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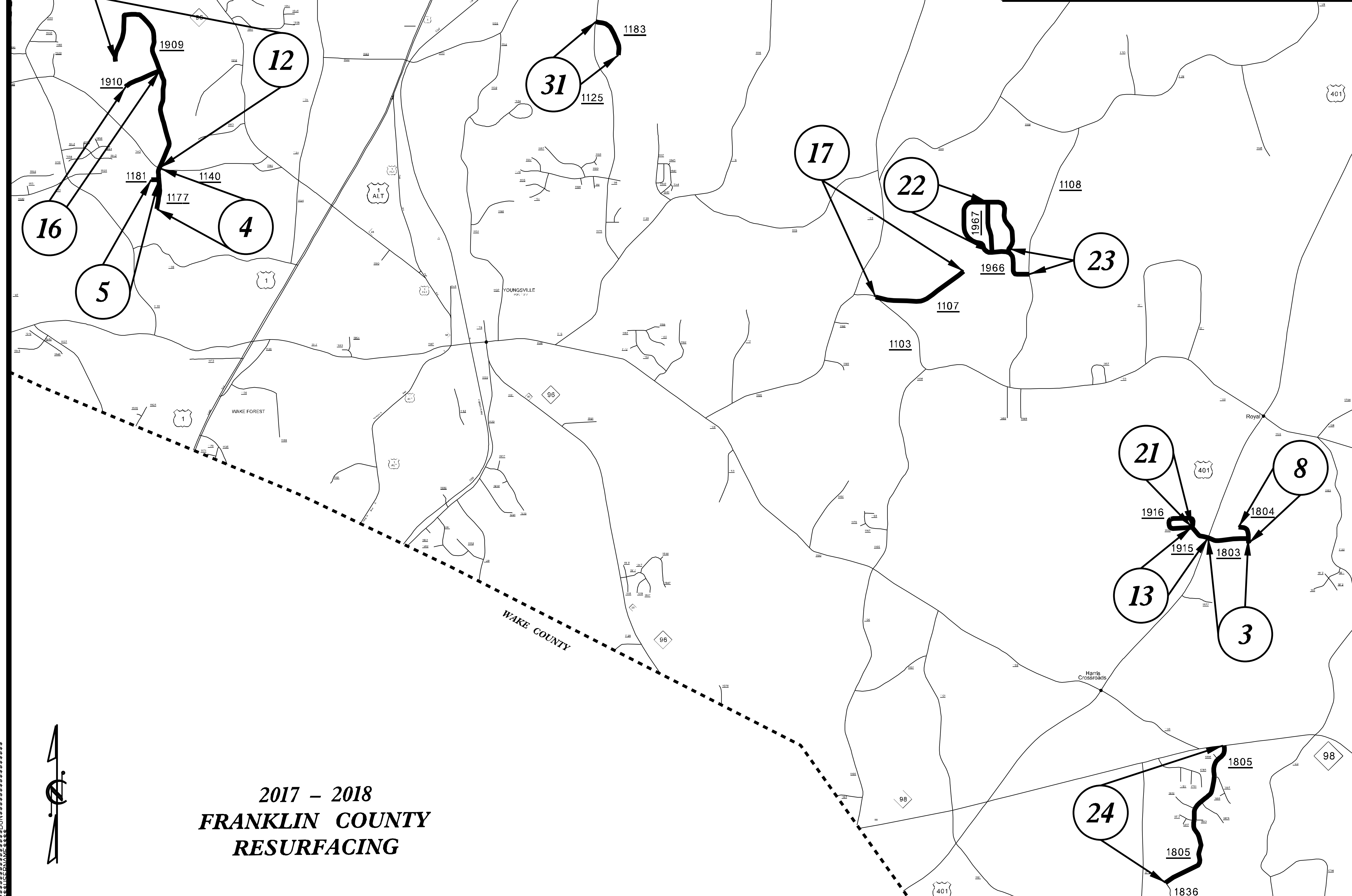
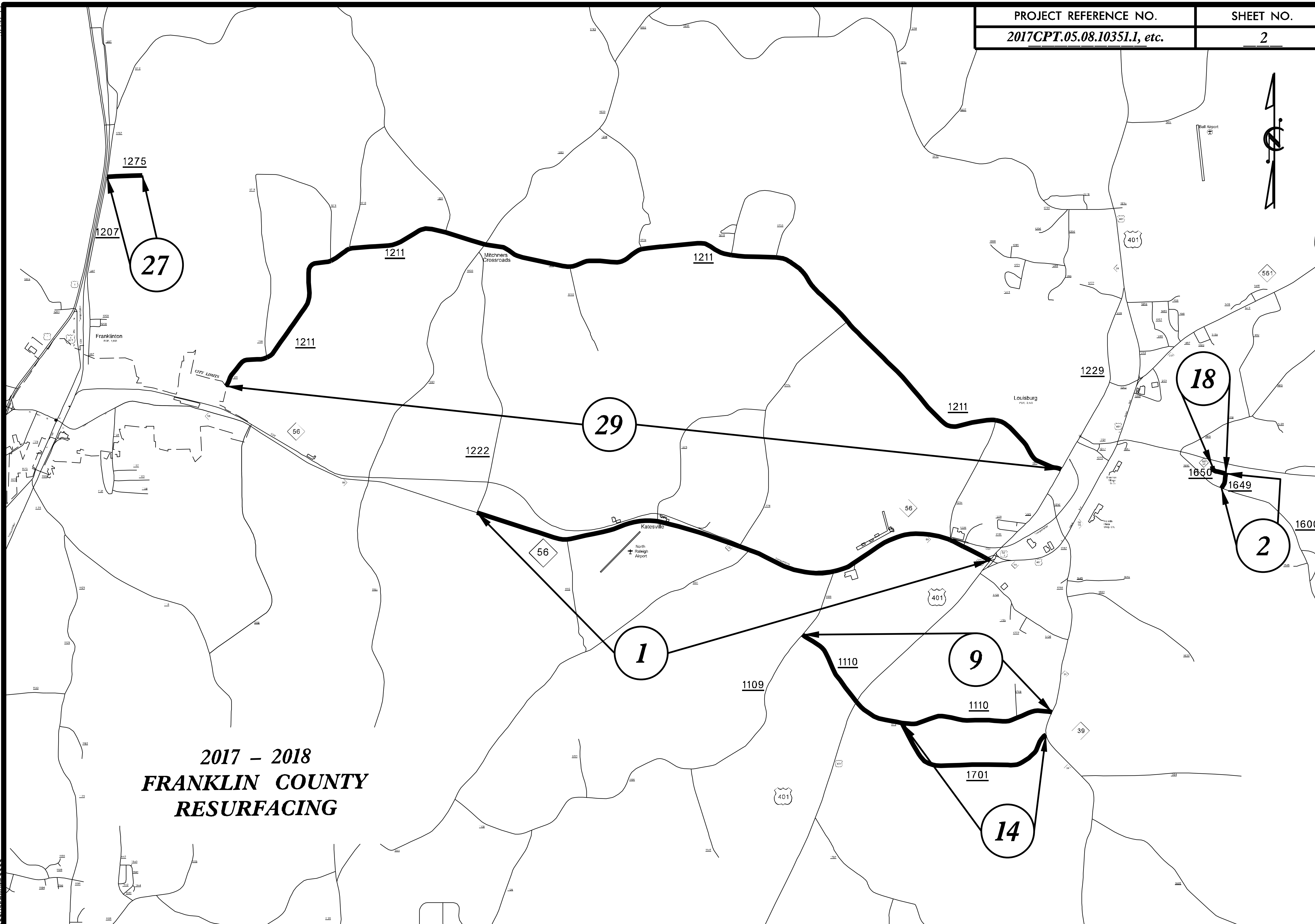
PROJECT REFERENCE NO.	SHEET NO.
2017CPT.05.08.10351.1, etc.	1



