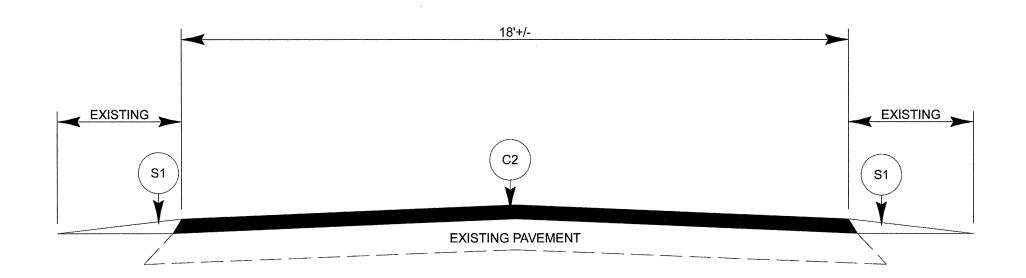
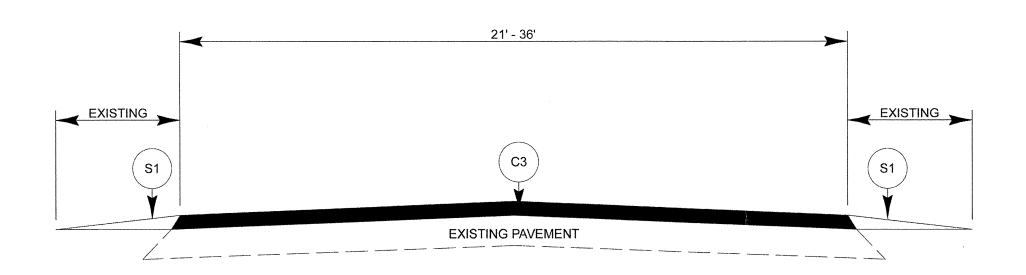


TYPICAL SECTION NO. 1

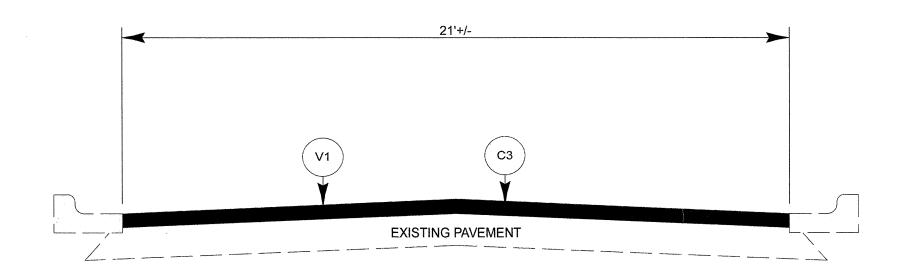


TYPICAL SECTION NO. 2

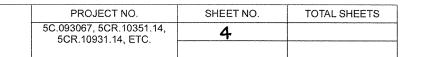
	PAVEMENT SCHEDULE
	PROP. APPROX. 1.0" OF ASPHALT
C1	CONCRETE SURFACE COURSE, TYPE
	SF9.5A AT AN AVERAGE RATE OF 110 LBS.
	PER SQ YD
	PROP. APPROX. 2.5" OF ASPHALT
C2	CONCRETE SURFACE COURSE, TYPE
	SF9.5A AT A RATE OF 137.5 LBS PER SQ
	YD IN EACH OF TWO LIFTS
	PROP. APPROX. 1.5" OF ASPHALT
C3	CONCRETE SURFACE COURSE, TYPE
CS	S9.5B AT AN AVERAGE RATE OF 168 LBS
	PER SQ YD
	SHOULDER RECONSTRUCTION BY THE
S1	CONTRACTOR, AS DIRECTED BY THE
	ENGINEER
S2	SHOULDER RECONSTRUCTION BY STATE
- J_	FORCES
V1	PROP. MILLING 1 1/2" DEPTH

