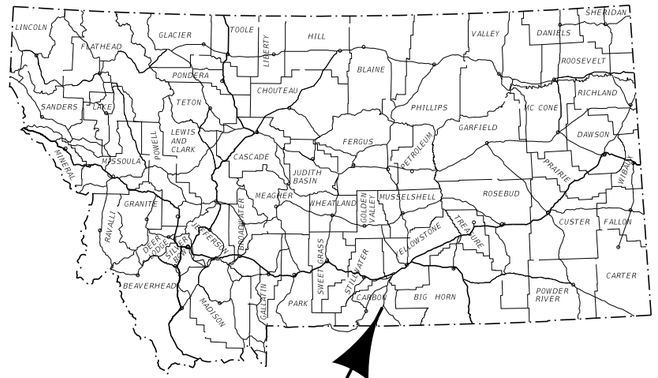
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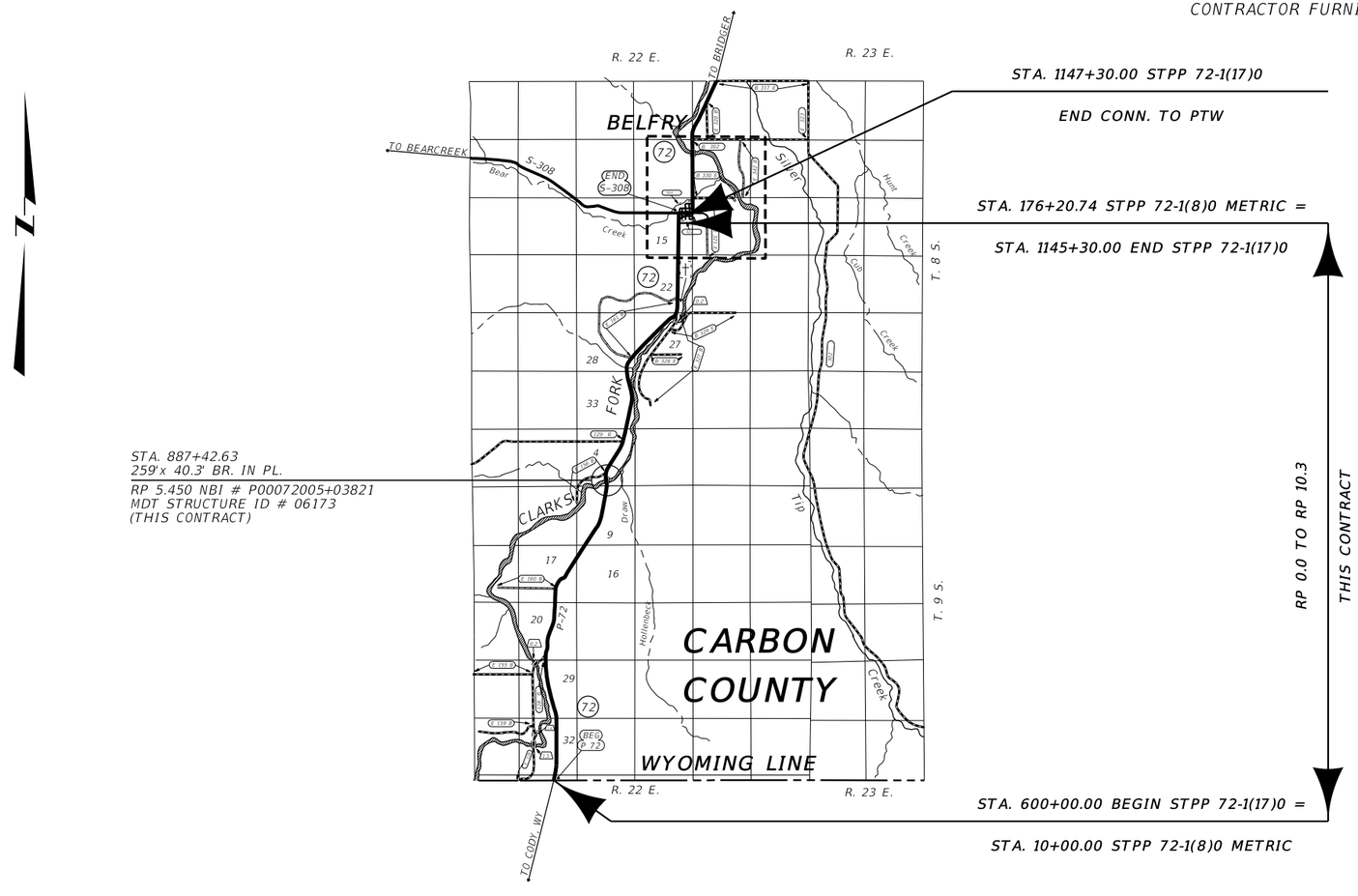
MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT STPP 72-1(17)0
OVERLAY, GUARDRAIL, SEAL AND COVER
BELFRY - SOUTH
CARBON COUNTY

PROJECT DESIGN DATA		
PRESENT	2021	A.D.T. = 1,750
LETTING	2023	A.D.T. = 1,800
DESIGN	2043	A.D.T. = 2,330
		D.H.V. = 310
		TRUCKS = 9.9 %
		V. = 55 MPH
		18 KIP ESAL'S = 105 DAILY
		GROWTH RATE = 1.3 % ANNUALLY

LENGTH 10.3 MILES

SURFACING SOURCES –
CONTRACTOR FURNISHED



ASSOCIATED PROJECT AGREEMENT NUMBERS	
R / W	
I.C.	
P. E.	STPP 72-1(16)0

3	MONTANA Department of Transportation	C:\DGN\9964000rdtl001.dgn	DESIGNED BY	B. HENDERSON	8/29/2022	ROAD PLANS
2		11/1/2023	REVIEWED BY	J. BROTZLER	9/9/2022	
		11:20:34 AM CPS – U6909	CHECKED BY	J. FLEMING	9/8/2022	UPN 9964000

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NOTES

BASIS OF PLAN QUANTITIES

(QUANTITIES FOR ESTIMATING PURPOSES ONLY)

COMP. AGGREGATE WEIGHT	= 3750 LBS. PER CUBIC YARD
COMP. WEIGHT OF PL. MIX BIT. SURF.	= 4167 LBS. PER CUBIC YARD
ASPHALT CEMENT – GRADE S – 3/4" AGG.	= 5.4% OF PL.MIX BIT.SURF.
HYDRATED LIME	= 1.4% OF PL.MIX BIT.SURF.
BITUMINOUS MATERIAL	= 8.5 LBS. PER GAL.
EMULSIFIED ASPHALT – TACK (ALL OTHER SURFACES)	= 0.05 GAL. PER SQ.YARD (UNDILUTED)
EMULSIFIED ASPHALT – FOG SEAL (RUMBLE STRIPS)	= 0.10 GAL. PER SQ.YARD (UNDILUTED)
SEAL	= 0.42 GAL. PER SQ.YARD
COVER	= 25 LBS. PER SQ.YARD

UTILITIES

CALL THE UTILITIES UNDERGROUND LOCATION CENTER (811) OR OTHER NOTIFICATION SYSTEM FOR THE MARKING AND LOCATION OF ALL LINES AND SERVICES BEFORE EXCAVATING. ALL CLEARANCES OR DEPTHS PROVIDED FOR UTILITIES ARE FROM EXISTING GROUND LINE.

AS-BUILTS

FOR HORIZONTAL ALIGNMENT AND STATIONING, REFER TO THE FOLLOWING "AS-BUILT" PROJECT(S):
BRIDGE S136(5)
STPP 72-1(8)0 (METRIC)

WETLANDS

WETLANDS MAY EXIST ADJACENT TO THE ROADWAY AND BEYOND THE PROJECT LIMITS. A WETLAND DELINEATION HAS NOT BEEN COMPLETED FOR THIS PROJECT. IMPACTS TO WETLAND AREAS ARE NOT ANTICIPATED IN ASSOCIATION WITH THE PROPOSED WORK. NO PERMITS HAVE BEEN OBTAINED. ANY ACTION IMPACTING WETLAND AREAS WITHOUT THE APPROPRIATE PERMITTING IS THE RESPONSIBILITY OF THE CONTRACTOR.

NOTES

APPROACHES (FOR INFORMATION ONLY)

STATION	TYPE	linear feet				EXISTING SURFACING	PROPOSED SURFACE	sq. feet		feet	tons		feet	cu. yd.	REMARKS
		WIDTH	RADIUS #		LENGTH FROM EDGE OF PAVEMENT			TREATMENT AREA	TAPER MILL AREA *	PLANT MIX DEPTH	PLANT MIX BIT. SURF. 3/4"	PLANT MIX BIT. SURF. MISC.	CRUSHED AGG. COURSE DEPTH	CRUSHED AGG. COURSE	
			LEFT	RIGHT											
635+66	FARM FIELD	24	25	25	55.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.; HOLLENBECK DRAW RD
636+52	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
679+10	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
679+10	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
694+82	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
697+01	PRIVATE	24	NA	NA	12.0	PLANT MIX	PAVE TO ROW	728		0.20		11	0.50	13	LT.
712+73	PUBLIC	24	100	160	54.9	PLANT MIX	PAVE TO ROW	5418	5418	0.15	63				LT.; CHANCE RD
724+58	FARM FIELD	24	50	50	12.0	PLANT MIX	12' PAVEMENT STRIP	585		0.15		7			LT.
740+87	PRIVATE	24	25	25	150.8	PLANT MIX	PAVE TO ROW	3885		0.15		45			RT.
741+44	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
751+28	FARM FIELD	24	50	50	71.5	PLANT MIX	12' PAVEMENT STRIP	730		0.15		8			LT.
752+23	FARM FIELD	24	25	25	202.9	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
776+84	PUBLIC	24	85	85	211.5	PLANT MIX	PAVE TO ROW	9588		0.15	111				LT.; ROCKY RD
783+23	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
786+09	PRIVATE	24	40	25	128.1	PLANT MIX	PAVE TO ROW	4963		0.15		57			LT.
808+96	PRIVATE	24	30	30	109.5	PLANT MIX	PAVE TO ROW	5255	5255	0.15		61			LT.
823+23	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
823+62	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
836+45	PRIVATE	24	25	30	76.0	PLANT MIX	PAVE TO ROW	4197	4197	0.15		49			LT.
841+27	FARM FIELD	24	25	25	51.9	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
845+28	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
880+35	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	547		0.15		6			LT.
884+12	FARM FIELD	24	30	30	64.8	PLANT MIX	12' PAVEMENT STRIP	1095		0.15		13			LT.
884+78	PRIVATE	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.; HOLLENBECK DRAW RD
889+92	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
890+85	PRIVATE	24	25	25	51.4	PLANT MIX	REPLACE IN KIND	1486	1486	0.15		17			LT.
894+08	PUBLIC	24	40	155	53.4	PLANT MIX	PAVE TO ROW	4177	4177	0.15	48				LT.; JACKSON LANE
895+37	PRIVATE	24	25	25	30.0	PLANT MIX	PAVE TO ROW	1006		0.15		12			RT.
902+89	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
902+89	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
916+51	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
924+57	PUBLIC	24	30	60	37.4	PLANT MIX	PAVE TO ROW	2265		0.15	26				LT.; GROVE CREEK RD
924+80	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
934+91	PRIVATE	24	30	30	61.2	PLANT MIX	PAVE TO ROW	2762		0.15		32			LT.
938+58	PRIVATE	24	25	25	64.6	PLANT MIX	PAVE TO ROW	1818		0.15		21			LT.
950+98	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
951+48	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
958+98	PRIVATE	12	60	15	130.0	PLANT MIX	PAVE TO ROW	2440	2440	0.15		28			RT.
960+79	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
978+90	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.; MAILBOX TURNOUT
990+80	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	540		0.15		6			RT.
991+57	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.20		8	0.50	10	LT.
996+16	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
1000+43	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
1008+14	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
1008+23	FARM FIELD	24	35	25	30.0	PLANT MIX	12' PAVEMENT STRIP	623		0.15		7			LT.
1009+61	PUBLIC	30	80	80	44.7	PLANT MIX	PAVE TO ROW	3423		0.15	40				RT.; FISHING ACCESS
1069+49	PUBLIC	24	50	40	53.1	PLANT MIX	PAVE TO STOP BAR	4691	4691	0.15	54				RT.; RIVER VIEW LN
1074+18	PUBLIC	24	25	25	12.0	PLANT MIX	REPLACE IN KIND	526	526	0.15	6				RT.
1075+52	PUBLIC	24	25	25	12.0	PLANT MIX	REPLACE IN KIND	526	526	0.15	6				RT.
1076+71	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
1079+33	FARM FIELD	24	25	25	50.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
1089+67	FARM FIELD	16	25	30	64.2	PLANT MIX	12' PAVEMENT STRIP	504		0.15		6			RT.
1089+67	FARM FIELD	24	25	25	50.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
1102+46	FARM FIELD	14	30	30	48.6	PLANT MIX	12' PAVEMENT STRIP	484		0.15		6			LT.
1102+46	FARM FIELD	16	25	25	57.6	PLANT MIX	12' PAVEMENT STRIP	430		0.15		5			RT.
1123+29	PRIVATE	24	25	25	58.8	PLANT MIX	PAVE TO ROW	1679		0.15		19			RT.
1127+79	PRIVATE	24	30	30	60.0	PLANT MIX	PAVE TO ROW	2101		0.15		24			RT.
1128+71	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			LT.
1128+71	FARM FIELD	24	25	25	12.0	PLANT MIX	12' PAVEMENT STRIP	526		0.15		6			RT.
1139+86	FARM FIELD	16	25	25	48.6	PLANT MIX	12' PAVEMENT STRIP	430		0.15		5			LT.
1140+37	FARM FIELD	40	25	25	50.0	PLANT MIX	12' PAVEMENT STRIP	718		0.15		8			RT.
1143+79	FARM FIELD	12	25	25	55.1	PLANT MIX	12' PAVEMENT STRIP	430		0.15		5			LT.
1145+28	PRIVATE	24	25	25	50.0	PLANT MIX	PAVE TO ROW	1468		0.15		17			RT.
1147+08	PRIVATE	16	40	25	45.0	PLANT MIX	PAVE TO ROW	1277		0.15		15			RT.
SUBTOTAL								89,101	28,716	~		678	~	23	

\# ALL RADII MEASURED TO EDGE OF SHOULDER

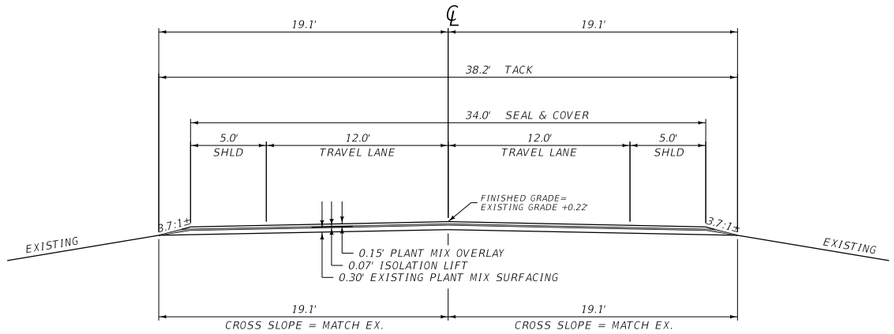
* TAPER MILL 0.15' TO THE LIMITS DESCRIBED. PROJECT MANAGER TO VERIFY IF PAVEMENT LIMITS ARE CORRECT BASED ON EXISTING APPROACH CONDITION

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TYPICAL SECTION NO. 1

MAINLINE

600+00.00	TO 884+04.89	
884+04.89	TO 884+95.11	TRANS. TYP. NO. 1 TO TYP. NO. 2
891+63.55	TO 1057+84.10	
1057+84.10	TO 1058+00.00	TRANS. TYP. NO. 1 TO TYP. NO. 6
1063+15.90	TO 1063+97.41	
1063+97.41	TO 1067+76.35	TRANS. TYP. NO. 1 TO TYP. NO. 3
1086+07.28	TO 1145+30.00	

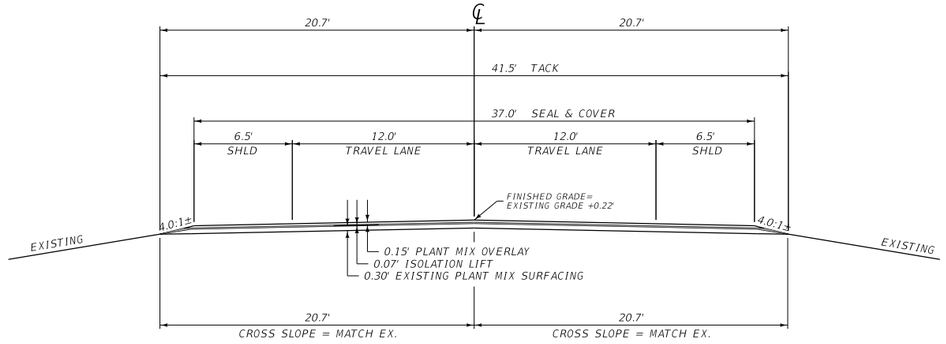


QUANTITIES								
UNIT	AGGREGATE			UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX	ISOLATION LIFT PLANT MIX		ASPHALT CEMENT	ISOLATION LIFT ASPHALT CEMENT	SEAL	EMULSIFIED ASPHALT TACK*
AREA square feet		5.19	2.73	square yards PER STATION			378	849
cubic yards PER STATION		19.2	10.1	tons PER STATION	2.16	1.13	0.67	
tons PER STATION		40.0	21.0	gals. PER STATION				42
square yards PER STATION	378							
*BASED ON 2 APPLICATIONS		61.0		TOTAL TONS PER STATION	3.29			

TYPICAL SECTION NO. 2

MAINLINE

884+95.11	TO	885+93.18	
885+93.18	TO	886+13.18 BE	20' BE SLAB
886+13.18 BE	TO	888+72.18 BE	BRIDGE
888+72.18 BE	TO	888+92.18	20' BE SLAB
888+92.18	TO	891+63.55	TRANS. TYP. NO. 2 TO TYP. NO. 1



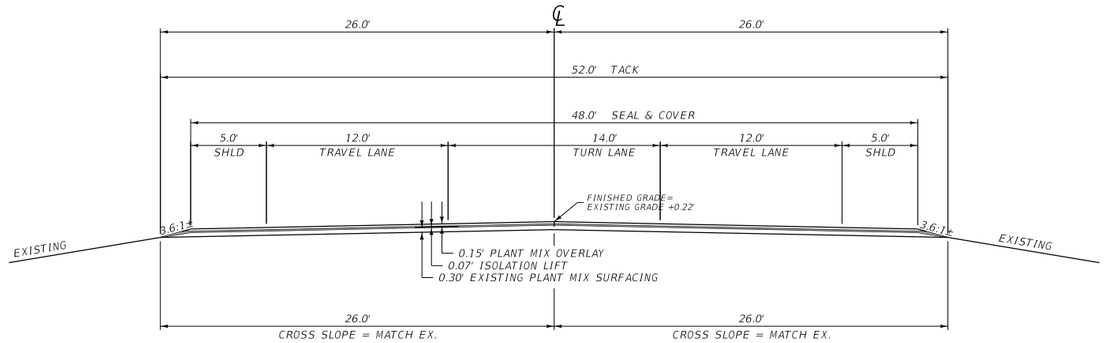
QUANTITIES								
UNIT	AGGREGATE			UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX	ISOLATION LIFT PLANT MIX		ASPHALT CEMENT	ISOLATION LIFT ASPHALT CEMENT	SEAL	EMULSIFIED ASPHALT TACK*
AREA square feet		5.65	2.93	square yards PER STATION			411	922
cubic yards PER STATION		20.9	10.9	tons PER STATION	2.35	1.23	0.73	
tons PER STATION		43.5	22.7	gals. PER STATION				46
square yards PER STATION	411							
*BASED ON 2 APPLICATIONS		66.2		TOTAL TONS PER STATION	3.58			

3	MONTANA Department of Transportation	C:\DGN\9964000rdtyp001.dgn	DESIGNED BY	B. HENDERSON	8/29/2022	ROAD PLANS	BELFRY - SOUTH / STPP 72-1(17)0
2		11/1/2023	REVIEWED BY	J. BROTZLER	9/9/2022		
		11:20:59 AM CPS - U6909	CHECKED BY	J. FLEMING	9/8/2022	CARBON COUNTY	UPN 9964000 / 04

