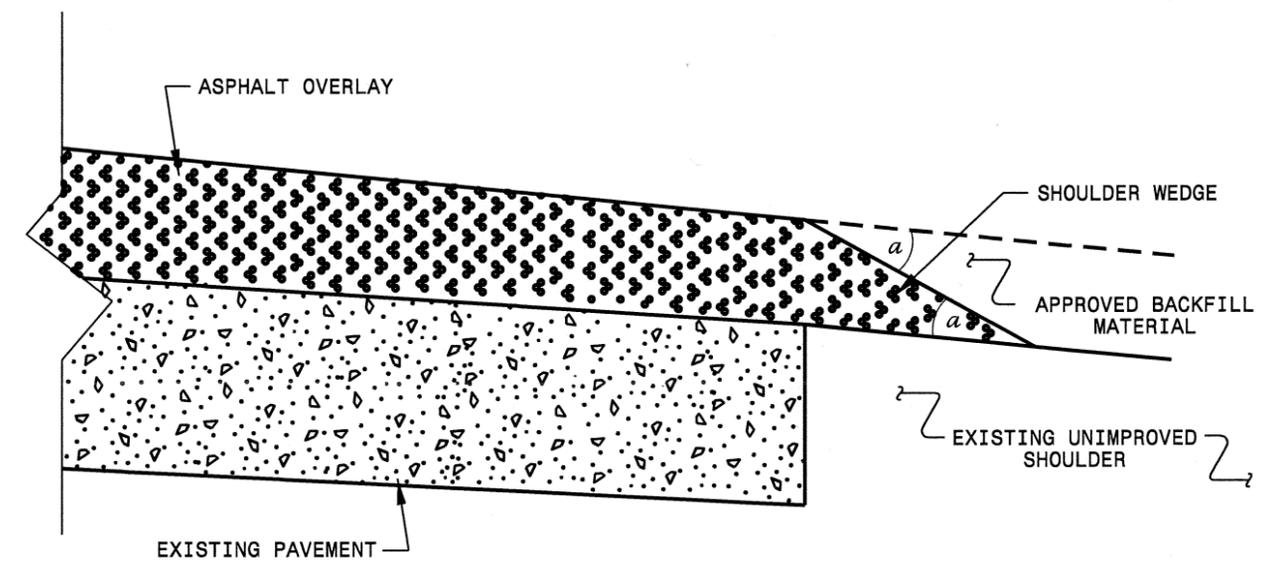
THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4810000000-E		4815000000-E		4820000000-E		4825000000-E	4835000000-E	4840000000-N		4845000000-N		4900000000-N	4905000000-N		
										WRK ZONE ADVANCE/GENERAL WARNING SIGNS	TEMPORARY TRAFFIC CONTROL	4" WHITE PAINT	4" YELLOW PAINT	6" WHITE PAINT	6" YELLOW PAINT	8" WHITE PAINT	8" YELLOW PAINT	12" WHITE PAINT	24" WHITE PAINT	PAINT M&G ONLY	PAINT M&G SCHOOL	PAINT RT ARROW	PAINT STR & LT ARROW	PAINT STR ARROW	PAINT LT ARROW	CRYSTAL & RED MARKERS	SNOW PLOWABLE MARKERS
										SF	LS	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA		
2016CPT.11.08.10971.1	Wilkes	1	US 421 NBL	FROM MP 282 TO SR 2461	1	2	MD	1.76	32	144	1.00			28,582	23,000	80		1,400	36	16		4	4	6	46	117	
2016CPT.11.08.10971.1	Wilkes	2	US 421 NBL	FROM SR 2461 TO ECL WILKESBORO	1	2	MD	1.07	32	88	*			17,377	13,640	80		900			2	2		30	71		
2016CPT.11.08.10971.1	Wilkes	3	US 421 NBL	ECL WILKESBORO TO 285' N OF MP 286	1	2	MD	1.23	32	104	*			26,124	22,622	80		2,050			2		12	2	66	82	
2016CPT.11.08.10971.1	Wilkes	4	US 421 SBL	FROM 285' N OF MP 286 TO ECL WILKESBORO	1	2	MD	1.23	32	120	*			19,975	15,000	160		2,300	40		2	2	6	2	73	82	
2016CPT.11.08.10971.1	Wilkes	5	US 421 SBL	ECL WILKESBORO TO SR 2461	1	2	MD	1.11	32	80	*			18,026	11,833			600					6		16	74	
2016CPT.11.08.10971.1	Wilkes	6	US 421 SBL	FROM SR 2461 TO MP 282	1	2	MD	1.76	32	136	*			28,582	23,310	80		600		16		4		6	4	30	117
2016CPT.11.08.10971.1	Wilkes	7	NC 16	FROM SR 2486 TO NC 18	2	2	2WU	1.76	32	256	*	37,875	38,224			150		100		12						120	
TOTAL FOR PROJ NO. 2016CPT.11.08.10971.1								9.92		928	1	37,875	38,224	138,666	109,405	480	150	7,850	176	32	12	14	8	36	8	261	663
												76,099		248,071		630			44		66						
GRANDTOTAL								9.92		928	1	37,875	38,224	138,666	109,405	480	150	7,850	176	32	12	14	8	36	8	261	663
												76,099		248,071		630			44		66						

