



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

January 23, 2023

Jason Burkey  
Oldcastle SW Group, Inc. dba United Companies of Mesa County  
2273 River Road  
Grand Junction, CO 81502-3609

**Re: Dick Casey Concr Pit - File No. M-1978-349**  
**Oldcastle SW Group, Inc. dba United Companies of Mesa County**  
**Surety Increase (SI-4)**  
**Dick Casey Concrete Pit, M-1978-349 Surety Increase 2023.**

Dear Jason Burkey:

On January 23, 2023 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$515,991.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$138,591.00.

Please see the November 1, 2022 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 (January 23, 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](mailto: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 March 24, 2023, if the amount of any increased Financial Warranty has not been provided.

Bond Held:	\$377,400.00
Prior Liability:	\$377,400.00
Change in Liability:	\$138,591.00
Revised Liability:	\$515,991.00
Prior Permit Acreage:	68.10



Change in Permit Acreage:	0.00
Revised Permit Acreage:	68.10
Prior Affected Acreage:	68.00
Change in Affected Acreage:	0.00
Revised Affected Acreage:	68.00

If you have any questions, please contact me by telephone at (303) 866-3567 x 8185, or by email at Clayton.wein@state.co.us.

Sincerely,



Clayton C. Wein  
Environmental Protection Specialist

cc: Jason Burkey

M-GR-04

## COST SUMMARY WORK

Task description: Post inspection update

Site: Dick Casey Concr Pit

Permit Action: 11-2022

Permit/Job#: M1978349

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 12/12/2022

County: Garfield

Filename: M349-000

User: CCW

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01are v	Demolition of on site structures	DEMOLISH	1	0.00	\$169,663
02a	Transport backfill material	TRUCK1	1	35.71	\$39,526
02b	Grade pit slopes to 3H:1V	DOZER	2	19.14	\$10,097
03a	Rip compacted areas	RIPPER	2	9.35	\$5,314
04a	Transport topsoil	TRUCK1	1	53.00	\$58,672
04b	Apply topsoil	DOZER	2	17.17	\$9,061
05a	Reveg affected lands	REVEGE	1	60.00	\$106,521
06a	Initial Mobilization	MOBILIZE	1	2.22	\$7,826
06b	Secondary Mobilization	MOBILIZE	1	2.22	\$1,361
<b><u>SUBTOTALS:</u></b>				<b>198.81</b>	<b>\$408,041</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$8,242

Performance bond: 1.05

Total = \$4,284

Job superintendent: 139.40

Total = \$10,473

Profit: 10.00

Total = \$40,804

TOTAL O & P = \$63,804

CONTRACT AMOUNT (direct + O & P) = \$471,845

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$500

Total = \$500

Engineering work and/or contract/bid preparation: 4.25

Total = \$20,053

Reclamation management and/or administration: 5.00

\$23,592

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$107,950

**TOTAL BOND AMOUNT (direct + indirect) = \$515,991**

## DEMOLITION WORK

Task description: Demolition of on site structures

Site: Dick Casey Concr Pit

Permit Action: 11-2022

Permit/Job#: M1978349

### PROJECT IDENTIFICATION

Task #: 01AREV

State: Colorado

Abbreviation: None

Date: 1/6/2023

County: Garfield

Filename: M349-01arev

User: CCW

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 86.90 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Batch Plant Structure	50'Wx100'Lx45'H	Plant (3S) demo./off-site disposal in approved landfill - Max. 15 mile haul	225,000.00	CF	\$0.77	\$173,250.00
Cement Pads	All	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul	10,000.00	SF	\$1.15	\$11,490.00
Office Buildings Structures	3 buildings 2275 sq ft	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul	27,500.00	CF	\$0.36	\$10,010.00
Scal Disposal Fee	40'Lx10'W	Dump fees - Building construction materials.	14.80	CY	\$11.10	\$164.28
Scale	40'Lx10'W	Loading and 2 mile haul, no salvage - Machine loading	14.80	CY	\$19.40	\$287.12
Scale Additional Hauling	40'Lx10'W	Hauling only, per mile, 12-18 CY truck - 50 mph average speed	10.00	MI	\$3.78	\$37.80

