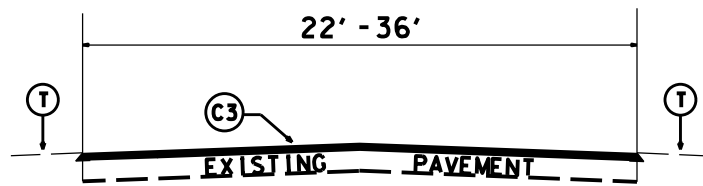
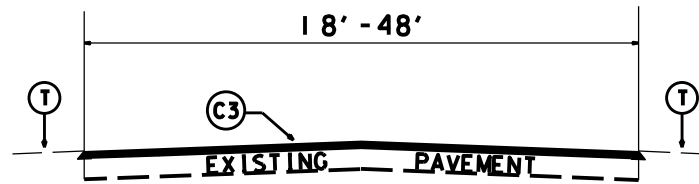


PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
IREDELL COUNTY	10	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
2019CPT. 12.04.10491		PRIMARY RESURFACING
2019CPT. 12.04.20491		SECONDARY RESURFACING



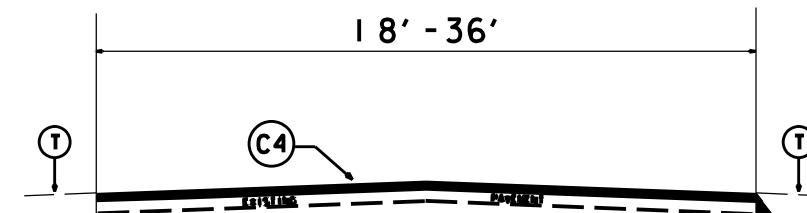
TYPICAL SECTION NO.1

Map 1: ALL
 Map 3: 0+00-1+00
 6+00-41+00
 57+00-77+00
 83+50-163+00
 263+00-284+1.5
 292+1.5-376+00
 385+65-388+08



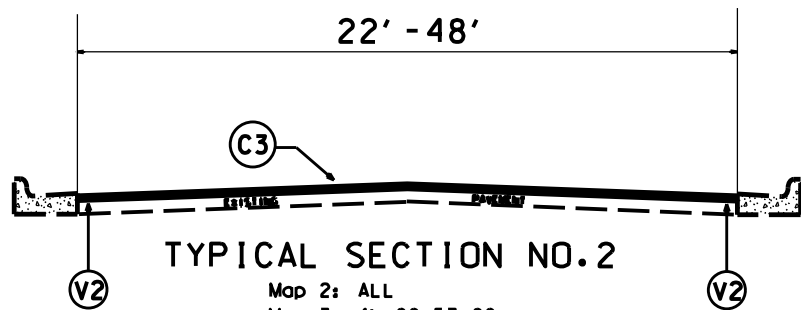
TYPICAL SECTION NO.5

Map 4, 38, 52: ALL
 Map 8: 0+00-34+00
 47+00-59+00
 Map 9: 0+00-23+00
 28+00-38+86
 Map 33: 7+00-187+00



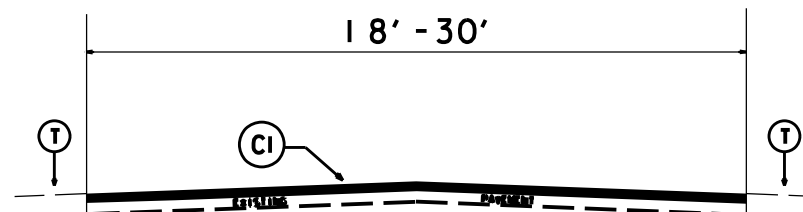
TYPICAL SECTION NO.10

Map 34: 0+00-202+86
 Map 37: ALL



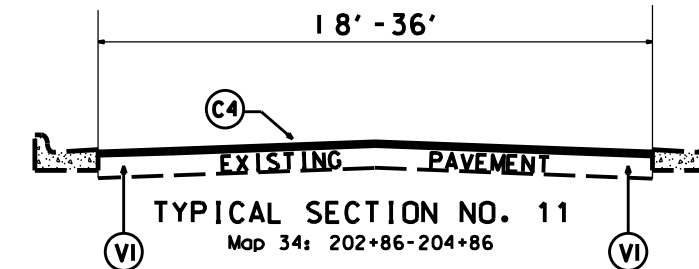
TYPICAL SECTION NO.2

Map 2: ALL
 Map 3: 41+00-57+00
 163+00-219+65
 Map 8: 34+00-47+00
 59+00-68+11
 Map 33: 0+00-7+00
 187+00-194+00



