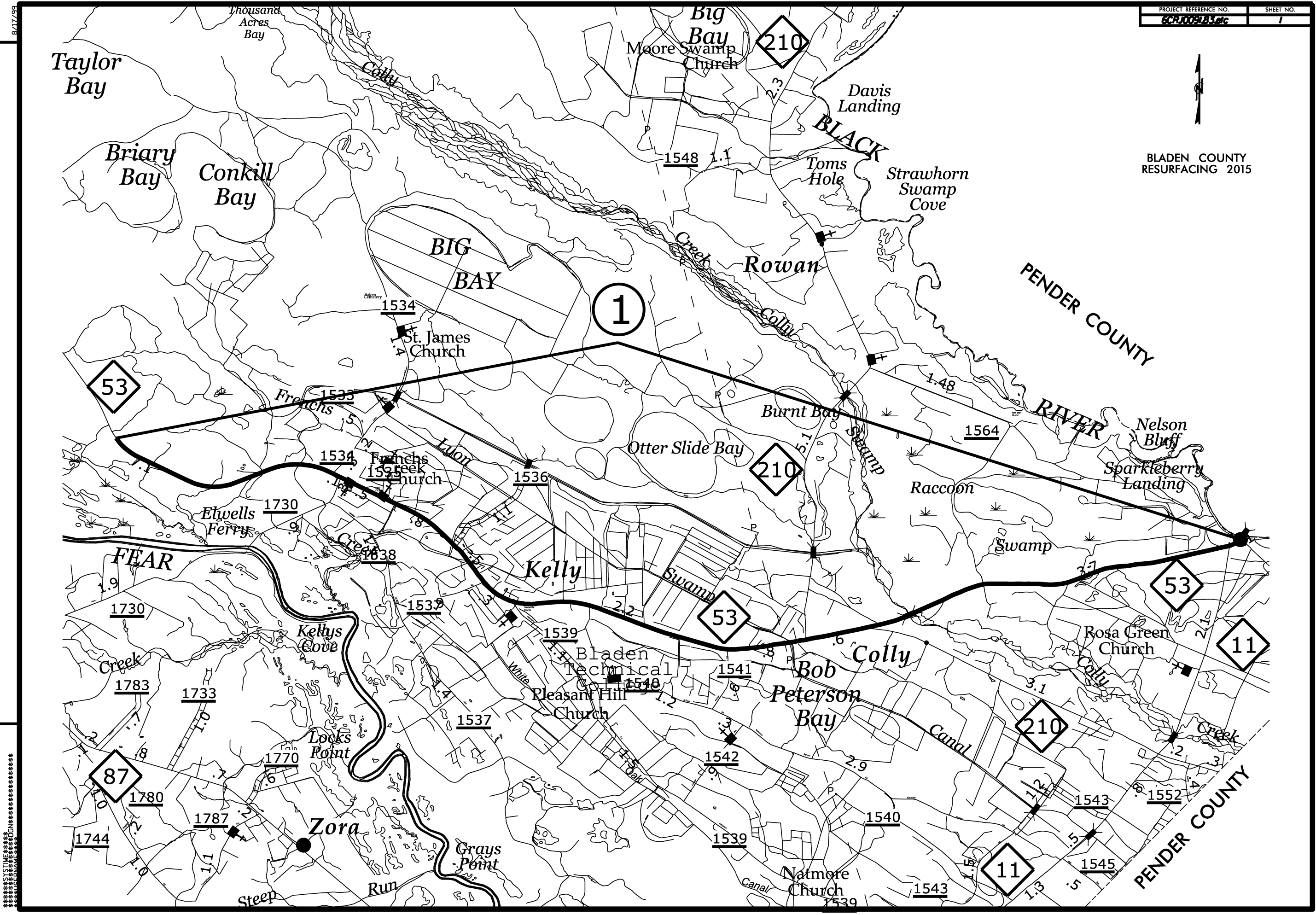


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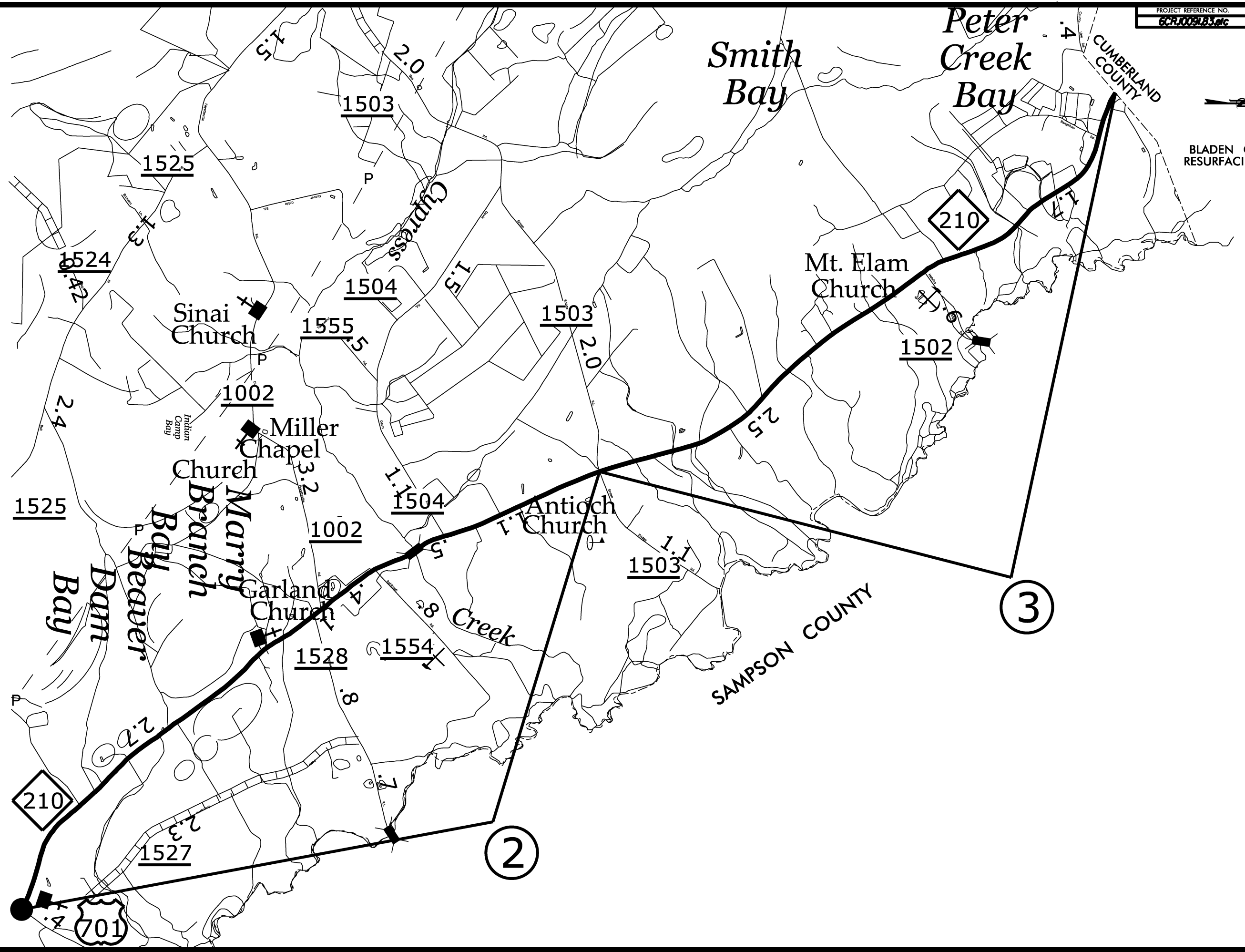
REVISIONS

SYSTEMS
DATE
BY
CHECKED
