

# STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY  
Department of Natural Resources

1313 Sherman St., Room 215  
Denver, Colorado 80203  
Phone: (303) 866-3567  
FAX: (303) 832-8106



March 12, 2013

Robert Gill  
Bear Ranch, LLC  
30682 CR 12  
Somerset, CO  
81434

John W. Hickenlooper  
Governor

Mike King  
Executive Director

Loretta Piñeda  
Director

***RE: Bear Ranch Gravel Mine, File No.M-2013-002, Construction Material Limited Impact (110) Operation Reclamation Permit Application Decision Letter – Financial and Performance Warranty Request***

Dear Mr. Gill:

On March 12, 2013, the Division of Reclamation, Mining and Safety (Division) approved the above noted permit application.

The amount of financial warranty set by the Division for this operation is an amount of (\$49,400.00). A financial warranty of the entire amount, as well as a performance warranty, must be submitted to the Division before a Reclamation Permit may be issued. Please select a type of financial warranty from those detailed in Rule 4.3. Once a financial warranty type is selected, please download the applicable financial warranty and performance warranty forms from the Division's website. You may also contact the the Division to have copies of your selected warranty forms mailed to you.

Please make arrangements with Barbara Coria at the Division of Reclamation, Mining and Safety Denver Office, phone no. 303.866.3567, ext. 8148 for submittal of the financial and performance warranties. Any questions regarding completion, execution and/or submittal of financial and/or performance warranty forms should also be directed to Barbara Coria.

**PLEASE NOTE THAT MINING OPERATIONS MAY NOT COMMENCE UNTIL A PERMIT HAS BEEN ISSUED BY THE DIVISION AFTER RECEIPT OF THE FINANCIAL AND PERFORMANCE WARRANTIES. A PERMIT WILL NOT BE ISSUED UNTIL THE ADEQUACY OF BOTH THE FINANCIAL WARRANTY AND PERFORMANCE WARRANTY ARE VERIFIED BY THE DIVISION.**

Bear Ranch Gravel Mine

March 12, 2013

Page 2

Please feel free to contact me, regarding any questions or concerns you may have, at the Division of Reclamation, Mining and Safety Grand Junction Field Office.

Sincerely,

  
A handwritten signature in dark ink, appearing to read 'Dustin Czapla', is written over a horizontal line.

*Dustin Czapla*

Environmental Protection Specialist

Department of Natural Resources

Division of Reclamation, Mining and Safety

101 South 3<sup>rd</sup>, Suite 301

Grand Junction, CO 81501

Phone: (970) 243-6299

Fax: (970) 241-1516

Enclosure: *DRMS Bond Calculation Worksheets*

Cc: Eric Mangeot, Resource Engineer

## COST SUMMARY WORK

Task description: Reclamation Liability Estimate

Site: Bear Ranch Gravel Mine

Permit Action: Initial

Permit/Job#: M2013002

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 3/4/2013

County: Gunnison

Filename: M002-000

User: DMC

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Regrading	DOZER	1	119.36	\$19,935.87
02a	Spread topsoil	DOZER	1	15.26	\$2,548.34
03a	Revegetate	REVEGE	1	10.00	\$12,075.75
04a	Mobilize reclamation crew/equipment	MOBILIZE	1	4.85	\$2,312.87
<b><u>SUBTOTALS:</u></b>				<b>149.47</b>	<b>\$36,872.83</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02%

Total = \$744.83

Performance bond: 1.05%

Total = \$387.16

Job superintendent: 74.73 hrs

Total = \$4,888.09

Profit: 10.00%

Total = \$3,687.28

TOTAL O & P = \$9,707.36

CONTRACT AMOUNT (direct + O & P) = \$46,580.19

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 500.00

Total = 500.00

Engineering work and/or contract/bid preparation: 0.00%

Total = \$0.00

Reclamation management and/or administration: 5.00%

\$2,329.01

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$12,536.37

**TOTAL BOND AMOUNT (direct + indirect) = \$49,400.00**

**BULLDOZER WORK**Task description: RegradingSite: Bear Ranch Gravel MinePermit Action: InitialPermit/Job#: M2013002**PROJECT IDENTIFICATION**Task #: 01AState: ColoradoAbbreviation: NoneDate: 3/5/2013County: GunnisonFilename: M002-01aUser: DMCAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D7R DS Series II LGPHorsepower: 238Blade Type: StraightAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$44.66	NA
Operating Cost/Hour:	\$81.07	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$163.14Total Fleet Cost/Hour: \$163.14**MATERIAL QUANTITIES**Initial Volume: 15,000Swell factor: 1.000Loose volume: 15,000 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 200 feetUnadjusted hourly production: 289.3 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: 0 %Average site altitude: 6,700 feetMaterial weight: 2,900 lbs/LCYWeight description: Decomposed rock - 50% Rock, 50% Earth**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(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:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4344

