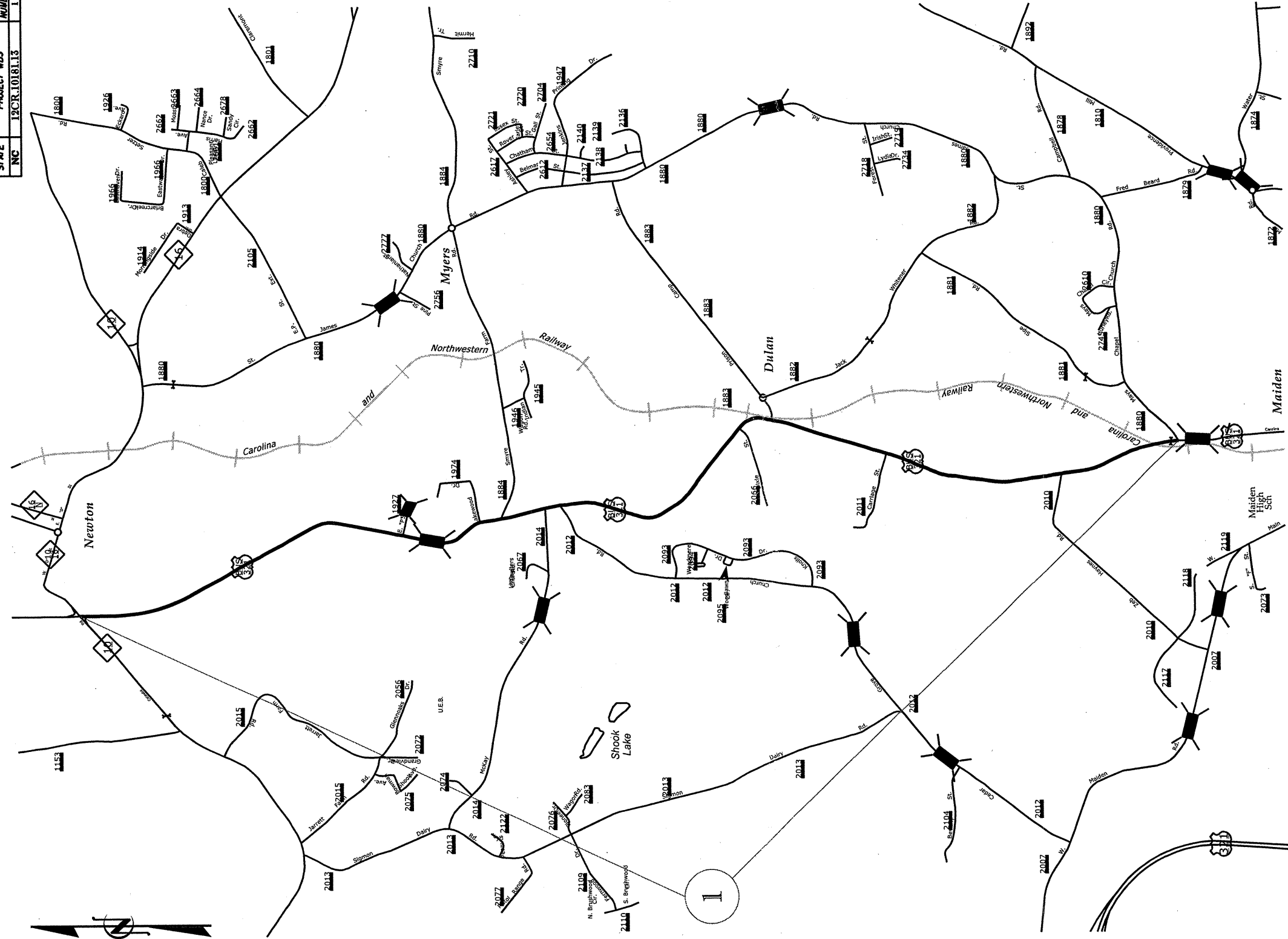


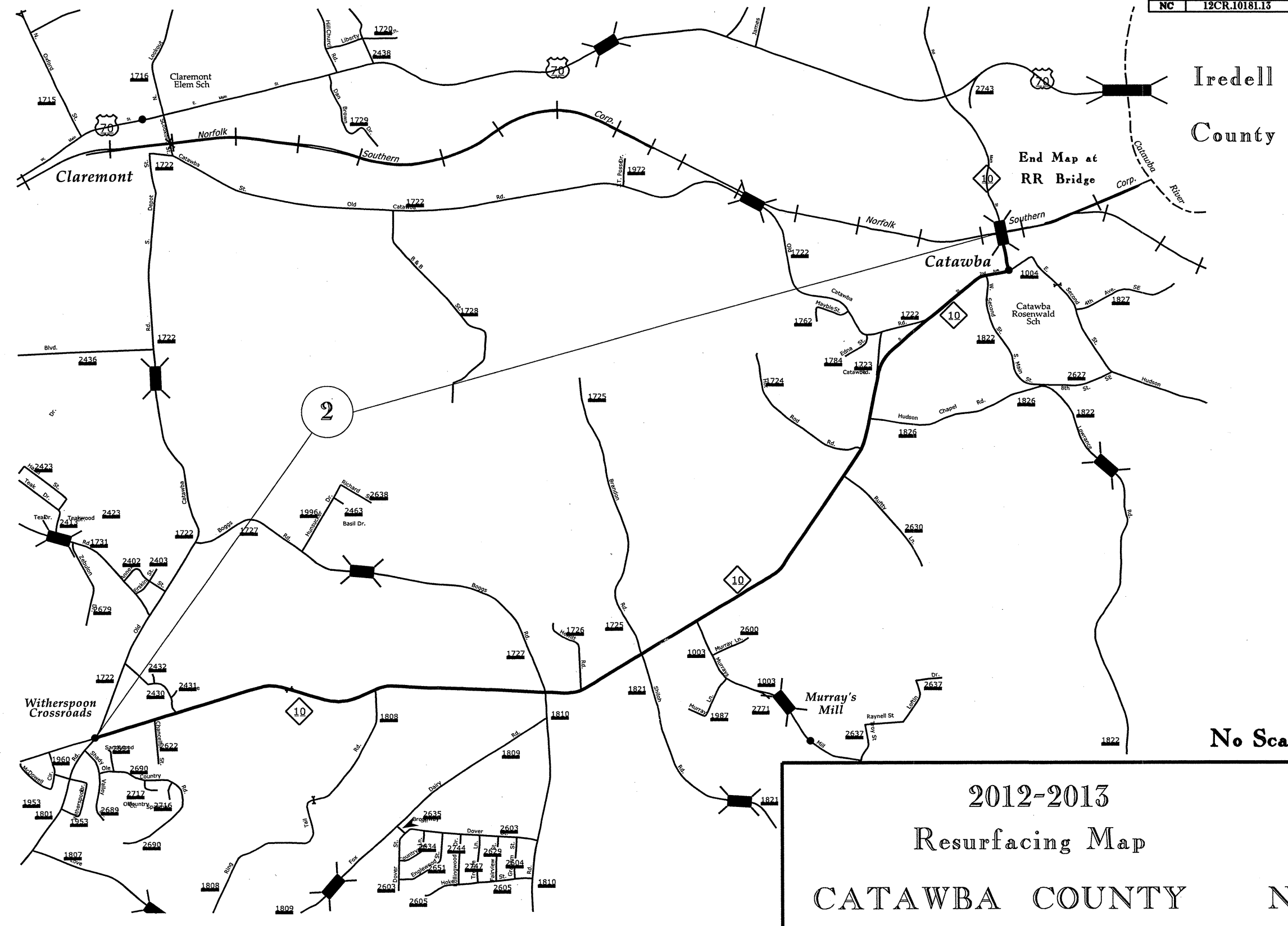
STATE NC PROJECT WBS 12CR10181.1.3 SHEET NUMBER 1



