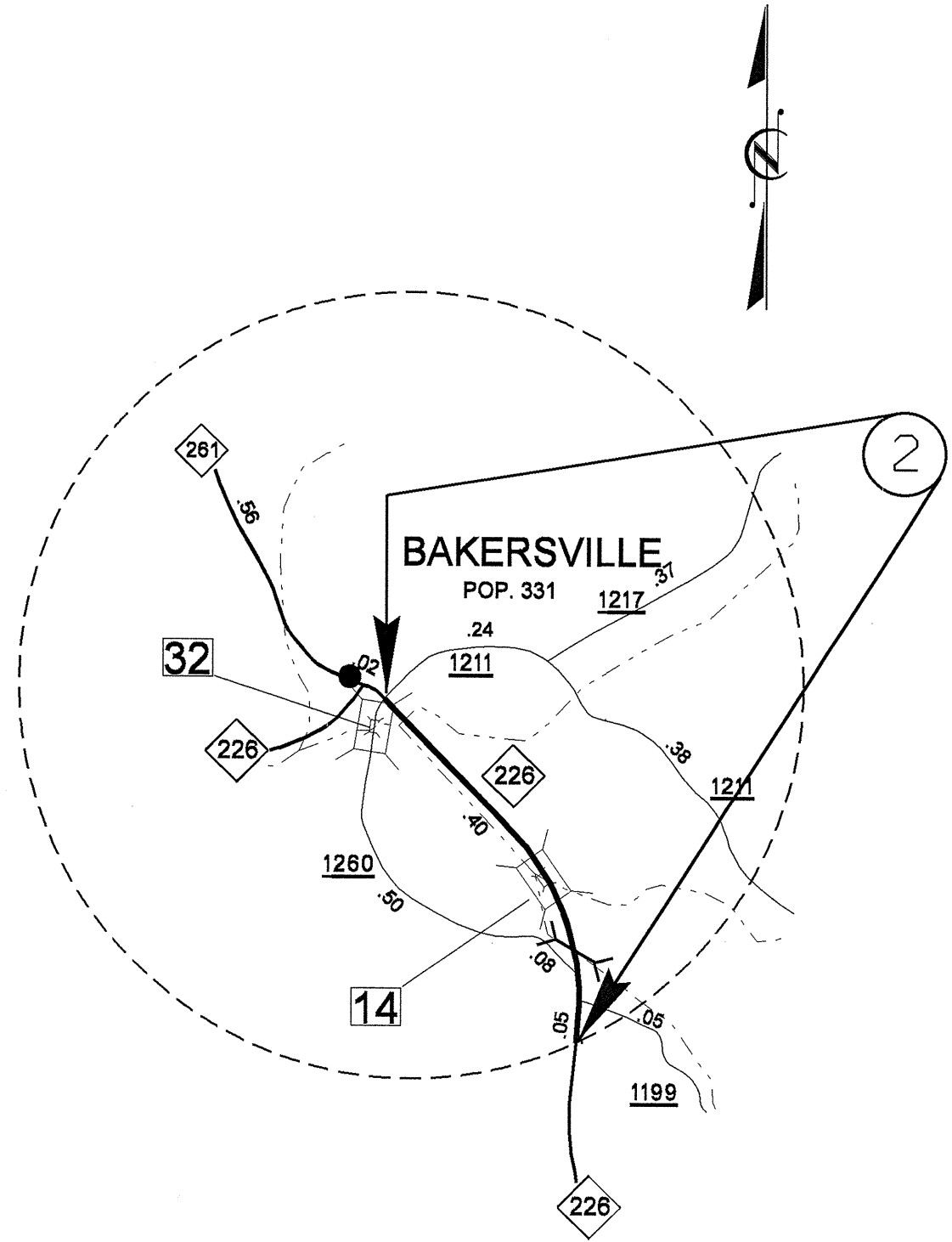
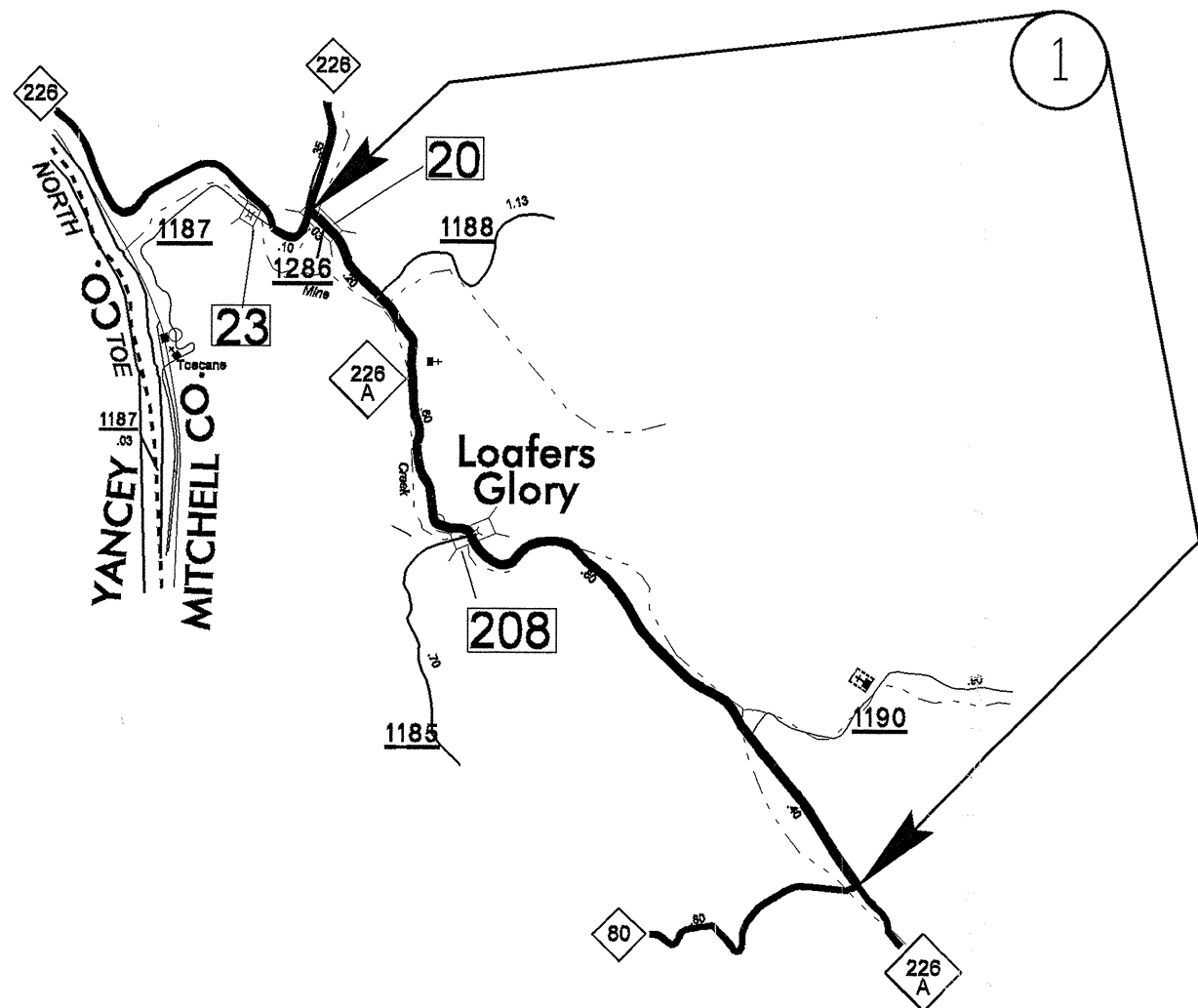
