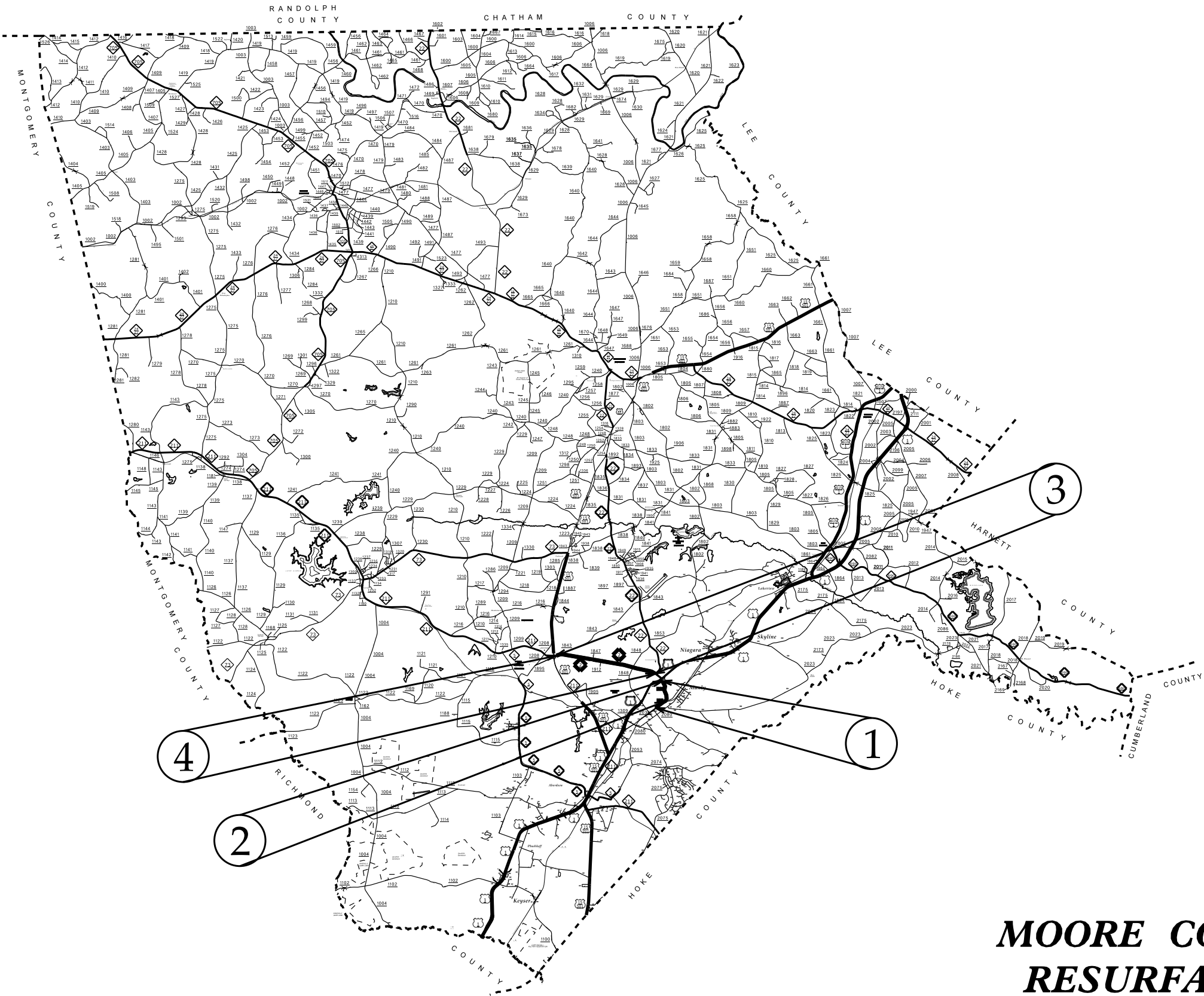
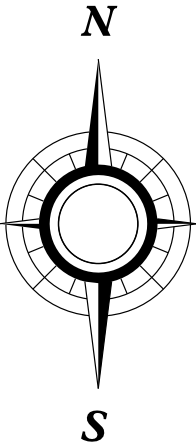
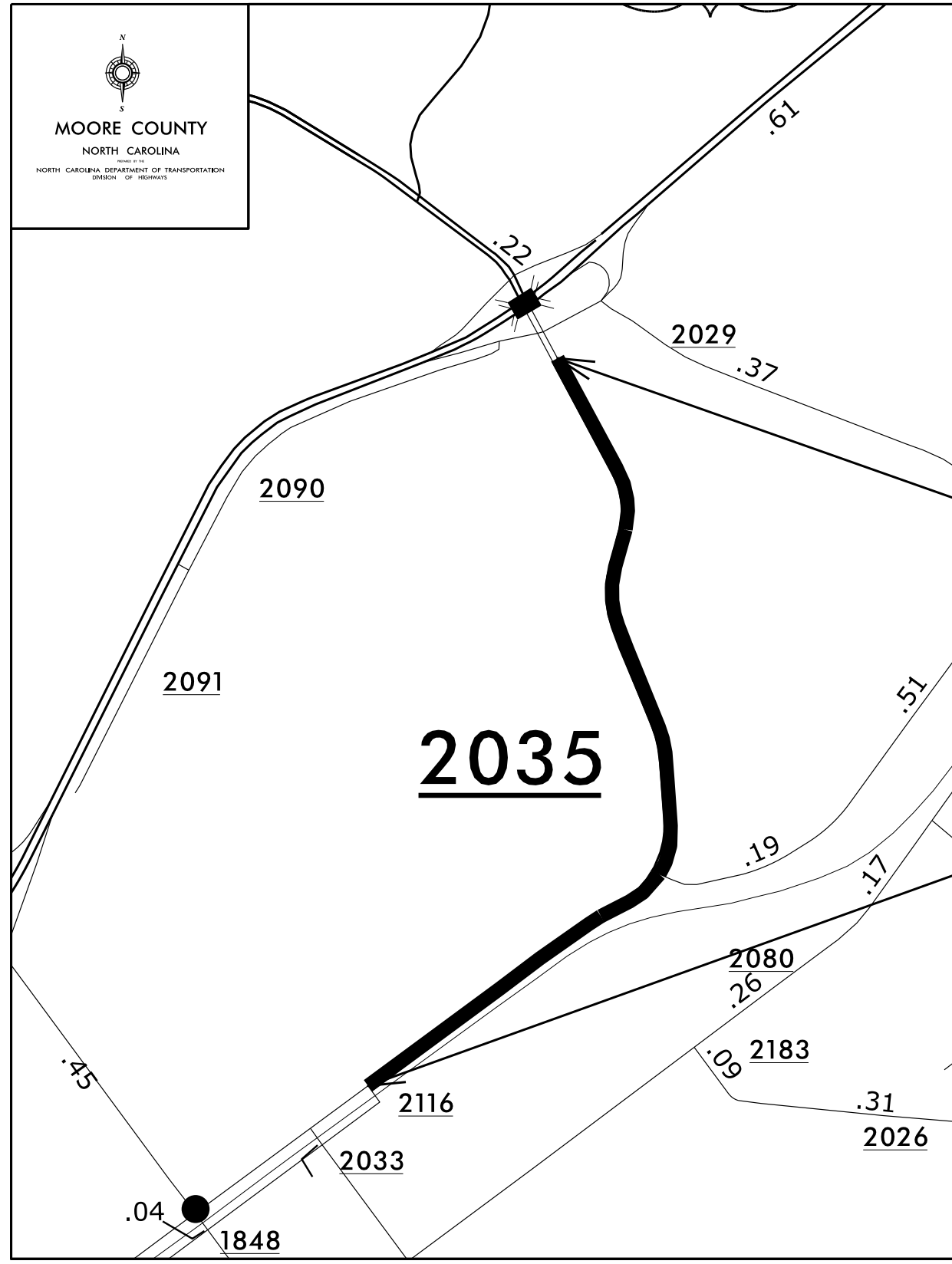




