

July 17, 2023

Nathan/ Jason Rinderle Upland Gravel, LLC 3202 Springfield Rd Grand Junction, CO 81503

RE: Upland Gravel Pit Np. 3, Permit No. M-2005-077, Proposed Surety Increase (SI-1)

Dear Mr. Rinderle:

This reclamation cost update was in response to the site inspection conducted on July 5, 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 2005 and no increases have occurred since the permit issuance. Below is a table summarizing input values that have been updated based on site conditions. 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.

General Assumptions:

- All slopes go to a 3H: 1V or less. No need for backfill at this time.
- 2 ft overburden replacement and 1 foot topsoil replacement. Stockpiles are centrally located with an average centroid to centroid distance of approx. 300'
- Pocking of slopes per rec plan.
- Broadcast seed, Disk 6", mulch w/ 2 ton/ac of straw, weed treatment of Halogeton
- Overall seeding amount higher than 2D area depicted on map due to sloping 12.5 ac vs 13.1
- Decreased seeding failure form 60% to 50% based on previous success.
- Currently hold, \$57,785. In a corporate surety. No increases since permit issuance in 2006.

Problems:

• Rec Plan states max of 6 ac requiring reveg, this needs to be revised

Suggestion/ Edits:

• Change seeding to drill seeding since you're already disking the pockets. Would reduce overall seed cost. Or propose dropping pocking in general unless necessary, cross ripping is usually sufficient.



- Provide the number of acres for which overburden has already been replaced if any.
- What's the number of acres reclaimed in Phase 1 and 2? This area can be subtracted from the total amount needing overburden, topsoil and reveg.
- In general provide updated/corrected values for any of the inputs listed below. Be sure to include a source.
- Can make one or several revisions under one Technical Revision (TR) for the same fee.

Task	Form Used	Description
01a	Excavator	Phase 1- Pull back slopes – 3738 CY 300 LF, Vertical, 15'H
01b	Dozer	Phase 1 & 2 - Highwall Reduction – 1557 CY 500 LF, Vertical, @ 15' H, cut fill
01c	Dozer	Phase 4 - Highwall Reduction - 4049 CY 1,300 LF, Vertical, @ 15' H, cut fill
02a	Scraper	Overburden Replacement Pit Floor 33,234 CY Phase 1, 2 and 4 bottoms ~10.3 ac @ 2' 300' avg push
02b	Grader	Ripping Pit Floor Phase 1, 2 and 4 bottoms ~10.3 ac
02c	Scraper	Topsoil Replacement Pit Floor 16,617 CY Phase 1, 2 and 4 bottoms ~10.3 ac @ 1' 300' avg push
03a	Scraper	Overburden Replacement Slopes 9,034 CY Phase 1, 2 and 4 (47'x 2100 LF) 2.8 ac @2' 300' avg push
03b	Scraper	Topsoil Replacement Slopes 4,517 CY Phase 1, 2 and 4 (47'x 2100 LF) 2.8ac @ 1' 300' avg push
03c	Excavator	Pocketing Slopes 4517 CY Phase 1, 2 and 4 (47'x 2100 LF) = 2.8ac * 2' D / 2(half area)

04a	Grader	Rip Haul Road (1.75 ac) 3800LF * 20' W
05a	Reveg	Phase 1 Reveg ~4.15 ac
05b	Reveg	Phase 2 Reveg ~4.45 ac
05c	Reveg	Phase 4 Reveg ~4.49 ac
05d	Reveg	Haul Road Reveg ~1.75ac
10a	Mob	Initial Mobilization D9 x 4, 637 x 2, 345 x 1, 14M x 1, 2500 gal x 1, Power mulcher, Crimper, Tractor, Crew Truck x 2, Flatbed x 1
10b	Mob	Secondary Mobilization Power mulcher, Crimper, Tractor, Crew Truck x 2
Indirect		BLM Requires Davis Bacon Wages (equivalent to DRMS costs) DRMS has statutory 23.5% cost (32-32.5-117(4)(b)(i)), cumulative of all indirect costs

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. As noted you may also wish to revise your reclamation plan. If no response is received by **Friday, September 22, 2023** then I'll issue SI-1 the following Monday as is. SI-1 will result in a total required bond amount of **\$306,321**, which is <u>an increase of \$248,536</u> over the \$57,785 currently held.

Please feel free to contact me with any further questions. Amy Yeldell at the Division of Reclamation, Mining and Safety, Rm 215, 1001 E 62nd Ave, Denver CO 80216. Direct contact can be made by phone at 303-866-3567 Ext 8183 or via email at amy.yeldell@ state.co.us

Sincerely,

Amy Geldell

Amy Yeldell Environmental Protection Specialist

COST SUMMARY WORK

Task descr	ption:	Post inspection	ipdate 07-05	-2023		
te: Upland	Gravel Pit No.	3 Per	rmit Action:	07-2023	Permit/Jol	o#: <u>M2005077</u>
<u>PROJECT</u>	<u>IDENTIFIC</u>	CATION				
Task #:	ACY	State:	Colorado		Abbreviation:	None
Date:	7/17/2023	County:	Mesa		Filename:	M077-ACY
User:	ACY		-			

TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	
Task	Description	Used	Size	Hours	Cost
01a	Phase 1- Pull back slopes	EXCAVATE	1	7.34	\$1,945
01b	Phase 1 & 2- Highwall Reduction	DOZER	4	0.69	\$1,268
01c	Phase 4 - Highwall Reduction	DOZER	4	1.79	\$3,298
02a	Overburden Replacement Pit Floor	SCRAPER1	1	28.87	\$93,149
02b	Ripping Pit Floor	GRADER	1	7.84	\$2,343
02c	Topsoil Replacement Pit Floor	SCRAPER1	1	14.11	\$45,540
03a	Overburden Replacement Slopes	SCRAPER1	1	7.85	\$25,321
03b	Topsoil Replacement Slopes	SCRAPER1	1	3.84	\$12,319
03c	Pocketing Slopes	EXCAVATE	1	8.87	\$2,350
04a	Rip Haul Road	GRADER	1	1.33	\$398
05a	Phase 1 Reveg	REVEGE	1	8.30	\$11,726
05b	Phase 2 Reveg	REVEGE	1	8.90	\$12,573
05c	Phase 2 Reveg	REVEGE	1	8.90	\$12,573
05d	Haul Road Reveg	REVEGE	1	3.50	\$4,945
10a	Initial Mobilization	MOBILIZE	1	2.50	\$12,931
10b	Secondary Mobilization	MOBILIZE	1	2.50	\$1,521
		<u>SUBTO</u>	TALS:	117.13	\$244,200

