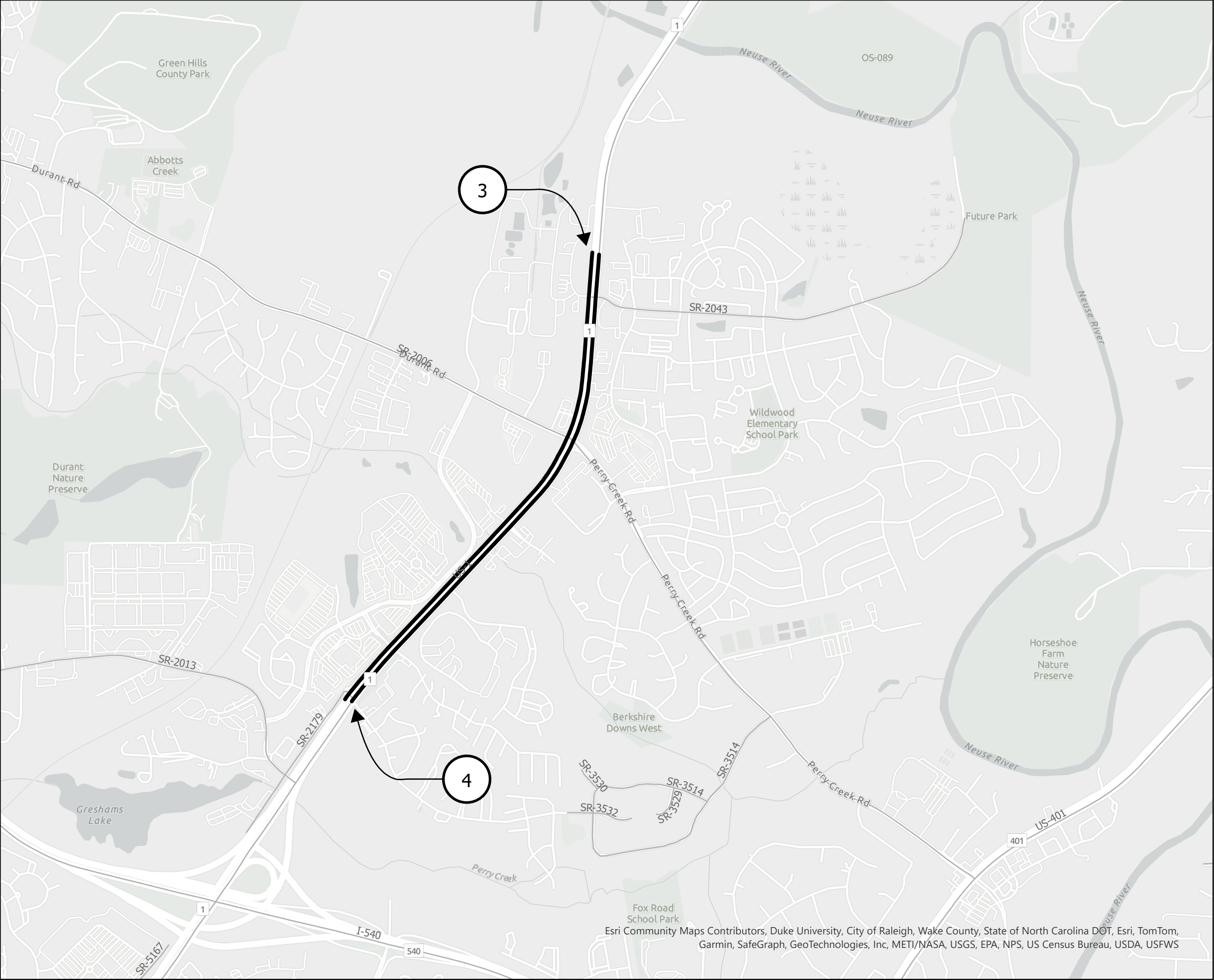




2027 Wake North – Wake County	
PROJECT REFERENCE NO.	SHEET NO.
2026CPT.05.06.10921.1	1

Map 1: NC 96 E / Zebulon Rd
From US 401 to NC 98

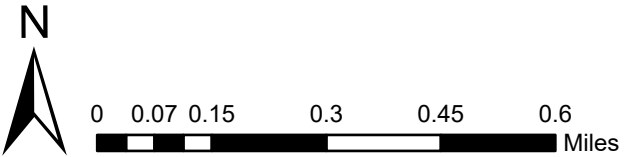
Map 2: NC 96 E (Zebulon Rd)
From Skeet Dr to US 401



2027 Wake North – Wake County	
PROJECT REFERENCE NO.	SHEET NO.
2026CPT.05.06.10921.1	2

Map 3: US 1 S (Capital Blvd)
From pavement joint ~600' N of Thornton Rd to
Jacqueline LN

Map 4: US 1 N (Capital Blvd)
From Jacqueline Ln to pavement joint ~600' N of
Thornton Rd



Esri Community Maps Contributors, Duke University, City of Raleigh, Wake County, State of North Carolina DOT, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

2027 Wake North – Wake County

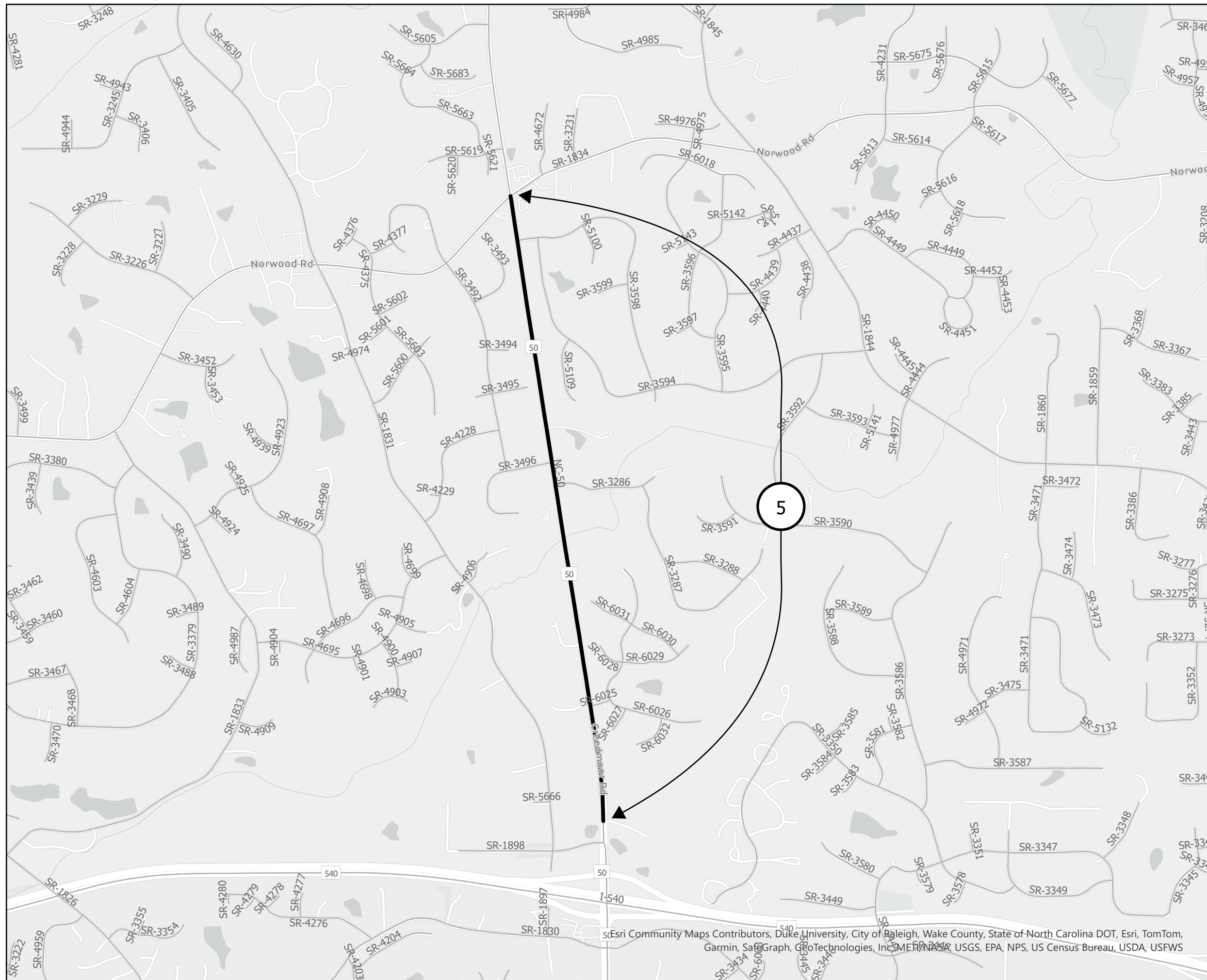
PROJECT REFERENCE NO.

