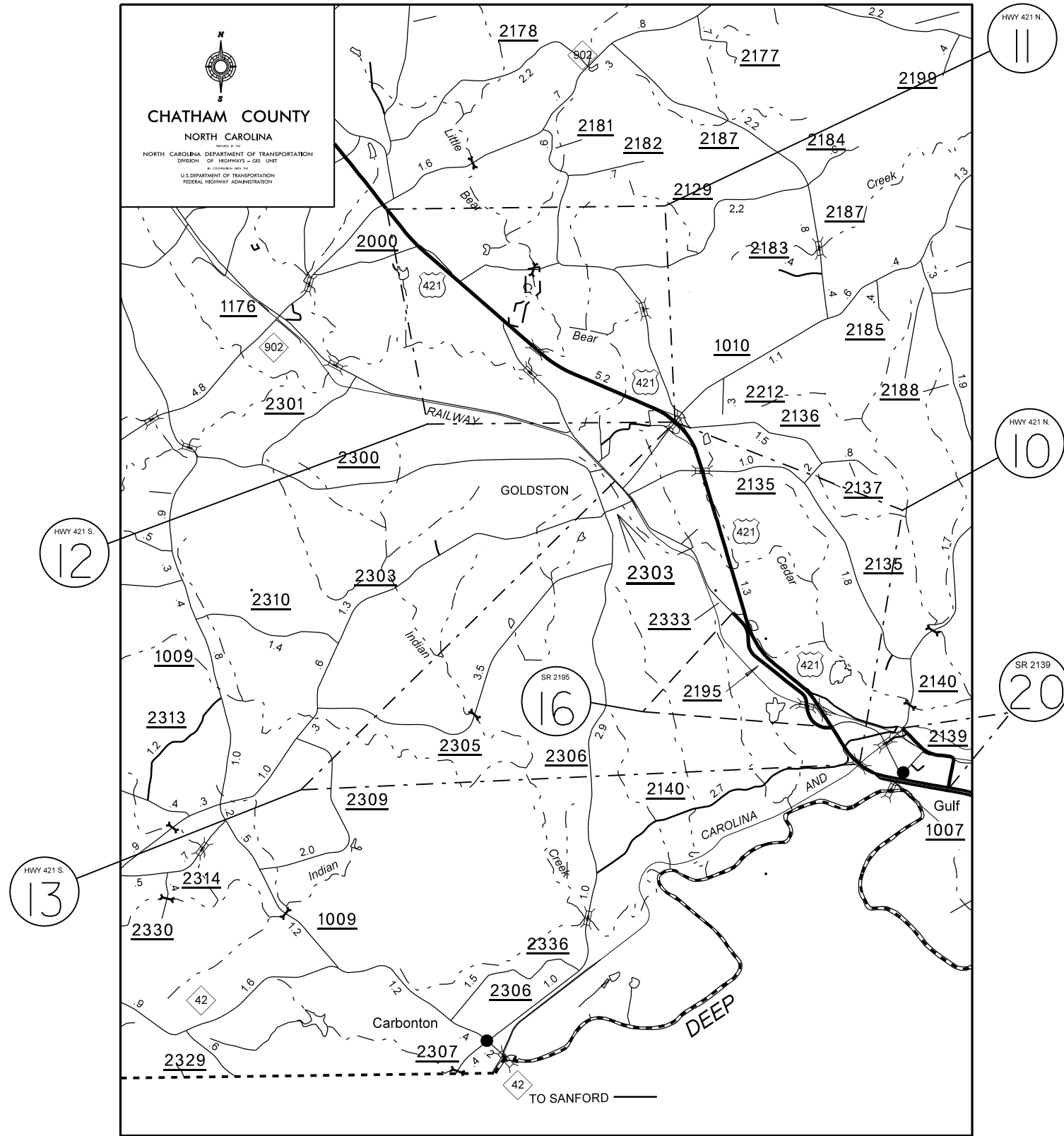
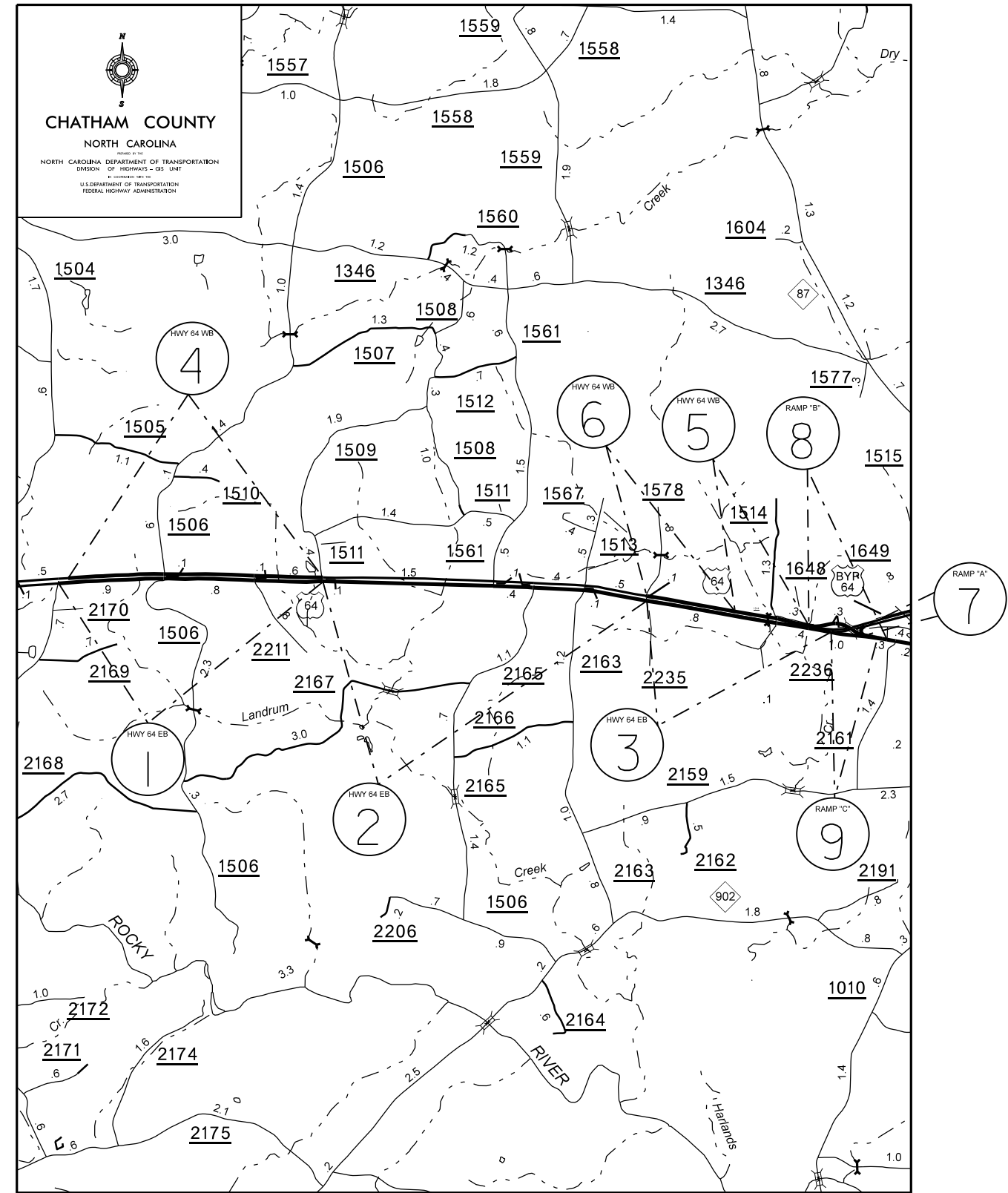




