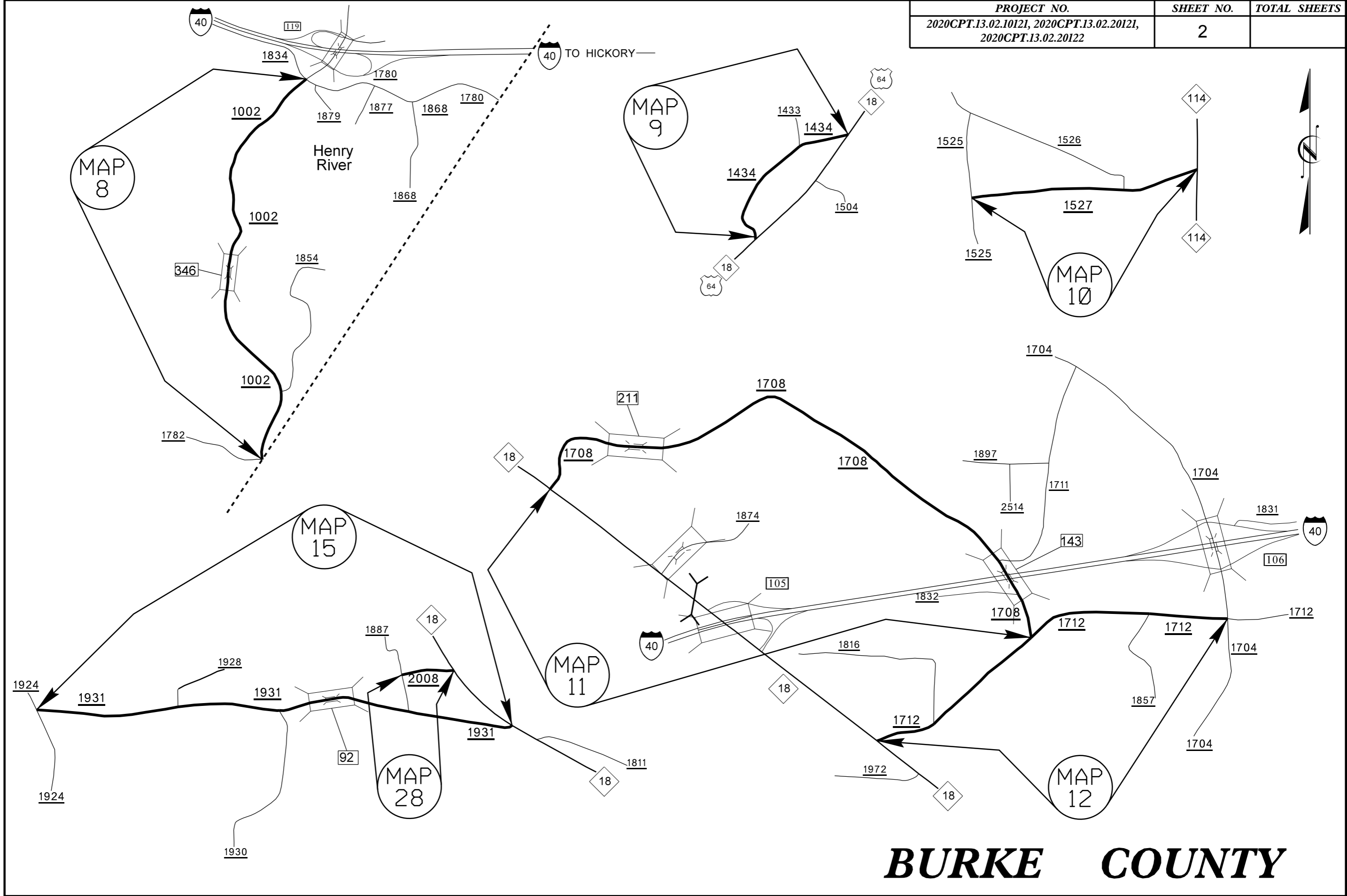


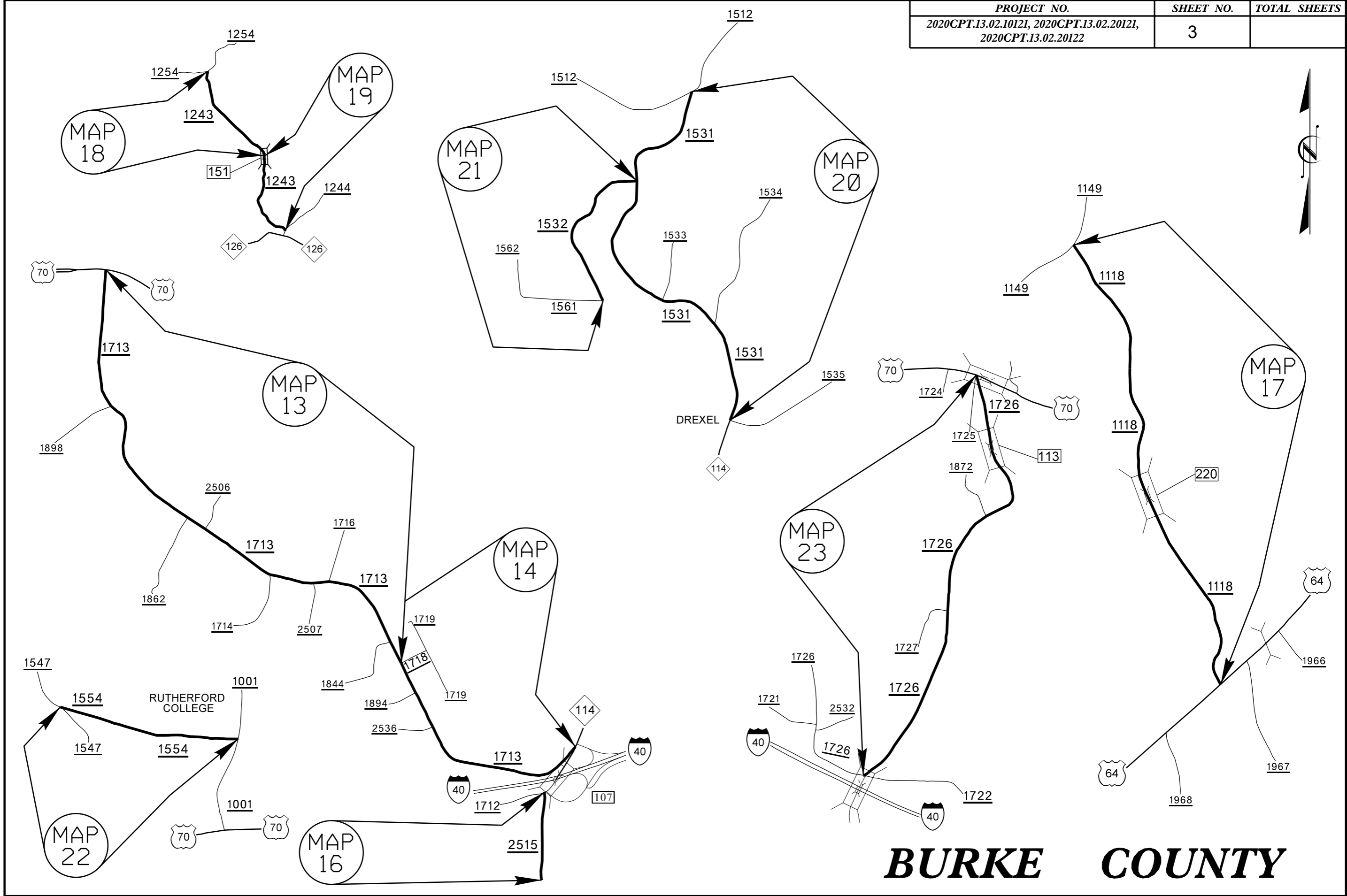


PROJECT NO.	SHEET NO.	TOTAL SHEETS
2020CPT.13.02.10121, 2020CPT.13.02.20121, 2020CPT.13.02.20122	2	

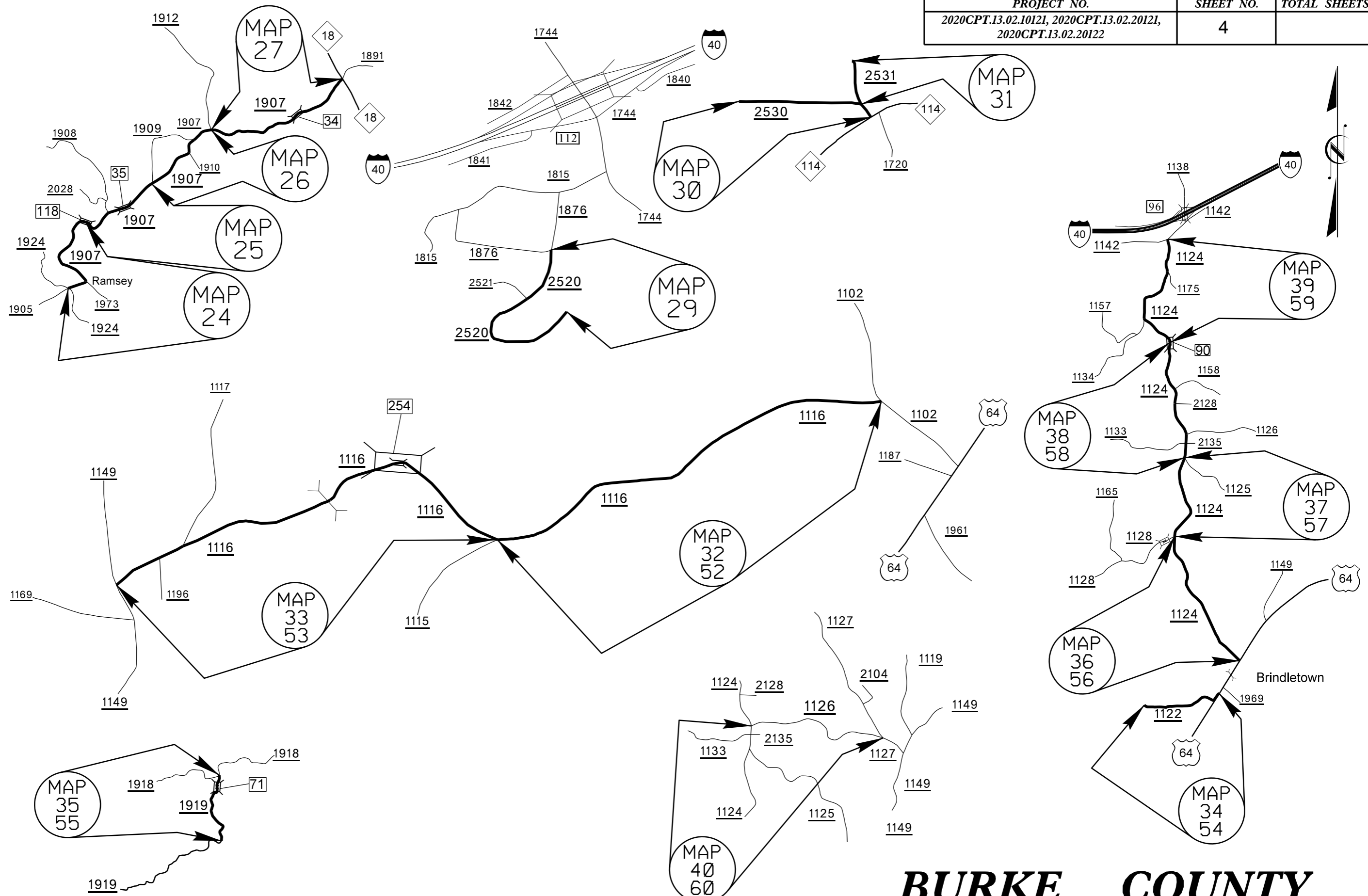


**BURKE COUNTY**

PROJECT NO.	SHEET NO.	TOTAL SHEETS
2020CPT.13.02.10121, 2020CPT.13.02.20121, 2020CPT.13.02.20122	3	

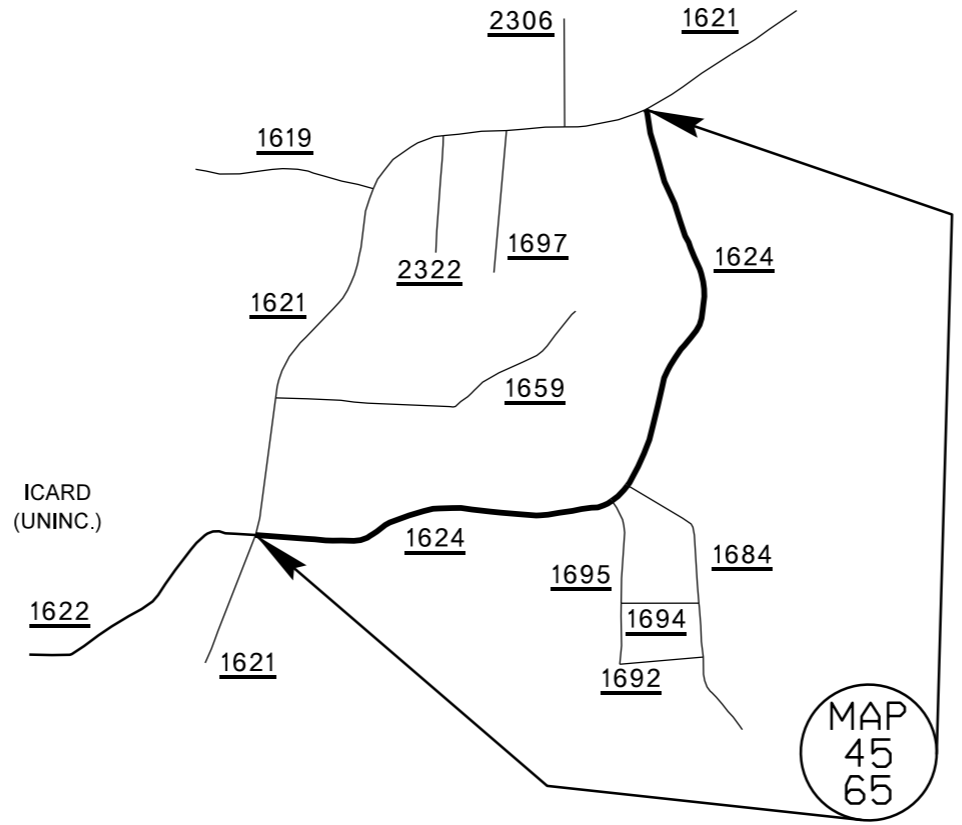
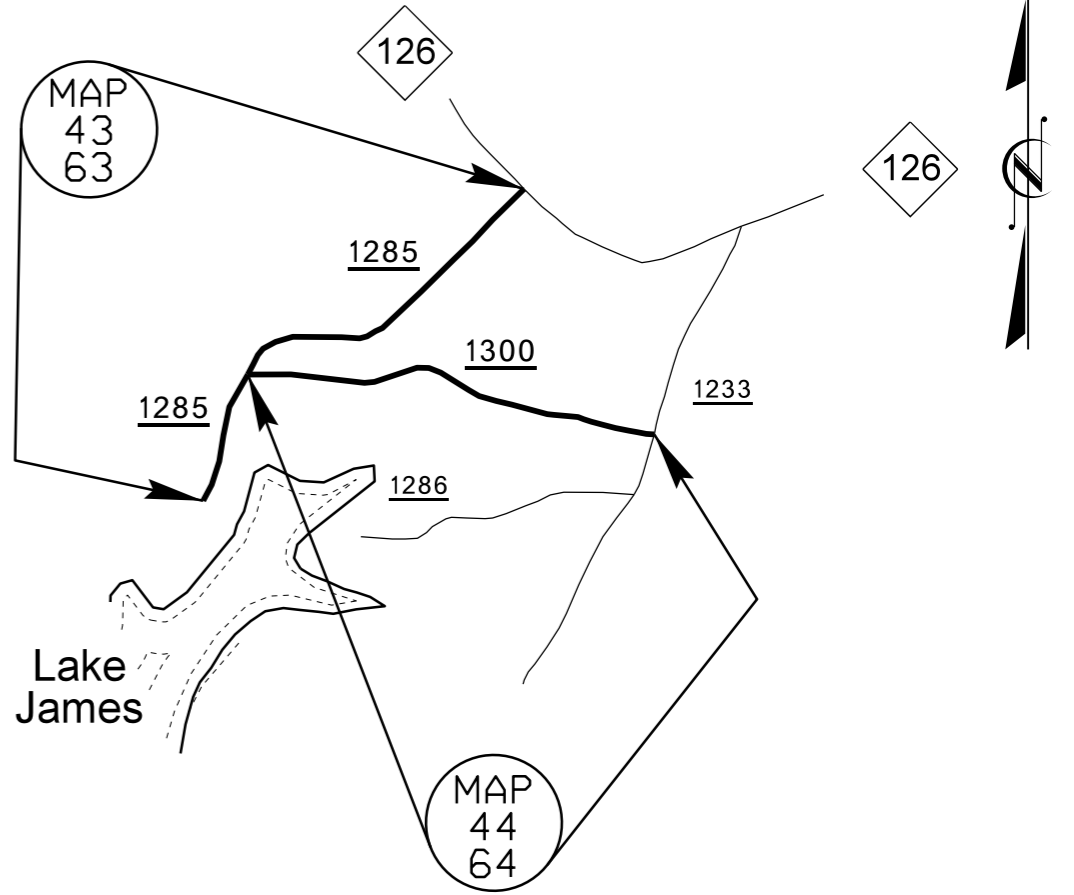
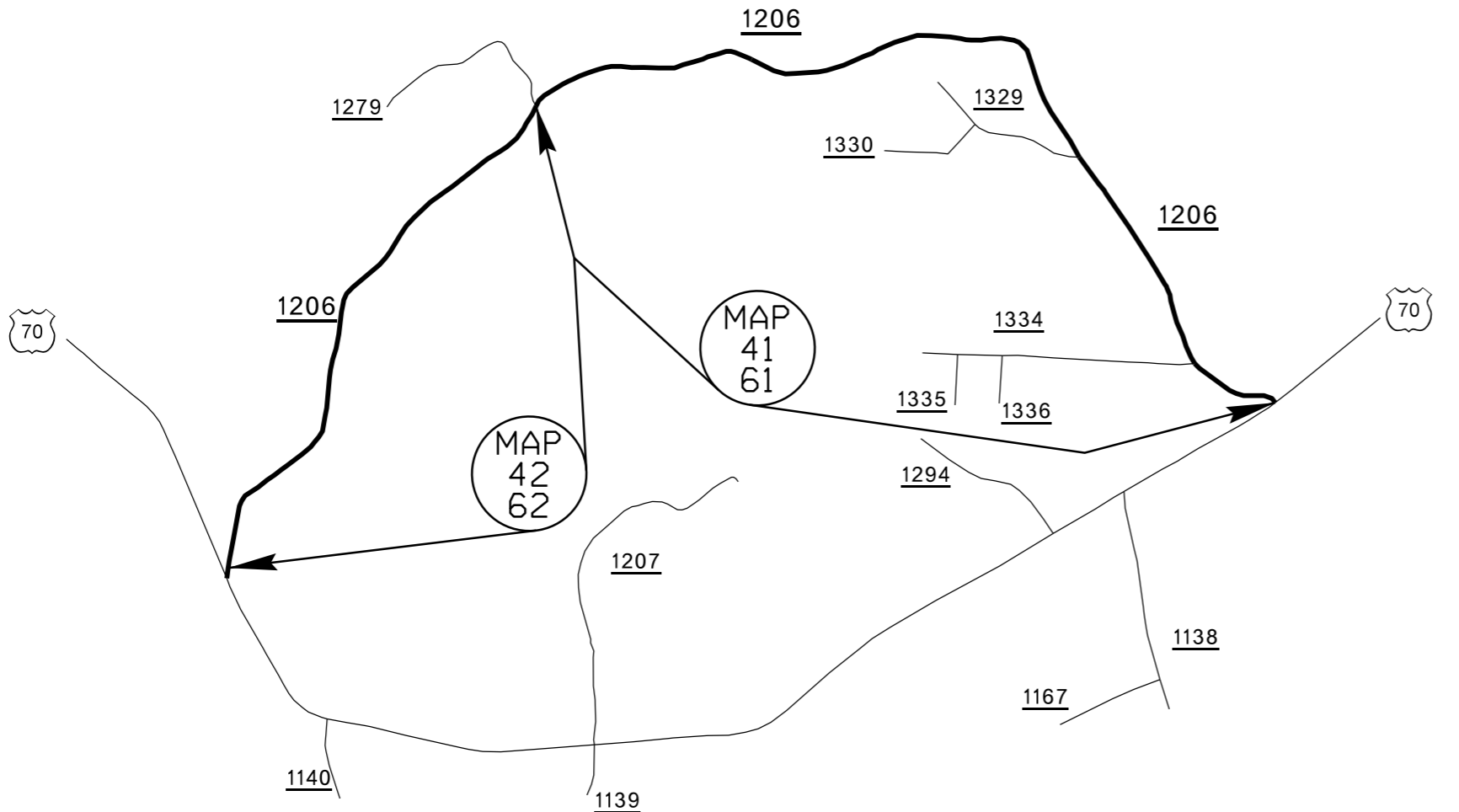