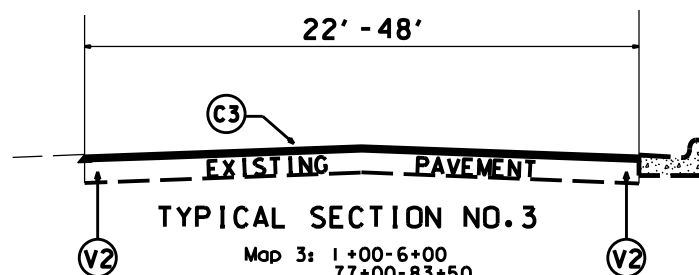
TYPICAL SECTION NO.6

Maps 5, 7, 10, 14, 19, 20, 21, 35,
 36, 39, 41, 42, 42, 44, 45,
 46, 57, 58: ALL



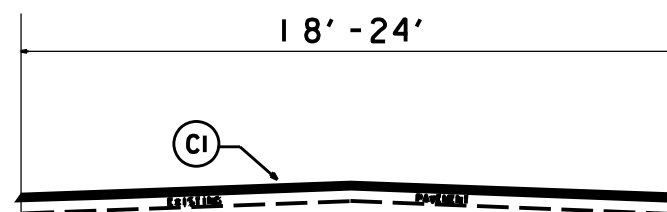
TYPICAL SECTION NO. 11

Map 34: 202+86-204+86



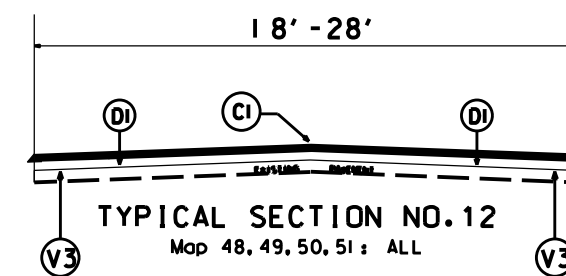
TYPICAL SECTION NO.3

Map 3: 1+00-6+00
 77+00-83+50



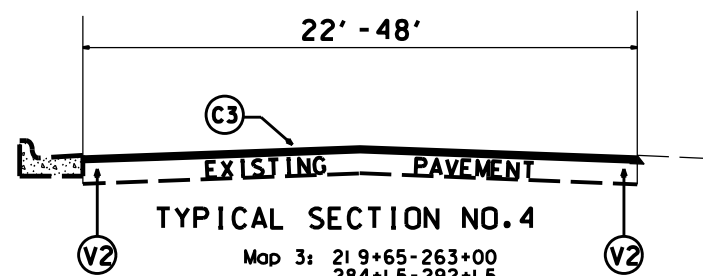
TYPICAL SECTION NO.7

Maps 6, 22, 23, 24, 25, 26, 27, 28,
 29, 31, 40, 53, 54, 55, 56: ALL



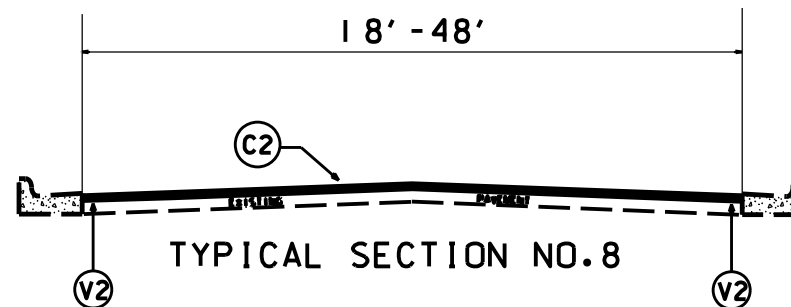
TYPICAL SECTION NO.12

Map 48, 49, 50, 51: ALL



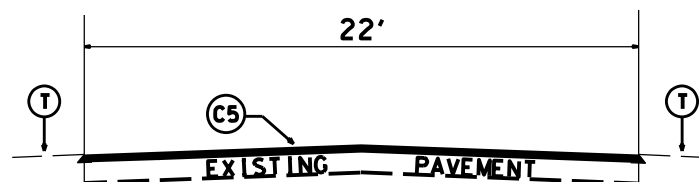
TYPICAL SECTION NO.4

Map 3: 219+65-263+00
 284+1.5-292+1.5
 376+00-385+65
 Map 9: 23+00-28+00



TYPICAL SECTION NO.8

Maps 11, 12, 13, 15, 16, 17, 18, 30: ALL



TYPICAL SECTION NO.9

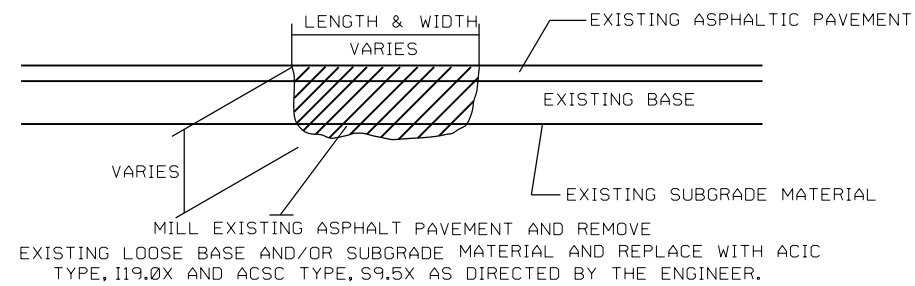
Map 32: ALL

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.0" WARM MIX ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C5	PROP. APPROX. 1.5" WARM MIX ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 3.0" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
V1	MILL EXISTING ASPHALT PAVEMENT APPROX. 1" IN DEPTH
V2	MILL EXISTING ASPHALT PAVEMENT APPROX. 1.5" IN DEPTH
V3	MILL EXISTING ASPHALT PAVEMENT APPROX. 4" IN DEPTH

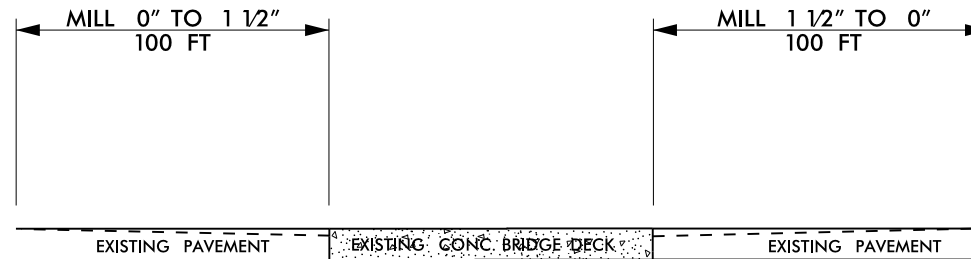
2019 - 2020
 Resurfacing Program
 Typical Sections
 Iredell County

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
IREDELL COUNTY	11	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
2019CPT.12.04.10491		PRIMARY RESURFACING
2019CPT.12.04.20491		SECONDARY RESURFACING

DETAIL A
PATCHING EXISTING PAVEMENT

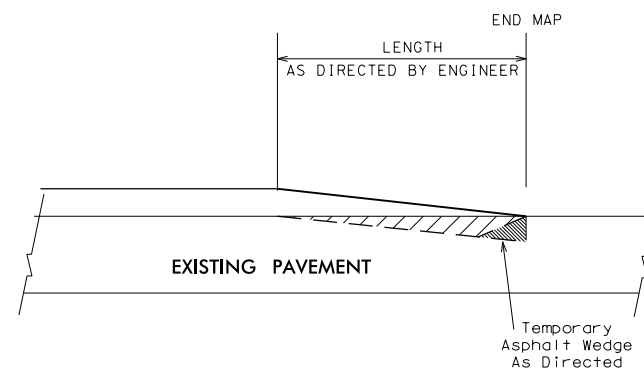
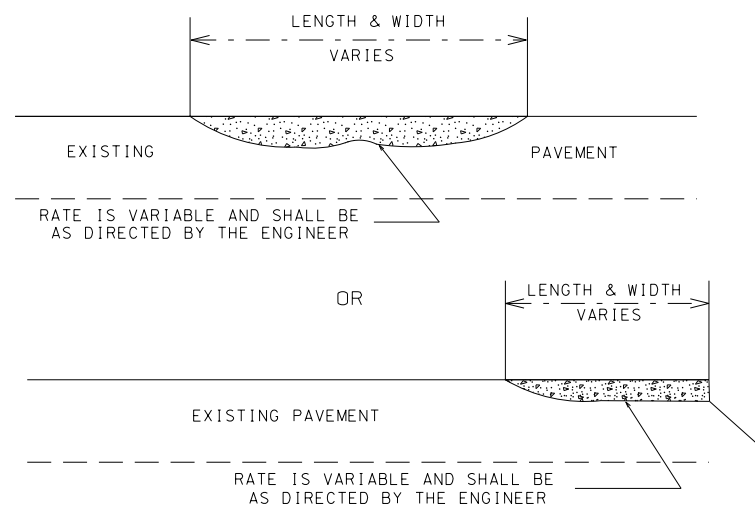


DETAIL C
MILLING BRIDGE APPROACHES

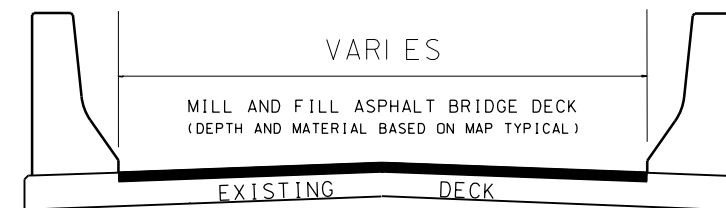


DETAIL B

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



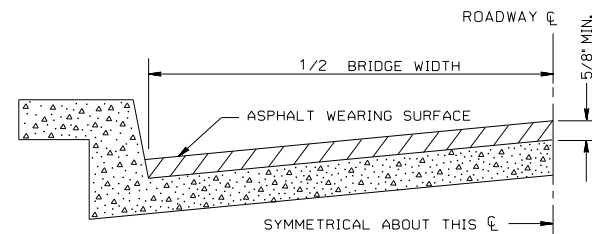
TIE-IN (INCIDENTAL) MILLING DETAIL



ASPHALT BRIDGE SECTION
USE FOR ALL ASPHALT BRIDGE DECKS

DETAIL E

BRIDGE HALF TYPICAL SECTION



FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN.

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

NOTES

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

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.0" WARM MIX ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
C5	PROP. APPROX. 1.5" WARM MIX ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 3.0" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
T	AGGREGATE SHOULDER BORROW (SHOULDER RECONSTRUCTION)
V1	MILL EXISTING ASPHALT PAVEMENT APPROX. 1" IN DEPTH
V2	MILL EXISTING ASPHALT PAVEMENT APPROX. 1.5" IN DEPTH
V3	MILL EXISTING ASPHALT PAVEMENT APPROX. 4" IN DEPTH

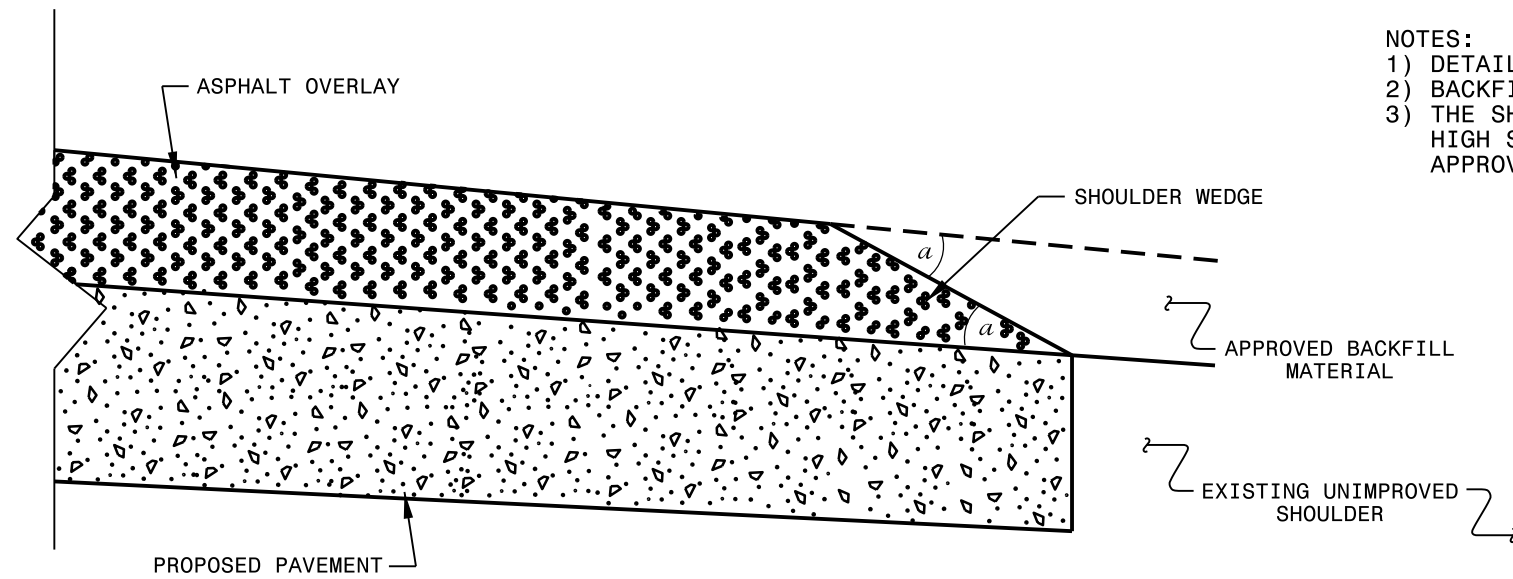
Note:

0"-1" milling is for bridge approaches on Maps 34-37, 45, 53.

