

December 27, 2023

Russell A. Larsen Kilgore Companies LLC dba Elam Construction 556 Struthers Ave Grand Junction, CO 81501

Re: Woodring Pit - File No. M-1978-323
Kilgore Companies LLC dba Elam Construction
Surety Increase (SI-5)
Post Inspection bond Increase

Dear Russell A. Larsen:

On December 27, 2023 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$707,024.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$422,257.58.

Please see the October 25, 2023 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 (December 27, 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.

The Permittee for this site may be scheduled for a Formal Board Hearing for possible revocation of the permit after February 25, 2024, if the amount of any increased Financial Warranty has not been provided.

Bond Held:	\$284,766.42
Prior Liability:	\$284,766.42
Change in Liability:	\$422,257.58
Revised Liability:	\$707,024.00
Prior Permit Acreage:	27.20



Change in Permit Acreage:	0.00
Revised Permit Acreage:	27.20
Prior Affected Acreage:	27.20
Change in Affected Acreage:	0.00
Revised Affected Acreage:	27.20

If you have any questions, please contact me by telephone at (303) 866-3567 x 8183, or by email at Amy.yeldell@state.co.us.

Sincerely,

Amy C. Yeldell

Amy Geldell

Environmental Protection Specialist

cc: Jon Mueller

M-GR-04

## COST SUMMARY WORK

		<u>CO;</u>	SI SUMIMI	ARI WURK				
Т	ask description: 2	023 update						
Site: Woodring Pit		Pe	Permit Action: SI-5			Permit/Job#: <u>M1978323</u>		
PF	ROJECT IDENTIFICA	<u> TION</u>						
	Task #: ACY Date: 11/20/2023 User: ACY	State: County:	Colorado Mesa		A	Abbreviation: Filename:	None M323-ACY	
	Agency or organizat	ion name: DF	RMS					
<u>TA</u>	ASK LIST (DIRECT CO	OSTS)						
Task	Description			Form Used	Fleet Size	Task Hours	Cost	
01a	Reduce highwalls to 2H	:1V		DOZER	4	101.47	\$179,026	
01b	Transport half of backfil	l for slopes		TRUCK1	2	82.83	\$129,370	
02a	Push topsoil down highy	valls		DOZER	4	1.11	\$1,952	
03a	Rough Grade Pit Floor			DOZER	4	5.53	\$9,752	
04a	Rip compaction on pit fl	oor		RIPPER	4	6.71	\$12,585	
05a	Haul overburden to pit f	loor		TRUCK1	2	51.64	\$80,650	
05b	Spread Overburden on P	it floor		DOZER	4	12.43	\$21,939	
06a	Haul topsoil to pit floor			TRUCK1	2	29.86	\$46,640	
06b	Spread topsoil on pit flo	or		DOZER	4	2.70	\$4,768	
07a	Revegetate affected land	ls		REVEGE	1	40.00	\$54,964	
10a	Initial Mobilization			MOBILIZE	] 1	5.50	\$17,930	
10B	Secondary Mobilization			MOBILIZE	1	5.50	\$2,437	
						1		

## **INDIRECT COSTS**

### **OVERHEAD AND PROFIT:**

Liability insurance: 2.02 Total = \$11,353 Performance bond: 1.05 Total = \$5,901 Total = Job superintendent: 172.64 \$11,235 Profit: 10.00 Total = \$56,201

**SUBTOTALS:** 

TOTAL O & P = \$84,691

345.28

\$562,013

CONTRACT AMOUNT (direct + O & P) = 646,704

### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Engineering work and/or contract/bid preparation: 4.25 Total = \$27,485

Reclamation management and/or administration: 5.00 \$32,335

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$145,011

TOTAL BOND AMOUNT (direct + indirect) = \$707,024

## **BULLDOZER WORK**

Task description:	Redu	ce highwalls to 2H:1V			
: Woodring Pit		Permit Action:	SI-5	Permit/Job#:	M1978323
PROJECT IDEN	NTIFICATIO	<u>ON</u>			
Task #: 01A		State: Colorado		Abbreviation:	None
	)/2023	County: Mesa		Filename:	M323-01a
User: ACY		<u> </u>		•	
Agency or	organization	name: DRMS			
HOURLY EQUI	PMENT CO	OST			
Basic Machine:	Cat D9T - 9				
Horsepower:	405		<del></del>		
Blade Type:	Semi-Unive	rsal			
Attachment:	NA				
Shift Basis:	1 per day		<u></u>		
Data Source:	(CRG)		<u>—</u>		
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/H		\$238.76	NA		
Operating Cost/H		\$162.29	100		
Ripper own. Cost/H		\$0.00	NA		
Ripper op. Cost/H		\$0.00	0		
Operator Cost/H	lour:	\$40.04	NA		
Total unit Cost/Hou	ır: \$441.0	)0			
Total Fleet Cost/Ho					
MATERIAL QU					
Initial Volume:	170,486				
Swell factor: Loose volume:	1.125	7			
Loose volume:	<b>191,797</b> LCY	<u>:                                      </u>			
Source of estimated	l volume:	See staff estimates			
Source of estimated	l swell factor:	Cat Handbook			
HOURLY PROI	<u>DUCTION</u>				
Average push distar	nce:	120 feet			
Unadjusted hourly		1,093.1 LCY/hr			
Materials consisten	cy description:	Consolidated stock	pile 1.0		
Average push gradi Average site altitud		feet			
Material weight:	2,650	lbs/LCY			
Weight description:	Decon	nposed rock - 25% Rock	x, 75% Earth		
Job Condition Corre	ection Factor erator Skill:	0.750	Source (AVG.)		
	onsistency:	1.000	(CAT HB)		
	ng method:	1.000	(GEN.)		
DUZII	Visibility:	1.000	(AVG.)	<del></del>	
	1310111ty.	1.000	(AVU.)		

