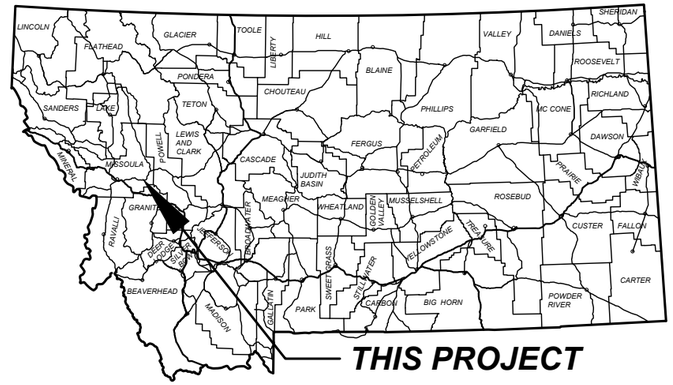
Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

AWARD COPY



PROJECT DESIGN DATA

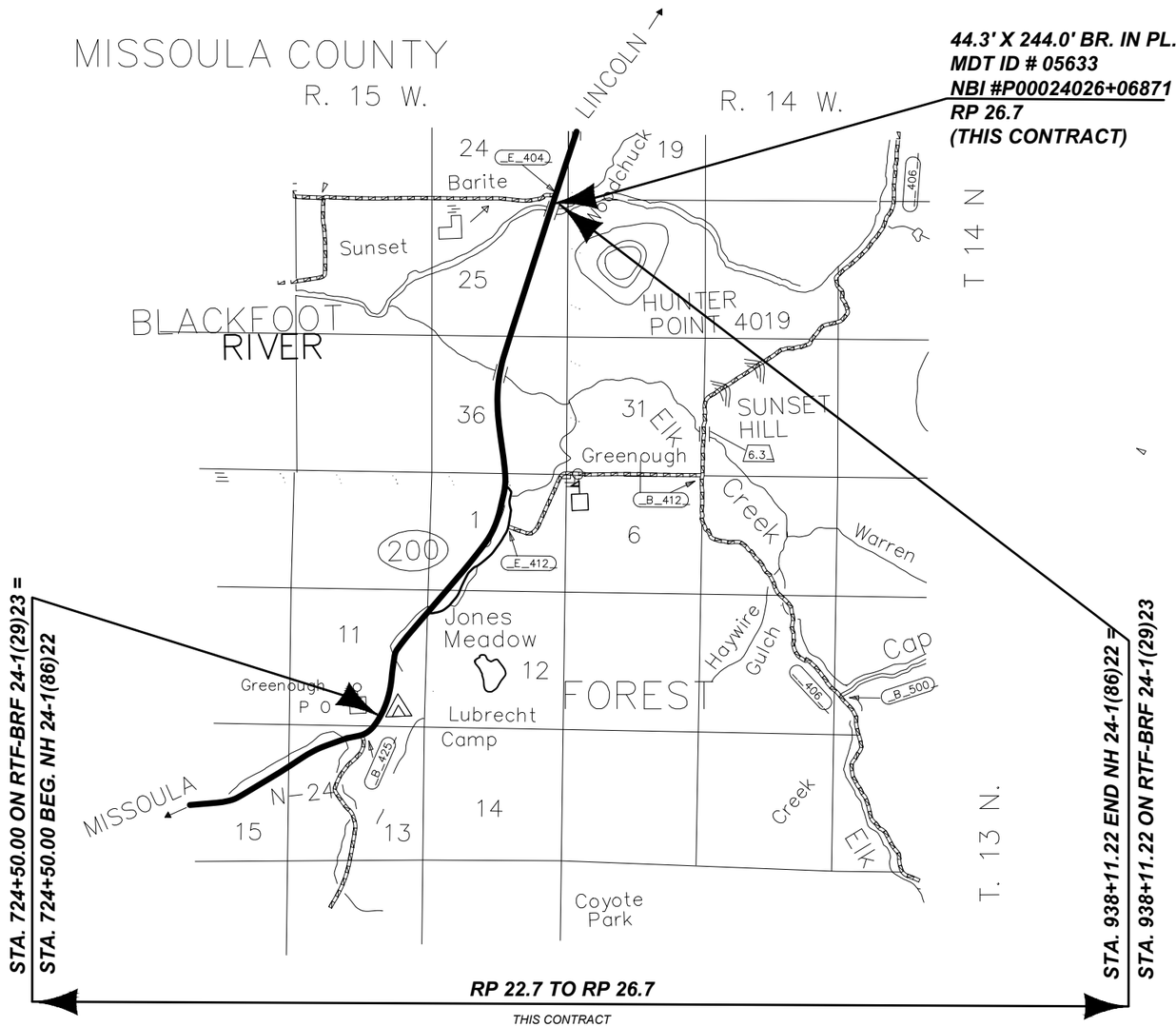
PRESENT	2023	A.D.T. =	3,900
LETTING	2023	A.D.T. =	3,900
DESIGN	2043	A.D.T. =	4,760
		D.H.V. =	790
		TRUCKS =	5.7%
		V. =	70
		18 KIP ESAL'S =	129 Daily
		GROWTH RATE =	1.0% Annual

MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT NH 24-1(86)22
COLD MILL, PL. MIX SURF., SEAL & COVER
GREENOUGH HILL - NORTH
MISSOULA COUNTY

LENGTH 4.0 MILES

SURFACING SOURCES = CONTRACTOR FURNISHED



44.3' X 244.0' BR. IN PL.
MDT ID # 05633
NBI #P00024026+06871
RP 26.7
(THIS CONTRACT)

MONTANA
DEPARTMENT OF TRANSPORTATION

APPROVED BY:

HIGHWAYS ENGINEER

DocuSigned by:
Damian Krings
354C32D8BEB0415...

MONTANA
DAMIAN KRINGS
12113PE
LICENSED PROFESSIONAL ENGINEER

11/14/2024
DATE

SHEET NO. 1

TITLE SHEET

PROJECT NAME	GREENOUGH HILL - NORTH
COUNTY	MISSOULA
PROJECT ID	NH 24-1(86)22
UPN	10376000
DESIGNED BY	T.GATES 11/8/23
REVIEWED BY	#### ####
CHECKED BY	J. SOLIDAY 8/5/2024

10376000RDTTL001.DWG

MONTANA Department of Transportation

ROAD PLANS

8/6/2024 11:06 AM

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

TABLE OF CONTENTS

ROAD PLANS	SHEET NO.
TITLE SHEET	1
TABLE OF CONTENTS	2
NOTES	2
TYPICAL SECTIONS	3
SUMMARIES	4-5
SURFACING	4
COLD MILLING	4
RUMBLE STRIPS	4
PMS JOINT SEALING	4
GUARDRAIL	5
PAVEMENT MARKINGS	5
GUARDRAIL END SECTION WIDENING	5
REVEGETATION	5
BRIDGE DECK CRACK SEAL	5
MISCELLANEOUS ITEMS	5
DETAILS	6
BRIDGE APPROACH SLAB	6

SIGNING PLANS	
SUMMARY	S1
SPECIFICATIONS	S2-S5
PLANS	S6-S14

NOTES

BASIS OF PLAN QUANTITIES

(QUANTITIES FOR ESTIMATING PURPOSES ONLY)

COMP. AGGREGATE WEIGHT	= 3700 LBS. PER CUBIC YARD	
COMP. WEIGHT OF PL. MIX BIT. SURF.	= 3855 LBS. PER CUBIC YARD	
ASPHALT CEMENT - GRADE S - 1/2" AGG.	= 5.6% 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 (S & C)		
	= 0.075 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.

WETLANDS

WETLANDS EXIST ADJACENT TO THE ROADWAY AND MAY EXIST 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.