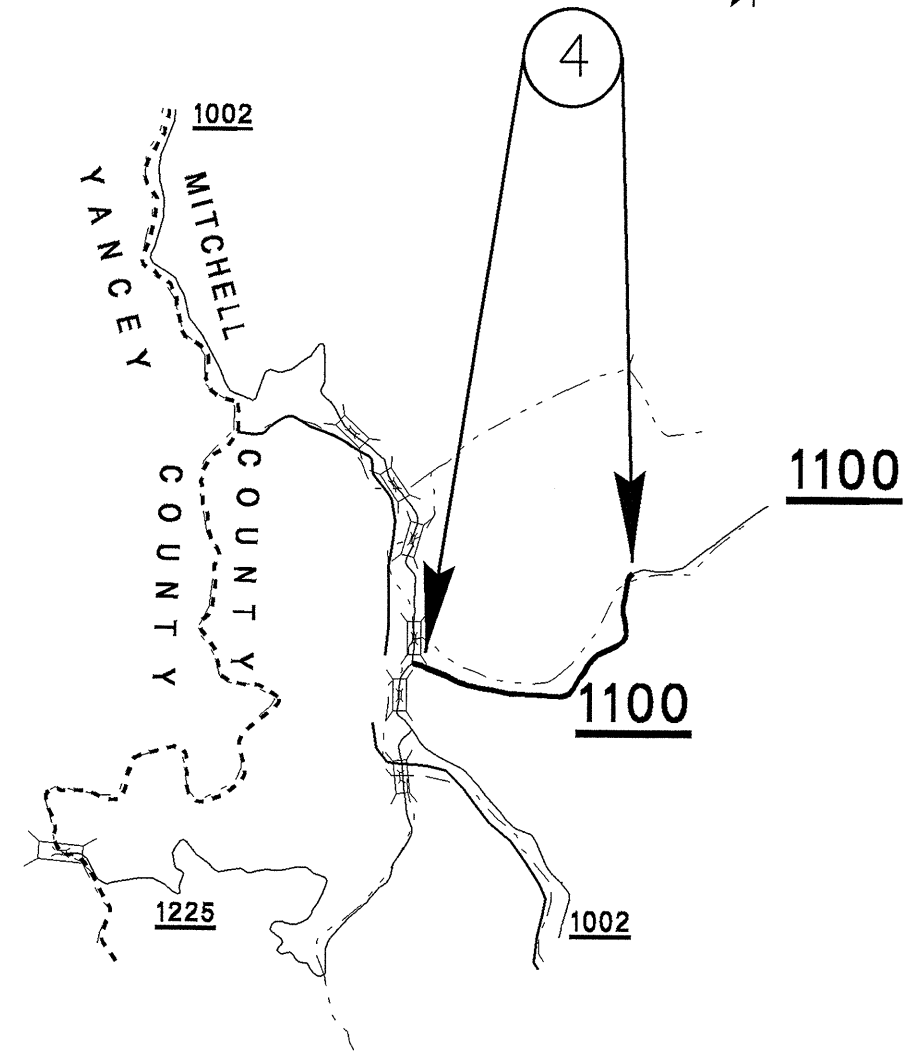
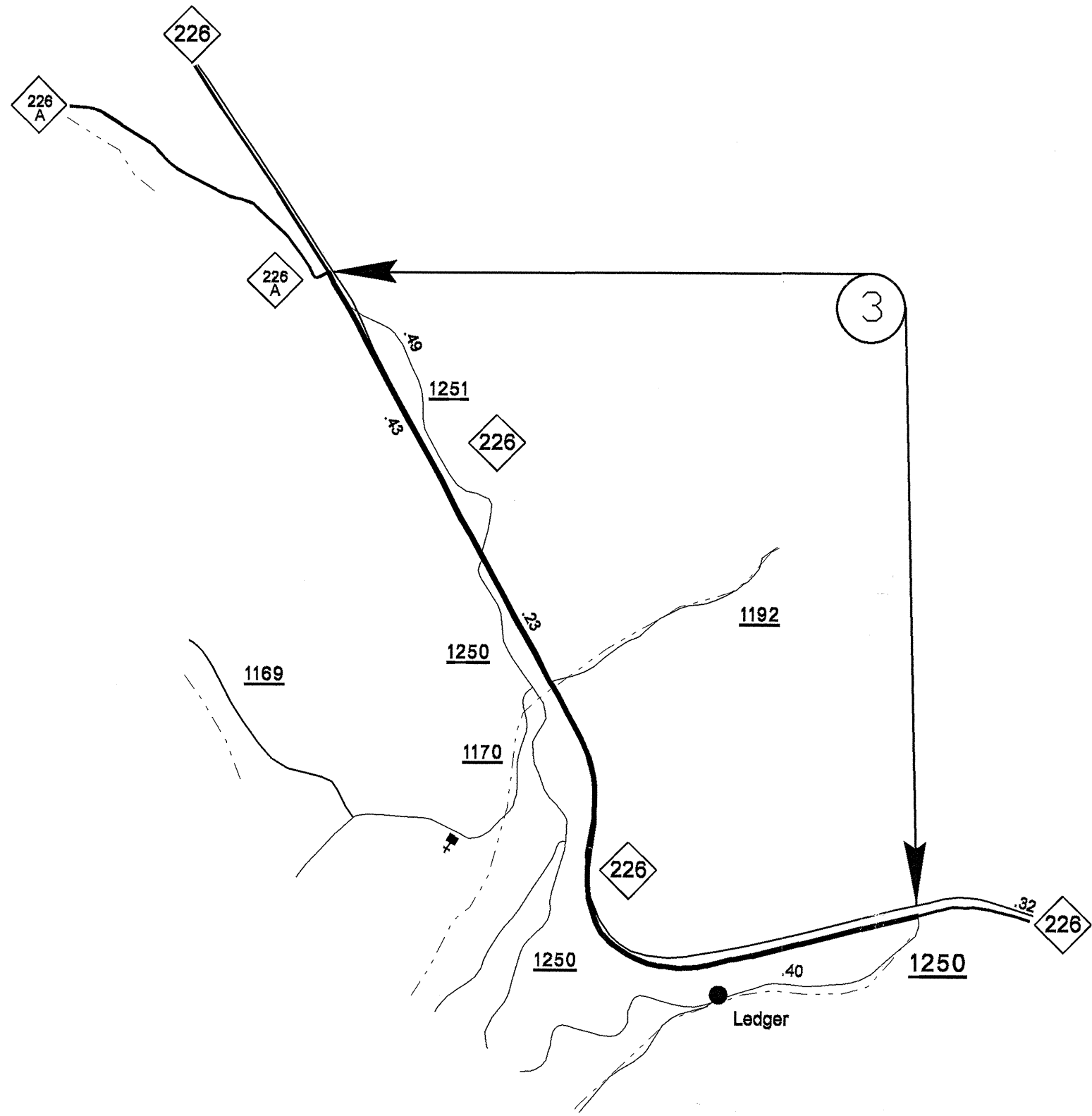


PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10611.10, 13CR.20611.9		



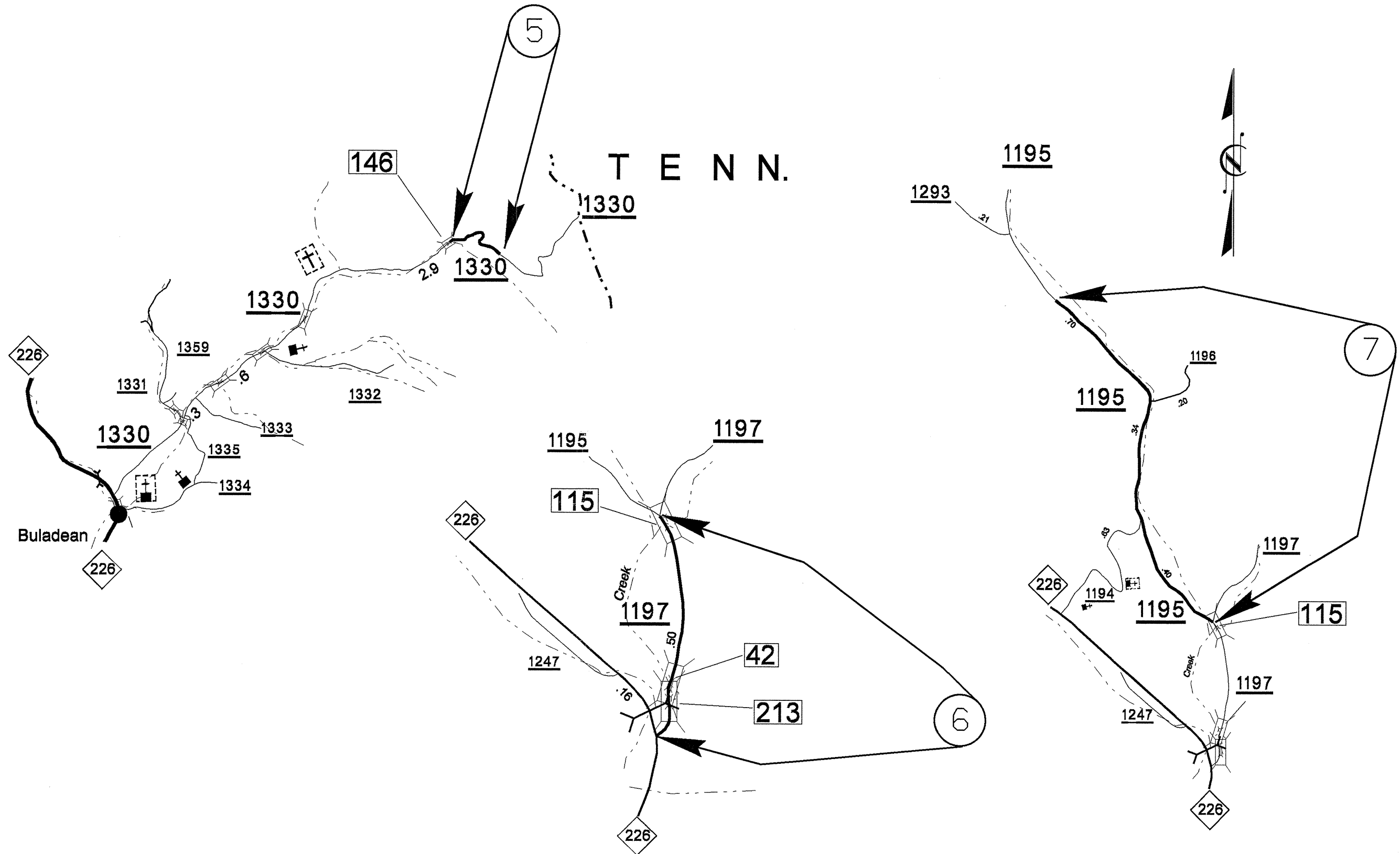
MITCHELL COUNTY

PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10611.10, 13CR.20611.9	2	



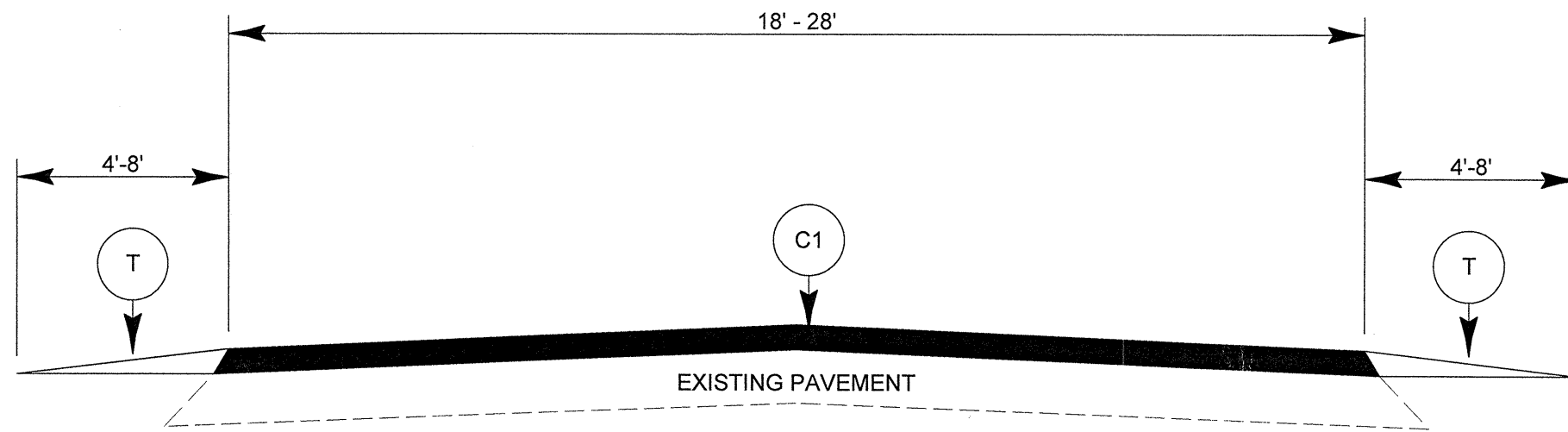
MITCHELL COUNTY

PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10611.10, 13CR.20611.9	3	