DATE
BY

8/17/99



BLADEN COUNTY
RESURFACING 2015



REVISIONS

8/17/95

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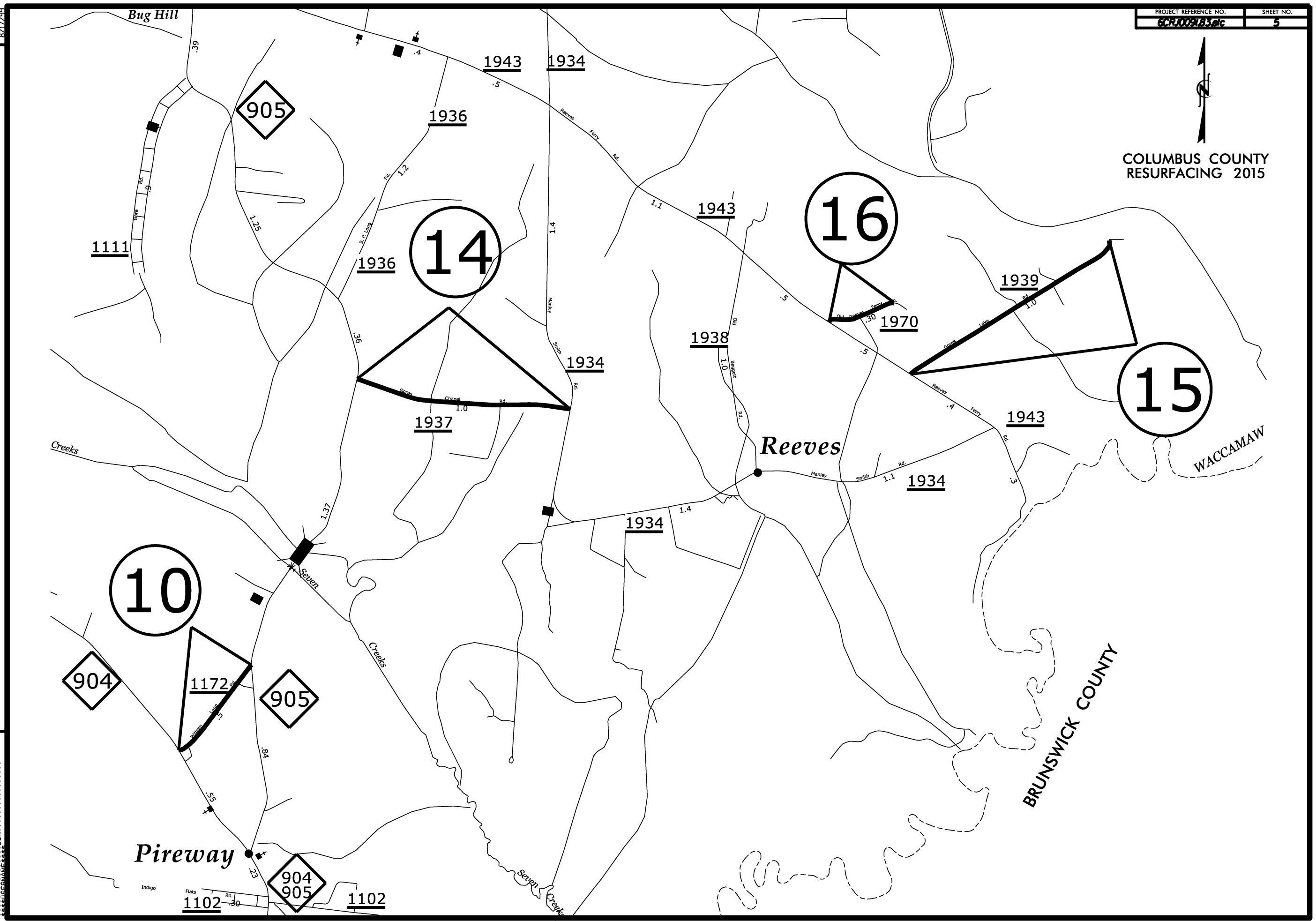