AS-BUILTS

FOR HORIZONTAL ALIGNMENT & STATIONING REFER TO "AS-BUILT" PROJECT:
PROJECT NAME
RTF-BRF 24-1(29)23

SHEET NO. 2

TABLE OF CONTENTS, NOTES

PROJECT NAME GREENOUGH HILL - NORTH
COUNTY MISSOULA
PROJECT ID NH 24-1(86)22
UPN 10376000

CHECKED BY	####	
REVIEWED BY	####	
DESIGNED BY	T.GATES	11/8/23

MONTANA Department of Transportation

ROAD PLANS

8/6/2024 11:06 AM

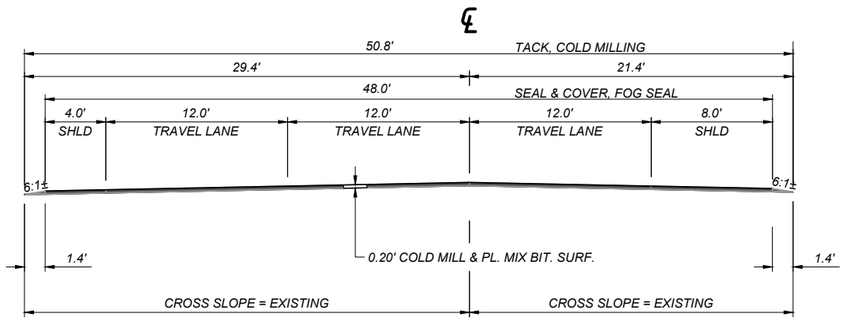
10376000RDTTL001.DWG

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

AWARD COPY

TYPICAL SECTION NO. 1

MAINLINE



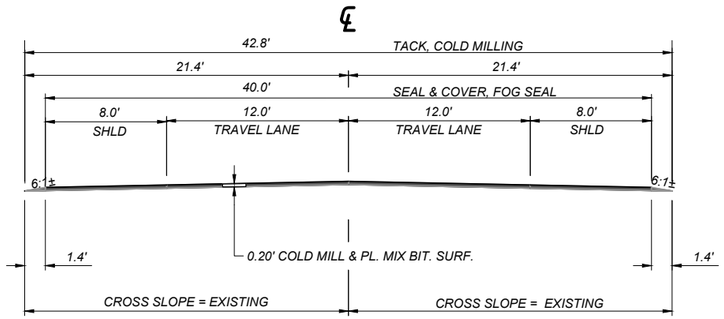
STA. 724+50.00
835+26.03 BK = 841+18.70 AH EQUATION
TO 854+25.00
STA. 854+25.00 TO 857+25.00 TRANS. TYP. SECT. NO. 1 TO NO. 2

QUANTITIES								
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL				COLD MILLING
	COVER	PLANT MIX		ASPHALT CEMENT	SEAL	EMULSIFIED ASPHALT TACK #	EMULSIFIED ASPHALT FOG SEAL	
AREA square feet		9.88	square yards PER STATION		533	564	533	564
cubic yards PER STATION		36.6	tons PER STATION	3.95	0.95			
tons PER STATION		70.5	gals. PER STATION			28	40	
square yards PER STATION	533							

BASED ON 1 APPLICATION

TYPICAL SECTION NO. 2

MAINLINE



STA. 857+25.00
887+18.40 BK = 887+23.26 AH EQUATION
TO 935+52.22

QUANTITIES								
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL				COLD MILLING
	COVER	PLANT MIX		ASPHALT CEMENT	SEAL	EMULSIFIED ASPHALT TACK #	EMULSIFIED ASPHALT FOG SEAL	
AREA square feet		8.28	square yards PER STATION		444	476	444	476
cubic yards PER STATION		30.7	tons PER STATION	3.32	0.79			
tons PER STATION		59.2	gals. PER STATION			24	33	
square yards PER STATION	444							

BASED ON 1 APPLICATION

SHEET NO.
3

TYPICAL SECTIONS

PROJECT NAME GREENOUGH HILL - NORTH
COUNTY MISSOULA
PROJECT ID NH 24-1(86)22
UPN 1037600

CHECKED BY	####	####	
REVIEWED BY	####	####	
DESIGNED BY	T.GATES	8/7/2023	1037600RDTYP001.DWG

MONTANA Department of Transportation

ROAD PLANS

4/25/2024 2:24 PM

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

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. 1/2"	BITUMINOUS MATERIAL tons ASPHALT CEMENT PG 58V-34	BITUMINOUS MATERIAL tons SEAL CHFRS-2P	BITUMINOUS MATERIAL gals. EMULSIFIED ASPHALT FOG SEAL (OVER SEAL & COVER)	BITUMINOUS MATERIAL gals. EMULSIFIED ASPHALT TACK	REMARKS
724+50.00														
835+26.03 BK	841+18.70 AH				592.67	EQUATION								
	854+25.00	12,975.00	12,382.33					65,998	8,730	489.1	117.6	4,953	3,467	TYP. NO. 1
854+25.00	857+25.00	300.00	300.00					1,466	195	10.9	2.6	110	78	TRANS. TYP. NO. 1 TO TYP. NO. 2
857+25.00														
887+18.40 BK	887+23.26 AH				4.86	EQUATION								
	935+52.22	7,827.22	7,822.36					34,731	4,631	259.7	61.8	2,581	1,877	TYP. NO. 2
935+52.22														
935+67.22 BE	938+11.22 BE				244.00	BRIDGE								
	938+11.22 BE	259.00	15.00					67	7	0.4	0.1	5	4	APPROACH SLAB
TOTAL		21,361.22	20,519.69		841.53		190	102,262	13,563	760.1	182.1	7,649	5,426	

COLD MILLING

STATION FROM	STATION TO	sq. yards COLD MILLING 0.20 ft	REMARKS
724+50.00	854+25.00	69,836	INCLUDES EQUATION
854+25.00	857+25.00	1,560	
857+25.00	935+52.22	37,234	INCLUDES EQUATION
SUBTOTAL		108,630	
TOTAL		108,630	

PMS JOINT SEALING

STATION FROM	STATION TO	sq. yards PMS JOINT SEALER *	REMARKS
724+50.00	938+11.22	11,938	
SUBTOTAL		11,938	
TOTAL		11,938	

*SEE SPECIAL PROVISION

RUMBLE STRIPS

STATION FROM	STATION TO	miles RUMBLE STRIPS INTER-MITTENT	miles RUMBLE STRIPS MODIFIED	miles RUMBLE STRIPS CENTERLINE TYPE 3	gals EMULSIFIED ASPHALT FOG SEAL #	sq. yards PMS JOINT SEALER	REMARKS
724+50.00	814+75.00		1.7		201		LT.
822+75.00	857+25.00		0.7		77		LT.
857+25.00	935+67.22	1.5			174		LT.
724+50.00	935+67.22	3.8			451		RT.
724+50.00	935+67.22			4.0		4,560	
SUBTOTAL		5.3	2.4	4.0	902		
TOTAL		7.7		4.0	~	*4560	

FOR INFORMATION ONLY, INCLUDE IN THE COST OF RUMBLE STRIPS
* QUANTITY IS INCLUDED IN PMS JOINT SEALING SUMMARY TABLE

SHEET NO. 4

SUMMARY

PROJECT NAME GREENOUGH HILL - NORTH
COUNTY MISSOULA
PROJECT ID NH 24-1(86)22
UPN 10376000

CHECKED BY	####	####	8/8/2023
REVIEWED BY	####	####	T.GATES
DESIGNED BY			10376000RDSUM001.DWG

MONTANA Department of Transportation

ROAD PLANS

10/31/2024 1:07 PM

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

AWARD COPY

SUMMARY

GUARDRAIL

STATION		linear feet				each		REMARKS
		REMOVE & SALVAGE GUARDRAIL		MGS GUARDRAIL		MASH W-BEAM TERMINAL SECTION		
FROM	TO	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	
NEW RAIL								
756+16.00	763+84.00				700.0		2	
778+28.50	794+09.00				1,512.5		2	
814+91.00	822+59.00			700.0		2		
815+16.00	826+09.00				1,025.0		2	
933+30.00	935+39.00				178.1		1	INCLUDES TRANSITION TO BRIDGE APPR. SECTION TYPE 1
934+60.90	935+39.00			28.1		1		INCLUDES TRANSITION TO BRIDGE APPR. SECTION TYPE 1
REMOVE RAIL								
756+00.00	764+00.00		800.0					
778+12.50	794+25.00		1,612.5					
814+75.00	822+75.00	800.0						
815+00.00	826+25.00		1,125.0					
933+14.00	935+39.00		225.0					REMOVE TO EXISTING BRIDGE APPR. SECTION TYPE 1
934+89.00	935+39.00	50.0						REMOVE TO EXISTING BRIDGE APPR. SECTION TYPE 1
SUBTOTAL		850.0	3,762.5	728.1	3,415.6	3	7	
TOTAL		4,612.5		4,143.8		10		

