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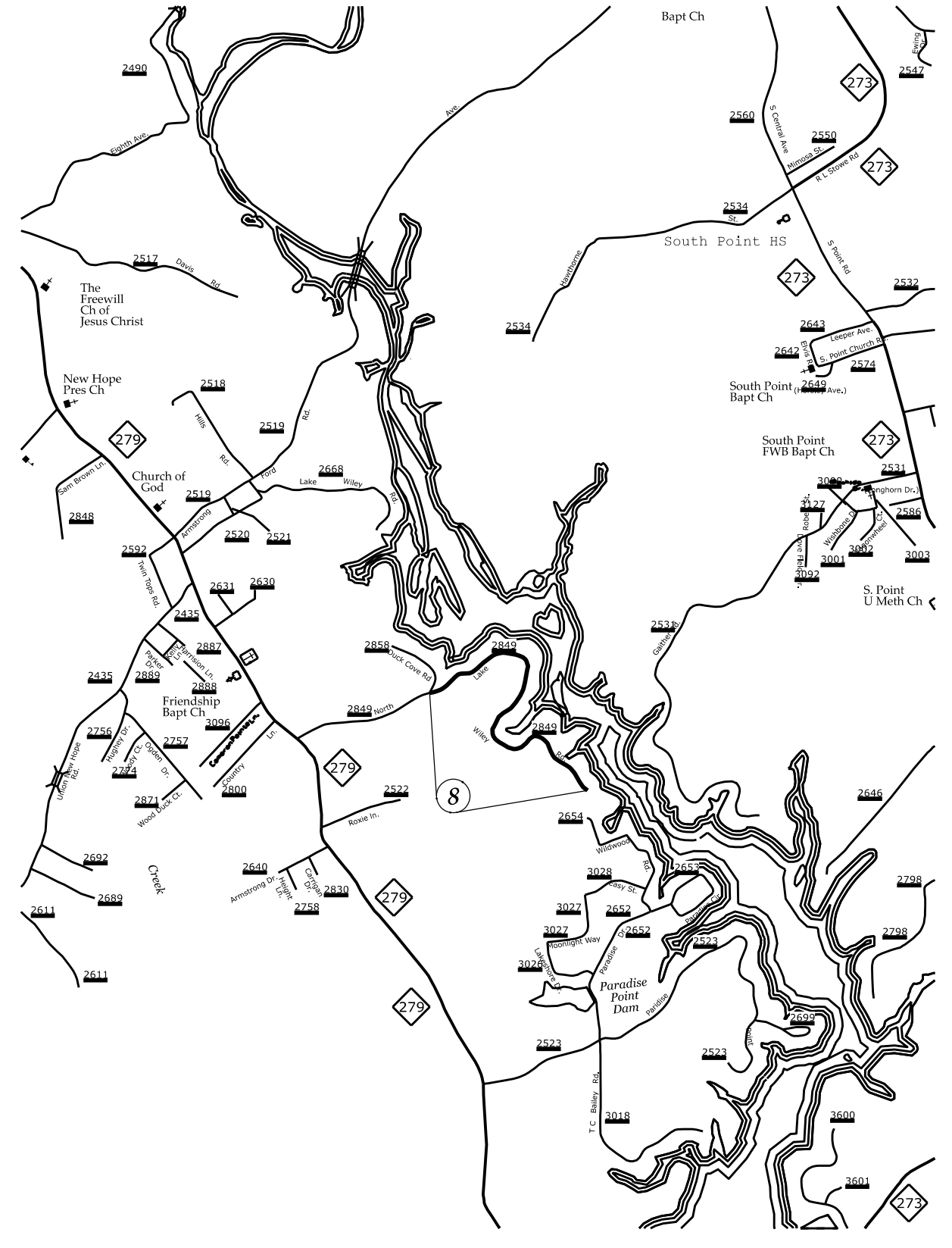
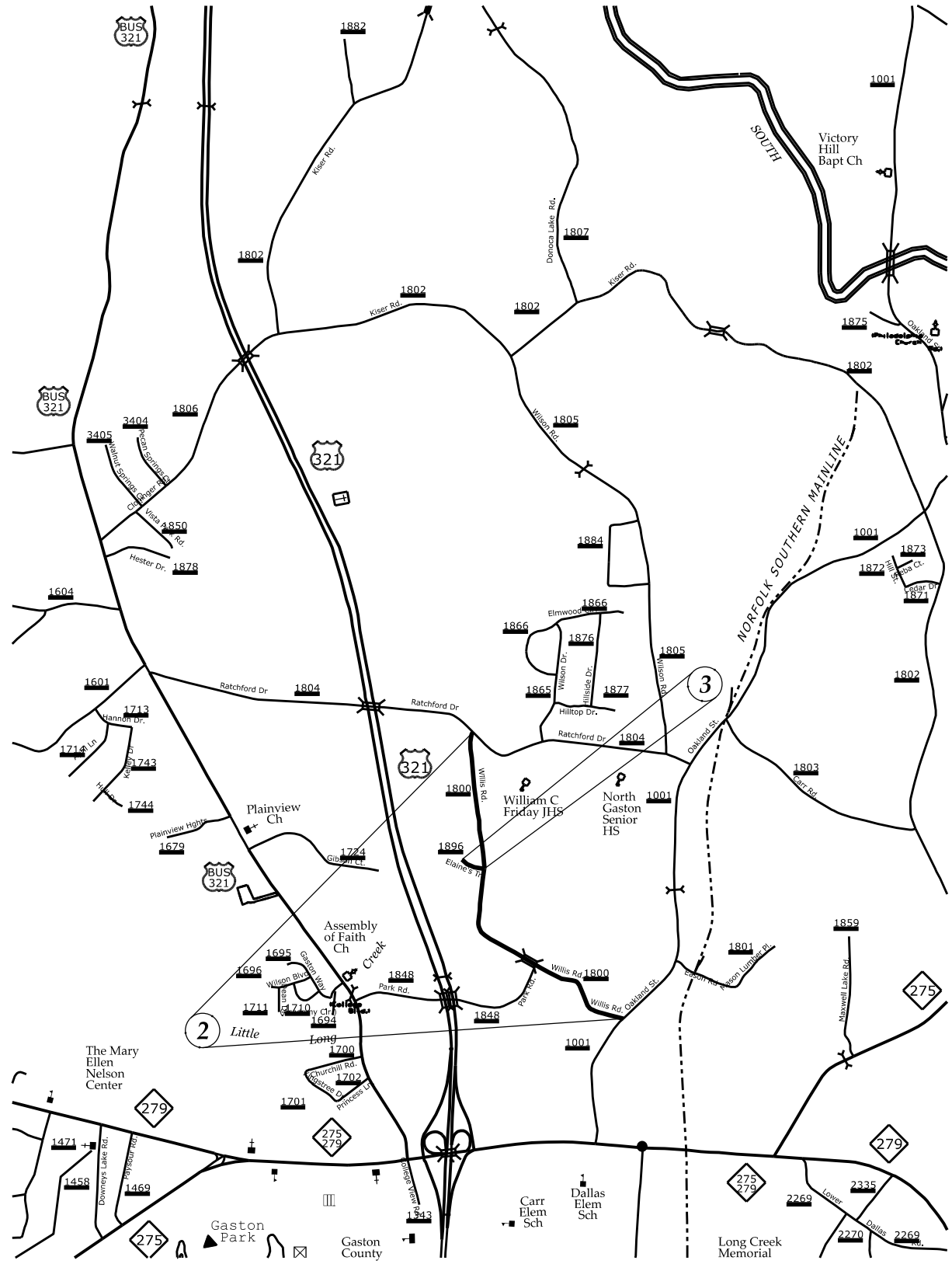
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GASTON CO. RESURFACING MAP 4

GASTON CO. RESURFACING MAP 8

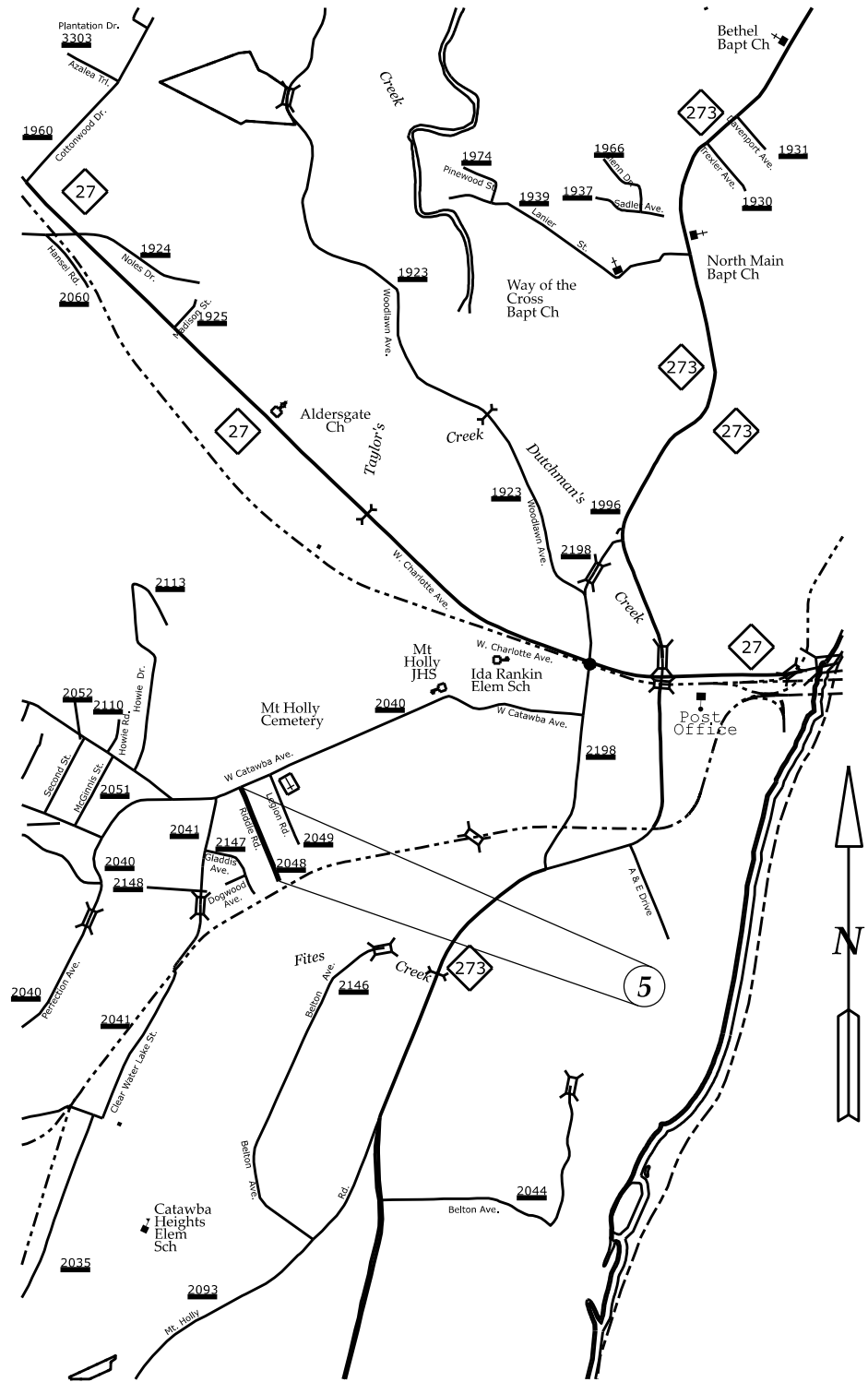
WBS Number	Sheet No.
2026CPT.12.07.10361	2
2026CPT.12.07.20361	



