

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION 6

PLANS

Letting Date: October 21, 2026

REVISED 10-20-2026

CONTRACT ID: DF00564

TIP NO.: -----

FEDERAL AID NO.: STATE FUNDED

WBS ELEMENT NO.: 2027CPT.06.06.20781.1

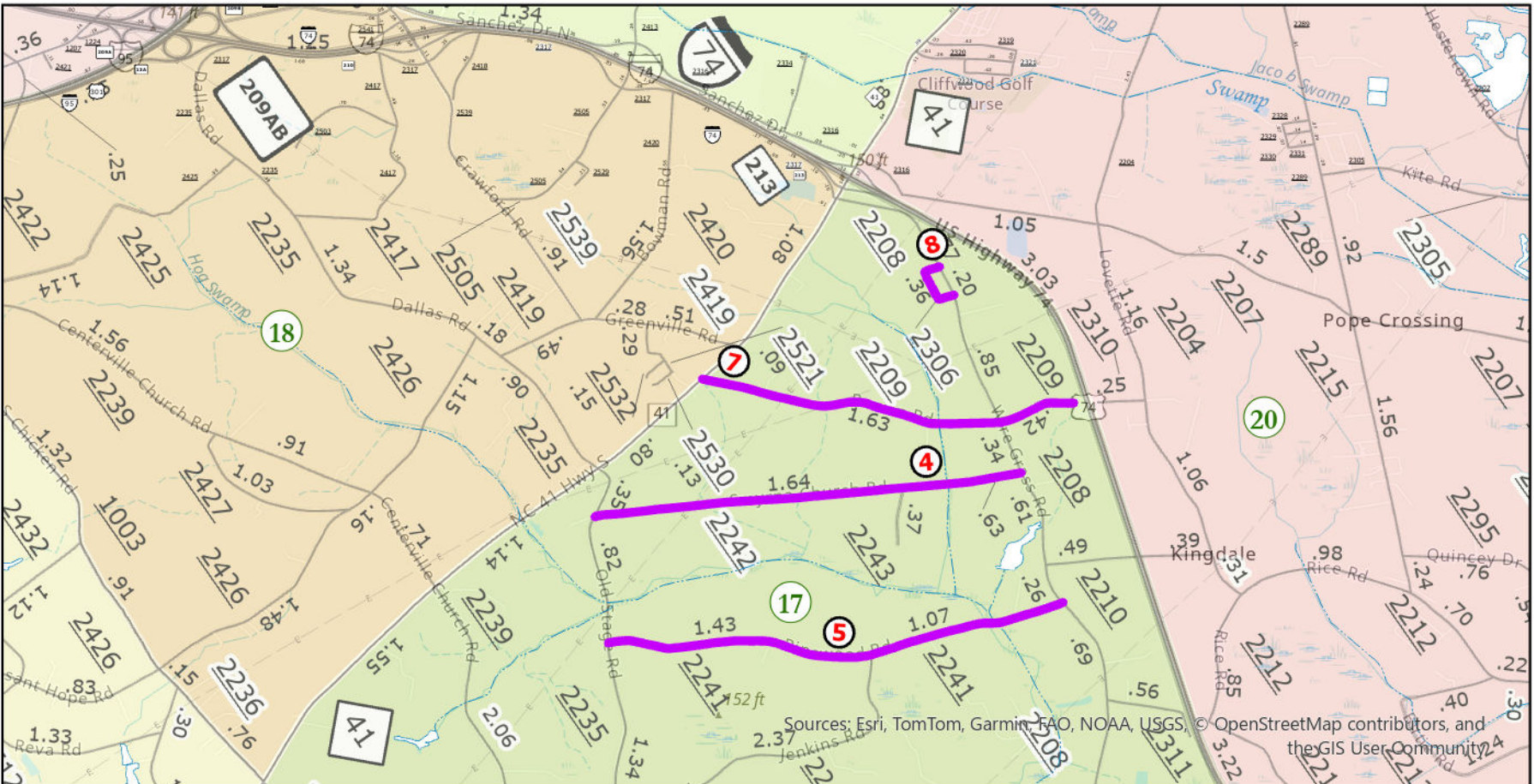
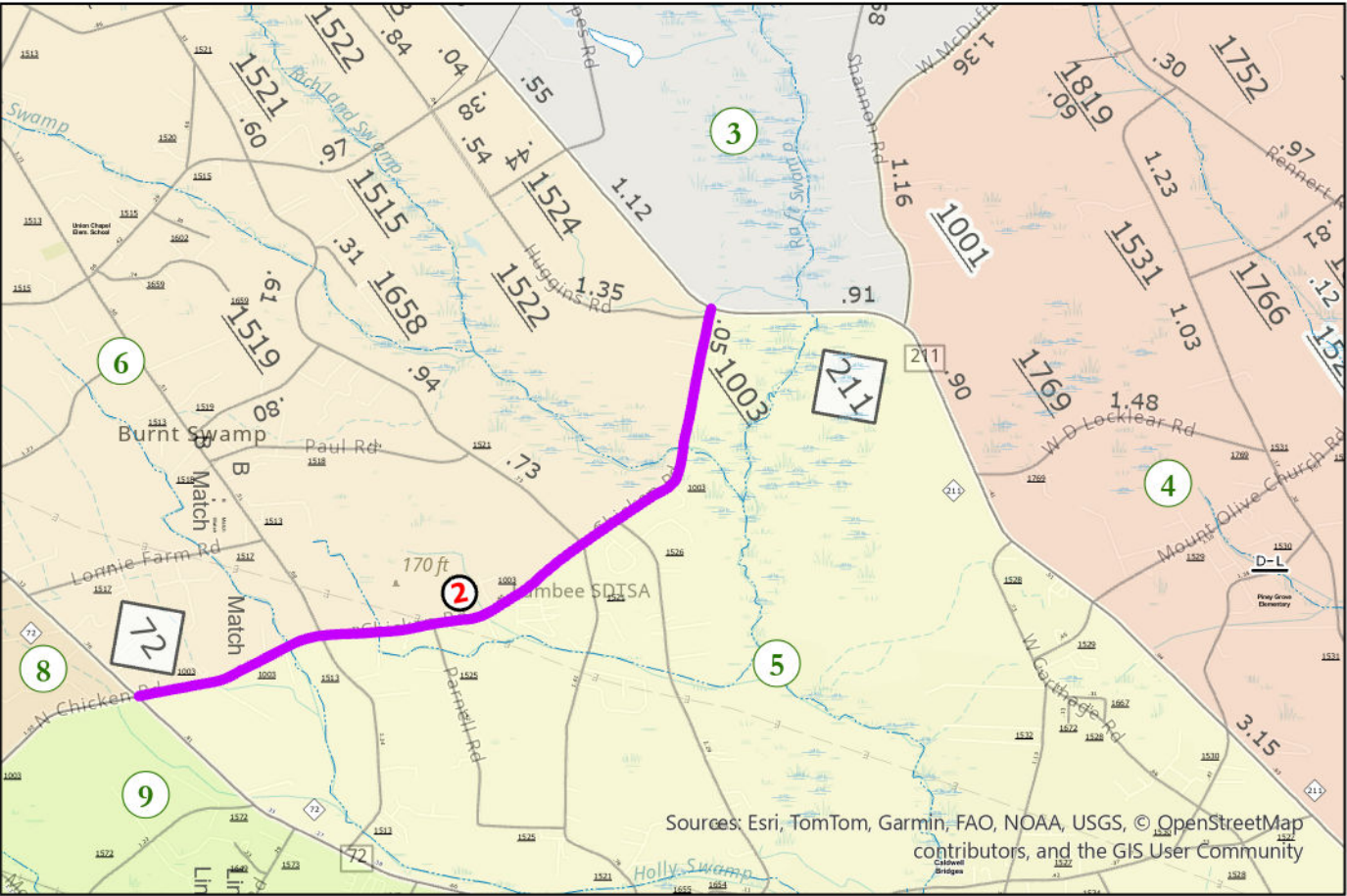
ROUTE NO.: VARIES