2012-2013
Resurfacing Map
CATAWBA COUNTY NC

No Scale

STATE	PROJECT WBS	SHEET NUMBER
NC	12CR.10181.13	2



Iredell
County

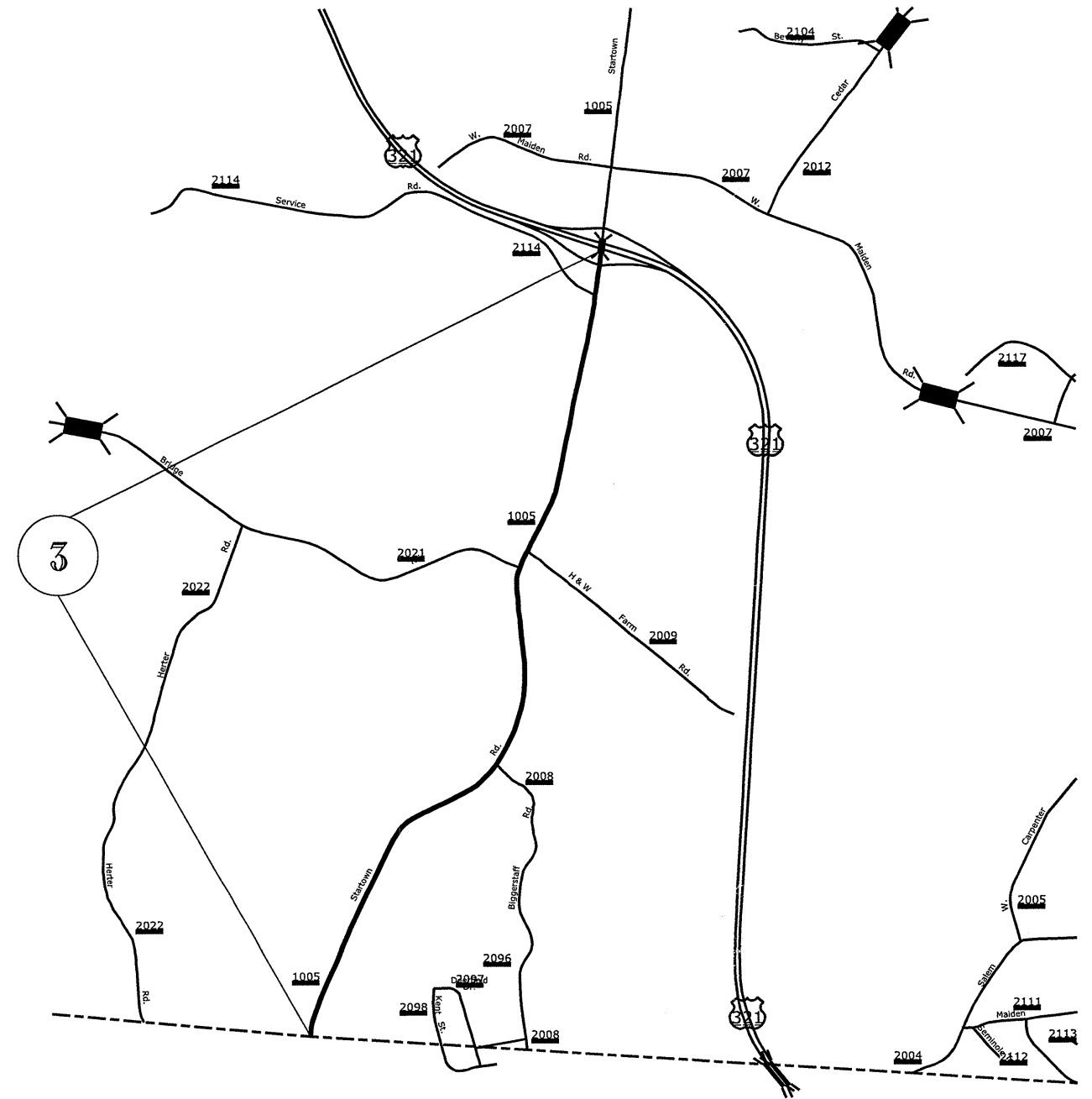
End Map at
RR Bridge

No Scale

2012-2013
Resurfacing Map
CATAWBA COUNTY NC

G. BRITAIN
Drawn by:

STATE	PROJECT WBS	SHEET NUMBER
NC	12CR.20181.15	3



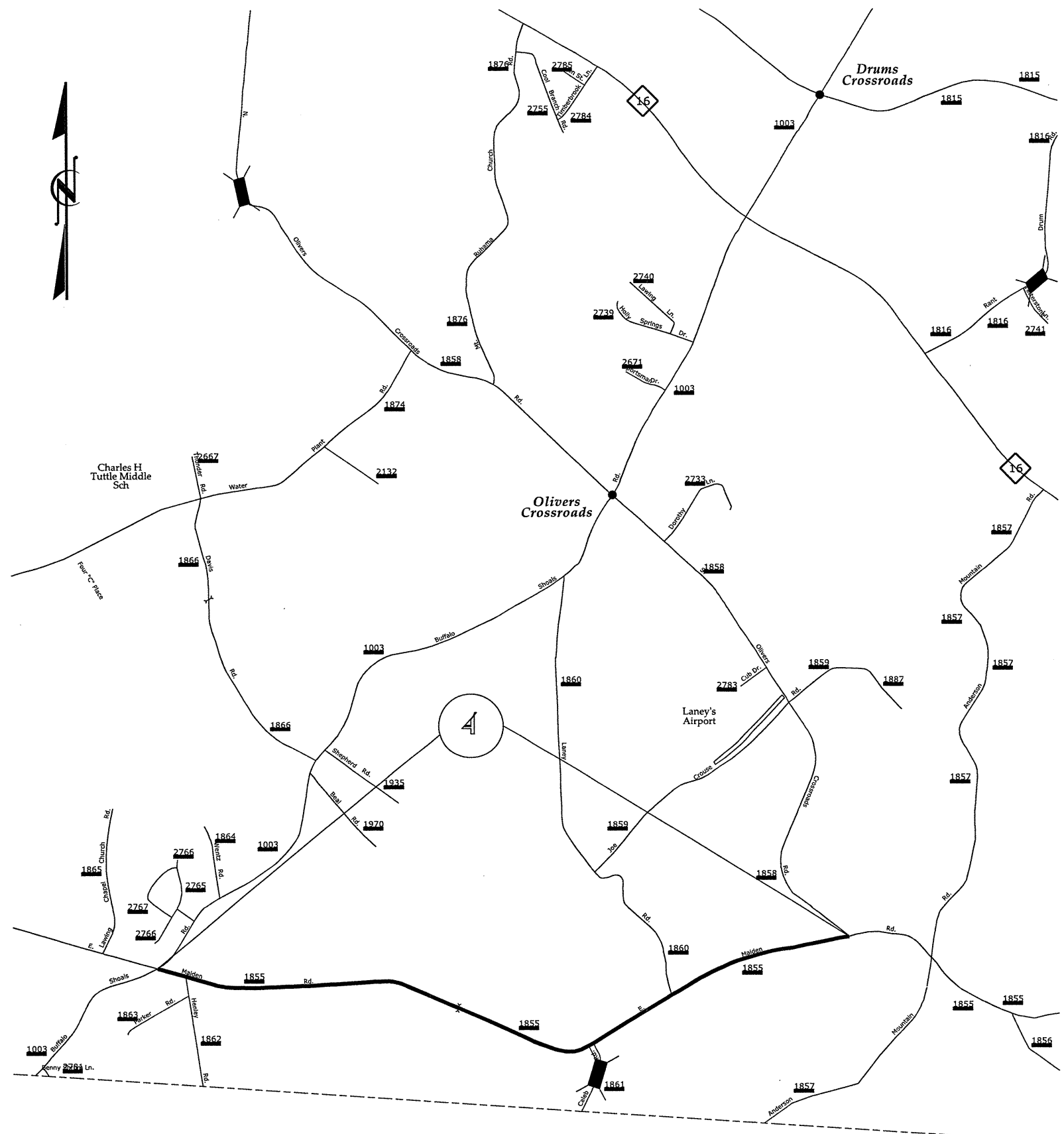
Drawn by: G. BRITAIN

Lincoln County

No Scale

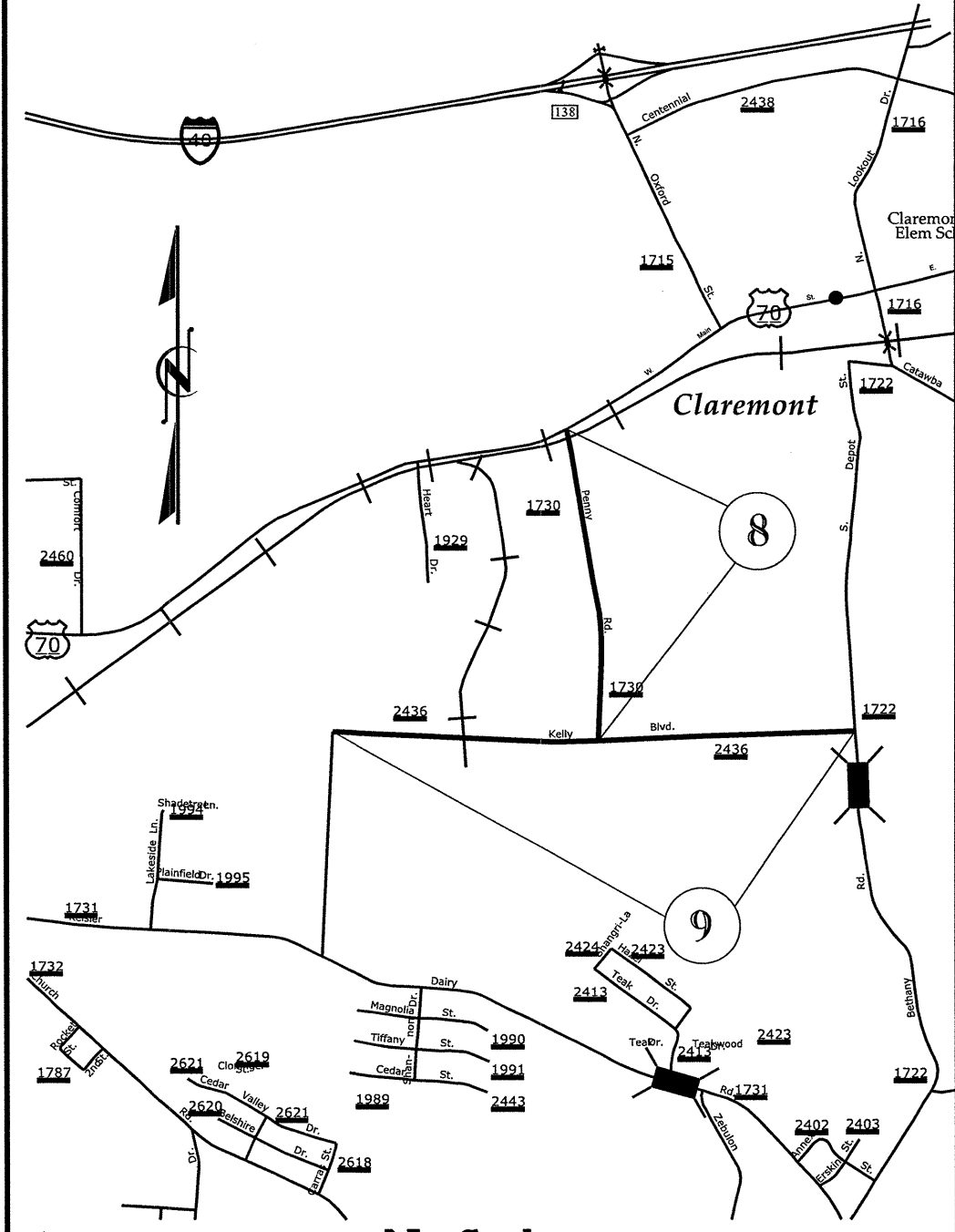
2012-2013
Resurfacing Map
CATAWBA COUNTY NC