GUARDRAIL END SECTION WIDENING

STATION	each		REMARKS
	WIDENING SECTIONS		
	LEFT	RIGHT	
756+16.00		1	
763+84.00		1	
778+28.50		1	
794+09.00		1	
814+91.00	1		
815+16.00		1	
822+59.00	1		
826+09.00		1	
933+30.00		1	
934+60.90	1		
SUBTOTAL	3	7	
TOTAL	10		

PAVEMENT MARKINGS

ITEM	UNIT	INTERIM APPLICATION #	FINAL APPLICA-TION	TOTAL
STRIPING - WHITE PAINT	gallon	341		341
STRIPING - YELLOW PAINT	gallon	299		299
WORDS & SYMBOLS - WHITE PAINT	gallon	8		8
STRIPING - WHITE EPOXY	gallon		227	227
STRIPING - YELLOW EPOXY	gallon		192	192
WORDS & SYMBOLS - WHITE EPOXY	gallon		5	5
TEMPORARY STRIPING	lnft			42,240

BASED ON 2 APPLICATIONS

REVEGETATION

STATION		lump sum	cu. yards	acres			REMARKS
		REVEGE-TATION	TOPSOIL SALVAGING & PLACING #	SEED #	FERTILIZER	CONDITION SEEDBED	
FROM	TO						
756+16.00	933+30.00	0.7	38	0.07			7 GUARDRAIL END SECTIONS ON RIGHT
814+91.00	934+60.90	0.3	16	0.03			3 GUARDRAIL END SECTIONS ON LEFT
TOTAL		1	~	~	~	~	

FOR INFORMATION ONLY

BRIDGE DECK CRACK SEAL

STATION		sq.yards	MONTANA STRUCTURE ID	NBI STRUCTURE ID	REMARKS
		CRACK SEAL			
FROM	TO				
935+67.22	938+11.22	1093.5	05633	P00024026+06871	BLACKFOOT RIVER BRIDGE
TOTAL		1,093.5	~	~	

MISCELLANEOUS ITEMS

STATION		sq. feet #	REMARKS
FROM	TO		
935+52.22	935+67.22	585	BRIDGE APPROACH SLAB
			SEE DETAIL

#NOTE- INCLUDE PMS REMOVAL, DIAMOND GRIND AND CLEANUP

SHEET NO. 5

SUMMARY

PROJECT NAME GREENOUGH HILL - NORTH
COUNTY MISSOULA
PROJECT ID NH 24-1(86)22
UPN 10376000

CHECKED BY	####	####	
REVIEWED BY	####	####	
DESIGNED BY	T. GATES	11/8/23	10376000RDSUM001.DWG

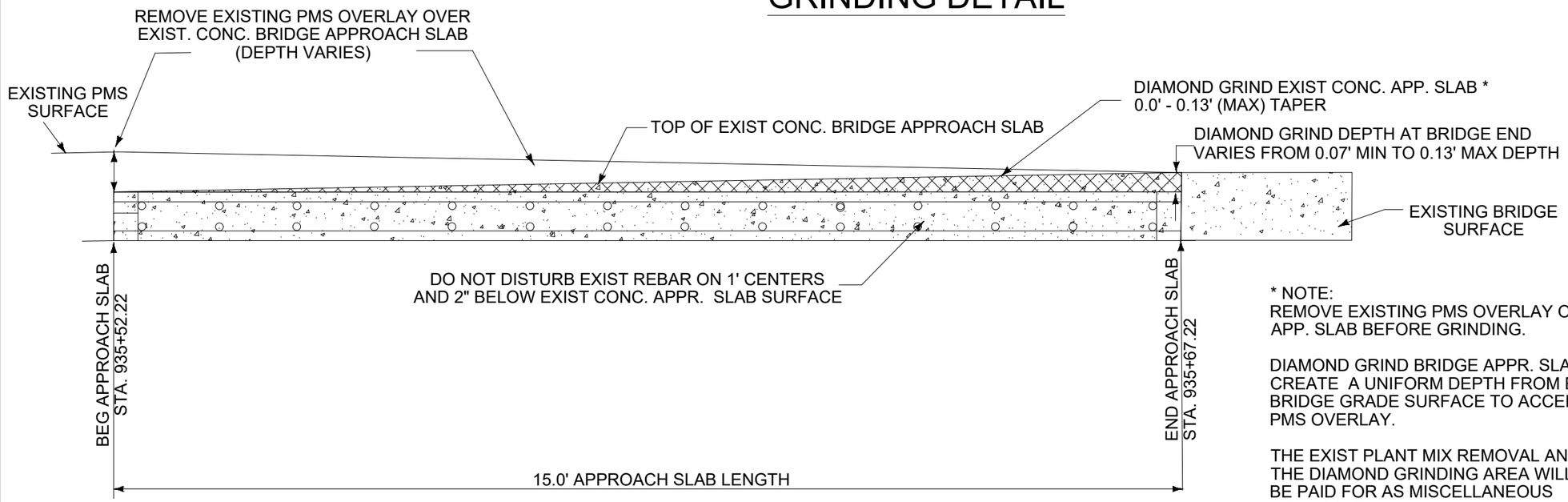
MONTANA Department of Transportation

ROAD PLANS

8/20/2024 8:45 AM

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

BRIDGE APPROACH SLAB GRINDING DETAIL

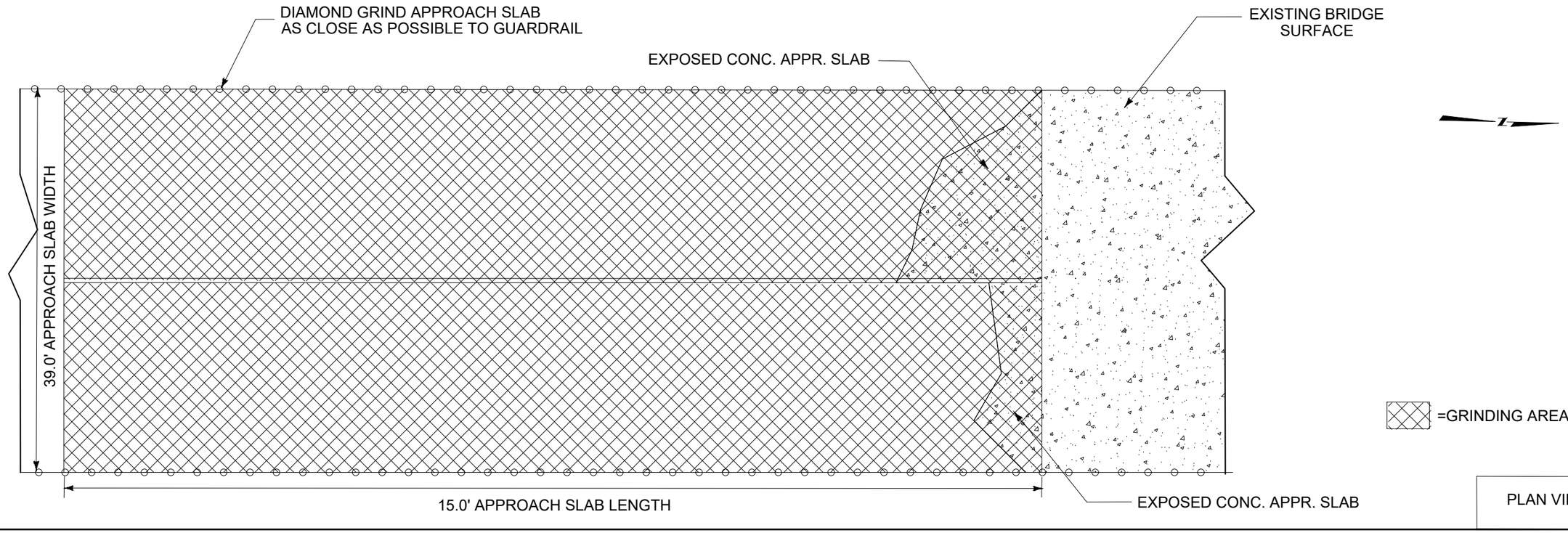


* NOTE:
REMOVE EXISTING PMS OVERLAY ON APP. SLAB BEFORE GRINDING.

