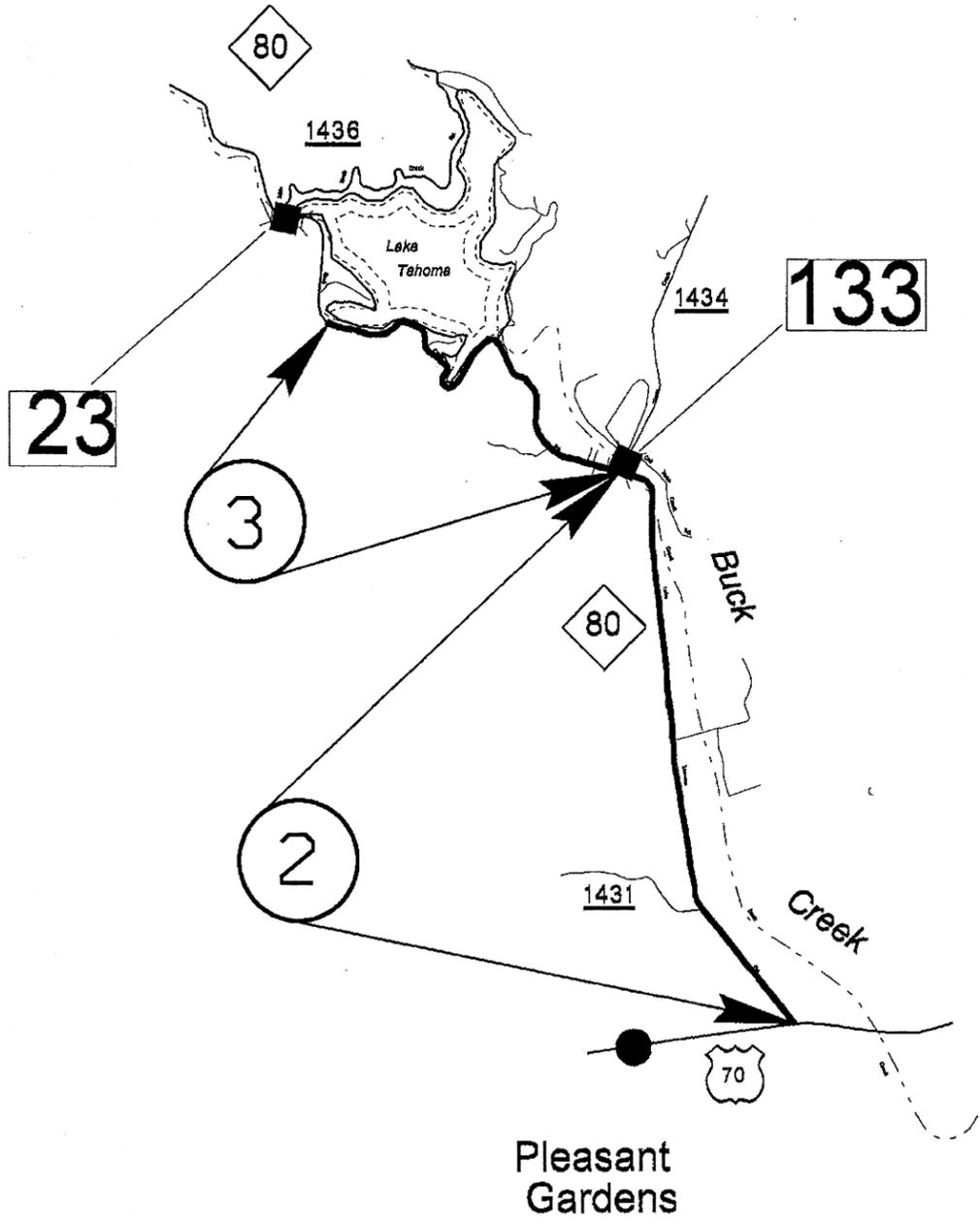
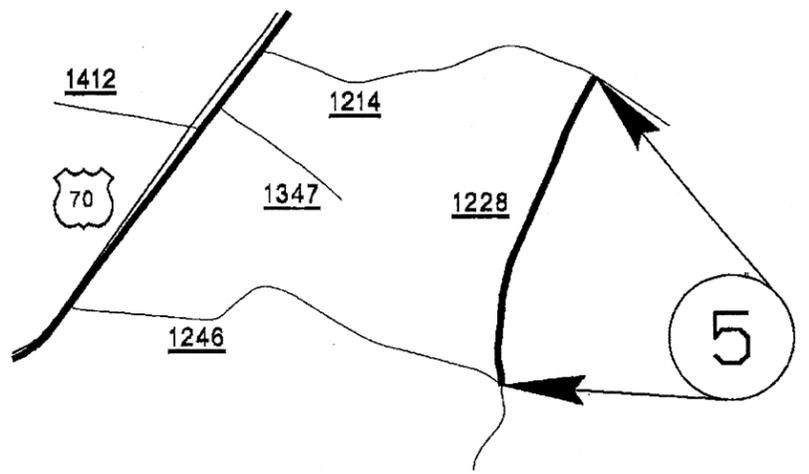
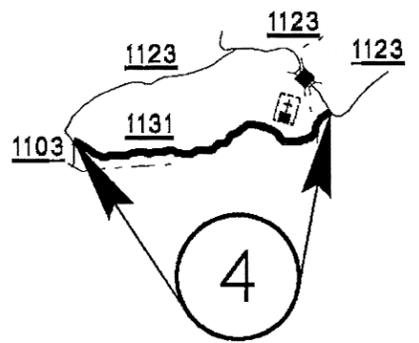
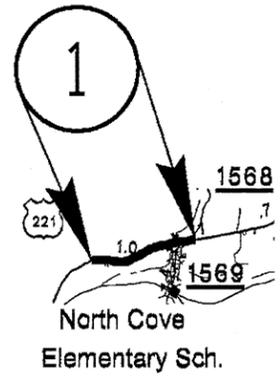


PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10591.15 13CR.20591.14	1	

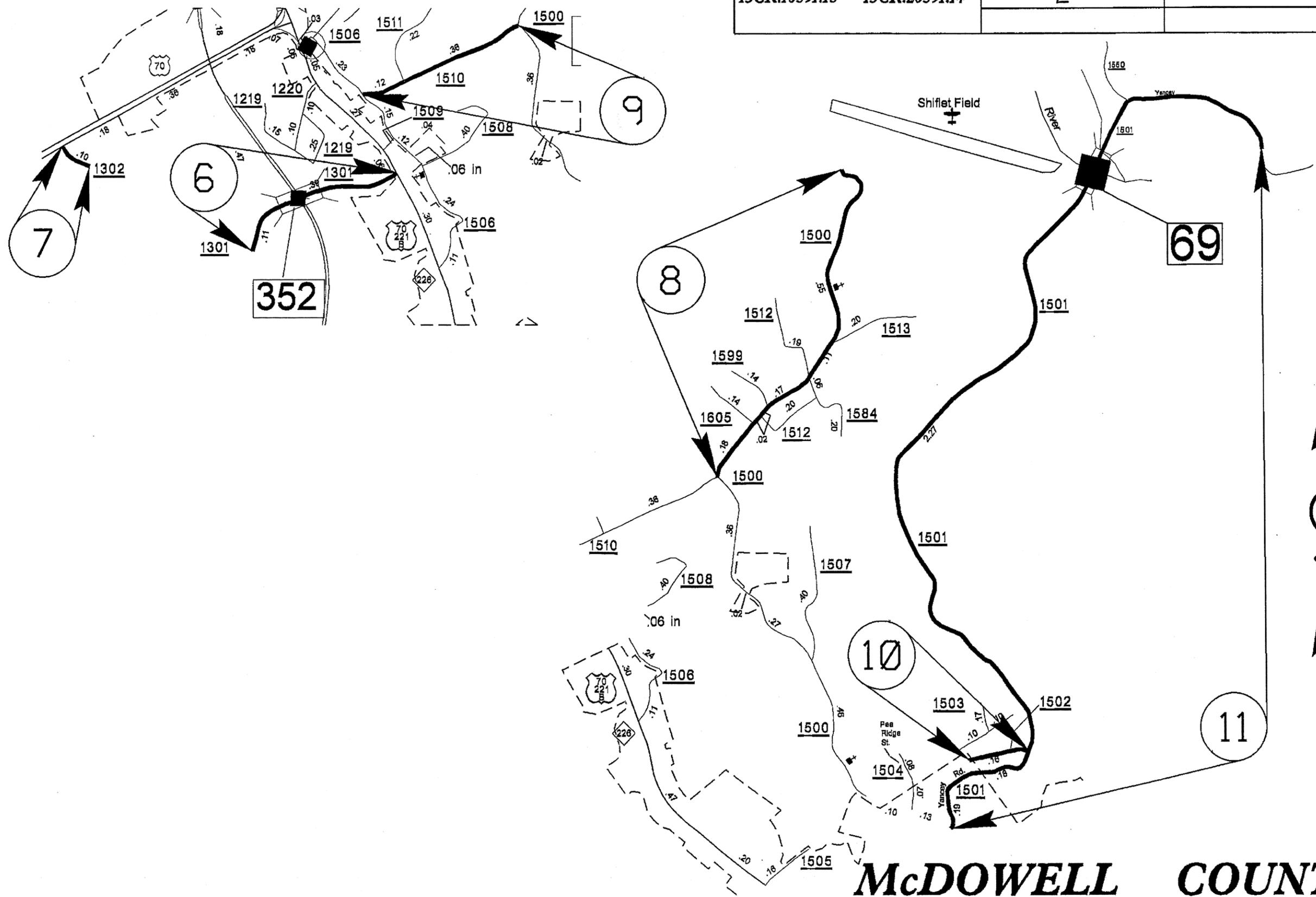


McDOWELL COUNTY

PROJECT NO.
13CR.10591.15 13CR.20591.14

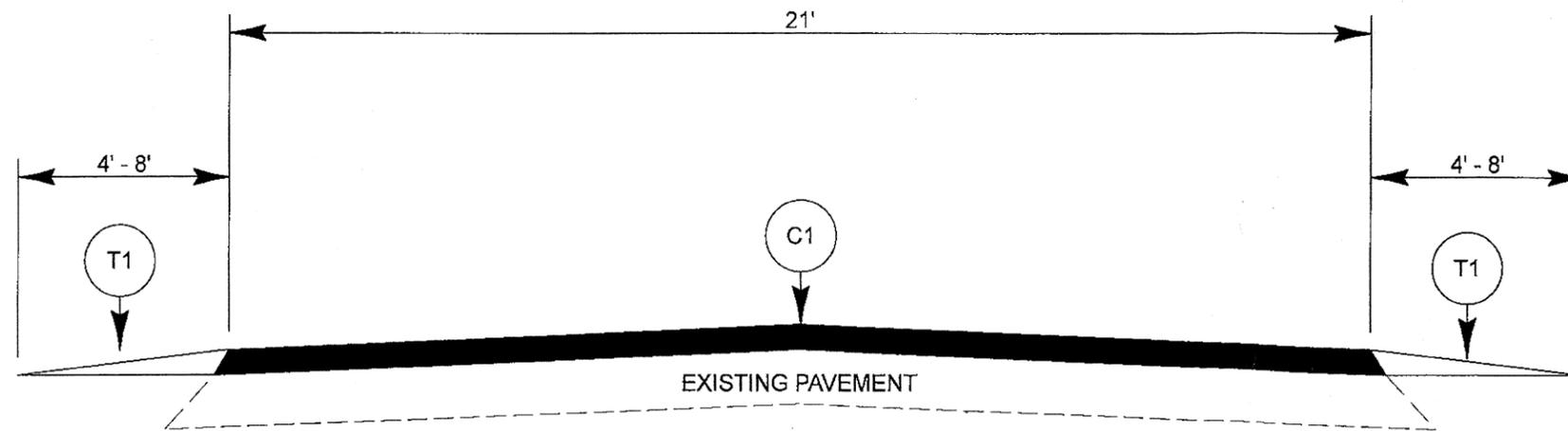
SHEET NO.
2

TOTAL SHEETS

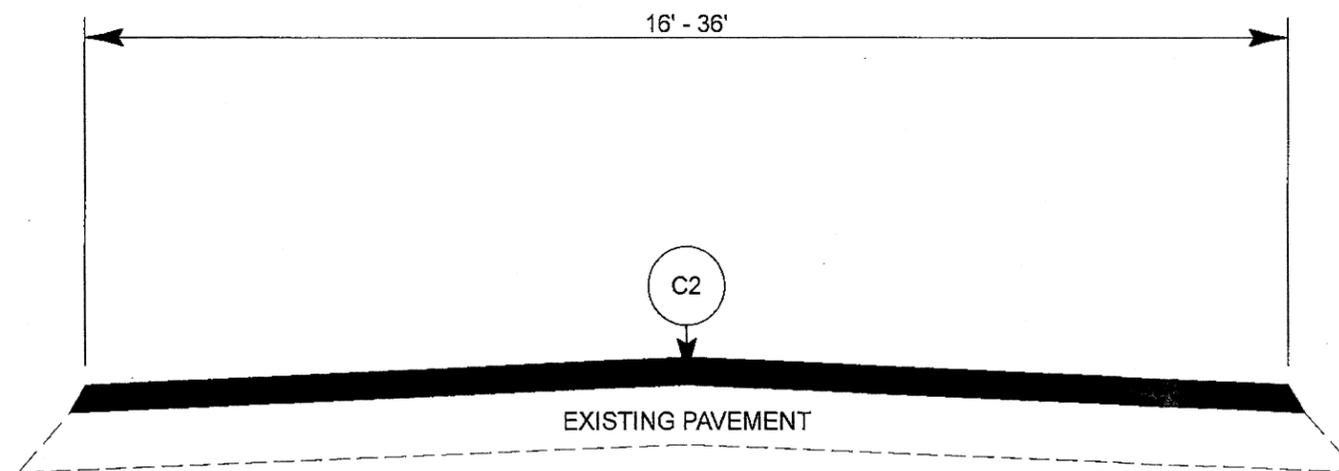
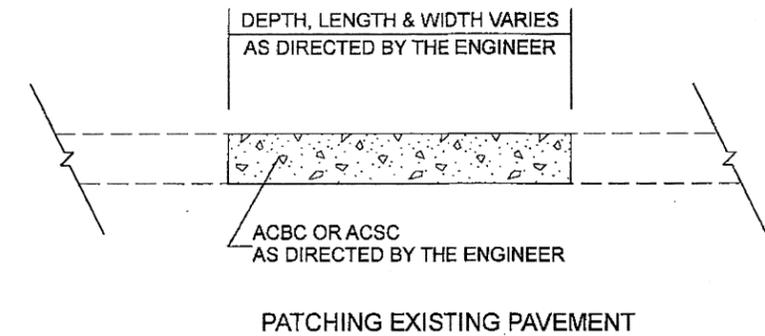


