



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

April 10, 2023

Jason Burkey  
Oldcastle SW Group, Inc. dba United Companies of Mesa County  
2273 River Road  
Grand Junction, CO 81502

**Re: Otter Creek Pit - File No. M-2012-050**  
**Oldcastle SW Group, Inc. dba United Companies of Mesa County**  
**Surety Increase (SI-1)**  
**Surety Increase after inspection**

Dear Jason Burkey:

On April 10, 2023 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$212,111.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$86,829.00.

Please see the March 29, 2023 inspection report for details regarding why this surety increase is required.

The Division ordered amendment of the current Financial Warranty, or submittal of a new Financial Warranty reflecting the increase, within 60 days from the date of this letter (April 10, 2023).

Please make arrangements with Sara M. Stevenson-Benn at the Division's Denver office for submittal of the financial warranty. Any other questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Sara M. Stevenson-Benn by telephone at (303) 866-3567 (8148), or by email at Sara.stevenson-benn@state.co.us.

The Permittee for this site may be scheduled for a Formal Board Hearing for possible revocation of the permit after June 9, 2023, if the amount of any increased Financial Warranty has not been provided.

Bond Held:	\$125,282.00
Prior Liability:	\$125,282.00
Change in Liability:	\$86,829.00
Revised Liability:	\$212,111.00
Prior Permit Acreage:	95.00



Change in Permit Acreage:	0.00
Revised Permit Acreage:	95.00
Prior Affected Acreage:	0.00
Change in Affected Acreage:	0.00
Revised Affected Acreage:	0.00

If you have any questions, please contact me by telephone at (303) 866-3567 x 8183, or by email at Amy.yeldell@state.co.us.

Sincerely,



Amy C. Yeldell  
Environmental Protection Specialist

cc: Jason Burkey

M-GR-04

			*internal seed cost have gone up significantly
08a	Reveg		No Change
09a	Mob		No Change
09b	Mob		No Change

Per policy I wanted to send this out for review prior to issuance. Please look it over and provide feedback and make corrections if/where necessary. If no feedback is provided by Friday, April 28, 2023 then I'll issued you have no objections SI-1 as calculated and the increase will be issued the following Monday.

Please feel free to contact me with any further questions.

Sincerely,



**Amy Yeldell**  
Environmental Protection Specialist

Enclosures- 2022 Mesa County Assessors website map with notes

## DEMOLITION WORK

Task description: Equipment Removal

Site: Otter Creek Pit

Permit Action: 2023

Permit/Job#: M2012050

### PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 4/4/2023

County: Mesa

Filename: M050-01a

User: ACY

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 100.00 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Removal of Buried Truck Scale	15' x 60'	USER PROVIDED ITEM	1.00	1	\$3,500.00	\$3,500.00

Job Hours: 16.00

Subtotal  
(unadjusted): \$3,500.00

Total Cost  
(adjusted for  
location): \$3,500.00

**WHEEL LOADER – LOAD AND CARRY WORK**Task description: **Backfill Perimeter Highwall**Site: **Otter Creek Pit**Permit Action: **2023**Permit/Job#: **M2012050****PROJECT IDENTIFICATION**Task #: **02A**State: **Colorado**Abbreviation: **None**Date: **4/4/2023**County: **Mesa**Filename: **M050-02a**User: **ACY**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **CAT 980H high lift**Attachment 1: **ROPS Cab**Horsepower: **315**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$54.58	NA
Operating Cost/Hour:	\$53.14	100
Operator Cost/Hour:	\$35.97	NA
Total Unit Cost/Hour:	\$143.69	
Total Fleet Cost/Hour:	\$143.69	

**MATERIAL QUANTITIES**Initial volume: **5,352**

CCY

Swell factor: **1.115**Loose volume: **5,967**

LCY

Source of estimated volume: **1000 LF @ 17'H 2:1 to 3:1 backfill**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION****Loader Cycle Time:** Unadjusted Basic Cycle Time (load, dump, maneuver): **0.550** minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material 3/4" to 6" diameter 0.00	0.000	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high or less 0.01	0.010	(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:		-0.070	minutes
Adjusted Basic Cycle Time:		0.480	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:	1300	0.00	5.00	5.00	1.1492	(Cat HB)
Return Route:	1300	0.00	5.00	5.00	1.0392	(Cat HB)

