

PAVEMENT SCHEDULE

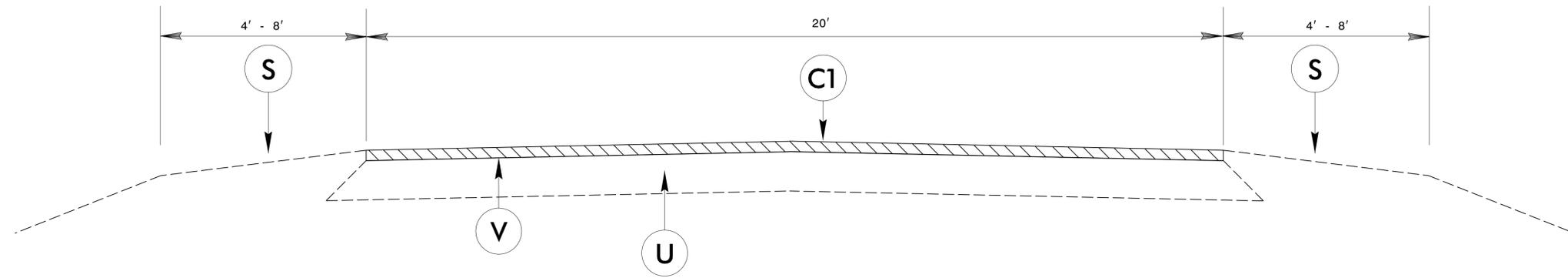
PROJECT REFERENCE NO.

SHEET NO.

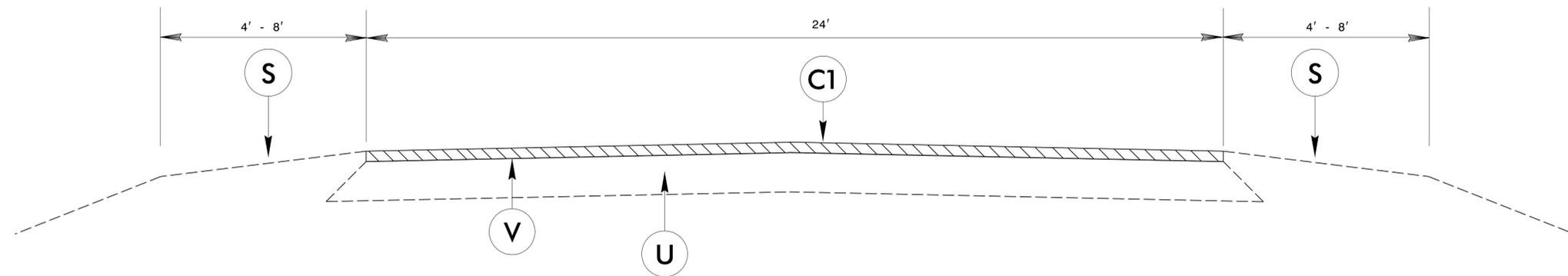
2026CPT.05.07.10351.1, ETC.

3

C1	1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
S	SHOULDER RECONSTRUCTION, ASB REQUIRED (EXCEPT AT RESIDENTIAL AREAS)
U	EXISTING PAVEMENT
V	MILL ASPHALT PAVEMENT, 1 1/2" DEPTH



