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

August 1, 2023

Elaine Urie
Urie Rock Company
2424 E. Main St
Rangely, CO 81648

RE: Urie Gravel Pit, Permit No. M-2009-038, Proposed Surety Increase (SI-2)

Dear Ms. Urie:

This reclamation cost update was in response to the site inspection conducted on July 24, 2023. It is Division policy to periodically update its costs to ensure that the Financial Warranty adequately, reflects the actual current cost of fulfilling the requirements of the approved reclamation plan.

The bond was last recalculated in 2019 and no increases have occurred since the permit issuance in 2009. Below is a table summarizing input values that have been updated based on site conditions. This table does not account for price changes resulting from inflation or other RS Means cost changes. Bond calculations are based on a combination of field observations and worst case scenario based on the approved reclamation plan.

Assumptions:

- Phase 1 is graded and initially reclaimed, Phase 2 active pit area partially graded, Phase 3 no stockpiling
- All areas are to received 6" of topsoil prior to reveg
- Did not include pumping dewatering task
- All compacted areas used for stockpiling requires ripping prior to topsoil replacement
- Assumed enough overburden material has been placed over shale. Rec Plan calls for a min of 54" site wide to be replaced
- Revegetation per Reclamation Plan calls for disk soil, seed mix drilled, straw mulch at 3000 lbs. /ac power mulched and crimped into place. Added weed spraying based of site conditions

Task	Form Used	Description
01a	Dozer	Grade Pit slopes to 3H: 1V = 6,852 CCY 400 LF of 1: 1V @ 20' backfill = 5926 CY 500 LF of 2H: 1V @ 20' cut/fill = 926 CY
02a	Scraper	Transport topsoil to pit slopes (phase 2) = 1,670 CCY Slopes are 900LF x 100'W = 2.07 ac @ 6"D
02b	Dozer	Grade transported topsoil on pit slopes = 2,029 LCY
03a	Ripper	Rip stockpile area (Phase 3) ~8 ac
04a	Scraper	Place topsoil on stockpile area = 6,453 CCY 8ac @ 6" D
04b	Dozer	Grade transported topsoil on stockpile area = 7,840LCY
05a	Reveg	Reveg topsoiled areas = 12.37 ac Previously topsoil slopes 1000 LF x 100'W = 2.3 ac Graded Slopes 2.07 Stockpile area 8 ac
05b	Reveg	Reveg Failure areas (phase 1) 50% of total = 2.52 ac 2200 LF x 10'W = 5.05 ac
06a	Mob	Initial Mobilization
06b	Mob	Secondary Mobilization Reseeding equipment only

Per policy I wanted to send this out for review prior to issuance. Please look it over and let me know if there are errors or concerns. If no response is received by **Monday, October 2, 2023** then I'll issue SI-2 as is. SI-2 will result in a total required bond amount of **$115,616**, which is an increase of $24,016 over the $91,600 currently held.

Please feel free to contact me with any further questions. Amy Yeldell at the Division of Reclamation, Mining and Safety, Rm 215, 1001 E 62nd Ave, Denver CO 80216. Direct contact can be made by phone at 303-866-3567 Ext 8183 or via email at amy.yeldell@ state.co.us

Sincerely,

Amy Yeldell

Amy Yeldell
Environmental Protection Specialist

Ec: Travis Marshall, Senior EPS, Grand Junction DRMS

COST SUMMARY WORK

Task description:

Site: **Urie Gravel Pit** Permit Action: 2023 Permit/Job#: M2009038

PROJECT IDENTIFICATION

Task #: ACY State: Colorado Abbreviation: None
Date: 8/1/2023 County: Rio Blanco Filename: M038-ACY
User: ACY

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Grade pit slopes to 3H:1V	DOZER	1	18.75	$7,997
02a	Place topsoil on pit slopes	SCRAPER1	1	5.04	$2,731
02b	Grade transported topsoil on pit slopes	DOZER	1	2.32	$990
03a	Rip stockpile area	RIPPER	1	12.05	$5,403
04a	Place topsoil on stockpile area	SCRAPER1	1	16.54	$8,968
04b	Grade transported topsoil on stockpile area	DOZER	1	8.97	$3,827
05a	Revegetate topsoiled areas	REVEGE	1	20.00	$44,325
05b	Revegetate Failure 50% Phase 1	REVEGE	1	8.00	$5,972
06a	Initial Mobilization	MOBILIZE	1	2.32	$5,305
06b	Initial Mobilization	MOBILIZE	1	2.32	$5,305
			SUBTOTALS:	**96.31**	**$90,823**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$1,835
Performance bond:	1.05	Total =	$954
Job superintendent:	48.15	Total =	$3,134
Profit:	10.00	Total =	$9,082
		TOTAL O & P =	$15,004
		CONTRACT AMOUNT (direct + O & P) =	$105,827