### MAPS #10 - #13, #16 & #20



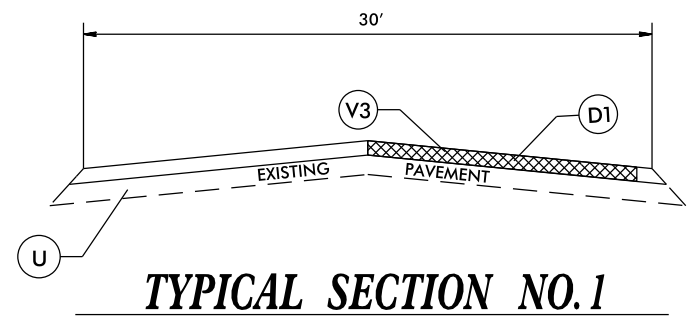
### MAPS #1 - #9



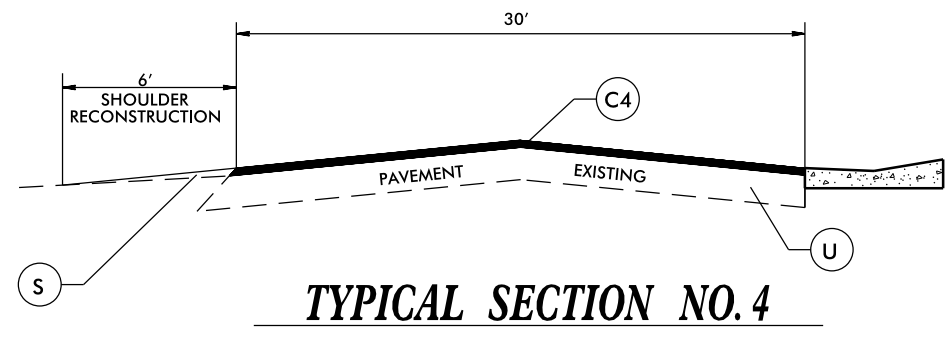




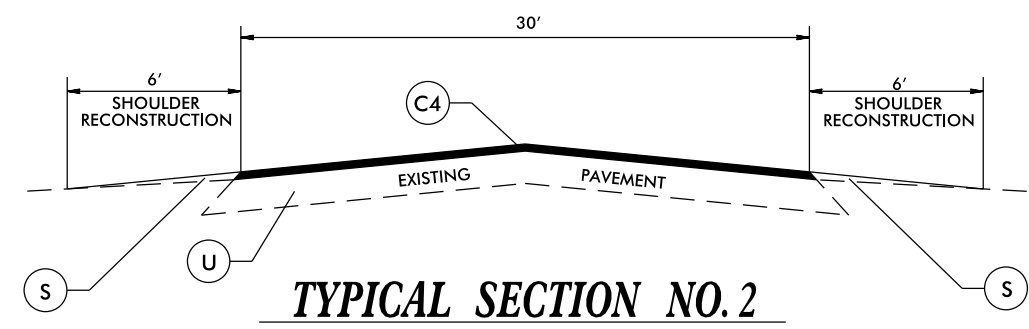




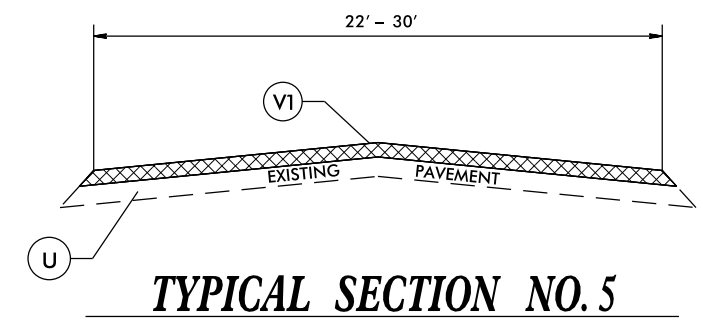
**TYPICAL SECTION NO.1**



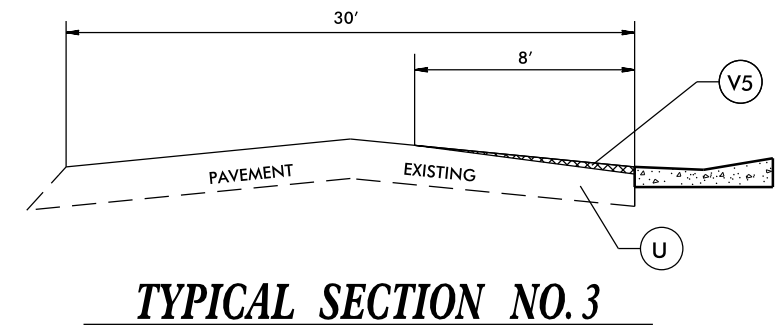
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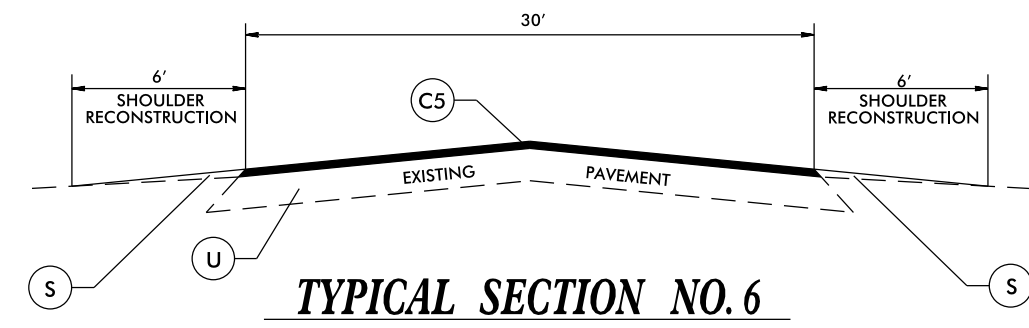
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**TYPICAL SECTION NO.5**



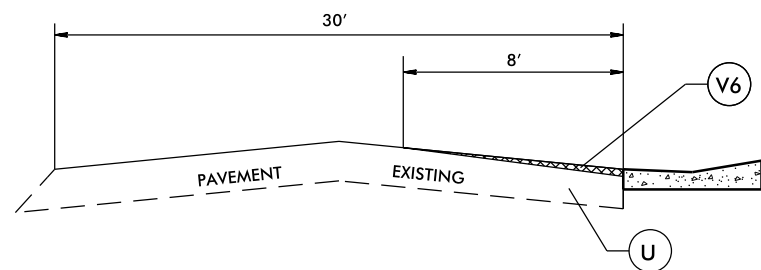
**TYPICAL SECTION NO.3**



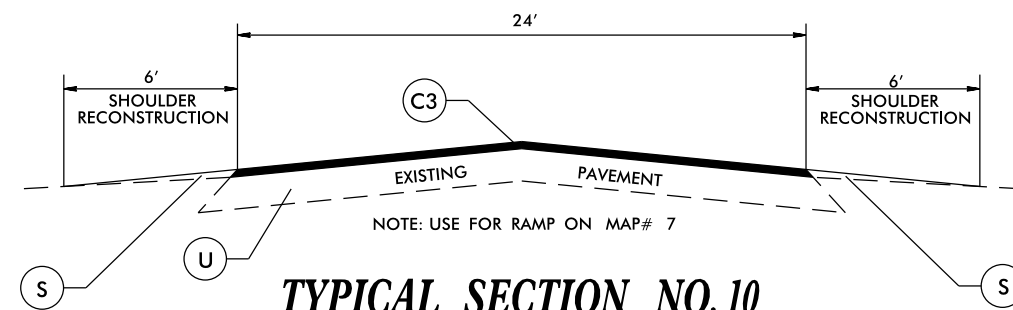
**TYPICAL SECTION NO.6**

PAVEMENT SCHEDULE	
C4	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C5	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
S	AGGREGATE SHOULDER BORROW
U	EXISTING PAVEMENT.
V1	MILLING 1.5" IN DEPTH
V3	MILLING 2.5" IN DEPTH
V5	MILLING 0.0" - 1.5" IN DEPTH

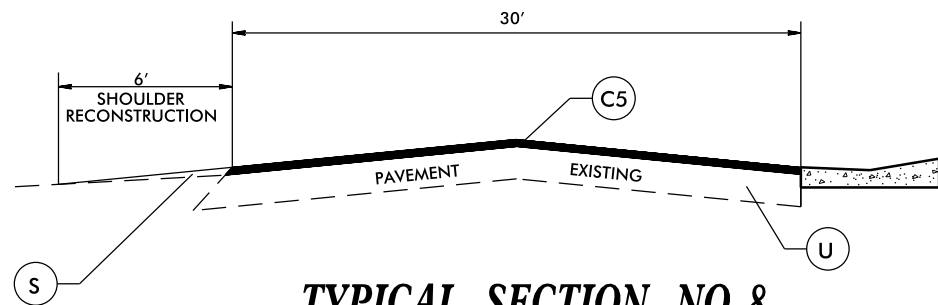
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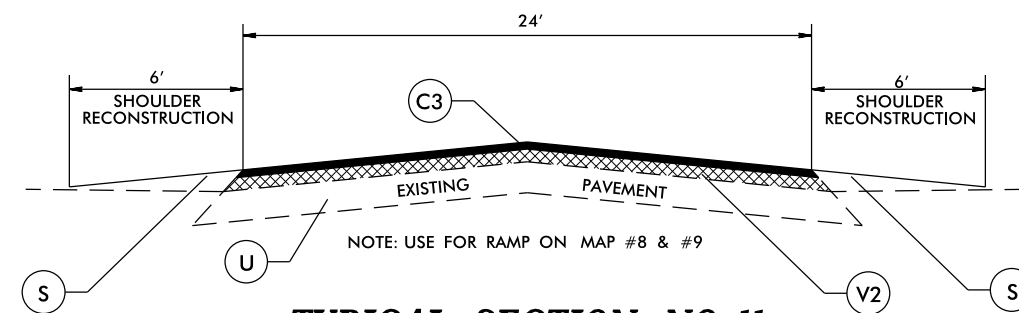
**TYPICAL SECTION NO. 7**