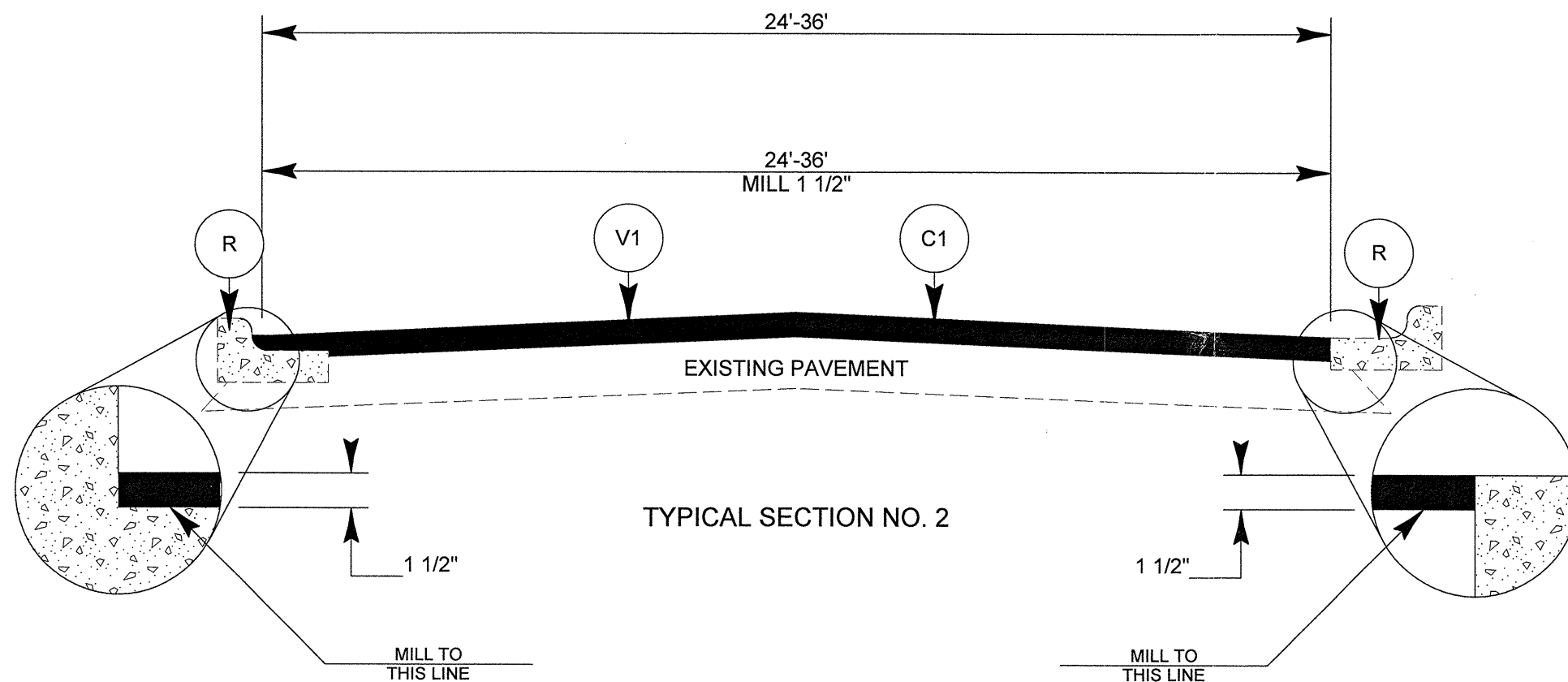
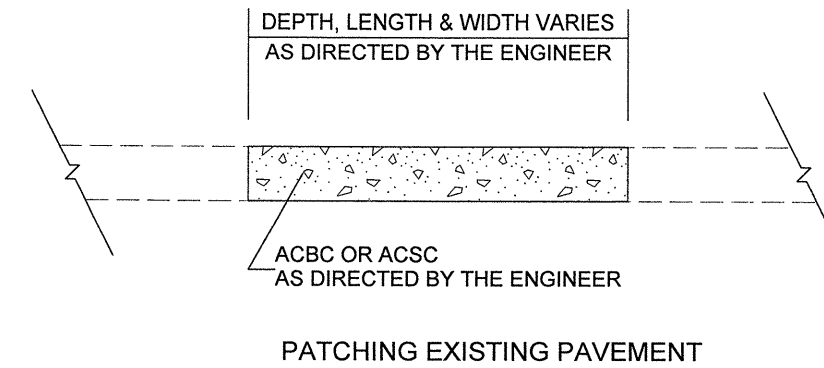


MITCHELL COUNTY

PROJECT NO. 13CR.10611.10, 13CR.20611.9	SHEET NO. 4	TOTAL SHEETS
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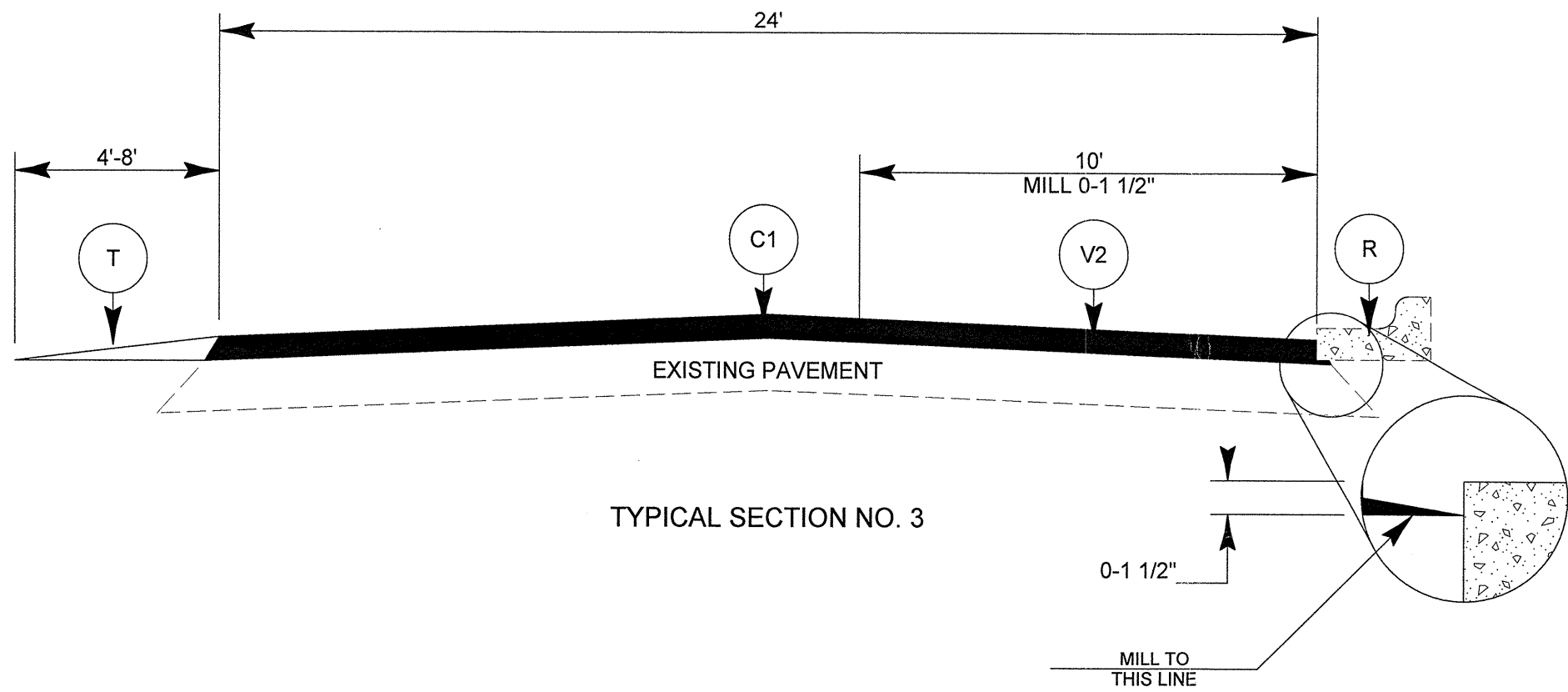
TYPICAL SECTION NO. 1



