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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION 6

PLANS

Letting Date: April 20, 2022

CONTRACT ID: DF00305

TIP NO.: -----

FEDERAL AID NO.: STATE FUNDED

WBS ELEMENT NO.: 2022CPT.06.16.20781.1 & 50342

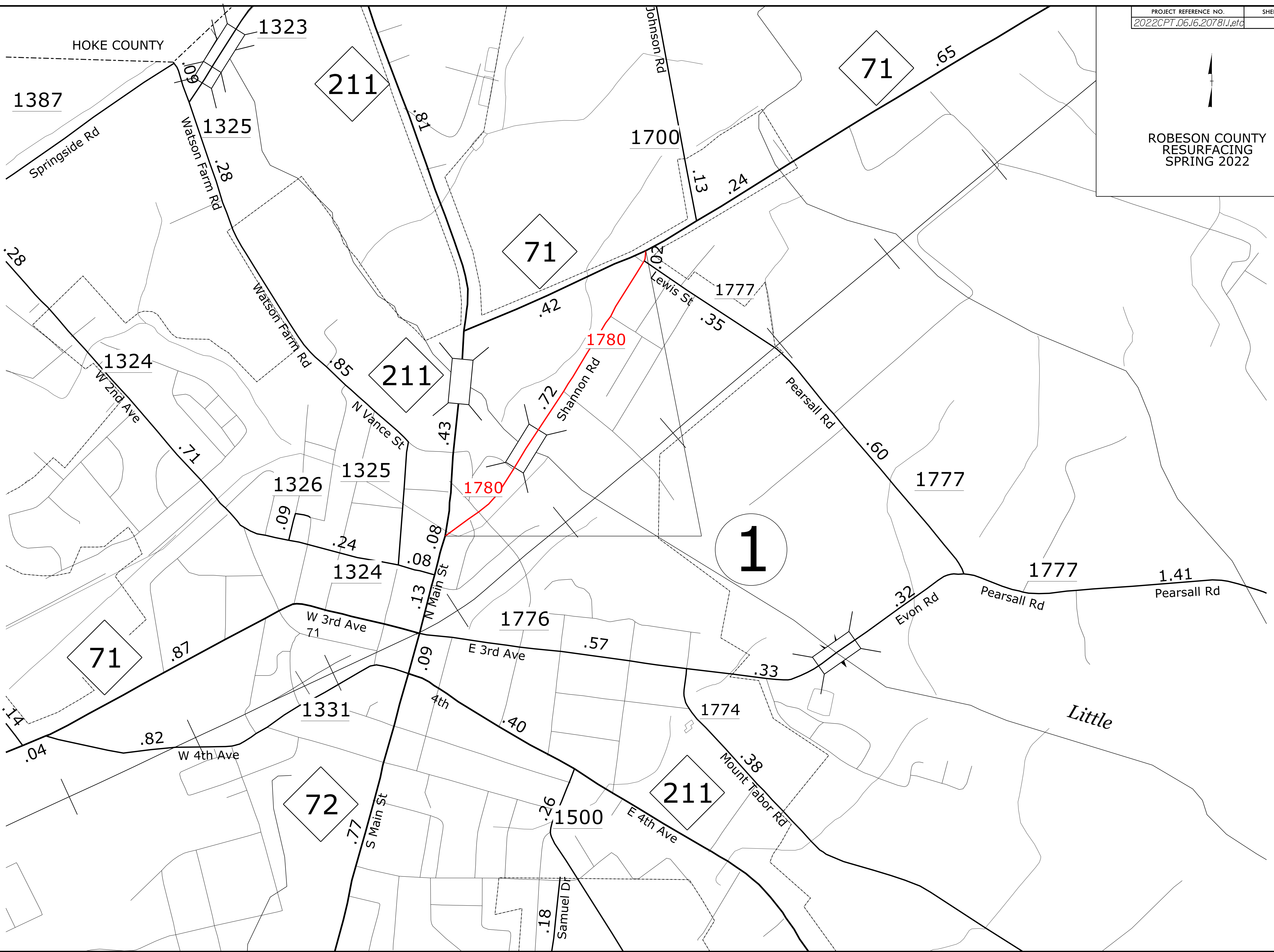
ROUTE NO.: VARIOUS SR ROUTES

LOCATION: VARIOUS

COUNTY: ROBESON

LENGTH OF PROJECT: 17.27 MILES

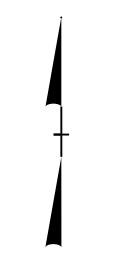
TYPE OF WORK: RESURFACING, WIDENING, MILLING, SHOULDERS & PVT. MKGS.



