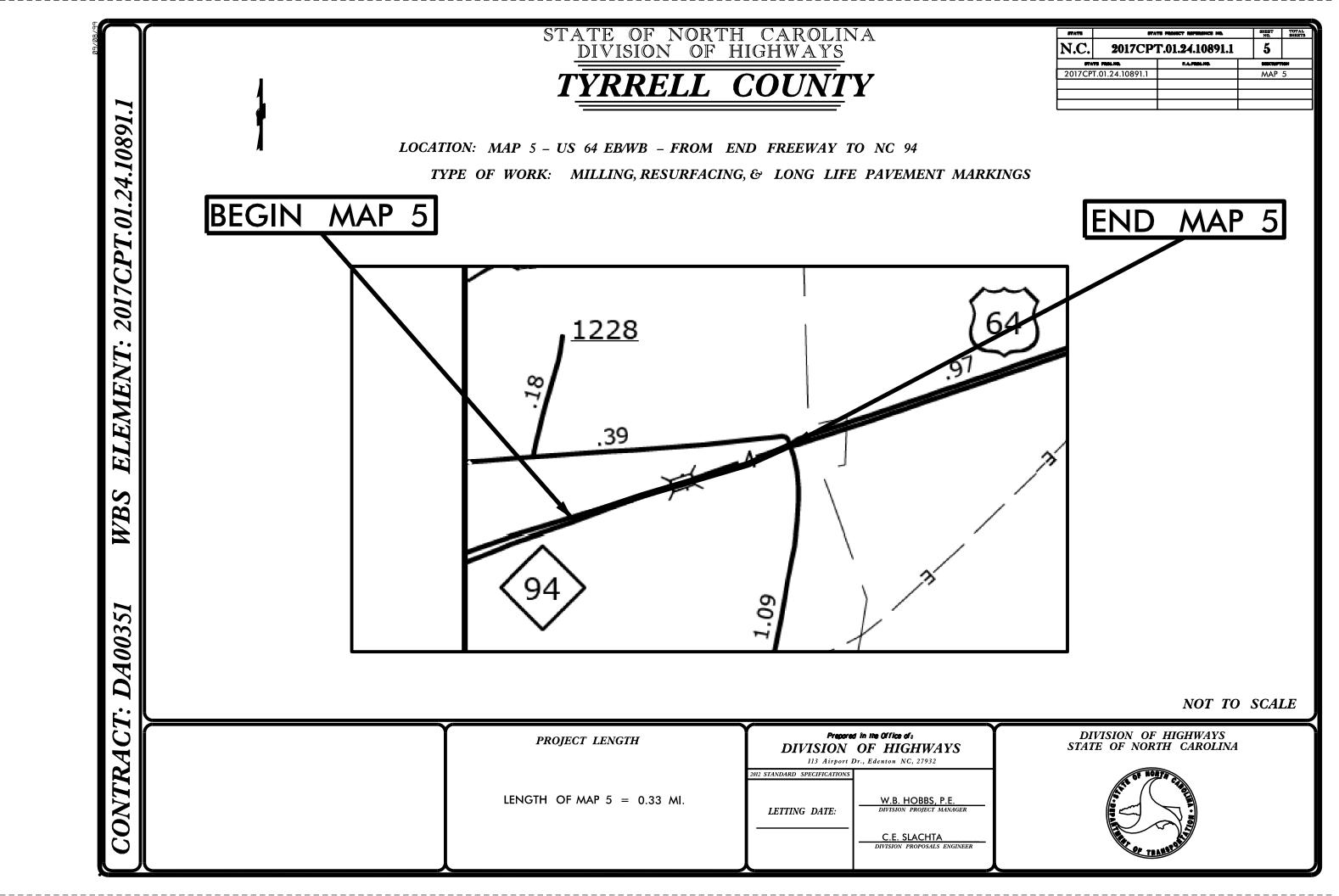
66/80/60	00351 WBS ELEMENT: 2017CPT.01.24.10941.1	BEGIN	LOCATION: MAP 1 - US 64 EB - ALLIGOOD ROTYPE OF WORK: MILLING, RESURFACING MAP 1 1310 1310	OAD TO TYRRELL COUNTY LINE	REVISED 6/8/2017 C & LONG LIFE PAVEMENT MARKINGS END MAP 1
	r: D40				NOT TO SCALE
	CONTRAC		PROJECT LENGTH LENGTH OF MAP 1 = 1.31 MI.	Prepared in the Office of 8 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

