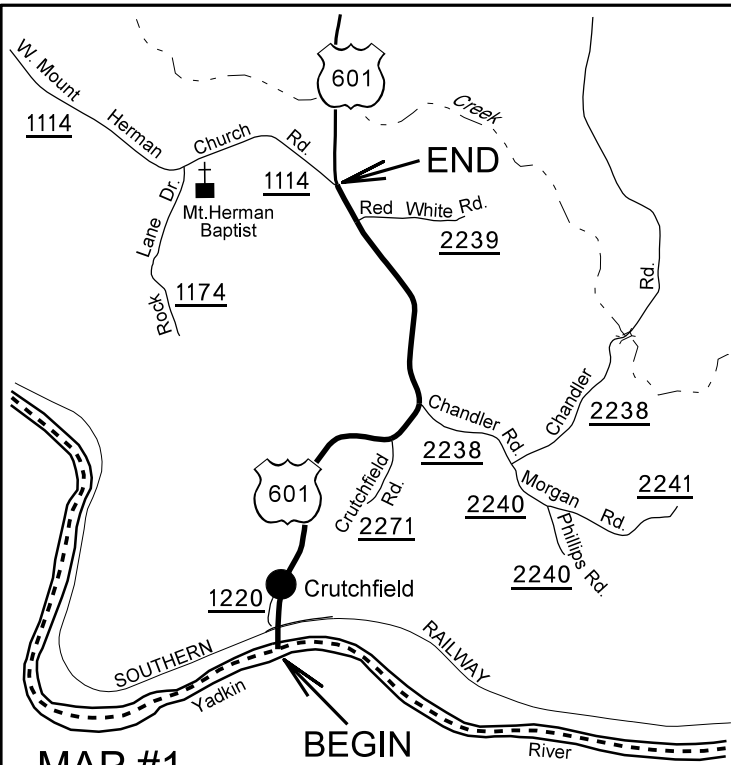
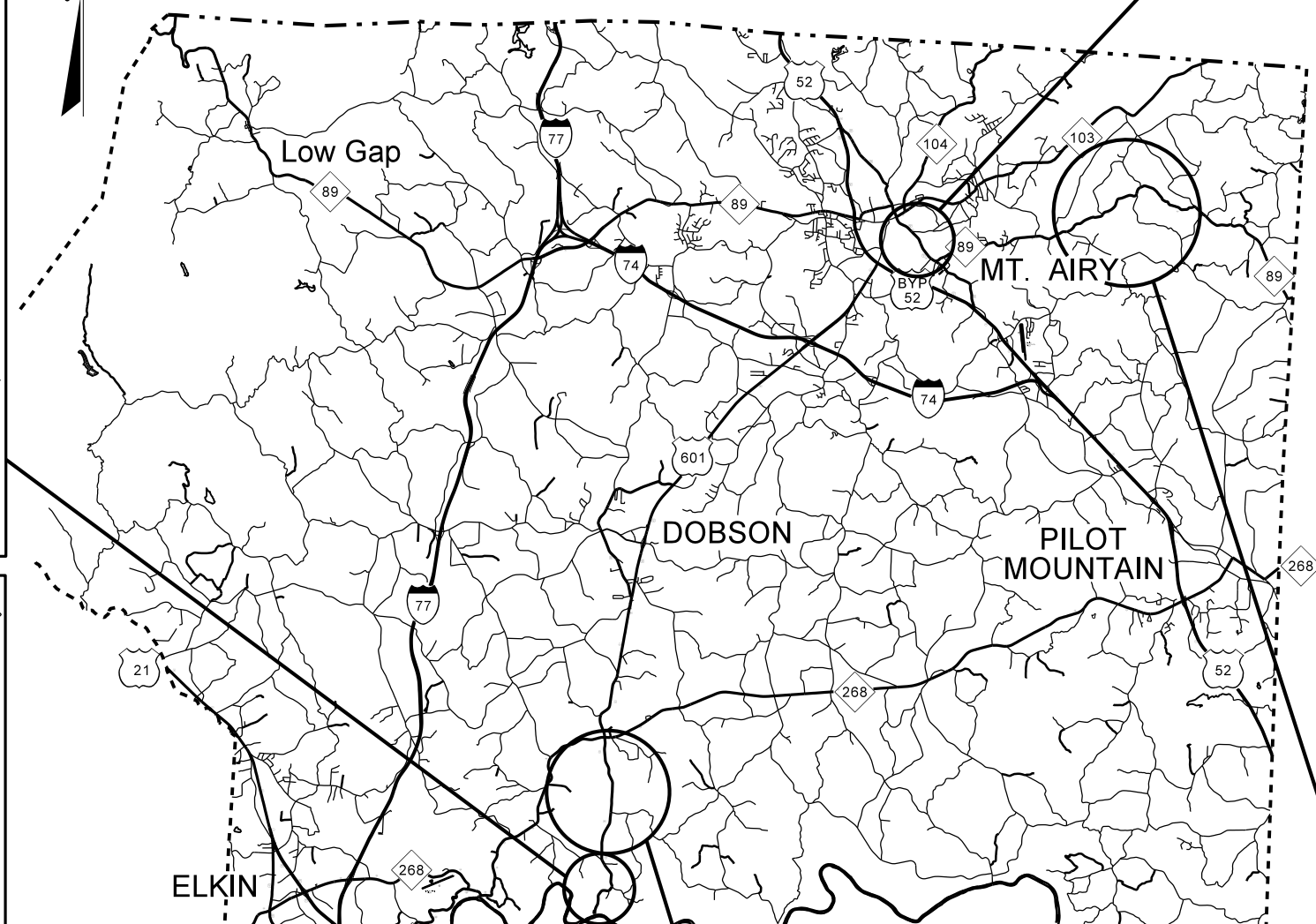