2019 - 2020
Resurfacing Program
Typical Sections
Iredell County

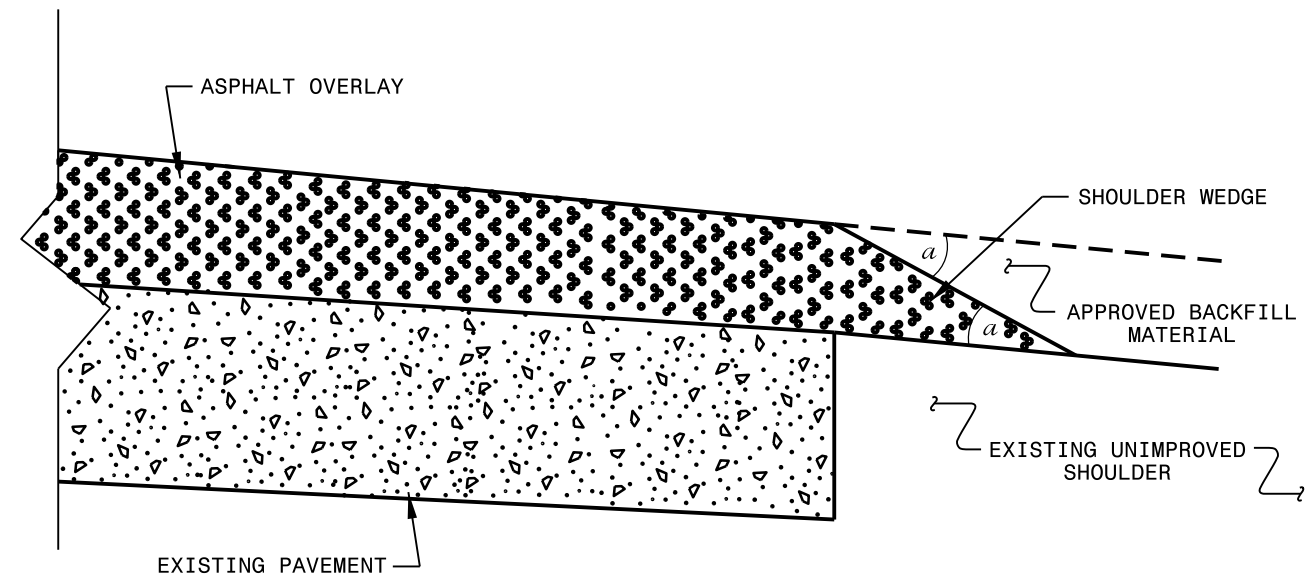
NOTES:

- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
- 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
- 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