COLUMBUS COUNTY RESURFACING 2015

B/17/99

REVISIONS

SYSTEMS
ADDENDUMS
DATE
BY
DESCRIPTION



Bug Hill

905

14

16

15

1111

10

904

1172

905

Pireway

904
905

1102

1102

1943

1934

1936

1943

1936

1934

1938

1970

1939

1943

1934

1934

Reeves

BRUNSWICK COUNTY

WACCAMAW

Indigo Flats Rd. 1102

Seven Creeks

Creeks

Creeks

W. Seven

William Link

S. P. Long

Reeves Ferry Rd.

Manley

Smith

Baggett

Manley

Smith

Reeves

Reeves

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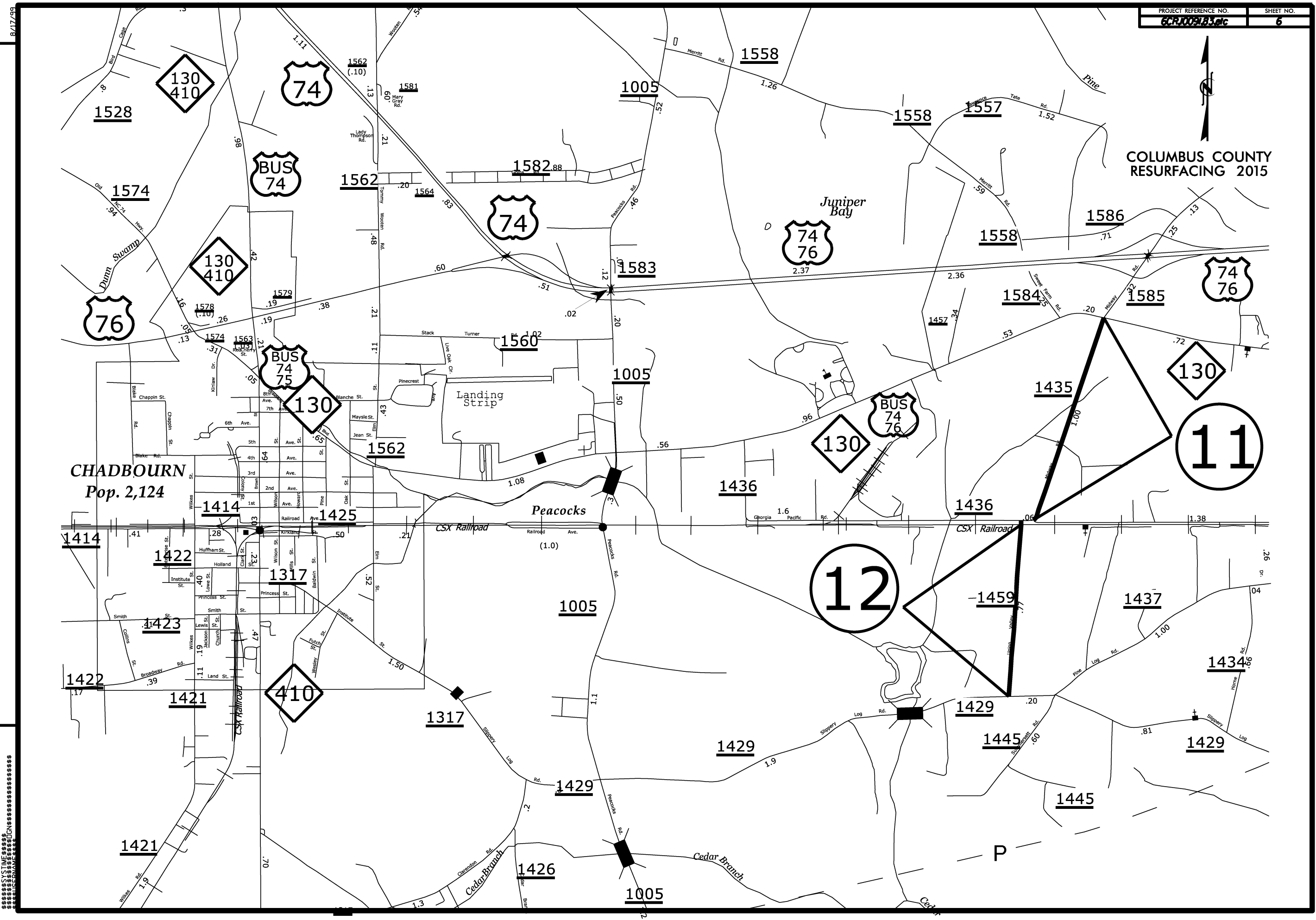
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COLUMBUS COUNTY RESURFACING 2015