STATE	PROJECT WBS	SHEET NUMBER
NC	12CR.20181.15	4



Lincoln County

No Scale



No Scale

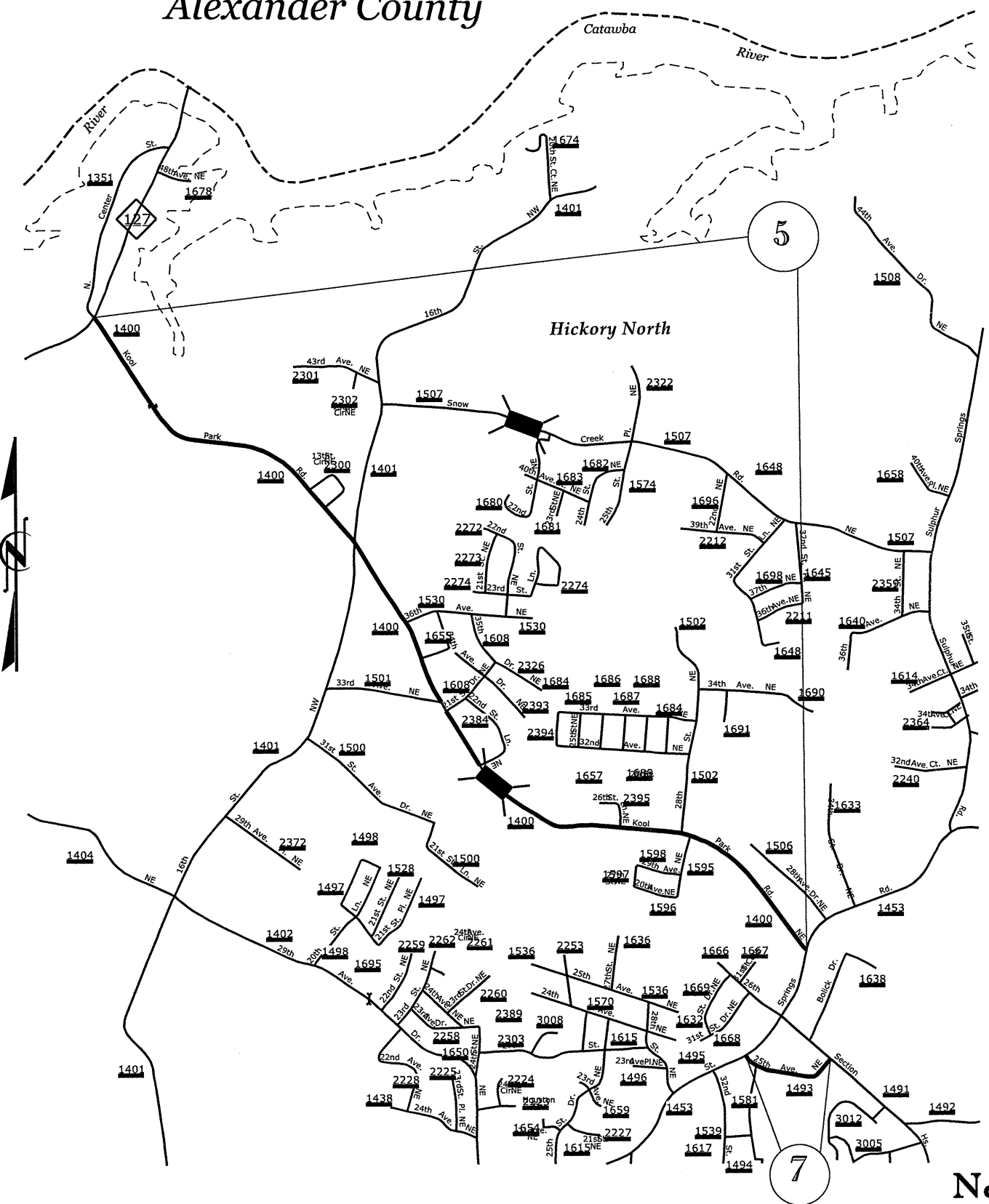
2012-2013
Resurfacing Map

CATAWBA COUNTY NC

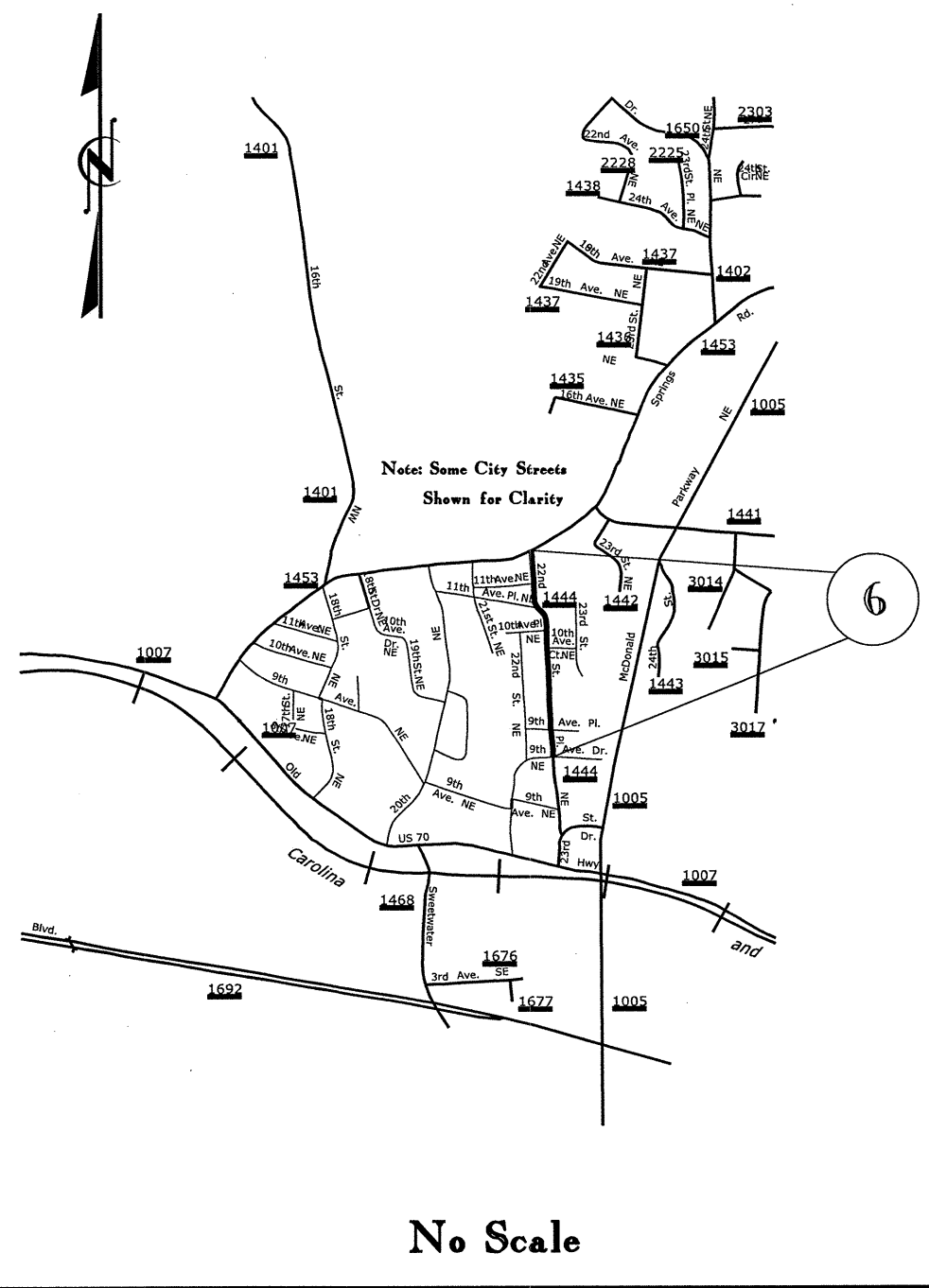