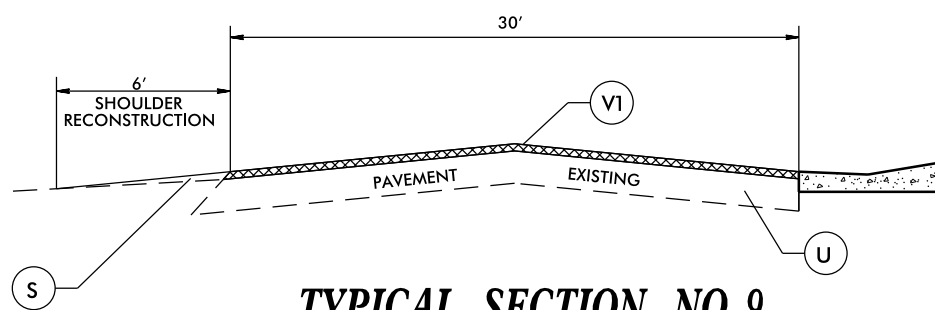
**TYPICAL SECTION NO. 10**



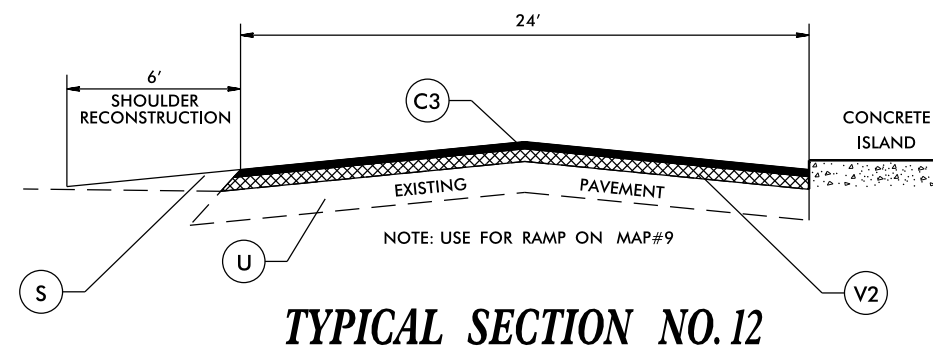
**TYPICAL SECTION NO. 8**



**TYPICAL SECTION NO. 11**

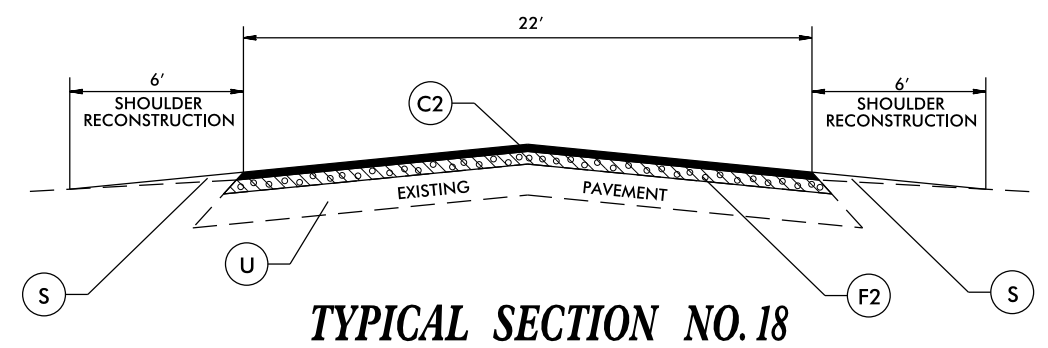
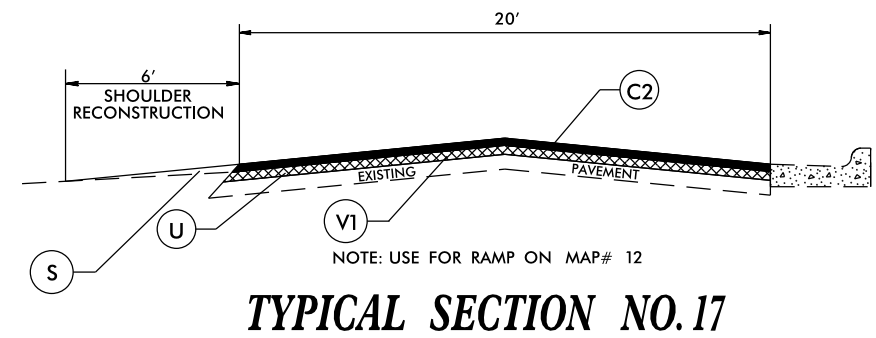
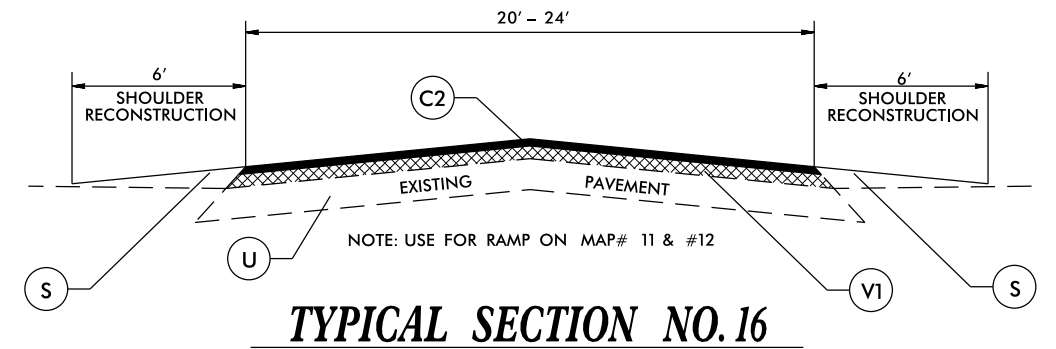
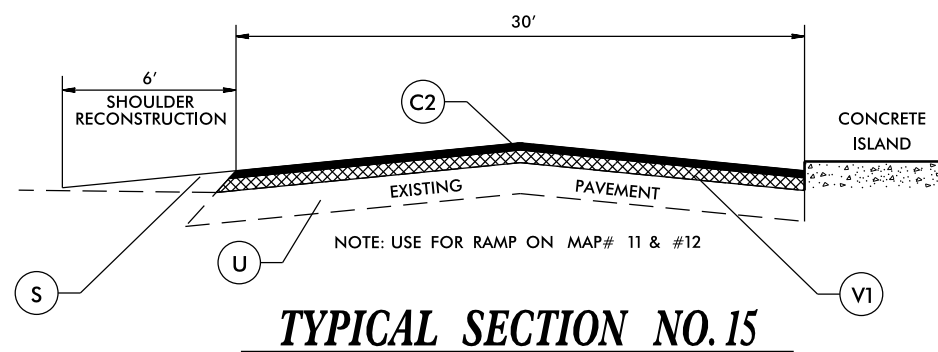
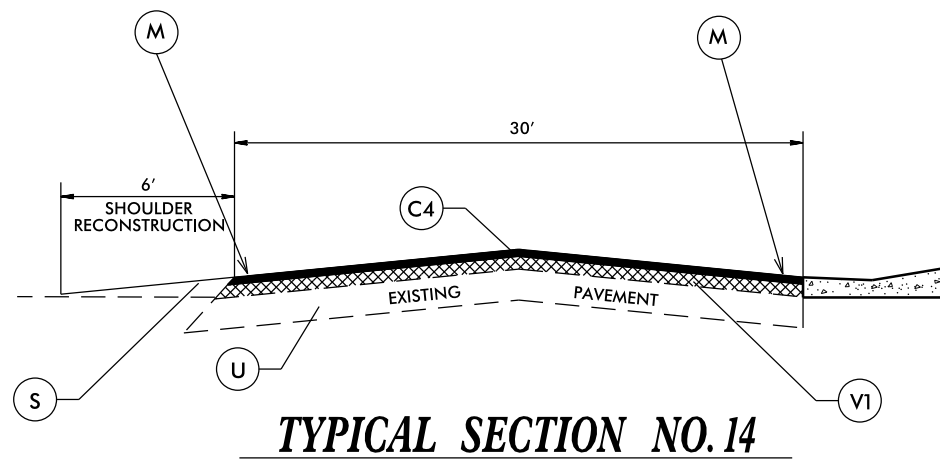
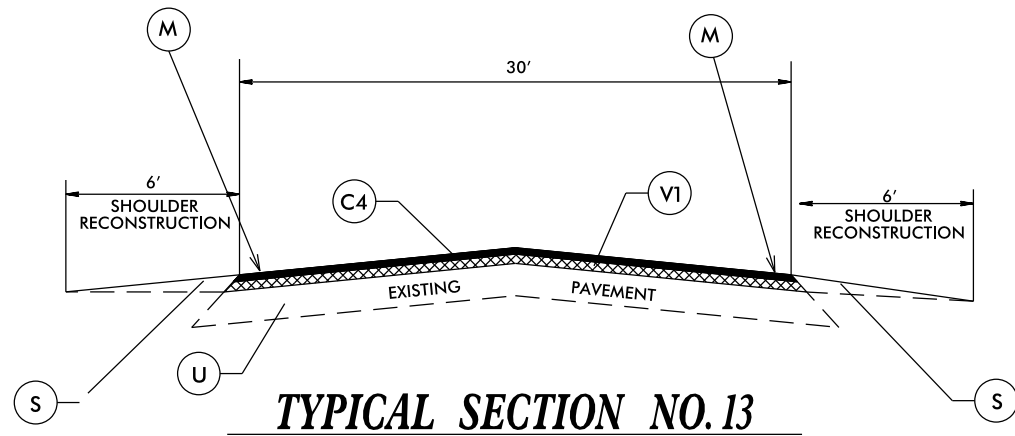


**TYPICAL SECTION NO. 9**



**TYPICAL SECTION NO. 12**

PAVEMENT SCHEDULE	
C3	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 220 LBS. PER SQ. YD.
C5	PROP. APPROX. 2.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 224 LBS. PER SQ. YD.
S	AGGREGATE SHOULDER BORROW
U	EXISTING PAVEMENT.
V1	MILLING 1.5" IN DEPTH
V2	MILLING 2.0" IN DEPTH
V6	MILLING 0.0" - 2.0" IN DEPTH



PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C4	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
F2	PROPOSED ASPHALT SURFACE TREATMENT, MAT COAT WITH #78M STONE
M	PROPOSED MILLED RUMBLE STRIPS
S	AGGREGATE SHOULDER BORROW
U	EXISTING PAVEMENT.
T	EARTH MATERIAL
V1	MILLING 1.5" IN DEPTH
V2	MILLING 2.0" IN DEPTH