TYPICAL 1
MILL AND FILL SHOULDER SECTION
MAP NO. 2



TYPICAL 2
MILL AND FILL SHOULDER SECTION
MAP NO. 1, 4, AND 5

PAVEMENT SCHEDULE

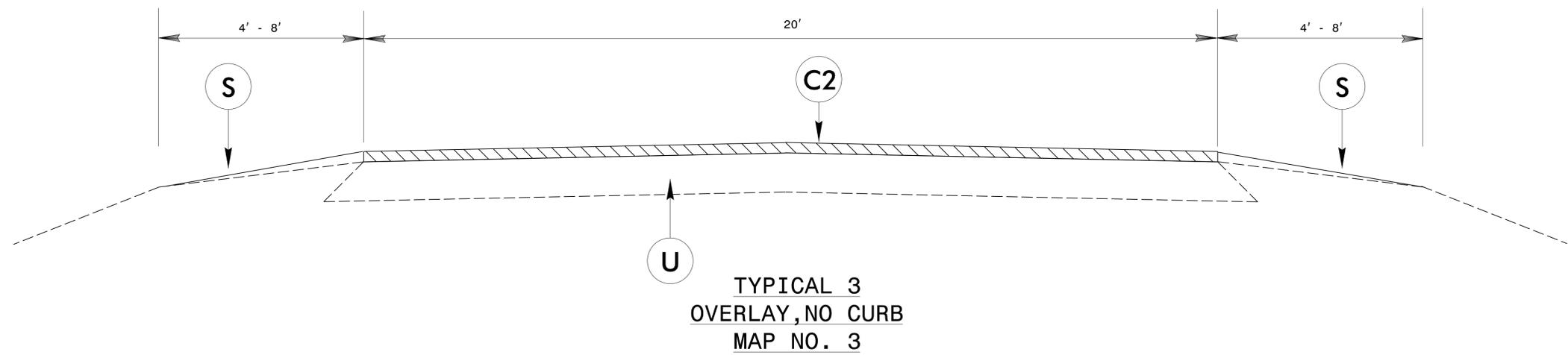
PROJECT REFERENCE NO.

SHEET NO.

2026CPT.05.07.10351.1, ETC.

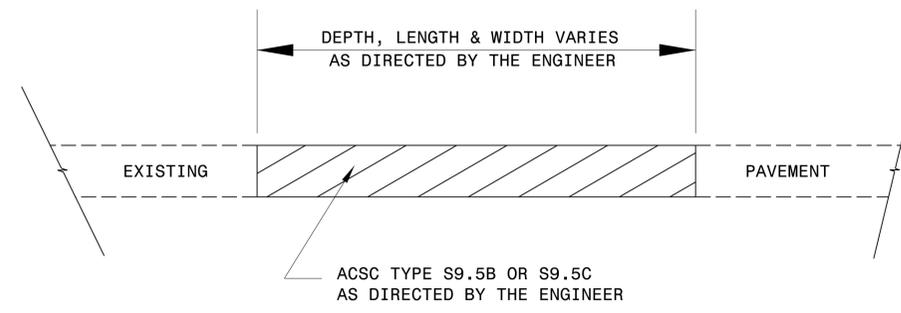
4

C2	1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
S	SHOULDER RECONSTRUCTION, ASB REQUIRED (EXCEPT AT RESIDENTIAL AREAS)
U	EXISTING PAVEMENT

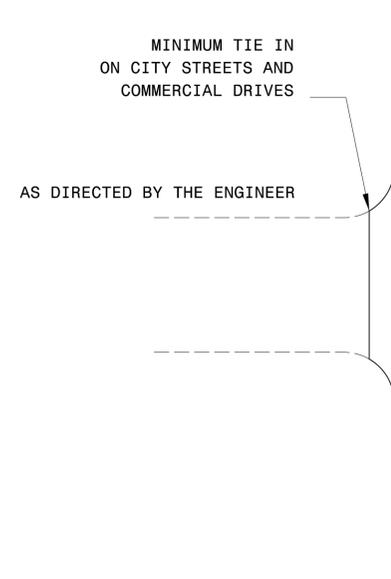
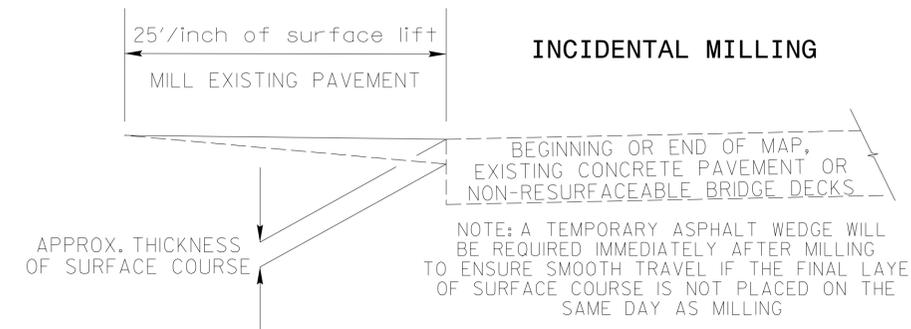