TYPICAL SECTION NO. 3

MAINLINE

1067+76.35	TO 1072+76.90	
1072+76.90	TO 1073+09.68	TRANS. TYP. NO. 3 TO TYP. NO. 4
1080+15.09	TO 1082+28.35	
1082+28.35	TO 1086+07.28	TRANS. TYP. NO. 3 TO TYP. NO. 1

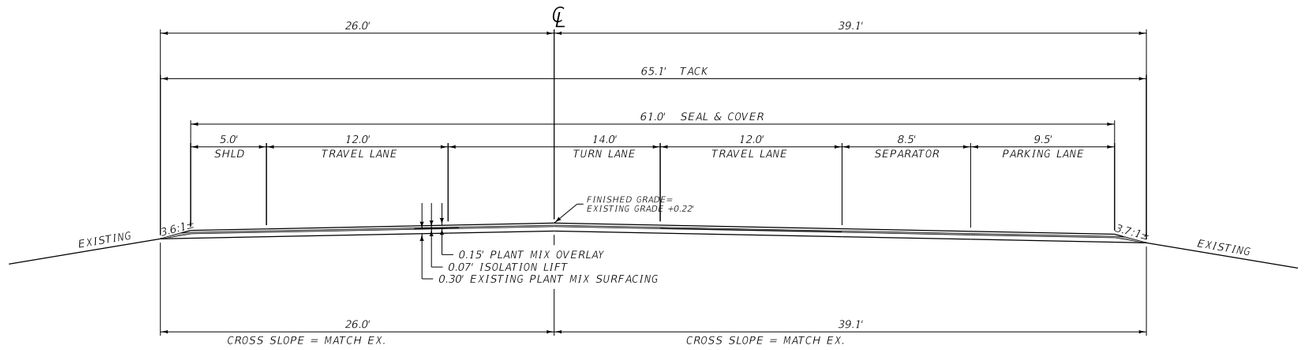


QUANTITIES								
UNIT	AGGREGATE			UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX	ISOLATION LIFT PLANT MIX		ASPHALT CEMENT	ISOLATION LIFT ASPHALT CEMENT	SEAL	EMULSIFIED ASPHALT TACK*
AREA square feet		7.29	3.73	square yards PER STATION			533	1,156
cubic yards PER STATION		27.0	13.8	tons PER STATION	3.04	1.56	0.95	
tons PER STATION		56.3	28.8	gals. PER STATION				58
square yards PER STATION	533							
*BASED ON 2 APPLICATIONS		85.1		TOTAL TONS PER STATION	4.60			

TYPICAL SECTION NO. 4

MAINLINE

1073+09.68		THEN TYP. NO. 5
1076+37.43	TO 1079+82.28	
1079+82.28	TO 1080+15.09	TRANS. TYP. NO. 4 TO TYP. NO. 3



QUANTITIES								
UNIT	AGGREGATE			UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX	ISOLATION LIFT PLANT MIX		ASPHALT CEMENT	ISOLATION LIFT ASPHALT CEMENT	SEAL	EMULSIFIED ASPHALT TACK*
AREA square feet		9.24	4.63	square yards PER STATION			678	1,446
cubic yards PER STATION		34.2	17.1	tons PER STATION	3.85	1.92	1.21	
tons PER STATION		71.3	35.6	gals. PER STATION				72
square yards PER STATION	678							
*BASED ON 2 APPLICATIONS		106.9		TOTAL TONS PER STATION	5.77			

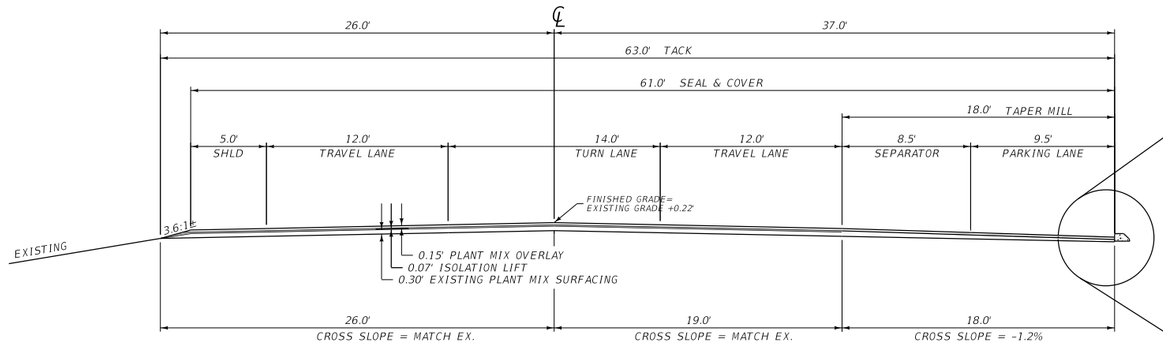
3 / 1	MONTANA Department of Transportation	C:\DGN\9964000rdtyp001.dgn	DESIGNED BY B. HENDERSON	8/29/2022	ROAD PLANS	BELFRY - SOUTH / STPP 72-1(17)0
		11/1/2023	REVIEWED BY J. BROTZLER	9/9/2022		
		11:21:03 AM CPS - U6909	CHECKED BY J. FLEMING	9/8/2022	CARBON COUNTY	UPN 9964000 / 05

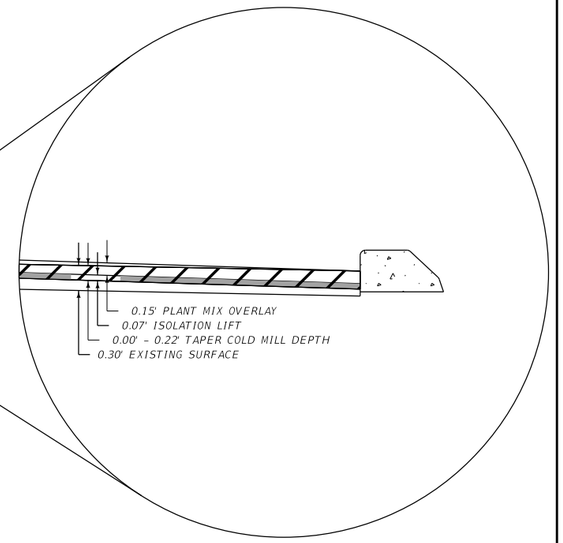
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TYPICAL SECTION NO. 5

MAINLINE

1073+09.68 TO 1076+37.43 THEN TYP. NO. 4



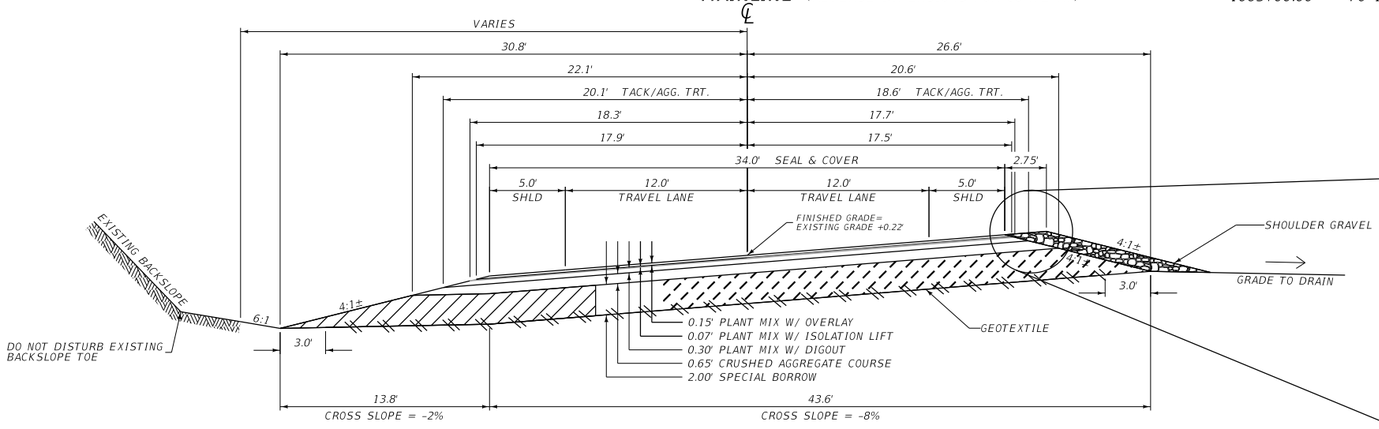


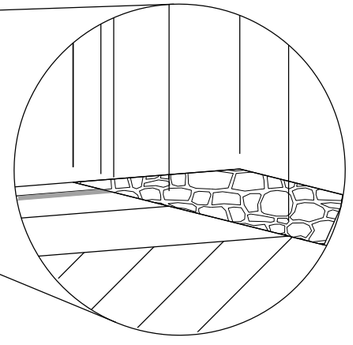
QUANTITIES								
UNIT	AGGREGATE			UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX	ISOLATION LIFT PLANT MIX		ASPHALT CEMENT	ISOLATION LIFT ASPHALT CEMENT	SEAL	EMULSIFIED ASPHALT TACK*
AREA square feet		9.20	4.46	square yards PER STATION			678	1,400
cubic yards PER STATION		34.1	16.5	tons PER STATION	3.83	1.86	1.21	
tons PER STATION		71.0	34.4	gals. PER STATION				70
square yards PER STATION	678							
*BASED ON 2 APPLICATIONS		105.4		TOTAL TONS PER STATION	5.69			

TYPICAL SECTION NO. 6

MAINLINE (REVERSE DIMENSIONS FOR CURVE RT)

1058+00.00 TO 1063+00.00
1063+00.00 TO 1063+15.90 TRANS. TYP. NO. 6 TO TYP. NO. 1





1. RESHAPE EXISTING DITCH LEFT SO WATER DRAINS TO THE NORTH FROM STA 1057+84.10 TO STA 1063+15.90

2. LIMIT EXCAVATION TO DEPTH REQUIRED TO REESTABLISH DITCH PROFILE GRADIENT.

3. FINAL DITCH BOTTOM LOCATION IS AT THE PROJECT MANAGERS DISCRETION.

4. UTILIZE NECESSARY EQUIPMENT TO COMPLETE DITCH GRADING TASK. SEE EQUIPMENT SUMMARY FRAME.

QUANTITIES																
UNIT	AGGREGATE								BITUMINOUS MATERIAL							
	COVER	PLANT MIX OVERLAY	ISOLATION LIFT PLANT MIX	PLANT MIX W/ DIGOUT	CRUSHED AGG. COURSE	SPECIAL BORROW	SHOULDER GRAVEL	UNIT	ASPHALT CEMENT W/ OVERLAY	ASPHALT CEMENT W/ ISOLATION LIFT	ASPHALT CEMENT W/ DIGOUT	SEAL	EMULSIFIED ASPHALT TACK*	AGG. TREATMENT	GEOTEXTILE
AREA square feet		5.22	2.50	11.23	26.04	100.45	9.29	square yards PER STATION				378	1,720	430	571
cubic yards PER STATION		19.3	9.3	41.6	96.4	372.0	34.4	tons PER STATION	2.17	1.05	4.68	0.67			
tons PER STATION		40.2	19.4	86.7				gals. PER STATION					86		
square yards PER STATION	378														
TOTAL TONS PER STATION		146.3						TOTAL TONS PER STATION	7.90						

*BASED ON 4 APPLICATIONS

2	MONTANA Department of Transportation	C:\DGN\9964000rdtyp001.dgn	DESIGNED BY B. HENDERSON	8/29/2022	ROAD PLANS	BELFRY - SOUTH / STPP 72-1(17)0
1		11/1/2023	REVIEWED BY J. BROTZLER	9/9/2022		
		11:21:07 AM CPS - U6909	CHECKED BY J. FLEMING	9/8/2022	CARBON COUNTY	UPN 9964000 / 06

AWARD COPY

SUMMARY

SURFACING

STATION FROM	STATION TO	linear feet GROSS	linear feet NET	linear feet +	linear feet -	FOR	tons HYDRATED LIME	AGGREGATE sq. yards COVER TYPE 1	AGGREGATE tons PLANT MIX BIT. SURF. 3/4"	AGGREGATE tons ISO LIFT PLANT MIX BIT. SURF. 3/4"	AGGREGATE tons DIGOUT PLANT MIX BIT. SURF. 3/4"	AGGREGATE tons PLANT MIX BIT. SURF. MISC.	AGGREGATE cu. yards CRUSHED AGG. COURSE	AGGREGATE cu. yards SHOULDER GRAVEL #	BITUMINOUS MATERIAL tons ASPHALT CEMENT 58V-34	BITUMINOUS MATERIAL tons ISO LIFT ASPHALT CEMENT 58V-34	BITUMINOUS MATERIAL tons DIGOUT ASPHALT CEMENT 58V-34	BITUMINOUS MATERIAL tons EMULSIFIED ASPHALT SEAL CHFRS-2P	BITUMINOUS MATERIAL gals. EMULSIFIED ASPHALT TACK	BITUMINOUS MATERIAL sq. yards AGG. TREATMENT	BITUMINOUS MATERIAL sq. yards GEOTEXTILE	REMARKS
600+00.00	884+04.89	28,404.89	28,404.89					107,370	11,362	5,965					613.5	321.0		190.3	11,930			TYP. NO. 1
884+04.89	884+95.11	90.22	90.22					356	38	20					2.0	1.1		0.6	40			TRANS. TYP. NO. 1 TO TYP. NO. 2
884+95.11	885+93.18	98.07	98.07					403	43	22					2.3	1.2		0.7	45			TYP. NO. 2
885+93.18	888+92.18	299.00	0.00		299.00	APPROACH SLABS AND CLARKS FORK YELLOWSTONE RIVER BRIDGE																
888+92.18	891+63.55	271.37	271.37					1,071	113	59					6.1	3.2		1.9	119			TRANS. TYP. NO. 2 TO TYP. NO. 1
891+63.55	1057+84.10	16,620.55	16,620.55					62,826	6,648	3,490					359.0	187.8		111.4	6,981			TYP. NO. 1
1057+84.10	1058+00.00	15.90	15.90					60	6	3	14		8	3	0.3	0.2	0.7	0.1	10	68	91	TRANS. TYP. NO. 1 TO TYP. NO. 6
1058+00.00	1063+00.00	500.00	500.00					1,890	201	97	434		482	172	10.9	5.3	23.4	3.4	430	2,150	2,855	TYP. NO. 6
1063+00.00	1063+15.90	15.90	15.90					60	6	3	14		8	3	0.3	0.2	0.7	0.1	10	68	91	TRANS. TYP. NO. 6 TO TYP. NO. 1
1063+15.90	1063+97.41	81.51	81.51					308	33	17					1.8	0.9		0.5	34			TYP. NO. 1
1063+97.41	1067+76.35	378.94	378.94					1,726	182	94					9.9	5.1		3.1	189			TRANS. TYP. NO. 1 TO TYP. NO. 3
1067+76.35	1072+76.90	500.55	500.55					2,668	282	144					15.2	7.8		4.8	290			TYP. NO. 3
1072+76.90	1073+09.68	32.78	32.78					198	21	11					1.1	0.6		0.4	21			TRANS. TYP. NO. 3 TO TYP. NO. 4
1073+09.68	1076+37.43	327.75	327.75					2,222	233	113					12.6	6.1		4.0	229			TYP. NO. 5
1076+37.43	1079+82.28	344.85	344.85					2,338	246	123					13.3	6.6		4.2	248			TYP. NO. 4
1079+82.28	1080+15.09	32.81	32.81					199	21	11					1.1	0.6		0.4	21			TRANS. TYP. NO. 4 TO TYP. NO. 3
1080+15.09	1082+28.35	213.26	213.26					1,137	120	61					6.5	3.3		2.0	124			TYP. NO. 3
1082+28.35	1086+07.28	378.93	378.93					1,726	182	94					9.9	5.1		3.1	189			TRANS. TYP. NO. 3 TO TYP. NO. 1
1086+07.28	1145+30.00	5,922.72	5,922.72					22,388	2,369	1,244					127.9	66.9		39.7	2,488			TYP. NO. 1
						ADDITIONAL SURFACING		4,748	525	542		678	10	100	65.0	29.3		8.5	1,666			
SUBTOTAL		~	~	~	~		~	~	22,631	12,113	462	~	~	~	1,258.7	652.3	24.8	~	~	~	~	
TOTAL		54,530.00	54,231.00	~	299.00		502	213,694	35,206			678	508	278	1,935.8			379.2	25,064	2,286	3,037	

SEE DETAIL

ADDITIONAL SURFACING (INCLUDED IN SURFACING FRAME)

STATION FROM	STATION TO	linear feet GROSS	linear feet NET	linear feet +	linear feet -	FOR	tons HYDRATED LIME	AGGREGATE * sq. yards COVER TYPE 1	AGGREGATE * tons PLANT MIX BIT. SURF. 3/4"	AGGREGATE * tons ISO LIFT PLANT MIX BIT. SURF. 3/4"	AGGREGATE * tons DIGOUT PLANT MIX BIT. SURF. 3/4"	AGGREGATE * tons PLANT MIX BIT. SURF. MISC.	AGGREGATE * cu. yards CRUSHED AGG. COURSE	AGGREGATE * cu. yards SHOULDER GRAVEL #	BITUMINOUS MATERIAL * tons ASPHALT CEMENT 58V-34	BITUMINOUS MATERIAL * tons ISO LIFT ASPHALT CEMENT 58V-34	BITUMINOUS MATERIAL * tons DIGOUT ASPHALT CEMENT 58V-34	BITUMINOUS MATERIAL * tons EMULSIFIED ASPHALT SEAL CHFRS-2P	BITUMINOUS MATERIAL * gals. EMULSIFIED ASPHALT TACK	BITUMINOUS MATERIAL * sq. yards AGG. TREATMENT	BITUMINOUS MATERIAL * sq. yards GEOTEXTILE	REMARKS
						15 - PRIVATE APPROACH						414			22.4				!98			
						8 - PUBLIC APPROACH		3,402	354						19.1			6.1	!70			
						42 - FARM FIELD APPROACH						264	10		14.3				220			
957+20.49	960+36.07	315.58	315.58			PULL OUT		171	26						1.4			0.3	9			LT.
977+82.07	980+73.59	291.52	291.52			EXTRA WIDE SHOULDER FOR APP.		96	15						0.8			0.2	5			LT.
1123+54.76	1129+72.96	618.20	618.20			MAILBOX TURNOUT WITH FIELD APP.		226	35						1.9			0.4	11			LT.
1144+15.77	1146+75.00	259.23	259.23			MAILBOX TURNOUT WITHOUT APP.		97	15						0.8			0.2	5			LT.
1145+30.00	1147+30.00	200.00	200.00			PROJ. END CONN.		756	80	42					4.3	2.3		1.3	84			
600+00.00	1145+30.00	54,530.00	54,530.00			LEVELING **				500				100		27.0			964			
SUBTOTAL		~	~	~	~		~	4,748	525	542	~	678	10	100	65.0	29.3	~	8.5	1,666	~	~	

* MEASURED IN CADD.
** LEVELING NOT CONTINUOUS; COORDINATE WITH EPM FOR LEVELING LOCATIONS
# SEE DETAIL

AWARD COPY

SUMMARY

GUARDRAIL

STATION		linear feet								each								REMARKS
		REMOVE GUARDRAIL		BOX BEAM GUARDRAIL		MGS GUARDRAIL		MGS INTERSECTING ROADWAY TERMINAL SECTION		MASH BOX BEAM TERMINAL - MBEAT #		BOX BEAM BRIDGE APPROACH SECTION TYPE 3		MASH W-BEAM TERMINAL SECTION *		MASH THRIE BEAM BRIDGE APPROACH SECTION **		
FROM	TO	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	
REMOVE RAIL																		
649+40.94	671+62.07	2,221.1																
847+24.41	852+55.91	531.5																
884+95.11	886+23.52		162.5															BRIDGE END
885+26.61	886+01.61	75.0																BRIDGE END
888+61.88	890+73.33	211.5																BRIDGE END
888+83.79	889+58.79		75.0															BRIDGE END
935+59.71	942+32.28		672.6															
965+09.19	985+33.46		2,024.3															
1008+69.42	1019+48.26	1,078.8																
1012+95.93	1036+77.82		2,381.9															
1034+18.26	1034+90.43	72.2																NORTH END OF JERSEY RAIL TERMINAL SECT.
1057+80.84	1066+43.70		862.9															
NEW RAIL																		
649+41.57	671+61.45			2,196						2								
847+26.22	852+54.10			504						2								
884+98.52	886+23.52 BE						87.5		50.0								1	BRIDGE END; 16' IRT RADIUS
885+29.74	886+01.61 BE													1		1		BRIDGE END
888+61.88 BE	890+49.38					150.0		62.5								1		BRIDGE END; 24' IRT RADIUS
888+83.79 BE	889+55.67														1		1	BRIDGE END
935+60.06	942+31.94				648						2							
965+10.39	985+32.27				1,998						2							
1008+66.73	1019+04.67			1,026						1		1						CONNECTS TO SOUTH END OF JERSEY RAIL
1012+95.94	1036+77.82				2,358						2							
1034+22.67	1034+70.62			36						1		1						CONNECTS TO NORTH END OF JERSEY RAIL
1057+32.33	1066+92.21				936						2							
SUBTOTAL		4,190.1	6,179.1	3,762.0	5,940.0	150.0	87.5	62.5	50.0	6	8	2	0	1	1	2	2	
TOTAL		10,369.2		9,702		237.5		112.5		14		2		2		4		