PROJECT NO.	SHEET NO.	TOTAL SHEETS
2020CPT.13.02.10121, 2020CPT.13.02.20121, 2020CPT.13.02.20122	4	



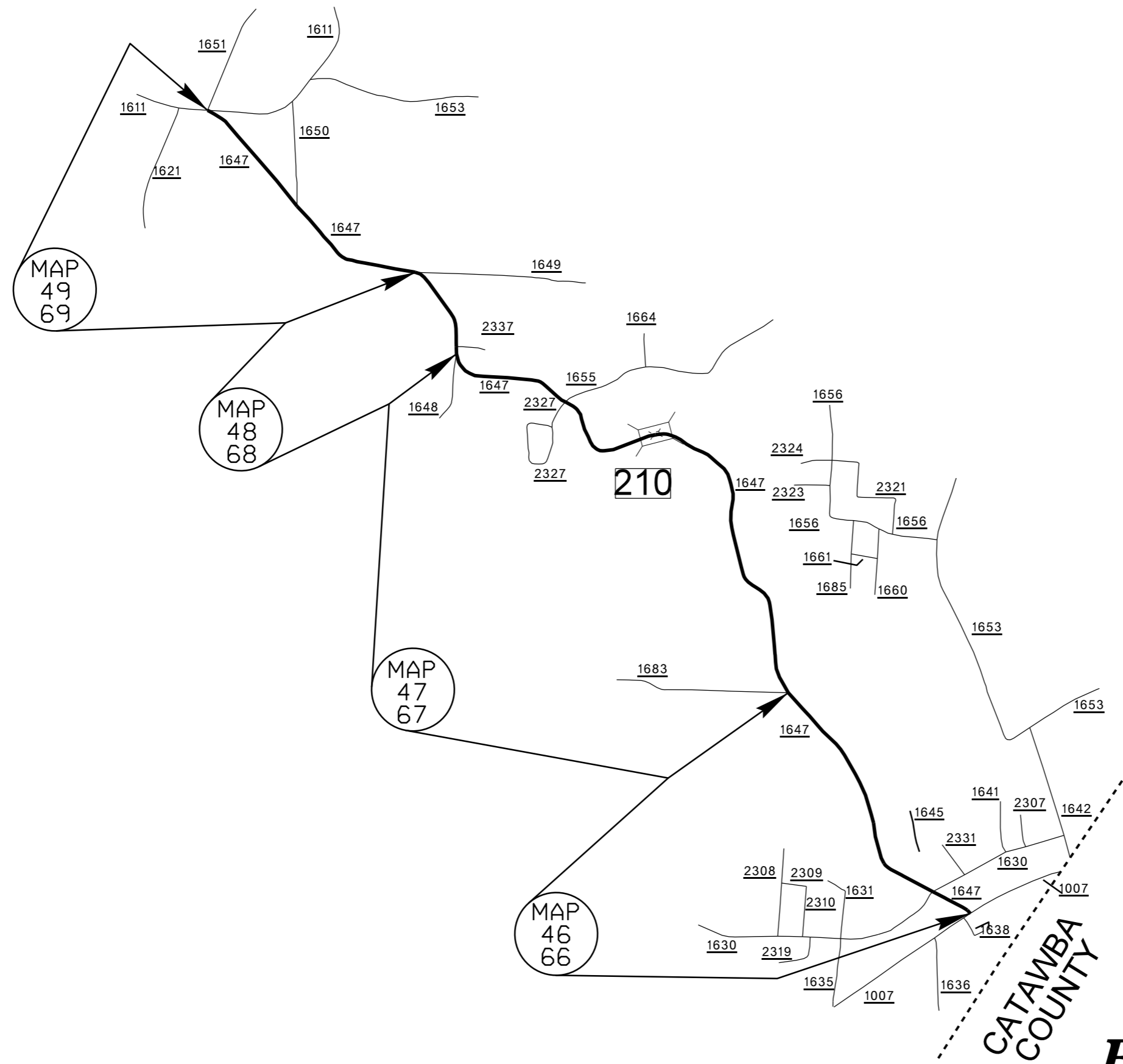
**BURKE COUNTY**

PROJECT NO.	SHEET NO.	TOTAL SHEETS
2020CPT.13.02.10121, 2020CPT.13.02.20121, 2020CPT.13.02.20122	5	



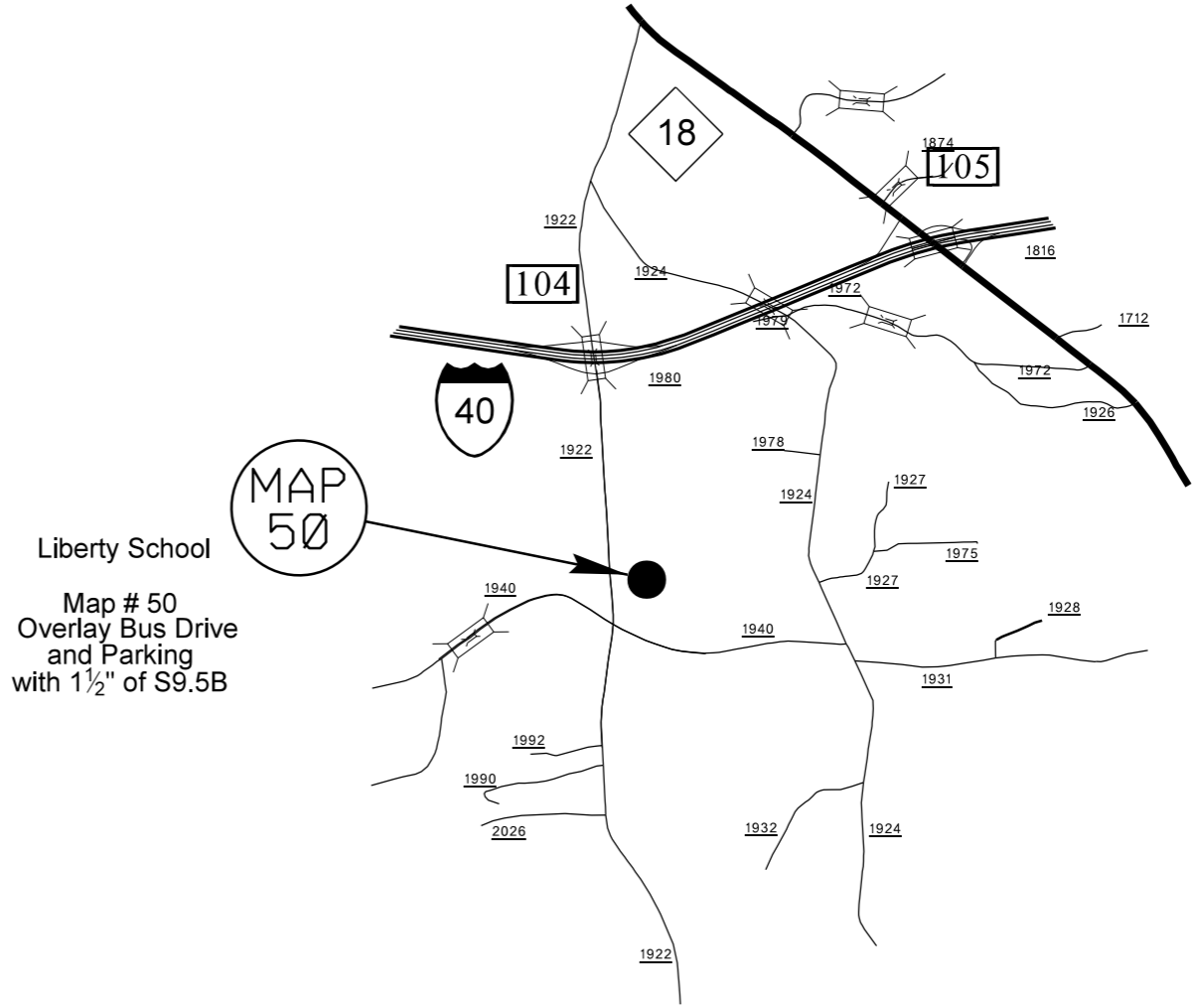
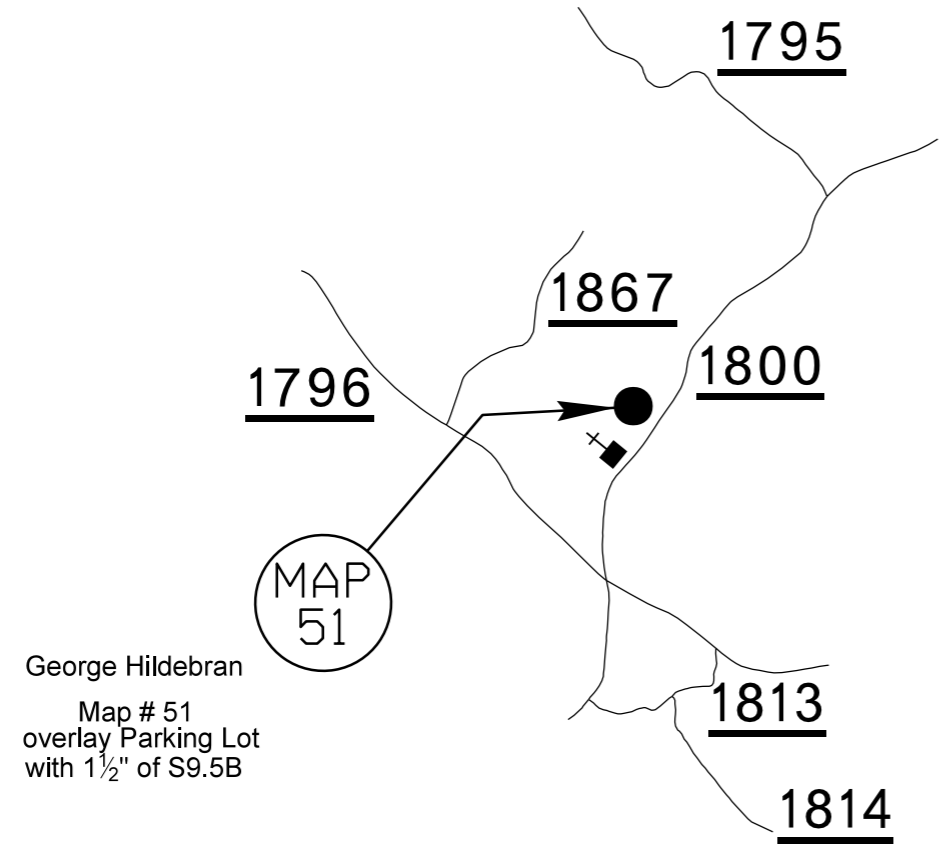
**BURKE COUNTY**

PROJECT NO.	SHEET NO.	TOTAL SHEETS
2020CPT.13.02.10121, 2020CPT.13.02.20121, 2020CPT.13.02.20122	6	



**BURKE COUNTY**

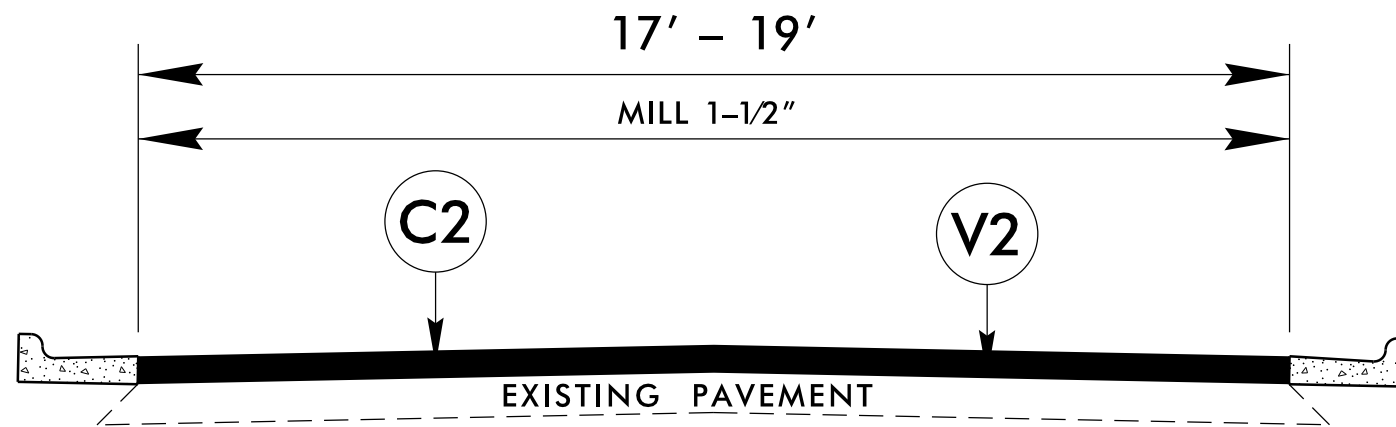
PROJECT NO.	SHEET NO.	TOTAL SHEETS
2020CPT.13.02.10121, 2020CPT.13.02.20121, 2020CPT.13.02.20122	7	