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:	0.868	(CAT HB)
Blade type:	1.000	(PAT)
		•

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Net correction: 0.4323

Adjusted unit production: 472.55 LCY/hr
Adjusted fleet production: 1890.2 LCY/hr

## **JOB TIME AND COST**

Fleet size: 4 Dozer(s)
Unit cost: \$0.933/LCY

Total job time: 101.47 Hours
Total job cost: \$179,026

# TRUCK/LOADER TEAM WORK

Site:	Woodring Pit		Permit Action	on: SI-5		Permit/Job#: M	1978323
]	PROJECT IDEN	TIFICATION					
=	Task #: 01B		State: Colora	ado	Ab	breviation: No	ne
	Date: 11/20	/2023	County: Mesa			Filename: M3	23-01b
	User: ACY						
	Agency or	organization nar	ne: DRMS				
]	HOURLY EQUI	PMENT COST	<u>r</u>		Shift bas	is: 1 per day	
_	7	Truck Loader Tea		Equipment Descri 730	ption		
	1	Truck Loader Tea		<u>730                                    </u>			
	Supp	ort Equipment -L		D9T - 9SU			
_	D 1 M		imp Area: NA				
	Road M	aintenance –Mot -Wa	or Grader: NA ter Truck: NA				
	Cost Breakdown:	Truck/Los	ader Team Loader	Support I Load Area	Equipment Dump Area	Maintenan Motor Grader	ce Equipment Water Truck
					•		
	ization-machine:	100	100	100	NA	NA	NA
	ership cost/hour:	\$108.06	\$57.78	\$238.76	NA	NA	NA
	rating cost/hour:	\$71.88	\$56.23	\$162.29	NA NA	NA NA	NA NA
	Utilization-riper: r own. cost/hour:	NA NA	\$0.00	\$18.32	NA NA	NA NA	NA NA
	per op. cost/hour:	NA NA	\$0.00	\$1.80	NA NA	NA	NA NA
	erator cost/hour:	\$24.82	\$35.97	\$40.04	NA NA	NA	NA
	Unit Subtotals:	\$204.76	\$149.98	\$442.88	NA	NA	NA
1	Number of Units:	4	2	1	0	0	0
-	Group Subtotals:	Work:	\$1,119.00	Support:	\$442.88	Maint:	\$0.00
,	Total work team co	st/hour: \$1 561	88			I	
	total work team co	3υ 110α1. <u>φ<b>1,501.</b></u>					
]	MATERIAL QU	ANTITIES					
	Initial volume	: 80,093	CCY	Swell	factor: 1.125		
	Loose volume						
	So	urce of estimated	volume: Divis	sion of Reclamation	on, Mining & Safe	ety	
	Source	of estimated swe	ell factor: Cat I	Handbook		•	
		Material Purch					
		10	otal Cost: \$0.00	)			
J	HOURLY PRO	DUCTION					
-	Truck Capacity:						
	Truck Payload (wei	ght) Basis:					
		voi abt. 2 650		Pounds/LCY			
-	Material v						
-		ription: Decom	4	Rock, 75% Earth Pounds			

Truck Travel (Haul & Return) Time:

penetration 5.0

Truck Bed (volume) Basis:						
Struck Volume:	17.10 L	.CY				
Heaped Volume:	22.10 L	.CY				
Average Volume:	19.60 L	CY				
Adjusted Volume:	22.10 L	CY				
Final 7	Гruck Volume E	Based on Number of I	Loader Passes:	18.48	LCY	
<b>Loading Tool Capacity</b>						
			Buc	ket Size Class: N	A	_
Rated Capacity:	5.600	LCY (heaped)				_
Bucket Fill Factor:	1.100	Other - rock/dirt	nixtures (100	0-120%) 1.100		_
Adjusted Capacity:	6.160	LCY				
<b>Job Condition Corrections:</b>		Site	Altitude (ft.):	5400 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:  Excavators and Front Shovels		of Loading Tool Pass	es Required to	Fill Truck:	3 1	passes
Machine Cycle Time vs	- . Job Condition					
Selected Value w						
Track Loaders – No. Cycle Time Elements (min.):	Material Descrip	лион				
Load: NA	Ma	neuver: NA		Dump: 0.100	)	
	-		<del></del>	·		
Wheel and Track Loaders -	Unadjusted Basi	ic Loader Cycle Time	(load, dump, i	naneuver):0	.525 min	utes
Cycle Time Factors				Factor (min.)	Source	_
Material:		o 6" diameter 0.00		0.000	(Cat HB)	_
Stockpile:		ozer piled 10 ft. high		0.000	(Cat HB)	_
Truck Ownership:		- factor not applicable	e 0.00	0.000	(Cat HB)	_
Operation:	Constant opera			-0.040	(Cat HB)	_
Dump Target:	Nominal target		A divistment:	0.000	(Cat HB)	_
		Net Cycle Time Adjusted Loader		-0.040 <b>0.485</b>	_ minutes minutes	
		Net Load Tin		1.070	_ minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.60	Minutes	Adjusted	for site altitude:	0.600	Minute
Truck Load Time:	1.070	Minutes	J	for site altitude:	1.070	Minute
ck Maneuver and Dump Time:	1.00	Minutes	Adjusted	for site altitude:	1.000	Minute
1		_	v	_		_

Road Condition: Rutted dirt, little maintenance, no water, 2" tire

### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	0.00	5.00	5.00	1427	0.403

Haul Time: **0.403** minutes Return Route: Travel Haul Distance Grade (%) Roll. Res Total Res Velocity Seg# Time (Ft) (%) (%) (fpm) (min) 400.00 0.00 5.00 5.00 2646 0.311

Return Time: 0.311 minutes
Total Truck Cycle Time: 3.384 minutes

Loading Tool unit

Production Truck Unit Production

327.66 LCY/Hour Adjusted for job efficiency: 551.08 LCY/Hour Adjusted for job efficiency: 271.96 LCY/Hour Optimal No. of Trucks: 2 Truck(s)

Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 543.91 LCY/Hour Adjusted single truck/loader team production: 543.91 LCY/Hour Adjusted multiple truck/loader team production: 1,087.83 LCY/Hour

