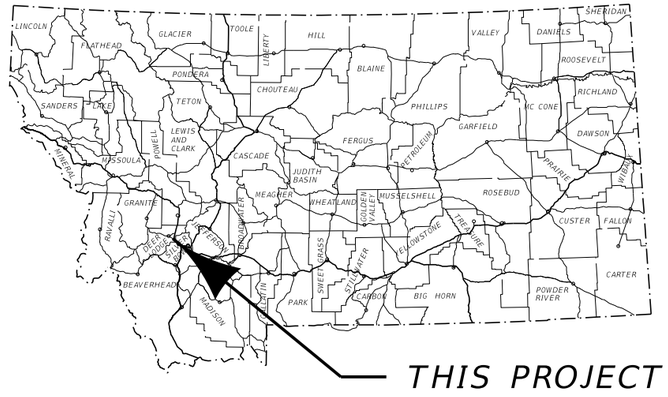
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MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT STPP 19-1(61)0
SEAL & COVER
JCT I-90 TO ANACONDA (MT-1)
DEER LODGE COUNTY

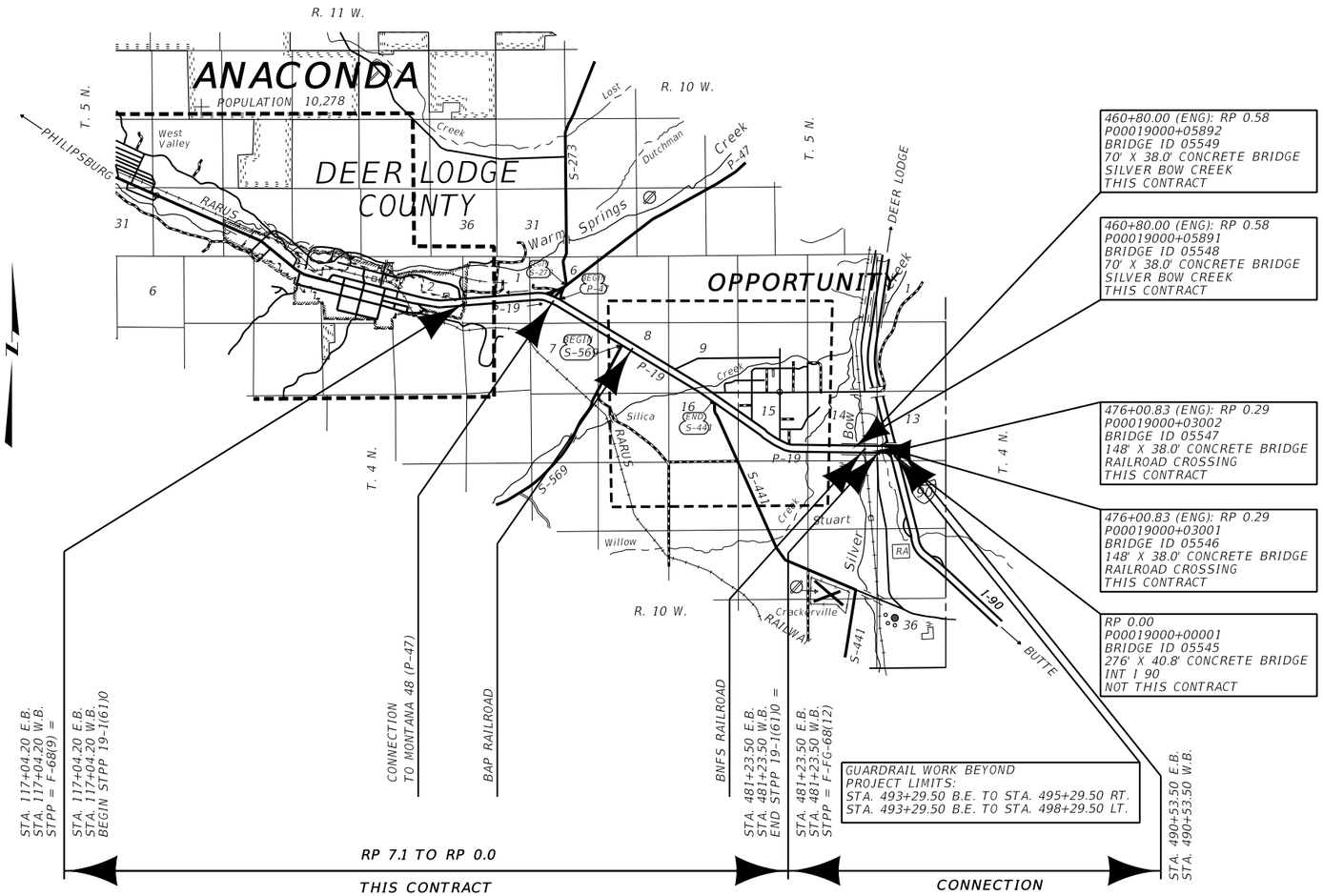
Design Data

PRESENT 2019	A.D.T. =	5,860
LETTING 2020	A.D.T. =	5,940
DESIGN 2040	A.D.T. =	7,690
	D.H.V. =	780
	TRUCKS =	6.9 %
	V. =	70 MPH
	18 KIP ESAL'S =	170 DAILY
	GROWTH RATE =	1.3 % ANNUALLY

LETTING DATE - _____

LENGTH 6.9 MILES

SURFACING SOURCES -
CONTRACTOR FURNISHED



3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	C:\DGN\9484000rdtl001.dgn	DESIGNED BY	J. BRAZILL	6/23/2020
2		8/24/2021	REVIEWED BY		
		1:49:14 PM CPS - U6561	CHECKED BY	TROY JOHNSON	6/10/2021

ROAD PLANS

UPN 9484000

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NOTES

BASIS OF PLAN QUANTITIES

(QUANTITIES FOR ESTIMATING PURPOSES ONLY)

BITUMINOUS MATERIAL	= 8.5 LBS. PER GAL.
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.

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.

STATIONING - REFERENCE POSTS

STATIONING ON THIS PROJECT RUNS FROM WEST TO EAST .
REFERENCE POSTS RUN FROM EAST TO WEST .

STATIONING

STATIONING USED IN PLANS WAS GENERATED BY A BEST FIT METHOD. IT IS NOT INTENDED TO BE EXACT, BUT REPRESENTS LOCATIONS WHERE WORK IS REQUIRED.

AS-BUILTS

F-68(9) 1962 CONSTRUCTION
STPP 1(19)1 1995 (0.15' MILL/FILL, 0.15' OVERLAY, S&C)
STPP 19-1(46)0 2011 - (0.10' MILL, 0.20' OVERLAY, S&C)
HSIP 19-1(44)7 2011 TURNBAYS (MP 7.0)

LINEAR DATA

EASTBOUND		
LENGTH OF ROADWAY	RURAL	36,201.30 ft
LENGTH OF BRIDGE	RURAL	218.00 ft
TOTAL LENGTH OF STPP 19-1(61)0	RURAL	36,419.30 ft
WESTBOUND		
LENGTH OF ROADWAY	RURAL	36,201.30 ft
LENGTH OF BRIDGE	RURAL	218.00 ft
TOTAL LENGTH OF STPP 19-1(61)0	RURAL	36,419.30 ft

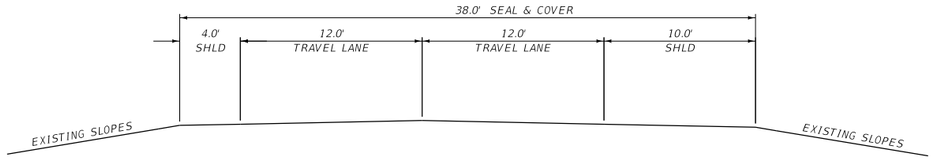
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TYPICAL SECTION NO. 1

MAINLINE (EASTBOUND)

STA. 117+04.20	TO	STA. 120+00.00	
STA. 120+00.00	TO	STA. 123+62.00	TRANSITION FROM TYP. NO. 1 TO TYP. NO. 2
STA. 128+97.00	TO	STA. 190+98.00	
STA. 190+98.00	TO	STA. 193+23.00	TRANSITION FROM TYP. NO. 1 TO TYP. NO. 2
STA. 203+55.00	TO	STA. 330+63.00	
STA. 330+63.00	TO	STA. 333+13.00	TRANSITION FROM TYP. NO. 1 TO TYP. NO. 2
STA. 347+20.00			
STA. 460+45.00 BE	TO	STA. 461+16.00 BE	
STA. 475+31.96 BE	TO	STA. 476+79.96 BE	
		STA. 477+50.00	
STA. 477+50.00	TO	STA. 480+12.21	TRANSITION FROM TYP. NO. 1 TO TYP. NO. 8

℄



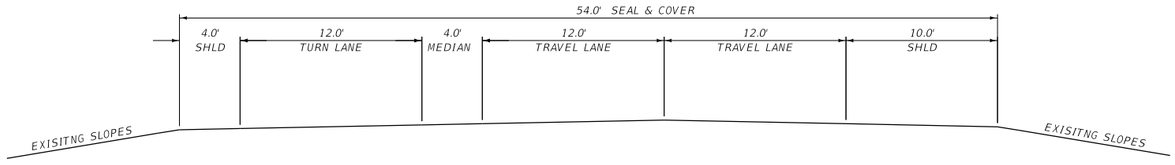
QUANTITIES									
UNIT	AGGREGATE					UNIT	BITUMINOUS MATERIAL		
	COVER						SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	422					square yards PER STATION tons PER STATION gallons PER STATION	422 0.75		

TYPICAL SECTION NO. 2

MAINLINE (EASTBOUND)

STA. 123+62.00	TO	STA. 128+97.00	THEN TO TYP. NO. 1
STA. 193+23.00	TO	STA. 201+30.00	
STA. 201+30.00	TO	STA. 203+55.00	TRANSITION FROM TYP. NO. 2 TO TYP. NO. 1
STA. 333+13.00	TO	STA. 337+53.00	
STA. 337+53.00	TO	STA. 338+53.00	TRANSITION FROM TYP. NO. 2 TO TYP. NO. 3

℄



QUANTITIES									
UNIT	AGGREGATE					UNIT	BITUMINOUS MATERIAL		
	COVER						SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	600					square yards PER STATION tons PER STATION gallons PER STATION	600 1.07		

* INCLUDES BOTH SHOULDERS

3	MDT	MONTANA DEPARTMENT OF TRANSPORTATION	C:\DGN\9484000rdtyp001.dgn	DESIGNED BY J. BRAZILL	6/23/2020	ROAD PLANS	JCT I-90 TO ANACONDA (MT-1) / STPP 19-1(61)0
2			8/24/2021	REVIEWED BY			
			1:49:32 PM CPS - U6561	CHECKED BY TROY JOHNSON	6/10/2021	DEER LODGE COUNTY	UPN 9484000 / 3

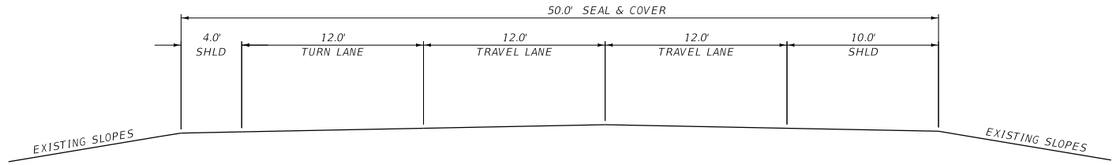
AWARD COPY

TYPICAL SECTION NO. 3

MAINLINE (EASTBOUND)

STA. 338+53.00 TO STA. 338+98.00 THEN TO TYP. NO. 4

℄



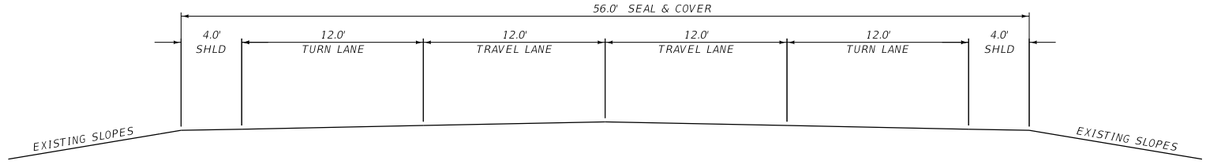
QUANTITIES									
UNIT	AGGREGATE					UNIT	BITUMINOUS MATERIAL		
	COVER						SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	556					square yards PER STATION tons PER STATION gallons PER STATION	556 0.99		

TYPICAL SECTION NO. 4

MAINLINE (EASTBOUND)

STA. 338+98.00 TO STA. 345+70.00
STA. 345+70.00 TO STA. 347+20.00 TRANSITION FROM TYP. NO. 4 TO TYP. NO. 1

℄



QUANTITIES									
UNIT	AGGREGATE					UNIT	BITUMINOUS MATERIAL		
	COVER						SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	622					square yards PER STATION tons PER STATION gallons PER STATION	622 1.11		

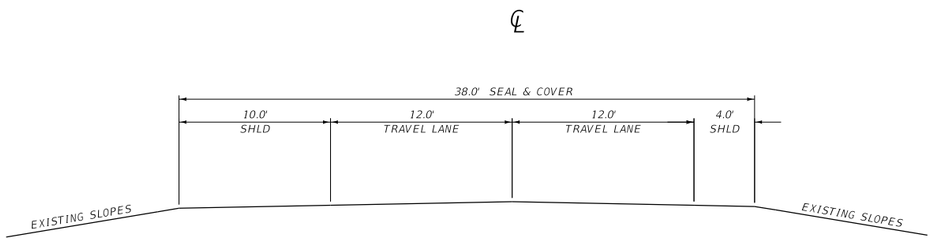
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TYPICAL SECTION NO. 5

MAINLINE (WESTBOUND)

STA. 117+04.20 TO STA. 194+00.00
STA. 194+00.00 TO STA. 196+20.00 TRANSITION FROM TYP. NO. 5 TO TYP. NO. 6
STA. 206+60.00 TO STA. 341+50.00 THEN TO TYP. NO. 6
STA. 346+50.00 TO STA. 451+75.00 THEN TO TYP. NO. 7
STA. 457+25.00
STA. 460+45.00 BE TO STA. 461+16.00 BE
STA. 475+26.83 BE TO STA. 476+74.83 BE
STA. 481+23.50

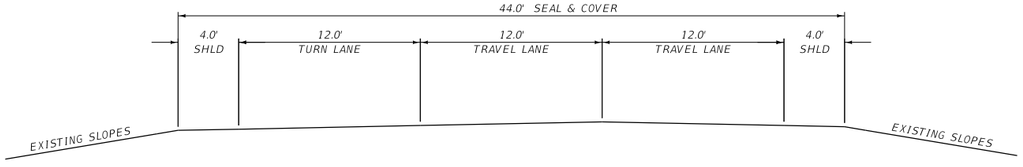


QUANTITIES									
UNIT	AGGREGATE					UNIT	BITUMINOUS MATERIAL		
	COVER						SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	422					square yards PER STATION tons PER STATION gallons PER STATION	422 0.75		

TYPICAL SECTION NO. 6

MAINLINE (WESTBOUND)

STA. 196+20.00 TO STA. 205+10.00
STA. 205+10.00 TO STA. 206+60.00 TRANSITION FROM TYP. NO. 6 TO TYP. NO. 5
STA. 341+50.00 TO STA. 345+50.00
STA. 345+50.00 TO STA. 346+50.00 TRANSITION FROM TYP. NO. 6 TO TYP. NO. 5
STA. 347+20.00 TO STA. 460+45.00 BE
STA. 461+16.00 BE TO STA. 475+31.96 BE



QUANTITIES									
UNIT	AGGREGATE					UNIT	BITUMINOUS MATERIAL		
	COVER						SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	489					square yards PER STATION tons PER STATION gallons PER STATION	489 0.87		

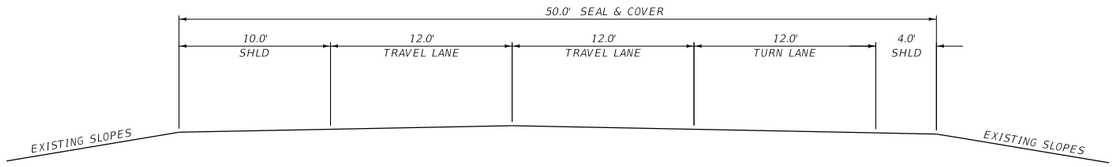
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TYPICAL SECTION NO. 7

MAINLINE (WESTBOUND)