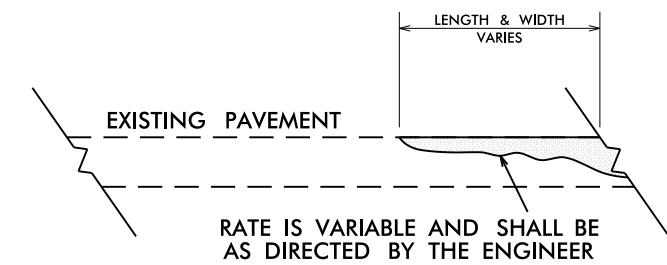
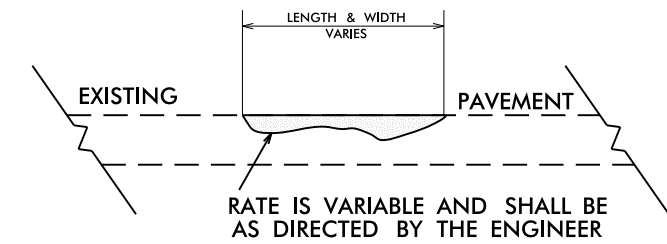
**BURKE COUNTY**



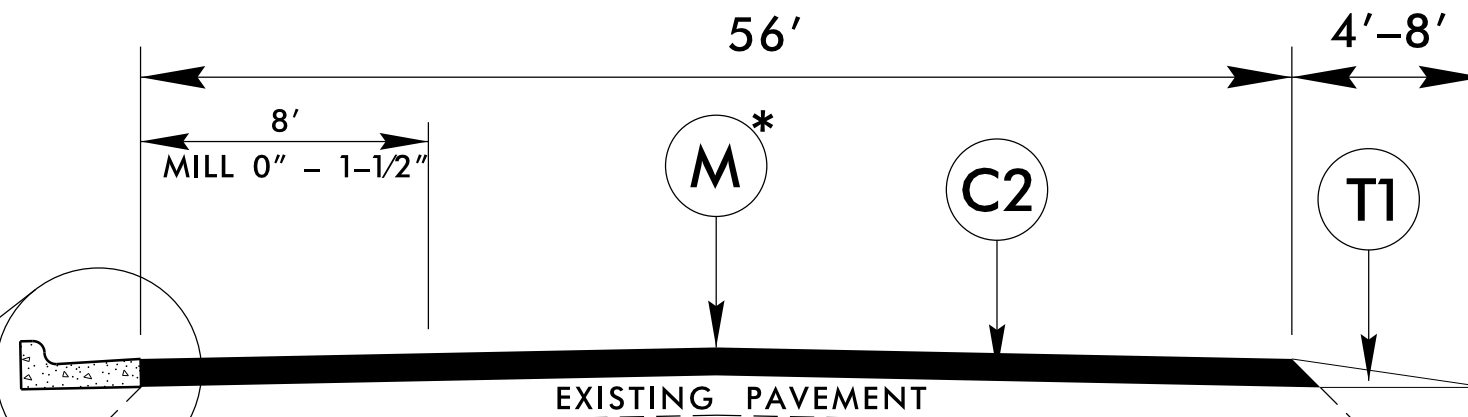




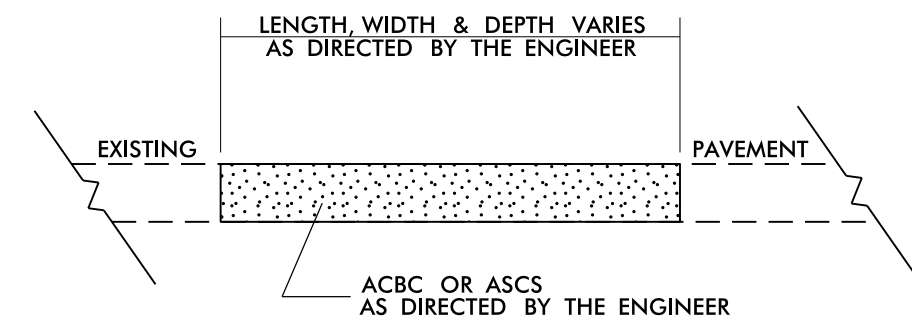
**TYPICAL SECTION #3**



**DETAIL SHOWING METHOD OF WEDGING**



\*ONLY MAP #6  
**TYPICAL SECTION #4**

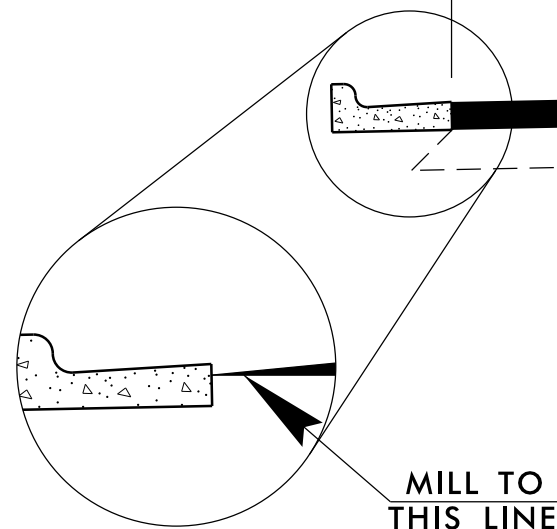


**PATCHING EXISTING PAVEMENT**

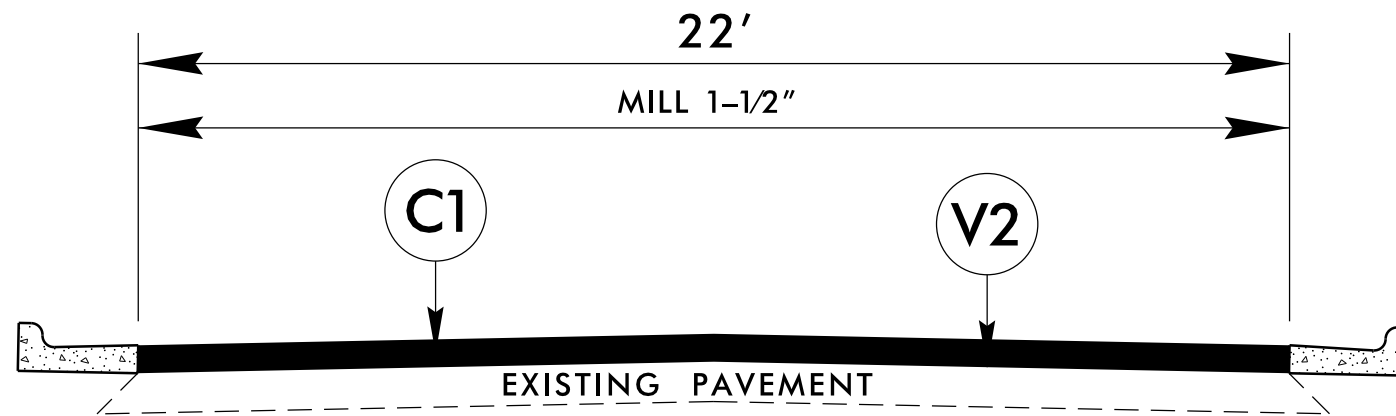
PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YARD
M	CENTERLINE MILLED RUMBLE STRIPS
T1	SHOULDER RECONSTRUCTION
V2	MILLING ASPHALT PAVEMENT 1-1/2" DEPTH

6/2/99

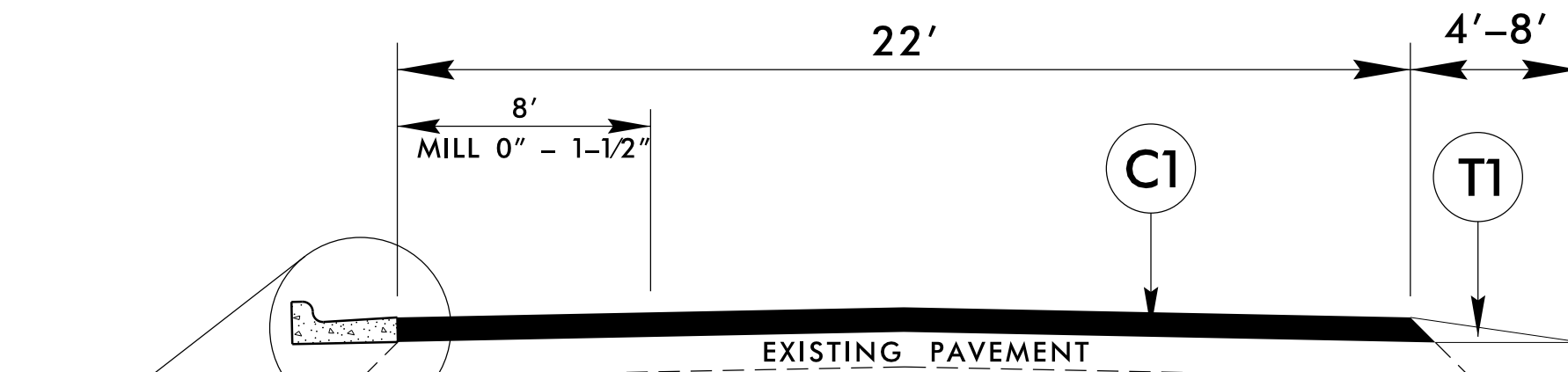
21 NOV 2018 13:17  
2020 Resurfacing Package 2020 Burke Resurfacing Package 2020 Burke Resurfacing Package TYP.dgn



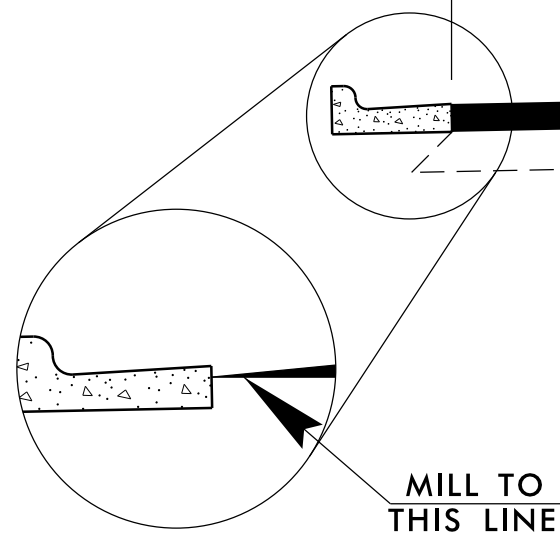




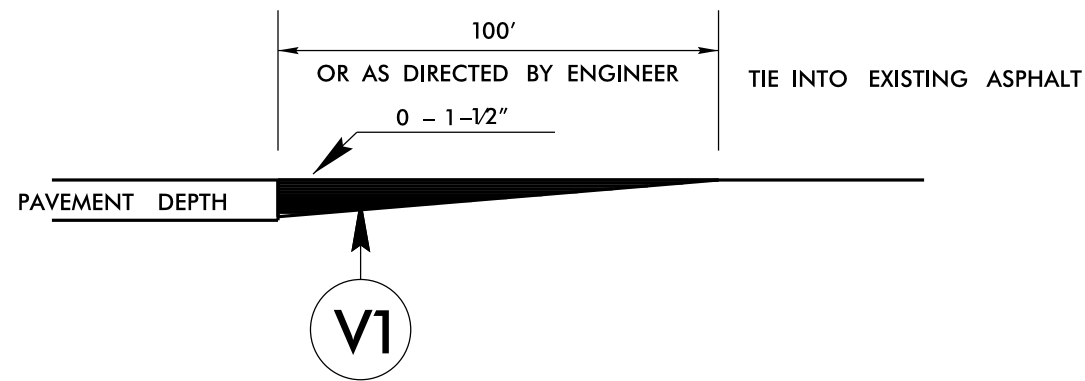
**TYPICAL SECTION #7**



**TYPICAL SECTION #8**

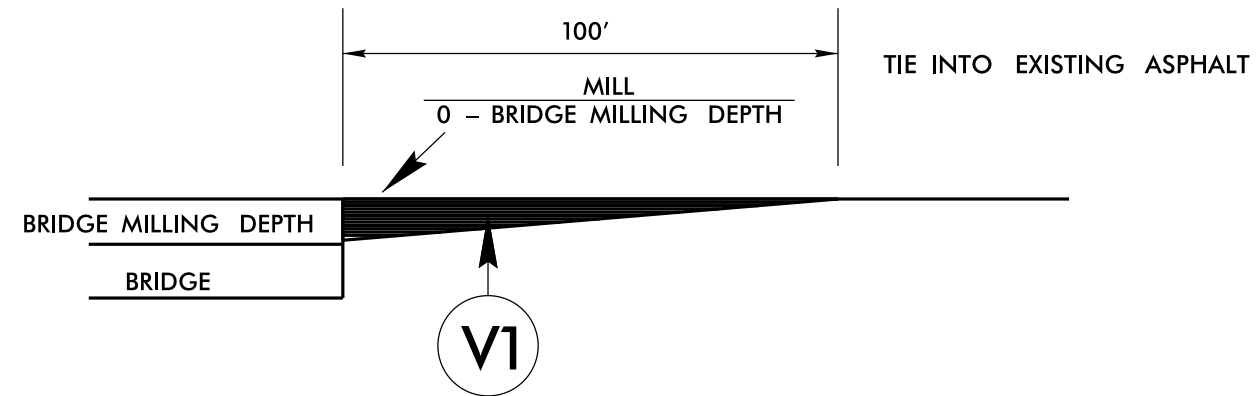


PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YARD
T1	SHOULDER RECONSTRUCTION
V2	MILLING ASPHALT PAVEMENT 1-1/2" DEPTH



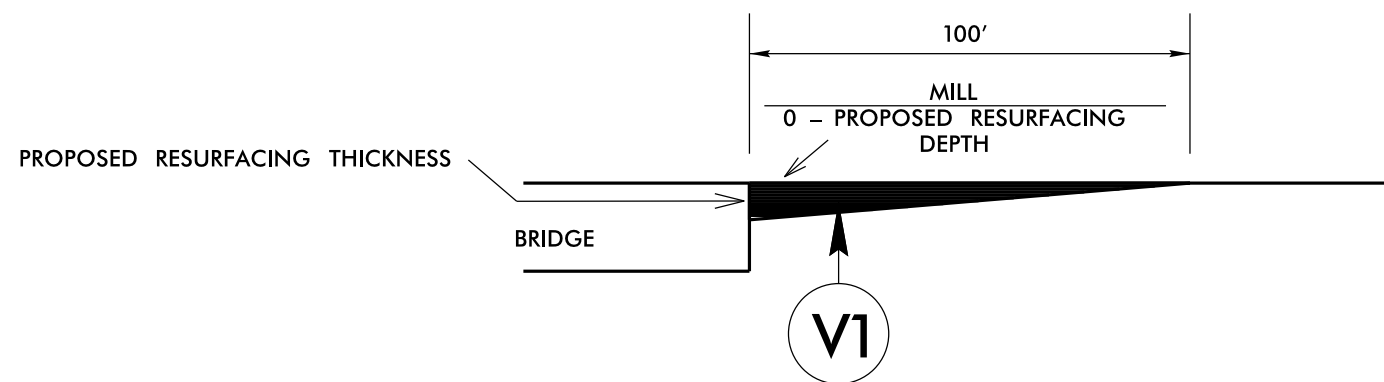
**DETAIL TO TIE INTO EXIST PAVEMENT**

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT HE WILL BE REQUIRED TO MILL THE EXISTING ASPHALT PAVEMENT TO ENSURE A PROPER TIE-IN WITH THE EXISTING SURFACE AT THE BEGINNING, END AND Y LINES OF EACH MAP TO BE RESURFACED WITH ASPHALT CONC SURFACE COURSE, TYPE S9.5C. THIS WILL BE PAID FOR AS INCIDENTAL MILLING.



