

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



September 4, 2012

Christopher Varra
Varra Companies, Inc.
8120 Gage Street
Fredrick, CO
80516

John W. Hickenlooper
Governor

Mike King
Executive Director

Loretta Piñeda
Director

RE: Sea Horse Ranch West Gravel Pit, Permit No. M-2001-113, Reclamation Costs Update and Notice of Surety Increase SI-1

Dear Mr. Varra:

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 **Monday, November 05, 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 \$100,980.00. This is an increase of \$71,176.00 over the \$29,804.00 currently held by the Division. This estimate is based on conditions observed during the August 15, 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,



Justin Czapla

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

Cc: Jason Burkey, United Companies
Enc: Financial Warranty Cost Estimate

COST SUMMARY WORK

Task description: Update FW estimate following August 15, 2012 Inspection

Sea Horse Ranch West Permit Action:
Site: Gravel Pit 2012AugInsp Permit/Job#: M2001113

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 9/4/2012 County: Gunnison Filename: M113-000
User: DMC

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Remove misc. debris	DEMOLISH	1	5.00	\$400.81
02a	Dewater pit	PUMPING	1	239.14	\$31,314.00
03a	Haul backfill material from stockpiles to slopes	TRUCK1	1	28.09	\$18,042.74
03b	Grade slopes, final site grading	DOZER	1	28.27	\$5,650.22
04a	Haul topsoil from stockpiles	TRUCK1	1	12.59	\$8,086.15
04b	Spread topsoil	DOZER	1	7.34	\$1,467.40
05a	Revegetate disturbed areas above water level	REVEGE	1	8.00	\$4,786.13
06a	Mobilize reclamation crew/equipment	MOBILIZE	1	2.57	\$6,206.22
<u>SUBTOTALS:</u>				331	\$75,953.67

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$1,534.26
Performance bond:	1.05	Total =	\$797.51
Job superintendent:	165.50	Total =	\$9,814.15
Profit:	10.00	Total =	\$7,595.37
		TOTAL O & P =	\$19,741.29
		CONTRACT AMOUNT (direct + O & P) =	\$95,694.96

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		\$4,784.75

CONTINGENCY: 0.00 Total = \$0.00

TOTAL INDIRECT COST = \$25,026.04

TOTAL BOND AMOUNT (direct + indirect) = \$100,980.00

DEMOLITION WORK

Task description: Remove misc. debris

Site: Sea Horse Ranch West
Gravel Pit

Permit Action: 2012AugInsp

Permit/Job#: M2001113

PROJECT IDENTIFICATION

Task #: 01A
Date: 9/4/2012
User: DMC

State: Colorado
County: Gunnison

Abbreviation: None
Filename: M113-01a

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
Pipes, barrels, wood, etc.	50 cy	Loading and 5 mile haul, salvage allowed - Steel frame structures	50.00	CY	\$8.78	\$439.00

Job Hours: 5.00

Subtotal
(unadjusted): \$439.00

Total Cost
(adjusted for location): \$400.81

PUMPING WORK

Task description: Dewater pit

Site: Sea Horse Ranch West Permit Action: 2012AugInsp Permit/Job#: M2001113
Gravel Pit

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 9/4/2012 County: Gunnison Filename: M113-02a
User: DMC

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.	4
Attachment 2:	Discharge pipe - 10 in. D., 25 ft.	4
Labor Unit 1:	Pump operator	1

Horsepower: 70
Shift Basis: 1 per day
Weight: 1.95
(US Tons)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$42.16	NA
Operating Cost/Hour:	\$69.36	100
Operator Cost/Hour:	\$19.42	NA
Total Unit Cost/Hour:	\$130.94	

Total Fleet Cost/Hour: \$130.94

PUMPING QUANTITIES

Initial Pond Volume: 700.00 gallons Conversion factor: 325850.5800
Final Pond Volume: 228,095,406.00 gallons
Total Pond Inflow Surface Area: 48,000 Sq. ft. Unit inflow rate in gph/sq. ft.: 0.1758
Total Pond Inflow Volume per Hour: 8,438.40 gallons

