

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



April 16, 2012

Scott Brennise
4B Land & Livestock LLC
5801 Highway 394
Craig, CO
81625

John W. Hickenlooper
Governor

Mike King
Executive Director

Loretta E. Piñeda
Director

RE: Breeze Basin Sand and Gravel Pit, Permit No. M-2008-022, Reclamation Costs Update and Notice of Surety Increase SI-1

Dear Mr. Brennise:

In an effort to ensure the Financial Warranty for the above referenced site adequately reflects the actual current costs of fulfilling the requirements of the approved reclamation plan, the Colorado Division of Reclamation, Mining and Safety (Division) has updated the reclamation cost estimate (copy enclosed). ***Therefore, pursuant to Section 34-32.5-117(4) of the Colorado Land Reclamation Act, adequate Financial Warranty must be submitted to the Division within 60 days of the mailing date of this letter.*** The additional amount needs to be accepted prior to **Friday, June 15, 2012**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Staff calculations estimate the cost to reclaim the above referenced site to be \$47,810.00. This is an increase of \$6,489.00 over the \$41,321.00 currently held by the Division. This estimate is based on conditions observed during the March 28, 2012 inspection.

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 warranty. Any questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Barbara Coria.

If you require additional information, have questions or concerns, please contact me at the DRMS Grand Junction Field Office.

Sincerely,



Dustin Czaplak

Dustin Czaplak

Environmental Protection Specialist
Department of Natural Resources
Division of Reclamation, Mining and Safety
101 South 3rd, Suite 301
Grand Junction, CO 81501
Phone: (970) 243-6299
Fax: (970) 241-1516

Cc: Gayle Lyman, Elam Construction, Inc.

Enc: Financial Warranty Cost Estimate

COST SUMMARY WORK

Task description: Reclamation cost review

Breeze Basin Sand & Gravel Permit Action:
Site: Pit 2012 March Inspection Permit/Job#: M2008022

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 4/16/2012 County: Moffat Filename: M022-000
User: DMC

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Decrease pit water level 15 feet	PUMPING	1	385.26	\$18,435.00
02a	Highwall reduction	DOZER	1	3.99	\$797.80
03a	Rip stockpile area and temporary access	RIPPER	1	8.79	\$1,874.00
04a	Push topsoil over pit slopes and stockpile area	DOZER	1	10.75	\$2,148.39
05a	Revegetate pit slopes	REVEGE	1	1.50	\$3,293.48
05b	Revegetate stockpile area	REVEGE	1	6.00	\$8,659.80
06a	Mobilize reclamation crew and equipment	MOBILIZE	1	2.57	\$2,542.53
<u>SUBTOTALS:</u>				418.86	\$37,751.00

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$762.57
Performance bond:	1.05	Total =	\$396.39
Job superintendent:	40.00	Total =	\$2,372.00
Profit:	10.00	Total =	\$3,775.10
		TOTAL O & P =	\$7,306.06
		CONTRACT AMOUNT (direct + O & P) =	\$45,057.06

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		\$2,252.85

CONTINGENCY: 0.00 Total = \$0.00

TOTAL INDIRECT COST = \$10,058.91

TOTAL BOND AMOUNT (direct + indirect) = \$47,810

PUMPING WORK

Task description: Decrease pit water level 15 feet

Breeze Basin Sand & Gravel
Site: Pit

Permit Action:
2012 March Inspection

Permit/Job#: M2008022

PROJECT IDENTIFICATION

Task #: 01A
Date: 4/16/2012
User: DMC

State: Colorado
County: Moffat

Abbreviation: None
Filename: M022-01a

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

	Description	Quantity
Make and Model:	Centrifugal pump - 125M, 8 in.	1
Attachment 1:	Suction pipe - 8 in. diam., 25 ft.	2
Attachment 2:	Discharge pipe - 8 in. D., 25 ft.	4
Labor Unit 1:	Pump operator	1