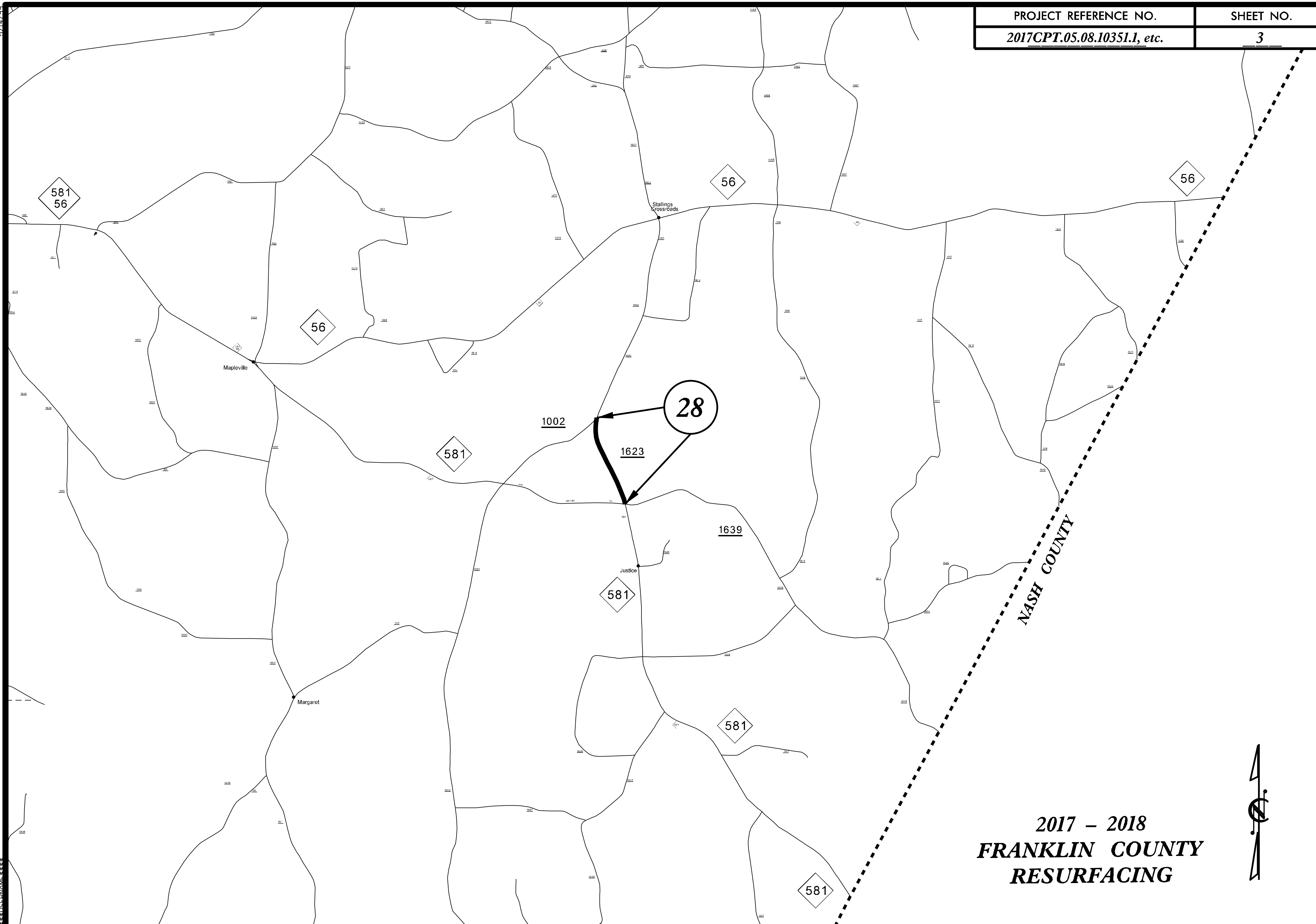
2017 – 2018

FRANKLIN COUNTY RESURFACING

PROJECT REFERENCE NO.	SHEET NO.
2017CPT.05.08.10351.1, etc.	2



PROJECT REFERENCE NO.	SHEET NO.
2017CPT.05.08.10351.1, etc.	3



2017 – 2018
FRANKLIN COUNTY
RESURFACING

PROJECT REFERENCE NO.	SHEET NO.
2017CPT.05.08.10351.1, etc.	4

2017 – 2018
FRANKLIN COUNTY
RESURFACING

WAKE COUNTY

NASH COUNTY

Pilot

11 20 30 6 15 7 19 10 26 25

1779 1792 1741 1737 1103 1001 1770 1738 1802 1730 1799 1744 1742 1746 1745 1771 1743 1757 1759 1747 1748 1780 1781 1763 1773 1769 1797 1801 1784 1785 1828 1829 1765 1766 1775 1776 1777 1774 1749

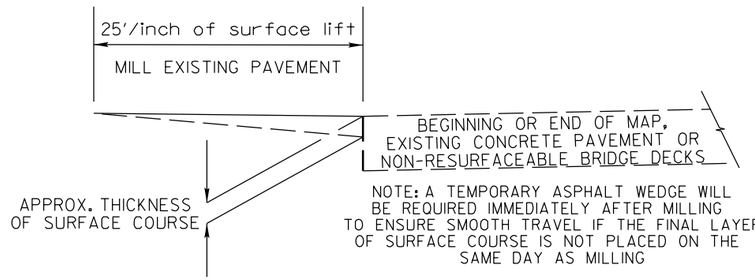
39 64

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
2017CPT.05.08.10351.1, etc.	1

PAVEMENT SCHEDULE

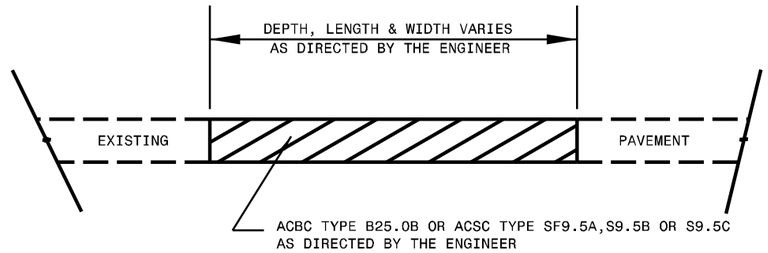
C1	1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
C2	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
S	SHOULDER GRADING ASB REQUIRED (EXCEPT IN RESIDENTIAL AREAS)
U	EXISTING PAVEMENT
V1	0"-1¼" MILLING NEW ASPHALT TO BE PAVED BACK FLUSH
V2	0"-1½" MILLING NEW ASPHALT TO BE PAVED BACK FLUSH



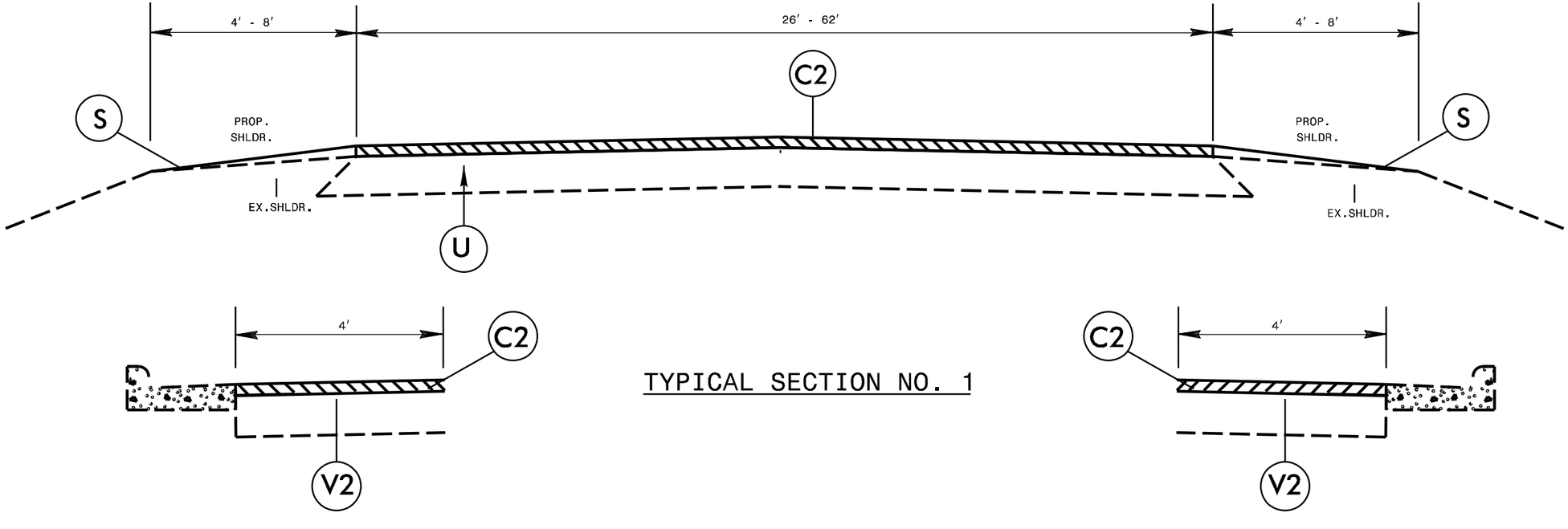
INCIDENTAL MILLING

NOTES

ALL UNPAVED S.R. ROADS TO BE RESURFACED 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.
BRIDGES TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.



PATCHING EXISTING PAVEMENT
MILLING (IF REQUIRED BY TYPICAL) TO BE PERFORMED PRIOR TO PATCHING

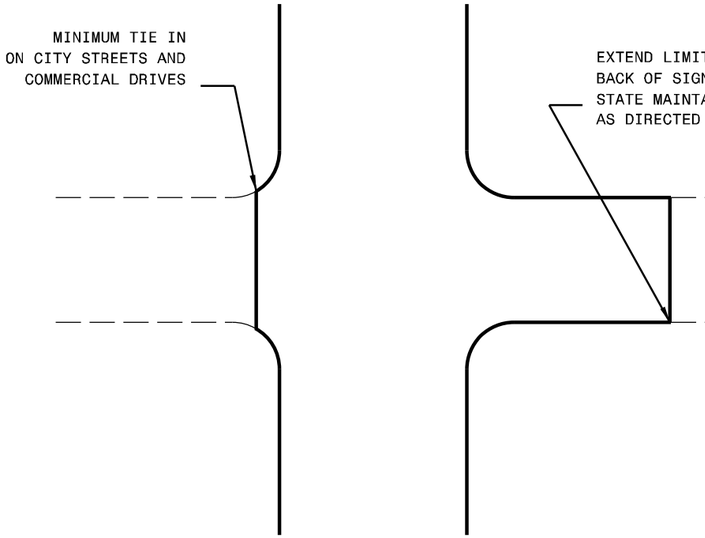


TYPICAL SECTION NO. 1

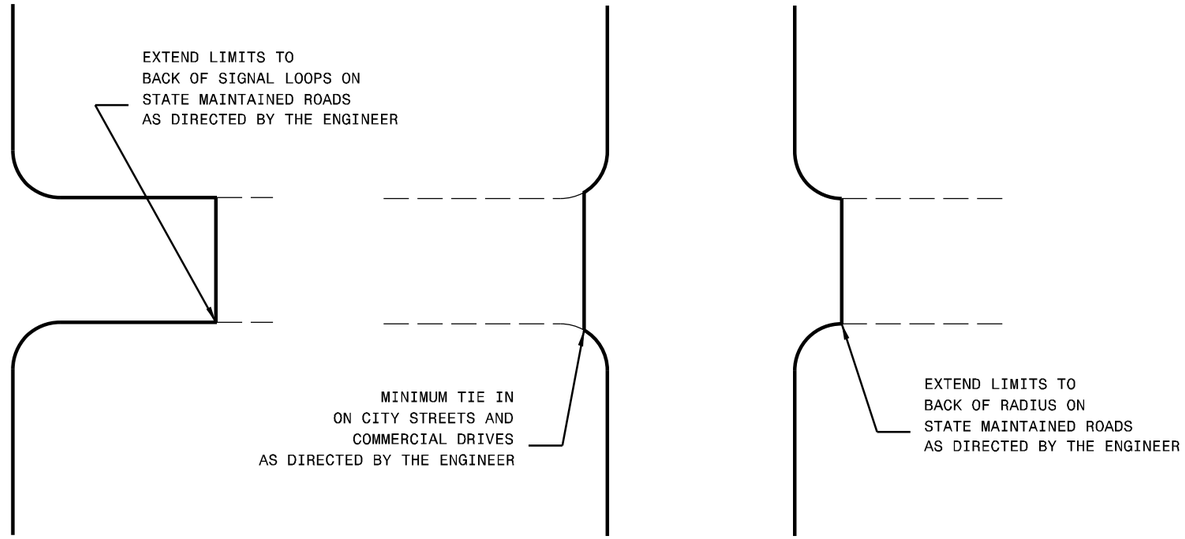
PROJECT REFERENCE NO.	SHEET NO.
2017CPT.05.08.10351.1, etc.	2

