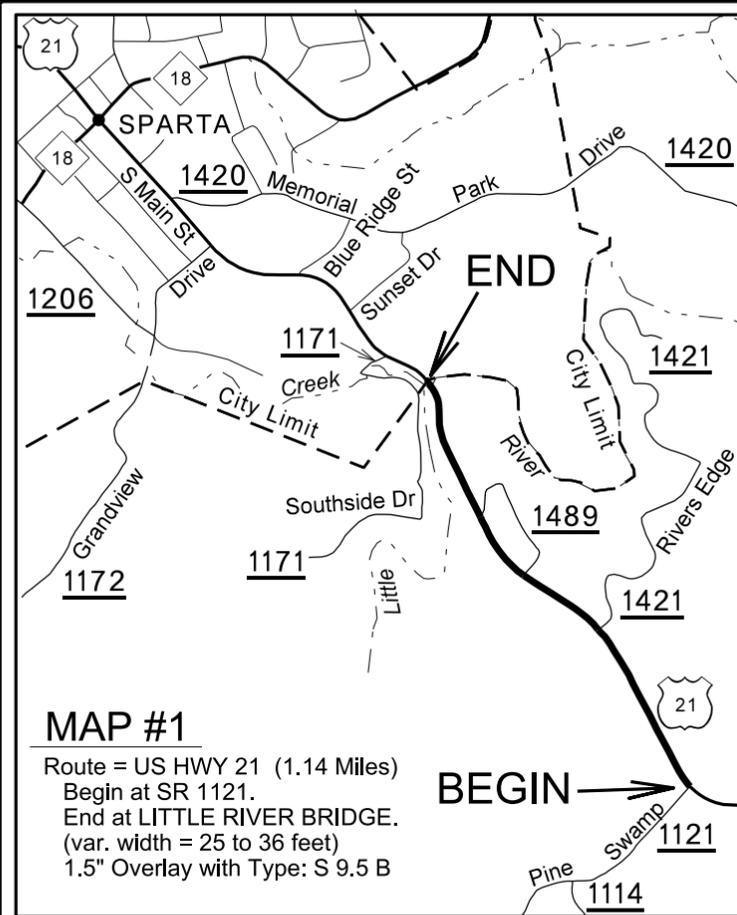


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

ALLEGHANY COUNTY

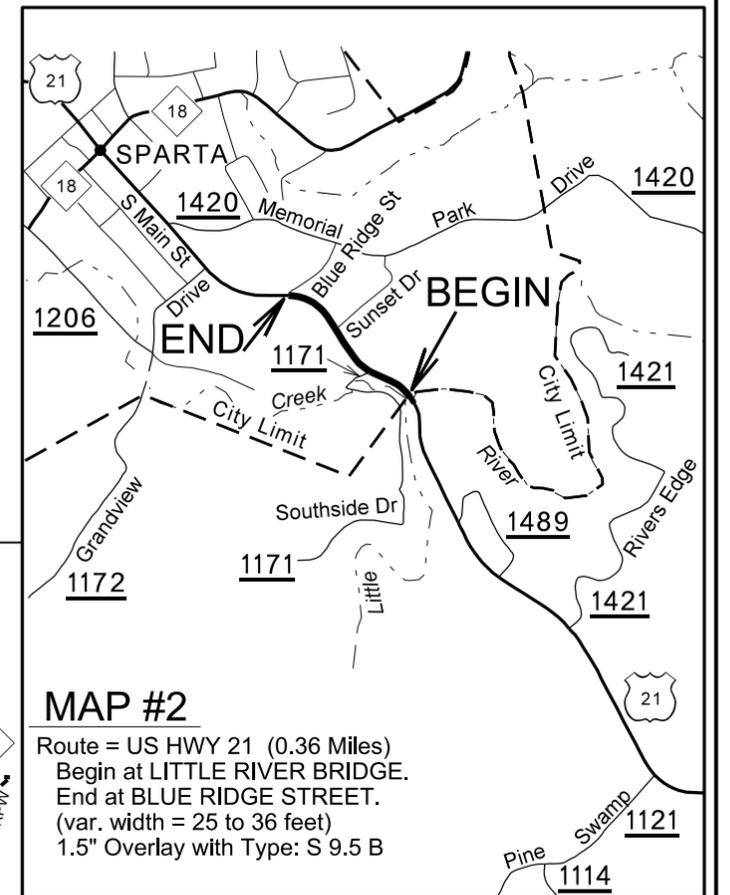
2017

TYPE OF WORK: ASPHALT RESURFACING
PRIMARY & SECONDARY ROUTES



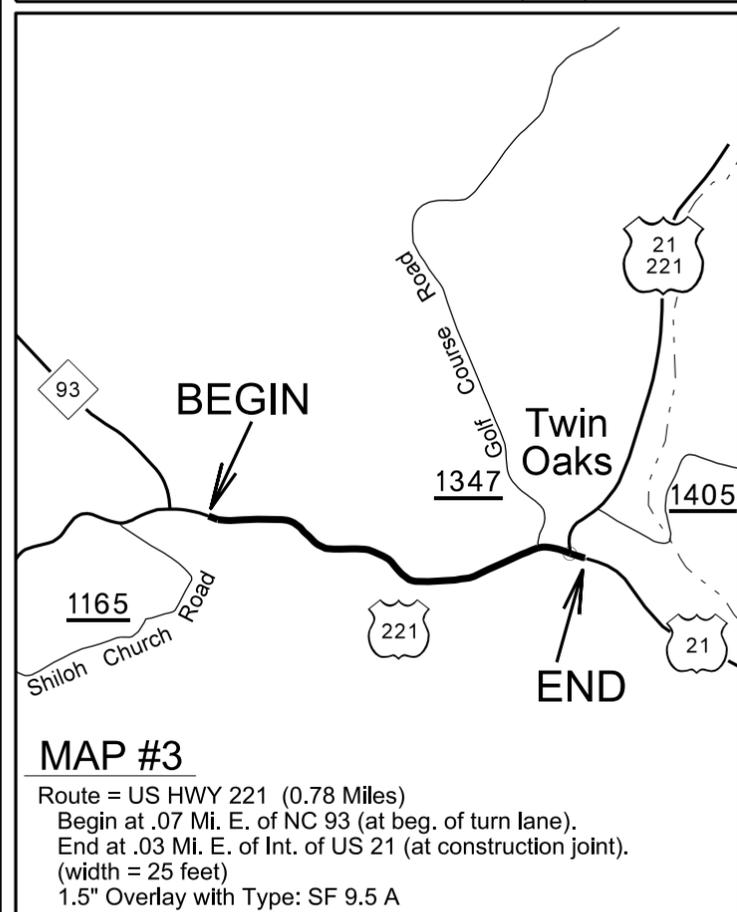
MAP #1

Route = US HWY 21 (1.14 Miles)
Begin at SR 1121.
End at LITTLE RIVER BRIDGE.
(var. width = 25 to 36 feet)
1.5" Overlay with Type: S 9.5 B