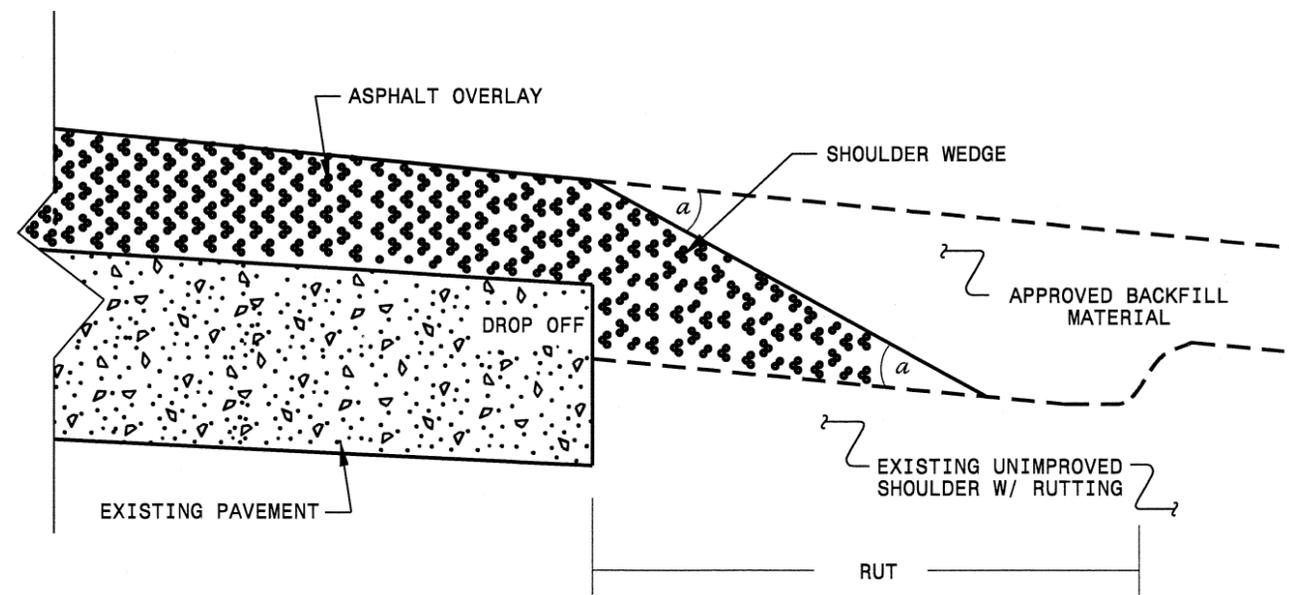
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)