REVISIONS

SYSTEMS ENGINEERING
DESIGN
DRAWING

8/17/99

CHADBOURN
Pop. 2,124

Peacocks

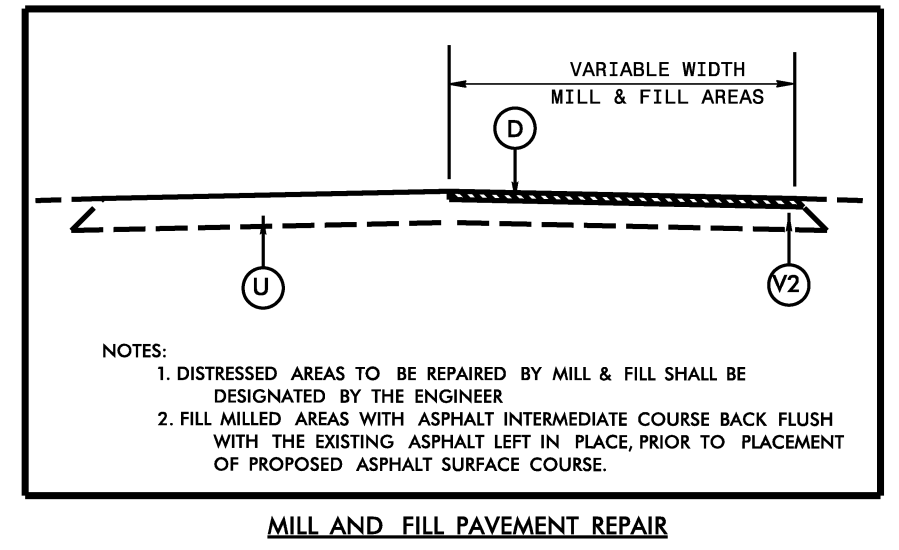
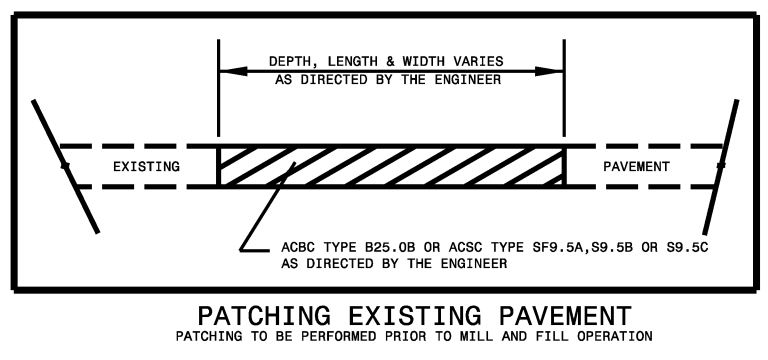
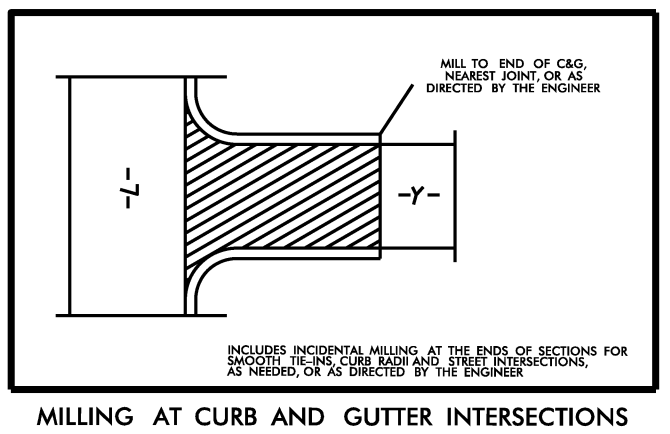
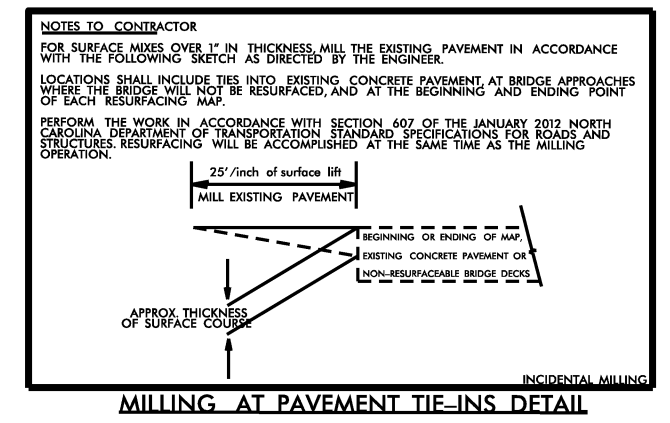
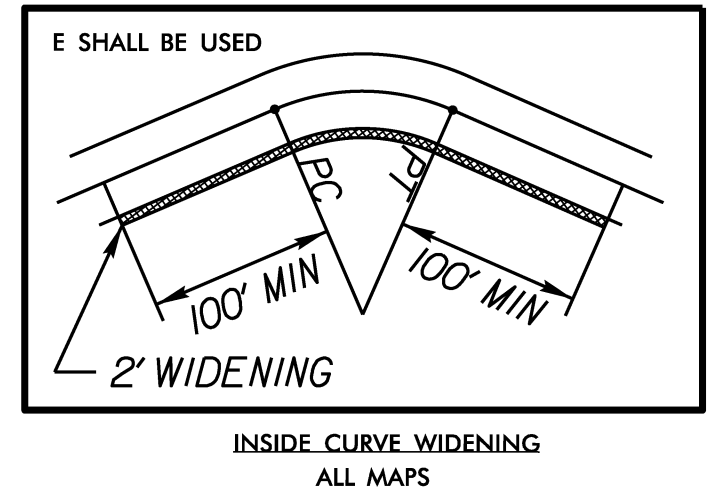
