09/08/99

CONTRACT: WBS NO: 3CR.10311.77 & 3CR.10821.77

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	3CR.10311.77 & 3CR.10821.77	1	

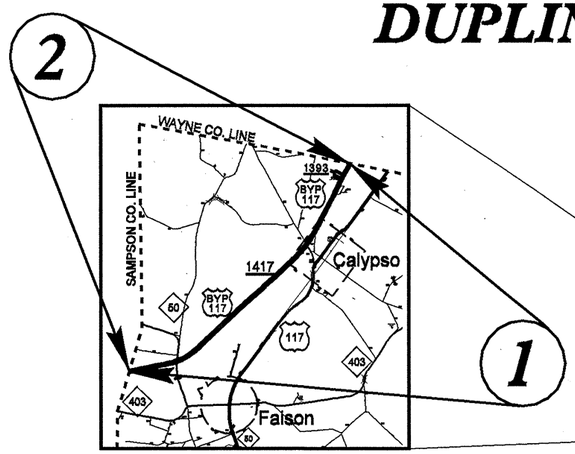
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION

DUPLIN /SAMPSON COUNTIES

LOCATION: DUPLIN CO. – US 117 CONNECTOR NBL & SBL (SAMPSON CO. LINE & WAYNE CO. LINE), US 117 (CITY LIMITS OF TEACHEY TO CITY LIMITS OF FAISON), NC 111 (SR 1800 TO 0.10 MI. FROM NC 41)

SAMPSON CO. – NC 403 NBL & SBL (SR 1734 TO US 117 CONNECTOR), US 117 BYP NBL & SBL (NC 903 TO DUPLIN CO. LINE), NC 411 (0.01 MI. N. OF NC 41 TO NC 903)

TYPE OF WORK: RESURFACING, WIDENING, MILLING, PAVEMENT MARKERS AND MARKINGS, ETC.



DUPLIN COUNTY

P1 = *PIT NO. 1, LOCATED OFF SR 1501 E. OF SR 1505, APPROX. 12 MI. FROM MAP NO. 1 & 2*

P2 = *PIT NO. 2, LOCATED OFF SR 1737 (DOBSON CHAPEL RD) N. OF NC 24, APPROX. 13.6 MI. FROM MAP NO. 4*

P3 = *PIT NO. 3, LOCATED OFF NC 403 1 MI. W. OF DUPLIN/SAMPSON COUNTY LINE, APPROX. 1.1 MI. FROM MAP NO. 1, 2, 5, AND 6*

NOT TO SCALE

GRAPHIC SCALES

PLANS 0

PROFILE (HORIZONTAL) 0

PROFILE (VERTICAL) 0

PROJECT LENGTH

MAP NO. 1 =	5.68 MI.	MAP NO. 6 =	0.19 MI.
MAP NO. 2 =	5.63 MI.	MAP NO. 7 =	1.40 MI.
MAP NO. 3 =	25.23 MI.	MAP NO. 8 =	1.43 MI.
MAP NO. 4 =	3.37 MI.	MAP NO. 9 =	8.99 MI.
MAP NO. 5 =	0.19 MI.		

TOTAL = 44.89 MI.

Prepared In the Office of:
DIVISION OF HIGHWAYS
124 Division Dr., Wilmington, NC 28401

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE: 2009

HYDRAULICS ENGINEER

P.E.
SIGNATURE:

ROADWAY DESIGN TECHNICIAN
DNL
SIGNATURE:

SIGNATURE:

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 20224 ENGINEER CHARLES A. SCHOONOVER

DIVISION DESIGN ENGINEER

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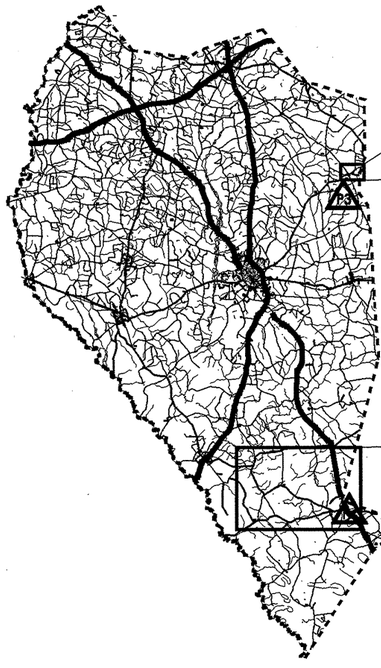
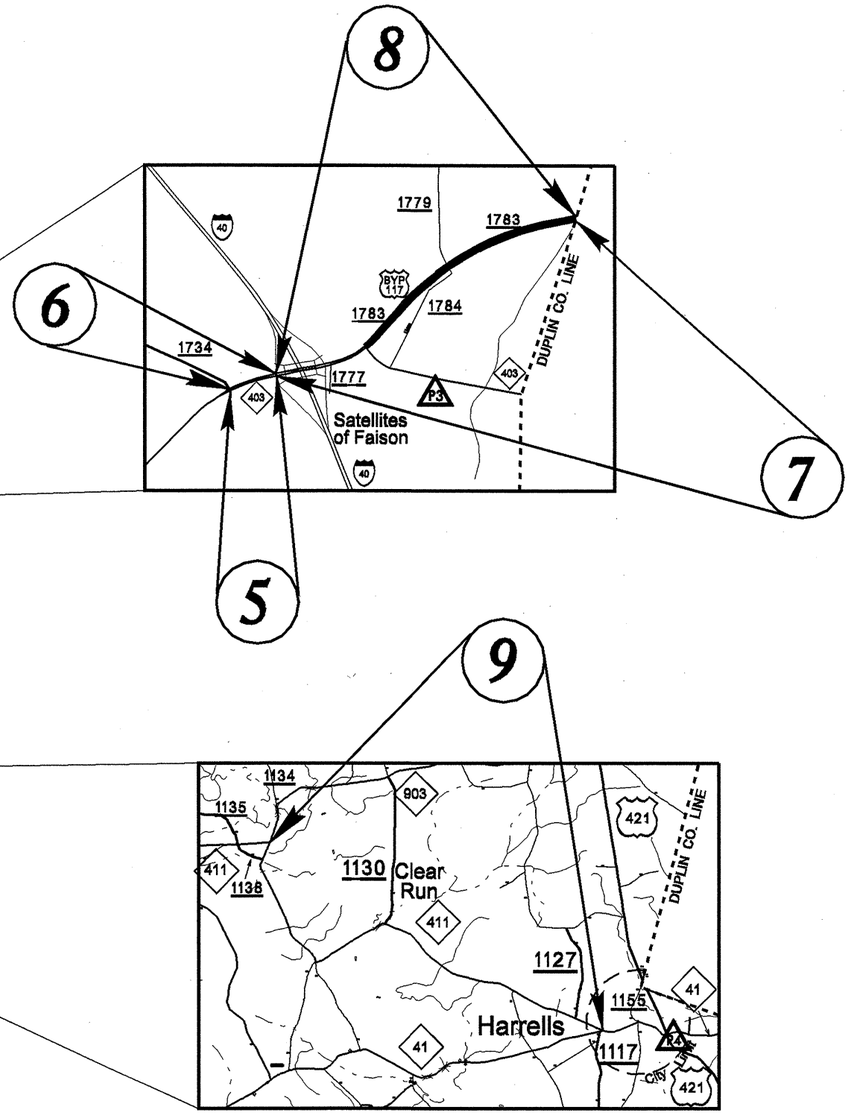
PROJECT REFERENCE NO.	SHEET NO.
3CR.10311.77 & 3CR.10821.77	2

SAMPSON COUNTY





NOT TO SCALE

P3 = *PIT NO. 3, LOCATED OFF NC 403 1 MI. W. OF DUPLIN/SAMPSON COUNTY LINE, APPROX. 1.1 MI. FROM MAP NO. 1, 2, 5, AND 6*

P4 = *PIT NO. 4, LOCATED AT THE INTERSECTION OF US 421 AND US 41. APPROX. 2.0 MI. FROM MAP NO. 9*

REVISIONS

8.17.99

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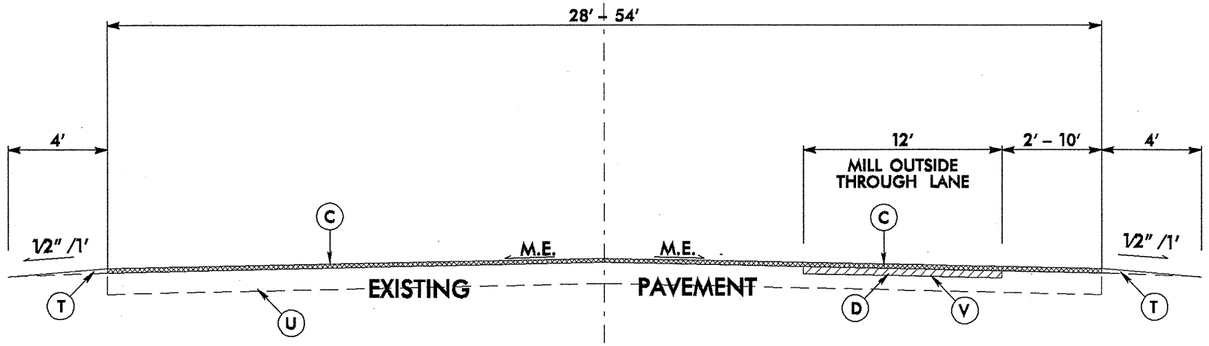
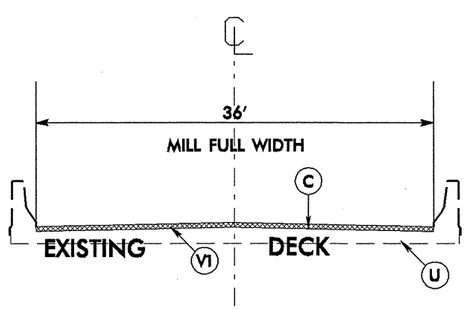
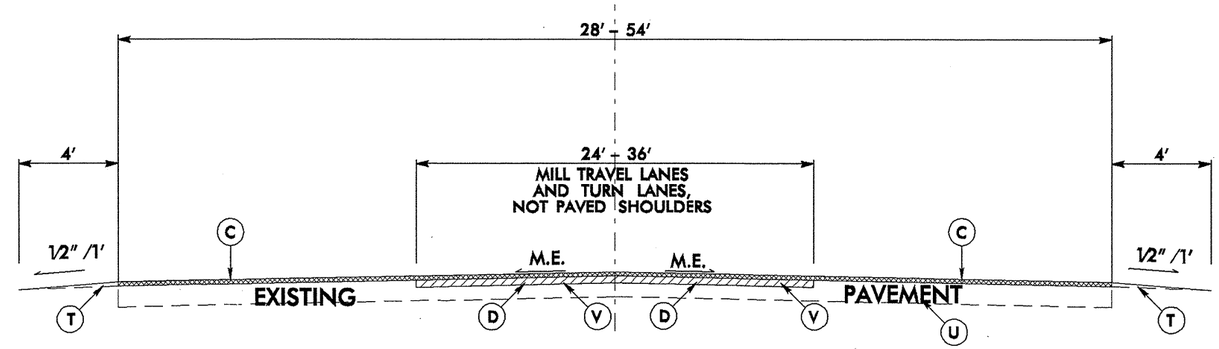
PROJECT REFERENCE NO.	SHEET NO.
3CR.10311.77 & 3CR.10821.77	3