DA00351 WBS ELEMENT: 2017CPT.01.24.10941.1	END MAP 2	Pop. 268	COUNTY OUNTY LINE TO ALLIGOOD ROAD	REVISED 6/8/2017 BEGIN MAP 2 BEGIN MAP 2
T:		~	—————————————————————————————————————	NOT TO SCALE
CONTRAC		PROJECT LENGTH LENGTH OF MAP 2 = 1.31 MI.	DIVISION OF HIGHWAYS 113 Airport Dr., Edenton NC, 27932 2012 STANDARD SPECIFICATIONS W.B. HOBBS, P.E. DIVISION PROJECT MANAGER C.E. SLACHTA DIVISION PROPOSALS ENGINEER	DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

1351 WBS ELEMENT: 2017CPT.01.24.10891.1	BEGIN MAP 3	TYRRELL (2) TION: MAP 3 - US 64 EB - FROM WASH EXPE OF WORK: MILLING, RESURFACING 1201 1201 1117 94 1116 23 36 125	IGHWAYS COUNTY INGTON COUNTY LINE TO END ING. OPEN GRADE FRICTION COURSE Travis 15 SCUPGERNONG V	
: DA003;		ζ Ot. T uTK ₍₍		NOT TO SCALE
CONTRACI		PROJECT LENGTH LENGTH OF MAP 3 = 5.77 MI.	Prepored in the Office of 8 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

ELEMENT: 2017CPT.01.24.10891.1	TYRRELL (TION: MAP 4 - US 64 WB - FROM END EXPE OF WORK: MILLING, RESURFACING Bay 1111 94	FREEWAY TO WASHINGTON COUNTY S, OPEN GRADE FRICTION COURSE & Travis 94 94 94 96 Travis	N.C. 2017CPT.01.2 CONTROLLED CONTROLLED	MAP 4
CONTRACT: DA00351 WB	PROJECT LENGTH LENGTH OF MAP 4 = 5.77 MI.	WL	DIVISION OF HIGH	NOT TO SCALE SHWAYS CAROLINA



		PROJECT REFERENCE NO.	SHEET NO.
	NOTES:	2017CPT.01.24.10891.1, ETC.	6
PAVEMENT SCHEDULE			

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 0.75" OPEN GRADE ASPHALT FRICTION COURSE, TYPE FC-1 MODIFIED, AT AN AVERAGE RATE OF 90 LBS. PER SQ. YD.
V1	MILLING BITUMINOUS PAVEMENT. 1.5" IN DEPTH.
U	EXISTING PAVEMENT.

*ALL PAVED S.R. ROADS OR RAMPS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER

