







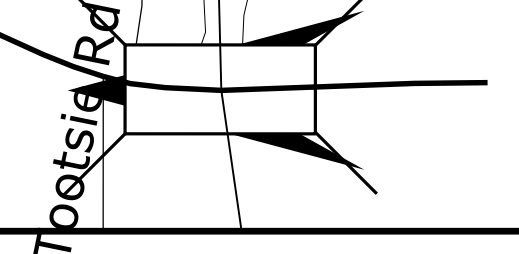
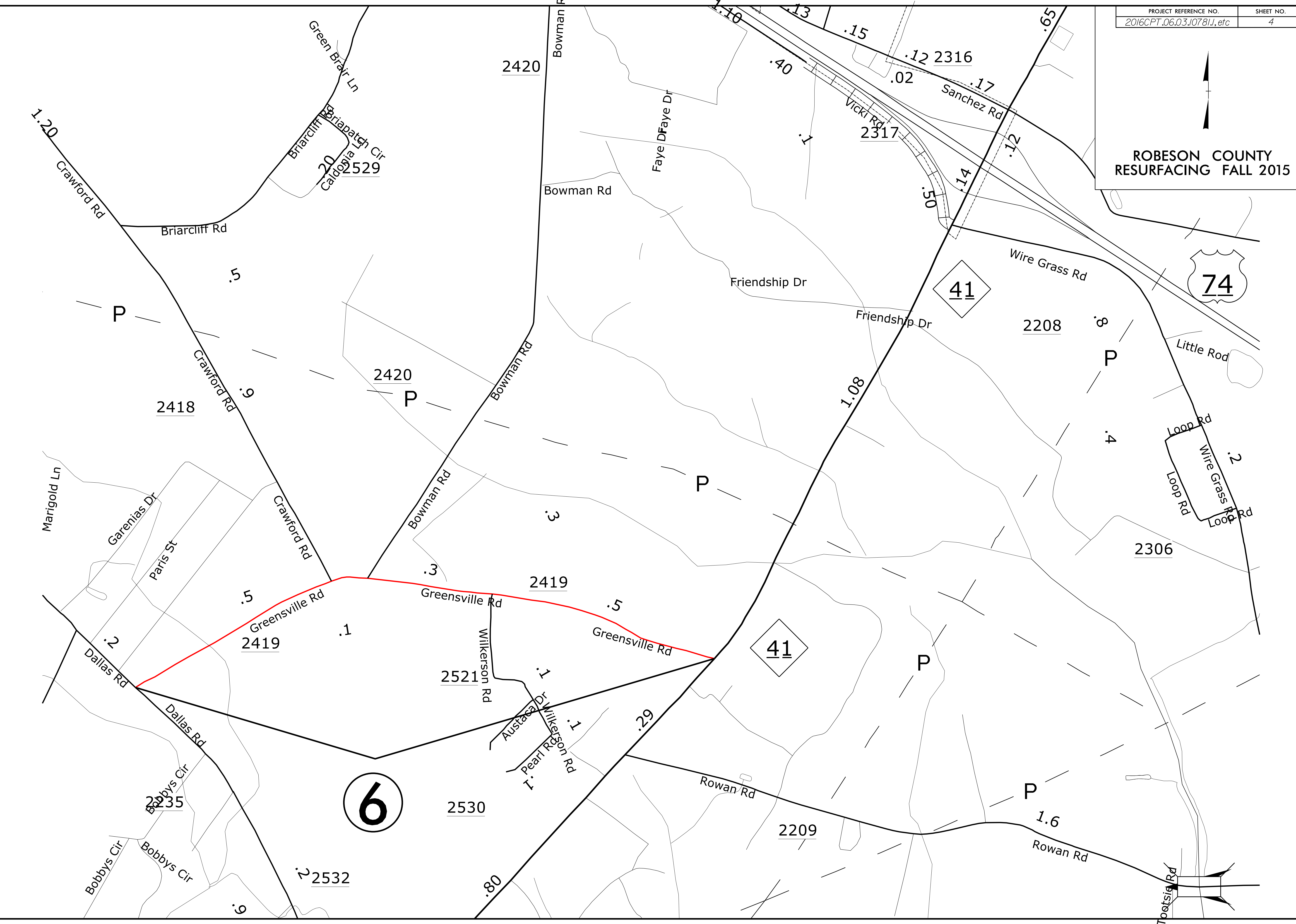