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

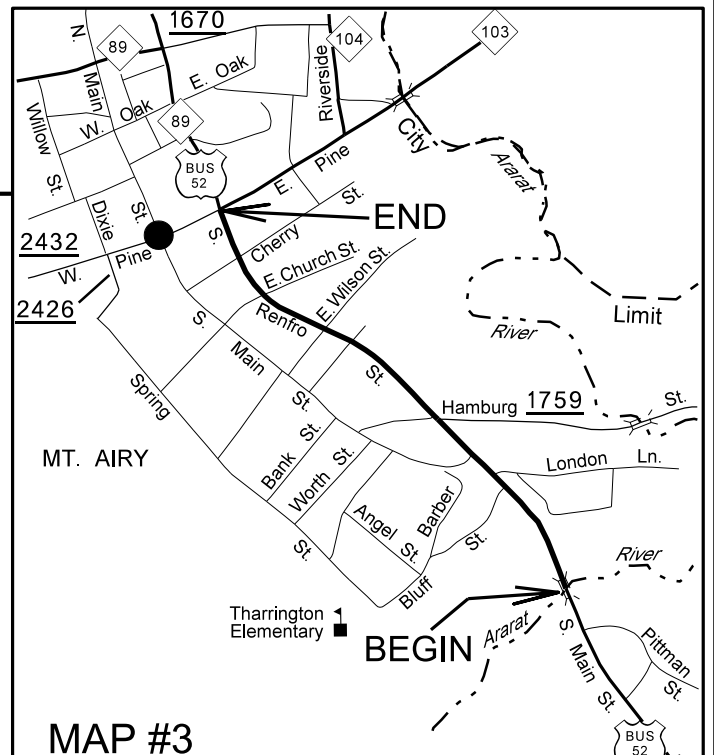
**SURRY COUNTY**

2016

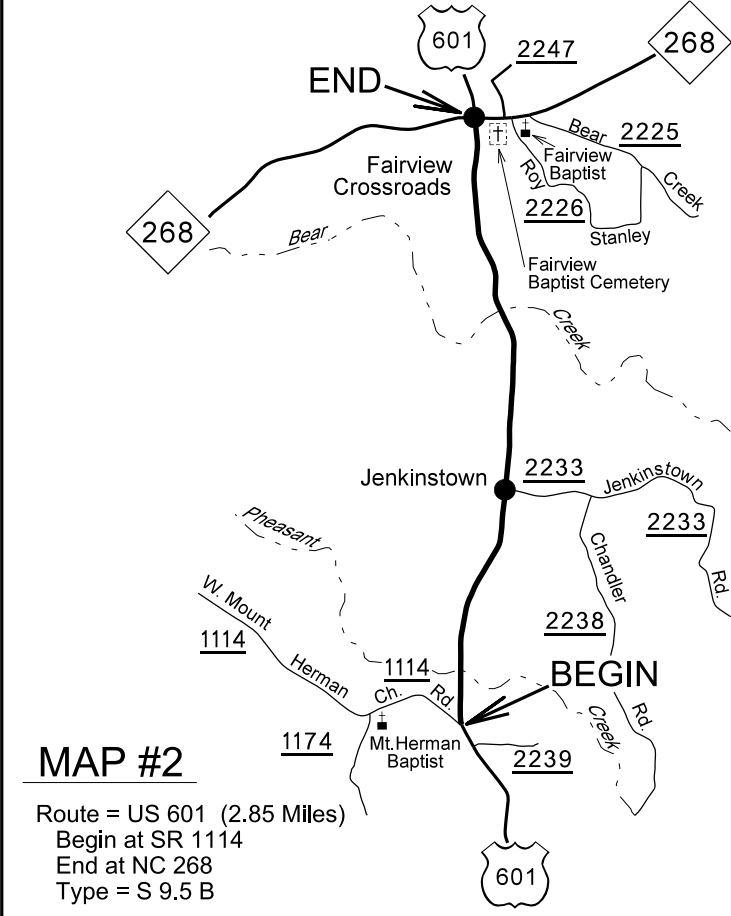
PRIMARY & SECONDARY ASPHALT RESURFACING



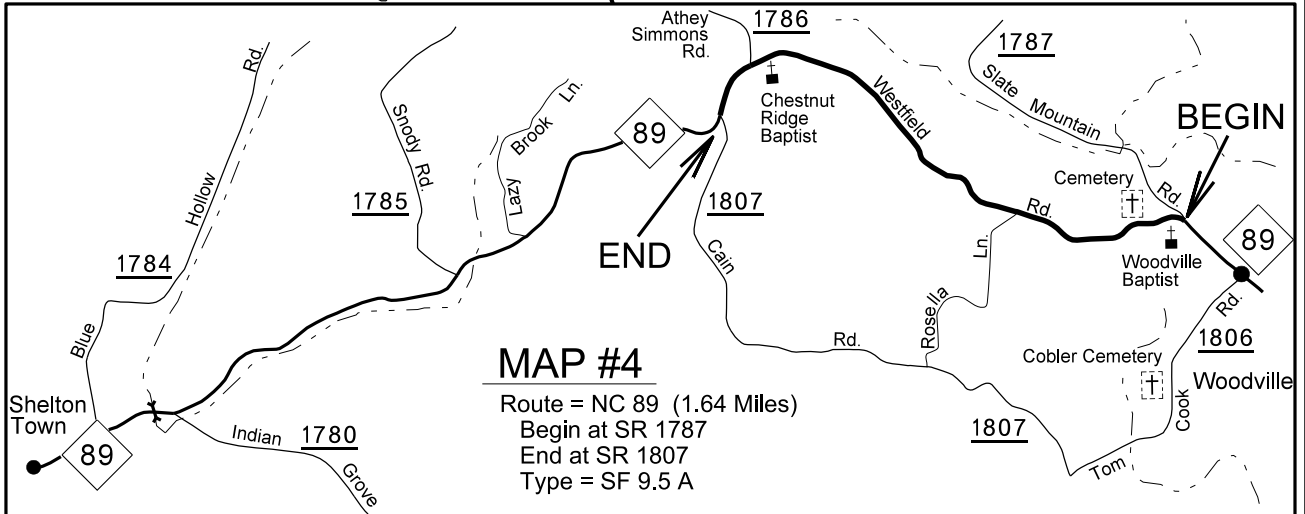
**MAP #1**  
Route = US 601 (1.56 Miles)  
Begin at Yadkin County Line  
End at SR 1114  
Type = S 9.5 B (Mill Bridge Approach at Yadkin River)



**MAP #3**  
Route = US 52 BUS (0.84 Miles)  
Begin at Ararat River  
End at NC 103  
Type = S 9.5 B  
Mill 1 1/2", Full Depth Milling as Directed