MOORE COUNTY RESURFACING

Map 1

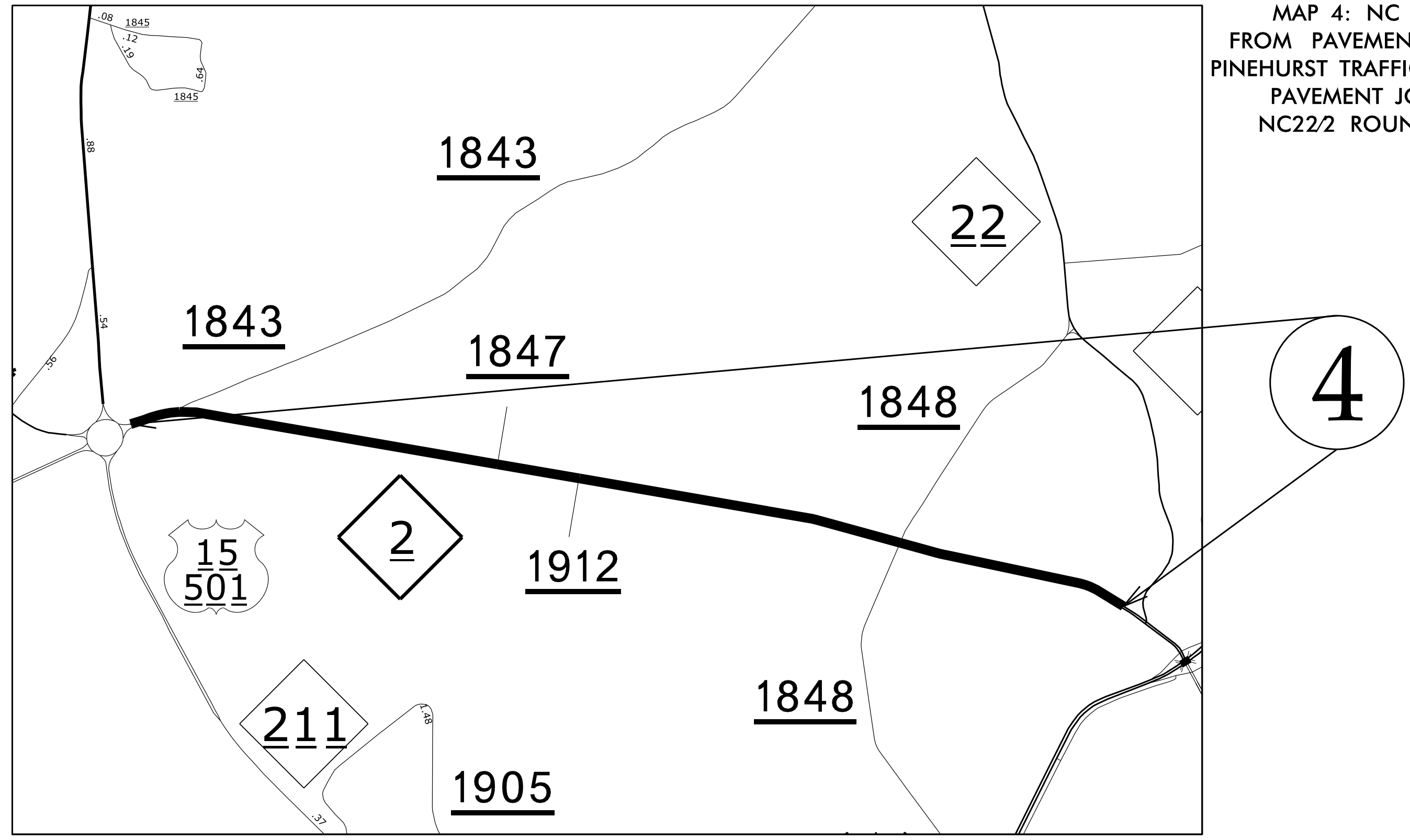


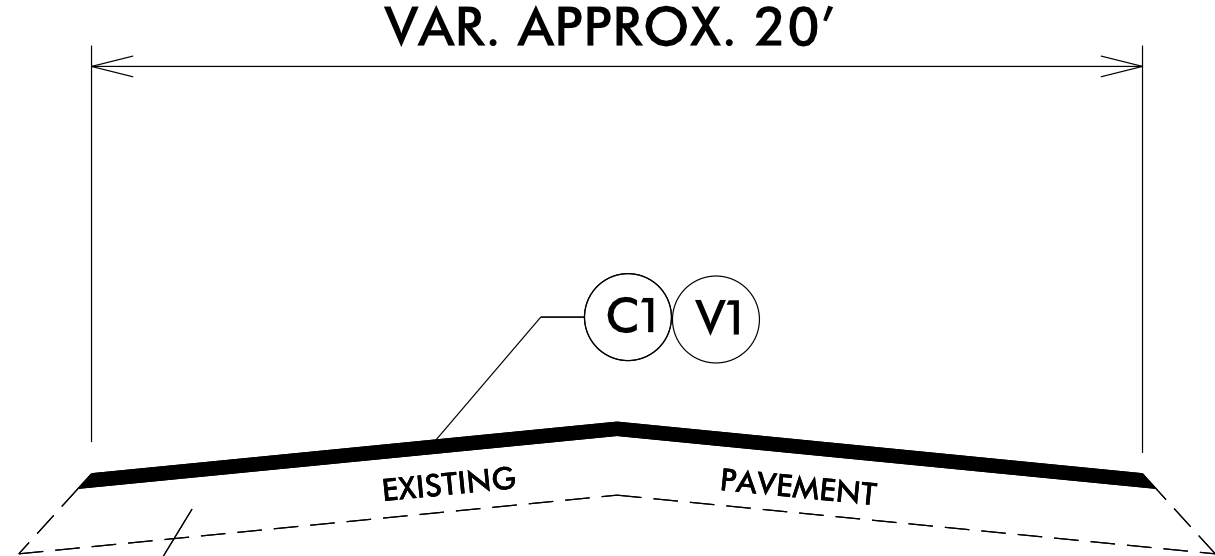
MAP 1: SR 2035 MIDLAND RD NB
FROM PAVEMENT JOINT AT
SR 1116 (W. VERMONT AVE)