## **JOB TIME AND COST**

 Fleet size:
 2
 Team(s)
 Total job time:
 82.83
 Hours

 Unit cost:
 \$1.436
 /LCY
 Total job cost:
 \$129,370

## **BULLDOZER WORK**

Task description:	Push	topsoil down highwall	S			
Woodring Pit		Permit Action:	SI-5		Permit/Job#:	M1978323
PROJECT IDEN	TIFICATIO	<u>ON</u>				
Task #: 02A		State: Colorado			Abbreviation:	None
Date: 11/20/	/2023	County: Mesa			Filename:	M323-02a
User: ACY		<u> </u>			<del>-</del>	
Agency or	organization	name: DRMS				
HOURLY EQUI	PMENT CO	<u>OST</u>				
Basic Machine:	Cat D9T - 9	SU				
Horsepower:	405					
Blade Type:	Semi-Unive	ersal				
Attachment:	NA					
Shift Basis:	1 per day					
Data Source:	(CRG)					
Cost Breakdown:			ı			
			<u>I</u>	<u> Utilization %</u>		
Ownership Cost/He		\$238.76		NA		
Operating Cost/He		\$162.29		100		
Ripper own. Cost/H		\$0.00		NA		
Ripper op. Cost/H	our:	\$0.00		0		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU.	stanta st			NA		
Total unit Cost/Hour Total Fleet Cost/Hour MATERIAL QU.  Initial Volume:  Swell factor:	r: \$441.0 \$1,764 <b>ANTITIES</b> 6,663 1.215	)9		NA		
Total unit Cost/Hour Total Fleet Cost/Hour MATERIAL QU. Initial Volume:	r: \$441.0 \$1,764 ANTITIES 6,663	)9		NA		
Total unit Cost/Hour Total Fleet Cost/Hour MATERIAL QU.  Initial Volume:  Swell factor:	r: \$441.0 \$1,764 ANTITIES 6,663 1.215 8,096 LCY volume:	)9	tion, Mini			
Total unit Cost/Hour Total Fleet Cost/Hour MATERIAL QU.  Initial Volume: Swell factor: Loose volume: Source of estimated	### \$441.0 #### \$441.0 ####################################	09 1.34  Division of Reclama	tion, Mini			
Total unit Cost/Hour Total Fleet Cost/Hour Swell factor:  Loose volume:  Source of estimated Source of estimated  HOURLY PROD  Average push distant	r: \$441.0 \$1,764 ANTITIES 6,663 1.215 8,096 LCY volume: swell factor:	Division of Reclama Cat Handbook  60 feet	tion, Mini			
Total unit Cost/Hour Total Fleet Cost/Hour Initial Volume:  Swell factor: Loose volume:  Source of estimated Source of estimated  HOURLY PROD  Average push distant Unadjusted hourly p	r: \$441.0 s1,764  ANTITIES 6,663 1.215 8,096 LCY volume: swell factor:  PUCTION ace:	Division of Reclama Cat Handbook  60 feet 1,872.0 LCY/hr		ing & Safety		
Total unit Cost/Hour Total Fleet Cost/Hour Initial Volume:  Swell factor: Loose volume:  Source of estimated Source of estimated  HOURLY PROD  Average push distant Unadjusted hourly push Materials consistence	sydescription  \$441.0 \$1,764  ANTITIES  6,663 1.215 8,096 LCY  volume: swell factor:  OUCTION  ace: cydescription	Division of Reclama Cat Handbook  60 feet 1,872.0 LCY/hr		ing & Safety		
Total unit Cost/Hour Total Fleet Cost/Hour Initial Volume:  Swell factor: Loose volume:  Source of estimated Source of estimated  HOURLY PROD  Average push distant Unadjusted hourly p	### ##################################	Division of Reclama Cat Handbook  60 feet 1,872.0 LCY/hr  Compacted fill or one		ing & Safety		
Total unit Cost/Hour Total Fleet Cost/Hour Initial Volume:  Swell factor: Loose volume:  Source of estimated Source of estimated  HOURLY PROD  Average push distant Unadjusted hourly push Materials consistence  Average push gradients	### ### ##############################	Division of Reclama Cat Handbook  60 feet 1,872.0 LCY/hr  Compacted fill or one		ing & Safety		
Total unit Cost/Hour Total Fleet Cost/Hour Particles Fleet Cost/Hour Total Fleet Cost/Hour Particles Fleet Fleet Cost/Hour Particles Fleet	### ### ##############################			ing & Safety		
Total unit Cost/Hour Total Fleet Cost/Hour T	### ### ##############################	Division of Reclama Cat Handbook  60 feet 1,872.0 LCY/hr  Compacted fill or of feet  lbs/LCY oil		ing & Safety ent 0.9  Source		
Total unit Cost/Hour Total Fleet Cost/Hour Part Fleet Cost Fleet Fle	### ### ##############################			ent 0.9  Source (AVG.)		
Total unit Cost/Hour Total Fleet Cost/Hour T	### ### ##############################	Division of Reclama Cat Handbook  60 feet 1,872.0 LCY/hr  Compacted fill or of feet  lbs/LCY oil		ing & Safety ent 0.9  Source		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.9771

Adjusted unit production: 1,829.13 LCY/hr
Adjusted fleet production: 7316.52 LCY/hr

## **JOB TIME AND COST**

Fleet size: 4 Dozer(s)
Unit cost: \$0.241/LCY

Total job time: Total job cost: 1.11 Hours \$1,952

## **BULLDOZER WORK**

Task description:	Rough Grade Pi	t Floor				
: Woodring Pit	Per	mit Action:	SI-5		Permit/Job#:	M1978323
PROJECT IDENTIFI	<u>ICATION</u>					
Task #: 03A	State:	Colorado			Abbreviation:	None
Date: 11/20/2023	County:	Mesa			Filename:	M323-03a
User: ACY						
Agency or organ	nization name:DF	RMS				
HOURLY EQUIPME	NT COST					
Basic Machine: Cat	D9T - 9SU					
Horsepower: 405			<del></del>			
Blade Type: Sen	ni-Universal		<del></del> _			
Attachment: NA						
	er day					
Data Source: (CR	RG)					
Cost Breakdown:						
			<u>Utiliza</u>	tion_%		
Ownership Cost/Hour:		\$238.76	N.			
Operating Cost/Hour:		\$162.29	10	00	<del>_</del>	
Ripper own. Cost/Hour:		\$0.00	N	A	<del></del>	
Ripper op. Cost/Hour:		\$0.00	(	)		
Operator Cost/Hour:		\$40.04	N	A		
MATERIAL QUANT  Initial Volume: 16,12  Swell factor: 1.12:	34					
	51 LCY	_				
		<u>—</u>				
Source of estimated volur Source of estimated swell						
HOURLY PRODUCT	<u> TION</u>					
Average push distance: Unadjusted hourly produc	etion: $\frac{50 \text{ feet}}{2,110.5 \text{ LC}}$	Y/hr				
Materials consistency des	cription: Compa	cted fill or e	mbankment 0.9	)		
Average push gradient: Average site altitude:	0 % 5,400 feet					
Material weight:	2,650 lbs/LCY					
Weight description:	Decomposed rock	- 25% Rock	, 75% Earth			
Job Condition Correction Operator S		750		Source (AVG.)		
Material consiste		900		AT HB))		
Dozing met		000		(GEN.)		
Visib		000		(AVG.)	<del></del>	

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

Net correction: 0.3890

Adjusted unit production: 820.98 LCY/hr
Adjusted fleet production: 3283.92 LCY/hr