PAVEMENT SCHEDULE

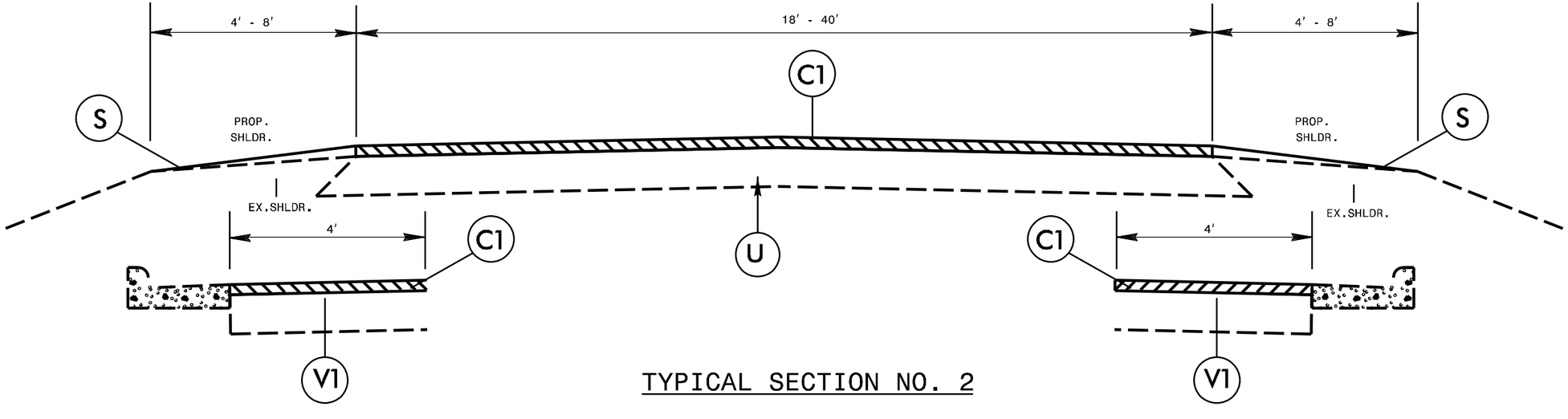
C1	1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
C2	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
S	SHOULDER GRADING ASB REQUIRED (EXCEPT IN RESIDENTIAL AREAS)
U	EXISTING PAVEMENT
V1	0"-1¼" MILLING NEW ASPHALT TO BE PAVED BACK FLUSH
V2	0"-1½" MILLING NEW ASPHALT TO BE PAVED BACK FLUSH



DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES



DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES



TYPICAL SECTION NO. 2

PROJECT NO.	SHEET NO.	TOTAL NO.
2017CPT.05.08.10351.1, etc.		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	BORROW CY	AGGREGATE SHOULDER BORROW (ASB) TON	SHOULDER GRADING SMI	INCIDENTAL STONE BASE TONS	0" TO 1.5" MILLING SY	0" TO 1.25" MILLING SY	INCIDENTAL MILLING SY	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, SF9.5A TON	ASPHALT BINDER FOR PLANT MIX TON	PATCHING EXISTING PAVEMENT TONS	ADJUST DROP INLET EA	ADJUST MANHOLES EA	ADJUST METER OR VALVE BOX EA	TEMPORARY SILT FENCE LF	WATTLE LF	SEED & MULCHING AC	INDUCTIVE LOOP LF
2017CPT.05.08.10351.1	Franklin	1	NC 56	SR 1222-WILL MITCHINER RD - TO US 401	1	2		NO	YES	4.72	26-62	233	672	9.33	58	260		3,506	6,759		406	25	1	7	16	170	430	1.70	2,688
TOTAL FOR MAP NO. 1										**4.72**		**233**	**672**	**9.33**	**58**	**260**		**3,506**	**6,759**		**406**	**25**	**1**	**7**	**16**	**170**	**430**	**1.70**	**2,688**
TOTAL FOR PROJ NO. 2017CPT.05.08.10351.1										**4.72**		**233**	**672**	**9.33**	**58**	**260**		**3,506**	**6,759**		**406**	**25**	**1**	**7**	**16**	**170**	**430**	**1.70**	**2,688**
2017CPT.05.08.20351.1	Franklin	2	SR 1649-RIVERWOOD DRIVE	SR1600-EAST RIVER ROAD TO SR 1650-TAR RIVER DRIVE	2	2		NO	NO	0.12	20	26		0.26	7			92		110	7	50				19	50	0.19	
TOTAL FOR MAP NO. 2										**0.12**		**26**		**0.26**	**7**			**92**		**110**	**7**	**50**				**19**	**50**	**0.19**	
2017CPT.05.08.20351.1	Franklin	3	SR 1803-THISTLE DRIVE	US 401 TO SR 1804-THORNWOOD LANE	2	2	2WU	NO	NO	0.32	19	64		0.64	16			77		266	18	25				47	120	0.47	
TOTAL FOR MAP NO. 3										**0.32**		**64**		**0.64**	**16**			**77**		**266**	**18**	**25**				**47**	**120**	**0.47**	
2017CPT.05.08.20351.1	Franklin	4	SR 1177-NOTTINGHAM COURT	SR 1140-JOHN MITCHELL ROAD TO CUL DE SAC	2	2	2WU	NO	NO	0.34	19	70		0.70	18			101		313	21	350			1	51	130	0.51	
TOTAL FOR MAP NO. 4										**0.34**		**70**		**0.70**	**18**			**101**		**313**	**21**	**350**			**1**	**51**	**130**	**0.51**	
2017CPT.05.08.20351.1	Franklin	5	SR 1181-KNIGHTS WAY	SR 1177-NOTTINGHAM WAY TO CUL DE SAC	2	2	2WU	NO	NO	0.06	19	12		0.12	3					88	6	100				9	30	0.09	
TOTAL FOR MAP NO. 5										**0.06**		**12**		**0.12**	**3**					**88**	**6**	**100**				**9**	**30**	**0.09**	
2017CPT.05.08.20351.1	Franklin	6	SR 1775-LEWIS FARM ROAD	SR 1774-LAKESIDE FARMS TO CUL DE SAC	2	2	2WU	NO	NO	0.11	18	22		0.22	6					128	9	50				16	40	0.16	
TOTAL FOR MAP NO. 6										**0.11**		**22**		**0.22**	**6**					**128**	**9**	**50**				**16**	**40**	**0.16**	
2017CPT.05.08.20351.1	Franklin	7	SR 1777-HOMESTEAD PLACE	SR 1776-LOOKOUT POINT TO CUL DE SAC	2	2	2WU	NO	NO	0.03	18	6		0.06	2					66	4	25				4	20	0.04	
TOTAL FOR MAP NO. 7										**0.03**		**6**		**0.06**	**2**					**66**	**4**	**25**				**4**	**20**	**0.04**	
2017CPT.05.08.20351.1	Franklin	8	SR 1804-THORNWOOD LANE	END MAINTENANCE TO CUL DE SAC	2	2	2WU	NO	NO	0.19	19	38		0.38	10					154	10	25				28	70	0.28	
TOTAL FOR MAP NO. 8										**0.19**		**38**		**0.38**	**10**					**154**	**10**	**25**				**28**	**70**	**0.28**	
2017CPT.05.08.20351.1	Franklin	9	SR 1110-EF COTTRELL ROAD	NC39 TO SR 1109-TIMBERLAKE ROAD	2	2	2WU	NO	NO	2.45	20	245	235	4.90	61			423		2,099	141	200				178	450	1.78	
TOTAL FOR MAP NO. 9										**2.45**		**245**	**235**	**4.90**	**61**			**423**		**2,099**	**141**	**200**				**178**	**450**	**1.78**	
2017CPT.05.08.20351.1	Franklin	10	SR 1776-LOOKOUT POINT	SR 1774-LAKESIDE FARM TO CUL DE SAC	2	2	2WU	NO	NO	0.12	18	24		0.24	6					107	7	25				17	50	0.18	
TOTAL FOR MAP NO. 10										**0.12**		**24**		**0.24**	**6**					**107**	**7**	**25**				**17**	**50**	**0.18**	
2017CPT.05.08.20351.1	Franklin	11	SR 1779-MEADOW LANE	NC 39 TO CUL DE SAC	2	2	2WU	NO	NO	0.12	19	24		0.24	6			98		118	8	25				17	50	0.18	
TOTAL FOR MAP NO. 11										**0.12**		**24**		**0.24**	**6**			**98**		**118**	**8**	**25**				**17**	**50**	**0.18**	
2017CPT.05.08.20351.1	Franklin	12	SR 1909-NORTH RALEIGH FARMS RD	SR 1140-JOHN MITCHELL ROAD TO END PAVEMENT	2	2	2WU	NO	NO	1.89	20	382		3.82	96			92		1,666	112	100				278	700	2.78	
TOTAL FOR MAP NO. 12										**1.89**		**382**		**3.82**	**96**			**92**		**1,666**	**112**	**100**				**278**	**700**	**2.78**	
2017CPT.05.08.20351.1	Franklin	13	SR 1915-CASTLE DRIVE	US 401 TO SR 1916-BARON CIRCLE	2	2	2WU	NO	NO	0.17	30						798	105		217	15	25							
TOTAL FOR MAP NO. 13										**0.17**							**798**	**105**		**217**	**15**	**25**							
2017CPT.05.08.20351.1	Franklin	14	SR 1701-OTIS BURROWS ROAD	N 39 TO SR 1110-EF COTTRELL ROAD	2	2	2WU	NO	NO	1.55	20	77	221	3.06	19			102		1,204	81	100				56	140	0.56	
TOTAL FOR MAP NO. 14										**1.55**		**77**	**221**	**3.06**	**19**			**102**		**1,204**	**81**	**100**				**56**	**140**	**0.56**	
2017CPT.05.08.20351.1	Franklin	15	SR 1774-LAKESIDE FARM ROAD	NC 39 TO CUL DE SAC	2	2	2WU	NO	NO	0.25	18	50		0.50	13			94		211	14	125				36	100	0.36	
TOTAL FOR MAP NO. 15										**0.25**		**50**		**0.50**	**13**			**94**		**211**	**14**	**125**				**36**	**100**	**0.36**	
2017CPT.05.08.20351.1	Franklin	16	SR 1910- JASON WAY	SR 1909-NORTH RALEIGH FARMS TO CUL DE SAC	2	2	2WU	NO	NO	0.32	20	64		0.64	16					318	21	25				47	120	0.47	
TOTAL FOR MAP NO. 16										**0.32**		**64**		**0.64**	**16**					**318**	**21**	**25**				**47**	**120**	**0.47**	
2017CPT.05.08.20351.1	Franklin	17	SR 1107-WIGGINS ROAD	SR 1103-PILOT RILEY ROAD TO END MAINTENANCE	2	2	2WU	NO	NO	0.82	19	156		1.56	39			73		663	44	175				113	290	1.14	
TOTAL FOR MAP NO. 17										**0.82**		**156**		**1.56**	**39**			**73**		**663**	**44**	**175**				**113**	**290**	**1.14**	
2017CPT.05.08.20351.1	Franklin	18	SR 1650-TAR RIVER AVE	SR 1649- RIVERWOOD DRIVE TO END OF PAVEMENT	2	2	2WU	NO	NO	0.12	19	24		0.24	6			69		92	6	50			1	17	50	0.18	
TOTAL FOR MAP NO. 18										**0.12**		**24**		**0.24**	**6**			**69**		**92**	**6**	**50**			**1**	**17**	**50**	**0.18**	
2017CPT.05.08.20351.1	Franklin	19	SR 1785-ROSE LANE	SR 1784-DELANO COURT TO CUL DE SAC	2	2	2WU	NO	NO	0.11	18	24		0.24	6			140		84	6	25				17	50	0.18	
TOTAL FOR MAP NO. 19										**0.11**		**24**		**0.24**	**6**			**140**		**84**	**6**	**25**				**17**	**50**	**0.18**	
2017CPT.05.08.20351.1	Franklin	20	SR 1797-MARY AVENUE	SR 1784-DELANO COURT TO CUL DE SAC	2	2	2WU	NO	NO	0.1	18	22		0.22	6			63		98	7					16	40	0.16	
TOTAL FOR MAP NO. 20										**0.1**		**22**		**0.22**	**6**			**63**		**98**	**7**					**16**	**40**	**0.16**	
2017CPT.05.08.20351.1	Franklin	21	SR 1916-BARON CIRCLE	SR 1915-CASTLE DRIVE TO SR 1915-CASTLE DRIVE	2	2	2WU	NO	NO	0.51	20	102		1.02	26					434	29	50				74	190	0.74	
TOTAL FOR MAP NO. 21										**0.51**		**102**		**1.02**	**26**					**434**	**29**	**50**				**74**	**190**	**0.74**	
2017CPT.05.08.20351.1	Franklin	22	SR 1967-LUMBER JACK LANE	SR 1966- TIMBERLANDS DRIVE TO SR 1966-TIMBERLANDS DRIVE	2	2	2WU	NO	NO	0.42	20	84		0.84	21					366	24	25				61	160	0.61	
TOTAL FOR MAP NO. 22										**0.42**		**84**		**0.84**	**21**					**366**	**24**	**25**				**61**	**160**	**0.61**	
2017CPT.05.08.20351.1	Franklin	23	SR 1966-TIMBERLANDS DRIVE	SR 1108-HART ROAD TO SR 1966 TIMBERLANDS ROAD	2	2	2WU	NO	NO	1.75	20	350		3.50	88			75		1,490	100	25				255	640	2.55	
TOTAL FOR MAP NO. 23										**1.75**		**350**		**3.50**	**88**			**75**		**1,490**	**100**	**25**				**255**	**640**	**2.55**	
2017CPT.05.08.20351.1	Franklin	24	SR 1805-SPENCERS GATE DRIVE	NC 98 TO SR 1836-SWEETGRASS LANE	2	2	2WU	NO	NO	1.41	19-36	282		2.82	71			1,009		1,356	91	100			6	205	520	2.05	
TOTAL FOR MAP NO. 24										**1.41**		**282**		**2.82**	**71**			**1,009**		**1,356**	**91**	**100**			**6**	**205**	**520**	**2.05**	
2017CPT.05.08.20351.1	Franklin	25	SR 1828-VALENTINE STREET	SR 1784-HERBERT DRIVE TO CUL DE SAC	2	2	2WU	NO	NO	0.22	18	46		0.46	12			70		169	11	75				33	90	0.34	
TOTAL FOR MAP NO. 25										**0.22**		**46**		**0.46**	**12**			**70**		**169**	**11**	**75**				**33**	**90**	**0.34**	
2017CPT.05.08.20351.1	Franklin	26	SR 1829-EVELYN CIRCLE	SR 1828-VALENTINE STREET TO CUL DE SAC	2	2	2WU	NO	NO	0.08	18	16		0.16	4					85	6	25				12	30	0.12	