G. BRITAIN
Drawn by:

STATE	PROJECT WBS	SHEET NUMBER
	12CR.20181.15	5

Alexander County

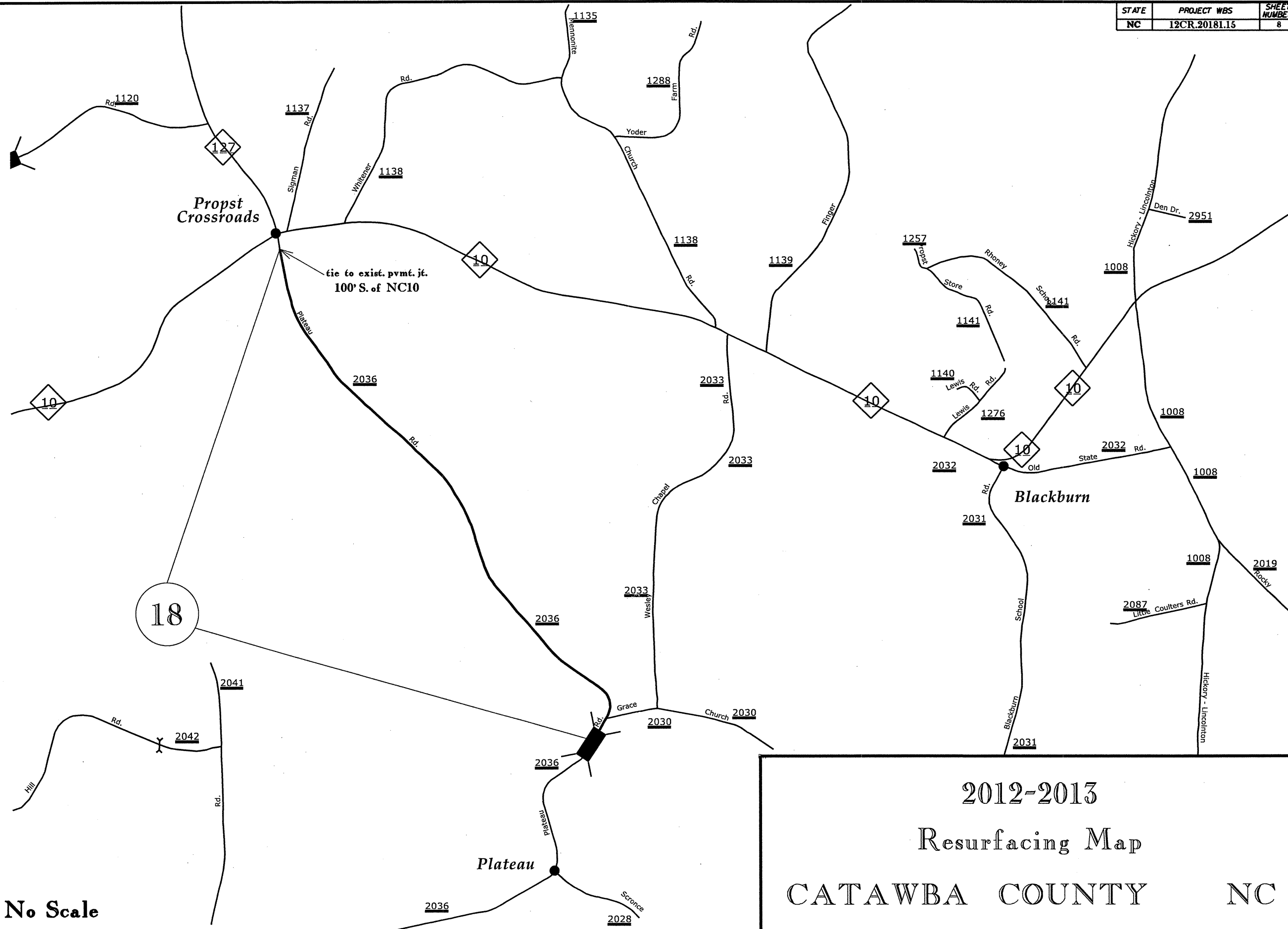


No Scale



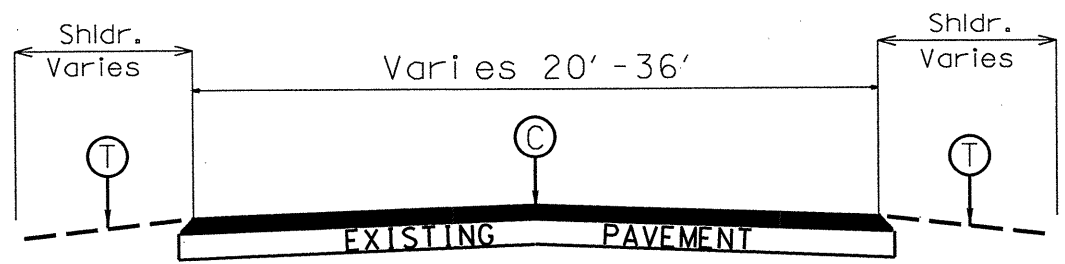
2012-2013
Resurfacing Map
CATAWBA COUNTY NC