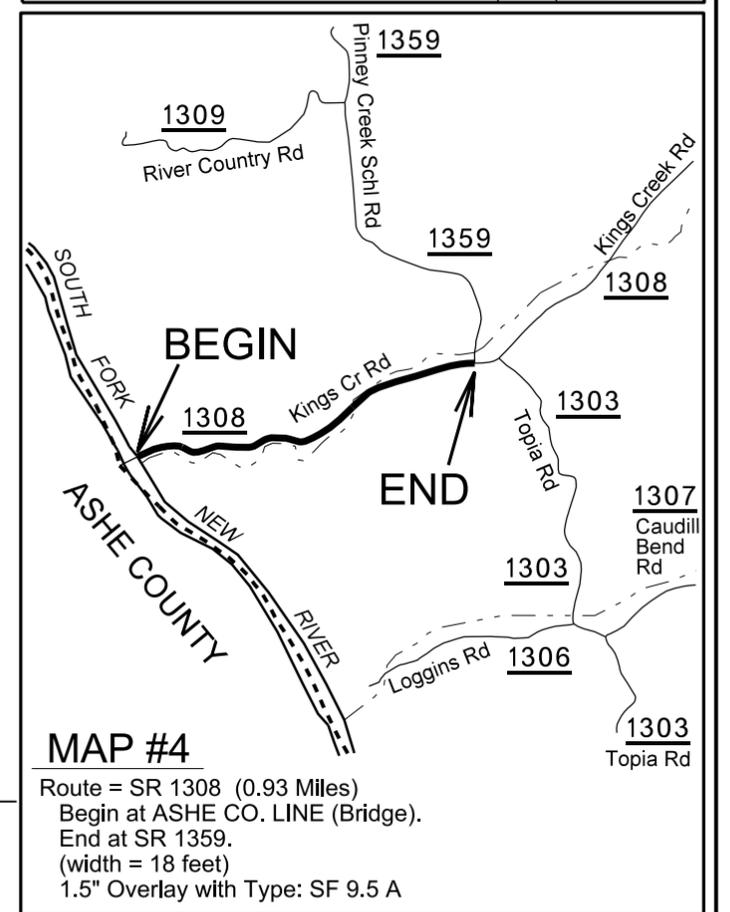
MAP #2

Route = US HWY 21 (0.36 Miles)
Begin at BLUE RIDGE STREET.
End at LITTLE RIVER BRIDGE.
(var. width = 25 to 36 feet)
1.5" Overlay with Type: S 9.5 B



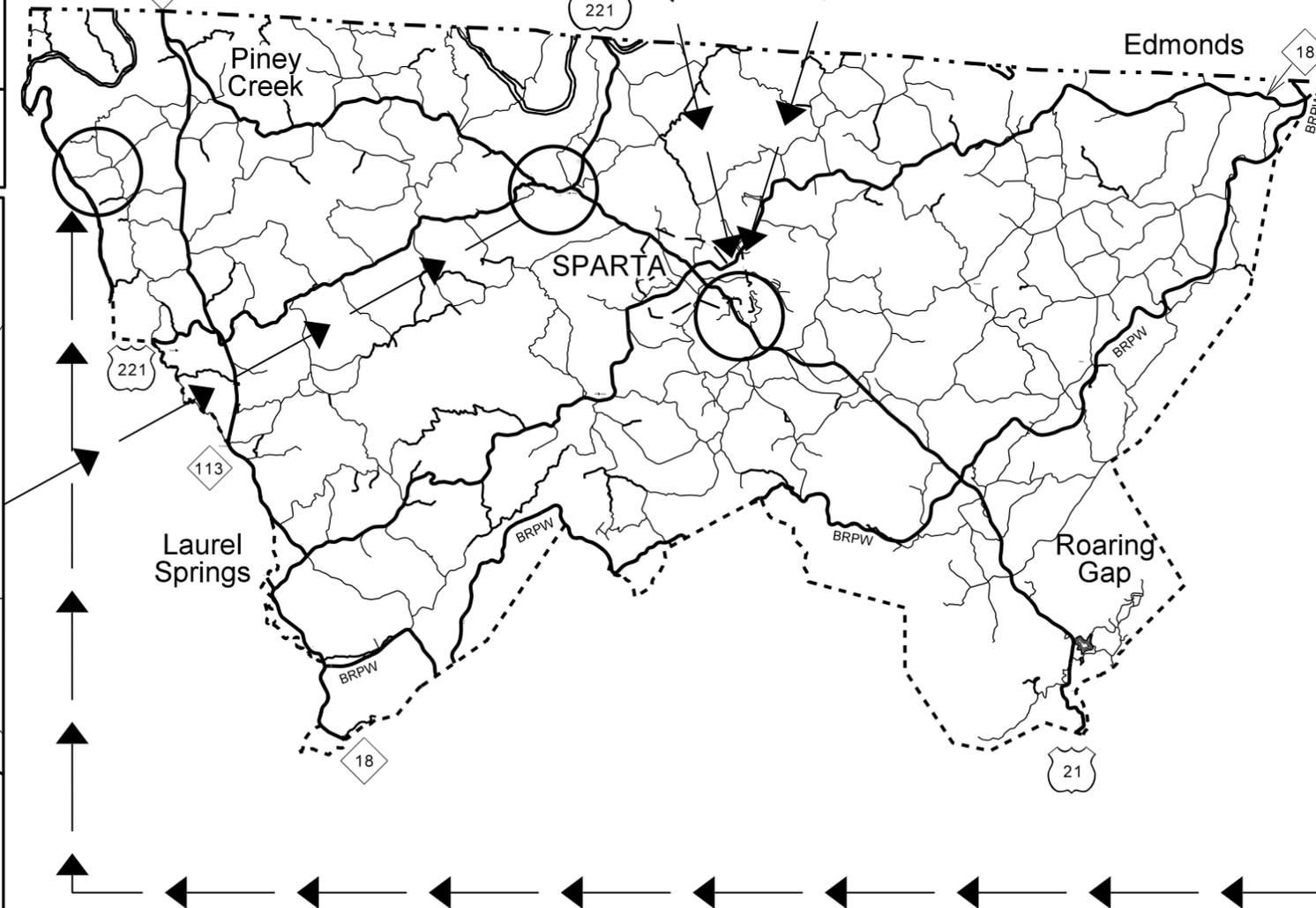
MAP #3

Route = US HWY 221 (0.78 Miles)
Begin at .07 Mi. E. of NC 93 (at beg. of turn lane).
End at .03 Mi. E. of Int. of US 21 (at construction joint).
(width = 25 feet)
1.5" Overlay with Type: SF 9.5 A