Job Hours: 0.00

**Subtotal**  
(unadjusted): \$195,239.20

**Total Cost**  
(adjusted for location): \$169,662.86

TRUCK/LOADER TEAM WORKTask description: Transport backfill materialSite: Dick Casey Concr PitPermit Action: 11-2022Permit/Job#: M1978349PROJECT IDENTIFICATIONTask #: 02AState: ColoradoAbbreviation: NoneDate: 12/12/2022County: GarfieldFilename: M349-02aUser: CCWAgency or organization name: DRMSHOURLY EQUIPMENT COSTShift basis: 1 per day

	Equipment Description
Truck Loader Team -Truck:	Cat 730
-Loader:	CAT 972H
Support Equipment -Load Area:	Cat D8T - 8SU
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

Cost Breakdown:

	Truck/Loader Team		Support Equipment		Maintenance Equipment	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	15	NA	NA	NA
Ownership cost/hour:	\$97.13	\$53.96	\$124.85	NA	NA	NA
Operating cost/hour:	\$65.52	\$50.78	\$14.64	NA	NA	NA
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	NA	NA
Operator cost/hour:	\$32.54	\$40.71	\$41.30	NA	NA	NA
Unit Subtotals:	\$195.19	\$145.45	\$180.80	NA	NA	NA
Number of Units:	4	1	1	0	0	0
Group Subtotals:	Work: \$926.21		Support: \$180.80		Maint: \$0.00	

Total work team cost/hour: \$1,107.01MATERIAL QUANTITIESInitial volume: 20,000

CCY

Swell factor: 1.060Loose volume: 21,200

LCY

Source of estimated volume: 1350 LF 1:1 to 3:1 20'H backfillSource of estimated swell factor: Cat HandbookMaterial Purchase Cost: \$0.00Total Cost: \$0.00HOURLY PRODUCTIONTruck Capacity:Truck Payload (weight) Basis:Material weight: 2,900

Pounds/LCY

Description: Sand and gravel - DryRated Payload: 62,000

Pounds

Payload Capacity: 21.38 LCY

**Truck Bed (volume) Basis:**

Struck Volume: 17.10 LCY  
 Heaped Volume: 22.10 LCY  
 Average Volume: 19.60 LCY  
 Adjusted Volume: 21.38 LCY

Final Truck Volume Based on Number of Loader Passes: 18.48 LCY

**Loading Tool Capacity**

Bucket Size Class: NA

Rated Capacity:	<u>5.600</u>	LCY (heaped)
Bucket Fill Factor:	<u>1.100</u>	Other - rock/dirt mixtures (100-120%) 1.100
Adjusted Capacity:	<u>6.160</u>	LCY

**Job Condition Corrections:**

Site Altitude (ft.): 5320 feet

	Truck	Loader	Source
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: 3 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): 0.525 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 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:		-0.100	minutes
Adjusted Loader Cycle Time:		<b>0.425</b>	minutes
Net Load Time per Truck:		<b>0.950</b>	minutes

**Truck Cycle Time:**

Truck Exchange Time:	<u>0.60</u>	Minutes	Adjusted for site altitude:	<u>0.600</u>	Minutes
Truck Load Time:	<u>0.950</u>	Minutes	Adjusted for site altitude:	<u>0.950</u>	Minutes
Truck Maneuver and Dump Time:	<u>1.00</u>	Minutes	Adjusted for site altitude:	<u>1.000</u>	Minutes

Truck Travel (Haul & Return) Time:  
penetration 14

Road Condition: Soft, rutted dirt, no maintenance or water, 8" tire

## Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	14.00	14.00	508	1.981

Haul Time: **1.981** minutes

## Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	14.00	14.00	1115	0.929

Return Time: **0.929** minutesTotal Truck Cycle Time: **5.460** minutes

Loading Tool unit  
 Production 715.35 LCY/Hour      Adjusted for job efficiency: 593.74 LCY/Hour  
 Truck Unit Production  
203.08 LCY/Hour      Adjusted for job efficiency: 168.55 LCY/Hour  
 Optimal No. of Trucks: 4 Truck(s)      Selected Number of Trucks: 4 Truck(s)  
                                  Adjusted hourly truck team production: 674.22 LCY/Hour  
                                  Adjusted single truck/loader team production: 593.74 LCY/Hour  
                                  Adjusted multiple truck/loader team production: **593.74** LCY/Hour

