

1313 Sherman St. Room 215 Denver, CO 80203

March 18, 2019

Mr. Nick H. Gray Nick H. Gray 584 65.30 Rd. Montrose, CO 81401

Re: Gray Pit #1, Permit No. M-2003-092, Financial Warranty Increase, Revision No. SI-2

Dear Mr. Gray:

On March 18, 2019 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$64,044.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$2,804.00 over the currently held \$61,240.00. Please see the enclosed reclamation cost estimate update worksheets for details.

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. If you wish to submit a different type of Financial Warranty, please contact Barbara Coria at (303) 866-3567 Ext. 8149 for applicable form. The new financial warranty must be received and accepted by the Division's Denver Office no later than **Friday May 17, 2019**. If you have any questions, please feel free to contact me at the Division's Grand Junction Field Office, by phone at (970) 243-6368 or by email at lucas.west@state.co.us.

Sincerely,

Lucas J. West

Environmental Protection Specialist

cc:

Barbara J. Coria, DRMS

Travis Marshall, Senior Environmental Protection Specialist



COST SUMMARY WORK

: Gray Pit	#1	Pe	rmit Action:	2019 Update	Permit/Job	#: <u>M2003092</u>
PROJECT	IDENTIFICA	ΓΙΟΝ				
Task #:	_000_	State:	Colorado		Abbreviation:	None
Date:	3/15/2019	County:	Montrose		Filename:	M092-000
User:	LJW					

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Reduce highwalls to 2H: 1V	DOZER	1	17.39	\$4,521
002	Rip the pit floor	RIPPER	$\frac{1}{1}$	8.63	\$2,312
003	Topsoil 20 acres	DOZER	1	22.35	\$5,812
004	Revegetate steeper slopes	REVEGE	1	3.00	\$6,367
005	Revegetate pit floor/operations area	REVEGE	1	3.00	\$29,744
006	Mobilize to the site	MOBILIZE	1	2.50	\$3,432
		SUBTO	DTALS:	56.87	\$52,188

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02 Total = \$1,054 Performance bond: 1.05 Total = \$548 Job superintendent: 27.18 Total = \$1,985 Profit: 10.00 Total = \$5,219

TOTAL O & P = \$8,806 CONTRACT AMOUNT (direct + O & P) = \$60,994

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):

Engineering work and/or contract/bid preparation:

Reclamation management and/or administration:

Solution

Total = \$0
Total = \$0
Total = \$0
\$3,050

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$11,856

TOTAL BOND AMOUNT (direct + indirect) = \$64,044

BULLDOZER WORK

Task description:	Reduce highwa	lls to 2H: 1V			
te: Gray Pit #1	P	ermit Action:	2019 Update	Permit/Jol	b#: M2003092
PROJECT IDENT	FIFICATION				
Task #: 001 Date: 3/15/2 User: LJW	State:	Colorado Montrose	,	Abbreviation: Filename:	None M092-001
Agency or	organization name:D	RMS			
HOURLY EQUIP	MENT COST				
Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	Cat D9T - 9SU 405 Semi-Universal 3-shank ripper 1 per day (CRG)				
Cost Breakdown:		1			
Ownership Cost/Ho	our:	\$110.70	<u>Utilization %</u> NA		
Operating Cost/He		\$95.46	100		
Ripper o Cost/Ho		\$12.36	NA		
Ripper op. Cost/Ho		\$0.00	0		
Operator Cost/Ho	our:	\$41.52	NA		
MATERIAL QUA Initial Volume: Swell factor: Loose volume:	13,287 1.165 15,479 LCY				
Source of estimated Source of estimated factor: HOURLY PRODU	volume: 2,917 C swell Cat Han		0 CY around pond		
Average push distar Unadjusted hourly production:	-	CY/hr	_		
Materials consistence	cy description: Compa	acted fill or en	nbankment 0.9		
Average push gradient:	-5 %				
Average site altitude	e: 6,890 feet				
Material weight:	2,900 lbs/LCY				
Weight description:	Decomposed rocl	c - 50% Rock,	50% Earth	th.	
Job Condition Correct	tion Factor	· · · · · · · · · · · · · · · · · · ·	Source		