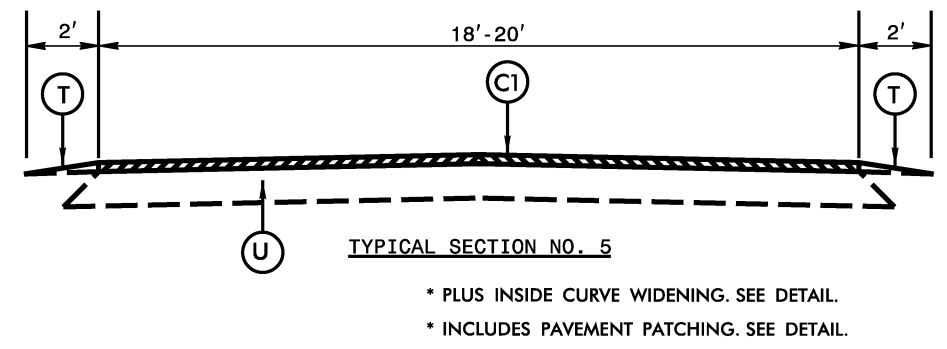
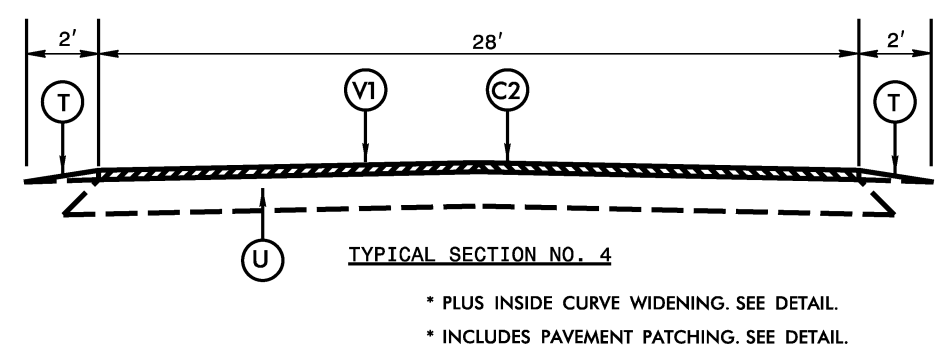
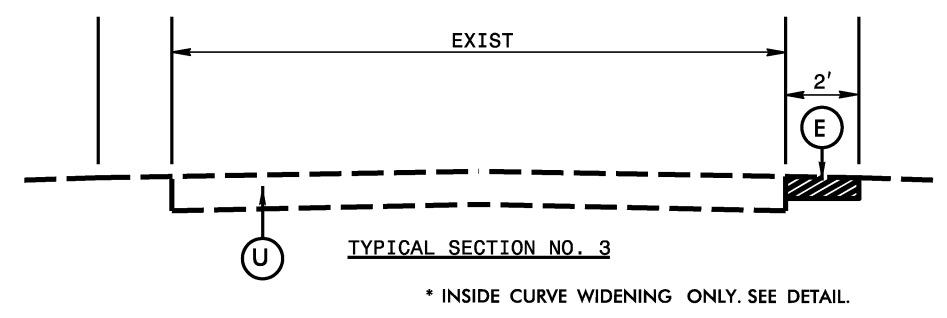
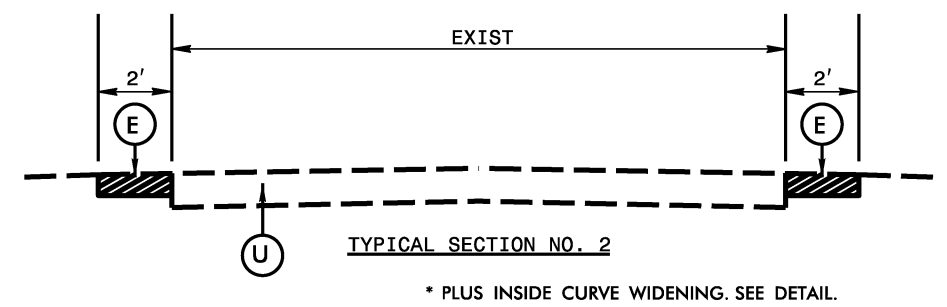
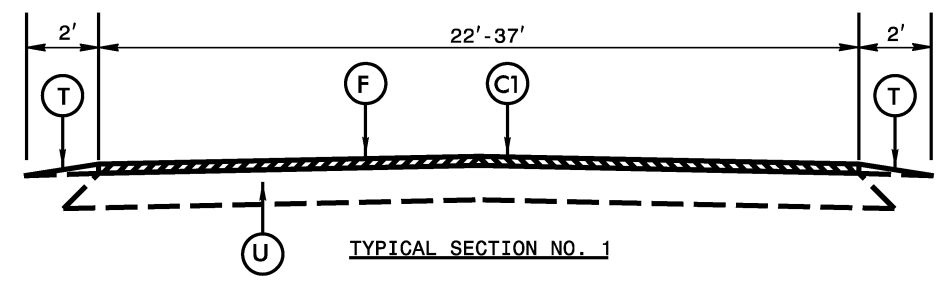
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410