PROJECT NO.	SHEET NO.	TOTAL NO.
2017CPT.05.08.10351.1, etc.		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	BORROW CY	AGGREGATE SHOULDER BORROW (ASB) TON	SHOULDER GRADING SMI	INCIDENTAL STONE BASE TONS	0" TO 1.5" MILLING SY	0" TO 1.25" MILLING SY	INCIDENTAL MILLING SY	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, SF9.5A TON	ASPHALT BINDER FOR PLANT MIX TON	PATCHING EXISTING PAVEMENT TONS	ADJUST DROP INLET EA	ADJUST MANHOLES EA	ADJUST METER OR VALVE BOX EA	TEMPORARY SILT FENCE LF	WATTLE LF	SEED & MULCHING AC	INDUCTIVE LOOP LF
TOTAL FOR MAP NO. 26										**0.08**		**16**		**0.16**	**4**					**85**	**6**	**25**				**12**	**30**	**0.12**	
2017CPT.05.08.20351.1	Franklin	27	SR 1275-MISTY WAY	SR 1207-WINSTON STREET TO END MAINTENANCE	2	2	2WU	NO	NO	0.3	20	60		0.60	15			69		270	18	300				44	110	0.44	
TOTAL FOR MAP NO. 27										**0.3**		**60**		**0.60**	**15**			**69**		**270**	**18**	**300**				**44**	**110**	**0.44**	
2017CPT.05.08.20351.1	Franklin	28	SR 1623-PREACHER BALL ROAD	SR 1002-TRINITY CHURCH ROAD TO NC 581	2	2	2WU	NO	NO	0.75	21	38	108	1.50	9			125		670	45	275				27	70	0.27	
TOTAL FOR MAP NO. 28										**0.75**		**38**	**108**	**1.50**	**9**			**125**		**670**	**45**	**275**				**27**	**70**	**0.27**	
2017CPT.05.08.20351.1	Franklin	29	SR 1211-WEST RIVER ROAD	FRANKLINTON CITY LIMITS TO SR 1229-SOUTH MAIN STREET	2	2	2WU	NO	YES	8.8	20-40	439	1,266	17.56	110		74	375		7,110	476	100	2	5	1	319	800	3.19	282
TOTAL FOR MAP NO. 29										**8.8**		**439**	**1,266**	**17.56**	**110**		**74**	**375**		**7,110**	**476**	**100**	**2**	**5**	**1**	**319**	**800**	**3.19**	**282**
2017CPT.05.08.20351.1	Franklin	30	SR 1801-DELANO COURT	SR 1784-HERBERT DRIVE TO CUL DE SAC	2	2	2WU	NO	NO	0.05	18	12		0.12	3			69		59	4					9	30	0.09	
TOTAL FOR MAP NO. 30										**0.05**		**12**		**0.12**	**3**			**69**		**59**	**4**					**9**	**30**	**0.09**	
2017CPT.05.08.20351.1	Franklin	31	SR 1183-GREGORY MANOR	SR 1125-HICKS ROAD TO CUL DE SAC	2	2	2WU	NO	NO	0.38	20	76		0.76	19			103		365	24	475				55	140	0.55	
TOTAL FOR MAP NO. 31										**0.38**		**76**		**0.76**	**19**			**103**		**365**	**24**	**475**				**55**	**140**	**0.55**	
TOTAL FOR PROJ NO. 2017CPT.05.08.20351.1										**23.86**		**2,835**	**1,830**	**47.38**	**714**		**872**	**3,424**		**20,376**	**1,365**	**2,950**	**2**	**5**	**9**	**2,060**	**5,280**	**20.66**	**282**
GRAND TOTAL										**28.58**		**3,068**	**2,502**	**56.71**	**772**	**260**	**872**	**6,930**	**6,759**	**20,376**	**1,771**	**2,975**	**3**	**12**	**25**	**2,230**	**5,710**	**22.36**	**2,970**

PROJECT NO.	SHEET NO.	TOTAL NO.
2017CPT.05.08.10351.1, etc.		

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	4457000000-N TEMPORARY TRAFFIC CONTROL LS	4685000000-E 4" X 90 M WHITE THERMO LF	4686000000-E 4" X 120 M YELLOW THERMO LF	4686000000-E 4" X 120 M WHITE THERMO LF	4697000000-E 8" X 120 M YELLOW THERMO LF	4710000000-E 24" X 120 M WHITE THERMO LF	4721000000-E THERMO MSG SCHOOL 120 M EA	4725000000-E THERMO LT ARROW 90 M EA	4725000000-E THERMO RT ARROW 90 M EA	4725000000-E THERMO STR ARROW 90 M EA	4725000000-E THERMO STR & LT ARROW 90 M EA	4905000000-N SNOW PLOWABLE MARKERS EA
2017CPT.05.08.10351.1	Franklin	1	NC 56	SR 1222-WILL MITCHINER RD - TO US 401	1	2		4.72	26-62	529	0.20	49,850	54,013		268	300		15	5	8	1	389
TOTAL FOR MAP NO. 1								**4.72**		**529**	**0.20**	**49,850**	**54,013**		**268**	**300**		**15**	**5**	**8**	**1**	**389**
TOTAL FOR PROJ NO. 2017CPT.05.08.10351.1								**4.72**		**529**	**0.20**	**49,850**	**54,013**		**268**	**300**		**15**	**5**	**8**	**1**	**389**
													54,013					**29**				
2017CPT.05.08.20351.1	Franklin	2	SR 1649-RIVERWOOD DRIVE	SR1600-EAST RIVER ROAD TO SR 1650-TAR RIVER DRIVE	2	2		0.12	20	15	0.01											
TOTAL FOR MAP NO. 2								**0.12**		**15**	**0.01**											
2017CPT.05.08.20351.1	Franklin	3	SR 1803-THISTLE DRIVE	US 401 TO SR 1804-THORNWOOD LANE	2	2	2WU	0.32	19	36	0.01											
TOTAL FOR MAP NO. 3								**0.32**		**36**	**0.01**											
2017CPT.05.08.20351.1	Franklin	4	SR 1177-NOTTINGHAM COURT	SR 1140-JOHN MITCHELL ROAD TO CUL DE SAC	2	2	2WU	0.34	19	39	0.01											
TOTAL FOR MAP NO. 4								**0.34**		**39**	**0.01**											
2017CPT.05.08.20351.1	Franklin	5	SR 1181-KNIGHTS WAY	SR 1177-NOTTINGHAM WAY TO CUL DE SAC	2	2	2WU	0.06	19	7	0.01											
TOTAL FOR MAP NO. 5								**0.06**		**7**	**0.01**											
2017CPT.05.08.20351.1	Franklin	6	SR 1775-LEWIS FARM ROAD	SR 1774-LAKESIDE FARMS TO CUL DE SAC	2	2	2WU	0.11	18	12	0.01											
TOTAL FOR MAP NO. 6								**0.11**		**12**	**0.01**											
2017CPT.05.08.20351.1	Franklin	7	SR 1777-HOMESTEAD PLACE	SR 1776-LOOKOUT POINT TO CUL DE SAC	2	2	2WU	0.03	18	3	0.01											
TOTAL FOR MAP NO. 7								**0.03**		**3**	**0.01**											
2017CPT.05.08.20351.1	Franklin	8	SR 1804-THORNWOOD LANE	END MAINTENANCE TO CUL DE SAC	2	2	2WU	0.19	19	21	0.01											
TOTAL FOR MAP NO. 8								**0.19**		**21**	**0.01**											
2017CPT.05.08.20351.1	Franklin	9	SR 1110-EF COTTRELL ROAD	NC39 TO SR 1109-TIMBERLAKE ROAD	2	2	2WU	2.45	20	274	0.08	26,362	25,872	58								
TOTAL FOR MAP NO. 9								**2.45**		**274**	**0.08**	**26,362**	**25,872**	**58**								
2017CPT.05.08.20351.1	Franklin	10	SR 1776-LOOKOUT POINT	SR 1774-LAKESIDE FARM TO CUL DE SAC	2	2	2WU	0.12	18	13	0.01											
TOTAL FOR MAP NO. 10								**0.12**		**13**	**0.01**											
2017CPT.05.08.20351.1	Franklin	11	SR 1779-MEADOW LANE	NC 39 TO CUL DE SAC	2	2	2WU	0.12	19	13	0.01											
TOTAL FOR MAP NO. 11								**0.12**		**13**	**0.01**											
2017CPT.05.08.20351.1	Franklin	12	SR 1909-NORTH RALEIGH FARMS RD	SR 1140-JOHN MITCHELL ROAD TO END PAVEMENT	2	2	2WU	1.89	20	214	0.06	20,115	20,170									
TOTAL FOR MAP NO. 12								**1.89**		**214**	**0.06**	**20,115**	**20,170**									
2017CPT.05.08.20351.1	Franklin	13	SR 1915-CASTLE DRIVE	US 401 TO SR 1916-BARON CIRCLE	2	2	2WU	0.17	30	19	0.01											
TOTAL FOR MAP NO. 13								**0.17**		**19**	**0.01**											
2017CPT.05.08.20351.1	Franklin	14	SR 1701-OTIS BURROWS ROAD	N 39 TO SR 1110-EF COTTRELL ROAD	2	2	2WU	1.55	20	171	0.05	16,157	16,157									
TOTAL FOR MAP NO. 14								**1.55**		**171**	**0.05**	**16,157**	**16,157**									
2017CPT.05.08.20351.1	Franklin	15	SR 1774-LAKESIDE FARM ROAD	NC 39 TO CUL DE SAC	2	2	2WU	0.25	18	28	0.01											
TOTAL FOR MAP NO. 15								**0.25**		**28**	**0.01**											
2017CPT.05.08.20351.1	Franklin	16	SR 1910- JASON WAY	SR 1909-NORTH RALEIGH FARMS TO CUL DE SAC	2	2	2WU	0.32	20	36	0.01											
TOTAL FOR MAP NO. 16								**0.32**		**36**	**0.01**											
2017CPT.05.08.20351.1	Franklin	17	SR 1107-WIGGINS ROAD	SR 1103-PILOT RILEY ROAD TO END MAINTENANCE	2	2	2WU	0.82	19	87	0.02	8,823	8,800									
TOTAL FOR MAP NO. 17								**0.82**		**87**	**0.02**	**8,823**	**8,800**									
2017CPT.05.08.20351.1	Franklin	18	SR 1650-TAR RIVER AVE	SR 1649- RIVERWOOD DRIVE TO END OF PAVEMENT	2	2	2WU	0.12	19	13	0.01											
TOTAL FOR MAP NO. 18								**0.12**		**13**	**0.01**											
2017CPT.05.08.20351.1	Franklin	19	SR 1785-ROSE LANE	SR 1784-DELANO COURT TO CUL DE SAC	2	2	2WU	0.11	18	13	0.01											
TOTAL FOR MAP NO. 19								**0.11**		**13**	**0.01**											
2017CPT.05.08.20351.1	Franklin	20	SR 1797-MARY AVENUE	SR 1784-DELANO COURT TO CUL DE SAC	2	2	2WU	0.1	18	12	0.01											
TOTAL FOR MAP NO. 20								**0.1**		**12**	**0.01**											

