

COST SUMMARY WORK

Task description: Reclamation Cost Estimate Summary -TR2

Site: Ted Franciscotti Pit #1

Permit Action: TR2

Permit/Job#: M2007006

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 6/5/2025

County: Huerfano

Filename: M006-000

User: AMG

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Grade slopes within east disturbance to 3H:1V	DOZER	1	1.62	\$356
002	Grade highwalls within landowner's pit to 3H:1V	DOZER	1	1.53	\$337
003	Grade Out Reject Stockpile	DOZER	1	40.82	\$8,965
004	Spread topsoil over 46 acres	SCRAPER1	1	42.50	\$43,018
005	Revegetate 46 acres	REVEGE	1	46.00	\$102,118
005b	Re-seed 46 acres	REVEGE	1	46.00	\$33,175
006	Mobilization/Demobilization	MOBILIZE	1	6.44	\$7,501
<u>SUBTOTALS:</u>				184.91	\$195,470

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$3,948

Performance bond: 1.05

Total = \$2,052

Job superintendent: 92.46

Total = \$7,329

Profit: 10.00

Total = \$19,547

TOTAL O & P = \$32,877

CONTRACT AMOUNT (direct + O & P) = \$228,347

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$500

Engineering work and/or contract/bid preparation: 4.25

Total = \$9,705

Reclamation management and/or administration: 5.00

\$11,417

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$54,499

TOTAL BOND AMOUNT (direct + indirect) = \$249,969

BULLDOZER WORKTask description: **Grade slopes within east disturbance to 3H:1V**Site: **Ted Franciscotti Pit #1**Permit Action: TR2Permit/Job#: M2007006**PROJECT IDENTIFICATION**Task #: 001State: ColoradoAbbreviation: NoneDate: 5/28/2025County: HuerfanoFilename: 1User: AMGAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D7R DS XR Series IIHorsepower: 240Blade Type: Semi-UniversalAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$90.24</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$78.95</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$9.25</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$2.60</u>	<u>50</u>
Operator Cost/Hour:	<u>\$38.59</u>	<u>NA</u>

Total unit Cost/Hour: \$219.63Total Fleet Cost/Hour: **\$219.63****MATERIAL QUANTITIES**Initial Volume: 902Swell factor: 1.060Loose volume: **956 LCY**Source of estimated volume: 2024 Inspection length est. ~ 1559' L x 15' H slope
2H:1VSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 1,022.9 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: -15 %Average site altitude: 6,100 feetMaterial weight: 2,900 lbs/LCYWeight description: Sand and gravel - Dry**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.000</u>	<u>(CAT HB)</u>
Dozing method:	<u>1.100</u>	<u>(50% SL)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>

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

Net correction: 0.5773

Adjusted unit production: 590.52 LCY/hr

Adjusted fleet production: **590.52** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.372/LCY

Total job time: **1.62** Hours

Total job cost: **\$356**

BULLDOZER WORKTask description: Grade highwalls within landowner's pit to 3H:1VSite: Ted Franciscotti Pit #1 Permit Action: TR2 Permit/Job#: M2007006**PROJECT IDENTIFICATION**

Task #: 002 State: Colorado Abbreviation: None
 Date: 5/28/2025 County: Huerfano Filename: 2
 User: AMG

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine: Cat D7R DS XR Series II
 Horsepower: 240
 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>\$90.24</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$78.95</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$9.25</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$2.60</u>	<u>50</u>
Operator Cost/Hour:	<u>\$38.59</u>	<u>NA</u>

Total unit Cost/Hour: \$219.63
 Total Fleet Cost/Hour: \$219.63

MATERIAL QUANTITIES

Initial Volume: 725
 Swell factor: 1.124
 Loose volume: 815 LCY

Source of estimated volume: 2024 Inspection length est ~ 742.23 L x 10' H slope .75H:1VSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**

Average push distance: 50 feet
 Unadjusted hourly production: 1,022.9 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: -15 %
 Average site altitude: 6,100 feet

Material weight: 2,900 lbs/LCYWeight description: Sand and gravel - Dry**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>0.900</u>	<u>(CAT HB))</u>
Dozing method:	<u>1.100</u>	<u>(50% SL)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>

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

Net correction: 0.5196

Adjusted unit production: 531.50 LCY/hr

Adjusted fleet production: **531.5** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.413/LCY

Total job time: **1.53** Hours

Total job cost: **\$337**

BULLDOZER WORKTask description: **Grade Out Reject Stockpile**Site: **Ted Franciscotti Pit #1** Permit Action: **TR2** Permit/Job#: **M2007006****PROJECT IDENTIFICATION**