## **JOB TIME AND COST**

Fleet size: 4 Dozer(s)
Unit cost: \$0.537/LCY

Total job time: 5.53 Hours
Total job cost: \$9,752

# **BULLDOZER RIPPING WORK**

	Task description:	Rip	compaction on pit floor					
Site	: Woodring Pit		Permit Action:	SI-5	Pe	ermit/Job#	: <u>M19783</u>	323
	PROJECT IDI	ENTIFICAT	<u>ION</u>					
	Task #: 04A	<b>A</b>	State: Colorado		Abb	reviation:	None	
		20/2023	County: Mesa			Filename:	M323-04	la
	User: AC							
	Agency	or organization	n name: DRMS					
	HOURLY EQ	UIPMENT C	<u>OST</u>					
	Basic I	Machine: Ca	nt D9T - 9SU		Horsepower:		405	
	Ripper Att		Shank Ripper	<del></del>	Shift Basis:	1	per day	
	• •		**	<u> </u>	Data Source:		CRG)	
	Cost Breakdown:							
					Utilization %			
		Ownership C		\$238.76	NA	-		
	ъ.	Operating C		\$162.29	100	<u>-</u>		
		er Ownership Coer Operating C		\$18.32 \$8.98	NA 100	=		
	Кірр	Operating C		\$40.04	100 NA	=		
		Total Unit C	-	\$468.39	IVA	_		
		Total Fleet C	<del></del>					
	MATEDIAL C		<u> </u>					
	MATERIAL C		<u>S</u> ele	cted estimating	g method: Area	ì		
	Alternate Method	<u>s:</u>						
Seismic:	NA		Bank Volume:	NA	BCY _		NA	
Area:	20.00	acres	Rip Depth (ft):	1.50	Volume:	48,400		BCY or CCY
		Source of esti	mated quantity: 20 ac p	it floor				
	HOURLY PRO	DUCTION						
	Seismic:							
			Seismic Velocity:	NA	feet/sec	ond		
	Araa:		· -					
	Area:	Avera	ge Ripping Depth:	1.50	feet/pas	s		
			ge Ripping Width:	7.67	feet/pas			
			e Ripping Length:	600.00	feet/pas	S		
			rage Dozer Speed:	88.00	feet/mir			
		_	e Maneuver Time:	0.25	minutes	-		
		Produ	ction per unit area:	0.897	acres/ho	our		
	Job Condition Co	rrection Factor	<u>'S</u>					
	Un	adjusted Hourl	y Unit Production:	0.897	Acres/h	r		
			Site Altitude:	5,400	feet			
			Altitude Adj:	1.00	(CAT H			
			Job Efficiency:	0.83	(1 shift/			
			Net Correction:	0.83	multipli	er		
			Hourly Unit Production: Hourly Fleet Production:	0.74 <b>2.98</b>	Acres/hr Acres/hr			
	JOB TIME AN	ID COST						
	Fleet size:	4	Grader(s)	Total job tim	ne:	6.72	Но	ours
	Unit cost:	\$629,256	Per acre	Total iob co	st: \$1	12.585		

# TRUCK/LOADER TEAM WORK

Task description:	Haul ov	erburden to pit fl	loor			
Site: Woodring Pit		Permit Actio	on: SI-5		Permit/Job#: M	1978323
PROJECT IDE	NTIFICATION	<u>I</u>				
Task #: 05A		State: Colora	do	Ab	breviation: No	
		County: Mesa			Filename: M3	323-05a
User: <u>ACY</u> Agency o	r organization nar	ne: DRMS				
HOURLY EQU	IPMENT COST	 <u>Γ</u>		Shift bas	is: <u>1 per day</u>	
			Equipment Descri	ption		
•	Truck Loader Tea					
Supi	oort Equipment -L		Г 972H D9T - 9SU			
	-Dı	ump Area: NA				<del></del>
Road M	Iaintenance – Mot					
	- w a	ter Truck: NA				
Cost Breakdown:	Truck/Loa	ader Team	Support I	Equipment	Maintenan	nce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	NA	NA
Ownership cost/hour:	\$108.06	\$57.78	\$238.76	NA	NA	NA
Operating cost/hour:	\$71.88	\$56.23	\$162.29	NA	NA	NA
%Utilization-riper:	NA	0	20	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$18.32	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.00	\$1.80	NA	NA	NA
Operator cost/hour:	\$24.82	\$35.97	\$40.04	NA	NA	NA
Unit Subtotals:	\$204.76	\$149.98	\$442.88	NA	NA	NA
Number of Units:	4	2	1	0	0	0
Group Subtotals:	Work:	\$1,119.00	Support:	\$442.88	Maint:	\$0.00
Total work team co	st/hour: <b>\$1,561.</b>	88				
3.5.4 mm p x 1.7. 0 x						
MATERIAL QU	JANTITIES					
Initial volume		CCY	Swell	factor: 1.125		
Loose volume	e: <b>54,45</b>	50 LCY				
	ource of estimated		@ 18"			
Source	e of estimated swe Material Purch		landbook			
		otal Cost: \$0.00				<del></del>
<b>HOURLY PRO</b>	<u>DDUCTION</u>					
Truck Capacity:						
Truck Payload (we			_			
Material		mosad made 250/	Pounds/LCY			
Rated P		posed rock - 25%	Pounds	1		
Payload Ca			LCY			

Truck Travel (Haul & Return) Time:

penetration 5.0

Truck Bed (volume) Basis:						
Struck Volume:	17.10 L	.CY				
Heaped Volume:	22.10 L	.CY				
Average Volume:	19.60 L	CY				
Adjusted Volume:	22.10 L	CY				
Final 7	Гruck Volume E	Based on Number of I	Loader Passes:	18.48	LCY	
<b>Loading Tool Capacity</b>						
			Buc	ket Size Class: N	A	_
Rated Capacity:	5.600	LCY (heaped)				_
Bucket Fill Factor:	1.100	Other - rock/dirt	nixtures (100	0-120%) 1.100		_
Adjusted Capacity:	6.160	LCY				
<b>Job Condition Corrections:</b>		Site	Altitude (ft.):	5400 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:  Excavators and Front Shovels		of Loading Tool Pass	es Required to	Fill Truck:	3 1	passes
Machine Cycle Time vs	- . Job Condition					
Selected Value w						
Track Loaders – No. Cycle Time Elements (min.):	Material Descrip	лион				
Load: NA	Ma	neuver: NA		Dump: 0.100	)	
	-		<del></del>	·		
Wheel and Track Loaders -	Unadjusted Basi	ic Loader Cycle Time	(load, dump, i	naneuver):0	.525 min	utes
Cycle Time Factors				Factor (min.)	Source	_
Material:		o 6" diameter 0.00		0.000	(Cat HB)	_
Stockpile:		ozer piled 10 ft. high		0.000	(Cat HB)	_
Truck Ownership:		- factor not applicable	e 0.00	0.000	(Cat HB)	_
Operation:	Constant opera			-0.040	(Cat HB)	_
Dump Target:	Nominal target		A divistment:	0.000	(Cat HB)	_
		Net Cycle Time Adjusted Loader		-0.040 <b>0.485</b>	_ minutes minutes	
		Net Load Tin		1.070	_ minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.60	Minutes	Adjusted	for site altitude:	0.600	Minute
Truck Load Time:	1.070	Minutes	J	for site altitude:	1.070	Minute
ck Maneuver and Dump Time:	1.00	Minutes	Adjusted	for site altitude:	1.000	Minute
1		_	v	_		_