  
**ROBESON COUNTY**  
**RESURFACING FALL 2015**

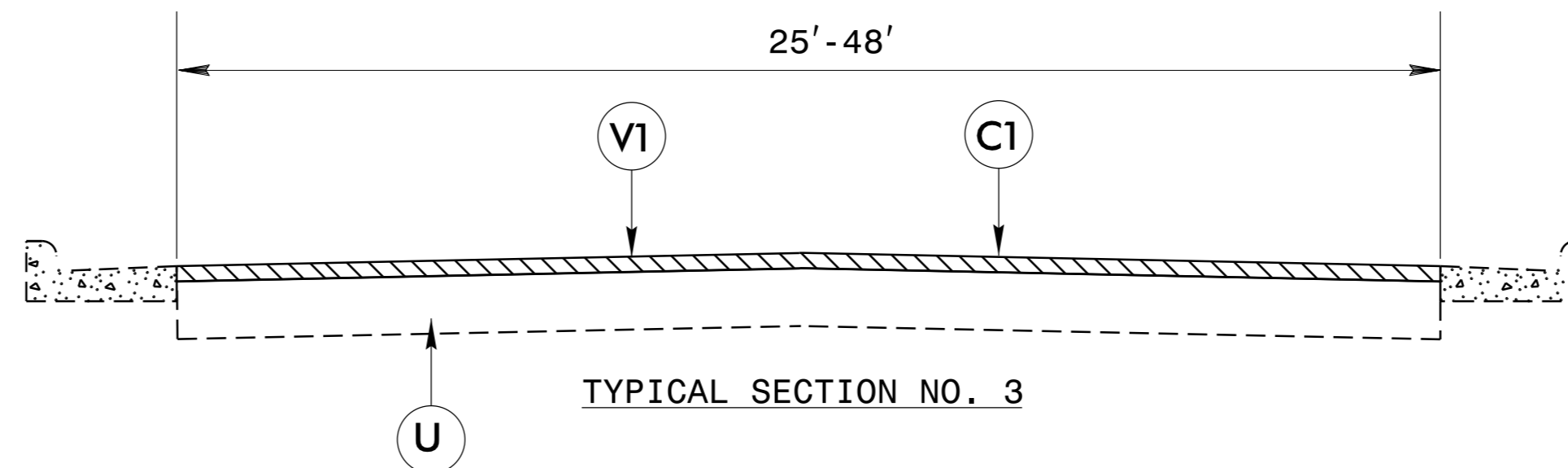
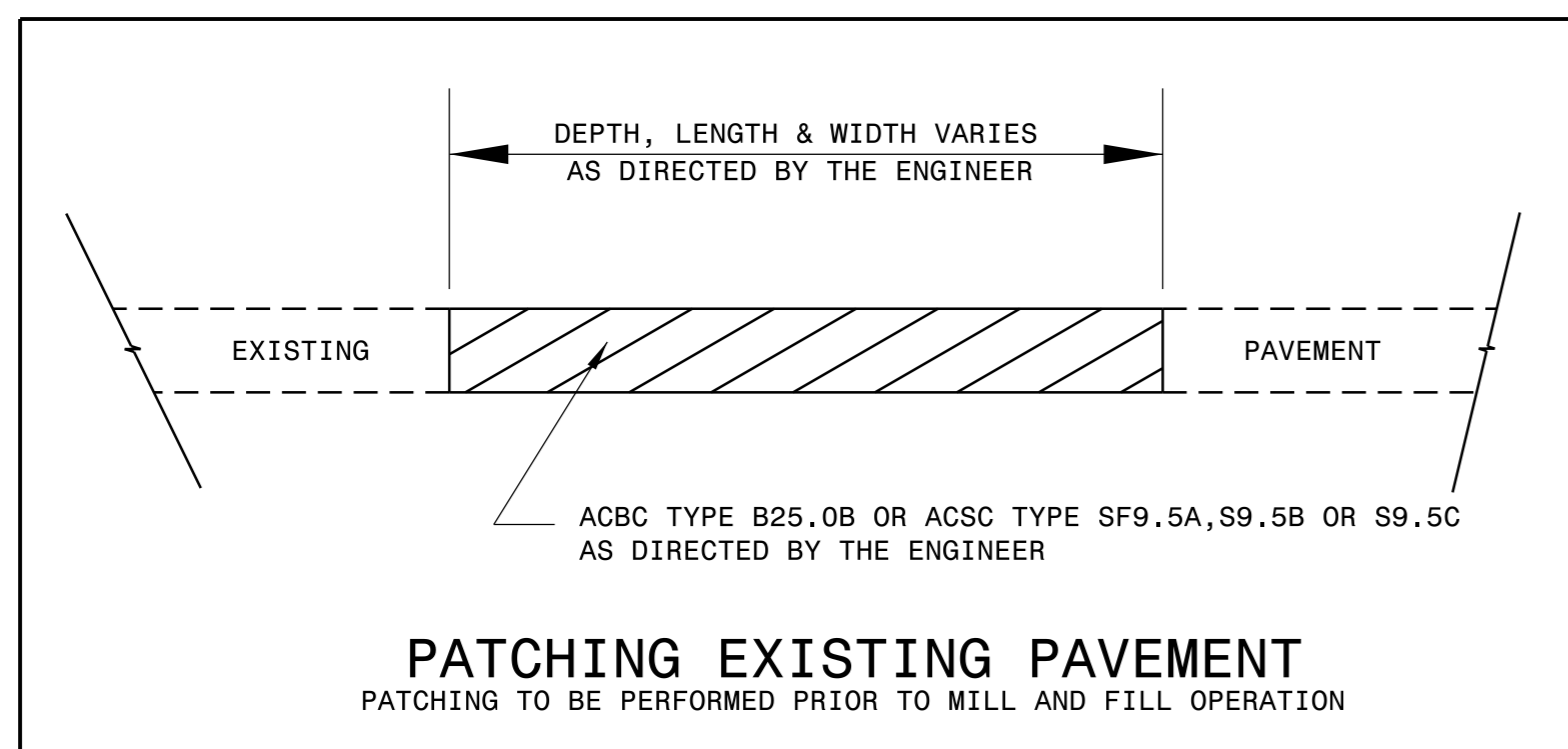
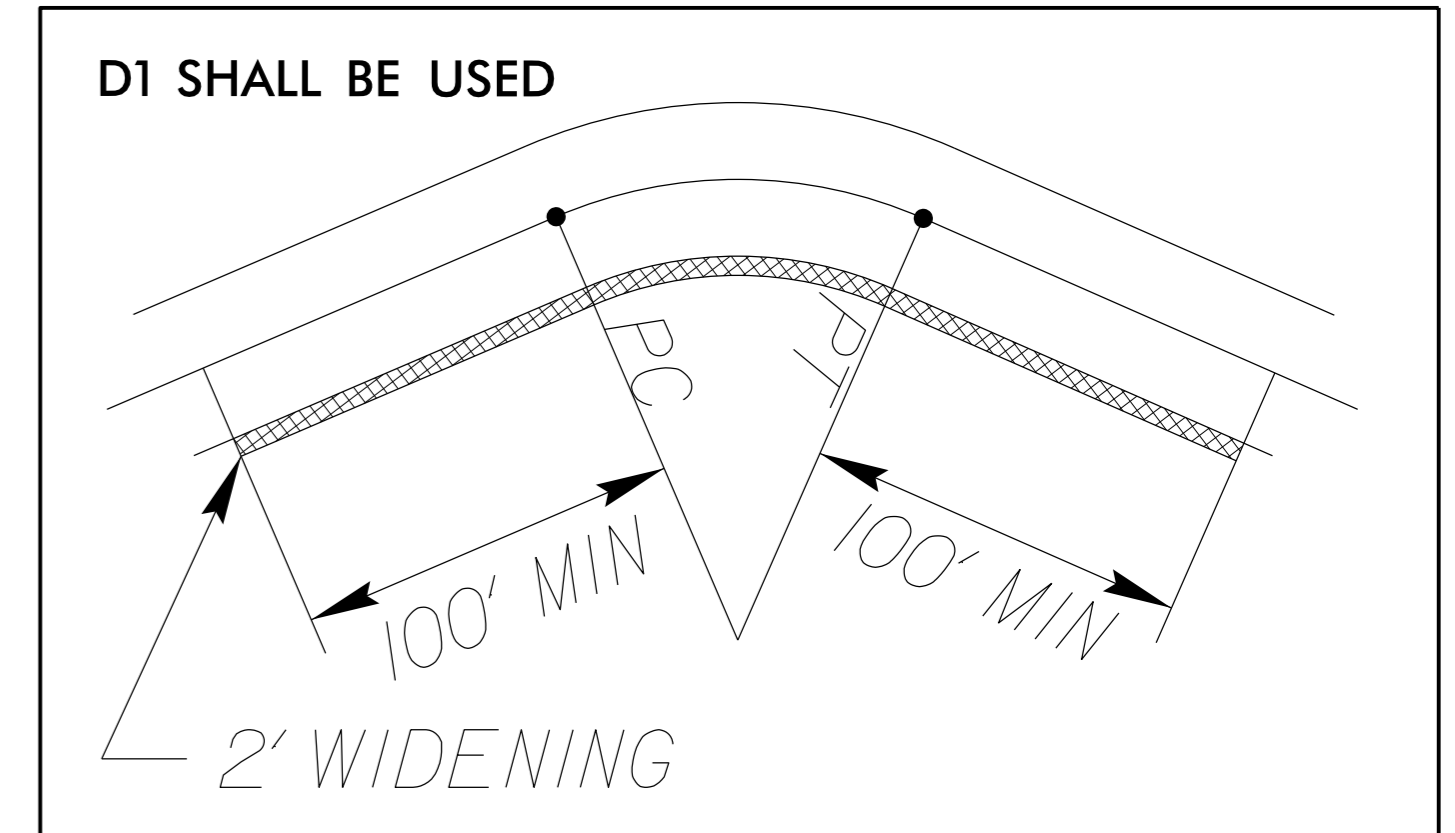
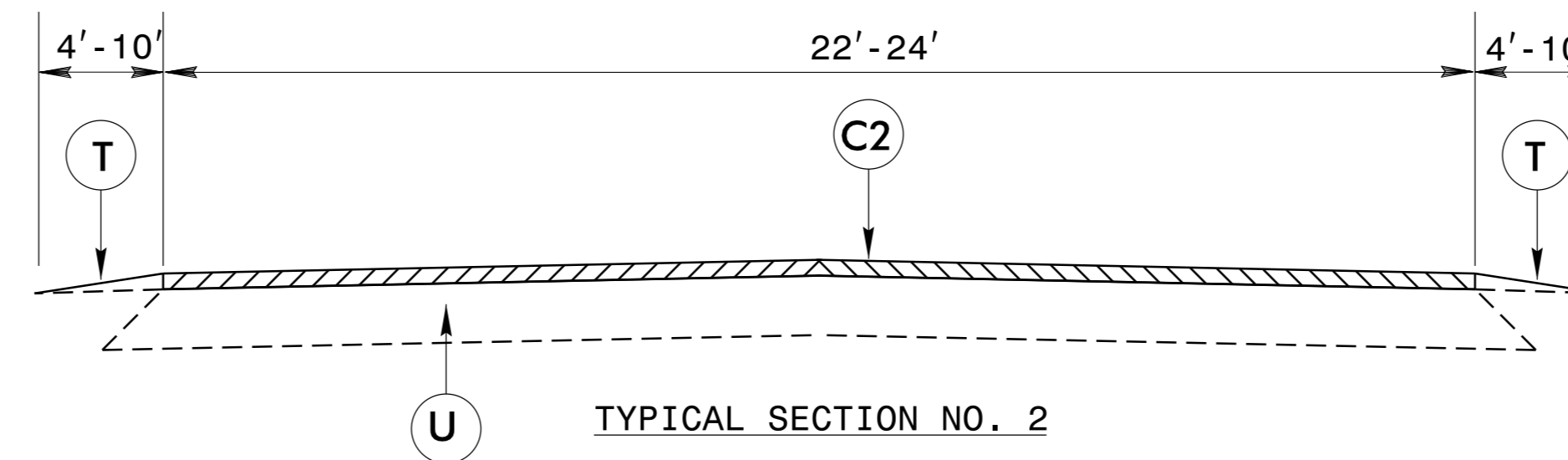
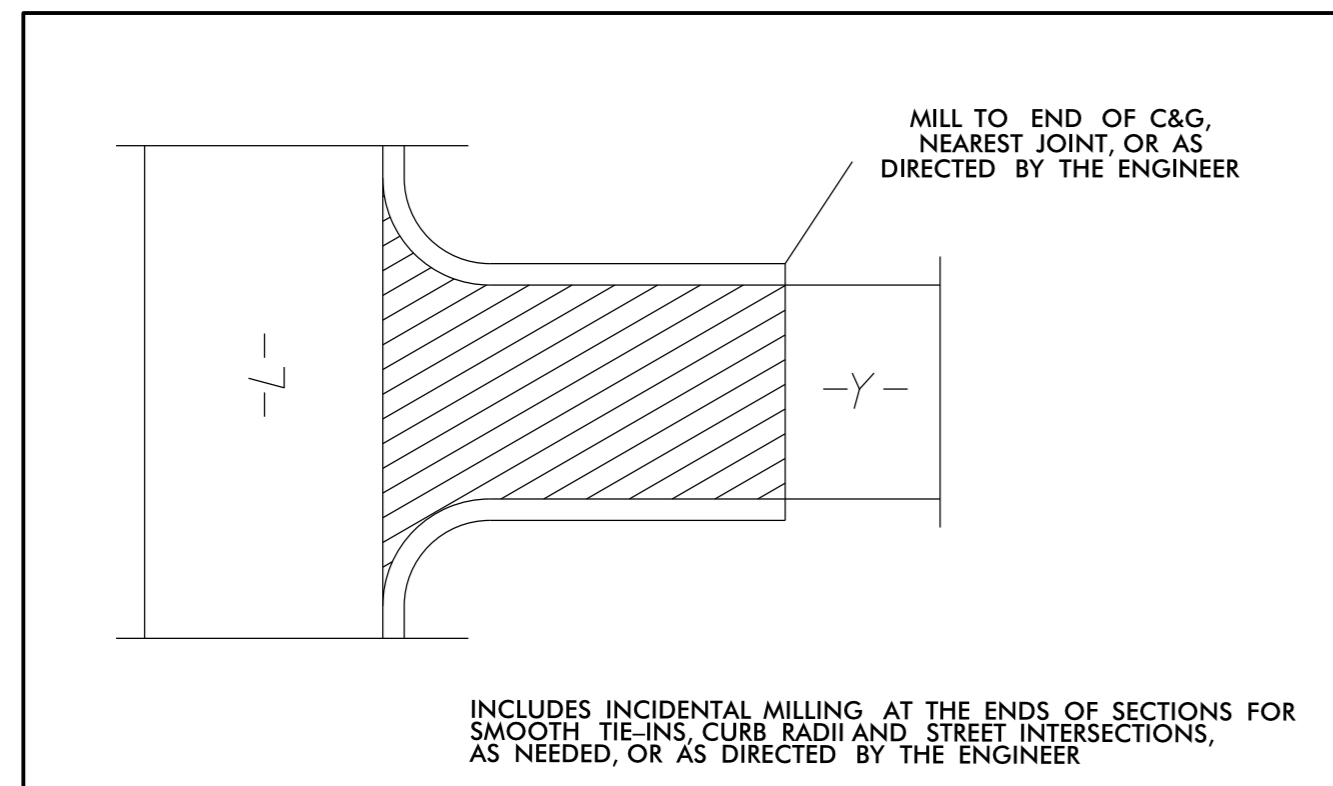
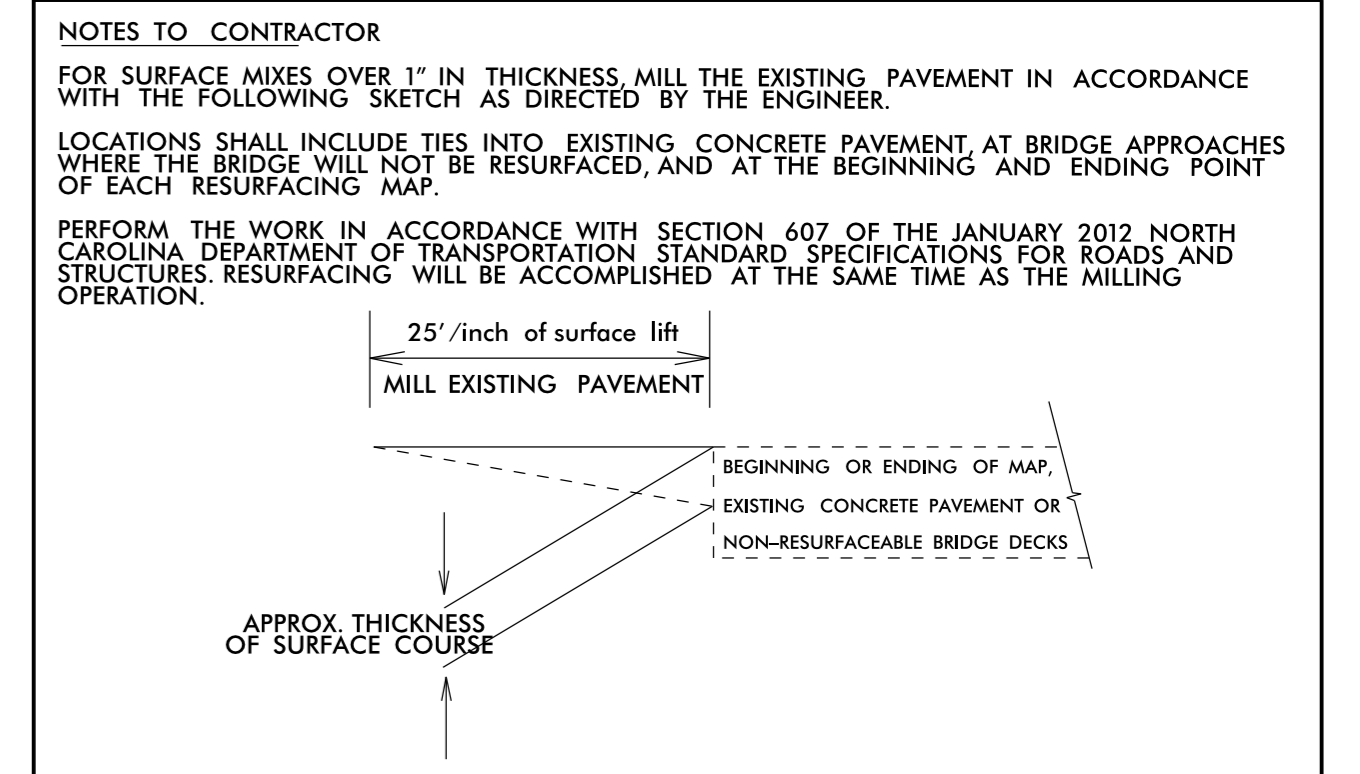
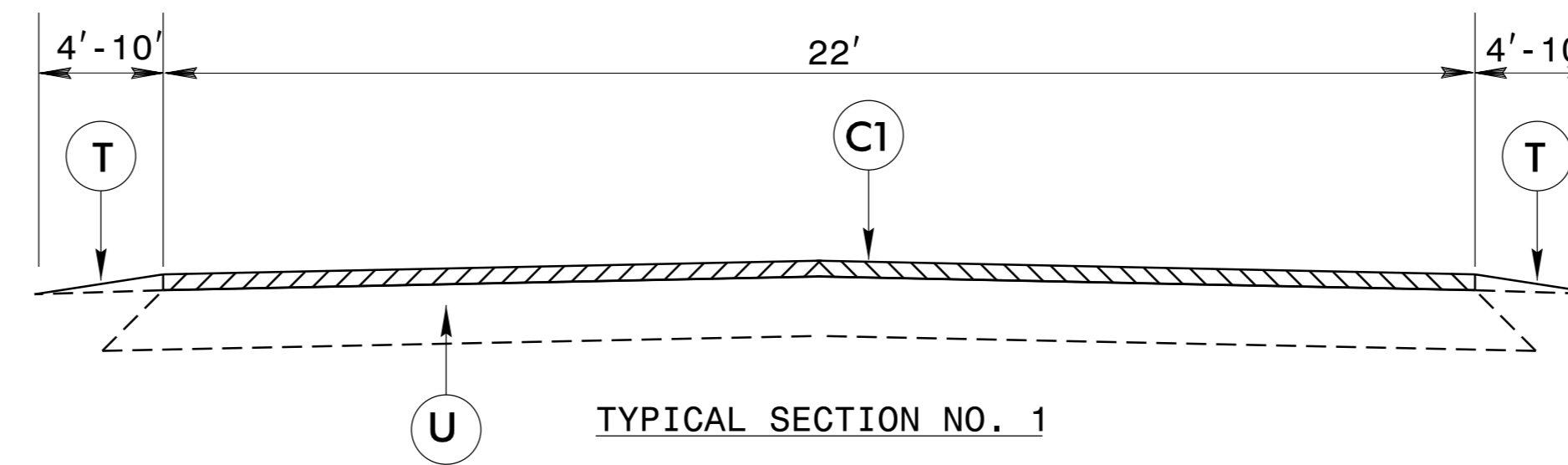


