

September 3, 2015

Ed MacArthur  
Alpine Aggregates, LLC  
P.O. Box 880202  
Steamboat Springs, CO 80487



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

1313 Sherman Street, Room 215  
Denver, CO 80203

***RE: Steamboat Sand and Gravel Pit, Permit No. M-2001-090, Estimated Reclamation Costs Update***

Dear Mr. MacArthur:

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 \$573,838. This is an increase of \$151,838 over the \$422,000 currently held by the Division. This estimate is based on conditions observed during the August 6, 2015 inspection. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Inadvertently the cost of purchasing 10,000 CCY of fill material deficit per the reclamation plan was incorrectly calculated in our software for the 2012 bond calculation. This error when corrected resulted in a significant increase in reclamation cost as compared to typical inflation and industry price changes. Per the phone conversation with the operator on September 2, 2015 this need for fill may be corrected by revising the mining and reclamation plan.

The operator should submit a Technical Revision, with the required \$216 revision fee, to update and clarify the need for imported fill material during the final phase of mining rather than carrying the liability through the entire mining process to achieve final reclamation by **Monday, November 2, 2015**.

If no Technical Revision is received by November 2, 2015 than it is the Divisions understanding that the operator has no objections to the bond calculated on August 18, 2015 for the amount of \$573,838 according the current permit conditions. At that time a Notice for Surety Increase will be issued for the above amount as required by the Act and Rules.

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  
Fax: (970) 241-1516

Ec:  
Russ Means, Senior EPS / Field Office Supervisor, Grand Junction DRMS

Enc: Financial Warranty Cost Estimate

## COST SUMMARY WORK

Task description: \_\_\_\_\_

Site: River Valley Resource Permit Action: 2015-Post Inspection Permit/Job#: M2001090

### PROJECT IDENTIFICATION

Task #: 001 State: Colorado Abbreviation: None  
Date: 8/18/2015 County: Routt Filename: M090-001  
User: ACY

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01b	Remove scale and scalehouse	DEMOLISH	1	20.00	\$9,801.60
02b	Dewater Phase 1A Pit	PUMPING	1	232.22	\$32,495.00
03b	Import backfill material	TRUCK1	1	175.75	\$201,679.00
04b	Placement of backfill	LOADER	4	246.15	\$142,300.00
05b	Grade backfill material	DOZER	1	18.74	\$3,915.00
06b	Placement of topsoil	DOZER	1	34.96	\$7,303.00
07b	Reveg. shoreline	REVEGE	1	16.00	\$12,907.00
08b	Reveg. Hay Meadows	REVEGE	1	36.00	\$40,724.00
09b	Mobilize reclamation crew and equipment	MOBILIZE	1	3.14	\$5,661.00
10b	Secondary mobilize reclamation crew and equipment	MOBILIZE	1	0.57	\$92.00
<b><u>SUBTOTALS:</u></b>				<b>783.53</b>	<b>\$456,878</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance:	2.02%	Total =	\$9,228.94
Performance bond:	1.05%	Total =	\$4,797.22
Job superintendent:	391.76 hrs	Total =	\$29,444.68
Profit:	10.00%	Total =	\$45,687.80
		TOTAL O & P =	\$89,158.64
		CONTRACT AMOUNT (direct + O & P) =	\$546,036.64

#### 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%		\$27,301.83

CONTINGENCY: 0.00 Total = \$0.00

TOTAL INDIRECT COST = \$116,960.47

**TOTAL BOND AMOUNT (direct + indirect) = \$573,838.47**

## DEMOLITION WORK

Task description: Remove scale and scalehouse

Site: River Valley Resource

Permit Action: 2015-Post Inspection

Permit/Job#: M2001090

### PROJECT IDENTIFICATION

Task #: 01B

State: Colorado

Abbreviation: None

Date: 8/18/2015

County: Routt

Filename: M090-01b

User: ACY

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 91.30 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Scale house	60L x 12W x 10H (ft)	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul	7,200.00	CF	\$1.08	\$7,768.80
Scale	60'L x 15'W (ft)	Demo/Load/Haul to Milner landfill - 20 mi.	1.00	EA	\$1,786.00	\$1,786.00
Scale house foundation	60L x 12W	Floor, concrete, demolition only, average reinforcing - 6 in. thick	720.00	SF	\$1.64	\$1,180.80