SHEET NO. |

2026CPT.05.06.10921.1

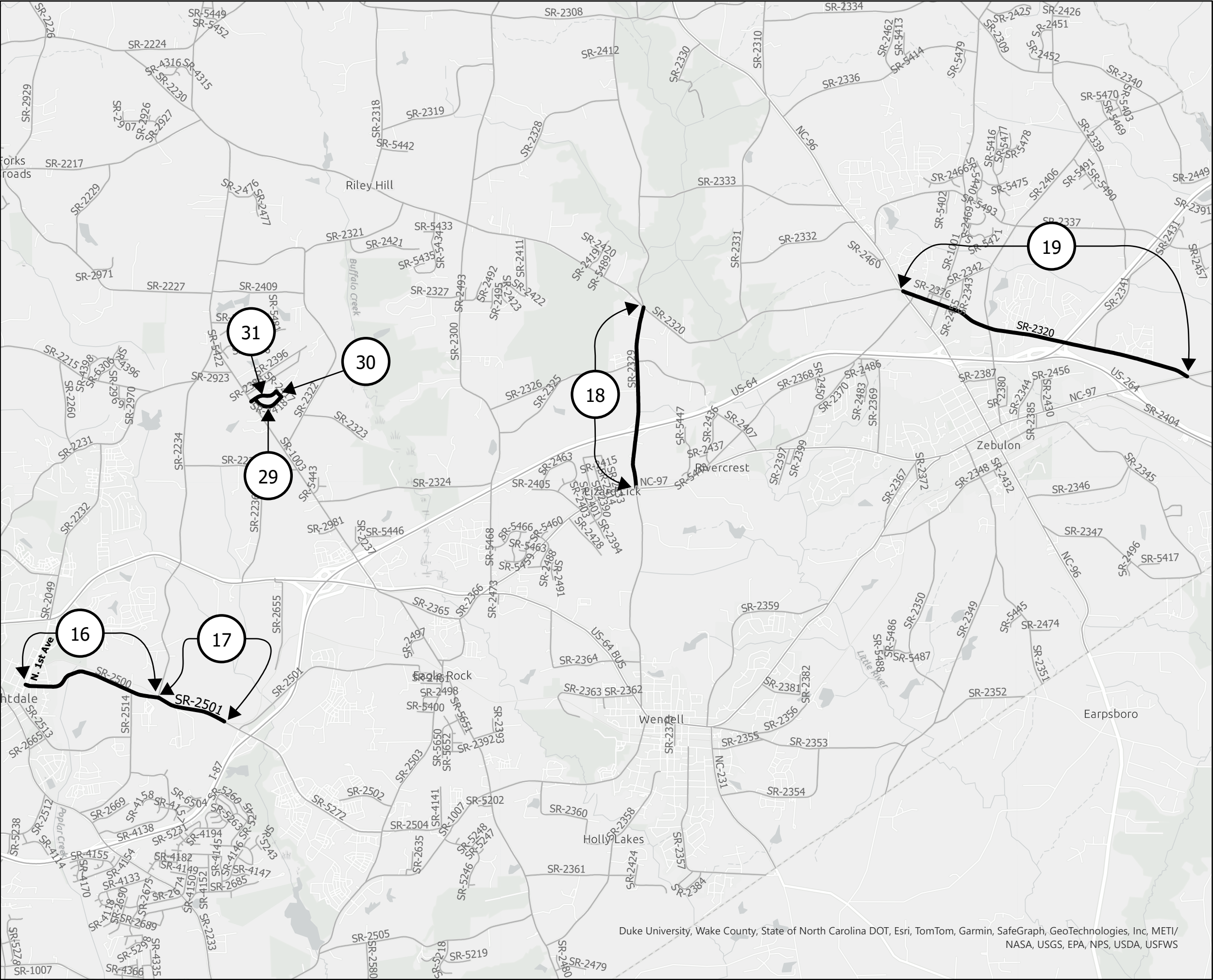
3

Map 5: NC 50 (Creedmoor Rd)
From Pavement Joint (MP 24.442) to Norwood Rd



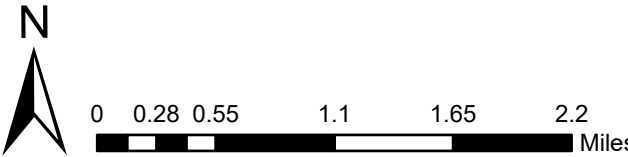
Esri Community Maps Contributors, Duke University, City of Raleigh, Wake County, State of North Carolina DOT, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc., METANASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

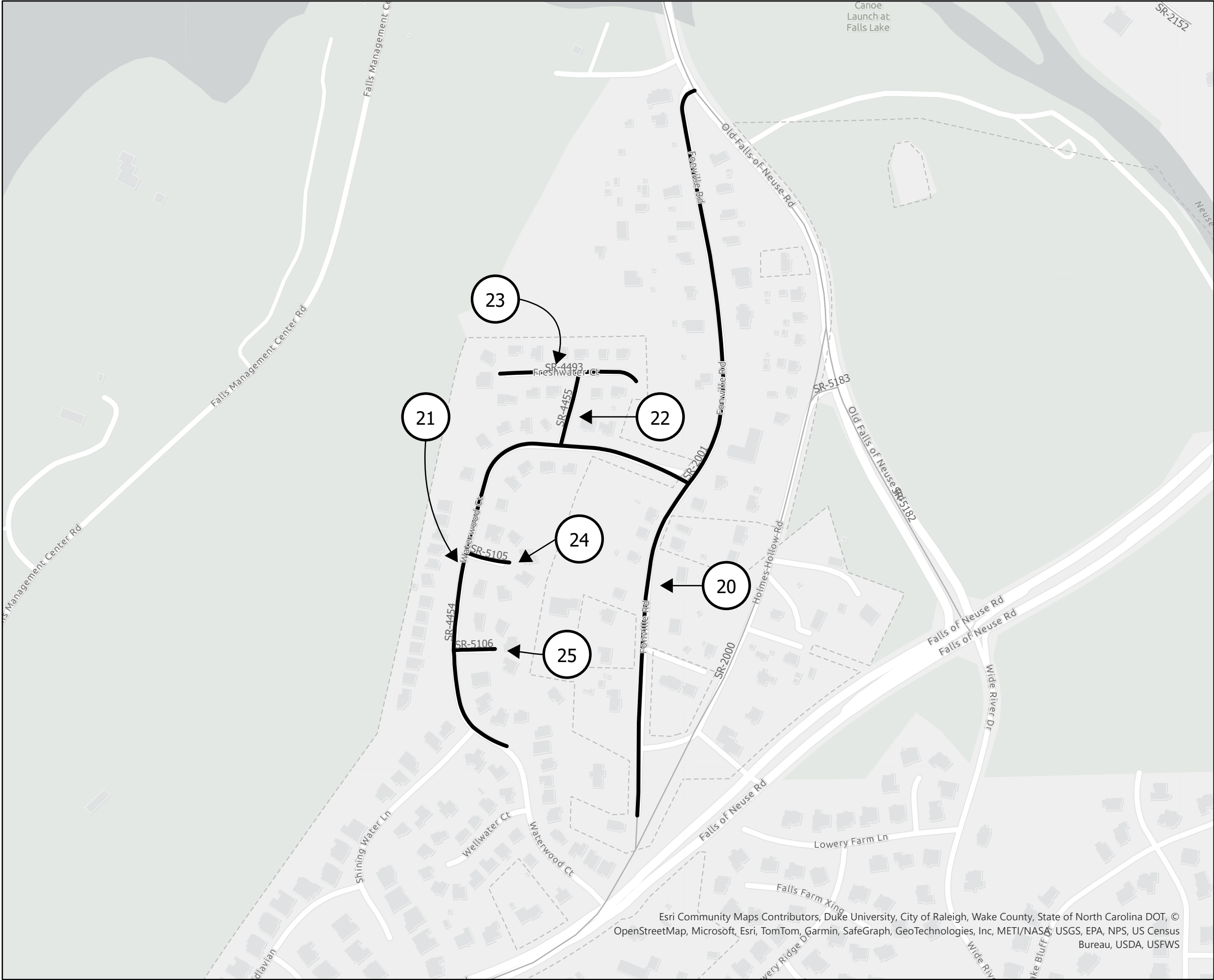




2027 Wake North – Wake County	
PROJECT REFERENCE NO.	SHEET NO.
2026CPT.05.06.20921.1	7

- Map 16: SR 2500 (Robertson St)
From SR Marks Creek Rd to N First Ave
- Map 17: SR 2501 (Knightdale Eagle Rock Rd)
From Marks Creek Rd to Pavement Joint
- Map 18: SR 2329 (Lizard Lick Rd)
From NC 97 to SR 2320
- Map 19: SR 2320 (Riley Hill Rd/Proctor St/Old Bunn Rd)
From NC 96 to NC 97
- REFER TO SHEET 10 FOR FURTHER DETAILS ON THE FOLLOWING MAPS:
Map 29: SR 2418 (Gail Ridge Ln)
Map 30: SR 2417 (Rose Place)
Map 31: SR 2416 (Candlewick Dr)





2027 Wake North – Wake County	
PROJECT REFERENCE NO.	SHEET NO.
2026CPT.05.06.20921.1 2026CPT.05.06.20922.1	8

Map 20: SR 2001 (Fonville Rd)
From SR 2000 to Cul-de-Sac

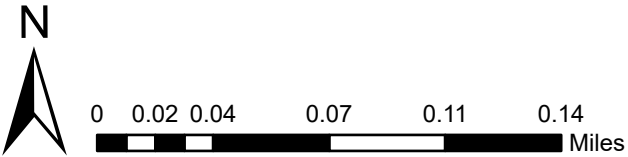
Map 21: SR 4454 (Waterwood Ct)
From SR 2001 to End Maintenance

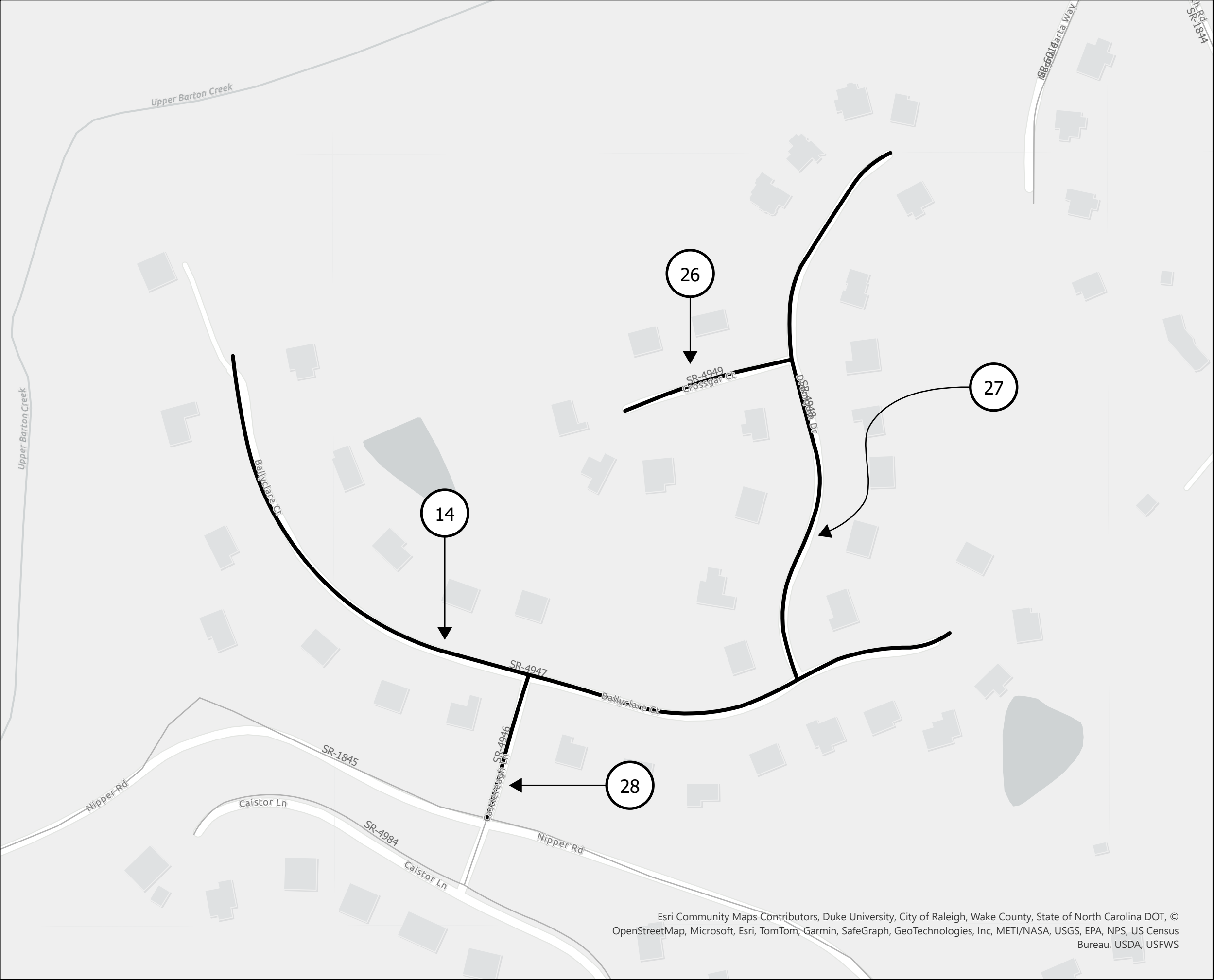
Map 22: SR 4455 (Fountainside Ct)
From SR 4454 to SR 4493

Map 23: SR 4493 (Freshwater Ct)
From Dead End to Cul-de-Sac

Map 24: SR 5105 (Waterwinds Ct)
From SR 4454 to Cul-de-Sac

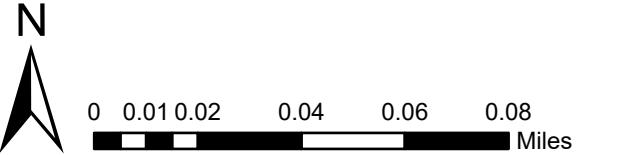
Map 25: SR 5106 (Coolwater Ct)
From SR 4454 to Cul-de-Sac