G. BRITAIN
Drawn by:



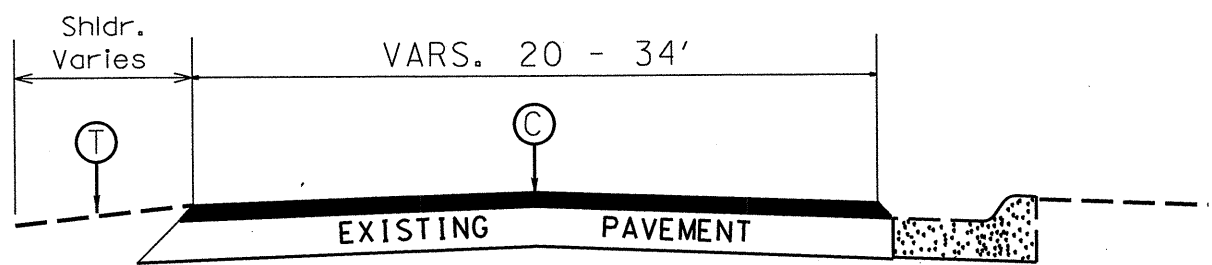
No Scale

2012-2013
 Resurfacing Map
 CATAWBA COUNTY NC



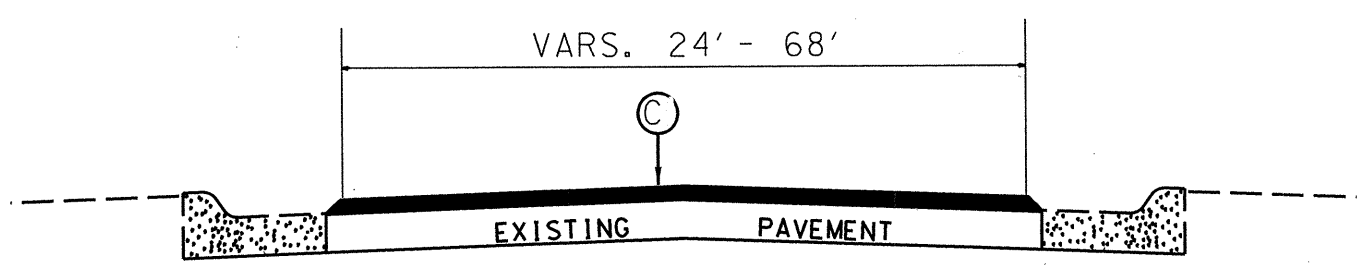
TYPICAL SECTION NO. 1

- | | |
|--|--------------------------|
| MAP # 1 - 0+00 to 114+00
126+50 to 199+50
206+00 to 280+00 | MAP # 9 - (entire map) |
| MAP # 2 - 270+00 to 277+75 | MAP # 10 - 2+00 to 42+25 |
| MAP # 3 -(entire map) | MAP # 11 - (entire map) |
| MAP # 4 -(entire map) | MAP # 12 - (entire map) |
| MAP # 6 - 5+00 to 27+00 | MAP # 13 - (entire map) |
| MAP # 7 -(entire map) | MAP # 14 - (entire map) |
| | MAP # 16 - (entire map) |
| | MAP # 18 - (entire map) |



TYPICAL SECTION NO. 2

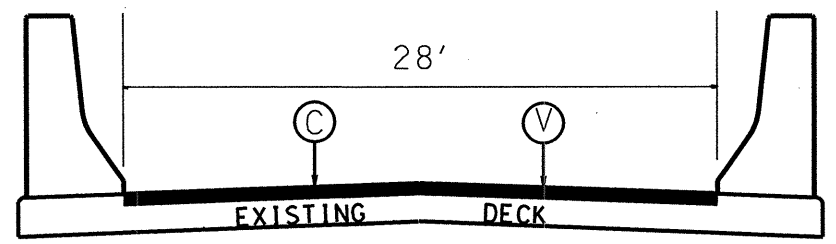
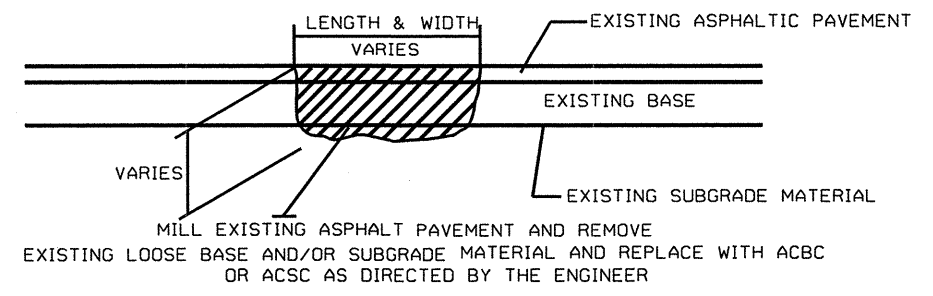
- MAP # 1 - 114+00 to 126+50
199+50 to 206+00
- MAP # 2 - 254+00 to 270+00
- MAP # 6 - 1+70 to 5+00



TYPICAL SECTION NO. 3

- MAP # 1 - 280+00 to 284+50
- MAP # 6 - 0+00 to 1+70

DETAIL A
PATCHING EXISTING PAVEMENT



BRIDGE SECTION

- Map # 1 - Bridge # 81
- Map # 5 - Bridge # 31

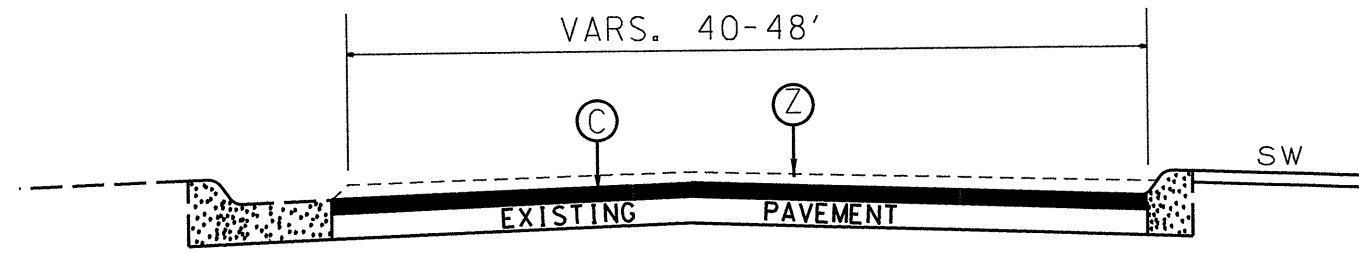
PAVEMENT SCHEDULE	
C	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
V	MILL ASPHALT PVMT. APPROX. 1.5" DEPTH
Z	MILL ASPHALT PVMT. APPROX. 3.0" DEPTH

General Notes:

1. Pavement edge slopes are 1:1 unless specified otherwise.
2. Mill bridge approaches 100' to provide a smooth transition or as directed by the Engineer.

