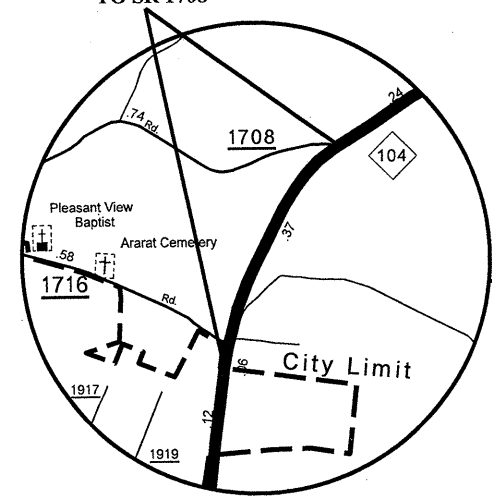


MAP #2 NC 104
FROM MT. AIRY CITY LIMITS
TO SR 1708

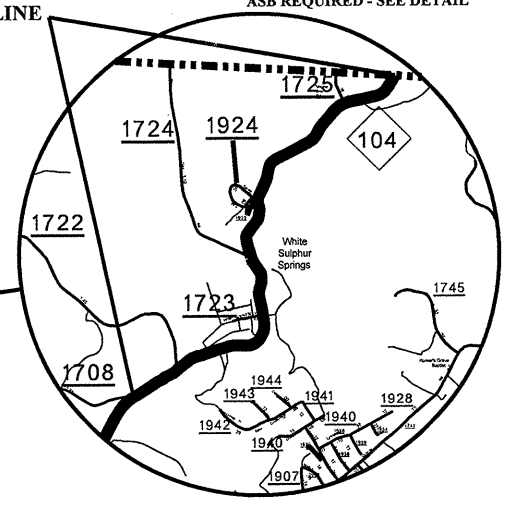


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURRY COUNTY

PRIMARY ASPHALT RESURFACING

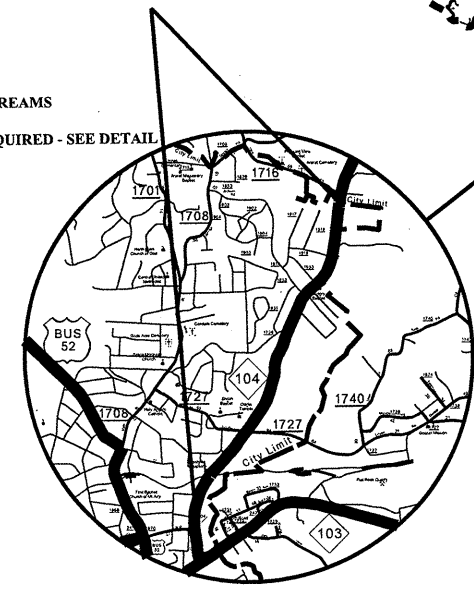
MAP #3 NC 104
FROM SR 1708 TO
VIRGINIA STATE LINE



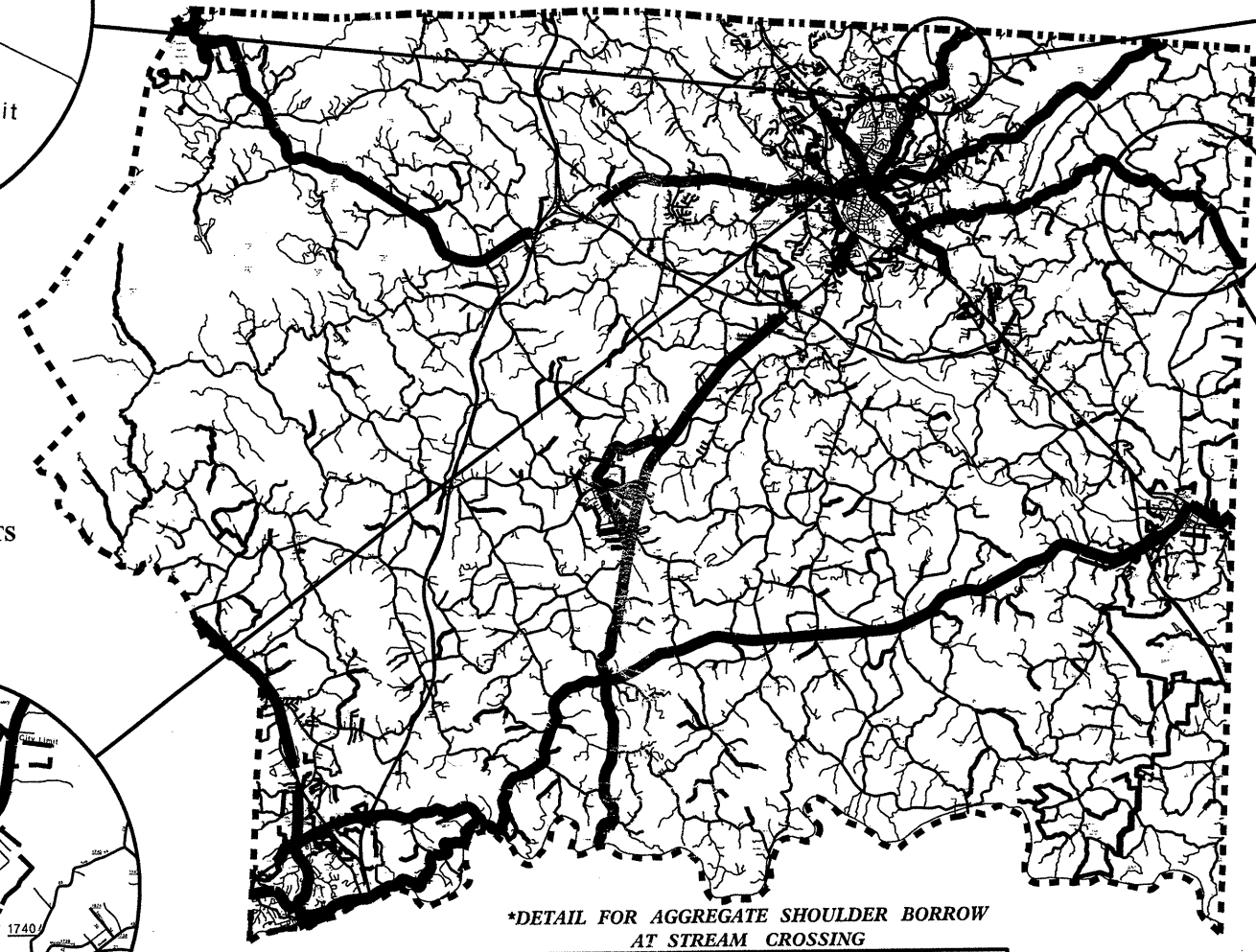
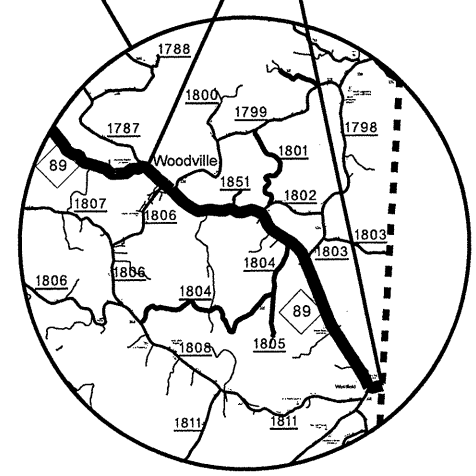
LIVE STREAMS
66+20
ASB REQUIRED - SEE DETAIL

MAP #1 NC 104
FROM NC 103 TO MT. AIRY CITY LIMITS

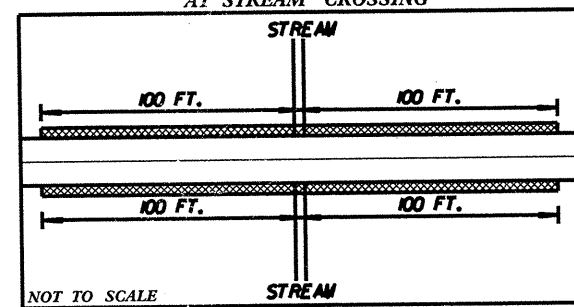
LIVE STREAMS
60+60
ASB REQUIRED - SEE DETAIL



MAP #4 NC 89
FROM SR 1787 TO
STOKES COUNTY LINE



*DETAIL FOR AGGREGATE SHOULDER BORROW
AT STREAM CROSSING



NOT TO SCALE

HATCHED AREA SHOWS PLACEMENT
OF AGGREGATE SHOULDER BORROW

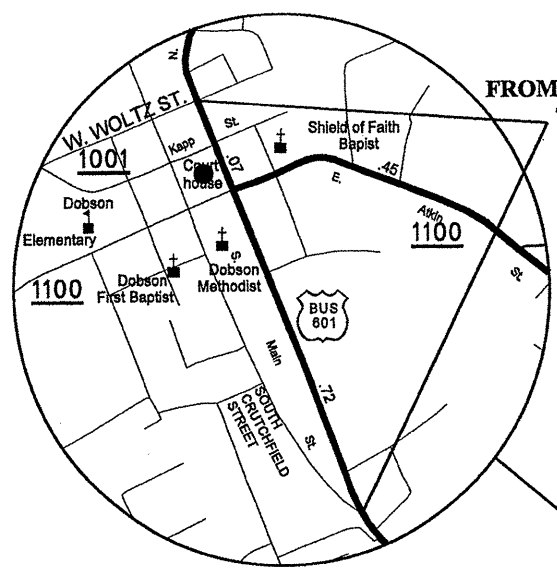
8/17/99

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

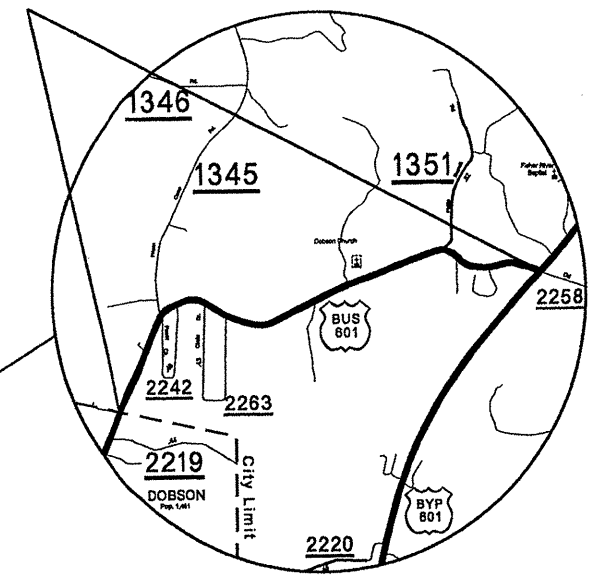
SURRY COUNTY

PRIMARY ASPHALT RESURFACING

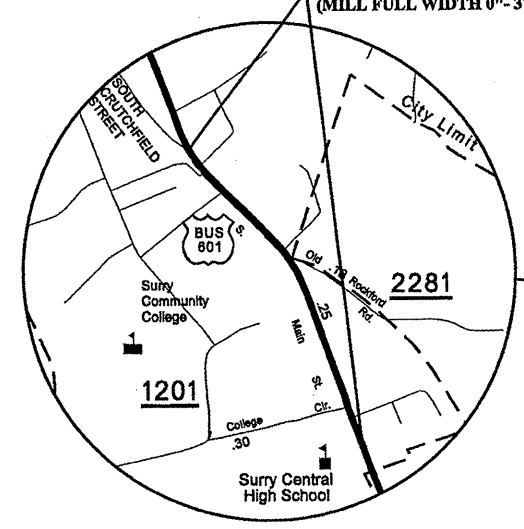
8/17/99
27-JUL-2012 11:03
C:\My Documents\Projects\2013\Surry-Wilkes-Yadkin\2013 Surry Resurfacing Maps.dgn
Manager\Contracts\Resurfacing



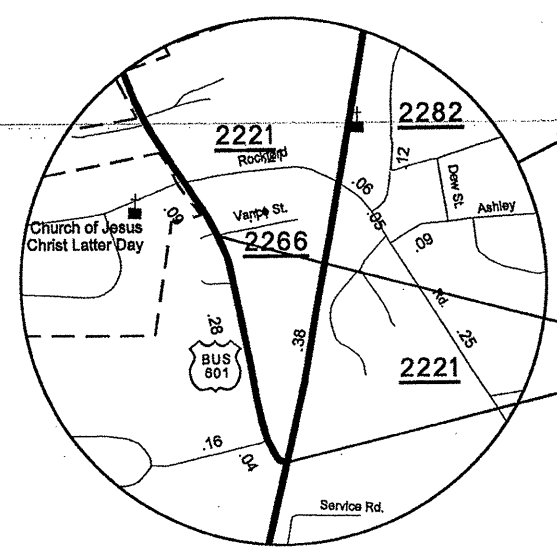
**MAP #7 US 601 BUSINESS
FROM SOUTH CRUTCHFIELD STREET
TO WEST WOLTZ STREET**
(MILL FULL WIDTH 0"-3")



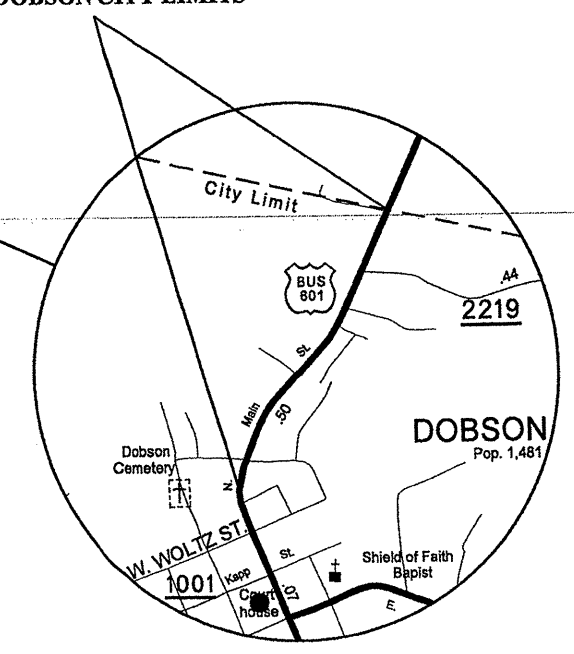
**MAP #9 US 601 BUSINESS
FROM DOBSON CITY LIMITS
TO US 601**



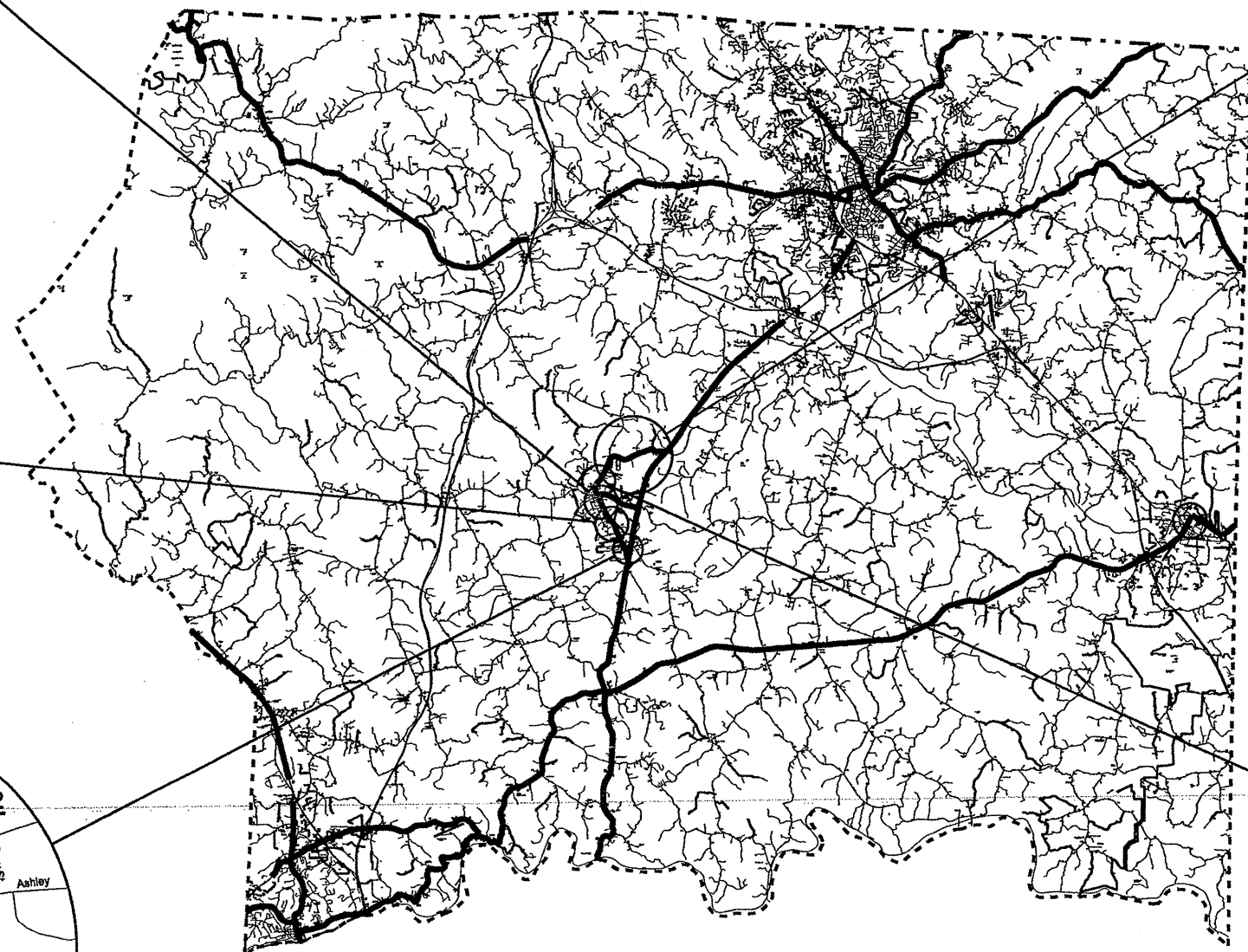
**MAP #6 US 601 BUSINESS
FROM PAVEMENT CHANGE AT
SURRY CENTRAL HIGH SCHOOL
TO SOUTH CRUTCHFIELD STREET**
(MILL FULL WIDTH 0"-3")