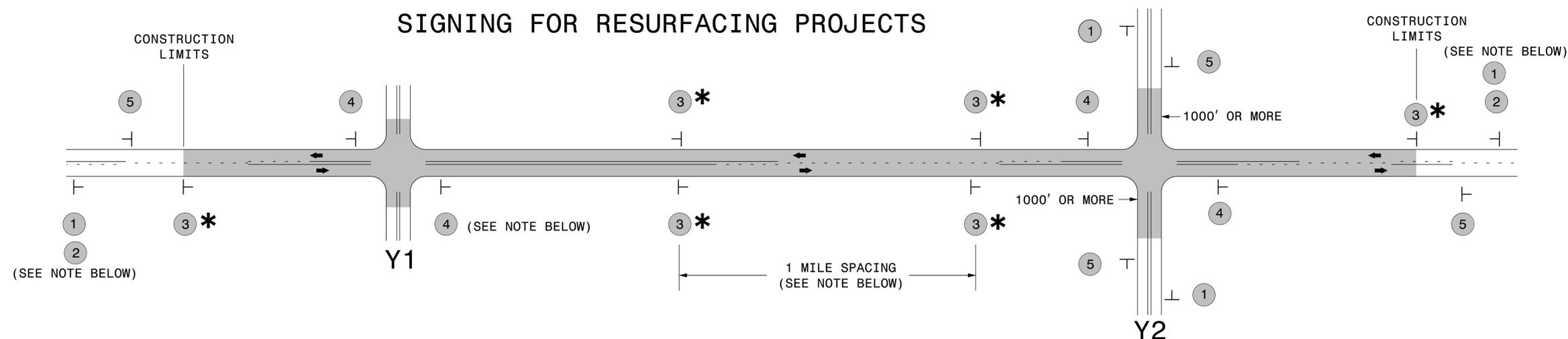
SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950 FAX 919-250-4119	
SHOULDER WEDGE DETAILS	
ORIGINAL BY: T.SPELL	DATE: 7-19-11
MODIFIED BY:	DATE: 10/18/12
CHECKED BY:	DATE:
FILE SPEC.: s:\user\detailed\stand\shoulderwedgedetail.dgn	

SYSTEMS CONSULTANTS

SIGNING FOR RESURFACING PROJECTS



LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION		
1 2		<p style="text-align: center;">NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p style="text-align: center;">WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>W20-1 48" X 48"</p> </div> <div style="text-align: center;"> <p>W20-7 A 48" X 48"</p> </div> </div> <p style="text-align: center;">PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
3 *		
4		
5		

* SIGNING FOR ASPHALT SURFACE TREATMENTS (ONLY)