Job Hours: 20.00

Subtotal  
(unadjusted): \$10,735.60

Total Cost  
(adjusted for location): \$9,801.60

## PUMPING WORK

Task description: Dewater Phase 1A Pit

Site: River Valley Resource

Permit Action: 2015-Post Inspection

Permit/Job#: M2001090

### PROJECT IDENTIFICATION

Task #: 02B

State: Colorado

Abbreviation: None

Date: 8/18/2015

County: Routt

Filename: M090-02b

User: ACY

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

	Description	Quantity
Make and Model:	Centrifugal pump - 200M, 10 in.	4
Attachment 1:	Suction pipe - 10 in. diam., 25 ft.	2
Attachment 2:	Discharge pipe - 10 in. D., 25 ft.	2
Labor Unit 1:	Pump operator	1

Horsepower: 70

Shift Basis: 1 per day

Weight: 1.95

(US Tons)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$34.86	NA
Operating Cost/Hour:	\$82.58	100
Operator Cost/Hour:	\$22.49	NA
Total Unit Cost/Hour:	\$139.93	

Total Fleet Cost/Hour: \$139.93

### PUMPING QUANTITIES

Initial Pond Volume:	<u>306.93</u>		Conversion factor:	<u>325850.5800</u>
Final Pond Volume:	<u>100,013,318.52</u>	gallons		
Total Pond Inflow Surface Area:	<u>75,000</u>	Sq. ft.	Unit inflow rate in gph/sq. ft.:	<u>0.1758</u>
Total Pond Inflow Volume per Hour:	<u>13,185.00</u>	gallons		

Source of estimated volume: Mine map

### PUMPING TIME

Maximum Pump Capacity:	<u>200,000</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>93,000</u>	gph/pump
Site Altitude:	<u>7,850</u>	feet
Adjusted Pumping Capacity:	<u>372,000</u>	gph
Initial Unadjusted Pumping Time:	<u>268.85</u>	hours
Inflow during Initial Pumping:	<u>3,544,827</u>	gallons
Net Unadjusted Pumping Time:	<u>278.38</u>	Hours
Altitude Adjustment Factor:	<u>0.9100</u>	(3% rule)
Pump Efficiency Factor:	<u>0.9167</u>	(55 min./hr.)
Total Adjusted Pumping Time:	<u>232.23</u>	hours

### JOB TIME AND COST

Total job time: 232.23 Hours

Unit cost: \$0.000314 /Gallon

Total job cost: \$32,495

**TRUCK/LOADER TEAM WORK**Task description: **Import backfill material**Site: **River Valley Resource**Permit Action: **2015-Post Inspection**Permit/Job#: **M2001090****PROJECT IDENTIFICATION**Task #: **03B**State: **Colorado**Abbreviation: **None**Date: **8/18/2015**County: **Routt**Filename: **M090-03b**User: **ACY**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Shift basis: **1 per day**

		Equipment Description
Truck Loader Team -Truck:		Generic 12-18 cy, 6x4
-Loader:		CAT 972H
Support Equipment -Load Area:		NA
-Dump Area:		NA
Road Maintenance -Motor Grader:		NA
-Water Truck:		NA

<b><u>Cost Breakdown:</u></b>	<b>Truck/Loader Team</b>		<b>Support Equipment</b>		<b>Maintenance Equipment</b>	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	NA
Ownership cost/hour:	\$15.21	\$38.44	NA	NA	NA	NA
Operating cost/hour:	\$66.59	\$68.95	NA	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Operator cost/hour:	\$26.72	\$37.13	NA	NA	NA	NA
Unit Subtotals:	\$108.51	\$144.52	NA	NA	NA	NA
Number of Units:	4	1	0	0	0	0
Group Subtotals:	Work:	\$578.56	Support:	\$0.00	Maint:	\$0.00

