

June 28, 2016

Brian Watterson
Peabody Williams Fork Mining, LLC
36600 Routt County Road #27
Hayden, CO 81639



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

1313 Sherman Street, Room 215
Denver, CO 80203

RE: Red Rock Pit, Permit No. M-1978-315, Reclamation Costs Update and Notice of Surety Increase (SI-1)

Dear Mr. Waterson:

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).

Division calculations estimate the cost to reclaim the above referenced site to be \$30,790 rounded up from \$30,789.20. This is an increase of \$5,847 over the \$24,943 currently required by the Division. This estimate is based on conditions observed during the June 16, 2016 inspection. It is noted that the Division currently holds an excess surety amount of \$6,607 for a total bond amount of \$31,550. **Therefore no additional bond is required to be posted at this time.**

Any questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Barbara Coria Mining and Safety Denver Office, phone no. 303.866.3567, ext. 8148.

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@state.co.us

Sincerely,

Amy Yeldell
Environmental Protection Specialist
Department of Natural Resources
Division of Reclamation, Mining and Safety
Phone: (970) 254-8511

Ec: Russ Means, Senior EPS / Field Office Supervisor, Grand Junction DRMS
Enc: Financial Warranty Cost Estimate



COST SUMMARY WORK

Task description: Updated based on 6/16/16 inspection

Site: Red Rock Pit

Permit Action: 2016-06

Permit/Job#: M1978315

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 6/22/2016

County: Routt

Filename: M315-000

User: ACY

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Finish grade mined 1H:1V slopes, spread fines	DOZER	1	24.00	\$3,842.00
02a	Rip base area in Phase 2	RIPPER	1	6.06	\$1,056.00
03a	Spread topsoil over base area	DOZER	1	1.15	\$185.00
04a	Revegetate base area in Phase 2	REVEGE	1	3.00	\$4,265.00
04b	Revegetate slopes in Phase 2	REVEGE	1	5.00	\$9,687.00
05a	Initial mobilize reclamation crew and equipment	MOBILIZE	1	4.22	\$3,154.00
05b	Secondary mobilize reclamation crew and equipment	MOBILIZE	1	4.22	\$1,921.00
<u>SUBTOTALS:</u>				47.65	\$24,110

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$487.02

Performance bond: 1.05

Total = \$253.16

Job superintendent: 21.29

Total = \$1,585.68

Profit: 10.00

Total = \$2,411.00

TOTAL O & P = \$4,736.86

CONTRACT AMOUNT (direct + O & P) = \$28,846.86

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

\$1,442.34

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$6,679.20

TOTAL BOND AMOUNT (direct + indirect) = \$30,789.20

BULLDOZER WORKTask description: Finish grade mined 1H:1V slopes, spread finesSite: Red Rock Pit Permit Action: 2016-06 Permit/Job#: M1978315**PROJECT IDENTIFICATION**

Task #: 01A State: Colorado Abbreviation: None
 Date: 6/22/2016 County: Routt Filename: M315-01a
 User: ACY

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine: Cat D8T - 8U
 Horsepower: 305
 Blade Type: Universal
 Attachment: NA
 Shift Basis: 1 per day
 Data Source: (CRG)

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$52.86</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$68.35</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>
Operator Cost/Hour:	<u>\$38.89</u>	<u>NA</u>

Total unit Cost/Hour: \$160.10
 Total Fleet Cost/Hour: **\$160.10**

MATERIAL QUANTITIES

Initial Volume: 13,875
 Swell factor: 1.000
 Loose volume: **13,875 LCY**

Source of estimated volume: Grade upper 1 foot of material in Phase 2 (8.6 ac.)
 Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 50 feet
 Unadjusted hourly production: 1,627.0 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: 0 %
 Average site altitude: 6,300 feet

Material weight: 2,900 lbs/LCYWeight description: Decomposed rock - 50% Rock, 50% Earth**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:	<u>1.000</u>	<u>(GEN.)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>

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: 0.3554

Adjusted unit production: 578.24 LCY/hr

Adjusted fleet production: **578.24** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.277/LCY

