

March 22, 2017

Doug Grant  
Grant Bros Construction Ltd  
PO Box 1027  
Basalt, CO 81621



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

1313 Sherman Street, Room 215  
Denver, CO 80203

***RE: Loesch Pit, Permit No. M-1981-068, Reclamation Costs Update and Notice of Surety Increase (SI-1)***

Dear Mr. Grant:

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 \$23,786 rounded down from \$23,786.26. This is an increase of \$4,786.00 over the \$19,000.00 currently held by the Division. This estimate is based on conditions observed during the March 3, 2017 inspection. ***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 **Monday, May 22, 2017**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

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, 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, Grand Junction DRMS

Enc: Financial Warranty Cost Estimate



## COST SUMMARY WORK

Task description: Updated post inspection 3-3-17

Site: Loesch Pit

Permit Action: 03-2017

Permit/Job#: M1981068

### PROJECT IDENTIFICATION

Task #: ACY

State: Colorado

Abbreviation: None

Date: 3/17/2017

County: Garfield

Filename: M068-ACY

User: ACY

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Backfilling and grading highwalls	DOZER	1	20.00	\$4,030.00
02a	Apply topsoil	DOZER	1	7.07	\$1,426.00
03a	Rip haul road	RIPPER	1	0.67	\$138.00
04a	Rip processing areas	RIPPER	1	19.84	\$4,155.00
05a	Reseed disturbed areas-pit slopes	REVEGE	1	24.00	\$6,429.00
06a	Initial mobilization to site	MOBILIZE	1	2.22	\$2,415.00
07a	Secondary seeding mobilization	MOBILIZE	1	2.22	\$1,442.00
<b><u>SUBTOTALS:</u></b>				<b>76.02</b>	<b>\$20,035</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$404.71

Performance bond: 1.05

Total = \$210.37

Job superintendent: 0.00

Total = \$0.00

Profit: 10.00

Total = \$2,003.50

TOTAL O & P = \$2,618.58

CONTRACT AMOUNT (direct + O & P) = \$22,653.58

#### 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

\$1,132.68

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$3,751.26

TOTAL BOND AMOUNT (direct + indirect) = \$23,786.26

**TOTAL BOND AMOUNT (rounded) = \$23,786**

**BULLDOZER WORK**Task description: **Backfilling and grading highwalls**Site: **Loesch Pit** Permit Action: **03-2017** Permit/Job#: **M1981068****PROJECT IDENTIFICATION**

Task #: **01A** State: **Colorado** Abbreviation: **None**  
 Date: **3/17/2017** County: **Garfield** Filename: **M068-01a**  
 User: **ACY**

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

Basic Machine: **Cat D8T - 8SU**  
 Horsepower: **310**  
 Blade Type: **Semi-Universal**  
 Attachment: **3-shank ripper**  
 Shift Basis: **1 per day**  
 Data Source: **(CRG)**

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$83.81	NA
Operating Cost/Hour:	\$66.17	100
Ripper own. Cost/Hour:	\$7.55	NA
Ripper op. Cost/Hour:	\$2.16	30
Operator Cost/Hour:	\$41.85	NA

Total unit Cost/Hour: **\$201.54**  
 Total Fleet Cost/Hour: **\$201.54**

**MATERIAL QUANTITIES**

Initial Volume: **10,000**  
 Swell factor: **1.120**  
 Loose volume: **11,200 LCY**

Source of estimated volume: **1500' 1:1 to 3:1 cut and 300' 2:1 to 4:1 backfill**  
 Source of estimated swell factor: **Cat Handbook**

**HOURLY PRODUCTION**

Average push distance: **60 feet**  
 Unadjusted hourly production: **1,246.9 LCY/hr**

Materials consistency description: **Consolidated stockpile 1.0**

Average push gradient: **0 %**  
 Average site altitude: **6,360 feet**

Material weight: **2,550 lbs/LCY**Weight description: **Gravel - Dry****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:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4492