TYPICAL SECTION NO. 1
USE ON MAP NO. 1, 2, 7, 8



TYPICAL SECTION NO. 3
USE ON MAP NO. 1, 2



TYPICAL SECTION NO. 2
USE ON MAP NO. 2, 5, 6

PAVEMENT SCHEDULE					
C	PROP. APPROX. 1½" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	D	PROP. APPROX. 2½" DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.	V	MILLING BITUMINOUS PAVEMENT. 2 1/2 " DEPTH.
C1	PROP. APPROX. 1½" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	D1	PROP. APPROX. 2½" DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.	V1	MILLING BITUMINOUS PAVEMENT. 1½" DEPTH.
C2	PROP. APPROX. 2" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.	E	PROP. APPROX. 5½" DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.	V2	MILLING BITUMINOUS PAVEMENT. 2" DEPTH.
C3	PROP. APPROX. 3" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LIFTS.	T	EARTH MATERIAL (SHOULDER RECONSTRUCTION)		
		U	EXISTING PAVEMENT.		

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
SEE STD. DRAWING 1205.01, SHEET 2 OF 2, TABLE 1 FOR EDGE LINE OFFSETS.
M.E. = MATCH EXISTING

REVISIONS 8/17/99

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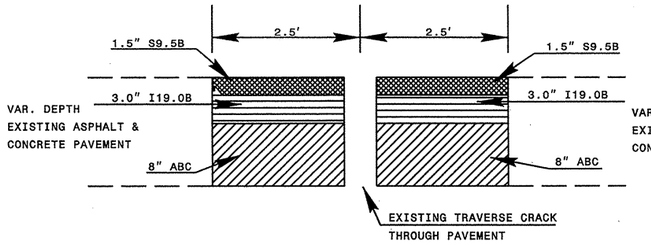
PROJECT REFERENCE NO.	SHEET NO.
3CR.10311.77, ETC.	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

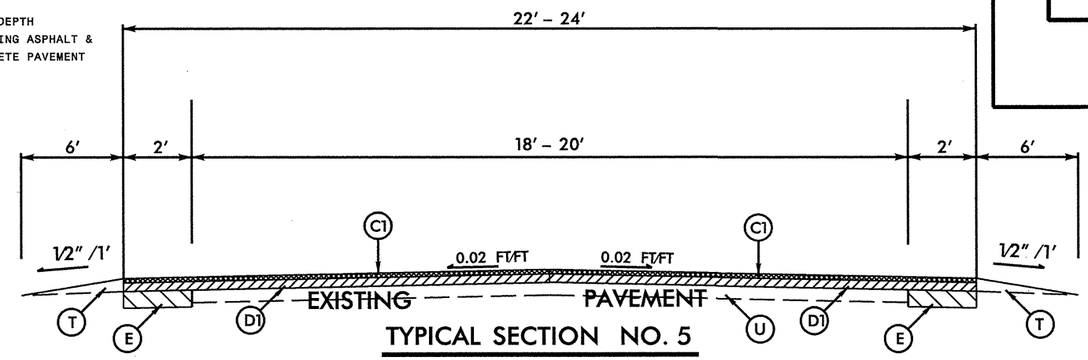
REVISIONS

TYP.NO.4 REVISED.



TYPICAL SECTION NO. 4
USE ON MAP NO. 3

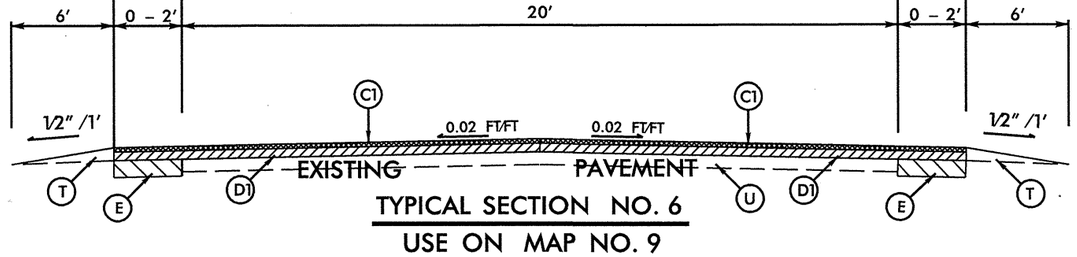
SEE JOINT M.P. TABLE
FOR APPROXIMATE LOCATIONS



TYPICAL SECTION NO. 5
USE ON MAP NO. 4, 9

JOINT M.P. TABLE

MAP NO. 3								
M.P.	M.P.	M.P.	M.P.	M.P.	M.P.	M.P.	M.P.	M.P.
0.000	1.547	4.400	12.020	19.630	22.313	23.201	24.115	25.091
0.087	1.663	4.470	14.035	19.730	22.350	23.242	24.138	25.141
0.195	1.818	4.878	14.335	19.839	22.390	23.267	24.195	25.181
0.246	1.883	6.805	15.458	20.070	22.490	23.299	24.229	25.211
0.262	2.181	9.070	15.932	20.167	22.554	23.362	24.245	25.215
0.297	2.400	9.159	16.880	20.380	22.662	23.456	24.293	25.225
0.335	2.549	9.172	17.015	20.403	22.694	23.473	24.363	
0.354	2.675	9.193	17.097	20.562	22.760	23.670	24.516	
0.376	2.813	9.300	18.541	20.756	22.782	23.729	24.532	
0.444	3.115	9.320	18.589	21.137	22.814	23.769	24.605	
0.629	3.516	9.437	18.616	21.276	22.850	23.811	24.637	
0.691	3.680	9.460	18.766	21.542	22.877	23.831	24.700	
0.710	3.772	9.530	18.905	21.567	22.968	23.860	24.747	
0.778	3.857	9.570	19.050	21.596	22.998	23.896	24.776	
0.859	3.960	9.610	19.070	21.677	23.011	23.922	24.830	
0.875	3.980	9.625	19.121	21.700	23.029	23.954	24.848	
0.961	4.030	9.790	19.247	21.783	23.058	23.990	24.886	
1.000	4.125	9.926	19.387	21.900	23.084	24.013	24.976	
1.080	4.136	10.060	19.540	22.650	23.129	24.047	25.010	
1.445	4.250	10.442	19.585	22.111	23.160	24.087	25.034	



TYPICAL SECTION NO. 6
USE ON MAP NO. 9

APPROXIMATE LOCATIONS

PAVEMENT SCHEDULE					
C	PROP. APPROX. 1½" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	D	PROP. APPROX. 2½" DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.	V	MILLING BITUMINOUS PAVEMENT. 2 1/2 " DEPTH.
C1	PROP. APPROX. 1½" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	D1	PROP. APPROX. 2½" DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.	V1	MILLING BITUMINOUS PAVEMENT. 1½" DEPTH.
C2	PROP. APPROX. 2" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.	E	PROP. APPROX. 5½" DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.	V2	MILLING BITUMINOUS PAVEMENT. 2" DEPTH.
C3	PROP. APPROX. 3" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LIFTS.	T	EARTH MATERIAL		
		U	EXISTING PAVEMENT.		