*INCIDENTAL MILLING INCLUDES ALL BUTT JOINTS AND RAMPS WHERE CURB AND GUTTER IS PRESENT

*EDGES, PAVEMENT WIDENING, INTERSECTIONS, AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES

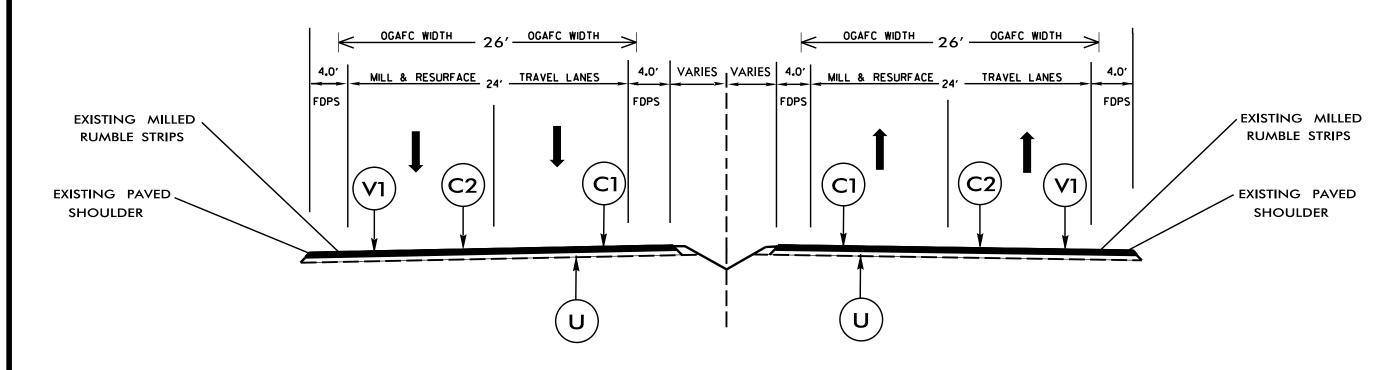
*EXISTING PAVED SHOULDERS NOT TO BE MILLED

*1/2 MILLING AND 1.5" OF S9.5C TO BE APPLIED IN TRAVEL LANES ONLY

*OPEN GRADE ASPHALT FRICTION COURSE TO BE APPLIED + 26' WIDE OR ONE FOOT BEYOND TRAVEL LANES ON EACH SIDE OF TRAVELWAY

*EXISTING MILLED RUMBLE STRIPS NOT TO BE DISTURBED





TYPICAL SECTION NO. 1

USE WITH MAPS 1 - 4

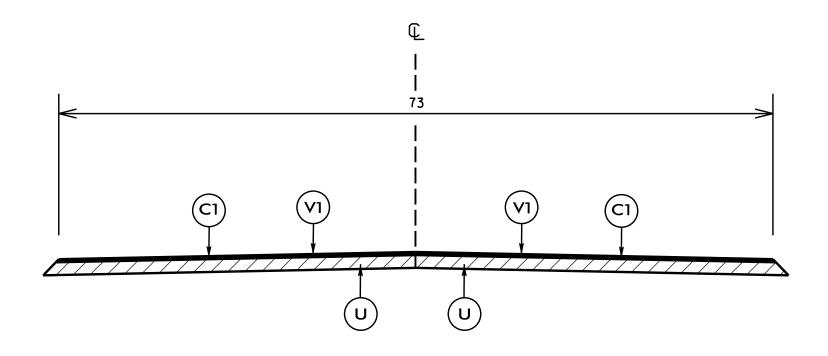
PAVEMENT SCHEDULE

2017CPT.01.24.10891.1	SHEET NO. 7
	· ·

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
V1	MILLING BITUMINOUS PAVEMENT. 1.5" DEPTH.
U	EXISTING PAVEMENT.

RESURFACING NOTES:

*ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII., OR AS DIRECTED BY THE ENGINEER.