No Scale

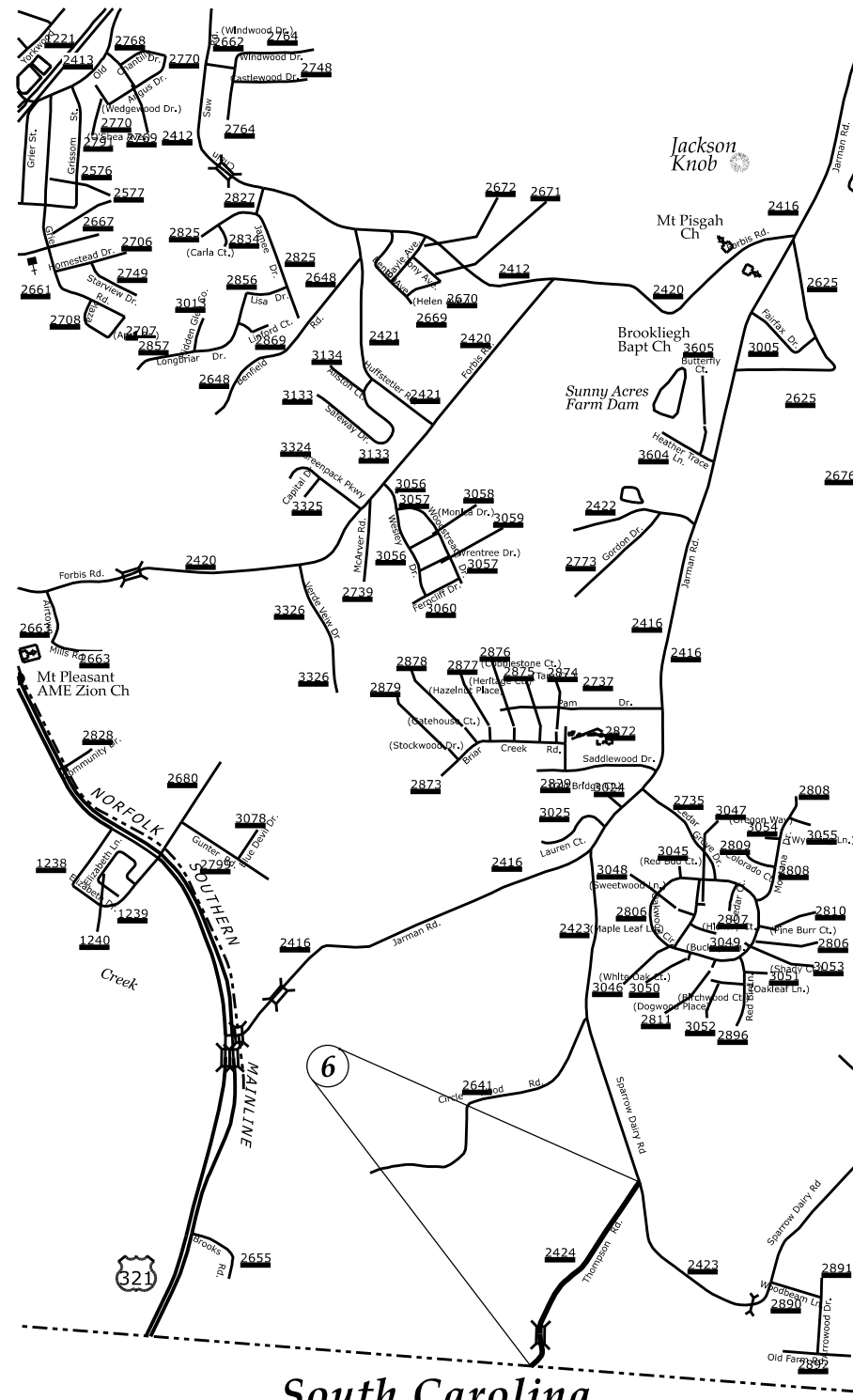
No Scale

GASTON CO. RESURFACING MAP 5



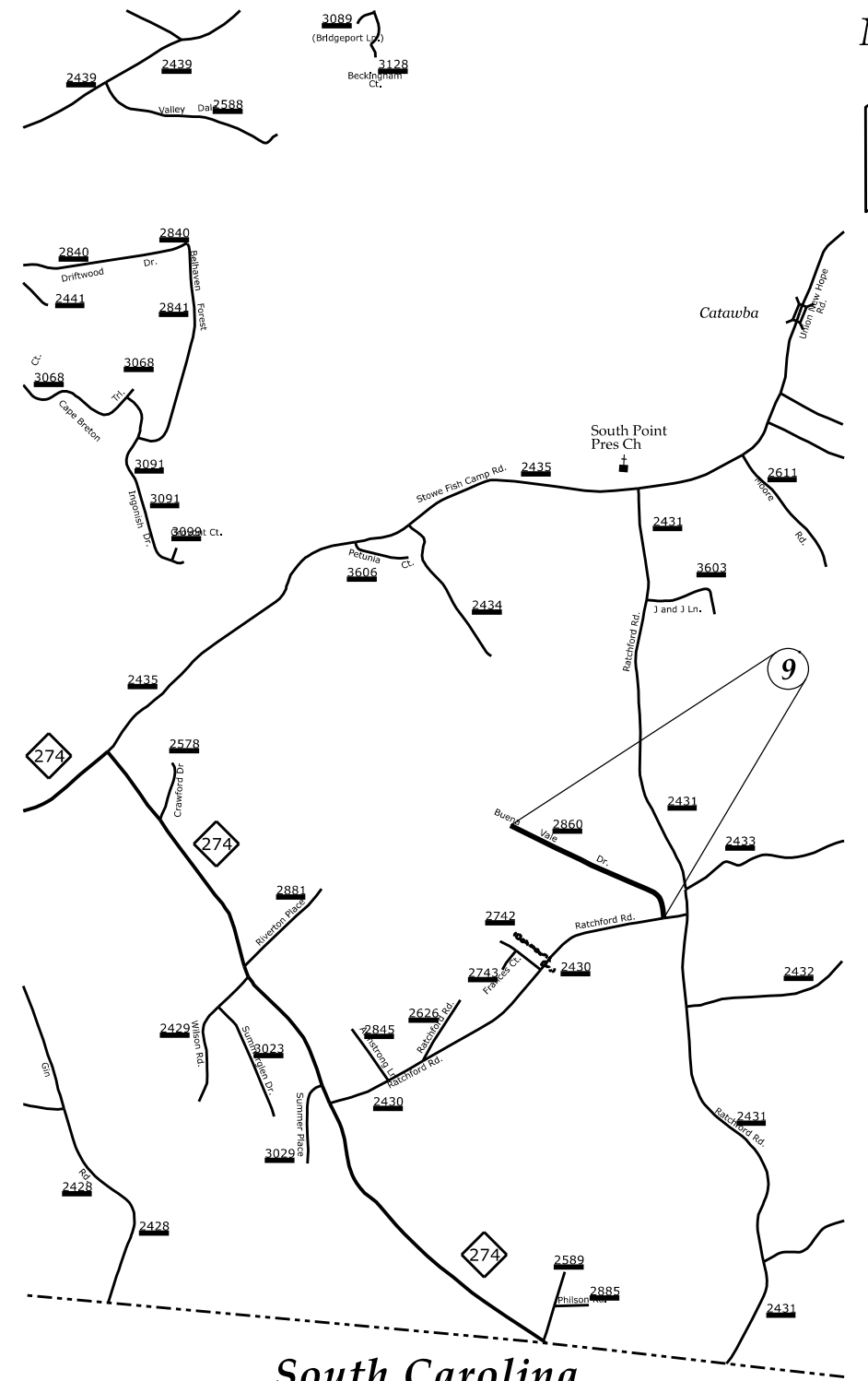
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GASTON CO. RESURFACING MAP 6



No Scale

GASTON CO. RESURFACING MAP 9

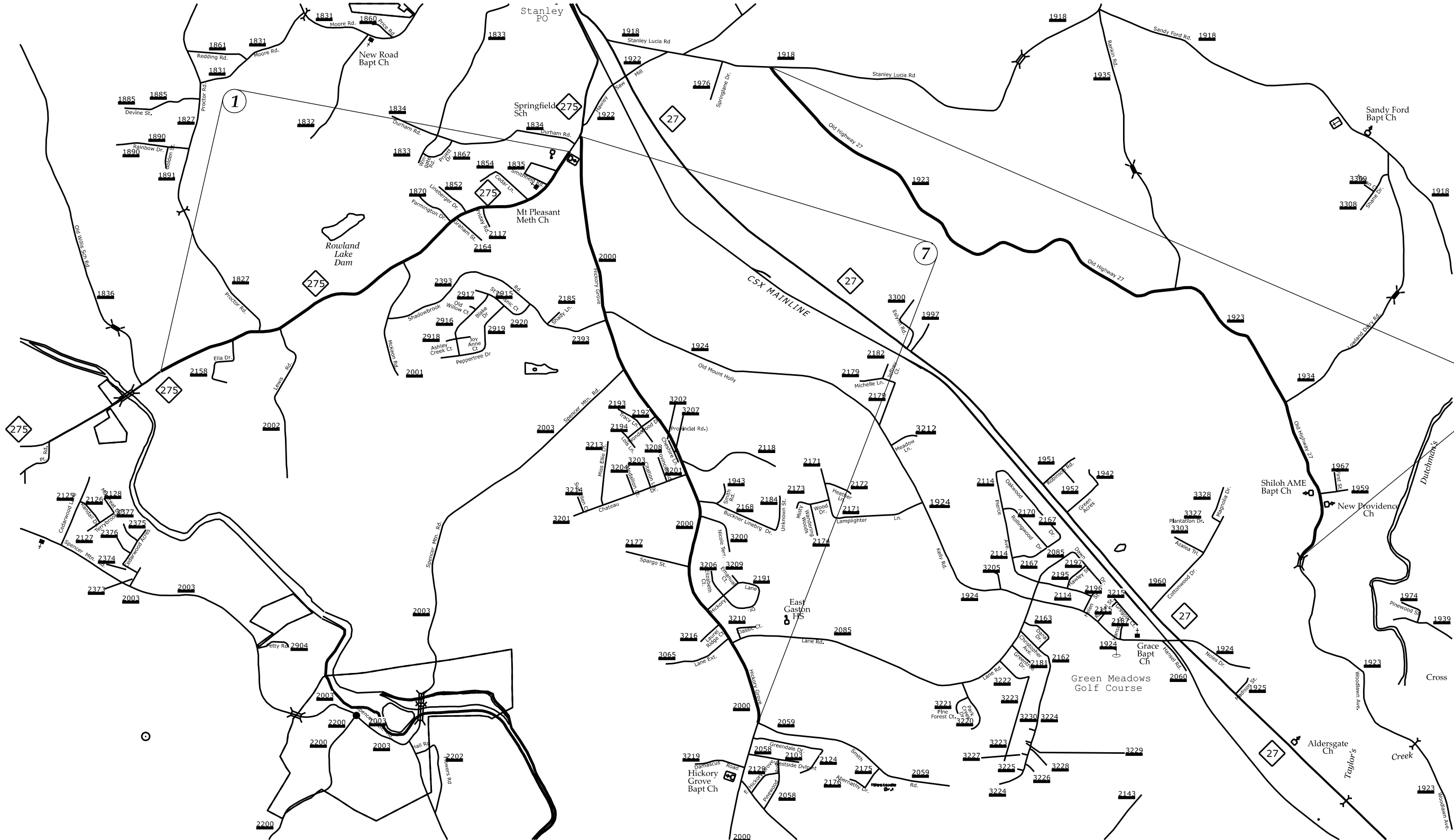


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WBS Number	Sheet No.
2026CPT.12.07.10361	3
2026CPT.12.07.20361	

GASTON CO. RESURFACING MAP 1, 4 & 7

WBS Number	Sheet No.
2026CPT.12.07.10361	4
2026CPT.12.07.20361	

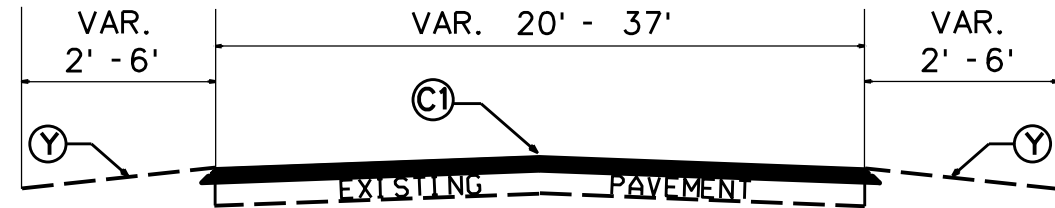


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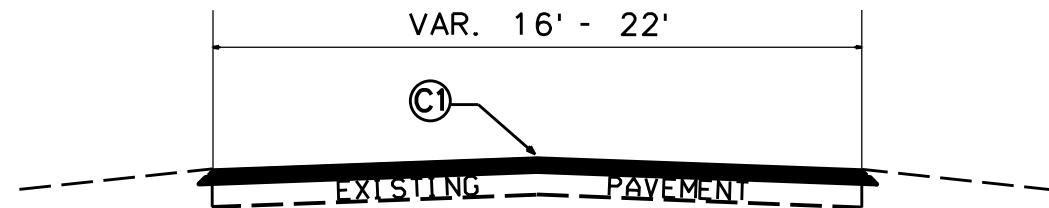
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
V1	MILL ASPHALT PAVEMENT APPROX. 1-1/2" AS DIRECTED BY ENGINEER
Y	SHOULDER RECONSTRUCTION
Z	INCIDENTAL MILLING AS DIRECTED BY THE ENGINEER.

PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
GASTON COUNTY 2026	5	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
2026CPT. 12. 07. 1 0361		
2026CPT. 12. 07. 20361		

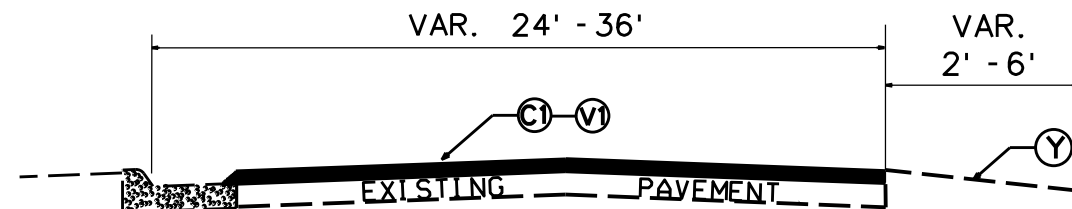
- NOTES: 1. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
 2. MILL BRIDGE APPROACHES & RXR APPROACHES 100' TO PROVIDE A SMOOTH TRANSITION AS DIRECTED.
 3. MILL INTO GUTTER LINE WHERE SHOWN AND AS DIRECTED.
 4. MAINTAIN PROPER CROWN FOR DRAINAGE OF THE ROAD SURFACE.



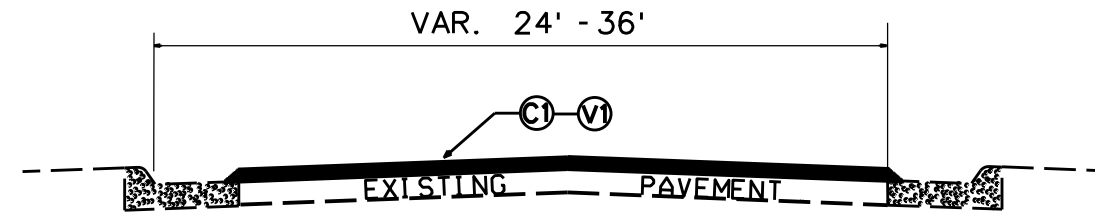
TYPICAL SECTION NO. 1
(MAP 1, 2, 4, 7)



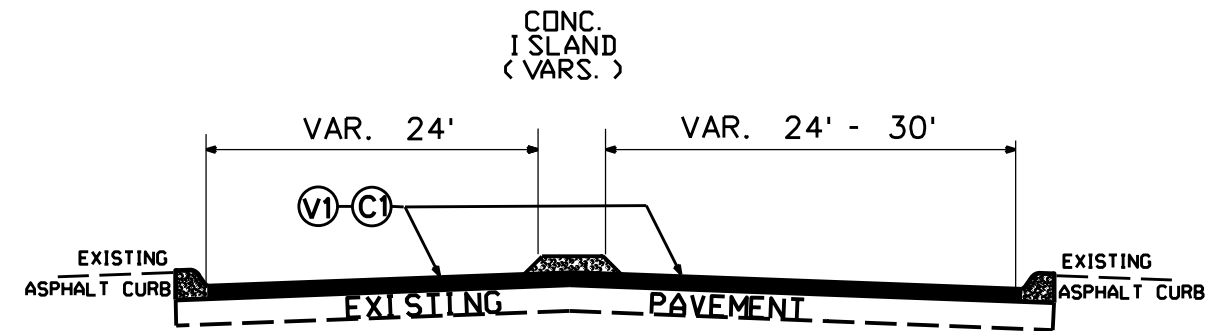
TYPICAL SECTION NO. 2
(MAP 3, 5, 6, 8, 9)



TYPICAL SECTION NO. 3
(MAP 7)



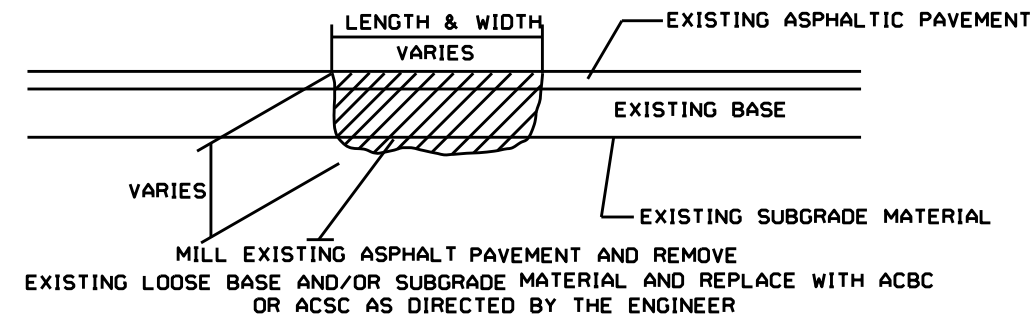
TYPICAL SECTION NO. 4
(MAP 7)



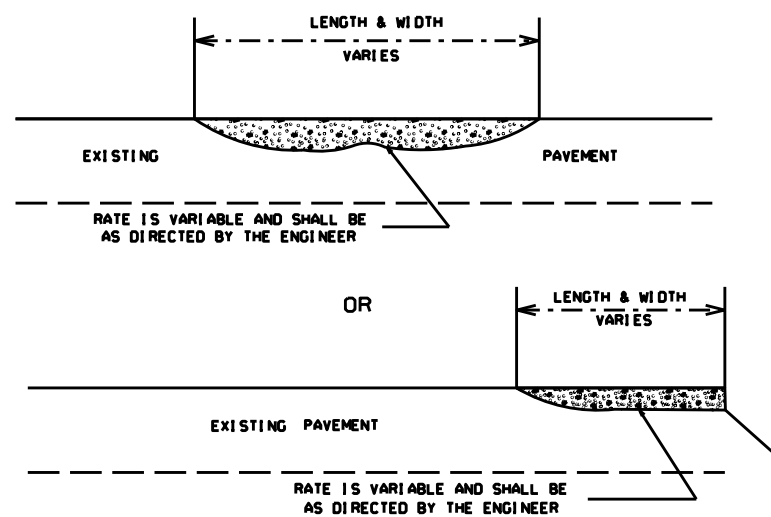
TYPICAL SECTION NO. 5
(MAP 7)

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
V1	MILL ASPHALT PAVEMENT APPROX. 1-1/2" AS DIRECTED BY ENGINEER
Y	SHOULDER RECONSTRUCTION
Z	INCIDENTAL MILLING AS DIRECTED BY THE ENGINEER.

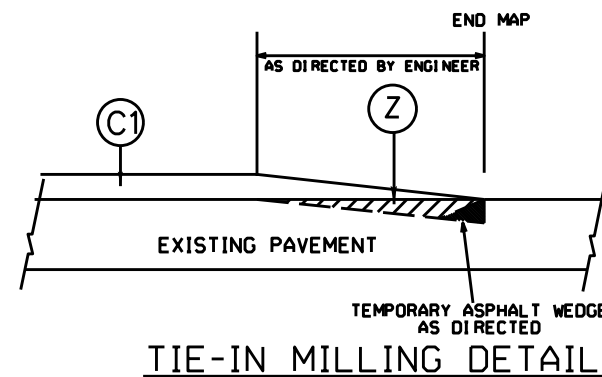
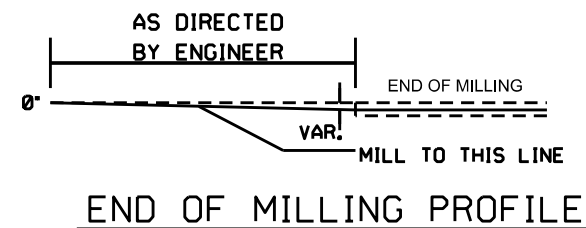
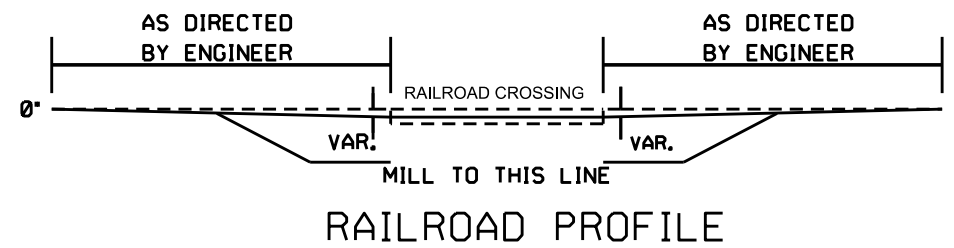
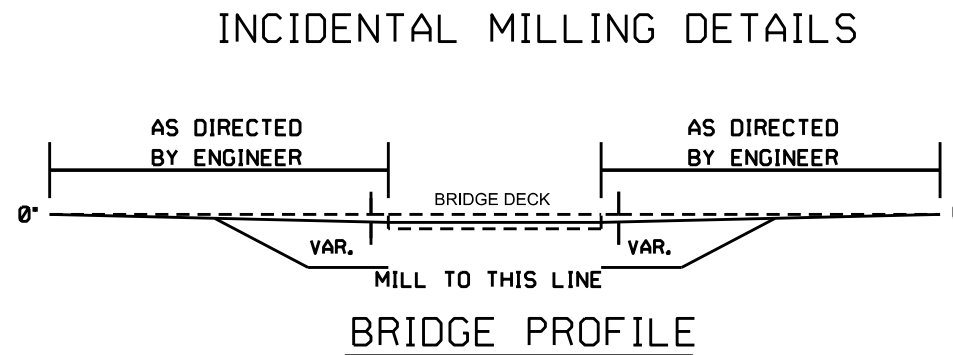
NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
MILL BRIDGE APPROACHES & RXR APPROACHES 100' TO PROVIDE A SMOOTH TRANSITION AS DIRECTED.
MILL INTO GUTTER LINE WHERE SHOWN AND AS DIRECTED.
MAINTAIN PROPER CROWN FOR DRAINAGE OF THE ROAD SURFACE.



PATCHING EXISTING PAVEMENT

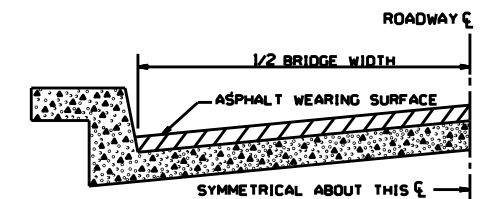


ASPHALT CONCRETE SURFACE COURSE
TYPE S9.5C (LEVELING COURSE)



PROJ. REFERENCE NO.	SHEET NO.	TOTAL SHEETS
GASTON COUNTY 2026	6	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
2026CPT. 12.07.10361		
2026CPT. 12.07.20361		

BRIDGE HALF TYPICAL SECTION DETAIL

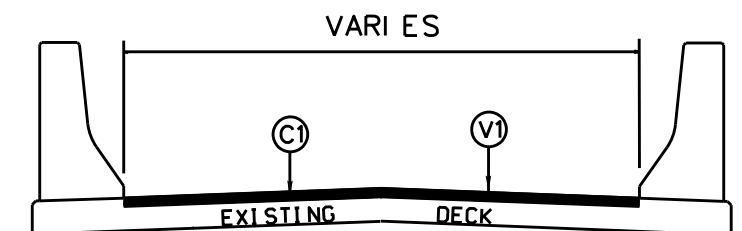


FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN.