LOCATION: VARIES

COUNTY: ROBESON

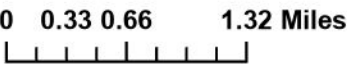
LENGTH OF PROJECT: 20.521 MILES

**TYPE OF WORK: MILLING, WIDENING, RESURFACING, MILLED SINUSOIDAL RUMBLE STRIPS
& SHOULDER RECONSTRUCTION**



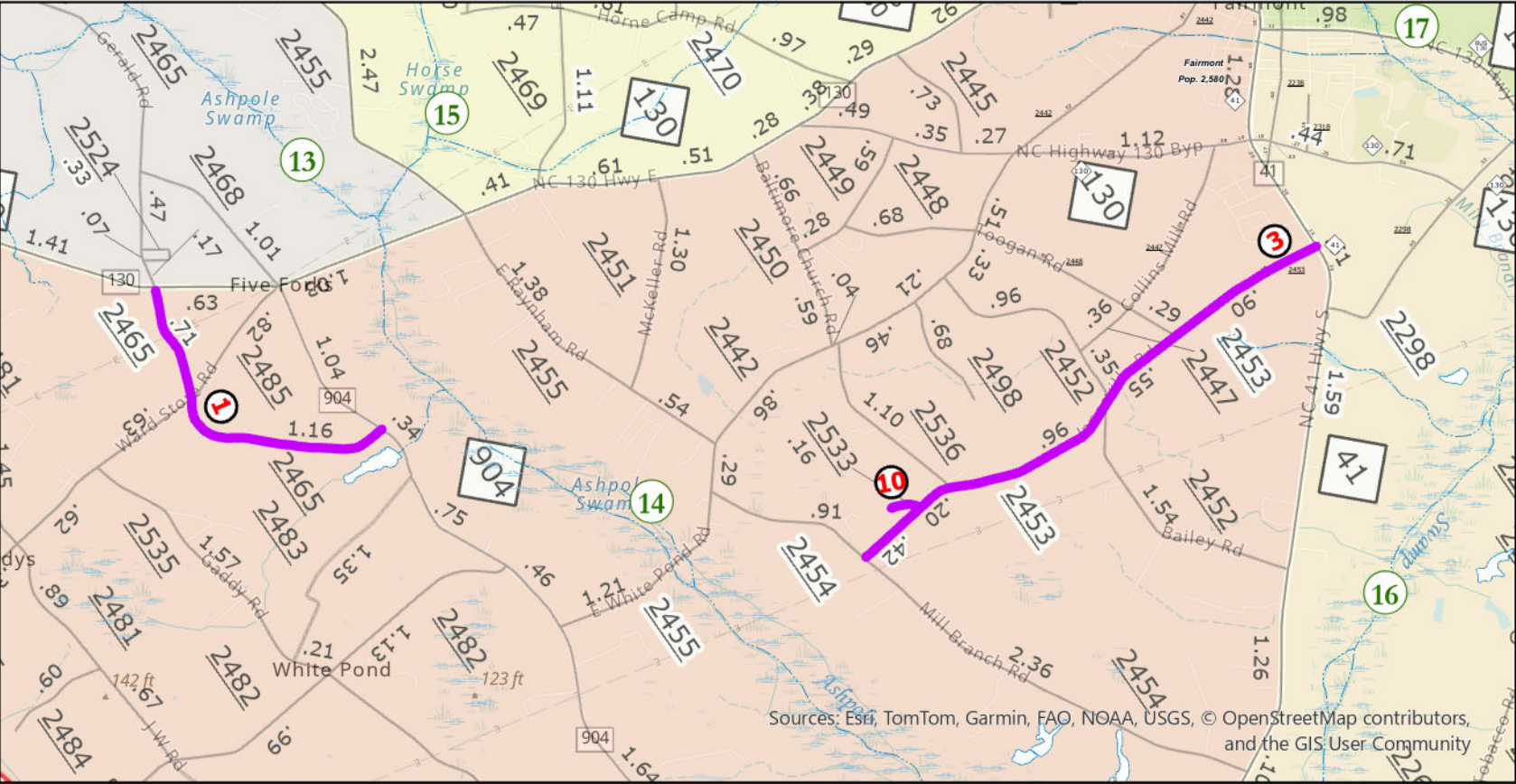
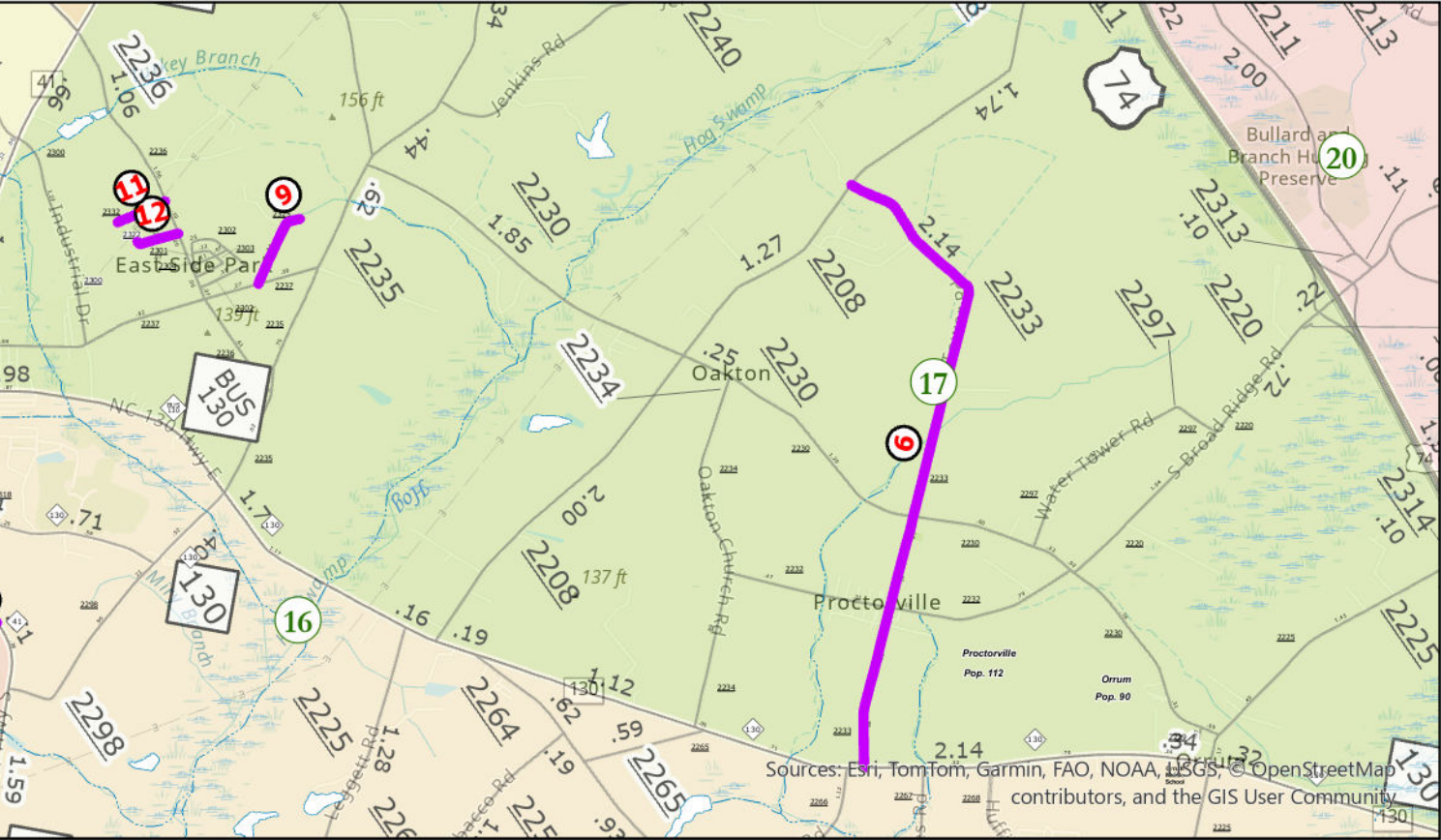
Robeson County Resurfacing, 2026