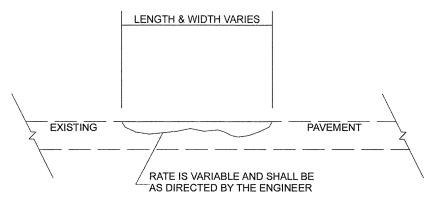


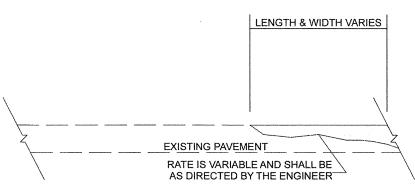
TYPICAL SECTION NO. 3



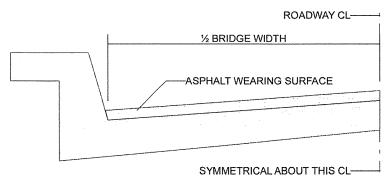
TYPICAL SECTION NO. 4







### ASPHALT CONCRETE SURFACE COURSE (LEVELING COURSE)



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. THE MINIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: \$4.75A ½", \$F9.5A 1.0", \$9.5X 1.5", \$12.5X 2.0", ULTRATHIN HOT MIX ASPHALT-TYPE A ½", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C ½". THE MAXIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: \$4.75A 1.0", \$F9.5A 1.5", \$9.5X 2.0", \$12.5X 2.0", ULTRATHIN HOT MIX ASPHALT-TYPE A ½", ULTRATHIN HOT MIX ASPHALT-TYPE A ½", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX

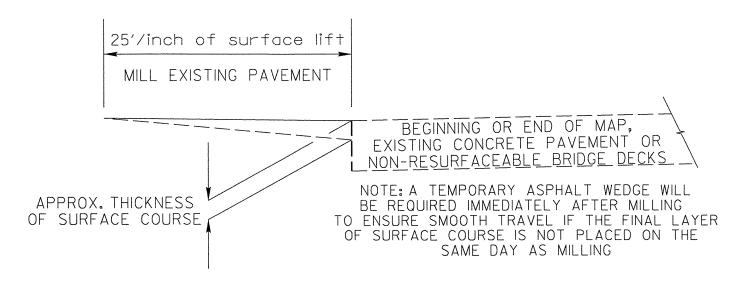
NOTES

ALL UNPAVED ROADS TO BE RESURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT.
ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.

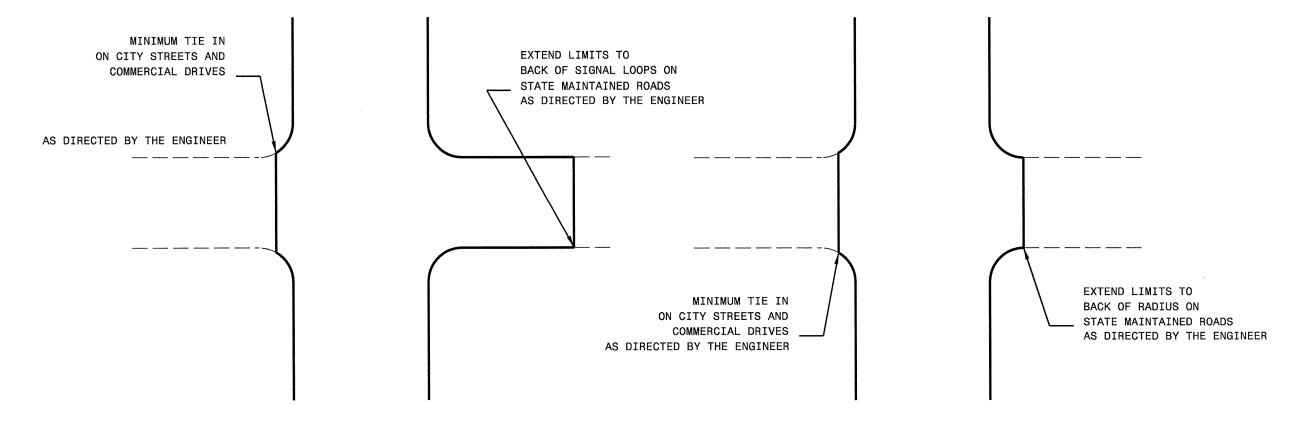
EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.

OUANTITIES.

SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE INDICATED, BRIDGES ARE TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.



### DETAIL OF INCIDENTAL MILLING



DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES

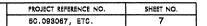
DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

PROJECT REFERENCE NO. SHEET NO.

## DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

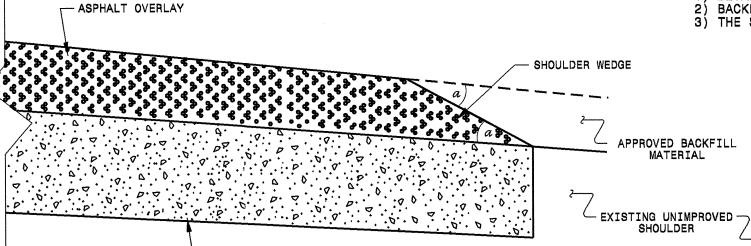
# SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE IO'OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES.