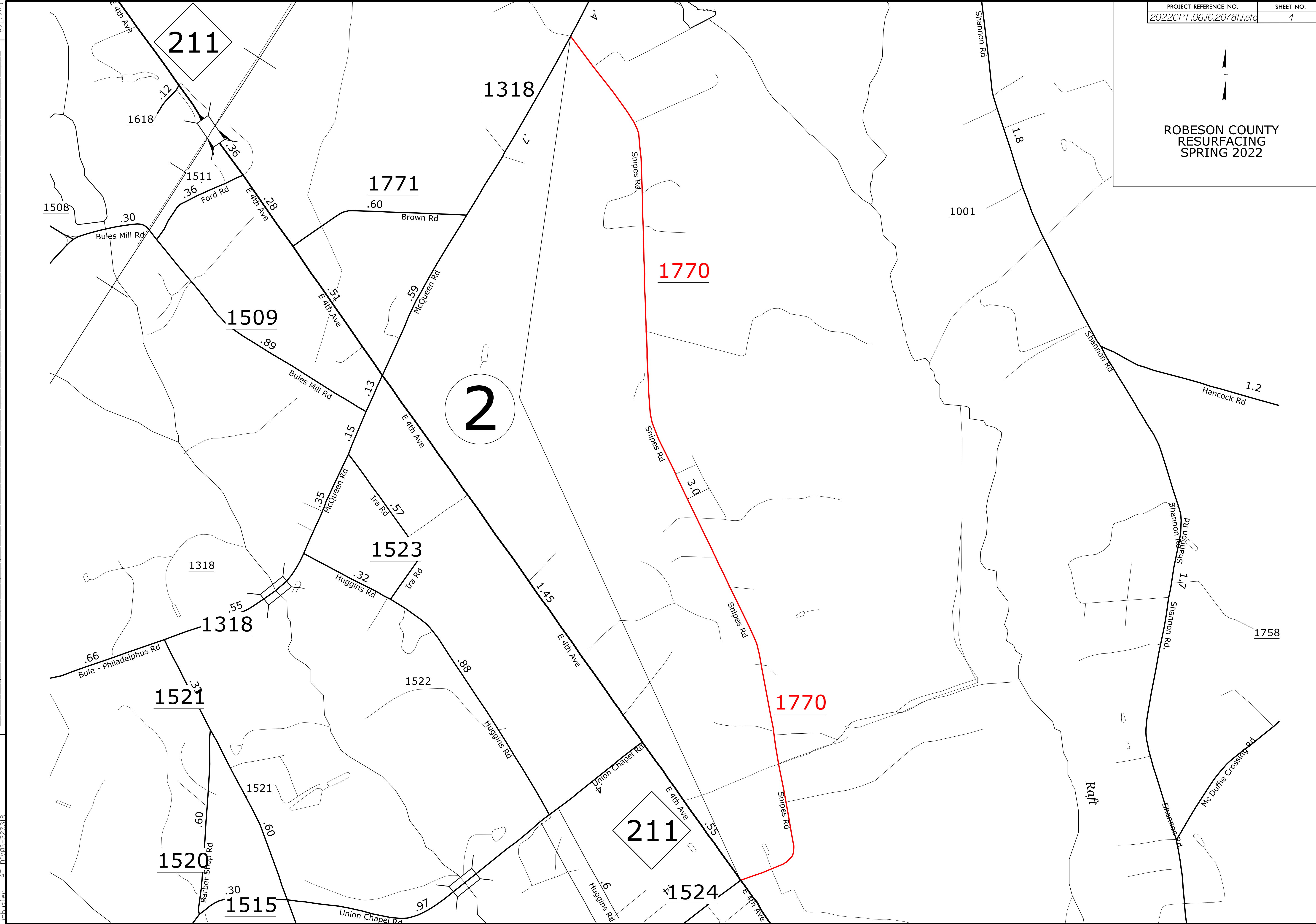
REVISIONS

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11/16/2022

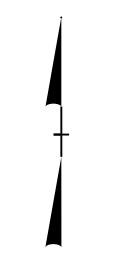
8/17/99



ROBESON COUNTY
RESURFACING
SPRING 2022



REVISIONS

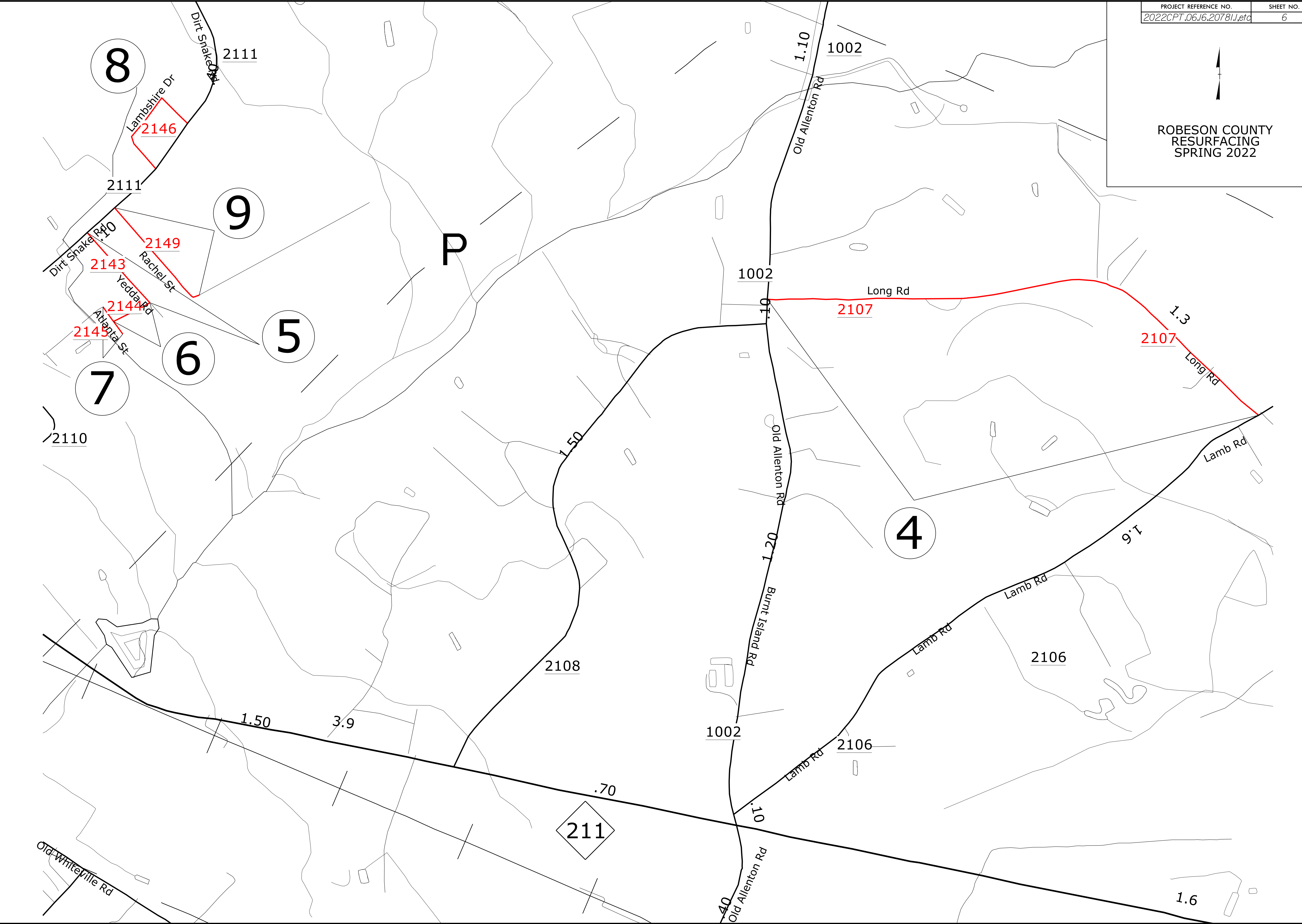


ROBESON COUNTY
RESURFACING
SPRING 2022

REVISIONS

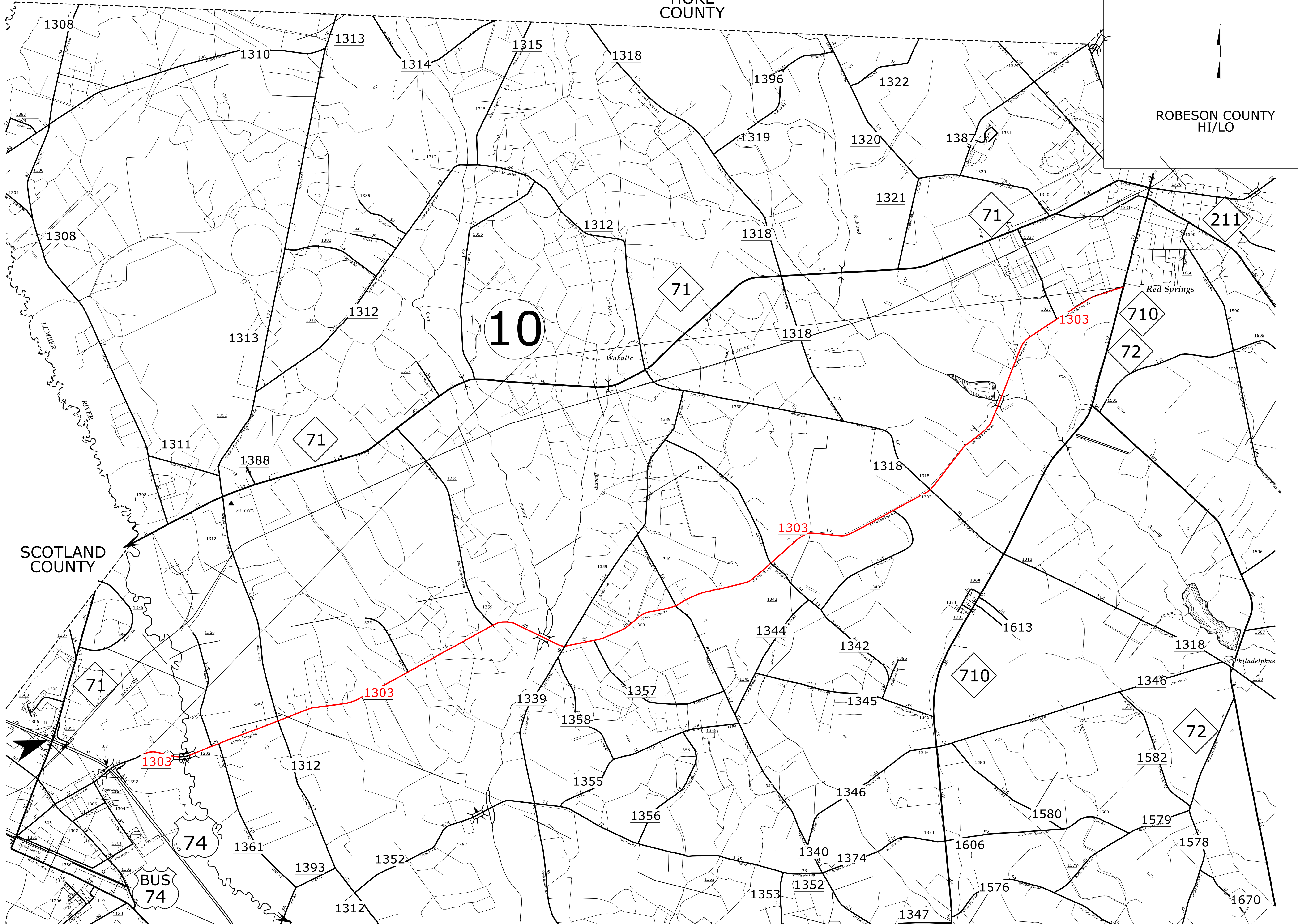
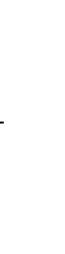
NO.	DATE	DESCRIPTION