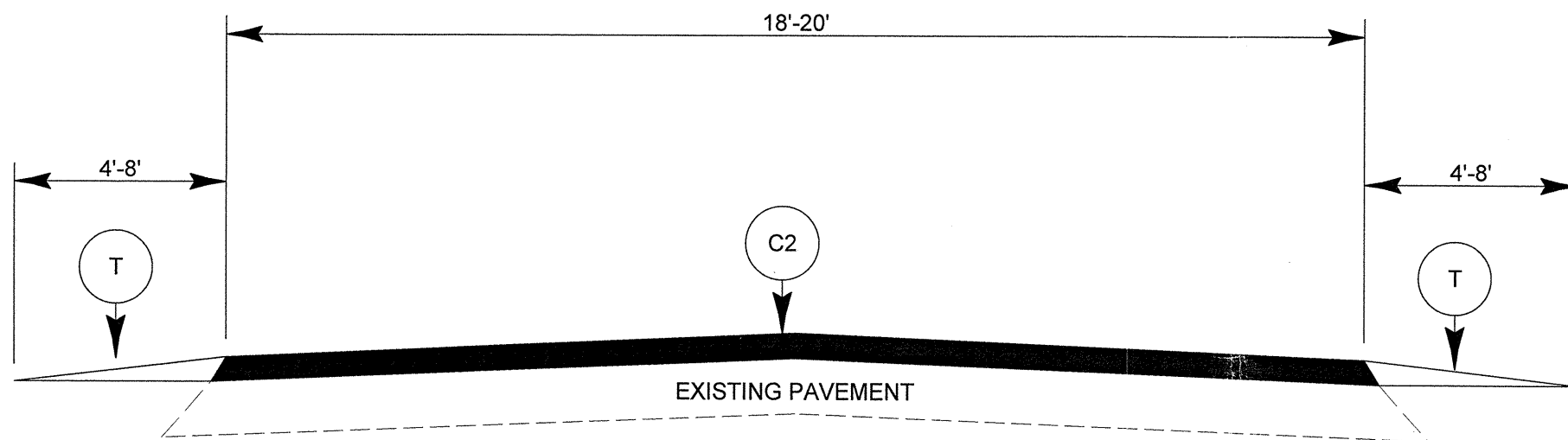
TYPICAL SECTION NO. 2

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
R	EXISTING CURB AND GUTTER OR SIDEWALK
T	SHOULDER RECONSTRUCTION
V1	MILL 1 1/2"
V2	MILL 0-1 1/2"

PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10611.10, 13CR.20611.9	5	



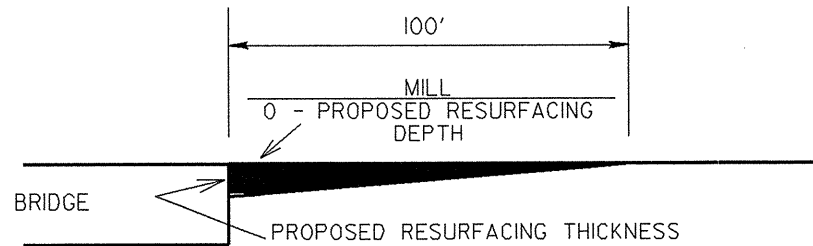
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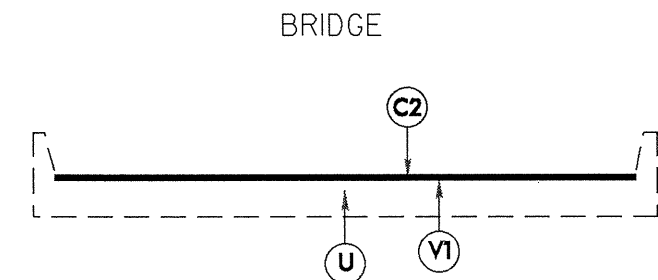
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MITCHELL COUNTY

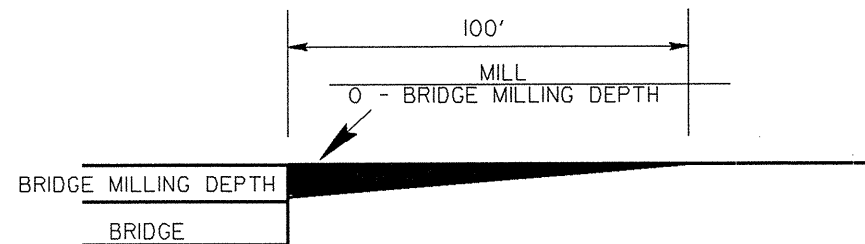
PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10611.10 & 13CR.20611.9	6	



MILLING DETAIL AT BRIDGE APPROACHES
WHERE BRIDGES WILL NOT BE RESURFACED
COST OF MILLING IS INCIDENTAL TO OTHER ITEMS



BRIDGE DETAIL
BRIDGE # 42, #115 AND #213 MAP 6
MILL 1½" OFF EXISTING PAVEMENT
SEE MAPS FOR BRIDGE LOCATION

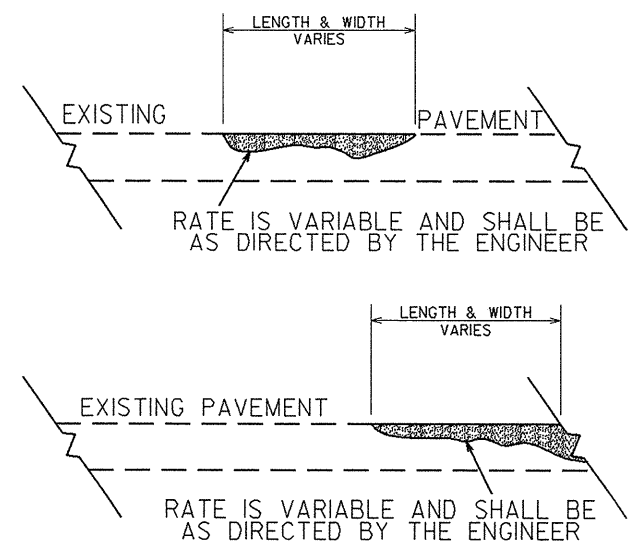


MILLING DETAIL AT BRIDGE APPROACHES
WHERE BRIDGES WILL BE MILLED THEN RESURFACED
COST OF MILLING IS INCIDENTAL TO OTHER ITEMS

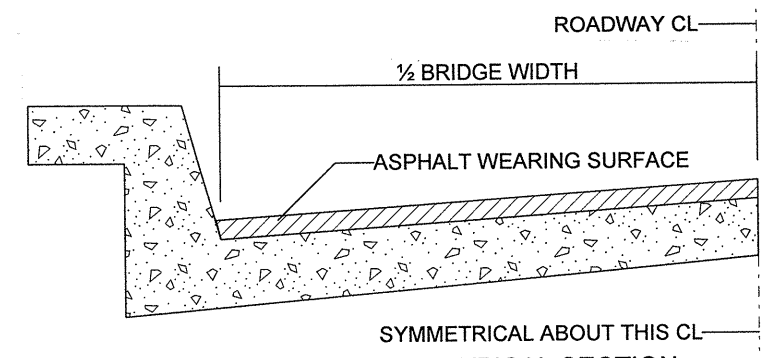
PAVEMENT SCHEDULE	
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE SF9.5A, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
U	EXISTING PAVEMENT
V1	MILL 1½"

MITCHELL COUNTY

PROJECT NO.	SHEET NO.	TOTAL SHEETS
13CR.10611.10 & 13CR.20611.9	7	



DETAIL SHOWING METHOD OF WEDGING



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 1/2", ULTRATHIN HOT MIX ASPHALT-TYPE B 5/8", ULTRATHIN HOT MIX ASPHALT-TYPE C 1/4".

