

August 23, 2023

A. Bruce Johnson J. Quarter Circle Mineral Co., LLC 801 8th Street, Suite 220 Greeley, CO 80631

Re: Frentress Gravel Pit - File No. M-2011-017 J. Quarter Circle Mineral Co., LLC Surety Increase (SI-1) Bond increase from \$17,414.13 to \$37,390.

Dear A. Bruce Johnson:

On August 23, 2023 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$37,390.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$19,975.47.

Please see the July 17, 2023 inspection report for details regarding why this surety increase is required.

The Division ordered amendment of the current Financial Warranty, or submittal of a new Financial Warranty reflecting the increase, within 60 days from the date of this letter (August 23, 2023).

Please make arrangements with Sara M. Stevenson-Benn at the Division's Denver office for submittal of the financial warranty. Any other questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Sara M. Stevenson-Benn by telephone at (303) 866-3567 (8148), or by email at Sara.stevenson-benn@state.co.us.

The Permittee for this site may be scheduled for a Formal Board Hearing for possible revocation of the permit after October 22, 2023, if the amount of any increased Financial Warranty has not been provided.

Bond Held:	\$17,414.53
Prior Liability:	\$17,414.53
Change in Liability:	\$19,975.47
Revised Liability:	\$37,390.00
Prior Permit Acreage:	9.90



Change in Permit Acreage:	0.00
Revised Permit Acreage:	9.90
Prior Affected Acreage:	9.90
Change in Affected Acreage:	0.00
Revised Affected Acreage:	9.90

If you have any questions, please contact me by telephone at (303) 866-3567 x 8176, or by email at Hunter.ridley@state.co.us.

Sincerely,

Hunter C. Ridley

Hunter Ridley

Environmental Protection Specialist

M-GR-04

# COST SUMMARY WORK

T	ask description: UI	odated post inspection 7/1	7/2023			
Site:	Frentress Gravel Pit	Permit Action:	Insp 7/17/23		Permit/Job#	#: <u>M2011017</u>
PR	ROJECT IDENTIFICAT	TION				
	Task #: HCR	State: Colorado		A	Abbreviation:	None
	Date: 7/17/2023	County: Routt		<sup>-</sup>	Filename:	M017-HCR
	User: HR1	_				
	Agency or organization	on name: DRMS				
TA	ASK LIST (DIRECT CO	STS)				
			Form	Fleet	Task	
ask	Description		Used	Size	Hours	Cost
1a	Push & Grade pit slopes t		DOZER	1	27.44	\$11,704
2a	Placement of topsoil (4.5	ac. at 7" depth)	DOZER	_ 1	3.52	\$1,502
3a	Vegetate disturbed area		REVEGE	1	16.00	\$10,698
4a	Initial Mob./Demob. recla		MOBILIZE	1	5.20	\$4,209
4b	Secondary Mob./Demob. crew/equipment	reciamation	MOBILIZE	1	5.20	\$2,017
			SUBTO	OTALS:	57.36	\$30,130
	DIRECT COSTS					
<u> </u>	<u>'ERHEAD AND PROFIT:</u>					
	Liability insurance:	2.02			Total =\$60	
	Performance bond:	1.05			Total =  \$3	
	Job superintendent:	16.36				,065
	Profit:	10.00		TOTAL		,013
		CONT				,003
		CONT	RACT AMOUNT	(direct +	$(0 \times P) = 53.$	5,133
LE	GAL - ENGINEERING - PR	ROJECT MANAGEMENT	:			
	Financial warranty proces		\$500		Total = \$50	00
	Engineering work and/or		0.00	<del>_</del>	Total = \$0	
	Reclamation manageme	ent and/or administration:	5.00	<u> </u>	\$1.	,757
		CONTINGENCY:	0.00		Total = <u>\$0</u>	
			TOTAL I	NDIRECT	COST = \$7	,260
		TOTAL BO	ND AMOUNT (	direct + in	ndirect) =\$3'	7,390