NOTES

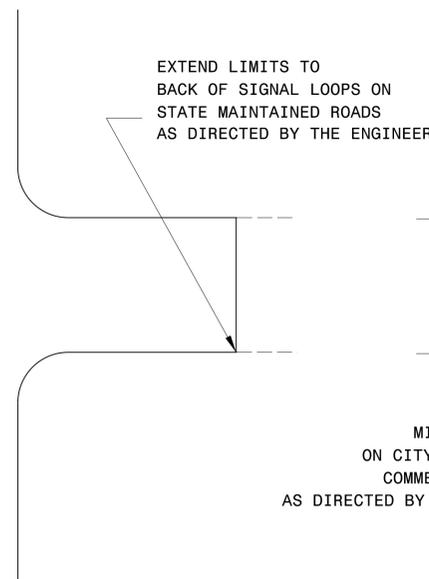
ALL UNPAVED S.R. ROADS TO BE RESURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT
ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.
EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.
BRIDGES TO BE RESURFACED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



PATCHING EXISTING PAVEMENT
MILLING TO BE PERFORMED PRIOR TO PATCHING



DETAIL OF PROJECT LIMITS AT SIGNALIZED Y LINES



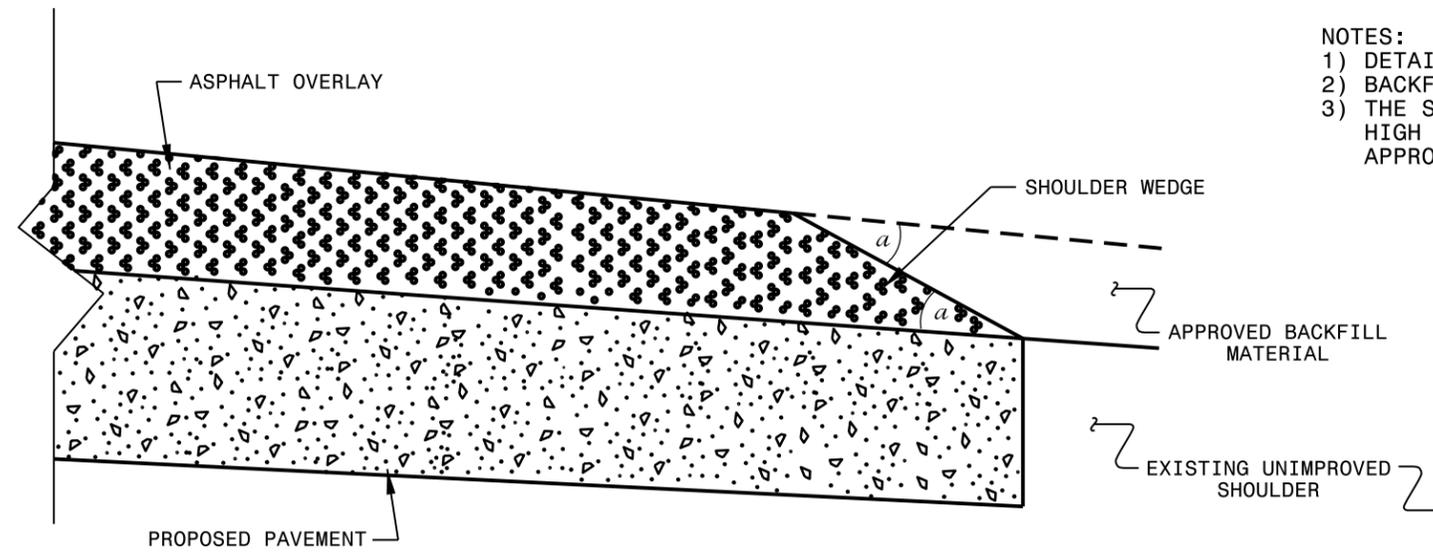
MINIMUM TIE IN ON CITY STREETS AND COMMERCIAL DRIVES AS DIRECTED BY THE ENGINEER

