

05/08/99

CONTRACT NO.: DA00229 WBS ELEMENT: ICR.10661.29, ETC.

CONTRACT NO.: DA00229

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

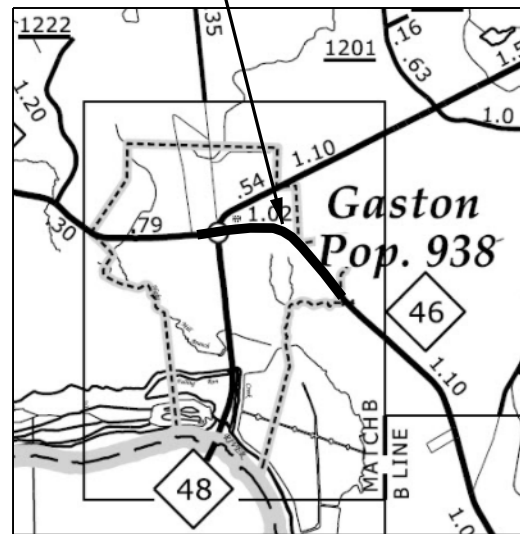
**NORTHAMPTON COUNTY**

LOCATION: MAP 1 NC 46 FROM GASTON ECL TO BEGIN C&G  
 MAP 2 NC 46 FROM BEGIN C&G TO END C&G  
 MAP 3 NC 46 FROM END C&G TO NC 48  
 MAP 4 NC 46 FROM NC 48 TO SR 1281 (BROUGHTON ST.)  
 MAP 5 SR 1614 FROM SR 1217 TO VIRGINIA SL  
 MAP 6 SR 1217 FROM SR 1214 TO VIRGINIA SL  
 MAP 7 SR 1202 FROM SR 1200 TO SR 1201  
 MAP 8 SR 1500 FROM US 158 TO SR 1505

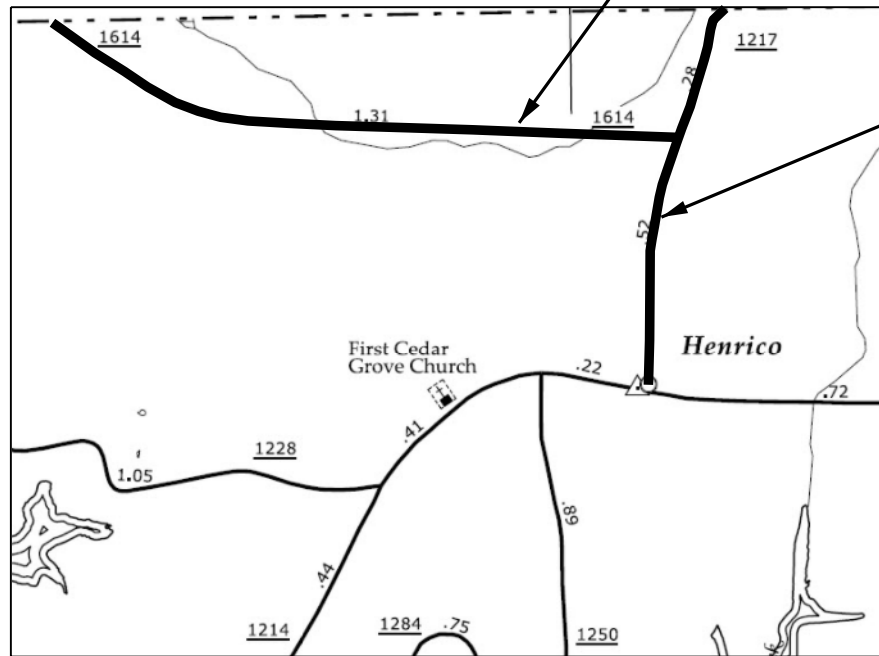
TYPE OF WORK: MILLING & RESURFACING

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	1CR.10661.29, ETC.	1	8
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
1CR.10661.29		MAPS 1 - 4	
1CR.20661.103		MAP 5	
1CR.20661.104		MAP 6	
1CR.20661.105		MAP 7	
1CR.20661.106		MAP 8	