MAP #4

Route = SR 1308 (0.93 Miles)
Begin at ASHE CO. LINE (Bridge).
End at SR 1359.
(width = 18 feet)
1.5" Overlay with Type: SF 9.5 A

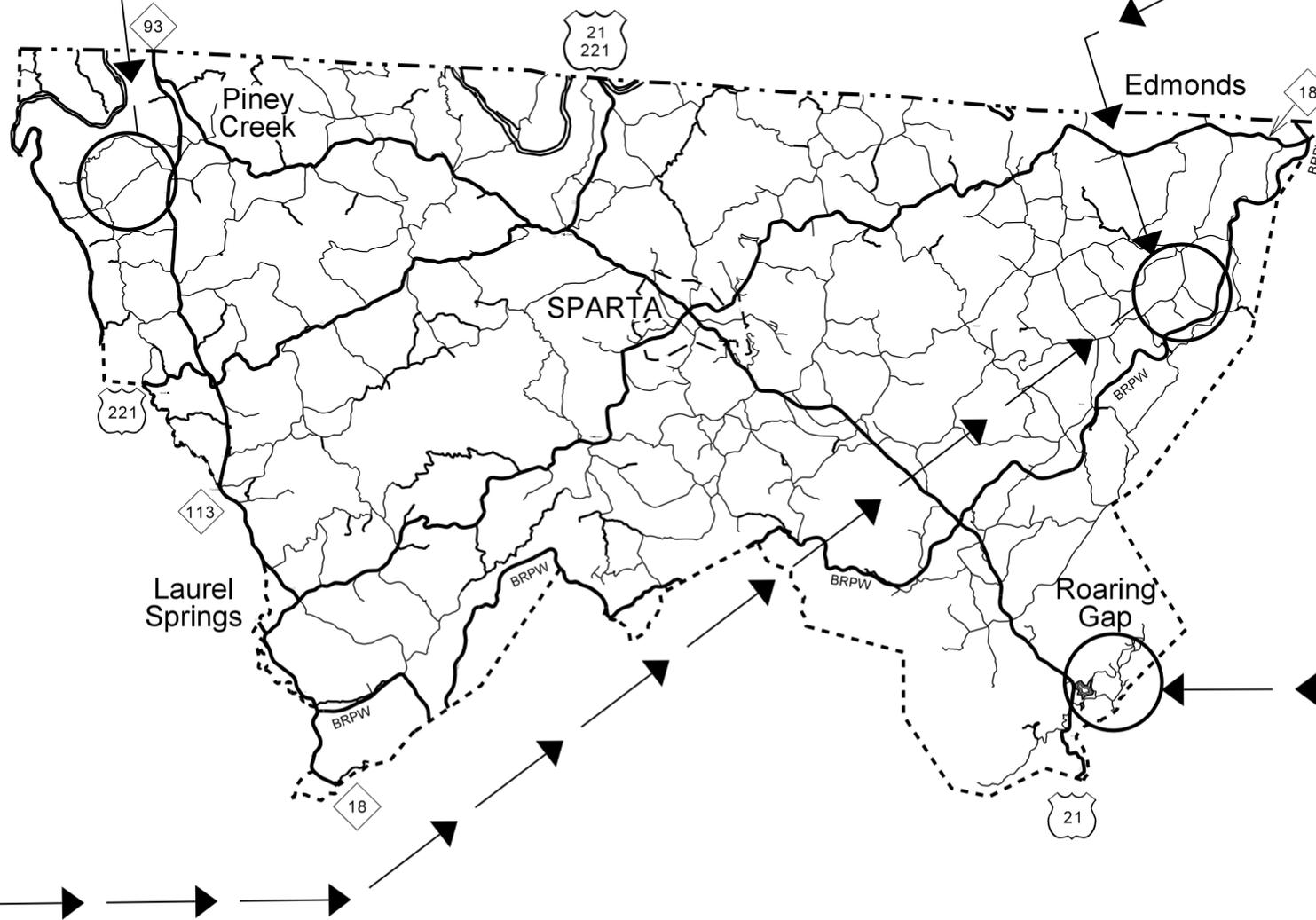
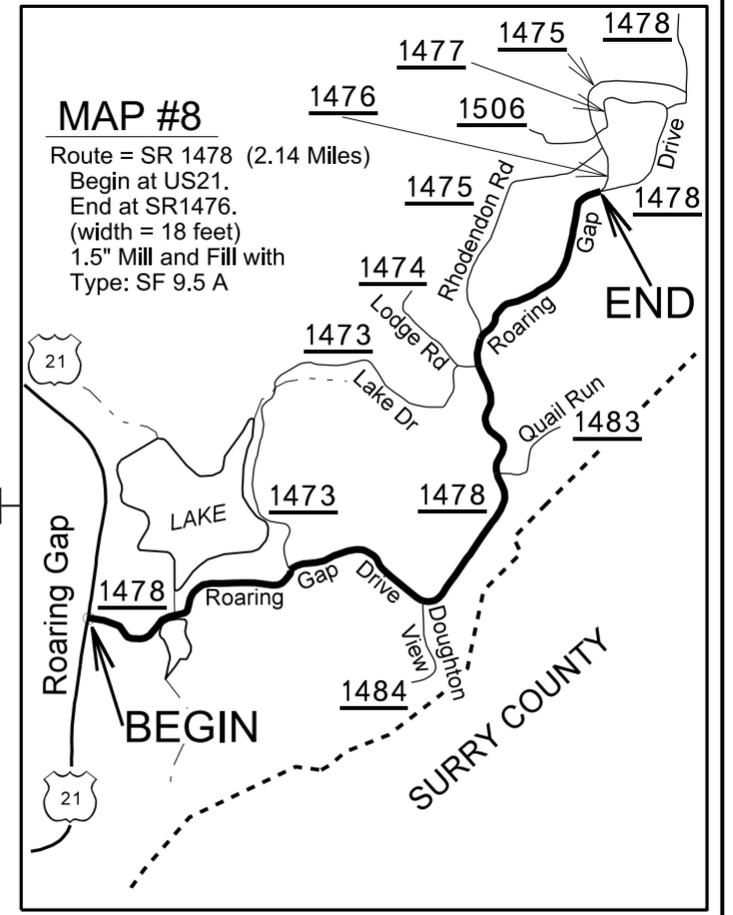
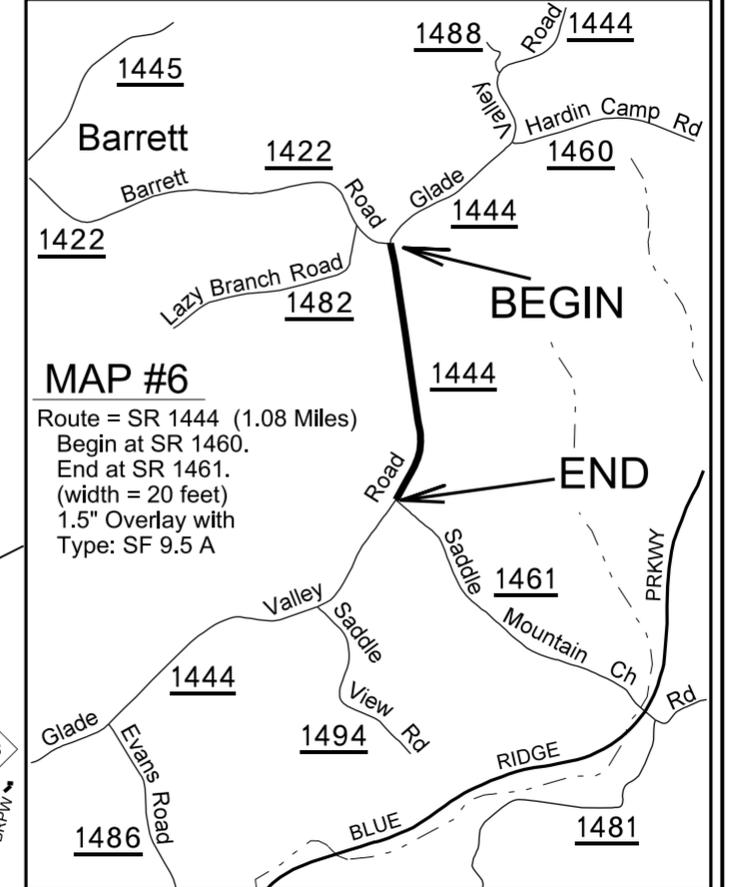
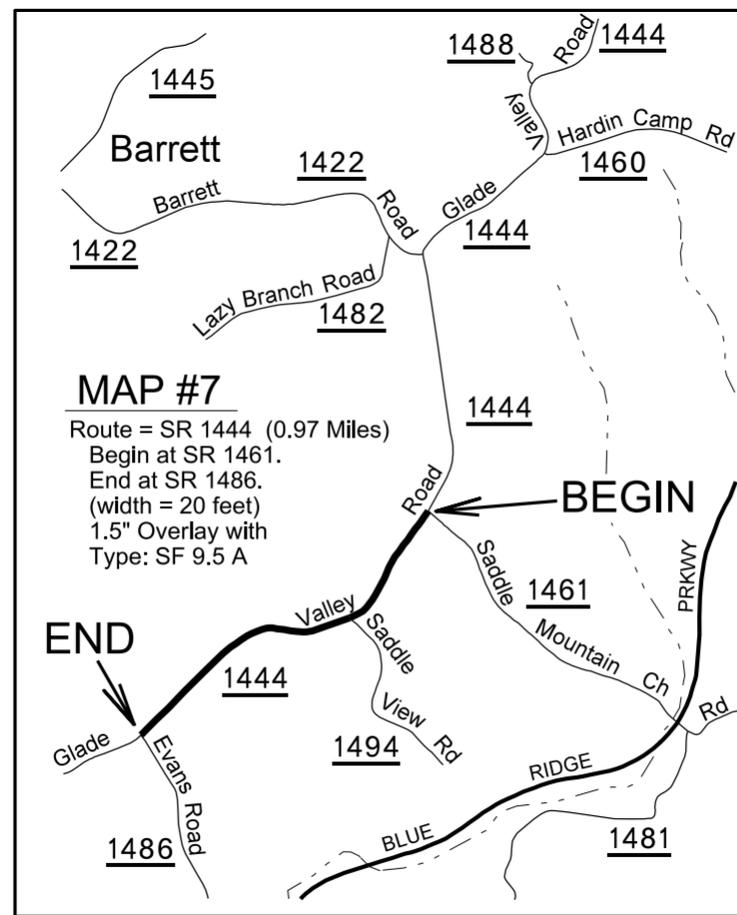
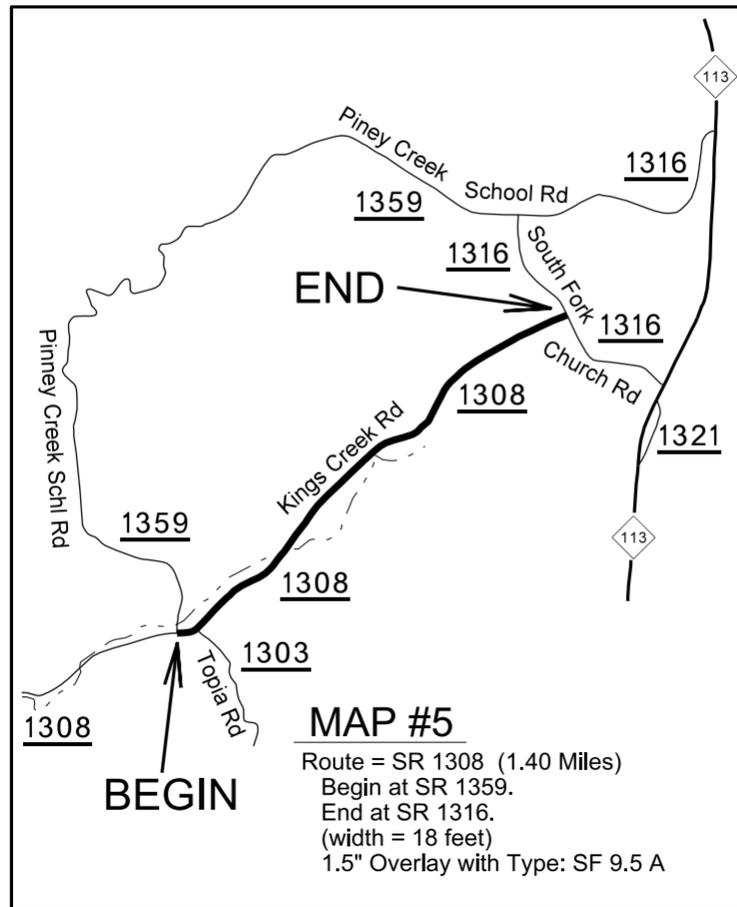