REVISIONS  
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 8/17/99



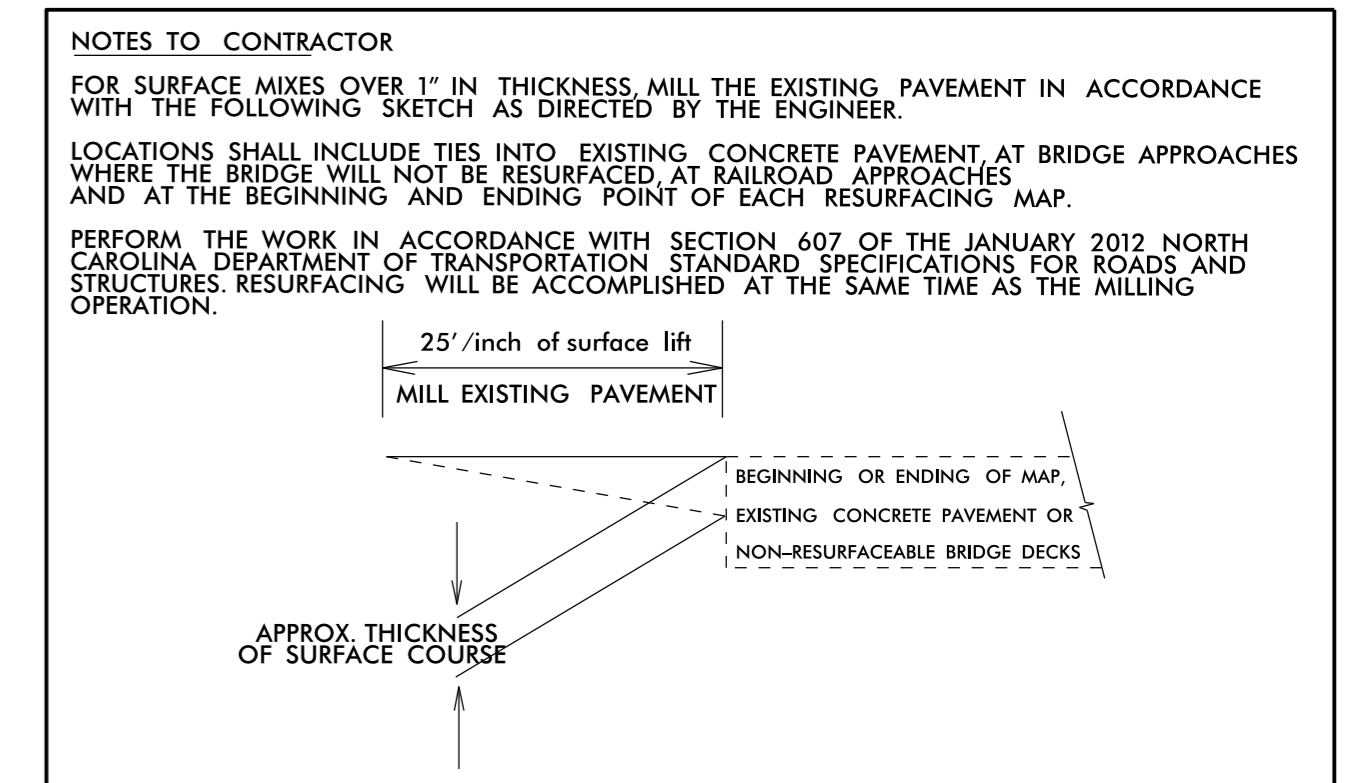
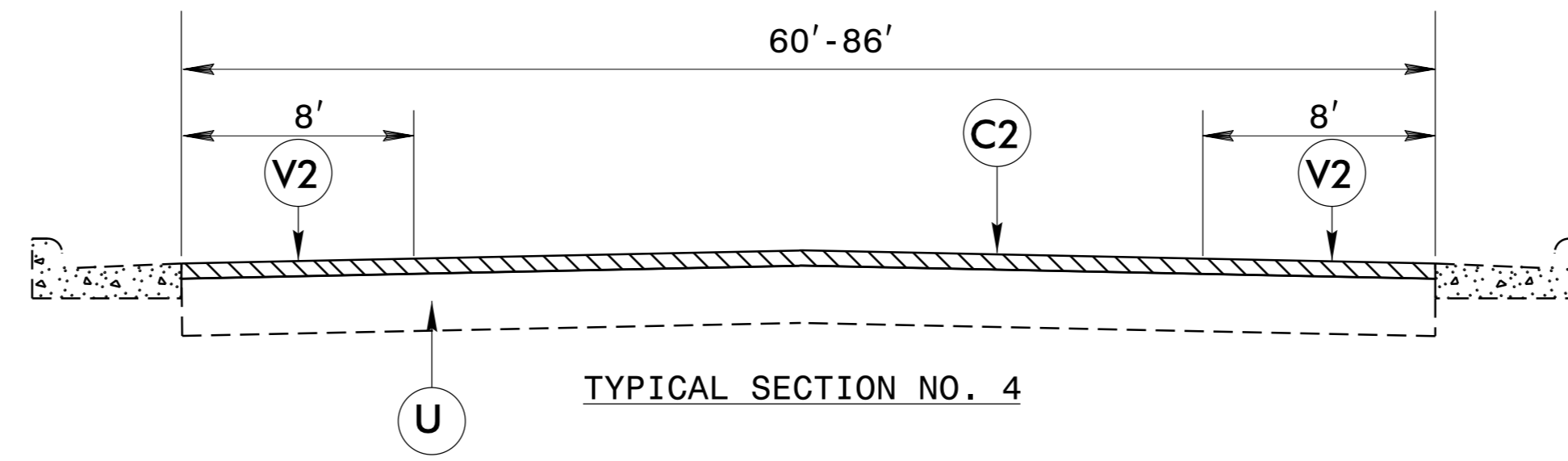


PAVEMENT SCHEDULE	
C1	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	5½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T	AGGREGATE SHOULDER BORROW
U	EXISTING ASPHALT
V1	1½" MILLING
V2	0" - 1½" MILLING

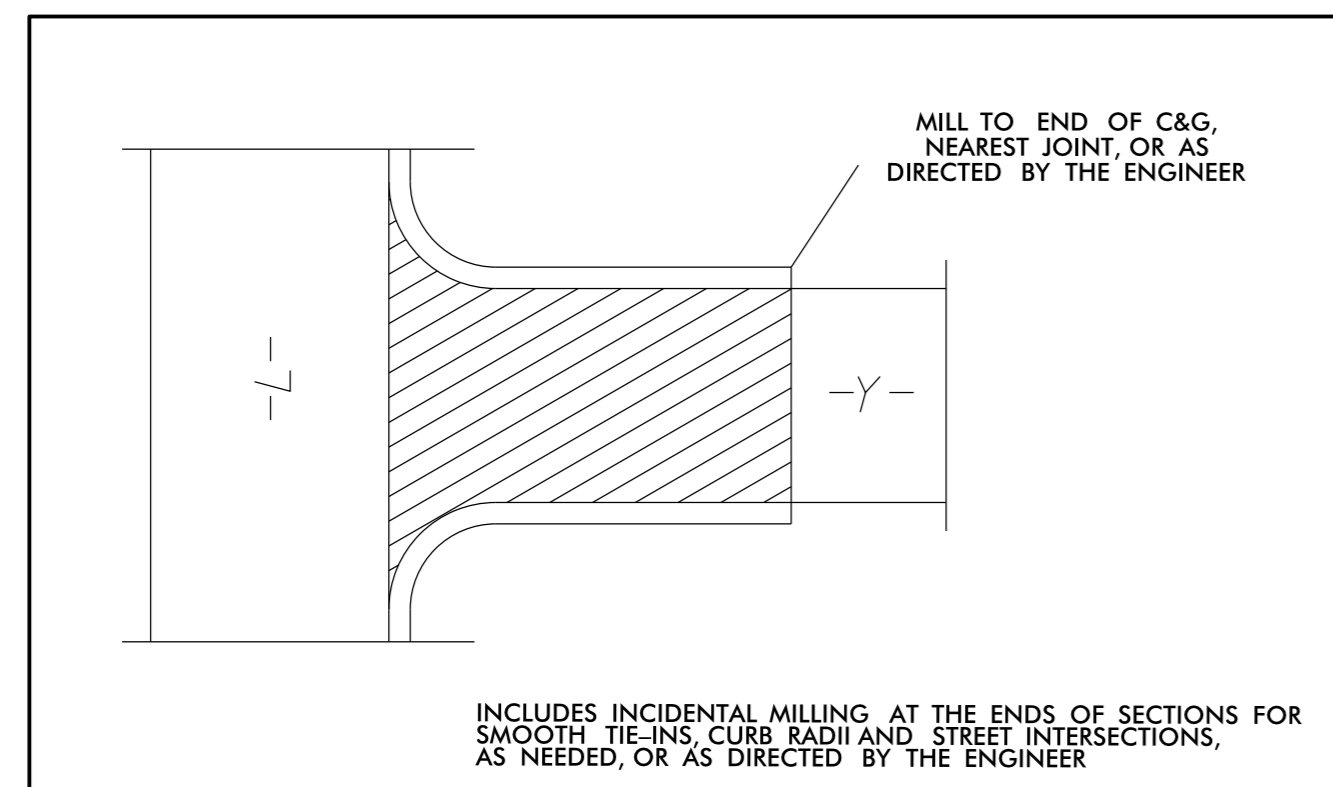


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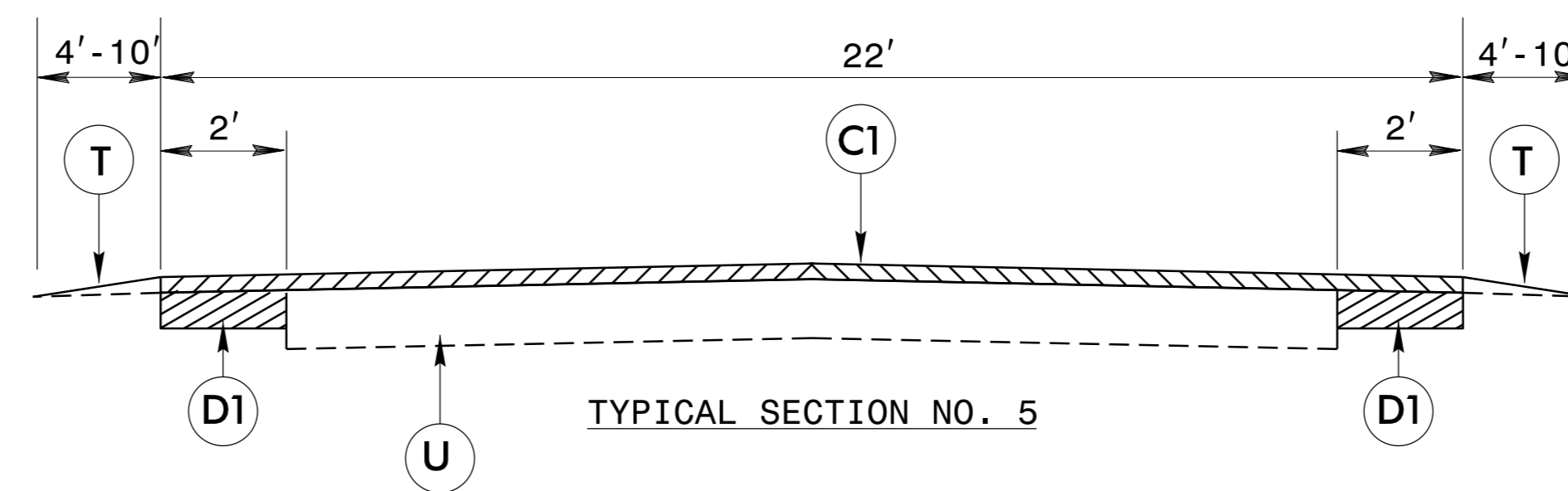
PAVEMENT SCHEDULE	
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C2	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	5½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B AT AN AVERAGE RATE OF 627 LBS. PER SQ. YD.
T	AGGREGATE SHOULDER BORROW
U	EXISTING ASPHALT
V1	1½" MILLING
V2	0" - 1½" MILLING