8/17/99
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20220318



HOKE COUNTY

ROBESON COUNTY HI/LO

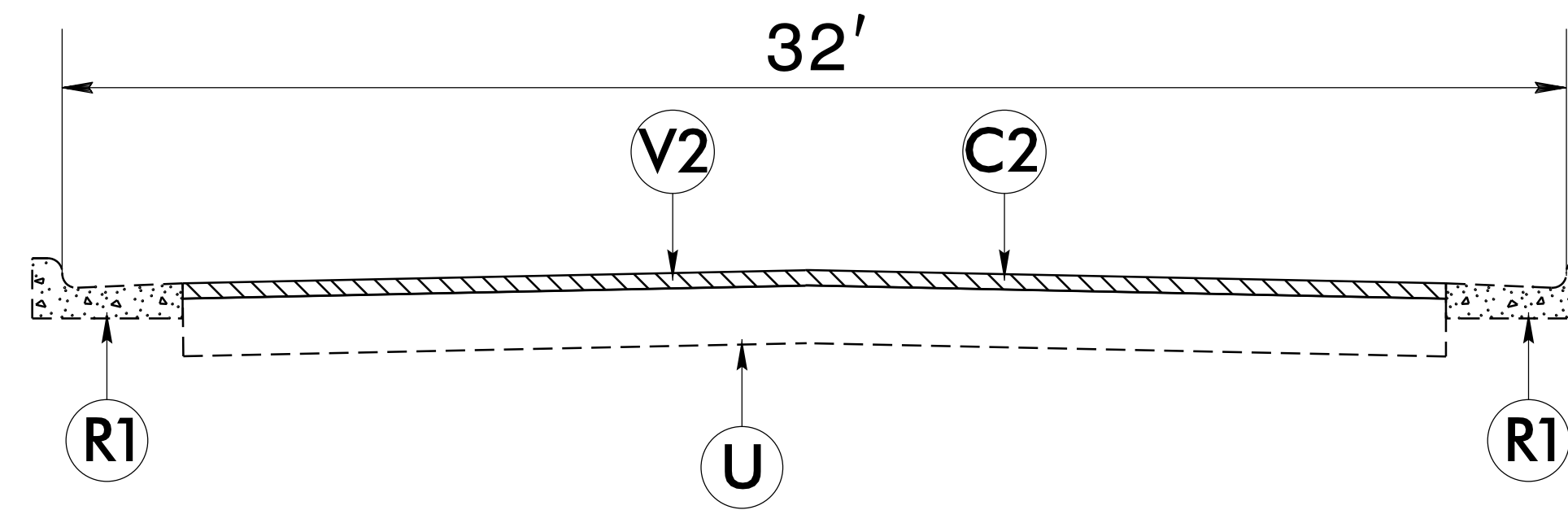


REVISIONS

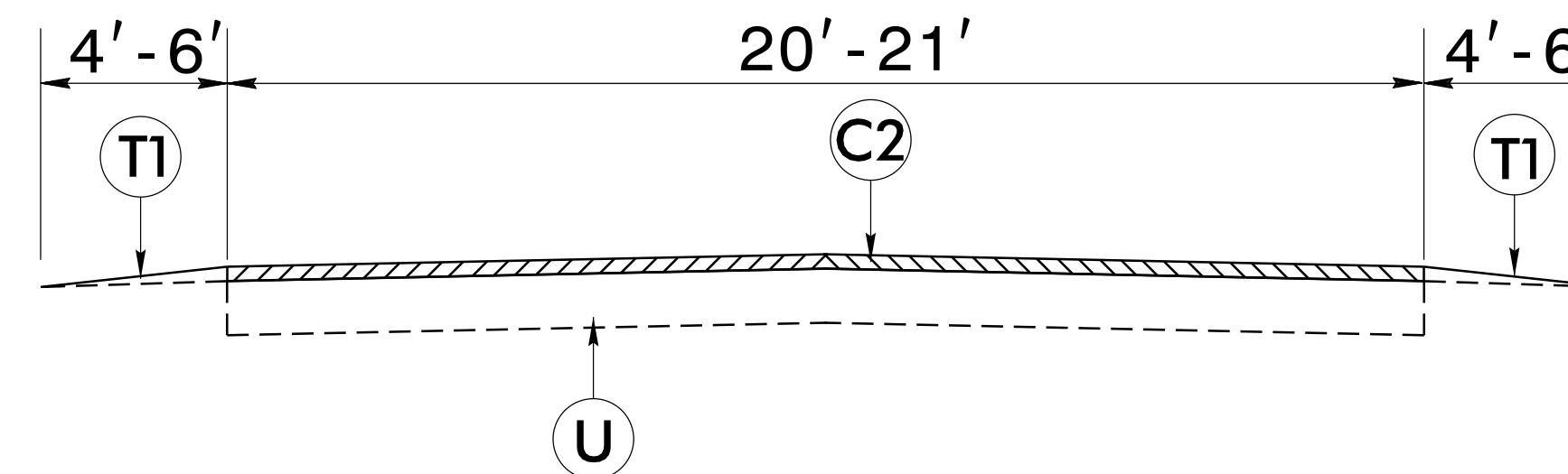
25-MAR-2022 16:07 C:\Users\p6cc\OneDrive\Documents\Projects\Resurfacing\2022_Spring\01\2\ROBESON_MS_ENG.dgn 8/17/99
DocId:37941106-953018

PAVEMENT SCHEDULE

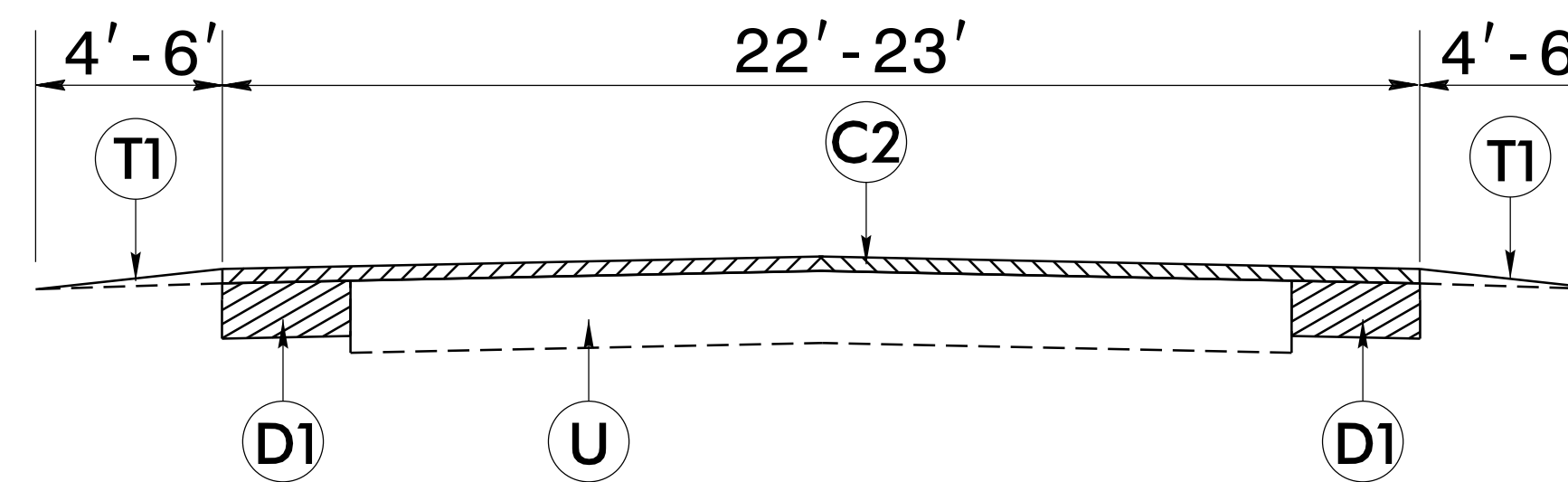
C1	1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C2	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
D1	5½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
R1	EXISTING CURB AND GUTTER
T1	SHOULDER RECONSTRUCTION WITH AGGREGATE SHOULDER BORROW
U	EXISTING ASPHALT PAVEMENT
V1	0" - 1½" MILLING
V2	1½" MILLING