Adjusted unit production: 560.11 LCY/hr

Adjusted fleet production: **560.11** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.360/LCY

Total job time: **20.00** Hours

Total job cost: **\$4,030**

**BULLDOZER WORK**Task description: Apply topsoilSite: Loesch PitPermit Action: 03-2017Permit/Job#: M1981068**PROJECT IDENTIFICATION**Task #: 02AState: ColoradoAbbreviation: NoneDate: 3/17/2017County: GarfieldFilename: M068-02aUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: 3-shank ripperShift 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:	\$7.55	NA
Ripper op. Cost/Hour:	\$2.16	30
Operator Cost/Hour:	\$41.85	NA

Total unit Cost/Hour: \$201.54Total Fleet Cost/Hour: \$201.54**MATERIAL QUANTITIES**Initial Volume: 4,665Swell factor: 1.215Loose volume: 5,668 LCYSource of estimated volume: 20' D 2000' on a 3:1 and 300' on a 4:1 @ 10" deepSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 75 feetUnadjusted hourly production: 1,017.1 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: 0 %Average site altitude: 6,360 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil**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:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7877

Adjusted unit production: 801.17 LCY/hr

Adjusted fleet production: **801.17 LCY/hr**

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.252/LCY

Total job time: **7.07 Hours**

Total job cost: **\$1,426**

## BULLDOZER RIPPING WORK

Task description: Rip haul road

Site: Loesch Pit Permit Action: 03-2017 Permit/Job#: M1981068

### PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None  
Date: 3/17/2017 County: Garfield Filename: M068-03a  
User: ACY

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

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

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$83.81	NA
Operating Cost/Hour:	\$66.17	100
Ripper Ownership Cost/Hour:	\$7.55	NA
Ripper Operating Cost/Hour:	\$7.21	100
Operator Cost/Hour:	\$41.85	NA
Total Unit Cost/Hour:	\$206.59	
Total Fleet Cost/Hour:	<b>\$206.59</b>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA  
Area: 0.43 acres Rip Depth (ft): 2.00 Volume: 1,387 BCY or CCY

Source of estimated quantity: Reclamation Plan

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth: 1.00 mph  
Average Ripping Width: 7.08 degrees  
Average Ripping Length: 200.00 feet  
Average Dozer Speed: 88.00 feet  
Average Maneuver Time: 0.25 feet  
Production per unit area: 0.773 acres/hour

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.773 Acres/hr  
Site Altitude: 6,360 feet  
Altitude Adj: 1.00 (CAT HB)  
Job Efficiency: 0.83 (1 shift/day)  
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.64 Acres/hr  
Adjusted Hourly Fleet Production: **0.64** Acres/hr

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **0.67** Hours

Unit cost: \$321.940 Per acre Total job cost: **\$138**

## BULLDOZER RIPPING WORK

Task description: Rip processing areas

Site: Loesch Pit Permit Action: 03-2017 Permit/Job#: M1981068

### PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None  
Date: 3/17/2017 County: Garfield Filename: M068-04a  
User: ACY

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

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

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$83.81</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$66.17</u>	<u>100</u>
Ripper Ownership Cost/Hour:	<u>\$10.94</u>	<u>NA</u>
Ripper Operating Cost/Hour:	<u>\$6.62</u>	<u>100</u>
Operator Cost/Hour:	<u>\$41.85</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$209.39</u>	
Total Fleet Cost/Hour:	<u><b>\$209.39</b></u>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA  
Area: 10.00 acres Rip Depth (ft): 2.00 Volume: 32,267 BCY or CCY

Source of estimated quantity: Mining Plan

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth: 1.00 mph  
Average Ripping Width: 5.56 degrees  
Average Ripping Length: 200.00 feet  
Average Dozer Speed: 88.00 feet  
Average Maneuver Time: 0.25 feet  
Production per unit area: 0.607 acres/hour