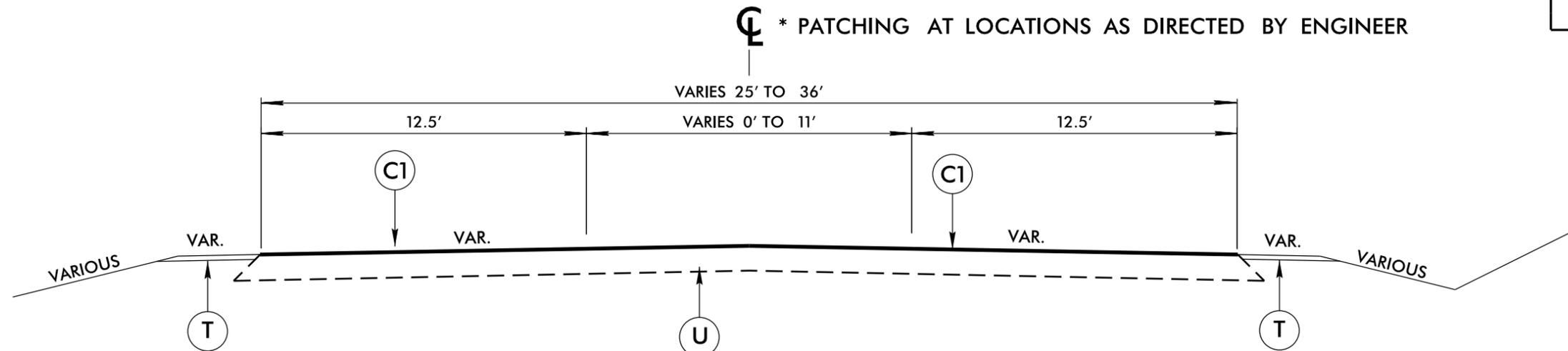
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