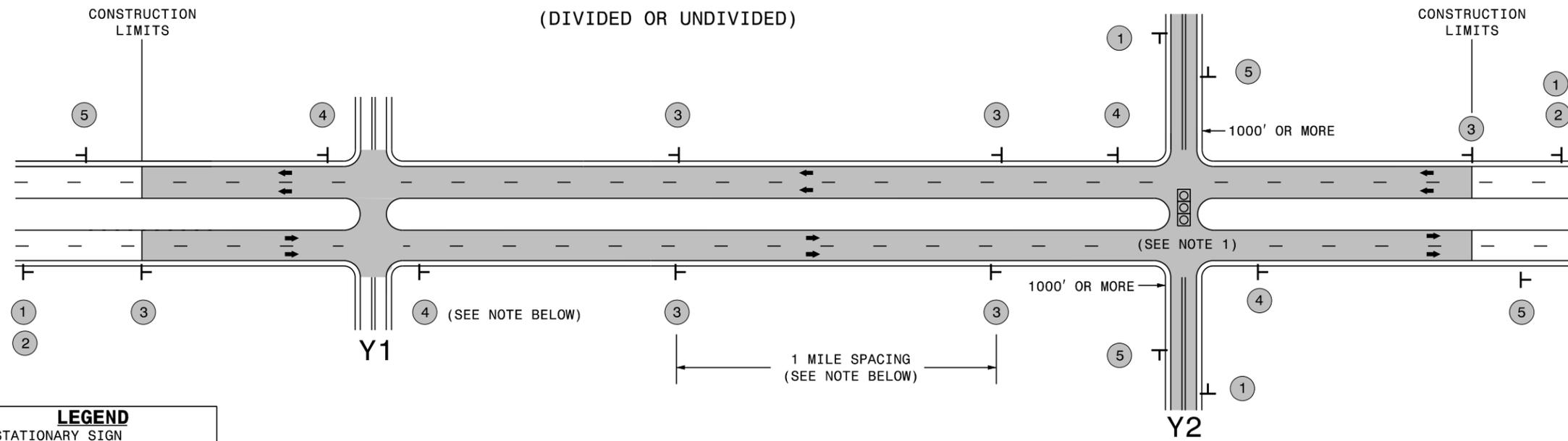
SUBSTITUTE LOW/SOFT SHOULDER SIGNS BY ALTERNATING THE FOLLOWING TWO SIGNS:
STARTING WITH "UNMARKED PAVEMENT AHEAD" (SP 06026) FOLLOWED BY "LOOSE GRAVEL" (W8-7).



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

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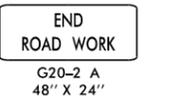
SIGNING FOR RURAL AND SUBURBAN MULTI-LANE ROADWAYS WITH SHOULDER SECTIONS (DIVIDED OR UNDIVIDED)



LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

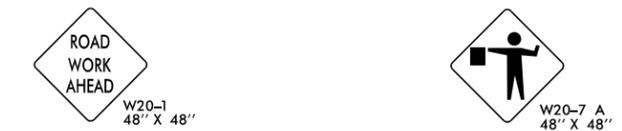
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION		
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">1</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">2</div> </div>		<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <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 style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">3</div>		<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 style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">4</div>		<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 style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">5</div>		<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>

NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

- 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE
- 2) SUBDIVISION ROADS
- 3) DEAD END ROADS

WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.



PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.

NOTES:

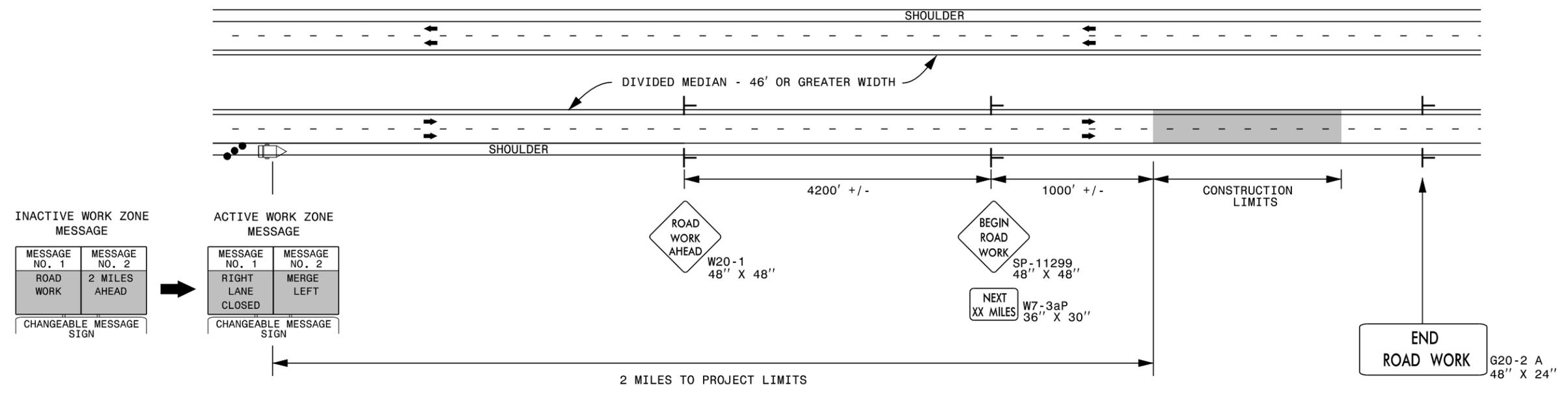
- 1) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.