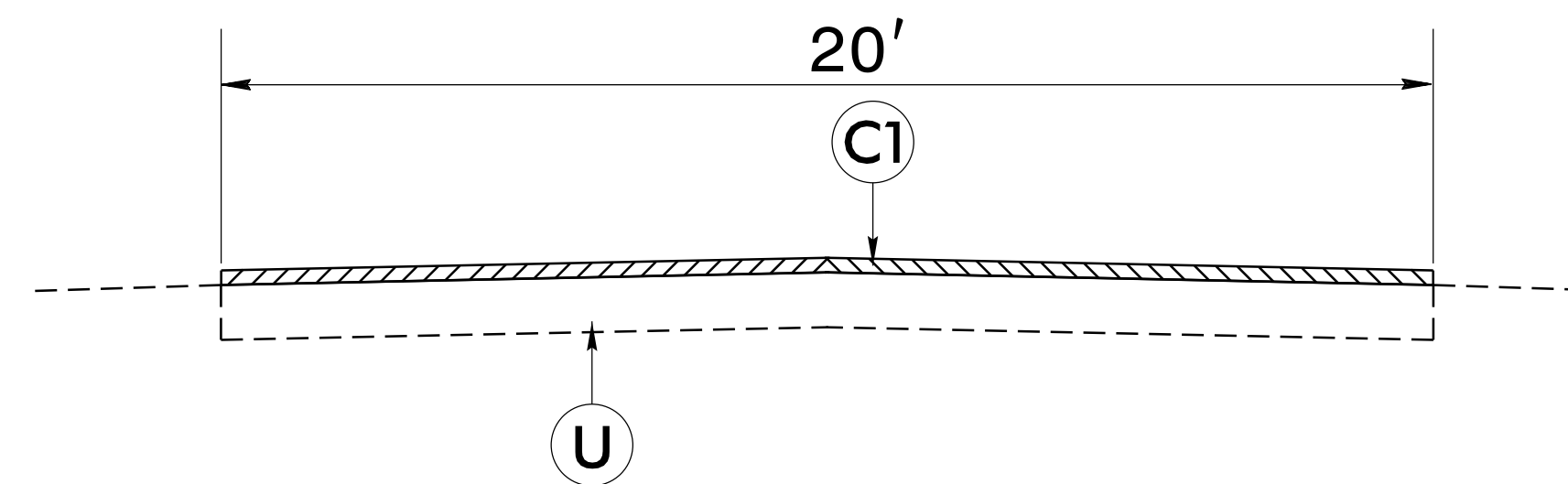
TYPICAL SECTION NO. 1



TYPICAL SECTION NO. 2



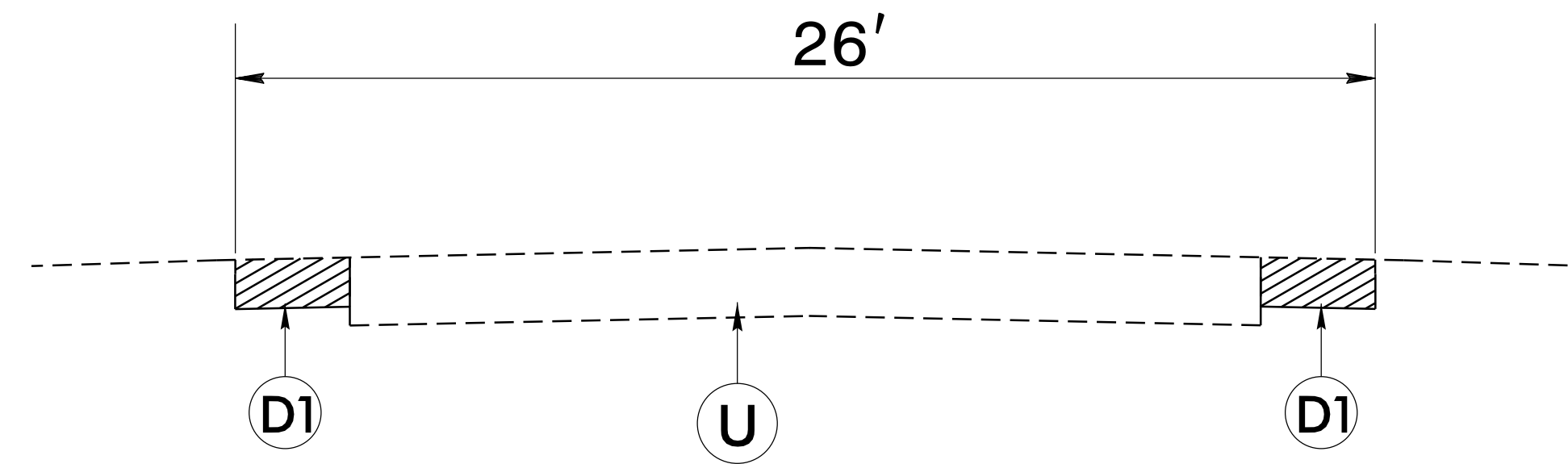
TYPICAL SECTION NO. 3



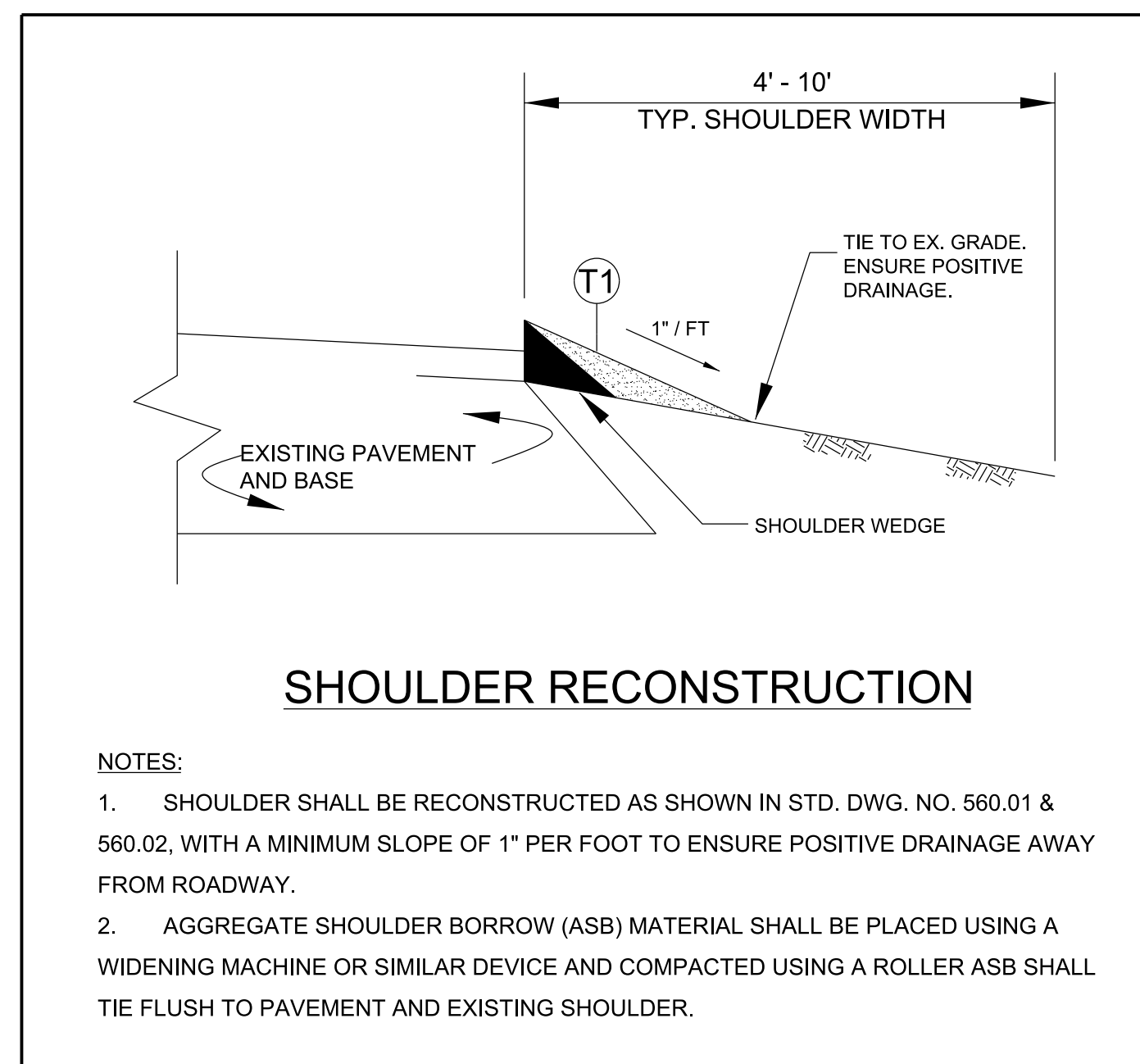
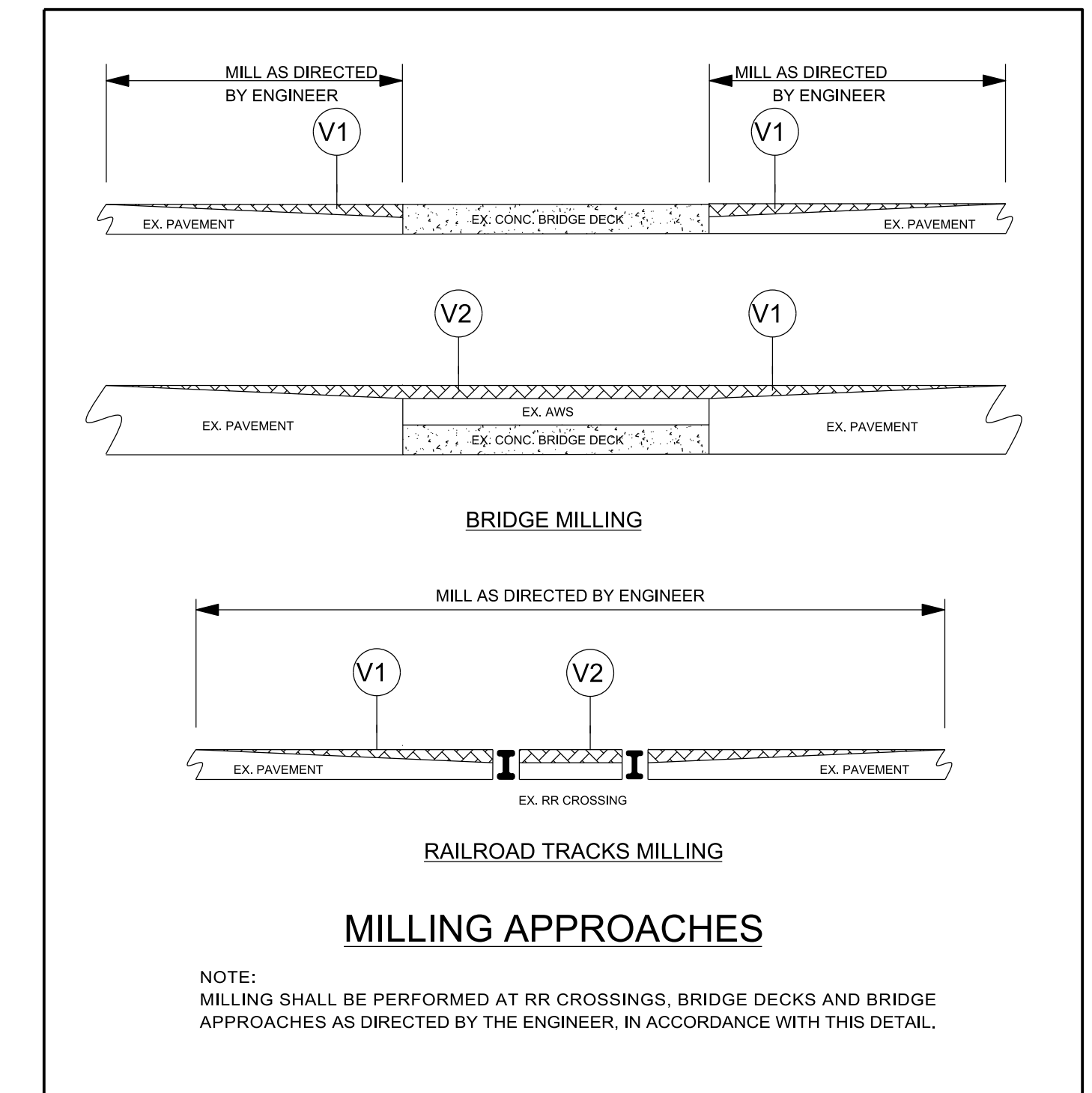
TYPICAL SECTION NO. 4

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.
D1	5½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
R1	EXISTING CURB AND GUTTER
T1	SHOULDER RECONSTRUCTION WITH AGGREGATE SHOULDER BORROW
U	EXISTING ASPHALT PAVEMENT
V1	0" - 1½" MILLING
V2	1½" MILLING