ALLEGHANY COUNTY

2017

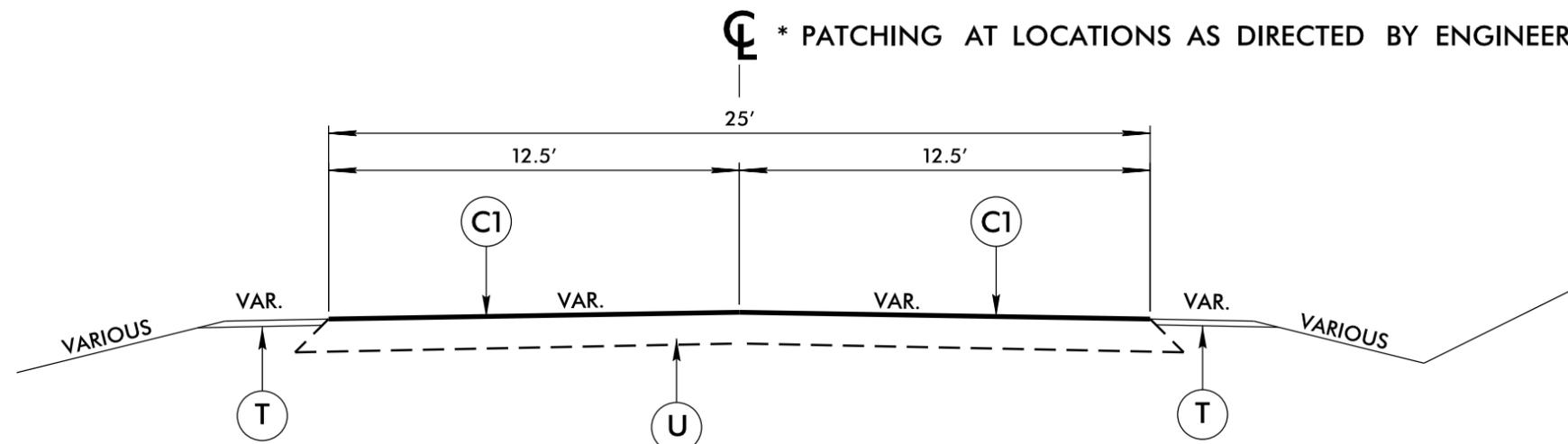
TYPE OF WORK: ASPHALT RESURFACING
PRIMARY & SECONDARY ROUTES





TYPICAL SECTION NO. 1

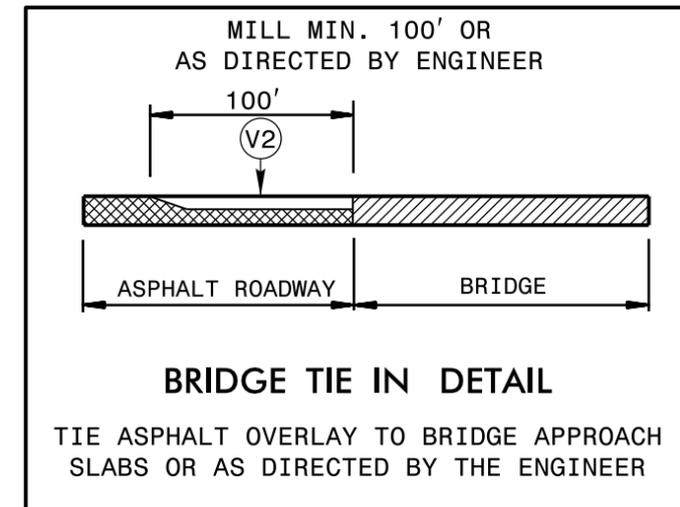
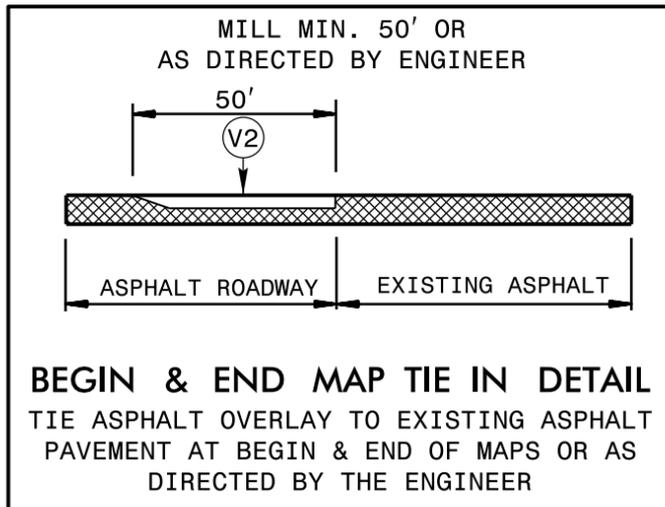
MAP 1 - US 21 FROM SR 1121 TO SPARTA SCL
 MILL 1 1/2" ON BRIDGE DECK ON MAP 1



TYPICAL SECTION NO. 2

MAP 2 - US 21 FROM SPARTA SCL TO CONSTRUCTION JOINT
 MILL 1 1/2" ON BRIDGE DECK ON MAP 2

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1 1/2"
V2	INCIDENTAL MILLING