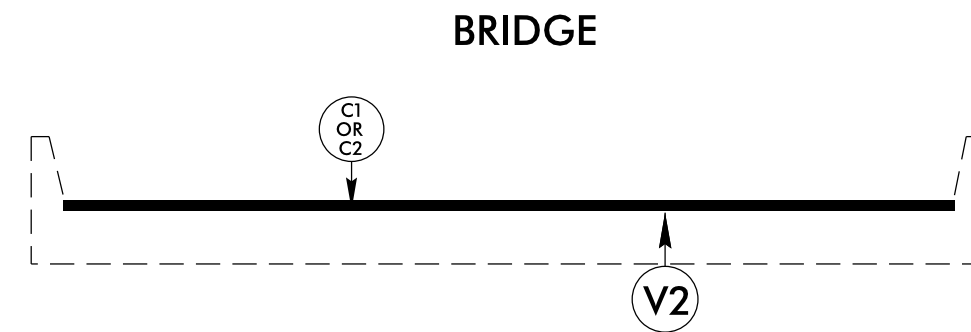
**MILLING DETAIL AT BRIDGE APPROACHES**

WHERE BRIDGES WILL BE MILLED THEN RESURFACED. THIS WILL BE PAID FOR AS INCIDENTAL MILLING. USE AT BRIDGE NUMBER: 81 ON MAP 4, 211 AND 143 MAP 11, 92 MAP 15, 220 MAP 17, 151 Map 19, 113 MAP 23, 118 MAP 24, 35 MAP 25, AND 34 MAP 27.



**MILLING DETAIL AT BRIDGE APPROACHES**

WHERE BRIDGES WILL NOT BE RESURFACED. THIS WILL BE PAID FOR AS INCIDENTAL MILLING. USE AT BRIDGE NUMBER: 80 MAP 2 AND 346 MAP 8.

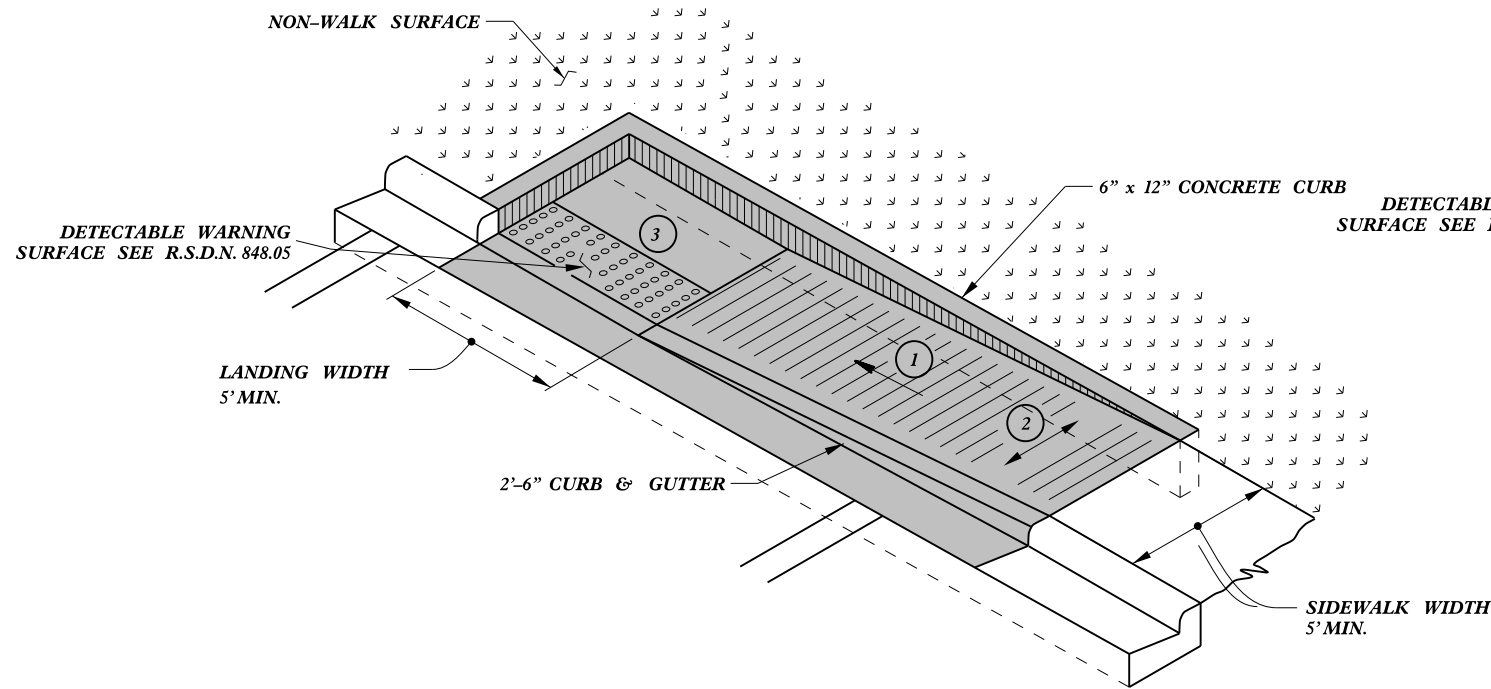


**BRIDGE DETAIL**

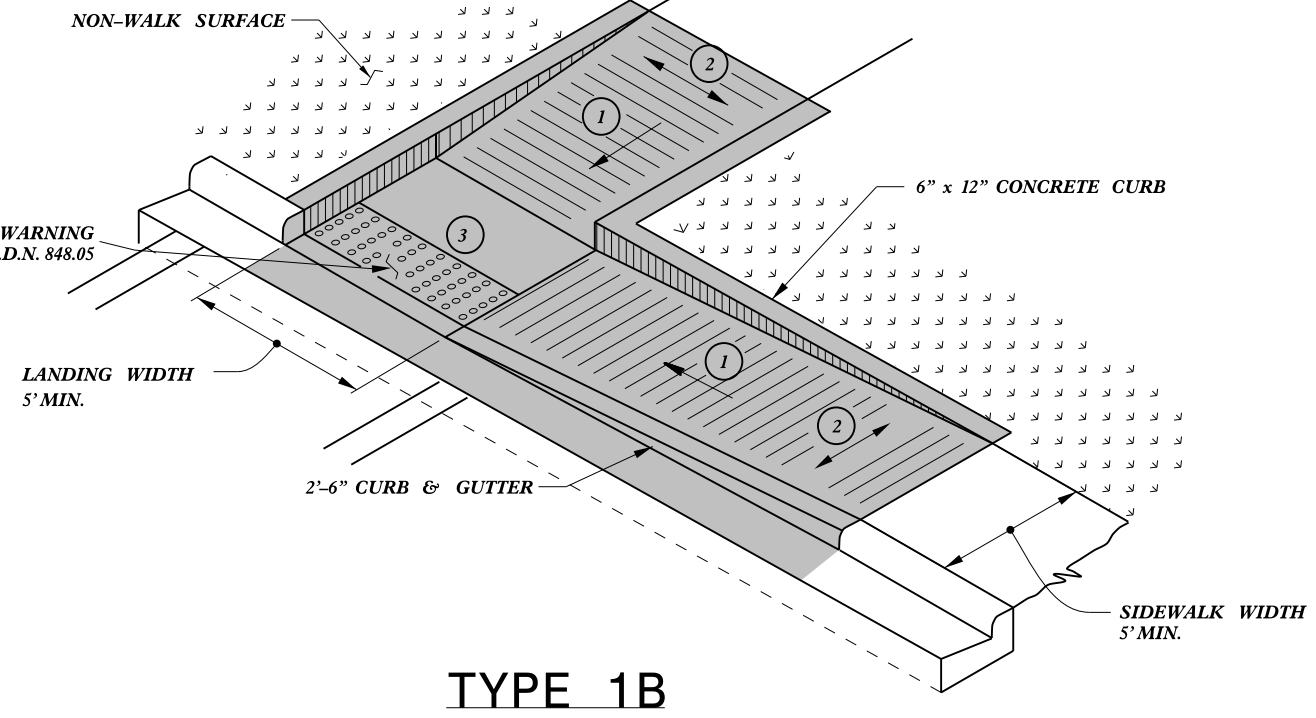
BRIDGE NUMBER 81 ON MAP 4, 211 AND 143 MAP 11, 92 MAP 15, 220 MAP 17, 151 Map 19, 113 MAP 23, 118 MAP 24, 35 MAP 25, AND 34 MAP 27. MILL 1-1/2" OFF EXISTING PAVEMENT SEE MAP FOR BRIDGE LOCATION.

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YARD
C2	PROP. APPROX. 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YARD
V1	INCIDENTAL MILLING
V2	MILLING ASPHALT PAVEMENT 1-1/2" DEPTH

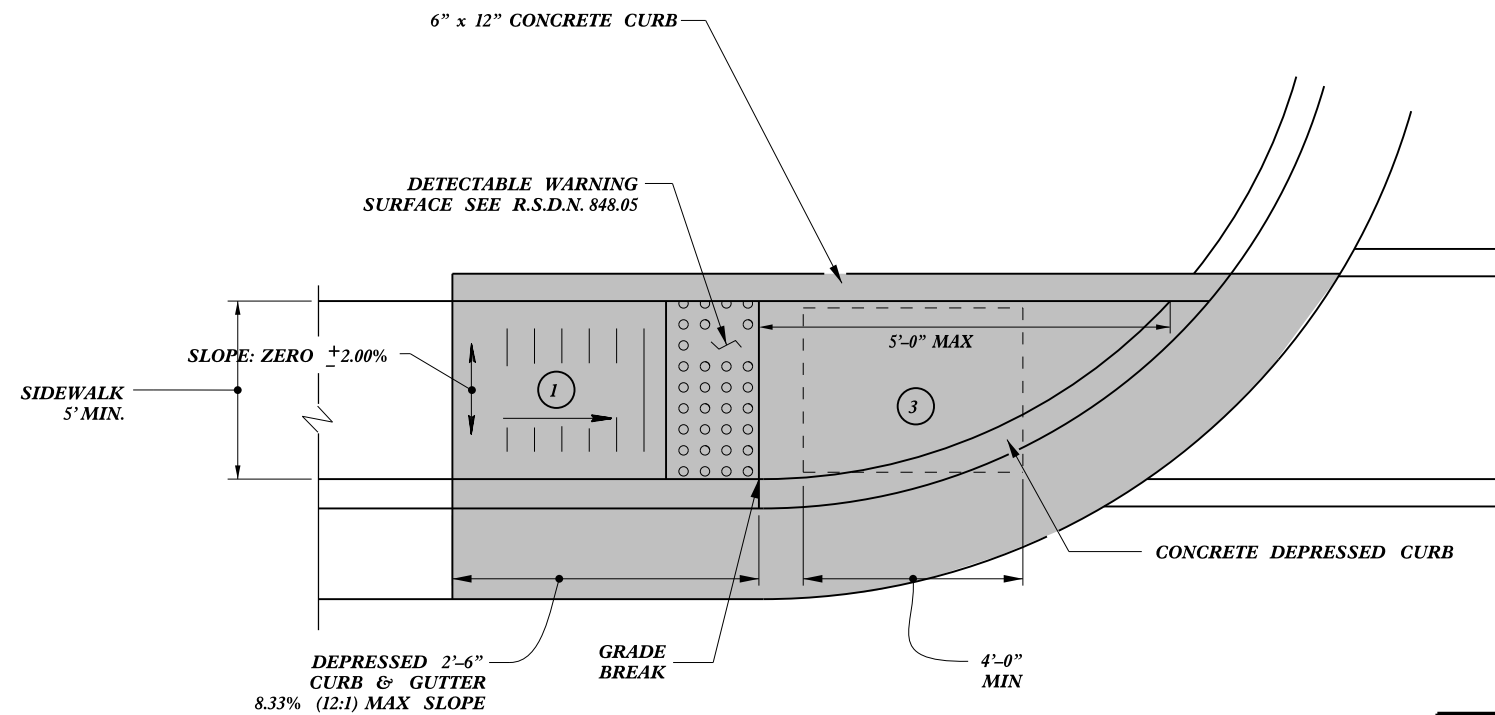
6/12/99  
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Resurfacing\Burke\Package\2020\_Burke\_Resurfacing-TYP.dgn



**TYPE 1A**



**TYPE 1B**



**TYPE 1**

PAY LIMITS FOR 1 CURB RAMP

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES



DocuSign by  
Joel S. Howerton

449E8E25522144F...

11/18/2015

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

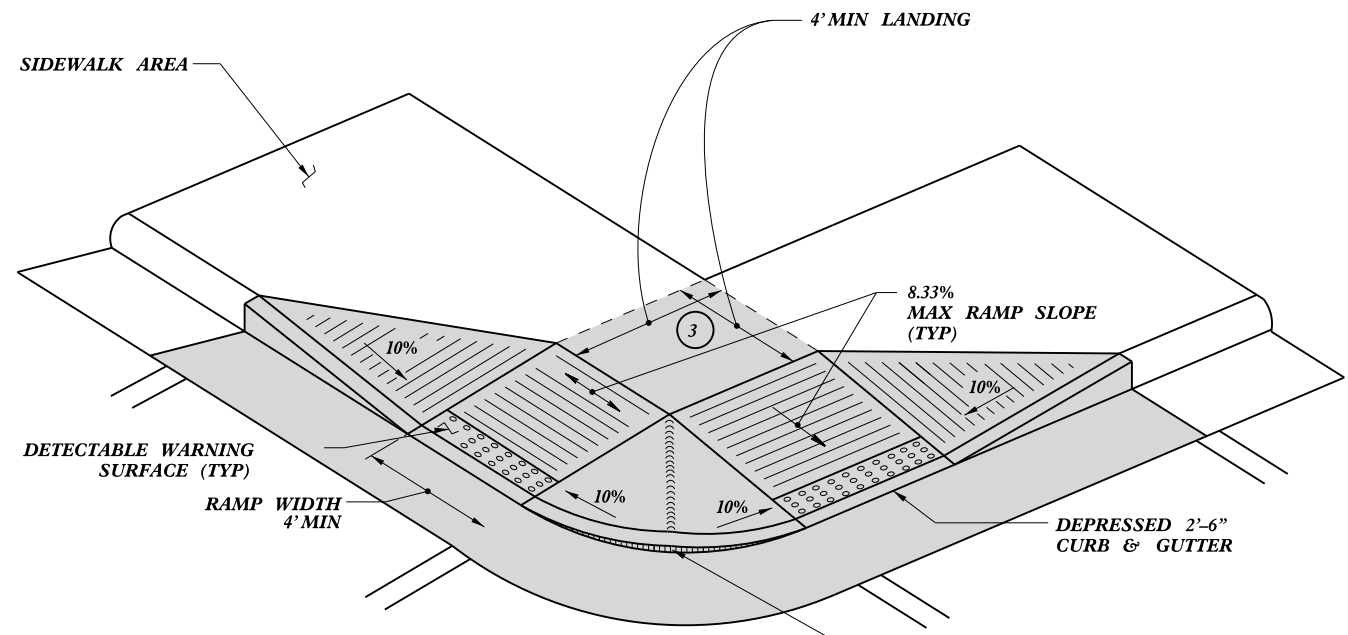
**CONTRACT STANDARDS AND DEVELOPMENT UNIT**  
Office 919-707-6950 FAX 919-250-4119

**CURB RAMPS**  
Directional Ramps

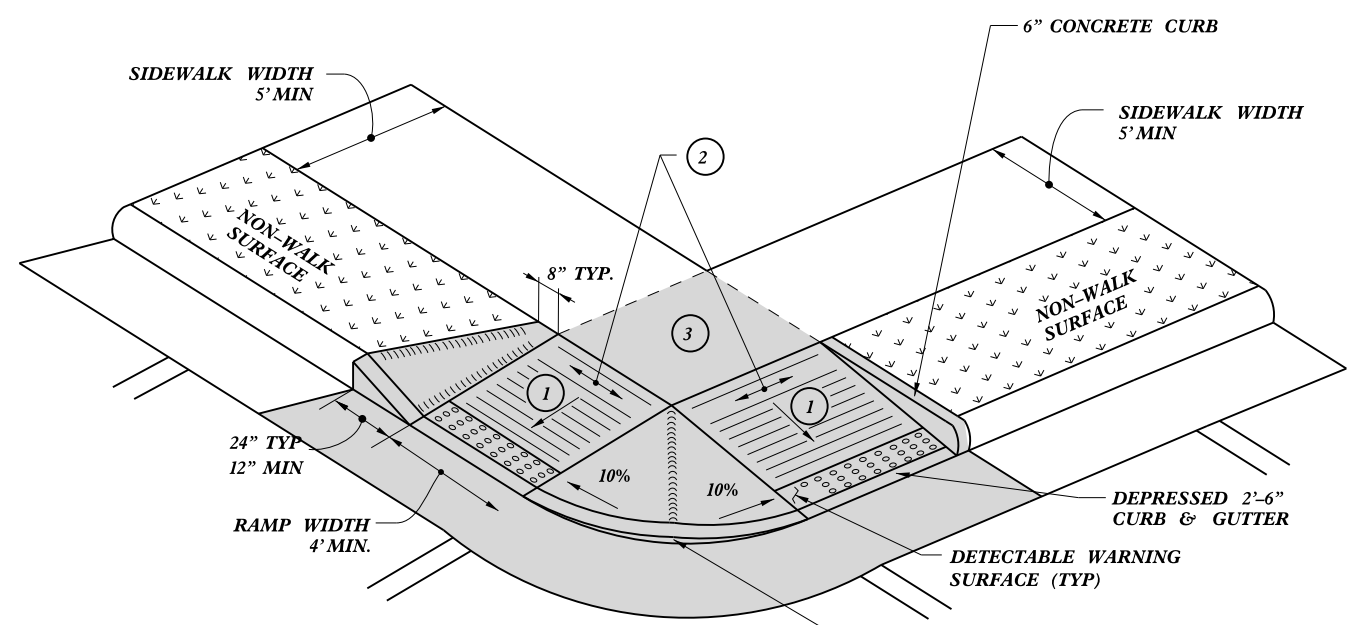
ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11  
MODIFIED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dwg