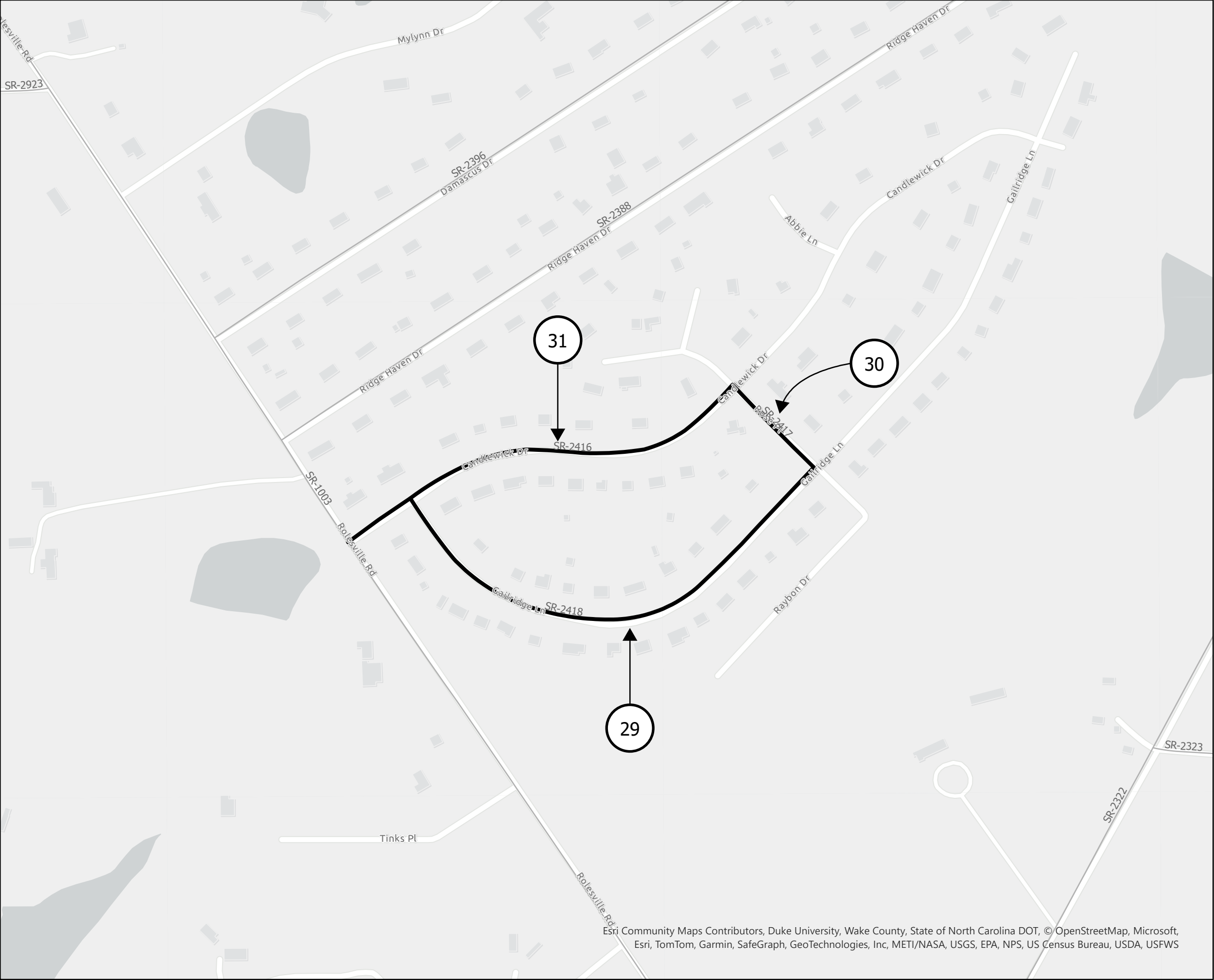




2027 Wake North – Wake County	
PROJECT REFERENCE NO.	SHEET NO.
2026CPT.05.06.20921.1 2026CPT.05.06.20922.1	9

- Map 26: SR 4949 (Crossgar Ct)
From SR 4948 to Cul-de-Sac
- Map 27: SR 4948 (Drumquin Ct)
From SR 4947 to Cul-de-Sac
- Map 28: SR 4946 (Castlereagh Ln)
From SR 1845 to SR 4947
- Map 14: SR 4947 (Ballyclare Ct)
From Cul-de-Sac to Cul-de-Sac



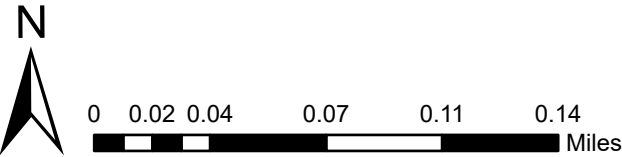


2027 Wake North – Wake County	
PROJECT REFERENCE NO.	SHEET NO.
2026CPT.05.06.20922.1	10

Map 29: SR 2418 (Gail Ridge Ln)
From Candlewick Dr to Rose Place

Map 30: SR 2417 (Rose Place)
From Gail Ridge Ln to Candlewick Dr

Map 31: SR 2416 (Candlewick Dr)
From Rolesville Rd to Rose Place



PAVEMENT SCHEDULE

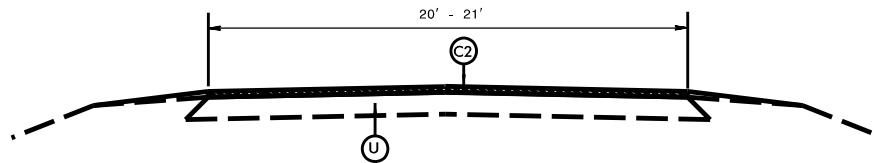
PROJECT REFERENCE NO.

SHEET NO.

2026CPT.05.06.10921.1, etc.

II

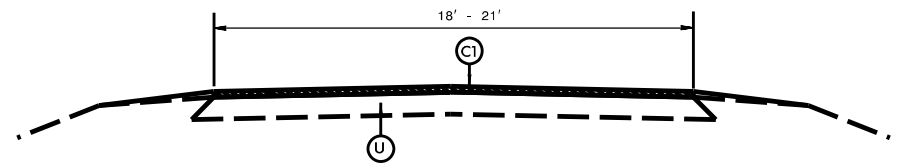
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	S	SHOULDER RECONSTRUCTION, ASB REQUIRED
C2	PROP. APPROX. 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	U	EXISTING PAVEMENT
C3	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	V	VARIABLE MILLING



TYPICAL SECTION NO. 1

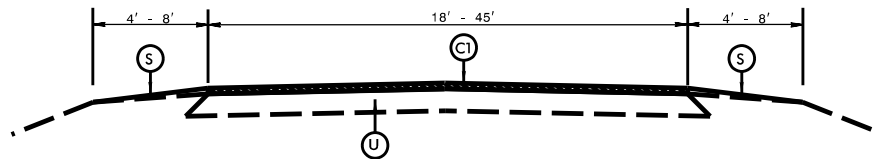
FULL DEPTH PATCH AND 1.25" S9.5B OVERLAY
MAP NO's. 7, 8, 10, 11, 13, 14, 15, 20, 21

ON MAP 21, MINOR AMOUNTS OF VARIABLE DEPTH MILLING (V) WILL BE NEEDED
AT ENTRANCE TO NEIGHBORHOOD TO ADDRESS EXISTING CURB



TYPICAL SECTION NO. 2

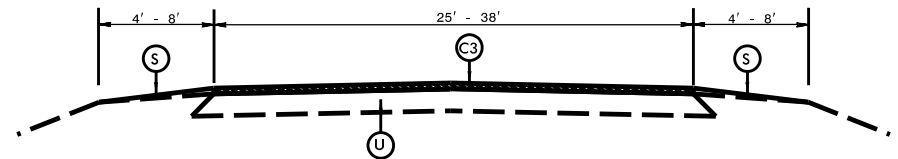
FULL DEPTH PATCH AND 1.5" S9.5B OVERLAY
MAP NO's. 6, 9, 12



TYPICAL SECTION NO. 3

FULL DEPTH PATCH AND 1.5" S9.5B OVERLAY
MAP NO's. 16, 17, 18, 19

MINOR AMOUNTS OF VARIABLE DEPTH MILLING (V) WILL BE NEEDED TO ADDRESS EXISTING CURB
AT WEST END OF MAP 16 AND ENTRANCE TO NEIGHBORHOODS /DEVELOPMENTS ALONG MAP 19



TYPICAL SECTION NO. 4

FULL DEPTH PATCH AND 1.5" S9.5C OVERLAY
MAP NO's. 1, 2

PAVEMENT SCHEDULE

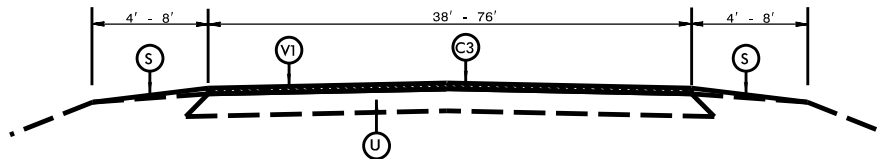
PROJECT REFERENCE NO.

SHEET NO.

2026CPT.05.06.10921.1, etc.

12

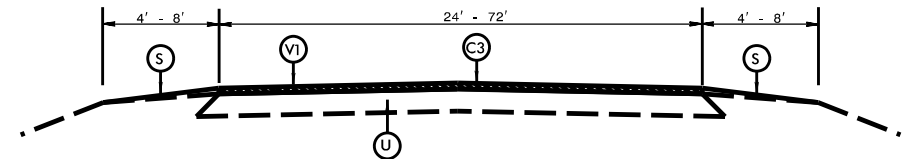
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	S	SHOULDER RECONSTRUCTION, ASB REQUIRED
C2	PROP. APPROX. 1¼" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.	U	EXISTING PAVEMENT
C3	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.	V1	MILL ASPHALT PAVEMENT, 1½" DEPTH
C4	PROP. APPROX. 1" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.		