STA. 451+75.00 TO STA. 454+75.00
STA. 454+75.00 TO STA. 457+25.00 TRANSITION FROM TYP. NO. 7 TO TYP. NO. 5



QUANTITIES									
UNIT	AGGREGATE					UNIT	BITUMINOUS MATERIAL		
	COVER						SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	556					square yards PER STATION tons PER STATION gallons PER STATION	556 0.99		

TYPICAL SECTION NO. 8

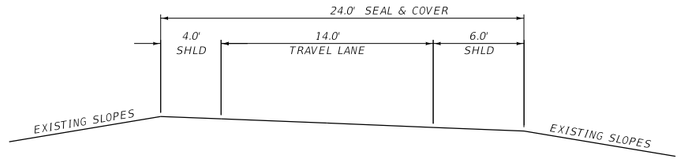
RAMP

EASTBOUND
STA. 480+12.21 TO STA. 481+23.50

RAMP "B1"
STA. 481+23.50 TO STA. 482+73.50

RAMP "B2"
STA. 481+23.50 TO STA. 486+73.50 THEN TO TYP. NO. 9

RAMP "B7"
STA. 482+73.50 TO STA. 486+73.50



QUANTITIES									
UNIT	AGGREGATE					UNIT	BITUMINOUS MATERIAL		
	COVER						SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	267					square yards PER STATION tons PER STATION gallons PER STATION	267 0.48		

3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	C:\DGN\9484000rdtyp002.dgn	DESIGNED BY J. BRAZILL	6/23/2020	ROAD PLANS	JCT I-90 TO ANACONDA (MT-1)	STPP 19-1(61)0
2		8/24/2021	REVIEWED BY				
		1:49:56 PM CPS - U6561	CHECKED BY TROY JOHNSON	6/10/2021	DEER LODGE COUNTY	UPN 9484000	6

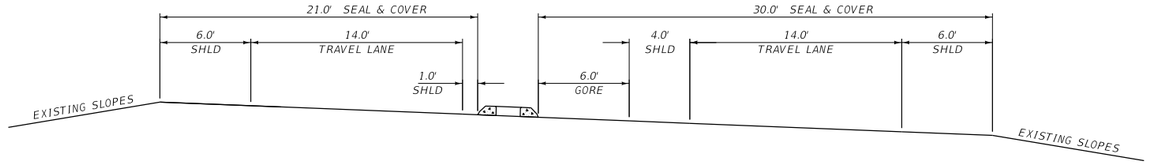
AWARD COPY

TYPICAL SECTION NO. 9

RAMP

RAMP " B2"
STA. 486+73.50 TYP. NO. 9 ONLY
STA. 486+73.50 TO STA. 490+53.50 TRANSITION FROM TYP. NO. 9 TO TYP. NO. 10

℄ RAMP B2 ℄ RAMP B7



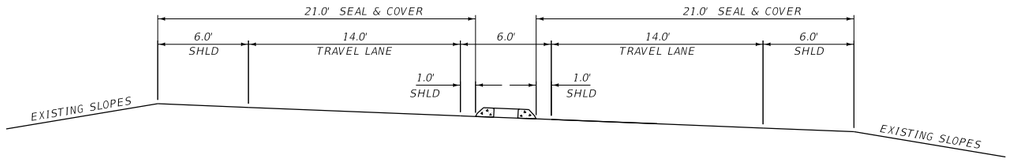
QUANTITIES									
UNIT	AGGREGATE					UNIT	BITUMINOUS MATERIAL		
	COVER						SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	567					square yards PER STATION tons PER STATION gallons PER STATION	567 1.01		

TYPICAL SECTION NO. 10

RAMP

RAMP " B2"
STA. 490+53.50 TYP. NO. 10 ONLY

℄ RAMP B2 ℄ RAMP B7



QUANTITIES									
UNIT	AGGREGATE					UNIT	BITUMINOUS MATERIAL		
	COVER						SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	467					square yards PER STATION tons PER STATION gallons PER STATION	467 0.84		

SUMMARY

SURFACING

STATION FROM	STATION TO	linear feet GROSS	linear feet NET	linear feet +	linear feet -	FOR	AGGREGATE square yards COVER TYPE 1	BITUMINOUS MATERIAL tons SEAL CHFRS-2P	REMARKS
EASTBOUND									
117+04.20	120+00.00	295.80	295.80				1,248	2.2	TYPICAL SECTION NO. 1
120+00.00	123+62.00	362.00	362.00				1,850	3.3	TRANSITION TYP. SECT. NO. 1 TO TYP. SECT. NO. 2
123+62.00	128+97.00	535.00	535.00				3,210	5.7	TYPICAL SECTION NO. 2 THEN TO TYP. SECT. NO. 1
128+97.00	190+98.00	6,201.00	6,201.00				26,168	46.5	TYPICAL SECTION NO. 1
190+98.00	193+23.00	225.00	225.00				1,150	2.0	TRANSITION TYP. SECT. NO. 1 TO TYP. SECT. NO. 2
193+23.00	201+30.00	807.00	807.00				4,842	8.6	TYPICAL SECTION NO. 2
201+30.00	203+55.00	225.00	225.00				1,150	2.0	TRANSITION TYP. SECT. NO. 2 TO TYP. SECT. NO. 1
203+55.00	330+63.00	12,708.00	12,708.00				53,628	95.3	TYPICAL SECTION NO. 1
330+63.00	333+13.00	250.00	250.00				1,278	2.3	TRANSITION TYP. SECT. NO. 1 TO TYP. SECT. NO. 2
333+13.00	337+53.00	440.00	440.00				2,640	4.7	TYPICAL SECTION NO. 2
337+53.00	338+53.00	100.00	100.00				578	1.0	TRANSITION TYP. SECT. NO. 2 TO TYP. SECT. NO. 3
338+53.00	338+98.00	45.00	45.00				250	0.4	TYPICAL SECTION NO. 3 THEN TO TYP. SECT. NO. 4
338+98.00	345+70.00	672.00	672.00				4,180	7.5	TYPICAL SECTION NO. 4
345+70.00	347+20.00	150.00	150.00				783	1.4	TRANSITION TYP. SECT. NO. 4 TO TYP. SECT. NO. 1
347+20.00									
460+45.00 BE	461+15.00 BE				70.00	BRIDGE			
475+31.96 BE	476+79.96 BE				148.00	BRIDGE			
	477+50.00	13,030.00	12,812.00				54,067	96.1	TYPICAL SECTION NO. 1
477+50.00	480+12.21	262.21	262.21				903	1.6	TRANSITION TYP. SECT. NO. 1 TO TYP. SECT. NO. 8
480+12.21	481+23.50	111.29	111.29				297	0.5	TYPICAL SECTION NO. 8
SUBTOTAL		36,419.30	36,201.30	~	218.00		158,222	281.1	
WESTBOUND									
117+04.20	194+00.00	7,695.80	7,695.80				32,476	57.7	TYPICAL SECTION NO. 5
194+00.00	196+20.00	220.00	220.00				1,002	1.8	TRANSITION TYP. SECT. NO. 5 TO TYP. SECT. NO. 6
196+20.00	205+10.00	890.00	890.00				4,352	7.7	TYPICAL SECTION NO. 6
205+10.00	206+60.00	150.00	150.00				683	1.2	TRANSITION TYP. SECT. NO. 6 TO TYP. SECT. NO. 5
206+60.00	341+50.00	13,490.00	13,490.00				56,928	101.2	TYPICAL SECTION NO. 5 THEN TO TYP. SECT. NO. 6
341+50.00	345+50.00	400.00	400.00				1,956	3.5	TYPICAL SECTION NO. 6
345+50.00	346+50.00	100.00	100.00				456	0.8	TRANSITION TYP. SECT. NO. 6 TO TYP. SECT. NO. 5
346+50.00	451+75.00	10,525.00	10,525.00				44,416	78.9	TYPICAL SECTION NO. 5 THEN TO TYP. SECT. NO. 7
451+75.00	454+75.00	300.00	300.00				1,668	3.0	TYPICAL SECTION NO. 7
454+75.00	457+25.00	250.00	250.00				1,223	2.2	TRANSITION TYP. SECT. NO. 7 TO TYP. SECT. NO. 5
457+25.00									
460+45.00 BE	461+15.00 BE				70.00	BRIDGE			
475+26.83 BE	476+74.83 BE				148.00	BRIDGE			
	481+23.50	2,398.50	2,180.50				9,202	16.4	TYPICAL SECTION NO. 5
SUBTOTAL		36,419.30	36,201.30	~	218.00		154,362	274.4	
						ADDITIONAL SURFACING	13,931	24.7	
TOTAL		~	~	~	~		326,515	580.2	

AWARD COPY

SUMMARY

ADDITIONAL SURFACING (INCLUDED IN SURFACING FRAME)

STATION FROM	STATION TO	linear feet GROSS	linear feet NET	linear feet +	linear feet -	FOR	AGGREGATE square yards COVER TYPE 1	BITUMINOUS MATERIAL tons SEAL CHFRS-2P	REMARKS
I-90 INTERCHANGE									
481+23.50	482+73.50	150.00	150.00				401	0.7	RAMP "B1" – TYPICAL SECTION NO. 8
481+23.50	483+65.50	242.00	242.00				1,021	1.8	RAMP "B2" – TYPICAL SECTION NO. 5
483+65.50	484+65.50	100.00	100.00				345	0.6	RAMP "B2" – TRANSITION TYP. SECT. NO. 5 TO TYP. SECT. NO. 8
481+23.50	486+73.50	550.00	550.00				1,469	2.6	RAMP "B2" – TYPICAL SECTION NO. 8 THEN TO TYPICAL SECTION NO. 9
486+73.50	490+53.50	380.00	380.00				1,965	3.5	RAMP "B2" AND "B7" – TRANSITION TYP. SECT. NO. 9 TO TYP. SECT. NO. 10
482+73.50	486+73.50	400.00	400.00				1,068	1.9	RAMP "B7" – TYPICAL SECTION NO. 8
	198+52.30						2,363	4.2	MT-48 INTERSECTION
	339+41.00						1,664	3.0	STEWART ST INTERSECTION
							245	0.4	MT-48 INTERSECTION MEDIAN TURN AROUND
							354	0.6	STEWART ST INTERSECTION MEDIAN TURN AROUND
							3,036	5.4	14 MEDIAN TURN AROUNDS
SUBTOTAL		~	~	~	~		13,931	24.7	

PAVEMENT MARKINGS

ITEM	UNIT	INTERIM APPLICATION #	FINAL APPLICATION	TOTAL
STRIPING – WHITE PAINT	gallon	311		311
STRIPING – YELLOW PAINT	gallon	248		248
WORDS & SYMBOLS – WHITE PAINT	gallon	66		66
STRIPING – WHITE EPOXY	gallon		414	414
STRIPING – YELLOW EPOXY	gallon		331	331
WORDS & SYMBOLS – WHITE EPOXY	gallon		86	86
CURB MARKING – YELLOW EPOXY	gallon		24	24
FINAL SWEEP AND BROOM	course mile			14.1

BASED ON 1 APPLICATION.

CURB

STATION FROM	STATION TO	linear feet CONCRETE CURB 4 in LEFT	linear feet CONCRETE CURB 4 in RIGHT	REMARKS
~	~	20.0	20.0	10' OF CURB PER BRIDGE CORNER BRIDGE ID 05548
~	~	20.0	20.0	10' OF CURB PER BRIDGE CORNER BRIDGE ID 05549
~	~	20.0	20.0	10' OF CURB PER BRIDGE CORNER BRIDGE ID 05546
~	~	20.0	20.0	10' OF CURB PER BRIDGE CORNER BRIDGE ID 05547
~	~	20.0	20.0	10' OF CURB PER BRIDGE CORNER BRIDGE ID 05545
SUBTOTAL		100.0	100.0	
TOTAL		200.0		

CONCRETE BARRIER RAIL

STATION FROM	STATION TO	each REMOVE CONCRETE BARRIER RAIL	REMARKS
EASTBOUND			
324+53.00	324+73.00	2	RT.
WESTBOUND			
324+51.50	324+71.50	2	LT.
TOTAL		4	

TEMPORARY BARRIER RAIL

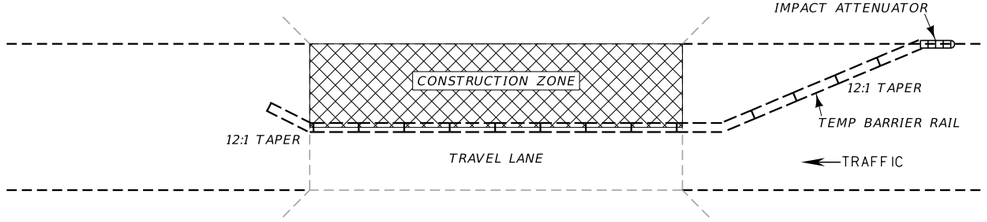
STATION FROM	STATION TO	linear feet TEMPORARY BARRIER RAIL	linear feet RESET TEMPORARY BARRIER RAIL	each TEMPORARY IMPACT ATTENUATOR	each RESET TEMPORARY IMPACT ATTENUATOR	REMARKS
EASTBOUND						
460+45.00	461+15.00	330		1		BRIDGE PHASE 1 – 17' MINIMUM TRAVEL LANE
475+31.96	476+79.96	420		1		BRIDGE PHASE 1 – 17' MINIMUM TRAVEL LANE
460+45.00	461+15.00		330		1	BRIDGE PHASE 2 – 17' MINIMUM TRAVEL LANE
475+31.96	476+79.96		420		1	BRIDGE PHASE 2 – 17' MINIMUM TRAVEL LANE
WESTBOUND						
460+45.00	461+15.00	330		1		BRIDGE PHASE 1 – 17' MINIMUM TRAVEL LANE
475+26.83	476+74.83	420		1		BRIDGE PHASE 1 – 17' MINIMUM TRAVEL LANE
460+45.00	461+15.00		330		1	BRIDGE PHASE 2 – 17' MINIMUM TRAVEL LANE
475+26.83	476+74.83		420		1	BRIDGE PHASE 2 – 17' MINIMUM TRAVEL LANE
TOTAL		1,500	1,500	4	4	

SUMMARY

GUARDRAIL

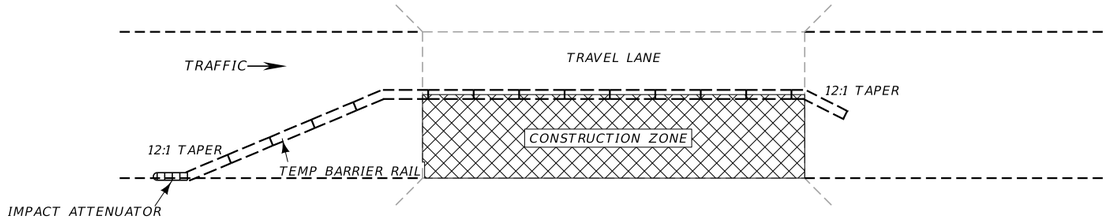
STATION		linear feet						each										REMARKS
		REMOVE GUARDRAIL		MGS GUARDRAIL		MGS LONG SPAN GUARDRAIL		MASH W-BEAM TERMINAL SECTION		GUARDRAIL END SECTION WIDENING		MGS ONE-WAY DEPARTURE TERMINAL SECTION		BRIDGE APPROACH SECTION TYPE 1		MASH THRIE-BEAM BRIDGE APPROACH SECTION		
FROM	TO	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	
EASTBOUND																		
272+04.58	273+29.58		125.0															
272+07.70	273+29.58				75.0				1		1		1					
321+90.50	324+53.00		262.5															
321+98.02	327+48.00				* 440.6		50.0		1		1				1			
324+73.00	327+48.00		275.0															
327+88.00	328+13.00		25.0															
327+88.00	328+28.63				* 28.1								1					
458+07.50	460+45.00 BE	237.5																
458+10.63	460+45.00 BE			162.5				1		1						1		
459+45.00	460+45.00 BE		100.0															
459+48.13	460+45.00 BE				25.0				1		1						1	
461+16.00 BE	461+41.00		25.0															
461+16.00 BE	461+66.00												1				1	
461+16.00 BE	461+66.00											1				1		
462+45.46	475+31.96 BE		1,300.0															
462+72.59	475+31.96 BE				1,187.5				1		1						1	
472+56.96	475+31.96 BE	275.0																
472+60.09	475+31.96 BE			200.0				1		1						1		
476+79.96 BE	477+54.96	75.0																
476+79.96 BE	477+54.96			50.0								1				1		
476+79.96 BE	481+29.96		450.0															
476+79.96 BE	481+29.96				425.0								1				1	
486+80.53	490+55.53 BE		375.0															
486+83.66	490+55.53 BE				300.0				1		1						1	
493+29.50 BE	495+29.50		200.0															
493+29.50 BE	495+29.50				175.0								1				1	
SUBTOTAL		587.5	3,137.5	412.5	2,656.2	~	50.0	2	5	2	5	2	5	~	1	4	6	
WESTBOUND																		
273+83.79	275+08.79	125.0																
273+83.79	274+93.06			62.5				1		1		1						
324+26.50	324+51.50	25.0																
324+12.13	325+34.00			25.0		50.0		1		1		1						
324+71.50	325+46.50	75.0																
327+21.50	327+46.50	25.0																
327+05.90	327+46.50			* 28.1								1						
327+86.50	330+49.00	262.5																
327+86.50	330+36.48			* 190.6				1		1				1				
459+95.00	460+45.00 BE											1				1		
460+20.00	460+45.00 BE	25.0																
461+16.00 BE	462+00.00		175.0															REMOVE 175' BULLNOSE
461+16.00 BE	461+87.88								1		1						1	
461+16.00 BE	475+26.83 BE	1,410.8																
461+16.00 BE	475+26.83 BE			# 1398.3												2		
476+74.83 BE	478+62.33		187.5															
476+74.83 BE	478+59.21				112.5				1		1						1	
476+74.83 BE	489+24.83	1,250.0																
476+74.83 BE	489+21.71			1,175.0				1		1						1		
486+03.50	490+53.50 BE	450.0																
486+03.50	490+53.50 BE			425.0								1				1		
493+29.50 BE	498+29.50	500.0																
493+29.50 BE	498+26.38			425.0				1		1						1		
SUBTOTAL		4,148.3	362.5	3,729.5	112.5	50.0	~	5	2	5	2	5	~	1	~	6	2	
TOTAL		8,235.8		6,910.7		100.0		14		14		12		2		18		

