

COST SUMMARY WORK

Task description: Reclamation Cost Estimate

Site: Gray Pit #1 Permit Action: 2022-04-22 SO-01 Permit/Job#: M2003092
Update

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 4/22/2022 County: Montrose Filename: M092-000
User: DMC

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

| Task | Description | Form Used | Fleet Size | Task Hours | Cost |
|--------------------------|--------------------------------------|-----------|------------|--------------|-----------------|
| 01a | Reduce highwalls to 2H: 1V | DOZER | 1 | 17.39 | \$5,702 |
| 02a | Rip the pit floor | RIPPER | 1 | 8.63 | \$2,930 |
| 03a | Topsoil 20 acres | DOZER | 1 | 22.35 | \$7,331 |
| 04a | Revegetate steeper slopes | REVEGE | 1 | 3.00 | \$5,487 |
| 04b | Revegetate pit floor/operations area | REVEGE | 1 | 3.00 | \$32,881 |
| 05a | Mobilize to the site | MOBILIZE | 1 | 2.50 | \$3,456 |
| <u>SUBTOTALS:</u> | | | | 56.87 | \$57,787 |

INDIRECT COSTS

OVERHEAD AND PROFIT:

| | | |
|---------------------------|------------------------------------|----------|
| Liability insurance: 2.02 | Total = | \$1,167 |
| Performance bond: 1.05 | Total = | \$607 |
| Job superintendent: 28.44 | Total = | \$2,048 |
| Profit: 10.00 | Total = | \$5,779 |
| | TOTAL O & P = | \$9,601 |
| | CONTRACT AMOUNT (direct + O & P) = | \$67,388 |

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

| | | | |
|--|-------|---------|---------|
| Financial warranty processing (legal/related costs): | \$500 | Total = | \$500 |
| Engineering work and/or contract/bid preparation: | 0.00 | Total = | \$0 |
| Reclamation management and/or administration: | 5.00 | | \$3,369 |

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$13,470

TOTAL BOND AMOUNT (direct + indirect) = \$71,257

BULLDOZER WORK

Task description: **Reduce highwalls to 2H: 1V**

Site: **Gray Pit #1**

Permit Action: 2022-04-22 SO-01
Update

Permit/Job#: M2003092

PROJECT IDENTIFICATION

Task #: 01A
Date: 4/22/2022
User: DMC

State: Colorado
County: Montrose

Abbreviation: None
Filename: M092-01a

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D9T - 9SU
Horsepower: 405
Blade Type: Semi-Universal
Attachment: 3-shank ripper
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

| | | <u>Utilization %</u> |
|------------------------|------------------------|----------------------|
| Ownership Cost/Hour: | <u>\$126.01</u> | <u>NA</u> |
| Operating Cost/Hour: | <u>\$141.41</u> | <u>100</u> |
| Ripper own. Cost/Hour: | <u>\$19.26</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>\$327.98</u> | |
| Total Fleet Cost/Hour: | <u>\$327.98</u> | |

MATERIAL QUANTITIES

Initial Volume: 13,287
Swell factor: 1.165
Loose volume: **15,479 LCY**

Source of estimated volume: 2,917 CY in pit, 10,370 CY around pond
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 60 feet
Unadjusted hourly production: 1,872.0 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: -5 %
Average site altitude: 6,890 feet

Material weight: 2,900 lbs/LCY

Weight description: Decomposed rock - 50% Rock, 50% Earth

Job Condition Correction Factor

Source

| | | |
|-----------------------|-------|---------------|
| Operator Skill: | 0.750 | (AVG.) |
| Material consistency: | 0.900 | (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: | 1.115 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 0.793 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |

Net correction: 0.4756

Adjusted unit
production: 890.32 LCY/hr
Adjusted fleet
production: **890.32 LCY/hr**

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.368/LCY

Total job time: **17.39 Hours**
Total job cost: **\$5,702**

BULLDOZER RIPPING WORK

Task description: Rip the pit floor

Site: Gray Pit #1 Permit Action: 2022-04-22 SO-01
Update Permit/Job#: M2003092

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 4/22/2022 County: Montrose Filename: M092-02a
User: DMC