Contract: DF00564



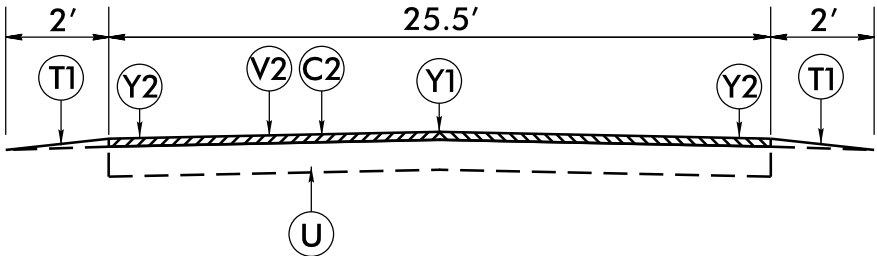
Legend

WBS: 2027CPT.06.06.20781.1



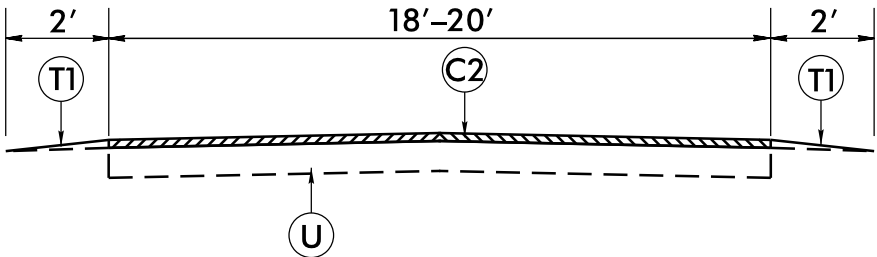
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25-SEP-2026 17:35
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3881142PNAME\$888

PAVEMENT SCHEDULE	
C1	1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C2	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
E1	5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
E2	5½" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
R1	EXISTING CURB AND GUTTER
T1	SHOULDER RECONSTRUCTION WITH AGGREGATE SHOULDER BORROW
U	EXISTING PAVEMENT
V1	0" - 1½" MILLING