TO PAVEMENT JOINT AT
SHORT RD

1

Map 4

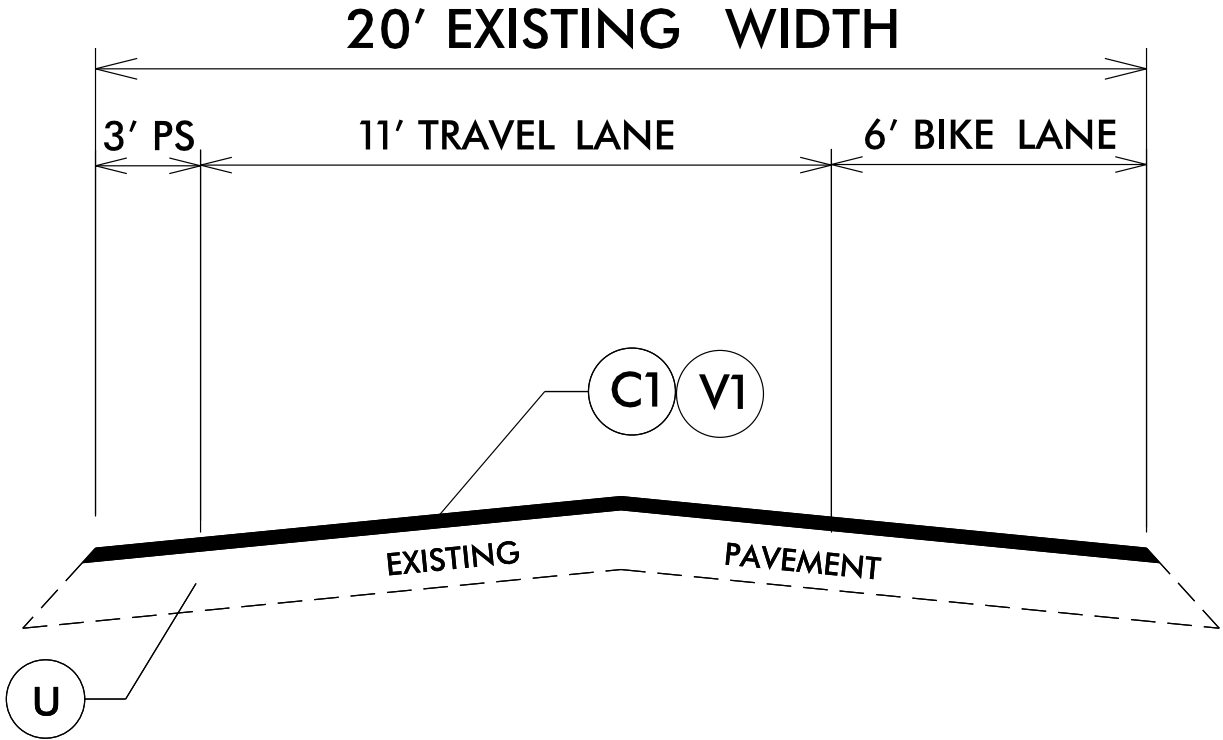
MAP 4: NC 2 EAST
FROM PAVEMENT JOINT AT
PINEHURST TRAFFIC CIRCLE TO
PAVEMENT JOINT AT
NC22/2 ROUNDABOUT