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$4,933
Performance bond:	1.05	Total =	\$2,564
Job superintendent:	58.56	Total =	\$3,811
Profit:	10.00	Total =	\$24,420
		TOTAL O & P =	\$35,728
		CONTRACT AMOUNT (direct + O & P) = $($	\$279,928

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	4.25	Total =	\$11,897
Reclamation management and/or administration:	<u>5.00</u>	-	\$13,996
CONTINGENCY:	0.00	Total =	\$0
	TOTAL IN	DIRECT COST =	\$62,121
TOTAL BO	ND AMOUNT (d	irect + indirect) =	\$306,321

HYDRAULIC EXCAVATOR WORK

Task description:	Phase 1- Pull ba	ck slopes				
Upland Gravel Pit No.	.3 Per	mit Action:	07-2023	Per	mit/Job#	: M2005077
PROJECT IDENTIFI	CATION					
Task #: 01A Date: 7/17/2023 User: ACY	State: County:	Colorado Mesa			viation: lename:	None M077-01a
Agency or organ	ization name: DI	RMS				
HOURLY EQUIPME	NT COST					
	Cat 345D L 12'-10 ROPS Cab	" Stick		Horsepower: /eight (MT): Shift Basis:		380 49.37 per day
]	Data Source:		CRG)
Cost Breakdown:						
Ownership Cost/H	lour: \$121	.73	Utilization % NA			
Operating Cost/H			100	_		
Operator Cost/H		87	NA	-		
Total Unit Cost/H	lour: \$264	.74		_		
Total Fleet Cost/I	Hour: \$264	.74				
MATERIAL QUANT	ITIES					
	738 738	CCY LCY	Swell facto	r: <u>1.000</u>		
HOURLY PRODUCT Excavator Cycle Time (lo		aded, dump l	bucket, swing empt	<u>y):</u>		
		Basic Job C	Condition Description	on: AVERAG	GΕ	
	Secondary Job Co	ondition with	hin Basic Description		GE	
			Cycle Time Val	ue: 0.315		minutes
Load Bucket Capacity				Bucket Size Cl	ass: M	edium
Rated Capacity:		LCY (he				
Bucket Fill Factor:			ay; Earth (100%-10	1.025 (1.025)		
Adjusted Capacity: Job Condition Correction		_ LCY	Sita	Altitude: <u>5000</u> f	aat	
Job Condition Confection	<u>Pactors</u>	Source		Annuae. <u>5000</u> I		
Altitude Adj:	1.00	(CAT H				
Job Efficiency:	0.83	(1 shift/d				
Net Correction:	0.83	multiplie				
	djusted Hourly Unit			LCY/Hour		
	djusted Hourly Unit ljusted Hourly Fleet			LCY/Hour LCY/Hour		
JOB TIME AND COS	• •	i rouucuon:	200.03			
Fleet size: 1	Excavat	or T	otal job time:	7.35		Hours
		οι I		1.00		-
Unit cost: \$0.5	20 /LCY		Total job cost:	\$1,945		_

Page 1 of 2

BULLDOZER WORK

Task description:	I hase I	u 2- 1115	hwall Redu			
Upland Gravel Pit	No. 3	Perr	nit Action:	07-2023	Permit/Job#:	M2005077
PROJECT IDENT	IFICATION	1				
Task #: 01B Date: 7/17/202 User: ACY		State: County:	Colorado Mesa		Abbreviation: Filename:	None M077-01b
Agency or or	ganization na	me: DR	MS			
HOURLY EQUIPM	MENT COS	<u>T</u>				
	Cat D9T - 9SU	J				
I	405					
· · ·	Semi-Universa					
	3-shank ripper	•				
	l per day					
	(CRG)					
Cost Breakdown:						
				Utilization %		
Ownership Cost/Hou			\$238.76	NA		
Operating Cost/Hou			\$162.29	100		
Ripper own. Cost/Hou			\$18.32	NA		
Ripper op. Cost/Hou	-		\$0.00	0		
Operator Cost/Hou	r:		\$40.04	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN		2				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume:1,	\$1,837.6	2				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>1</u> , Swell factor: <u>1</u> .	\$1,837.6 NTITIES 557	2				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1, Swell factor: 1. Loose volume: 2, Source of estimated volume: 5	\$1,837.6 NTITIES 557 330 071 LCY olume: vell factor:			on, Mining & Safety		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1, Swell factor: 1. Loose volume: 2, Source of estimated volume 1.	\$1,837.6 NTITIES 557 330 071 LCY olume: vell factor:	Division of		on, Mining & Safety		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1, Swell factor: 1. Loose volume: 2, Source of estimated volume: 5	\$1,837.6 NTITIES 557 330 071 LCY blume: vell factor: CTION	Division of		on, Mining & Safety		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1, Swell factor: 1. Loose volume: 2, Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance	\$1,837.6 NTITIES 557 330 071 LCY blume: vell factor: CTION :50	Division of Cat Handl	book	on, Mining & Safety		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1, Swell factor: 1. Loose volume: 2, Source of estimated vo Source of estimated sw HOURLY PRODU	\$1,837.6 NTITIES 5557 330 071 LCY olume: vell factor: CTION : 50 duction: 2,	Division of Cat Hand) feet 110.5 LCY	book Y/hr	 on, Mining & Safety mbankment 0.9		
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Total Fleet Cost/Hour: MATERIAL QUAI Initial Volume: 1, Swell factor: 1. Loose volume: 2, Source of estimated volume: 2, Source of estimated volume: 2, Source of estimated volume: 0, Average push distance 0, Unadjusted hourly pro 0, Materials consistency of 0, Average push gradient 0, Average site altitude: 0, Material weight: 0, Weight description: 0,	\$1,837.6 NTITIES 557 330 071 LCY olume: vell factor: vell factor: CTION : 50 description: : 0 %	Division of Cat Handl) feet 110.5 LCY Compac et s/LCY	book Ý/hr 			
Total Fleet Cost/Hour: MATERIAL QUAI Initial Volume: 1, Swell factor: 1. Loose volume: 2, Source of estimated volume: 2, Source of estimated volume: 2, Source of estimated volume: 0, Average push distance 0, Unadjusted hourly pro 0, Materials consistency of 0, Average push gradient 0, Average site altitude: 0, Material weight: 0, Weight description: 1, Lob Condition Correctit 1,	\$1,837.6 NTITIES 557 330 071 LCY olume: vell factor: vell factor: CTION : 50 description: : 0 %	Division of Cat Handl) feet 110.5 LCY Compacet s/LCY osed rock	book Y/hr cted fill or ei - 50% Rock,			
Total Fleet Cost/Hour: MATERIAL QUAI Initial Volume: 1, Swell factor: 1. Loose volume: 2, Source of estimated volume: 2, Source of estimated volume: 2, Source of estimated volume: 0, Average push distance 0, Unadjusted hourly pro 0, Materials consistency of 0, Average push gradient 0, Average site altitude: 0, Material weight: 0, Weight description: 1, Lob Condition Correctit 1,	\$1,837.6 NTITIES 557 330 071 LCY olume: vell factor: vell factor: CTION :	Division of Cat Handl) feet 110.5 LCY Compacet 5/LCY osed rock 0.	book Ý/hr 			
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Job efficiency	y: 0.830	(1 SHIFT/DAY)
Spoil pil	e: 0.800	(FND-RF)
Push gradien	nt: 1.000	(CAT HB)
Altitud	e: 1.000	(CAT HB)
Material Weigh	it: 0.793	(CAT HB)
Blade typ	e: 1.000	(PAT)
Net correction	n:0.3554	
Adjusted unit production:	750.07 LCY/hr	
Adjusted fleet production:	3000.28 LCY/hr	
—		