DETAIL OF PROJECT LIMITS AT UNSIGNALIZED Y LINES

EXTEND LIMITS TO BACK OF RADIUS ON STATE MAINTAINED ROADS AS DIRECTED BY THE ENGINEER

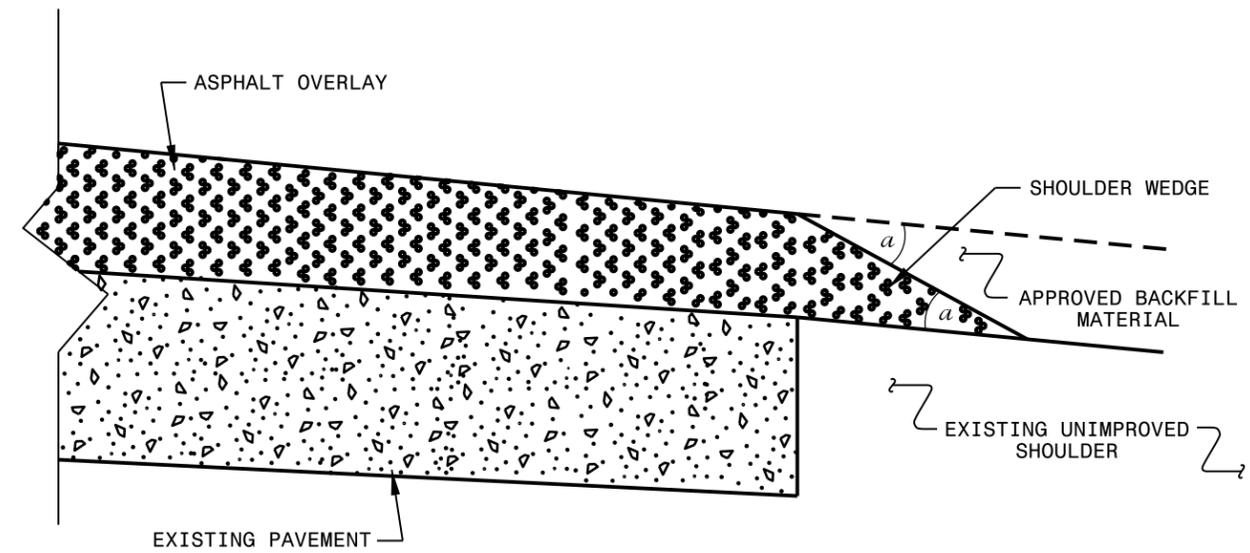
NOTES:

- 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.