DIAMOND GRIND BRIDGE APPR. SLAB TO CREATE A UNIFORM DEPTH FROM EXISTING BRIDGE GRADE SURFACE TO ACCEPT NEW PMS OVERLAY.

THE EXIST PLANT MIX REMOVAL AND THE DIAMOND GRINDING AREA WILL BE PAID FOR AS MISCELLANEOUS ITEM -SQ. FT.

GRINDING CONNECTION



PLAN VIEW

SHEET NO.
6

DETAIL

PROJECT NAME: GREENOUGH HILL - NORTH
COUNTY: MISSOULA
PROJECT ID: NH 24-1(86)22
UPN: 10376000

CHECKED BY	####	####
REVIEWED BY	####	####
DESIGNED BY	T. GATES	11/8/23

10376000RDDET001.DWG

MONTANA Department of Transportation

ROAD PLANS

8/6/2024 11:25 AM

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

AWARD COPY

SUMMARY
SIGNING & DELINEATION QUANTITIES

MATERIAL	TOTALS	UNIT
SIGNS-SHEET ALUM SHT INCR XI	32.0	SQFT
SIGNS-ALUM REFL SHEET XI	209.2	SQFT
REMOVE SIGN	33	EACH
REMOVE SIGN-GUIDE	1	EACH
POSTS-STEEL U SIGN	170	LB
POLES-TREATED WOOD 4 IN	178	LNFT
POLES-TREATED WOOD 5 IN	172	LNFT
DELINEATOR TYPE 1	163	EACH

DELINEATION SPECIFICATIONS		
SYMBOL	DESIGN	TOTALS
⊣	A	155
⊣⊢	D	8

SYMBOLS & ABBREVIATIONS:

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

▲ = SINGLE SQUARE TUBE REQUIRED. MOUNTED IN HEAVY DUTY STUB.

★ = TELESCOPED SQUARE TUBES (2-1/4" & 2-1/2") WITH SLIP BASE BREAKAWAY REQUIRED. MOUNTED IN HEAVY DUTY STUB.

■ = FRANGIBLE SIGN POST. BREAKAWAY DEVICE REQUIRED.

AIR = ANGLE IRON REQUIRED
2 1/2" x 2 1/2" x 3/8" x 6'-4" (37 lbs.)

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

BGR = BEHIND GUARDRAIL

DSF = DOUBLE SIGN FACE

FY = FLUORESCENT YELLOW SHEETING REQUIRED.

FYG = FLUORESCENT YELLOW - GREEN SHEETING REQUIRED.

MBB = MOUNT BACK TO BACK

RSFO = REPLACE SIGN FACE ONLY.

NOTES:

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

ALL MARKING ARE PAINT, EXCEPT AS NOTED. WHERE SPECIFIED ON THE PLANS AS PLASTIC, INSTALL INLAID HOT EXTRUDED HYDRO-CARBON THERMOPLASTIC PAVEMENT MARKINGS.

SEE LOCATION AND SPECIFICATION SHEETS FOR PORTIONS OF PROJECT NOT INCLUDED WITHIN SIGNING PLAN SHEETS.

SIGN POSTS SYMBOLS SHOWN ARE FOR REFERENCE ONLY TO SHOW EXISTING SIGNS THAT REQUIRE NO ACTION.

STATIONING IS APPROXIMATE. FIELD ADJUST AS NECESSARY.

SIGNING LOCATIONS ARE APPROXIMATE.
FIELD PROJECT MANAGER TO FIELD ADJUST AS NECESSARY.

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.

WHITE CROSS
BY OTHERS. SIGNS WILL BE "USE AS IS"

SHEET NO.
S1

SIGNING SUMMARY
FRAMES AND NOTES

PROJECT NAME	GREENOUGH HILL - NORTH
COUNTY	MISSOULA
PROJECT ID	NH 24-1(86)22
UPN	10376000

DESIGNED BY	H HOELSTAD	04/2024
REVIEWED BY	FIRST INITIAL LAST NAME	MM/YYYY
CHECKED BY	R SCHROEDER	05/2024

10376000SISUM001.DWG

MONTANA
Department of Transportation

SIGNING PLANS

8/6/2024 10:50 AM

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

AWARD COPY

SIGN LOCATION				SIGN PANEL SPECIFICATIONS									SIGN ASSEMBLY SPECIFICATIONS												SIGN ASSEMBLY QUANTITIES														ADDITIONAL SIGN INFORMATION	
STATION / R.P.		DIRECTION	RAMP NO.	SIGN NO. (MUTCD)	PANEL SIZE (INCHES)			FY OR FYG	BACK BRACING REQ'D ANGLE IRON REQ'D	DOUBLE FACE SIGN / MOUNT BACK TO BACK	REPLACE SIGN FACE ONLY	FEET	TYPE OF SUPPORT	FEET							CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)				BREAKAWAY	REMV		RESET		SIGN TEXT	SIGN IMAGE
LEFT	MDN	RGT			W	X	H					CLEARANCE/OFFSET (SHOULDER TO EDGE OF SIGN)		SIGN SUPPORT SPACING	MOUNTING HEIGHT	SIGN HEIGHT + GAPS	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z				SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST		SIGN	GUIDE	SIGN	GUIDE		
689+65.00																																							
		X		(2) D10-2	10	x	27			MBB		4.0	2.0lb Steel U Post		4.0	2.3	3.0	9.9						3.8							20		X				(2x) MILE 22	
691+88.75		EB																																					
		X		N7-1	36	x	48					20.0	5" Treated Wood Pole		5.0	5.2	3.5	15.8				X		12.0			16					X				ADOPT A HIGHWAY	
				N7-2	36	x	12																		3.0												LUBRECHT FOREST	
691+88.75		WB																																					
X				N7-1	36	x	48					20.0	5" Treated Wood Pole		5.0	5.2	3.5	15.8				X		12.0			16					X				ADOPT A HIGHWAY	
						x																																	
702+00.20		EB																																					
		X		BY OTHERS		x																																(by others)	
						x																																	
705+90.00		NB																																					
X				D1-A 01	96	x	48					20.0	5" Treated Wood Pole	4.8	5.0	4.0	3.5	12.5	12.5			X		32.0		28							X				<-MISSOULA JCT MT 83 ->	
						x																																	
706+16.00		NB																																					
		X		R1-1	36	x	36						4" Treated Wood Pole		5.0	3.0	3.0	13.0						7.5		14						X				STOP	
						x																																	
709+45.00		WB																																					
X				BY OTHERS		x																																(by others)	
						x																																	
714+00.00		WB																																					
X				W4-2R	30	x	30	FY				10.0	4" Treated Wood Pole		5.0	3.3	3.0	13.3						6.3		14						X				MERGE LEFT	
						x																																	
727+07.25		NB																																					
		X		R1-1	30	x	30						4" Treated Wood Pole		5.0	3.0	3.0	13.0						5.2		14						X				STOP	
						x																																	
743+03.83																																							
		X		(2) D10-2	10	x	27			MBB		4.0	2.0lb Steel U Post		4.0	2.3	3.0	9.9						3.8							20		X				(2x) MILE 23	
						x																																	
						x																																	

