



STATE OF  
COLORADO

Simmons - DNR, Leigh <leigh.simmons@state.co.us>

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## M2018055, Tower Pit, SI-1

1 message

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**Simmons - DNR, Leigh** <leigh.simmons@state.co.us>

Mon, May 15, 2023 at 12:05 PM

To: Jen Jewett <thetowerpit@gmail.com>, srm1998@gmail.com

Please find attached the Notice of Surety Increase No.1 (SI-1) for the Tower Pit. I didn't receive any comments following the inspection report that was sent on April 13, 2023, so I moved ahead with the Reclamation Cost Estimate that was attached to the inspection report.

Leigh Simmons  
Environmental Protection Specialist



**COLORADO**  
Division of Reclamation,  
Mining and Safety  
Department of Natural Resources

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**M2018055\_SI1Packet.pdf**

792K



**COLORADO**  
Division of Reclamation,  
Mining and Safety  
Department of Natural Resources

May 15, 2023

Chris Fedrizzi  
Eagle Rocks Aggregate, Inc.  
PO Box 5019  
Eagle, CO 81631

**Re: Tower Pit - File No. M-2018-055  
Eagle Rocks Aggregate, Inc.  
Surety Increase (SI-1)  
Surety Increase for 2023 Unit Costs**

Dear Chris Fedrizzi:

On May 15, 2023 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$183,363.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$81,910.00.

Please see the March 22, 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 (May 15, 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](mailto: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 July 14, 2023, if the amount of any increased Financial Warranty has not been provided.

Bond Held:	\$101,453.00
Prior Liability:	\$101,453.00
Change in Liability:	\$81,910.00
Revised Liability:	\$183,363.00
Prior Permit Acreage:	36.70



Change in Permit Acreage:	0.00
Revised Permit Acreage:	36.70
Prior Affected Acreage:	0.00
Change in Affected Acreage:	0.00
Revised Affected Acreage:	0.00

If you have any questions, please contact me by telephone at (303) 866-3567 x 8121, or by email at Leigh.Simmons@state.co.us.

Sincerely,



Leigh D. Simmons  
Environmental Protection Specialist

cc: Ben Langenfeld

M-GR-04

## COST SUMMARY WORK

Task description: Cost estimate review and update

Site: Tower Pit

Permit Action: 2023\_Inspection

Permit/Job#: M2018055

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 4/11/2023

County: Eagle

Filename: M055-000

User: LDS

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	remove truck scale and office trailer	DEMOLISH	1	80.00	\$8,469
002	knock down highwall	DOZER	1	107.69	\$31,096
003	Topsoil	LOADER	1	392.31	\$42,194
004	Reveg	REVEGE	1	0.00	\$40,031
005	Mob/demob	MOBILIZE	1	0.11	\$2,057
<b><u>SUBTOTALS:</u></b>				<b>580.11</b>	<b>\$123,847</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$2,502

Performance bond: 1.05

Total = \$1,300

Job superintendent: 290.06

Total = \$21,792

Profit: 10.00

Total = \$12,385

TOTAL O & P = \$37,979

CONTRACT AMOUNT (direct + O & P) = \$161,826

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$500

Total = \$500

Engineering work and/or contract/bid preparation: 8.00

Total = \$12,946

Reclamation management and/or administration: 5.00

\$8,091

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$59,516

**TOTAL BOND AMOUNT (direct + indirect) = \$183,363**

## DEMOLITION WORK

Task description: Remove truck scale and office trailer

Site: Tower Pit Permit Action: 2023\_Inspection Permit/Job#: M2018055

### PROJECT IDENTIFICATION

Task #: 001 State: Colorado Abbreviation: None  
Date: 4/11/2023 County: Eagle Filename: 055-001  
User: LDS

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 95.90 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
scale	100x 20	Cat 319D L 8'-10" Stick	30.00	EA	\$147.19	\$4,415.70
office trailer	100x20	Cat 319D L 8'-10" Stick	30.00	EA	\$147.19	\$4,415.70

