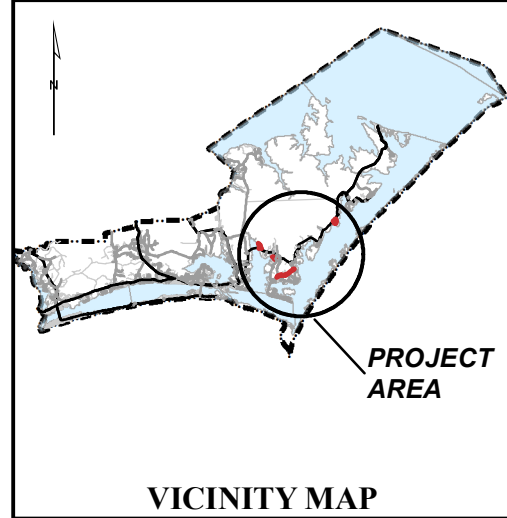


PROJECT REFERENCE NO.	SHEET NO.
2017CPT.02.03.20161.1	1

CARTERET COUNTY
RESURFACING CONTRACT:
DB00301
WBS: 2017CPT.02.03.20161.1

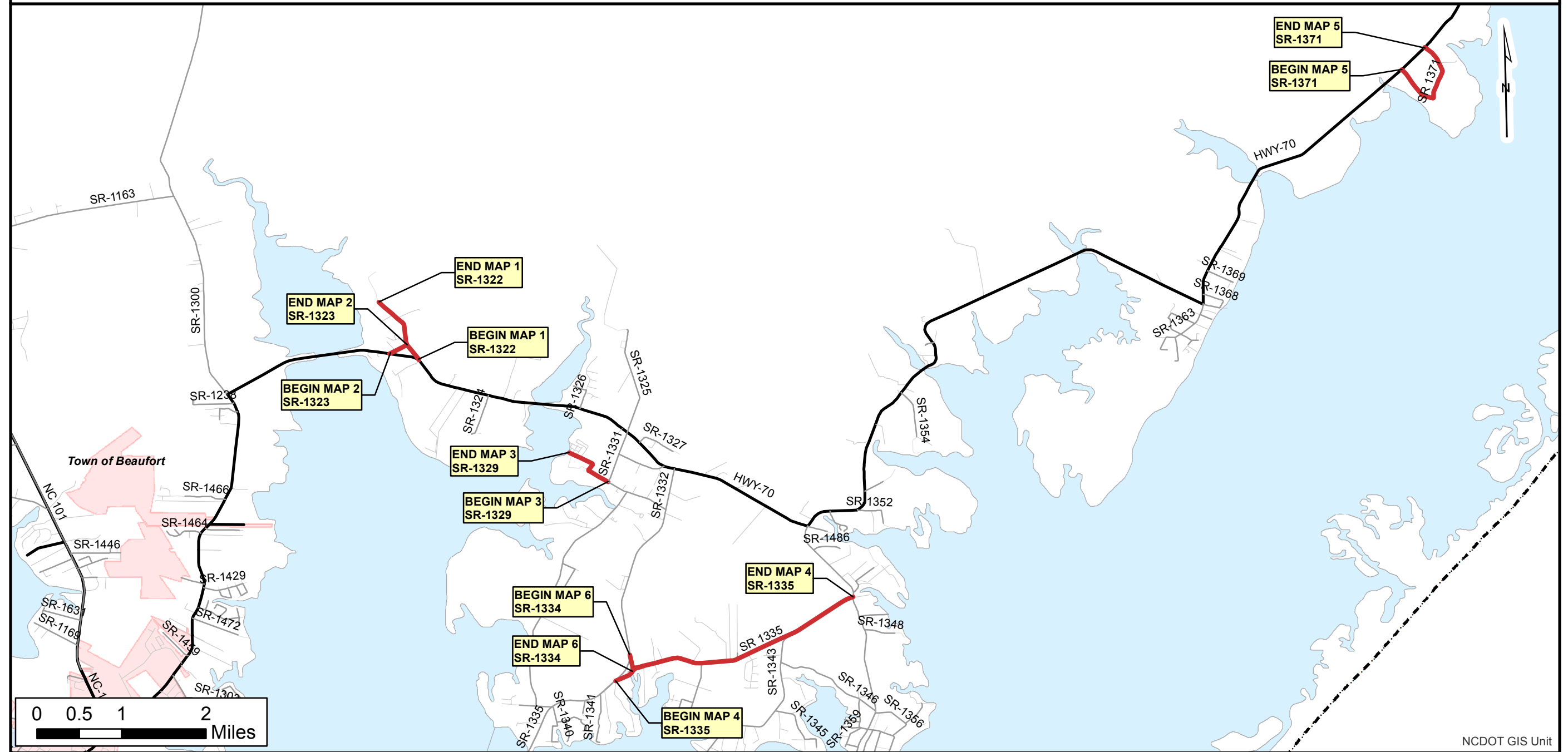


LOCATION:
MAP 1 - SR-1322 - FROM US-70 TO END MAINTENANCE.
MAP 2 - SR-1323 - FROM US-70 TO SR-1322.
MAP 3 - SR-1329 - FROM SR-1331 TO END MAINTENANCE.
MAP 4 - SR-1335 - FROM SR-1332 TO SR-1347.
MAP 5 - SR-1371 - FROM US-70 TO US-70.
MAP 6 - SR-1334 - FROM SR-1335 TO SR-1332

TYPE OF WORK: MILLING, PAVEMENT REPAIR, RESURFACING & SHOULDER RECONSTRUCTION.

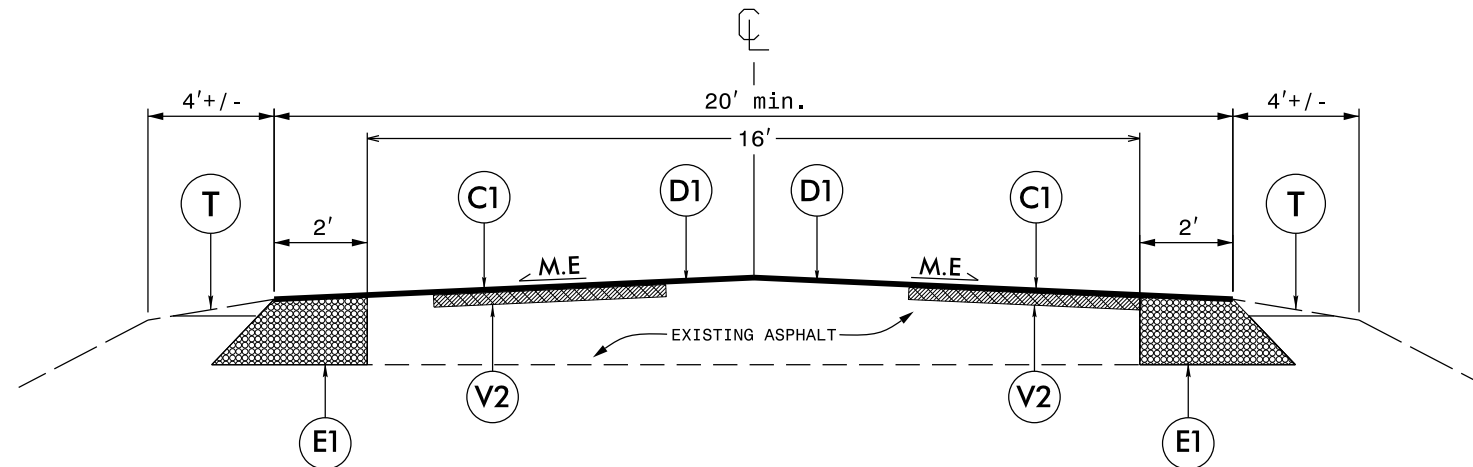


NCDOT
 DIVISION 2



TYPICAL SECTION NO. 1

MAP 1 - SR-1322 FROM US-70(0+00) TO END MAINTENANCE(38+19).
MAP 2 - SR-1323 FROM US-70(0+00) TO SR-1322(10+03).