# **BULLDOZER WORK**

Task description:	Push & Grade pi	t slopes to 31	1:1 V		
Frentress Gravel Pit	Peri	mit Action: _	Insp 7/17/23	Permit/Job#:	M2011017
PROJECT IDENTIF	<u>ICATION</u>				
Task #: 01A	State:	Colorado		Abbreviation:	None
Date: 7/19/2023	County:	Routt		Filename:	01a
User: HR1					
Agency or organ	nization name: DR	MS			
HOURLY EQUIPME	ENT COST				
Basic Machine: Cat	D8T - 8SU		_		
Horsepower: 310			_		
• • • • • • • • • • • • • • • • • • •	ni-Universal		_		
Attachment: NA			_		
	er day		_		
Data Source: (CF	KG)		_		
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/Hour:		\$241.38	NA		
Operating Cost/Hour:		\$143.92	100		
Ripper own. Cost/Hour:		\$0.00	NA O		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
Total unit Cost/Hour:	\$426.60				
Total Fleet Cost/Hour:	\$426.60				
<b>MATERIAL QUANT</b>	TITIES				
Initial Values 0.25	0				
Initial Volume: 9,25 Swell factor: 1.23					
	0 <b>89</b> LCY	<u>—</u>			
Source of estimated volume		5' H @ 1:1 to	a 3:1		
Source of estimated swell	factor: Cat Hand	book			
<b>HOURLY PRODUC</b>	<u> FION</u>				
Average push distance:	150 feet				
Unadjusted hourly produc		hr			
Materials consistency des		stockpile 1.2	<del></del> '		
·				_	
Average push gradient:	0 %				
Average site altitude:	6,380 feet				
Material weight:	2,100 lbs/LCY			<u> </u>	
Weight description:	Earth - Loam				
Job Condition Correction	Factor		Source		
Operator		750	(AVG.)		
Material consist		200	(CAT HB)		
Dozing me		000	(GEN.)		
		000	(AVG.)		

Job efficiency:

0.830

(1 SHIFT/DAY)

Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6544

Adjusted unit production: 415.09 LCY/hr
Adjusted fleet production: 415.09 LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)
Unit cost: \$1.028/LCY