Fleet size:	4 Dozer(s)
Unit cost:	\$0.612/LCY

Total job time:	0.69 Hours
Total job cost:	\$1,268

BULLDOZER WORK

Task description		- 11450	mgnwa	all Reductio	11		
Upland Grav	el Pit No	b. 3	Per	mit Action:	07-2023	Permit/Job#	: M2005077
PROJECT ID	<u>ENTIF</u>	ICATIO	N				
Task #: 01			State:	Colorado		Abbreviation:	None
	7/2023		County:	Mesa		Filename:	M077-01c
User: AC			j·				
Agency	or organ	nization na	ame: DF	RMS			
HOURLY EQ	UIPME	ENT COS	<u>5T</u>				
Basic Machine		t D9T - 9S	U				
Horsepowe							
Blade Typ		ni-Univers					
Attachmen		hank rippe	r				
Shift Basi	1	er day					
Data Source	e: <u>(C</u> F	RG)					
Cost Breakdown	:						
					<u>Utilizatio</u>	<u>n %</u>	
Ownership Cos				\$238.76	NA		
Operating Cos				\$162.29	100		
Ripper own. Cos				\$18.32	NA		
Ripper op. Cos				\$0.00	0		
Operator Cos	t/Hour:			\$40.04	NA		
Total Fleet Cost/		\$459.41 \$1,837.0					
	Hour:)UANT	\$1,837.0					
Total Fleet Cost/ <u>MATERIAL (</u> Initial Volume Swell factor	Hour:)UANT : <u>4,04</u> : <u>1.33</u>	\$1,837.4 ••••••••••••••••••••••••••••••••••••					
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Total Fleet Cost/ MATERIAL (Initial Volume Swell factor Loose volume Source of estima Source of estima Mourly PR(Average push dis Unadjusted hourf Materials consist Average push gra Average site altit Material weight: Weight description Job Condition Co	Hour: DUANT 4,04 1.33 5,38 ted volut ted swell DDUC stance: by product adient: ude: on: perator	\$1,837.0 YTTIES 9 0 5 LCY me: 1 factor: 1 factor: 2 scription: 0 % 5,000 fe 2,900 lb Decomp Factor Skill:	62 Division Cat Hand 0 feet ,110.5 LC Compa pet pos/LCY posed rock 0.	book Y/hr icted fill or e - 50% Rock 750		<u>urce</u> /G.)	
Total Fleet Cost/ MATERIAL (Initial Volume Swell factor Loose volume Source of estima Source of estima Mourly PR(Average push dis Unadjusted hour Materials consist Average push gra Average site altit Material weight: Weight description Loo Material	Hour: DUANT 4,04 1.33 5,38 ted volut ted swell ODUC stance: by product adient: ude: on: <u>orrection</u> perator a l consiste	\$1,837.0 TTIES 9 0 5 5 LCY 9 me: - 1 factor: - 1 factor: - 5 LCY - me: - 1 factor: - 5 ction: - 2 ction: - 5 ction: - 2 ction: - 0 % - 5,000 fe - 2,900 lb - Decomp - Factor - Skill: - ency: -	62 Division Cat Hand 0 feet ,110.5 LC Compa eet bos/LCY bosed rock 0. 0.	book Y/hr .cted fill or e 		<u>urce</u> /G.) ` HB))	
Total Fleet Cost/ MATERIAL (Initial Volume Swell factor Loose volume Source of estima Source of estima Mourly PR(Average push dis Unadjusted hour Materials consist Average push gra Average site altit Material weight: Weight description Loo Material	Hour: DUANT 4,04 1.33 5,38 ted voluted swell ODUC stance: by product adient: ude: OTEC DUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODUC CODU	\$1,837.0 TTIES 9 0 5 5 LCY 9 me: - 1 factor: - 1 factor: - 5 LCY - me: - 1 factor: - 5 ction: - 2 ction: - 5 ction: - 2 ction: - 0 % - 5,000 fe - 2,900 lb - Decomp - Factor - Skill: - ency: -	62 Division Cat Hand 0 feet ,110.5 LC Compa eet bs/LCY posed rock 0. 0. 1.	book Y/hr icted fill or e - 50% Rock 750		<u>urce</u> /G.)	

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:	0.793	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.3554	
Adjusted unit production: 75	50.07 LCY/hr	
Adjusted fleet production: 30	000.28 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.612/LCY