Road Condition: Rutted dirt, little maintenance, no water, 2" tire

### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	0.00	5.00	5.00	1427	0.473

Haul Time: **0.473** minutes Return Route: Travel Haul Distance Grade (%) Roll. Res Total Res Velocity Seg# Time (Ft) (%) (%) (fpm) (min) 0.00 5.00 5.00 500.00 2646 0.348

Return Time: 0.348 minutes
Total Truck Cycle Time: 3.491 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

317.62 LCY/Hour Adjusted for job efficiency: 551.08 LCY/Hour Adjusted for job efficiency: 263.62 LCY/Hour Optimal No. of Trucks: 2 Truck(s)

Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 527.24 LCY/Hour Adjusted single truck/loader team production: 527.24 LCY/Hour Adjusted multiple truck/loader team production: 1,054.49 LCY/Hour

## **JOB TIME AND COST**

 Fleet size:
 2
 Team(s)
 Total job time:
 51.64
 Hours

 Unit cost:
 \$1.481
 /LCY
 Total job cost:
 \$80,650

## **BULLDOZER WORK**

Task description:	Spre	ad Overbur	den on Pit fl	oor			
: Woodring Pit		Per	mit Action:	SI-5		Permit/Job#:	M1978323
PROJECT IDE	NTIFICATION OF THE PROPERTY OF	<u>ON</u>					
Task #: 05B		State:	Colorado			Abbreviation:	None
Date: 11/2	20/2023	County:	Mesa			Filename:	M323-05b
User: AC'	Y	•				-	
Agency	or organization	name: DI	RMS				
HOURLY EQU	JIPMENT CO	<u>OST</u>					
Basic Machine		SU					
Horsepower							
Blade Type:		ersal		_			
Attachment: Shift Basis:				<del></del>			
Data Source:				_			
	. <u>(CRG)</u>			_			
Cost Breakdown:			1	**	r. 11		
O	/II		¢220.76	<u>U</u>	<u>stilization %</u>		
Ownership Cost/ Operating Cost/			\$238.76 \$162.29		NA 100		
Ripper own. Cost/			\$0.00		NA		
Ripper own. Cost/			\$0.00		0		
Operator Cost/			\$40.04		NA		
MATERIAL Q  Initial Volume: Swell factor:	54,450 1.000						
Loose volume:	<b>54,450</b> LCY						
Source of estimate Source of estimate		Division Cat Hand	of Reclamati lbook	on, Minii	ng & Safety		
<b>HOURLY PRO</b>	<u>DUCTION</u>						
Average push dist Unadjusted hourly		50 feet 2,110.5 LC	Y/hr				
Materials consiste	_		stockpile 1.2				
Average push grad	dient: <u>0 %</u>						
Average site altitu	ide: 5,400	feet					
Material weight:	2,650	lbs/LCY					
		mmacad maals	25% Pook	, 75% Ear	.4		
Weight description	n: Decor	nposed rock	- 23 % ROCK	, , , , , , ,	th		
Job Condition Con	rection Factor	•			Source		
Job Condition Con	rrection Factor perator Skill:	0.	.750		Source (AVG.)		
Job Condition Con Op Material	rection Factor	0.			Source		

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

Net correction: 0.5187

Adjusted unit production: 1,094.72 LCY/hr
Adjusted fleet production: 4378.88 LCY/hr

## **JOB TIME AND COST**

Fleet size: 4 Dozer(s)
Unit cost: \$0.403/LCY

Total job time: 12.43 Hours 
Total job cost: \$21,939

# TRUCK/LOADER TEAM WORK

Task description:	Haul to	psoil to pit fl	oor				
Site: Woodring Pit		Permit .	Actio	on: SI-5		Permit/Job#: N	11978323
PROJECT IDE	ENTIFICATION	<u>I</u>					
Task #: 06A			olora	ado	Ab		one
		County: M	lesa			Filename: M	323-06a
User: AC							
	or organization nai		5				
HOURLY EQU	JIPMENT COS	<u>r</u>	I	Equipment Descri		is: <u>1 per day</u>	
	Truck Loader Tea	ım -Truck:	Cat		ption		
		-Loader:		Г 972Н			
Suj	pport Equipment -I		Cat NA	D9T - 9SU			
Road	ם- Maintenance –Mot	ump Area:	NA NA				
		ater Truck:	NA				
G . D . I I				a		3.6.1	
Cost Breakdown	Truck/Lo	ader Team Loader		Support I Load Area	Equipment Dump Area	Maintena Motor Grader	nce Equipment Water Truck
					-		
%Utilization-machine:	100		.00	100	NA	NA	NA
Ownership cost/hour:	\$108.06	\$57.		\$238.76	NA	NA	NA
Operating cost/hour:	\$71.88	\$56.		\$162.29	NA NA	NA NA	NA NA
%Utilization-riper: Ripper own. cost/hour:	NA NA	0.2	.00	20 \$18.32	NA NA	NA NA	NA NA
Ripper op. cost/hour:	NA		.00	\$1.80	NA	NA NA	NA
Operator cost/hour:	\$24.82	\$35.		\$40.04	NA	NA	NA
Unit Subtotals:	\$204.76	\$149.		\$442.88	NA	NA	NA
Number of Units:	4	Ψ1.2.	2	1	0	0	0
Group Subtotals:	Work:	\$1,119.00		Support:	\$442.88	Maint:	\$0.00
-	cost/hour: <b>\$1,561.</b>			11			
Initial volun	ne: 16,133	(	CCY	Swell	factor: 1.215		
Loose volun	ne: <b>19,60</b>	)2 ]	LCY				
Ş	Source of estimated	l volume: 2	20 ac	e @ 6"			
Sour	ce of estimated sw			Handbook			
	Material Purch		50.00 50.00				
HOURLY PR	ODUCTION						
	222011						
Truck Capacity: Truck Payload (w	eight) Basis:						
	l weight: 1,600			Pounds/LCY			
Des	cription: Top So						
Rated Payload C	Payload: <u>62,000</u> Capacity: <u>38.75</u>	)		Pounds LCY			