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>\$126.01</u> | <u>NA</u> |
| Operating Cost/Hour: | <u>\$141.41</u> | <u>100</u> |
| Ripper Ownership Cost/Hour: | <u>\$19.26</u> | <u>NA</u> |
| Ripper Operating Cost/Hour: | <u>\$11.48</u> | <u>100</u> |
| Operator Cost/Hour: | <u>\$41.30</u> | <u>NA</u> |
| Total Unit Cost/Hour: | <u>\$339.46</u> | |
| Total Fleet Cost/Hour: | <u>\$339.46</u> | |

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 6.00 acres Rip Depth (ft): 1.50 Volume: 14,520 BCY or CCY

Source of estimated quantity: Inspection Observations and reclamation plan

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: 200.00 feet/pass
Average Dozer Speed: 88.00 feet/minute
Average Maneuver Time: 0.25 minutes/pass
Production per unit area: 0.838 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.838 Acres/hr
Site Altitude: 6,890 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.70 Acres/hr
Adjusted Hourly Fleet Production: **0.70** Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **8.63** Hours

Unit cost: \$488.306 Per acre

Total job cost: **\$2,930**

BULLDOZER WORK

Task description: Topsoil 20 acres

Site: Gray Pit #1 Permit Action: 2022-04-22 SO-01 Update Permit/Job#: M2003092

PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None
 Date: 4/22/2022 County: Montrose Filename: M092-03a
 User: DMC

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D9T - 9SU
 Horsepower: 405
 Blade Type: Semi-Universal
 Attachment: 3-shank ripper
 Shift Basis: 1 per day
 Data Source: (CRG)

Cost Breakdown:

| | | <u>Utilization %</u> |
|------------------------|-----------------|----------------------|
| Ownership Cost/Hour: | \$126.01 | NA |
| Operating Cost/Hour: | \$141.41 | 100 |
| Ripper own. Cost/Hour: | \$19.26 | NA |
| Ripper op. Cost/Hour: | \$0.00 | 0 |
| Operator Cost/Hour: | \$41.30 | NA |
| Total unit Cost/Hour: | \$327.98 | |
| Total Fleet Cost/Hour: | \$327.98 | |

MATERIAL QUANTITIES

Initial Volume: 13,444
 Swell factor: 1.000
 Loose volume: 13,444 LCY

Source of estimated volume: Avg. 5 inches over 20 ac.
 Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 200 feet
 Unadjusted hourly production: 700.0 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %
 Average site altitude: 6,890 feet

Material weight: 1,600 lbs/LCY

Weight description: Top Soil

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: | 1.438 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |

Net correction: 0.8593

Adjusted unit
production: 601.51 LCY/hr
Adjusted fleet
production: **601.51** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.545/LCY

Total job time: **22.35** Hours
Total job cost: **\$7,331**

REVEGETATION WORKTask description: Revegetate steeper slopesSite: Gray Pit #1 Permit Action: 2022-04-22 SO-01
UpdatePermit/Job#: M2003092**PROJECT IDENTIFICATION**Task #: 04A State: Colorado Abbreviation: None
Date: 4/22/2022 County: Montrose Filename: M092-04a
User: DMCAgency 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 |
|--|-----------------|
| Chisel plowing {DMG} | \$96.50 |
| Weed control spraying (MEANS 31 31 16.13 3100) | \$290.40 |
| Total Tilling Cost/Acre | |
| | \$386.90 |

SEEDING

| Seed Mix | Rate – PLS LBS / Acre | Seeds per SQ. FT | Cost /Acre |
|------------------------------|--------------------------------|------------------------|-----------------|
| Indian Ricegrass - Native | 6.25 | 20.23 | \$40.63 |
| Crested Wheatgrass - Ephraim | 3.00 | 13.77 | \$12.98 |
| Canby Bluegrass - Canbar | 0.90 | 19.13 | \$9.23 |
| Sand Dropseed | 0.10 | 11.94 | \$0.98 |
| Galleta | 6.00 | 21.90 | \$134.10 |
| Saltbush, Four Wing | 2.00 | 2.75 | \$25.00 |
| | | 89.73 | \$222.90 |