Total Travel Time: 2.1884 minutes  
 Total Cycle Time: 2.6684 minutes

Load Bucket Capacity

Rated Capacity: 7.50 LCY (heaped)  
 Bucket Fill Factor: 0.925 Loose material - 1/8" to 3/8" (90 - 95%) 0.925  
 Adjusted Capacity: 6.94 LCY

Job Condition Correction Factors

Site Altitude: 4630 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: 155.99 LCY/Hour  
 Adjusted Hourly Unit Production: 129.47 LCY/Hour  
 Adjusted Hourly Fleet Production: 129.47 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Loader(s) Total job time: 46.09 Hours  
 Unit cost: \$1.110 /LCY Total job cost: \$6,623

**BULLDOZER WORK**Task description: Grade backfilled perimeter slopesSite: Otter Creek PitPermit Action: 2023Permit/Job#: M2012050**PROJECT IDENTIFICATION**Task #: 03AState: ColoradoAbbreviation: NoneDate: 4/4/2023County: MesaFilename: M050-03aUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9SUHorsepower: 405Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$146.30	NA
Operating Cost/Hour:	\$141.41	100
Ripper own. Cost/Hour:	\$17.01	NA
Ripper op. Cost/Hour:	\$8.85	100
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: \$353.61Total Fleet Cost/Hour: **\$353.61****MATERIAL QUANTITIES**Initial Volume: 5,967Swell factor: 1.000Loose volume: **5,967** LCYSource of estimated volume: Transported Volume from 02aSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 2,110.5 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 15 %Average site altitude: 4,630 feetMaterial weight: 2,500 lbs/LCYWeight description: Clay - Dry**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:	0.900	(SSD-FC)
Push gradient:	0.666	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.920	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4119

Adjusted unit production: 869.31 LCY/hr

Adjusted fleet production: **869.31** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.407/LCY

Total job time: **6.86** Hours

Total job cost: **\$2,427**



**BULLDOZER WORK**Task description: Grade interior slopesSite: Otter Creek PitPermit Action: 2023Permit/Job#: M2012050**PROJECT IDENTIFICATION**Task #: 03BState: ColoradoAbbreviation: NoneDate: 4/4/2023County: MesaFilename: M050-03bUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9SUHorsepower: 405Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$146.30	NA
Operating Cost/Hour:	\$141.41	100
Ripper own. Cost/Hour:	\$17.01	NA
Ripper op. Cost/Hour:	\$8.85	100
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: \$353.61Total Fleet Cost/Hour: **\$353.61****MATERIAL QUANTITIES**Initial Volume: 2,676Swell factor: 1.230Loose volume: **3,291** LCYSource of estimated volume: 1000 LF of 1:1V to 3H:1V @ 17'HSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 2,110.5 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: -15 %Average site altitude: 4,630 feetMaterial weight: 2,500 lbs/LCYWeight description: Clay - Dry**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.200	(SLOT)
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:	0.920	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7307

Adjusted unit production: 1,542.14 LCY/hr

Adjusted fleet production: **1542.14** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.229/LCY

Total job time: **2.13** Hours

Total job cost: **\$755**

**BULLDOZER WORK**Task description: Grade TopsoilSite: Otter Creek PitPermit Action: 2023Permit/Job#: M2012050**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 4/4/2023County: MesaFilename: M050-04aUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D9T - 9SUHorsepower: 405Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$146.30	NA
Operating Cost/Hour:	\$141.41	100
Ripper own. Cost/Hour:	\$17.01	NA
Ripper op. Cost/Hour:	\$8.85	100
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: \$353.61Total Fleet Cost/Hour: **\$353.61****MATERIAL QUANTITIES**Initial Volume: 41,946Swell factor: 1.115Loose volume: **46,770 LCY**Source of estimated volume: 26 ac affected @ 12" DSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 90 feetUnadjusted hourly production: 1,351.7 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: 0 %Average site altitude: 4,630 feetMaterial weight: 2,500 lbs/LCYWeight description: Clay - Dry**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:	0.920	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5040

Adjusted unit production: 681.26 LCY/hr

Adjusted fleet production: **681.26** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.519/LCY

Total job time: **68.65** Hours

Total job cost: **\$24,276**

**TRUCK/LOADER TEAM WORK**Task description: Move topsoil to 6 acre overburden storage areaSite: Otter Creek PitPermit Action: 2023Permit/Job#: M2012050**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 4/4/2023County: MesaFilename: M050-05aUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

	Equipment Description
Truck Loader Team -Truck:	Cat 770D
-Loader:	CAT 980H high lift
Support Equipment -Load Area:	NA
-Dump Area:	Cat D9T - 9SU
Road Maintenance -Motor Grader:	CAT 140M
-Water Truck:	Water Tanker, 5,000 Gal.