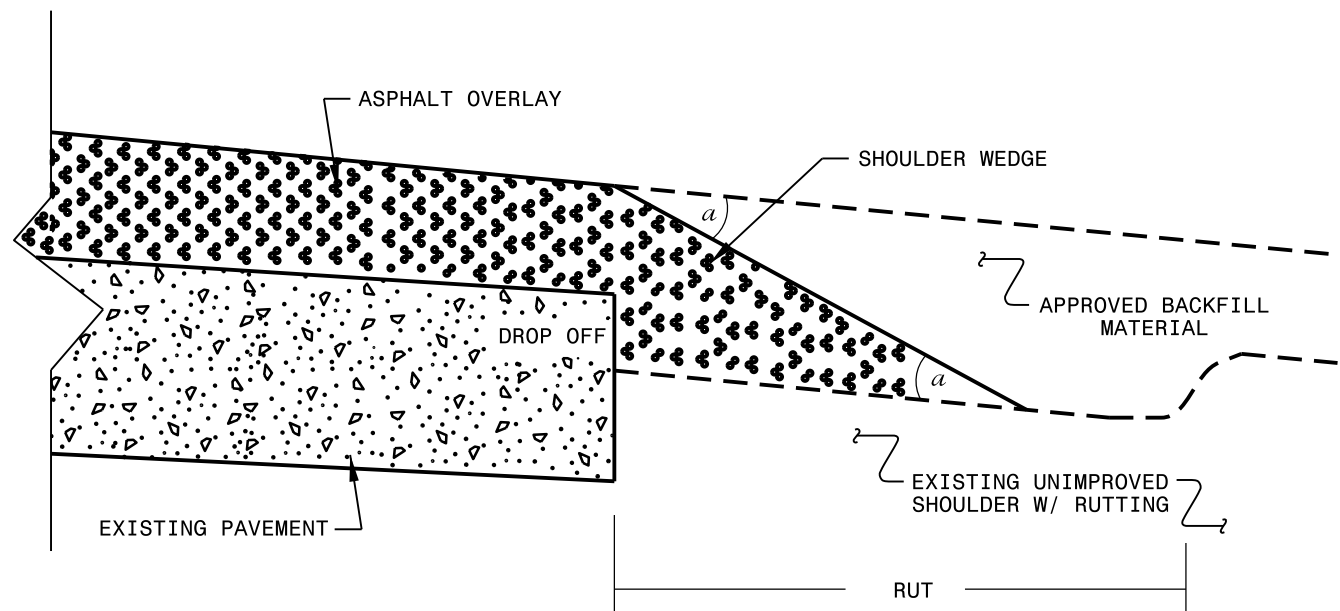
SHOULDER WEDGE DETAIL

(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: 2/2/16	
CHECKED BY:	DATE:	
FILE SPEC.: szusr/details/stand/shoulderwedgedetail.dgn		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	AGGREGATE SHOULDER BORROW	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	1 1/2"	1"	4"	0" TO 1"	0" TO 1.5"	INCIDENTAL MILLING	INTERMEDIATE COURSE, I19.0C	SURFACE COURSE, S9.5B	LEVELING COURSE, S9.5B	SURFACE COURSE, S9.5C	LEVELING COURSE, S9.5C	AS-PHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ADJ. OF MAN HOLES	ADJ. OF METER OR VALVE BOXES	PORTABLE LIGHTING	INDUCTIVE LOOP SAWCUT	LEAD-IN CABLE (14-2)																
														MI	FT	TON	TONS	SMI														SY	SY	SY	SY	SY	TONS	TONS	TONS	TONS	TONS	TONS	EA	EA	LS	LF	LF
2019CPT.12.04.10	Iredell	1	NC 150	FROM .07 MILES WEST OF NC 152 TO .07 MILES EAST OF NC 152	1	2	NO	NO	0.141	24	30	10	0.28							60					15	40			*	300	100																
		2	NC 152	FROM NC 3 TO SR 1150 (LINWOOD ROAD)	2	2	NO	NO	1.05	36					22,000										250		132	100	24	11	*	900	200														
		3	NC 115	FROM .16 MILES NORTH OF SR 1223 (EASTPORT TRAIL) AT BEG. SCHOOL ZONE TO US21/NC115 SPLIT	1 2 3	2	NO	NO	7.35	22-48		800	400	9.40	54,000										11,000	200	673	1,400	57		*	1,500	300														
TOTAL FOR PROJ NO. 2019CPT.12.04.10491									8.541		830	410	9.68	76,000					560				13,450	200	820	1,540	81	11	*	2,700	600																
20491		4	SR 1137 (MIDWAY LAKE ROAD)	FROM NC 115 TO SR 1136 (FAITH ROAD)	5	2	NO	NO	1.85	19	310	100	3.70												550																						
		5	SR 1272 (NANCE FARM ROAD)	FROM SR 1137 (MIDWAY LAKE ROAD) TO DEAD END	6	2	NO	NO	0.308	20	50	15	0.62													30	225	150				25	100														
		6	SR 1297 (TAMMY DRIVE)	FROM SR 1137 (MIDWAY LAKE ROAD) TO DEAD END	7	2	NO	NO	0.12	18	20	10														30	80	10				6	10														
		7	SR 1144 (RUSTIC ROAD)	FROM SR 1143 (PATTERSON FARM ROAD) TO CUL-DE-SAC	6	2	NO	NO	0.95	20	160	50	1.90														30	675	300				65	10													
		8	SR 1116 (TALBERT ROAD)	FROM SR 1100 (BRAWLEY SCHOOL ROAD) TO SR 1305 (OATES ROAD)	2 5	2	NO	NO	1.29	18-48	48	210	75	1.74	9,000												100					170	45	3	5	*	600	200									
		9	SR 1395 (BLUEFIELD ROAD)	FROM SR 1302 (CORNELIUS ROAD) TO 20' PVMT. WIDTH .24 MILES NORTH OF BIG INDIAN LOOP	4 5	2	NO	NO	0.736	18-48	48	120	50	1.37	1,500												100					925	75	60	375		*										
		10	SR 1428 (NORMANDY ROAD)	FROM SR 1303 (PERTH ROAD) TO CUL-DE-SAC	6	2	NO	NO	2.415	18	400	125	4.83														30	1,550	750				154	475													
		11	SR 3074 (ATTLEBORO PLACE)	FROM SR 1100 (BRAWLEY SCHOOL ROAD) TO CUL-DE-SAC	8	2	NO	NO	0.41	24						5,800																37	15														
		12	SR 3075 (REHOBOTH LANE)	FROM SR 3074 (ATTLEBORO PLACE) TO CUL-DE-SAC	8	2	NO	NO	0.32	24						4,600																425	28	20													
		13	SR 3309 (MARBURY LANE)	FROM SR 3074 (ATTLEBORO PLACE) TO CUL-DE-SAC	8	2	NO	NO	0.05	20						700																75	5	5													
		14	SR 2944 (PERENNIAL DRIVE)	FROM SR 2943 (FARMSTEAD LANE) TO SR 2945 (PONDHAVEN CIRCLE)	6	2	NO	NO	0.193	18	30	10	0.39															60	125	50				12	10												
		15	SR 2962 (MONTEREY DRIVE)	FROM SR 1193 (CATALINA DRIVE) TO SR 2963 (PASEO DRIVE)	8	2	NO	NO	0.201	24						3,000																300	20	5													
		16	SR 2963 (PASEO DRIVE)	FROM SR 1193 (CATALINA DRIVE) TO CUL-DE-SAC	8	2	NO	NO	0.24	24						3,500																325	22	10													
		17	SR 2964 (RIO VISTA DRIVE)	FROM SR 2963 (PASEO DRIVE) TO DEAD END	8	2	NO	NO	0.108	24						1,500																150	10	10													
		18	SR 2965 (PALLISADES COURT)	FROM SR 2964 (RIO VISTA DRIVE) TO CUL-DE-SAC	8	2	NO	NO	0.07	24						1,000																100	7	5													
		19	SR 2906 (SUNFISH DRIVE)	FROM SR 1100 (BRAWLEY SCHOOL ROAD) TO SR 2907 (CLIPPER LANE)	6	2	NO	NO	0.405	19	70	20	0.81															60	300	175				32	30												
		20	SR 2907 (CLIPPER LANE)	FROM CUL-DE-SAC TO DEAD END	6	2	NO	NO	0.183	18	30	18	0.37															30	125	75				13	15												
		21	SR 2789 (SUMMERCHASE LANE)	FROM US 21 TO DEAD END	6	2	NO	NO	0.13	24	20	10	0.26															30	125	75				13	15												
		22	SR 3104 (VALLEYVIEW ROAD)	FROM US 21 TO CUL-DE-SAC	7	2	NO	NO	0.605	19				40														30	425	150				39	175												
		23	SR 3105 (BROOKTREE DRIVE)	FROM SR 3104 (VALLEYVIEW ROAD) TO CUL-DE-SAC	7	2	NO	NO	0.39	20				25														30	300	50				23	75												
		24	SR 3106 (MAXAMY LANE)	FROM SR 3105 (BROOKTREE DRIVE) TO CUL-DE-SAC	7	2	NO	NO	0.118	20				10														30	100	20				8	20												
		25	SR 3107 (PATROSE LANE)	FROM SR 3104 (VALLEYVIEW ROAD) TO CUL-DE-SAC	7	2	NO	NO	0.119	18				10														30	100				7	5													
		26	SR 3108 (LISMARK DRIVE)	FROM SR 3104 (VALLEYVIEW ROAD) TO CUL-DE-SAC	7	2	NO	NO	0.165	20				10														30	125	20				10	10												
		27	SR 3109 (CLIFFVIEW LANE)	FROM SR 3104 (VALLEYVIEW ROAD) TO CUL-DE-SAC	7	2	NO	NO	0.18	20				10														30	150	20				11	10												
		28	SR 1489 (SAGEMORE ROAD)	FROM SR 1303 (PERTH ROAD) TO CUL-DE-SAC	7	2	NO	NO	0.44	18				25														30	300	75				25	100												
		29	SR 3133 (HARBOR LANDING DRIVE)	FROM SR 1489 (SAGEMORE ROAD) TO CUL-DE-SAC	7	2	NO	NO	0.731	18				45														30	500	50				37	150												
		30	SR 3132 (HARBOR LANDING DRIVE)	FROM SR 1303 (PERTH ROAD) TO SR 3133 (HARBOR LANDING DRIVE)	8	2	NO	NO	0.05	30						1,200																100	7	5													