Horsepower: 70
Shift Basis: 1 per day
Weight: 1.50
(US Tons)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$11.91	NA
Operating Cost/Hour:	\$16.52	100
Operator Cost/Hour:	\$19.42	NA
Total Unit Cost/Hour:	\$47.85	

Total Fleet Cost/Hour: \$47.85

PUMPING QUANTITIES

Initial Pond Volume:	<u>90.00</u>		Conversion factor:	<u>325850.5800</u>
Final Pond Volume:	<u>29,326,552.20</u>	gallons		
Total Pond Inflow Surface Area:	<u>40,000</u>	Sq. ft.	Unit inflow rate in gph/sq. ft.:	<u>0.1758</u>
Total Pond Inflow Volume per Hour:	<u>7,032.00</u>	gallons		

Source of estimated volume: Approx. 6 ac. pond observed during inspection

PUMPING TIME

Maximum Pump Capacity:	<u>125,000</u>	gph/pump
Estimated Suction Head:	<u>25</u>	feet
Estimated Discharge Head:	<u>0</u>	feet
Total Head:	<u>25</u>	feet
CPB Pump Capacity:	<u>72,000</u>	gph/pump
Site Altitude:	<u>6,200</u>	feet
Adjusted Pumping Capacity:	<u>72,000</u>	gph
Initial Unadjusted Pumping Time:	<u>407.31</u>	hours
Inflow during Initial Pumping:	<u>2,864,227</u>	gallons
Net Unadjusted Pumping Time:	<u>447.09</u>	Hours
Altitude Adjustment Factor:	<u>0.9400</u>	(3% rule)
Pump Efficiency Factor:	<u>0.9167</u>	(55 min./hr.)
Total Adjusted Pumping Time:	<u>385.26</u>	hours

JOB TIME AND COST

Total job time: 385.26 Hours

Unit cost: \$0.000573 /Gallon

Total job cost: \$18,435.00

BULLDOZER WORKTask description: Highwall reductionSite: Breeze Basin Sand & Gravel PitPermit Action: 2012 March InspectionPermit/Job#: M2008022**PROJECT IDENTIFICATION**Task #: 02A
Date: 4/16/2012
User: DMCState: Colorado
County: MoffatAbbreviation: None
Filename: M022-02aAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8U
Horsepower: 310
Blade Type: Universal
Attachment: NA
Shift Basis: 1 per day
Data Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$58.56</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$102.84</u>	<u>100</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>
Operator Cost/Hour:	<u>\$38.49</u>	<u>NA</u>

Total unit Cost/Hour: \$199.89
Total Fleet Cost/Hour: \$199.89**MATERIAL QUANTITIES**Initial Volume: 2,894
Swell factor: 1.060
Loose volume: 3,068 LCYSource of estimated volume: Division of Reclamation, Mining & Safety
Source of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feet
Unadjusted hourly production: 1,627.0 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: -15 %
Average site altitude: 6,200 feetMaterial weight: 2,900 lbs/LCYWeight description: Sand and gravel - Dry**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>0.900</u>	<u>(CAT HB))</u>

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: 768.59 LCY/hr

Adjusted fleet production: 768.59 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.260/LCY

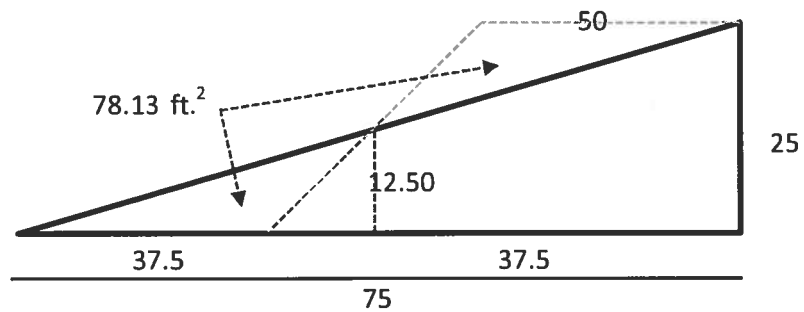
Total job time: 3.99 Hours

Total job cost: \$797.80

Highwall reduction - cut and fill

Highwall Height (ft.)	25.0
Length of Highwall (ft.)	1000
----- Initial Slope	2.0 H:1V
———— Desired Slope	3 H:1V
Volume of material to be moved (ft. ³)	78,125
Volume of material to be moved (yd. ³)	2,894