5/14/99  
CONSTRUCTION USER NAME  
DATE

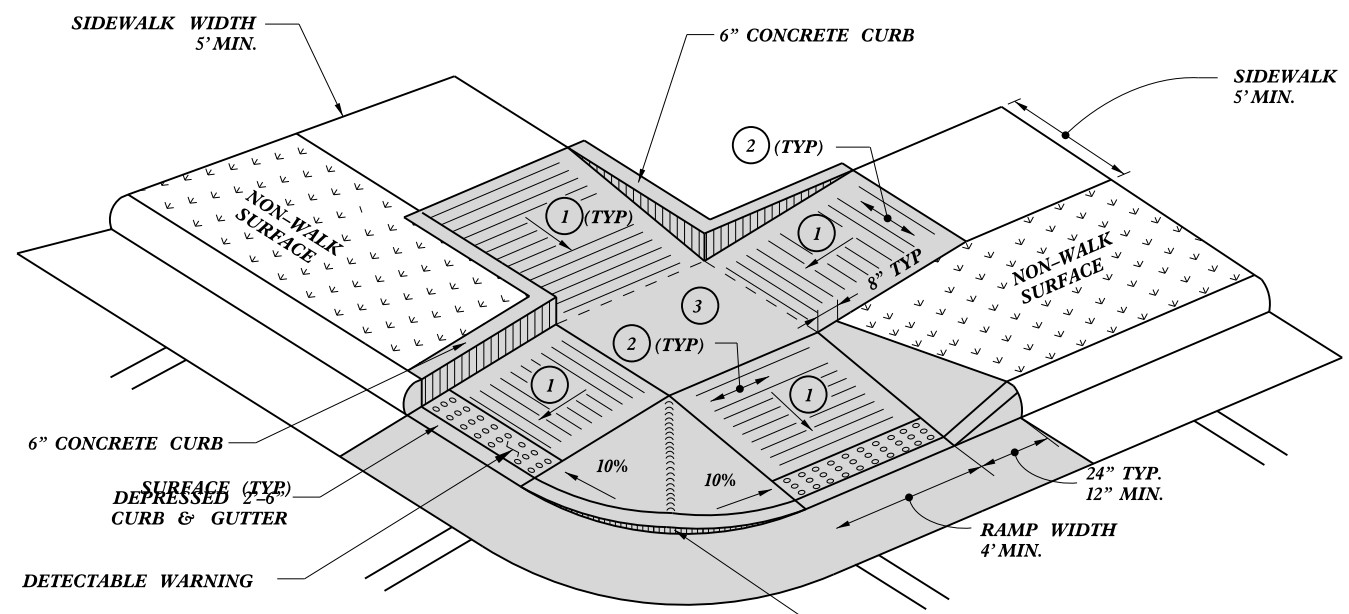




**TYPE 4**



**TYPE 4A**



**TYPE 5**

PAY LIMITS FOR 2 CURB RAMPS

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

DocuSigned by:  
Joel S Howerton  
449E8E25522144F...



11/18/2015

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT  
Office 919-707-6950 FAX 919-250-4119

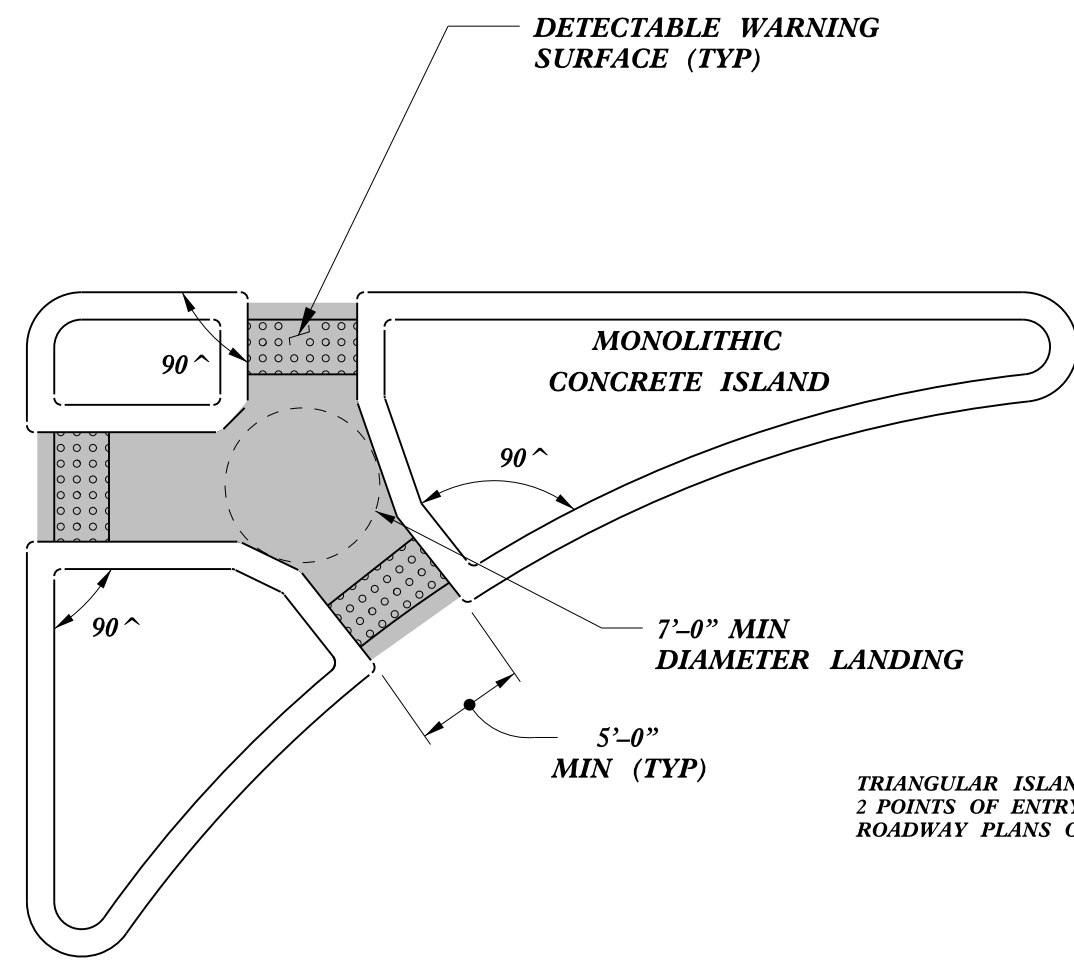
**CURB RAMPS**  
Shared Landing

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11  
MODIFIED BY: DATE:   
CHECKED BY: DATE:   
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dwg

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

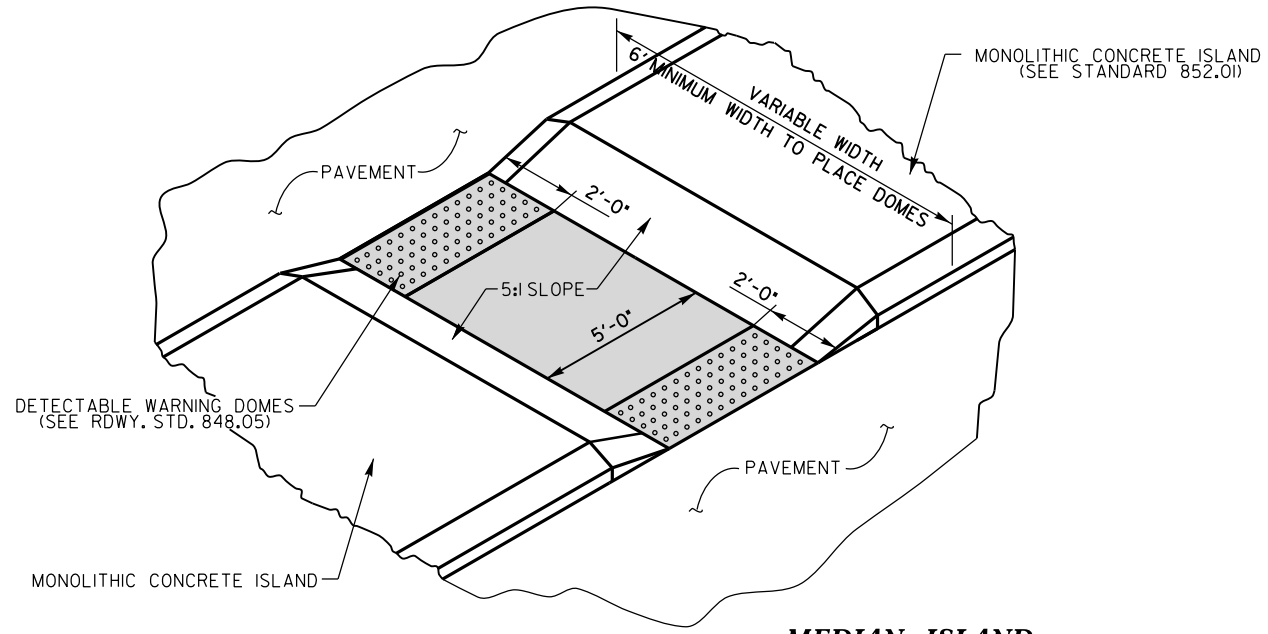
5/14/1999  
SYTIMECONSUNUSRNAME

PAY LIMITS FOR 2 OR 3 CURB RAMPS  
(CALCULATE BASED ON NUMBER OF  
SETS OF TRUNCATED DOMES)

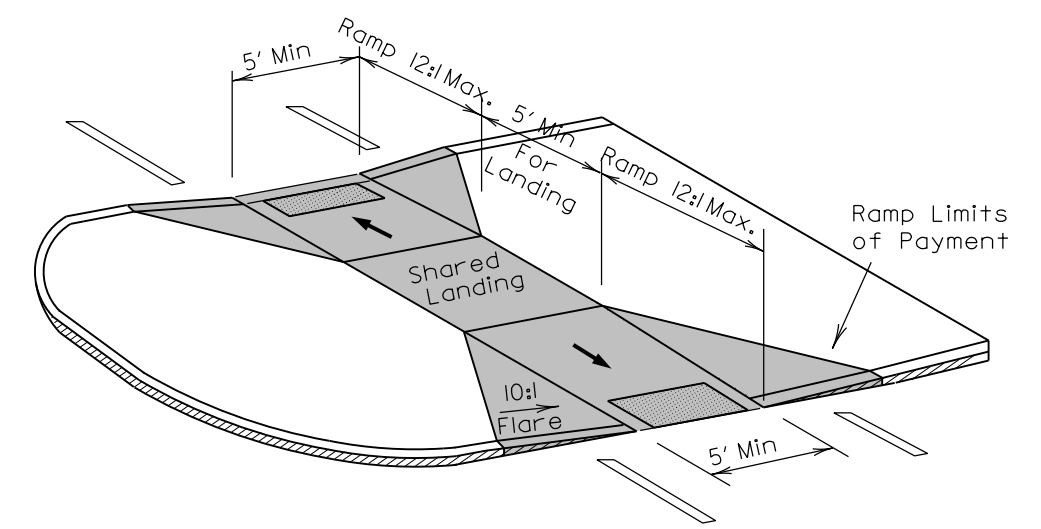


TRIANGULAR ISLANDS MAY BE CONSTRUCTED WITH ONLY  
2 POINTS OF ENTRY AND EXIT AS SHOWN IN THE  
ROADWAY PLANS OR AS DIRECTED BY THE ENGINEER.

**TRIANGULAR ISLAND  
WITH CUT THROUGH**



**MEDIAN ISLAND  
WITH CUT THROUGH**



**MEDIAN ISLAND  
CURB RAMPS**

5/14/99  
SYTIME  
SERIAL  
DATE  
C:\P\2012\2522144F\DWG\2012CurbRamp\CurbRampDetails.dwg  
USER: J.S.HOWERTON  
DATE: 11/18/2015 11:18:15 AM  
449E8E25522144F...

11/18/2015

DocuSign  
Seal  
Joel S. Howerton  
Professional Engineer  
North Carolina  
SEAL 022966

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

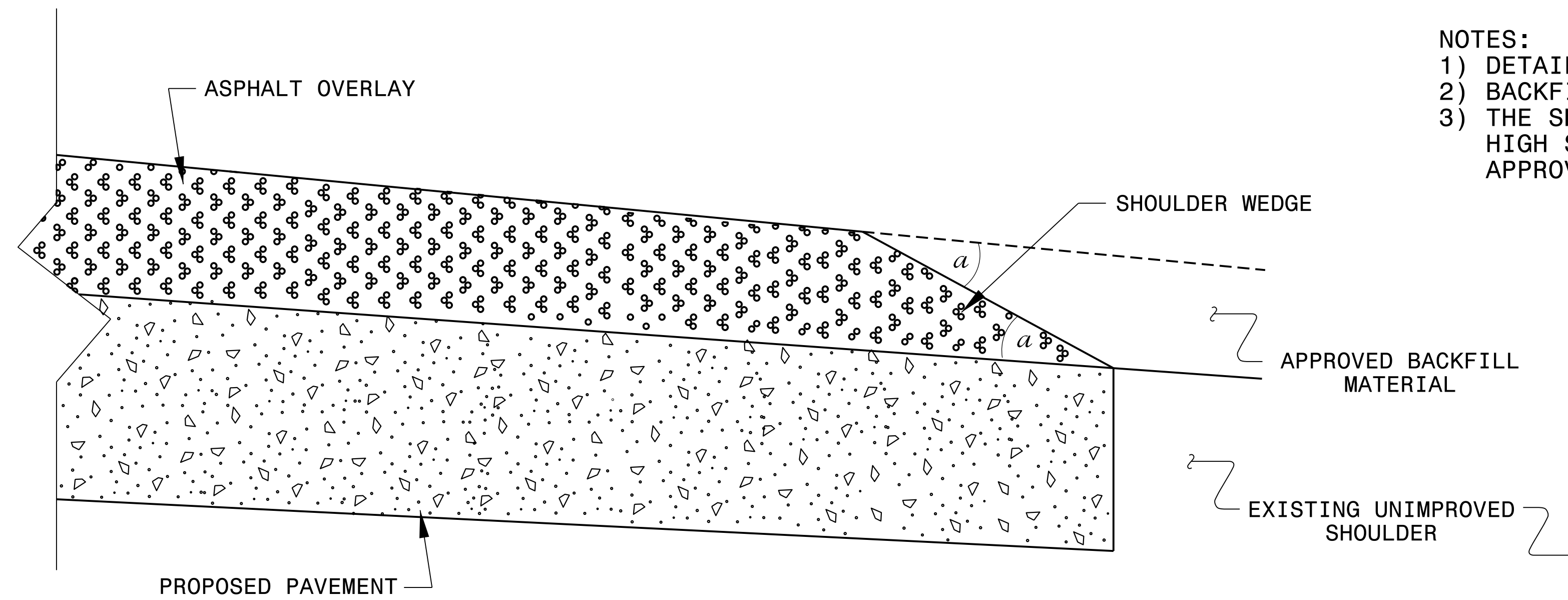
<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950	FAX 919-250-4119
<b>CURB RAMPS</b>	
Median or Turn Lane Islands	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dwg	