TYPICAL SECTION NO. 5

FULL DEPTH PATCH /1.5" MILL AND 1.5" S9.5C
MAP NO's. 3, 4

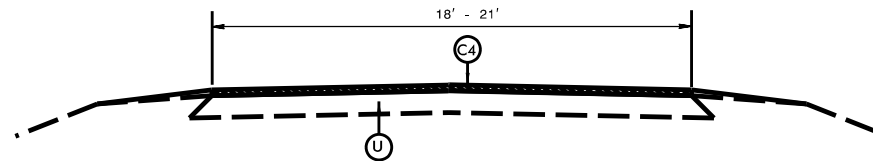
MINOR AMOUNTS OF VARIABLE DEPTH MILLING (V) WILL BE NEEDED TO ADDRESS EXISTING CURB AT INTERSECTIONS ALONG BOTH MAPS 3 & 4



TYPICAL SECTION NO. 6

FULL DEPTH PATCH /1.5" MILL AND 1.5" S9.5C
MAP NO. 5

MINOR AMOUNTS OF VARIABLE DEPTH MILLING (V) WILL BE NEEDED TO ADDRESS EXISTING CURB AT BUSINESSES NEAR NORWOOD RD INTERSECTION



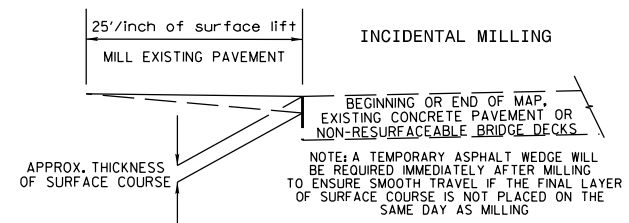
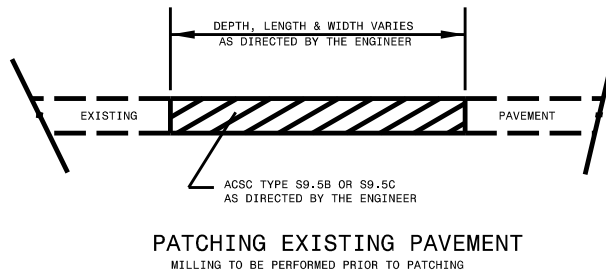
TYPICAL SECTION NO. 7

1.0" S9.5B OVERLAY
MAP NO's. 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

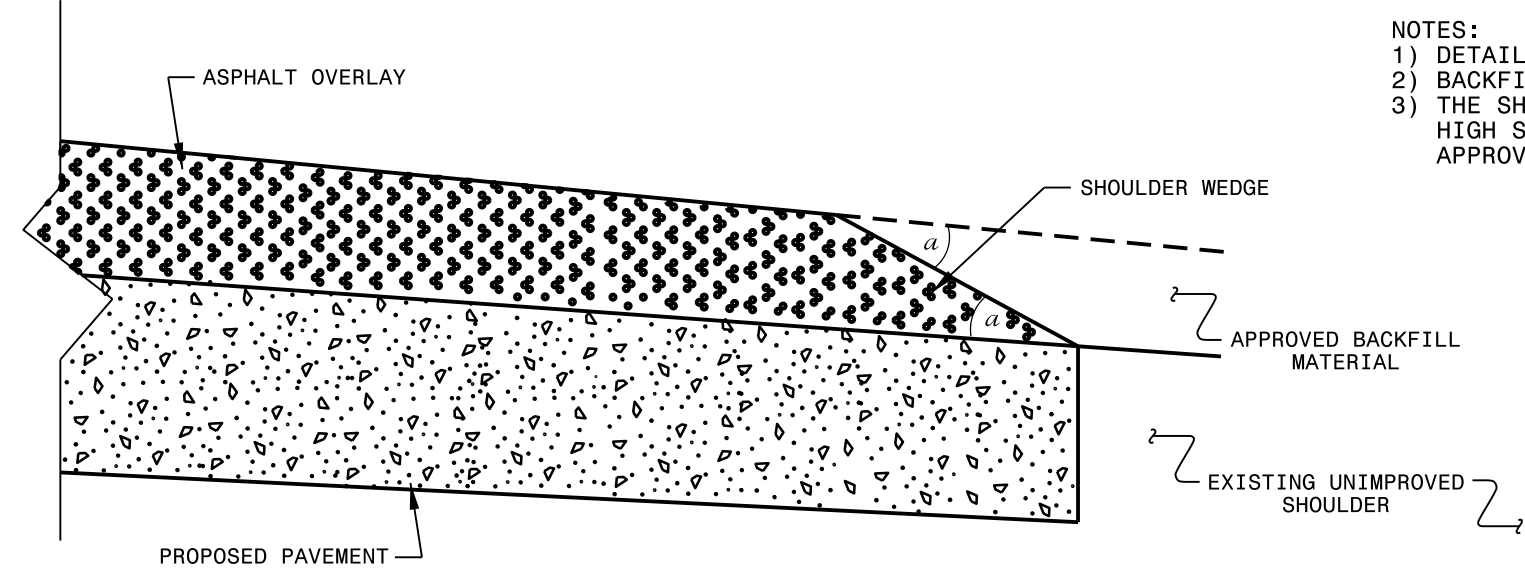
ON MAP 28, MINOR AMOUNTS OF VARIABLE DEPTH MILLING (V) WILL BE NEEDED TO ADDRESS EXISTING CURB AT ENTRANCE TO NEIGHBORHOOD

NOTES

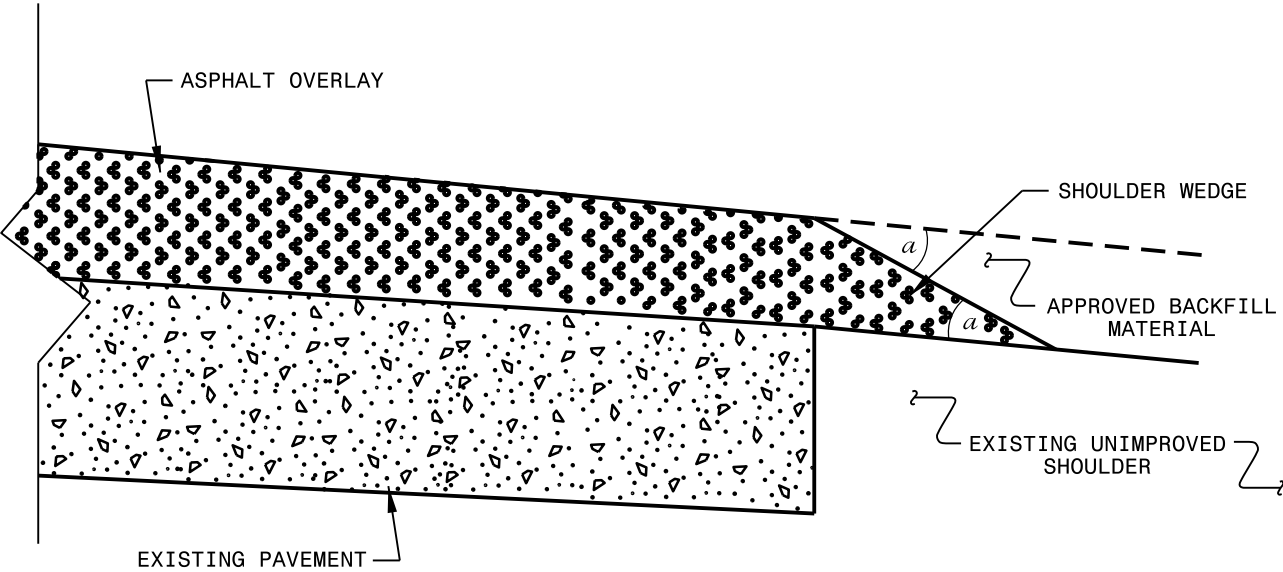
ALL UNPAVED S.R. ROADS TO BE RESURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT
ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE ROAD, OR AS DIRECTED BY THE ENGINEER.
EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.
BRIDGES TO BE RESURFACED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



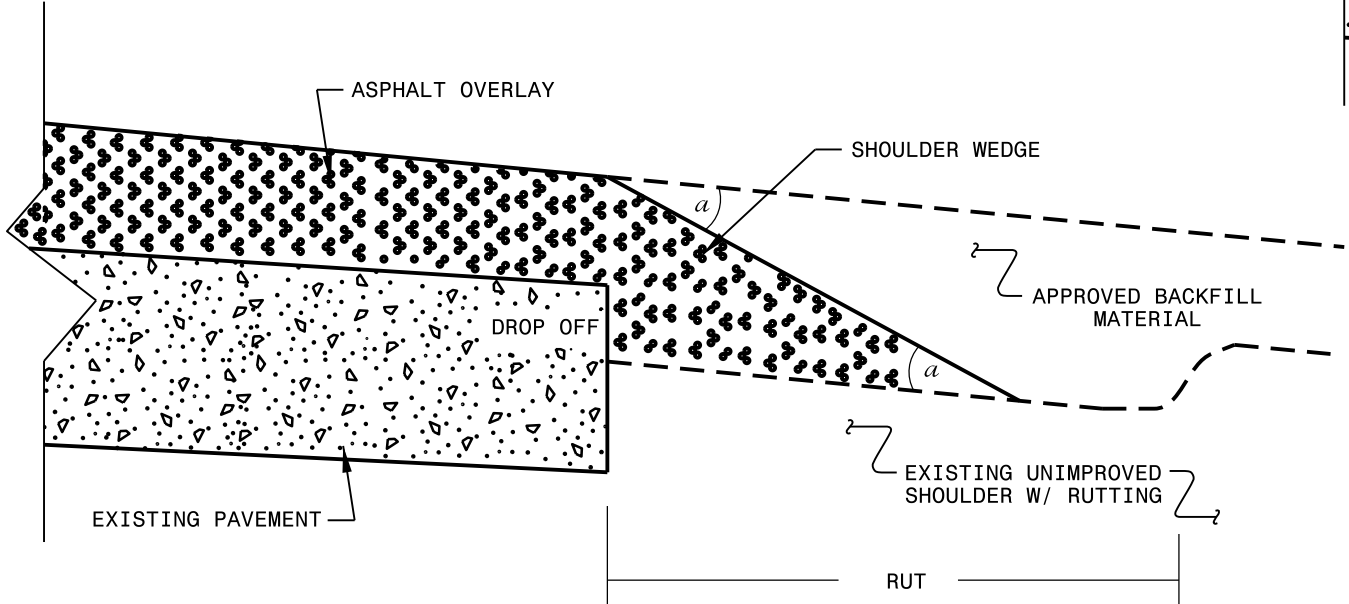
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFS AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



SHOULDER WEDGE DETAIL
(Resurfacing Projects w/ Widening or
with Existing Paved Shoulder having no dropoffs)



