



STATE OF
COLORADO

Zuber - DNR, Rob <rob.zuber@state.co.us>

Warren Gravel Pit - Surety Increase

1 message

Zuber - DNR, Rob <rob.zuber@state.co.us>
To: Mark Gardner <whiteh2o@acsol.net>

Wed, Jul 5, 2023 at 2:56 PM

Hello, Mark -

Please see the attached letter and reclamation cost estimate.

Please do not hesitate to let me know if you have questions.

Rob

Rob Zuber, P.E.
Environmental Protection Specialist
Active Mines Regulatory Program



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

I am working remotely and can be reached by cell at 720.601.2276.

Physical Address:

1313 Sherman Street, Room 215
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M2012024_SI1_Division_Letter_07052023_with_RCE.pdf
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COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

July 5, 2023

Mark Gardner
Whitewater Building Materials Corporation
940 South 10th Street
Grand Junction, CO 81501

Re: Warren Gravel Pit - File No. M-2012-024
Increase of Required Surety after Inspection of Site (SI-01)

Dear Mr. Gardner:

On July 5, 2023 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$37,429.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$8,694.16. Please see the enclosed pages with details of the Division's estimate.

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 (July 5, 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 September 3, 2023, if the amount of any increased Financial Warranty has not been provided.

Bond Held:	\$28,734.84
Prior Liability:	\$28,734.84
Change in Liability:	\$8,694.16
Revised Liability:	\$37,429.00
Prior Permit Acreage:	40.44
Change in Permit Acreage:	0.00
Revised Permit Acreage:	40.44
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 (720) 601-2276, or by email at Rob.zuber@state.co.us.

Sincerely,

A handwritten signature in blue ink, appearing to read "Robert D. Zuber". The signature is fluid and cursive, with the first name "Robert" and last name "Zuber" clearly distinguishable.

Robert D. Zuber, P.E.
Environmental Protection Specialist

Enclosure

COST SUMMARY WORK

Task description: Cost Summary

Site: Warren Gravel Pit

Permit Action: 2023 Update

Permit/Job#: M2012024

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 6/27/2023

County: Delta

Filename: M024-000

User: RDZ

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Reduce 1,600 ft highwall with dozer	DOZER	1	21.16	\$6,961
02a	Distribute topsoil around pit prior to spreading with Dozer	LOADER	1	27.29	\$3,192
03a	Spread 4926 CY of topsoil placed by loader	DOZER	1	2.75	\$904
04a	Revegetation of 8.64 acres	REVEGE	1	16.00	\$14,502
05a	Mobilization	MOBILIZE	1	2.30	\$3,237
<u>SUBTOTALS:</u>				69.5	\$28,796

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$582

Performance bond: 1.05

Total = \$302

Job superintendent: 34.75

Total = \$2,611

Profit: 10.00

Total = \$2,880

TOTAL O & P = \$6,374

CONTRACT AMOUNT (direct + O & P) = \$35,170

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$500

Engineering work and/or contract/bid preparation: 0.00

Total = \$0

Reclamation management and/or administration: 5.00

\$1,759

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$8,633

TOTAL BOND AMOUNT (direct + indirect) = \$37,429

BULLDOZER WORKTask description: **Reduce 1,600 ft highwall with dozer**Site: **Warren Gravel Pit**Permit Action: **2023 Update**Permit/Job#: **M2012024****PROJECT IDENTIFICATION**Task #: **01A**State: **Colorado**Abbreviation: **None**Date: **6/27/2023**County: **Delta**Filename: **M024-01a**User: **RDZ**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D9T - 9SU**Horsepower: **405**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$146.30	NA
Operating Cost/Hour:	\$141.41	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: **\$329.01**Total Fleet Cost/Hour: **\$329.01****MATERIAL QUANTITIES**Initial Volume: **16,652**Swell factor: **1.124**Loose volume: **18,710 LCY**Source of estimated volume: **Division of Reclamation, Mining & Safety**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **60 feet**Unadjusted hourly production: **1,872.0 LCY/hr**Materials consistency description: **Compacted fill or embankment 0.9**Average push gradient: **-15 %**Average site altitude: **4,970 feet**Material weight: **2,900 lbs/LCY**Weight description: **Sand and gravel - Dry****Job Condition Correction Factor**

		<u>Source</u>
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:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4724

Adjusted unit production: 884.33 LCY/hr

Adjusted fleet production: **884.33** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.372/LCY

Total job time: **21.16** Hours

Total job cost: **\$6,961**

WHEEL LOADER – LOAD AND CARRY WORKTask description: Distribute topsoil around pit prior to spreading with DozerSite: Warren Gravel PitPermit Action: 2023 UpdatePermit/Job#: M2012024**PROJECT IDENTIFICATION**Task #: 02AState: ColoradoAbbreviation: NoneDate: 6/27/2023County: DeltaFilename: M024-02aUser: RDZAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: CAT 962HAttachment 1: ROPS CabHorsepower: 209Shift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$40.53	NA
Operating Cost/Hour:	\$35.70	100
Operator Cost/Hour:	\$40.71	NA
Total Unit Cost/Hour:	\$116.94	
Total Fleet Cost/Hour:	\$116.94	