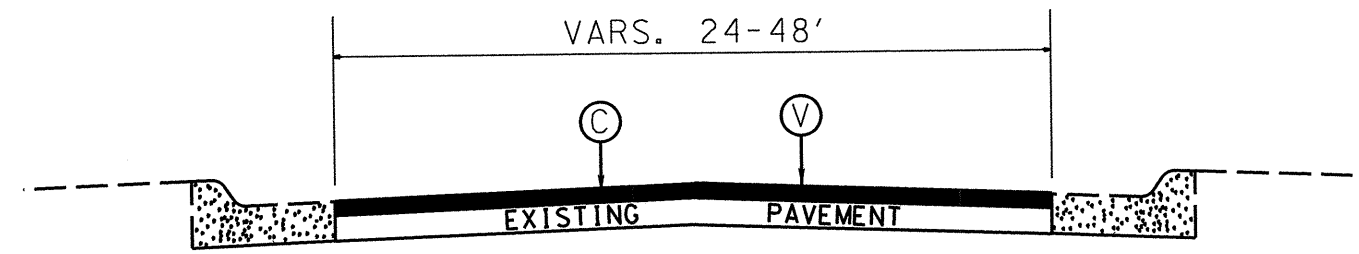
2012 - 2013
Resurfacing Program
Typical Sections
Catawba County NC

Checked by: _____
Drawn by: G. Brittain



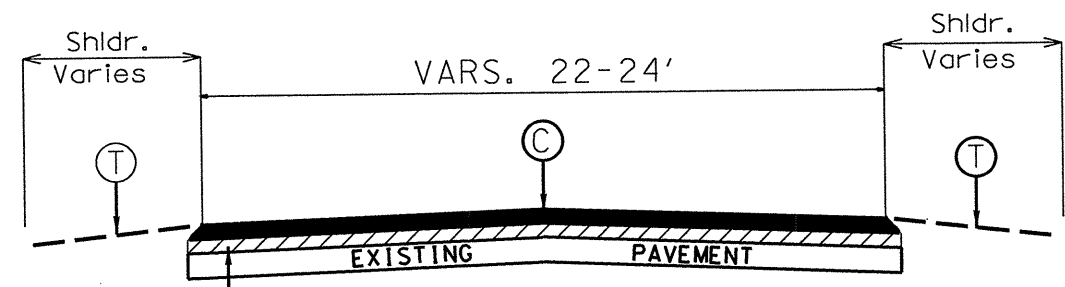
TYPICAL SECTION NO. 4

MAP # 2 - 277+75 to 283+00



TYPICAL SECTION NO. 5

MAP # 2 - 283+00 to 286+75 (RR Brdg.#113)

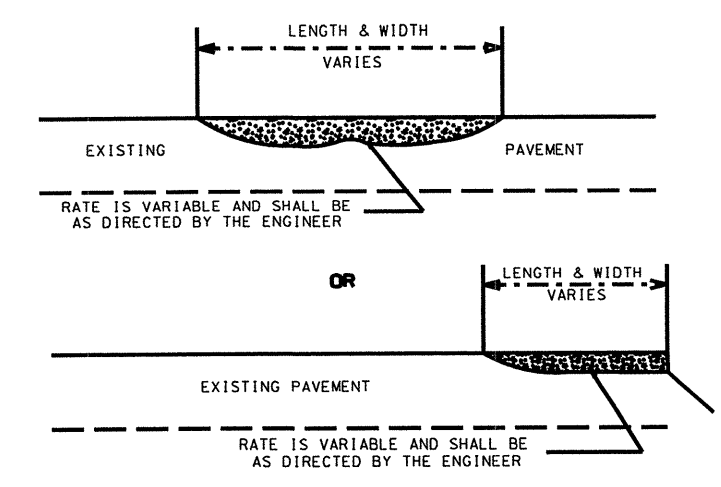


TYPICAL SECTION NO. 6

MAP # 5 - (entire map)
 MAP # 8 - (entire map)
 MAP # 2 - 0+00 to 254+00

DETAIL B

**ASPHALT CONCRETE SURFACE COURSE
 TYPE S9.5B (LEVELING COURSE)**



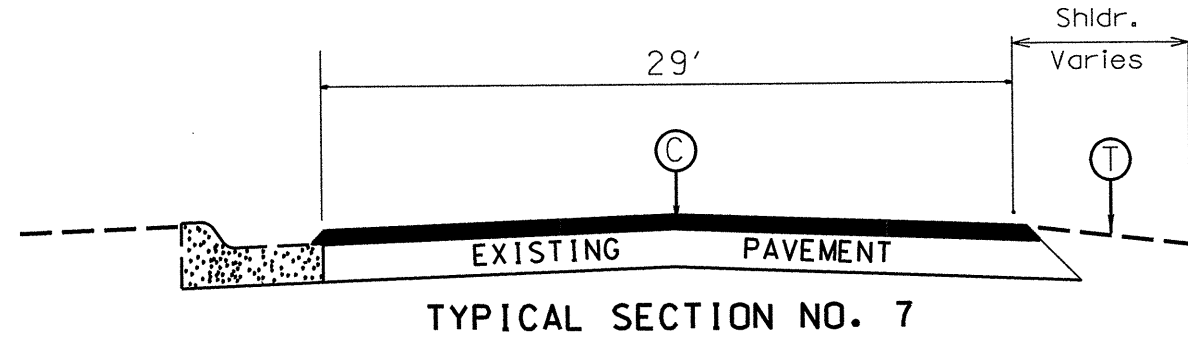
PAVEMENT SCHEDULE	
C	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
F	ASPHALT SURFACE TREATMENT TYPE, POLYMER MODIFIED MATCOAT #6
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
V	MILL ASPHALT PAVEMENT APPROX. 1.5" IN DEPTH
Z	MILL ASPHALT PAVEMENT APPROX. 3.0" IN DEPTH

General Notes:

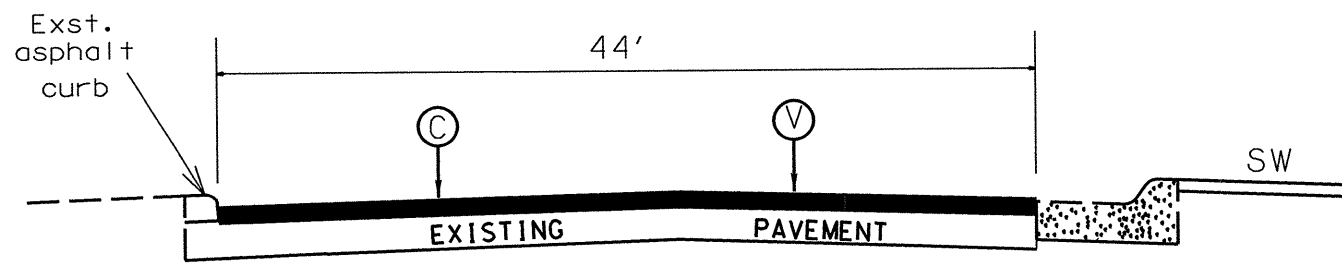
1. Pavement edge slopes are 1:1 unless specified otherwise.
2. Mill bridge approaches 100' to provide a smooth transition or as directed by the Engineer.

**2012 - 2013
 Resurfacing Program
 Typical Sections
 Catawba County NC**

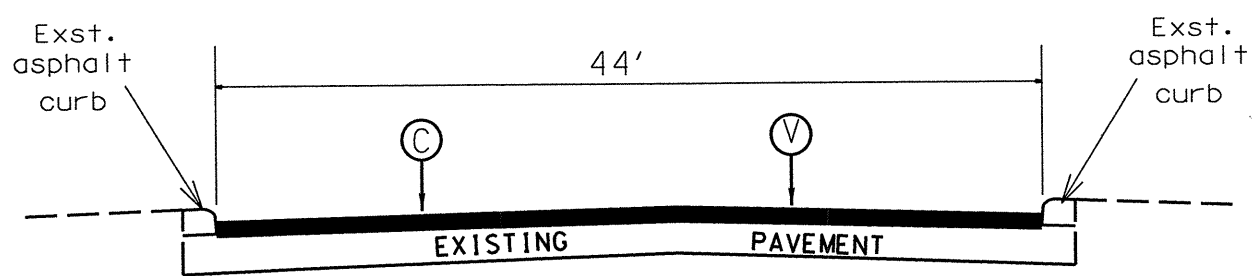
Checked by: _____
 Drawn by: C. Brittain