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.607 Acres/hr  
Site Altitude: 6,360 feet  
Altitude Adj: 1.00 (CAT HB)  
Job Efficiency: 0.83 (1 shift/day)  
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.50 Acres/hr  
Adjusted Hourly Fleet Production: **0.50** Acres/hr

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **19.84** Hours

Unit cost: \$415.509 Per acre Total job cost: **\$4,155**



**REVEGETATION WORK**Task description: **Reseed disturbed areas-pit slopes**Site: **Loesch Pit**Permit Action: 03-2017Permit/Job#: M1981068**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 3/17/2017County: GarfieldFilename: M068-05aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

<b>Description</b>	<b>Units / Acre</b>	<b>Unit</b>	<b>Cost / Unit</b>	<b>Cost /Acre</b>
10-34-0, 18-46-0, 5-10-5	200.00	pound	\$0.34	\$68.00
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$68.00</b>

**Application**

<b>Description</b>	<b>Cost /Acre</b>
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$144.62
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$144.62</b>

**TILLING**

<b>Description</b>	<b>Cost /Acre</b>
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$106.29
<b>Total Tilling Cost/Acre</b>	<b>\$106.29</b>

**SEEDING**

<b>Seed Mix</b>	<b>Rate – PLS LBS / Acre</b>	<b>Seeds per SQ. FT</b>	<b>Cost /Acre</b>
Alkali Sacaton	0.50	19.51	\$14.16
Tall Wheatgrass - Jose	6.00	10.88	\$14.52
Western Wheatgrass - Arriba	4.00	10.10	\$32.32
Saltbush, Four Wing	1.00	1.38	\$12.50
<b>Totals Seed Mix</b>	<b>11.50</b>	<b>41.87</b>	<b>\$73.50</b>

**Application**

<b>Description</b>	<b>Cost /Acre</b>
Drill Seeding (DRMS Survey Cost)	\$232.00

<b>Total Seed Application Cost/Acre</b>	<b>\$232.00</b>
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**MULCHING and MISCELLANEOUS****Materials**

<b>Description</b>	<b>Units / Acre</b>	<b>Unit</b>	<b>Cost / Unit</b>	<b>Cost /Acre</b>
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$7.16	\$7.16
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$261.00	\$261.00
<b>Total Mulch Materials Cost/Acre</b>				<b>\$268.16</b>

**Application**

<b>Description</b>	<b>Cost /Acre</b>
Crimping, with tractor {DMG survey data}	\$66.02
Power mulcher (MEANS 32 91 13.16 0350)	\$99.32
Weed spray, truck, aquatic area, nox. [DMG]	\$68.50
<b>Total Mulch Application Cost/Acre</b>	<b>\$233.84</b>

**NURSERY STOCK PLANTING**

<b>Common Name</b>	<b>No / Acre</b>	<b>Type and Size</b>	<b>Planting Cost</b>	<b>Fertilizer Pellet Cost</b>	<b>Cost /Acre</b>
Cottonwood, Narrowleaf	5	Tubling, 10 cu. in. container { (MEANS)	\$4.33	\$2.40	\$21.65
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$21.65</b>

**JOB TIME AND COST**

No. of Acres: 4 Cost /Acre: \$1,148.06  
 Estimated Failure Rate: 40% Cost /Acre\*: \$1,148.06  
 \*Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,NURSERY,MULCHING

Initial Job Cost: \$4,592.24  
 Reseeding Job Cost: \$1,836.90  
 Total Job Cost: \$6,429  
 Job Hours: 24.00

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Initial mobilization to site**Site: **Loesch Pit**Permit Action: **03-2017**Permit/Job#: **M1981068****PROJECT IDENTIFICATION**Task #: **06A**State: **Colorado**Abbreviation: **None**Date: **3/17/2017**County: **Garfield**Filename: **M068-06a**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:**

<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 D8T - 8SU	53.08	\$91.36	\$125.45	1	\$216.81	\$125.45	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$12.22	\$88.67	1	\$100.89	\$88.67	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$7.03	\$88.67	1	\$95.70	\$88.67	\$250.00