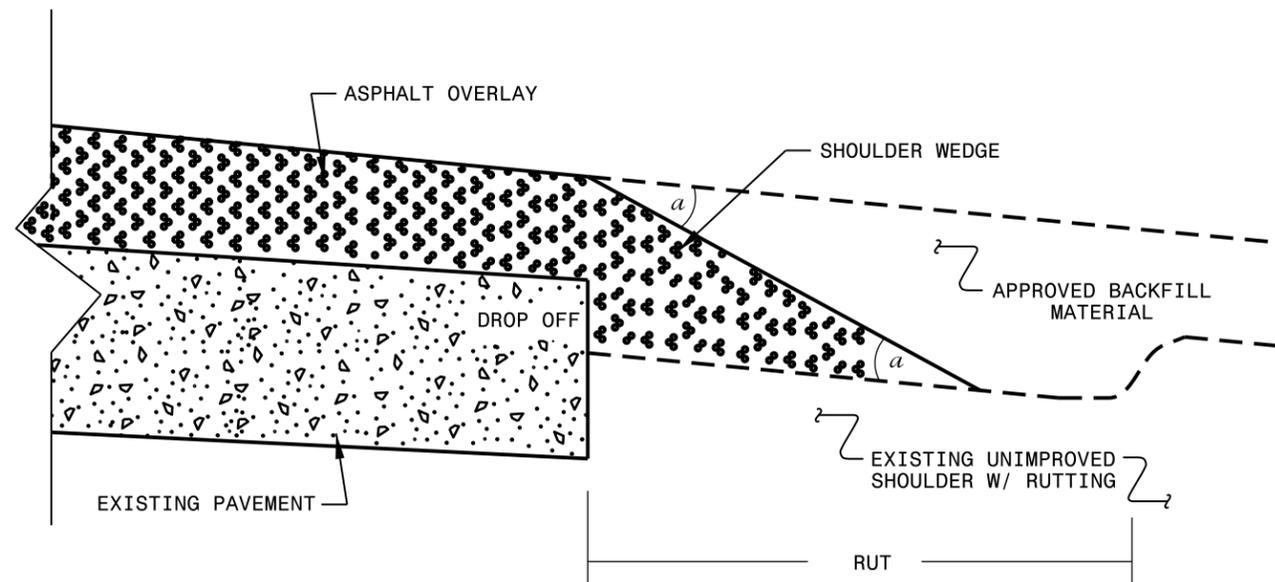
SHOULDER WEDGE DETAIL

(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°

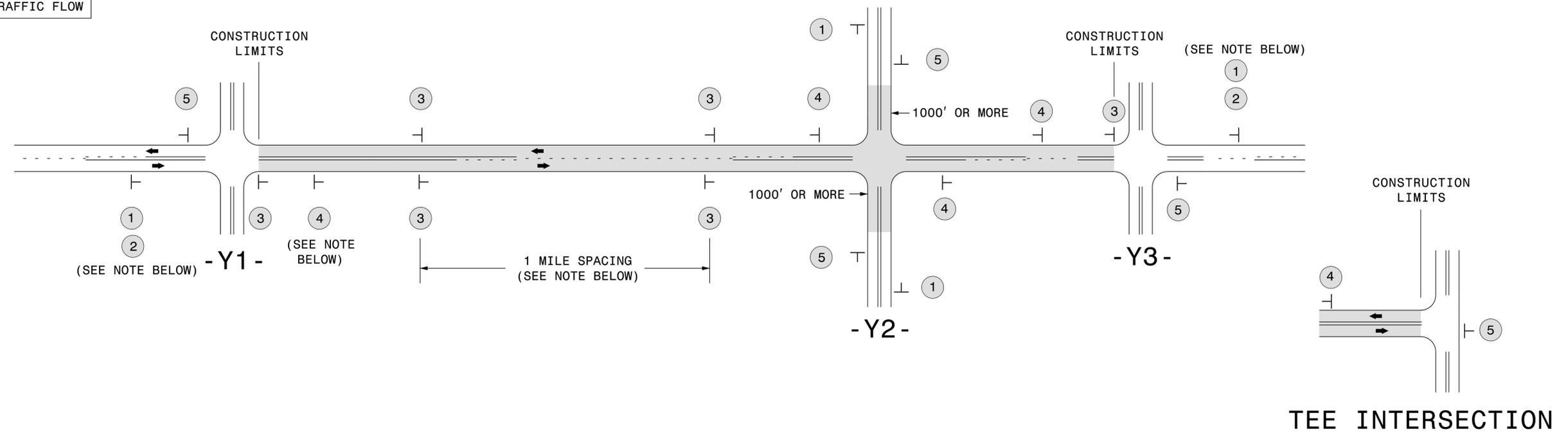
CONTRACT STANDARDS AND DEVELOPMENT UNIT		
Office 919-707-6950 FAX 919-250-4119		
SHOULDER WEDGE DETAILS		
ORIGINAL BY: T.SPELL	DATE: 7-19-11	
MODIFIED BY:	DATE: 2/2/16	
CHECKED BY:	DATE:	
FILE SPEC.: szusr/details/stand/shoulderwedgedetail.dgn		

SIGNING FOR RESURFACING PROJECTS

LEGEND

┃ STATIONARY SIGN

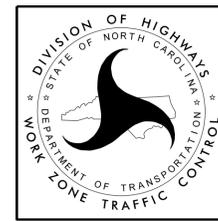
← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