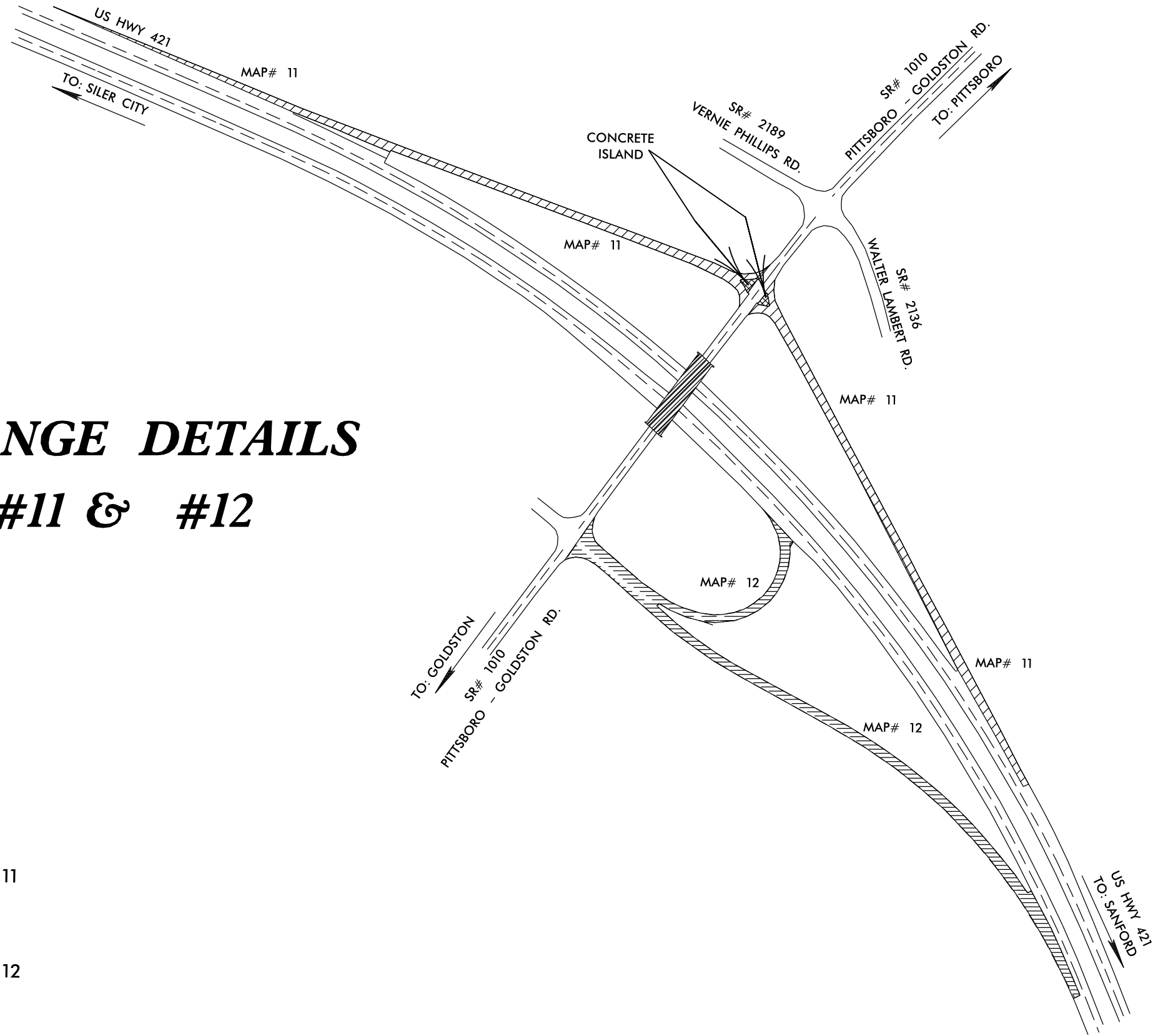


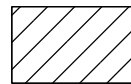
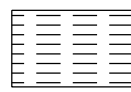