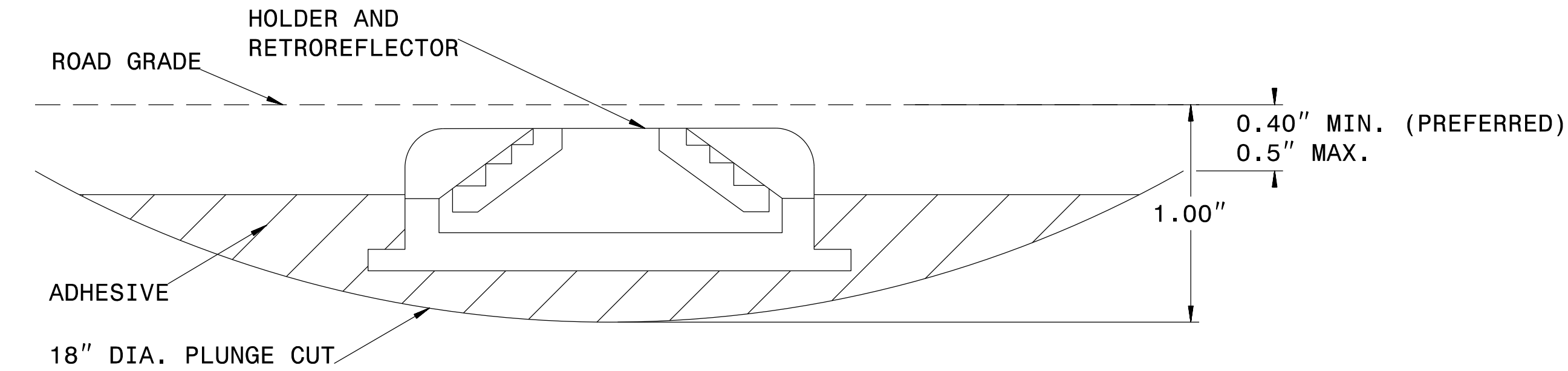
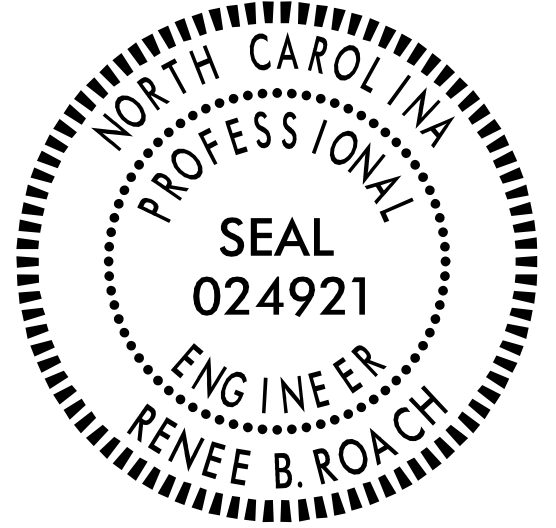
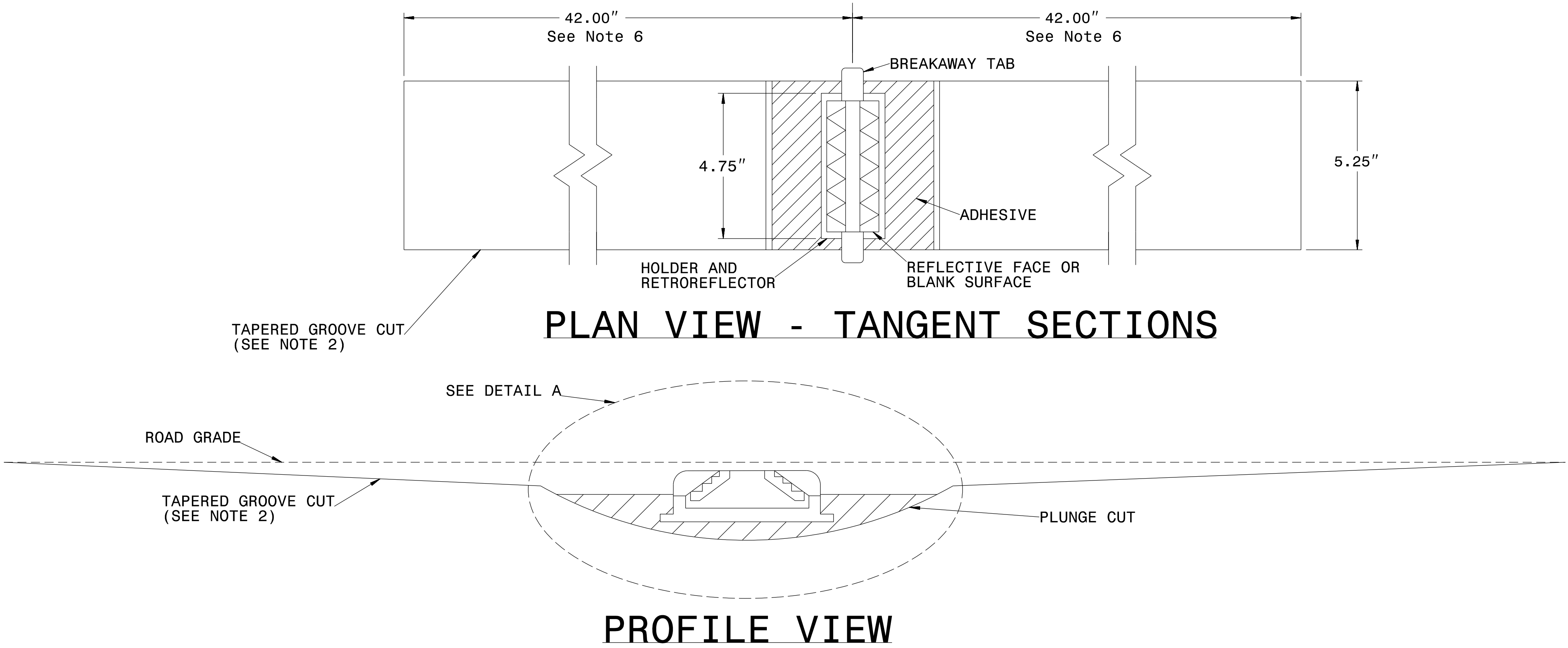
SHOULDER WEDGE DETAIL
(Resurfacing Projects w/ NO Widening)



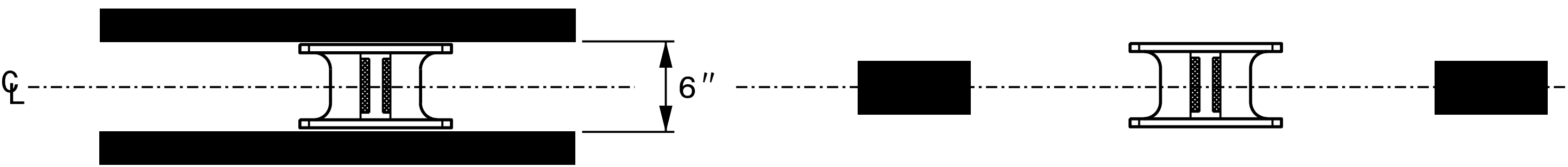
SHOULDER WEDGE DETAIL
(Resurfacing Adjacent to
Rutted Shoulder)

- 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.:	s:\usr\details\stand\shoulderwedgedetail.dgn		



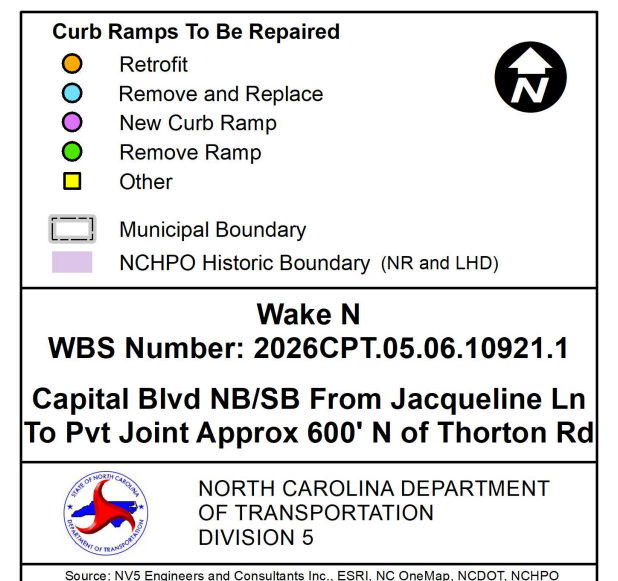
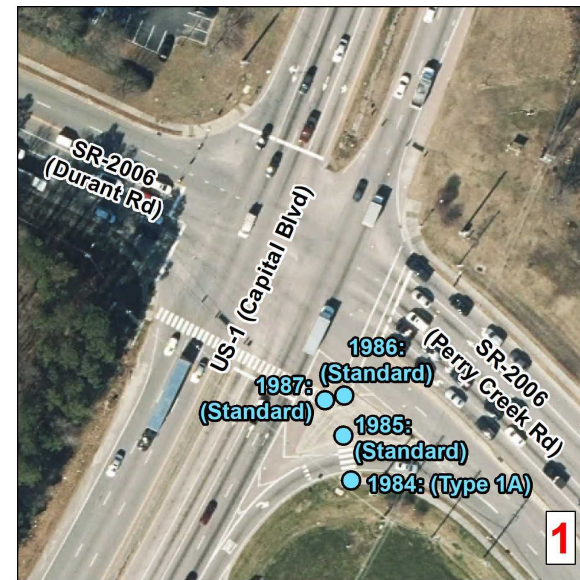
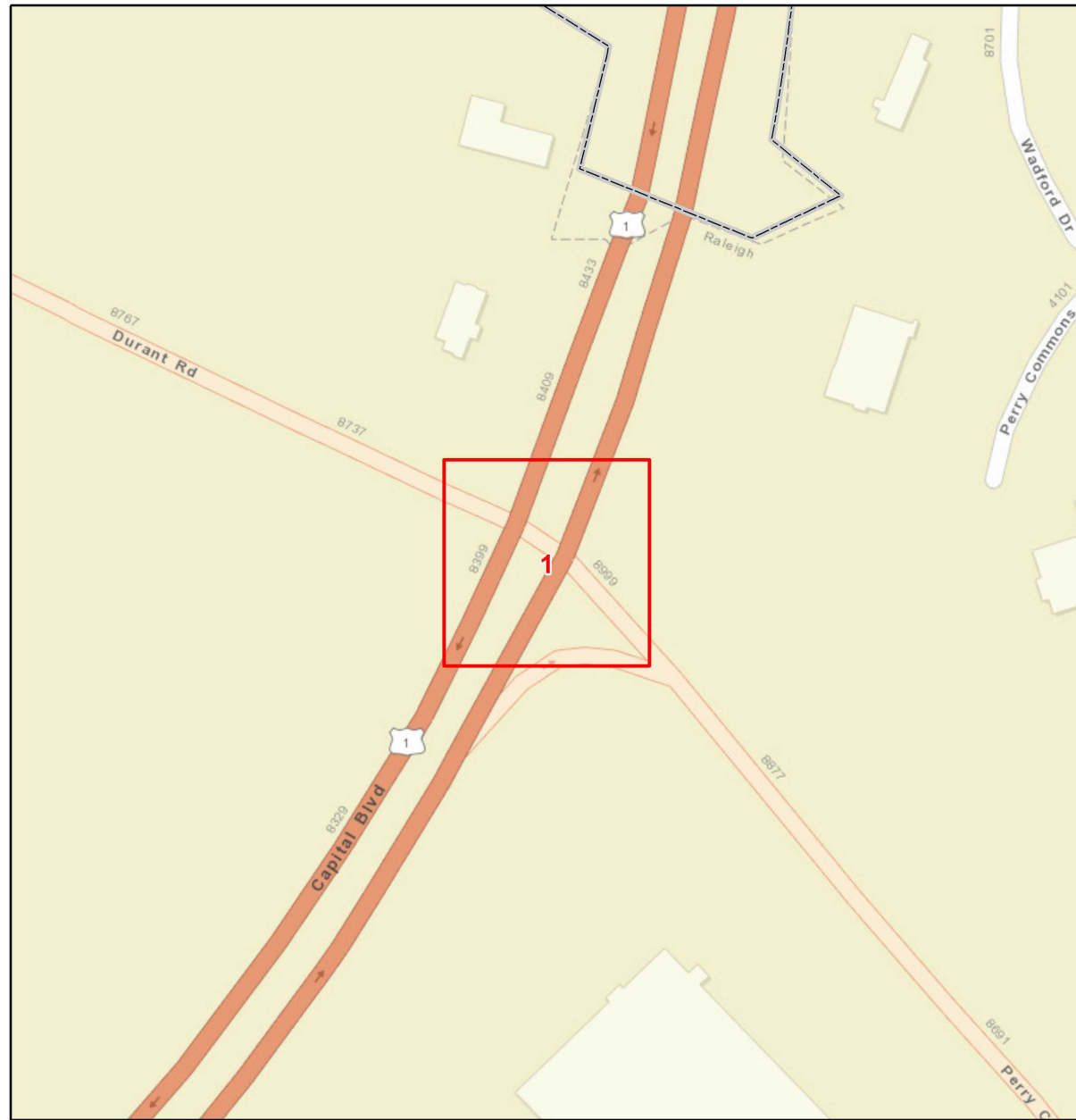
DETAIL A



MARKER SPACING

NOTES:

1. ALL GROOVE EDGES SHALL BE AT LEAST 2 INCHES FROM ANY SEAM OR PAVEMENT JOINT
2. GROOVE CUTS MAY BE TAPERED OR BEVELED. TAPERED CUTS SHALL START AT ROAD LEVEL ON EACH END AND TAPER AT A FIXED RATE AS SHOWN ON THE PROFILE VIEW. BEVELED GROOVE CUTS SHALL BE 0.5" MAXIMUM DEPTH (0.4" PREFERRED), AND SHALL BE 0.4" MINIMUM DEPTH AT BOTH ENDS OF THE PLUNGE CUT.
3. GROOVE AND PLUNGE CUT SHALL BE CLEAN AND DRY PRIOR TO PLACEMENT OF ADHESIVE.
4. THE EPOXY ADHESIVE SHALL BE THOROUGHLY MIXED UNTIL IT IS UNIFORM IN COLOR, AND APPLIED IN COLOR, AND APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
5. MARKER SHALL BE INSTALLED AS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS WITH THE BREAKWAY TABS RESTING ON THE PAVEMENT SURFACE. THE EPOXY SHALL BE FILLED TO THE LEVEL OF THE TOP OF THE MARKER HOLDER. EPOXY SHALL NOT TOUCH THE RETROREFLECTOR.
6. TOTAL GROOVE LENGTH MAY BE SHORTENED TO 54" ON SHARP CURVES IF APPROVED BY THE ENGINEER. GROOVES SHALL NOT OVERLAP WITH LOOP DETECTOR WIRES.