SHEET NO.
S2

SIGN LOCATIONS AND SPECIFICATIONS

PROJECT NAME: GREENOUGH HILL - NORTH
COUNTY: MISSOULA
PROJECT ID: NH 24-1(86)22
UPN: 10376000

DESIGNED BY: H HOELSTAD 04/2024
REVIEWED BY: FIRST INITIAL LAST NAME MM/YYYY
CHECKED BY: R SCHROEDER 05/2024
10376000SISUM001.DWG

MONTANA Department of Transportation

SIGNING PLANS

8/6/2024 10:50 AM

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

SIGN LOCATION				SIGN PANEL SPECIFICATIONS								SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES												ADDITIONAL SIGN INFORMATION	
STATION / R.P.		DIRECTION	RAMP NO.	SIGN NO. (MUTCD)	PANEL SIZE (INCHES)			FY OR FYG	BACK BRACING REQ'D ANGLE IRON REQ'D	DOUBLE FACE SIGN / MOUNT BACK TO BACK	REPLACE SIGN FACE ONLY	FEET	TYPE OF SUPPORT	FEET							CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)				BREAKAWAY	REMV		RESET		SIGN TEXT	SIGN IMAGE
LEFT	MDN	RGT			W	X	H					CLEARANCE/OFFSET (SHOULDER TO EDGE OF SIGN)		SIGN SUPPORT SPACING	MOUNTING HEIGHT	SIGN HEIGHT + GAPS	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z				SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST		SIGN	GUIDE	SIGN	GUIDE		
794+78.00		EB																																	
		X		N7-1	36	X	48					20.0	5" Treated Wood Pole		5.0	5.2	3.5	15.8				X		12.0			16					X				ADOPT A HIGHWAY	
				N7-2	36	X	12																	3.0												THE RESORT AT PAWS UP	THE RESORT AT PAWS UP
						X																														
795+97.85				(2) D10-2	10	X	27			MBB		4.0	2.0lb Steel U Post		4.0	5.2	3.0	9.9						3.8						20		X				(2X) MILE 24	MILE 24
		X																																	
						X																														
796+65.75		WB																																	
X				N7-1	36	X	48					20.0	5" Treated Wood Pole		5.0	5.2	3.5	15.8				X		12.0			16					X				ADOPT A HIGHWAY	
				N7-2	36	X	12																	3.0												LUBRECHT FOREST	LUBRECHT FOREST
814+47.87		EB		PAWS UP (BY OTHERS)																																PAWS UP 1	PAWS UP 1
		X				X																														
824+77.50		EB																																	
		X		W2-2R	30	X	30					10.0	5" Treated Wood Pole		5.0	4.8	3.5	15.2				X		6.3			16					X				SIDE ROAD-RT	
				W16-8AP	30	X	15																	3.1												SUNSET HILL RD	SUNSET HILL RD
						X																														
826+88.16		EB		D3-2B (REMOVE)		X																										X				SUNSET HILL RD	SUNSET HILL RD
		X																																	
						X																														
829+15.52		NB																																	
		X		R1-1	30	X	30					10.0	4" Treated Wood Pole		5.0	3.0	3.0	13.0						5.2		14						X				STOP	STOP
						X																														
830+90.25		WB																																	
X				D3-2C (REMOVE)		X																										X				<- SUNSET HILL RD	<- SUNSET HILL ROAD
						X																														
832+73.45		WB																																	
X				W2-2L	30	X	30					10.0	5" Treated Wood Pole		5.0	4.8	3.5	15.2				X		6.3			16					X				SIDE ROAD-LT	
				W16-8AP	30	X	15																	3.1												SUNSET HILL RD	SUNSET HILL RD
841+90.02		WB		PAWS UP (BY OTHERS)																																PAWS UP 1	PAWS UP 1
X						X																														

SHEET NO.
S3

SIGN LOCATIONS AND SPECIFICATIONS

PROJECT NAME: GREENOUGH HILL - NORTH
COUNTY: MISSOULA
PROJECT ID: NH 24-1(86)22
UPN: 10376000

DESIGNED BY: H HOELSTAD 04/2024
REVIEWED BY: FIRST INITIAL LAST NAME MM/YYYY
CHECKED BY: R SCHROEDER 05/2024
10376000SIGSUM001.DWG

MONTANA Department of Transportation

SIGNING PLANS

8/6/2024 10:50 AM

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

AWARD COPY

SIGN LOCATIONS AND SPECIFICATIONS

SIGN LOCATION				SIGN PANEL SPECIFICATIONS								SIGN ASSEMBLY SPECIFICATIONS											SIGN ASSEMBLY QUANTITIES										ADDITIONAL SIGN INFORMATION	
STATION / R.P.		DIRECTON	RAMP NO.	SIGN NO. (MUTCD)	PANEL SIZE (INCHES)			FY OR FYG	BACK BRACING REQ'D ANGLE IRON REQ'D	DOUBLE FACE SIGN / MOUNT BACK TO BACK	REPLACE SIGN FACE ONLY	FEET	TYPE OF SUPPORT	FEET							CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)				BREAKAWAY	REMV		RESET		SIGN TEXT	SIGN IMAGE
LEFT	MDN	RGT			W	X	H					CLEARANCE/OFFSET (SHOULDER TO EDGE OF SIGN)		SIGN SUPPORT SPACING	MOUNTING HEIGHT	SIGN HEIGHT + GAPS	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z				SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST		SIGN	GUIDE	SIGN	GUIDE		
847+96.86																																			
		X		(2) D10-2	10	X	27			MBB		4.0	2.0lb Steel U Post		4.0	5.2	3.0	9.9						3.8						20		X				MILE 25	
						X																													
857+13.40		WB																																	
X				R4-3	24	X	30					10.0	4" Treated Wood Pole		5.0	2.5	3.0	12.3						5.0		14						X				SLOWER TRAFFIC	
						X																													
861+80.50		WB																																	
		X		W14-3	48 X 48 X 36							10.0	4" Treated Wood Pole		5.0	3.0	3.0	13.0						5.5		14						X				NO PASSING ZONE	
						X																													
895+63.25		EB																																	
X				W14-3	48 X 48 X 36							10.0	4" Treated Wood Pole		5.0	3.0	3.0	13.0						5.5		14						X				NO PASSING ZONE	
						X																													
899+38.50		EB																																	
		X		N7-1	36	X	48					20.0	5" Treated Wood Pole		5.0	5.2	3.5	15.8				X		12.0			16					X				ADOPT A HIGHWAY	
				N7-2	36	X	12																	3.0											PAWS UP RANCH	
						X																													
900+31.75																																			
		X		(2) D10-2	10	X	27			MBB		4.0	2.0lb Steel U Post		4.0	5.2	3.0	9.9						3.8						20		X				MILE 26	
						X																													
900+88.50		WB																																	
X				N7-1	30	X	30					20.0	5" Treated Wood Pole		5.0	5.2	3.5	15.8				X		6.3			16					X				ADOPT A HIGHWAY	
				N7-2	36	X	12																	3.0											THE RESORT AT PAWS UP	
						X																													
910+07.57		EB		W8-6 (MT)01 REMOVE		X																														TRUCKS ENTERING (FOLDING)	
		X																																	
						X																														
915+11.86		WB																																	
		X		W14-3	48 X 48 X 36							10.0	4" Treated Wood Pole		5.0	3.0	3.0	13.0						5.5		14						X				NO PASSING ZONE	
						X																													

PROJECT NAME: GREENOUGH HILL - NORTH
COUNTY: MISSOULA
PROJECT ID: NH 24-1(86)22
UPN: 1037600

DESIGNED BY	DATE
H HOELSTAD	04/2024
REVIEWED BY	MM/YYYY
FIRST INITIAL LAST NAME	
CHECKED BY	05/2024
R SCHROEDER	1037600SISUM001.DWG