McDOWELL COUNTY

PROJECT NO. 13CR.10591.15, 13CR.20591.14	SHEET NO. 3	TOTAL SHEETS
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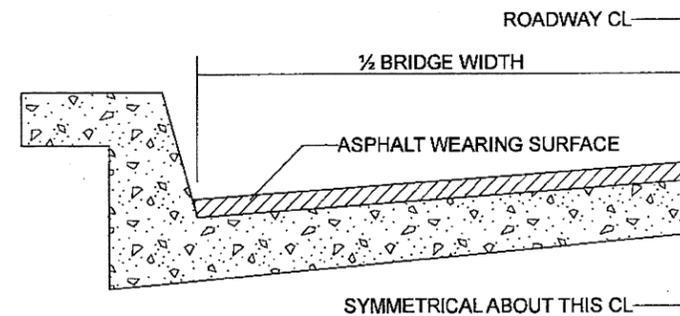
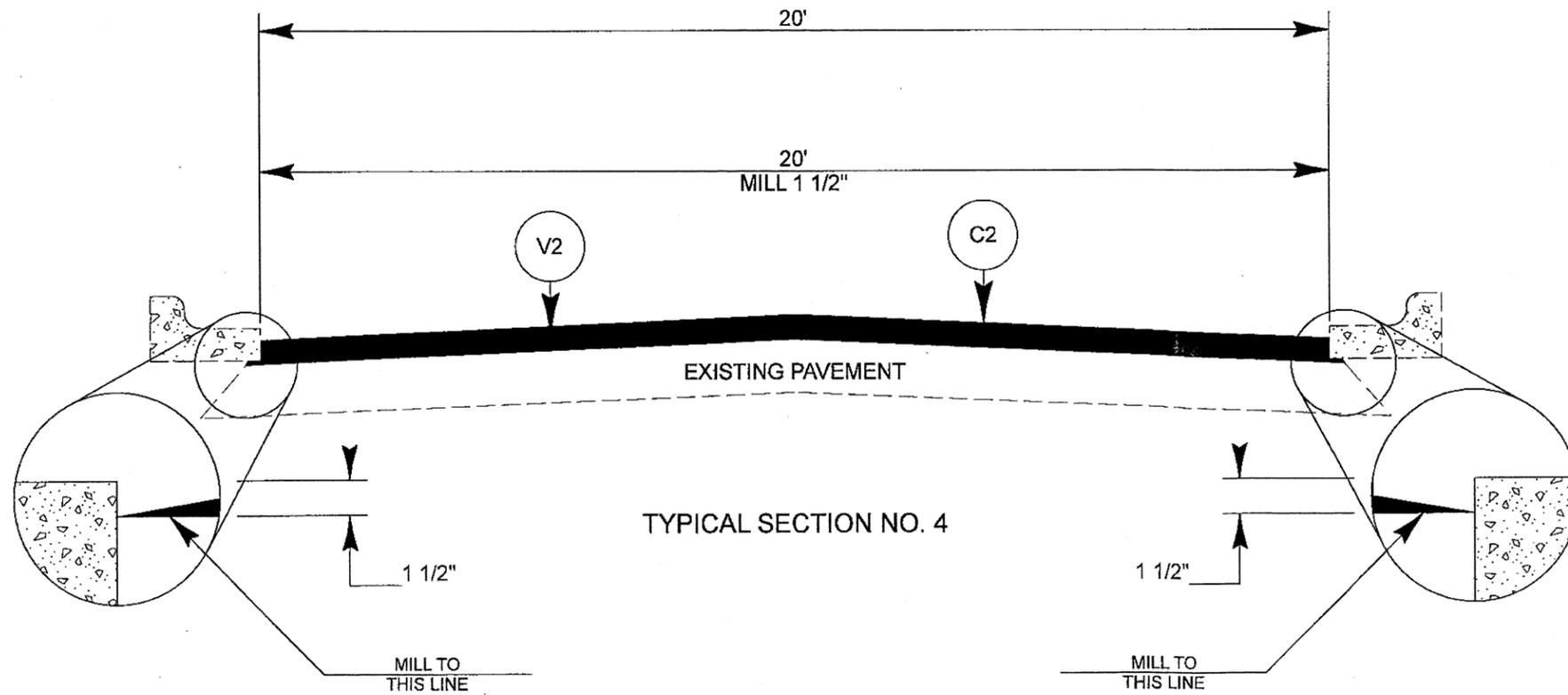
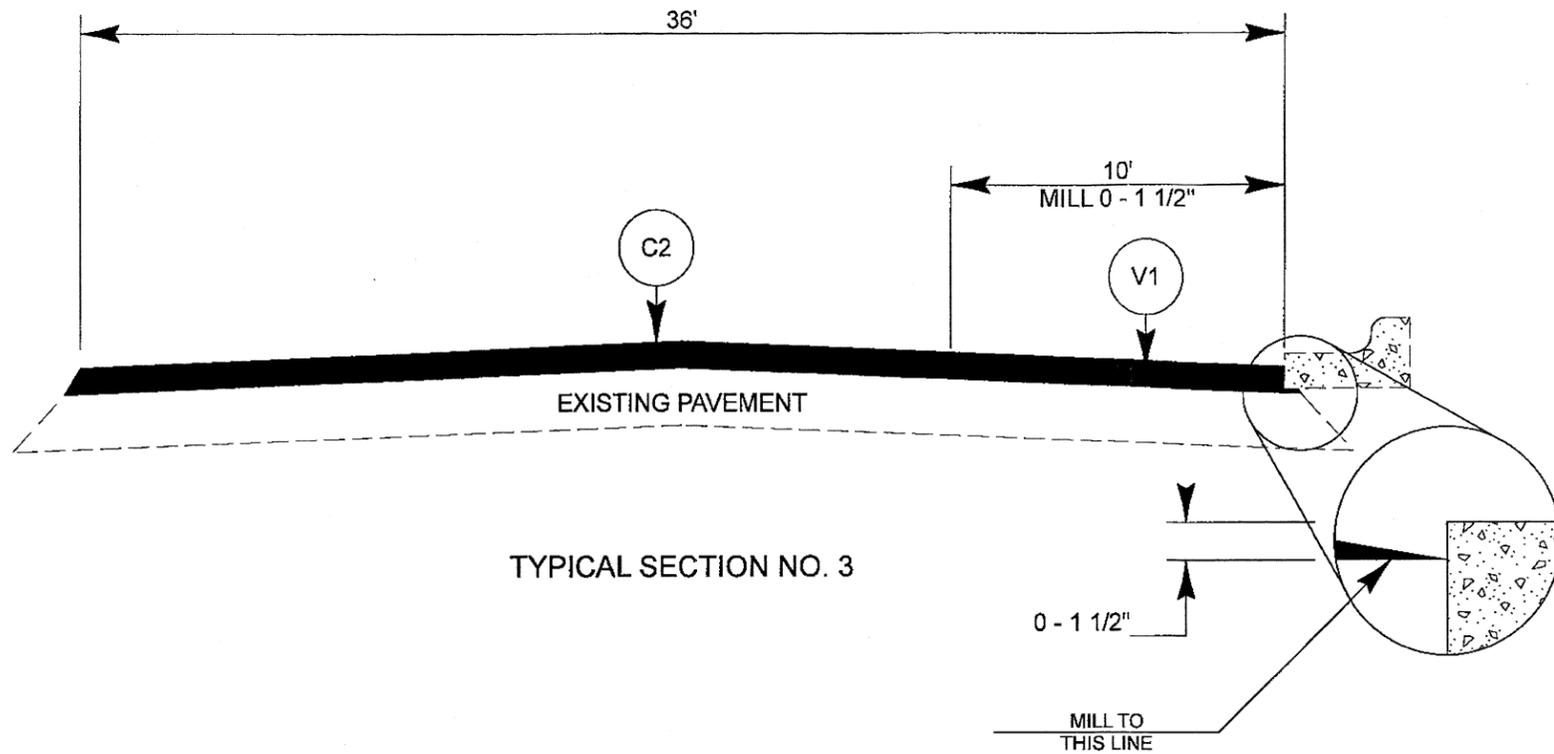
TYPICAL SECTION NO. 1