* INCLUDES MGS TO METAL GUARDRAIL TRANSTION
\# MAY REQUIRE CUTTING – FIELD VERIFY LENGTH



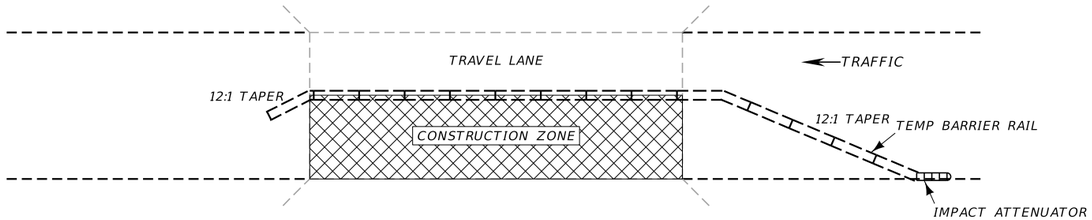
BRIDGE PHASE I CONSTRUCTION DIAGRAM
WESTBOUND

P00019000+03002 (05547)
P00019000+05892 (05549)



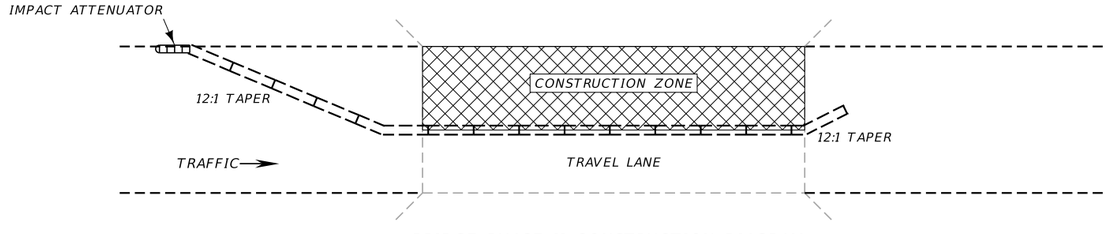
BRIDGE PHASE I CONSTRUCTION DIAGRAM
EASTBOUND

P00019000+03001 (05546)
P00019000+05891 (05548)



BRIDGE PHASE II CONSTRUCTION DIAGRAM
WESTBOUND

P00019000+03002 (05547)
P00019000+05892 (05549)



BRIDGE PHASE II CONSTRUCTION DIAGRAM
EASTBOUND

P00019000+03001 (05546)
P00019000+05891 (05548)

* SEE SPECIAL PROVISIONS

** SEE SUMMARY FRAME FOR BARRIER LENGTHS

*** SEE BRIDGE PLANS FOR LAYOUT

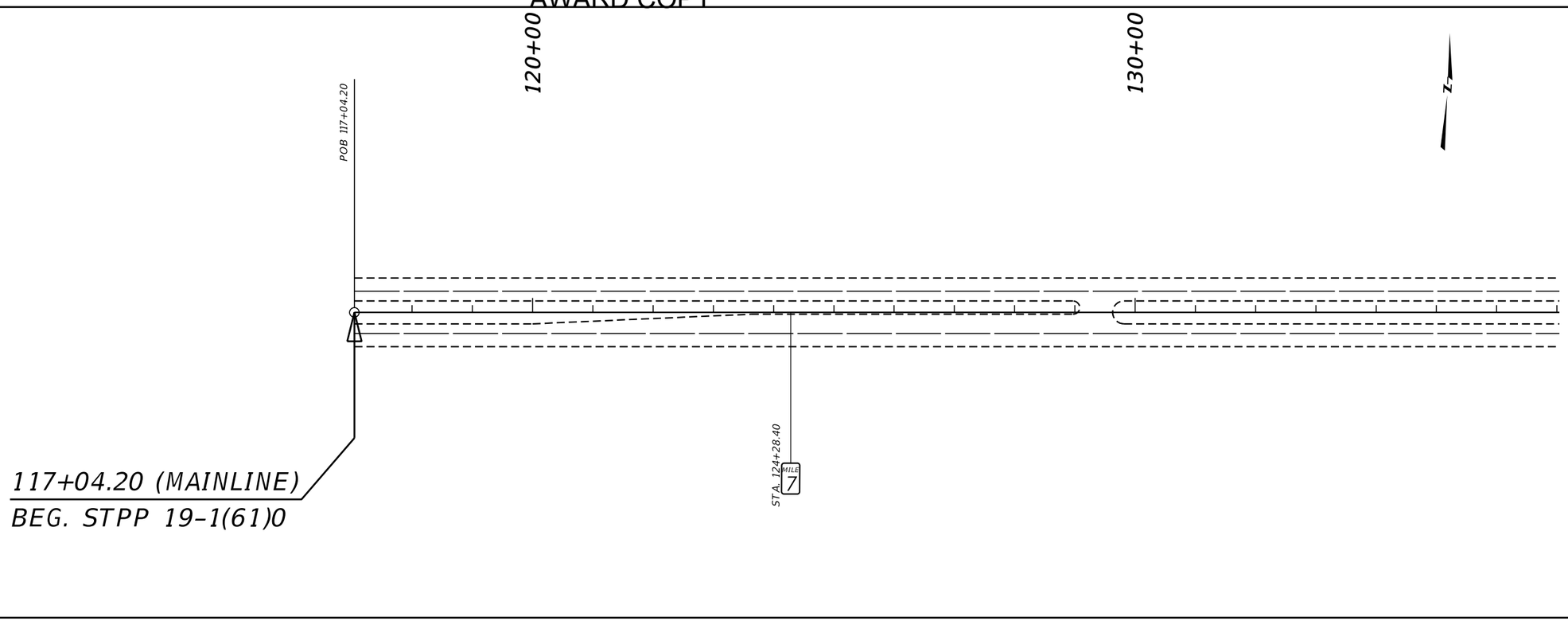
DETAIL

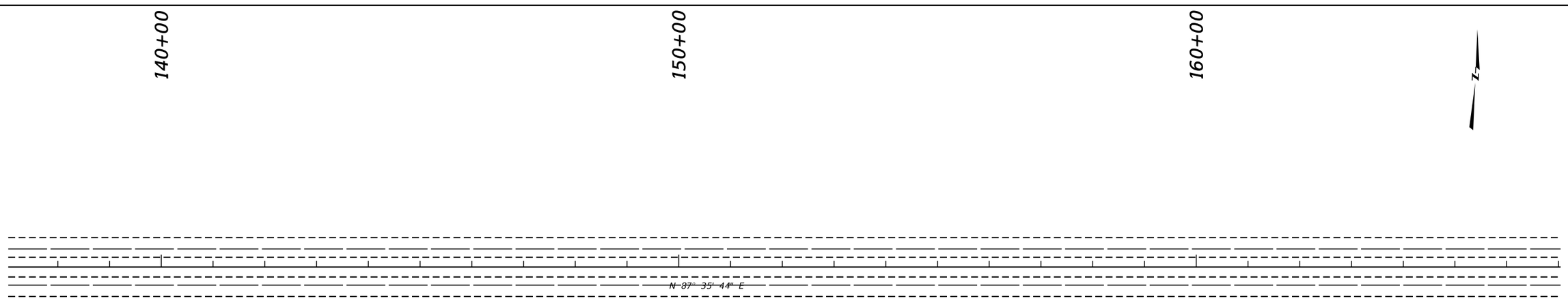
TEMPORARY BARRIER RAIL
FOR BRIDGE DECK REPAIR

NO SCALE

3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	C:\DGN\9484000rddet001.dgn	DESIGNED BY J. BRAZILL	9/9/2020	ROAD PLANS	JCT I-90 TO ANACONDA (MT-1)	STPP 19-1(61)0
2		8/24/2021	REVIEWED BY				
		1:50:50 PM CPS - U656.1	CHECKED BY TROY JOHNSON	6/10/2021	DEER LODGE COUNTY	UPN 9484000	11

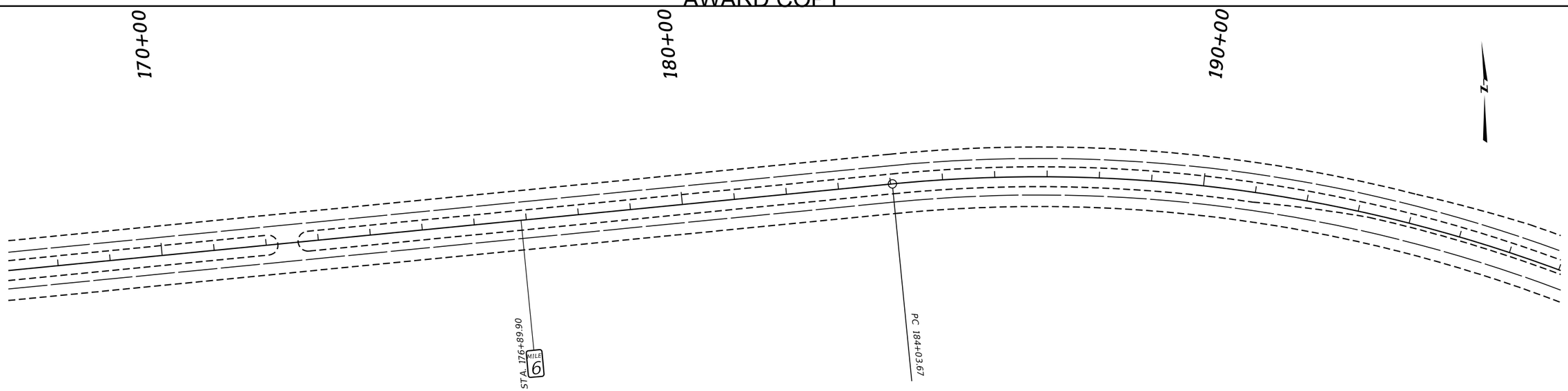
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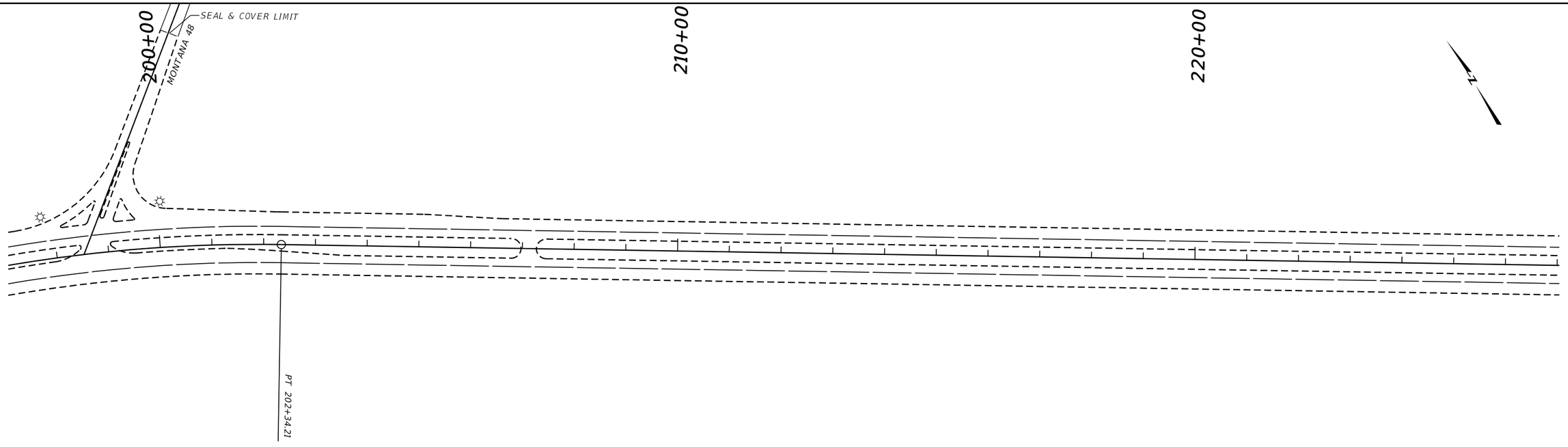