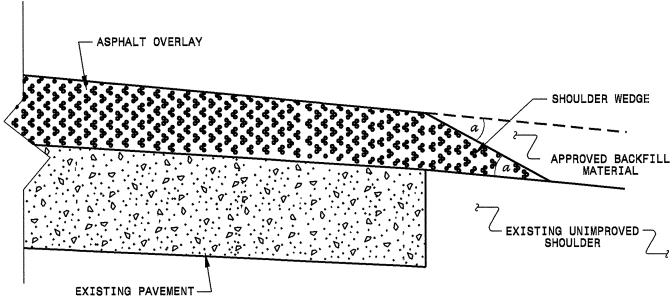
DETAIL DOES NOT APPLY TO OGAFC AND ULTRA-THIN BONDED WEARING COURSE. BACKFILL SHOULDER WITH APPROVED MATERIAL.

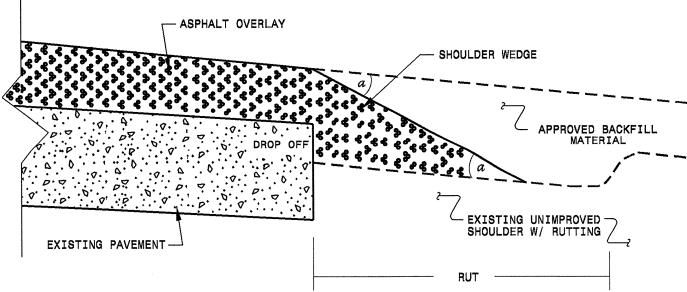
2) BACKFILL SHOULDER WITH APPROVED MATERIAL. 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



## 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 ANGLE = 30°

CONTRACT STANDARDS
AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

### SHOULDER WEDGE **DETAILS**

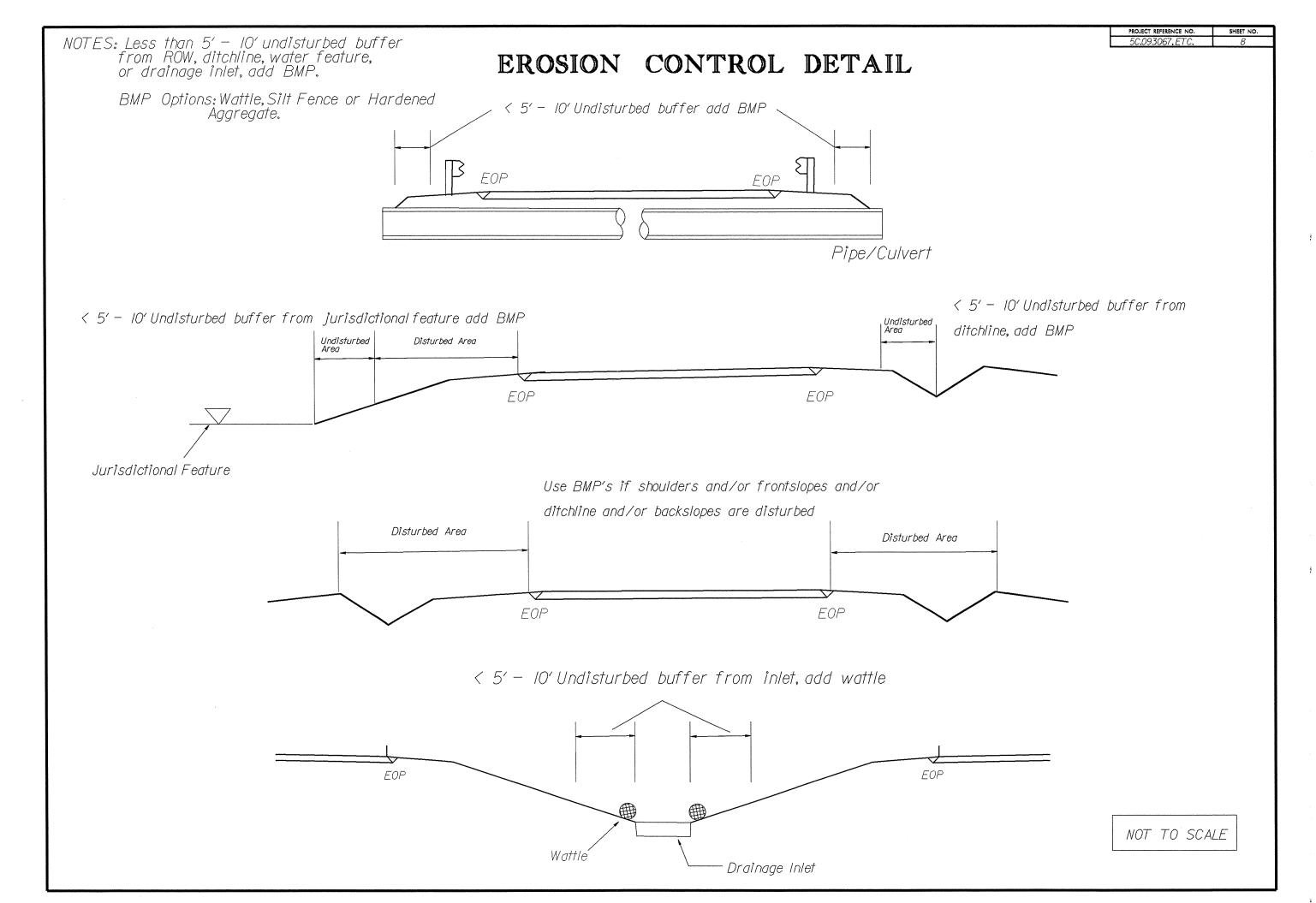
ORIGINAL BY:_	T.SPELL DATE: 7-19-11
MODIFIED BY:_	DATE: 10/16/12
CHECKED BY:	DATE:
FILE SPEC.: _ *:	uar/details/stand/shoulderwedgsdstail.dgn