TYPICAL SECTION NO. 2

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1-1/2" ACSC, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1-1/2" ACSC, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
T1	SHOULDER RECONSTRUCTION
V1	MILLING ASPHALT PAVEMENT, 0 TO 1-1/2" DEPTH
V2	MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH
V3	INCIDENTAL MILLING

PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10591.15, 13CR.20591.14	4	



BRIDGE HALF TYPICAL SECTION

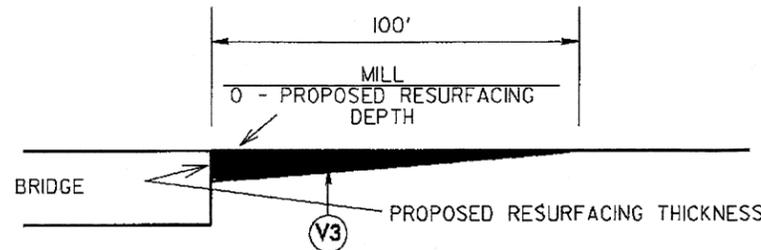
FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN

THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. THE MINIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1/2", SF9.5A 1.0", S9.5X 1.5", S12.5X 2.0", ULTRATHIN HOT MIX ASPHALT-TYPE A 3/4", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C 1/2". THE MAXIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1.0", SF9.5A 1.5", S9.5X 2.0", S12.5X 2.0", ULTRATHIN HOT MIX ASPHALT-TYPE A 3/4", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C 1/2".

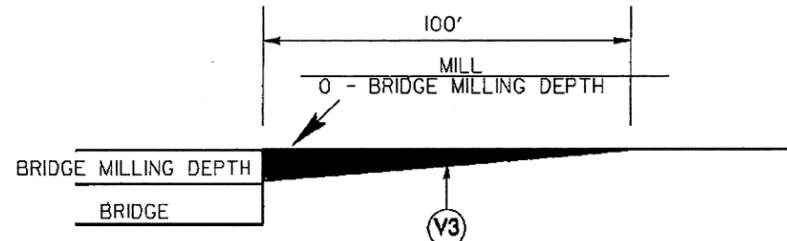
NOTES

ALL UNPAVED ROADS TO BE RESURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT.
 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 TABLE OF QUANTITIES.
 SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE INDICATED.
 BRIDGES ARE TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.