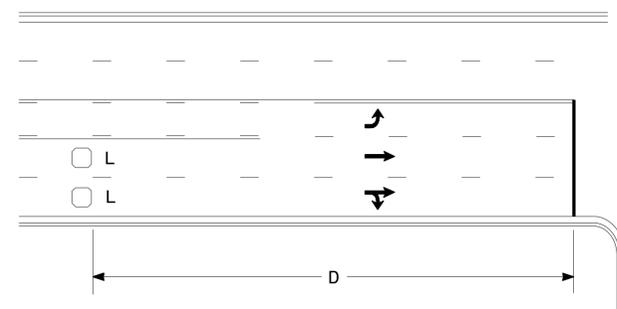
SIGNING NOTES AND PLACEMENT PER DIRECTION	 	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p>#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)</p>	<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> <p>PLACED 500' IN ADVANCE OF FLAGGER.</p> <p>PLACED 250' IN ADVANCE OF FLAGGER.</p>
		<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. 	
		<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. 	
		<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>	
	<p>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.</p>		
<p>MAPS LESS THAN 2 MILES</p>	<p>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.</p>		



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

25-SEP-2025 17:04 \\dewberry\dewberry\root\local\offices\Rateigh\Projects\5018574\NDB_Assignments\2027\07_2027_S_Franklin_Dewberry_2027_S_Franklin_Submittal\Work_Files\Resurfacing_AdvWarn_2Ln.dgn AT PF4666LV

High Speed Detection (≥40 mph)

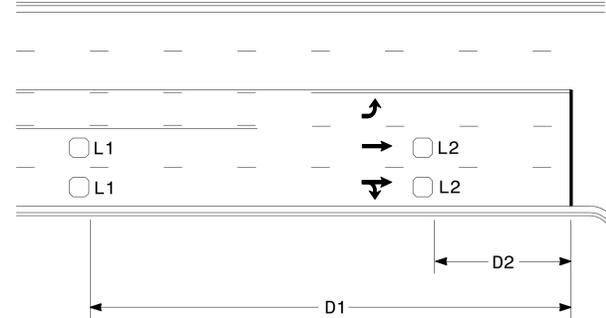


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

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

Volume Density Operation

OR

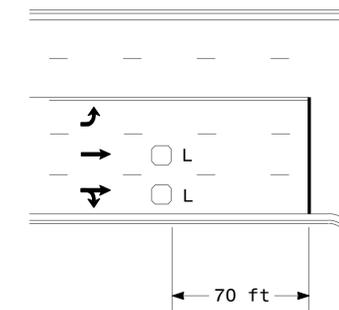


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

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

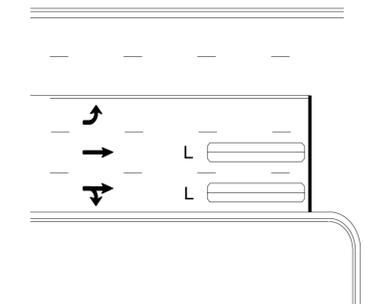
"Stretch" Operation

Low Speed Detection (≤35 mph)



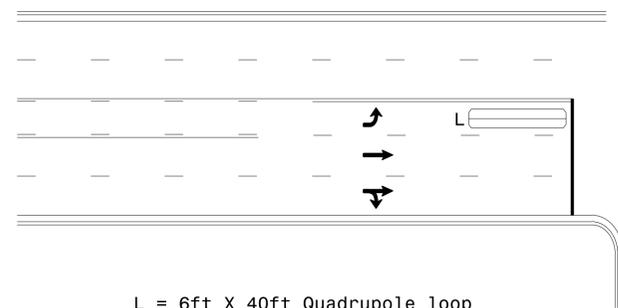
L = 6ft X 6ft
Wired in series

OR



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

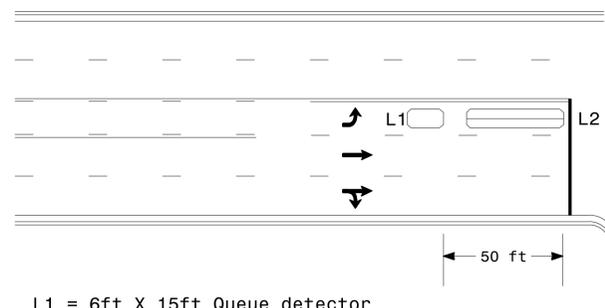
Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

