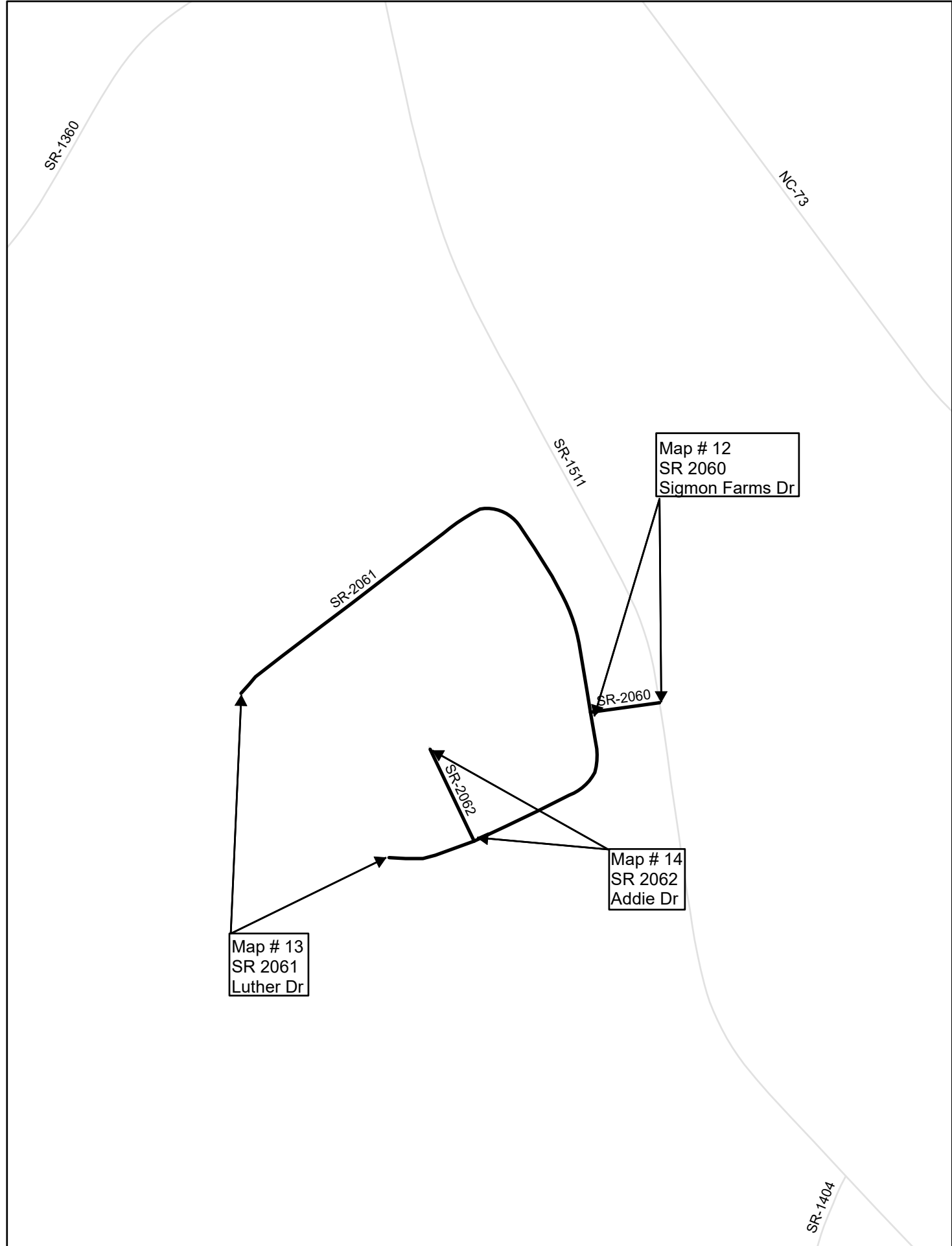
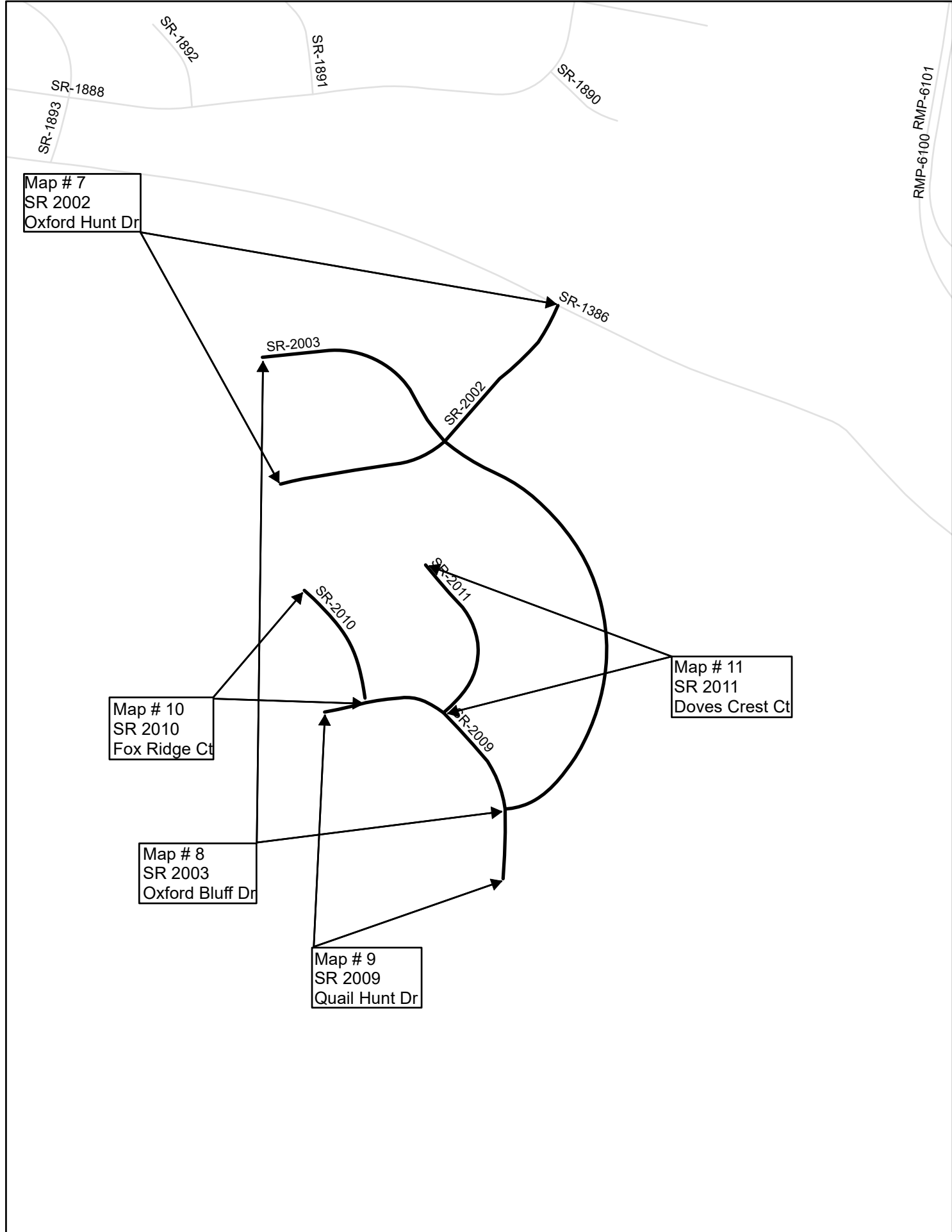