V2	¾" MILLING
V3	1½" MILLING
V4	5" MILLING
Y1	SINUSOIDAL MILLED RUMBLE STRIP; 14"
Y2	SINUSOIDAL MILLED RUMBLE STRIP; 8"



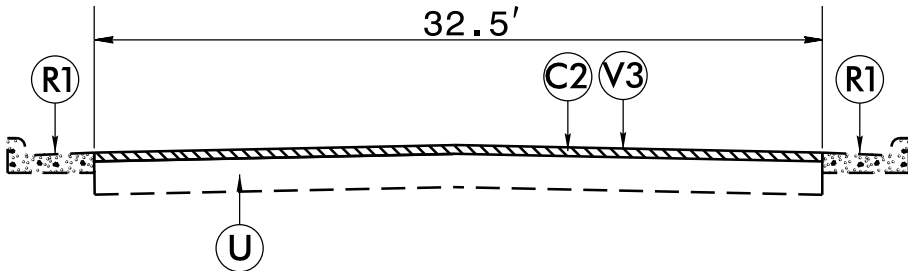
TYPICAL SECTION NO. 1

-PLUS 2' INSIDE CURVE WIDENING
(SEE DETAIL)

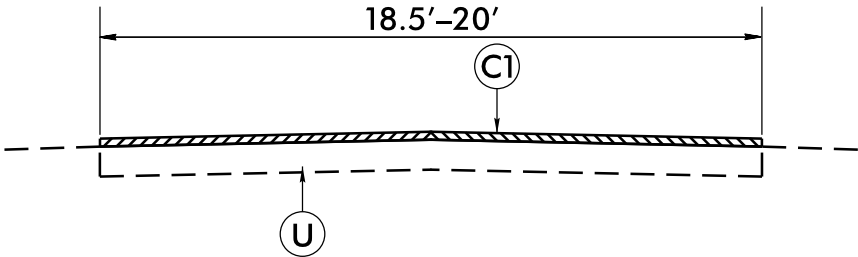


TYPICAL SECTION NO. 2

-PLUS 2' INSIDE CURVE WIDENING
(SEE DETAIL)
-PLUS 5" MILL AND FILL
WITH B25.0C (SEE DETAIL)



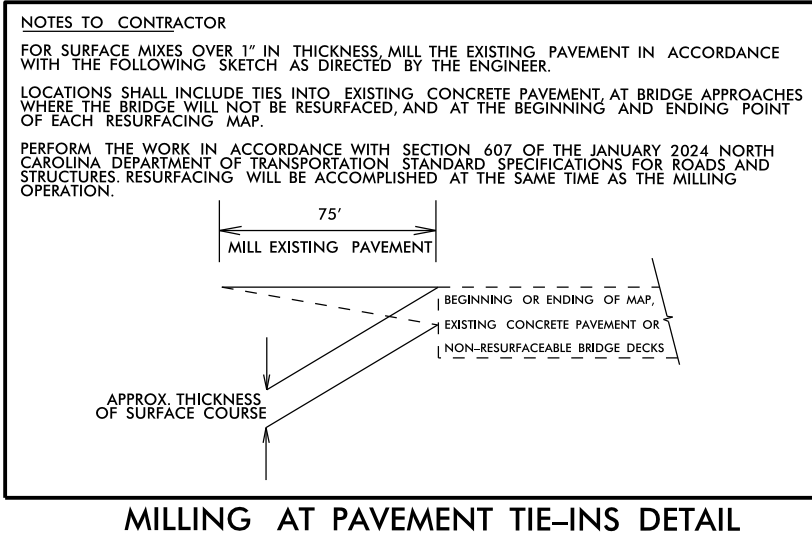
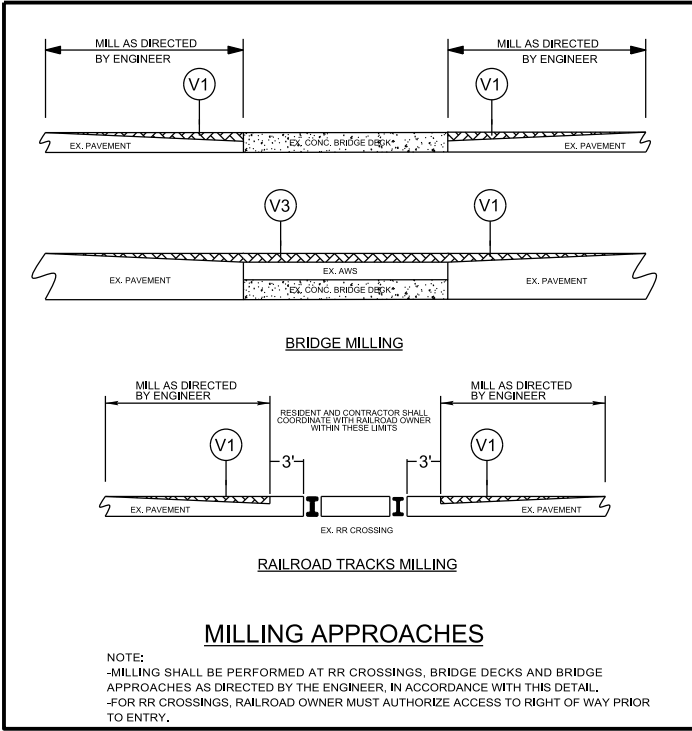
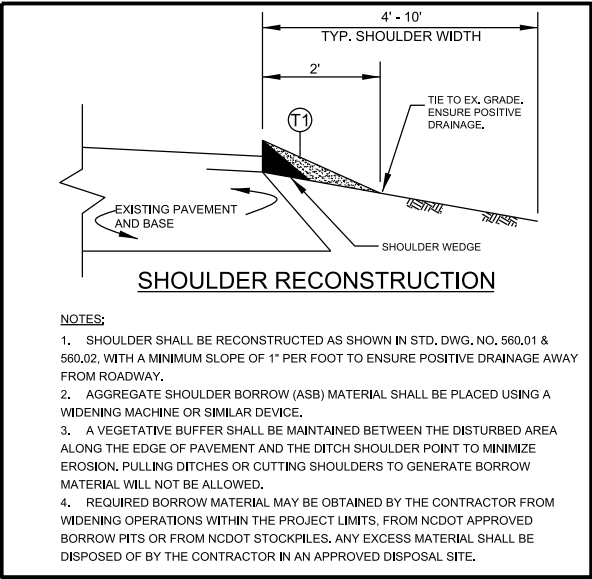
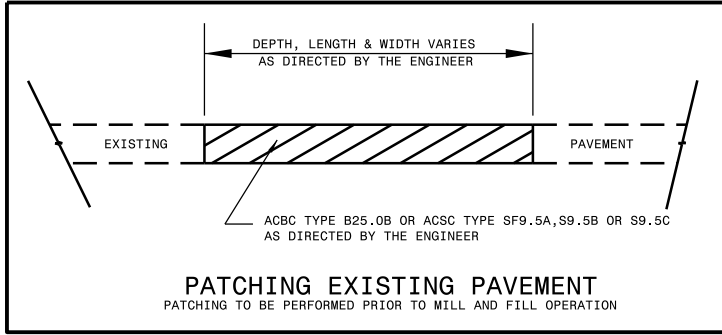
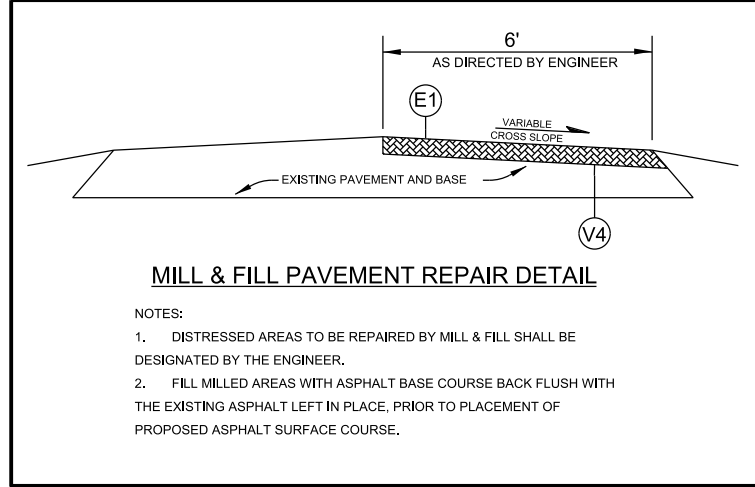
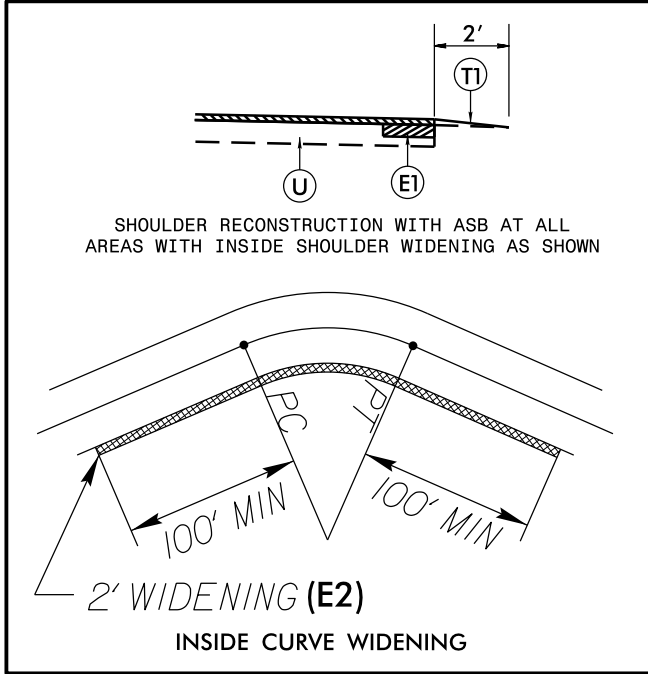
TYPICAL SECTION NO. 3