Job Hours: <u>80.00</u>	Subtotal (unadjusted): <u>\$8,831.40</u>	Total Cost (adjusted for location): <u>\$8,469.31</u>
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**BULLDOZER WORK**Task description: **Knock down highwall**Site: **Tower Pit** Permit Action: **2023\_Inspection** Permit/Job#: **M2018055****PROJECT IDENTIFICATION**

Task #: **002** State: **Colorado** Abbreviation: **None**  
 Date: **4/11/2023** County: **Eagle** Filename: **055-002**  
 User: **LDS**

Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**

Basic Machine: **Cat D8T - 8SU**  
 Horsepower: **310**  
 Blade Type: **Semi-Universal**  
 Attachment: **1-shank ripper**  
 Shift Basis: **1 per day**  
 Data Source: **(CRG)**

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$124.85	NA
Operating Cost/Hour:	\$97.63	100
Ripper own. Cost/Hour:	\$16.38	NA
Ripper op. Cost/Hour:	\$8.60	100
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: **\$288.76**  
 Total Fleet Cost/Hour: **\$288.76**

**MATERIAL QUANTITIES**

Initial Volume: **33,333**  
 Swell factor: **1.000**  
 Loose volume: **33,333 LCY**

Source of estimated volume: **Division of Reclamation, Mining & Safety**  
 Source of estimated swell factor: **Cat Handbook**

**HOURLY PRODUCTION**

Average push distance: **55 feet**  
 Unadjusted hourly production: **1,323.4 LCY/hr**

Materials consistency description: **Partly consolidated stockpile 1.1**

Average push gradient: **25 %**  
 Average site altitude: **6,500 feet**

Material weight: **2,000 lbs/LCY**Weight description: **User Provided**

<u>Job Condition Correction Factor</u>	<u>Source</u>
Operator Skill: <b>0.750</b>	<b>(AVG.)</b>
Material consistency: <b>1.100</b>	<b>(CAT HB)</b>
Dozing method: <b>1.100</b>	<b>(50% SL)</b>
Visibility: <b>0.800</b>	<b>(POOR)</b>

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.422	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.150	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.2339

Adjusted unit production: 309.54 LCY/hr

Adjusted fleet production: **309.54** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.933/LCY

Total job time: **107.69** Hours

Total job cost: **\$31,096**

**WHEEL LOADER – LOAD AND CARRY WORK**Task description: TopsoilSite: Tower Pit Permit Action: 2023\_Inspection Permit/Job#: M2018055**PROJECT IDENTIFICATION**

Task #: 003 State: Colorado Abbreviation: None  
 Date: 4/11/2023 County: Eagle Filename: 055-003  
 User: LDS

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine: CAT 924H Horsepower: 128  
 Attachment 1: ROPS Cab Shift Basis: 1 per day  
 Data Source: (CRG)

**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$35.89	NA
Operating Cost/Hour:	\$30.95	100
Operator Cost/Hour:	\$40.71	NA
Total Unit Cost/Hour:	\$107.55	
Total Fleet Cost/Hour:	\$107.55	

**MATERIAL QUANTITIES**

Initial volume: 116,133 CCY Swell factor: 1.000  
 Loose volume: 116,133 LCY

Source of estimated volume: Division of Reclamation, Mining & Safety  
 Source of estimated swell factor: Cat Handbook

**HOURLY PRODUCTION**Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.475 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	Independently owned trucks 0.04	0.040	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		0.000	minutes
Adjusted Basic Cycle Time:		0.475	minutes

**Rolling Resistance – Road Conditions**

Haul: Hard, smooth, stabilized, surfaced, watered, maintained 2.0  
 Return: Hard, smooth, stabilized, surfaced, watered, maintained 2.0

**Haul and Return Time**

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	25	0.00	2.00	2.00	0.0123	(Cat HB)
Return Route:	25	0.00	2.00	2.00	0.0123	(Cat HB)



Total Travel Time: 0.0247 minutes  
 Total Cycle Time: 0.4997 minutes

Load Bucket Capacity

Rated Capacity: 2.70 LCY (heaped)  
 Bucket Fill Factor: 1.100 Other - rock/dirt mixtures (100-120%) 1.100  
 Adjusted Capacity: 2.97 LCY