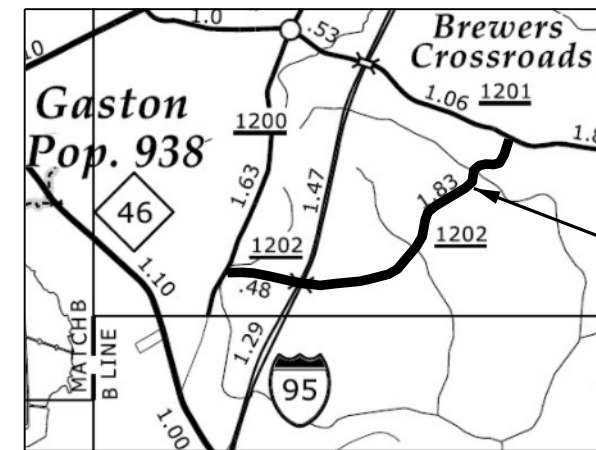
MAPS 1 - 4



MAP 5

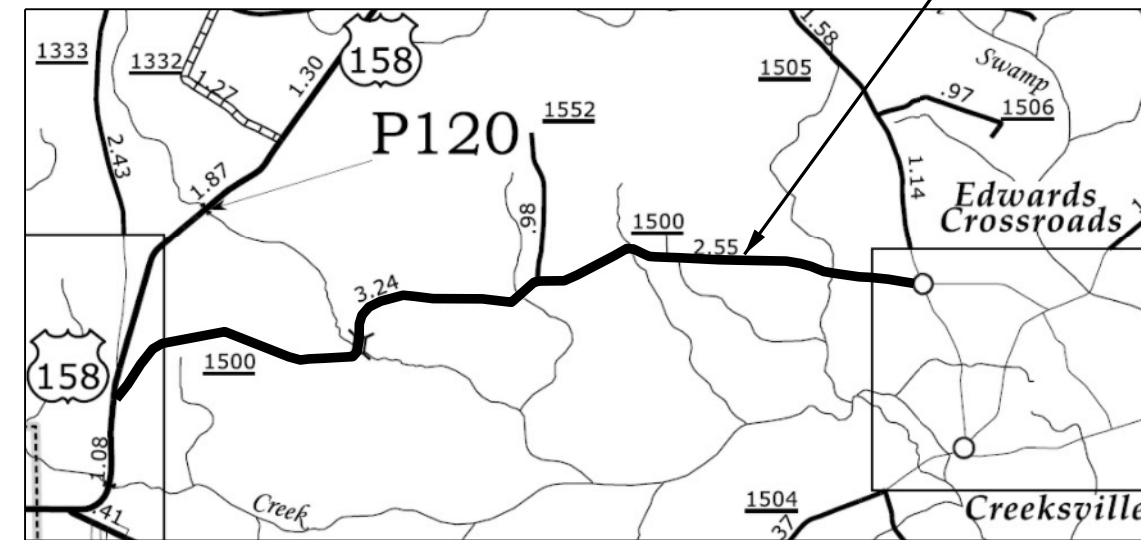


MAP 6



MAP 7

MAP 8



**NTS**

**PROJECT LENGTH**

LENGTH OF ROADWAY PROJECT MAP 1 =	0.12 MI.
LENGTH OF ROADWAY PROJECT MAP 2 =	0.82 MI.
LENGTH OF ROADWAY PROJECT MAP 3 =	0.15 MI.
LENGTH OF ROADWAY PROJECT MAP 4 =	0.13 MI.
LENGTH OF ROADWAY PROJECT MAP 5 =	1.33 MI.
LENGTH OF ROADWAY PROJECT MAP 6 =	0.73 MI.
LENGTH OF ROADWAY PROJECT MAP 7 =	2.31 MI.
LENGTH OF ROADWAY PROJECT MAP 8 =	5.79 MI.

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**  
 113 Airport Dr., Edenton NC, 27932

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2012 STANDARD SPECIFICATIONS

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LETTING DATE:  
 MARCH 25, 2015

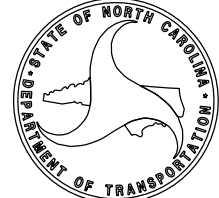
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W.B. HOBBS, P.E.  
 DIVISION PROJECT MANAGER

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C.E. SLACHTA  
 DIVISION PROPOSALS ENGINEER

**DIVISION OF HIGHWAYS**  
 STATE OF NORTH CAROLINA



05/08/99

WBS ELEMENT: ICR.10661.29, ETC.