Adjusted unit production: 125.67 LCY/hr

Adjusted fleet production: 125.67 LCY/hr

### JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$1.298/LCY

Total job time: 119.36 Hours

Total job cost: \$19,472.39

**BULLDOZER WORK**Task description: Spread topsoilSite: Bear Ranch Gravel MinePermit Action: InitialPermit/Job#: M2013002**PROJECT IDENTIFICATION**Task #: 02AState: ColoradoAbbreviation: NoneDate: 3/5/2013County: GunnisonFilename: M002-02aUser: DMCAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D7R DS Series II LGPHorsepower: 238Blade Type: StraightAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$44.66	NA
Operating Cost/Hour:	\$81.07	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$37.41	NA

Total unit Cost/Hour: \$163.14Total Fleet Cost/Hour: \$163.14**MATERIAL QUANTITIES**Initial Volume: 3,793Swell factor: 1.000Loose volume: 3,793 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 200 feetUnadjusted hourly production: 289.3 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 0 %Average site altitude: 6,700 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:	1.000	(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: 248.60 LCY/hr

Adjusted fleet production: 248.6 LCY/hr

### JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.656/LCY

Total job time: 15.26 Hours

Total job cost: \$2,489.09

**REVEGETATION WORK**Task description: RevegetateSite: Bear Ranch Gravel MinePermit Action: InitialPermit/Job#: M2013002**PROJECT IDENTIFICATION**Task #: 03AState: ColoradoAbbreviation: NoneDate: 3/5/2013County: GunnisonFilename: M002-03aUser: DMCAgency 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
Chisel plowing (DMG)	\$88.58
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
Total Tilling Cost/Acre	\$233.78

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Crested Wheatgrass - Ephraim	3.75	17.22	\$8.36
Orchardgrass - Paiute	3.75	46.49	\$8.10
Rye, Perennial Tetraploid - Tetra-Plus	5.00	28.35	\$8.65
Smooth Brome - Lincoln	5.00	16.64	\$6.65
Intermediate Wheatgrass - Oahe	5.00	10.67	\$10.80
Slender Wheatgrass - Native	2.50	9.13	\$5.63
Totals Seed Mix	25.00	128.50	\$48.19

**Application**

Description	Cost /Acre
Drill seeding (DRMS Cost Data)	\$88.20



<b>Total Seed Application Cost/Acre</b>	<b>\$88.20</b>
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**MULCHING and MISCELLANEOUS****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$265.00	\$530.00
<b>Total Mulch Materials Cost/Acre</b>				<b>\$530.00</b>

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$65.89
<b>Total Mulch Application Cost/Acre</b>	<b>\$65.89</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres: 10 Cost /Acre: \$966.06  
 Estimated Failure Rate: 25% Cost /Acre\*: \$966.06  
 \*Selected Replanting Work Items: TILLING, SEEDING, MULCHING

Initial Job Cost: \$9,660.60  
 Reseeding Job Cost: \$2,415.15  
 Total Job Cost: \$12,075.75  
 Job Hours: 10.00

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: Mobilize reclamation crew/equipmentSite: Bear Ranch Gravel MinePermit Action: InitialPermit/Job#: M2013002**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 3/5/2013County: GunnisonFilename: M002-04aUser: DMCAgency 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:	\$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/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D7R DS Series II LGP	34.57	\$44.66	\$117.55	1	\$162.21	\$117.55	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00

Subtotals: **\$290.47** **\$206.22** **\$500.00****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.	\$15.66	1	\$15.66	\$15.66

Subtotals: **\$15.66** **\$15.66**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	PAIONIA	
Total one-way travel distance:	25.00	miles
Average Travel Speed:	35.00	mph

Total Non-Roadable Mob/Demob Cost *	\$2,290.50
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\* two round trips with haul rig:

Total Roadable Mob/Demob Cost **	\$22.37
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\*\* one round trip, no haul rig:

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.71	0.71
Return Time (Hours):	0.71	0.71
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.43	1.43

**JOB TIME AND COST**

Total job time:	4.86	Hours
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Total job cost:	\$2,312.87
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