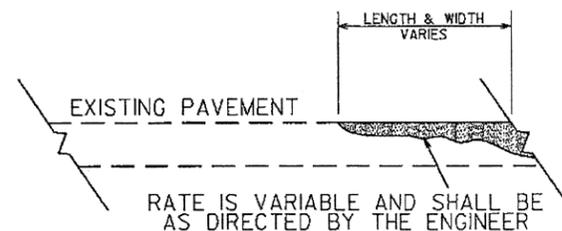
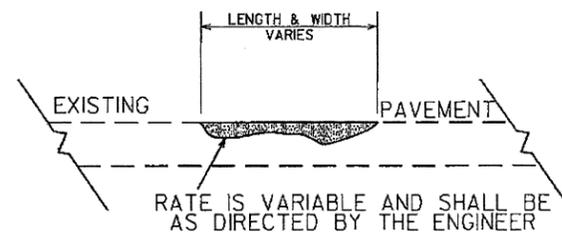
PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10591.15, 13CR.20591.14	5	



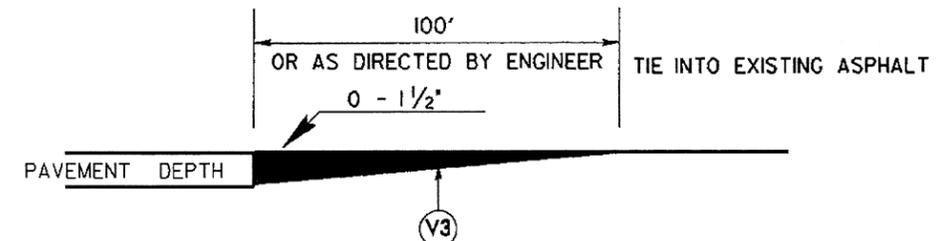
INCIDENTAL MILLING DETAIL AT BRIDGE APPROACHES
WHERE BRIDGES WILL NOT BE RESURFACED.
THIS WILL BE PAID FOR AS INCIDENTAL MILLING.



INCIDENTAL MILLING DETAIL AT BRIDGE APPROACHES
WHERE BRIDGES WILL BE MILLED THEN RESURFACED.
THIS WILL BE PAID FOR AS INCIDENTAL MILLING.