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2		8/24/2021	REVIEWED BY				
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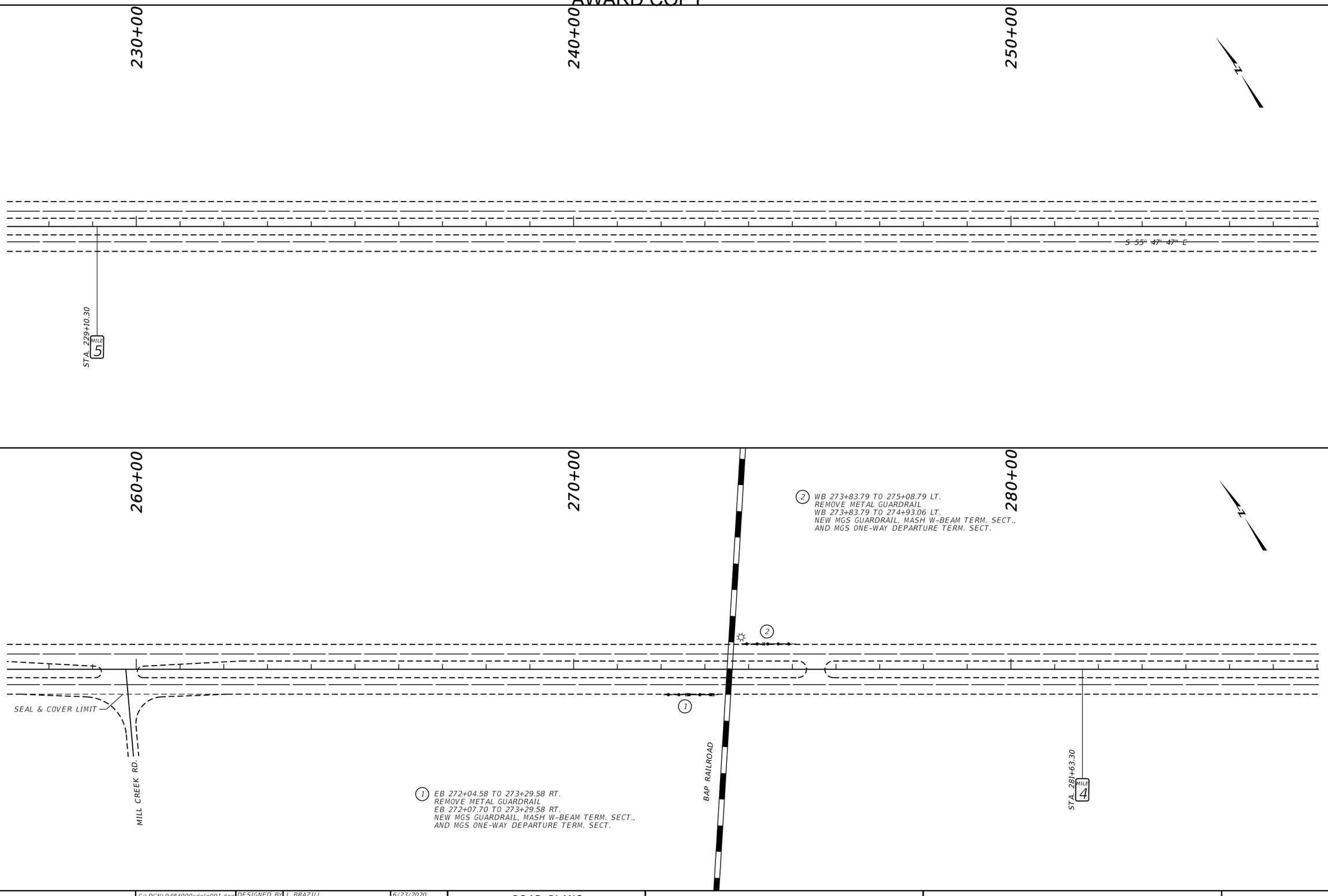
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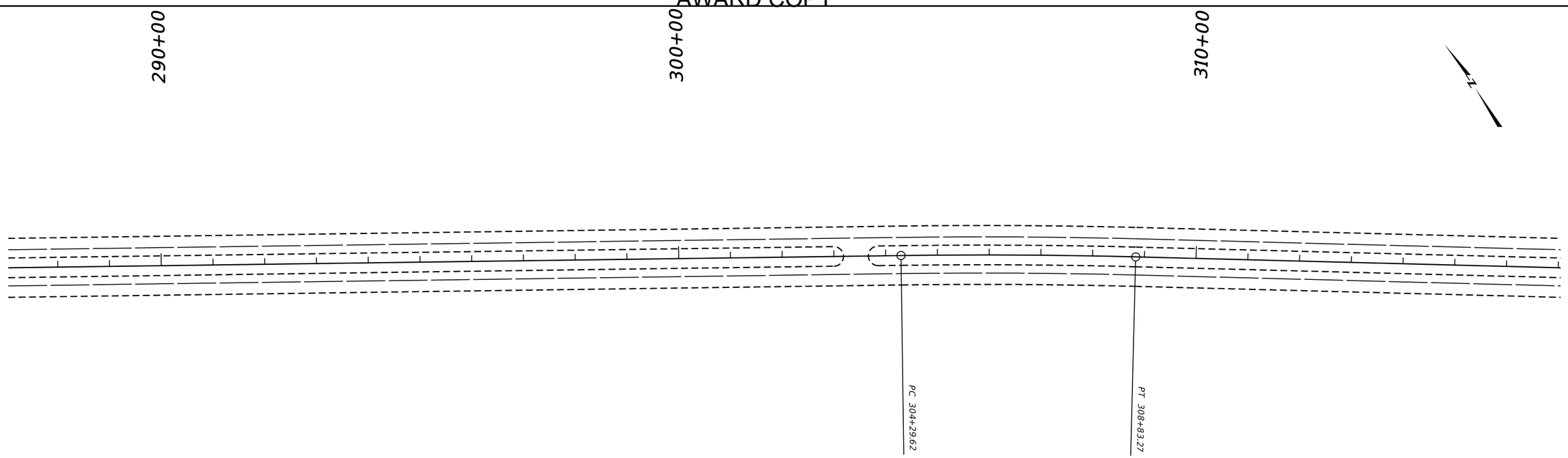
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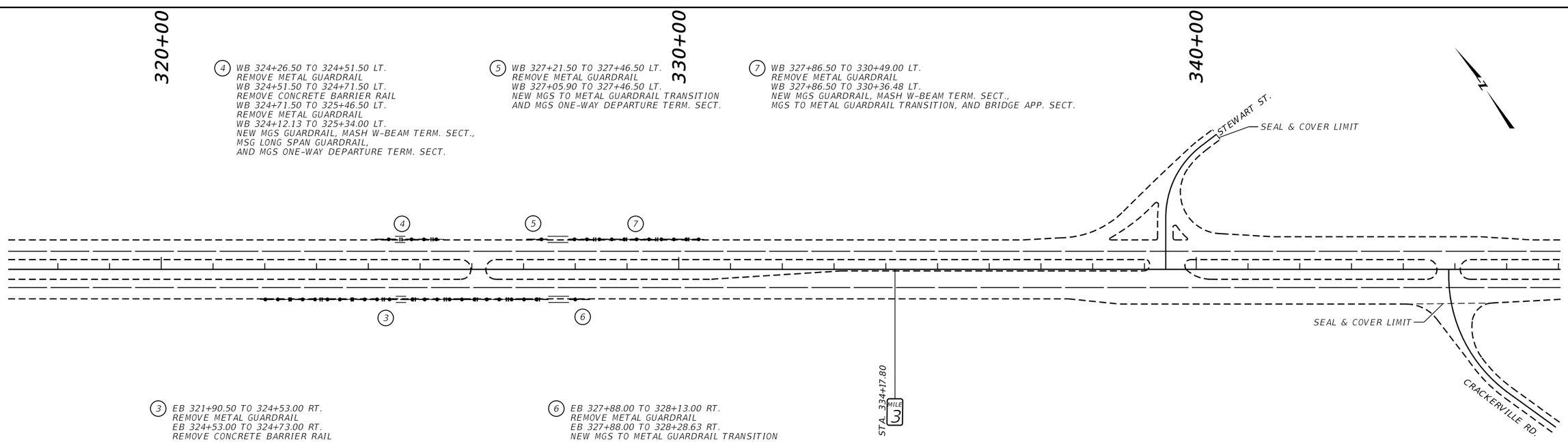
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1		8/24/2021	REVIEWED BY				
		1:51:09 PM CPS - U6561	CHECKED BY TROY JOHNSON	6/10/2021	DEER LODGE COUNTY	UPN 9484000	14

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(4) WB 324+26.50 TO 324+51.50 LT.
REMOVE METAL GUARDRAIL
WB 324+51.50 TO 324+71.50 LT.
REMOVE CONCRETE BARRIER RAIL
WB 324+71.50 TO 325+46.50 LT.
REMOVE METAL GUARDRAIL
WB 324+12.13 TO 325+34.00 LT.
NEW MGS GUARDRAIL, MASH W-BEAM TERM. SECT.,
MSG LONG SPAN GUARDRAIL,
AND MGS ONE-WAY DEPARTURE TERM. SECT.

(5) WB 327+21.50 TO 327+46.50 LT.
REMOVE METAL GUARDRAIL
WB 327+05.90 TO 327+46.50 LT.
NEW MGS TO METAL GUARDRAIL TRANSITION
AND MGS ONE-WAY DEPARTURE TERM. SECT.

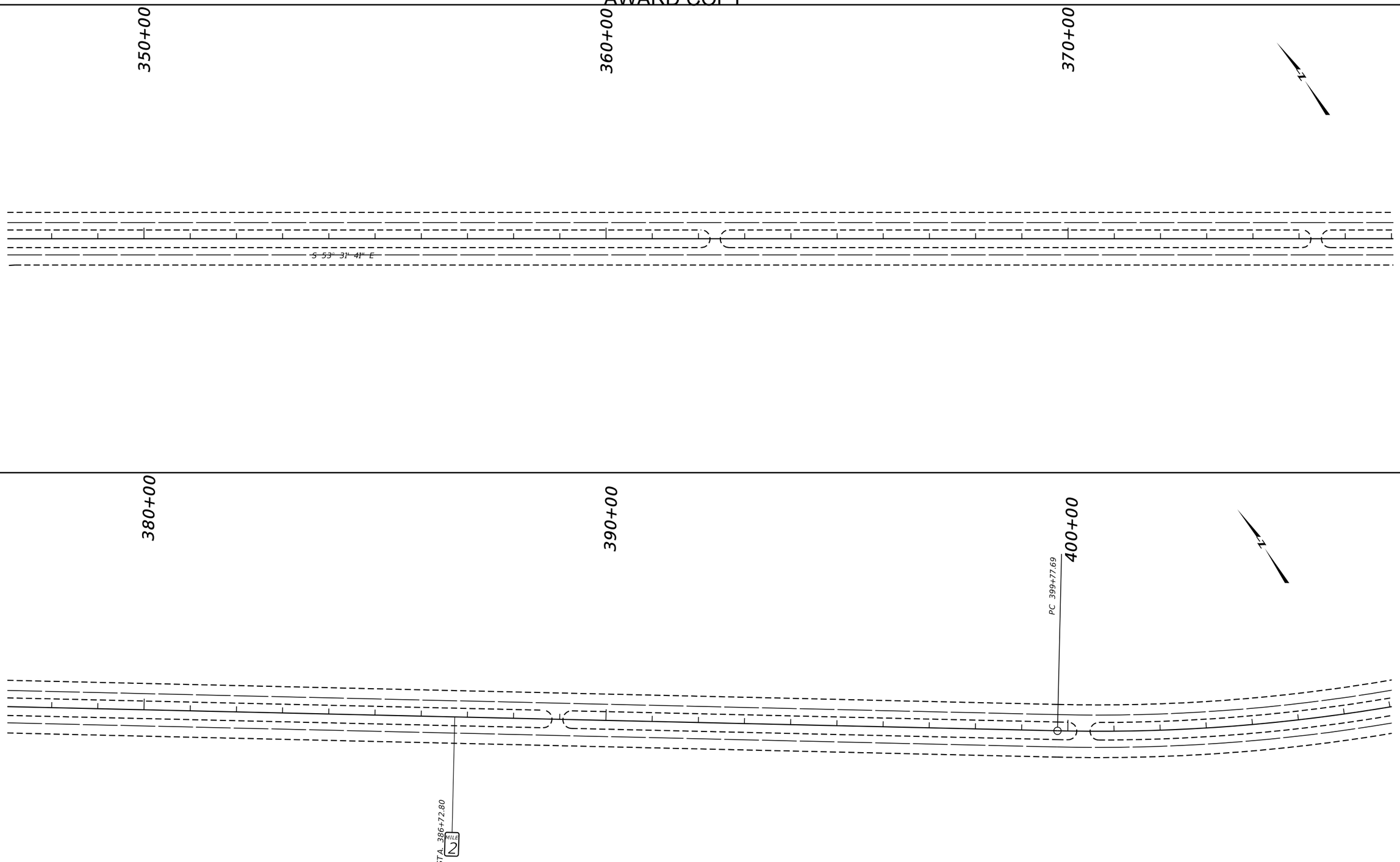
(7) WB 327+86.50 TO 330+49.00 LT.
REMOVE METAL GUARDRAIL
WB 327+86.50 TO 330+36.48 LT.
NEW MGS GUARDRAIL, MASH W-BEAM TERM. SECT.,
MGS TO METAL GUARDRAIL TRANSITION, AND BRIDGE APP. SECT.

(3) EB 321+90.50 TO 324+53.00 RT.
REMOVE METAL GUARDRAIL
EB 324+53.00 TO 324+73.00 RT.
REMOVE CONCRETE BARRIER RAIL
EB 324+73.00 TO 327+48.00 RT.
REMOVE METAL GUARDRAIL
EB 321+98.02 TO 327+48.00 RT.
NEW MGS GUARDRAIL, MASH W-BEAM TERM. SECT.,
MSG LONG SPAN GUARDRAIL,
MGS TO METAL GUARDRAIL TRANSITION, AND BRIDGE APP. SECT.

(6) EB 327+88.00 TO 328+13.00 RT.
REMOVE METAL GUARDRAIL
EB 327+88.00 TO 328+28.63 RT.
NEW MGS TO METAL GUARDRAIL TRANSITION
AND MGS ONE-WAY DEPARTURE TERM. SECT.

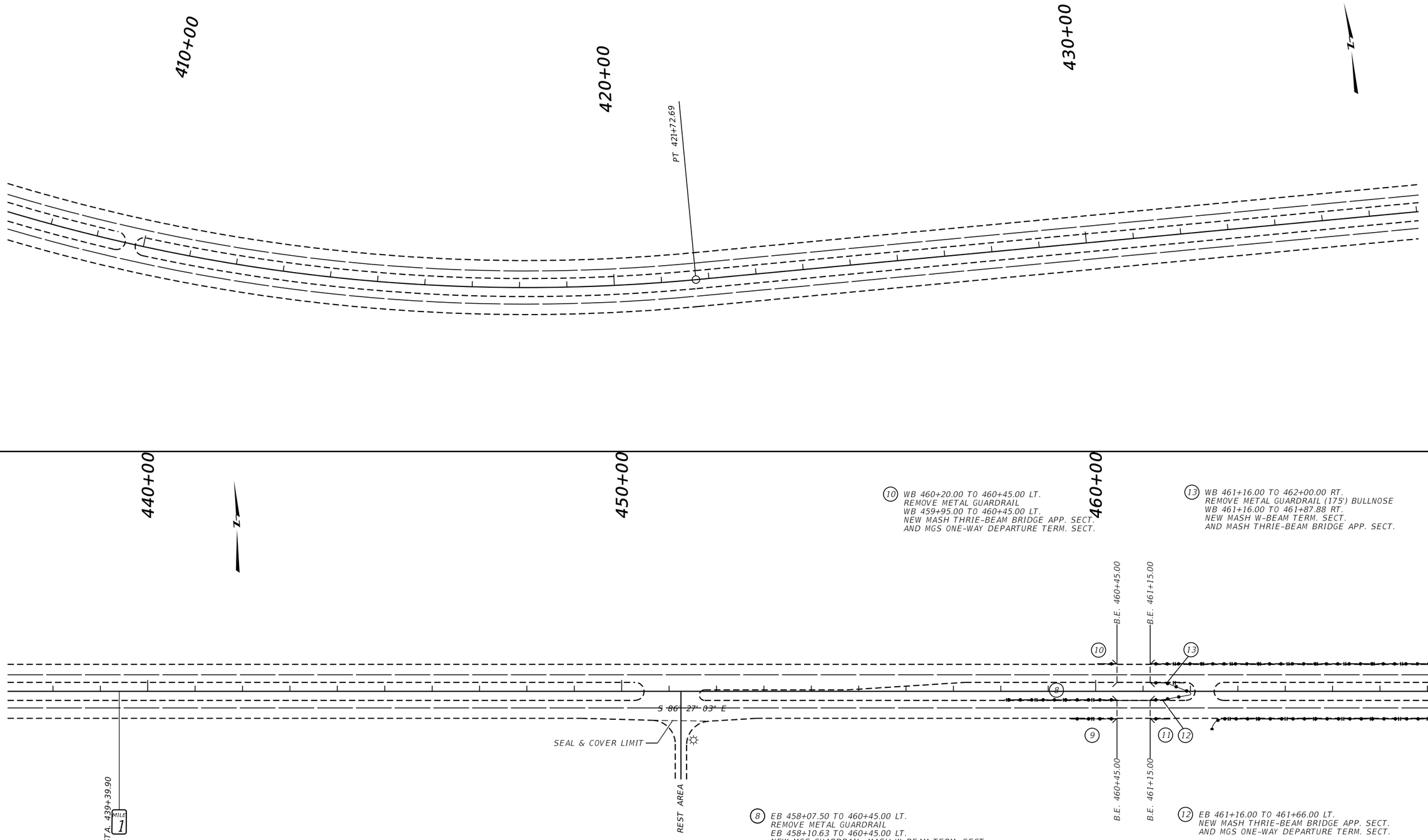
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2		8/24/2021	REVIEWED BY				
		1:51:20 PM CPS - U656.1	CHECKED BY TROY JOHNSON	6/10/2021	DEER LODGE COUNTY	UPN 9484000	15