Job Condition Correction Factors

Site Altitude: 6500 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.83</u>	(1 shift/day)
Net Correction:	<u>0.83</u>	multiplier

Unadjusted Hourly Unit Production: 356.65 LCY/Hour  
 Adjusted Hourly Unit Production: 296.02 LCY/Hour  
 Adjusted Hourly Fleet Production: 296.02 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Loader(s) Total job time: 392.32 Hours  
 Unit cost: \$0.363 /LCY Total job cost: \$42,194

**REVEGETATION WORK**Task description: RevegSite: Tower PitPermit Action: 2023\_InspectionPermit/Job#: M2018055**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 4/11/2023County: EagleFilename: 055-004User: LDSAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$0.00</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

Description	Cost /Acre
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Orchardgrass - Latar	0.60	7.44	\$2.51
Smooth Brome - Lincoln	3.20	10.65	\$10.64
Intermediate Wheatgrass - Rush	5.00	10.67	\$14.00
Sainfoin - Remont	5.00	2.18	\$15.80
Pubescent Wheatgrass - Topar	4.50	9.30	\$14.85
<b>Totals Seed Mix</b>	<b>18.30</b>	<b>40.24</b>	<b>\$57.80</b>

**Application**

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
<b>Total Seed Application Cost/Acre</b>	<b>\$267.22</b>

## **MULCHING and MISCELLANEOUS**

## Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	5.00	TON	\$421.36	\$2,106.80
<b>Total Mulch Materials Cost/Acre</b>				<b>\$2,106.80</b>

## Application

Application	
Description	Cost /Acre
Hand spread, 1" deep (MEANS 32 91 13.16 0200)	\$3,726.80
<b>Total Mulch Application Cost/Acre</b>	<b>\$3,726.80</b>

## NURSERY STOCK PLANTING

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

### JOB TIME AND COST

No. of Acres:	5	Cost /Acre:	\$6,158.62
Estimated Failure Rate:	30%	Cost /Acre*:	\$6,158.62
*Selected Replanting Work Items:	SEEDING,MULCHING		
Initial Job Cost:	\$30,793.10		
Reseeding Job Cost:	\$9,237.93		
Total Job Cost:	\$40,031		
Job Hours:	0.00		

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: Mob/demobSite: Tower PitPermit Action: 2023\_InspectionPermit/Job#: M2018055**PROJECT IDENTIFICATION**Task #: 005State: ColoradoAbbreviation: NoneDate: 4/11/2023County: EagleFilename: 055-005User: LDSAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck 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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
Ownership Cost/Hour:	\$15.25	\$23.06	\$37.58
Operating Cost/Hour:	\$25.26	\$30.83	\$51.41
Operator Cost/Hour:	\$27.71	\$27.71	\$27.71
Helper Cost/Hour:	\$0.00	\$20.22	\$20.22
Total Unit Cost/Hour:	\$68.22	\$101.82	\$136.92

**NON ROADABLE EQUIPMENT:**

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat 315D L 8'-6" Stick	19.05	\$68.58	\$68.22	2	\$273.60	\$136.44	\$500.00
Cat D8T - 8SU	52.21	\$141.23	\$136.92	1	\$278.15	\$136.92	\$250.00
CAT 924H	12.69	\$35.89	\$68.22	1	\$104.11	\$68.22	\$250.00
Subtotals:					<b>\$655.86</b>	<b>\$341.58</b>	<b>\$1,000.00</b>

**ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Subtotals:			<b>\$0.00</b>	<b>\$0.00</b>

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: GYPSUM  
 Total one-way travel distance: 1.00 miles  
 Average Travel Speed: 35.00 mph

Total Non-Roadable Mob/Demob Cost \* \$2,057.00  
 \* two round trips with haul rig:  
 Total Roadable Mob/Demob Cost \*\* \$0.00  
 \*\* one round trip, no haul rig:

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.03	0.03
Return Time (Hours):	0.03	0.03
Loading Time (Hours):	0.00	NA
Unloading Time (Hours):	0.00	NA
Subtotals:	0.06	0.06

**JOB TIME AND COST**

Total job time: 0.11 Hours

Total job cost: \$2,057