Total job time: 27.44 Hours
Total job cost: \$11,704

### **BULLDOZER WORK**

Task description:	Placement of topsoil (4.5 ac	. at 7" depth)		
Frentress Gravel Pit	Permit Action:	Insp 7/17/23	Permit/Job#:	M2011017
PROJECT IDENTIFI	<u>CATION</u>			
Task #: 02A	State: Colorado		Abbreviation:	None
Date: 7/19/2023	County: Routt		Filename:	02a
User: HR1			<del>-</del>	
Agency or organ	ization name: DRMS			
HOURLY EQUIPME	NT COST			
Basic Machine: Cat	D8T - 8SU			
Horsepower: 310				
<u></u>	ni-Universal			
Attachment: NA				
	r day			
Data Source: (CR	(d)			
Cost Breakdown:		I		
		<u>Utilization %</u>		
Ownership Cost/Hour:	\$241.38	NA 100		
Operating Cost/Hour:	\$143.92	100		
Ripper own. Cost/Hour:	\$0.00	NA 0		
Ripper op. Cost/Hour:	\$0.00 \$41.30			
Operator Cost/Hour:	\$41.30	NA		
Total Fleet Cost/Hour:	\$426.60 \$426.60			
Total unit Cost/Hour: Total Fleet Cost/Hour:  MATERIAL QUANTI  Initial Volume: 4,235	\$426.60 ITIES			
Total Fleet Cost/Hour:  MATERIAL QUANTI  Initial Volume: 4,235  Swell factor: 1.000	\$426.60 ITIES			
Total Fleet Cost/Hour:  MATERIAL QUANTI  Initial Volume: 4,235  Swell factor: 1.000  Loose volume: 4,235  Source of estimated volume	\$426.60  ITIES  5  CLCY  ne: 4.5 ac @ 7" deep			
Total Fleet Cost/Hour:  MATERIAL QUANTI  Initial Volume: 4,235  Swell factor: 1.000	\$426.60  ITIES  SINGULATION STATES  SINGULATIO			
Total Fleet Cost/Hour:  MATERIAL QUANTI  Initial Volume: 4,235 Swell factor: 1.000 Loose volume: 4,235 Source of estimated volum Source of estimated swell  HOURLY PRODUCT  Average push distance:	\$426.60  ITIES  5  CLCY  ne: 4.5 ac @ 7" deep  Cat Handbook  ION  50 feet			
Total Fleet Cost/Hour:  MATERIAL QUANTI  Initial Volume: 4,235  Swell factor: 1.000 4,235  Source of estimated volum Source of estimated swell	\$426.60  ITIES  5 5 6 LCY  ne:	2		
Initial Volume: 4,235 Swell factor: 1.000 Loose volume: 4,235 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product	\$426.60  ITIES  5 5 6 LCY  ne:	2		
Initial Volume: 4,235 Swell factor: 1.000 Loose volume: 4,235 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency descare Average push gradient:	\$426.60  ITIES  5  SLCY  ne:	2		
MATERIAL QUANTI  Initial Volume: 4,235 Swell factor: 1.000 Loose volume: 4,235 Source of estimated volum Source of estimated swell  HOURLY PRODUCT Average push distance: Unadjusted hourly produc  Materials consistency desc Average push gradient: Average site altitude:	\$426.60  ITIES  5  5  CLCY  ne:	2		
Initial Volume: 4,235 Swell factor: 1.000 Loose volume: 4,235 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: Material weight:	\$426.60  ITIES  5  CLCY  ne:	2		
Initial Volume: 4,235 Swell factor: 1.000 Loose volume: 4,235 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$426.60  ITIES  5  CLCY  ne:	Source		
Initial Volume: 4,235 Swell factor: 1.000 Loose volume: 4,235 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S	\$426.60  ITIES  5  CLCY  ne:	Source (AVG.)		
MATERIAL QUANTI  Initial Volume: 4,235 Swell factor: 1.000 Loose volume: 4,235 Source of estimated volum Source of estimated swell  HOURLY PRODUCT  Average push distance: Unadjusted hourly product  Materials consistency desc  Average push gradient: Average site altitude:  Material weight:  Weight description:  Job Condition Correction Operator S Material consiste	\$426.60  ITIES  SOCIETY  The:  4.5 ac @ 7" deep Cat Handbook  TON  50 feet 1,400.0 LCY/hr  Cription:  Loose stockpile 1.6  6,380 feet  1,600 lbs/LCY  Top Soil  Factor Skill:  0.750 ncy:  1.200	Source (AVG.) (CAT HB)		
Initial Volume: 4,235 Swell factor: 1.000 Loose volume: 4,235 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S	\$426.60  ITIES  SOCIETY  The:  4.5 ac @ 7" deep Cat Handbook  TON  50 feet  1,400.0 LCY/hr  Cription:  Loose stockpile 1.:  0 % 6,380 feet  1,600 lbs/LCY  Top Soil  Factor Skill: 0.750 ncy: 1.200 hod: 1.000	Source (AVG.)		

Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.8593

Adjusted unit production: 1,203.02 LCY/hr
Adjusted fleet production: 1203.02 LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s) Unit cost: \$0.355/LCY