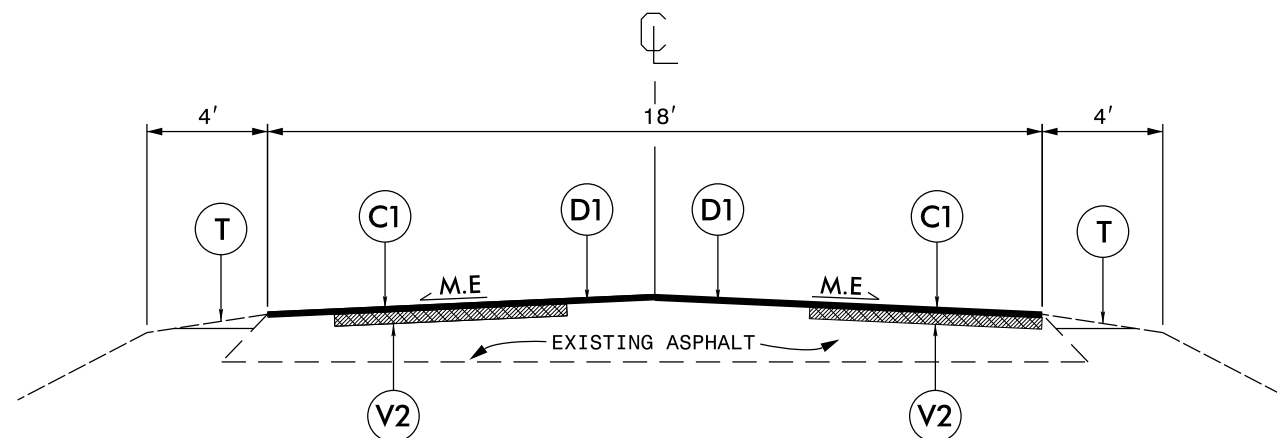


NOTE:

1. PLACE SYMMETRICAL WIDENING, AS DIRECTED BY THE ENGINEER. MAKE FLUSH WITH THE EXISTING ASPHALT.
2. INCLUDED 3" MILL AND FILL AT SPECIFIED LOCATIONS, SEE PLAN SHEET 3 FOR PROPOSED MILLING LOCATIONS.
3. PLACE 2.5" INTERMEDIATE SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT AT SPECIFIED LOCATIONS, SEE PLAN SHEET 4 FOR PROPOSED LOCATIONS.
4. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH, INCLUDING NEW WIDENING.
5. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER. SEE DETAIL 1.

TYPICAL SECTION NO. 2

MAP 3 - SR-1329 FROM SR-1331(0+00) TO END MAINTENANCE(30+62).



NOTE:

1. INCLUDED 3" MILL AND FILL AT SPECIFIED LOCATIONS, SEE PLAN SHEET 4 FOR PROPOSED MILLING LOCATIONS.
2. PLACE 2.5" INTERMEDIATE SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT AT SPECIFIED LOCATIONS, SEE PLAN SHEET 3 FOR PROPOSED LOCATIONS.
3. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
4. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.

PAVEMENT SCHEDULE

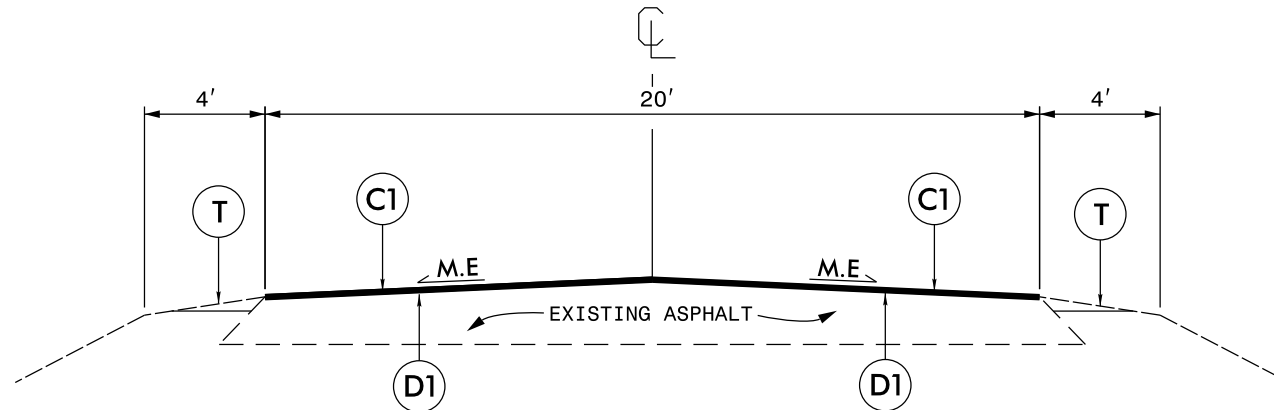
C1	PROP. APPROX. 1 3/4" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 192.5 LBS. PER SQ. YD.
D1	PROP. APPROX. 2 1/2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
D2	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 684 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
V1	INCIDENTAL MILLING.
V2	MILLING DEPTH 3".

DRAWINGS NOT TO SCALE

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

TYPICAL SECTION NO. 3

MAP 4 - SR-1335 FROM SR-1332(0+00) TO SR-1347(138+52).