# INTERCHANGE DETAILS

## MAP #11 & #12

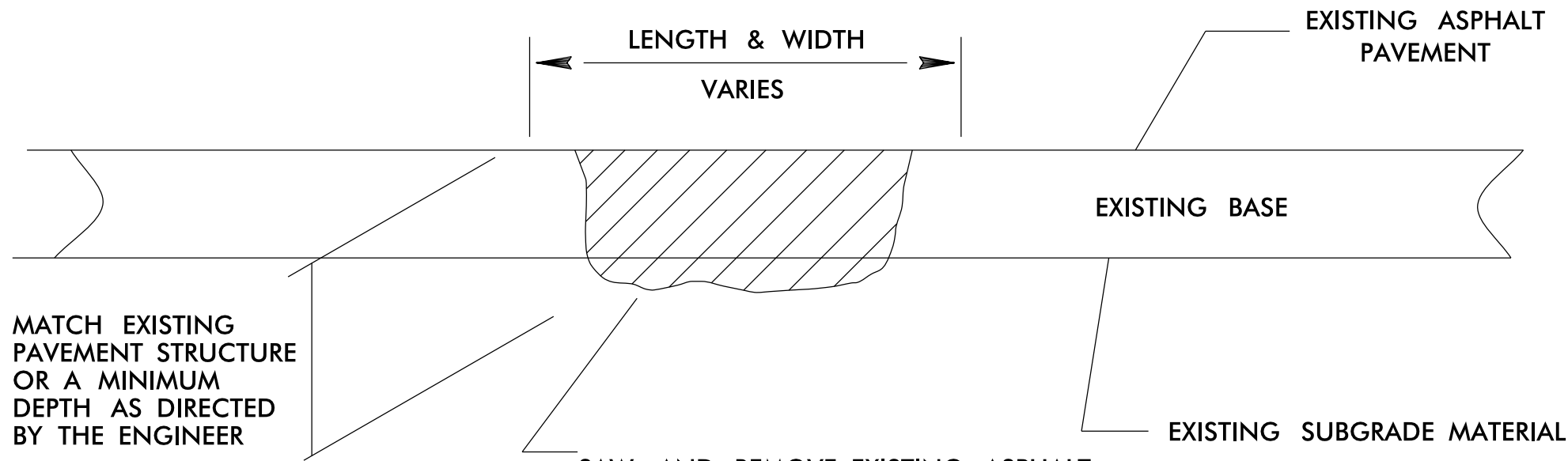


-  MAP# 11
-  MAP# 12



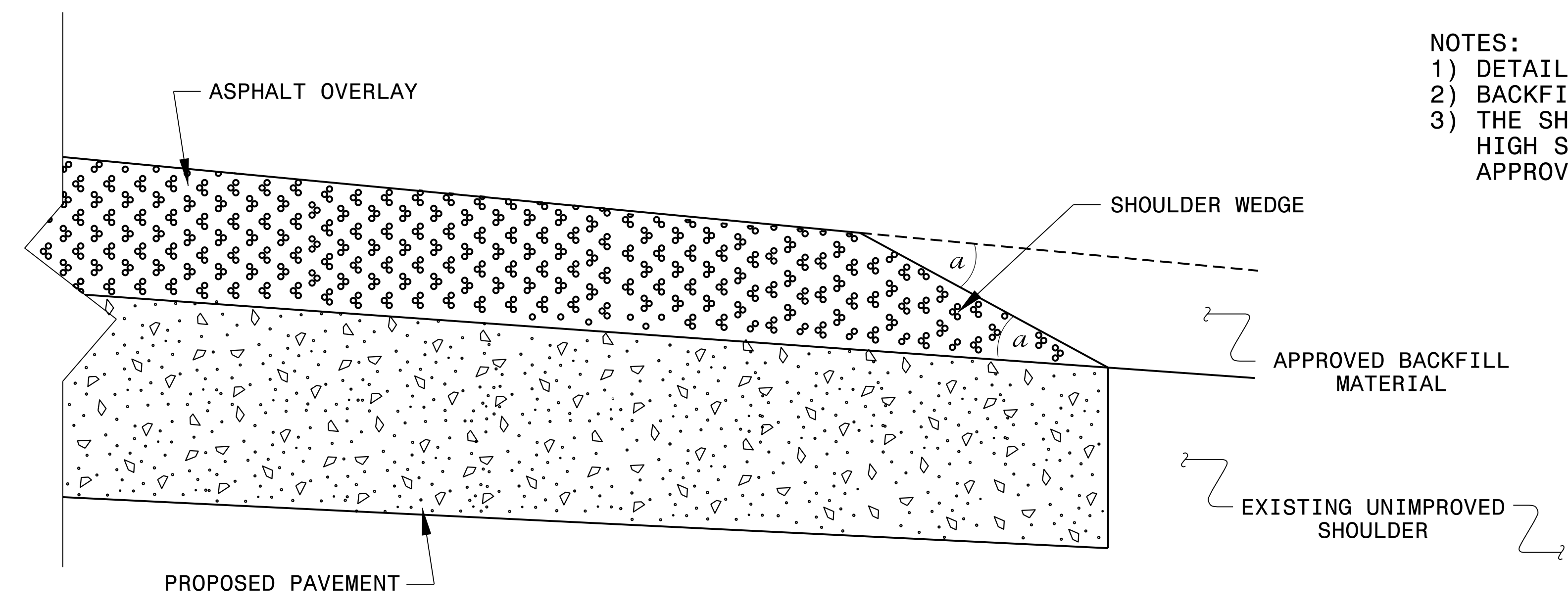


# DETAILS OF PATCHING EXISTING PAVEMENT PRIOR TO RESURFACING DETAIL

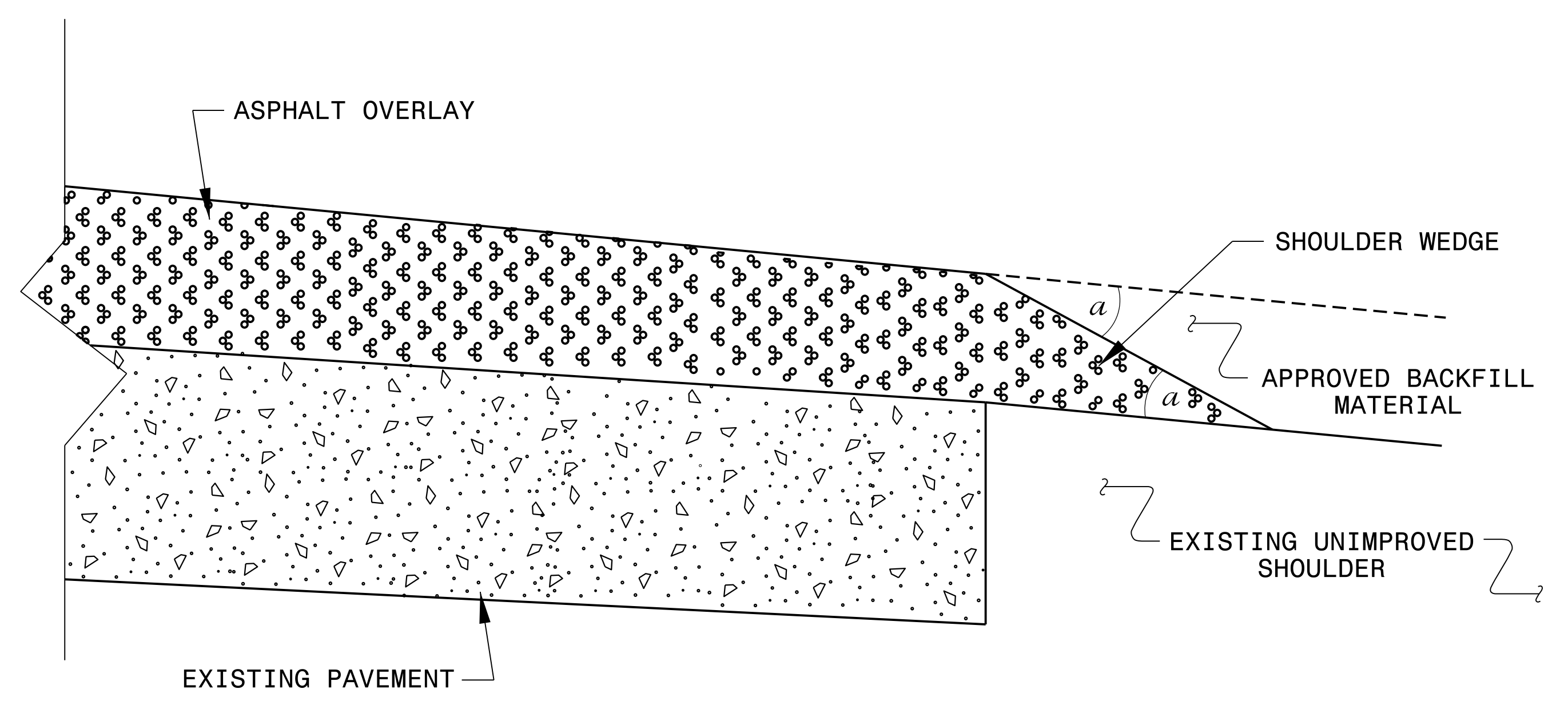


SAW AND REMOVE EXISTING ASPHALT PAVEMENT TO NEAT LINES AND REMOVE EXISTING LOOSE BASE AND/OR SUBGRADE MATERIAL AND REPLACE WITH ASPHALT CONCRETE BASE COURSE B-25.0C OR ASPHALT CONCRETE INTERMEDIATE COURSE I-19.0C, AS DIRECTED BY THE ENGINEER

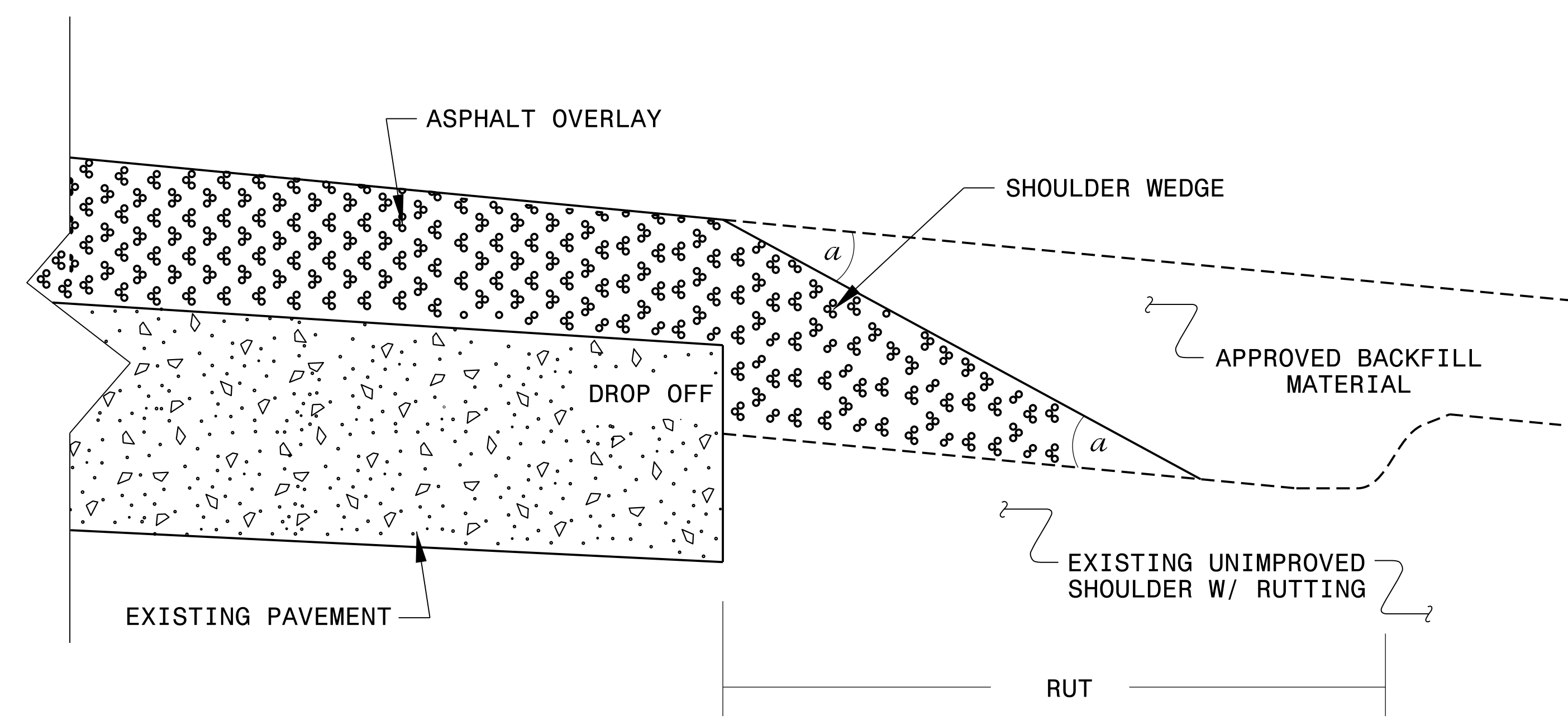
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFD AND ULTRA-THIN BONDED WEARING COURSE.
  - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
  - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



**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°



<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: 2/2/16
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

I2-SEP-2018 10:10 S:\Contracts\Resurfacing Projects\Shoulder Wedge Details\Revised Shoulder Wedge Detail.dgn J:\over-ton AT\_CSD-232595