* SEE DETAILED DRAWING NUMBERS 606-13
\# SEE DETAILED DRAWING NUMBERS 606-55
** SEE DETAILED DRAWING NUMBER 606-23

COLD MILLING *

STATION		sq. yards		REMARKS
		COLD MILLING		
FROM	TO	0.00 - 0.15 ft	0.00 - 0.22 ft	
600+00.00	602+00.00		825	BEGINNING OF PROJ. TAPER
883+63.18	885+93.18		1,001	BRIDGE END MILLING
888+92.18	891+22.18		991	BRIDGE END MILLING
1145+30.00	1147+30.00		825	END OF PROJECT TAPER
1073+09.68	1076+37.43		656	CEMETERY CURB; TYP. 5
635+66.00	1147+08.00	3,191		# APPROACH MILLING
SUBTOTAL		3,191	4,298	
TOTAL		7,489		

* SEE DETAILS
\# MEASURED WITH CADD

RUMBLE STRIPS

STATION		miles			gals	REMARKS
		RUMBLE STRIPS			EMULSIFIED ASPHALT FOG SEAL #	
FROM	TO	CONTIN-UOUS	INTER-MITTENT	CENTERLINE TYPE 3		
600+00.00	1145+30.00		9.0		1,056	LT.
600+00.00	1145+30.00		8.7		1,021	RT.
600+00.00	1135+15.00			10.0	1,173	
SUBTOTAL		0.0	17.7	10.0	3,250	
TOTAL		17.7		10.0	~	

\# FOR INFORMATION ONLY, INCLUDE IN THE COST OF RUMBLE STRIPS

AWARD COPY

SUMMARY

PAVEMENT MARKINGS

ITEM	UNIT	INTERIM APPLICATION #	FINAL APPLICATION	TOTAL
STRIPING - WHITE PAINT	gallon	760		760
STRIPING - YELLOW PAINT	gallon	252		252
WORDS & SYMBOLS - WHITE PAINT	gallon	6		6
WORDS & SYMBOLS - YELLOW PAINT	gallon	8		8
STRIPING - WHITE EPOXY	gallon		506	506
STRIPING - YELLOW EPOXY	gallon		168	168
WORDS & SYMBOLS - WHITE EPOXY	gallon		4	4
WORDS & SYMBOLS - YELLOW EPOXY	gallon		6	6
TEMPORARY STRIPING	linear feet	68,212		68,212
FINAL SWEEP AND BROOM	course mile	10.3		10.3

BASED ON 2 APPLICATIONS.

CONCRETE BARRIER RAIL

STATION		each		REMARKS
		REMOVE CONCRETE BARRIER RAIL	RESET CONCRETE BARRIER RAIL	
FROM	TO			
1019+28.67	1033+98.67	147	147	LT., TALL CONCRETE BARRIER RAIL
TOTAL		147	147	

DIGOUT EXCAVATION

STATION		cu. yards		REMARKS
		DIGOUT EXCAVATION	SPECIAL BORROW NEAT LINE *	
FROM	TO			
1057+84.10	1063+15.90	3,411	1,918	TYP. NO. 1 AND TYP. NO. 6
TOTAL		3,411	1,918	

* MEASURED IN CADD

EQUIPMENT

STATION		hours	REMARKS
		MOTOR GRADER	
FROM	TO		
1058+00	1063+00	6	GRADE DITCH TO DRAIN
600+00	1145+30	45	APPROACH SHAPING
TOTAL		51	

REVEGETATION

STATION		lump sum	cu. yards	acres	REMARKS
		REVEGETATION	TOPSOIL SALVAGING & PLACING	SEED	
FROM	TO				
1057+84	1063+16	1	427	1.95	
TOTAL		1	~	~	

FOR INFORMATION ONLY

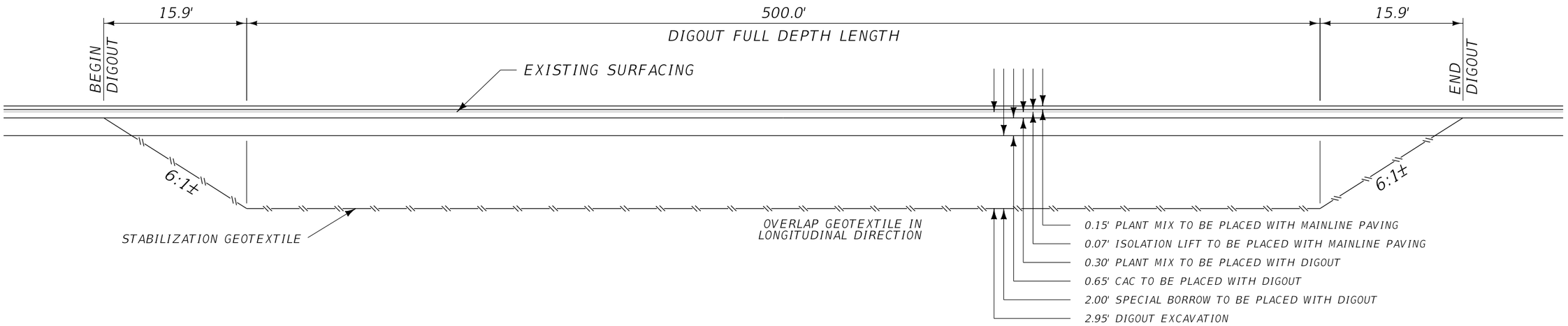
CRACK SEALING *

STATION		TRANSVERSE & LONGITUDINAL CRACK SEALING		REMARKS
		CRACK SEALING		
		NEW	NEW	
FROM	TO	pounds	linear feet	
600+00.00	1145+30.00	74,407	106,296	
SUBTOTAL		74,407	#	
TOTAL		74,407	#	

* SEE DETAIL SHEET
# FOR INFORMATION ONLY

2	MONTANA Department of Transportation	C:\DGN\9964000rdsum001.dgn	DESIGNED BY	B. HENDERSON	8/29/2022	ROAD PLANS	BELFRY - SOUTH	STPP 72-1(17)0
		11/1/2023	REVIEWED BY	J. BROTZLER	9/9/2022			
1		11:21:32 AM CPS - U6909	CHECKED BY	J. FLEMING	9/8/2022	CARBON COUNTY	UPN 9964000	09

1057+84.10	TO 1058+00.00	BEGIN DIGOUT TAPER
1058+00.00	TO 1063+00.00	FULL DEPTH DIGOUT
1063+00.00	TO 1063+15.90	END DIGOUT TAPER



NOTE: FINAL DIGOUT LOCATION, LENGTH, AND DEPTH IS AT THE PROJECT MANAGER'S DISCRETION.

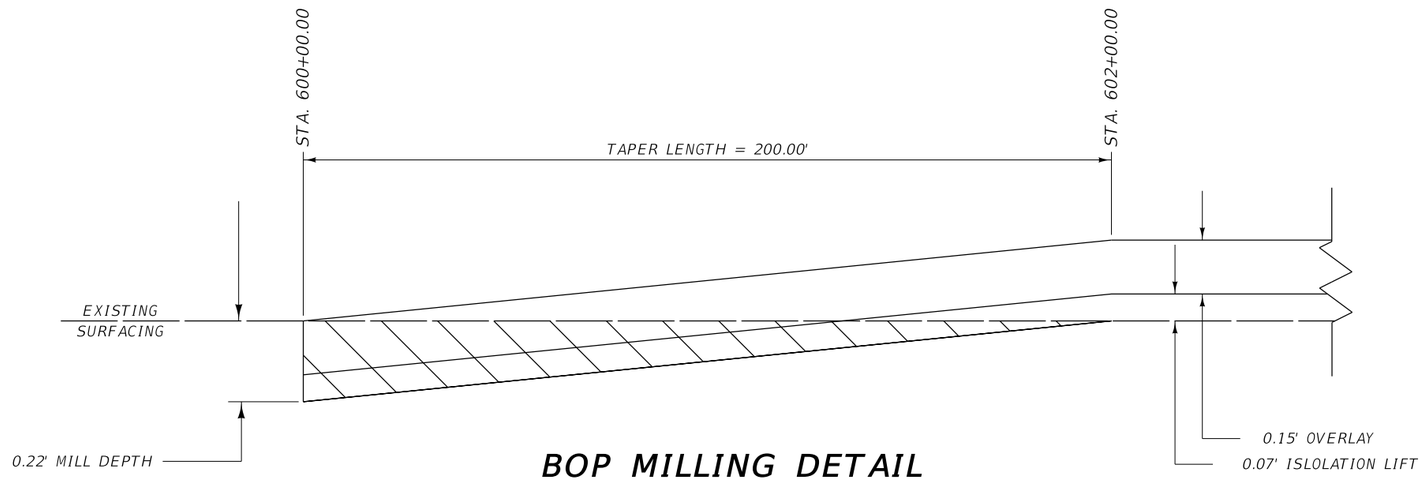
SEE TYPICALS 1 AND 6 FOR DIGOUT SECTIONS.

DETAIL

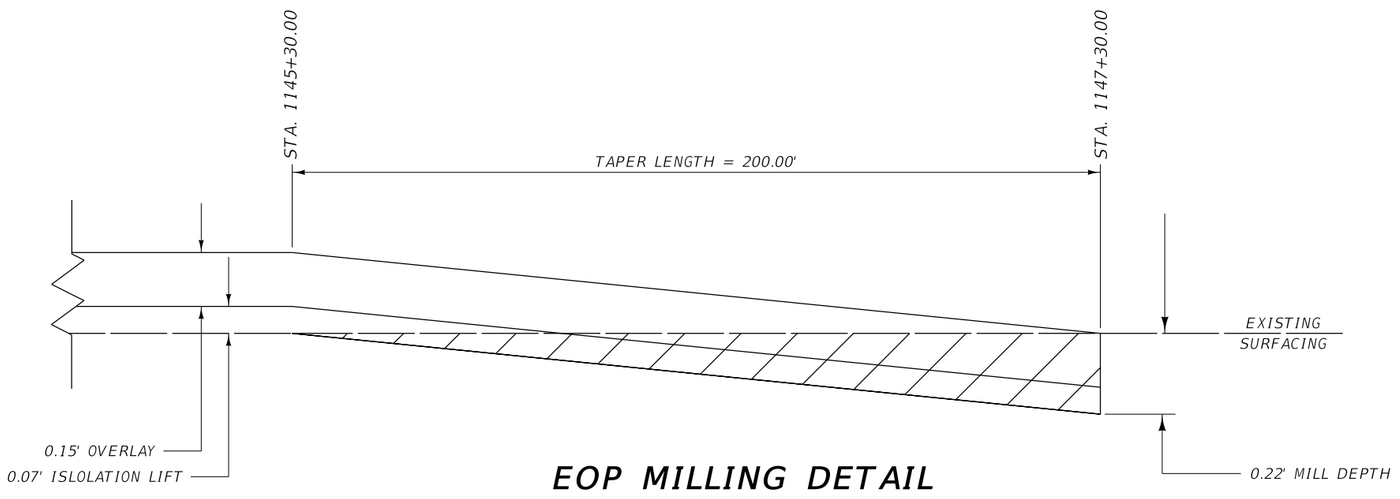
DIGOUT

NO SCALE

AWARD COPY



BOP MILLING DETAIL



EOP MILLING DETAIL

DETAIL

BEGINNING AND END OF PROJECT MILLING TAPER

NO SCALE

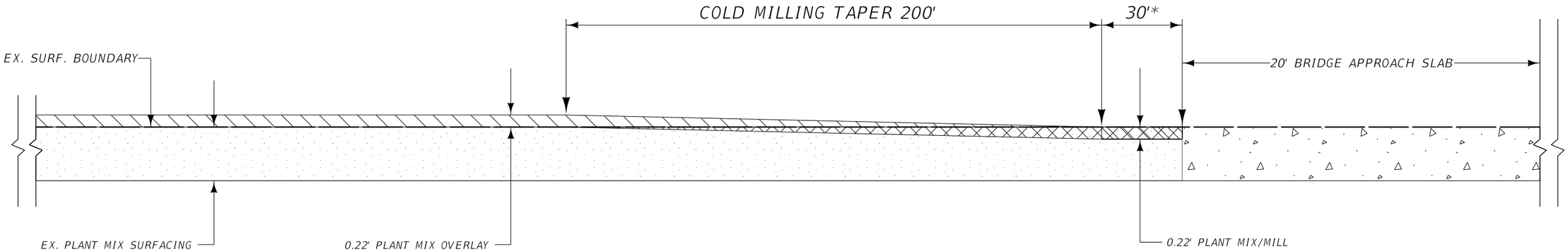
3	MONTANA Department of Transportation	C:\DGN\9964000rddet002.dgn	DESIGNED BY	B. HENDERSON	8/29/2022	ROAD PLANS	BELFRY - SOUTH	STPP 72-1(17)0
2		11/1/2023	REVIEWED BY	J. BROTZLER	9/9/2022			
		11:21:54 AM CPS - U6905	CHECKED BY	J. FLEMING	9/8/2022	CARBON COUNTY	UPN 9964000	11

PLANT MIX/MILL

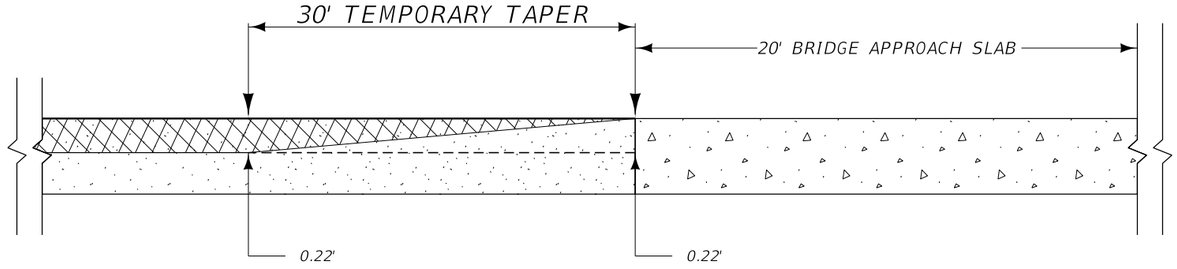
NEW PLANT MIX BIT. SURF.

EX. PLANT MIX BIT. SURF.

BRIDGE END OR 20'
BRIDGE APPROACH SLAB



COLD MILLING



EX. PAVEMENT – LEAVE IN PLACE FOR RAMP.
REMOVE NO SOONER THAN 24 HOURS BEFORE PAVING.

*ACTUAL REMOVAL DISTANCES TO BE DETERMINED DURING CONSTRUCTION BY THE PROJECT MANAGER

DETAIL

BRIDGE END MILLING TAPER

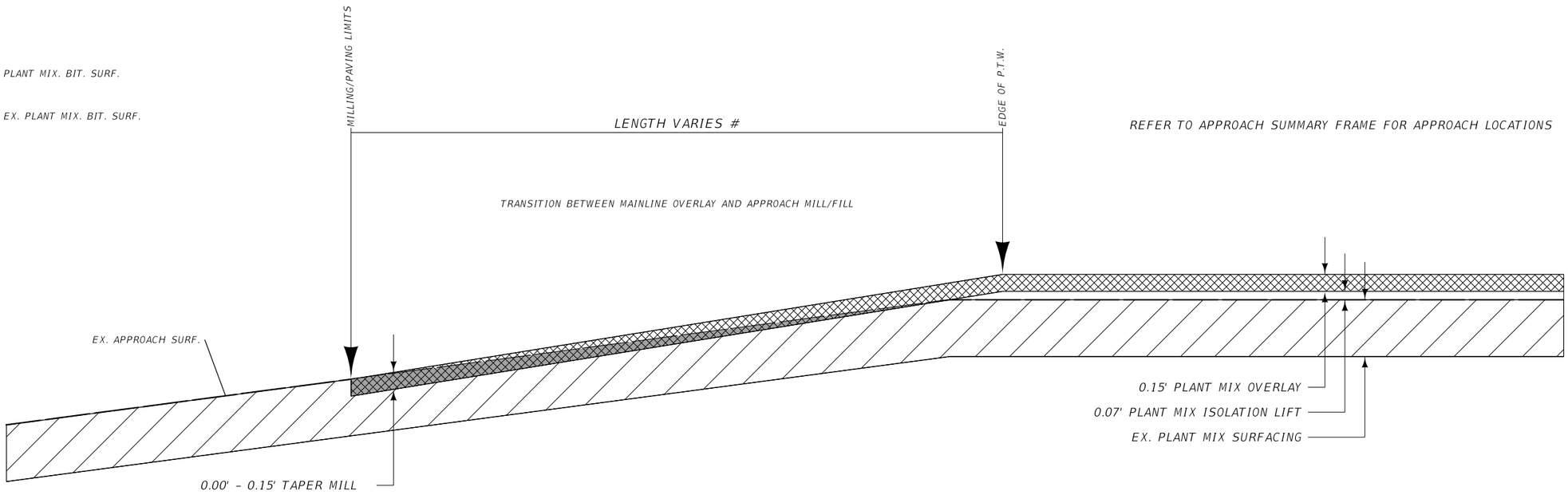
NO SCALE

3 / 1	MONTANA Department of Transportation	C:\DGN\9964000rddet002.dgn	DESIGNED BY	B. HENDERSON	8/29/2022	ROAD PLANS	BELFRY - SOUTH	STPP 72-1(17)0
		11/1/2023	REVIEWED BY	J. BROTZLER	9/9/2022			
		11:21:58 AM CPS - U6909	CHECKED BY	J. FLEMING	9/8/2022	CARBON COUNTY	UPN 9964000	12

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PLANT MIX. BIT. SURF.

EX. PLANT MIX. BIT. SURF.



NOTE: REFER TO SECTION 400 OF THE STANDARD SPECIFICATIONS FOR PLANT MIX SURFACING INSTALLATION.