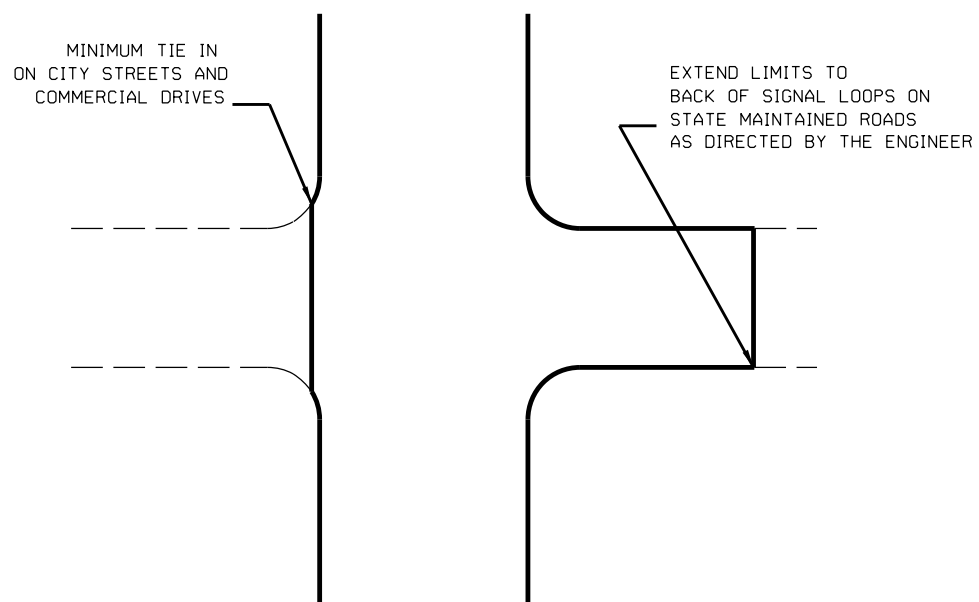
THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. A THICKNESS OF NOT LESS THAN 1" SHALL BE PROVIDED. THE MAXIMUM THICKNESS SHALL PREFERABLY BE 1-1/2" UNLESS IT IS IMPRACTICAL TO PROVIDE A SMOOTH RIDING SURFACE OTHERWISE.

NOTES

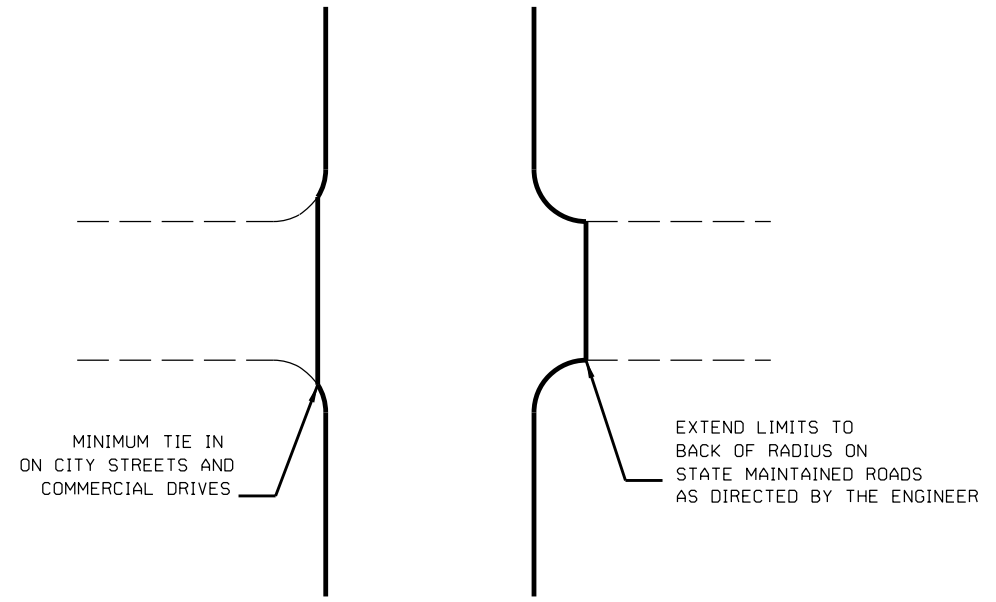
ALL UNPAVED S.R. ROADS TO BE SURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT.
BRIDGES TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.



ASPHALT BRIDGE SECTION
Use for all asphalt bridges

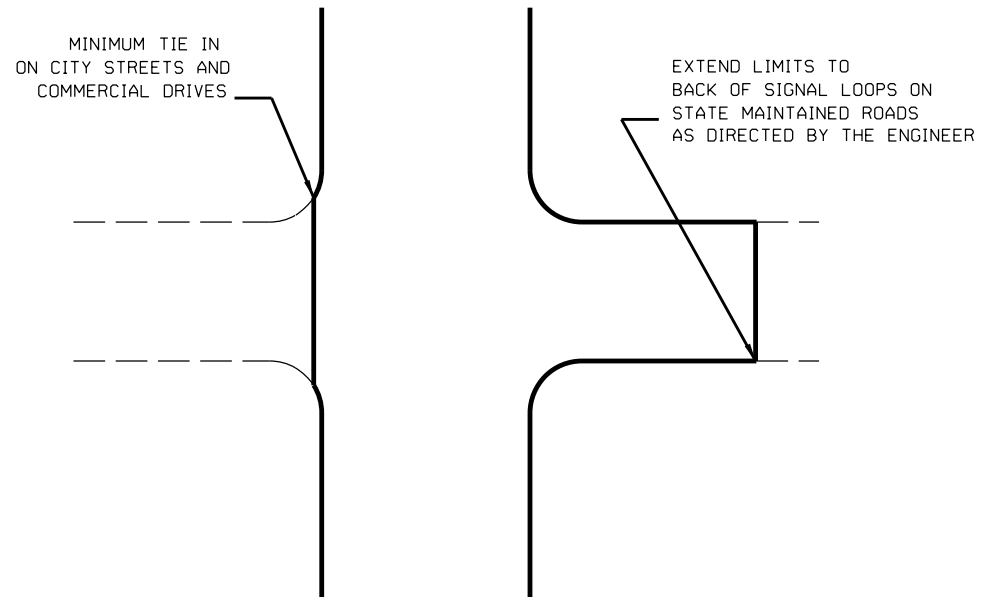


TYPICAL DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES

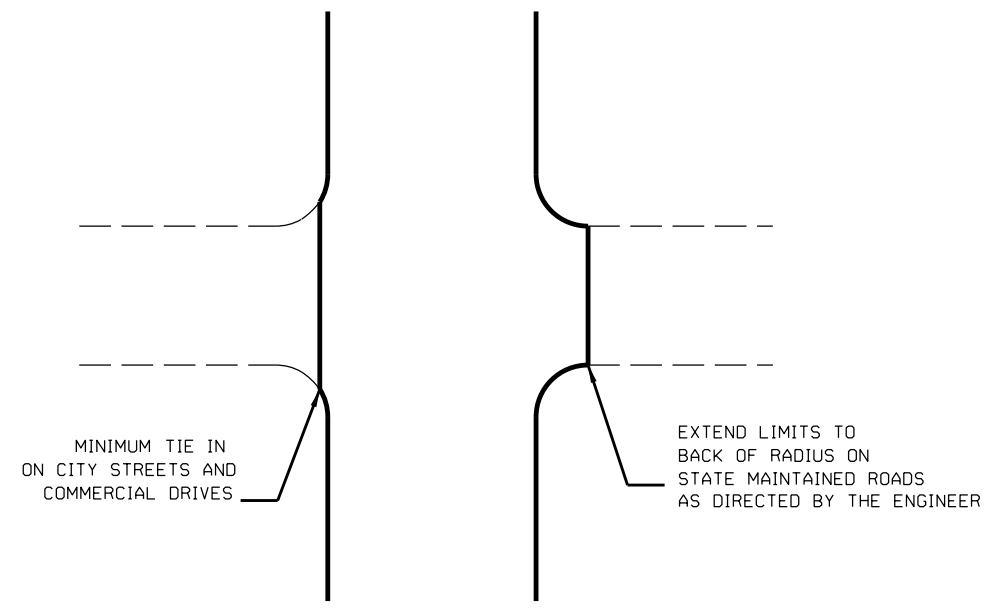


TYPICAL DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

ADDITIONAL INTERSECTIONS (NON-TYPICAL)		
Extend paving limits to back of radius or loop on the following intersections:		
MAP#	STREET NAME	COMMENTS
1	SR 1836 OLD WILLIS SCHOOL RD	BACK OF RADIUS
1	OLD RIVER LN	MINIMUM TIE IN ON CITY STREETS
1	SR 1827 UPPER SPENCER MTN RD	BACK OF RADIUS
1	SR 2002 LINEBERGER RD	BACK OF RADIUS
1	SR 2117 ANDY FRIDAY RD	BACK OF RADIUS
1	SR 1854 CEDAR LN	BACK OF RADIUS
1	SPRINGFIELD RD	BACK OF RADIUS
1	BROWN ST	BACK OF RADIUS
1	SPRINGFIELD ELEMENTARY DRIVEWAY ENTRANCES	BACK OF RADIUS
1	SPRINGFIELD BAPTIST CHURCH ENTRANCES	MINIMUM TIE IN ON CITY STREETS
2	SR 1896 ELAINES TRL	BACK OF RADIUS
2	HOLLAND RIDGE LN	MINIMUM TIE IN ON CITY STREETS
2	SR 1848 PARK RD	BACK OF RADIUS