PROJECT NO.	SHEET NO.	TOTAL NO.
2019CPT.08.04.10191	19	
2019CPT.08.04.20191		

### THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4420000000-N	4457000000-N	4510000000-N	4685000000-E		4686000000-E		4695000000-E	4700000000-E	4710000000-E	4725000000-E					
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	PORTABLE CHANGEABLE MESSAGE SIGN	TEMPORARY TRAFFIC CONTROL	LAW ENFORCEMENT	4" X 90 M WHITE THERMO	4" X 90 M YELLOW THERMO	4" X 120 M WHITE THERMO	4" X 120 M YELLOW THERMO	8" X 90 M WHITE THERMO	12" X 90 M WHITE THERMO	24" X 120 M WHITE THERMO	THERMO LT ARROW 90 M	THERMO RT ARROW 90 M	THERMO STR ARROW 90 M	THERMO MERGE ARROW 90 M		
										MI	FT	SF	EA	LS	HR	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	
2019CPT.08.04.10191	Chatham	1	US 64 EB	FROM PVT JT 150FT E OF SR 2170 (RIVES CHAPEL RD) TO SR 1511 (HILLSIDE DAIRY RD)	1, 2, 3, 4	2		2.227	30	130					11,800	11,800	5,030				10	2	20			
<b>TOTAL FOR MAP NO. 1</b>										<b>2.227</b>		<b>130</b>			<b>11,800</b>	<b>11,800</b>	<b>5,030</b>				<b>10</b>	<b>2</b>	<b>20</b>			
2019CPT.08.04.10191	Chatham	2	US 64 EB	FROM SR 1511 (HILLSIDE DAIRY RD) TO E SIDE OF SR 1578 (COUNTY LANDFILL RD)	2, 5	2		2.78	30	130					14,700	14,700	6,300			90	12	3	24			
<b>TOTAL FOR MAP NO. 2</b>										<b>2.78</b>		<b>130</b>			<b>14,700</b>	<b>14,700</b>	<b>6,300</b>			<b>90</b>	<b>12</b>	<b>3</b>	<b>24</b>			
2019CPT.08.04.10191	Chatham	3	US 64 EB	FROM E SIDE OF SR 1578 (COUNTY LANDFILL RD) TO PVT. JT. AT EXIT# 378 (US 64 BUS)	6, 7, 8	2		1.6	30	130					16,900	16,900	2,120	780		20	7	1	12			
<b>TOTAL FOR MAP NO. 3</b>										<b>1.6</b>		<b>130</b>			<b>16,900</b>	<b>16,900</b>	<b>2,120</b>	<b>780</b>		<b>20</b>	<b>7</b>	<b>1</b>	<b>12</b>			
2019CPT.08.04.10191	Chatham	4	US 64 WB	FROM PVT JT 100FT W OF SR 1511 (HILLSIDE DAIRY RD TO SR 2170 (RIVES CHAPEL CH RD)	2, 3, 4, 5	2		2.09	30	130					11,036	11,036	4,215			30	8	1	16			
<b>TOTAL FOR MAP NO. 4</b>										<b>2.09</b>		<b>130</b>			<b>11,036</b>	<b>11,036</b>	<b>4,215</b>			<b>30</b>	<b>8</b>	<b>1</b>	<b>16</b>			
2019CPT.08.04.10191	Chatham	5	US 64 WB	FROM PVT. JT AT RAMP ONTO US 64WB TO W SIDE OF PAVED CROSSOVER 1,900 LF W OF SR 1514 (MANCO DAIRY RD)	5, 6, 8, 9	2		0.624	30	130					3,300	3,300	1,005	500		30	4	1	8	3		
<b>TOTAL FOR MAP NO. 5</b>										<b>0.624</b>		<b>130</b>			<b>3,300</b>	<b>3,300</b>	<b>1,005</b>	<b>500</b>		<b>30</b>	<b>4</b>	<b>1</b>	<b>8</b>	<b>3</b>		
2019CPT.08.04.10191	Chatham	6	US 64 WB	FROM W SIDE OF PAVED CROSSOVER 1,900 LF W OF SR 1514 (MANCO DAIRY RD) TO PVT JT F SR 1578 (RENAISSANCE RD)	6, 7, 8	2		0.655	30	130					3,500	3,500	1,065				2		4			
<b>TOTAL FOR MAP NO. 6</b>										<b>0.655</b>		<b>130</b>			<b>3,500</b>	<b>3,500</b>	<b>1,065</b>				<b>2</b>		<b>4</b>			
2019CPT.08.04.10191	Chatham	7	US 64 RAMP "A"	FROM END CONCRETE ISLAND 1025FT W OF SR 1650 (SARAH LN ) TO END GORE AREA US 64 BYP	10	2		0.104	24	100	1			40	520	375		220								
<b>TOTAL FOR MAP NO. 7</b>										<b>0.104</b>		<b>100</b>	<b>1</b>		<b>40</b>	<b>520</b>	<b>375</b>		<b>220</b>							
2019CPT.08.04.10191	Chatham	8	US 64 RAMP "B"	FROM PVT JT 100FT E OF SR 1650 (SARAH LN) TO END GORE AREA US 64	11	2		0.69	24	160	1			40	2,600	2,600		1,600	730							
<b>TOTAL FOR MAP NO. 8</b>										<b>0.69</b>		<b>160</b>	<b>1</b>		<b>40</b>	<b>2,600</b>	<b>2,600</b>		<b>1,600</b>	<b>730</b>						
2019CPT.08.04.10191	Chatham	9	US 64 WB RAMP "C"	FROM BEGIN EXIT #378 ON US 64 WB TO END OF CENTERLINE ISLAND 470FT W OF SR 1650 (SARAH LN)	11, 12	2		0.5	24	140	1			40	2,700	2,200										
<b>TOTAL FOR MAP NO. 9</b>										<b>0.5</b>		<b>140</b>	<b>1</b>		<b>40</b>	<b>2,700</b>	<b>2,200</b>									
2019CPT.08.04.10191	Chatham	10	US 421 NB	FROM N JOINT RR BRIDGE # 35 LOCATED 0.4MI N OF SR 1007 (PLANK RD) TO CENTER BENEATH SR 1010 PITTSBORO GOLDSTON RD OVERPASS BRIDGE # 16	13, 14	2		3.54	30	210					18,700	18,700	5,405	3,520	200		15	3	20			
<b>TOTAL FOR MAP NO. 10</b>										<b>3.54</b>		<b>210</b>			<b>18,700</b>	<b>18,700</b>	<b>5,405</b>	<b>3,520</b>	<b>200</b>		<b>15</b>	<b>3</b>	<b>20</b>			
2019CPT.08.04.10191	Chatham	11	US 421 NB	FROM CENTER OF SR 1010 (PITTSBORO GOLDSTON RD) OVERPASS BRIDGE # 16) TO PVT. JT. 600FT S OF NC 902	13, 14, 15, 16	2		3.205	30	210				40	19,532	19,532	4,325	3,655	240	90	12	2	20			
<b>TOTAL FOR MAP NO. 11</b>										<b>3.205</b>		<b>210</b>			<b>40</b>	<b>19,532</b>	<b>19,532</b>	<b>4,325</b>	<b>3,655</b>	<b>240</b>	<b>90</b>	<b>12</b>	<b>2</b>	<b>20</b>		
2019CPT.08.04.10191	Chatham	12	US 421 SB	FROM PVT. JT. 600FT S OF NC 902 TO CENTER OF SR 1010 (PITTSBORO GOLDSTON RD) OVERPASS BRIDGE # 16	13, 14, 15, 16, 17	2		3.193	30	210				40	17,000	17,000	4,800	1,900	180	125	12	4	16			
<b>TOTAL FOR MAP NO. 12</b>										<b>3.193</b>		<b>210</b>			<b>40</b>	<b>17,000</b>	<b>17,000</b>	<b>4,800</b>	<b>1,900</b>	<b>180</b>	<b>125</b>	<b>12</b>	<b>4</b>	<b>16</b>		
2019CPT.08.04.10191	Chatham	13	US 421 SB	FROM CENTER BENEATH SR 1010 PITTSBORO GOLDSTON RD OVERPASS BRIDGE # 16 TO PVT JT N OF RR BRIDGE # 506 LOCATED 0.4MI N OF SR 1007 (PLANK RD)	13, 14	2		3.531	30	210					18,700	18,700	5,000	4,200	200		15	3	23			
<b>TOTAL FOR MAP NO. 13</b>										<b>3.531</b>		<b>210</b>			<b>18,700</b>	<b>18,700</b>	<b>5,000</b>	<b>4,200</b>	<b>200</b>		<b>15</b>	<b>3</b>	<b>23</b>			
<b>TOTAL FOR PROJ NO. 2019CPT.08.04.10191</b>										<b>24.739</b>		<b>2,020</b>	<b>3</b>	<b>1</b>	<b>200</b>	<b>140,988</b>	<b>140,343</b>	<b>39,265</b>	<b>1,600</b>	<b>15,505</b>	<b>820</b>	<b>385</b>	<b>97</b>	<b>20</b>	<b>163</b>	<b>3</b>
															<b>281,331</b>		<b>40,865</b>						<b>283</b>			

PROJECT NO.	SHEET NO.	TOTAL NO.
2019CPT.08.04.10191	20	
2019CPT.08.04.20191		

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	477000000-E	481000000-E	482000000-E	483000000-E	483500000-E	484000000-N	485000000-E	490000000-N	490500000-N	525500000-N					
										COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE II (4")	4" WHITE PAINT	4" YELLOW PAINT	8" WHITE PAINT	8" YELLOW PAINT	16" WHITE PAINT	24" WHITE PAINT	PAINT MSG RXR	4" LINE REMOVAL	YELLOW & YELLOW MARKERS	CRYSTAL & RED MARKERS	SNOW PLOWABLE MARKERS C & R MARKERS	SNOW PLOWABLE MARKERS Y & Y MARKERS	PORTABLE LIGHTING	
									MI	FT	LF	LF	LF	LF	EA	LF	EA	EA	EA	EA	LS			
2019CPT.08.04.10191	Chatham	1	US 64 EB	FROM PVT JT 150FT E OF SR 2170 (RIVES CHAPEL RD) TO SR 1511 (HILLSIDE DAIRY RD)	1, 2, 3, 4	2		2.227	30															
<b>TOTAL FOR MAP NO. 1</b>									<b>2.227</b>		<b>16,830</b>	<b>11,800</b>										240		
2019CPT.08.04.10191	Chatham	2	US 64 EB	FROM SR 1511 (HILLSIDE DAIRY RD) TO E SIDE OF SR 1578 (COUNTY LANDFILL RD)	2, 5	2		2.78	30						90							265		
<b>TOTAL FOR MAP NO. 2</b>									<b>2.78</b>		<b>21,000</b>	<b>14,700</b>			<b>90</b>							265		
2019CPT.08.04.10191	Chatham	3	US 64 EB	FROM E SIDE OF SR 1578 (COUNTY LANDFILL RD) TO PVT. JT. AT EXIT# 378 (US 64 BUS)	6, 7, 8	2		1.6	30													195		
<b>TOTAL FOR MAP NO. 3</b>									<b>1.6</b>													195		
2019CPT.08.04.10191	Chatham	4	US 64 WB	FROM PVT JT 100FT W OF SR 1511 (HILLSIDE DAIRY RD) TO SR 2170 (RIVES CHAPEL CH RD)	2, 3, 4, 5	2		2.09	30													280		
<b>TOTAL FOR MAP NO. 4</b>									<b>2.09</b>		<b>15,300</b>	<b>11,100</b>											280	
2019CPT.08.04.10191	Chatham	5	US 64 WB	FROM PVT. JT AT RAMP ONTO US 64WB TO W SIDE OF PAVED CROSSOVER 1,900 LF W OF SR 1514 (MANCO DAIRY RD)	5, 6, 8, 9	2		0.624	30													80		
<b>TOTAL FOR MAP NO. 5</b>									<b>0.624</b>		<b>4,305</b>	<b>3,300</b>	<b>500</b>									80		
2019CPT.08.04.10191	Chatham	6	US 64 WB	FROM W SIDE OF PAVED CROSSOVER 1,900 LF W OF SR 1514 (MANCO DAIRY RD) TO PVT JT F SR 1578 (RENAISSANCE RD)	6, 7, 8	2		0.655	30													65		
<b>TOTAL FOR MAP NO. 6</b>									<b>0.655</b>													65		
2019CPT.08.04.10191	Chatham	7	US 64 RAMP "A"	FROM END CONCRETE ISLAND 1025FT W OF SR 1650 (SARAH LN ) TO END GORE AREA US 64 BYP	10	2		0.104	24													15		
<b>TOTAL FOR MAP NO. 7</b>									<b>0.104</b>													15		
2019CPT.08.04.10191	Chatham	8	US 64 RAMP "B"	FROM PVT JT 100FT E OF SR 1650 (SARAH LN) TO END GORE AREA US 64	11	2		0.69	24	760						760						36		
<b>TOTAL FOR MAP NO. 8</b>									<b>0.69</b>		<b>760</b>				<b>760</b>							36		
2019CPT.08.04.10191	Chatham	9	US 64 WB RAMP "C"	FROM BEGIN EXIT #378 ON US 64 WB TO END OF CENTERLINE ISLAND 470FT W OF SR 1650 (SARAH LN)	11, 12	2		0.5	24															
<b>TOTAL FOR MAP NO. 9</b>									<b>0.5</b>															
2019CPT.08.04.10191	Chatham	10	US 421 NB	FROM N JOINT RR BRIDGE # 35 LOCATED 0.4MI N OF SR 1007 (PLANK RD) TO CENTER BENEATH SR 1010 PITTSBORO GOLDSTON RD OVERPASS BRIDGE # 16	13, 14	2		3.54	30													450		
<b>TOTAL FOR MAP NO. 10</b>									<b>3.54</b>		<b>24,200</b>	<b>18,700</b>	<b>3,720</b>									450		
2019CPT.08.04.10191	Chatham	11	US 421 NB	FROM CENTER OF SR 1010 (PITTSBORO GOLDSTON RD) OVERPASS BRIDGE # 16) TO PVT. JT. 600FT S OF NC 902	13, 14, 15, 16	2		3.205	30	565					90							405		
<b>TOTAL FOR MAP NO. 11</b>									<b>3.205</b>		<b>565</b>	<b>19,937</b>	<b>19,532</b>	<b>3,895</b>		<b>90</b>							405	
2019CPT.08.04.10191	Chatham	12	US 421 SB	FROM PVT. JT. 600FT S OF NC 902 TO CENTER OF SR 1010 (PITTSBORO GOLDSTON RD) OVERPASS BRIDGE # 16	13, 14, 15, 16, 17	2		3.193	30	610					125							320		
<b>TOTAL FOR MAP NO. 12</b>									<b>3.193</b>		<b>610</b>	<b>2,200</b>	<b>17,000</b>	<b>2,100</b>		<b>125</b>							320	
2019CPT.08.04.10191	Chatham	13	US 421 SB	FROM CENTER BENEATH SR 1010 PITTSBORO GOLDSTON RD OVERPASS BRIDGE # 16 TO PVT JT N OF RR BRIDGE # 506 LOCATED 0.4MI N OF SR 1007 (PLANK RD)	13, 14	2		3.531	30	510												455		
<b>TOTAL FOR MAP NO. 13</b>									<b>3.531</b>		<b>510</b>	<b>23,700</b>	<b>18,700</b>	<b>4,400</b>					<b>510</b>				455	
<b>TOTAL FOR PROJ NO. 2019CPT.08.04.10191</b>									<b>24.739</b>		<b>2,445</b>	<b>127,472</b>	<b>114,832</b>	<b>14,615</b>		<b>305</b>		<b>2,445</b>				<b>2,806</b>	<b>7</b>	<b>1</b>
										<b>242,304</b>		<b>14,615</b>								<b>2,813</b>				