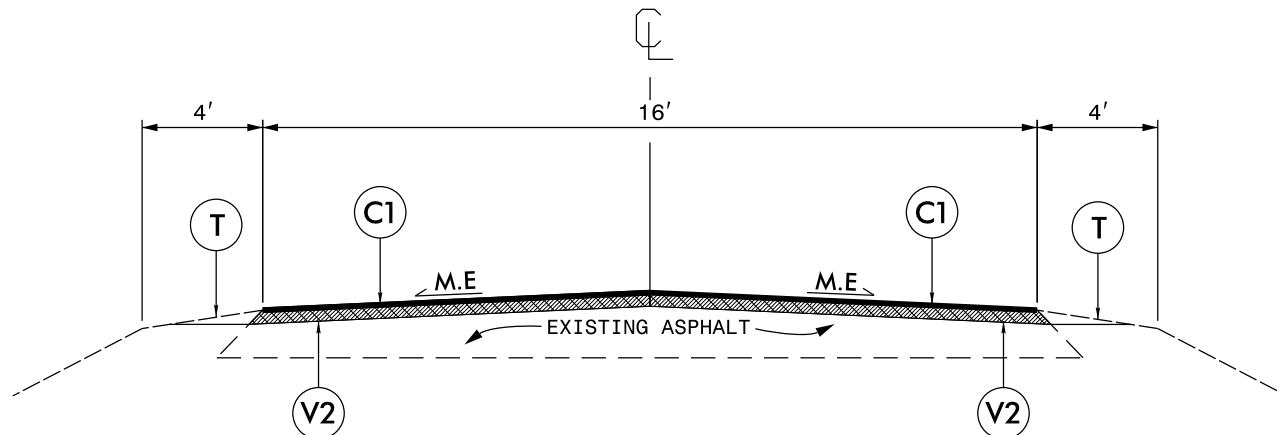


NOTE 1:

1. PLACE 2.5" INTERMEDIATE SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT AT SPECIFIED LOCATIONS, SEE PLAN SHEET 4 FOR PROPOSED LOCATIONS.
2. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
3. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.

TYPICAL SECTION NO. 4

MAP 5 - SR-1371 FROM US-70(0+00) TO US-70(59+16)



NOTE 1:

1. INCLUDES 3" MILL AND FILL AT SPECIFIED LOCATIONS, SEE PLAN SHEET 4 FOR PROPOSED MILLING LOCATIONS.
2. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
3. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.

PAVEMENT SCHEDULE

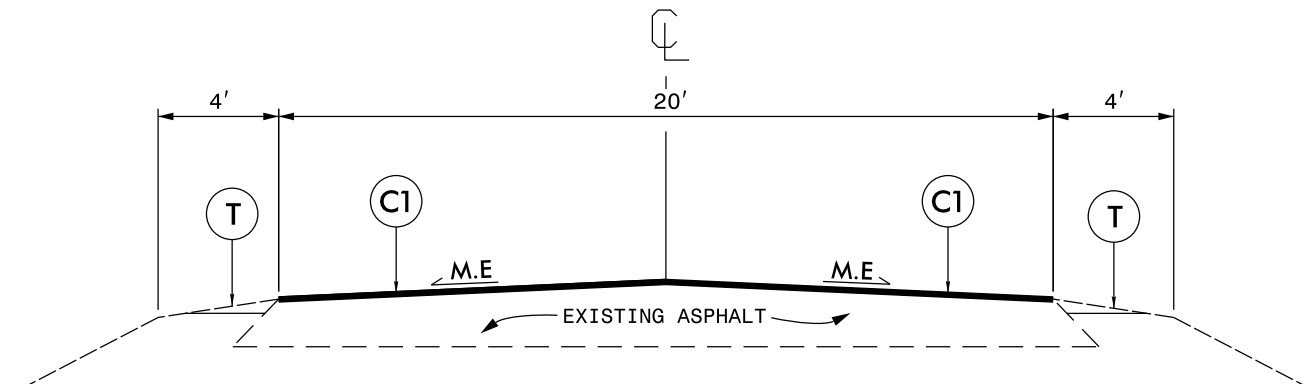
C1	PROP. APPROX. 1¾" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 192.5 LBS. PER SQ. YD.
D1	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
D2	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 684 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
V1	INCIDENTAL MILLING.
V2	MILLING DEPTH 3".

DRAWINGS NOT TO SCALE

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

TYPICAL SECTION NO. 5

MAP 6 - SR-1334 FROM SR-1335(0+00) TO SR-1332(6+03).



NOTE 1:

1. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
2. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER.

MAP 1 - SR-1322 - PROPOSED 3" MILL AND FILL LOCATIONS

LT/RT CL	STATION	LENGTH	WIDTH	LT/RT CL	STATION	LENGTH	WIDTH
LT	7+81 - 9+41	160	8	RT	0+17 - 3+49	332	8
LT	12+18 - 12+70	52	8	RT	10+61 - 12+18	157	8
LT	32+04 - 32+68	64	8	RT	14+25 - 14+72	47	8
				RT	32+04 - 32+68	64	8

2.5" OVERLAY LOCATIONS - SR-1322 - MAP 1

LT/RT CL	STATION	LENGTH	WIDTH	LT/RT CL	STATION	LENGTH	WIDTH
LT	27+33 - 29+87	254	8	RT	27+33 - 29+87	254	8
LT	30+66 - 31+70	164	8	RT	30+66 - 31+70	164	8

MAP 4 - SR-1335 - 2.5" OVERLAY LOCATIONS

LT/RT CL	STATION	LENGTH	WIDTH	LT/RT CL	STATION	LENGTH	WIDTH
LT	8+83 - 9+99	116	10	RT	8+83 - 9+99	116	10
LT	15+48 - 17+61	213	10	RT	15+48 - 17+61	213	10
LT	26+15 - 28+34	219	10	RT	26+15 - 28+34	219	10
LT	49+41 - 66+89	1748	10	RT	49+41 - 66+89	1748	10
LT	80+22 - 83+68	346	10	RT	80+22 - 83+68	346	10
LT	88+64 - 90+73	209	10	RT	88+64 - 90+73	209	10
LT	101+31 - 108+01	670	10	RT	101+31 - 108+01	670	10
LT	110+18 - 118+56	838	10	RT	110+18 - 118+56	838	10
LT	128+27 - 136+43	816	10	RT	128+27 - 136+43	816	10

MAP 2 - SR-1323 - PROPOSED 3" MILL AND FILL LOCATIONS

LT/RT CL	STATION	LENGTH	WIDTH	LT/RT CL	STATION	LENGTH	WIDTH
LT	0+00 - 0+93	93	8	RT	0+00 - 0+93	93	8
LT	1+40 - 4+12	272	8	RT	1+40 - 4+12	272	8
LT	8+18 - 9+26	108	8	RT	8+18 - 9+26	108	8

MAP 5 - SR-1371 - PROPOSED 3" MILL AND FILL LOCATIONS

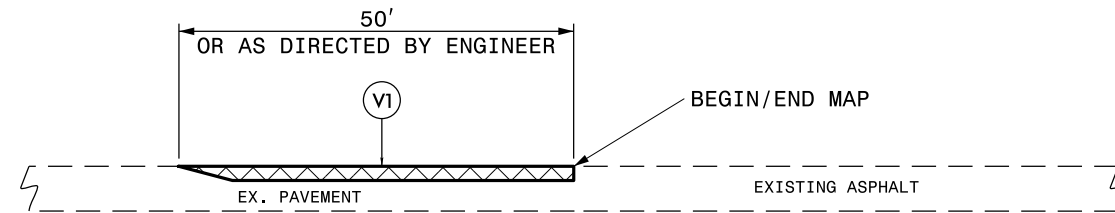
LT/RT CL	STATION	LENGTH	WIDTH	LT/RT CL	STATION	LENGTH	WIDTH
LT	0+72 - 93+75	303	8	RT	0+72 - 93+75	303	8
LT	16+35 - 18+50	215	8	RT	16+35 - 18+50	215	8
LT	27+16 - 32+30	514	8	RT	27+16 - 32+30	514	8