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	AGGREGATE SHOULDER BORROW	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	1 1/2"	1"	4"	0" TO 1"	0" TO 1.5"	INCIDENTAL MILLING	INTERMEDIATE COURSE, I19.0C	SURFACE COURSE, S9.5B	LEVELING COURSE, S9.5B	SURFACE COURSE, S9.5C	LEVELING COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ADJ. OF MAN HOLES	ADJ. OF METER OR VALVE BOXES	PORTABLE LIGHTING	INDUCTIVE LOOP SAWCUT	LEAD-IN CABLE (14-2)																
														MI	FT	TON	TONS	SMI														SY	SY	SY	SY	SY	TONS	TONS	TONS	TONS	TONS	TONS	EA	EA	LS	LF	LF
2019CPT.12.04.1	Irredell	31	SR 3197 (HONEYSUCKLE CREEK LOOP)	FROM SR 1303 (PERTH ROAD) TO SR 1303 (PERTH ROAD),	7	2	NO	NO	0.59	20		30							60		450	25			32	25																					
		32	SR 2319 (TWIN OAKS ROAD)	FROM SR 2320 (S. GREENBRIAR ROAD) TO SR 2318 (FANJOY ROAD)	9	2	NO	YES	1.45	22	240	80	2.90									1,750	30	107	25																						
		33	SR 2638 (OLD SALISBURY HIGHWAY)	FROM US 70 TO US 70	2 5	2	NO	NO	3.675	18-48	560	200	6.82	6,000								6,500	2,000	520	400			*	600	150																	
		34	SR 2359 (BETHESDA ROAD)	FROM SR 1001 (OSTWALT AMITY ROAD) TO US 70	10 11	2	NO	YES	3.88	18-36	640	200	7.76		1,000		500					3,000	1,200		281	400																					
		35	SR 2617 (WINTHROW CREEK ROAD)	FROM SR 2362 (TRIPLETT ROAD) TO SR 2383 (SHINNVILLE ROAD)	6	2	NO	NO	1.54	19	250	100	3.08		300		500					1,050	650		114	450																					
		36	SR 2375 (HOUSTON ROAD)	FROM US 21 TO SR 2379 (WEATHERS CREEK ROAD)	6	2	NO	NO	3.155	18	520	150	6.31				500					2,050	1,000		204	545																					
		37	SR 2318 (SHILOH ROAD)	FROM SR 2342 (AMITY HILL ROAD) TO US 70	10	2	NO	YES	3.2	20	530	160	6.40		400		500					2,300	550		191	350																					
		38	SR 2342 (AMITY HILL ROAD)	FROM US 21 TO SR 1001 (OSTWALT AMITY ROAD)	5	2	NO	NO	6.975	20	1,150	350	13.95	1,100			1,000	1,400					7,575	1,000	520	525		1																			
		39	SR 3128 (STATELY PINES DRIVE)	FROM SR 1314 (CLONTZ HILL ROAD) TO CUL-DE-SAC	6	2	NO	NO	0.137	19	20	10	0.27									100	45		10	40																					
		40	SR 3129 (MISTY SPRINGS ROAD)	FROM SR 3128 (STATELY PINES DRIVE) TO CUL-DE-SAC	7	2	NO	NO	0.199	18		10										150	15		11	15																					
		41	SR 2808 (GRAFTON PLACE)	FROM SR 2811 (FARMDALE DRIVE) TO CUL-DE-SAC	6	2	NO	NO	0.112	18	20	10	0.22									75	45		8	30																					
		42	SR 2809 (HOLMFIELD ROAD)	FROM DEAD END TO DEAD END	6	2	NO	NO	0.116	18	20	10	0.23									75	50		8	10																					
		43	SR 2810 (LORAM DRIVE)	FROM SR 2809 (HOLMFIELD ROAD) TO DEAD END	6	2	NO	NO	0.126	18	20	10	0.25									100	50		10	15																					
		44	SR 2811 (FARMDALE DRIVE)	FROM SR 1313 (CARLYLE ROAD) TO SR 2809 (HOLMFIELD ROAD)	6	2	NO	NO	0.171	18	30	10	0.34									125	70		13	30																					
		45	SR 1338 (WALLACE SPRINGS ROAD)	FROM SR 1421 (WILSON W LEE BLVD) TO SR 1005 (OLD MOUNTAIN ROAD)	6	2	NO	NO	3.17	18	520	160	6.34		200		500					2,200	1,000		214	250	3																				
		46	SR 1334 (TROUTMAN FARM ROAD)	FROM SR 1005 (OLD MOUNTAIN ROAD) TO DEAD END	6	2	NO	NO	1.907	18	310	100	3.81									1,225	400		109	230																					
		47	SR 2728 (WINDEMERE ISLE ROAD)	FROM SR 1328 (E MONBO ROAD) TO SR 3100 (WINDEMERE ISLE ROAD)	8	2	NO	NO	0.106	28				1,745								175			12																						
		48	SR 3100 (WINDEMERE ISLE ROAD)	FROM SR 2728 (WINDEMERE ISLE ROAD) TO BRIDGE	12	2	NO	NO	0.415	28						7,000						1,150	425		84																						
		49	SR 3101 (E. TATTERSALL DRIVE)	FROM SR 3100 (WINDEMERE ISLE ROAD) TO CUL-DE-SAC	12	2	NO	NO	0.41	24						6,000						1,000	350		71																						
		50	SR 3102 (W. TATTERSALL DRIVE)	FROM SR 3100 (WINDEMERE ISLE ROAD) TO CUL-DE-SAC	12	2	NO	NO	0.183	24						2,750						500	175		36																						
		51	SR 1358 (A STREET)	FROM SR 1617 (WESTMINSTER DRIVE) TO DEAD END	12	2	NO	NO	0.059	18		10				700						125	40		9																						
		52	SR 1753 (STAMEY FARM ROAD)	FROM SR 1006 (ISLAND FORD ROAD) TO US 70	5	2	NO	NO	1.395	24	230	70	2.79	500				1,000	100				1,850	500	144	475																					
		53	SR 1502 (SHARON SCHOOL ROAD/ANDRA LANE)	FROM SR 1529 (SHARON SCHOOL ROAD) TO US 70	7	2	NO	NO	3.245	22		175					500					2,550	200		184	200																					
		54	SR 1529 (SHARON SCHOOL ROAD)	FROM SR 1502 (SHARON SCHOOL ROAD) TO ALEXANDER CO	7	2	NO	NO	2.32	22		125										1,825	100		129	150																					
		55	SR 1625 (HUDSON LANE)	FROM SR 1502 (SHARON SCHOOL ROAD) TO DEAD END	7	2	NO	NO	0.275	20		10										200			13	10																					
		56	SR 1548 (LITTLE FARM ROAD)	FROM NC 90 TO SR 1551 (SCOTTS CREEK ROAD)	7	2	NO	NO	1.32	18		75										850	100		64	250																					
		57	SR 2187 (GLENWAY DRIVE)	FROM NEW PVMT. TO SR 2173 (JAMES FARM ROAD)	6	2	NO	NO	0.56	24	100	30	1.12									500	300		54	600																					
		58	SR 2142 (CARTNER ROAD)	FROM SR 2139 (RIMROCK ROAD) TO SR 2158 (OLD MOCKSVILLE ROAD)	6	2	NO	NO	1.245	20	210	75	2.49									900	400		87	300																					
TOTAL FOR PROJ NO. 2019CPT.12.04.20491									54.713		6,790	2,818	81.07	41,145	1,900	16,450	3,000	2,000	5,840	2,775	28,120	8,170	23,025	4,105	4,214	7,630	6	6	*	1,200	350																
GRAND TOTAL									63.254		7,620	3,228	90.75	117,145	1,900	16,450	3,000	2,000	6,400	2,775	28,120	8,170	36,475	4,305	5,034	9,170	87	17	1	3,900	950																