PROJECT NO.	SHEET NO.	TOTAL NO.
2019CPT.08.04.10191	23	
2019CPT.08.04.20191		

**THERMOPLASTIC AND PAINT QUANTITIES**

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH		WIDTH	4413000000-E	4420000000-N	4457000000-N	4510000000-N	4685000000-E		4686000000-E		4695000000-E	4700000000-E	4710000000-E	4725000000-E						
								MI	FT		SF	EA	LS	HR	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA			
2019CPT.08.04.20191	Chatham	31	SR 1956 (E. GARGUS RD.)	FROM SR 1955 (MTN VIEW CHURCH RD.) TO END MAINTANCE	20	2		1.505	20	169																		
<b>TOTAL FOR MAP NO. 31</b>								<b>1.505</b>		<b>169</b>																		
2019CPT.08.04.20191	Chatham	32	SR 1910 (NEW ELAM CHURCH RD.)	FROM SR 1011 (OLD US 1) TO SR 1972 (PEA RIDGE RD.)	20	2		2.52	20	283																		
<b>TOTAL FOR MAP NO. 32</b>								<b>2.52</b>		<b>283</b>																		
2019CPT.08.04.20191	Chatham	33	SR 1520 (RUSSELLS CHAPEL RD.)	FROM SR 1545 ( CHICKEN BRIDGE RD.) TO SR 1516 (OLD GRAHAM RD)	21	2		5.002	22	561											7	7						
<b>TOTAL FOR MAP NO. 33</b>								<b>5.002</b>		<b>561</b>												<b>7</b>	<b>7</b>					
2019CPT.08.04.20191	Chatham	34	SR 1520 (RUSSELLS CHAPEL RD.)	FROM SR 1516 (OLD GRAHAM RD.) TO US 15/501	21	2		2.184	20	245																		
<b>TOTAL FOR MAP NO. 34</b>								<b>2.184</b>		<b>245</b>																		
2019CPT.08.04.20191	Chatham	35	SR 2225 (ROBERSON RD.)	FROM US 64 BUS. TO SR 2226 (REAVES RD.)	23	2		0.58	19	65																		
<b>TOTAL FOR MAP NO. 35</b>								<b>0.58</b>		<b>65</b>																		
2019CPT.08.04.20191	Chatham	36	SR 2226 (REAVES RD.)	FROM SR 2225 (ROBERSON RD.) TO END MAINTANCE	20	2		0.159	19	18																		
<b>TOTAL FOR MAP NO. 36</b>								<b>0.159</b>		<b>18</b>																		
2019CPT.08.04.20191	Chatham	37	SR 1557 (EPPS CLARK RD.)	FROM SR 1506 (WHITE SMITH RD.) TO SR 1556 (IRVING LINDLEY RD.)	20	2		0.998	20	112																		
<b>TOTAL FOR MAP NO. 37</b>								<b>0.998</b>		<b>112</b>																		
2019CPT.08.04.20191	Chatham	38	SR 1557 (EPPS CLARK RD.)	FROM SR 1556 (IRVING LINDLEY RD.) TO SR 1003 (SH LINDLEY MILL RD.)	19	2		2.205	18	247																		
<b>TOTAL FOR MAP NO. 38</b>								<b>2.205</b>		<b>247</b>																		
2019CPT.08.04.20191	Chatham	39	SR 1132 (JOE BROWN RD.)	FROM SR 1133 (WILDLIFE RD.) TO SR 1130 (OAKLEY CHURCH RD.)	24	2		1.52	20	171																		
<b>TOTAL FOR MAP NO. 39</b>								<b>1.52</b>		<b>171</b>																		
2019CPT.08.04.20191	Chatham	40	SR 1132 (JOE BROWN RD.)	FROM SR 1006 (SC GLENDON RD.) TO SR 1133 (WILDLIFE RD.)	23	2		0.831	20	94																		
<b>TOTAL FOR MAP NO. 40</b>								<b>0.831</b>		<b>94</b>																		
<b>TOTAL FOR PROJ NO. 2019CPT.08.04.20191</b>								<b>49.046</b>		<b>5,510</b>				<b>1</b>									<b>7</b>	<b>7</b>				<b>14</b>
<b>GRAND TOTAL</b>								<b>73.785</b>		<b>7,530</b>	<b>3</b>		<b>1</b>	<b>200</b>	<b>140,988</b>	<b>140,343</b>	<b>39,265</b>	<b>1,600</b>	<b>15,505</b>	<b>820</b>	<b>385</b>	<b>104</b>	<b>27</b>	<b>163</b>	<b>3</b>			
														<b>281,331</b>	<b>40,865</b>										<b>297</b>			

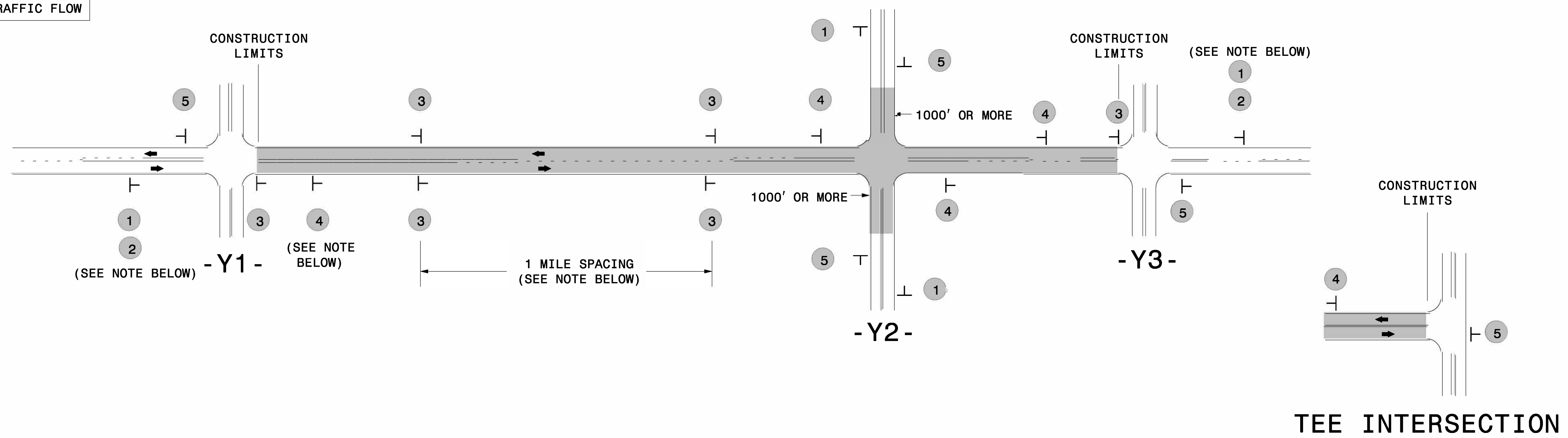
PROJECT NO.	SHEET NO.	TOTAL NO.
2019CPT.08.04.10191	24	
2019CPT.08.04.20191		