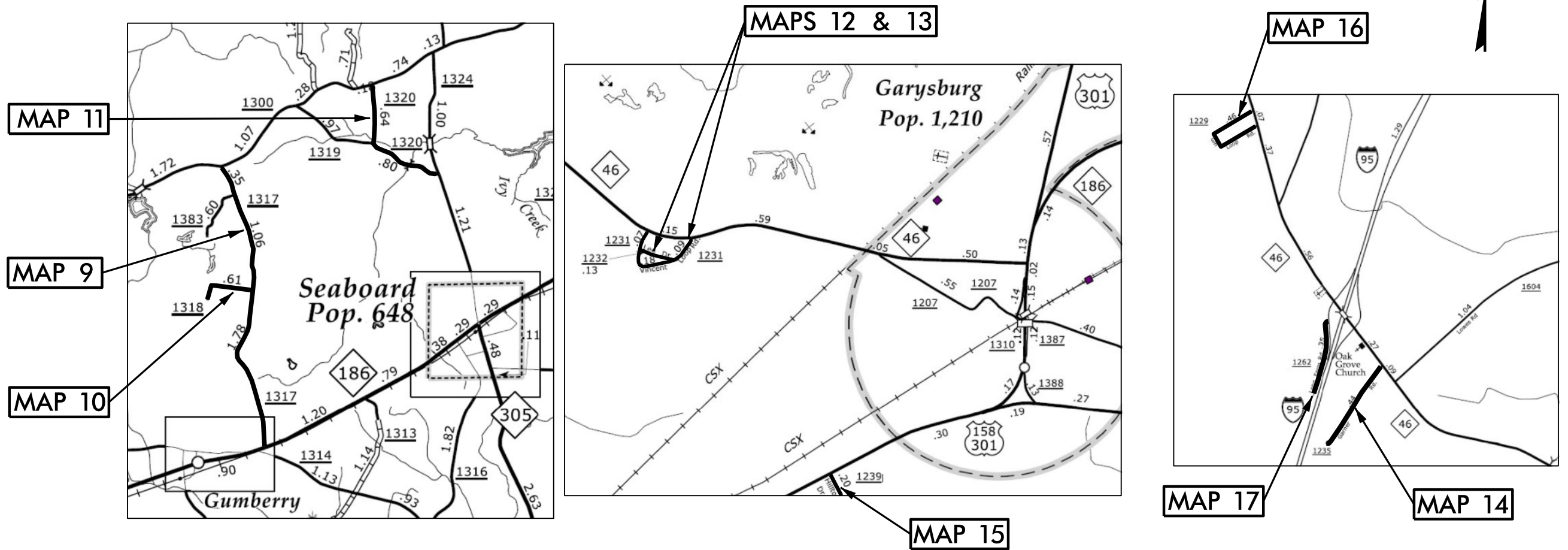
CONTRACT NO.: DA00229

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**NORTHAMPTON COUNTY**

LOCATION: MAP 9 SR 1317 FROM SR 1300 TO NC 186  
 MAP 10 SR 1318 FROM SR 1317 TO END  
 MAP 11 SR 1320 FROM SR 1300 TO SR 1324  
 MAP 12 SR 1231 FROM NC 46 TO NC 46  
 MAP 13 SR 1232 FROM SR 1231 TO SR 1231  
 MAP 14 SR 1235 FROM NC 46 TO END  
 MAP 15 SR 1239 FROM US 301 TO END  
 MAP 16 SR 1229 FROM NC 46 TO NC 46  
 MAP 17 SR 1262 FROM I-95 RAMP TO END  
 TYPE OF WORK: RESURFACING

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	ICR.10661.29, ETC.	2	8
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
1CR.20661.107		MAP 9	
1CR.20661.108		MAP 10	
1CR.20661.109		MAP 11	
1CR.20661.110		MAP 12	
1CR.20661.111		MAP 13	
1CR.20661.112		MAP 14	
1CR.20661.113		MAP 15	
1CR.20661.114		MAP 16	
1CR.20661.115		MAP 17	



**NTS**

**PROJECT LENGTH**

LENGTH OF ROADWAY PROJECT MAP 9	= 3.15 MI.
LENGTH OF ROADWAY PROJECT MAP 10	= 0.44 MI.
LENGTH OF ROADWAY PROJECT MAP 11	= 1.41 MI.
LENGTH OF ROADWAY PROJECT MAP 12	= 0.31 MI.
LENGTH OF ROADWAY PROJECT MAP 13	= 0.12 MI.
LENGTH OF ROADWAY PROJECT MAP 14	= 0.40 MI.
LENGTH OF ROADWAY PROJECT MAP 15	= 0.19 MI.
LENGTH OF ROADWAY PROJECT MAP 16	= 0.43 MI.
LENGTH OF ROADWAY PROJECT MAP 17	= 0.32 MI.

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 113 Airport Dr., Edenton NC, 27932