penetration 5.0

Truck Bed (volume) Basis:						
Struck Volume:	17.10	LCY				
Heaped Volume:	22.10	LCY				
Average Volume:		LCY				
Adjusted Volume:		LCY				
Trajustea voranie.	22.10	201				
Final	Truck Volume	Based on Number o	f Loader Passes:	18.48	LCY	
Loading Tool Capacity						
			Buck	ket Size Class: N	ΙA	<u> </u>
Rated Capacity:	5.600	LCY (heaped)				
Bucket Fill Factor:	1.100	Other - rock/dia	rt mixtures (100	-120%) 1.100		<del>-</del>
Adjusted Capacity:	6.160	LCY				_
<b>Job Condition Corrections:</b>		S	ite Altitude (ft.): 5	5400 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HB	)		
Job Efficiency:	0.830	0.830	(CAT HB			
300 Efficiency.	0.030	0.030	(CITI IID			
Net Correction:	0.830	0.830				
Excavators and Front Shovel	<u>s:</u>	r of Loading Tool Pa	isses Required to I	Fill Truck:		passes
Machine Cycle Time vs Selected Value v	vithin this Basi	c Rating: NA				
Track Loaders – 1	Material Descr	ription:				
Cycle Time Elements (min.):						
Load: NA	N	Ianeuver: NA		Dump: 0.100	)	
Wheel and Track Loaders -	Unadjusted Ba	asic Loader Cycle Ti	me (load, dump, n	naneuver):0	0.525 min	utes
Cycle Time Factors				Factor (min.)	Source	
Material:	Material 3/4'	' to 6" diameter 0.00		0.000	(Cat HB)	_
Stockpile:	Conveyor or	dozer piled 10 ft. hig	th and up 0.00	0.000	(Cat HB)	_
Truck Ownership:	No adjustmen	nt - factor not applica	able 0.00	0.000	(Cat HB)	<del>_</del>
Operation:	Constant ope	ration -0.04		-0.040	(Cat HB)	
Dump Target:	Nominal targ	et 0.00		0.000	(Cat HB)	
		Net Cycle Tir	ne Adjustment:	-0.040	minutes	
		Adjusted Load	er Cycle Time:	0.485	minutes	
		Net Load T	ime per Truck: _	1.070	minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.60	Minutes	Adjusted	for site altitude:	0.600	Minute
Truck Load Time:	1.070	Minutes	Adjusted	for site altitude:	1.070	Minute
ck Maneuver and Dump Time:	1.00	Minutes	Adjusted	for site altitude:	1.000	Minute
Truck Travel (Haul & Return	) Time:	Road Condition:	Rutted dirt, little 1	naintenance, no wa	ater, 2" tire	_

### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2700.00	-5.00	5.00	0.00	3080	1.144

Haul Time: 1.144 minutes

Return Ro	Return Route:							
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)		
1	2700.00	5.00	5.00	10.00	1561	1.794		

Return Time: 1.794 minutes
Total Truck Cycle Time: 5.608 minutes

Loading Tool unit

Production 663.95 LCY/Hour Adjusted for job efficiency: 551.08 LCY/Hour Truck Unit Production 197.72 LCY/Hour Adjusted for job efficiency: 164.11 LCY/Hour

Optimal No. of Trucks: 3 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 328.21 LCY/Hour Adjusted single truck/loader team production: 328.21 LCY/Hour Adjusted multiple truck/loader team production: 656.42 LCY/Hour