DETAIL

APPROACH MILLING

NO SCALE

2	MONTANA Department of Transportation	C:\DGN\9964000rddet002.dgn	DESIGNED BY B. HENDERSON	8/29/2022	ROAD PLANS	BELFRY - SOUTH	STPP 72-1(17)0
		11/1/2023	REVIEWED BY J. BROTZLER	9/9/2022			
1		11:22:02 AM CPS - U6909	CHECKED BY J. FLEMING	9/8/2022	CARBON COUNTY	UPN 9964000	13

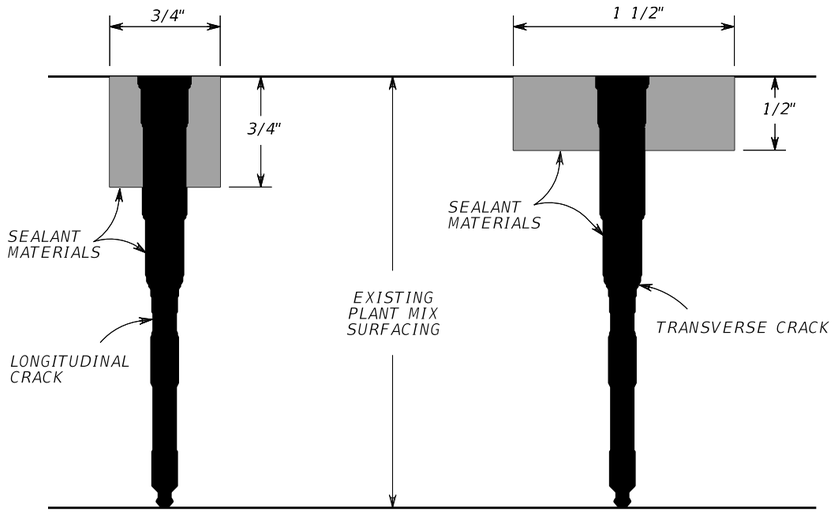
CRACKS 1/8" TO 1.5" WIDE

LONGITUDINAL CRACK

ROUT 3/4" WIDE x 3/4" DEEP
PRIOR TO APPLYING SEALANT

TRANSVERSE CRACK

ROUT 1 1/2" WIDE x 1/2" DEEP
PRIOR TO APPLYING SEALANT



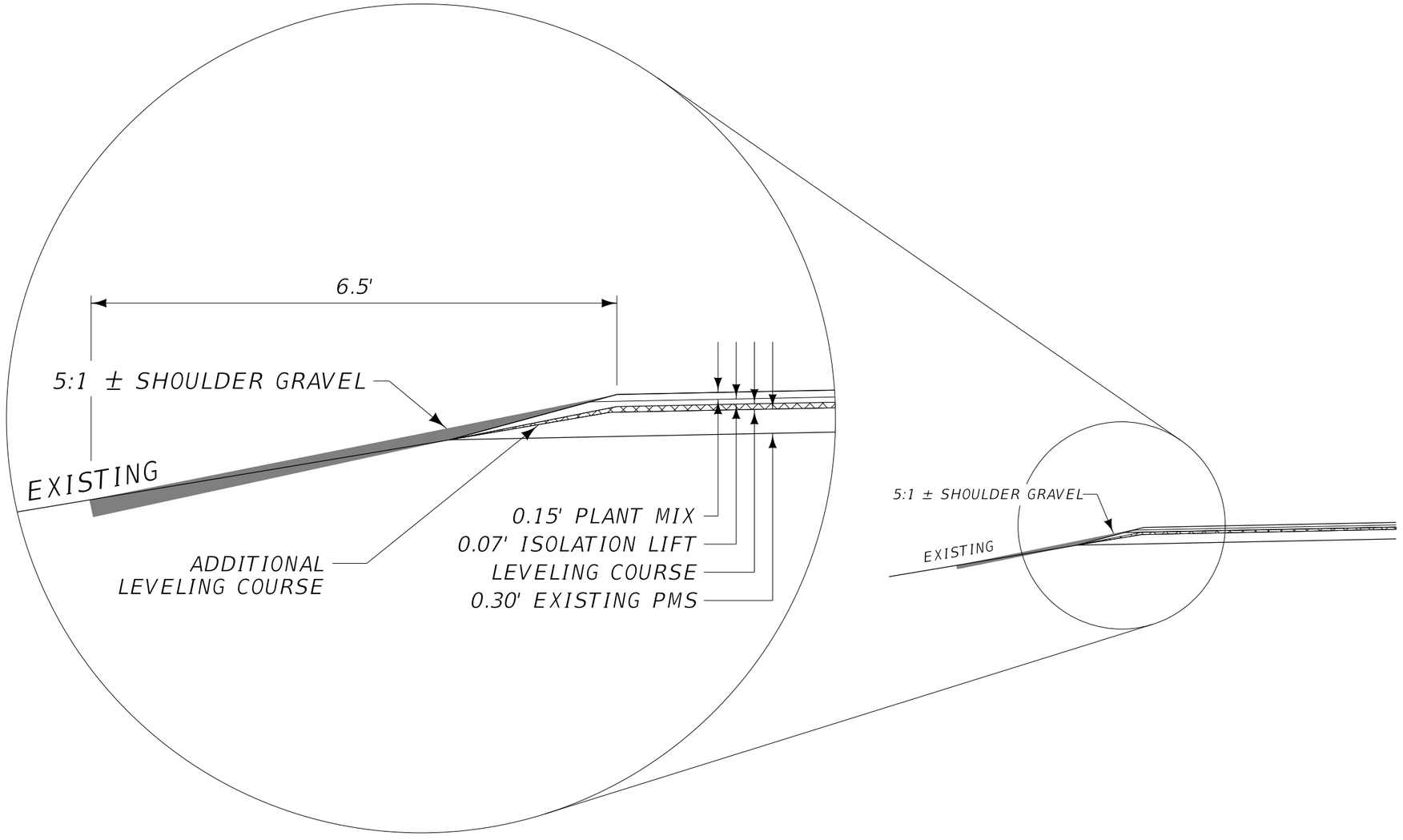
DETAIL

CRACK SEALING

NO SCALE

3	MONTANA Department of Transportation	C:\DGN\9964000rddet003.dgn	DESIGNED BY	B. HENDERSON	8/29/2022	ROAD PLANS	BELFRY - SOUTH / STPP 72-1(17)0
2		11/1/2023	REVIEWED BY	J. BROTZLER	9/9/2022		
		11:22:11 AM CPS - U6909	CHECKED BY	J. FLEMING	9/8/2022	CARBON COUNTY	UPN 9964000 / 14

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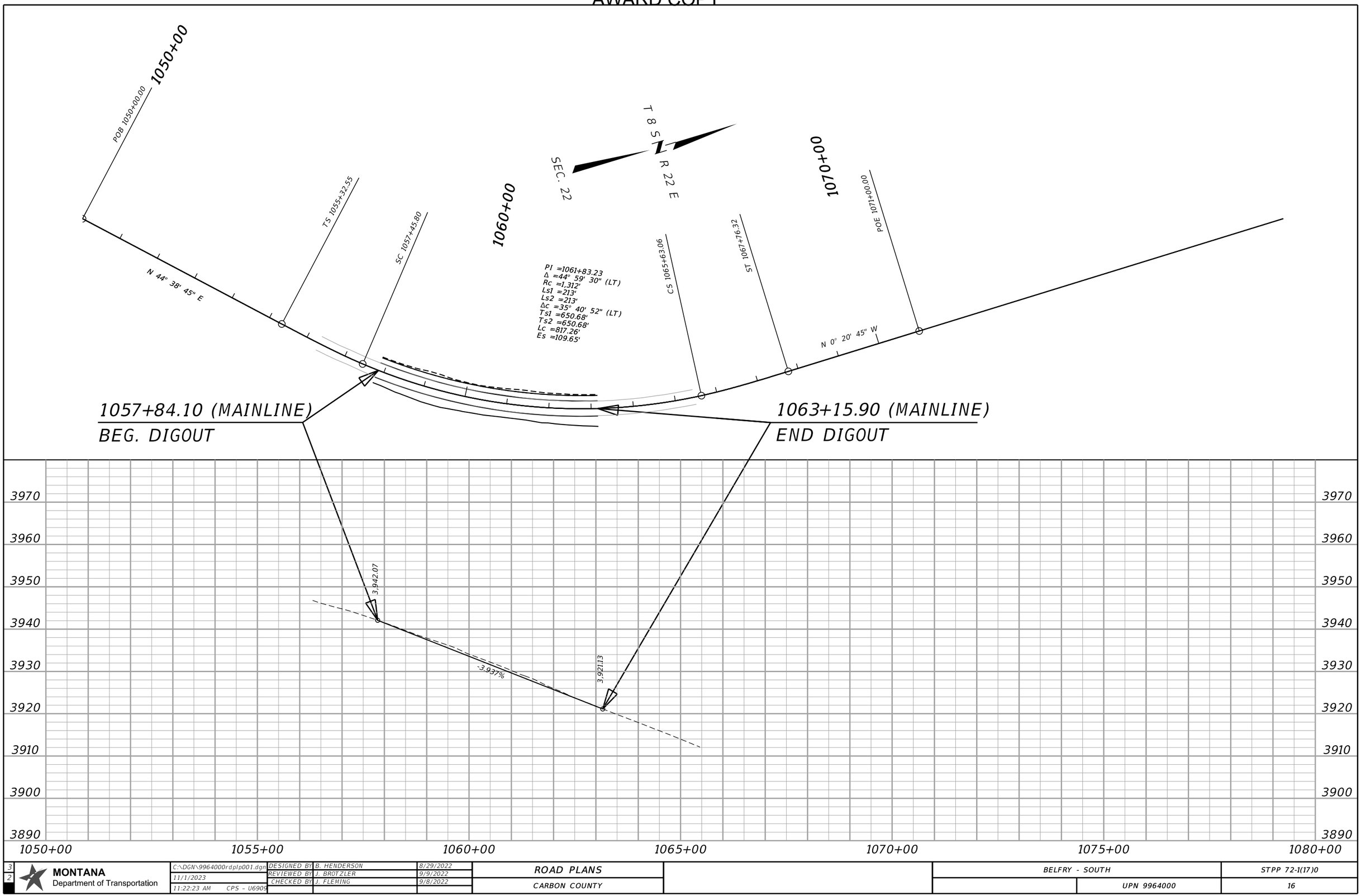
DETAIL

LEVELING SHOULDER GRAVEL

NO SCALE

2	MONTANA Department of Transportation	C:\DGN\9964000rddet003.dgn	DESIGNED BY B. HENDERSON	8/29/2022	ROAD PLANS	BELFRY - SOUTH	STPP 72-1(17)0
1		11/1/2023	REVIEWED BY J. BROTZLER	9/9/2022			
		11:22:15 AM CPS - U6909	CHECKED BY J. FLEMING	9/8/2022	CARBON COUNTY	UPN 9964000	15

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3	MONTANA Department of Transportation	C:\DGN\9964000rdplp001.dgn	DESIGNED BY	B. HENDERSON	8/29/2022	ROAD PLANS	BELFRY - SOUTH / STPP 72-1(17)0
2		11/1/2023	REVIEWED BY	J. BROTZLER	9/9/2022		
		11:22:23 AM CPS - U6909	CHECKED BY	J. FLEMING	9/8/2022	CARBON COUNTY	UPN 9964000 / 16

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SUMMARY
SIGNING & DELINEATION QUANTITIES

MATERIAL	TOTAL	UNIT
SIGNS-ALUM REFL SHEET XI	441.9	SQ. FOOT
SIGNS-ALUM SHEET INCR XI	123.0	SQ. FOOT
POSTS-STEEL U SIGN	191	POUNDS
POLES-TREATED WOOD 4 IN	546	LINEAR FT.
POLES-TREATED WOOD 5 IN	222	LINEAR FT.
POSTS-STEEL STRUCTURAL SIGN	1000	POUNDS
DELINEATOR DES A	357	EACH
DELINEATOR DES D	8	EACH
DELINEATOR DES F	29	EACH
REMOVE SIGNS	57	EACH
REMOVE SIGNS-GUIDE	4	EACH
FRANG SIGN POST BKWY-S5X10	2	EACH
FRANG SIGN POST BKWY-W8X18	2	EACH

AWARD COPY

SIGN LOCATION AND SPECIFICATIONS

STATION	RAMP NO.	SIGN NO.	PANEL SIZE	REFL SHTG TYPE: BACK-GROUND	REFL SHTG TYPE: LEGEND	FEET: CLEARANCE	FEET: SIGN SUPPORT SPACING	TYPE OF SUPPORT	FEET: CANTILEVER	FEET: SUPPORT LENGTH (ESTIMATED)	FEET: SUPPORT LENGTH (INSTALLED)	FEET: MOUNTING HEIGHT	FEET: FOUNDATION DEPTH	SIGN PANEL (SQ. FT.): SHEET ALUMINUM	SIGN PANEL (SQ. FT.): ALUMINUM SHEET INCREMENT	SIGN PANEL (SQ. FT.): ALUMINUM SHEET OVERLAY	TIMBER POLE (LINEAR FT.): 4" TOP DIA.	TIMBER POLE (LINEAR FT.): 5" TOP DIA.	STEEL POST(LBS.): ROUND TUBULAR	STEEL POST(LBS.): SQUARE TUBULAR	STEEL POST(LBS.): STRUCTURAL STEEL	STEEL POST(LBS.): "U" POST	BREAKAWAY	SIGNS/GUIDE: REMOVE	SIGNS/GUIDE: RESET	SIGNS/GUIDE: REMOVE	SIGNS/GUIDE: RESET	REFLECTIVITY	REMARKS
0.017 RT		N6-4B	USE AS IS																										WELCOME TO MONTANA
0.028 RT		R99-1	144 X 78	XI		30-0		W8X18		X= 18-5 Y= 19-7		7-0	5-6		78.0 XI						684		■		1				REPLACE
0.047 RT		N7-1 N7-1P	36 X 48 36 X 12	XI XI	XI XI	20-0		5" DIA POLE		17-2		5-0	3-6	12.0 XI 3.0 XI				18					X	1					REPLACE - PIONEER SCHOOL CLARK WYOMING*
0.057 RT		R16-1	36 X 48	XI		10-0		5" DIA POLE		15-5		5-0	3-6	12.0 XI				16					X	1					REPLACE
0.093 RT		R2-1 R2-3A	24 X 30 24 X 18	XI	XI	10-0		4" DIA POLE		13-0		5-7	3-0	5.0 XI 3.0 XI			14							1					REPLACE - 70 MPH REPLACE - 65 MPH
0.133 RT		R2-2A	24 X 30	XI		10-0		4" DIA POLE		12-4		5-0	3-0	5.0 XI			14							1					REPLACE - 65 MPH
0.168 RT		M3-1 M1-5	24 X 12 24 X 24	XI XI		10-0		4" DIA POLE		12-11		5-0	3-0	2.0 XI 4.0 XI			14							1					REPLACE - NORTH REPLACE - MT-72
0.203 RT		G72-0A	108 X 36	XI	XI	30-0		S5X10		X= 15-4 Y= 16-3		7-0	3-6		27.0 XI						316		■		1				REPLACE - BELFRY/JCT US 310
0.243 RT		D12-5	36 X 48	XI	XI	10-0		4" DIA POLE		15-5		5-0	3-0	12.0 XI			16							1					REPLACE
1.000 RT		(2) D10-1	10 X 18	XI	XI	4-0		2# STL U-POST		9-3		4-0	3-0	1.3 XI 1.3 XI								19		1					REPLACE - REF. POST 1
2.000 RT		(2) D10-1	10 X 18	XI	XI	4-0		2# STL U-POST		9-3		4-0	3-0	1.3 XI 1.3 XI								19		1					REPLACE - REF. POST 2
2.005 LT		N7-1 N7-1P	36 X 48 36 X 12	XI XI	XI XI	20-0		5" DIA POLE		17-2		5-0	3-6	12.0 XI 3.0 XI				18					X	1					REPLACE - PIONEER SCHOOL CLARK WYOMING*
2.005 RT		W11-3 W16-3P	30 X 30 18 X 24	XI XI		10-0		4" DIA POLE		14-6		5-7	3-6	9.3 XI			16							1					REPLACE REPLACE - NEXT 6 MILES
2.030 RT		NF-1	BY OTHERS																										
2.035 LT		W14-3	48X48X36	XI		10-0		4" DIA POLE		13-0		5-0	3-0	5.5 XI			14							1				FY	REPLACE BBR
2.054 RT		MISC-1	BY OTHERS																										BEARTOOTH BASIN BUNKHOUSE
2.155 LT		(2) D-3 R1-1	36 X 10 30 X 30	XI XI	XI XI	6-0		4" DIA POLE		12-8		5-0	3-0	2.5 XI 5.2 XI			14												NEW - CHANCE RD NEW
2.225 LT		MISC-2	BY OTHERS																										BEARTOOTH BASIN BUNKHOUSE

MOUNTING HEIGHT REQUIREMENTS: MOUNTING HEIGHTS SHOWN REFER TO THE BOTTOM OF THE MAJOR PANEL. SEE DETAILED DRAWINGS 619-00 & 619-08.

FY = TYPE XI FLUORESCENT YELLOW SHEETING REQUIRED.

X = STANDARD BREAKAWAY DEVICE:
- FOR WOOD POST SEE DETAILED DRAWING 619-20.
- FOR STRUCTURAL STEEL SEE DETAILED DRAWING 619-13.

■ = FRANGIBLE SIGN POST BREAKAWAY DEVICE REQUIRED.

BBR = BACKBRACING REQUIRED:
- FOR WOOD POST 2" x 4" REQ'D.
- FOR STRUCTURAL STEEL 2" x 2" x 1/4" ANGLE IRON REQ'D.

* Adopt-A-Highway Signing

Contractor will confirm that the group name on the sign(s) currently existing at the time of construction corresponds to the group name on the sign(s) shown in plans. If name is different, Field Project Manager will contact Traffic & Safety Bureau Signing Section with correct name and a new sign design will be provided.

AWARD COPY

SIGN LOCATION AND SPECIFICATIONS

STATION	RAMP NO.	SIGN NO.	PANEL SIZE	REFL SHTG TYPE: BACKGROUND	REFL SHTG TYPE: LEGEND	FEET: CLEARANCE	FEET: SIGN SUPPORT SPACING	TYPE OF SUPPORT	FEET: CANTILEVER	FEET: SUPPORT LENGTH (ESTIMATED)	FEET: SUPPORT LENGTH (INSTALLED)	FEET: MOUNTING HEIGHT	FEET: FOUNDATION DEPTH	SIGN PANEL (SQ. FT.): SHEET ALUMINUM	SIGN PANEL (SQ. FT.): ALUMINUM SHEET INCREMENT	SIGN PANEL (SQ. FT.): ALUMINUM SHEET OVERLAY	TIMBER POLE (LINEAR FT.): 4" TOP DIA.	TIMBER POLE (LINEAR FT.): 5" TOP DIA.	STEEL POST(LBS.): ROUND TUBULAR	STEEL POST(LBS.): SQUARE TUBULAR	STEEL POST(LBS.): STRUCTURAL STEEL	STEEL POST(LBS.): "U" POST	BREAKAWAY	SIGNS REMOVE	SIGNS RESET	GUIDE REMOVE	GUIDE RESET	REFLECTIVITY	REMARKS
2.250 LT		NF-2	USE AS IS																										
2.255 RT		W14-3	48X48X36	XI		10-0		4" DIA POLE		13-0		5-0	3-0	5.5 XI			14						1					FY	REPLACE BBR
2.280 LT		(2) N6-5	60 X 30	XI	XI	10-0		5" DIA POLE		14-9		5-0	3-6	12.5 XI 12.5 XI				16					X	1					REPLACE - BEARTOOTH MTN RANGE
3.000 RT		(2) D10-1	10 X 18	XI	XI	4-0		2# STL U-POST		9-3		4-0	3-0	1.3 XI 1.3 XI								19		1					REPLACE - REF. POST 3
3.203 RT		W14-3	48X48X36	XI		10-0		4" DIA POLE		13-0		5-0	3-0	5.5 XI			14						1					FY	REPLACE BBR
4.000 RT		(2) D10-1	10 X 18	XI	XI	4-0		2# STL U-POST		9-3		4-0	3-0	1.3 XI 1.3 XI								19		1					REPLACE - REF. POST 4
4.641 LT		WHITE CROSS	BY OTHERS																										
4.976 LT		W14-3	48X48X36	XI		10-0		4" DIA POLE		13-0		5-0	3-0	5.5 XI			14						1					FY	REPLACE
5.000 RT		(2) D10-1	10 X 18	XI	XI	4-0		STL U-POST		9-3		4-0	3-0	1.3 XI 1.3 XI								19		1					REPLACE - REF. POST 5
5.200 RT		W1-4L W13-1	30 X 30 18 X 18	XI XI		10-0		4" DIA POLE		14-0		5-7	3-6	6.3 XI 2.3 XI			14						1					FY	REPLACE REPLACE - 55 MPH
5.230 RT		W8-12B	36 X 36	XI		10-0		5" DIA POLE		14-5		5-0	3-6	9.0 XI				16					X	1					REPLACE - WATCH FOR ICE HINGED SIGN
5.276 RT		(2) W1-8	24 X 30	XI		10-0		5" DIA POLE		12-11		5-0	3-6	5.0 XI 5.0 XI				14						1				FY	REPLACE
5.306 RT		(2) W1-8	24 X 30	XI		10-0		5" DIA POLE		12-11		5-0	3-6	5.0 XI 5.0 XI				14						1				FY	REPLACE FROM RP 5.316
5.336 RT		(2) W1-8	24 X 30	XI		10-0		5" DIA POLE		12-11		5-0	3-6	5.0 XI 5.0 XI				14						1				FY	REPLACE FROM RP 5.361
5.366 RT		(2) W1-8	24 X 30	XI		10-0		5" DIA POLE		12-11		5-0	3-6	5.0 XI 5.0 XI				14										FY	NEW
5.366 RT		N6-2	72 X 18	XI	XI	5-0		4" DIA POLE		X = 13-1 Y = 14-0	3-8	7-0	3-0		9.0 XI		28									1			REPLACE - CLARKS FORK YELLOWSTONE RIVER
5.474 LT		N6-2	72 X 18	XI	XI	5-0		4" DIA POLE		X = 13-1 Y = 14-0	3-8	7-0	3-0		9.0 XI		28									1			REPLACE - CLARKS FORK YELLOWSTONE RIVER
5.573 LT		(2) D-3 R1-1	42 X 10 30 X 30	XI XI	XI XI	6-0		4" DIA POLE		12-8		5-0	3-0	2.9 XI 5.2 XI			14												NEW - JACKSON LN NEW

FY = TYPE XI FLUORESCENT YELLOW SHEETING REQUIRED.