Total work team cost/hour: **\$578.56****MATERIAL QUANTITIES**Initial volume: **10,000**

CCY

Swell factor: **1.000**Loose volume: **10,000**

LCY

Source of estimated volume:

Division of Reclamation, Mining &amp; Safety

Source of estimated swell factor:

Cat Handbook

Material Purchase Cost:

\$10.00

Total Cost:

\$100,000.00

**HOURLY PRODUCTION****Truck Capacity:****Truck Payload (weight) Basis:**Material weight: **2,100**

Pounds/LCY

Description: **Earth - Loam**Rated Payload: **50,300**

Pounds

Payload Capacity: **23.95**

LCY

Truck Bed (volume) Basis:

Struck Volume:	12.00	LCY
Heaped Volume:	18.00	LCY
Average Volume:	15.00	LCY
Adjusted Volume:	18.00	LCY

Final Truck Volume Based on Number of Loader Passes: 16.38 LCYLoading Tool CapacityBucket Size Class: NA

Rated Capacity:	5.600	LCY (heaped)
Bucket Fill Factor:	0.975	Loose material - mixed moist aggregates (95-100%) 0.975
Adjusted Capacity:	<b>5.460</b>	LCY

Job Condition Corrections:Site Altitude (ft.): 6850 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)

Net Correction: **0.830** **0.830**Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 3 passesExcavators and Front Shovels:Machine Cycle Time vs. Job Condition Rating: NASelected Value within this Basic Rating: NA

Track Loaders – Material Description: \_\_\_\_\_

Cycle Time Elements (min.):Load: NA Maneuver: NA Dump: 0.100Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.525 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Dumped by truck 0.02	0.020	(Cat HB)
Truck Ownership:	Independently owned trucks 0.04	0.040	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		0.040	minutes
Adjusted Loader Cycle Time:		<b>0.565</b>	minutes
Net Load Time per Truck:		<b>1.230</b>	minutes

Truck Cycle Time:

Truck Exchange Time:	0.50	Minutes	Adjusted for site altitude:	0.500	Minutes
Truck Load Time:	1.230	Minutes	Adjusted for site altitude:	1.230	Minutes
Truck Maneuver and Dump Time:	0.90	Minutes	Adjusted for site altitude:	0.900	Minutes

Truck Travel (Haul & Return) Time:  
penetration 1.2Road Condition: Very hard, smooth, asphalt or concrete, no tire

## Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	79200.00	0.00	1.20	1.20	2895	27.491

Haul Time: 27.491 minutes

## Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	79200.00	0.00	1.20	1.20	2913	27.223

Return Time: 27.223 minutesTotal Truck Cycle Time: 57.344 minutes

Loading Tool unit  
 Production 568.09 LCY/Hour  
 Truck Unit Production  
17.14 LCY/Hour  
 Optimal No. of Trucks: 33 Truck(s)

Adjusted for job efficiency: 471.52 LCY/Hour  
 Adjusted for job efficiency: 14.23 LCY/Hour  
 Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 56.90 LCY/Hour  
 Adjusted single truck/loader team production: 56.90 LCY/Hour  
 Adjusted multiple truck/loader team production: 56.90 LCY/Hour

**JOB TIME AND COST**Fleet size: 1 Team(s) Total job time: 175.75 HoursUnit cost: \$10.168 /LCY Total job cost: \$201,679



**WHEEL LOADER – LOAD AND CARRY WORK**Task description: **Placement of backfill**Site: **River Valley Resource** Permit Action: **2015-Post Inspection** Permit/Job#: **M2001090****PROJECT IDENTIFICATION**

Task #: **04B** State: **Colorado** Abbreviation: **None**  
 Date: **8/18/2015** County: **Routt** Filename: **M090-04b**  
 User: **ACY**