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 NO.
13CR.10611.10, 13CR.20611.9	8	

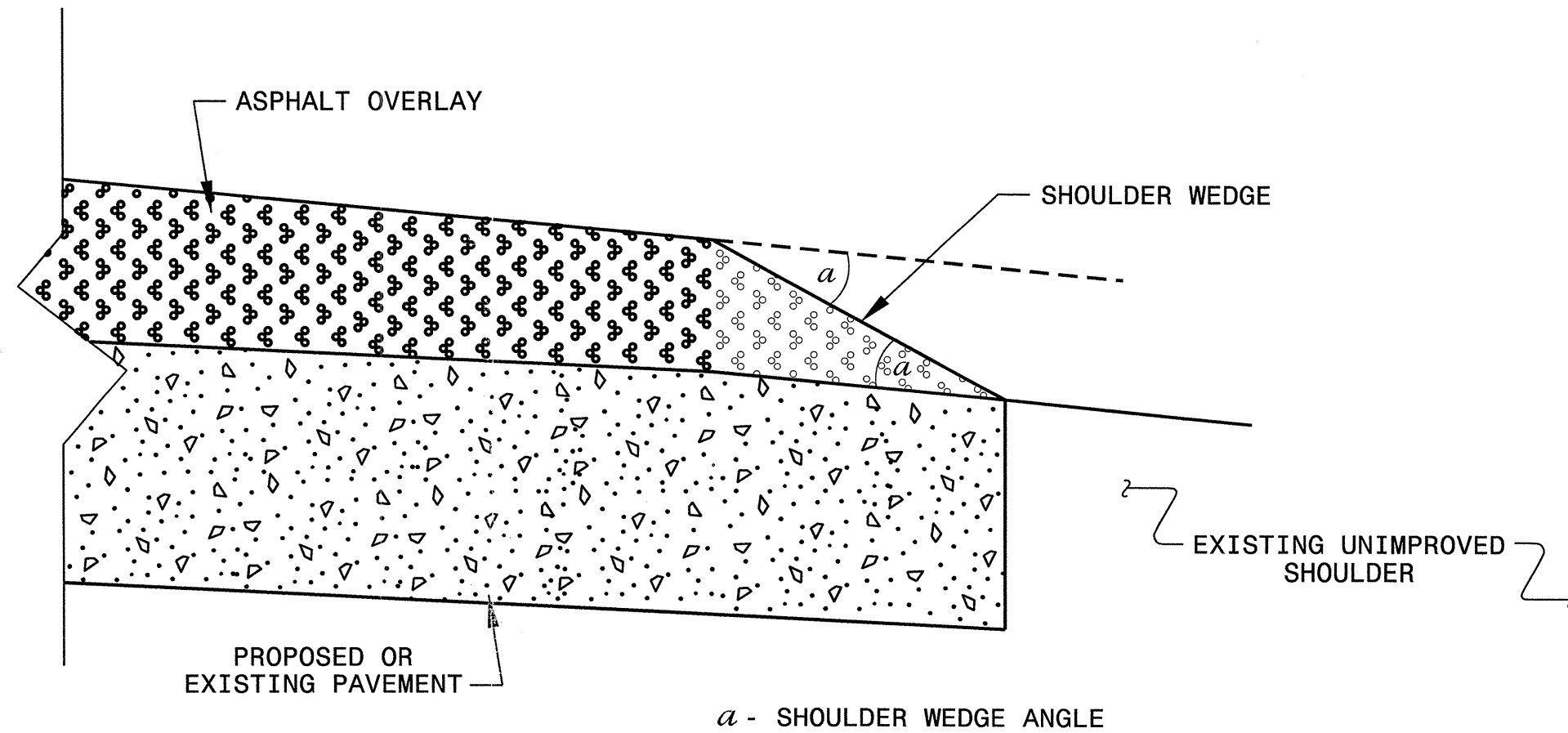
SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	FINAL SURFACE TESTING REQUIRED	LENGTH MI	WIDTH FT	INCIDENTAL STONE BASE TON	SHOULDER RECONSTRUCTION SMI	1½" MILLING SY	0" TO 1½" 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
13CR.10611.10	Mitchell	1	NC 226A	FROM NC 80 MP 1.66 TO NC 226 MP 3.72	1	NO	2.06	18	103.00	4.12			2,024		121	90
	Mitchell	2	NC 226	FROM SCL BAKERSVILLE MP 14.37 TO SR 1211 MP 14.87	1,2,3	NO	0.5	24-36	5.00	0.25	4,800	1,600	979		59	125
	Mitchell	3	NC 226	FROM SR 1250 MP 10.35 TO NC 226A MP 12.02	1	NO	1.58	28	79.00	3.16			2,409		145	320
TOTAL FOR PROJ NO. 13CR.10611.10							4.14		187.00	7.53	4,800	1,600	5,412		325	535
13CR.20611.9	Mitchell	4	SR 1100	FROM PAVEMENT CHANGE MP 2.46 TO SR 1002 MP 3.36	4	NO	0.9	20	45.00	1.80				964	65	240
	Mitchell	5	SR 1330	FROM PAVEMENT CHANGE MP 2.83 TO EOP MP 3.48	4	NO	0.65	18	32.50	1.30				627	42	100
	Mitchell	6	SR 1197	FROM NC 226 MP 0 TO SR 1195 MP 0.48	4	NO	0.48	18	24.00	0.96	330			463	31	100
	Mitchell	7	SR 1195	FROM SR 1197 MP 0 TO 0.20 MILES SOUTH OF SR 1293 MP 1.28	4	NO	1.28	18	64.00	2.56				1,235	83	110
TOTAL FOR PROJ NO. 13CR.20611.9							3.31		165.50	6.62	330			3,289	221	550
GRAND TOTAL							7.45		352.50	14.15	5,130	1,600	5,412	3,289	546	1,085

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	LENGTH	WIDTH	4685000000-E 4" X 90 M WHITE THERMO LF	4686000000-E 4" X 120 M YELLOW THERMO LF	4697000000-E 8" X 120 M WHITE THERMO LF	4710000000-E 24" X 120 M WHITE THERMO LF	4721000000-E THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS, SCHOOL) EA	4810000000-E PAINT PAVEMENT MARKING LINES (4") WHITE LF	4820000000-E PAINT PAVEMENT MARKING LINES (4") YELLOW LF	4820000000-E PAINT PAVEMENT MARKING LINES (8") WHITE LF	4905000000-N SNOWPLOWABLE PAVEMENT MARKERS EA
13CR.10611.10	Mitchell	1	NC 226A	FROM NC 80 MP 1.66 TO NC 226 MP 3.72	2.06	18	21,754	21,754							272
	Mitchell	2	NC 226	FROM SCL BAKERSVILLE MP 14.37 TO SR 1211 MP 14.87	0.5	36	5,280	5,280	216	72	12				40
	Mitchell	3	NC 226	FROM SR 1250 MP 10.35 TO NC 226A MP 12.02	1.58	28	16,685	16,685							209
TOTAL FOR PROJ NO. 13CR.10611.10					4.14		43,719	43,719	216	72	12				521
13CR.20611.9	Mitchell	4	SR 1100	FROM PAVEMENT CHANGE MP 2.46 TO SR 1002 MP 3.36	0.9	20						19,008	19,008	80	
	Mitchell	5	SR 1330	FROM PAVEMENT CHANGE MP 2.83 TO EOP MP 3.48	0.65	18						13,728	13,728		
	Mitchell	6	SR 1197	FROM NC 226 MP 0 TO SR 1195 MP 0.48	0.48	18						10,138	10,138		
	Mitchell	7	SR 1195	FROM SR 1197 MP 0 TO 0.20 MILES SOUTH OF SR 1293 MP 1.28	1.28	18						27,034	27,034		
TOTAL FOR PROJ NO. 13CR.20611.9					3.31							69,908	69,908	80	
GRAND TOTAL					7.45		43,719	43,719	216	72	12	69,908	69,908	80	521
												139,816			

BCR.10611.10, etc.