X = STANDARD BREAKAWAY DEVICE:
- FOR WOOD POST SEE DETAILED DRAWING 619-20.
- FOR STRUCTURAL STEEL SEE DETAILED DRAWING 619-13.

BBR = BACKBRACING REQUIRED:
- FOR WOOD POST 2" x 4" REQ'D.
- FOR STRUCTURAL STEEL 2" x 2" x 1/4" ANGLE IRON REQ'D.

MOUNTING HEIGHT REQUIREMENTS: MOUNTING HEIGHTS SHOWN REFER TO THE BOTTOM OF THE MAJOR PANEL. SEE DETAILED DRAWINGS 619-00 & 619-08.

AWARD COPY

SIGN LOCATION AND SPECIFICATIONS

REF. POST		SIGN NO.	PANEL SIZE	REFL SHTG TYPE: BACK-GROUND	REFL SHTG TYPE: LEGEND	FEET: CLEARANCE	FEET: SIGN SUPPORT SPACING	TYPE OF SUPPORT	FEET: CANTILEVER	FEET: SUPPORT LENGTH (ESTIMATED)	FEET: SUPPORT LENGTH (INSTALLED)	FEET: MOUNTING HEIGHT	FEET: FOUNDATION DEPTH	SIGN PANEL (SQ. FT.): SHEET ALUMINUM	SIGN PANEL (SQ. FT.): ALUMINUM SHEET INCREMENT	SIGN PANEL (SQ. FT.): ALUMINUM SHEET OVERLAY	TIMBER POLE (LINEAR FT.): 4" TOP DIA.	TIMBER POLE (LINEAR FT.): 5" TOP DIA.	STEEL POST(LBS.): ROUND TUBULAR	STEEL POST(LBS.): SQUARE TUBULAR	STEEL POST(LBS.): STRUCTURAL STEEL	STEEL POST(LBS.): "U" POST	BREAKAWAY	SIGNS GUIDE: REMOVE	SIGNS GUIDE: RESET	REMOVE	RESET	REFLECTIVITY	REMARKS
5.579 LT		D-3	REMOVE																										
		(2) D-3 R1-1	42 X 10 30 X 30	XI XI	XI XI	6-0		4" DIA POLE		12-8		5-0	3-0	2.9 XI 5.2 XI			14							1					NEW - JACKSON LN NEW
5.659 LT		W8-12b	36 X 36	XI		10-0		5" DIA POLE		14-5		5-0	3-6	9.0 XI				16					X	1					REPLACE - WATCH FOR ICE HINGED SIGN
5.724 LT		W1-4L W13-1	30 X 30 18 X 18	XI XI		10-0		4" DIA POLE		14-0		5-7	3-6	6.3 XI 2.3 XI			14							1				FY	REPLACE REPLACE - 55 MPH
5.797 RT		W14-3	48X48X36	XI		10-0		4" DIA POLE		13-0		5-0	3-0	5.5 XI			14							1				FY	REPLACE BBR
6.000 RT		(2) D10-1	10 X 18	XI	XI	4-0		STL U-POST		9-3		4-0	3-0	1.3 XI 1.3 XI								19		1					REPLACE - REF. POST 6
6.051 LT		W14-3	48X48X36	XI		10-0		4" DIA POLE		13-0		5-0	3-0	5.5 XI			14							1				FY	REPLACE BBR
6.146 LT		(2) D-3 R1-1	42 X 10 30 X 30	XI XI	XI XI	6-0		4" DIA POLE		12-8		5-0	3-0	2.9 XI 5.2 XI			14							1					REPLACE- GROVE CREEK RD REPLACE
6.256 RT		W14-3	48X48X36	XI		10-0		4" DIA POLE		13-0		5-0	3-0	5.5 XI			14							1				FY	REPLACE BBR
7.000 RT		(2) D10-1	10 X 18	XI	XI	4-0		STL U-POST		9-3		4-0	3-0	1.3 XI 1.3 XI								19		1					REPLACE - REF. POST 7
7.567 RT		FWP-1	USE AS IS																										
7.629 LT		W14-3	48X48X36	XI		10-0		4" DIA POLE		13-0		5-0	3-0	5.5 XI			14							1				FY	REPLACE BBR
7.739 LT		R1-1	30 X 30	XI	XI	6-0		4" DIA POLE		11-9		5-0	3-0	5.2 XI			12							1					REPLACE
7.838 RT		W8-11L	30 X 30	XI		10-0		4" DIA POLE		13-4		5-0	3-0	6.3 XI			14							1					REPLACE
7.848 RT		W14-3	48X48X36	XI		10-0		4" DIA POLE		13-0		5-0	3-0	5.5 XI			14							1				FY	REPLACE BBR
7.970 LT		FWP-2	USE AS IS																										
8.000 RT		(2) D10-1	10 X 18	XI	XI	4-0		STL U-POST		9-3		4-0	3-0	1.3 XI 1.3 XI								19		1					REPLACE - REF. POST 8
8.281 LT		W8-11R	30 X 30	XI		10-0		4" DIA POLE		13-4		5-0	3-0	6.3 XI			14							1					NEW

X = STANDARD BREAKAWAY DEVICE:
- FOR WOOD POST SEE DETAILED DRAWING 619-20.
- FOR STRUCTURAL STEEL SEE DETAILED DRAWING 619-13.

BBR = BACKBRACING REQUIRED:
- FOR WOOD POST 2" x 4" REQ'D.
- FOR STRUCTURAL STEEL 2" x 2" x 1/4" ANGLE IRON REQ'D.

MOUNTING HEIGHT REQUIREMENTS: MOUNTING HEIGHTS SHOWN REFER TO THE BOTTOM OF THE MAJOR PANEL. SEE DETAILED DRAWINGS 619-00 & 619-08.

FY = TYPE XI FLUORESCENT YELLOW SHEETING REQUIRED.

AWARD COPY

SIGN LOCATION AND SPECIFICATIONS

REF. POST		SIGN NO.	PANEL SIZE	REFL SHTG TYPE: BACKGROUND	REFL SHTG TYPE: LEGEND	FEET: CLEARANCE	FEET: SIGN SUPPORT SPACING	TYPE OF SUPPORT		FEET: CANTILEVER	FEET: SUPPORT LENGTH (ESTIMATED)	FEET: SUPPORT LENGTH (INSTALLED)	FEET: MOUNTING HEIGHT	FEET: FOUNDATION DEPTH	SIGN PANEL (SQ. FT.): SHEET ALUMINUM	SIGN PANEL (SQ. FT.): ALUMINUM SHEET INCREMENT	SIGN PANEL (SQ. FT.): ALUMINUM SHEET OVERLAY	TIMBER POLE (LINEAR FT.): 4" TOP DIA.	TIMBER POLE (LINEAR FT.): 5" TOP DIA.		STEEL POST(LBS.): ROUND TUBULAR	STEEL POST(LBS.): SQUARE TUBULAR	STEEL POST(LBS.): STRUCTURAL STEEL	STEEL POST(LBS.): "U" POST	BREAKAWAY	SIGNS REMOVE	SIGNS RESET	GUIDE REMOVE	GUIDE RESET	REFLECTIVITY	REMARKS
8.572 RT		W1-2L	30 X 30	XI		10-0		4" DIA POLE		13-4			5-0	3-0	6.3 XI			14								1					FY	REPLACE
8.607 RT		IS99-2	USE AS IS																												
8.773 RT		S3-1	36 X 36	XI		10-0		5" DIA POLE		14-5			5-0	3-6	9.0 XI				16						X	1					FYG	REPLACE
8.787 RT		WHITE CROSS	BY OTHERS																												
8.893 RT		(2) D-3 R1-1	42 X 10 30 X 30	XI XI	XI XI	6-0		4" DIA POLE		12-8			5-0	3-0	2.9 XI 5.2 XI			14								1						REPLACE - RIVERVIEW LN REPLACE
8.907 RT		W1-2R	30 X 30	XI		10-0		4" DIA POLE		13-4			5-0	3-0	6.3 XI			14								1					FY	REPLACE
9.000 RT		(2) D10-1	10 X 18	XI	XI	4-0		STL U-POST		9-3			4-0	3-0	1.3 XI 1.3 XI									19		1						REPLACE - REF. POST 9
9.014 LT		S3-1	36 X 36	XI		10-0		5" DIA POLE		14-5			5-0	3-6	9.0 XI				16						X	1					FYG	REPLACE
9.316 RT		W14-3	48X48X36	XI		10-0		4" DIA POLE		13-0			5-0	3-0	5.5 XI			14								1					FY	REPLACE BBR
9.978 RT		W3-5	36 X 36	XI		10-0		5" DIA POLE		14-5			5-0	3-6	9.0 XI				16						X	1						REPLACE - 45 MPH
10.000 RT		(2) D10-2	10 X 27	XI	XI	4-0		STL U-POST		10-0			4-0	3-0	1.9 XI 1.9 XI									20		1						REPLACE - REF. POST 10
10.000 RT		N7-1 N7-1P	36 X 48 36 X 12	XI XI	XI XI	20-0		5" DIA POLE		17-2			5-0	3-6	12.0 XI 3.0 XI				18						X	1						REPLACE - BELFRY BUSY* BEAVERS 4-H CLUB
10.042 LT		W11-3 W16-3P	30 X 30 18 X 24	XI XI		10-0		4" DIA POLE		14-6			5-7	3-0	6.3 XI 3.0 XI			16								1						REPLACE REPLACE - NEXT 6 MILES
10.086 RT		IS99-3	USE AS IS																												
10.102 LT		R2-2	24 X 30	XI		10-0		4" DIA POLE		12-4			5-0	3-0	5.0 XI			14								1						REPLACE - 65 MPH
10.122 LT		R2-1 R2-3A	24 X 30 24 X 18	XI	XI	10-0		4" DIA POLE		12-11			5-7	3-0	5.0 XI 3.0 XI			14								1						REPLACE - 70 MPH REPLACE - 65 MPH
10.131 RT		R2-1	24 X 30	XI		10-0		4" DIA POLE		12-4			5-0	3-0	5.0 XI			14								1						REPLACE - 45 MPH
10.162 LT		W14-3	48X48X36	XI		10-0		4" DIA POLE		13-0			5-0	3-0	5.5 XI			14								1					FY	REPLACE BBR

X = STANDARD BREAKAWAY DEVICE:
- FOR WOOD POST SEE DETAILED DRAWING 619-20.
- FOR STRUCTURAL STEEL SEE DETAILED DRAWING 619-13.

BBR = BACKBRACING REQUIRED:
- FOR WOOD POST 2" x 4" REQ'D.
- FOR STRUCTURAL STEEL 2" x 2" x ¼" ANGLE IRON REQ'D.

MOUNTING HEIGHT REQUIREMENTS: MOUNTING HEIGHTS SHOWN REFER TO THE BOTTOM OF THE MAJOR PANEL. SEE DETAILED DRAWINGS 619-00 & 619-08.

* Adopt-A-Highway Signing

Contractor will confirm that the group name on the sign(s) currently existing at the time of construction corresponds to the group name on the sign(s) shown in plans. If name is different, Field Project Manager will contact Traffic & Safety Bureau Signing Section with correct name and a new sign design will be provided.

FY = TYPE XI FLUORESCENT YELLOW SHEETING REQUIRED.

FYG = TYPE XI FLUORESCENT YELLOW-GREEN SHEETING REQUIRED.

AWARD COPY

SIGN LOCATION AND SPECIFICATIONS

REF. POST		SIGN NO.	PANEL SIZE	REFL SHTG TYPE: BACK-GROUND	REFL SHTG TYPE: LEGEND	FEET: CLEARANCE	FEET: SIGN SUPPORT SPACING	TYPE OF SUPPORT		FEET: CANTILEVER	FEET: SUPPORT LENGTH (ESTIMATED)	FEET: SUPPORT LENGTH (INSTALLED)	FEET: MOUNTING HEIGHT	FEET: FOUNDATION DEPTH	SIGN PANEL (SQ. FT.): SHEET ALUMINUM	SIGN PANEL (SQ. FT.): ALUMINUM SHEET INCREMENT	SIGN PANEL (SQ. FT.): ALUMINUM SHEET OVERLAY	TIMBER POLE (LINEAR FT.): 4" TOP DIA.	TIMBER POLE (LINEAR FT.): 5" TOP DIA.		STEEL POST(LBS.): ROUND TUBULAR	STEEL POST(LBS.): SQUARE TUBULAR	STEEL POST(LBS.): STRUCTURAL STEEL	STEEL POST(LBS.): "U" POST		BREAKAWAY	SIGNS REMOVE	SIGNS RESET	GUIDE REMOVE	GUIDE RESET	REMARKS
10.276 RT		M2-1 M1-12	21 X 15 24 X 24	XI XI		10-0		4" DIA POLE			13-2		5-0	3-0	2.2 XI 4.0 XI			14									1					REPLACE REPLACE - S-308
10.307 LT		R2-1	24 X 30	XI		10-0		4" DIA POLE			12-4		5-0	3-0	5.0 XI			14									1					REPLACE - 45 MPH
10.311 RT		R2-1	24 X 30	XI		10-0		4" DIA POLE			12-4		5-0	3-0	5.0 XI			14									1					REPLACE - 35 MPH
10.321 RT		N6-1	36 X 18	XI	XI	10-0		4" DIA POLE			11-5		5-0	3-0	4.5 XI			12									1					REPLACE - BELFRY
TOTALS															441.9	123.0		546	222					1000	191		57		4			

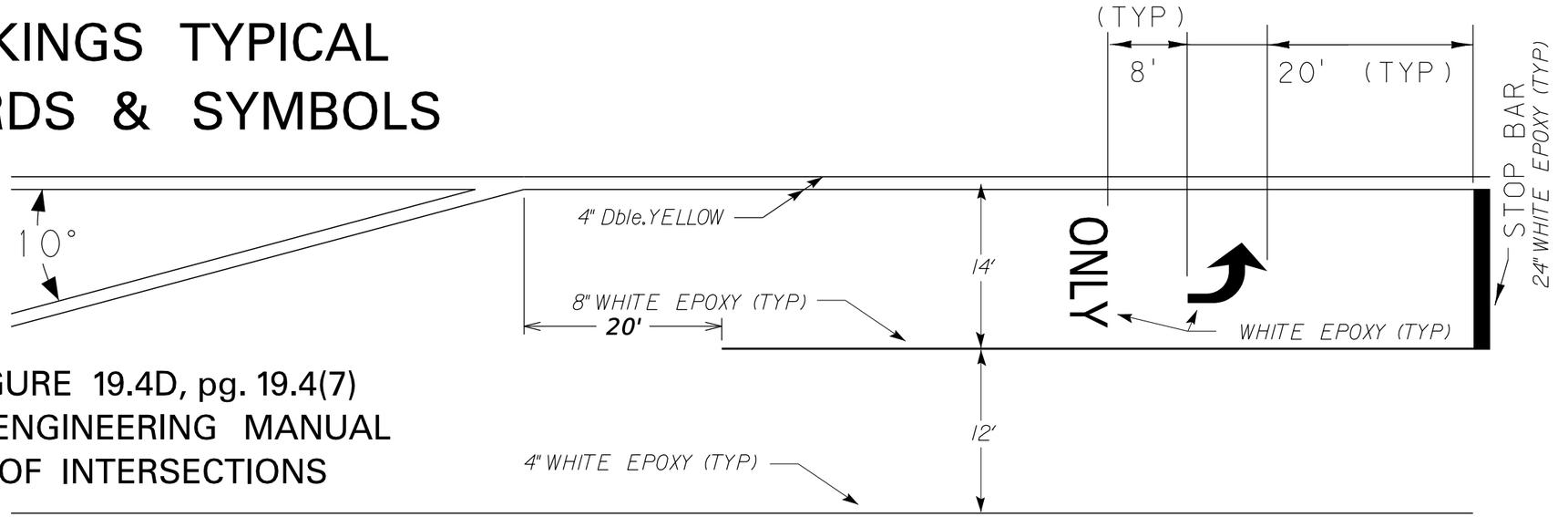
DELINEATION TABLE		
⊣	DESIGN "A"	357
⊣⊢⊣	DESIGN "D"	8
⊣⊢	DESIGN "F"	29

3	MONTANA Department of Transportation	C:\DGN\9964000sisum002.dgn	DESIGN BY	LANDON SHOQUIST		SIGNING PLANS		BELFRY - SOUTH	STPP 72-1(17)0
2		6/8/2023							
1		4:08:51 PM CPS - U6775	CHECK BY	NATHAN STYREN		CARBON COUNTY		UPN #9964000	S6

DETAILS

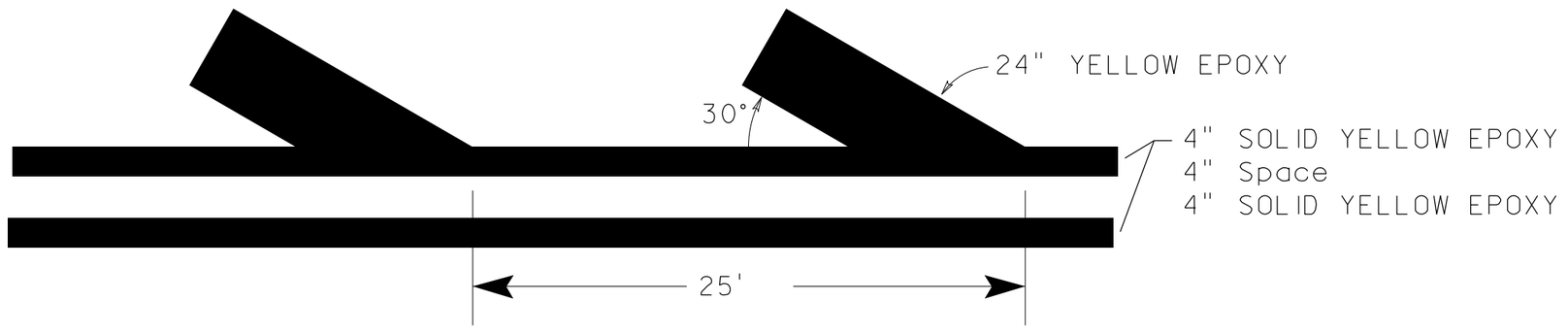
MEDIAN DETAIL

PAVEMENT MARKINGS TYPICAL TURN LANE WORDS & SYMBOLS



SEE DETAIL "FIGURE 19.4D, pg. 19.4(7) OF THE TRAFFIC ENGINEERING MANUAL FOR DETAILS OF INTERSECTIONS

MEDIAN DETAIL "A"