All dimensions measured in feet
Drawing not to scale



BULLDOZER RIPPING WORK

Task description: Rip stockpile area and temporary access

Breeze Basin Sand & Gravel Permit Action:
Site: Pit 2012 March Inspection Permit/Job#: M2008022

PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None
Date: 4/16/2012 County: Moffat Filename: M022-03a
User: DMC

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

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

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$65.28	NA
Operating Cost/Hour:	\$102.84	100
Ripper Operating Cost/Hour:	\$6.49	100
Operator Cost/Hour:	\$38.49	NA
Total Unit Cost/Hour:	\$213.10	
Total Fleet Cost/Hour:	\$213.10	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 6.00 acres Rip Depth (ft): 2.00 Volume: 19,360 BCY or CCY

Source of estimated quantity: Based on site inspection

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth:	<u>2.56</u>	mph
Average Ripping Width:	<u>7.08</u>	degrees
Average Ripping Length:	<u>500.00</u>	feet
Average Dozer Speed:	<u>88.00</u>	feet
Average Maneuver Time:	<u>0.25</u>	feet
Production per unit area:	<u>0.822</u>	acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production:	<u>0.822</u>	Acres/hr
Site Altitude:	<u>6,200</u>	feet
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.83</u>	(1 shift/day)
Net Correction:	<u>0.83</u>	multiplier
Adjusted Hourly Unit Production:	<u>0.68</u>	Acres/hr
Adjusted Hourly Fleet Production:	<u>0.68</u>	Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 8.79 Hours
Unit cost: \$312.339 Per acre Total job cost: \$1,874.00

BULLDOZER WORKTask description: Push topsoil over pit slopes and stockpile areaSite: Breeze Basin Sand & Gravel
PitPermit Action: 2012 March InspectionPermit/Job#: M2008022**PROJECT IDENTIFICATION**Task #: 04A
Date: 4/16/2012
User: DMCState: Colorado
County: MoffatAbbreviation: None
Filename: M022-04aAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8U
Horsepower: 310
Blade Type: Universal
Attachment: NA
Shift Basis: 1 per day
Data Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$58.56	NA
Operating Cost/Hour:	\$102.84	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.49	NA

Total unit Cost/Hour: \$199.89
Total Fleet Cost/Hour: \$199.89**MATERIAL QUANTITIES**Initial Volume: 8,604
Swell factor: 1.000
Loose volume: 8,604 LCYSource of estimated volume: Approx. 8 ac. @ 8" depth
Source of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feet
Unadjusted hourly production: 931.6 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 0 %
Average site altitude: 6,200 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: 800.52 LCY/hr

Adjusted fleet production: 800.52 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
 Unit cost: \$0.250/LCY

Total job time: 10.75 Hours
 Total job cost: \$2,148.39

REVEGETATION WORKTask description: Revegetate pit slopesSite: Breeze Basin Sand & Gravel
PitPermit Action: 2012 March InspectionPermit/Job#: M2008022**PROJECT IDENTIFICATION**Task #: 05A
Date: 4/16/2012
User: DMCState: Colorado
County: MoffatAbbreviation: None
Filename: M022-05aAgency 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)	\$92.35
Total Tilling Cost/Acre	\$92.35

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	1.00	3.24	\$8.53
Bluebunch Wheatgrass - Secar	5.00	16.07	\$33.50
Crested Wheatgrass - Ephraim	2.00	9.18	\$4.36
Great Basin Wildrye - Magnar	1.00	4.06	\$7.33
Nebraska Sedge	3.80	79.59	\$513.00
Western Wheatgrass - Arriba	2.90	7.32	\$10.44
Timothy - Climax	1.00	28.70	\$1.13
Totals Seed Mix	16.70	148.16	\$578.29