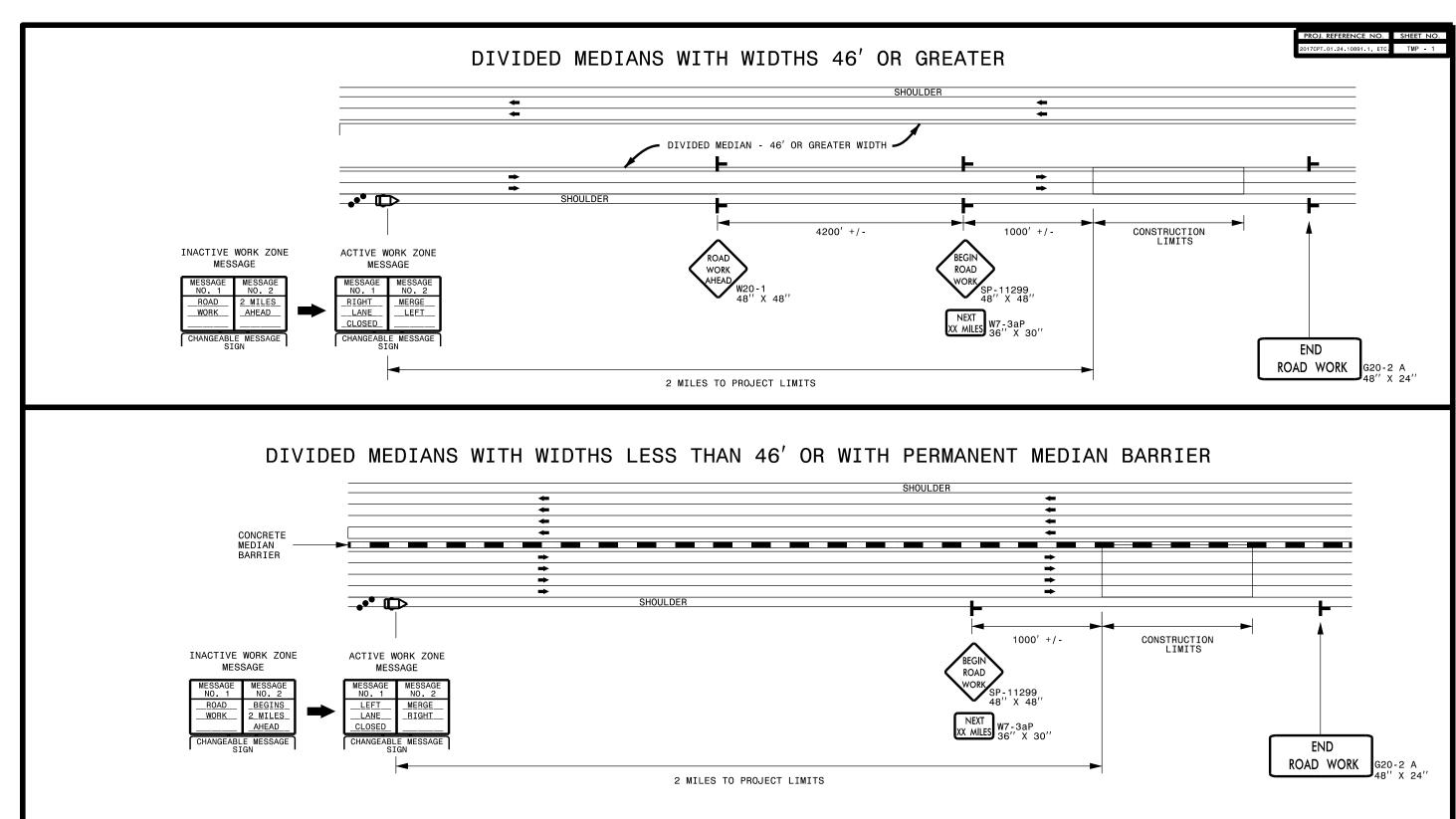
TYPICAL SECTION NO. 2

USE WITH MAP 5

PROJECT NO.	SHEET NO.	
2017CPT.01.24.10941.1, ETC.	8	

	SUMMARY OF QUANTITIES																				
PROJECT	COUNTY	MAP	ROUTE	DESCRIPTION	TYP	LANES	TYPE	FINAL SURFACE TESTING REQUIRED		MATERIAL TRANSFER VEHICLE REQUIRED	LENGTH	WIDTH	MOBILIZATION	1½" MILLING	INCIDENTAL MILLING	SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	POLYMER MODIFIED ASPHALT BINDER FOR PLANT MIX	OGAFC, TYPE FC-1 MOD	WORK ZONE ADV/GEN WARN SIGN	TEMPORARY TRAFFIC CONTROL
NO		NO			NO						МІ	FT	LS	SY	SY	TONS	TONS	TONS	TONS	SF	LS
2017CPT.01.24.10941.1	Washington	1	US 64 EB	ALLIGOOD ROAD TO TYRRELL COUNTY LINE	1	4	MD	NO	NO	YES	1.31	26	1	19,500	1,000	1,635	96	54	883	200	1
2017CPT.01.24.10941.1	Washington	2	US 64 WB	TYRRELL COUNTY LINE TO ALLIGOOD ROAD	1	4	MD	NO	NO	YES	1.31	26	*	19,500	1,000	1,635	96	54	883	200	*
2017CPT.01.24.10891.1	Tyrrell	3	US 64 EB	WASHINGTON COUNTY LINE TO END FREEWAY	1	2	MD	NO	NO	YES	5.77	26	*	85,000	200	7,203	425	237	3,891	200	*
2017CPT.01.24.10891.1	Tyrrell	4	US 64 WB	BEGIN FREEWAY TO WASHINGTON COUNTY LINE	1	2	MD	NO	NO	YES	5.77	26	*	85,000	200	7,203	425	237	3,891	200	*
2017CPT.01.24.10891.1	Tyrrell	5	US 64 EB/WB	FROM END FREEWAY TO NC 94	2	5	MU	NO	NO	NO	0.33	73	*	15,000		1,249	74			200	*
GI	RAND TOTAL										14.49		1	224,000	2,400	18,925	1,116	582	9,548	1000	1

	THERMOPLASTIC AND PAINT QUANTITIES																						