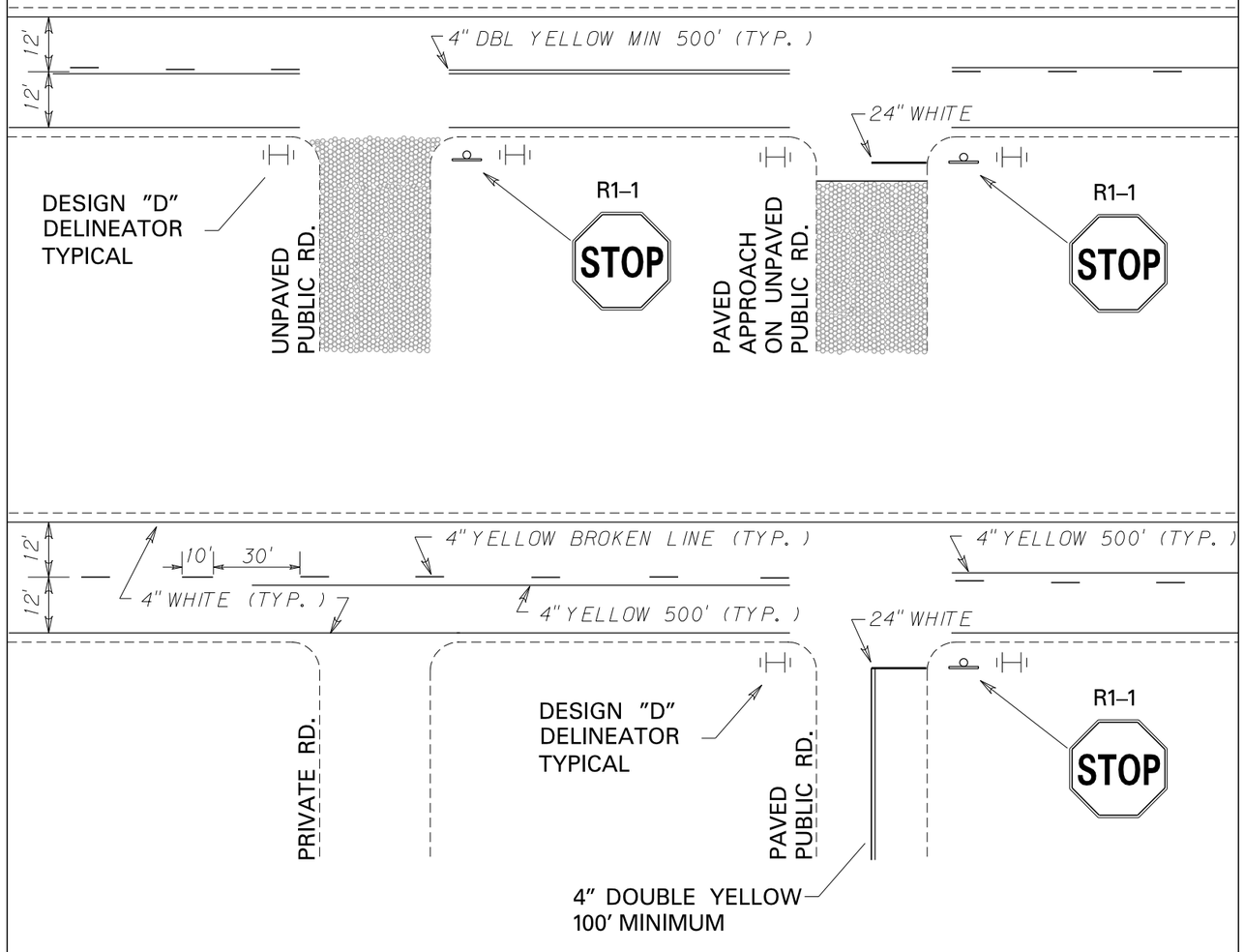


3	MONTANA Department of Transportation	C:\DGN\9964000sidet001.dgn	DESIGN BY	LANDON SHOQUIST		SIGNING PLANS	BELFRY - SOUTH / STPP 72-1(17)0
2		6/8/2023					
1		4:09:01 PM CPS - U6775	CHECK BY	NATHAN STYREN		CARBON COUNTY	UPN #9964000 / S7

DETAILS

TYPICAL PAVEMENT MARKINGS

NO SCALE



NOTE: FINAL CENTERLINE CONFIGURATION AND NO PASSING ZONES TO BE DETERMINED BY THE PROJECT MANAGER.

ALL PAVEMENT MARKINGS TO BE EPOXY UNLESS OTHERWISE SPECIFIED.

AWARD COPY

ASSOCIATED PROJECT AGREEMENT NUMBERS	
P.E.	STPP 72-1(16)0

BRIDGE IDENTIFICATION	
MDT STR ID	NBI NUMBER
06173	P00072005+03821

MONTANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS AND QUANTITIES

FEDERAL AID PROJECT STPP 72-1(17)0

BELFRY - SOUTH

CARBON COUNTY

SCALES SHOWN ON BRIDGE PLANS SHEETS
ARE FOR HALF SIZE (11X17) PRINTS
FULL SIZE PRINTS ARE APPROXIMATELY TWICE
ORIGINAL SCALE

LIST OF DRAWINGS

SHEET NO.	DWG. NO.	TITLE
B1	27931	LIST OF DRAWINGS, ESTIMATED BRIDGE PLAN QUANTITIES
B2	27932	GENERAL NOTES, BRIDGE DECK REPAIR
B3	27933	REVISE CONCRETE BARRIER RAIL - BR
B4	27934	REVISE CONCRETE BARRIER RAIL DETAILS & PRECOMPRESSED JOINT SEALS
B5	27935	BARRIER REINFORCING STEEL PLACEMENT DIAGRAM
B6	27936	EXPANSION JOINT

ESTIMATED BRIDGE PLAN QUANTITIES

MDT I.D. STRUCTURE NUMBER	STRUCTURE NAME	GENERAL LAYOUT DRAWING NUMBER	REVISE CONCRETE BARRIER RAIL - BR (LN.FT.)	CLASS A BRIDGE DECK REPAIR (YD^2)	** CLASS B BRIDGE DECK REPAIR (YD^2)	BRIDGE DECK CRACK SEAL (YD^2)	EXPANSION JOINT - STRIP SEAL (LN.FT.)	REVISE JOINT (LN.FT.)	EXPANSION JOINT PRECOMPRESSED (LN.FT.)	* REPAIR STRUCTURE (LUMP SUM)
06173	BRIDGE OVER CLARK FORK YELLOWSTONE RIVER	9720	525.6	25.0	5.0	1085.4	90.6	90.6	102.3	1.0
	PROJECT TOTAL		525.6	25.0	5.0	1085.4	90.6	90.6	102.3	1.0

NOTE: Class A Bridge Deck Repair quantities are estimated based on deck condition survey. The Project Manager will identify any additional Class A Deck Repair areas if they are needed.

** NOTE: Specific Class B Bridge Deck Repair areas are not identified in the contract. Class B Bridge Deck Repair quantities are provided as a contingency. The Project Manager will indentify any Class B Bridge Deck Repair areas if they are needed.

* NOTE: See Special Provisions for Repair Structure pay item.

BRIDGE WORK SUMMARY

MDT. I.D. STRUCTURE NUMBER	CLASS A BRIDGE DECK REPAIR	CLASS B BRIDGE DECK REPAIR	BRIDGE DECK CRACK SEAL	REVISE CONCRETE BARRIER RAIL	REPLACE EXPANSION JOINT	REPLACE JOINT SEAL	REPAIR PRESTRESSED BEAMS
06173	✔	✔	✔	✔	✔	✔	✔

SHEET NO.
B1

LIST OF DRAWINGS, ESTIMATED BRIDGE PLAN QUANTITIES

REVISED	REVISED	REVISED	REVISED	CHECKED	DRAWN	DESIGNED	9964000BRREH001.dwg \ QSH001
				J.A.N.	D.G.G.	J.A.N.	
				10-15-22	6-9-22	6-1-22	

MONTANA Department of Transportation
BRIDGE BUREAU

11/2/2023 10:17:53 AM

UPN NUMBER
9964000

DRAWING NO.
27931

AWARD COPY

GENERAL NOTES

Specifications:

Plans were prepared from original drawings and as-built drawings. No additional survey information was procured for this project. Existing structure dimensions may vary from those shown on the drawings. Verify all dimensions necessary to complete the work.

The current version of the Standard and Supplemental Specifications for Road and Bridge Construction, adopted by the Montana Department of Transportation, applies.

See Standard Specifications and Special Provisions for Traffic Control and Sequence of Operations.

All dimensions are in feet and inches except as noted. Verify all necessary dimensions of the existing structures in the field before ordering materials. Obtain approval of shop plans from the State of Montana, Department of Transportation before beginning fabrication. If the dimensions and details of the existing structure are not as shown on the plans, vary construction as necessary to best suit existing conditions and the nature of the intended work.

Reinforcing Steel:

Unless specified otherwise on the drawings, provide 2" minimum concrete cover measured from the face of the concrete to the face of any reinforcing steel, except as noted below.

Bottom of Slab	1"
Top of Slab	2 ½"
Bottom of Abutment Caps	3"
Concrete Barriers and Curbs	1 ½"

Concrete cover to any tie bar is ½" less than what is listed above.

Use new deformed type reinforcing steel meeting the requirements of AASHTO M 31 Grade 60.

The suffix E denotes epoxy coated reinforcing steel.

Bridge Deck Repair:

See the bridge deck repair section of the Standard Specifications for allowable repair concrete options.

Quantities shown for Class A and B Bridge Deck Repair may vary from actual field quantities.

Opening to Traffic:

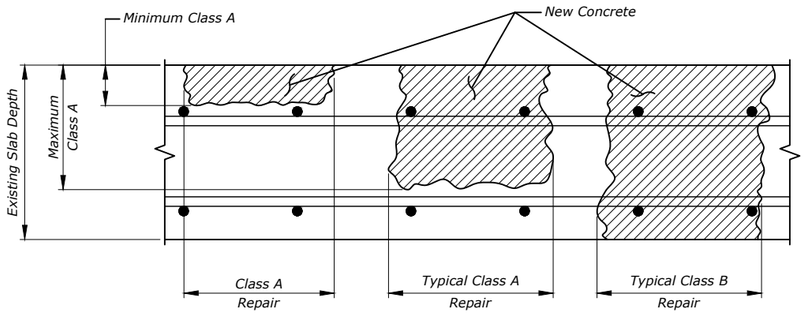
Do not allow traffic onto the bridge until both the repair concrete and barrier concrete have reached a minimum compression strength f'c = 3500psi.

Revise Concrete Barrier:

Include all costs associated with removing existing barrier end, bridge rail, cleaning exposed reinforcing steel, preparation of surface, painting exposed rebar ends, placing new reinforcing and barrier end hardware, and placing new concrete in the unit bid price for Revise Concrete Barrier Rail - BR.

Replace existing reinforcing steel damaged during construction that is called out to remain in place at no additional cost to the State.

See Road Plans and Detail Dwg. No. 606-23 for MGS Thrie Beam Approach Section Imformation.



BRIDGE DECK REPAIR

No Scale

SHEET NO. B2

GENERAL NOTES, BRIDGE DECK REPAIR

SCALE: No Scale

PROJECT NAME **BELFRY - SOUTH**

MDT STRUCTURE ID **06173**

FEDERAL AID PROJECT **STPP 72-1(17)0**

COUNTY **CARBON**

REVISED	REVISED	REVISED	REVISED	CHECKED	J.A.N.	10-15-22		
				DRAWN	D.G.G.	5-9-22		
				DESIGNED	J.A.N.	5-1-22		

996400BRREH001.dwg \ SUM001

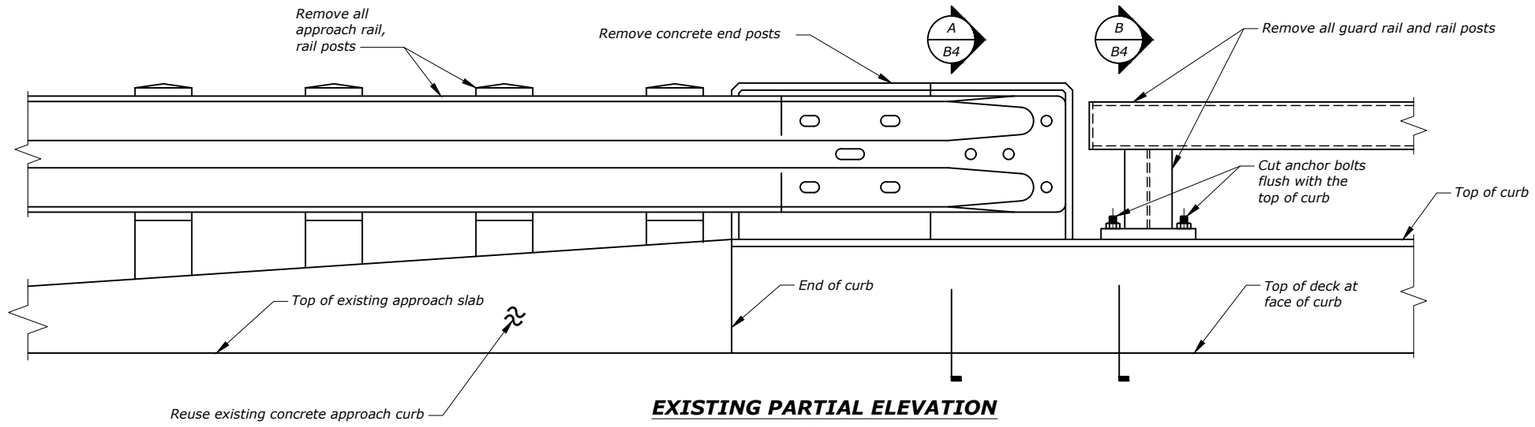
MONTANA Department of Transportation — BRIDGE BUREAU

11/2/2023 10:17:54 AM

UPN NUMBER 9964000

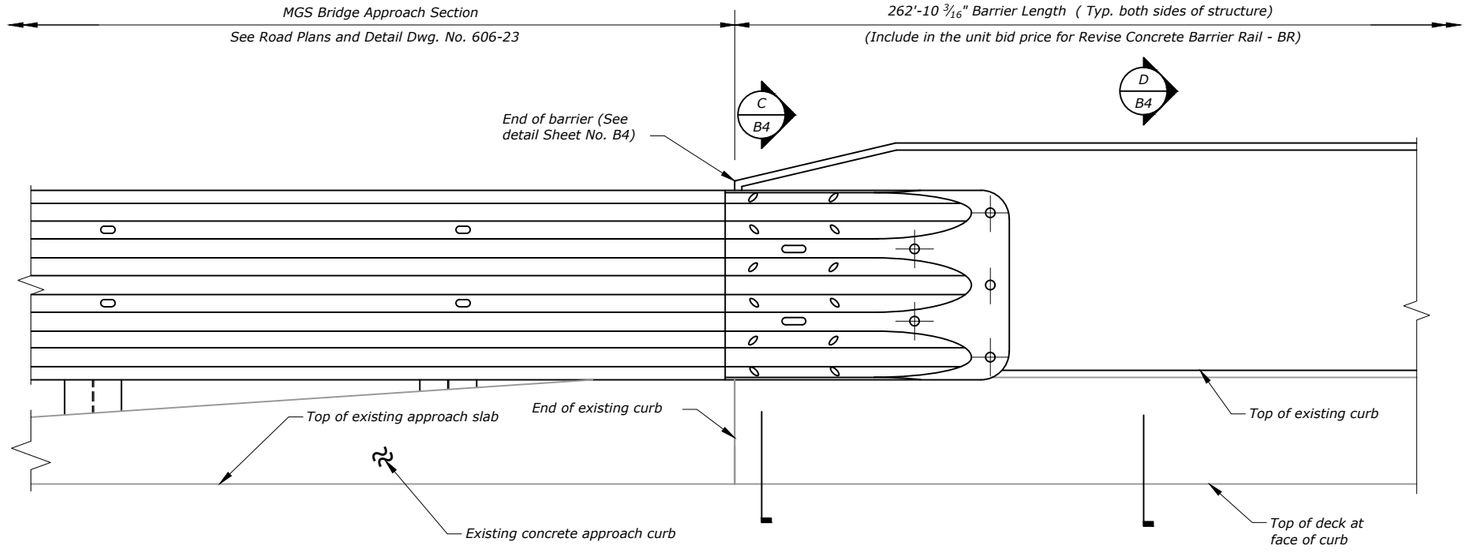
DRAWING NO. 27932

AWARD COPY



EXISTING PARTIAL ELEVATION

Left side near Bent No. 1 shown other locations similar



NOTE: Larger block outs may be required to install Thrie Beam over existing curb

NEW PARTIAL ELEVATION

Left side near Bent No. 1 shown other locations similar

SHEET NO. B3

REVISE CONCRETE BARRIER RAIL - BR

SCALE: 3/4" = 1'-0"

PROJECT NAME **BELFRY - SOUTH**

MDT STRUCTURE ID **06173**

FEDERAL AID PROJECT **STPP 72-1(17)0**

COUNTY **CARBON**

REVISED			
REVISED			
REVISED			
REVISED			
CHECKED	J.A.N.	10-15-22	
DRAWN	D.G.G.	6-9-22	
DESIGNED	J.A.N.	5-1-22	

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MONTANA Department of Transportation

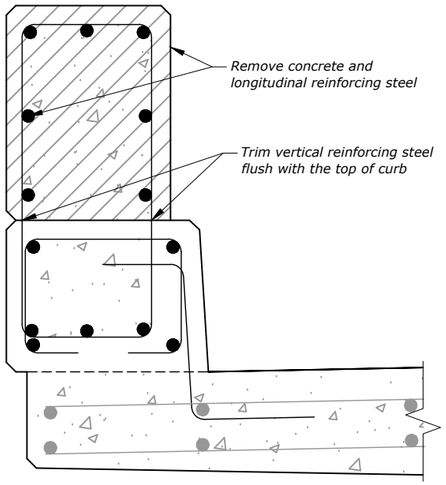
BRIDGE BUREAU

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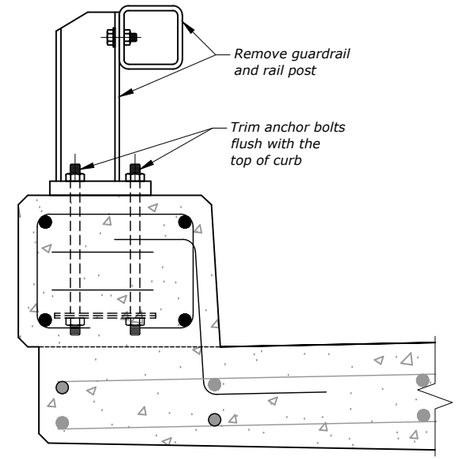
UPN NUMBER 9964000

DRAWING NO. 27933

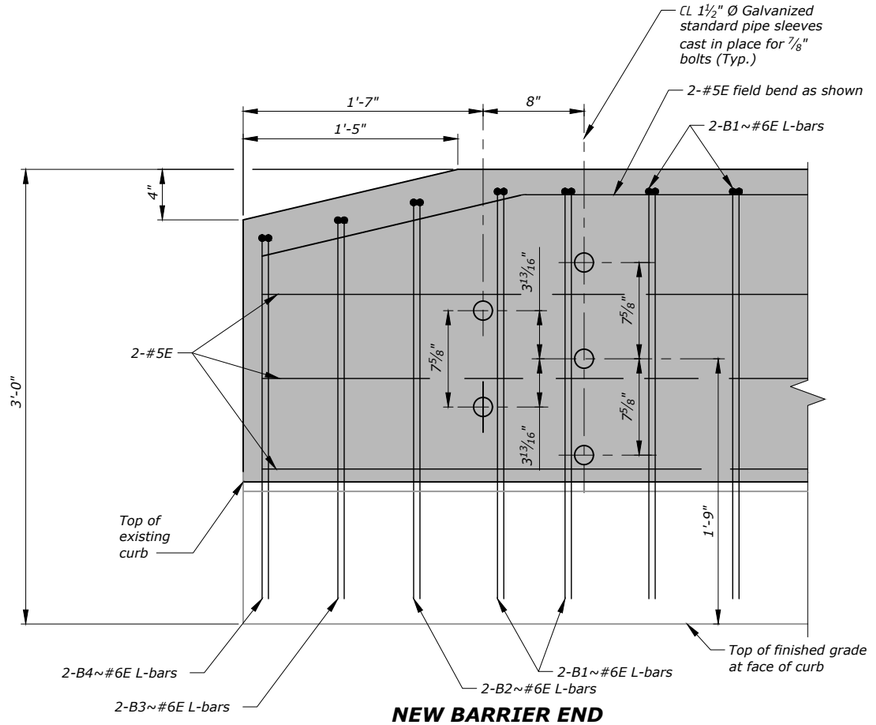
AWARD COPY



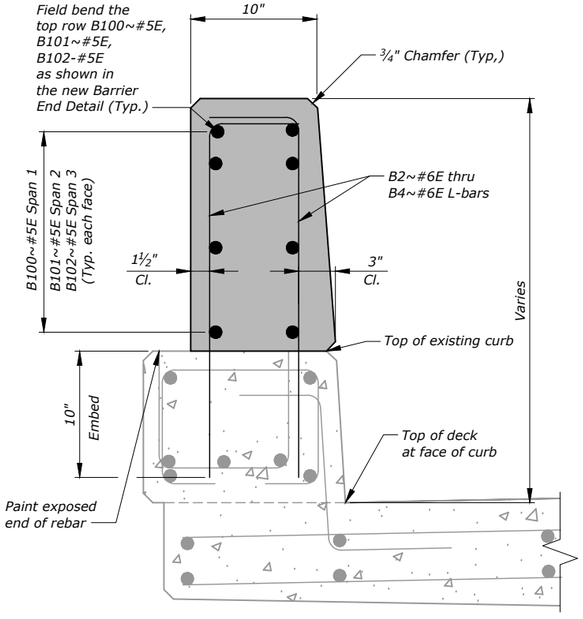
A / B3 **EXISTING CONCRETE ENDPOST**
Scale ~ 1"=1'-0"