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PAVEMENT SCHEDULE	
C1	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D	2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
E	5½" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
F	#6M MAT COAT
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION AS DIRECTED BY THE ENGINEER)
U	EXISTING ASPHALT
V1	¾" MILLING
V2	2½" MILLING



*****SYTIME*****

PROJECT NO.	SHEET NO.	TOTAL NO.
6CR.10091.83, ETC	9	

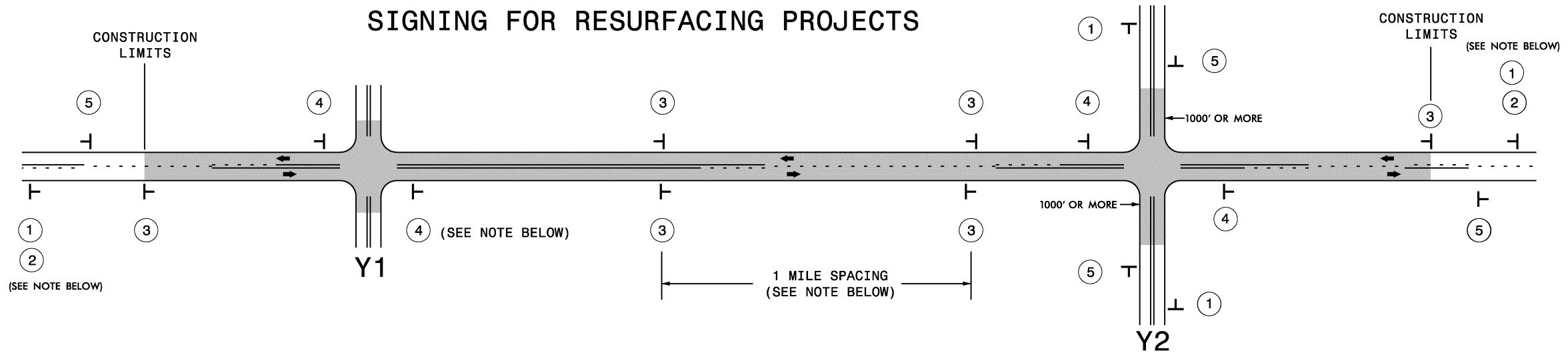
SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANE S	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	AGGREGATE SHOULDER BORROW TON	SHOULDER RECONSTRUCTION SMI	3/4" MILLING SY	2.5" MILLING SY	INCIDENTAL MILLING SY	BASE COURSE, B25.0B TONS	INTERMEDIATE COURSE, I19.0B TONS	SURFACE COURSE, S9.5B TONS	LEVELING COURSE, S9.5B TONS	SURFACE COURSE, SF9.5A TONS	LEVELING COURSE, SF9.5A TONS	ASPH. BINDER TONS	PATCHING EXISTING PAVEMENT TONS	AST MAT COAT #6M SY	EMULSION FOR ASPHALT SURFACE TREATMENT GAL
6CR.10091.83	Bladen	1	NC 53	FROM PENDER CL TO NEW CJ	1	2	2WU	NO	NO	12	22	4,001	24.0			2,376	1,361			13,222			946	86	154,880	66,598
6CR.10091.83	Bladen	2	NC 210 - A	FROM US 701 TO SR 1503	2	2	2WU	NO	NO	4.73	19	1,577	9.5				4,025						177			
6CR.10091.83	Bladen	3	NC 210 - B	FROM SR 1503 TO CUMBERLAND CL	3	2	2WU	NO	NO	4.2	22	430	1.3				489						22			
TOTAL FOR PROJ NO. 6CR.10091.83										20.93		6,008	34.8			2,376	5,875			13,222			1,145	86	154,880	66,598
6CR.10241.83	Columbus	4	NC 410	FROM US 701 TO SR 1004	4	2	2WU	NO	NO	7.38	28	2,461	14.8	121,229	24,640	1,190	681	3,511	10,517	127			838	37		
TOTAL FOR PROJ NO. 6CR.10241.83										7.38		2,461	14.8	121,229	24,640	1,190	681	3,511	10,517	127			838	37		
6CR.20241.83	Columbus	5	SR 1004	FROM NC 410 TO SR 1005	5	2	2WU	NO	NO	1.3	22	433	2.6		252	89	121	36			1,441	14	104	13		
6CR.20241.83	Columbus	6	SR 1317	FROM SR 1329 TO SR 1004	5	2	2WU	NO	NO	2.27	18	757	4.5			644	85				2,062	261	158	114		
6CR.20241.83	Columbus	7	SR 1329	FROM SR 1005 TO NC 410	5	2	2WU	NO	NO	1.63	18	543	3.3			89					1,445		97	16		
6CR.20241.83	Columbus	8	SR 1157	FROM SR 1166 TO SR 1162	5	2	2WU	NO	NO	2.53	18	843	5.1			178	331				2,341	33	173	25		
6CR.20241.83	Columbus	9	SR 1162	FROM SR 1157 TO SR 1166	5	2	2WU	NO	NO	2.52	18	840	5.0			178	331				2,332	33	173	63		
6CR.20241.83	Columbus	10	SR 1172	FROM NC 905 TO NC 904	5	2	2WU	NO	NO	0.49	18	163	1.0			178	55				491	85	40			
6CR.20241.83	Columbus	11	SR 1435	FROM NC 130 TO SR 1436	5	2	2WU	NO	NO	0.94	20	313	1.9			89					935		63	24		
6CR.20241.83	Columbus	12	SR 1459	FROM SR 1429 TO SR 1436	5	2	2WU	NO	NO	0.78	20	260	1.6			89					780		52	20		
6CR.20241.83	Columbus	13	SR 1932	FROM SR 1006 TO NC 905	5	2	2WU	NO	NO	3.51	18	1,170	7.0			1,112	482				3,259	92	245	35		
6CR.20241.83	Columbus	14	SR 1937	FROM NC 905 TO SR 1934	5	2	2WU	NO	NO	0.95	20	317	1.9			89	103				971	14	70	24		
6CR.20241.83	Columbus	15	SR 1939	FROM SR 1943 TO DEAD END	5	2	2WU	NO	NO	1.06	20	354	2.1			44	55				1,053	29	75	11		
6CR.20241.83	Columbus	16	SR 1970	FROM SR 1943 TO END MAINT	5	2	2WU	NO	NO	0.3	18	100	0.6			44	74				293	91	28	12		
TOTAL FOR PROJ NO. 6CR.20241.83										18.28		6,093	36.6		252	2,823	1,637	36			17,403	652	1,278	357		
GRAND TOTAL										46.59		14,562	86.2	121,229	24,892	6,389	8,193	3,547	10,517	127	30,625	652	3,261	480	154,880	66,598