# SHOULDER WEDGE DETAIL

(Resurfacing Adjacent to Rutted Shoulder)

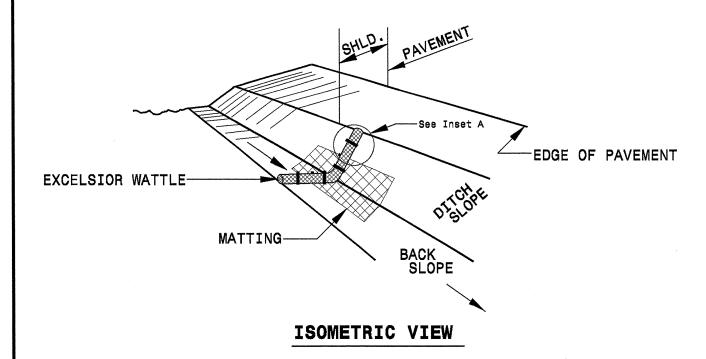
21-FEB-2014 10:42 S:\Contracts\Contr \$\$\$\$USERNAME\$\$\$\$

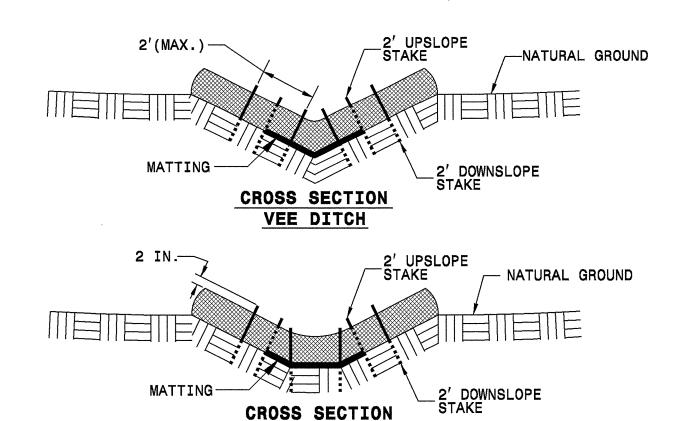
PROPOSED PAVEMENT



PROJECT REFERENCE NO.	SHEET NO.
5C 093067 FTC	9

# WATTLE DETAIL





TRAPEZOIDAL DITCH

### NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

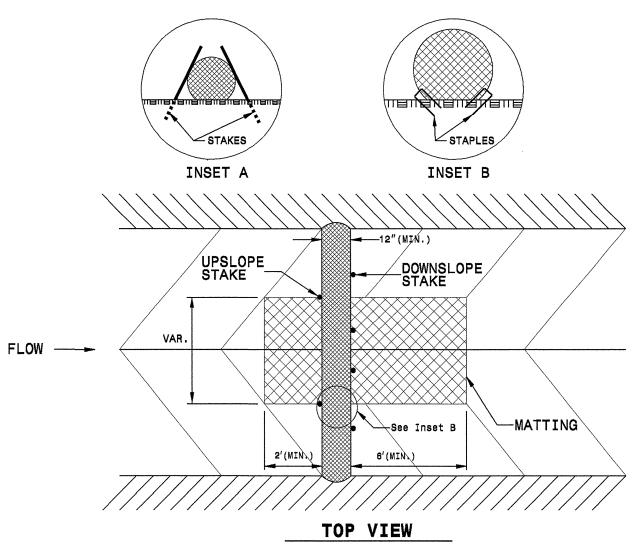
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



PROJECT NO.	SHEET NO.	TOTAL NO.
5C.093067, 5CR.10351.14	10	10
5CR.10931.14, ETC.		