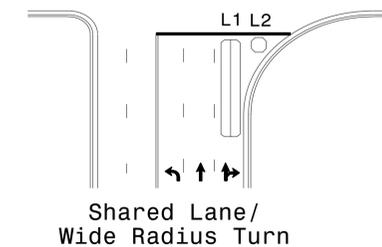
OR



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

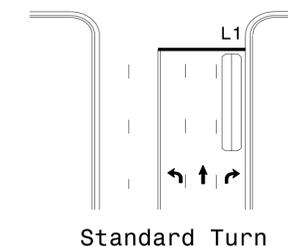
Queue Loop Detection

Right Turn Lane Detection

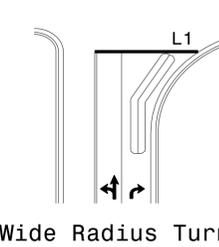


Shared Lane/
Wide Radius Turn

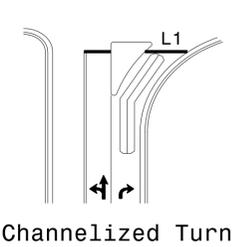
L1 = 6ft X 40ft Quadrupole loop
L2 = 6ft X 6ft [Minimum] Presence loop
Wired separately



Standard Turn

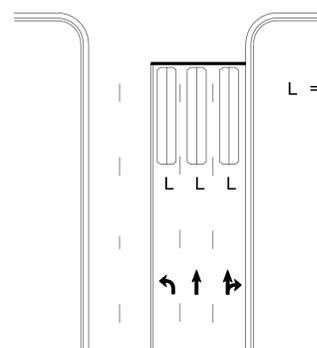


Wide Radius Turn



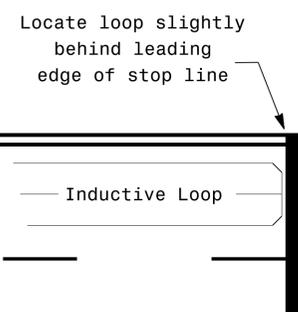
Channelized Turn

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

Prepared In the Offices of:

Transporation Mobility and Safety Solutions

STATE OF NORTH CAROLINA

Signal Design Section

SEAL

NORTH CAROLINA

PROFESSIONAL ENGINEER

SEAL 23489

PAMELA L. ALEXANDER

PLAN DATE: January 2015		REVIEWED BY: JPG	
PREPARED BY: PLA		REVIEWED BY:	
SCALE	REVISIONS	INIT.	DATE
N/A			

DocuSigned by:
P. Alexander
1/30/2015 1:30:25 PM

SIG. INVENTORY NO. _____

PROJECT NO.	SHEET NO.	TOTAL NO.
2026CPT.05.07.10351.1, ETC.	24	11

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	LENGTH	WIDTH	BEGIN MP	END MP	1220000000-E	1245000000-E	1260000000-E	1297000000-E	1330000000-E	1519000000-E	1523000000-E	1575000000-E	1704000000-E	2815000000-N	7444000000-E	
													INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTI ON	AGGREGATE SHOULDER BORROW	1 1/2" MILLING	INCIDENTAL MILLING	SURFACE COURSE, S9.5B	SURFACE COURSE, S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ADJUST DROP INLET	INDUCTIVE LOOP SAWCUT	
													TONS	SMI	TON	SY	SY	TONS	TONS	TON	TONS	EA	LF	
2026CPT.05.07.10351.1	Franklin	1	NC-39 N / NC 39 HWY S/MAIN ST	FROM US 64 TO PAVEMENT JOINT	2	2		YES	6.743	26	0.747	7.49	318	12.72	1,176	103,057	3,500		9,133	560	441		180	
TOTAL FOR MAP NO. 1									6.743				318	12.72	1,176	103,057	3,500		9,133	560	441		180	
2026CPT.05.07.10351.1	Franklin	2	NC-98 E / NC 98 HWY E	FROM NC 39 TO NASH COUNTY	1	2	2WD	YES	3.685	22	10.335	14.02	182	7.29	673	47,620	1,635		4,224	252	53			
TOTAL FOR MAP NO. 2									3.685				182	7.29	673	47,620	1,635		4,224	252	53			
TOTAL FOR PROJ NO. 2026CPT.05.07.10351.1									10.428				500	20.01	1,849	150,677	5,135		13,357	812	494			180
2026CPT.05.07.20351.1	Franklin	3	SR-1101 / SID EAVES RD/DARIUS PEARCE RD	FROM SR 1100 TO US 401	3	2	2WD	YES	2.02	20	0	2.02	97	3.86	357		3,559	1,982		130	24			
TOTAL FOR MAP NO. 3									2.02				97	3.86	357		3,559	1,982		130	24			
2026CPT.05.07.20351.1	Franklin	4	RMP-6288	FROM NC 39 TO NC 39	2	1		NO	0.119	22	0	0.119	4	0.17	15	1,552	111		138	9	11			
TOTAL FOR MAP NO. 4									0.119				4	0.17	15	1,552	111		138	9	11			
2026CPT.05.07.20351.1	Franklin	5	RMP-6348	FROM NC 39 TO NC 98	2	1		NO	0.075	19	0	0.075	4	0.15	14	842	101		75	5	11	1		
TOTAL FOR MAP NO. 5									0.075				4	0.15	14	842	101		75	5	11	1		
TOTAL FOR PROJ NO. 2026CPT.05.07.20351.1									2.214				105	4.18	386	2,394	3,771	1,982	213	144	46	1		
GRAND TOTAL									12.642				605	24.19	2,235	153,071	8,906	1,982	13,570	956	540	1		180