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
SEE STD. DRAWING 1205.01, SHEET 2 OF 2, TABLE 1 FOR EDGE LINE OFFSETS.
M.E. = MATCH EXISTING

$$$$$$SYSTIME$$$$$$
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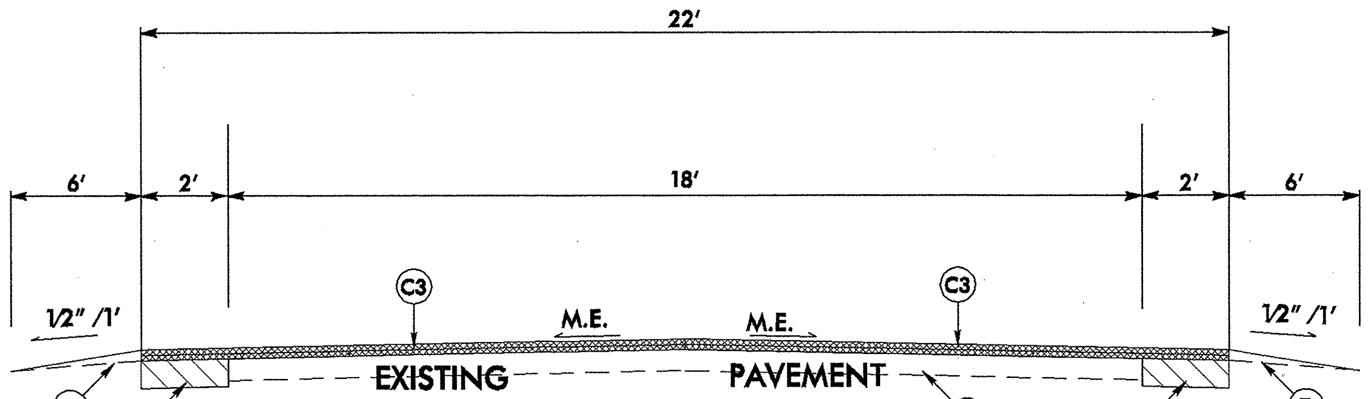
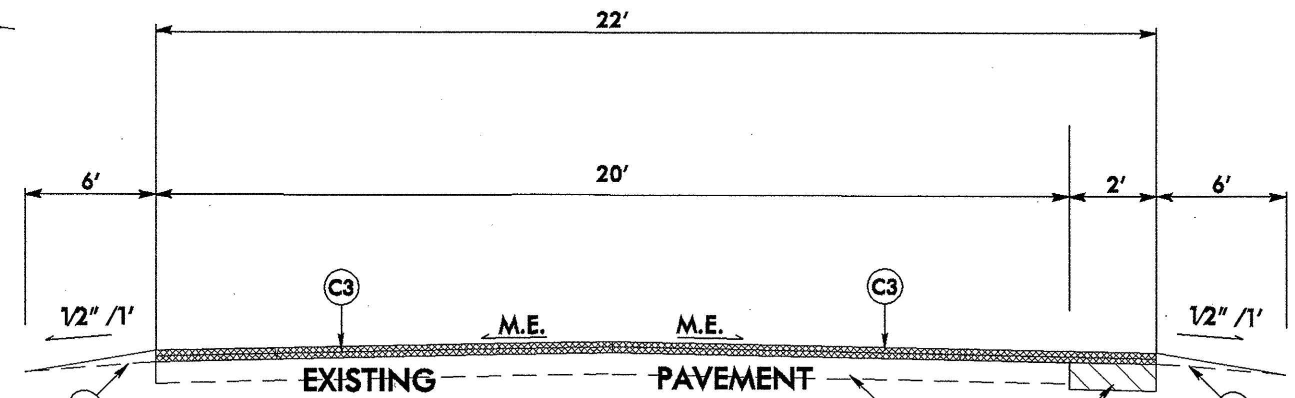
PROJECT REFERENCE NO.	SHEET NO.
3CR.10311.77 & 3CR.10821.77	5



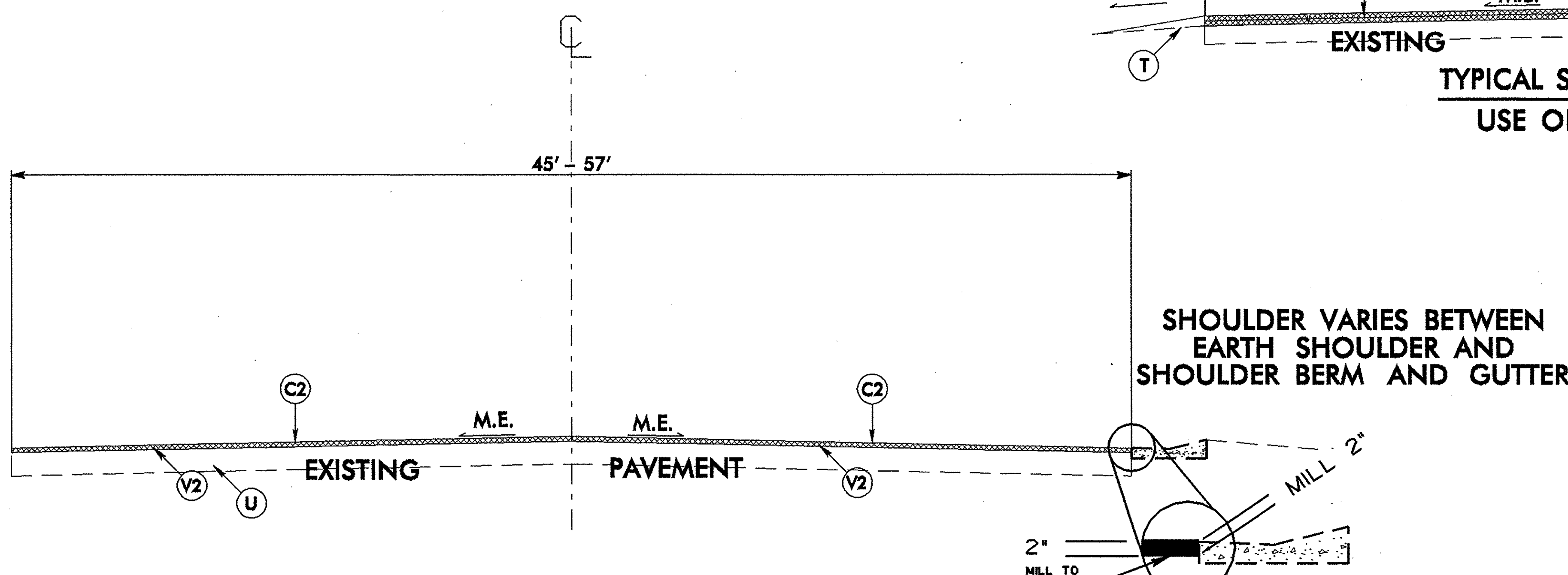
TYPICAL SECTION NO. 7

USE ON MAP NO. 9



TYPICAL SECTION NO. 8

USE ON MAP NO. 9



TYPICAL SECTION NO. 9

USE ON MAP NO. 7, 8

PAVEMENT SCHEDULE		D	PROP. APPROX. 2½" DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.	V	MILLING BITUMINOUS PAVEMENT. 2 1/2 " DEPTH.
C	PROP. APPROX. 1½" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	D1	PROP. APPROX. 2½" DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.	V1	MILLING BITUMINOUS PAVEMENT. 1½" DEPTH.
C1	PROP. APPROX. 1½" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	E	PROP. APPROX. 5½" DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.	V2	MILLING BITUMINOUS PAVEMENT. 2" DEPTH.
C2	PROP. APPROX. 2" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.	T	EARTH MATERIAL		
C3	PROP. APPROX. 3" DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LIFTS.	U	EXISTING PAVEMENT.		

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
SEE STD. DRAWING 1205.01, SHEET 2 OF 2, TABLE 1 FOR EDGE LINE OFFSETS.
N.E. = MATCH EXISTING