MAP 3 - SR-1329 - PROPOSED 3" MILL AND FILL LOCATIONS

LT/RT CL	STATION	LENGTH	WIDTH	LT/RT CL	STATION	LENGTH	WIDTH
LT	0+00 - 0+69	69	9	RT	10+05 - 11+31	129	9
LT	1+17 - 3+68	251	9	RT	13+81 - 15+49	168	9
LT	7+44 - 8+71	127	9				
LT	13+81 - 15+49	168	9				

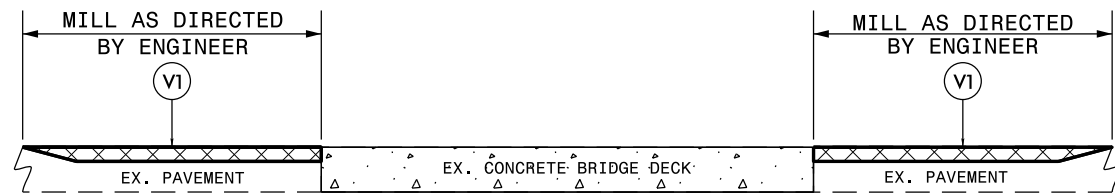
MAP 3 - SR-1329 - 2.5" OVERLAY LOCATIONS

LT/RT CL	STATION	LENGTH	WIDTH	LT/RT CL	STATION	LENGTH	WIDTH
LT	9+15 - 10+05	90	9	RT	9+15 - 10+05	90	9
LT	27+92 - 28+94	102	9	RT	27+92 - 28+94	102	9



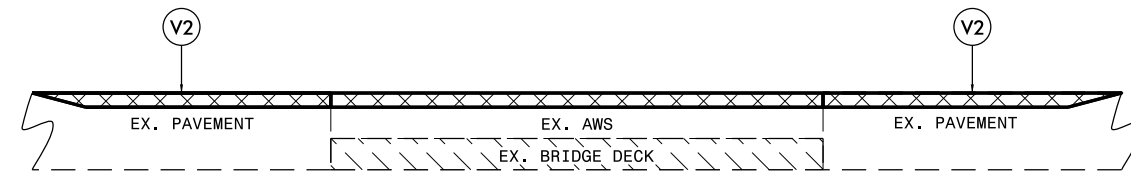
DETAIL 1
BEGIN/END MAP TIE-IN

- NOTE:**
- MILLING SHALL BE PERFORMED AT MAIN LINE TIE-INS AND Y-LINE TIE-INS AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.



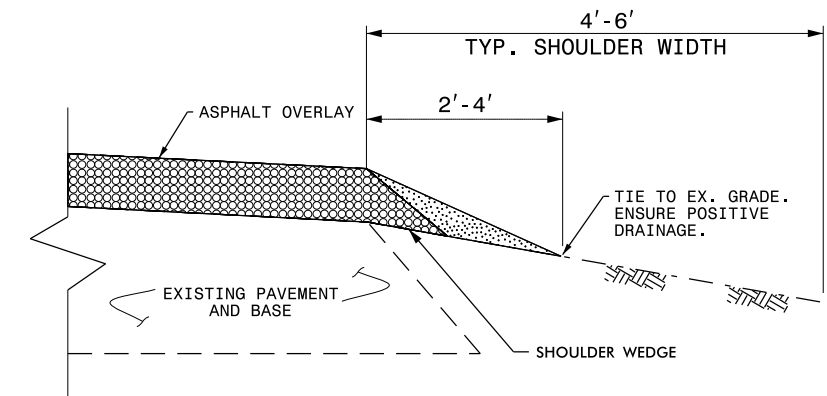
DETAIL 2
BRIDGE MILLING

- NOTE:**
- MILLING SHALL BE PERFORMED AT THE BRIDGE APPROACHES AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.



DETAIL 3
BRIDGE MILLING

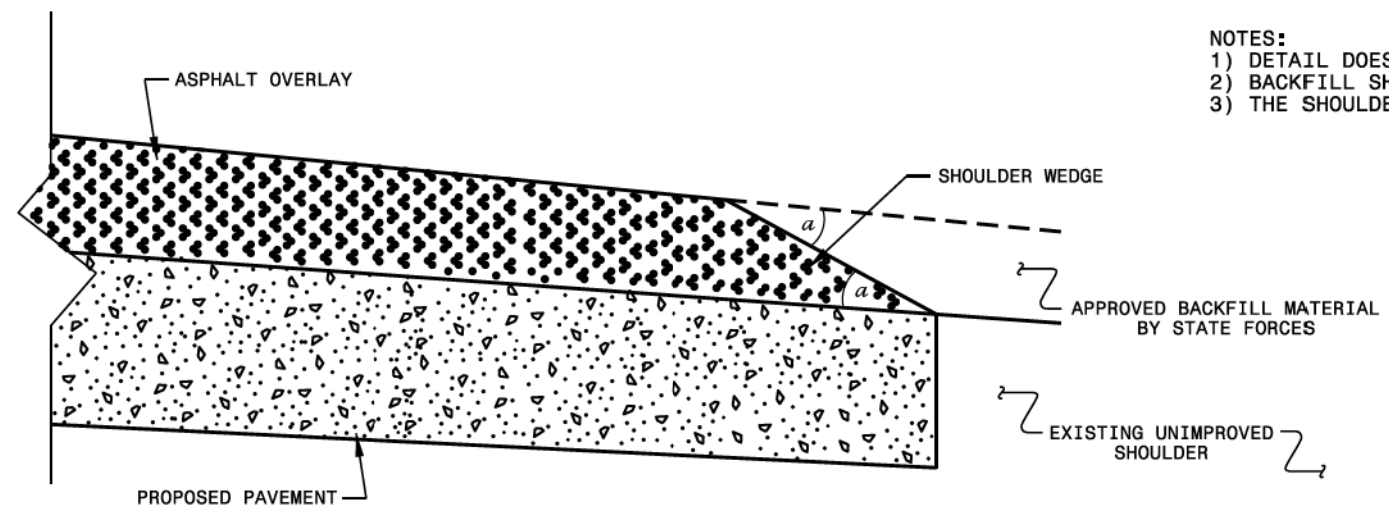
- NOTE:**
- MILLING SHALL BE PERFORMED AT THE BRIDGE APPROACHES AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.