ADA SUMMARY OF QUANTITIES - CAPITAL BLVD NB/SB FROM JACQUELINE LN TO PVT JOINT APPROX 600' N OF THORTON RD

Municipality:	Raleigh
WBS Number:	2026CPT.05.06.10921.1
County:	Wake

Sheet No.
18

Ramp ID	Inset Map Number	Route 1	Route 2	2752000000-E (LF) Remove And Replace 2'-6" Concrete Curb & Gutter	2738000000-E (SY) Remove And Replace 5" Monolithic Concrete Islands (Keyed In)	2612500000-N (EA) Remove and Replace Concrete Curb Ramps	Improvement Type
1984	1	US-1 (Capital Blvd)	SR-2006 (Durant Rd)			1	Type 1A - 848.06
1985	1	US-1 (Capital Blvd)	SR-2006 (Durant Rd)			1	Standard - 848.06
1986	1	US-1 (Capital Blvd)	SR-2006 (Durant Rd)			1	Standard - 848.06
1987	1	US-1 (Capital Blvd)	SR-2006 (Durant Rd)			1	Standard - 848.06
-	-	-	-	8*	4*	-	
Sub-Total for Capital Blvd NB/SB From Jacqueline Ln To Pvt Joint Approx 600' N of Thorton Rd				8	4	4	

Notes: (1) ADA quantity totals are provided on the project 'ADA SUMMARY OF QUANTITIES - TOTALS' page. (2) *Contingency line item amount provided for adjustments outside of curb ramp pay limits.

ADA SUMMARY OF QUANTITIES - TOTALS

WBS	2026CPT.05.06.10921.1
Number:	
County:	Wake

Sheet No.
19

WBS Number	County	Municipality	Resurfacing Route	4447000000-E (LF) Pedestrian Channelizing Devices	4600000000-N (EA) Generic Traffic Control Item - Pedestrian Transport Service (Per Trip)	4600000000-N (EA) Generic Traffic Control Item - Audible Warning Devices	2752000000-E (LF) Remove And Replace 2'-6" Concrete Curb & Gutter	2738000000-E (SY) Remove And Replace 5" Monolithic Concrete Islands (Keyed In)	2612500000-N (EA) Remove and Replace Concrete Curb Ramps
2026CPT.05.06.10921.1	Wake	Raleigh	Capital Blvd NB/SB From Jacqueline Ln To Pvt Joint Approx 600' N of Thorton Rd	12	5	1	8	4	4
GRAND TOTAL				12	5	1	8	4	4

PROJECT NO.	SHEET NO.
2026CPT.05.06.10921.1,etc	20

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	1220000000-E	1245000000-E	1260000000-E	1297000000-E	1330000000-E	1519000000-E	1523000000-E	1575000000-E	1704000000-E	2605000000-N	2738000000-E	2752000000-E	2759000000-N	2830000000-N	2845000000-N	4600000000-N		7444000000-E	
								INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	1½" MILLING	INCIDENTAL MILLING	SURFACE COURSE, S9.5B	SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	CONCRETE CURB RAMPS	REMOVE AND REPLACE 5" MONOLITHIC CONCRETE ISLANDS	REMOVE AND REPLACE 2' 6" C&G	REMOVE CURB RAMPS	ADJUST MANHOLES	ADJUST METER OR VALVE BOX	PEDESTRIAN TRANSPORT SERVICE	AUDIBLE WARNING DEVICES	INDUCTIVE LOOP SAWCUT					
								MI	FT			TONS	SMI	TON	SY	SY	TONS	TONS	TON	TONS	EA	SY	LF	EA	EA	EA	EA	EA	EA	EA
2026CPT.05.06.10921.1	Wake	1	NC-96 E / ZEBULON RD	FROM US 401 TO NC 98	4	2		1.201	25	13.237	14.438	57	2.29	211		589		1,613	97	40										36
2026CPT.05.06.10921.1	Wake	2	NC-96 E / ZEBULON RD	FROM SKEET DR TO US 401	4	2		5.271	25	7.950	13.221	249	9.95	919		2,811		7,101	425	130										36
2026CPT.05.06.10921.1	Wake	3	US-1 S / CAPITAL BLVD	FROM PVT JOINT APPROX 600' N OF THORTON RD TO JACQUELINE LN	5	2		1.430	48	8.310	9.740	61	2.45	226	40,269	2,752		3,804	229	100	4	4	8	4			5	1	2,880	
2026CPT.05.06.10921.1	Wake	4	US-1 N / CAPITAL BLVD	FROM JACQUELINE LN TO PVT JOINT APPROX 600' N OF THORTON RD	5	2		1.440	48	32.620	34.060	59	2.36	218	47,144	1,286		4,281	257	100									3,120	
2026CPT.05.06.10921.1	Wake	5	NC-50 E / CREEDMOOR RD	FROM PAVEMENT JOINT TO SR 1834	6	2		1.800	24	24.442	26.242	83	3.32	307	26,305	2,307		2,535	153	80									3,216	
TOTAL FOR PROJ NO. 2026CPT.05.06.10921.1								11.142				509	20.37	1,881	113,718	9,745		19,334	1,161	450	4	4	8	4			5	1	9,288	
2026CPT.05.06.20921.1	Wake	6	SR-4552 / BUCK WALLOW RD	FROM SR 1831 TO SR 4551	2	2		0.237	20	0.000	0.237					165	257		32	318										
2026CPT.05.06.20921.1	Wake	7	SR-4551 / HEARTLAND DR	FROM CUL-DE-SAC TO CUL-DE-SAC	1	2		0.330	20	0.000	0.330					104	332		31	201										
2026CPT.05.06.20921.1	Wake	8	SR-4550 / CHESTNUT HILL RD	FROM CUL-DE-SAC TO CUL-DE-SAC	1	2		0.267	20	0.000	0.267					270	272		28	220										
2026CPT.05.06.20921.1	Wake	9	SR-4537 / LAKEFALL DR	FROM NC 98 TO SR 4550	2	2		0.290	20	0.000	0.290					356	327		24	61										
2026CPT.05.06.20921.1	Wake	10	SR-4539 / GREAT WOODS RD	FROM SR 4537 TO CUL DE SAC	1	2		0.155	18	0.000	0.155						141		16	147										
2026CPT.05.06.20921.1	Wake	11	SR-4538 / FROSTY HOLLOW RD	FROM SR 4537 TO GRACE COVE LN	1	2		0.147	18	0.000	0.147					67	113		11	75										
2026CPT.05.06.20921.1	Wake	12	SR-1921 / KEITH RD	FROM SR 1917 TO DEAD END	2	2		0.947	20	0.000	0.947			9		109	978		86	470										
2026CPT.05.06.20921.1	Wake	13	SR-4536 / INCLINE DR	FROM SR 1921 TO CUL-DE-SAC	1	2		0.150	18	0.000	0.150						115		9	22										
2026CPT.05.06.20921.1	Wake	14	SR-4947 / BALLYCLARE CT	FROM CUL-DE-SAC TO CUL-DE-SAC	1	2		0.369	18	0.000	0.369						283		26	168										
2026CPT.05.06.20921.1	Wake	15	SR-3479 / SASSAFRAS LN	FROM SR 1847 TO CUL-DE-SAC	1	2		0.230	18	0.000	0.230					405	192		17	91										
2026CPT.05.06.20921.1	Wake	16	SR-2500 / MARKS CREEK RD/KNIGHTDALE EAGLE ROCK RD/ROBERTSON ST	FROM SR 2501 TO N FIRST AVE	3	2		1.367	20	1.369	2.736	61	2.43	224		528	1,444		104	210					3	5				
2026CPT.05.06.20921.1	Wake	17	SR-2501 / KNIGHTDALE EAGLE ROCK RD	FROM SR 2500 TO PAVEMENT JOINT	3	2		0.608	22	0.000	0.608	28	1.12	103		242	684		47	44										
2026CPT.05.06.20921.1	Wake	18	SR-2329 / LIZARD LICK RD	FROM NC 97 TO SR 2320	3	2		1.740	20	2.140	3.880	75	3.01	285		2,708	1,932		128	50									276	
2026CPT.05.06.20921.1	Wake	19	SR-2320 / RILEY HILL RD/PROCTOR ST/OLD BUNN RD	FROM NC 96 TO NC 97	3	2		2.844	20	7.070	9.914	100	3.99	369		1,683	3,055		203	85									1,200	
2026CPT.05.06.20921.1	Wake	20	SR-2001 / FONVILLE RD	FROM SR 2000 TO CUL-DE-SAC	1	2		0.482	20	0.000	0.482					714	462		34	91					5					
2026CPT.05.06.20921.1	Wake	21	SR-4454 / WATERWOOD CT	FROM SR 2001 TO END MAINT	1	2		0.316	20	0.001	0.317						269		33	317					5	5				
TOTAL FOR PROJ NO. 2026CPT.05.06.20921.1								10.479				264	10.55	990		7,351	10,856		829	2,570						13	10			1,476
2026CPT.05.06.20922.1	Wake	22	SR-4455 / FOUNTAINSIDE CT	FROM SR 4454 TO SR 4493	7	2		0.050	18	0.000	0.050						31		5	61										
2026CPT.05.06.20922.1	Wake	23	SR-4493 / FRESHWATER CT	FROM DEAD END TO CUL-DE-SAC	7	2		0.089	18	0.000	0.089						71		6	27					1	3				
2026CPT.05.06.20922.1	Wake	24	SR-5105 / WATERWINDS CT	FROM SR 4454 TO CUL-DE-SAC	7	2		0.025	20	0.000	0.025						33		6	73					1	2				
2026CPT.05.06.20922.1	Wake	25	SR-5106 / COOLWATER CT	FROM SR 4454 TO CUL-DE-SAC	7	2		0.024	20	0.000	0.024						56		5	20					2	3				
2026CPT.05.06.20922.1	Wake	26	SR-4949 / CROSSGAR CT	FROM SR 4948 TO CUL-DE-SAC	7	2		0.069	18	0.000	0.069						59		6	48										
2026CPT.05.06.20922.1	Wake	27	SR-4948 / DRUMQUIN DR	FROM SR 4947 TO CUL-DE-SAC	7	2		0.215	18	0.000	0.215						148		12	54										
2026CPT.05.06.20922.1	Wake	28	SR-4946 / CASTLEREAGH LN	FROM SR 1845 TO SR 4947	7	2		0.089	18	0.000	0.089					36	55		5	20						2				
2026CPT.05.06.20922.1	Wake	29	SR-2418 / GAIL RIDGE LN	FROM SR 2416 TO SR 2417	7	2		0.316	20	0.000	0.316						215		21	141										
2026CPT.05.06.20922.1	Wake	30	SR-2417 / ROSE PL	FROM SR 2418 TO SR 2416	7	2		0.072	20	0.000	0.072					89	54		5	25										
2026CPT.05.06.20922.1	Wake	31	SR-2416 / CANDLEWICK DR	FROM SR 1003 TO SR 2417	7	2		0.269	20	0.000	0.269					89	188		26	280										
TOTAL FOR PROJ NO. 2026CPT.05.06.20922.1								1.218								214	910		97	749						4	10			
GRAND TOTAL								22.839				773	30.92	2,871	113,718	17,310	11,766	19,334	2,087	3,769	4	4	8	4	17	20	5	1	10,764	