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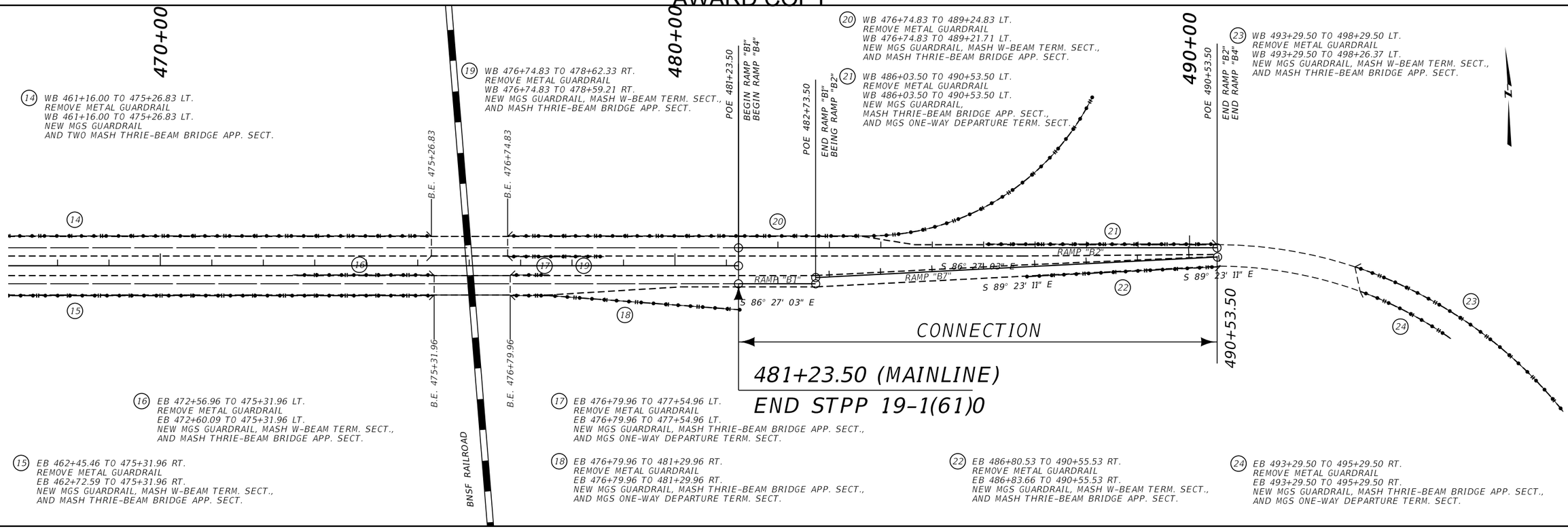
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2 / 1	MDT MONTANA DEPARTMENT OF TRANSPORTATION	C:\DGN\9484000rdplp002.dgn 8/24/2021 1:51:28 PM CPS - U656A	DESIGNED BY J. BRAZILL 6/23/2020 REVIEWED BY CHECKED BY TROY JOHNSON 6/10/2021	ROAD PLANS DEER LODGE COUNTY		JCT I-90 TO ANACONDA (MT-1) UPN 9484000	STPP 19-1(61)0 17

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(14) WB 461+16.00 TO 475+26.83 LT.
REMOVE METAL GUARDRAIL
WB 461+16.00 TO 475+26.83 LT.
NEW MGS GUARDRAIL
AND TWO MASH THRIE-BEAM BRIDGE APP. SECT.

(15) EB 462+45.46 TO 475+31.96 RT.
REMOVE METAL GUARDRAIL
EB 462+72.59 TO 475+31.96 RT.
NEW MGS GUARDRAIL, MASH W-BEAM TERM. SECT.,
AND MASH THRIE-BEAM BRIDGE APP. SECT.

(16) EB 472+56.96 TO 475+31.96 LT.
REMOVE METAL GUARDRAIL
EB 472+60.09 TO 475+31.96 LT.
NEW MGS GUARDRAIL, MASH W-BEAM TERM. SECT.,
AND MASH THRIE-BEAM BRIDGE APP. SECT.

(17) EB 476+79.96 TO 477+54.96 LT.
REMOVE METAL GUARDRAIL
EB 476+79.96 TO 477+54.96 LT.
NEW MGS GUARDRAIL, MASH THRIE-BEAM BRIDGE APP. SECT.,
AND MGS ONE-WAY DEPARTURE TERM. SECT.

(18) EB 476+79.96 TO 481+29.96 RT.
REMOVE METAL GUARDRAIL
EB 476+79.96 TO 481+29.96 RT.
NEW MGS GUARDRAIL, MASH THRIE-BEAM BRIDGE APP. SECT.,
AND MGS ONE-WAY DEPARTURE TERM. SECT.

(19) WB 476+74.83 TO 478+62.33 RT.
REMOVE METAL GUARDRAIL
WB 476+74.83 TO 478+59.21 RT.
NEW MGS GUARDRAIL, MASH W-BEAM TERM. SECT.,
AND MASH THRIE-BEAM BRIDGE APP. SECT.

(20) WB 476+74.83 TO 489+24.83 LT.
REMOVE METAL GUARDRAIL
WB 476+74.83 TO 489+21.71 LT.
NEW MGS GUARDRAIL, MASH W-BEAM TERM. SECT.,
AND MASH THRIE-BEAM BRIDGE APP. SECT.

(21) WB 486+03.50 TO 490+53.50 LT.
REMOVE METAL GUARDRAIL
WB 486+03.50 TO 490+53.50 LT.
NEW MGS GUARDRAIL,
MASH THRIE-BEAM BRIDGE APP. SECT.,
AND MGS ONE-WAY DEPARTURE TERM. SECT.

(22) EB 486+80.53 TO 490+55.53 RT.
REMOVE METAL GUARDRAIL
EB 486+83.66 TO 490+55.53 RT.
NEW MGS GUARDRAIL, MASH W-BEAM TERM. SECT.,
AND MASH THRIE-BEAM BRIDGE APP. SECT.

(23) WB 493+29.50 TO 498+29.50 LT.
REMOVE METAL GUARDRAIL
WB 493+29.50 TO 498+26.37 LT.
NEW MGS GUARDRAIL, MASH W-BEAM TERM. SECT.,
AND MASH THRIE-BEAM BRIDGE APP. SECT.

(24) EB 493+29.50 TO 495+29.50 RT.
REMOVE METAL GUARDRAIL
EB 493+29.50 TO 495+29.50 RT.
NEW MGS GUARDRAIL, MASH THRIE-BEAM BRIDGE APP. SECT.,
AND MGS ONE-WAY DEPARTURE TERM. SECT.

3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	C:\DGN\9484000rdplp003.dgn	DESIGNED BY	J. BRAZILL	6/23/2020	ROAD PLANS	JCT I-90 TO ANACONDA (MT-1)	STPP 19-1(61)0
2		8/24/2021	REVIEWED BY					
		1:51:39 PM CPS - U6561	CHECKED BY	TROY JOHNSON	6/10/2021	DEER LODGE COUNTY	UPN 9484000	18

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ASSOCIATED PROJECT AGREEMENT NUMBERS	
P.E.	STPP 19-1(60)0

MONTANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS AND QUANTITIES

FEDERAL AID PROJECT STPP 19-1(61)0

JCT - I90 TO ANACONDA

DEER LODGE COUNTY

BRIDGE IDENTIFICATION	
MDT STR ID	NBI NUMBER
05545	P00019000+00001
05546	P00019000+03001
05547	P00019000+03002
05548	P00019000+05891
05549	P00019000+05892

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

LIST OF DRAWINGS

Sheet Number	Dwg. No.	Sheet Title
B1	24295	LIST OF DRAWINGS AND ESTIMATED BRIDGE PLAN QUANTITES
B2	24296	GENERAL NOTES AND BRIDGE DECK REPAIR
B3	24297	REVISE CONCRETE BARRIER RAIL - BR
B4	24298	REVISE CONCRETE BARRIER RAIL DETAILS
B5	24299	BARRIER REINFORCING STEEL PLACEMENT DIAGRAM
B6	24300	REVISE BRIDGE RAIL END
B7	24301	CONSTRUCTION PHASE DIAGRAMS

ESTIMATED BRIDGE PLAN QUANTITIES

MDT I.D. STRUCTURE NUMBER	STRUCTURE NAME	GENERAL LAYOUT DRAWING NUMBER	PHASE NUMBER	BRIDGE DECK CRACK SEAL (YD^2)	REVISE CONCRETE BARRIER RAIL - BR (LN.FT.)	REVISE CONCRETE BARRIER END - BR (EACH)	CLASS A BRIDGE DECK REPAIR (YD^2)	CLASS B BRIDGE DECK REPAIR (YD^2)
05545	INT I-90	6265	PHASE I			2		
			PHASE II			2		
			TOTAL			4		
05546	RAILROAD CROSSING	6294	PHASE I	312.0	147.5		5.0	
			PHASE II	312.0	147.5		5.0	
			STRUCTURE TOTAL	624.0	295.0		10.0	
05547	RAILROAD CROSSING	6294	PHASE I	312.0	147.5		5.0	
			PHASE II	312.0	147.5		5.0	
			STRUCTURE TOTAL	624.0	295.0		10.0	
05548	SILVER BOW CREEK	6291	PHASE I	148.0	69.5		5.0	
			PHASE II	148.0	69.5		5.0	
			STRUCTURE TOTAL	296.0	139.0		10.0	
05549	SILVER BOW CREEK	6291	PHASE I	148.0	69.5		5.0	
			PHASE II	148.0	69.5		5.0	
			STRUCTURE TOTAL	296.0	139.0		10.0	
			PROJECT TOTAL	1840.0	868.0	4	40.0	5.0

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.

SHEET NO.
B1

LIST OF DRAWINGS AND ESTIMATED BRIDGE PLAN QUANTITES

REVISED	REVISED	REVISED	REVISED	CHECKED	DRAWN	DESIGNED	10-23-20	09-18-20	09-17-20
				J.E.S.	D.G.G.	D.M.P.			

9484000BRREH001.dwg \ 05H001

2/14/2022 2:12:02 PM

MONTANA DEPARTMENT OF TRANSPORTATION
BRIDGE BUREAU

UPN NUMBER
9484000

DRAWING NO.
24295

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, the minimum concrete cover measured from the face of the concrete to the face of any reinforcing steel is 2" except as noted below:

Bottom of Slab	1"
Top of Slab	2 $\frac{1}{2}$"
Bottom of Abutment Caps	3"
Concrete Barriers and Curbs	1 $\frac{1}{2}$"

Concrete cover to any tie bar is $\frac{1}{2}$" less than what is listed above.

Use new deformed type reinforcing steel meeting the requirements of AASHTO M 31 Grade 60. Include all costs associated with furnishing and placing new reinforcing steel in the unit price bid for Revise Concrete Barrier Rail – BR.

The suffix E denotes epoxy coated reinforcing steel.

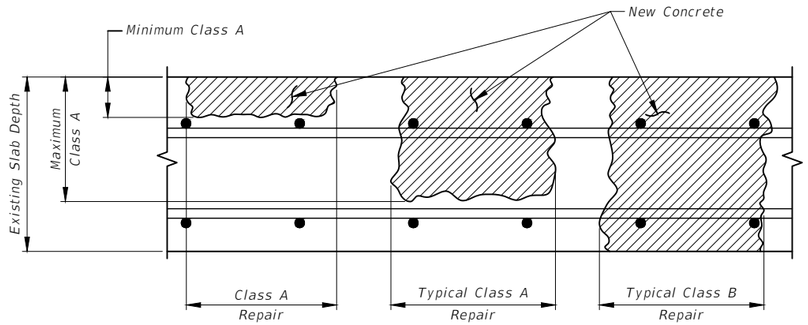
Bridge Deck Repair:

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.



BRIDGE DECK REPAIR

05546, 05547
05548, 05549

SHEET NO.
B2

GENERAL NOTES AND BRIDGE DECK REPAIR

SCALE: NO SCALE

PROJECT NAME
JCT - I90 TO ANACONDA

MDT STRUCTURE ID
05546, 05547, 05548, 05549, 05545

FEDERAL AID PROJECT
STPP 19-1(61)0

COUNTY
DEER LODGE

REVISED				10-23-20	
REVISED				09-18-20	
REVISED				09-17-20	
REVISED					
CHECKED	J.E.S.				
DRAWN	D.G.G.				
DESIGNED	D.M.P.				

9484000BRREH001.dwg \ SUM001

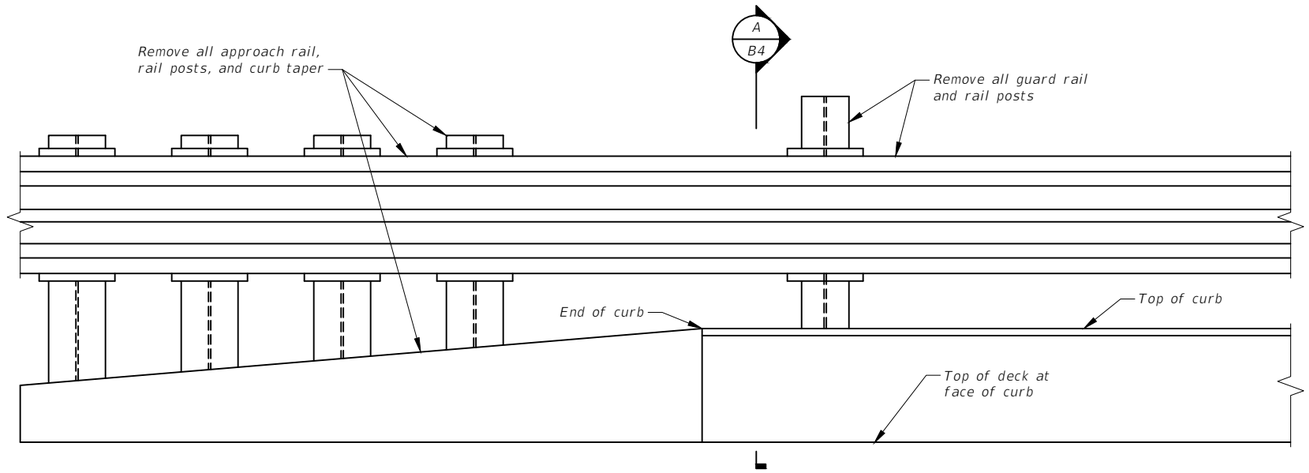
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BRIDGE BUREAU

UPN NUMBER
9484000

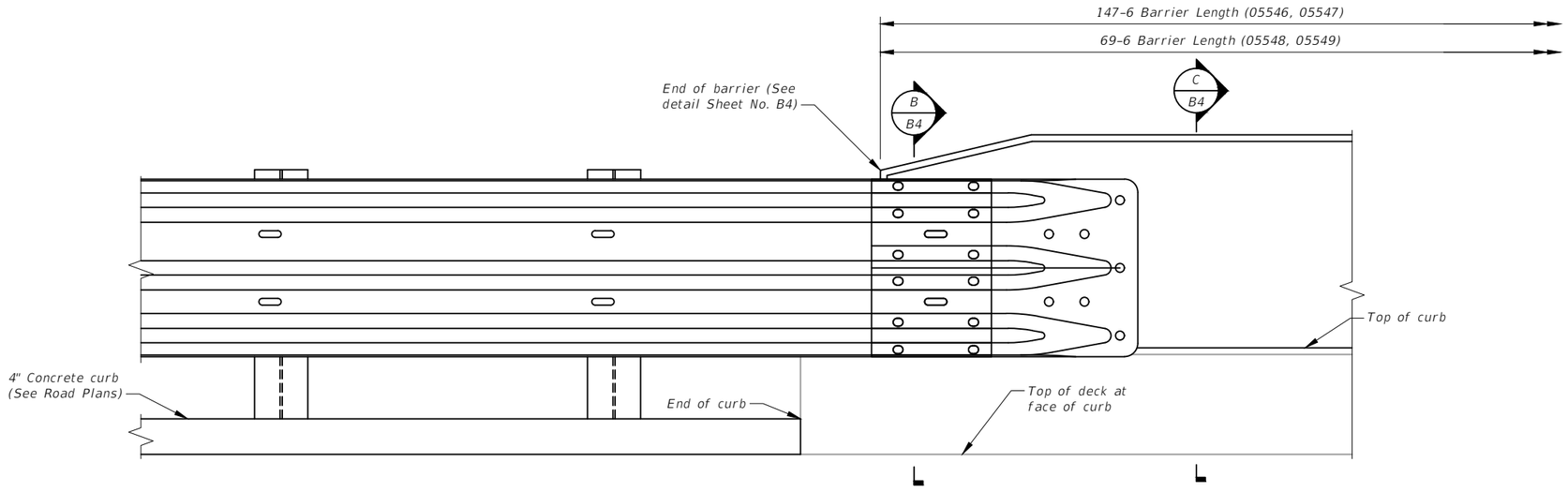
DRAWING NO.
24296

AWARD COPY



EXISTING PARTIAL ELEVATION

05546, 05547, 05548, 05549



NEW PARTIAL ELEVATION

05546, 05547, 05548, 05549

SHEET NO.
B3

REVISE CONCRETE BARRIER RAIL - BR

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

PROJECT NAME
JCT - I90 TO ANACONDA

MDT STRUCTURE ID
05546, 05547, 05548, 05549, 05545

FEDERAL AID PROJECT
STPP 19-1(61)0

COUNTY
DEER LODGE

REVISED	CHECKED	J.E.S.	10-23-20
REVISED	DRAWN	D.G.G.	09-18-20
REVISED	DESIGNED	D.M.P.	09-17-20
REVISED			

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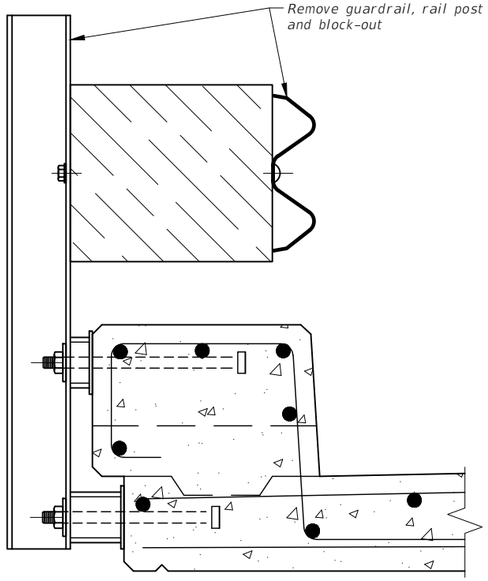
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MONTANA DEPARTMENT OF TRANSPORTATION
BRIDGE BUREAU