**MAP #5 US 601 BUSINESS
FROM US 601 TO PAVEMENT
CHANGE AT SR 2266**



**MAP #8 US 601 BUSINESS
FROM WEST WOLTZ STREET
TO DOBSON CITY LIMITS**



DOBSON
Pop. 1,481

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
ICR1097120	3

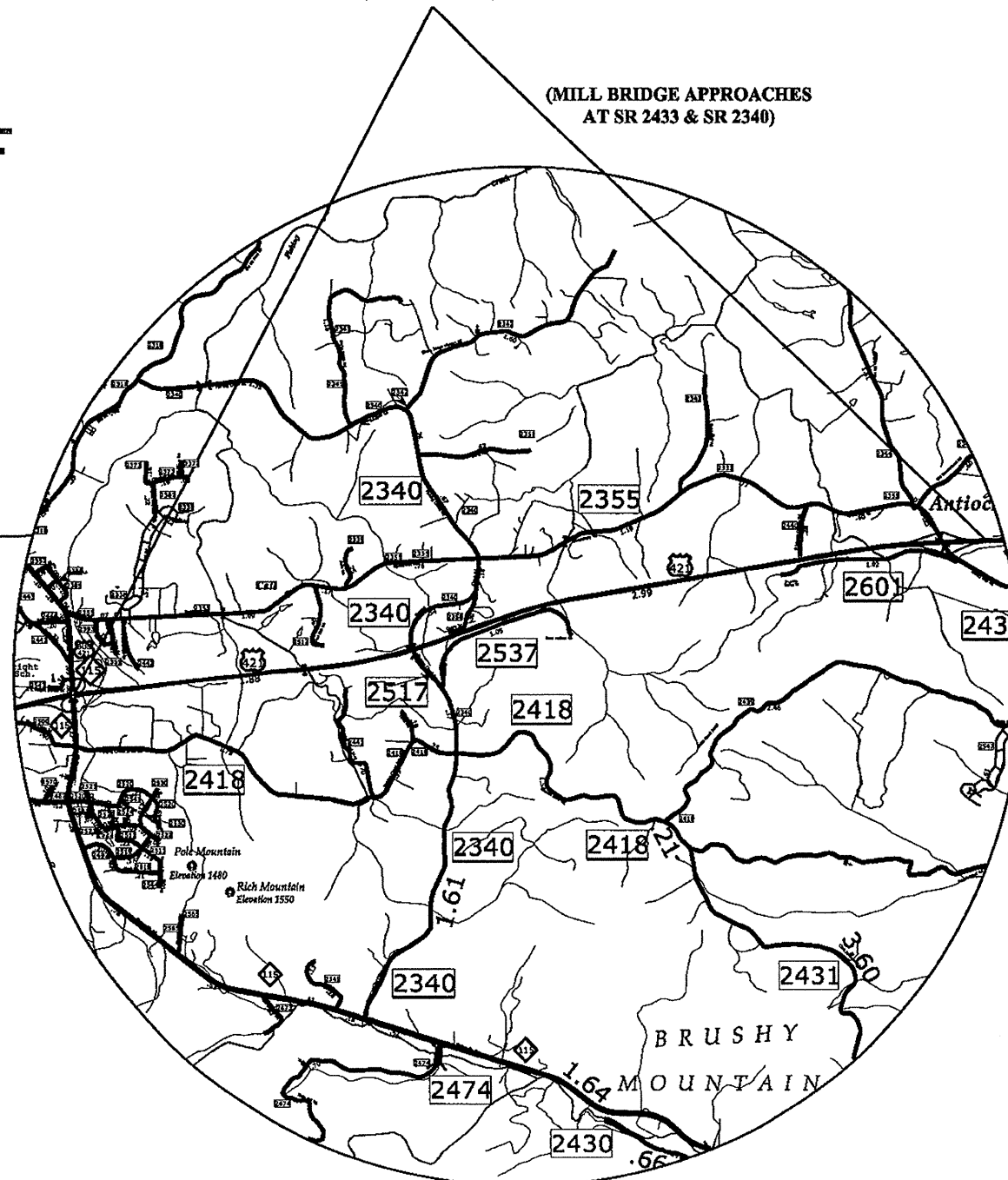
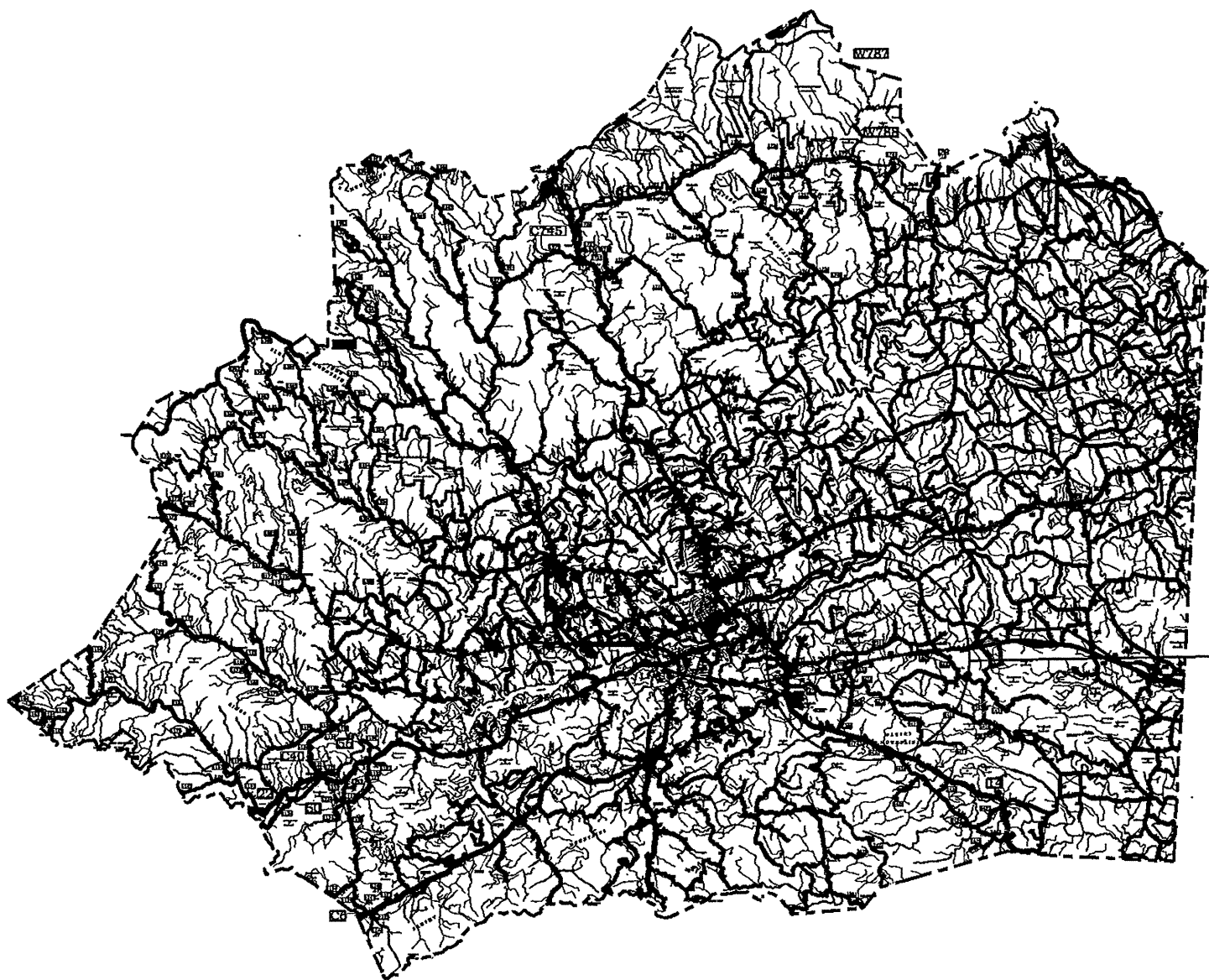
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WILKES COUNTY

PRIMARY ASPHALT RESURFACING

MAP #10 US 421 SBL
FROM NC 115 TO END OF
ON RAMP AT SR 2433
(EXIT 277)

(MILL BRIDGE APPROACHES
AT SR 2433 & SR 2340)



I:\JUL-2012_0736
 C:\NHY Documents\2013\Surry-Wilkes-Yadkin\2013 Wilkes Resurfacing Maps.dgn
 10/21/2013 10:25:18 AM

8/17/98

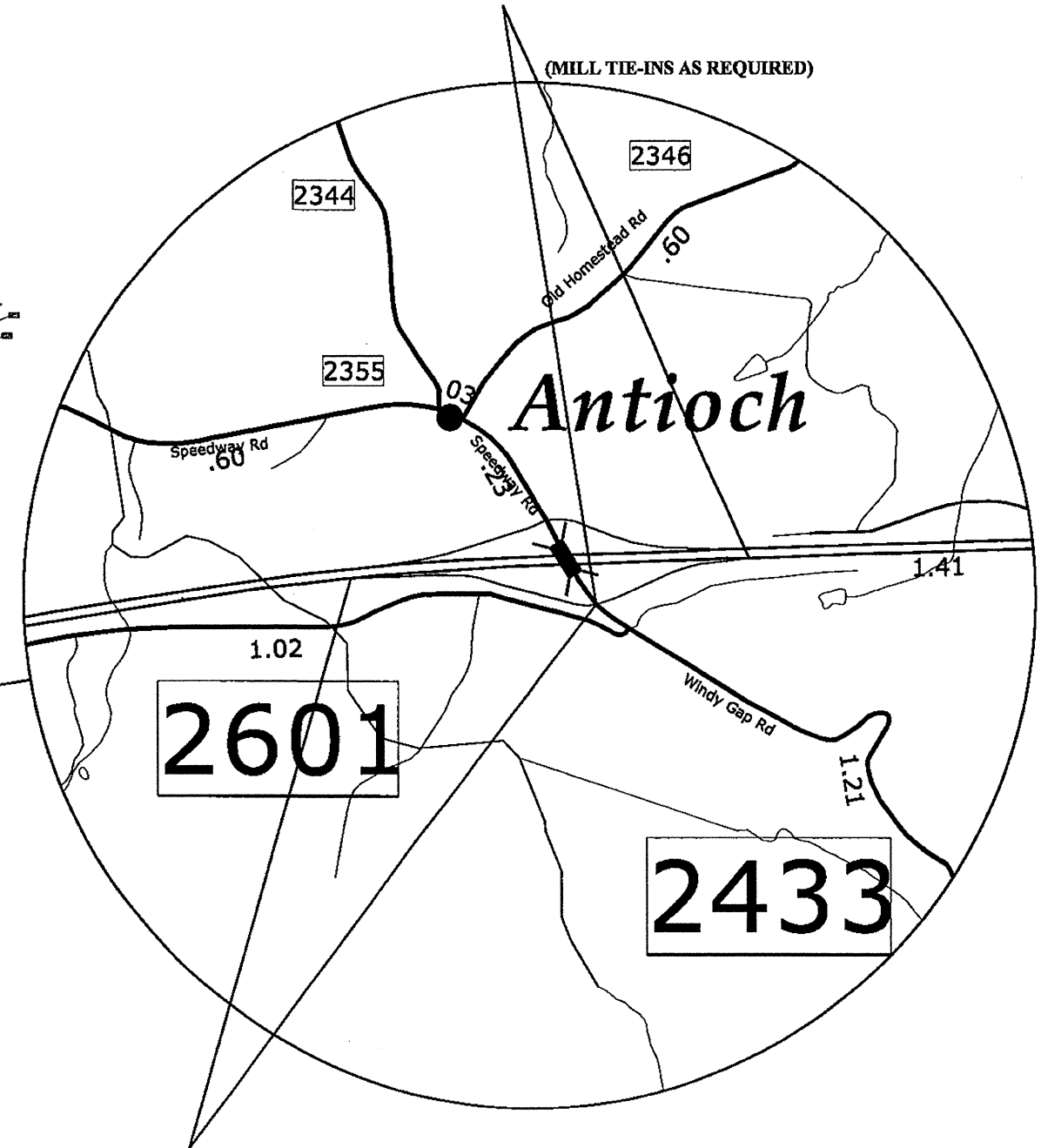
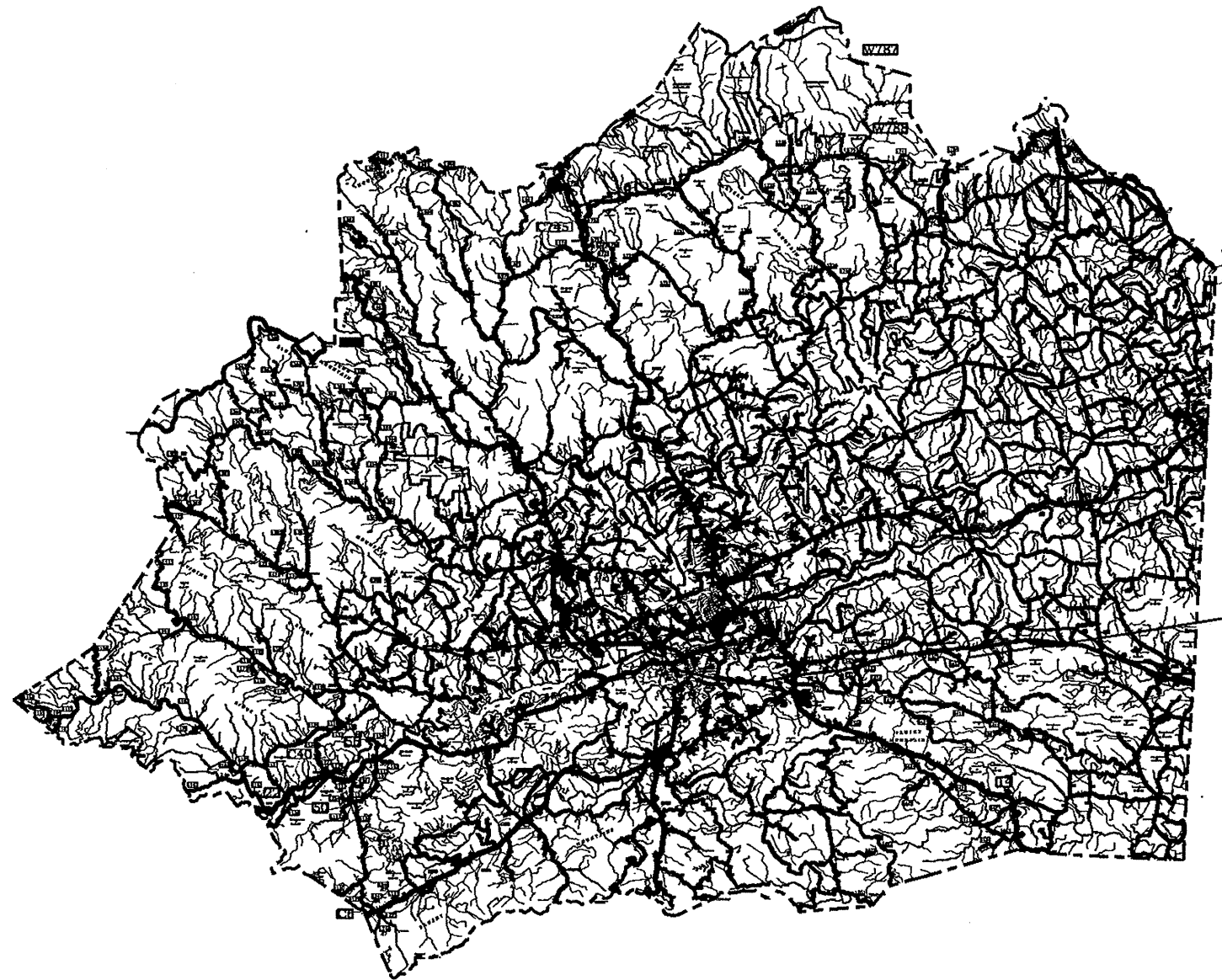
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO. SHEET NO.
ICR1097120 4

WILKES COUNTY

PRIMARY ASPHALT RESURFACING

MAP #12 US 421 SBL ON RAMP
(EXIT 277)
FROM SR 2433 TO US 421 SBL



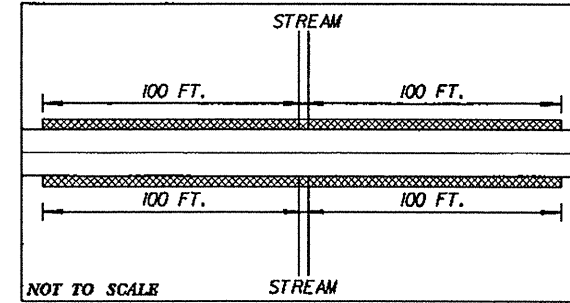
MAP #11 US 421 SBL OFF RAMP
(EXIT 277)
FROM US 421 SBL TO SR 2433
(MILL TIE-INS AS REQUIRED)