Application

Description	Cost /Acre
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Drill seeding {DMG}	\$90.11
Total Seed Application Cost/Acre	\$90.11

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$164.00	\$328.00
Total Mulch Materials Cost/Acre				\$328.00

Application

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

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Cottonwood, Narrowleaf	25	Tubling, 10 cu. in. container {(MEANS)}	\$1.45	\$0.00	\$36.25
Willow, Sandbar	770	Tubling, 3 cu. in. container (MEANS)	\$0.93	\$0.00	\$716.10
Totals Nursery Stock Cost / Acre					\$752.35

JOB TIME AND COST

No. of Acres: 1.5 Cost /Acre: \$1,906.99
 Estimated Failure Rate: 25% Cost /Acre*: \$1,154.64
 *Selected Replanting Work Items: TILLING, SEEDING, MULCHING

Initial Job Cost: \$2,860.49
 Reseeding Job Cost: \$432.99
 Total Job Cost: \$3,293.48
 Job Hours: 1.50

REVEGETATION WORKTask description: Revegetate stockpile areaBreeze Basin Sand & Gravel
Site: PitPermit Action:
2012 March InspectionPermit/Job#: M2008022**PROJECT IDENTIFICATION**Task #: 05B
Date: 4/16/2012
User: DMCState: Colorado
County: MoffatAbbreviation: None
Filename: M022-05bAgency 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)	\$92.35
Total Tilling Cost/Acre	\$92.35

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	1.00	3.24	\$8.53
Bluebunch Wheatgrass - Secar	5.00	16.07	\$33.50
Crested Wheatgrass - Ephraim	2.00	9.18	\$4.36
Great Basin Wildrye - Magnar	1.00	4.06	\$7.33
Nebraska Sedge	3.80	79.59	\$513.00
Western Wheatgrass - Arriba	2.90	7.32	\$10.44
Timothy - Climax	1.00	28.70	\$1.13
Totals Seed Mix	16.70	148.16	\$578.29

Application

Description	Cost /Acre
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Drill seeding {DMG}	\$90.11
Total Seed Application Cost/Acre	\$90.11

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$164.00	\$328.00
Total Mulch Materials Cost/Acre				\$328.00

Application

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

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: 6 Cost /Acre: \$1,154.64
 Estimated Failure Rate: 25% Cost /Acre*: \$1,154.64
 *Selected Replanting Work Items: TILLING, SEEDING, MULCHING
 Initial Job Cost: \$6,927.84
 Reseeding Job Cost: \$1,731.96
 Total Job Cost: \$8,659.80
 Job Hours: 6.00

EQUIPMENT MOBILIZATION/DEMobilIZATIONTask description: **Mobilize reclamation crew and equipment**Breeze Basin Sand & Gravel
Site: **Pit**Permit Action:
2012 March InspectionPermit/Job#: **M2008022****PROJECT IDENTIFICATION**Task #: **06A**
Date: **4/16/2012**
User: **DMC**State: **Colorado**
County: **Moffat**Abbreviation: **None**
Filename: **M022-06a**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/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8U	53.70	\$65.28	\$125.45	1	\$190.73	\$125.45	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Centrifugal pump - 125M, 8 in.	1.50	\$6.41	\$88.67	1	\$95.08	\$88.67	\$250.00

Subtotals: **\$414.07** **\$302.79** **\$750.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$33.48	1	\$33.48	\$33.48

Subtotals: **\$33.48** **\$33.48**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>CRAIG</u>	
Total one-way travel distance:	<u>5.00</u>	miles
Average Travel Speed:	<u>35.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$2,532.96</u>
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$9.57</u>
'** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.14	0.14
Return Time (Hours):	0.14	0.14
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.29	0.29

JOB TIME AND COST

Total job time:	<u>2.57</u>	Hours
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Total job cost:	<u>\$2,542.53</u>
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