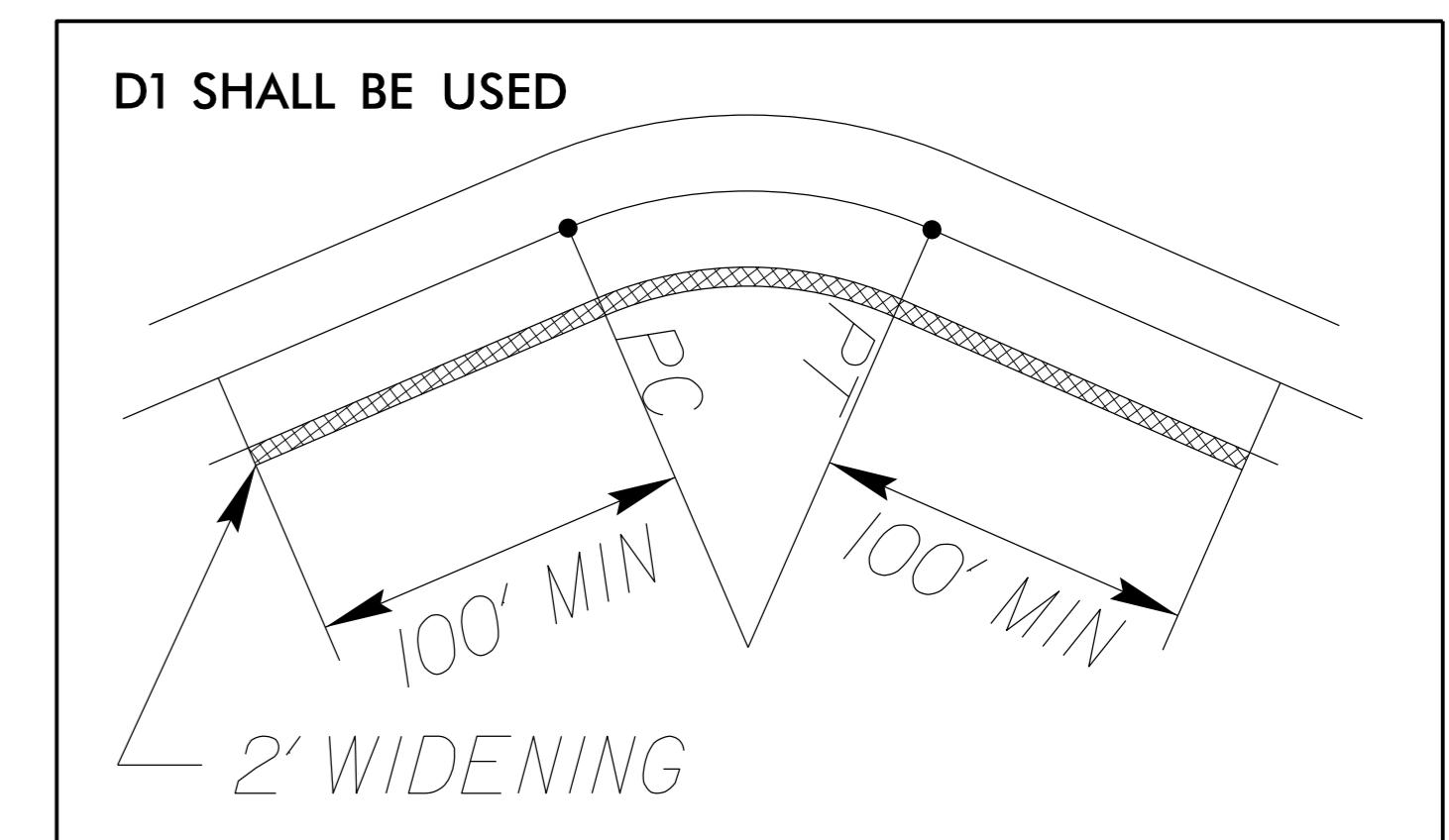
**MILLING AT PAVEMENT TIE-INS DETAIL**



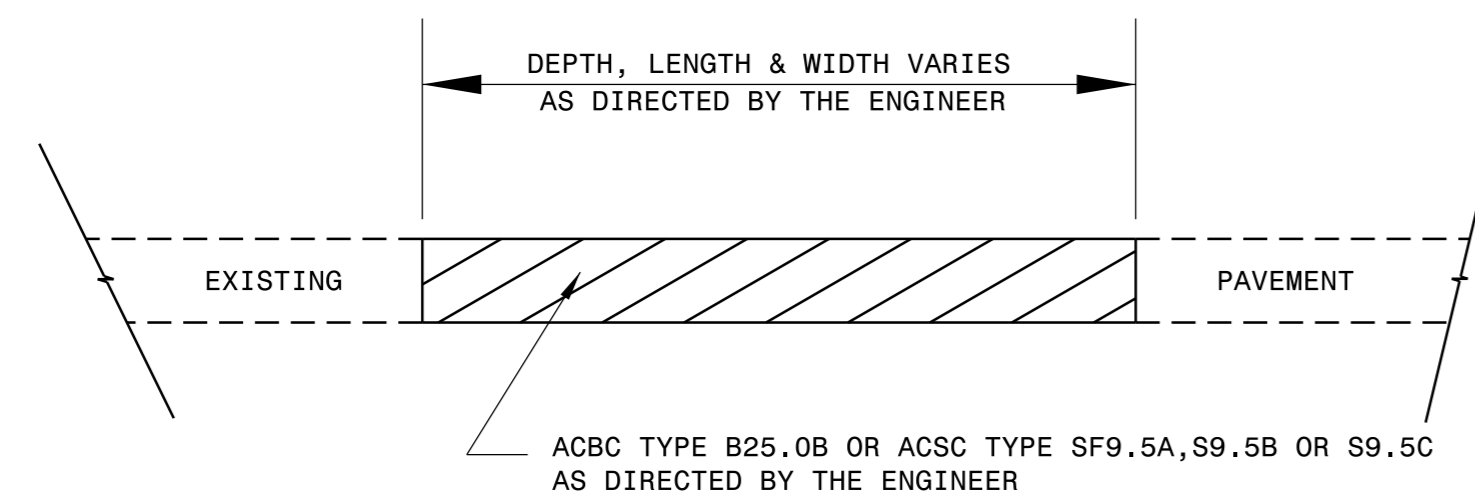
**MILLING AT CURB AND GUTTER INTERSECTIONS**



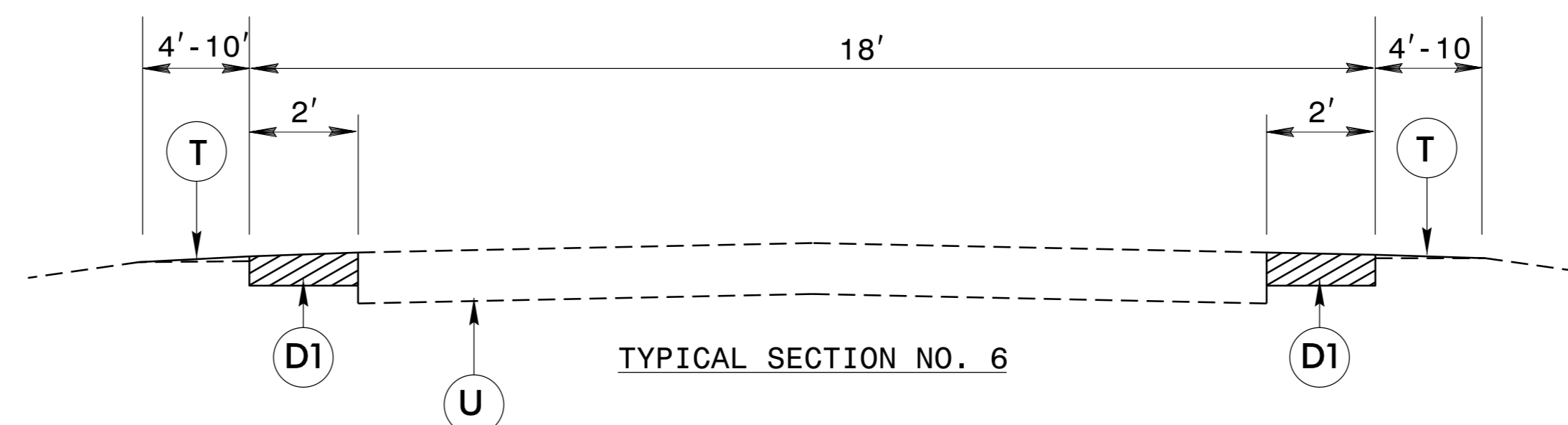
\* INCLUDES INSIDE CURVE WIDENING. SEE DETAIL.