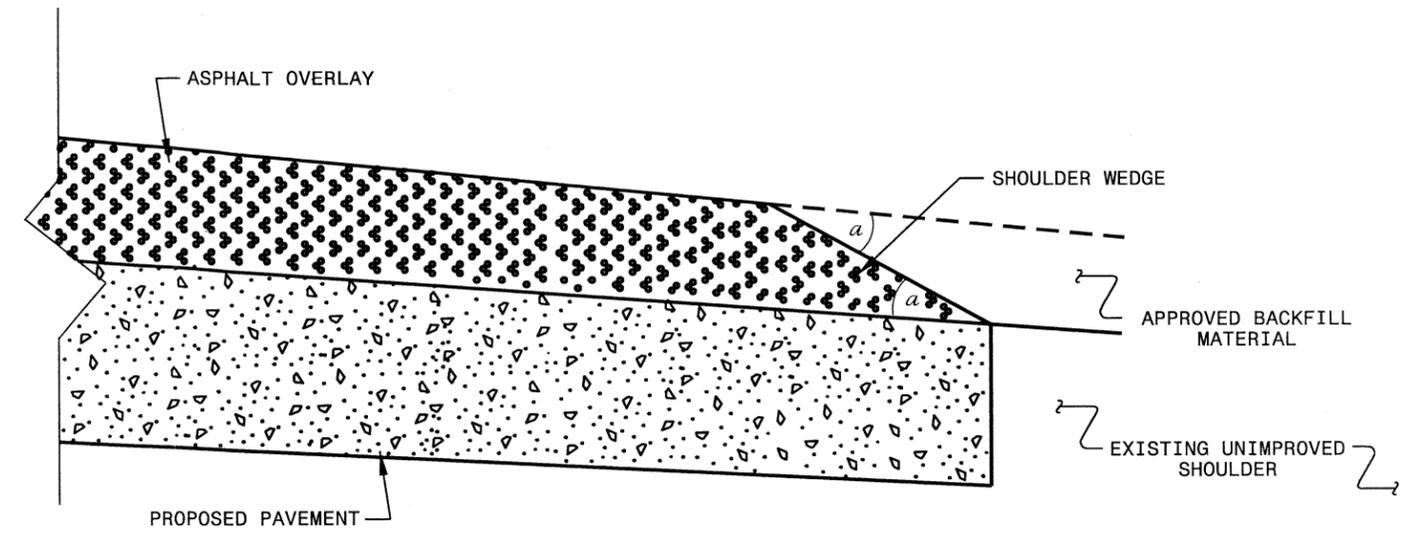


**DETAIL SHOWING
METHOD OF WEDGING**



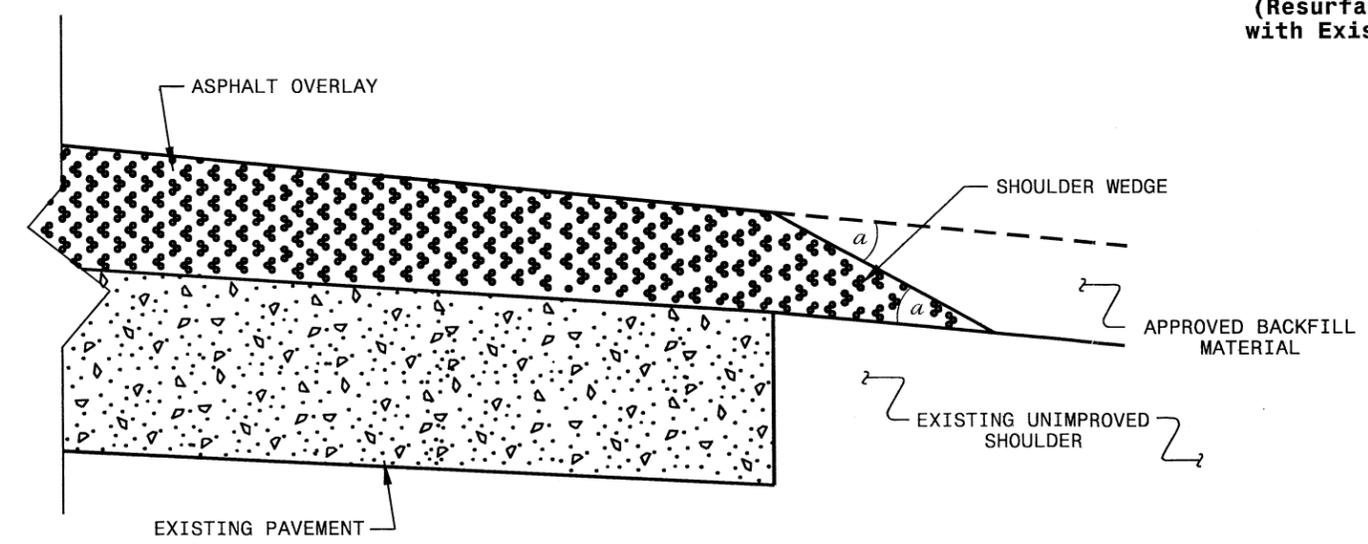
DETAIL TO TIE INTO EXIST PAVEMENT

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 BEGINING, END AND Y LINES OF EACH MAP TO BE RESURFACED WITH ASPHALT CONC SURFACE COURSE, TYPE S9.5B. THIS WILL BE PAID FOR AS INCIDENTAL MILLING.



SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ Widening or with Existing Paved Shoulder > 2 ft.)



SHOULDER WEDGE DETAIL

(Resurfacing Projects w/ NO Widening)

- 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.

a - SHOULDER WEDGE ANGLE = 30°

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	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: s:\usr\details\stand\shoulderwedgedetail.dgn	

 CUSTOMER SERVICE

PROJECT NO. 13CR.10591.15, 13CR.20591.14	SHEET NO. 7	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 MI	WIDTH FT	INCIDENTAL STONE BASE TON	SHOULDER RECONSTRUCTION SMI	MILLING ASPHALT PAVEMENT, 1-1/2" DEPTH SY	MILLING ASPHALT PAVEMENT, 0" TO 1-1/2" DEPTH SY	INCIDENTAL MILLING SY	ASPHALT CONC SURFACE COURSE, TYPE S9.5B TON	ASPHALT CONC SURFACE COURSE, TYPE SF9.5A TON	ASPHALT BINDER FOR PLANT MIX TON	PATCHING EXISTING PAVEMENT TON	ADJUSTMENT OF METER BOXES OR VALVE BOXES EA	
13CR.10591.15	McDowell	1	US 221	FROM END 4 LANE TO SR 1568 (MP 26.04 - MP 26.686)	1	2	2WU	NO	NO	0.65	21	33	1.30			810	744		45	300		
13CR.10591.15	McDowell	2	NC 80	FROM US 70 TO SR 1434 (MP 0.00 - MP 1.92)	1	2	2WU	NO	NO	1.92	21	96	3.84			810	2,199		132	500	1	