**ALLEGHANY COUNTY
 PRIMARY AND SECONDARY
 RESURFACING**

DIVISION II

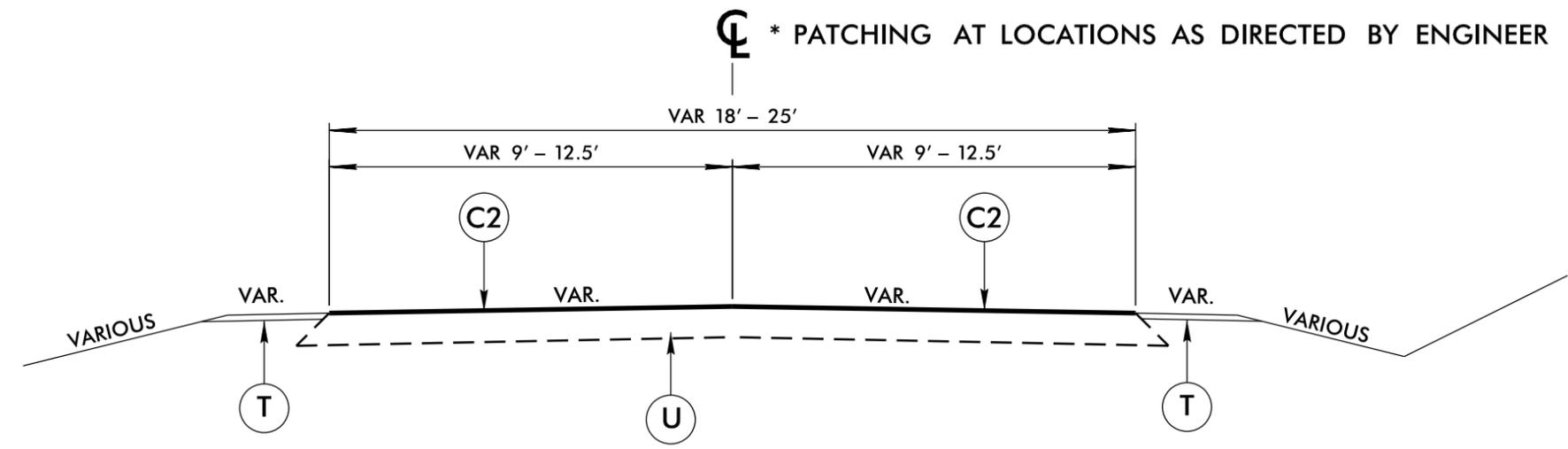
REVISIONS	INIT.	DATE

SCALE: N/A DATE: 12/2015

PREPARED BY: S.B. DARNELL
 REVIEWED BY: J.D. WOOD

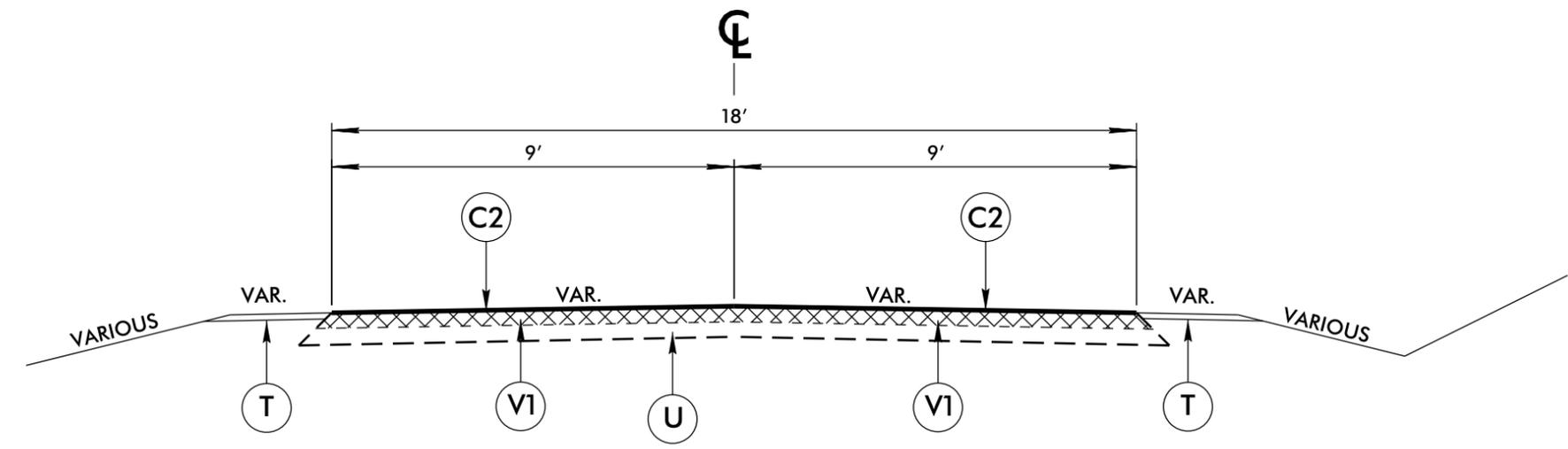
**N.C. DEPARTMENT of TRANSPORTATION
 DIVISION of HIGHWAYS
 DIVISION ELEVEN**





TYPICAL SECTION NO. 3

MAP 3 – US 221 FROM NC 93 TO CONSTRUCTION JOINT AT US 21
 MAP 4 – SR 1308 FROM ASHE COUNTY LINE TO SR 1359
 MAP 5 – SR 1308 FROM SR 1359 TO SR 1316
 MAP 6 – SR 1444 FROM SR 1460 TO SR 1461
 MAP 7 – SR 1444 FROM SR 1461 TO SR 1486
 MILL 1½" ON BRIDGE DECK ON MAP 4



TYPICAL SECTION NO. 4

MAP 8 – SR 1478 FROM US 21 TO SR 1473

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.
T	SHOULDER RECONSTRUCTION
U	EXISTING PAVEMENT
V1	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 1½"
V2	INCIDENTAL MILLING