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WILKES COUNTY

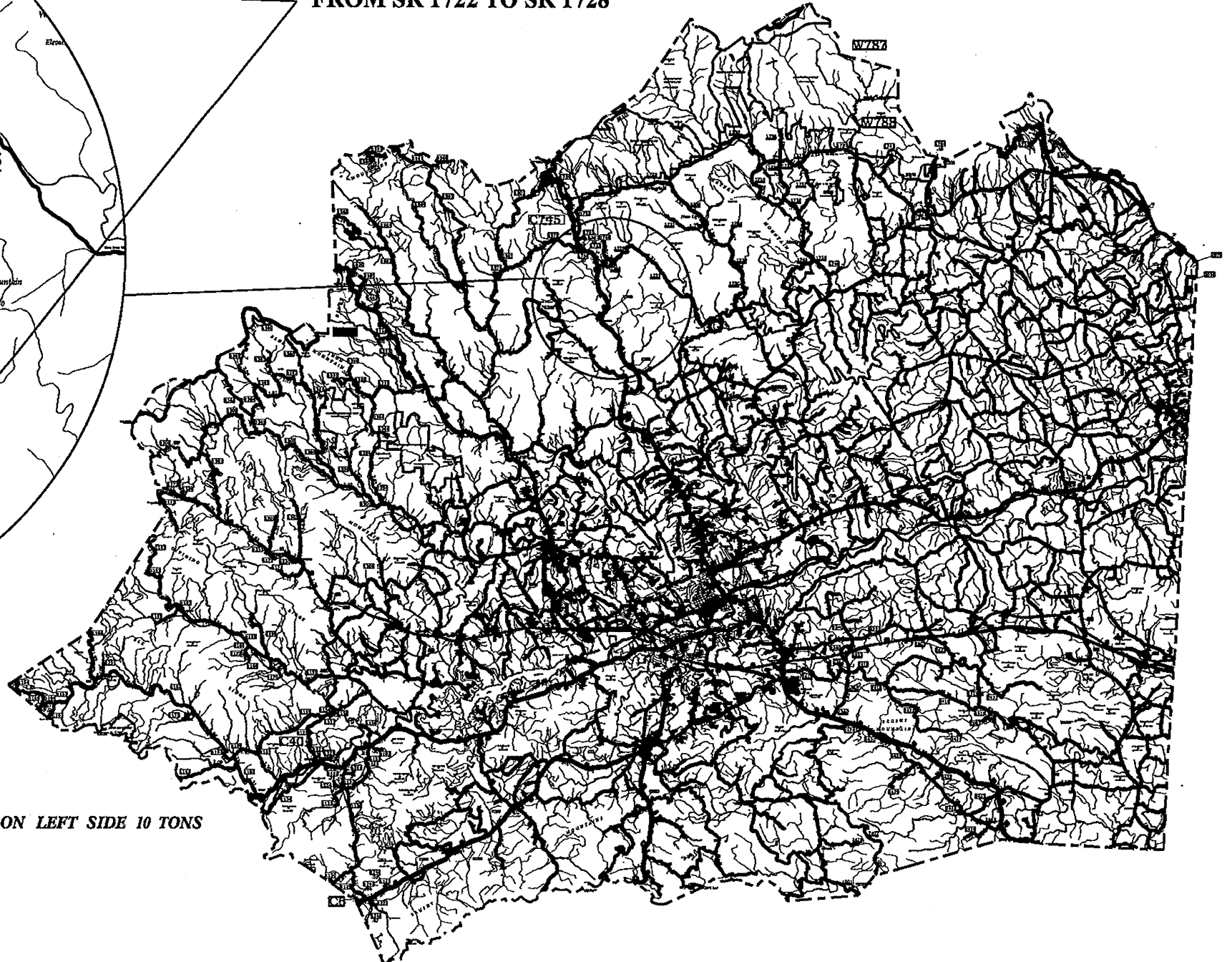
PRIMARY ASPHALT RESURFACING

*DETAIL FOR AGGREGATE SHOULDER BORROW
AT STREAM CROSSING



HATCHED AREA SHOWS PLACEMENT
OF AGGREGATE SHOULDER BORROW

MAP #13 NC 18
FROM SR 1722 TO SR 1728



- AGGREGATE SHOULDER BORROW TO BE PLACED AS FOLLOWS:**
- * APPROX. STATION 48+50 20 TONS (SEE DETAIL)
 - * APPROX. STATION 83+00 20 TONS (SEE DETAIL)
 - * APPROX. STATION 104+00 20 TONS (SEE DETAIL) W/ADDITIONAL 200' ON LEFT SIDE 10 TONS
 - * APPROX. STATION 132+40 TO 134+40 RIGHT SIDE 10 TONS
 - * APPROX. STATION 141+50 20 TONS (SEE DETAIL)
 - * APPROX. STATION 154+80 TO 157+80 LEFT SIDE 15 TONS
 - * APPROX. STATION 192+60 20 TONS (SEE DETAIL)
 - * APPROX. STATION 206+00 20 TONS (SEE DETAIL)
 - * APPROX. STATION 211+00 20 TONS (SEE DETAIL)
 - * APPROX. STATION 221+00 TO 230+00 RIGHT SIDE 45 TONS
 - * APPROX. STATION 259+75 20 TONS (SEE DETAIL)

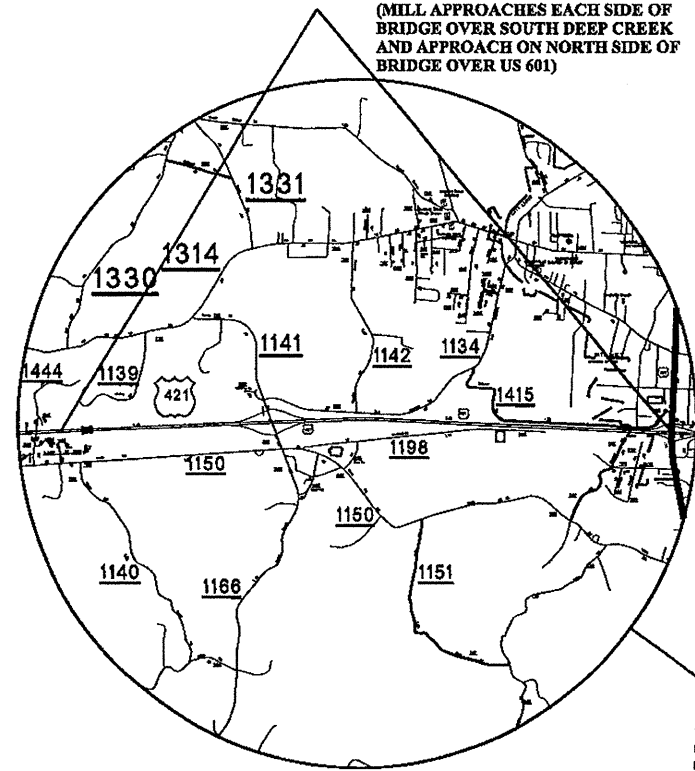
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

YADKIN COUNTY

PRIMARY ASPHALT RESURFACING

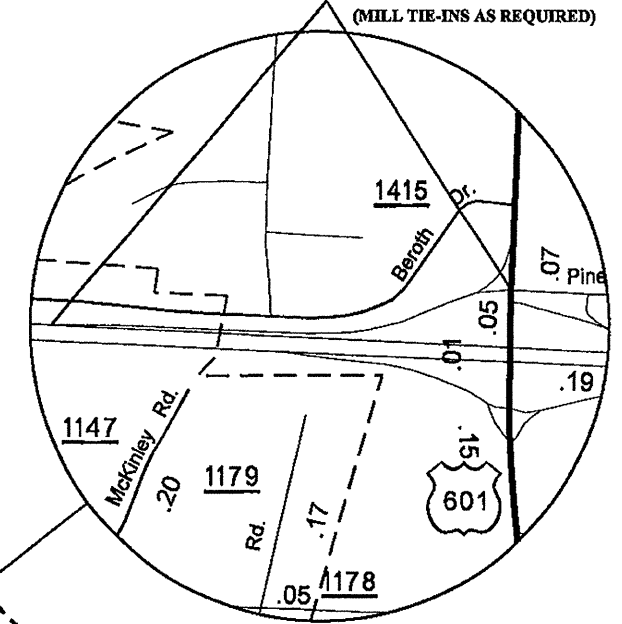
MAP #14 US 421 NBL
FROM US 601 TO 500' NORTH OF
SOUTH DEEP CREEK BRIDGE

(MILL APPROACHES EACH SIDE OF
BRIDGE OVER SOUTH DEEP CREEK
AND APPROACH ON NORTH SIDE OF
BRIDGE OVER US 601)



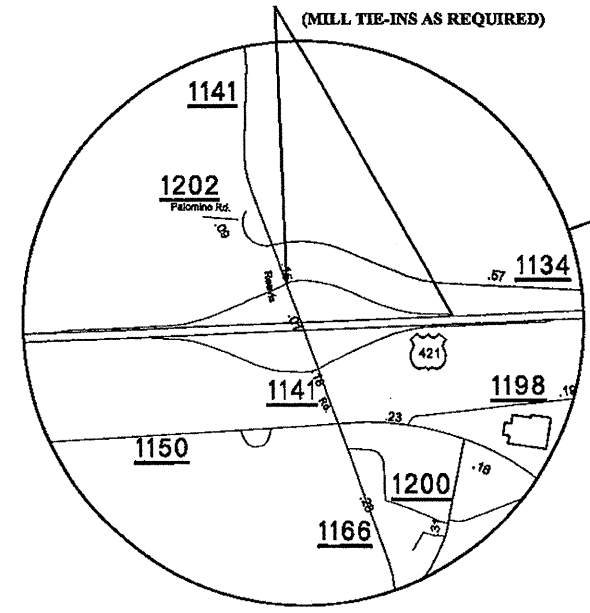
MAP #15 US 421 NBL ON RAMP
(EXIT 257)
FROM US 601 TO US 421 NBL

(MILL TIE-INS AS REQUIRED)



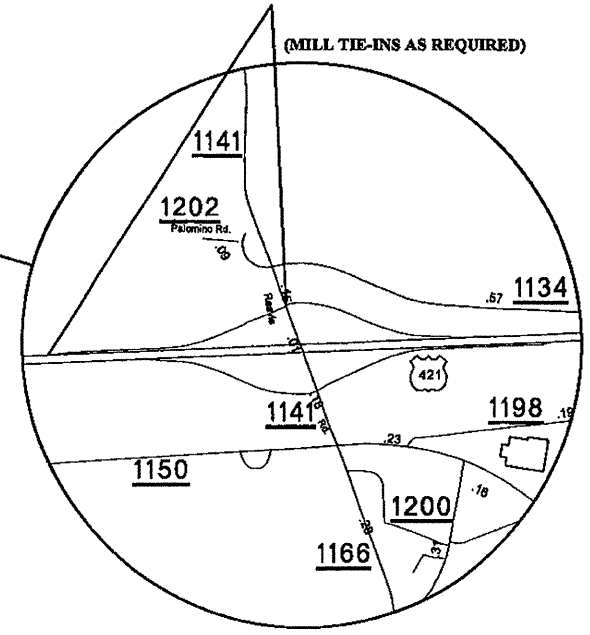
MAP #16 US 421 NBL OFF RAMP
(EXIT 259)
FROM US 421 NBL TO SR 1141

(MILL TIE-INS AS REQUIRED)



MAP #17 US 421 NBL ON RAMP
(EXIT 259)
FROM SR 1141 TO US 421 NBL

(MILL TIE-INS AS REQUIRED)



8/17/99
 15-JUL-2012 15:37
 C:\My Documents\F585661 Manager\Contracts\Resurfacing 2013\Surry-Wilkes-Yadkin\2013 Yadkin Resurfacing Maps.dgn

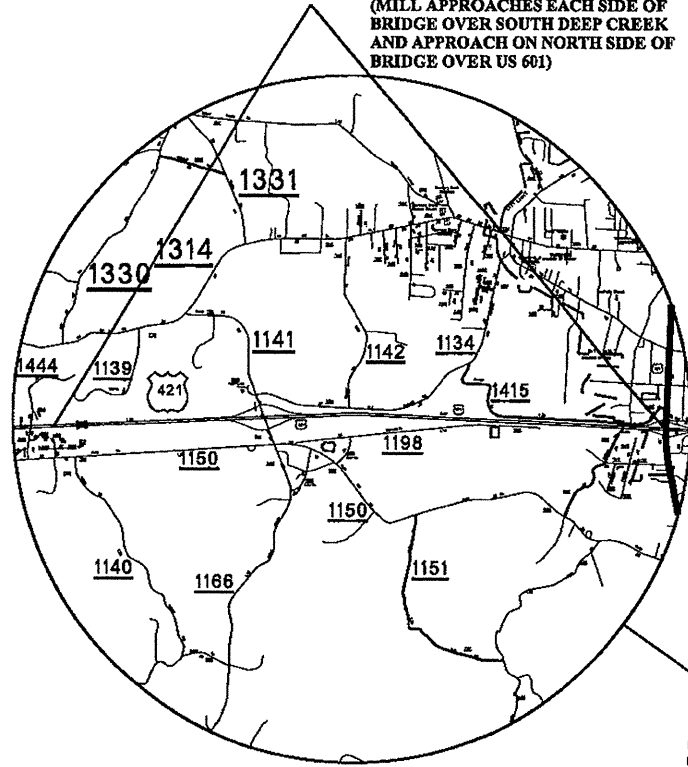
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

YADKIN COUNTY

PRIMARY ASPHALT RESURFACING

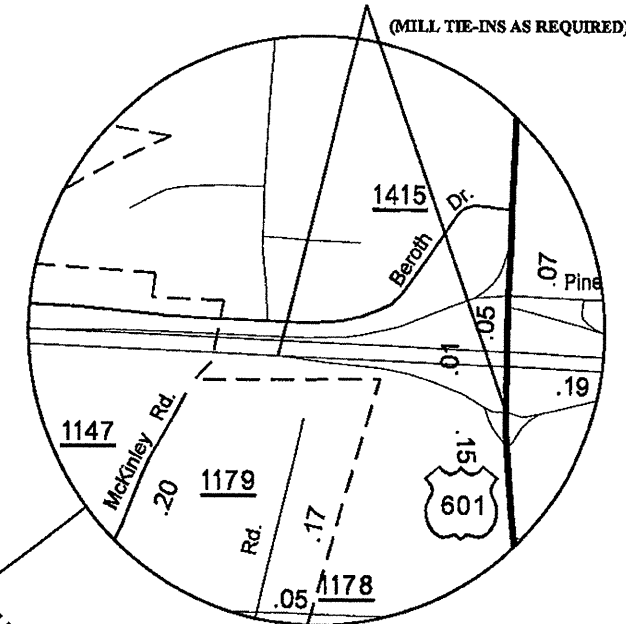
MAP #18 US 421 SBL
FROM US 601 TO 500' NORTH OF
SOUTH DEEP CREEK BRIDGE

(MILL APPROACHES EACH SIDE OF
BRIDGE OVER SOUTH DEEP CREEK
AND APPROACH ON NORTH SIDE OF
BRIDGE OVER US 601)



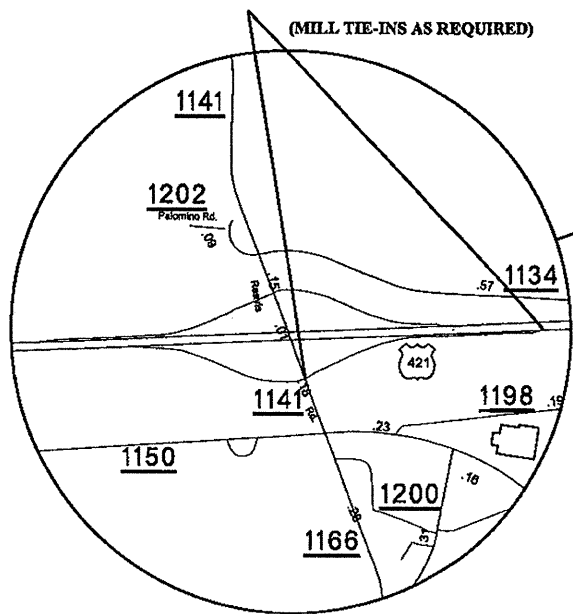
MAP #19 US 421 SBL OFF RAMP
(EXIT 257)
FROM US 421 SBL TO US 601

(MILL TIE-INS AS REQUIRED)



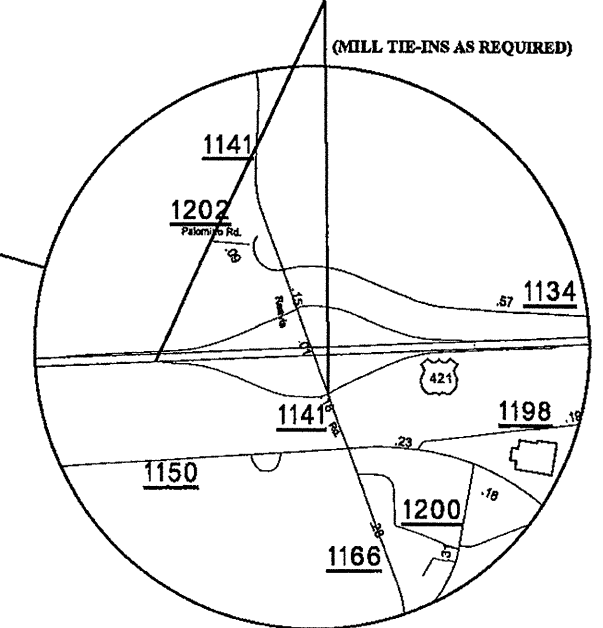
MAP #20 US 421 SBL ON RAMP
(EXIT 259)
FROM SR 1141 TO US 421 SBL

(MILL TIE-INS AS REQUIRED)



MAP #21 US 421 SBL OFF RAMP
(EXIT 259)
FROM US 421 SBL TO SR 1141

(MILL TIE-INS AS REQUIRED)