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	$0	Total =	$0
Engineering work and/or contract/bid preparation:	4.25	Total =	$4,498
Reclamation management and/or administration:	5.00		$5,291
CONTINGENCY:	0.00	Total =	$0
		TOTAL INDIRECT COST =	$24,793
		TOTAL BOND AMOUNT (direct + indirect) =	**$115,616**

BULLDOZER WORK

Task description: **Grade pit slopes to 3H:1V**

Site: **Urie Gravel Pit** Permit Action: 2023 Permit/Job#: M2009038

PROJECT IDENTIFICATION

Task #:	01A	State:	Colorado	Abbreviation:	None
Date:	8/1/2023	County:	Rio Blanco	Filename:	M038-01a
User:	ACY				

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

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

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$241.38	NA
Operating Cost/Hour:	$143.92	100
Ripper own. Cost/Hour:	$0.00	NA
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**

MATERIAL QUANTITIES

Initial Volume: 6,852
Swell factor: 1.125
Loose volume: **7,709** LCY

Source of estimated volume: 500LF 1:1 cut/fill and 400LF 2:1 backfill
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 75 feet
Unadjusted hourly production: 1,017.1 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: 0 %
Average site altitude: 5,200 feet

Material weight: 2,550 lbs/LCY

Weight description: Earth - Dry packed

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(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:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4043

Adjusted unit production: 411.21 LCY/hr
Adjusted fleet production: **411.21** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $1.037/LCY

Total job time: **18.75** Hours
Total job cost: **$7,997**

SCRAPER TEAM WORK

Task description: **Place topsoil on pit slopes**

Site: **Urie Gravel Pit** Permit Action: 2023 Permit/Job#: M2009038

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 8/1/2023 County: Rio Blanco Filename: M038-02a
User: ACY

Agency or organization name: DRMS

HOURLY EQUIPMENT

COSTShift basis: 1 per day

	Equipment Description
-Scraper:	Cat 627G
-Dozer:	NA
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance –Motor Grader:	NA
-Water Truck:	NA

Cost Breakdown:

	Scraper Work Team		Support Equipment		Maintenance Equipment	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	NA	NA	NA	NA
Ownership cost/hour:	$230.18	NA	NA	NA	NA	NA
Operating cost/hour:	$281.21	NA	NA	NA	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	NA	NA	NA	NA
Ripper op. cost/hour:	NA	NA	NA	NA	NA	NA
Operator cost/hour:	$30.90	NA	NA	NA	NA	NA
Unit Subtotals:	$542.29	NA	NA	NA	NA	NA
Number of Units:	1	0	0	0	0	0
Group Subtotals:	Work:	$542.29	Support:	$0.00	Maint:	$0.00

Total work team cost/hour: **$542.29**

MATERIAL QUANTITIES

Initial volume: 1,670 CCY Swell factor: 1.215
Loose volume: **2,029** LCY

Source of estimated volume: Approx. 2.07 ac. 6" depth
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Scraper Bowl (volume) Basis:

Material weight: 1,600 lbs/LCY
Material description: Top Soil
Rated Payload: 52,800 pounds
Payload Capacity: 33.00 LCY

Struck Volume: 15.70 LCY
Heaped Volume: 22.00 LCY
Average Volume: 18.85 LCY
Adjusted Capacity: **18.85** LCY

Cycle Time:

Scraper Loading Time: 0.70 Minutes
Maneuver and Spread Time: 0.60 Minutes

Job Condition Correction: Site Altitude: 5200 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	750.00	0.00	8.00	8.00	1381	0.59

Haul Time: **0.59** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	750.00	0.00	8.00	8.00	2202	0.44

Return Time: **0.44** minutes

Total Scraper team cycle time: **2.33** minutes
Adjusted for job conditions: 402.89 LCY/Hour
Selected Number of Scrapers: 1 Scraper(s)
Adjusted single scraper team (unit) hourly production: 402.89 LCY/Hour
Adjusted multiple scraper team (fleet) hourly production: **402.89** LCY/Hour