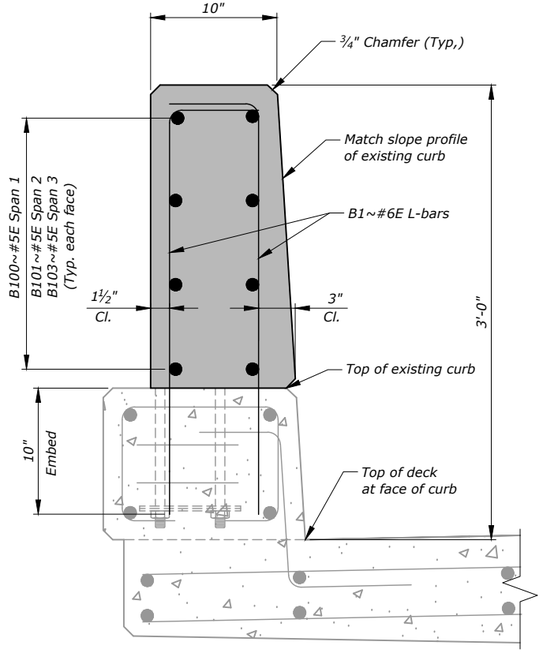
B / B3 **EXISTING GUARDRAIL ON CURB**
Scale ~ 1"=1'-0"



NEW BARRIER END
Scale ~ 1"=1'-0"



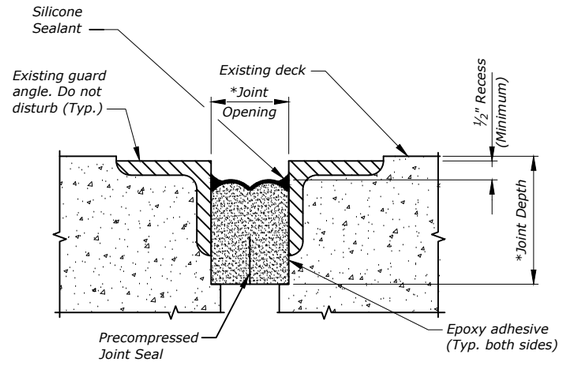
C / B3 **NEW BARRIER AT END OF CURB**
Scale ~ 1"=1'-0"



D / B3 **NEW BARRIER ON CURB**
Scale ~ 1"=1'-0"

NOTE: For Barrier Reinforcing Steel Placement Diagram, see Sheet No. B5.

NOTE: For Bill of Reinforcing Steel Placement Diagram, see Sheet No. B5.

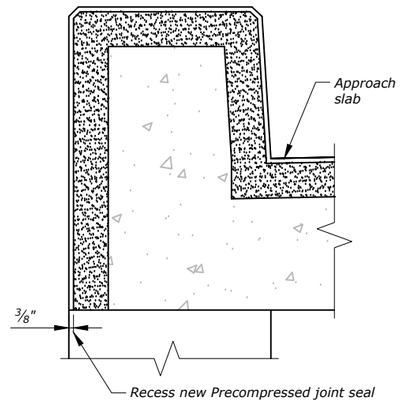


PRECOMPRESSED JOINT SEAL DETAIL
No Scale
Bent No. 1, Bent No. 2

*NOTE: Joint dimensions may vary. Field verify all joint widths and depths before ordering materials.

NOTE: Remove existing joint seal and replace with new precompressed joint seal according to the Special Provisions and manufacturer recommendations.

NOTE: Include all costs associated with providing and placing new joint seal in the unit price bid for Expansion Joint - Precompressed.



PRECOMPRESSED JOINT SEAL AT CURB
Scale ~ 1"=1'-0"

SHEET NO. B4

REVISE CONCRETE BARRIER RAIL DETAILS & PRECOMPRESSED JOINT SEALS

SCALE: As Shown

PROJECT NAME **BELFRY - SOUTH**

MDT STRUCTURE ID **06173**

FEDERAL AID PROJECT **STPP 72-1(17)0**

COUNTY **CARBON**

REVISED			
REVISED			
REVISED			
REVISED			
CHECKED	J.A.N.	10-15-22	
DRAWN	D.G.G.	6-9-22	
DESIGNED	J.A.N.	5-1-22	

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MONTANA Department of Transportation

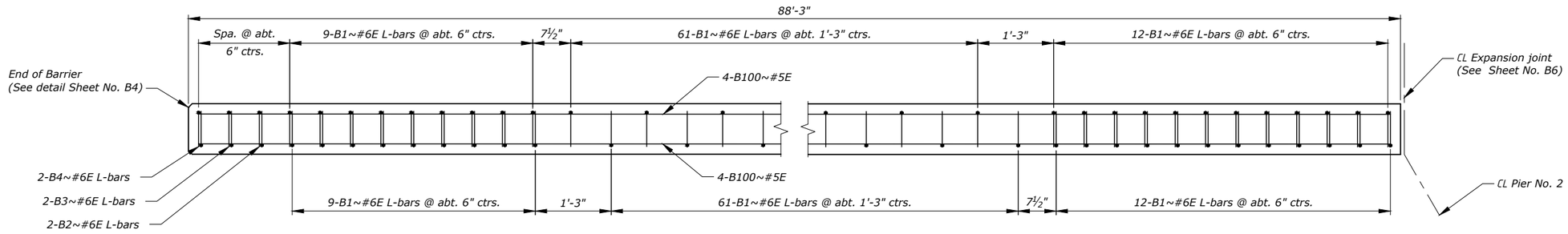
BRIDGE BUREAU

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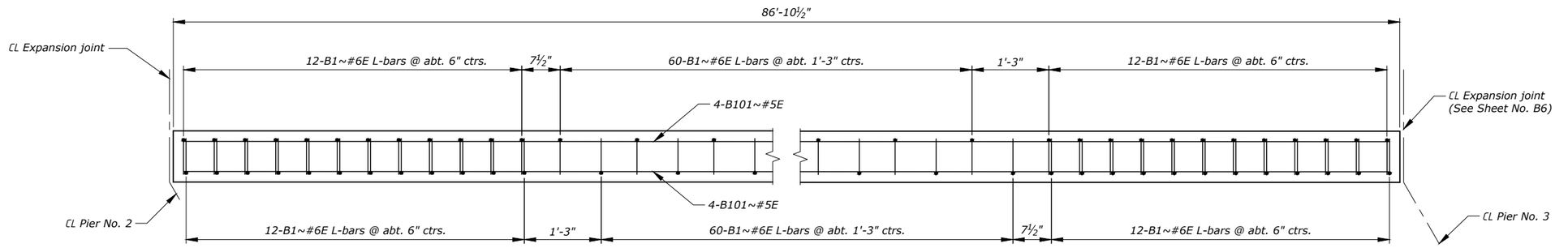
UPN NUMBER 9964000

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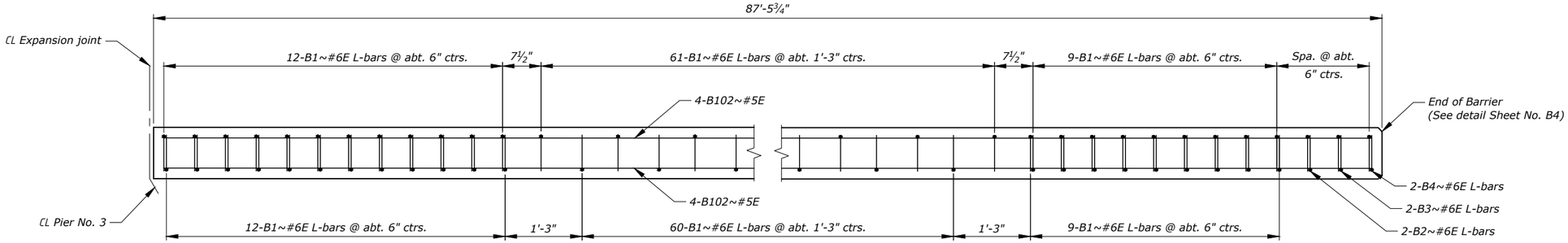
AWARD COPY



BARRIER REINFORCING STEEL PLACEMENT DIAGRAM (SPAN 1)



BARRIER REINFORCING STEEL PLACEMENT DIAGRAM (SPAN 2)

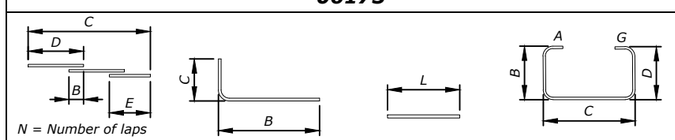


BARRIER REINFORCING STEEL PLACEMENT DIAGRAM (SPAN 3)

NOTE: Reinforcement diagram shown ahead-on-line left side of structure. Right side of structure similar reverse order of dimensions. Spans 1 and Span 3 are also swapped for the right side.

BILL OF REINFORCING STEEL
06173

(FOR INFORMATION PURPOSE ONLY)
(ALL DIMENSIONS ARE OUT TO OUT)



TYPE 27 TYPE 37 TYPE STR TYPE S6

Mark	Size	No.	Type	Length	A	B	C	D	E	G	N
B100	#5E	16	27	90'-11'		3'-0"	87'-11"	60'-0'	30'-11"		1
B101	#5E	16	27	89'-6'		3'-0"	86'-6"	60'-0'	29'-6"		1
B102	#5E	16	27	90'-1'		3'-0"	87'-1"	60'-0'	30'-1"		1
B1	#6E	990	37	3'-3 ½"		2'-8 ½"	0'-7"				
B2	#6E	8	37	3'-2 ½"		2'-7 ½"	0'-7"				
B3	#6E	8	37	3'-1"		2'-6"	0'-7"				
B4	#6E	8	37	3'-0"		2'-5"	0'-7"				
J1	#5E	8	STR	45'-9½"							
S1	#5E	8	STR	45'-9½"						0'-5"	
C1	#4E	12	S6	3'-4"	0'-5"	0'-9"	1'-0"	0'-9'			

SHEET NO. B5

BARRIER REINFORCING STEEL PLACEMENT DIAGRAM

SCALE: No Scale

PROJECT NAME **BELFRY - SOUTH**

MDT STRUCTURE ID **06173**

FEDERAL AID PROJECT **STPP 72-1(17)0**

COUNTY **CARBON**

CHECKED	J.A.N.	10-15-22
DRAWN	D.G.G.	6-9-22
DESIGNED	J.A.N.	5-1-22

REVISED REVISED REVISED REVISED

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MONTANA Department of Transportation — BRIDGE BUREAU

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UPN NUMBER 9964000

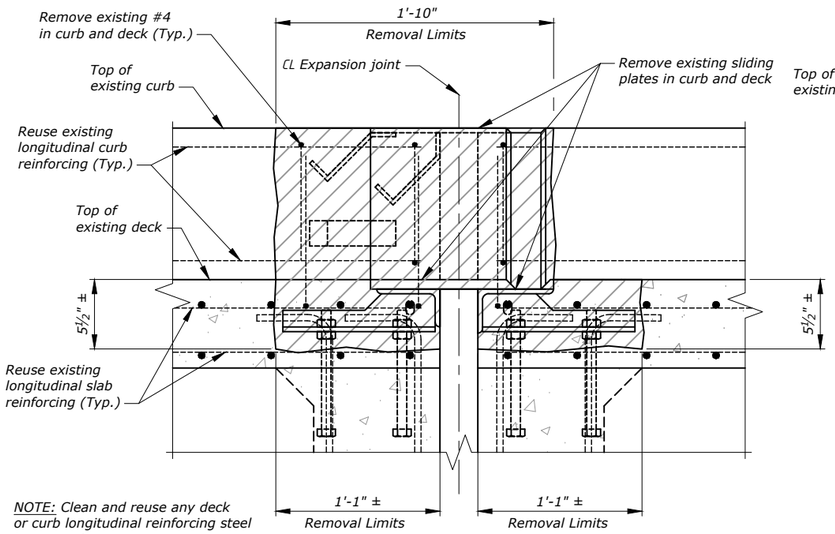
DRAWING NO. 27935

AWARD COPY

NOTES:
Include all costs associated with removing existing parts, concrete and cleaning exposed reinforcing steel in the unit bid price for Revise Joint. Include all costs associated with furnishing, placing new concrete and reinforcing steel in the unit bid price for Revise Joint.

Include all cost associated with furnishing and installing new expansion joint in the unit price bid for Expansion Joint.

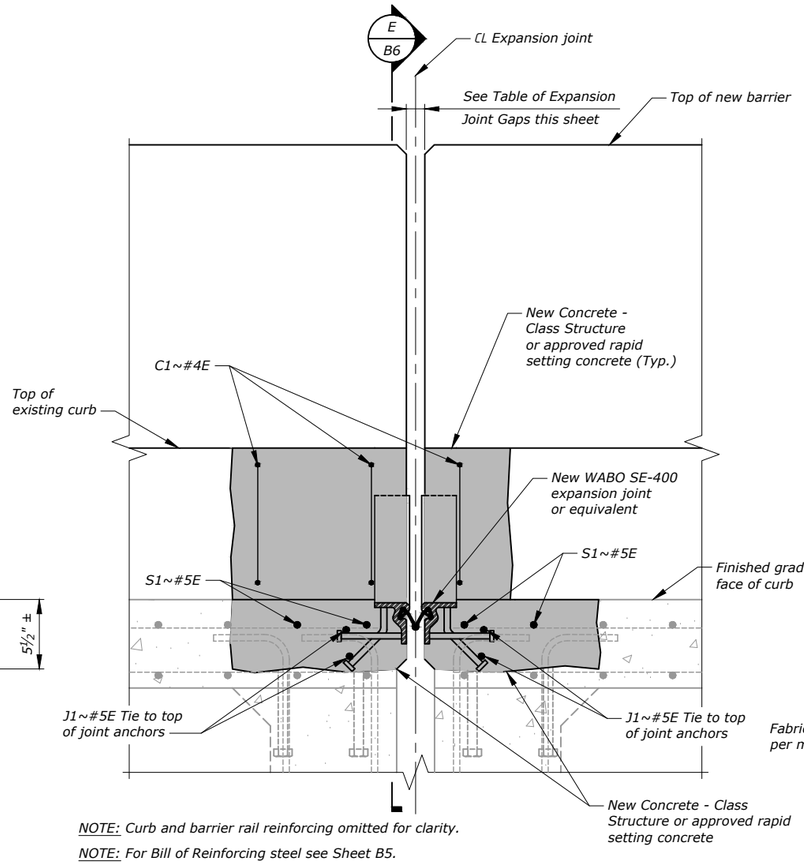
Replace existing reinforcing steel damaged during construction that is called out to remain in place at no additional cost to the State.



NOTE: Clean and reuse any deck or curb longitudinal reinforcing steel in removal area.

EXPANSION JOINT REMOVAL

Scale: 1" = 1'-0"
Pier No. 2, Pier No. 3

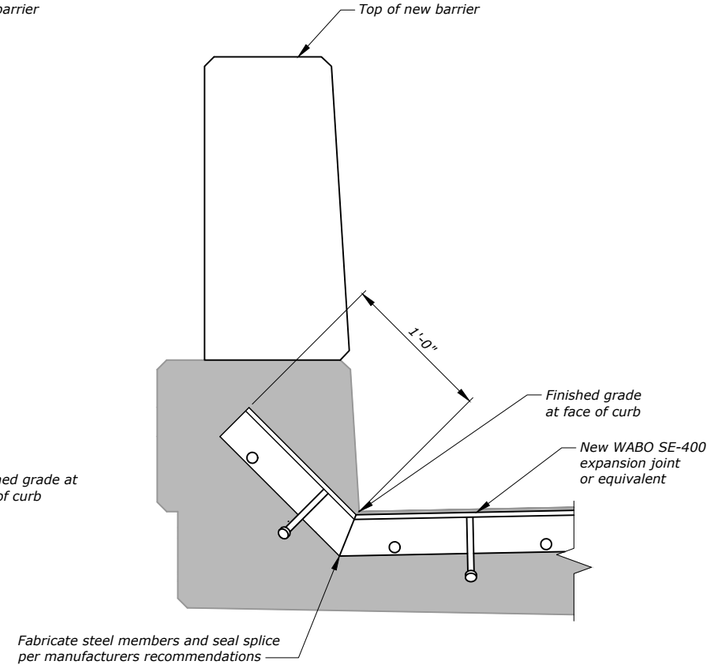


NOTE: Curb and barrier rail reinforcing omitted for clarity.

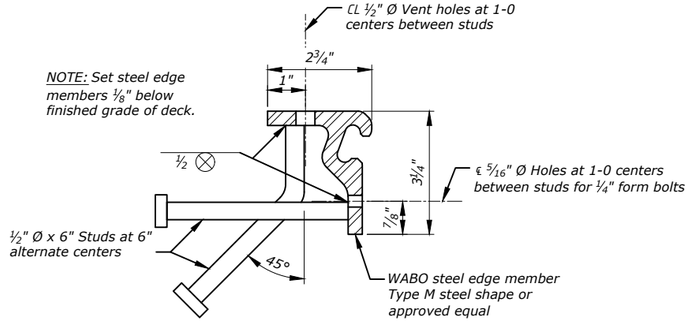
NOTE: For Bill of Reinforcing steel see Sheet B5.