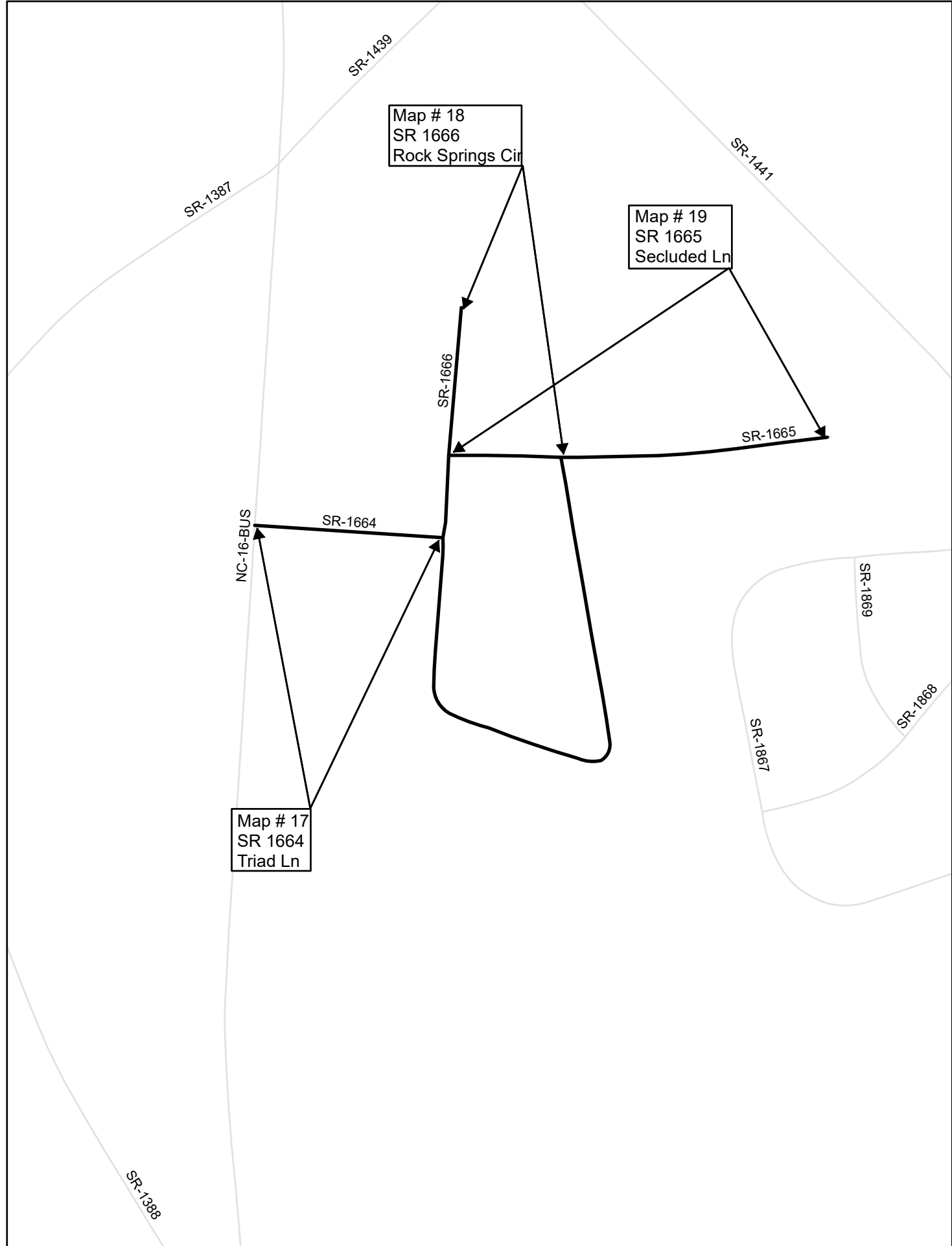
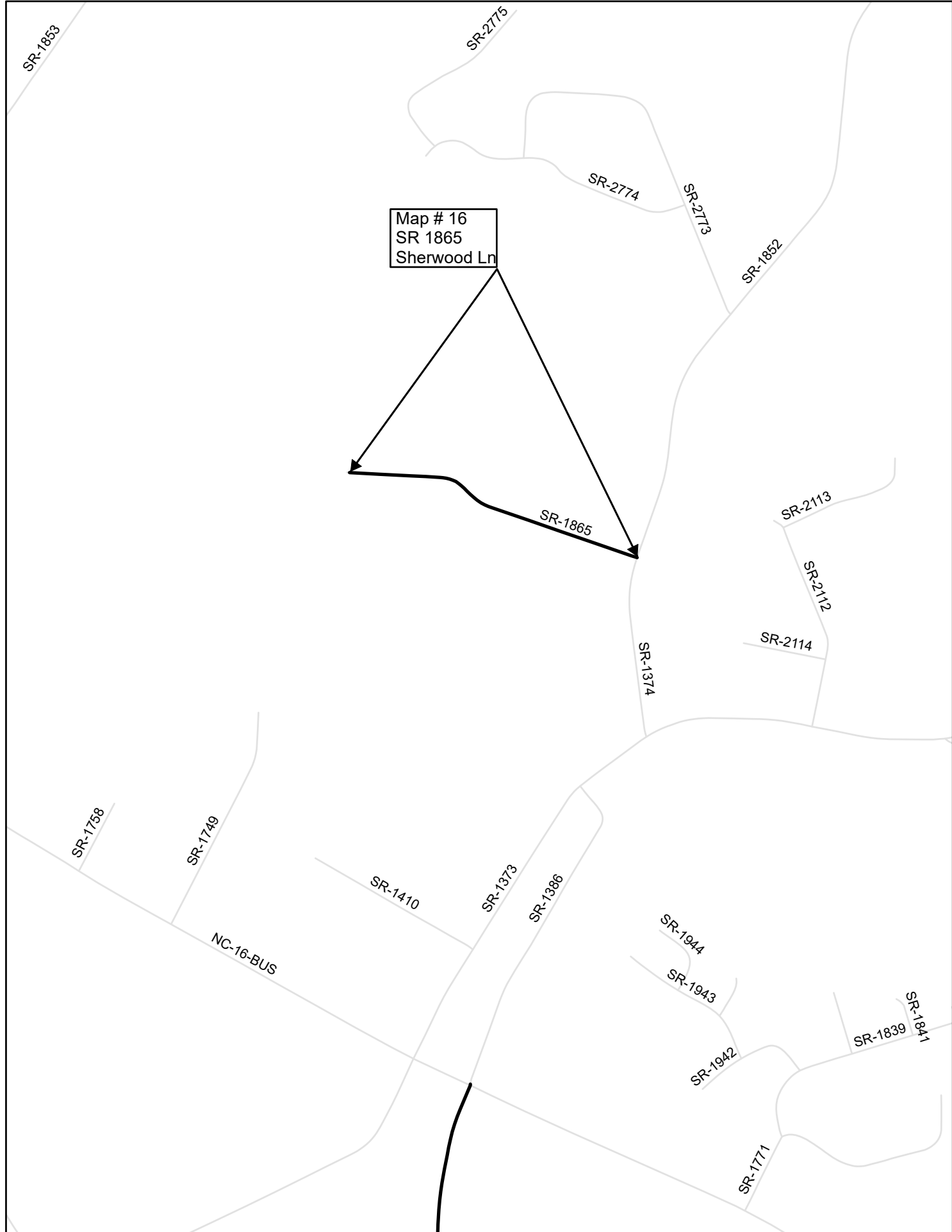