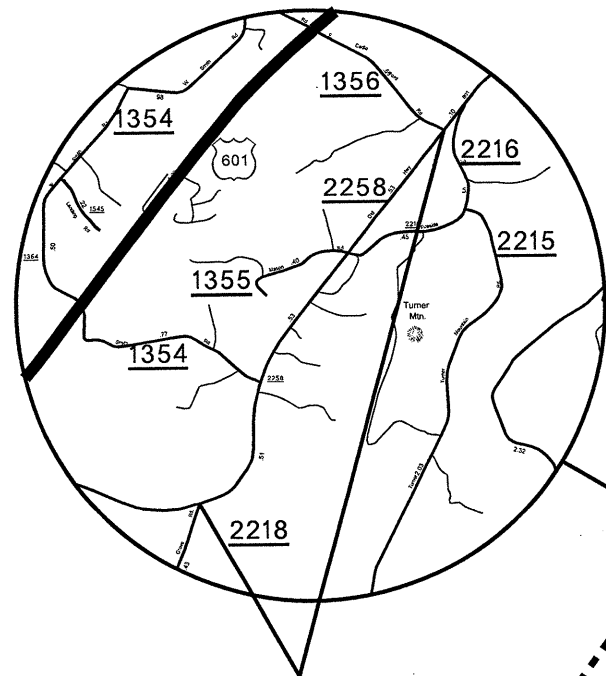
8/17/99
15:40
C:\Users\wilkes\Documents\Projects\Yadkin\2013\Surry-Wilkes-Yadkin\2013 Yadkin Resurfacing Maps.dgn
1305
1306
1307
1308
1309
1310
1311
1312
1313
1314
1315
1316
1317
1318
1319
1320
1321
1322
1323
1324
1325
1326
1327
1328
1329
1330
1331
1332
1333
1334
1335
1336
1337
1338
1339
1340
1341
1342
1343
1344
1345
1346
1347
1348
1349
1350
1351
1352
1353
1354
1355
1356
1357
1358
1359
1360
1361
1362
1363
1364
1365
1366
1367
1368
1369
1370
1371
1372
1373
1374
1375
1376
1377
1378
1379
1380
1381
1382
1383
1384
1385
1386
1387
1388
1389
1390
1391
1392
1393
1394
1395
1396
1397
1398
1399
1400



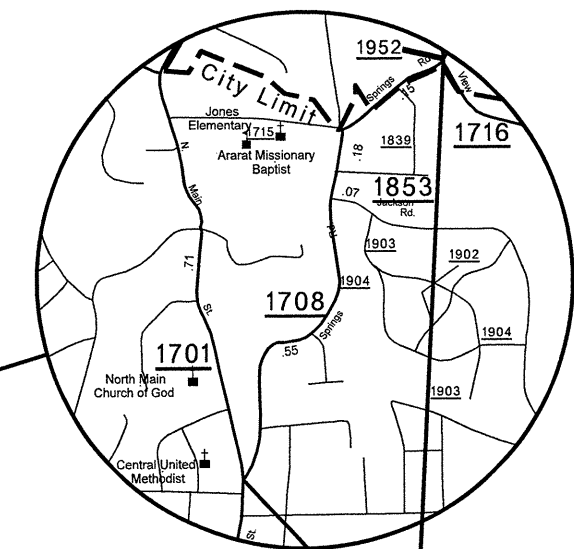
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SURRY COUNTY

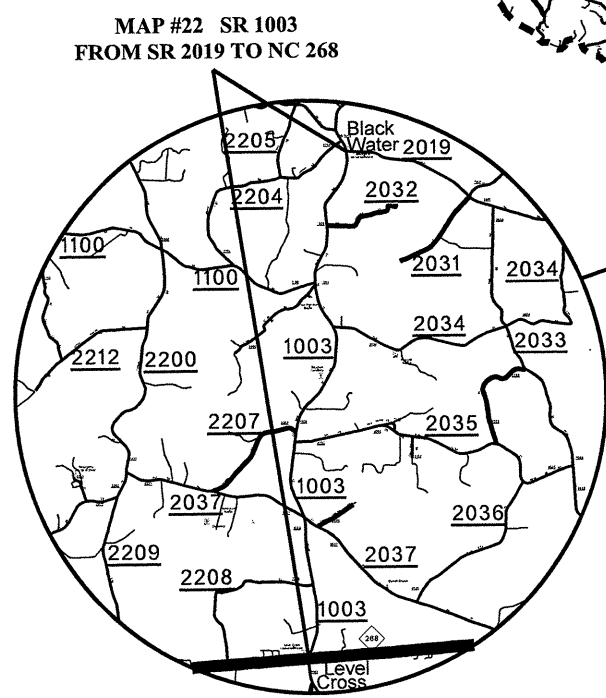
SECONDARY ASPHALT RESURFACING



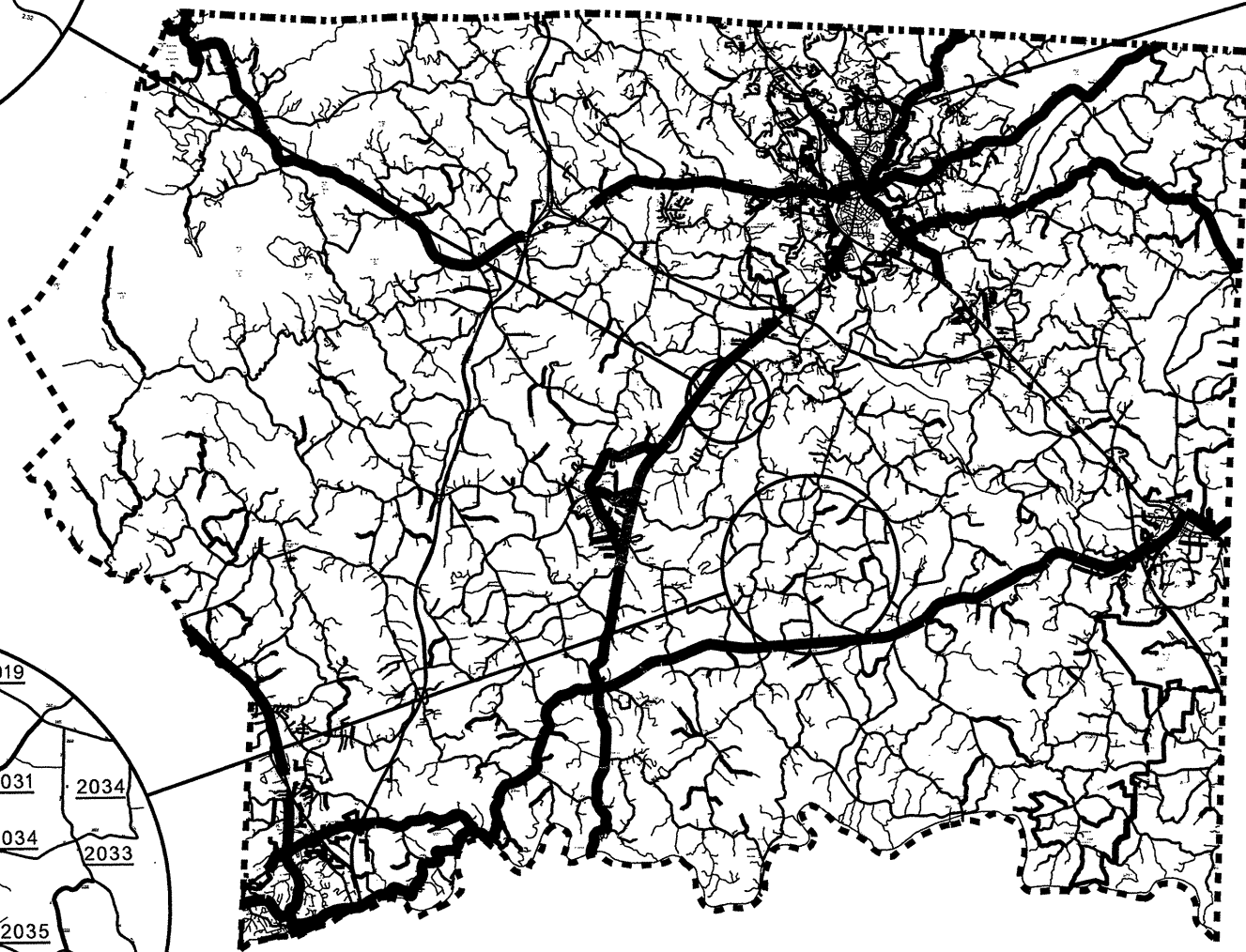
MAP #23 SR 2258
FROM SR 2218 TO SR 1356



MAP #24 SR 1708
FROM SR 1701 TO SR 1952



MAP #22 SR 1003
FROM SR 2019 TO NC 268



8/17/99
SYSTEMS SECTION

8/17/95

PROJECT REFERENCE NO.	SHEET NO.
ICR.20971.20	9

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

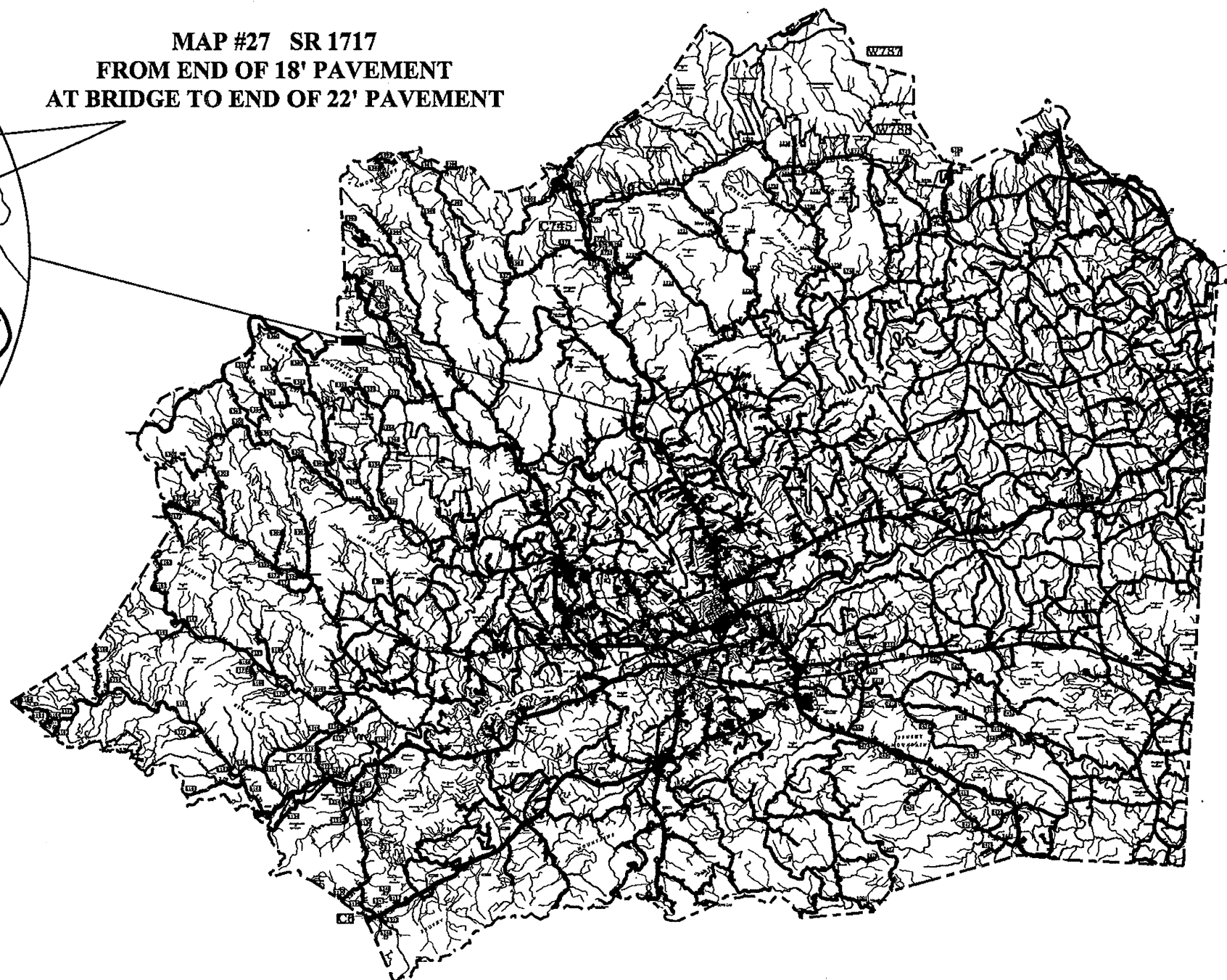
WILKES COUNTY

SECONDARY ASPHALT RESURFACING

MAP #28 SR 1717
FROM END 22' PAVEMENT TO SR 1703



MAP #27 SR 1717
FROM END OF 18' PAVEMENT
AT BRIDGE TO END OF 22' PAVEMENT



MAP #26 SR 1717
FROM NC 18 TO END 18' PAVEMENT
AT BRIDGE

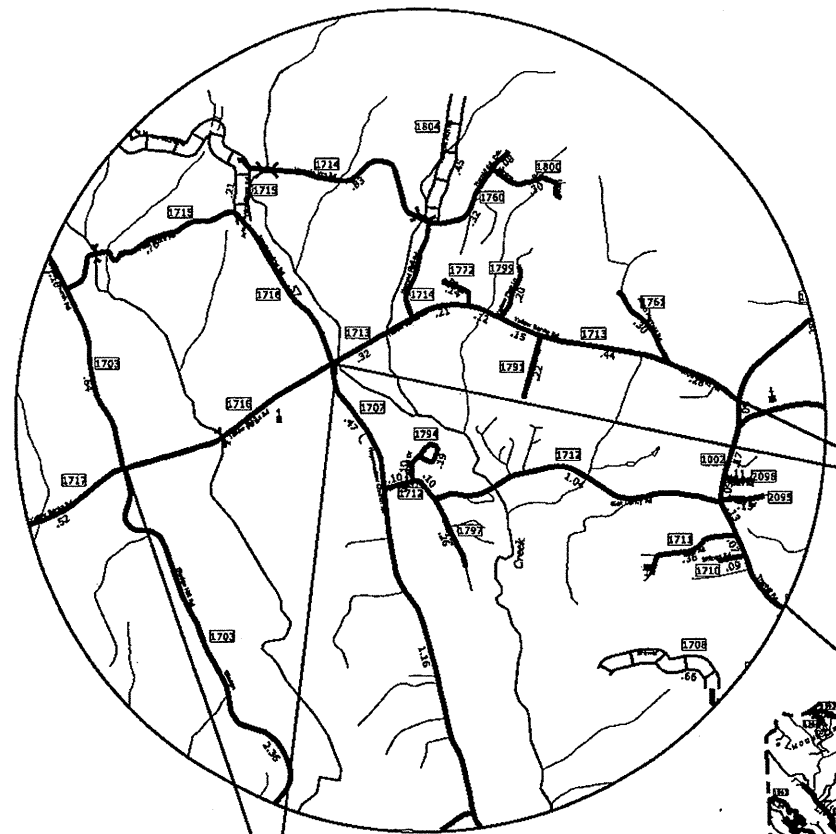
8/17/95

PROJECT REFERENCE NO.	SHEET NO.
ICR.20971.20	10

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

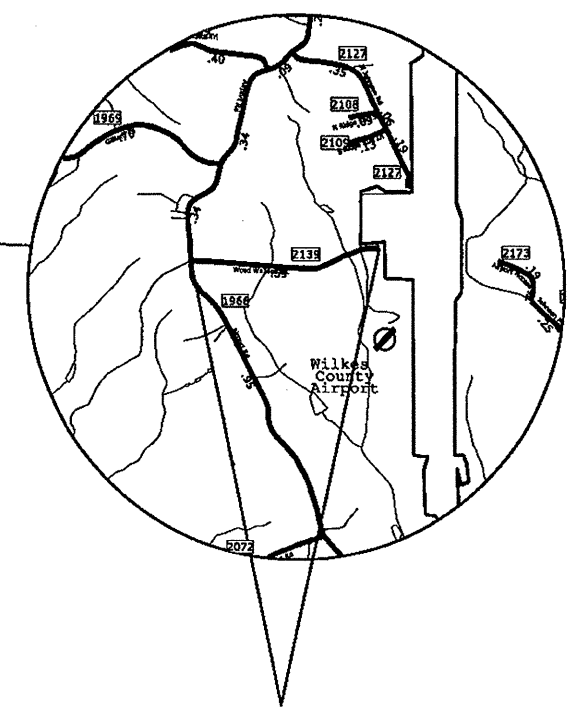
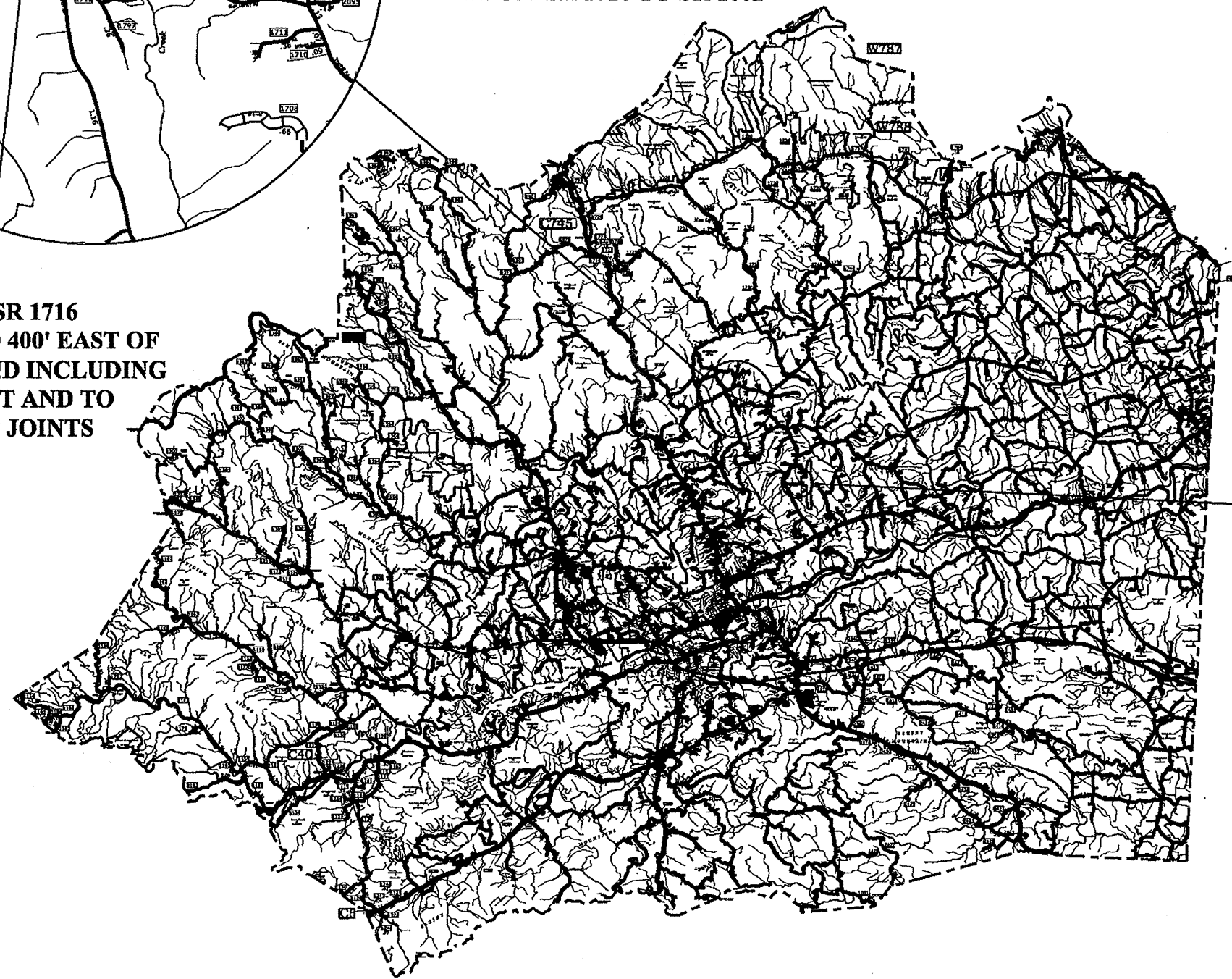
WILKES COUNTY