**INSIDE CURVE WIDENING**

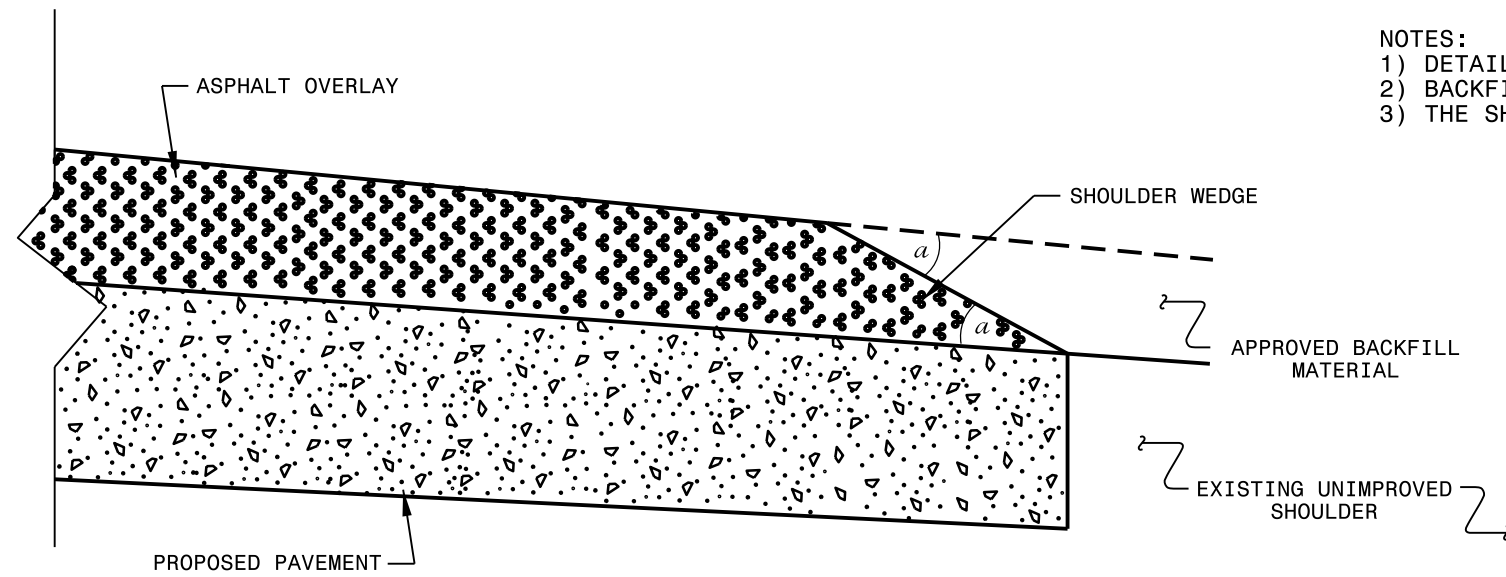


**PATCHING EXISTING PAVEMENT**  
PATCHING TO BE PERFORMED PRIOR TO MILL AND FILL OPERATION

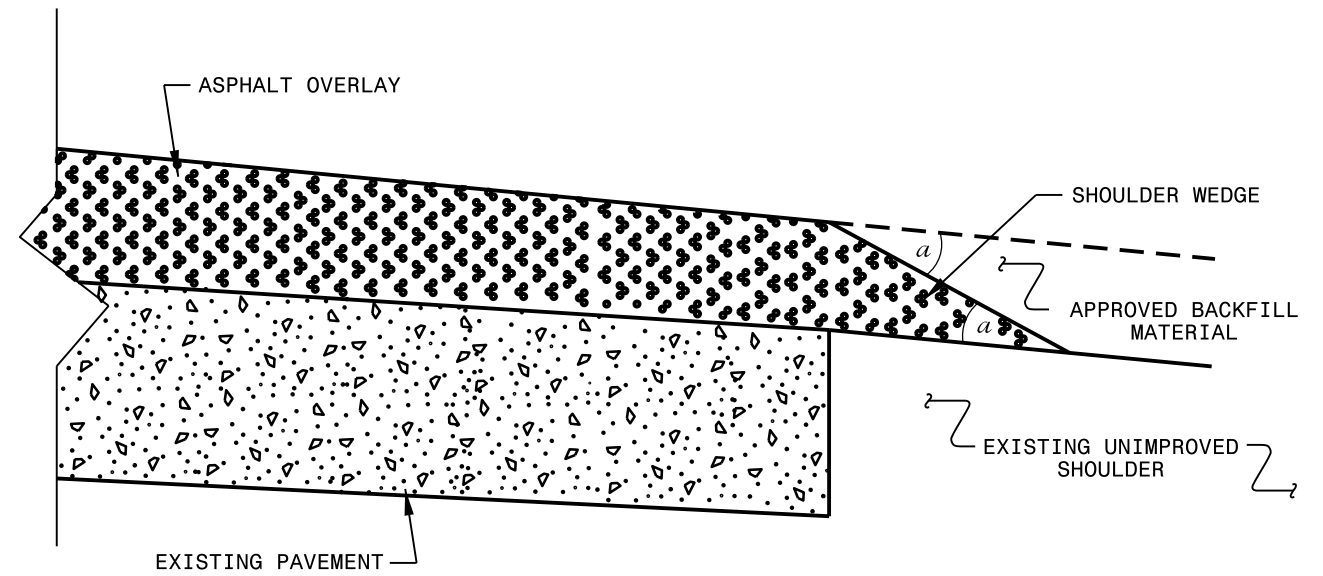


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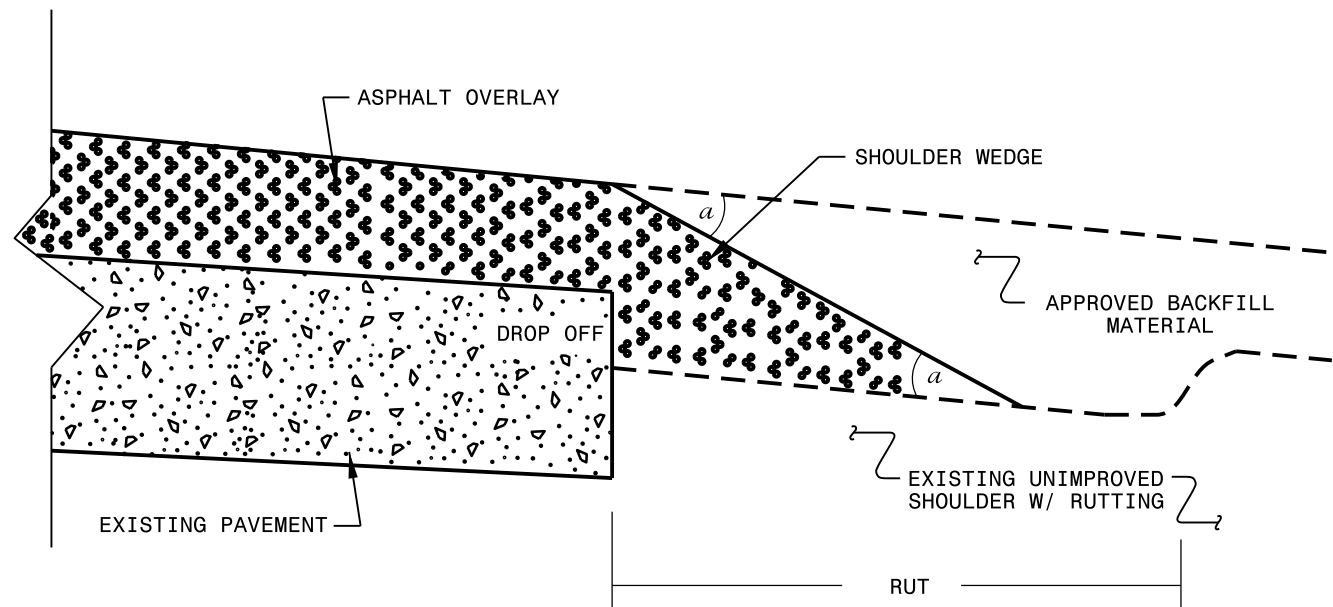
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
  - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
  - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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



**SHOULDER WEDGE DETAIL**  
 (Resurfacing Projects w/ NO Widening)



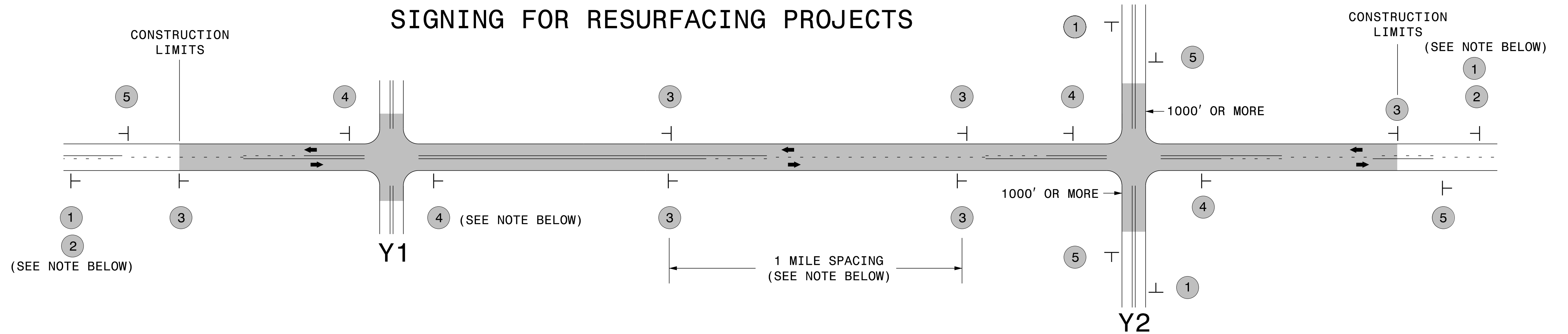
**SHOULDER WEDGE DETAIL**  
 (Resurfacing Adjacent to  
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>			
Office 919-707-6950		FAX 919-250-4119	
<b>SHOULDER WEDGE DETAILS</b>			
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

# SIGNING FOR RESURFACING PROJECTS



LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

## MAINLINE (-L-) SIGNING

## -Y- LINE SIGNING

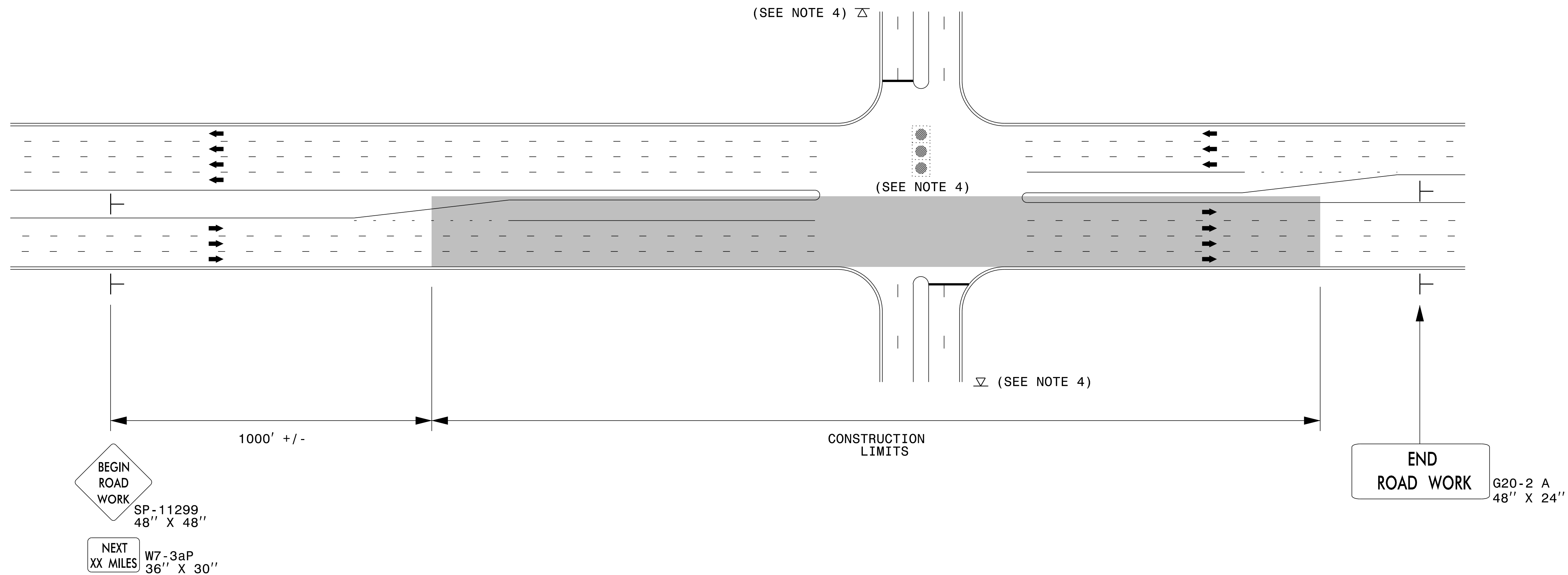
SIGNING NOTES AND PLACEMENT PER DIRECTION	MAINLINE (-L-) SIGNING		-Y- LINE SIGNING	
	1	 W20-1 48" X 48"	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p>	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <p>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.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>W20-1 48" X 48"</p> </div> <div style="text-align: center;"> <p>W20-7 A 48" X 48"</p> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	2	 W7-3aP 24" X 18"	<p>#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)</p>	
	3	 SP 13107 48" X 48"	<p>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.</p>	
	4	 SP 13106 48" X 48"	<p>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.</p>	
5	 G20-2 A 48" X 24"	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p>		

3/19/2015  
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 User:rmgarrrett

**RESURFACING  
ADVANCE WARNING SIGNS  
FOR  
RURAL AND SUBURBAN  
2 LANE ROADWAYS**



## URBAN / SUBURBAN WORKZONES

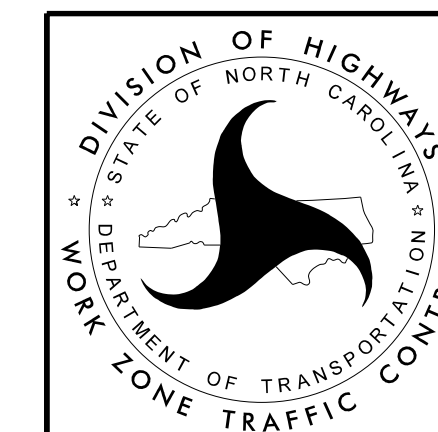


### NOTES:

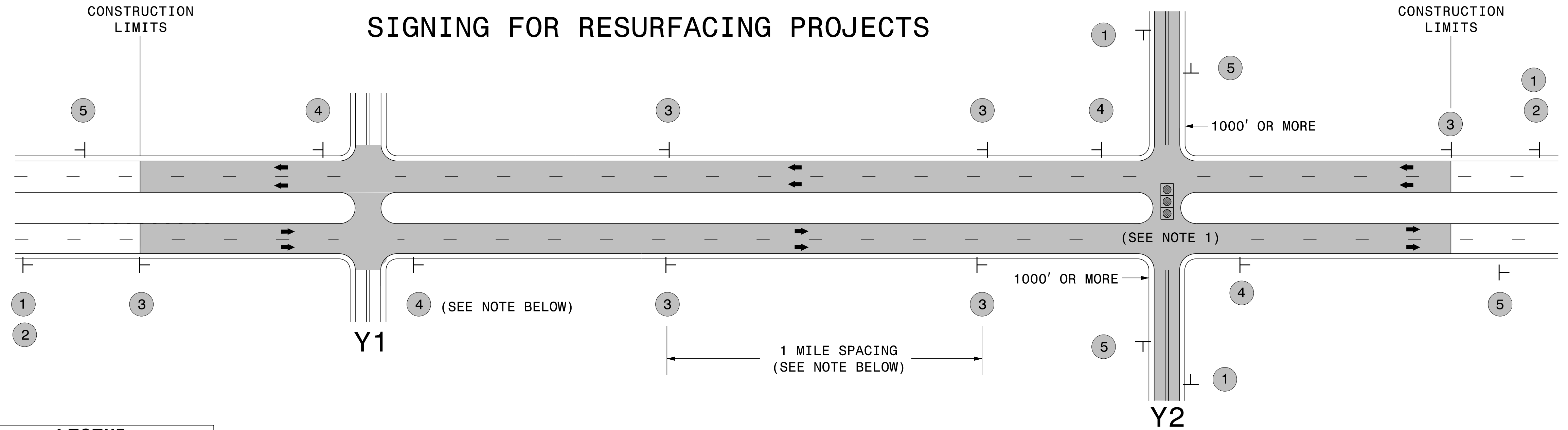
- 1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. 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