Total job time: **24.00** Hours

Total job cost: **\$3,842**

BULLDOZER RIPPING WORK

Task description: Rip base area in Phase 2

Site: Red Rock Pit Permit Action: 2016-06 Permit/Job#: M1978315

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 6/22/2016 County: Routt Filename: M315-02a
User: ACY

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8U Horsepower: 305
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$52.86</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$68.35</u>	<u>100</u>
Ripper Ownership Cost/Hour:	<u>\$8.40</u>	<u>NA</u>
Ripper Operating Cost/Hour:	<u>\$5.62</u>	<u>100</u>
Operator Cost/Hour:	<u>\$38.89</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$174.12</u>	
Total Fleet Cost/Hour:	<u>\$174.12</u>	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 3.00 acres Rip Depth (ft): 2.00 Volume: 9,680 BCY or CCY

Source of estimated quantity: Mine/Rec. Plan Maps

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth:	<u>2.56</u>	<u>mph</u>
Average Ripping Width:	<u>7.08</u>	<u>degrees</u>
Average Ripping Length:	<u>50.00</u>	<u>feet</u>
Average Dozer Speed:	<u>88.00</u>	<u>feet</u>
Average Maneuver Time:	<u>0.25</u>	<u>feet</u>
Production per unit area:	<u>0.596</u>	<u>acres/hour</u>

Job Condition Correction Factors

Unadjusted Hourly Unit Production:	<u>0.596</u>	<u>Acres/hr</u>
Site Altitude:	<u>6,300</u>	<u>feet</u>
Altitude Adj:	<u>1.00</u>	<u>(CAT HB)</u>
Job Efficiency:	<u>0.83</u>	<u>(1 shift/day)</u>
Net Correction:	<u>0.83</u>	<u>multiplier</u>

Adjusted Hourly Unit Production: 0.49 Acres/hr
Adjusted Hourly Fleet Production: 0.49 Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 6.06 Hours

Unit cost: \$352.009 Per acre Total job cost: \$1,056

BULLDOZER WORKTask description: Spread topsoil over base areaSite: Red Rock Pit Permit Action: 2016-06 Permit/Job#: M1978315**PROJECT IDENTIFICATION**

Task #: 03A State: Colorado Abbreviation: None
 Date: 6/22/2016 County: Routt Filename: M315-03a
 User: ACY

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine: Cat D8T - 8U
 Horsepower: 305
 Blade Type: Universal
 Attachment: NA
 Shift Basis: 1 per day
 Data Source: (CRG)

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$52.86</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$68.35</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>
Operator Cost/Hour:	<u>\$38.89</u>	<u>NA</u>

Total unit Cost/Hour: \$160.10
 Total Fleet Cost/Hour: **\$160.10**

MATERIAL QUANTITIES

Initial Volume: 1,613
 Swell factor: 1.000
 Loose volume: **1,613** LCY

Source of estimated volume: Approx. 3 ac. @ 4" depth
 Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 50 feet
 Unadjusted hourly production: 1,627.0 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %
 Average site altitude: 6,300 feet

Material weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.200</u>	<u>(CAT HB)</u>
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>

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: 1,398.08 LCY/hr

Adjusted fleet production: **1398.08** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.115/LCY

Total job time: **1.15** Hours

Total job cost: **\$185**

REVEGETATION WORKTask description: Revegetate base area in Phase 2Site: Red Rock PitPermit Action: 2016-06Permit/Job#: M1978315**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 6/22/2016County: RouttFilename: M315-04aUser: ACYAgency 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}	\$88.76
Total Tilling Cost/Acre	\$88.76

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Bitterbrush, Antelope	1.00	0.31	\$20.67
Indian Ricegrass - Native	2.50	8.09	\$16.88
Intermediate Wheatgrass - Oahe	3.00	6.40	\$6.57
Slender Wheatgrass - Native	3.00	10.95	\$6.75
Western Wheatgrass - Arriba	2.50	6.31	\$9.23
Sagebrush, Mountain or Big	0.25	13.20	\$8.60
Bluebunch Wheatgrass - Goldar	5.00	16.07	\$27.55
Totals Seed Mix	17.25	61.34	\$96.24

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	2.00	ACRE	\$1.25	\$2.50
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$246.00	\$492.00
Total Mulch Materials Cost/Acre				\$494.50