### SUMMARY OF QUANTITIES

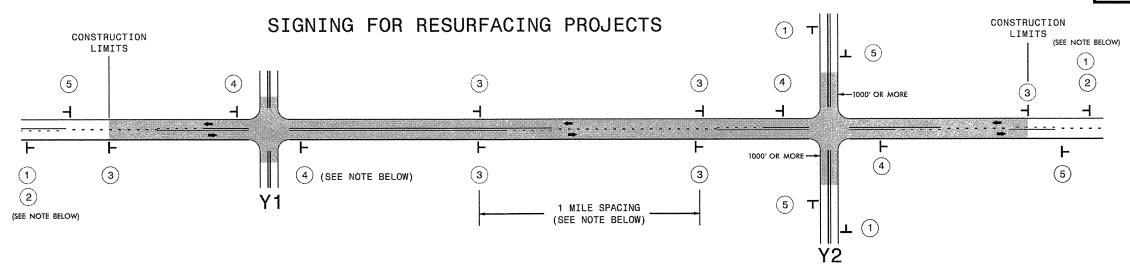
PROJECT	COUNTY	BAAD	ROUTE	DESCRIPTION	TVD	LANES	FINAL	WARM MIX	LENGTH	WIDTH	BORROW	INCIDENTAL	SHOTTI DEB	1½" MILLING	INCIDENTAL	SURFACE	SLIDENCE	LEVELING	ASPHAIT	PATCHING	ADJUST	ADJUST	TEMPORARY	WATTLE	SEED &
PROJECT	COONTY	WAP	ROOTE	DESCRIPTION	111	LANES	SURFAC	1	LLIVOITI	Wibiii	BORROW	STONE BASE	RECON	1/2 WILLING	MILLING	COURSE.	ł .	COURSE, TYPE	BINDER FOR	ł	i	METER OR	SILT FENCE	WAITE	MULCHING
						1	TESTING					STONE BASE	STRUCTION		MILLING	S9.5B	SF9.5A	SF9.5A	PLANT MIX	1	WIANTIOLES	VALVE BOX	1		WIOLCHING
1								1 ' 1					STRUCTION			39.36	3F9.5A	3F9.3A	PLANT IVIIA	PAVEIVIEIVI		VALVE BOX			
							REQUIRE	ا ا																	
		NO			NO				MI	FT	CY	TONS	SMI	SY	SY	TONS	TON	TONS	TON	TONS	EA	EA	LF	LF	AC
NO 50 003007	14/		CD 1400 (LVANACOOD DOAD)	FROM NC 903 TO CUL-DE-SAC	NO	-	NO	NO	1.15	18	281	28	2.30	31	333	10143	1,723	200	127	75	EA	EA	100	LF	1.00
5C.093067			SR 1409 (LYNWOOD ROAD)	PROWING 903 TO COL-DE-SAC	2		INU	NO		18			2.30			-	1,723	200	127	75		<del> </del>	100		1.00
			MAP NO. 1						1.15		281	28	2.30		333	<del> </del>		200				ļ	100		1.00
	IOIALF	OR PRO	NO. 5C.093067	<u>Landaniana de la companya de la com</u>					1.15	L	281	28	2.30	L	333	J	1,723	200	127	75	L	1	100		1.00
				L NC 30 (INCLESIDE) TO WARPEN CO.	,		<del></del>	<del></del>			·	· · · · · · · · · · · · · · · · · · ·		<del></del>		T		T		r	r	T	1		T
				NC 39 (INGLESIDE) TO WARREN CO.	_	_				1															
5CR.10351.14		2	US 401	LINE	3	2	NO	YES '	6.7	24	982	168	13.40	ļ	600	8,364		ļ	502	200		ļ	800		8.11
			MAP NO. 2		<u> </u>				6.7		982	168	13.40		600	8,364			502	200	<b> </b>	ļ	800		8.11
	TOTAL FO	R PROJ I	NO. 5CR.10351.14						6.7	<u> </u>	982	168	13.40	<u> </u>	600	8,364	L	<u> </u>	502	200	l	L	800		8.11
					,												·		·	,	·		·		
				FROM FRANKLIN CL TO SR 1001																					
5CR.10931.14	Warren	3	US 401	(WARRENTON ROAD)	3,4	2	NO	YES -	11.6	21	1,687	278	22.20	7,040	2,500	12,680			761	50	9	18	400	200	8.40
	TO	TAL FOR	MAP NO. 3						11.6		1,687	278	22.20	7,040	2,500	12,680			761	50	9	18	400	200	8.40
				FROM VANCE COUNTY LINE TO																					
5CR.10931.14	Warren	4	US 1/158	NORLINA	3	2	NO	YES.	6.3	24	924	151	12.60		2,000	7,864			472	40	1				
	то	TAL FOR	MAP NO. 4						6.3		924	151	12.60		2,000	7,864			472	40	1				
	TOTAL FO	R PROJ I	NO. 5CR.10931.14						17.9		2,611	429	34.80	7,040	4,500	20,544			1,233	90	10	18	400	200	8.40
				L FROM CR 1F00/MACON FMBRO RDI	,					T		<del></del>		<del></del>	r	<del></del>	·	T	r			T			r
				FROM SR 1500(MACON-EMBRO RD)	١. ١	_ 1					İ					1									
5CR.20931.14			SR 1507(EMBRO-VAUGHN ROAD)	TO US-158	1	2	NO	NO	4.8	20		115			315	<b></b>	3,204	ļ	215	200		ļ			ļ
	TO	TAL FOR	MAP NO. 5		$\sqcup$				4.8	<u> </u>		115			315		3,204	ļ	215	200		ļ			ļ
				FROM SR 1507(EMBRO-VAUGHN RD)	1 1	- 1	ŀ					1				1						l			
5CR.20931.14			SR 1500(MACON-EMBRO ROAD)	TO SR 1309(OAKVILLE RD)	1	2	NO	YES	6.78	20		163			575		4,525		303	400					
			MAP NO. 6		$oxed{oxed}$				6.78			163			575		4,525		303	400		<u> </u>			
	TOTAL FO	R PROJ I	NO. 5CR.20931.14						11.58		1	278		<u> </u>	890		7,729	<u> </u>	518	600		<u> </u>	<u> </u>		<u> </u>
												.,			···		·			·	·	·	_		
GRAND TOTAL									37.33		3,874	903	50.50	7,040	6,323	28,908	9,452	200	2,380	965	10	18	1,300	200	17.51