SECONDARY ASPHALT RESURFACING



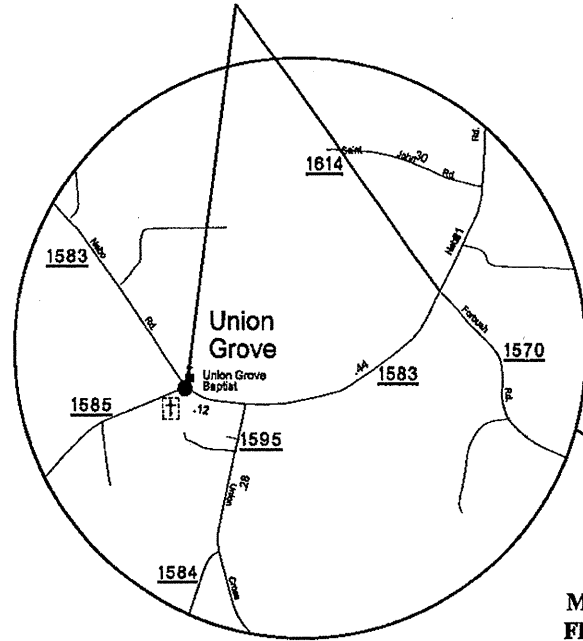
MAP #30 SR 1713
FROM SR 1716 TO SR 1002

MAP #29 SR 1716
FROM SR 1703 TO 400' EAST OF
ROUNDBOUT AND INCLUDING
ROUNDBOUT AND TO
PAVEMENT JOINTS



MAP #25 SR 2139
FROM SR 1966 TO EOM

MAP #32 SR 1583
FROM SR 1585 TO SR 1570

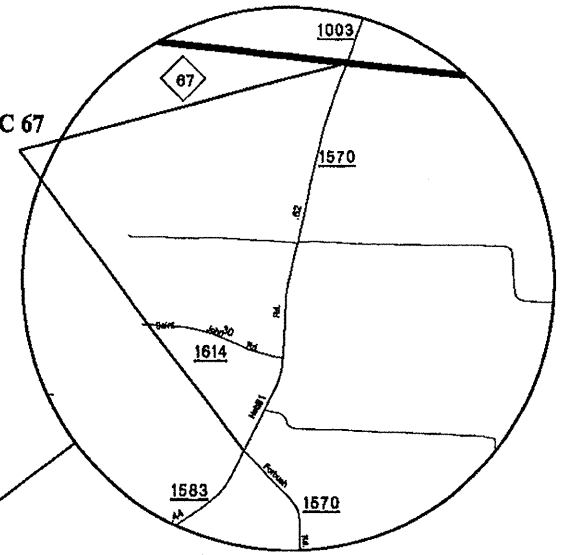


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

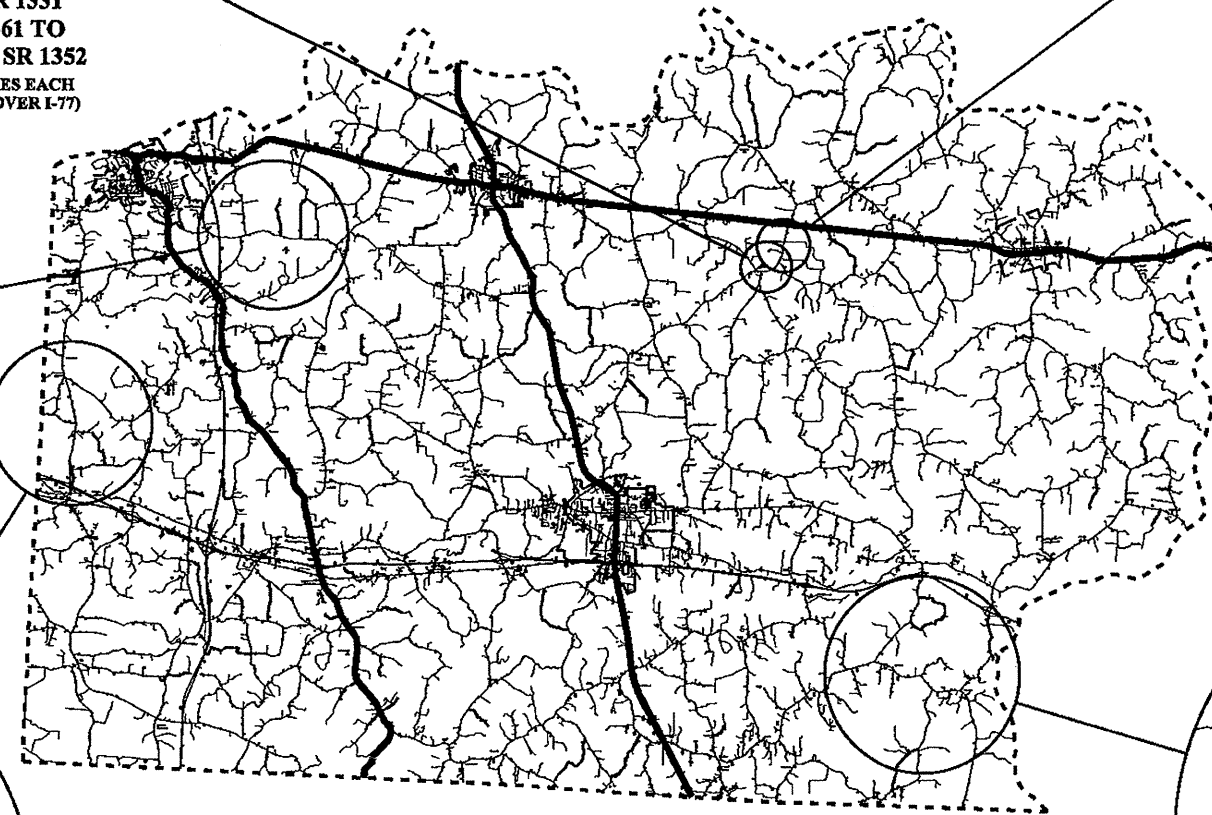
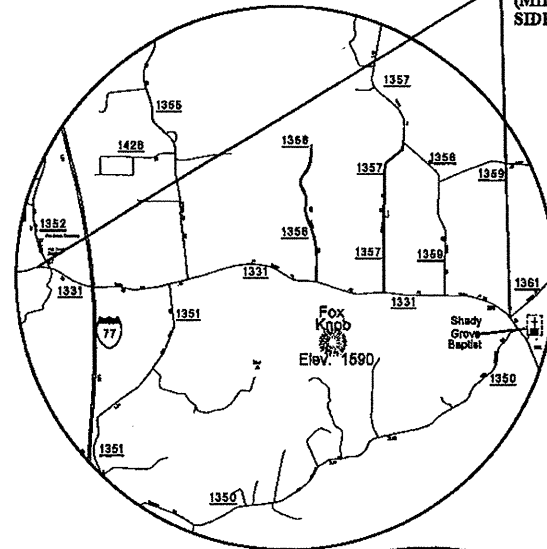
YADKIN COUNTY

SECONDARY ASPHALT RESURFACING

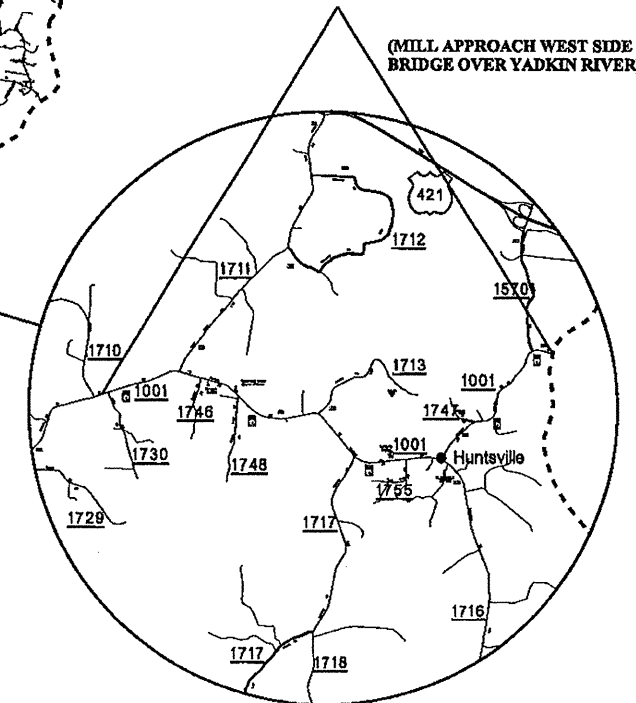
MAP #33 SR 1570
FROM SR 1583 TO NC 67



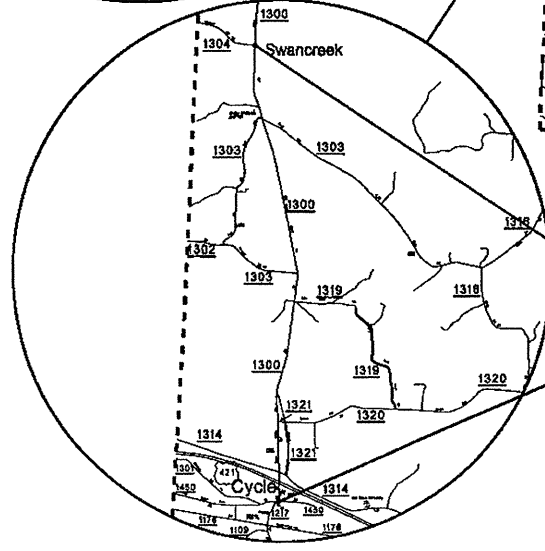
MAP #35 SR 1331
FROM SR 1361 TO
100' WEST OF SR 1352
(MILL APPROACHES EACH
SIDE OF BRIDGE OVER I-77)



MAP #31 SR 1001
FROM 250' EAST OF SR 1710
TO FORSYTH COUNTY LINE

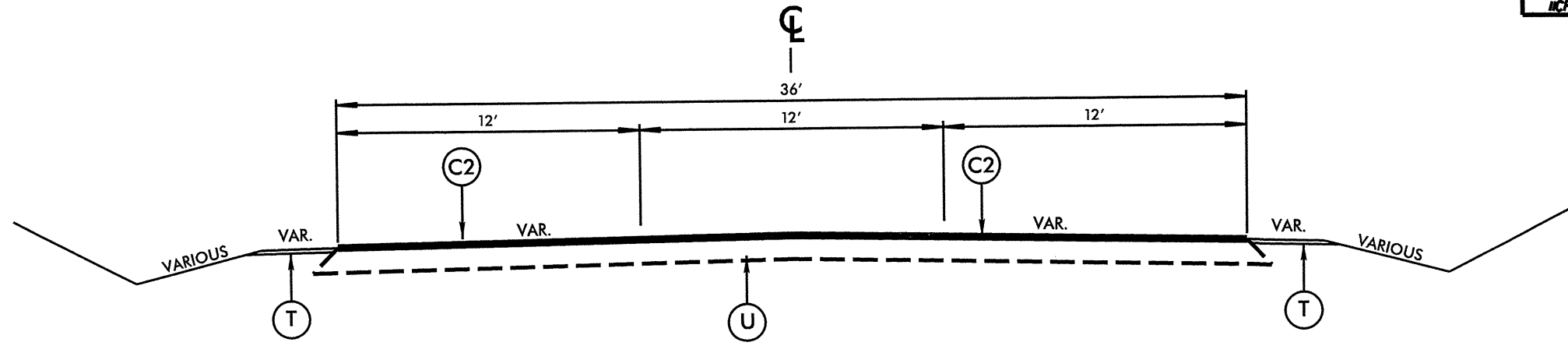


MAP #34 SR 1300
FROM SR 1304 TO SR 1450
(MILL 175' EACH SIDE UNDER BRIDGES
OF US 421 NBL AND SBL)



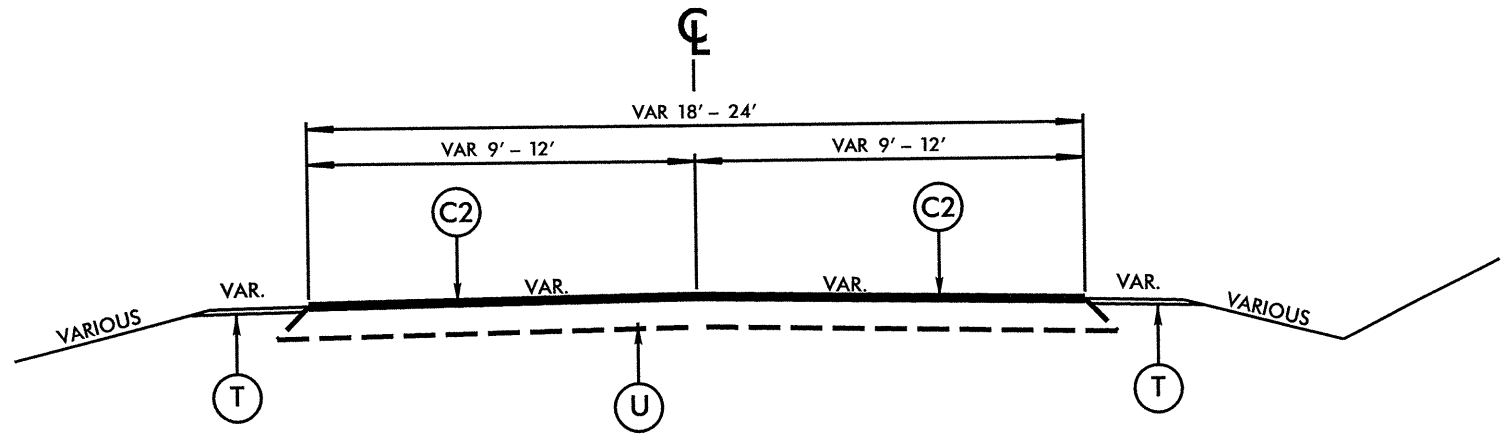
(MILL APPROACH WEST SIDE OF
BRIDGE OVER YADKIN RIVER)

8/17/99
2012 15:42
C:\Users\jwilkas\Documents\2013\Surry\Wilkas-Yadkin\Resurfacing Maps\dgn



TYPICAL SECTION NO. 1

MAP 1 - NC 104 FROM NC 103 TO MT. AIRY CITY LIMITS
 MAP 8 - US 601 BUSINESS FROM WEST WOLTZ STREET TO DOBSON CITY LIMITS



TYPICAL SECTION NO. 2

MAP 2 - NC 104 FROM MT. AIRY CITY LIMITS TO SR 1708
 MAP 3 - NC 104 FROM SR 1708 TO VIRGINIA STATE LINE
 MAP 4 - NC 89 FROM SR 1787 TO STOKES COUNTY LINE
 MAP 5 - US 601 BUSINESS FROM US 601 TO PAVEMENT CHANGE AT SR 2266
 MAP 9 - US 601 BUSINESS FROM DOBSON CITY LIMITS TO US 601

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. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	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 0 - 1½"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 0 - 3"
V3	MILLED RUMBLE STRIPS (ASPHALT CEMENT)
V4	INCIDENTAL MILLING

SURRY-WILKES-YADKIN COUNTIES
 PRIMARY AND SECONDARY RESURFACING

DIVISION # _____

REVISIONS	BY	DATE

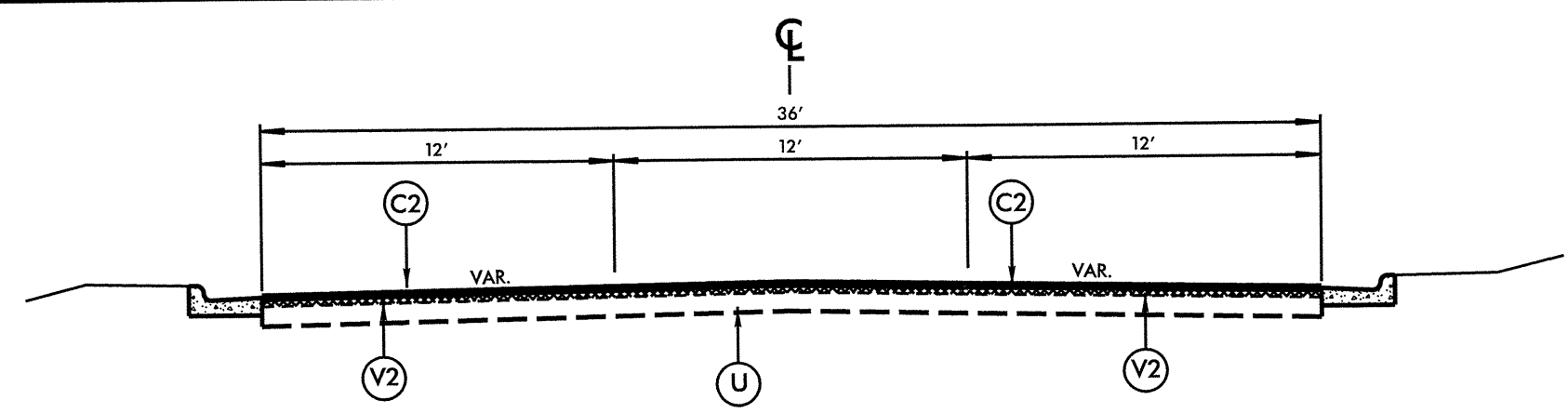
N.C. DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 DIVISION ELEVEN