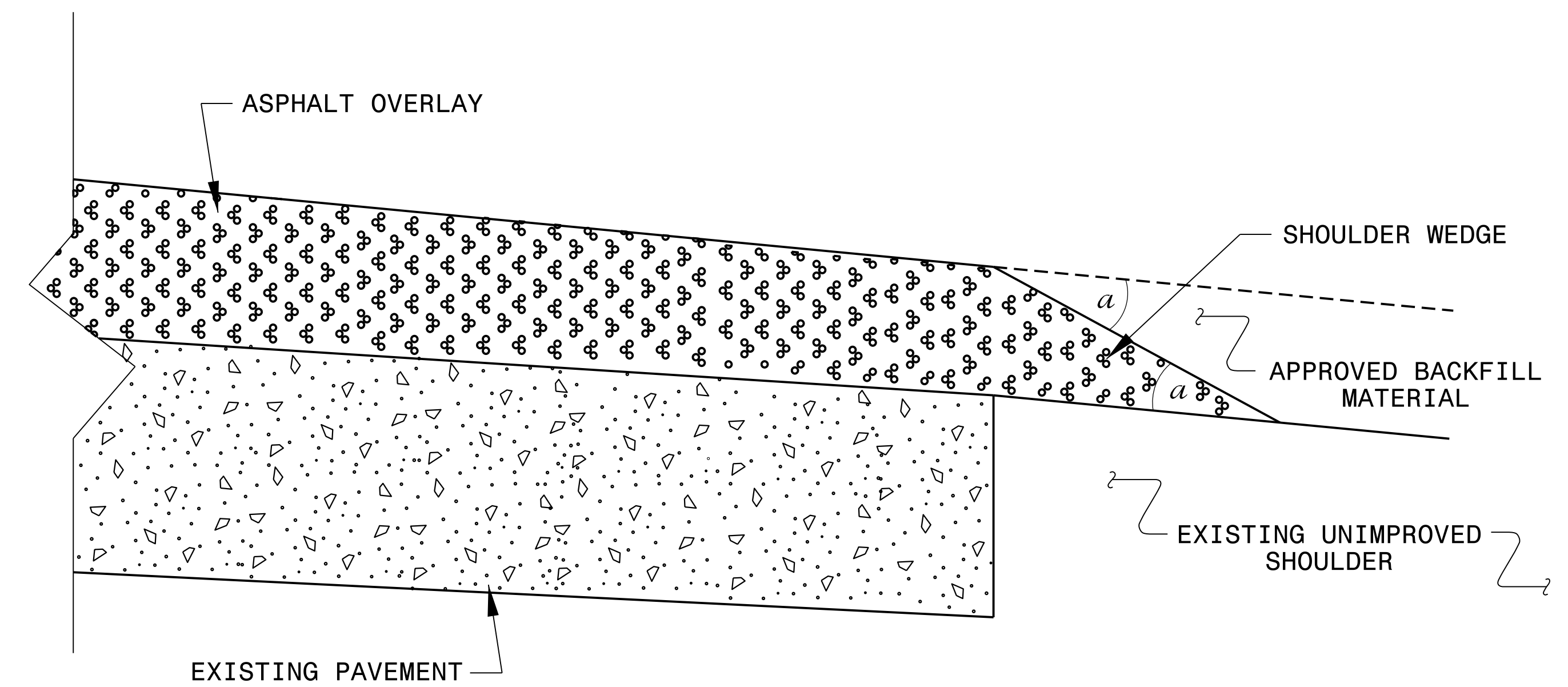
**NOTES:**

- 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.



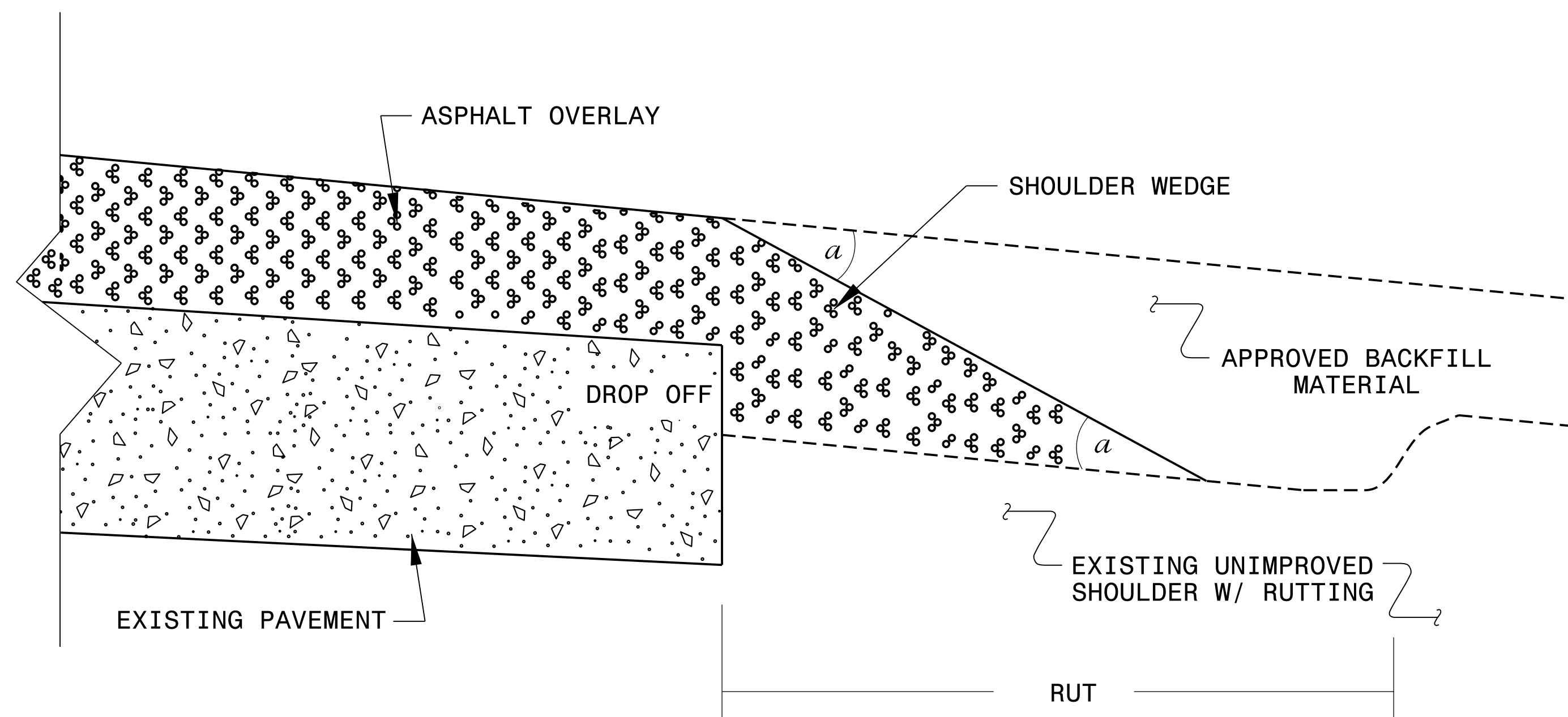
**SHOULDER WEDGE DETAIL**

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



**SHOULDER WEDGE DETAIL**

(Resurfacing Projects w/ NO Widening)



**SHOULDER WEDGE DETAIL**

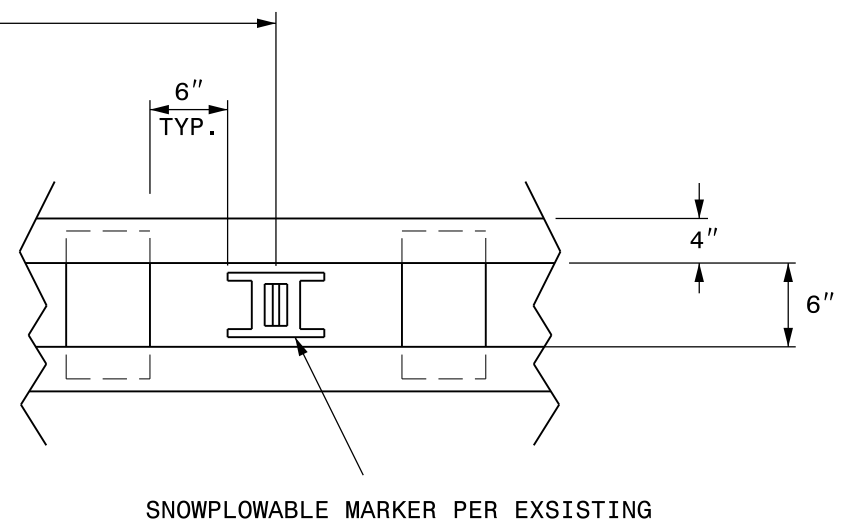
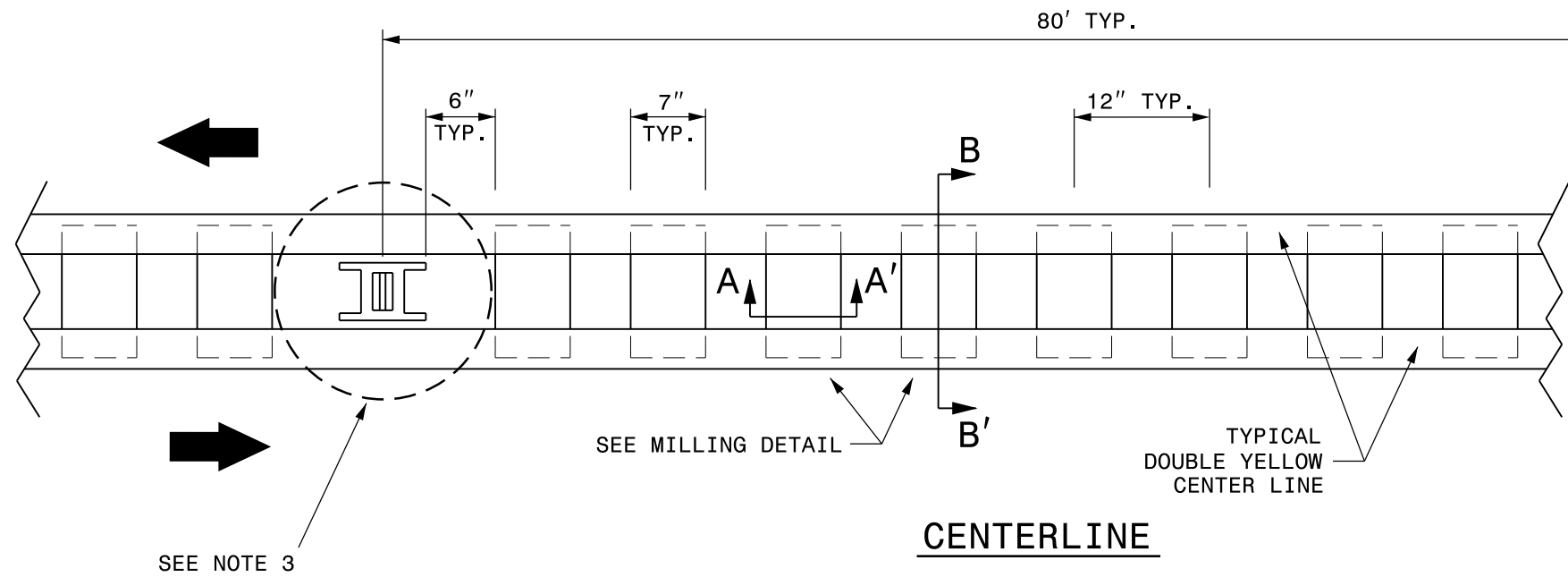
(Resurfacing Adjacent to Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°



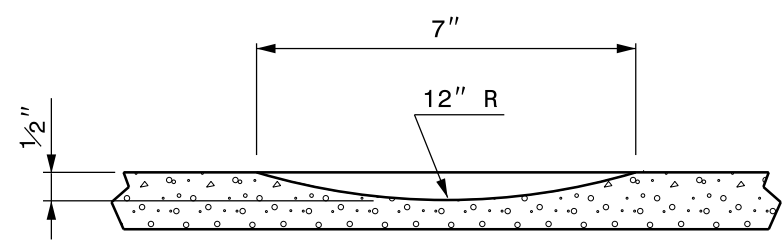
<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950 FAX 919-250-4119	
<b>SHOULDER WEDGE DETAILS</b>	
ORIGINAL BY: T. SPELL	DATE: 7-19-11
MODIFIED BY:	DATE: 2/2/16
CHECKED BY:	DATE:
FILE SPEC.: s:\usr\details\stand\shoulderwedgedetail.dgn	

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

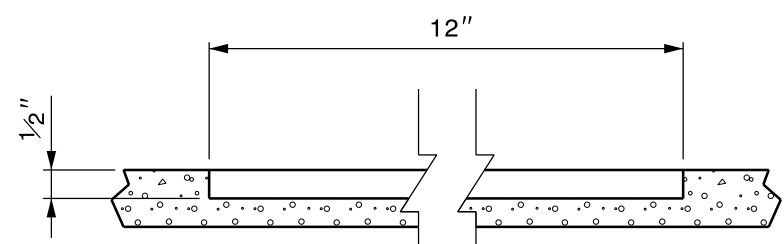


SNOWPLOWABLE MARKER PER EXSISTING

**MILLING DETAIL**



SECTION A-A'

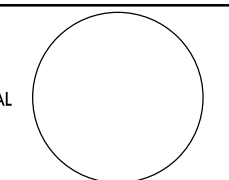



SECTION B-B'

**NOTES:**

- 1) USING A VACUUM, REMOVE ALL DEBRIS FROM THE MILLINGS JUST PRIOR TO PLACING ANY PAVEMENT MARKINGS.
- 2) ENSURE GLASS BEADS ARE SPREAD UNIFORMLY OVER THE ENTIRE SURFACE OF THE PAVEMENT MARKING MATERIAL.
- 3) INSTALL SNOWPLWABLE MARKERS AT THE APPROACHES PER EXISTING. USE RAISED MARKERS ON CONCRETE BRIDGE DECK (TBD).

06-DEC-2018 15:05 S:\Contracts\Contractors\Resurfacing Projects\Division 13\Burke Jan 2019\Center Line 12in Rumble-Stripe & Snowpl-Marker.dgn pwrcheester AT CSD-292933

APPROVED: _____ DATE: _____	<b>RUMBLE STRIPES</b>	
SEAL 	SCALE: NONE	
	DATE: 11/2018	
	DWG. BY: MDS	
	DESIGN BY: MDS	
REVIEWED BY: _____	REVISIONS	



PROJECT NO. 2020CPT.13.02.10121, 2020CPT.13.02.20121, 2020CPT.13.02.20122	SHEET NO. 21	TOTAL NO.
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**SUMMARY OF QUANTITIES**