**MAP #2**  
Route = US 601 (2.85 Miles)  
Begin at SR 1114  
End at NC 268  
Type = S 9.5 B



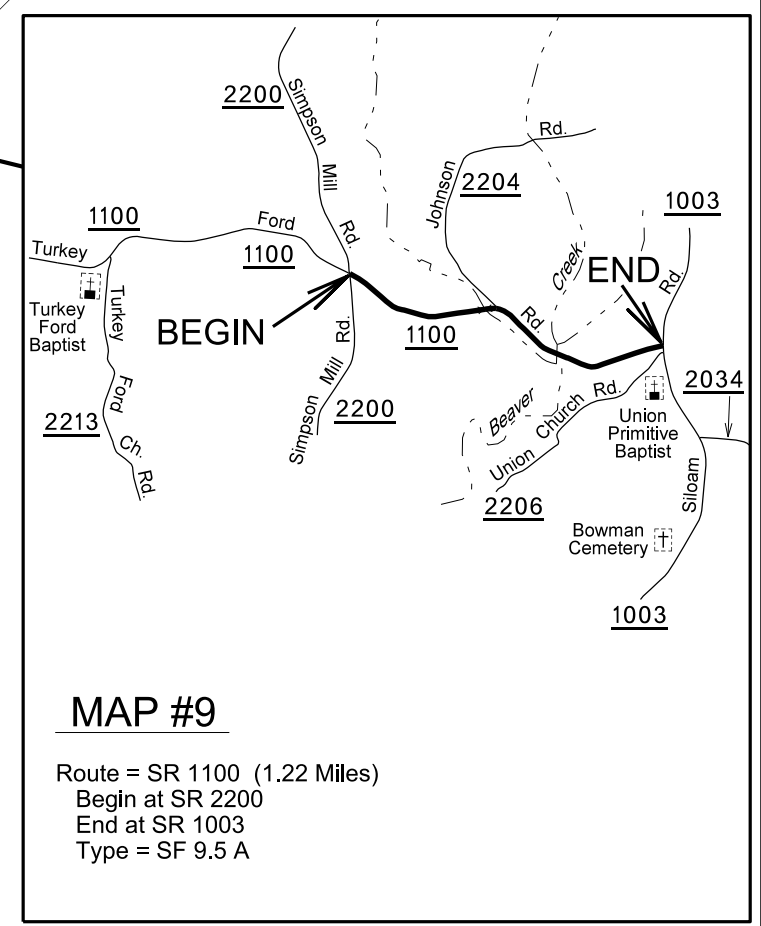
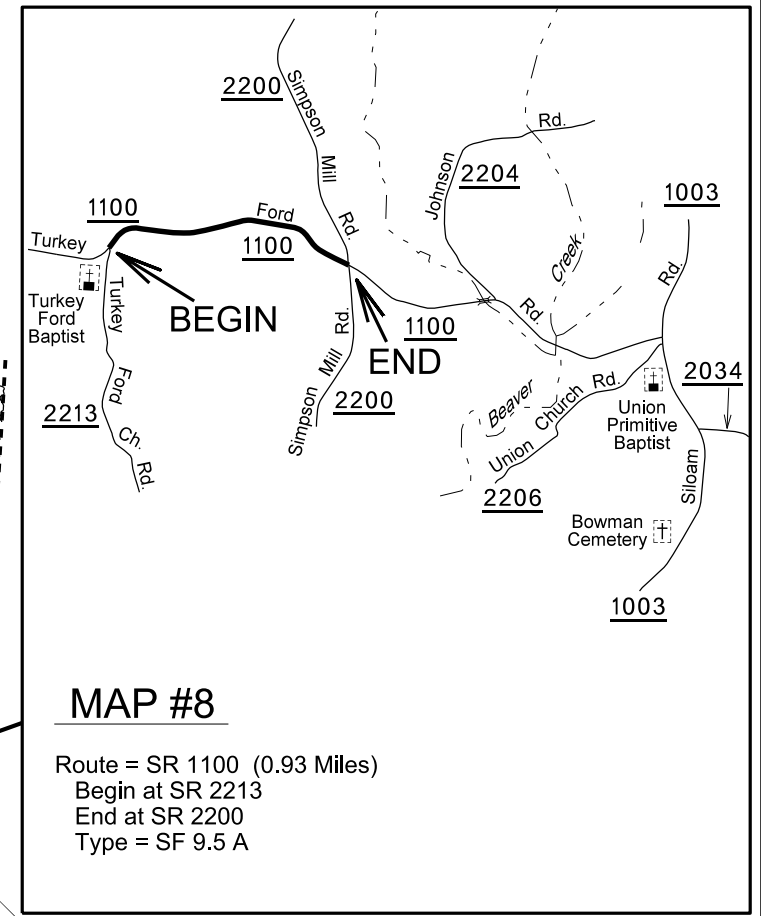
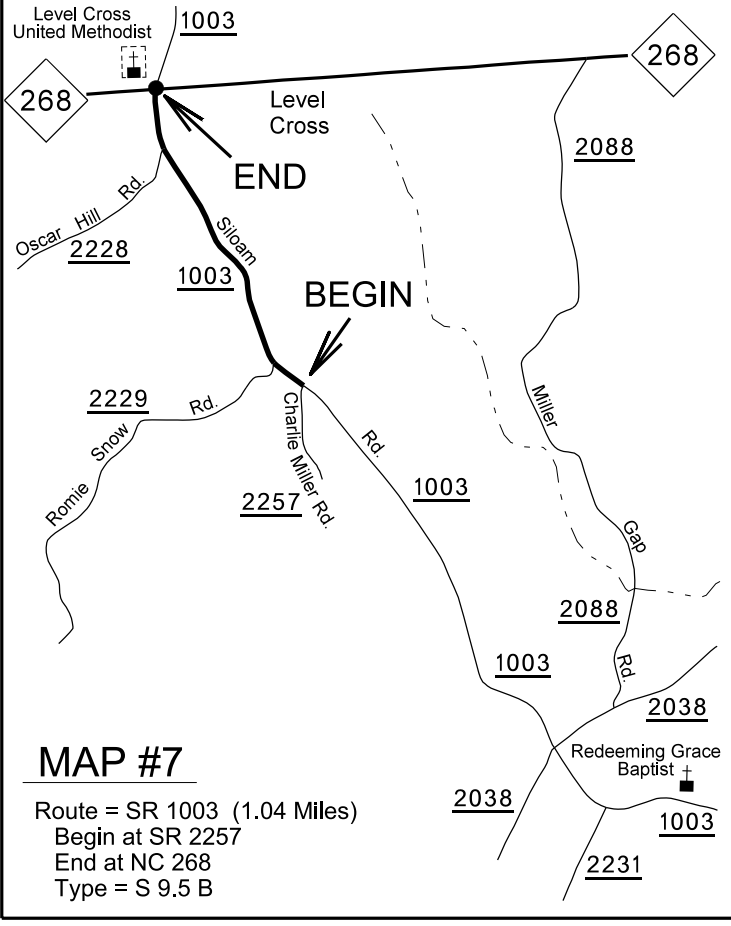
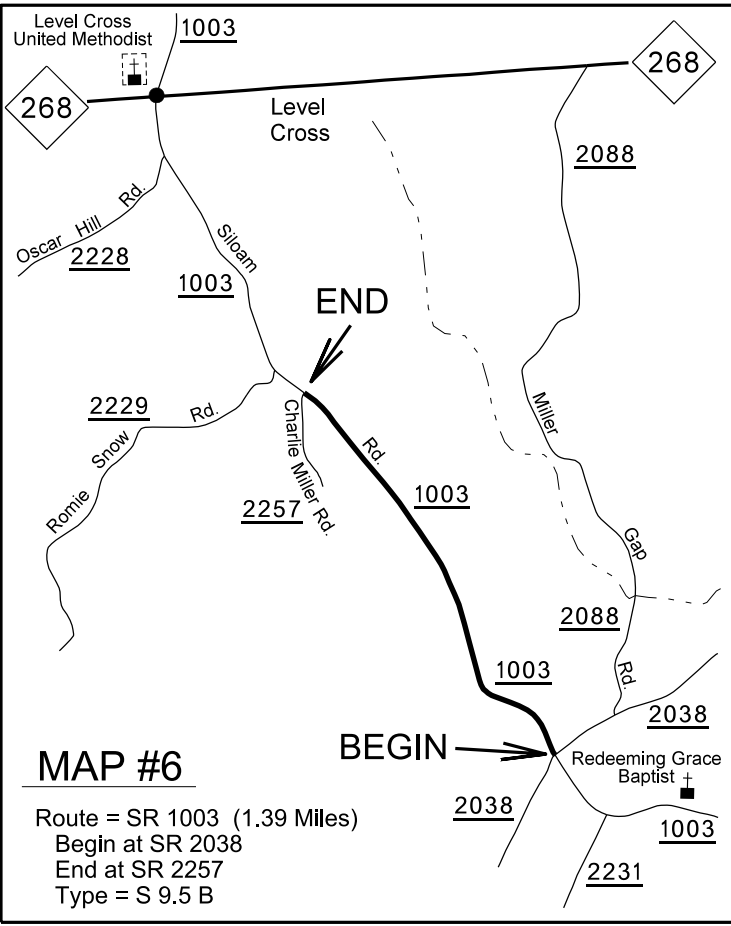
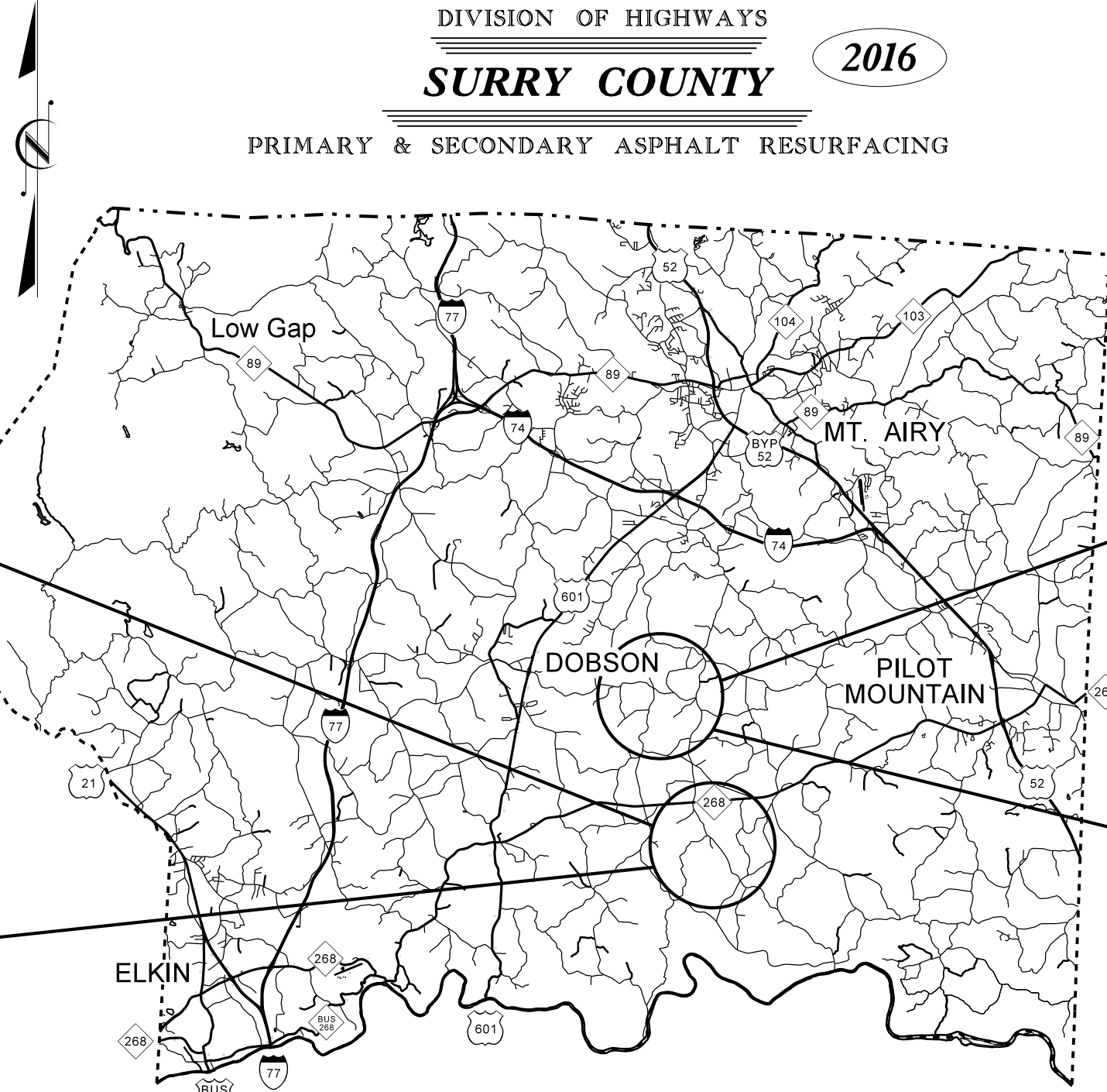
**MAP #4**  
Route = NC 89 (1.64 Miles)  
Begin at SR 1787  
End at SR 1807  
Type = SF 9.5 A