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	477000000-E	481000000-E	482000000-E	483000000-E	483500000-E	484000000-N	485000000-E	490000000-N	490500000-N	495000000-N	525500000-N			
										COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE II (4")	4" WHITE PAINT	4" YELLOW PAINT	8" WHITE PAINT	8" YELLOW PAINT	16" WHITE PAINT	24" WHITE PAINT	PAINT MSG RXR	4" LINE REMOVAL	YELLOW & YELLOW MARKERS	CRYSTAL & RED MARKERS	SNOW PLOWABLE MARKERS C & R MARKERS	SNOW PLOWABLE MARKERS Y & Y MARKERS	PORTABLE LIGHTING
									MI	FT	LF	LF	LF	LF	EA	LF	EA	EA	EA	EA	LS		
2019CPT.08.04.20191	Chatham	31	SR 1956 (E. GARGUS RD.)	FROM SR 1955 (MTN VIEW CHURCH RD.) TO END MAINTANCE	20	2		1.505	20														
<b>TOTAL FOR MAP NO. 31</b>									<b>1.505</b>			<b>32,388</b>	<b>32,388</b>										
2019CPT.08.04.20191	Chatham	32	SR 1910 (NEW ELAM CHURCH RD.)	FROM SR 1011 (OLD US 1) TO SR 1972 (PEA RIDGE RD.)	20	2		2.52	20														
<b>TOTAL FOR MAP NO. 32</b>									<b>2.52</b>			<b>54,230</b>	<b>54,230</b>										
2019CPT.08.04.20191	Chatham	33	SR 1520 (RUSSELLS CHAPEL RD.)	FROM SR 1545 ( CHICKEN BRIDGE RD.) TO SR 1516 (OLD GRAHAM RD)	21	2		5.002	22														
<b>TOTAL FOR MAP NO. 33</b>									<b>5.002</b>			<b>110,000</b>	<b>116,000</b>										
2019CPT.08.04.20191	Chatham	34	SR 1520 (RUSSELLS CHAPEL RD.)	FROM SR 1516 (OLD GRAHAM RD.) TO US 15/501	21	2		2.184	20														
<b>TOTAL FOR MAP NO. 34</b>									<b>2.184</b>			<b>47,000</b>	<b>47,000</b>										
2019CPT.08.04.20191	Chatham	35	SR 2225 (ROBERSON RD.)	FROM US 64 BUS. TO SR 2226 (REAVES RD.)	23	2		0.58	19														
<b>TOTAL FOR MAP NO. 35</b>									<b>0.58</b>														
2019CPT.08.04.20191	Chatham	36	SR 2226 (REAVES RD.)	FROM SR 2225 (ROBERSON RD.) TO END MAINTANCE	20	2		0.159	19														
<b>TOTAL FOR MAP NO. 36</b>									<b>0.159</b>														
2019CPT.08.04.20191	Chatham	37	SR 1557 (EPPS CLARK RD.)	FROM SR 1506 (WHITE SMITH RD.) TO SR 1556 (IRVING LINDLEY RD.)	20	2		0.998	20														
<b>TOTAL FOR MAP NO. 37</b>									<b>0.998</b>			<b>21,477</b>	<b>21,477</b>										
2019CPT.08.04.20191	Chatham	38	SR 1557 (EPPS CLARK RD.)	FROM SR 1556 (IRVING LINDLEY RD.) TO SR 1003 (SH LINDLEY MILL RD.)	19	2		2.205	18														
<b>TOTAL FOR MAP NO. 38</b>									<b>2.205</b>			<b>47,452</b>	<b>47,452</b>										
2019CPT.08.04.20191	Chatham	39	SR 1132 (JOE BROWN RD.)	FROM SR 1133 (WILDLIFE RD.) TO SR 1130 (OAKLEY CHURCH RD.)	24	2		1.52	20														
<b>TOTAL FOR MAP NO. 39</b>									<b>1.52</b>			<b>32,710</b>	<b>32,710</b>										
2019CPT.08.04.20191	Chatham	40	SR 1132 (JOE BROWN RD.)	FROM SR 1006 (SC GLENDON RD.) TO SR 1133 (WILDLIFE RD.)	23	2		0.831	20														
<b>TOTAL FOR MAP NO. 40</b>									<b>0.831</b>			<b>17,883</b>	<b>17,883</b>										
<b>TOTAL FOR PROJ NO. 2019CPT.08.04.20191</b>									<b>49.046</b>			<b>933,528</b>	<b>939,528</b>		<b>510</b>	<b>100</b>	<b>80</b>	<b>2</b>		<b>568</b>	<b>12</b>		
<b>GRAND TOTAL</b>												<b>2,115,360</b>	<b>15,125</b>						<b>580</b>	<b>2,806</b>	<b>7</b>	<b>1</b>	



# SIGNING FOR RESURFACING PROJECTS

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



## MAINLINE (-L-) SIGNING

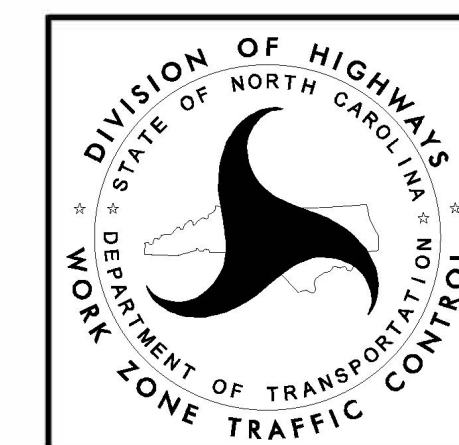
## -Y- LINE SIGNING

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"> <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, 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		- 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		- 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.

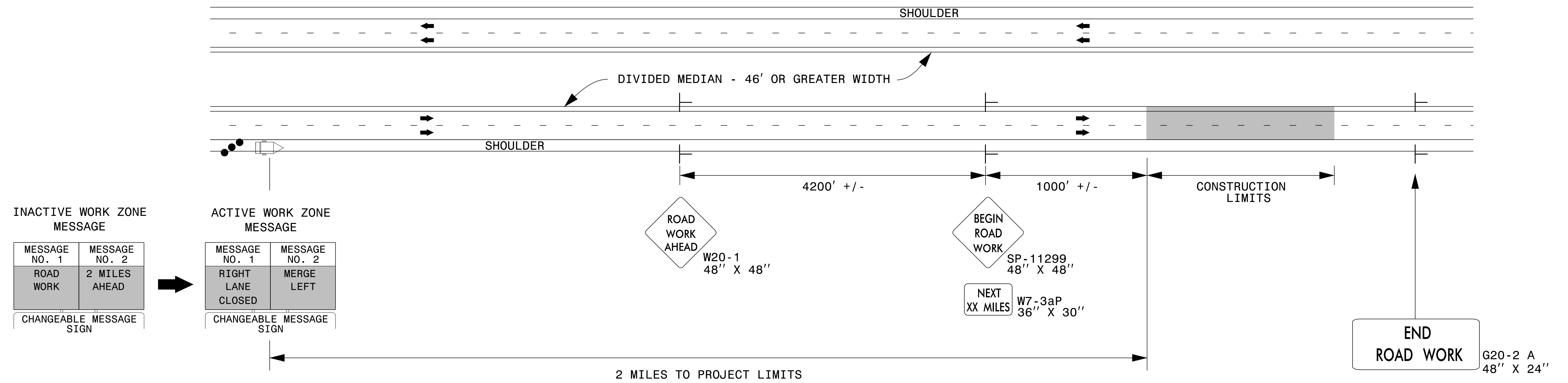
### MAPS LESS THAN 2 MILES

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.

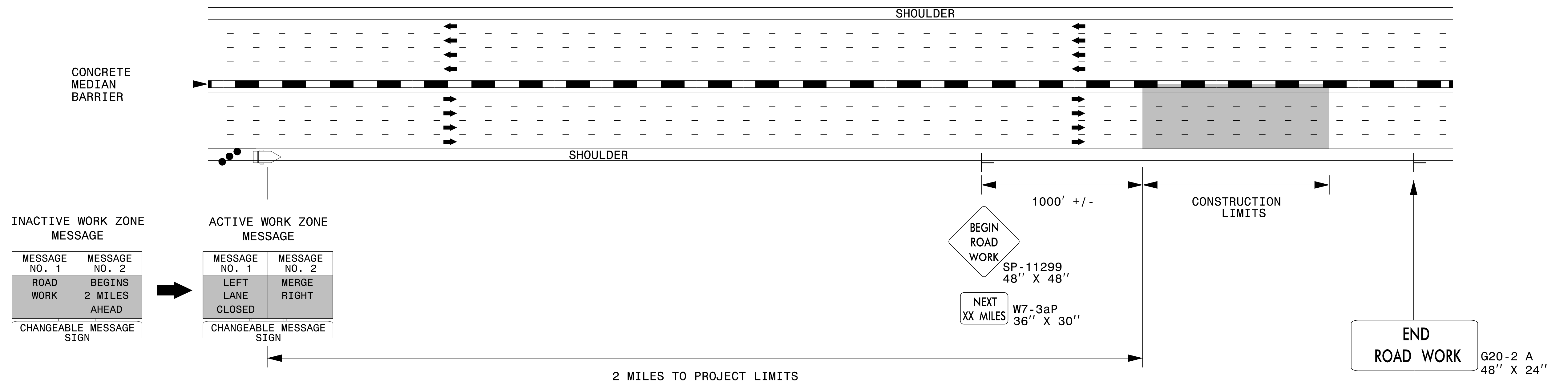


ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

## DIVIDED MEDIANS WITH WIDTHS 46' OR GREATER



## DIVIDED MEDIANS WITH WIDTHS LESS THAN 46' OR WITH PERMANENT MEDIAN BARRIER

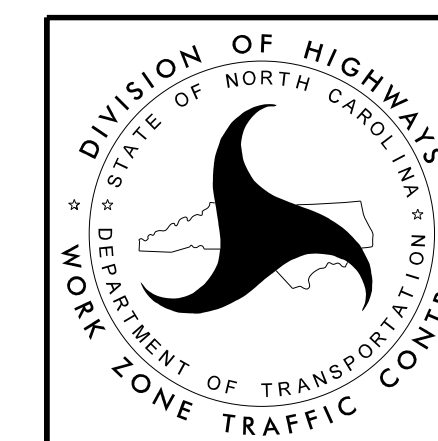


### NOTES:

- 1) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 6' AS MEASURED FROM THE EDGE OF PAVEMENT.
- 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) FOR MEDIAN WIDTHS LESS THAN 46' (MEASURED EDGELINE TO EDGELINE) USE THE BOTTOM DRAWING.
- 4) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 5) INSTALL "ROAD WORK AHEAD" (W20-1) ALONG ENTRANCE RAMP 500' PRIOR TO RAMP TERMINAL, AND "END ROAD WORK" (G20-2a) AT THE END OF EXIT RAMP WITHIN THE WORK ZONE.
- 6) 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 AND WITH DIVIDED MEDIANS OF 46' OR GREATER. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

### LEGEND

- CHANGEABLE MESSAGE SIGN (CMS)
- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW
- TRAFFIC DRUM



**RESURFACING ADVANCE  
WARNING SIGNS FOR  
HIGH SPEED FACILITIES  
≥ 60 MPH**