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4756

Adjusted unit production:

890.32 LCY/hr

Adjusted fleet production:

890.32 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.292/LCY

Total job time: 17.39 Hours Total job cost: \$4,521

BULLDOZER RIPPING WORK

Task description:	Rip the pit floor				_
Site: Gray Pit #1	Permit Action:	2019 Update	Permit/.	Job#: <u>M20030</u>	92
PROJECT IDENTIFI	CATION				
Task #: 002	State: Colorado		Abbreviation	: None	
Date: 3/15/2019			Filename		
User: LJW		7		. 10002-002	
Agency or organ	nization name: DRMS				
HOURLY EQUIPME	NT COST				**
Basic Machine	e: Cat D9T - 9SU		Horsepower:	405	
Ripper Attachmen		_		1 per day	-
rapper retainmen	S Bhank Repper	-	Data Source:	(CRG)	-
Cost Decalations				(CRG)	-
Cost Breakdown:		Ι.τ	T4:1:4: 0/		
Owne	rship Cost/Hour:	\$110.70	Utilization % NA		
	rship Cost/Hour:ating Cost/Hour:	\$95.46	100		
	rship Cost/Hour:	01000	NA		
	-Aim - C 4/III	07.00	100		
	rator Cost/Hour:	\$41.52	NA		
-	Unit Cost/Hour:	\$267.92	IVA		
		-			
Total	Fleet Cost/Hour: \$267	.92			
MATERIAL QUANT	ITIES Selec	ted estimating m	nethod: Area		
Alternate Methods:	<u> </u>	ted estimating in	ictilod. Aica	717	_
	5	37.			
Seismic: NA Area: 6.00 ac	Bank Volume:	NA 1.50	BCY	NA NA	
Area: 6.00 a	cres Rip Depth (ft):	1.50	Volume:14,520	<u> </u>	BCY or CC
Source	of estimated quantity: Inspect	ion Observations	s and reclamation plan		
HOURLY PRODUCT	ION			-	
	<u>ION</u>				
Seismic:					
	Seismic Velocity:	NA	feet/second		
Area:					
	Average Ripping Depth:	2.63	mph		
	Average Ripping Width:	7.67	degrees		
	Average Ripping Length:	200.00	feet		
	Average Dozer Speed:	88.00	feet		
Α	verage Maneuver Time:	0.25	feet		
	Production per unit area:	0.838	acres/hour		
Job Condition Correction	Factors				
Unadjusted	Hourly Unit Production:	0.838	Acres/hr		
	Site Altitude:	6,890			
	Altitude Adj:	1.00	feet (CATHE)		
	Job Efficiency:	0.83	(CAT HB)		
	Net Correction:	0.83	(1 shift/day) multiplier		
			 -		
	ljusted Hourly Unit Production:	0.70	_ Acres/hr		
Ad	justed Hourly Fleet Production:	0.70	Acres/hr		
JOB TIME AND COS	<u>T</u>				
Fleet size:1	Grader(s)	Total job time:	8.63	Hours	
Unit cost: \$385.	397 Per acre	Total job cost:	\$2,312		