PROJECT NO.	SHEET NO.
2026CPT.05.06.10921.1,etc	21

THERMOPLASTIC AND PAINT QUANTITIES

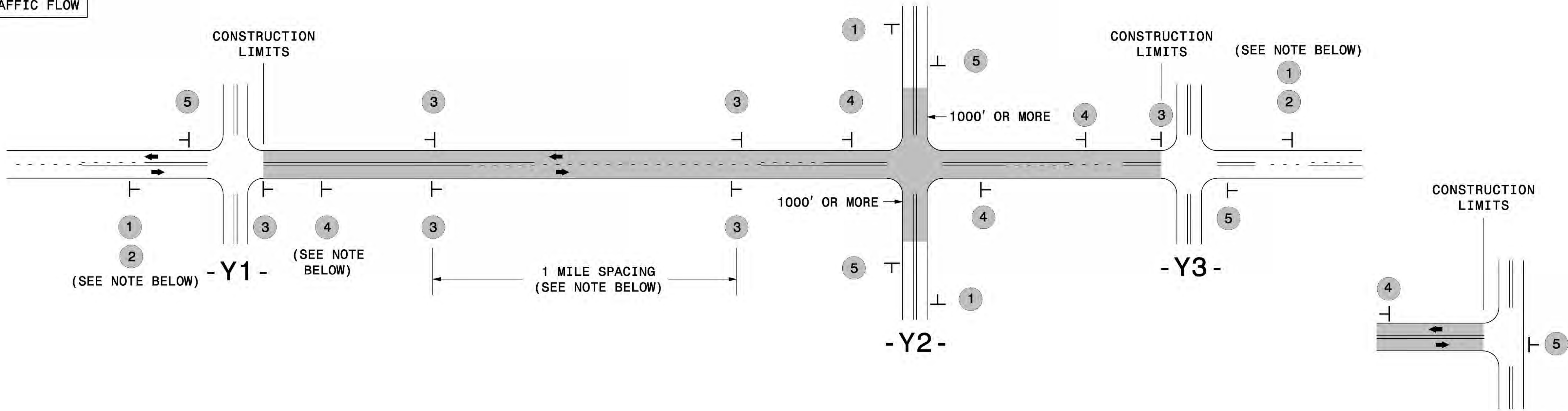
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	4413000000-E	4447000000-E	4457000000-N	4510000000-N	4688000000-E	4695000000-E	4700000000-E	4704000000-E	4709000000-E	4720000000-E					4725000000-E					4890000000-E	4895000000-N			
												WORK ZONE ADVANCE/GE NERAL WARNING SIGNING	PEDESTRIAN CHANNELIZIN G DE- VICES	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMEN T	6" X 90 M WHITE THERMO	6" X 90 M YELLOW THERMO	8" X 90 M WHITE THERMO	12" X 90 M YELLOW THERMO	16" X 90 M WHITE THERMO	24" X 90 M WHITE THERMO	THERMO MSG ONLY 90 M	THERMO MSG STOP 90 M	THERMO MSG AHEAD 90 M	THERMO MSG RXR 90 M	THERMO MSG SCHOOL 90 M	THERMO LT ARROW 90 M	THERMO STR & RT ARROW 90 M	THERMO STR ARROW 90 M	THERMO RT ARROW 90 M	THERMO MERGE ARROW 90 M	THERMO STR & LT ARROW 90 M	YIELD LINE PAVEMENT MARKING, 24" 90 MILS	INLAID CRADLE MARKERS	
												SF	LF	LS	HR	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	
2026CPT.05.06.10921.1	Wake	1	NC-96 E / ZEBULON RD	FROM US 401 TO NC 98	4	2		1.201	25	13.237	14.438	135			*		12,834	11,926		242							2						88		
2026CPT.05.06.10921.1	Wake	2	NC-96 E / ZEBULON RD	FROM SKEET DR TO US 401	4	2		5.271	25	7.95	13.221	590					55,662	44,407		63												344			
2026CPT.05.06.10921.1	Wake	3	US-1 S / CAPITAL BLVD	FROM PVT JOINT APPROX 600' N OF THORTON RD TO JACQUELINE LN	5	2		1.43	48	8.31	9.74	160	12			120	11,151	8,334	445			609					6	6	6	3			185		
2026CPT.05.06.10921.1	Wake	4	US-1 N / CAPITAL BLVD	FROM JACQUELINE LN TO PVT JOINT APPROX 600' N OF THORTON RD	5	2		1.44	48	32.62	34.06	161			120	12,602	7,410	1,504			836	12				20		8	14			12	190		
2026CPT.05.06.10921.1	Wake	5	NC-50 E / CREEDMOOR RD	FROM PAVEMENT JOINT TO SR 1834	6	2		1.8	24	24.442	26.242	202			40	23,191	30,639		755		204				13	3	1	2	3			201			
TOTAL FOR PROJ NO. 2026CPT.05.06.10921.1								11.142					1,248	12.000	1.00	280	115,440	102,716	1,949	1,060		1,649	12			41	9	15	19	3		12	1,008		
																218,156						12					87								
2026CPT.05.06.20921.1	Wake	6	SR-4552 / BUCK WALLOW RD	FROM SR 1831 TO SR 4551	2	2		0.237	20	0	0.237	27			*																				
2026CPT.05.06.20921.1	Wake	7	SR-4551 / HEARTLAND DR	FROM CUL-DE-SAC TO CUL-DE-SAC	1	2		0.33	20	0	0.33	37																							
2026CPT.05.06.20921.1	Wake	8	SR-4550 / CHESTNUT HILL RD	FROM CUL-DE-SAC TO CUL-DE-SAC	1	2		0.267	20	0	0.267	30																							
2026CPT.05.06.20921.1	Wake	9	SR-4537 / LAKEFALL DR	FROM NC 98 TO SR 4550	2	2		0.29	20	0	0.29	32																							
2026CPT.05.06.20921.1	Wake	10	SR-4539 / GREAT WOODS RD	FROM SR 4537 TO CUL DE SAC	1	2		0.155	18	0	0.155	17																							
2026CPT.05.06.20921.1	Wake	11	SR-4538 / FROSTY HOLLOW RD	FROM SR 4537 TO GRACE COVE LN	1	2		0.147	18	0	0.147	16																							
2026CPT.05.06.20921.1	Wake	12	SR-1921 / KEITH RD	FROM SR 1917 TO DEAD END	2	2		0.947	20	0	0.947						10,000	10,000			60		8	5							20				
2026CPT.05.06.20921.1	Wake	13	SR-4536 / INCLINE DR	FROM SR 1921 TO CUL-DE-SAC	1	2		0.15	18	0	0.15	17																							
2026CPT.05.06.20921.1	Wake	14	SR-4947 / BALLYCLARE CT	FROM CUL-DE-SAC TO CUL-DE-SAC	1	2		0.369	18	0	0.369	41																							
2026CPT.05.06.20921.1	Wake	15	SR-3479 / SASSAFRAS LN	FROM SR 1847 TO CUL-DE-SAC	1	2		0.23	18	0	0.23	26																							
2026CPT.05.06.20921.1	Wake	16	SR-2500 / MARKS CREEK RD/KNIGHTDALE EAGLE ROCK RD/ROBERTSON ST	FROM SR 2501 TO N FIRST AVE	3	2		1.367	20	1.369	2.736	221					14,135	12,292			100	67			4										
2026CPT.05.06.20921.1	Wake	17	SR-2501 / KNIGHTDALE EAGLE ROCK RD	FROM SR 2500 TO PAVEMENT JOINT	3	2		0.608	22	0	0.608						6,378	6,280			50	41			2										
2026CPT.05.06.20921.1	Wake	18	SR-2329 / LIZARD LICK RD	FROM NC 97 TO SR 2320	3	2		1.74	20	2.14	3.88	195				40	18,374	14,640				143		8	5				1		1		111		
2026CPT.05.06.20921.1	Wake	19	SR-2320 / RILEY HILL RD/PROCTOR ST/OLD BUNN RD	FROM NC 96 TO NC 97	3	2		2.844	20	7.07	9.914	319				40	23,906	26,788		356		244		16	10		12	5		3					
2026CPT.05.06.20921.1	Wake	20	SR-2001 / FONVILLE RD	FROM SR 2000 TO CUL-DE-SAC	1	2		0.482	20	0	0.482	54					5,090	5,090				24													
2026CPT.05.06.20921.1	Wake	21	SR-4454 / WATERWOOD CT	FROM SR 2001 TO END MAINT	1	2		0.316	20	0.001	0.317	35																							
TOTAL FOR PROJ NO. 2026CPT.05.06.20921.1								10.479					1,067		1.00	80	77,883	75,090		356	150	579		32	20	6	12	5		4		1	20	111	
																152,973							70					10							
2026CPT.05.06.20922.1	Wake	22	SR-4455 / FOUNTAINSIDE CT	FROM SR 4454 TO SR 4493	7	2		0.05	18	0	0.05	6			*																				
2026CPT.05.06.20922.1	Wake	23	SR-4493 / FRESHWATER CT	FROM DEAD END TO CUL-DE-SAC	7	2		0.089	18	0	0.089	10																							
2026CPT.05.06.20922.1	Wake	24	SR-5105 / WATERWINDS CT	FROM SR 4454 TO CUL-DE-SAC	7	2		0.025	20	0	0.025	3																							
2026CPT.05.06.20922.1	Wake	25	SR-5106 / COOLWATER CT	FROM SR 4454 TO CUL-DE-SAC	7	2		0.024	20	0	0.024	3																							
2026CPT.05.06.20922.1	Wake	26	SR-4949 / CROSSGAR CT	FROM SR 4948 TO CUL-DE-SAC	7	2		0.069	18	0	0.069	8																							
2026CPT.05.06.20922.1	Wake	27	SR-4948 / DRUMQUIN DR	FROM SR 4947 TO CUL-DE-SAC	7	2		0.215	18	0	0.215	24																							
2026CPT.05.06.20922.1	Wake	28	SR-4946 / CASTLEREAGH LN	FROM SR 1845 TO SR 4947	7	2		0.089	18	0	0.089	10																							
2026CPT.05.06.20922.1	Wake	29	SR-2418 / GAIL RIDGE LN	FROM SR 2416 TO SR 2417	7	2		0.316	20	0	0.316	35																							
2026CPT.05.06.20922.1	Wake	30	SR-2417 / ROSE PL	FROM SR 2418 TO SR 2416	7	2		0.072	20	0	0.072	8																							
2026CPT.05.06.20922.1	Wake	31	SR-2416 / CANDLEWICK DR	FROM SR 1003 TO SR 2417	7	2		0.269	20	0	0.269	30																							
TOTAL FOR PROJ NO. 2026CPT.05.06.20922.1								1.218					137		1.000																				
GRAND TOTAL								22.839					2,452	12.000	1.000	360	193,323	177,806	1,949	1,416	150	2,228	12	32	20	6	12	46	9	15	23	3	1	32	1,119
																	371,129						82					97							