**JOB TIME AND COST**Fleet size: 1 Team(s)      Total job time: **35.71** HoursUnit cost: \$1.864 /LCY      Total job cost: **\$39,526**



**BULLDOZER WORK**Task description: **Grade pit slopes to 3H:1V**Site: **Dick Casey Concr Pit**Permit Action: **11-2022**Permit/Job#: **M1978349****PROJECT IDENTIFICATION**Task #: **02B**  
Date: **12/12/2022**  
User: **CCW**State: **Colorado**  
County: **Garfield**Abbreviation: **None**  
Filename: **M349-02b**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D8T - 8SU**  
Horsepower: **310**  
Blade Type: **Semi-Universal**  
Attachment: **NA**  
Shift Basis: **1 per day**  
Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$124.85	NA
Operating Cost/Hour:	\$97.63	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.30	NA
Total unit Cost/Hour:	\$263.78	
Total Fleet Cost/Hour:	<b>\$527.56</b>	

**MATERIAL QUANTITIES**Initial Volume: **25,395**  
Swell factor: **1.000**  
Loose volume: **25,395 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: **1,400.0 LCY/hr**Materials consistency description: **Loose stockpile 1.2**Average push gradient: **0 %**  
Average site altitude: **5,320 feet**Material weight: **2,900 lbs/LCY**Weight description: **Sand and gravel - Dry****Job Condition Correction Factor****Source**

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:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4739

Adjusted unit  
production: 663.46 LCY/hr  
Adjusted fleet  
production: **1326.92** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)  
Unit cost: \$0.398/LCY

Total job time: **19.14** Hours  
Total job cost: **\$10,097**

## BULLDOZER RIPPING WORK

Task description: Rip compacted areas

Site: Dick Casey Concr Pit Permit Action: 11-2022 Permit/Job#: M1978349

### PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None  
Date: 12/12/2022 County: Garfield Filename: M349-03a  
User: CCW

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:	\$124.85	NA
Operating Cost/Hour:	\$97.63	100
Ripper Ownership Cost/Hour:	\$13.10	NA
Ripper Operating Cost/Hour:	\$7.30	100
Operator Cost/Hour:	\$41.30	NA
Total Unit Cost/Hour:	\$284.18	
Total Fleet Cost/Hour:	<b>\$568.36</b>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA  
Area: 12.00 acres Rip Depth (ft): 2.00 Volume: 38,720 BCY or CCY

Source of estimated quantity: Field estimates, rec map

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth: 2.56 feet/pass  
Average Ripping Width: 7.08 feet/pass  
Average Ripping Length: 200.00 feet/pass  
Average Dozer Speed: 88.00 feet/minute  
Average Maneuver Time: 0.25 minutes/pass  
Production per unit area: 0.773 acres/hour

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.773 Acres/hr  
Site Altitude: 5,320 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: 1.28 Acres/hr

### JOB TIME AND COST

Fleet size: 2 Grader(s) Total job time: 9.35 Hours

Unit cost: \$442.852 Per acre Total job cost: \$5,314



**TRUCK/LOADER TEAM WORK**Task description: Transport topsoilSite: Dick Casey Concr PitPermit Action: 11-2022Permit/Job#: M1978349**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 12/12/2022County: GarfieldFilename: M349-04aUser: CCWAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

	Equipment Description
Truck Loader Team -Truck:	Cat 730
-Loader:	CAT 972H
Support Equipment -Load Area:	Cat D8T - 8SU
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