TYPICAL SECTION NO. 1

USE FOR MAPS 1 AND 2



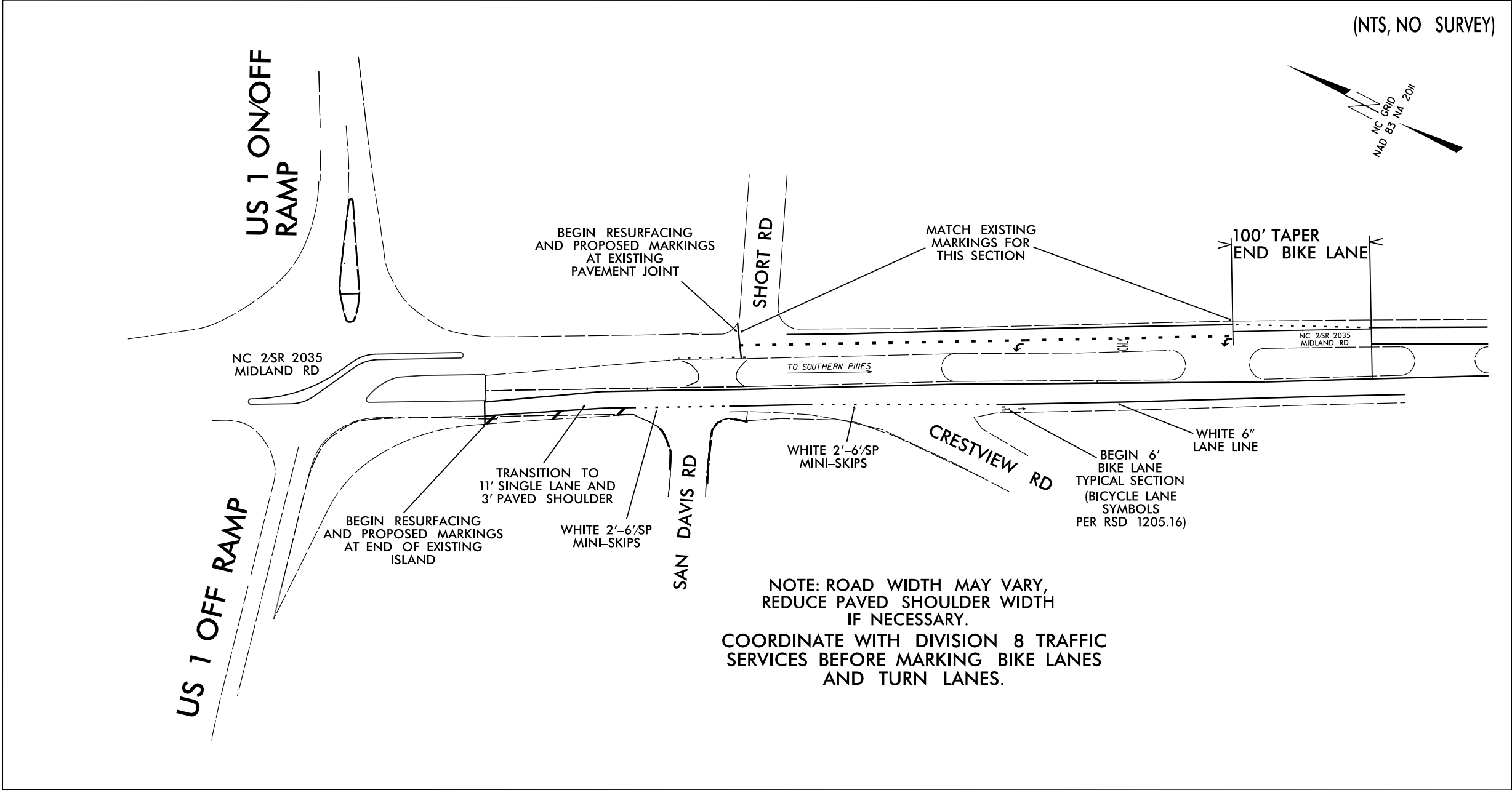
TYPICAL SECTION NO. 2

USE FOR MAPS 3 AND 4
RESTRIPE ACCORDING TO
TYPICAL SECTION ALONG WITH
DETAIL SHEETS 7 AND 8

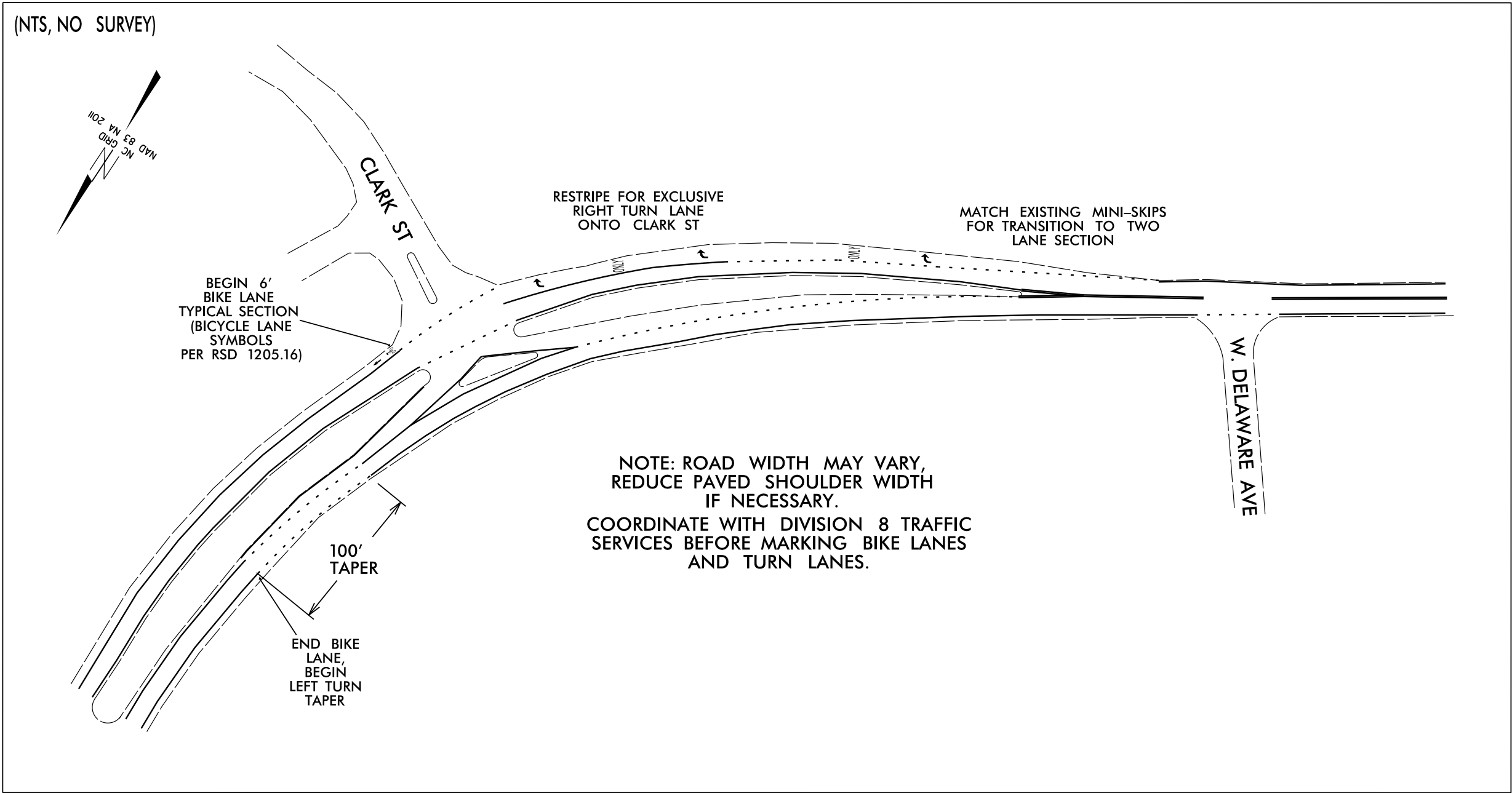
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
U	EXISTING PAVEMENT.
V1	MILLING 1.5" IN DEPTH