REVEGETATION WORKTask description: Revegetate pit floor/operations areaSite: Gray Pit #1 Permit Action: 2022-04-22 SO-01
UpdatePermit/Job#: M2003092**PROJECT IDENTIFICATION**Task #: 04B State: Colorado Abbreviation: None
Date: 4/22/2022 County: Montrose Filename: M092-04b
User: DMCAgency 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 |
|--|-----------------|
| Chisel plowing {DMG} | \$96.50 |
| Weed control spraying (MEANS 31 31 16.13 3100) | \$290.40 |
| Total Tilling Cost/Acre | \$386.90 |

SEEDING

| Seed Mix | Rate – PLS LBS / Acre | Seeds per SQ. FT | Cost /Acre |
|------------------------------|--------------------------------|------------------------|-----------------|
| Indian Ricegrass - Native | 3.13 | 10.12 | \$20.31 |
| Crested Wheatgrass - Ephraim | 1.50 | 6.89 | \$6.49 |
| Canby Bluegrass - Canbar | 0.45 | 9.57 | \$4.61 |
| Sand Dropseed | 0.05 | 5.97 | \$0.49 |
| Galleta | 3.00 | 10.95 | \$67.05 |
| Saltbush, Four Wing | 1.00 | 1.38 | \$12.50 |
| | | 44.87 | \$111.45 |

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mobilize to the site**

Permit Action: 2022-04-22 SO-01
 Site: Gray Pit #1 Update Permit/Job#: M2003092

PROJECT IDENTIFICATION

Task #: 05A State: Colorado Abbreviation: None
 Date: 4/22/2022 County: Montrose Filename: M092-05a
 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: | \$21.28 | \$37.94 | \$47.67 |
| Operating Cost/Hour: | \$26.55 | \$50.48 | \$56.21 |
| Operator Cost/Hour: | \$20.54 | \$20.54 | \$20.54 |
| Helper Cost/Hour: | \$0.00 | \$23.53 | \$23.53 |
| Total Unit Cost/Hour: | \$68.37 | \$132.49 | \$147.95 |

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 | 66.13 | \$145.27 | \$147.95 | 1 | \$293.22 | \$147.95 | \$250.00 |
| Drill/Broadcast Seeder with Tractor | 25.00 | \$7.98 | \$68.37 | 1 | \$76.35 | \$68.37 | \$250.00 |
| Hydroseeder with Tractor | 28.00 | \$13.97 | \$132.49 | 1 | \$146.46 | \$132.49 | \$250.00 |
| Power Mulcher (Bowie LD-90) | 6.00 | \$14.98 | \$68.37 | 1 | \$83.35 | \$68.37 | \$250.00 |

Subtotals: **\$599.38** **\$417.18** **\$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, 3/4 T. | \$12.93 | 1 | \$12.93 | \$12.93 |

Subtotals: **\$12.93** **\$12.93**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: MONTROSE
 Total one-way travel distance: 5.00 miles
 Average Travel Speed: 40.00 mph

Total Non-Roadable Mob/Demob Cost * \$3,452.90
 * * two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$3.23
 ** one round trip, no haul rig:

Transportation Cycle Time:

| | Non-Roadable Equipment | Roadable Equipment |
|-------------------------|------------------------|--------------------|
| Haul Time (Hours): | 0.13 | 0.13 |
| Return Time (Hours): | 0.13 | 0.13 |
| Loading Time (Hours): | 0.50 | NA |
| Unloading Time (Hours): | 0.50 | NA |
| Subtotals: | 1.25 | 0.25 |

JOB TIME AND COST

Total job time: 2.50 Hours

Total job cost: \$3,456