Task #: **003** State: **Colorado** Abbreviation: **None**
 Date: **6/5/2025** County: **Huerfano** Filename: **M006-003**
 User: **AMG**

Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**

Basic Machine: **Cat D7R DS XR Series II**
 Horsepower: **240**
 Blade Type: **Semi-Universal**
 Attachment: **3-shank ripper**
 Shift Basis: **1 per day**
 Data Source: **(CRG)**

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$90.24	NA
Operating Cost/Hour:	\$78.95	100
Ripper own. Cost/Hour:	\$9.25	NA
Ripper op. Cost/Hour:	\$2.60	50
Operator Cost/Hour:	\$38.59	NA

Total unit Cost/Hour: **\$219.63**
 Total Fleet Cost/Hour: **\$219.63**

MATERIAL QUANTITIES

Initial Volume: **5,875**
 Swell factor: **1.060**
 Loose volume: **6,228 LCY**

Source of estimated volume: **Inspection Estimate using GE imagery and est 5' H avg.**
 Source of estimated swell factor: **Cat Handbook**

HOURLY PRODUCTION

Average push distance: **300 feet**
 Unadjusted hourly production: **311.1 LCY/hr**

Materials consistency description: **Compacted fill or embankment 0.9**

Average push gradient: **-5 %**
 Average site altitude: **6,100 feet**

Material weight: **2,900 lbs/LCY**Weight description: **Sand and gravel - Dry**

<u>Job Condition Correction Factor</u>	<u>Source</u>
Operator Skill: 0.750	(AVG.)
Material consistency: 0.900	(CAT HB))
Dozing method: 1.100	(50% SL)
Visibility: 1.000	(AVG.)
Job efficiency: 0.830	(1 SHIFT/DAY)

Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4904

Adjusted unit production: 152.56 LCY/hr

Adjusted fleet production: **152.56** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$1.440/LCY

Total job time: **40.82** Hours

Total job cost: **\$8,965**

SCRAPER TEAM WORKTask description: **Spread topsoil over 46 acres**Site: **Ted Franciscotti Pit #1**Permit Action: TR2Permit/Job#: M2007006**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 6/6/2025County: HuerfanoFilename: M006-004User: AMGAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 627G
-Dozer:	NA
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

Cost Breakdown:**Scraper Work Team****Support Equipment****Maintenance Equipment**

	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	NA	NA	NA	NA
Ownership cost/hour:	\$217.39	NA	NA	NA	NA	NA
Operating cost/hour:	\$257.76	NA	NA	NA	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	NA	NA	NA	NA
Ripper op. cost/hour:	NA	NA	NA	NA	NA	NA
Operator cost/hour:	\$30.90	NA	NA	NA	NA	NA
Unit Subtotals:	\$506.05	NA	NA	NA	NA	NA
Number of Units:	2	0	0	0	0	0
Group Subtotals:	Work: \$1,012.10		Support:	\$0.00	Maint:	\$0.00

Total work team cost/hour: **\$1,012.10****MATERIAL QUANTITIES**Initial volume: 37,107

CCY

Swell factor: 1.215Loose volume: **45,085**

LCY

Source of estimated volume: 6" over 46 acres at any one timeSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight:	<u>1,600 lbs/LCY</u>	Struck Volume:	<u>15.70</u>	LCY
Material description:	<u>Top Soil</u>	Heaped Volume:	<u>22.00</u>	LCY
Rated Payload:	<u>52,800 pounds</u>	Average Volume:	<u>18.85</u>	LCY
Payload Capacity:	<u>33.00 LCY</u>	Adjusted Capacity:	<u>18.85</u>	LCY

Cycle Time:Scraper Loading Time: 0.70 MinutesManeuver and Spread Time: 0.60 MinutesJob Condition Correction:

Site Altitude: 6100 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:Road Condition: Hard, smooth, stabilized, surfaced, watered, maintained 2.0Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	2.00	2.00	4.00	2665	0.28

Haul Time: 0.28 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	-2.00	2.00	0.00	2921	0.19

Return Time: 0.19 minutesTotal Scraper team cycle time: 1.77 minutesAdjusted for job conditions: 530.36 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 1,060.71 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 1,060.71 LCY/HourUnadjusted unit production/hour: 638.98 LCY/Hour

Optimal Number of Scrapers per push dozer: _____

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 42.50 HoursUnit cost: \$0.954 /LCYTotal job cost: \$43,018