2012 STANDARD SPECIFICATIONS

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 MARCH 25, 2015

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 STATE OF NORTH CAROLINA

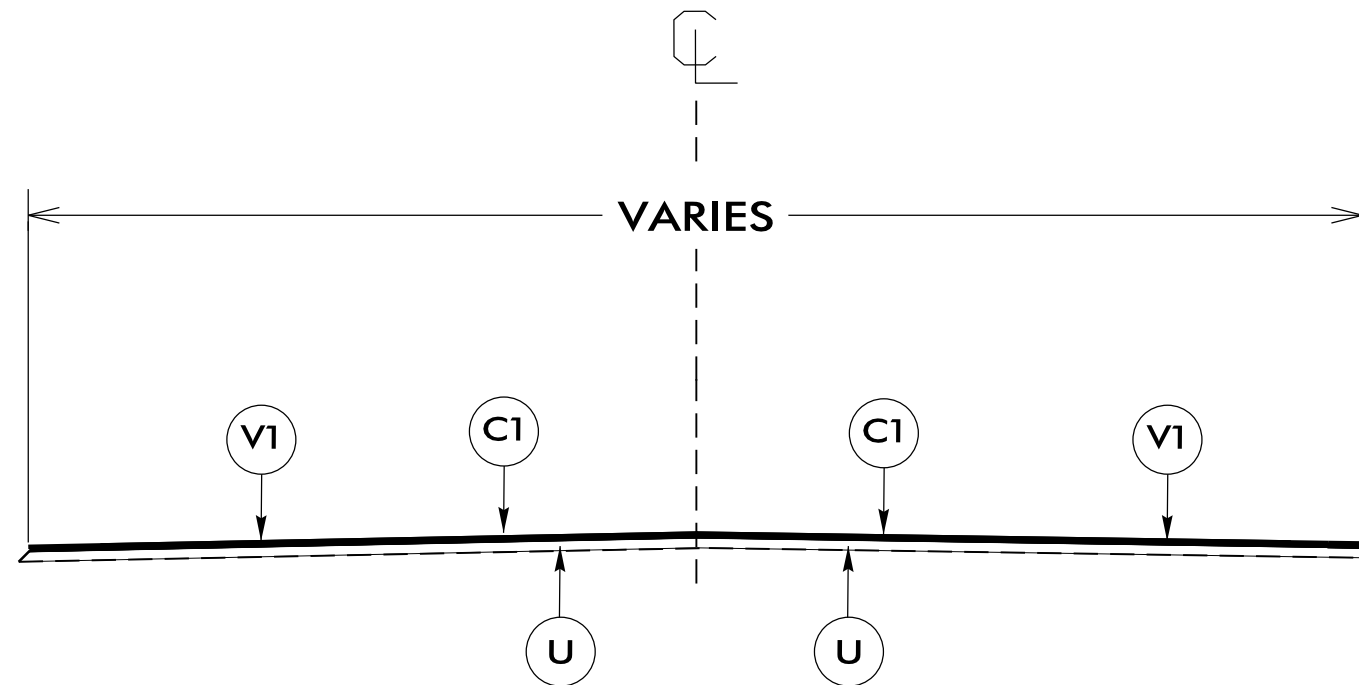
P A V E M E N T S C H E D U L E

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
V1	MILLING BITUMINOUS PAVEMENT. 1.5" IN DEPTH.
U	EXISTING PAVEMENT.

PROJECT REFERENCE NO.	SHEET NO.
1CR.10661.29, ETC.	3 of 8

NOTES:

- \*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 SUMMARY OF QUANTITIES
- \*SHOULDER RECONSTRUCTION TO BE PERFORMED BY OTHERS
- \*PAVEMENT MARKINGS TO BE PERFORMED BY OTHERS