REVISIONS

8/17/99

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PROJECT NO.	SHEET NO.	TOTAL NO.
3CR.10311.77, 3CR.10821.77	6	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LENGTH MI	WIDTH FT	BORROW EXC. (STATE FURNISHED SOURCES) CY	INC. STONE BASE TONS	SHOULDER RECON. SMI	2 1/2" MILLING SY	1 1/2" MILLING SY	2" MILLING SY	INC. MILLING SY	BASE COURSE, B25.0B TONS	INT. COURSE, I19.0B TONS	INT. COURSE, I19.0C TONS	SURFACE COURSE, S9.5B TONS	SURFACE COURSE, S9.5C TONS	LEVELING COURSE, S9.5C TONS	PG 64-22 PLANT MIX TONS	PG 70-22 PLANT MIX TONS	ASPHALT PLANT MIX, PAVEMENT REPAIR TON	PATCHING (MILL) TON	PATCHING (FULL DEPTH) TONS	MILLED RUMBLE STRIPS LF	ABC, PAVEMENT REPAIR TON	INC. CONC SY	STEEL BM GR LF	ADDITIONAL GR POSTS EA	GR ANCHOR UNITS, TYPE 350 EA	TEMP. SILT FENCE LF	STONE FOR EC CLASS B TON	INDUCTIVE LOOP SAWCUT LF	LEAD-IN CABLE (14-2) TON	SEDIMENT CONTROL STONE TON	TEMP. MULCHING ACR	SEED FOR TEMP. SEEDING LBS	FERTILIZER FOR TEMP. SEEDING TON	1/4" HARDWARE CLOTH LF	SEED & MULCHING AC
3CR.10311.77	Duplin	1	US 117 CONNECTOR (NBL)	SAMPSON CO. LINE TO WAYNE CO. LINE, FULL WIDTH (MP 0.00-0.05, 0.30-0.52, 1.80-2.33, 2.62-2.81, 2.84-3.11), TAPER (30'-42') (MP 4.39-4.45)	1	1.32	36	304	25	2.64	9,293			400			1,482		2,702	29	70	164		375	60	13,939						568	142			142.00	5.68	248	1.42	284	0.80
"	"			TAPER (36'-30') (MP 0.05-0.06, 0.28-0.30, 0.52-0.53, 1.77-1.80, 2.33-2.35, 2.60-2.62, 3.11-3.12), TAPER (28'-40') (MP 4.76-4.81, 5.33-5.38)	1	0.22	33.5	93		0.44	1,549						247		419		12	25				2,323															0.22
"	"			FULL WIDTH (MP 0.06-0.28, 0.53-0.77, 0.89-1.77, 2.35-2.60, 3.12-3.94, 4.05-4.39, 4.49-4.56), TAPER (30'-28') (MP 4.56-4.59)	1	2.85	30	1,208		5.70	20,064						3,200		4,866		150	292				30,096															2.85
"	"			TAPER (36'-54')(MP 0.77-0.83)	1	0.06	45	25		0.12	422						67		153		3	9				634														0.06
"	"			FULL WIDTH (MP 0.83-0.89, 4.00-4.05)	1	0.11	54	47		0.22	774						123		337		6	20				1,162														0.11
"	"			FULL WIDTH BRIDGE (MP 2.81-2.84)	3	0.03	36	13				634					61					4				317														0.03
"	"			TAPER (30'-54') (MP 3.94-4.00), FULL WIDTH (MP 4.45-4.49)	1	0.1	42	42		0.20	704						112		239		5	14				1,056														0.10
"	"			FULL WIDTH (MP 4.81-4.84, 5.38-5.41), TAPER (28'-52') (MP 5.00-5.04)	1	0.1	40	42		0.20	704						112		227		5	14				1,056														0.10
"	"			FULL WIDTH (MP 5.04-5.08)	1	0.04	52	17		0.08	282						45		118		2	7				422														0.04
"	"			FULL WIDTH (MP 4.59-4.76, 4.84-5.00, 5.08-5.33, 5.41-5.68)	1	0.85	28	360		1.70	5,984			156			954		1,355		45	81				8,976														0.85
TOTAL FOR MAP NO. 1						**5.68**		**2,151**	**25**	**11.30**	**39,776**	**634**		**556**			**6,342**		**10,477**	**29**	**298**	**630**		**375**	**60**	**59,981**						**568**	**142**			**142.00**	**5.68**	**248**	**1.42**	**284**	**5.16**
		2	US 117 CONNECTOR (SBL)	FULL WIDTH (MP 0.00-0.20, 0.28-0.53, 0.62-0.77, 0.85-1.09)	2	0.84	28	534		1.68	11,827			156			1,870		1,339		88	80		275	30	8,870						563	141			141.00	5.63	282	1.41	282	1.26
"	"			TAPER (28'-52') (MP 0.20-.024), FULL WIDTH (MP 0.57-0.62, 0.81-0.85)	2	0.13	40	83		0.26	2,746						433		296		20	18				1,373														0.20
"	"			FULL WIDTH (MP 0.24-0.28)	2	0.04	52	25		0.08	1,126						177		205		8	12				422														0.06
"	"			TAPER (28'-40') (MP 0.53-0.57, 0.77-0.81),TAPER (28'-42') (MP 1.09-1.16)	2	0.15	34	95		0.30	2,640						417		290		20	17				1,584														0.23
"	"			FULL WIDTH (MP 1.16-1.20), TAPER (30'-54') (MP 1.53-1.58)	2	0.09	42	57		0.18	1,901						300		215		14	13				950														0.14
"	"			FULL WIDTH (MP 1.20-1.53)	2	0.33	30	210		0.66	4,646						735		563		35	34				3,485														0.50
"	"			FULL WIDTH (MP 1.58-1.65)	2	0.07	54	45		0.14	1,971						310		215		15	13				739														0.11
"	"			FULL WIDTH (MP 1.65-2.39, 3.06-3.33, 3.85-4.67, 4.79-5.13, 5.37-5.54)	1	2.34	30	992		4.68	16,474						2,627		3,995		123	240				24,710														2.34
"	"			TAPER (30'-36') (MP 2.39-2.41, 3.05-3.06, 3.33-3.36, 3.84-3.85, 5.13-5.15, 5.36-5.37, 5.54-5.56)	1	0.12	33	51		0.24	845						135		225		6	14				1,267														0.12
"	"			FULL WIDTH (MP 2.41-2.82, 2.86-3.05, 3.36-3.84, 5.15-5.36, 5.56-5.63)	1	1.36	36	579		2.72	9,574			400			1,527		2,784		72	167				14,362														1.36
"	"			FULL WIDTH BRIDGE (MP 2.82-2.86)	3	0.04	36					845					82					5				422														
"	"			TAPER (30'-54') (MP 4.67-4.73)	1	0.06	42	25		0.12	422						67		143		3	9				634														0.06
"	"			FULL WIDTH (MP 4.73-4.79)	1	0.06	54	25		0.12	422						67		184		3	11				634														0.06
TOTAL FOR MAP NO. 2						**5.63**		**2,721**		**11.18**	**54,594**	**845**		**556**			**8,665**		**10,536**		**407**	**633**		**275**	**30**	**59,452**						**563**	**141**			**141.00**	**5.63**	**282**	**1.41**	**282**	**6.42**
		3	US 117 - JOINT REPAIR	S. CITY LIMITS OF TEACHEY TO S. CITY LIMITS OF FAISON (SEE TYPICAL FOR MP LOCATIONS)	4	25.23	24																918	2,100			1,148											3,850	550			
TOTAL FOR MAP NO. 3						**25.23**																**918**	**2,100**			**1,148**											**3,850**	**550**			
		4	NC 111	SR 1800 TO 0.10 MI. S. OF NC 41, WIDEN TO 24'	5	3.37	24	2,157	325	6.74				267	3,040	7,502		4,608		760			400	75				115	50.00	5.00	4.00		84			84.00	3.37	169	0.84	169	5.06
TOTAL FOR MAP NO. 4						**3.37**		**2,157**	**325**	**6.74**				**267**	**3,040**	**7,502**		**4,608**			**760**		**400**	**75**				**115**	**50.00**	**5.00**	**4.00**		**84**			**84.00**	**3.37**	**169**	**0.84**	**169**	**5.06**
TOTAL FOR PROJ NO. 3CR.10311.77						**39.91**		**7,029**	**350**	**29.22**	**94,370**	**1,479**		**1,379**	**3,040**	**7,502**	**15,007**	**4,608**	**21,013**	**29**	**1,465**	**1,263**	**918**	**3,150**	**165**	**119,433**	**1,148**	**115**	**50.00**	**5.00**	**4.00**	**1,131**	**367**			**367.00**	**14.68**	**699**	**3.67**	**735**	**16.64**
3CR.10821.77	Sampson	5	NC 403 (NBL) (2-32-42)	SR 1734 (BEG. DIVIDED HWY) TO US 117 CONNECTOR, TAPER (32'-42') (MP 0.00-0.16)	2	0.16	37	102	20	0.32	3,098						489		337		23	20			20								5			5.00	0.20	19	0.05	10	0.24
"	"			FULL WIDTH, (MP 0.16-0.19)	2	0.03	42	19		0.06	634						100		72		5	4																			0.05
TOTAL FOR MAP NO. 5						**0.19**		**121**	**20**	**0.38**	**3,732**						**589**		**409**		**28**	**24**			**20**								**5**			**5.00**	**0.20**	**19**	**0.05**	**10**	**0.29**
		6	NC 403 (SBL)	US 117 CONNECTOR TO SR 1734 (END DIVIDED HWY), FULL WIDTH (MP 0.00-0.19)	2	0.19	30	121		0.38	2,675						423		324		20	19			20						19	5			5.00	0.19	10	0.05	10	0.29
TOTAL FOR MAP NO. 6						**0.19**		**121**		**0.38**	**2,675**						**423**		**324**		**20**	**19**			**20**						**19**	**5**			**5.00**	**0.19**	**10**	**0.05**	**10**	**0.29**
		7	US 117 CONNECTOR (NBL)	NC 403 TO DUPLIN COUNTY LINE, FULL WIDTH (MP 0.00-0.08, 0.13-0.21)	9	0.16	52						4,881	289				631				38		125	15						140	35			35.00	1.40	70	0.35	70	
"	"			NO WORK (MP 0.08-0.13)		0.05	52																																	
"	"			FULL WIDTH (MP 0.21-0.30), TAPER (30'-54') (MP 0.76-0.83)	1	0.16	42	68		0.32	1,126			233			180		382		8	23																			0.16
"	"			TAPER (42'-54') (MP 0.30-0.36)	1	0.06	48	25		0.10	422						67		160		3	10																			0.06
"	"			FULL WIDTH (MP 0.36-0.40, 0.83-0.87)	1	0.08	54	34		0.16	563						90		245		4	15																			0.08
"	"			FULL WIDTH (MP 0.40-0.76, 0.87-1.29)	1	0.78	30	331		1.56	5,491						876		1,332		41	80																			0.78
"	"			TAPER (30'-36') (MP 1.29-1.31)	1	0.02	33	8		0.04	141						22		38		1	2																			0.02
"	"			FULL WIDTH (MP 1.31-1.40)	1	0.09	36	38		0.18	634						101		184		5	11																			0.09
TOTAL FOR MAP NO. 7						**1.4**		**504**		**2.36**	**8,377**		**4,881**	**522**			**1,336**		**2,972**		**62**	**179**		**125**	**15**					**140**	**35**			**35.00**	**1.40**	**70**	**0.35**	**70**	**1.19**
		8	US 117 CONNECTOR (SBL)	DUPLIN COUNTY LINE TO NC 403, FULL WIDTH (MP 0.00-0.06), TAPER (30'-42') (MP 0.95-1.01)	1	0.12	36	51		0.24	845						135		246		6	15		150	15						143	36			36.00	1.43	72	0.36	72	0.12
"	"			TAPER (36'-30') (MP 0.06-0.07)	1	0.01	33	4		0.02	70						11		19		1	1																			0.01
"	"			FULL WIDTH (MP 0.07-0.47, 0.59-0.95)	1	0.76	30	322		1.52	5,350						853		1,298		40	78																			0.76
"	"			TAPER (30'-54') (MP 0.47-0.53),FULL WIDTH (MP 1.01-1.06)	1	0.11	42	47		0.22	774						123		263		6	16																			0.11
"	"			FULL WIDTH (MP 0.53-0.59)	1	0.06	54	25		0.12	422						67		184		3	11																			0.06
"	"			FULL WIDTH (MP 1.06-1.13)	9	0.07	45						1,848					239			14																			
"	"			TAPER (45'-57') (MP 1.13-1.16)	9	0.03	51						898					116			7																			
"	"			FULL WIDTH (MP 1.16-1.23)	9	0.07	57						2,341					302			18																			
"	"			FULL WIDTH (MP 1.23-1.31, 1.36-1.43)	9	0.15	52						4,576					591			35																			
"	"			NO WORK (MP 1.31-1.36)		0.05	52																																	
TOTAL FOR MAP NO. 8						**1.43**		**449**		**2.12**	**7,461**		**9,663**				**1,189**		**3,258**		**56**	**195**		**150**	**15**					**143**	**36**			**36.00**	**1.43**	**72**	**0.36**	**72**	**1.06**
		9	NC 411	0.01 MI. N. OF NC 41 TO NC 903, FULL WIDTH (MP 0.00-2.33, 2.49-2.77, 3.16-3.63, 3.68-4.83, 6.29-6.56, 6.68-8.99)	7	6.81	22	5,448	400	13.62				244	6,142			17,078		1,289				300	30			30					899	225			225.00	8.99	450	2.25	450	10.22
"	"			FULL WIDTH (MP 2.33-2.49, 2.77-3.16, 3.63-3.68)	8	0.6	22	526		1.20					298			1,504		103																					0.90
"	"			NO WORK (MP 4.83-4.95)		0.12	22																																	
"	"			FULL WIDTH (MP 4.95-6.11, 6.21-6.29)	5	1.24	22	1,230		2.48				122	1,118	2,532		1,555		260																					1.86
"	"			FULL WIDTH (MP 6.11-6.21)	6	0.1	22	113		0.20					50	204		125		19																					0.15
"	"			FULL WIDTH (MP 6.56-6.68)	8	0.12	22	105		0.24					60			300		21																					0.18
TOTAL FOR MAP NO. 9						**8.99**		**7,422**	**400**	**17.74**				**366**	**7,668**	**2,736**		**20,562**			**1,692**			**300**	**30**			**30**					**899**	**225**			**225.00**	**8.99**	**450**	**2.25**	**450**	**13.31**
TOTAL FOR PROJ NO. 3CR.10821.77						**12.2**		**8,617**	**420**	**22.98**	**22,245**		**14,544**	**888**	**7,668**	**2,736**	**3,537**	**20,562**	**6,963**		**1,858**	**417**		**575**	**100**			**30**					**1,201**	**306**			**306.00**	**12.21**	**621**	**3.06**	**612**	**16.13**
GRAND TOTAL						**52.11**		**16,646**	**770**	**52.20**	**116,615**	**1,479**	**14,544**	**2,267**	**10,708**	**10,238**	**18,544**	**25,170**	**27,976**	**29**	**3,323**	**1,680**	**918**	**3,725**	**265**	**119,433**	**1,148**	**145**	**50.00**	**5.00**	**4.00**	**2,332**	**673**	**3,850.00**	**550.00**	**673.00**	**26.89**	**1,320**	**6.73**	**1,347**	**32.77**