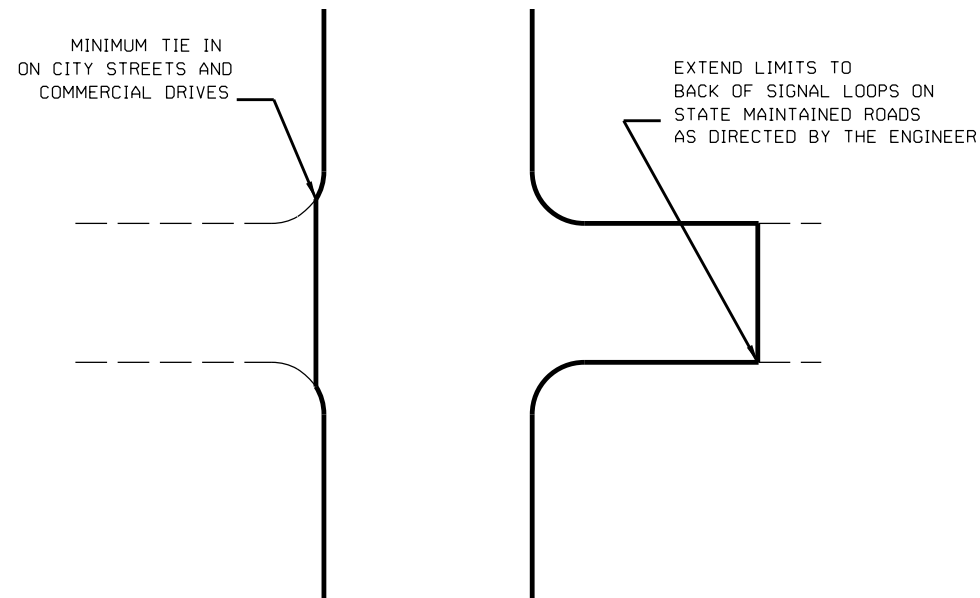


TYPICAL DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES

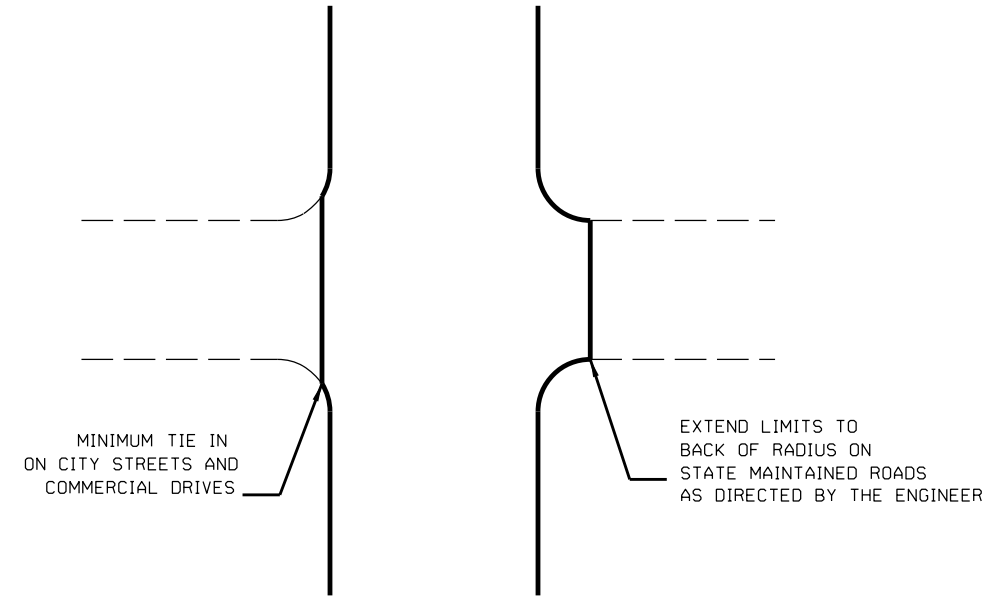


TYPICAL DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

ADDITIONAL INTERSECTIONS (NON-TYPICAL)		
Extend paving limits to back of radius or loop on the following intersections:		
MAP#	STREET NAME	COMMENTS
4	CEDAR RIDGE RD	MINIMUM TIE IN ON CITY STREETS
4	PINE HILLS WAY	MINIMUM TIE IN ON CITY STREETS
4	SR 1935 WILLOWSIDE DR	BACK OF RADIUS
4	SR 3333 STOCKBRIDGE DR	BACK OF RADIUS
4	ANGEL HAM ST	MINIMUM TIE IN ON CITY STREETS
4	GEMINI DR	MINIMUM TIE IN ON CITY STREETS
4	SR 1934 LOWLAND DAIRY RD	BACK OF RADIUS
4	SR 1959 TATE ST	BACK OF RADIUS
7	GENERAL J E JOHNSTON ST	MINIMUM TIE IN ON CITY STREETS
7	GENERAL STONEWALL JACKSON ST	MINIMUM TIE IN ON CITY STREETS
7	GENERAL BEAUREGARD ST	MINIMUM TIE IN ON CITY STREETS
7	VILLAS DR	MINIMUM TIE IN ON CITY STREETS
7	CREEKWALK DR	MINIMUM TIE IN ON CITY STREETS
7	SR 3237 HIGHGROVE PL	BACK OF RADIUS
7	SR 1924 KELLY RD	BACK OF SIGNAL LOOP
7	SR 2393 SHADOWBROOK RD	BACK OF RADIUS



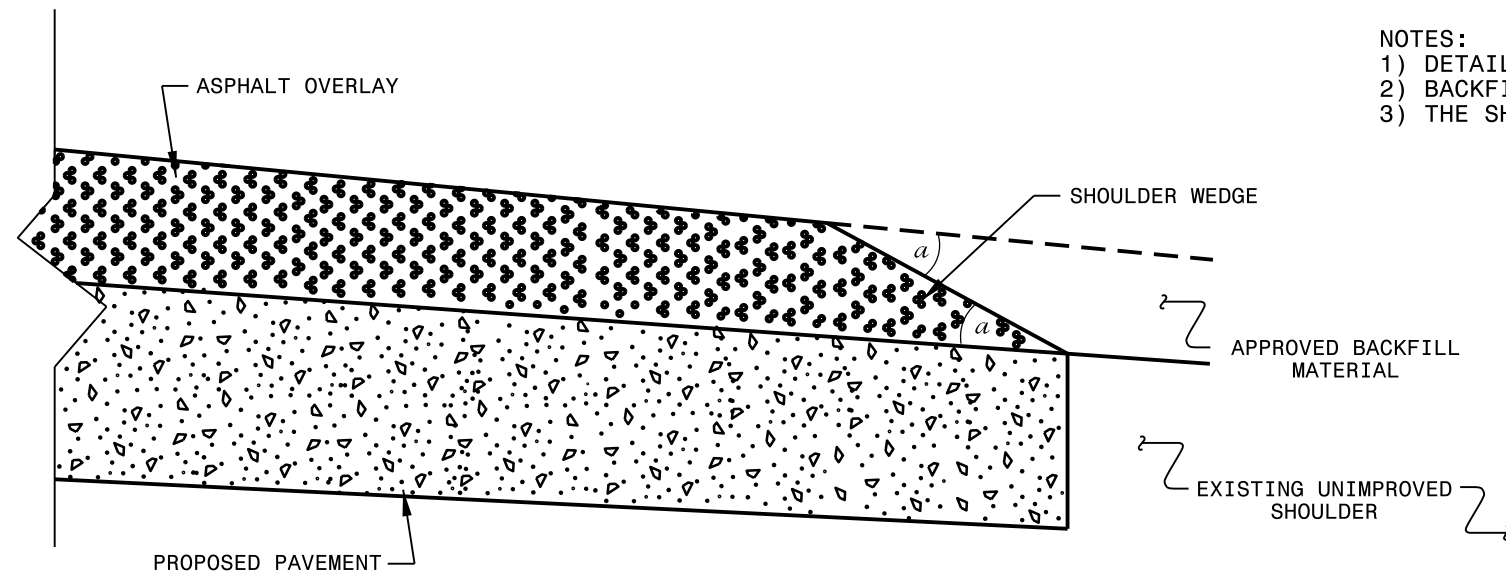
TYPICAL DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES



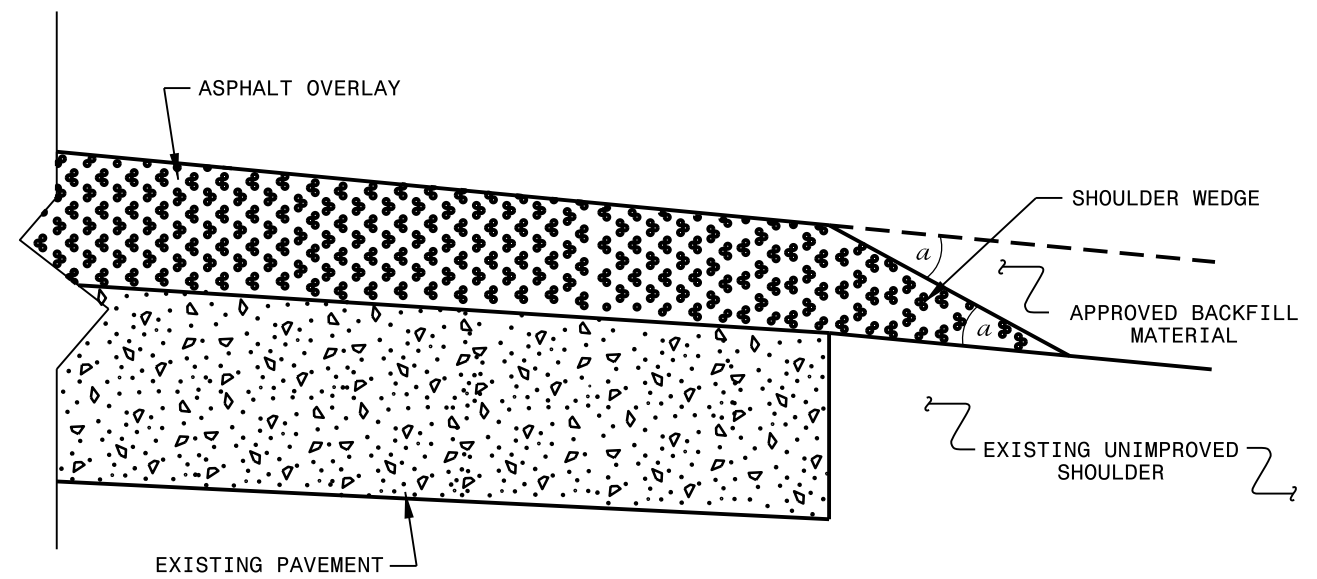
TYPICAL DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

ADDITIONAL INTERSECTIONS (NON-TYPICAL)		
Extend paving limits to back of radius or loop on the following intersections:		
MAP#	STREET NAME	COMMENTS
7	SR 2003 STANLEY SPENCER MTN RD	BACK OF SIGNAL LOOP
7	WONDERWOOD DR	MINIMUM TIE IN ON CITY STREETS
7	SR 3208 PROVINCIAL RD	BACK OF RADIUS
7	SR 2118 SMITH CLEMMER RD	BACK OF RADIUS
7	CHATEAU DR	MINIMUM TIE IN ON CITY STREETS
7	SR 1943 SHAWN RD	BACK OF RADIUS
7	SR 3200 NICOLE TERRACE	BACK OF RADIUS
7	SR 2177 HICKORY LN	BACK OF RADIUS
7	SR 2191 HICKORY LN	BACK OF RADIUS
7	SR 3216 LAUREL RIDGE CT	BACK OF RADIUS
7	SR 3065 LANE RD EXT	BACK OF RADIUS
7	SR 2085 LANE RD	BACK OF SIGNAL LOOP
7	TURN BERRY DR	MINIMUM TIE IN ON CITY STREETS
7	SR 2059 SMITH RD	BACK OF RADIUS

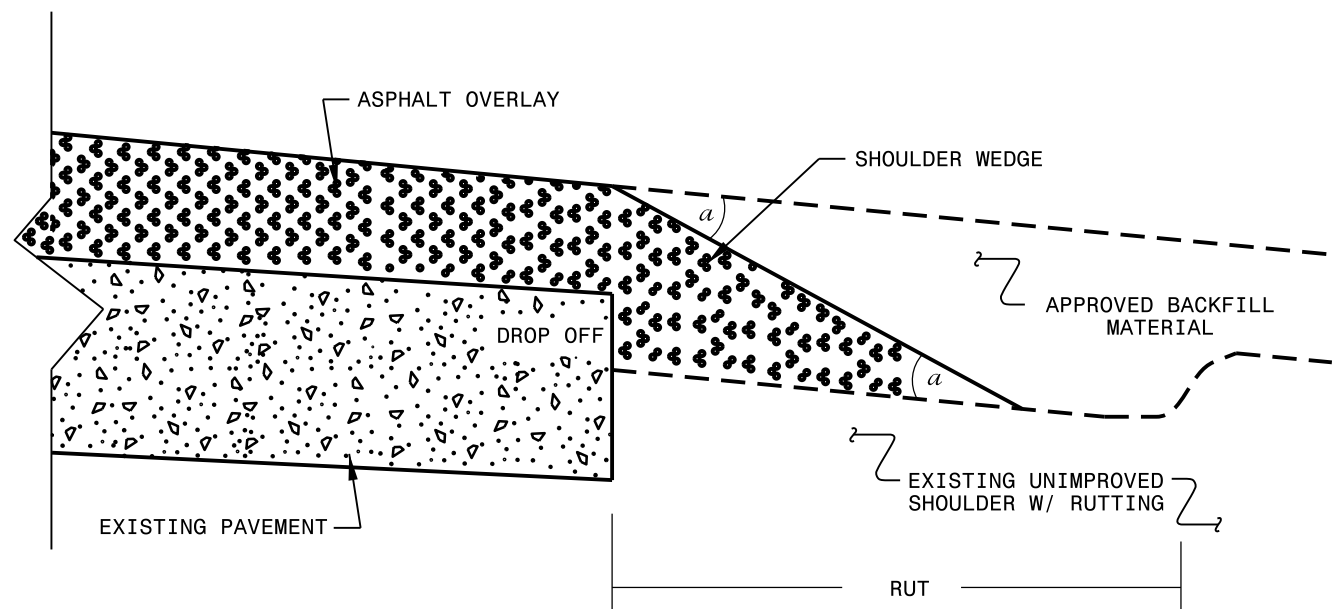
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