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**SURRY COUNTY**

2016

PRIMARY & SECONDARY ASPHALT RESURFACING

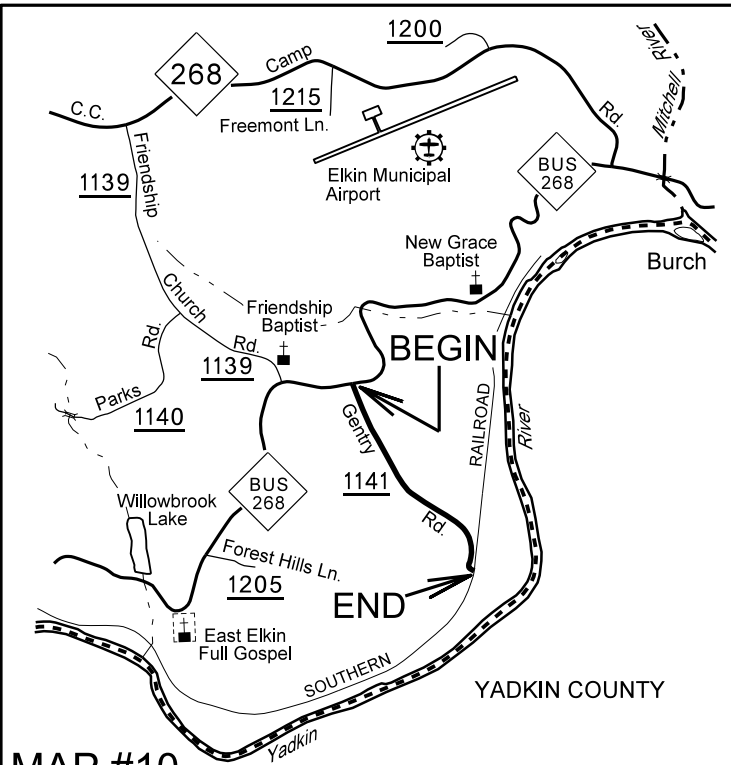
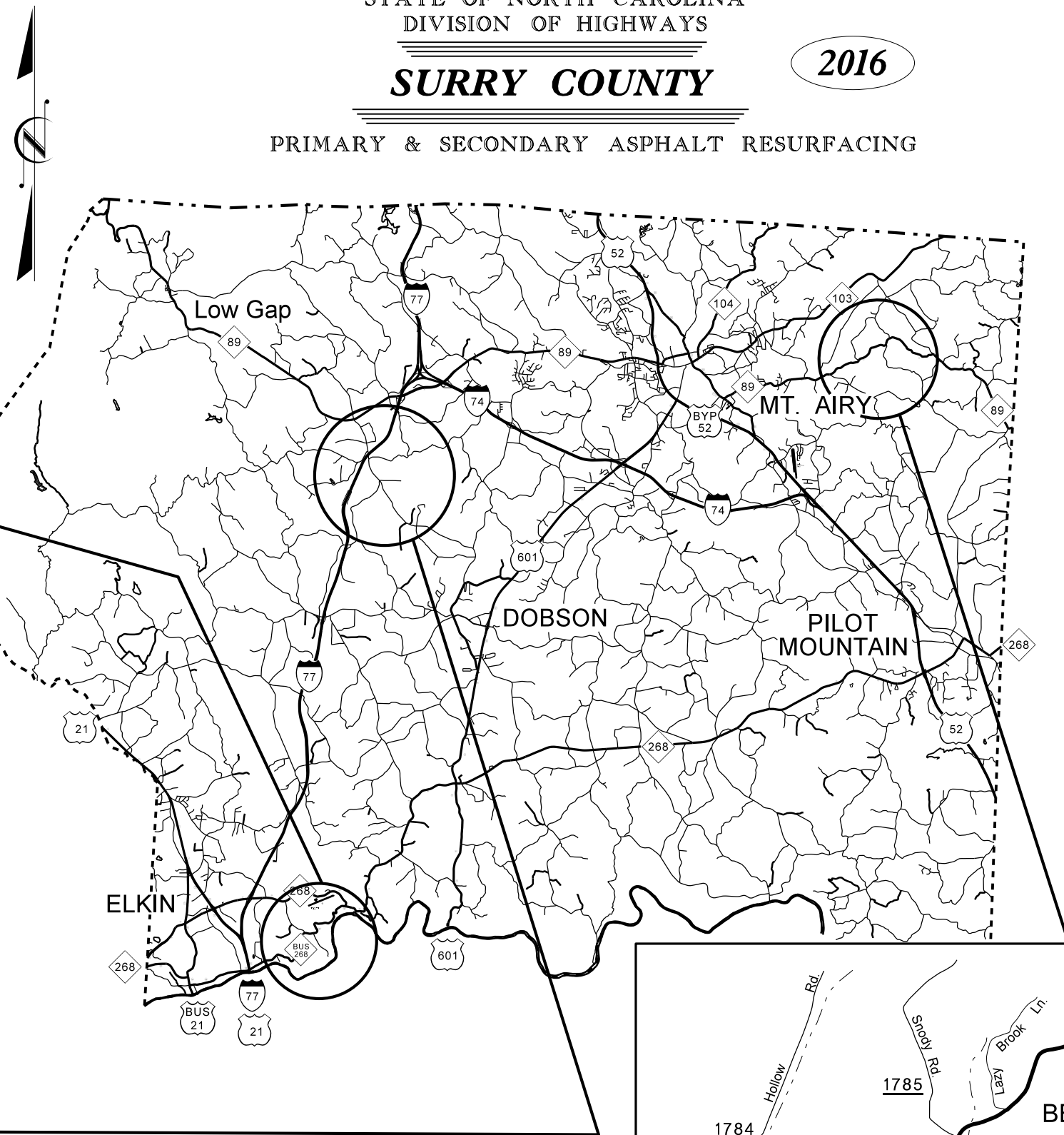


STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

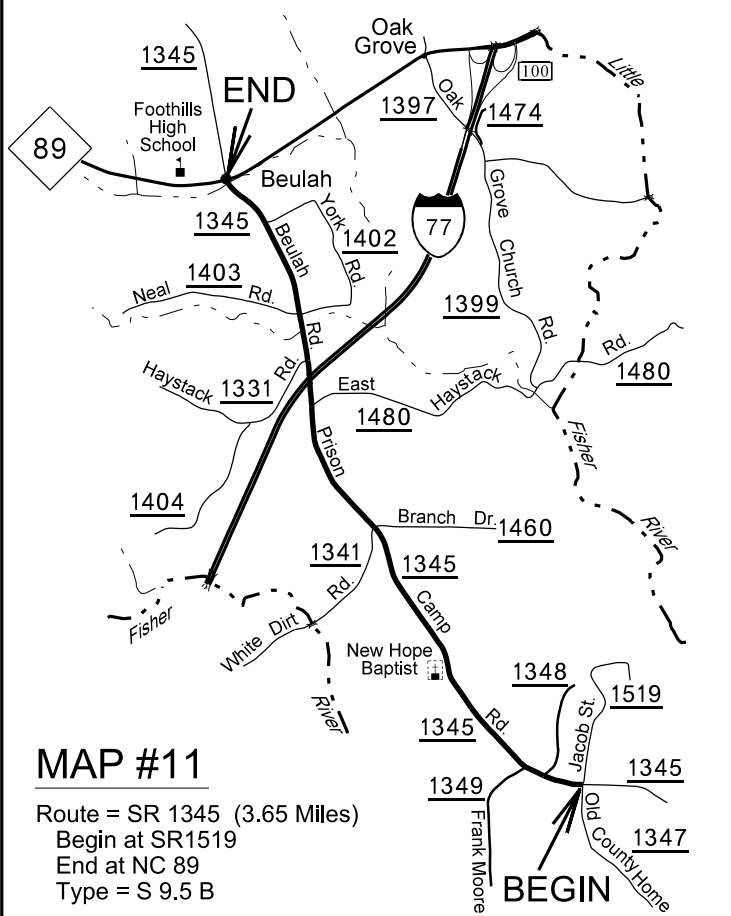
**SURRY COUNTY**

2016

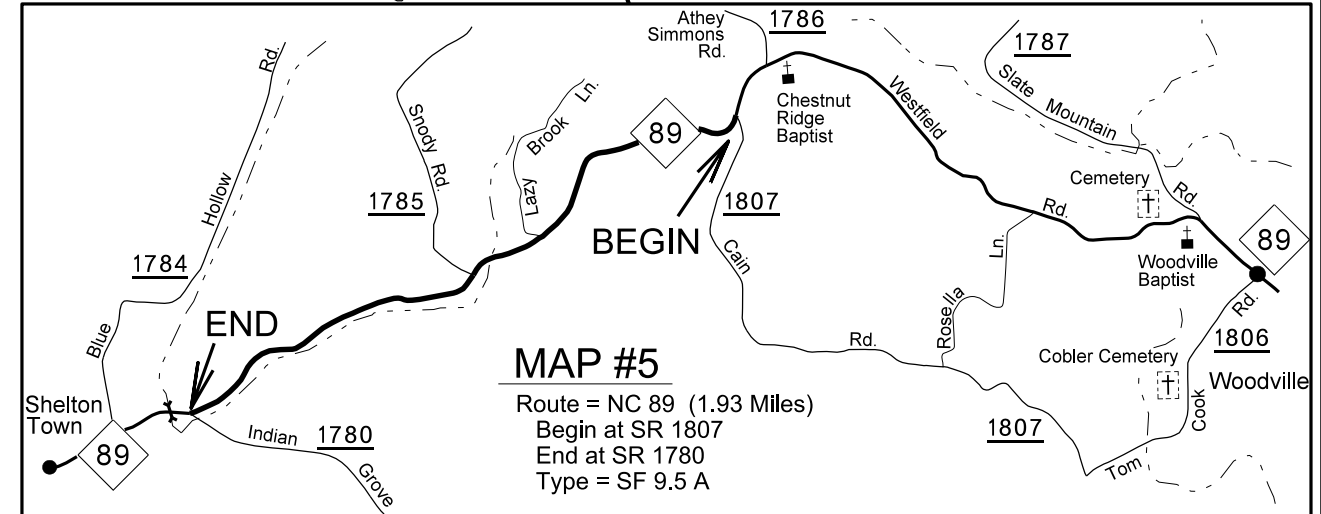
PRIMARY & SECONDARY ASPHALT RESURFACING



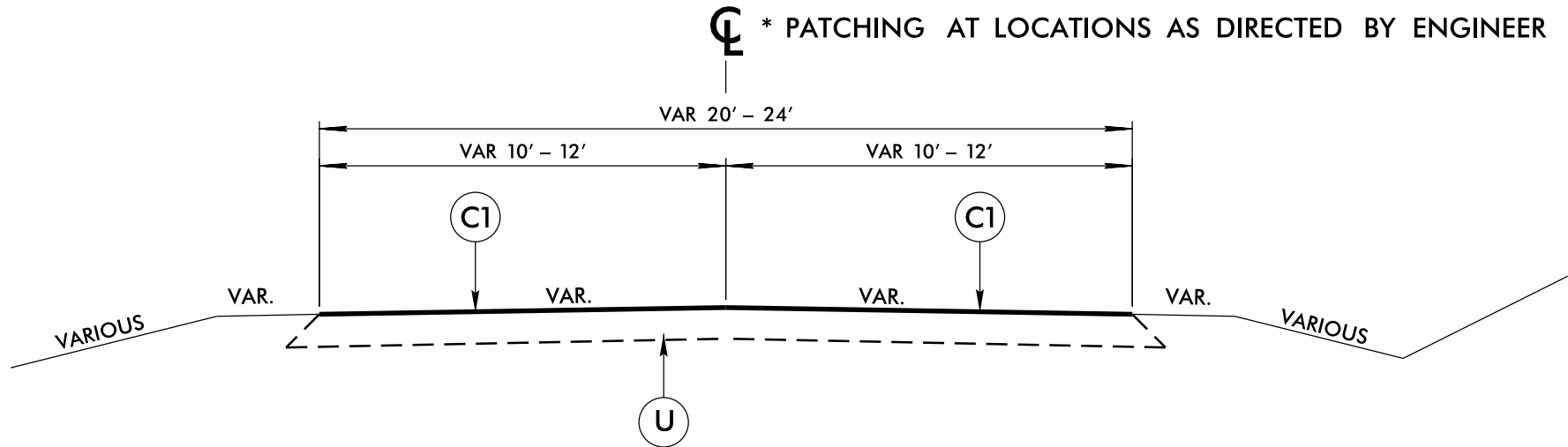
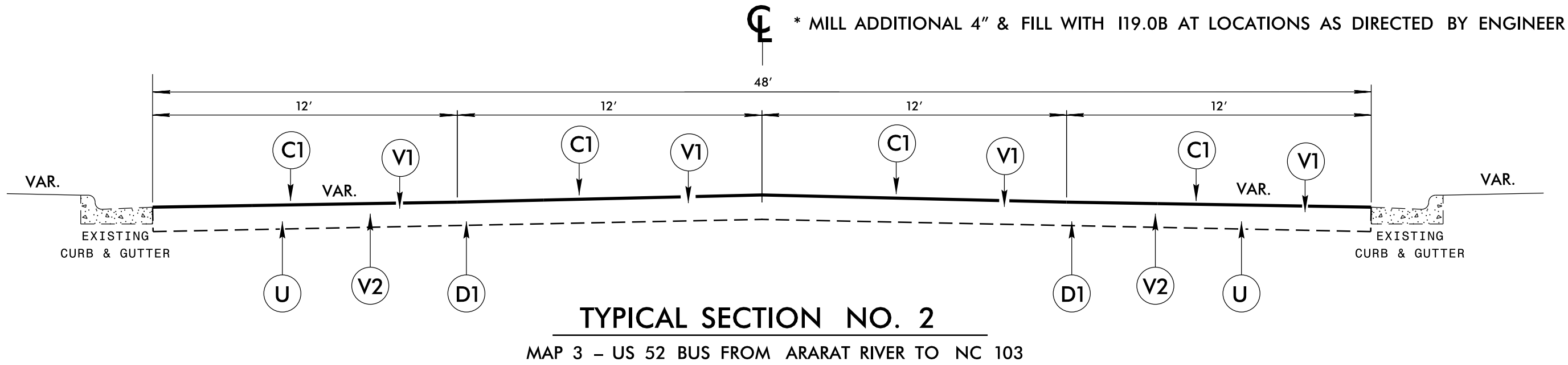
**MAP #10**  
Route = SR 1141 (0.82 Miles)  
Begin at NC 268  
End at END OF MAINTENANCE  
Type = S 9.5 B



**MAP #11**  
Route = SR 1345 (3.65 Miles)  
Begin at SR 1519  
End at NC 89  
Type = S 9.5 B



**MAP #5**  
Route = NC 89 (1.93 Miles)  
Begin at SR 1807  
End at SR 1780  
Type = SF 9.5 A



- MAP 1 - US 601 FROM YADKIN CO LINE TO SR 1114
- MAP 2 - US 601 FROM SR 1114 TO NC 268
- MAP 6 - SR 1003 FROM SR 2038 TO SR 2257
- MAP 7 - SR 1003 FROM SR 2257 TO NC 268
- MAP 10 - SR 1141 FROM NC 268 TO EOM
- MAP 11 - SR 1345 FROM SR 1519 TO NC 89

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 0" - 4"
V3	INCIDENTAL MILLING