### THERMOPLASTIC AND PAINT QUANTITIES

	COUNTY		ROUTE	DESCRIPTION		LANES	LENGTH	WIDTH	WORK ZONE ADVANCE/GEN ERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	4" X 90 M WHITE THERMO	4" X 120 M YELLOW THERMO	4" X 120 M WHITE THERMO	8" X 90 M YELLOW THERMO	24" X 120 M WHITE THERMO	THERMO STR & RT ARROW 90 M	THERMO LT ARROW 90 M	SNOW PLOWABLE MARKERS
NO		NO			NO				SF	LS	LF 40.074	LF	LF	LF	LF	EA	EA	EA
5C.093067	Warren		SR 1409 (LYNWOOD ROAD)	FROM NC 903 TO CUL-DE-SAC	2	2	1.15 1.15	18	128 128	0.03 <b>0.03</b>	12,374 <b>12,374</b>	7,590 <b>7.590</b>	ļ		<b></b>			<b></b>
	10	IALFO	R MAP NO. 1				1.15		128	0.03	12,374	7,590			<del> </del>			<b></b>
	TOTAL	FOR PRO	DJ NO. 5C.093067				1.15		128	0.03	12,374	7,590			<del> </del>			<b></b>
<b></b>												1 /,:	990		1	L		
5CR.10351.14	<del>~~~~~~~~</del>		US 401	NC 39 (INGLESIDE) TO WARREN CO. LINE	3	2	6.7 <b>6.7</b>	24	1,696 <b>1,696</b>	0.18 <b>0.18</b>	72,092 <b>72,092</b>	44,220 <b>44,220</b>			30 <b>30</b>			442 <b>442</b>
<b></b>	TOTAL FOR MAP NO. 2			+				1,696		72,092	44,220			30			442	
TOTAL FOR PROJ NO. 5CR.10351.14				-		6.7		1,696	0.18	72,092	44,220	220		30			442	
					لــــــــــــــــــــــــــــــــــــــ				<u> </u>		L	1 44,	220		1	1		L
5CR.10931.14			US 401 R MAP NO. 3	FROM FRANKLIN CL TO SR 1001 (WARRENTON ROAD)	3, 4	2	11.6 11.6	21	1,296 1,296	0.31 <b>0.31</b>	124,816 <b>124,816</b>	76,560 <b>76,560</b>	100 100					766 <b>766</b>
		.		FROM VANCE COUNTY LINE TO				1			2	44 700		400	4.5			100
5CR.10931.14		4 1	US 1/158	NORLINA	3	2	6.3	24	704	0.17	67,788	41,580	200	180	15	2	2	426
	10	TAL FO	R MAP NO. 4		+		6.3		704	0.17	67,788	41,580	200	180	15 15	2	2	426
	TOTAL FO	OR PRO.	NO. 5CR.10931.14				17.9		2,000	0.48	192,604	118,140	300	180	15		2	1,192
										L	L	118	,440		L	<u> </u>	4	L
5CR.20931.14			SR 1507(EMBRO-VAUGHN ROAD)	FROM SR 1500(MACON-EMBRO RD) TO US-158	1	2	4.8	20	544	0.13	51,648	31,680						
	TC	TAL FO	R MAP NO. 5		1		4.8		544	0.13	51,648	31,680				ļ		<b></b>
				FROM SR 1507(EMBRO-VAUGHN RD)	1		1						1 450					
5CR.20931.14			SR 1500(MACON-EMBRO ROAD)	TO SR 1309(OAKVILLE RD)	1	2	6.78	20	752	0.18	72,953	44,748	150		<del> </del>	<del> </del>		<b></b>
	TC	TAL FO	R MAP NO. 6		-	<del>                                     </del>	6.78		752	0	72,953	44,748 76,428	150 150		<b>_</b>			<del> </del>
	TOTAL FO	OR PRO	NO. 5CR.20931.14		+		11.58		1,296	U	124,601	<del></del>	578				L	
GRAND TOTAL			D TOTAL		+		37.33		5,120	1	401,671	246,378	450 ,828	180	45	2	2	1,634

PROJ. REFERENCE NO. SHEET NO.