CONTRACT STANDARDS AND DEVELOPMENT UNIT			
Office 919-707-6950		FAX 919-250-4119	
SHOULDER WEDGE DETAILS			
ORIGINAL BY: T.SPELL	DATE: 7-19-11		
MODIFIED BY:	DATE: 10/16/12		
CHECKED BY:	DATE:		
FILE SPEC.: susr/details/stand/shoulderwedgedetail.dgn			

SYSTEMS DESIGN
 USER NAME

PROJECT NO.	SHEET NO.	TOTAL NO.
2026CPT.12.07.10361, 2026CPT.12.07.20361		

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	0255000000-E	1220000000-E	1245000000-E	1297000000-E	1330000000-E	1523000000-E	1524000000-E	1575000000-E	1704000000-E	2815000000-N	2845000000-N	7324000000-N	7444000000-E	7456100000-E		
												AGGREGATE SHOULDER BORROW	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	1½" MILLING	INCIDENTAL MILLING	SURFACE COURSE, S9.5C	LEVELING COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ADJ. OF DROP INLET	ADJ. OF METER OR VALVE BOX	JUNCTION BOX (STANDARD SIZE)	INDUCTIVE LOOP SAWCUT	LEAD-IN CABLE (14-2)		
												TON	TONS	SMI	SY	SY	TONS	TONS	TONS	TONS	EA	EA	EA	LF	LF		
2026CPT.12.07.10361	Gaston	1	NC-275 / DALLAS-STANLEY HWY	FROM 650' NE OF SR 1836 / OLD WILLIS SCH RD (BR-0019 PROJ. LIMITS) TO STANLEY CITY LIMIT	1	2	2WU	2.33	VAR. 24-37	7.5	9.88	850	100	4.66		325	3,250	175	249	995		1					
TOTAL FOR MAP NO. 1								2.33				850	100	4.66		325	3,250	175	249	995		1					
TOTAL FOR PROJ NO. 2026CPT.12.07.10361								2.33				850	100	4.66		325	3,250	175	249	995		1					
2026CPT.12.07.20361	Gaston	2	SR-1800 / WILLIS RD	FROM SR-1804 / RATCHFORD DR TO SR-1001 / N OAKLAND ST	1	2	2WU	1.24	20	0	1.24	434	50	2.48		600	1,353	163	101	244	1	2					
TOTAL FOR MAP NO. 2								1.24				434	50	2.48		600	1,353	163	101	244	1	2					
2026CPT.12.07.20361	Gaston	3	SR-1896 / ELAINES TRL	FROM SR-1800 / WILLIS RD TO CUL-DE-SAC	2	2	2WU	0.08	20	0	0.08		7		50	110	10	9	30								
TOTAL FOR MAP NO. 3								0.08				7		50	110	10	9	30									
2026CPT.12.07.20361	Gaston	4	SR-1923 / OLD NC 27 HWY	FROM SR-1918 / STANLEY LUCIA RD TO S STANLEY CREEK BRIDGE #193	1	2	2WU	4.15	VAR. 21-23	0	4.15	1,453	250	8.30		470	4,932	595	388	1,283							
TOTAL FOR MAP NO. 4								4.15				1,453	250	8.30		470	4,932	595	388	1,283							
2026CPT.12.07.20361	Gaston	5	SR-2048 / RIDDLE ST	FROM SR-2040 / W CATAWBA AVE TO DEAD END	2	2	2WU	0.28	20	0	0.28		20		50	305	15	23	77								
TOTAL FOR MAP NO. 5								0.28				20		50	305	15	23	77									
2026CPT.12.07.20361	Gaston	6	SR-2424 / THOMPSON RD	FROM S.C. STATELINE TO SR-2423 / SPARROW DAIRY RD	2	2	2WU	0.6	20	0	0.6		35		120	655	79	52	190								
TOTAL FOR MAP NO. 6								0.6				35		120	655	79	52	190									
2026CPT.12.07.20361	Gaston	7	SR-2000 / HICKORY GROVE RD	FROM NC-275 / S MAIN ST TO SR-2059 / SMITH RD	1 3 4 5	2	2WU	3.08	VAR. 22-38 VAR. 24-36 Var. 24-36 VAR. 48-54	0 2.97 3.03 3.07	2.97 3.03 3.07	1,078	99	6.16	2,453	84	4,009	190	275	568	3		1	800	400		
TOTAL FOR MAP NO. 7								3.08				1,078	99	6.16	2,453	84	4,009	190	275	568	3		1	800	400		
2026CPT.12.07.20361	Gaston	8	SR-2849 / LAKE WYLIE RD	FROM SR-2858 / DUCK COVE RD TO DEAD END	2	2	2WU	1.12	VAR. 20-22	0.48	1.6		18		60	1,301	78	91	208								
TOTAL FOR MAP NO. 8								1.12				18		60	1,301	78	91	208									
2026CPT.12.07.20361	Gaston	9	SR-2860 / BUENA VALE DR	FROM SR-2430 / RATCHFORD DR TO END MAINT	2	2	2WU	0.52	VAR. 16-20	0	0.52		98		50	555	25	38	70								
TOTAL FOR MAP NO. 9								0.52				98		50	555	25	38	70									
TOTAL FOR PROJ NO. 2026CPT.12.07.20361								11.07				2,965	577	16.94	2,453	1,484	13,220	1,155	977	2,670	4	2	1	800	400		
GRAND TOTAL								13.4				3,815	677	21.60	2,453	1,809	16,470	1,330	1,226	3,665	4	3	1	800	400		

PROJECT NO.	SHEET NO.	TOTAL NO.
2026CPT.12.07.10361, 2026CPT.12.07.20361		

THERMOPLASTIC AND PAINT QUANTITIES

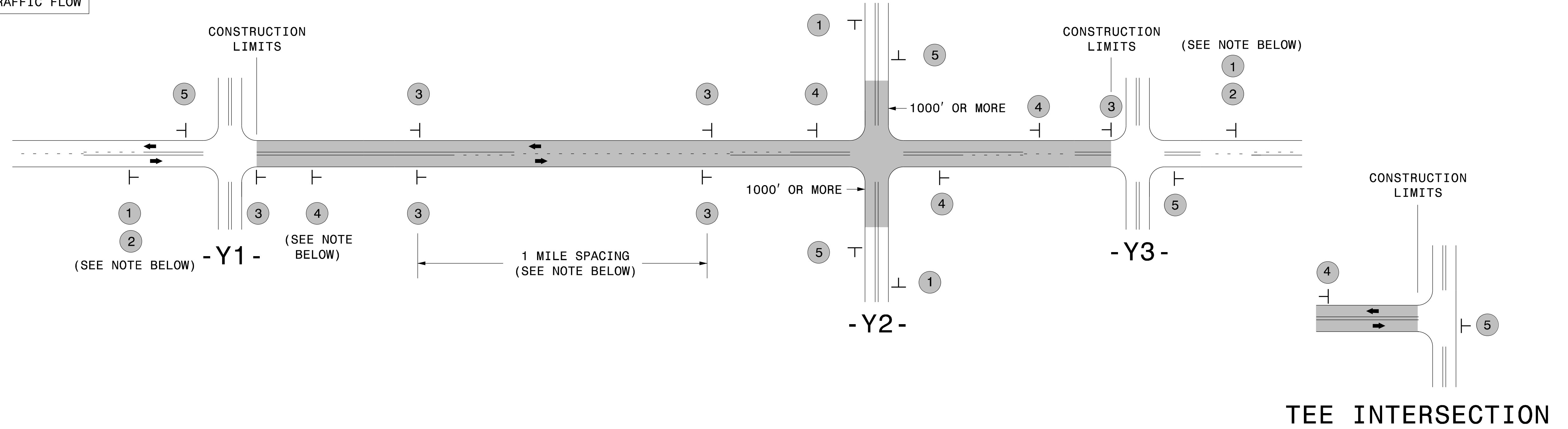
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	BEGIN MP	END MP	4413000000-E	4457000000-N	4510000000-N	4685000000-E		4700000000-E	4709000000-E	4720000000-E	4725000000-E	4810000000-E		4835000000-E	4895000000-N		
												WORK ZONE ADV/GEN WARNING SIGNS	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	12" X 90 M YELLOW THERMO	24" X 90 M WHITE THERMO	THERMO MSG SCHOOL 90 M	THERMO LT ARROW 90 M	4" WHITE PAINT	4" YELLOW PAINT	24" WHITE PAINT	POLYCARBONATE H-SHAPED MARKER		
												SF	LS	HR	LF	LF	LF	LF	EA	EA	LF	LF	LF	EA		
2026CPT.12.07.10361	Gaston	1	NC-275 / DALLAS-STANLEY HWY	FROM 650' NE OF SR 1836 / OLD WILLIS SCH RD (BR-0019 PROJ. LIMITS) TO STANLEY CITY LIMIT	1	2	2WU	2.33	VAR. 24-37	7.5	9.88	292			20	25,000	24,000		50	6				160		
TOTAL FOR MAP NO. 1								2.33				292			20	25,000	24,000		50	6				160		
TOTAL FOR PROJ NO. 2026CPT.12.07.10361								2.33				292			20	25,000	24,000		50	6				160		
															49,000											
2026CPT.12.07.20361	Gaston	2	SR-1800 / WILLIS RD	FROM SR-1804 / RATCHFORD DR TO SR-1001 / N OAKLAND ST	1	2	2WU	1.24	20	0	1.24	116									26,685	23,368				
TOTAL FOR MAP NO. 2								1.24				116										26,685	23,368			
2026CPT.12.07.20361	Gaston	3	SR-1896 / ELAINES TRL	FROM SR-1800 / WILLIS RD TO CUL-DE-SAC	2	2	2WU	0.08	20	0	0.08	84														
TOTAL FOR MAP NO. 3								0.08				84														
2026CPT.12.07.20361	Gaston	4	SR-1923 / OLD NC 27 HWY	FROM SR-1918 / STANLEY LUCIA RD TO S STANLEY CREEK BRIDGE #193	1	2	2WU	4.15	VAR. 21-23	0	4.15	308									89,308	74,780				
TOTAL FOR MAP NO. 4								4.15				308											89,308	74,780		
2026CPT.12.07.20361	Gaston	5	SR-2048 / RIDDLE ST	FROM SR-2040 / W CATAWBA AVE TO DEAD END	2	2	2WU	0.28	20	0	0.28	84														
TOTAL FOR MAP NO. 5								0.28				84														
2026CPT.12.07.20361	Gaston	6	SR-2424 / THOMPSON RD	FROM S.C. STATELINE TO SR-2423 / SPARROW DAIRY RD	2	2	2WU	0.6	20	0	0.6	84									12,912	12,912				
TOTAL FOR MAP NO. 6								0.6				84										12,912	12,912			
2026CPT.12.07.20361	Gaston	7	SR-2000 / HICKORY GROVE RD	FROM NC-275 / S MAIN ST TO SR-2059 / SMITH RD	1 3 4 5	2	2WU	3.08	VAR. 22-38 VAR. 24-36 Var. 24-36 VAR. 48-54	0 2.97 3.03 3.07	2.97 3.03 3.07	324			20	33,341	34,141	80	95	3			95	210		
TOTAL FOR MAP NO. 7								3.08				324			20	33,341	34,141	80	95	3				95	210	
2026CPT.12.07.20361	Gaston	8	SR-2849 / LAKE WYLIE RD	FROM SR-2858 / DUCK COVE RD TO DEAD END	2	2	2WU	1.12	VAR. 20-22	0.48	1.6	116									24,102	24,102				
TOTAL FOR MAP NO. 8								1.12				116										24,102	24,102			
2026CPT.12.07.20361	Gaston	9	SR-2860 / BUENA VALE DR	FROM SR-2430 / RATCHFORD DR TO END MAINT	2	2	2WU	0.52	VAR. 16-20	0	0.52	84														
TOTAL FOR MAP NO. 9								0.52				84														
TOTAL FOR PROJ NO. 2026CPT.12.07.20361								11.07				1,200			20	33,341	34,141	80	95	3			153,007	135,162	95	210
															67,482							288,169				
GRAND TOTAL								13.4				1,492	1	40	58,341	58,141	80	145	6	3	153,007	135,162	95	370		
															116,482							288,169				