**Cost Breakdown:**

	Truck/Loader Team		Support Equipment		Maintenance Equipment	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	15	NA	NA	NA
Ownership cost/hour:	\$97.13	\$53.96	\$124.85	NA	NA	NA
Operating cost/hour:	\$65.52	\$50.78	\$14.64	NA	NA	NA
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	NA	NA
Operator cost/hour:	\$32.54	\$40.71	\$41.30	NA	NA	NA
Unit Subtotals:	\$195.19	\$145.45	\$180.80	NA	NA	NA
Number of Units:	4	1	1	0	0	0
Group Subtotals:	Work: \$926.21		Support: \$180.80		Maint: \$0.00	

Total work team cost/hour: **\$1,107.01****MATERIAL QUANTITIES**Initial volume: 28,223

CCY

Swell factor: 1.115Loose volume: **31,469**

LCY

Source of estimated volume: 35 ac 6" depthSource of estimated swell factor: Cat HandbookMaterial Purchase Cost: \$0.00Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:**Truck Payload (weight) Basis:Material weight: 2,100

Pounds/LCY

Description: Earth - LoamRated Payload: 62,000

Pounds

Payload Capacity: 29.52 LCY

**Truck Bed (volume) Basis:**

Struck Volume: 17.10 LCY  
 Heaped Volume: 22.10 LCY  
 Average Volume: 19.60 LCY  
 Adjusted Volume: 22.10 LCY

Final Truck Volume Based on Number of Loader Passes: 18.48 LCY

**Loading Tool Capacity**

Bucket Size Class: NA

Rated Capacity:	<u>5.600</u>	LCY (heaped)
Bucket Fill Factor:	<u>1.100</u>	Other - rock/dirt mixtures (100-120%) 1.100
Adjusted Capacity:	<u>6.160</u>	LCY

**Job Condition Corrections:**

Site Altitude (ft.): 5320 feet

	Truck	Loader	Source
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: 3 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): 0.525 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 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:		-0.100	minutes
Adjusted Loader Cycle Time:		<b>0.425</b>	minutes
Net Load Time per Truck:		<b>0.950</b>	minutes

**Truck Cycle Time:**

Truck Exchange Time:	<u>0.60</u>	Minutes	Adjusted for site altitude:	<u>0.600</u>	Minutes
Truck Load Time:	<u>0.950</u>	Minutes	Adjusted for site altitude:	<u>0.950</u>	Minutes
Truck Maneuver and Dump Time:	<u>1.00</u>	Minutes	Adjusted for site altitude:	<u>1.000</u>	Minutes

Truck Travel (Haul & Return) Time:  
penetration 14

Road Condition: Soft, rutted dirt, no maintenance or water, 8" tire

## Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	14.00	14.00	508	1.981

Haul Time: **1.981** minutes

## Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	14.00	14.00	1115	0.929

Return Time: **0.929** minutesTotal Truck Cycle Time: **5.460** minutes

Loading Tool unit

Production 715.35 LCY/HourAdjusted for job efficiency: 593.74 LCY/Hour

Truck Unit Production

203.08 LCY/HourAdjusted for job efficiency: 168.55 LCY/HourOptimal No. of Trucks: 4 Truck(s)Selected Number of Trucks: 4 Truck(s)Adjusted hourly truck team production: 674.22 LCY/HourAdjusted single truck/loader team production: 593.74 LCY/HourAdjusted multiple truck/loader team production: **593.74** LCY/Hour**JOB TIME AND COST**Fleet size: 1 Team(s)Total job time: **53.00** HoursUnit cost: \$1.864 /LCYTotal job cost: **\$58,672**



**BULLDOZER WORK**Task description: Apply topsoilSite: Dick Casey Concr PitPermit Action: 11-2022Permit/Job#: M1978349**PROJECT IDENTIFICATION**Task #: 04BState: ColoradoAbbreviation: NoneDate: 12/12/2022County: GarfieldFilename: M349-04bUser: CCWAgency or organization name: DRMS**HOURLY EQUIPMENT COST**

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

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$124.85</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$97.63</u>	<u>100</u>
Ripper own.		
Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>
Operator Cost/Hour:	<u>\$41.30</u>	<u>NA</u>
Total unit Cost/Hour:	<u>\$263.78</u>	
Total Fleet Cost/Hour:	<u>\$527.56</u>	