SR 2035 BIKE LANE MARKING DETAIL AT SANDAVIS RD

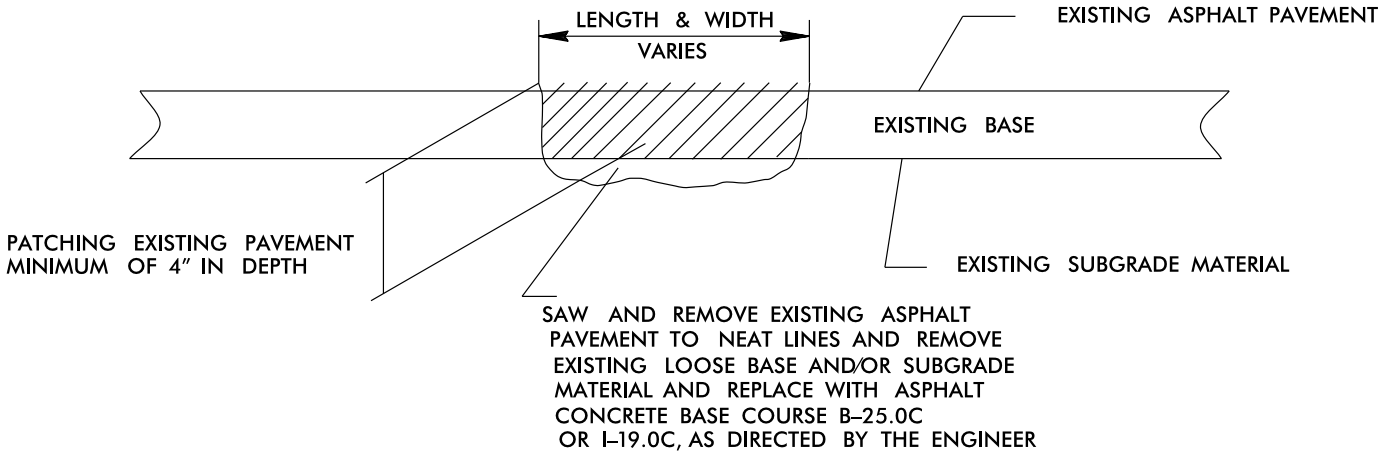


SR 2035 BIKE LANE MARKING DETAIL AT CLARK ST

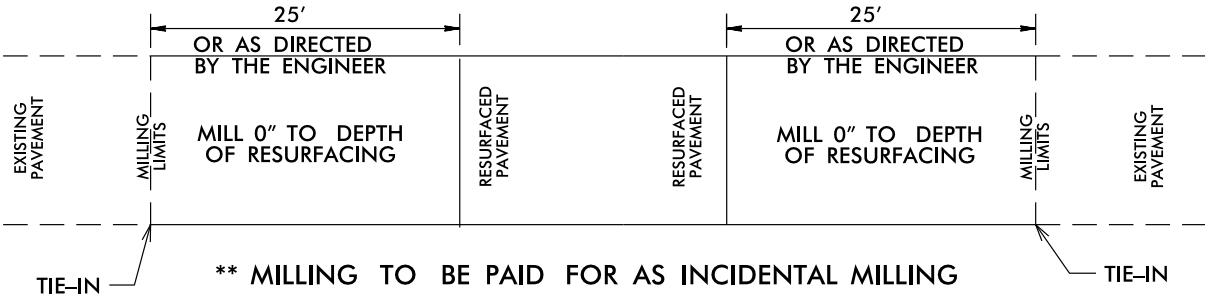


DETAILS

DETAILS OF PATCHING EXISTING PAVEMENT PRIOR TO RESURFACING



PAVEMENT TIE-IN DETAIL



PROJECT NOTES

- PAINT MARKINGS INCLUDED FOR MILLING ON ALL MAPS.
- ALL EXISTING PAVED MEDIAN OPENINGS TO BE RESURFACED.

PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.08.01.10631, 2025CPT.08.01.20631	11	

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE					1297000000-E	1330000000-E	1519000000-E	1575000000-E	1704000000-E	2830000000-N	2845000000-N	7444000000-E
								LENGTH	WIDTH	BEGI	END	1.5" MILLING	INCIDENTAL MILLING	SURFACE COURSE, \$9.5B	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ADJUST MANHOLES	ADJUST METER OR VALVE BOX	INDUCTIVE LOOP SAWCUT
								MI	FT	N MP	MP	SY	SY	TONS	TONS	TONS	EA	EA	LF
2025CPT.08.01.10631	Moore	1	NC-2 W	FROM PVMT JT AT NC 22/2 ROUNDABOUT TO PVMT JT AT PINEHURST TRAFFIC CIRCLE	1	2	MD	3.49	22	0.31	3.8	45,044	3,190	3,979	261	50	1	3	312
TOTAL FOR MAP NO. 1								3.49				45,044	3,190	3,979	261	50	1	3	312
2025CPT.08.01.10631	Moore	2	NC-2 E	FROM PVMT JT AT PINEHURST TRAFFIC CIRCLE TO PVMT JT AT NC 22/2 ROUNDABOUT	1	2	MD	3.48	22	0.19	3.67	44,915	2,125	3,881	255	50	1	2	444
TOTAL FOR MAP NO. 2								3.48				44,915	2,125	3,881	255	50	1	2	444
TOTAL FOR PROJ NO. 2025CPT.08.01.10631								6.97				89,959	5,315	7,860	516	100	2	5	756
2025CPT.08.01.20631	Moore	3	SR-2035 OI / MIDLAND RD NB	FROM PVMT JOINT AT SR 2116 (W VERMONT AVE) TO PVMT JOINT AT SHORT RD	2	2	MD	1.14	20	0.94	2.08	13,545	300	1,256	84	50	3	1	
TOTAL FOR MAP NO. 3								1.14				13,545	300	1,256	84	50	3	1	
2025CPT.08.01.20631	Moore	4	SR-2035 OO / MIDLAND RD SB	FROM CONCRETE ISLAND 145 FT NORTH OF SANDAVIS RD TO END OF MEDIAN	2	2	MD	0.77	20	0.08	0.85	8,917	525	856	58	50	1		
TOTAL FOR MAP NO. 4								0.77				8,917	525	856	58	50	1		
TOTAL FOR PROJ NO. 2025CPT.08.01.20631								1.91				22,462	825	2,112	142	100	4	1	
GRAND TOTAL								8.88				112,421	6,140	9,972	658	200	6	6	756

PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.08.01.10631, 2025CPT.08.01.20631	12	

THERMOPLASTIC AND PAINT QUANTITIES

												4413000000-E	4457000000-N	4510000000-N	4688000000-E		4695000000-E		4700000000-E	4709000000-E	4720000000-E						
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	6" X 90 M WHITE THERMO	6" X 90 M YELLOW THERMO	8" X 90 M WHITE THERMO	8" X 90 M YELLOW THERMO	12" X 90 M WHITE THERMO	24" X 90 M WHITE THERMO	THERMO MSG NORTH 90 M	THERMO MSG ONLY 90 M	THERMO MSG US15 90 M	THERMO MSG 501 90 M	THERMO MSG AHEAD 90 M	THERMO MSG YIELD 90 M	
								MI	FT				SF	LS	HR	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	
2025CPT.08.01.10631	Moore	1	NC-2 W	FROM PVMT JT AT NC 22/2 ROUNDAABOUT TO PVMT JT AT PINEHURST TRAFFIC CIRCLE	1	2	MD	3.49	22	0.31	3.8	390	*	40	23,034	18,427	25	40	190	100	5	4	4	3			
TOTAL FOR MAP NO. 1							3.49				390	40		23,034	18,427	25	40	190	100	5	4	4	3				
2025CPT.08.01.10631	Moore	2	NC-2 E	FROM PVMT JT AT PINEHURST TRAFFIC CIRCLE TO PVMT JT AT NC 22/2 ROUNDAABOUT	1	2	MD	3.48	22	0.19	3.67	390		40	22,968	18,374	25	40	190	120							
TOTAL FOR MAP NO. 2							3.48				390	40		22,968	18,374	25	40	190	120								
TOTAL FOR PROJ NO. 2025CPT.08.01.10631								6.97				780	1.0000	80	46,002	36,801	50	80	380	220	5	4	4	3			
														82,803		130		16									
2025CPT.08.01.20631	Moore	3	SR-2035 OI / MIDLAND RD NB	FROM PVMT JOINT AT SR 2116 (W VERMONT AVE) TO PVMT JOINT AT SHORT RD	2	2	MD	1.14	20	0.94	2.08	126	*		7,571	7,373	90			20		12			5	5	
TOTAL FOR MAP NO. 3							1.14				126			7,571	7,373	90			20		12			5	5		
2025CPT.08.01.20631	Moore	4	SR-2035 OO / MIDLAND RD SB	FROM CONCRETE ISLAND 145 FT NORTH OF SANDAVIS RD TO END OF MEDIAN	2	2	MD	0.77	20	0.08	0.85	126			3,831	3,450	50										
TOTAL FOR MAP NO. 4							0.77				126			3,831	3,450	50											
TOTAL FOR PROJ NO. 2025CPT.08.01.20631								1.91				252	1.000		11,402	10,823	140			20		12			5	5	
														22,225		140		22									
GRAND TOTAL								8.88				1,032	1.000	80	57,404	47,624	190	80	380	240	5	16	4	3	5	5	
															105,028		270						38				

PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.08.01.10631, 2025CPT.08.01.20631	13	

THERMOPLASTIC AND PAINT QUANTITIES

												4725000000-E						4726110000-E	
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	THERMO STR ARROW 90 M	THERMO STR & RT ARROW 90 M	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO 24" YIELD TRIANGLE	THERMO MERGE ARROW 90M	THERMO BICYCLE CHARACTER, HEATED-IN- PLACE 90 M	THERMO BICYCLE STRAIGHT ARROW, HEATED-IN- PLACE 90 M
								MI	FT					EA	EA	EA	EA	EA	EA
2025CPT.08.01.10631	Moore	1	NC-2 W	FROM PVMT JT AT NC 22/2 ROUNDAABOUT TO PVMT JT AT PINEHURST TRAFFIC CIRCLE	1	2	MD	3.49	22	0.31	3.8	4	4	6	1				
TOTAL FOR MAP NO. 1								3.49				4	4	6	1				
2025CPT.08.01.10631	Moore	2	NC-2 E	FROM PVMT JT AT PINEHURST TRAFFIC CIRCLE TO PVMT JT AT NC 22/2 ROUNDAABOUT	1	2	MD	3.48	22	0.19	3.67	4	4	5					
TOTAL FOR MAP NO. 2								3.48				4	4	5					
TOTAL FOR PROJ NO. 2025CPT.08.01.10631								6.97				8	8	11	1				
												28							
2025CPT.08.01.20631	Moore	3	SR-2035 OI / MIDLAND RD NB	FROM PVMT JOINT AT SR 2116 (W VERMONT AVE) TO PVMT JOINT AT SHORT RD	2	2	MD	1.14	20	0.94	2.08	7		2	3	3		7	7
TOTAL FOR MAP NO. 3								1.14				7		2	3	3		7	7
2025CPT.08.01.20631	Moore	4	SR-2035 OO / MIDLAND RD SB	FROM CONCRETE ISLAND 145 FT NORTH OF SANDAVIS RD TO END OF MEDIAN	2	2	MD	0.77	20	0.08	0.85	12		5			1	7	7
TOTAL FOR MAP NO. 4								0.77				12		5			1	7	7
TOTAL FOR PROJ NO. 2025CPT.08.01.20631								1.91				19		7	3	3	1	14	14
												33						28	
GRAND TOTAL								8.88				27	8	18	4	3	1	14	14
												61						28	

PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.08.01.10631, 2025CPT.08.01.20631	14	