SIGNING FOR RESURFACING PROJECTS

LEGEND

┆ STATIONARY SIGN

← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

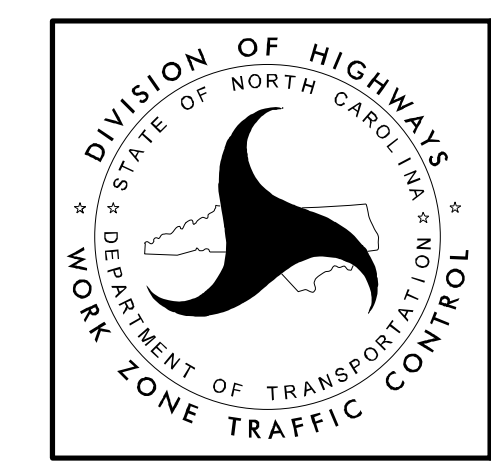
-Y- LINE SIGNING

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"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) 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		<ul style="list-style-type: none"> - 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		<ul style="list-style-type: none"> - 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

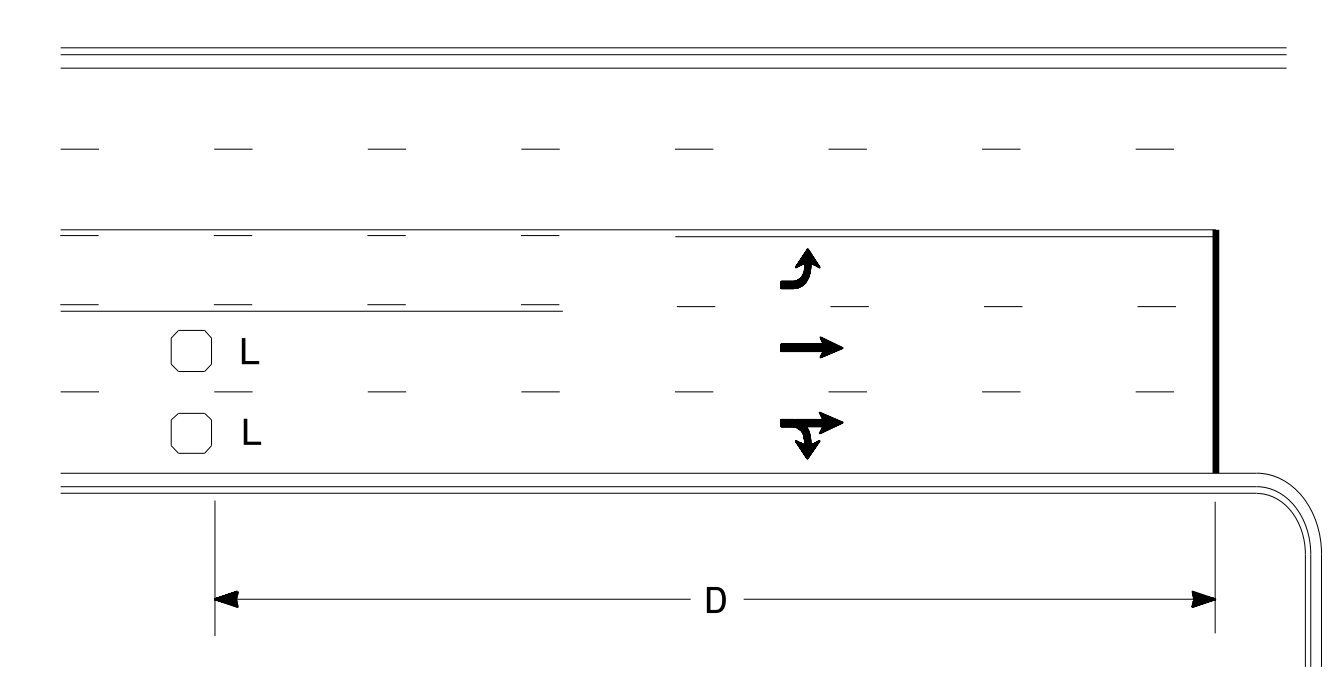
FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



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)

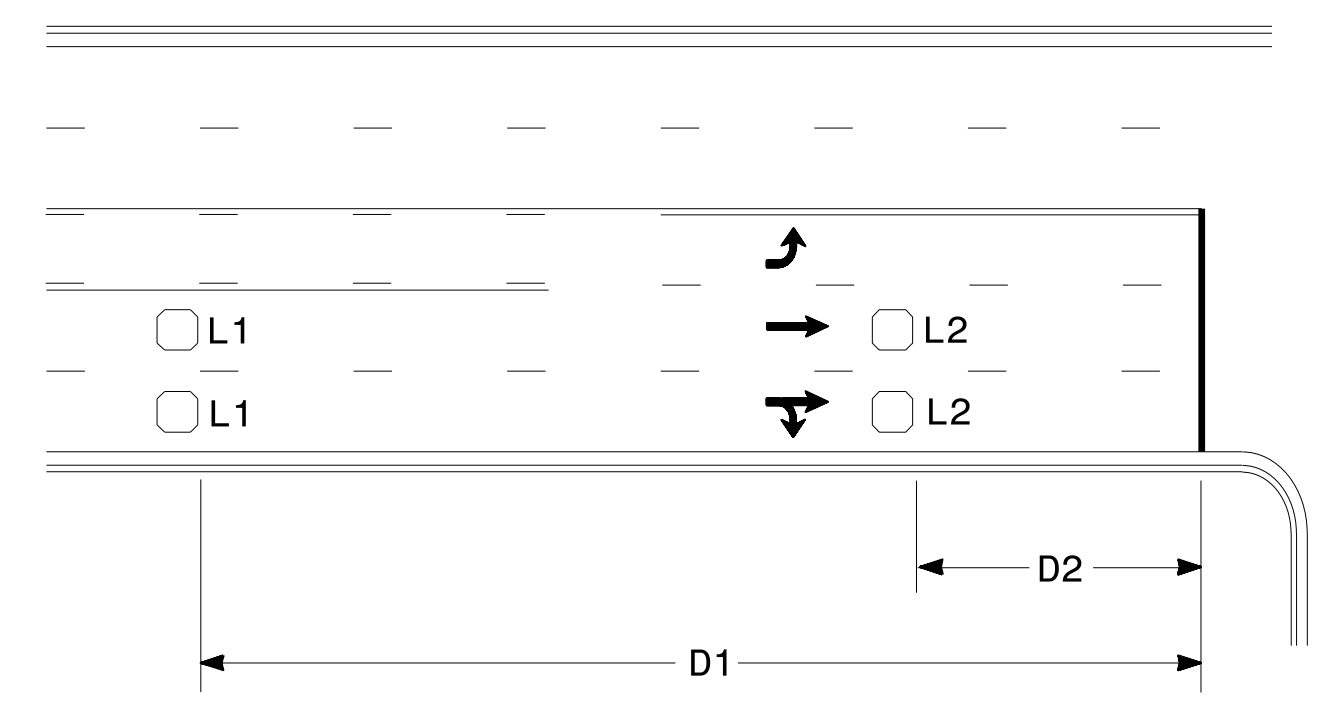


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

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

Volume Density Operation

OR

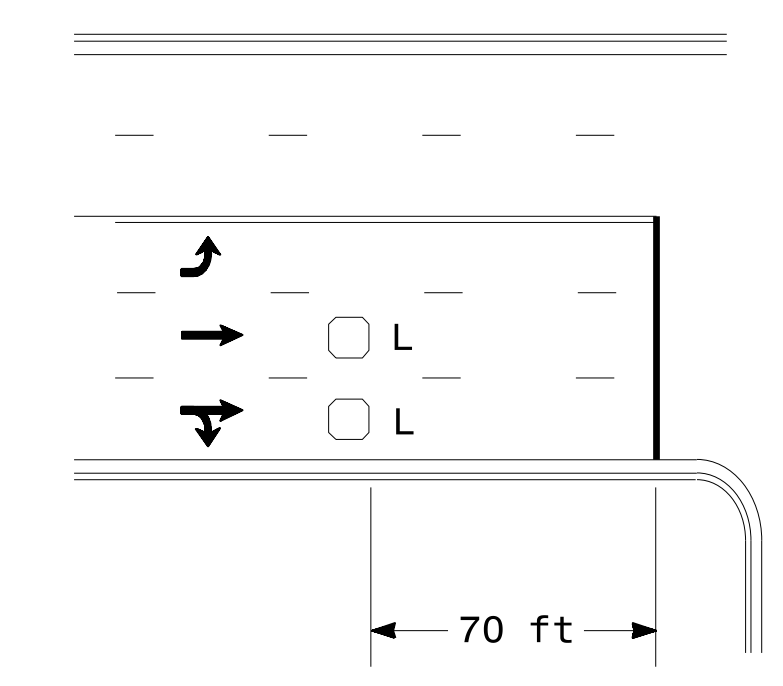


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

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

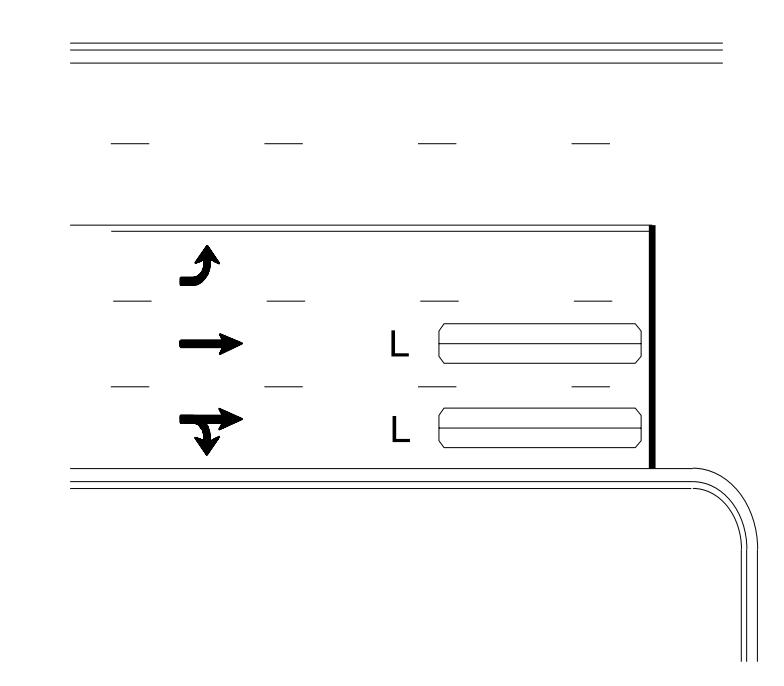
"Stretch" Operation

Low Speed Detection (≤35 mph)