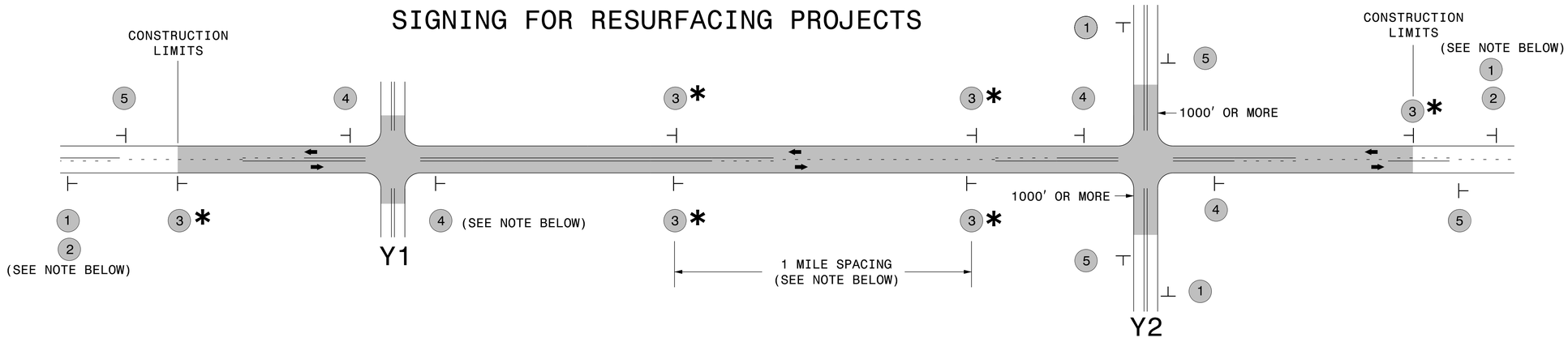
PROJECT NO.	SHEET NO.	TOTAL NO.
2017CPT.05.08.10351.1, etc.		

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	4457000000-N TEMPORARY TRAFFIC CONTROL LS	4685000000-E 4" X 90 M WHITE THERMO LF	4686000000-E 4" X 120 M YELLOW THERMO LF	4686000000-E 4" X 120 M WHITE THERMO LF	4697000000-E 8" X 120 M YELLOW THERMO LF	4710000000-E 24" X 120 M WHITE THERMO LF	4721000000-E THERMO MSG SCHOOL 120 M EA	4725000000-E THERMO LT ARROW 90 M EA	4725000000-E THERMO RT ARROW 90 M EA	4725000000-E THERMO STR ARROW 90 M EA	4725000000-E THERMO STR & LT ARROW 90 M EA	4905000000-N SNOW PLOWABLE MARKERS EA
2017CPT.05.08.20351.1	Franklin	21	SR 1916-BARON CIRCLE	SR 1915-CASTLE DRIVE TO SR 1915-CASTLE DRIVE	2	2	2WU	0.51	20	57	0.02											
TOTAL FOR MAP NO. 21								**0.51**		**57**	**0.02**											
2017CPT.05.08.20351.1	Franklin	22	SR 1967-LUMBER JACK LANE	SR 1966- TIMBERLANDS DRIVE TO SR 1966-TIMBERLANDS DRIVE	2	2	2WU	0.42	20	47	0.01											
TOTAL FOR MAP NO. 22								**0.42**		**47**	**0.01**											
2017CPT.05.08.20351.1	Franklin	23	SR 1966-TIMBERLANDS DRIVE	SR 1108-HART ROAD TO SR 1966 TIMBERLANDS ROAD	2	2	2WU	1.75	20	196	0.06											
TOTAL FOR MAP NO. 23								**1.75**		**196**	**0.06**											
2017CPT.05.08.20351.1	Franklin	24	SR 1805-SPENCERS GATE DRIVE	NC 98 TO SR 1836-SWEETGRASS LANE	2	2	2WU	1.41	19-36	158	0.05	200	220	12				1	1			
TOTAL FOR MAP NO. 24								**1.41**		**158**	**0.05**	**200**	**220**	**12**				**1**	**1**			
2017CPT.05.08.20351.1	Franklin	25	SR 1828-VALENTINE STREET	SR 1784-HERBERT DRIVE TO CUL DE SAC	2	2	2WU	0.22	18	26	0.01											
TOTAL FOR MAP NO. 25								**0.22**		**26**	**0.01**											
2017CPT.05.08.20351.1	Franklin	26	SR 1829-EVELYN CIRCLE	SR 1828-VALENTINE STREET TO CUL DE SAC	2	2	2WU	0.08	18	9	0.01											
TOTAL FOR MAP NO. 26								**0.08**		**9**	**0.01**											
2017CPT.05.08.20351.1	Franklin	27	SR 1275-MISTY WAY	SR 1207-WINSTON STREET TO END MAINTENANCE	2	2	2WU	0.3	20	34	0.01											
TOTAL FOR MAP NO. 27								**0.3**		**34**	**0.01**											
2017CPT.05.08.20351.1	Franklin	28	SR 1623-PREACHER BALL ROAD	SR 1002-TRINITY CHURCH ROAD TO NC 581	2	2	2WU	0.75	21	84	0.03	8,070	5,950									
TOTAL FOR MAP NO. 28								**0.75**		**84**	**0.03**	**8,070**	**5,950**									
2017CPT.05.08.20351.1	Franklin	29	SR 1211-WEST RIVER ROAD	FRANKLINTON CITY LIMITS TO SR 1229-SOUTH MAIN STREET	2	2	2WU	8.8	20-40	986	0.22	94,688	83,635	450		137	12	4	2		1	
TOTAL FOR MAP NO. 29								**8.8**		**986**	**0.22**	**94,688**	**83,635**	**450**		**137**	**12**	**4**	**2**		**1**	
2017CPT.05.08.20351.1	Franklin	30	SR 1801-DELANO COURT	SR 1784-HERBERT DRIVE TO CUL DE SAC	2	2	2WU	0.05	18	7	0.01											
TOTAL FOR MAP NO. 30								**0.05**		**7**	**0.01**											
2017CPT.05.08.20351.1	Franklin	31	SR 1183-GREGORY MANOR	SR 1125-HICKS ROAD TO CUL DE SAC	2	2	2WU	0.38	20	43	0.01											
TOTAL FOR MAP NO. 31								**0.38**		**43**	**0.01**											
TOTAL FOR PROJ NO. 2017CPT.05.08.20351.1								**23.86**		**2,673**	**0.80**	**174,415**	**160,804**	**520**		**137**	**12**	**5**	**3**		**1**	
													161,324					**9**				
GRAND TOTAL								**28.58**		**3,202**	**1.00**	**224,265**	**214,817**	**520**	**268**	**437**	**12**	**20**	**8**	**8**	**2**	**389**
													215,337					**38**				

PROJ. REFERENCE NO.	SHEET NO.

SIGNING FOR RESURFACING PROJECTS



LEGEND
- ⊢ STATIONARY SIGN
- ⬅ DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION

1	ROAD WORK AHEAD W20-1 48″ X 48″	PLACE 1000′ PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000′ ALONG -Y- LINE.
2	NEXT XX MILES W7-3aP 24″ X 18″	#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 *	LOW/SOFT SHOULDER SP 13107 48″ X 48″	PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET ½ MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.
4	ROAD UNDER CONST SP 13106 48″ X 48″	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	END ROAD WORK G20-2 A 48″ X 24″	PLACE 500′ FOLLOWING THE END OF CONSTRUCTION LIMITS.