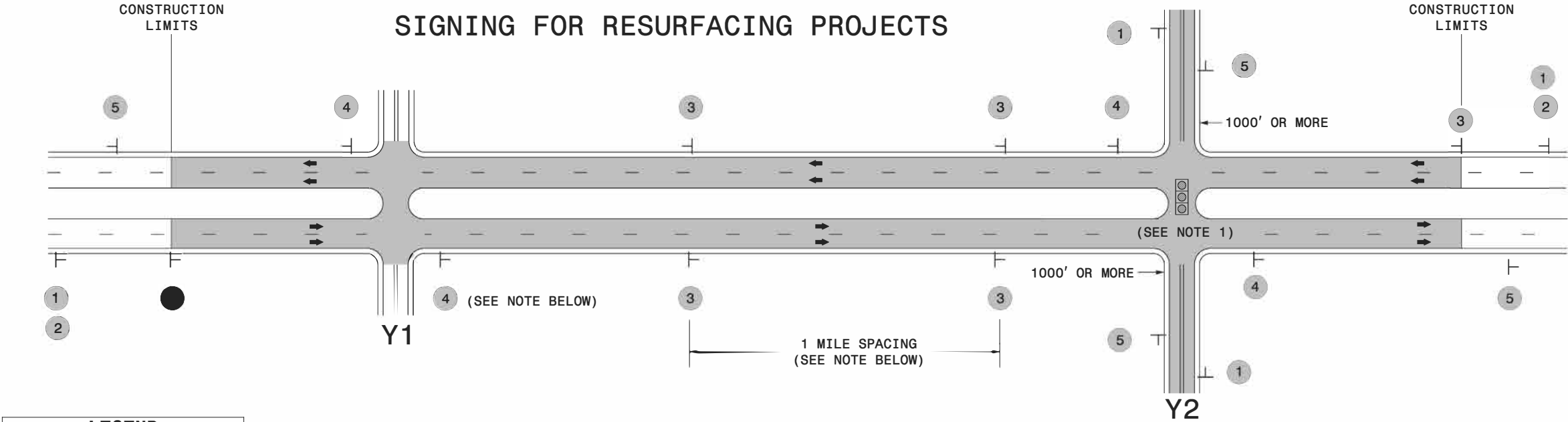
THERMOPLASTIC AND PAINT QUANTITIES

												4815000000-E		4820000000-E		4825000000-E	4835000000-E	4840000000-N						
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	6" WHITE PAINT	6" YELLOW PAINT	8" WHITE PAINT	8" YELLOW PAINT	12" WHITE PAINT	24" WHITE PAINT	PAINT MSG NORTH	PAINT MSG ONLY	PAINT MSG US15	PAINT MSG 501	PAINT MSG AHEAD	PAINT MSG YIELD	
								MI	FT			LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	
2025CPT.08.01.10631	Moore	1	NC-2 W	FROM PVMT JT AT NC 22/2 ROUNDABOUT TO PVMT JT AT PINEHURST TRAFFIC CIRCLE	1	2	MD	3.49	22	0.31	3.8	23,034	18,427	25	40	190	100	5	4	4	3			
TOTAL FOR MAP NO. 1							3.49					23,034	18,427	25	40	190	100	5	4	4	3			
2025CPT.08.01.10631	Moore	2	NC-2 E	FROM PVMT JT AT PINEHURST TRAFFIC CIRCLE TO PVMT JT AT NC 22/2 ROUNDABOUT	1	2	MD	3.48	22	0.19	3.67	22,968	18,374	25	40	190	120							
TOTAL FOR MAP NO. 2							3.48					22,968	18,374	25	40	190	120							
TOTAL FOR PROJ NO. 2025CPT.08.01.10631							6.97					46,002	36,801	50	80	380	220	5	4	4	3			
												82,803		130				16						
2025CPT.08.01.20631	Moore	3	SR-2035 OI / MIDLAND RD NB	FROM PVMT JOINT AT SR 2116 (W VERMONT AVE) TO PVMT JOINT AT SHORT RD	2	2	MD	1.14	20	0.94	2.08	8,575	7,604	90			20		4			5	5	
TOTAL FOR MAP NO. 3							1.14					8,575	7,604	90			20		4			5	5	
2025CPT.08.01.20631	Moore	4	SR-2035 OO / MIDLAND RD SB	FROM CONCRETE ISLAND 145 FT NORTH OF SANDAVIS RD TO END OF MEDIAN	2	2	MD	0.77	20	0.08	0.85	5,018	4,015											
TOTAL FOR MAP NO. 4							0.77					5,018	4,015											
TOTAL FOR PROJ NO. 2025CPT.08.01.20631							1.91					13,593	11,619	90			20		4			5	5	
												25,212		90				14						
GRAND TOTAL								8.88				59,595	48,420	140	80	380	240	5	8	4	3	5	5	
												108,015		220				30						

PROJECT NO.	SHEET NO.	TOTAL NO.
2025CPT.08.01.10631, 2025CPT.08.01.20631	15	

THERMOPLASTIC AND PAINT QUANTITIES

												4845000000-N						4895000000-N	
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	PAINT STR ARROW	PAINT STR & RT ARROW	PAINT LT ARROW	PAINT RT ARROW	PAINT YIELD LINETRIANGLE	PAINT MERGE ARROW	GENERIC PAVEMENT MARKING ITEM POLYCARBONATE H-SHAPED MARKERS C&R	GENERIC PAVEMENT MARKING ITEM POLYCARBONATE H-SHAPED MARKERS Y&Y
								MI	FT										
2025CPT.08.01.10631	Moore	1	NC-2 W	FROM PVMT JT AT NC 22/2 ROUNDABOUT TO PVMT JT AT PINEHURST TRAFFIC CIRCLE	1	2	MD	3.49	22	0.31	3.8	4	4	6	1			271	4
TOTAL FOR MAP NO. 1								3.49				4	4	6	1			271	4
2025CPT.08.01.10631	Moore	2	NC-2 E	FROM PVMT JT AT PINEHURST TRAFFIC CIRCLE TO PVMT JT AT NC 22/2 ROUNDABOUT	1	2	MD	3.48	22	0.19	3.67	4	4	5				264	4
TOTAL FOR MAP NO. 2								3.48				4	4	5				264	4
TOTAL FOR PROJ NO. 2025CPT.08.01.10631								6.97				8	8	11	1			535	8
													28						543
2025CPT.08.01.20631	Moore	3	SR-2035 OI / MIDLAND RD NB	FROM PVMT JOINT AT SR 2116 (W VERMONT AVE) TO PVMT JOINT AT SHORT RD	2	2	MD	1.14	20	0.94	2.08			2		3		5	25
TOTAL FOR MAP NO. 3								1.14						2		3		5	25
2025CPT.08.01.20631	Moore	4	SR-2035 OO / MIDLAND RD SB	FROM CONCRETE ISLAND 145 FT NORTH OF SANDAVIS RD TO END OF MEDIAN	2	2	MD	0.77	20	0.08	0.85	5		5			1	10	
TOTAL FOR MAP NO. 4								0.77				5		5			1	10	
TOTAL FOR PROJ NO. 2025CPT.08.01.20631								1.91				5		7		3	1	15	25
													16						40
GRAND TOTAL								8.88				13	8	18	1	3	1	550	33
													44						583