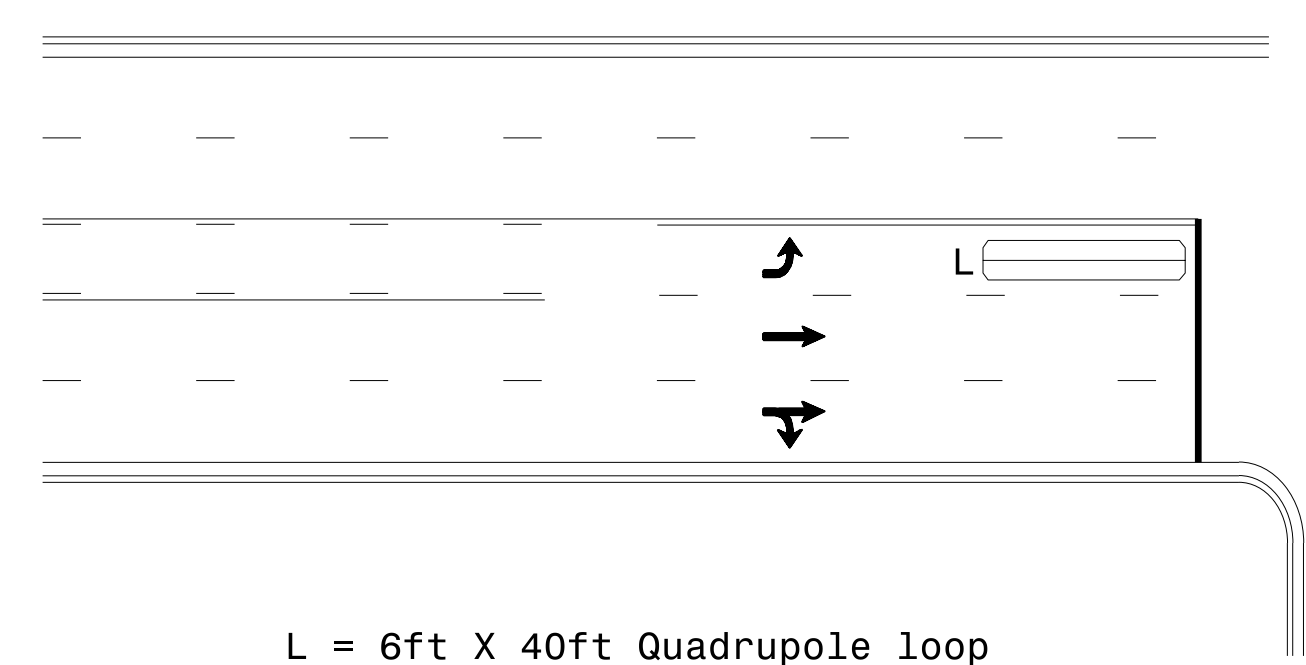
L = 6ft X 6ft
Wired in series

OR



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

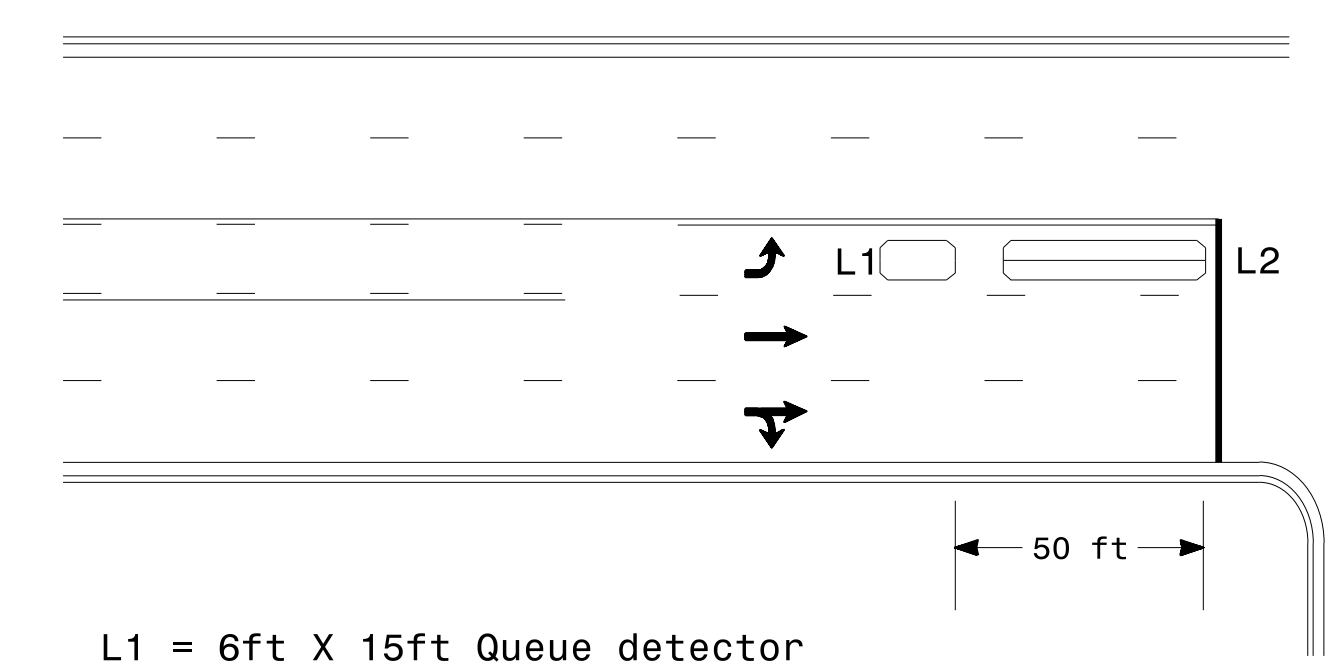
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

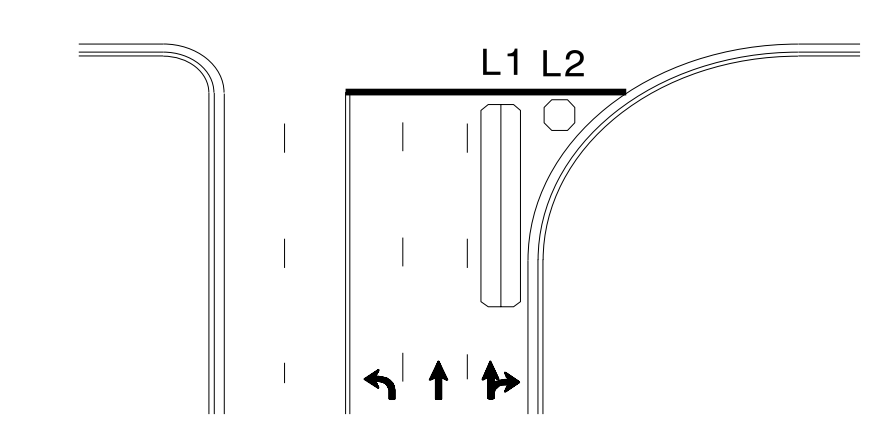
OR



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

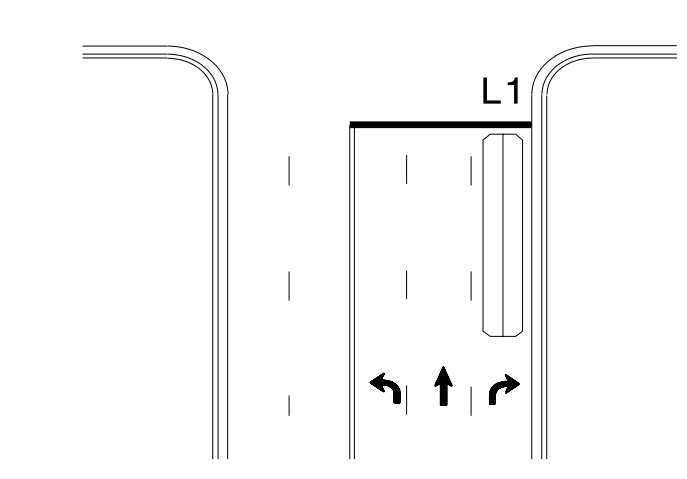
Queue Loop Detection

Right Turn Lane Detection

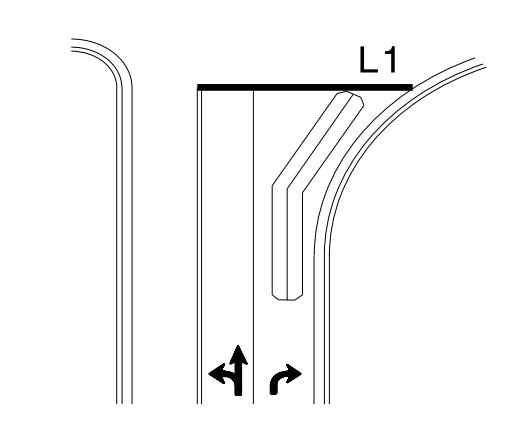


Shared Lane/
Wide Radius Turn

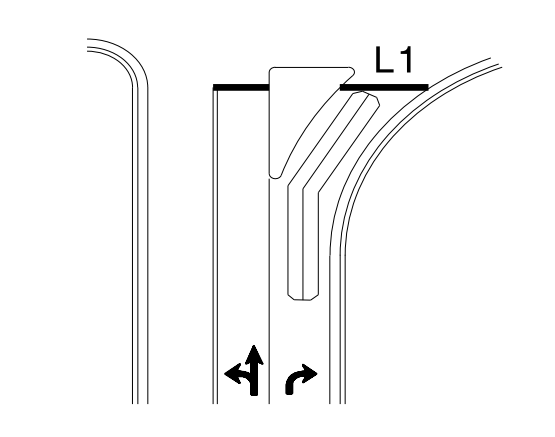
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

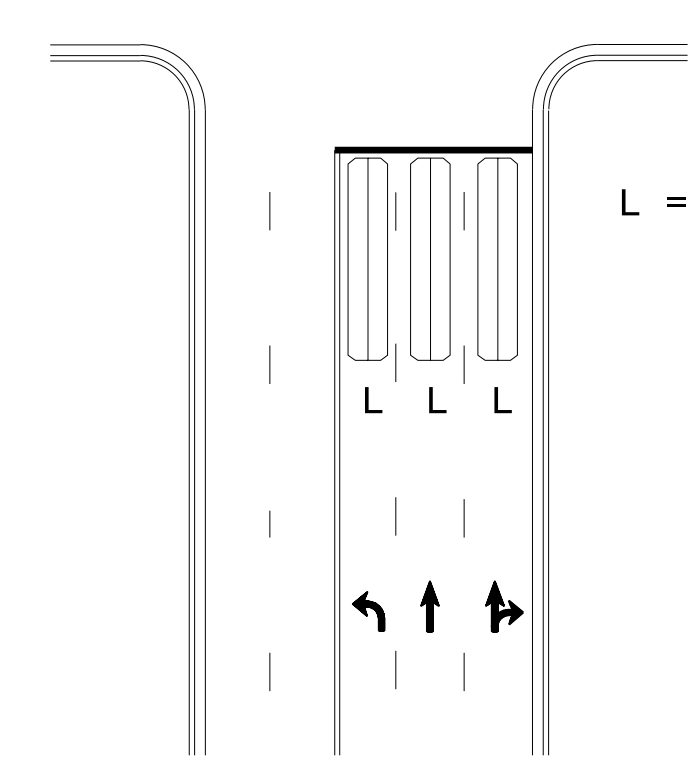


Wide Radius Turn



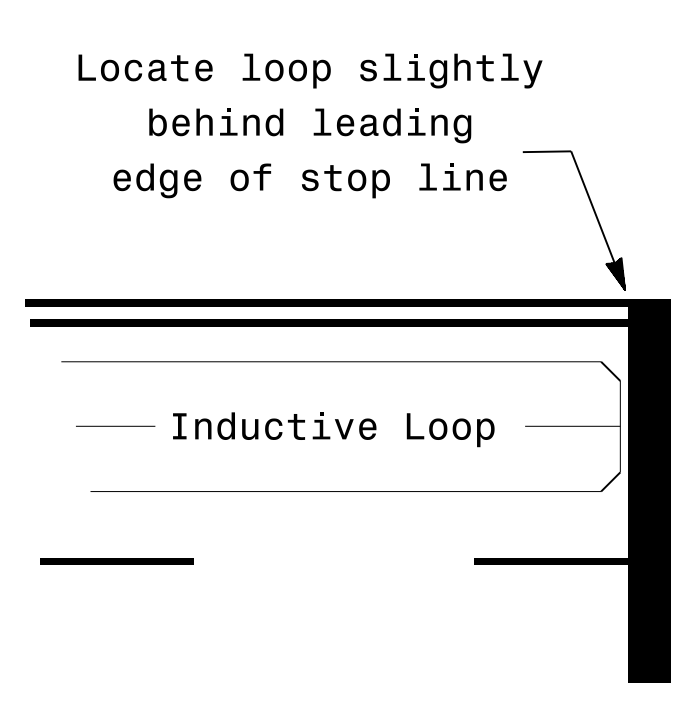
Channelized Turn

Side Street Detection



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

Presence Loop Placement at Stop Lines



Locate loop slightly
behind leading
edge of stop line

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

750 N. Greenfield Pkwy, Garner, NC 27529

Typical Signal Loop Locations

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

SCALE: N/A

SEAL

1/30/2015

3D:\AH\2015\12\29
 S:\ITS\AS\15\SIGNAL\Signal Design\Section\Eastern\Region\loop\ypj\ca\2015.dgn
 paalexander