Source of estimated volume: Site maps, roughly 35 ac. lake approx. 20' depth

PUMPING TIME

Maximum Pump Capacity:	<u>200,000</u>	<u>gph/pump</u>
Estimated Suction Head:	<u>10</u>	<u>feet</u>
Estimated Discharge Head:	<u>10</u>	<u>feet</u>
Total Head:	<u>20</u>	<u>feet</u>
CPB Pump Capacity:	<u>201,000</u>	<u>gph/pump</u>
Site Altitude:	<u>7,750</u>	<u>feet</u>
Adjusted Pumping Capacity:	<u>804,000</u>	<u>gph</u>
Initial Unadjusted Pumping Time:	<u>283.70</u>	<u>hours</u>
Inflow during Initial Pumping:	<u>2,393,980</u>	<u>gallons</u>
Net Unadjusted Pumping Time:	<u>286.68</u>	<u>Hours</u>
Altitude Adjustment Factor:	<u>0.9100</u>	<u>(3% rule)</u>
Pump Efficiency Factor:	<u>0.9167</u>	<u>(55 min./hr.)</u>
Total Adjusted Pumping Time:	<u>239.15</u>	<u>hours</u>

JOB TIME AND COST

Total job time: 239.15 Hours
Unit cost: \$0.000136 /Gallon Total job cost: \$31,314.00

TRUCK/LOADER TEAM WORKTask description: Haul backfill material from stockpiles to slopesSite: Sea Horse Ranch West
Gravel PitPermit Action: 2012AugInspPermit/Job#: M2001113**PROJECT IDENTIFICATION**Task #: 03A
Date: 9/4/2012
User: DMCState: Colorado
County: GunnisonAbbreviation: None
Filename: M113-03aAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

	Equipment Description
Truck Loader Team -Truck:	Cat 769D
-Loader:	CAT 980H high lift
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	Water Tanker, 10,000 Gal.

<u>Cost Breakdown:</u>	Truck/Loader Team		Support Equipment		Maintenance Equipment	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	100
Ownership cost/hour:	\$43.04	\$44.85	NA	NA	NA	\$54.68
Operating cost/hour:	\$91.48	\$73.25	NA	NA	NA	\$117.24
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	\$0.00
Operator cost/hour:	\$22.29	\$38.67	NA	NA	NA	\$0.00
Unit Subtotals:	\$156.81	\$156.78	NA	NA	NA	\$171.91
Number of Units:	2	1	0	0	0	1
Group Subtotals:	Work: \$470.40		Support:	\$0.00	Maint:	\$171.91

Total work team cost/hour: \$642.31**MATERIAL QUANTITIES**Initial volume: 16,000 CCY Swell factor: 1.125
Loose volume: 18,000 LCYSource of estimated volume: Approx. 6k lft pond (s) perimeter, 1.5H:1V to 3H:1V, 20' dp
Source of estimated swell factor: Cat Handbook
Material Purchase Cost: \$0.00
Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:****Truck Payload (weight) Basis:**Material weight: 2,650 Pounds/LCY
Description: Decomposed rock - 25% Rock, 75% Earth
Rated Payload: 82,000 Pounds
Payload Capacity: 30.94 LCY

Truck Bed (volume) Basis:

Struck Volume:	21.60	LCY
Heaped Volume:	31.70	LCY
Average Volume:	26.65	LCY
Adjusted Volume:	30.94	LCY

Final Truck Volume Based on Number of Loader Passes: 29.25 LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	7.500	LCY (heaped)
Bucket Fill Factor:	0.975	Loose material - mixed moist aggregates (95-100%) 0.975
Adjusted Capacity:	7.313	LCY

Job Condition Corrections:

Site Altitude (ft.): 7750 feet

	Truck	Loader	Source
Altitude Adj:	0.930	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.772	0.830	

Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 4 passes

Excavators and Front Shovels:

Machine Cycle Time vs. Job Condition Rating: NA
 Selected Value within this Basic Rating: NA

Track Loaders – Material Description: _____

Cycle Time Elements (min.):

Load: NA Maneuver: NA Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.550 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -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:	-0.060	minutes
	Adjusted Loader Cycle Time:	0.490	minutes
	Net Load Time per Truck:	1.570	minutes

Truck Cycle Time:

Truck Exchange Time:	0.60	Minutes	Adjusted for site altitude:	0.645	Minutes
Truck Load Time:	1.570	Minutes	Adjusted for site altitude:	1.570	Minutes
Truck Maneuver and Dump Time:	1.00	Minutes	Adjusted for site altitude:	1.075	Minutes

Truck Travel (Haul & Return) Time:
penetration 5.0

Road Condition: Rutted dirt, little maintenance, no water, 2" tire

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	5.00	5.00	1629	0.645

Haul Time: 0.645 minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	5.00	5.00	3600	0.611

Return Time: 0.611 minutesTotal Truck Cycle Time: 4.546 minutes

Loading Tool unit
 Production 792.27 LCY/Hour Adjusted for job efficiency: 657.58 LCY/Hour
 Truck Unit Production 386.02 LCY/Hour Adjusted for job efficiency: 320.39 LCY/Hour
 Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 640.79 LCY/Hour
 Adjusted single truck/loader team production: 640.79 LCY/Hour
 Adjusted multiple truck/loader team production: 640.79 LCY/Hour