**TYPICAL SECTION NO. 1**

**USE WITH MAPS 1, 3, & 4**

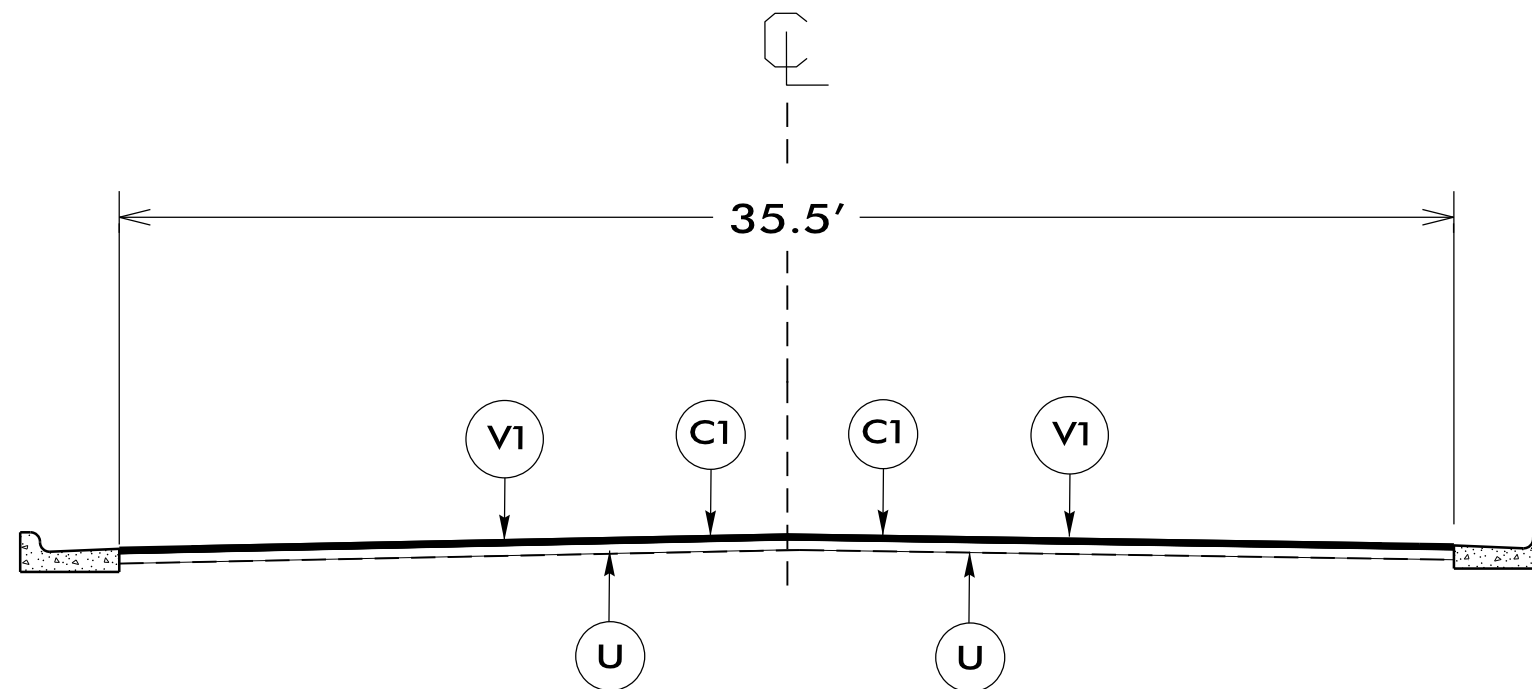
NTS

PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
V1	MILLING BITUMINOUS PAVEMENT. 1.5" IN DEPTH.
U	EXISTING PAVEMENT.

NOTES:

- \*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 SUMMARY OF QUANTITIES
- \*CONTRACTOR SHALL MILL 1.5" BELOW EXISTING EDGE OF CONC. CURB & GUTTER.
- \*PAVEMENT MARKINGS TO BE PERFORMED BY OTHERS



**TYPICAL SECTION NO. 2**

USE WITH MAP 2

NTS

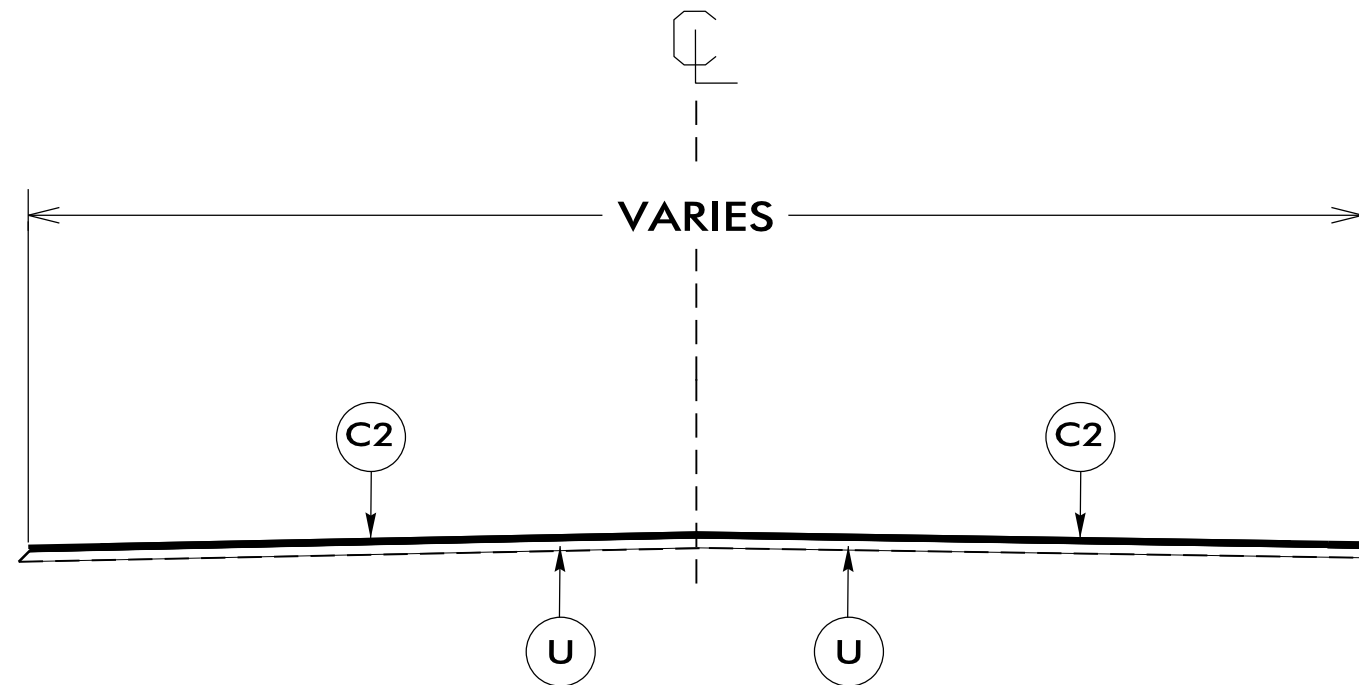
PAVEMENT SCHEDULE

C2	PROP. APPROX. 1.25" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 137.5 LBS. PER SQ. YD.
U	EXISTING PAVEMENT.

PROJECT REFERENCE NO.	SHEET NO.
1CR.10661.29, ETC.	5 of 8

NOTES:

- \*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 SUMMARY OF QUANTITIES
- \*SHOULDER RECONSTRUCTION TO BE PERFORMED BY OTHERS
- \*PAVEMENT MARKINGS TO BE PERFORMED BY OTHERS
- \*BRIDGE NO. 55 ON MAP 7 SHALL NOT BE RESURFACED.
- \*BRIDGE NO. 14 ON MAP 8 TO BE MILLED 1.25" AND RESURFACED WITH 1.25" OF MIX SF9.5A.