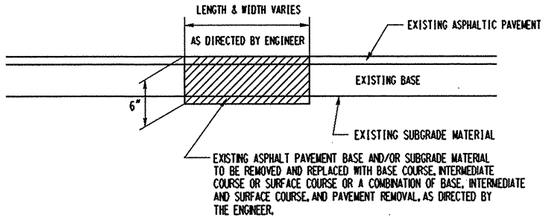
PROJECT NO.	SHEET NO.	TOTAL NO.
3CR.10311.77, 3CR.10821.77	7	

THERMOPLASTIC AND PAINT QUANTITIES

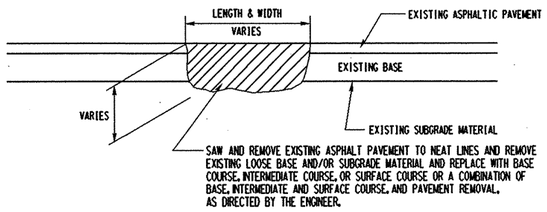
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	4415000000-E FLASHING ARROW PANELS EA	4420000000-E CHANGEABLE MESSAGE SIGN EA	4480000000-E TMA EA	4686000000-E 4" X 90 M WHITE THERMO LF	4686000000-E 4" X 90 M YELLOW THERMO LF	4686000000-E 4" X 120 M WHITE THERMO LF	4686000000-E 4" X 120 M YELLOW THERMO LF	4710000000-E 24" X 120 M WHITE THERMO LF	4721000000-E THERMO MSG ONLY 120 M EA	4725000000-E THERMO LT ARROW 90 M EA	4725000000-E THERMO STR ARROW 90 M EA	4725000000-E THERMO RT ARROW 90 M EA	4725000000-E THERMO LT STR RT ARROW 90 M EA	4725000000-E THERMO STR & LT ARROW 90 M EA	4725000000-E THERMO STR & RT ARROW 90 M EA	4810000000-E 4" WHITE PAINT LF	4810000000-E 4" YELLOW PAINT LF	4835000000-E 24" WHITE PAINT LF	4840000000-N PAINT MSG ONLY EA	4845000000-N PAINT LT ARROW EA	4845000000-N PAINT STR ARROW EA	4845000000-N PAINT RT ARROW EA	4845000000-N PAINT LT STR RT ARROW EA	4845000000-N PAINT STR & LT ARROW EA	4845000000-N PAINT STR & RT ARROW EA	4905000000-N SNOW PLOWABLE MARKERS (C/R) EA	4905000000-N SNOW PLOWABLE MARKERS (Y/Y) EA
3CR.10311.77	Duplin	1	US 117 CONNECTOR (NBL)	SAMPSON CO. LINE TO WAYNE CO. LINE, FULL WIDTH (MP 0.00-0.05, 0.30-0.52, 1.80-2.33, 2.62-2.81, 2.84-3.11), TAPER (30'-42') (MP 4.39-4.45)				6,970	6,970	1,742										8,712	6,970									87	
		-	-	TAPER (36'-30') (MP 0.05-0.06, 0.28-0.30, 0.52-0.53, 1.77-1.80, 2.33-2.35, 2.60-2.62, 3.11-3.12), TAPER (28'-40') (MP 4.76-4.81, 5.33-5.38)				1,162	1,162	290										1,452	1,162									15	
		-	-	FULL WIDTH (MP 0.06-0.28, 0.53-0.77, 0.89-1.77, 2.35-2.60, 3.12-3.94, 4.05-4.39, 4.49-4.56), TAPER (30'-28') (MP 4.56-4.59)				15,048	15,048	3,762										18,810	15,048									188	
		"	"	TAPER (36'-54')(MP 0.77-0.83)				317	317	164										481	317									4	
		-	-	FULL WIDTH (MP 0.83-0.89, 4.00-4.05)				581	581	736		100	8	4	12	5	1	1		1,317	581	100	8	4	12	5	1	1		38	
		-	-	FULL WIDTH BRIDGE (MP 2.81-2.84)				158	158	40										198	158									2	
		-	-	TAPER (30'-54') (MP 3.94-4.00), FULL WIDTH (MP 4.45-4.49)				528	528	282			4	2	6					810	528		4	2	6					15	
		-	-	FULL WIDTH (MP 4.81-4.84, 5.38-5.41), TAPER (28'-52') (MP 5.00-5.04)				528	528	582				4		2				1,056	528			4		2				31	
		"	"	FULL WIDTH (MP 5.04-5.08)				211	211	353				2		2				564	211			2		2				19	
		-	-	FULL WIDTH (MP 4.59-4.76, 4.84-5.00, 5.08-5.33, 5.41-5.66)				4,488	4,488	1,122										5,610	4,488									56	
TOTAL FOR MAP NO. 1								**29,991**	**29,991**	**9,073**		**100**	**12**	**12**	**18**	**9**	**1**	**1**		**39,010**	**29,991**	**100**	**12**	**12**	**18**	**9**	**1**	**1**		**455**	
		2	US 117 CONNECTOR (SBL)	FULL WIDTH (MP 0.00-0.20, 0.28-0.53, 0.62-0.77, 0.85-1.09)				4,435	4,435	1,109										6,006	4,805									55	
		-	-	TAPER (28'-52') (MP 0.20-.024), FULL WIDTH (MP 0.57-0.62, 0.81-0.85)				686	686	870										1,556	686									9	
		"	"	FULL WIDTH (MP 0.24-0.28)				211	211	203				2						414	211			2						11	
		-	-	TAPER (28'-40') (MP 0.53-0.57, 0.77-0.81),TAPER (28'-42') (MP 1.09-1.16)				792	792	198										528	422									10	
		-	-	FULL WIDTH (MP 1.16-1.20), TAPER (30'-54') (MP 1.53-1.58)				475	475	269										744	475									14	
		"	"	FULL WIDTH (MP 1.20-1.53)				1,742	1,742	436										2,178	1,742									22	
		"	"	FULL WIDTH (MP 1.58-1.65)				370	370	392		50	8	2	6	2				762	370	50	8	2	6	2				21	
		-	-	FULL WIDTH (MP 1.65-2.39, 3.06-3.33, 3.85-4.67, 4.79-5.13, 5.37-5.54)				12,355	12,355	3,089										15,444	12,355									154	
		-	-	TAPER (30'-36') (MP 2.39-2.41, 3.05-3.06, 3.33-3.36, 3.84-3.85, 5.13-5.15, 5.36-5.37, 5.54-5.56)				634	634	158										792	634									8	
		-	-	FULL WIDTH (MP 2.41-2.82, 2.86-3.05, 3.36-3.84, 5.15-5.36, 5.56-5.63)				7,181	7,181	1,795										8,976	7,181									90	
		-	-	FULL WIDTH BRIDGE (MP 2.82-2.86)				211	211	53										264	211									3	
		"	"	TAPER (30'-54') (MP 4.67-4.73)				317	317	164										481	317										
		"	"	FULL WIDTH (MP 4.73-4.79)				317	317	379			8	2	3	2				696	317		8	2	3	2				20	
TOTAL FOR MAP NO. 2								**29,726**	**29,726**	**9,115**		**50**	**16**	**6**	**9**	**4**				**38,841**	**29,726**	**50**	**16**	**6**	**9**	**4**				**417**	
		3	US 117 - JOINT REPAIR	S. CITY LIMITS OF TEACHEY TO S. CITY LIMITS OF FAISON (SEE TYPICAL FOR MP LOCATIONS)				250	250	250																				10	
TOTAL FOR MAP NO. 3								**250**	**250**	**250**																		**10**	
		4	NC 111	SR 1800 TO 0.10 MI. S. OF NC 41, WIDEN TO 24'				35,587			8,897									35,587	8,897									222	
TOTAL FOR MAP NO. 4								**35,587**			**8,897**									**35,587**	**8,897**									**222**	
TOTAL FOR PROJ NO. 3CR.10311.77								**95,554**	**59,967**	**18,438**	**8,897**	**150**	**28**	**18**	**27**	**13**	**1**	**1**		**113,438**	**68,614**	**150**	**28**	**18**	**27**	**13**	**1**	**1**		**872**	**232**
								155,521		**27,335**					**60**					**182,052**						**60**					
3CR.10821.77	Sampson	5	NC 403 (NBL) (2-32-42)	SR 1734 (BEG. DIVIDED HWY) TO US 117 CONNECTOR, TAPER (32'-42') (MP 0.00-0.16)				845	845	323										1,493	845									11	
		-	-	FULL WIDTH, (MP 0.16-0.19)				158	158	61					6				3	280	158				6			3		2	
TOTAL FOR MAP NO. 5								**1,003**	**1,003**	**384**					**6**				**3**	**1,773**	**1,003**				**6**			**3**		**13**	
		6	NC 403 (SBL)	US 117 CONNECTOR TO SR 1734 (END DIVIDED HWY), FULL WIDTH (MP 0.00-0.19)				1,003	1,003	384					3				3	1,771	1,003				3			3		13	
TOTAL FOR MAP NO. 5								**1,003**	**1,003**	**384**					**3**				**3**	**1,771**	**1,003**				**3**			**3**		**13**	
		7	US 117 CONNECTOR (NBL)	NC 403 TO DUPLIN COUNTY LINE, FULL WIDTH (MP 0.00-0.08, 0.13-0.21)	1	1	1	845	845	422			4	4	6					1,267	845		4	4	6					21	
		"	"	NO WORK (MP 0.08-0.13)																												
		-	-	FULL WIDTH (MP 0.21-0.30), TAPER (32'-54') (MP 0.76-0.83)				845	845	422										1,267	845									21	
		"	"	TAPER (42'-54') (MP 0.30-0.36)				317	317	158			4			2				475	317		4			2				8	
		-	-	FULL WIDTH (MP 0.36-0.40, 0.83-0.87)				422	422	917			16	4	12	4				1,339	422		16	4	12	4				16	
		-	-	FULL WIDTH (MP 0.40-0.76, 0.87-1.29)				4,118	4,118	1,030										5,148	4,118									51	
		-	-	TAPER (30'-36') (MP 1.29-1.31)				106	106	26										132	106									1	
		-	-	FULL WIDTH (MP 1.31-1.40)				475	475	119										594	475									6	
TOTAL FOR MAP NO. 7					**1**	**1**	**1**	**7,128**	**7,128**	**3,094**			**24**	**8**	**18**	**6**				**10,222**	**7,128**		**24**	**8**	**18**	**6**				**124**	
		8	US 117 CONNECTOR (SBL)	DUPLIN COUNTY LINE TO NC 403, FULL WIDTH (MP 0.00-0.06), TAPER (30'-42') (MP 0.95-1.01)	1	1	1	634	634	158										792	634									8	
		"	"	TAPER (36'-30') (MP 0.06-0.07)				53	53	13										66	53									1	
		-	-	FULL WIDTH (MP 0.07-0.47, 0.59-0.95)				4,013	4,013	1,003										5,016	4,013									50	
		-	-	TAPER (30'-54') (MP 0.47-0.53),FULL WIDTH (MP 1.01-1.06)				581	581	145										726	581									7	
		"	"	FULL WIDTH (MP 0.53-0.59)				317	317	838			8							1,155	317		8								
		"	"	FULL WIDTH (MP 1.06-1.13)				370	370	185										555	370									9	
		"	"	TAPER (45'-57') (MP 1.13-1.16)				158	158	79										237	158									4	
		"	"	FULL WIDTH (MP 1.16-1.23)				370	370	477			4		9					847	370		8		9					210	
		-	-	FULL WIDTH (MP 1.23-1.31, 1.36-1.43)				792	792	396			8	6	6					1,188	792		32	6	6					28	
		"	"	NO WORK (MP 1.31-1.36)																												
TOTAL FOR MAP NO. 8					**1**	**1**	**1**	**7,288**	**7,288**	**3,294**			**20**	**6**	**15**					**10,582**	**7,288**		**48**	**6**	**15**					**317**	
		9	NC 411	0.01 MI. N. OF NC 41 TO NC 903, FULL WIDTH (MP 0.00-2.33, 2.49-2.77, 3.16-3.63, 3.69-4.83, 6.29-6.56, 6.68-8.99)				71,914			26,968										71,914	26,958									449	
		-	-	FULL WIDTH (MP 2.33-2.49, 2.77-3.16, 3.63-3.68)				6,336			2,376										6,336	2,376									40	
		"	"	NO WORK (MP 4.83-4.95)																												
		-	-	FULL WIDTH (MP 4.95-6.11, 6.21-6.29)				13,094			4,910										13,094	4,910									82	
		"	"	FULL WIDTH (MP 6.11-6.21)				1,056			396										1,056	396									7	
		"	"	FULL WIDTH (MP 6.56-6.68)				1,267			475										1,267	475									8	
TOTAL FOR MAP NO. 9								**93,667**			**35,125**									**93,667**	**35,125**									**586**	
TOTAL FOR PROJ NO. 3CR.10821.77								**110,089**	**16,422**	**7,156**	**35,125**		**44**	**14**	**42**	**6**			**6**	**119,015**	**51,547**		**72**	**14**	**42**	**6**			**6**	**467**	**586**
								126,511		**42,281**					**68**					**169,562**						**68**					
GRAND TOTAL					**2**	**2**	**2**	**205,643**	**76,389**	**25,594**	**44,022**	**150**	**72**	**32**	**69**	**19**	**1**	**1**	**6**	**231,453**	**120,161**	**150**	**100**	**32**	**69**	**19**	**1**	**1**	**6**	**1,339**	**818**
								282,032		**69,616**					**128**					**351,614**						**128**				**2,157**	