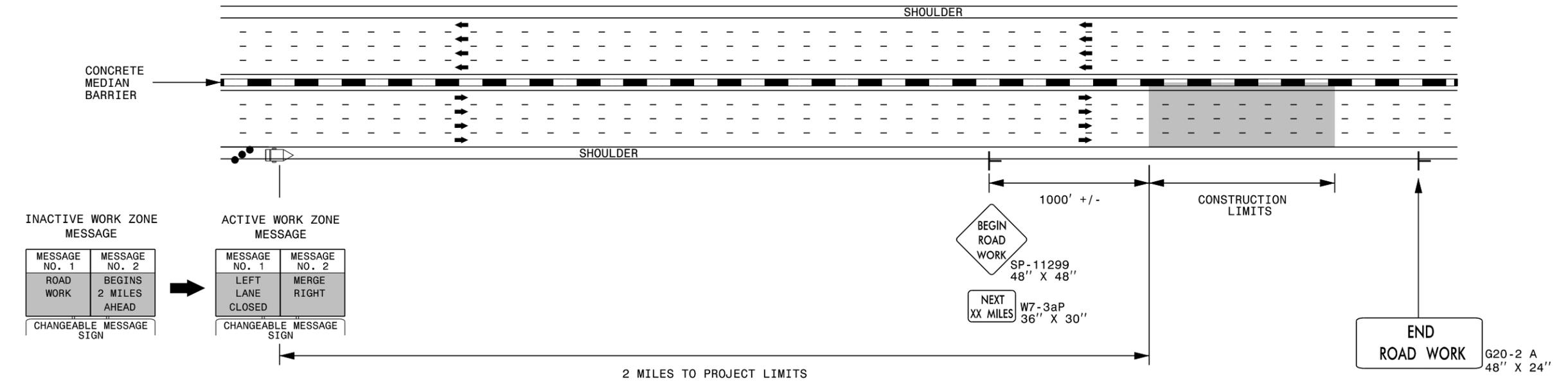
RESURFACING ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN MULTI-LANE ROADWAYS W/ SHOULDER SECTIONS (DIVIDED OR UNDIVIDED)

2/24/2014 S:\TMU\WZTC\Resurfacing\2013Documents\New_Procedures_05_09_2013\Resurfacing_AdvWarn_UrSu_Shldr.dgn User:rmgarrrett

DIVIDED MEDIANS WITH WIDTHS 46' OR GREATER



DIVIDED MEDIANS WITH WIDTHS LESS THAN 46' OR WITH PERMANENT MEDIAN BARRIER



NOTES:

- 1) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 6' AS MEASURED FROM THE EDGE OF PAVEMENT.
- 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) FOR MEDIAN WIDTHS LESS THAN 46' (MEASURED EDGELINE TO EDGELINE) USE THE BOTTOM DRAWING.
- 4) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 5) INSTALL "ROAD WORK AHEAD" (W20-1) ALONG ENTRANCE RAMP 500' PRIOR TO RAMP TERMINAL, AND "END ROAD WORK" (G20-2a) AT THE END OF EXIT RAMP WITHIN THE WORK ZONE.
- 6) 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 AND WITH DIVIDED MEDIANS OF 46' OR GREATER. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

- CHANGEABLE MESSAGE SIGN (CMS)
- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW
- TRAFFIC DRUM



**RESURFACING ADVANCE
WARNING SIGNS FOR
HIGH SPEED FACILITIES
≥ 60 MPH**

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