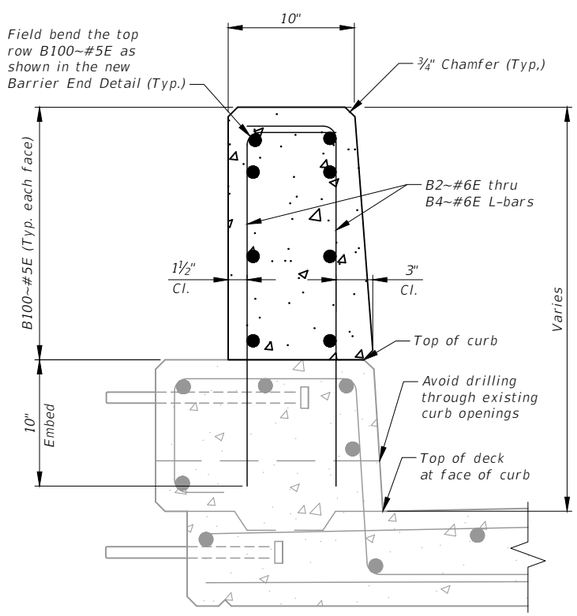
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DRAWING NO.
24297

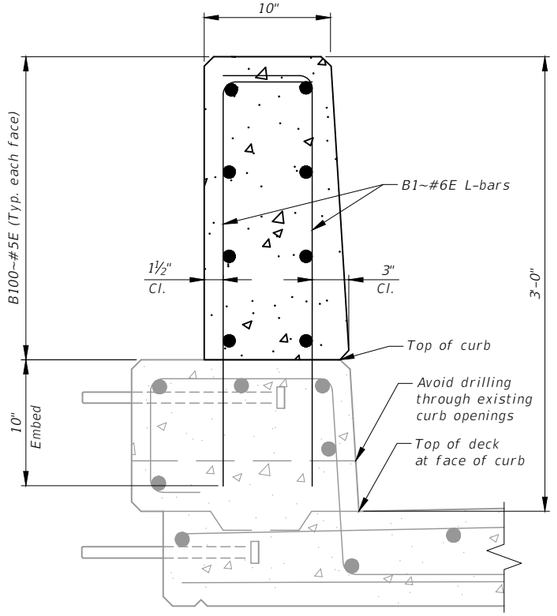
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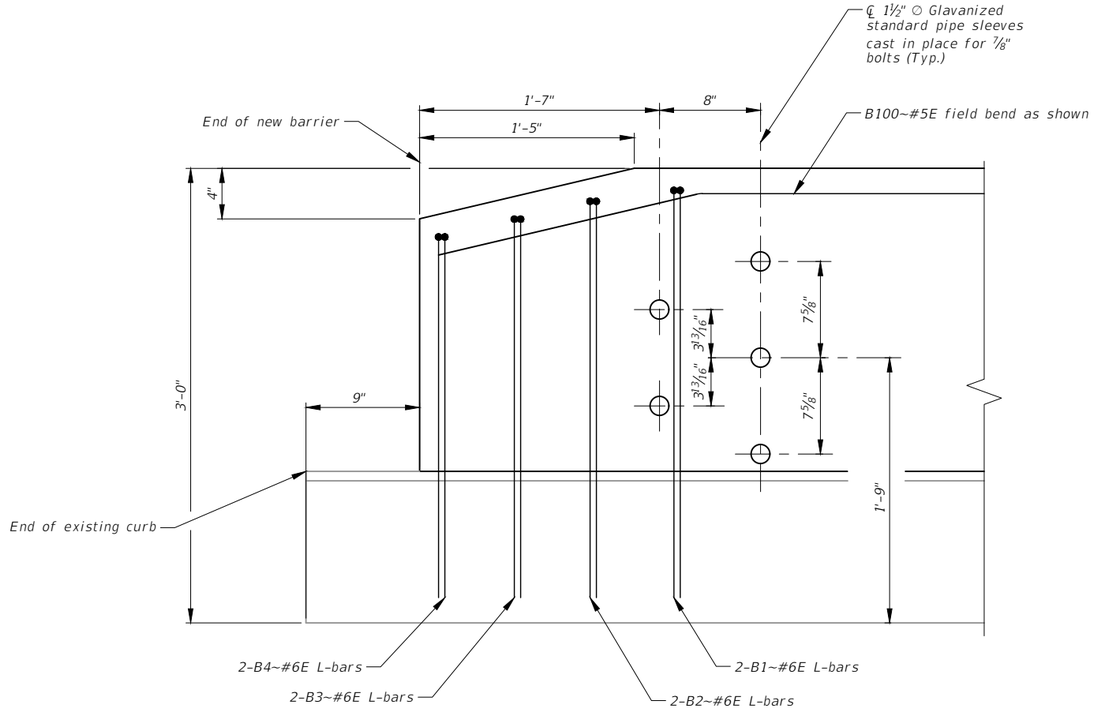
A / B3 EXISTING GUARDRAIL



B / B3 NEW BARRIER AT END OF CURB



C / B3 NEW BARRIER ON CURB



NEW BARRIER END

SHEET NO. B4

REVISE CONCRETE BARRIER RAIL DETAILS

SCALE:

PROJECT NAME
JCT - I90 TO ANACONDA

MDT STRUCTURE ID

FEDERAL AID PROJECT
STPP 19-1(61)0

COUNTY
DEER LODGE

REVISED				CHECKED	J.E.S.	10-23-20
REVISED				DRAWN	D.G.G.	09-18-20
REVISED				DESIGNED	D.M.P.	09-17-20
REVISED				9484000BRREH001.dwg \ REH002		

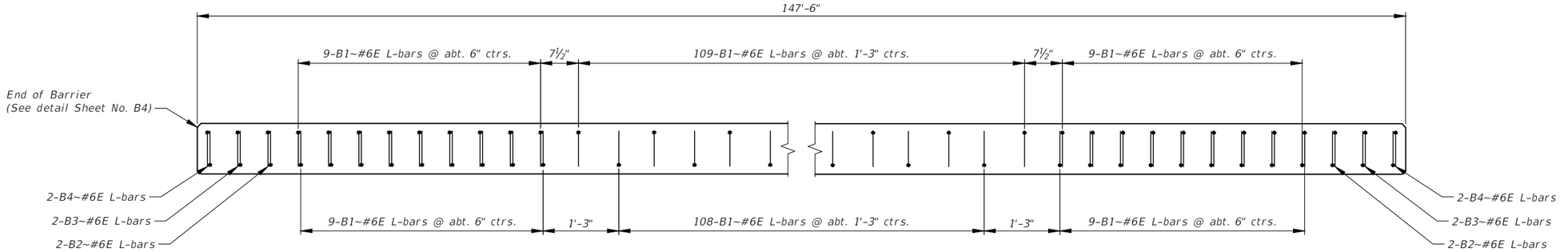
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MONTANA DEPARTMENT OF TRANSPORTATION BRIDGE BUREAU

UPN NUMBER
9484000

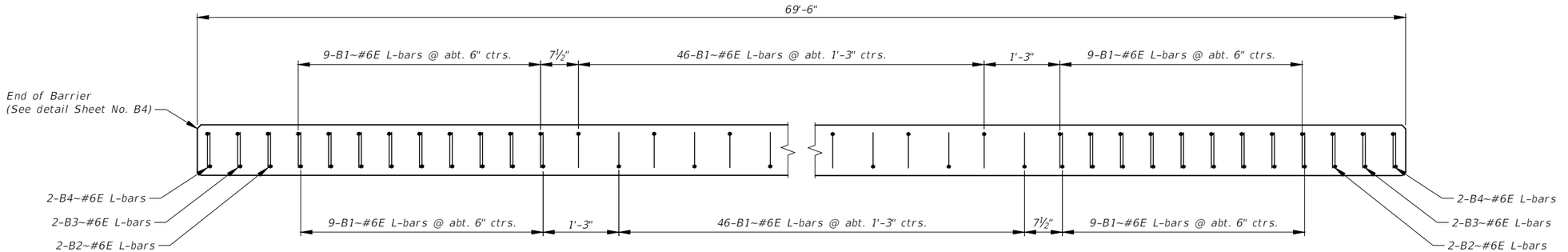
DRAWING NO.
24298

AWARD COPY



BARRIER REINFORCING STEEL PLACEMENT DIAGRAM

05546, 05547



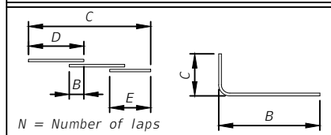
BARRIER REINFORCING STEEL PLACEMENT DIAGRAM

05548, 05549

BILL OF REINFORCING STEEL
05546, 05547

(ONE STRUCTURE ONLY)

(ALL DIMENSIONS ARE OUT TO OUT)

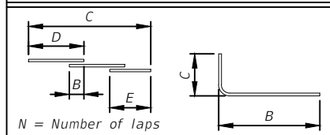


Mark	Size	No.	Type	Length	A	B	C	D	E	G	N
B100	#5E	16	27	153-2		3-0	147-2	60-0	33-2		2
B1	#6E	506	37	3-3½		2-8½	0-7				
B2	#6E	8	37	3-2½		2-7½	0-7				
B3	#6E	8	37	3-1		2-6	0-7				
B4	#6E	8	37	3-0		2-5	0-7				

BILL OF REINFORCING STEEL
05548, 05549

(ONE STRUCTURE ONLY)

(ALL DIMENSIONS ARE OUT TO OUT)



Mark	Size	No.	Type	Length	A	B	C	D	E	G	N
B100	#5E	16	27	72-2		3-0	69-2	60-0	12-2		1
B1	#6E	256	37	3-3½		2-8½	0-7				
B2	#6E	8	37	3-2½		2-7½	0-7				
B3	#6E	8	37	3-1		2-6	0-7				
B4	#6E	8	37	3-0		2-5	0-7				

SHEET NO.
B5

BARRIER REINFORCING STEEL PLACEMENT DIAGRAM

SCALE: No Scale

PROJECT NAME
JCT - I90 TO ANACONDA

MDT STRUCTURE ID
05546, 05547, 05548, 05549, 05545

FEDERAL AID PROJECT
STPP 19-1(61)0

COUNTY
DEER LODGE

REVISED			
REVISED			
REVISED			
REVISED			
CHECKED	J.E.S.	10-23-20	
DRAWN	D.G.G.	9-18-20	
DESIGNED	D.M.P.	9-17-20	

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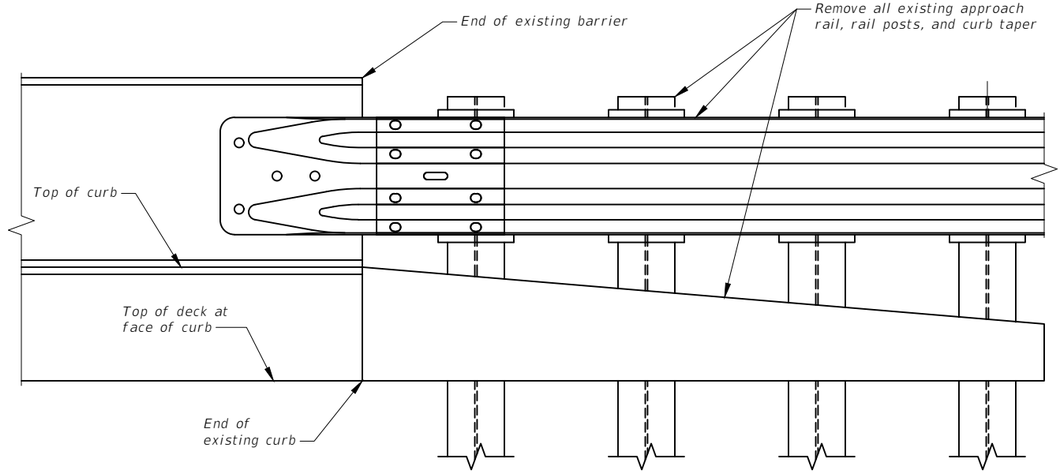
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MONTANA DEPARTMENT OF TRANSPORTATION
MDT
BRIDGE BUREAU

UPN NUMBER
9484000

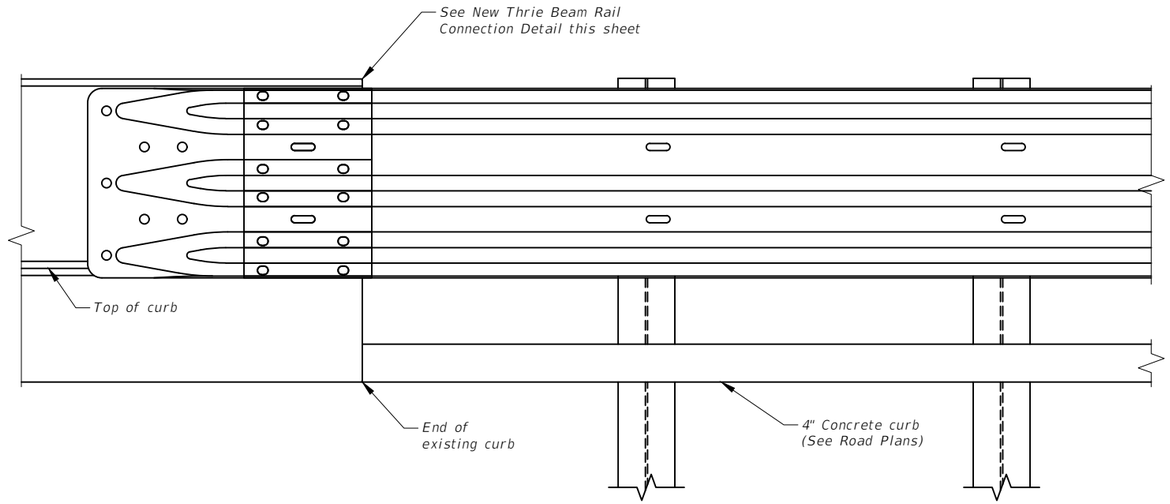
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APPROACH RAIL REMOVAL

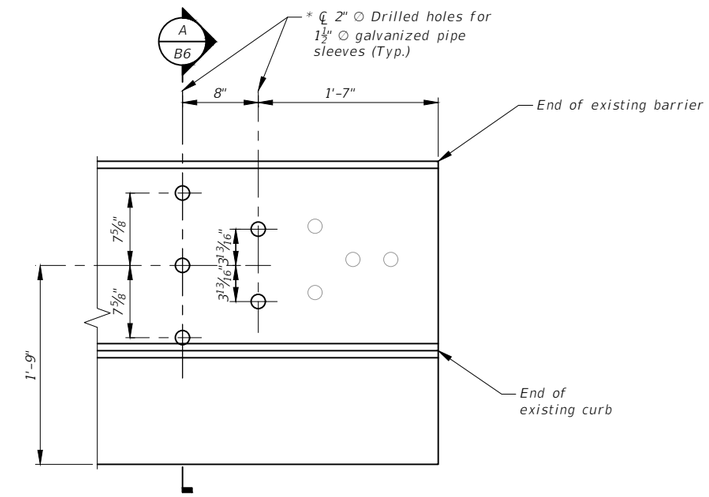
05545



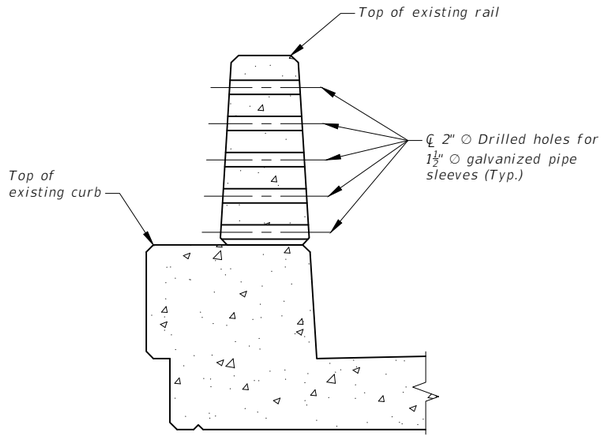
NEW APPROACH RAIL

05545

* NOTE: Locate existing reinforcing steel prior to drilling pipe sleeve holes. Contact Project Manager if steel in encountered at specific pipe sleeve locations. See Dwg. No. 18164 for existing barrier end details. Include all work and materials required to install the galvanized pipe sleeves in the bid price for Revise Concrete Barrier Rail End – BR.