Total job time: 3.52 Hours
Total job cost: \$1,502

# **REVEGETATION WORK**

1 Tenti ess	Gravel Pit	Perm	nit Action: Insp	7/17/23		Permit/Job#	: <u>M2011017</u>
ROJECT I	<b>DENTIFICAT</b>	<u> ION</u>					
Task #:	03A	State:	Colorado		Ah	breviation:	None
Date:	7/19/2023		Routt				03a
User:	HR1	-					
Ager	ncy or organization	on name: DRN	ИS				
ERTILIZI	NG						
aterials							
D : /:			Units /	#T *4	Co	st / Unit	Cost /Acre
Descriptio	n		Acre	Unit			
666			40.00	pound	\$0.	45	\$18.00
					To	tal Fertilizer	
						Materials	
						Cost/Acre	\$18.00
		EANS 32 01 90.1	,	Fertilizer	Application	on Cost/Acre	\$41.82 \$41.82
	n		,	Fertilizer	Applicatio	on Cost/Acre	
LLING  Descriptio	n wing, 6" deep (M		Total	Fertilizer	Applicatio	on Cost/Acre	\$41.82
LLING  Descriptio			Total			on Cost/Acre	\$41.82 Cost /Acre
LLING  Descriptio			Total				\$41.82 Cost /Acre \$112.82
LLING  Descriptio  Disc harroy			Total		Rate – PLS LBS /		\$41.82 Cost /Acre \$112.82
LLING  Descriptio  Disc harrov	wing, 6" deep (M		Total		Fotal Tillin Rate – PLS	ng Cost/Acre Seeds per SQ.	\$41.82 Cost /Acre \$112.82 \$112.82
Description Disc harrow  EEDING  Seed Mix  Alfalfa - Co	wing, 6" deep (M		Total		Rate – PLS LBS / Acre	Seeds per SQ. FT	\$41.82  Cost /Acre \$112.82  \$112.82  Cost /Acre
Description Disc harrow  EEDING  Seed Mix  Alfalfa - Commonth Britannia	wing, 6" deep (M	EANS 32 91 13.	Total		Rate – PLS LBS / Acre 8.00	Seeds per SQ. FT	\$41.82  Cost /Acre \$112.82  \$112.82  Cost /Acre
Description Disc harrow  EEDING  Seed Mix  Alfalfa - Commonth Britannia	ommon ome - Lincoln	EANS 32 91 13.	Total 23 6100)		Rate – PLS LBS / Acre 8.00 13.00	Seeds per SQ. FT 38.57 43.27	\$41.82  Cost /Acre \$112.82  \$112.82  Cost /Acre  \$20.40 \$43.23
Description Disc harrow  EEDING  Seed Mix  Alfalfa - Common Second Britermedian	ommon ome - Lincoln	EANS 32 91 13.	Total 23 6100)	,	Rate – PLS LBS / Acre 8.00 13.00 20.00	Seeds per SQ. FT  38.57  43.27  42.70	\$41.82  Cost /Acre \$112.82  \$112.82  Cost /Acre  \$20.40 \$43.23 \$56.00
Description Disc harrow  EEDING  Seed Mix  Alfalfa - Commonth Br	ommon ome - Lincoln te Wheatgrass - F	EANS 32 91 13.	Total 23 6100)	,	Rate – PLS LBS / Acre 8.00 13.00 20.00	Seeds per SQ. FT  38.57  43.27  42.70	\$41.82  Cost /Acre \$112.82  \$112.82  Cost /Acre  \$20.40 \$43.23 \$56.00

<b>Total Seed Application Cost/Acre</b>	\$468.00

### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$4.01	\$4.01
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
Total Mulch Materials Cost/Acre				\$863.58

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$74.46
Weed spray, truck, non-aquatic area, nox. [DMG]		\$62.72
	<b>Total Mulch Application Cost/Acre</b>	\$137.18

### **NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

### **JOB TIME AND COST**

 No. of Acres:
 4.5
 Cost / Acre:
 \$1,761.03

 Estimated Failure Rate:
 35%
 Cost / Acre\*:
 \$1,761.03

\*Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,MU

LCHING

Initial Job Cost: \$7,924.64

Reseeding Job Cost: \$2,773.62

Total Job Cost: \$10,698

16.00

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task (	description: I	nitial Mob./Demo	b. reclama	tion crew/equi	pment	
Site: Fre	entress Gravel Pit	Perm	nit Action:	Insp 7/17/23	Permit/Jo	bb#: <u>M2011017</u>
<u>PROJ</u>	ECT IDENTIFICA	ΓΙΟΝ				
Ta	sk #: 04A	State:	Colorado		Abbreviation:	None
	Date: 7/19/2023 User: HR1	County:	Routt		Filename:	04a
	Agency or organizat	ion name: DRN	/IS			
<b>EQUI</b>	PMENT TRANSPO	RT RIG COST	1 -			
					Shift basis:	1 per day
					Cost Data Source:	CRG Data
	Truck Tractor De	escription: GEN	NERIC ON-	HIGHWAY TI	RUCK TRACTOR, 6X4,	DIESEL POWERED,
				400 H	P (2ND HALF, 2006)	
	Truck Trailer De	escription:	GENERIC	FOLDING GC	OSENECK, DROP DEC	CK EQUIPMENT
				TRAILE	R (25T, 50T, AND 100T	)
Cost B	reakdown:					
Avail	lable Rig Capacities	0-25 Tons	26-50	Tons 5	1+ Tons	
·	Ownership Cost/Hour	\$20.26	\$36	.04	\$47.05	
	Operating Cost/Hour	\$39.51	\$76	.08	\$82.85	
	Operator Cost/Hour	\$22.52	\$22	.52	\$22.52	
	Helper Cost/Hour	\$0.00	\$23	.53	\$23.53	
	Total Unit Cost/Hour	\$82.29	\$15	8.17	8175.95	