TYPICAL SECTION NO. 5

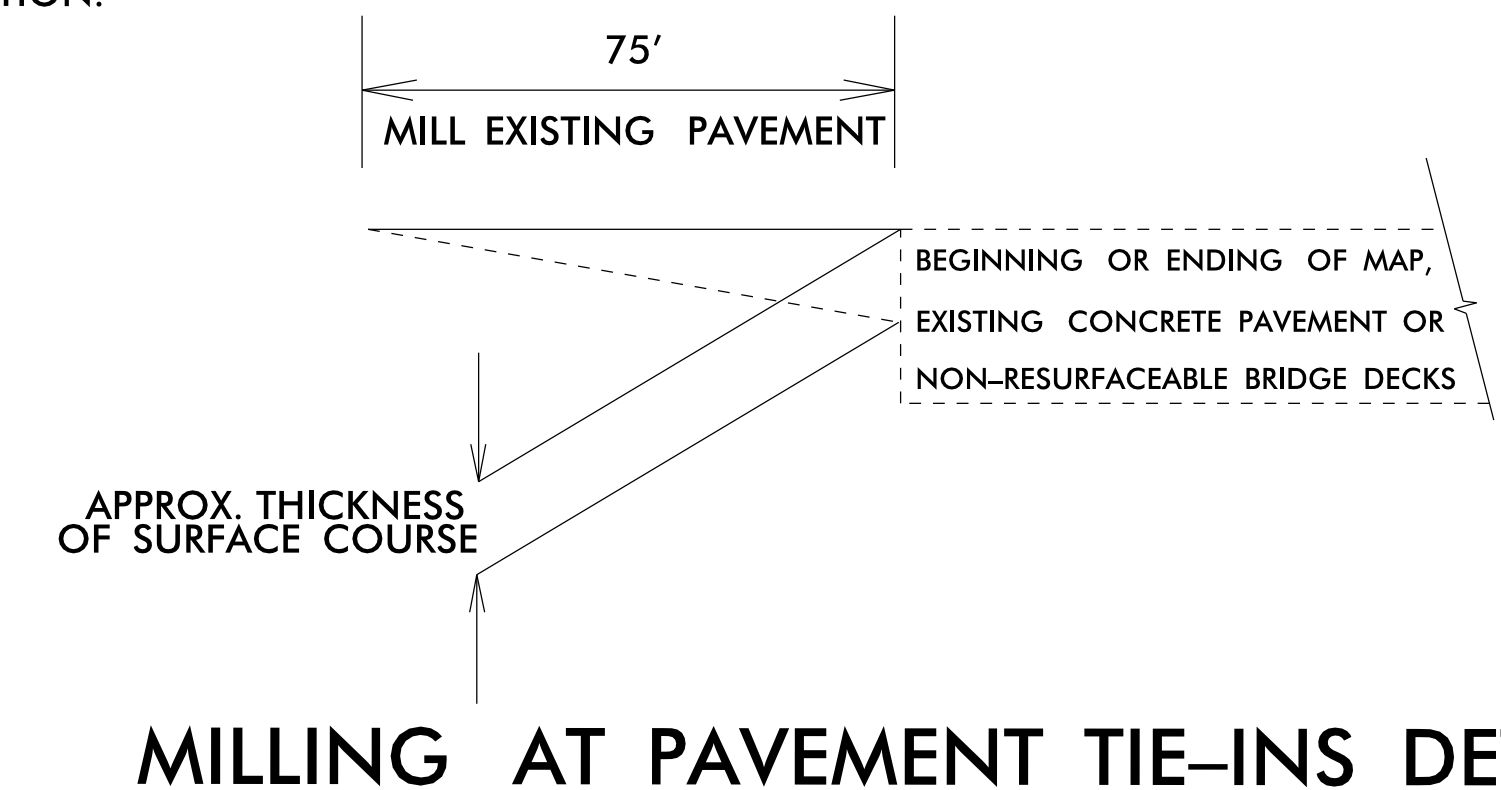


NOTES TO CONTRACTOR

FOR SURFACE MIXES OVER 1" IN THICKNESS, MILL THE EXISTING PAVEMENT IN ACCORDANCE WITH THE FOLLOWING SKETCH AS DIRECTED BY THE ENGINEER.

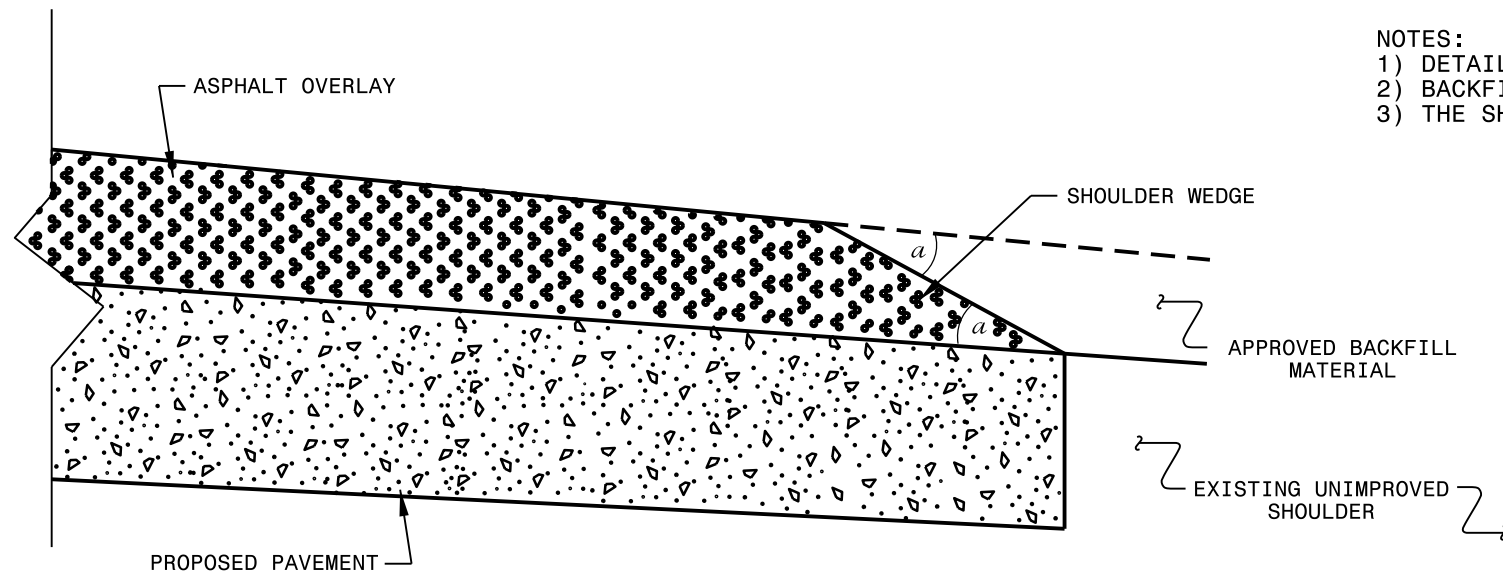
LOCATIONS SHALL INCLUDE TIES INTO EXISTING CONCRETE PAVEMENT, AT BRIDGE APPROACHES WHERE THE BRIDGE WILL NOT BE RESURFACED, AND AT THE BEGINNING AND ENDING POINT OF EACH RESURFACING MAP.

PERFORM THE WORK IN ACCORDANCE WITH SECTION 607 OF THE JANUARY 2012 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. RESURFACING WILL BE ACCOMPLISHED AT THE SAME TIME AS THE MILLING OPERATION.

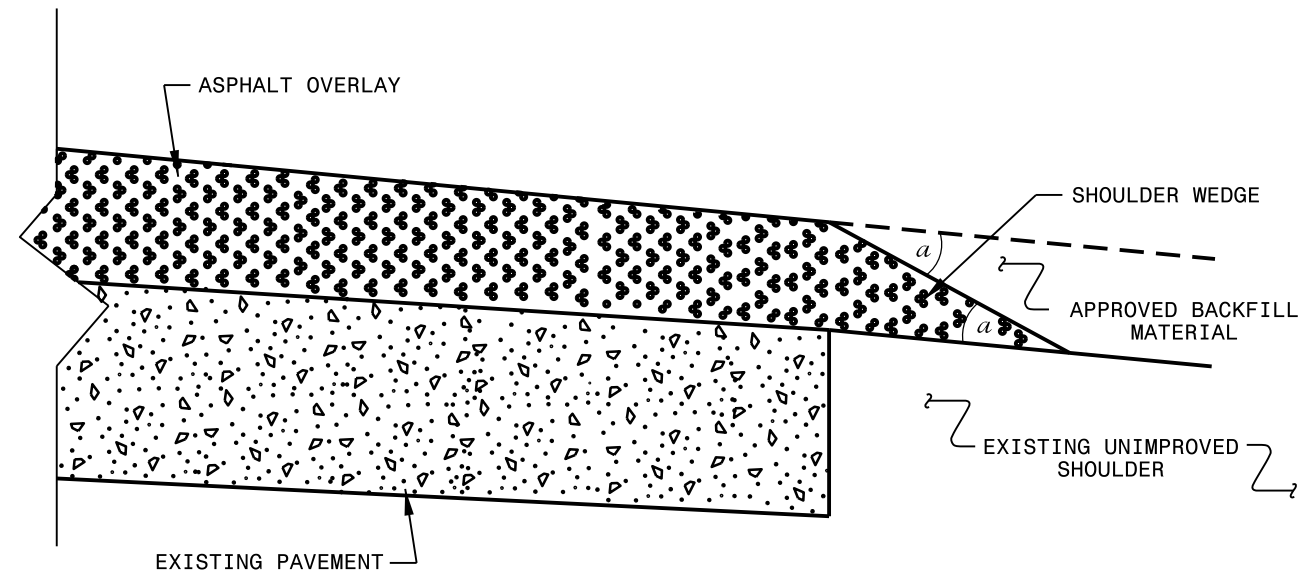


6/2/99 29-MAR-2022 07:24 Jomk-Files\Projects\Resurfacing\2022 Spring\01\C2\tup.dgn