5C.093067, STC TMP-1

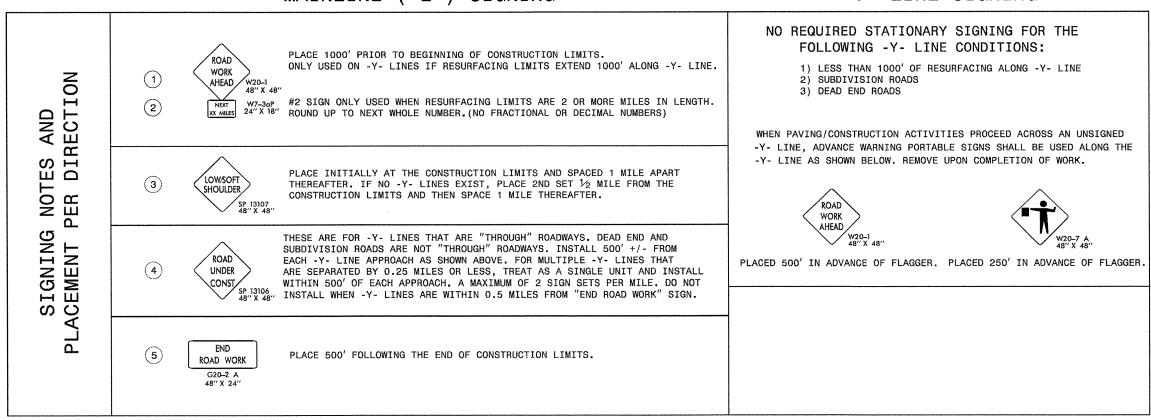


LEGEND - STATIONARY SIGN

→ DIRECTION OF TRAFFIC FLOW

### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING



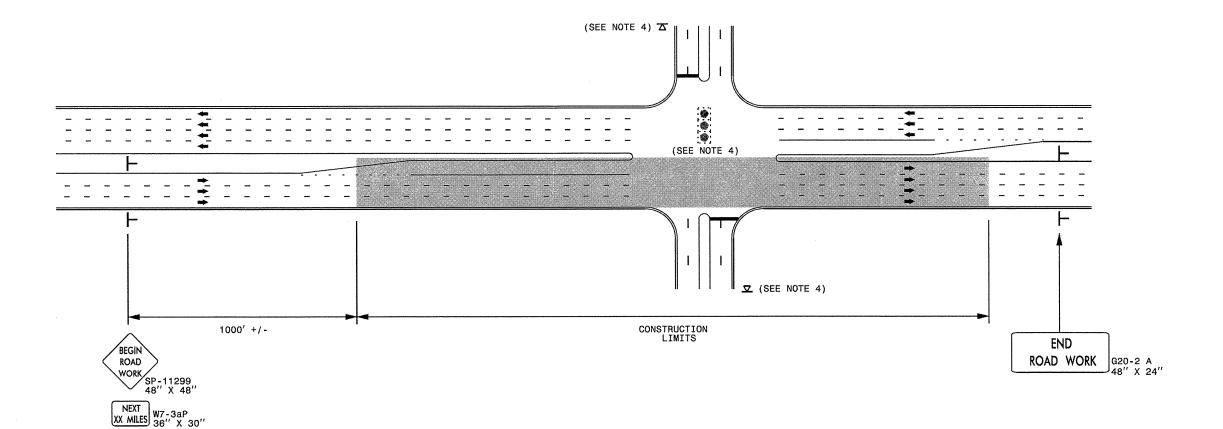


RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS

PROJ. REFERENCE NO. SHEET NO.

5C. 093067 BK TMP-Z

### URBAN / SUBURBAN WORKZONES



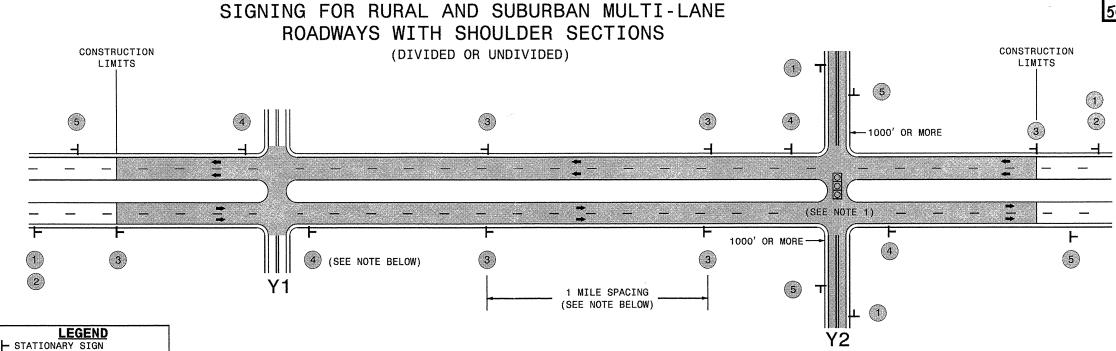