PROJECT REFERENCE NO.	SHEET NO.
3CR.10311.77 & 3CR.10821.77	8
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

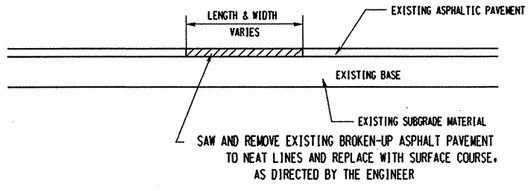
DETAILS OF REPAIRING EXISTING PAVEMENT PRIOR TO RESURFACING FOR FULL DEPTH AND MILLING



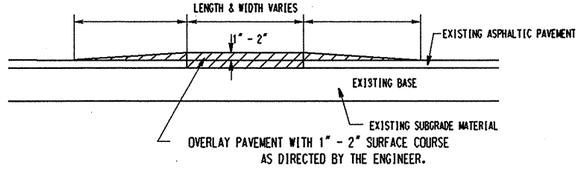
DETAIL NO. 1



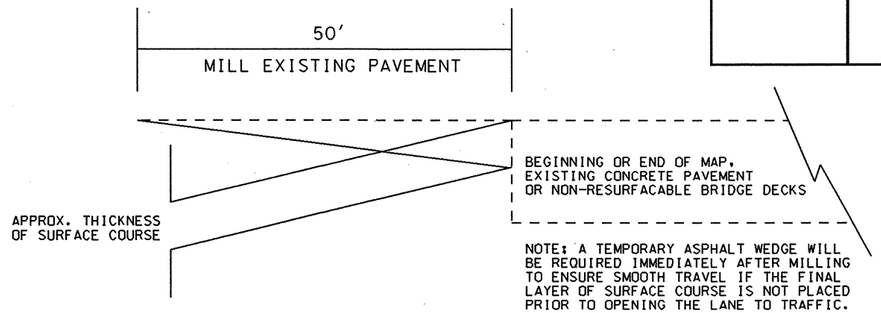
DETAIL NO. 2

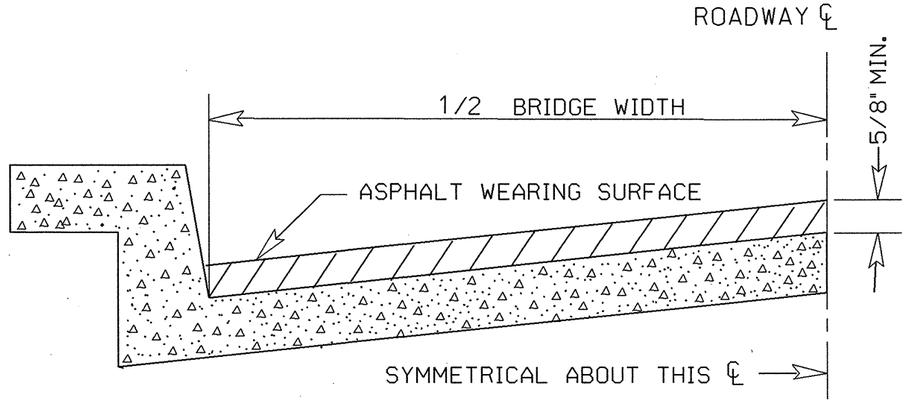


DETAIL NO. 3



DETAIL NO. 4





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.

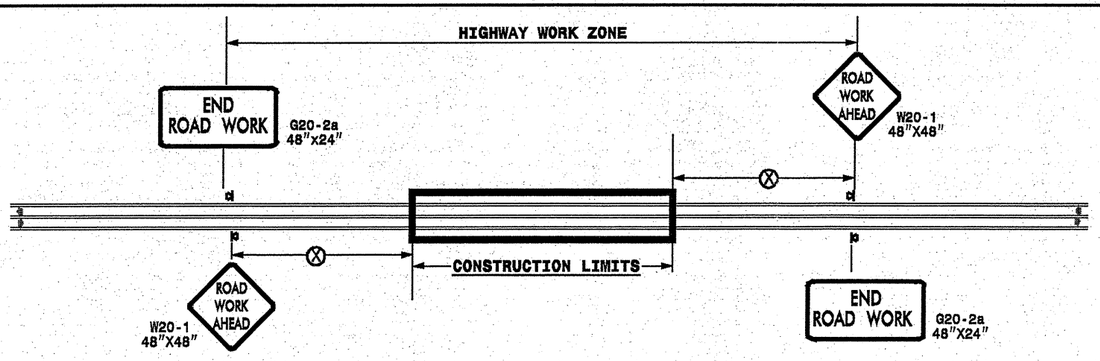
THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. A THICKNESS OF NOT LESS THAN 5/8" SHALL BE PROVIDED. THE MAXIMUM THICKNESS SHALL PREFERABLY BE 1-1/2" UNLESS IT IS IMPRACTICAL TO PROVIDE A SMOOTH RIDING SURFACE OTHERWISE.