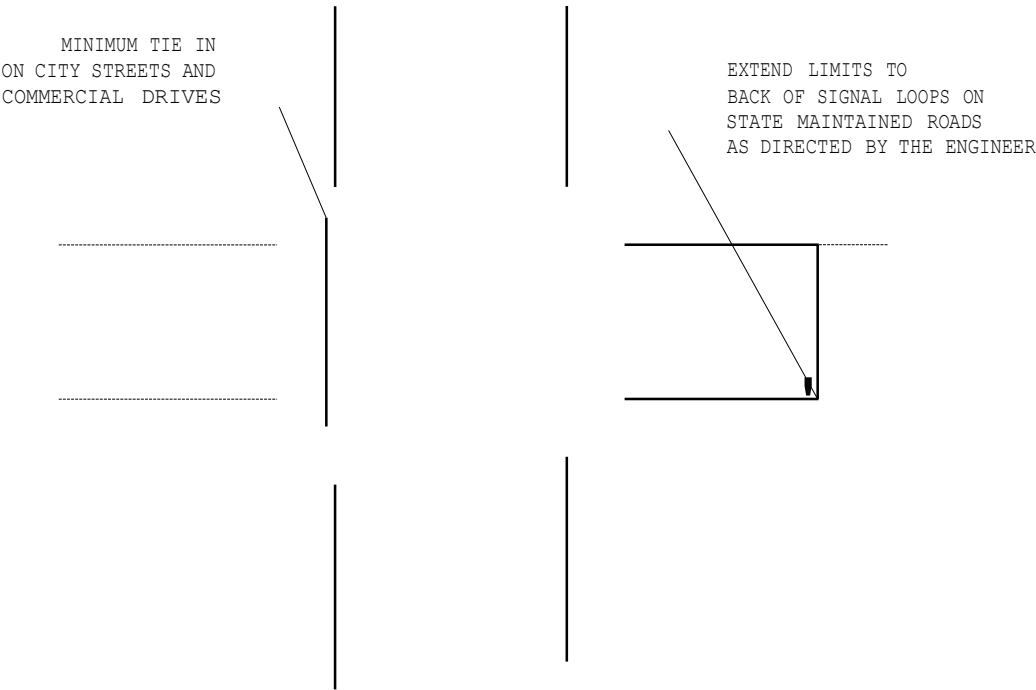


TYPICAL SECTION NO. 4

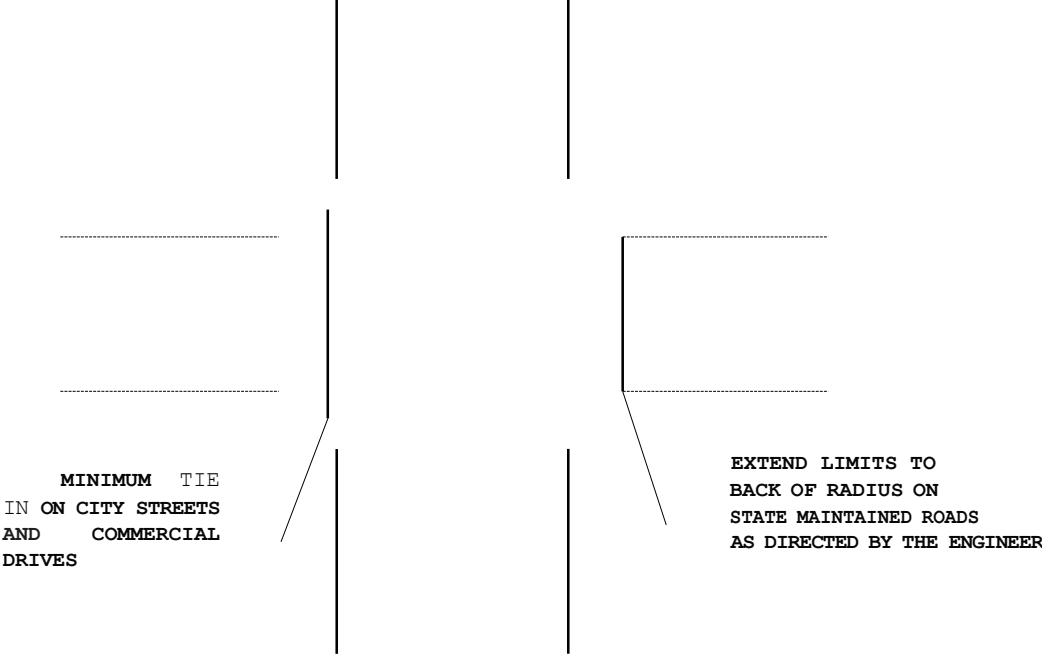
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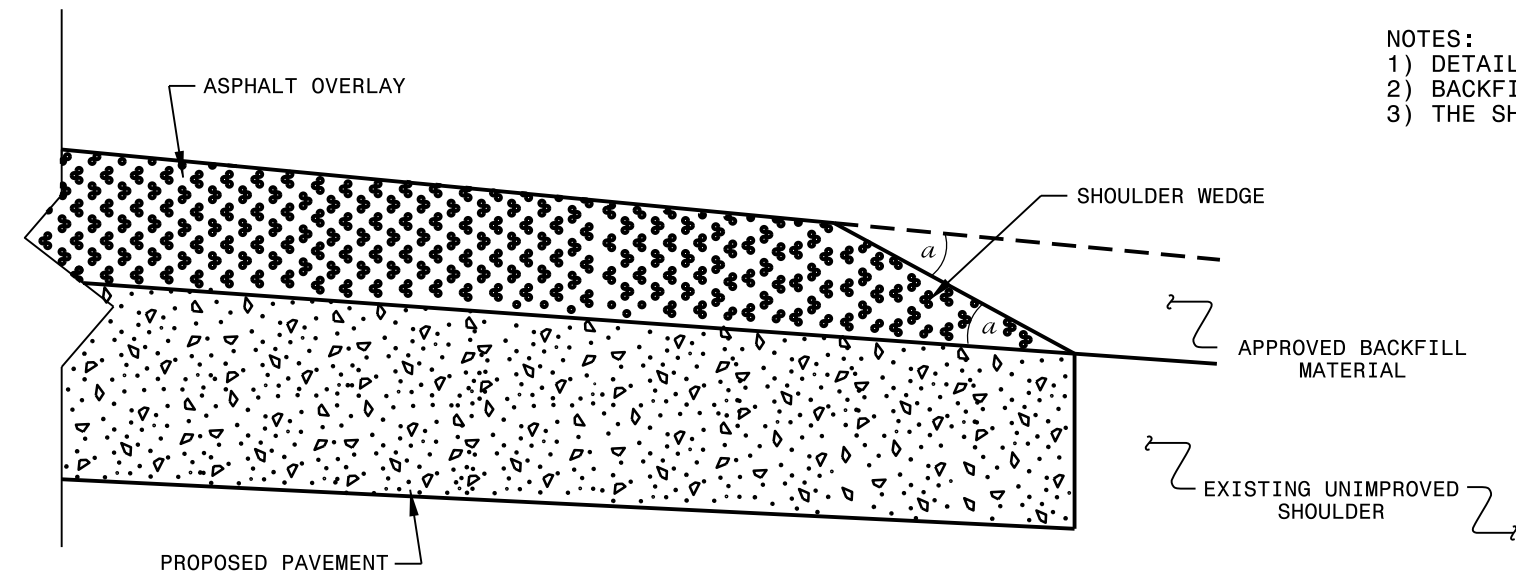
TYPICAL DETAIL OF PROJECT LIMITS AT
SIGNALIZED Y LINES



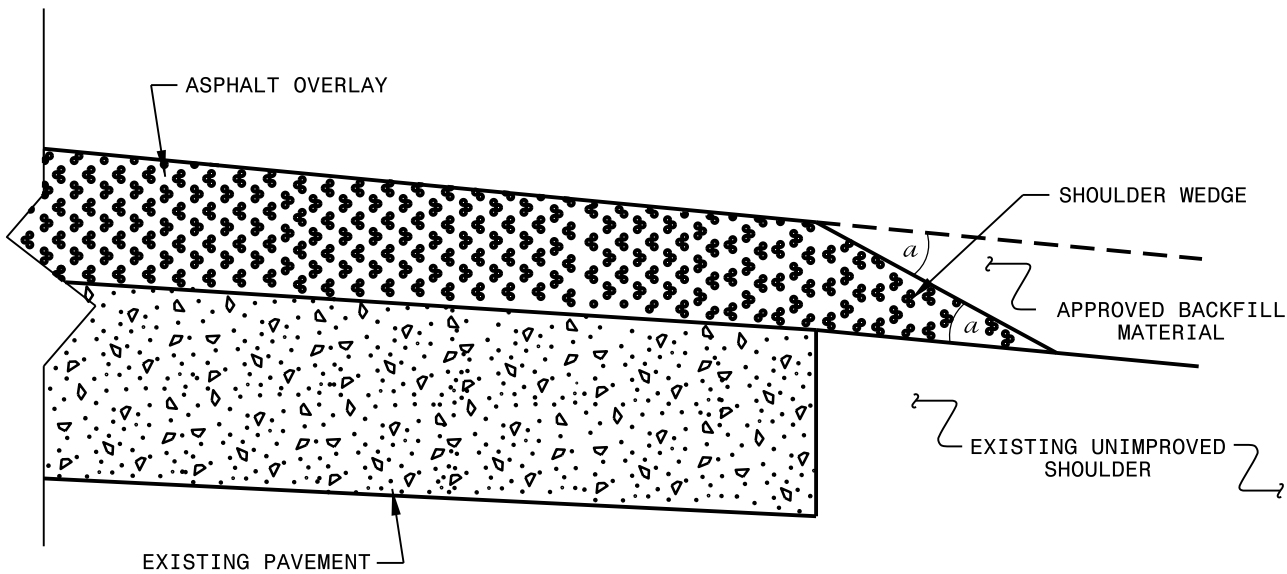
TYPICAL DETAIL OF PROJECT LIMITS AT
UNSIGNALIZED Y LINES

	ADDITIONAL INTERSECTIONS (NON-TYPICAL)		
	Extend paving limits to back of radius or loop on the following intersections:		
	MAP#	STREET NAME	COMMENTS
	2	SR 1522 (Huggins Rd)	90 FT from EP of L-Line = 425 SY
	2	SR 1526 (Odum Rd)	58 FT from EP of L-Line = 283 SY
	2	SR 1525 (Parnell Rd	51 FT from EP of L-Line = 311 SY
	2	SR 1513 (Evergreen Church Rd) West Side of Intersection	47 FT from EP of L-Line = 172 SY
	2	SR 1513 (Evergreen Church Rd) East Side of Intersection	52 FT from EP of L-Line =215 SY
	2	SR 1521 (Oak Grove Church Rd) East Side of Intersection	58 FT from EP of L-Line =258 SY
	2	SR 1521 (Oak Grove Church Rd) West Side of Intersection	41 FT from EP of L-Line = 571SY
	3	SR 2448 (Toogan Road)	90 FT from EP of L-Line = 593 SY
	3	SR 2452 (Bailey Road) North Side of Intersection	105 FT from EP of L-Line = 632 SY
	3	SR 2452 (Bailey Road) South Side of Intersection	70 FT from EP of L-Line = 396 SY
	3	SR 2536 (Baltimore Church Rd)	60 FT from EP of L-Line = 321 SY
	4	SR 2242 (Collins Lane)	52 FT from EP of L-Line = 234 SY
	5	SR 2240 (Jenkins Road)	75 FT from EP of L-Line = 332 SY