-Y- LINE SIGNING

NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

1) LESS THAN 1000′ OF RESURFACING ALONG -Y- LINE
2) SUBDIVISION ROADS
3) DEAD END ROADS

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.

ROAD WORK AHEAD W20-1 48″ X 48″ — PLACED 500′ IN ADVANCE OF FLAGGER.

W20-7 A 48″ X 48″ — PLACED 250′ IN ADVANCE OF FLAGGER.

* SIGNING FOR ASPHALT SURFACE TREATMENTS (ONLY)

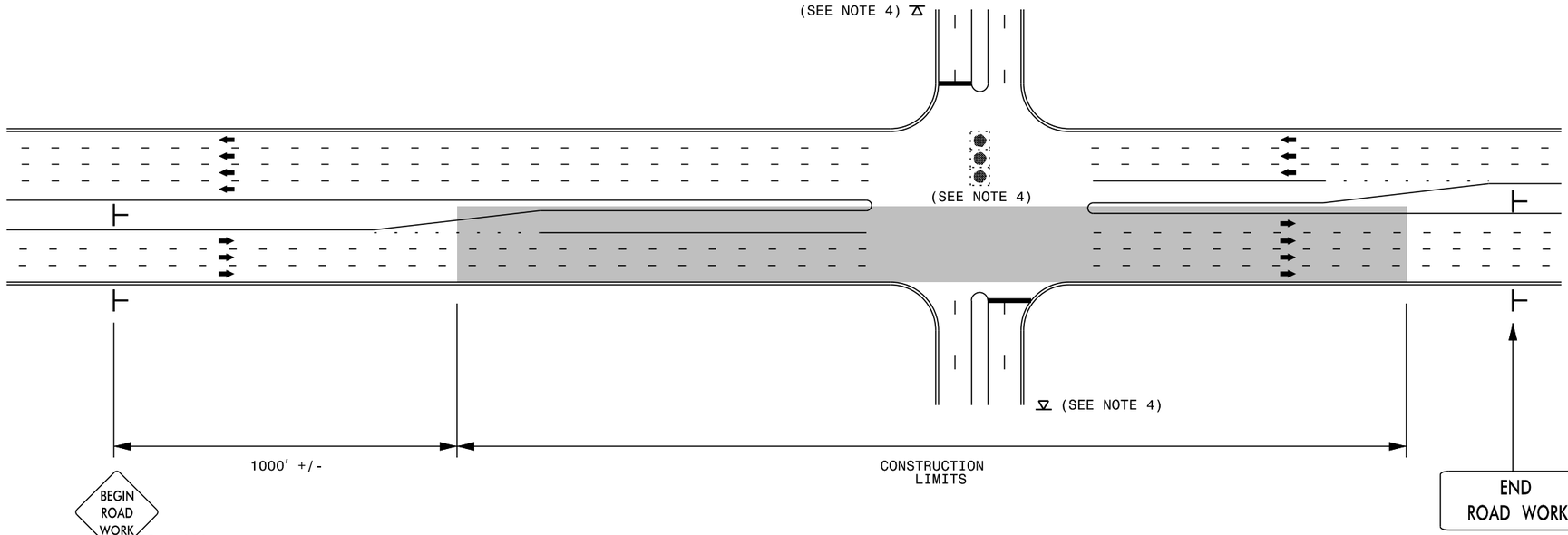
SUBSTITUTE LOW/SOFT SHOULDER SIGNS BY ALTERNATING THE FOLLOWING TWO SIGNS:
STARTING WITH "UNMARKED PAVEMENT AHEAD" (SP 06026) FOLLOWED BY "LOOSE GRAVEL" (W8-7).

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

RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS

PROJ. REFERENCE NO.	SHEET NO.

URBAN / SUBURBAN WORKZONES



NOTES:

1) 48″ x 48″ SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36″ X 36″ ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
4) 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.
5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2′ AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
8) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS.THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

⊢ STATIONARY SIGN

➡ DIRECTION OF TRAFFIC FLOW

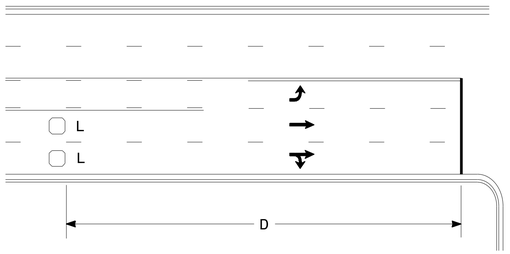
DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

RESURFACING ADVANCE WARNING SIGNS FOR URBAN / SUBURBAN FACILITIES

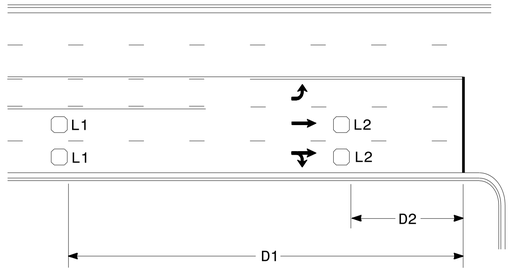
2/24/2014
S:\TMU\WZTC\Resurfacing\2013Resurfacing\2013Documents\New_Procedures_05_09_2013\Resurfacing_AdvWarn_Ur-Su.dgn

PROJECT REFERENCE NO.	SHEET NO.

High Speed Detection
(≥40 mph)



OR



Speed Limit mph	D ft
40	250
45	300
50	355
55	420

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

Volume Density Operation

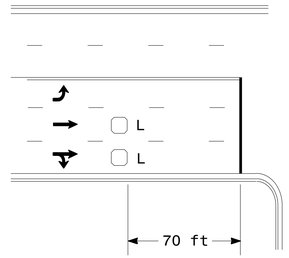
Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series

L2 = 6ft X 6ft
Wired in series

"Stretch" Operation

Low Speed Detection
(≤35 mph)



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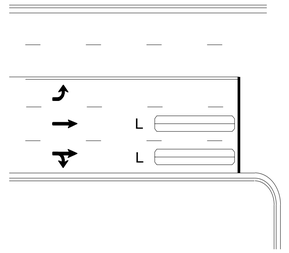
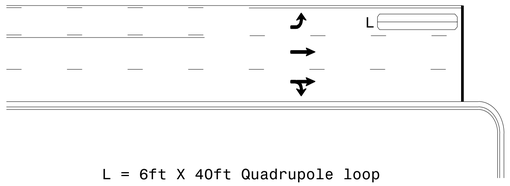


L = 6ft X 6ft
Wired in series

L = 6ft X 40ft
Quadrupole loop, wired separately

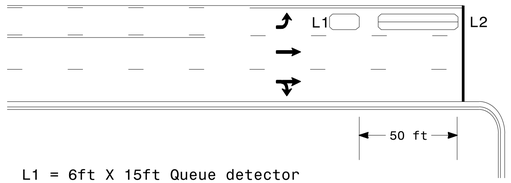
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

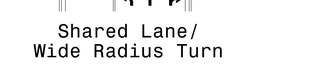
OR



L1 = 6ft X 15ft Queue detector
L2 = 6ft X 40ft Quadrupole loop

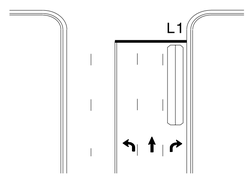
Queue Loop Detection

Right Turn Lane Detection

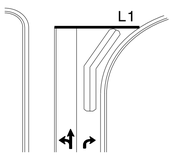


Shared Lane/
Wide Radius Turn

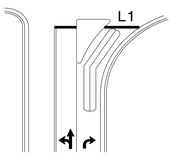
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

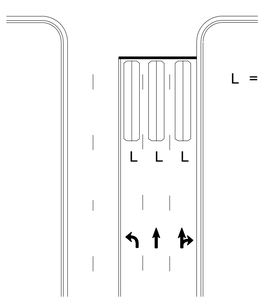


Wide Radius Turn



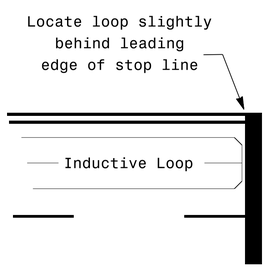
Channelized Turn

Side Street Detection



L = 6ft X 40ft
Quadrupole loop
Wired to separate detectors/channels

Presence Loop Placement at Stop Lines



Note:
Loop may be located in advance of stop line under any of the following conditions:
1) stop line is greater than 15′ from edge of intersecting roadway
2) loop detects a permissive or protected/permissive left turn
3) for an exclusive right turn lane

Recommended Number of Turns

Single 6′ X 6′ loop
(when wired separately):

Length of Lead-in ft	Number of Turns
< 250	3
250-375	4
375-525	5
> 525	6

Quadrupole loops: Use 2-4-2 turns

6′ X 15′ Loops:
Lead-in < 150′, use 2 turns
Lead-in > 150′, use 3 turns

Prepared in the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

Typical Signal Loop Locations

PLAN DATE: January 2015	REVIEWED BY: JPG
PREPARED BY: PLA	REVIEWED BY:

SCALE
N/A

REVISIONS	INIT.	DATE

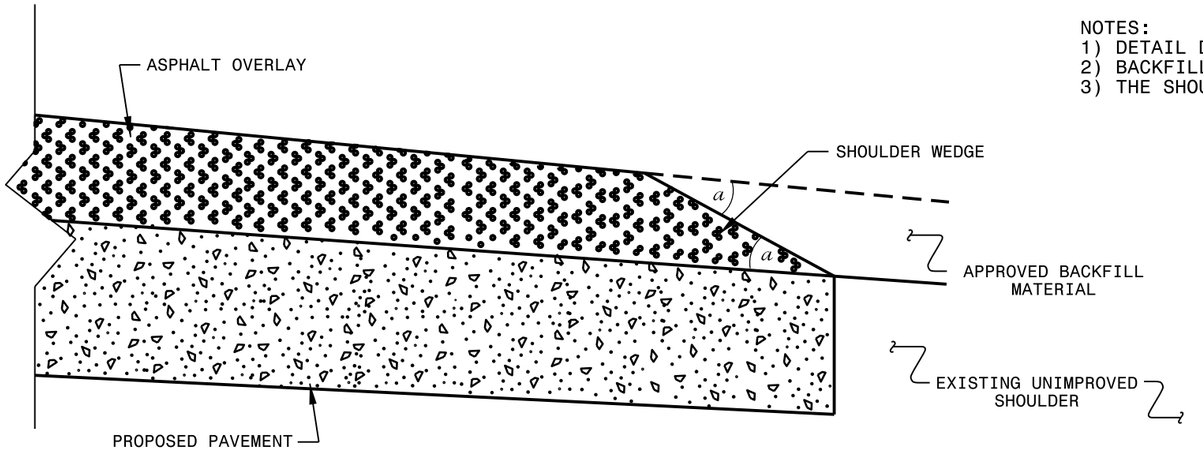
SEAL
NORTH CAROLINA PROFESSIONAL SEAL 23489 ENGINEER PAMELA L. ALEXANDER

DocuSigned by: P L Alexander B4756E00CE4E46D...
1/30/2015
DATE

SIG. INVENTORY NO.