## **JOB TIME AND COST**

 Fleet size:
 2
 Team(s)
 Total job time:
 29.86
 Hours

 Unit cost:
 \$2.379
 /LCY
 Total job cost:
 \$46,640

## **BULLDOZER WORK**

Task description:	Spread topsoil	on pit floor			
: Woodring Pit	P	ermit Action:	SI-5	Permit/Job#:	M1978323
PROJECT IDENTIFI	CATION				
Task #: 06B	State	: Colorado		Abbreviation:	None
Date: 11/20/2023	County			Filename:	M323-06b
User: ACY				-	
Agency or organ	nization name' I	ORMS			
		<u> </u>			
<b>HOURLY EQUIPME</b>	NT COST				
Basic Machine: _Cat	D9T - 9SU				
Horsepower: 405			<u> </u>		
Blade Type: Sem	ni-Universal				
Attachment: NA			<u> </u>		
	er day		<u> </u>		
Data Source: (CR	(G)		<u>—</u>		
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/Hour:		\$238.76	NA		
Operating Cost/Hour:		\$162.29	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$40.04	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$441.09 <b>\$1,764.34</b>				
Total Fleet Cost/Hour:  MATERIAL QUANT  Initial Volume: 19,60 Swell factor: 1.000	\$1,764.34 <u>ITIES</u> )2				
Total Fleet Cost/Hour:  MATERIAL QUANT  Initial Volume: 19,60 Swell factor: 1.000	\$1,764.34 <u>ITIES</u> )2				
Total Fleet Cost/Hour:  MATERIAL QUANT  Initial Volume: 19,60 Swell factor: 1.000	\$1,764.34  ITIES  )2 ) )2 LCY ne: Divisio		on, Mining & Safety		
Total Fleet Cost/Hour:  MATERIAL QUANT  Initial Volume: 19,60 Swell factor: 1.000 Loose volume: 19,60 Source of estimated volume	\$1,764.34  ITIES  )2 ) 02 LCY  ne: Divisio Cat Hai		on, Mining & Safety		
Total Fleet Cost/Hour:  MATERIAL QUANT  Initial Volume: 19,60  Swell factor: 1.000  Loose volume: 19,60  Source of estimated volum  Source of estimated swell	\$1,764.34  ITIES  02  0 D2 LCY  ne: Divisio Cat Hair  CION  0 feet	ndbook	on, Mining & Safety		
Total Fleet Cost/Hour:  MATERIAL QUANT  Initial Volume: 19,60 Swell factor: 1.000 Loose volume: 19,60 Source of estimated volum Source of estimated swell  HOURLY PRODUCT  Average push distance:	\$1,764.34  ITIES  02 0 02 LCY  ne: Divisio Cat Har  ION  10 feet 2,110.5 L	ndbook	on, Mining & Safety		
Total Fleet Cost/Hour:  MATERIAL QUANT  Initial Volume: 19,60 Swell factor: 1.000 Loose volume: 19,60 Source of estimated volum Source of estimated swell  HOURLY PRODUCT  Average push distance: Unadjusted hourly product	\$1,764.34  ITIES  02 0 02 LCY  ne: Divisio Cat Har  ION  10 feet 2,110.5 L	ndbook CY/hr	on, Mining & Safety		
Total Fleet Cost/Hour:  MATERIAL QUANT  Initial Volume: 19,60 Swell factor: 1.000 Loose volume: 19,60 Source of estimated volum Source of estimated swell  HOURLY PRODUCT  Average push distance: Unadjusted hourly product  Materials consistency descriptions  Average push gradient:	\$1,764.34  ITIES  D2  D2 LCY  ne: Divisio Cat Han  CION  10 feet 2,110.5 L  cription: Loos  0 %	ndbook CY/hr	on, Mining & Safety		
MATERIAL QUANT  Initial Volume: 19,60 Swell factor: 1,000 Loose volume: 19,60 Source of estimated volum Source of estimated swell  HOURLY PRODUCT  Average push distance: Unadjusted hourly product  Materials consistency descriptions  Average push gradient: Average site altitude:	\$1,764.34  ITIES  D2  D2 LCY  ne: Divisio	ndbook CY/hr	on, Mining & Safety		
Total Fleet Cost/Hour:  MATERIAL QUANT  Initial Volume: 19,60 Swell factor: 1.000 Loose volume: 19,60 Source of estimated volum Source of estimated swell  HOURLY PRODUCT  Average push distance: Unadjusted hourly product  Materials consistency desc  Average push gradient: Average site altitude:  Material weight:  Weight description:  Job Condition Correction	\$1,764.34  ITIES  D2  D2 LCY  ne: Divisio Cat Har  ION  ction: 0 feet 2,110.5 L  cription: Loos  0 %  5,400 feet  1,600 lbs/LCY  Top Soil  Factor	CY/hr e stockpile 1.2	Source		
Total Fleet Cost/Hour:  MATERIAL QUANT  Initial Volume: 19,60 Swell factor: 1.000 Loose volume: 19,60 Source of estimated volum Source of estimated swell  HOURLY PRODUCT  Average push distance: Unadjusted hourly product  Materials consistency descard Average push gradient: Average site altitude:  Material weight:  Weight description:  Job Condition Correction Operator S	\$1,764.34  ITIES  D2  D2  D2 LCY  ne:	CY/hr e stockpile 1.2	Source (AVG.)		
Total Fleet Cost/Hour:  MATERIAL QUANT  Initial Volume: 19,60 Swell factor: 1.000 Loose volume: 19,60 Source of estimated volum Source of estimated swell  HOURLY PRODUCT  Average push distance: Unadjusted hourly product  Materials consistency desc  Average push gradient: Average site altitude:  Material weight:  Weight description:  Job Condition Correction	\$1,764.34  ITIES  D2  D2	CY/hr e stockpile 1.2	Source		

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: 1,813.55 LCY/hr
Adjusted fleet production: 7254.2 LCY/hr

## **JOB TIME AND COST**

Fleet size: 4 Dozer(s)
Unit cost: \$0.243/LCY

Total job time: 2.70 Hours
Total job cost: \$4,768

# **REVEGETATION WORK**

ite: Woodring Pit		Per	rmit Action: SI-5	Permit/Job	o#: M1978323
PROJECT I	DENTIFICA :	<u> FION</u>			
_	07A 11/20/2023 ACY	State: County:	Colorado Mesa	Abbreviation: Filename:	None M323-07a
Ager	ncy or organizati	ion name: <u>DF</u>	RMS		

## Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
10-34-0, 18-46-0, 5-10-5	100.00	pound	\$0.50	\$49.67
			Total Fertilizer Materials	
			Cost/Acre	\$49.67

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$41.82
	<b>Total Fertilizer Application Cost/Acre</b>	\$41.82

# **TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

# **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Crested Wheatgrass - Ephraim	2.40	11.02	\$10.38
Sand Dropseed	0.20	23.88	\$1.95
Burnett, Small (or Little) - Delar	8.00	10.10	\$20.00
Pubescent Wheatgrass - Luna	5.60	11.57	\$19.04
Galleta	4.80	17.52	\$107.28
Rabbitbrush, Rubber	0.24	3.58	\$15.43
Saltbush, Four Wing	2.00	2.75	\$25.00
Totals Seed Mix	23.24	80.42	\$199.08

## Application

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

## **MULCHING and MISCELLANEOUS**

### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$4.01	\$4.01
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$429.79	\$429.79
Total Mulch Materials Cost/Acre				\$433.79

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$74.46
Power mulcher (MEANS 32 91 13.16 0350)		\$147.67
Weed spray, truck, non-aquatic area, nox. [DMG]		\$62.72
	<b>Total Mulch Application Cost/Acre</b>	\$284.85

## **NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
	\$0.00				

## **JOB TIME AND COST**

 No. of Acres:
 28.26
 Cost /Acre:
 \$1,389.25

 Estimated Failure Rate:
 40%
 Cost /Acre\*:
 \$1,389.25

\*Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,MU

LCHING

Initial Job Cost: \$39,260.21

Reseeding Job Cost: \$15,704.08

Total Job Cost: \$54,964

40.00

## EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Initial Mobilization	1		
ite: Woodring Pit	Permi	t Action: SI-5	Permit/Jo	ob#: M1978323
PROJECT IDENTIFICA	ATION			
Task #: 10A	State: C	Colorado	Abbreviation:	None
Date: 11/20/2023	County: N	Mesa	Filename:	M323-10a
User: ACY				
Agency or organiz	ation name: DRM	S		
Truck Tractor I			Shift basis: Cost Data Source: AY TRUCK TRACTOR, 6X4 400 HP (2ND HALF, 2006)	,
Truck Trailer I	Description: ———		NG GOOSENECK, DROP DEG RAILER (25T, 50T, AND 100T	•
Cost Breakdown:				
<b>Available Rig Capacities</b>	0-25 Tons	26-50 Tons	51+ Tons	
Ownership Cost/Hou		\$36.04	\$47.05	
Operating Cost/Hou		\$76.08	\$82.85	
Operator Cost/Hor	ar: \$22.52	\$22.52	\$22.52	

## **NON ROADABLE EQUIPMENT:**

Total Unit Cost/Hour:

Helper Cost/Hour:

\$0.00

\$82.29

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	(TONS)		t		fleet		
Cat D9T - 9SU	66.13	\$257.08	\$175.95	4	\$1,732.12	\$703.80	\$250.00
Cat 730	25.19	\$108.06	\$82.29	4	\$761.40	\$329.16	\$250.00
CAT 972H	28.00	\$57.78	\$158.17	2	\$431.90	\$316.34	\$500.00
Drill/Broadcast	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00
(Bowie LD-90)							

\$23.53

\$158.17

\$23.53

\$175.95

Subtotals: \$3,122.67 \$1,513.88 \$1,500.00

## **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	\$92.68	1	\$92.68	\$92.68
Light Duty Pickup, 4x4, 3/4 T.	\$116.86	2	\$233.72	\$233.72

Subtotals:	\$326.40	\$326.40

\$17,359.30

## **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: GRAND JUNCTION,

Task # 10A

CO Total one-way travel distance: 35.00 miles

Average Travel Speed: 40.00 mph

Total Non-Roadable Mob/Demob Cost \*

'\* two round trips with haul rig:

Total Roadable Mob/Demob Cost \*\* \$571.20 \*\* one round trip, no haul rig:

### **Transportation Cycle Time:**

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.88	0.88
Return Time (Hours):	0.88	0.88
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.75	1.75

### **JOB TIME AND COST**

Total job time: 5.50 Hours

Total job cost: \$17,930

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Sec	ondary Mobiliza	ation		
te: Woodring Pit	Permit	t Action: SI-5	Permit/J	Tob#: <u>M1978323</u>
PROJECT IDENTIFICAT	<u>ION</u>			
Task #: 10B	State: C	olorado	Abbreviation	: None
Date: 11/20/2023 User: ACY	County: N	lesa	Filename	: M323-10B
Agency or organizatio	n name: DRMS	5		
EQUIPMENT TRANSPOR	T RIG COST			
			Shift basis:	1 per day
			Cost Data Source:	CRG Data
Truck Tractor Desc	eription: GENI		AY TRUCK TRACTOR, 6X4 400 HP (2ND HALF, 2006)	, DIESEL POWERED,
Truck Trailer Desc	cription:		IG GOOSENECK, DROP DE	CK EQUIPMENT
		TR	AILER (25T, 50T, AND 1007	Γ)
Cost Breakdown:				
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05	
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85	
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52	
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53	

### **NON ROADABLE EQUIPMENT:**

Total Unit Cost/Hour:

\$82.29

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	COSt/III/ Heet	Cost/ freet
	(TONS)		ι		fleet		
Drill/Broadcast	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00
(Bowie LD-90)							

\$158.17

\$175.95

Subtotals: \$197.25 \$164.58 \$500.00

## **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.	\$116.86	2	\$233.72	\$233.72

Subtotals: \$233.72 \$233.72

## **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: GRAND JUNCTION,

Task # 10B

Total one-way travel distance: CO mi

Total one-way travel distance: 35.00 miles
Average Travel Speed: 40.00 mph

Total Non-Roadable Mob/Demob Cost \*

'\* two round trips with haul rig:

Total Roadable Mob/Demob Cost \*\*

\*\* one round trip, no haul rig:

\$409.01

\$2,027.70

### **Transportation Cycle Time:**

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.88	0.88
Return Time (Hours):	0.88	0.88
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.75	1.75

### **JOB TIME AND COST**

Total job time: 5.50 Hours

Total job cost: \$2,437



November 20, 2023

Jim Doody Kilgore Companies LLC dba Elam Construction 556 Struthers Ave Grand Junction, CO 81501

RE: Woodring Pit, Permit No. M-1978-323, Proposed Surety Increase SI-5

Dear Mr. Doody:

This reclamation cost update was in response to the site inspection conducted on October 25, 2023. It is Division policy to periodically update its costs to ensure that the Financial Warranty adequately, reflects the actual current cost of fulfilling the requirements of the approved reclamation plan.

The bond was last recalculated in 2018 with SO-2. Below is a table summarizing input values that have been updated in since the SO-2 calculation. This table does not account for price changes resulting from inflation or other RS Means cost changes. Bond calculations are based on a combination of field observations and worst case scenario based on the approved reclamation plan.

Task	Form Used	Description
01a	Dozer	Highwall reduction grade to 2H: 1V = 170,486 CCY
		70'H x 500 LF @ vertical backfill = 90,741
		20'H x 150LF + 900 LF @ vert cut/fill = 3,889
		15'H x 600LF @ 1H: 1V cut/fill = 625
		50'H x 1500 LF @ 1H: 1V backfill = 69,444
		50'H x 500 LF @ 1H: 1V cut/fill = 5,787
		Previously: 68,865 CY - 50'H x 300 LF @ Vertical cut/fill = 5,208, 50'H X 1100 LF @ 1H: 1V cut/fill = 12,731, 50'H x 1100 LF @ 1H: 1V backfill = 50,926



01b	Truck	Transport half of material for backfill of slopes = 80,093 CCY 400 yrd haul @ 0%
-	-	No slope overburden replacement, backfill/ grading material is overburden
02a	Dozer	Push topsoil down highwalls = 6,663 CY 120' slope length 3,000 LF = 8.26 ac @ 6" Avg 60 yrd push, -25%
03a	Dozer	Rough Grade Pit Floor – No Changes Prev: 20 ac @ 6" = 16,134 CCY, 50' push
04a	Ripper	Rip Pit Floor - No changes 20 ac
05a	Truck	Haul overburden to pit floor 20 ac @ 18" = 48,400 CCY (no change to volume), haul 500 LF 0%
05b	Dozer	Spread overburden on pit floor 54,450 LCY, 50' push
06a	Truck	Haul topsoil to pit floor 20 ac @ 6" = 16,133 CCY (no change to volume), haul 2700 LF -5%
06b	Dozer	Spread topsoil on pit floor 19,602 LCY, 50' push
07a	Reveg	<ul> <li>Reveg 28.26 acres</li> <li>Recommend TR to remove straw. If slopes are 2H:1V too steep to drill seed straw is impractical. Needs hydromulched if desired.</li> <li>Also remove fertilizer unless soil samples deem necessary</li> </ul>
10a	Mob	Update equipment used
10b	Mob	Update equipment used

Per policy I wanted to send this out for review prior to issuance. Please look it over and let me know if there are errors or concerns. If no response is received by **Monday, January 22, 2024** then I'll issue SI-5 as is. SI-5 will result in a total required bond amount of \$707,024, which is an increase of \$422,257.58 over the \$284,766.42 currently held.

Sincerely,

Amy Yeldell

**Environmental Protection Specialist** 

Amy Geldell

Ec:

Travis Marshall, Senior EPS, Grand Junction DRMS