**SURRY COUNTY  
PRIMARY & SECONDARY  
RESURFACING**

DIVISION II

REVISIONS	INT.	DATE

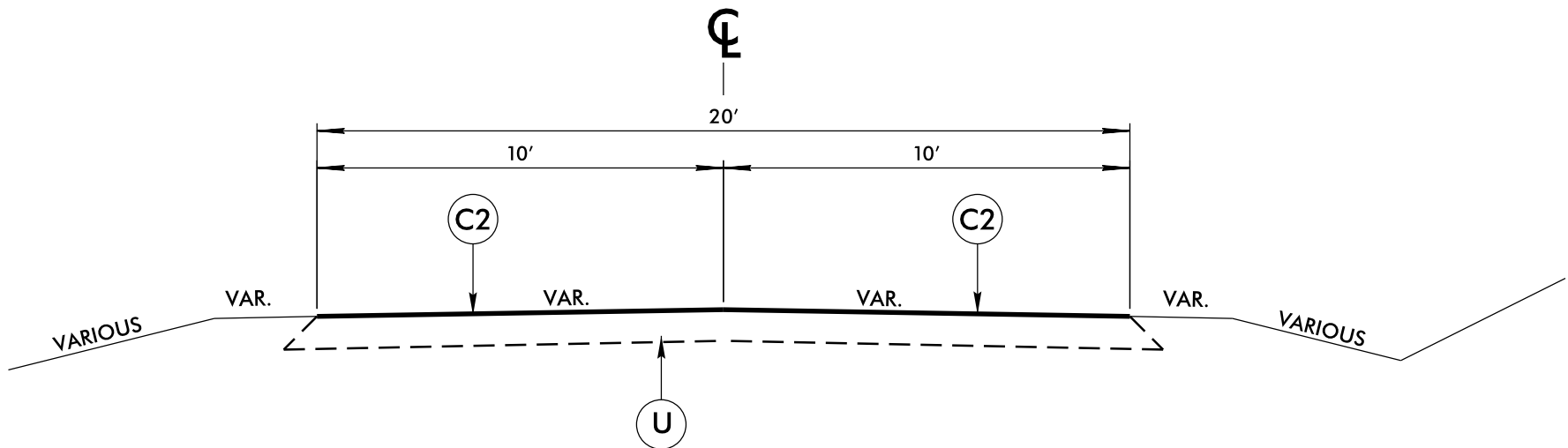
**N.C. DEPARTMENT of TRANSPORTATION  
DIVISION of HIGHWAYS  
DIVISION ELEVEN**

SCALE: N/A DATE: 05/2015

PREPARED BY: S.B. DARNELL

REVIEWED BY: J.L. LAWS

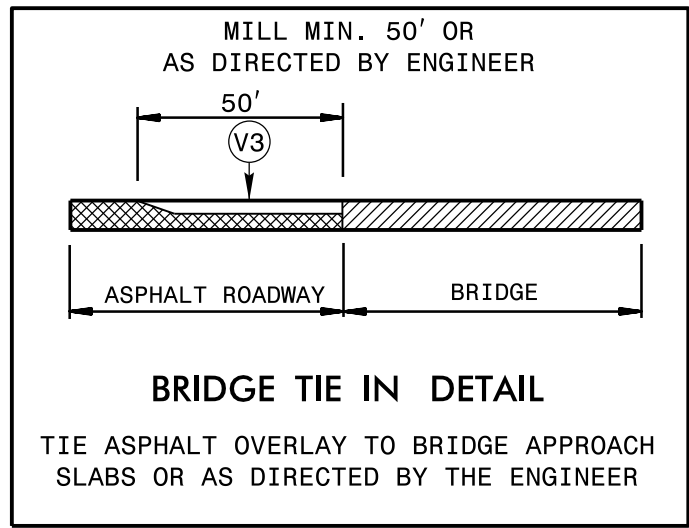
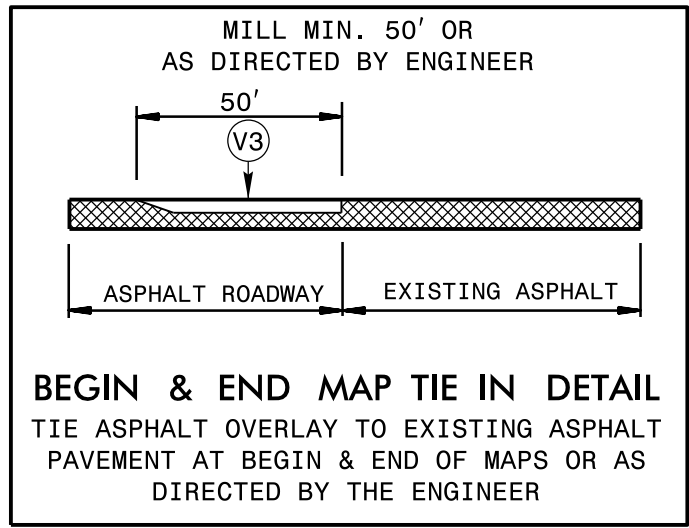
REVIEWED BY:



### TYPICAL SECTION NO. 3

MAP 4 - NC 89 FROM SR 1787 TO SR 1807  
 MAP 5 - NC 89 FROM 1807 TO SR 1780  
 MAP 8 - SR 1100 FROM SR 2213 TO SR 2200  
 MAP 9 - SR 1100 FROM SR 2200 TO SR 1003

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 0" - 4"
V3	INCIDENTAL MILLING



**SURRY COUNTY  
 PRIMARY & SECONDARY  
 RESURFACING**

DIVISION II

REVISIONS	INT.	DATE

**N.C. DEPARTMENT of TRANSPORTATION  
 DIVISION of HIGHWAYS  
 DIVISION ELEVEN**

SCALE: N/A      DATE: 05/2015

PREPARED BY: S.B. DARNELL  
 REVIEWED BY: J.L. LAWS  
 REVIEWED BY:

PROJECT NO.	SHEET NO.	TOTAL NO.
11CR.10861.23, 11CR.20861.23		

### SUMMARY OF QUANTITIES

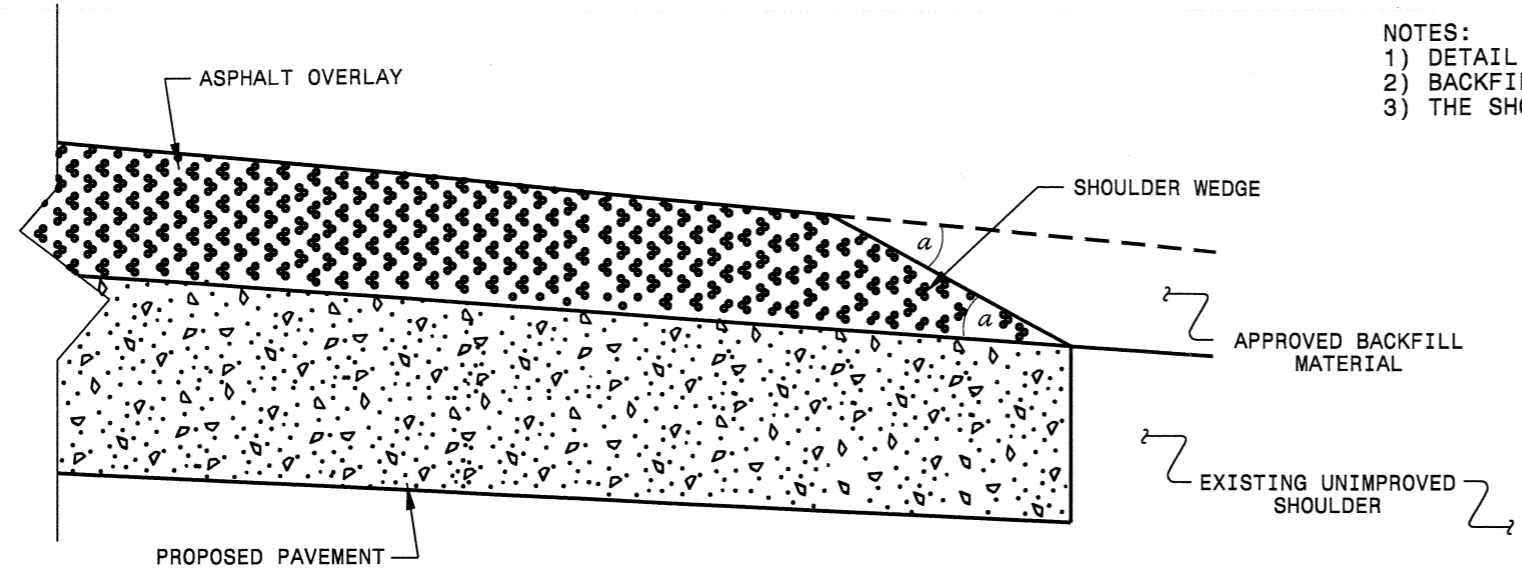
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARMMX ASPHALT REQUIRED	LENGTH	WIDTH	INCIDENTAL STONE BASE	1½" MILLING	0" TO 4" MILLING	INCIDENTAL MILLING	INTERMEDIATE COURSE, I19.0B	SURFACE COURSE, S9.5B	SURFACE COURSE, SF9.5A	ASPHALT BINDER FOR PLANT MX	PATCHING EXISTING PAVEMENT	ADI. OF MANHOLES	ADI. OF METER OR VALVE BOX	PAVED TRENCHING (1,2")	UNPAVED TRENCHING (1,2")	JUNCTION BOX (STANDARD SIZE)	INDUCTIVE LOOP	LEAD-IN CABLE (14-2)	
					NO					M	FT	TONS	SY	SY	SY	TONS	TONS	TONS	TONS	TONS	EA	EA	LF	LF	EA	LF	LF	
11CR.10861.23	Surry	1	US 601	FROM YADKIN COUNTY LINE TO SR 1114	1	2	2WU	NO	NO	1.56	24	50			532		1,950		117	150								
11CR.10861.23	Surry	2	US 601	FROM SR 1114 TO NC 268	1	2	2WU	NO	NO	2.85	22	100			250		3,300		198	100								
11CR.10861.23	Surry	3	US 52 BUS	FROM ARARAT RIVER TO NC 103	2	4	MU	NO	NO	0.84	48		23,654	7,500		1,710	2,835		252	200	13	17	50.00	50.00	1.00	640	120	
11CR.10861.23	Surry	4	NC 89	FROM SR 1787 TO SR 1807	3	2	2WU	NO	NO	1.64	20	50			225			1,650	111	100								
11CR.10861.23	Surry	5	NC 89	FROM SR 1807 TO SR 1780	3	2	2WU	NO	NO	1.93	20	50			225			1,980	133	100								
<b>TOTAL FOR PROJ NO. 11CR.10861.23</b>										<b>8.82</b>		<b>250</b>	<b>23,654</b>	<b>7,500</b>	<b>1,232</b>	<b>1,710</b>	<b>8,085</b>	<b>3,630</b>	<b>811</b>	<b>650</b>	<b>13</b>	<b>17</b>	<b>50.00</b>	<b>50.00</b>	<b>1.00</b>	<b>640</b>	<b>120</b>	
11CR.20861.23	Surry	6	SR 1003	FROM SR 2038 TO SR 2257	1	2	2WU	NO	NO	1.39	20	50			225		1,430		86	100								
11CR.20861.23	Surry	7	SR 1003	FROM SR 2257 TO NC 268	1	2	2WU	NO	NO	1.04	20	50			225		1,090		65	75								
11CR.20861.23	Surry	8	SR 1100	FROM SR 2213 TO SR 2200	3	2	2WU	NO	NO	0.93	20	50			125			950	64	75								
11CR.20861.23	Surry	9	SR 1100	FROM SR 2200 TO SR 1003	3	2	2WU	NO	NO	1.22	20	50			335			1,250	84									
11CR.20861.23	Surry	10	SR 1141	FROM NC 268 TO EOM	1	2	2WU	NO	NO	0.82	24	75			150		1,040		62	50								
11CR.20861.23	Surry	11	SR 1345	FROM SR 1519 TO NC 89	1	2	2WU	NO	NO	3.65	20	150			500		3,850		231	250								
<b>TOTAL FOR PROJ NO. 11CR.20861.23</b>										<b>9.05</b>		<b>425</b>			<b>1,560</b>		<b>7,410</b>	<b>2,200</b>	<b>592</b>	<b>550</b>								
<b>GRANDTOTAL</b>										<b>17.87</b>		<b>675</b>	<b>23,654</b>	<b>7,500</b>	<b>2,792</b>	<b>1,710</b>	<b>15,495</b>	<b>5,830</b>	<b>1,403</b>	<b>1,200</b>	<b>13</b>	<b>17</b>	<b>50.00</b>	<b>50.00</b>	<b>1.00</b>	<b>640</b>	<b>120</b>	