SCALE: N/A DATE: 6/2002

PREPARED BY: J. L. LAWS

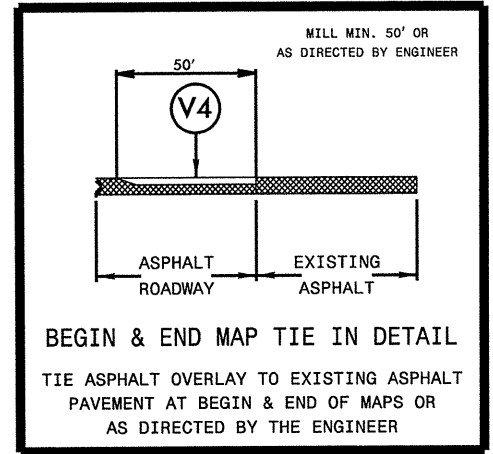
REVIEWED BY: _____

REVISION BY: _____

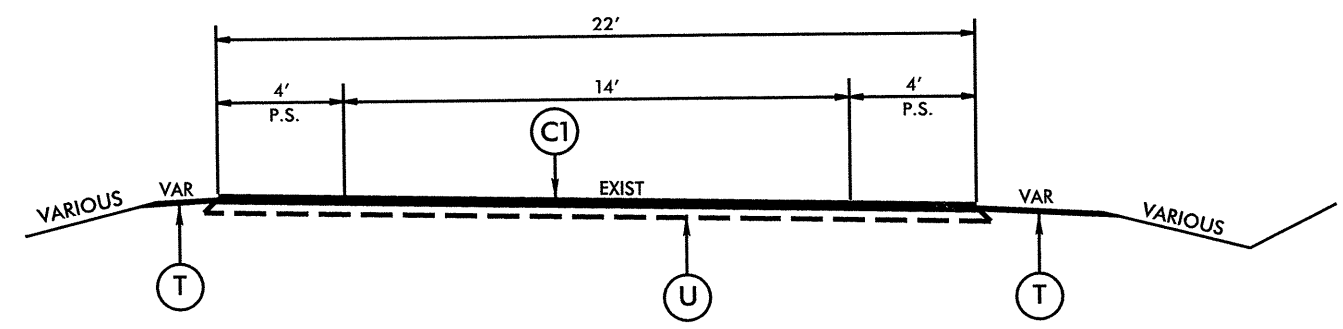


TYPICAL SECTION NO. 3

MAP 6 - US 601 BUSINESS FROM PAVEMENT CHANGE AT SURRY CENTRAL HIGH SCHOOL TO SOUTH CRUTCHFIELD STREET
 MAP 7 - US 601 BUSINESS FROM SOUTH CRUTCHFIELD STREET TO WEST WOLTZ STREET

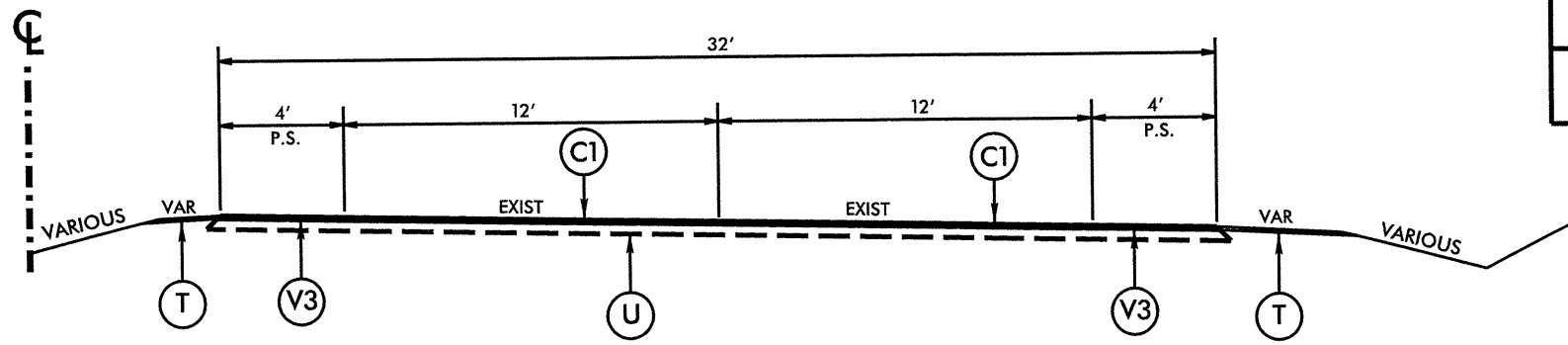


PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, 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 0 - 1½"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 0 - 3"
V3	MILLED RUMBLE STRIPS (ASPHALT CEMENT)
V4	INCIDENTAL MILLING



TYPICAL SECTION NO. 4

MAP 11 - US 421 SBL OFF RAMP (EXIT 277) FROM US 421 SBL TO SR 2433
 MAP 12 - US 421 SBL ON RAMP (EXIT 277) FROM SR 2433 TO US 421 SBL



TYPICAL SECTION NO. 5

MAP 10 - US 421 SBL FROM NC 115 TO END OF ON RAMP AT SR 2433

SURRY-WILKES-YADKIN COUNTIES
 PRIMARY AND SECONDARY RESURFACING

DIVISION II

REVISIONS	NO.	DATE

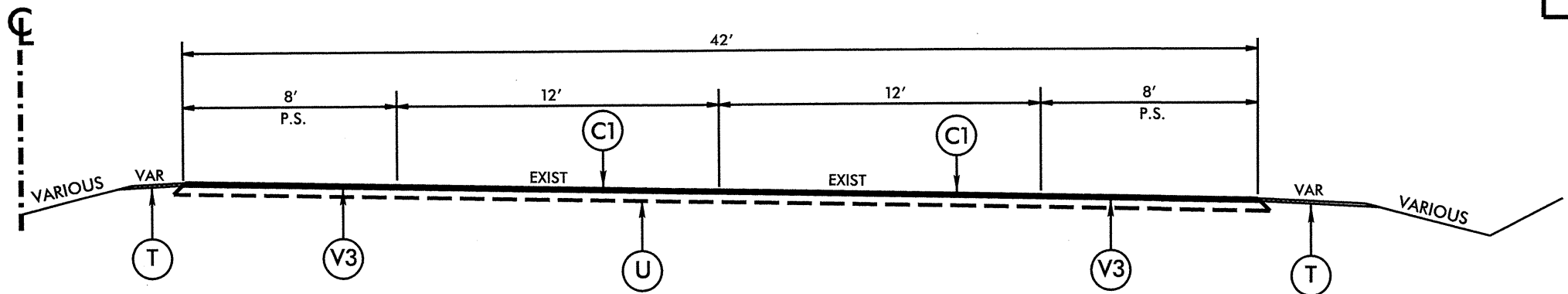
N.C. DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 DIVISION ELEVEN

SCALE: N/A DATE: 6/2002

DRAWN BY: J.L. LAWS

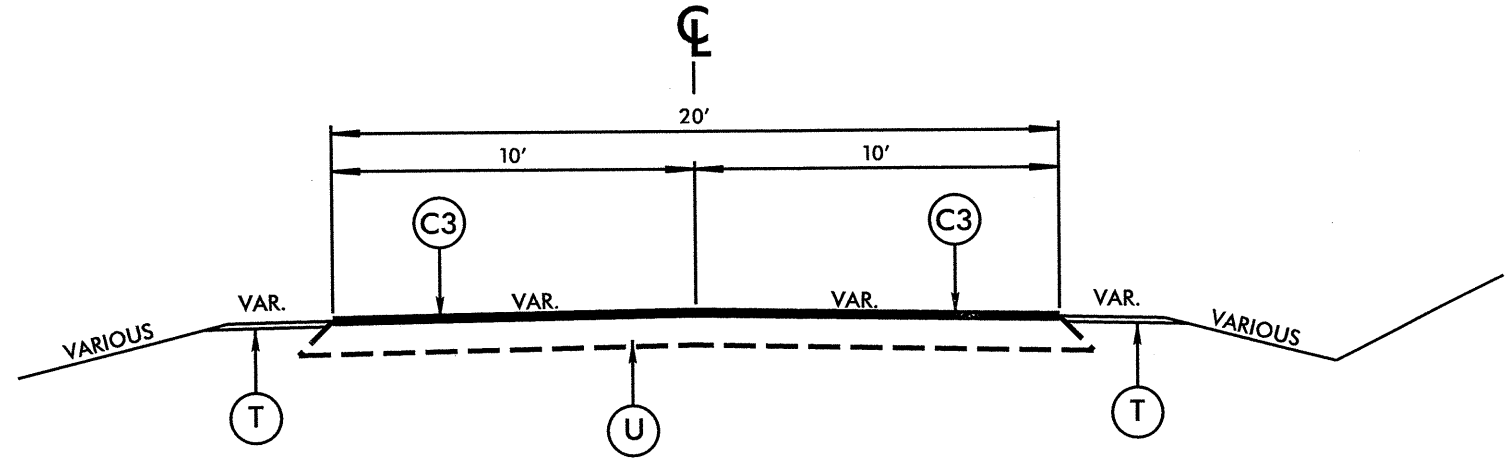
REVIEWED BY:

REVIEWED BY:



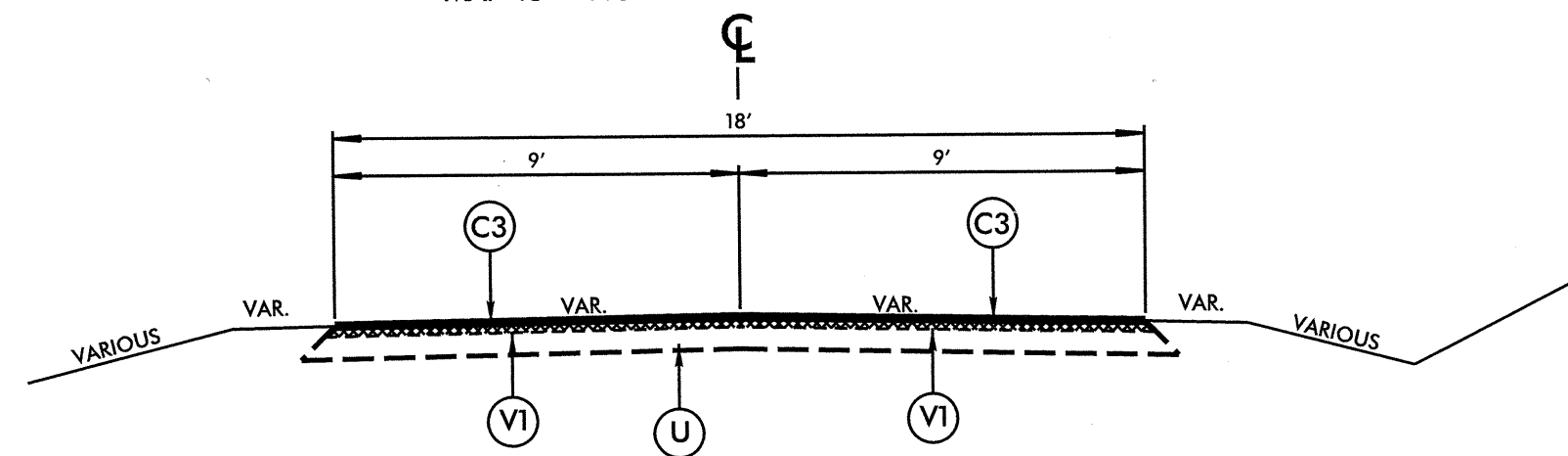
TYPICAL SECTION NO. 6

MAP 14 - US 421 NBL FROM US 601 TO 500' NORTH OF SOUTH DEEP CREEK BRIDGE
 MAP 18 - US 421 SBL FROM US 601 TO 500' NORTH OF SOUTH DEEP CREEK BRIDGE



TYPICAL SECTION NO. 7

MAP 13 - NC 18 FROM SR 1722 TO SR 1728



TYPICAL SECTION NO. 8

MAP 29 - SR 1716 FROM 400' EAST OF ROUNDABOUT AND INCLUDING ROUNDABOUT AND TO PAVEMENT JOINTS ON SR 1716 AND SR 1717
 MILL 0" - 1.5" AT ROUNDABOUT ONLY


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. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	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 0 - 1½"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 0 - 3"
V3	MILLED RUMBLE STRIPS (ASPHALT CEMENT)
V4	INCIDENTAL MILLING

SURRY-WILKES-YADKIN COUNTIES
 PRIMARY AND SECONDARY RESURFACING

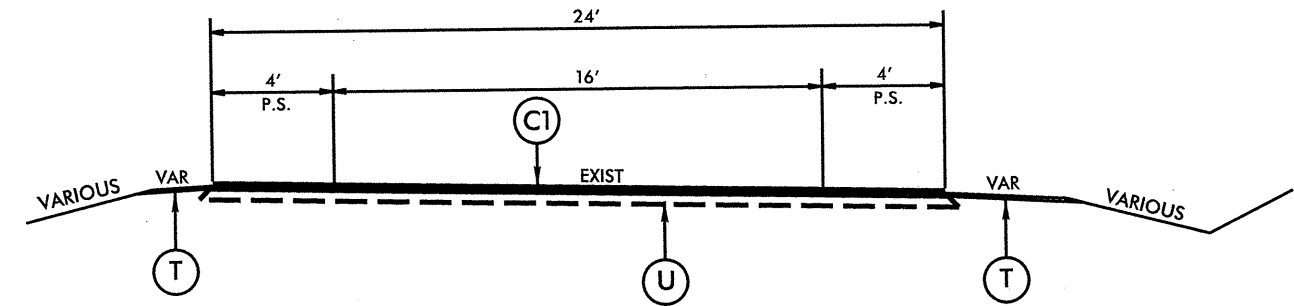
DIVISION II

REVISIONS	BY	DATE

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

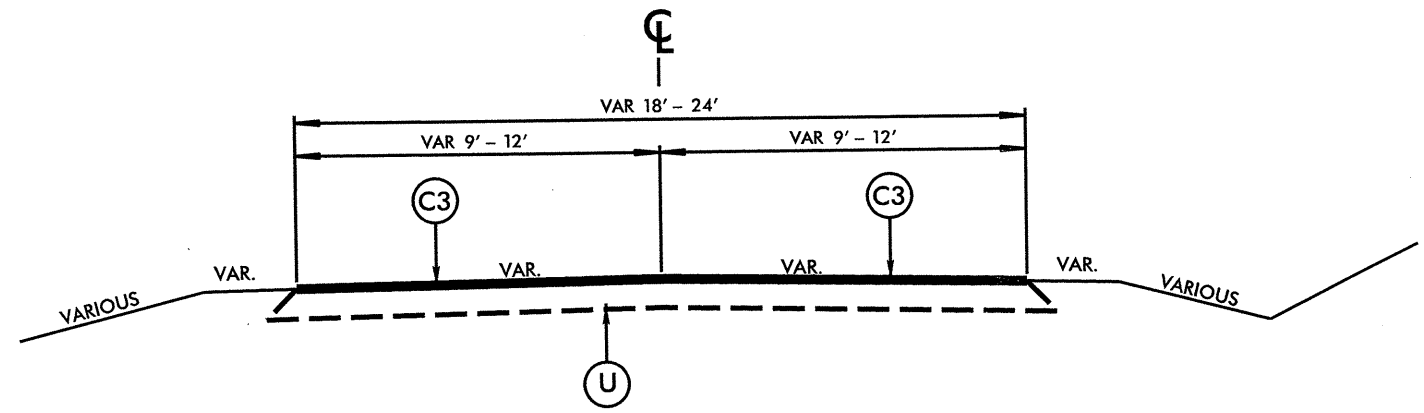


SCALE: N/A DATE: 6/2002
 PREPARED BY: J.L. LAWS
 REVIEWED BY: _____



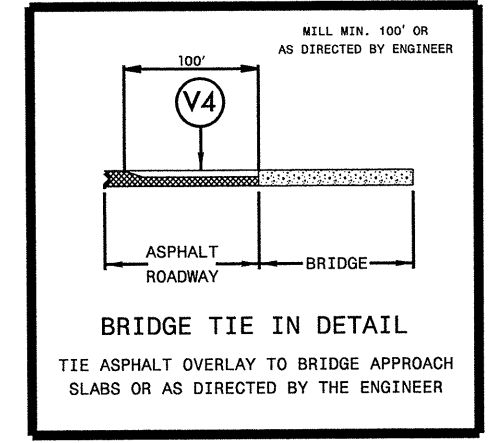
TYPICAL SECTION NO. 9

- MAP 15 - US 421 NBL ON RAMP (EXIT 257) FROM US 601 TO US 421 NBL
- MAP 16 - US 421 NBL OFF RAMP (EXIT 259) FROM US 421 NBL TO SR 1141
- MAP 17 - US 421 NBL ON RAMP (EXIT 259) FROM SR 1141 TO US 421 NBL
- MAP 19 - US 421 SBL OFF RAMP (EXIT 257) FROM US 421 SBL TO US 601
- MAP 20 - US 421 SBL ON RAMP (EXIT 259) FROM SR 1141 TO US 421 SBL
- MAP 21 - US 421 SBL OFF RAMP (EXIT 259) FROM US 421 SBL TO SR 1141