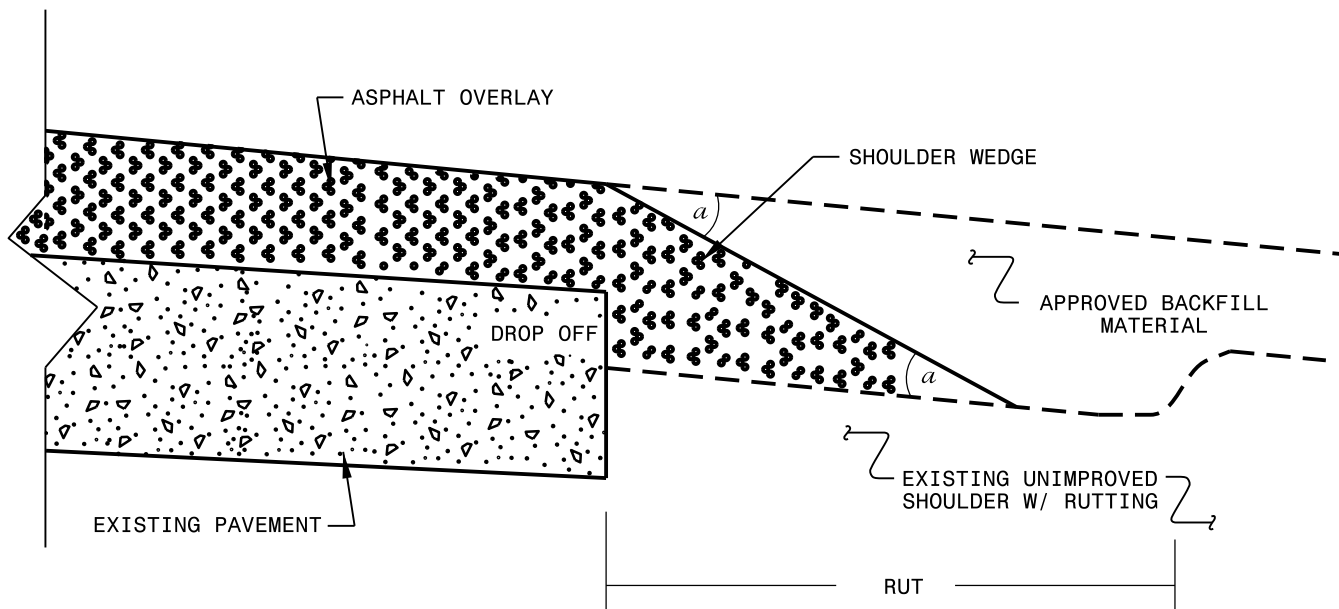
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFD AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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**

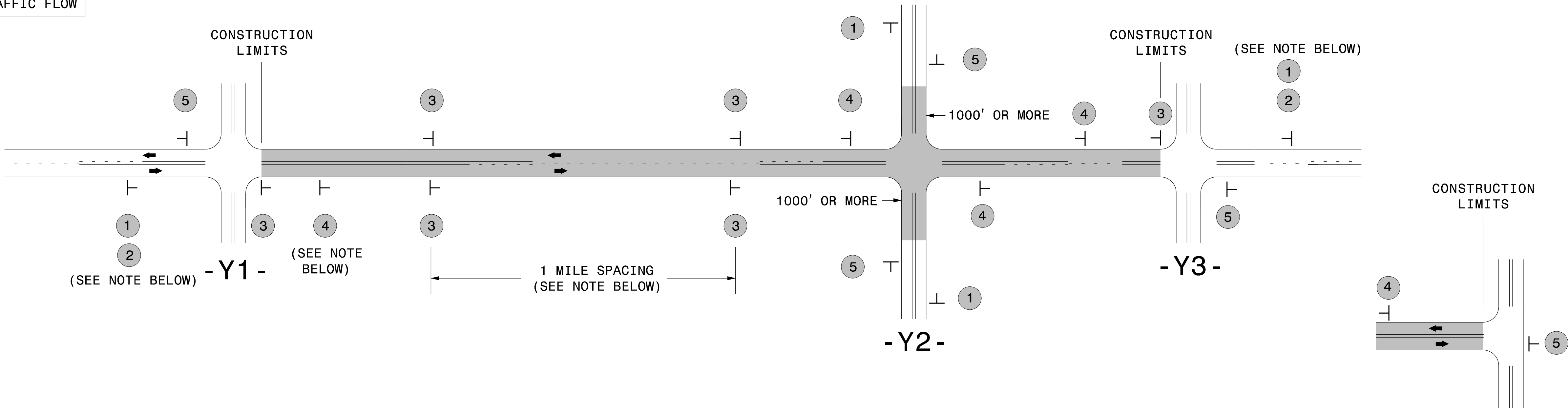
ORIGINAL BY: T.SPELL DATE: 7-19-11
MODIFIED BY: DATE: 10/16/12
CHECKED BY: DATE:
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn

SIGNING FOR RESURFACING PROJECTS

LEGEND

STATIONARY SIGN

DIRECTION OF TRAFFIC FLOW



TEE INTERSECTION

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

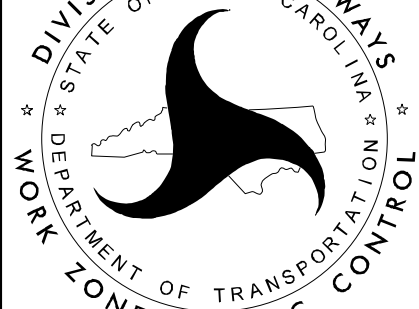
SIGNING NOTES AND PLACEMENT PER DIRECTION	1 ROAD WORK AHEAD W20-1 48" X 48" NEXT XX MILES W7-3aP 24" X 18" PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE. #2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER.(NO FRACTIONAL OR DECIMAL NUMBERS)	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, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK. ROAD WORK AHEAD W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. WORK AHEAD W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER.
	3 LOW/SOFT SHOULDER SP 13107 48" X 48" - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.	
	4 ROAD UNDER CONST SP 13106 48" X 48" - 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. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.	
	5 END ROAD WORK G20-2 A 48" X 24" PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	
	THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.	
LESS 2 MILES	FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.	

DIVISION OF HIGHWAYS

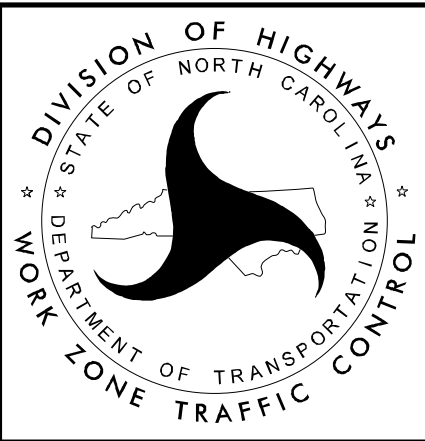
STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

WORK ZONE TRAFFIC CONTROL



AD



ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2-LANE ROADWAY
RESURFACING

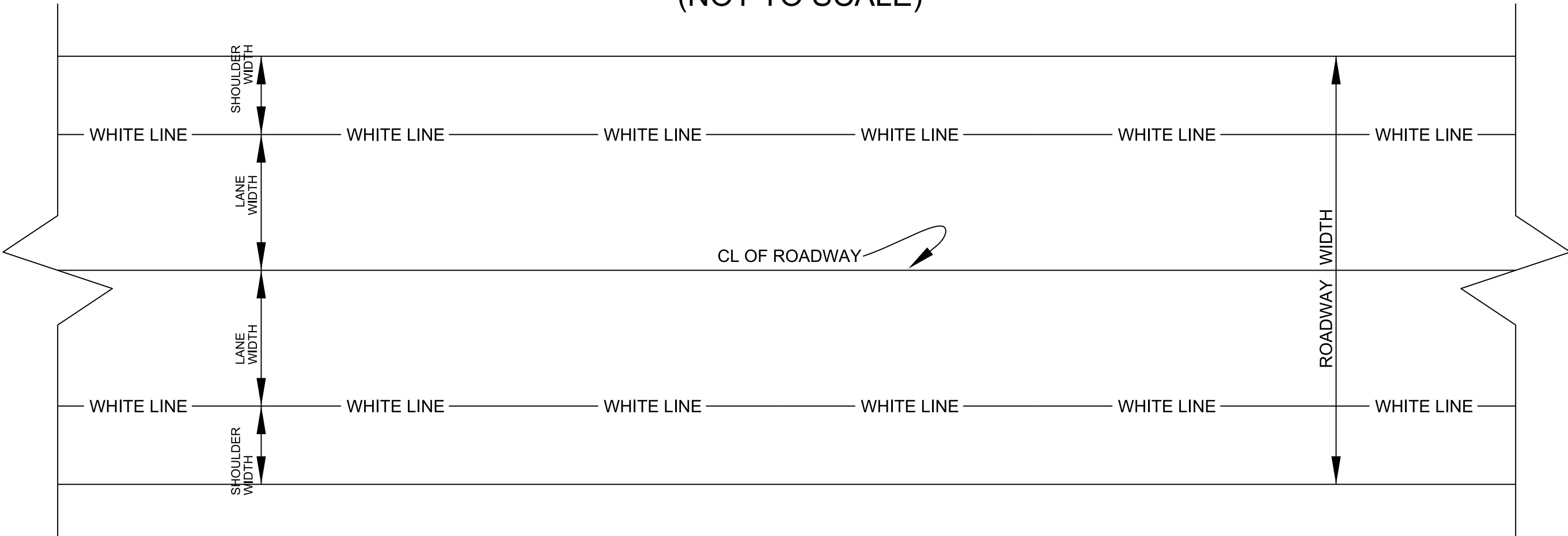
GUIDELINES FOR LANE WIDTHS ON RESURFACING PROJECTS

Contractor shall place the new pavement markings in accordance with this table and detail unless otherwise directed by the Engineer.