PROJECT NO.	SHEET NO.	TOTAL NO.
2026CPT.05.07.10351.1, ETC.	27	11

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	4688000000-E			4709000000-E				4725000000-E	4890000000-E	4895000000-N	
												WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	6" X 90 M YELLOW THERMO	6" X 90 M WHITE THERMO	24" X 90 M WHITE THERMO	THERMO LT ARROW 90 M	THERMO STR ARROW 90 M	THERMO STR & RT ARROW 90 M	THERMO RT ARROW 90 M	YIELD LINE PAVEMENT MARKERS	POLYCARBONATE H SHAPED MARKERS, 24" 90 MILS		
								MI	FT			SF	LS	HR	LF	LF	LF	EA	EA	EA	EA	LF	EA		
2026CPT.05.07.10351.1	Franklin	1	NC-39 N / NC 39 HWY S/MAIN ST	FROM US 64 TO PAVEMENT JOINT	2	2		6.743	26	0.747	7.49	1,463	0.53	80	69,494	73,090	72	4	2				445		
TOTAL FOR MAP NO. 1								6.743				1,463	0.53	80	69,494	73,090	72	4	2				445		
2026CPT.05.07.10351.1	Franklin	2	NC-98 E / NC 98 HWY E	FROM NC 39 TO NASH COUNTY	1	2	2WD	3.685	22	10.335	14.02	126	0.30		37,458	383,966	24	1		1					
TOTAL FOR MAP NO. 2								3.685				126	0.30		37,458	383,966	24	1		1					
TOTAL FOR PROJ NO. 2026CPT.05.07.10351.1								10.428				1,589	0.83	80	106,952	457,056	96	5	2	1				445	
															564,008			8							
2026CPT.05.07.20351.1	Franklin	3	SR-1101 / SID EAVES RD/DARIUS PEARCE RD	FROM SR 1100 TO US 401	3	2	2WD	2.02	20	0	2.02	226	0.16		17,642	20,408	44								
TOTAL FOR MAP NO. 3								2.02				226	0.16		17,642	20,408	44								
2026CPT.05.07.20351.1	Franklin	4	RMP-6288	FROM NC 39 TO NC 39	2	1		0.119	22	0	0.119	10	0.01		464	520						20			
TOTAL FOR MAP NO. 4								0.119				10	0.01		464	520							20		
2026CPT.05.07.20351.1	Franklin	5	RMP-6348	FROM NC 39 TO NC 98	2	1		0.075	19	0	0.075	8	0.01		288	288	17				1				
TOTAL FOR MAP NO. 5								0.075				8	0.010		288	288	17				1				
TOTAL FOR PROJ NO. 2026CPT.05.07.20351.1								2.214				244	0.180		18,394	21,216	61				1		20		
															39,610			1							