Total job time:	1.79 Hours
Total job cost:	\$3,298

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SCRAPER TEAM WORK

Site: Upland Grave	l Pit No. 3	Permit	Action:	07-2023	Perr	mit/Job#: M200	5077
PROJECT ID	ENTIFICATION						
Task #: 024		State: 0	Colorado		Abbuoy	viation: None	
			Joiorado Mesa			ename: M077-	.02a
User: AC		.ounty	viesa				02a
Agency	or organization nam	e: DRM	S				
rigency	or organization num		5				
HOURLY EQ	JIPMENT			COSTSI	nift basis: <u>1 per d</u>	<u>ay</u>	
			Equipme	nt Description			
		-Scraper:	Cat 637	G w/push-pull			
		-Dozer:	Cat D9T Cat D9T				
5u	pport Equipment -Lo -Dui	mp Area:	Cat D91 Cat D91				
Road	Maintenance – Moto		CAT 14				
	-Wate	er Truck:	Water T	anker, 3,500 Gal			
Cost Breakdowr	: Scraper W	orl Toom		Support Equip	mont	Maintenance	Fauinma
Cost Dreakuowi	Scraper W	Doz	ver	Load Area	Dump Area	Motor Grader	Water
%Utilization-machir	_		100	100	100	50	
Ownership cost/hou		\$	238.76	\$238.76	\$238.76	\$149.33	
Operating cost/hou			162.29	\$162.29	\$162.29	\$46.40	
%Utilization-rippe		Ψ.	NA	, 102.29 NA	NA	NA	
Ripper own. cost/hou			\$0.00	\$0.00	\$0.00	\$0.00	
Ripper op. cost/hou			\$0.00	\$0.00	\$0.00	\$0.00	
Operator cost/hou			\$40.04	\$40.04	\$40.04	\$46.87	
Unit Subtota		\$4	441.09	\$441.09	\$441.09	\$242.60	
Number of Uni	s: 2		2	1	1	1	
Group Subtota	s: Work:	\$2,04	7.96	Support:	\$882.18	Maint:	\$29
Total work team	cost/hour: \$3,226.99	4	H			I	
	<u>+++++++++++++++++++++++++++++++++++++</u>						
<u>MATERIAL (</u>	UANTITIES						
Initial volur	ne: 33,234		CCY	Swell fact	or: 1.125		
Loose volur	ne: 37,388	}	LCY				
	Source of estimated			of Reclamation, I	Mining & Safety		
Sou	ce of estimated swel	l factor:	Cat Hand	book			
HOURLY PRO	DUCTION						
HUUKLI FKU				C D		•	
					owl (volume) Basi		
Material weig		1.1			Volume: 24.00		CY
Material description Rated Paylor		ked		Heaped Y Average			CY CY

<u>1.00</u> Minutes

<u>0.60</u> Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5000 feet

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

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	0.00	3.00	3.00	2800	0.38

Haul Time: **0.38** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	0.00	3.00	3.00	2949	0.25
				Return Time:	0.25	ninutes
			Total Scrap	er team cycle time:	2.23	minutes
			Adjusted	for job conditions:	1,295.25	LCY/Hour
			Selected N	umber of Scrapers:	2	Scraper(s)
	Adjuste	d single scra	per team (unit)	hourly production:	1,295.25	LCY/Hour
	Adjusted n	nultiple scra	per team (fleet)	hourly production:	1,295.25	LCY/Hour
Optima	Unadjusted unit pro al Number of Scrapers pe			LCY/Hour		
JOB T	IME AND COST					
Flee	t size: 1	Team(s)]	Fotal job time:	28.87	Hours

Unit cost: \$2.491 /LCY

Total job cost: ______\$93,149_____

MOTOR GRADER WORK

Task description:	Ripping Pit Flo	or				
Upland Gravel Pit N	0.3 Pe	ermit Action:	07-2023		Permit/Job#:	M2005077
PROJECT IDENTIE	FICATION					
Task #: 02B	State:	Colorado		Al	obreviation:	None
Date: $7/17/2023$		-			Filename:	M077-02b
User: ACY	County.	111050			T fieldunie.	111077 020
· · · · · · · · · · · · · · · · · · ·						
Agency or orga	anization name:	ORMS				
HOURLY EQUIPM	<u>ENT COST</u>					
Basic Machin	e: CAT 14M			Horsepower	:	259
Ripper Attachmer	nt: Multi-Shank R	ipper		Shift Basis	: 1 p	er day
				Data Source	: (0	CRG)
Cost Breakdown:						
				Utilization %		
	ership Cost/Hour:		\$149.33	NA		
	erating Cost/Hour:		\$92.79	100		
	ership Cost/Hour:		\$5.83	NA		
	erating Cost/Hour:		\$4.02	100		
*	erator Cost/Hour:		\$46.87	NA		
Tota	l Unit Cost/Hour:		\$298.84			
Tota	l Fleet Cost/Hour:	\$20	8.84			
	to be graded or ripp		1 2 1 4 1 4	10.2		acres
	ce of estimated acrea	age: Phase	1, 2 and 4 botto	$ms \sim 10.3 \text{ ac}$		
HOURLY PRODUC	TION					
	Average Grader S		1.50	mph		
	Selected Applic			oping (0-3 mph)		
	Selected Blade A		-1	degre	es	
XX 7' 1.1	Effective Blade Lo		0.00	feet		
	of blade overlap per or ripping width per		2.00	feet		
6 6	d Hourly Unit Produ	1	<u>8.50</u> 1.5455	feet acres	hour	
Job Condition Correctio	-	<u></u>		ite Altitude: 50		
	<u>III I uctors</u>	Source		10 / 11111000. <u>500</u>	<u></u>	
Altitude Adj:	1.00	(CAT HI				
Job Efficiency:	0.85	(1sh/d, mo				
Net Correction:	0.8500	multiplier				
		-		1 7 7		
	Adjusted Hourly Uni		1.3136	acres/Ho		
I	Adjusted Hourly Flee	et Production:	1.3136	acres/Ho	ur	
JOB TIME AND CO	<u>ST</u>					
	1 Grader(s		Total job time	e:7.	.84	Hours
Unit cost: \$22	27.49 per acre		Total job cos	t:\$2,	,343	

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SCRAPER TEAM WORK

Site: Upland Gravel Pit	No. 3	Permit	Action:	07-2023	Perr	nit/Job#: <u>N</u>	1200507	77
PROJECT IDENT	IFICATION							
Task #: 02C	Si	tate: C	olorado		Abbrey	viation: No	one	
Date: $7/17/20$			lesa				077-020	2
User: ACY		-						
Agency or o	rganization name:	DRMS	5					
HOURLY EQUIP	MENT			COSTSh	ift basis: <u>1 per da</u>	<u>ay</u>		
			Equipme	nt Description				
		craper:		G w/push-pull				
<u> </u>	t Equipment -Load	Dozer:	Cat D9T Cat D9T					
Suppor	Dump-Dump		Cat D91 Cat D91					
Road Mai	ntenance – Motor C		CAT 14					
	-Water	Truck:	Water T	anker, 3,500 Gal.				
Cost Breakdown:	Scraper Wor	- Toom		Support Equip	mont	Mainten	onco Ec	uinmont
<u>Cost breakdown</u> .	Scraper	Doz	er	Load Area	Dump Area	Motor Gra		Water Tru
%Utilization-machine:	100		100	100	100		50	
Ownership cost/hour:	\$255.23	\$2	238.76	\$238.76	\$238.76	\$149	9.33	\$16
Operating cost/hour:	\$280.59	\$1	62.29	\$162.29	\$162.29	\$46	5.40	\$37
%Utilization-ripper:	NA		NA	NA	NA		NA	
Ripper own. cost/hour:	NA		\$0.00	\$0.00	\$0.00	\$0	0.00	\$0
Ripper op. cost/hour:	NA		\$0.00	\$0.00	\$0.00	\$0	0.00	\$0
Operator cost/hour:	\$47.07	\$	640.04	\$40.04	\$40.04	\$46	5.87	\$0
Unit Subtotals:	\$582.89	\$4	41.09	\$441.09	\$441.09	\$242	2.60	\$54
Number of Units:	2		2	1	1		1	
Group Subtotals:	Work:	\$2,047	7.96	Support:	\$882.18	Ma	int:	\$296.85
Total work team cost/	hour: \$3,226.99							
MATERIAL QUA	NTITIES							
Initial volume:	16,617		CCY	Swell fact	or: 1.115			
Loose volume:	18,528		LCY	S went fact				
	ce of estimated vol			of Reclamation, N	/lining & Safety			
Source of	f estimated swell fa	actor:	Cat Hand	book				
HOURLY PRODU	UCTION							
				Scraper Bo	wl (volume) Basi	<u>s:</u>		
Material weight:	2,100 lbs/LCY			Struck V			LCY	•
Material description:	Earth - Loam			Heaped V			- LCY	
Rated Payload:	81,600 pounds			Average V	/olume: 29.00		LCY	•
Payload Capacity:	38.86 LCY			Adjusted C	apacity: 29.00		LCY	r