MATERIAL QUANTITIESInitial volume: 4,926

CCY

Swell factor: 1.000Loose volume: 4,926

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material 1/8" to 3/4" diameter -0.02	-0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high or less 0.01	0.010	(Cat HB)
Truck Ownership:	No adjustment - factor not applicable 0.00	0.000	(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:		-0.050	minutes
Adjusted Basic Cycle Time:		0.450	minutes

Rolling Resistance – Road ConditionsHaul: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0Return: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0**Haul and Return Time**

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	400	0.00	5.00	5.00	0.3671	(Cat HB)
Return Route:	400	0.00	8.00	8.00	0.4288	(Cat HB)

Total Travel Time: 0.7959 minutes
 Total Cycle Time: 1.2459 minutes

Load Bucket Capacity

Rated Capacity: 4.30 LCY (heaped)
 Bucket Fill Factor: 1.050 Moist loam or sandy clay (100% - 110%) 1.050
 Adjusted Capacity: 4.52 LCY

Job Condition Correction Factors

Site Altitude: 4970 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: 217.43 LCY/Hour
 Adjusted Hourly Unit Production: 180.47 LCY/Hour
 Adjusted Hourly Fleet Production: 180.47 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Loader(s) Total job time: 27.30 Hours
 Unit cost: \$0.648 /LCY Total job cost: \$3,192

BULLDOZER WORKTask description: Spread 4926 CY of topsoil placed by loaderSite: Warren Gravel PitPermit Action: 2023 UpdatePermit/Job#: M2012024**PROJECT IDENTIFICATION**Task #: 03AState: ColoradoAbbreviation: NoneDate: 6/27/2023County: DeltaFilename: M024-03aUser: RDZAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9SUHorsepower: 405Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$146.30	NA
Operating Cost/Hour:	\$141.41	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: \$329.01Total Fleet Cost/Hour: **\$329.01****MATERIAL QUANTITIES**Initial Volume: 4,926Swell factor: 1.000Loose volume: **4,926 LCY**Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 60 feetUnadjusted hourly production: 1,872.0 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: -5 %Average site altitude: 4,970 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
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:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.9582

Adjusted unit production: 1,793.75 LCY/hr

Adjusted fleet production: **1793.75** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.183/LCY

Total job time: **2.75** Hours

Total job cost: **\$904**

REVEGETATION WORKTask description: Revegetation of 8.64 acresSite: Warren Gravel PitPermit Action: 2023 UpdatePermit/Job#: M2012024**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 6/27/2023County: DeltaFilename: M024-04aUser: RDZAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
12--4--8	100.00	pound	\$0.47	\$47.00
			Total Fertilizer Materials Cost/Acre	\$47.00

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$39.64
Total Fertilizer Application Cost/Acre	\$39.64

TILLING

Description	Cost /Acre
Subsoiling, heavy, 18" depth {DMG}	\$213.22
Total Tilling Cost/Acre	\$213.22

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Crested Wheatgrass - Fairway	1.50	6.89	\$6.04
Yellow Sweet Clover - Madrid	1.50	8.95	\$4.24
Streambank Wheatgrass - Sodar	3.00	9.78	\$17.10
Thickspike Wheatgrass - Critana	3.00	10.61	\$20.63
Rabbitbrush, Rubber	0.25	3.72	\$16.07
Saltbush, Four Wing	0.25	0.34	\$3.13
Sumac, Skunkbrush	0.25	0.12	\$5.25
Totals Seed Mix	9.75	40.41	\$72.45

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	\$3.04	\$3.04
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$421.36	\$421.36
Total Mulch Materials Cost/Acre				\$424.40

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$73.00
Power mulcher (MEANS 32 91 13.16 0350)	\$141.57
Total Mulch Application Cost/Acre	\$214.57

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: 8.64 Cost /Acre: \$1,243.28
 Estimated Failure Rate: 35% Cost /Acre*: \$1,243.28
 *Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,MU
LCHING

Initial Job Cost: **\$10,741.94**
 Reseeding Job Cost: **\$3,759.68**
 Total Job Cost: **\$14,502**
 Job Hours: **16.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mobilization**Site: **Warren Gravel Pit**Permit Action: **2023 Update**Permit/Job#: **M2012024****PROJECT IDENTIFICATION**Task #: **05A**State: **Colorado**Abbreviation: **None**Date: **6/27/2023**County: **Delta**Filename: **M024-05a**User: **RDZ**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:	\$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 D9T - 9SU	60.01	\$146.30	\$136.92	1	\$283.22	\$136.92	\$250.00
CAT 962H	20.95	\$40.53	\$68.22	1	\$108.75	\$68.22	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.25	\$68.22	1	\$74.47	\$68.22	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$14.79	\$68.22	1	\$83.01	\$68.22	\$250.00
Subtotals:					\$549.45	\$341.58	\$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.	\$14.23	2	\$28.46	\$28.46
Subtotals:			\$28.46	\$28.46

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: DELTA
 Total one-way travel distance: 3.00 miles
 Average Travel Speed: 40.00 mph

Total Non-Roadable Mob/Demob Cost * \$3,232.55
 * two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$4.27
 ** one round trip, no haul rig:

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:	1.15	0.15

JOB TIME AND COST

Total job time: 2.30 Hours

Total job cost: \$3,237