SIGNING FOR RESURFACING PROJECTS

LEGEND

STATIONARY SIGN

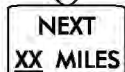
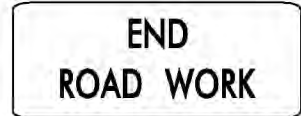
DIRECTION OF TRAFFIC FLOW



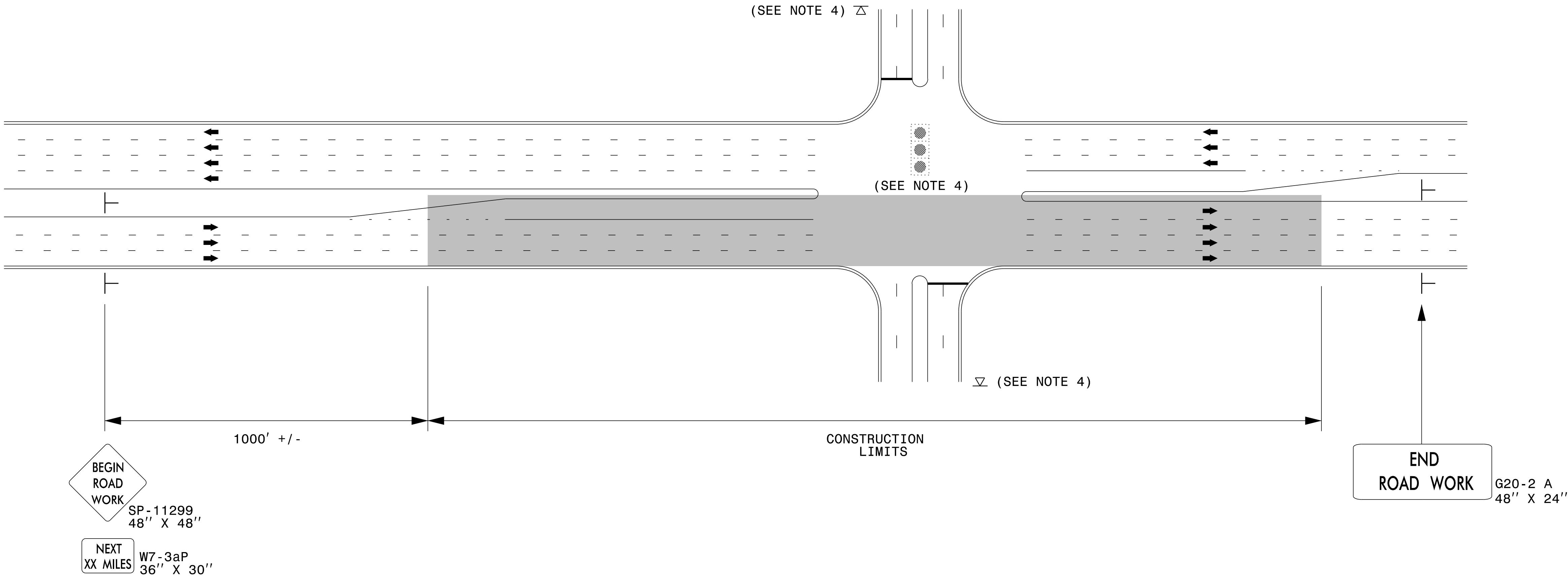
TEE INTERSECTION

MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	1  W20-1 48" X 48" 2  W7-3aP 24" X 18"	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 CONSTRUCTION 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, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.  W20-1 48" X 48" PLACED 500' IN ADVANCE OF FLAGGER.  W20-7 A 48" X 48" PLACED 250' IN ADVANCE OF FLAGGER.
	3  SP 13107 48" X 48"	- 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  SP 13106 48" X 48"	- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. - DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. - INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. - FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. - A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.	
	5  G20-2 A 48" X 24"	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.		
LESS 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.		 AD

URBAN / SUBURBAN WORKZONES



NOTES:

- 1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
- 3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
- 4) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.
- 5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
- 6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
- 7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 8) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS.THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

STATIONARY SIGN

DIRECTION OF TRAFFIC FLOW

DIVISION OF HIGHWAYS

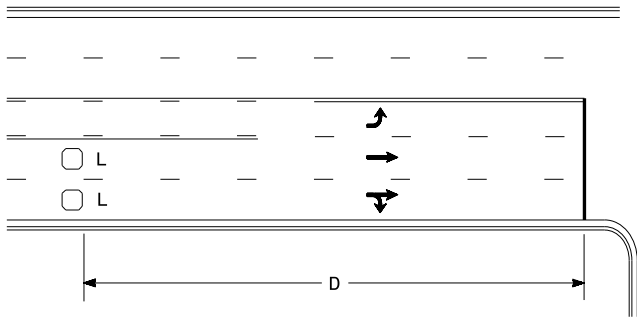
STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

WORK ZONE TRAFFIC CONTROL

RESURFACING ADVANCE WARNING SIGNS FOR URBAN / SUBURBAN FACILITIES

High Speed Detection
(≥35 mph)

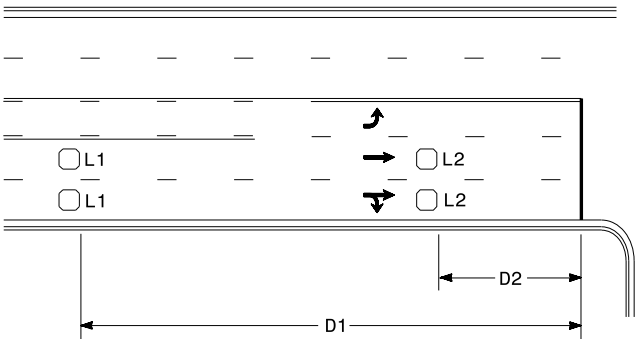


Speed Limit mph	D ft
35	200
40	250
45	300
50	355
55	420
60	475
65	550

L = 6ft X 6ft
Wired separately

Volume Density Operation

OR



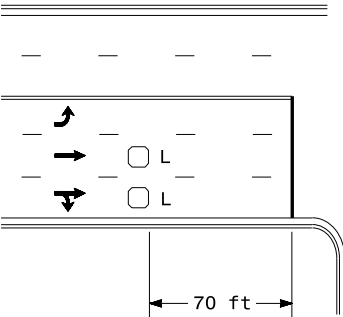
Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110
60	475	120
65	550	130

L1 = 6ft X 6ft
Wired in series

L2 = 6ft X 6ft
Wired in series

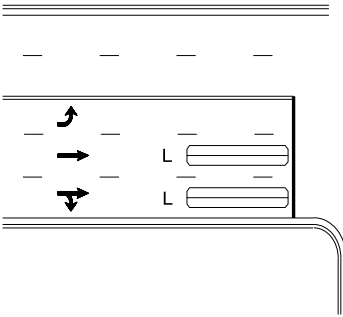
"Stretch" Operation

Low Speed Detection
(≤35 mph)



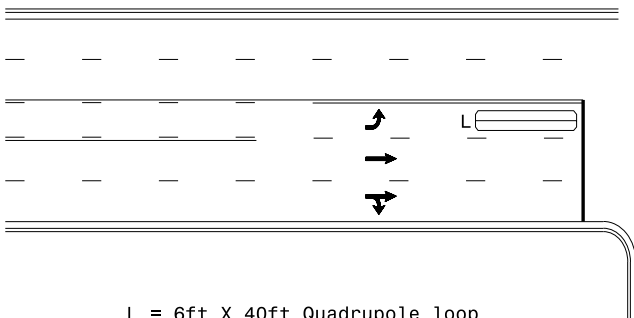
L = 6ft X 6ft
Wired in series

OR



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

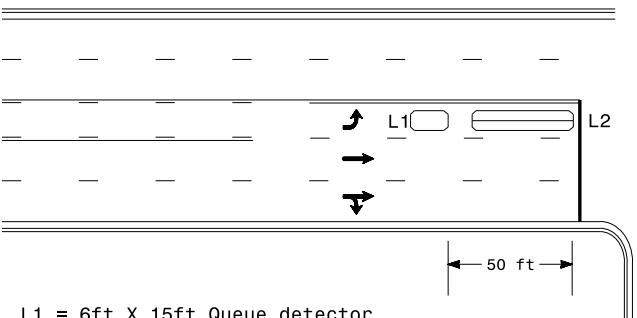
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

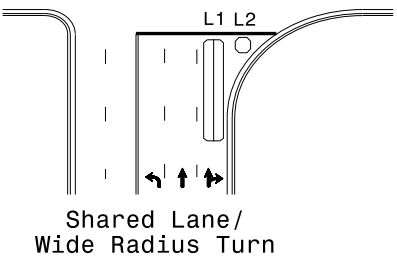
OR



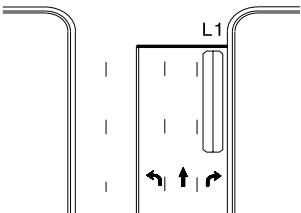
L1 = 6ft X 15ft Queue detector
L2 = 6ft X 40ft Quadrupole loop

Queue Loop Detection

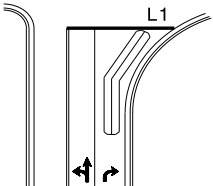
Right Turn Lane Detection



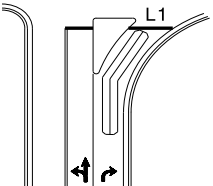
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

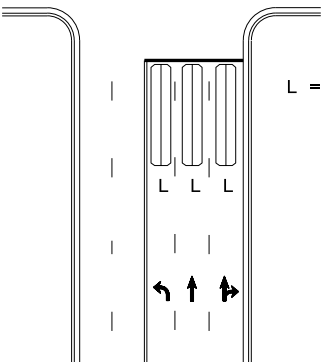


Wide Radius Turn



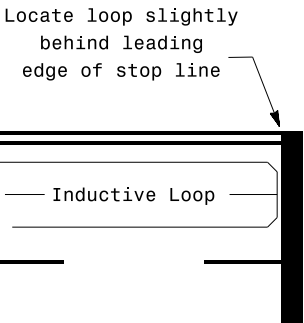
Channelized Turn

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

PLAN DATE: September 2025
PREPARED BY: J.A. Lohr

REVIEWED BY:
REVISIONS
INIT. DATE

SCALE
N/A

Typical Signal Loop Locations

SEAL
NORTH CAROLINA
PROFESSIONAL ENGINEER
ROBERT J. ZIEGLER
026486

11/25/2025
DATE

SIG. INVENTORY NO.