<u>1.00</u> Minutes

<u>0.60</u> Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5000 feet

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

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	0.00	3.00	3.00	2800	0.35

Haul Time: **0.35** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	0.00	3.00	3.00	2949	0.25
				Return Time:	0.25	minutes
			Total Scrap	er team cycle time:	2.20	minutes
			Adjusted	for job conditions:	1,312.91	LCY/Hour
			Selected N	umber of Scrapers:	2	Scraper(s)
	Adjuste	d single scra	per team (unit)	hourly production:	1,312.91	LCY/Hour
	Adjusted n	nultiple scra	per team (fleet)	hourly production:	1,312.91	LCY/Hour
Optima	Unadjusted unit pro- al Number of Scrapers pe			_ LCY/Hour		
JOB T	IME AND COST					
Flee	t size: 1	Team(s)]	Fotal job time:	14.11	Hours

Unit cost: \$2.458 /LCY

Total job cost: ______\$45,540

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SCRAPER TEAM WORK

Site: Upland Gravel Pit	t No. 3	Permit Action:	07-2023	Perr	nit/Job#: <u>M200</u>	5077
PROJECT IDENI	TIFICATION					
Task #: 03A	St	tate: Colorado		Abbrev	viation: None	
Date: 7/17/20 User: ACY	23 Cou	nty: Mesa		File	ename: M077-0	03a
		DDMC				
Agency of o	rganization name:	DRMS				
HOURLY EQUIP	<u>MENT</u>		COSTSI	nift basis: <u>1 per da</u>	ay	
			ent Description			
			7G w/push-pull /T - 9SU			
Suppor	t Equipment -Load	Area: Cat D9	T - 9SU			
Road Mai	-Dump ntenance –Motor G		<u>7 - 9SU</u> 4M			
	-Water '		Tanker, 3,500 Gal.			
Cost Breakdown:	Scraper Worl	k Team	Support Equip	ment	Maintenance	Fauinment
<u>Cost Dicardown</u> .	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water T
%Utilization-machine:	100	100	100	100	50	
Ownership cost/hour:	\$255.23	\$238.76	\$238.76	\$238.76	\$149.33	\$1
Operating cost/hour:	\$280.59	\$162.29	\$162.29	\$162.29	\$46.40	\$3
%Utilization-ripper:	NA	NA	NA	NA	NA	
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	9
Ripper op. cost/hour: Operator cost/hour:	NA	\$0.00	\$0.00	\$0.00 \$40.04	\$0.00	9
Unit Subtotals:	\$47.07 \$582.89	\$40.04 \$441.09	\$40.04 \$441.09	\$40.04	\$46.87 \$242.60	\$
Number of Units:	\$382.89	\$441.09 2	\$441.09 1	\$441.09 1	\$242.00	ب و
Group Subtotals:	Work:	\$2,047.96	Support:	\$882.18	Maint:	\$296.8
Total work team cost/			~~			1
MATERIAL QUA Initial volume:	9,034	CCY	Swell fact	or: <u>1.125</u>		
Loose volume:	10,163	LCY				
	ce of estimated vol f estimated swell fa		n of Reclamation, M dbook	Mining & Safety		
HOURLY PRODU	JCTION		Scraper Bo	owl (volume) Basi	s.	
Material weight:	2,550 lbs/LCY			Volume: 24.00		CY
Material description:	Earth - Dry packet	d	Heaped Y	Volume: 34.00	L	CY
Rated Payload:	81,600 pounds		Average V	Volume: 29.00		CY

<u>1.00</u> Minutes

<u>0.60</u> Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5000 feet

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

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	0.00	3.00	3.00	2800	0.38

Haul Time: **0.38** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	0.00	3.00	3.00	2949	0.25
				Return Time:	0.25	ninutes
			Total Scrap	er team cycle time:	2.23	minutes
			Adjusted	for job conditions:	1,295.25	LCY/Hour
			Selected N	umber of Scrapers:	2	Scraper(s)
	Adjuste	d single scra	per team (unit)	hourly production:	1,295.25	LCY/Hour
	Adjusted m	nultiple scrap	per team (fleet)	hourly production:	1,295.25	LCY/Hour
Optima	Unadjusted unit pro- al Number of Scrapers pe			_ LCY/Hour		
JOB T	IME AND COST					
Flee	t size: 1	Team(s)]	Fotal job time:	7.85	Hours