TYPICAL SECTION NO. 10

- MAP 22 - SR 1003 FROM SR 2019 TO NC 268
- MAP 23 - SR 2258 FROM SR 2218 TO SR 1356
- MAP 24 - SR 1708 FROM SR 1701 TO SR 1952
- MAP 25 - SR 2139 FROM SR 1966 TO EOM
- MAP 26 - SR 1717 FROM NC 18 TO END 18' PAVEMENT AT BRIDGE
- MAP 27 - SR 1717 FROM END 18' PAVEMENT AT BRIDGE TO END 22' PAVEMENT
- MAP 28 - SR 1717 FROM END 22' PAVEMENT TO SR 1703
- MAP 30 - SR 1713 FROM SR 1716 TO SR 1002
- MAP 31 - SR 1001 FROM 250' EAST OF SR 1710 TO FORSYTH COUNTY LINE
- MAP 32 - SR 1583 FROM SR 1585 TO SR 1570
- MAP 33 - SR 1570 FROM SR 1583 TO NC 67
- MAP 34 - SR 1300 FROM SR 1304 TO SR 1450
- MAP 35 - SR 1331 FROM SR 1361 TO 100' WEST OF SR 1352



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 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	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 0 - 1 1/2"
V2	MILLING OF EXISTING ASPHALT PAVEMENT AT DEPTH OF 0 - 3"
V3	MILLED RUMBLE STRIPS (ASPHALT CEMENT)
V4	INCIDENTAL MILLING

SURRY-WILKES-YADKIN COUNTIES
PRIMARY AND SECONDARY RESURFACING

DIVISION II

REVISIONS	NO.	DATE

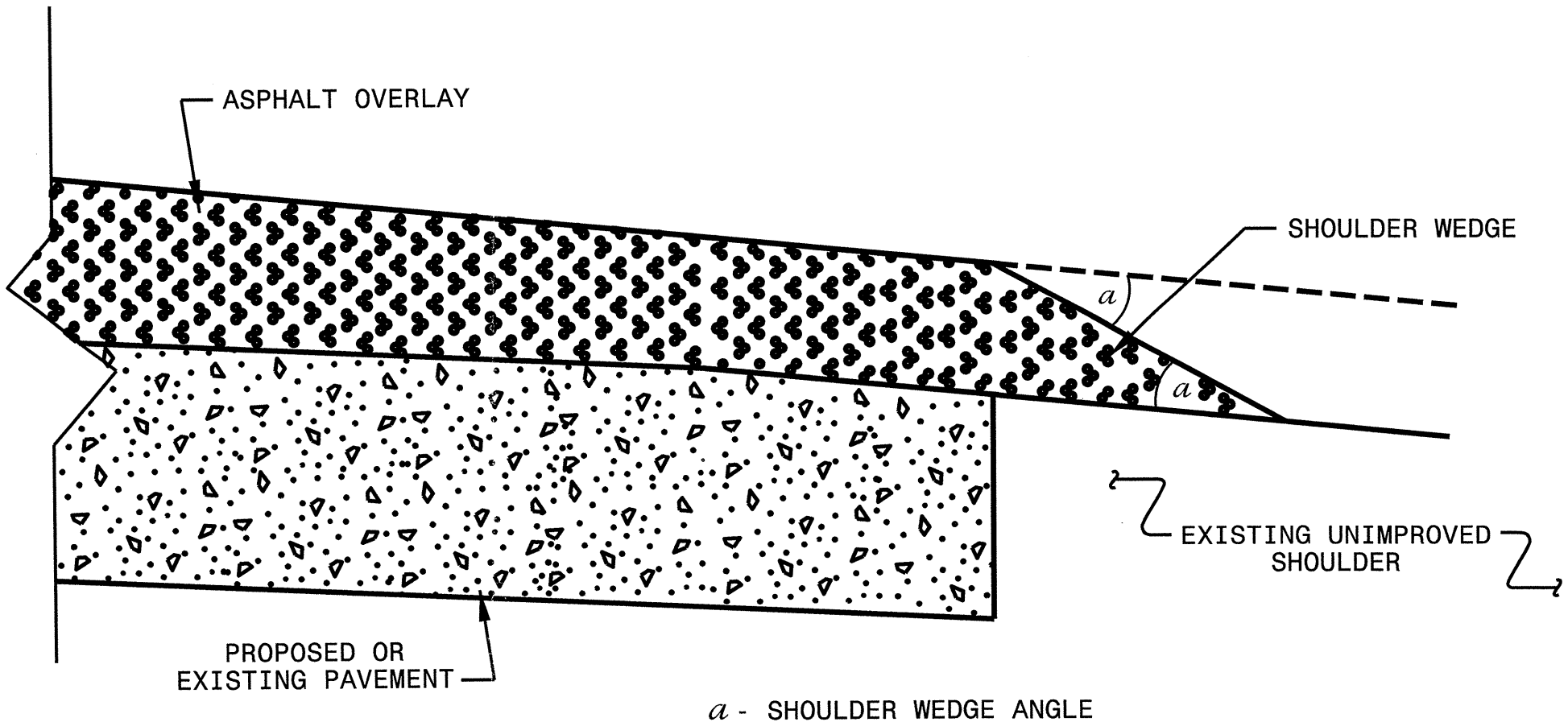
N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN

SCALE: N/A INCHES
6/2002

PREPARED BY: **J.L. LAWS**

REVIEWED BY: _____

REVIEWED BY: _____



SHOULDER WEDGE DETAIL

SYSTEMS CONSTRUCTION

DO NOT USE

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

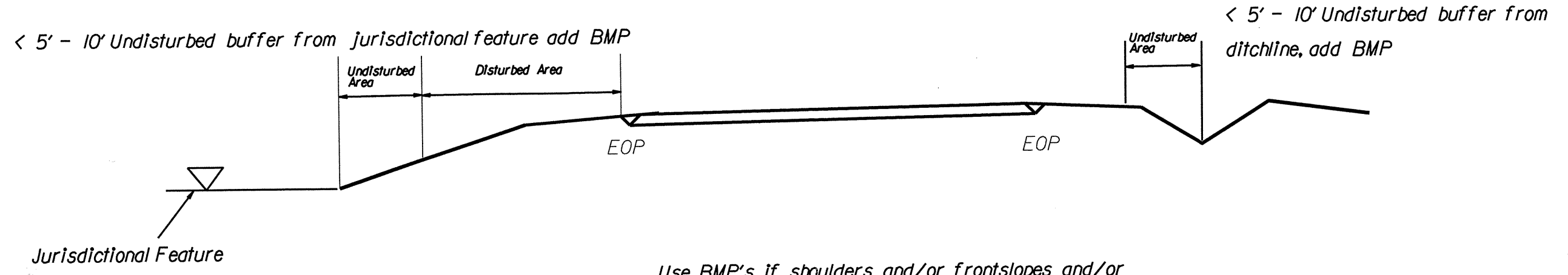
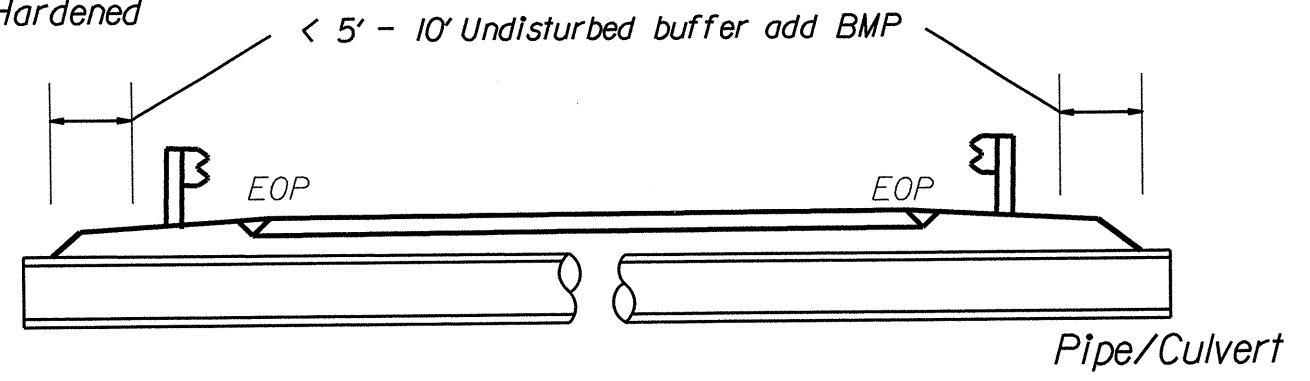
**SHOULDER WEDGE
DETAIL**

ORIGINAL BY: T.SPELL DATE: 7-19-11
MODIFIED BY: DATE: _____
CHECKED BY: DATE: _____
FILE SPEC: s:\usr\details\stand\shoulderwedge\detail.dgn

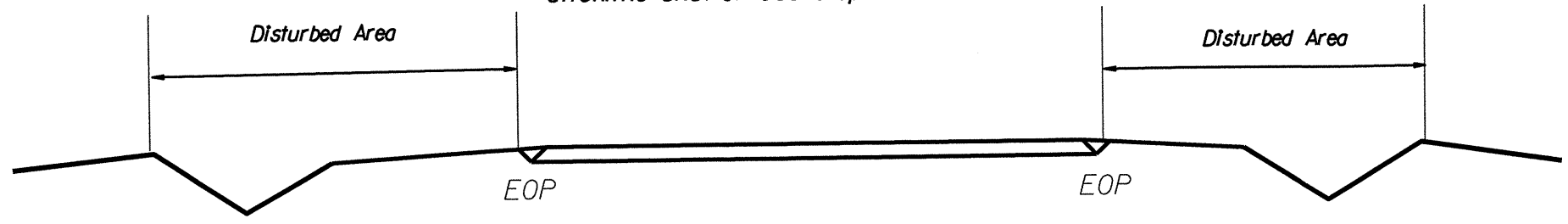
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle, Silt Fence or Hardened Aggregate.

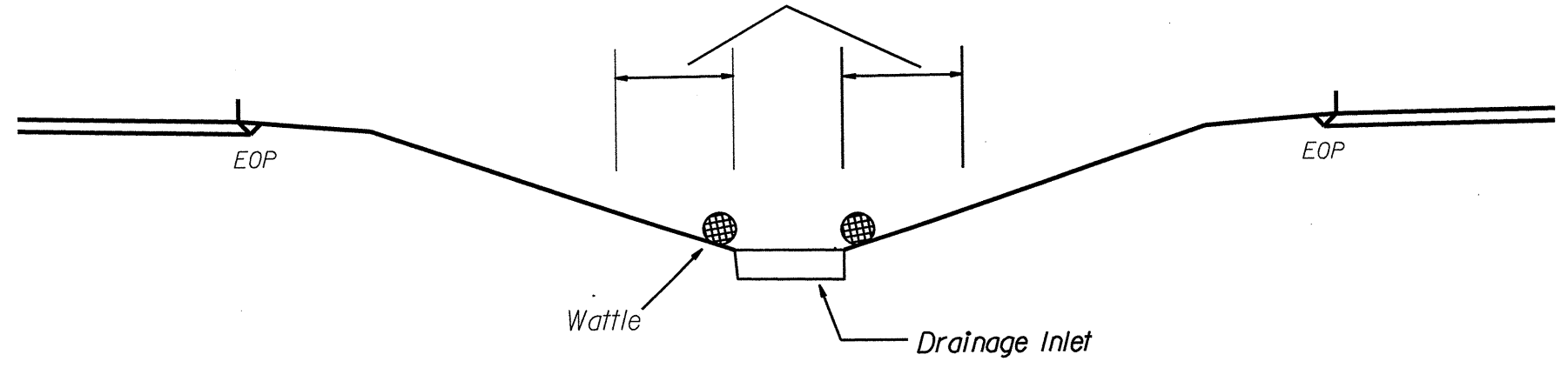
EROSION CONTROL DETAIL



Use BMP's if shoulders and/or frontslopes and/or ditchline and/or backslopes are disturbed



< 5' - 10' Undisturbed buffer from inlet, add wattle



NOT TO SCALE

PROJECT NO.	SHEET NO.	TOTAL NO.
11CR.10861.20, 11CR.10971.20 11CR.10991.20, ETC.	18	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	BORROW EXCAVATION CY	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SMI	0" TO 1.5" MILLING SY	0" TO 3" MILLING SY	INCIDENTAL MILLING SY	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, S9.5C TONS	SURFACE COURSE, S9.5A TONS	ASPHALT BINDER FOR PLANT MIX TONS	MILLED RUMBLE STRIPS (ASPHALT CEMENT CONCRETE) LF	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	SEED & MULCHING AC	PORTABLE LIGHTING LS	INDUCTIVE LOOP LF		
11CR.10861.20	Surry	1	NC 104	FROM NC 103 TO MT. AIRY CITY LIMITS	1	NO	2.12	36	424	50	4.24			1,200	4,064			244		7	14	0.94				
		2	NC 104	FROM MT. AIRY CITY LIMITS TO SR 1708	2	NO	0.37	24	74	15	0.74				460				28				0.18			
		3	NC 104	FROM SR 1708 TO VIRGINIA STATE LINE	2	NO	2.36	18	472	50	4.72			900	2,168				130				1.14			
		4	NC 89	FROM SR 1787 TO STOKES COUNTY LINE	2	NO	3.32	18	664	60	6.64			200	3,065				184				1.61			
		5	US 601 BUSINESS	FROM US 601 TO PAVEMENT CHANGE AT SR 2266	2	NO	0.31	20	62	15	0.62			225	327					20				0.16	1	
		6	US 601 BUSINESS	FROM PAVEMENT CHANGE AT SURRY CENTRAL HIGH SCHOOL TO SOUTH CRUTCHFIELD STREET	3	NO	0.55	36		15				13,580			1,147			69		6	4	0.13	*	
		7	US 601 BUSINESS	FROM SOUTH CRUTCHFIELD STREET TO WEST WOLTZ STREET	3	NO	0.65	36						15,667			1,377			83		16	15		*	100
		8	US 601 BUSINESS	FROM WEST WOLTZ STREET TO DOBSON CITY LIMITS	1	NO	0.54	36	108	15	1.08					125	1,000			60		13	5	0.27	*	
		9	US 601 BUSINESS	FROM DOBSON CITY LIMITS TO US 601	2	NO	1.75	20	350	30	3.50						1,786			107				0.88	*	300
TOTAL FOR PROJ NO. 11CR.10861.20							11.97		2,154	250	21.54		29,247	2,650	15,394			925		42	38	5.30		400		
11CR.10971.20	Wilkes	10	US 421 SBL	FROM NC 115 TO END OF ON RAMP AT SR 2433	5	NO	5.047	32	1,009		10.09			2,133		8,108		478	53,296			4.89				
		11	US 421 SBL OFF RAMP (EXIT 277)	FROM US 421 SBL TO SR 2433	4	NO	0.227	22	45		0.45			125		376		22					0.20			
		12	US 421 SBL ON RAMP (EXIT 277)	FROM SR 2433 TO US 421 SBL	4	NO	0.142	22	34		0.34			125		311		18					0.20			
		13	NC 18	FROM SR 1722 TO SR 1728	7	NO	4.972	20	994	75	9.94				225		4,843		324				4.82			
TOTAL FOR PROJ NO. 11CR.10971.20							10.388		2,082	75	20.82			2,608		8,795	4,843	842	53,296			10.11				
11CR.10991.20	Yadkin	14	US 421 NBL	FROM US 601 TO 500' NORTH OF SOUTH DEEP CREEK BRIDGE	6	NO	3.67	42	734		7.34			1,423		7,619		449	38,755			3.60				
		15	US 421 NBL ON RAMP (EXIT 257)	FROM US 601 TO US 421 NBL	9	NO	0.41	24	82	25	0.82			150		487		29					0.40	*		
		16	US 421 NBL OFF RAMP (EXIT 259)	FROM US 421 NBL TO SR 1141	9	NO	0.31	24	62	25	0.62			150		369		22					0.30			
		17	US 421 NBL ON RAMP (EXIT 259)	FROM SR 1141 TO US 421 NBL	9	NO	0.45	24	90	25	0.90			150		535		32					0.44			
		18	US 421 SBL	FROM US 601 TO 500' NORTH OF SOUTH DEEP CREEK BRIDGE	6	NO	3.67	42	734		7.34				1,423		7,619		449	38,755			3.60			
		19	US 421 SBL OFF RAMP (EXIT 257)	FROM US 421 SBL TO US 601	9	NO	0.23	24	46	25	0.46				150		273		16					0.22	*	
		20	US 421 SBL ON RAMP (EXIT 259)	SR 1141 TO US 421 SBL	9	NO	0.44	24	88	25	0.88				150		523		31					0.43		
21	US 421 SBL OFF RAMP (EXIT 259)	FROM US 421 SBL TO SR 1141	9	NO	0.33	24	66	25	0.66				150		392		23					0.32				
TOTAL FOR PROJ NO. 11CR.10991.20							9.51		1,902	150	19.02			3,746		17,817		1,051	77,510			9.31				