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANE S	LANE TYPE	LENGTH	WIDTH	44570000	4413000000	4685000000-E	4686000000-E		4695000000-E		47050000	4710000000-E	47210000	4725000000-E				4810000000-E		485000000	4900000000-N	
										TEMP. TRAFFIC CONTROL	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	4" X 90 M WHITE THERMO	4" X 120 M WHITE THERMO	4" X 120 M YELLOW THERMO	8" X 90 M WHITE THERMO	8" X 90 M YELLOW THERMO	16" X 120 M WHITE THERMO	24" X 120 M WHITE THERMO	THERMO RXR 120 M	THERMO LT ARROW 90 M	THERMO STR ARROW 90 M	THERMO RT ARROW 90 M	4" WHITE PAINT	4" YELLOW PAINT	4" LINE REMOVAL	CRYSTAL & RED MARKERS	YELLOW & YELLOW MARKERS	
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	LS	SF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	
6CR.10091.83	Bladen	1	NC 53	FROM PENDER CL TO NEW CJ	1	2	2WU	12	22	*	1,344	128,000	250	108,280	250	170		24			2	2	1				30	815
6CR.10091.83	Bladen	2	NC 210 - A	FROM US 701 TO SR 1503	2	2	2WU	4.73	19	*	530	50,000		45,000												95,000	325	
6CR.10091.83	Bladen	3	NC 210 - B	FROM SR 1503 TO CUMBERLAND CL	3	2	2WU	4.2	22	*	470	44,000		39,600												83,600	300	
TOTAL FOR PROJ NO. 6CR.10091.83											2,344	222,000	250	192,880	250	170		24		2	2	1			178,600	30	1,440	
													193,130		420				5								1,470	
6CR.10241.83	Columbus	4	NC 410	FROM US 701 TO SR 1004	4	2	2WU	7.38	28	*	827	78,200	750	73,000		350				7				78,200	73,000		40	510
													73,750		350				7			151,200				550		
6CR.20241.83	Columbus	5	SR 1004	FROM NC 410 TO SR 1005	5	2	2WU	1.3	22	*	146	14,000		11,900														95
6CR.20241.83	Columbus	6	SR 1317	FROM SR 1329 TO SR 1004	5	2	2WU	2.27	18	*	254													48,000	38,400		165	
6CR.20241.83	Columbus	7	SR 1329	FROM SR 1005 TO NC 410	5	2	2WU	1.63	18	*	183												34,800	31,320				
6CR.20241.83	Columbus	8	SR 1157	FROM SR 1166 TO SR 1162	5	2	2WU	2.53	18	*	283												54,000	48,600				
6CR.20241.83	Columbus	9	SR 1162	FROM SR 1157 TO SR 1166	5	2	2WU	2.52	18	*	282												54,000	48,600				
6CR.20241.83	Columbus	10	SR 1172	FROM NC 905 TO NC 904	5	2	2WU	0.49	18	*	55												10,800	9,180				
6CR.20241.83	Columbus	11	SR 1435	FROM NC 130 TO SR 1436	5	2	2WU	0.94	20	*	105												20,000	16,000				
6CR.20241.83	Columbus	12	SR 1459	FROM SR 1429 TO SR 1436	5	2	2WU	0.78	20	*	87					100	70	4					16,400	13,940				
6CR.20241.83	Columbus	13	SR 1932	FROM SR 1006 TO NC 905	5	2	2WU	3.51	18	*	393												74,000	62,900				
6CR.20241.83	Columbus	14	SR 1937	FROM NC 905 TO SR 1934	5	2	2WU	0.95	20	*	106												20,000	18,000				