13CR.10591.15	McDowell	3	NC 80	FROM SR 1434 TO 1.40 MILES NORTH OF SR 1434 (MP 1.92 - MP 3.32)	1	2	2WU	NO	NO	1.4	21	70	2.80			540	1,603		96	555		
TOTAL FOR PROJ NO. 13CR.10591.15										3.97		199	7.94			2,160	4,546		273	1,355	1	
13CR.20591.14	McDowell	4	SR 1131	FROM SR 1103 TO SR 1123 (MP 0.00 - MP 1.797)	2	2	2WU	NO	NO	1.8	18	90						1,737	116		1,300	
13CR.20591.14	McDowell	5	SR 1228	FROM SR 1214 TO SR 1246 (MP 0.00 - MP 0.502)	2	2	2WU	NO	NO	0.5	20	25						536	36		400	
13CR.20591.14	McDowell	6	SR 1301	FROM US 221 BUS. TO SCHOOL GATE (MP 0.00 - MP 0.509)	2	2	2WU	NO	NO	0.51	24	26				533		655	44		300	
13CR.20591.14	McDowell	7	SR 1302	FROM US 70 TO SCHOOL GATE (MP 0.00 - MP 0.099)	2,3	3	M2	NO	NO	0.1	36	5			586			192	13		50	
13CR.20591.14	McDowell	8	SR 1500	FROM SR 1510 TO E.O.M. (MP 0.00 - MP 1.056)	2	2	2WU	NO	NO	1.06	18	53						1,023	69		600	
13CR.20591.14	McDowell	9	SR 1510	FROM SR 1500 TO SR 1506 (MP 0.00 - MP 0.485)	2	2	2WU	NO	NO	0.49	18	25						473	32		325	
13CR.20591.14	McDowell	10	SR 1502	FROM SR 1501 TO NCL MARION (MP 0.00 - MP 0.172)	2	2	2WU	NO	NO	0.17	16	9						146	10		125	
13CR.20591.14	McDowell	11	SR 1501	FROM SR 1500 (FLEMING AVE.) TO SR 1550 + 0.50 (MP 0.00 - MP 3.13)	2,4	2	2WU	NO	NO	3.13	20	157		2,112		444		3,354	225		2,150	1
TOTAL FOR PROJ NO. 13CR.20591.14										7.76		390		2,112	586	977		8,116	545		5,250	1
GRAND TOTAL										11.73		589	7.94	2,112	586	3,137	4,546	8,116	818	6,605	2	