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

Basic Machine: **CAT 972H** Horsepower: **287**  
 Attachment 1: **ROPS Cab** Shift Basis: **1 per day**  
 Data Source: **(CRG)**

**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$38.44	NA
Operating Cost/Hour:	\$68.95	100
Operator Cost/Hour:	\$37.13	NA
Total Unit Cost/Hour:	\$144.52	
Total Fleet Cost/Hour:	\$578.08	

**MATERIAL QUANTITIES**

Initial volume: **190,953** CCY Swell factor: **1.000**  
 Loose volume: **190,953** LCY

Source of estimated volume: **Ex. L**  
 Source of estimated swell factor: **Cat Handbook**

**HOURLY PRODUCTION**Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): **0.525** minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Dumped by truck 0.02	0.020	(Cat HB)
Truck Ownership:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		0.000	minutes
Adjusted Basic Cycle Time:		0.525	minutes

**Rolling Resistance – Road Conditions**

Haul: **Rutted dirt, little maintenance, no water, 2" tire penetration 5.0**  
 Return: **Rutted dirt, little maintenance, no water, 2" tire penetration 5.0**

**Haul and Return Time**

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	500	0.00	5.00	5.00	0.4611	(Cat HB)
Return Route:	500	0.00	5.00	5.00	0.4160	(Cat HB)

Total Travel Time: 0.8771 minutes  
 Total Cycle Time: 1.4021 minutes

Load Bucket Capacity

Rated Capacity: 5.60 LCY (heaped)  
 Bucket Fill Factor: 0.975 Loose material - mixed moist aggregates (95-100%) 0.975  
 Adjusted Capacity: 5.46 LCY

Job Condition Correction Factors

Site Altitude: 7850 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.83</u>	(1 shift/day)
Net Correction:	<u>0.83</u>	multiplier

Unadjusted Hourly Unit Production:	<u>233.65</u>	LCY/Hour
Adjusted Hourly Unit Production:	<u>193.93</u>	LCY/Hour
Adjusted Hourly Fleet Production:	<u>775.73</u>	LCY/Hour

JOB TIME AND COST

Fleet size:	<u>4</u>	Loader(s)	Total job time:	<u>246.16</u>	Hours
Unit cost:	<u>\$0.745</u>	/LCY	Total job cost:	<u>\$142,300</u>	

**BULLDOZER WORK**Task description: **Grade backfill material**Site: **River Valley Resource**Permit Action: **2015-Post Inspection**Permit/Job#: **M2001090****PROJECT IDENTIFICATION**Task #: **05B**  
Date: **8/18/2015**  
User: **ACY**State: **Colorado**  
County: **Routt**Abbreviation: **None**  
Filename: **M090-05b**Agency 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:**

		<b><u>Utilization %</u></b>
Ownership Cost/Hour:	\$62.67	NA
Operating Cost/Hour:	\$108.22	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: **\$208.90**  
Total Fleet Cost/Hour: **\$208.90****MATERIAL QUANTITIES**Initial Volume: **19,953**  
Swell factor: **1.000**  
Loose volume: **19,953 LCY**Source of estimated volume: **10% of total backfill material placed by loader**  
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: **7,850 feet**Material weight: **2,100 lbs/LCY**Weight description: **Earth - Loam****Job Condition Correction Factor**

		<b><u>Source</u></b>
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:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6544

Adjusted unit production: 1,064.71 LCY/hr

Adjusted fleet production: **1064.71** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.196/LCY

Total job time: **18.74** Hours

Total job cost: **\$3,915**

**BULLDOZER WORK**Task description: **Placement of topsoil**Site: **River Valley Resource**Permit Action: **2015-Post Inspection**Permit/Job#: **M2001090****PROJECT IDENTIFICATION**Task #: **06B**State: **Colorado**Abbreviation: **None**Date: **8/18/2015**County: **Routt**Filename: **M090-06b**User: **ACY**Agency 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:	\$62.67	NA
Operating Cost/Hour:	\$108.22	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: **\$208.90**Total Fleet Cost/Hour: **\$208.90****MATERIAL QUANTITIES**Initial Volume: **27,985**Swell factor: **1.000**Loose volume: **27,985 LCY**Source of estimated volume: **Ex. L**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**Unadjusted hourly production: **931.6 LCY/hr**Materials consistency description: **Loose stockpile 1.2**Average push gradient: **0 %**Average site altitude: **7,850 feet**Material weight: **1,600 lbs/LCY**Weight 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: \$0.261/LCY