TWO LANE - TWO WAY ROADWAY - 55 MPH		
ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9' *	0'
20'	10' *	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	12'	2'
32'	12'	4'
* May vary due to pavement width		

TWO LANE - TWO WAY ROADWAY		50
MPH OR LESS		
ROADWAY WIDTH	LANE WIDTH	SHOULDER WIDTH
18'	9' *	0'
20'	10' *	0'
22'	10'	1'
24'	10'	2'
26'	11'	2'
28'	11'	3'
32'	11'	5'
* May vary due to pavement width		

SCHEMATIC OF ROADWAY
(NOT TO SCALE)



PLAN VIEW

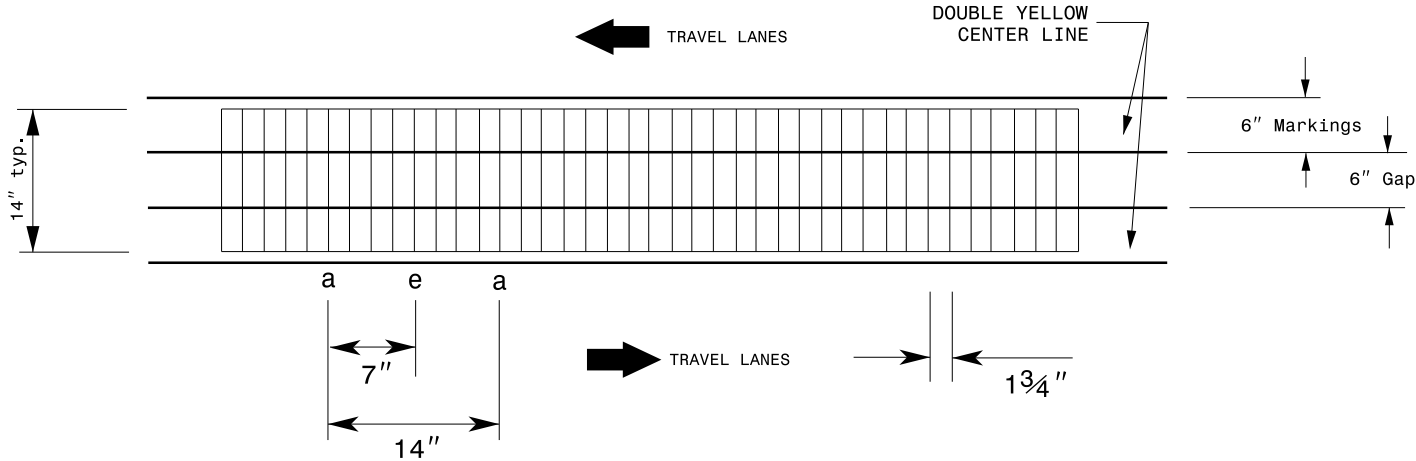


	DEPTH	
LOCATION	MIL	INCHES
a	62.5	$\frac{1}{16}$ "
b	125	$\frac{1}{8}$ "
c	219	$\frac{7}{32}$ "
d	344	$\frac{11}{32}$ "
e	375	$\frac{3}{8}$ "

DRAFT REFERENCE DRAWING: FEBRUARY 2023

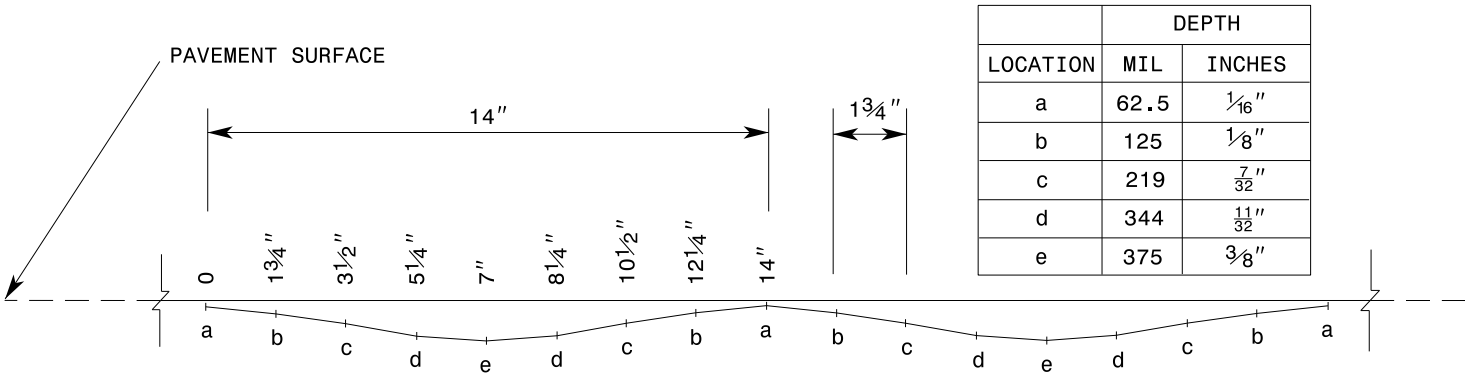
- 1) Specification in table taken from MNDOT Research Project Final Report 2016-23: *Sinusoidal Rumble Strip Design Optimization Study By: Terhaar et. al, June 2016*
- 2) USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.
- 3) ENSURE GLASS BEADS ARE SPREAD UNIFORMLY OVER THE ENTIRE SURFACE OF THE PAVEMENT MARKING MATERIAL.

Rumble Dimensions



Markings Dimensions

PROFILE:



REFERENCE DRAWING ID: Sin.CL

NOTES:

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- 3) ENSURE GLASS BEADS ARE SPREAD UNIFORMLY OVER THE ENTIRE SURFACE OF THE PAVEMENT MARKING MATERIAL.