JOB TIME AND COSTFleet size: 1 Team(s) Total job time: 28.09 HoursUnit cost: \$1.002 /LCY Total job cost: \$18,042.74

BULLDOZER WORKTask description: Grade slopes, final site gradingSite: Sea Horse Ranch West
Gravel PitPermit Action: 2012AugInspPermit/Job#: M2001113**PROJECT IDENTIFICATION**

Task #:	<u>03B</u>	State:	<u>Colorado</u>	Abbreviation:	<u>None</u>
Date:	<u>9/4/2012</u>	County:	<u>Gunnison</u>	Filename:	<u>M113-03b</u>
User:	<u>DMC</u>				

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

Basic Machine:	<u>Cat D8T - 8U</u>
Horsepower:	<u>310</u>
Blade Type:	<u>Universal</u>
Attachment:	<u>NA</u>
Shift Basis:	<u>1 per day</u>
Data Source:	<u>(CRG)</u>

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: \$199.89Total Fleet Cost/Hour: \$199.89**MATERIAL QUANTITIES**

Initial Volume:	<u>16,667</u>
Swell factor:	<u>1.125</u>
Loose volume:	<u>18,750 LCY</u>

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**

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

Materials consistency description: Loose stockpile 1.2

Average push gradient:	<u>10 %</u>
Average site altitude:	<u>7,750 feet</u>

Material weight: 2,650 lbs/LCYWeight description: Decomposed rock - 25% Rock, 75% Earth**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:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.786	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4077

Adjusted unit production: 663.33 LCY/hr
Adjusted fleet production: 663.33 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.301/LCY

Total job time: 28.27 Hours
Total job cost: \$5,650.22

TRUCK/LOADER TEAM WORKTask description: Haul topsoil from stockpiles

Site: Sea Horse Ranch West Permit Action: 2012AugInsp Permit/Job#: M2001113
Gravel Pit

PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None
 Date: 9/4/2012 County: Gunnison Filename: M113-04a
 User: DMC

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

	Equipment Description
Truck Loader Team -Truck:	Cat 769D
-Loader:	CAT 980H high lift
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	Water Tanker, 10,000 Gal.

<u>Cost Breakdown:</u>	Truck/Loader Team		Support Equipment		Maintenance Equipment	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	100
Ownership cost/hour:	\$43.04	\$44.85	NA	NA	NA	\$54.68
Operating cost/hour:	\$91.48	\$73.25	NA	NA	NA	\$117.24
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	\$0.00
Operator cost/hour:	\$22.29	\$38.67	NA	NA	NA	\$0.00
Unit Subtotals:	\$156.81	\$156.78	NA	NA	NA	\$171.91
Number of Units:	2	1	0	0	0	1
Group Subtotals:	Work: \$470.40		Support:	\$0.00	Maint:	\$171.91

Total work team cost/hour: \$642.31**MATERIAL QUANTITIES**

Initial volume: 8,067 CCY Swell factor: 1.000
 Loose volume: 8,067 LCY

Source of estimated volume: 40 ac. permit area - roughly 35 lake/pond surface, 12" depth
 Source of estimated swell factor: Cat Handbook
 Material Purchase Cost: \$0.00
 Total Cost: \$0.00

HOURLY PRODUCTION**Truck Capacity:****Truck Payload (weight) Basis:**

Material weight: 1,600 Pounds/LCY
 Description: Top Soil
 Rated Payload: 82,000 Pounds
 Payload Capacity: 51.25 LCY

Truck Bed (volume) Basis:

Struck Volume:	21.60	LCY
Heaped Volume:	31.70	LCY
Average Volume:	26.65	LCY
Adjusted Volume:	31.70	LCY

Final Truck Volume Based on Number of Loader Passes: 29.25 LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	7.500	LCY (heaped)
Bucket Fill Factor:	0.975	Loose material - uniform aggregates to 1/8" (95-100%) 0.975
Adjusted Capacity:	7.313	LCY

Job Condition Corrections:

Site Altitude (ft.): 7750 feet

	Truck	Loader	Source
Altitude Adj:	0.930	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.772	0.830	

Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 4 passes

Excavators and Front Shovels:

Machine Cycle Time vs. Job Condition Rating: NA
 Selected Value within this Basic Rating: NA

Track Loaders – Material Description: _____

Cycle Time Elements (min.):

Load: NA Maneuver: NA Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.550 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material up to 1/8" diameter 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -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:		-0.060	minutes
Adjusted Loader Cycle Time:		0.490	minutes
Net Load Time per Truck:		1.570	minutes