MONTANA
Department of Transportation

SIGNING PLANS

8/6/2024 10:50 AM

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

AWARD COPY

SIGN LOCATION				SIGN PANEL SPECIFICATIONS								SIGN ASSEMBLY SPECIFICATIONS											SIGN ASSEMBLY QUANTITIES												ADDITIONAL SIGN INFORMATION	
STATION / R.P.		DIRECTON	RAMP NO.	SIGN NO. (MUTCD)	PANEL SIZE (INCHES)			FY OR FYG	BACK BRACING REQ'D ANGLE IRON REQ'D	DOUBLE FACE SIGN / MOUNT BACK TO BACK	REPLACE SIGN FACE ONLY	FEET	TYPE OF SUPPORT	FEET							CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)				BREAKAWAY	REMV		RESET		SIGN TEXT	SIGN IMAGE
LEFT	MDN	RGT			W	X	H					CLEARANCE/OFFSET (SHOULDER TO EDGE OF SIGN)		SIGN SUPPORT SPACING	MOUNTING HEIGHT	SIGN HEIGHT + GAPS	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z				SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST		SIGN	GUIDE	SIGN	GUIDE		
921+50.49		EB																																	
		X		BY OTHERS		X																													(by others)	
						X																													
924+65.75		EB		W8-22 (MT)01 REMOVE																															LIMITED VISIBILITY (FOLD)	
		X				X																										X			
						X																													
927+63.00		EB																																	
		X		W8-13 (MT)01	30	X	30					10.0	4" Treated Wood Pole		5.0	3.3	3.0	13.8						6.3		14							X			WATCH FOR ICE ON BRIDGE	
						X																													
931+30.00		EB																																	
		X		D9-1	24	X	24					10.0	4" Treated Wood Pole		5.0	3.3	3.0	13.1						4.0		14							X			TELEPHONE	
				M6-1L	21	X	15																		2.2											DIRECTIONAL ARROW-LT	
						X																													
933+07.50		SB																																	
		X		R8-1 (MT)01	18	X	24					10.0	3.0lb Steel U Post		5.0	2.0	3.0	11.8						3.0						35			X			NO PARKING BETWEEN SIGNS	
						X																													
933+95.50		EB																																	
		X		W2-2L	30	X	30					10.0	5" Treated Wood Pole		5.0	4.8	3.5	15.2					X	6.3			16						X			SIDE ROAD-LT	
				W16-8AP	30	X	15																		3.1											NINEMILE PRAIRIE RD	
						X																													
934+47.95		EB																																	
X				W14-3	48 X 48 X 36							10.0	4" Treated Wood Pole		5.0	3.0	3.0	13.0						5.5		14							X			NO PASSING ZONE	
						X																													
934+56.50		NB		R8-1 (MT)01	24	X	30					10.0	3.0lb Steel U Post		5.0	2.0	3.0	11.8						5.0						35			X			NO PARKING BETWEEN SIGNS	
X						X																													
935+38.50		EB																																	
		X		N6-2	36	X	18					10.0	4" Treated Wood Pole		5.0	1.5	3.0	11.3						4.5		12							X			BLACKFOOT RIVER	BLACKFOOT RIVER
937+85.00		WB																																	
X				N6-2	36	X	18					10.0	4" Treated Wood Pole		5.0	1.5	3.0	11.3						4.5		12							X			BLACKFOOT RIVER	BLACKFOOT RIVER
														PROJECT TOTALS									209.2	32.0	178	172				170		33	1		

SHEET NO.
S5

SIGN LOCATIONS AND SPECIFICATIONS

PROJECT NAME: GREENOUGH HILL - NORTH
COUNTY: MISSOULA
PROJECT ID: NH 24-1(86)22
UPN: 1037600

DESIGNED BY: H HOELSTAD 04/2024
REVIEWED BY: FIRST INITIAL LAST NAME MM/YYYY
CHECKED BY: R SCHROEDER 05/2024
1037600SISUM001.DWG

MONTANA Department of Transportation

SIGNING PLANS

8/6/2024 10:50 AM

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

AWARD COPY



MONTANA Department of Transportation	DESIGNED BY: H. HOELSTAD 02/2024	PROJECT NAME: GREENOUGH HILL - NORTH	PLAN SHEET
SIGNING PLANS	REVIEWED BY: FIRST INITIAL LAST NAME MM/YYYY	COUNTY: MISSOULA	SHEET NO. S6
6/12/2024 4:14 PM	CHECKED BY: R SCHROEDER 05/2024	PROJECT ID: NH 24-1(86)22	
10376000SIMAP001.DWG		UPN: 10376000	

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

AWARD COPY

720+00

730+00

PT 725+63.79

STOP

Ref Stationing: 727+07.25
Assembly Status: Replace

Sign Name: R1-1

740+00

TS 735+13.67

SC 737+13.67

Ref Stationing: 743+03.83
Assembly Status: Replace
Sign Name: D10-2 (23)

SHEET NO.
S7

PLAN SHEET

MONTANA
Department of Transportation

SIGNING PLANS

DESIGNED BY	04/2024
H.HOELSTAD	
REVIEWED BY	MM/YYYY
FIRST INITIAL LAST NAME	
CHECKED BY	05/2024
R.SCHROEDER	

PROJECT NAME: **GREENOUGH HILL - NORTH**
COUNTY: **MISSOULA**
PROJECT ID: **NH 24-1(86)22**
UPN: **1037600**

6/12/2024 4:14 PM
1037600SIMAP001.DWG

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

AWARD COPY



MONTANA Department of Transportation	DESIGNED BY: H HOELSTAD 04/2024	PROJECT NAME: GREENOUGH HILL - NORTH	PLAN SHEET
	REVIEWED BY: FIRST INITIAL LAST NAME MM/YYYY	COUNTY: MISSOULA	
SIGNING PLANS	CHECKED BY: R SCHROEDER 05/2024	PROJECT ID: NH 24-1(86)22	
6/12/2024 4:14 PM	10376000SIMAP001.DWG	UPN: 10376000	SHEET NO. S8