PROJECT NO.	SHEET NO.	TOTAL NO.
11CR.10861.20, 11CR.10971.20 11CR.10991.20, ETC.	19	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	BORROW EXCAVATION CY	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SMI	0" TO 1.5" MILLING SY	0" TO 3" MILLING SY	INCIDENTAL MILLING SY	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, S9.5C TONS	SURFACE COURSE, SF9.5A TONS	ASPHALT BINDER FOR PLANT MIX TONS	MILLED RUMBLE STRIPS (ASPHALT CEMENT CONCRETE) LF	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	SEED & MULCHING AC	PORTABLE LIGHTING LS	INDUCTIVE LOOP LF	
11CR.20861.20	Surry	22	SR 1003	FROM SR 2019 TO NC 268	10	NO	3.85	20		80				225			3,840	257							
		23	SR 2258	FROM SR 2218 TO SR 1356	10	NO	1.57	18		30				200			1,417	95							
		24	SR 1708	FROM SR 1701 TO SR 1952	10	NO	0.89	18		15				200			801	54							
TOTAL FOR PROJ NO. 11CR.20861.20							6.31			125				625			6,058	406							
11CR.20971.20	Wilkes	25	SR 2139	FROM SR 1966 TO EOM	10	NO	0.572	24						133			668	45							
		26	SR 1717	FROM NC 18 TO END 18' PAVEMENT @ BRIDGE	10	NO	1.03	18						300			904	61							
		27	SR 1717	FROM END 18' PAVEMENT @ BRIDGE TO END 22' PAVEMENT	10	NO	0.663	22						250			710	48							
		28	SR 1717	FROM END 22' PAVEMENT TO SR 1703	10	NO	0.492	18									432	29							
		29	SR 1716	FROM SR 1703 TO 400' EAST OF ROUNDABOUT AND INCLUDING ROUNDABOUT AND TO PAVEMENT JOINTS ON SR 1716 AND SR 1707	8	NO	0.89	18				2,800		400			1,284	86							
		30	SR 1713	FROM SR 1716 TO SR 1002	10	NO	1.428	18						200			1,368	92							
TOTAL FOR PROJ NO. 11CR.20971.20							5.075					2,800		1,283			5,366	361							
11CR.20991.20	Yadkin	31	SR 1001	FROM 250' EAST OF SR 1710 TO FORSYTH COUNTY LINE	10	NO	3.78	18		100				300			3,416	229							
		32	SR 1583	FROM SR 1585 TO SR 1570	10	NO	0.64	18		15				200			591	40							
		33	SR 1570	FROM SR 1583 TO NC 67	10	NO	0.9	18		25				200			900	60							
		34	SR 1300	FROM SR 1304 TO SR 1450	10	NO	2.95	20		50				1,000			2,953	198							
		35	SR 1331	FROM SR 1361 TO 100' WEST OF SR 1352	10	NO	2.9	20		50				667			2,885	193							
TOTAL FOR PROJ NO. 11CR.20991.20							11.17			240				2,367			10,745	720							
GRAND TOTAL							54.423			6,138	840	61.38	2,800	29,247	13,279	15,394	26,612	27,012	4,305	130,806	42	38	24.72	1.00	400

PROJECT NO.		SHEET NO.	TOTAL NO.
11CR.10861.20, 11CR.10971.20 11CR.10991.20, ETC.		20	

THERMOPLASTIC AND PAINT QUANTITIES

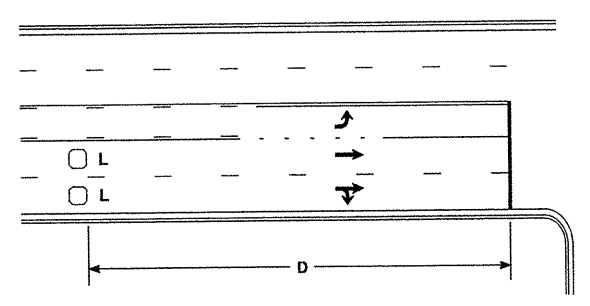
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	LENGTH	WIDTH	4810000000-E		4815000000-E		4820000000-E		4830000000-E	4835000000-E	4840000000-N			4845000000-N				4900000000-N	4905000000-N			
							4" WHITE PAINT LF	4" YELLOW PAINT LF	6" WHITE PAINT LF	6" YELLOW PAINT LF	8" WHITE PAINT LF	8" YELLOW PAINT LF	16" WHITE PAINT LF	24" WHITE PAINT LF	PAINT MSG ONLY EA	PAINT MSG RXR EA	PAINT MSG SCHOOL EA	PAINT RT ARROW EA	PAINT LT ARROW EA	PAINT STR & RT ARROW EA	PAINT STR ARROW EA	PAINT MERGE ARROW EA	PAINT SYM-SHARKS TEETH EA	CRYSTAL & RED MARKERS EA	SNOW PLOWABLE MARKERS EA	
11CR.10861.20	Surry	1	NC 104	FROM NC 103 TO MT. AIRY CITY LIMITS	2.12	36	52,776	44,775					100	300	24	4	12	4	67	7				180		
		2	NC 104	FROM MT. AIRY CITY LIMITS TO SR 1708	0.37	24	7,816	7,816																	24	
		3	NC 104	FROM SR 1708 TO VIRGINIA STATE LINE	2.36	18	49,843	49,843																	156	
		4	NC 89	FROM SR 1787 TO STOKES COUNTY LINE	3.32	18	70,118	70,118																	219	
		5	US 601 BUSINESS	FROM US 601 TO PAVEMENT CHANGE AT SR 2266	0.31	20	6,547	6,547																		20
		6	US 601 BUSINESS	FROM PAVEMENT CHANGE AT SURRY CENTRAL HIGH SCHOOL TO SOUTH CRUTCHFIELD STREET	0.55	36	11,580	11,580							50			6	8	19						109
		7	US 601 BUSINESS	FROM SOUTH CRUTCHFIELD STREET TO WEST WOLTZ STREET	0.65	36	1,000	13,728							140					20	4					86
		8	US 601 BUSINESS	FROM WEST WOLTZ STREET TO DOBSON CITY LIMITS	0.54	36	11,405	22,810												16						71
		9	US 601 BUSINESS	FROM DOBSON CITY LIMITS TO US 601	1.75	20	36,960	36,960																		116
TOTAL FOR PROJ NO. 11CR.10861.20					11.97		248,045	264,177					100	490	24	4	18	12	122	11				981		
							512,222								46			145								
11CR.10971.20	Wilkes	10	US 421 SBL	FROM NC 115 TO END OF ON RAMP AT SR 2433	5.047	32			66,625	53,300	1,720														440	
		11	US 421 SBL OFF RAMP (EXIT 277)	FROM US 421 SBL TO SR 2433	0.227	22	1,900	1,900	1,200		1,200								1	1		1				
		12	US 421 SBL ON RAMP (EXIT 277)	FROM SR 2433 TO US 421 SBL	0.142	22	1,440	1,440	2,300		500												3			
		13	NC 18	FROM SR 1722 TO SR 1728	4.972	20	105,000	95,000																		438
TOTAL FOR PROJ NO. 11CR.10971.20					10.388		108,340	98,440	70,125	53,300	3,420							1	1		1	3			878	
							206,680		123,425		3,420							6								
11CR.10991.20	Yadkin	14	US 421 NBL	FROM US 601 TO 500' NORTH OF SOUTH DEEP CREEK BRIDGE	3.67	42			38,755	38,755	1,800														260	
		15	US 421 NBL ON RAMP (EXIT 257)	FROM US 601 TO US 421 NBL	0.41	24			4,330	4,330	600															
		16	US 421 NBL OFF RAMP (EXIT 259)	FROM US 421 NBL TO SR 1141	0.31	24			3,274	3,274	640								2	2					14	
		17	US 421 NBL ON RAMP (EXIT 259)	FROM SR 1141 TO US 421 NBL	0.45	24			4,752	4,752	600												3			
		18	US 421 SBL	FROM US 601 TO 500' NORTH OF SOUTH DEEP CREEK BRIDGE	3.67	42			38,755	38,755	1,800															260
		19	US 421 SBL OFF RAMP (EXIT 257)	FROM US 421 SBL TO US 601	0.23	24			2,429	2,429	640								1	1						14
		20	US 421 SBL ON RAMP (EXIT 259)	SR 1141 TO US 421 SBL	0.44	24			4,646	4,646	600												3			
21	US 421 SBL OFF RAMP (EXIT 259)	FROM US 421 SBL TO SR 1141	0.33	24			3,485	3,485	640									2	2					14		
TOTAL FOR PROJ NO. 11CR.10991.20					9.51				100,426	100,426	7,320							5	5		9		42	520		
							200,852		7,320									19								

PROJECT NO.		SHEET NO.	TOTAL NO.
11CR.10861.20, 11CR.10971.20 11CR.10991.20, ETC.		21	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT	COUNTY	MAP	ROUTE	DESCRIPTION	LENGTH	WIDTH	4810000000-E		4815000000-E		4820000000-E		4830000000-E	4835000000-E	4840000000-N			4845000000-N				4900000000-N	4905000000-N			
							4" WHITE PAINT	4" YELLOW PAINT	6" WHITE PAINT	6" YELLOW PAINT	8" WHITE PAINT	8" YELLOW PAINT	16" WHITE PAINT	24" WHITE PAINT	PAINT MSG ONLY	PAINT MSG RXR	PAINT MSG SCHOOL	PAINT RT ARROW	PAINT LT ARROW	PAINT STR & RT ARROW	PAINT STR ARROW	PAINT MERGE ARROW	PAINT SYM-SHARKS TEETH	CRYSTAL & RED MARKERS	SNOW PLOWABLE MARKERS	
11CR.20861.20	Surry	22	SR 1003	FROM SR 2019 TO NC 268	3.85	20	81,312	81,312															254			
			23	SR 2258	FROM SR 2218 TO SR 1356	1.57	18	33,158	33,158															104		
			24	SR 1708	FROM SR 1701 TO SR 1952	0.89	18	18,797	18,797																59	
			TOTAL FOR PROJ NO. 11CR.20861.20					6.31		133,267	133,267															417
							266,534																			
11CR.20971.20	Wilkes	25	SR 2139	FROM SR 1966 TO EOM	0.572	24	12,081	12,081																136		
			26	SR 1717	FROM NC 18 TO END 18' PAVEMENT @ BRIDGE	1.03	18	21,760	21,760																88	
			27	SR 1717	FROM END OF 18' PAVEMENT @ BRIDGE TO END 22' PAVEMENT	0.663	22	14,000	14,000																	65
			28	SR 1717	FROM END 22' PAVEMENT TO SR 1703	0.492	18	10,391	10,391																	170
			29	SR 1716	FROM SR 1703 TO 400' EAST OF ROUNDABOUT AND INCLUDING ROUNDABOUT AND TO PAVEMENT JOINTS ON SR 1716 AND SR 1707	0.89	18	21,600	22,680				900		478			12		3		3		30		188
			30	SR 1713	FROM SR 1716 TO SR 1002	1.428	18	30,160	30,160				900		478			12		3		3		30		647
TOTAL FOR PROJ NO. 11CR.20971.20					5.075		109,992	111,072			900		478		12		3		3		30		647			
							221,064				900		12			36										
11CR.20991.20	Yadkin	31	SR 1001	FROM 250' EAST OF SR 1710 TO FORSYTH COUNTY LINE	3.78	18	79,834	79,834																249		
			32	SR 1583	FROM SR 1585 TO SR 1570	0.64	18	13,517	13,517																42	
			33	SR 1570	FROM SR 1583 TO NC 67	0.9	18	19,008	19,008																59	
			34	SR 1300	FROM SR 1304 TO SR 1450	2.95	20	62,304	62,304																	195
			35	SR 1331	FROM SR 1361 TO 100' WEST OF SR 1352	2.9	20	61,248	61,248																	191
TOTAL FOR PROJ NO. 11CR.20991.20					11.17		235,911	235,911																736		
							471,822																			
GRAND TOTAL					54,423		835,555	842,767	170,551	153,726	10,740	900	100	968	24	4	30	18	131	11	4	12	30	42	4,179	
							1,678,322		324,277		11,640		58			206										

High Speed Detection [≥40 mph (64 km/hr)]

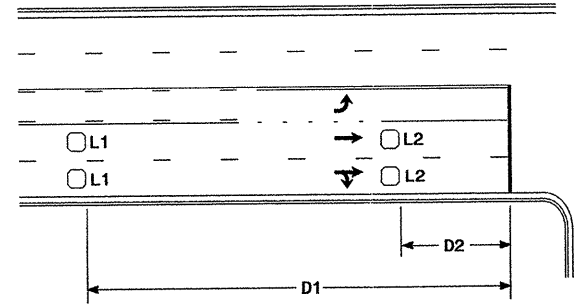


Speed Limit mph (km/hr)	D ft (m)
40 (64)	250 (75)
45 (72)	300 (90)
50 (80)	355 (110)
55 (88)	420 (130)

L = 6ft X 6ft (1.8m X 1.8m)
Wired in series for TS1
Controllers
Wired separately for TS2,
170, and 2070L Controllers

Volume Density Operation

OR

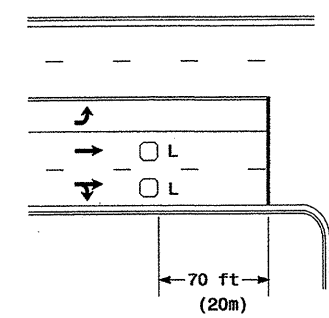


Speed Limit mph (km/hr)	D1 ft (m)	D2 ft (m)
40 (64)	250 (75)	80 (25)
45 (72)	300 (90)	90 (27)
50 (80)	355 (110)	100 (30)
55 (88)	420 (130)	110 (35)

L1 = 6ft X 6ft
(1.8m X 1.8m)
Wired in series
L2 = 6ft X 6ft
(1.8m X 1.8m)
Wired in series

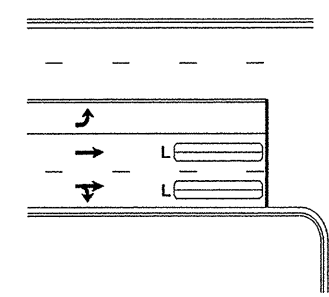
"Stretch" Operation

Low Speed Detection [≤35 mph (56 km/hr)]



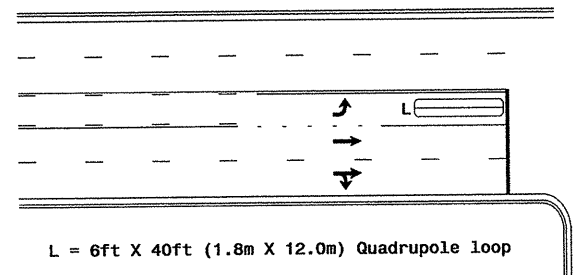
L = 6ft X 6ft (1.8m X 1.8m)
Wired in series

OR



L = 6ft X 40ft (1.8m X 12.0m)
Quadrupole loop, wired separately

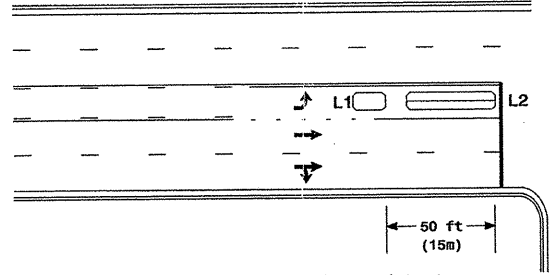
Left Turn Lane Detection



L = 6ft X 40ft (1.8m X 12.0m) Quadrupole loop

Presence Loop Detection

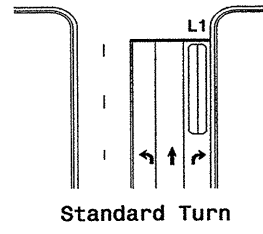
OR



L1 = 6ft X 15ft (1.8m X 4.6m) Queue detector
L2 = 6ft X 40ft (1.8m X 12.0m) Quadrupole loop

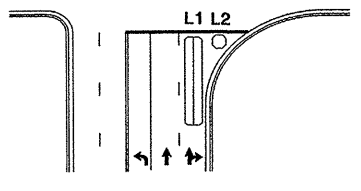
Queue Loop Detection

Right Turn Lane Detection

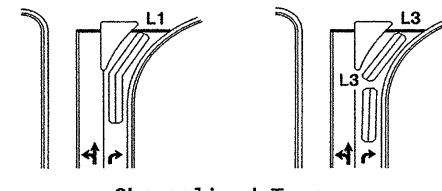


Standard Turn

L1 = 6ft X 40ft (1.8m X 12.0m) Quadrupole loop
L2 = 6ft X 6ft (1.8m X 1.8m) [Minimum] Presence loop
Wired separately
L3 = 6ft X 20ft (1.8m X 6.0m) Quadrupole loop
Wired in series

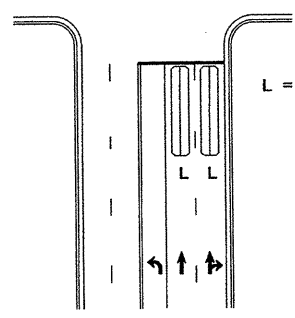


Wide Radius Turn



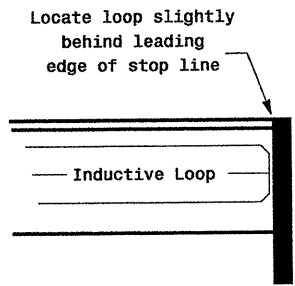
Channelized Turn

Side Street Detection



L = 6ft X 40ft (1.8m X 12.0m)
Quadrupole loop
Wired to separate
detectors/channels

Presence Loop Placement at Stop Lines



Note:
Loop may be located in advance
of stop line when stop line is
greater than 15' (4.5m) from edge
of intersecting roadway; or, when
loop detects a permissive or
protected/permissive left turn.

Recommended Number of Turns

Single 6' X 6' (1.8m X 1.8m)
loop (wired separately):

Length of Lead-in ft (m)	Number of Turns
< 250 (75)	3
250-375 (75-115)	4
375-525 (115-160)	5
> 525 (160)	6

Quadrupole loops: Use 2-4-2 turns
6' X 15' (1.8m X 4.6m) Loops:
Lead-in < 150' (45 m), use 2 turns
Lead-in > 150' (45 m), use 3 turns

	<p>Typical Loop Locations</p>		
	<p>PLAN DATE: June 2006</p> <p>PREPARED BY: P. L. Alexander</p> <p>SCALE: N/A</p>	<p>REVIEWED BY:</p> <p>REVISIONS</p> <p>INIT. DATE</p>	

10-055-2006 11.02
21-4115 Signal and Turn Inhibit Loop 2006.dgn
P. L. Alexander