### NOTES:

- 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.



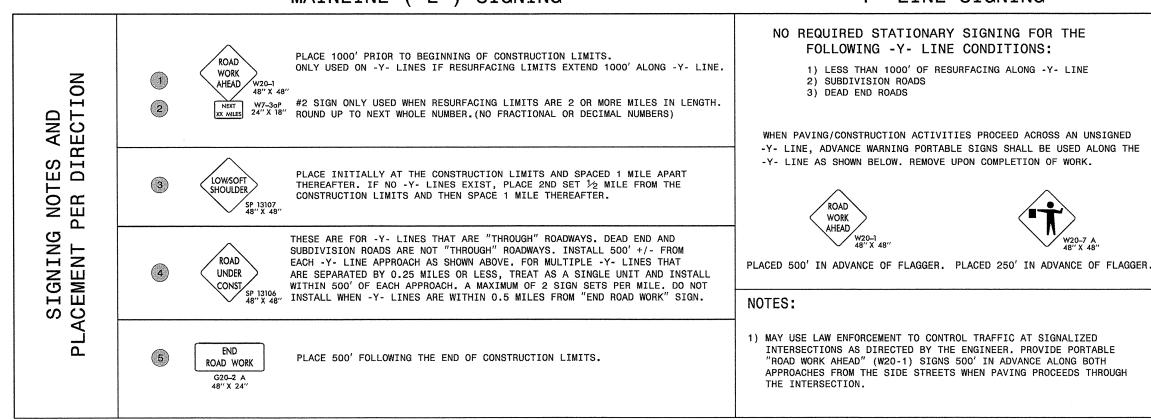


RESURFACING ADVANCE WARNING SIGNS FOR URBAN / SUBURBAN FACILITIES



### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING





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

ing/2013Resurfacing/2013Documents/New\_Procedures\_05\_09\_2013/Resurfacing\_AdvWarn\_UrSu\_Shldr.dq

- DIRECTION OF TRAFFIC FLOW