



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

April 17, 2017

Brent Tamburelli
Tamrock Gravel LLC
137 East Plum Street
Trinidad, CO 81082

RE: Bottomless Pit; DRMS File No. M-2001-068; Notice of Financial Warranty
Increase (SI-01)

Dear Mr. Tamburelli,

On April 17, 2017 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$56,204.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of **\$15,141.00** over the currently held \$41,063.00. The financial warranty calculation (copy enclosed) was based on a file review and observations made during the inspection conducted on April 11, 2017.

The Division ordered increase of the current Financial Warranty is due within 60 days (**June 16, 2017**) from the date of this letter. If you wish to submit a different type of Financial Warranty, please contact me so that I may send you the applicable form.

If you have any questions, please contact me at (303)866-3567 x8116.

Sincerely,

Michael A. Cunningham
Environmental Protection Specialist

Enclosure

CC: Wally Erickson, DRMS
Barbara Coria, DRMS



COST SUMMARY WORK

Task description: Cost Summary

Site: Bottomless Pit

Permit Action: 2017 Bond Calculation

Permit/Job#: M2001068

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 2/15/2017

County: Las Animas

Filename: M068-000

User: MAC

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Rough grading affected areas	DOZER	1	24.49	\$4,698.00
002	Replacing topsoil	DOZER	1	54.89	\$10,529.00
003	Revegetating disturbed areas	REVEGE	1	0.00	\$30,125.00
004	Equipment Mobilization/Demobilization	MOBILIZE	1	3.33	\$1,988.00
<u>SUBTOTALS:</u>				82.71	\$47,340

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$956.27

Performance bond: 1.05

Total = \$497.07

Job superintendent: 0.00

Total = \$0.00

Profit: 10.00

Total = \$4,734.00

TOTAL O & P = \$6,187.34

CONTRACT AMOUNT (direct + O & P) = \$53,527.34

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 0.00

Total = 0.00

Engineering work and/or contract/bid preparation: 0.00

Total = \$0.00

Reclamation management and/or administration: 5.00

\$2,676.37

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$8,863.71

TOTAL BOND AMOUNT (direct + indirect) = \$56,203.71

TOTAL BOND AMOUNT (rounded up) = \$56,204.00

BULLDOZER WORKTask description: Rough grading affected areasSite: Bottomless PitPermit Action: 2017 Bond CalculationPermit/Job#: M2001068**PROJECT IDENTIFICATION**Task #: 001State: ColoradoAbbreviation: NoneDate: 2/15/2017County: Las AnimasFilename: M068-001User: MACAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$83.81	NA
Operating Cost/Hour:	\$66.17	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.85	NA

Total unit Cost/Hour: \$191.83Total Fleet Cost/Hour: \$191.83**MATERIAL QUANTITIES**Initial Volume: 4,000Swell factor: 1.000Loose volume: 4,000 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 250 feetUnadjusted hourly production: 377.8 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: 0 %Average site altitude: 5,900 feetMaterial weight: 2,650 lbs/LCYWeight description: Decomposed rock - 25% Rock, 75% Earth**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(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:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4323

Adjusted unit production: 163.32 LCY/hr
Adjusted fleet production: 163.32 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.175/LCY

Total job time: 24.49 Hours
Total job cost: \$4,698

BULLDOZER WORKTask description: Replacing topsoilSite: Bottomless PitPermit Action: 2017 Bond CalculationPermit/Job#: M2001068**PROJECT IDENTIFICATION**Task #: 002State: ColoradoAbbreviation: NoneDate: 2/15/2017County: Las AnimasFilename: M068-002User: MACAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$83.81	NA
Operating Cost/Hour:	\$66.17	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.85	NA

Total unit Cost/Hour: \$191.83Total Fleet Cost/Hour: \$191.83**MATERIAL QUANTITIES**Initial Volume: 11,000Swell factor: 1.215Loose volume: 13,365 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 250 feetUnadjusted hourly production: 377.8 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 0 %Average site altitude: 5,900 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil**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:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6445

Adjusted unit production: 243.49 LCY/hr

Adjusted fleet production: 243.49 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.788/LCY

Total job time: 54.89 Hours

Total job cost: \$10,529

REVEGETATION WORKTask description: Revegetating disturbed areasSite: Bottomless PitPermit Action: 2017 Bond CalculationPermit/Job#: M2001068**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 2/15/2017County: Las AnimasFilename: M068-003User: MACAgency 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
	\$
Total Tilling Cost/Acre	\$0.00

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Hachita	3.00	48.97	\$48.81
Little Bluestem - Pastura	7.00	41.78	\$117.81
Sideoats Grama - El Reno	9.00	29.55	\$87.03
Western Wheatgrass - Barton	16.00	40.40	\$121.44
Totals Seed Mix	35.00	160.70	\$375.09

Application

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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
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$261.00	\$261.00
Total Mulch Materials Cost/Acre				\$261.00

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$66.02
Total Mulch Application Cost/Acre	\$66.02

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: 25.8 Cost /Acre: \$934.11
 Estimated Failure Rate: 25% Cost /Acre*: \$934.11
 *Selected Replanting Work Items: SEEDING,MULCHING
 Initial Job Cost: \$24,100.04
 Reseeding Job Cost: \$6,025.01
 Total Job Cost: \$30,125
 Job Hours: 0.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Equipment Mobilization/Demobilization**Site: **Bottomless Pit**Permit Action: **2017 Bond Calculation**Permit/Job#: **M2001068****PROJECT IDENTIFICATION**Task #: **004**State: **Colorado**Abbreviation: **None**Date: **2/15/2017**County: **Las Animas**Filename: **M068-004**User: **MAC**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 Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8SU	47.71	\$82.01	\$117.55	1	\$199.56	\$117.55	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$30.65	\$88.67	1	\$119.32	\$88.67	\$250.00

Subtotals:	\$318.88	\$206.22	\$500.00
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ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
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Subtotals:	\$0.00	\$0.00
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EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	TRINIDAD	
Total one-way travel distance:	15.00	miles
Average Travel Speed:	45.00	mph

Total Non-Roadable Mob/Demob Cost *	\$1,987.83
** 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):	0.33	0.33
Return Time (Hours):	0.33	0.33
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.67	0.67

JOB TIME AND COST

Total job time:	3.33	Hours
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Total job cost:	\$1,988
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