**Cost Breakdown:****Truck/Loader Team****Support Equipment****Maintenance Equipment**

	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
% Utilization-machine:	100	100	NA	100	100	100
Ownership cost/hour:	\$79.42	\$54.58	NA	\$146.30	\$75.87	\$37.19
Operating cost/hour:	\$70.82	\$53.14	NA	\$141.41	\$53.81	\$51.30
% Utilization-ripper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	NA	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$24.82	\$35.97	NA	\$40.04	\$46.87	\$0.00
Unit Subtotals:	\$175.06	\$143.69	NA	\$327.75	\$176.55	\$88.49
Number of Units:	2	1	0	1	1	1
Group Subtotals:	Work: \$493.81		Support: \$327.75		Maint: \$265.04	

Total work team cost/hour: \$1,086.60**MATERIAL QUANTITIES**Initial volume: 9,680

CCY

Swell factor: 1.115Loose volume: 10,793

LCY

Source of estimated volume: 6ac @12" DSource of estimated swell factor: Cat HandbookMaterial Purchase Cost: \$0.00Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:**Truck Payload (weight) Basis:Material weight: 2,500

Pounds/LCY

Description: Clay - DryRated Payload: 82,000

Pounds

Payload Capacity: 32.80

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: 27.75 LCY

**Loading Tool Capacity**

Bucket Size Class: NA

Rated Capacity:	7.500	LCY (heaped)
Bucket Fill Factor:	0.925	Loose material - 1/8" to 3/8" (90 - 95%) 0.925
Adjusted Capacity:	<b>6.938</b>	LCY

**Job Condition Corrections:**

Site Altitude (ft.): 4630 feet

	<b>Truck</b>	<b>Loader</b>	<b>Source</b>
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	<b>0.830</b>	<b>0.830</b>	

**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 1/8" to 3/4" diameter -0.02	-0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high or less 0.01	0.010	(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:		-0.090	minutes
Adjusted Loader Cycle Time:		<b>0.460</b>	minutes
Net Load Time per Truck:		<b>1.480</b>	minutes

**Truck Cycle Time:**

Truck Exchange Time:	0.60	Minutes	Adjusted for site altitude:	0.600	Minutes
Truck Load Time:	1.480	Minutes	Adjusted for site altitude:	1.480	Minutes
Truck Maneuver and Dump Time:	1.00	Minutes	Adjusted for site altitude:	1.000	Minutes

Truck Travel (Haul & Return) Time:  
penetration 4.0

Road Condition: Rutted dirt, little maintenance, no water, 1" tire

## Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	4.00	4.00	2051	0.735

Haul Time: **0.735** minutes

## Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	4.00	4.00	3891	0.638

Return Time: **0.638** minutesTotal Truck Cycle Time: **4.453** minutes

## Loading Tool unit

Production 800.48 LCY/Hour      Adjusted for job efficiency: 664.40 LCY/Hour  
Truck Unit Production 373.91 LCY/Hour      Adjusted for job efficiency: 310.34 LCY/Hour

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

Adjusted hourly truck team production: 620.68 LCY/Hour  
Adjusted single truck/loader team production: 620.68 LCY/Hour  
Adjusted multiple truck/loader team production: **620.68** LCY/Hour

**JOB TIME AND COST**

Fleet size: 1 Team(s)      Total job time: **17.39** Hours

Unit cost: \$1.751 /LCY      Total job cost: **\$18,895**

## BULLDOZER RIPPING WORK

Task description: Topsoil Compaction Relief

Site: Otter Creek Pit Permit Action: 2023 Permit/Job#: M2012050

### PROJECT IDENTIFICATION

Task #: 06A State: Colorado Abbreviation: None  
Date: 4/4/2023 County: Mesa Filename: M050-06a  
User: ACY