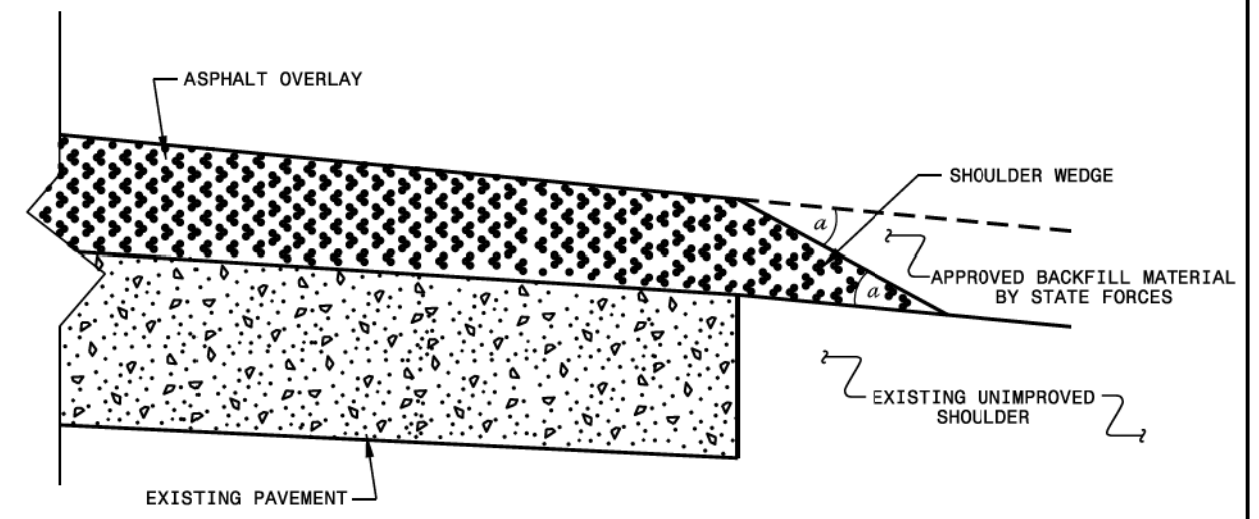
SHOULDER RECONSTRUCTION DETAIL

- NOTE:**
- SHOULDERS SHALL BE RECONSTRUCTED AS SHOWN IN STD. DWG. NO. 560.01 & 560.02, WITH A MINIMUM SLOPE OF 1" PER FOOT TO ENSURE POSITIVE DRAINAGE AWAY FROM THE ROADWAY.
 - A VEGETATIVE BUFFER SHALL BE MAINTAINED BETWEEN THE DISTURBED AREA ALONG THE EDGE OF PAVEMENT AND THE DITCH SHOULDER POINT TO MINIMIZE EROSION. PULLING DITCHES OR CUTTING SHOULDERS TO GENERATE BORROW MATERIAL WILL NOT BE ALLOWED.
 - REQUIRED BORROW MATERIAL MAY BE OBTAINED FROM NCDOT STOCKPILES. ANY EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR IN AN APPROVED DISPOSAL SITE.

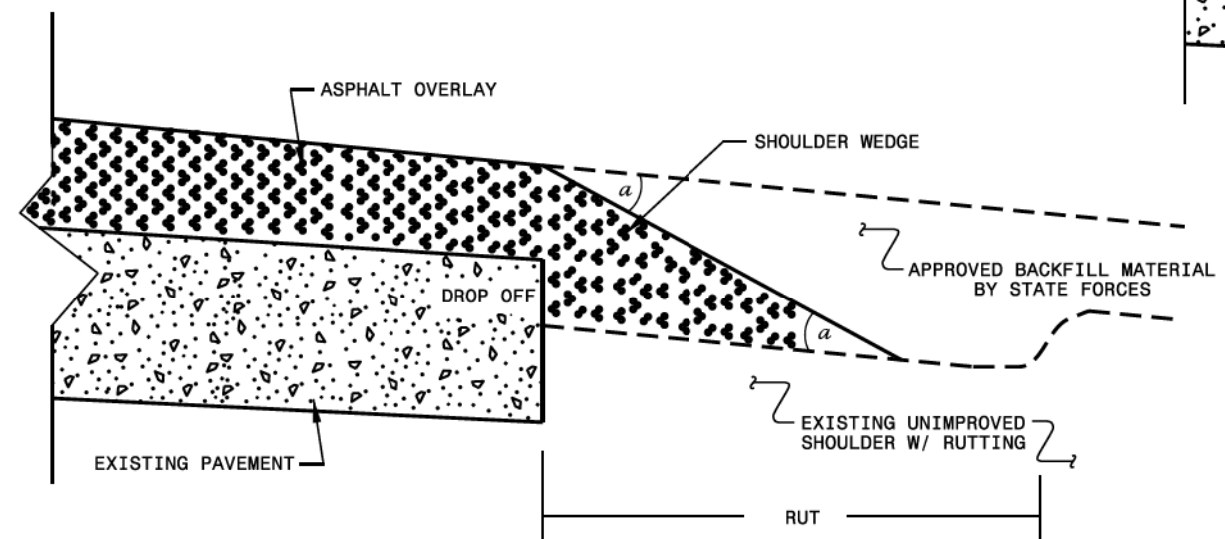
- NOTES:
 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



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°

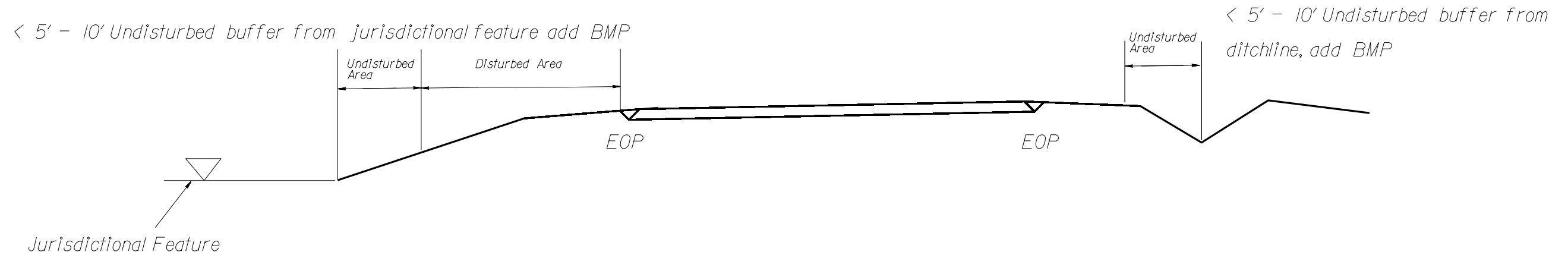
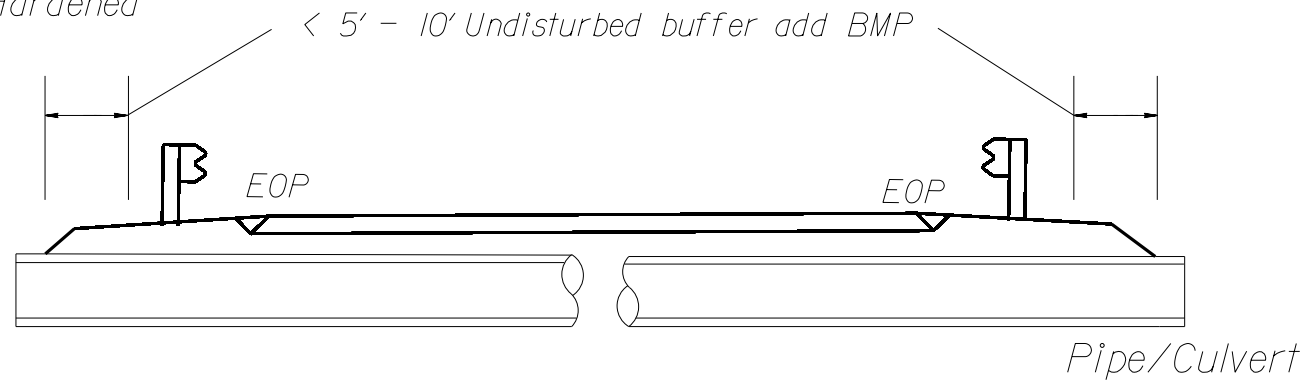
CONTRACT STANDARDS AND DEVELOPMENT UNIT			
Office 919-737-6950		FAX 919-250-4119	
SHOULDER WEDGE DETAILS			
ORIGINAL BY: T.SPELL	DATE: 7-19-11		
MODIFIED BY:	DATE: 10/16/12		
CHECKED BY:	DATE:		
FILE SPEC: staur/details/stand/shoulderwedgedetail.dgn			