ALLEGHANY COUNTY
PRIMARY AND SECONDARY
RESURFACING

DIVISION II

REVISIONS	INT.	DATE

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

SCALE: N/A DATE: 12/2015

PREPARED BY: S.B. DARNELL
 REVIEWED BY: J.D. WOOD

PROJECT NO.	SHEET NO.	TOTAL NO.
2017CPT.11.02.10031, 2017CPT.11.02.20031		

SUMMARY OF QUANTITIES

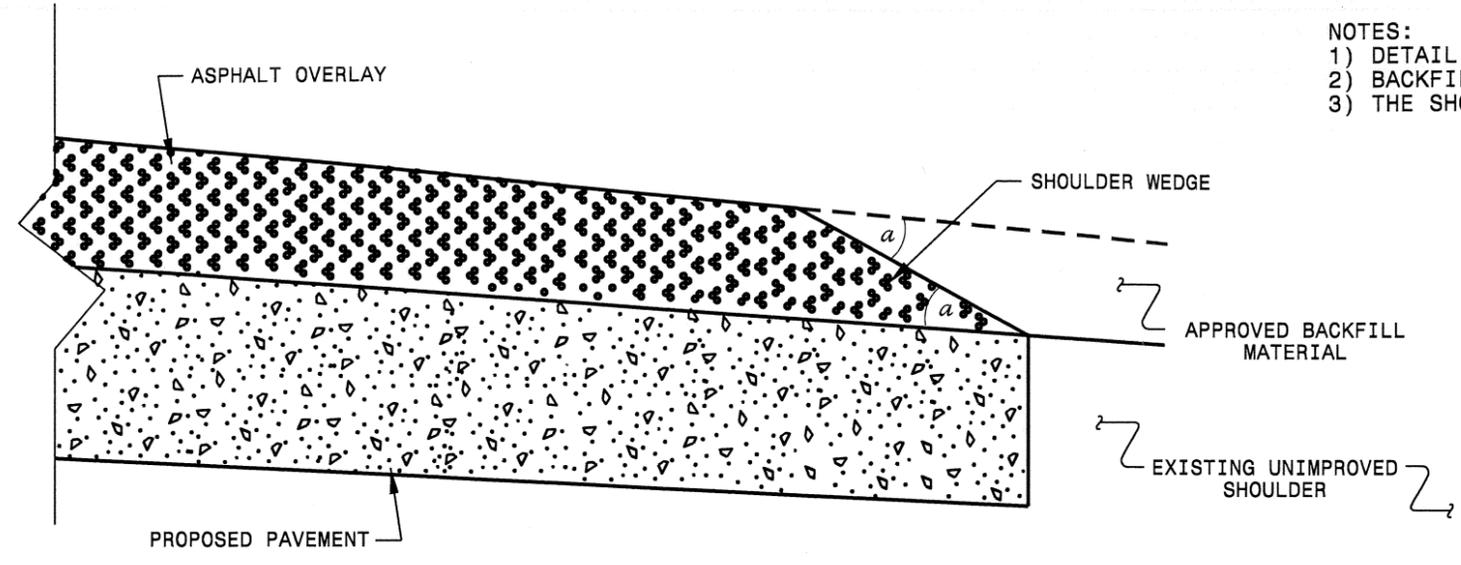
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARMMX ASPHALT REQUIRED	LENGTH M	WIDTH FT	BORROW EXCAVATION CY	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SM	1½" MILLING SY	INCIDENTAL MILLING SY	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, SF9.5A TONS	ASPHALT BINDER FOR PLANT MX TONS	PATCHING EXISTING PAVEMENT TONS	SEED & MULCHING AC
2017CPT.11.02.10031	Alleghany	1	US 21	FROM SR 1121 TO SPARTA SCL	1	3	MU	NO	NO	1.14	36	228		2.28	280	200	2,080		125	100	0.80
2017CPT.11.02.10031	Alleghany	2	US 21	FROM SPARTA SCL TO CONSTRUCTION JOINT	2	2	2WU	NO	NO	0.36	25	72	25	0.72	694	280	565		34	250	0.25
2017CPT.11.02.10031	Alleghany	3	US 221	FROM NC 93 TO CONSTRUCTION JOINT AT US 21	3	2	2WU	NO	NO	0.78	25	156	50	1.56		280	1,135		76	250	0.60
TOTAL FOR PROJ NO. 2017CPT.11.02.10031										2.28		456	75	4.56	974	760	2,645	1,135	235	600	1.65
2017CPT.11.02.20031	Alleghany	4	SR 1308	FROM ASHE COUNTY LINE TO SR 1359	3	2	2WU	NO	NO	0.93	18	186	50	1.86	800	200		865	58	250	0.75
2017CPT.11.02.20031	Alleghany	5	SR 1308	FROM SR 1359 TO SR 1316	3	2	2WU	NO	NO	1.4	18	280	50	2.80		200		1,330	89		1.00
2017CPT.11.02.20031	Alleghany	6	SR 1444	FROM SR 1460 TO SR 1461	3	2	2WU	NO	NO	1.08	20	216	50	2.16		222		1,110	74		0.80
2017CPT.11.02.20031	Alleghany	7	SR 1444	FROM SR 1461 TO SR 1486	3	2	2WU	NO	NO	0.97	20	194	50	1.94		222		1,000	67		0.80
2017CPT.11.02.20031	Alleghany	8	SR 1478	FROM US 21 TO SR 1473	4	2	2WU	NO	NO	2.14	18	428	50	4.28	25,450	200		1,950	131		1.60
TOTAL FOR PROJ NO. 2017CPT.11.02.20031										6.52		1,304	250	13.04	26,250	1,044		6,255	419	250	4.95
GRANDTOTAL										8.8		1,760	325	17.60	27,224	1,804	2,645	7,390	654	850	6.60

PROJECT NO.	SHEET NO.	TOTAL NO.
2017CPT.11.02.10031, 2017CPT.11.02.20031		

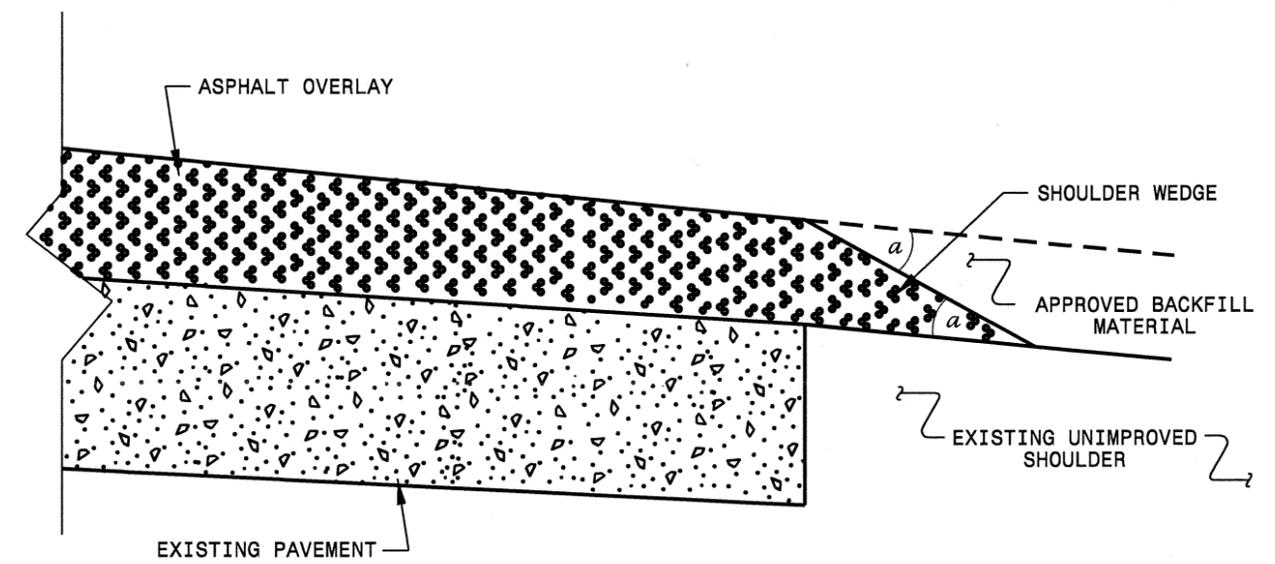
THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N	4810000000-E		4845000000-N	4905000000-N
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS	4" WHITE PAINT LF	4" YELLOW PAINT LF	PAINT LT ARROW EA	SNOW PLOWABLE MARKERS EA
2017CPT.11.02.10031	Alleghany	1	US 21	FROM SR 1121 TO SPARTA SCL	1	3	MU	1.14	36	104	1.00	24,533	48,154	26	92
2017CPT.11.02.10031	Alleghany	2	US 21	FROM SPARTA SCL TO CONSTRUCTION JOINT	2	2	2WU	0.36	25	48		7,603	15,206	2	153
2017CPT.11.02.10031	Alleghany	3	US 221	FROM NC 93 TO CONSTRUCTION JOINT AT US 21	3	2	2WU	0.78	25	72		16,474	16,474	2	52
TOTAL FOR PROJ NO. 2017CPT.11.02.10031								2.28		224	1	48,610	79,834	30	297
												128,444			
2017CPT.11.02.20031	Alleghany	4	SR 1308	FROM ASHE COUNTY LINE TO SR 1359	3	2	2WU	0.93	18	72		19,642	19,642		62
2017CPT.11.02.20031	Alleghany	5	SR 1308	FROM SR 1359 TO SR 1316	3	2	2WU	1.4	18	72		29,568	29,568		93
2017CPT.11.02.20031	Alleghany	6	SR 1444	FROM SR 1460 TO SR 1461	3	2	2WU	1.08	20	72		22,810	22,810		72
2017CPT.11.02.20031	Alleghany	7	SR 1444	FROM SR 1461 TO SR 1486	3	2	2WU	0.97	20	72		20,486	20,486		65
2017CPT.11.02.20031	Alleghany	8	SR 1478	FROM US 21 TO SR 1473	4	2	2WU	2.14	18	148		45,197	45,197		151
TOTAL FOR PROJ NO. 2017CPT.11.02.20031								6.52		436		137,703	137,703		443
												275,406			
GRANDTOTAL								8.8		660	1	186,313	217,537	30	740
												403,850			