REVISIONS

8.632.999

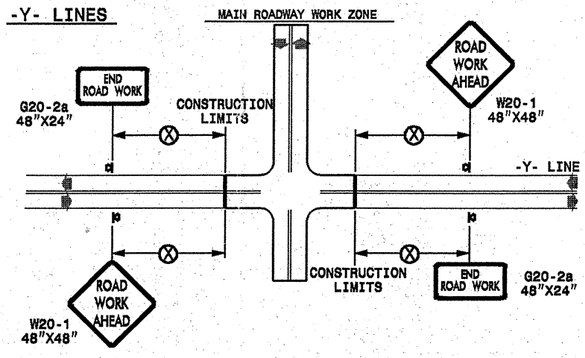
PROJ. REFERENCE NO.	SHEET NO.
3CR.10311.77 & 3CR.10821.77	TCP-1

TWO-WAY UNDIVIDED ** (L-LINES)



POSTED SPEED LIMIT (M.P.H.)	RECOMMENDED MINIMUM SIGN SPACING Ⓧ
≤ 50	500'
≥ 55	1000'

ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)



GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCE WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE PORTABLE WORK ZONE SIGNS ONLY WITH PORTABLE WORK ZONE SIGN STANDS SPECIFICALLY DESIGNED FOR ONE ANOTHER. PORTABLE WORK ZONE SIGNS MAY BE ROLL UP OR APPROVED COMPOSITE.
- PROVIDE PORTABLE WORK ZONE SIGN STANDS, PORTABLE SIGNS AND SIGN SHEETING WHICH ARE LISTED ON THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCT LIST OR ACCEPTED AS TRAFFIC QUALIFIED BY THE TRAFFIC CONTROL UNIT.
- ** TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

LEGEND

PORTABLE SIGN

DIRECTION OF TRAFFIC FLOW

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

DETAIL DRAWING FOR TWO-WAY UNDIVIDED WORK ZONE WARNING SIGNS

SHEET 1 OF 1

APPROVED:_____ DATE:_____

SEAL

DETAIL DRAWING
FOR TWO-WAY UNDIVIDED
ADVANCED WORK ZONE WARNING SIGNS

SCALE:	NONE
DATE:	
DWG. BY:	
DESIGN BY:	
REVIEWED BY:	

REVISIONS	
7-98	10/01
10-98	03/04
01/01	11/04

CADD FILE

21-SEP-2009 20:00
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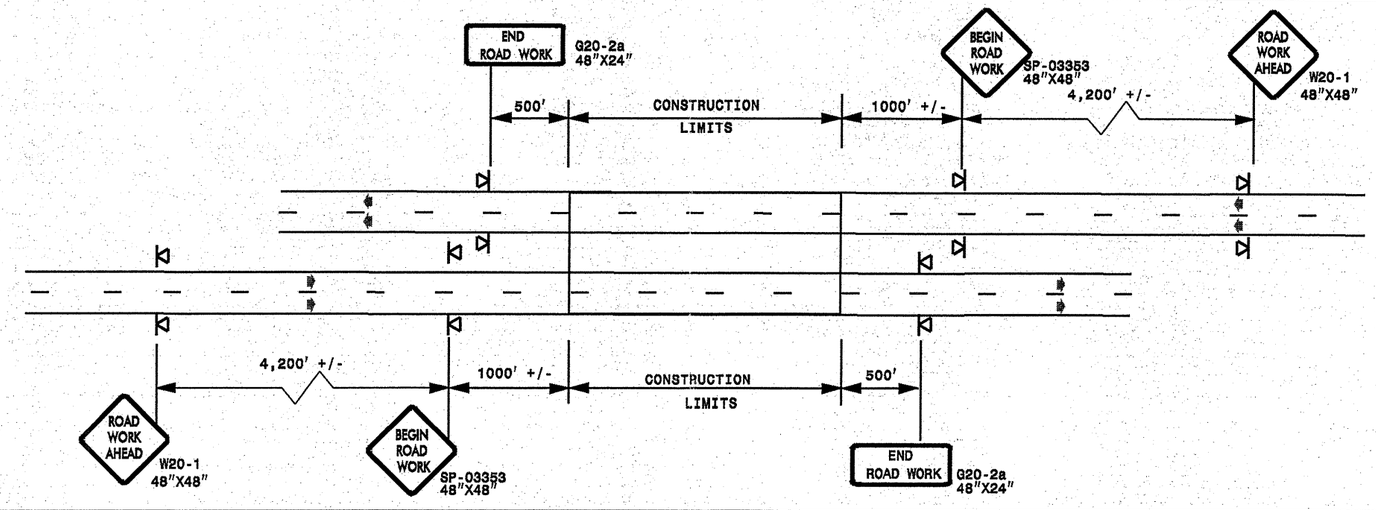
pseymore AT WZTC2575G2

PROJ. REFERENCE NO.	SHEET NO.
3CR.10311.77 & 3CR.10821.77	TCP-2

ADVANCE WORK ZONE WARNING SIGNING FOR FREEWAYS (4 LANES OR GREATER)

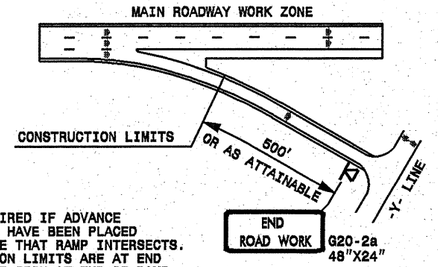
DETAIL A



ROADWAYS INTERSECTING ALONG FREEWAY WORK ZONE (Y-LINES)

DETAIL B

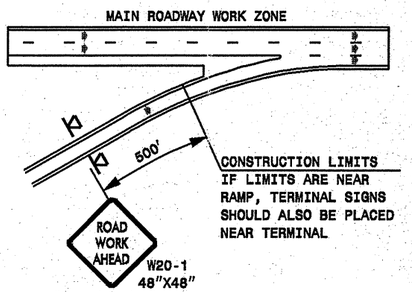
EXIT RAMPS



NOTE:
SIGN NOT REQUIRED IF ADVANCE WARNING SIGNS HAVE BEEN PLACED ALONG -Y- LINE THAT RAMP INTERSECTS. IF CONSTRUCTION LIMITS ARE AT END OF RAMP, PLACE SIGN AT END OF RAMP.

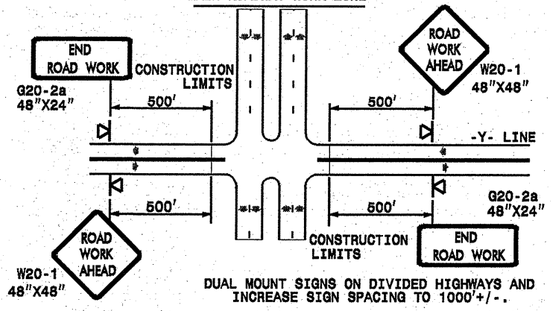
DETAIL C

ENTRANCE RAMPS



DETAIL D

-Y- LINES



DUAL MOUNT SIGNS ON DIVIDED HIGHWAYS AND INCREASE SIGN SPACING TO 1000'+/-.

GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCE WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE PORTABLE WORK ZONE SIGNS ONLY WITH PORTABLE WORK ZONE SIGN STANDS SPECIFICALLY DESIGNED FOR ONE ANOTHER. PORTABLE WORK ZONE SIGNS MAY BE ROLL UP OR APPROVED COMPOSITE.
- PROVIDE PORTABLE WORK ZONE SIGN STANDS, PORTABLE SIGNS AND SIGN SHEETING WHICH ARE LISTED ON THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCT LIST OR ACCEPTED AS TRAFFIC QUALIFIED BY THE TRAFFIC CONTROL UNIT.
- ** TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

LEGEND

- PORTABLE SIGN
- DIRECTION OF TRAFFIC FLOW

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

DETAIL DRAWING FOR FREEWAYS WORK ZONE WARNING SIGNS (SHORT-DURATION LANE CLOSURES)

SHEET 1 OF 1

APPROVED:_____ DATE:_____

SEAL

DETAIL DRAWING
FOR FREEWAYS
WORK ZONE WARNING SIGNS

SCALE: NONE	REVISIONS	
DATE:	7-98	10/01
DWG. BY:	10-98	03/04
DESIGN BY:	01/01	11/04
REVIEWED BY:	CADD FILE	

PROJECT REFERENCE NO.	SHEET NO.
3CR.10311.77,etc	Sig. 1

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

5-07

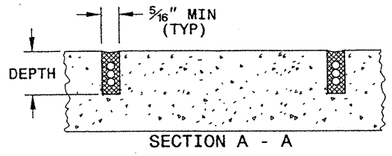
ENGLISH DETAIL DRAWING FOR

INDUCTIVE DETECTION LOOPS

CONVENTIONAL 4-SIDED LOOP

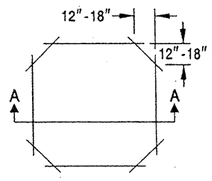
SAW SLOT DEPTH CHART

DEPTH (IN)	NO. OF WIRE TURNS				
	2	3	4	5	6
CONCRETE	2.0	2.0	2.5	2.5	3.0
ASPHALT	2.0	2.5	3.0	3.0	3.0

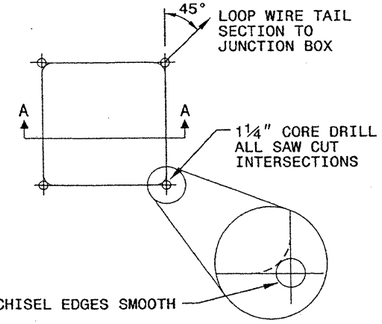


SAW CUT OPTIONS

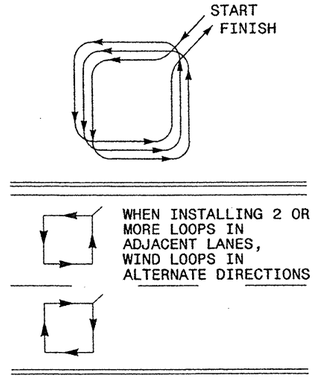
OPTION 1



OPTION 2 (POOR PAVEMENT)