30-JAN-2015 12:39
S:\Traffic\Signal\Signal Design Section\Eastern Region\loop typical 2015.dgn
palexander

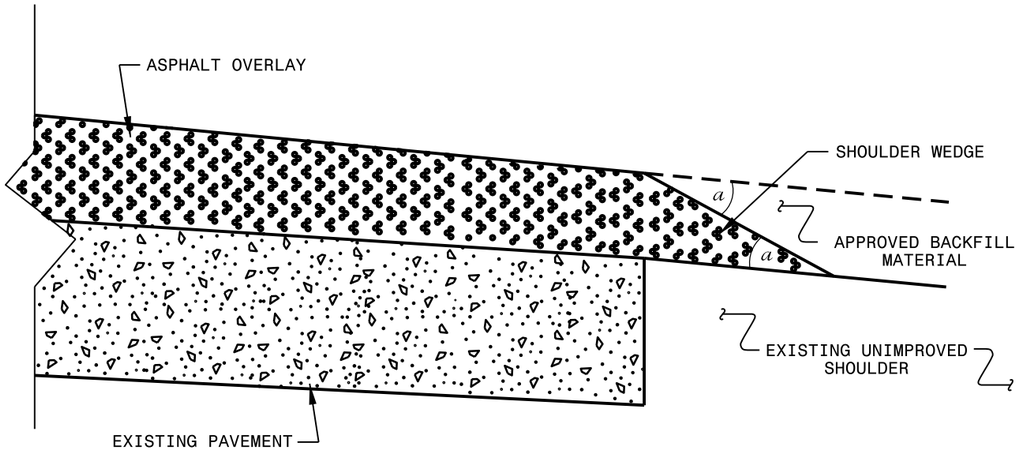
PROJECT REFERENCE NO.	SHEET NO.



NOTES:
1) DETAIL DOES NOT APPLY TO OGAFC 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.

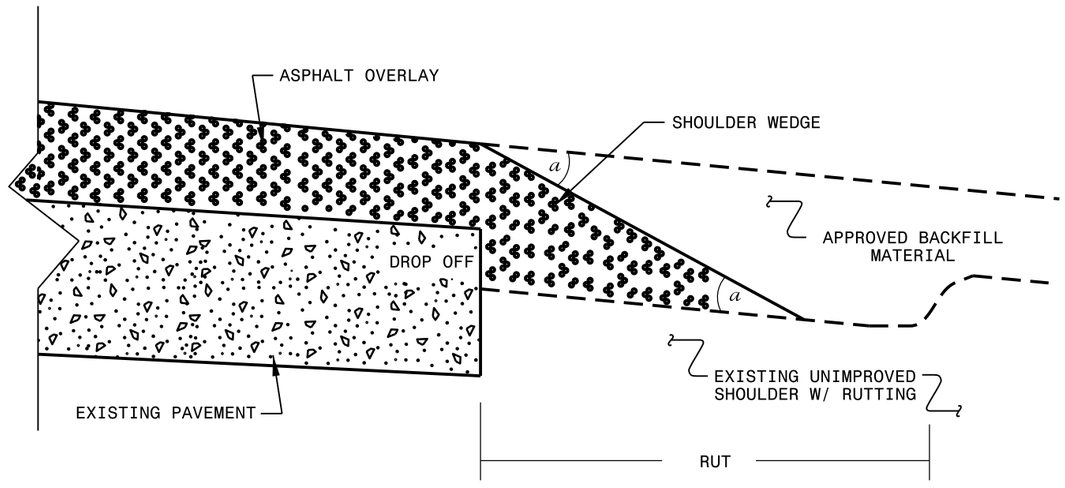
SHOULDER WEDGE DETAIL

(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:	10/16/12
CHECKED BY:		DATE:	
FILE SPEC.:	s:usr/details/stand/shoulderwedgedetail.dgn		

$$$$$$SYSTIME$$$$$
$$$$$$USERNAME$$$$$DGN$$$$$$$$$$$$$$$$$$$$

PROJECT REFERENCE NO.	SHEET NO.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

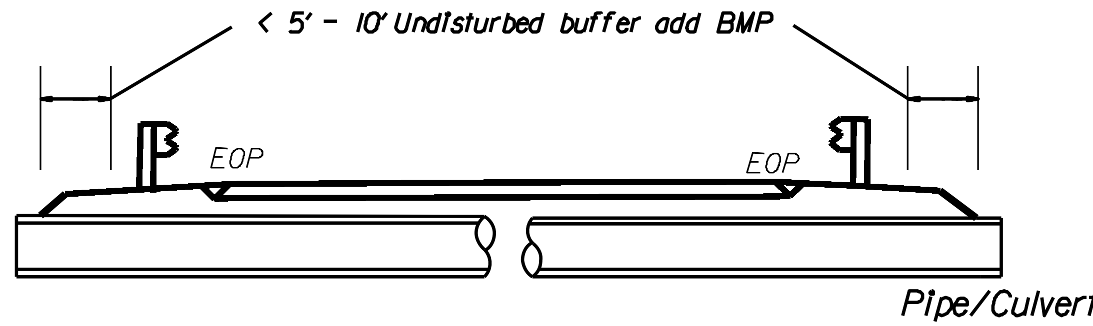
SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

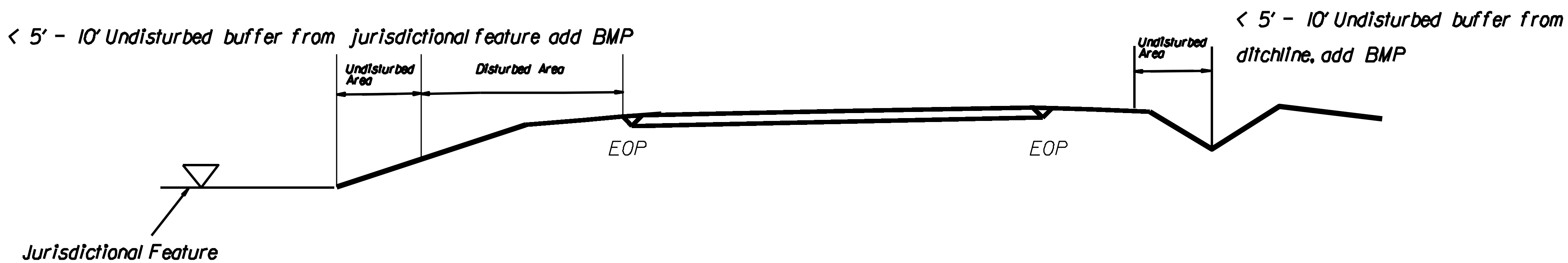
PROJECT REFERENCE NO.	SHEET NO.
X-XXXX	[illegible]
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

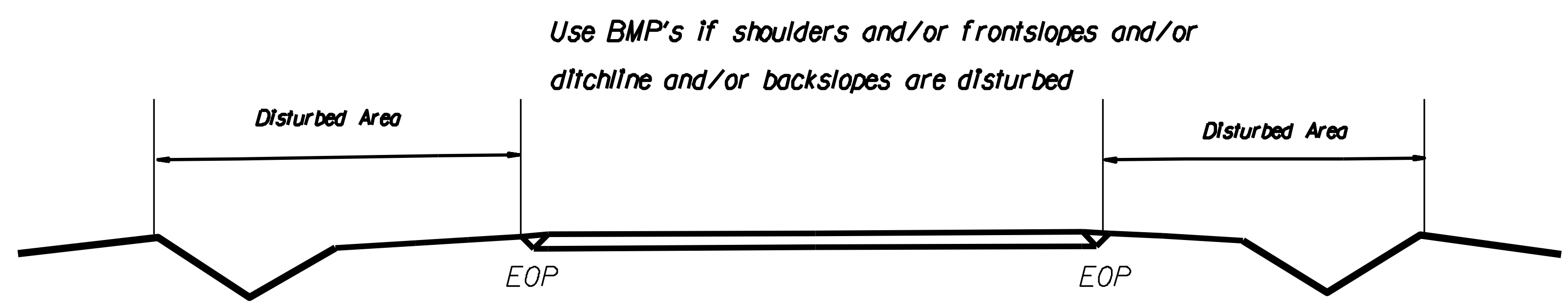
EROSION CONTROL DETAIL

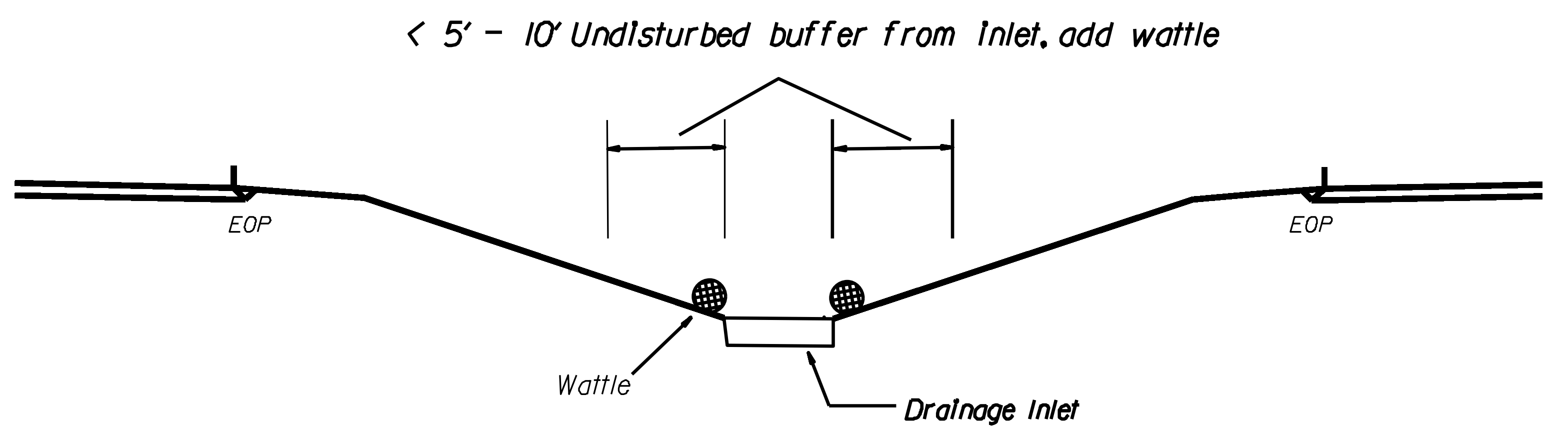
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle, Silt Fence, or Hardened Aggregate.