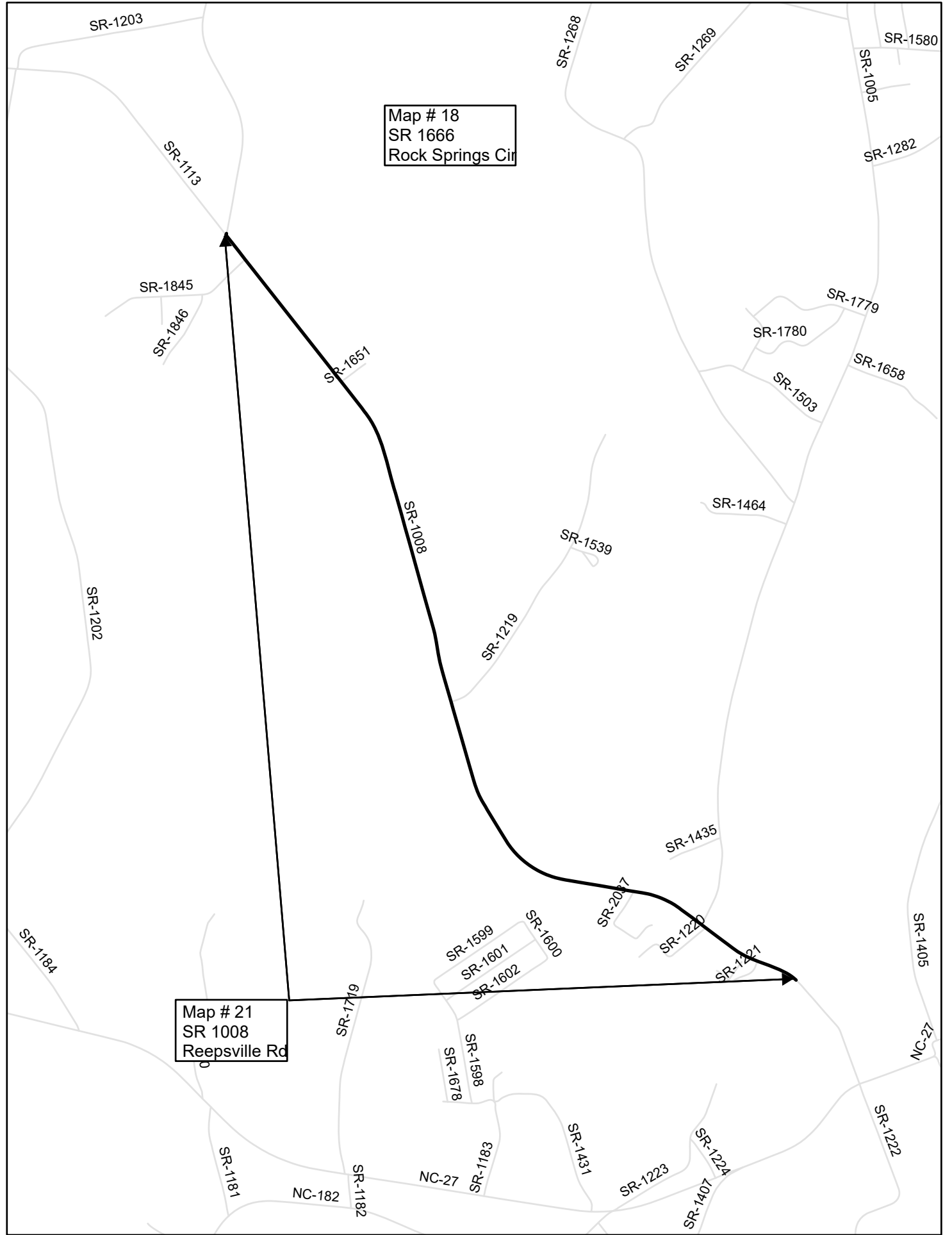
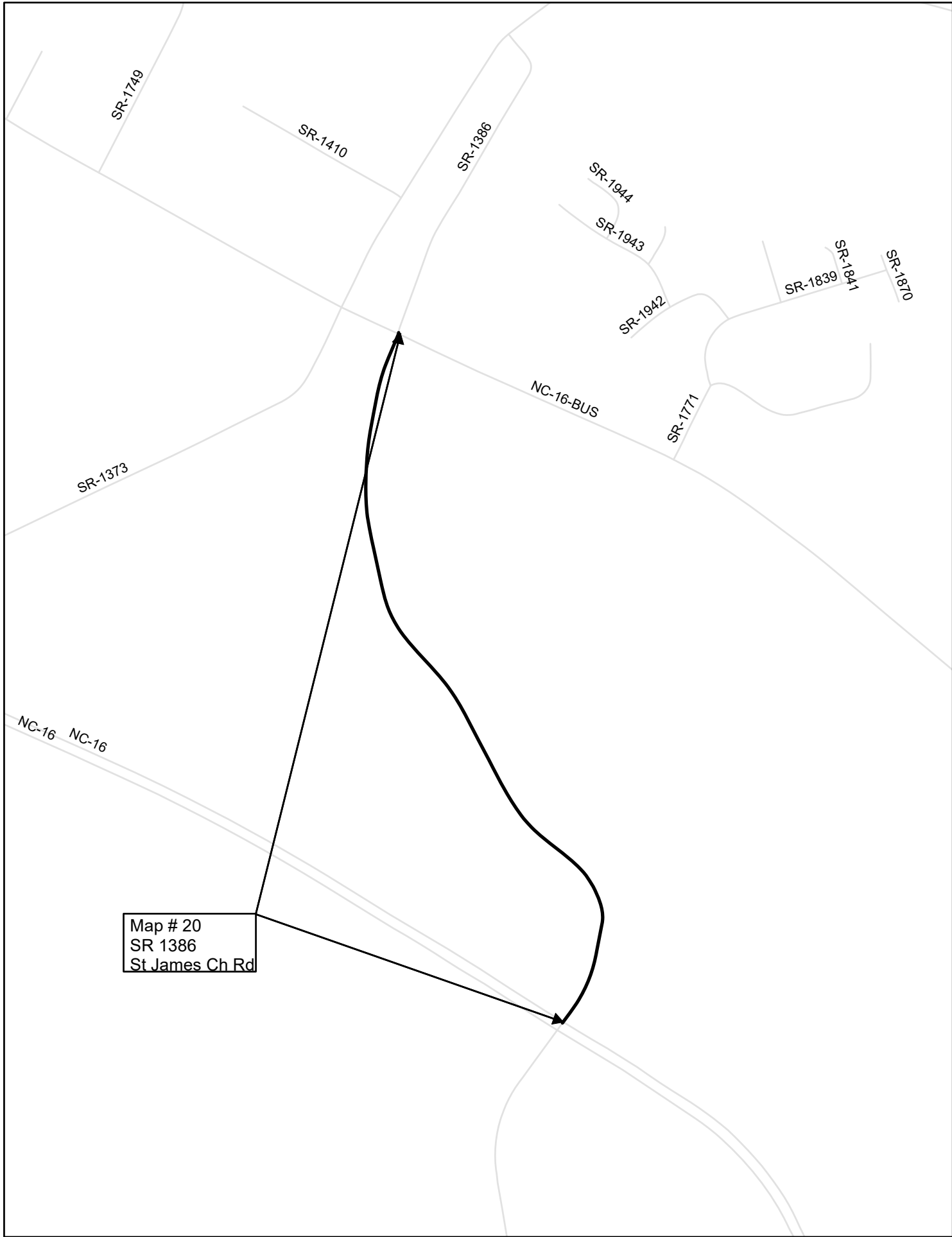
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with their signature on that page.**