**RESURFACING ADVANCE  
WARNING SIGNS FOR  
URBAN / SUBURBAN  
FACILITIES**



**LEGEND**  
 T STATIONARY SIGN  
 ← DIRECTION OF TRAFFIC FLOW

**MAINLINE (-L-) SIGNING**

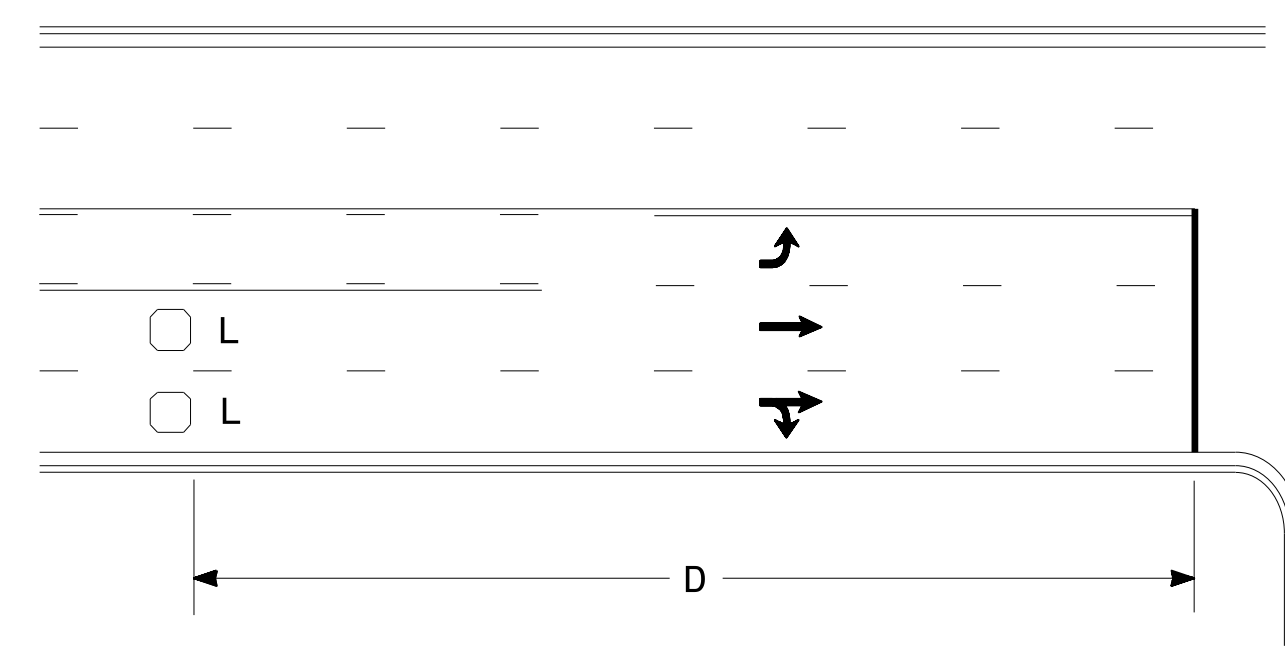
**-Y- LINE SIGNING**

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><b>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</b></p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <p>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.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">   <small>W20-1 48" X 48"</small> </div> <div style="text-align: center;">   <small>W20-7 A 48" X 48"</small> </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	2		#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)	
	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.	<p><b>NOTES:</b></p> <ol style="list-style-type: none"> <li>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.</li> </ol>	