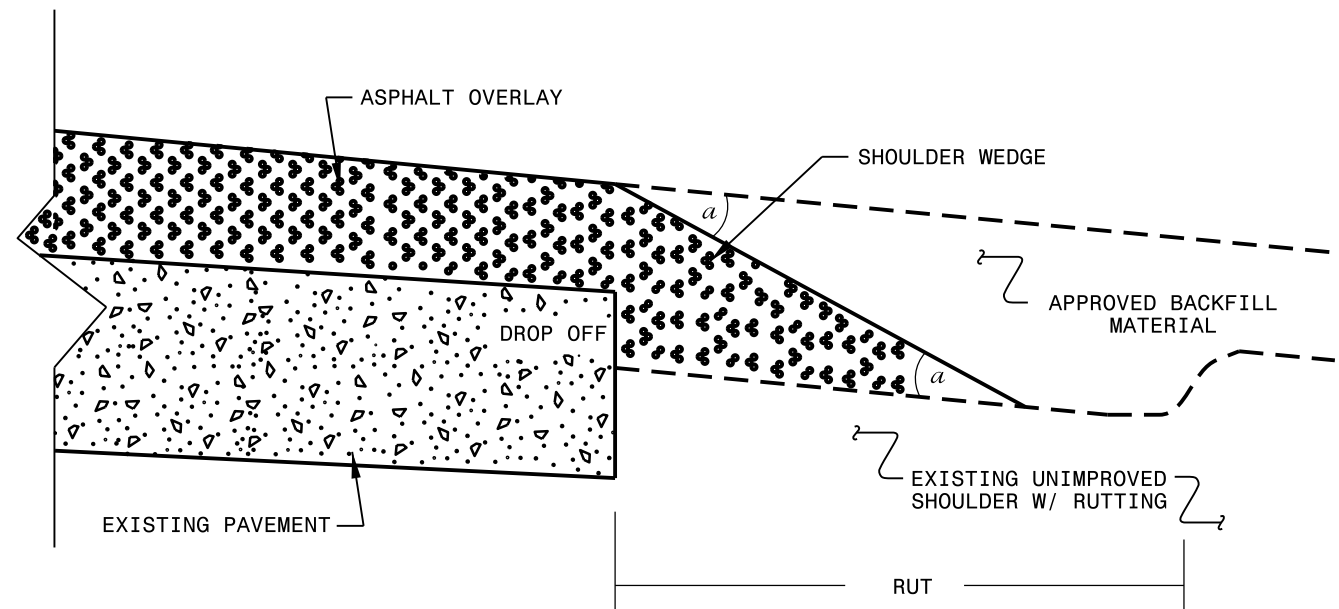
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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)

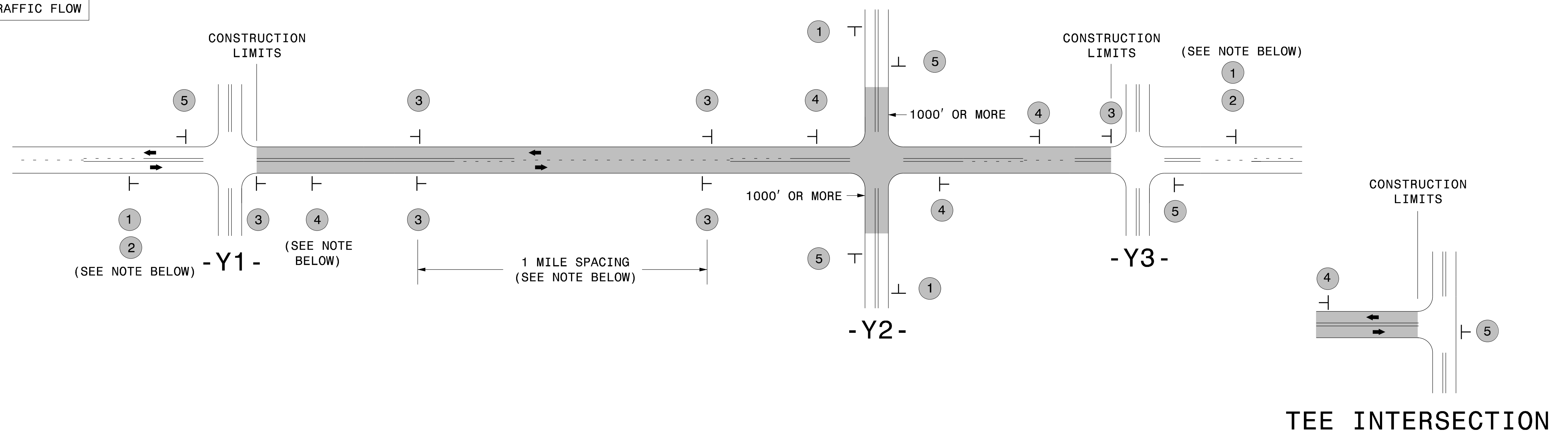
- SHOULDER WEDGE ANGLE = 30°

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.: susr/details/stand/shoulderwedgedetail.dgn			

SYSTEMS DESIGN
USER NAME

SIGNING FOR RESURFACING PROJECTS

LEGEND
 ┆ STATIONARY SIGN
 ← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

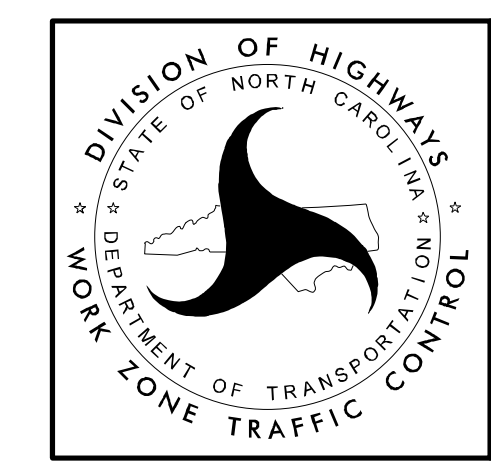
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1		PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p>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>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.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER. </div> </div>
	2		#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)	
	3		- 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		- 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		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.

MAPS LESS THAN 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.



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

5/15/2017 S:\TUX\WZTC\Resurfacing\2L2W & AST Resurfacing Details\Resurfacing_AdvWarn_2Ln.dgn User:kadai

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'

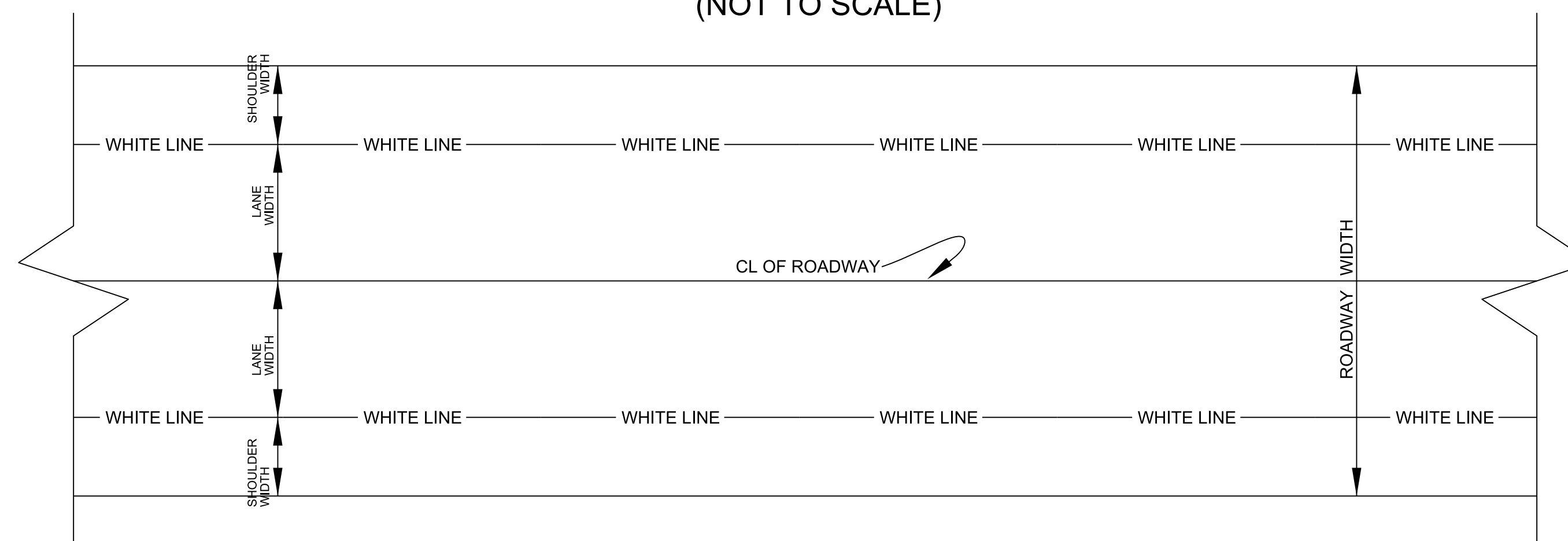
* May vary due to pavement width

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)