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat D9T - 9SU Horsepower: 405  
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day  
Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$146.30</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$141.41</u>	<u>100</u>
Ripper Ownership Cost/Hour:	<u>\$17.01</u>	<u>NA</u>
Ripper Operating Cost/Hour:	<u>\$8.85</u>	<u>100</u>
Operator Cost/Hour:	<u>\$40.04</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$353.61</u>	
Total Fleet Cost/Hour:	<u><b>\$353.61</b></u>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA  
Area: 26.00 acres Rip Depth (ft): 1.00 Volume: 41,947 BCY or CCY

Source of estimated quantity: Staff estimates

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth: 2.63 feet/pass  
Average Ripping Width: 7.67 feet/pass  
Average Ripping Length: 250.00 feet/pass  
Average Dozer Speed: 88.00 feet/minute  
Average Maneuver Time: 0.25 minutes/pass  
Production per unit area: 0.855 acres/hour

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.855 Acres/hr  
Site Altitude: 4,630 feet  
Altitude Adj: 1.00 (CAT HB)  
Job Efficiency: 0.83 (1 shift/day)  
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.71 Acres/hr  
Adjusted Hourly Fleet Production: **0.71** Acres/hr

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **36.66** Hours

Unit cost: \$498.579 Per acre Total job cost: **\$12,963**



**REVEGETATION WORK**Task description: Revegetate 24.8 acres + TreesSite: Otter Creek PitPermit Action: 2023Permit/Job#: M2012050**PROJECT IDENTIFICATION**Task #: 07AState: ColoradoAbbreviation: NoneDate: 4/4/2023County: MesaFilename: M050-07aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
12--4--8	100.00	pound	\$0.47	\$47.00
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$47.00</b>

**Application**

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$39.64
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$39.64</b>

**TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
<b>Total Tilling Cost/Acre</b>	<b>\$117.18</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Sand Dropseed	1.90	226.81	\$18.53
Sandberg Bluegrass - VNS	1.50	31.85	\$12.60
Galleta	1.90	6.94	\$42.47
Rabbitbrush, Rubber	0.20	2.98	\$12.86
Winter Fat	1.13	2.87	\$23.06
Yarrow, Western	0.40	24.32	\$16.72
Kochia, Forage (Prostrate)	0.20	28.09	\$1.80
Globemallow, Munro	0.40	4.53	\$35.00
<b>Totals Seed Mix</b>	<b>7.63</b>	<b>328.39</b>	<b>\$163.03</b>

**Application**

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

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

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	100.00	ACRE	\$3.04	\$304.00
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
<b>Total Mulch Materials Cost/Acre</b>				<b>\$1,146.72</b>

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$73.00
Power mulcher (MEANS 32 91 13.16 0350)	\$141.57
Weed spray, truck, aquatic area, nox. [DMG]	\$62.72
<b>Total Mulch Application Cost/Acre</b>	<b>\$277.29</b>

**NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Cottonwood, Narrowleaf	9	Container, 1 gallon (MEANS)	\$15.83	\$0.00	\$142.47
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$142.47</b>

**JOB TIME AND COST**

No. of Acres: 24.8                      Cost /Acre: \$2,165.33  
 Estimated Failure Rate: 40%                      Cost /Acre\*: \$1,819.04  
 \*Selected Replanting Work Items: SEEDING,MULCHING

Initial Job Cost: **\$53,700.18**  
 Reseeding Job Cost: **\$18,044.88**  
 Total Job Cost: **\$71,745**  
 Job Hours: **35.00**

**REVEGETATION WORK**Task description: Revegetate 1.2 Acres Wetland AreaSite: Otter Creek PitPermit Action: 2023Permit/Job#: M2012050**PROJECT IDENTIFICATION**Task #: 08AState: ColoradoAbbreviation: NoneDate: 4/4/2023County: MesaFilename: M050-08aUser: 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
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	2.00	78.05	\$56.95
Aquatic Sedge	0.20	5.29	\$35.00
Orchardgrass - Paiute	2.00	24.79	\$8.15
Slender Wheatgrass - Native	6.00	21.90	\$27.75
Western Wheatgrass - Native	0.20	0.51	\$1.20
Red Top	2.00	229.11	\$15.75
Reedgrass, Canadian (or Blue Joint)	0.40	41.14	\$81.30
Reedgrass, Northern - Native	1.00	102.85	\$136.65
Saltgrass, Inland	2.00	27.72	\$85.60