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	1220000000-E	1245000000-E	1260000000-E	1297000000-E	1308000000-E	1330000000-E	1519000000-E	1523000000-E	1575000000-E	1704000000-E	1803500000-E	1820000000-E	1838000000-E	1838500000-N	1881000000-E	2613000000-N	2800000000-N	2815000000-N	2830000000-N	2845000000-N	7444000000-E			
												INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH	MILLING ASPHALT PAVEMENT, 0" TO 1-1/2" DEPTH	INCIDENTAL MILLING	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ASPHALT SURFACE TREATMENT, DOUBLE SEAL	ASPHALT SURFACE TREATMENT, FOG SEAL	EMULSION FOR ASPHALT SURFACE TREATMENT	VACUUM TRUCK	CENTERLINE MILLED RUMBLE STRIPS	REMOVE AND REPLACE CURB RAMPS	ADJUSTMENT OF CATCH BASINS	ADJUSTMENT OF DROP INLET	ADJUSTMENT OF MANHOLES	ADJUSTMENT OF METER BOXES OR VALVE BOXES	INDUCTIVE LOOP SAWCUT			
MI	FT	TON	SMI	TON	SY	SY	SY	TON	TON	TON	TON	SY	SY	GAL	WK	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA		
2020CPT.13.02.20121	Burke	40	SR 1126	FROM SR 1127 TO SR 1124 (MP 0.00 - MP 1.43)	6	2	2WD	NO	NO	1.43	18										400														
2020CPT.13.02.20121	Burke	41	SR 1206	FROM US 70 TO SR 1279 (MP 0.00 - MP 1.88)	6	2	2WD	NO	NO	1.88	20										300														
2020CPT.13.02.20121	Burke	42	SR 1206	FROM SR 1279 TO US 70 (MP 1.88 - MP 3.01)	6	2	2WD	NO	NO	1.13	20										230														
2020CPT.13.02.20121	Burke	43	SR 1285	FROM NC 126 TO DEAD END (MP 0.00 - MP 0.58)	6	2	2WD	NO	NO	0.58	20										150														
2020CPT.13.02.20121	Burke	44	SR 1300	FROM SR 1233 TO SR 1285 (MP 0.00 - MP 0.50)	6	2	2WD	NO	NO	0.5	20										100														
2020CPT.13.02.20121	Burke	45	SR 1624	FROM SR 1621 TO SR 1621 (MP 0.00 - MP 1.16)	6	2	2WD	NO	NO	1.16	20										100														
2020CPT.13.02.20121	Burke	46	SR 1647	FROM SR 1007 TO SR 1683 (MP 0.00 - MP 0.89)	6	2	2WD	NO	NO	0.89	18										130														
2020CPT.13.02.20121	Burke	47	SR 1647	FROM SR 1648 TO SR 1649 (MP 0.89 - MP 2.58)	6	2	2WD	NO	NO	1.69	28										350														
2020CPT.13.02.20121	Burke	48	SR 1647	FROM SR 1648 TO SR 1649 (MP 2.58 - MP 2.86)	6	2	2WD	NO	NO	0.28	30										20														
2020CPT.13.02.20121	Burke	49	SR 1647	FROM SR 1649 TO SR 1611 (MP 2.86 - MP 3.67)	6	2	2WD	NO	NO	0.81	19										120														
2020CPT.13.02.20121	Burke	50	LIBERTY SCHOOL	BUS DRIVE AND PARKING	N/A	2		NO	NO	0.01	1					4,000			400	24	20														
2020CPT.13.02.20121	Burke	51	GEORGE HILDEBRAND	FIRE DEPARTMENT	N/A	2	2WD	NO	YES	0.01	1					100			100	6	10														
<b>TOTAL FOR PROJ NO. 2020CPT.13.02.20121</b>										<b>42.051</b>		<b>1,155</b>	<b>46.00</b>	<b>5,981</b>	<b>3,387</b>	<b>7,535</b>	<b>5,824</b>	<b>23,169</b>	<b>1,993</b>	<b>1,670</b>	<b>8,820</b>									<b>2</b>	<b>13</b>	<b>16</b>	<b>3</b>	<b>41</b>	
2020CPT.13.02.20122	Burke	52	SR 1116	FROM SR 1102 TO SR 1115 (MP 0.00 - MP 1.15)	6	2	2WD	NO	NO	1.15	19											12,819	12,819	7,050											
2020CPT.13.02.20122	Burke	53	SR 1116	FROM SR 1115 TO SR 1149 (MP 1.15 - MP 2.36)	6	2	2WD	NO	NO	1.21	19											13,487	13,487	7,418											
2020CPT.13.02.20122	Burke	54	SR 1122	FROM HWY 64 TO END OF MAINT (MP 0.00 - MP 0.80)	6	2	2WD	NO	NO	0.8	18											8,448	8,448	4,646											
2020CPT.13.02.20122	Burke	55	SR 1919	FROM SR 1918 TO END OF MAINT. (MP 0.00 - MP .80)	6	2	2WD	NO	NO	0.8	18											8,448	8,448	4,658											
2020CPT.13.02.20122	Burke	56	SR 1124	FROM US 64 TO SR 1128 (MP 0.00 - MP 1.43)	6	2	2WD	NO	NO	1.43	19											15,940	15,940	8,761											
2020CPT.13.02.20122	Burke	57	SR 1124	FROM SR 1128 TO SR 1125 (MP 1.43 - MP 2.28)	6	2	2WD	NO	NO	0.85	19											9,475	9,475	5,211											
2020CPT.13.02.20122	Burke	58	SR 1124	FROM SR 1125 TO BRIDGE # 90 (MP 2.28 - MP 3.45)	6	2	2WD	NO	NO	1.17	19											13,042	13,042	7,173											
2020CPT.13.02.20122	Burke	59	SR 1124	FROM BRIDGE # 90 TO SR 1142 (MP 3.45 - MP 4.72)	6	2	2WD	NO	NO	1.27	19											14,157	14,157	7,786											
2020CPT.13.02.20122	Burke	60	SR 1126	FROM SR 1127 TO SR 1124 (MP 0.00 - MP 1.43)	6	2	2WD	NO	NO	1.43	18											15,101	15,101	8,294											
2020CPT.13.02.20122	Burke	61	SR 1206	FROM US 70 TO SR 1279 (MP 0.00 - MP 1.88)	6	2	2WD	NO	NO	1.88	20											22,059	22,059	12,132											
2020CPT.13.02.20122	Burke	62	SR 1206	FROM SR 1279 TO US 70 (MP 1.88 - MP 3.01)	6	2	2WD	NO	NO	1.13	20											13,259	13,259	7,312											
2020CPT.13.02.20122	Burke	63	SR 1285	FROM NC 126 TO DEAD END (MP 0.00 - MP 0.58)	6	2	2WD	NO	NO	0.58	20											6,805	6,805	3,717											
2020CPT.13.02.20122	Burke	64	SR 1300	FROM SR 1233 TO SR 1285 (MP 0.00 - MP 0.50)	6	2	2WD	NO	NO	0.5	20											5,867	5,867	3,214											
2020CPT.13.02.20122	Burke	65	SR 1624	FROM SR 1621 TO SR 1621 (MP 0.00 - MP 1.16)	6	2	2WD	NO	NO	1.16	20											13,611	13,611	7,486											
2020CPT.13.02.20122	Burke	66	SR 1647	FROM SR 1007 TO SR 1683 (MP 0.00 - MP 0.89)	6	2	2WD	NO	NO	0.89	18											9,398	9,398	5,169											
2020CPT.13.02.20122	Burke	67	SR 1647	FROM SR 1683 TO SR 1648 (MP 0.89 - MP 2.58)	6	2	2WD	NO	NO	1.69	28											27,761	27,761	15,269											
2020CPT.13.02.20122	Burke	68	SR 1647	FROM SR 1648 TO SR 1649 (MP 2.58 - MP 2.86)	6	2	2WD	NO	NO	0.28	30											4,928	4,928	2,710											
2020CPT.13.02.20122	Burke	69	SR 1647	FROM SR 1649 TO SR 1611 (MP 2.86 - MP 3.67)	6	2	2WD	NO	NO	0.81	19											9,029	9,029	4,948											
<b>TOTAL FOR PROJ NO. 2020CPT.13.02.20122</b>										<b>19.03</b>		<b>954</b>											<b>223,634</b>	<b>223,634</b>	<b>122,954</b>								<b>4</b>		
<b>GRAND TOTAL</b>										<b>67.831</b>		<b>2,434</b>	<b>58.41</b>	<b>7,594</b>	<b>16,787</b>	<b>10,135</b>	<b>12,369</b>	<b>23,169</b>	<b>14,610</b>	<b>2,426</b>	<b>11,690</b>	<b>223,634</b>	<b>223,634</b>	<b>122,954</b>	<b>11</b>	<b>12,160</b>	<b>11</b>	<b>16</b>	<b>17</b>	<b>27</b>	<b>85</b>	<b>1,225</b>			

PROJECT NO.	SHEET NO.	TOTAL NO.
2020CPT13.02.10121, 2020CPT13.02.20121, 2020CPT13.02.20122	22	

**THERMOPLASTIC AND PAINT QUANTITIES**

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	441300000-E	445700000-N	469500000-E	469700000-E	470500000-E	471000000-E	472500000-E								481000000-E		484701000-E		490500000-N							
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS) YELLOW	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (16", 120 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS) SCHOOL	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS) RXR	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) LT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR & RT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) LT, STR, RT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) RT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) MERGE ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR ARROW	PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	POLYUREA PAVEMENT MARKING LINES WHITE (4", 20 MILS) (HIGHLY REFLECTIVE MEDIA)	POLYUREA PAVEMENT MARKING LINES YELLOW (4", 20 MILS) (HIGHLY REFLECTIVE MEDIA)	SNOW PLOWABLE PAVEMENT MARKERS							
								MI	FT	SF	LS	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA			
2020CPT13.02.10121	Burke	1	US 64	FROM US 64 BUS TO US 64 WEST (MP 16.573 - MP 16.942)	1	4	MU	0.369	56	760	*				140			2	5	2											5,150	3,897	75		
2020CPT13.02.10121	Burke	2	US 64	FROM US 64 WEST TO US 64 WEST (MP 16.942 - MP 17.543)	2	2		0.601	32					220			120	12				2	8										9,500	6,347	90
2020CPT13.02.10121	Burke	3	US 64	FROM SR 1569 + 0.343 MILES TO CALDWELL COUNTY (MP 21.526 - MP 22.768)	2	2	2WU	1.225	30					140			70					3	1										14,000	10,000	100
2020CPT13.02.10121	Burke	4	US 64	FROM US 64 TO US 64 (MP 5.225 - MP 5.815)	2	2	MD	0.59	32								64	12				3											6,230	6,630	80
2020CPT13.02.10121	Burke	5	NC 114	FROM US 70 TO SR 1535 (MP 1.739 - MP 2.599)	2,3	2	2WU	0.863	36					55	404	44	263	12	4			2	1					3,400	9,113		3,400	9,113		35	
2020CPT13.02.10121	Burke	6	NC 181	FROM SR 1264 TO SR 1401 (MP 23.50 - MP 25.803)	2,4	2	2WU	2.303	34																							24,320	24,320	300	
2020CPT13.02.10121	Burke	7	NC 181	FROM 0.10 MILEN OF NC 183 TO AVERY CO (MP 26.720 TO MP 27.519)	2	2	2WU	0.799	23																							8,437	8,437	110	
TOTAL FOR PROJ NO. 2020CPT13.02.10121									6.75		760	*	415	404	44	657	36	4	10	6	2	3	8		3,400	9,113	71,037	68,744	790						
																40					29			12,513		139,781									
2020CPT13.02.20121	Burke	8	SR 1002	FROM CATAWBA CL TO SR 1834 (MP 0.00 - MP 1.52)	2	2	2WD	1.52	18	4,722	*																				32,102	32,102			
2020CPT13.02.20121	Burke	9	SR 1434	FROM NC 18 TO NC 18 (MP 0.00 - MP 1.012)	5	2	2WD	1.012	18																							21,373	21,373		
2020CPT13.02.20121	Burke	10	SR 1527	FROM NC 114 TO SR 1525 (MP 0.00 - MP 0.52)	5	2	2WD	0.52	19																							10,982	10,982		
2020CPT13.02.20121	Burke	11	SR 1708	FROM NC 18 TO SR 1712 (MP 0.00 - MP 1.446)	5	2	2WD	1.446	22						42		20				2											30,540	30,540		
2020CPT13.02.20121	Burke	12	SR 1712	FROM NC 18 TO SR 1704 (MP 0.00 - MP 0.907)	5	2	2WD	0.91	19								40															19,219	19,219		
2020CPT13.02.20121	Burke	13	SR 1713	FROM US 70 TO SR 1718 (MP 0.00 - MP 1.943)	5	2	2WD	1.943	22																							41,036	41,036		
2020CPT13.02.20121	Burke	14	SR 1713	FROM SR 1718 TO NC 114 (MP 1.943 - MP 2.789)	5	2	2WD	0.85	22																							17,952	17,952		
2020CPT13.02.20121	Burke	15	SR 1931	FROM NC 18 TO SR 1924 (MP 0.00 - MP 1.35)	5	2	2WD	1.35	23																							28,512	28,512		
2020CPT13.02.20121	Burke	16	SR 2515	FROM SR 1712 TO END OF MAINT (MP 0.00 - MP 0.31)	5	2	2WD	0.31	20																										
2020CPT13.02.20121	Burke	17	SR 1118	FROM US 64 TO SR 1149 (MP 0.00 - MP 1.36)	5	2	2WD	1.36	21																							28,723	28,723		
2020CPT13.02.20121	Burke	18	SR 1243	FROM SR 1254 TO BRIDGE#151 (MP 0.00 - MP 1.22)	5	2	2WD	1.22	18																							25,766	25,766		
2020CPT13.02.20121	Burke	19	SR 1243	FROM BRIDGE#151 TO SR 1244 (MP 1.22 - MP 2.21)	5	2	2WD	0.99	18																							20,909	20,909		
2020CPT13.02.20121	Burke	20	SR 1531	FROM NC 114 TO SR 1512 (MP 0.00 - MP 1.20)	5,7,8	2	2WD	1.2	22						120	44	80				2											25,344	26,344		
2020CPT13.02.20121	Burke	21	SR 1532	FROM SR 1531 TO DREXEL CITY LIMITS (MP 0.00 - MP 0.47)	5	2	2WD	0.47	21																							9,926	9,926	5	
2020CPT13.02.20121	Burke	22	SR 1544	FROM SR 1001 TO SR 1547 (MP 0.00 - MP 0.76)	5	2	2WD	0.76	19																							16,051	16,051		
2020CPT13.02.20121	Burke	23	SR 1726	FROM US 70 TO SR 1722 (MP 0.00 - MP 1.43)	5	2	2WD	1.43	19																							30,202	30,202		

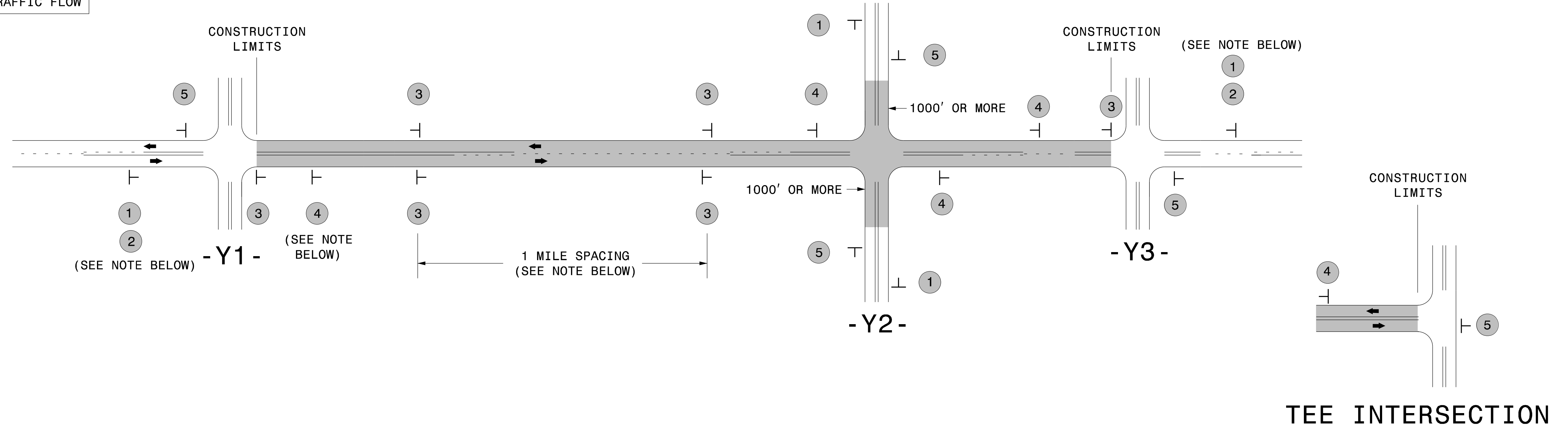






# SIGNING FOR RESURFACING PROJECTS

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



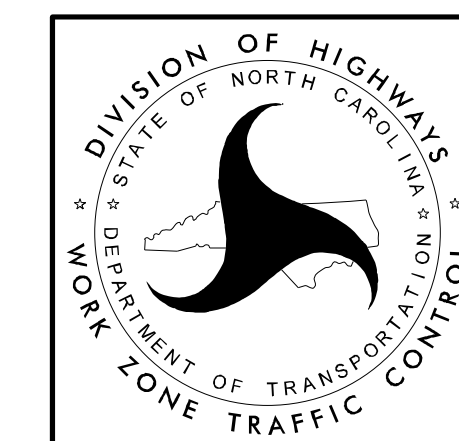
## MAINLINE (-L-) SIGNING

## -Y- LINE SIGNING

<b>SIGNING NOTES AND PLACEMENT PER DIRECTION</b>	 	<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><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, 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;">             PLACED 500' IN ADVANCE OF FLAGGER.         </div> <div style="text-align: center;">             PLACED 250' IN ADVANCE OF FLAGGER.         </div> </div>
		<p>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</p> <p>- AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</p>	
		<p>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS.</p> <p>- DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</p> <p>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</p> <p>- 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.</p> <p>- 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> <p>- FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.</p>	
		<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>		