Note: Shoulder work on secondary roads will be done by state forces.

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	441300000	445700000	469700000-E	471000000-E	472500000-E			481000000-E		484700000-E		490500000-N		
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS) WHITE LF	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS) WHITE LF	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) RT ARROW EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) STR & LT EA	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) LT ARROW EA	PAINT PAVEMENT MARKING LINES (4") WHITE LF	PAINT PAVEMENT MARKING LINES (4") YELLOW LF	POLYUREA PAVEMENT MARKING LINES (4") WHITE (HIGHLY REFLECTIVE ELEMENTS) LF	POLYUREA PAVEMENT MARKING LINES (4") YELLOW (HIGHLY REFLECTIVE ELEMENTS) LF	SNOWPLOWABLE PAVEMENT MARKERS EA		
13CR.10591.15	McDowell	1	US 221	FROM END 4 LANE TO SR 1568 (MP 26.04 - MP 26.686)	1	2	2WU	0.65	21	445	*								6,864	6,864	43		
13CR.10591.15	McDowell	2	NC 80	FROM US 70 TO SR 1434 (MP 0.00 - MP 1.92)	1	2	2WU	1.92	21			75	16							20,275	20,275	127	
13CR.10591.15	McDowell	3	NC 80	FROM SR 1434 TO 1.40 MILES NORTH OF SR 1434 (MP 1.92 - MP 3.32)	1	2	2WU	1.4	21											14,784	14,784	92	
TOTAL FOR PROJ NO. 13CR.10591.15								3.97		445	1	75	16						41,923	41,923	262		
										83,846													
13CR.20591.14	McDowell	4	SR 1131	FROM SR 1103 TO SR 1123 (MP 0.00 - MP 1.797)	2	2	2WU	1.8	18	984	*						38,016	38,016					
13CR.20591.14	McDowell	5	SR 1228	FROM SR 1214 TO SR 1246 (MP 0.00 - MP 0.502)	2	2	2WU	0.5	20										10,560	10,560			
13CR.20591.14	McDowell	6	SR 1301	FROM US 221 BUS. TO SCHOOL GATE (MP 0.00 - MP 0.509)	2	2	2WU	0.51	24						1	1			10,771	10,771			
13CR.20591.14	McDowell	7	SR 1302	FROM US 70 TO SCHOOL GATE (MP 0.00 - MP 0.099)	2,3	3	M2	0.1	36					30	2		2		2,112	2,112			
13CR.20591.14	McDowell	8	SR 1500	FROM SR 1510 TO E.O.M. (MP 0.00 - MP 1.056)	2	2	2WU	1.06	18					16					22,387	22,387			
13CR.20591.14	McDowell	9	SR 1510	FROM SR 1500 TO SR 1506 (MP 0.00 - MP 0.485)	2	2	2WU	0.49	18					16					10,349	10,349			
13CR.20591.14	McDowell	10	SR 1502	FROM SR 1501 TO NCL MARION (MP 0.00 - MP 0.172)	2	2	2WU	0.17	16														
13CR.20591.14	McDowell	11	SR 1501	FROM SR 1500 (FLEMING AVE.) TO SR 1550 + 0.50 (MP 0.00 - MP 3.13)	2,4	2	2WU	3.13	20								66,106	66,106					
TOTAL FOR PROJ NO. 13CR.20591.14								7.76		984	1	62	3	1	2		160,301	160,301					
										320,602													
GRAND TOTAL								11.73		1,429	1	75	78	3	1	2	160,301	160,301	41,923	41,923	262		
										320,602													
										83,846													