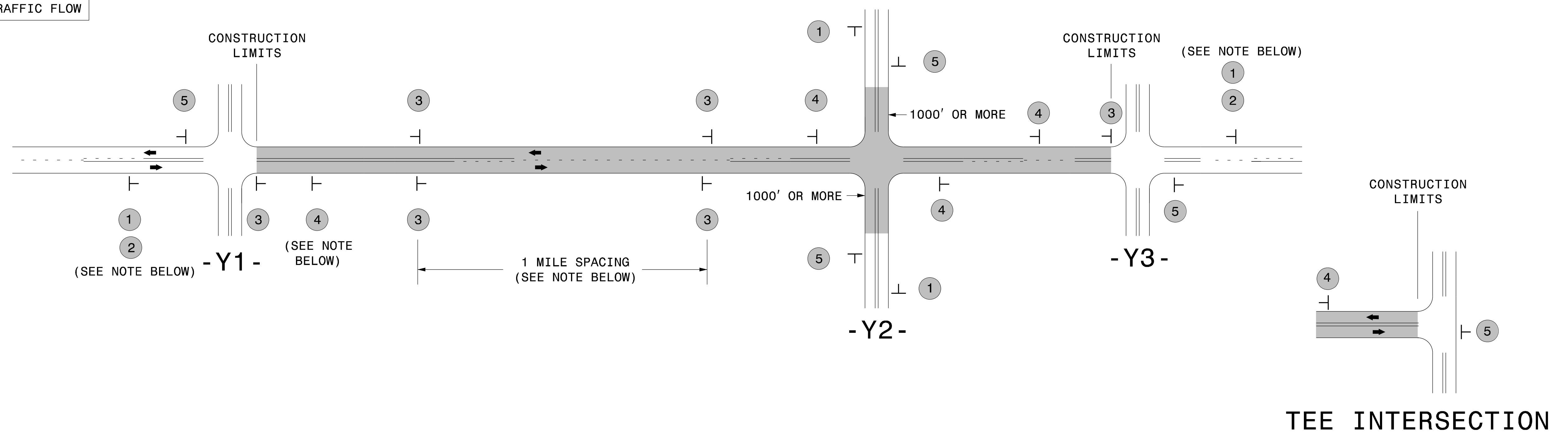
PROJECT NO.	SHEET NO.	TOTAL NO.
2019CPT.12.04.10491, etc	15	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LENGTH	WIDT H	WZ ADV/ GEN. WARN. SIGNING	TEMP. TRAFFIC CONTROL	8" X 120 M WHITE THERMO	8" X 90 M YELLOW THERMO	16" X 120 M WHITE THERMO	24" X 120 M WHITE THERMO	THERM O RXR 120 M	THERM O MSG SCHO O L 120 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR & RT ARROW 90 M	THERMO STR & LT ARROW 90 M	4" WHITE PAINT	4" YELLOW PAINT	SNOW PLOWABLE MARKERS					
							MI	FT	SF	LS	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
2019CPT.12.04	Iredell	1	NC 150	FROM .07 MILES WEST OF NC 152 TO .07 MILES EAST OF NC 152	1	2	0.141	24	50	*		80		48			2	2			2,975	2,975	25					
		2	NC 152	FROM NC 3 TO SR 1150 (LINWOOD ROAD)	2	2	1.05	36	125		190	200		72			20		6		7,000	30,000	200					
		3	NC 115	FROM .16 MILES NORTH OF SR 1223 (EASTPORT TRAIL) AT BEG. SCHOOL ZONE TO US21/NC115 SPLIT	1	2	7.35	22-48	825		500	900			1,100		24	37	10	20	2	100,000	180,000	650				
		TOTAL FOR PROJ NO. 2019CPT.12.04.10491							8.541			1,000	690	1,180		1,220		24	59	12	26	2	109,975	212,975	875			
															24	99				322,950								
2019CPT.12.04.20491	Iredell	4	SR 1137 (MIDWAY LAKE ROAD)	FROM NC 115 TO SR 1136 (FAITH ROAD)	5	2	1.85	19	210												39,825	39,825						
		5	SR 1272 (NANCE FARM ROAD)	FROM SR 1137 (MIDWAY LAKE ROAD) TO DEAD END	6	2	0.308	20	48																			
		6	SR 1297 (TAMMY DRIVE)	FROM SR 1137 (MIDWAY LAKE ROAD) TO DEAD END	7	2	0.12	18	48																			
		7	SR 1144 (RUSTIC ROAD)	FROM SR 1143 (PATTERSON FARM ROAD) TO CUL-DE-SAC	6	2	0.95	20	110														20,500	20,500				
		8	SR 1116 (TALBERT ROAD)	FROM SR 1100 (BRAWLEY SCHOOL ROAD) TO SR 1305 (OATES ROAD)	2	5	1.29	18-48	150			400		200				17	6	4		27,500	38,000	160				
		9	SR 1395 (BLUEFIELD ROAD)	FROM SR 1302 (CORNELIUS ROAD) TO 20' PVMT. WIDTH .24 MILES NORTH OF BIG INDIAN LOOP	4	5	0.736	18-48	85													15,839	15,839	55				
		10	SR 1428 (NORMANDY ROAD)	FROM SR 1303 (PERTH ROAD) TO CUL-DE-SAC	6	2	2.415	18	275													52,000	52,000					
		11	SR 3074 (ATTLEBORO PLACE)	FROM SR 1100 (BRAWLEY SCHOOL ROAD) TO CUL-DE-SAC	8	2	0.41	24	48																			
		12	SR 3075 (REHOBOTH LANE)	FROM SR 3074 (ATTLEBORO PLACE) TO CUL-DE-SAC	8	2	0.32	24	48																			
		13	SR 3309 (MARBURY LANE)	FROM SR 3074 (ATTLEBORO PLACE) TO CUL-DE-SAC	8	2	0.05	20	48																			
		14	SR 2944 (PERENNIAL DRIVE)	FROM SR 2943 (FARMSTEAD LANE) TO SR 2945 (PONDHAVEN CIRCLE)	6	2	0.193	18	48																			
		15	SR 2962 (MONTEREY DRIVE)	FROM SR 1193 (CATALINA DRIVE) TO SR 2963 (PASEO DRIVE)	8	2	0.201	24	48																			
		16	SR 2963 (PASEO DRIVE)	FROM SR 1193 (CATALINA DRIVE) TO CUL-DE-SAC	8	2	0.24	24	48																			
		17	SR 2964 (RIO VISTA DRIVE)	FROM SR 2963 (PASEO DRIVE) TO DEAD END	8	2	0.108	24	48																			
		18	SR 2965 (PALLISADES COURT)	FROM SR 2964 (RIO VISTA DRIVE) TO CUL-DE-SAC	8	2	0.07	24	48																			
		19	SR 2906 (SUNFISH DRIVE)	FROM SR 1100 (BRAWLEY SCHOOL ROAD) TO SR 2907 (CLIPPER LANE)	6	2	0.405	19	48																			
		20	SR 2907 (CLIPPER LANE)	FROM CUL-DE-SAC TO DEAD END	6	2	0.183	18	48																			
		21	SR 2789 (SUMMERCHASE LANE)	FROM US 21 TO DEAD END	6	2	0.13	24	48																			
		22	SR 3104 (VALLEYVIEW ROAD)	FROM US 21 TO CUL-DE-SAC	7	2	0.605	19	75																			
		23	SR 3105 (BROOKTREE DRIVE)	FROM SR 3104 (VALLEYVIEW ROAD) TO CUL-DE-SAC	7	2	0.39	20	48																			
		24	SR 3106 (MAXAMY LANE)	FROM SR 3105 (BROOKTREE DRIVE) TO CUL-DE-SAC	7	2	0.118	20	48																			
		25	SR 3107 (PATROSE LANE)	FROM SR 3104 (VALLEYVIEW ROAD) TO CUL-DE-SAC	7	2	0.119	18	48																			
		26	SR 3108 (LISMARK DRIVE)	FROM SR 3104 (VALLEYVIEW ROAD) TO CUL-DE-SAC	7	2	0.165	20	48																			
		27	SR 3109 (CLIFFVIEW LANE)	FROM SR 3104 (VALLEYVIEW ROAD) TO CUL-DE-SAC	7	2	0.18	20	48																			
		28	SR 1489 (SAGEMORE ROAD)	FROM SR 1303 (PERTH ROAD) TO CUL-DE-SAC	7	2	0.44	18	48																			
		29	SR 3133 (HARBOR LANDING DRIVE)	FROM SR 1489 (SAGEMORE ROAD) TO CUL-DE-SAC	7	2	0.731	18	85																			
		30	SR 3132 (HARBOR LANDING DRIVE)	FROM SR 1303 (PERTH ROAD) TO SR 3133 (HARBOR LANDING DRIVE)	8	2	0.05	30	48																			
		31	SR 3197 (HONEYSUCKLE CREEK LOOP)	FROM SR 1303 (PERTH ROAD) TO SR 1303 (PERTH ROAD),	7	2	0.59	20	75																			
		32	SR 2319 (TWIN OAKS ROAD)	FROM SR 2320 (S. GREENBRIAR ROAD) TO SR 2318 (FANJOY ROAD)	9	2	1.45	22	175														31,204	31,204				

SIGNING FOR RESURFACING PROJECTS

LEGEND
 ┆ STATIONARY SIGN
 ← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1		PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> LESS THAN 1000' OF RESURFACING ALONG -Y- LINE SUBDIVISION ROADS DEAD END ROADS <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER. </div> <div style="text-align: center;"> W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER. </div> </div>
	2		#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	
	3		- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.	
	4		- 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. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.	
	5		PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.	

THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.

MAPS LESS THAN 2 MILES

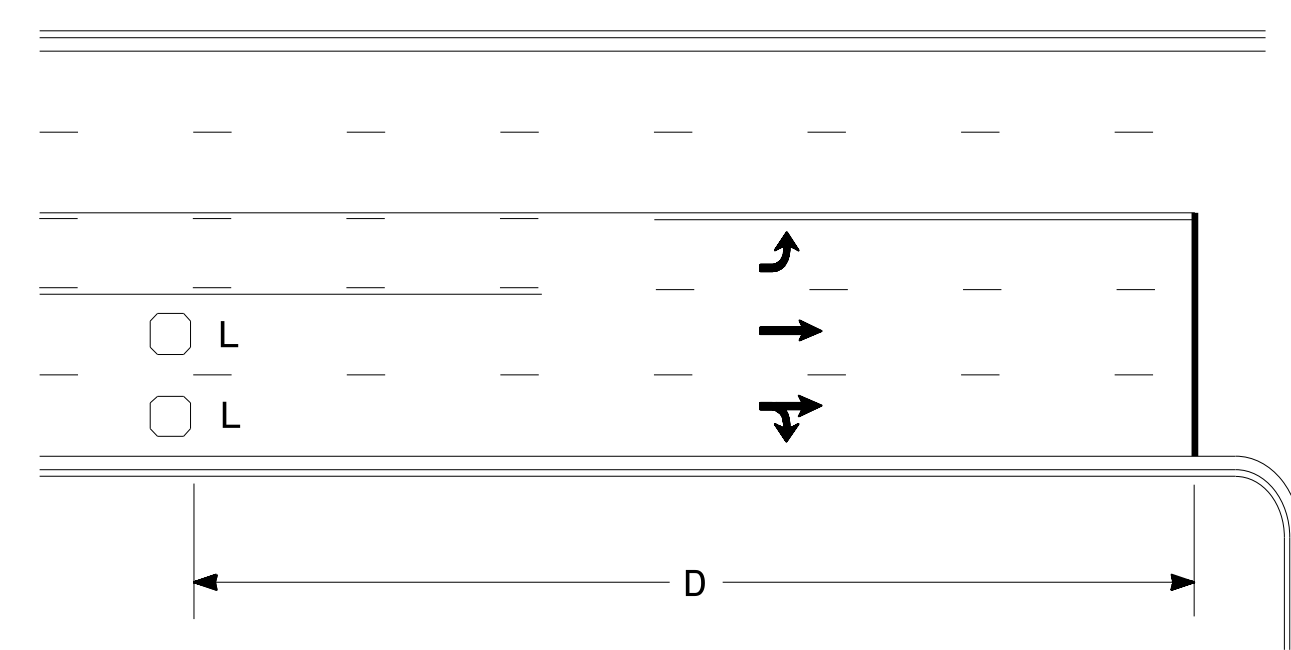
FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

5/15/2017 S:\TUXWZTC\Resurfacing\2L2W & AST Resurfacing Details\Resurfacing_AdvWarn_2Ln.dgn User:kadai

High Speed Detection (≥40 mph)