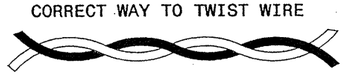
LOOP WINDING METHOD



LOOP WIRE TWISTING METHOD

INCORRECT WAY TO TWIST WIRE

CORRECT WAY TO TWIST WIRE



NOTES

1. OVERLAP SAW CUTS AT CORNERS AND INTERSECTION POINTS TO ENSURE UNIFORM SAW SLOT DEPTH.
2. MAINTAIN 12" SPACING BETWEEN LOOP WIRE TAIL SECTIONS.
3. WIRE LOOPS CONNECTED TO THE SAME DETECTOR CHANNEL IN SERIES.
4. LOCATE LOOPS IN CENTER OF LANES UNLESS OTHERWISE SHOWN ON PLANS OR APPROVED BY ENGINEER.

QUADRUPOLE LOOP

SAW CUT OPTIONS

OPTION 1

OPTION 2 (POOR PAVEMENT)

LOOP WINDING METHOD

DEPTH IS 2.5" FOR CONCRETE AND 3.0" FOR ASPHALT

SHEET 1 OF 3
1725D01

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

5-07

ENGLISH DETAIL DRAWING FOR

INDUCTIVE DETECTION LOOPS

SHEET 1 OF 3
1725D01

See Plate for Title

Prepared in the Offices of:
Intelligent Transportation Systems & Signals Unit
750 N. Greenfield Parkway
Garner, NC 27529

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 016286 ENGINEER MILTON I. DEAN
Milton I Dean 9/5/07
SIGNATURE DATE

05-SEP-2007 14:00
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mil111a

PROJECT REFERENCE NO.	SHEET NO.
3CR.10311772	Sig. 2

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

5-07

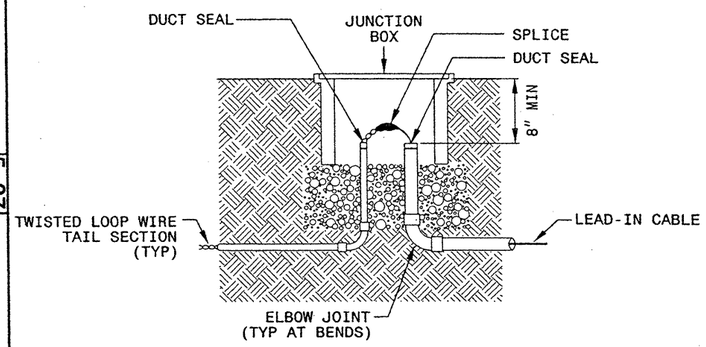
ENGLISH DETAIL DRAWING FOR

INDUCTIVE DETECTION LOOPS

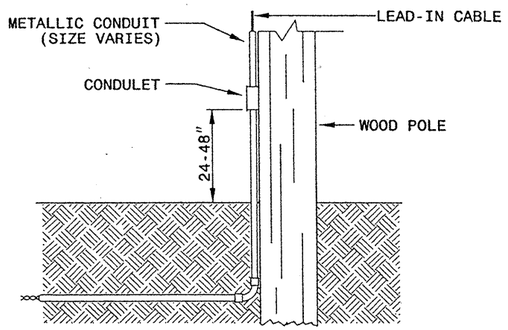
LOOP WIRE DETAILS

LOOP WIRE SPLICE POINT DETAILS

LOOP WIRE AT JUNCTION BOX



LOOP WIRE AT POLE

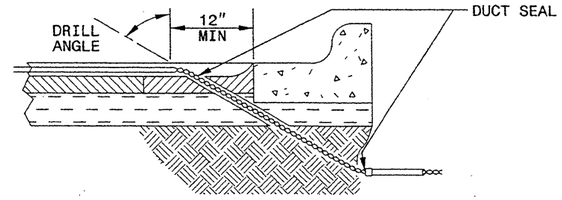


NOTE

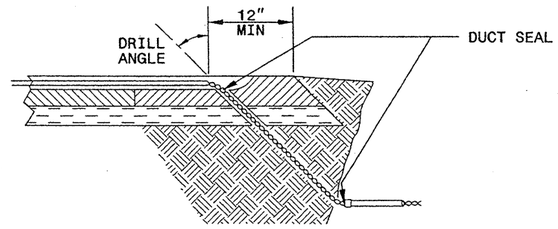
SPLICE ALL LOOP WIRE TAIL SECTIONS/LEAD-IN CABLE IN JUNCTION BOXES OR APPROVED CONDULETS.

LOOP WIRE PAVEMENT EDGE DETAILS

LOOP WIRE AT CURB & GUTTER SECTION



LOOP WIRE AT PAVEMENT SECTION



NOTES

1. DO NOT EXCAVATE UNDER CURB AND GUTTER SECTIONS FOR CONDUIT INSTALLATION.
2. TWIST LOOP WIRE TAIL SECTIONS FROM WHERE LOOP WIRE TAIL LEAVES SAW CUT TO JUNCTION BOX, INCLUDING THROUGH CONDUIT.
3. BEFORE SEALING LOOPS, INSTALL DUCT SEAL WHERE LOOP WIRE TAIL SECTION LEAVES SAW CUT IN PAVEMENT AND AT ENTRANCE OF CONDUIT TO JUNCTION BOX.

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

5-07

ENGLISH DETAIL DRAWING FOR

INDUCTIVE DETECTION LOOPS

LOOP WIRE DETAILS

SHEET 2 OF 3

1725D01

SHEET 2 OF 3

1725D01

See Plate for Title

Prepared in the Offices of:

Intelligent Transportation Systems & Signals Unit
STATE OF NORTH CAROLINA — DEPARTMENT OF TRANSPORTATION

750 N. Greenfield Parkway
Garner, NC 27529

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 016286 ENGINEER MILTON I. DEAN

Milton I. Dean 9/5/07
SIGNATURE DATE

05-SEP-2007 14:00
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emilittle

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

5-07

ENGLISH DETAIL DRAWING FOR

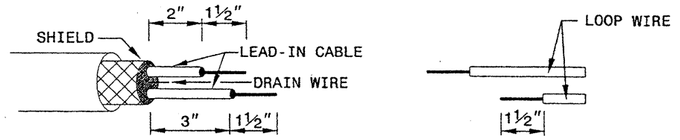
INDUCTION DETECTION LOOPS

SPLICING FOR LEAD-IN CABLE AND LOOP WIRE

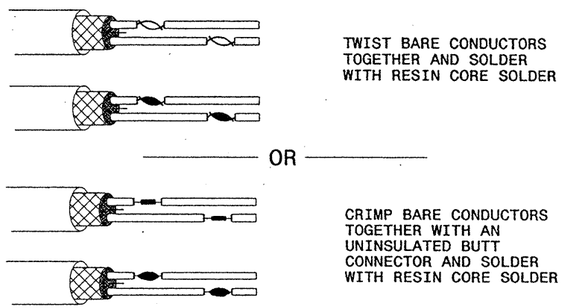
SHEET 3 OF 3

1725D01

STEP 1. STRIP LOOP WIRE AND LEAD-IN CABLE



STEP 2. CONNECT AND SOLDER



TWIST BARE CONDUCTORS TOGETHER AND SOLDER WITH RESIN CORE SOLDER

OR

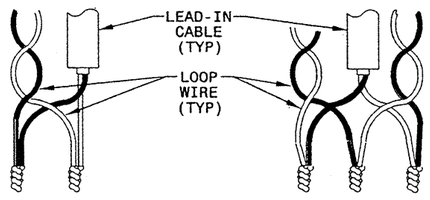
CRIMP BARE CONDUCTORS TOGETHER WITH AN UNINSULATED BUTT CONNECTOR AND SOLDER WITH RESIN CORE SOLDER

BOND SHIELD DRAIN WIRE AT SPLICE SECTIONS (DO NOT GROUND)

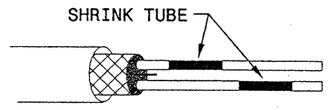
LOOP WIRE AND LEAD-IN CABLE CONNECTION DETAILS

SINGLE CONNECTION

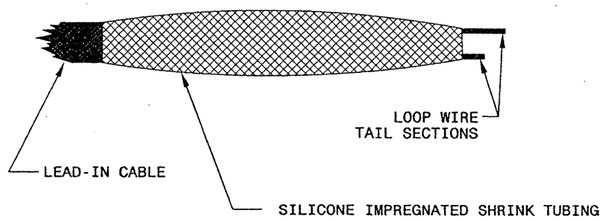
SERIES CONNECTION



STEP 3. INSULATE EACH SOLDER JOINT SEPARATELY



STEP 4. ENVIRONMENTALLY PROTECT SPLICE



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

5-07

ENGLISH DETAIL DRAWING FOR

INDUCTIVE DETECTION LOOPS

SPLICING FOR LEAD-IN CABLE AND LOOP WIRE

SHEET 3 OF 3

1725D01

See Plate for Title

Prepared in the Offices of:
Intelligent Transportation Systems & Signals Unit
750 N. Greenfield Parkway
Garner, NC 27529

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 016286 ENGINEER MILTON I. DEAN
SIGNATURE 9/5/07 DATE