

COST SUMMARY WORK

Task description: Cost Summary

Site: Old Town Reclamation Project

Permit Action: 110D Application

Permit/Job#: M2018057

PROJECT IDENTIFICATION

Task #: 000
Date: 12/5/2018
User: JLE

State: Colorado
County: Gilpin

Abbreviation: None
Filename: M057-000

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Rip Final Surface	RIPPER	1	4.06	\$915.00
002	Revegetation	REVEGE	1	3.00	\$3,479.00
003	Soil Amendments	SITEMAINT ENANCE	1	6.00	\$6,055.08
004	Mobilization	MOBILIZE	1	2.15	\$3,109.00
<u>SUBTOTALS:</u>				15.21	\$13,558

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$273.87
Performance bond:	1.05	Total =	\$142.36
Job superintendent:	0.00	Total =	\$0.00
Profit:	10.00	Total =	\$1,355.80

TOTAL O & P = \$1,772.03

CONTRACT AMOUNT (direct + O & P) = \$15,330.03

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	<u>0.00</u>	Total =	<u>0.00</u>
Engineering work and/or contract/bid preparation:	<u>4.25</u>	Total =	<u>\$651.53</u>
Reclamation management and/or administration:	<u>5.00</u>		<u>\$766.50</u>

CONTINGENCY: 0.00 Total = \$0.00

TOTAL INDIRECT COST = \$3,190.06

TOTAL BOND AMOUNT (direct + indirect) = \$16,748.06

Total Proposed Bond Amount (Rounded) = \$16,750.00

BULLDOZER RIPPING WORK

Task description: Rip Final Surface

Old Town Reclamation
Site: Project

Permit Action:
110d Application

Permit/Job#: M2018057

PROJECT IDENTIFICATION

Task #: 001
Date: 12/4/2018
User: JLE

State: Colorado
County: Gilpin

Abbreviation: None
Filename: M057-001

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU
Ripper Attachment: 3-Shank Ripper

Horsepower: 310
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$93.62	NA
Operating Cost/Hour:	\$73.35	100
Ripper Ownership Cost/Hour:	\$8.93	NA
Ripper Operating Cost/Hour:	\$7.78	100
Operator Cost/Hour:	\$41.52	NA
Total Unit Cost/Hour:	\$225.20	
Total Fleet Cost/Hour:	\$225.20	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 2.76 acres Rip Depth (ft): 1.00 Volume: 4,453 BCY or CCY

Source of estimated quantity: Attachment V - Cost Estimate

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 1.00 mph
Average Ripping Width: 7.08 degrees
Average Ripping Length: 450.00 feet
Average Dozer Speed: 88.00 feet
Average Maneuver Time: 0.25 feet
Production per unit area: 0.818 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.818 Acres/hr
Site Altitude: 9,080 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.68 Acres/hr
Adjusted Hourly Fleet Production: 0.68 Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 4.06 Hours

Unit cost: \$331.620 Per acre

Total job cost: \$915

REVEGETATION WORK

Task description: Revegetation

Site: Old Town Reclamation Project

Permit Action: 110d Application

Permit/Job#: M2018057

PROJECT IDENTIFICATION

Task #: 002
Date: 12/4/2018
User: JLE

State: Colorado
County: Gilpin

Abbreviation: None
Filename: M057-002

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Manure, delivery (average cost), per ton	0.45	ton	\$37.53	\$16.89
			Total Fertilizer Materials Cost/Acre	\$16.89

Application

Description	Cost /Acre
Manure, tractor spreader (MEANS 32 91 13.23 4450)	\$64.03
Total Fertilizer Application Cost/Acre	\$64.03

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$106.29
Total Tilling Cost/Acre	\$106.29

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arizona Fescue - Redondo	2.00	22.96	\$24.24
Canby Bluegrass - Canbar	1.50	31.89	\$14.60
Sheep Fescue - Azay	1.00	15.61	\$4.93
Thickspike Wheatgrass - Critana	3.00	10.61	\$17.61
Western Wheatgrass - Rosanna	4.00	10.10	\$33.12
Totals Seed Mix	11.50	91.16	\$94.50

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$232.00

Total Seed Application Cost/Acre	\$232.00
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MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$288.00	\$576.00
Total Mulch Materials Cost/Acre				\$576.00

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$68.78
Total Mulch Application Cost/Acre	\$68.78

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:	2.76	Cost /Acre:	\$1,158.49
Estimated Failure Rate:	25%	Cost /Acre*:	\$407.42
*Selected Replanting Work Items:	FERTILIZING,SEEDING		

Initial Job Cost:	\$3,197.43
Reseeding Job Cost:	\$281.12
Total Job Cost:	\$3,479
Job Hours:	3

SITE MAINTENANCE

Task description: Soil Amendments

Site: Old Town Reclamation Project

Permit Action:

110d Application

Permit/Job#: M2018057

PROJECT IDENTIFICATION

Task #: 003

State: Colorado

Abbreviation: None

Date: 12/5/2018

County: Gilpin

Filename: M057-003

User: JLE

Agency or organization name: DRMS

UNIT COSTS

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Apply Lime	3.00	USER PROVIDED ITEM	555.00	Bags	\$10.00	\$5,550.00
Other Soil Amendments	3.00	USER PROVIDED ITEM	2.76	Acre	\$183.00	\$505.08

Job Hours: 6.00

Total Cost: \$6,055.08

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Mobilization

Site: Old Town Reclamation Project

Permit Action: 110d Application

Permit/Job#: M2018057

PROJECT IDENTIFICATION

Task #: 004
Date: 12/5/2018
User: JLE

State: Colorado
County: Gilpin

Abbreviation: None
Filename: M057-004

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
Cat D8T - 8SU	53.08	\$102.55	\$125.45	1	\$228.00	\$125.45	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$15.54	\$88.67	2	\$208.42	\$177.34	\$500.00
Power Mulcher (Bowie LD-90)	6.00	\$8.33	\$88.67	1	\$97.00	\$88.67	\$250.00

Subtotals:

\$533.42	\$391.46	\$1,000.00
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ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$47.19	1	\$47.19	\$47.19

Subtotals:

\$47.19	\$47.19
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EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>CENTRAL CITY</u>	
Total one-way travel distance:	<u>3.10</u>	miles
Average Travel Speed:	<u>15.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$3,089.60</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$19.51</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.21</u>	<u>0.21</u>
Return Time (Hours):	<u>0.21</u>	<u>0.21</u>
Loading Time (Hours):	<u>0.33</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.33</u>	<u>NA</u>
Subtotals:	<u>1.08</u>	<u>0.41</u>

JOB TIME AND COST

Total job time:	<u>2.15</u>	Hours
Total job cost:	<u>\$3,109</u>	