Truck Cycle Time:

Truck Exchange Time:	0.60	Minutes	Adjusted for site altitude:	0.645	Minutes
Truck Load Time:	1.570	Minutes	Adjusted for site altitude:	1.570	Minutes
Truck Maneuver and Dump Time:	1.00	Minutes	Adjusted for site altitude:	1.075	Minutes

Truck Travel (Haul & Return) Time:
penetration 5.0

Road Condition: Rutted dirt, little maintenance, no water, 2" tire

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	5.00	5.00	1629	0.645

Haul Time: 0.645 minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	5.00	5.00	3600	0.611

Return Time: 0.611 minutesTotal Truck Cycle Time: 4.546 minutes

Loading Tool unit
 Production 792.27 LCY/Hour Adjusted for job efficiency: 657.58 LCY/Hour
 Truck Unit Production
386.02 LCY/Hour Adjusted for job efficiency: 320.39 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 640.79 LCY/Hour
 Adjusted single truck/loader team production: 640.79 LCY/Hour
 Adjusted multiple truck/loader team production: 640.79 LCY/Hour

JOB TIME AND COSTFleet size: 1 Team(s) Total job time: 12.59 HoursUnit cost: \$1.002 /LCY Total job cost: \$8,086.15

BULLDOZER WORKTask description: Spread topsoil

Site: Sea Horse Ranch West Permit Action: 2012AugInsp Permit/Job#: M2001113
Gravel Pit

PROJECT IDENTIFICATION

Task #: 04B State: Colorado Abbreviation: None
 Date: 9/4/2012 County: Gunnison Filename: M113-04b
 User: DMC

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:	<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: 8,067
 Swell factor: 1.000
 Loose volume: 8,067 LCY

Source 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/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 10 %
 Average site altitude: 7,750 feet

Material weight: 1,600 lbs/LCYWeight description: Top Soil

<u>Job Condition Correction Factor</u>		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.200</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:	0.786	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6754

Adjusted unit production: 1,098.88 LCY/hr

Adjusted fleet production: 1098.88 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.182/LCY

Total job time: 7.34 Hours
Total job cost: \$1,467.40

REVEGETATION WORKTask description: Revegetate disturbed areas above water level

Site: Sea Horse Ranch West Permit Action: 2012AugInsp Permit/Job#: M2001113
Gravel Pit

PROJECT IDENTIFICATION

Task #: 05A State: Colorado Abbreviation: None
 Date: 9/4/2012 County: Gunnison Filename: M113-05a
 User: DMC

Agency 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
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
Total Tilling Cost/Acre	\$237.55

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Slender Wheatgrass - Native	5.50	20.08	\$12.10
Red Top	0.10	11.46	\$0.60
Reed Canarygrass - VNS	1.00	11.62	\$4.72
Reedgrass, Canadian (or Blue Joint)	0.10	10.28	\$19.88
Slough Grass	0.30	7.58	\$6.36
Timothy - Climax	0.50	14.35	\$0.57
Totals Seed Mix	7.50	75.36	\$44.23

Application

Description	Cost /Acre
-------------	------------

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: 5 Cost /Acre: \$765.78
 Estimated Failure Rate: 25% Cost /Acre*: \$765.78
 *Selected Replanting Work Items: TILLING, SEEDING, MULCHING
 Initial Job Cost: \$3,828.90
 Reseeding Job Cost: \$957.23
 Total Job Cost: \$4,786.13
 Job Hours: 8.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mobilize reclamation crew/equipment**

Site: **Sea Horse Ranch West** Permit Action: **2012AugInsp** Permit/Job#: **M2001113**
Gravel Pit

PROJECT IDENTIFICATION

Task #: **06A** State: **Colorado** Abbreviation: **None**
 Date: **9/4/2012** County: **Gunnison** Filename: **M113-06a**
 User: **DMC**

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
Centrifugal pump - 200M, 10 in.	1.95	\$7.66	\$88.67	1	\$96.33	\$88.67	\$250.00
Cat 769D	37.54	\$43.04	\$117.55	2	\$321.18	\$235.10	\$1,000.00
CAT 980H high lift	33.12	\$44.85	\$117.55	1	\$162.40	\$117.55	\$250.00
Cat D8T - 8U	48.33	\$58.56	\$117.55	1	\$176.11	\$117.55	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Subtotals:					\$884.28	\$647.54	\$2,000.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Subtotals:			\$0.00	\$0.00

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>GUNNISON</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>\$6,206.22</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$0.00</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

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

JOB TIME AND COST

Total job time:	<u>2.57</u>	Hours
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Total job cost:	<u>\$6,206.22</u>
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