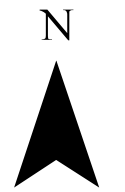
**This file or an individual page
shall not be considered a certified document.**

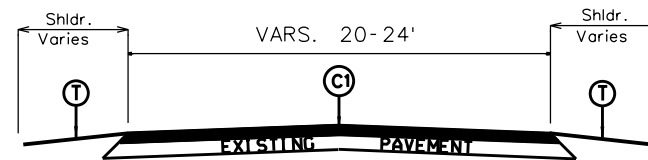






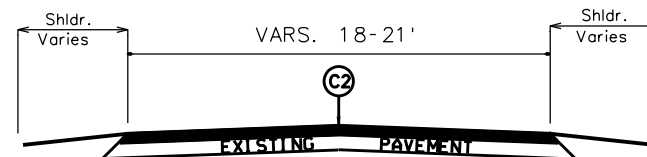
Map # 18
SR 1666
Rock Springs Cir





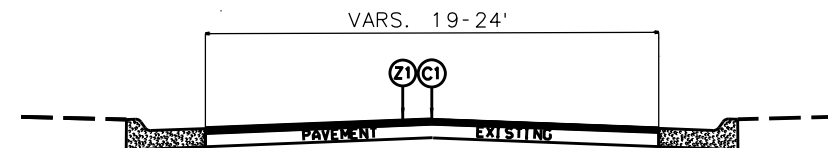
TYPICAL SECTION NO. 1

- MAP # 1 - ENTIRE MAP
- MAP # 2 - ENTIRE MAP
- MAP # 3 - ENTIRE MAP
- MAP # 20 - ENTIRE MAP
- MAP # 21 - ENTIRE MAP



TYPICAL SECTION NO. 2

- MAP # 4 - ENTIRE MAP
- MAP # 5 - ENTIRE MAP
- MAP # 6 - ENTIRE MAP
- MAP # 12 - ENTIRE MAP
- MAP # 13 - ENTIRE MAP
- MAP # 14 - ENTIRE MAP
- MAP # 15 - ENTIRE MAP
- MAP # 16 - ENTIRE MAP
- MAP # 17 - ENTIRE MAP
- MAP # 18 - ENTIRE MAP
- MAP # 19 - ENTIRE MAP



TYPICAL SECTION NO. 3

- MAP # 7 - ENTIRE MAP
- MAP # 8 - ENTIRE MAP
- MAP # 9 - ENTIRE MAP
- MAP # 10 - ENTIRE MAP
- MAP # 11 - ENTIRE MAP

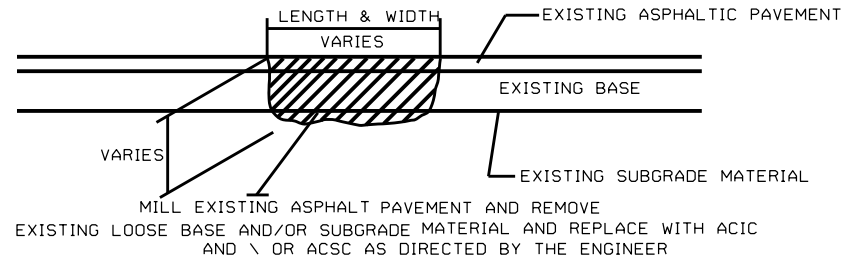
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD.
Z1	MILL EXST. ASPHALT PAVMENT APPROX. 1 1/2" IN DEPTH
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION, WIDTH VARIES 2'-6')
Y1	INCIDENTAL MILLING