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



### High Speed Detection (≥40 mph)

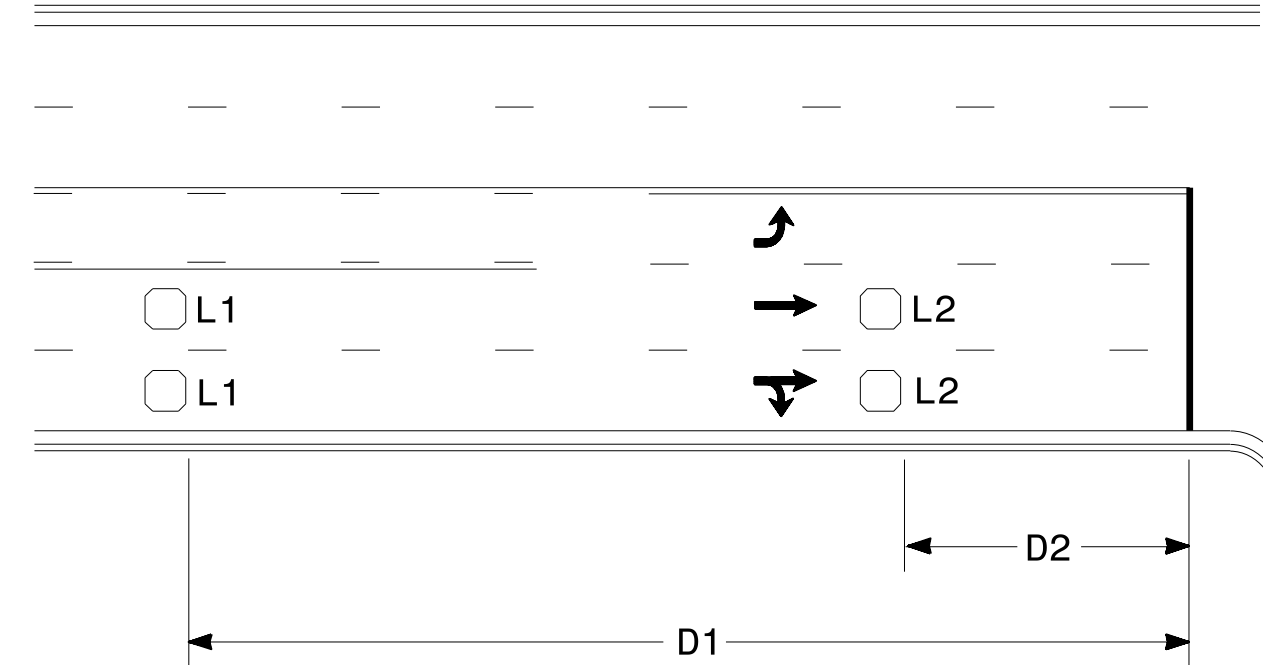


Speed Limit mph	D ft
40	250
45	300
50	355
55	420

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

Volume Density Operation

OR

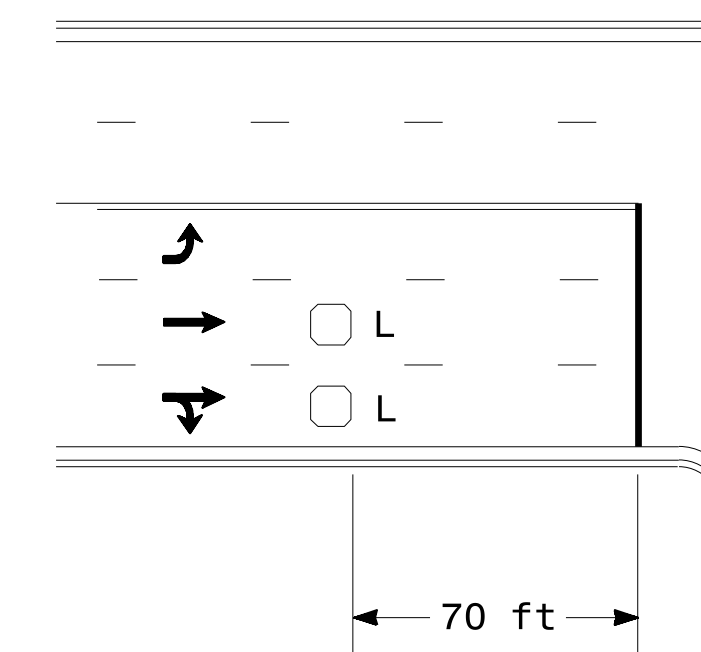


Speed Limit mph	D1 ft	D2 ft
40	250	80
45	300	90
50	355	100
55	420	110

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

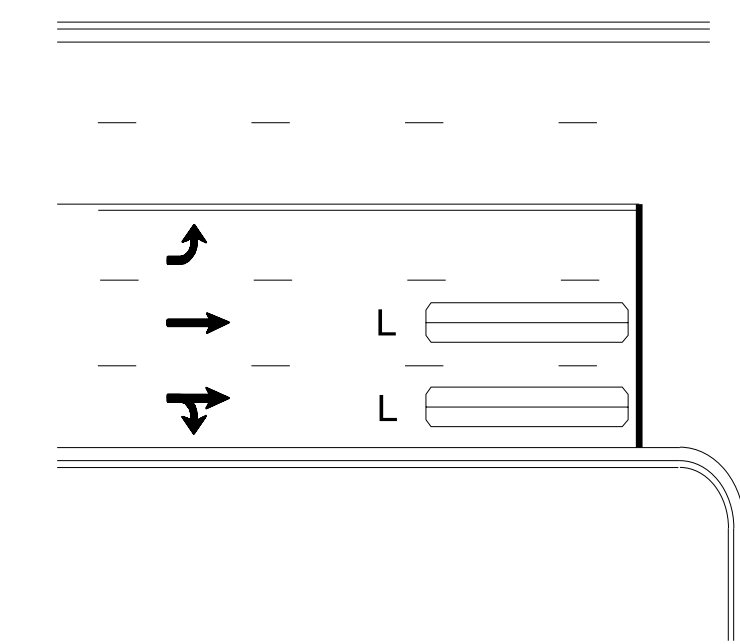
"Stretch" Operation

### Low Speed Detection (≤35 mph)



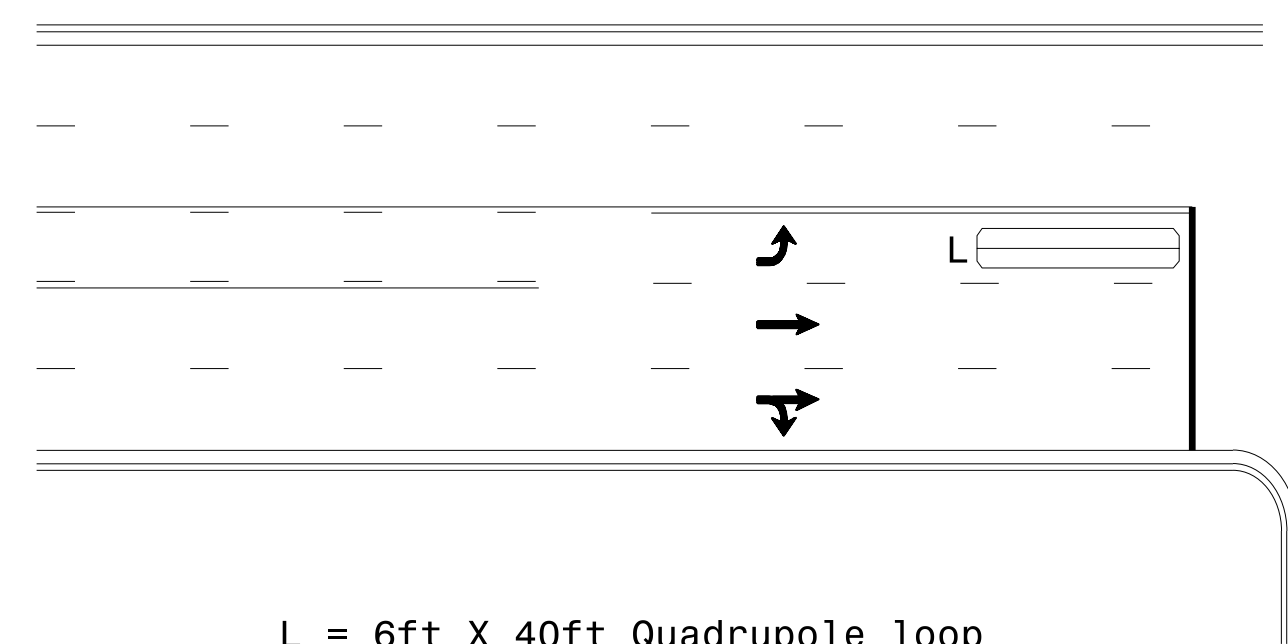
L = 6ft X 6ft  
Wired in series

OR



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

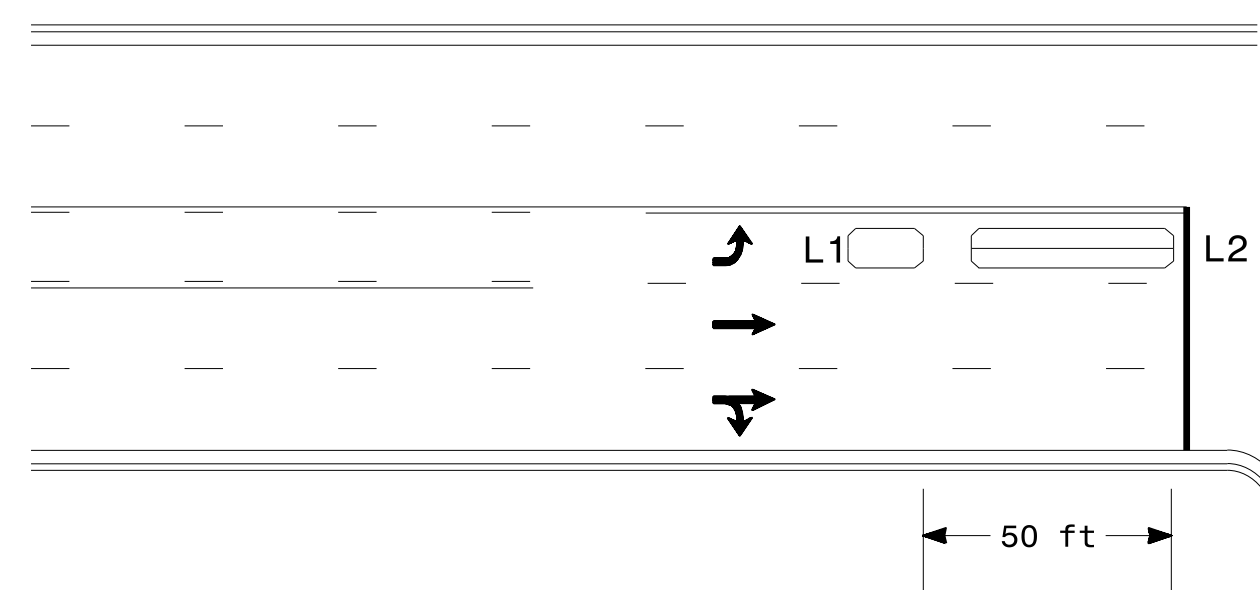
### Left Turn Lane Detection



L = 6ft X 40ft Quadrupole loop

Presence Loop Detection

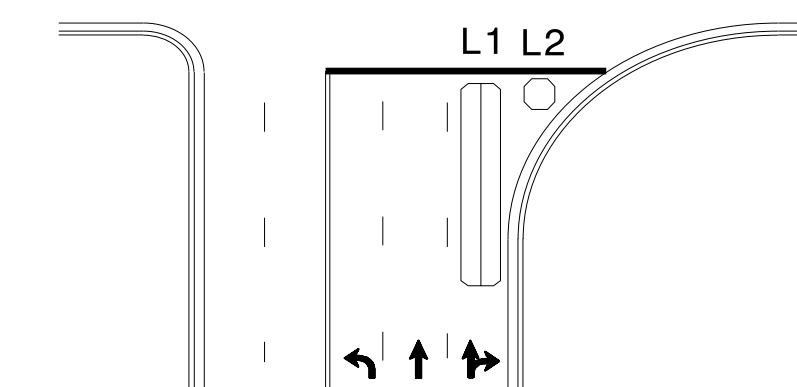
OR



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

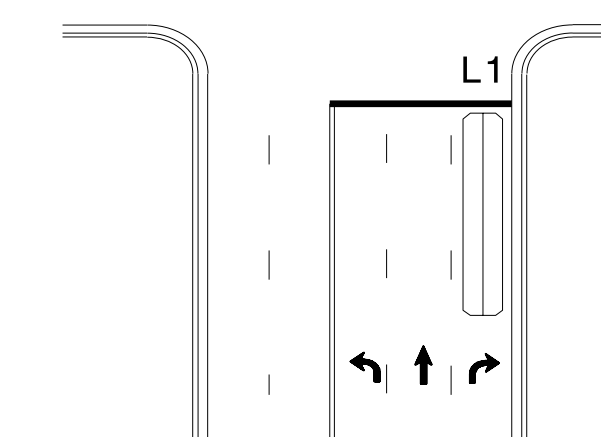
Queue Loop Detection

### Right Turn Lane Detection

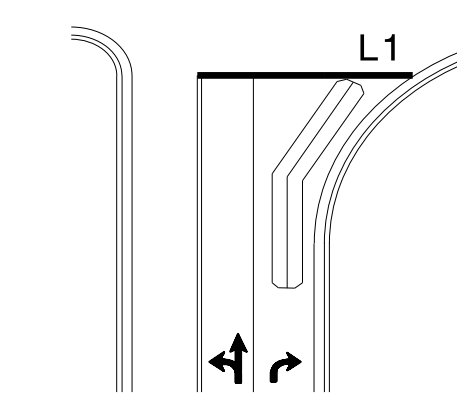


Shared Lane/  
Wide Radius Turn

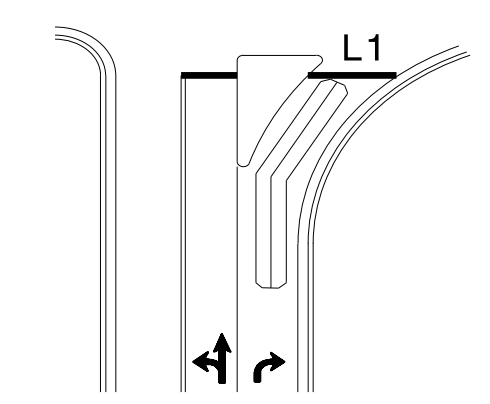
L1 = 6ft X 40ft Quadrupole loop  
L2 = 6ft X 6ft [Minimum] Presence loop  
Wired separately



Standard Turn

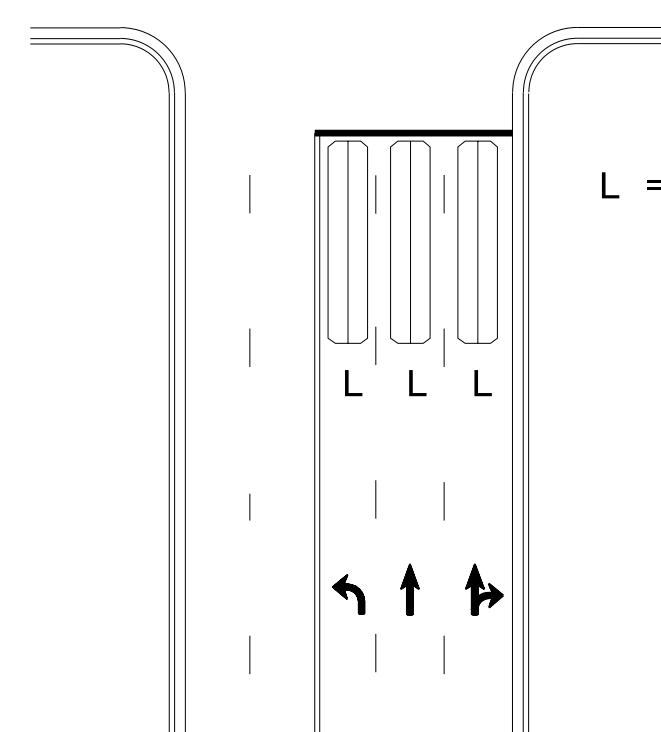


Wide Radius Turn



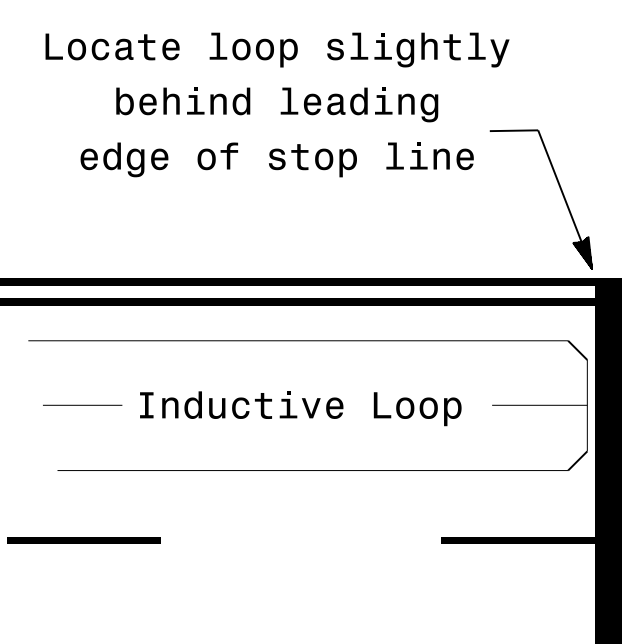
Channelized Turn

### Side Street Detection



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

### Presence Loop Placement at Stop Lines



Note:  
Loop may be located in advance  
of stop line under any of the  
following conditions:  
1) stop line is greater than 15'  
from edge of intersecting  
roadway  
2) loop detects a permissive or  
protected/permissive left turn  
3) for an exclusive right turn  
lane

### Recommended Number of Turns

Single 6' X 6' loop  
(when wired separately):

Length of Lead-in ft	Number of Turns
< 250	3
250-375	4
375-525	5
> 525	6

Quadrupole loops: Use 2-4-2 turns

6' X 15' Loops:  
Lead-in < 150', use 2 turns  
Lead-in > 150', use 3 turns

	<h3>Typical Signal Loop Locations</h3>		
	PLAN DATE: January 2015 PREPARED BY: PLA	REVIEWED BY: JPG REVIEWED BY:	

# SUMMARY OF QUANTITIES

PROJECT NO.	SHEET NO.	TOTAL NO.
2016CPT.06.03.10781.1, 2016.CPT06.03.20781.1		

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	GENERIC GRADING ITEM - AGGREGATE SHOULDER BORROW TON	SHOULDER RECONSTRUCTION SMI	1 1/2" MILLING SY	0" TO 1.5" MILLING	INCIDENTAL MILLING	INTERMEDIATE COURSE, I19.0B	SURFACE COURSE, S9.5B	SURFACE COURSE, SF9.5A	ASPHALT BINDER FOR PLANT MIX
															SY	SY	TONS	TONS	TONS	TONS
2016CPT.06.03.10781.1	Robeson	1	US 301	FROM CUMBERLAND COUNTY LINE TO NC 71	2	2	2WU	NO	NO	0.81	24	270	1.60			404		1,013		61
<b>TOTAL FOR MAP NO. 1</b>										<b>0.81</b>		<b>270</b>	<b>1.60</b>		<b>404</b>		<b>1,013</b>		<b>61</b>	
2016CPT.06.03.10781.1	Robeson	2	NC 211	1200' EAST OF SR 1997 MP 10.04 TO END OF 60' PAVEMENT MP 10.63	4	5	MU	NO	NO	0.59	60				5,538	1,000		1,878		113
		"	"	END 60' PAVEMENT MP 10.63 TO END 6 LANES MP 11.14	4	5	MU	NO	NO	0.51	86				4,787	956		2,188		131
		"	"	END 6 LANES MP 11.14 TO SR 1530 MP 13.45	2	2	2WU	NO	NO	2.31	22	770	4.60			122		3,014		181
<b>TOTAL FOR MAP NO. 2</b>										<b>3.41</b>		<b>770</b>	<b>4.60</b>		<b>10,325</b>	<b>2,078</b>		<b>7,080</b>		<b>425</b>
<b>TOTAL FOR PROJ NO. 2016CPT.06.03.10781.1</b>										<b>4.22</b>		<b>1,040</b>	<b>6.20</b>		<b>10,325</b>	<b>2,482</b>		<b>8,093</b>		<b>486</b>
2016.CPT06.03.20781.1	Robeson	3	SR 1948	SR 1945 MP 2.72 TO SR 1005 MP 3.70	1	2	2WU	NO	NO	0.95	22	317	1.90			489			1,024	69
<b>TOTAL FOR MAP NO. 3</b>										<b>0.95</b>		<b>317</b>	<b>1.90</b>			<b>489</b>			<b>1,024</b>	<b>69</b>
2016.CPT06.03.20781.1	Robeson	4	SR 1963	FROM NC 41 MP 0.00 TO SR 1004 MP3.61	6	2	2WU	NO	NO	3.55	18	1,184	7.10				2,911			140
<b>TOTAL FOR MAP NO. 4</b>										<b>3.55</b>		<b>1,184</b>	<b>7.10</b>				<b>2,911</b>			<b>140</b>
2016.CPT06.03.20781.1	Robeson	5	SR 2055	SR 1997 MP 0.00 TO BEGIN 4 LANES MP .11	3	2	2WU	NO	NO	0.11	25			1,611					134	9
		"	"	FROM BEGIN 4 LANES MP 0.11 TO NC 211 MP 0.87	3	4	MU	NO	NO	0.76	48			21,402					1,770	119
<b>TOTAL FOR MAP NO. 5</b>										<b>0.87</b>				<b>23,013</b>					<b>1,904</b>	<b>128</b>
2016.CPT06.03.20781.1	Robeson	6	SR 2419	FROM NC 41 MP0.00 TO SR 2235 MP 1.35	5	2	2WU	NO	NO	1.35	22	451	2.70			244	1,107		1,476	152
<b>TOTAL FOR MAP NO. 6</b>										<b>1.35</b>		<b>451</b>	<b>2.70</b>			<b>244</b>	<b>1,107</b>		<b>1,476</b>	<b>152</b>
<b>TOTAL FOR PROJ NO. 2016.CPT06.03.20781.1</b>										<b>6.72</b>		<b>1,952</b>	<b>11.70</b>	<b>23,013</b>		<b>733</b>	<b>4,018</b>		<b>4,404</b>	<b>489</b>
<b>GRAND TOTAL</b>										<b>10.94</b>		<b>2,992</b>	<b>17.90</b>	<b>23,013</b>	<b>10,325</b>	<b>3,215</b>	<b>4,018</b>	<b>8,093</b>	<b>4,404</b>	<b>975</b>