SUMMARY OF QUANTITIES

												PROJECT NO.		SHEET NO.	TOTAL NO.				
												2022CPT.06.16.20781.1, 50342							
												1121000000-E	1245000000-E	1260000000-E	1297000000-E	1330000000-E	1503000000-E	1519000000-E	1575000000-E
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH		AGGREGATE BASE COURSE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	1½" MILLING	INCIDENTAL MILLING	INTERMEDIATE COURSE, I19.0C	SURFACE COURSE, S9.5B	ASPHALT BINDER FOR PLANT MIX
										MI	FT								
2022CPT.06.16.20781.1	Robeson	1	SR 1780 - A	NC 211 (MP 0.0) TO END C&G (MP 0.24)	1	2	2WU	NO	NO	0.24	32				9,013			392	26
		1	SR 1780 - B	END C&G (MP 0.24) TO NC 71 (MP 0.72)	2	2	2WU	NO	NO	0.48	21		0.96	207		175		515	35
TOTAL FOR MAP NO. 1										0.72		0.96	207	9,013	175		907	61	
2022CPT.06.16.20781.1	Robeson	2	SR 1770	SR 1318 (MP 0.0) TO NC 211 (MP 3.0)	3	2	2WU	NO	NO	3.00	18		6.00	1,296		367	2,583	3,424	353
TOTAL FOR MAP NO. 2										3.00		6.00	1,296		367	2,583	3,424	353	
2022CPT.06.16.20781.1	Robeson	3	SR 1729	SR 1727 (MP 0.0) TO SR 1725 (MP 1.60)	3	2	2WU	NO	NO	1.60	19		3.20	691		383	1,378	1,907	194
TOTAL FOR MAP NO. 3										1.60		3.20	691		383	1,378	1,907	194	
2022CPT.06.16.20781.1	Robeson	4	SR 2107	SR 1002 (MP 0.0) TO SR 2106 (MP 1.29)	2	2	2WU	NO	NO	1.29	20		2.58	557				1,319	88
TOTAL FOR MAP NO. 4										1.29		2.58	557				1,319	88	
2022CPT.06.16.20781.1	Robeson	5	SR 2143	SR 2111 (MP 0.0) TO SR 2144 (MP 0.22)	4	2	2WU	NO	NO	0.22	20							150	10
TOTAL FOR MAP NO. 5										0.22								150	10
2022CPT.06.16.20781.1	Robeson	6	SR 2144	SR 2145 (MP 0.0) TO SR 2143 (MP 0.10)	4	2	2WU	NO	NO	0.10	20							68	5
TOTAL FOR MAP NO. 6										0.10								68	5
2022CPT.06.16.20781.1	Robeson	7	SR 2145	DEAD END (MP 0.0) TO DEAD END (MP 0.08)	4	2		NO	NO	0.08	20							54	4
TOTAL FOR MAP NO. 7										0.08								54	4
2022CPT.06.16.20781.1	Robeson	8	SR 2146	SR 2111 (MP 0.0) TO SR 2111 (MP0.30)	4	2	2WU	NO	NO	0.30	20							204	14
TOTAL FOR MAP NO. 8										0.30								204	14
2022CPT.06.16.20781.1	Robeson	9	SR 2149	SR 2111 (MP 0.0) TO DEAD END (MP 0.27)	4	2	2WU	NO	NO	0.27	20							184	12
TOTAL FOR MAP NO. 9										0.27								184	12
TOTAL FOR PROJ NO. 2022CPT.06.16.20781.1										7.58		12.74	2,751	9,013	925	3,961	8,217	741	
50342	Robeson	10	SR 1303	MM 1.25 TO NC 710 (MM10.94)	5	2	2WU	NO	NO	9.69	22	50						8,343	400
TOTAL FOR MAP NO. 10										9.69		50						8,343	400
TOTAL FOR PROJ NO. 50342										9.69		50						8,343	400
GRAND TOTAL										17.27		50	12.74	2,751	9,013	925	12,304	8,217	1,141

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO.	SHEET NO.	TOTAL NO.
2022CPT.06.16.20781.1, 50342		

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH		WIDTH	441300000-E	445700000-N	468500000-E	468800000-E	481000000-E		490000000-N
								MI	FT		WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	4" X 90 M YELLOW THERMO	6" X 90 M WHITE THERMO	4" WHITE PAINT	4" YELLOW PAINT	YELLOW & YELLOW MARKERS
											SF	LS	LF	LF	LF	LF	EA
2022CPT.06.16.20781.1	Robeson	1	SR 1780 - A	NC 211 (MP 0.0) TO END C&G (MP 0.24)	1	2	2WU	0.24	32		126	1					
		1	SR 1780 - B	END C&G (MP 0.24) TO NC 71 (MP 0.72)	2	2	2WU	0.48	21		54		7,604	5,604			50
TOTAL FOR MAP NO. 1								0.72			180	1	7,604	5,604			50
2022CPT.06.16.20781.1	Robeson	2	SR 1770	SR 1318 (MP 0.0) TO NC 211 (MP 3.0)	3	2	2WU	3.00	18		336				31,680	26,928	
TOTAL FOR MAP NO. 2								3.00			336				31,680	26,928	
2022CPT.06.16.20781.1	Robeson	3	SR 1729	SR 1727 (MP 0.0) TO SR 1725 (MP 1.60)	3	2	2WU	1.60	19		179				16,896	14,354	
TOTAL FOR MAP NO. 3								1.60			179				16,896	14,354	
2022CPT.06.16.20781.1	Robeson	4	SR 2107	SR 1002 (MP 0.0) TO SR 2106 (MP 1.29)	2	2	2WU	1.29	20		144				13,622	11,579	
TOTAL FOR MAP NO. 4								1.29			144				13,622	11,579	
2022CPT.06.16.20781.1	Robeson	5	SR 2143	SR 2111 (MP 0.0) TO SR 2144 (MP 0.22)	4	2	2WU	0.22	20		25						
TOTAL FOR MAP NO. 5								0.22			25						
2022CPT.06.16.20781.1	Robeson	6	SR 2144	SR 2145 (MP 0.0) TO SR 2143 (MP 0.10)	4	2	2WU	0.10	20		11						
TOTAL FOR MAP NO. 6								0.10			11						
2022CPT.06.16.20781.1	Robeson	7	SR 2145	DEAD END (MP 0.0) TO DEAD END (MP 0.08)	4	2		0.08	20		9						
TOTAL FOR MAP NO. 7								0.08			9						
2022CPT.06.16.20781.1	Robeson	8	SR 2146	SR 2111 (MP 0.0) TO SR 2111 (MP0.30)	4	2	2WU	0.30	20		34						
TOTAL FOR MAP NO. 8								0.30			34						
2022CPT.06.16.20781.1	Robeson	9	SR 2149	SR 2111 (MP 0.0) TO DEAD END (MP 0.27)	4	2	2WU	0.27	20		30						
TOTAL FOR MAP NO. 9								0.27			30						
TOTAL FOR PROJ NO. 2022CPT.06.16.20781.1								7.58			948	1	7,604	5,604	62,198	52,861	50
115,059																	
50342	Robeson	10	SR 1303	MM 1.25 TO NC 710 (MM10.94)	5	2	2WU	9.69	22		1,085				208,529	127,908	
TOTAL FOR MAP NO. 10								9.69			1,085				208,529	127,908	
TOTAL FOR PROJ NO. 50342								9.69			1,085				208,529	127,908	
336,437																	
GRAND TOTAL								17.27			2,033	1	7,604	5,604	270,727	180,769	50
451,496																	