24-MAR-2016 10:46
 S:\CONTRACTS\Projects\Resurfacing Projects\Shoulder Wedge Details\Revised Shoulder Wedge Detail.dgn
 \$\$\$\$\$\$

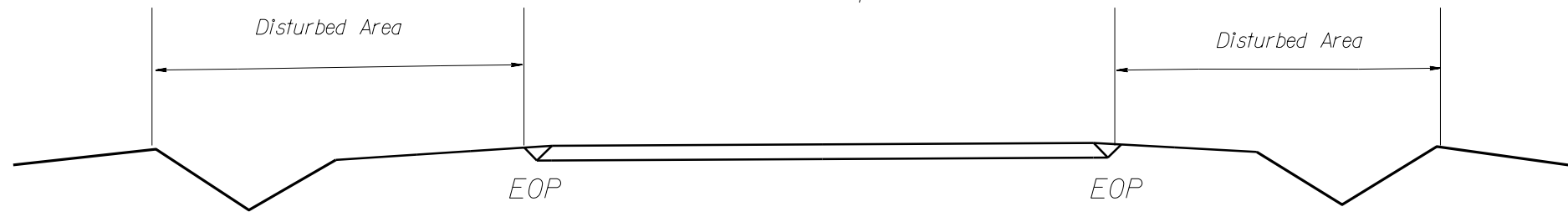
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle, Silt Fence or Hardened Aggregate.

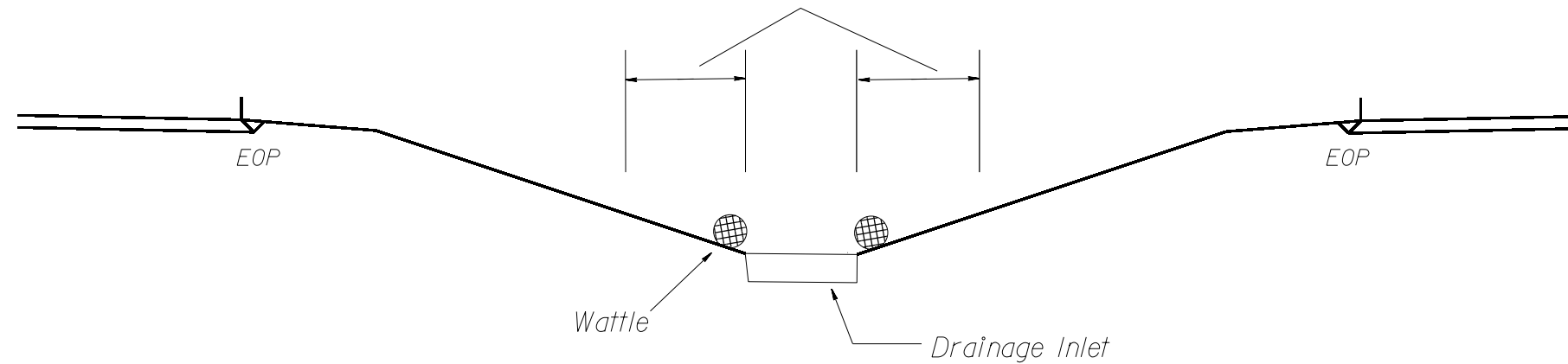
EROSION CONTROL DETAIL



Use BMP's if shoulders and/or frontslopes and/or ditchline and/or backslopes are disturbed