EXPANSION JOINT REPLACEMENT

Scale: 1" = 1'-0"
Pier No. 2, Pier No. 3



E
B6 **EXPANSION JOINT SECTION**
Scale: 1" = 1'-0"



STEEL EDGE MEMBER AND ANCHORAGE SYSTEM

Scale ~ 3" = 1'-0"

TABLE OF EXPANSION JOINT GAPS

TEMPERATURE (°F)						ADJUSTMENT FOR 1°F TEMPERATURE CHANGE (in./°F)	TOTAL MOVEMENT
JOINT OPENING (-40)	JOINT OPENING (0)	JOINT OPENING (33)	JOINT OPENING (60)	JOINT OPENING (90)	JOINT OPENING (110)		
$2\frac{7}{16}$"	$2\frac{1}{16}$"	$1\frac{3}{4}$"	$1\frac{1}{2}$"	$1\frac{1}{4}$"	$1\frac{1}{16}$"	0.009324	$1\frac{3}{8}$"

SHEET NO. B6

EXPANSION JOINT

SCALE: As Shown

PROJECT NAME **BELFRY - SOUTH**

MDT STRUCTURE ID **06173**

FEDERAL AID PROJECT **STPP 72-1(17)0**

COUNTY **CARBON**

REVISED	REVISED	REVISED	REVISED	CHECKED	J.A.N.	10-15-22	9964000BRREH001.dwg \ REH004
				DRAWN	D.G.G.	5-9-22	
				DESIGNED	J.A.N.	5-1-22	

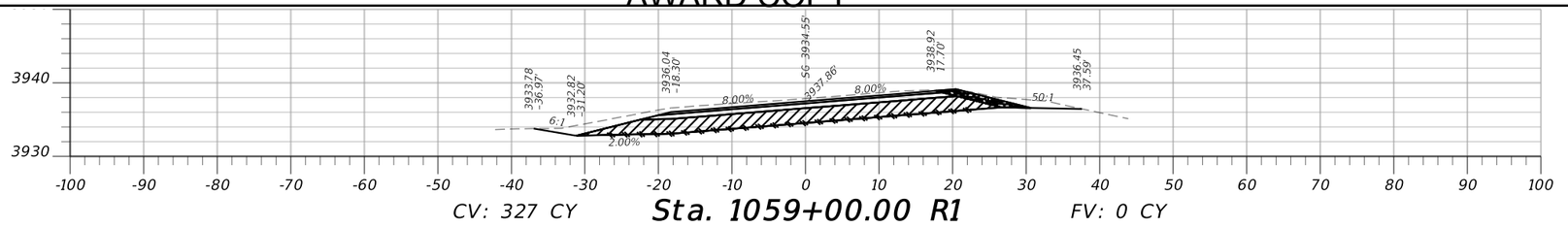
MONTANA Department of Transportation
BRIDGE BUREAU

11/2/2023 10:18:14 AM

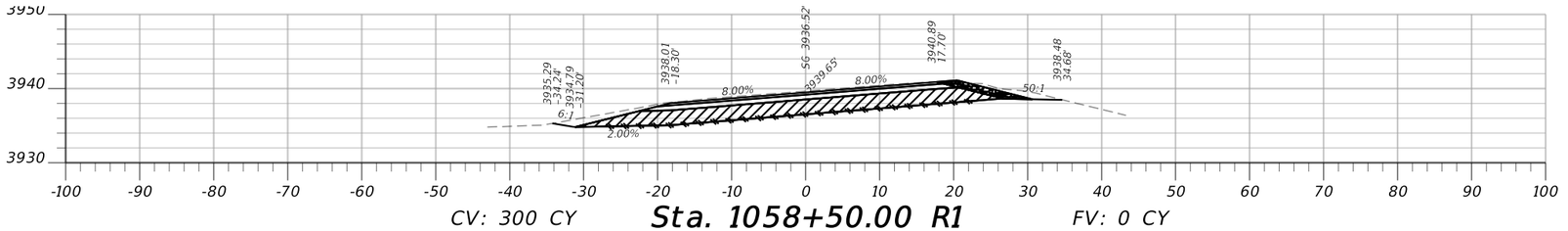
UPN NUMBER 9964000

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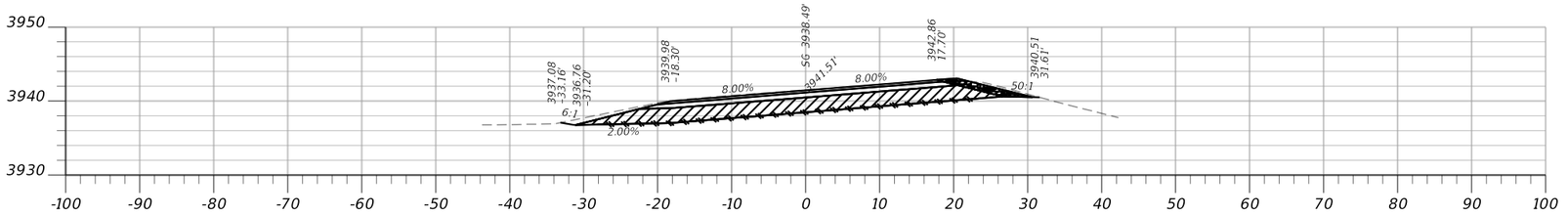
AWARD COPY



CV: 327 CY **Sta. 1059+00.00 R1** FV: 0 CY

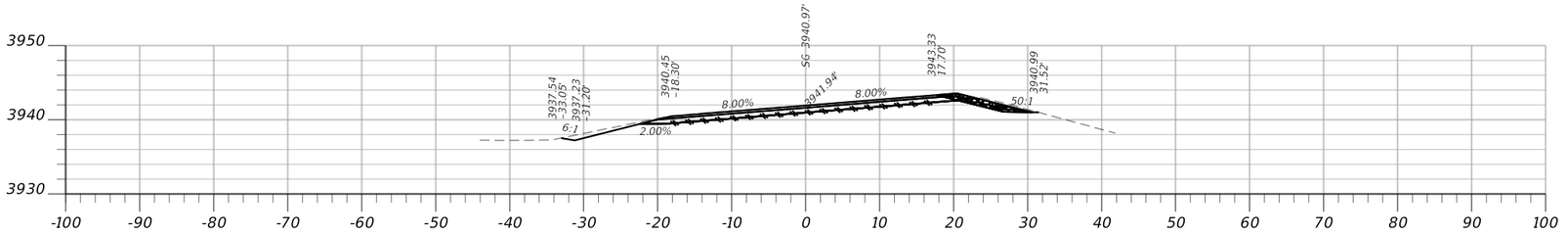


CV: 300 CY **Sta. 1058+50.00 R1** FV: 0 CY



CV: 46 CY **Sta. 1058+00.00 R1** FV: 0 CY

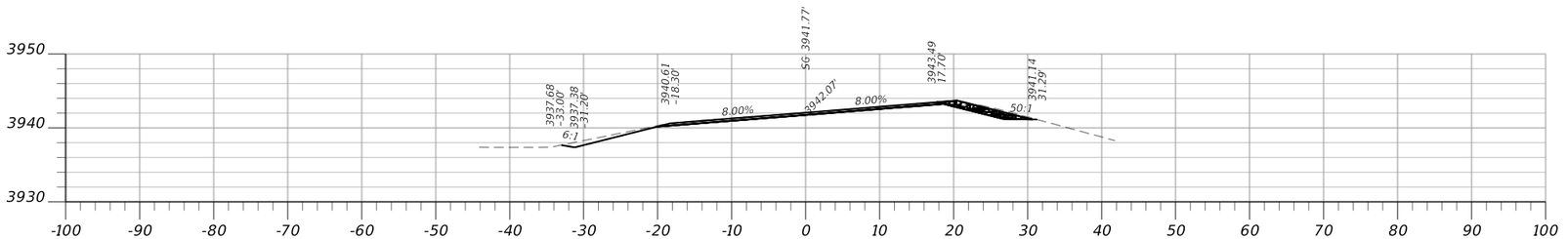
SPECIAL BORROW
1,918 CU. YD.



CV: 6 CY **Sta. 1057+88.00 R1** FV: 0 CY

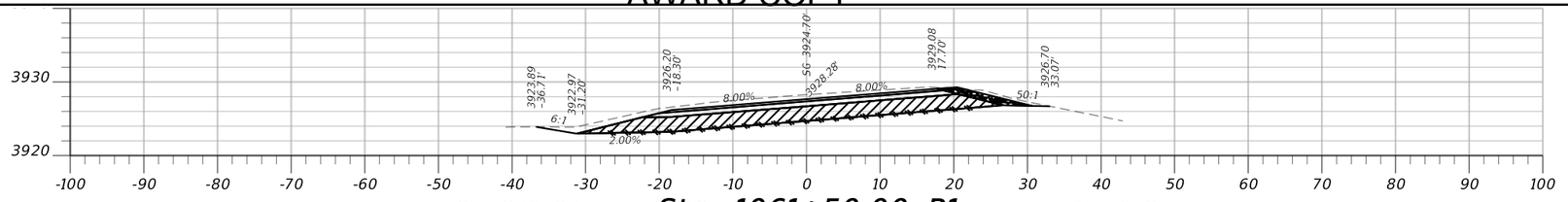
GEOTEXTILE
3,037 SQ. YD.

SHOULDER GRAVEL
178 CU. YD.

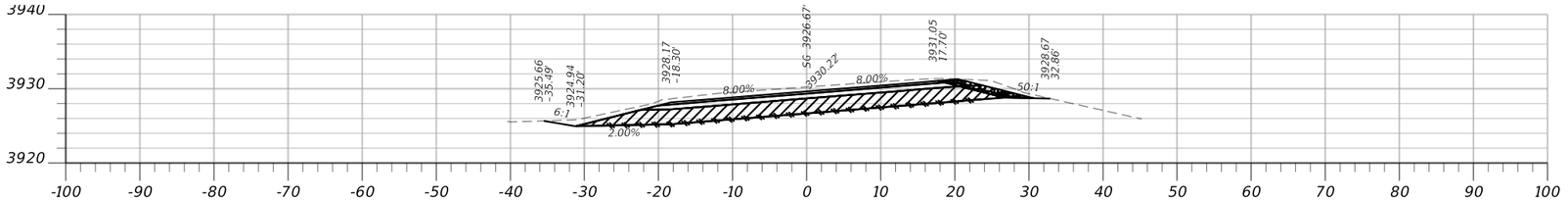


CV: 0 CY **Sta. 1057+84.10 R1** FV: 0 CY

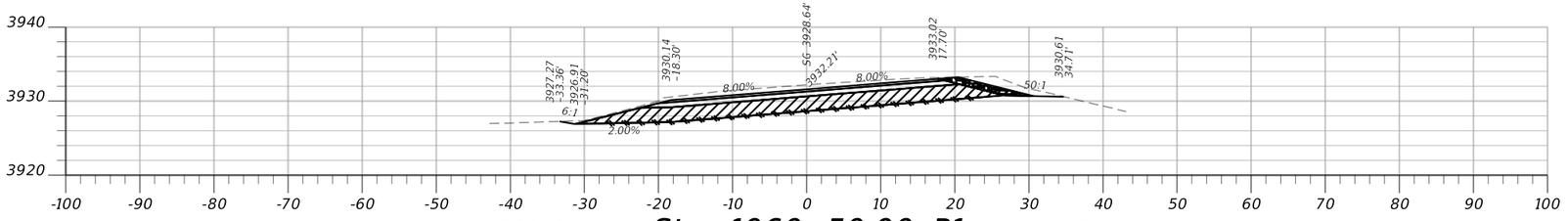
MONTANA Department of Transportation	C:\DGN\9964000rdlay001.dgn	DESIGNED BY B. HENDERSON 9/15/2022	MAINLINE CROSS SECTIONS		BELFRY - SOUTH	STPP 72-1(17)0
	10/5/2022	REVIEWED BY J. BROTZLER 9/15/2022				
	3:49:55 PM CPS - U6909	CHECKED BY J. FLEMING 9/15/2022	CARBON COUNTY		UPN 9964000	SHEET 1



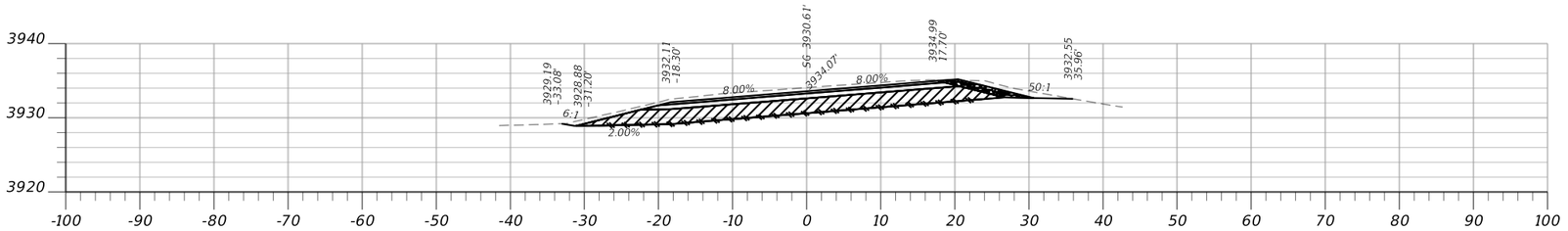
CV: 340 CY **Sta. 1061+50.00 R1** FV: 0 CY



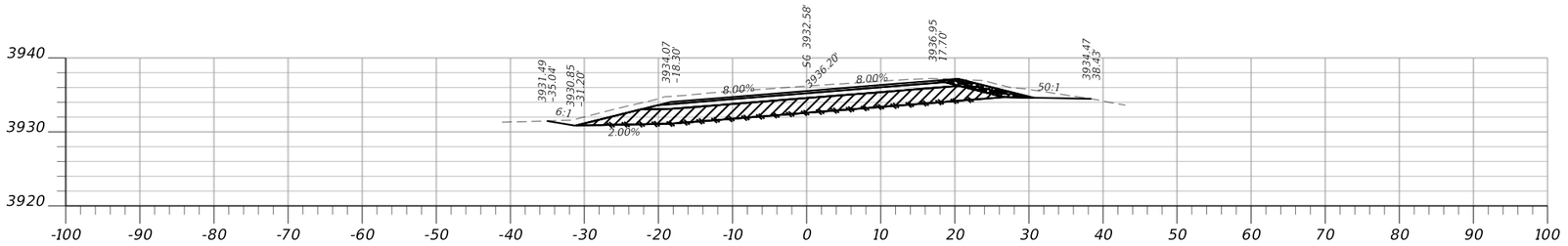
CV: 338 CY **Sta. 1061+00.00 R1** FV: 0 CY



CV: 333 CY **Sta. 1060+50.00 R1** FV: 0 CY

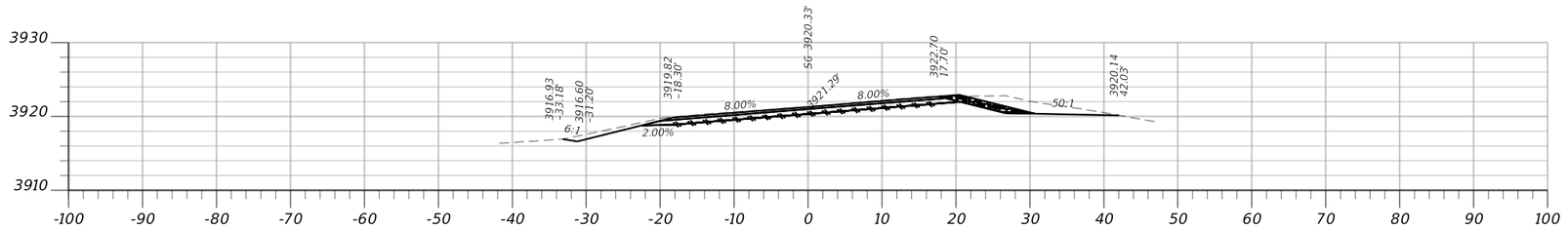


CV: 344 CY **Sta. 1060+00.00 R1** FV: 0 CY

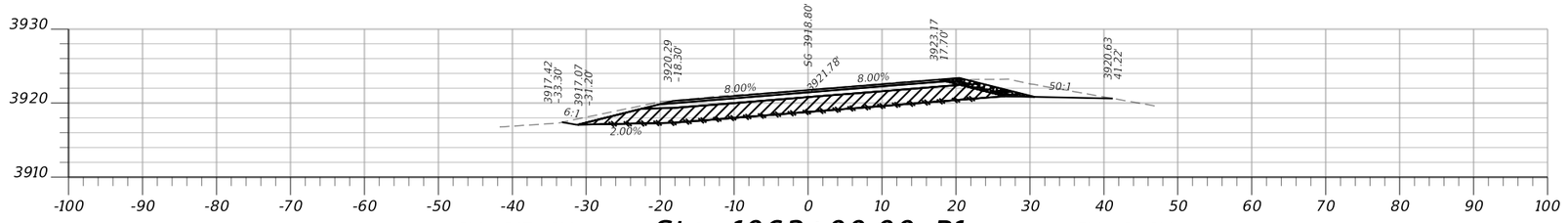


CV: 351 CY **Sta. 1059+50.00 R1** FV: 0 CY

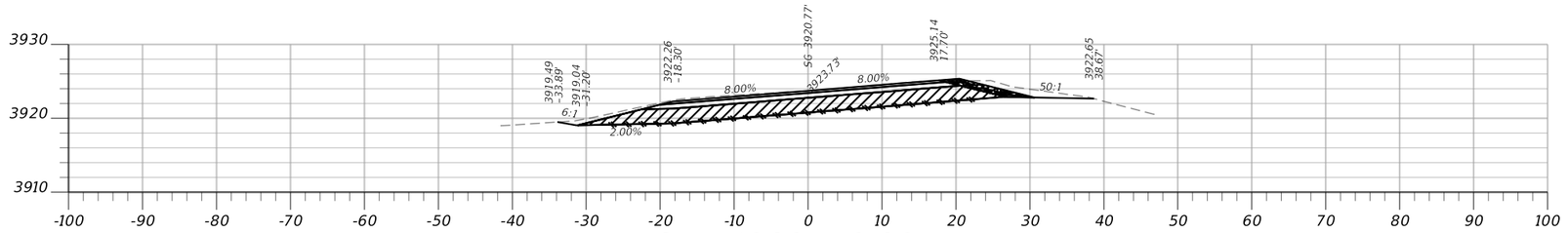
MONTANA Department of Transportation	C:\DGN\9964000rdlay001.dgn	DESIGNED BY	B. HENDERSON	9/15/2022	MAINLINE CROSS SECTIONS	BELFRY - SOUTH / STPP 72-1(17)0
	10/5/2022	REVIEWED BY	J. BROTZLER	9/15/2022		
	3:49:59 PM CPS - U6909	CHECKED BY	J. FLEMING	9/15/2022	CARBON COUNTY	UPN 9964000 / SHEET 2



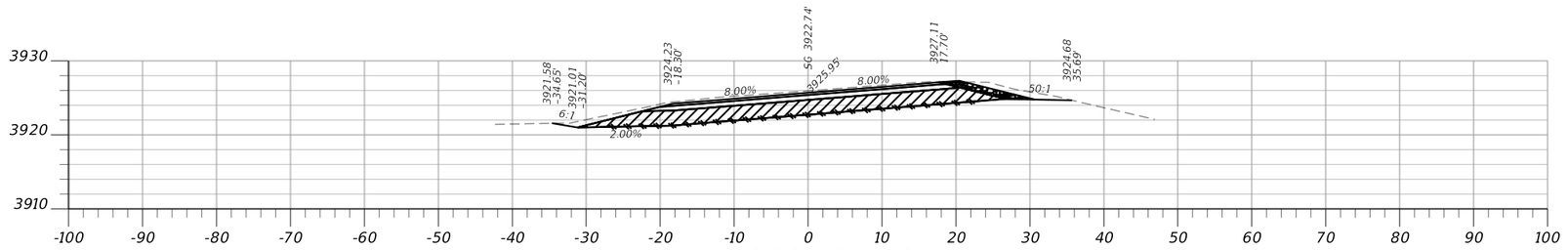
CV: 56 CY **Sta. 1063+12.00 R1** FV: 0 CY



CV: 317 CY **Sta. 1063+00.00 R1** FV: 0 CY



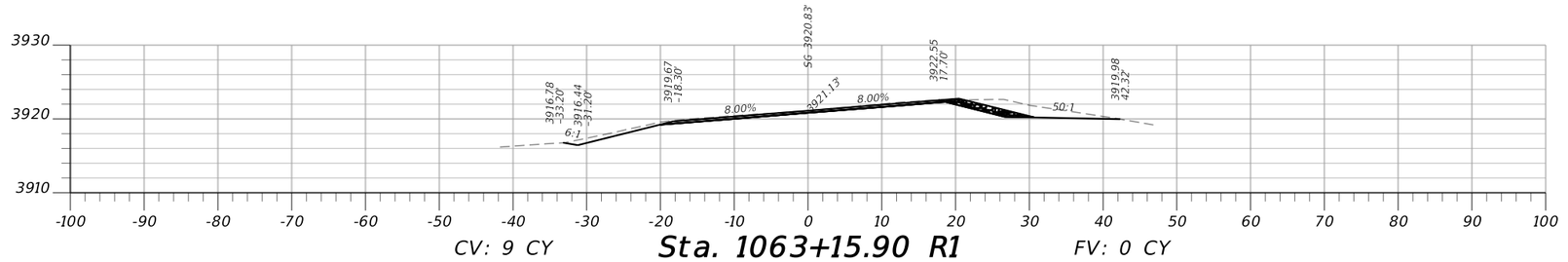
CV: 315 CY **Sta. 1062+50.00 R1** FV: 0 CY



CV: 329 CY **Sta. 1062+00.00 R1** FV: 0 CY

MONTANA Department of Transportation	C:\DGN\9964000rdlay001.dgn	DESIGNED BY B. HENDERSON 9/15/2022	MAINLINE CROSS SECTIONS	BELFRY - SOUTH	STPP 72-1(17)0
	10/5/2022	REVIEWED BY J. BROTZLER 9/15/2022			
	3:50:04 PM CPS - U6909	CHECKED BY J. FLEMING 9/15/2022	CARBON COUNTY	UPN 9964000	SHEET 3

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CV: 9 CY **Sta. 1063+15.90 R1** FV: 0 CY

MONTANA Department of Transportation	C:\DGN\9964000rdlay001.dgn	DESIGNED BY	B. HENDERSON	9/15/2022	MAINLINE CROSS SECTIONS	BELFRY - SOUTH	STPP 72-1(17)0
	10/5/2022	REVIEWED BY	J. BROTZLER	9/15/2022			
	3:50:08 PM CPS - U6905	CHECKED BY	J. FLEMING	9/15/2022	CARBON COUNTY	UPN 9964000	SHEET 4