**TYPICAL SECTION NO. 3**

**USE WITH MAPS 5 - 17**

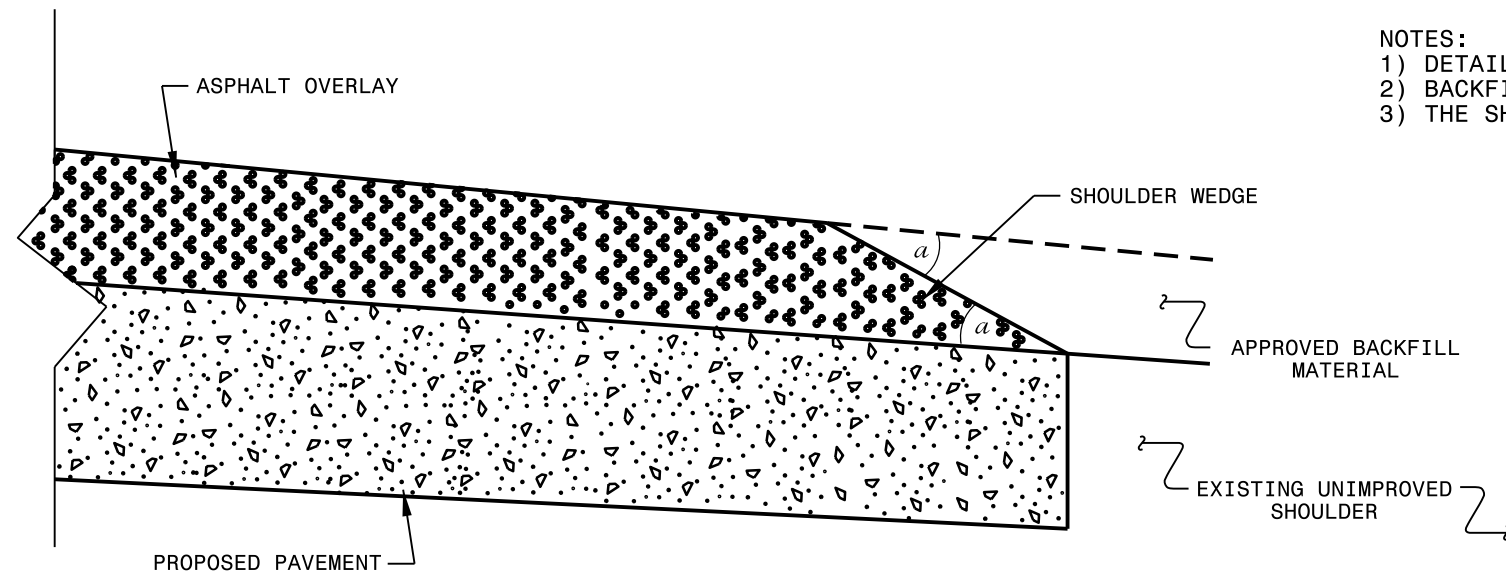
NTS

PROJECT NO.	SHEET NO.	TOTAL NO.
1CR.10661.29, ETC.	6	8

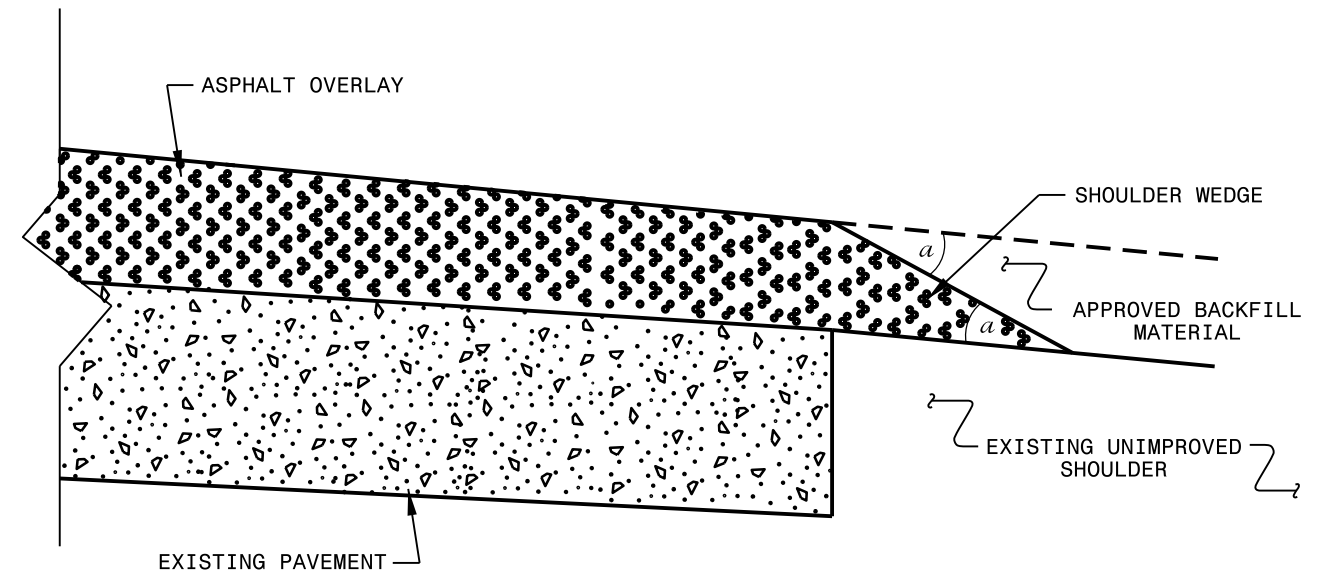
### SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	MOBILIZATION LS	1.5" MILLING SY	INCIDENTAL MILLING SY	SURFACE COURSE, S9.5C TONS	SURFACE COURSE, SF9.5A TONS	ASPHALT BINDER FOR PLANT MIX TONS	AC PLANT MIX (REPAIR) TONS	ADJ. OF MANHOLES EA	ADJ. OF METER OR VALVE BOX EA	TEMPORARY TRAFFIC CONTROL LS
1CR.10661.29	Northampton	1	NC 46	FROM GASTON ECL TO BEGIN C&G	1	2	2WU	NO	NO	0.12	Varies	1	2,000		173		10				1
1CR.10661.29	Northampton	2	NC 46	FROM BEGIN C&G TO END C&G	2	3	MU	NO	NO	0.82	35.5	*	17,300		1,563		92	10	4		*
1CR.10661.29	Northampton	3	NC 46	FROM END C&G TO NC 48	1	2	2WU	NO	NO	0.15	Varies	*	2,200		189		11				*
1CR.10661.29	Northampton	4	NC 46	FROM NC 48 TO BROUGHTON ST.	1	2	2WU	NO	NO	0.13	Varies	*	1,900		166		10				*
1CR.20661.103	Northampton	5	SR 1614	FROM SR 1217 TO VA SL	3	2	2WU	NO	NO	1.33	19	*		40		1,110	74				*
1CR.20661.104	Northampton	6	SR 1217	FROM SR 1214 TO VA SL	3	2	2WU	NO	NO	0.73	20	*		100		645	43			2	*
1CR.20661.105	Northampton	7	SR 1202	FROM SR 1200 TO SR 1201	3	2	2WU	NO	NO	2.31	20	*		80		1,982	133				*