LEGEND

—

STATIONARY SIGN

→

DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

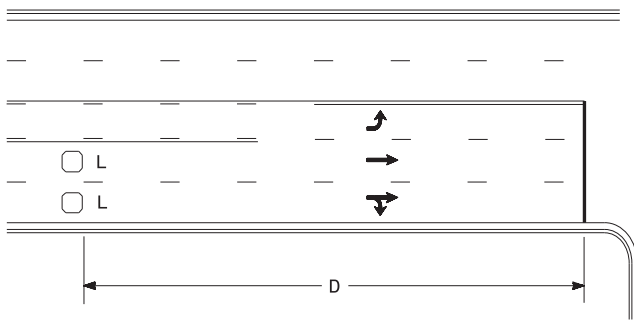
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1 2 PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE. #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)	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. PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER. NOTES: 1) 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.
	3 PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE 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.	
	5 PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.	



RESURFACING
ADVANCE WARNING SIGNS
FOR RURAL AND SUBURBAN
MULTI-LANE ROADWAYS
W/ SHOULDER SECTIONS

High Speed Detection
(≥40 mph)

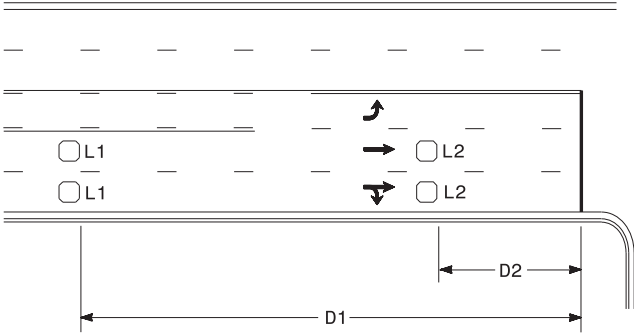


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

L = 6ft X 6ft
Wired separately

Volume Density Operation

OR



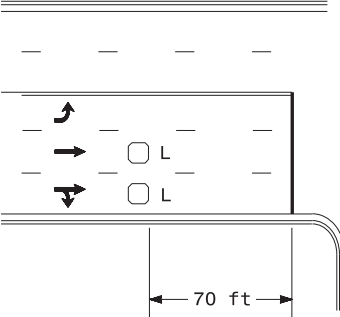
Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

L1 = 6ft X 6ft
Wired in series

L2 = 6ft X 6ft
Wired in series

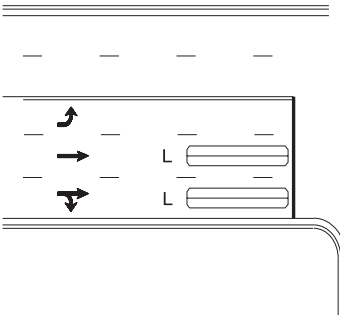
"Stretch" Operation

Low Speed Detection
(≤35 mph)



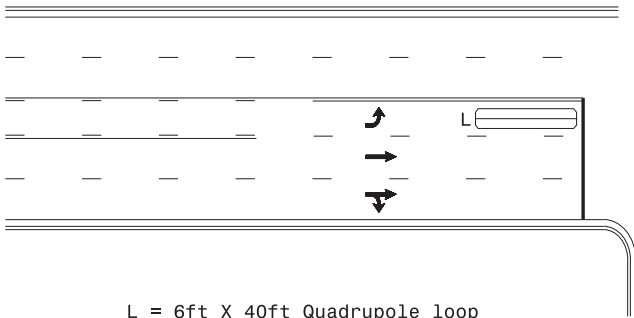
L = 6ft X 6ft
Wired in series

OR



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

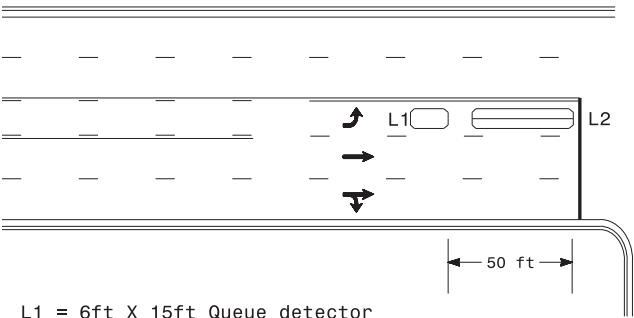
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

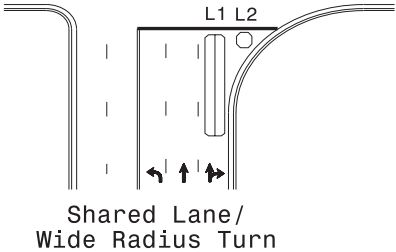
OR



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

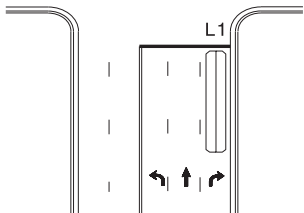
Queue Loop Detection

Right Turn Lane Detection

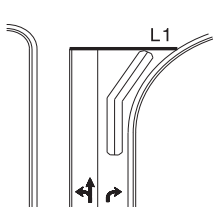


Shared Lane/
Wide Radius Turn

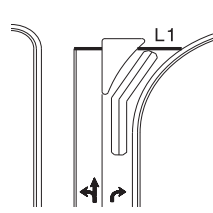
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

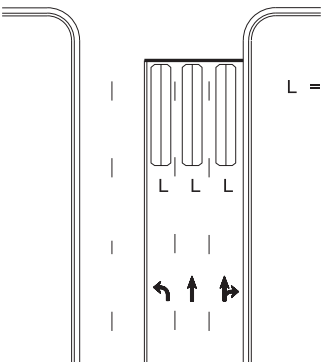


Wide Radius Turn



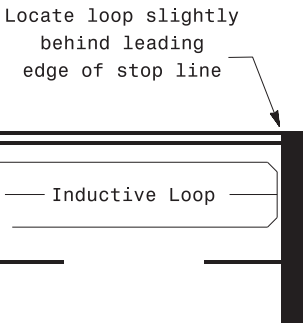
Channelized Turn

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

	Typical Signal Loop Locations		
	PLAN DATE: September 2020	REVIEWED BY: JPG	
	PREPARED BY: PLA	REVIEWED BY:	
	REVISIONS	INIT. DATE	
SCALE N/A			