SHOULDER WEDGE DETAIL

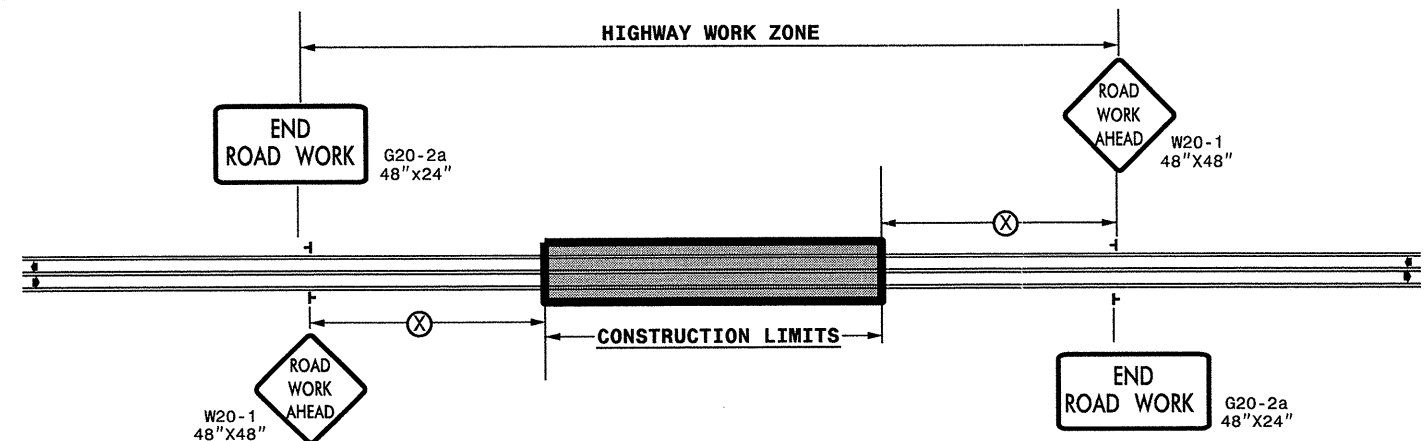
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CONTRACT STANDARDS AND DEVELOPMENT UNIT Office 919-707-6950 FAX 919-250-4119	
SHOULDER WEDGE DETAIL	
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MODIFIED BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
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27-OCT-2011 14:39
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PROJ. REFERENCE NO.	SHEET NO.
13CR.10611.10	TCP-1
13CR.20611.9	

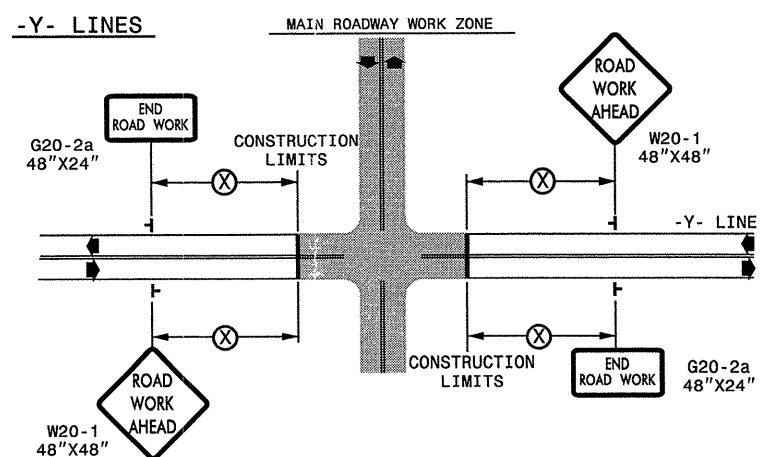
TWO-WAY UNDIVIDED ** (L-LINES)



POSTED SPEED LIMIT (M.P.H.)	RECOMMENDED MINIMUM SIGN SPACING
≤ 50	500'
≥ 55	1000'

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)



**DETAIL DRAWING FOR
 TWO-WAY UNDIVIDED
 WORK ZONE WARNING SIGNS**

GENERAL NOTES

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 3LB STEEL U-CHANNEL POST OR 4" X 4" WOOD POST FOR ALL WORK ZONE SIGNS. 3LB STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 3 LB STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 3LB STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.
- ** TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

LEGEND

STATIONARY SIGN
 DIRECTION OF TRAFFIC FLOW






SHEET 1 OF 1

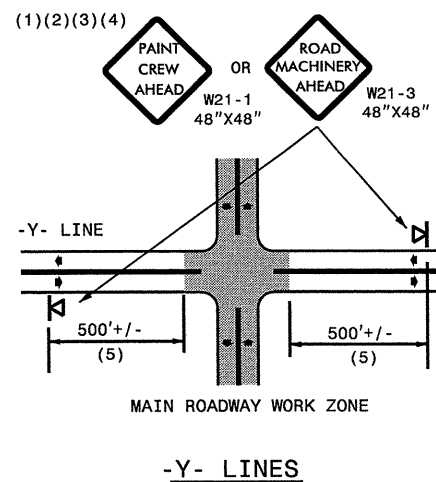
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SEAL 	SCALE: NONE	REVISIONS	
	DATE: _____	7-98	10/01
	DWG. BY: _____	10-98	03/04
	DESIGN BY: _____	01/01	11/04
REVIEWED BY: _____		CARD FILE	