Checked by:

Drawn by: G. Brittain

STATE	PROJECT WBS	SHEET NUMBER
NC	2022CPT. 12.15.10551	7
	2022CPT. 12.15.20551	

DETAIL A
PATCHING EXISTING PAVEMENT



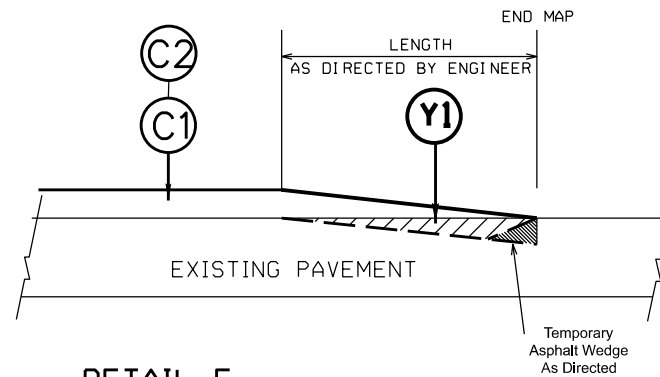
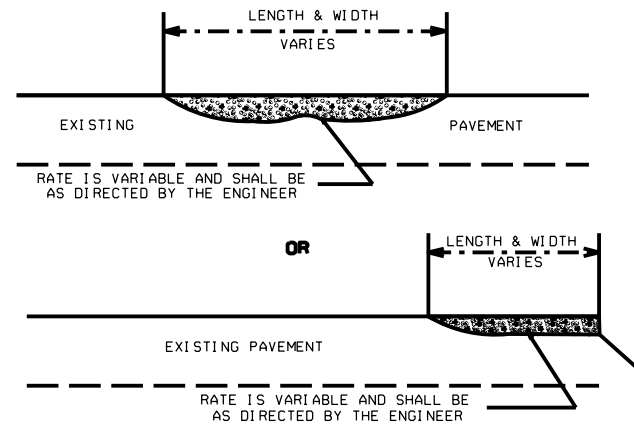
DETAIL D
MILLING BRIDGE APPROACHES



PAVEMENT SCHEDULE

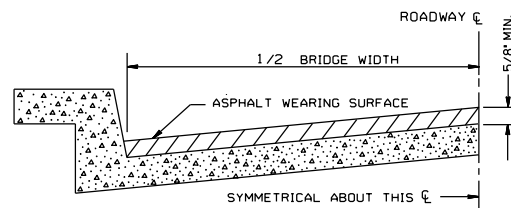
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD.
Z1	MILL EXST. ASPHALT PAVMENT APPROX. 1 1/2" IN DEPTH
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION, WIDTH VARIES 2'-6')
Y1	INCIDENTAL MILLING

DETAIL B
ASPHALT CONCRETE SURFACE COURSE
TYPE S9.5B OR S9.5C (LEVELING COURSE)



DETAIL E
TIE-IN (INCIDENTAL) MILLING DETAIL

DETAIL C
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. A THICKNESS OF NOT LESS THAN 5/8" SHALL BE PROVIDED. THE MAXIMUM THICKNESS SHALL PREFERABLY BE 1-1/2" UNLESS IT IS IMPRACTICAL TO PROVIDE A SMOOTH RIDING SURFACE OTHERWISE.

NOTES

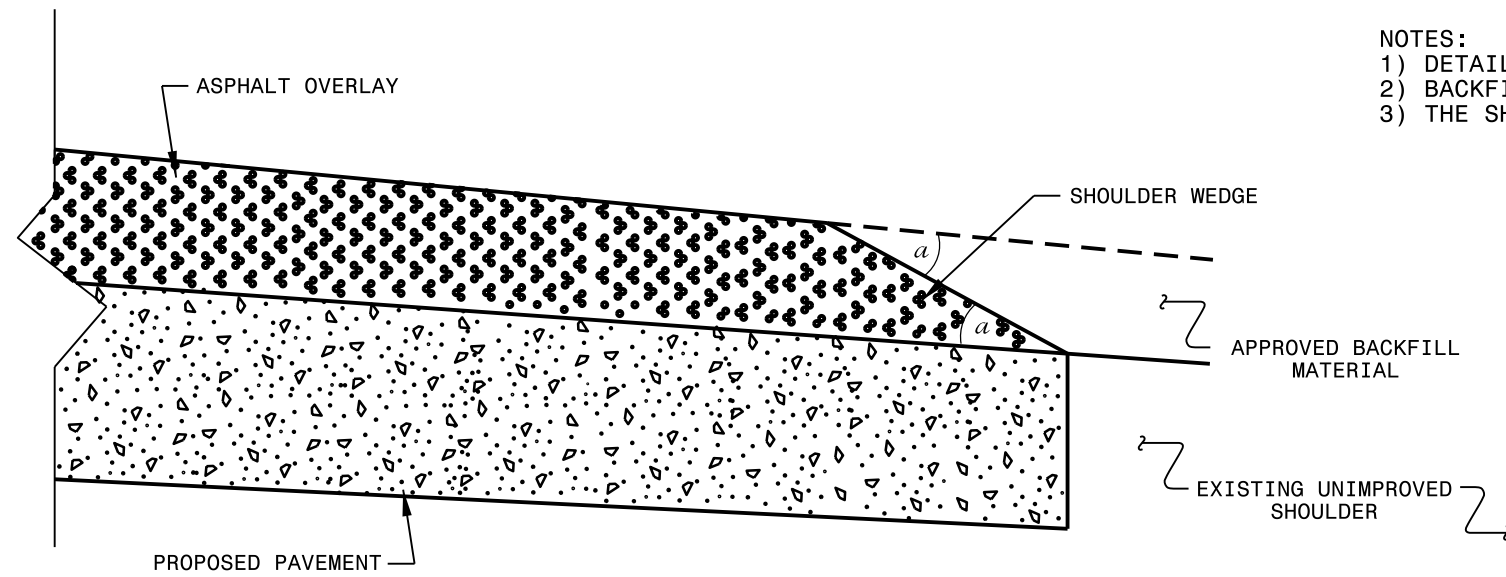
ALL UNPAVED S.R. ROADS TO BE SURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT.
ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.
EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.
SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE NOTED.
BRIDGES TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.