Snowberry, Western	2.00	3.44	\$127.00
Sumac, Skunkbrush	0.80	0.37	\$16.80
Timothy - Climax	2.00	57.39	\$3.20
Basin Wildrye - Trailhead	3.00	12.19	\$46.23
Greasewood, Black	2.00	280.90	\$38.00
<b>Totals Seed Mix</b>	25.60	885.66	<b>\$679.58</b>

## Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
<b>Total Seed Application Cost/Acre</b>	<b>\$267.22</b>

## MULCHING and MISCELLANEOUS

## Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	100.00	ACRE	\$3.04	\$304.00
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
<b>Total Mulch Materials Cost/Acre</b>				<b>\$1,146.72</b>

## Application

Description	Cost /Acre
Hand spread, 1" deep (MEANS 32 91 13.16 0200)	\$3,726.80
Weed spray, hand, aquatic area, nox. [DMG]	\$183.16
<b>Total Mulch Application Cost/Acre</b>	<b>\$3,909.96</b>

## 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:	1.2	Cost /Acre:	\$6,003.48
Estimated Failure Rate:	25%	Cost /Acre*:	\$6,003.48
*Selected Replanting Work Items:	SEEDING,MULCHING		
Initial Job Cost:	<b>\$7,204.18</b>		
Reseeding Job Cost:	<b>\$1,801.04</b>		
Total Job Cost:	<b>\$9,005</b>		
Job Hours:	<b>8.00</b>		

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Initial Mobilization**Site: **Otter Creek Pit**Permit Action: **2023**Permit/Job#: **M2012050****PROJECT IDENTIFICATION**Task #: **09A**State: **Colorado**Abbreviation: **None**Date: **4/4/2023**County: **Mesa**Filename: **M050-09a**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:	\$15.25	\$23.06	\$37.58
Operating Cost/Hour:	\$25.26	\$30.83	\$51.41
Operator Cost/Hour:	\$27.71	\$27.71	\$27.71
Helper Cost/Hour:	\$0.00	\$20.22	\$20.22
Total Unit Cost/Hour:	\$68.22	\$101.82	\$136.92

**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 D9T - 9SU	60.01	\$146.30	\$136.92	1	\$283.22	\$136.92	\$250.00
Cat D6T LGP	28.63	\$84.20	\$101.82	1	\$186.02	\$101.82	\$250.00
CAT 980H high lift	33.12	\$54.58	\$101.82	1	\$156.40	\$101.82	\$250.00
Cat 770D	37.54	\$79.42	\$101.82	2	\$362.48	\$203.64	\$500.00
CAT 140M	16.68	\$75.87	\$68.22	1	\$144.09	\$68.22	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.25	\$68.22	1	\$74.47	\$68.22	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$14.79	\$68.22	1	\$83.01	\$68.22	\$250.00

Subtotals: **\$1,289.69** **\$748.86** **\$2,000.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 5,000 Gal.	\$88.49	1	\$88.49	\$88.49
Light Duty Pickup, 4x4, 3/4 T.	\$70.69	3	\$212.07	\$212.07

Subtotals: **\$300.56** **\$300.56**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>GRAND JUNCTION</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>\$7,161.82</u>
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$85.87</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: 2.57 Hours

Total job cost: \$7,248

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Secondary Mobilization**Site: **Otter Creek Pit**Permit Action: **2023**Permit/Job#: **M2012050****PROJECT IDENTIFICATION**Task #: **09B**State: **Colorado**Abbreviation: **None**Date: **4/4/2023**County: **Mesa**Filename: **M050-09b**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:	\$15.25	\$23.06	\$37.58
Operating Cost/Hour:	\$25.26	\$30.83	\$51.41
Operator Cost/Hour:	\$27.71	\$27.71	\$27.71
Helper Cost/Hour:	\$0.00	\$20.22	\$20.22
Total Unit Cost/Hour:	\$68.22	\$101.82	\$136.92

**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	\$6.25	\$68.22	1	\$74.47	\$68.22	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$14.79	\$68.22	1	\$83.01	\$68.22	\$250.00
Subtotals:					<b>\$157.48</b>	<b>\$136.44</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
Light Duty Pickup, 4x4, 3/4 T.	\$70.69	3	\$212.07	\$212.07
Subtotals:			<b>\$212.07</b>	<b>\$212.07</b>

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>GRAND JUNCTION</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>\$1,398.94</u>
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$60.59</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: 2.57 Hours

Total job cost: \$1,460