Unadjusted unit production/hour: 485.41 LCY/Hour
Optimal Number of Scrapers per push dozer: ____

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **5.04** Hours

Unit cost: $1.346 /LCY Total job cost: **$2,731**

BULLDOZER WORK

Task description: **Grade transported topsoil on pit slopes**

Site: **Urie Gravel Pit** Permit Action: 2023 Permit/Job#: M2009038

PROJECT IDENTIFICATION

Task #:	02B	State:	Colorado	Abbreviation:	None
Date:	8/1/2023	County:	Rio Blanco	Filename:	M038-02b
User:	ACY				

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

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

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$241.38	NA
Operating Cost/Hour:	$143.92	100
Ripper own. Cost/Hour:	$0.00	NA
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**

MATERIAL QUANTITIES

Initial Volume:	2,029
Swell factor:	1.000
Loose volume:	**2,029** LCY

Source of estimated volume: Transported volume
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 75 feet
Unadjusted hourly production: 1,017.1 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %
Average site altitude: 5,200 feet

Material weight: 1,600 lbs/LCY

Weight description: Top Soil

Job Condition Correction 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: 873.99 LCY/hr
Adjusted fleet production: **873.99** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.488/LCY

Total job time: **2.32** Hours
Total job cost: **$990**

BULLDOZER RIPPING WORK

Task description: **Rip stockpile area**

Site: **Urie Gravel Pit** Permit Action: 2023 Permit/Job#: M2009038

PROJECT IDENTIFICATION

Task #:	03A	State:	Colorado	Abbreviation:	None
Date:	8/1/2023	County:	Rio Blanco	Filename:	M038-03a
User:	ACY				

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine:	Cat D8T - 8SU	Horsepower:	310
Ripper Attachment:	3-Shank Ripper	Shift Basis:	1 per day
		Data Source:	(CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$241.38	NA
Operating Cost/Hour:	$143.92	100
Ripper Ownership Cost/Hour:	$14.11	NA
Ripper Operating Cost/Hour:	$7.45	100
Operator Cost/Hour:	$41.30	NA
Total Unit Cost/Hour:	$448.16	

Total Fleet Cost/Hour: **$448.16**

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic:	NA		Bank Volume:	NA	BCY	NA	
Area:	8.00	acres	Rip Depth (ft):	2.00	Volume:	25,813	BCY or CCY

Source of estimated quantity: Current conditions

HOURLY PRODUCTION

Seismic:

Seismic Velocity:	NA	feet/second

Area:

Average Ripping Depth:	2.56	feet/pass
Average Ripping Width:	7.08	feet/pass
Average Ripping Length:	300.00	feet/pass
Average Dozer Speed:	88.00	feet/minute
Average Maneuver Time:	0.25	minutes/pass
Production per unit area:	0.800	acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production:	0.800	Acres/hr
Site Altitude:	5,200	feet
Altitude Adj:	1.00	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.83	multiplier
Adjusted Hourly Unit Production:	0.66	Acres/hr
Adjusted Hourly Fleet Production:	**0.66**	Acres/hr

JOB TIME AND COST

Fleet size:	1	Grader(s)	Total job time:	**12.05**	Hours
Unit cost:	$675.321	Per acre	Total job cost:	**$5,403**	

SCRAPER TEAM WORK

Task description: **Place topsoil on stockpile area**

Site: **Urie Gravel Pit** Permit Action: 2023 Permit/Job#: M2009038

PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None
Date: 8/1/2023 County: Rio Blanco Filename: M038-04a
User: ACY

Agency or organization name: DRMS

HOURLY EQUIPMENT

COSTShift basis: 1 per day

	Equipment Description
-Scraper:	Cat 627G
-Dozer:	NA
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance –Motor Grader:	NA
-Water Truck:	NA

Cost Breakdown:

	Scraper Work Team		Support Equipment		Maintenance Equipment	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	NA	NA	NA	NA
Ownership cost/hour:	$230.18	NA	NA	NA	NA	NA
Operating cost/hour:	$281.21	NA	NA	NA	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	NA	NA	NA	NA
Ripper op. cost/hour:	NA	NA	NA	NA	NA	NA
Operator cost/hour:	$30.90	NA	NA	NA	NA	NA
Unit Subtotals:	$542.29	NA	NA	NA	NA	NA
Number of Units:	1	0	0	0	0	0
Group Subtotals:	Work:	$542.29	Support:	$0.00	Maint:	$0.00

