

COST SUMMARY WORK

Task description: Cost Summary

Site: Fork Horn Mesa Subdivision

Permit Action: 2018 Update

Permit/Job#: M2008044

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 12/19/2018

County: La Plata

Filename: M044-000

User: LJW

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Rough grade and rip 2 acres of affected land	DOZER	1	3.21	\$710.00
002	Revegetate 2 acres	REVEGE	1	6.00	\$1,298.00
004	Mobilize	MOBILIZE	1	3.20	\$1,000.00
<u>SUBTOTALS:</u>				12.41	\$3,008

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$60.76

Performance bond: 1.05

Total = \$31.58

Job superintendent: 0.00

Total = \$0.00

Profit: 10.00

Total = \$300.80

TOTAL O & P = \$393.14

CONTRACT AMOUNT (direct + O & P) = \$3,401.14

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 0.00

Total = 0.00

Engineering work and/or contract/bid preparation: 0.00

Total = \$0.00

Reclamation management and/or administration: 5.00

\$170.06

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$563.20

TOTAL BOND AMOUNT (direct + indirect) = \$3,571.20

BULLDOZER WORKTask description: Rough grade and rip 2 acres of affected landSite: Fork Horn Mesa SubdivisionPermit Action: 2018 UpdatePermit/Job#: M2008044**PROJECT IDENTIFICATION**Task #: 001State: ColoradoAbbreviation: NoneDate: 12/19/2018County: La PlataFilename: M001-044User: LJWAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$93.62	NA
Operating Cost/Hour:	\$73.35	100
Ripper own. Cost/Hour:	\$8.93	NA
Ripper op. Cost/Hour:	\$3.89	50
Operator Cost/Hour:	\$41.52	NA

Total unit Cost/Hour: \$221.31Total Fleet Cost/Hour: \$221.31**MATERIAL QUANTITIES**Initial Volume: 1,613Swell factor: 1.125Loose volume: 1,815 LCYSource of estimated volume: 2 acres, avg 6" deepSource of estimated swell
factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly
production: 1,400.0 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push
gradient: 0 %Average site altitude: 6,740 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packedJob Condition Correction FactorSource

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4043

Adjusted unit
production: 566.02 LCY/hr

Adjusted fleet
production: 566.02 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.391/LCY

Total job time: 3.21 Hours

Total job cost: \$710

REVEGETATION WORKTask description: Revegetate 2 acresSite: Fork Horn Mesa SubdivisionPermit Action: 2018 UpdatePermit/Job#: M2008044**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 12/19/2018County: La PlataFilename: M044-003User: LJWAgency 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)	\$106.29
Total Tilling Cost/Acre	\$106.29

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Rye, Perennial Tetraploid - Aubisque	0.80	4.54	\$1.38
Orchardgrass - Paiute	3.32	41.16	\$12.32
Crested Wheatgrass - Fairway	2.50	11.48	\$8.55
Smooth Brome - Lincoln	4.00	13.31	\$17.44
Intermediate Wheatgrass - Oahe	4.00	8.54	\$15.72
Russian Wildrye - VNS	1.66	6.67	\$9.83
Totals Seed Mix	16.28	85.70	\$65.23

Application

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

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	\$7.34	\$7.34
Total Mulch Materials Cost/Acre				\$7.34

Application

Description	Cost /Acre
Weed spray, truck, non-aquatic area, nox. [DMG]	\$73.22
Total Mulch Application Cost/Acre	\$73.22

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	Cost /Acre:	\$519.30
Estimated Failure Rate:	25%	Cost /Acre*:	\$413.01
*Selected Replanting Work Items: SEEDING,MULCHING			
Initial Job Cost:	\$1,038.60		
Reseeding Job Cost:	\$206.51		
Total Job Cost:	\$1,245		
Job Hours:	6.00		

EQUIPMENT MOBILIZATION/DEMobilIZATIONTask description: MobilizeSite: Fork Horn Mesa SubdivisionPermit Action: 2018 UpdatePermit/Job#: M2008044**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 12/19/2018County: La PlataFilename: M044-004User: LJWAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck 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	\$0.00
Drill/Broadcast Seeder with Tractor	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$0.00

Subtotals: **\$332.21** **\$214.12** **\$0.00****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.	\$12.23	1	\$12.23	\$12.23

Subtotals: **\$12.23** **\$12.23**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>DURANGO</u>	
Total one-way travel distance:	<u>12.00</u>	miles
Average Travel Speed:	<u>40.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$992.22</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$7.34</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.30</u>	<u>0.30</u>
Return Time (Hours):	<u>0.30</u>	<u>0.30</u>
Loading Time (Hours):	<u>0.50</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.50</u>	<u>NA</u>
Subtotals:	<u>1.60</u>	<u>0.60</u>

JOB TIME AND COST

Total job time:	<u>3.20</u>	Hours
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Total job cost:	<u>\$1,000</u>
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