Subtotals: **\$413.40** **\$302.79** **\$750.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 4x2, 30K GVW	\$54.25	1	\$54.25	\$54.25

Subtotals: **\$54.25** **\$54.25**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: RIFLE, CO  
 Total one-way travel distance: 2.00 miles  
 Average Travel Speed: 35.00 mph

Total Non-Roadable Mob/Demob Cost \* \$2,408.65  
 \* two round trips with haul rig:  
 Total Roadable Mob/Demob Cost \*\* \$6.20  
 \*\* one round trip, no haul rig:

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.06	0.06
Return Time (Hours):	0.06	0.06
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.11	0.11

**JOB TIME AND COST**

Total job time: 2.23 Hours

Total job cost: \$2,415

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: Secondary seeding mobilizationSite: Loesch PitPermit Action: 03-2017Permit/Job#: M1981068**PROJECT IDENTIFICATION**Task #: 07AState: ColoradoAbbreviation: NoneDate: 3/17/2017County: GarfieldFilename: M068-07aUser: ACYAgency 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
Drill/Broadcast Seeder with Tractor	25.00	\$12.22	\$88.67	1	\$100.89	\$88.67	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$7.03	\$88.67	1	\$95.70	\$88.67	\$250.00
Subtotals:					<b>\$196.59</b>	<b>\$177.34</b>	<b>\$500.00</b>

**ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 4x2, 30K GVW	\$54.25	1	\$54.25	\$54.25
Subtotals:			<b>\$54.25</b>	<b>\$54.25</b>

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>RIFLE, CO</u>	
Total one-way travel distance:	<u>2.00</u>	miles
Average Travel Speed:	<u>35.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$1,435.91</u>
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$6.20</u>
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.06</u>	<u>0.06</u>
Return Time (Hours):	<u>0.06</u>	<u>0.06</u>
Loading Time (Hours):	<u>0.50</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.50</u>	<u>NA</u>
Subtotals:	<u>1.11</u>	<u>0.11</u>

**JOB TIME AND COST**

Total job time: 2.23 Hours

Total job cost: \$1,442

March 22, 2017

Doug Grant  
Grant Bros Construction Ltd  
PO Box 1027  
Basalt, CO 81621



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

1313 Sherman Street, Room 215  
Denver, CO 80203

***RE: Loesch Pit, Permit No. M-1981-068, SI-1 Reclamation Cost Estimate***

Dear Mr. Grant:

This reclamation cost update was in response to the site inspection conducted on March 3, 2017. There have been no surety increases since the permit issuance in 1981 and the last cost estimate was done in 2006. It is Division policy to periodically update its costs to ensure that the Financial Warranty adequately, reflects the actual current cost of fulfilling the requirements of the approved reclamation plan.

Below is a table summarizing input values that have been updated in the surety increase (SI-1) as compared to the 2006 calculation. This table does not account for price changes resulting from inflation or other RS Means cost changes. Bond calculations are based on a combination of field observations and worst case scenario based on the approved reclamation permit.

Task	Form Used	Change	Justification
01a	Dozer	+	Grading task added. 20'D pit, 300' @ 2:1->4:1 backfill = 4,444CY + 1500' 1:1->3:1 cut & fill= 5,556 cy total of 10,000 CY
02a	Dozer	+	More area requires topsoil, previously 3,683 CY 20' D pit, 300' @ 4:1 + 2000' @ 3:1+151,238 sq ft= 3.47 ac @ 10" D = 4,665 CY
03a	Ripper		No changes
04a	Ripper		No changes
05a	Reveg	+	More area with topsoil applied plus spot seeding in previously topsoiled areas approx. 4 ac. Previously 3.14 ac Added crimper
06a	Mob	+	Updated reveg equipment to include specific pieces used
07a	Mob	+	Updated reveg equipment to include specific pieces used



Please feel free to contact me with any further questions. 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  
Fax: (970) 241-1516

Ec:  
Russ Means, Senior EPS, Grand Junction DRMS