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$66.02
Power mulcher (MEANS 32 91 13.16 0350)	\$97.14
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$225.88

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: 3 Cost /Acre: \$1,137.38
 Estimated Failure Rate: 25% Cost /Acre*: \$1,137.38
 *Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **\$3,412.14**
 Reseeding Job Cost: **\$853.04**
 Total Job Cost: **\$4,265**
 Job Hours: **3.00**

REVEGETATION WORKTask description: Revegetate slopes in Phase 2Site: Red Rock PitPermit Action: 2016-06Permit/Job#: M1978315**PROJECT IDENTIFICATION**Task #: 04BState: ColoradoAbbreviation: NoneDate: 6/22/2016County: RouttFilename: M315-04bUser: ACYAgency 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}	\$88.76
Total Tilling Cost/Acre	\$88.76

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Bitterbrush, Antelope	2.00	0.62	\$41.34
Indian Ricegrass - Native	5.00	16.18	\$33.75
Intermediate Wheatgrass - Oahe	6.00	12.81	\$13.14
Slender Wheatgrass - Native	6.00	21.90	\$13.50
Western Wheatgrass - Arriba	5.00	12.63	\$18.45
Sagebrush, Mountain or Big	0.50	26.40	\$17.19
Bluebunch Wheatgrass - Goldar	10.00	32.14	\$55.10
Totals Seed Mix	34.50	122.68	\$192.47

Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$261.80
Total Seed Application Cost/Acre	\$261.80

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	2.00	ACRE	\$1.25	\$2.50
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$246.00	\$492.00
Total Mulch Materials Cost/Acre				\$494.50

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$66.02
Power mulcher (MEANS 32 91 13.16 0350)	\$97.14
Weed spray, hand, non-aquatic area, nox. [DMG]	\$183.16
Total Mulch Application Cost/Acre	\$346.32

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: 5.6 Cost /Acre: \$1,383.85
 Estimated Failure Rate: 25% Cost /Acre*: \$1,383.85
 *Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: \$7,749.56
 Reseeding Job Cost: \$1,937.39
 Total Job Cost: \$9,687
 Job Hours: 5.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Initial mobilize reclamation crew and equipment**Site: **Red Rock Pit**Permit Action: 2016-06Permit/Job#: M1978315**PROJECT IDENTIFICATION**

Task #: 05A State: Colorado Abbreviation: None
 Date: 6/22/2016 County: Routt Filename: M315-05a
 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:	\$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
Power Mulcher (Reinco M90)	6.00	\$6.72	\$88.67	1	\$95.39	\$88.67	\$250.00

Subtotals: **\$414.38** **\$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	\$25.30	1	\$25.30	\$25.30

Subtotals: **\$25.30** **\$25.30**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: CRAIG
 Total one-way travel distance: 25.00 miles
 Average Travel Speed: 45.00 mph

Total Non-Roadable Mob/Demob Cost * \$3,125.62
 * two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$28.11
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.56	0.56
Return Time (Hours):	0.56	0.56
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.11	1.11

JOB TIME AND COST

Total job time: 4.22 Hours

Total job cost: \$3,154

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Secondary mobilize reclamation crew and equipmentSite: Red Rock PitPermit Action: 2016-06Permit/Job#: M1978315**PROJECT IDENTIFICATION**

Task #: 05B State: Colorado Abbreviation: None
 Date: 6/22/2016 County: Routt Filename: M315-05b
 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:	\$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
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Power Mulcher (Reinco M90)	6.00	\$6.72	\$88.67	1	\$95.39	\$88.67	\$250.00
Subtotals:					\$223.65	\$177.34	\$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, 1 T. Crew	\$25.30	1	\$25.30	\$25.30
Subtotals:			\$25.30	\$25.30

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: CRAIG
 Total one-way travel distance: 25.00 miles
 Average Travel Speed: 45.00 mph

Total Non-Roadable Mob/Demob Cost * \$1,892.84
 * two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$28.11
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.56	0.56
Return Time (Hours):	0.56	0.56
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.11	1.11

JOB TIME AND COST

Total job time: 4.22 Hours

Total job cost: \$1,921