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	ADJ. OF MANHOLES	ADJ. OF METER OR VALVE BOX	PAVED TRENCHING (1, 2")	UNPAVED TRENCHING (1, 2")	JUNCTION BOX (STANDARD SIZE)	JUNCTION BOX (OVER-SIZED, HEAVY DUTY)	2" RISER WITH WEATHERHEAD	INDUCTIVE LOOP	LEAD-IN CABLE (14-2)
												EA	EA	LF	LF	EA	EA	EA	LF	LF
2016CPT.06.03.10781.1	Robeson	1	US 301	FROM CUMBERLAND COUNTY LINE TO NC 71	2	2	2WU	NO	NO	0.81	24			10	50	1.00		1.00	2,000	100
<b>TOTAL FOR MAP NO. 1</b>										<b>0.81</b>		<b>10</b>	<b>50</b>	<b>1.00</b>		<b>1.00</b>	<b>2,000</b>	<b>100</b>		
2016CPT.06.03.10781.1	Robeson	2	NC 211	1200' EAST OF SR 1997 MP 10.04 TO END OF 60' PAVEMENT MP 10.63	4	5	MU	NO	NO	0.59	60	7	3							
		"	"	END 60' PAVEMENT MP 10.63 TO END 6 LANES MP 11.14	4	5	MU	NO	NO	0.51	86	7	4	30	300	3.00	3.00	3.00	7,300	300
		"	"	END 6 LANES MP 11.14 TO SR 1530 MP 13.45	2	2	2WU	NO	NO	2.31	22		1							
<b>TOTAL FOR MAP NO. 2</b>										<b>3.41</b>		<b>14</b>	<b>8</b>	<b>30</b>	<b>300</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>7,300</b>	<b>300</b>
<b>TOTAL FOR PROJ NO. 2016CPT.06.03.10781.1</b>										<b>4.22</b>		<b>14</b>	<b>8</b>	<b>40</b>	<b>350</b>	<b>4.00</b>	<b>3.00</b>	<b>4.00</b>	<b>9,300</b>	<b>400</b>
2016.CPT06.03.20781.1	Robeson	3	SR 1948	SR 1945 MP 2.72 TO SR 1005 MP 3.70	1	2	2WU	NO	NO	0.95	22									
<b>TOTAL FOR MAP NO. 3</b>										<b>0.95</b>										
2016.CPT06.03.20781.1	Robeson	4	SR 1963	FROM NC 41 MP 0.00 TO SR 1004 MP3.61	6	2	2WU	NO	NO	3.55	18									
<b>TOTAL FOR MAP NO. 4</b>										<b>3.55</b>										
2016.CPT06.03.20781.1	Robeson	5	SR 2055	SR 1997 MP 0.00 TO BEGIN 4 LANES MP .11	3	2	2WU	NO	NO	0.11	25	3	3							
		"	"	FROM BEGIN 4 LANES MP 0.11 TO NC 211 MP 0.87	3	4	MU	NO	NO	0.76	48									
<b>TOTAL FOR MAP NO. 5</b>										<b>0.87</b>		<b>3</b>	<b>3</b>							
2016.CPT06.03.20781.1	Robeson	6	SR 2419	FROM NC 41 MP0.00 TO SR 2235 MP 1.35	5	2	2WU	NO	NO	1.35	22									
<b>TOTAL FOR MAP NO. 6</b>										<b>1.35</b>		<b>3</b>	<b>3</b>							
<b>TOTAL FOR PROJ NO. 2016.CPT06.03.20781.1</b>										<b>6.72</b>		<b>3</b>	<b>3</b>							
<b>GRAND TOTAL</b>										<b>10.94</b>		<b>17</b>	<b>11</b>	<b>40</b>	<b>350</b>	<b>4.00</b>	<b>3.00</b>	<b>4.00</b>	<b>9,300</b>	<b>400</b>



# THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO.	SHEET NO.	TOTAL NO.
2016CPT.06.03.10781.1, 2016.CPT06.03.20781.1		

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH MI	WIDTH FT	4413000000-E	4457000000-N	4685000000-E	4686000000-E			4690000000-E	4695000000-E			4697000000-E	4705000000-E	4710000000-E	4721000000-E				
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS	4" X 90 M WHITE THERMO LF	4" X 120 M YELLOW THERMO LF	4" X 120 M WHITE THERMO LF	6" X 120 M WHITE THERMO LF	8" X 90 M YELLOW THERMO LF	8" X 90 M WHITE THERMO LF	8" X 120 M WHITE THERMO LF	16" X 120 M WHITE THERMO LF	24" X 120 M WHITE THERMO LF	THERMO RXR 120 M EA	THERMO MSG ONLY 120 M EA	THERMO MSG SCHOOL 120 M EA				
2016CPT.06.03.10781.1	Robeson	1	US 301	FROM CUMBERLAND COUNTY LINE TO NC 71	2	2	2WU	0.81	24	91	1	7,290	6,197														
<b>TOTAL FOR MAP NO. 1</b>									<b>91</b>	<b>1</b>	<b>7,290</b>	<b>6,197</b>															
2016CPT.06.03.10781.1	Robeson	2	NC 211	1200' EAST OF SR 1997 MP 10.04 TO END OF 60' PAVEMENT MP 10.63	4	5	MU	0.59	60	382			11,500	3,225					150	450	938	18					
		*	*	END 60' PAVEMENT MP 10.63 TO END 6 LANES MP 11.14	4	5	MU	0.51	86				12,000	5,330			770				550		28				
		*	*	END 6 LANES MP 11.14 TO SR 1530 MP 13.45	2	2	2WU	2.31	22			25,600	11,500	3,225	600	1,100			150	450	600	9					
<b>TOTAL FOR MAP NO. 2</b>									<b>382</b>		<b>25,600</b>	<b>35,000</b>	<b>11,780</b>	<b>600</b>	<b>1,870</b>			<b>300</b>	<b>900</b>	<b>2,088</b>	<b>27</b>	<b>28</b>					
<b>TOTAL FOR PROJ NO. 2016CPT.06.03.10781.1</b>									<b>473</b>	<b>1</b>	<b>32,890</b>	<b>52,977</b>		<b>600</b>	<b>1,870</b>			<b>300</b>	<b>900</b>	<b>2,088</b>	<b>27</b>	<b>28</b>			<b>55</b>		
2016.CPT06.03.20781.1	Robeson	3	SR 1948	SR 1945 MP 2.72 TO SR 1005 MP 3.70	1	2	2WU	0.95	22	106										100	175			12			
<b>TOTAL FOR MAP NO. 3</b>									<b>106</b>											<b>100</b>	<b>175</b>			<b>12</b>			
2016.CPT06.03.20781.1	Robeson	4	SR 1963	FROM NC 41 MP 0.00 TO SR 1004 MP3.61	6	2	2WU	3.55	18	398																	
<b>TOTAL FOR MAP NO. 4</b>									<b>398</b>																		
2016.CPT06.03.20781.1	Robeson	5	SR 2055	SR 1997 MP 0.00 TO BEGIN 4 LANES MP .11	3	2	2WU	0.11	25	97			1,160														
		*	*	FROM BEGIN 4 LANES MP 0.11 TO NC 211 MP 0.87	3	4	MU	0.76	48				8,840	5,350			150			400	425	4	16				
<b>TOTAL FOR MAP NO. 5</b>									<b>97</b>			<b>10,000</b>	<b>5,350</b>			<b>150</b>			<b>400</b>	<b>425</b>	<b>4</b>	<b>16</b>					
2016.CPT06.03.20781.1	Robeson	6	SR 2419	FROM NC 41 MP0.00 TO SR 2235 MP 1.35	5	2	2WU	1.35	22	151																	
<b>TOTAL FOR MAP NO. 6</b>									<b>151</b>																		
<b>TOTAL FOR PROJ NO. 2016.CPT06.03.20781.1</b>									<b>752</b>			<b>10,000</b>	<b>5,350</b>			<b>150</b>			<b>500</b>	<b>600</b>	<b>4</b>	<b>16</b>		<b>12</b>			
<b>GRAND TOTAL</b>									<b>1,225</b>	<b>1</b>		<b>51,197</b>	<b>17,130</b>			<b>1,870</b>	<b>150</b>			<b>500</b>	<b>600</b>	<b>31</b>	<b>44</b>		<b>12</b>		
									<b>10.94</b>			<b>68,327</b>			<b>2,020</b>					<b>87</b>							

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH MI	WIDTH FT	4725000000-E				4810000000-E		4830000000-E	4835000000-E	4840000000-N	4900000000-N				
										THERMO LT ARROW 90 M EA	THERMO RT ARROW 90 M EA	THERMO STR ARROW 90 M EA	THERMO STR & RT ARROW 90 M EA	4" WHITE PAINT LF	4" YELLOW PAINT LF	16" WHITE PAINT LF	24" WHITE PAINT LF	PAINT MSG RXR EA	YELLOW & YELLOW MARKERS EA	CRYSTAL & RED MARKERS EA			
2016CPT.06.03.10781.1	Robeson	1	US 301	FROM CUMBERLAND COUNTY LINE TO NC 71	2	2	2WU	0.81	24										60				
<b>TOTAL FOR MAP NO. 1</b>									<b>0.81</b>										<b>60</b>				
2016CPT.06.03.10781.1	Robeson	2	NC 211	1200' EAST OF SR 1997 MP 10.04 TO END OF 60' PAVEMENT MP 10.63	4	5	MU	0.59	60	40	16	16	5						150	200			
		*	*	END 60' PAVEMENT MP 10.63 TO END 6 LANES MP 11.14	4	5	MU	0.51	86	10	10	30	8						70	200			
		*	*	END 6 LANES MP 11.14 TO SR 1530 MP 13.45	2	2	2WU	2.31	22	40	16	16	5						150	200			
<b>TOTAL FOR MAP NO. 2</b>									<b>90</b>	<b>42</b>	<b>62</b>	<b>18</b>						<b>370</b>	<b>600</b>				
<b>TOTAL FOR PROJ NO. 2016CPT.06.03.10781.1</b>									<b>90</b>	<b>42</b>	<b>62</b>	<b>18</b>						<b>430</b>	<b>600</b>				
										<b>212</b>								<b>1,030</b>					
2016.CPT06.03.20781.1	Robeson	3	SR 1948	SR 1945 MP 2.72 TO SR 1005 MP 3.70	1	2	2WU	0.95	22				19,800	22,000					66				
<b>TOTAL FOR MAP NO. 3</b>									<b>0.95</b>				<b>19,800</b>	<b>22,000</b>					<b>66</b>				
2016.CPT06.03.20781.1	Robeson	4	SR 1963	FROM NC 41 MP 0.00 TO SR 1004 MP3.61	6	2	2WU	3.55	18				38,000										
<b>TOTAL FOR MAP NO. 4</b>									<b>3.55</b>				<b>38,000</b>										
2016.CPT06.03.20781.1	Robeson	5	SR 2055	SR 1997 MP 0.00 TO BEGIN 4 LANES MP .11	3	2	2WU	0.11	25														
		*	*	FROM BEGIN 4 LANES MP 0.11 TO NC 211 MP 0.87	3	4	MU	0.76	48	10	5	2	4	5,350	10,000	200	425	8	75	165			
<b>TOTAL FOR MAP NO. 5</b>									<b>10</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>5,350</b>	<b>10,000</b>	<b>200</b>	<b>425</b>	<b>8</b>	<b>75</b>	<b>165</b>				
2016.CPT06.03.20781.1	Robeson	6	SR 2419	FROM NC 41 MP0.00 TO SR 2235 MP 1.35	5	2	2WU	1.35	22				28,400	24,200									
<b>TOTAL FOR MAP NO. 6</b>									<b>1.35</b>				<b>28,400</b>	<b>24,200</b>									
<b>TOTAL FOR PROJ NO. 2016.CPT06.03.20781.1</b>									<b>10</b>	<b>5</b>	<b>2</b>	<b>4</b>	<b>91,550</b>	<b>56,200</b>	<b>200</b>	<b>425</b>	<b>8</b>	<b>141</b>	<b>165</b>				
<b>GRAND TOTAL</b>									<b>10.94</b>				<b>100</b>	<b>47</b>	<b>64</b>	<b>22</b>	<b>91,550</b>	<b>56,200</b>	<b>200</b>	<b>425</b>	<b>8</b>	<b>571</b>	<b>765</b>
										<b>233</b>			<b>147,750</b>					<b>1,336</b>					