PROJECT NO.	SHEET NO.	TOTAL NO.
11CR.10861.23, 11CR.20861.23		

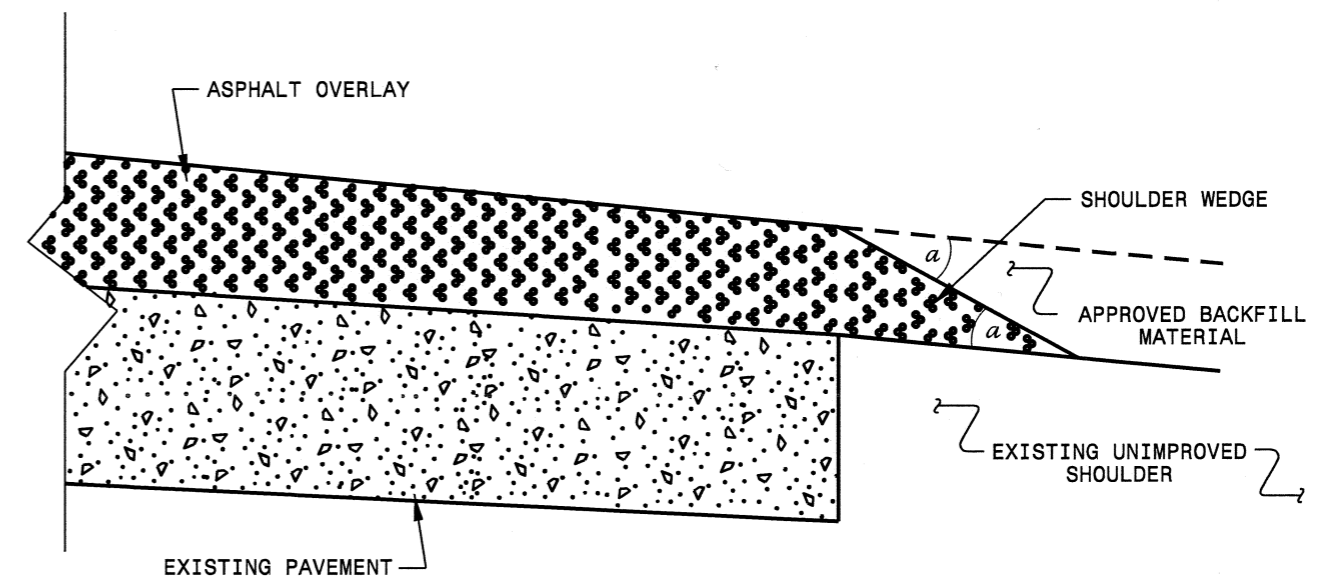
**THERMOPLASTIC AND PAINT QUANTITIES**

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4810000000-E		4820000000-E	4835000000-E	4840000000-N		4845000000-N				4905000000-N
										WORK ZONE ADVANCE/GENERAL WARNING SIGNS	TEMPORARY TRAFFIC CONTROL	4" WHITE PAINT	4" YELLOW PAINT	8" WHITE PAINT	24" WHITE PAINT	PAINT M&G AHEAD	PAINT M&G SIGNAL	PAINT LT ARROW	PAINT STR ARROW	PAINT STR & RT ARROW	PAINT STR & LT ARROW	SNOW PLOWABLE MARKERS
										SF	LS	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA
11CR.10861.23	Surry	1	US 601	FROM YADKIN COUNTY LINE TO SR 1114	1	2	2WU	1.56	24	76	1	32,947	32,947									105
11CR.10861.23	Surry	2	US 601	FROM SR 1114 TO NC 268	1	2	2WU	2.85	22	144		60,192	60,192			10	12					190
11CR.10861.23	Surry	3	US 52 BUS	FROM ARARAT RIVER TO NC 103	2	4	MU	0.84	48	76		17,741	28,301	640	300			26	12	20	4	60
11CR.10861.23	Surry	4	NC 89	FROM SR 1787 TO SR 1807	3	2	2WU	1.64	20	76		34,637	34,637									109
11CR.10861.23	Surry	5	NC 89	FROM SR 1807 TO SR 1780	3	2	2WU	1.93	20	76		40,762	40,762									128
<b>TOTAL FOR PROJ NO. 11CR.10861.23</b>								<b>8.82</b>		<b>448</b>	<b>1</b>	<b>186,279</b>	<b>196,839</b>	<b>640</b>	<b>300</b>	<b>10</b>	<b>12</b>	<b>26</b>	<b>12</b>	<b>20</b>	<b>4</b>	<b>592</b>
										<b>383,118</b>				<b>22</b>		<b>62</b>						
11CR.20861.23	Surry	6	SR 1003	FROM SR 2038 TO SR 2257	1	2	2WU	1.39	20	76		29,357	29,357									95
11CR.20861.23	Surry	7	SR 1003	FROM SR 2257 TO NC 268	1	2	2WU	1.04	20	52		21,965	21,965									70
11CR.20861.23	Surry	8	SR 1100	FROM SR 2213 TO SR 2200	3	2	2WU	0.93	20	52		19,642	19,642									65
11CR.20861.23	Surry	9	SR 1100	FROM SR 2200 TO SR 1003	3	2	2WU	1.22	20	76		25,766	25,766									90
11CR.20861.23	Surry	10	SR 1141	FROM NC 268 TO EOM	1	2	2WU	0.82	24	76		17,318	17,318									
11CR.20861.23	Surry	11	SR 1345	FROM SR 1519 TO NC 89	1	2	2WU	3.65	20	180		77,088	77,088									241
<b>TOTAL FOR PROJ NO. 11CR.20861.23</b>								<b>9.05</b>		<b>512</b>		<b>191,136</b>	<b>191,136</b>									<b>561</b>
										<b>382,272</b>												
<b>GRAND TOTAL</b>								<b>17.87</b>		<b>960</b>	<b>1</b>	<b>377,415</b>	<b>387,975</b>	<b>640</b>	<b>300</b>	<b>10</b>	<b>12</b>	<b>26</b>	<b>12</b>	<b>20</b>	<b>4</b>	<b>1,153</b>
										<b>765,390</b>				<b>22</b>		<b>62</b>						