TYPICAL SECTION NO. 7
 MAP # 10 - 0+00 to 2+00
 42+25 to 46+25



TYPICAL SECTION NO. 8
 MAP # 15 - 0+00 to 52+50

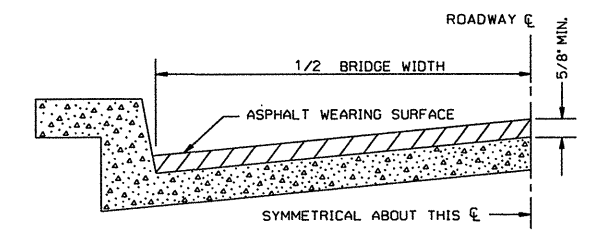


TYPICAL SECTION NO. 9
 MAP # 15 - 52+50 to 65+00

Checked by: _____
 Drawn by: G. Brittain

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

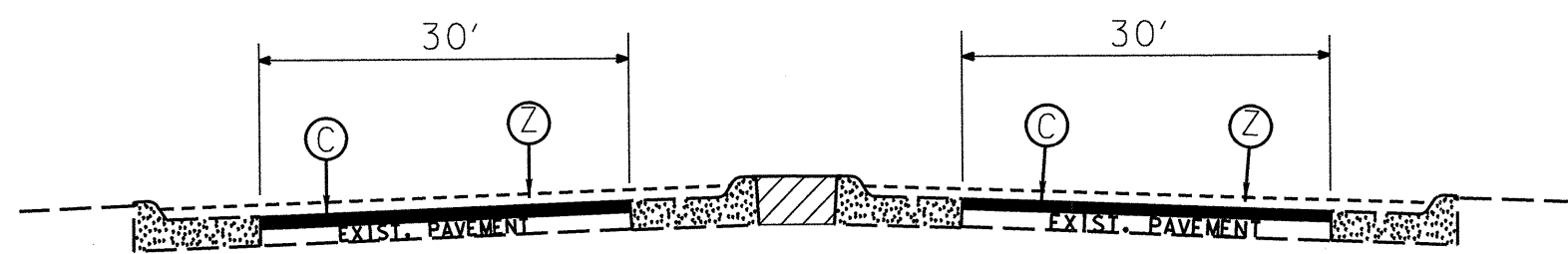
ALL UNPAVED S.R. ROADS TO BE SURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT.
 ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.
 EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.
 SHOULDERS AND DITCHES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

PAVEMENT SCHEDULE	
C	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
V	MILL ASPHALT PAVEMENT APPROX. 1.5" IN DEPTH
Z	MILL ASPHALT PAVEMENT APPROX. 3.0" IN DEPTH

General Notes:

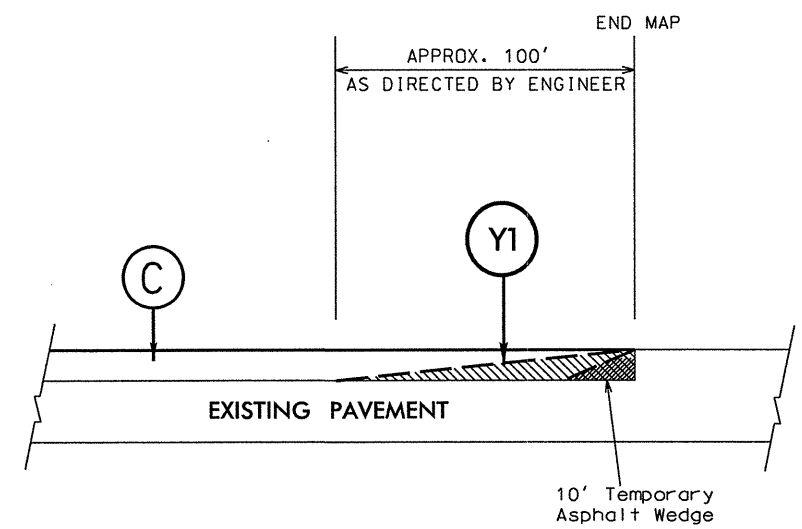
1. Pavement edge slopes are 1:1 unless specified otherwise.
2. Mill bridge approaches 100' to provide a smooth transition or as directed by the Engineer.

**2012 - 2013
 Resurfacing Program
 Typical Sections
 Catawba County NC**

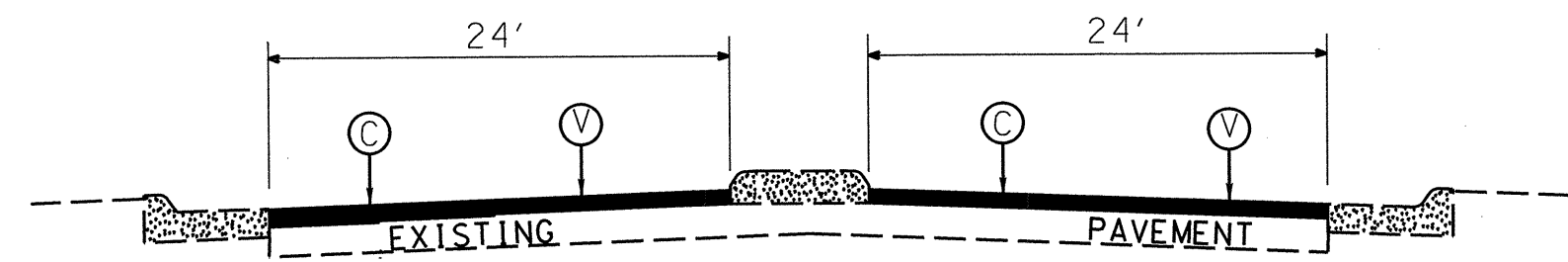


TYPICAL SECTION NO. 10

MAP # 17 - 0+00 to 15+00



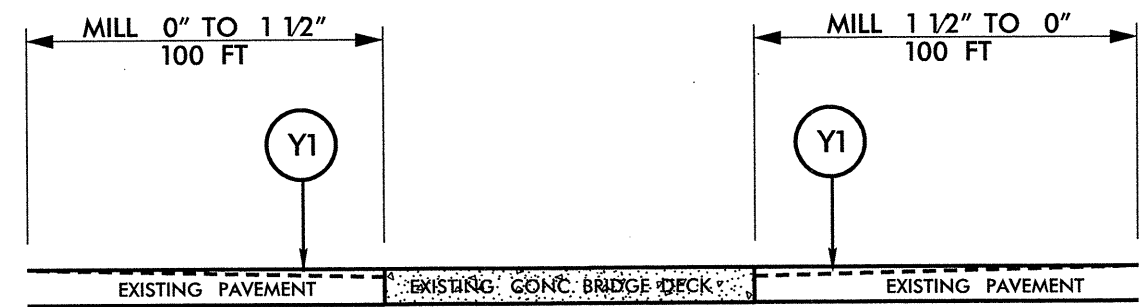
DETAIL E
TIE-IN MILLING DETAIL



TYPICAL SECTION NO. 11

MAP # 17 - 15+00 to 19+00

DETAIL D
MILLING BRIDGE APPROACHES



- Map # 3 - Bridge # 315 - Mill Southern Approach
- Map # 16 - Bridge # 165 - Mill Both Approaches
- Map # 18 - Bridge # 100 - Mill Northern Approach

PAVEMENT SCHEDULE	
C	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
V	MILL ASPHALT PAVEMENT APPROX. 1.5" IN DEPTH
Y1	0 TO 1.5" INCIDENTAL MILLING
Z	MILL ASPHALT PAVEMENT APPROX. 3.0" IN DEPTH

General Notes:

- Pavement edge slopes are 1:1 unless specified otherwise.
- Mill bridge approaches 100' to provide a smooth transition or as directed by the Engineer.