Unit cost: \$2.491 /LCY

Total job cost: \$25,321

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SCRAPER TEAM WORK

Site: Upland Gravel Pit	. 110. 3	Permit Action:	07-2025	Pen	nit/Job#: <u>M200</u>	5077
PROJECT IDENT	TIFICATION					
Task #: 03B Date: 7/17/202		tate: <u>Colorado</u> nty: Mesa			viation: <u>None</u> ename: M077-0	
Date: $7/17/20$ User: ACY	23 Cou	inty: <u>Niesa</u>		FII	ename: $M077-0$	150
Agency or o	rganization name:	DRMS				
HOURLY EQUIP	MENT		COSTSI	nift basis: <u>1 per d</u>	<u>ay</u>	
		Equipm	ent Description			
		craper: Cat 63	7G w/push-pull			
Suppor	t Equipment -Load		/T - 9SU /T - 9SU			
	-Dump	Area: Cat D8	5T - 8SU			
Road Main	ntenance –Motor C -Water		<u>4M</u> Tanker, 3,500 Gal.			
	- water	TTUCK. Water	<u>1 alikel, 5,500 Gal.</u>			
Cost Breakdown:	Scraper Wor		Support Equip		Maintenance	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water '
%Utilization-machine:	100	100	100	100	50	
Ownership cost/hour:	\$255.23	\$238.76	\$238.76	\$241.38	\$149.33	
Operating cost/hour:	\$280.59	\$162.29	\$162.29	\$143.92	\$46.40	5
%Utilization-ripper:	NA	NA	NA	NA	NA	
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	
Operator cost/hour:	\$47.07	\$40.04	\$40.04	\$40.04	\$46.87	
Unit Subtotals:	\$582.89	\$441.09	\$441.09	\$425.34	\$242.60	5
Number of Units:	2 Work:	2 \$2,047.96	1 Support:	1 \$866.43	1 Maint:	\$296
Group Subtotals:	WOIK.	\$2,047.90	Support:	\$800.45	Maint:	\$290
			Swell fact <u>n of Reclamation, N</u> dbook			
HOURLY PRODU						
			Scraper Bo	owl (volume) Basi	<u>s:</u>	
Material weight:	2,100 lbs/LCY		Struck V	Volume: 24.00 Volume: 34.00		CY CY

<u>1.00</u> Minutes

<u>0.60</u> Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5000 feet

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

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	0.00	3.00	3.00	2800	0.35

Haul Time: **0.35** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	0.00	3.00	3.00	2949	0.25
				Return Time:	0.25	minutes
			Total Scrap	er team cycle time:	2.20	minutes
			Adjusted	for job conditions:	1,312.91	LCY/Hour
		2	Scraper(s)			
	Adjuste	d single scra	per team (unit)	hourly production:	1,312.91	LCY/Hour
	Adjusted n	ultiple scra	per team (fleet)	hourly production:	1,312.91	LCY/Hour
Optima	Unadjusted unit pro al Number of Scrapers pe			LCY/Hour		
JOB T	IME AND COST					
Flee	t size: 1	Team(s)]	Fotal job time:	3.84	Hours

Unit cost: \$2.446 /LCY

Total job cost: \$12,319

HYDRAULIC EXCAVATOR WORK

Task description:	Pocketi	ng Slopes	6				
Upland Gravel Pit N	lo. 3	Perr	mit Action:	07-2023		Permit/Job#:	M2005077
PROJECT IDENTI	FICATION	I					
Task #: 03C Date: 7/17/2023 User: ACY	l	State: County:	Colorado Mesa			Abbreviation: Filename:	None M077-03c
Agency or org	anization nai	ne: DR	RMS				
HOURLY EQUIPM	ENT COS	<u>Γ</u>					
Basic Machine: Attachment 1:	Cat 345D ROPS Cat		"Stick		Horsepo Weight (M Shift Ba Data Sou	AT): 4 asis: 1 p	380 19.37 per day CRG)
Cost Breakdown:					Data Sot	nee. <u>(</u>	
Ownership Cost Operating Cost Operator Cost Total Unit Cost	/Hour: /Hour:	\$121. \$96.1 \$46.8 \$264.	14 37	Utilization % NA 100 NA			
Total Fleet Cos	t/Hour:	\$264	.74				
Loose volume: Source	4,517 4,517 of estimated estimated swe		CCY LCY Division Cat Hand	Swell factoring of Reclamation,			
				UUUK			
HOURLY PRODUC		1	1.1.1	1			
Excavator Cycle Time (load bucket,	•	-	-			
Load Bucket Capacity	Seconda			ondition Descrip in Basic Descrip Cycle Time V	ption: A	VERAGE VERAGE 315	minutes
					Bucket	Size Class: <u>M</u>	edium
Rated Capaci Bucket Fill Fact Adjusted Capaci	or: 1	.14 .025 .22	LCY (hea Bank Cla LCY	aped) y; Earth (100%)	-105%) 1.0	25	
Job Condition Correction	n Factors			Si	te Altitude:	<u>5000</u> feet	
	1.00 0.83 0.83 nadjusted Ho Adjusted Ho	urly Unit urly Unit	Production:	<u>(y)</u> 613.05 508.83	LCY/	Hour	
	Adjusted Hou	ITIY Fleet	Production:	508.83	LCY/	nour	
JOB TIME AND CO	<u>DST</u>						
Fleet size:	1	Excavato	or To	otal job time:		8.88	Hours
Unit cost: \$0	0.520	LCY		Total job cost	•	\$2,350	

MOTOR GRADER WORK

Task description:	Rip Haul Road				
Upland Gravel Pit No.	3 Permit Actio	on: 07-2023	P	ermit/Job#:	M2005077
PROJECT IDENTIFI	<u>CATION</u>				
Task #: 04A	State: Colora	ado	Abb	reviation:	None
Date: 7/17/2023	County: Mesa			Filename:	M077-04a
User: ACY					11077 014
Agency or organ	ization name: DRMS				
HOURLY EQUIPME					
Basic Machine:	CAT 14M		Horsepower:		259
Ripper Attachment:			Shift Basis:		ber day
rupper r nueriment.			Data Source:		CRG)
Cost Breakdown:)
<u>Cost Broakdown.</u>			Utilization %		
	ship Cost/Hour:	\$149.33	NA	_	
	ting Cost/Hour:	\$92.79	100	_	
	ship Cost/Hour:	\$5.83	NA	-	
	ting Cost/Hour:	\$4.02	100	-	
*	ator Cost/Hour:	\$46.87	NA	-	
Total	Unit Cost/Hour:	\$298.84			
Total I	Fleet Cost/Hour:	\$298.84			
Source	of estimated acreage: <u>38</u>	00LF * 20' W			
HOURLY PRODUCT	ION				
	Average Grader Speed:	1.50	mph		
	Selected Application:		pping (0-3 mph) -	1.50	
	Selected Blade Angle:	-1	degrees		
	Effective Blade Length:	0.00	feet		
	f blade overlap per pass:	2.00	feet		
	r ripping width per pass:	8.50	feet		
· ·	Hourly Unit Production:	1.5455	acres/he		
Job Condition Correction			ite Altitude: 5000	feet	
Altitude Adj:		urce ΓHB)			
Job Efficiency:		, mod.)			
Net Correction:	0.8500 multi				
			~~		
	ljusted Hourly Unit Producti		acres/Hour		
Ad	justed Hourly Fleet Producti	ion: 1.3136	acres/Hour		
JOB TIME AND COS	<u>T</u>				
Fleet size: 1	Grader(s)	Total job time	e: <u>1.3.</u>	3	Hours
Unit cost: \$227	40 por coro	Total ich acc	.t: \$39	8	
Unit cost: \$227	.49 per acre	Total job cos	a. 739	υ	