# **NON ROADABLE EQUIPMENT:**

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	(TONS)		t		fleet		
Cat D8T - 8SU	47.71	\$241.38	\$158.17	1	\$399.55	\$158.17	\$250.00
Drill/Broadcast	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00
(Bowie LD-90)							

Subtotals: \$596.80 \$322.75 \$750.00

# **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$27.44	1	\$27.44	\$27.44

Subtotals	\$27.44	\$27.44
Subjoining.	\$7744	N//44

### **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: STEAMBOAT

Total one-way travel distance:

Average Travel Speed:

SPRINGS

28.00

miles

mph

\$4,164.88

Total Non-Roadable Mob/Demob Cost \* 
'\* two round trips with haul rig:

Total Roadable Mob/Demob Cost \*\*

\*\* one round trip, no haul rig:

\$43.90

#### **Transportation Cycle Time:**

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.80	0.80
Return Time (Hours):	0.80	0.80
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.60	1.60

### **JOB TIME AND COST**

Total job time:	5.20	Hours
Total job cost:	\$4,209	

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Secondary Mob.	Demob. reclam	ation crew/equi	pment	
ite: Frentress Gravel Pit	Per	mit Action: Ins	p 7/17/23	Permit/Jo	b#: <u>M2011017</u>
PROJECT IDENTIFIC	CATION				
Task #: 04B Date: 7/19/2023 User: HR1	State: County:	Colorado Routt		Abbreviation: Filename:	None 04b
Agency or organi	zation name: DR	MS			
EQUIPMENT TRANS  Truck Tractor				t Data Source:	1 per day CRG Data DIESEL POWERED,
Truck Tructor	Description. GI	INLINE OIV-IIIC		ND HALF, 2006)	DIESEE I OWEKED,
Truck Trailer	Description:	GENERIC FO		NECK, DROP DEC T, 50T, AND 100T)	~
Cost Breakdown:					
Available Rig Capacitie	s 0-25 Tons	26-50 Tor	51+ T	ons	
Ownership Cost/Ho	our: \$20.26	\$36.04	\$47.0	)5	
Operating Cost/He		\$76.08	\$82.8		
Operator Cost/He		\$22.52	\$22.5	52	
Helper Cost/He	our: \$0.00	\$23.53	\$23.5	53	
Total Unit Cost/H	nur: \$82.29	\$158.17	\$175	95	

#### **NON ROADABLE EQUIPMENT:**

Machine Description	Weight/ Unit	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni	Fleet Size	Haul Trip Cost/hr/	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
	(TONS)		t		fleet		
Drill/Broadcast	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00
(Bowie LD-90)							

Subtotals: \$197.25 \$164.58 \$500.00

### **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T.	\$27.44	1	\$27.44	\$27.44
Crew				

Subtotals: \$27.44 \$27.44

### **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: STEAMBOAT

Task # 04B

SPRINGS

Total one-way travel distance: Average Travel Speed: 28.00 miles 35.00 mph

Total Non-Roadable Mob/Demob Cost \*

\*\* two round trips with haul rig:

\$1,973.43

Total Roadable Mob/Demob Cost \*\*

\*\* one round trip, no haul rig:

\*\* one round trip, no haul rig: \$43.

\$43.90

#### **Transportation Cycle Time:**

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.80	0.80
Return Time (Hours):	0.80	0.80
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.60	1 60

### **JOB TIME AND COST**

Total job time:	5.20	Hours
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Total job cost: **\$2,017**