6CR.20241.83	Columbus	15	SR 1939	FROM SR 1943 TO DEAD END	5	2	2WU	1.06	20	*	119												22,400	19,040				
6CR.20241.83	Columbus	16	SR 1970	FROM SR 1943 TO END MAINT	5	2	2WU	0.3	18	*	34																	
TOTAL FOR PROJ NO. 6CR.20241.83											2,047	14,000		11,900		100	70	4					354,400	305,980		260		
													11,900										660,380		260			
GRAND TOTAL										1	5,218	314,200	1,000	277,780	250	520	100	94	4	9	2	1	432,600	378,980	178,600	70	2,210	
													278,780		770				12			811,580		2,280				

SIGNING FOR RESURFACING PROJECTS



LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

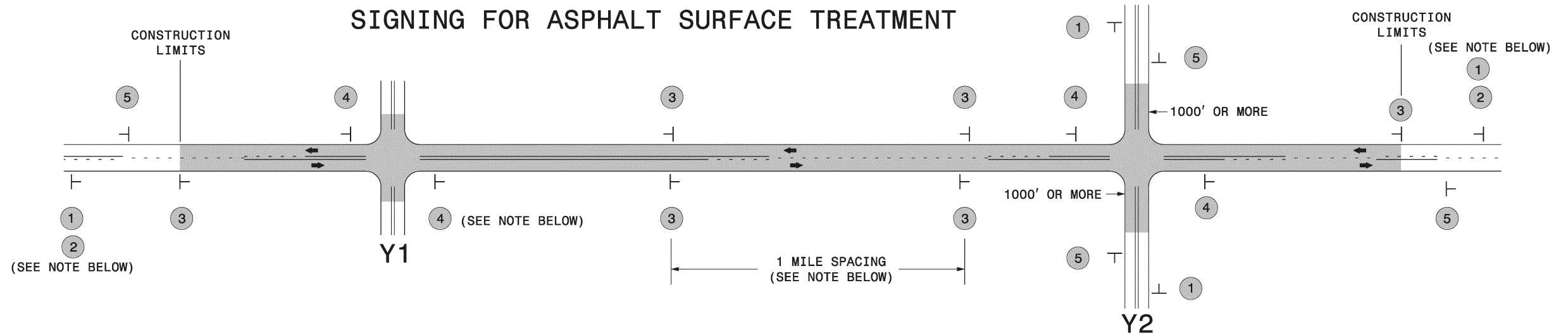
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION		
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">①</div> <div style="border: 1px solid black; padding: 2px;">②</div> </div>	<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div> <p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> </div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div> <p>#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)</p> </div> </div>	<p style="text-align: center;">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 style="text-align: center; font-size: small;">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; margin: 10px 0;"> </div> <p style="text-align: center; font-size: x-small;">PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
③	<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div> <p>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.</p> </div> </div>	
④	<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div> <p>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.</p> </div> </div>	
⑤	<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div> <p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p> </div> </div>	

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

SIGNING FOR ASPHALT SURFACE TREATMENT



LEGEND	
	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	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;">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 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;"> <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>
	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>W8-7 48" X 48"</small> <small>SP 48" X 48"</small>	ALTERNATE THE FOLLOWING TWO SIGNS: STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT". 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.	



**ADVANCE WARNING SIGNS
FOR
ASPHALT SURFACE TREATMENTS
2 LANE ROADWAYS**