REVEGETATION WORK

Task desci	iption:	Phase 1 Reveg			
Site: Upland	Gravel Pit No.	3 Permit Action:	07-2023	Permit/Job	o#: M2005077
PROJEC.	<u>IDENTIFIC</u>	ATION			
Task #:	05A	State: Colorado		Abbreviation:	None
	7/17/2023	County: Mesa		Filename:	M077-05a
Date:	1/1//2025	e o unity i mesu			

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)	\$112.82
Total Tilling Cost/Acre	\$112.82

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	4.00	12.95	\$44.50
Crested Wheatgrass - Ephraim	3.20	14.69	\$13.84
Sand Dropseed	0.10	11.94	\$0.98
Pubescent Wheatgrass - Luna	6.00	12.40	\$20.40
Galleta	5.40	19.71	\$120.69
Saltbush, Four Wing	6.00	8.26	\$75.00
Saltbush, Shadscale	6.00	8.95	\$60.00
Totals Seed Mix	30.70	88.90	\$335.41

Application

Description Broadcast seeding [DMG]		Cost /Acre \$267.22
	Total Soud Application Cost/Acro	
	Total Seed Application Cost/Acre	\$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
Herbicide - Plateau @ 1.0 pt/ac	1.00	ACRE	\$19.79	\$19.79
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
Total Mulch Materials Cost/Acre				\$883.37

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, aquatic area, nox. [DMG]		\$62.72
	Total Mulch Application Cost/Acre	\$284.85

NURSERY STOCK PLANTING

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

No. of Acres:	4.15	Cost /Acre:	\$1,883.67
Estimated Failure Rate:	50%	Cost /Acre*:	\$1,883.67
*Selected Replanting Work Items:	TILLING,SEEDIN	G,MULCHING	

Initial Job Cost:	\$7,817.23
Reseeding Job Cost:	\$3,908.62
Total Job Cost:	\$11,726
Job Hours:	8.30

REVEGETATION WORK

Task descri	ption:	Phase 2 Reveg			
ite: Upland	Gravel Pit No.	3 Permit Action:	07-2023	Permit/Job	#: <u>M2005077</u>
PROJECT	IDENTIFIC	ATION			
Task #: Date:	05B 7/17/2023	State: <u>Colorado</u> County: Mesa		Abbreviation: Filename:	None M077-05b
User:	ACY	County			WI077-030

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)	\$112.82
Total Tilling Cost/Acre	\$112.82

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	4.00	12.95	\$44.50
Crested Wheatgrass - Ephraim	3.20	14.69	\$13.84
Sand Dropseed	0.10	11.94	\$0.98
Pubescent Wheatgrass - Luna	6.00	12.40	\$20.40
Galleta	5.40	19.71	\$120.69
Saltbush, Four Wing	6.00	8.26	\$75.00
Saltbush, Shadscale	6.00	8.95	\$60.00
Totals Seed Mix	30.70	88.90	\$335.41

Application

Description Broadcast seeding [DMG]		Cost /Acre \$267.22
	Total Soud Application Cost/Acro	
	Total Seed Application Cost/Acre	\$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
Herbicide - Plateau @ 1.0 pt/ac	1.00	ACRE	\$19.79	\$19.79
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
Total Mulch Materials Cost/Acre				\$883.37

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, aquatic area, nox. [DMG]		\$62.72
	Total Mulch Application Cost/Acre	\$284.85

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals 1	Nursery Stoc	k Cost / Acre	\$0.00

No. of Acres:	4.45	Cost /Acre:	\$1,883.67
Estimated Failure Rate:	50%	Cost /Acre*:	\$1,883.67
*Selected Replanting Work Items:	TILLING,SEEDIN	G,MULCHING	

Initial Job Cost:	\$8,382.33
Reseeding Job Cost:	\$4,191.17
Total Job Cost:	\$12,573
Job Hours:	8.90

REVEGETATION WORK

Task descrij te: Upland (Gravel Pit No.	Phase 2 Reveg 3 Permit Action:	07-2023	Permit/Job	o#: <u>M2005077</u>
PROJECT	IDENTIFIC	CATION			
Task #:	05C	State: Colorado		Abbreviation:	None
Date:	7/17/2023	County: Mesa		Filename:	M077-05c
	ACY				

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)	\$112.82
Total Tilling Cost/Acre	\$112.82

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	4.00	12.95	\$44.50
Crested Wheatgrass - Ephraim	3.20	14.69	\$13.84
Sand Dropseed	0.10	11.94	\$0.98
Pubescent Wheatgrass - Luna	6.00	12.40	\$20.40
Galleta	5.40	19.71	\$120.69
Saltbush, Four Wing	6.00	8.26	\$75.00
Saltbush, Shadscale	6.00	8.95	\$60.00
Totals Seed Mix	30.70	88.90	\$335.41

Application

Description Broadcast seeding [DMG]		Cost /Acre \$267.22
	Total Soud Application Cost/Acro	
	Total Seed Application Cost/Acre	\$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
Herbicide - Plateau @ 1.0 pt/ac	1.00	ACRE	\$19.79	\$19.79
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
Total Mulch Materials Cost/Acre				\$883.37

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, aquatic area, nox. [DMG]		\$62.72
	Total Mulch Application Cost/Acre	\$284.85

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

No. of Acres:	4.45	Cost /Acre:	\$1,883.67
Estimated Failure Rate:	50%	Cost /Acre*:	\$1,883.67
*Selected Replanting Work Items:	TILLING,SEEDIN	G,MULCHING	

Initial Job Cost:	\$8,382.33
Reseeding Job Cost:	\$4,191.17
Total Job Cost:	\$12,573
Job Hours:	8.90

REVEGETATION WORK

1	Fask descrip	otion:	Haul Road Reveg			
Site:	Upland G	Fravel Pit No.	<u>3</u> Permit Action:	07-2023	Permit/Job#	: M2005077
<u>P</u>	ROJECT	IDENTIFIC	ATION			
	Task #: Date:	05D 7/17/2023	State: <u>Colorado</u> County: Mesa			None M077-05d
	User:	ACY	County: Mesa			wi077-03u
	Age	ency or organiz	zation 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)	\$112.82
Total Tilling Cost/Acre	\$112.82

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	4.00	12.95	\$44.50
Crested Wheatgrass - Ephraim	3.20	14.69	\$13.84
Sand Dropseed	0.10	11.94	\$0.98
Pubescent Wheatgrass - Luna	6.00	12.40	\$20.40
Galleta	5.40	19.71	\$120.69
Saltbush, Four Wing	6.00	8.26	\$75.00
Saltbush, Shadscale	6.00	8.95	\$60.00
Totals Seed Mix	30.70	88.90	\$335.41