2022-2023
Lincoln County Resurfacing

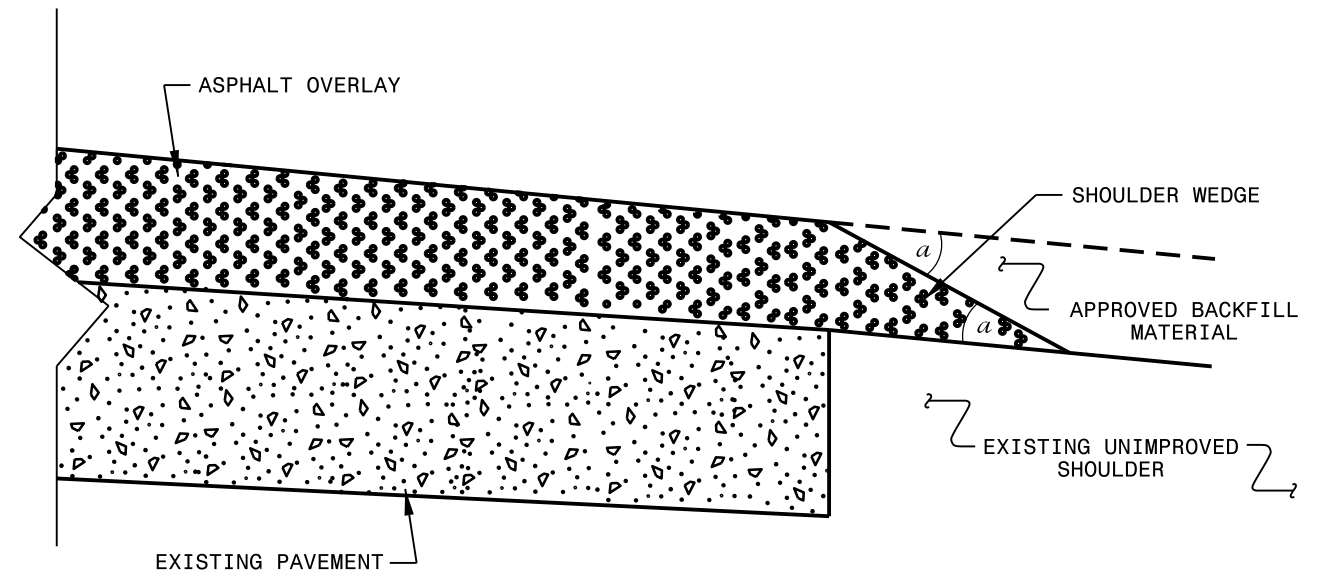
Checked by:

Drawn by: G. Brittain

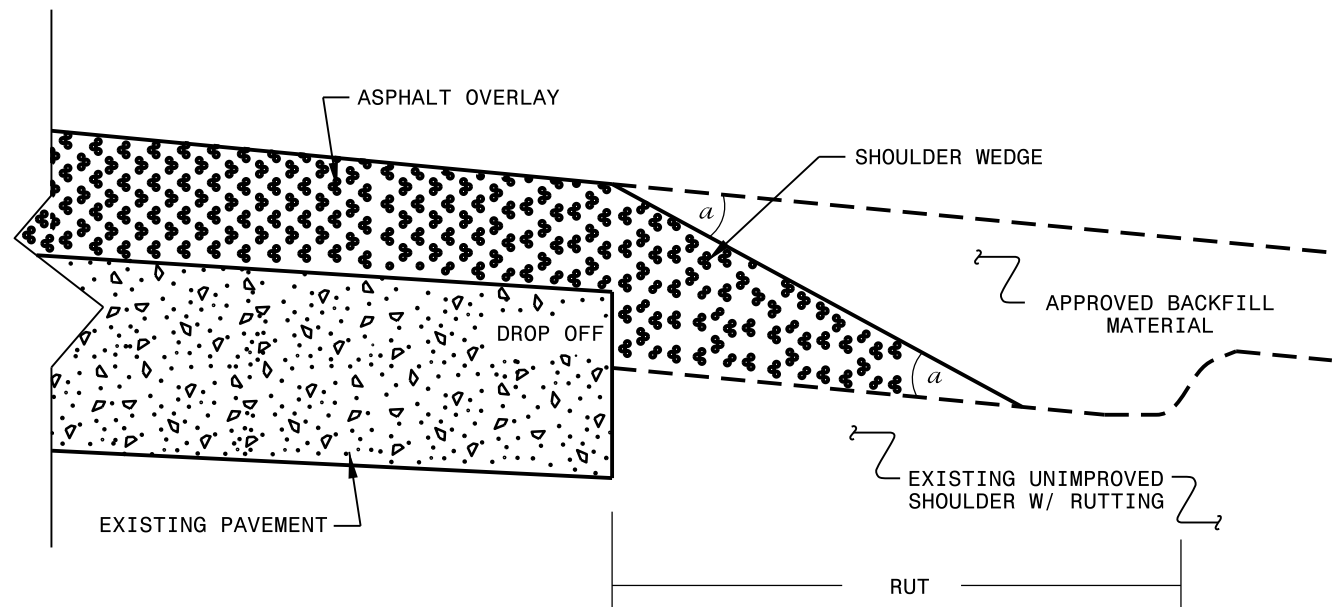
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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