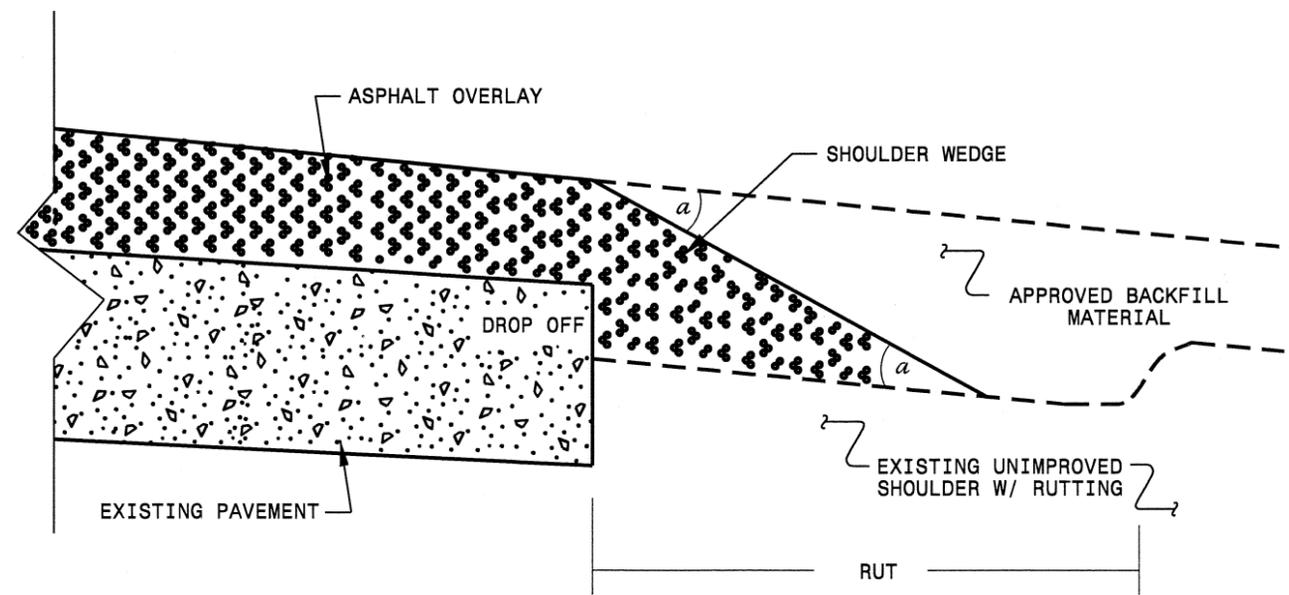
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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°

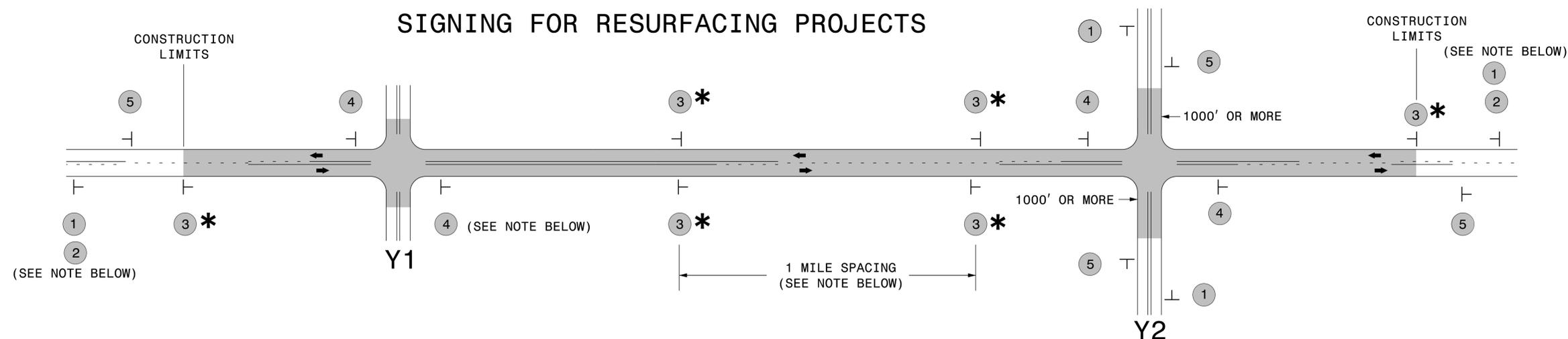
CONTRACT STANDARDS
 AND DEVELOPMENT UNIT
 Office 919-707-6950 FAX 919-250-4119

**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	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>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, 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;"> <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>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	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.		

* 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