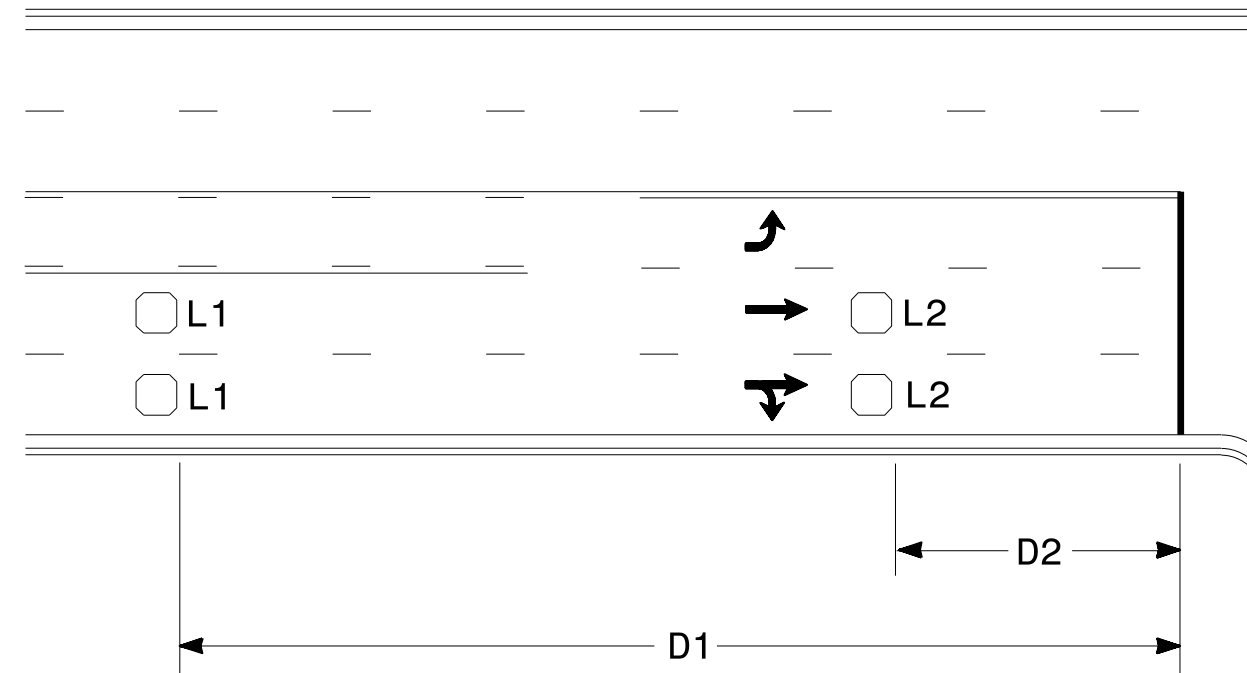


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

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

Volume Density Operation

OR

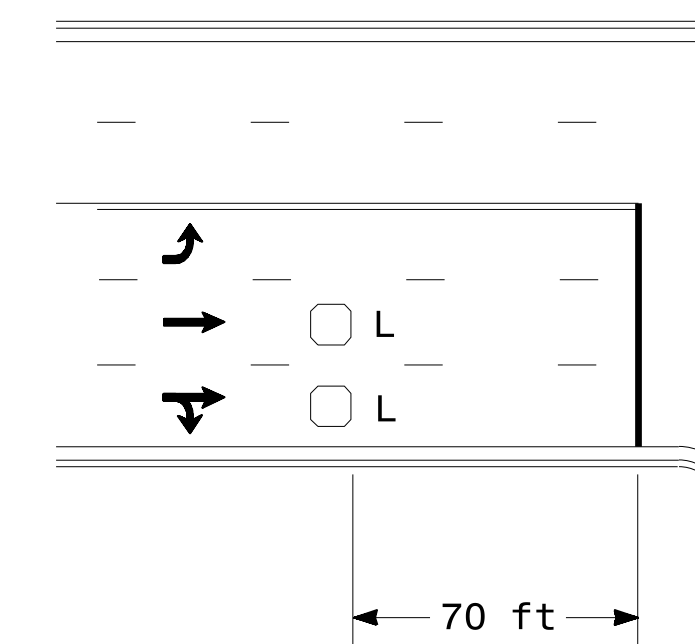


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series
L2 = 6ft X 6ft
Wired in series

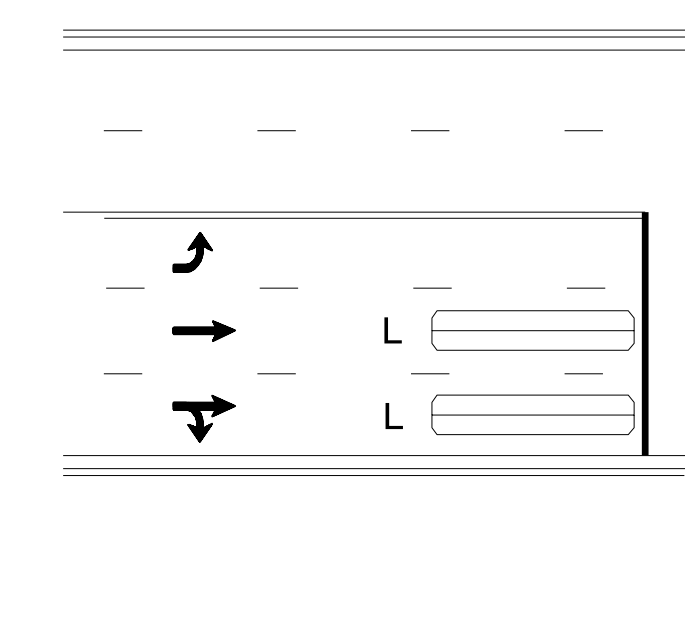
"Stretch" Operation

Low Speed Detection (≤35 mph)