PROJECT	COUNTY	MAP	ROUTE	DESCRIPTION	TYP	LANES	LANE	LENGTH	WIDTH	4" X 90 M	6" X 90 M	6" X 90 M	6" X 120 M	6" X 120 M	8" X 90 M	12" X 90 M	12" X 120 M	THERMO LT	THERMO RT	THERMO STR	4" WHITE	4"	SNOW
							TYPE			WHITE	WHITE	YELLOW	WHITE THERMO	YELLOW	WHITE	WHITE	YELLOW	ARROW	ARROW 90 M	& RT ARROW	PAINT	YELLOW	PLOWABLE
										THERMO	THERMO	THERMO		THERMO	THERMO	THERMO	THERMO	90 M		90 M		PAINT	MARKERS
NO		NO			NO					LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	LF	LF	EA
2017CPT.01.24.10941.1	Washington	1	US 64 EB	ALLIGOOD ROAD TO TYRRELL COUNTY LINE	1	4	MD	1.31	26		8,000	8,000	1,000			650		3			15,500	8,000	130
2017CPT.01.24.10941.1	Washington	2	US 64 WB	TYRRELL COUNTY LINE TO ALLIGOOD ROAD	1	4	MD	1.31	26		8,000	8,000	1,000			650		3			15,500	8,000	130
2017CPT.01.24.10891.1	Tyrrell	3	US 64 EB	WASHINGTON COUNTY LINE TO END FREEWAY	1	2	MD	5.77	26		32,000	32,000	1,250			1,500		3			50,000	35,000	475
2017CPT.01.24.10891.1	Tyrrell	4	US 64 WB	BEGIN FREEWAY TO WASHINGTON COUNTY LINE	1	2	MD	5.77	26		32,000	32,000	1,250			1,500		3			50,000	35,000	475
2017CPT.01.24.10891.1	Tyrrell	5	US 64 EB/WB	FROM END FREEWAY TO NC 94	2	5	MU	0.33	73	5,300				7,000	500		500	2	2	2	5,300	7,000	125
GRAND TOTAL							14.49		5,300	80,000	80,000	4,500	7,000	500	4,300	500	14	2	2	136,300	93,000	1,335	
										160	0,000	11,	11,500				18			229,300			



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 RAMPS 500' PRIOR TO RAMP TERMINAL, AND "END ROAD WORK" (G20-2a) AT THE END OF EXIT RAMPS 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.