PROJECT NO.	SHEET NO.	TOTAL NO.
2022CPT.12.15.10551, 2022CPT.12.15.20551		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	1220000000-E	1245000000-E	1260000000-E	1297000000-E	1330000000-E	1523000000-E	1524000000-E	1519000000-E	1520000000-E	1575000000-E	1704000000-E	2830000000-N	2845000000-N	
												INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	1 1/2" MILLING	INCIDENTAL MILLING	ASPHALT SURFACE COURSE, \$9.5C	ASPHALT LEVELING COURSE, \$9.5C	ASPHALT SURFACE COURSE, TYPE \$9.5B	ASPHALT LEVELING COURSE, \$9.5B	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	MANHOLES	METER OR VALVE BOX	
											MI	FT	TONS	SMI	TON	SY	SY	TONS	TON	TON	TON	TONS	TONS	EA	EA
2022CPT.12.15.10551	Lincoln	1	NC 18	FROM CATAWBA CO TO CLEVELAND CO	1	2	2WU	NO	NO	3.59	24	30	7.20	360		275	4,463	200			303	120			
2022CPT.12.15.10551	Lincoln	2	NC 10	FROM CLEVELAND CO TO NC 18	1	2	2WU	NO	NO	0.38	20		0.76	40	300	399					27	30			
2022CPT.12.15.10551	Lincoln	3	NC 10	FROM NC 18 TO CATAWBA CO	1	2	2WU	NO	NO	1.7	22		3.40	170	420	1,995	100				135	80			
TOTAL FOR PROJ NO. 2022CPT.12.15.10551											5.67		30	11.36	570		995	6,857	300			465	230		
2022CPT.12.15.20551	Lincoln	4	SR 1946 (KILLARNEY DR)	FROM SR 1396 (KILLIAN FARM RD) TO CUL-DE-SAC	2	2	2WU	NO	NO	0.28	18								184	18	13	100			
2022CPT.12.15.20551	Lincoln	5	SR 1947 (DONEGAL CT)	FROM SR 1946 (KILLARNEY DR) TO CUL-DE-SAC	2	2	2WU	NO	NO	0.03	18								22		1	25			
2022CPT.12.15.20551	Lincoln	6	SR 1948 (MONAGHAN CT)	FROM SR 1946 (KILLARNEY DR) TO CUL-DE-SAC	2	2	2WU	NO	NO	0.07	18								46		3	25			
2022CPT.12.15.20551	Lincoln	7	SR 2002 (OXFORD HUNT DR)	FROM SR 1386 (S LITTLE EGYPT RD) TO CUL-DE-SAC	3	2	2WU	NO	NO	0.21	24				2,150	120	210				14	20	7		
2022CPT.12.15.20551	Lincoln	8	SR 2003 (OXFORD BLUFF DR)	FROM SR 2009 (QUAIL HUNT DR) TO CUL-DE-SAC	3	2	2WU	NO	NO	0.45	19				5,050		452				30	40	12	3	
2022CPT.12.15.20551	Lincoln	9	SR 2009 (QUAIL HUNT DR)	FROM CUL-DE-SAC TO CUL-DE-SAC	3	2	2WU	NO	NO	0.19	19				2,175		200				13	20	7		
2022CPT.12.15.20551	Lincoln	10	SR 2010 (FOX RIDGE CT)	FROM SR 2009 (QUAIL HUNT DR) TO CUL-DE-SAC	3	2	2WU	NO	NO	0.08	19				910		95				6		3		
2022CPT.12.15.20551	Lincoln	11	SR 2011 (DOVES CREST CT)	FROM SR 2009 (QUAIL HUNT DR) TO CUL-DE-SAC	3	2	2WU	NO	NO	0.11	19				1,250		116				8	20	5	1	
2022CPT.12.15.20551	Lincoln	12	SR 2060 (SIGMON FARMS DR)	FROM SR 1511 (OLD PLANK RD) TO SR 2061 (LUTHER DR)	2	2	2WU	NO	NO	0.05	20					110			37		2	10			
2022CPT.12.15.20551	Lincoln	13	SR 2061 (LUTHER DR)	FROM CUL-DE-SAC TO CUL-DE-SAC	2	2	2WU	NO	NO	0.66	20								525	52	38	100			
2022CPT.12.15.20551	Lincoln	14	SR 2062 (ADDIE DR)	FROM SR 2061 (LUTHER DR) TO CUL-DE-SAC	2	2	2WU	NO	NO	0.08	18								84		6	30			
2022CPT.12.15.20551	Lincoln	15	SR 1676 (GRICE RD)	FROM SR 1397 (SIFORD RD) TO DEAD END	2	2	2WU	NO	NO	0.09	21								68		5				
2022CPT.12.15.20551	Lincoln	16	SR 1865 (SHERWOOD LN)	FROM SR 1374 (CATAWBA BURRIS RD) TO END MAINT	2	2	2WU	NO	NO	0.49	20	40				110			515	52	38	25			
2022CPT.12.15.20551	Lincoln	17	SR 1664 (TRIAD LN)	FROM NC 16 BUS TO SR 1666 (ROCK SPRINGS CIR)	2	2	2WU	NO	NO	0.11	20								79		5	25			
2022CPT.12.15.20551	Lincoln	18	SR 1666 (ROCK SPRINGS CIR)	FROM SR 1665 (SECLUDED LN) TO CUL-DE-SAC	2	2	2WU	NO	NO	0.55	20								394	39	26	25			
2022CPT.12.15.20551	Lincoln	19	SR 1665 (SECLUDED LN)	FROM SR 1666 (ROCK SPRINGS CIR) TO CUL-DE-SAC	2	2	2WU	NO	NO	0.24	20								189	19	13	25			
2022CPT.12.15.20551	Lincoln	20	SR 1386 (ST JAMES CH RD)	FROM NC 16 TO NC 16 BUS	1	2	2WU	NO	NO	1.14	24	20	2.28	114	300	1,418					95	330			
2022CPT.12.15.20551	Lincoln	21	SR 1008 (REEPSVILLE RD)	FROM END OF CURB AND GUTTER TO SR 1008 (KILLIAN RD)	1	2	2WU	NO	NO	3.02	24	50	6.04	310	1,200	3,780					253				
TOTAL FOR PROJ NO. 2022CPT.12.15.20551											7.85		110	8.32	424	11,535	1,840	6,271		2,143	180	569	820	34	4
GRAND TOTAL											13.52		140	19.68	994	11,535	2,835	13,128	300	2,143	180	1,034	1,050	34	4