Total job time: **34.96** Hours

Total job cost: **\$7,303**

**REVEGETATION WORK**Task description: Reveg. shorelineSite: River Valley ResourcePermit Action: 2015-Post InspectionPermit/Job#: M2001090**PROJECT IDENTIFICATION**Task #: 07BState: ColoradoAbbreviation: NoneDate: 8/18/2015County: RouttFilename: M090-07bUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$0.00</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

Description	Cost /Acre
Chisel plowing {DMG}	\$88.58
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
<b>Total Tilling Cost/Acre</b>	<b>\$233.78</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	1.00	39.03	\$22.81
Meadow Sedge	1.00	41.69	\$150.69
Slender Wheatgrass - Native	3.00	10.95	\$6.75
Red Top	1.00	114.55	\$6.13
Reedgrass, Canadian (or Blue Joint)	0.50	51.42	\$101.55
Reedgrass, Northern - Native	0.50	51.42	\$68.96
Saltgrass, Inland	1.00	13.86	\$46.99
Timothy, Alpine - Native	1.00	29.84	\$27.07
Basin Wildrye - Trailhead	1.50	6.10	\$9.83

<b>Totals Seed Mix</b>	10.50	358.87	<b>\$440.78</b>
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**Application**

<b>Description</b>	<b>Cost /Acre</b>
Drill seeding (DRMS Cost Data)	\$88.20
<b>Total Seed Application Cost/Acre</b>	<b>\$88.20</b>

**MULCHING and MISCELLANEOUS****Materials**

<b>Description</b>	<b>Units / Acre</b>	<b>Unit</b>	<b>Cost / Unit</b>	<b>Cost /Acre</b>
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**

<b>Description</b>	<b>Cost /Acre</b>
Crimping, with tractor {DMG survey data}	\$65.89
<b>Total Mulch Application Cost/Acre</b>	<b>\$65.89</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>
					\$
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$0.00</b>

**JOB TIME AND COST**

No. of Acres: 7.6  
 Estimated Failure Rate: 25%  
 \*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Cost /Acre: \$1,358.65

Cost /Acre\*: \$1,358.65

Initial Job Cost: **\$10,325.74**  
 Reseeding Job Cost: **\$2,581.44**  
 Total Job Cost: **\$12,907**  
 Job Hours: **16.00**



REVEGETATION WORKTask description: Reveg. Hay MeadowsSite: River Valley ResourcePermit Action: 2015-Post InspectionPermit/Job#: M2001090PROJECT IDENTIFICATIONTask #: 08BState: ColoradoAbbreviation: NoneDate: 8/18/2015County: RouttFilename: M090-08bUser: ACYAgency or organization name: DRMSFERTILIZINGMaterials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$0.00</b>

Application

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

TILLING

Description	Cost /Acre
Chisel plowing {DMG}	\$88.58
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
<b>Total Tilling Cost/Acre</b>	<b>\$233.78</b>

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Orchardgrass - Paiute	3.50	43.39	\$7.56
Smooth Brome - Lincoln	2.50	8.32	\$3.33
Timothy, Alpine - Native	4.00	119.38	\$108.28
<b>Totals Seed Mix</b>	<b>10.00</b>	<b>171.09</b>	<b>\$119.17</b>

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
Cottonwood, Narrowleaf	8.7	Container, 1 gallon (MEANS)	\$13.50	\$2.40	\$117.45
Willow, Sandbar	8.7	Container, 1 gallon (MEANS)	\$15.90	\$2.40	\$138.33
Totals Nursery Stock Cost / Acre					\$255.78