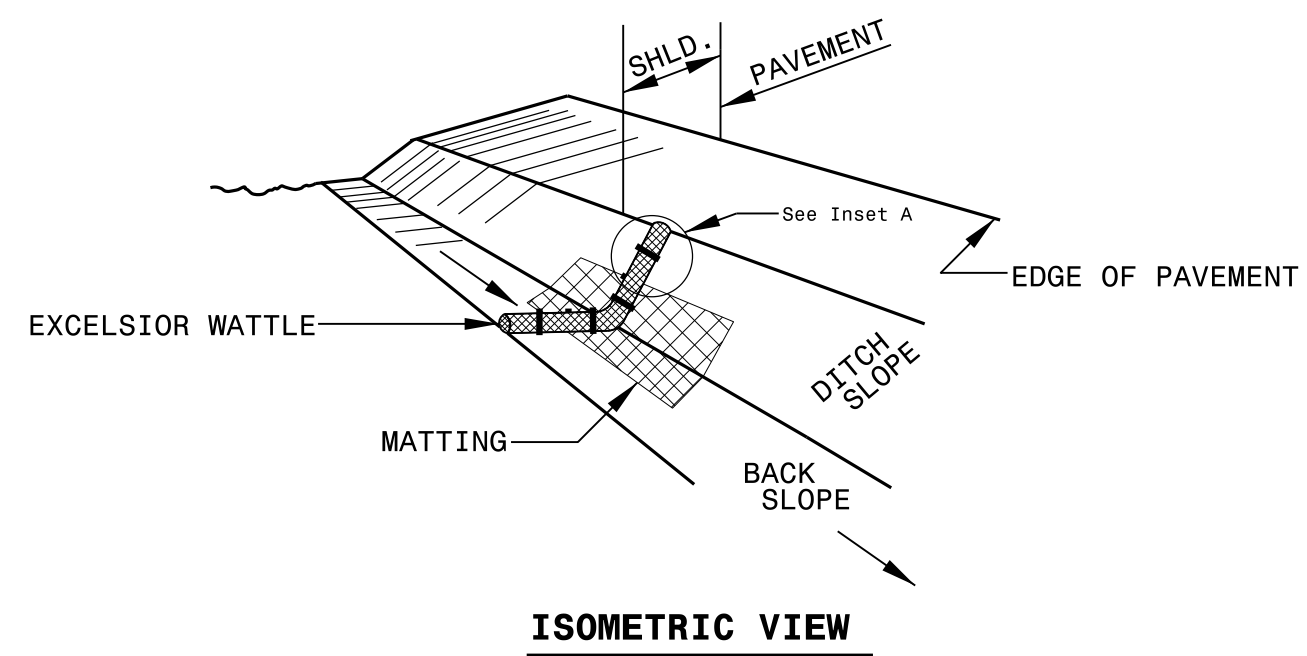


< 5' - 10' Undisturbed buffer from inlet, add wattle



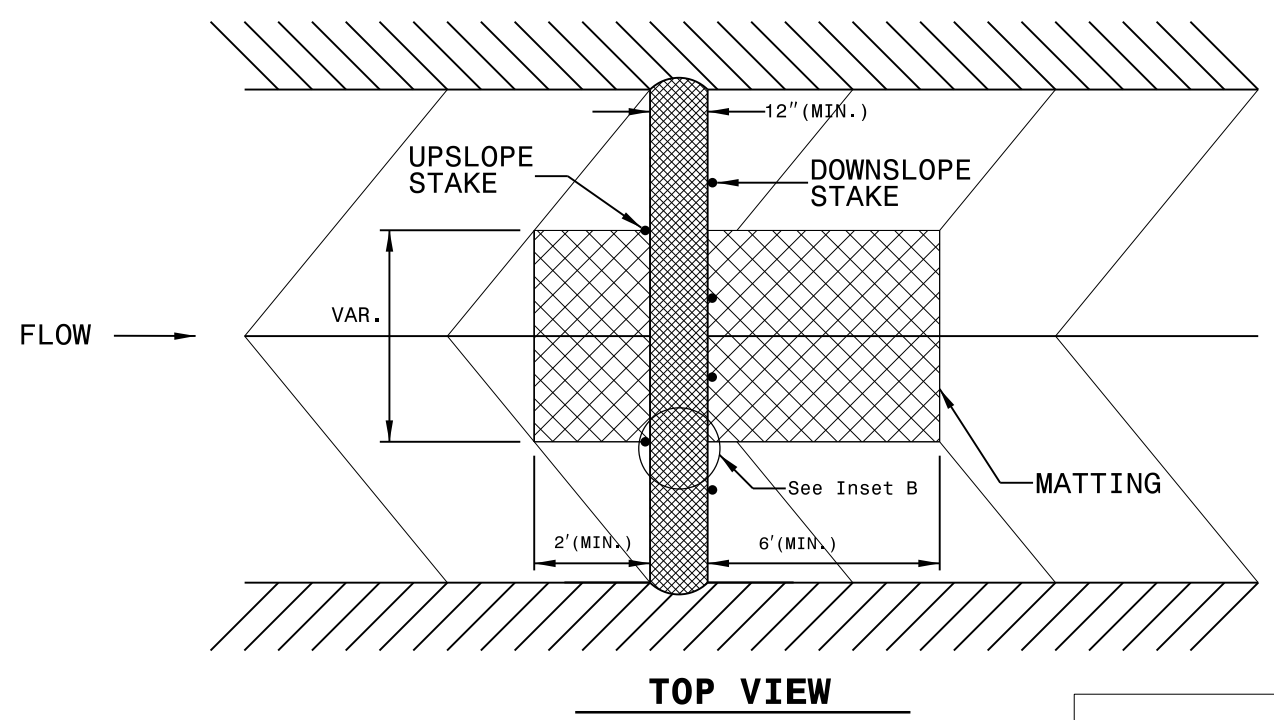
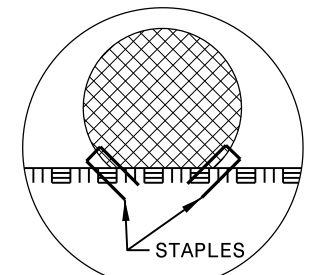
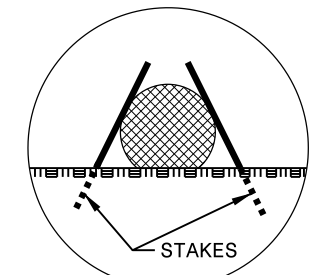
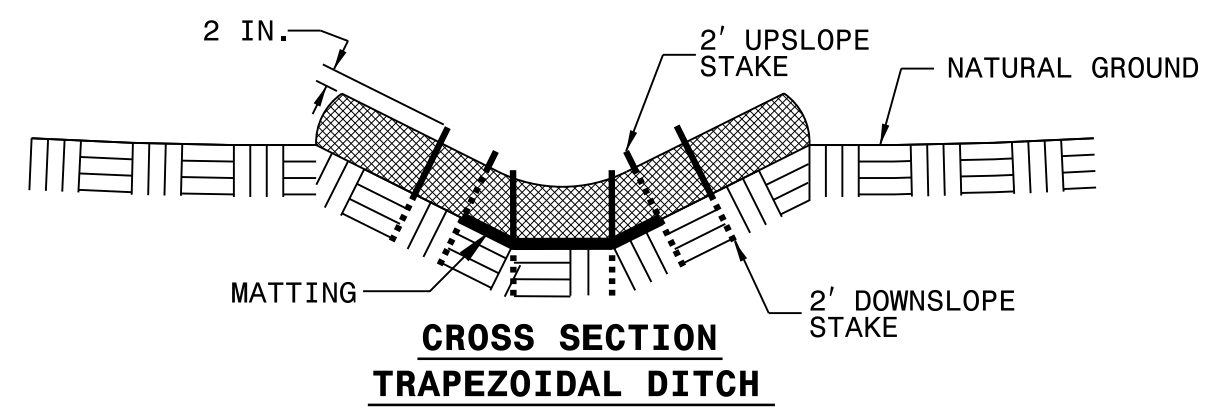
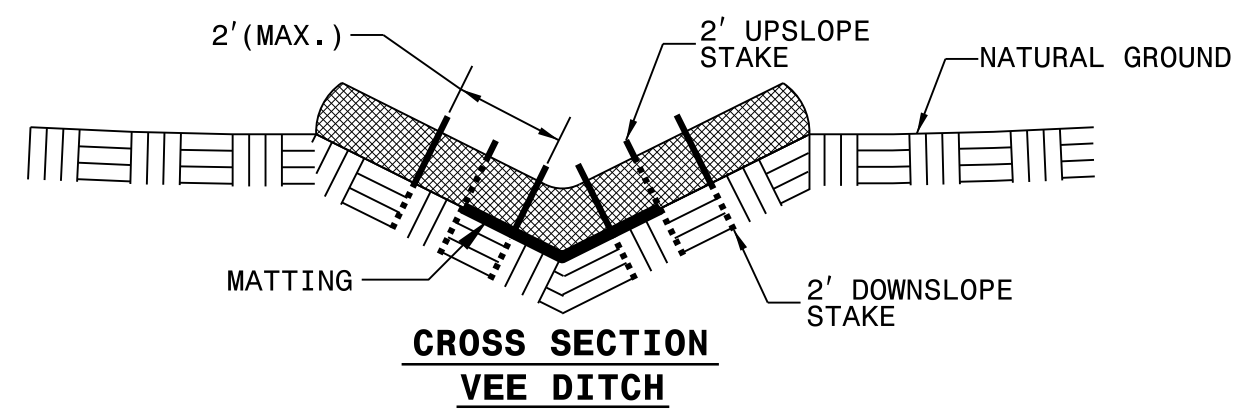
NOT TO SCALE