NEW THRIE BEAM RAIL CONNECTION DETAIL



A / B6 **BARRIER SECTION**

SHEET NO. B6

REVISE BRIDGE RAIL END

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

PROJECT NAME
JCT - I90 TO ANACONDA

MDT STRUCTURE ID
05546, 05547, 05548, 05549, 05545

FEDERAL AID PROJECT
STPP 19-1(61)0

COUNTY
DEER LODGE

REVISED		
REVISED		
REVISED		
REVISED		
CHECKED	J.E.S.	10-23-20
DRAWN	D.G.G.	09-18-20
DESIGNED	D.M.P.	09-17-20

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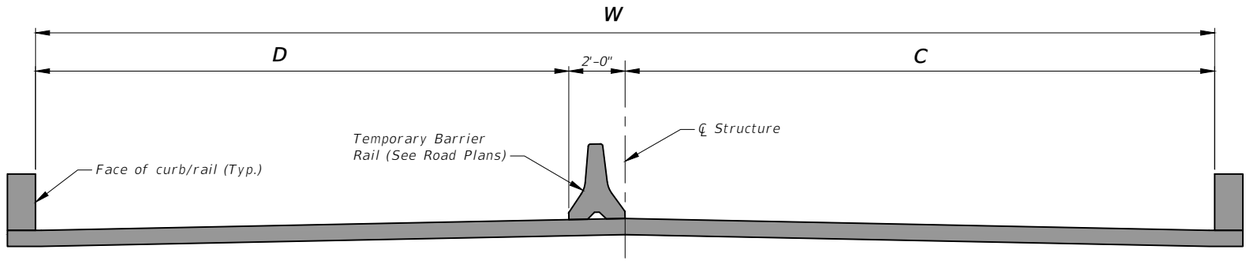
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BRIDGE BUREAU

UPN NUMBER
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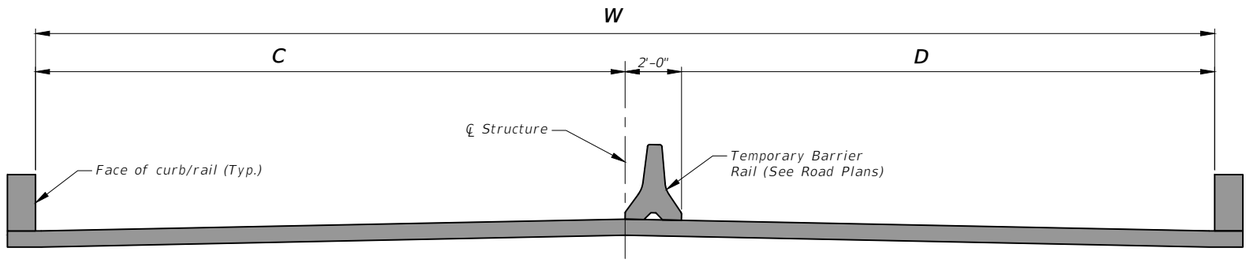
DRAWING NO.
24300

AWARD COPY



PHASE I

05546, 05548 looking ahead on line
05547, 05549 looking back on line



PHASE II

05547, 05549 looking ahead on line
05546, 05548 looking back on line

CONSTRUCTION PHASE DIAGRAM DIMENSION TABLE

STRUCTURE I.D.	CONSTRUCTION PHASE	W WIDTH OF DECK	C WIDTH OF CONSTRUCTION ZONE	D WIDTH OF TEMPORARY DRIVING LANE
05546	PHASE I	38'-0"	19'-0"	17'-0"
05546	PHASE II	38'-0"	19'-0"	17'-0"
05547	PHASE I	38'-0"	19'-0"	17'-0"
05547	PHASE II	38'-0"	19'-0"	17'-0"
05548	PHASE I	38'-0"	19'-0"	17'-0"
05548	PHASE II	38'-0"	19'-0"	17'-0"
05549	PHASE I	38'-0"	19'-0"	17'-0"
05549	PHASE II	38'-0"	19'-0"	17'-0"

SHEET NO.
B7

CONSTRUCTION PHASE DIAGRAMS

SCALE: No Scale

PROJECT NAME
JCT - I90 TO ANACONDA

MDT STRUCTURE ID
05546, 05547, 05548, 05549, 05545

FEDERAL AID PROJECT
STPP 19-1(61)0

COUNTY
DEER LODGE

REVISED			CHECKED	J.E.S.	10-23-20
REVISED			DRAWN	D.G.G.	09-18-20
REVISED			DESIGNED	D.M.P.	09-17-20
REVISED					

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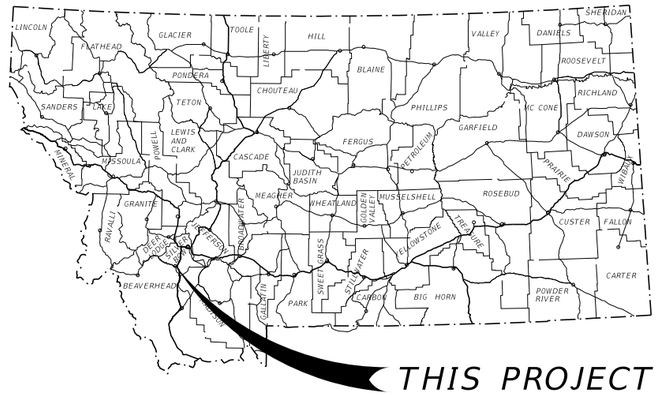
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STATE OF MONTANA DEPARTMENT OF TRANSPORTATION
MDT
BRIDGE BUREAU

UPN NUMBER
9484000

DRAWING NO.
24301

AWARD COPY



MONTANA DEPARTMENT OF TRANSPORTATION

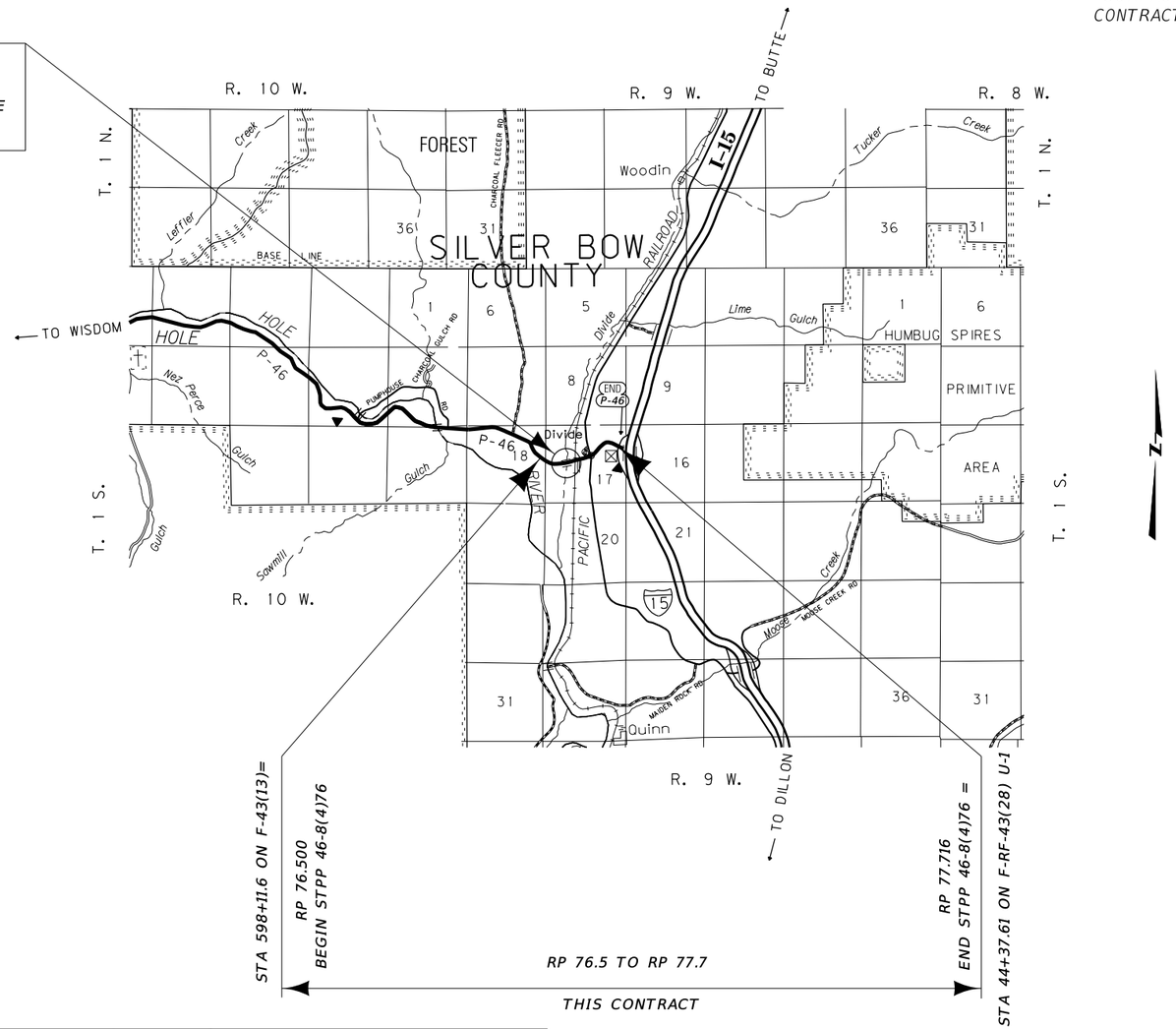
FEDERAL AID PROJECT STPP 46-8(4)76
SEAL AND COVER, GUARDRAIL
DIVIDE - EAST & WEST
SILVER BOW COUNTY

PROJECT DESIGN DATA		
PRESENT	2020	A.D.T. = 550
LETTING	2021	A.D.T. = 560
DESIGN	2041	A.D.T. = 720
		D.H.V. = 140
		TRUCKS = 5.9%
		V. = 60 mph
		18 KIP ESAL'S = 16
		GROWTH RATE = 1.3%

LENGTH 1.2 MILES

SURFACING SOURCES -
CONTRACTOR FURNISHED

RP 76.8
P00046076+08051
BRIDGE ID 05877
38.0' x 38.0' TIMBER BRIDGE
DIVIDE CREEK
THIS CONTRACT



3	MONTANA Department of Transportation	C:\DGN\9738000rdtl001.dgn	DESIGNED BY	R. WIANT	6/9/2020	ROAD PLANS
2		2/17/2022	REVIEWED BY	K. MUELLER	2/4/2022	
		8:39:37 AM CPS - U656	CHECKED BY	J. FLEMING	2/4/2022	UPN 9738000

AWARD COPY

TABLE OF CONTENTS

ROAD PLANS	SHEET NO.
TITLE SHEET	1
TABLE OF CONTENTS	2
NOTES	2
LINEAR DATA	2
TYPICAL SECTIONS	3-4
SUMMARIES	5
SURFACING	5
ADDITIONAL SURFACING	5
GUARDRAIL	5
PAVEMENT MARKINGS	5

NOTES

BASIS OF PLAN QUANTITIES

(QUANTITIES FOR ESTIMATING PURPOSES ONLY)

BITUMINOUS MATERIAL	= 8.5 LBS. PER GAL.
SEAL	= 0.42 GAL. PER SQ.YARD
COVER	= 25 LBS. PER SQ.YARD

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.

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

F 43(13)	(CONSTRUCTION - 1957)
F-RF-43(28) U-1	(CONSTRUCTION - 1973)

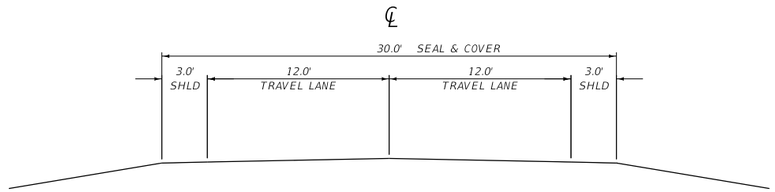
LINEAR DATA

LENGTH OF ROADWAY	SILVER BOW COUNTY	2-LANE RURAL	6,382.48 ft
LENGTH OF BRIDGE	SILVER BOW COUNTY	2-LANE RURAL	38.00 ft
TOTAL LENGTH OF	STPP 46-8(4)76	2-LANE RURAL	6,420.48 ft

AWARD COPY

TYPICAL SECTION NO. 1

RP 76.500 TO RP 76.592 THEN TYPICAL NO. 2



QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER			SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	 333		square yards PER STATION tons PER STATION gals. PER STATION	333 0.59		

TYPICAL SECTION NO. 2

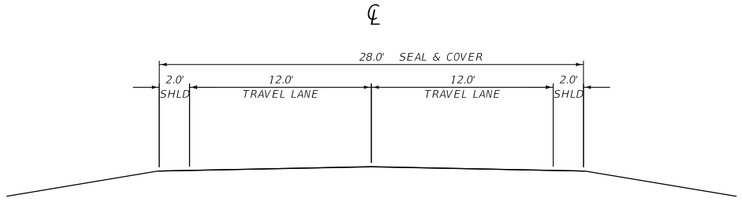
RP 76.592 TO RP 76.774 THEN TYPICAL NO. 3

RP 76.796 BE

RP 76.796 BE TO RP 76.803 BE

RP 76.989

RP 76.989 TO RP 77.056 TRANSITION TYP. NO. 2 TO TYP. NO. 4

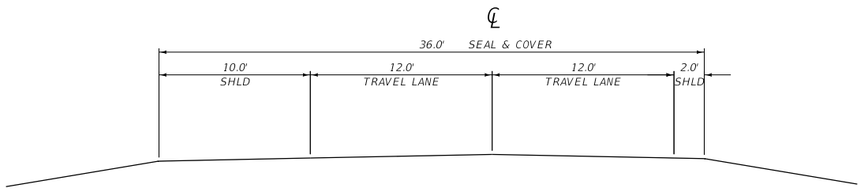


QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER			SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	 311		square yards PER STATION tons PER STATION gals. PER STATION	311 0.56		

AWARD COPY

RP 76.774 TO RP 76.796 BE THEN TYPICAL NO. 2

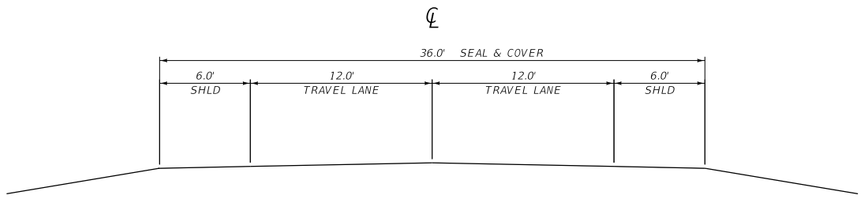
TYPICAL SECTION NO. 3



QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER			SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	 400		square yards PER STATION tons PER STATION gals. PER STATION	400 0.71 		

RP 77.056 TO RP 77.716 END PROJECT

TYPICAL SECTION NO. 4



QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER			SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	 400		square yards PER STATION tons PER STATION gals. PER STATION	400 0.71 		