Total work team cost/hour: **$542.29**

MATERIAL QUANTITIES

Initial volume: 6,453 CCY Swell factor: 1.215
Loose volume: **7,840** LCY

Source of estimated volume: Approx. 8 ac. 6" depth
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Scraper Bowl (volume) Basis:

Material weight:	1,600 lbs/LCY	Struck Volume:	15.70	LCY
Material description:	Top Soil	Heaped Volume:	22.00	LCY
Rated Payload:	52,800 pounds	Average Volume:	18.85	LCY
Payload Capacity:	33.00 LCY	Adjusted Capacity:	**18.85**	LCY

Cycle Time:

Scraper Loading Time: 0.70 Minutes
Maneuver and Spread Time: 0.60 Minutes

Job Condition Correction: Site Altitude: 5200 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	450.00	0.00	8.00	8.00	1381	0.37

Haul Time: **0.37** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	450.00	0.00	8.00	8.00	2202	0.31

Return Time: **0.31** minutes

Total Scraper team cycle time: **1.98** minutes
Adjusted for job conditions: 474.11 LCY/Hour
Selected Number of Scrapers: 1 Scraper(s)
Adjusted single scraper team (unit) hourly production: 474.11 LCY/Hour
Adjusted multiple scraper team (fleet) hourly production: **474.11** LCY/Hour

Unadjusted unit production/hour: 571.21 LCY/Hour
Optimal Number of Scrapers per push dozer: ______

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **16.54** Hours

Unit cost: $1.144 /LCY Total job cost: **$8,968**

BULLDOZER WORK

Task description: **Grade transported topsoil on stockpile area**

Site: **Urie Gravel Pit** Permit Action: 2023 Permit/Job#: M2009038

PROJECT IDENTIFICATION

Task #:	04B	State:	Colorado	Abbreviation:	None
Date:	8/1/2023	County:	Rio Blanco	Filename:	M038-04b
User:	ACY				

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

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

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$241.38	NA
Operating Cost/Hour:	$143.92	100
Ripper own. Cost/Hour:	$0.00	NA
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**

MATERIAL QUANTITIES

Initial Volume:	7,840
Swell factor:	1.000
Loose volume:	**7,840** LCY

Source of estimated volume: Transported volume

Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 75 feet

Unadjusted hourly production: 1,017.1 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %

Average site altitude: 5,200 feet

Material weight: 1,600 lbs/LCY

Weight description: Top Soil

Job Condition Correction 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: 873.99 LCY/hr
Adjusted fleet production: **873.99** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.488/LCY

Total job time: **8.97** Hours
Total job cost: **$3,827**

REVEGETATION WORK

Task description: **Revegetate topsoiled areas**

Site: **Urie Gravel Pit** Permit Action: 2023 Permit/Job#: M2009038

PROJECT IDENTIFICATION

Task #: 05A State: Colorado Abbreviation: None
Date: 8/1/2023 County: Rio Blanco Filename: M038-05a
User: ACY

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			$	$
			Total Fertilizer Materials Cost/Acre	**$0.00**

Application

Description	Cost /Acre
	$
Total Fertilizer Application Cost/Acre	**$0.00**

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	$112.82
Total Tilling Cost/Acre	**$112.82**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	6.00	19.42	$53.25
Sand Dropseed	0.30	35.81	$2.93
Bottlebrush Squirreltail	4.50	19.83	$73.01
Sandberg Bluegrass - VNS	1.50	31.85	$12.60
Galleta	5.50	20.08	$122.93
Western Wheatgrass - Rosanna	8.00	20.20	$46.00
Totals Seed Mix	25.80	147.20	**$310.71**

Application

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

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
Herbicide - Banvel @ 1.0 pt/ac	1.00	ACRE	$8.09	$8.09
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	$3.75	$3.75
Straw, delivered {MEANS 31 25 14.16 1200}	3.00	TON	$429.79	$1,289.36
Total Mulch Materials Cost/Acre				**$1,305.21**

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	$74.46
Power mulcher (MEANS 32 91 13.16 0350)	$147.67
Weed spray, hand, aquatic area, nox. [DMG]	$183.16
Weed spray, truck, non-aquatic areas, ann. [DMG]	$22.81
Total Mulch Application Cost/Acre	**$428.10**