### JOB TIME AND COST

No. of Acres:	25.2	Cost / Acre:	\$1,292.82
Estimated Failure Rate:	25%	Cost / Acre*:	\$1,292.82
*Selected Replanting Work Items:	TILLING,SEEDING,NURSERY,MULC HING		
Initial Job Cost:	\$32,579.06		
Reseeding Job Cost:	\$8,144.77		
Total Job Cost:	\$40,724		
Job Hours:	36.00		

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: Mobilize reclamation crew and equipmentSite: River Valley ResourcePermit Action: 2015-Post InspectionPermit/Job#: M2001090**PROJECT IDENTIFICATION**Task #: 09BState: ColoradoAbbreviation: NoneDate: 8/18/2015County: RouttFilename: M090-09bUser: 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
Cat D8T - 8U	48.33	\$58.56	\$117.55	1	\$176.11	\$117.55	\$250.00
CAT 972H	28.00	\$36.70	\$117.55	4	\$617.01	\$470.20	\$500.00
Centrifugal pump - 200M, 10 in.	1.95	\$7.66	\$88.67	4	\$385.30	\$354.68	\$250.00

Subtotals: **\$1,178.42** **\$942.43** **\$1,000.00****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
Drill/Broadcast Seeder with Tractor	\$136.29	1	\$136.29	\$136.29

Subtotals: **\$161.59** **\$161.59**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>STEAMBOAT SPRINGS</u>	
Total one-way travel distance:	<u>10.00</u>	miles
Average Travel Speed:	<u>35.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$5,568.75</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$92.34</u>
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.29</u>	<u>0.29</u>
Return Time (Hours):	<u>0.29</u>	<u>0.29</u>
Loading Time (Hours):	<u>0.50</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.50</u>	<u>NA</u>
Subtotals:	<u>1.57</u>	<u>0.57</u>

**JOB TIME AND COST**

Total job time:	<u>3.14</u>	Hours
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Total job cost:	<u>\$5,661</u>
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**EQUIPMENT MOBILIZATION/DEMobilIZATION**Task description: Secondary mobilize reclamation crew and equipmentSite: River Valley ResourcePermit Action: 2015-Post InspectionPermit/Job#: M2001090**PROJECT IDENTIFICATION**Task #: 10B  
Date: 8/18/2015  
User: ACYState: Colorado  
County: RouttAbbreviation: None  
Filename: M090-10bAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per day  
Cost 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
Subtotals:					<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

**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
Drill/Broadcast Seeder with Tractor	\$136.29	1	\$136.29	\$136.29
Subtotals:			<b>\$161.59</b>	<b>\$161.59</b>

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	STEAMBOAT SPRINGS	
Total one-way travel distance:	10.00	miles
Average Travel Speed:	35.00	mph
Total Non-Roadable Mob/Demob Cost *		
** two round trips with haul rig:	\$0.00	
Total Roadable Mob/Demob Cost **		
** one round trip, no haul rig:	\$92.34	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.29	0.29
Return Time (Hours):	0.29	0.29
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.57	0.57

**JOB TIME AND COST**

Total job time:	0.57	Hours
Total job cost:	\$92	



## COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

### REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- 2001-090 Site Name: \_\_\_\_\_

County \_\_\_\_\_ TR# \_\_\_\_\_ (DRMS Use only)

Permittee: \_\_\_\_\_

Operator (If Other than Permittee): \_\_\_\_\_

Permittee Representative: \_\_\_\_\_

Please provide a brief description of the proposed revision: \_\_\_\_\_

As defined by the Minerals Rules, a Technical Revision (TR) is: "a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan." The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered "filed for review" until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

<u>Permit Type</u>	<u>Required TR Fee</u>	<u>Submitted</u> (mark only one)
110c, 111, 112 construction materials, and 112 quarries	\$216	<input checked="" type="checkbox"/>
112 hard rock (not DMO)	\$175	<input type="checkbox"/>
110d, 112d(1, 2 or 3)	\$1006	<input type="checkbox"/>