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

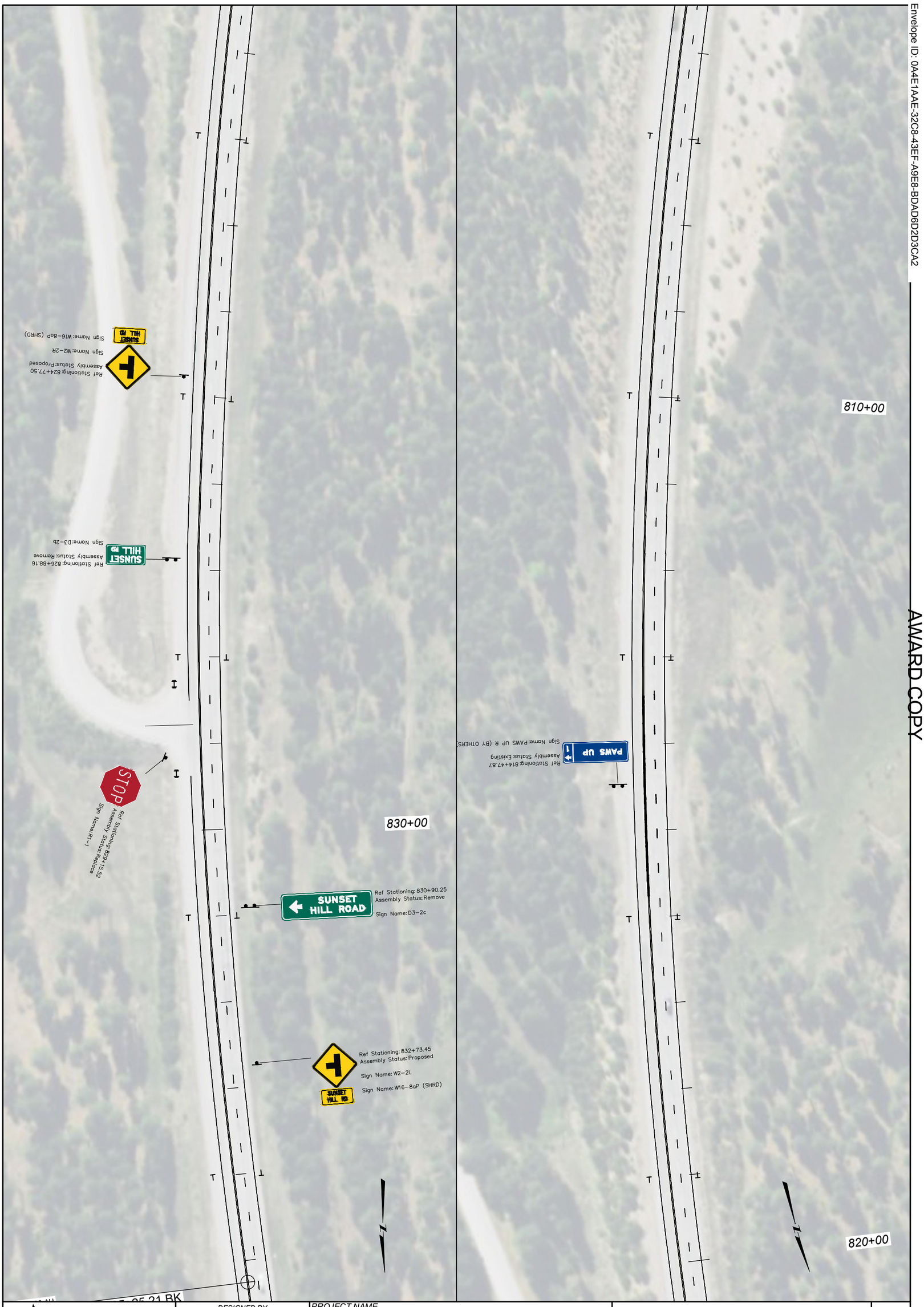
AWARD COPY



MONTANA Department of Transportation	DESIGNED BY	PROJECT NAME	
	H HOELSTAD 04/2024	GREENOUGH HILL - NORTH	
	REVIEWED BY	COUNTY	PLAN SHEET
	FIRST INITIAL LAST NAME MM/YYYY	MISSOULA	
SIGNING PLANS	CHECKED BY	PROJECT ID	
	R SCHROEDER 05/2024	NH 24-1(86)22	
6/12/2024 4:14 PM	10376000SIMAP001.DWG	UPN 10376000	SHEET NO. S9

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

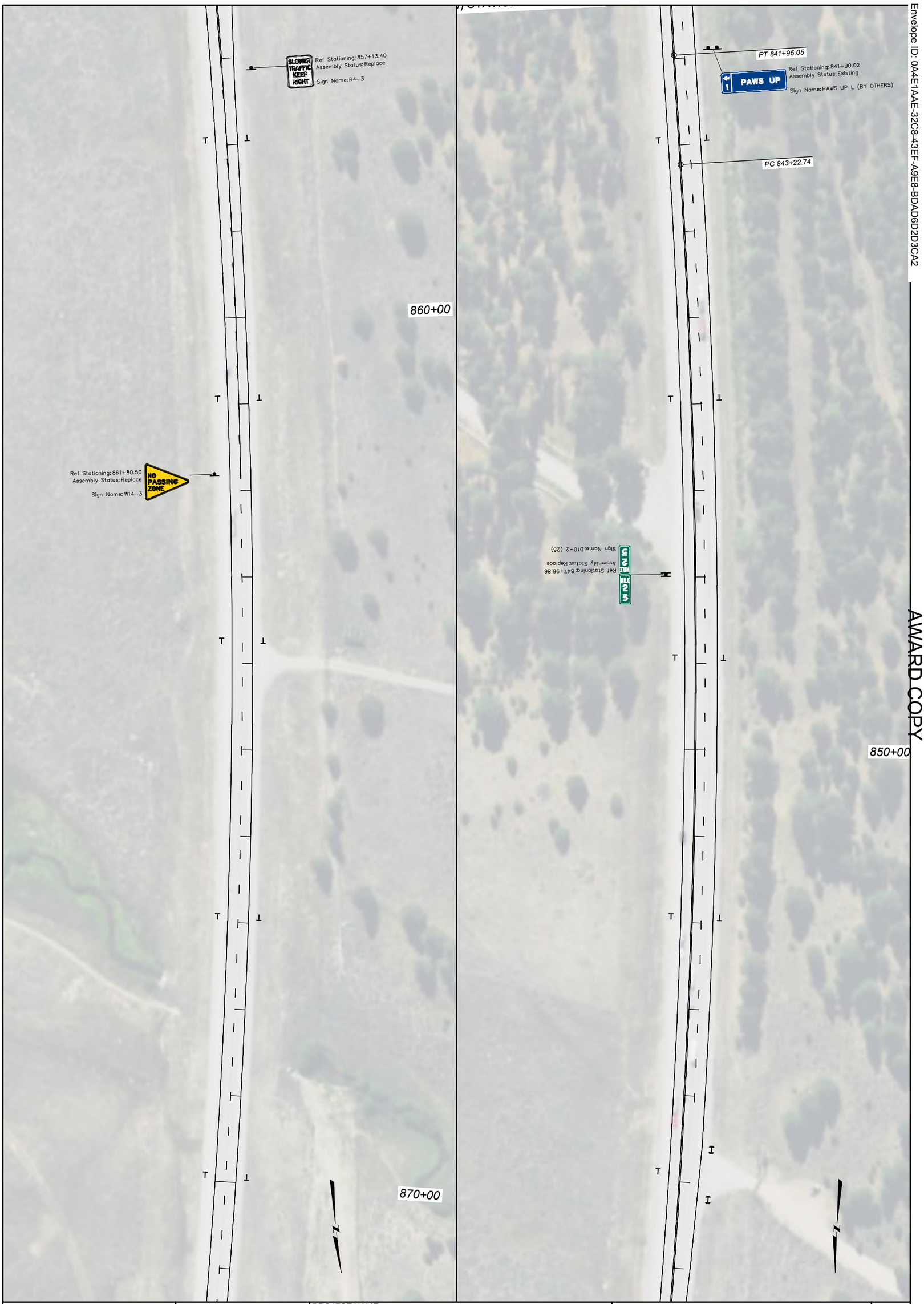
AWARD COPY



MONTANA Department of Transportation	DESIGNED BY	PROJECT NAME	PLAN SHEET
SIGNING PLANS	H HOELSTAD 04/2024	GREENOUGH HILL - NORTH	SHEET NO. S10
6/12/2024 4:14 PM	REVIEWED BY	COUNTY	
10376000SIMAP001.DWG	FIRST INITIAL LAST NAME MM/YYYY	MISSOULA	
	CHECKED BY	PROJECT ID	
	R SCHROEDER 05/2024	NH 24-1(86)22	
		UPN	
		10376000	