REVEGETATION WORKTask description: Revegetate 46 acresSite: Ted Franciscotti Pit #1Permit Action: TR2Permit/Job#: M2007006**PROJECT IDENTIFICATION**Task #: 005State: ColoradoAbbreviation: NoneDate: 6/5/2025County: HuerfanoFilename: M006-005User: AMGAgency or organization name: DRMS**TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$456.41

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Hachita	0.90	14.69	\$25.78
Indiangrass - Cheyenne	0.60	1.83	\$7.38
Little Bluestem - Native	0.40	2.39	\$6.16
Sideoats Grama - El Reno	1.00	3.28	\$24.42
Galleta	0.20	0.73	\$11.09
Western Wheatgrass - Native	4.80	12.12	\$43.23
Needlegrass, Green - Lodorm	0.50	2.08	\$4.32
Winter Fat	0.50	1.27	\$23.36
Totals Seed Mix	8.90	38.39	\$145.75

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37
Power mulcher (MEANS 32 91 13.16 0350)	\$157.25
Total Mulch Application Cost/Acre	\$242.63

JOB TIME AND COST

No. of Acres:	<u>46</u>	Cost /Acre:	<u>\$2,066.99</u>
Estimated Failure Rate:	<u>40%</u>	Cost /Acre*:	<u>\$382.39</u>
*Selected Replanting Work Items:	<u>SEEDING</u>		

Initial Job Cost:	<u>\$95,081.54</u>
Reseeding Job Cost:	<u>\$7,035.98</u>
Total Job Cost:	<u>\$102,118</u>
Job Hours:	<u>46.00</u>

REVEGETATION WORKTask description: Re-seed 46 acresSite: Ted Franciscotti Pit #1Permit Action: TR2Permit/Job#: M2007006**PROJECT IDENTIFICATION**Task #: 005BState: ColoradoAbbreviation: NoneDate: 6/6/2025County: HuerfanoFilename: M006-005bUser: AMGAgency or organization name: DRMS**TILLING**

Description	Cost /Acre
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$338.80

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Hachita	0.90	14.69	\$25.78
Indiangrass - Cheyenne	0.60	1.83	\$7.38
Little Bluestem - Native	0.40	2.39	\$6.16
Sideoats Grama - El Reno	1.00	3.28	\$24.42
Galleta	0.20	0.73	\$11.09
Western Wheatgrass - Native	4.80	12.12	\$43.23
Needlegrass, Green - Lodorm	0.50	2.08	\$4.32
Winter Fat	0.50	1.27	\$23.36
Totals Seed Mix	8.90	38.39	\$145.75

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

JOB TIME AND COSTNo. of Acres: 46Cost /Acre: \$721.19Estimated Failure Rate: 20%Cost /Acre*: \$0.00*Selected Replanting Work Items: NONEInitial Job Cost: \$33,174.74Reseeding Job Cost: \$0.00Total Job Cost: \$33,175Job Hours: 46.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mobilization/Demobilization**Site: **Ted Franciscotti Pit #1**Permit Action: **TR2**Permit/Job#: **M2007006****PROJECT IDENTIFICATION**Task #: **006**State: **Colorado**Abbreviation: **None**Date: **6/5/2025**County: **Huerfano**Filename: **6**User: **AMG**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:	\$10.44	\$22.18	\$23.94
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$59.44	\$122.78	\$125.64

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 D7R DS XR Series II	35.93	\$99.49	\$122.78	1	\$222.27	\$122.78	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$41.02	\$59.44	2	\$200.92	\$118.88	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$27.21	\$59.44	1	\$86.65	\$59.44	\$250.00
Cat 627G	41.80	\$217.39	\$122.78	1	\$340.17	\$122.78	\$500.00

Subtotals: **\$850.01** **\$423.88** **\$1,250.00****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.	\$119.71	1	\$119.71	\$119.71

Subtotals: **\$119.71** **\$119.71**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>PUEBLO</u>	
Total one-way travel distance:	<u>43.00</u>	miles
Average Travel Speed:	<u>55.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$7,313.93</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$187.18</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.78</u>	<u>0.78</u>
Return Time (Hours):	<u>0.78</u>	<u>0.78</u>
Loading Time (Hours):	<u>0.83</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.83</u>	<u>NA</u>
Subtotals:	<u>3.22</u>	<u>1.56</u>

JOB TIME AND COST

Total job time:	<u>6.45</u>	Hours
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Total job cost:	<u>\$7,501</u>
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