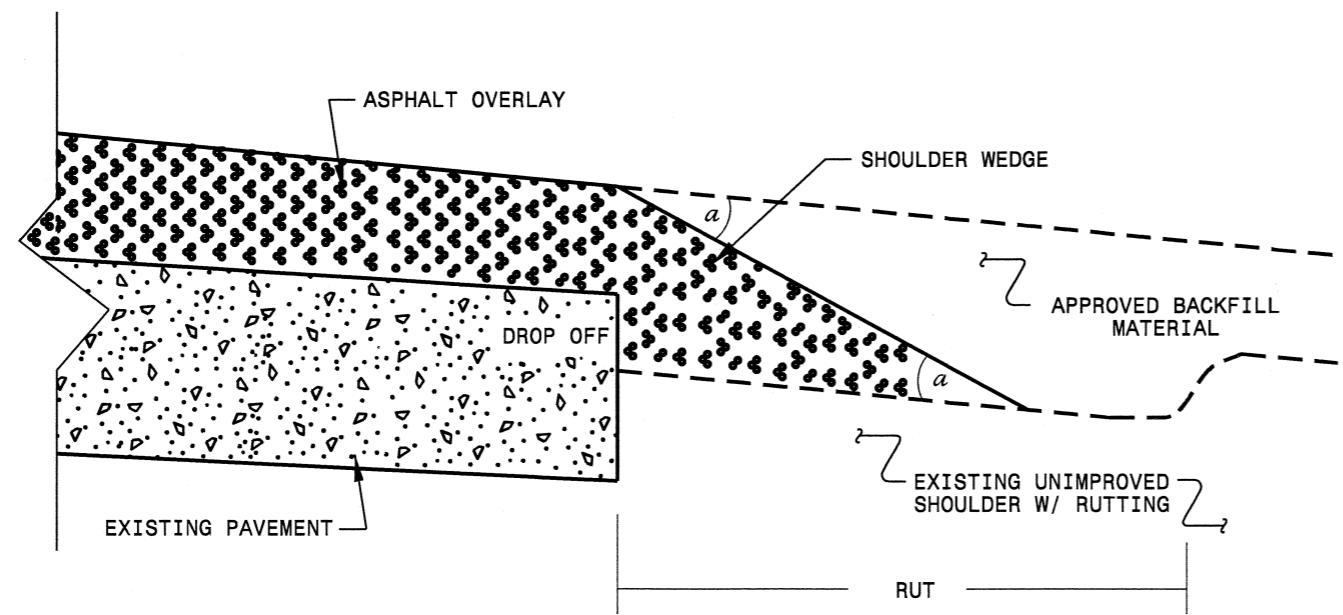
- NOTES:  
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.  
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.  
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



**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

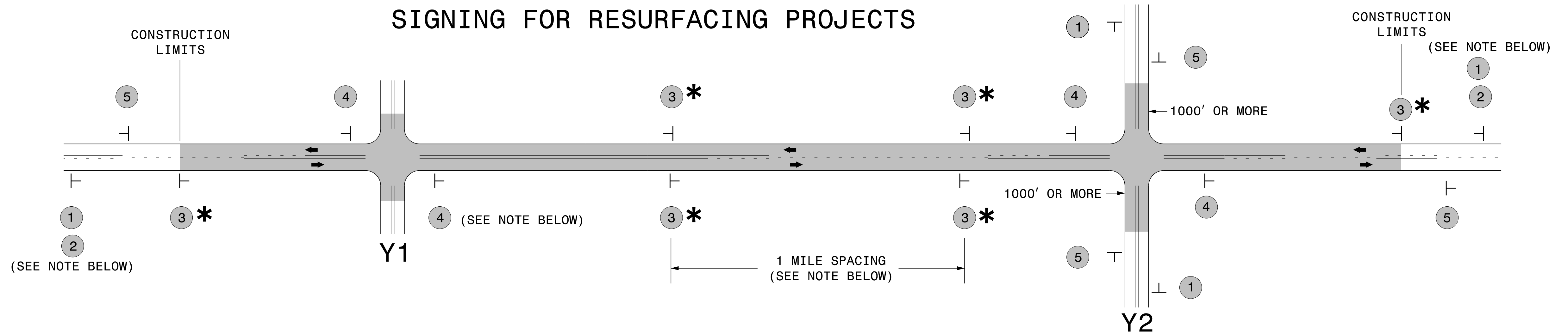
**SHOULDER WEDGE  
 DETAILS**

ORIGINAL BY: T.SPELL DATE: 7-19-11  
 MODIFIED BY: DATE: 10/18/12  
 CHECKED BY: DATE:  
 FILE SPEC.: s:\user\details\stand\shoulderwedgedetail.dgn

SYSTEMS CONSULTANTS  
 CONSULTANTS



## SIGNING FOR RESURFACING PROJECTS



LEGEND	
	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

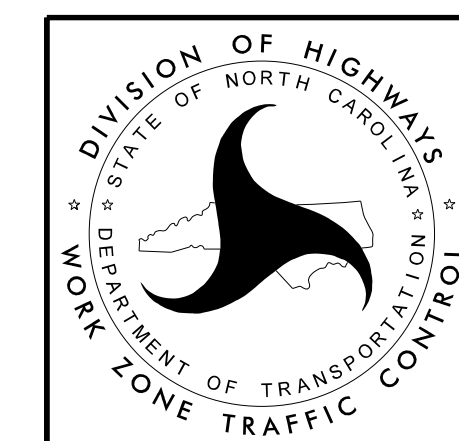
### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION		
1 2		<p style="text-align: center;"><b>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</b></p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <p style="text-align: center;">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.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>PLACED 500' IN ADVANCE OF FLAGGER.</p> </div> <div style="text-align: center;"> <p>PLACED 250' IN ADVANCE OF FLAGGER.</p> </div> </div>
3 *		
4		
5		

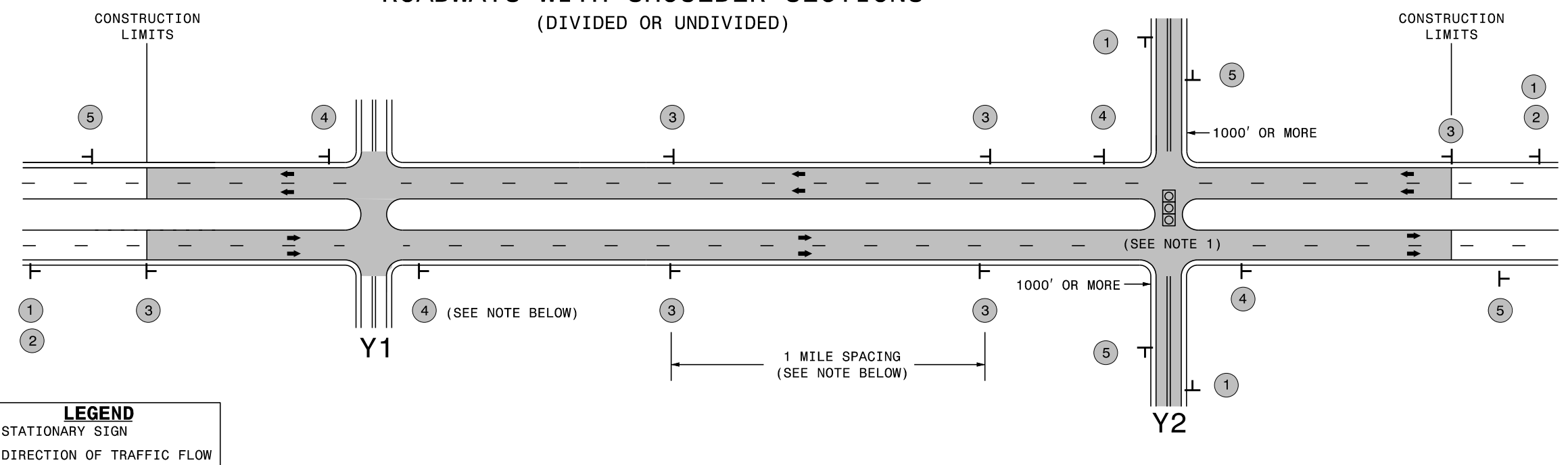
### \* SIGNING FOR ASPHALT SURFACE TREATMENTS (ONLY)

SUBSTITUTE LOW/SOFT SHOULDER SIGNS BY ALTERNATING THE FOLLOWING TWO SIGNS:  
STARTING WITH "UNMARKED PAVEMENT AHEAD" (SP 06026) FOLLOWED BY "LOOSE GRAVEL" (W8-7).



**RESURFACING  
ADVANCE WARNING SIGNS  
FOR  
RURAL AND SUBURBAN  
2 LANE ROADWAYS**

## SIGNING FOR RURAL AND SUBURBAN MULTI-LANE ROADWAYS WITH SHOULDER SECTIONS (DIVIDED OR UNDIVIDED)



LEGEND	
T	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	MAINLINE (-L-) SIGNING		-Y- LINE SIGNING	
	1	 <small>W20-1 48" X 48"</small>	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p style="text-align: center;"><b>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</b></p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <p>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.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">   <small>W20-1 48" X 48"</small> </div> <div style="text-align: center;">   <small>W20-7 A 48" X 48"</small> </div> </div> <p style="text-align: center;">PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p> <p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>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.</li> </ol>
	2	 <small>W7-3aP 24" X 18"</small>	#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)	
	3	 <small>SP 13107 48" X 48"</small>	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.	
	4	 <small>SP 13106 48" X 48"</small>	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.	
5	 <small>G20-2 A 48" X 24"</small>	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.		

DIVISION OF HIGHWAYS  
STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
WORK ZONE TRAFFIC CONTROL

**RESURFACING  
ADVANCE WARNING SIGNS  
FOR RURAL AND SUBURBAN  
MULTI-LANE ROADWAYS  
W/ SHOULDER SECTIONS  
(DIVIDED OR UNDIVIDED)**

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