Application

Description Broadcast seeding [DMG]		Cost /Acre \$267.22
	Total Soud Application Cost/Acro	
	Total Seed Application Cost/Acre	\$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
Herbicide - Plateau @ 1.0 pt/ac	1.00	ACRE	\$19.79	\$19.79
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
Total Mulch Materials Cost/Acre				\$883.37

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, aquatic area, nox. [DMG]		\$62.72
	Total Mulch Application Cost/Acre	\$284.85

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals 1	Nursery Stoc	k Cost / Acre	\$0.00

No. of Acres:	1.75	Cost /Acre:	\$1,883.67
Estimated Failure Rate:	50%	Cost /Acre*:	\$1,883.67
*Selected Replanting Work Items:	TILLING,SEEDIN	G,MULCHING	

Initial Job Cost:	\$3,296.42
Reseeding Job Cost:	\$1,648.21
Total Job Cost:	\$4,945
Job Hours:	3.50

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Tas	sk description:	Init	ial Mobilization					
Site: <u></u>	Upland Gravel 1	Pit No. 3	Permit	Action: 07-20	23]	Permit/Job#: <u>M</u>	2005077
<u>PR(</u>	OJECT IDEN	FIFICATI	<u>ON</u>					
1	Task #: 10A		State: Co	olorado		Abbre	eviation: None	
	Date: 7/17/2 User: ACY	2023	County: Mo	esa		Fi	lename: M077	-10a
	Agency or	organization	name: DRMS					
<u>EQ</u> I	UIPMENT TR	ANSPOR	<u>F RIG COST</u>					
						Shift ba	sis: 1 per da	v
					(Cost Data Sou		
	T 1 7		CDUD					
	Truck T	Tractor Desci	ription: GENE	RIC ON-HIGH			OR, 6X4, DIESEL	L POWERED,
	T - 17		· · ·			(2ND HALF,		IDMENIT
	Truck	Frailer Desci	ription: G				ROP DECK EQU	IPMENT
					KAILEK	(25T, 50T, AN	ND 1001)	
<u>Cost</u>	Breakdown:							
Av	ailable Rig Cap		0-25 Tons	26-50 Tons		- Tons		
	Ownership C		\$20.26	\$36.04		7.05		
	Operating C		\$39.51	\$76.08		32.85		
	Operator C		\$22.52	\$22.52		22.52		
	Helper C	Cost/Hour:	\$0.00	\$23.53	\$2	23.53		
	Total Unit C	Cost/Hour:	\$82.29	\$158.17	\$1	75.95		
<u>NO</u>]	N ROADABL	<u>E EQUIPN</u>	<u>1ENT:</u>					
Ma	achine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
De	escription	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	-	(TONS)		t		fleet		
Cat	t D9T - 9SU	66.13	\$257.08	\$175.95	4	\$1,732.12	\$703.80	\$1,000.00
	t 637G w/push-	59.59	\$255.23	\$175.95	2	\$862.36	\$351.90	\$500.00
pul								
	t 345D L 12'-	54.31	\$121.73	\$175.95	1	\$297.68	\$175.95	\$250.00
	" Stick							
CA	" Stick AT 14M	23.57	\$155.16	\$82.29	1	\$237.45	\$82.29	\$250.00
CA Dri	" Stick AT 14M ill/Broadcast		\$155.16 \$6.73	\$82.29 \$82.29	1	\$237.45 \$89.02	\$82.29 \$82.29	\$250.00 \$250.00
CA Dri See	" Stick AT 14M ill/Broadcast eder with	23.57						
CA Dri See Tra	" Stick AT 14M ill/Broadcast	23.57						

Subtotals: \$3,326.86 \$1,478.52 \$2,500.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 3,500 Gal.	\$93.16	1	\$93.16	\$93.16
Flatbed Truck, 4x2, 30K GVW	\$64.45	1	\$64.45	\$64.45
Light Duty Pickup, 4x4, 3/4 T.	\$72.29	2	\$144.58	\$144.58

Subtotals:	\$302.19	\$30	2.19
EQUIPMENT HAUL DISTANCE and Time			
Nearest Major City or Town within project area region:	GRAND JUNC	TION	
Total one-way travel distance:	5.00		miles
Average Travel Speed:	40.00		mph
Total Non-Roadable Mob/Demob Cost *	\$12,855.0	7	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$75.55		_

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	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

Total job time:	2.50	Hours
Total job cost:	\$12,931	

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Sec	ondary Mobilizat	tion				
e: Upland Grave	el Pit No. 3	Permit	Action: 07-20	023]	Permit/Job#:	M2005077
PROJECT IDE	NTIFICATI	<u>ON</u>					
Task #: 10]	В	State: Co	olorado		Abbre	eviation: Not	ne
	7/2023		esa				77-10b
User: AC	CY	·					
Agency	or organization	name: DRMS					
EQUIPMENT	FRANSPOR	T RIG COST					
					Shift ba	sis: 1 per	dav
				C	Cost Data Sour	1	
Truc	k Tractor Desc	ription: GENE	RIC ON-HIGH				EL POWERED,
m					(2ND HALF,	,	
Iruc	k Trailer Desc	ription: G	ENERIC FOLD			-	UIPMENI
				KAILEK	(25T, 50T, AN	ND 1001)	
Cost Breakdown:							
Available Rig C	anacities	0-25 Tons	26-50 Tons	51+	Tons		
	Cost/Hour:	\$20.26	\$36.04		7.05		
	g Cost/Hour:	\$39.51	\$76.08		2.85		
	r Cost/Hour:	\$22.52	\$22.52	\$2	2.52		
Helper	r Cost/Hour:	\$0.00	\$23.53	\$2	3.53		
Total Uni	t Cost/Hour:	\$82.29	\$158.17	\$1	75.95		
NON ROADAB	LE EQUIPN	<u>AENT:</u>					
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	
Description	(TONS)	COSt/III/ unit	t	5120	fleet		
Drill/Broadcast	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Seeder with							
Tractor	6.00	#25 01	#02.2 C		¢100.22	#02.2 0	#250.00
Power Mulcher (Bowie LD-90)	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00
(DOWIE LD-90)			1			1	1

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.	\$72.29	2	\$144.58	\$144.58
		Subtotals:	\$144.58	\$144.58

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	GRAND JUNCTION 5.00 40.00	_ miles _ mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$1,484.96	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$36.15	_

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: ______\$1,521