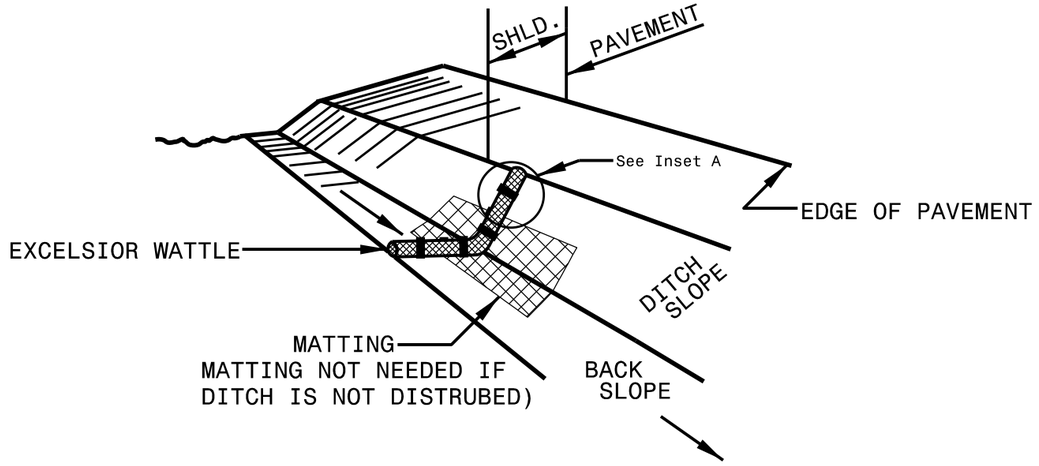




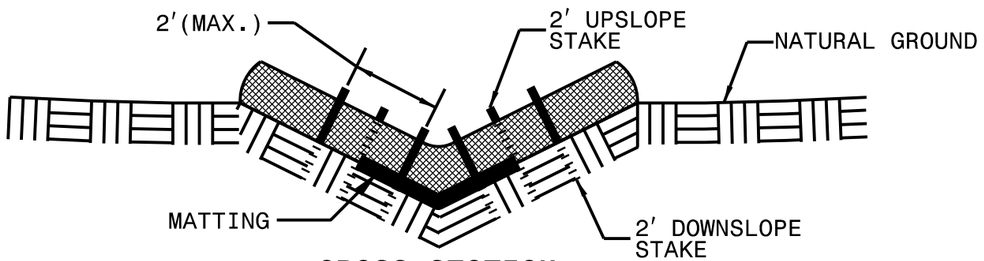


NOT TO SCALE

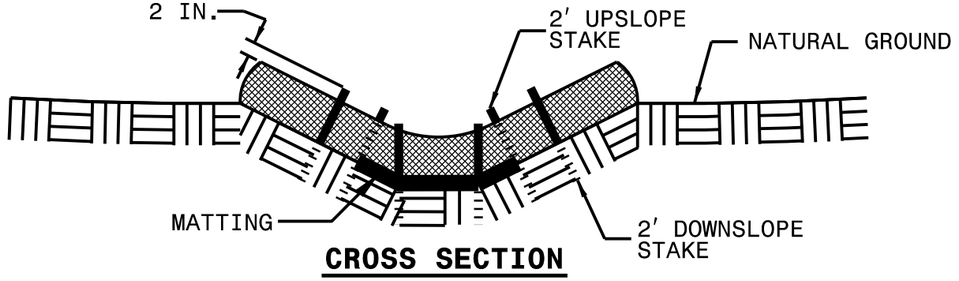
WATTLE DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

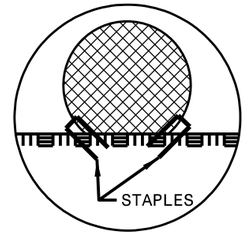
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

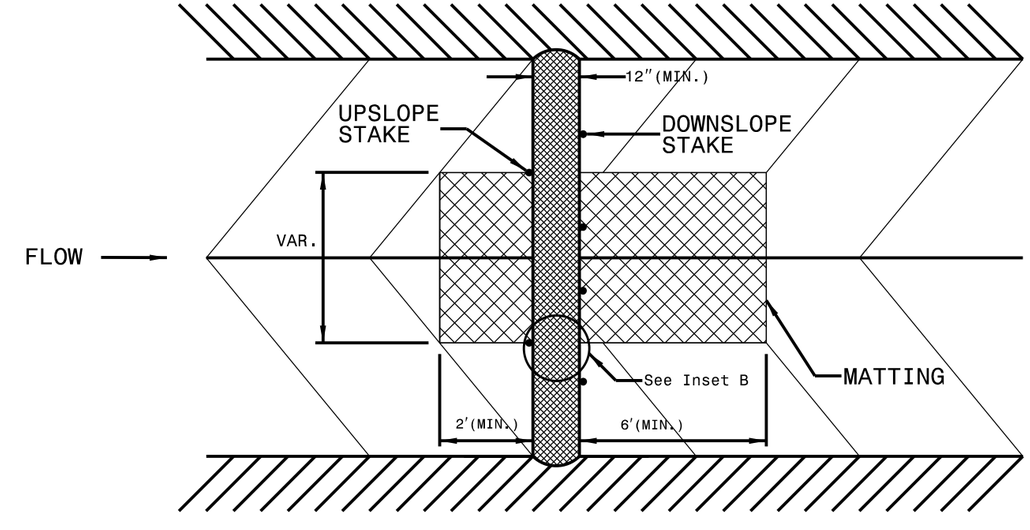
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

IF DITCH WILL BE DISTURBED, INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

INSET A



INSET B



TOP VIEW

TIP NO. | SHEET NO.

APPROVED: [signature]

DATE: 3/6/12

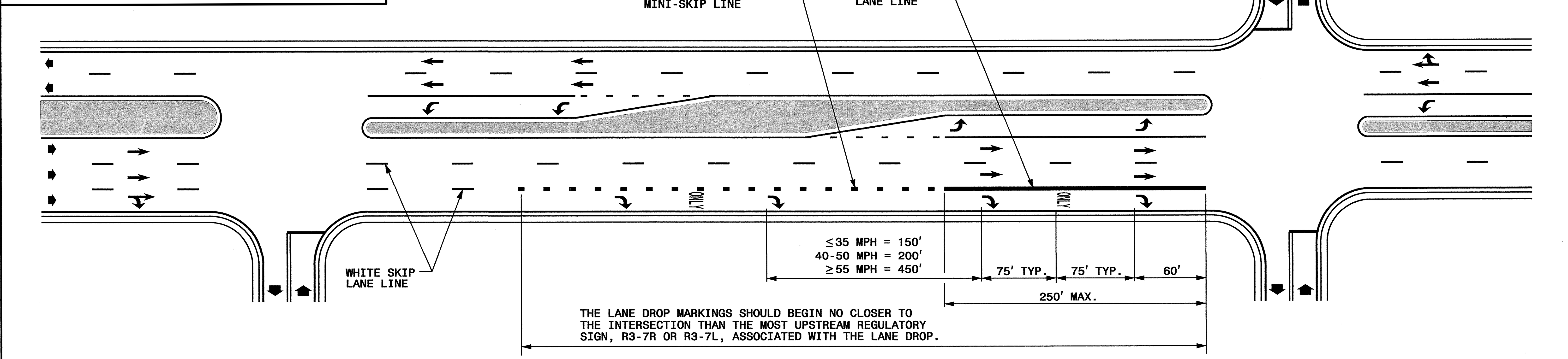
SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 022959 RONALD W. KING

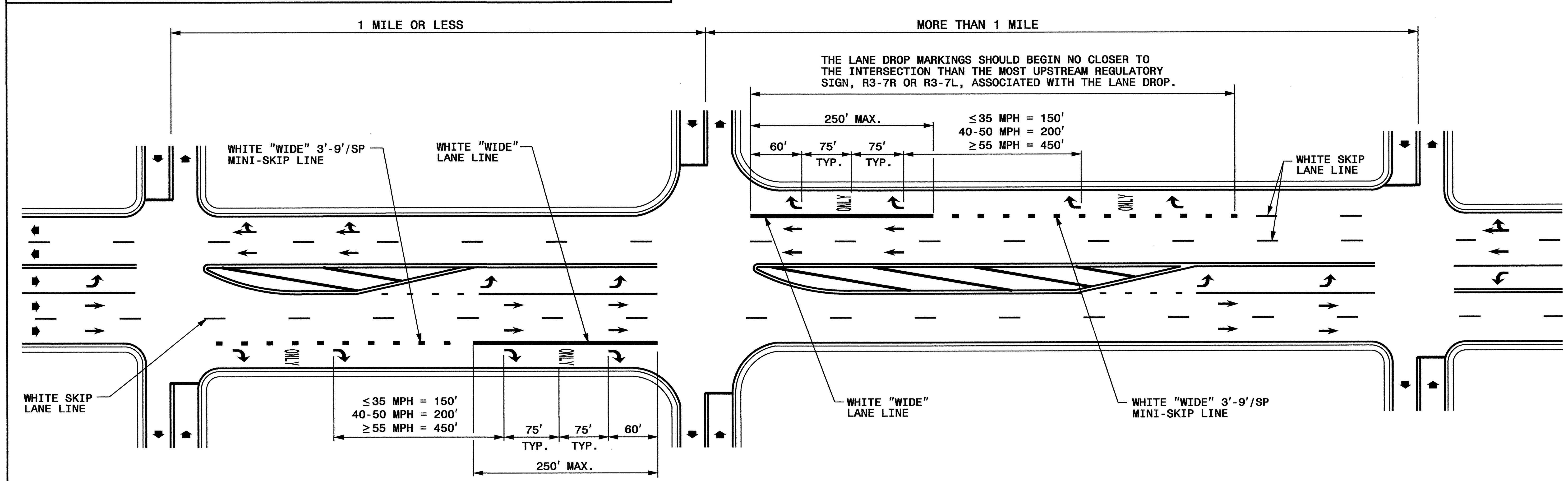
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

LANE DROP AT AN INTERSECTION



LANE DROP AT AN INTERSECTION WITH AN AUXILIARY LANE



GENERAL NOTES:

1- USE THE GUIDANCE SHOWN ON THE ABOVE DETAILS IN CONJUNCTION WITH INTERSECTION GUIDANCE SHOWN ON ROADWAY STANDARD DRAWING 1205.04.

2- LANE LINES INDICATED AS "WIDE" SHALL BE AT LEAST TWICE THE WIDTH OF THE NORMAL LINE.

LEGEND	
W = WIDTH OF TRAVEL LANE	ONLY — PAVEMENT MARKING SYMBOLS & CHARACTERS
DIRECTION OF TRAFFIC FLOW	

ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
LANE DROPS

SHEET 1 OF 3

1205D06

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH DETAIL DRAWING FOR
PAVEMENT MARKINGS
LANE DROPS

SHEET 1 OF 3

1205D06

REVISED PAVEMENT MARKING
ROADWAY STANDARD DRAWING

08-MAR-2012 11:09
S:\S&DU\Standards Group\PMP\2012 Standard Drawings\Standard Dwgs 8-17-11\Revised\1205060L_Revised 9-14-11_Sealed.dgn
dstokes AT TE244745