BULLDOZER WORK

rask description:	Topsoil 20 a	icres			
ite: Gray Pit #1	4.44	Permit Action:	2019 Update	Permit/Jol	o#: <u>M2003092</u>
PROJECT IDENT	IFICATION				
Task #: 003 Date: 3/15/20	Sta	ate: Colorado aty: Montrose		Abbreviation: Filename:	None M092-003
User: LJW	oiy coul	ity. Wiontrose		Filename.	101092-003
	rganization name:	DRMS			
rigency or o	gamzanon namo.	Didvio			
HOURLY EQUIP	MENT COST				
Basic Machine:	Cat D9T - 9SU		_		
Horsepower:	405	31114	_		
Blade Type: _ Attachment:	Semi-Universal		_		
Shift Basis:	3-shank ripper		_		
_	1 per day		=		
Data Source:	(CRG)		=		
Cost Breakdown:		i i			
0 11 0 177			<u>Utilization %</u>		
Ownership Cost/Ho		\$110.70	NA		
Operating Cost/Ho		\$95.46	100		
Ripper ov Cost/Ho		\$12.36	NA		
Ripper op. Cost/Ho		\$0.00	0		
Operator Cost/Ho		\$41.52	NA		
MATERIAL QUA					
_	13,444				
Swell factor:	1.000				
Loose volume:	13,444 LCY				
Source of estimated	volume: Ava	5 inches over 20	00		
Source of estimated factor:		Handbook	ac.		
HOURLY PRODU	CTION				
Average push distant					
Unadjusted hourly production:	700.01	LCY/hr			
Materials consistency	y description: Lo	ose stockpile 1.2		2	
Average push gradient:	0 %				
Average site altitude	: 6,890 feet				
Average site attitude	. 0,070 leet				
Material weight:	1,600 lbs/LC	Υ		_	
Weight description:	Top Soil				
Job Condition Correcti	ion Factor		Source		

Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(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:	1.438	(CAT HB)
Blade type:	1.000	(PAT)
		()

Net correction: 0.8593

Adjusted unit

production:

601.51 LCY/hr

Adjusted fleet production:

601.51 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.432/LCY

Total job time: 22.35 Hours
Total job cost: \$5,812

REVEGETATION WORK

Task description: Revegetate steeper	slopes			
ite: Gray Pit #1 Perm	it Action: <u>2019</u>	Update	Permit/Job#	#: <u>M2003092</u>
PROJECT IDENTIFICATION				
	Colorado Montrose			None M092-004
Agency or organization name: DRM	S			
FERTILIZING				
Materials				
Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials Cost/Acre	\$0.00
Application				
1	546			Cost /Acre
Description				_
Description				\$

Description		Cost /Acre
Chisel plowing {DMG}		\$92.77
Weed control spraying (MEANS 31 31 16.13 3100)		\$193.60
	Total Tilling Cost/Acre	\$286.37

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	6.25	20.23	\$43.75
Crested Wheatgrass - Ephraim	3.00	13.77	\$11.25
Canby Bluegrass - Canbar	0.90	19.13	\$8.76
Sand Dropseed	0.10	11.94	\$1.11
Galleta	6.00	21.90	\$151.74
Saltbush, Four Wing	2.00	2.75	\$25.60
Totals Seed Mix	18.25	89.73	\$242.21

Application

Description Hydro seeding (MEANS 32 92 19.14 0200)			Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)			\$919.12
	· .	Total Seed Application Cost/Acre	\$919.12

MULCHING and MISCELLANEOUS

Materials

Units / Acre	Unit	Cost / Unit	Cost /Acre
2.00	TON	\$288.00	\$576.00
			\$576.00
	Acre	Acre Unit	Acre Unit Cost / Unit

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$629.20
		-
	Total Mulch Application Cost/Acre	\$629.20

NURSERY STOCK PLANTING

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

JOB TIME AND COST

No. of Acres: 2 Cost/Acre: \$2,652.90

Estimated Failure Rate: 20% Cost /Acre*: \$2,652.90

*Selected Replanting Work Items: TILLING, SEEDING, MULCHING

Initial Job Cost: \$5,305.80

Reseeding Job Cost: \$1,061.16

Total Job Cost: \$6,367

REVEGETATION WORK

Gray Pit #1	Permit A	Permit Action: 2019 Update Permit/Job		#: <u>M2003092</u>	
ROJECT IDENTIFIC	ATION				
Task #: 005 Date: 3/15/2019 User: LJW Agency or organiz	State: Colo County: Mon ation name: DRMS			-	None M092-005
Interials Description		Units / Acre	Unit	Cost / Unit	Cost /Acre
				\$	\$
1900				Total Fertilizer Materials	