GENERAL NOTES

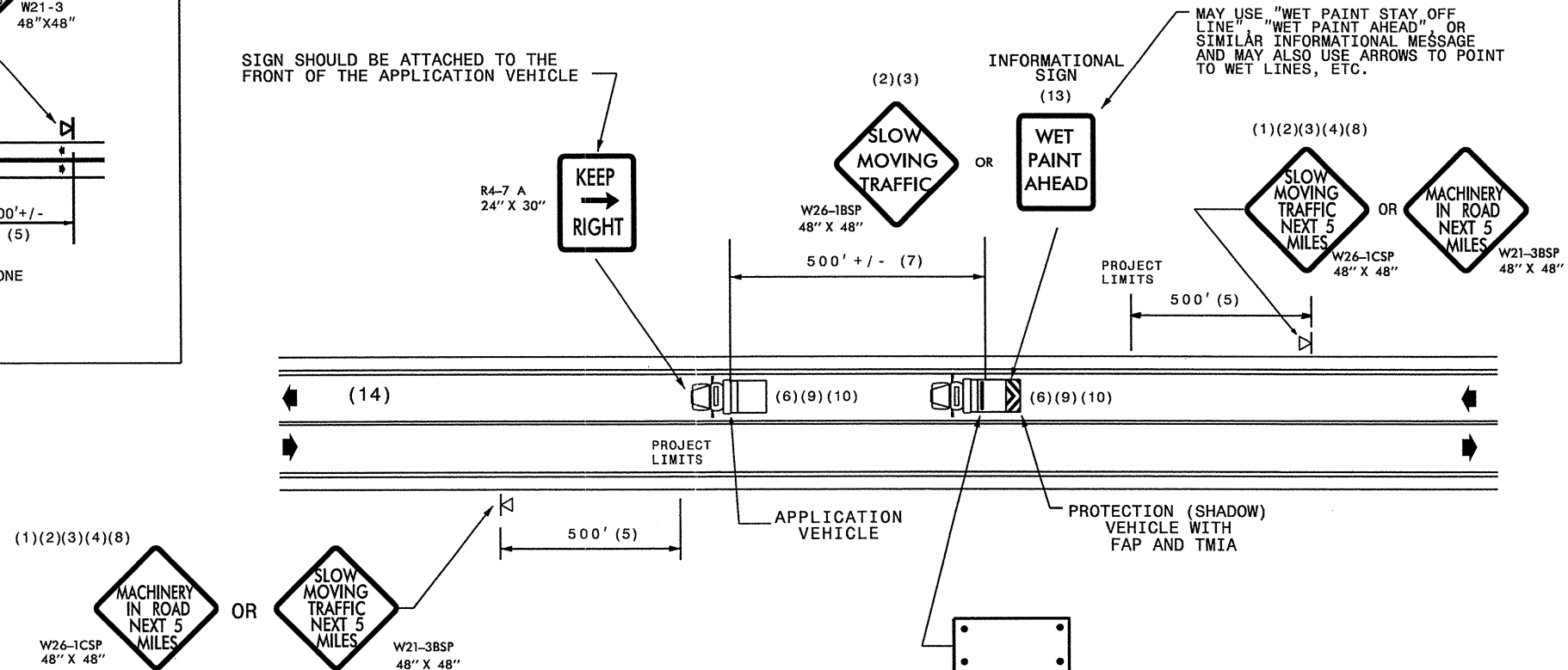
- (1) THE FOLLOWING OPTIONS MAY BE USED FOR ADVANCE WARNING SIGNS:
 - A. TRUCK MOUNTED SIGNS
 - B. TRUCK MOUNTED CHANGEABLE MESSAGE SIGN (CMS)
 - C. GROUND MOUNTED ADVANCE WARNING SIGNS (MUST CIRCLE TO PICK UP SIGNS)
 - D. GROUND MOUNTED CHANGEABLE MESSAGE SIGN (CMS) (MUST USE CIRCLE TO PICK UP SIGNS)
- (2) ALL ADVANCE WARNING SIGNS MUST BE 48" X 48" WITH FLUORESCENT ORANGE TYPE VII, VIII OR IX SHEETING. IF SPACE LIMITATIONS ON SHOULDER PROHIBIT A 48" X 48" SIGN, A SMALLER SIGN CAN BE USED WITH APPROVAL FROM ENGINEER.
- (3) SIGNS ON VEHICLES SHOULD BE MOUNTED A MINIMUM OF ONE (1) FOOT FROM THE GROUND AND SHOULD NOT BLOCK THE MOTORIST'S SIGHT OF THE FLASHING ARROW PANEL AND/OR LIGHTBAR.
- (4) GROUND MOUNTED ADVANCED WARNING SIGNS SHOULD BE MOUNTED A MINIMUM OF ONE (1) FOOT FROM THE GROUND TO BOTTOM OF SIGN.
- (5) SIGN SPACING SHOULD BE ADJUSTED FOR HORIZONTAL AND VERTICAL CURVES, ETC. TO IMPROVE SIGHT DISTANCES.
- (6) ADDITIONAL VEHICLES SHOULD BE USED IN WORK CARAVAN TO FACILITATE DRYING OF PAVEMENT MARKING MATERIAL (TMIA'S ARE OPTIONAL ON THESE ADDITIONAL VEHICLES). HOWEVER, THE FIRST VEHICLE MOTORISTS SEE IN THE TRAVEL LANE SHALL HAVE A TMIA.
- (7) ADJUST DISTANCE AS NEEDED TO PREVENT MOTORISTS FROM ENTERING SPACE BETWEEN THE APPLICATION AND PROTECTION VEHICLE. DISTANCE CAN BE LENGTHENED TO ACCOMMODATE SIGHT DISTANCE NEEDS.
- (8) ROUND UP MILEAGE TO NEXT WHOLE MILE. WORK ZONE SHOULD NOT EXCEED FIVE (5) MILES IN LENGTH.
- (9) RADIO COMMUNICATION BETWEEN VEHICLES IS REQUIRED.
- (10) USE OF A LIGHT BAR ON ALL VEHICLES IS PREFERRED, BUT A ROTATING BEACON MAY BE USED INSTEAD.
- (11) IF WORK IS PERFORMED AT NIGHT, THE WORK AREA MUST BE ILLUMINATED WITH MACHINE AND/OR TOWER LIGHTS AS APPROVED BY THE ENGINEER.
- (12) ALL TRAFFIC CONTROL DEVICES WILL BE CONSIDERED INCIDENTAL TO THE PAY ITEMS FOR PAVEMENT MARKING AND MARKERS.
- (13) INFORMATIONAL SIGNS SHOULD BE ACTIVITY SPECIFIC, I.E. "PAINT CREW IN ROAD". SIGNS MAY BE RECTANGULAR OR DIAMOND SHAPE. SIGN SIZE SHOULD BE BASED ON THE MOTORIST ABILITY TO RECOGNIZE SIGN WHEN TRAVELING FIVE (5) MILES ABOVE POSTED SPEED LIMIT.
- (14) IF A LEAD VEHICLE IS ADDED TO OPERATION, IT SHOULD HAVE THE SAME ADVANCE WARNING SIGNS AS THE APPLICATION VEHICLE SHOWN BELOW.

LEGEND

-  PORTABLE SIGN. SIGNS MUST BE NCHRP-350 AND NCDOT APPROVED.
-  DIRECTION OF TRAFFIC FLOW
-  APPLICATION VEHICLE WITH LIGHT BAR
-  PROTECTION VEHICLE WITH TRUCK MOUNTED IMPACT ATTENUATOR (TMIA) AND LIGHT BAR (SEE ROADWAY STANDARD NO. 1165.01). TMIA MUST BE NCHRP-350 TEST LEVEL 3 (60+MPH) APPROVED.
-  FLASHING ARROW PANEL, TYPE "B" (60"X30" MIN.), "CAUTION MODE"



SIGN SHOULD BE ATTACHED TO THE FRONT OF THE APPLICATION VEHICLE



MOVING OPERATION CARAVAN

(OPERATIONS TRAVELING 3 MPH OR FASTER)
PLACING PAVEMENT MARKING OR MARKERS
ON TWO-LANE TWO-WAY ROADWAYS

DRAWING NUMBER 6
IMPLEMENTATION DATE: 07/01/97
REVISED: 11/03/04