2012 - 2013
Resurfacing Program
Typical Sections
Catawba County NC

Checked by: _____
Drawn by: G. Brittain

PROJECT NO.	SHEET NO.	TOTAL NO.
12cr.10181.13	13	
12cr.20181.15		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	INCIDENTAL STONE BASE TONS	AGGREGATE SHOULDER BORROW TON	SHOULDER RECONSTRUCTION SMI	1 1/2" MILLING SY	3" MILLING SY	INCIDENTAL MILLING SY	SURFACE COURSE, S9.5B TONS	LEVELING COURSE, S9.5B TONS	ASPHALT BINDER FOR PLANT MIX TONS	PATCHING EXISTING PAVEMENT TONS	AST MAT COAT # SY	RETROFIT EXST. CURB (WHEELCHAIR) RAMP EA.	CURB (WHEELCHAIR) RAMPS EA	DROP INLET EA	MANHOLES EA	METER OR VALVE BOX EA	PORTABLE LIGHTING LS
12cr.10181.13	Catawba	1	US 321B	FROM SR 1880 TO NC 10	1,2,3	NO	5.38	vars. 22-68	200	395	10.45	225		1,222	7,303	400	464	750					1	1	
		2	NC 10	FROM SR 1722 TO RR BRIDGE (BRDG. #113)	1,2,4,5,6	NO	5.43	vars. 22-48	200	386	10.22	1,800	2,500	244	6,705	670	446	1,000	62,100	4	4		6	2	1
TOTAL FOR PROJECT NO. 12CR.10181.13							10.81		400	781	20.67	2,025	2,500	1,466	14,008	1,070	910	1,750	62,100	4	4		7	3	1
12cr.20181.15	Catawba	3	SR 1005 (STARTOWN RD)	FROM US 321 TO LINCOLN CO	1	NO	2.65	24	100	200	5.30			933	3,585	700	261	550							
		4	SR1855 (E. MAIDEN RD)	FROM SR 1003 TO SR 1858	1	NO	3.05	20	120	230	6.10			445	3,327	350	222	750							
		5	SR 1400 (KOOL PARK RD)	FROM SR 1453 TO NC 127	6	NO	3.25	24	120	245	6.50			1,088	4,435	440	295	900	47,750					3	
		6	SR 1444 (22ND ST PLACE NE)	FROM 9TH AVE DR NE TO SR 1453	1,2,3	NO	0.50	20	40	33	0.88			445	596	80	41	150					1	2	
		7	SR1493 (25TH AVE)	FROM SR 1491 TO SR 1453	1	NO	0.30	20	20	23	0.60			445	327	40	22	100							
		8	SR 1730 (PENNY RD)	FROM US 70 TO SR 2436	6	NO	0.77	24	20	58	1.54			533	1,007	150	69	400	11,000				1		
		9	SR 2436 (KELLY BLVD)	FROM SR 1722 TO HEART DRIVE	1	NO	1.19	24	20	45	2.38			533	1,556	200	105	600							
		10	SR 1739 (EMMANUAL CH RD\MCLIN CRK RD)	FROM US 70 TO EXST. PVMT. JT. 900' W OF NC 16 EXCEPTING NEWLY PAVED PORTION AT NC 16	1,7	NO	1.46	vars. 21-29	50	107	2.84			445	1,782	180	119	600				1	5	5	
		11	SR 1517 (SPRINGS RD)	FROM SR 1453 TO NC 16	1	NO	1.83	21	70	138	3.66			466	2,096	200	139	500							
		12	SR 1518 (UPPER SPRINGS RD)	FROM SR 1517 TO NC 16	1	NO	0.03	21	2	0.06				466	40	4	3	8							
		13	SR 1453 (SPRINGS RD)\ST. PETERS CH RD)	FROM SR 1516 TO NC 16	1	NO	2.56	24	90	194	5.12			533	3,348	325	222	650							
		14	SR 1474 (27TH ST DR NE)	FROM SR 1005 TO SR 1468	1	NO	1.14	vars. 20-36	20	86	2.28			622	1,373	140	91	300							
		15	SR 1306 (2ND AVE NW)	FROM US 321B TO BURKE CO LINE	8,9	NO	1.23	44				31,750			2,942	300	196	500					27	25	
		16	SR 1468 (SWEETWATER RD)	FROM SR 1478 TO END C&G APPROX. 1200' N. OF US 70	1	NO	0.65	vars. 28-30	30	49	1.30			1,300	1,009	100	67	350					1		
		17	SR 1361 (13TH ST SW)	FROM US 70 TO US 321	10,11	NO	0.36	vars. 48-60	20			3,250	12,500		1,326	100	86	200		12			2		
		18	SR 2036 (PLATEAU RD)	FROM EXST. PVMT JT. 100' S. OF NC 10 TO BRIDGE #100 LOCATED 425' S. OF SR 2030	1	NO	2.20	vars. 20-31	80	166	4.40			500	2,536	250	168	500							
TOTAL FOR PROJECT NO. 12CR.20181.15							23.17		800	1,576	42.96	35,000	12,500	8,754	31,285	3,559	2,106	7,058	58,750	12		1	37	35	
Grand Total							33.98		1,200	2,357	63.63	37,025	15,000	10,220	45,293	4,629	3,016	8,808	120,850	16	4	1	44	38	1

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	LENGTH	WIDTH	4685000000-E			4686000000-E			4697000000-E			4705000000-E			4710000000-E			4721000000-E			4725000000-E			4810000000-E		4905000000-E		
							4" X 90 M WHITE THERMO LF	4" X 120 M WHITE THERMO LF	4" X 120 M YELLOW THERMO LF	8" X 120 M WHITE THERMO LF	16" X 120 M WHITE THERMO LF	24" X 120 M WHITE THERMO LF	THERMO MSG ONLY 120 M EA	THERMO RXR 120 M EA	THERMO MSG SCHOOL 120 M EA	THERMO LT 90 M EA	THERMO STR & RT ARROW 90 M EA	THERMO MERGE ARROW 90 M EA	THERMO STR ARROW 90 M EA	THERMO STR & LT ARROW 90 M EA	THERMO RT ARROW 90 M EA	4" WHITE PAINT LF	4" YELLOW PAINT LF	SNOW PLOWABLE MARKERS EA								
12cr.10181.13	Catawba	1	US 321B	FROM SR 1880 TO NC 10	5.38	vars. 22-68	54,250	2,750	56,750	100	100	190				EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	600		
		2	NC 10	FROM SR 1722 TO RR BRIDGE (BRDG. #113)	5.43	vars. 22-48	57,440	200	56,925	315		74							2	2										370		
TOTAL FOR PROJECT NO. 12CR.10181.13							10.81		111,690	2,950	113,675	415	100	264	4	4	12	16	5	3	3	3	3	3	3	3	3	3	3	3	970	
							111,690		116,625					20																		
12cr.20181.15	Catawba	3	SR 1005 (STARTOWN RD)	FROM US 321 TO LINCOLN CO	2.65	24	28,250	250	27,900										2											200		
		4	SR1855 (E. MAIDEN RD)	FROM SR 1003 TO SR 1858	3.05	20																										
		5	SR 1400 (KOOL PARK RD)	FROM SR 1453 TO NC 127	3.25	24																										
		6	SR 1444 (22ND ST PLACE NE)	FROM 9TH AVE DR NE TO SR 1453	0.50	20													1													
		7	SR1493 (25TH AVE)	FROM SR 1491 TO SR 1453	0.30	20																										
		8	SR 1730 (PENNY RD)	FROM US 70 TO SR 2436	0.77	24																										
		9	SR 2436 (KELLY BLVD)	FROM SR 1722 TO HEART DRIVE	1.19	24																										
		10	SR 1739 (EMMANUAL CH RD\MCLIN CRK RD)	FROM US 70 TO EXST. PVMT. JT. 900' W OF NC 16 EXCEPTING NEWLY PAVED PORTION AT NC 16	1.46	vars. 21-29																										
		11	SR 1517 (SPRINGS RD)	FROM SR 1453 TO NC 16	1.83	21																										
		12	SR 1518 (UPPER SPRINGS RD)	FROM SR 1517 TO NC 16	0.03	21																										
		13	SR 1453 (SPRINGS RD)\ST. PETERS CH RD)	FROM SR 1516 TO NC 16	2.56	24	27,250		27,000																							
		14	SR 1474 (27TH ST DR NE)	FROM SR 1005 TO SR 1468	1.14	vars. 20-36																										
		15	SR 1306 (2ND AVE NW)	FROM US 321B TO BURKE CO LINE	1.23	44			3,250	13,000																						
		16	SR 1468 (SWEETWATER RD)	FROM SR 1478 TO END C&G APPROX. 1200' N. OF US 70	0.65	vars. 28-30	6,900		6,900																							
		17	SR 1361 (13TH ST SW)	FROM US 70 TO US 321	0.36	vars. 48-60	500		1,250	4,425	190																					
		18	SR 2036 (PLATEAU RD)	FROM EXST. PVMT JT. 100' S. OF NC 10 TO BRIDGE #100 LOCATED 425' S. OF SR 2030	2.20	vars. 20-31																										
TOTAL FOR PROJECT NO. 12CR.20181.15							23.17		62,900	4,750	79,225	190	200	767	4	8	12	22	11	4	8	3	4	8	3	324,700	329,000	1,290				
							62,900		83,975						24											653,700						
Grand Total							33.98		174,590	7,700	192,900	605	300	1,031	8	12	24	38	16	3	7	8	3	324,700	329,000	2,260						
							174,590		200,600						44									75		653,700						