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

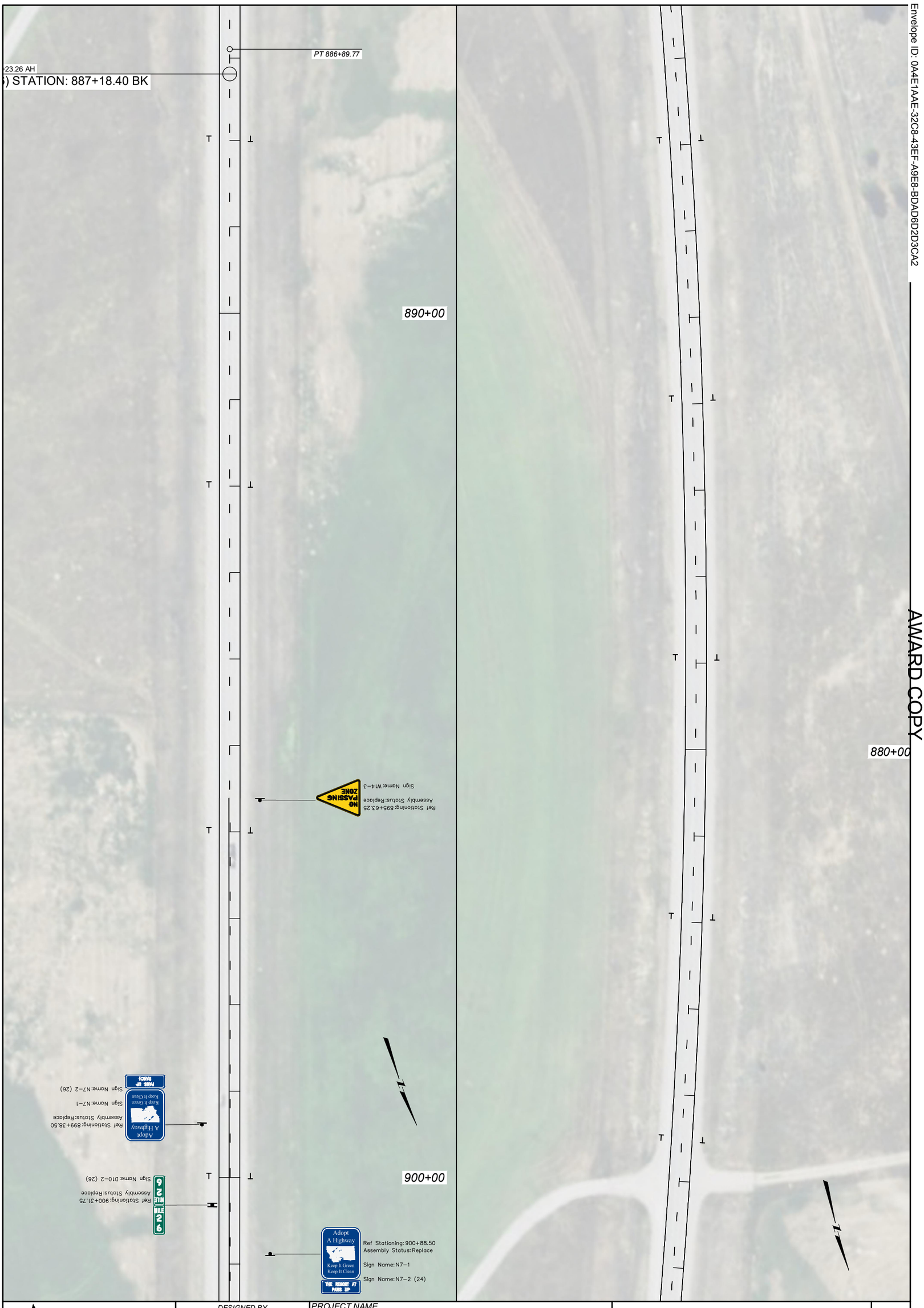
AWARD COPY



MONTANA Department of Transportation	DESIGNED BY: H HOELSTAD 04/2024	PROJECT NAME: GREENOUGH HILL - NORTH	PLAN SHEET
	REVIEWED BY: FIRST INITIAL LAST NAME MM/YYYY	COUNTY: MISSOULA	
SIGNING PLANS	CHECKED BY: R SCHROEDER 05/2024	PROJECT ID: NH 24-1(86)22	
6/12/2024 4:14 PM 10376000SIMAP001.DWG		UPN: 10376000	SHEET NO. S11

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

AWARD COPY



MONTANA Department of Transportation	DESIGNED BY		PROJECT NAME	PLAN SHEET	SHEET NO.
	H HOELSTAD	04/2024	GREENOUGH HILL - NORTH		
	REVIEWED BY		COUNTY		
	FIRST INITIAL LAST NAME	MM/YYYY	MISSOULA		
SIGNING PLANS	CHECKED BY		PROJECT ID		S12
	R SCHROEDER	05/2024	NH 24-1(86)22		
6/12/2024 4:14 PM	10376000SIMAP001.DWG		UPN 10376000		

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

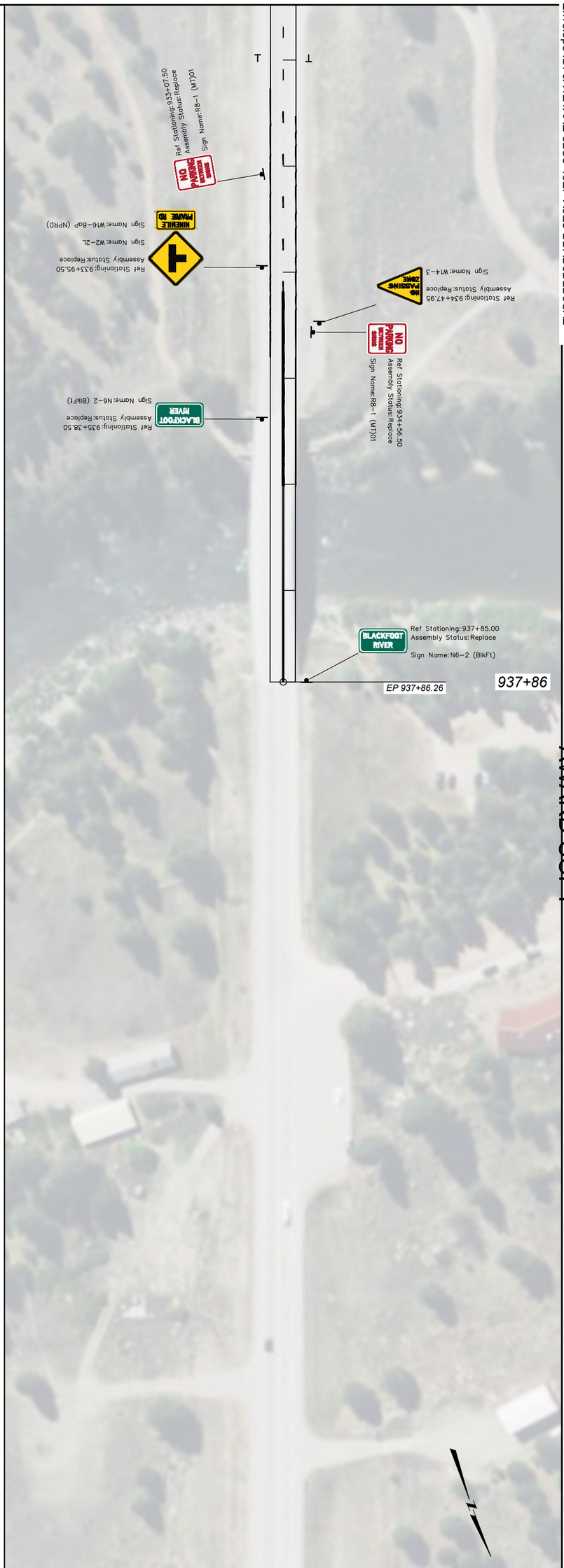
AWARD COPY



MONTANA Department of Transportation	DESIGNED BY		PROJECT NAME	PLAN SHEET	SHEET NO.
	H HOELSTAD	04/2024	GREENOUGH HILL - NORTH		
	REVIEWED BY		COUNTY		
	FIRST INITIAL LAST NAME	MM/YYYY	MISSOULA		
SIGNING PLANS	CHECKED BY		PROJECT ID		S13
	R SCHROEDER	05/2024	NH 24-1(86)22		
6/12/2024 4:14 PM	10376000SIMAP001.DWG		UPN 10376000		

Docusign Envelope ID: 0A4E1AAE-32C8-43EF-A9E8-BDAD6D2D3CA2

AWARD COPY



MONTANA Department of Transportation	DESIGNED BY: H HOELSTAD 04/2024	PROJECT NAME: GREENOUGH HILL - NORTH	PLAN SHEET
	REVIEWED BY: FIRST INITIAL LAST NAME MM/YYYY	COUNTY: MISSOULA	
SIGNING PLANS	CHECKED BY: R SCHROEDER 05/2024	PROJECT ID: NH 24-1(86)22	
6/12/2024 4:14 PM	10376000SIMAP001.DWG	UPN: 10376000	SHEET NO. S14