RESURFACING ADVANCE
WARNING SIGNS FOR
HIGH SPEED FACILITIES
≥ 60 MPH

LEGEND

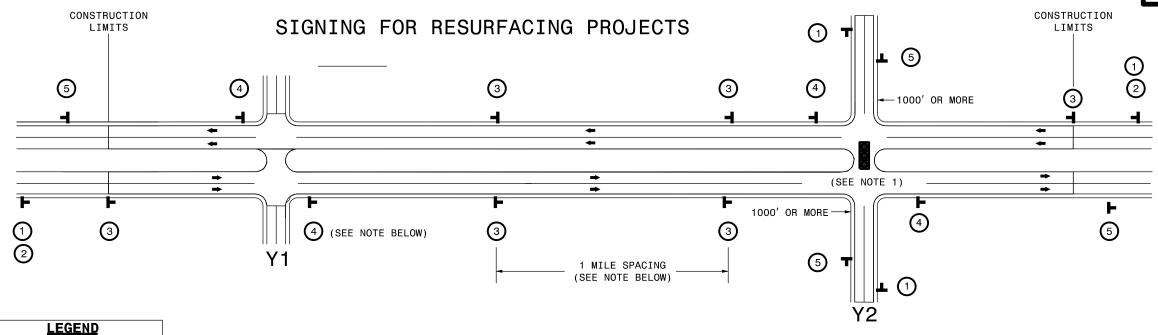
CHANGEABLE MESSAGE SIGN (CMS)

STATIONARY SIGN

TRAFFIC DRUM

DIRECTION OF TRAFFIC FLOW

17CPT.01.24.10891.1. E



- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

WORK AHEAD TES AND DIRECTION NOTES PER DIF LOW/SOFT SHOULDER (3) SP 13107 48" X 48" SIGNING PLACEMENT P

PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.

#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)

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.

ROAD **(**4**)** UNDER

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 SP 13106 48" X 48" INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.

ROAD WORK G20–2 A 48" X 24"

PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.

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

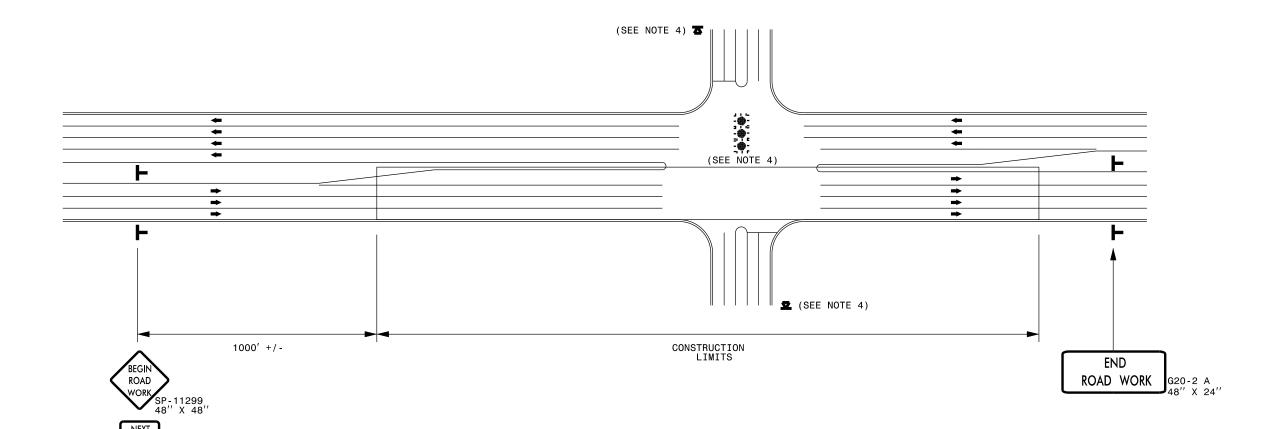
NOTES:

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.



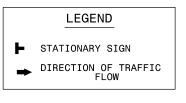
RESURFACING ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN MULTI-LANE ROADWAYS W/ SHOULDER SECTIONS

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.





RESURFACING ADVANCE WARNING SIGNS FOR URBAN / SUBURBAN FACILITIES