Application

Description		Cost /Acre
_	 	\$
	Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description		Cost /Acre
Chisel plowing {DMG}		\$92.77
Weed control spraying (MEANS 31 31 16.13 3100)		\$193.60
	Total Tilling Cost/Acre	\$286.37

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	3.13	10.12	\$21.88
Crested Wheatgrass - Ephraim	1.50	6.89	\$5.63
Canby Bluegrass - Canbar	0.45	9.57	\$4.38
Sand Dropseed	0.05	5.97	\$0.56
Galleta	3.00	10.95	\$75.87
Saltbush, Four Wing	1.00	1.38	\$12.80
Totals Seed Mix	9.13	44.87	\$121.10

Application

Description Drill Seeding (DRMS Survey Cost)	77.54	Cost /Acre \$232.00
	Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS

Materials

Description Straw, delivered {MEANS 31 25 14.16 1200}	Units / Acre 2.00	Unit	Cost / Unit	Cost /Acre
Total Mulch Materials Cost/Acre	2.00	TON	\$288.00	\$576.00 \$576.00

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$68.78
Power mulcher (MEANS 32 91 13.16 0350)		\$92.78
×	Total Mulch Application Cost/Acre	\$161.56

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
	_				\$
	\$0.00				

JOB TIME AND COST

No. of Acres: 18 Cost /Acre: \$1,377.03

Estimated Failure Rate: 20% Cost /Acre*: \$1,377.03

*Selected Replanting Work Items: TILLING, SEEDING, MULCHING

Initial Job Cost: **\$24,786.54**

Reseeding Job Cost: \$4,957.31

Total Job Cost: \$29,744

Job Hours: 3.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:

Mobilize to the site

Site: Gray Pit #1

Permit Action: 2019 Update

Permit/Job#: M2003092

PROJECT IDENTIFICATION

3/15/2019

Task #: 006

State: County:

Colorado

Montrose

Abbreviation:

None

Date: User:

LJW

Filename:

M092-006

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis:

1 per day

Cost Data Source:

CRG Data

Truck Tractor Description:

GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description:

GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$16.63	\$18.37	\$22.33
Operating Cost/Hour:	\$44.38	\$46.13	\$50.07
Operator Cost/Hour:	\$27.66	\$27.66	\$27.66
Helper Cost/Hour:	\$0.00	\$25.39	\$25.39
Total Unit Cost/Hour:	\$88.67	\$117.55	\$125.45

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	1	
Cat D9T - 9SU	66.13	\$123.06	\$125.45	1	\$248.51	\$125.45	\$250.00
Drill/Broadcast	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00
Seeder with							
Tractor							
Hydroseeder with	28.00	\$21.19	\$117.55	1	\$138.74	\$117.55	\$250.00
Tractor							
Power Mulcher	6.00	\$8.33	\$88.67	1	\$97.00	\$88.67	\$250.00
(Bowie LD-90)							

Subtotals:

\$588.46

\$420.34

\$1,000.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$12.23	1	\$12.23	\$12.23

Subtotals:

\$12.23

\$12.23

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

MONTROSE

miles

40.00

mph

Total Non-Roadable Mob/Demob Cost *

'* two round trips with haul rig:

Total Roadable Mob/Demob Cost **

** one round trip, no haul rig: \$3.06

Transportation Cycle Time:

	Non-		
	Roadable	Roadable	
	Equipment	Equipment	
Haul Time (Hours):	0.13	0.13	
Return Time (Hours):	0.13	0.13	
Loading Time (Hours):	0.50	NA	
Unloading Time (Hours):	0.50	NA	
Subtotals:	1.25	0.25	

JOB TIME AND COST

Total job time: 2.50 Hours

\$3,429.12

Total job cost: \$3,432