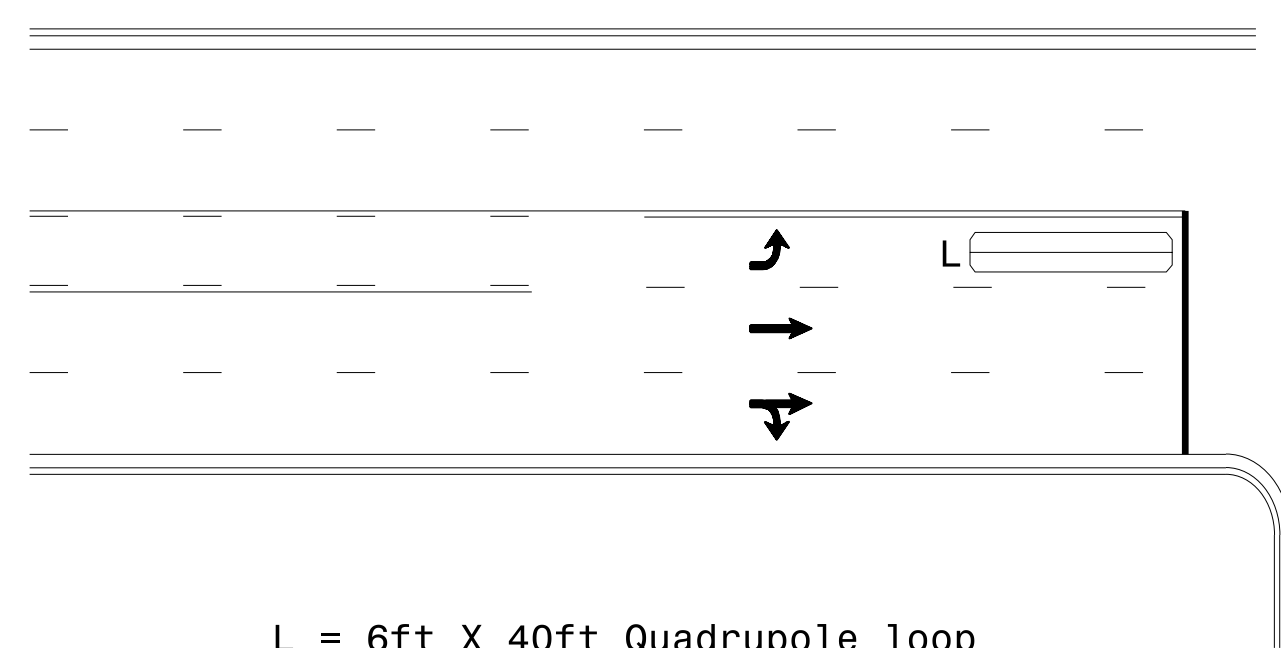
L = 6ft X 6ft
Wired in series

OR



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

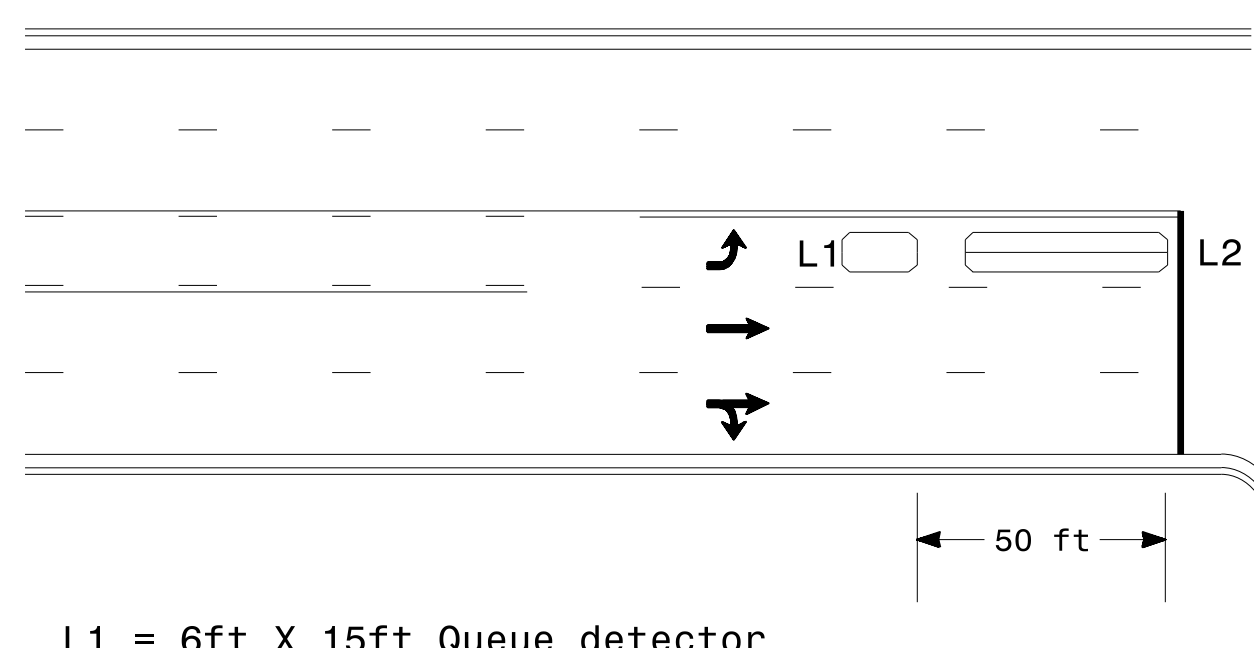
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

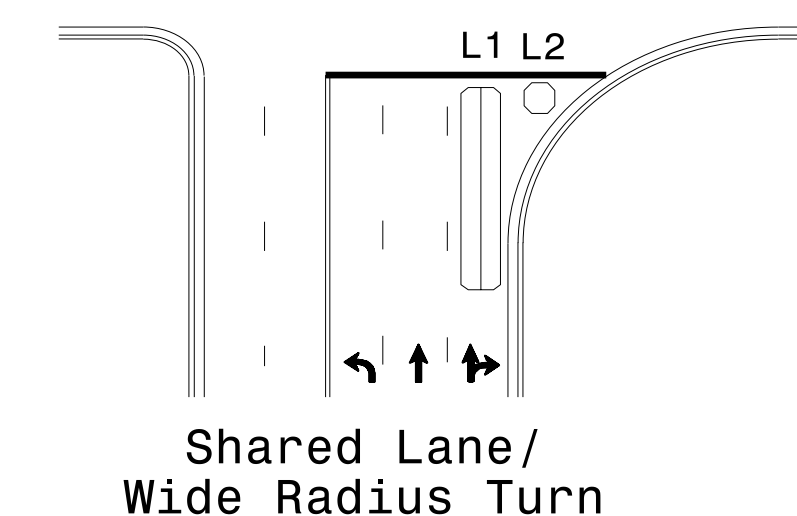
OR



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

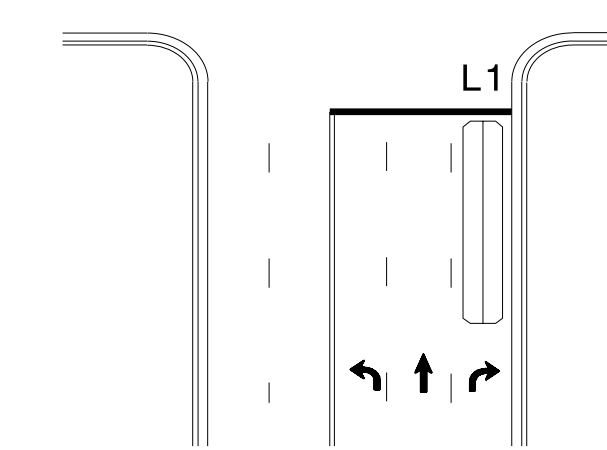
Queue Loop Detection

Right Turn Lane Detection

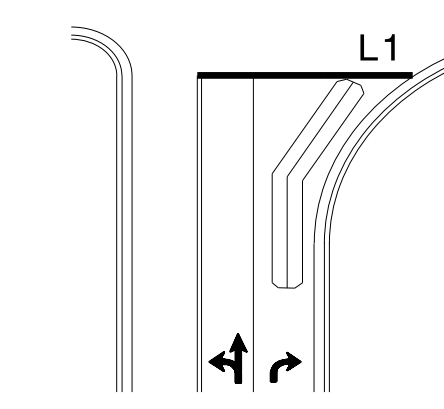


Shared Lane/
Wide Radius Turn

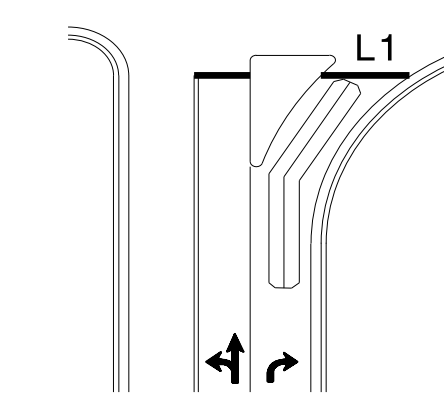
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

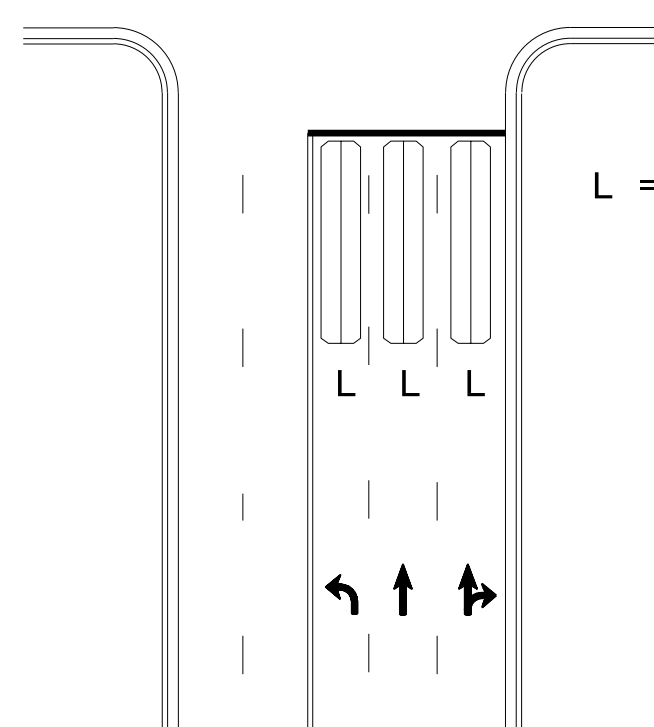


Wide Radius Turn



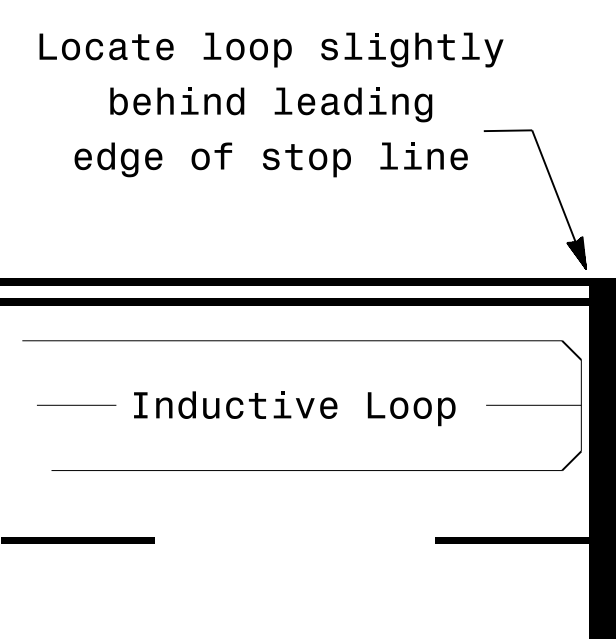
Channelized Turn

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:

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE
N/A

Typical Signal Loop Locations

PLAN DATE: January 2015	REVIEWED BY: JPG
PREPARED BY: PLA	REVIEWED BY:
REVISIONS	INIT. DATE

SEAL
NORTH CAROLINA
PROFESSIONAL ENGINEER
PAMELA L. ALEXANDER
23489

DocuSigned by:
P. Alexander
1/30/2015 10:44:44 AM
SIG. INVENTORY NO.