**MATERIAL QUANTITIES**

Initial Volume: 31,469  
 Swell factor: 1.000  
 Loose volume: 31,469 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: 1,400.0 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %  
 Average site altitude: 5,320 feet

Material weight: 2,100 lbs/LCYWeight description: Earth - LoamJob Condition Correction FactorSource

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: 916.16 LCY/hr

Adjusted fleet production: **1832.32** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)

Unit cost: \$0.288/LCY

Total job time: **17.17** Hours

Total job cost: **\$9,061**

**REVEGETATION WORK**Task description: Reveg affected landsSite: Dick Casey Concr PitPermit Action: 11-2022Permit/Job#: M1978349**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 12/12/2022County: GarfieldFilename: M349-05aUser: CCWAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-20-20, 4-8-12, 10-10-10	40.00	pound	\$0.23	\$9.20
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$9.20</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
Weed control spraying (MEANS 31 31 16.13 3100)	\$290.40
<b>Total Tilling Cost/Acre</b>	<b>\$407.58</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	0.50	19.51	\$14.24
Bluebunch Wheatgrass - Secar	12.00	38.57	\$130.50
Bottlebrush Squirreltail	9.00	39.67	\$146.03
Muttongrass	1.00	20.66	\$34.40
Western Wheatgrass - Arriba	16.00	40.40	\$104.00
Saltgrass, Inland	3.00	41.59	\$128.40
<b>Totals Seed Mix</b>	<b>41.50</b>	<b>200.40</b>	<b>\$557.56</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 - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	\$4.61	\$4.61
Herbicide - Plateau @ 1.0 pt/ac	1.00	ACRE	\$11.21	\$11.21
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
<b>Total Mulch Materials Cost/Acre</b>				<b>\$858.54</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
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
<b>Total Mulch Application Cost/Acre</b>	<b>\$340.01</b>

**NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$0.00</b>

**JOB TIME AND COST**

No. of Acres: 35 Cost /Acre: \$2,444.53  
 Estimated Failure Rate: 25% Cost /Acre\*: \$2,395.69  
 \*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **\$85,558.55**  
 Reseeding Job Cost: **\$20,962.29**  
 Total Job Cost: **\$106,521**  
 Job Hours: **60.00**

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Initial Mobilization**Site: **Dick Casey Concr Pit**Permit Action: **11-2022**Permit/Job#: **M1978349****PROJECT IDENTIFICATION**

Task #: **06A** State: **Colorado** Abbreviation: **None**  
 Date: **12/12/2022** County: **Garfield** Filename: **M349-06a**  
 User: **CCW**

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 730	25.19	\$97.13	\$68.22	4	\$661.40	\$272.88	\$1,000.00
CAT 972H	28.00	\$53.96	\$101.82	1	\$155.78	\$101.82	\$250.00
Cat D8T - 8SU	53.08	\$137.95	\$136.92	2	\$549.74	\$273.84	\$500.00
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: **\$1,524.40** **\$784.98** **\$2,250.00****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	\$60.02	1	\$60.02	\$60.02
Light Duty Pickup, 4x4, 1 T. Crew	\$51.98	1	\$51.98	\$51.98

Subtotals: **\$112.00** **\$112.00**

**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>\$7,812.73</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$12.80</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:	<u>2.23</u>	Hours
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Total job cost:	<u>\$7,826</u>
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**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Secondary Mobilization**Site: **Dick Casey Concr Pit**Permit Action: **11-2022**Permit/Job#: **M1978349****PROJECT IDENTIFICATION**Task #: **06B**State: **Colorado**Abbreviation: **None**Date: **12/12/2022**County: **Garfield**Filename: **M349-06b**User: **CCW**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
Flatbed Truck, 4x2, 30K GVW	\$60.02	1	\$60.02	\$60.02
Light Duty Pickup, 4x4, 1 T. Crew	\$51.98	1	\$51.98	\$51.98
Subtotals:			<b>\$112.00</b>	<b>\$112.00</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>\$1,348.55</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$12.80</u>
** 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:	<u>2.23</u>	Hours
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Total job cost:	<u>\$1,361</u>
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