SUMMARY

SURFACING

REFERANCE POSTS FROM	REFERANCE POSTS TO	linear feet GROSS	linear feet NET	linear feet +	linear feet -	FOR	AGGREGATE sq. yards COVER TYPE 1	AGGREGATE sq. yards	BITUMINOUS MATERIAL tons EMULSIFIED ASPHALT CHFRS 2P	BITUMINOUS MATERIAL tons	REMARKS
RP 76.500	RP 76.592	485.76	485.76				1,618		2.9		TYPICAL SECTION NO. 1
RP 76.592	RP 76.774	960.96	960.96				2,989		5.4		TYPICAL SECTION NO. 2
RP 76.774	RP 76.796 BE	116.16	116.16				465		0.8		TYPICAL SECTION NO. 3
RP 76.796 BE											
RP 76.796 BE	RP 76.803 BE				38.00	BRIDGE					
	RP 76.989	1,019.04	881.04		# 100.00	RAILROAD	2,740		4.9		TYPICAL SECTION NO. 2
RP 76.989	RP 77.056	353.76	353.76				1,258		2.2		TYPICAL SECTION TRAN. TYP. 2 TO TYP. 4
RP 77.056	RP 77.716	3,484.80	3,484.80				13,939		24.7		TYPICAL SECTION NO. 4
						ADDITIONAL SURFACING	118		0.2		
TOTAL		6,420.48	6,282.48	~	138.00		23,127		41.1		

NO WORK TO BE DONE WITHIN RAILROAD RIGHT OF WAY 50 FT FROM CENTERLINE OF RAILROAD ON EITHER SIDE OF THE TRACKS - SEE SPECIAL PROVISION

ADDITIONAL SURFACING (INCLUDED IN SURFACING FRAME)

STATION FROM	STATION TO	linear feet GROSS	linear feet NET	linear feet +	linear feet -	FOR	AGGREGATE sq. yards COVER TYPE 1	AGGREGATE sq. yards	BITUMINOUS MATERIAL tons EMULSIFIED ASPHALT CHFRS 2P	BITUMINOUS MATERIAL tons	REMARKS
RP 76.827 BE	RP 76.834 BE	38.00	38.00			BRIDGE	118		0.2		TYPICAL SECTION NO. 2
SUBTOTAL		~	~	~	~		118		0.2		

GUARDRAIL

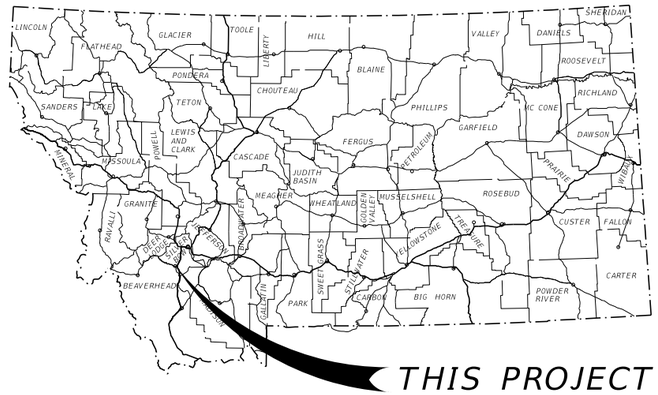
REFERANCE POSTS FROM	REFERANCE POSTS TO	linear feet REMOVE GUARDRAIL LEFT	linear feet REMOVE GUARDRAIL RIGHT	linear feet MGS GUARDRAIL LEFT	linear feet MGS GUARDRAIL RIGHT	each MASH W-BEAM TERMINAL SECTION LEFT	each MASH W-BEAM TERMINAL SECTION RIGHT	each GUARDRAIL END WIDENING LEFT	each GUARDRAIL END WIDENING RIGHT	REMARKS
RP 77.347	RP 77.641	1,550.0								
RP 77.349	RP 77.639			1,462.5		2		2		
SUBTOTAL		1,550.0		1,462.5		2		2		
TOTAL		1,550.0		1,462.5		2		2		

PAVEMENT MARKINGS

ITEM	UNIT	INTERIM APPLICATION #	FINAL APPLICATION	TOTAL
STRIPING - WHITE PAINT	gallon	43		43
STRIPING - YELLOW PAINT	gallon	43		43
WORDS & SYMBOLS - WHITE PAINT	gallon	3		3
STRIPING - WHITE EPOXY	gallon		58	58
STRIPING - YELLOW EPOXY	gallon		58	58
WORDS & SYMBOLS - WHITE EPOXY	gallon		4	4
FINAL SWEEP AND BROOM	course mile			1.2

BASED ON SINGLE APPLICATION.

AWARD COPY



MONTANA DEPARTMENT OF TRANSPORTATION

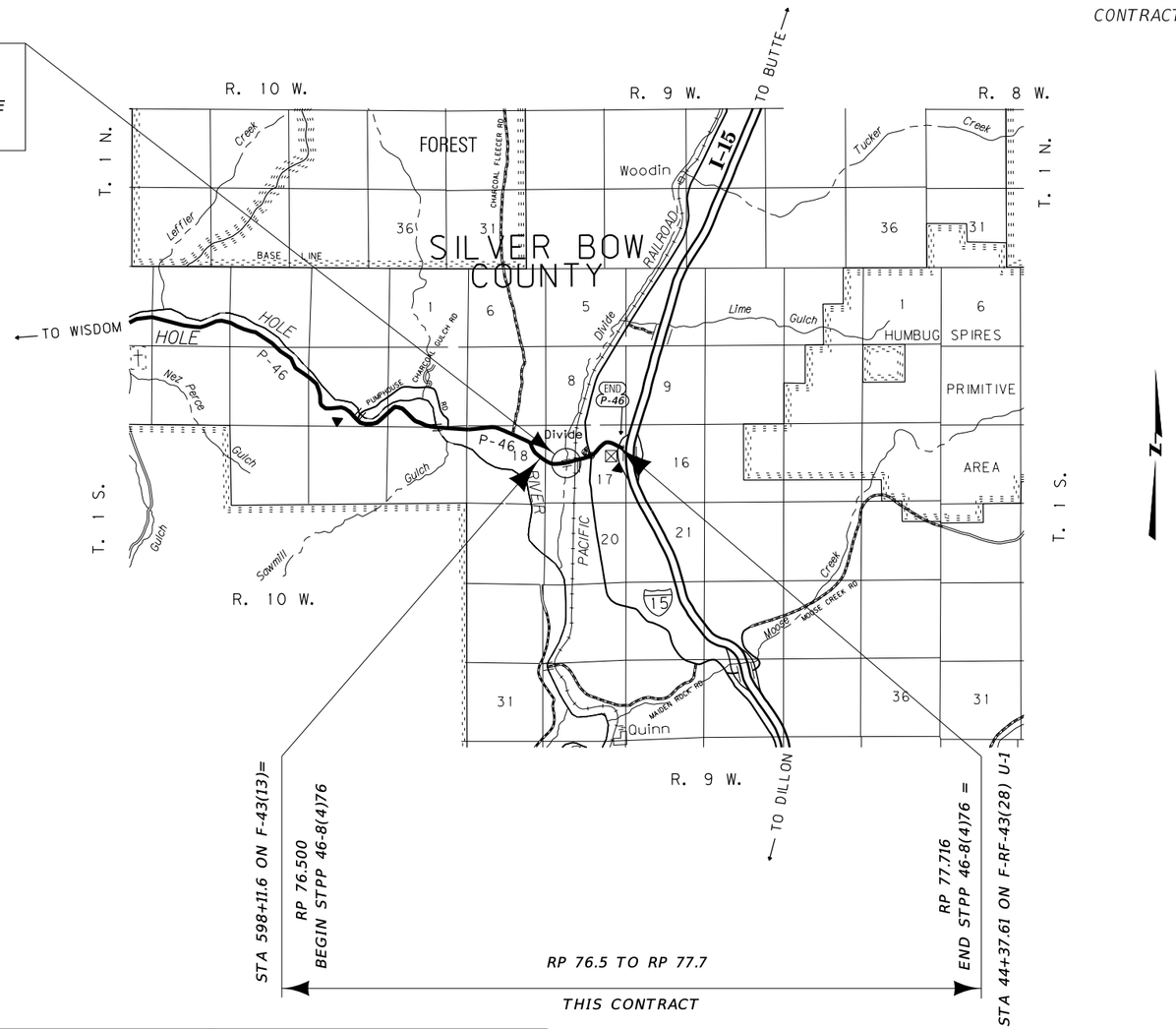
FEDERAL AID PROJECT STPP 46-8(4)76
SEAL AND COVER, GUARDRAIL
DIVIDE - EAST & WEST
SILVER BOW COUNTY

PROJECT DESIGN DATA		
PRESENT	2020	A.D.T. = 550
LETTING	2021	A.D.T. = 560
DESIGN	2041	A.D.T. = 720
		D.H.V. = 140
		TRUCKS = 5.9%
		V. = 60 mph
		18 KIP ESAL'S = 16
		GROWTH RATE = 1.3%

LENGTH 1.2 MILES

SURFACING SOURCES -
CONTRACTOR FURNISHED

RP 76.8
P00046076+08051
BRIDGE ID 05877
38.0' x 38.0' TIMBER BRIDGE
DIVIDE CREEK
THIS CONTRACT



3	MONTANA Department of Transportation	C:\DGN\9738000rdtl001.dgn	DESIGNED BY	R. WIANT	6/9/2020	ROAD PLANS
2		2/17/2022	REVIEWED BY	K. MUELLER	2/4/2022	
		8:39:37 AM CPS - U656	CHECKED BY	J. FLEMING	2/4/2022	UPN 9738000

AWARD COPY

TABLE OF CONTENTS

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NOTES

BASIS OF PLAN QUANTITIES

(QUANTITIES FOR ESTIMATING PURPOSES ONLY)

BITUMINOUS MATERIAL	= 8.5 LBS. PER GAL.
SEAL	= 0.42 GAL. PER SQ.YARD
COVER	= 25 LBS. PER SQ.YARD

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.

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

F 43(13)	(CONSTRUCTION - 1957)
F-RF-43(28) U-1	(CONSTRUCTION - 1973)

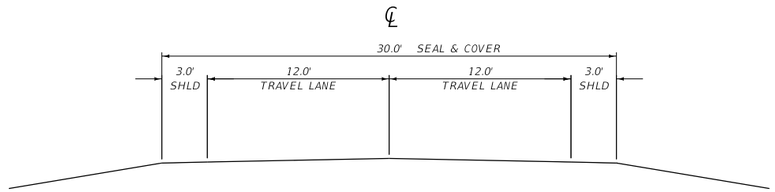
LINEAR DATA

LENGTH OF ROADWAY	SILVER BOW COUNTY	2-LANE RURAL	6,382.48 ft
LENGTH OF BRIDGE	SILVER BOW COUNTY	2-LANE RURAL	38.00 ft
TOTAL LENGTH OF	STPP 46-8(4)76	2-LANE RURAL	6,420.48 ft

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TYPICAL SECTION NO. 1

RP 76.500 TO RP 76.592 THEN TYPICAL NO. 2



QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER			SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	 333		square yards PER STATION tons PER STATION gals. PER STATION	333 0.59		

TYPICAL SECTION NO. 2

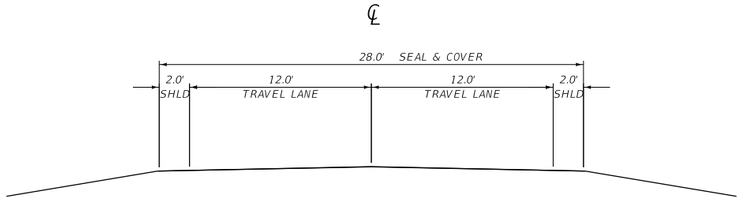
RP 76.592 TO RP 76.774 THEN TYPICAL NO. 3

RP 76.796 BE

RP 76.796 BE TO RP 76.803 BE

RP 76.989

RP 76.989 TO RP 77.056 TRANSITION TYP. NO. 2 TO TYP. NO. 4

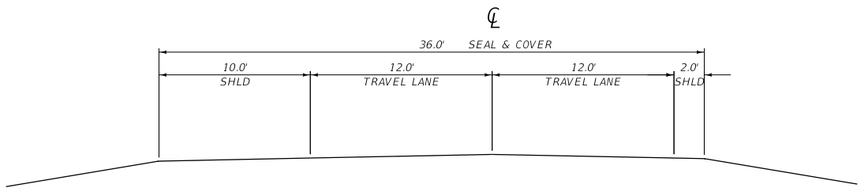


QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER			SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	 311		square yards PER STATION tons PER STATION gals. PER STATION	311 0.56		

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RP 76.774 TO RP 76.796 BE THEN TYPICAL NO. 2

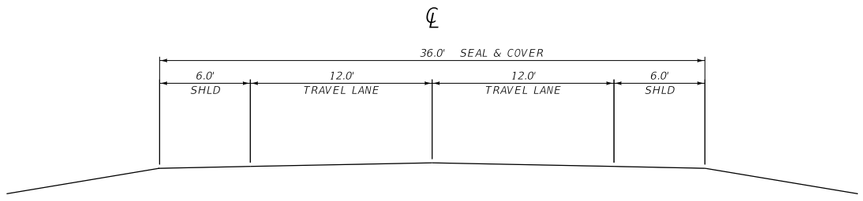
TYPICAL SECTION NO. 3



QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER			SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	 400		square yards PER STATION tons PER STATION gals. PER STATION	400 0.71 		

RP 77.056 TO RP 77.716 END PROJECT

TYPICAL SECTION NO. 4



QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER			SEAL		
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	 400		square yards PER STATION tons PER STATION gals. PER STATION	400 0.71 		

SUMMARY

SURFACING

REFERANCE POSTS FROM	REFERANCE POSTS TO	linear feet GROSS	linear feet NET	linear feet +	linear feet -	FOR	AGGREGATE sq. yards COVER TYPE 1	AGGREGATE sq. yards	BITUMINOUS MATERIAL tons EMULSIFIED ASPHALT CHFRS 2P	BITUMINOUS MATERIAL tons	REMARKS
RP 76.500	RP 76.592	485.76	485.76				1,618		2.9		TYPICAL SECTION NO. 1
RP 76.592	RP 76.774	960.96	960.96				2,989		5.4		TYPICAL SECTION NO. 2
RP 76.774	RP 76.796 BE	116.16	116.16				465		0.8		TYPICAL SECTION NO. 3
RP 76.796 BE											
RP 76.796 BE	RP 76.803 BE				38.00	BRIDGE					
	RP 76.989	1,019.04	881.04		# 100.00	RAILROAD	2,740		4.9		TYPICAL SECTION NO. 2
RP 76.989	RP 77.056	353.76	353.76				1,258		2.2		TYPICAL SECTION TRAN. TYP. 2 TO TYP. 4
RP 77.056	RP 77.716	3,484.80	3,484.80				13,939		24.7		TYPICAL SECTION NO. 4
						ADDITIONAL SURFACING	118		0.2		
TOTAL		6,420.48	6,282.48	~	138.00		23,127		41.1		

NO WORK TO BE DONE WITHIN RAILROAD RIGHT OF WAY 50 FT FROM CENTERLINE OF RAILROAD ON EITHER SIDE OF THE TRACKS - SEE SPECIAL PROVISION

ADDITIONAL SURFACING (INCLUDED IN SURFACING FRAME)

STATION FROM	STATION TO	linear feet GROSS	linear feet NET	linear feet +	linear feet -	FOR	AGGREGATE sq. yards COVER TYPE 1	AGGREGATE sq. yards	BITUMINOUS MATERIAL tons EMULSIFIED ASPHALT CHFRS 2P	BITUMINOUS MATERIAL tons	REMARKS
RP 76.827 BE	RP 76.834 BE	38.00	38.00			BRIDGE	118		0.2		TYPICAL SECTION NO. 2
SUBTOTAL		~	~	~	~		118		0.2		

GUARDRAIL

REFERANCE POSTS FROM	REFERANCE POSTS TO	linear feet REMOVE GUARDRAIL LEFT	linear feet REMOVE GUARDRAIL RIGHT	linear feet MGS GUARDRAIL LEFT	linear feet MGS GUARDRAIL RIGHT	each MASH W-BEAM TERMINAL SECTION LEFT	each MASH W-BEAM TERMINAL SECTION RIGHT	each GUARDRAIL END WIDENING LEFT	each GUARDRAIL END WIDENING RIGHT	REMARKS
RP 77.347	RP 77.641	1,550.0								
RP 77.349	RP 77.639			1,462.5		2		2		
SUBTOTAL		1,550.0		1,462.5		2		2		
TOTAL		1,550.0		1,462.5		2		2		

PAVEMENT MARKINGS

ITEM	UNIT	INTERIM APPLICATION #	FINAL APPLICATION	TOTAL
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BASED ON SINGLE APPLICATION.