1CR.20661.106	Northampton	8	SR 1500	FROM US 158 TO SR 1505	3	2	2WU	NO	NO	5.79	21	*		220		5,076	340				*
1CR.20661.107	Northampton	9	SR 1317	FROM SR 1300 TO NC 186	3	2	2WU	NO	NO	3.15	19	*		200		2,432	163				*
1CR.20661.108	Northampton	10	SR 1318	FROM SR 1317 TO DEAD END	3	2	2WU	NO	NO	0.44	18	*		50		337	23				*
1CR.20661.109	Northampton	11	SR 1320	FROM SR 1300 TO SR 1324	3	2	2WU	NO	NO	1.41	18	*		150		1,089	73				*
1CR.20661.110	Northampton	12	SR 1231	FROM NC 46 TO NC 46	3	2	2WU	NO	NO	0.31	20	*		80		266	18				*
1CR.20661.111	Northampton	13	SR 1232	FROM SR 1231 TO SR 1231	3	2	2WU	NO	NO	0.12	20	*				113	8				*
1CR.20661.112	Northampton	14	SR 1235	FROM NC 46 TO END	3	2	2WU	NO	NO	0.40	18	*		40		310	21			1	*
1CR.20661.113	Northampton	15	SR 1239	FROM US 301 TO END	3	2	2WU	NO	NO	0.19	20	*		40		172	12		3	1	*
1CR.20661.114	Northampton	16	SR 1229	FROM NC 46 TO NC 46	3	2	2WU	NO	NO	0.43	16	*		80		311	21				*
1CR.20661.115	Northampton	17	SR 1262	FROM I-95 RAMP TO END	3	2	2WU	NO	NO	0.32	16	*		60		238	16				*
<b>TOTAL</b>										<b>18.15</b>		<b>1</b>	<b>23,400</b>	<b>1,140</b>	<b>2,091</b>	<b>14,081</b>	<b>1,068</b>	<b>10</b>	<b>7</b>	<b>4</b>	<b>1</b>