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: 12.37 Cost /Acre: $2,388.84
Estimated Failure Rate: 50% Cost /Acre*: $2,388.84
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$29,549.95**
Reseeding Job Cost: **$14,774.98**
Total Job Cost: **$44,325**
Job Hours: **20.00**

REVEGETATION WORK

Task description: **Revegetate Failure 50% Phase 1**

Site: **Urie Gravel Pit** Permit Action: 2023 Permit/Job#: M2009038

PROJECT IDENTIFICATION

Task #: 05B State: Colorado Abbreviation: None
Date: 8/1/2023 County: Rio Blanco Filename: M038-05b
User: ACY

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			$	$
			Total Fertilizer Materials Cost/Acre	**$0.00**

Application

Description	Cost /Acre
	$
Total Fertilizer Application Cost/Acre	**$0.00**

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	$112.82
Total Tilling Cost/Acre	**$112.82**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	6.00	19.42	$53.25
Sand Dropseed	0.30	35.81	$2.93
Bottlebrush Squirreltail	4.50	19.83	$73.01
Sandberg Bluegrass - VNS	1.50	31.85	$12.60
Galleta	5.50	20.08	$122.93
Western Wheatgrass - Rosanna	8.00	20.20	$46.00
Totals Seed Mix	25.80	147.20	**$310.71**

Application

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

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
Herbicide - Banvel @ 1.0 pt/ac	1.00	ACRE	$8.09	$8.09
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	$3.75	$3.75
Straw, delivered {MEANS 31 25 14.16 1200}	3.00	TON	$429.79	$1,289.36
Total Mulch Materials Cost/Acre				**$1,305.21**

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	$74.46
Power mulcher (MEANS 32 91 13.16 0350)	$147.67
Weed spray, hand, aquatic area, nox. [DMG]	$183.16
Weed spray, truck, non-aquatic areas, ann. [DMG]	$22.81
Total Mulch Application Cost/Acre	**$428.10**

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: 2.5 Cost /Acre: $2,388.84
Estimated Failure Rate: 0% Cost /Acre*: $2,388.84
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$5,972.10**
Reseeding Job Cost: **$0.00**
Total Job Cost: **$5,972**
Job Hours: **8.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Initial Mobilization**

Site: **Urie Gravel Pit** Permit Action: 2023 Permit/Job#: M2009038

PROJECT IDENTIFICATION

Task #: 06A State: Colorado Abbreviation: None
Date: 8/1/2023 County: Rio Blanco Filename: M038-05a
User: ACY

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:	$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	$158.17	$175.95

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 D8T - 8SU	53.08	$255.49	$175.95	1	$431.44	$175.95	$500.00
Cat 627G	41.80	$230.18	$158.17	1	$388.35	$158.17	$500.00
Drill/Broadcast Seeder with Tractor	25.00	$6.73	$82.29	1	$89.02	$82.29	$250.00
Power Mulcher (Bowie LD-90)	6.00	$25.94	$82.29	1	$108.23	$82.29	$250.00
				Subtotals:	**$1,017.04**	**$498.70**	**$1,500.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 4x2, 30K GVW	$91.58	1	$91.58	$91.58
Light Duty Pickup, 4x4, 3/4 T.	$43.51	2	$87.02	$87.02
		Subtotals:	**$178.60**	**$178.60**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	RANGELY	
Total one-way travel distance:	2.00	miles
Average Travel Speed:	25.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$5,276.60	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$28.58	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.08	0.08
Return Time (Hours):	0.08	0.08
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.16	0.16

JOB TIME AND COST

Total job time: **2.32** Hours

Total job cost: **$5,305**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Initial Mobilization**

Site: **Urie Gravel Pit** Permit Action: 2023 Permit/Job#: M2009038

PROJECT IDENTIFICATION

Task #: 06B State: Colorado Abbreviation: None
Date: 8/1/2023 County: Rio Blanco Filename: M038-06b
User: ACY

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:	$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	$158.17	$175.95

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
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		Subtotals:	**$178.60**	**$178.60**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	RANGELY	
Total one-way travel distance:	2.00	miles
Average Travel Speed:	25.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$5,276.60	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$28.58	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.08	0.08
Return Time (Hours):	0.08	0.08
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.16	0.16

JOB TIME AND COST

Total job time:	**2.32**	Hours
Total job cost:	**$5,305**	