**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.

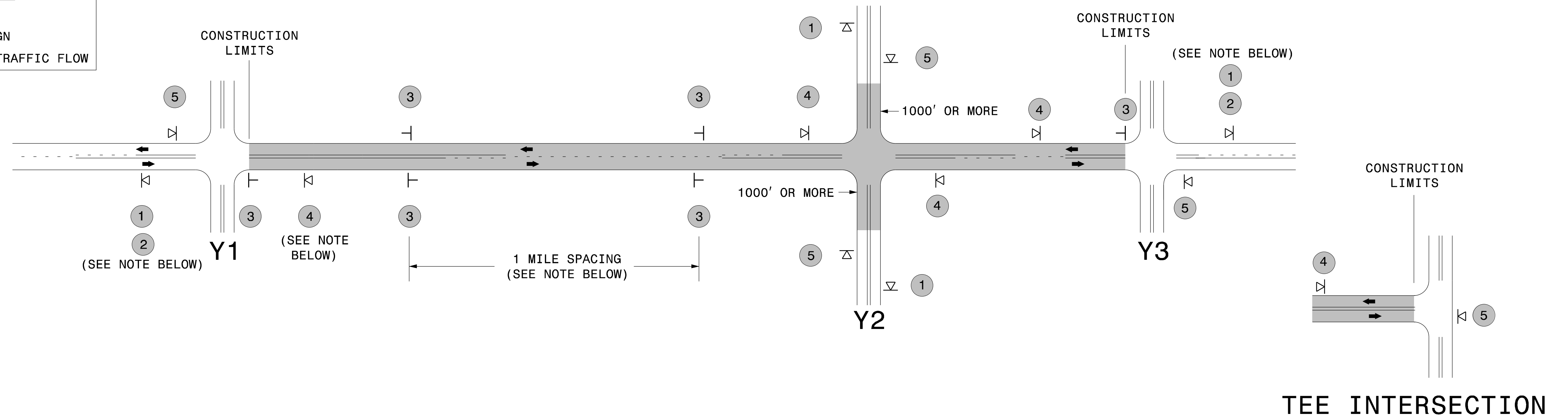


**ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING**

# SIGNING FOR ASPHALT SURFACE TREATMENT

**LEGEND**

- ▷ PORTABLE SIGN
- └ STATIONARY SIGN
- ← DIRECTION OF TRAFFIC FLOW



## MAINLINE (-L-) SIGNING

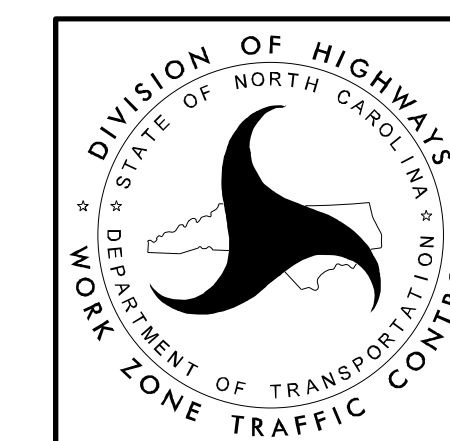
## -Y- LINE SIGNING

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>STATIONARY SIGNING NOT REQUIRED 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, 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;">               PLACED 500' IN ADVANCE OF FLAGGER.         </div> <div style="text-align: center;">               PLACED 250' IN ADVANCE OF FLAGGER.         </div> </div>
	2		- SIGN #2 ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO THE NEAREST WHOLE NUMBER. DO NOT USE FRACTIONAL OR DECIMAL NUMBERS.	
	3	 	<p>- ALTERNATE THE FOLLOWING TWO SIGNS:</p> <p>- STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT".</p> <p>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER.</p> <p>- AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</p>	
	4		<p>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</p> <p>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</p> <p>- 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.</p> <p>- 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		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.

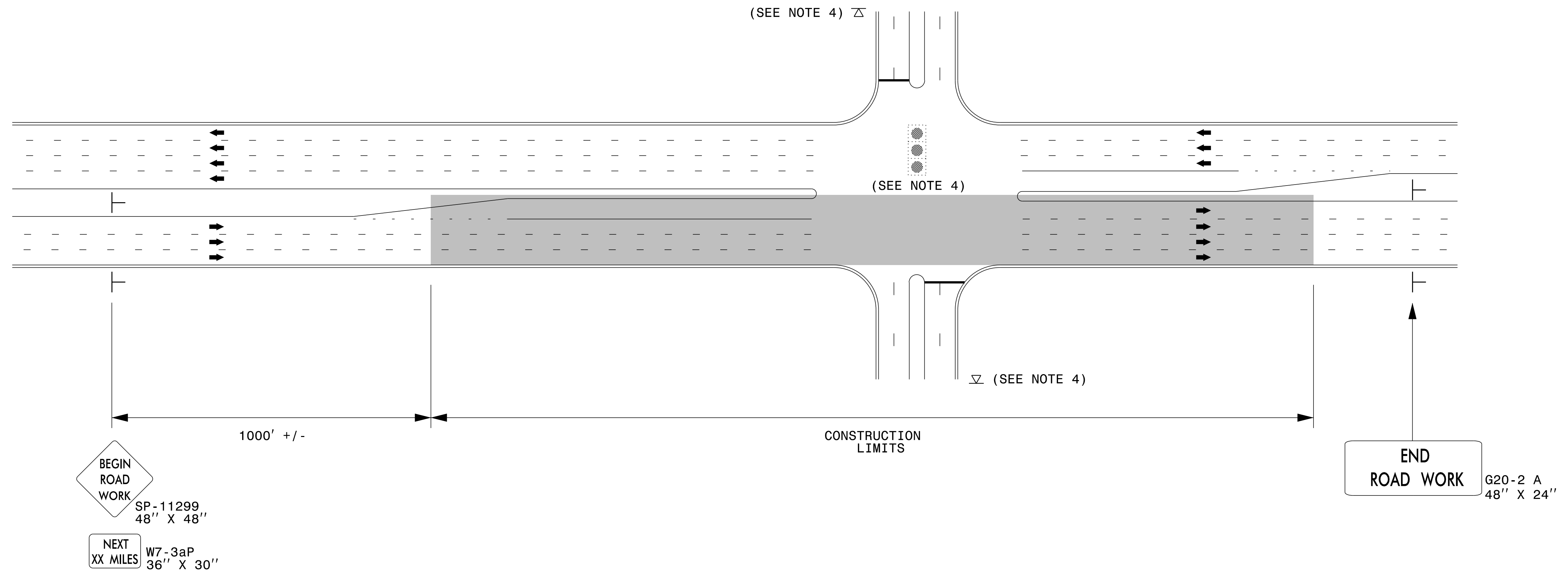
**MAPS LESS THAN 2 MILES**

FOR AST RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, USE A STATIONARY "LOOSE GRAVEL" SIGN AT THE BEGINNING CONSTRUCTION LIMIT FOLLOWED BY AN "UNMARKED PAVEMENT" SIGN MIDWAY THROUGH AND AN "END ROAD WORK" SIGN AT THE END CONSTRUCTION LIMIT.



**ADVANCE WARNING SIGNS FOR 2-LANE ROADWAY ASPHALT SURFACE TREATMENT**

## URBAN / SUBURBAN WORKZONES

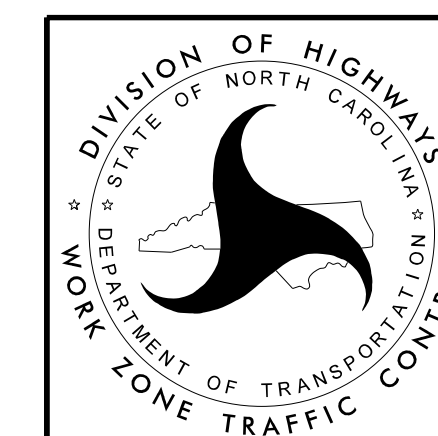


### NOTES:

- 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**

SIGN NUMBER: SP13106  
 TYPE: STATIONARY  
 QUANTITY: SEE PLANS

BACKG COLOR: Fluorescent Orange  
 COPY COLOR: Black

DESIGN BY: B. RASHID  
 PROJECT ID:

CHECKED BY: AIA  
 DIV:

DATE: Apr 26, 2013

SIGN WIDTH: 4'-0"  
 HEIGHT: 4'-0"  
 TOTAL AREA: 16.00 Sq.Ft.

SYMBOL	X	Y	WID	HT

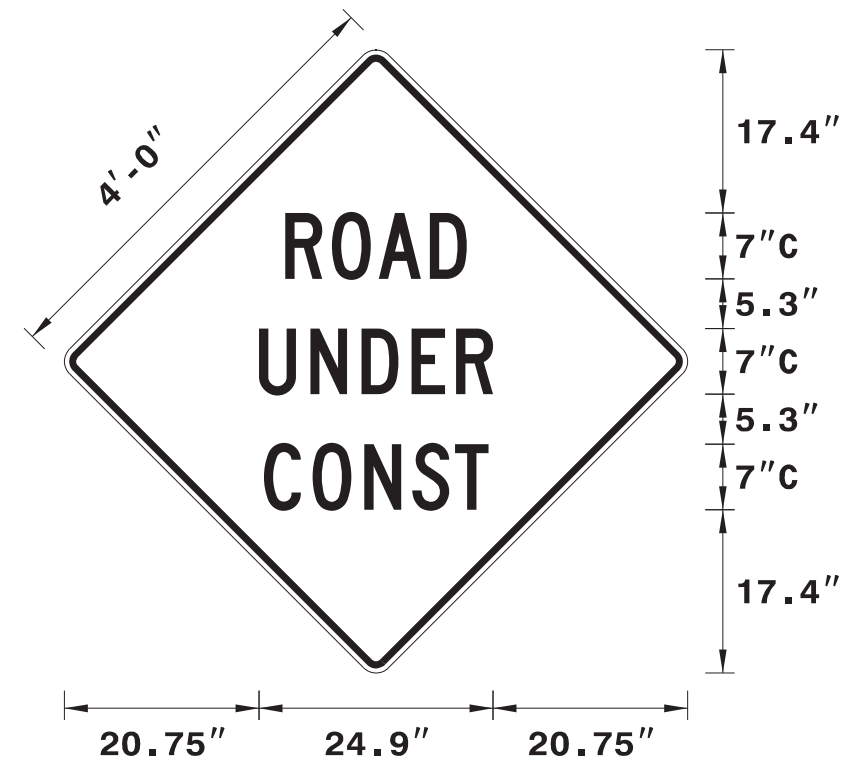
BORDER TYPE: INSET  
 RECESS: 0.75"  
 WIDTH: 1.25"  
 RADII: 3"

NO. Z BARS:  
 LENGTH:

MAT'L: 0.080" (2.0 mm) ALUMINUM

USE NOTES: 1,2

- Legend and border shall be direct applied black non-reflective sheeting.
- Background shall be NC GRADE B fluoresent orange retroreflective sheeting.



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter																			Series/Size Text Length	
		R	O	A	D															C 2000
	23.5	5	5	5.5	3.9	23.5														19.3
		U	N	D	E	R														C 2000
	20.7	5.5	5.5	5.3	4.8	3.9	20.7													24.9
		C	O	N	S	T														C 2000
	21.2	5.2	5.5	5.1	4.6	3.6	21.2													23.9

SIGN NUMBER: SP13107      BACKG COLOR: Fluorescent Orange  
 TYPE: STATIONARY      COPY COLOR: Black  
 QUANTITY: SEE PLANS

SYMBOL	X	Y	WID	HT

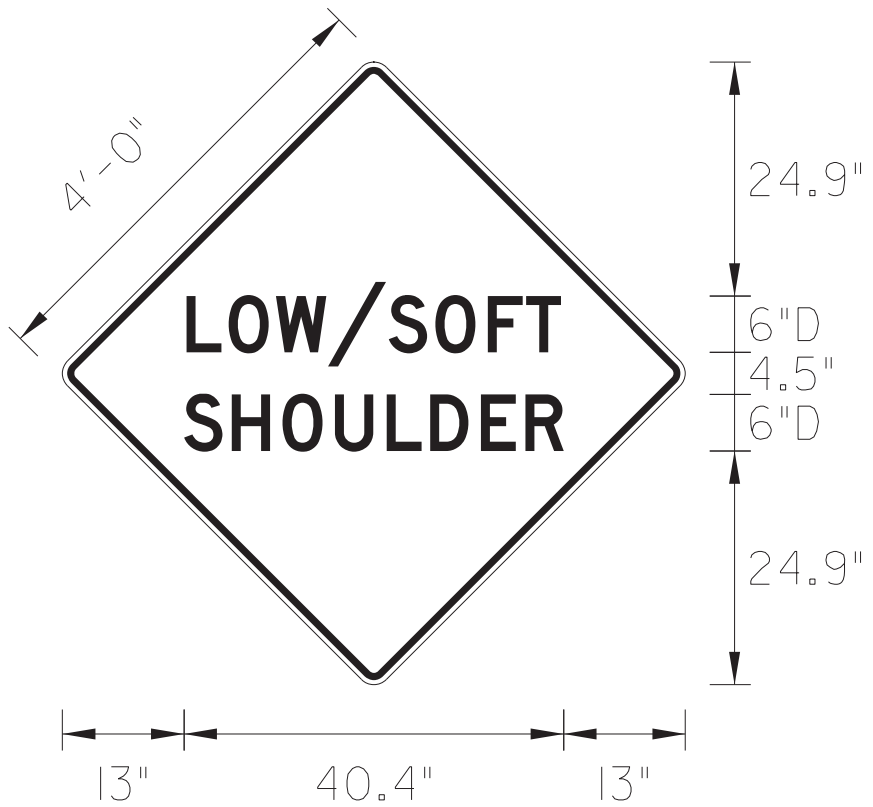
SIGN WIDTH: 4'-0"  
 HEIGHT: 4'-0"  
 TOTAL AREA: 16.00 Sq.Ft.

BORDER TYPE: INSET  
 RECESS: 0.75"  
 WIDTH: 1.25"  
 RADII: 3"

NO. Z BARS:  
 LENGTH:

MAT'L: 0.080" (2.0 mm) ALUMINUM

DESIGN BY: B. RASHID      CHECKED BY: AIA      DATE: Apr 26, 2013  
 PROJECT ID:      DIV:



Spacing Factor is 1 unless specified otherwise

USE NOTES: 1,2

- 1. Legend and border shall be direct applied black non-reflective sheeting.
- 2. Background shall be NC GRADE B fluoesent orange retroreflective sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter											Series/Size	
	L	O	W	/	S	O	F	T				Text Length
	13.2	4.5	5	5.5	6.5	5	5.6	4.1	3.7	13.2		D 2000 39.9
		S	H	O	U	L	D	E	R			D 2000 40.4
	13	5.1	5.4	5.6	5.5	4.6	5.4	4.7	4.1	13		

SIGN NUMBER: 11299  
 TYPE: B  
 QUANTITY: SEE PLANS

BACKG COLOR: Fluorescent Orange  
 COPY COLOR: Black

DESIGN BY: WJ  
 PROJECT ID: ALL

CHECKED BY:  
 DIV: ALL

DATE: Jun 22, 2011

SIGN WIDTH: 5'-6"  
 HEIGHT: 5'-6"  
 TOTAL AREA: 30.5 Sq.Ft.

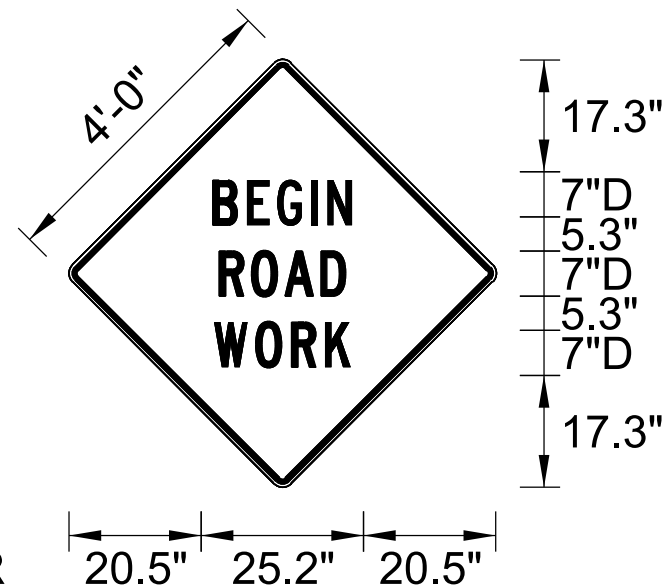
SYMBOL	X	Y	WID	HT

BORDER TYPE: INSET  
 RECESS: 0.59"  
 WIDTH: 0.75"  
 RADII: 1.38"

NO. Z BARS: N/A  
 LENGTH: N/A

MAT'L: 0.125" (3.2 mm) ALUMINUM

# SP 11299



BORDER  
 R=1.38"  
 TH=0.75"  
 IN=0.59"

Spacing Factor is 1 unless specified otherwise

USE NOTES: 1,2

- Legend and border shall be direct applied black non-reflective sheeting.
- Background shall be Type VII, VIII, or IX (prismatic) fluorescent orange retroreflective sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter																	Series/Size	
																	Text Length	
		B	E	G	I	N												D 2000
20.5	6	5.4	6.3	2.8	4.8	20.5												25.2
		R	O	A	D													D 2000
21.4	5.8	5.9	7	4.8	21.4													23.5
		W	O	R	K													D 2000
20.9	7.1	6.5	5.9	4.9	20.9													24.5