PROJECT NO.	SHEET NO.	TOTAL NO.
2022CPT.12.15.10551		
2022CPT.12.15.20551		

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4891000000-E	4725000000-N		4890000000-E		4810000000-E		4905000000-N	
										WORK ZONE ADVANCE GENERAL WARNING	TEMP TRAFFIC CONTROL	24" WHITE THERMO, 90M	THERMO STR & RT ARROW 90M	THERMO RT ARROW 90M	YELLOW HOTSpray THERMO 4", 50MILS	WHITE HOTSpray THERMO 4", 50 MILS	4" YELLOW PAINT	4" WHITE PAINT	SNOW PLOWABLE MARKERS	
										SF	LS	LF	EA	EA	LF	LF	LF	LF	EA	
2022CPT.12.15.10551	Lincoln	1	NC 18	FROM CATAWBA CO TO CLEVELAND CO	1	2	2WU	3.59	24	260	*	30				38,000	38,000	38,000	38,000	245
2022CPT.12.15.10551	Lincoln	2	NC 10	FROM CLEVELAND CO TO NC 18	1	2	2WU	0.38	20	48	*					4,100	4,100	4,100	4,100	30
2022CPT.12.15.10551	Lincoln	3	NC 10	FROM NC 18 TO CATAWBA CO	1	2	2WU	1.7	22	175	*					18,000	18,000	18,000	18,000	115
TOTAL FOR PROJ NO. 2022CPT.12.15.10551								5.67		483	*	30			60,100	60,100	60,100	60,100	390	
										120,200		120,200								
2022CPT.12.15.20551	Lincoln	4	SR 1946 (KILLARNEY DR)	FROM SR 1396 (KILLIAN FARM RD) TO CUL-DE-SAC	2	2	2WU	0.28	18	32	*									
2022CPT.12.15.20551	Lincoln	5	SR 1947 (DONEGAL CT)	FROM SR 1946 (KILLARNEY DR) TO CUL-DE-SAC	2	2	2WU	0.03	18		*									
2022CPT.12.15.20551	Lincoln	6	SR 1948 (MONAGHAN CT)	FROM SR 1946 (KILLARNEY DR) TO CUL-DE-SAC	2	2	2WU	0.07	18		*									
2022CPT.12.15.20551	Lincoln	7	SR 2002 (OXFORD HUNT DR)	FROM SR 1386 (S LITTLE EGYPT RD) TO CUL-DE-SAC	3	2	2WU	0.21	24	24	*									
2022CPT.12.15.20551	Lincoln	8	SR 2003 (OXFORD BLUFF DR)	FROM SR 2009 (QUAIL HUNT DR) TO CUL-DE-SAC	3	2	2WU	0.45	19		*									
2022CPT.12.15.20551	Lincoln	9	SR 2009 (QUAIL HUNT DR)	FROM CUL-DE-SAC TO CUL-DE-SAC	3	2	2WU	0.19	19		*									
2022CPT.12.15.20551	Lincoln	10	SR 2010 (FOX RIDGE CT)	FROM SR 2009 (QUAIL HUNT DR) TO CUL-DE-SAC	3	2	2WU	0.08	19		*									
2022CPT.12.15.20551	Lincoln	11	SR 2011 (DOVES CREST CT)	FROM SR 2009 (QUAIL HUNT DR) TO CUL-DE-SAC	3	2	2WU	0.11	19		*									
2022CPT.12.15.20551	Lincoln	12	SR 2060 (SIGMON FARMS DR)	FROM SR 1511 (OLD PLANK RD) TO SR 2061 (LUTHER DR)	2	2	2WU	0.05	20	24	*									
2022CPT.12.15.20551	Lincoln	13	SR 2061 (LUTHER DR)	FROM CUL-DE-SAC TO CUL-DE-SAC	2	2	2WU	0.66	20		*									
2022CPT.12.15.20551	Lincoln	14	SR 2062 (ADDIE DR)	FROM SR 2061 (LUTHER DR) TO CUL-DE-SAC	2	2	2WU	0.08	18		*									
2022CPT.12.15.20551	Lincoln	15	SR 1676 (GRICE RD)	FROM SR 1397 (SIFFORD RD) TO DEAD END	2	2	2WU	0.09	21	24	*									
2022CPT.12.15.20551	Lincoln	16	SR 1865 (SHERWOOD LN)	FROM SR 1374 (CATAWBA BURRIS RD) TO END MAINT	2	2	2WU	0.49	20	24	*									
2022CPT.12.15.20551	Lincoln	17	SR 1664 (TRIAD LN)	FROM NC 16 BUS TO SR 1666 (ROCK SPRINGS CIR)	2	2	2WU	0.11	20	24	*									
2022CPT.12.15.20551	Lincoln	18	SR 1666 (ROCK SPRINGS CIR)	FROM SR 1665 (SECLUDED LN) TO CUL-DE-SAC	2	2	2WU	0.55	20		*									
2022CPT.12.15.20551	Lincoln	19	SR 1665 (SECLUDED LN)	FROM SR 1666 (ROCK SPRINGS CIR) TO CUL-DE-SAC	2	2	2WU	0.24	20		*									
2022CPT.12.15.20551	Lincoln	20	SR 1386 (ST JAMES CH RD)	FROM NC 16 TO NC 16 BUS	1	2	2WU	1.14	24	80	*	30	1	2	12,000	12,000	12,000	12,000	80	
2022CPT.12.15.20551	Lincoln	21	SR 1008 (REEPSVILLE RD)	FROM END OF CURB AND GUTTER TO SR 1008 (KILLIAN RD)	1	2	2WU	3.02	24	220	*					32,000	32,000	32,000	32,000	210
TOTAL FOR PROJ NO. 2022CPT.12.15.20551								7.85		452	*	30	1	2	44,000	44,000	44,000	44,000	290	
										3		88,000		88,000						
GRAND TOTAL								13.52		935	1	60	1	2	104,100	104,100	104,100	104,100	680	
										3		208,200		208,200						

SIGNING FOR RESURFACING PROJECTS

LEGEND

┃ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

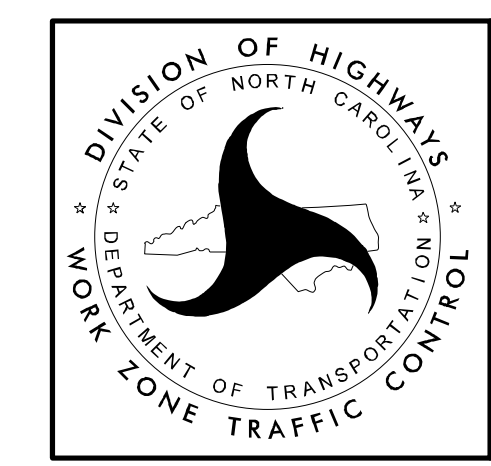
-Y- LINE SIGNING

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"> LESS THAN 1000' OF RESURFACING ALONG -Y- LINE SUBDIVISION ROADS 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;"> PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> 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