PROJECT NO.	SHEET NO.	TOTAL NO.
2027CPT.06.06.20781.1		

SUMMARY OF QUANTITIES

												1220000000-E	1245000000-E	1260000000-E	1297000000-E			1330000000-E	1491000000-E	1519000000-E	1520000000-E	1575000000-E	1704000000-E	1881000000-E		2845000000-N						
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTI ON	AGGREGATE SHOULDER BORROW	0.75" MILLING	1½" MILLING	5" MILLIN G	INCIDENTAL MILLING	BASE COURSE, B25.0C	SURFACE COURSE, S9.5B	LEVELING COURSE, S9.5B	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	GENERIC PAVING ITEM -8" SINUSOIDA L RUMBLE STRIPS	GENERIC PAVING ITEM -14" SINUSOIDA L RUMBLE STRIPS	ADJ. OF METER OR VALVE BOX						
								MI	FT			TONS	SMI	TON	SY	SY	SY	SY	TONS	TONS	TONS	TONS	TONS	LF	LF	EA						
2027CPT.06.06.20781.1	Robeson	1	SR-2465 / GERALD RD	FROM NC-904 TO NC-130	2	2		1.850	20	0.000	1.850	35	3.70	598					357	1,885	10	144	5									
TOTAL FOR MAP NO. 1								1.850				35	3.70	598					357	1,885	10	144	5									
2027CPT.06.06.20781.1	Robeson	2	SR-1003 / N CHICKEN RD	FROM NC-72 TO NC-211	1	2		3.830	25.5	15.170	19.000	100	7.66	1,239	58,122	343		2,931	294	4,982		348	5	39,706.00	19,853.00							
TOTAL FOR MAP NO. 2								3.830				100	7.66	1,239	58,122	343		2,931	294	4,982		348	5	39,706.00	19,853.00							
2027CPT.06.06.20781.1	Robeson	3	SR-2453 / JONESVILLE RD	FROM NC-41 TO SR 2454	2	2		3.020	20	0.000	3.020	60	6.04	977				1,952	239	3,085	10	220	5									
TOTAL FOR MAP NO. 3								3.020				60	6.04	977				1,952	239	3,085	10	220	5									
2027CPT.06.06.20781.1	Robeson	4	SR-2242 / SMYRNA CHURCH RD	FROM SR 2208 TO SR 2235	2	2		2.270	19	0.000	2.270	17	4.54	734		141		724	29	2,122	10	145	5									
TOTAL FOR MAP NO. 4								2.270				17	4.54	734		141		724	29	2,122	10	145	5									
2027CPT.06.06.20781.1	Robeson	5	SR-2241 / PINWOOD RD	FROM SR 2208 TO SR 2235	2	2		2.496	18	0.000	2.496	45	5.00	809		353		755	368	1,545	10	123	5									
TOTAL FOR MAP NO. 5								2.496				45	5.00	809		353		755	368	1,545	10	123	5									
2027CPT.06.06.20781.1	Robeson	6	SR-2233 / FIRE TOWER RD	FROM NC-130 TO SR 2208	2,3	2		3.590	20	0.000	3.590	77	7.00	1,161		1,716	92		250	3,589	10	254	5			1						
TOTAL FOR MAP NO. 6								3.590				77	7.00	1,161		1,716	92		250	3,589	10	254	5			1						
2027CPT.06.06.20781.1	Robeson	7	SR-2209 / ROWAN RD	FROM NC-41 TO DEAD END	2	2		2.050	19	0.000	2.050	47	4.10	663				446	147	1,944	10	140	5			2						
TOTAL FOR MAP NO. 7								2.050				47	4.10	663				446	147	1,944	10	140	5			2						
2027CPT.06.06.20781.1	Robeson	8	SR-2306 / LITTLE ROD RD	FROM SR 2208 TO SR 2208	4	2		0.360	20	0.000	0.360	35								232	10	18	2									
TOTAL FOR MAP NO. 8								0.360				35								232	10	18	2									
2027CPT.06.06.20781.1	Robeson	9	SR-2325 / STACKHOUSE RD	FROM SR 2237 TO DEAD END	4	2		0.435	18.5	0.000	0.435	18								263	10	20	5									
TOTAL FOR MAP NO. 9								0.435				18								263	10	20	5									
2027CPT.06.06.20781.1	Robeson	10	SR-2533 / SPENCER DR	FROM SR 2453 TO DEAD END	4	2		0.160	20	0.000	0.160	5								110	10	9	2									
TOTAL FOR MAP NO. 10								0.160				5								110	10	9	2									
2027CPT.06.06.20781.1	Robeson	11	SR-2332 / HAYWOOD AVE	FROM SR 2236 TO DEAD END	4	2		0.250	20	0.000	0.250	5								161	10	13	2									
TOTAL FOR MAP NO. 11								0.250				5								161	10	13	2									
2027CPT.06.06.20781.1	Robeson	12	SR-2322 / WASHINGTON DR	FROM SR 2236 TO DEAD END	4	2		0.210	20	0.000	0.210	13								136	11	11	2									
TOTAL FOR MAP NO. 12								0.210				13								136	11	11	2									
TOTAL FOR PROJ NO. 2027CPT.06.06.20781.1								20.521				457	38.04	6,181	58,122	2,553	92	6,808	1,684	20,054	111	1,445	48	39,706.00	19,853.00	3						
															60,767																	
GRAND TOTAL													20.521					457	38.04	6,181	58,122	2,553	92	6,808	1,684	20,054	111	1,445	48	39,706.00	19,853.00	3
																					60,767											

PROJECT NO.	SHEET NO.	TOTAL NO.
2027CPT.06.06.20781.1		

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	4413000000-E	4457000000-N	4685000000-E		4688000000-E		4709000000-E	4810000000-E		4835000000-E	4900000000-N
								MI	FT			WORK ZONE ADVANCE/GE NERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	6" X 90 M WHITE THERMO	6" X 90 M YELLOW THERMO	24" X 90 M WHITE THERMO	4" WHITE PAINT	4" YELLOW PAINT	PAINT PAVEMENT MARKING LINES (24")	YELLOW & YELLOW MARKERS
2027CPT.06.06.20781.1	Robeson	1	SR-2465 / GERALD RD	FROM NC-904 TO NC-130	2	2		1.85	20	0	1.85	207	1.00	19,536	13,675							122
TOTAL FOR MAP NO. 1								1.85				207	1	19,536	13,675							122
2027CPT.06.06.20781.1	Robeson	2	SR-1003 / N CHICKEN RD	FROM NC-72 TO NC-211	1	2		3.83	25.5	15.17	19	429				40,900	30,500	40	40,900	30,500	40	265
TOTAL FOR MAP NO. 2								3.83				429				40,900	30,500	40	40,900	30,500	40	265
2027CPT.06.06.20781.1	Robeson	3	SR-2453 / JONESVILLE RD	FROM NC-41 TO SR 2454	2	2		3.02	20	0	3.02	338		31,800	23,900							200
TOTAL FOR MAP NO. 3								3.02				338		31,800	23,900							200
2027CPT.06.06.20781.1	Robeson	4	SR-2242 / SMYRNA CHURCH RD	FROM SR 2208 TO SR 2235	2	2		2.27	19	0	2.27	254		24,100	16,900							175
TOTAL FOR MAP NO. 4								2.27				254		24,100	16,900							175
2027CPT.06.06.20781.1	Robeson	5	SR-2241 / PINWOOD RD	FROM SR 2208 TO SR 2235	2	2		2.496	18	0	2.496	280		26,600	19,800							185
TOTAL FOR MAP NO. 5								2.496				280		26,600	19,800							185
2027CPT.06.06.20781.1	Robeson	6	SR-2233 / FIRE TOWER RD	FROM NC-130 TO SR 2208	2,3	2		3.59	20	0	3.59	412		36,960	26,537							237
TOTAL FOR MAP NO. 6								3.59				412		36,960	26,537							237
2027CPT.06.06.20781.1	Robeson	7	SR-2209 / ROWAN RD	FROM NC-41 TO DEAD END	2	2		2.05	19	0	2.05	276		21,800	14,100							150
TOTAL FOR MAP NO. 7								2.05				276		21,800	14,100							150
2027CPT.06.06.20781.1	Robeson	8	SR-2306 / LITTLE ROD RD	FROM SR 2208 TO SR 2208	4	2		0.36	20	0	0.36	40										
TOTAL FOR MAP NO. 8								0.36				40										
2027CPT.06.06.20781.1	Robeson	9	SR-2325 / STACKHOUSE RD	FROM SR 2237 TO DEAD END	4	2		0.435	18.5	0	0.435	49										
TOTAL FOR MAP NO. 9								0.435				49										
2027CPT.06.06.20781.1	Robeson	10	SR-2533 / SPENCER DR	FROM SR 2453 TO DEAD END	4	2		0.16	20	0	0.16	18										
TOTAL FOR MAP NO. 10								0.16				18										
2027CPT.06.06.20781.1	Robeson	11	SR-2332 / HAYWOOD AVE	FROM SR 2236 TO DEAD END	4	2		0.25	20	0	0.25	28										
TOTAL FOR MAP NO. 11								0.25				28										
2027CPT.06.06.20781.1	Robeson	12	SR-2322 / WASHINGTON DR	FROM SR 2236 TO DEAD END	4	2		0.21	20	0	0.21	24										
TOTAL FOR MAP NO. 12								0.21				24										
TOTAL FOR PROJ NO. 2027CPT.06.06.20781.1								20.521				2,355	1.000	160,796	114,912	40,900	30,500	40	40,900	30,500	40	1,334
														275,708		71,400			71,400			
GRAND TOTAL								20.521				2,355	1.000	160,796	114,912	40,900	30,500	40	40,900	30,500	40	1,334
														275,708		71,400			71,400			