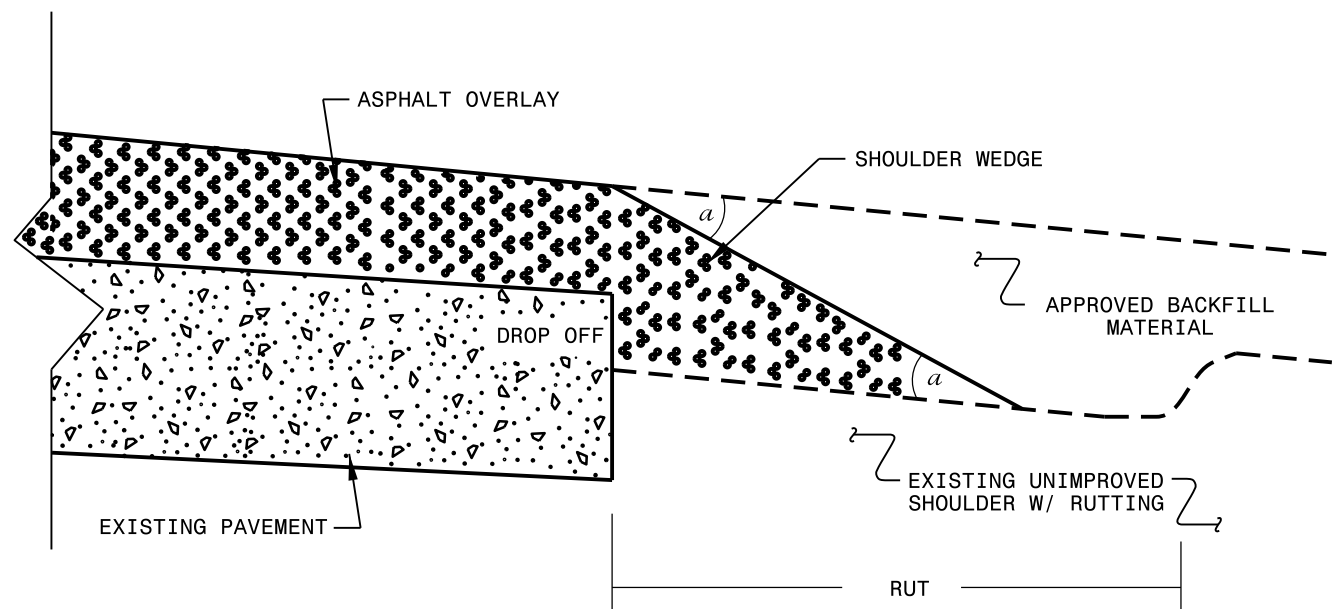
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFc AND ULTRA-THIN BONDED WEARING COURSE.
  - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
  - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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



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



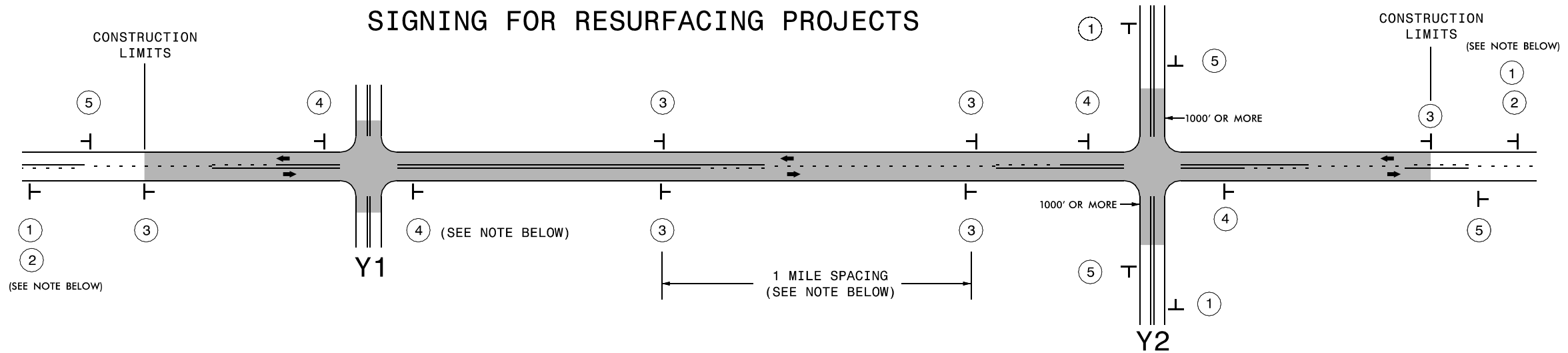
**SHOULDER WEDGE DETAIL**  
(Resurfacing Adjacent to  
Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

<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		
<div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">①</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">②</div> </div>	<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div> <p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> </div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div> <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> </div> </div>	<p style="text-align: center;"><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 style="text-align: center; font-size: small;">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; align-items: center; margin: 10px 0;"> <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 style="text-align: center; font-size: small;">PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
③	<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div> <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> </div> </div>	
④	<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div> <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> </div> </div>	
⑤	<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div> <p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.</p> </div> </div>	

8/8/2013 8:51:10 AM \\ZTC\Resurfacing\2013\Documents\New\_Procedures\_05\_09\_2013\Resurfacing\_AdvWarn\_2Ln.dgn User:frmgarratt

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