WATTLE DETAIL



NOTES:

- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
- PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
- INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
- INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



NOT TO SCALE

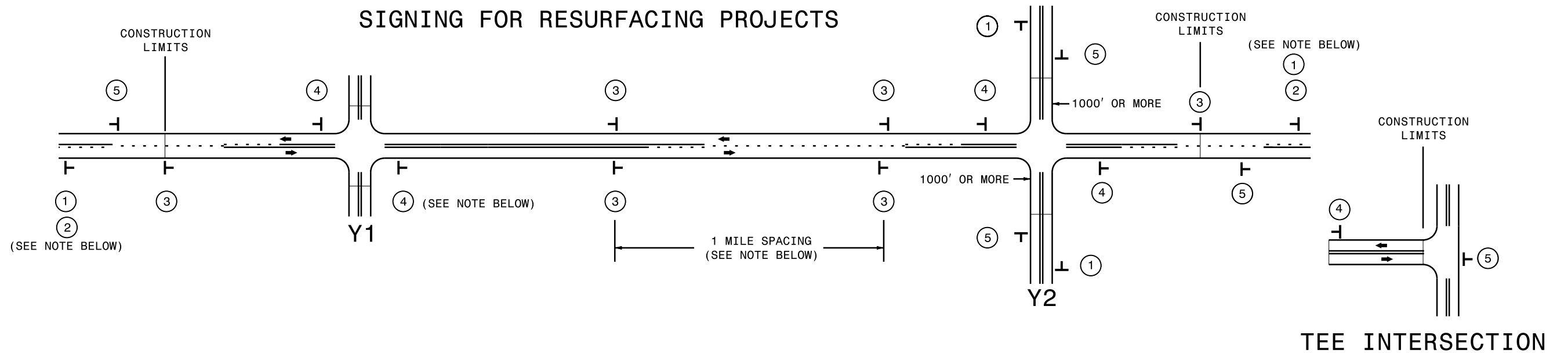
SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	HAULING NCDOT SUPPLIED SHOULDER LOAD	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SMI	3" MILLING SY	INCIDENTAL MILLING SY	BASE COURSE, B25.0B TONS	INTERMEDIATE COURSE, I19.0B TONS	SURFACE COURSE, SF9.5A TONS	ASPHALT BINDER FOR PLANT MIX TONS	TEMPORARY SILT FENCE LF	WATTLE LF	SEED & MULCHING AC	RESPONSE FOR EROSION CONTROL EA
2017.CPT.02.03.20161.1	Carteret	1	SR-1322	FROM US-70 TO END MAINTENANCE	1	2	2WU	NO	NO	0.72	16	25	40	2.00	800	350	718	280	905	106	100.0	40	1.00	1
TOTAL FOR MAP NO. 1										0.72		25	40	2.00	800	350	718	280	905	106	100.0	40	1.00	1
2017.CPT.02.03.20161.1	Carteret	2	SR-1323	FROM US-70 TO SR-1322	1	2	2WU	NO	NO	0.19	16	10	15	0.38	550	150	189	100	304	33		20	0.20	1
TOTAL FOR MAP NO. 2										0.19		10	15	0.38	550	150	189	100	304	33		20	0.20	1
2017.CPT.02.03.20161.1	Carteret	3	SR-1329	FROM SR-1331 TO END MAINTENANCE	2	2	2WU	NO	NO	0.58	18	20	30	1.16	1,050	150		275	653	57	60.0	20	0.60	1
TOTAL FOR MAP NO. 3										0.58		20	30	1.16	1,050	150		275	653	57	60.0	20	0.60	1
2017.CPT.02.03.20161.1	Carteret	4	SR-1335	FROM SR-1332 TO SR-1347	3	2	2WU	NO	NO	2.62	20	75	40	5.25		600		1,803	3,507	322	262.0	40	2.60	1
TOTAL FOR MAP NO. 4										2.62		75	40	5.25		600		1,803	3,507	322	262.0	40	2.60	1
2017.CPT.02.03.20161.1	Carteret	5	SR-1371	FROM US-70 TO US-70	4	2	2WU	NO	NO	1.12	16	35	30	2.25	1,835	200		345	1,123	92	112.0	20	1.10	1
TOTAL FOR MAP NO. 5										1.12		35	30	2.25	1,835	200		345	1,123	92	112.0	20	1.10	1
2017.CPT.02.03.20161.1	Carteret	6	SR-1334	FROM SR-1335 TO SR-1332	5	2	2WU	NO	NO	0.11	20	5		0.25		125			144	10	50.0	10	0.25	1
TOTAL FOR MAP NO. 6										0.11		5		0.25		125			144	10	50.0	10	0.25	1
TOTAL FOR PROJ NO. 2017.CPT.02.03.20161.1										5.35		170	155	11.29	4,235	1,575	907	2,803	6,636	620	584.0	150	5.75	6
GRAND TOTAL										5.35		170	155	11.29	4,235	1,575	907	2,803	6,636	620	584.0	150	5.75	6

WORK ZONE TRAFFIC CONTROL

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E	4457000000-N
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS
2017.CPT.02.03.20161.1	Carteret	1	SR-1322	FROM US-70 TO END MAINTENANCE	1	2	2WU	0.72	16	82	0.13
TOTAL FOR MAP NO. 1										82	0.13
2017.CPT.02.03.20161.1	Carteret	2	SR-1323	FROM US-70 TO SR-1322	1	2	2WU	0.19	16	22	0.04
TOTAL FOR MAP NO. 2										22	0.04
2017.CPT.02.03.20161.1	Carteret	3	SR-1329	FROM SR-1331 TO END MAINTENANCE	2	2	2WU	0.58	18	66	0.10
TOTAL FOR MAP NO. 3										66	0.10
2017.CPT.02.03.20161.1	Carteret	4	SR-1335	FROM SR-1332 TO SR-1347	3	2	2WU	2.62	20	300	0.48
TOTAL FOR MAP NO. 4										300	0.48
2017.CPT.02.03.20161.1	Carteret	5	SR-1371	FROM US-70 TO US-70	4	2	2WU	1.12	16	126	0.20
TOTAL FOR MAP NO. 5										126	0.20
2017.CPT.02.03.20161.1	Carteret	6	SR-1334	FROM SR-1335 TO SR-1332	5	2	2WU	0.11	20	28	0.04
TOTAL FOR MAP NO. 6										28	0.04
TOTAL FOR PROJ NO. 2017.CPT.02.03.20161.1										624	1.00
GRAND TOTAL										624	1.00

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"	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"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, 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> W20-1 48" X 48" </div> <div> W20-7 A 48" X 48" </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	②	 W7-3gP 24" X 18"	#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	 SP 13107 48" X 48"	<ul style="list-style-type: none"> - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER. 	
	④	 SP 13106 48" X 48"	<ul style="list-style-type: none"> - THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. - DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. - INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. - FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. - A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE. 	
⑤	 G20-2 A 48" X 24"	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.		



RESURFACING
 ADVANCE WARNING SIGNS
 FOR
 RURAL AND SUBURBAN
 2 LANE ROADWAYS